Plots from WimpEvent run in res-jan2013

Generated on Ons 16 Jan 2013 08:57:50 CET

Run parameters

```
# Fluxtype:     12 (1D diff)
### Run with WimpEvent version = wimpevent (trunk @ rev 111)
###   Using nusigma version  = nusigma (trunk @ rev 111)
###   Using DarkSUSY version = trunk (rev 775)
###   Using SLALIB version = 2.5-5
### WimpEvent run parameters
#  Detector latitude =  -.90000000E+02
#  Detector longitude =  0.00000000E+00
#  Start MJD date, mjd1 =    56371.45812137425      (20 Mar 2013 10:59:41.69 UTC)
#  entered as 'D0V 2013                  '
#  End MJD date, mjd2 =      56557.86126254499      (22 Sep 2013 20:40:13.08 UTC)
#  entered as 'D0A 2013                  '
#  Options:  wesunacc =         1
#            weradec  =         0
### Simulated interactions = cc and nc
### Target material = ice/water
#
### WimpAnn input event file = dat-wa/wa-m10-ch1-sun.dat
### Below is header from WimpAnn input event file
### Run with WimpAnn version = wimpann (trunk @ rev 111)
###   Using Pythia version   = Pythia 6.426
###   Using nusigma version  = nusigma (trunk @ rev 111)
###   Using DarkSUSY version = trunk (rev 775)
### Neutrino oscillation parameters
#      theta_12 =  0.33580000E+02
#      theta_13 =  0.91200000E+01
#      theta_23 =  0.40400000E+02
#         delta =  0.00000000E+00
#  delta_m^2_21 =  0.75800000E-04
#  delta_m^2_31 =  0.23500000E-02
### WimpAnn run parameters
#  Number of annihilations =  10000000
```

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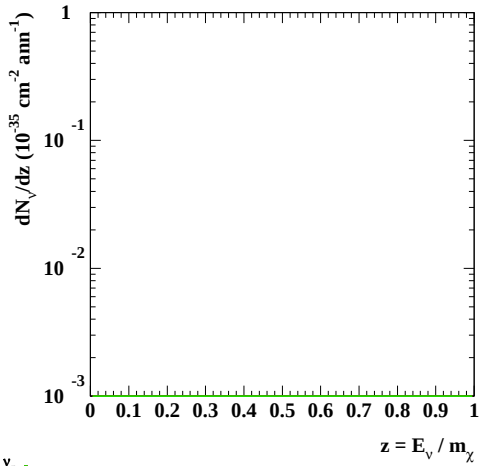
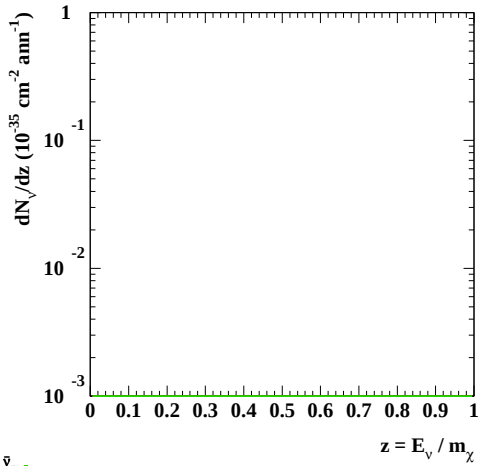
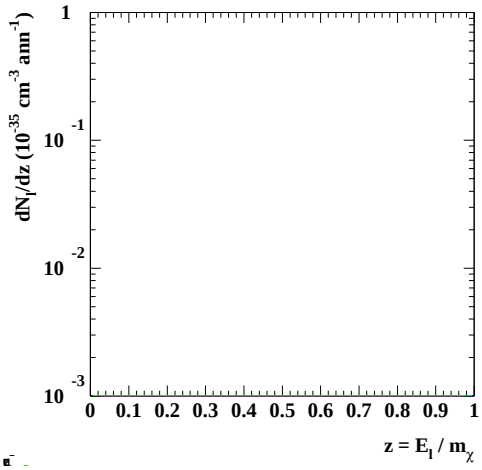
1.1 Channel 1 – $d\bar{d}$

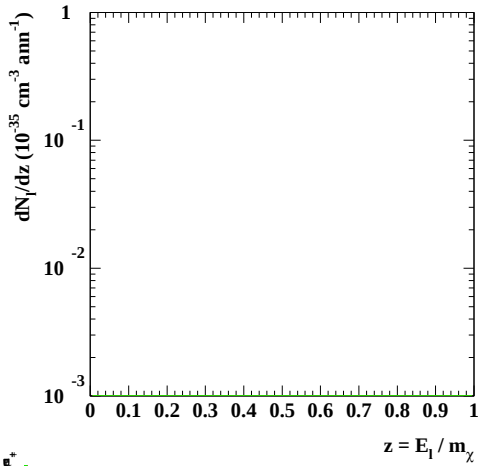
1.1.1 Neutrino fluxes at detector (Sun)



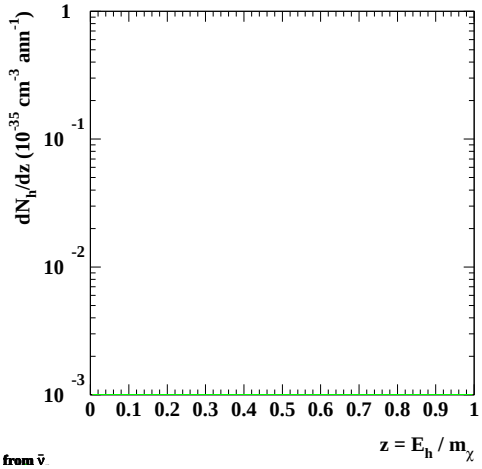


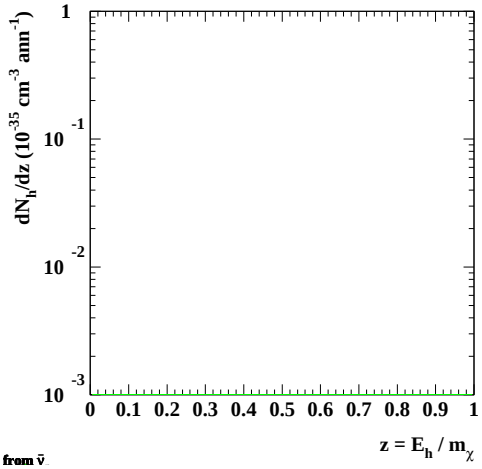
1.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



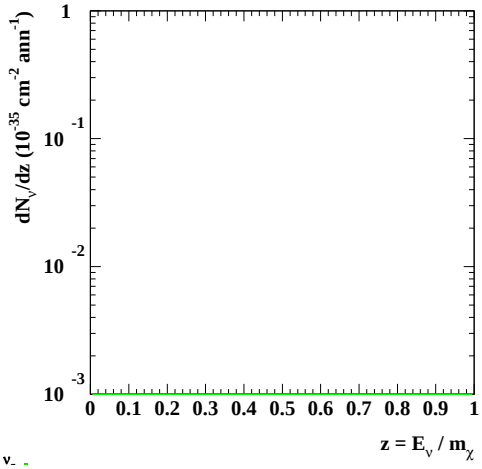


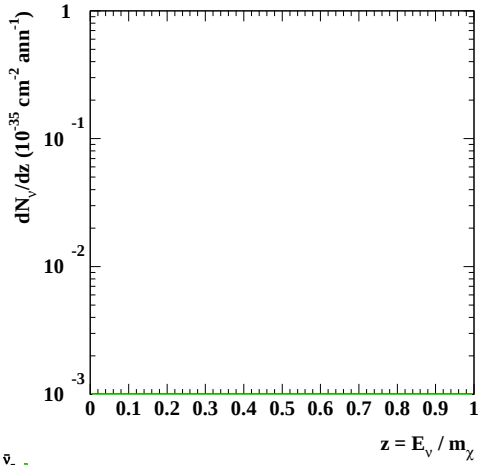
1.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



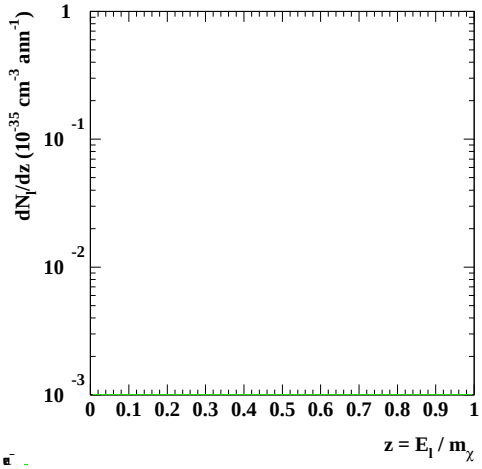


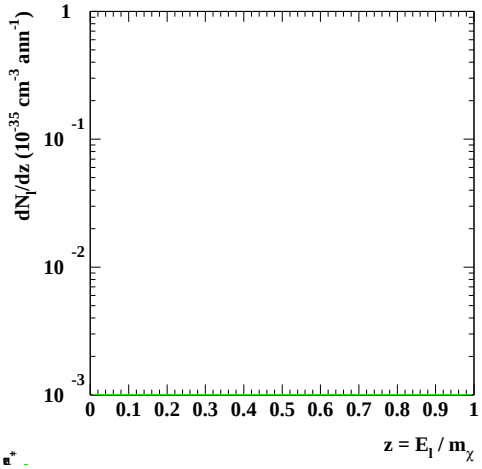
1.1.4 Neutrino fluxes at detector (Earth)



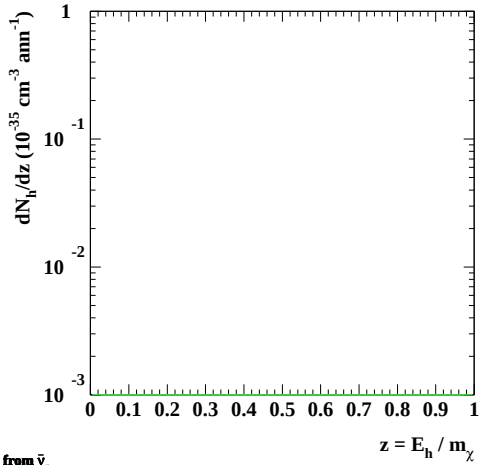


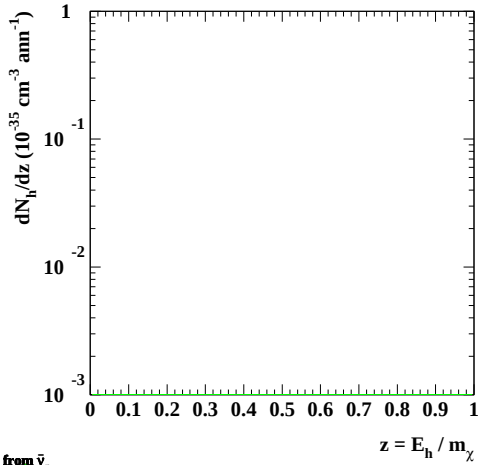
1.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



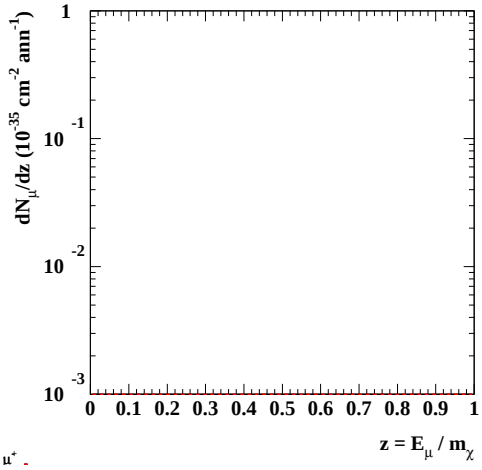


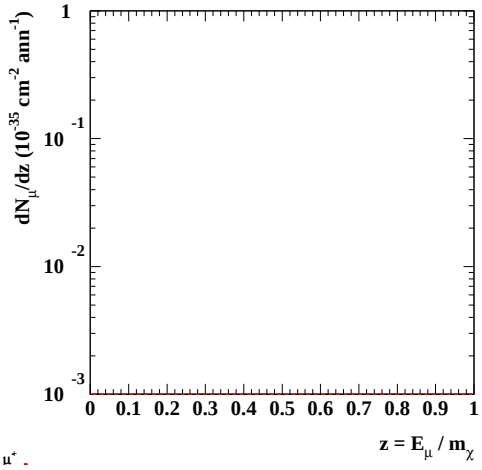
1.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





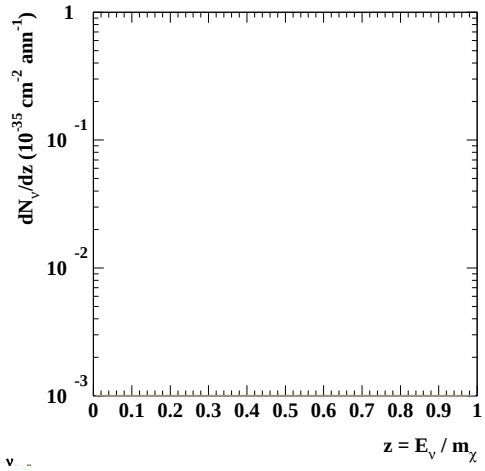
1.1.7 Muons at detector (Sun/Earth)

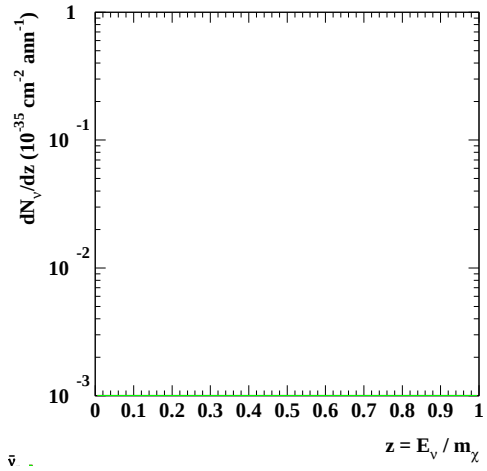




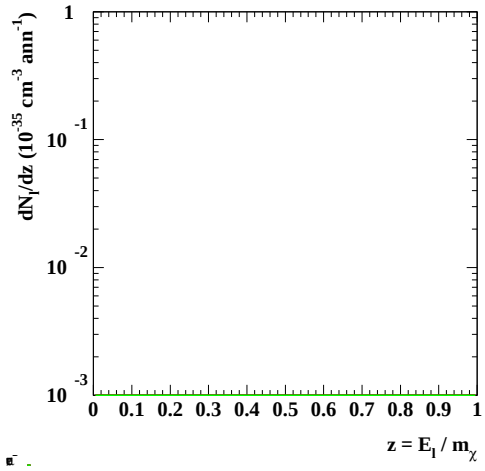
1.2 Channel 2 – $u\bar{u}$

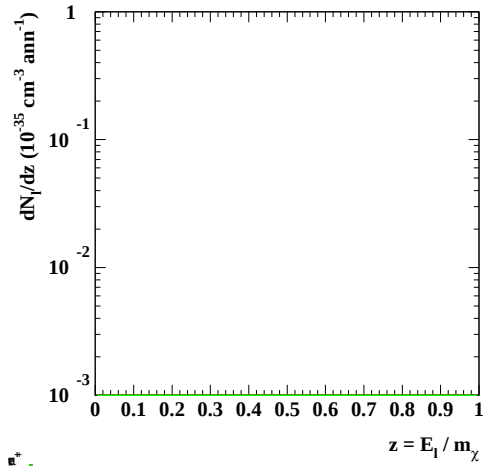
1.2.1 Neutrino fluxes at detector (Sun)



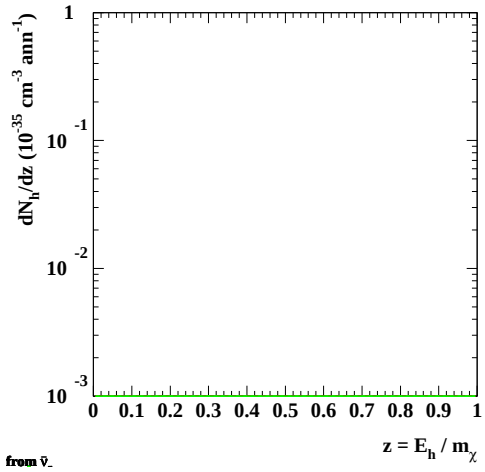


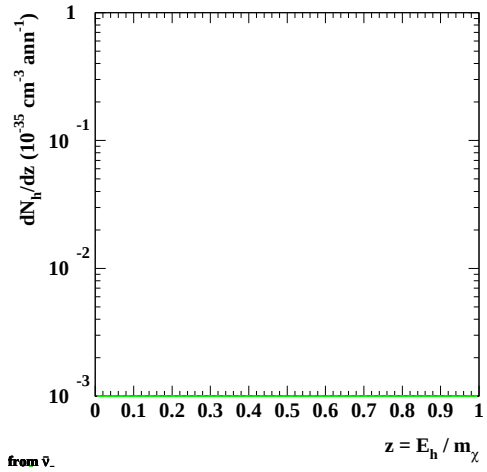
1.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



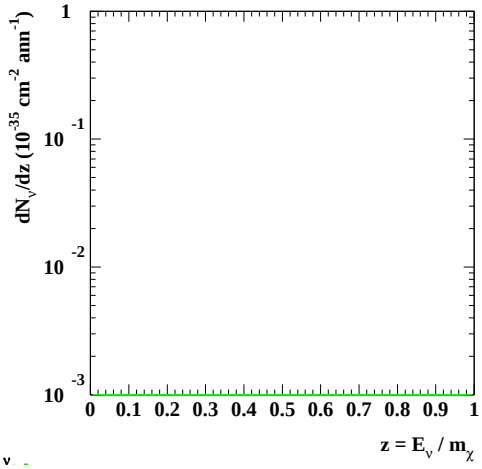


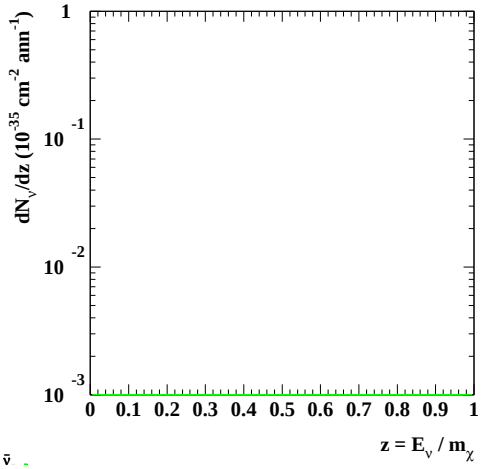
1.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



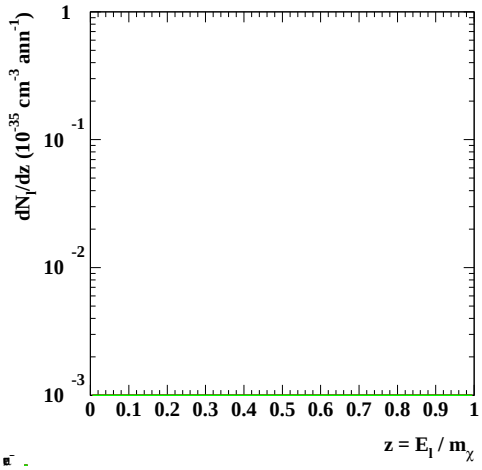


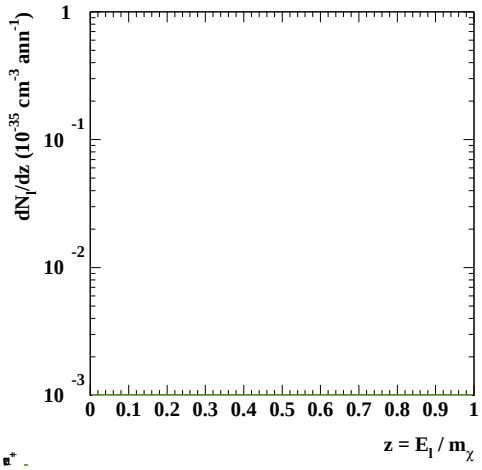
1.2.4 Neutrino fluxes at detector (Earth)



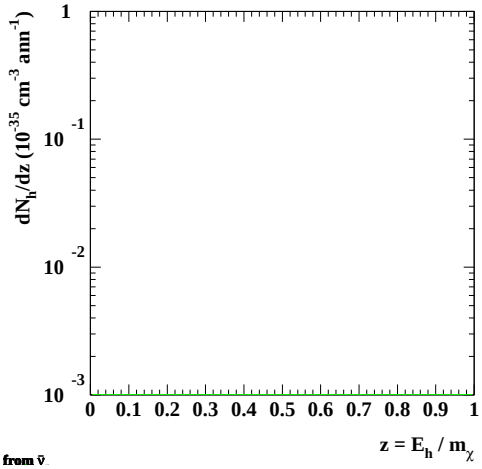


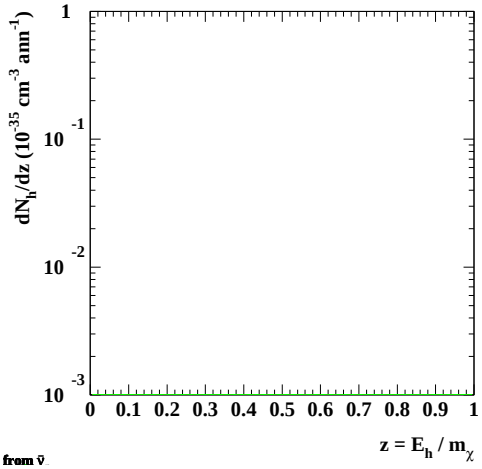
1.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



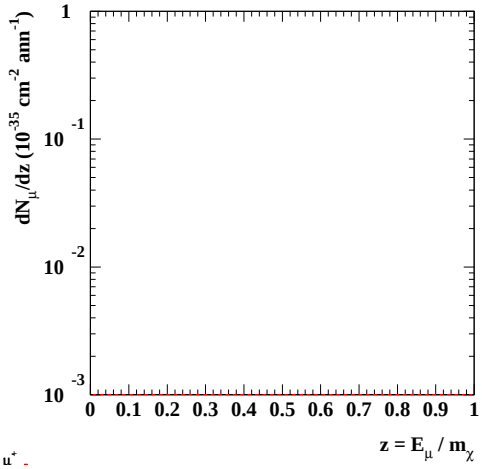


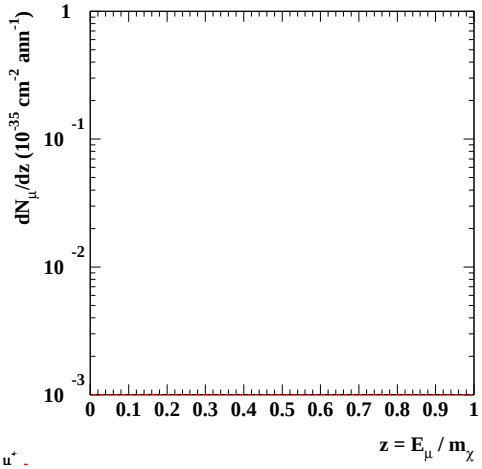
1.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





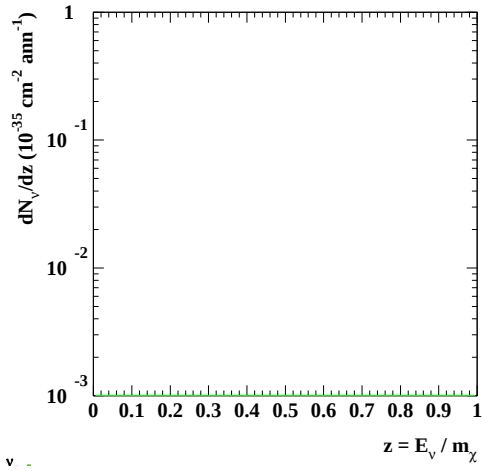
1.2.7 Muons at detector (Sun/Earth)

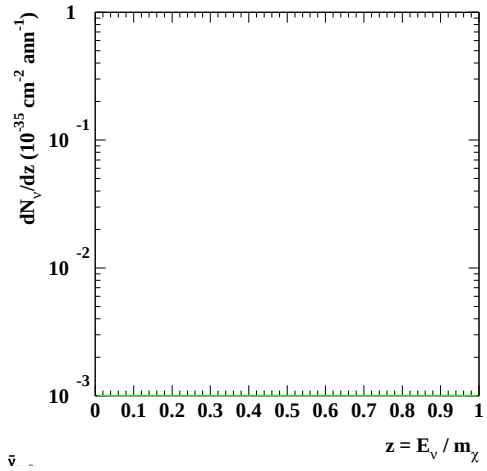




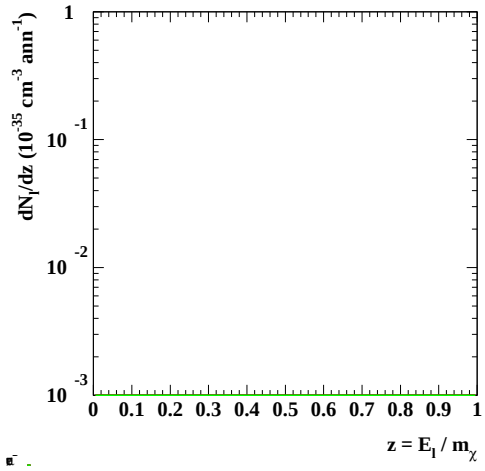
1.3 Channel 3 – $s\bar{s}$

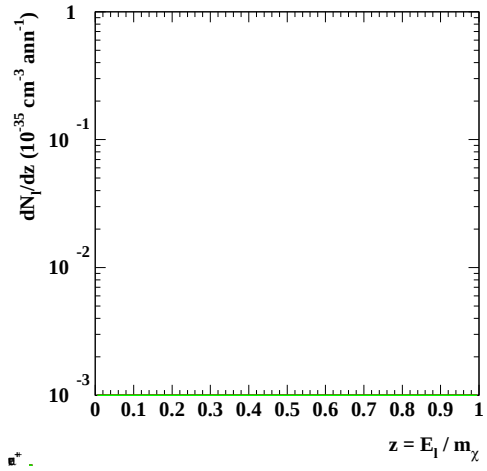
1.3.1 Neutrino fluxes at detector (Sun)



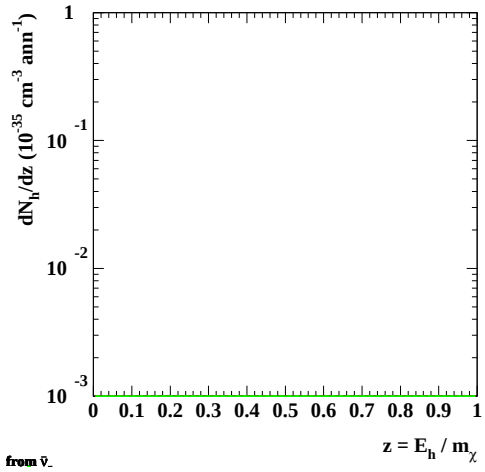


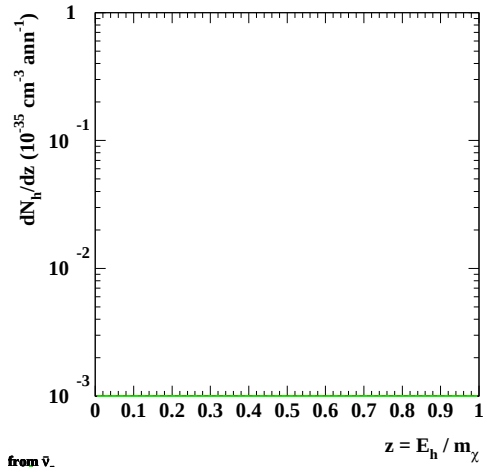
1.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



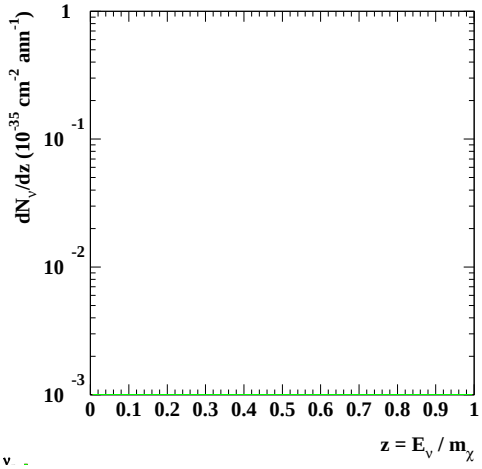


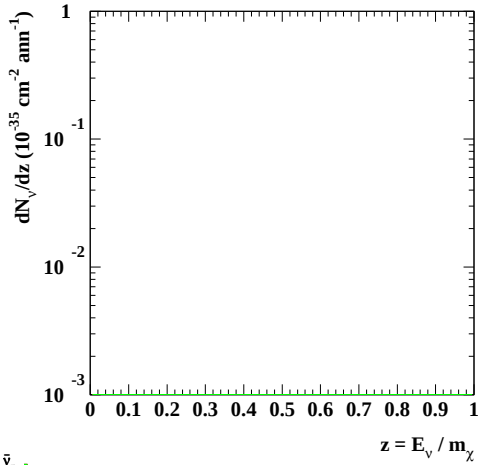
1.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



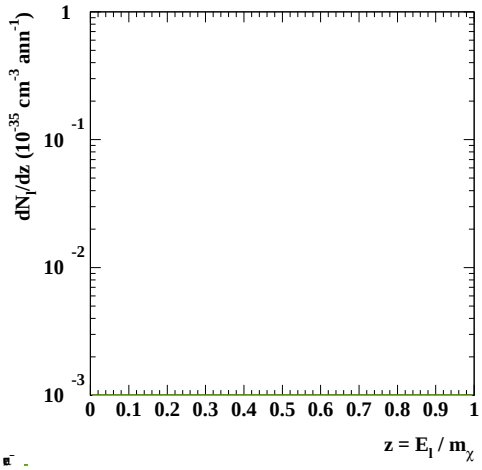


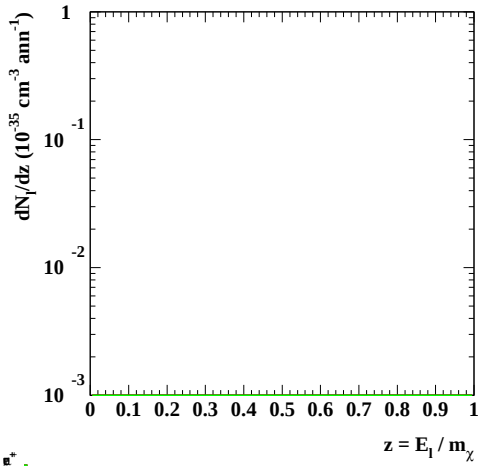
1.3.4 Neutrino fluxes at detector (Earth)



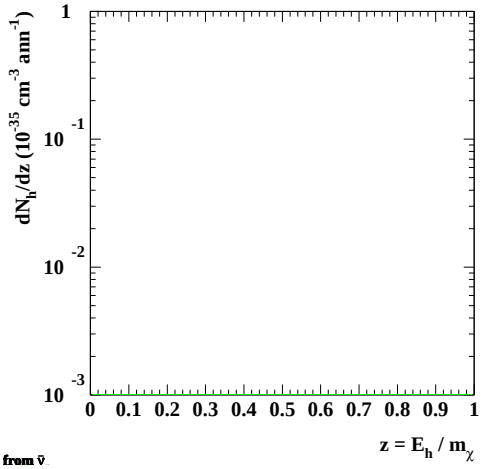


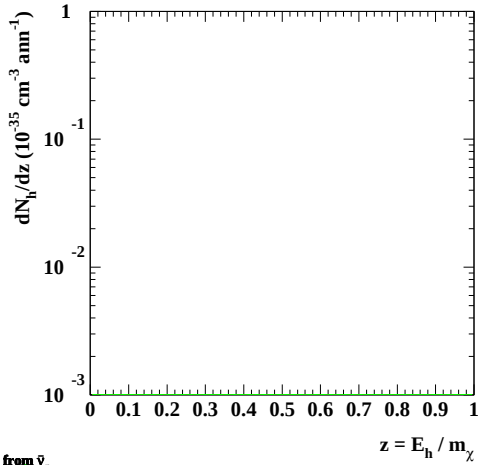
1.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



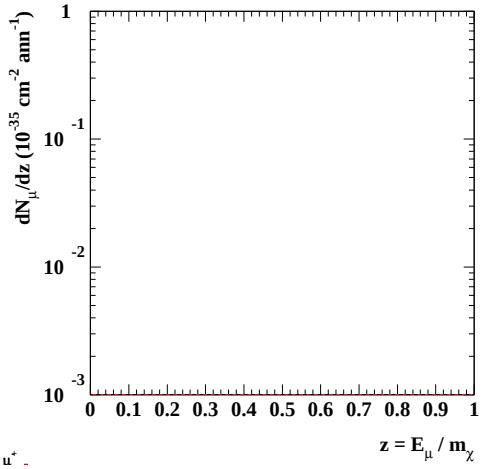


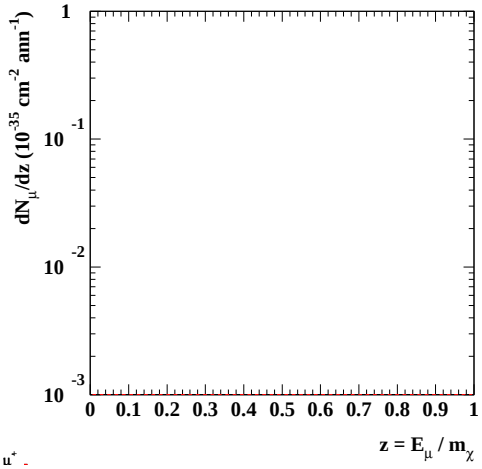
1.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





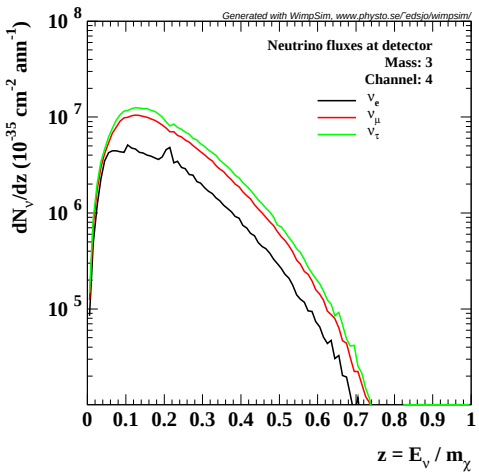
1.3.7 Muons at detector (Sun/Earth)

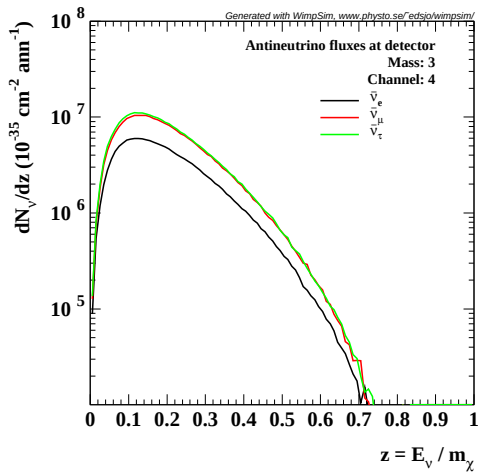




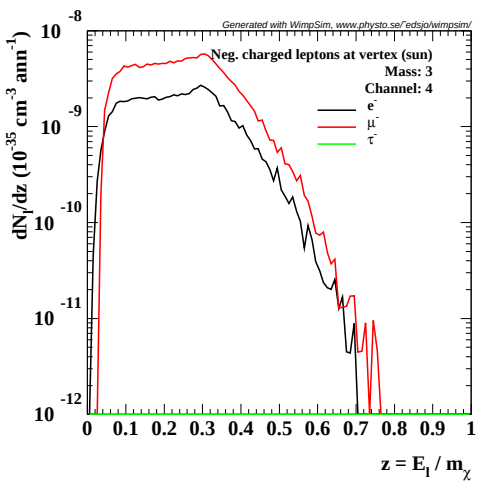
1.4 Channel 4 – $c\bar{c}$

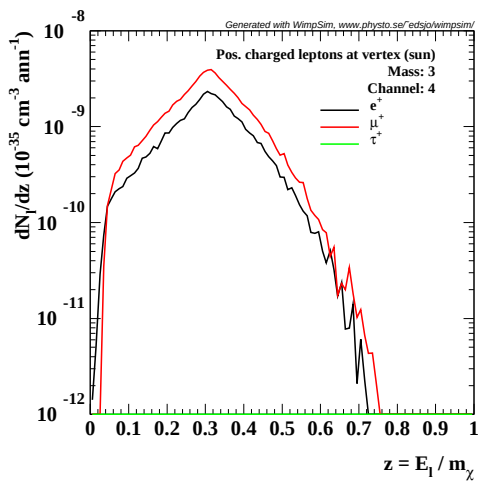
1.4.1 Neutrino fluxes at detector (Sun)



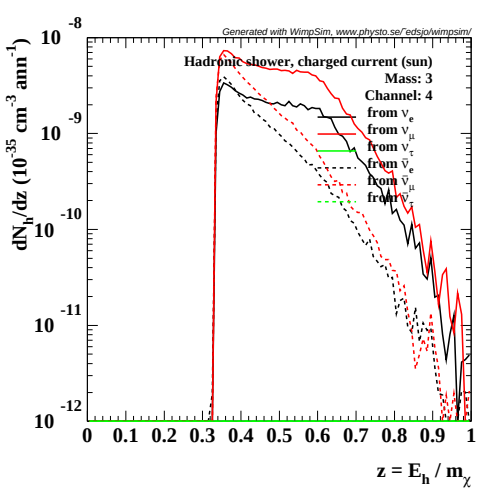


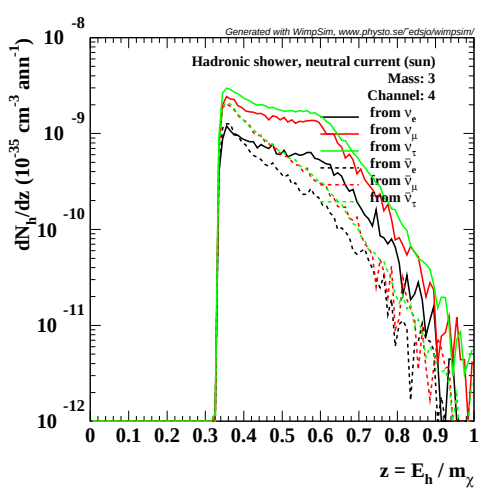
1.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



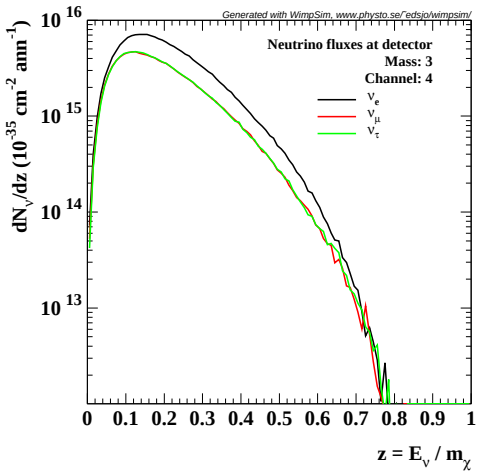


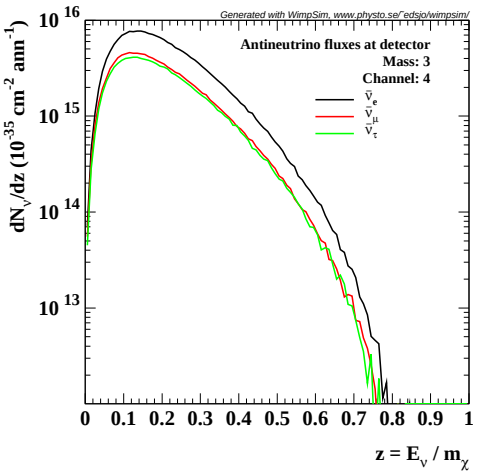
1.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



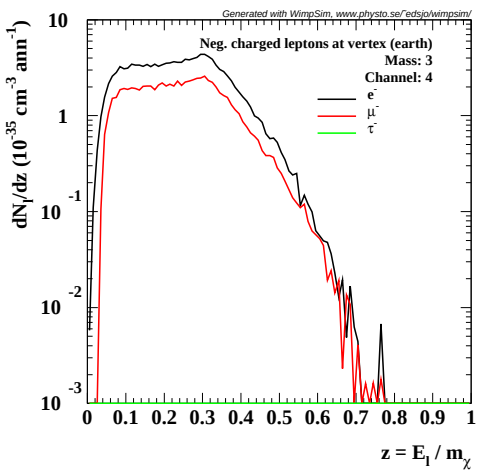


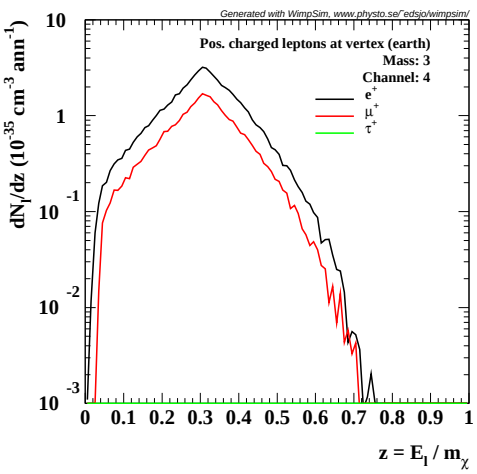
1.4.4 Neutrino fluxes at detector (Earth)



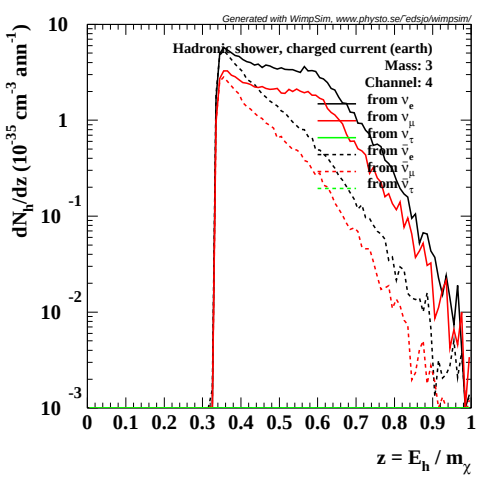


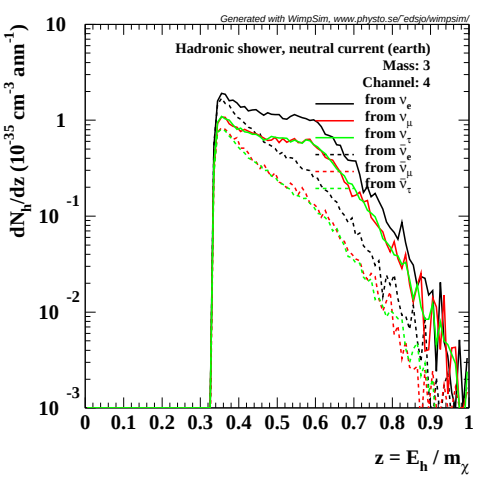
1.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



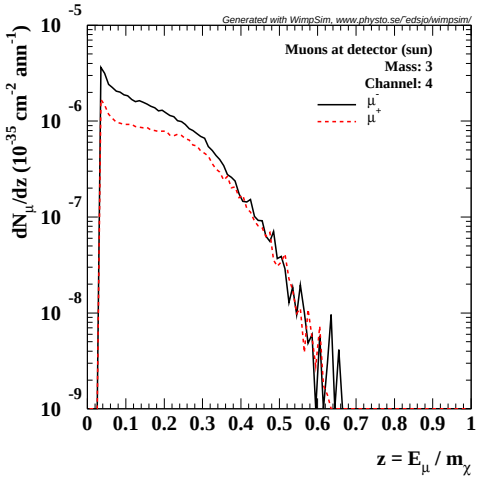


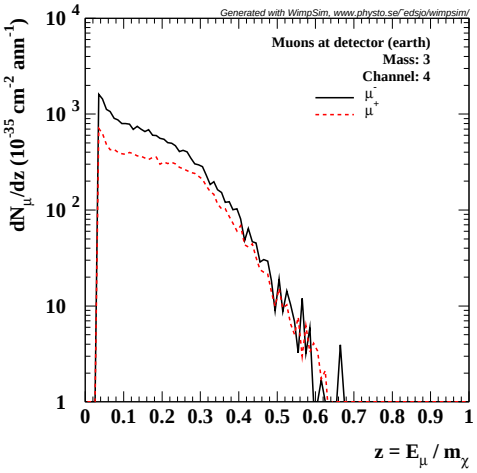
1.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





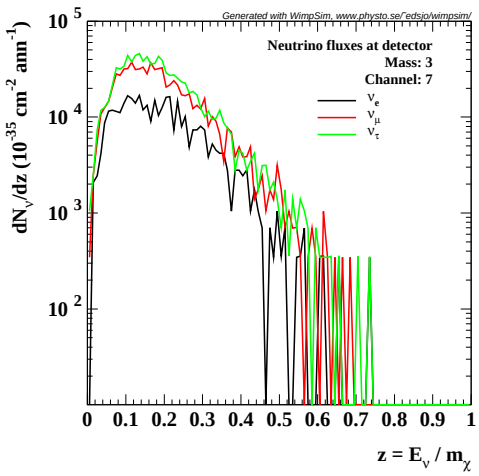
1.4.7 Muons at detector (Sun/Earth)

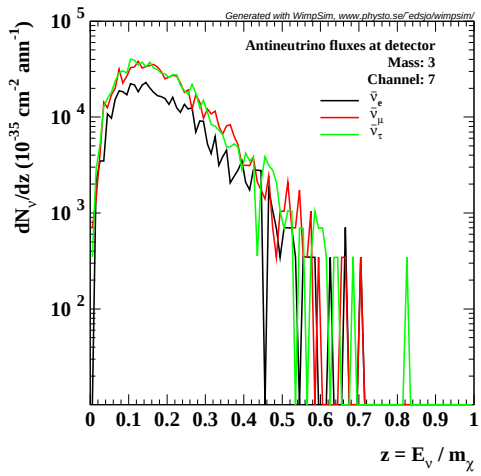




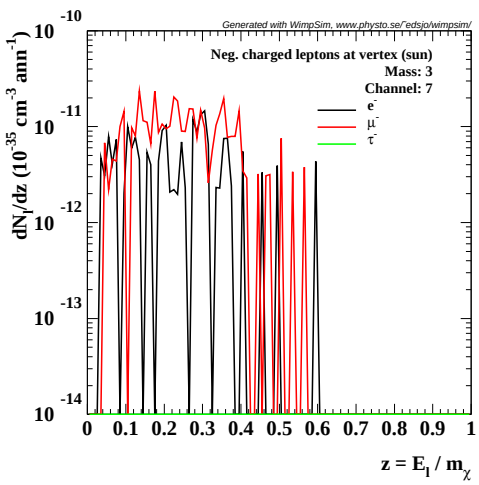
1.5 Channel 7 – gg

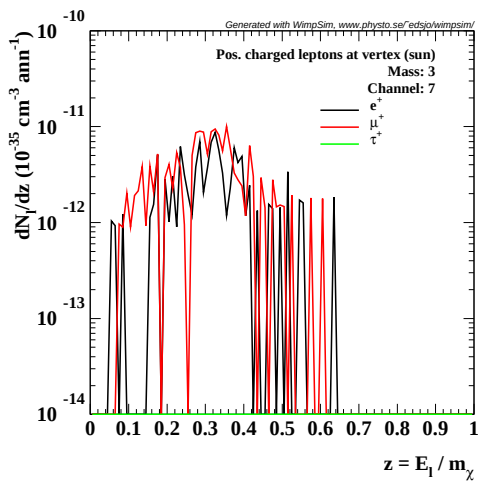
1.5.1 Neutrino fluxes at detector (Sun)



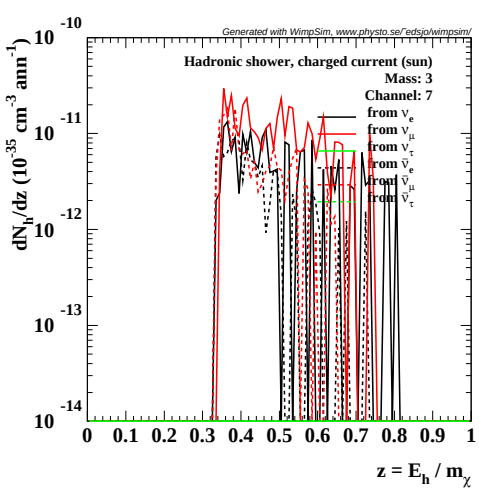


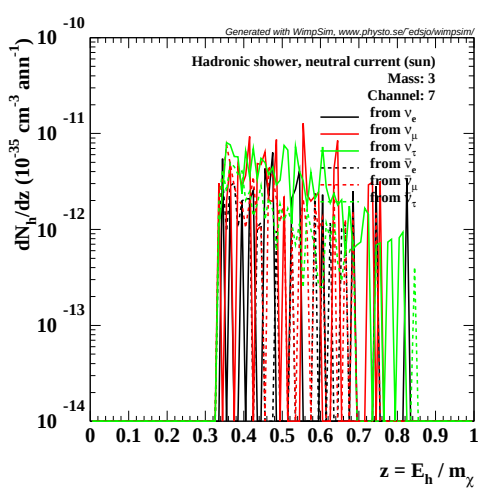
1.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



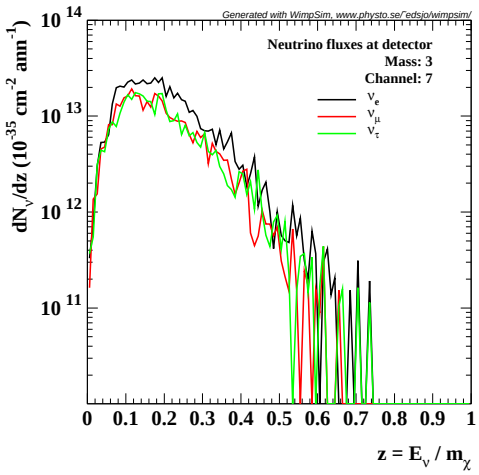


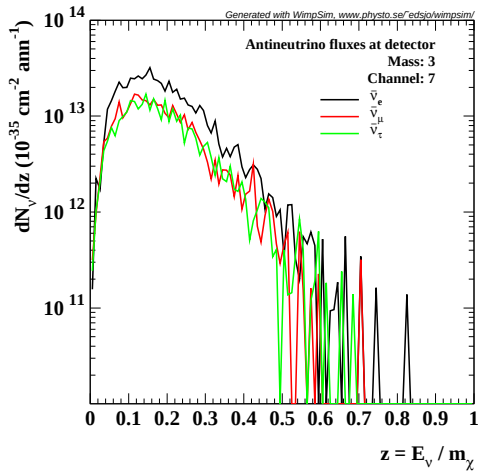
1.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



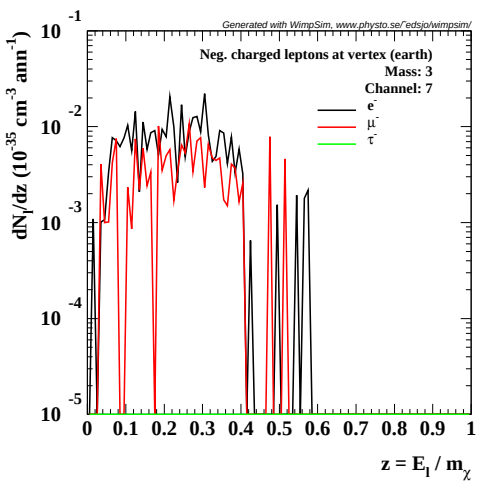


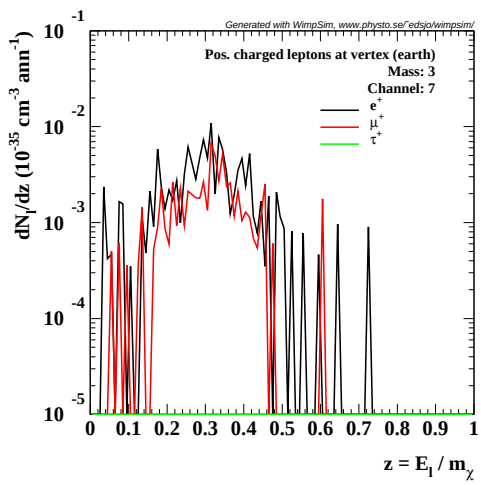
1.5.4 Neutrino fluxes at detector (Earth)



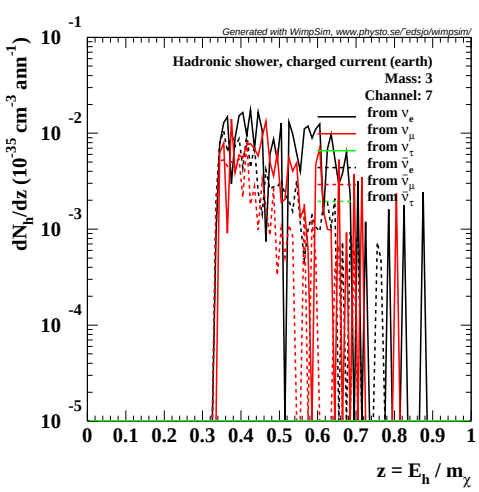


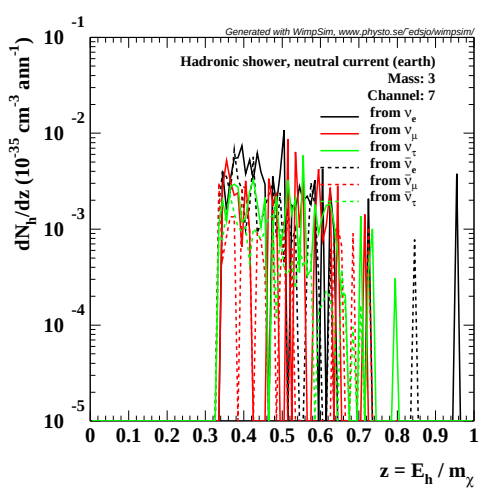
1.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



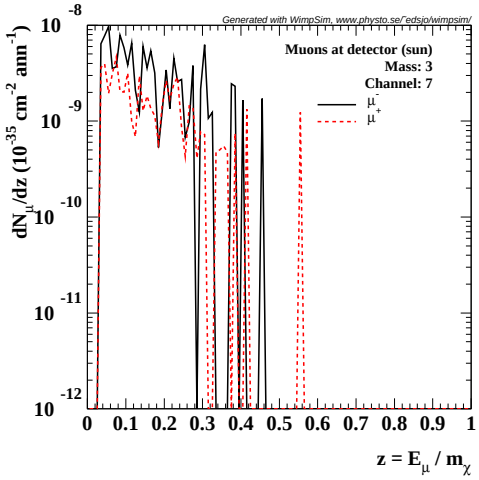


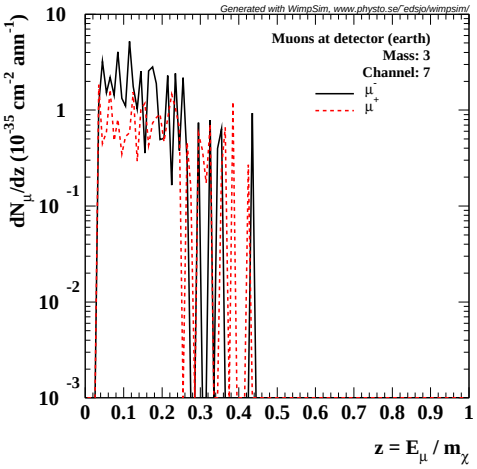
1.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





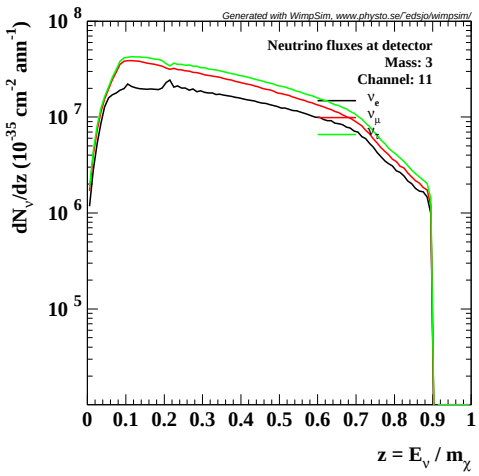
1.5.7 Muons at detector (Sun/Earth)

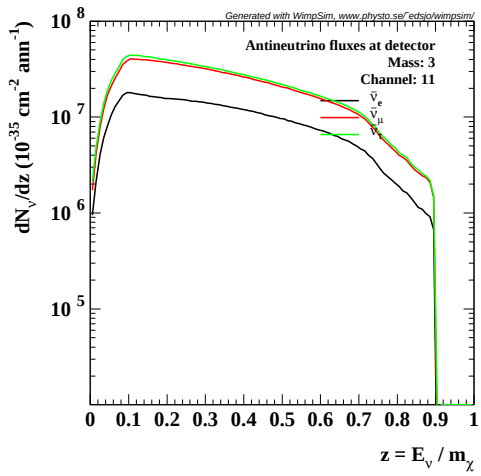




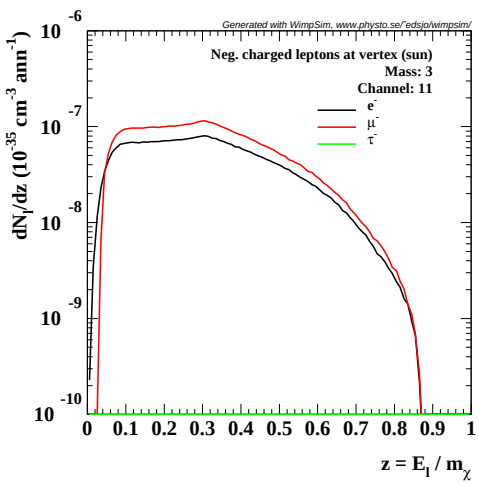
1.6 Channel 11 – $\tau^-\tau^+$

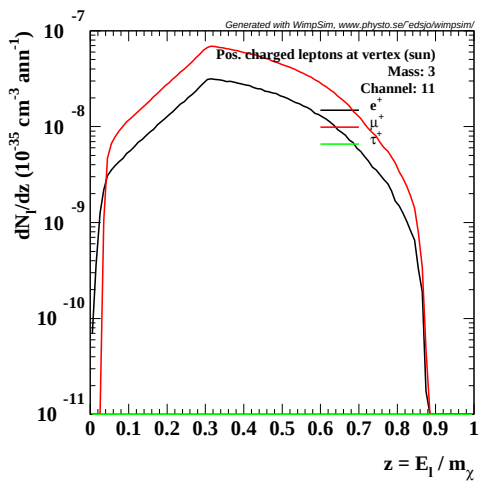
1.6.1 Neutrino fluxes at detector (Sun)



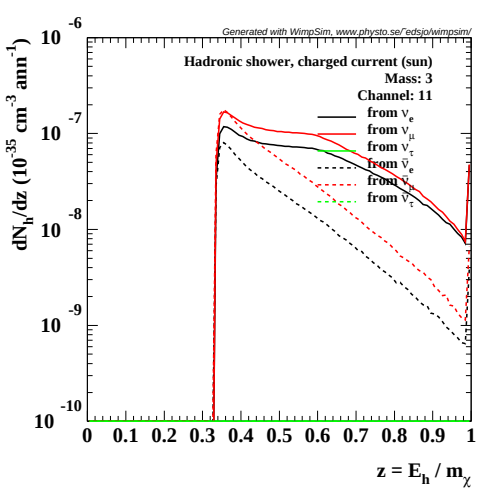


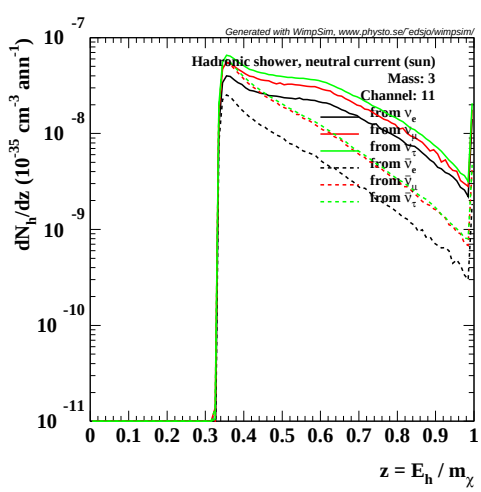
1.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



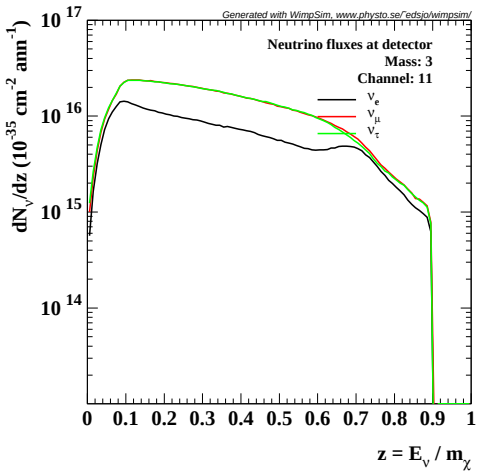


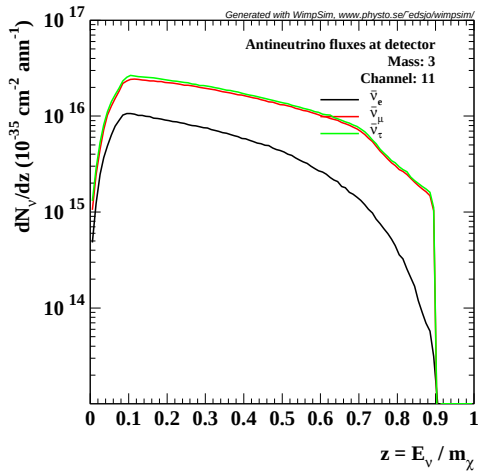
1.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



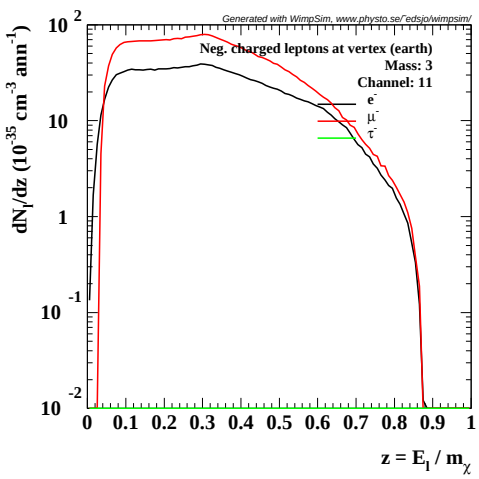


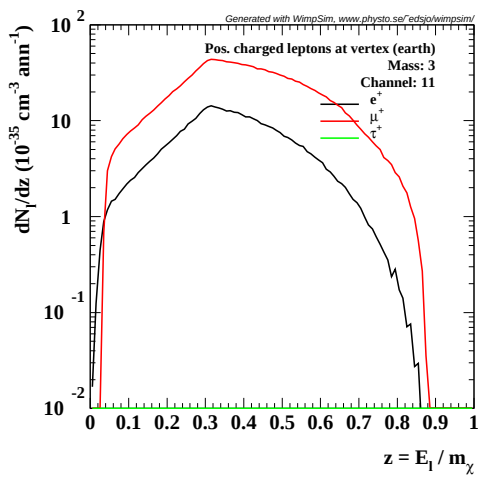
1.6.4 Neutrino fluxes at detector (Earth)



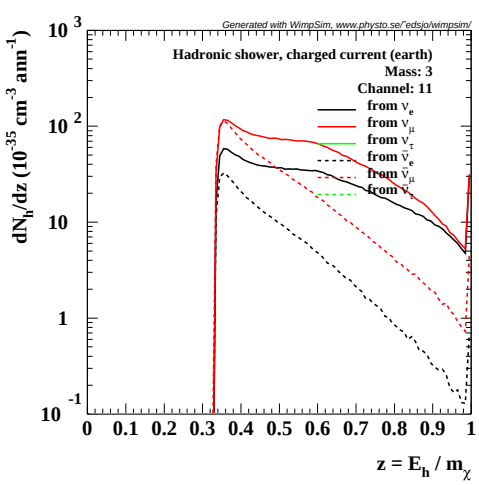


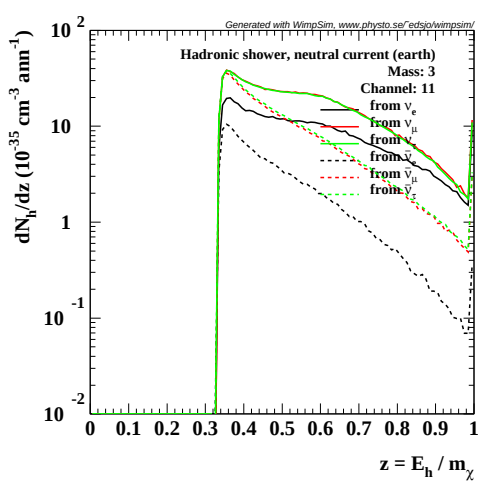
1.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



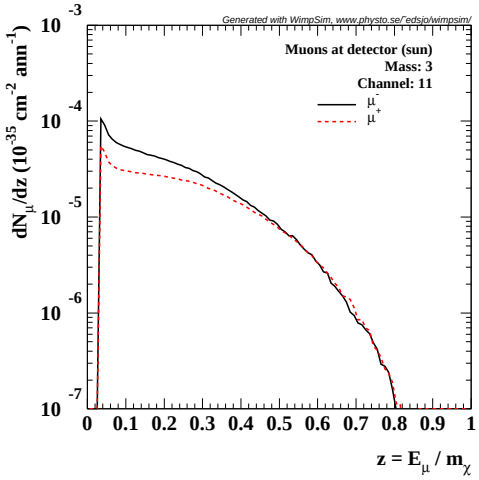


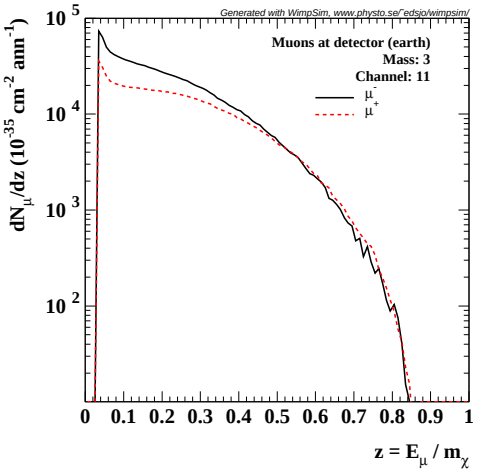
1.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





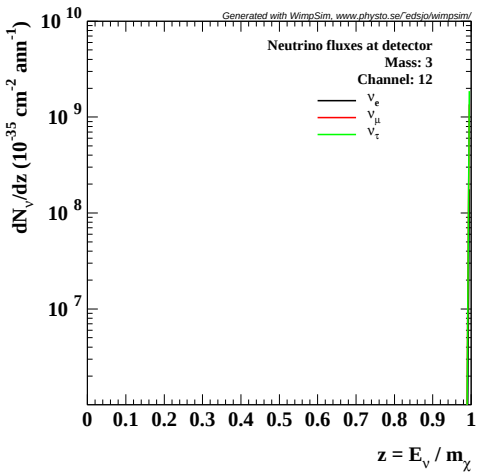
1.6.7 Muons at detector (Sun/Earth)

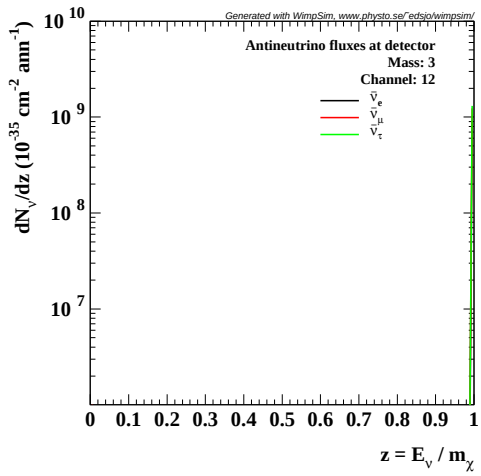




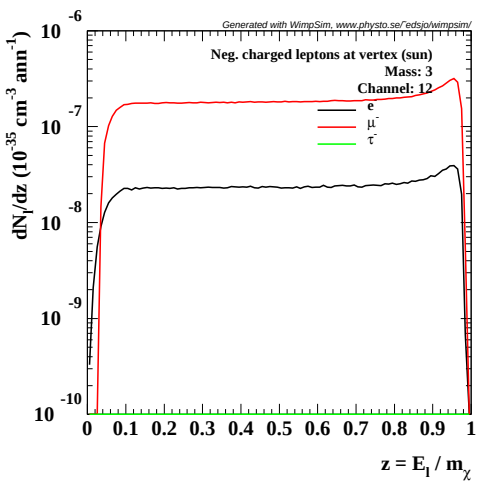
1.7 Channel 12 – $\nu_e\bar{\nu}_e$

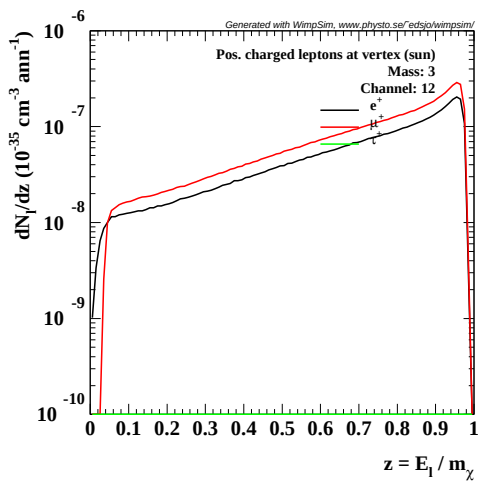
1.7.1 Neutrino fluxes at detector (Sun)



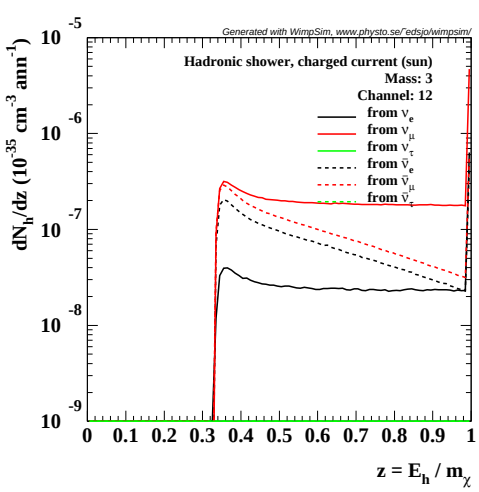


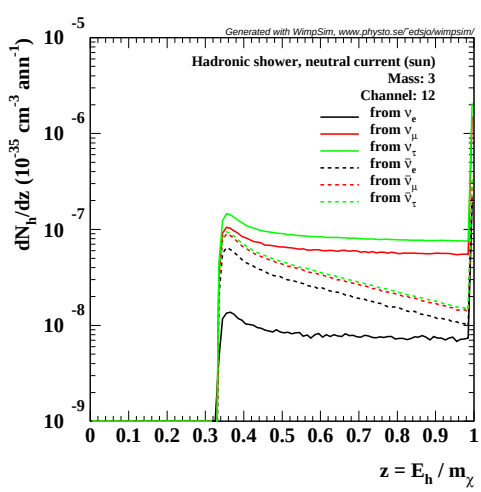
1.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



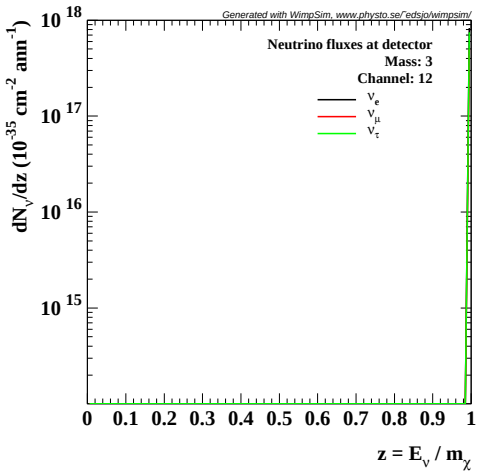


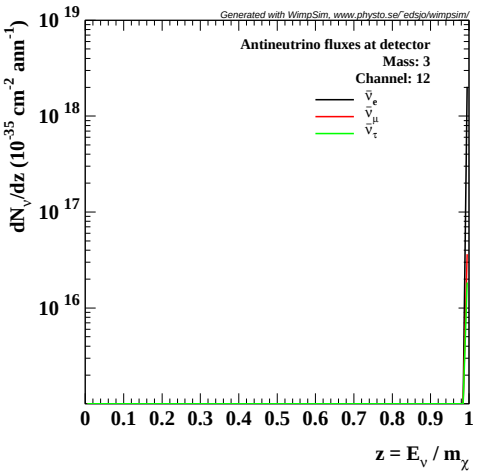
1.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



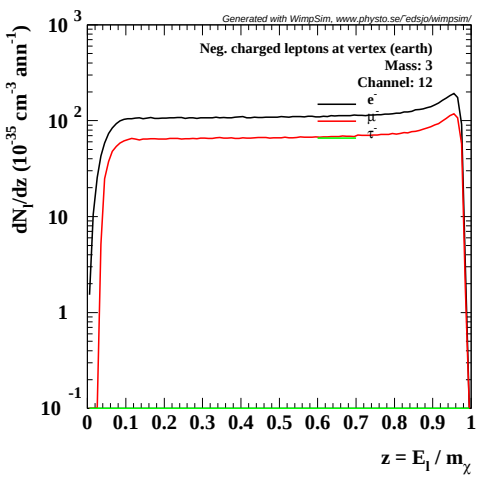


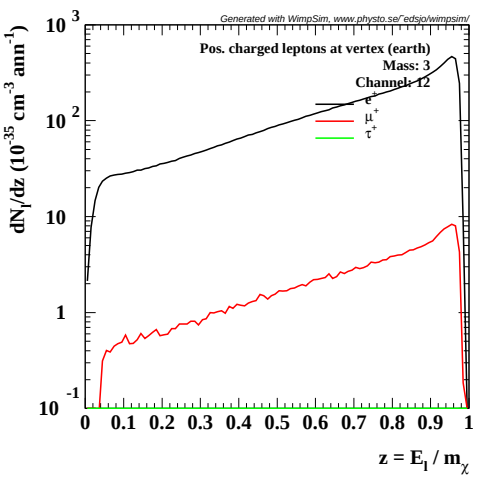
1.7.4 Neutrino fluxes at detector (Earth)



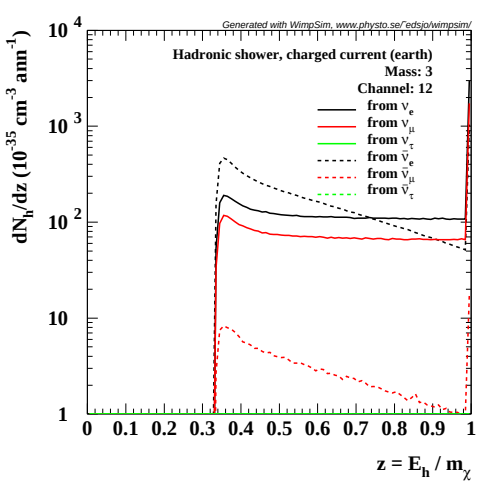


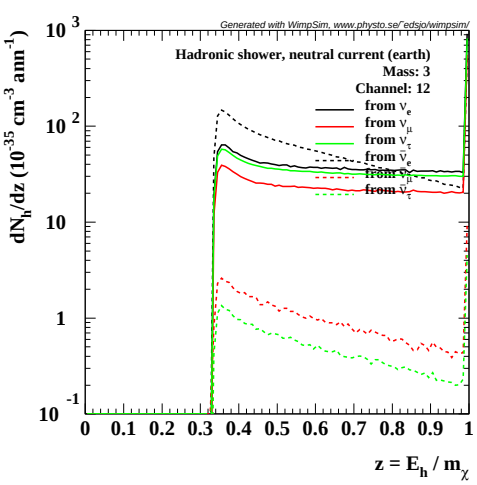
1.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



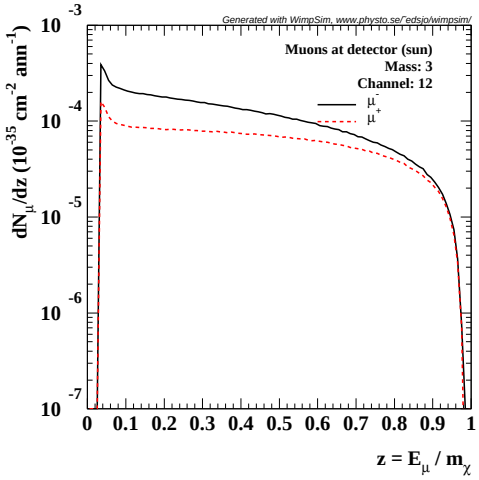


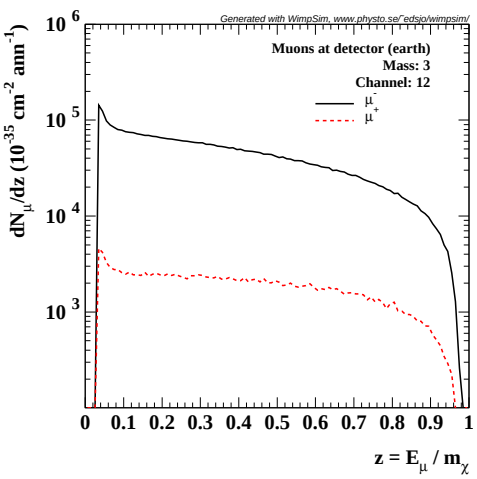
1.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





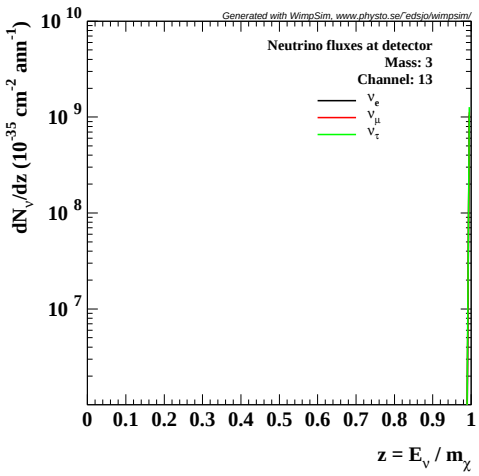
1.7.7 Muons at detector (Sun/Earth)

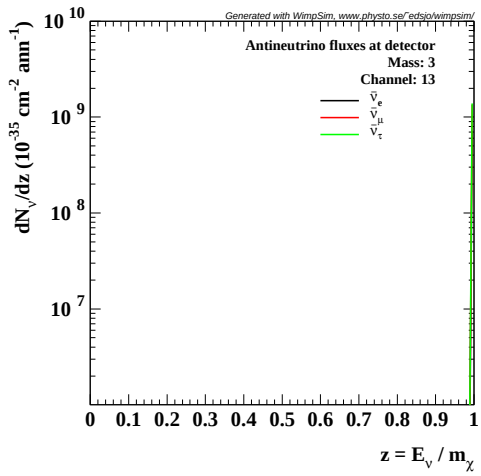




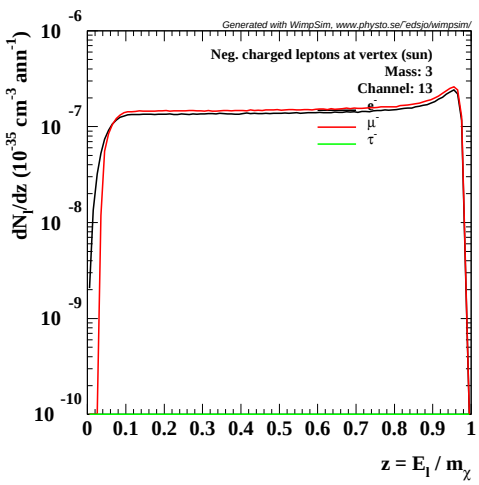
1.8 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

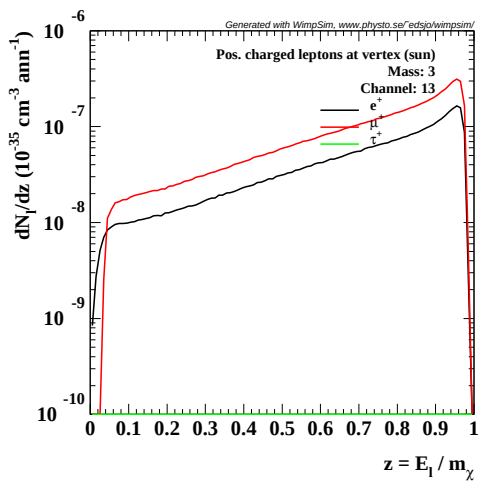
1.8.1 Neutrino fluxes at detector (Sun)



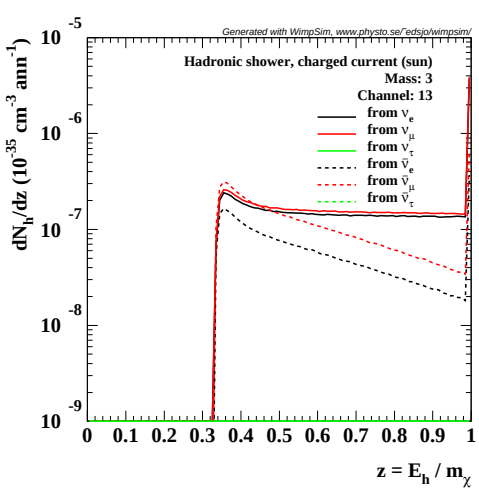


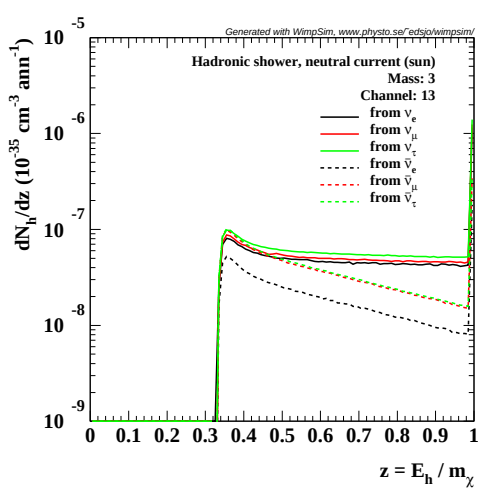
1.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



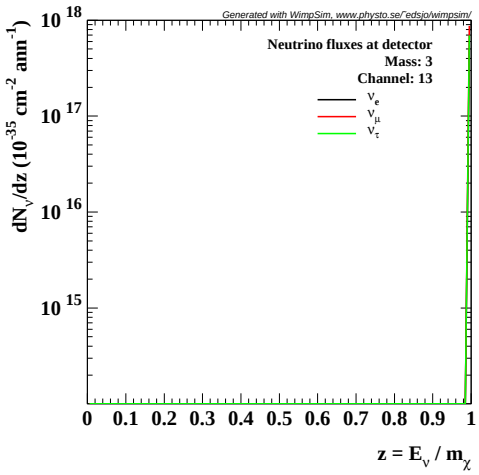


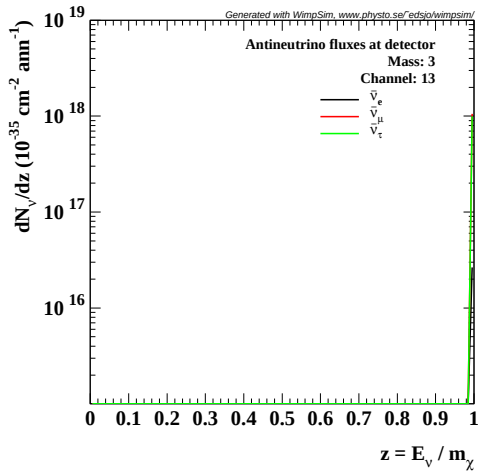
1.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



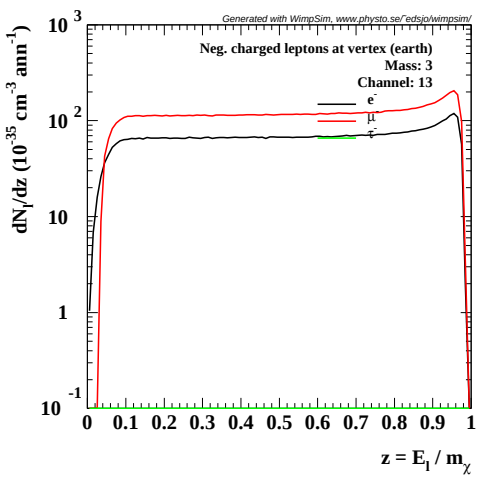


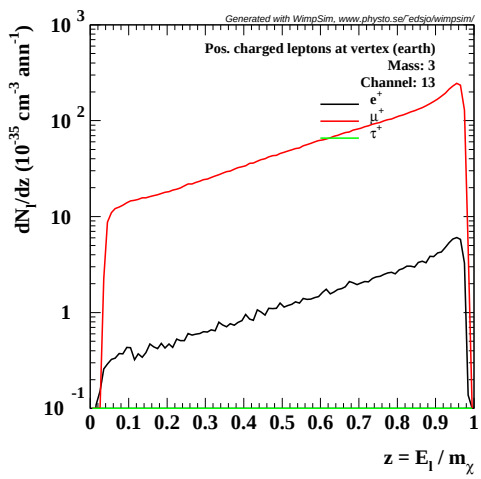
1.8.4 Neutrino fluxes at detector (Earth)



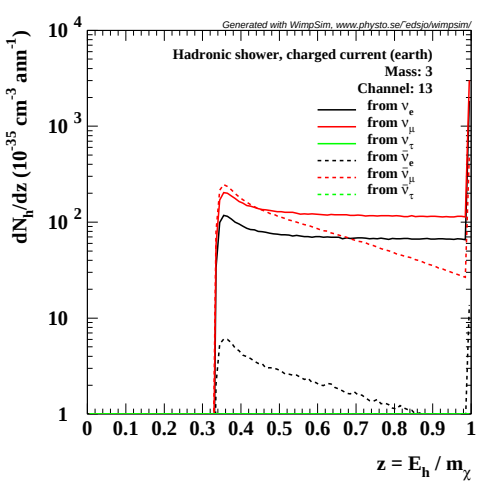


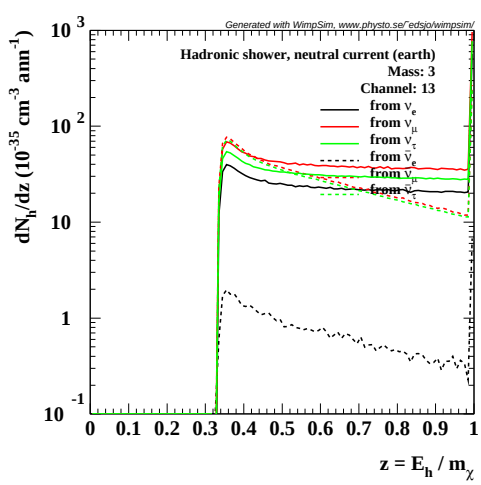
1.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



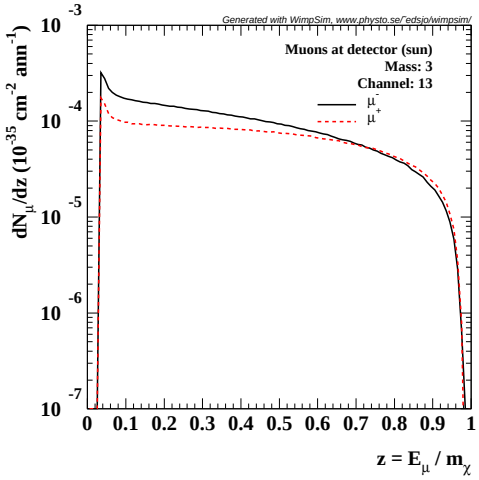


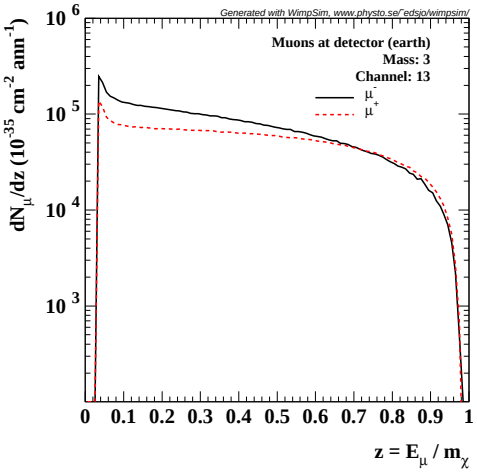
1.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





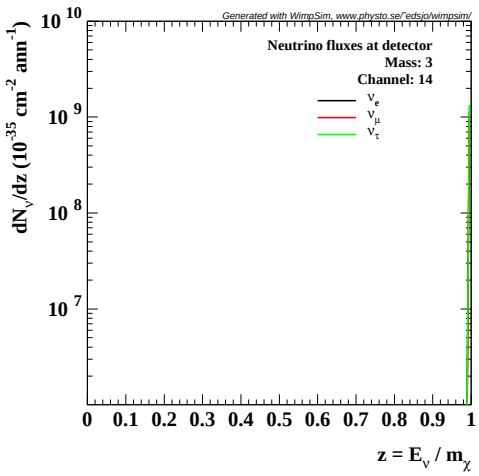
1.8.7 Muons at detector (Sun/Earth)

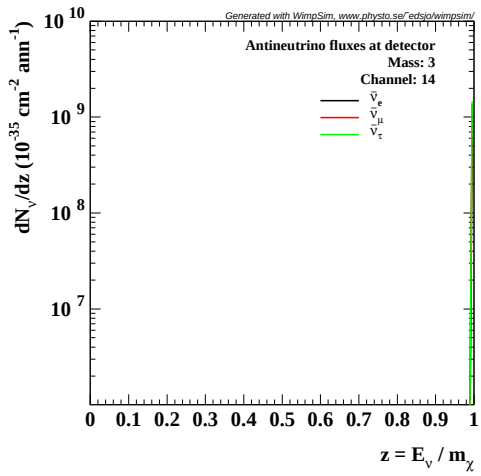




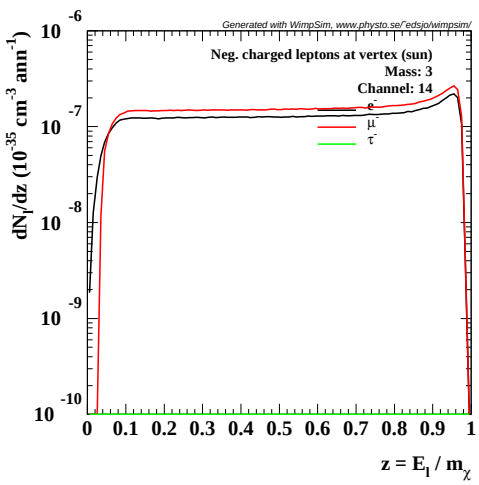
1.9 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

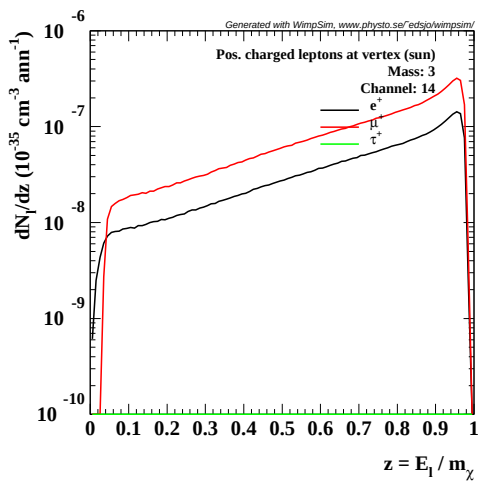
1.9.1 Neutrino fluxes at detector (Sun)



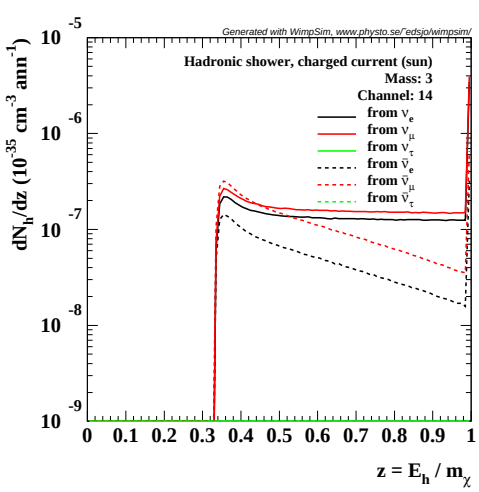


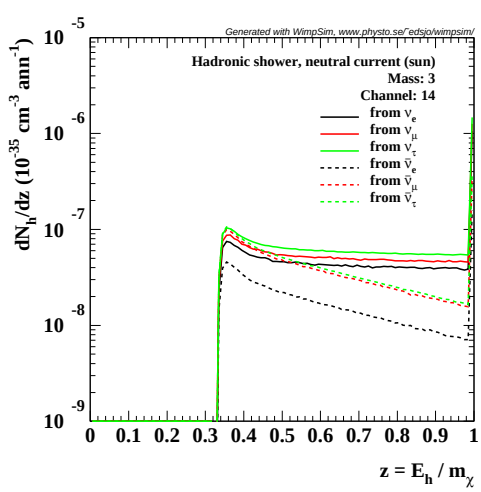
1.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



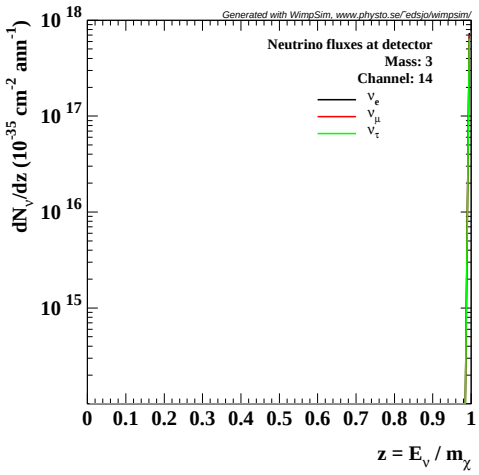


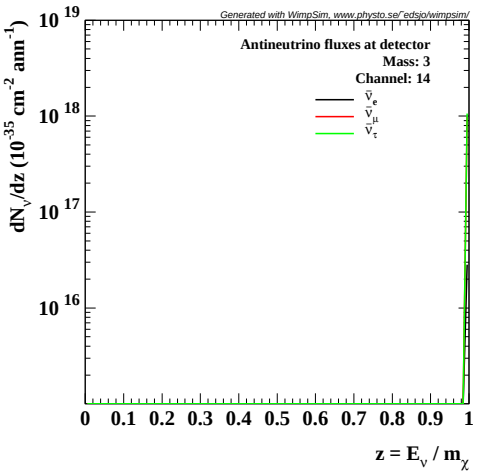
1.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



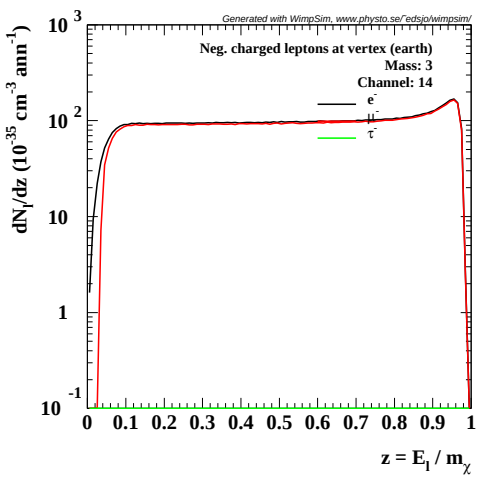


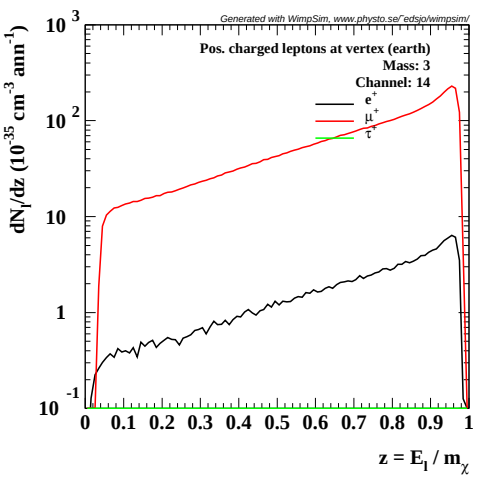
1.9.4 Neutrino fluxes at detector (Earth)



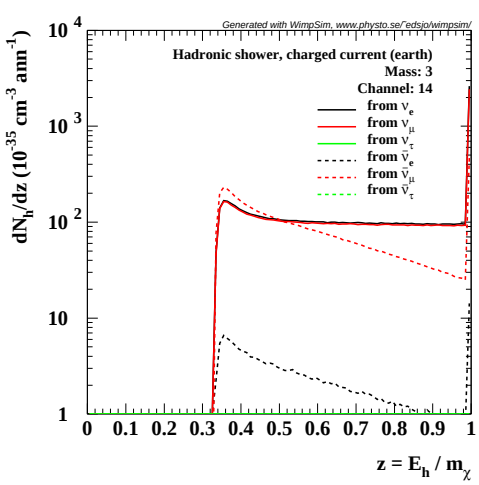


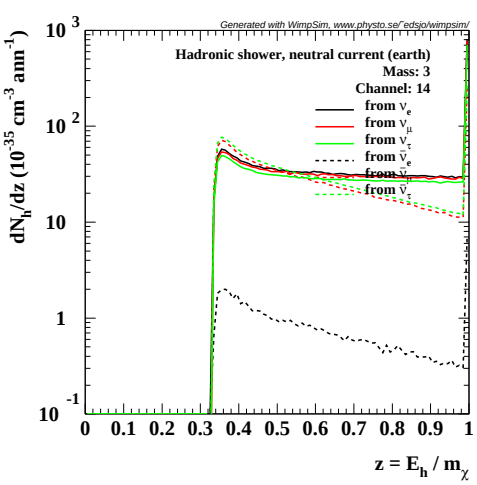
1.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



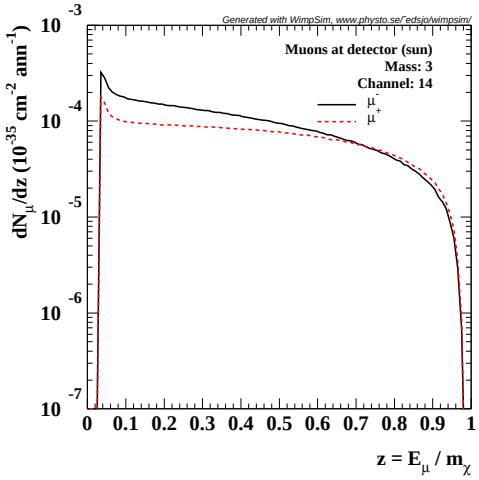


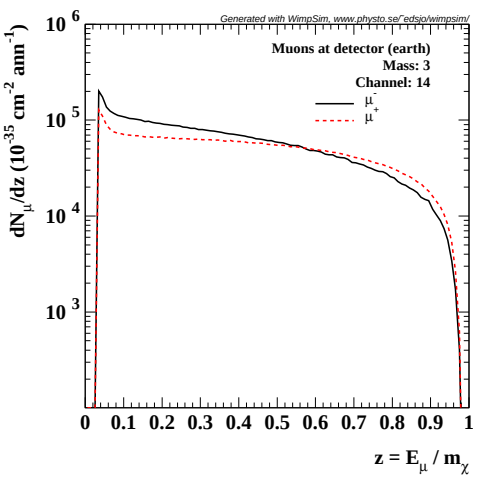
1.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





1.9.7 Muons at detector (Sun/Earth)

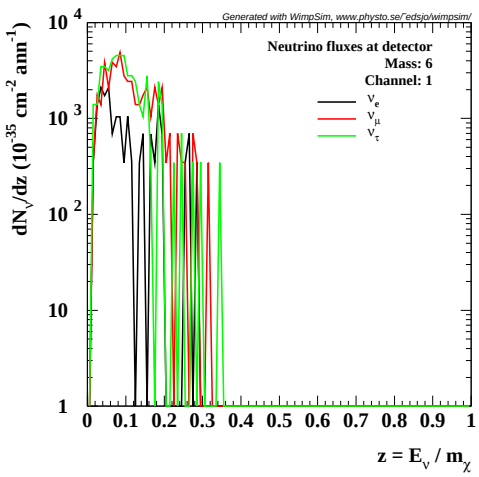


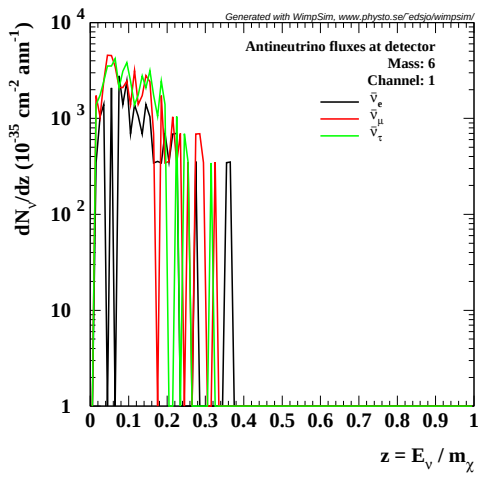


2 Mass 6

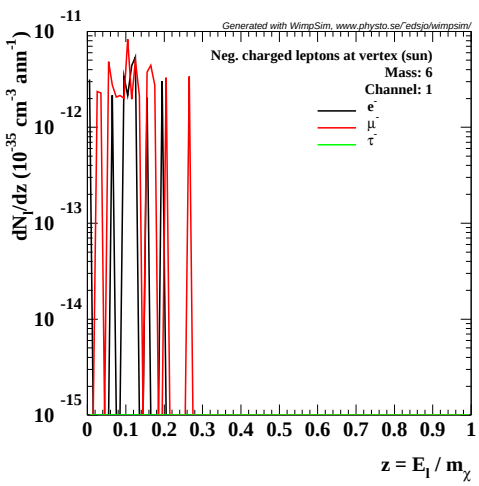
2.1 Channel 1 – $d\bar{d}$

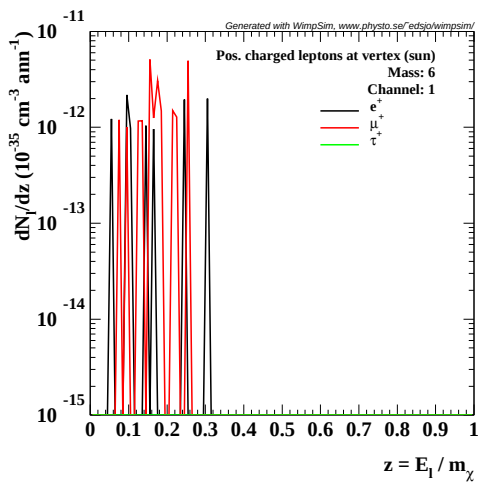
2.1.1 Neutrino fluxes at detector (Sun)



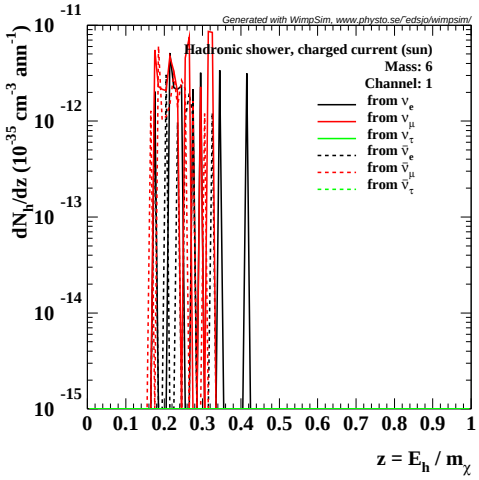


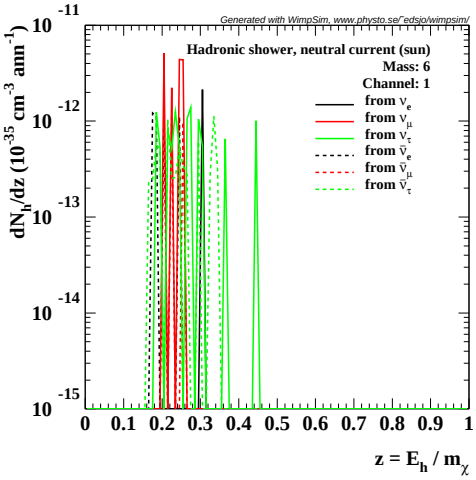
2.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



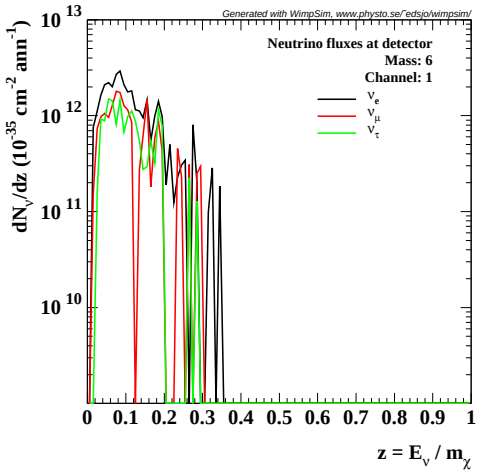


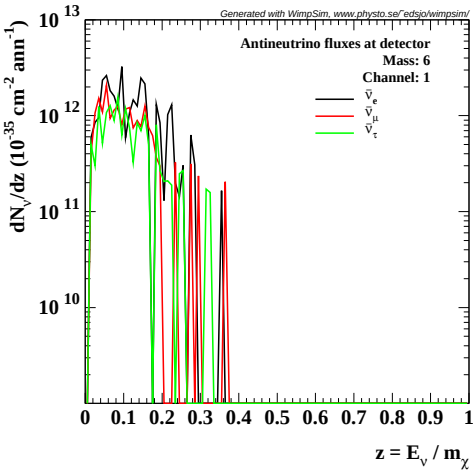
2.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



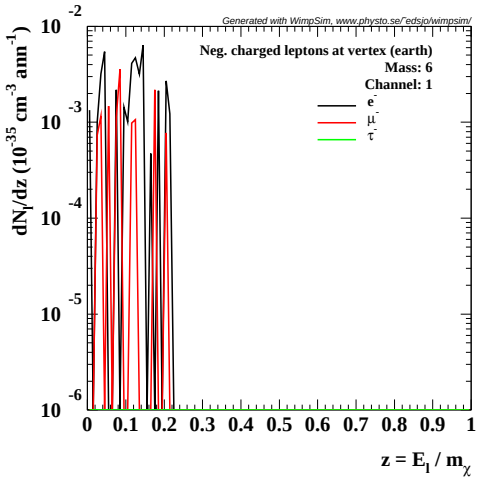


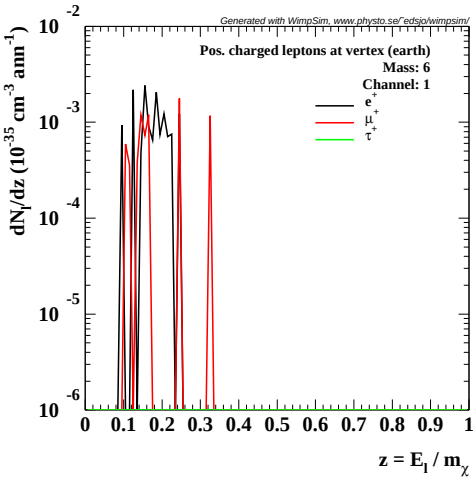
2.1.4 Neutrino fluxes at detector (Earth)



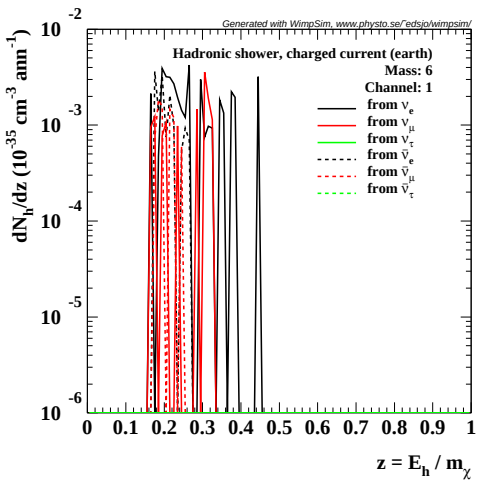


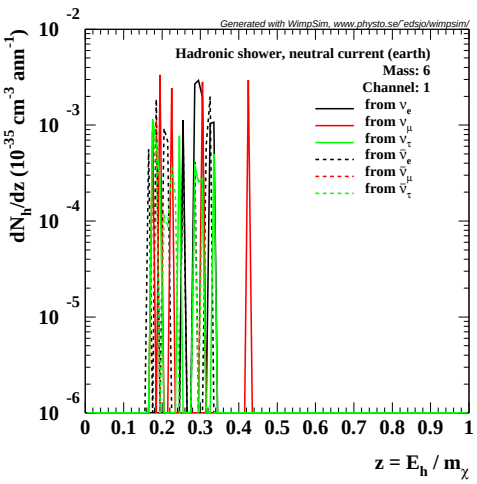
2.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



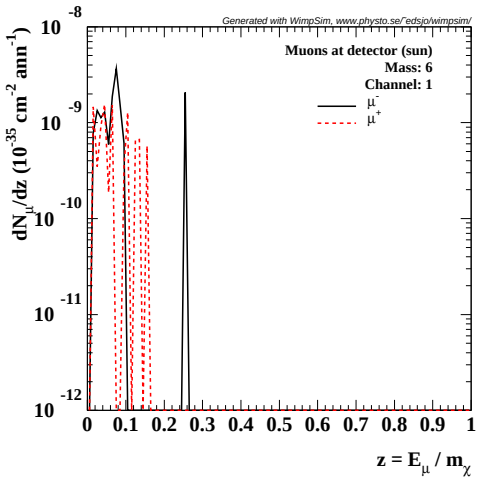


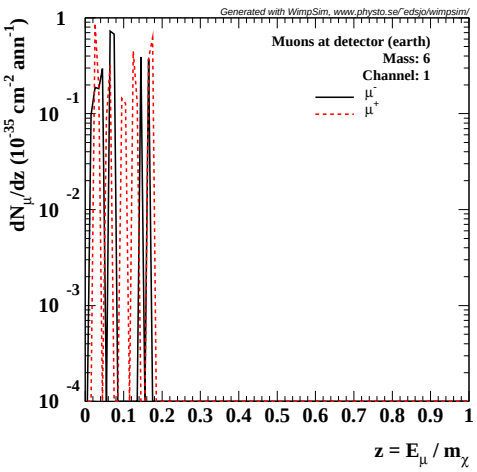
2.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





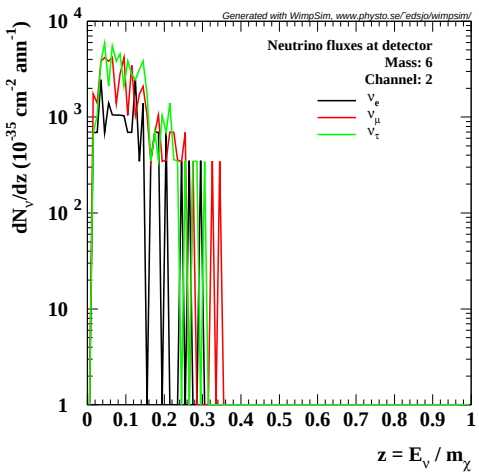
2.1.7 Muons at detector (Sun/Earth)

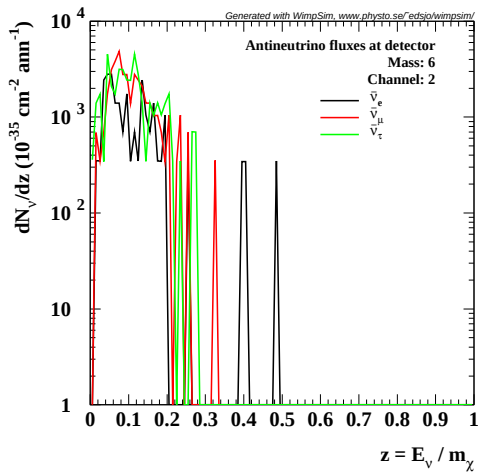




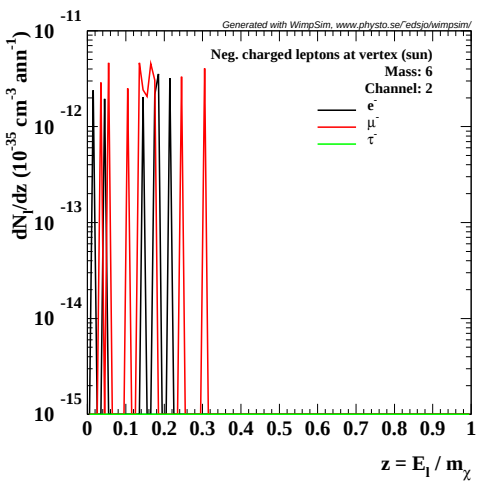
2.2 Channel 2 – $u\bar{u}$

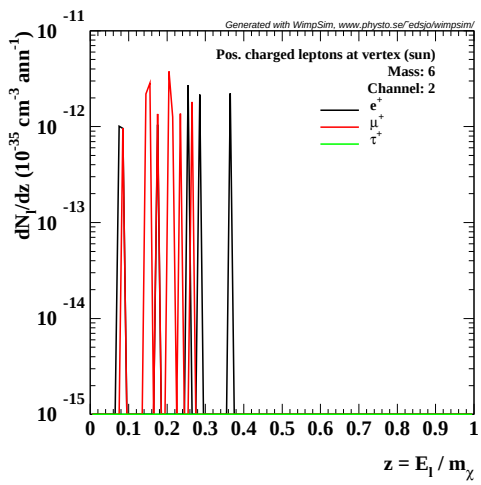
2.2.1 Neutrino fluxes at detector (Sun)



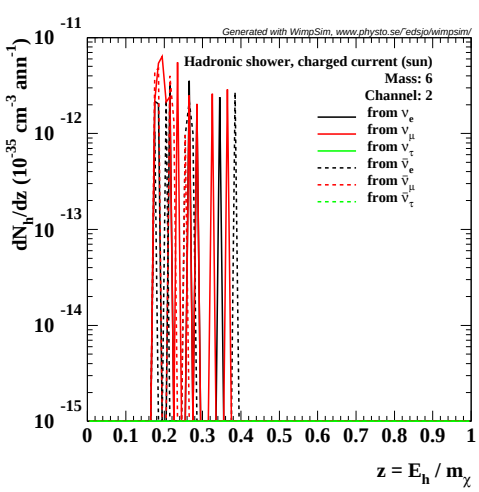


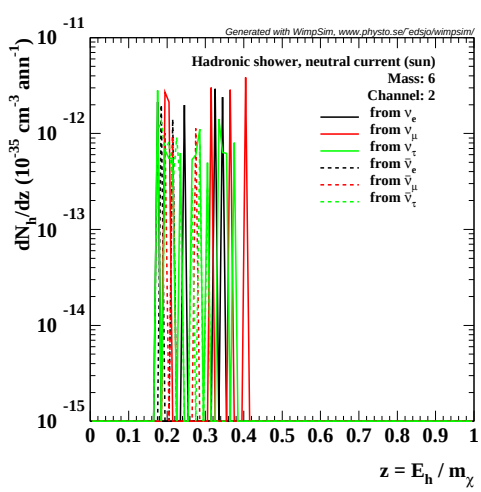
2.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



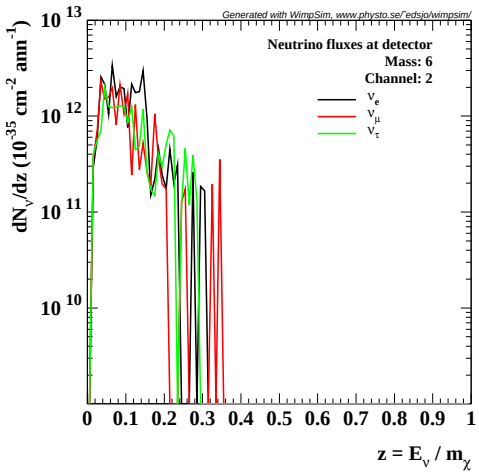


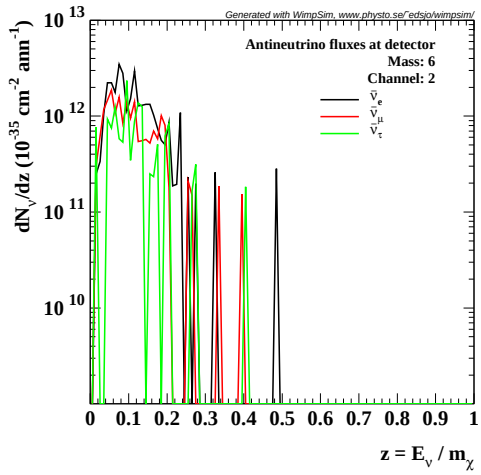
2.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



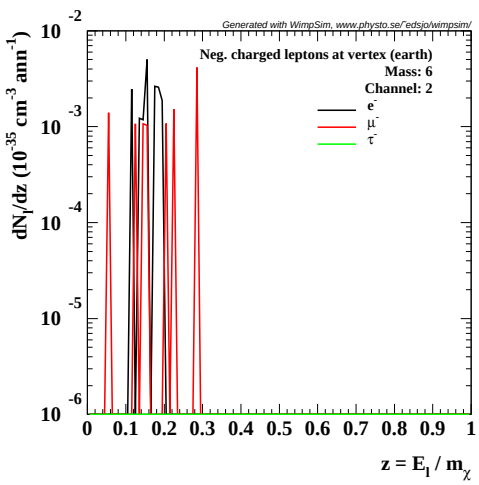


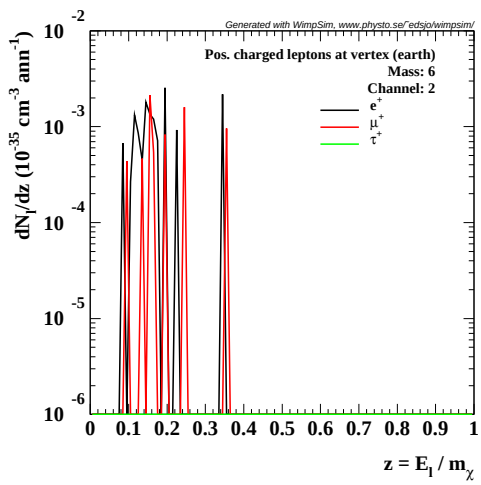
2.2.4 Neutrino fluxes at detector (Earth)



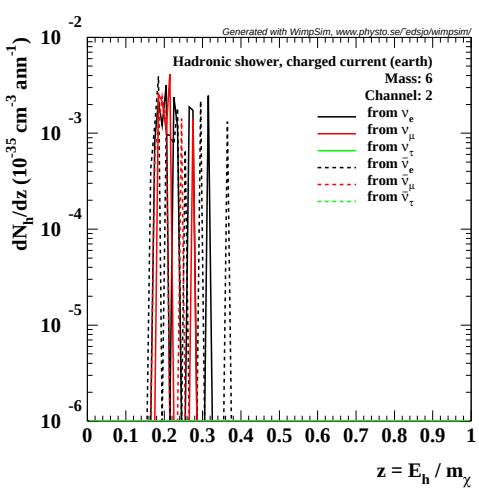


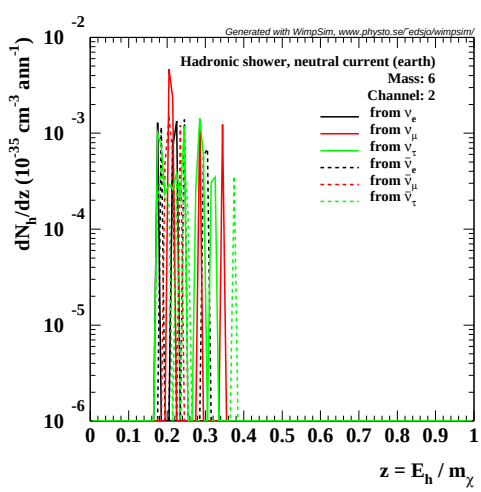
2.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



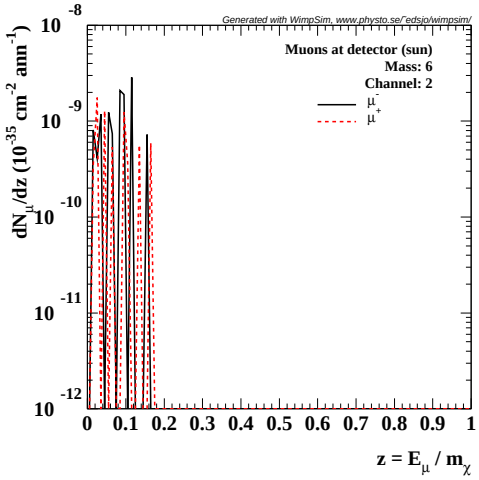


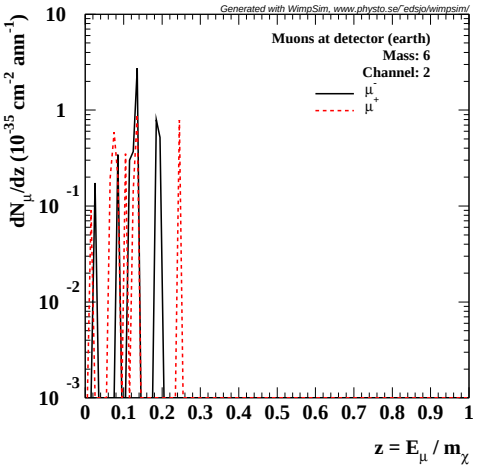
2.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





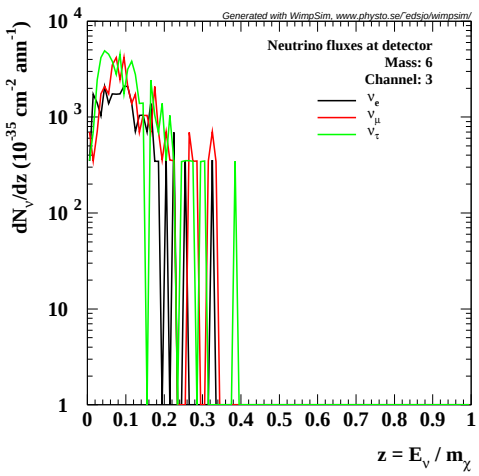
2.2.7 Muons at detector (Sun/Earth)

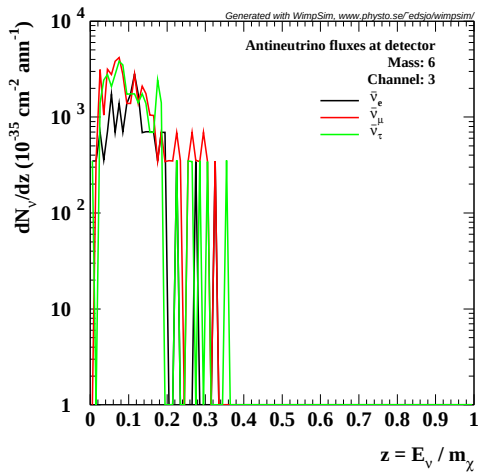




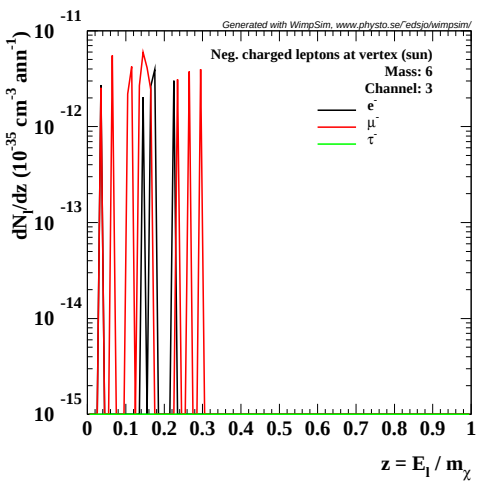
2.3 Channel 3 – $s\bar{s}$

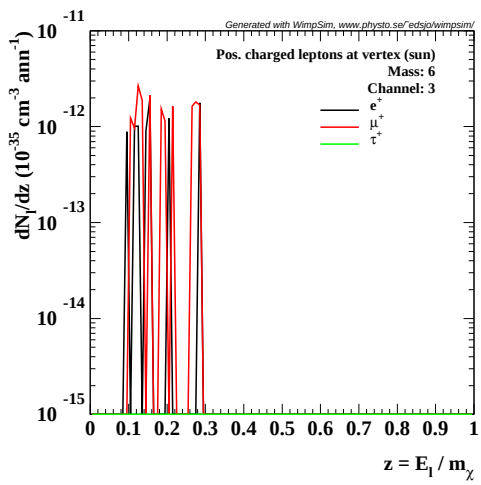
2.3.1 Neutrino fluxes at detector (Sun)



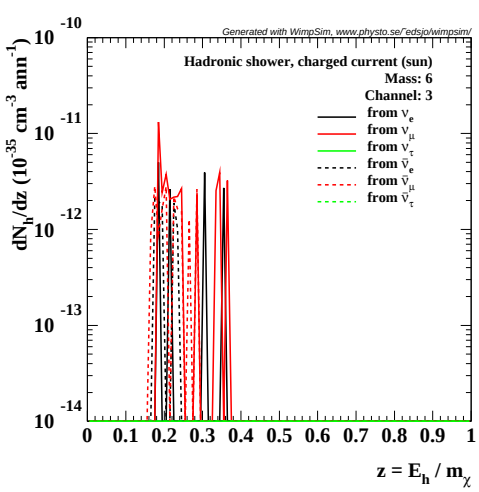


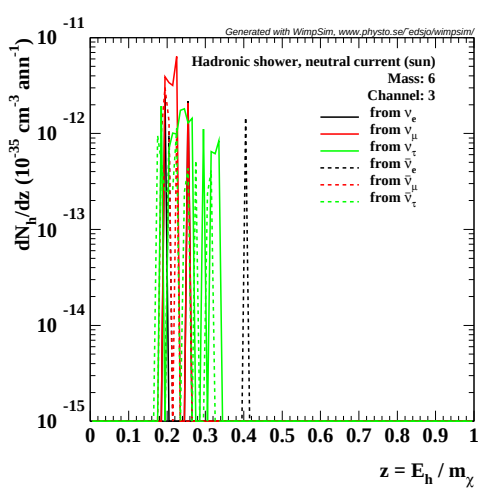
2.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



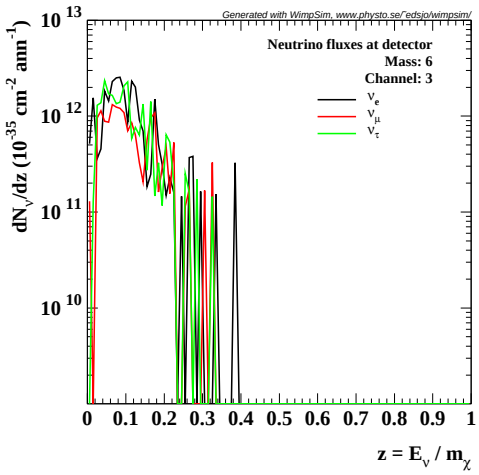


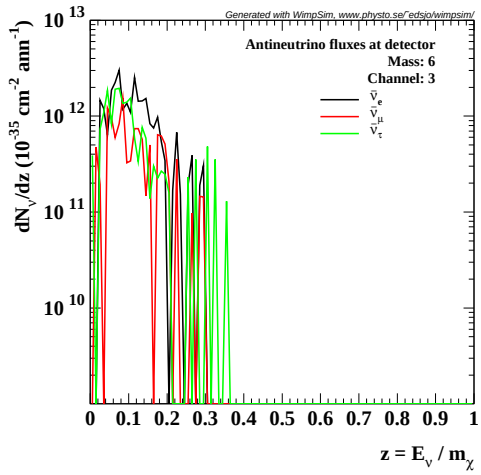
2.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



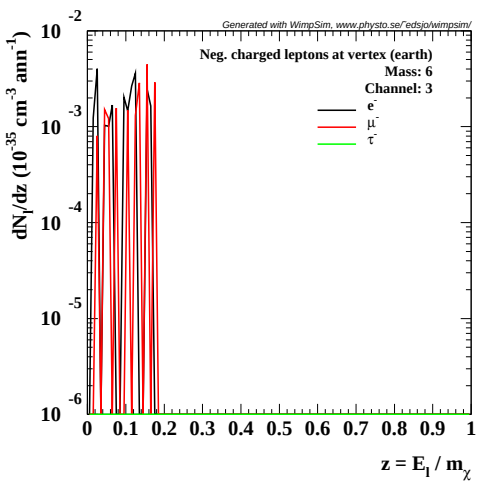


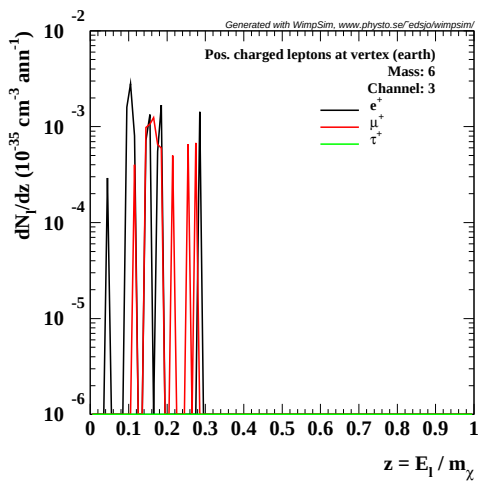
2.3.4 Neutrino fluxes at detector (Earth)



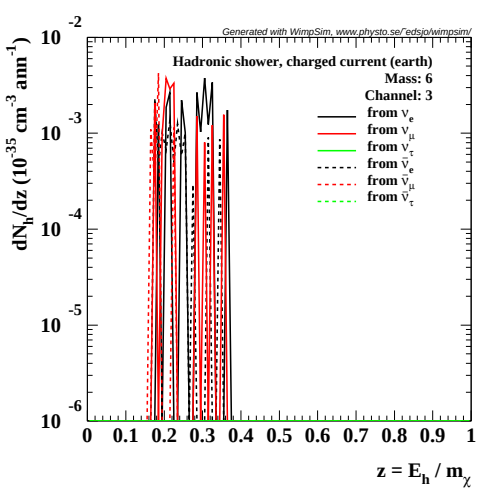


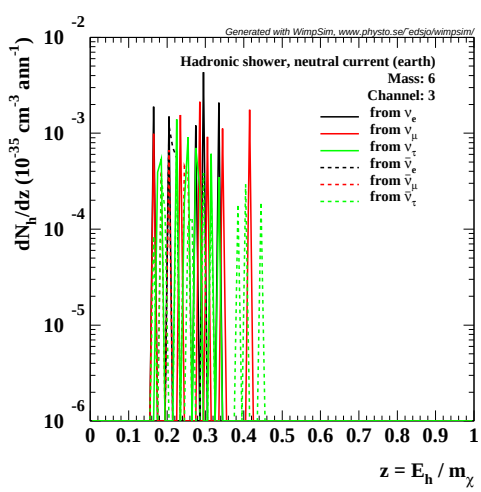
2.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



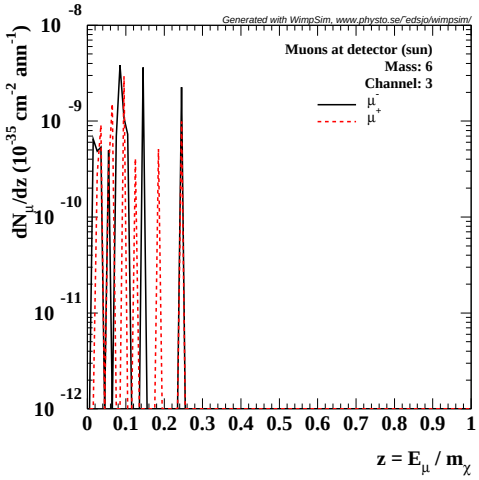


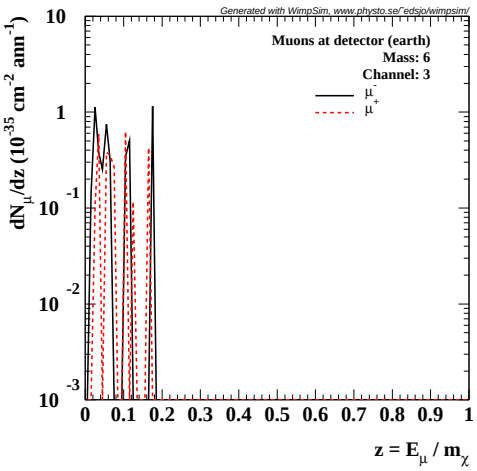
2.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





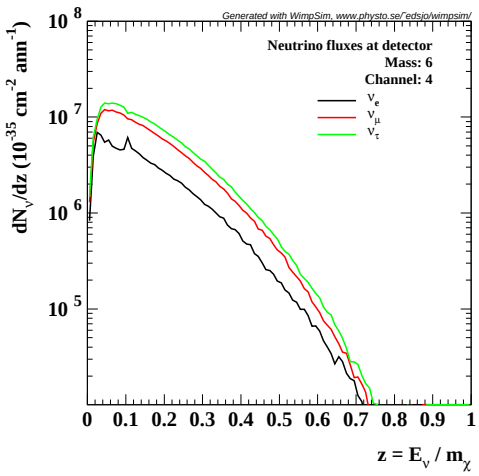
2.3.7 Muons at detector (Sun/Earth)

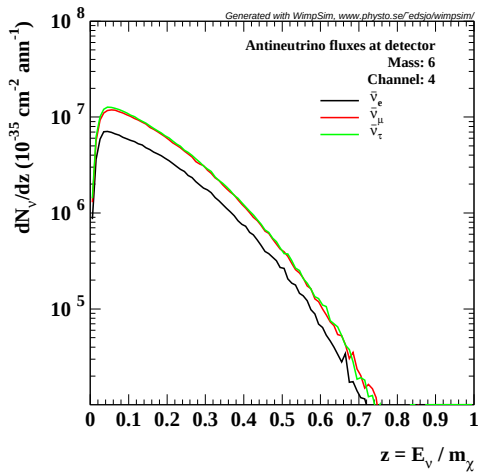




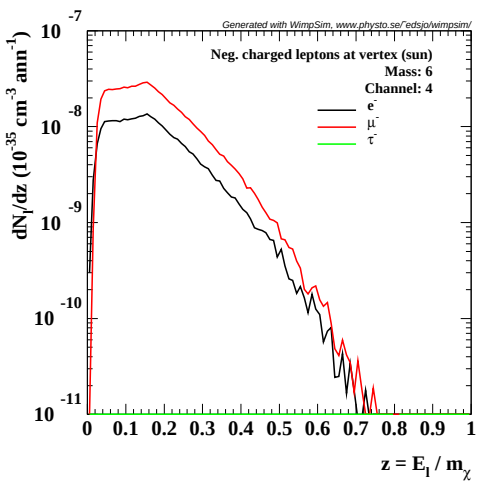
2.4 Channel 4 – $c\bar{c}$

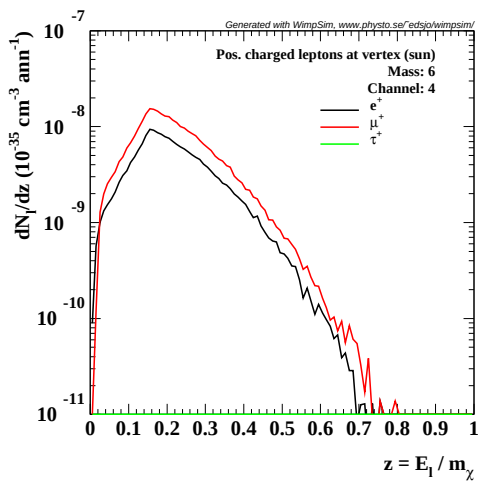
2.4.1 Neutrino fluxes at detector (Sun)



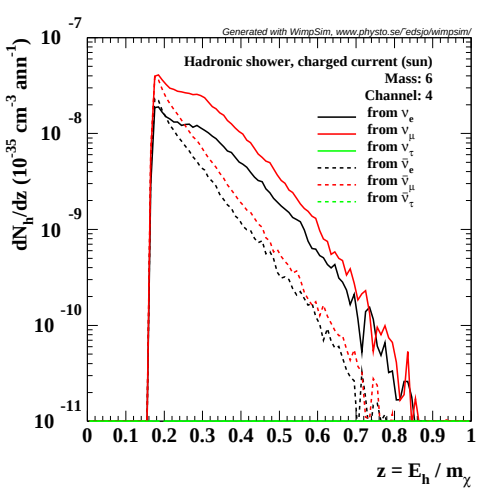


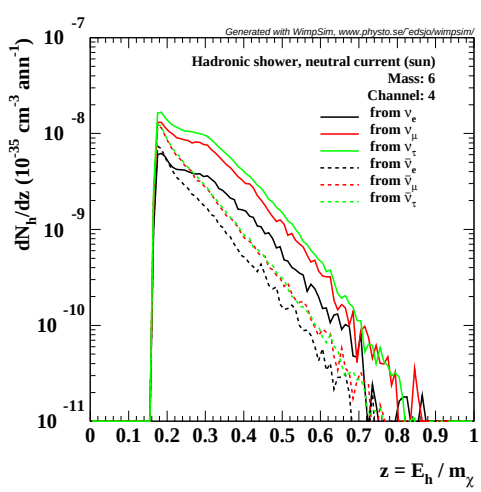
2.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



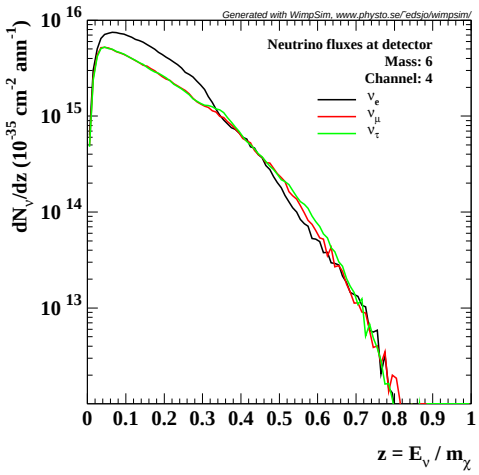


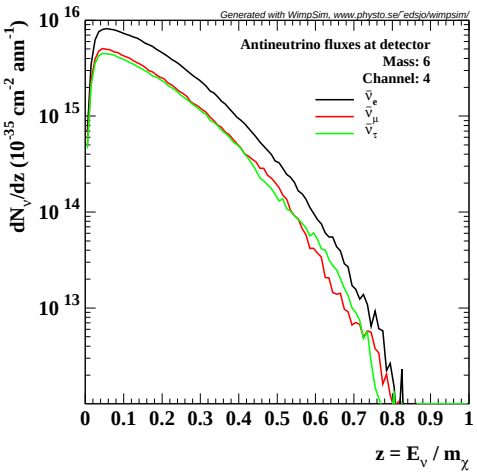
2.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



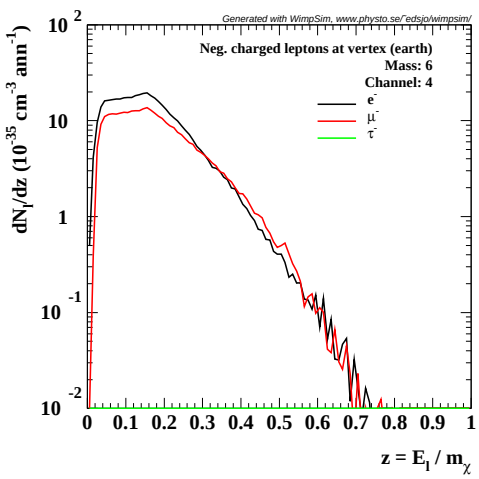


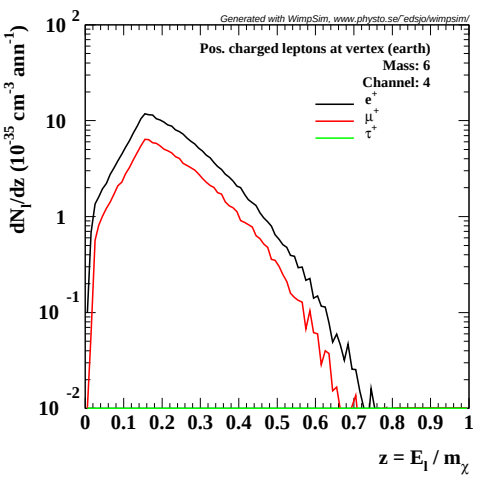
2.4.4 Neutrino fluxes at detector (Earth)



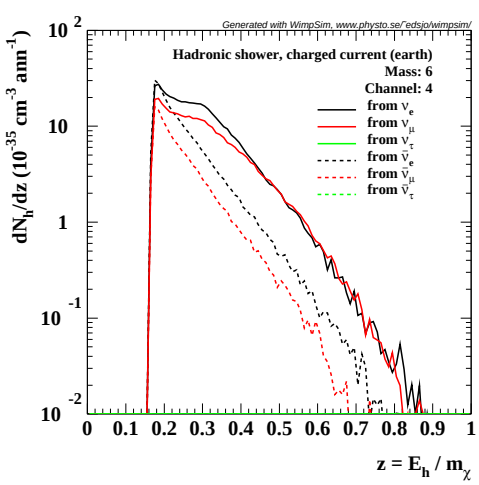


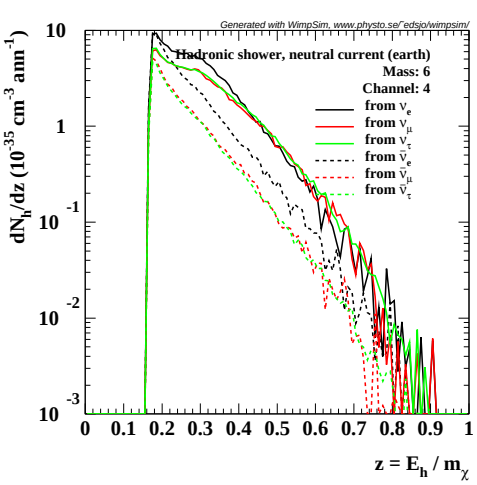
2.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



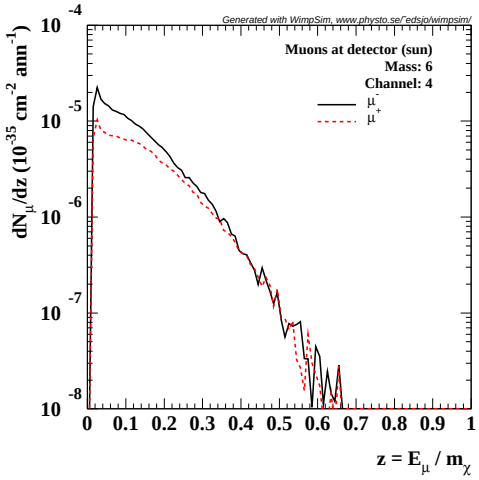


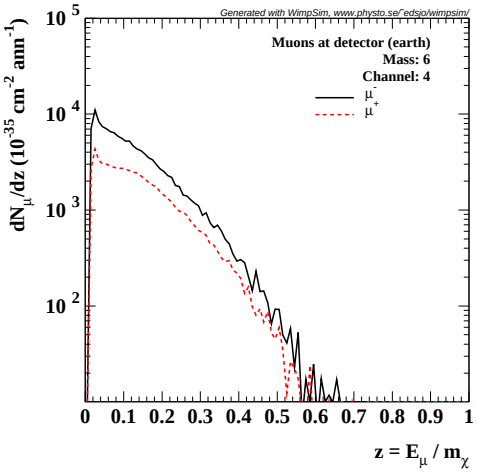
2.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





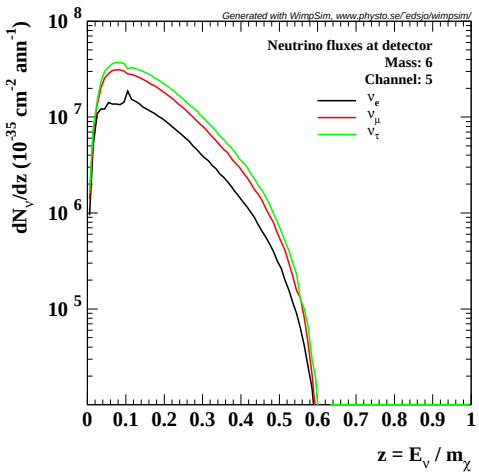
2.4.7 Muons at detector (Sun/Earth)

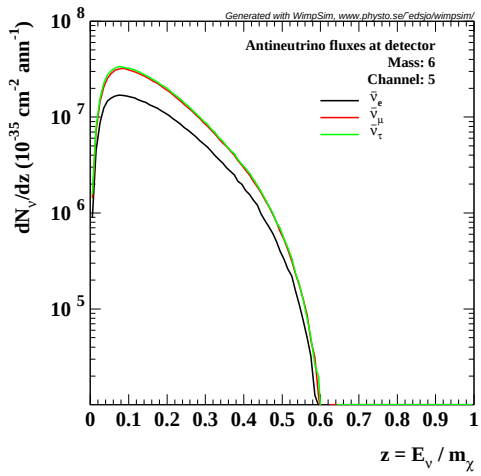




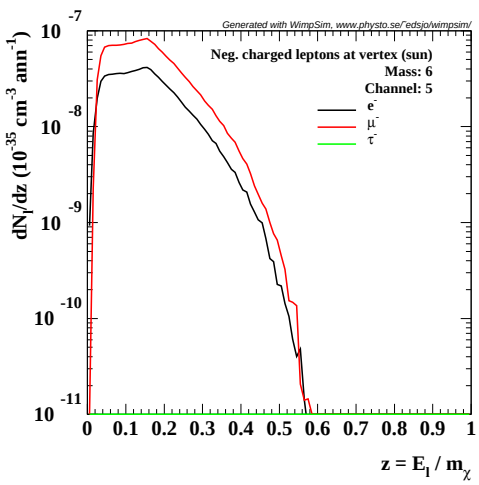
2.5 Channel 5 – $b\bar{b}$

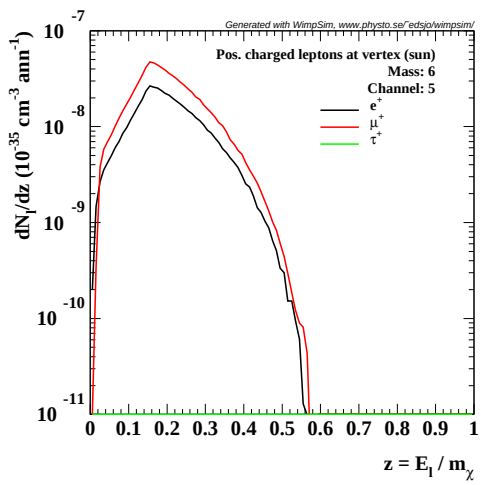
2.5.1 Neutrino fluxes at detector (Sun)



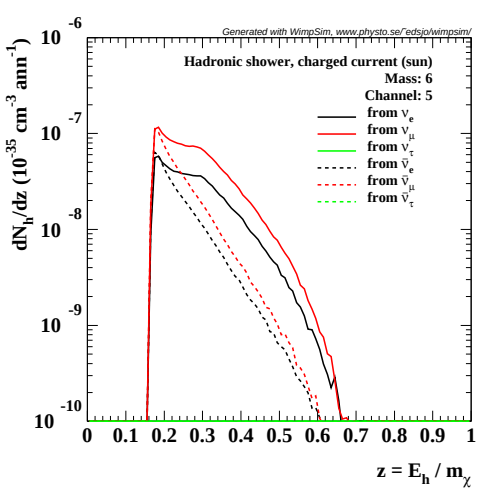


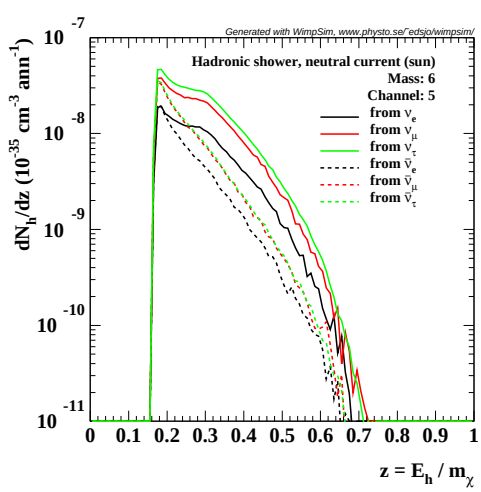
2.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



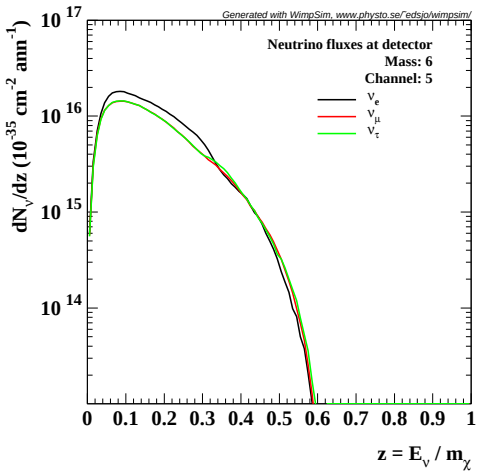


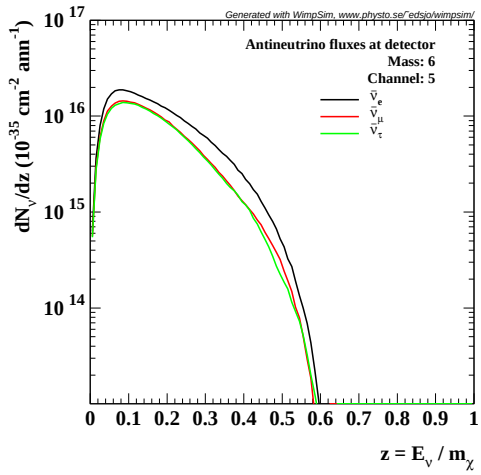
2.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



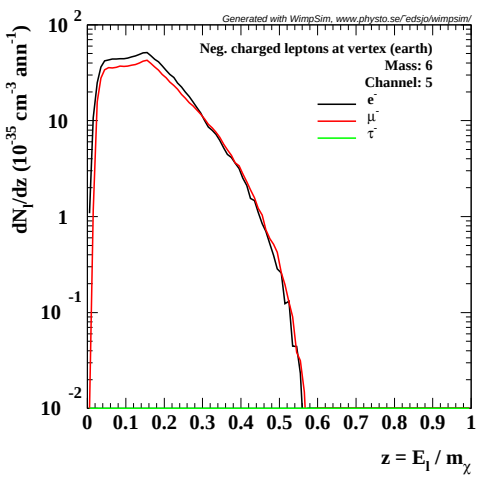


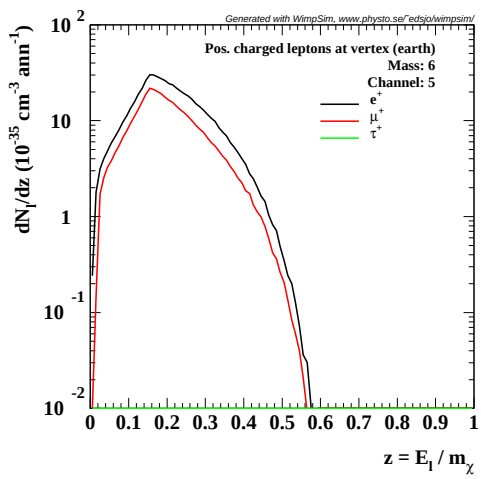
2.5.4 Neutrino fluxes at detector (Earth)



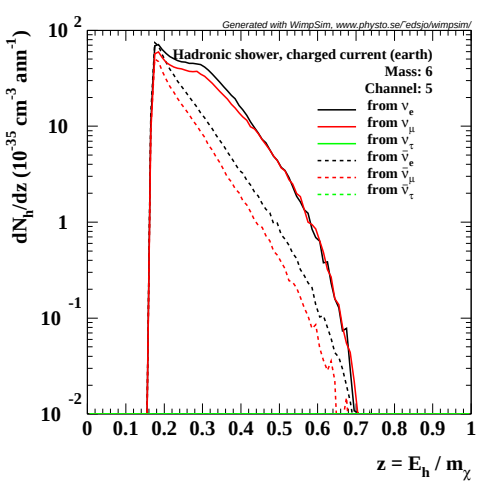


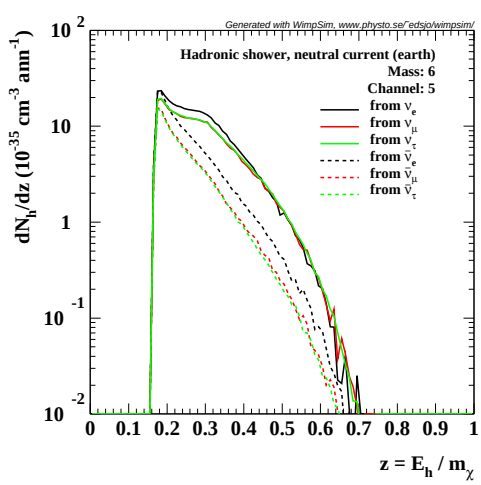
2.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



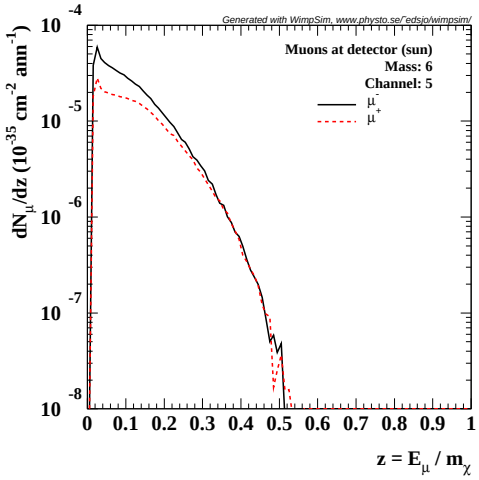


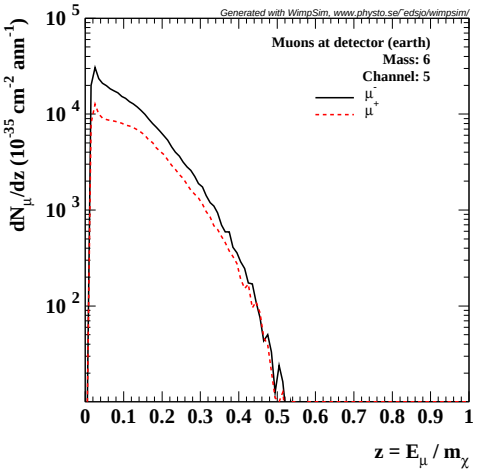
2.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





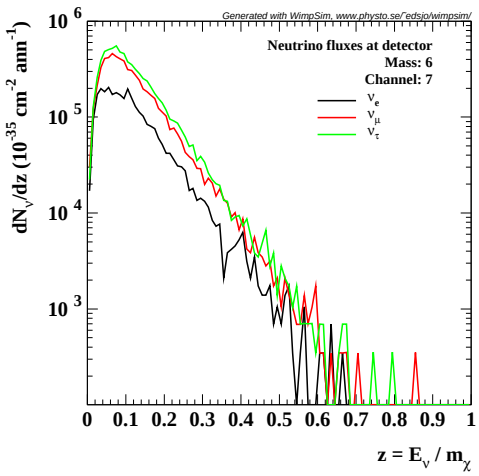
2.5.7 Muons at detector (Sun/Earth)

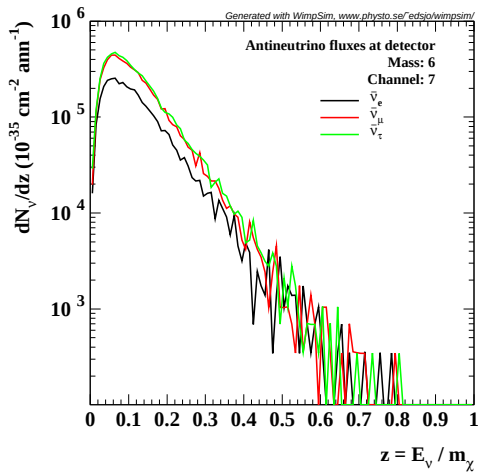




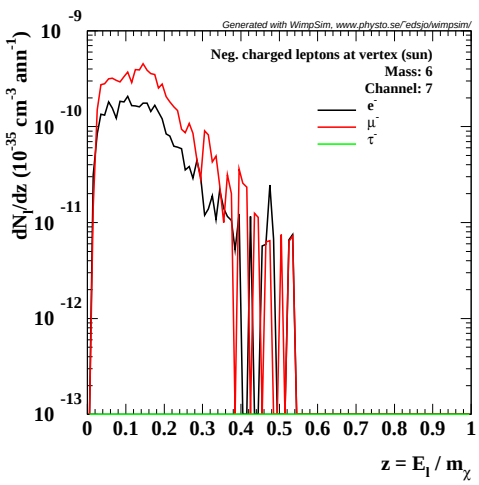
2.6 Channel 7 – gg

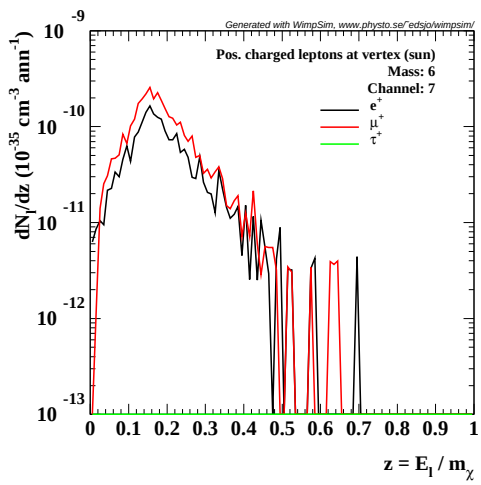
2.6.1 Neutrino fluxes at detector (Sun)



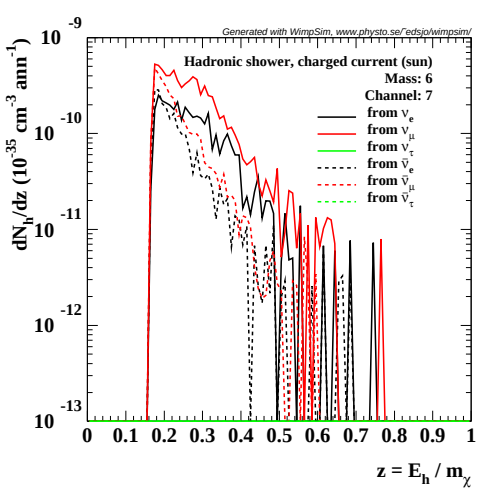


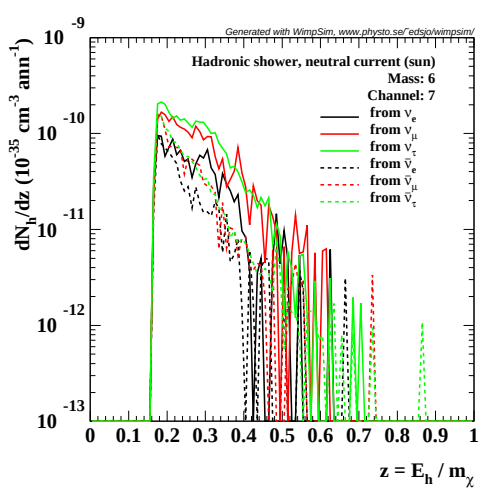
2.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



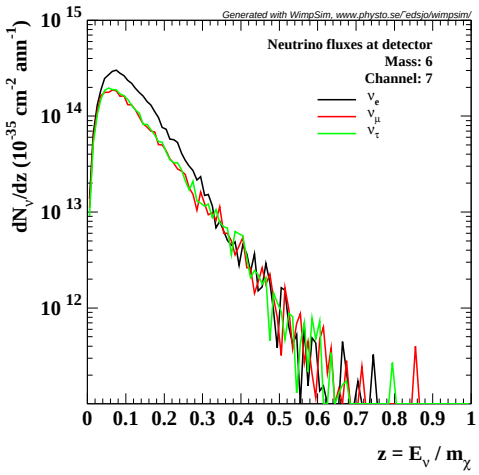


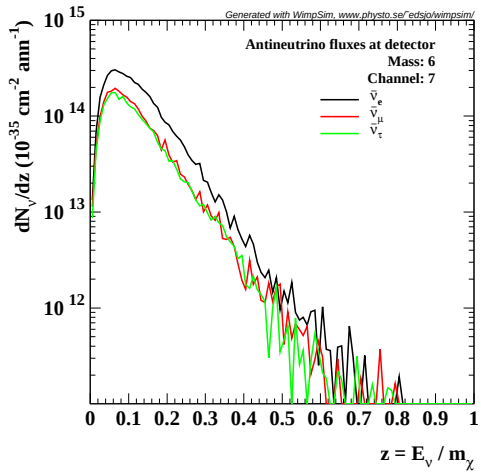
2.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



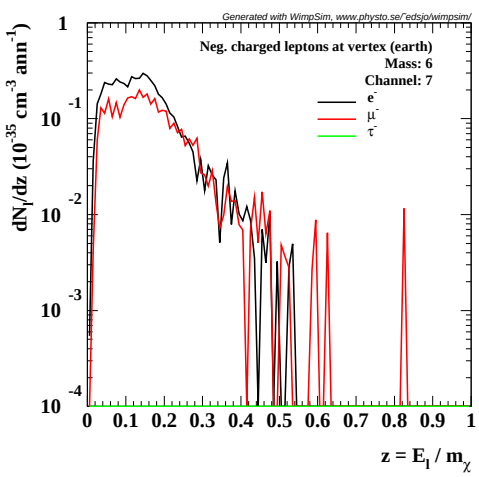


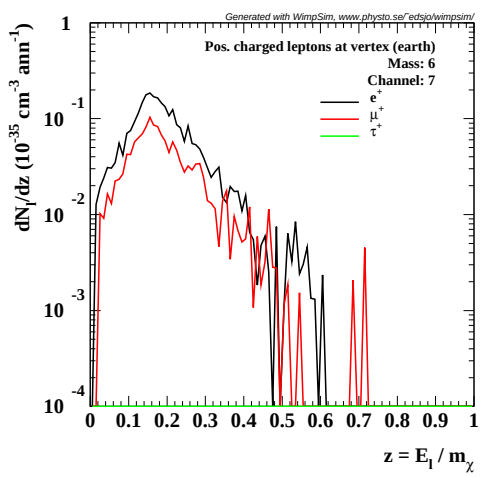
2.6.4 Neutrino fluxes at detector (Earth)



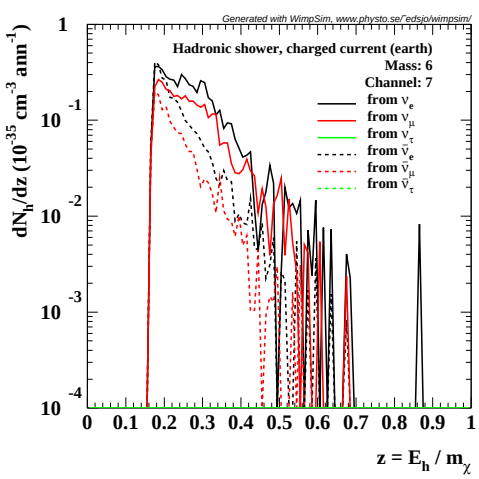


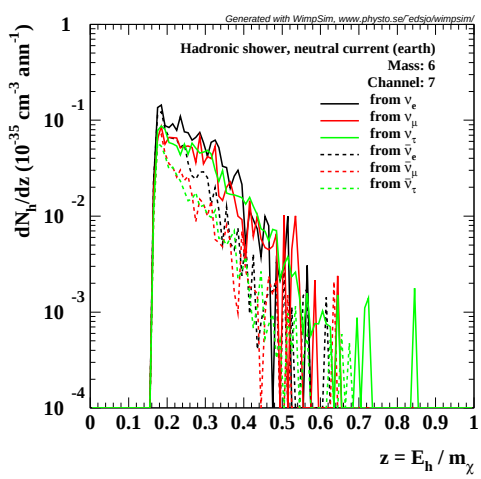
2.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



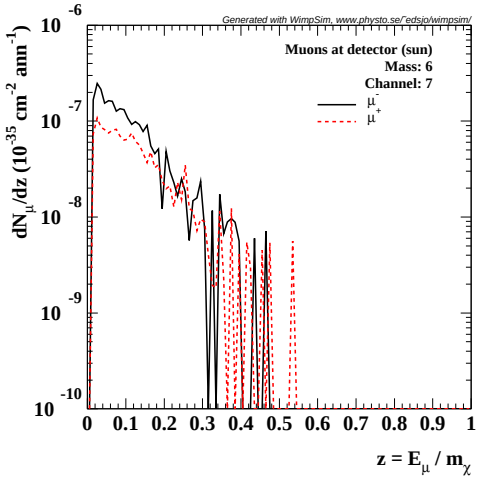


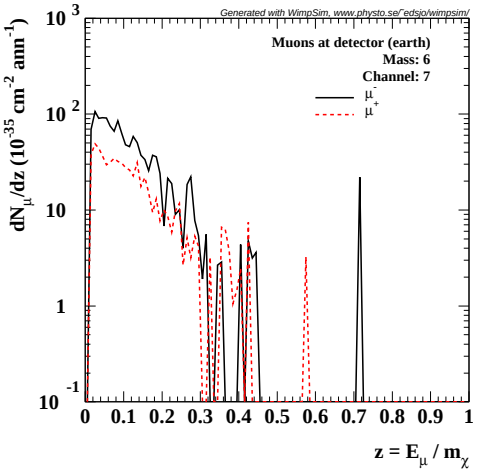
2.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





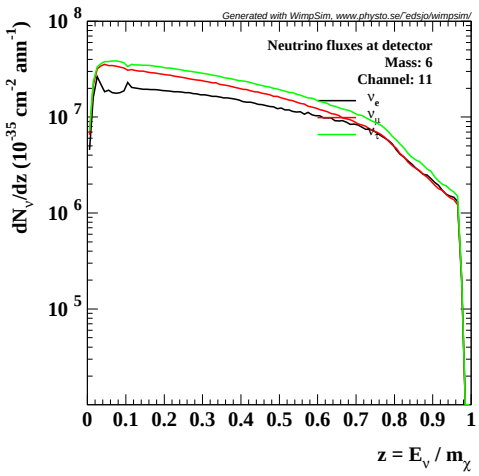
2.6.7 Muons at detector (Sun/Earth)

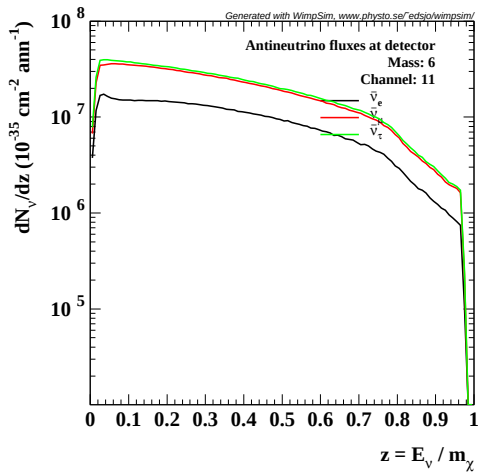




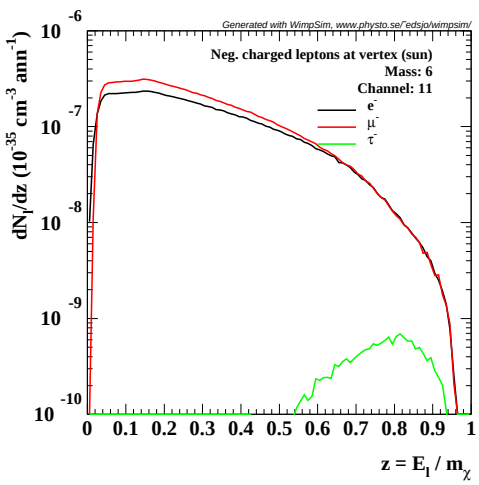
2.7 Channel 11 – $\tau^-\tau^+$

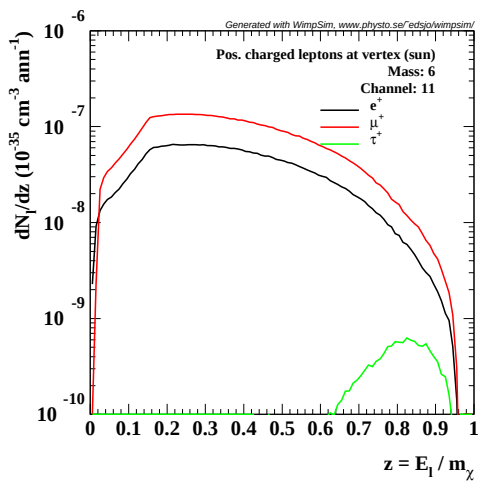
2.7.1 Neutrino fluxes at detector (Sun)



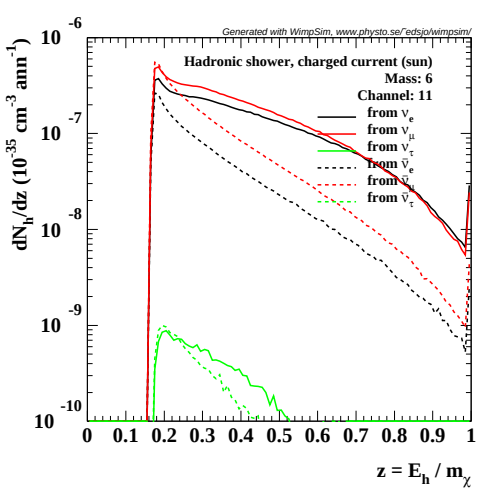


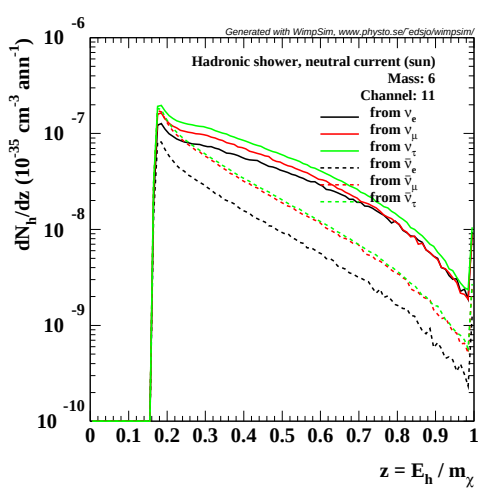
2.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



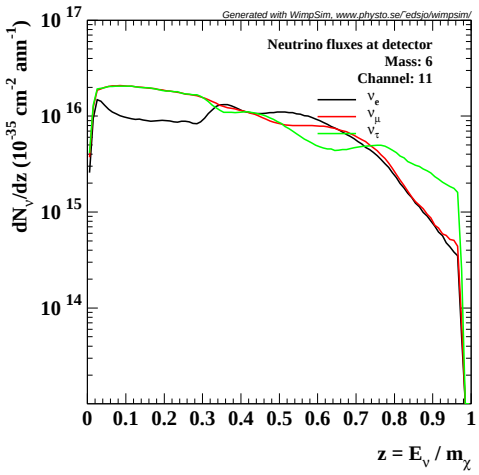


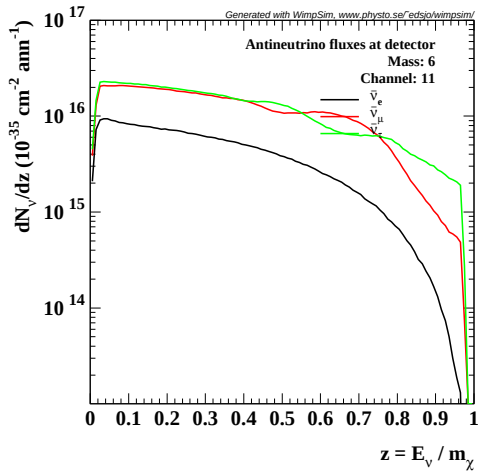
2.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



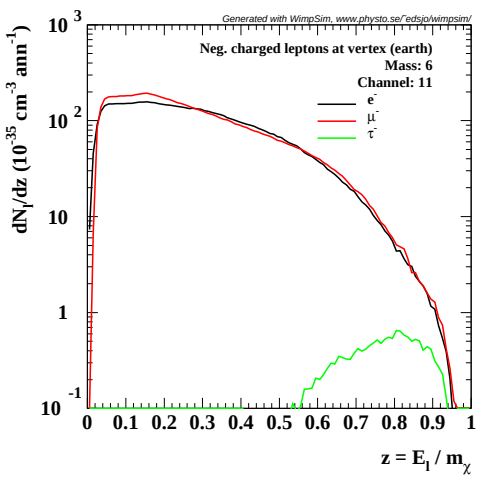


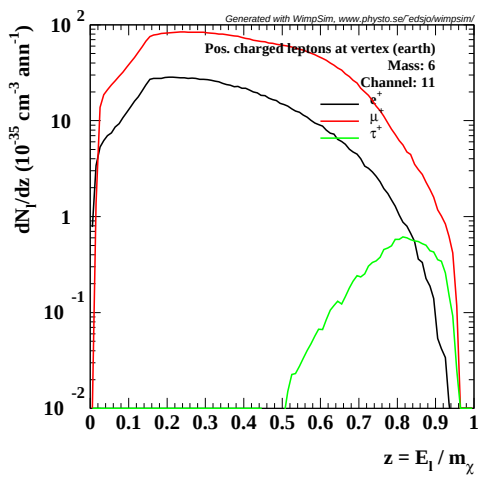
2.7.4 Neutrino fluxes at detector (Earth)



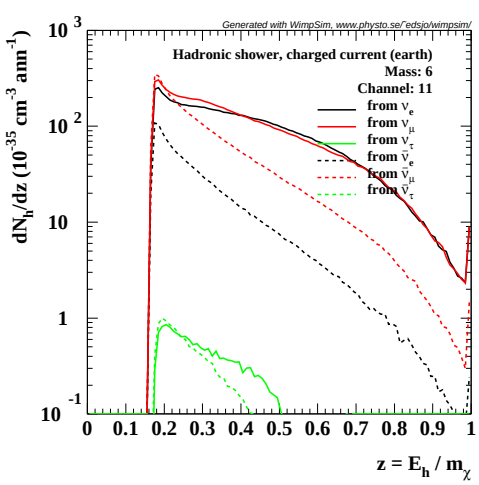


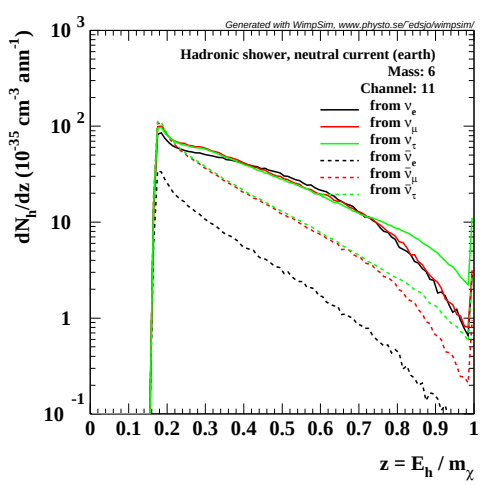
2.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



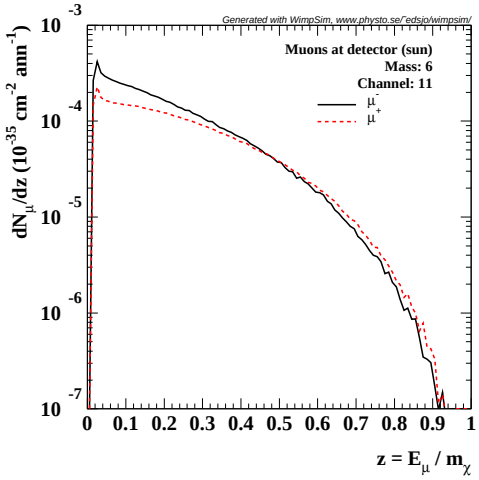


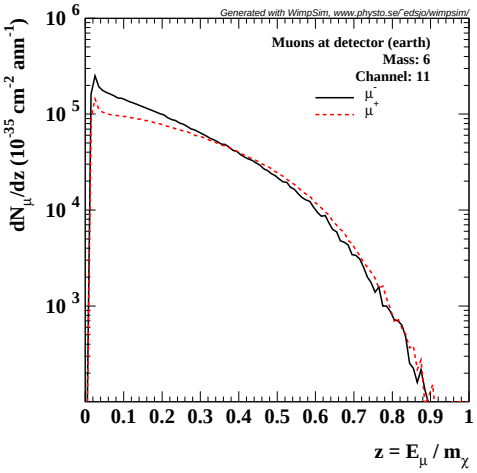
2.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





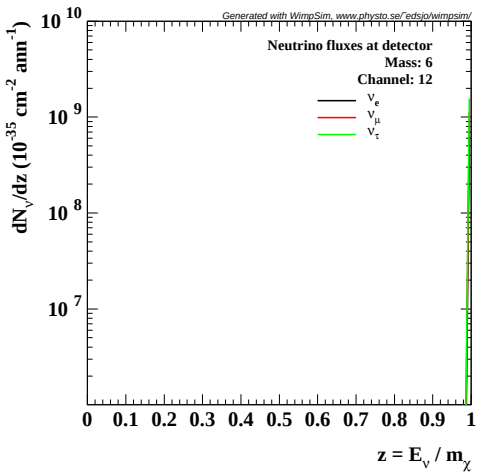
2.7.7 Muons at detector (Sun/Earth)

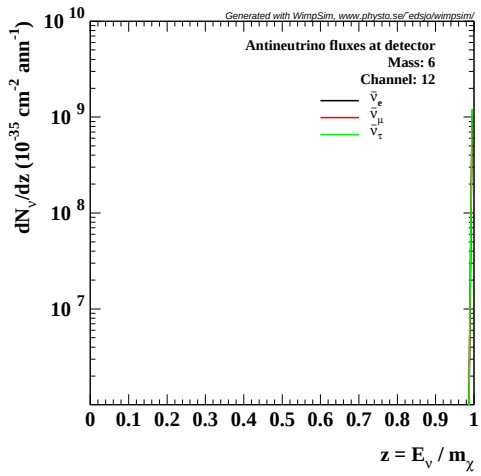




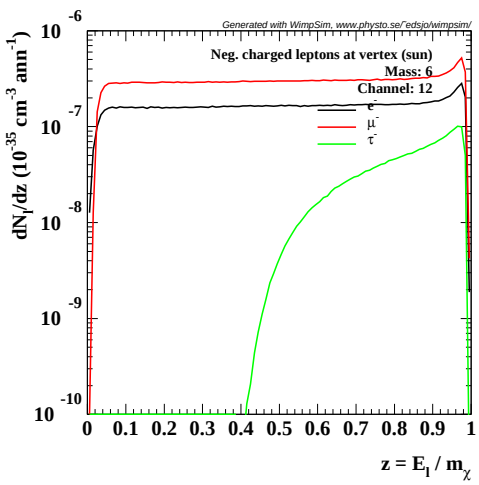
2.8 Channel 12 – $\nu_e\bar{\nu}_e$

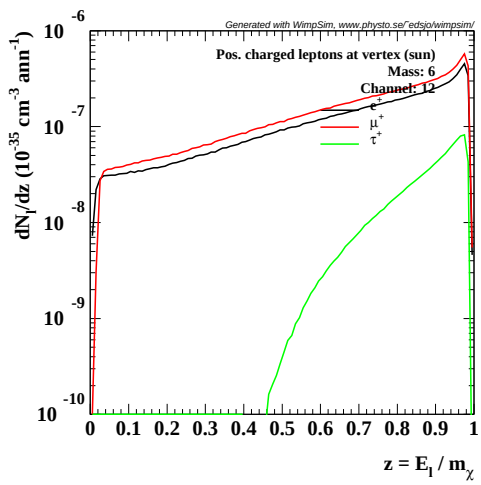
2.8.1 Neutrino fluxes at detector (Sun)



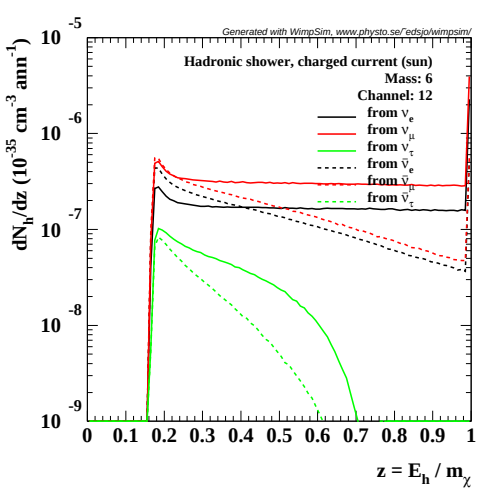


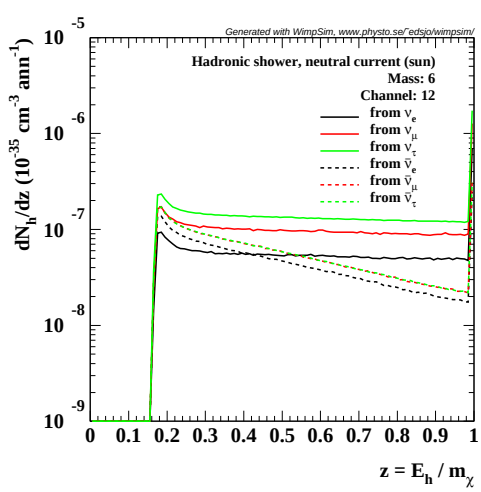
2.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



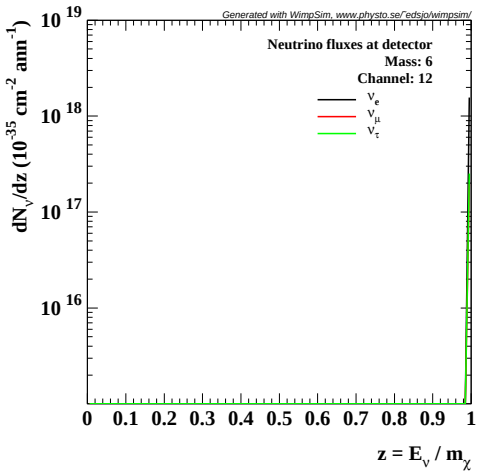


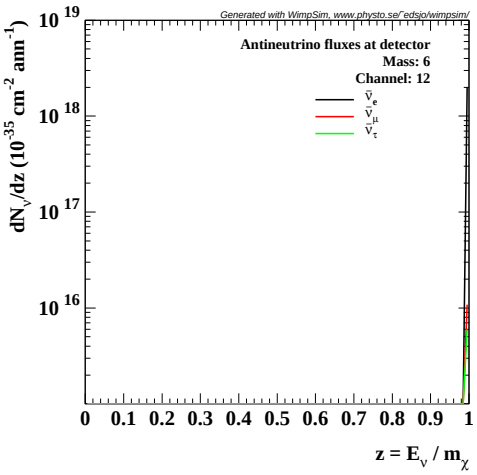
2.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



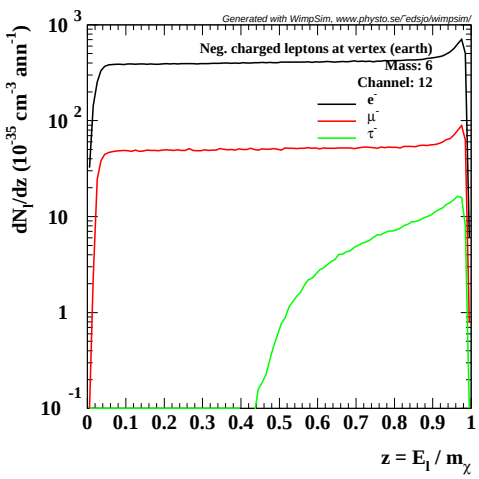


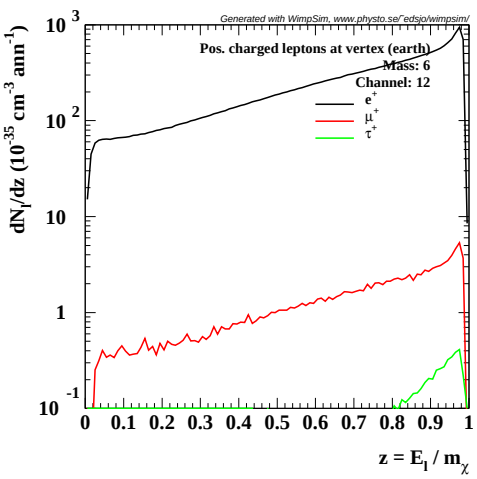
2.8.4 Neutrino fluxes at detector (Earth)



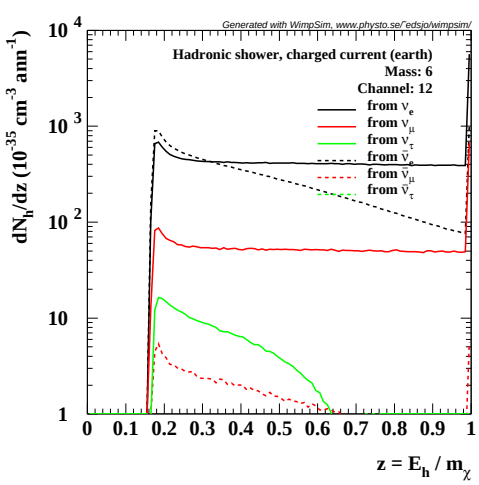


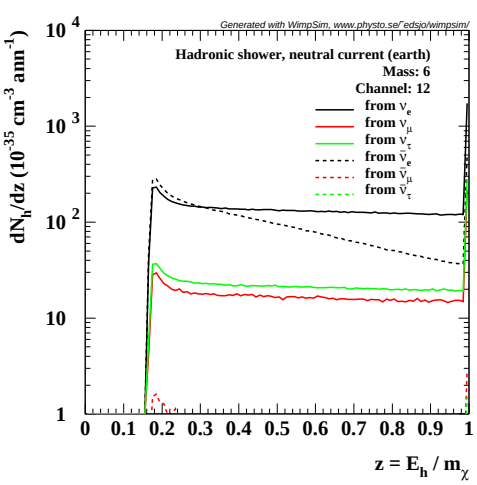
2.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



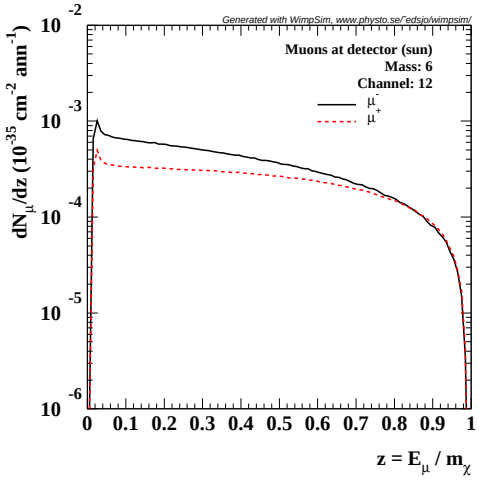


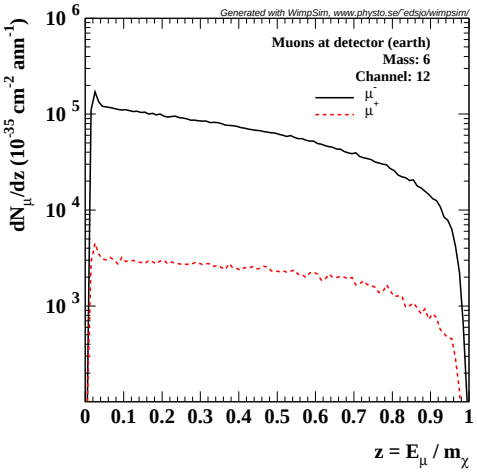
2.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





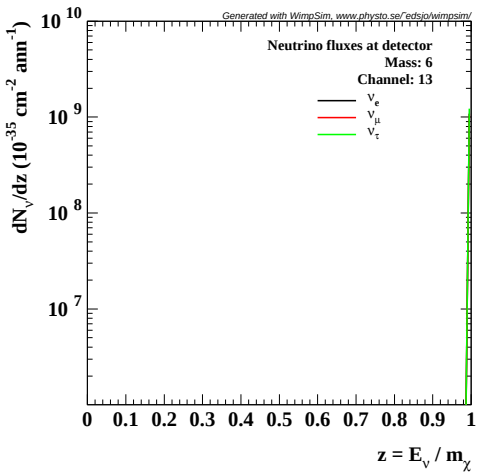
2.8.7 Muons at detector (Sun/Earth)

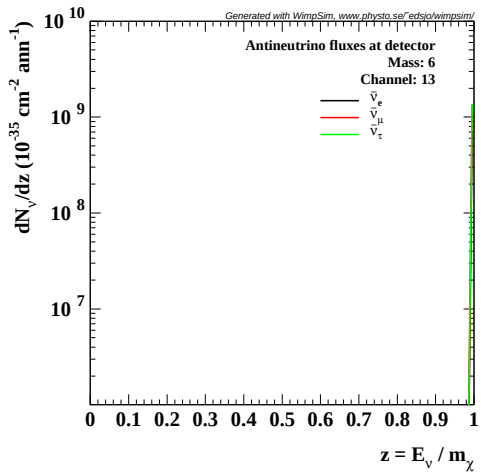




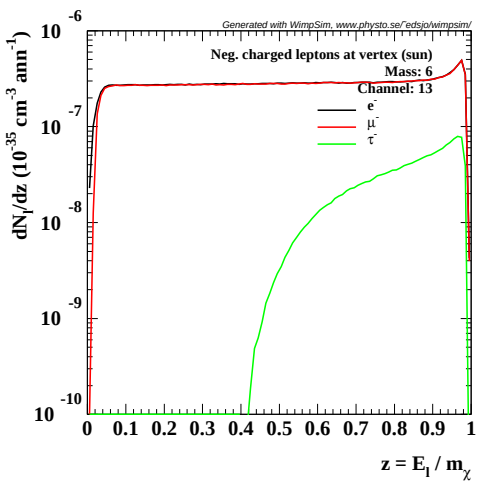
2.9 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

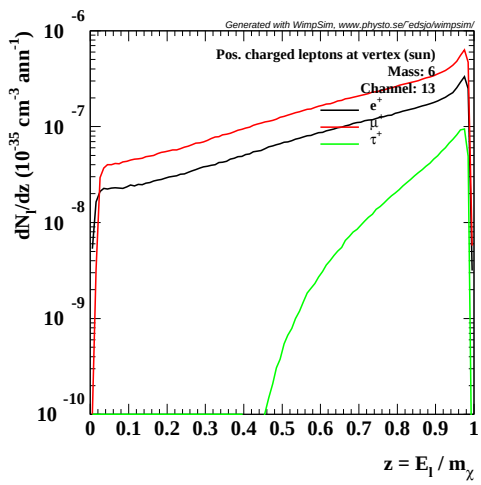
2.9.1 Neutrino fluxes at detector (Sun)



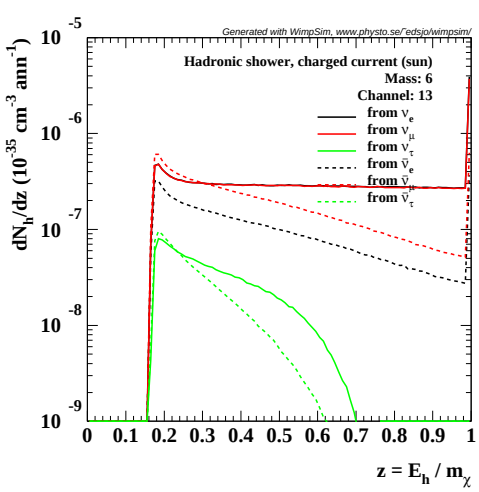


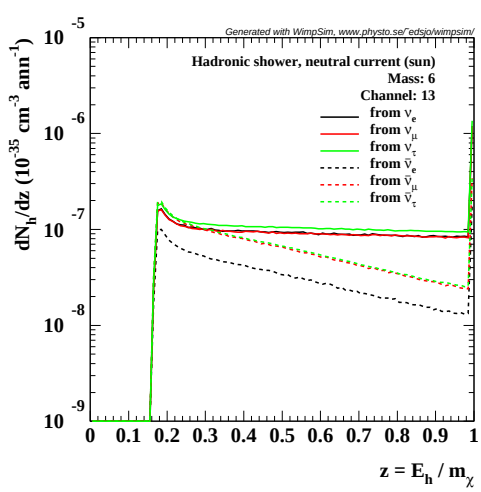
2.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



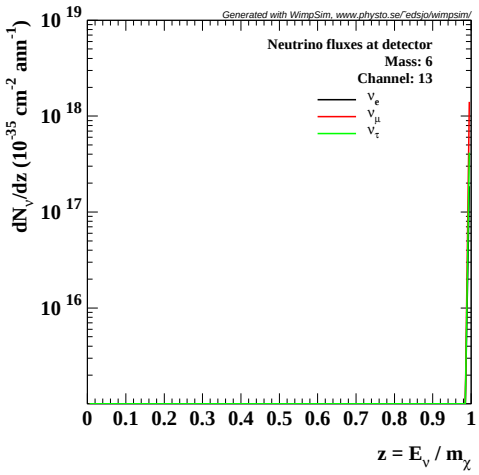


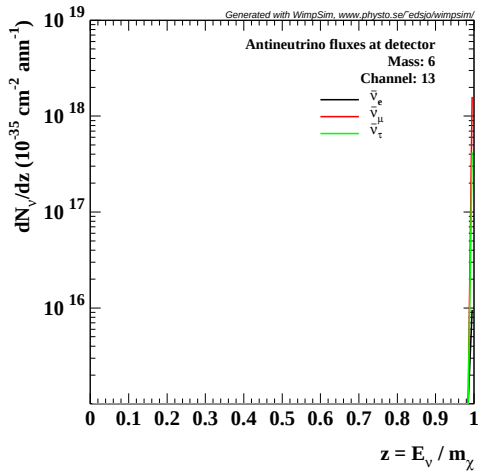
2.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



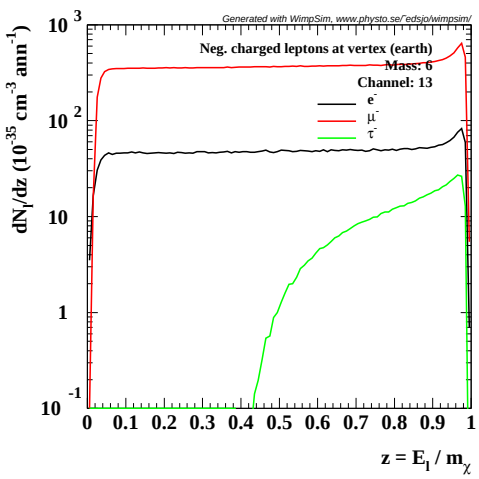


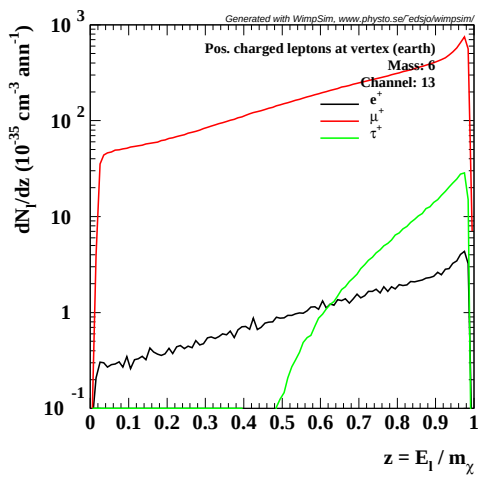
2.9.4 Neutrino fluxes at detector (Earth)



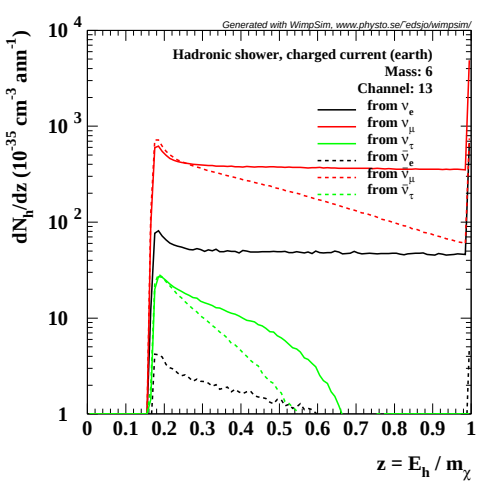


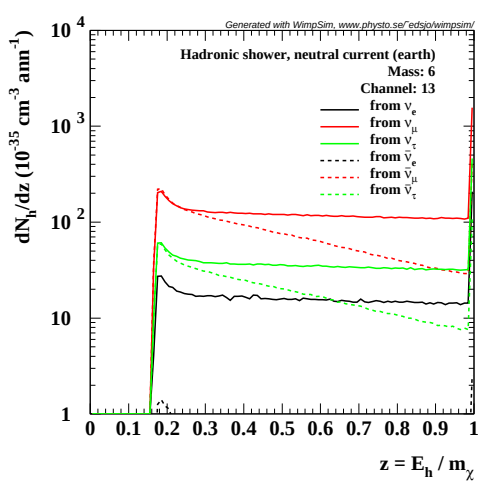
2.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



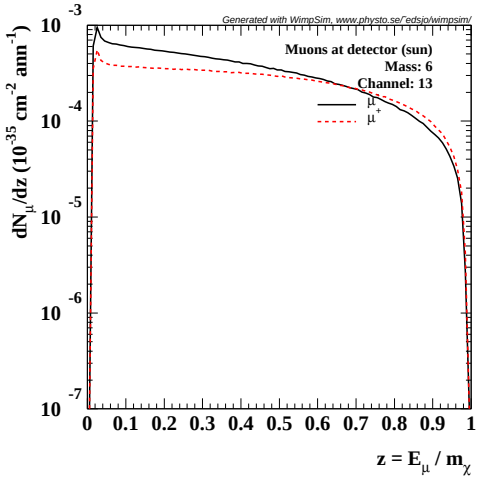


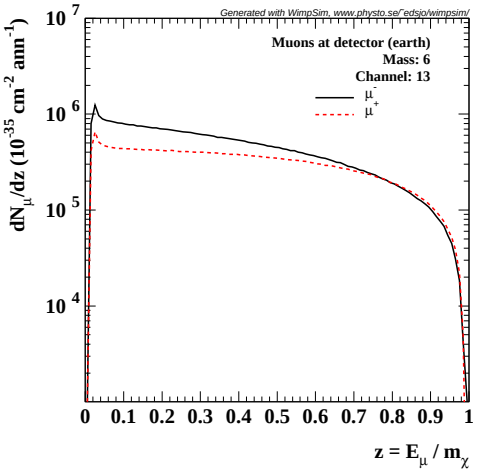
2.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





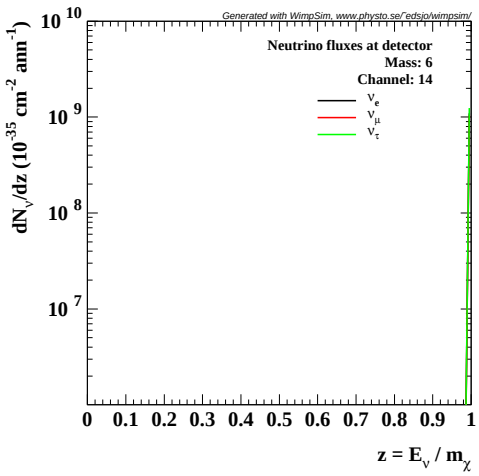
2.9.7 Muons at detector (Sun/Earth)

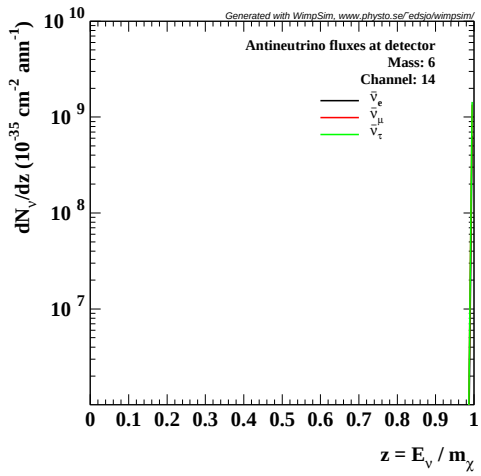




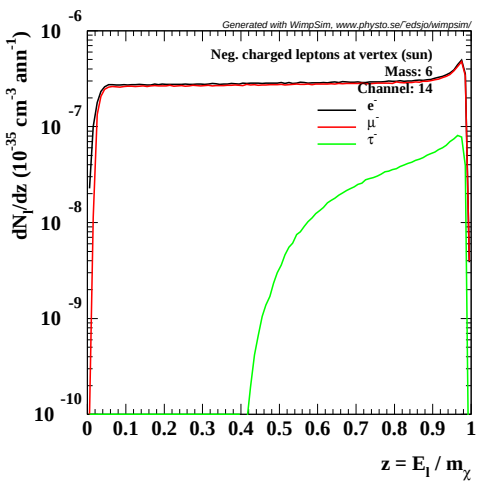
2.10 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

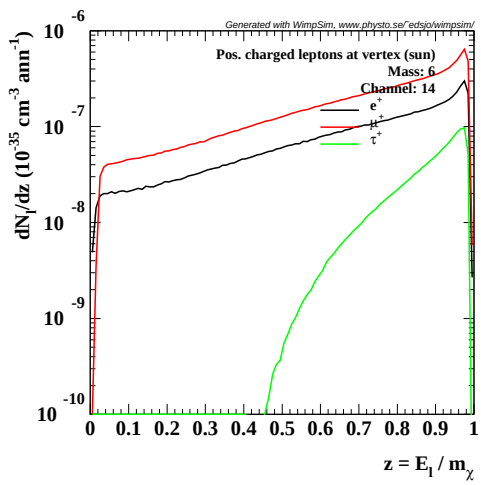
2.10.1 Neutrino fluxes at detector (Sun)



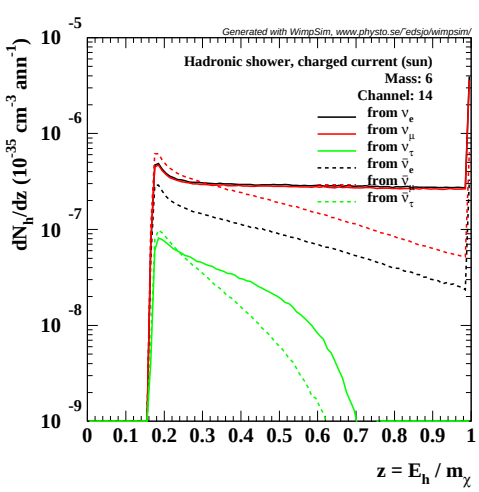


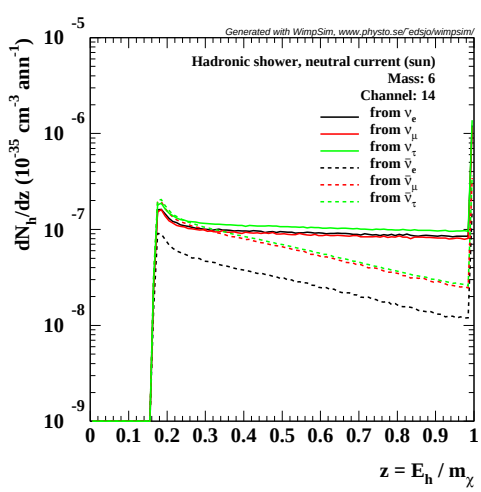
2.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



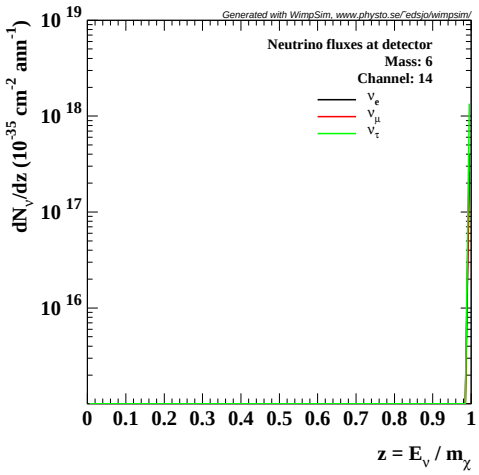


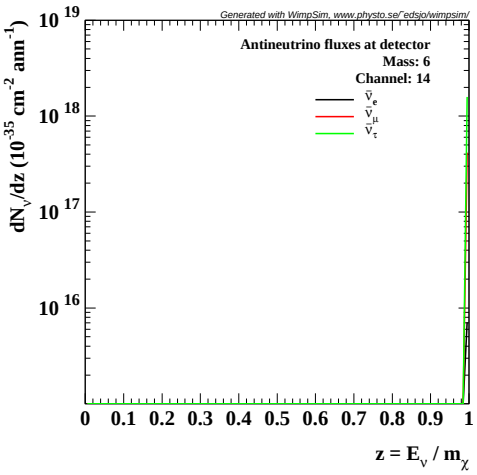
2.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



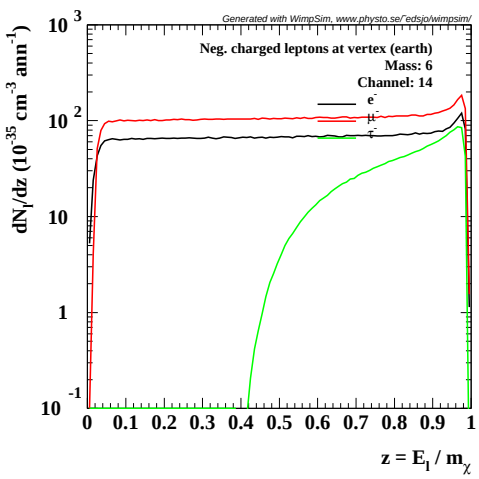


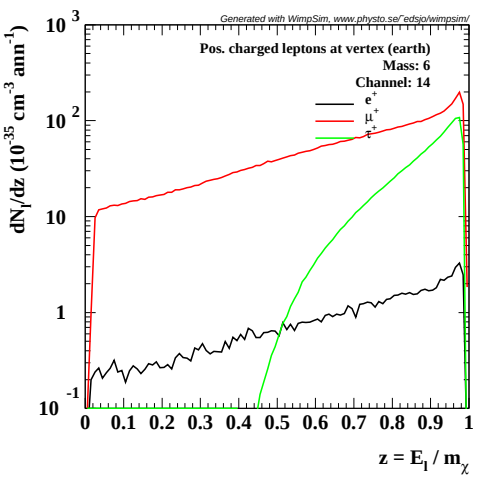
2.10.4 Neutrino fluxes at detector (Earth)



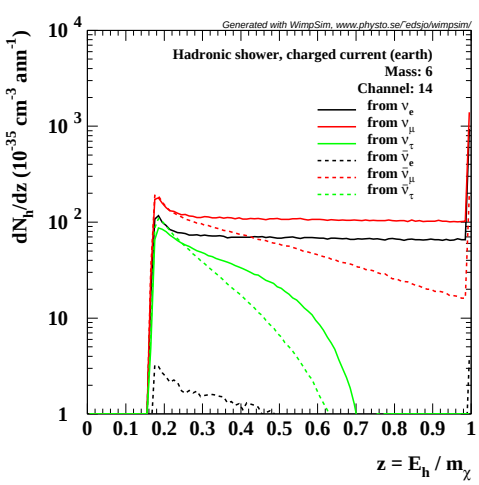


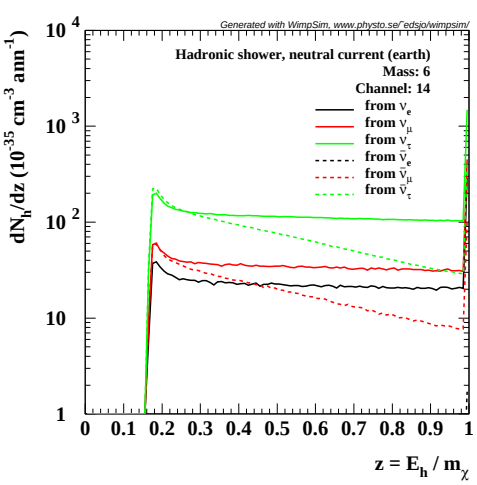
2.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



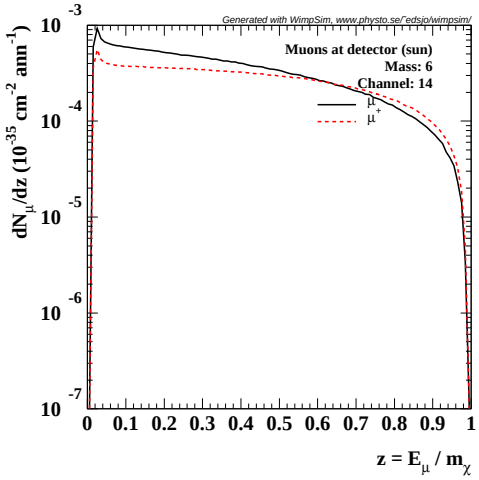


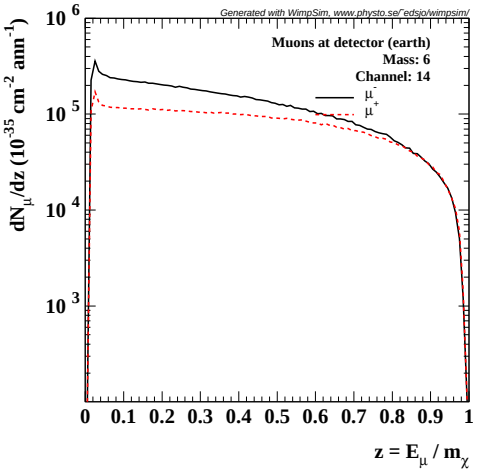
2.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





2.10.7 Muons at detector (Sun/Earth)

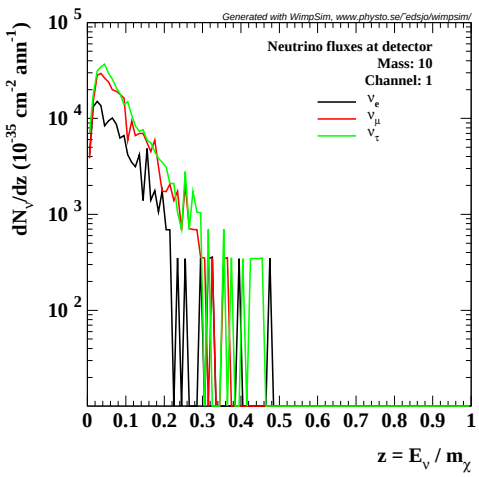


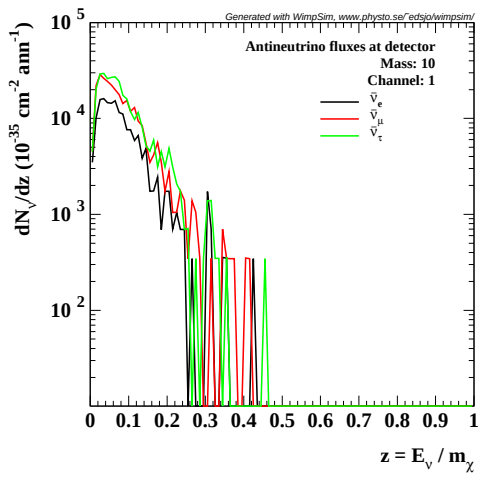


3 Mass 10

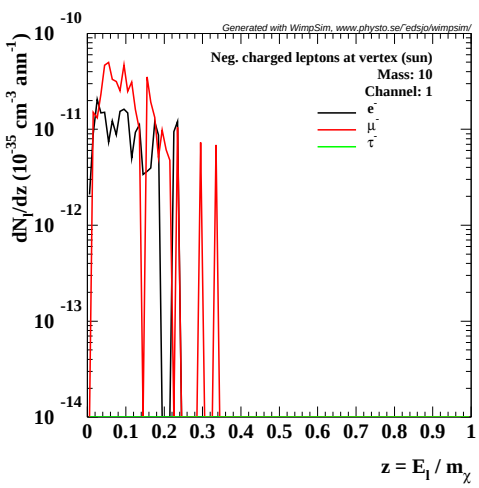
3.1 Channel 1 – $d\bar{d}$

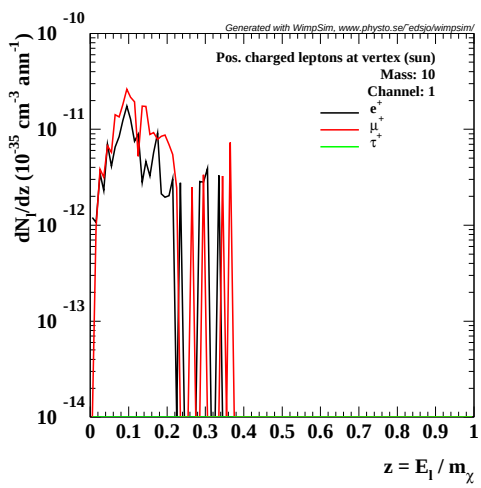
3.1.1 Neutrino fluxes at detector (Sun)



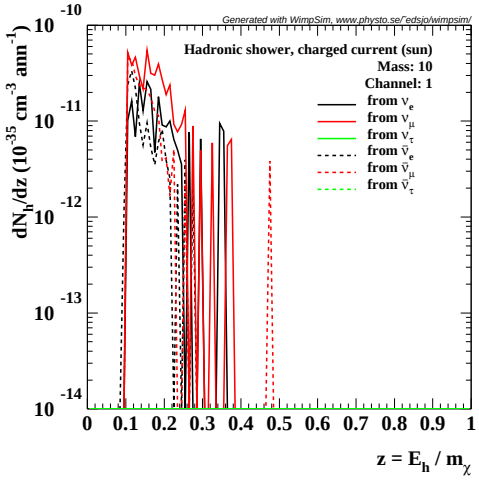


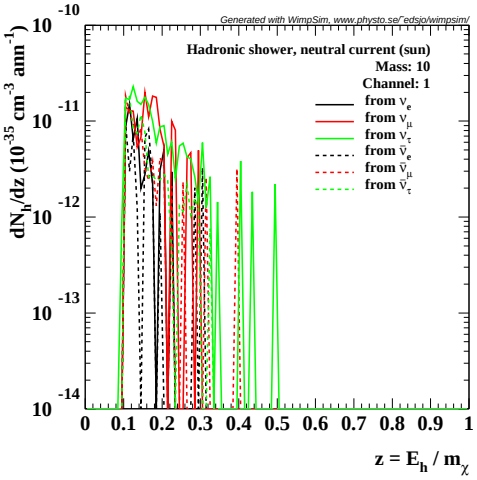
3.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



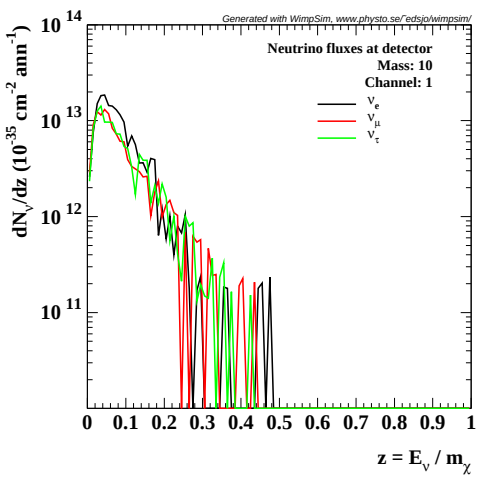


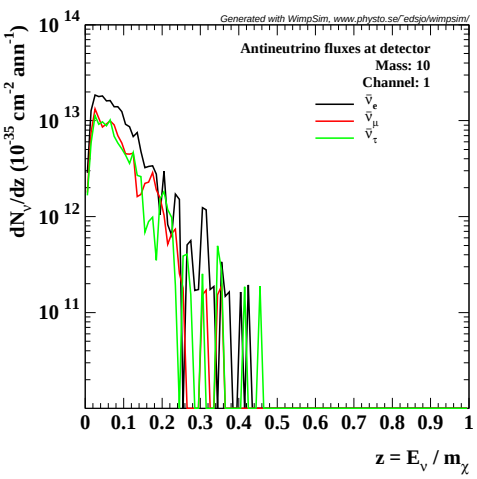
3.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



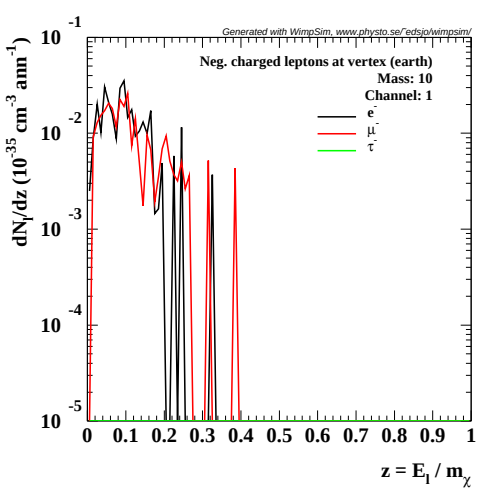


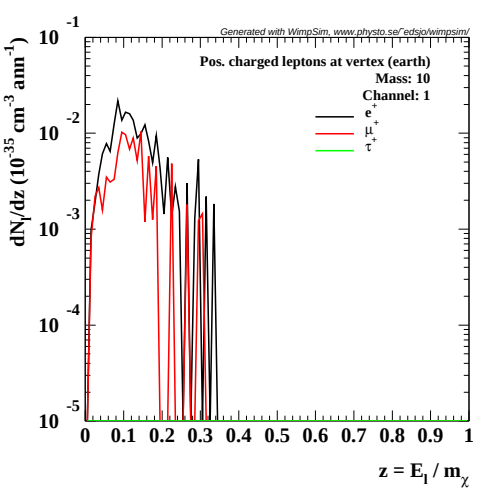
3.1.4 Neutrino fluxes at detector (Earth)



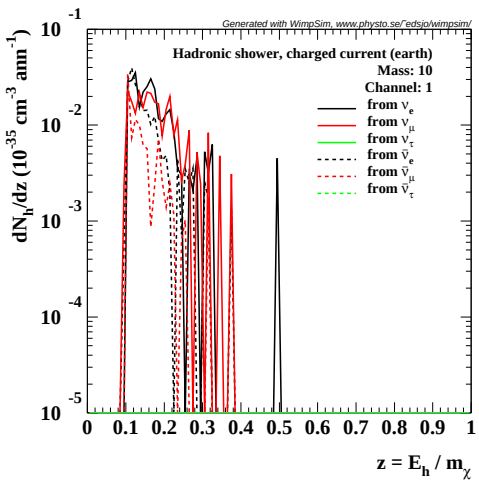


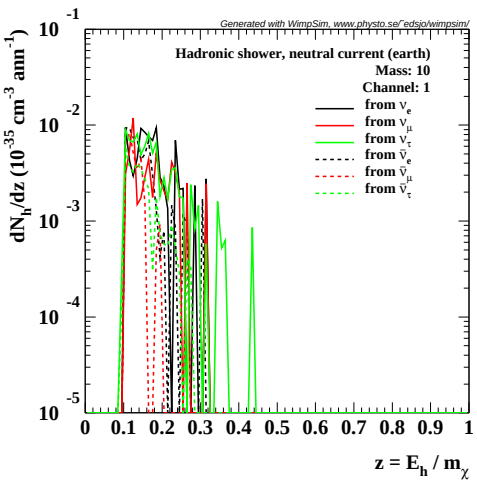
3.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



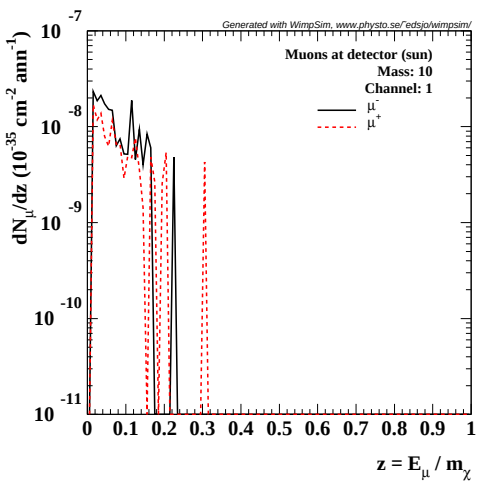


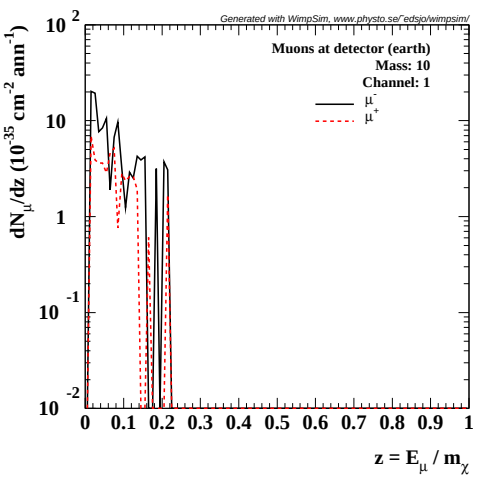
3.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





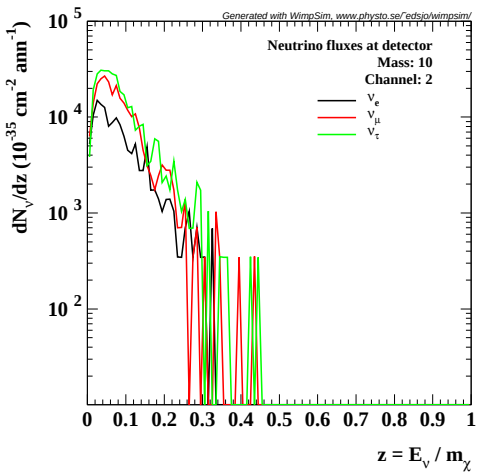
3.1.7 Muons at detector (Sun/Earth)

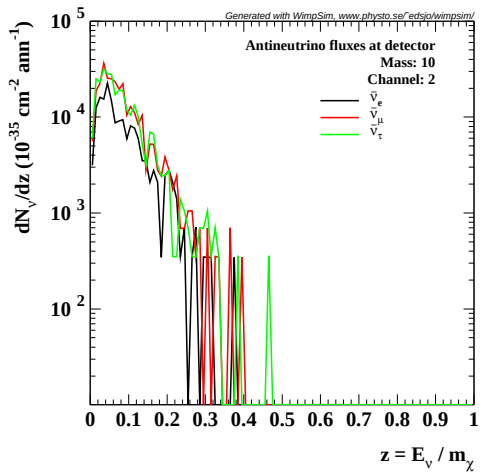




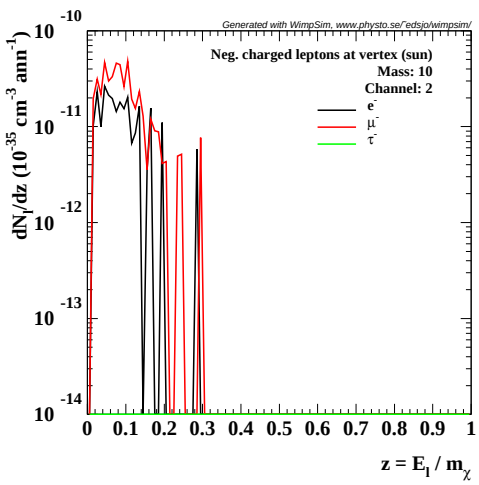
3.2 Channel 2 – $u\bar{u}$

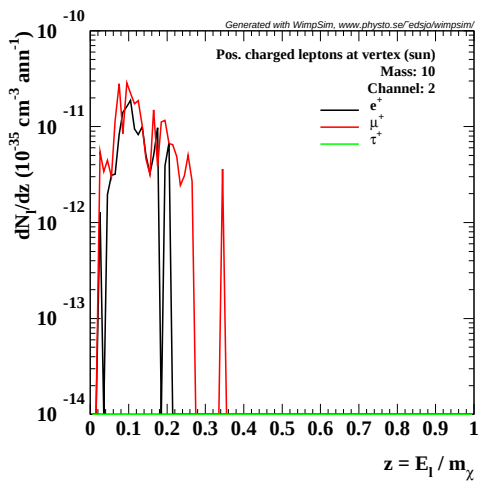
3.2.1 Neutrino fluxes at detector (Sun)



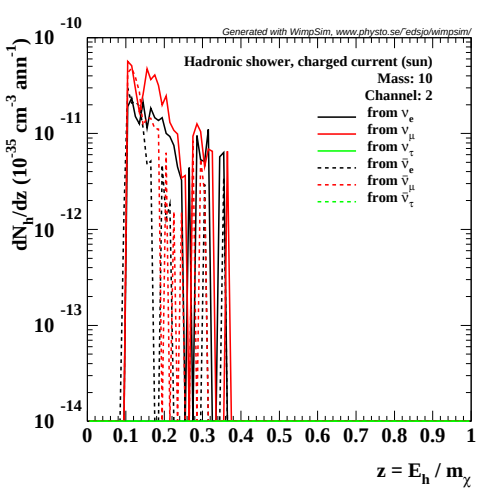


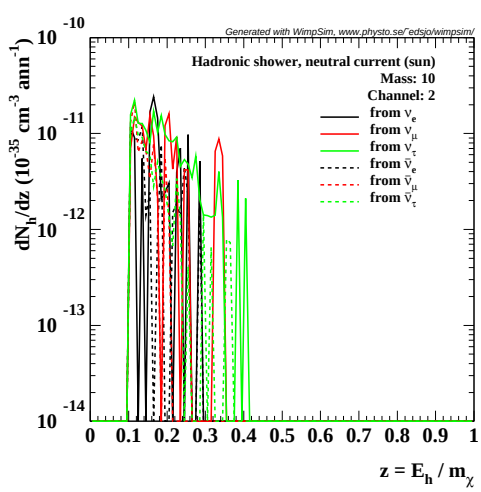
3.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



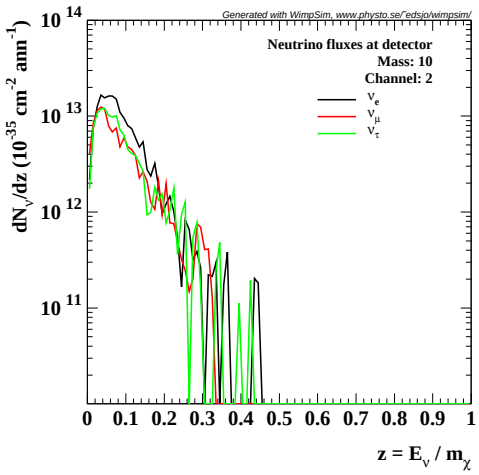


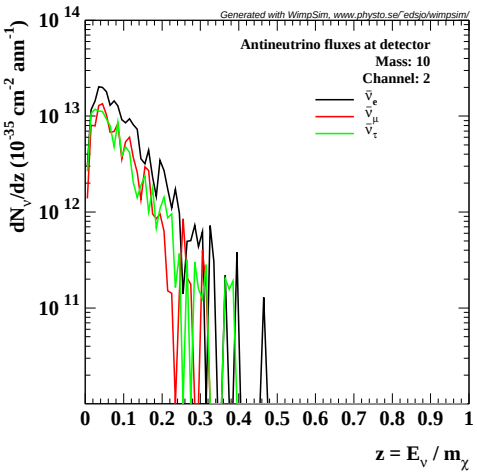
3.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



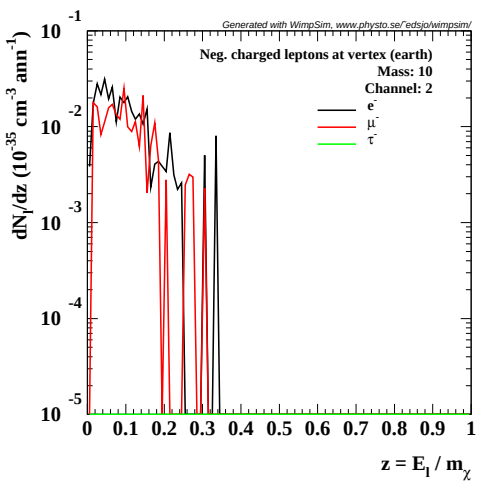


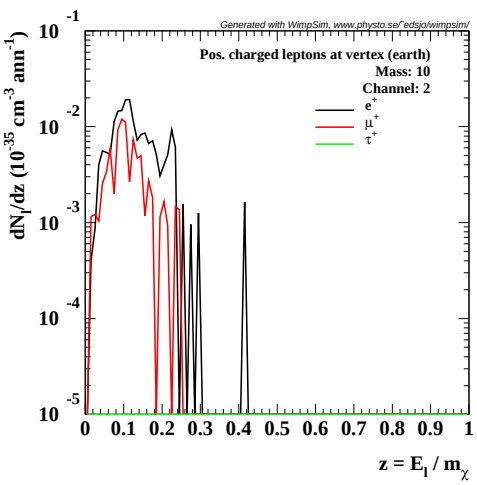
3.2.4 Neutrino fluxes at detector (Earth)



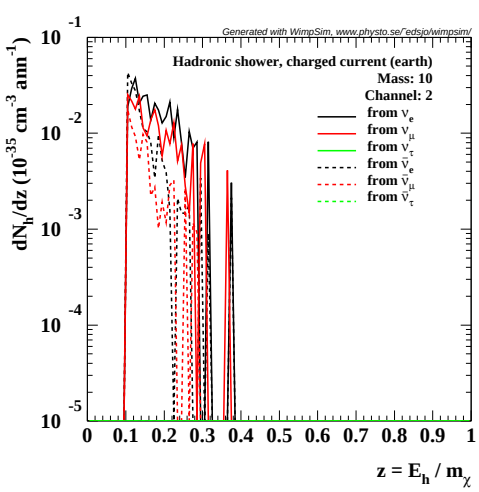


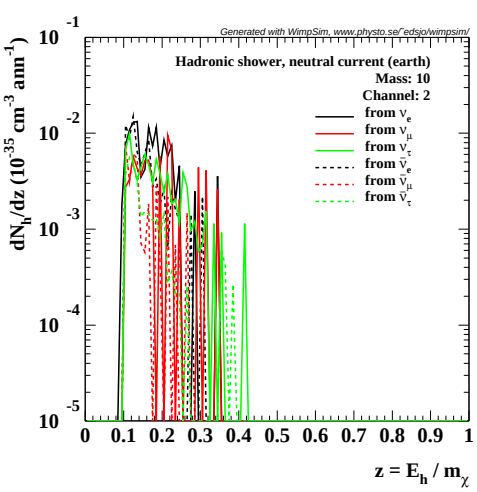
3.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



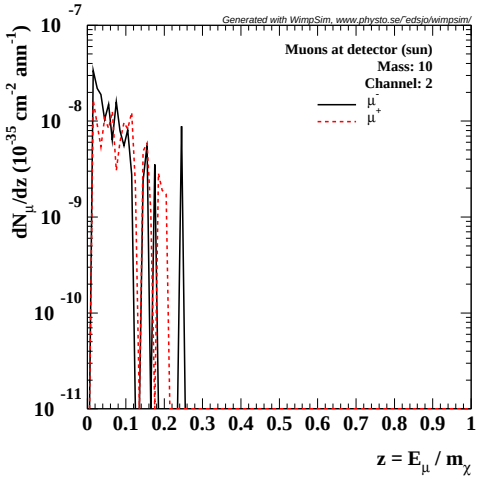


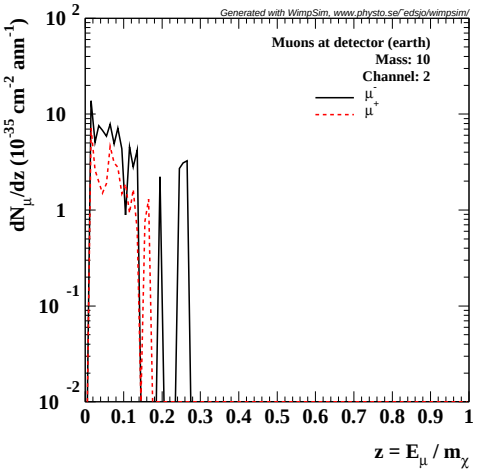
3.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





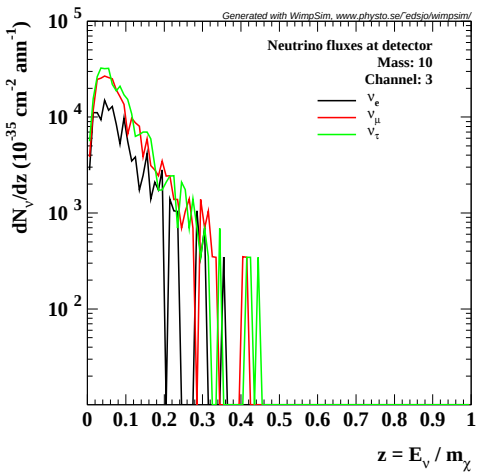
3.2.7 Muons at detector (Sun/Earth)

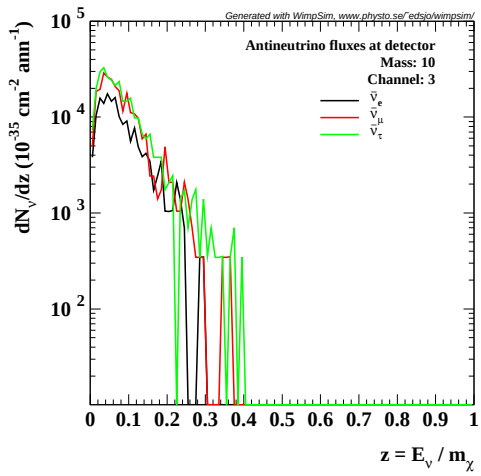




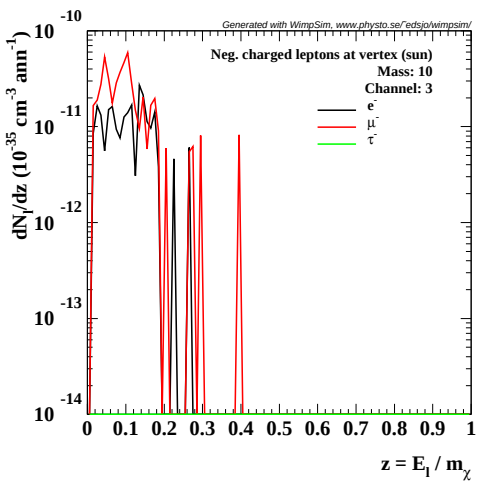
3.3 Channel 3 – $s\bar{s}$

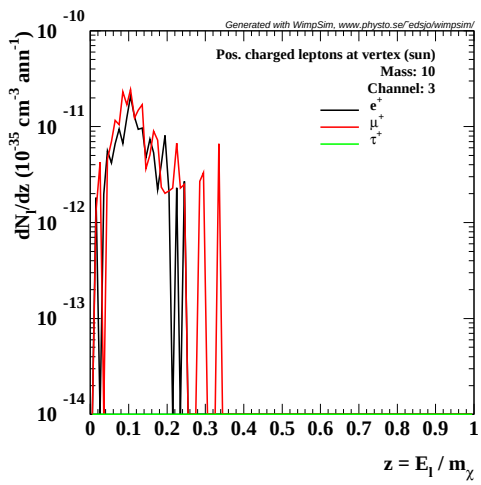
3.3.1 Neutrino fluxes at detector (Sun)



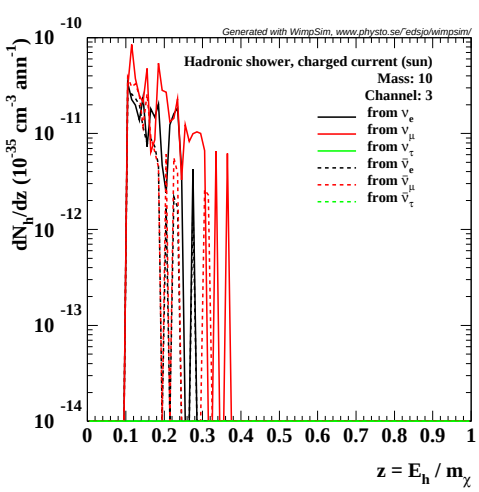


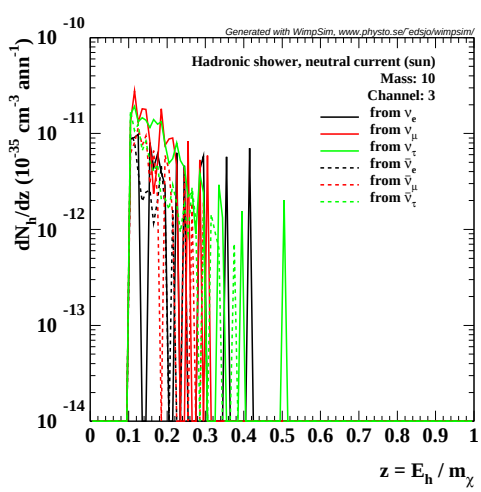
3.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



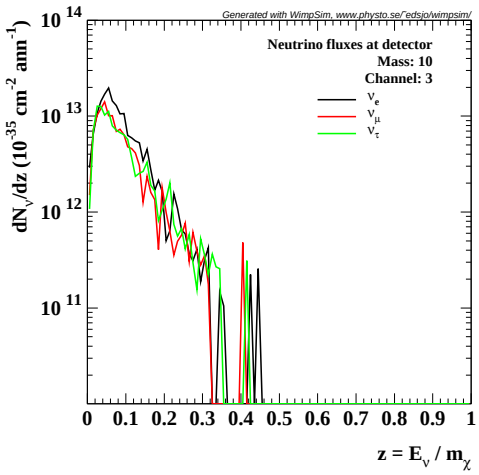


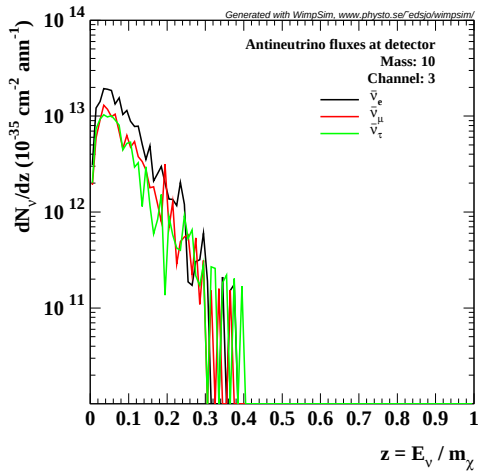
3.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



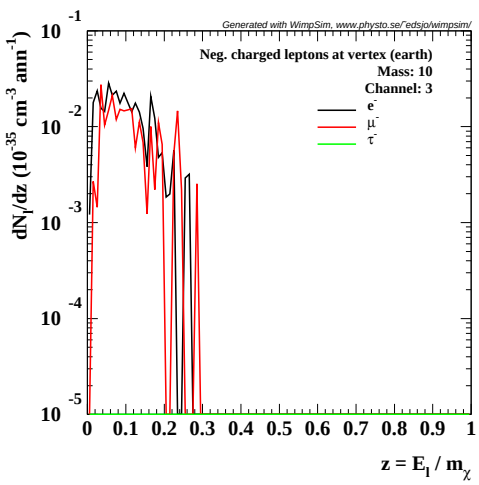


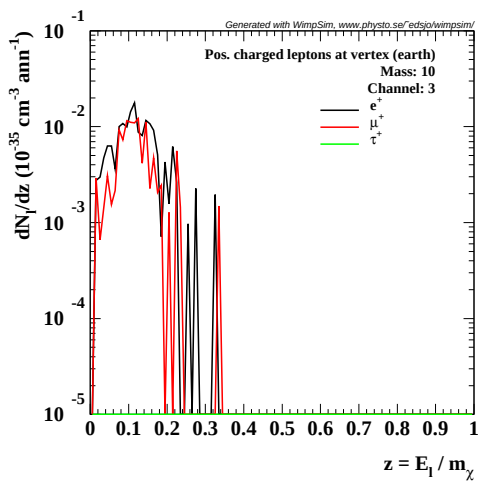
3.3.4 Neutrino fluxes at detector (Earth)



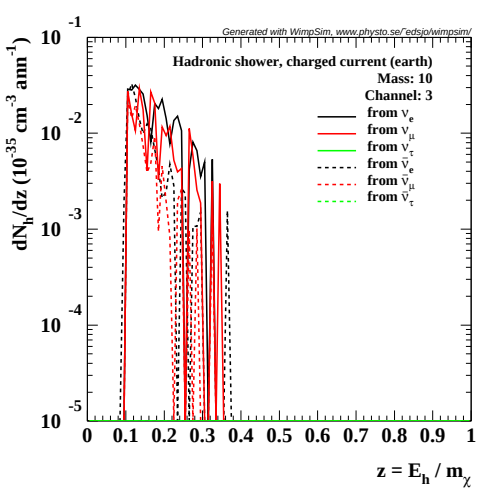


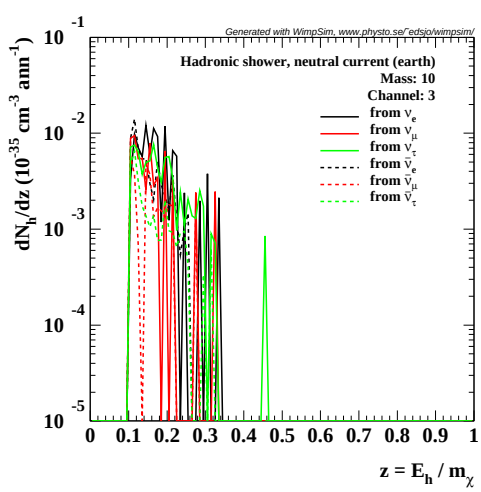
3.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



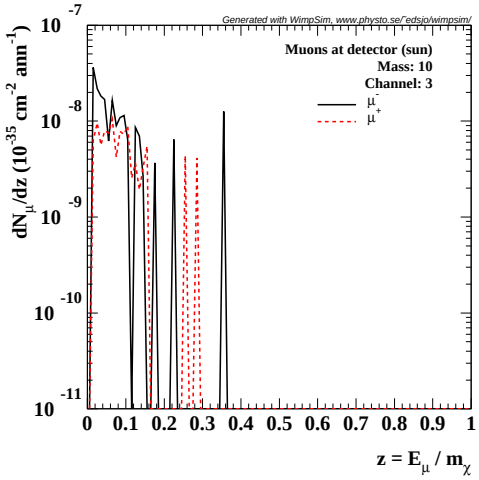


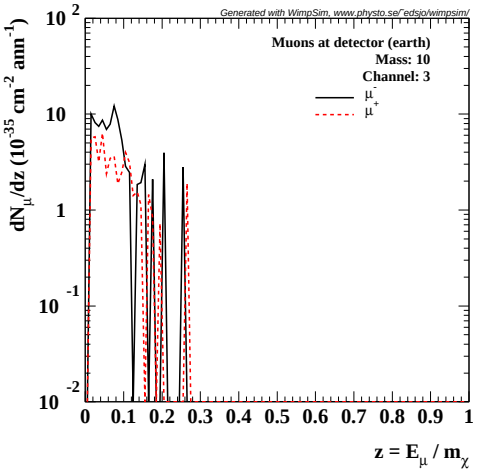
3.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





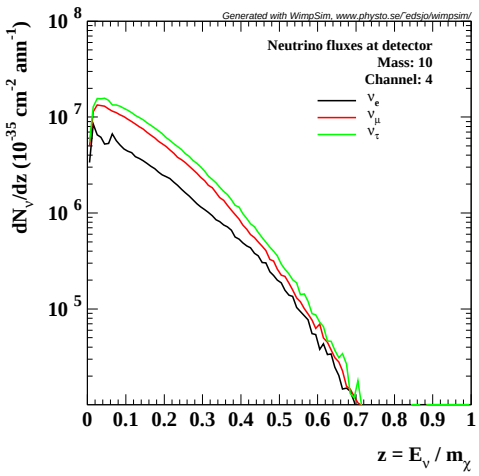
3.3.7 Muons at detector (Sun/Earth)

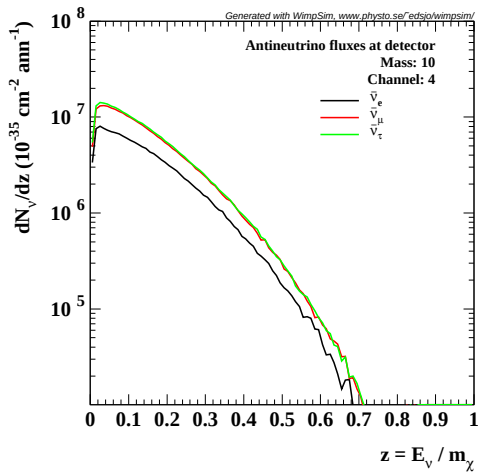




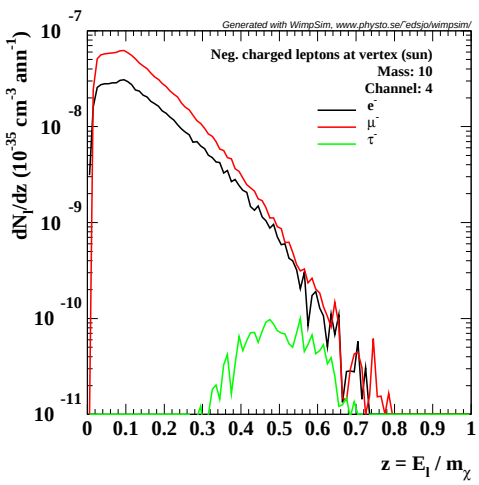
3.4 Channel 4 – $c\bar{c}$

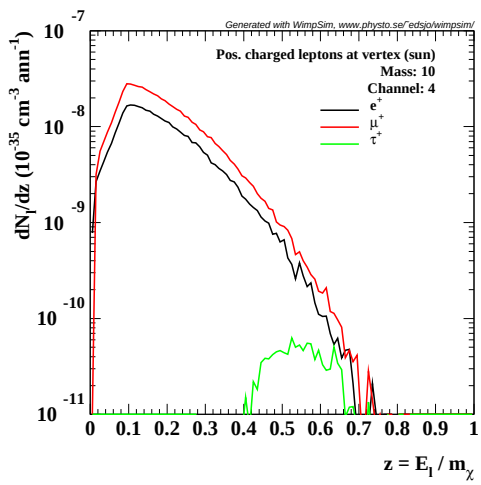
3.4.1 Neutrino fluxes at detector (Sun)



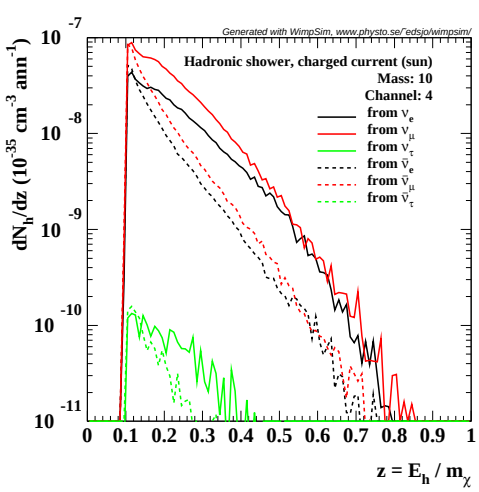


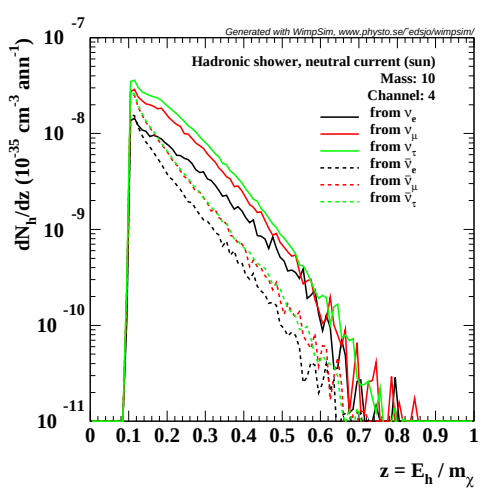
3.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



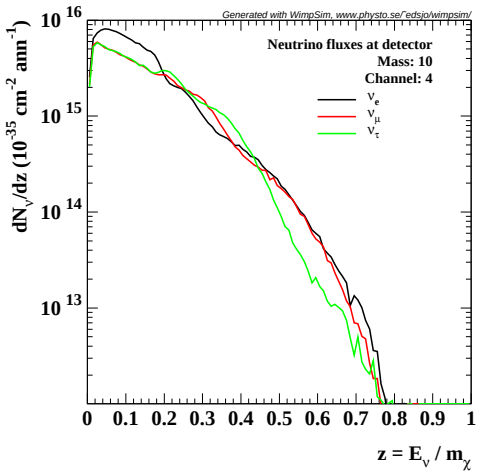


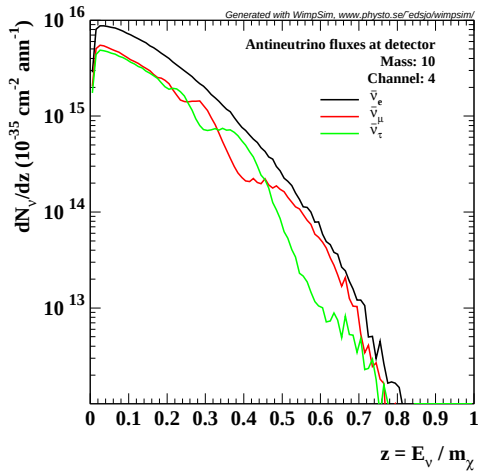
3.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



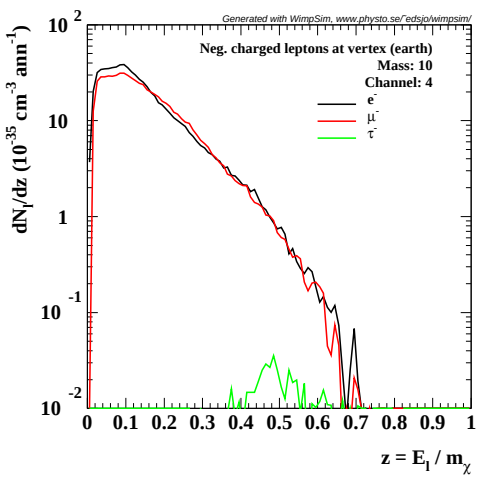


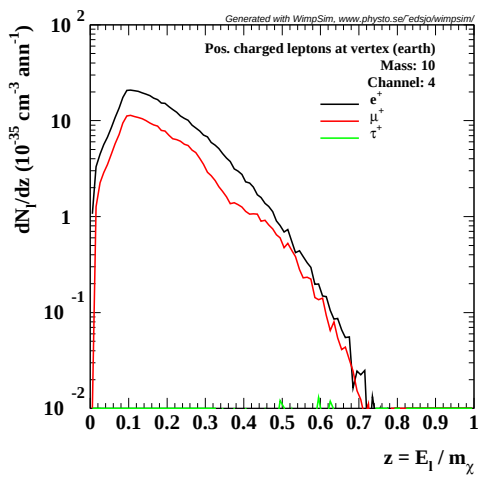
3.4.4 Neutrino fluxes at detector (Earth)



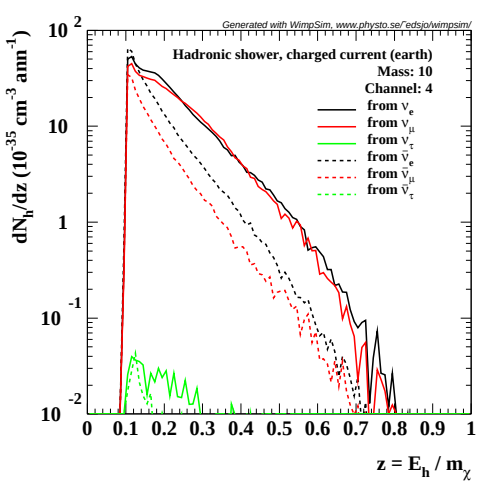


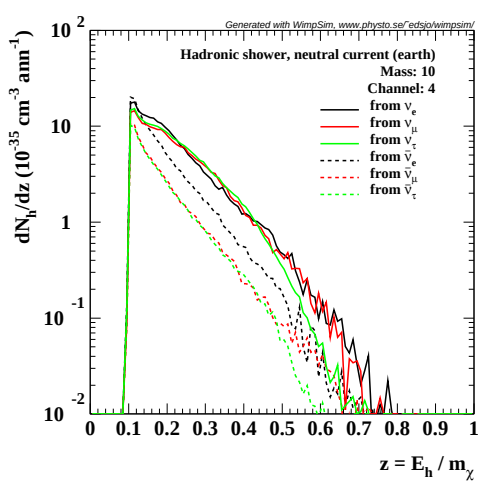
3.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



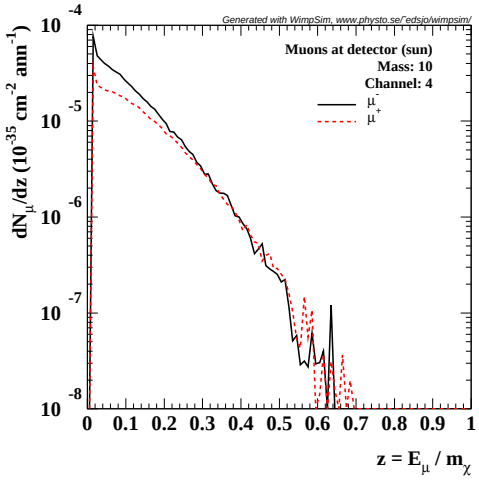


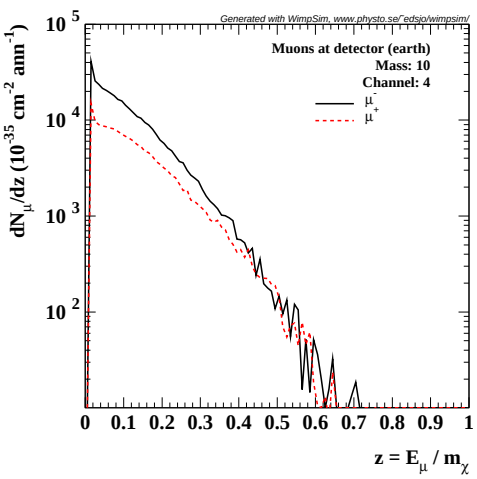
3.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





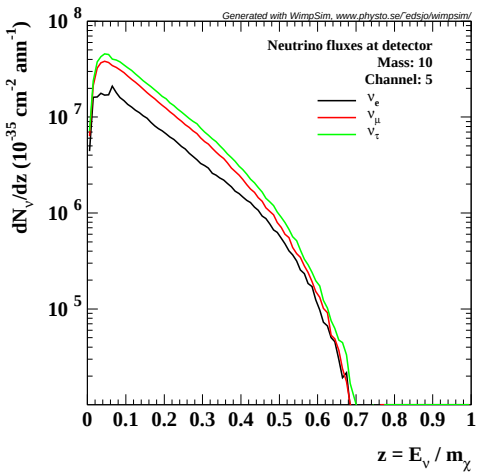
3.4.7 Muons at detector (Sun/Earth)

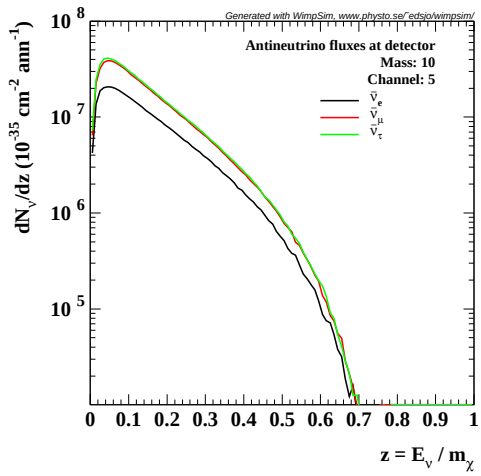




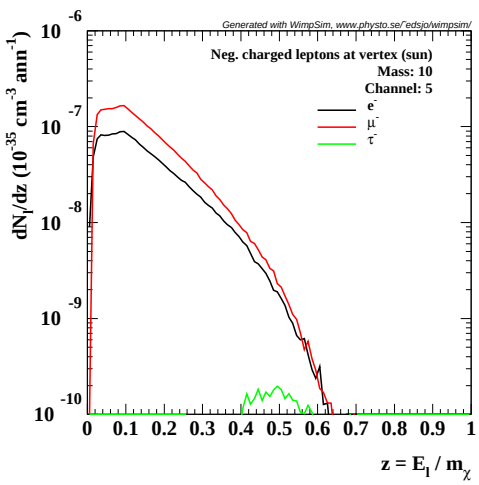
3.5 Channel 5 – $b\bar{b}$

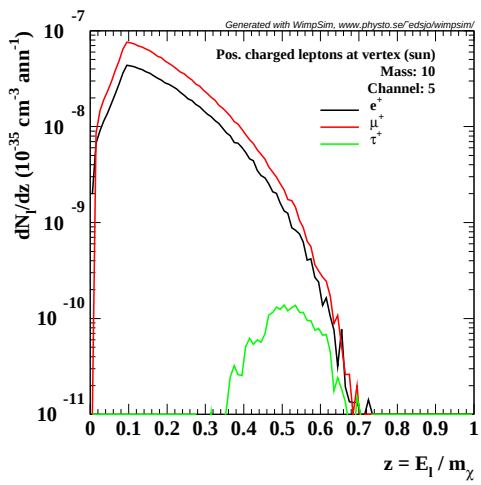
3.5.1 Neutrino fluxes at detector (Sun)



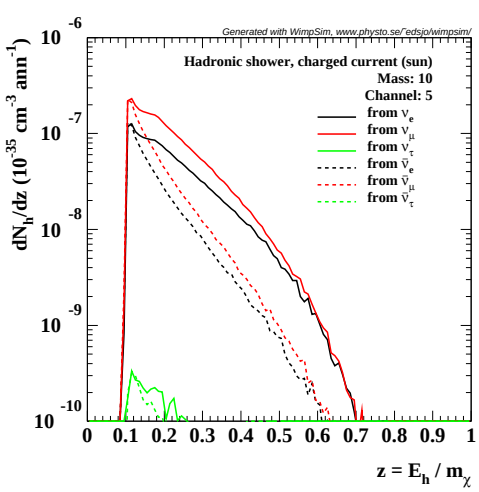


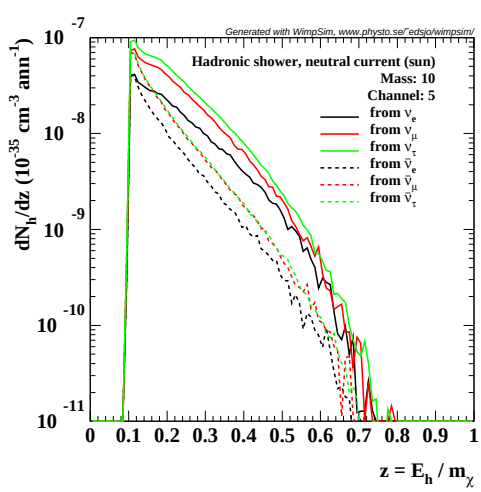
3.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



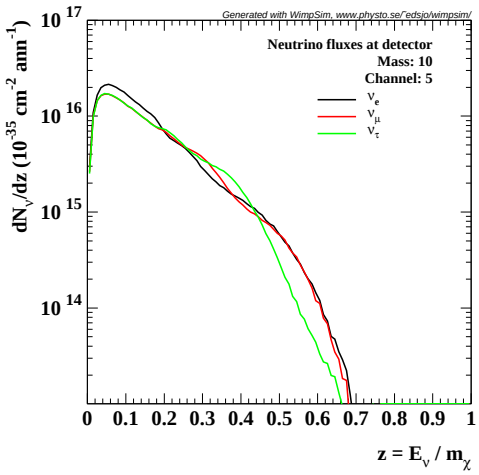


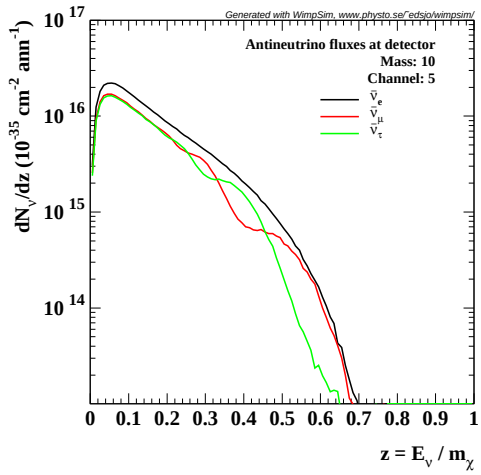
3.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



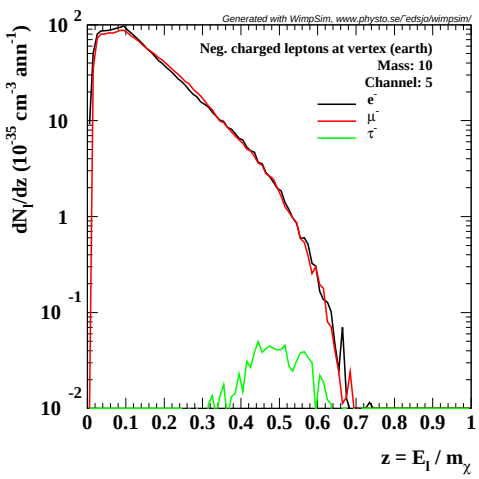


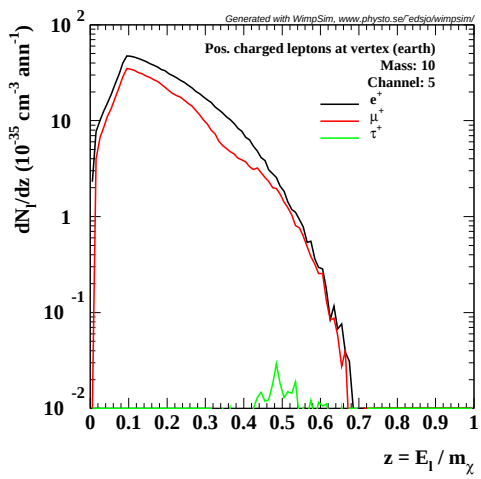
3.5.4 Neutrino fluxes at detector (Earth)



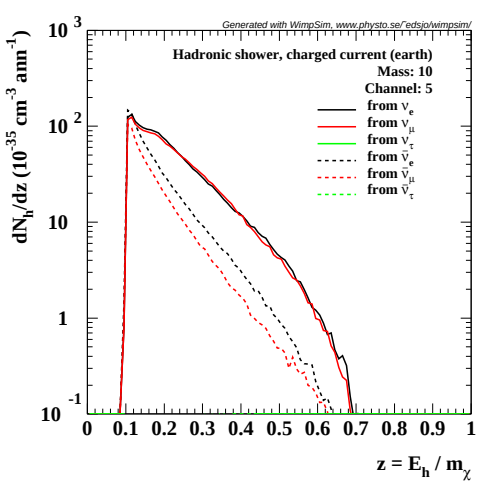


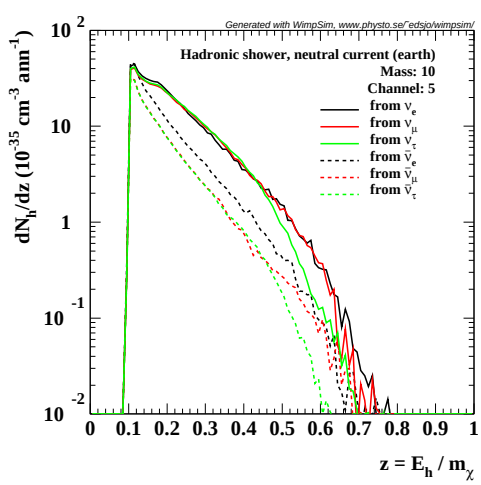
3.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



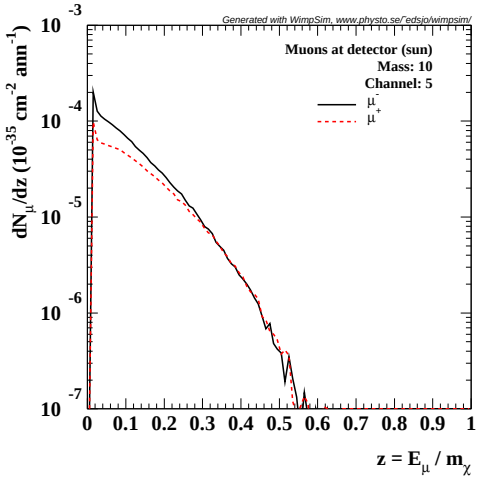


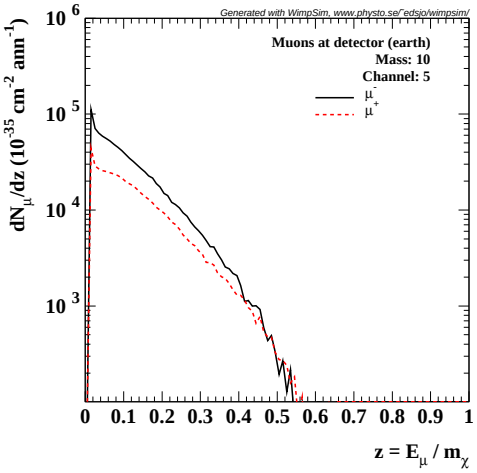
3.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





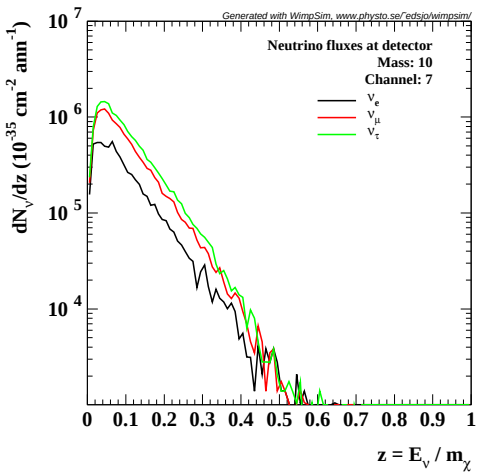
3.5.7 Muons at detector (Sun/Earth)

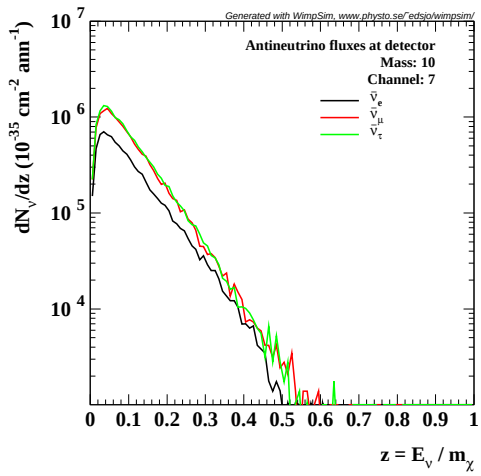




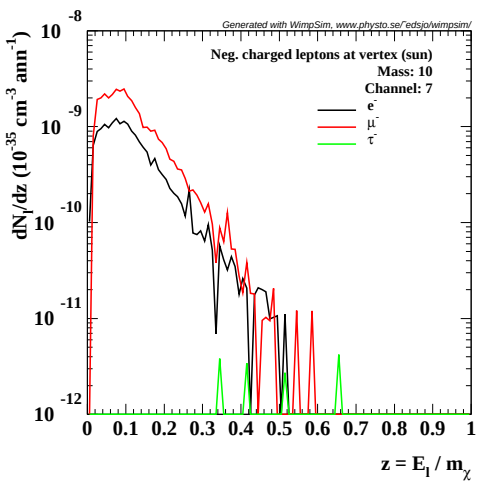
3.6 Channel 7 – gg

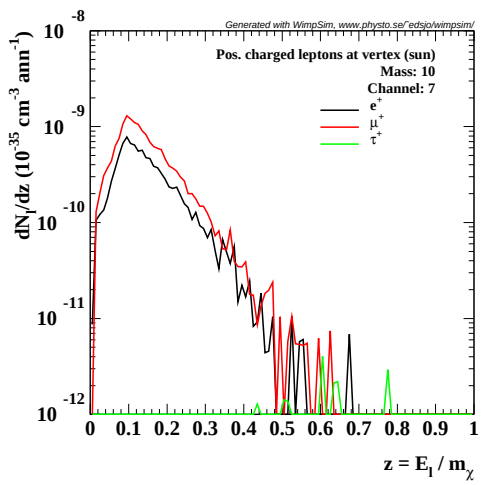
3.6.1 Neutrino fluxes at detector (Sun)



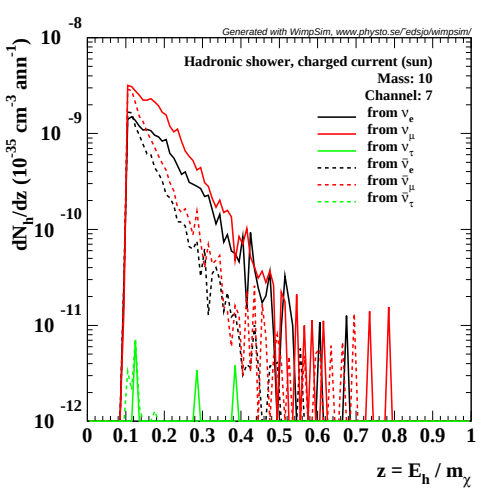


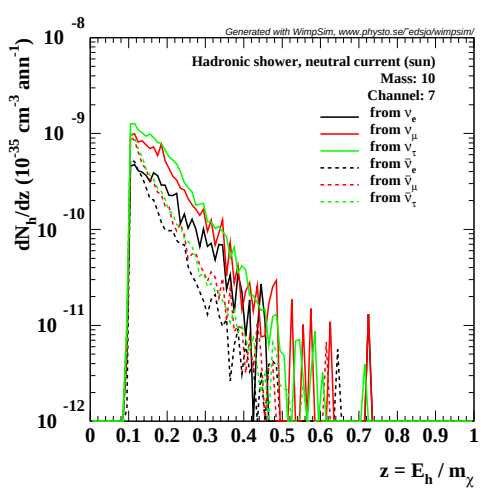
3.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



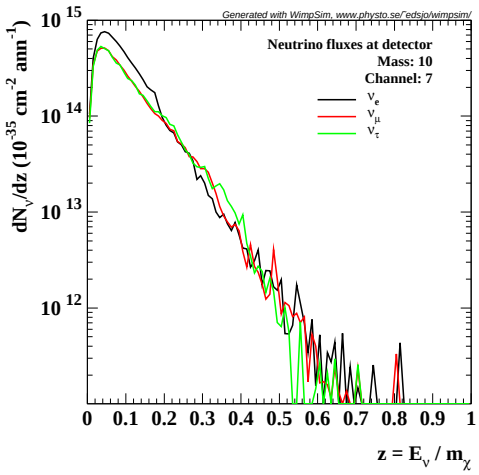


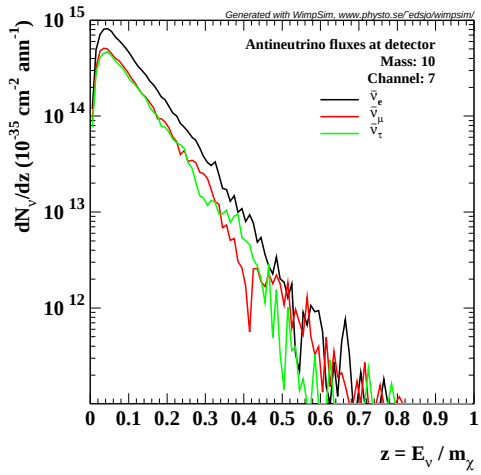
3.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



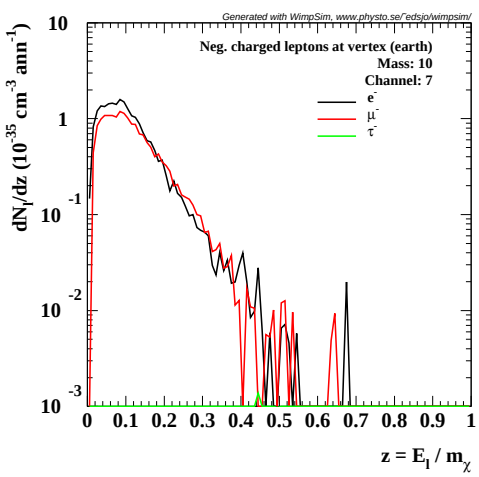


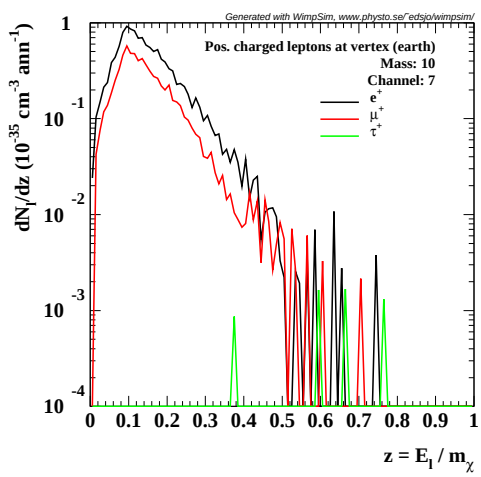
3.6.4 Neutrino fluxes at detector (Earth)



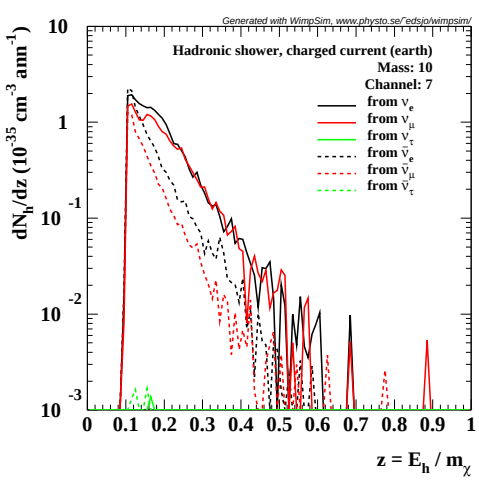


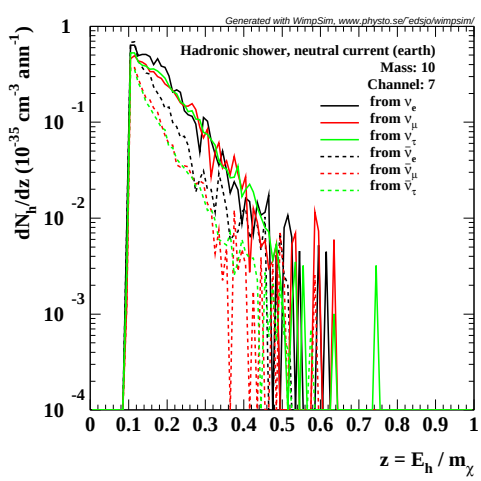
3.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



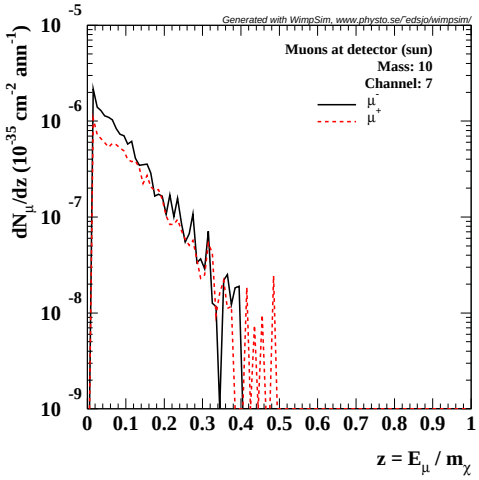


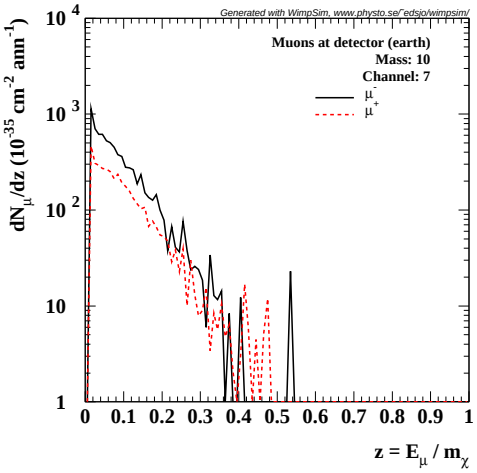
3.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





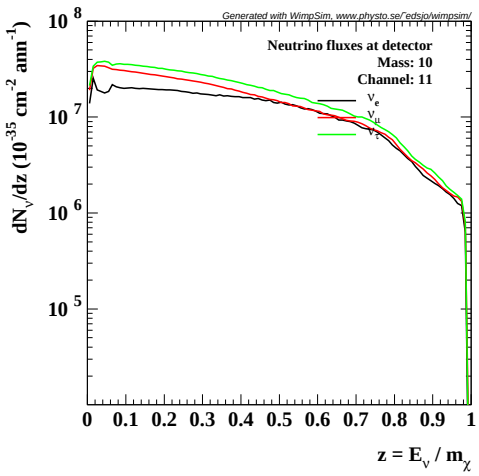
3.6.7 Muons at detector (Sun/Earth)

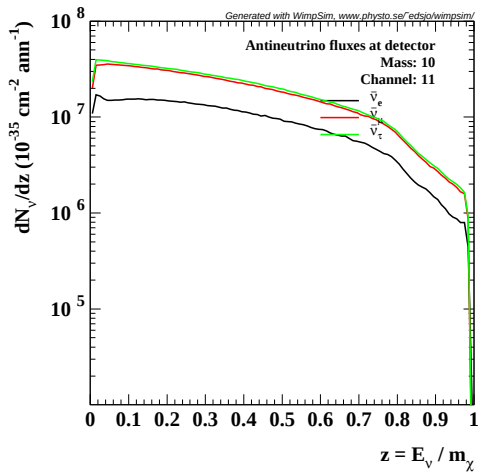




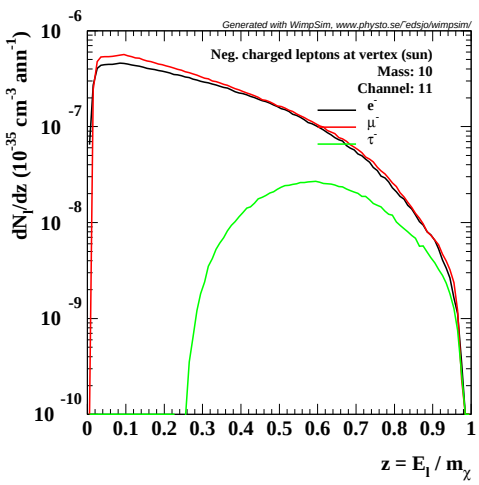
3.7 Channel 11 – $\tau^-\tau^+$

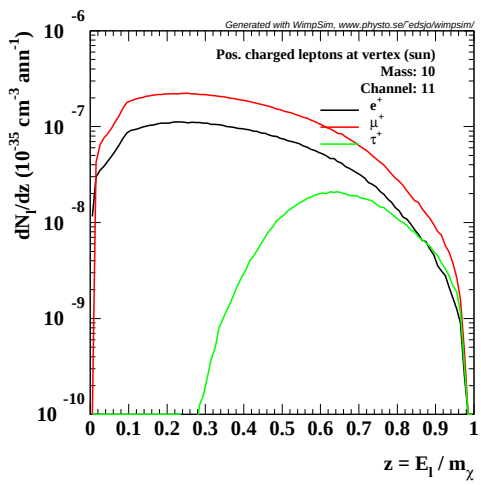
3.7.1 Neutrino fluxes at detector (Sun)



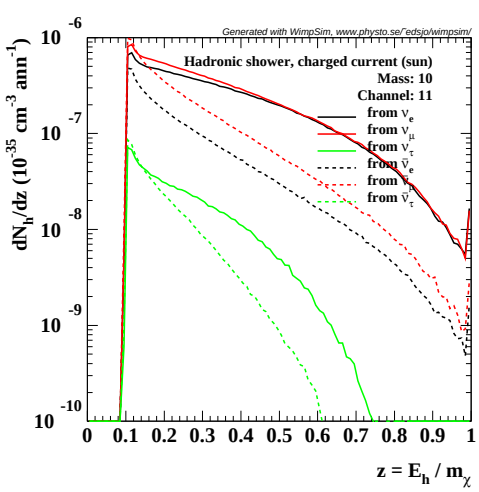


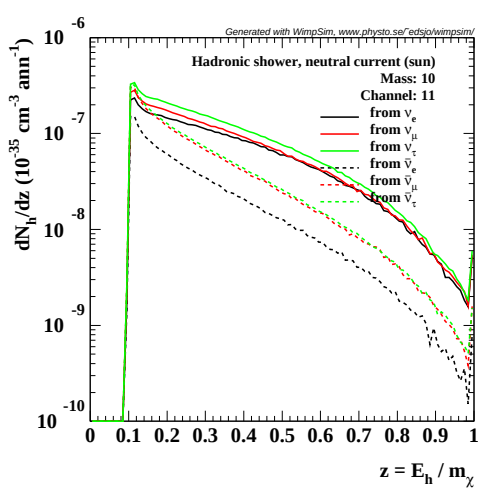
3.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



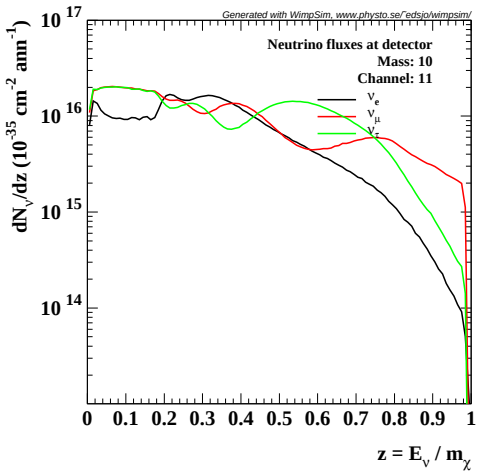


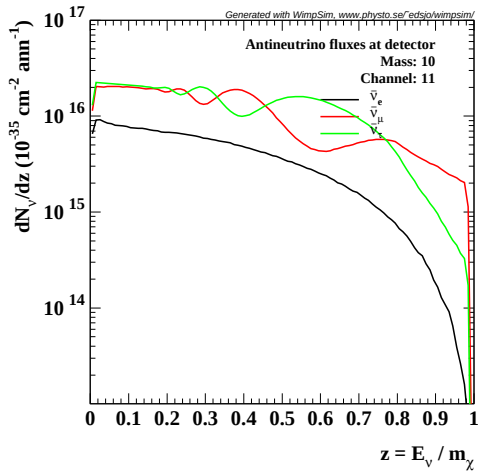
3.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



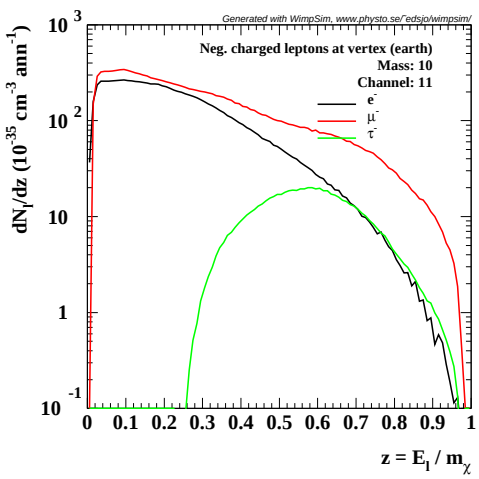


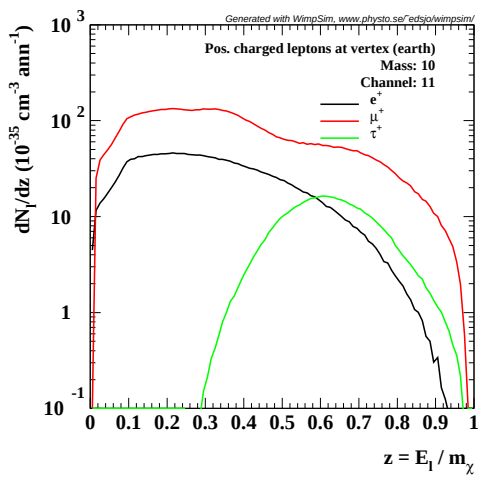
3.7.4 Neutrino fluxes at detector (Earth)



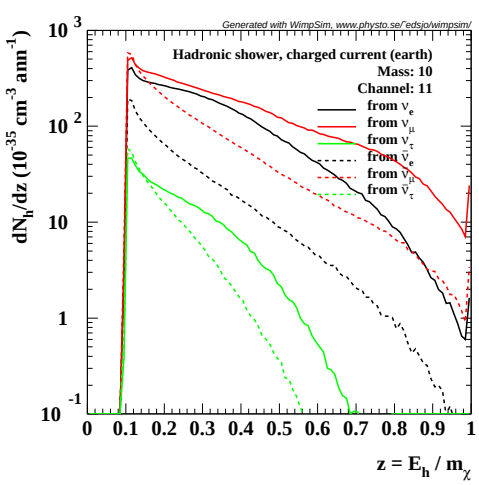


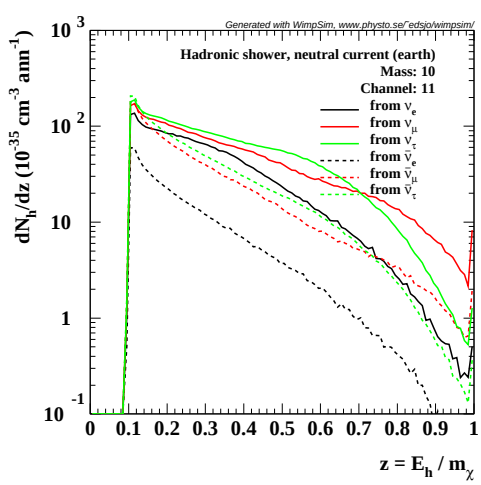
3.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



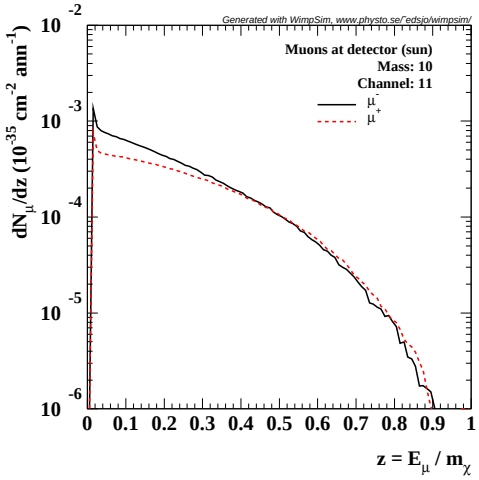


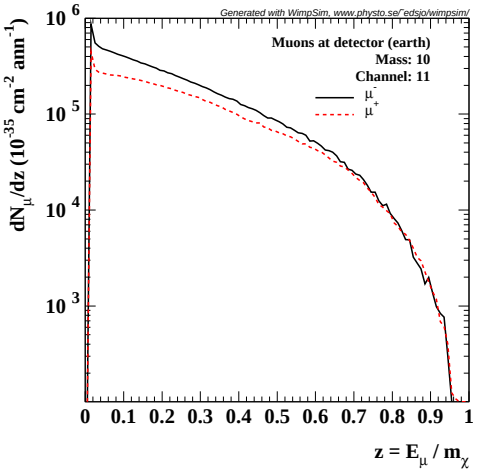
3.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





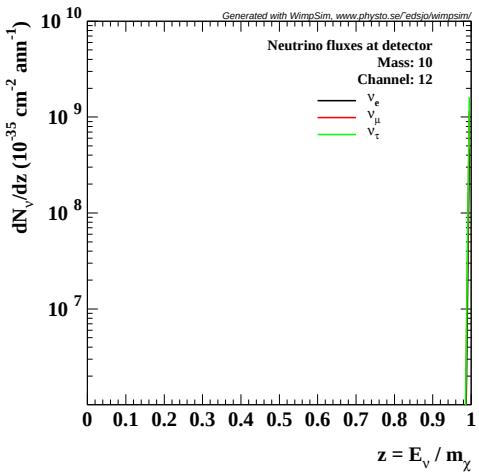
3.7.7 Muons at detector (Sun/Earth)

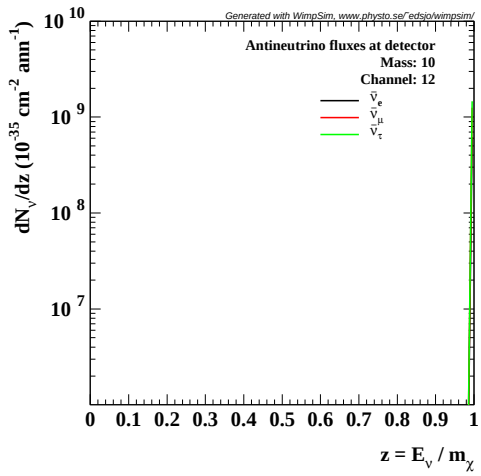




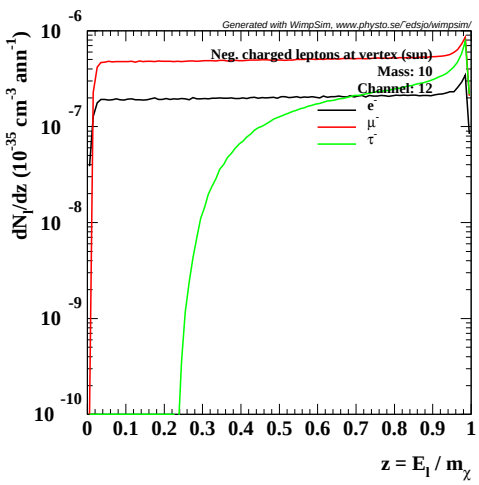
3.8 Channel 12 – $\nu_e\bar{\nu}_e$

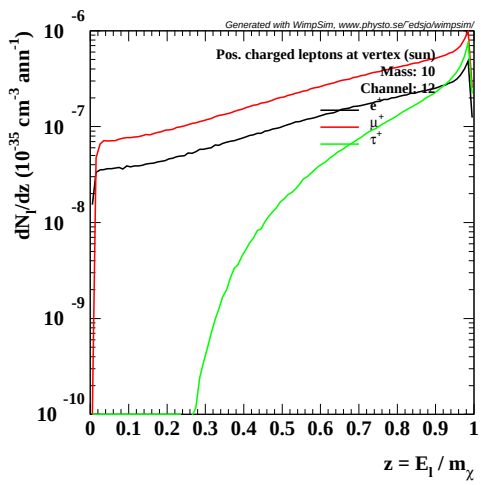
3.8.1 Neutrino fluxes at detector (Sun)



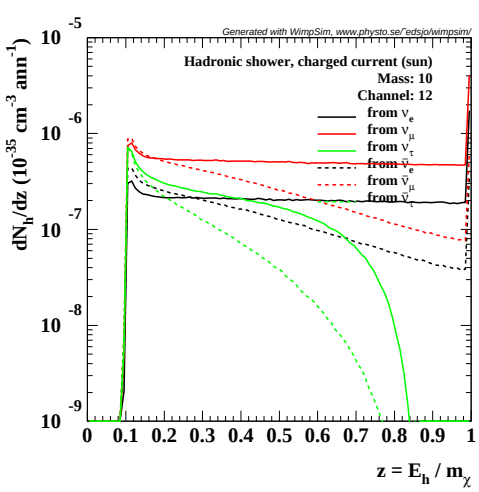


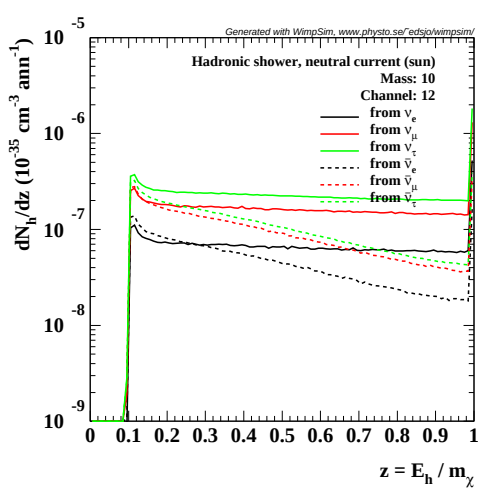
3.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



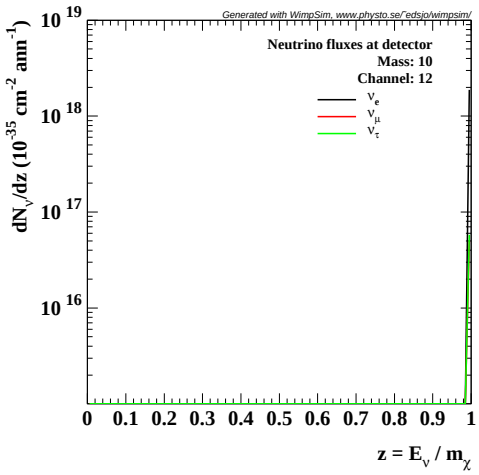


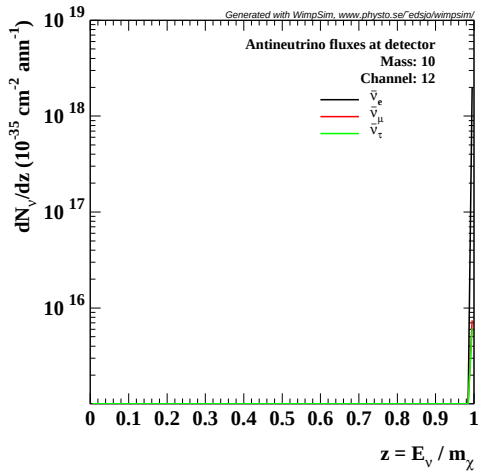
3.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



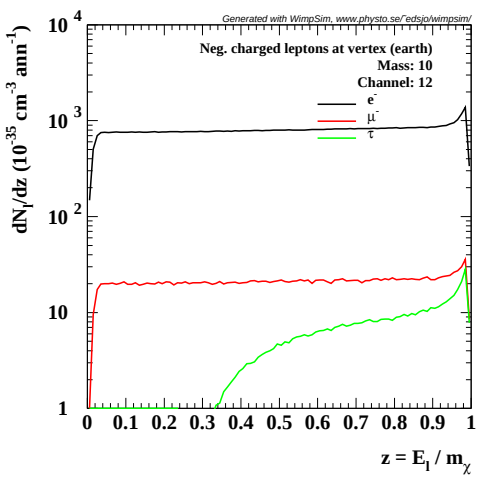


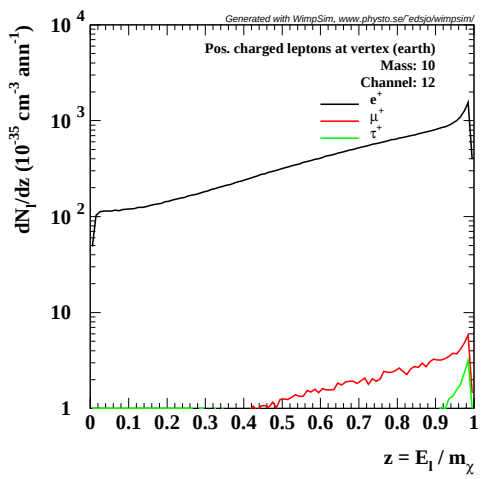
3.8.4 Neutrino fluxes at detector (Earth)



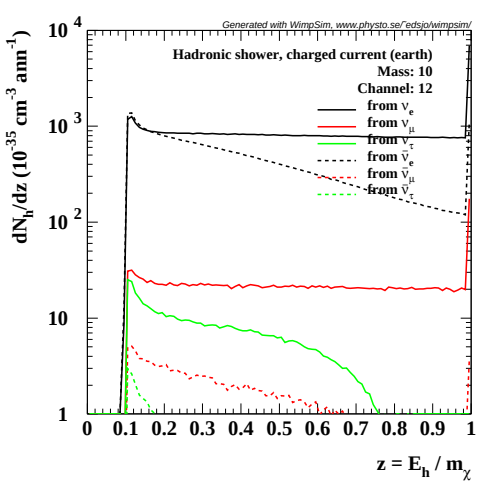


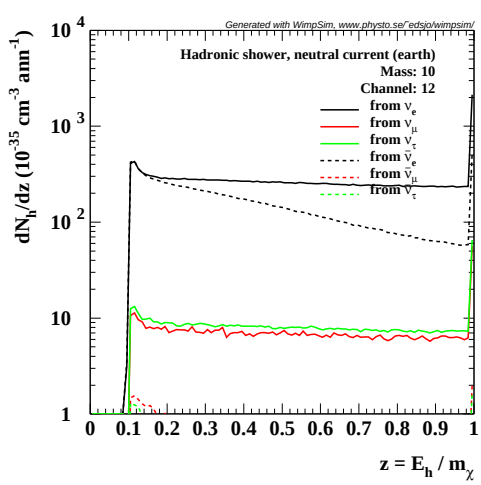
3.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



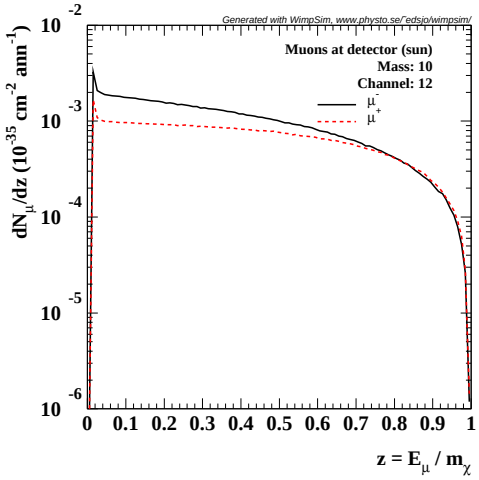


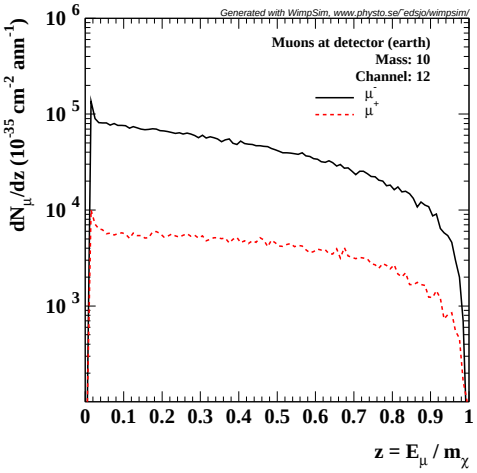
3.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





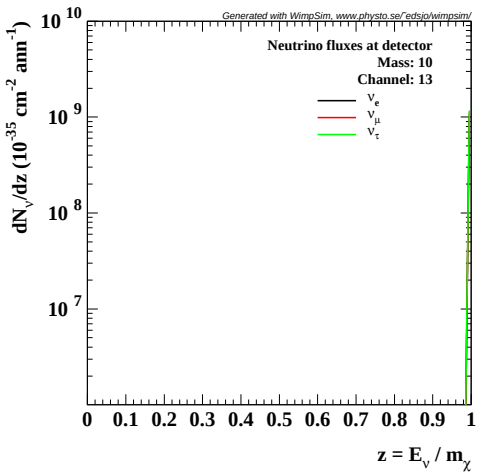
3.8.7 Muons at detector (Sun/Earth)

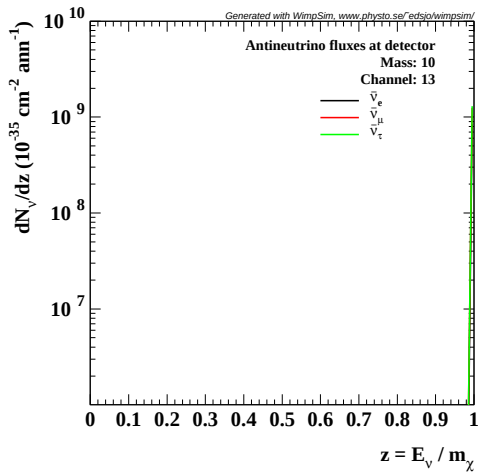




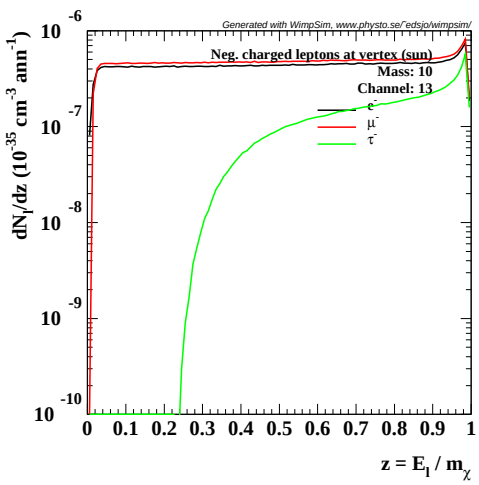
3.9 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

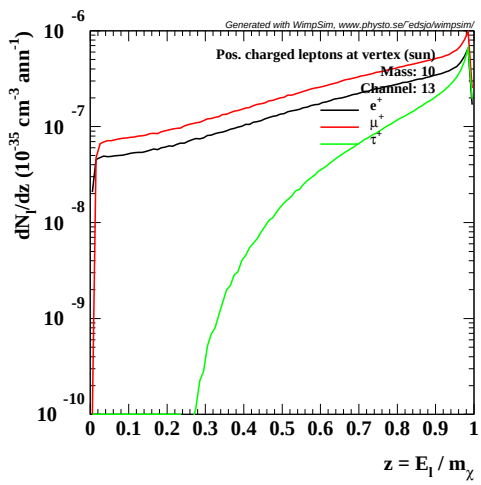
3.9.1 Neutrino fluxes at detector (Sun)



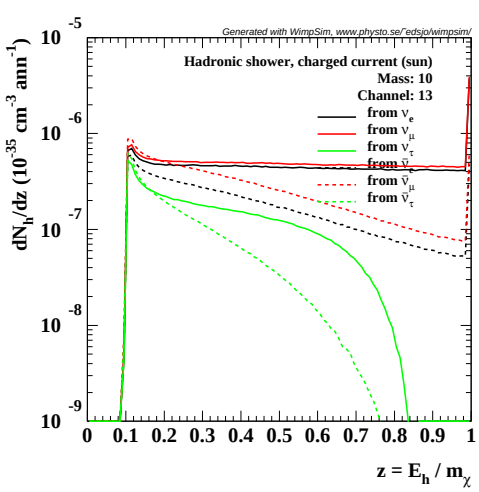


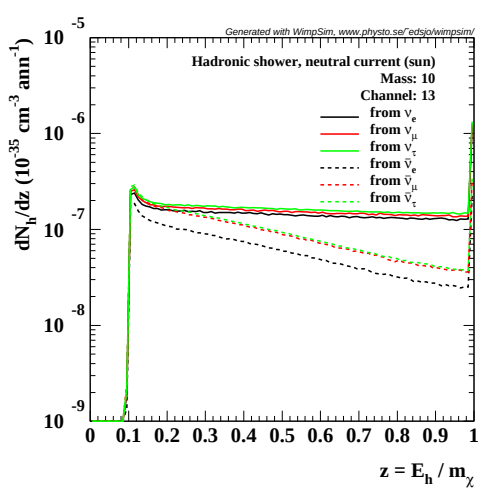
3.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



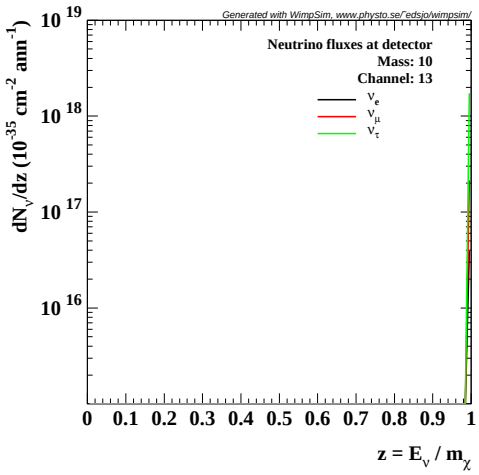


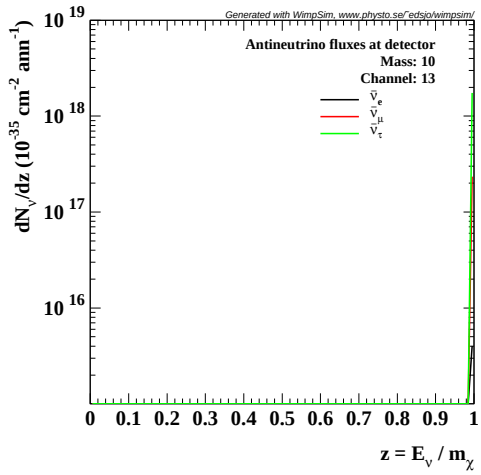
3.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



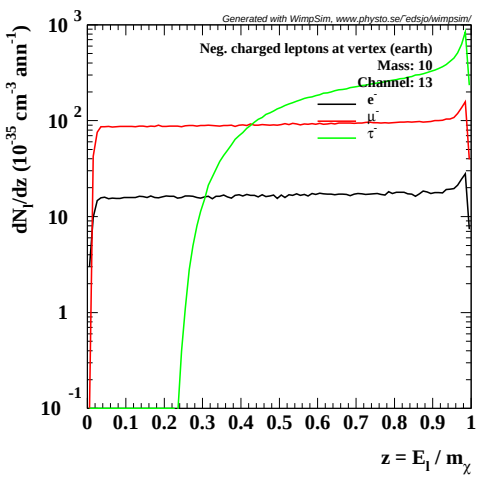


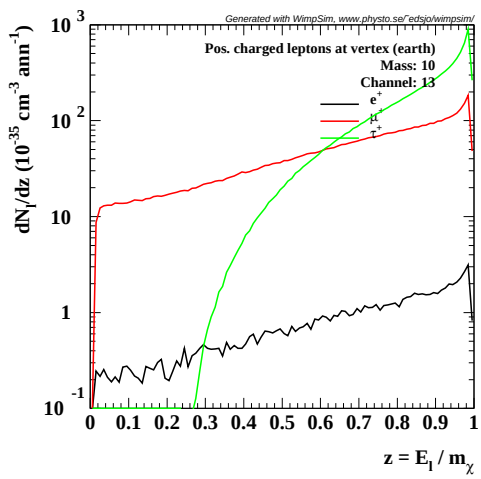
3.9.4 Neutrino fluxes at detector (Earth)



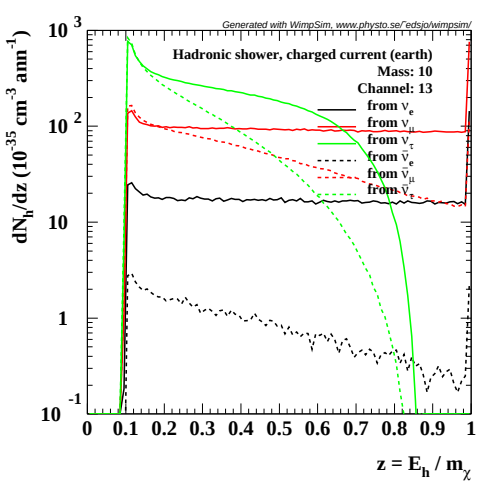


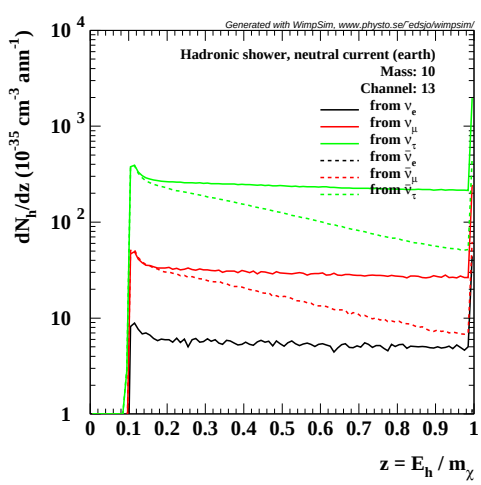
3.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



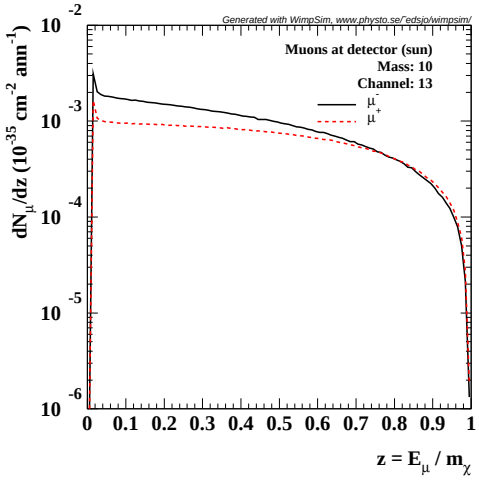


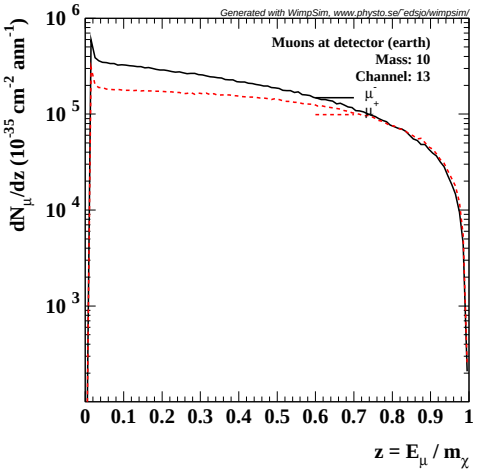
3.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





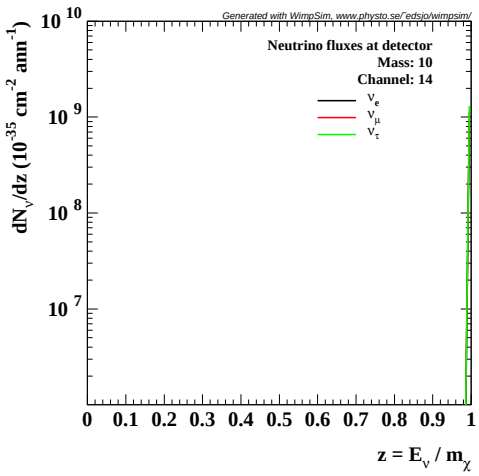
3.9.7 Muons at detector (Sun/Earth)

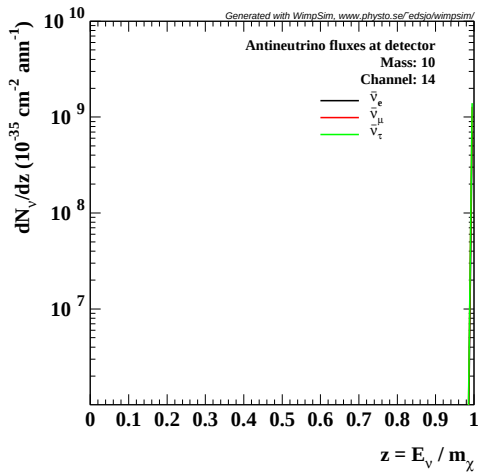




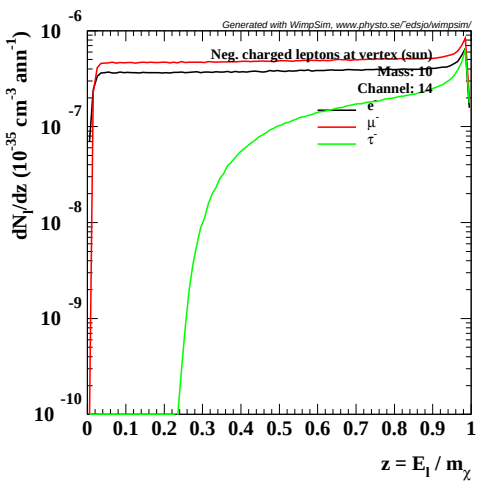
3.10 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

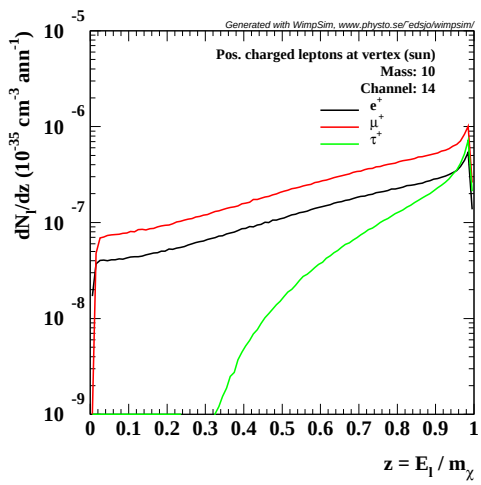
3.10.1 Neutrino fluxes at detector (Sun)



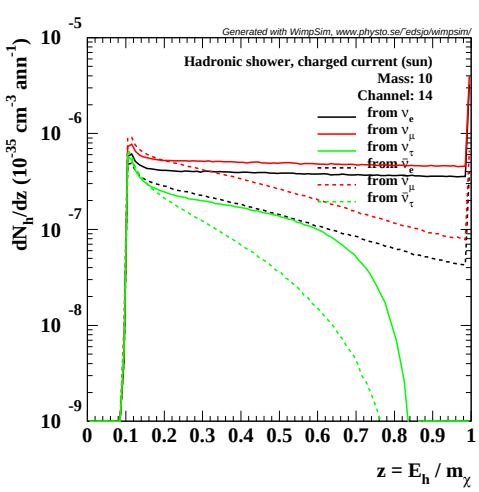


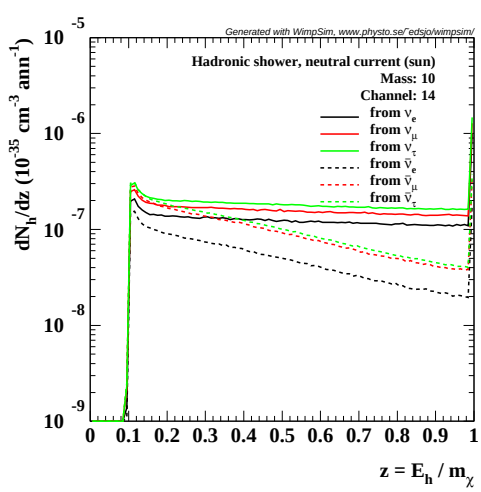
3.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



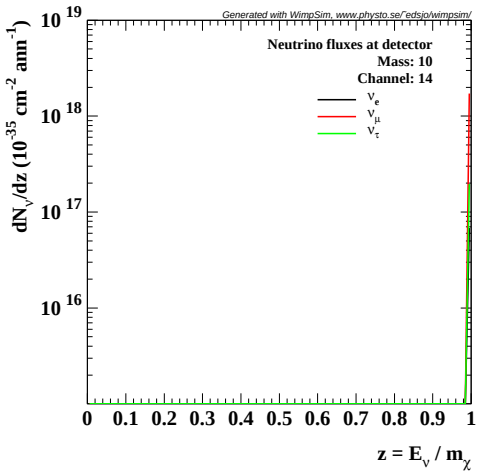


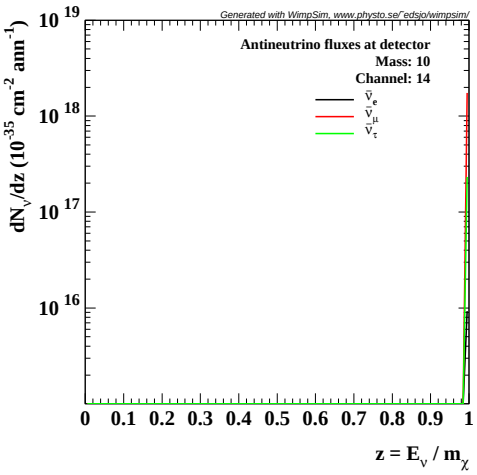
3.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



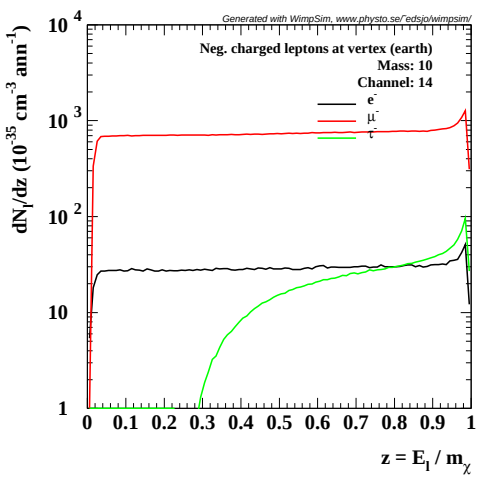


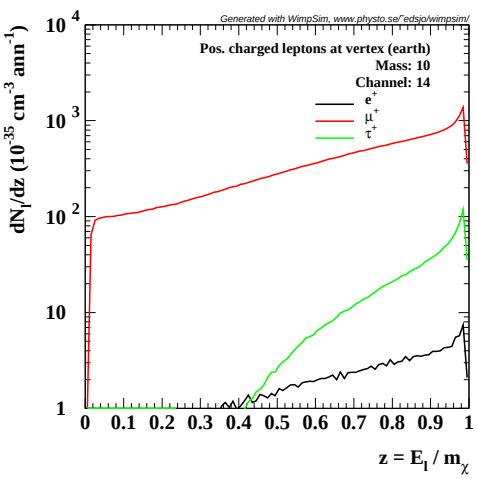
3.10.4 Neutrino fluxes at detector (Earth)



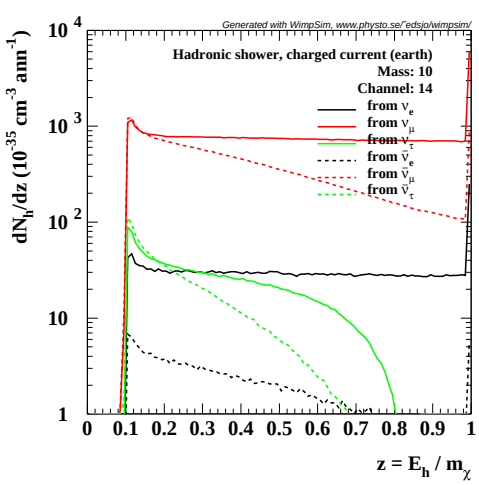


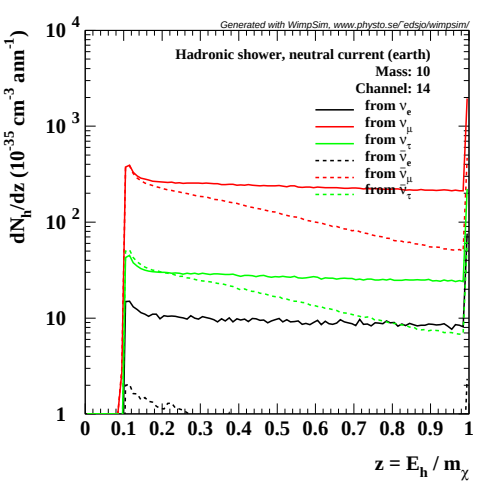
3.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



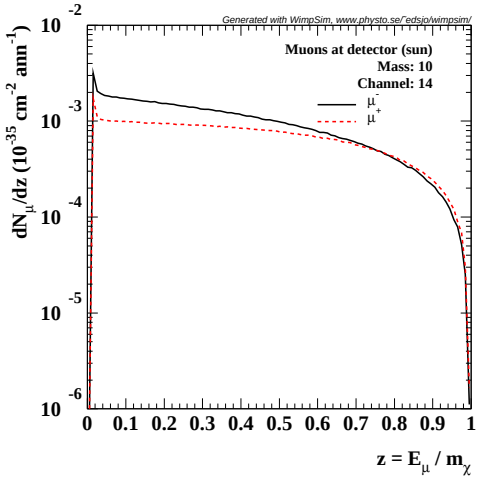


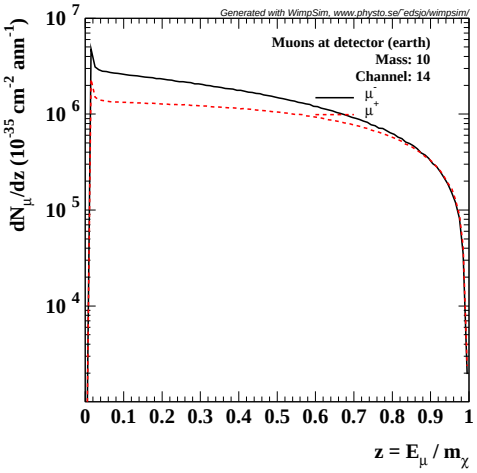
3.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





3.10.7 Muons at detector (Sun/Earth)

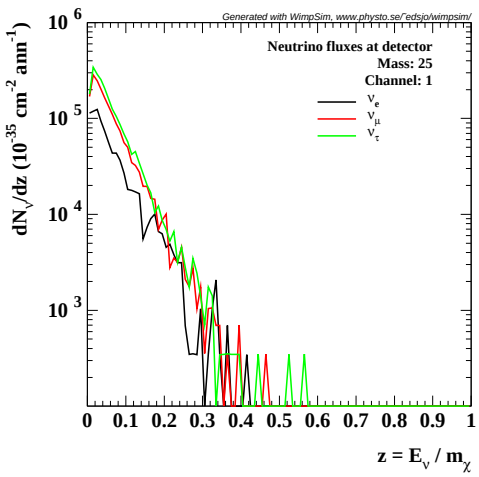


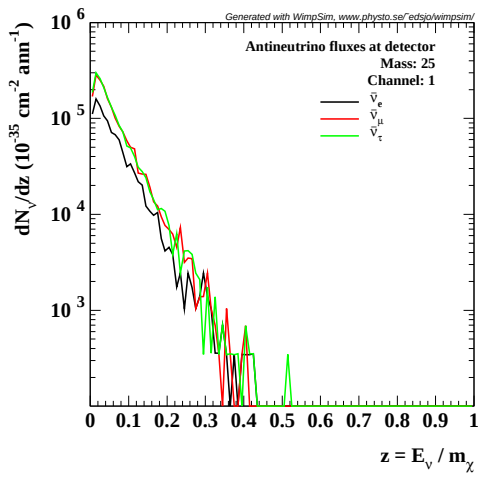


4 Mass 25

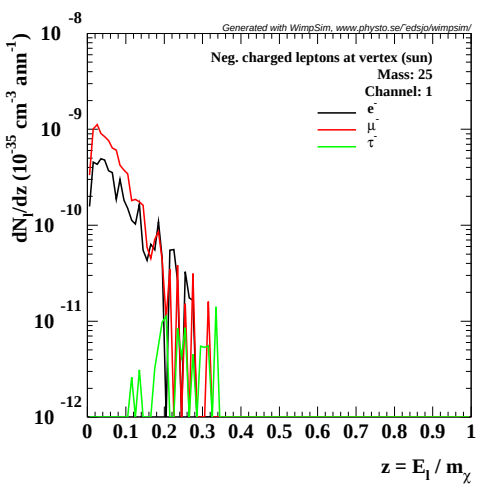
4.1 Channel 1 – $d\bar{d}$

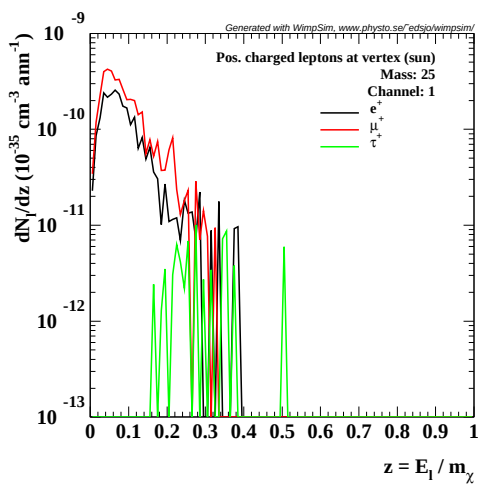
4.1.1 Neutrino fluxes at detector (Sun)



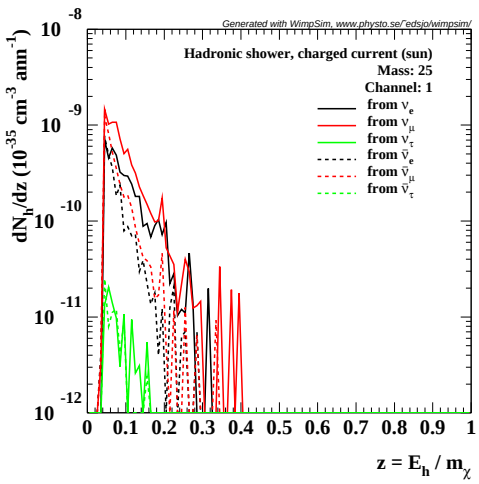


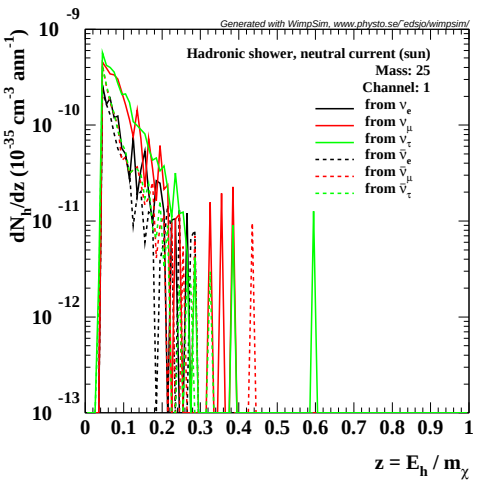
4.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



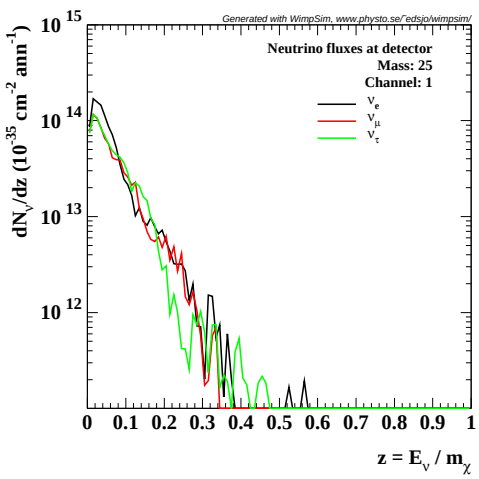


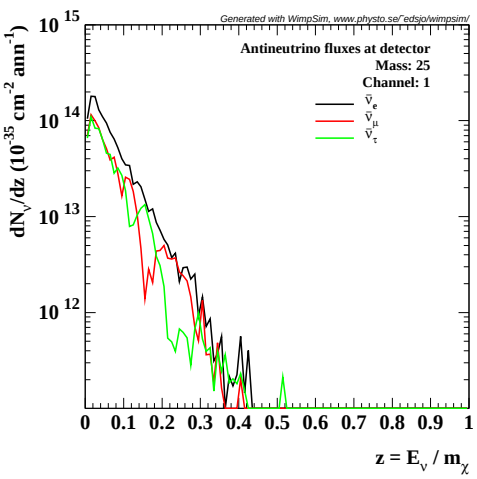
4.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



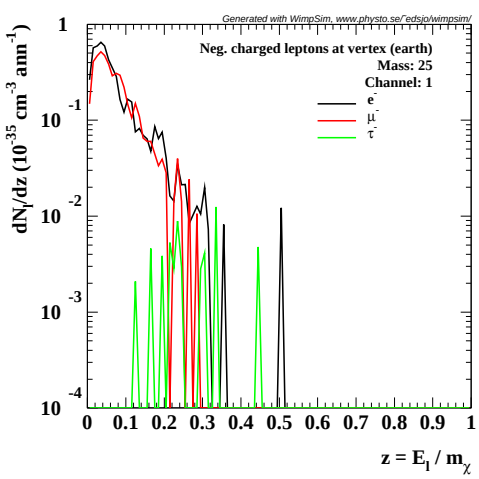


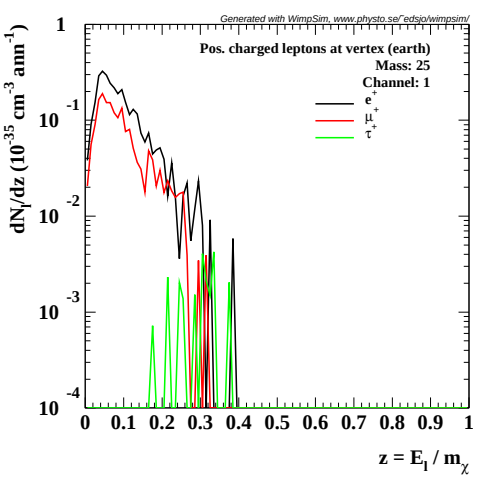
4.1.4 Neutrino fluxes at detector (Earth)



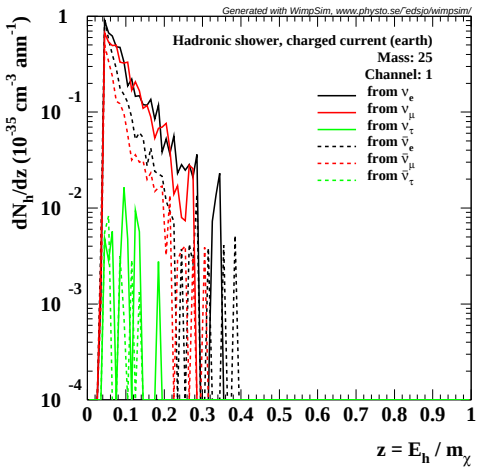


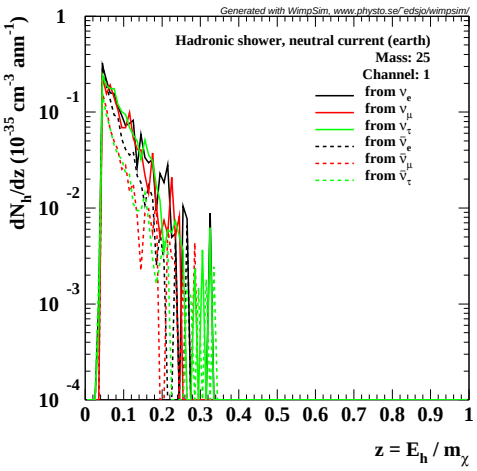
4.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



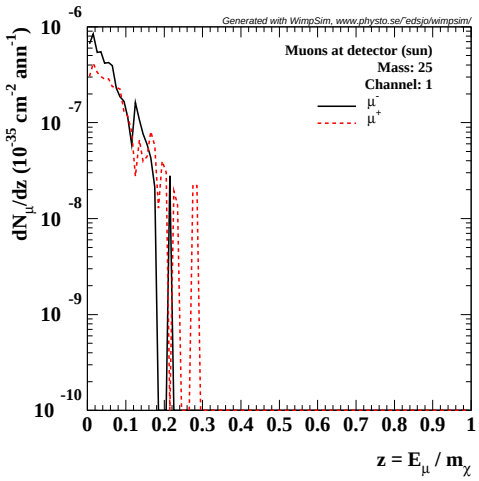


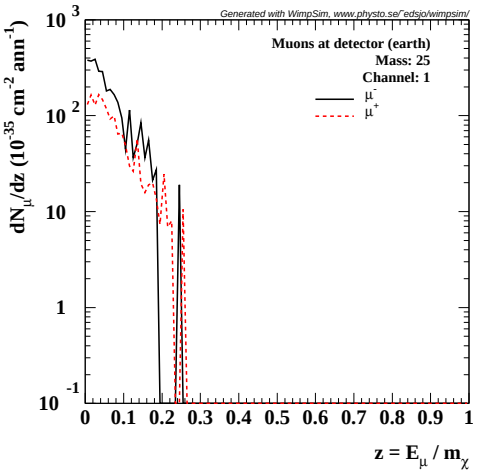
4.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





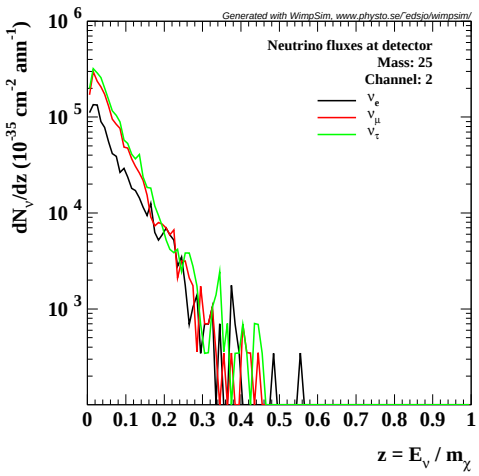
4.1.7 Muons at detector (Sun/Earth)

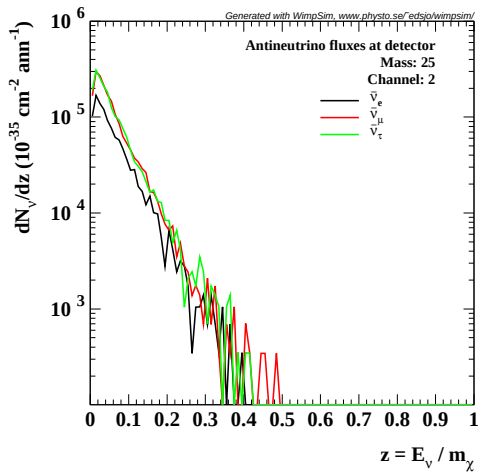




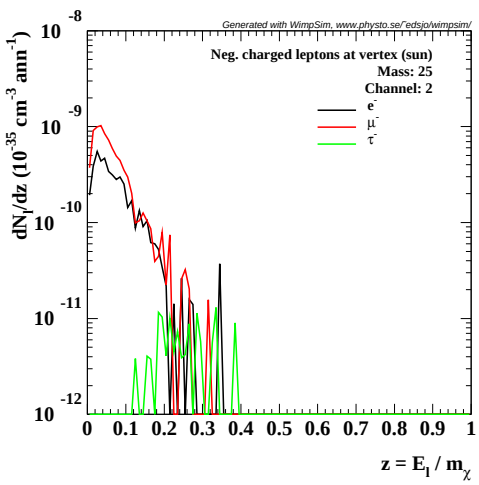
4.2 Channel 2 – $u\bar{u}$

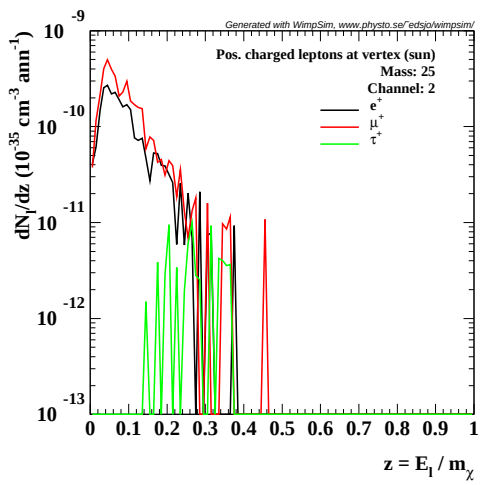
4.2.1 Neutrino fluxes at detector (Sun)



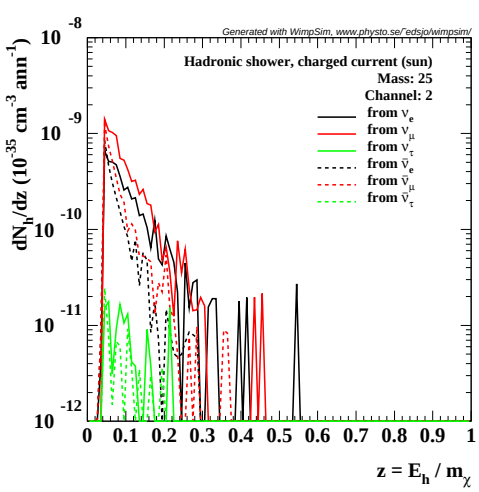


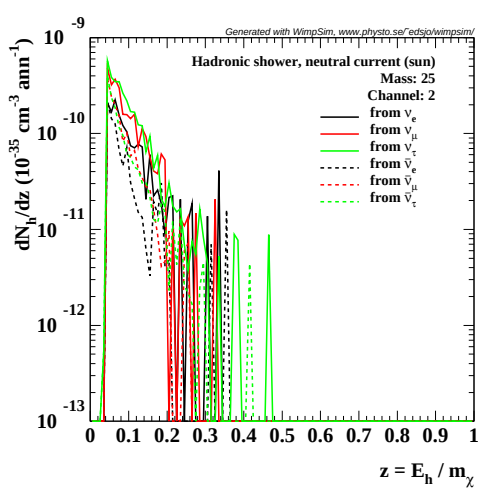
4.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



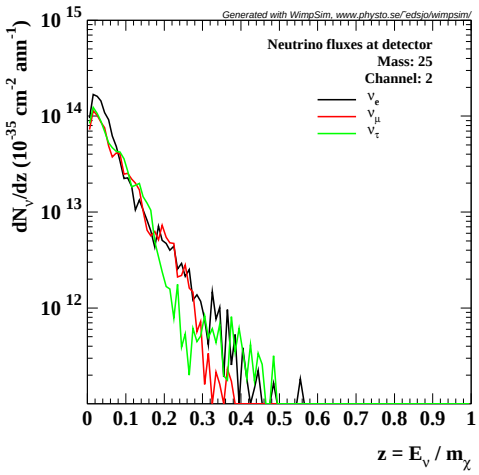


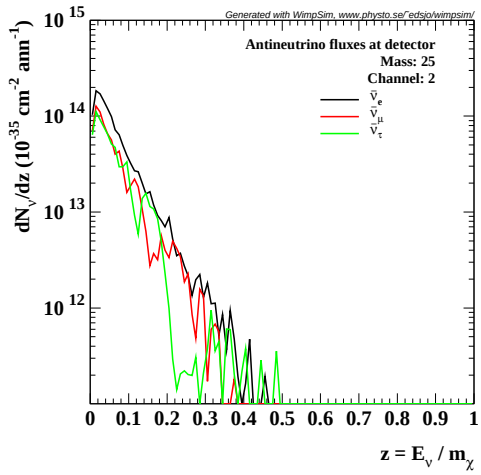
4.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



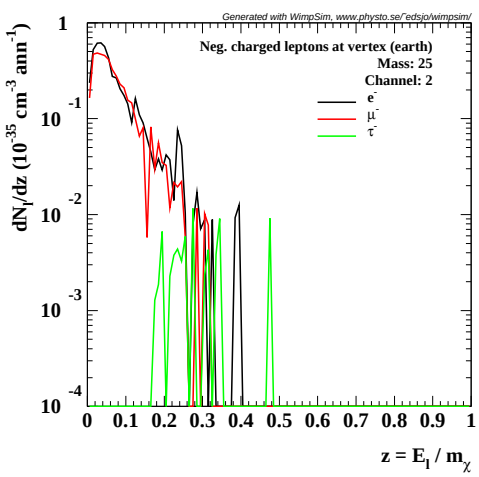


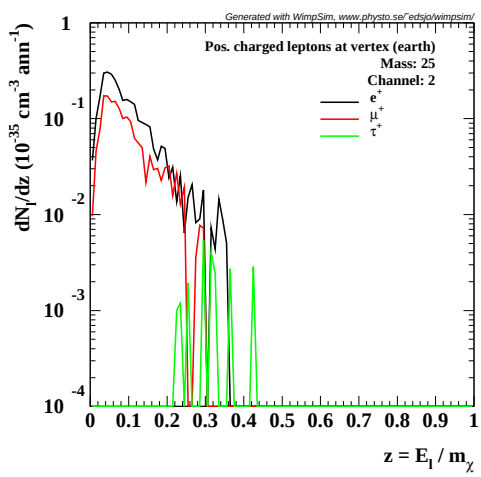
4.2.4 Neutrino fluxes at detector (Earth)



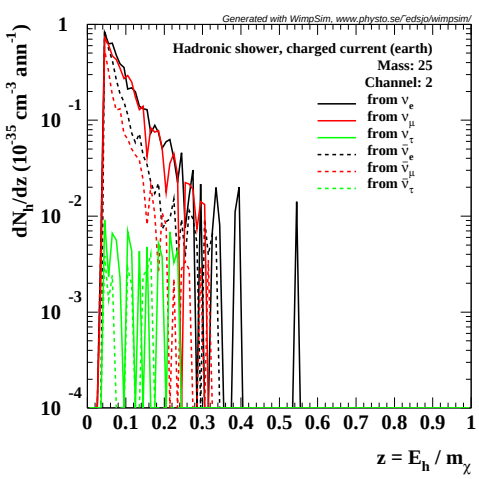


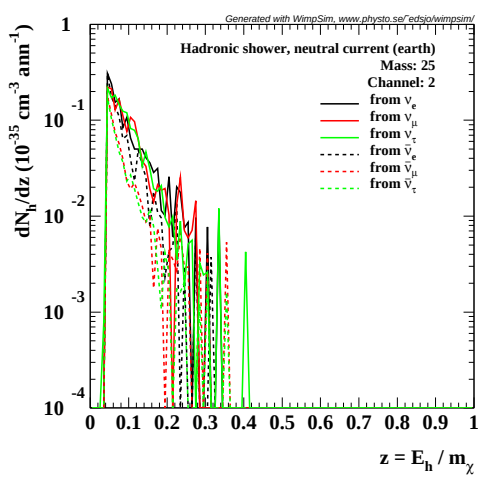
4.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



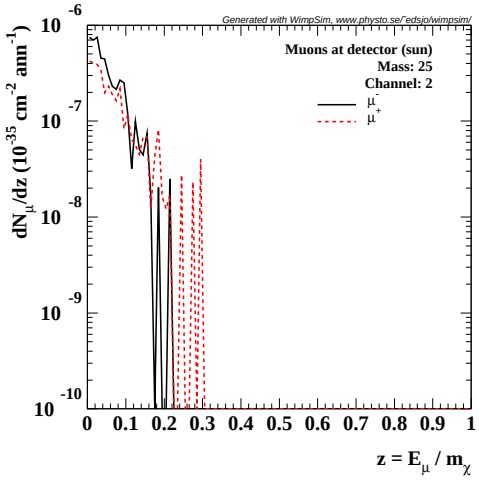


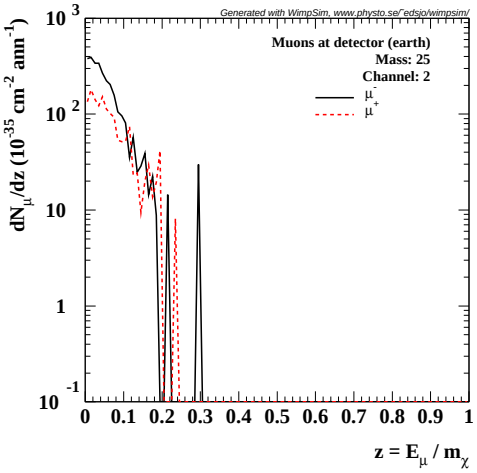
4.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





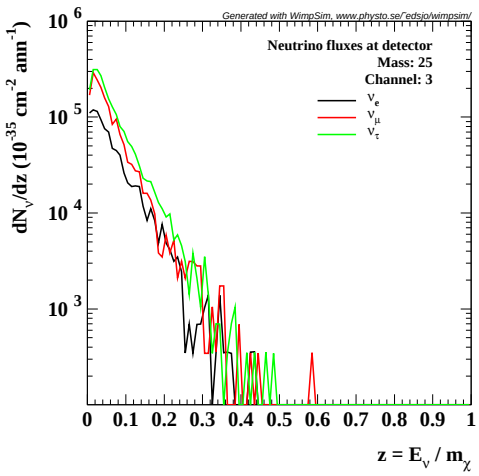
4.2.7 Muons at detector (Sun/Earth)

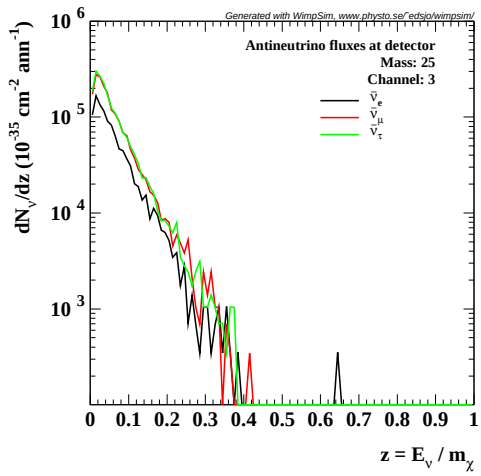




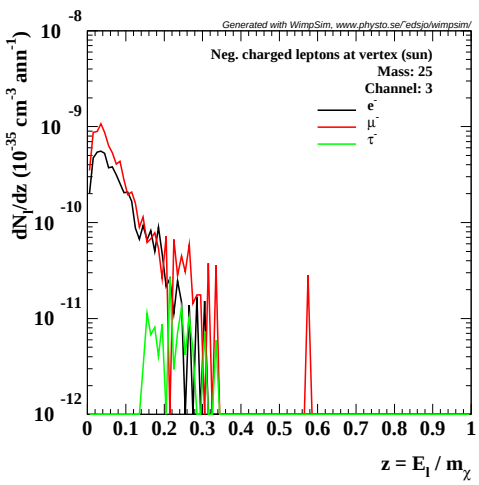
4.3 Channel 3 – $s\bar{s}$

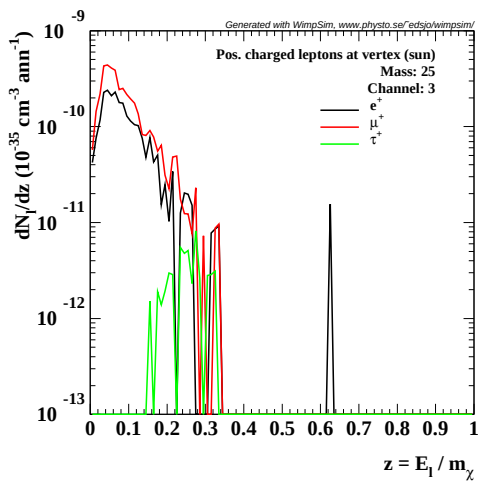
4.3.1 Neutrino fluxes at detector (Sun)



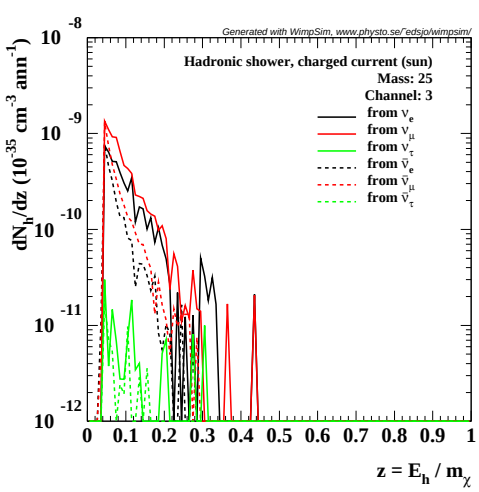


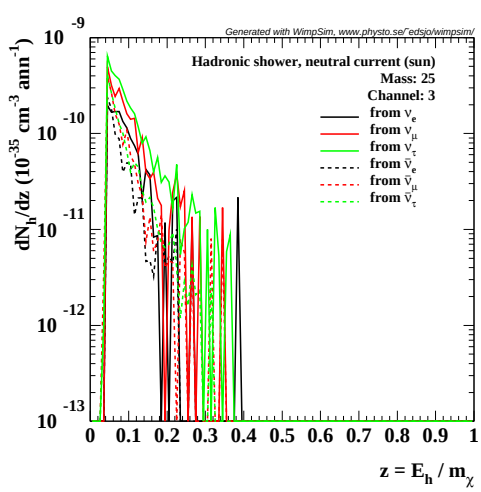
4.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



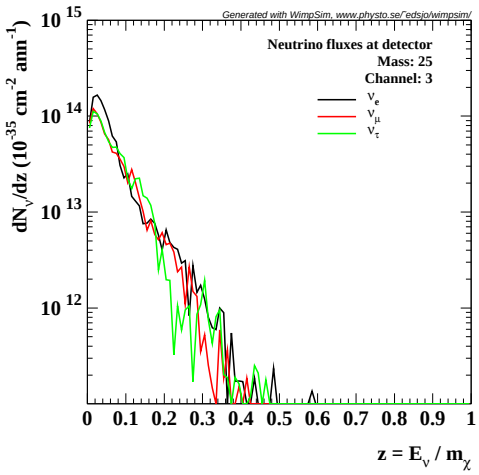


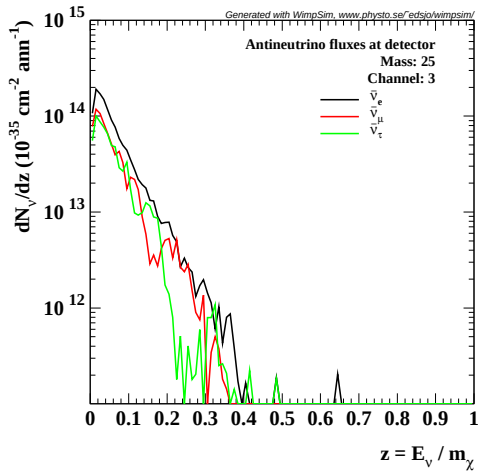
4.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



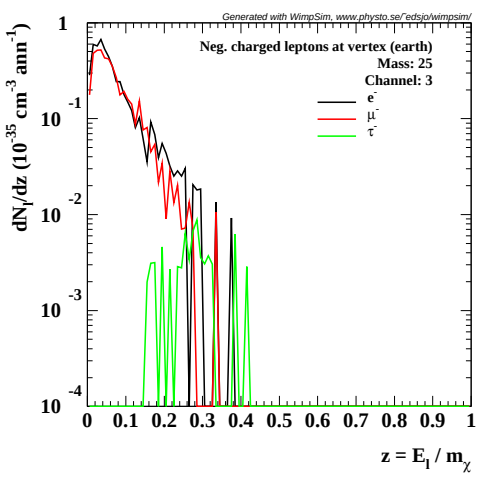


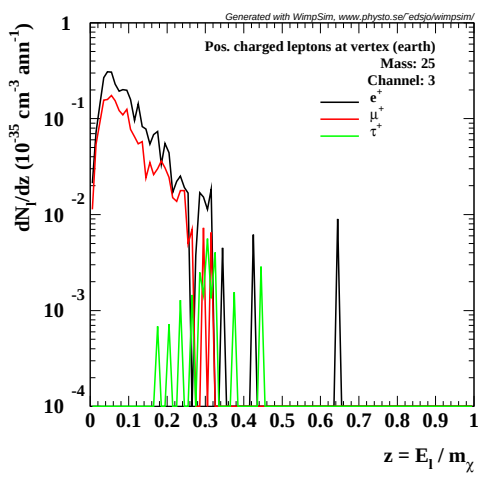
4.3.4 Neutrino fluxes at detector (Earth)



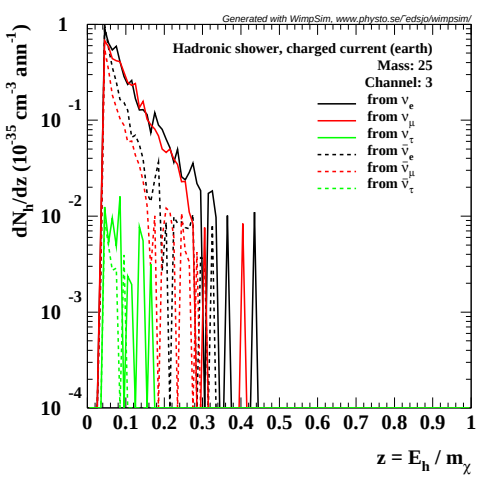


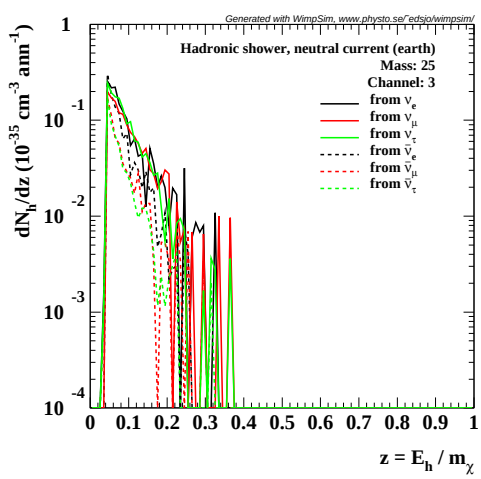
4.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



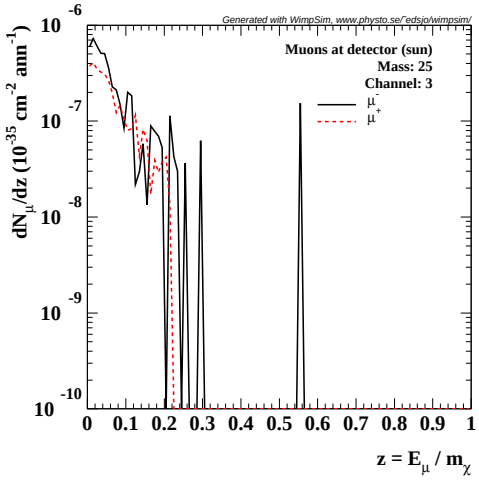


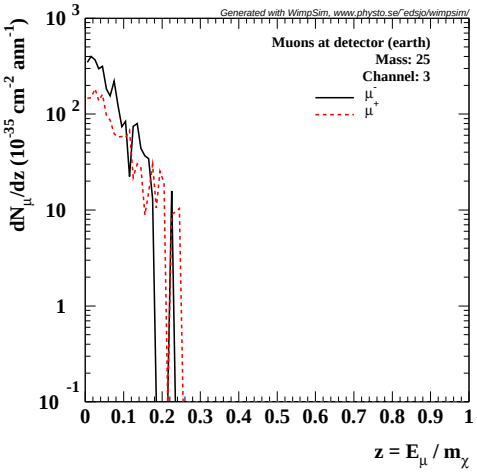
4.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





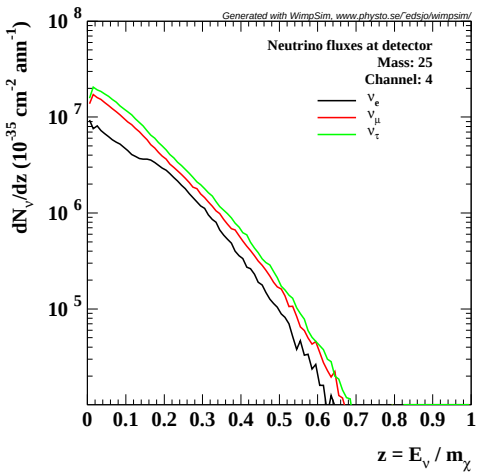
4.3.7 Muons at detector (Sun/Earth)

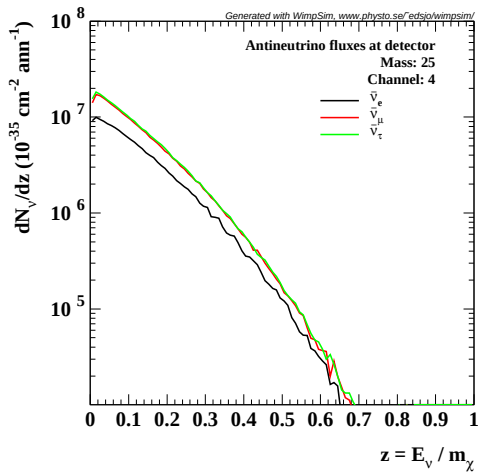




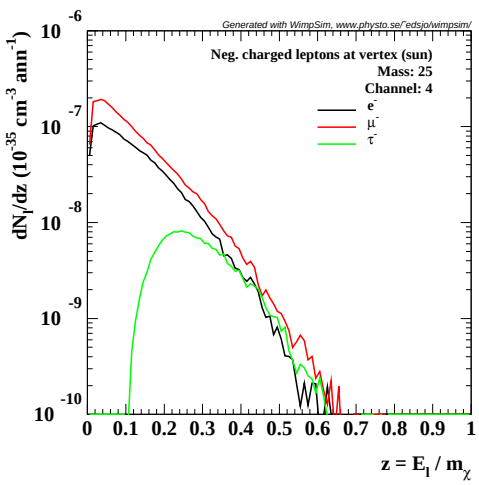
4.4 Channel 4 – $c\bar{c}$

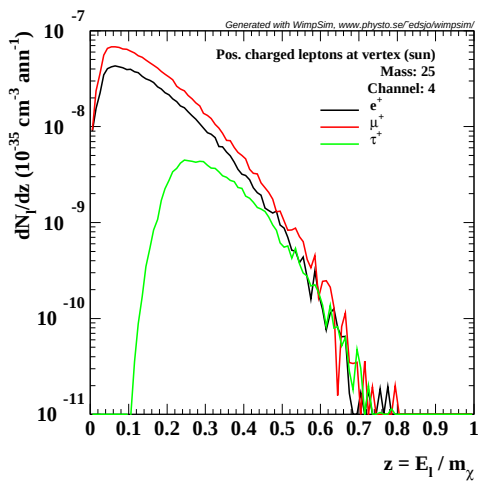
4.4.1 Neutrino fluxes at detector (Sun)



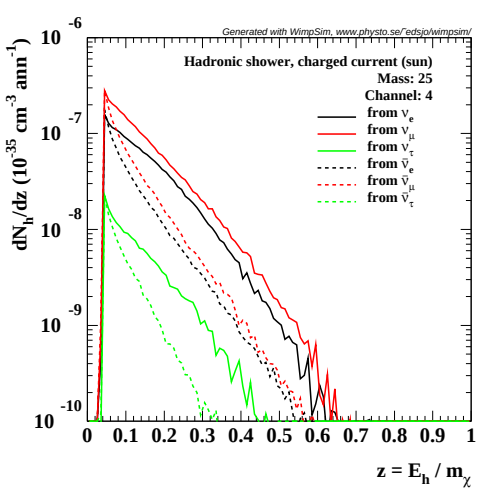


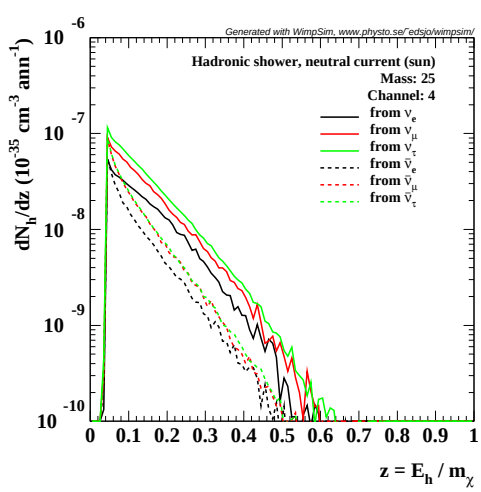
4.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



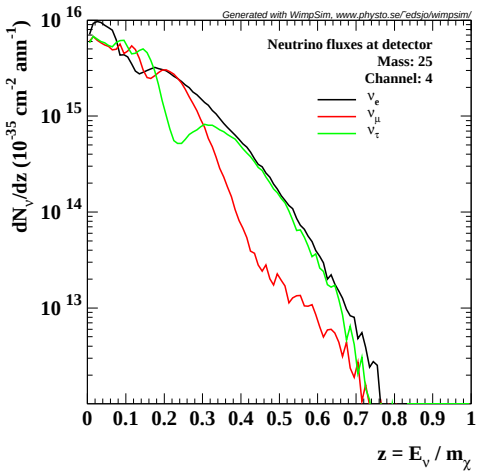


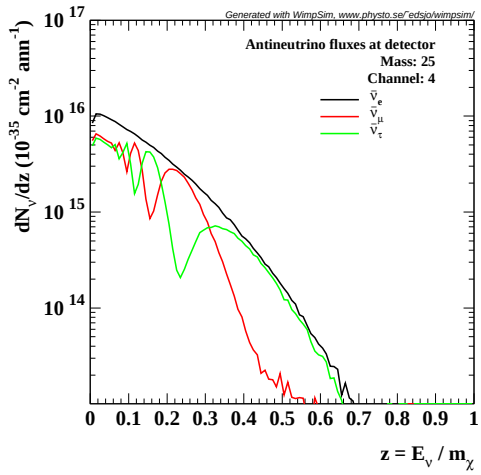
4.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



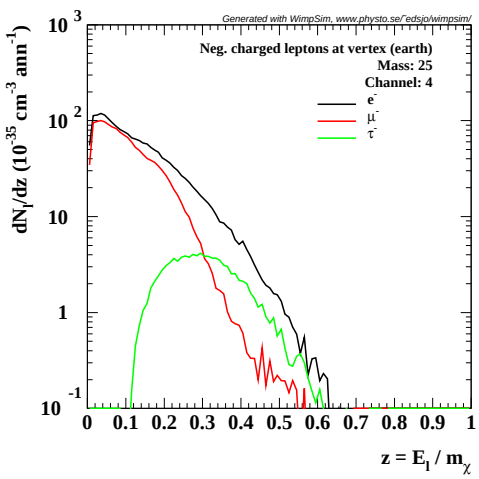


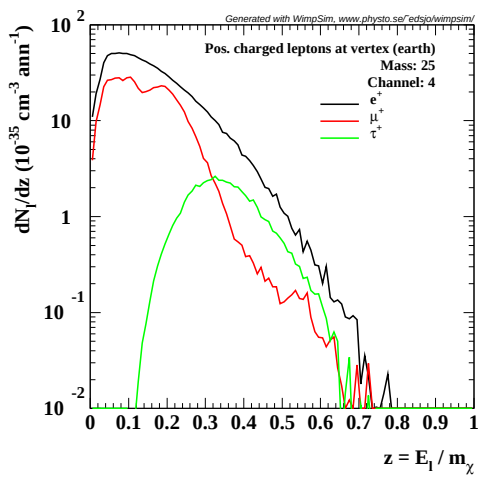
4.4.4 Neutrino fluxes at detector (Earth)



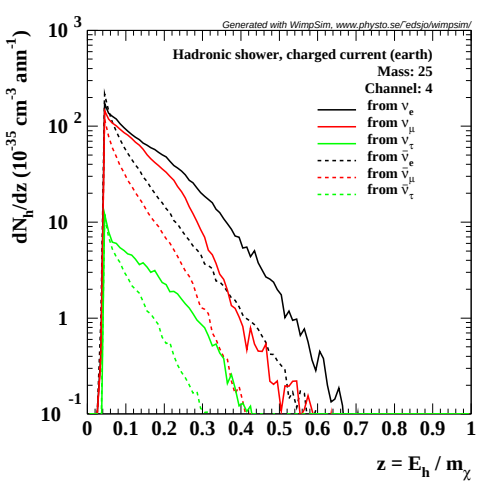


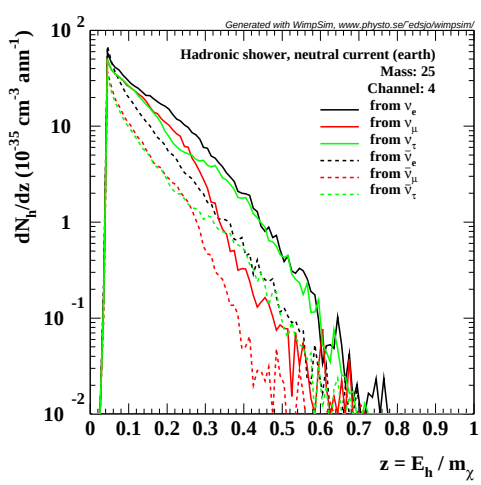
4.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



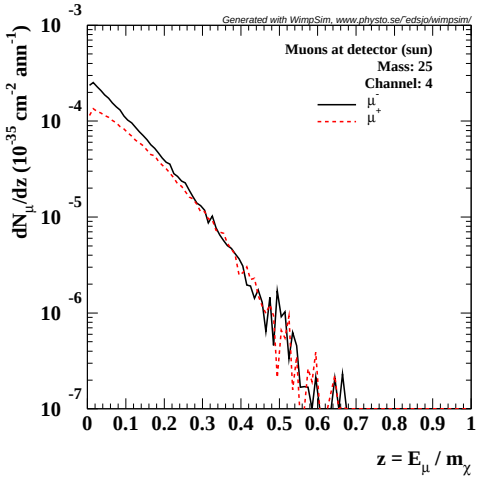


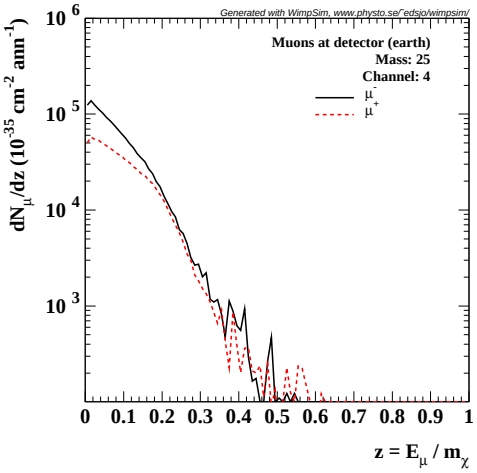
4.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





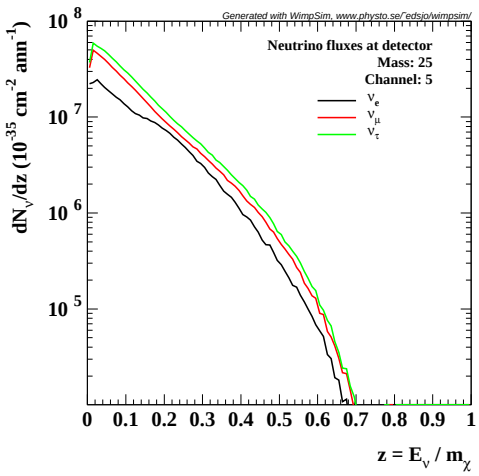
4.4.7 Muons at detector (Sun/Earth)

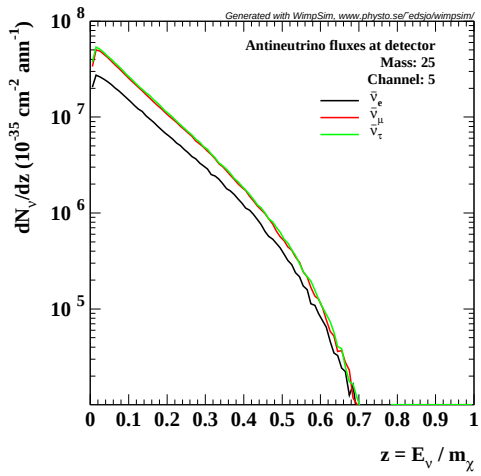




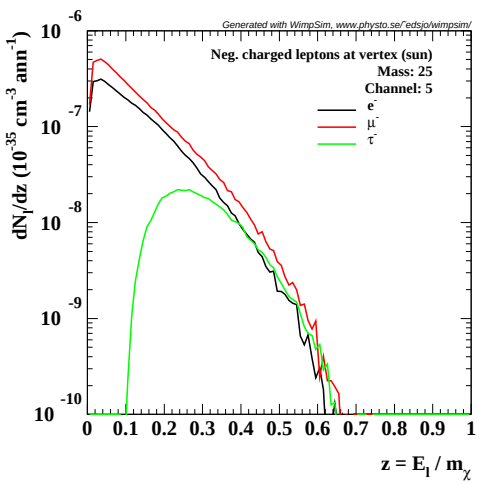
4.5 Channel 5 – $b\bar{b}$

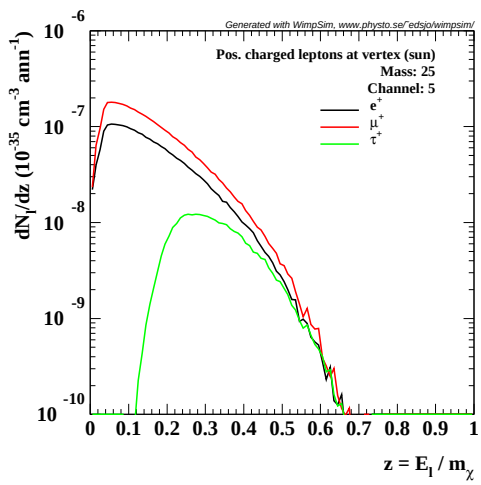
4.5.1 Neutrino fluxes at detector (Sun)



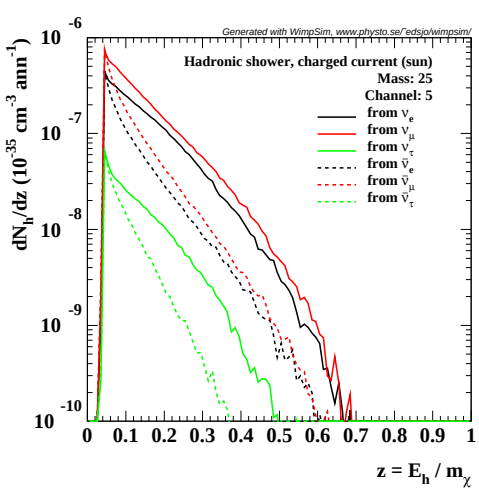


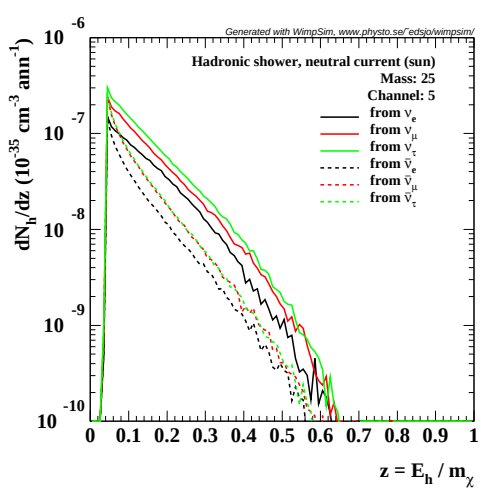
4.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



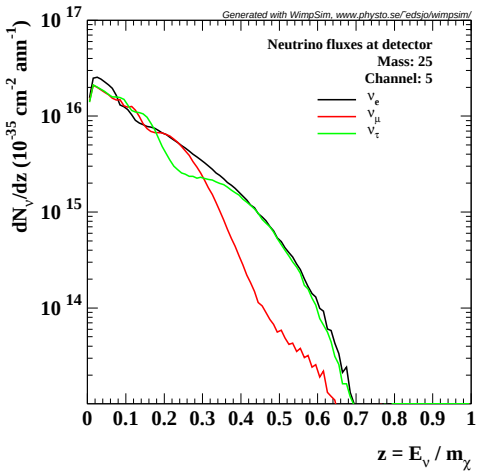


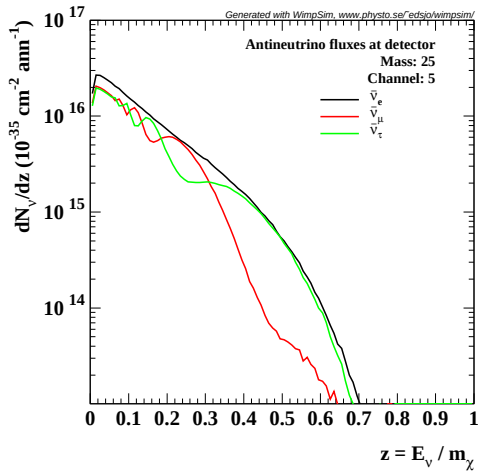
4.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



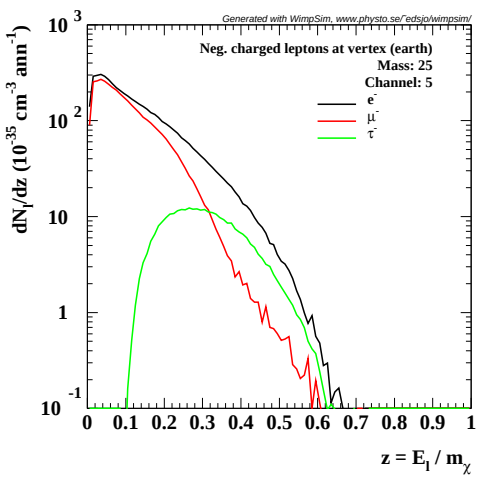


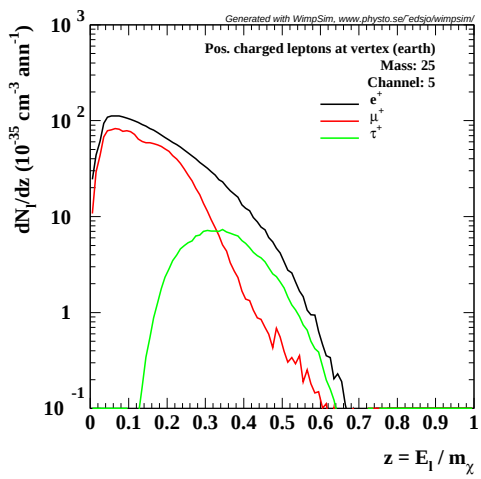
4.5.4 Neutrino fluxes at detector (Earth)



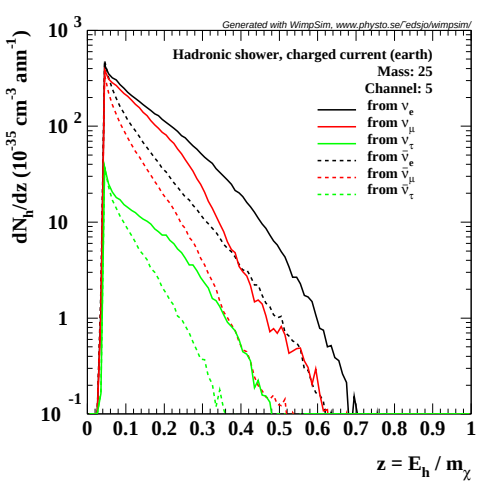


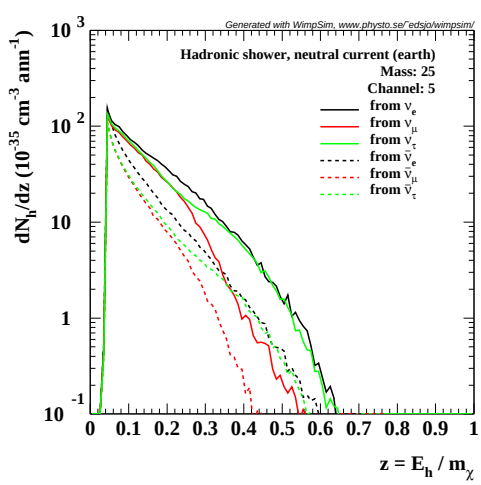
4.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



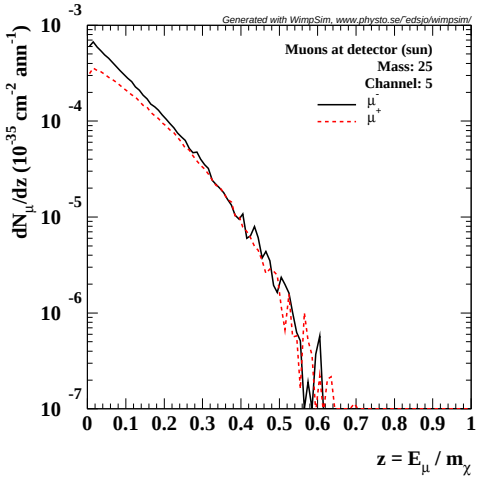


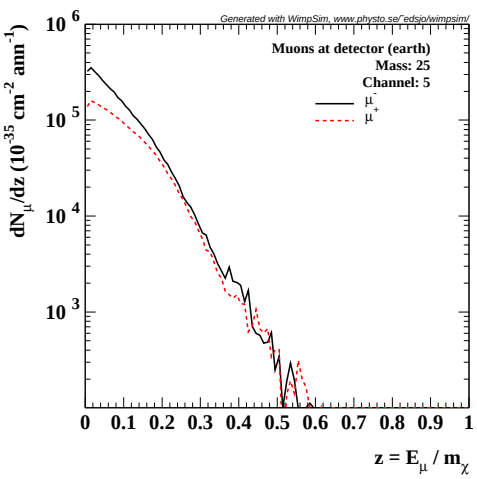
4.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





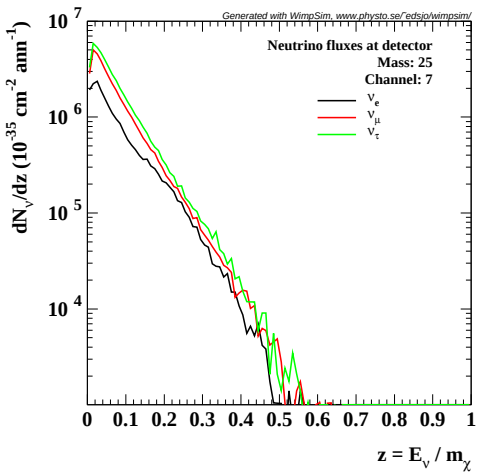
4.5.7 Muons at detector (Sun/Earth)

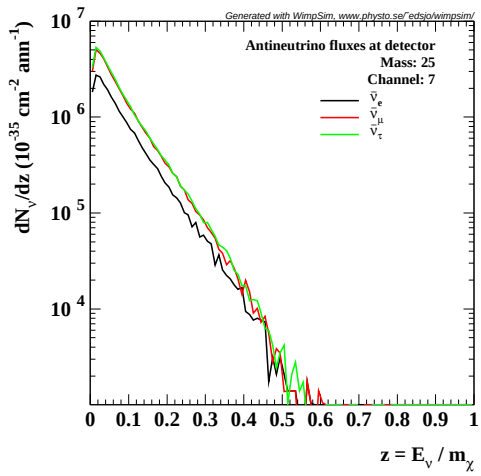




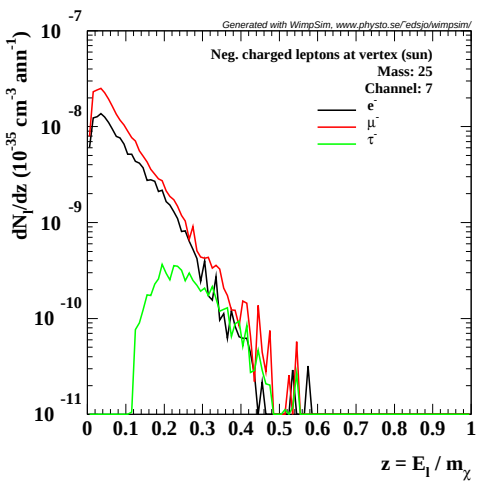
4.6 Channel 7 – gg

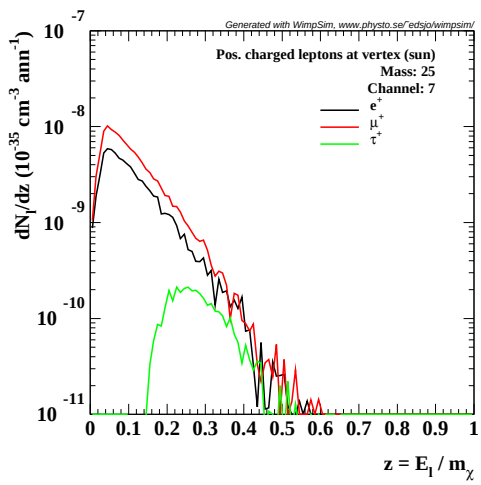
4.6.1 Neutrino fluxes at detector (Sun)



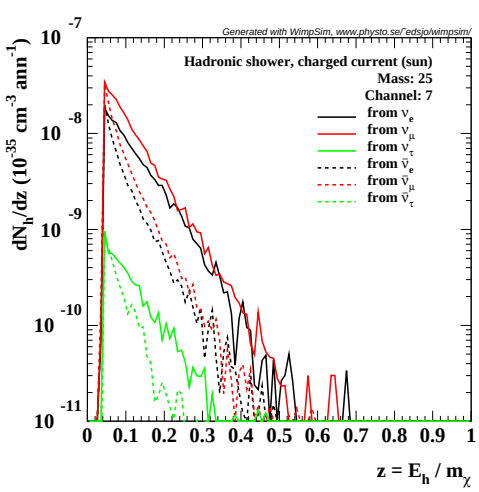


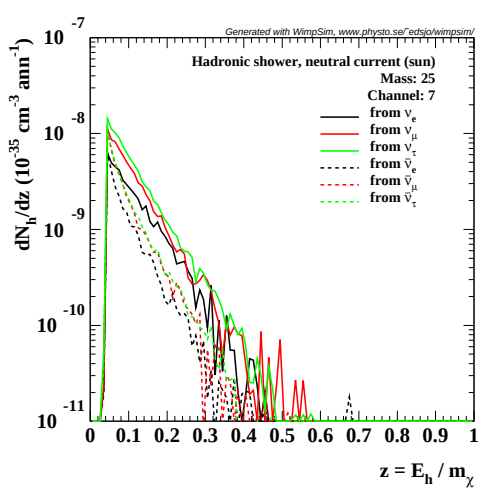
4.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



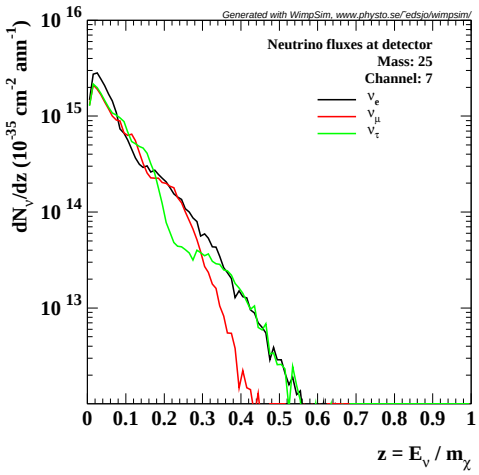


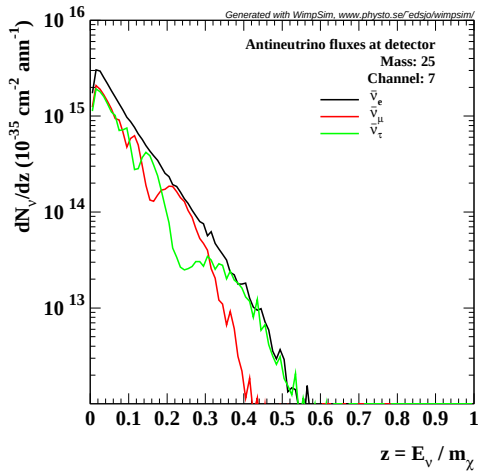
4.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



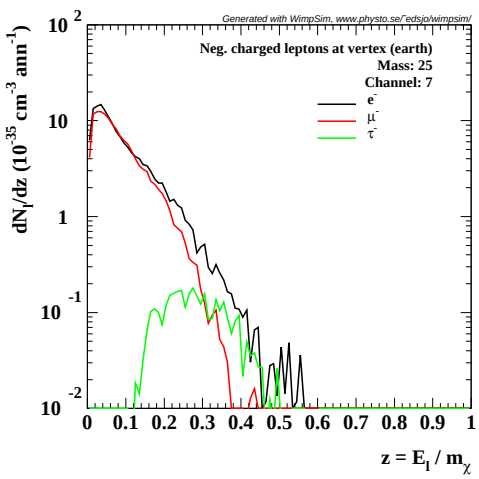


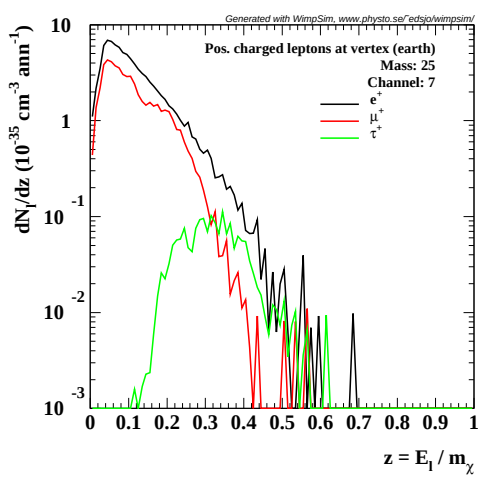
4.6.4 Neutrino fluxes at detector (Earth)



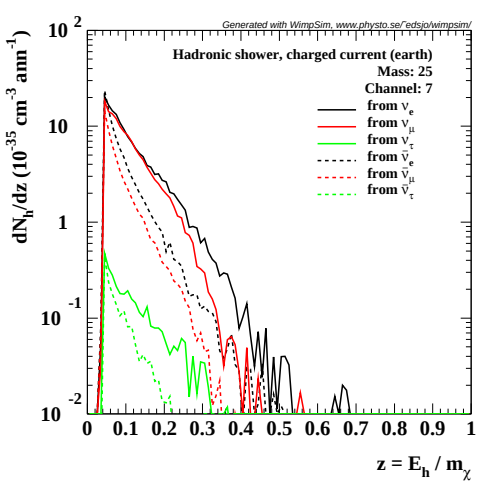


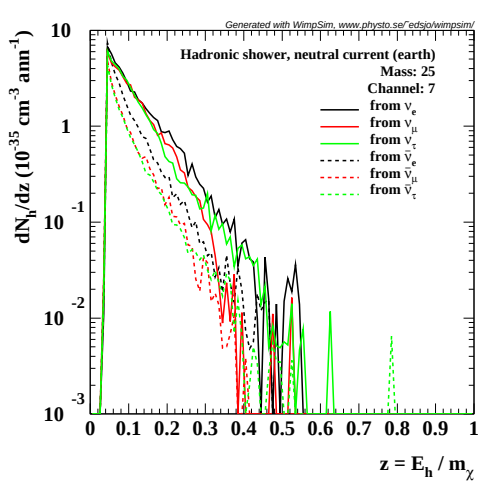
4.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



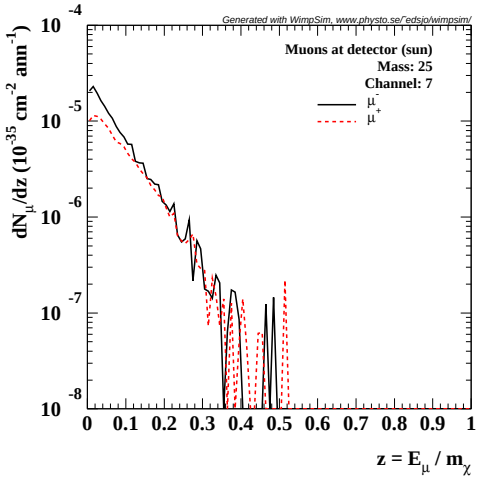


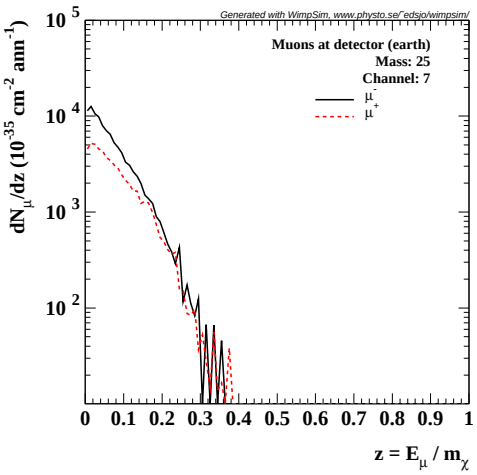
4.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





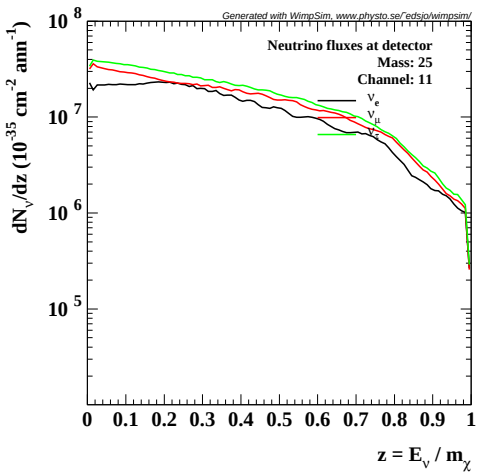
4.6.7 Muons at detector (Sun/Earth)

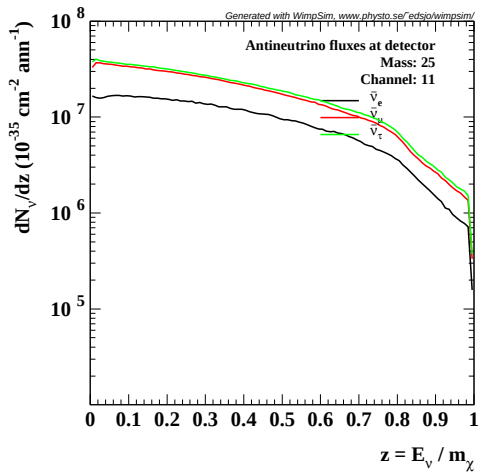




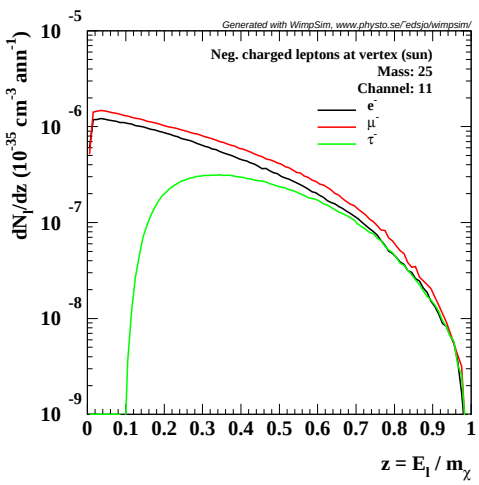
4.7 Channel 11 – $\tau^-\tau^+$

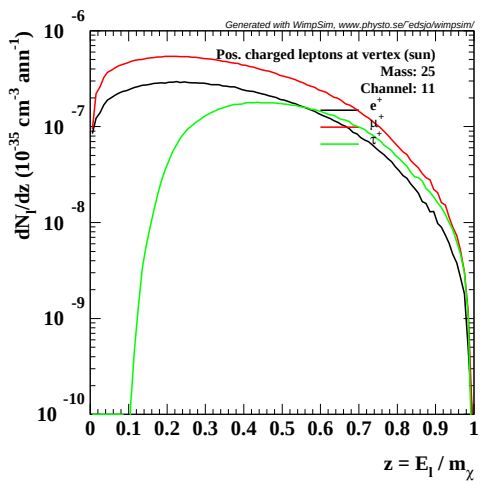
4.7.1 Neutrino fluxes at detector (Sun)



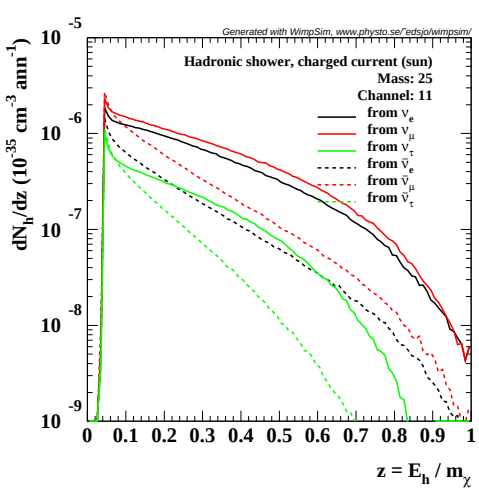


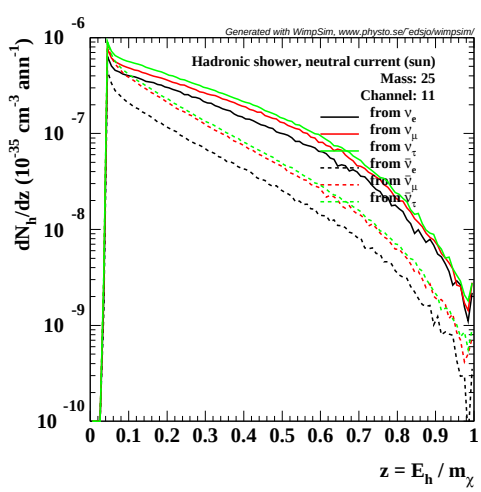
4.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



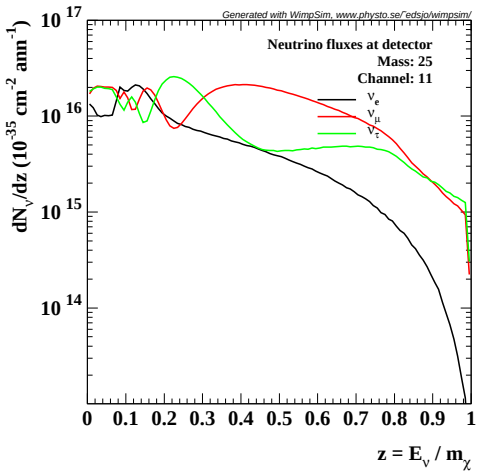


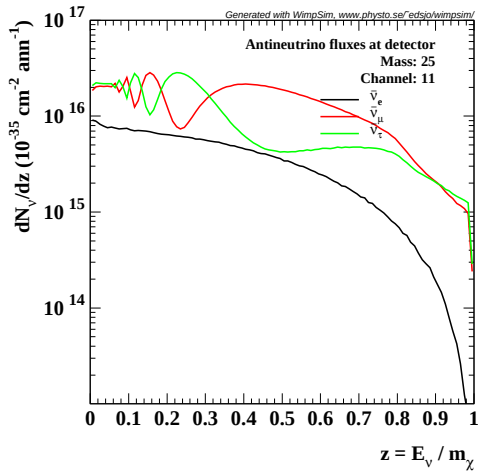
4.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



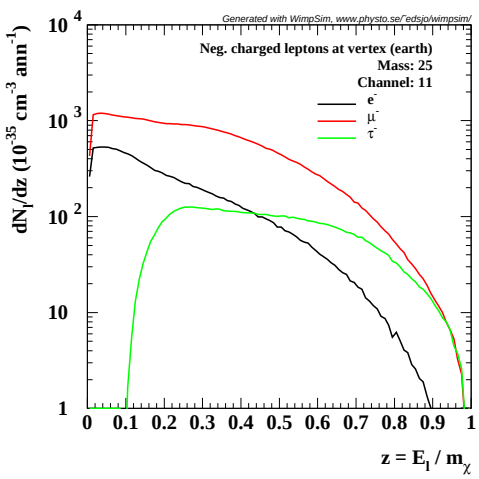


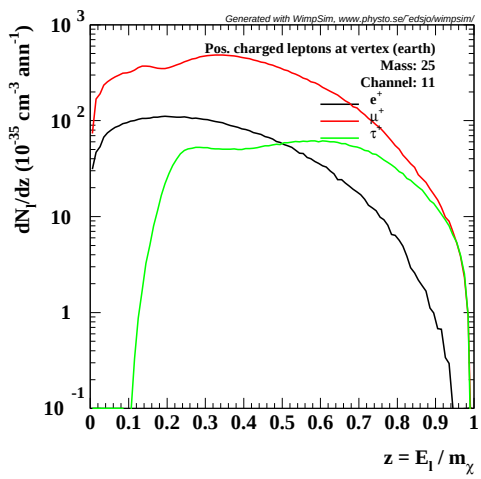
4.7.4 Neutrino fluxes at detector (Earth)



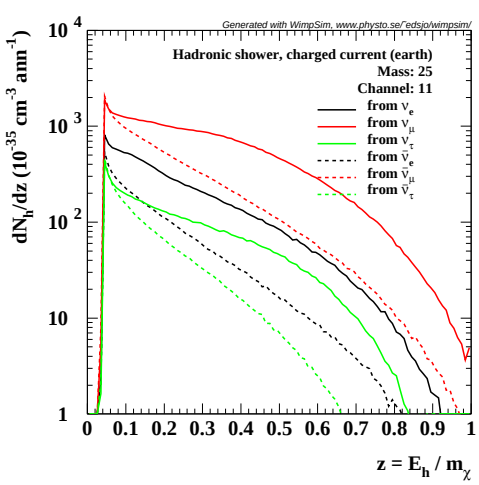


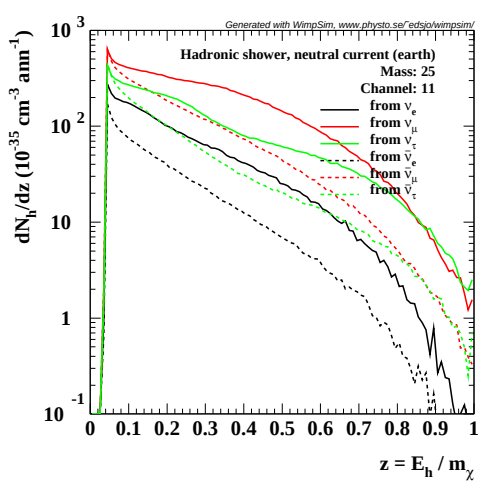
4.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



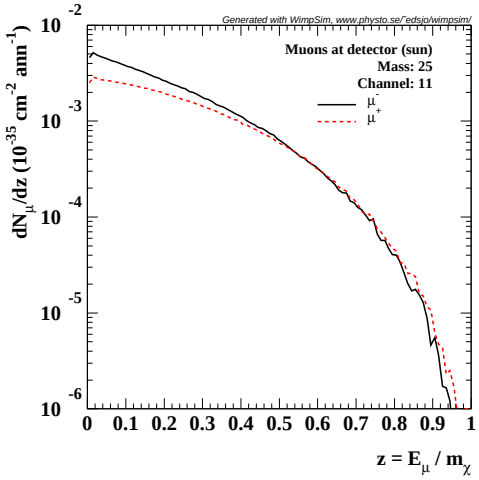


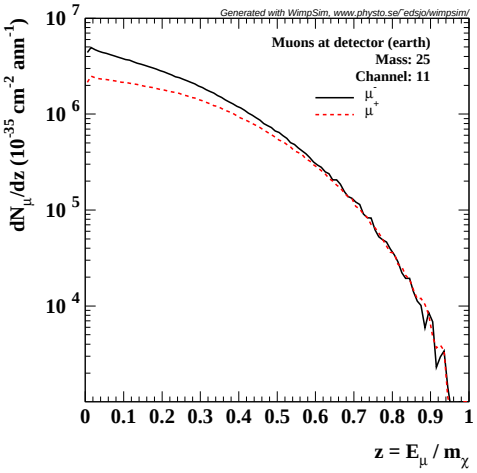
4.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





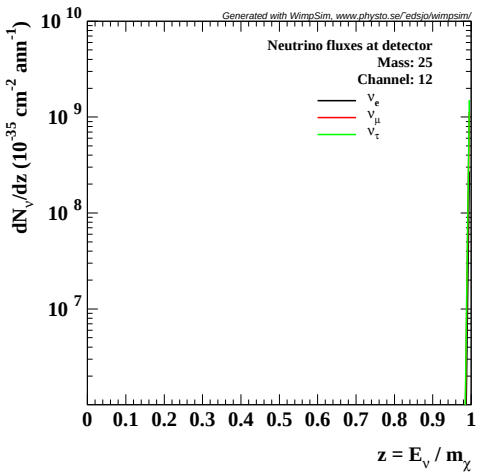
4.7.7 Muons at detector (Sun/Earth)

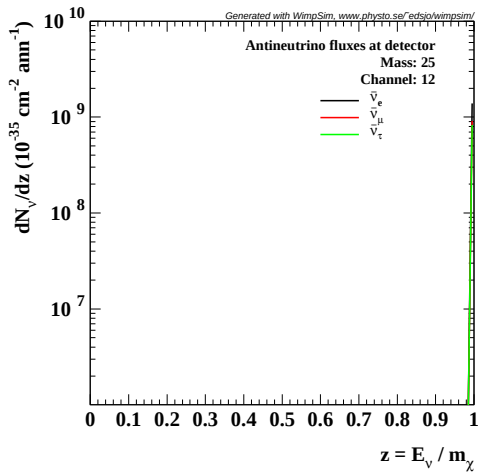




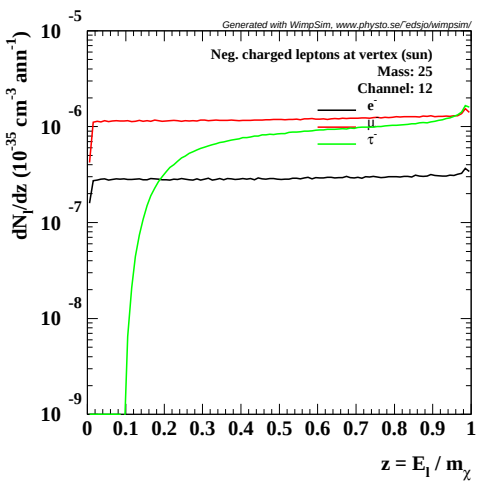
4.8 Channel 12 – $\nu_e\bar{\nu}_e$

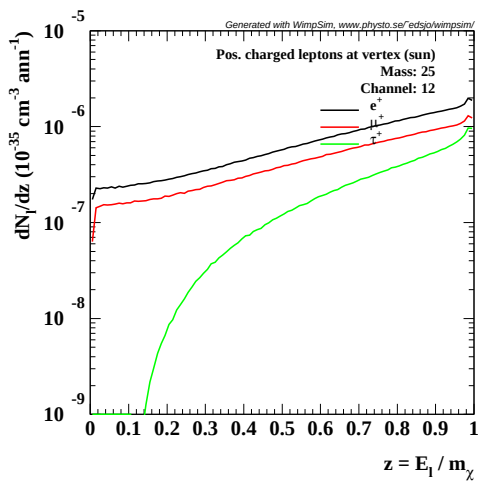
4.8.1 Neutrino fluxes at detector (Sun)



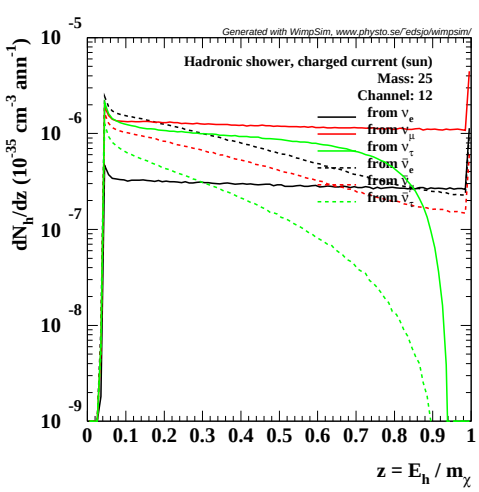


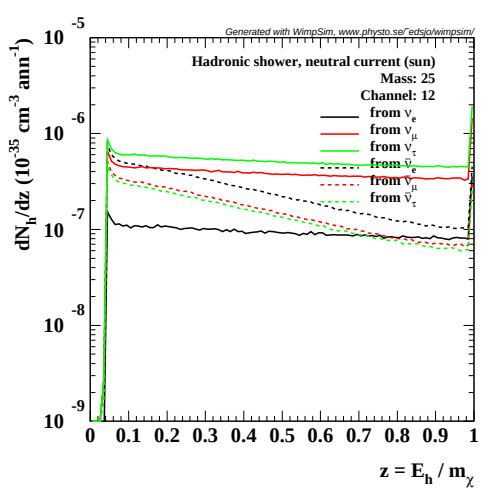
4.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



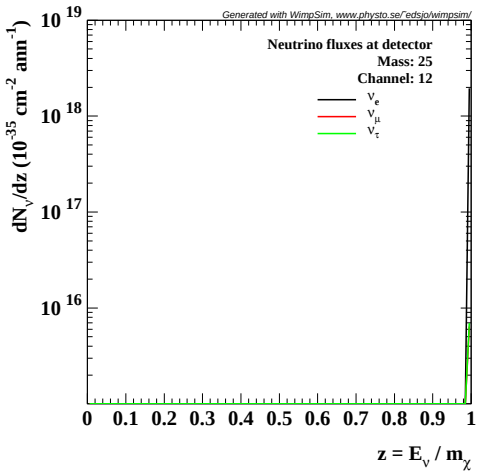


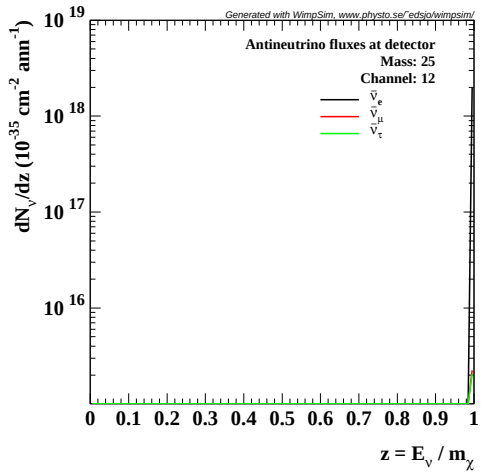
4.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



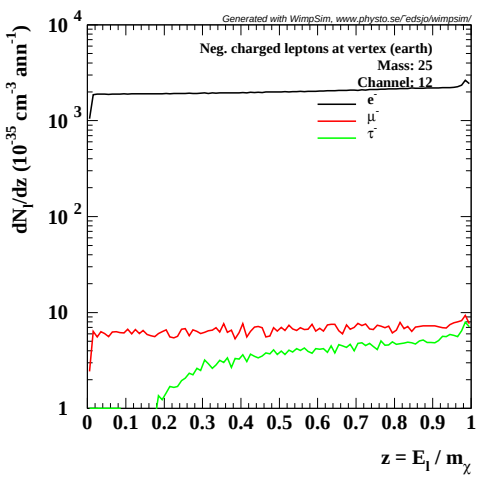


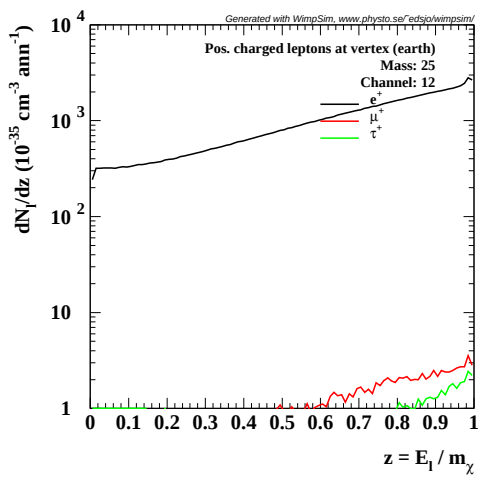
4.8.4 Neutrino fluxes at detector (Earth)



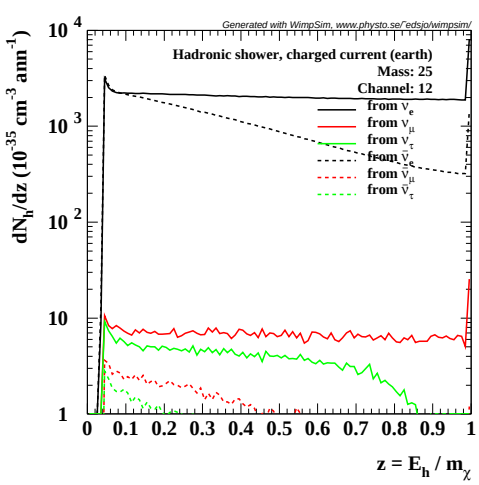


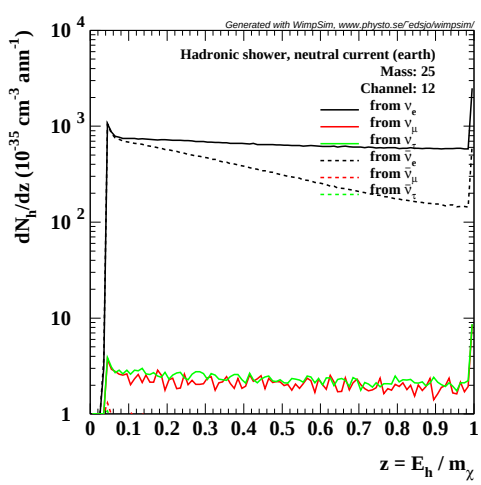
4.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



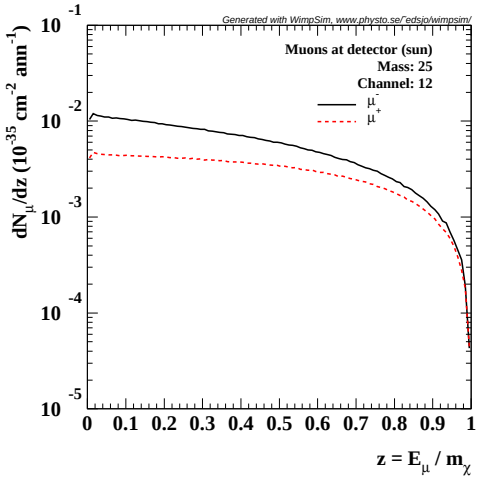


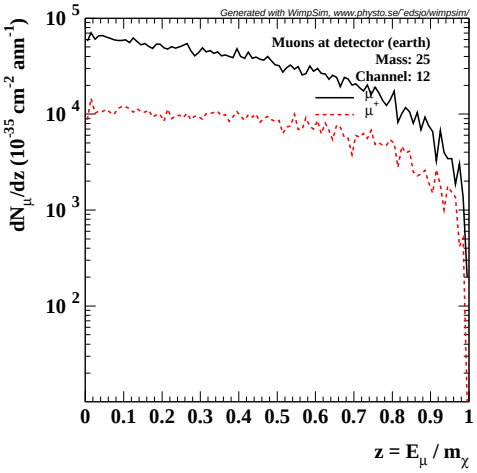
4.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





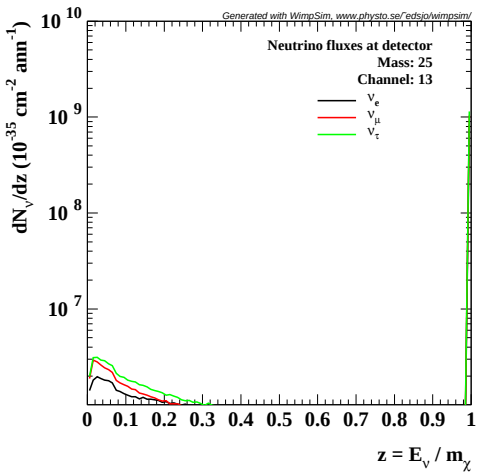
4.8.7 Muons at detector (Sun/Earth)

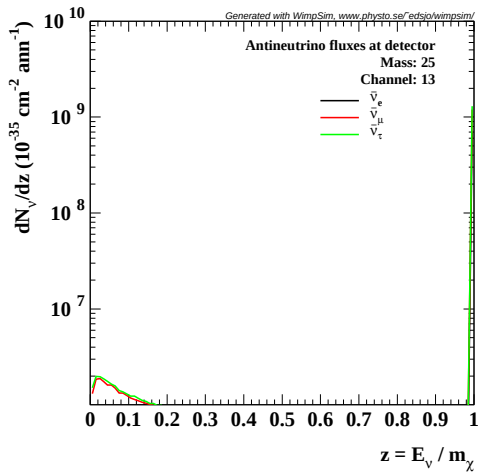




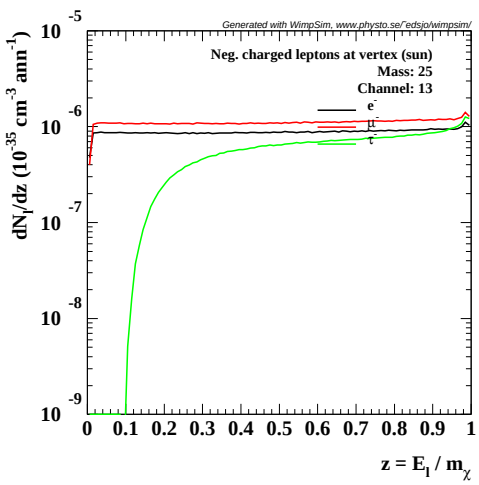
4.9 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

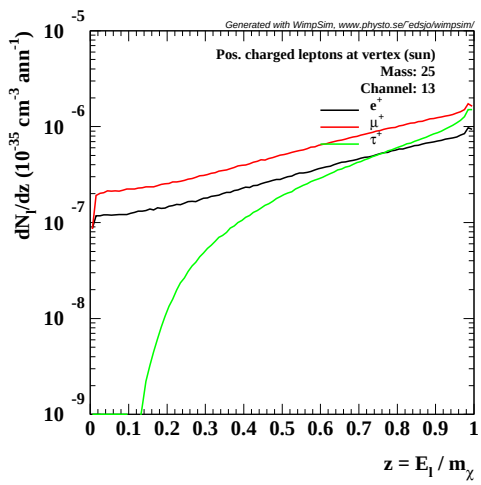
4.9.1 Neutrino fluxes at detector (Sun)



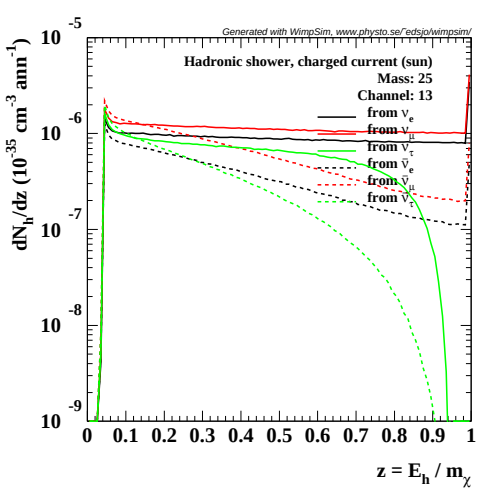


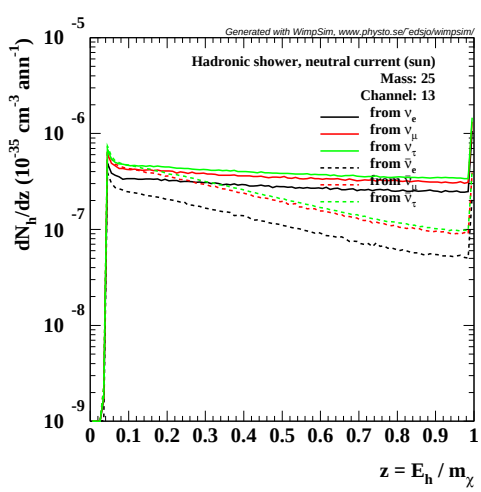
4.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



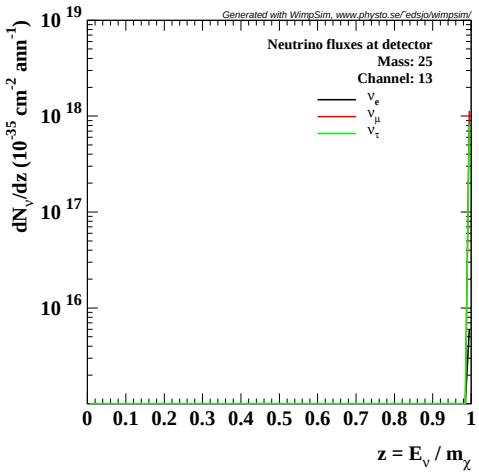


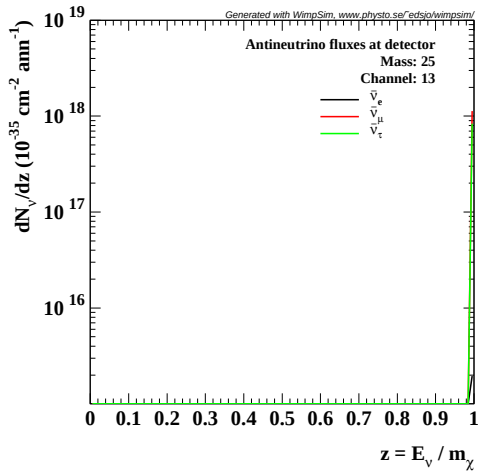
4.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



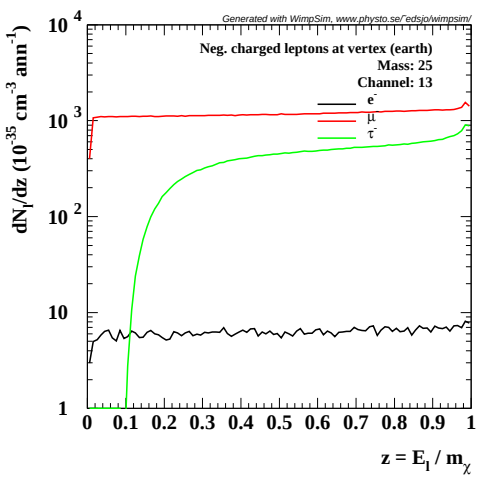


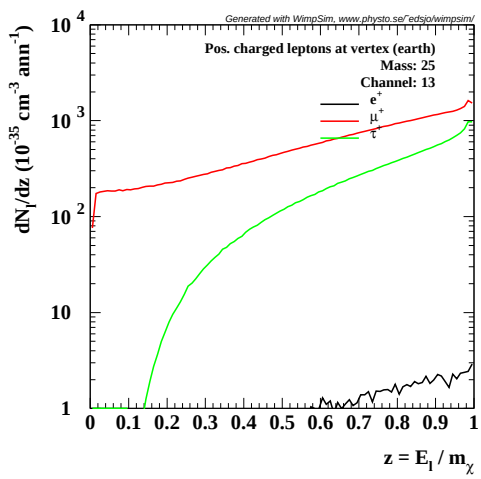
4.9.4 Neutrino fluxes at detector (Earth)



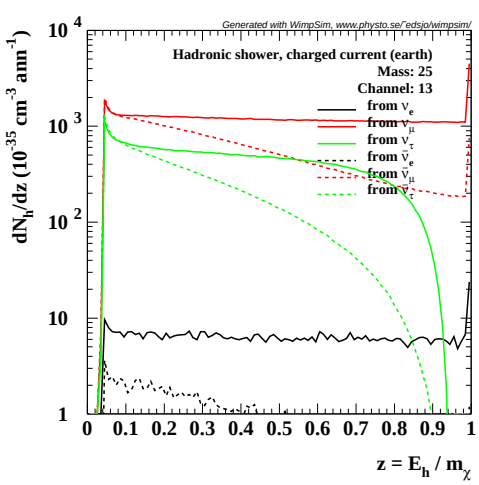


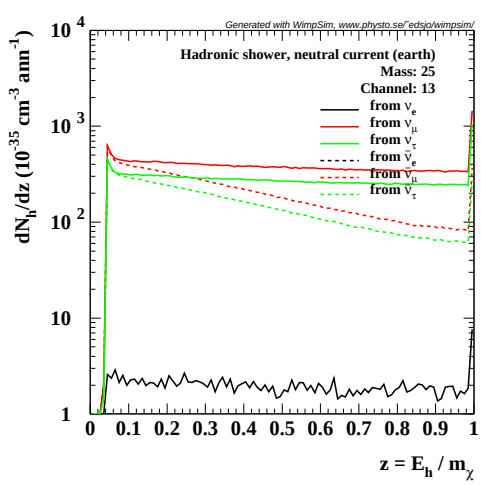
4.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



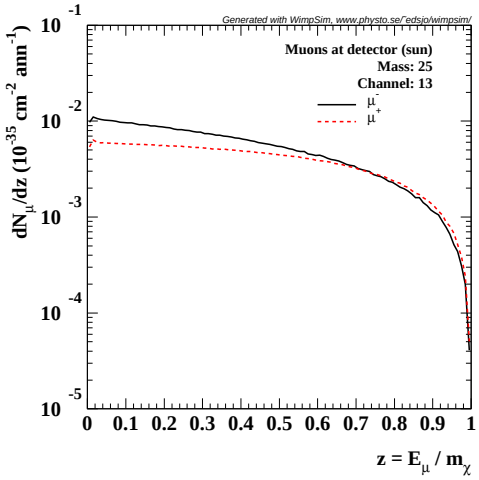


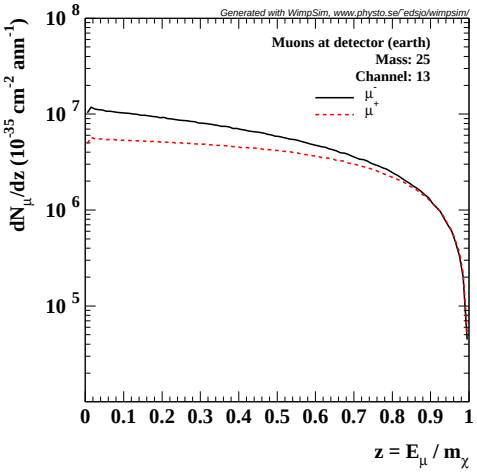
4.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





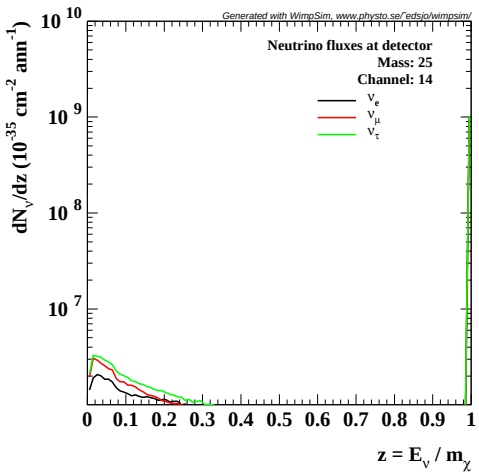
4.9.7 Muons at detector (Sun/Earth)

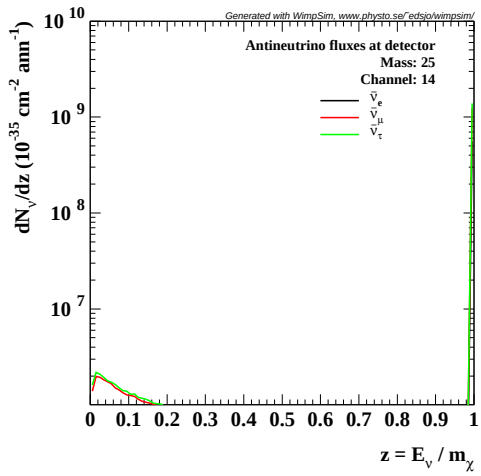




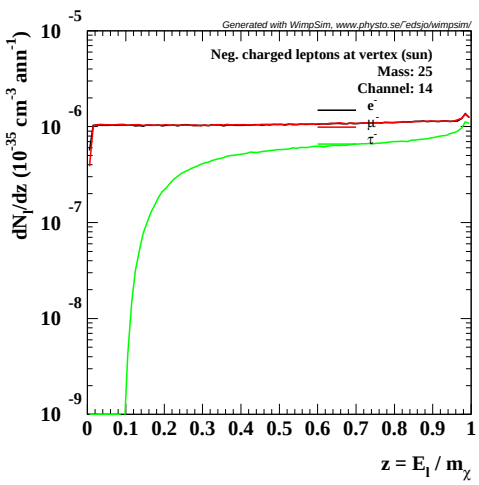
4.10 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

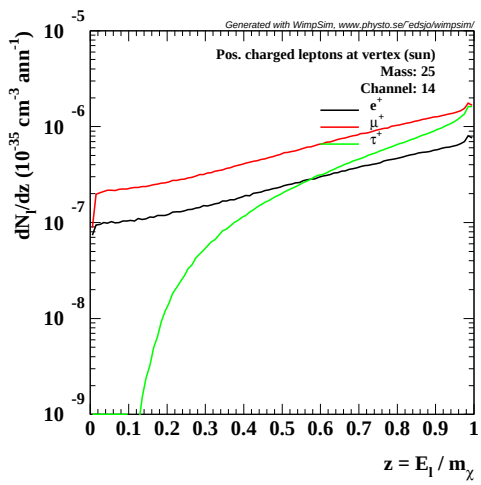
4.10.1 Neutrino fluxes at detector (Sun)



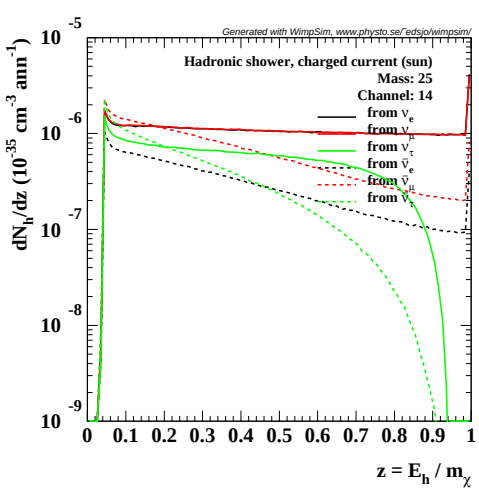


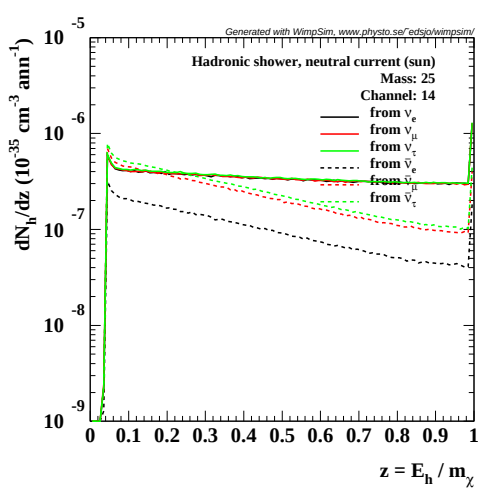
4.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



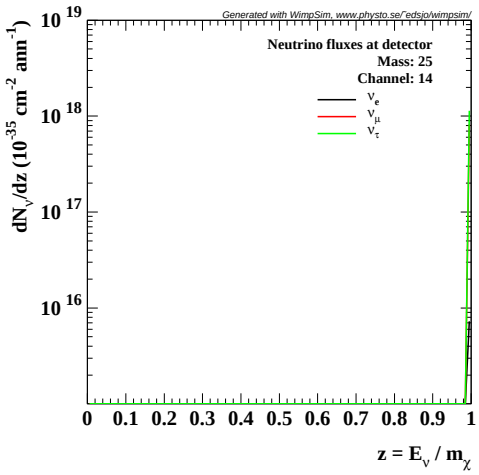


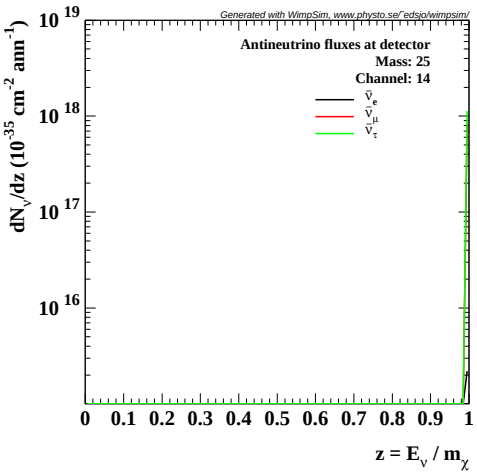
4.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



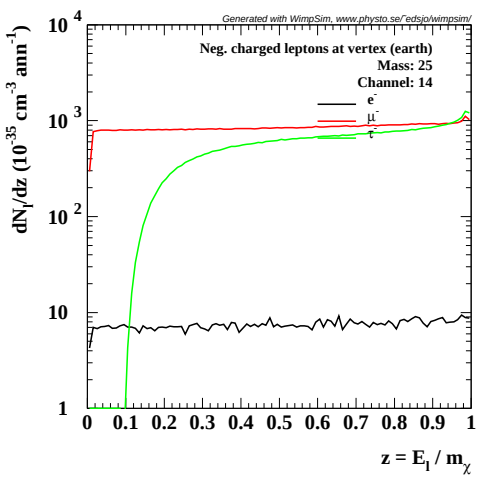


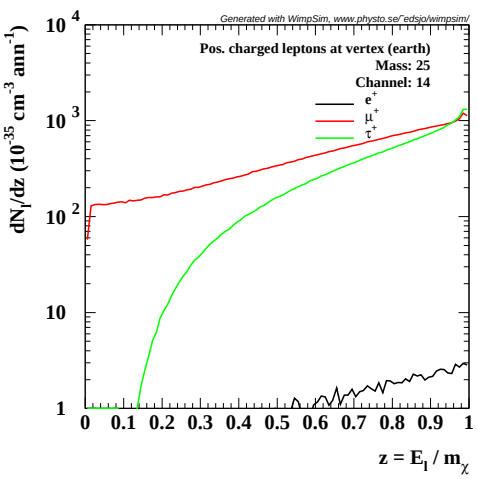
4.10.4 Neutrino fluxes at detector (Earth)



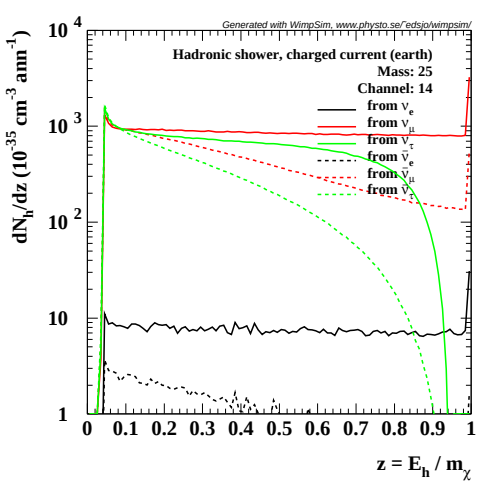


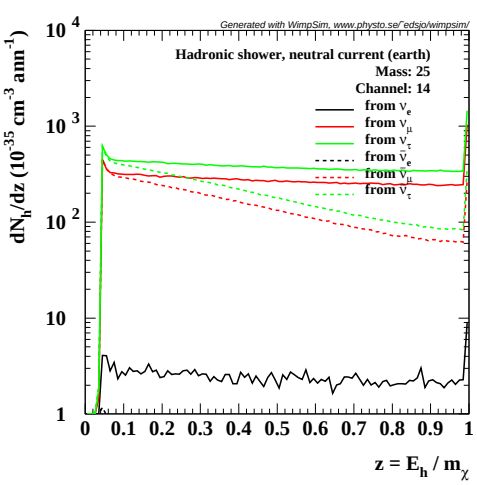
4.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



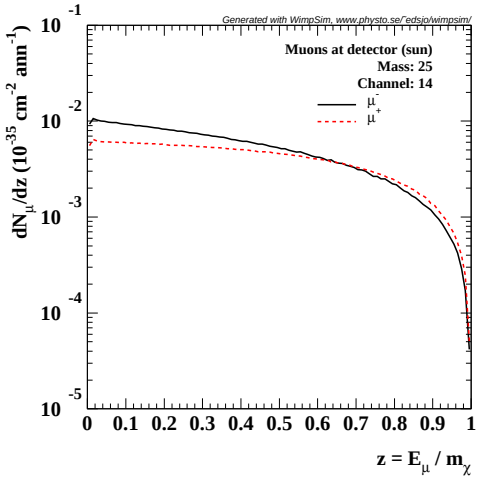


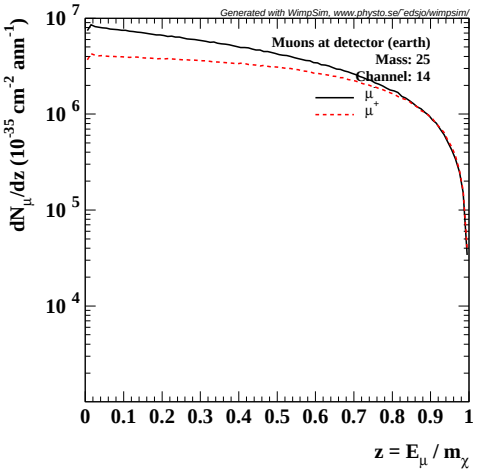
4.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





4.10.7 Muons at detector (Sun/Earth)

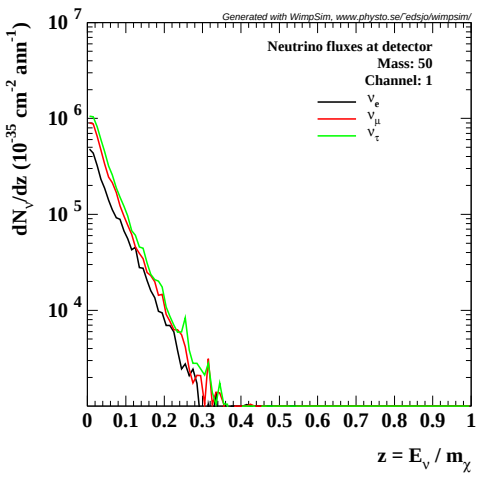


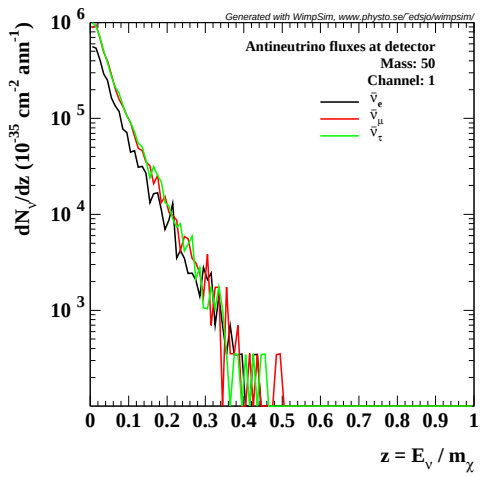


5 Mass 50

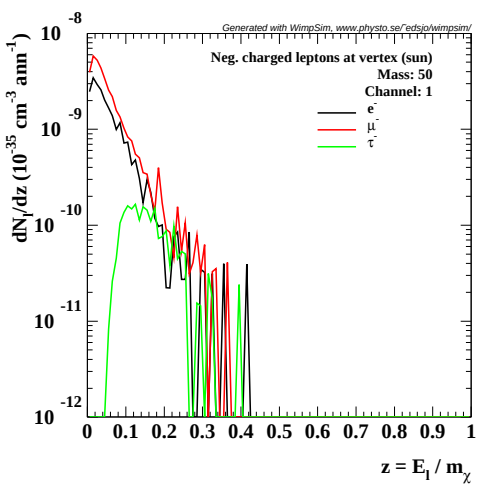
5.1 Channel 1 – $d\bar{d}$

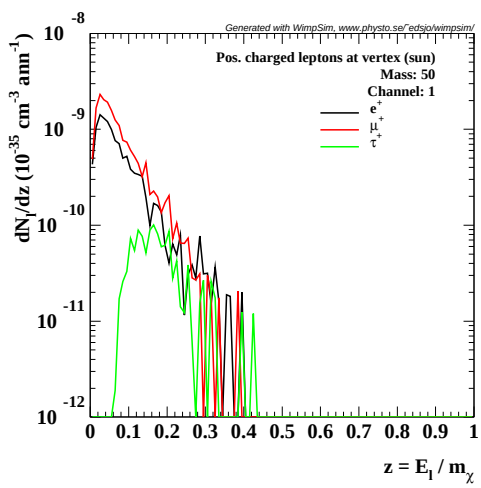
5.1.1 Neutrino fluxes at detector (Sun)



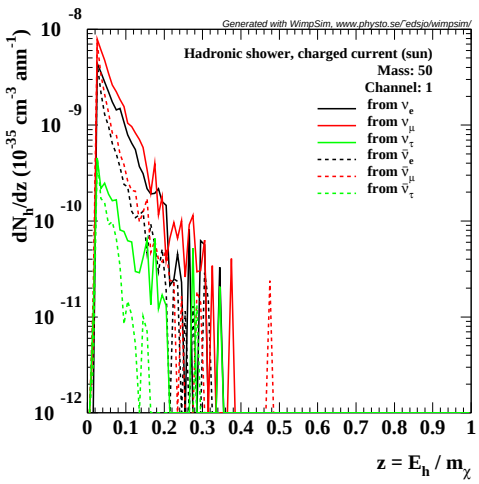


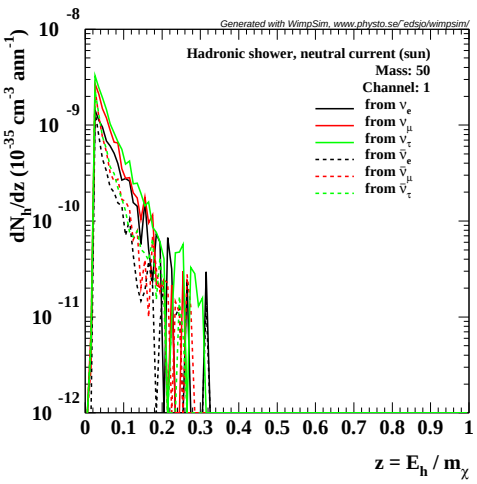
5.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



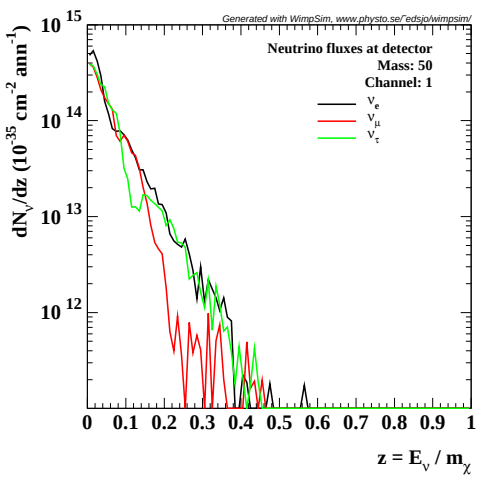


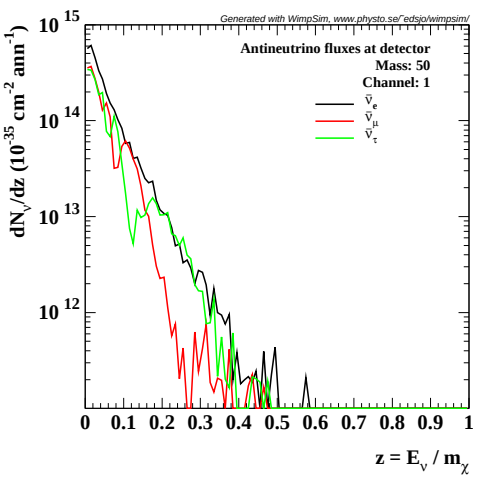
5.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



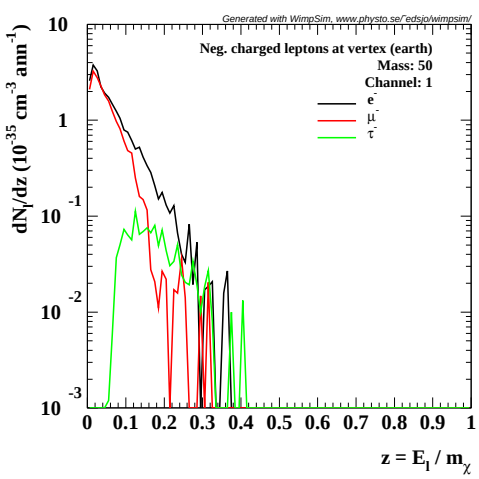


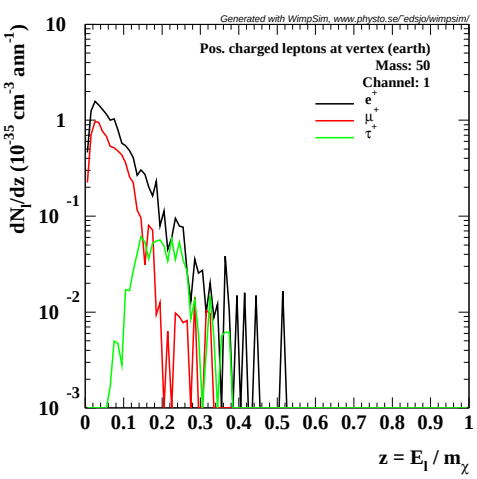
5.1.4 Neutrino fluxes at detector (Earth)



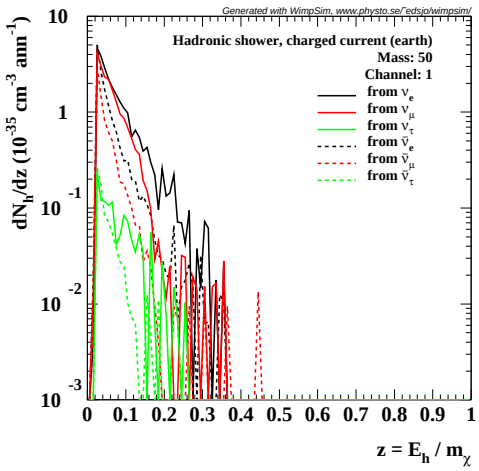


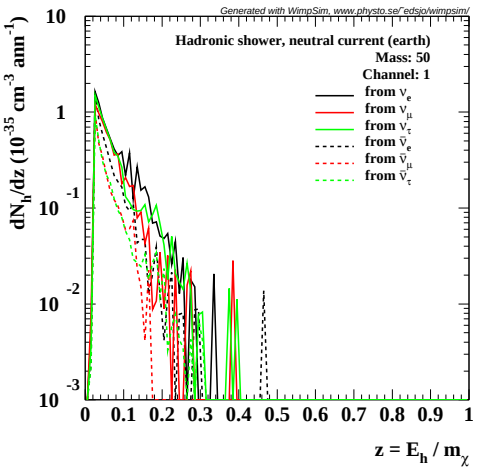
5.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



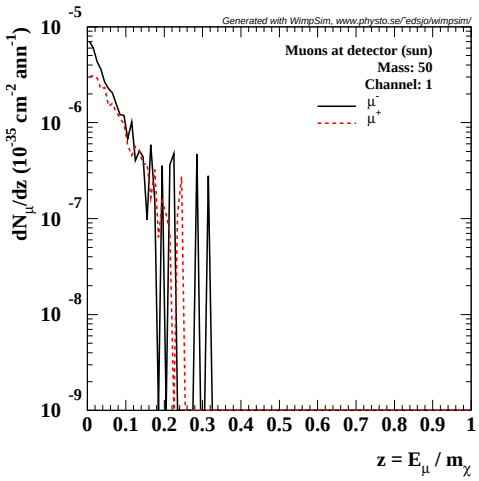


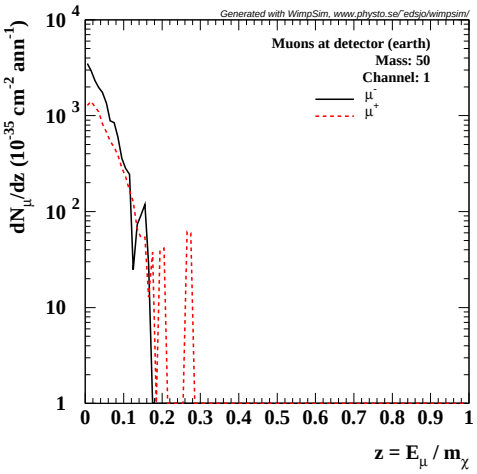
5.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





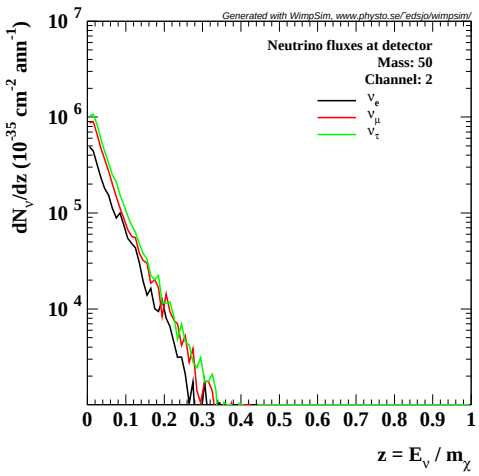
5.1.7 Muons at detector (Sun/Earth)

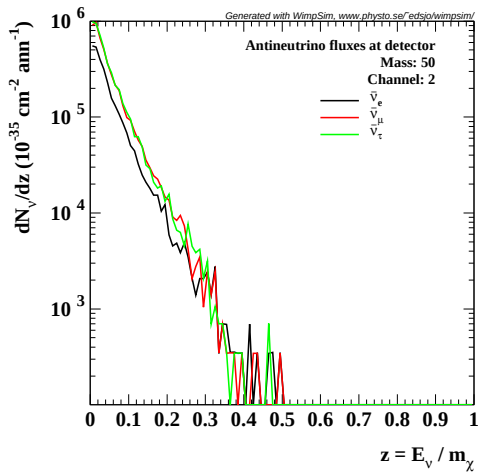




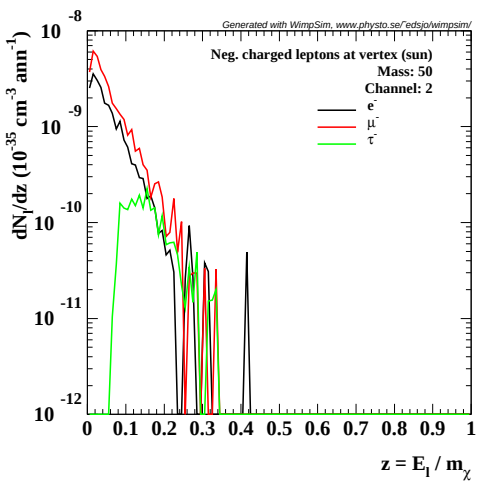
5.2 Channel 2 – $u\bar{u}$

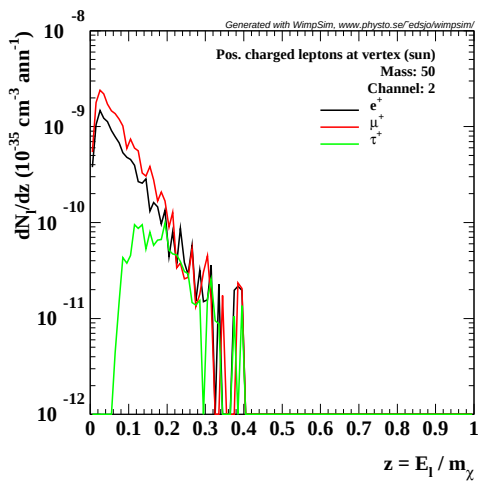
5.2.1 Neutrino fluxes at detector (Sun)



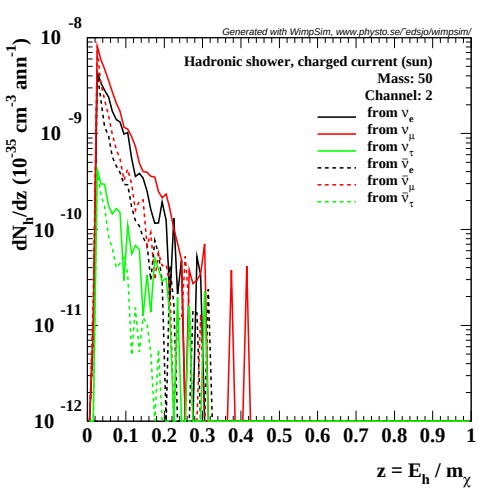


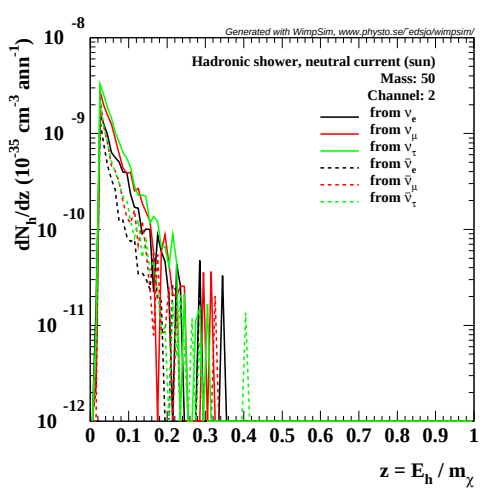
5.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



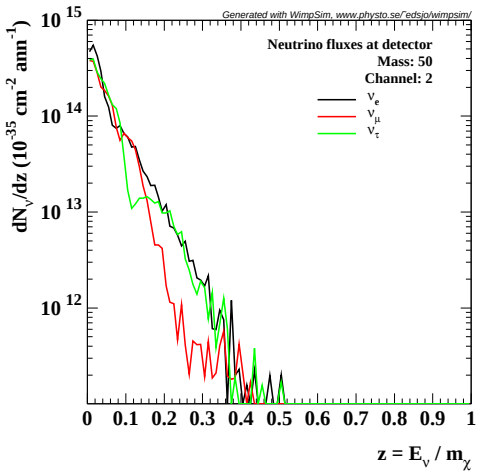


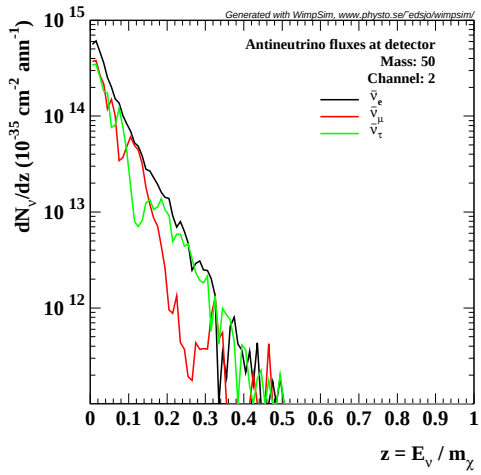
5.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



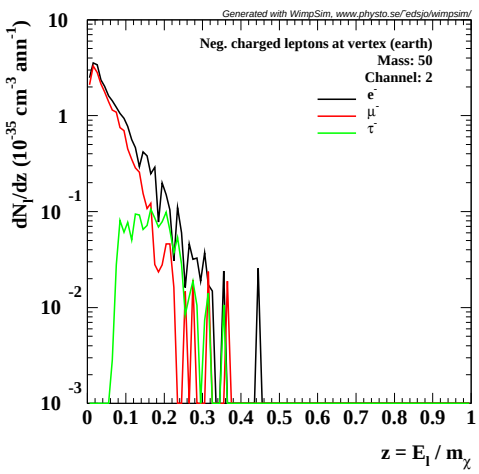


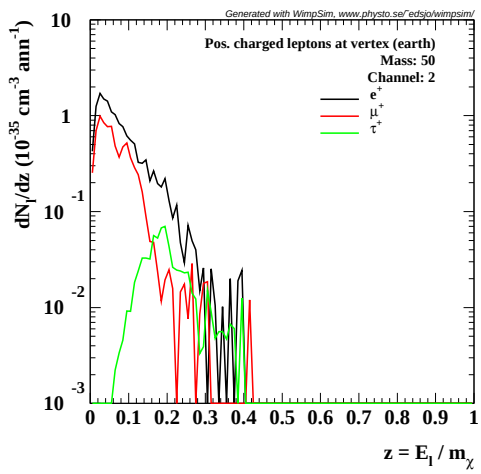
5.2.4 Neutrino fluxes at detector (Earth)



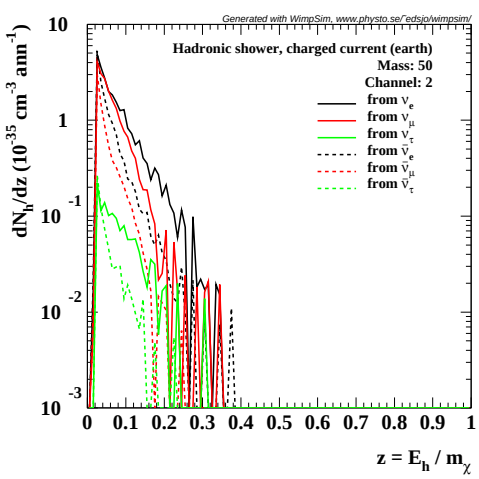


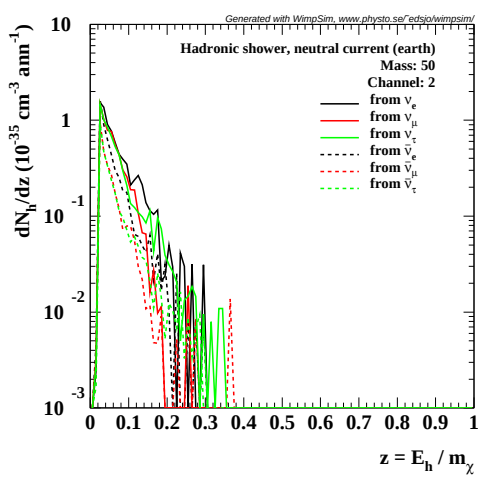
5.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



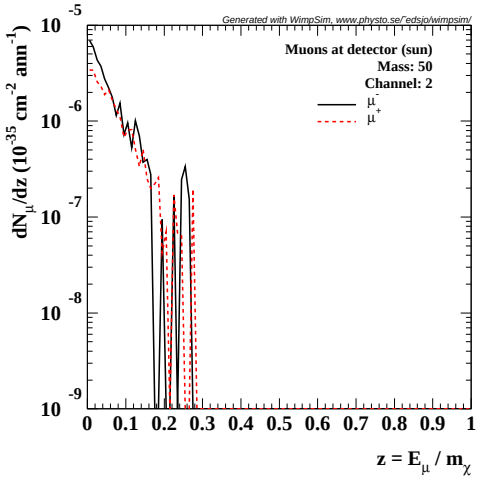


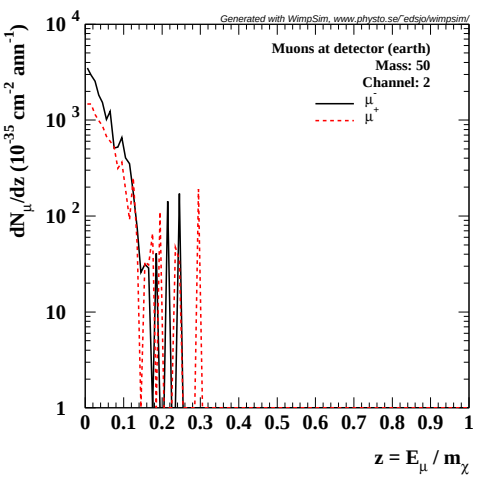
5.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





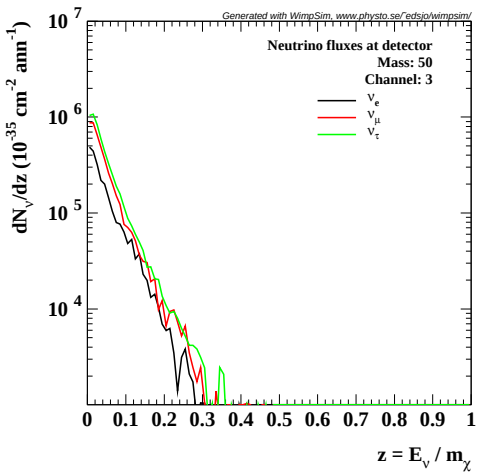
5.2.7 Muons at detector (Sun/Earth)

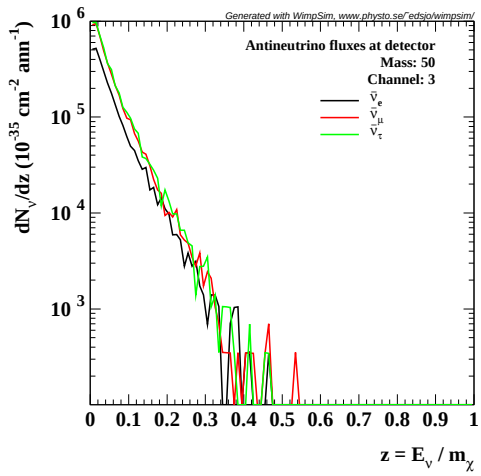




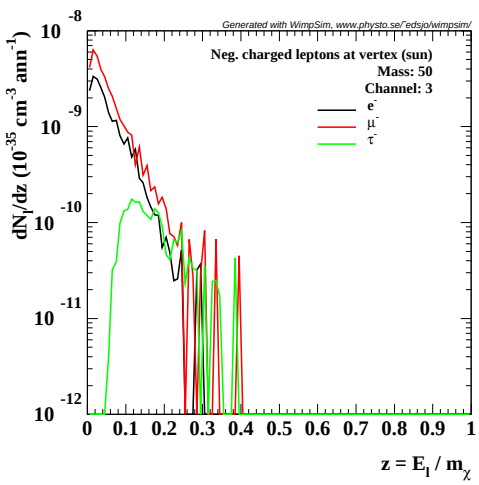
5.3 Channel 3 – $s\bar{s}$

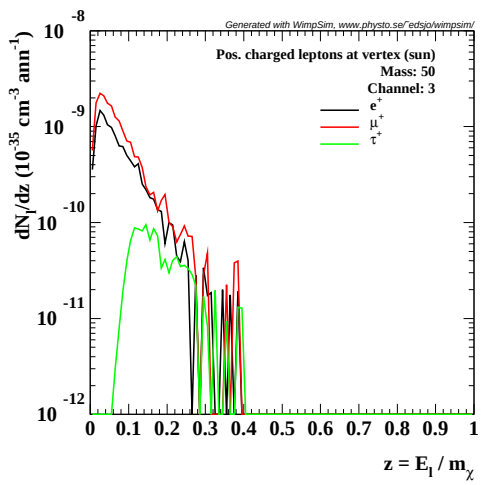
5.3.1 Neutrino fluxes at detector (Sun)



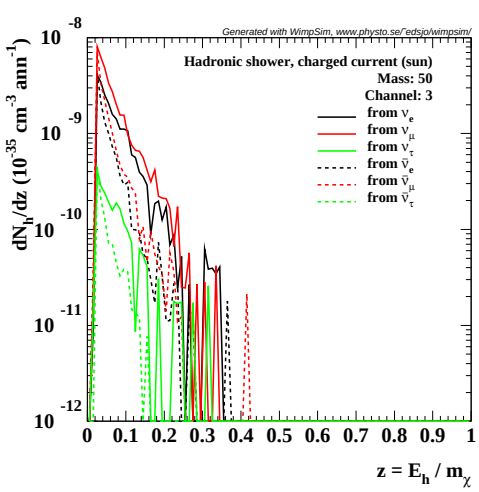


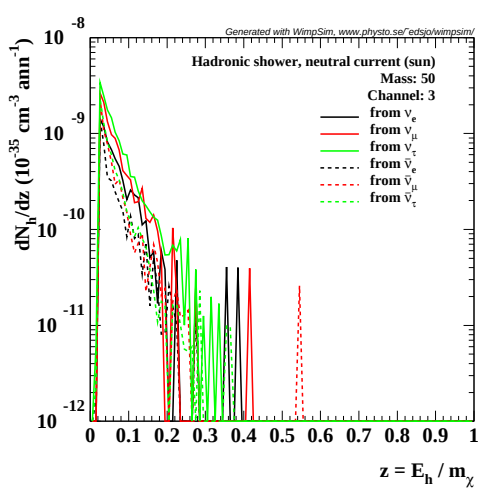
5.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



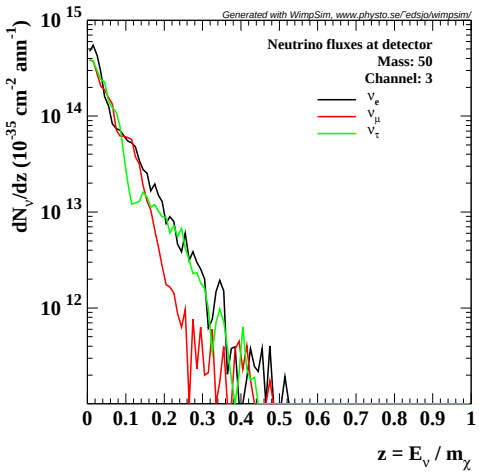


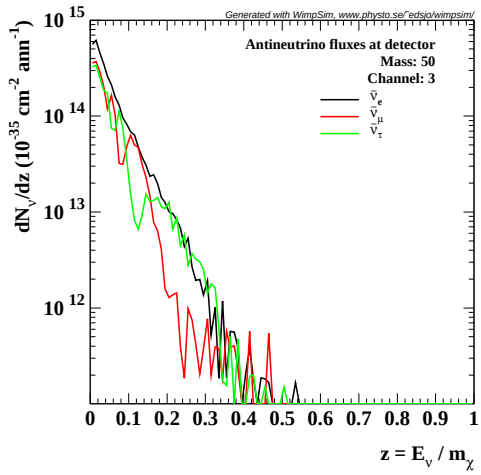
5.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



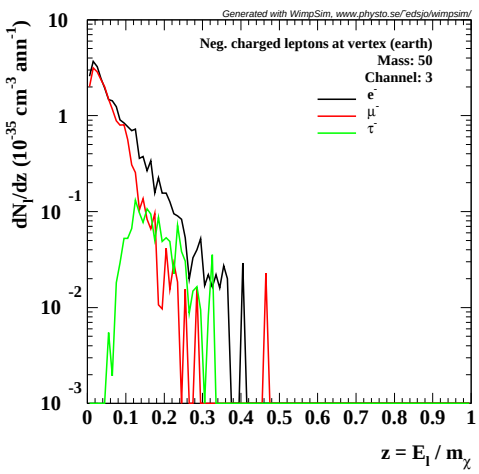


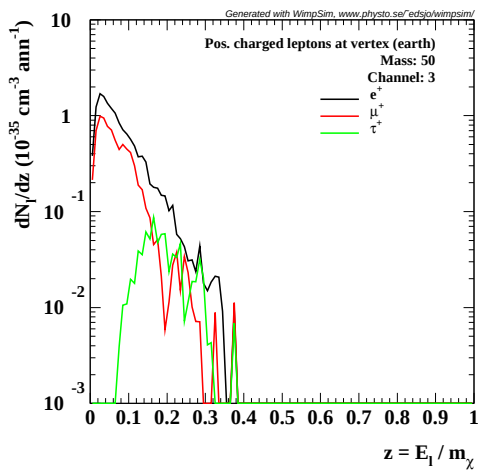
5.3.4 Neutrino fluxes at detector (Earth)



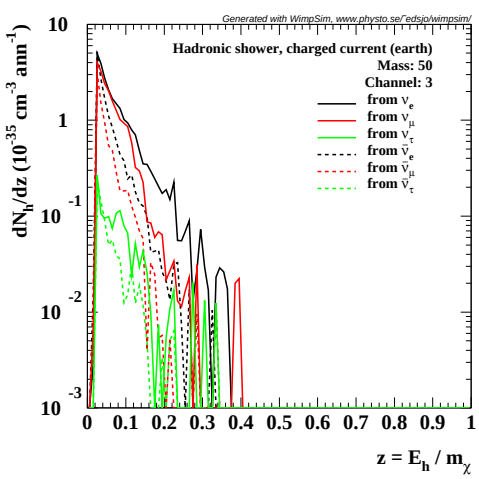


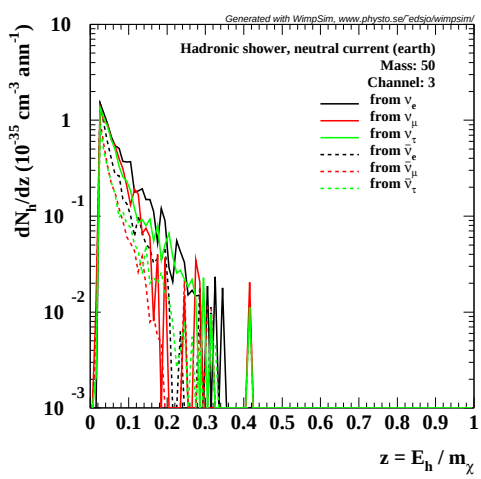
5.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



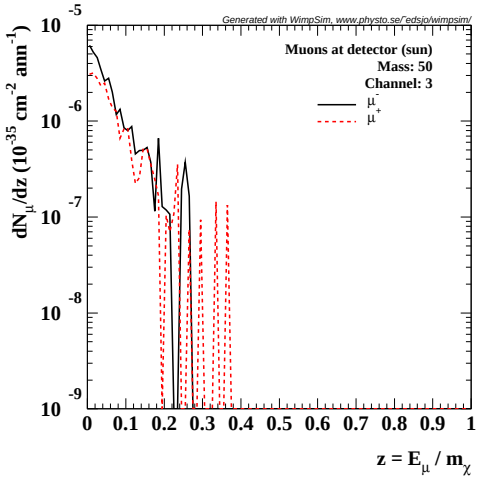


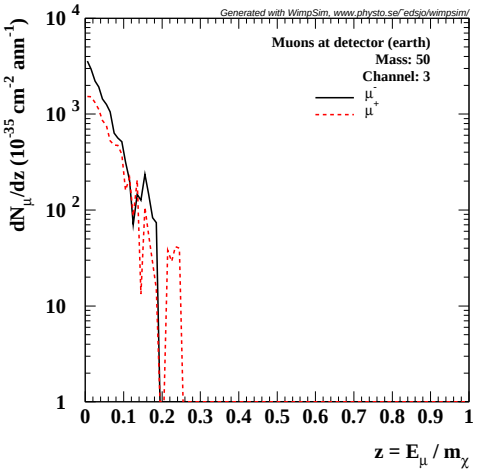
5.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





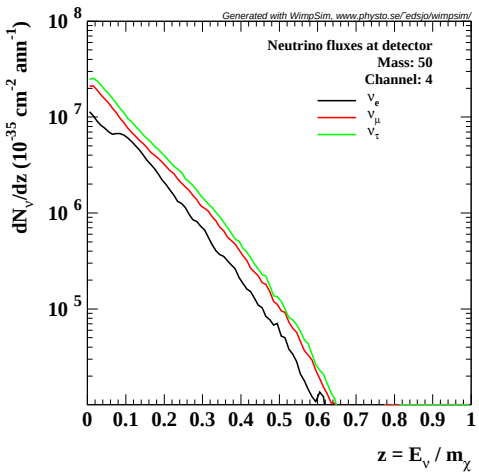
5.3.7 Muons at detector (Sun/Earth)

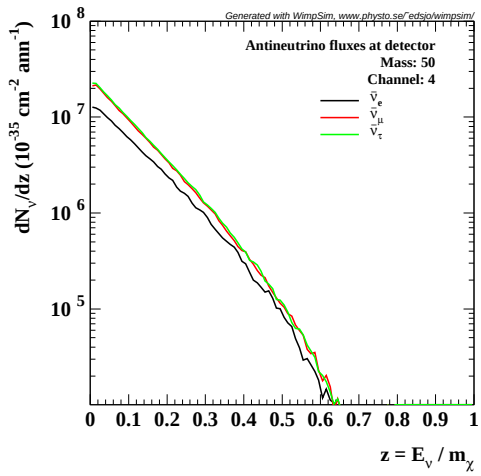




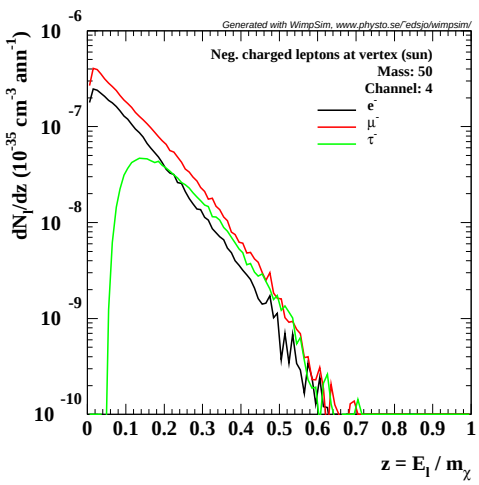
5.4 Channel 4 – $c\bar{c}$

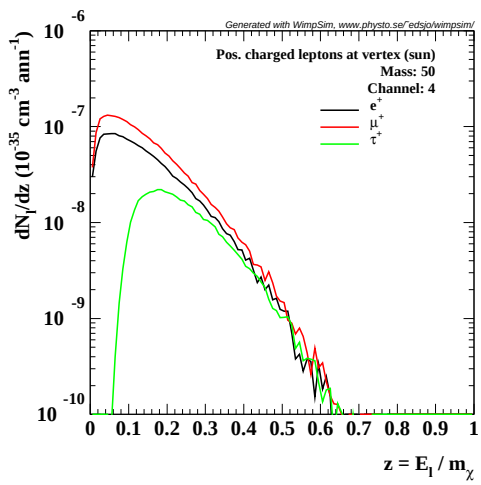
5.4.1 Neutrino fluxes at detector (Sun)



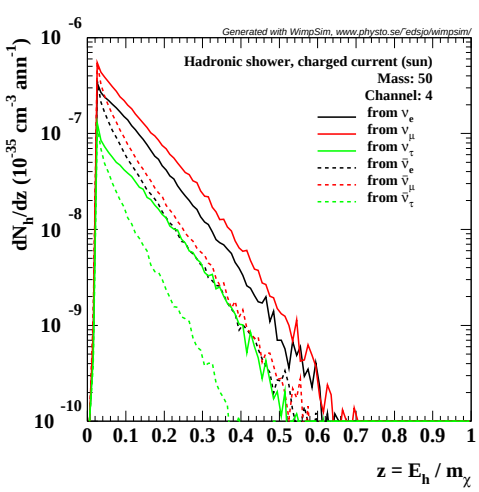


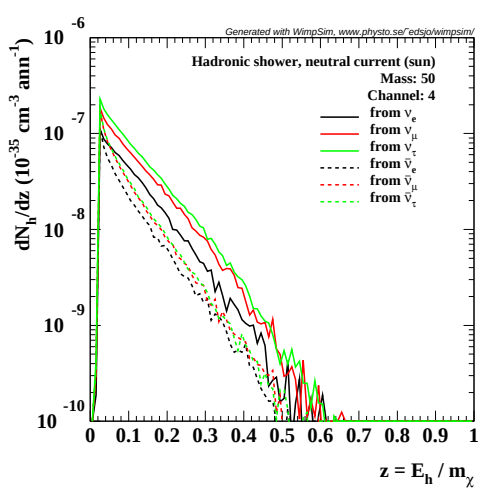
5.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



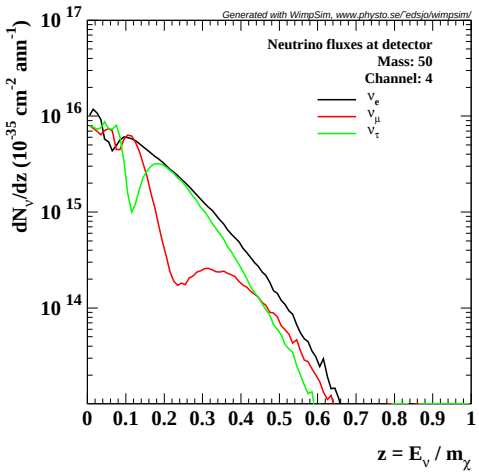


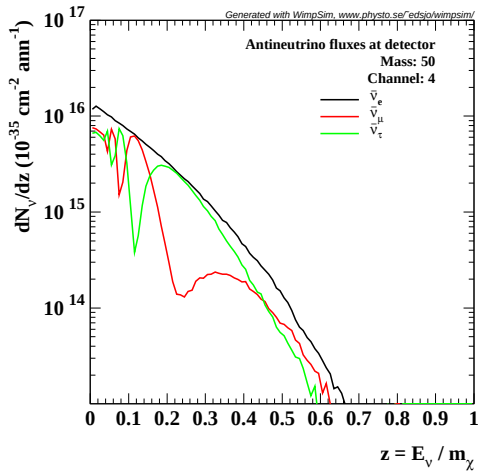
5.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



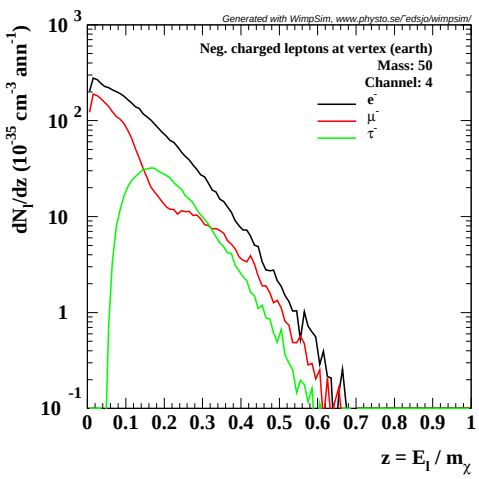


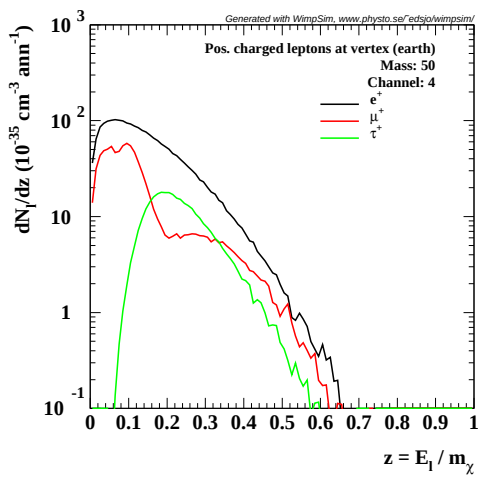
5.4.4 Neutrino fluxes at detector (Earth)



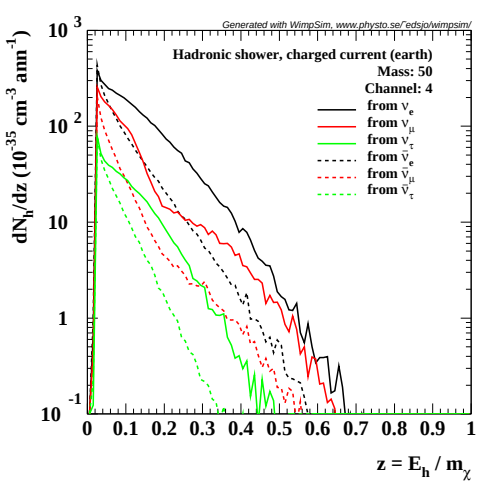


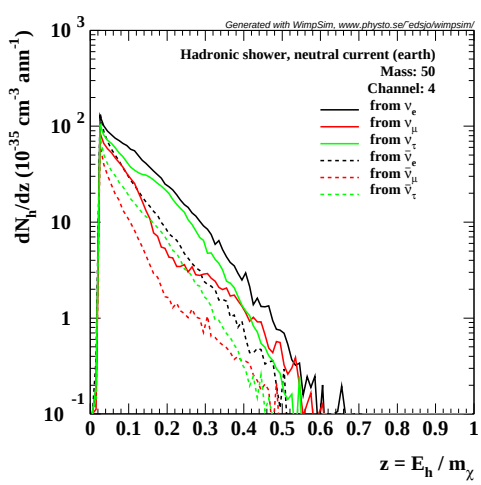
5.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



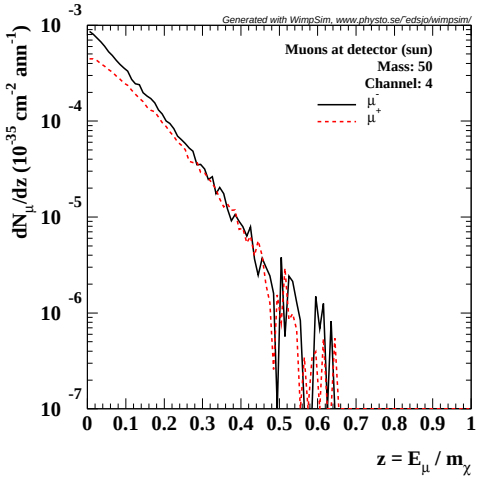


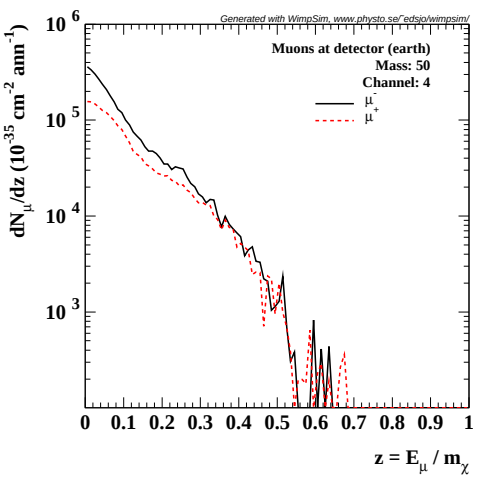
5.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





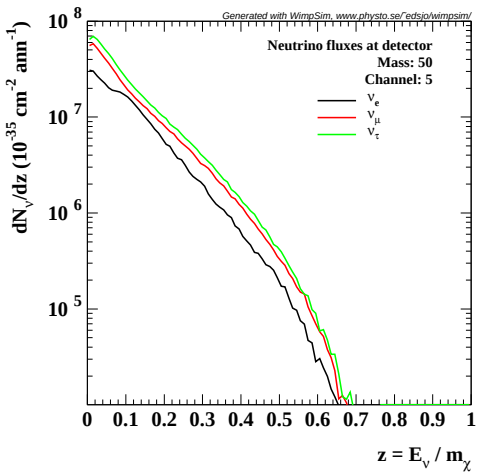
5.4.7 Muons at detector (Sun/Earth)

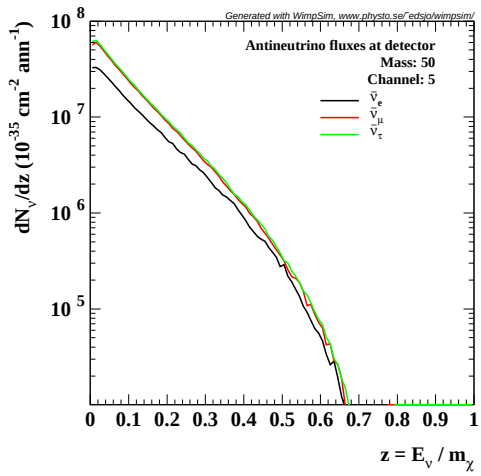




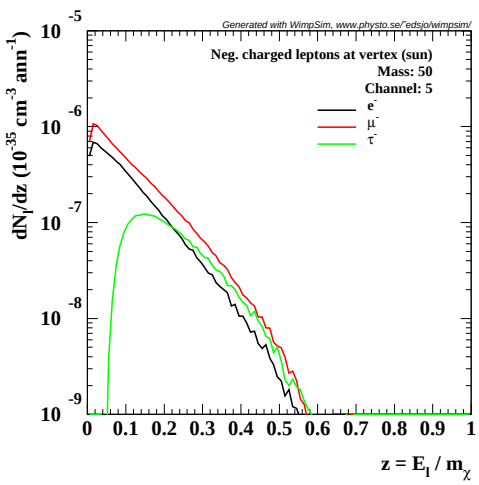
5.5 Channel 5 – $b\bar{b}$

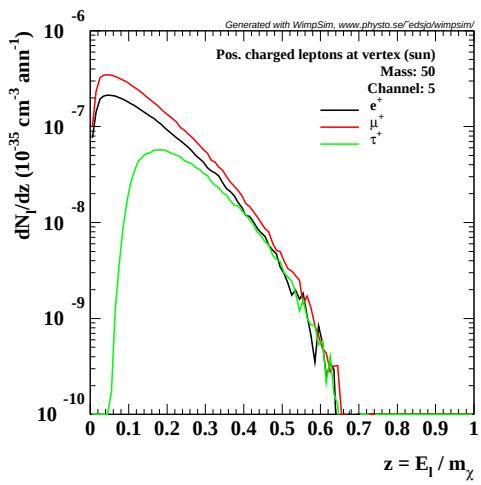
5.5.1 Neutrino fluxes at detector (Sun)



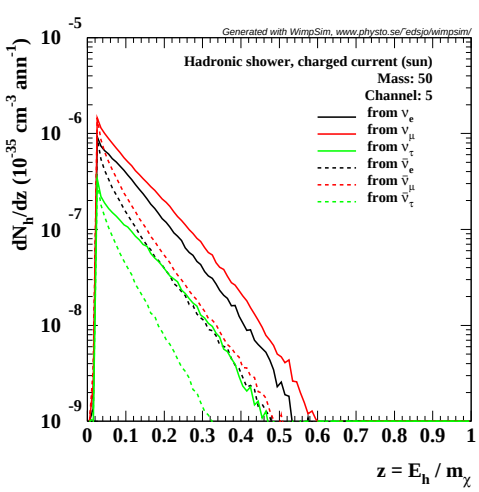


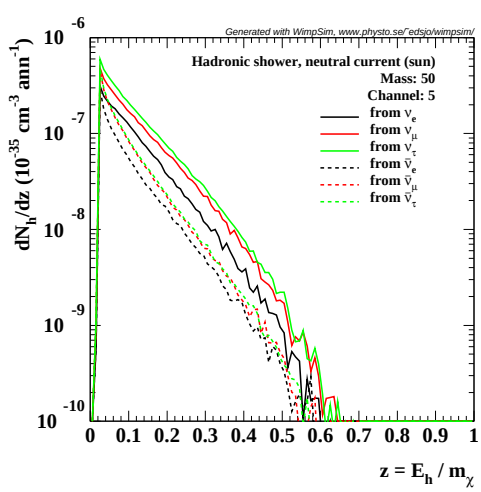
5.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



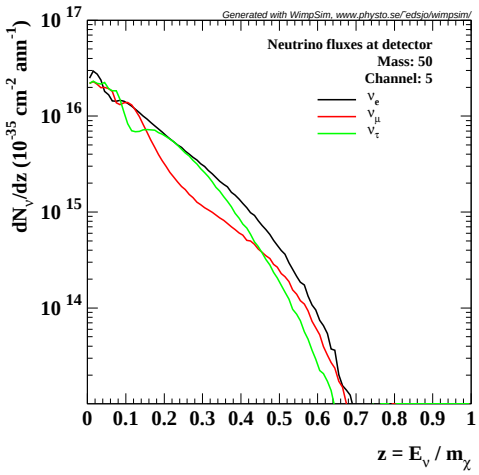


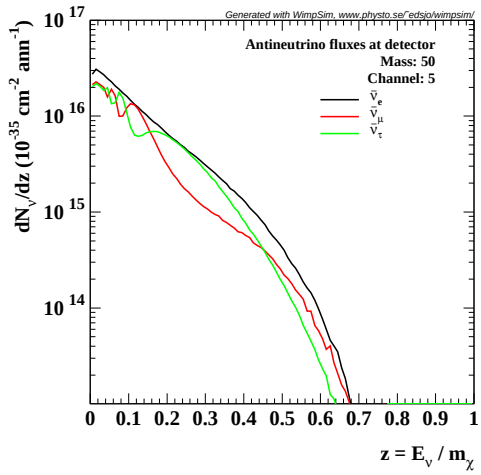
5.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



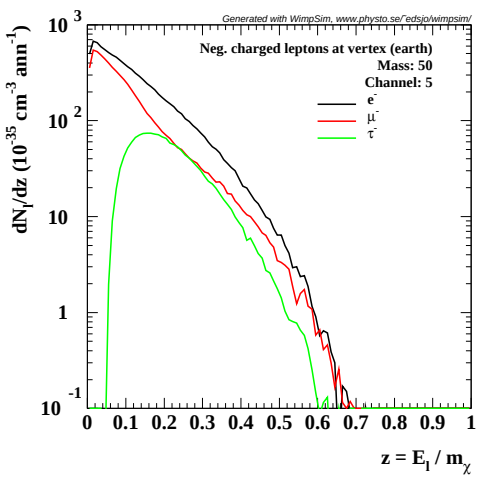


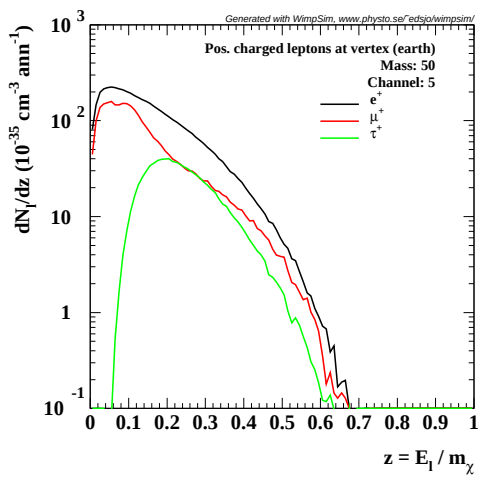
5.5.4 Neutrino fluxes at detector (Earth)



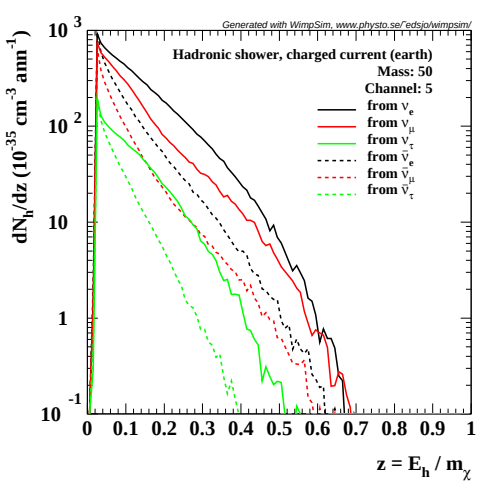


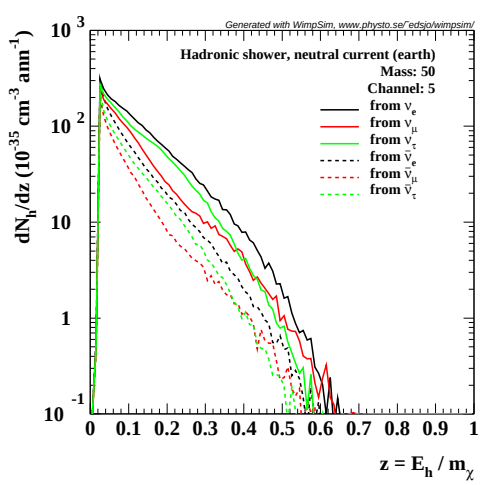
5.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



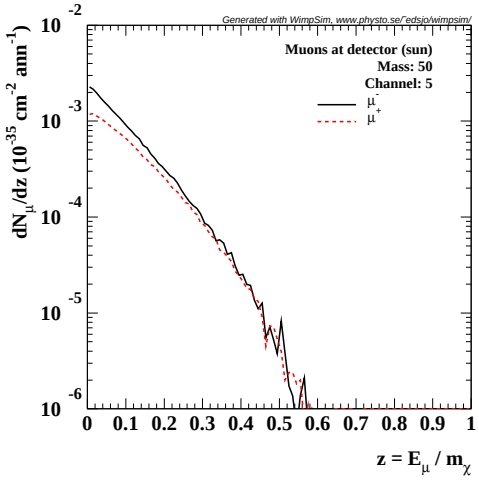


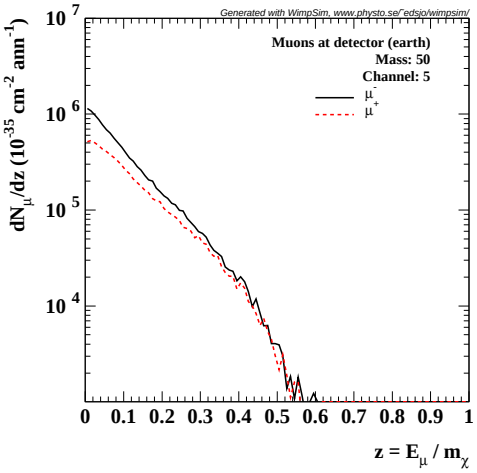
5.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





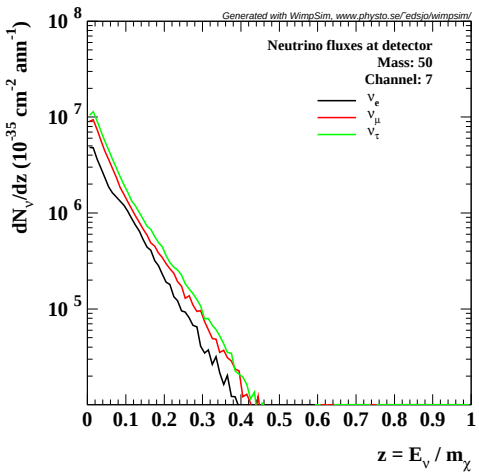
5.5.7 Muons at detector (Sun/Earth)

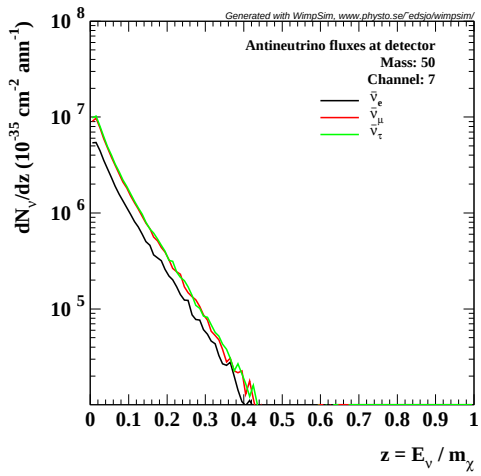




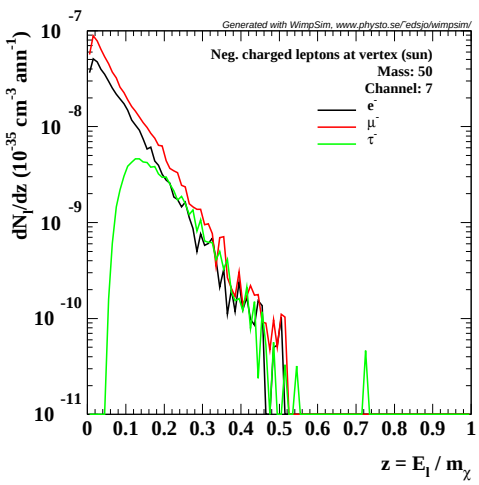
5.6 Channel 7 – gg

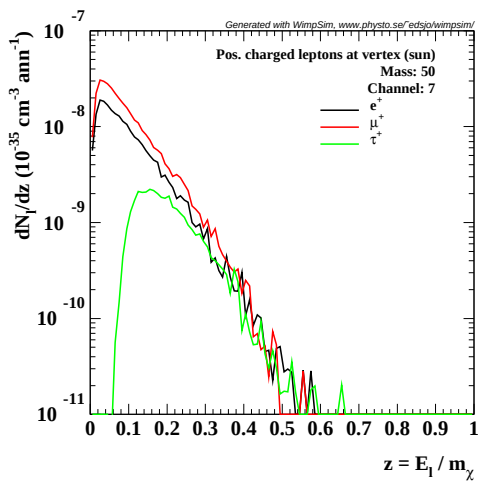
5.6.1 Neutrino fluxes at detector (Sun)



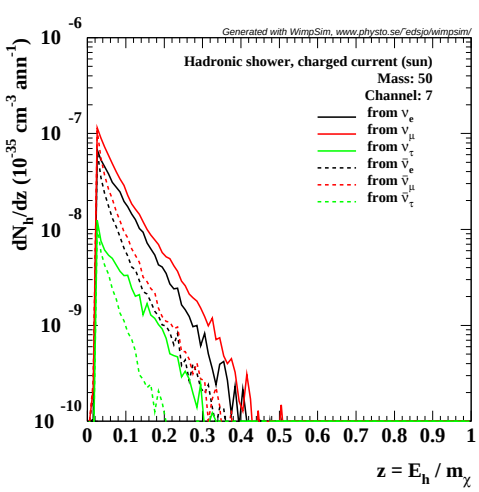


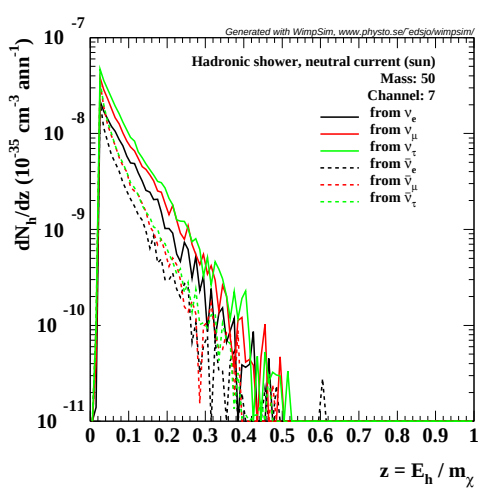
5.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



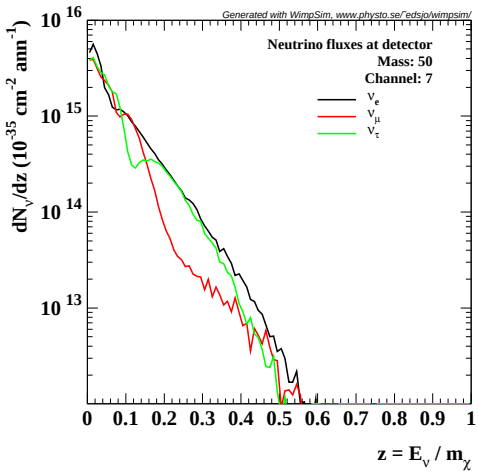


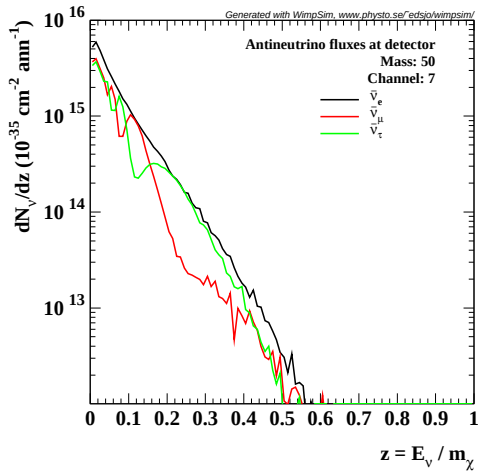
5.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



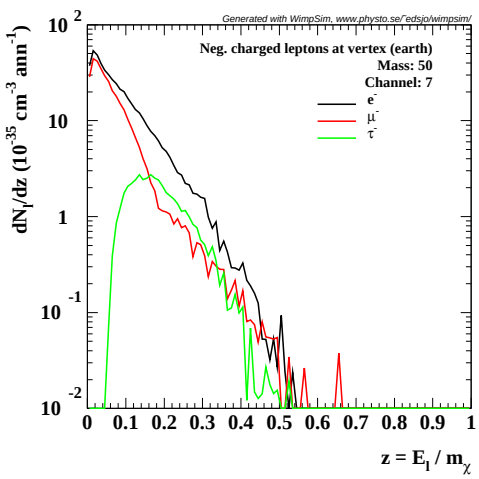


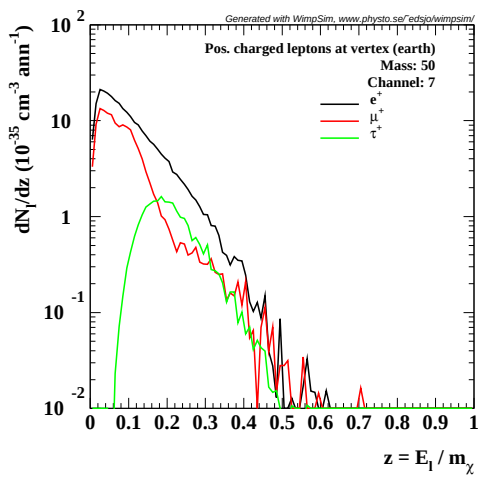
5.6.4 Neutrino fluxes at detector (Earth)



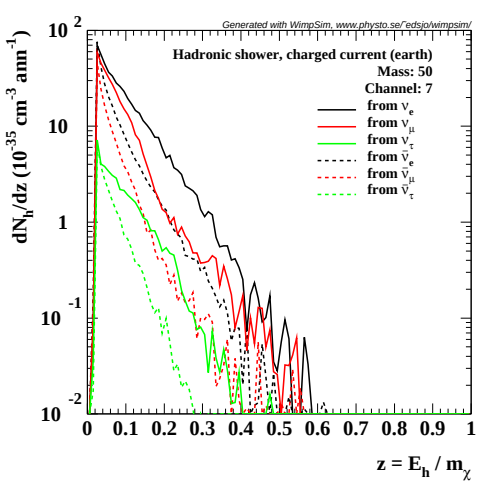


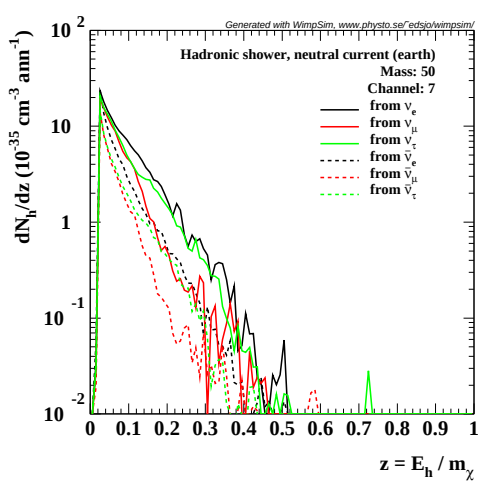
5.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



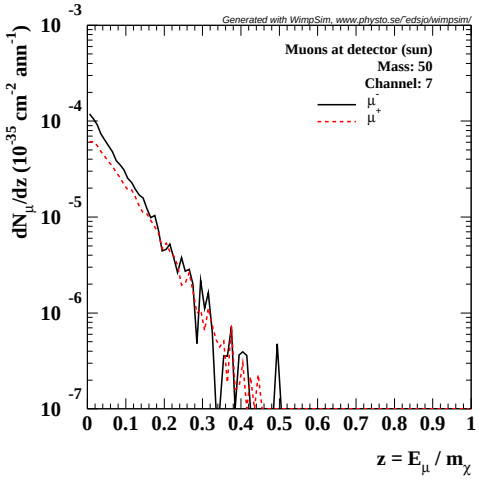


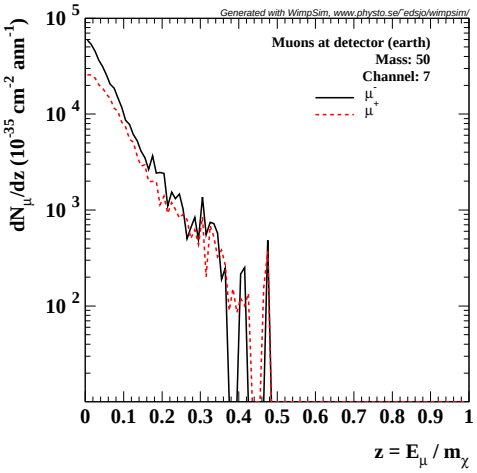
5.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





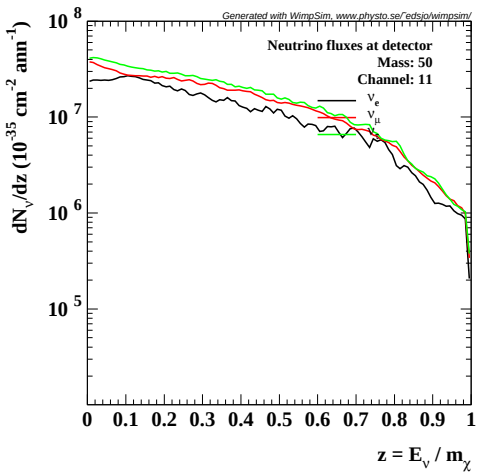
5.6.7 Muons at detector (Sun/Earth)

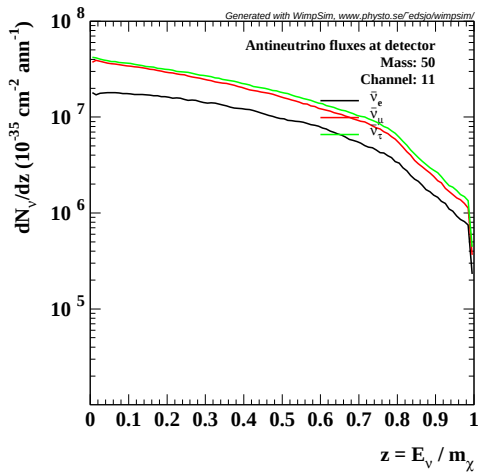




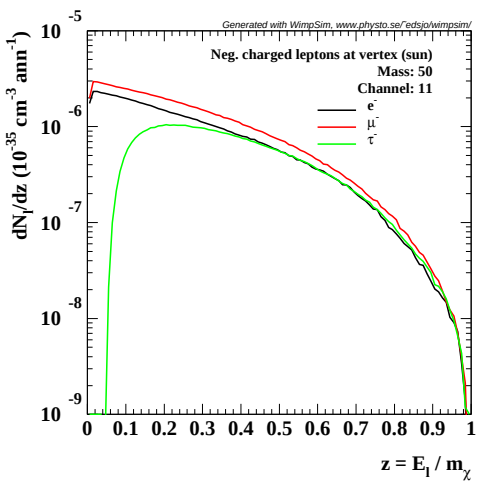
5.7 Channel 11 – $\tau^-\tau^+$

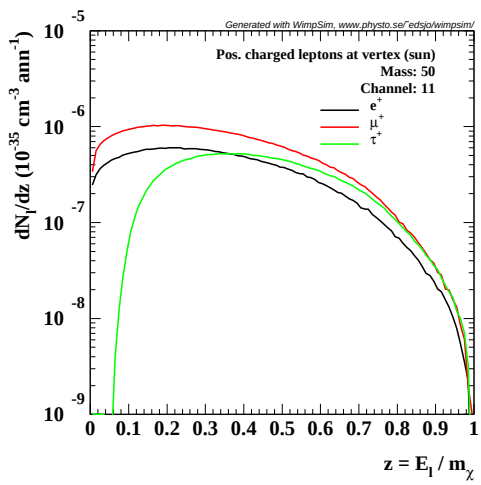
5.7.1 Neutrino fluxes at detector (Sun)



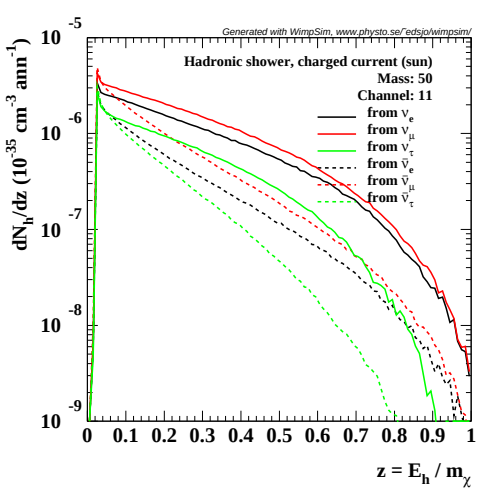


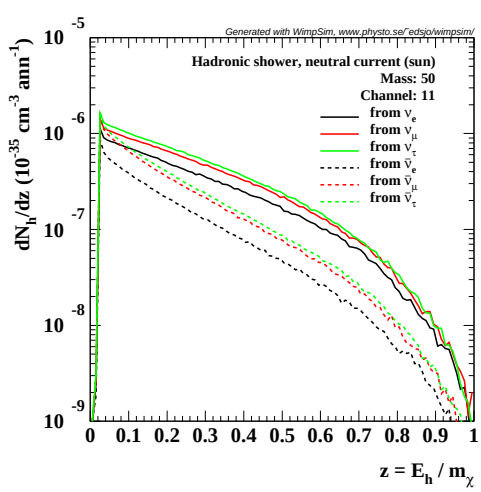
5.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



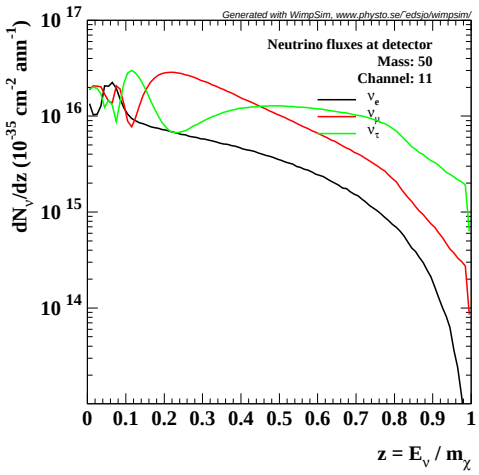


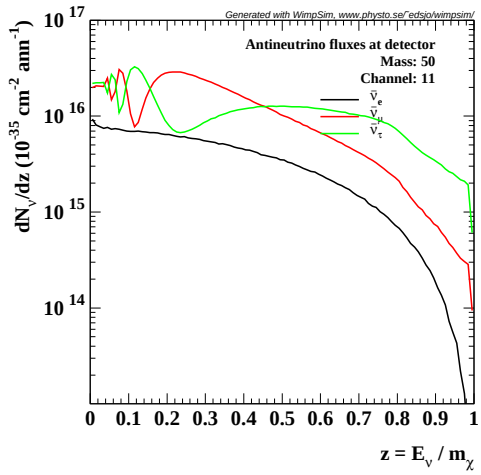
5.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



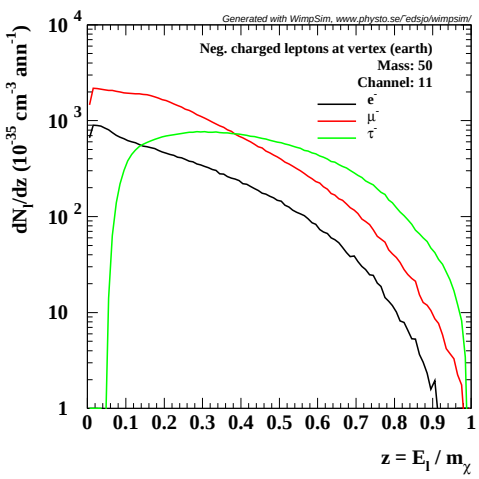


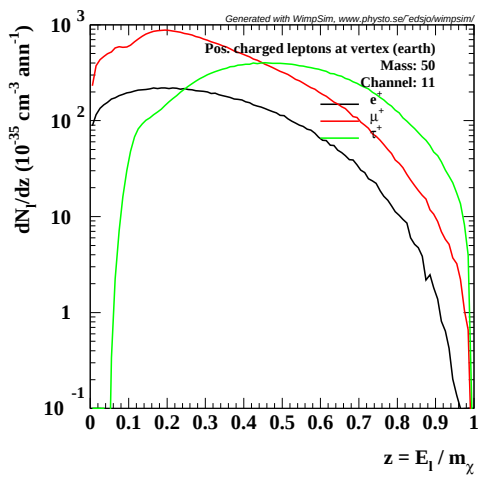
5.7.4 Neutrino fluxes at detector (Earth)



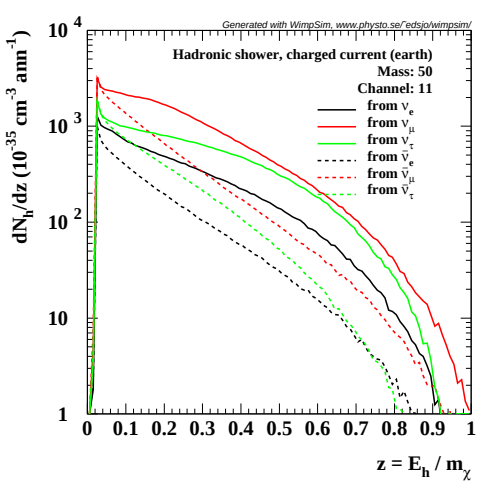


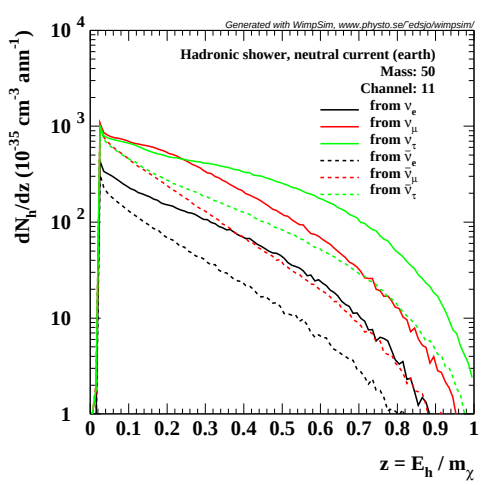
5.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



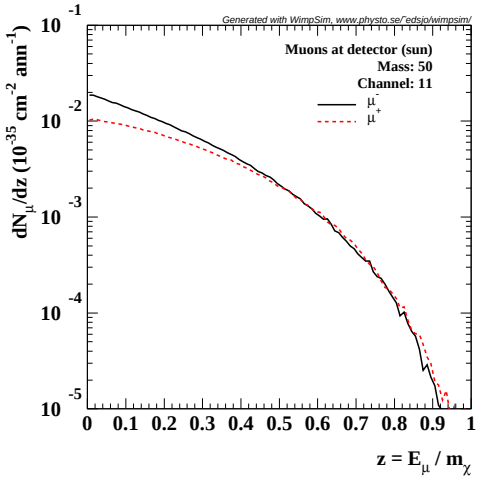


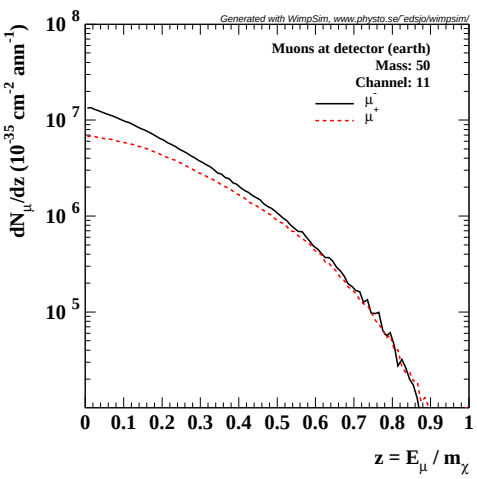
5.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





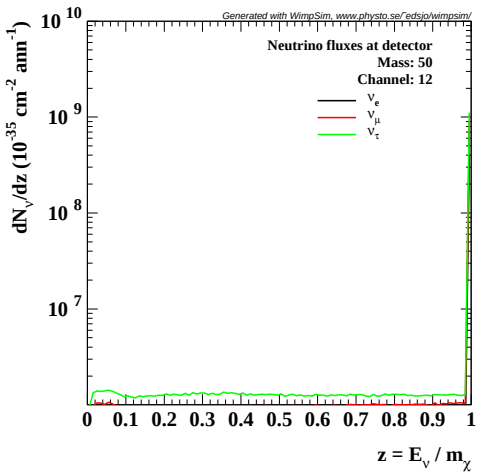
5.7.7 Muons at detector (Sun/Earth)

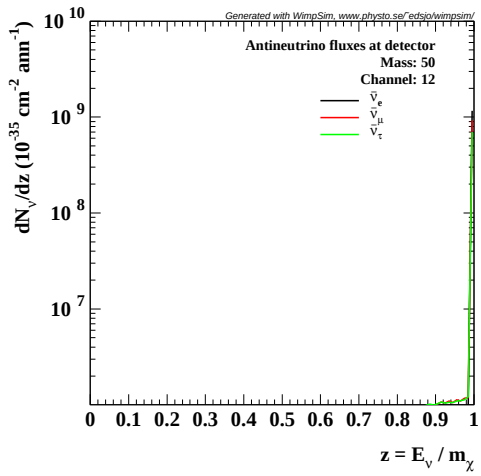




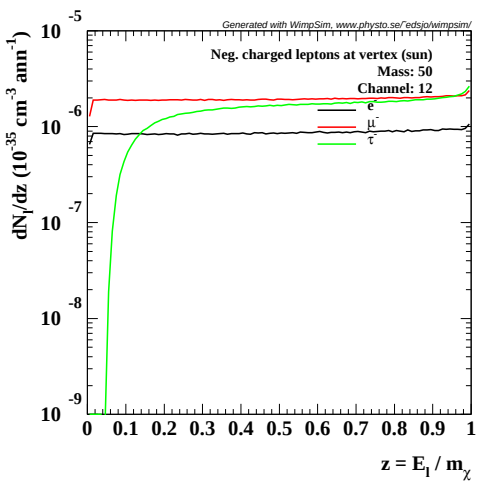
5.8 Channel 12 – $\nu_e\bar{\nu}_e$

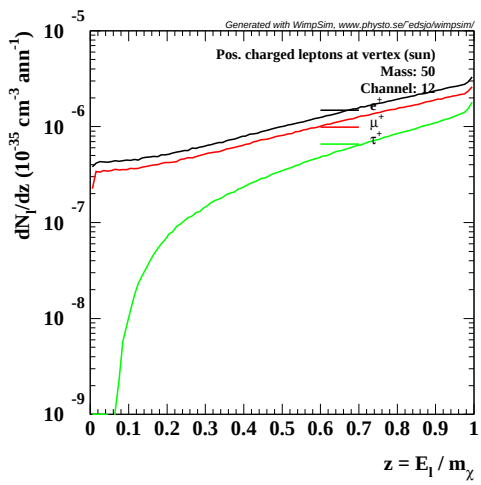
5.8.1 Neutrino fluxes at detector (Sun)



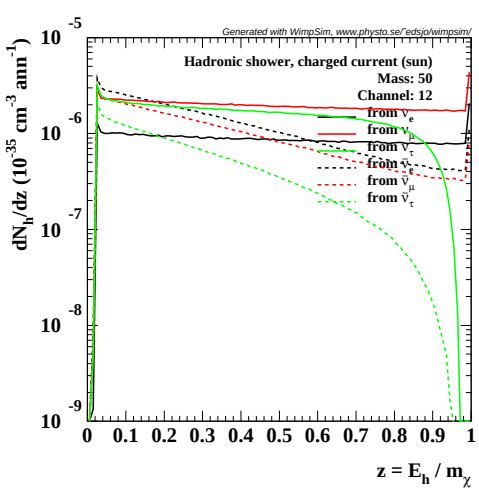


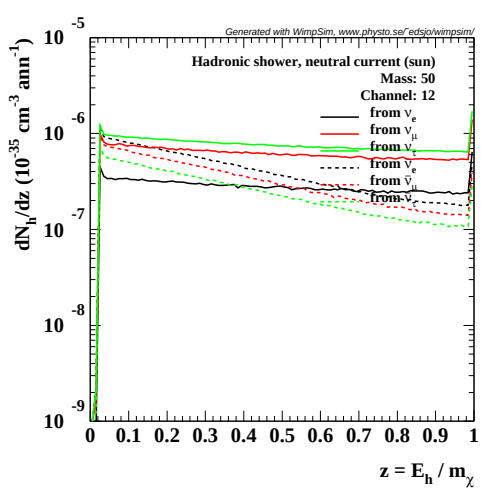
5.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



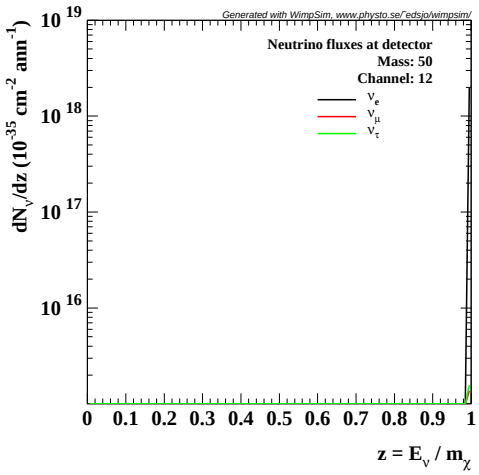


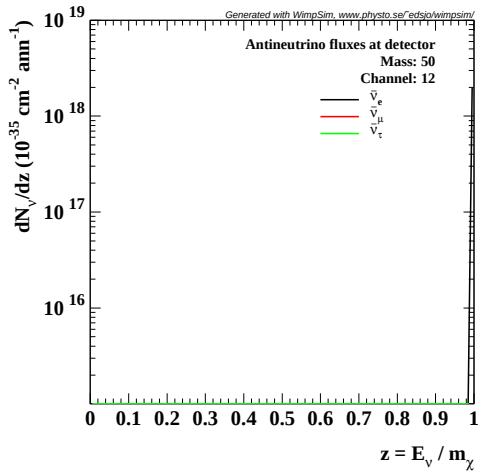
5.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



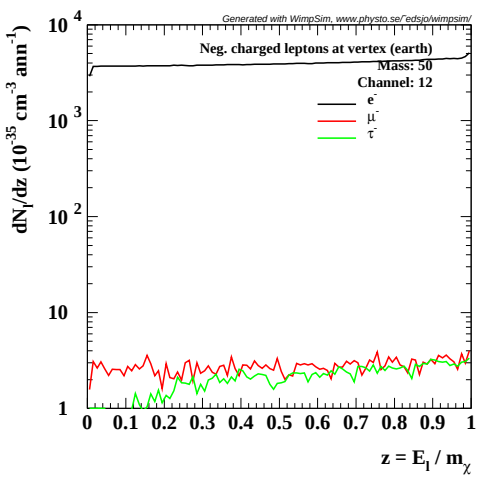


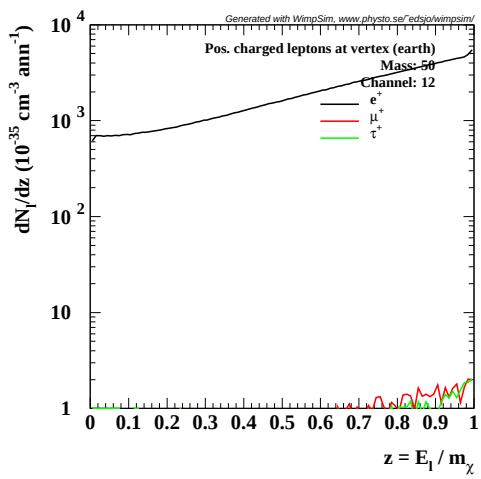
5.8.4 Neutrino fluxes at detector (Earth)



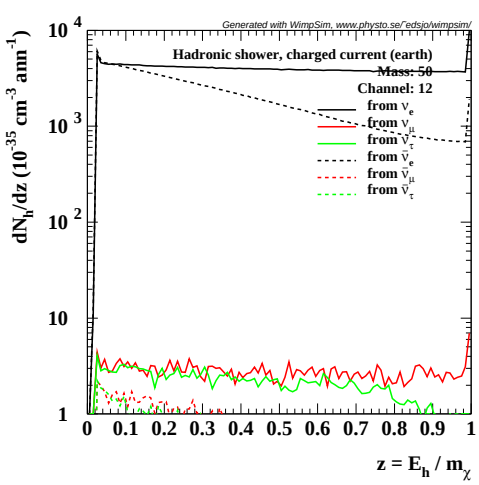


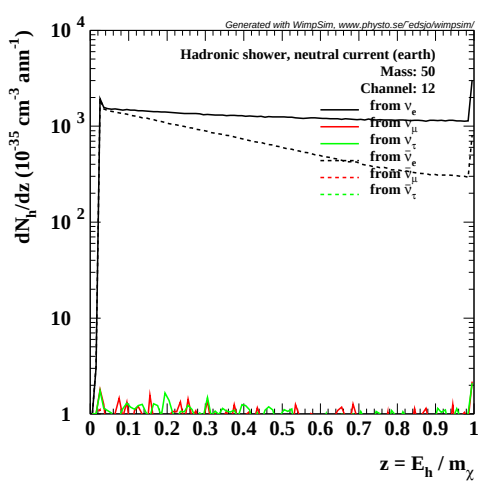
5.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



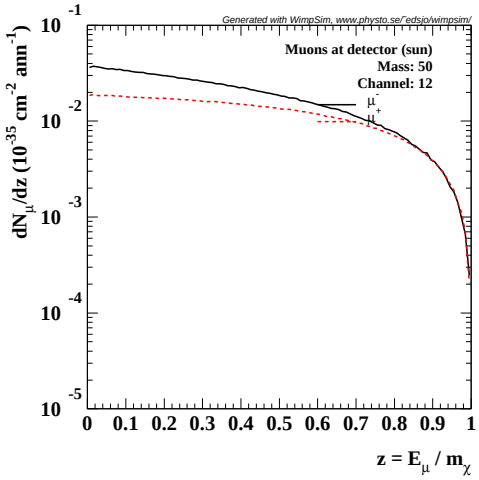


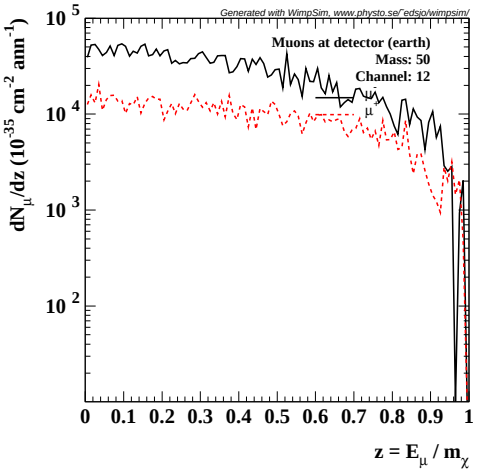
5.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





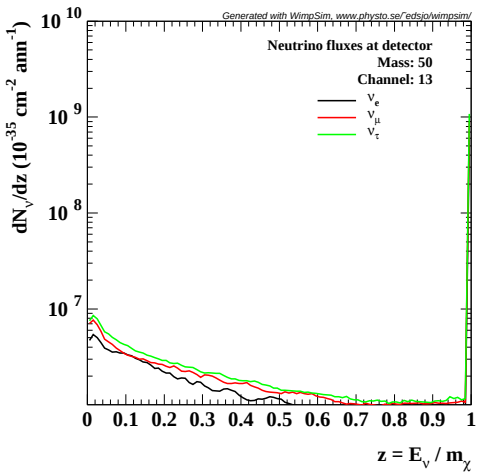
5.8.7 Muons at detector (Sun/Earth)

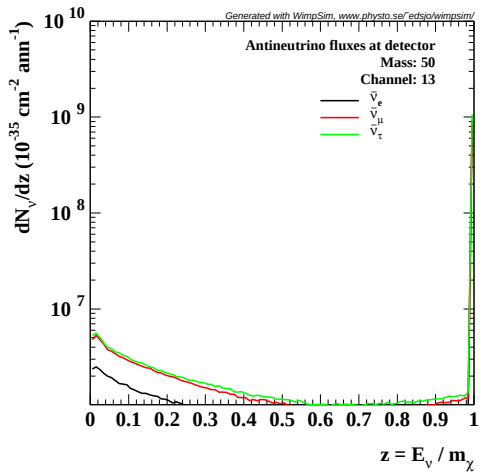




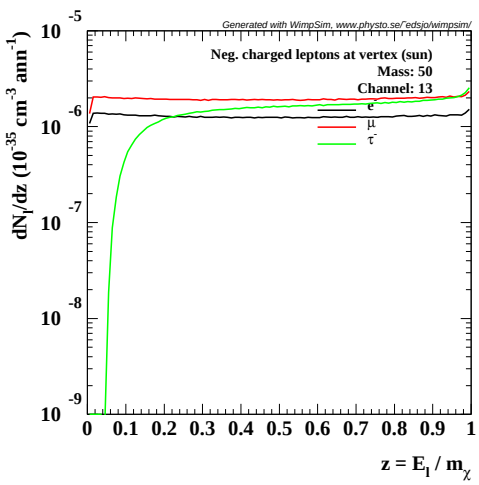
5.9 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

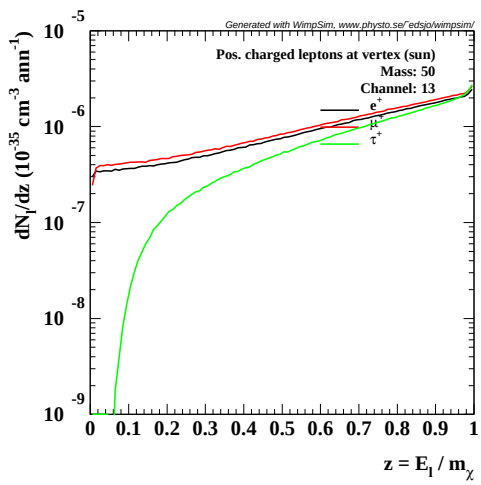
5.9.1 Neutrino fluxes at detector (Sun)



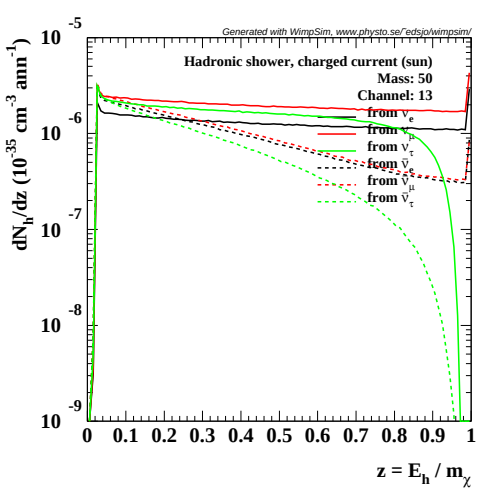


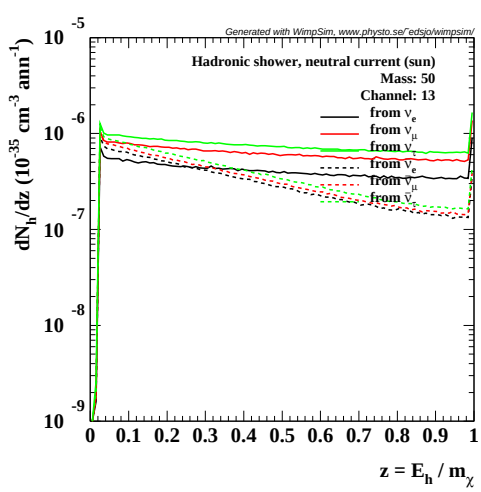
5.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



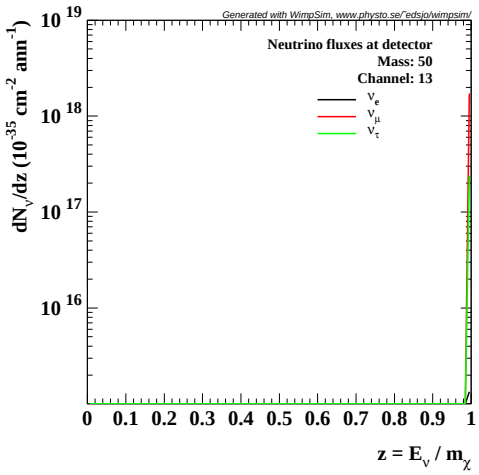


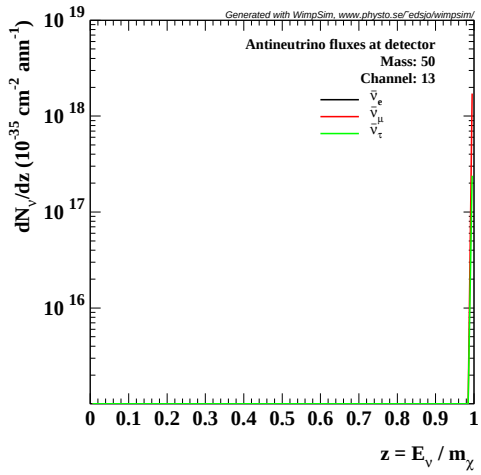
5.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



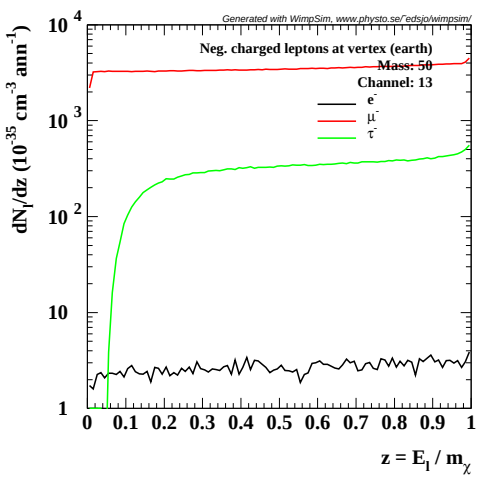


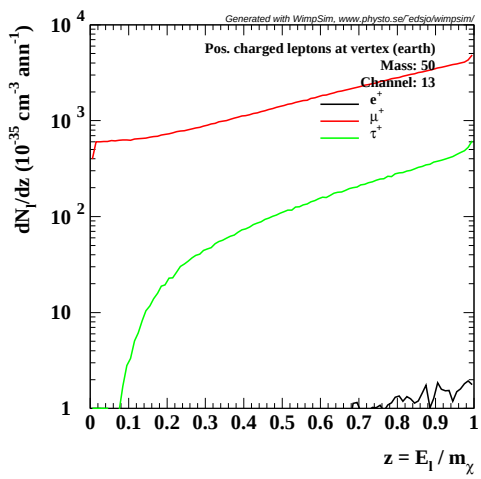
5.9.4 Neutrino fluxes at detector (Earth)



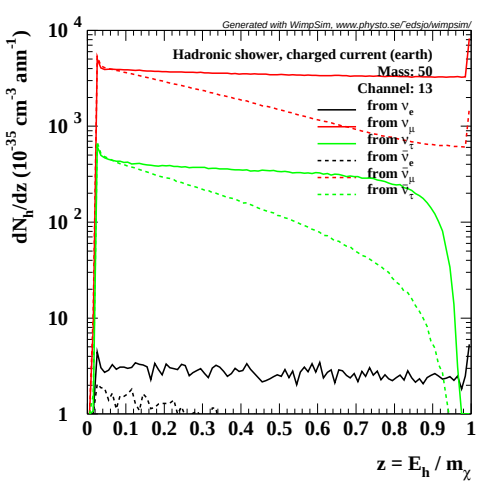


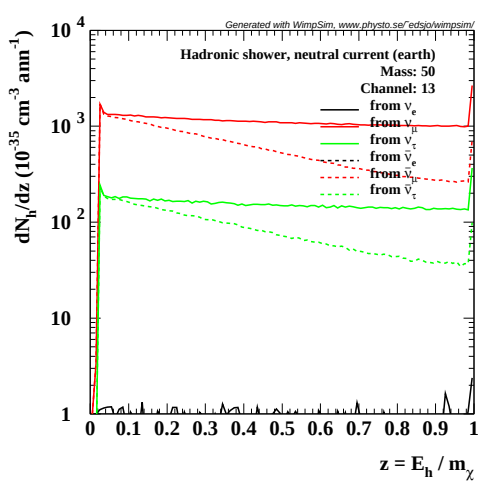
5.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



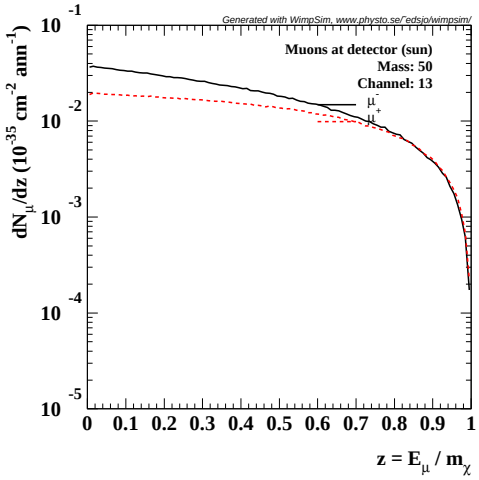


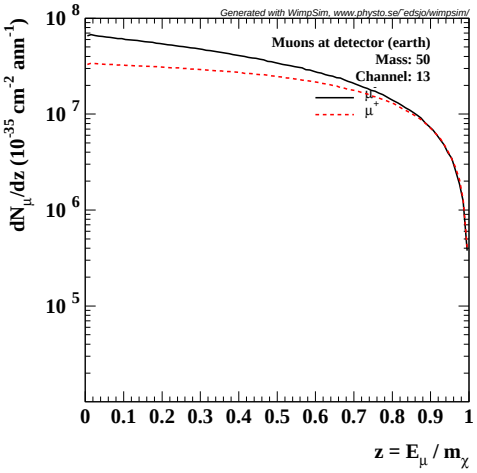
5.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





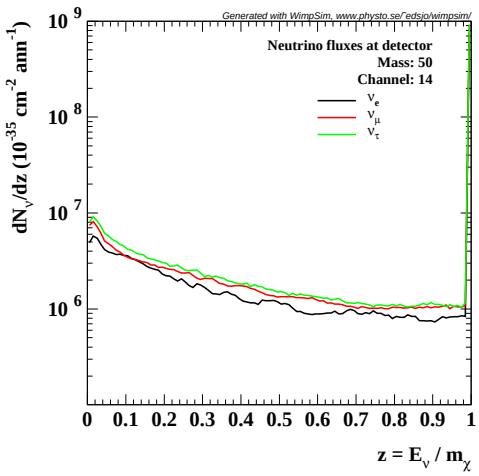
5.9.7 Muons at detector (Sun/Earth)

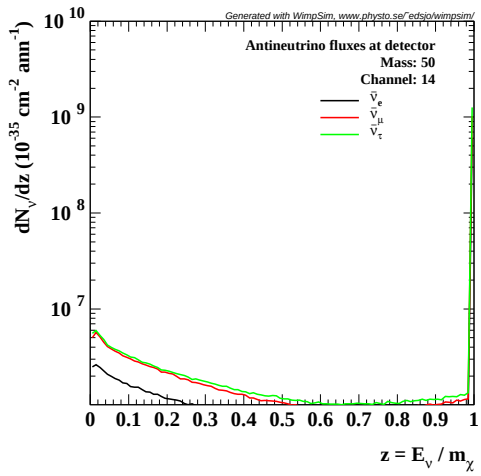




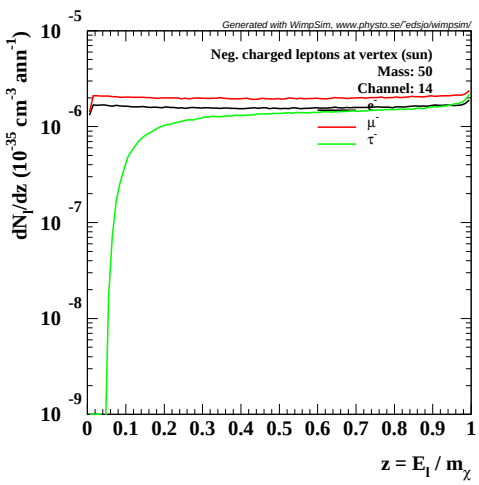
5.10 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

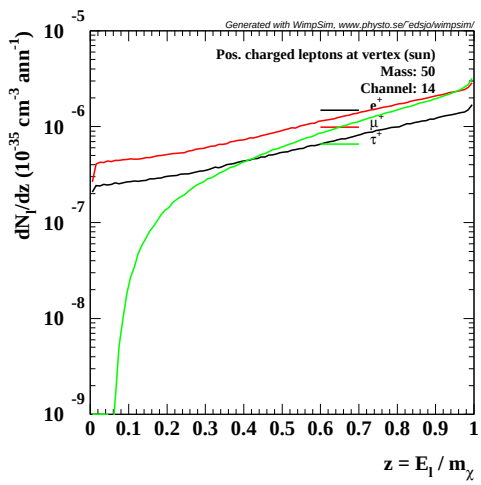
5.10.1 Neutrino fluxes at detector (Sun)



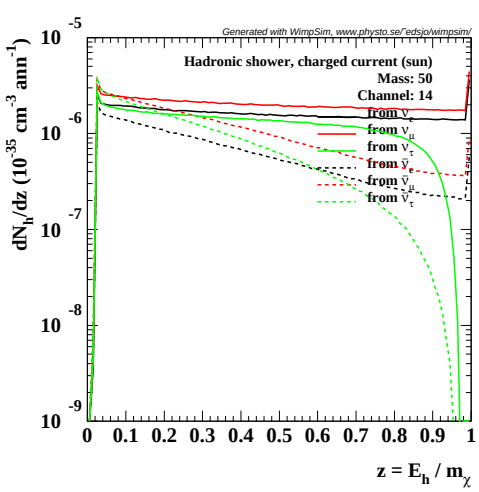


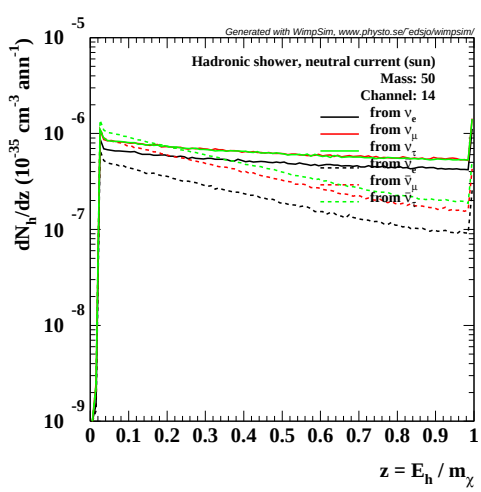
5.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



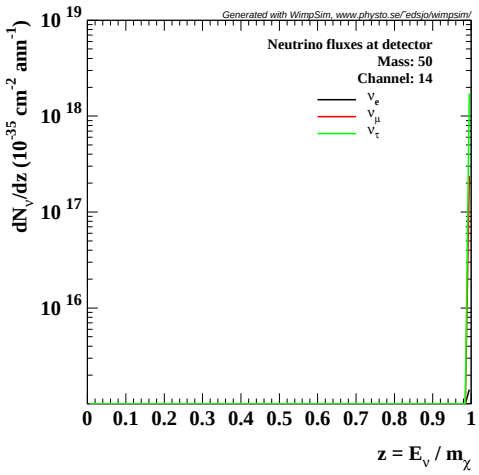


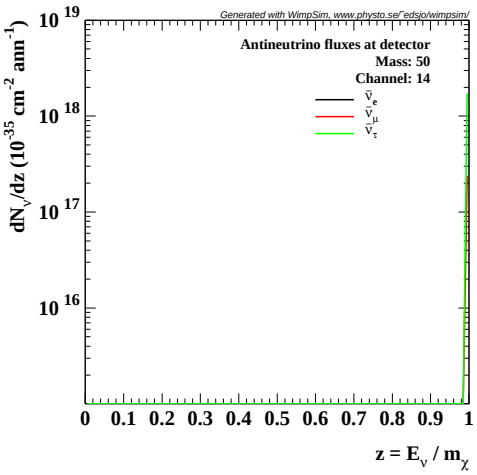
5.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



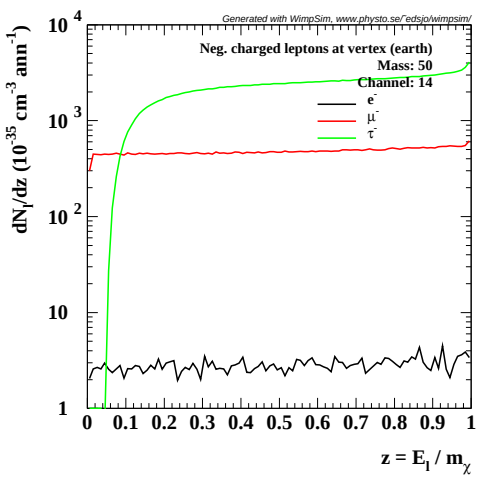


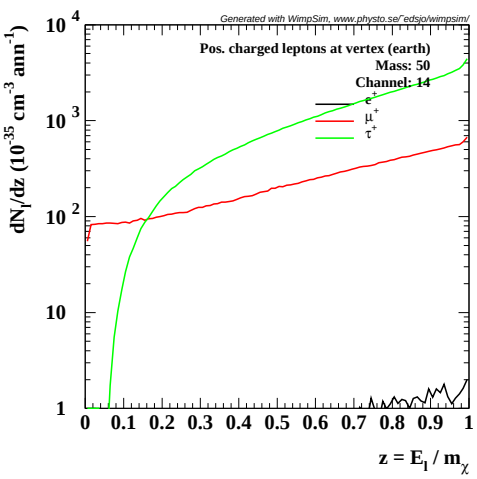
5.10.4 Neutrino fluxes at detector (Earth)



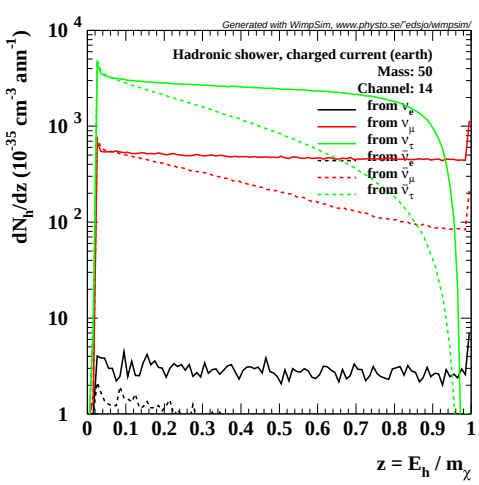


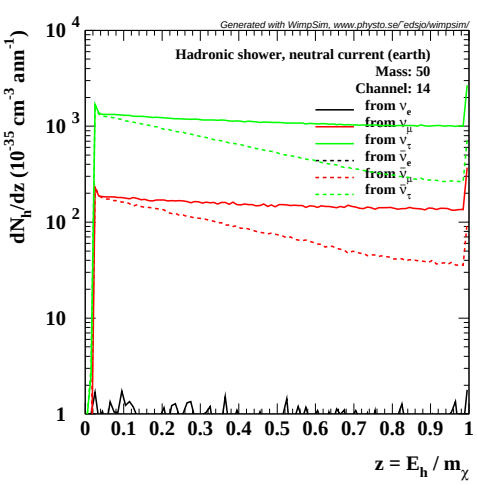
5.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



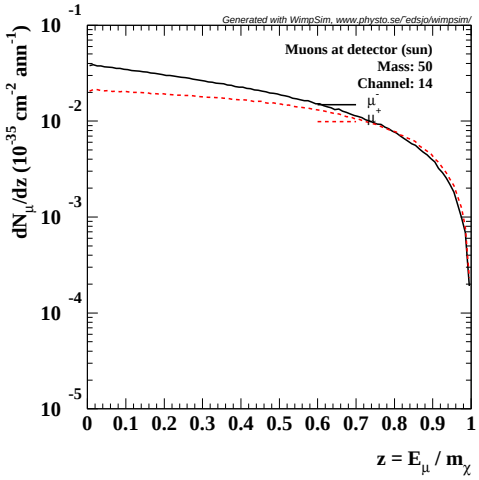


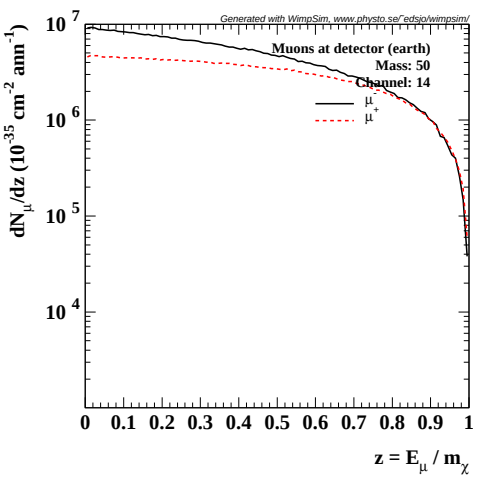
5.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





5.10.7 Muons at detector (Sun/Earth)

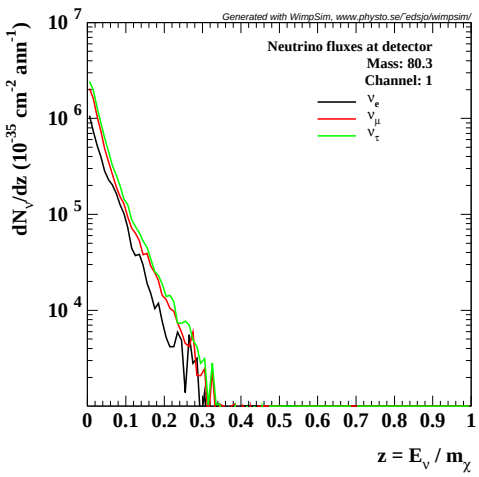


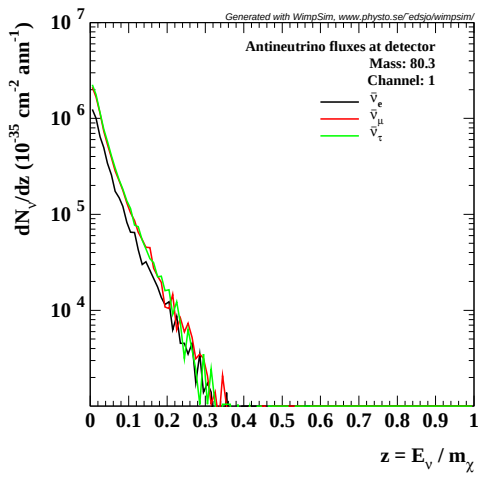


6 Mass 80.3

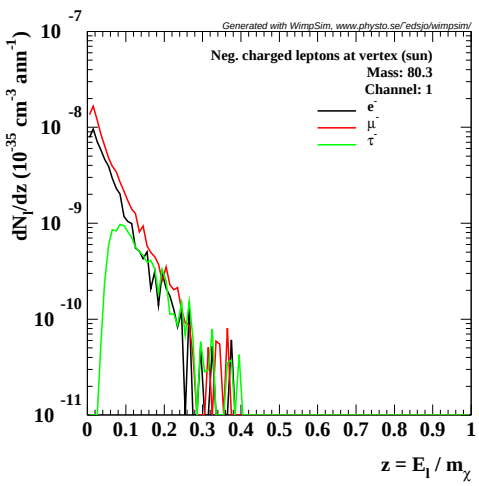
6.1 Channel 1 – $d\bar{d}$

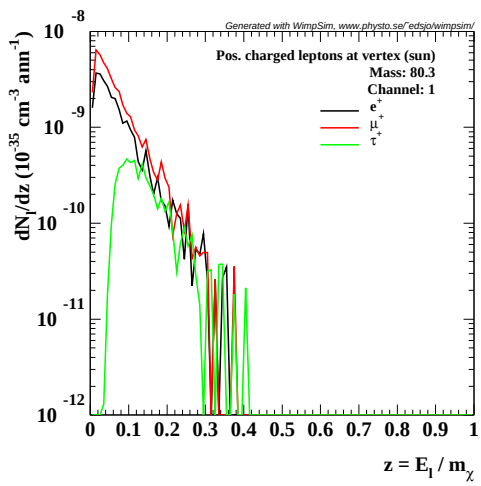
6.1.1 Neutrino fluxes at detector (Sun)



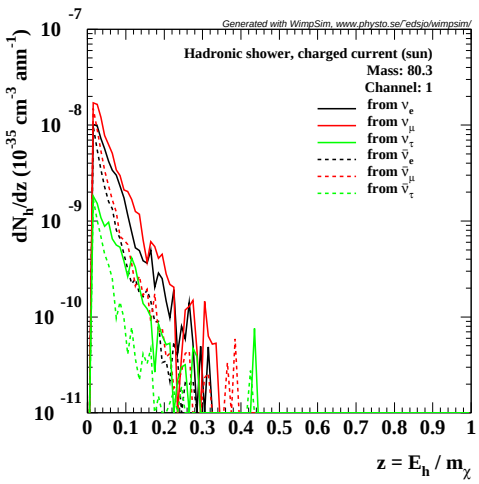


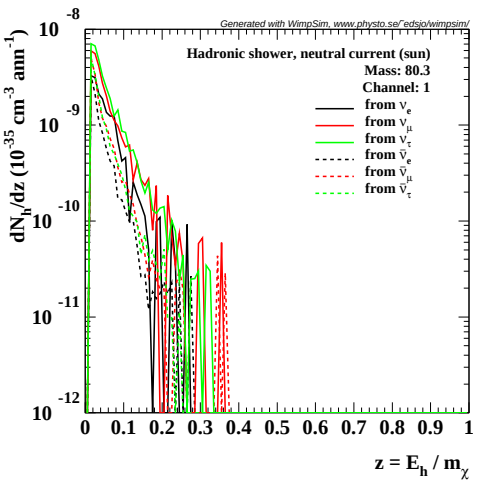
6.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



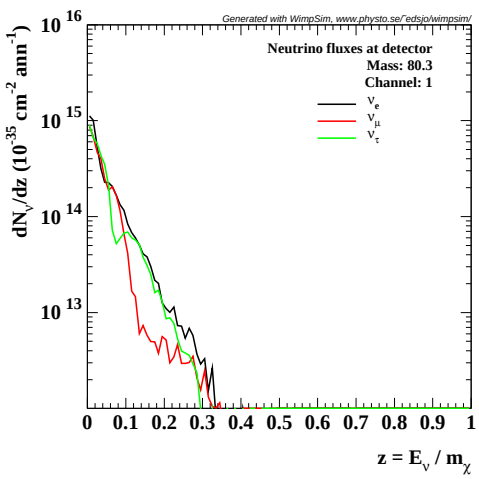


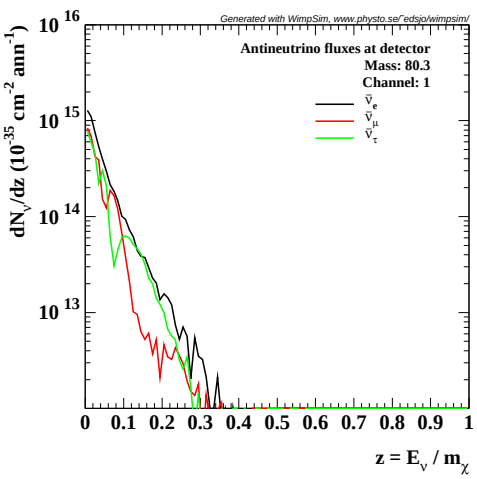
6.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



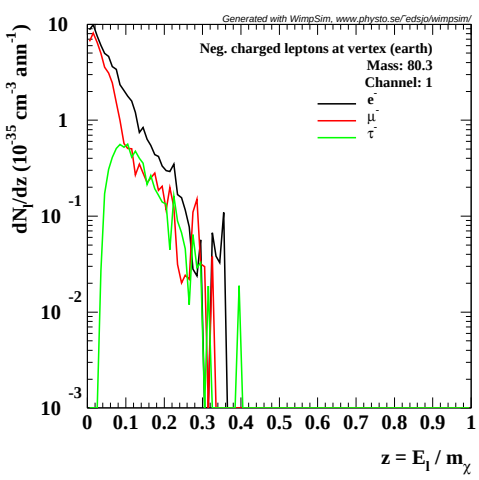


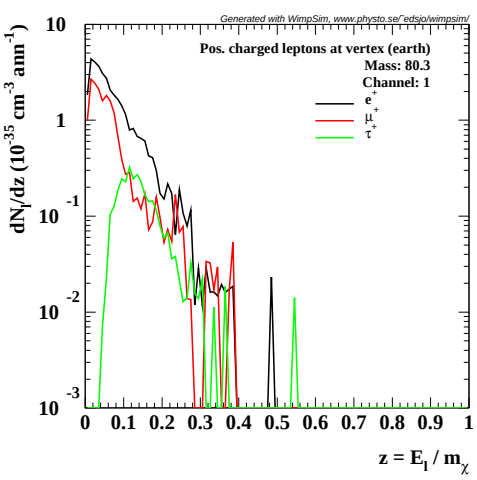
6.1.4 Neutrino fluxes at detector (Earth)



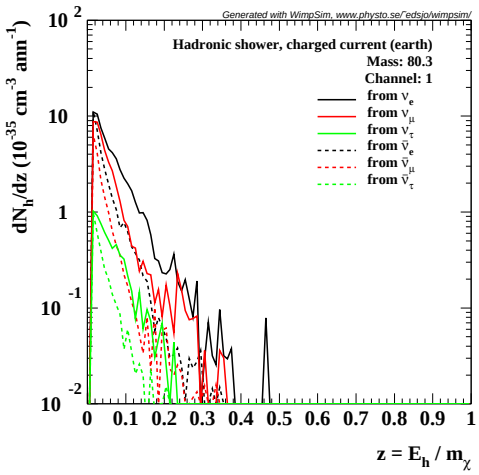


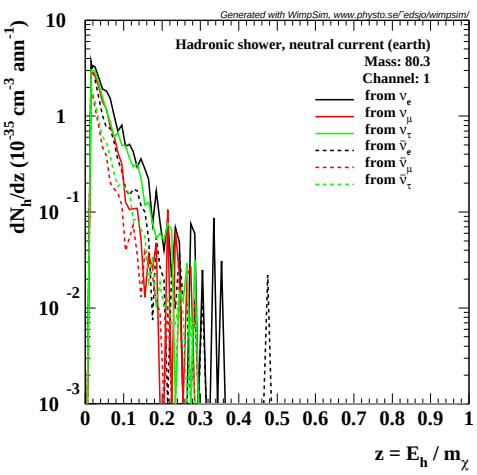
6.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



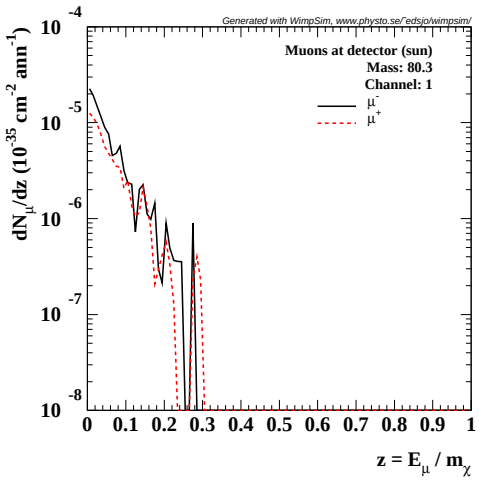


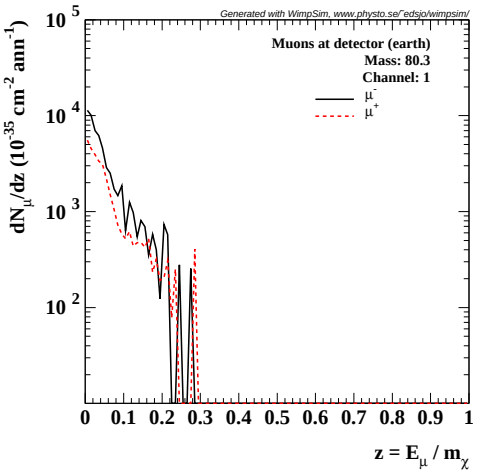
6.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





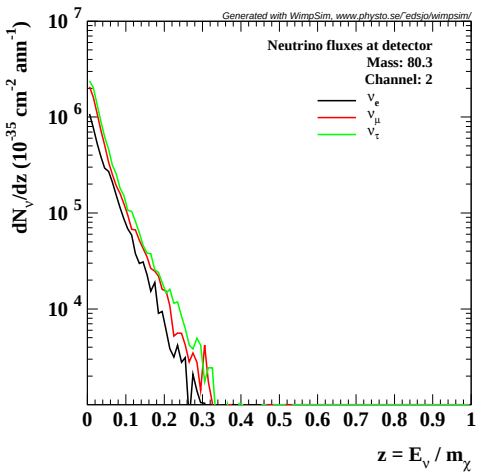
6.1.7 Muons at detector (Sun/Earth)

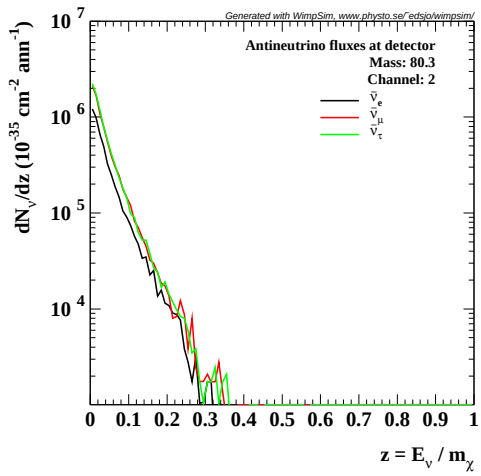




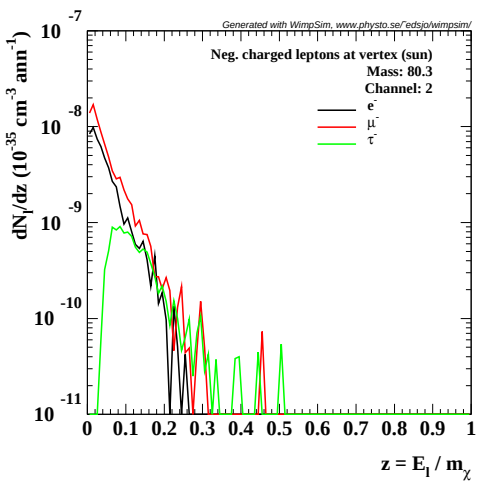
6.2 Channel 2 – $u\bar{u}$

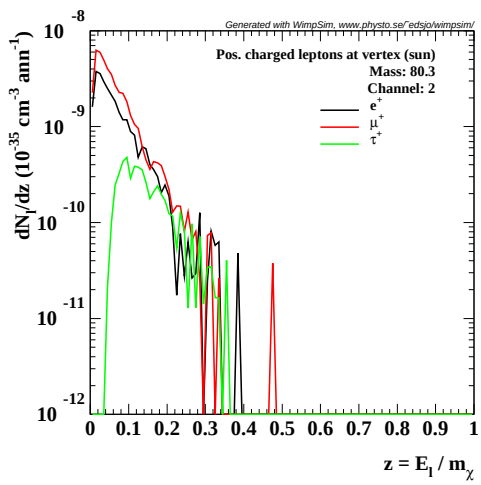
6.2.1 Neutrino fluxes at detector (Sun)



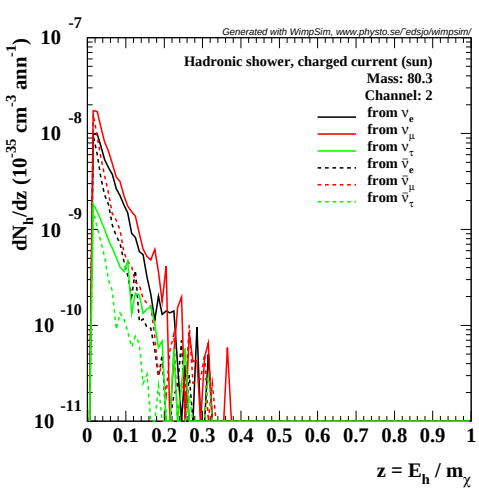


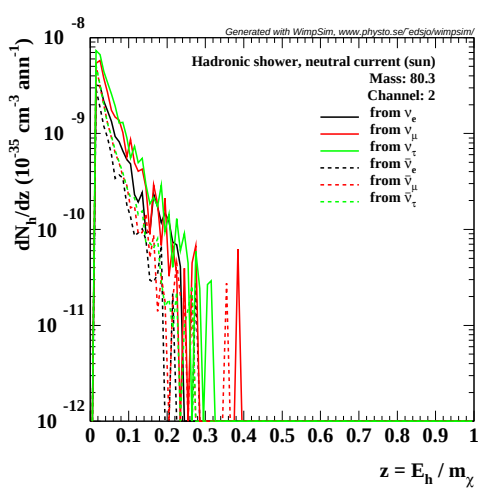
6.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



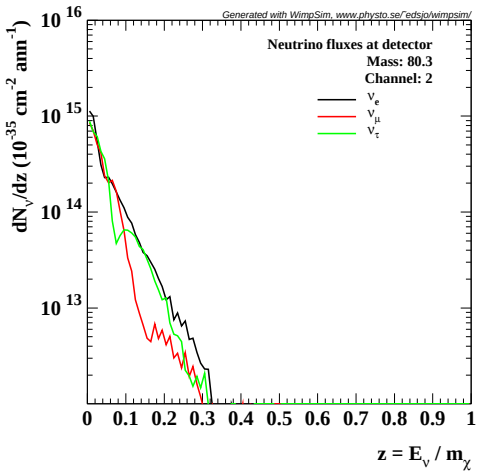


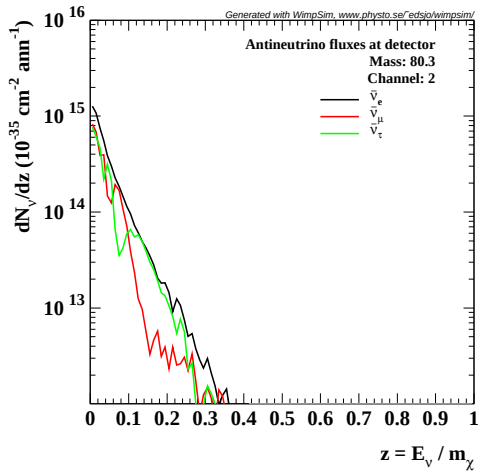
6.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



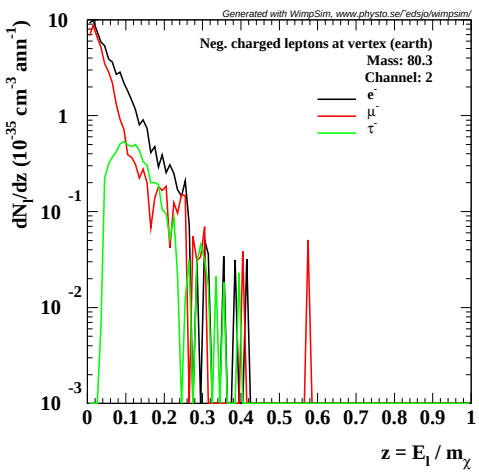


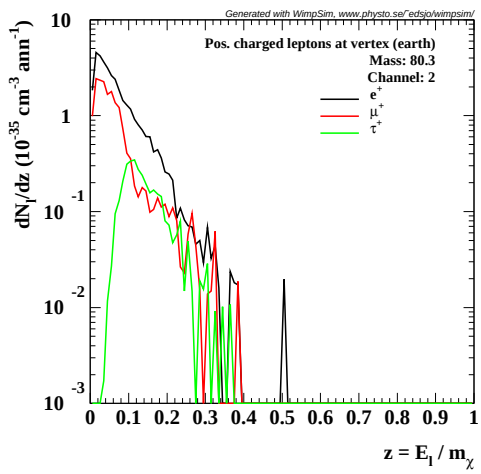
6.2.4 Neutrino fluxes at detector (Earth)



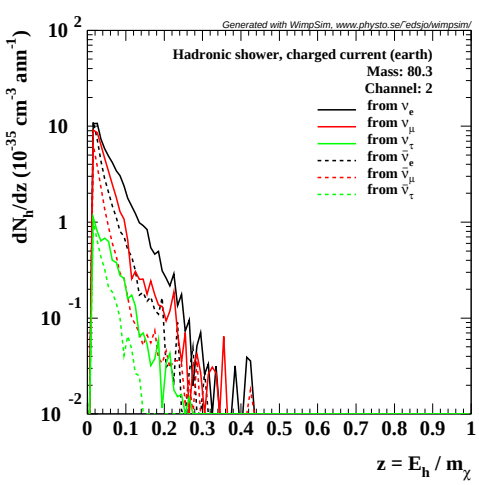


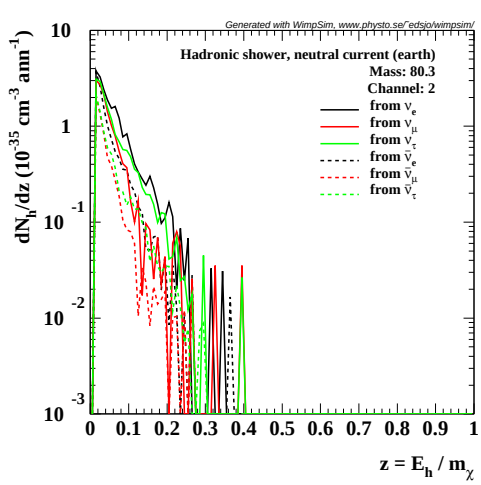
6.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



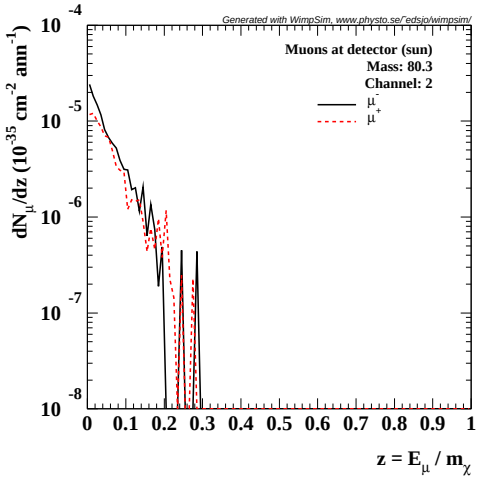


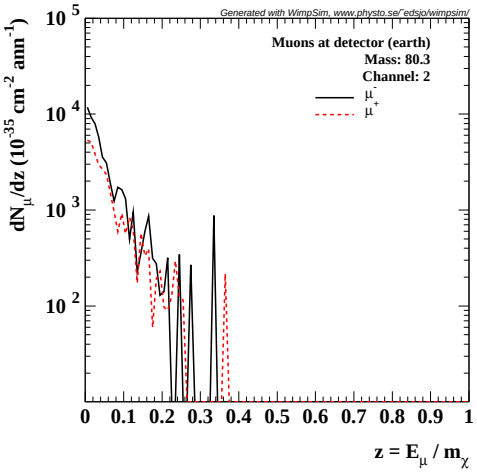
6.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





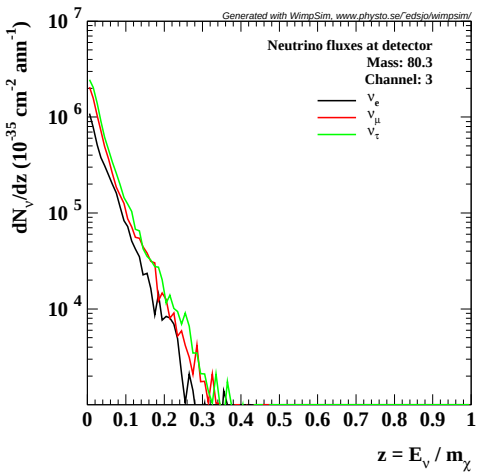
6.2.7 Muons at detector (Sun/Earth)

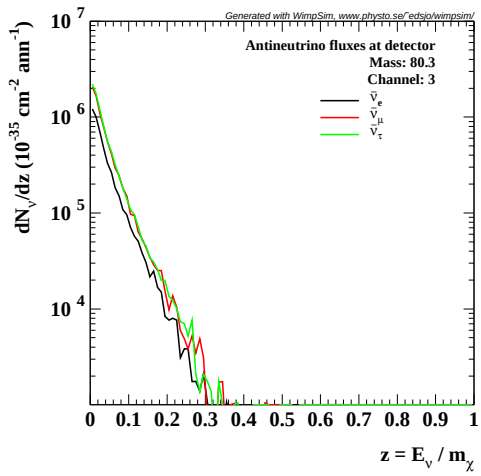




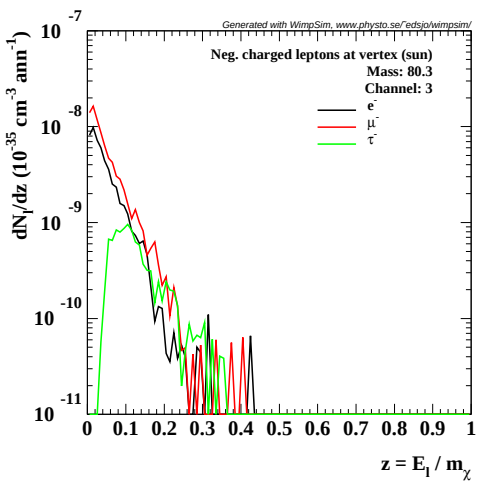
6.3 Channel 3 – $s\bar{s}$

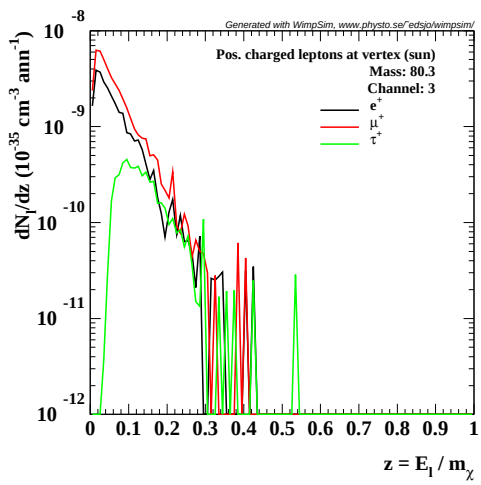
6.3.1 Neutrino fluxes at detector (Sun)



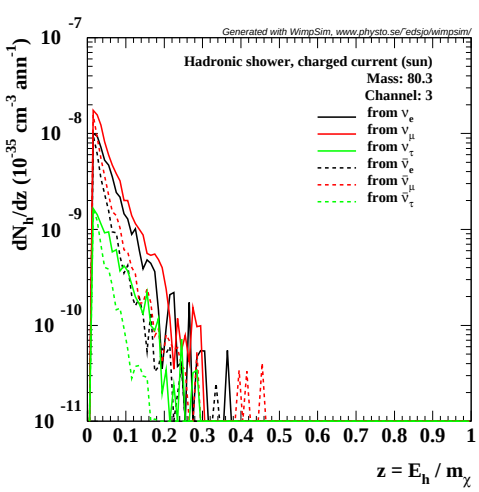


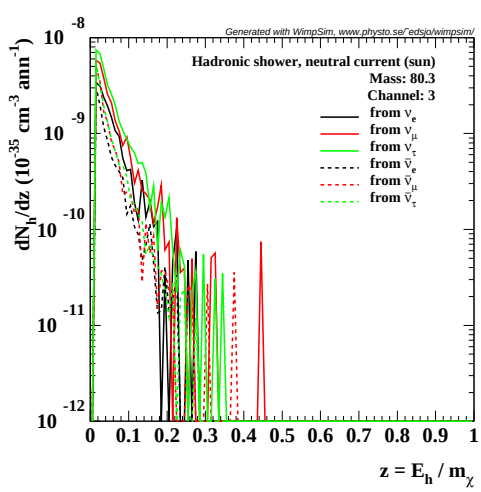
6.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



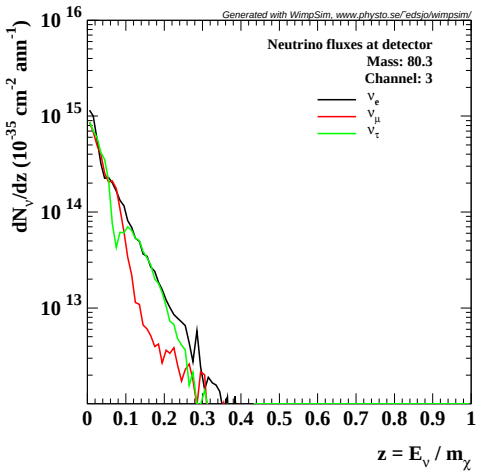


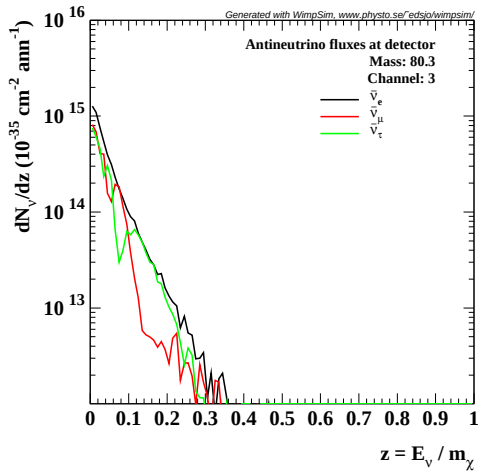
6.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



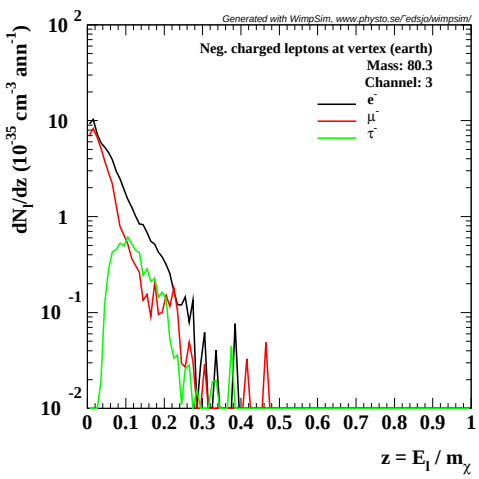


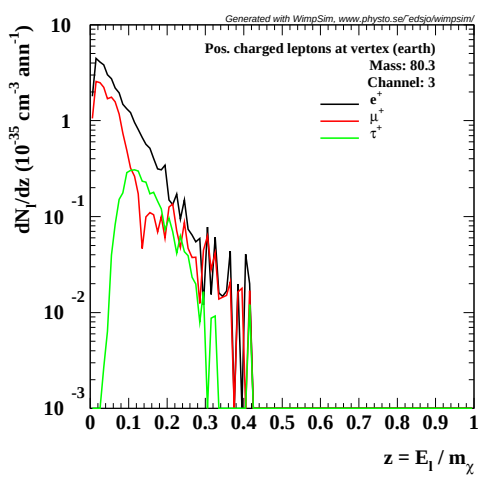
6.3.4 Neutrino fluxes at detector (Earth)



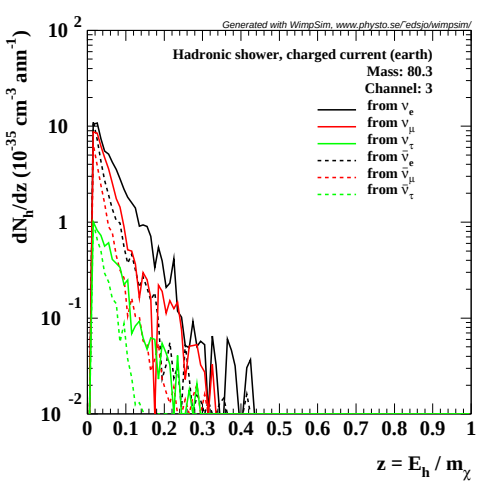


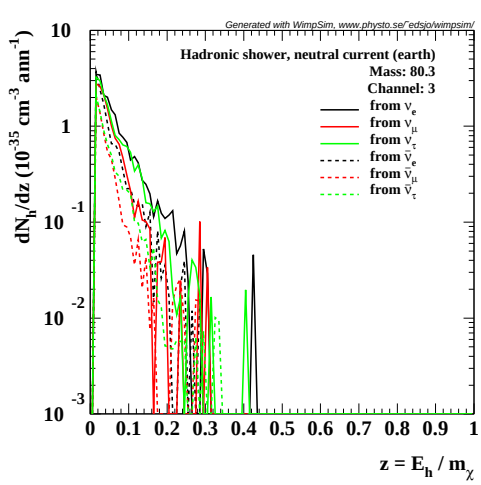
6.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



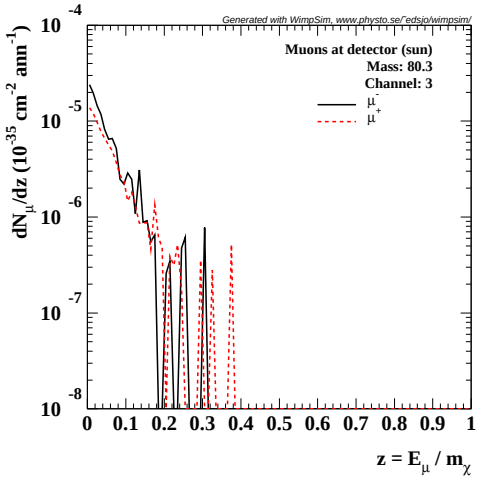


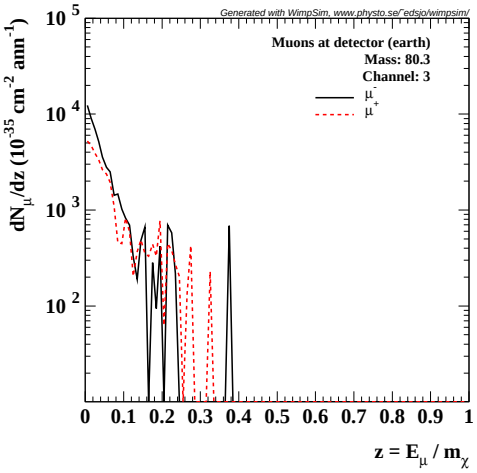
6.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





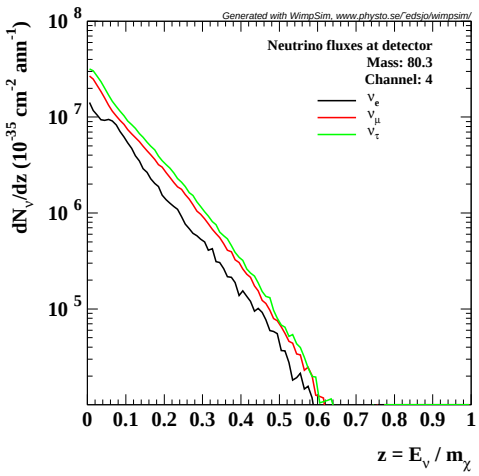
6.3.7 Muons at detector (Sun/Earth)

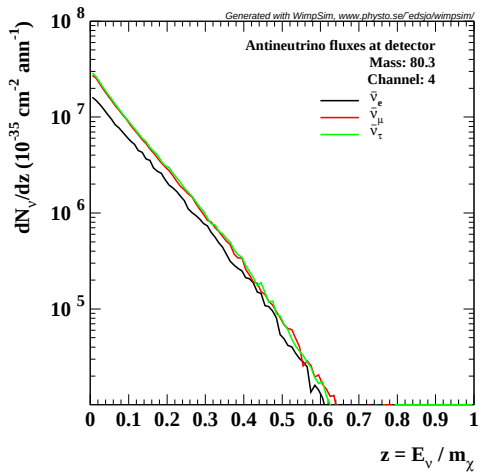




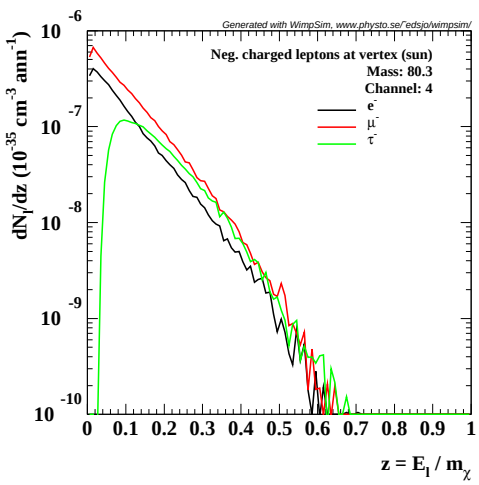
6.4 Channel 4 – $c\bar{c}$

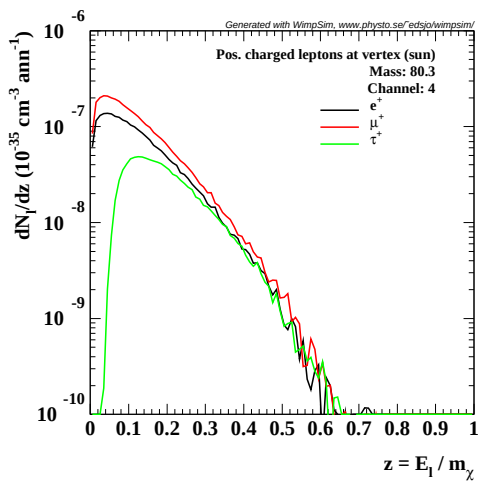
6.4.1 Neutrino fluxes at detector (Sun)



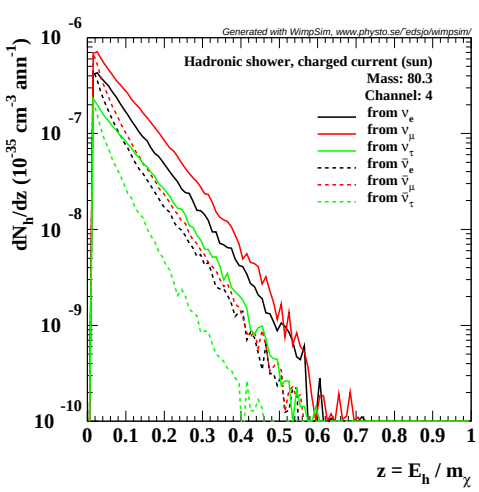


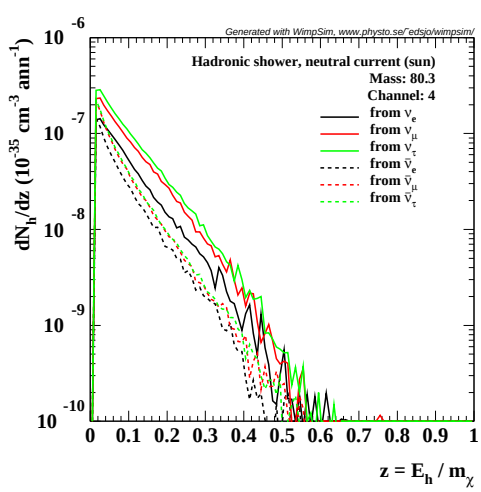
6.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



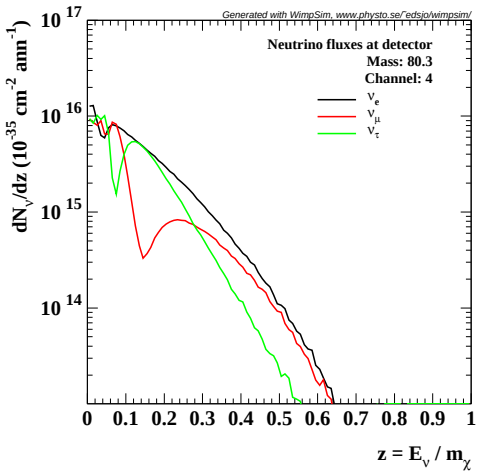


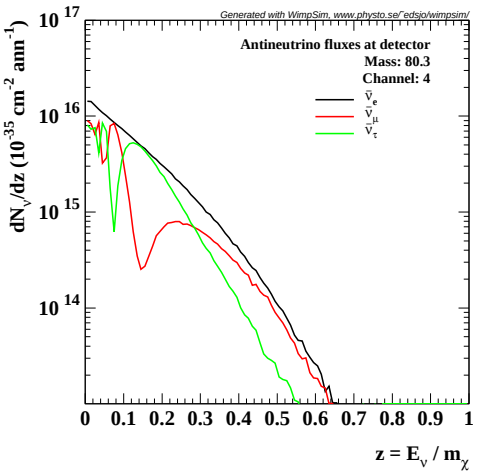
6.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



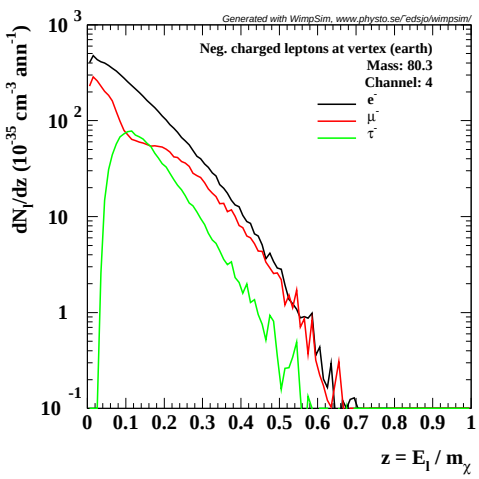


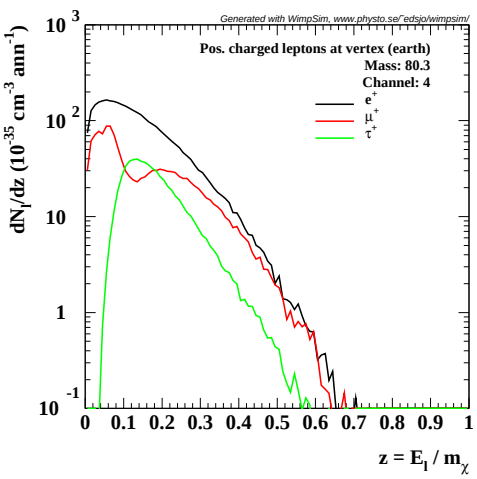
6.4.4 Neutrino fluxes at detector (Earth)



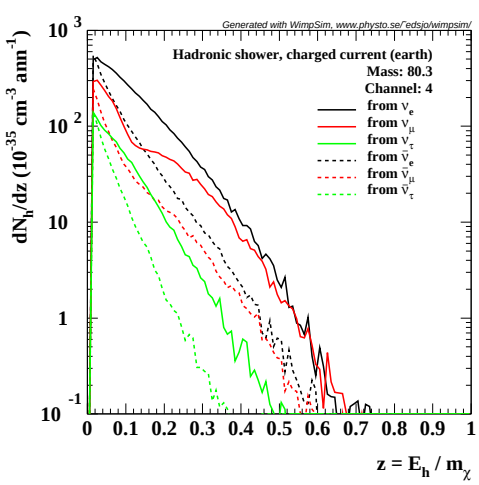


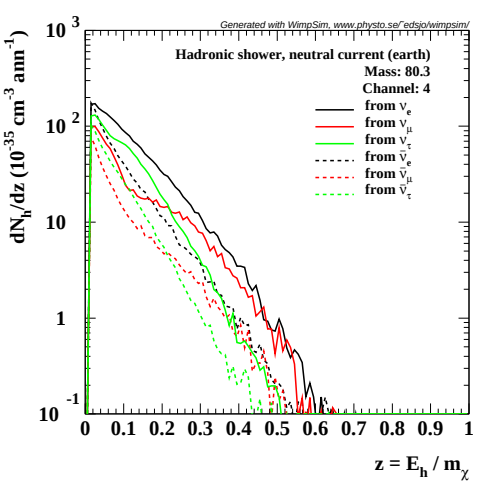
6.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



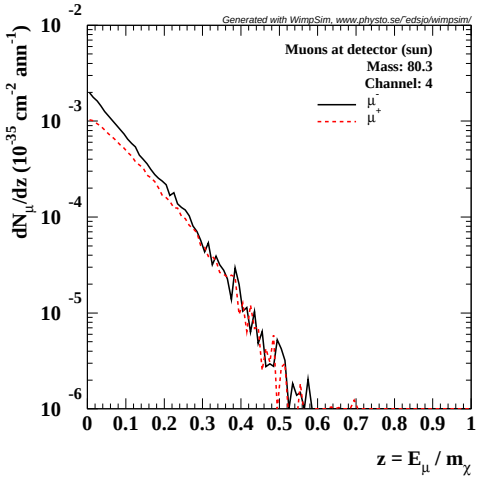


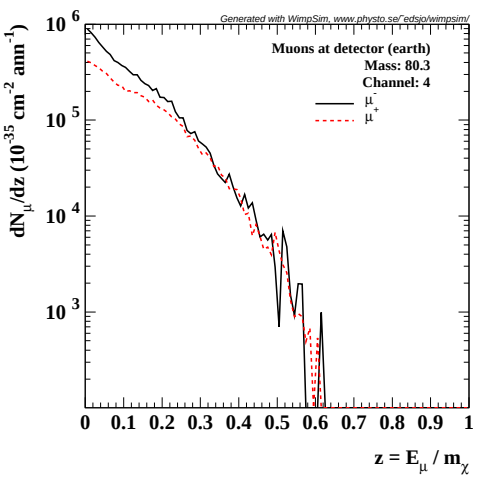
6.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





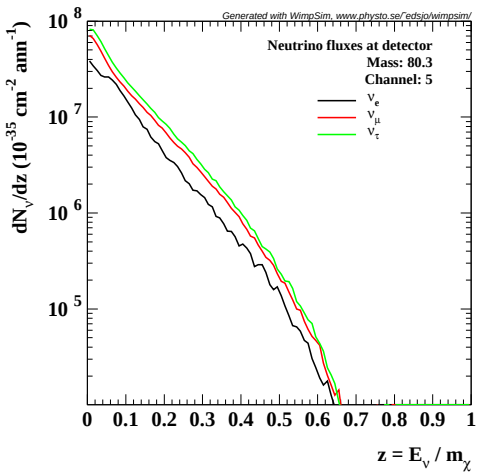
6.4.7 Muons at detector (Sun/Earth)

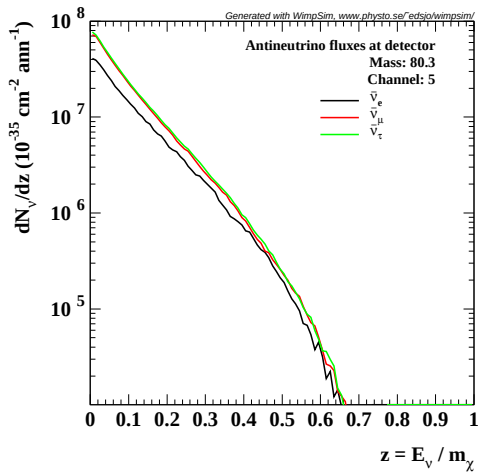




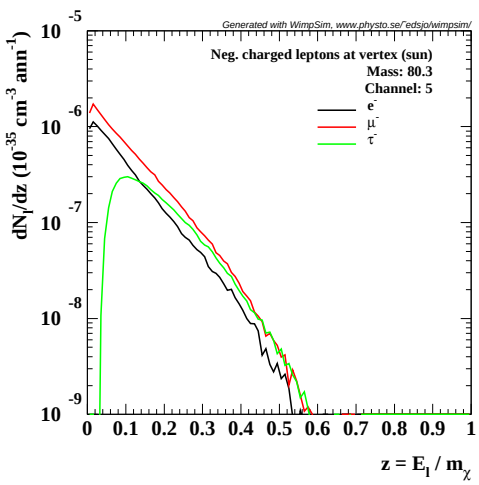
6.5 Channel 5 – $b\bar{b}$

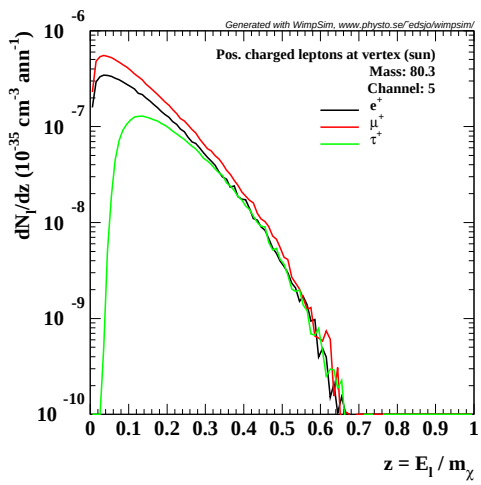
6.5.1 Neutrino fluxes at detector (Sun)



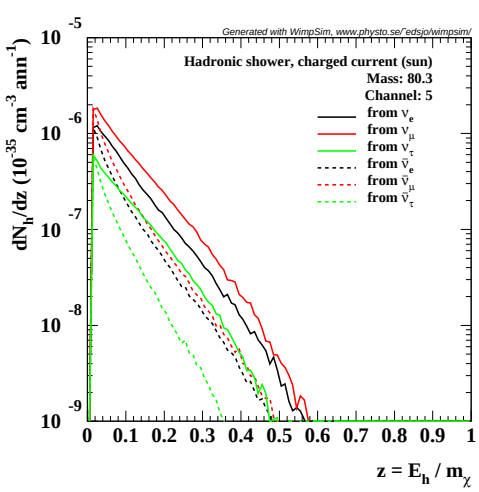


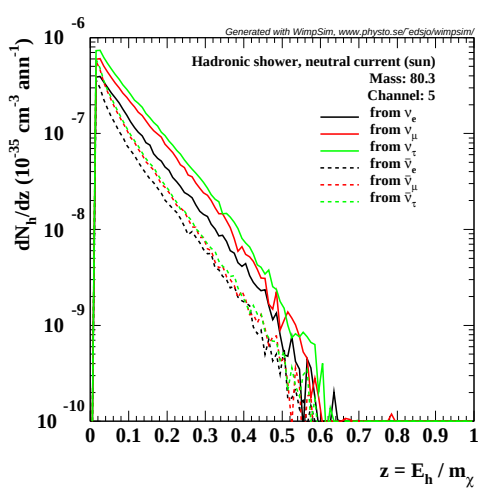
6.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



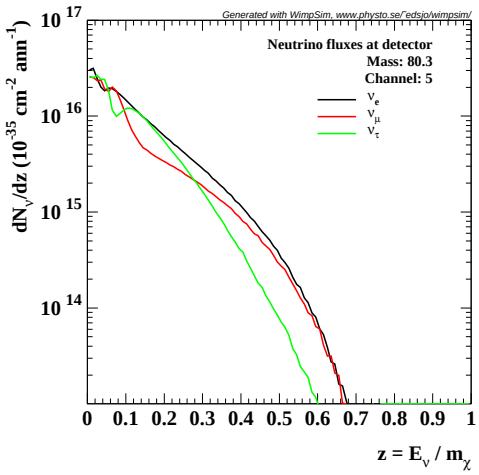


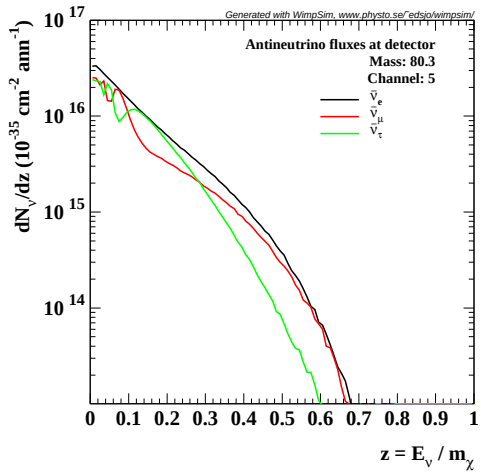
6.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



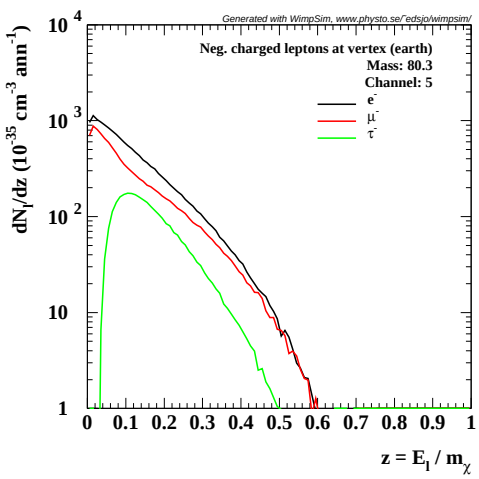


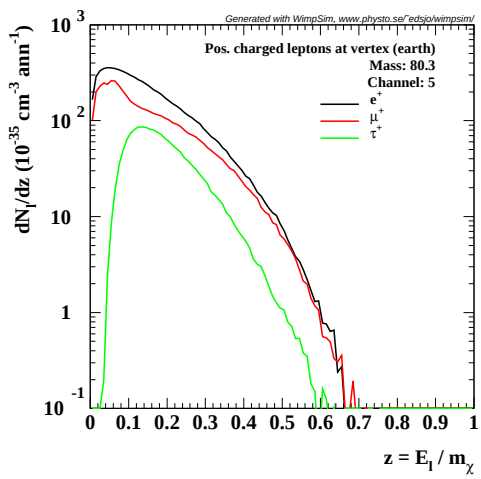
6.5.4 Neutrino fluxes at detector (Earth)



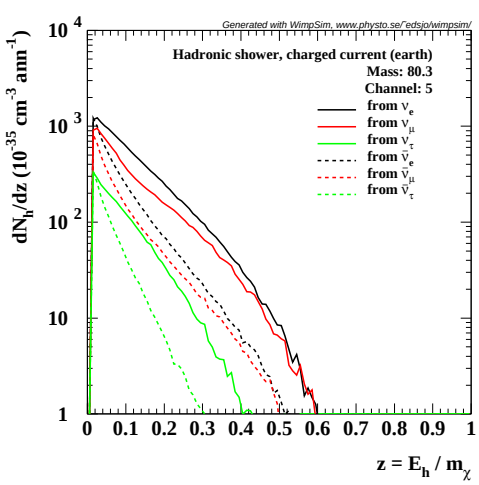


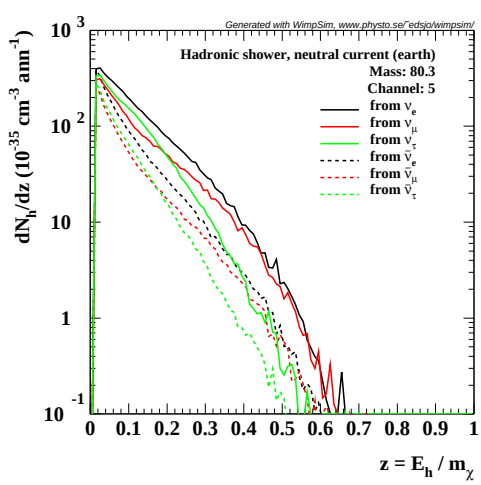
6.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



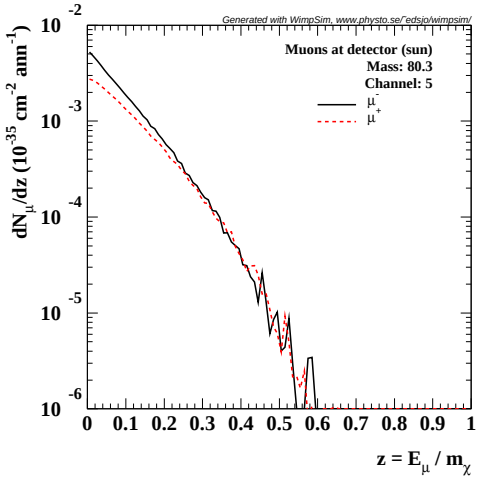


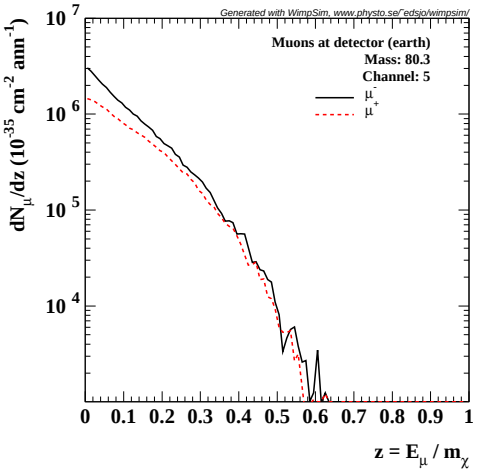
6.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





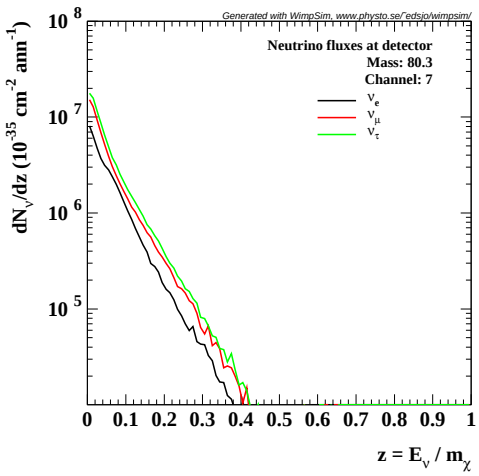
6.5.7 Muons at detector (Sun/Earth)

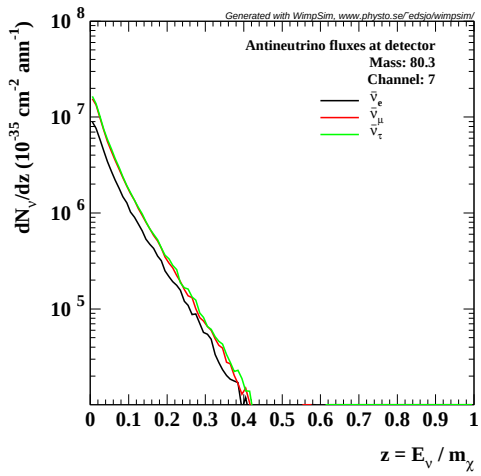




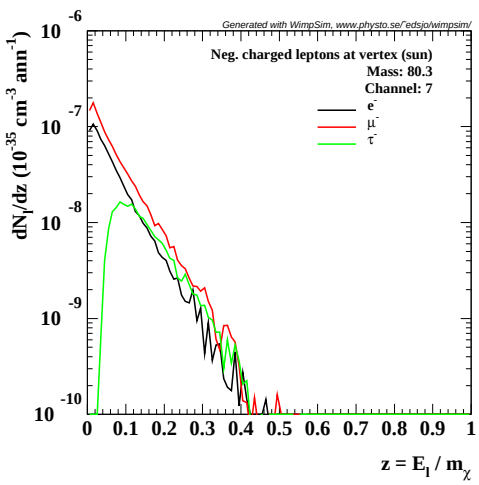
6.6 Channel 7 – gg

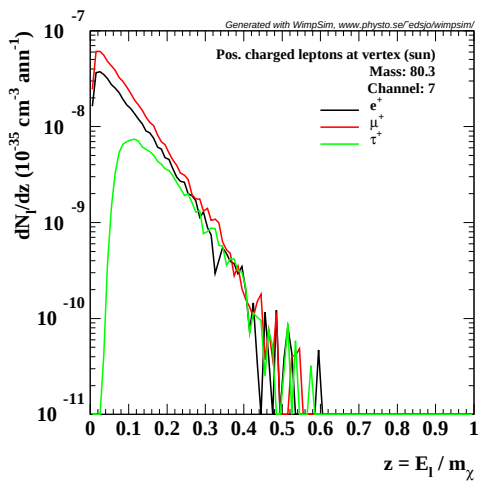
6.6.1 Neutrino fluxes at detector (Sun)



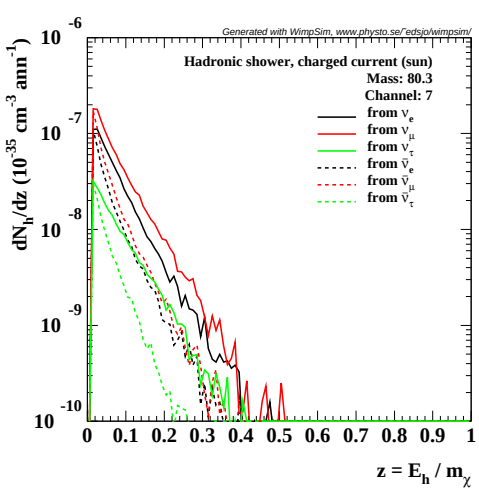


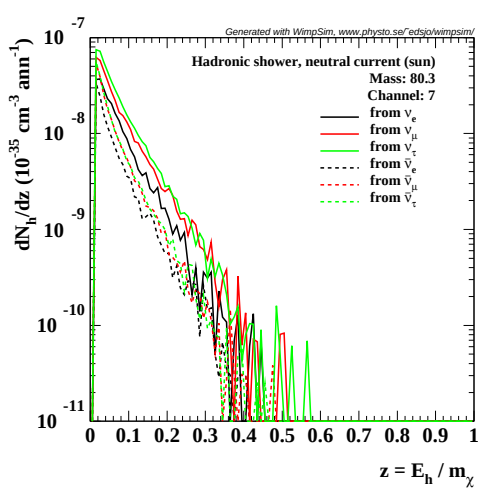
6.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



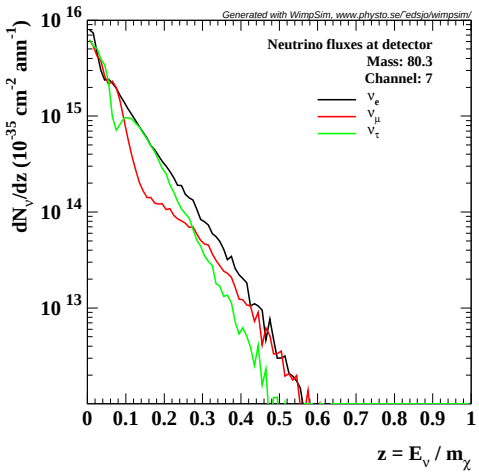


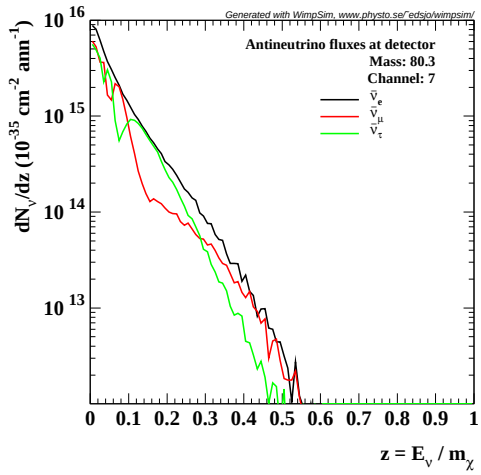
6.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



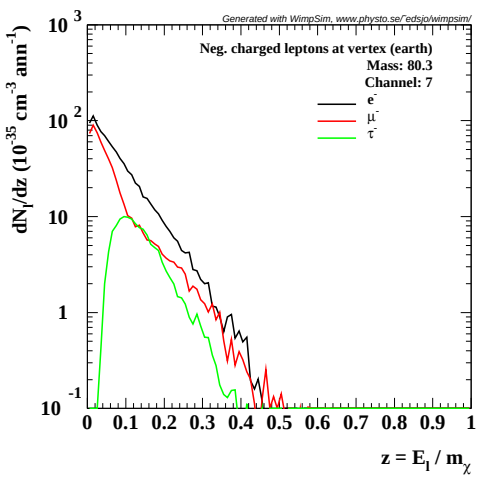


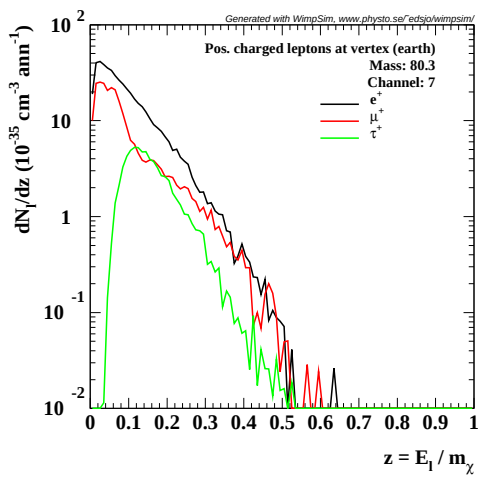
6.6.4 Neutrino fluxes at detector (Earth)



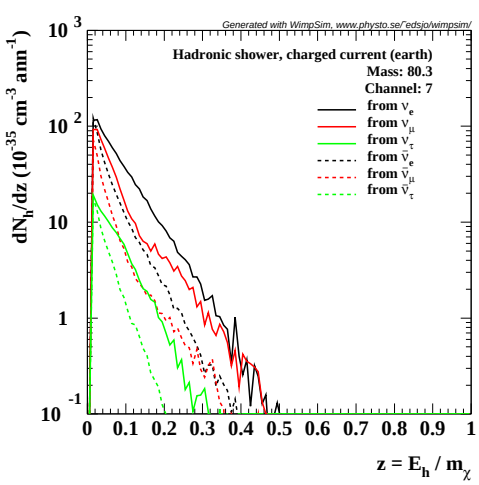


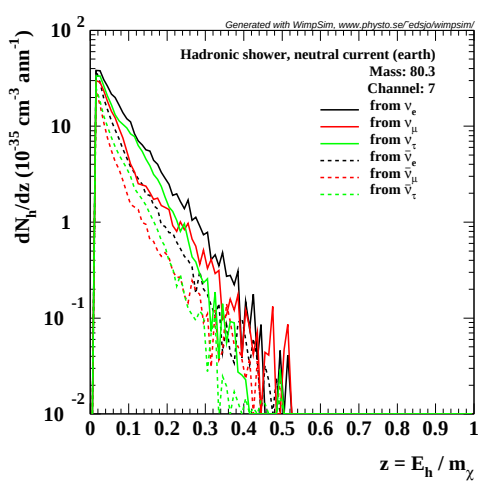
6.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



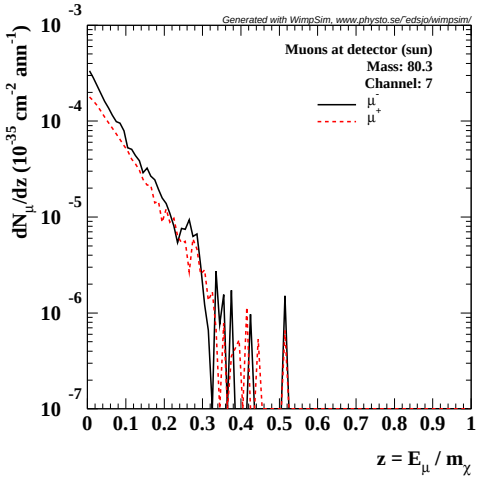


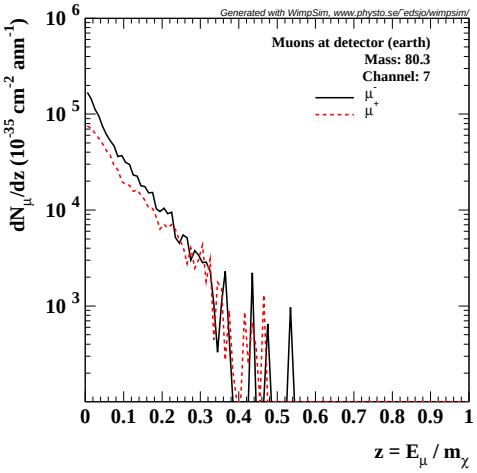
6.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





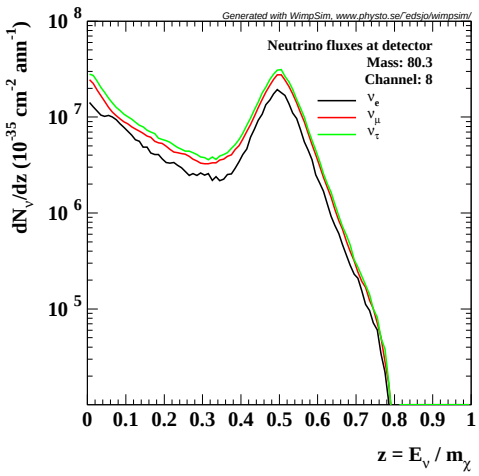
6.6.7 Muons at detector (Sun/Earth)

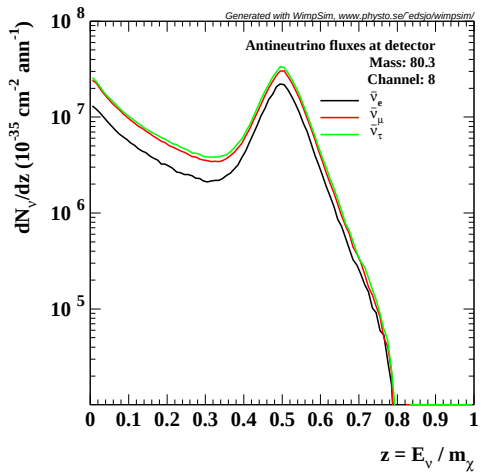




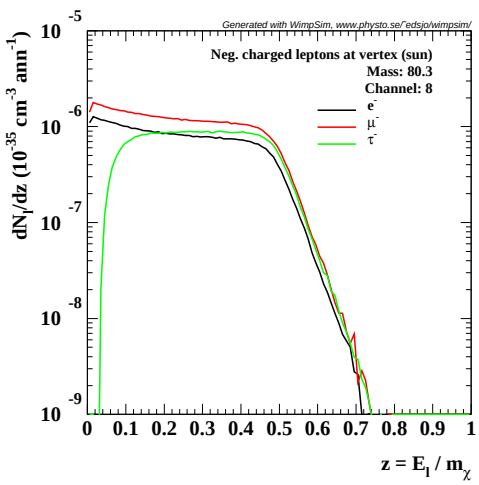
6.7 Channel 8 – W^-W^+

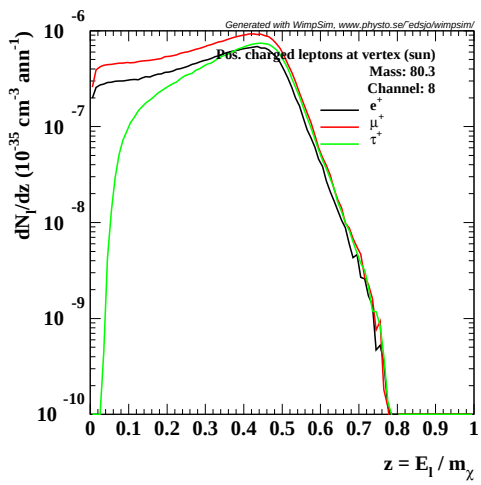
6.7.1 Neutrino fluxes at detector (Sun)



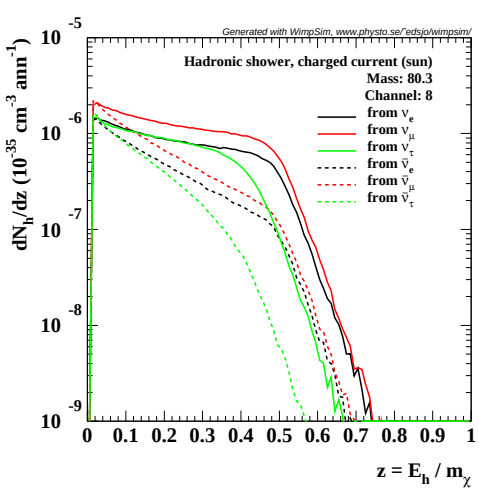


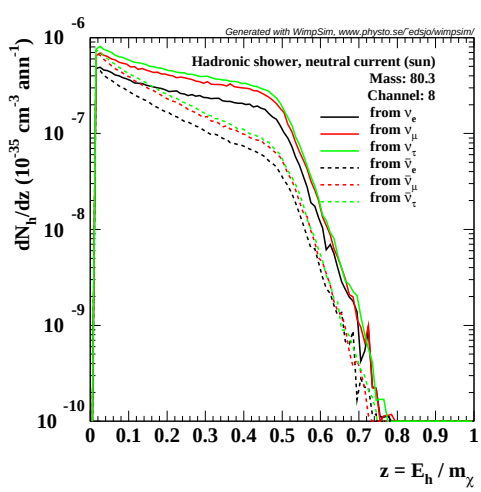
6.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



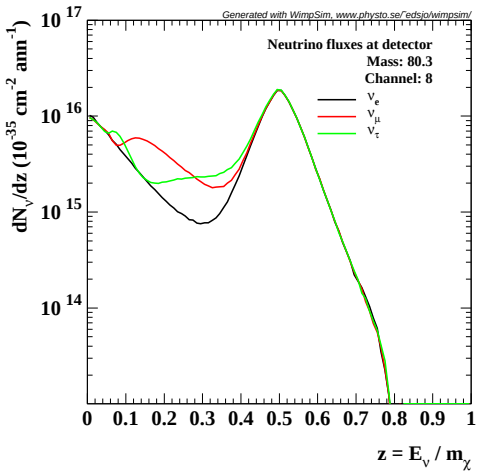


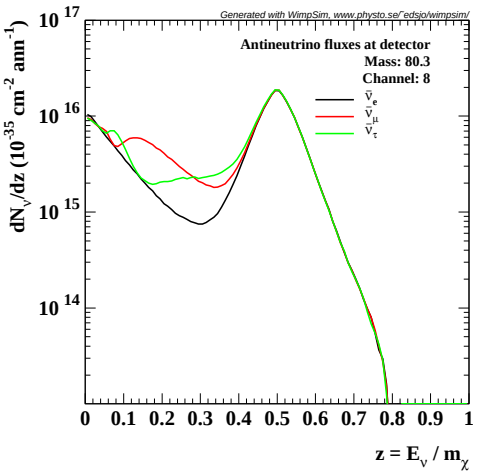
6.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



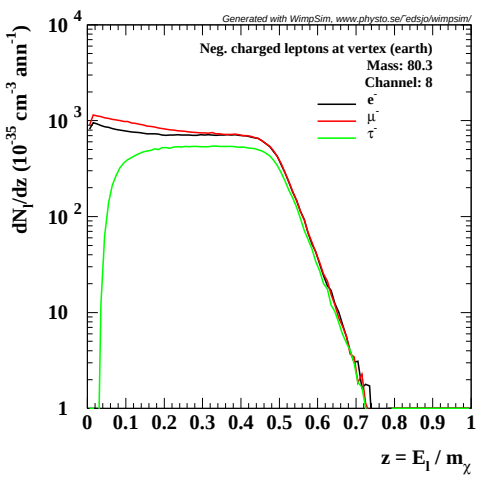


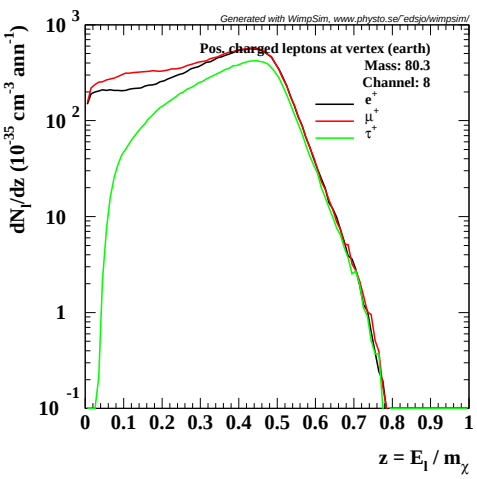
6.7.4 Neutrino fluxes at detector (Earth)



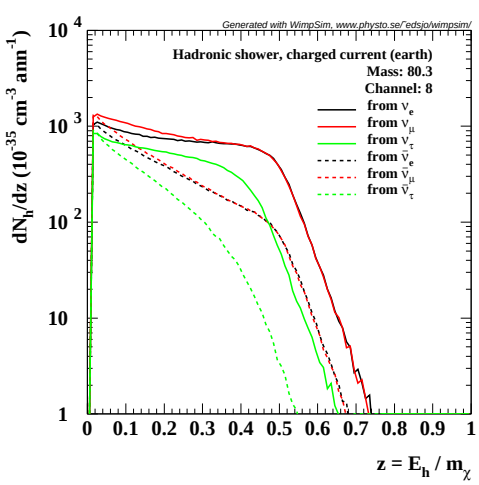


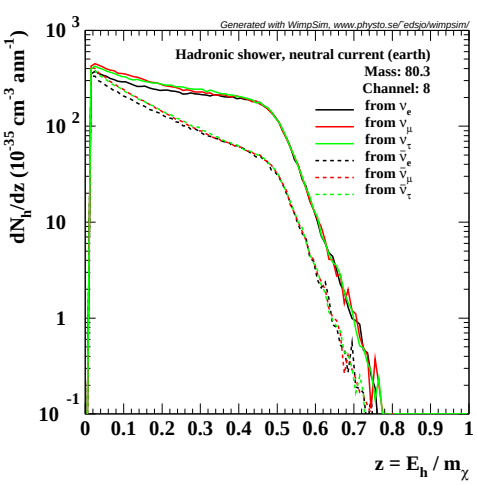
6.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



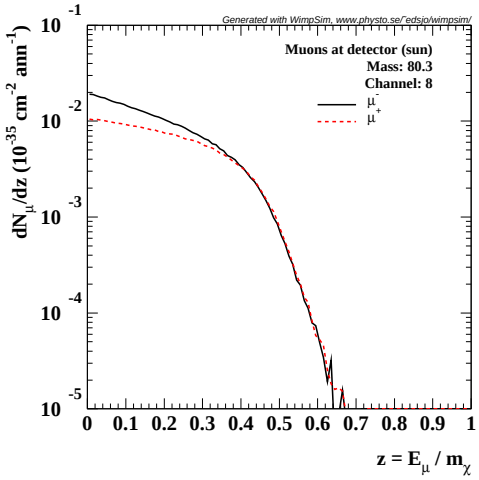


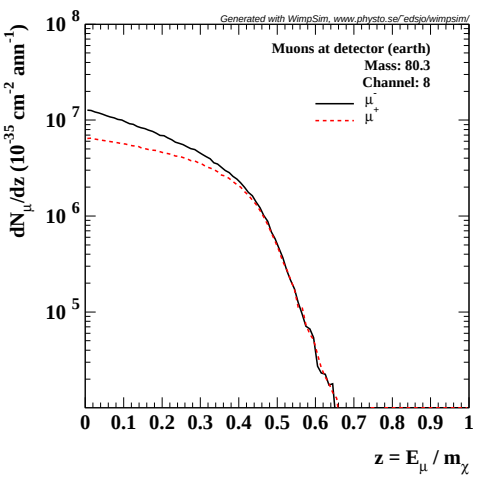
6.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





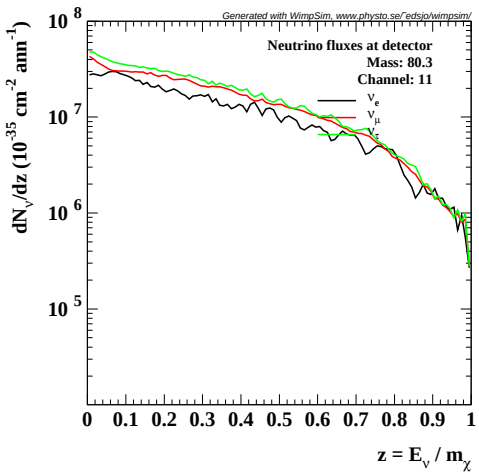
6.7.7 Muons at detector (Sun/Earth)

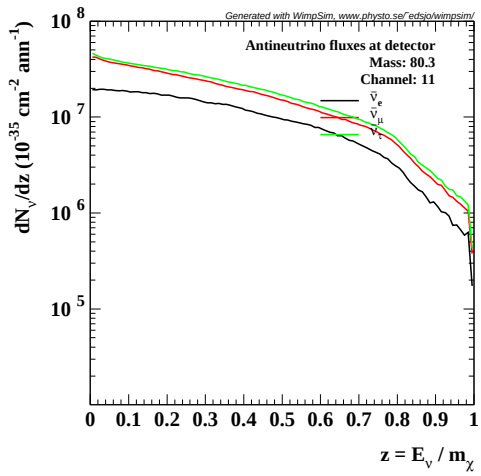




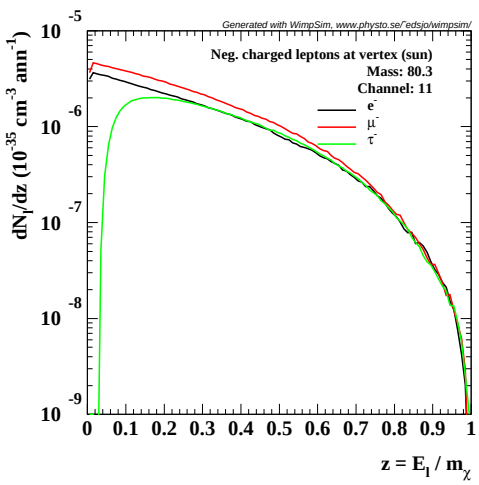
6.8 Channel 11 – $\tau^-\tau^+$

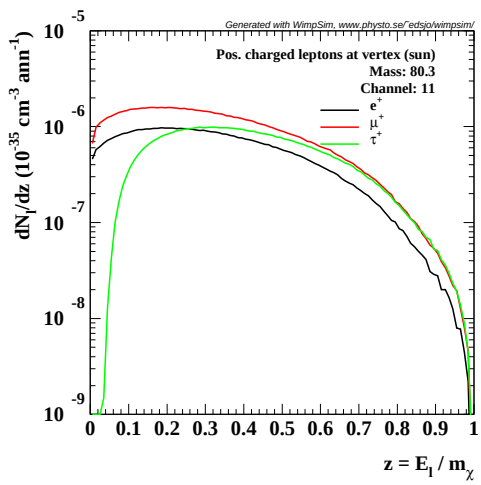
6.8.1 Neutrino fluxes at detector (Sun)



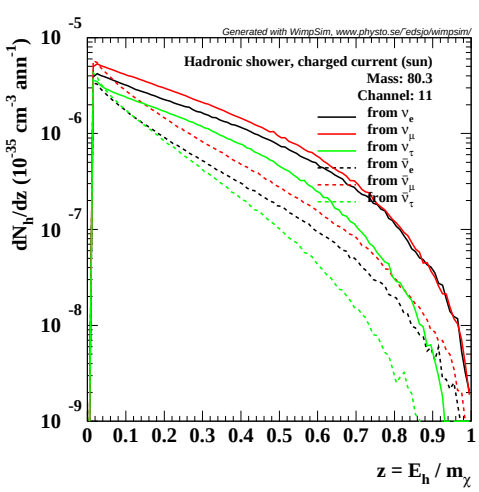


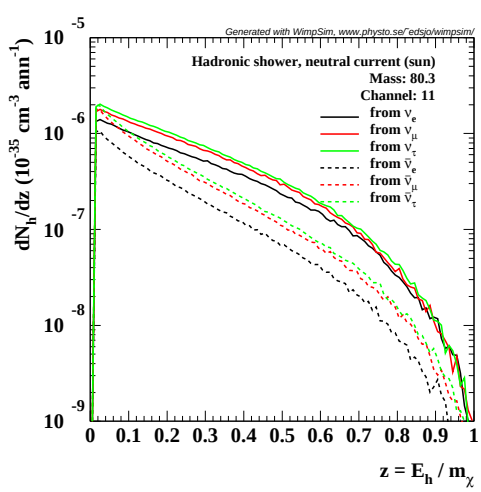
6.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



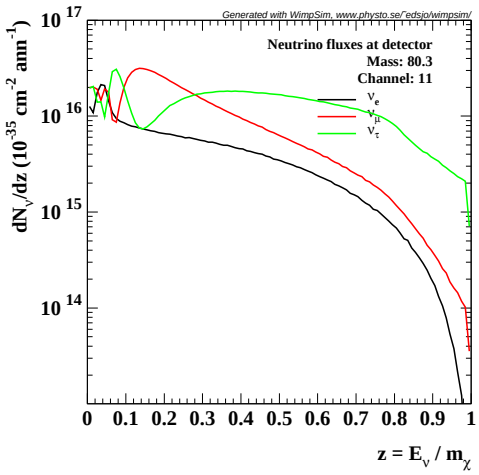


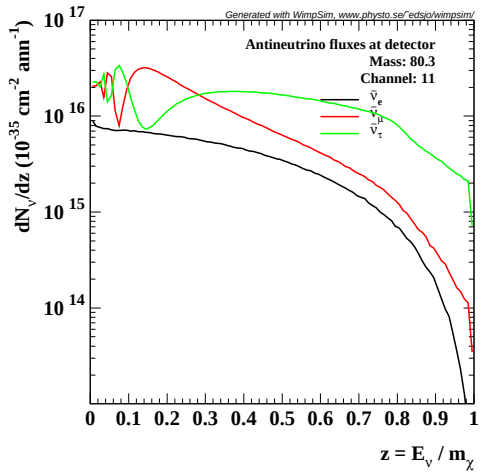
6.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



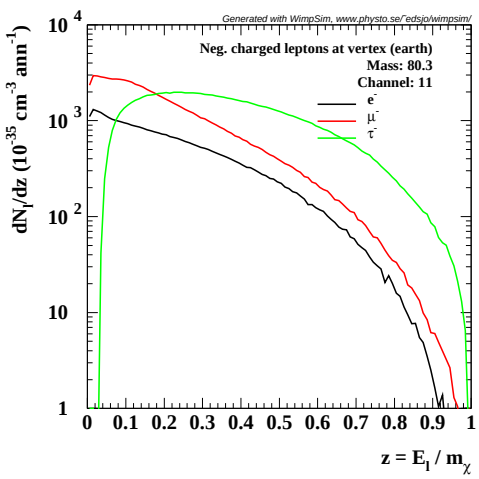


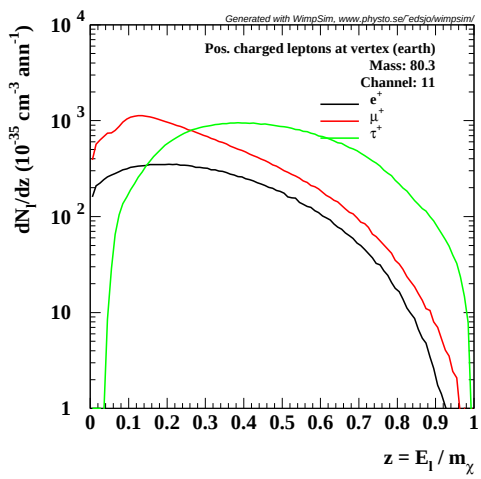
6.8.4 Neutrino fluxes at detector (Earth)



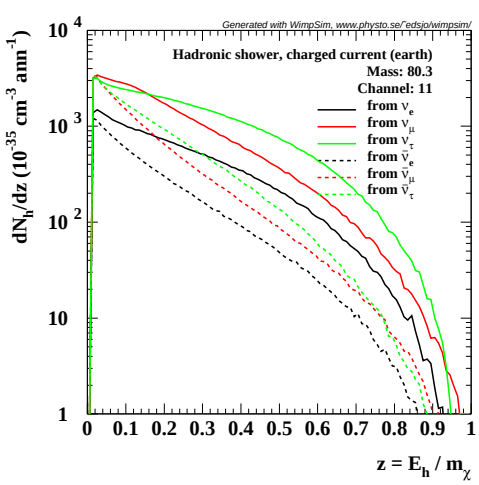


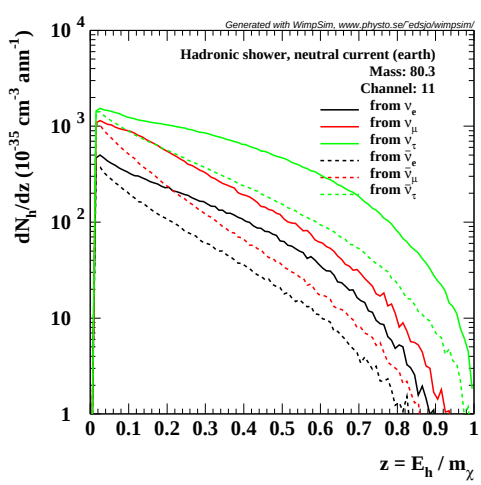
6.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



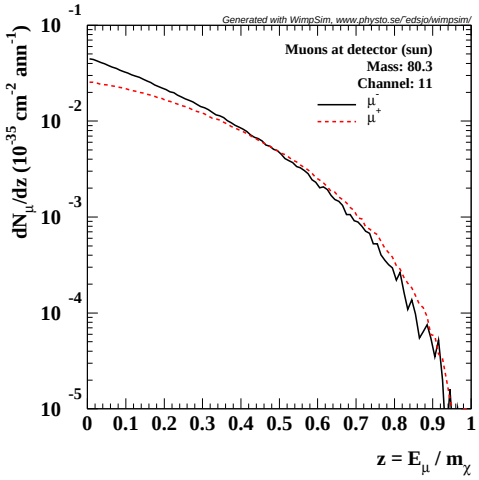


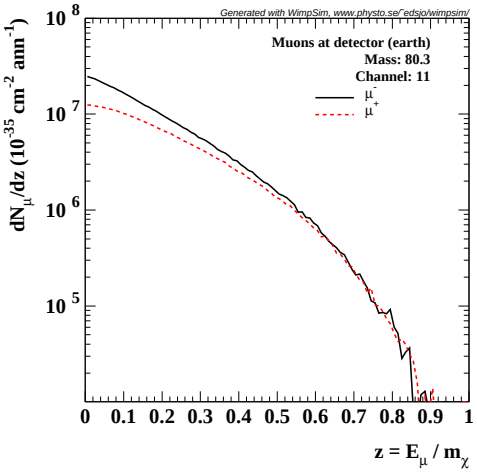
6.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





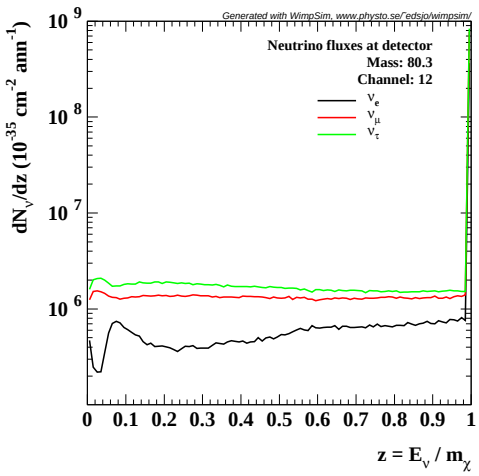
6.8.7 Muons at detector (Sun/Earth)

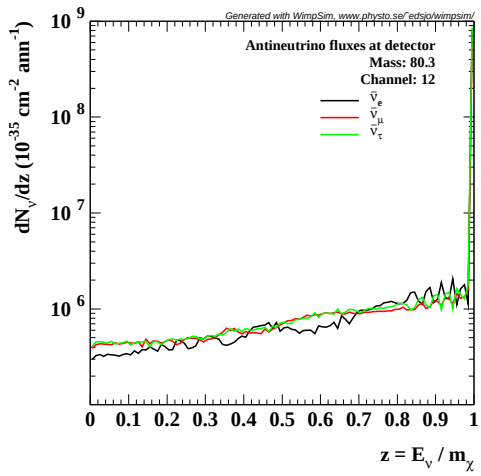




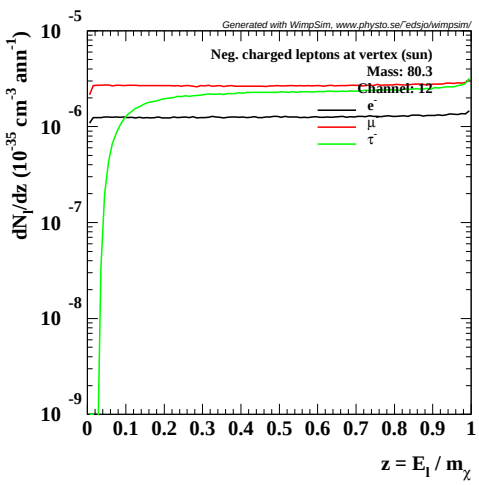
6.9 Channel 12 – $\nu_e\bar{\nu}_e$

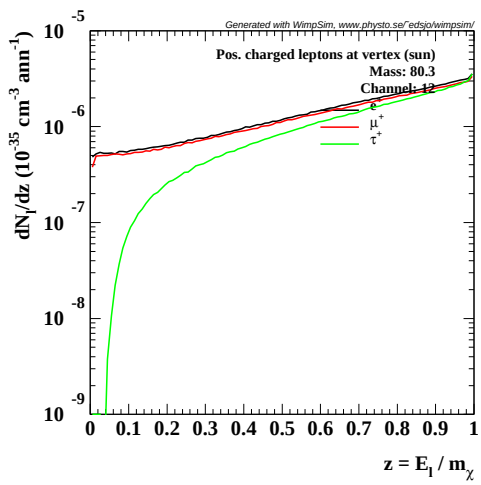
6.9.1 Neutrino fluxes at detector (Sun)



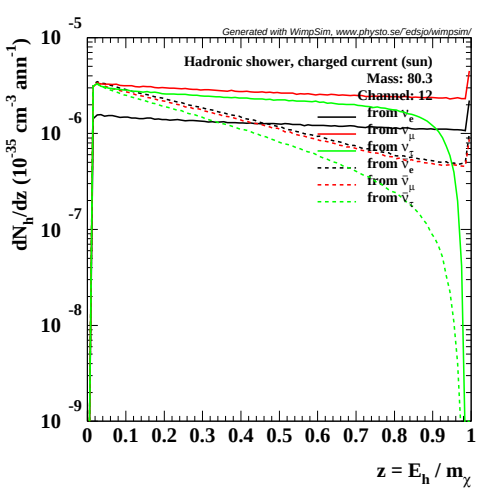


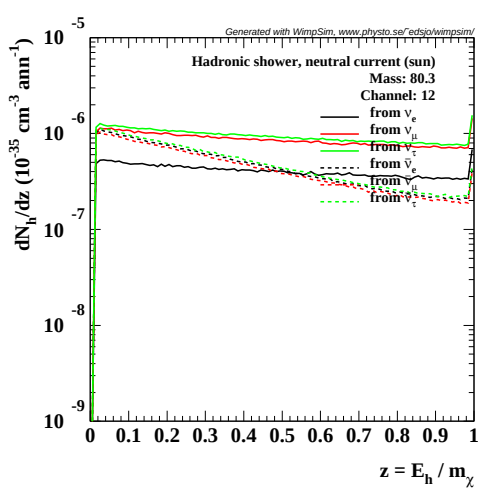
6.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



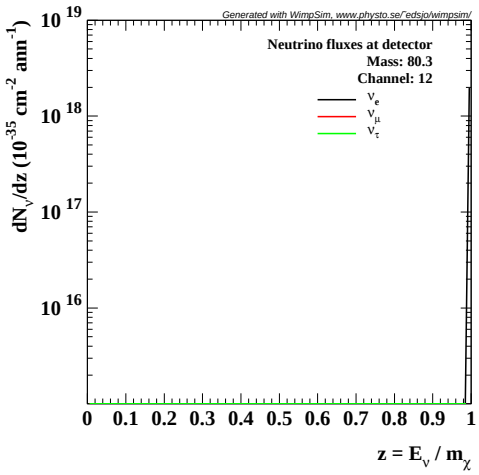


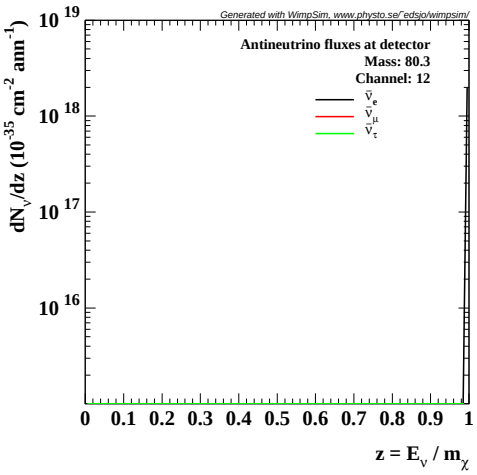
6.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



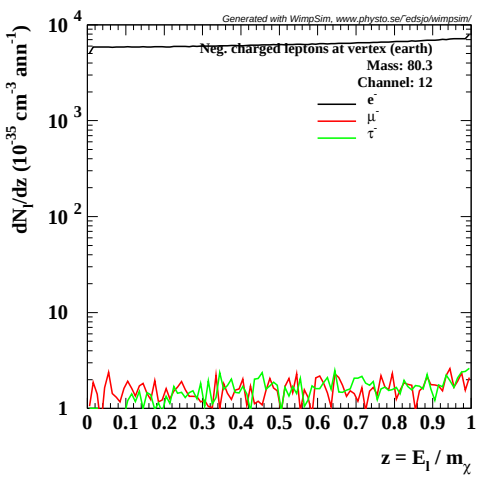


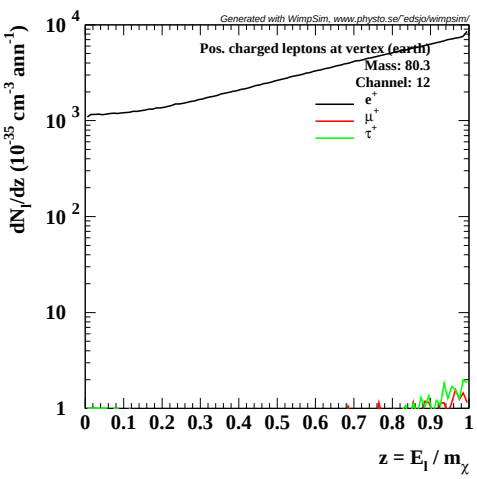
6.9.4 Neutrino fluxes at detector (Earth)



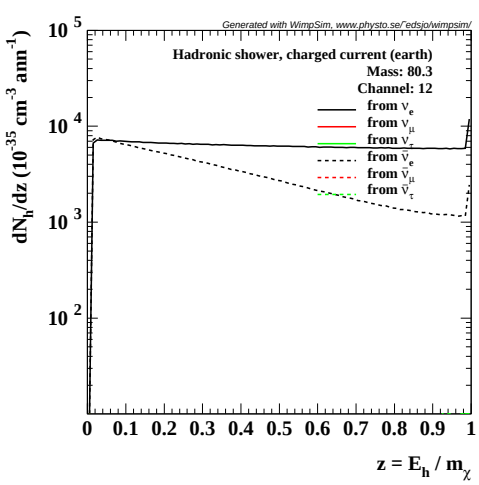


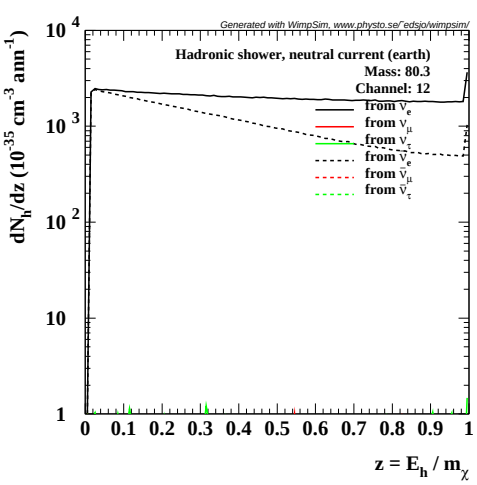
6.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



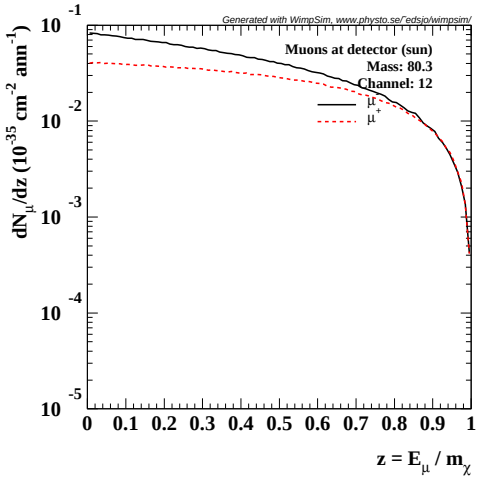


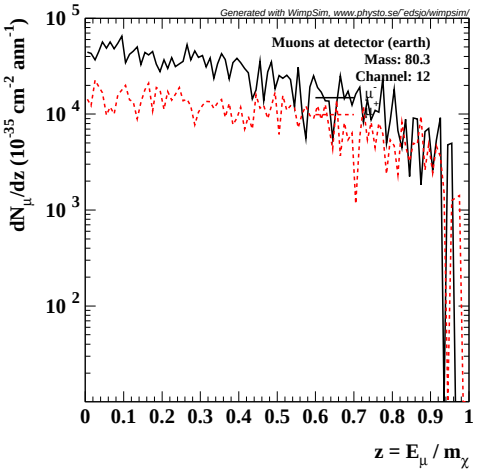
6.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





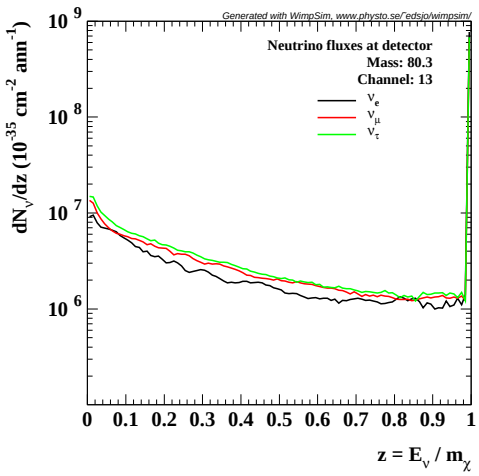
6.9.7 Muons at detector (Sun/Earth)

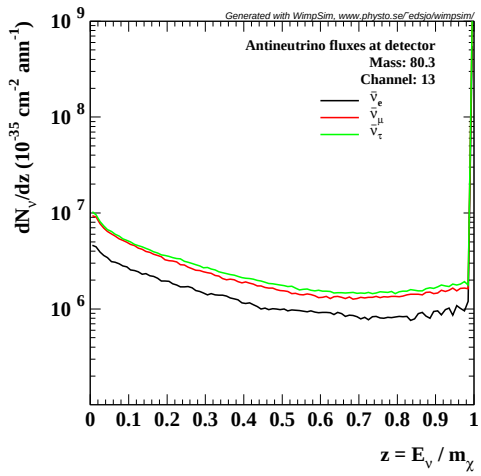




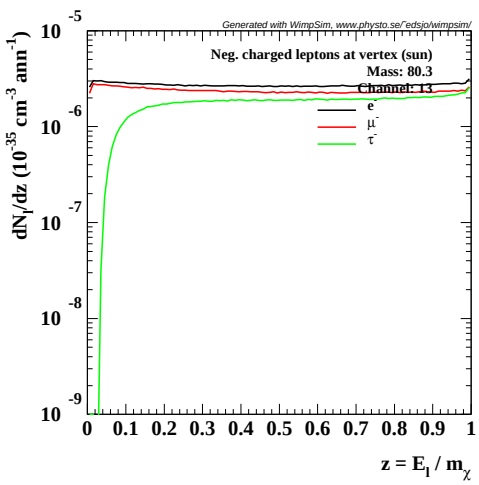
6.10 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

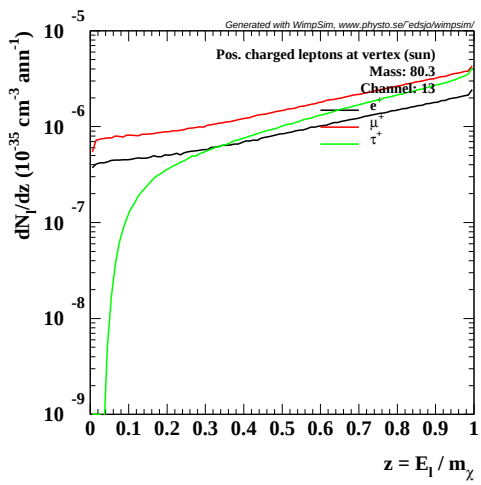
6.10.1 Neutrino fluxes at detector (Sun)



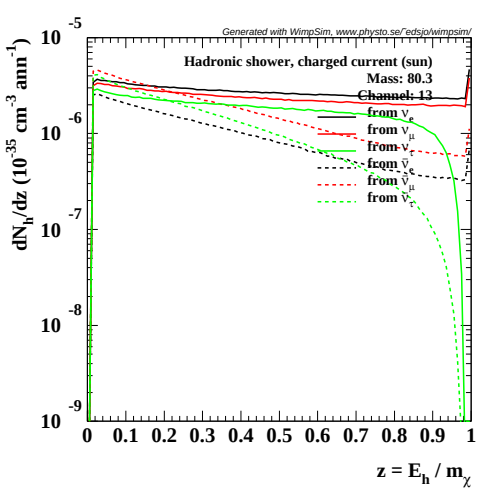


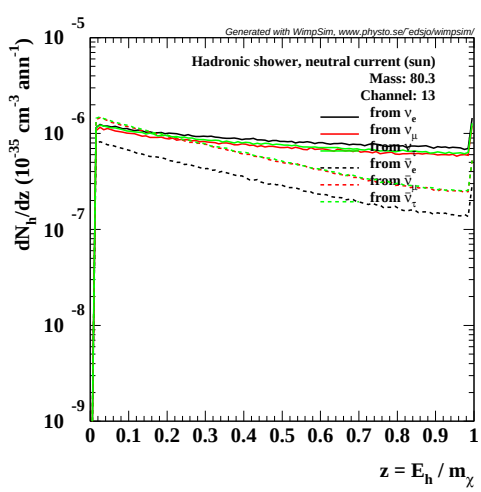
6.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



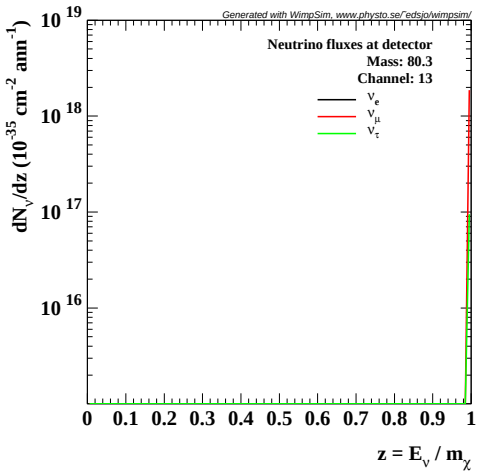


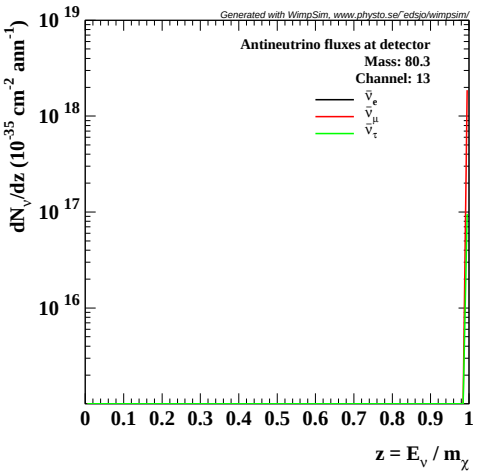
6.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



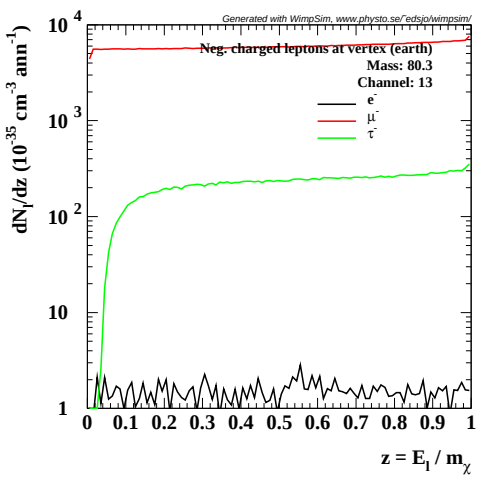


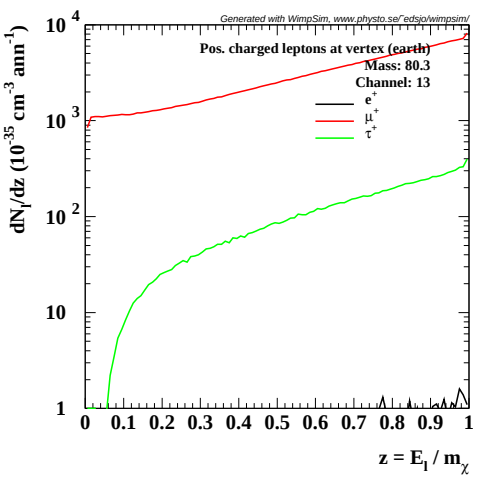
6.10.4 Neutrino fluxes at detector (Earth)



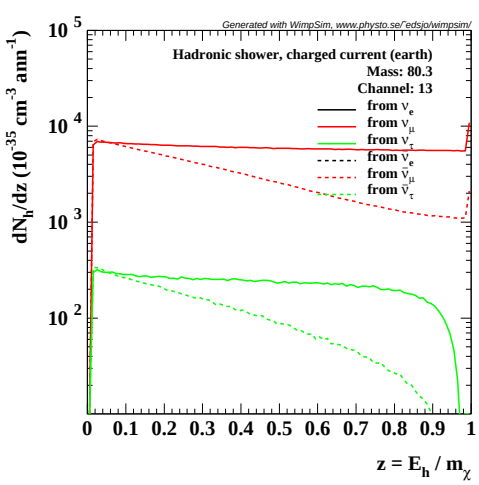


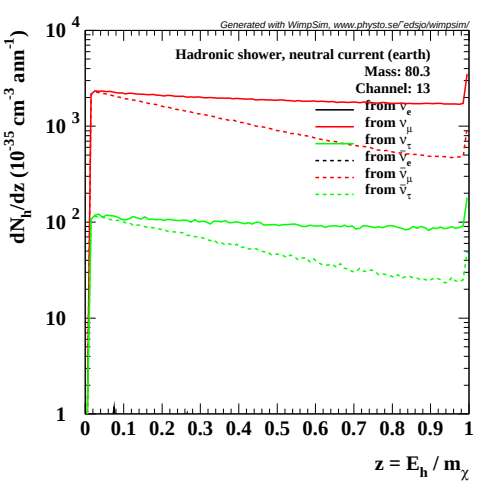
6.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



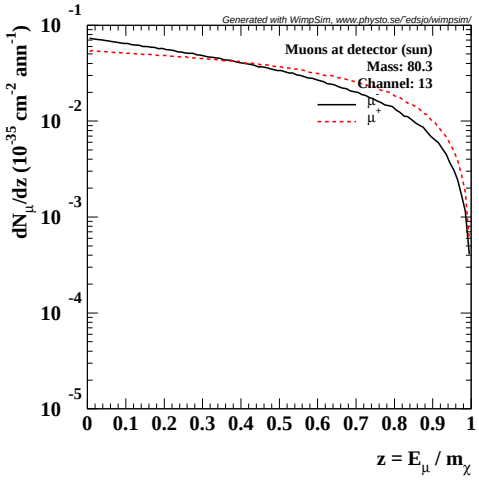


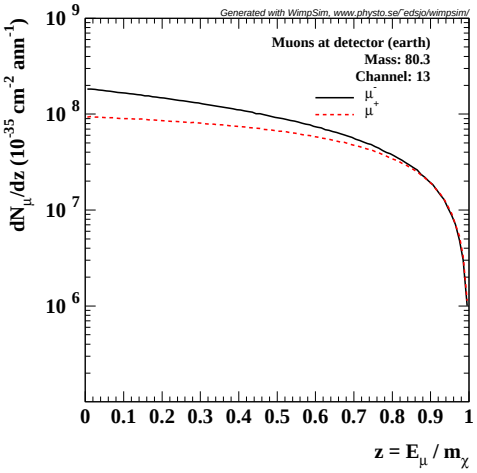
6.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





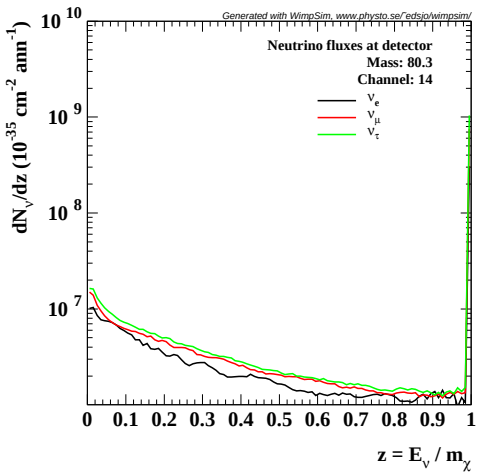
6.10.7 Muons at detector (Sun/Earth)

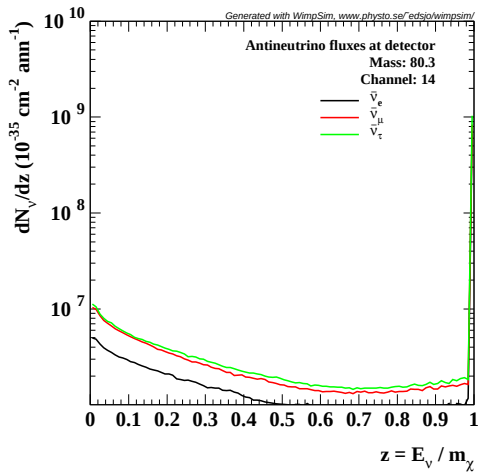




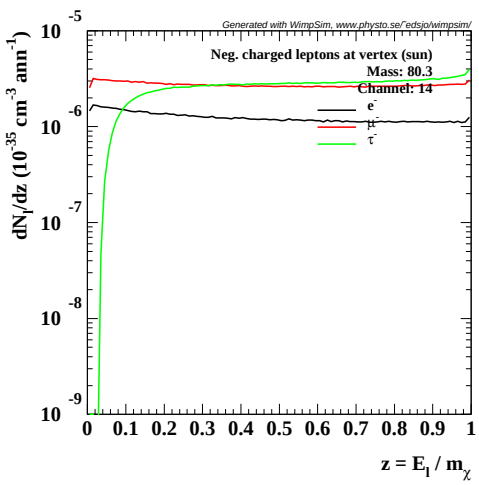
6.11 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

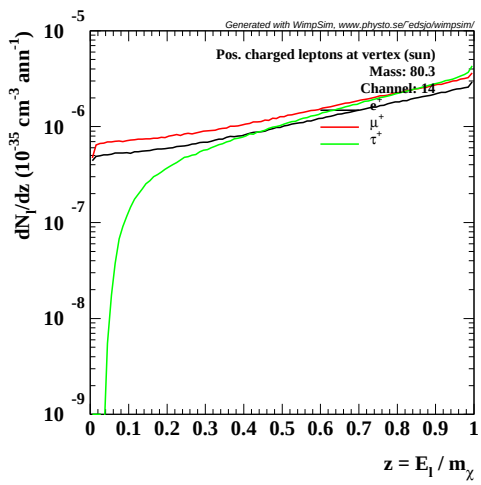
6.11.1 Neutrino fluxes at detector (Sun)



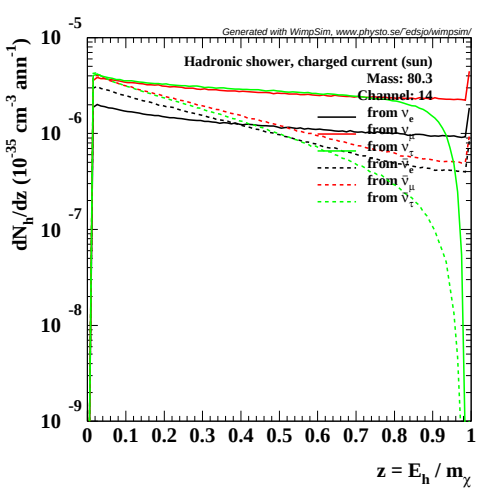


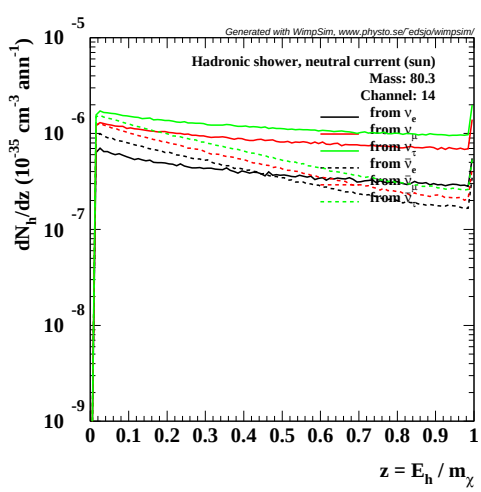
6.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



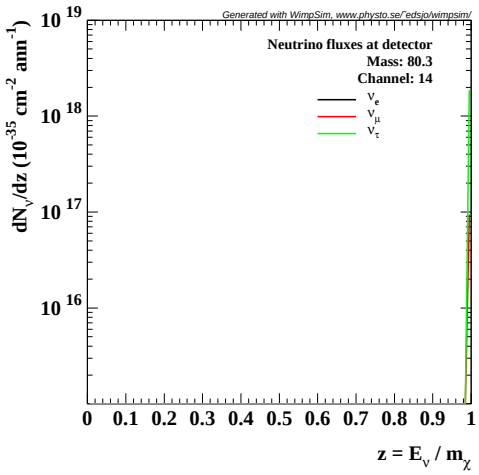


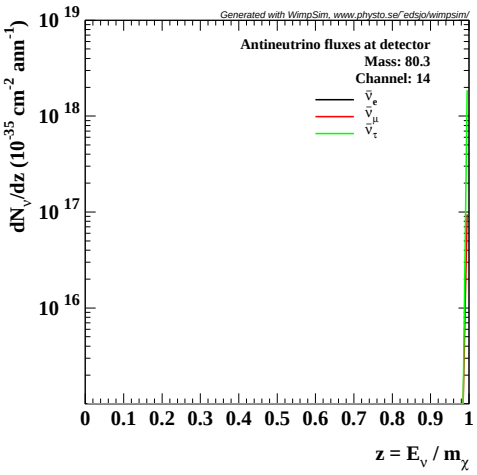
6.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



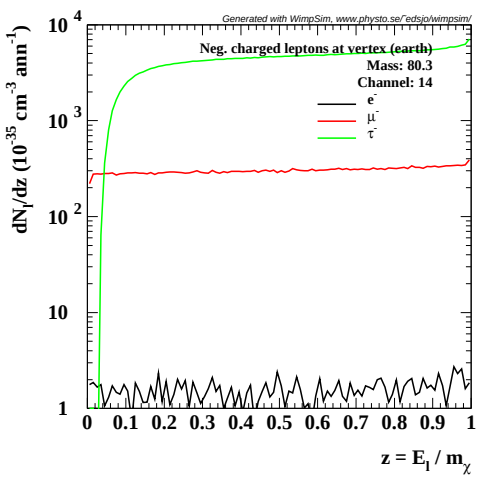


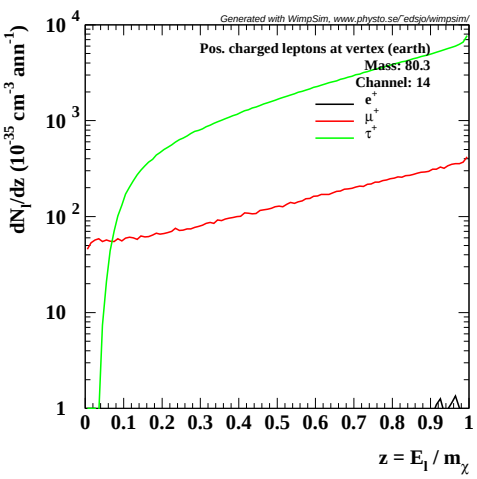
6.11.4 Neutrino fluxes at detector (Earth)



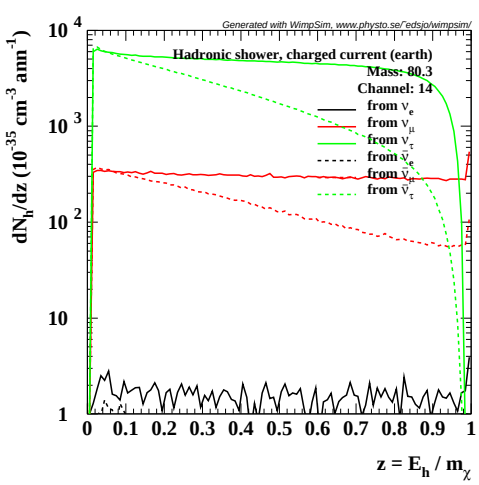


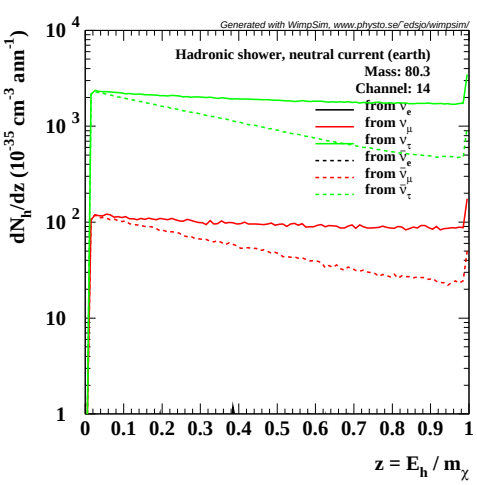
6.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



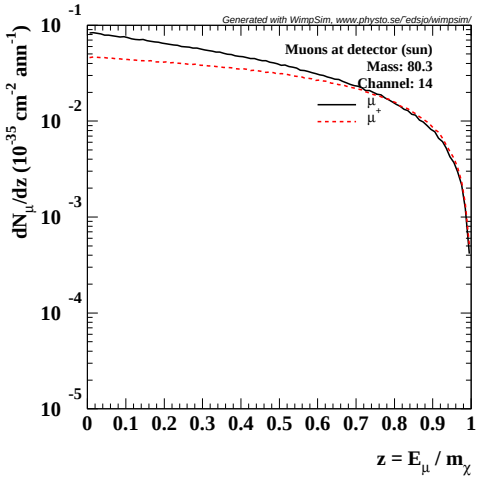


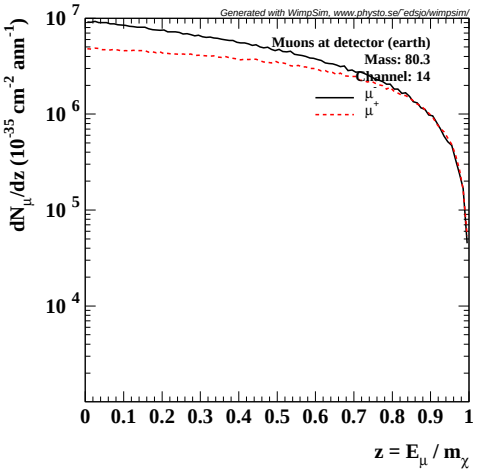
6.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





6.11.7 Muons at detector (Sun/Earth)

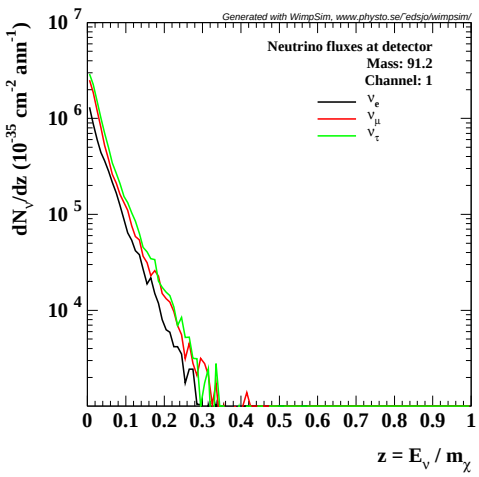


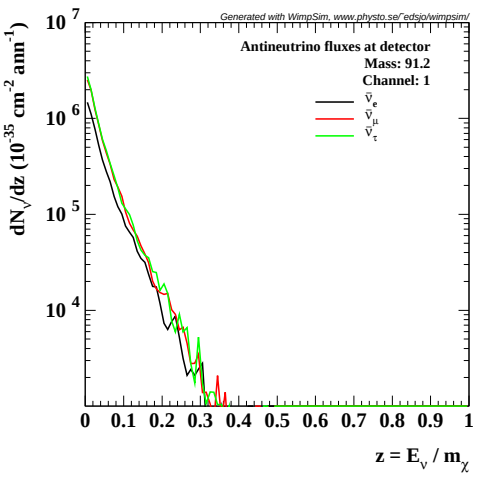


7 Mass 91.2

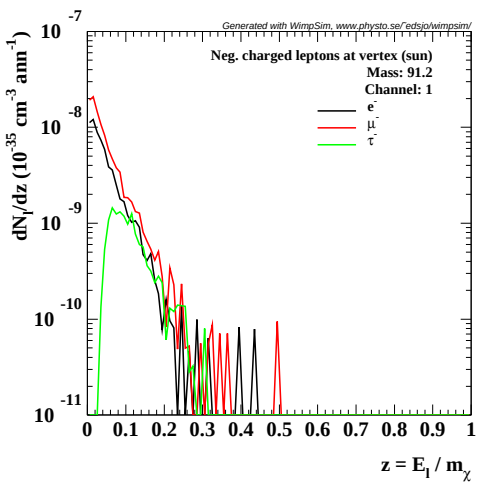
7.1 Channel 1 – $d\bar{d}$

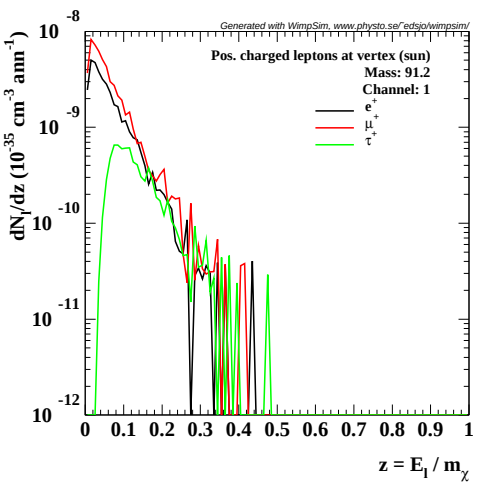
7.1.1 Neutrino fluxes at detector (Sun)



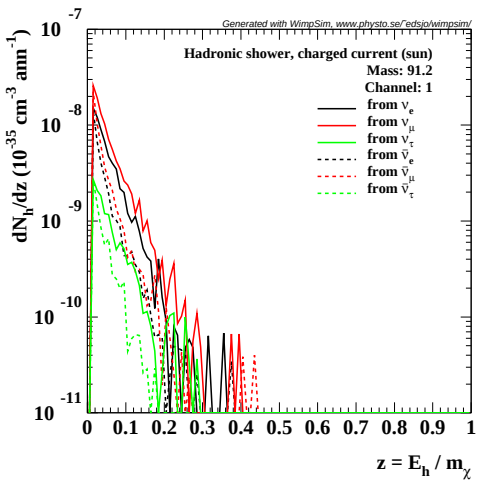


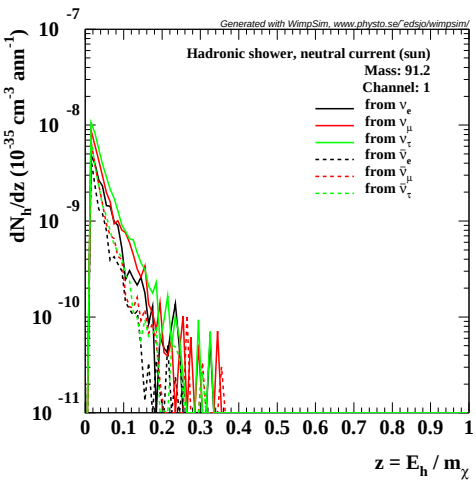
7.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



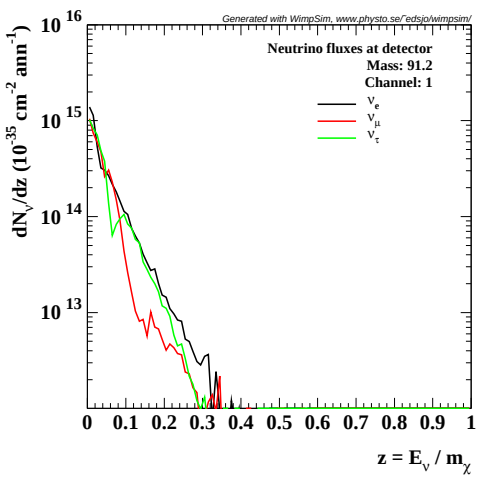


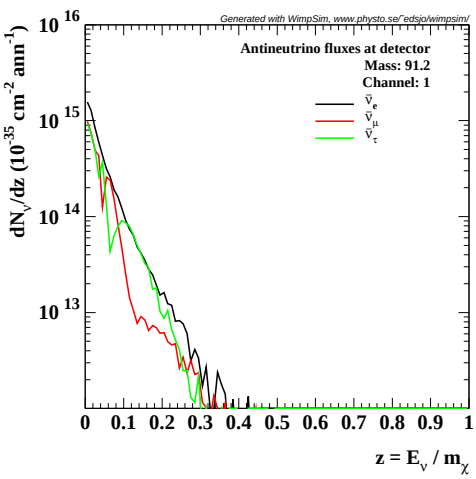
7.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



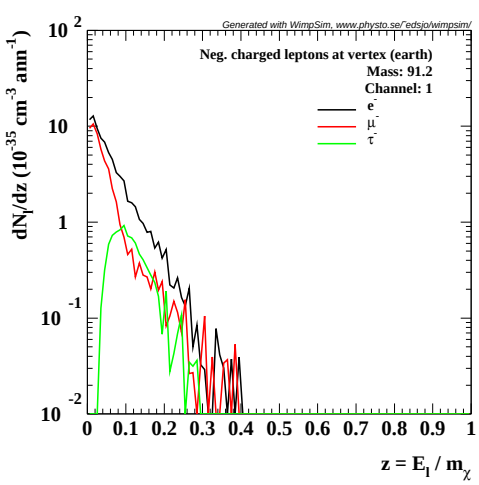


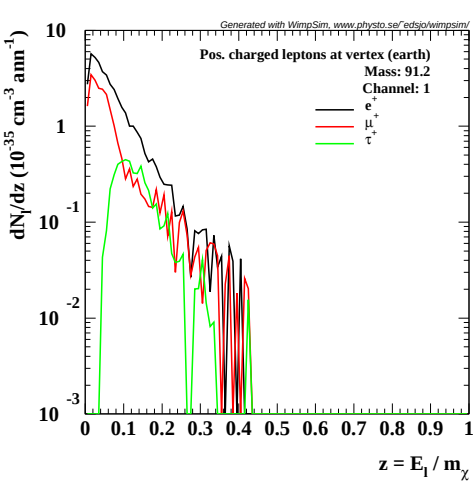
7.1.4 Neutrino fluxes at detector (Earth)



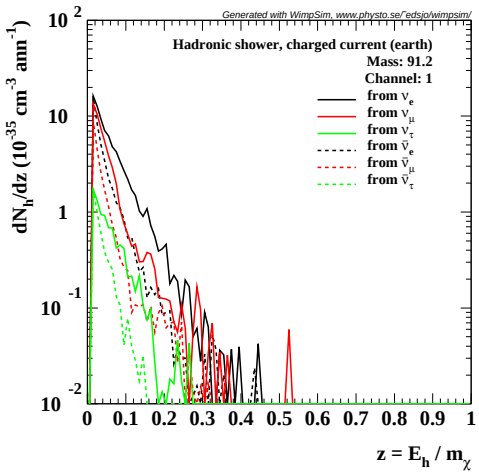


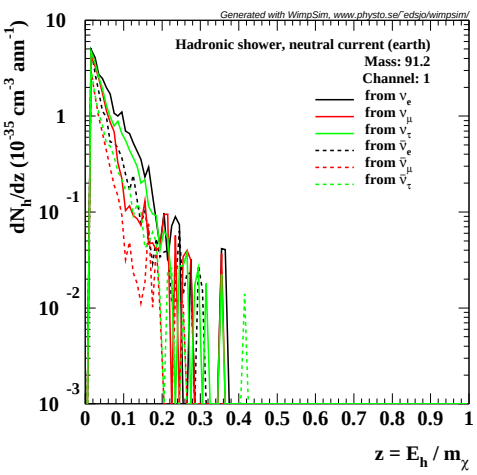
7.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



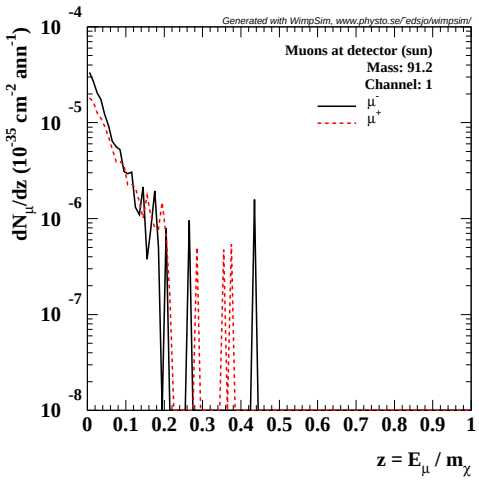


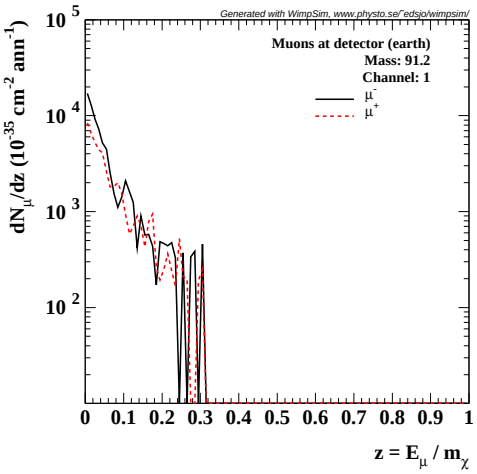
7.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





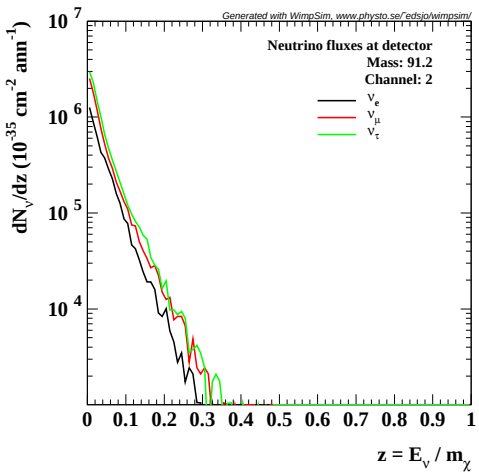
7.1.7 Muons at detector (Sun/Earth)

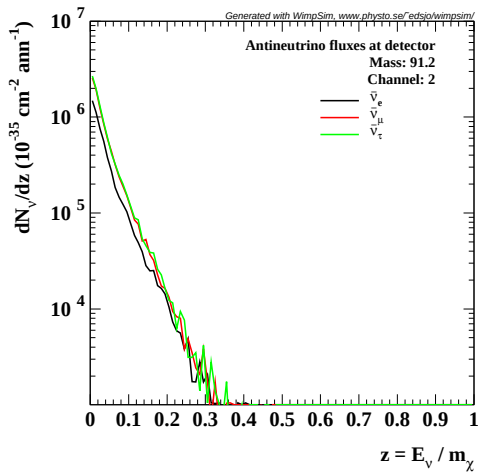




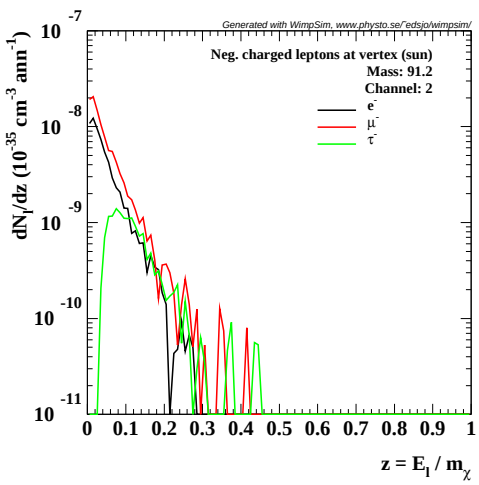
7.2 Channel 2 – $u\bar{u}$

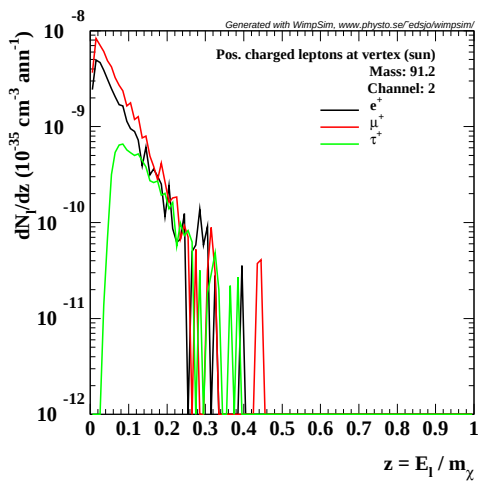
7.2.1 Neutrino fluxes at detector (Sun)



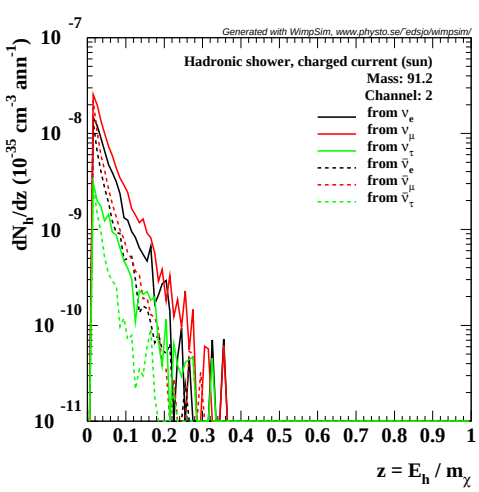


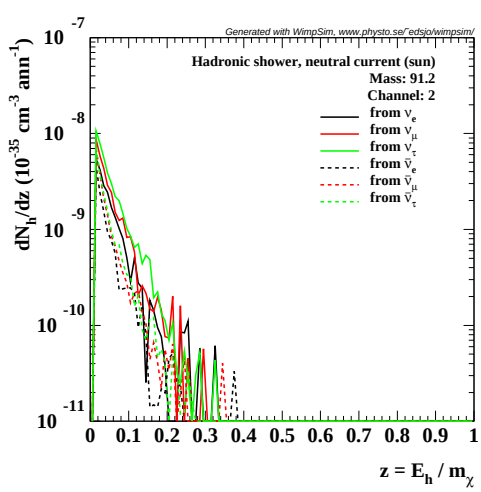
7.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



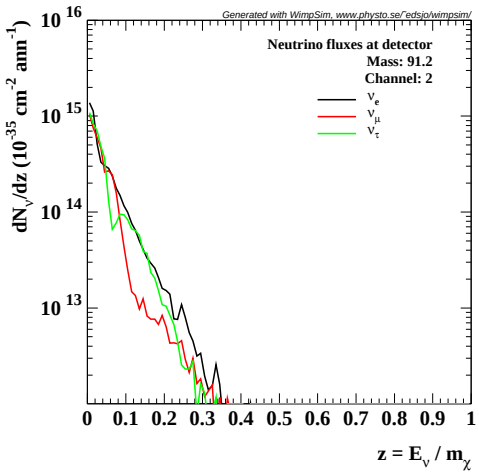


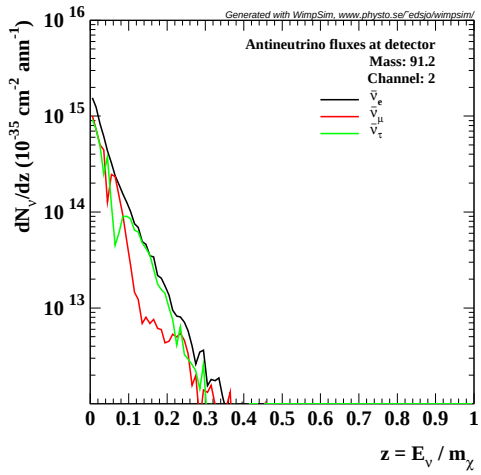
7.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



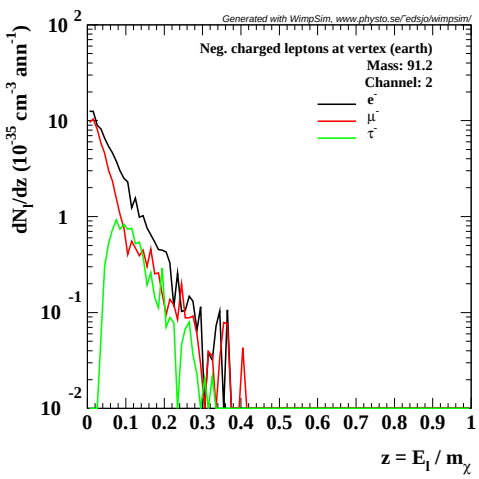


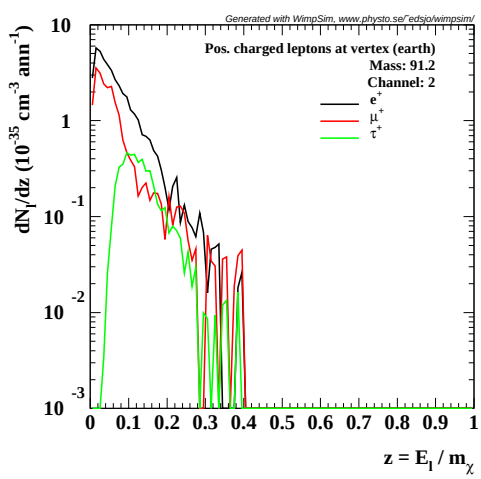
7.2.4 Neutrino fluxes at detector (Earth)



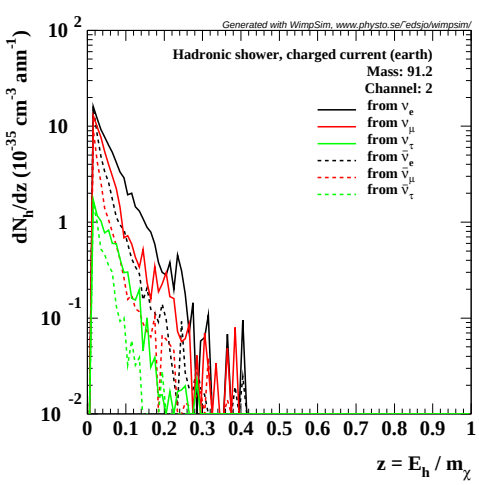


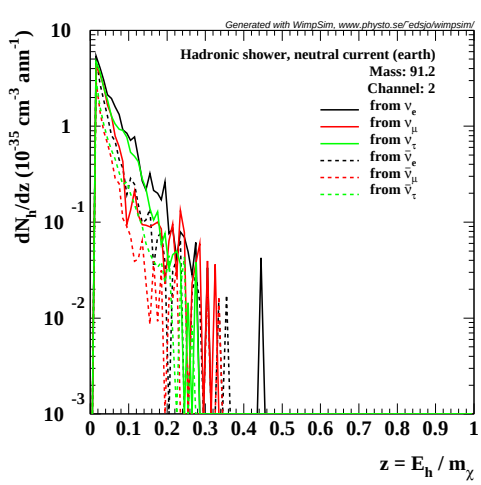
7.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



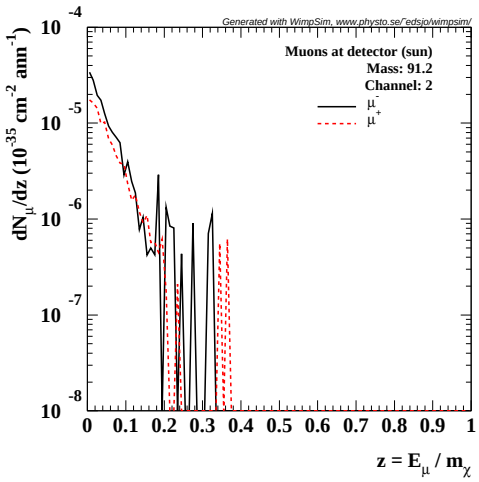


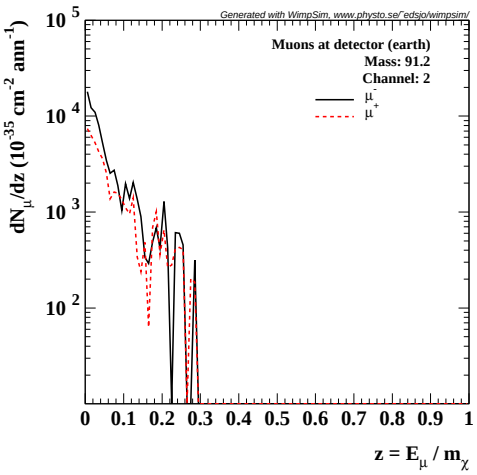
7.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





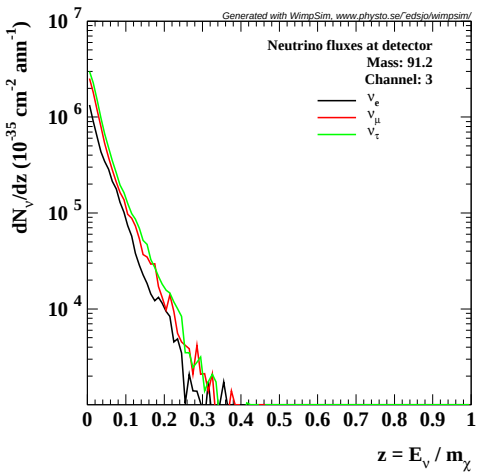
7.2.7 Muons at detector (Sun/Earth)

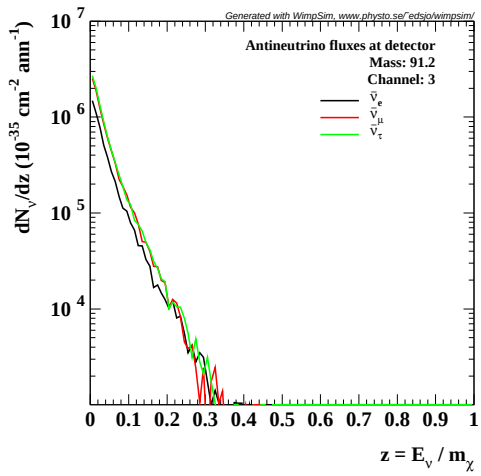




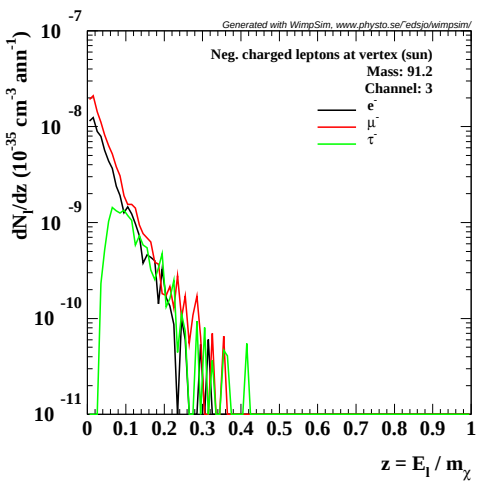
7.3 Channel 3 – $s\bar{s}$

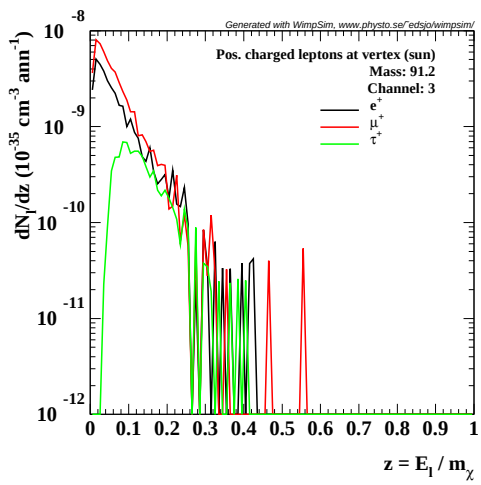
7.3.1 Neutrino fluxes at detector (Sun)



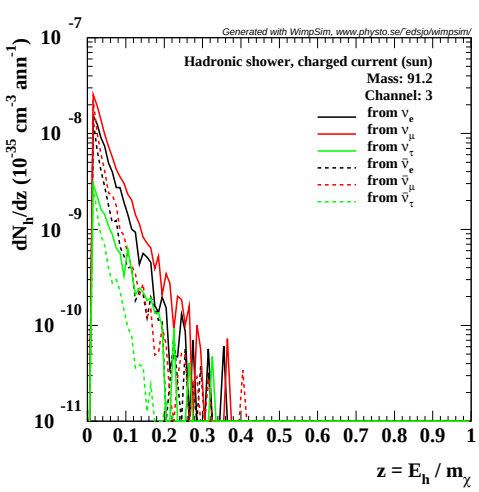


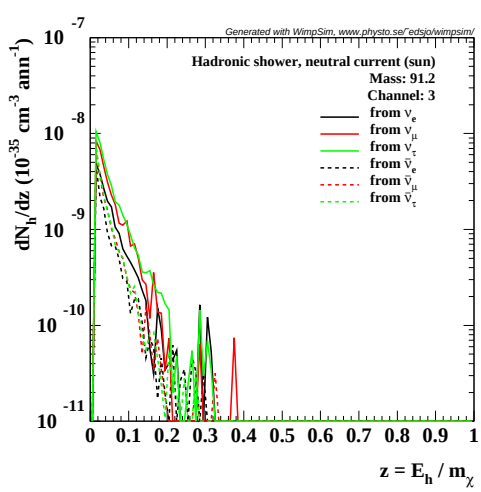
7.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



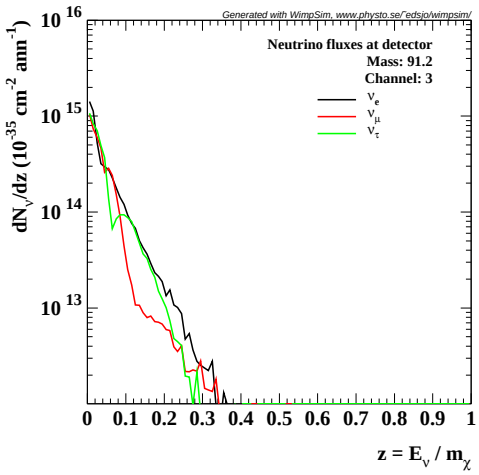


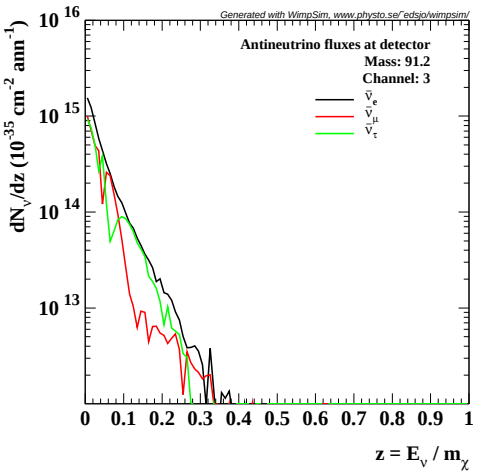
7.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



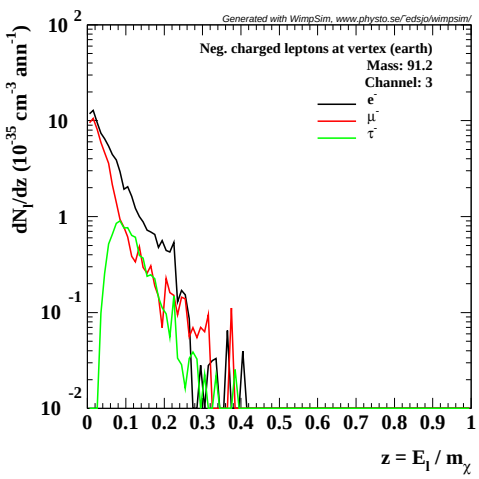


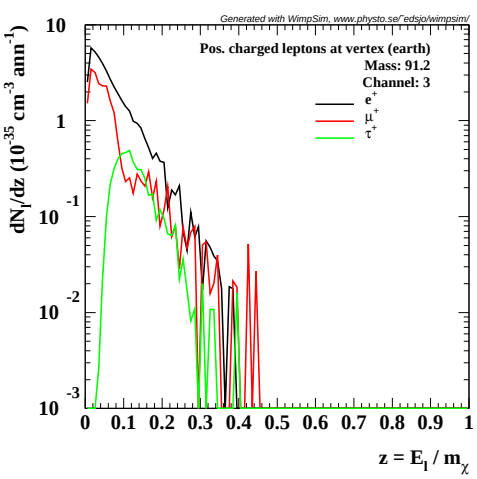
7.3.4 Neutrino fluxes at detector (Earth)



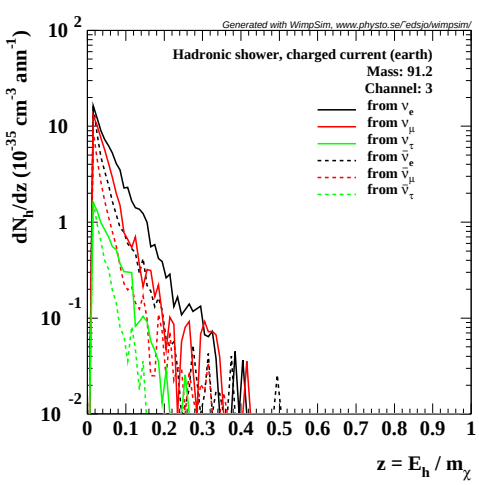


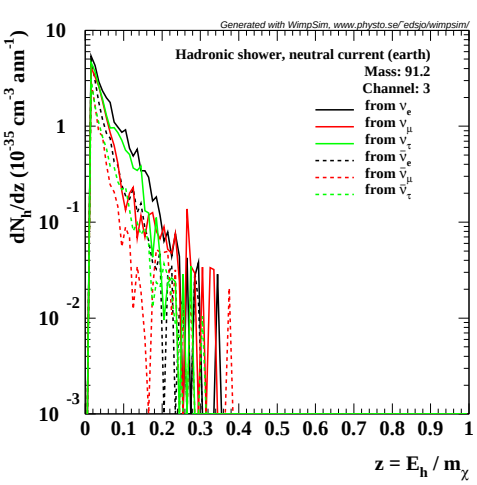
7.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



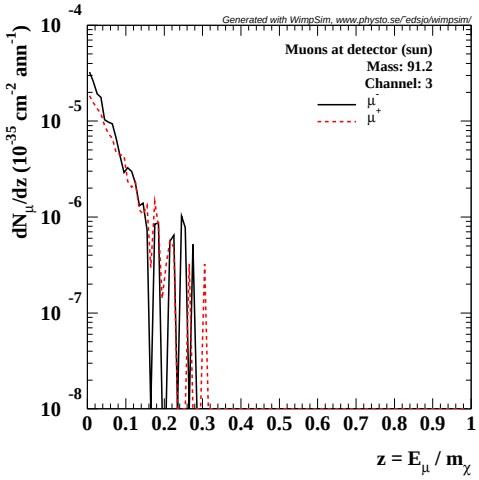


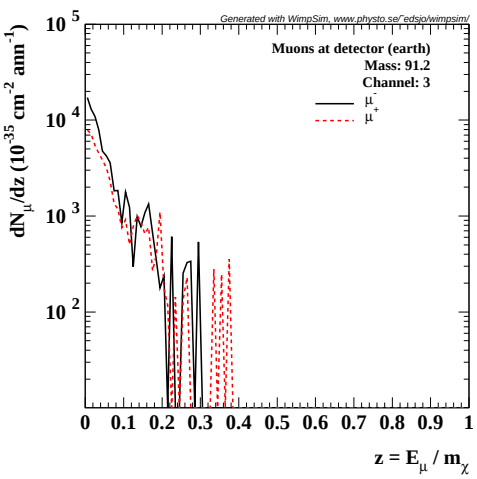
7.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





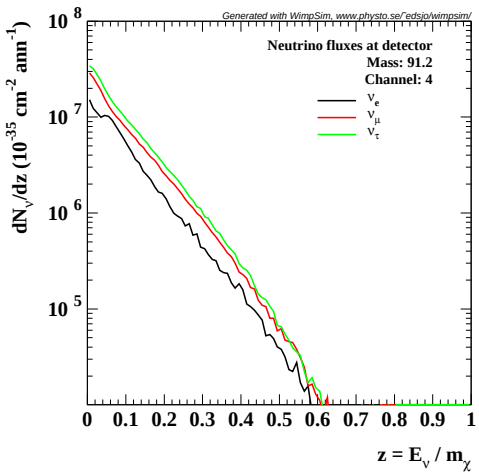
7.3.7 Muons at detector (Sun/Earth)

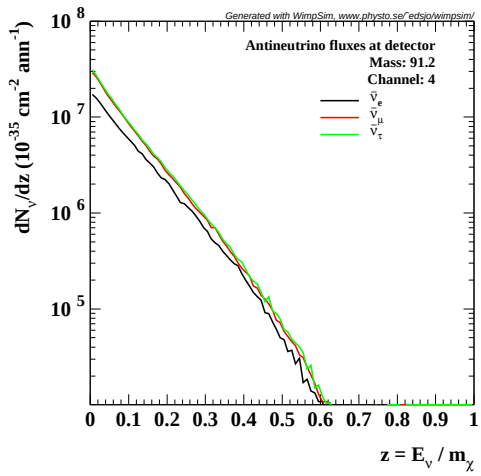




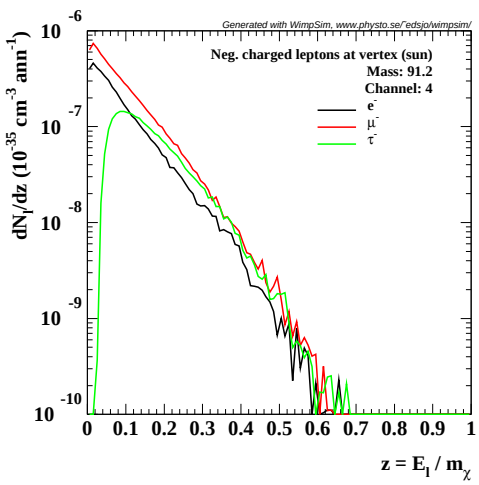
7.4 Channel 4 – $c\bar{c}$

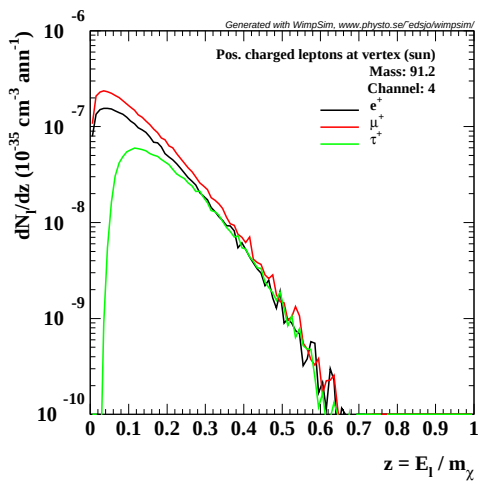
7.4.1 Neutrino fluxes at detector (Sun)



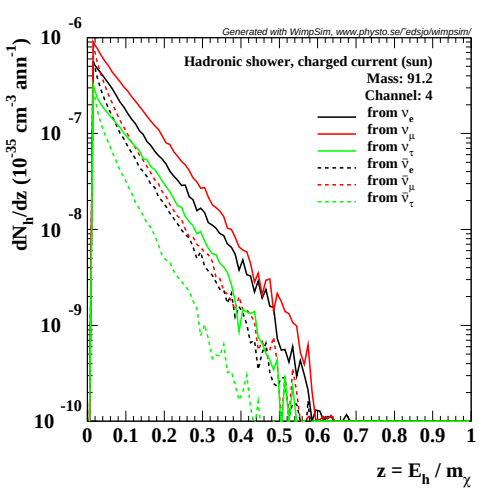


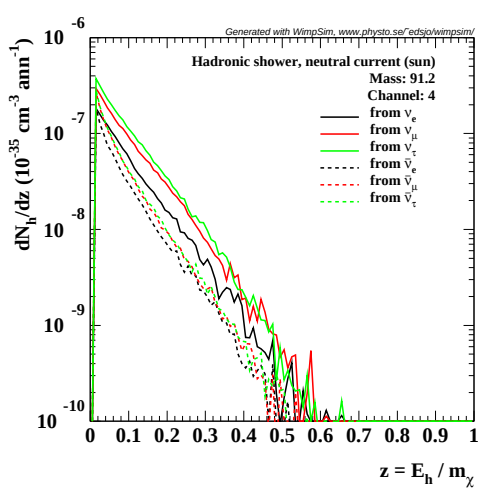
7.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



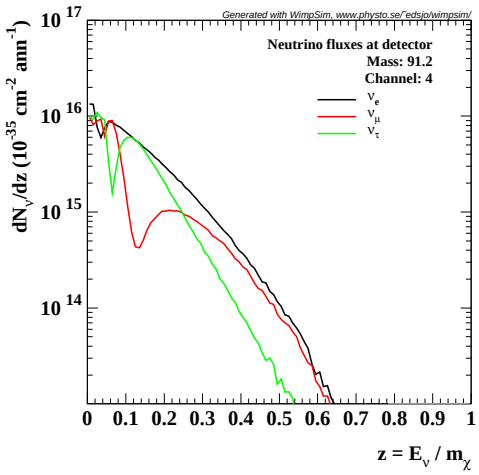


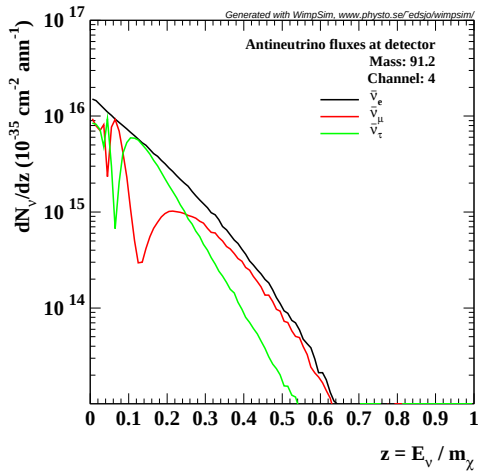
7.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



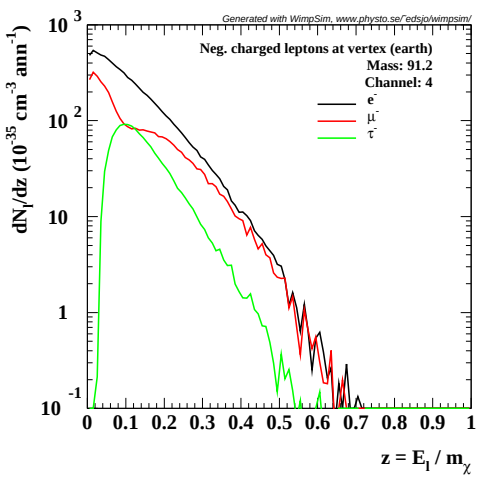


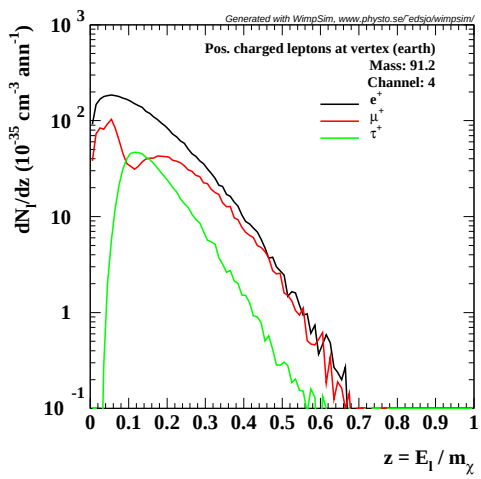
7.4.4 Neutrino fluxes at detector (Earth)



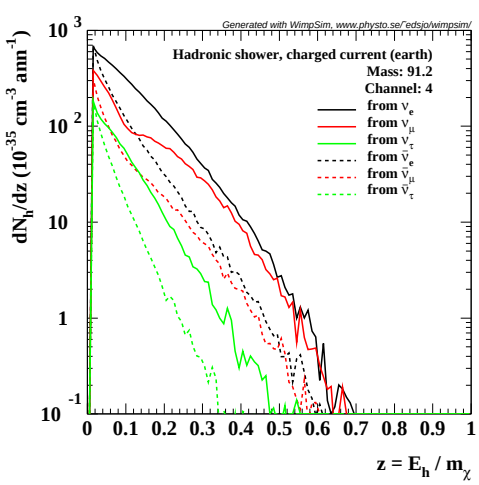


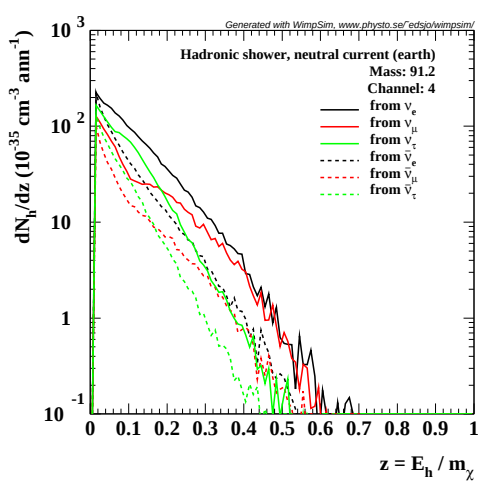
7.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



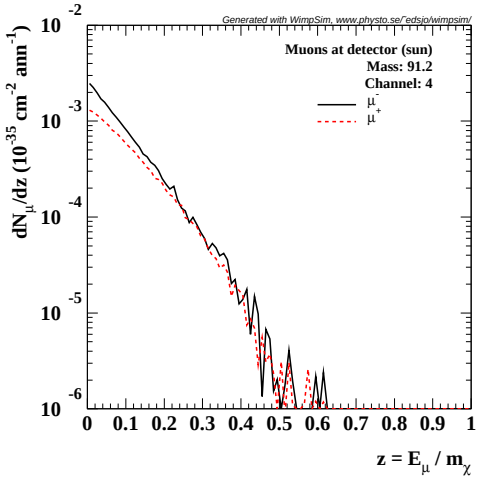


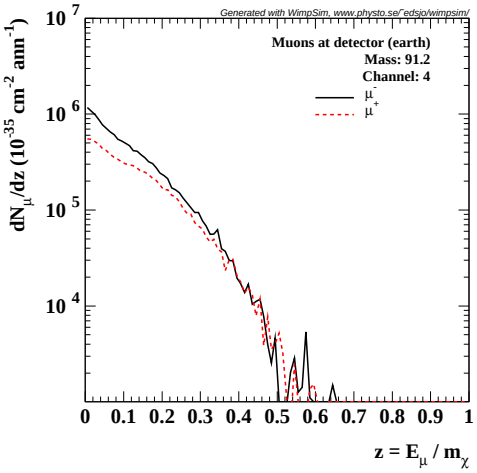
7.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





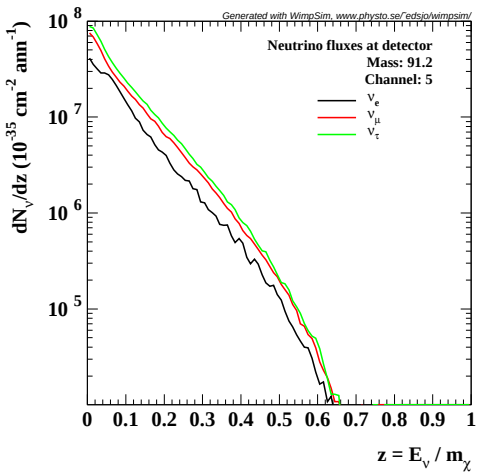
7.4.7 Muons at detector (Sun/Earth)

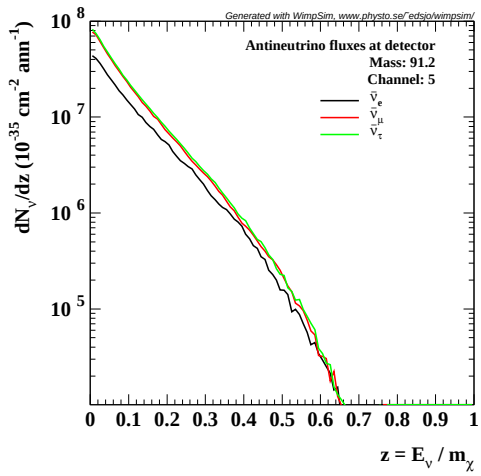




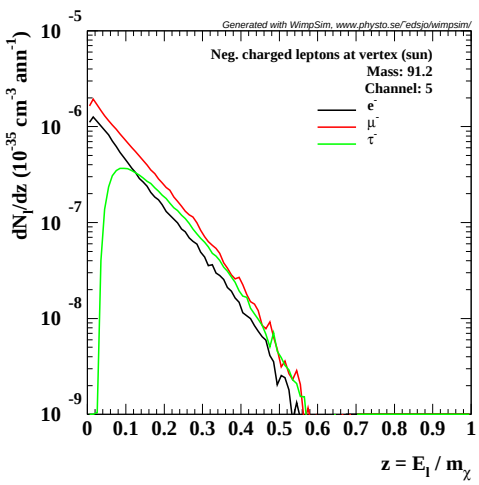
7.5 Channel 5 – $b\bar{b}$

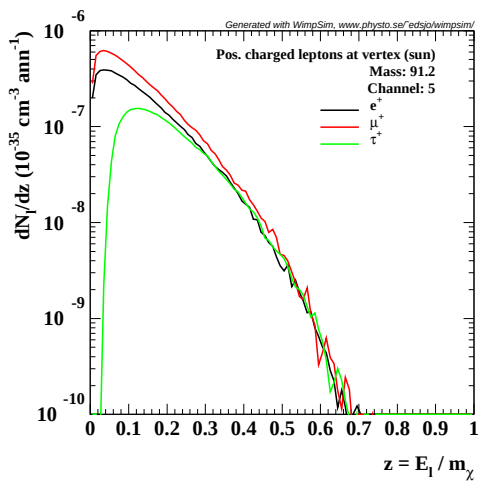
7.5.1 Neutrino fluxes at detector (Sun)



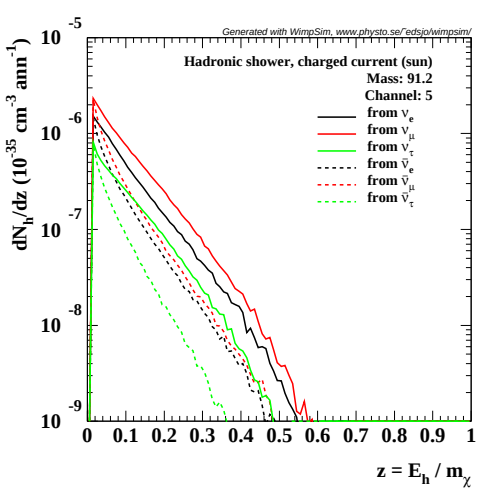


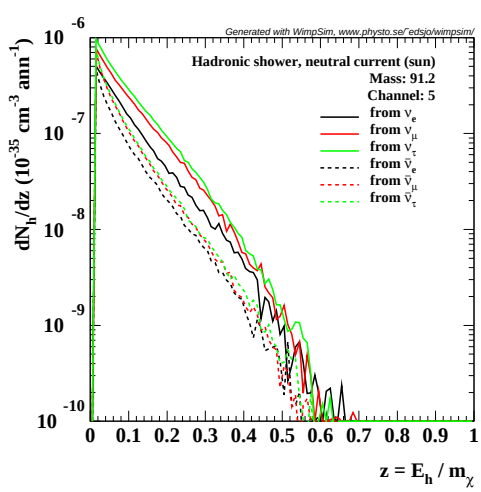
7.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



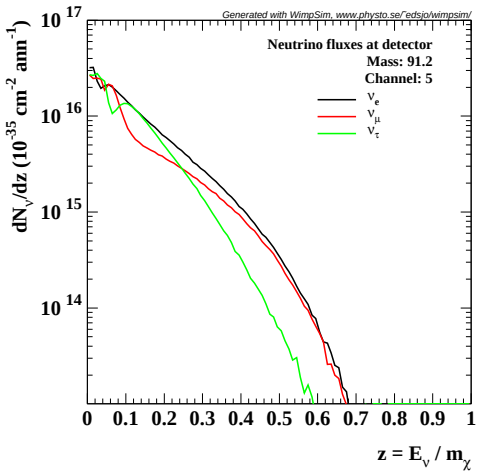


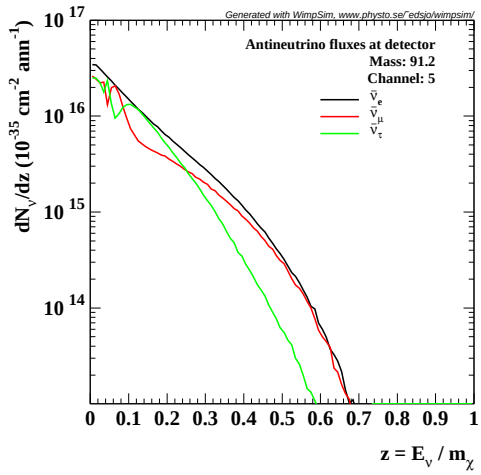
7.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



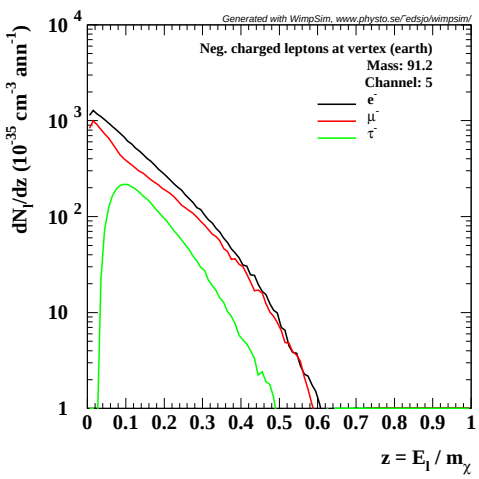


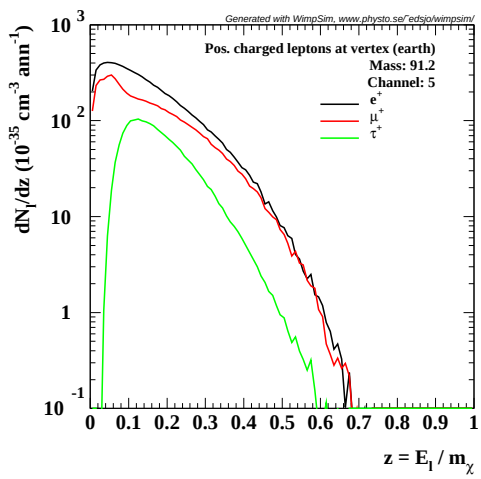
7.5.4 Neutrino fluxes at detector (Earth)



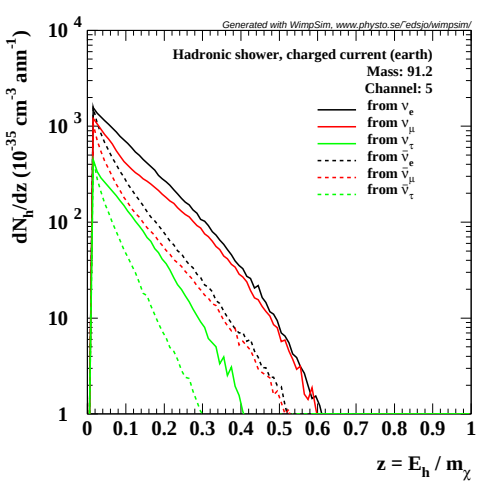


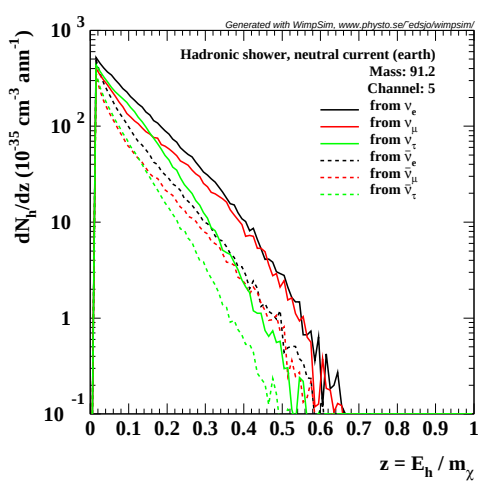
7.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



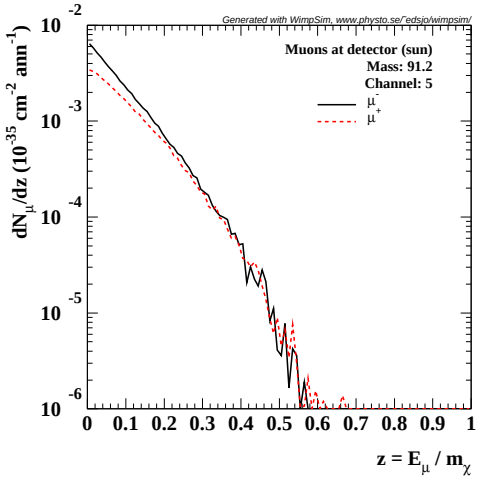


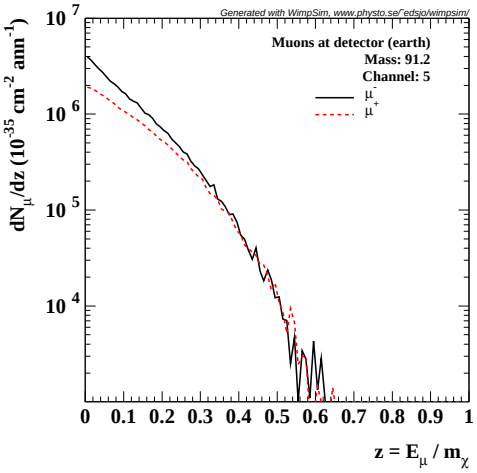
7.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





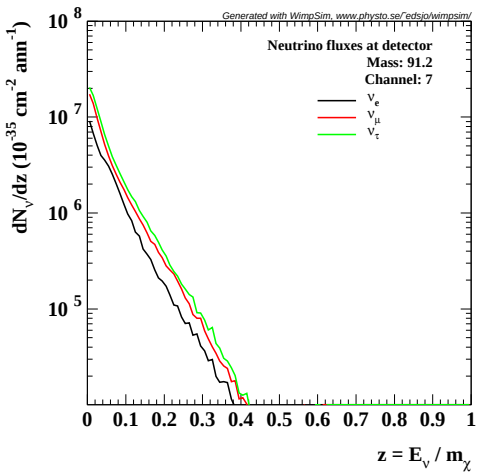
7.5.7 Muons at detector (Sun/Earth)

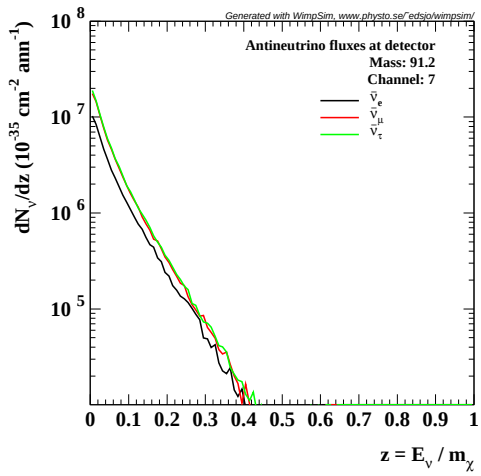




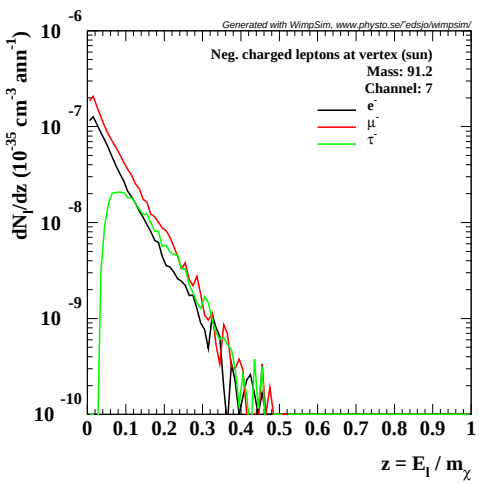
7.6 Channel 7 – gg

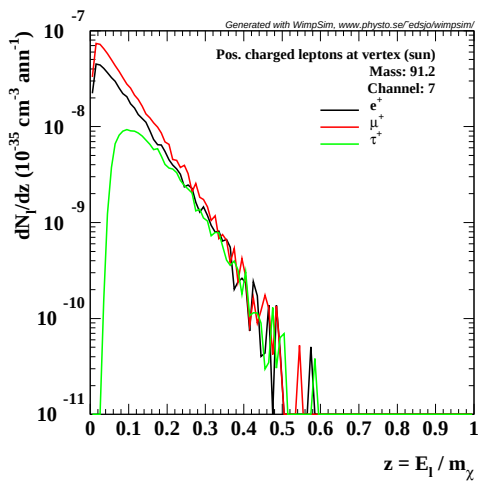
7.6.1 Neutrino fluxes at detector (Sun)



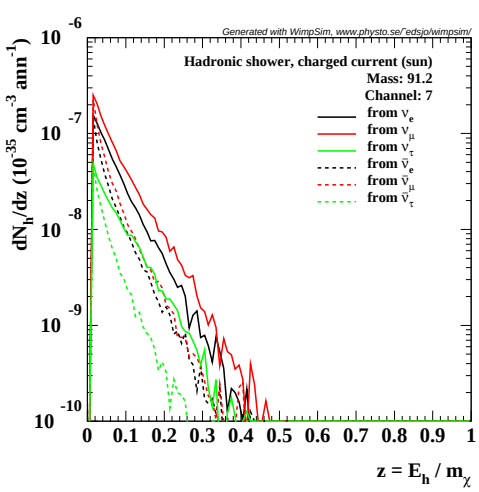


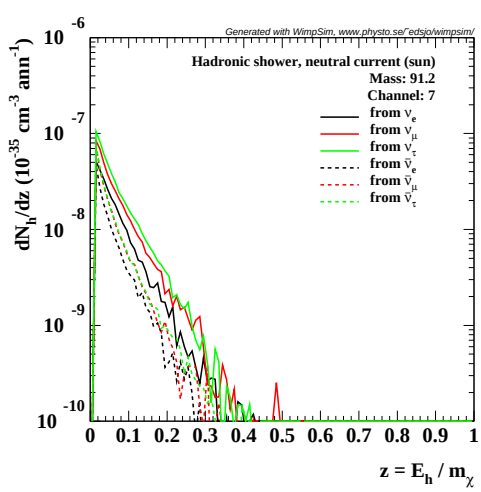
7.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



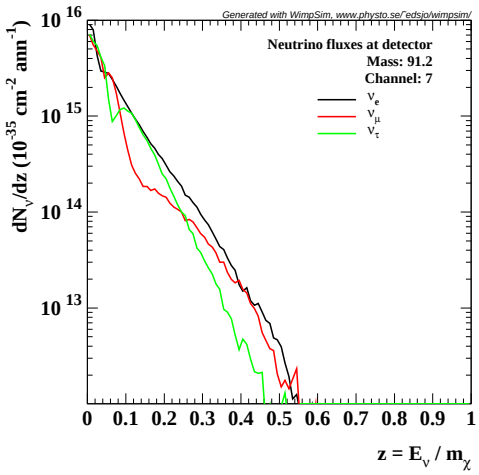


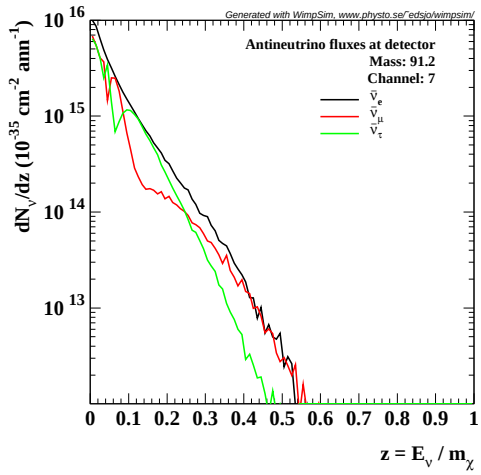
7.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



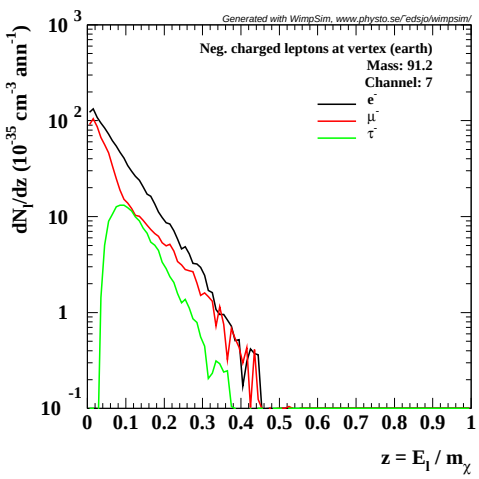


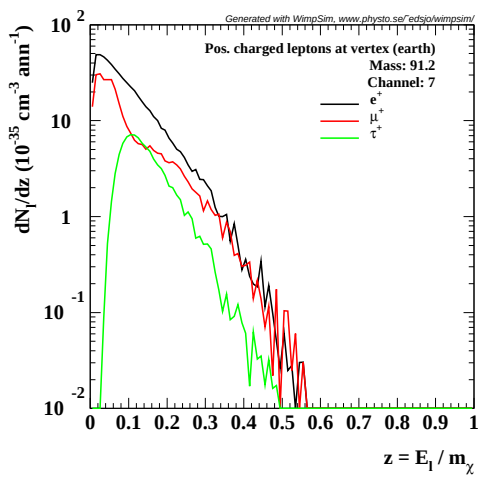
7.6.4 Neutrino fluxes at detector (Earth)



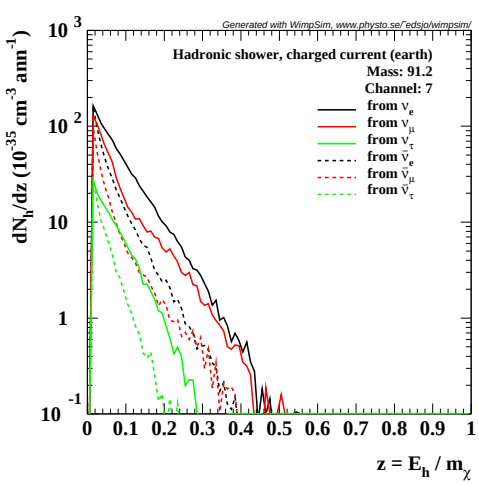


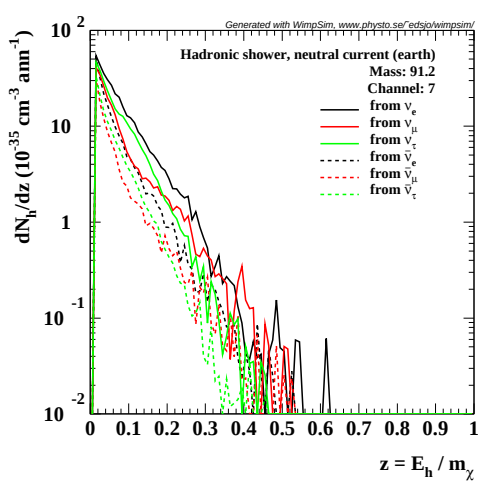
7.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



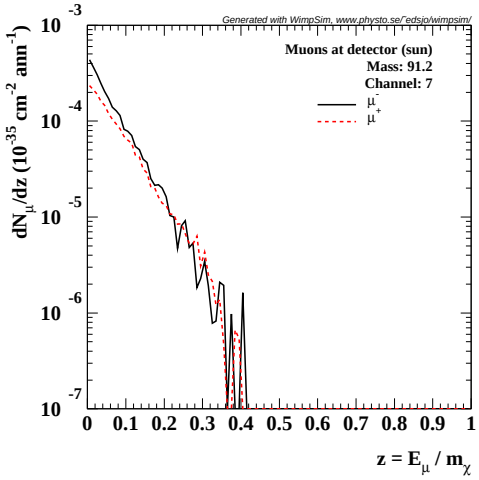


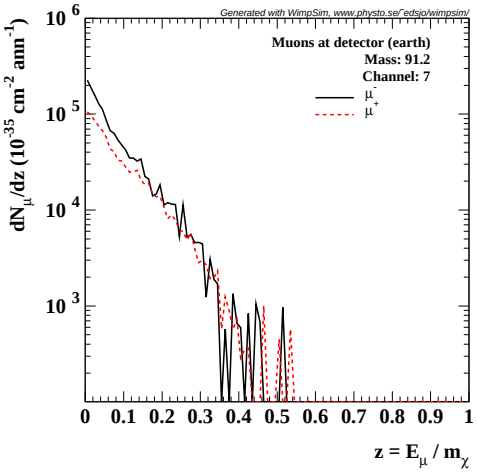
7.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





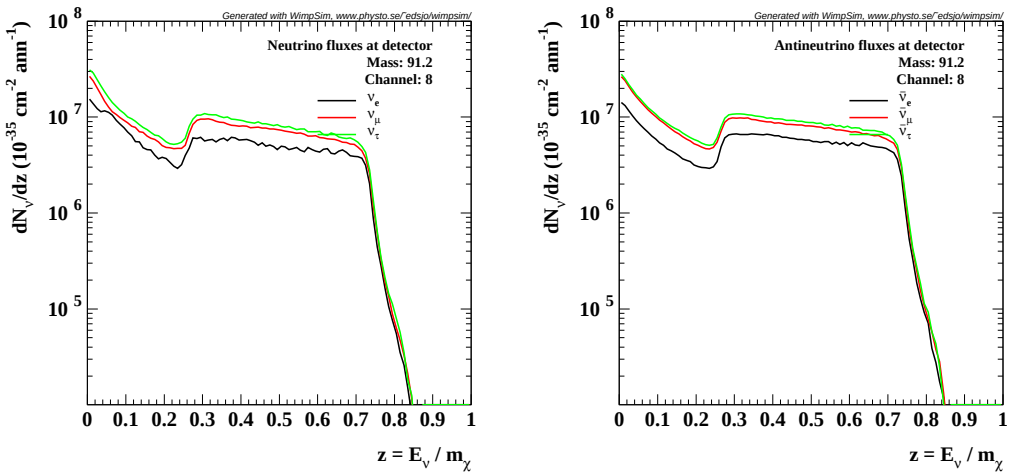
7.6.7 Muons at detector (Sun/Earth)



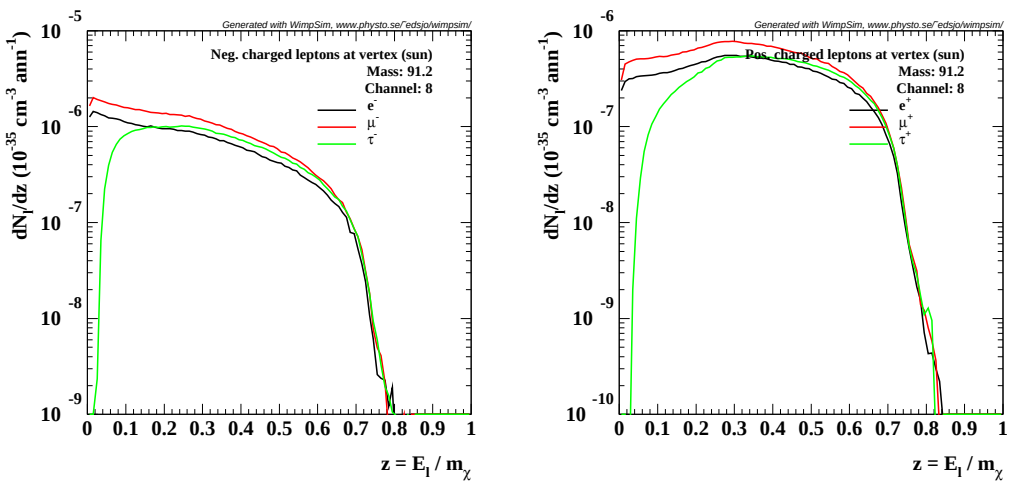


7.7 Channel 8 – W^-W^+

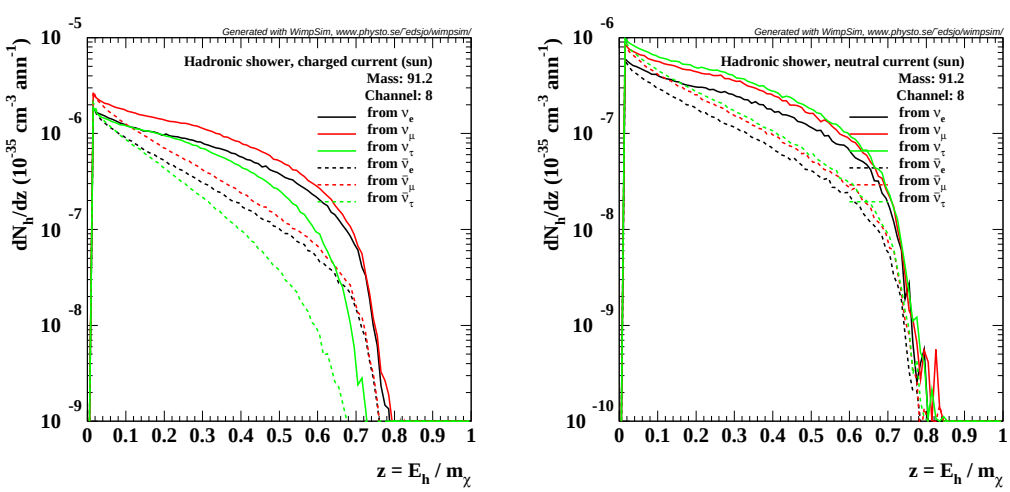
7.7.1 Neutrino fluxes at detector (Sun)



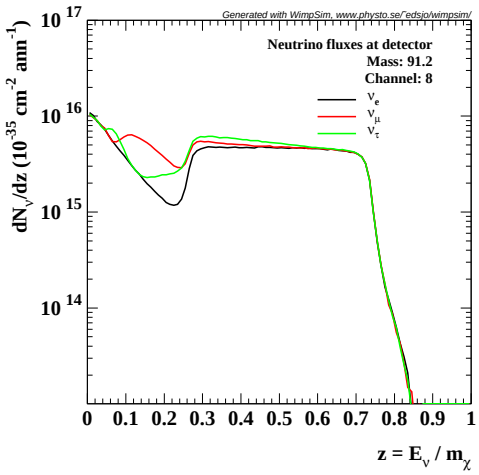
7.7.2 Charged leptons at neutrino-nucleon vertex (Sun)

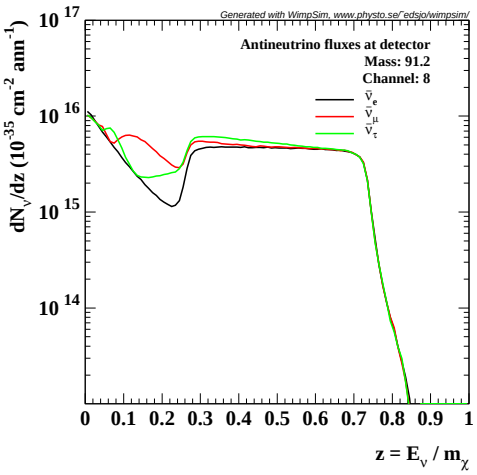


7.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)

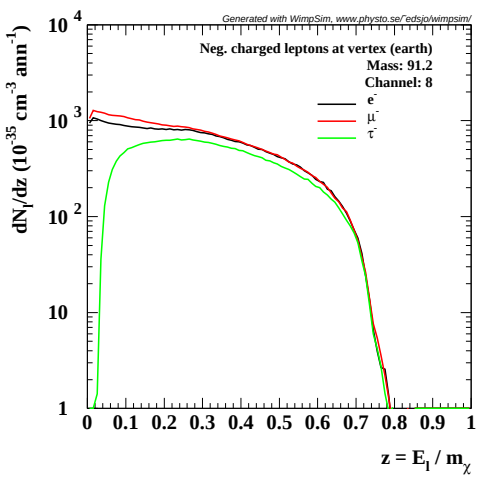


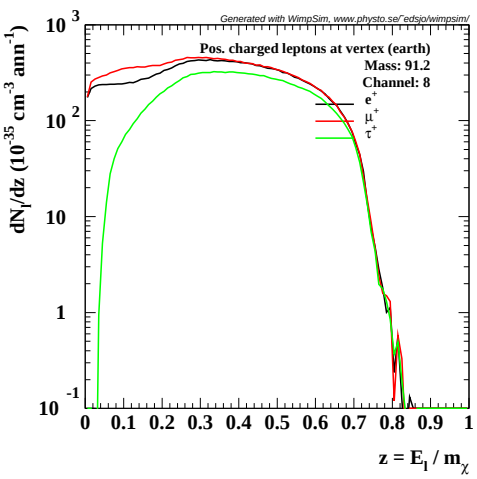
7.7.4 Neutrino fluxes at detector (Earth)



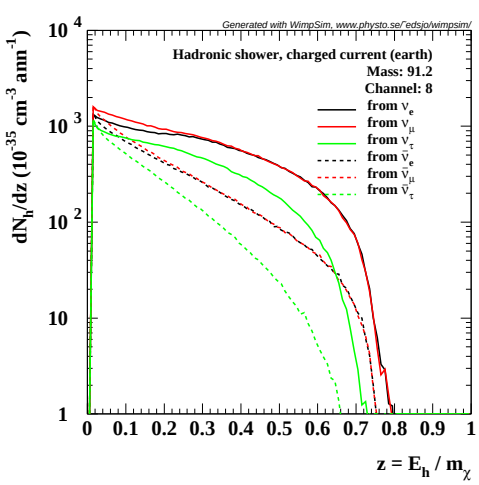


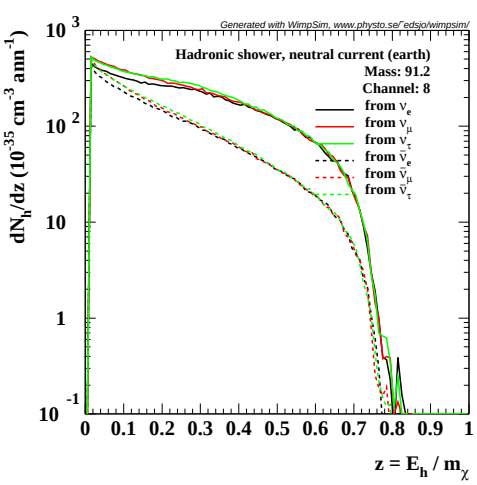
7.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



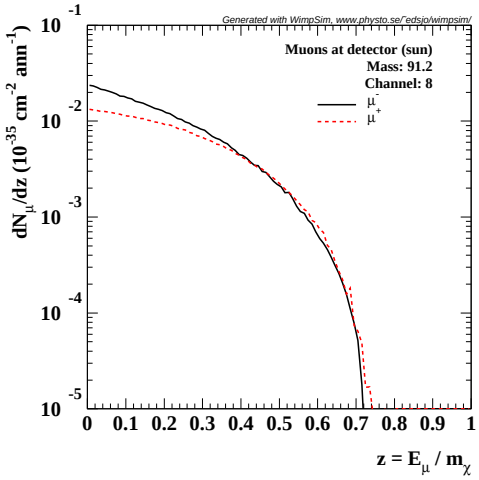


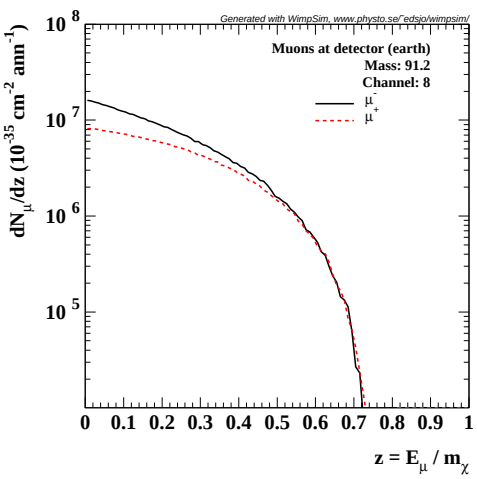
7.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





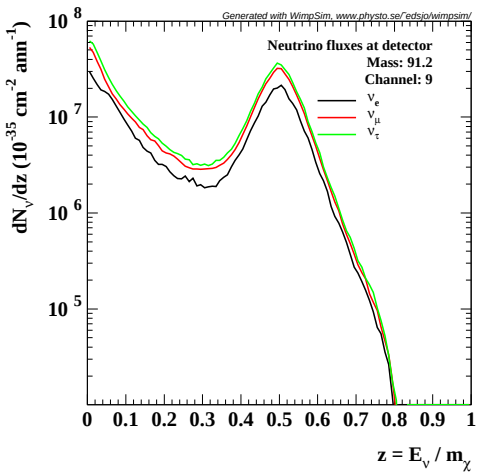
7.7.7 Muons at detector (Sun/Earth)

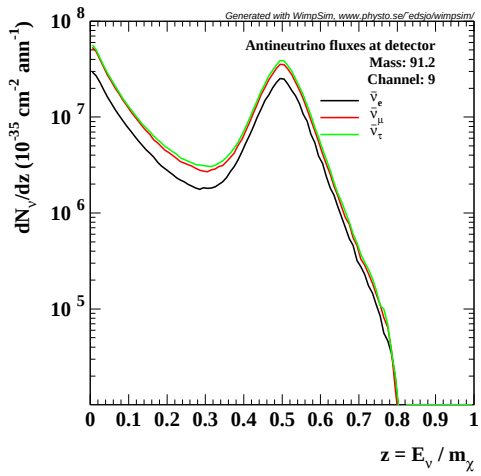




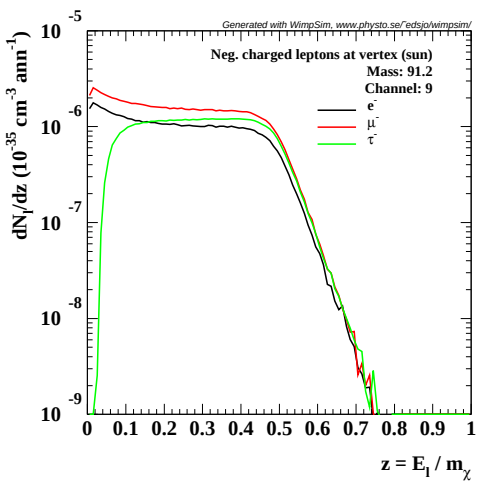
7.8 Channel 9 – Z^0Z^0

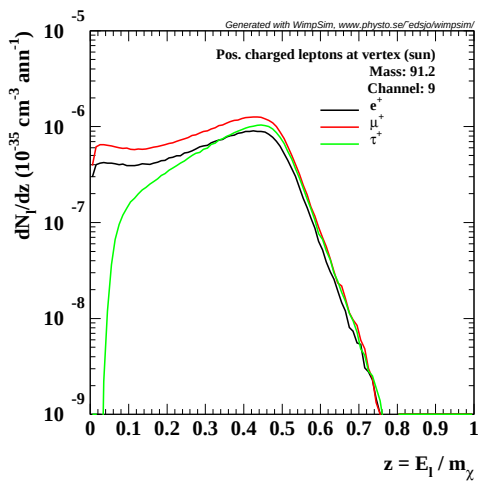
7.8.1 Neutrino fluxes at detector (Sun)



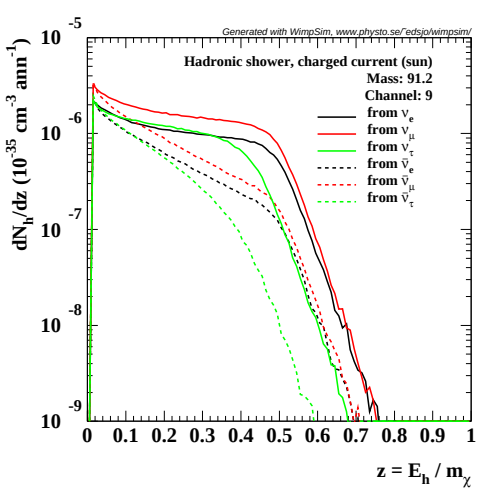


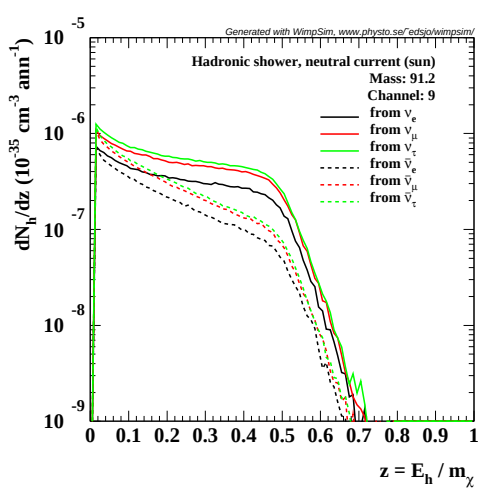
7.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



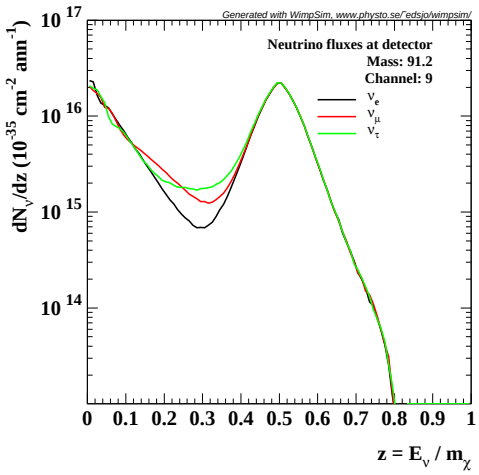


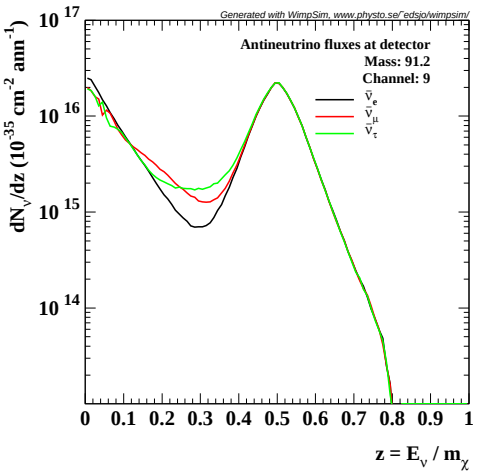
7.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



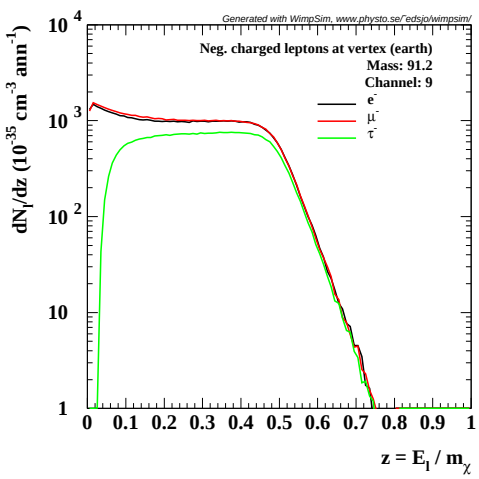


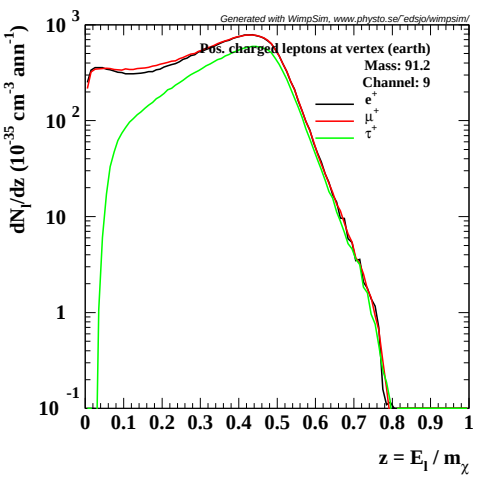
7.8.4 Neutrino fluxes at detector (Earth)



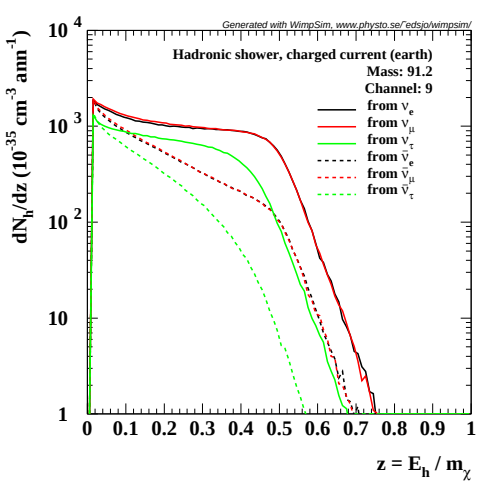


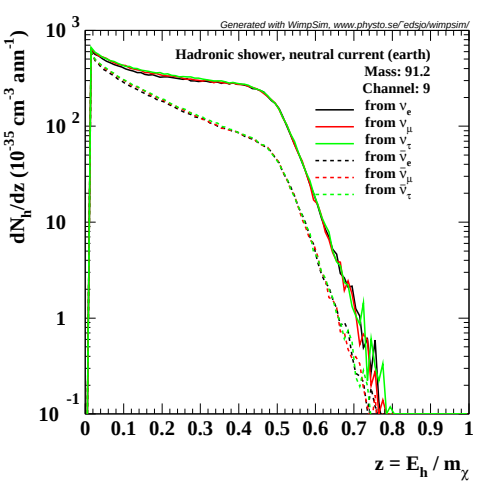
7.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



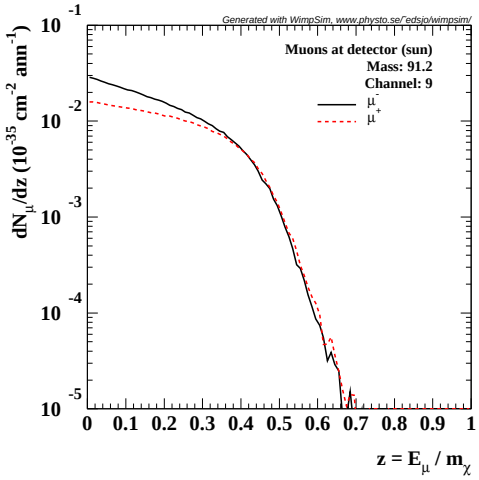


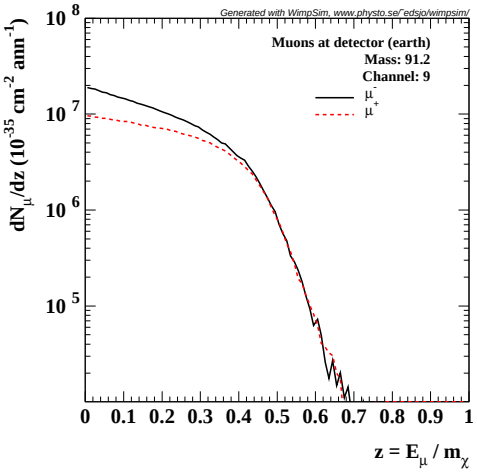
7.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





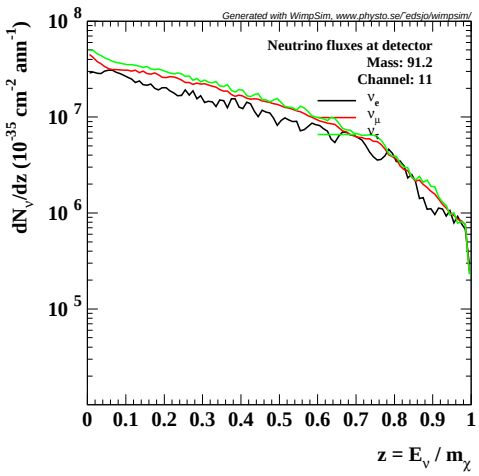
7.8.7 Muons at detector (Sun/Earth)

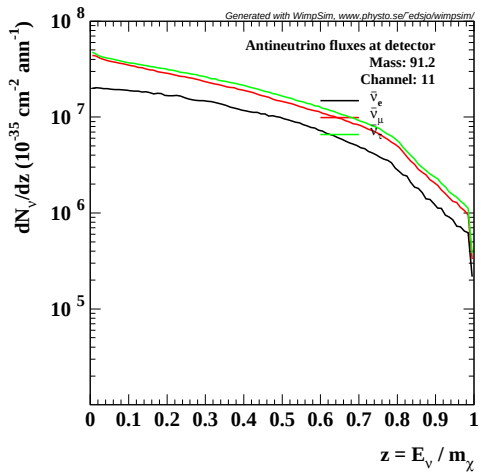




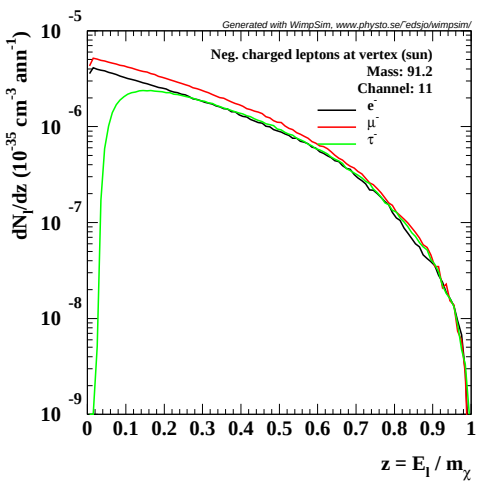
7.9 Channel 11 – $\tau^-\tau^+$

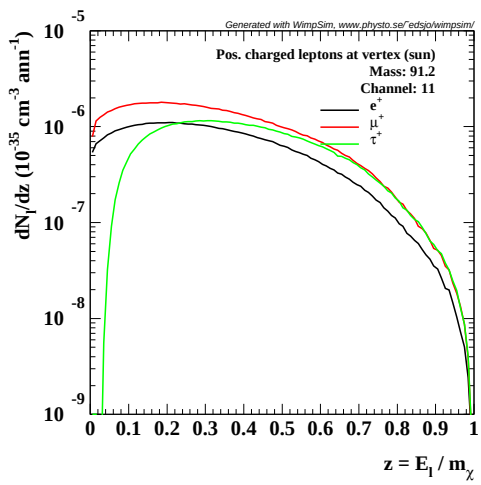
7.9.1 Neutrino fluxes at detector (Sun)



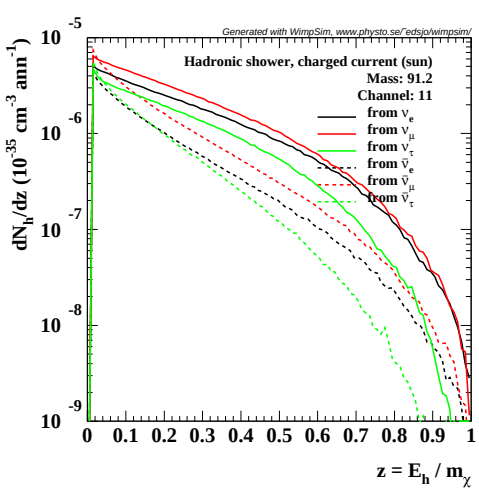


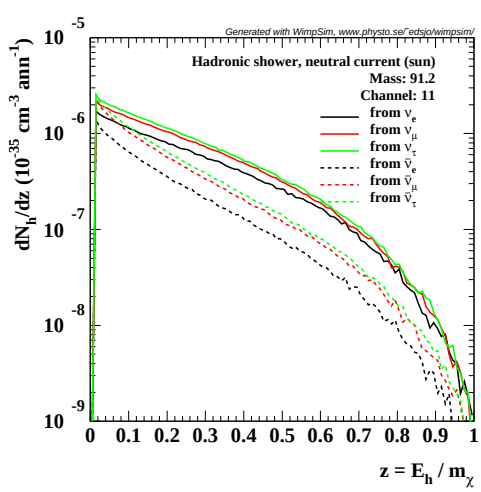
7.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



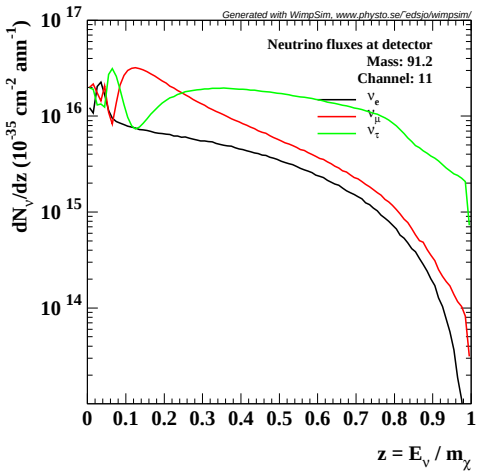


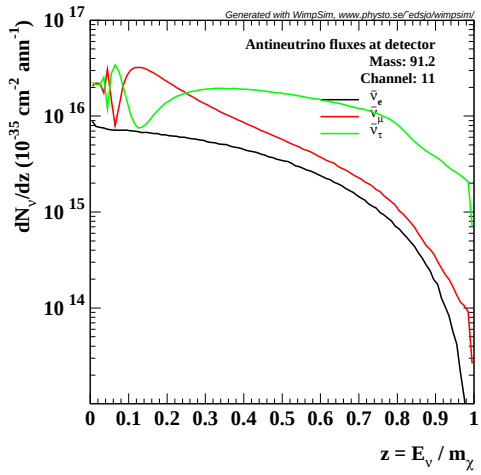
7.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



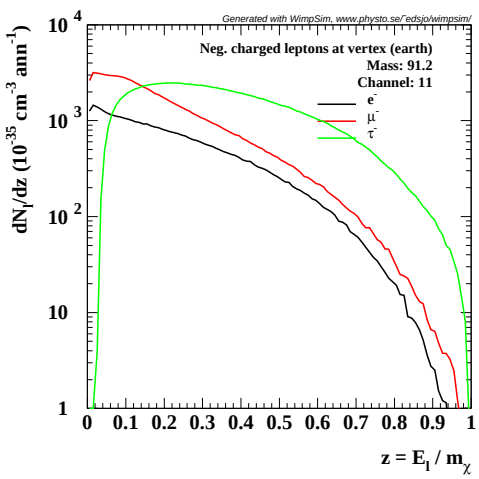


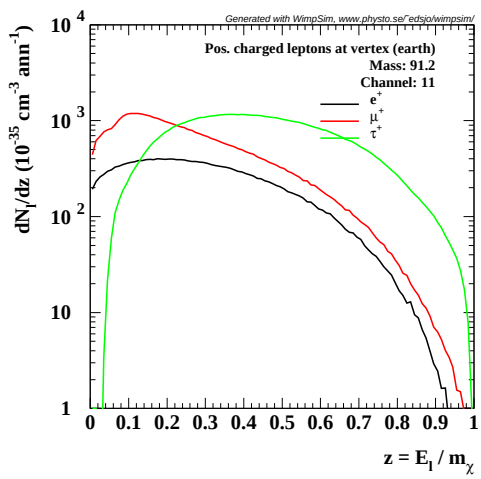
7.9.4 Neutrino fluxes at detector (Earth)



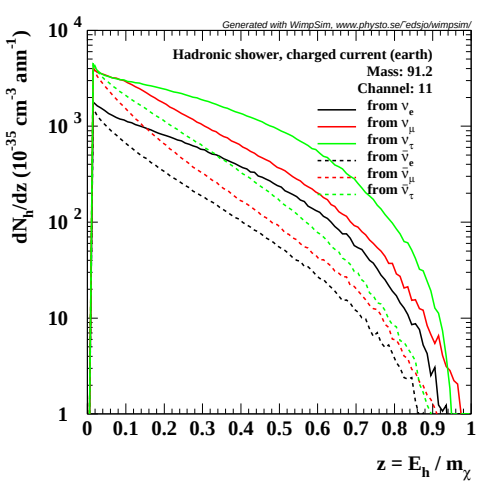


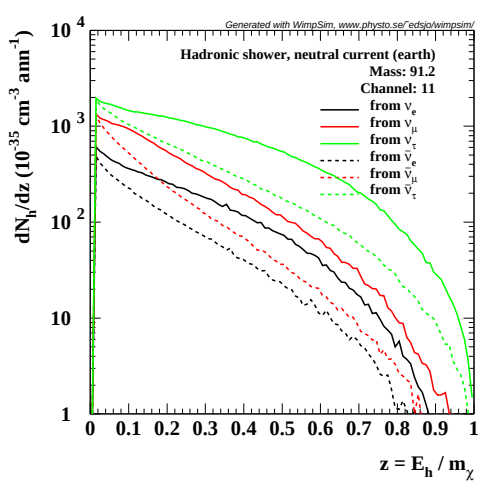
7.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



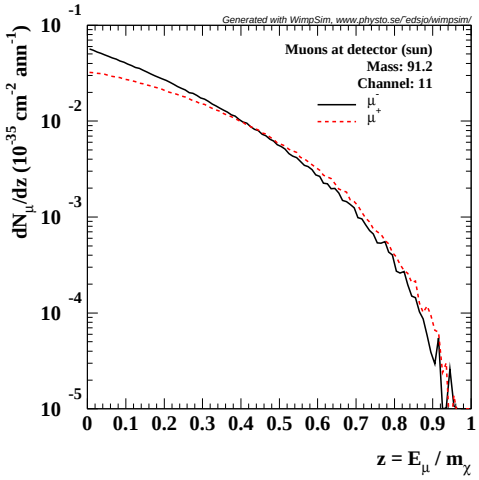


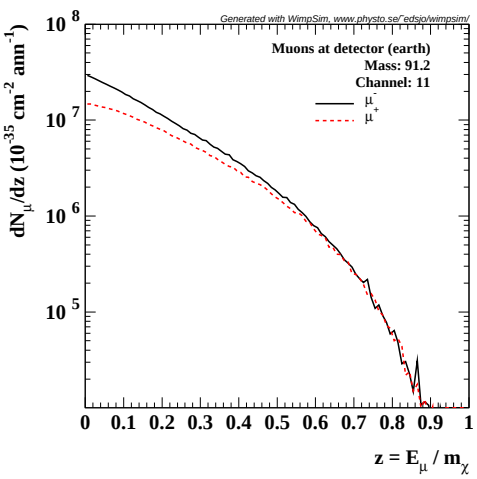
7.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





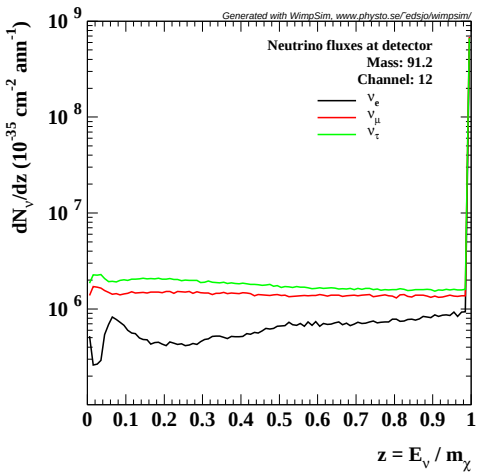
7.9.7 Muons at detector (Sun/Earth)

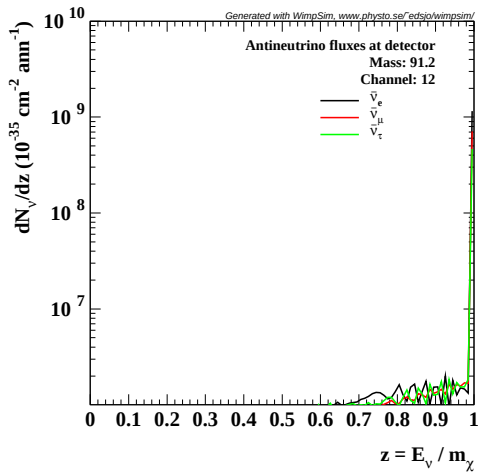




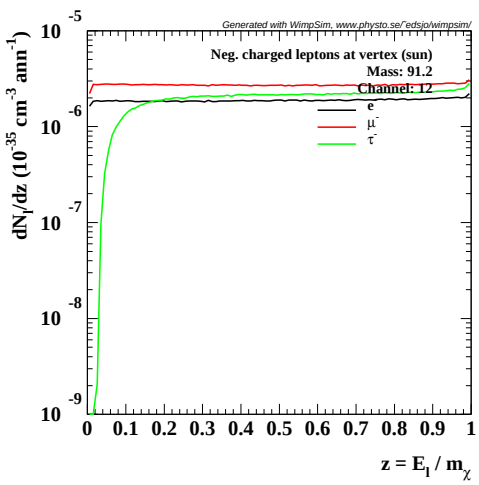
7.10 Channel 12 – $\nu_e\bar{\nu}_e$

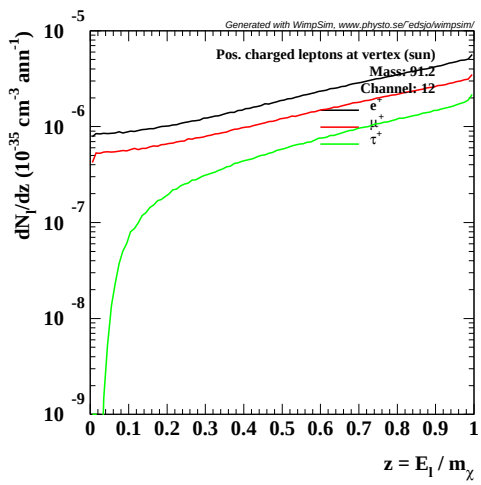
7.10.1 Neutrino fluxes at detector (Sun)



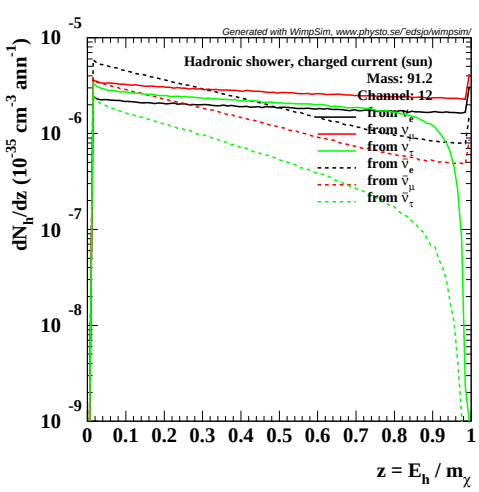


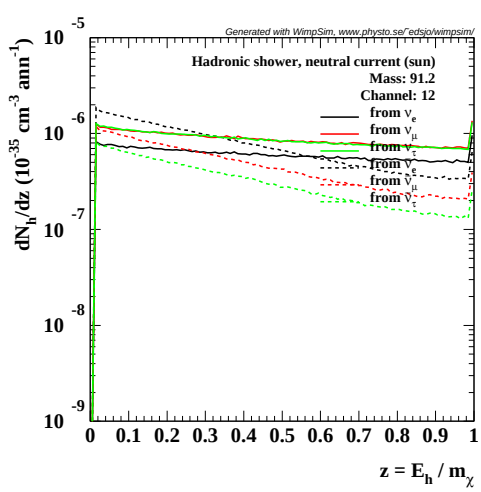
7.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



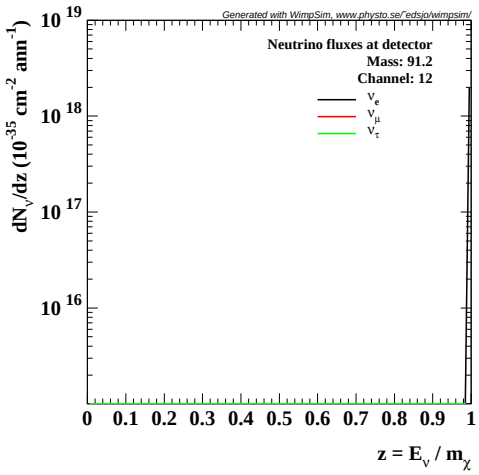


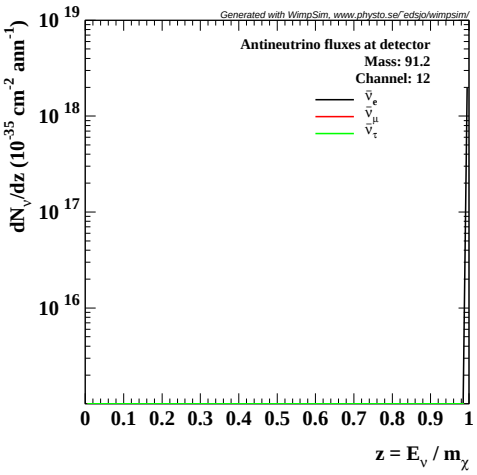
7.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



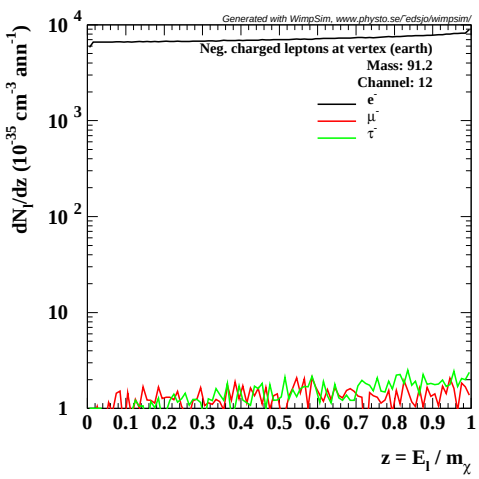


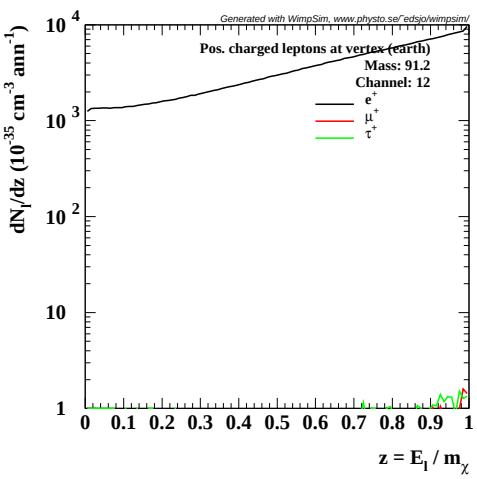
7.10.4 Neutrino fluxes at detector (Earth)



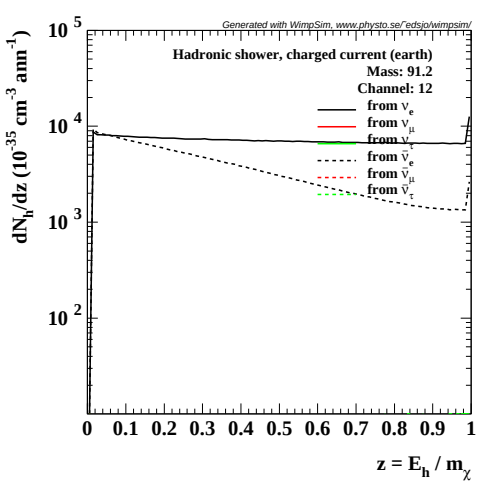


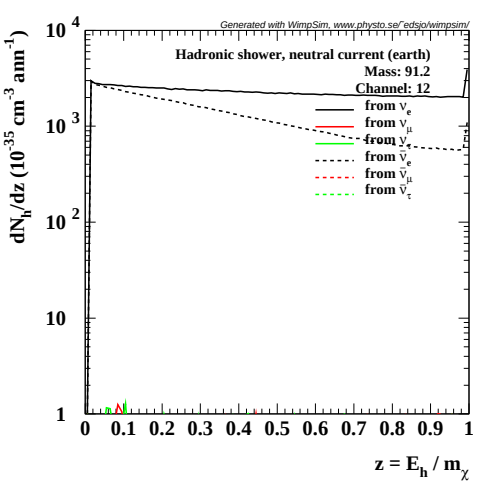
7.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



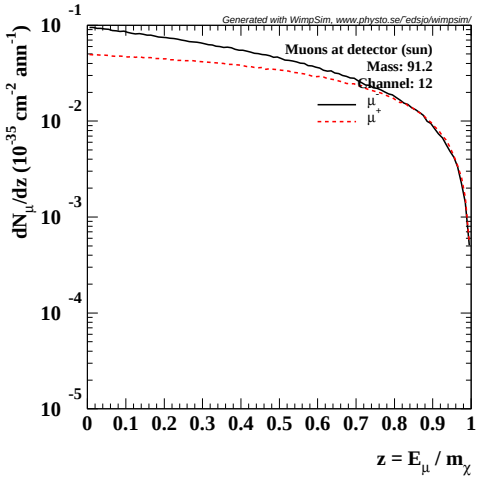


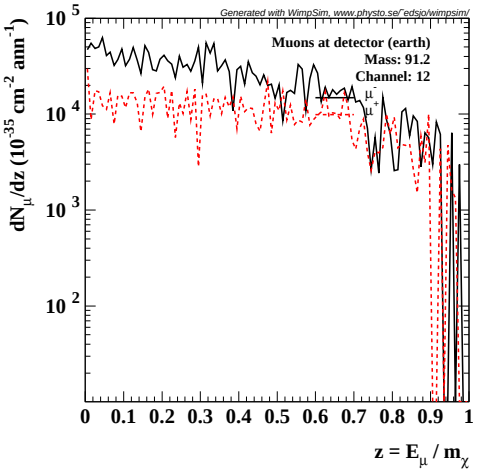
7.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





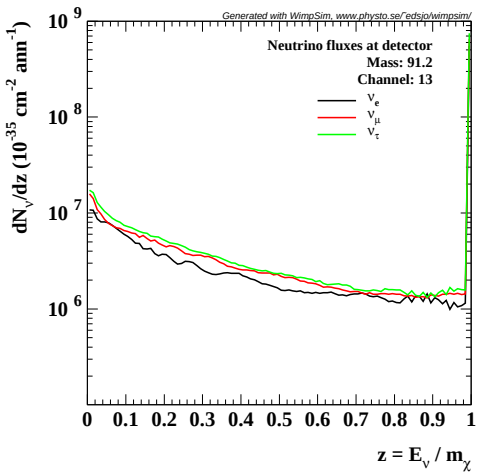
7.10.7 Muons at detector (Sun/Earth)

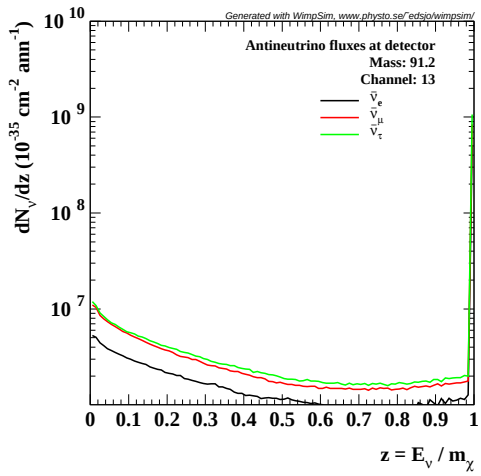




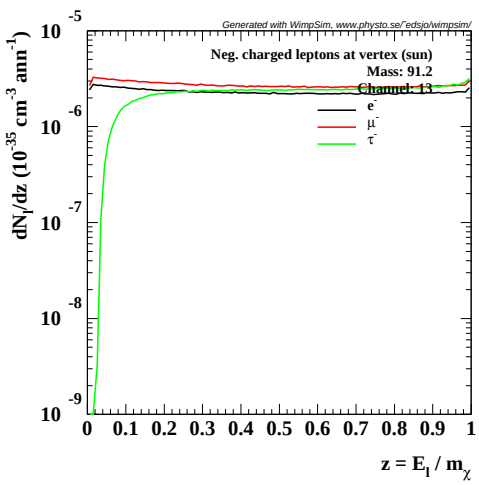
7.11 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

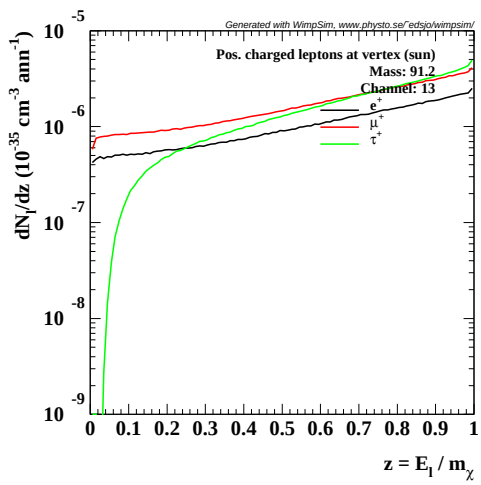
7.11.1 Neutrino fluxes at detector (Sun)



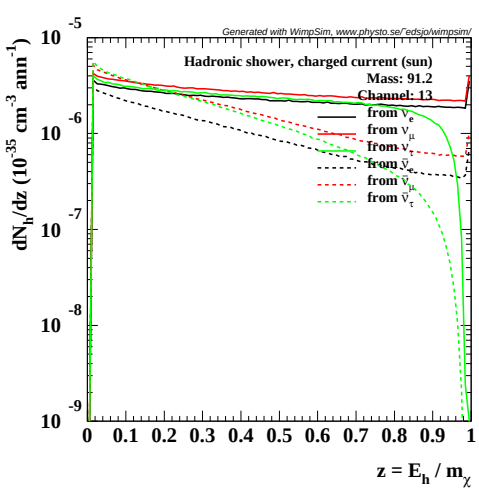


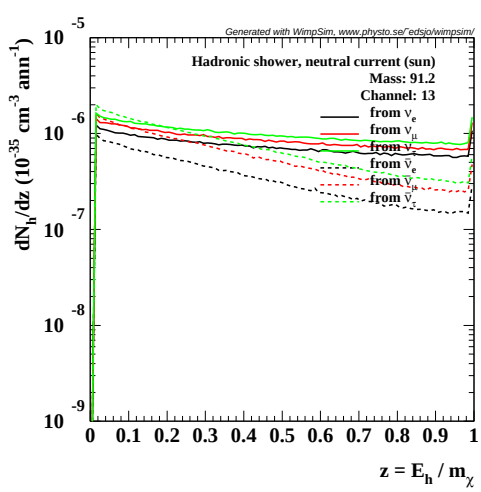
7.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



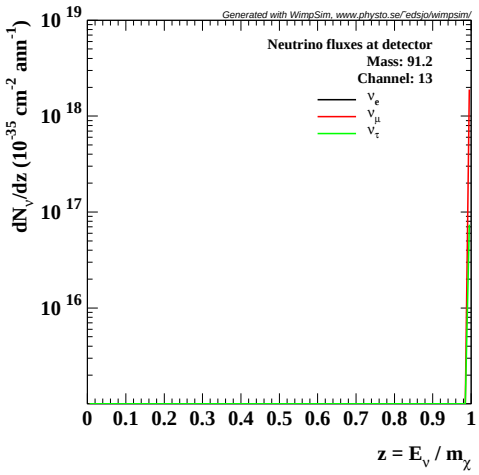


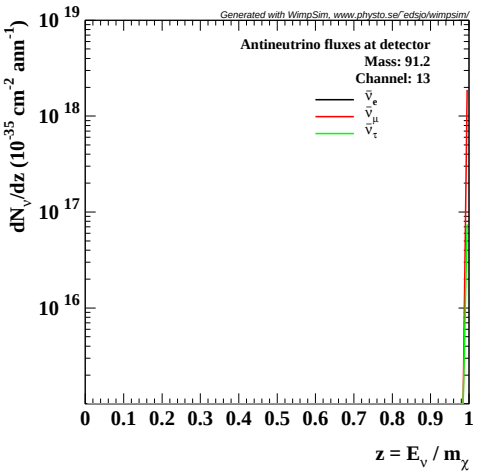
7.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



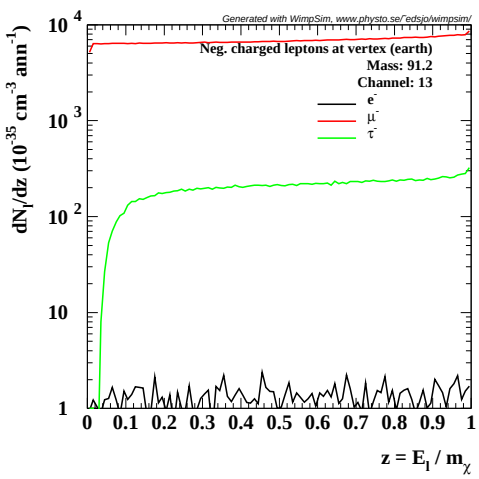


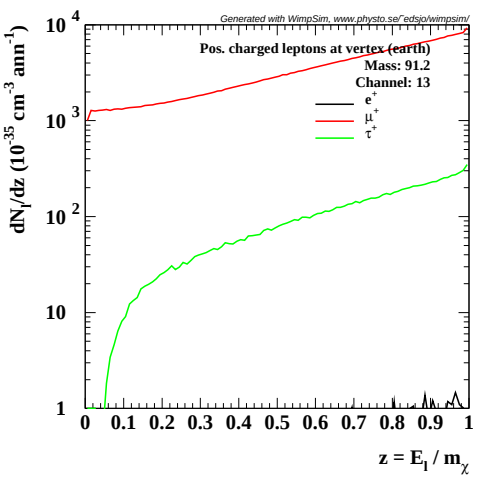
7.11.4 Neutrino fluxes at detector (Earth)



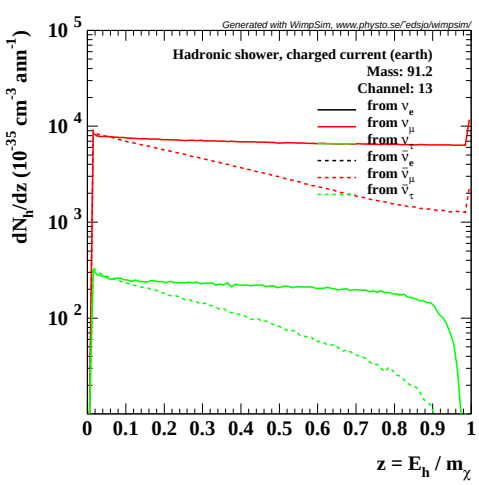


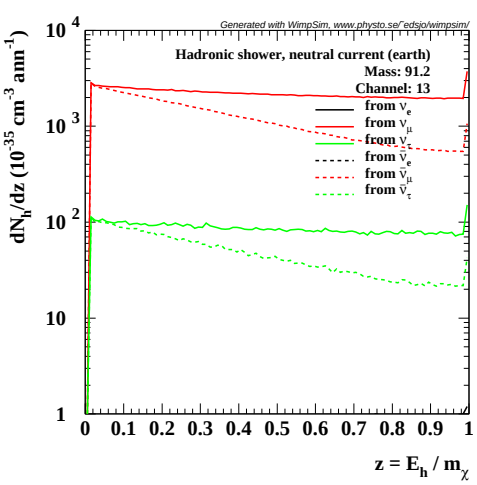
7.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



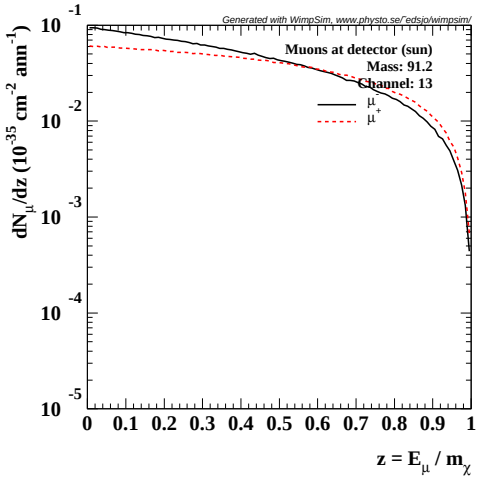


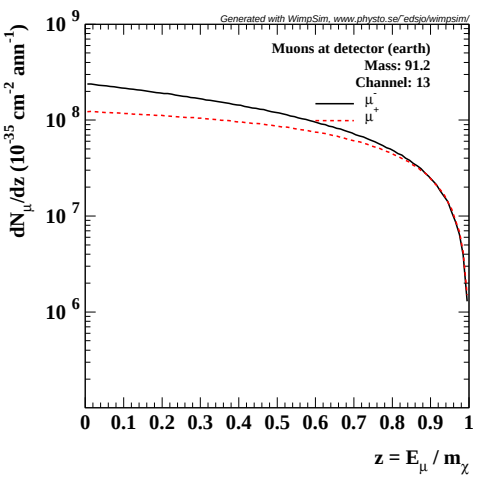
7.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





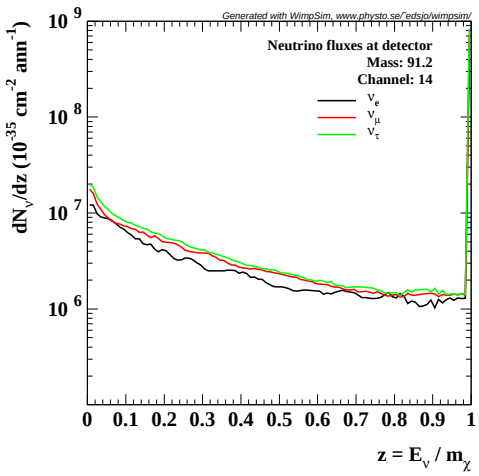
7.11.7 Muons at detector (Sun/Earth)

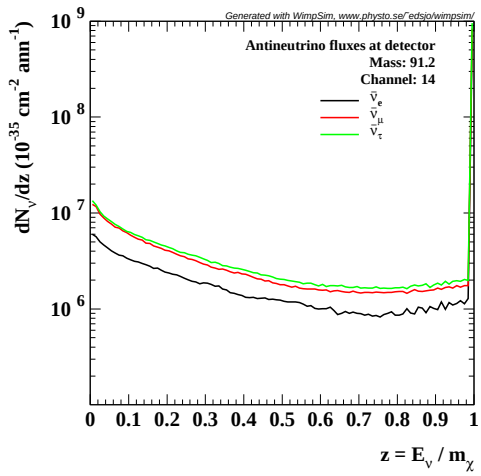




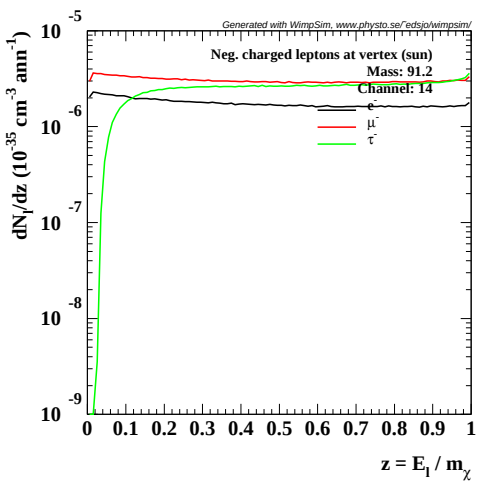
7.12 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

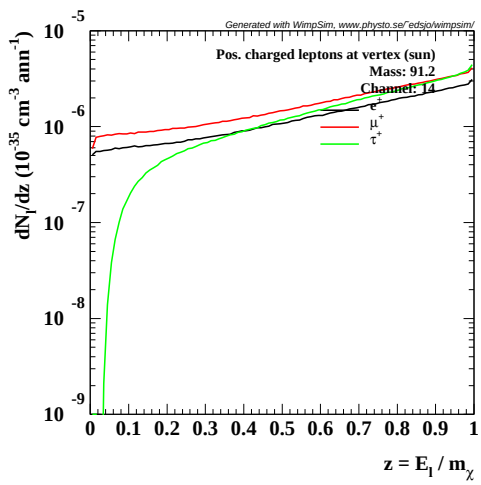
7.12.1 Neutrino fluxes at detector (Sun)



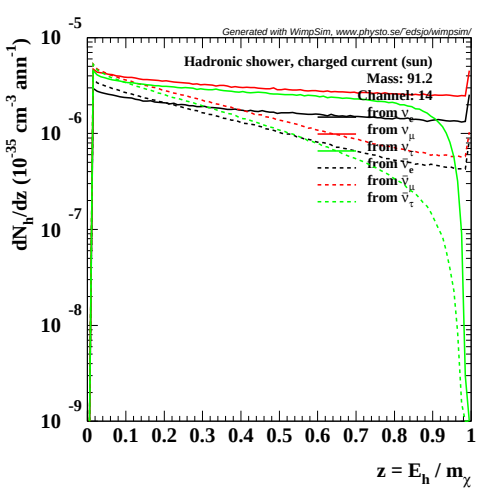


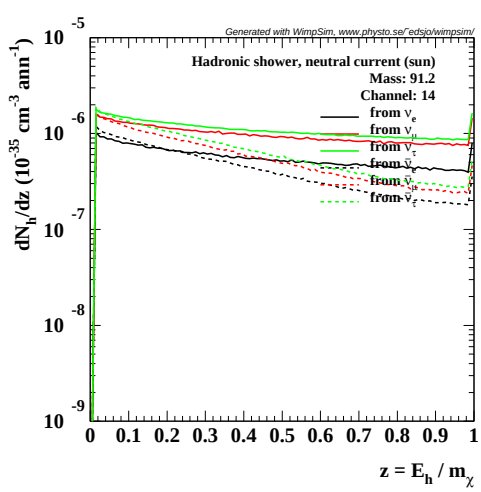
7.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



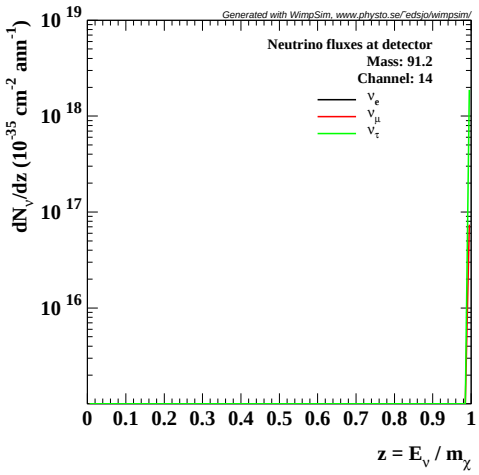


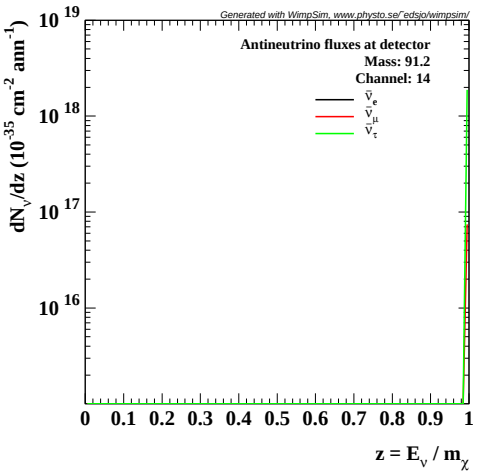
7.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



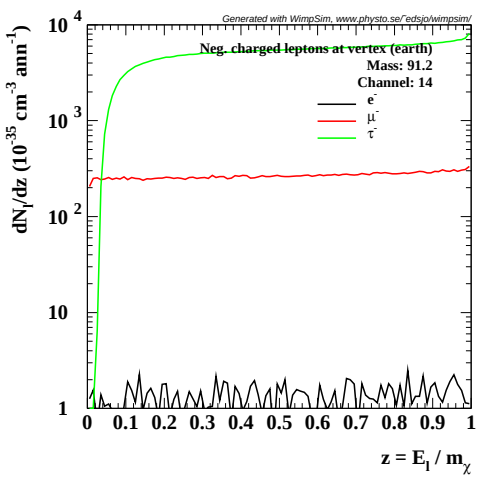


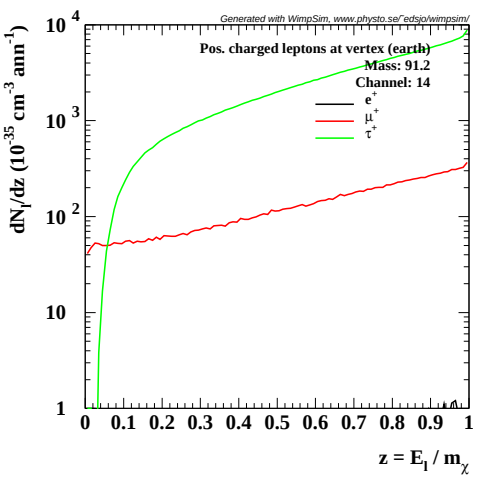
7.12.4 Neutrino fluxes at detector (Earth)



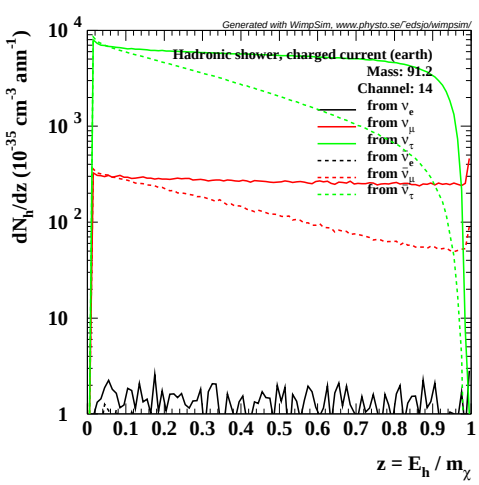


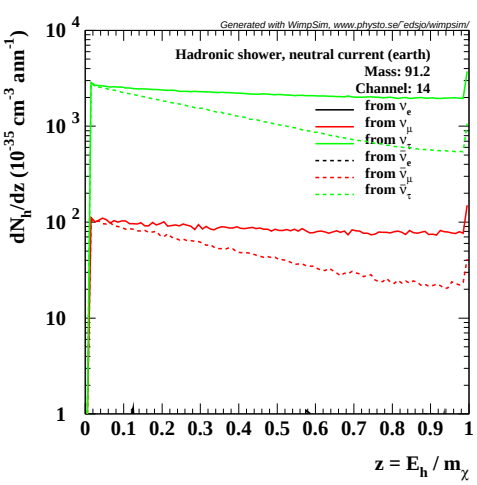
7.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



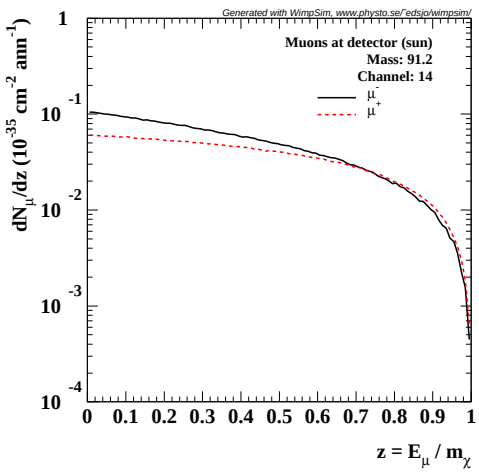


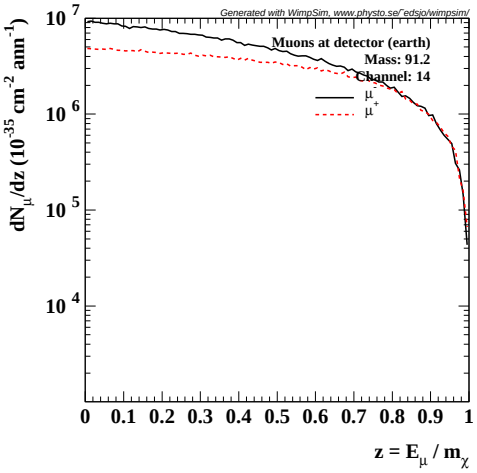
7.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





7.12.7 Muons at detector (Sun/Earth)

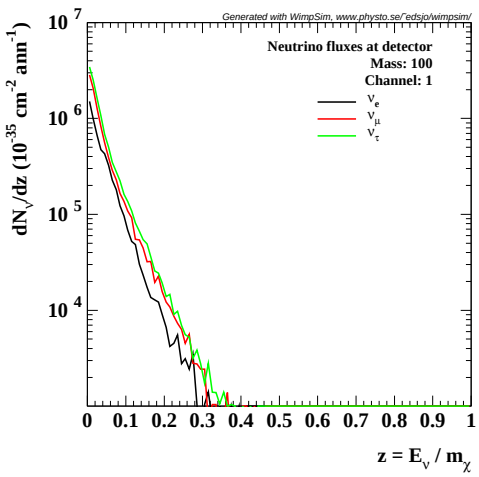


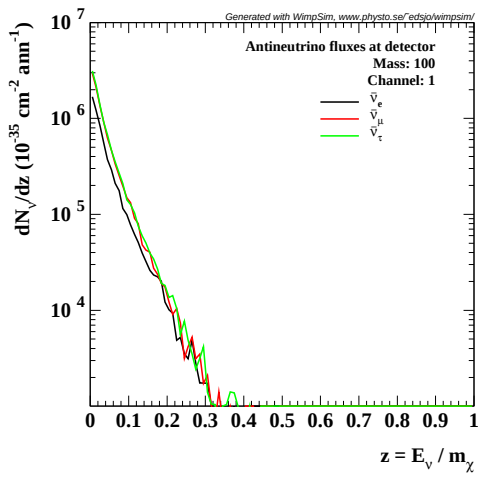


8 Mass 100

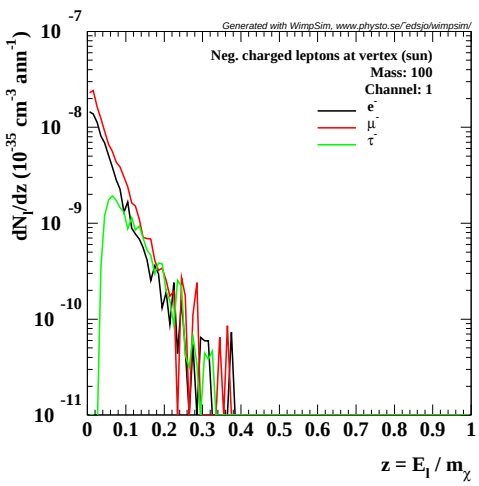
8.1 Channel 1 – $d\bar{d}$

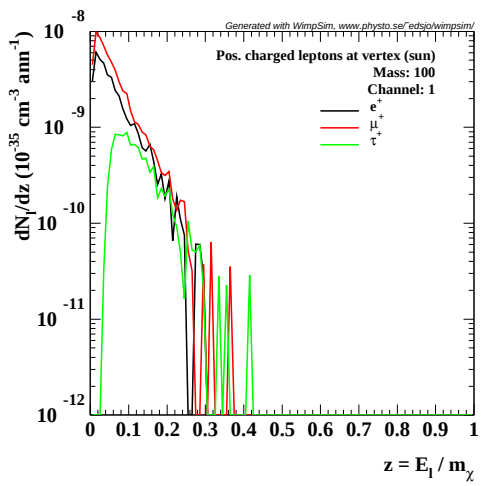
8.1.1 Neutrino fluxes at detector (Sun)



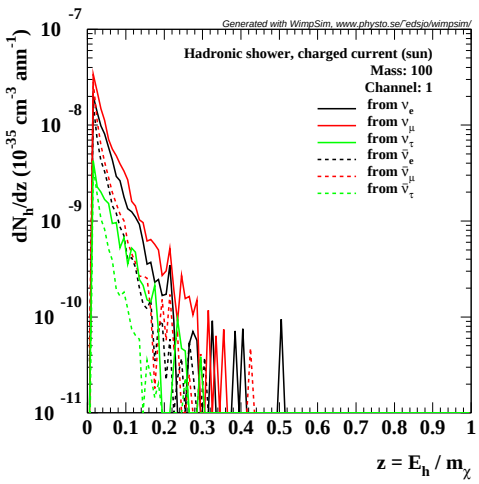


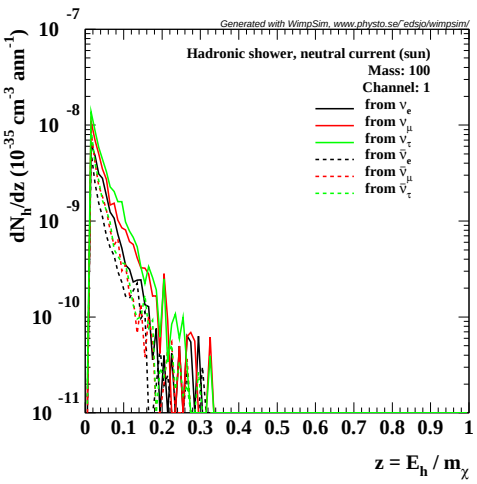
8.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



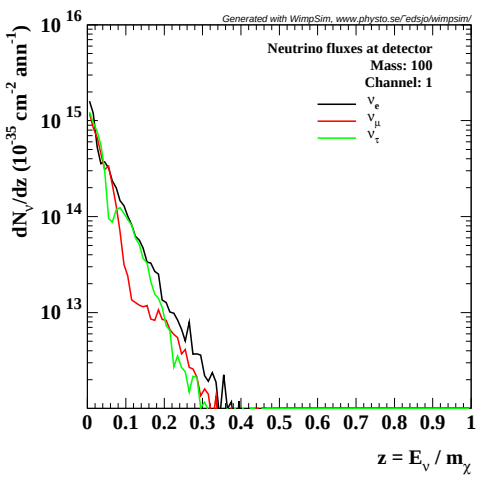


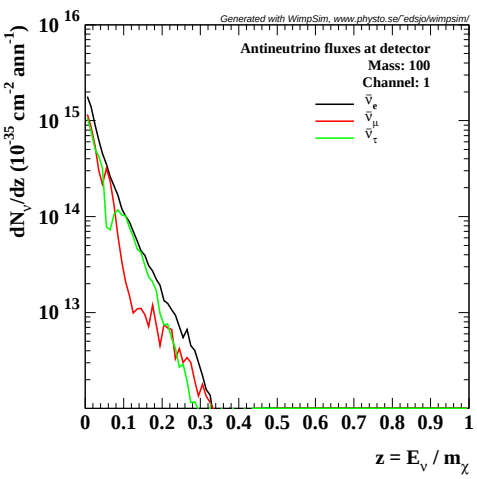
8.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



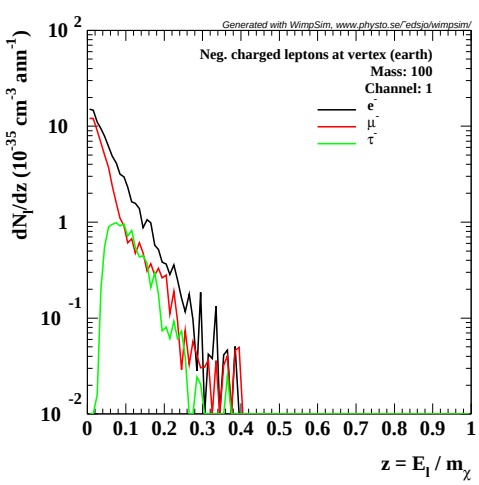


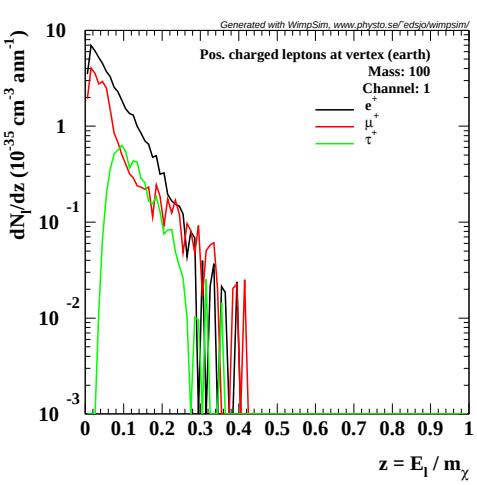
8.1.4 Neutrino fluxes at detector (Earth)



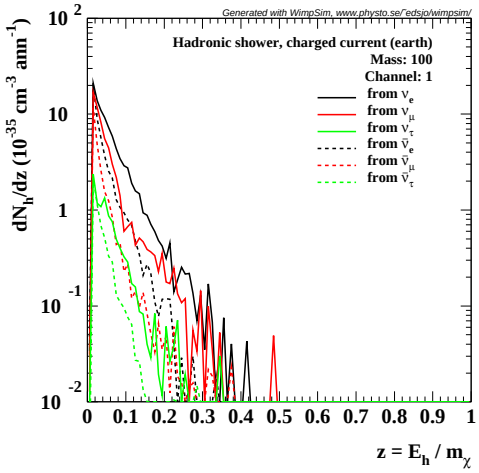


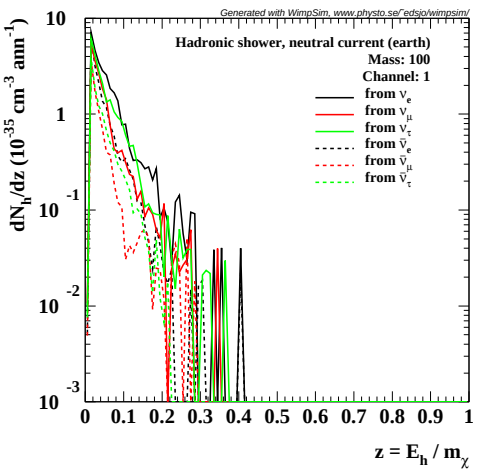
8.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



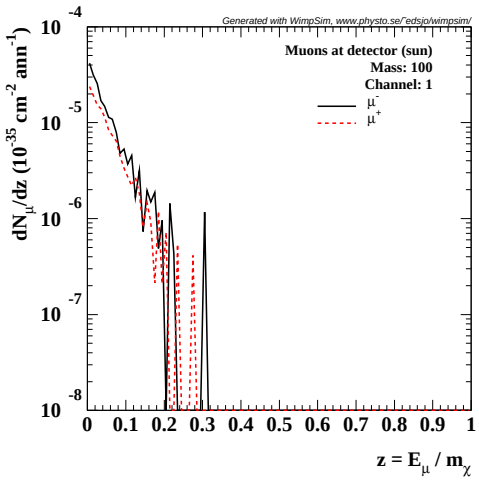


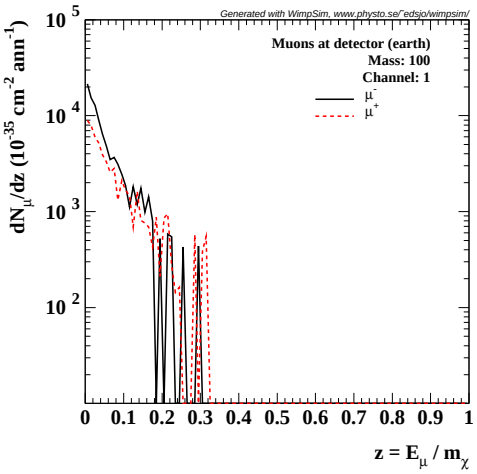
8.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





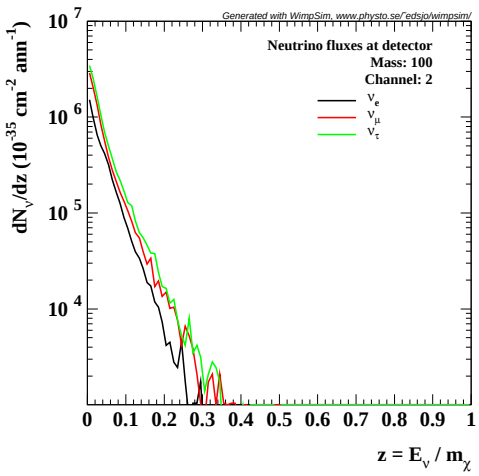
8.1.7 Muons at detector (Sun/Earth)

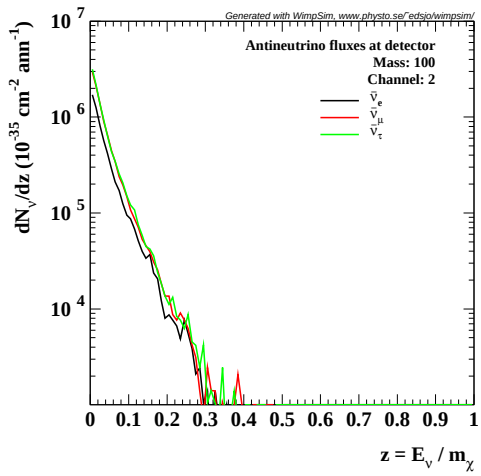




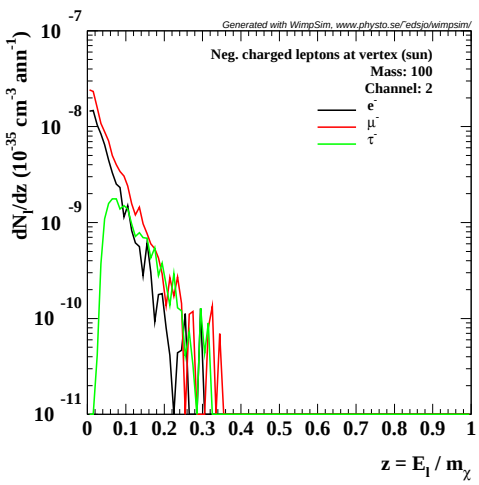
8.2 Channel 2 – $u\bar{u}$

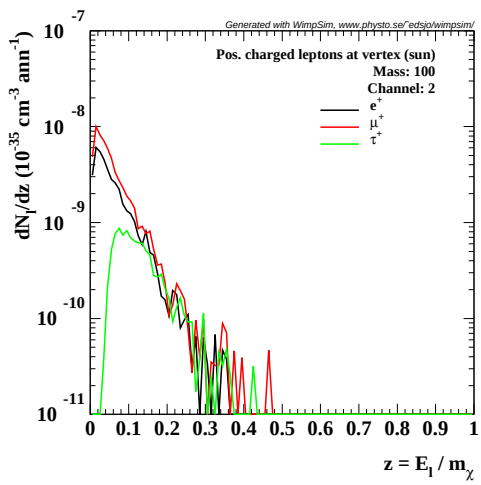
8.2.1 Neutrino fluxes at detector (Sun)



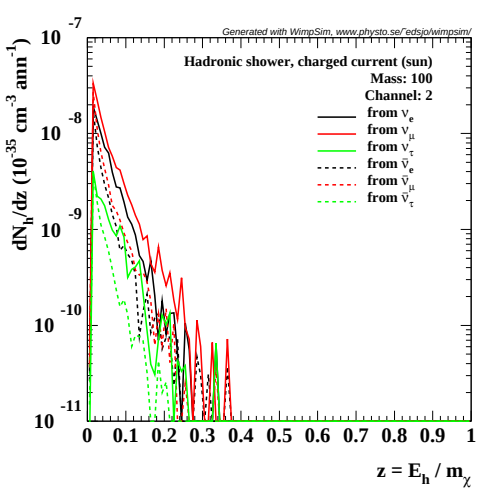


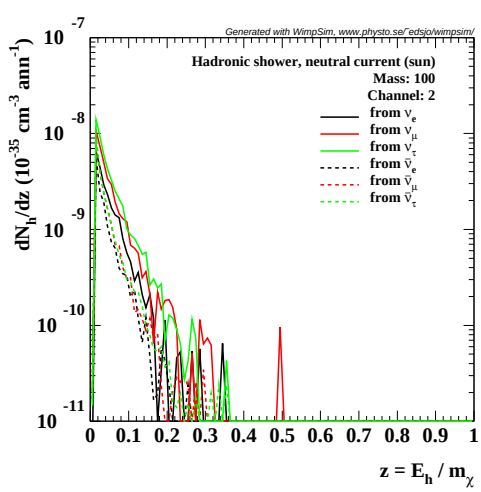
8.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



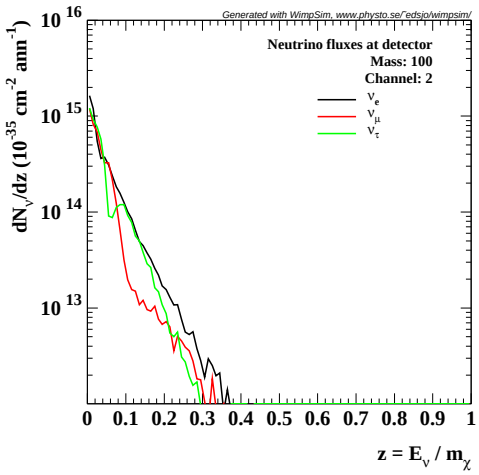


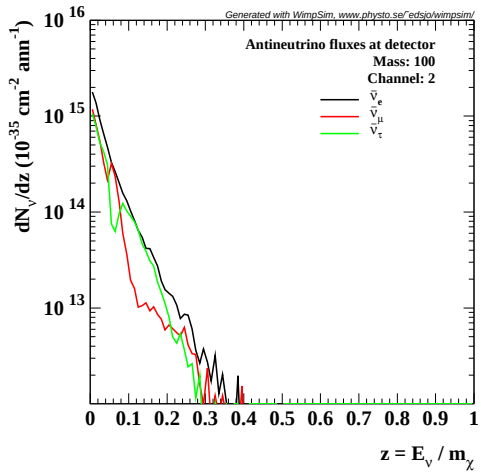
8.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



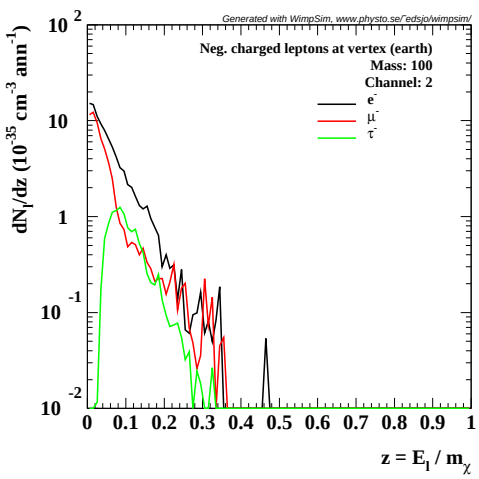


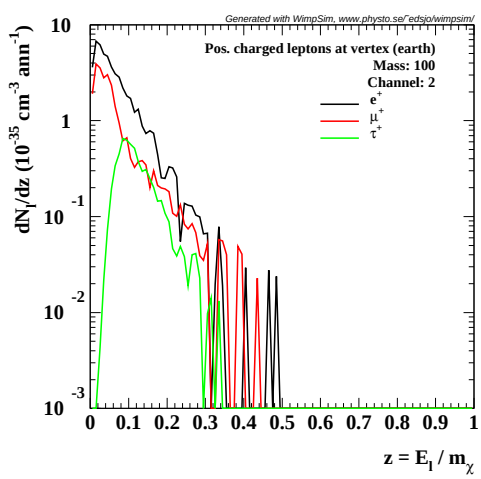
8.2.4 Neutrino fluxes at detector (Earth)



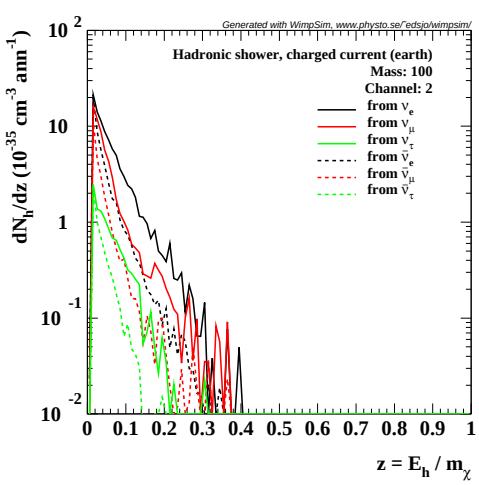


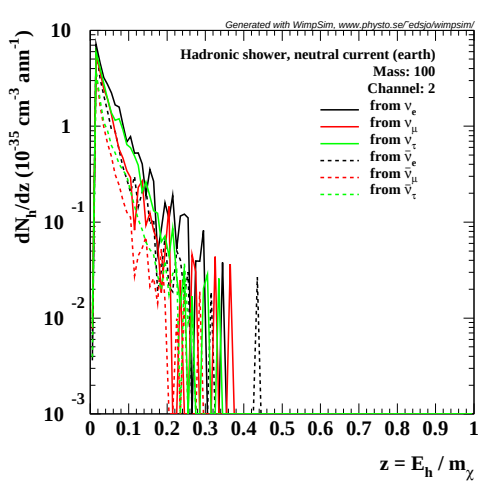
8.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



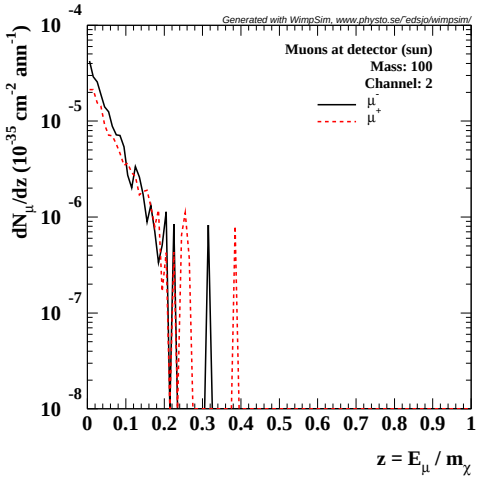


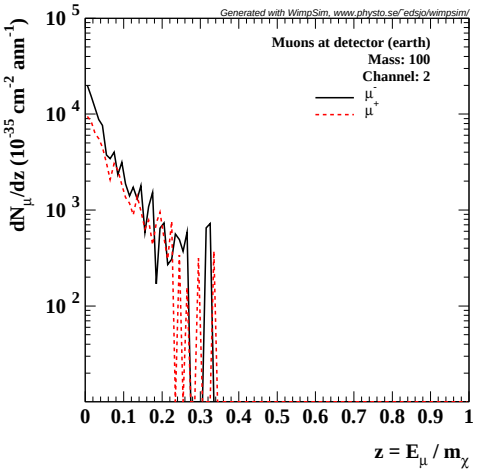
8.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





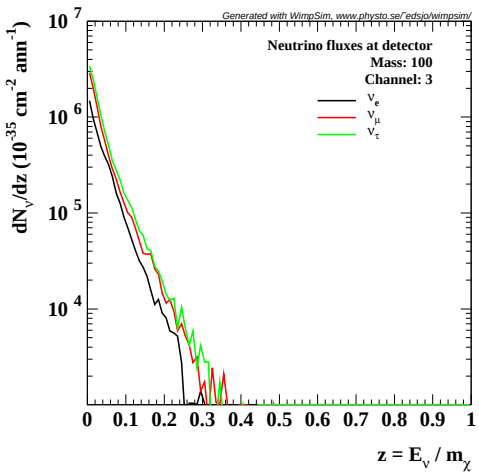
8.2.7 Muons at detector (Sun/Earth)

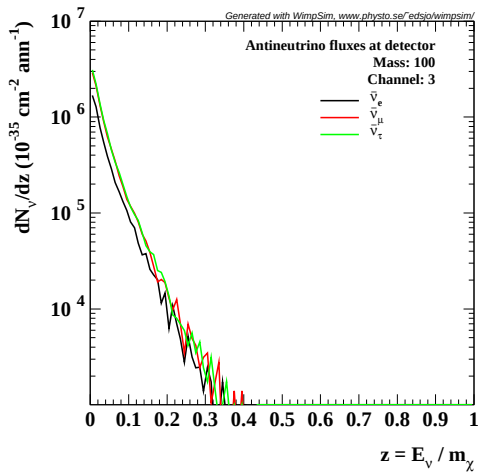




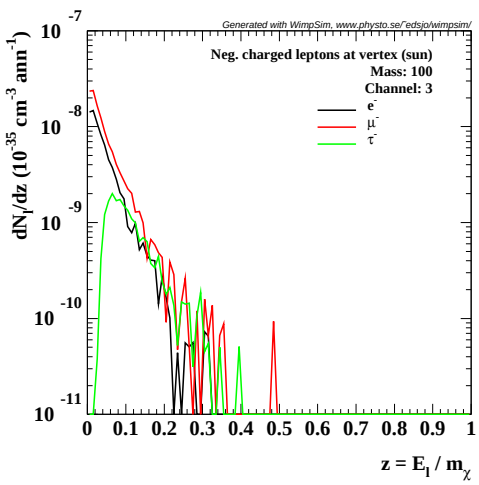
8.3 Channel 3 – $s\bar{s}$

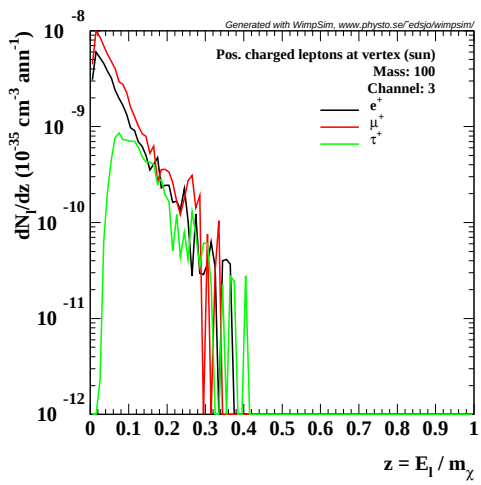
8.3.1 Neutrino fluxes at detector (Sun)



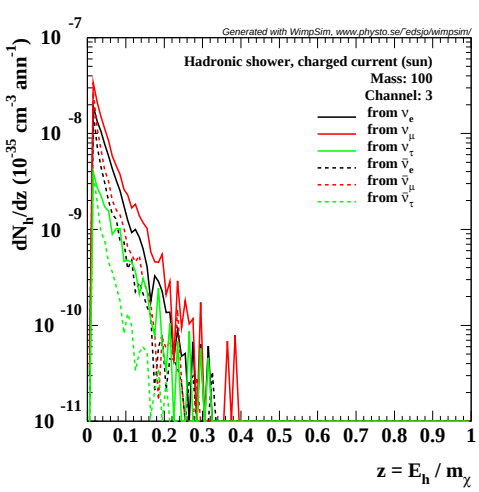


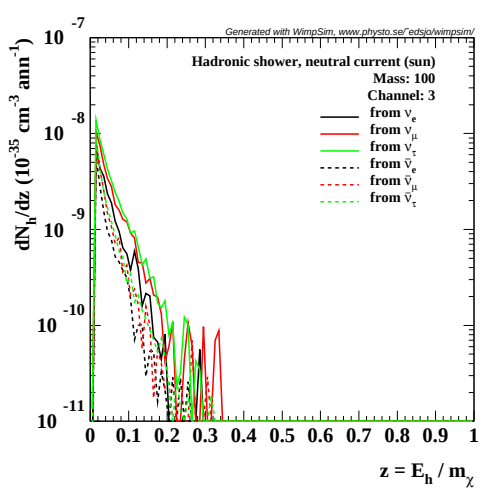
8.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



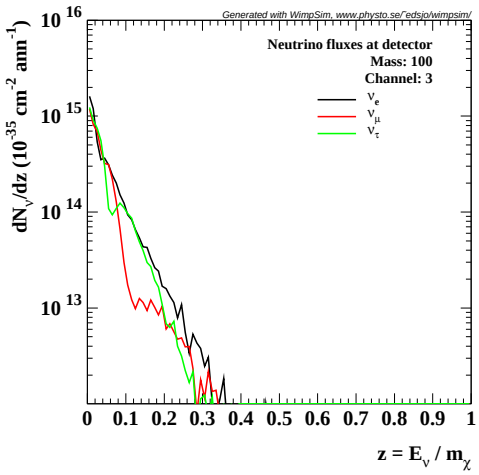


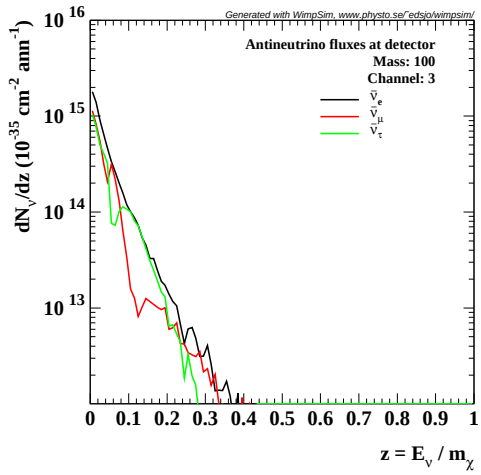
8.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



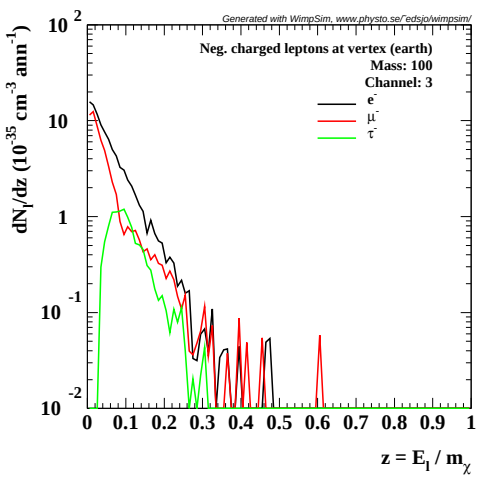


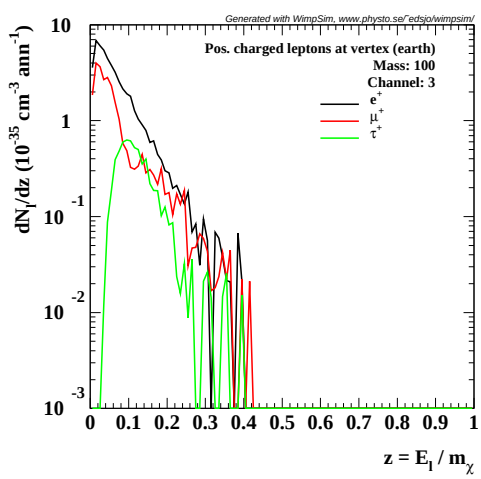
8.3.4 Neutrino fluxes at detector (Earth)



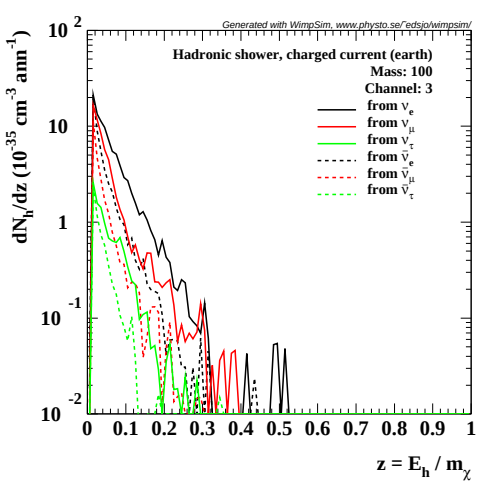


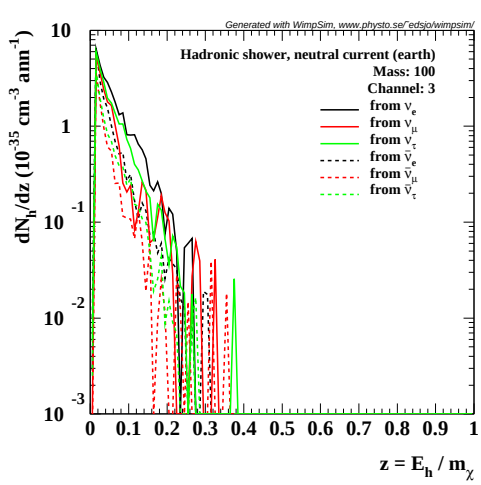
8.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



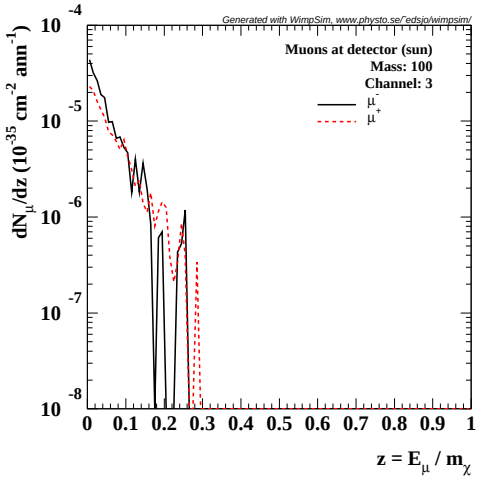


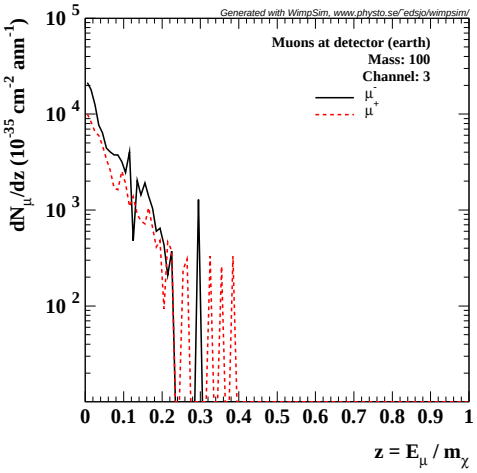
8.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





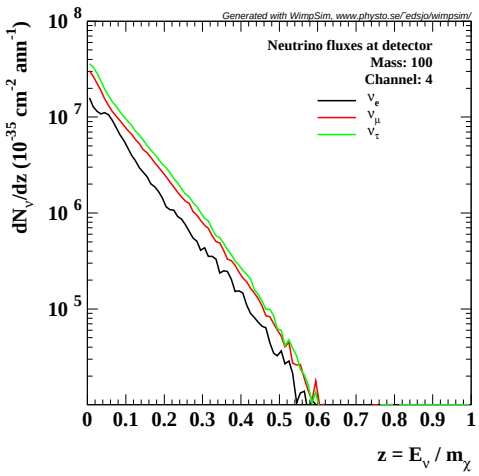
8.3.7 Muons at detector (Sun/Earth)

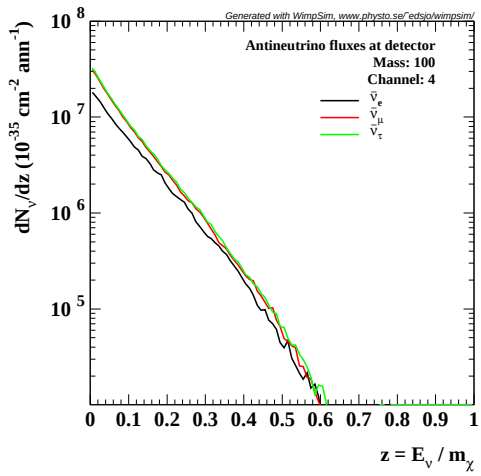




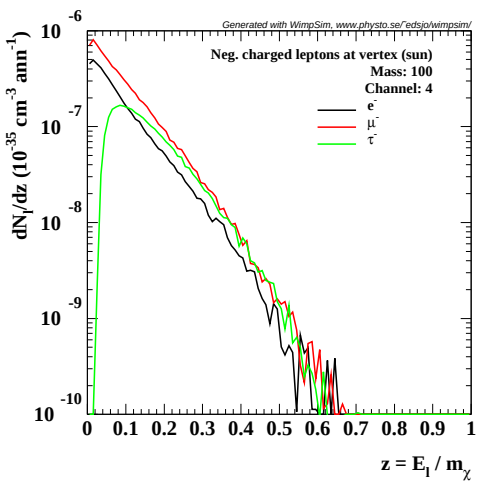
8.4 Channel 4 – $c\bar{c}$

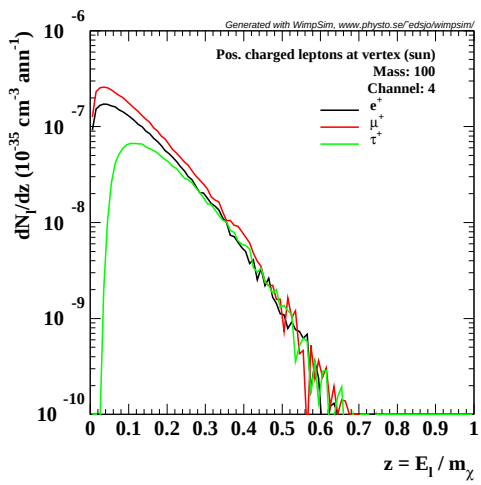
8.4.1 Neutrino fluxes at detector (Sun)



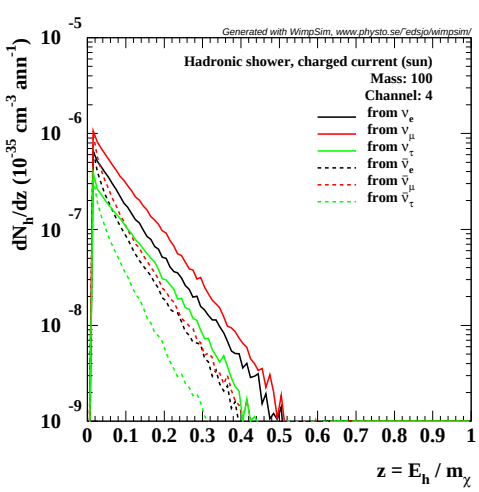


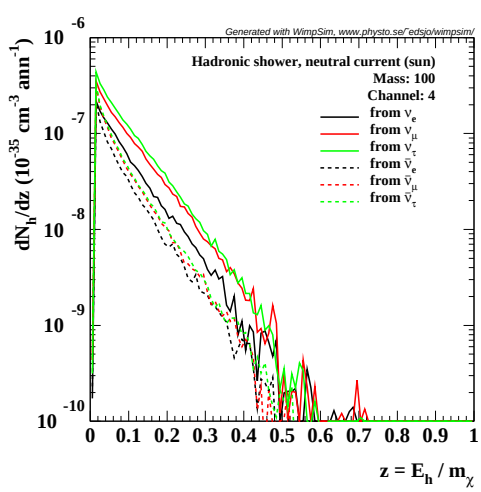
8.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



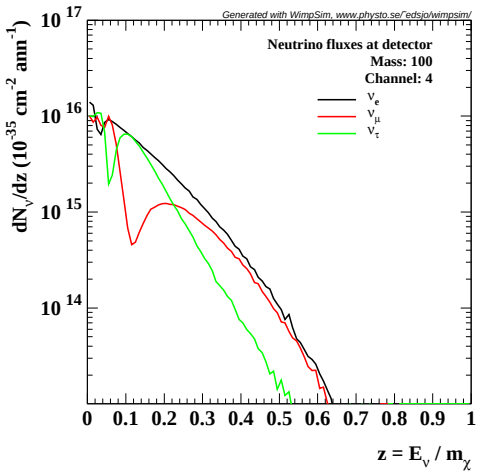


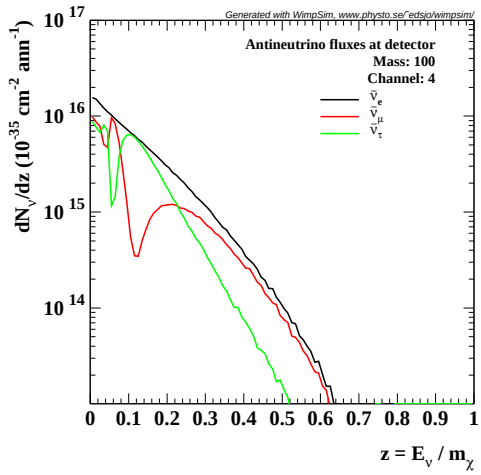
8.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



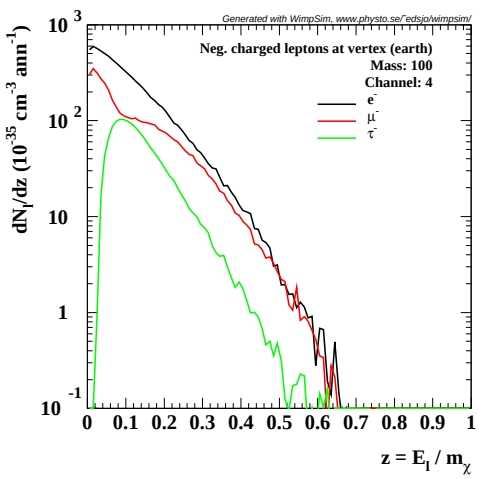


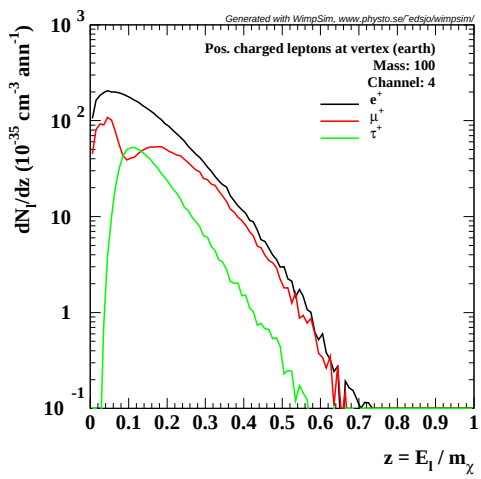
8.4.4 Neutrino fluxes at detector (Earth)



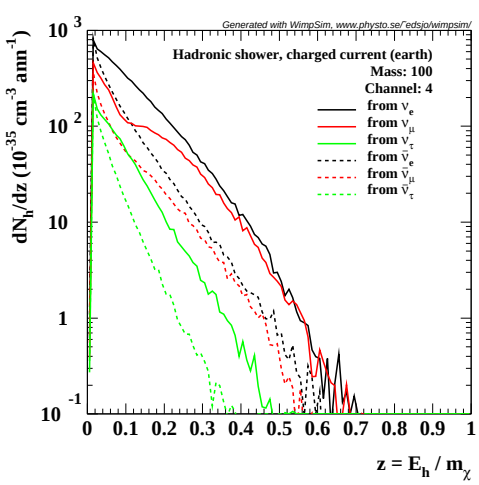


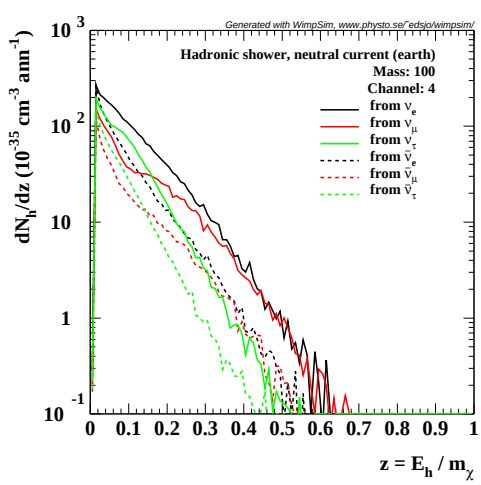
8.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



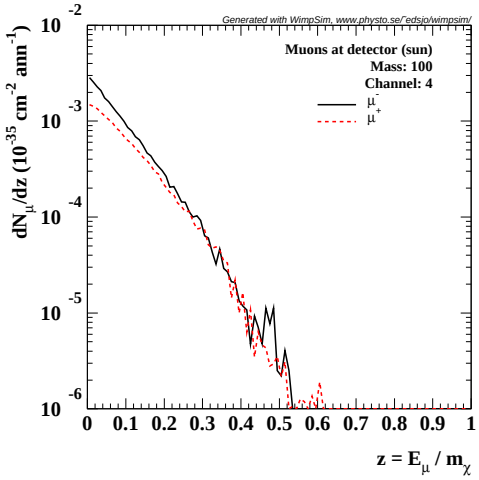


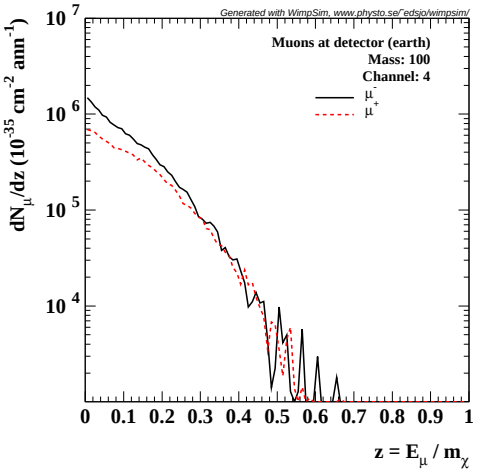
8.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





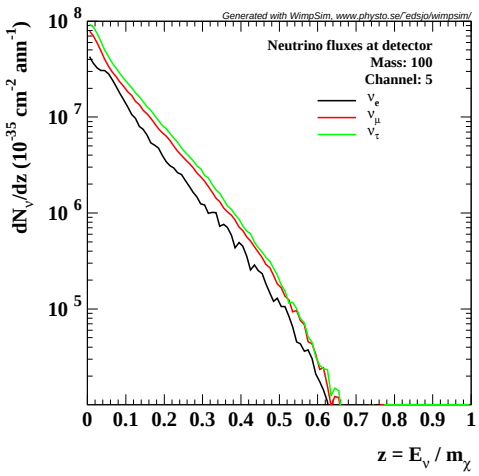
8.4.7 Muons at detector (Sun/Earth)

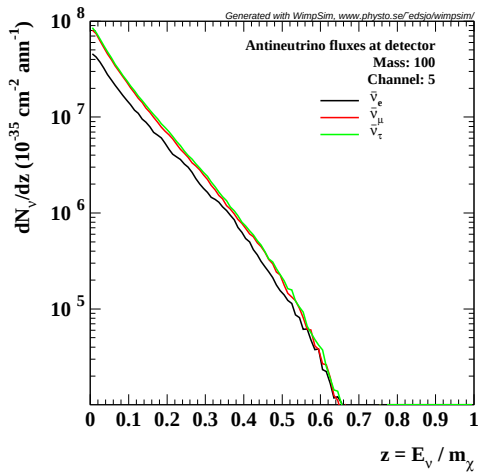




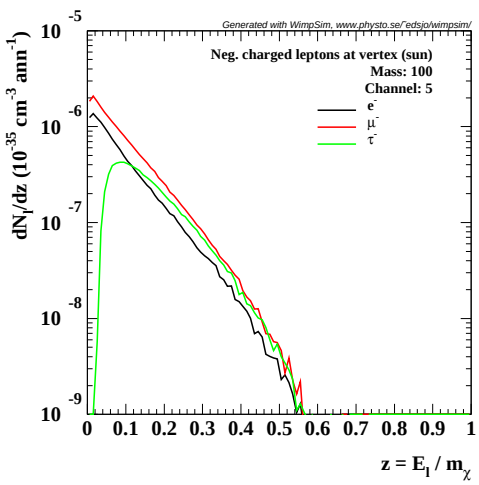
8.5 Channel 5 – $b\bar{b}$

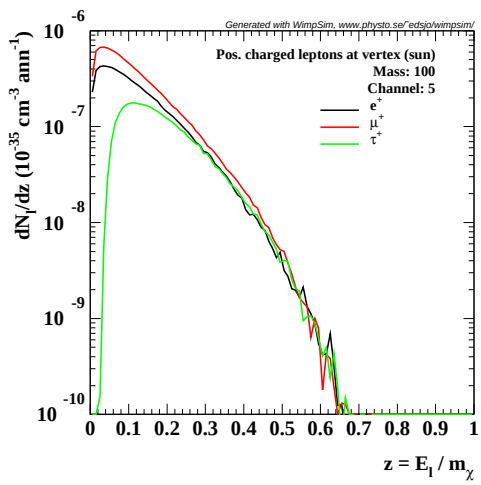
8.5.1 Neutrino fluxes at detector (Sun)



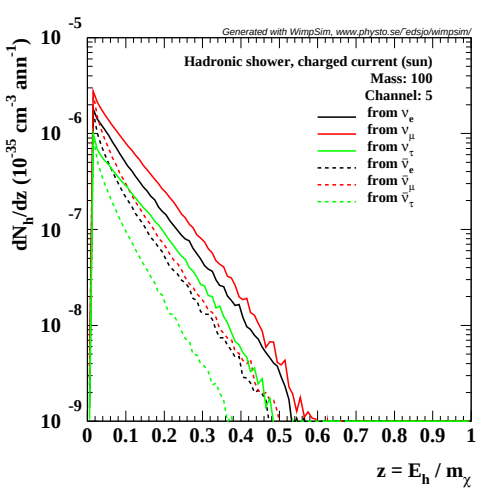


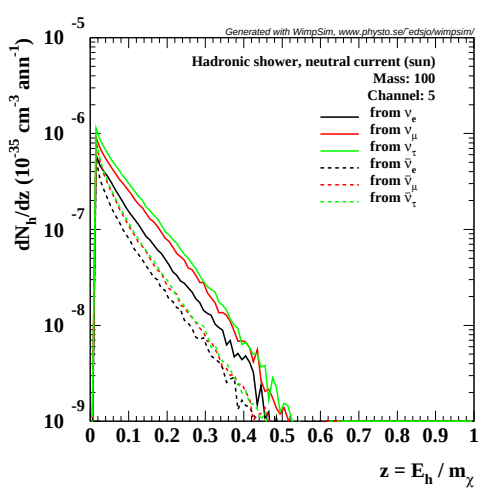
8.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



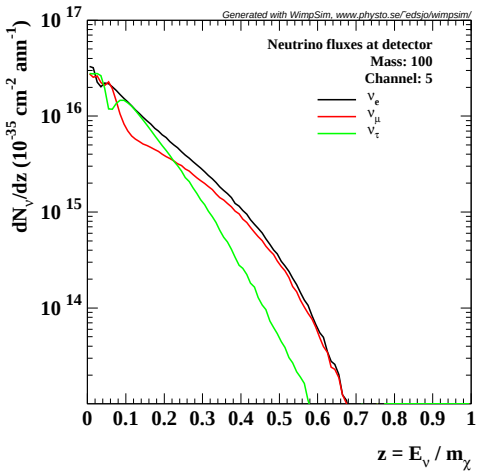


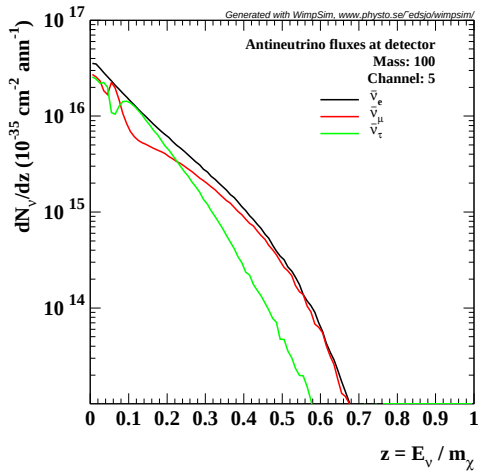
8.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



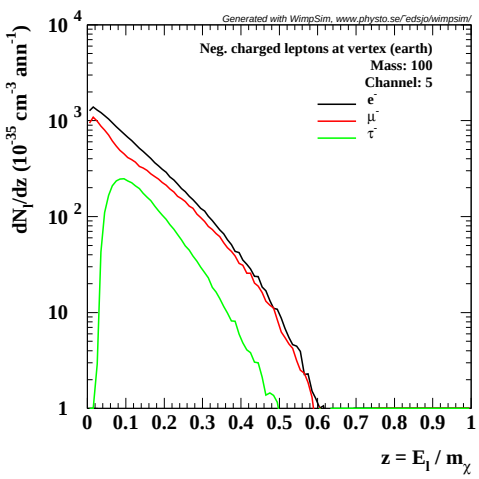


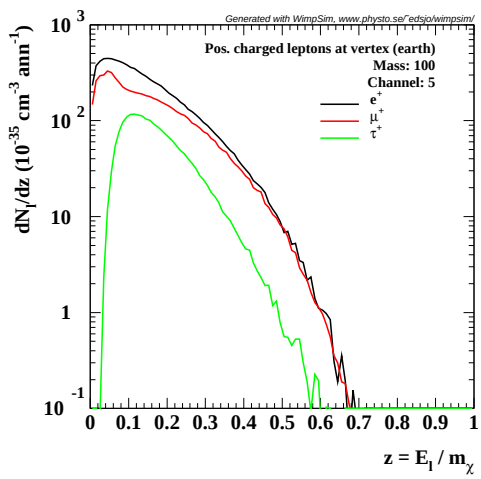
8.5.4 Neutrino fluxes at detector (Earth)



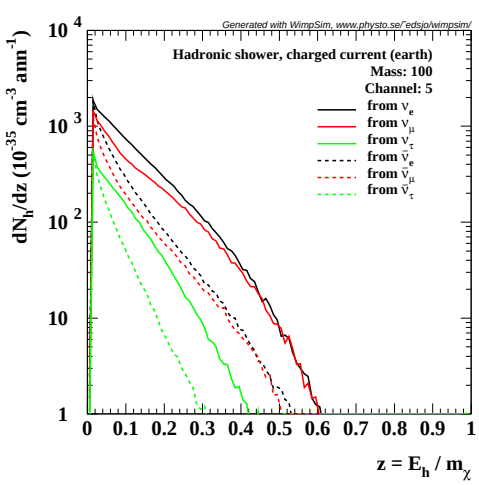


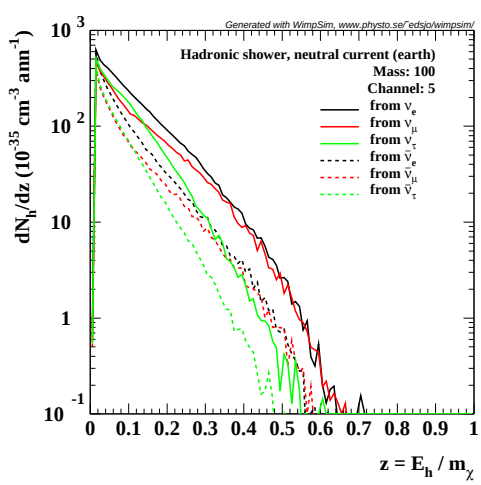
8.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



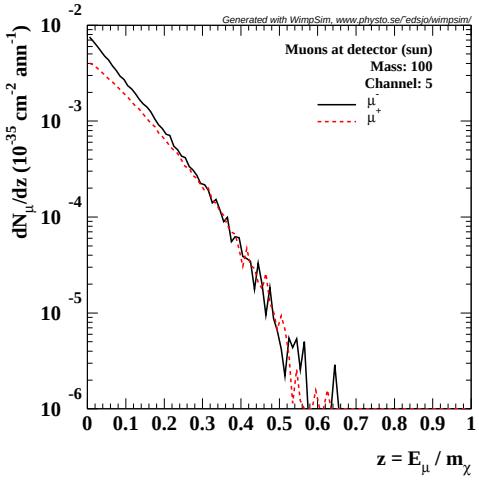


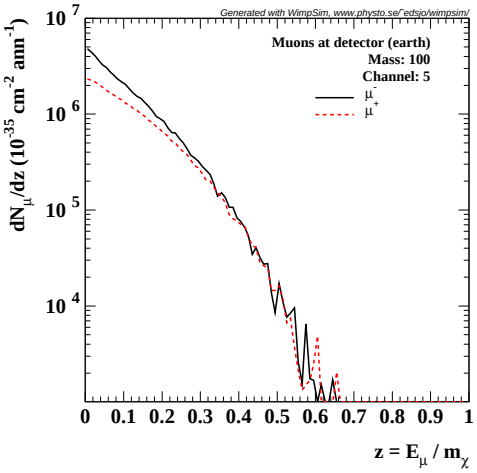
8.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





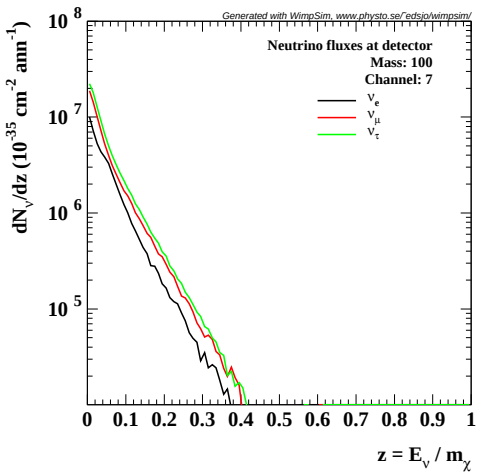
8.5.7 Muons at detector (Sun/Earth)

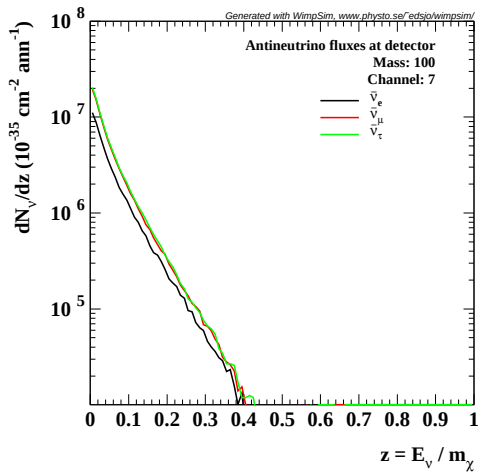




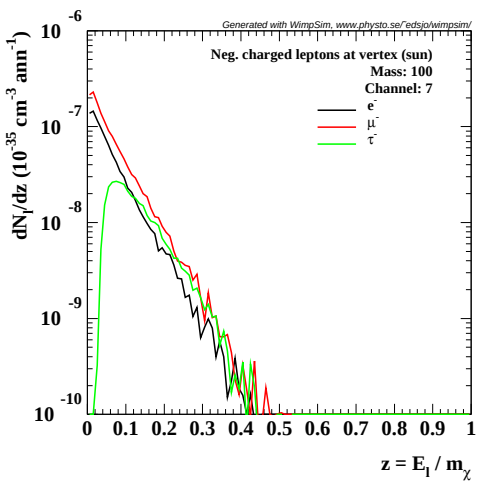
8.6 Channel 7 – gg

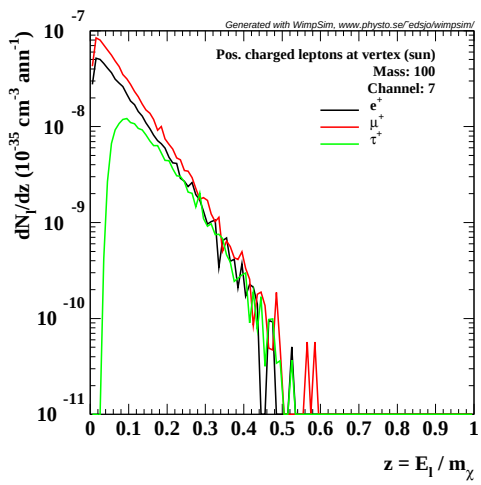
8.6.1 Neutrino fluxes at detector (Sun)



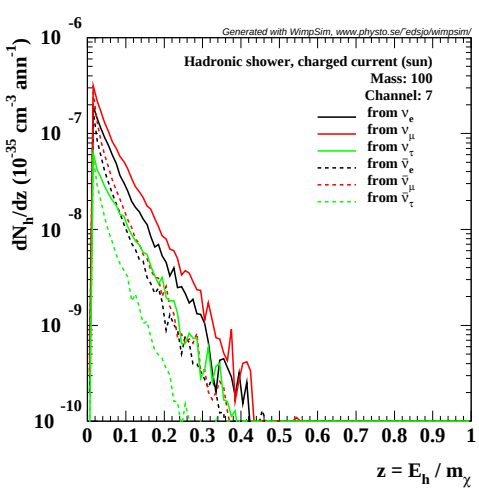


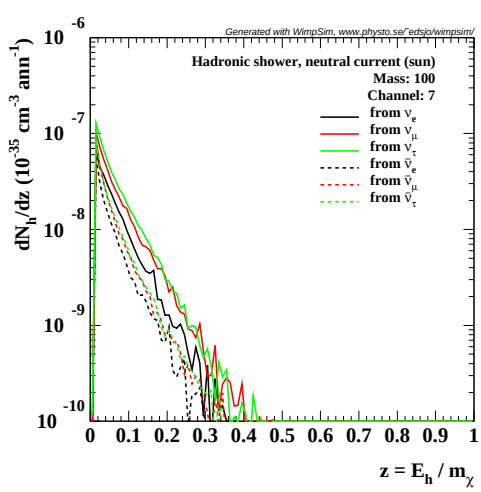
8.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



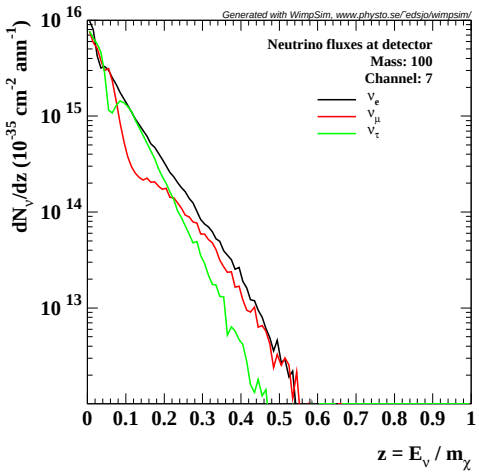


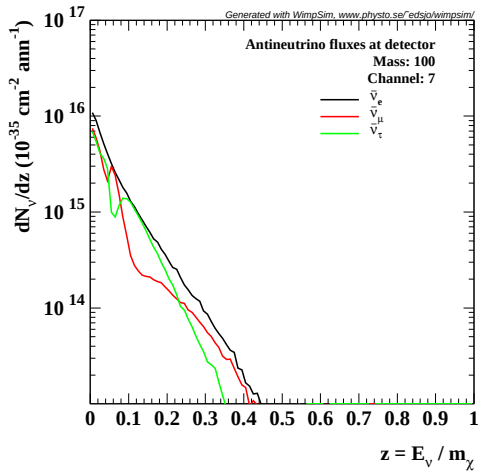
8.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



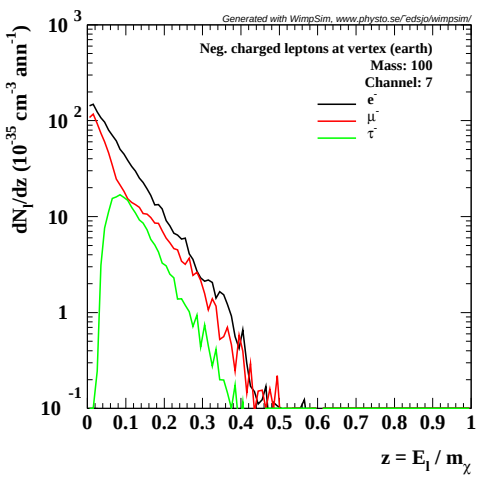


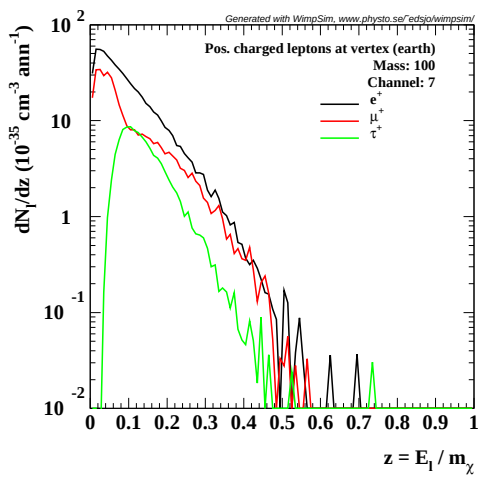
8.6.4 Neutrino fluxes at detector (Earth)



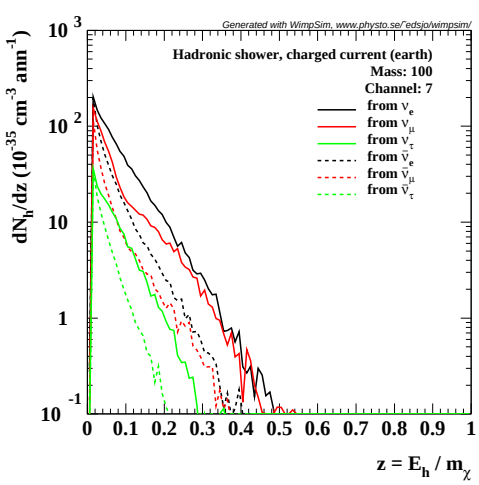


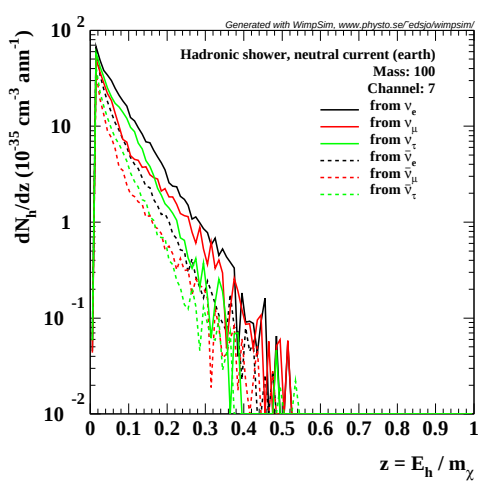
8.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



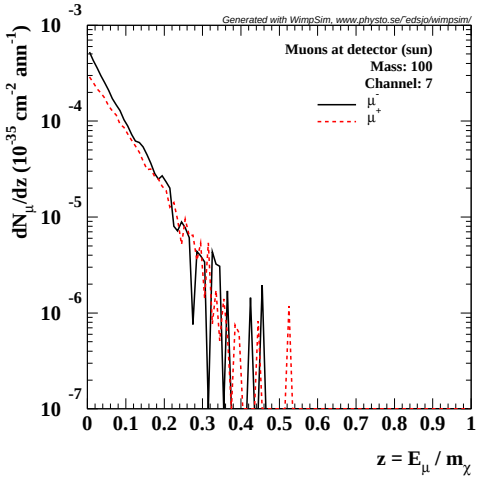


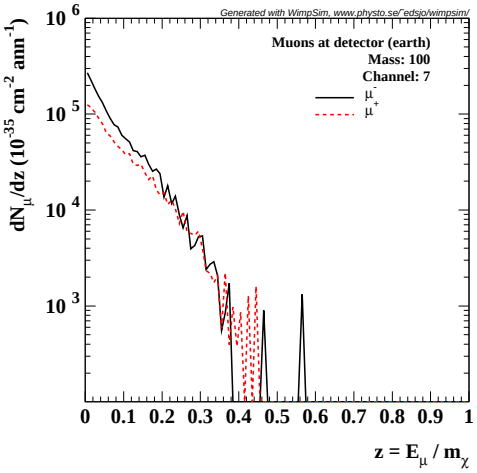
8.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





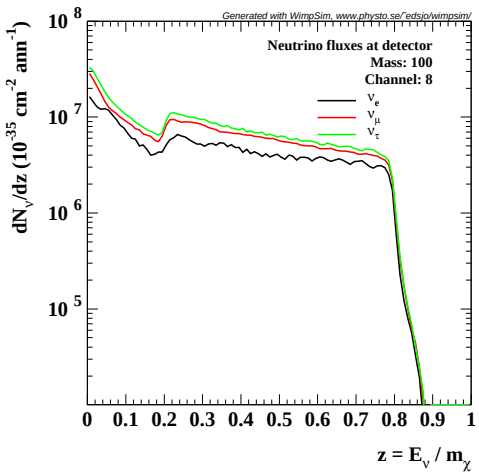
8.6.7 Muons at detector (Sun/Earth)

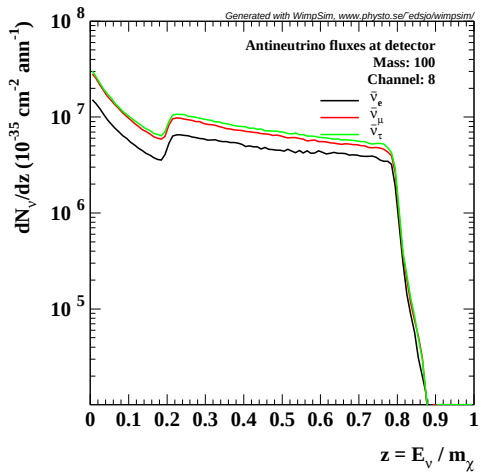




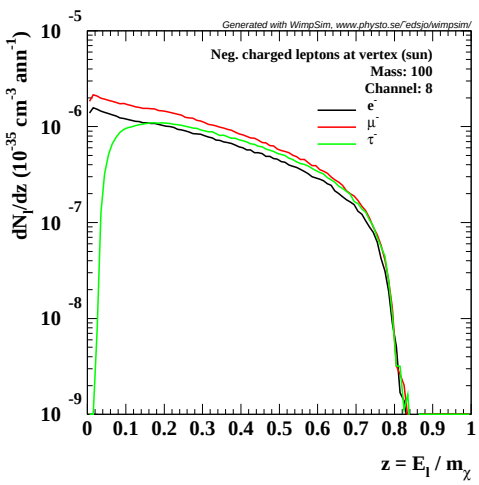
8.7 Channel 8 – W^-W^+

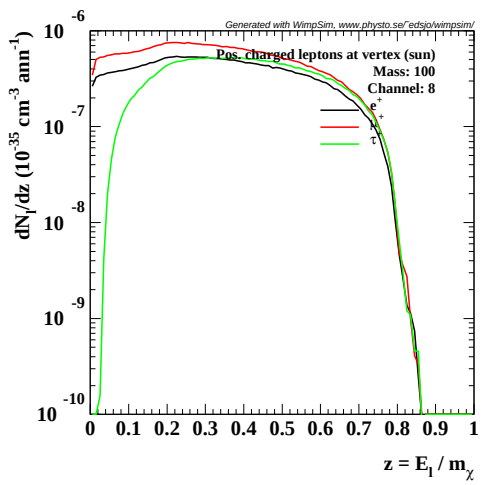
8.7.1 Neutrino fluxes at detector (Sun)



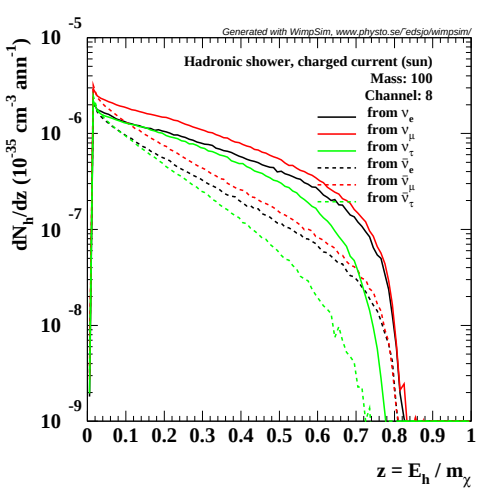


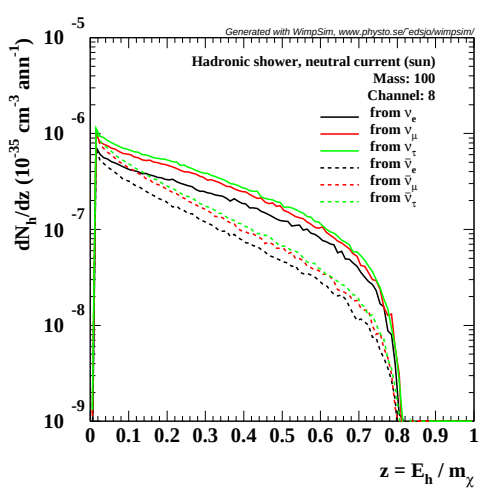
8.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



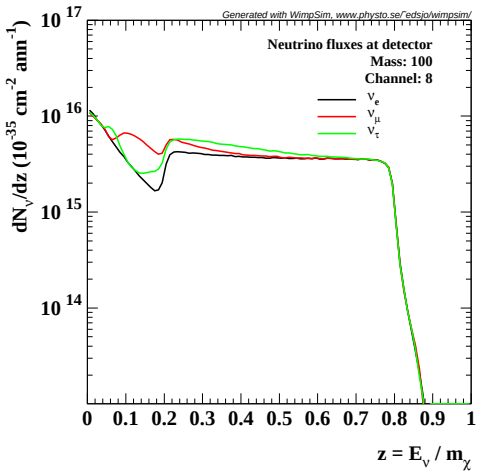


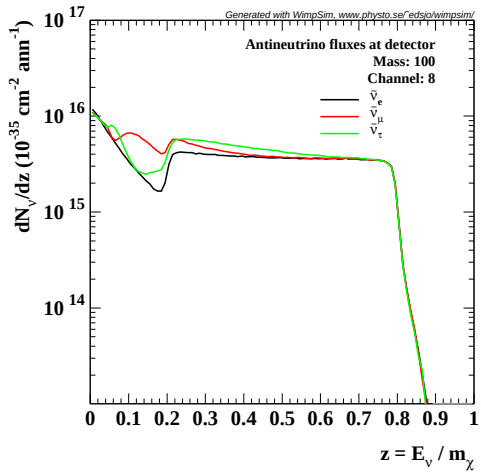
8.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



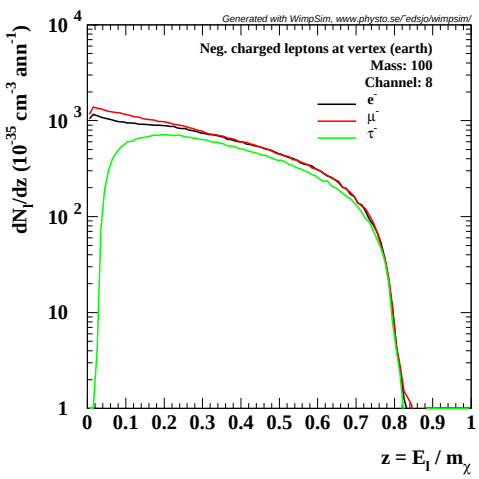


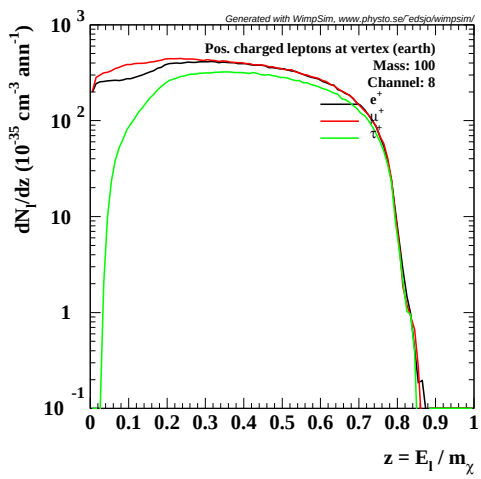
8.7.4 Neutrino fluxes at detector (Earth)



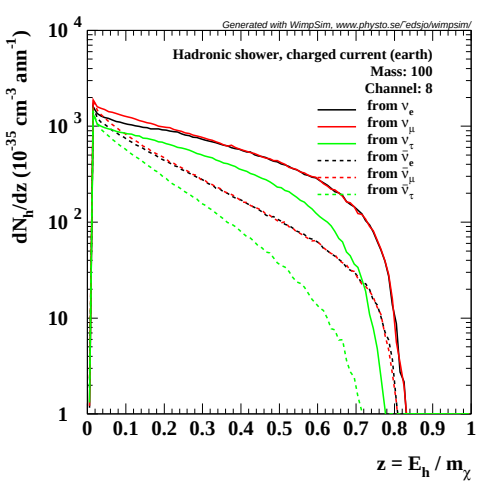


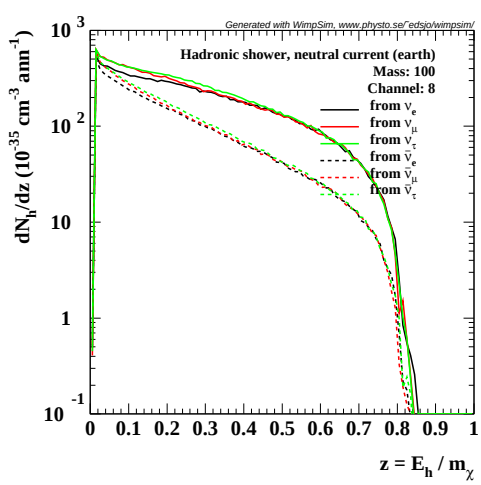
8.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



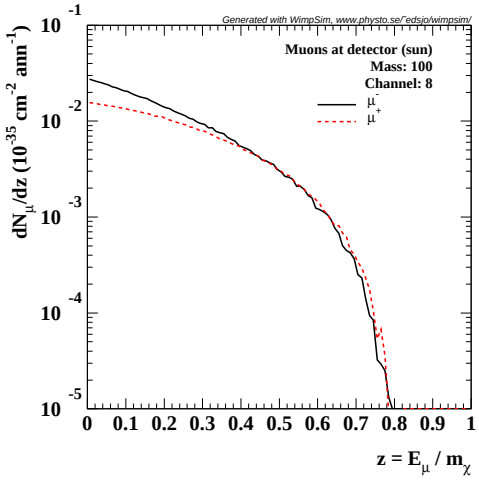


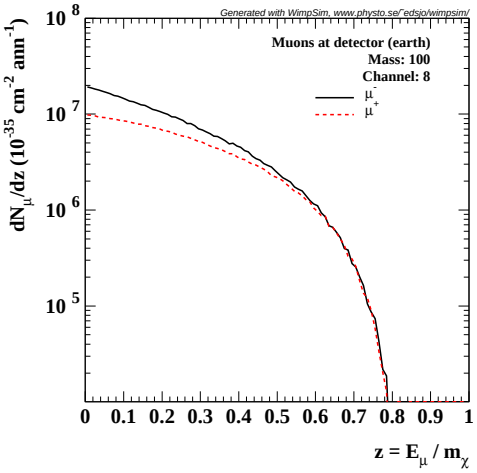
8.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





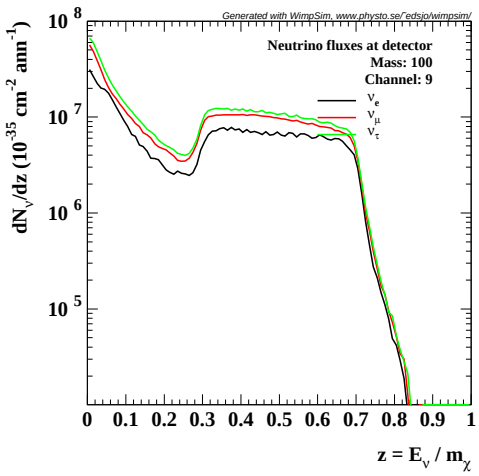
8.7.7 Muons at detector (Sun/Earth)

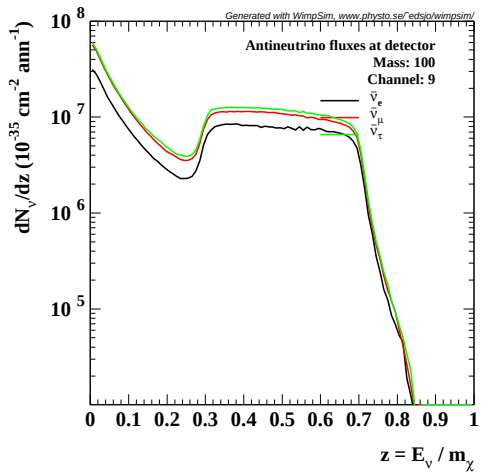




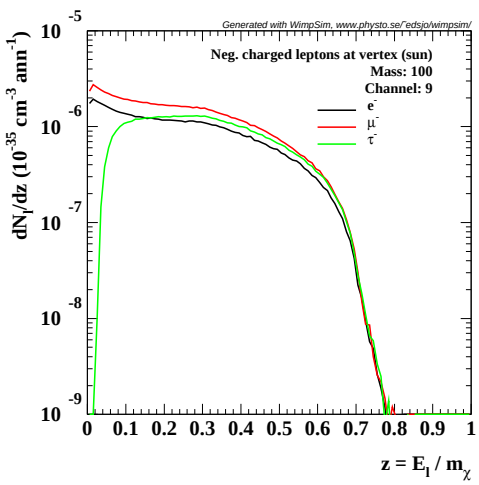
8.8 Channel 9 – Z^0Z^0

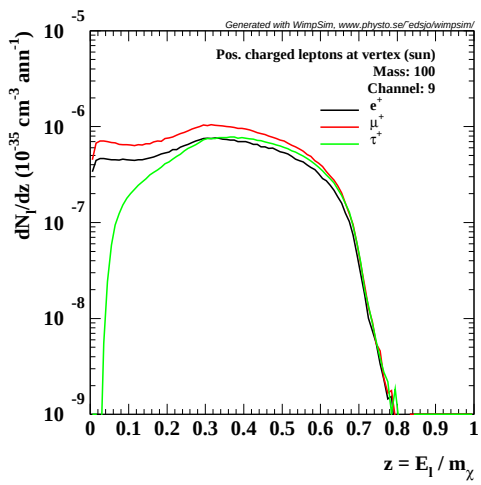
8.8.1 Neutrino fluxes at detector (Sun)



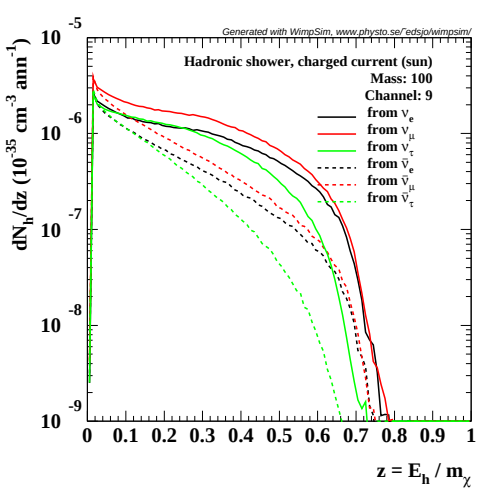


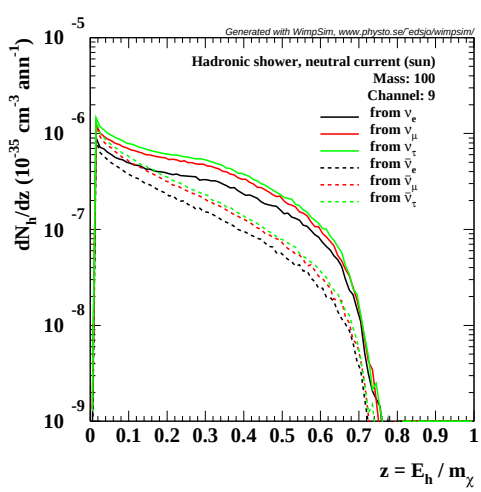
8.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



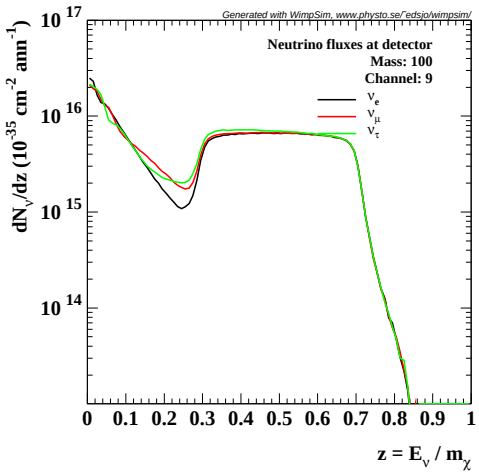


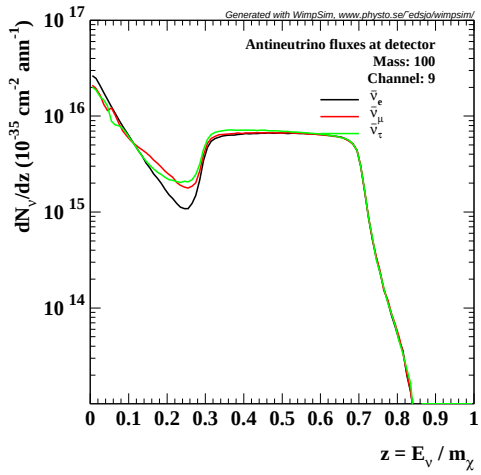
8.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



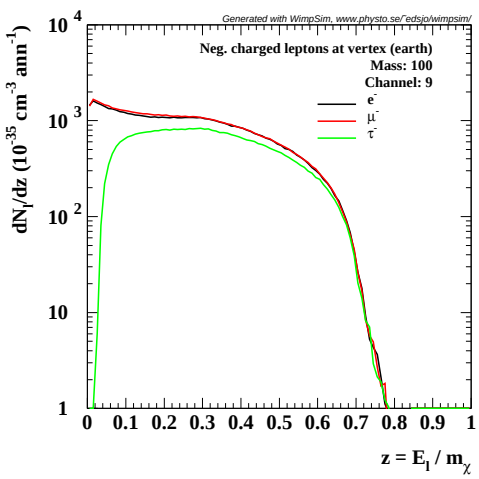


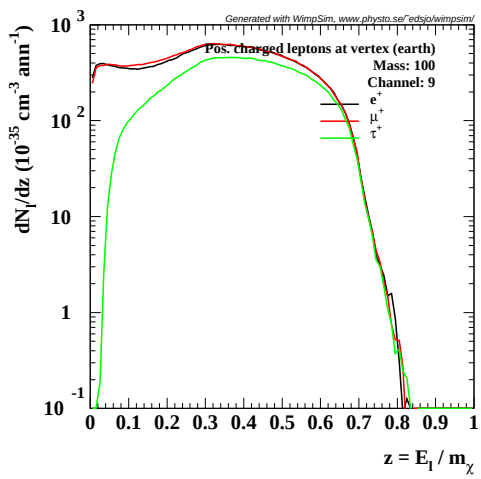
8.8.4 Neutrino fluxes at detector (Earth)



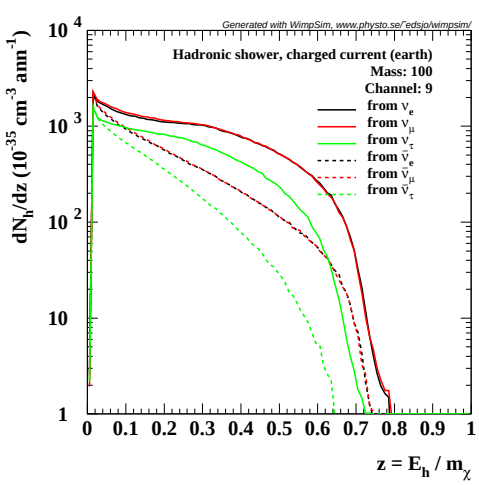


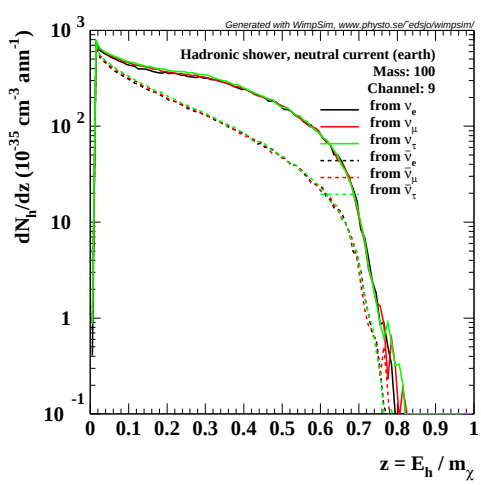
8.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



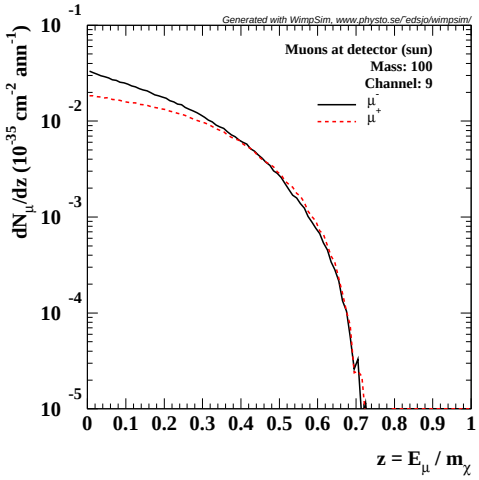


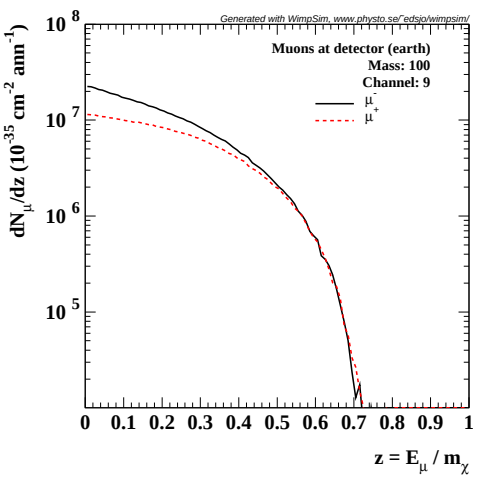
8.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





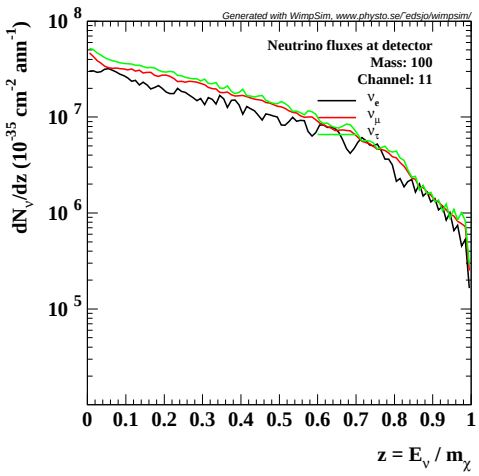
8.8.7 Muons at detector (Sun/Earth)

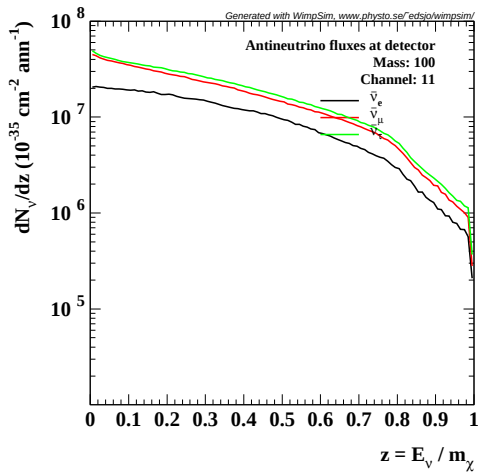




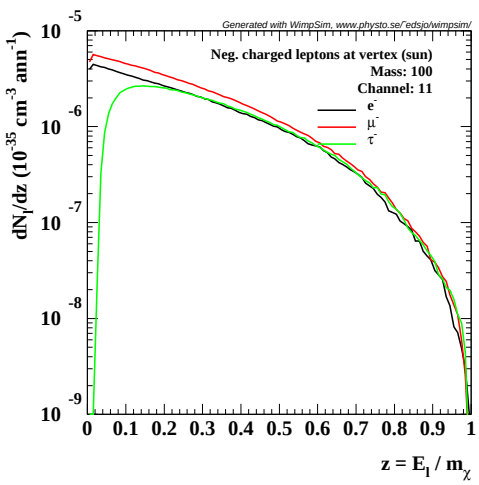
8.9 Channel 11 – $\tau^-\tau^+$

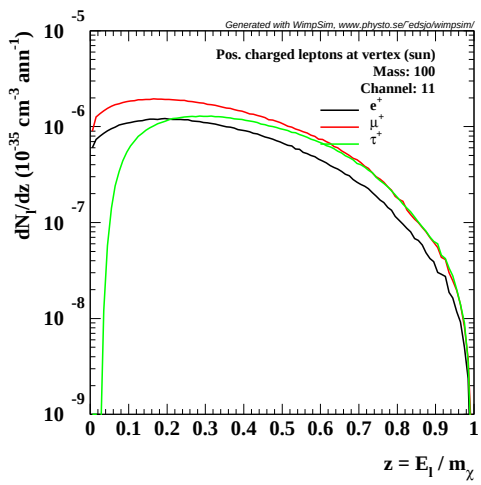
8.9.1 Neutrino fluxes at detector (Sun)



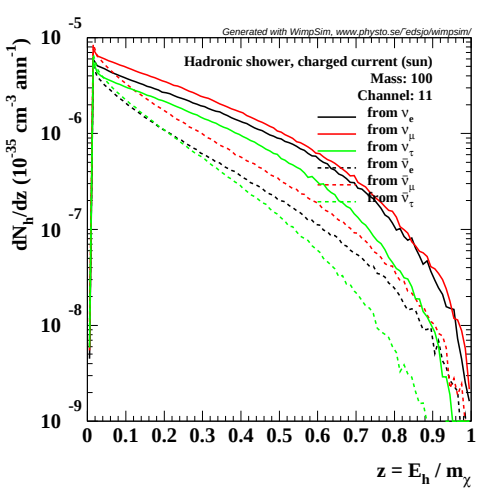


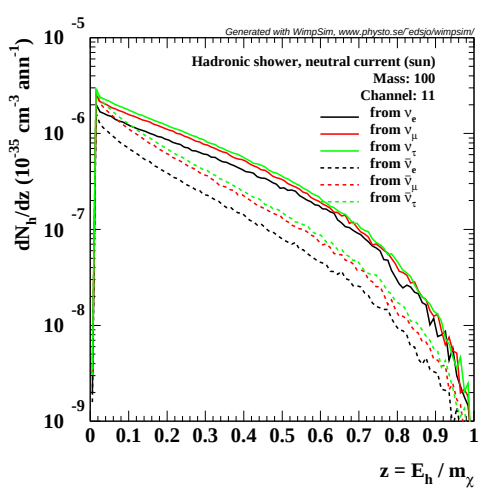
8.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



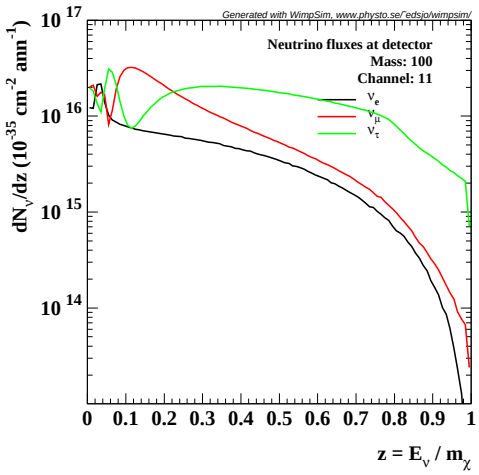


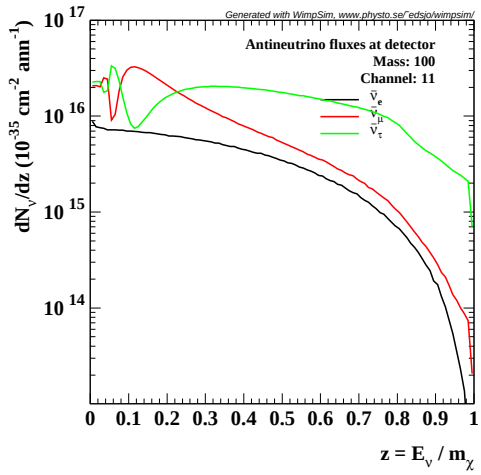
8.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



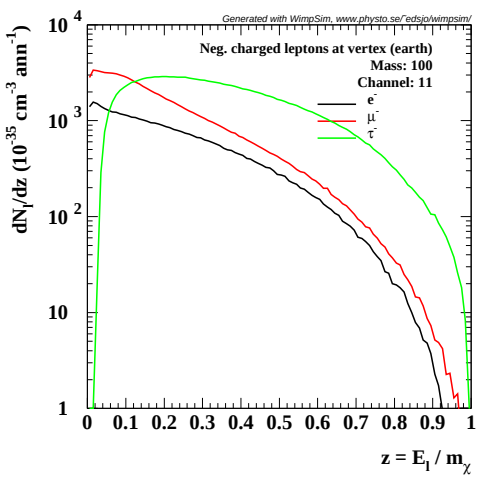


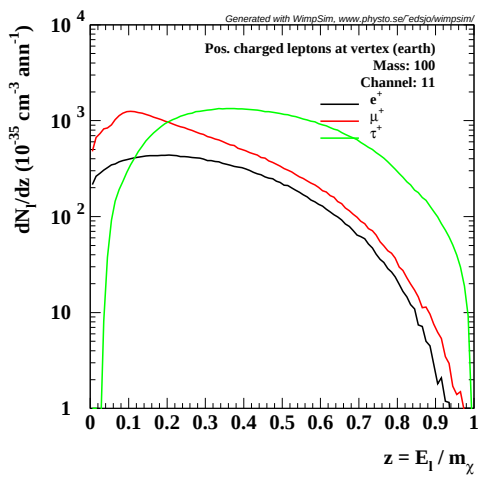
8.9.4 Neutrino fluxes at detector (Earth)



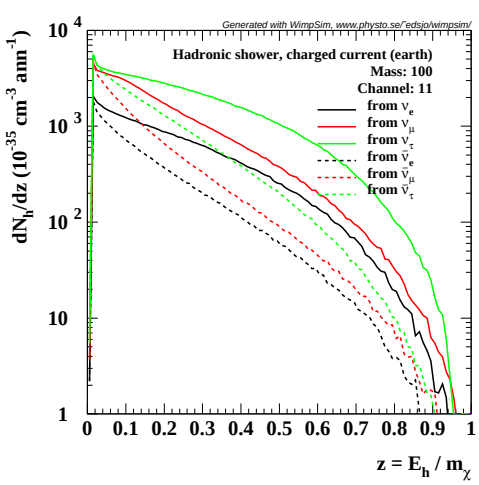


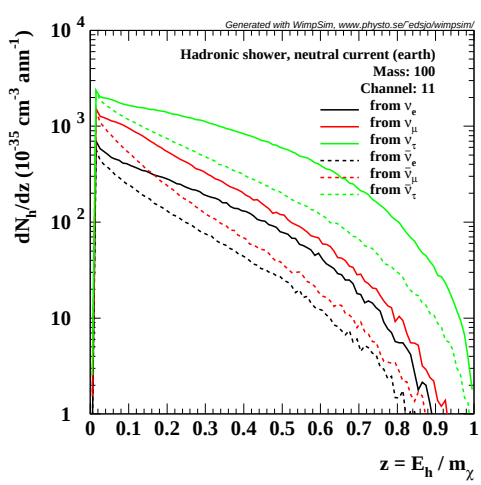
8.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



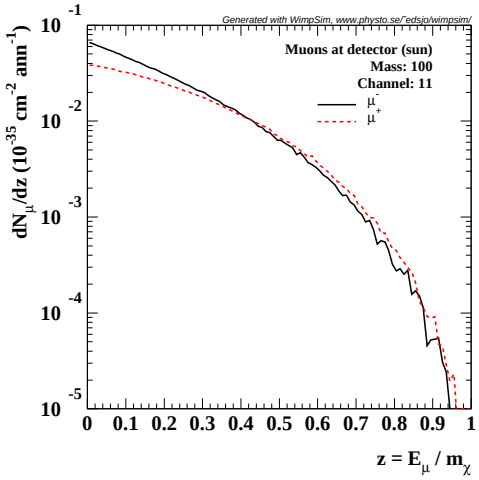


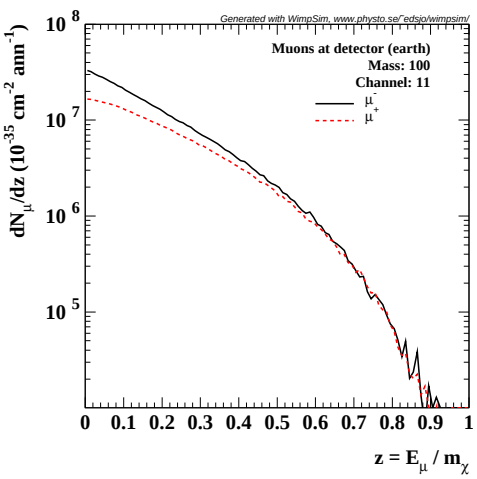
8.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





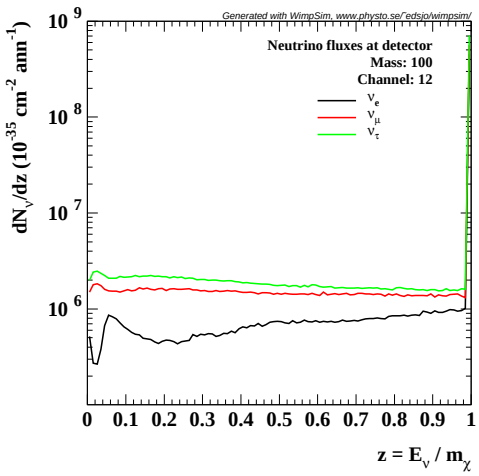
8.9.7 Muons at detector (Sun/Earth)

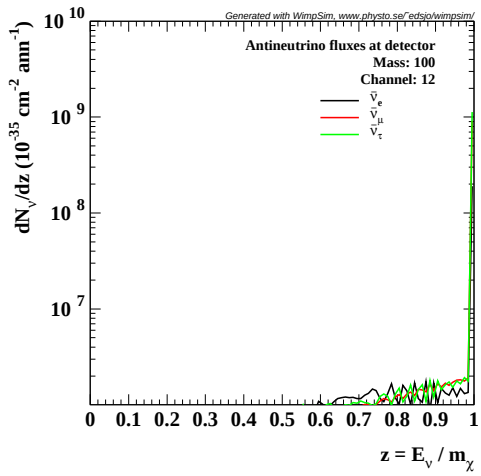




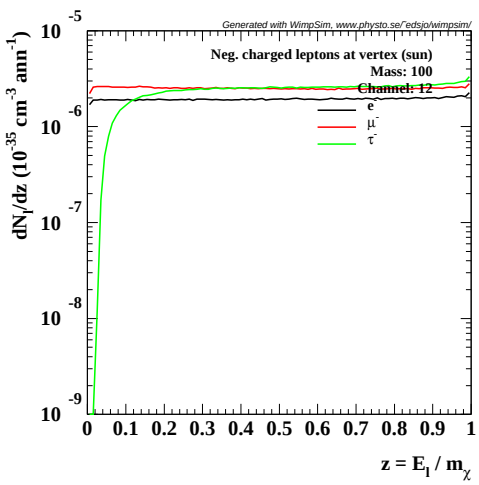
8.10 Channel 12 – $\nu_e\bar{\nu}_e$

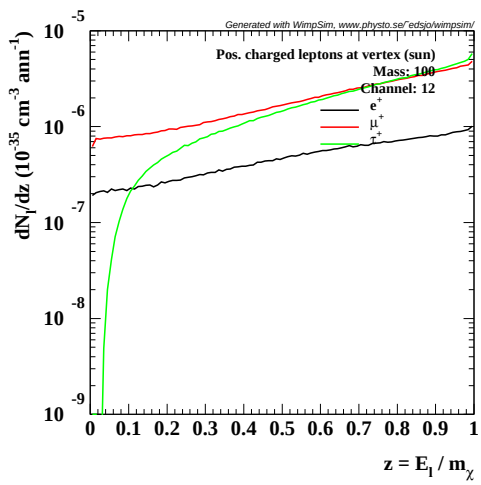
8.10.1 Neutrino fluxes at detector (Sun)



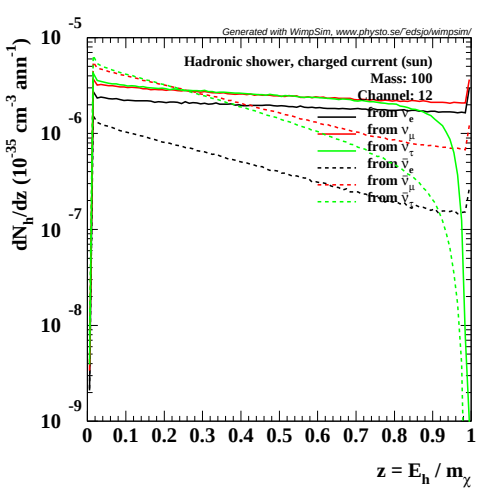


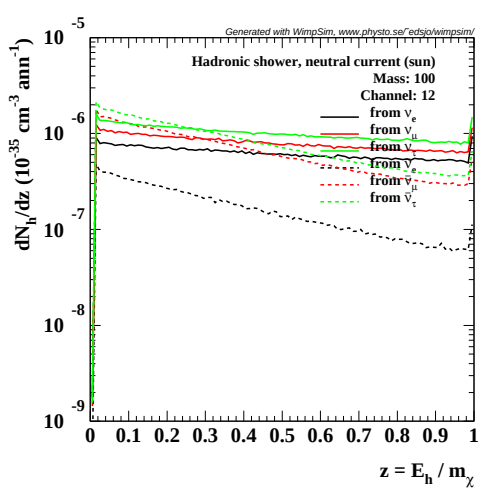
8.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



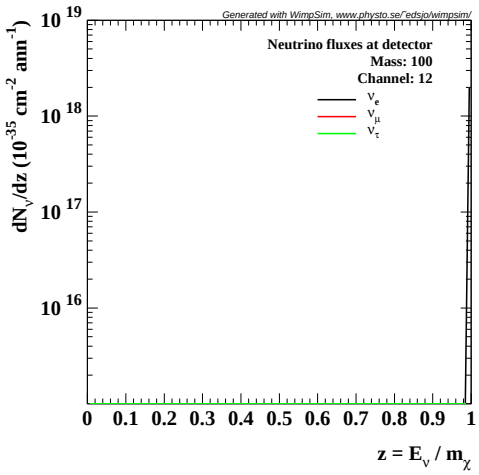


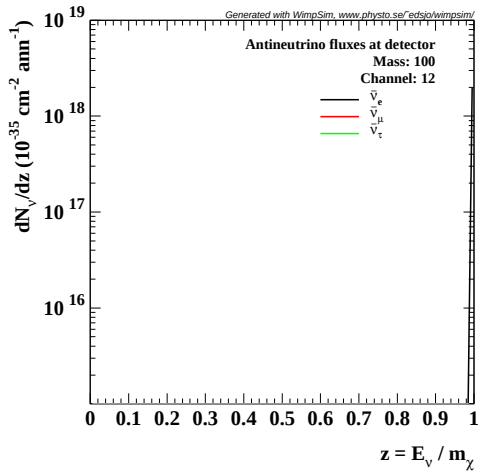
8.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



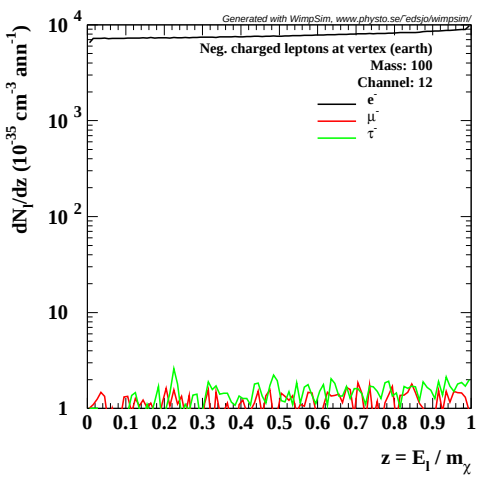


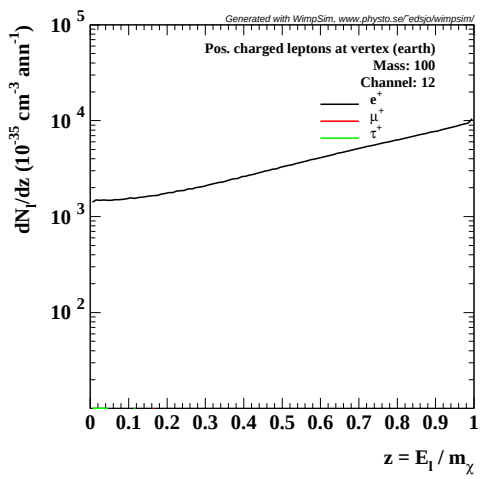
8.10.4 Neutrino fluxes at detector (Earth)



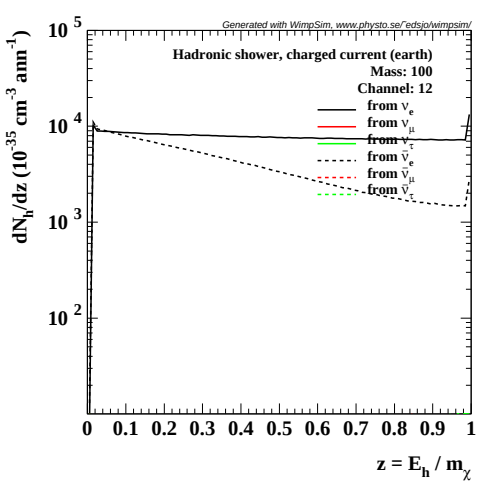


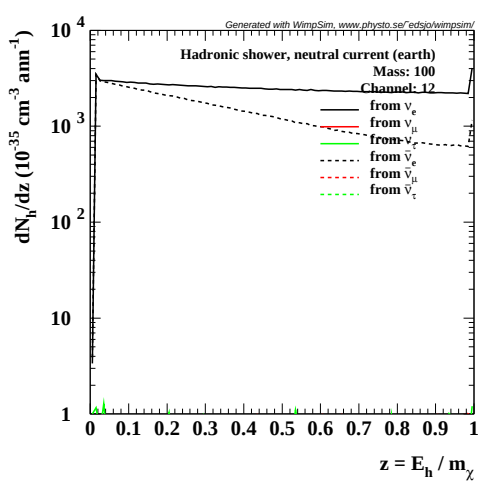
8.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



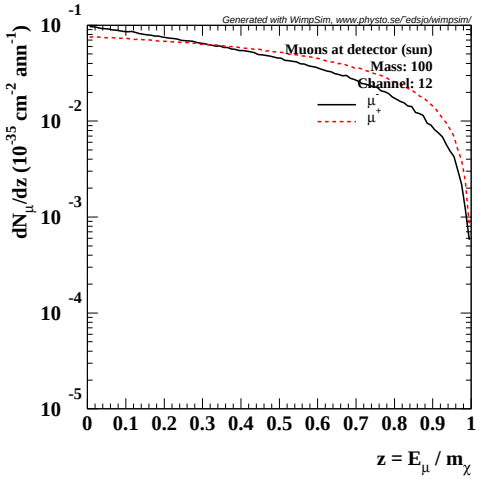


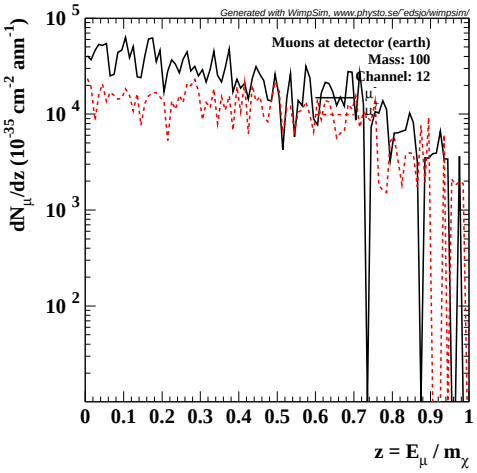
8.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





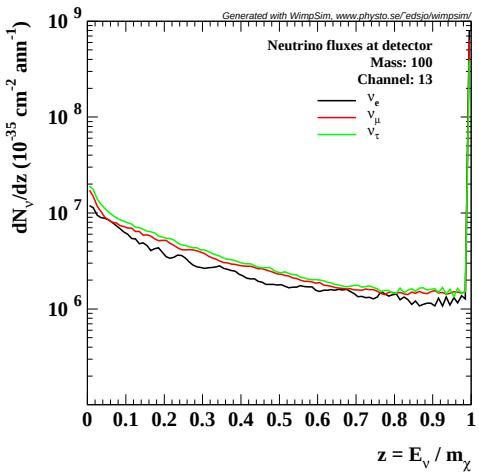
8.10.7 Muons at detector (Sun/Earth)

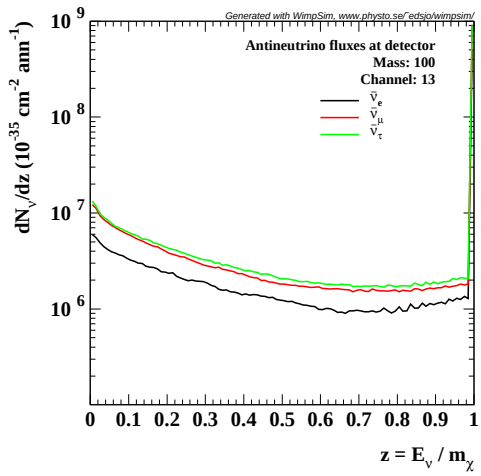




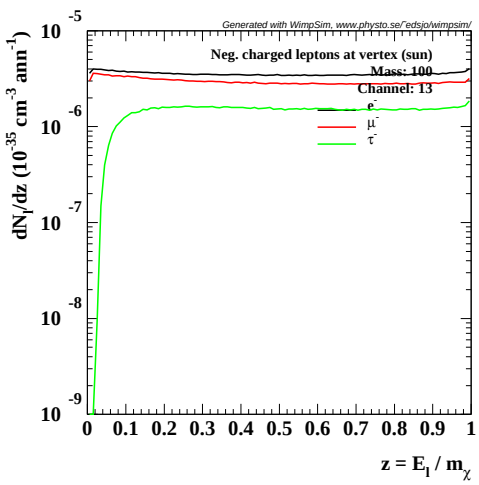
8.11 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

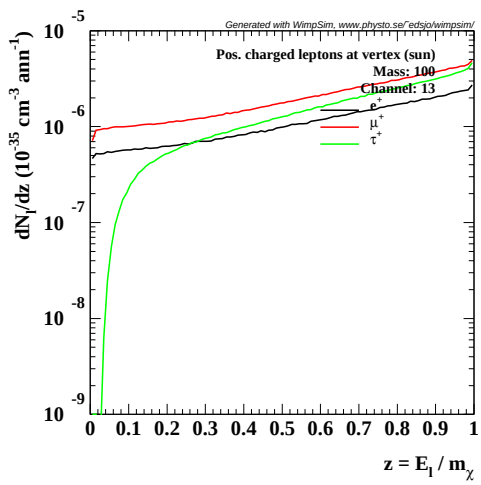
8.11.1 Neutrino fluxes at detector (Sun)



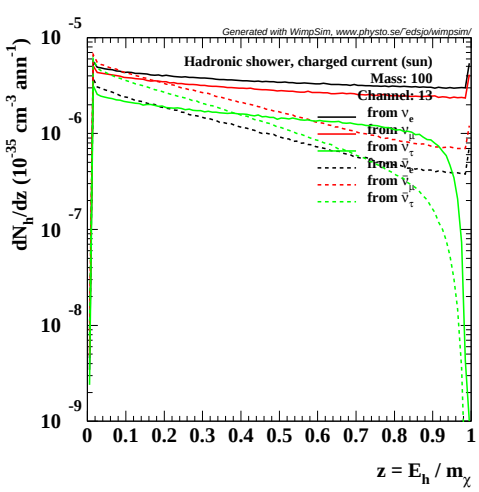


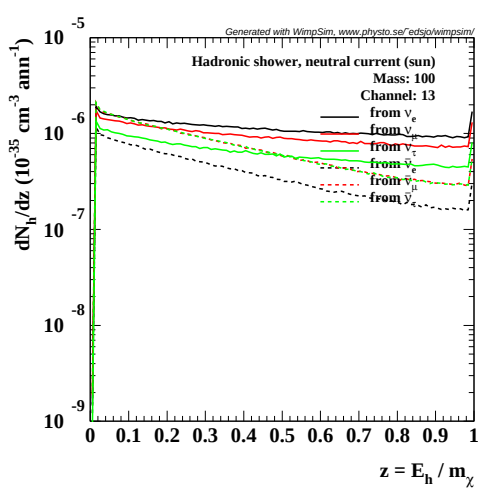
8.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



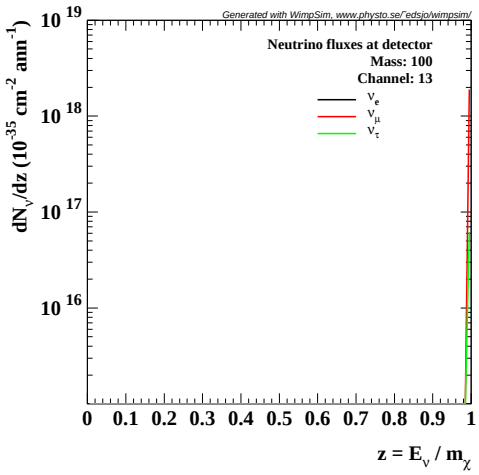


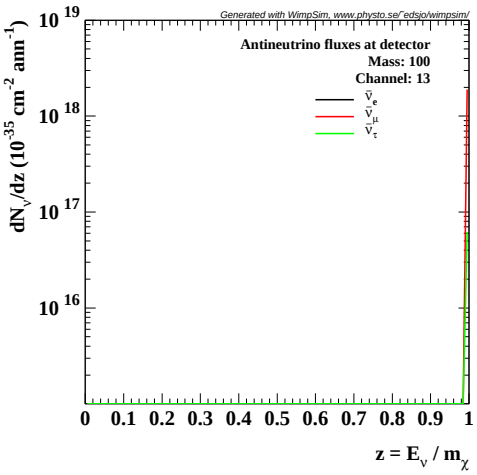
8.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



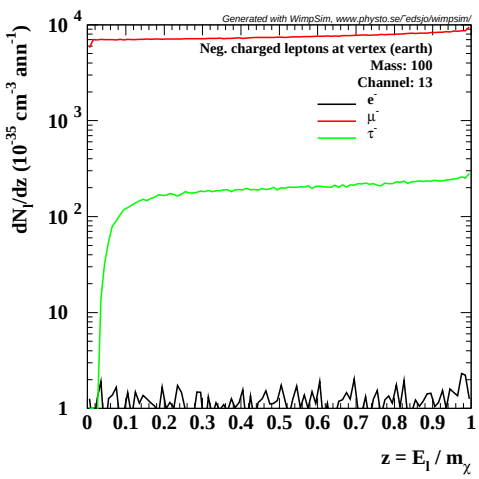


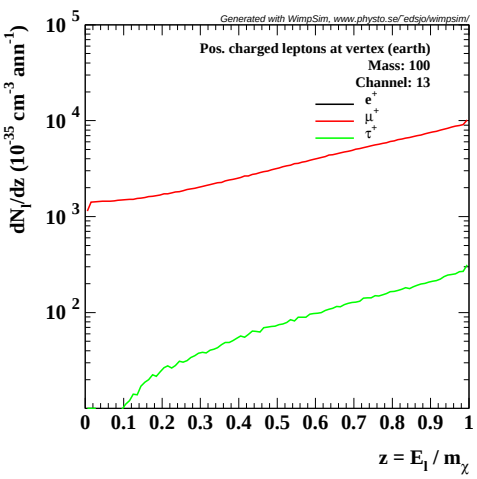
8.11.4 Neutrino fluxes at detector (Earth)



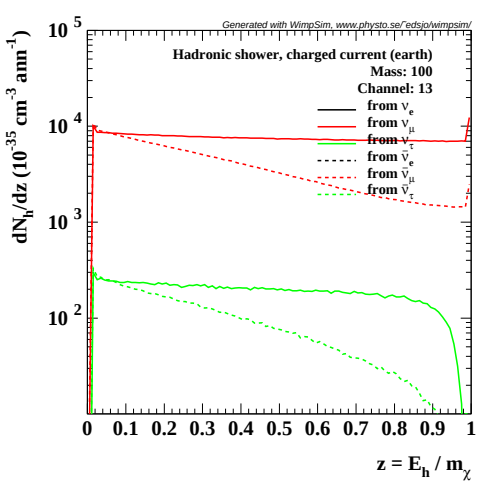


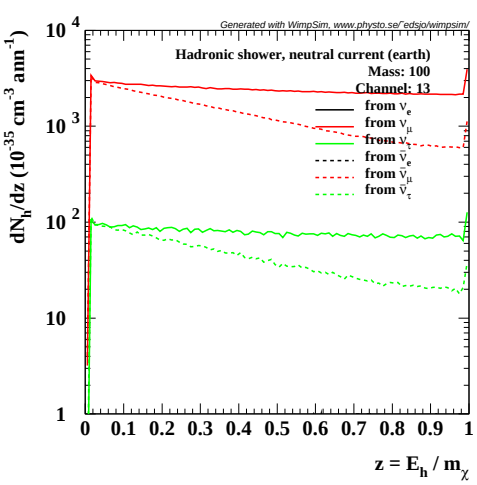
8.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



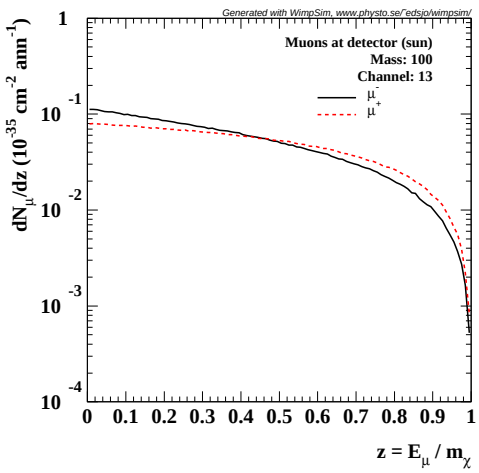


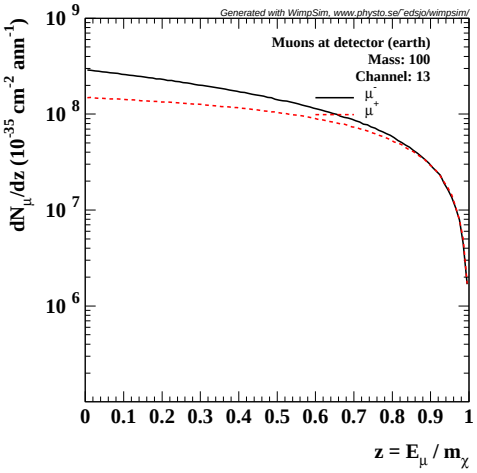
8.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





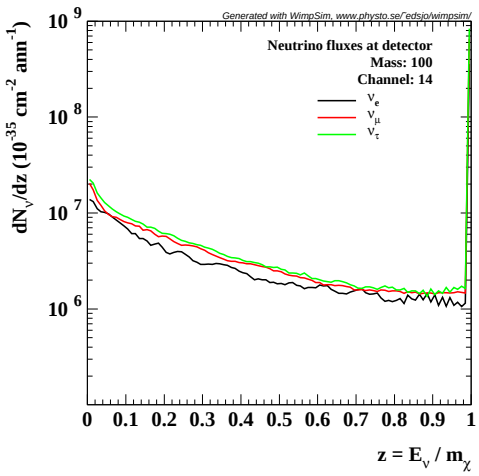
8.11.7 Muons at detector (Sun/Earth)

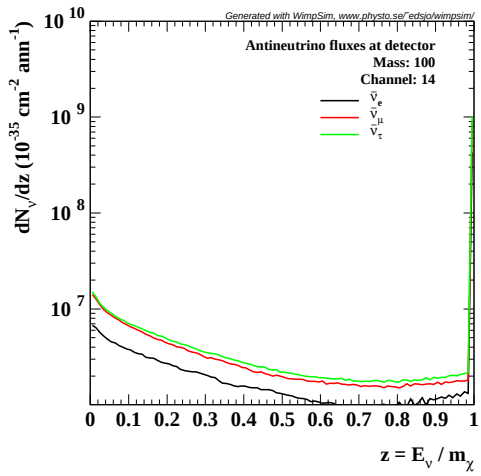




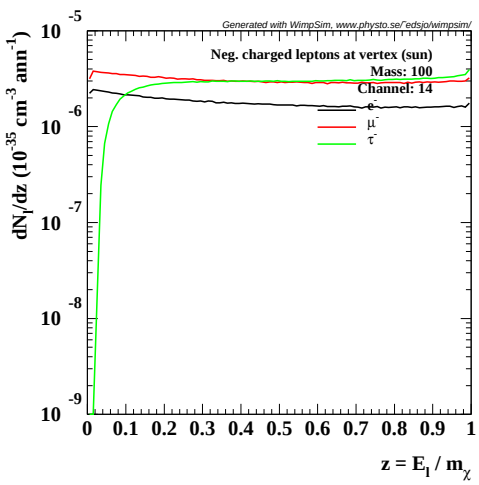
8.12 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

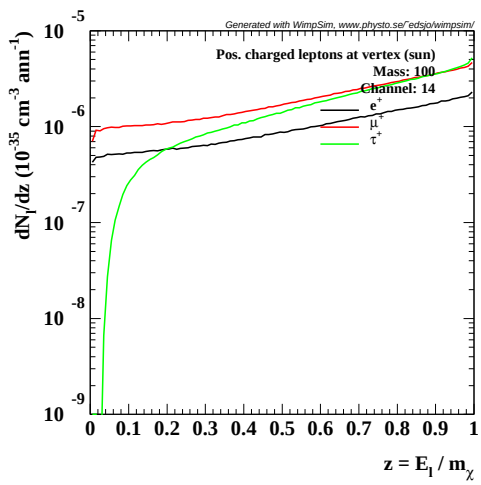
8.12.1 Neutrino fluxes at detector (Sun)



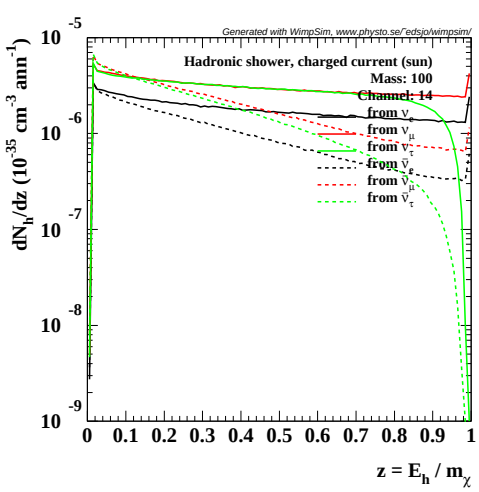


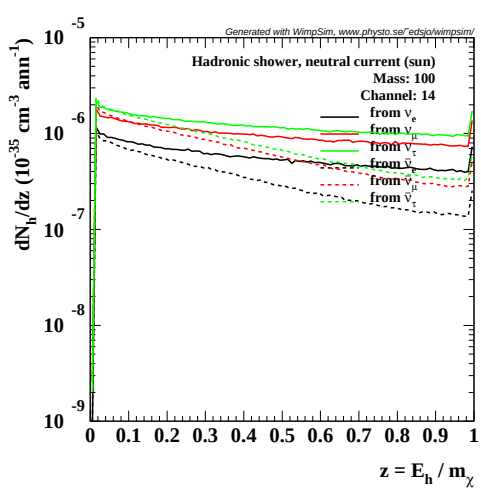
8.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



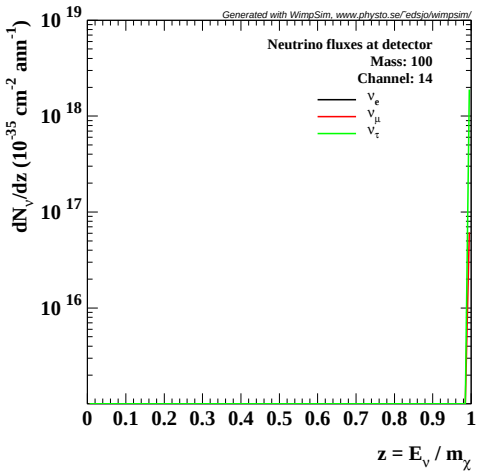


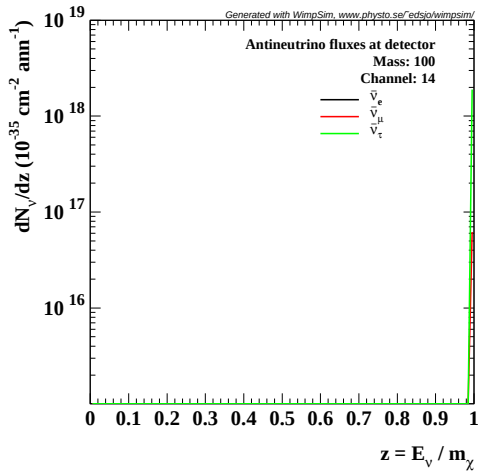
8.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



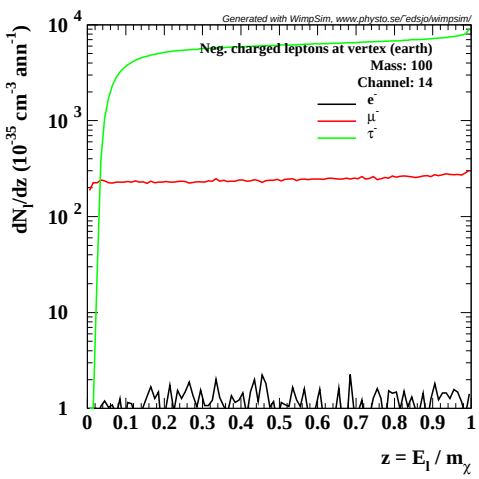


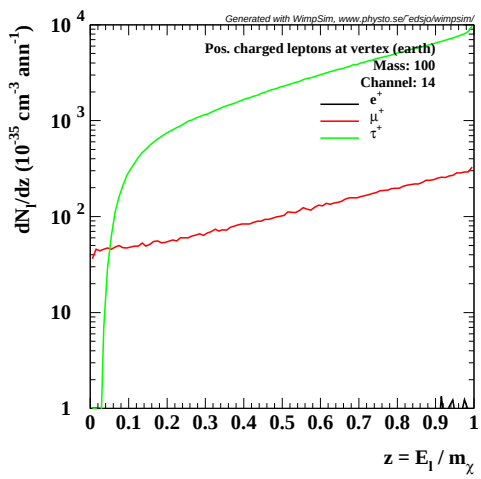
8.12.4 Neutrino fluxes at detector (Earth)



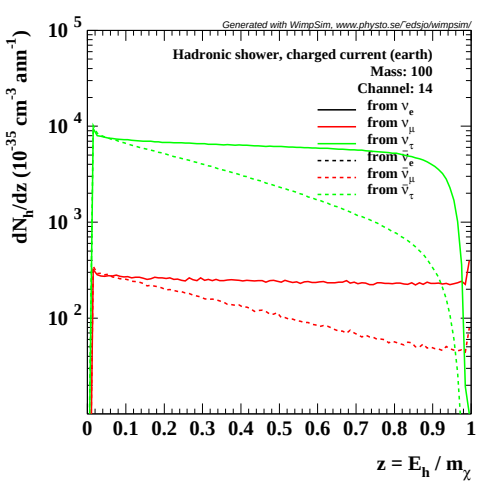


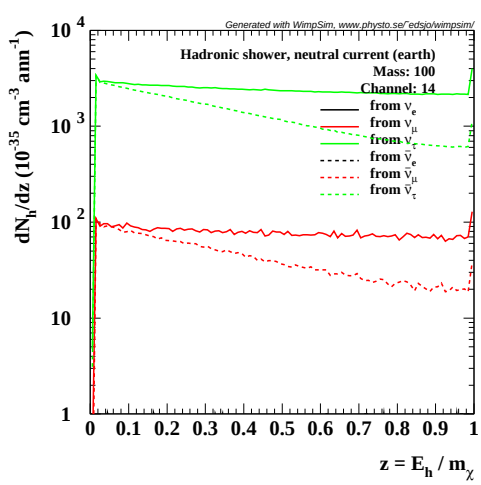
8.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



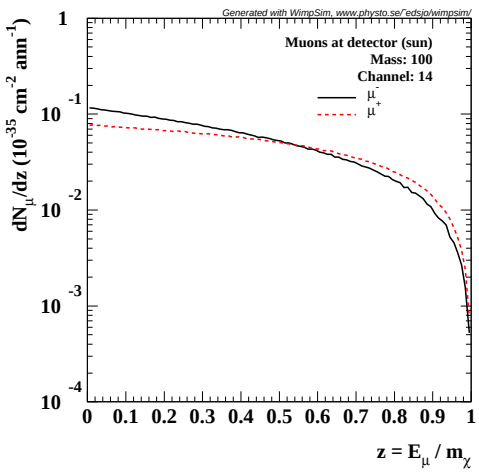


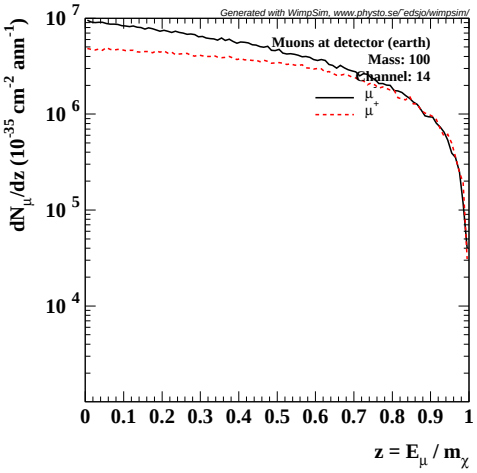
8.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





8.12.7 Muons at detector (Sun/Earth)

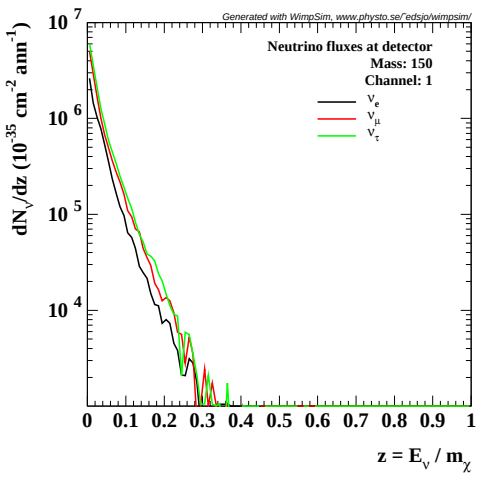


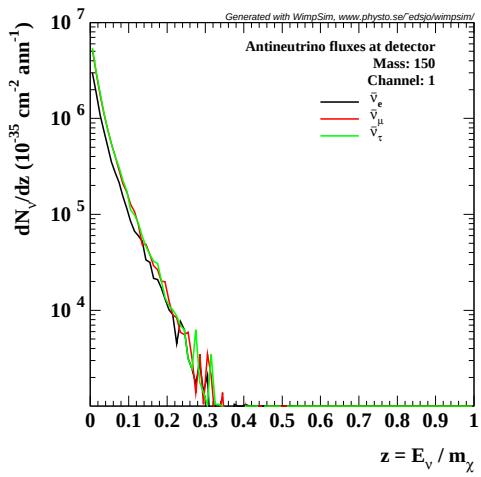


9 Mass 150

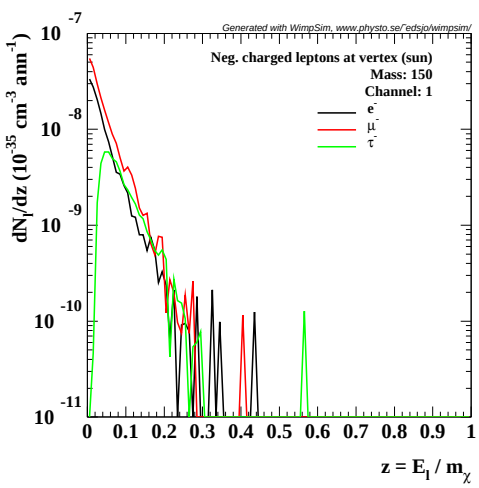
9.1 Channel 1 – $d\bar{d}$

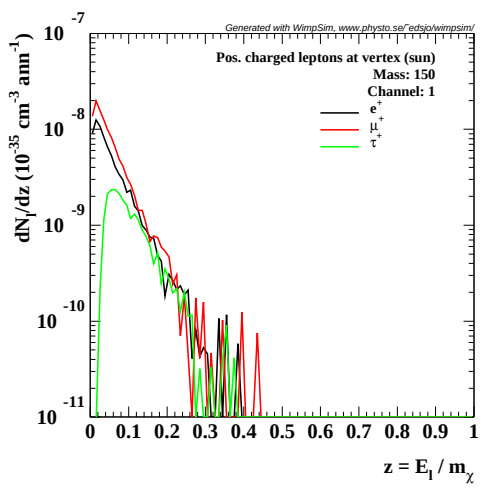
9.1.1 Neutrino fluxes at detector (Sun)



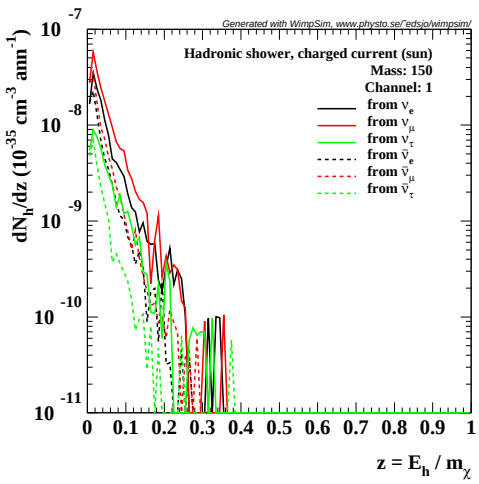


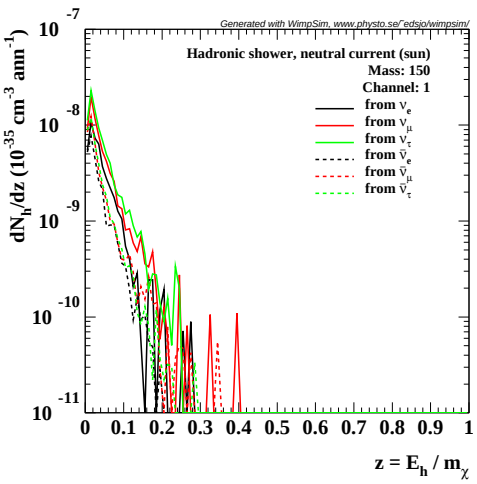
9.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



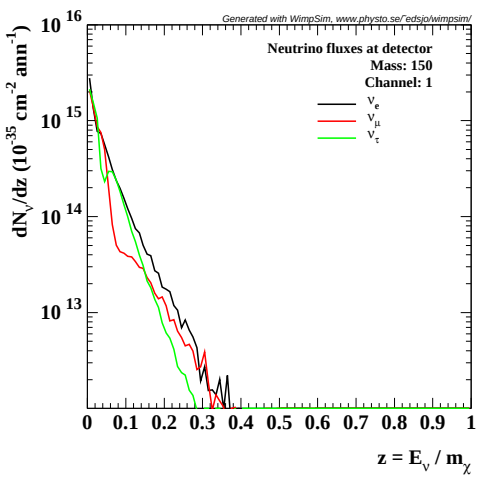


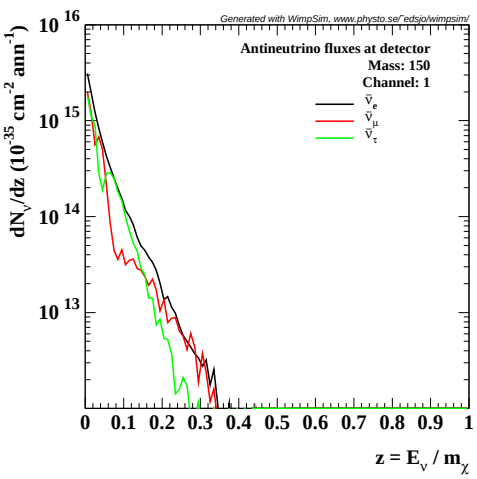
9.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



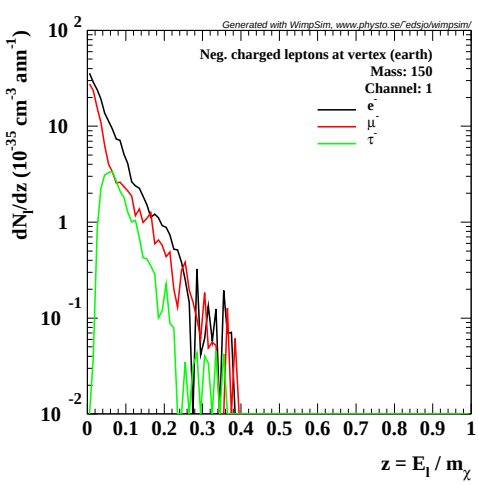


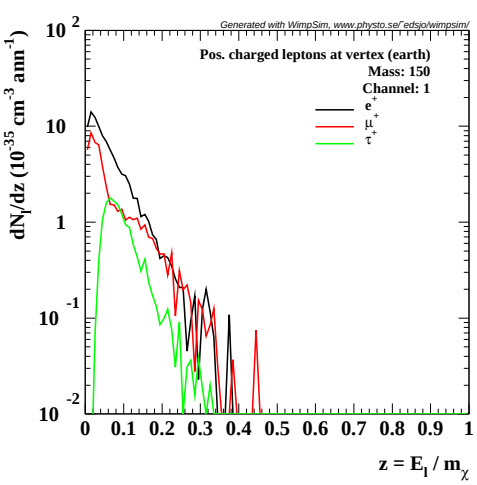
9.1.4 Neutrino fluxes at detector (Earth)



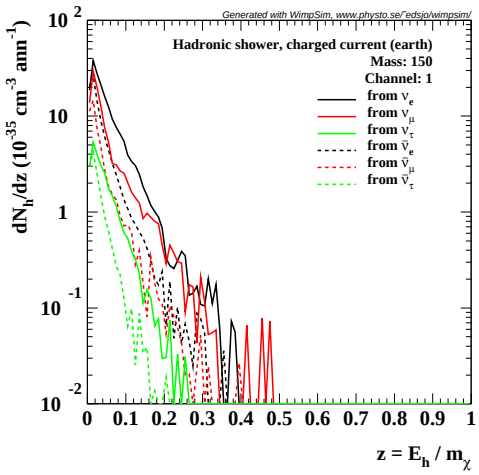


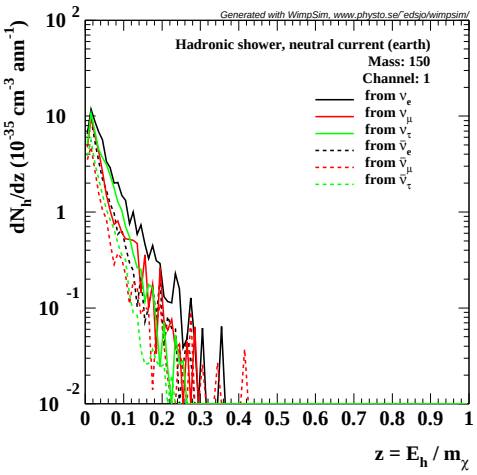
9.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



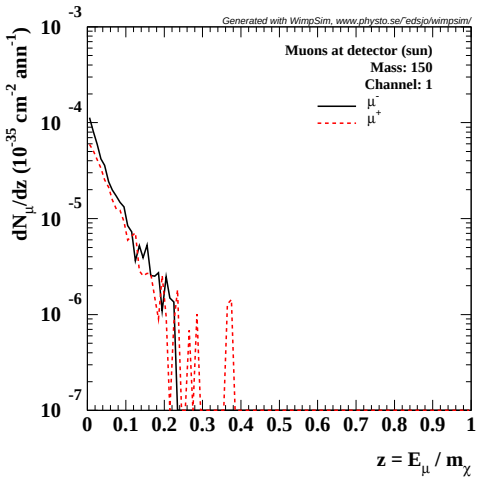


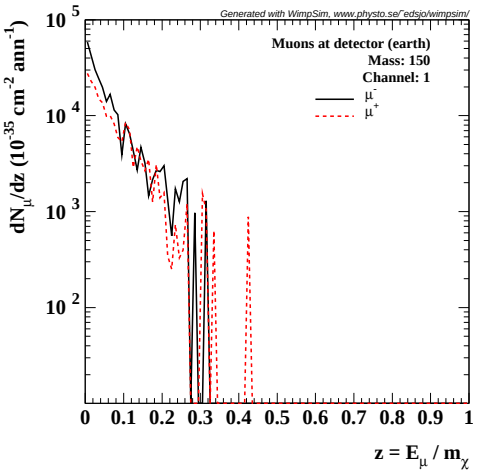
9.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





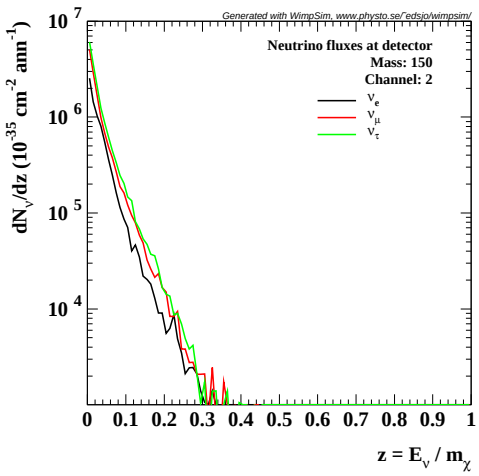
9.1.7 Muons at detector (Sun/Earth)

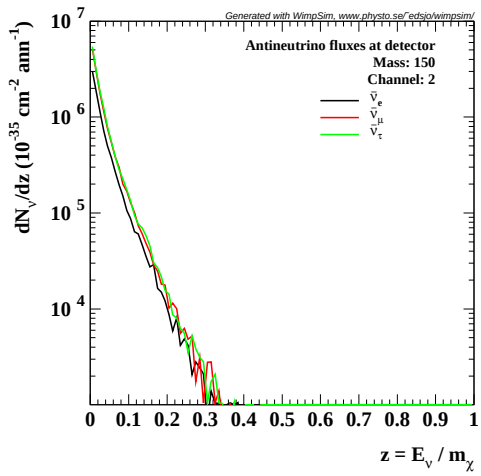




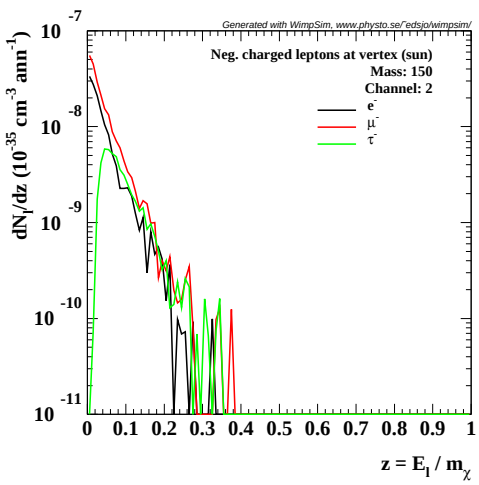
9.2 Channel 2 – $u\bar{u}$

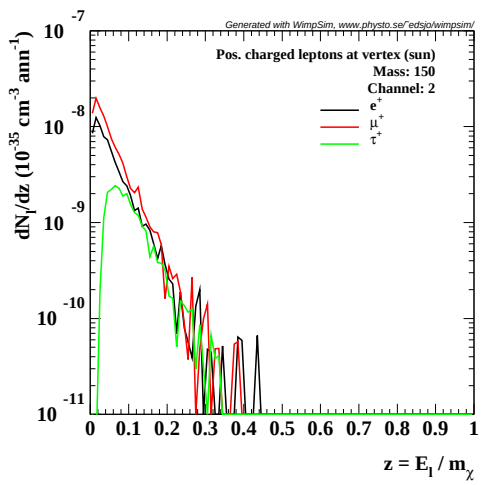
9.2.1 Neutrino fluxes at detector (Sun)



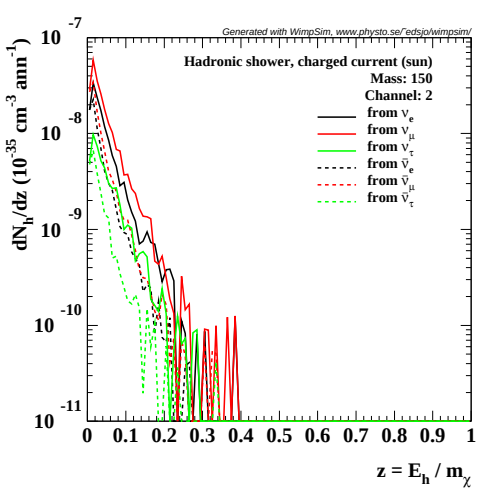


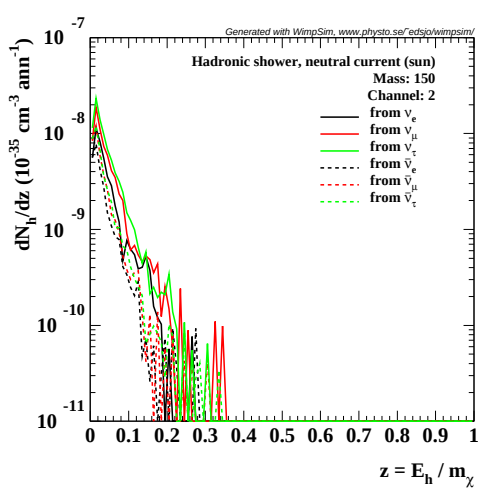
9.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



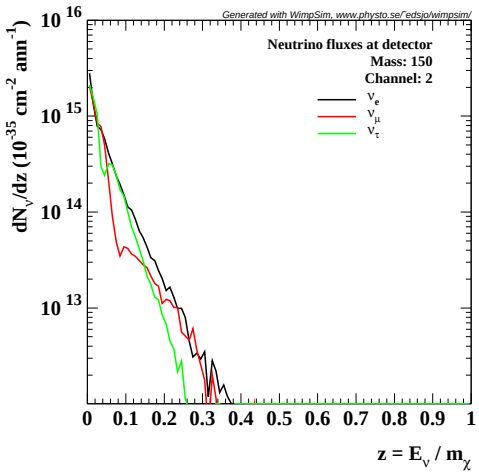


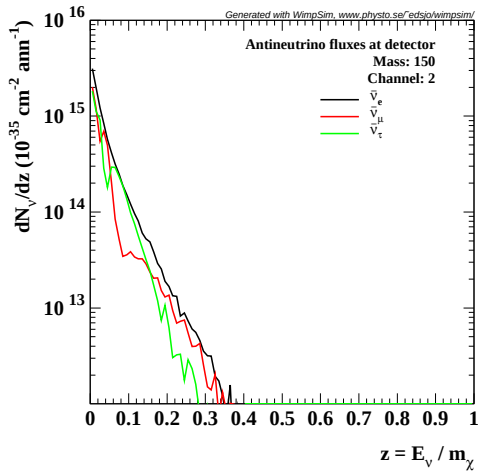
9.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



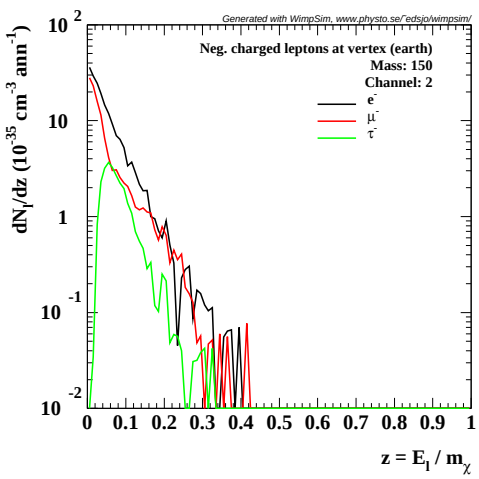


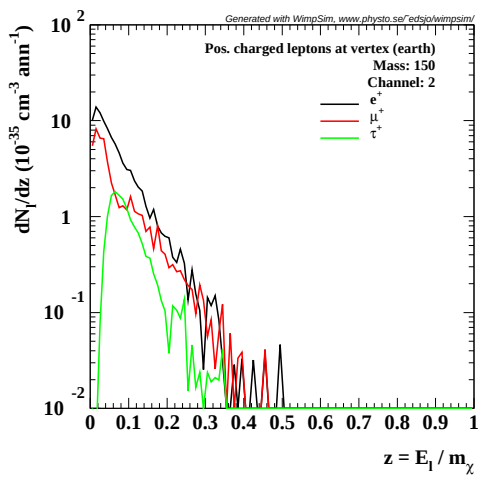
9.2.4 Neutrino fluxes at detector (Earth)



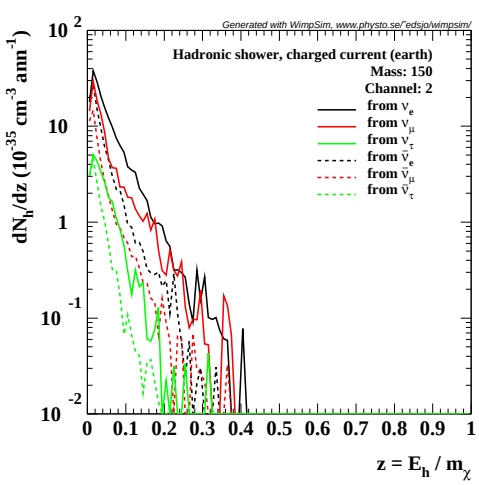


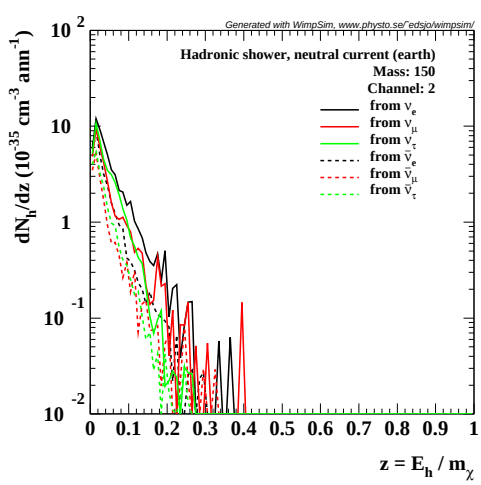
9.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



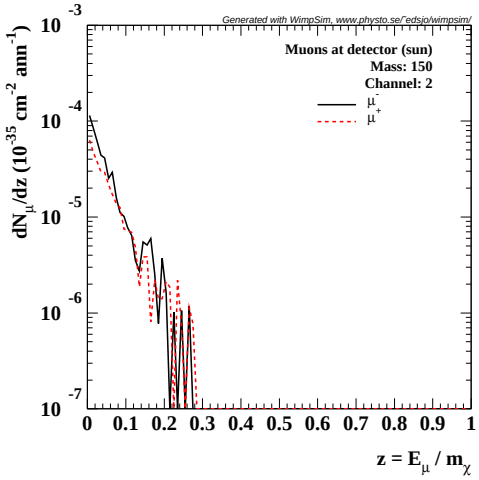


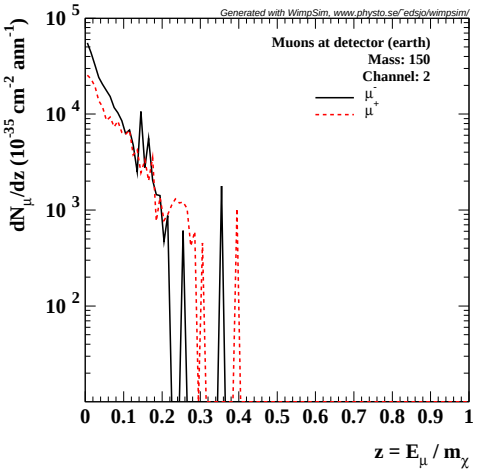
9.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





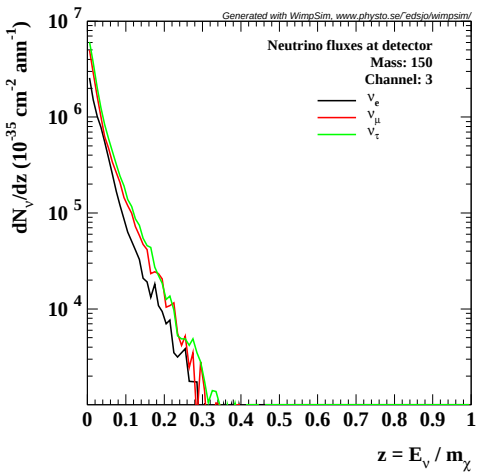
9.2.7 Muons at detector (Sun/Earth)

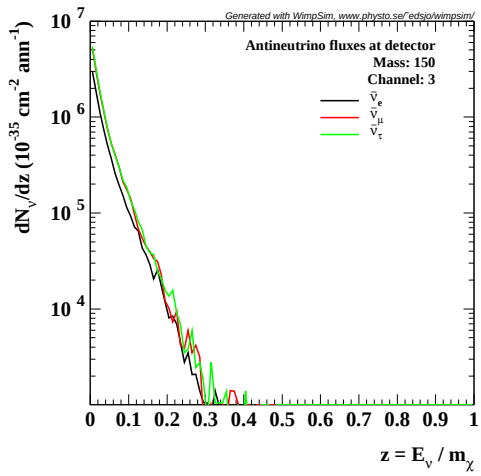




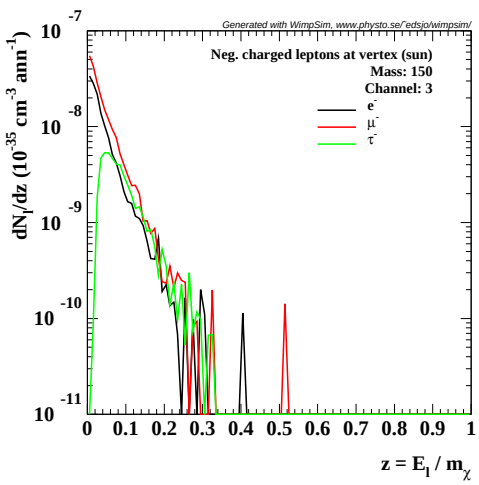
9.3 Channel 3 – $s\bar{s}$

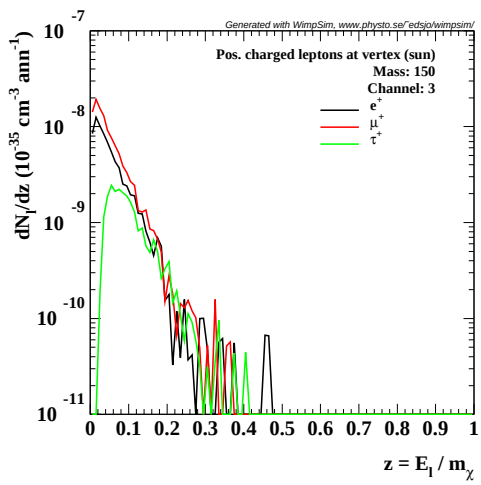
9.3.1 Neutrino fluxes at detector (Sun)



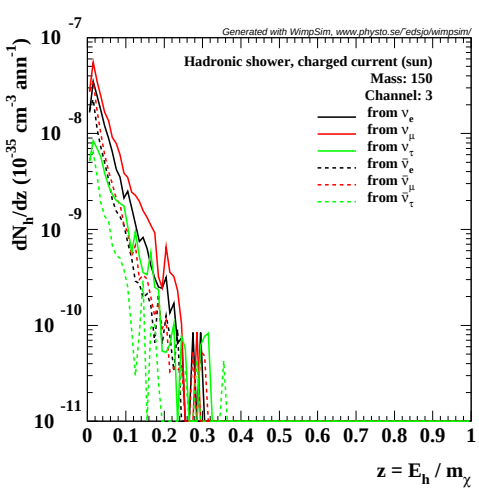


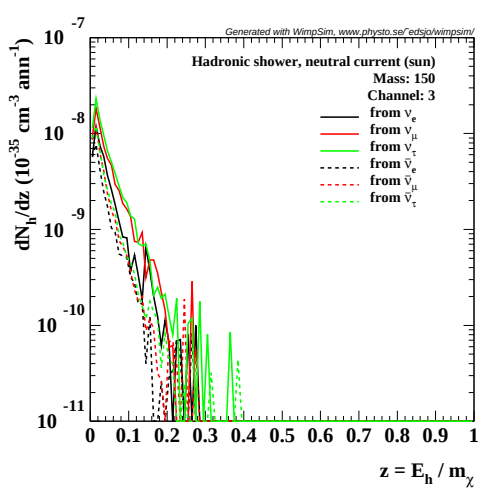
9.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



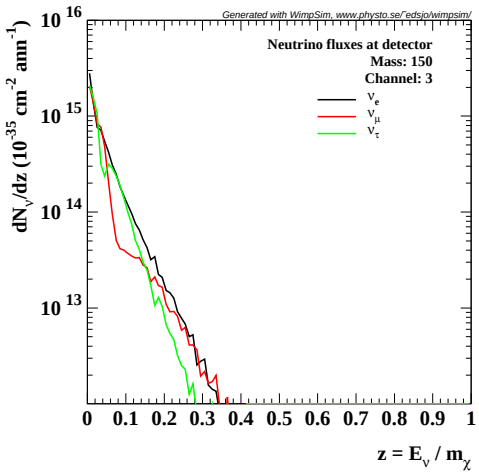


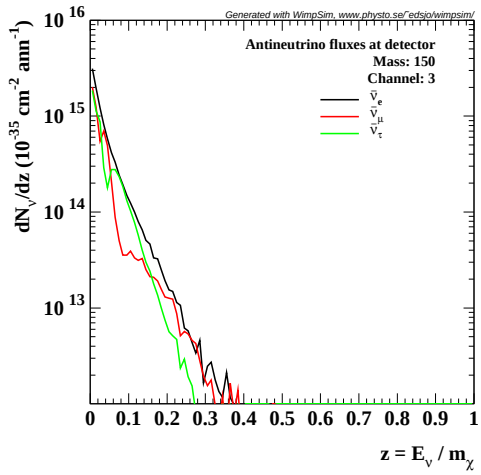
9.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



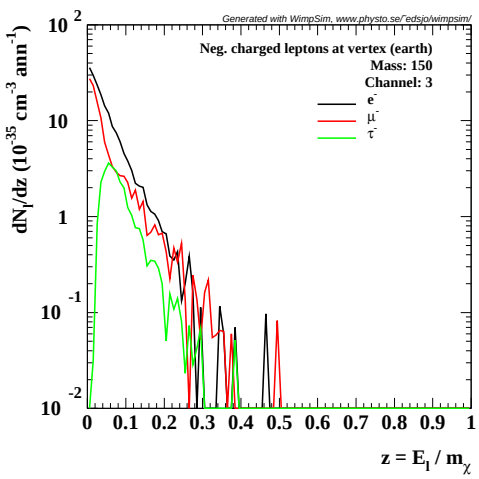


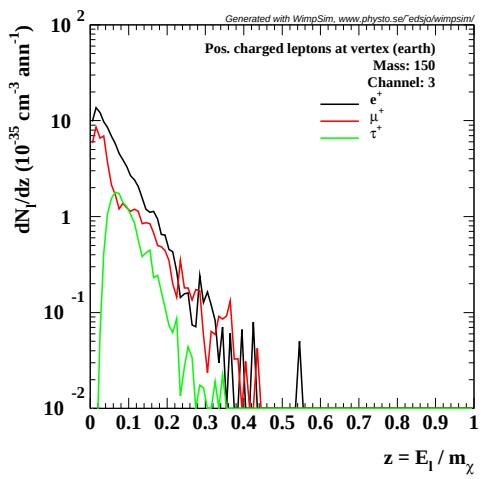
9.3.4 Neutrino fluxes at detector (Earth)



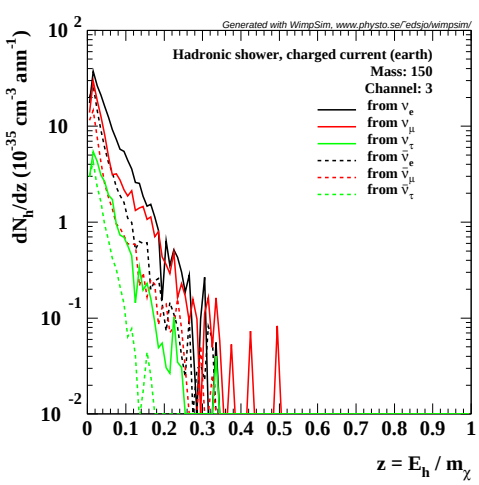


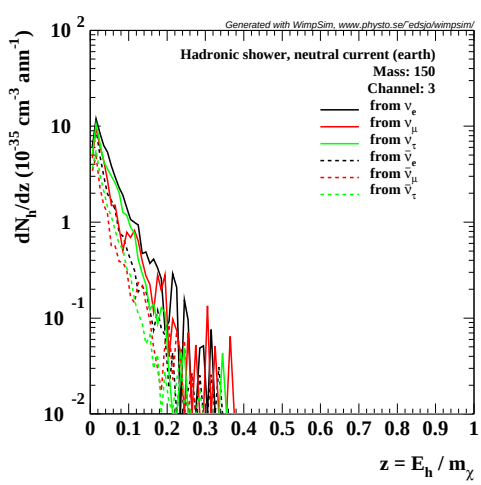
9.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



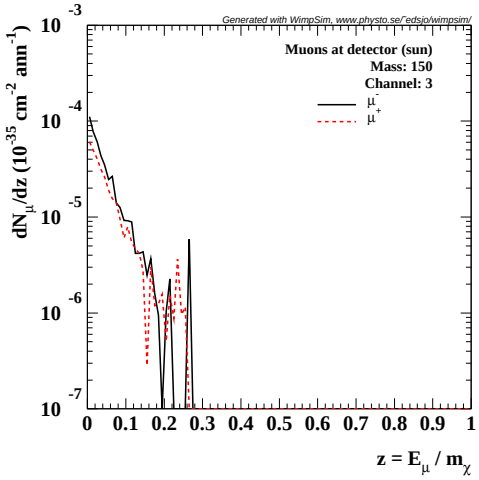


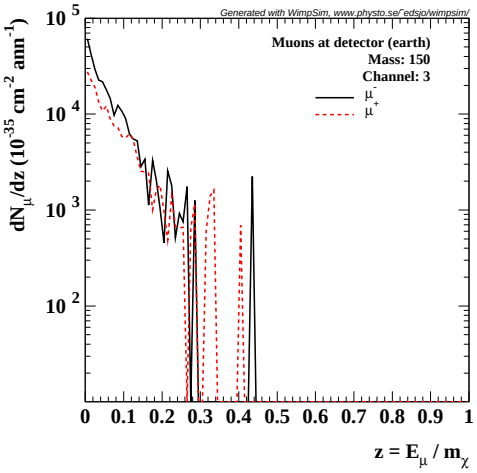
9.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





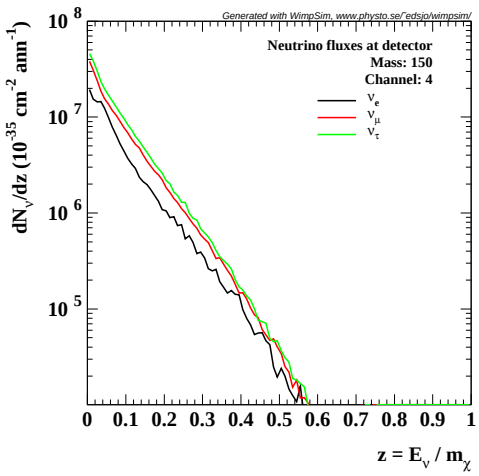
9.3.7 Muons at detector (Sun/Earth)

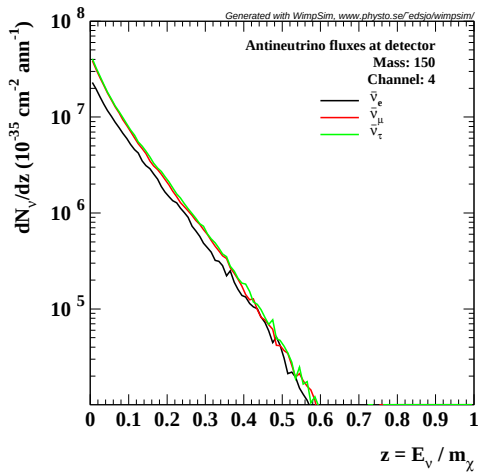




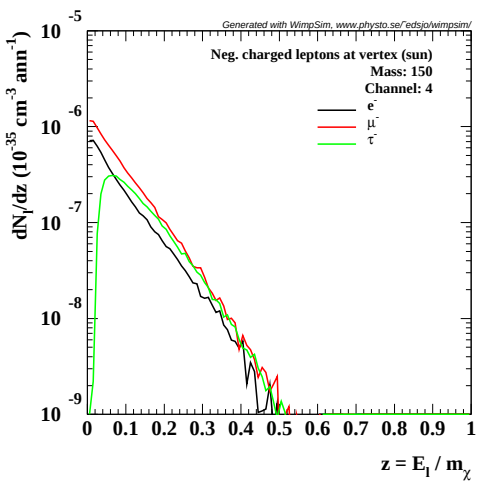
9.4 Channel 4 – $c\bar{c}$

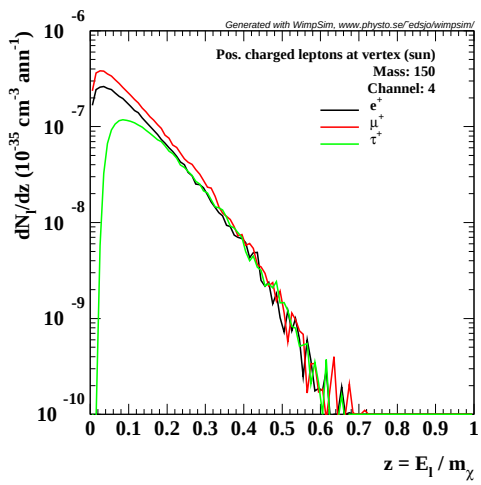
9.4.1 Neutrino fluxes at detector (Sun)



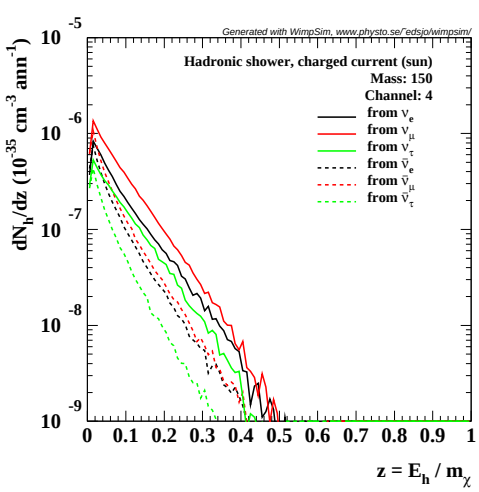


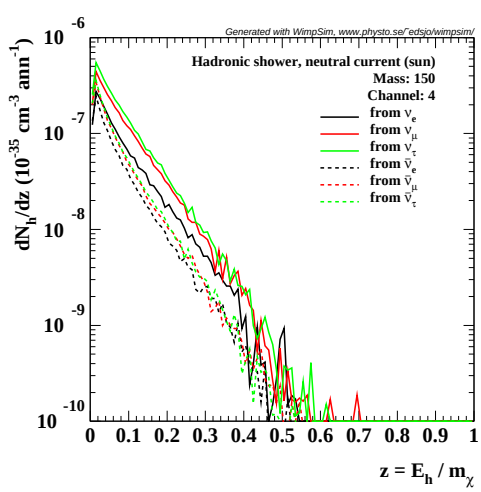
9.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



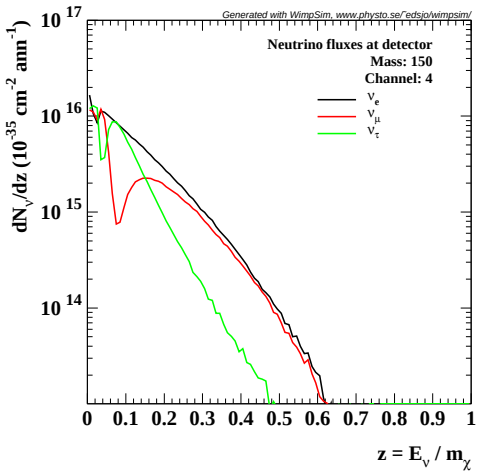


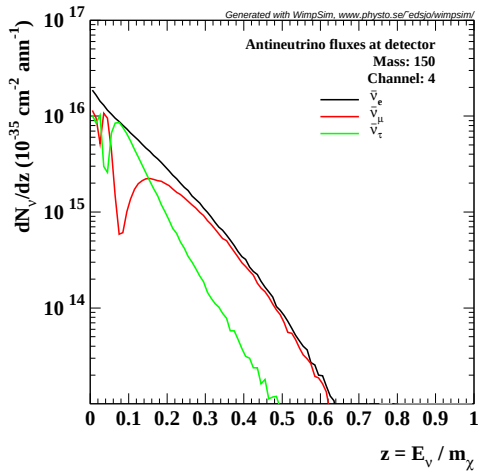
9.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



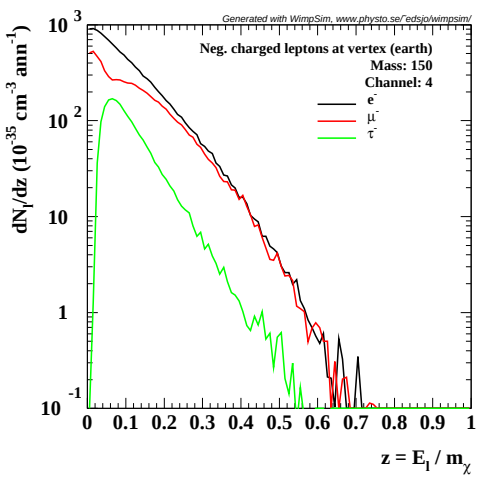


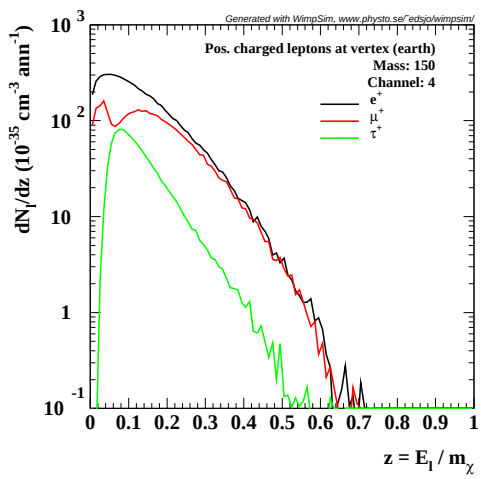
9.4.4 Neutrino fluxes at detector (Earth)



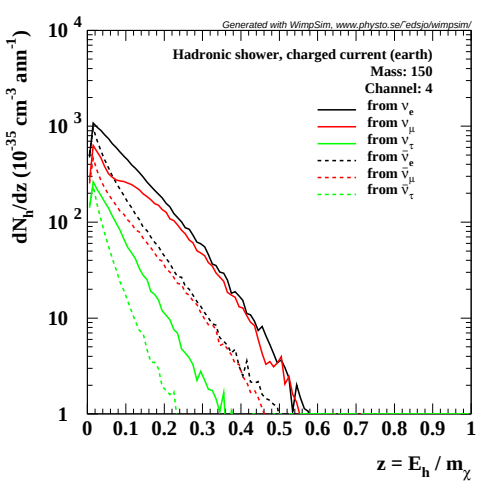


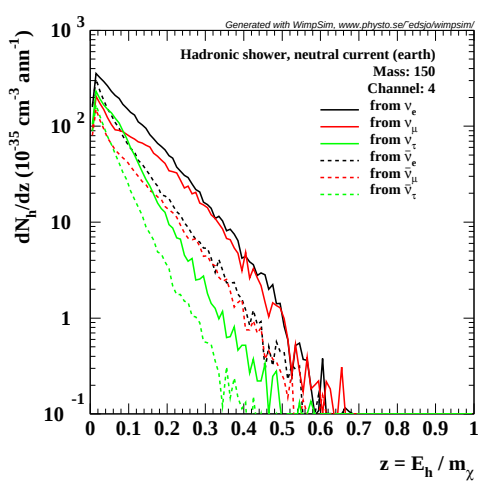
9.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



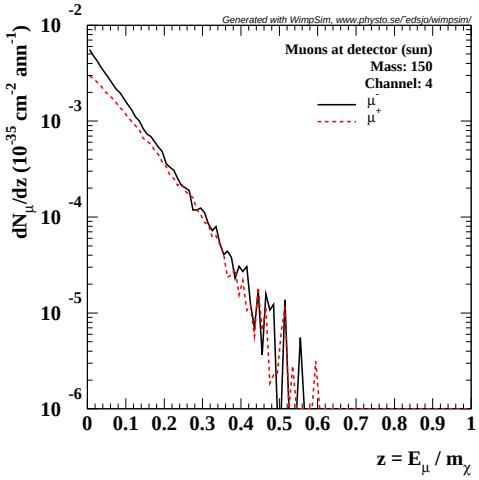


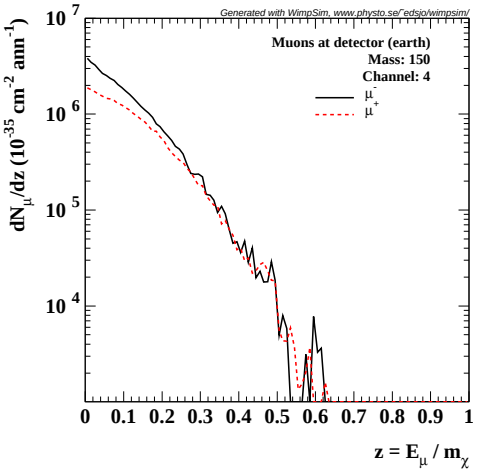
9.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





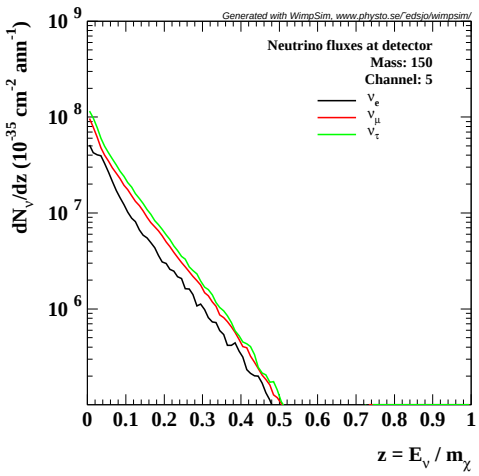
9.4.7 Muons at detector (Sun/Earth)

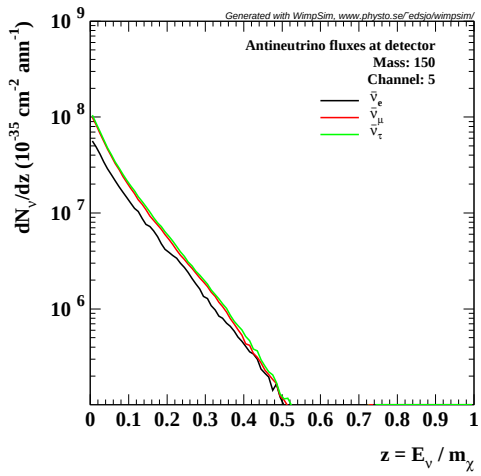




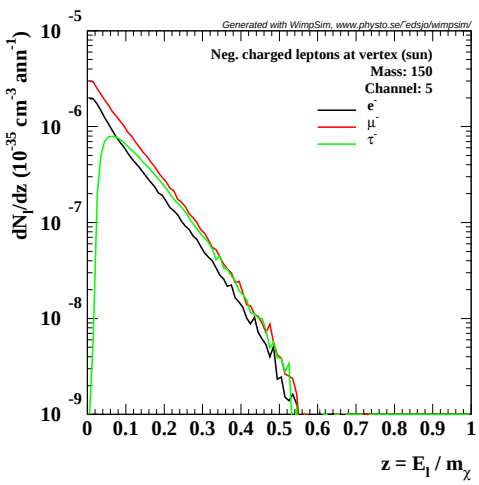
9.5 Channel 5 – $b\bar{b}$

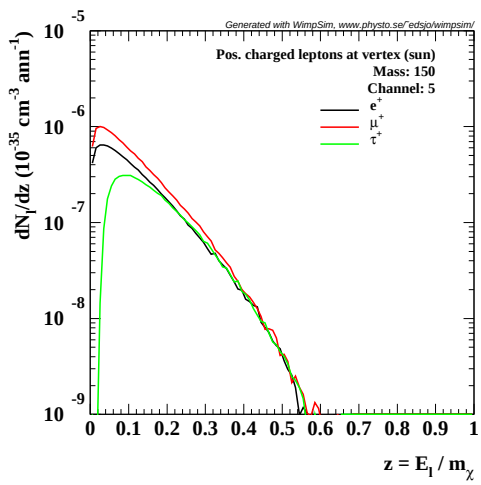
9.5.1 Neutrino fluxes at detector (Sun)



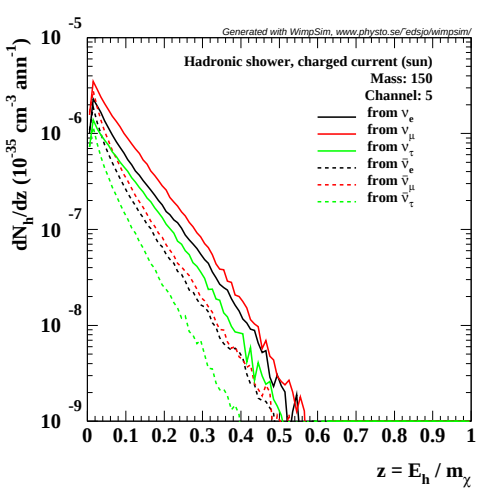


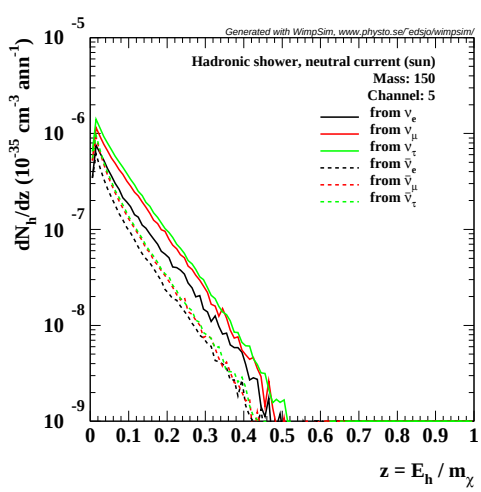
9.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



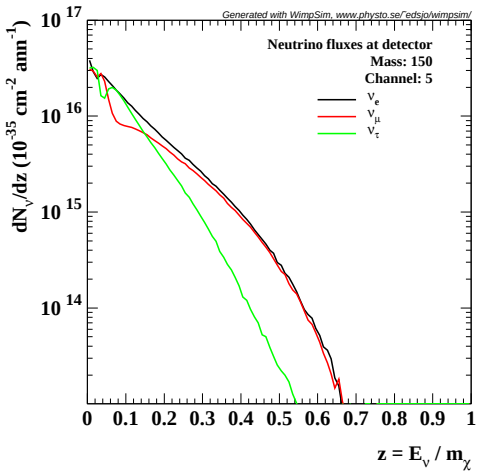


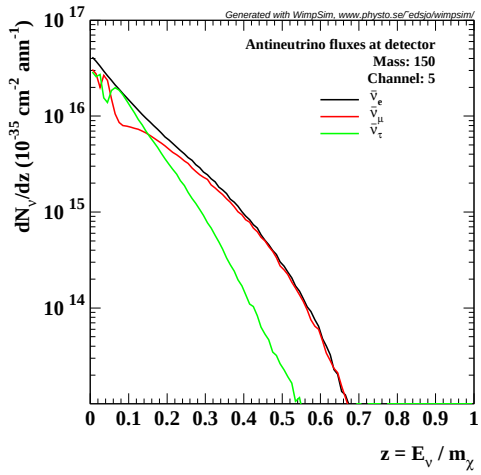
9.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



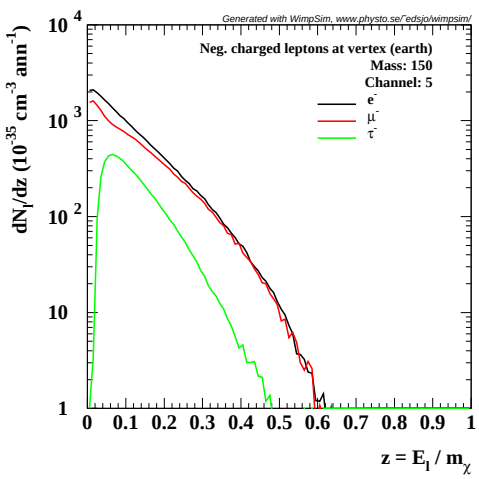


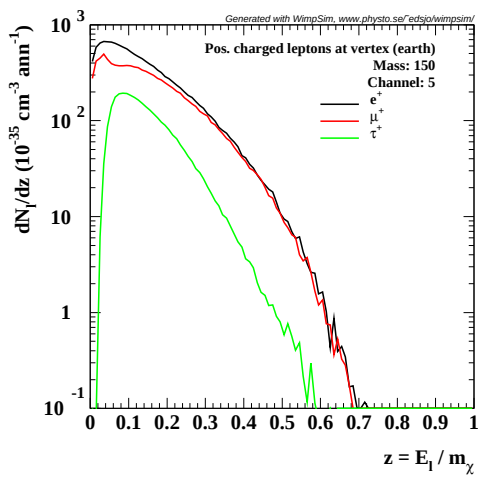
9.5.4 Neutrino fluxes at detector (Earth)



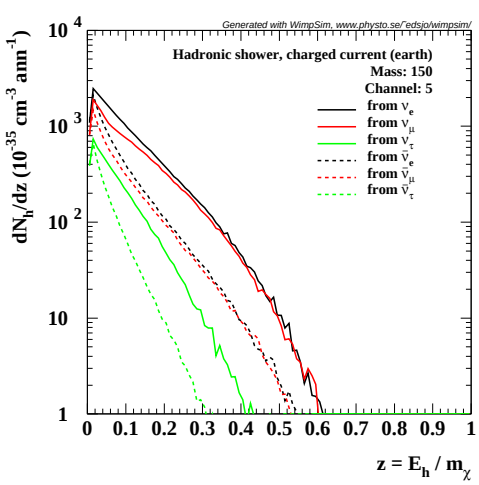


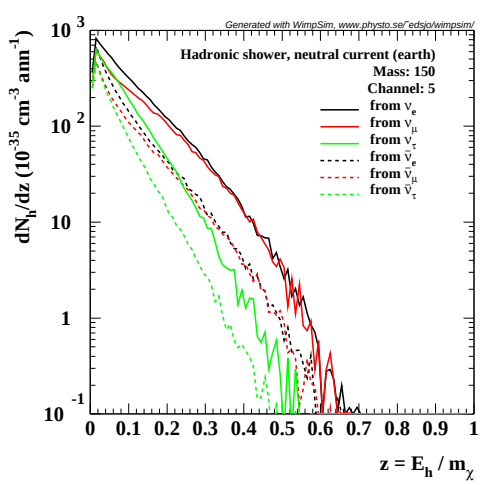
9.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



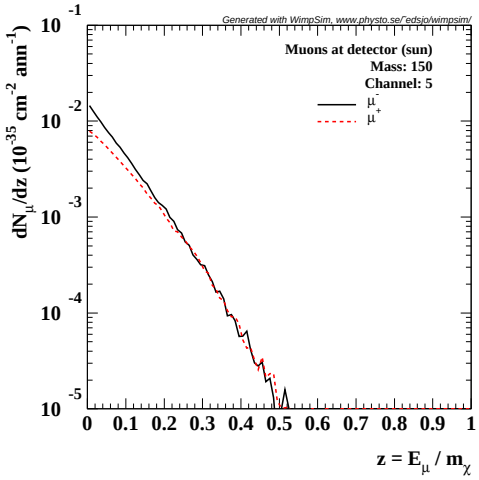


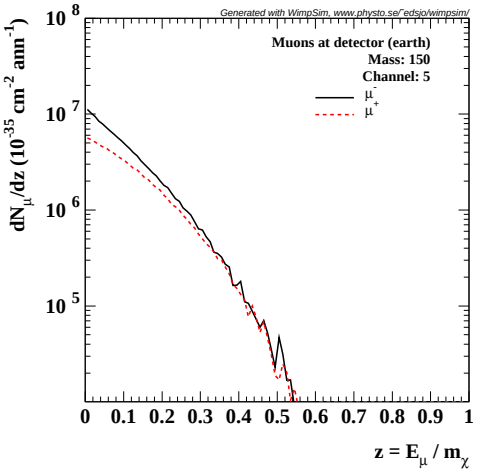
9.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





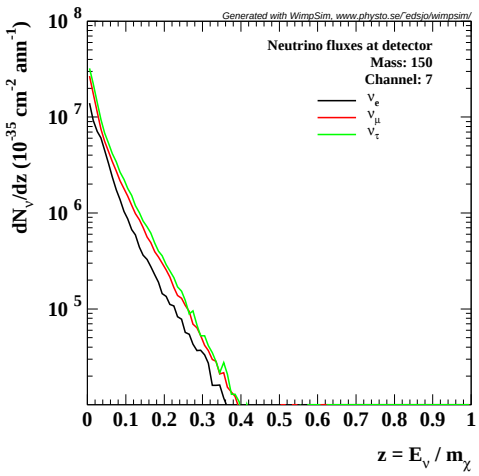
9.5.7 Muons at detector (Sun/Earth)

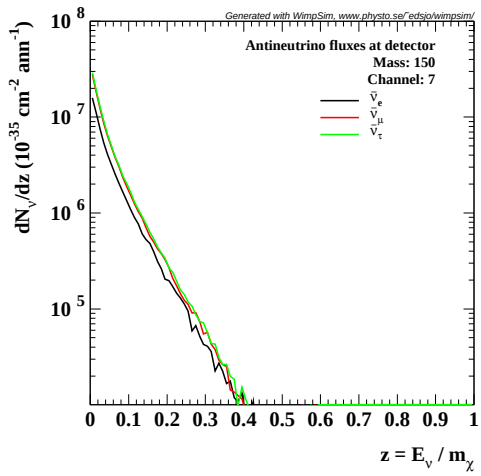




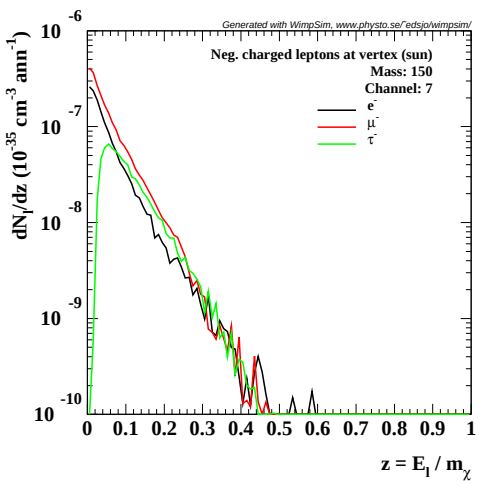
9.6 Channel 7 – gg

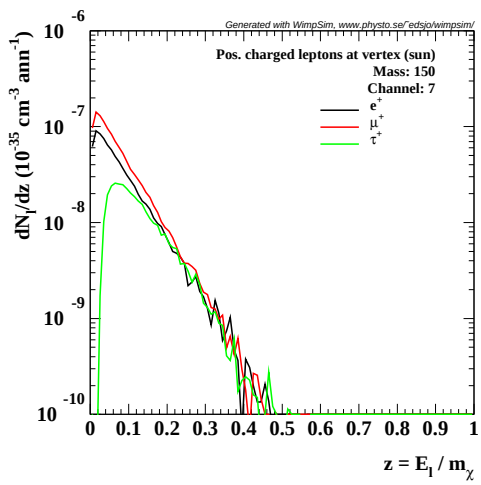
9.6.1 Neutrino fluxes at detector (Sun)



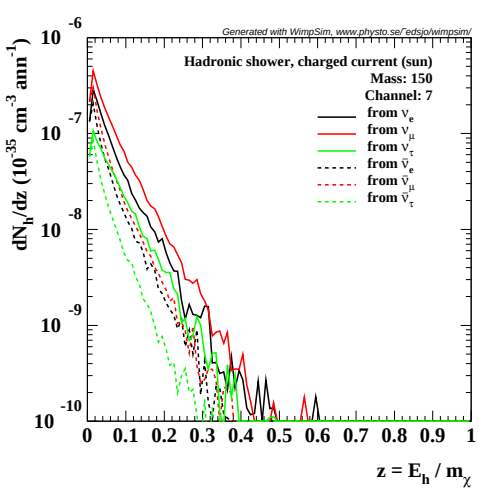


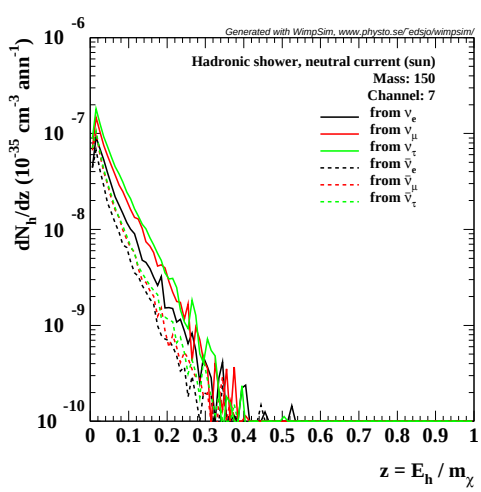
9.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



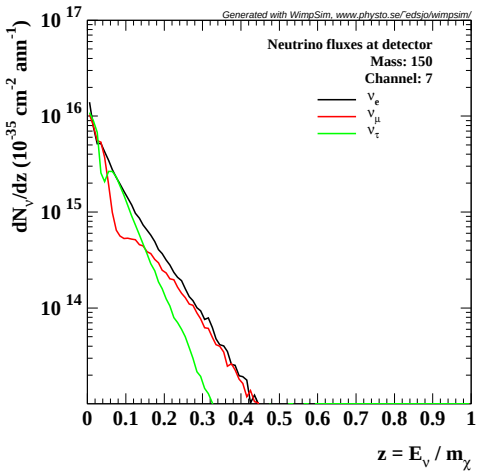


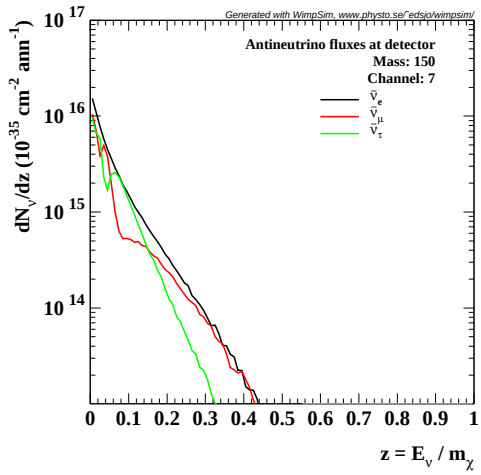
9.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



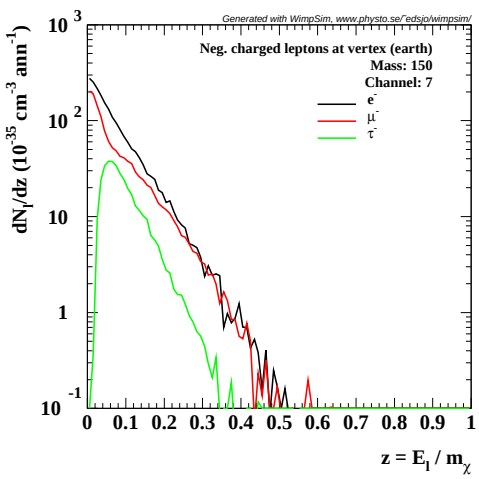


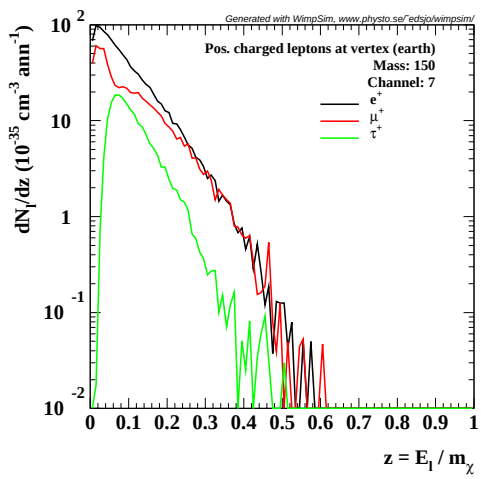
9.6.4 Neutrino fluxes at detector (Earth)



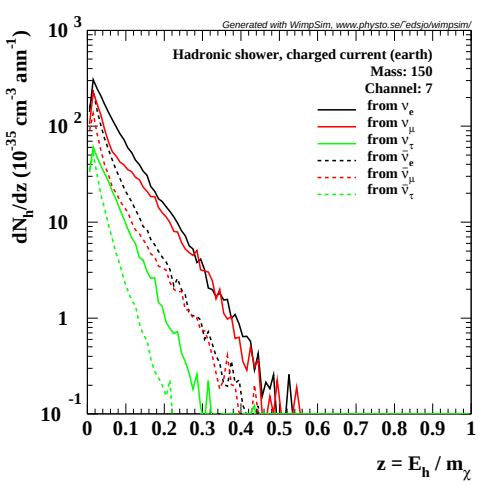


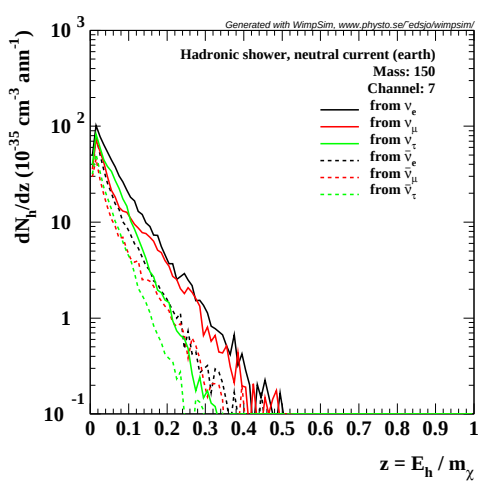
9.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



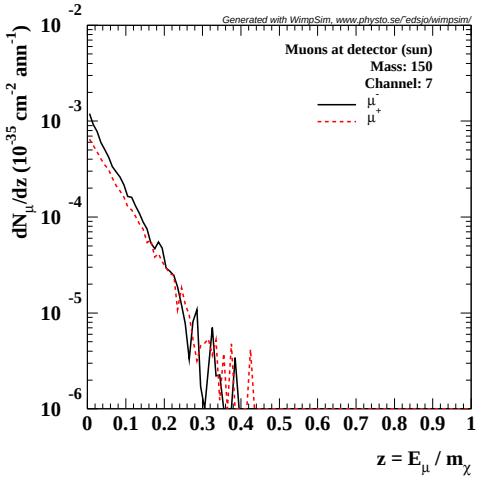


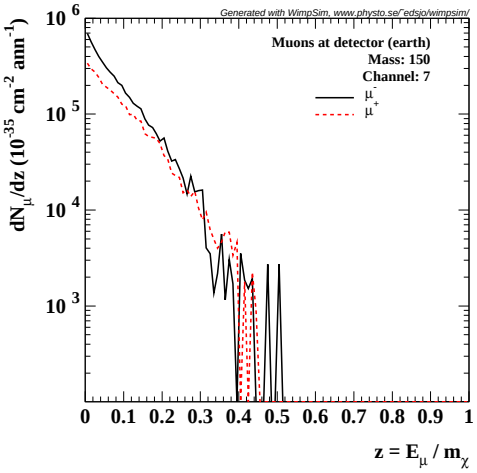
9.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





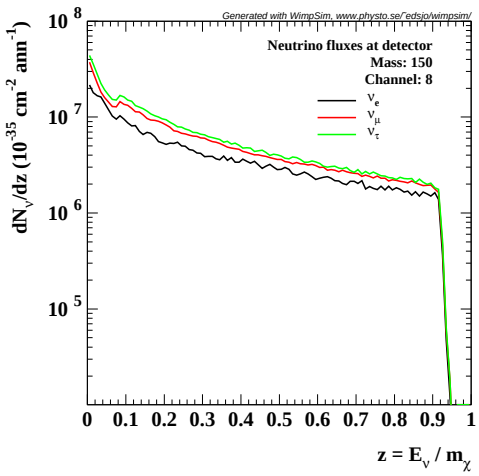
9.6.7 Muons at detector (Sun/Earth)

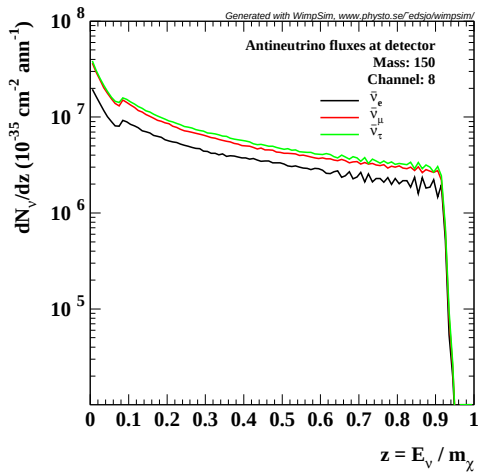




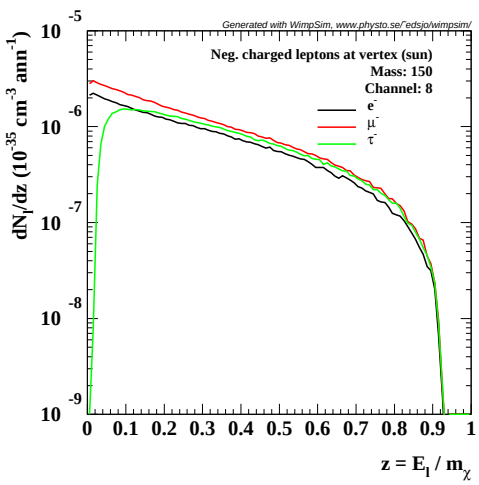
9.7 Channel 8 – W^-W^+

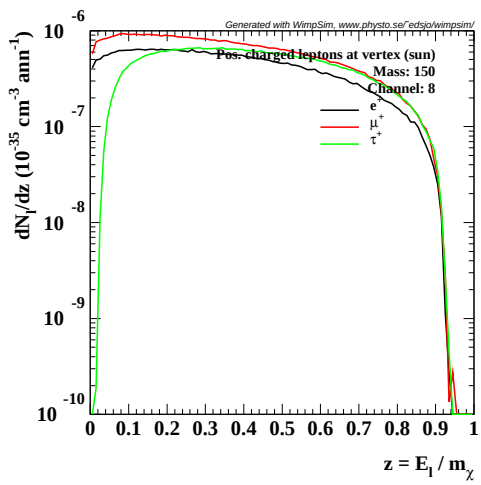
9.7.1 Neutrino fluxes at detector (Sun)



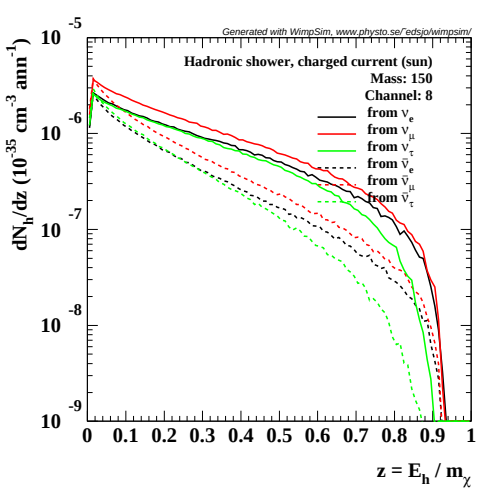


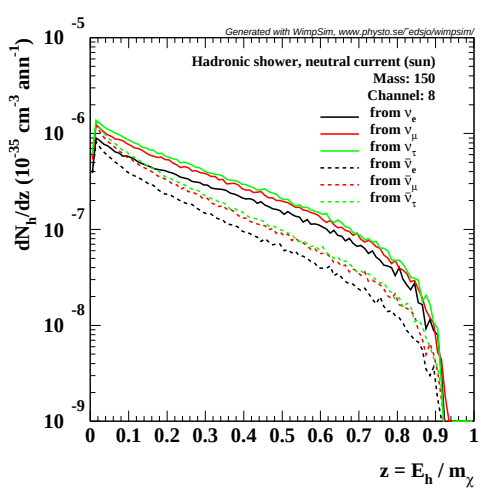
9.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



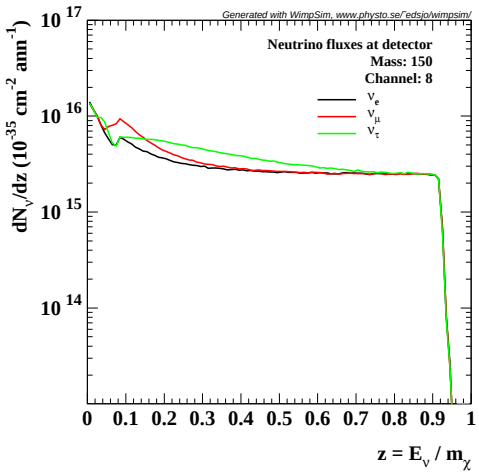


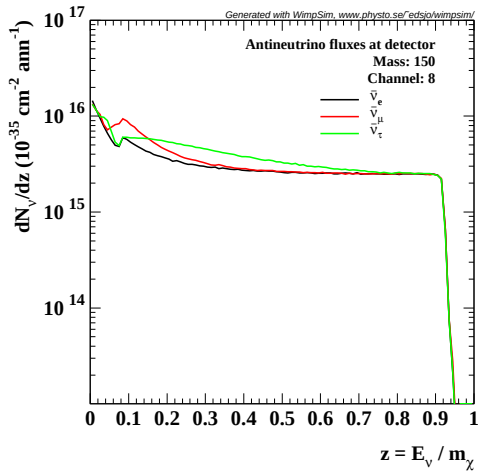
9.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



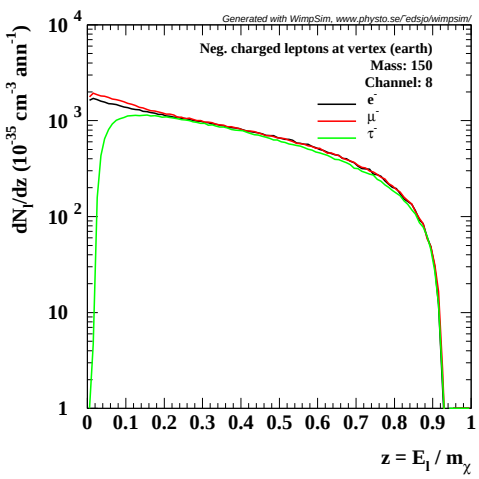


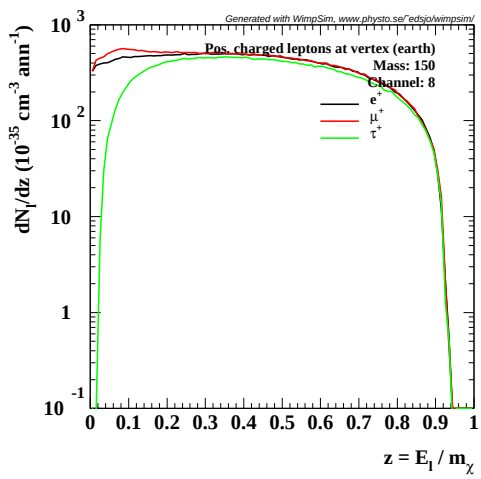
9.7.4 Neutrino fluxes at detector (Earth)



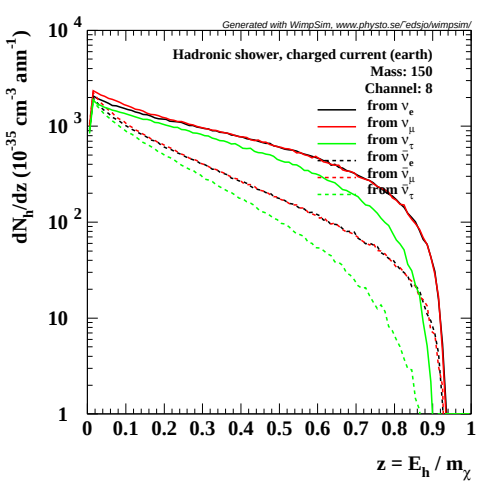


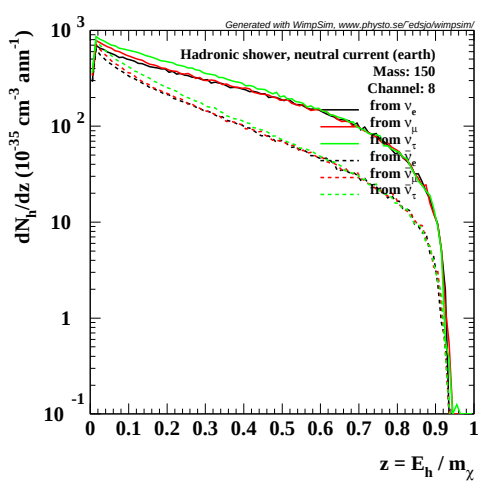
9.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



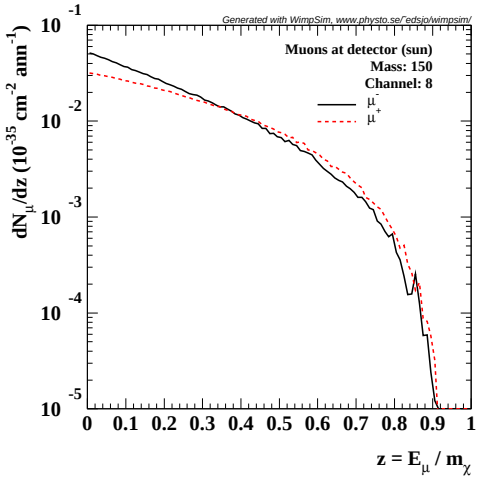


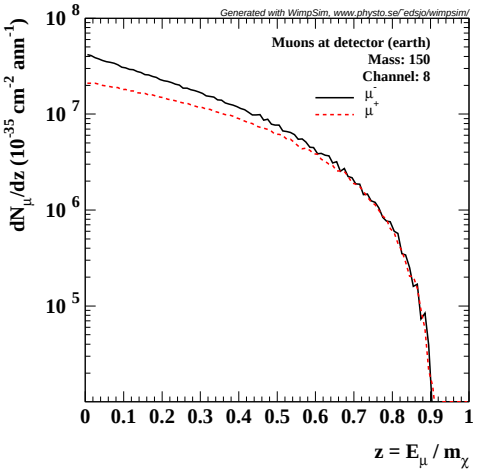
9.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





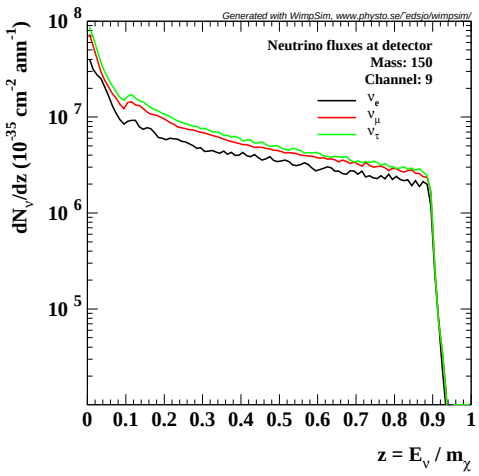
9.7.7 Muons at detector (Sun/Earth)

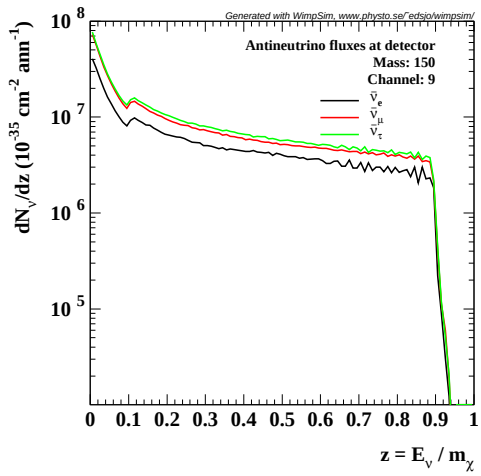




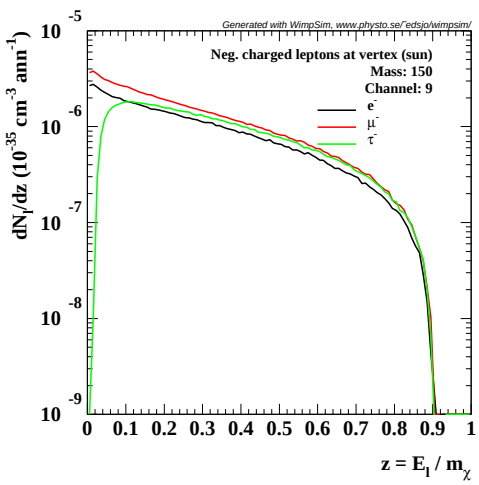
9.8 Channel 9 – Z^0Z^0

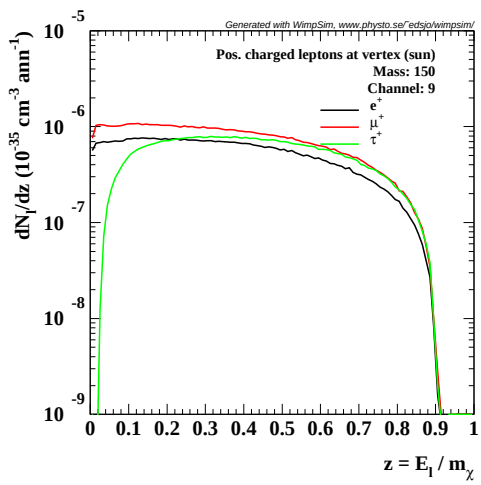
9.8.1 Neutrino fluxes at detector (Sun)



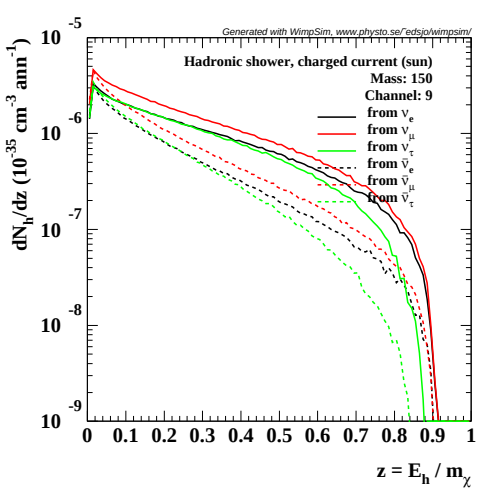


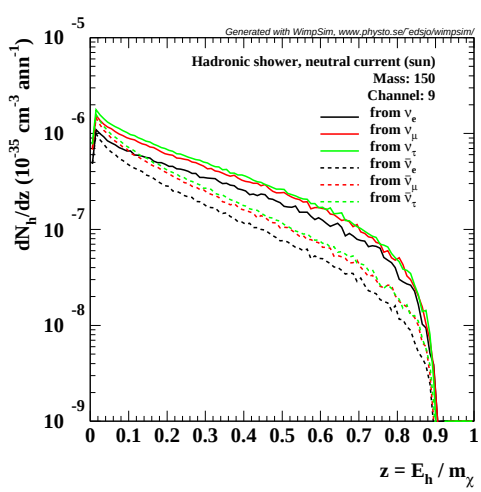
9.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



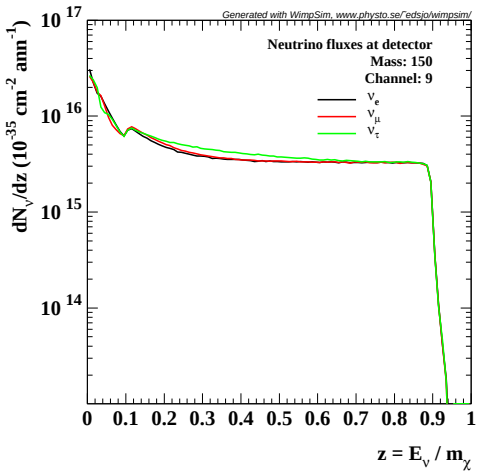


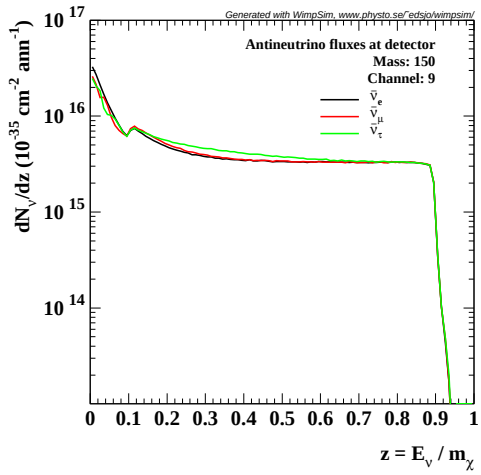
9.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



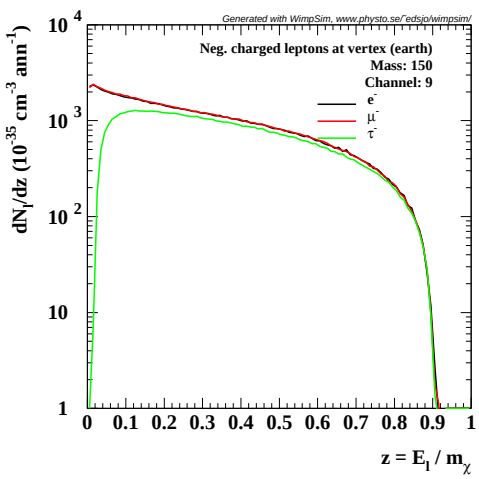


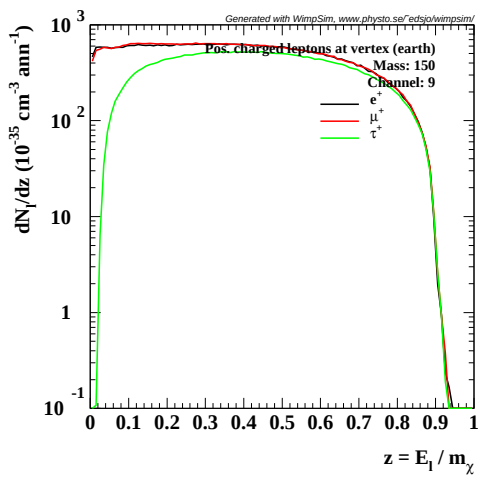
9.8.4 Neutrino fluxes at detector (Earth)



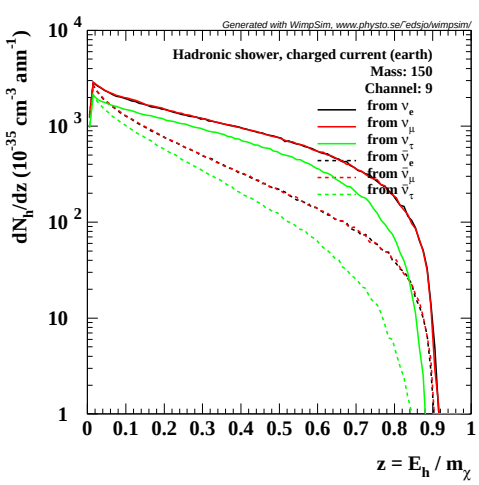


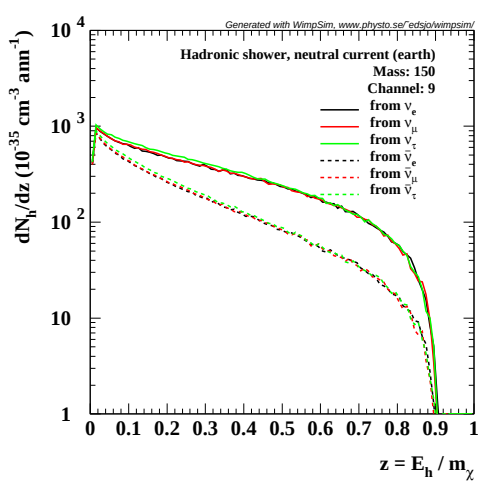
9.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



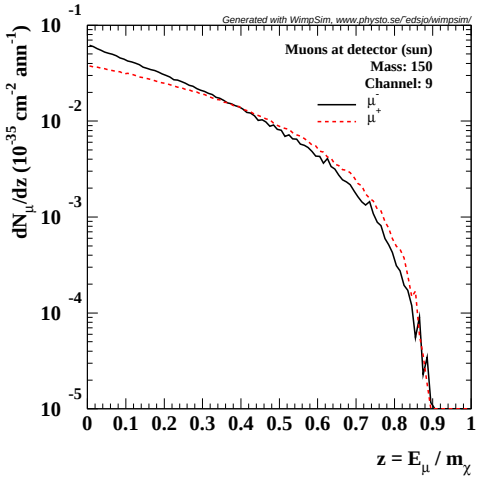


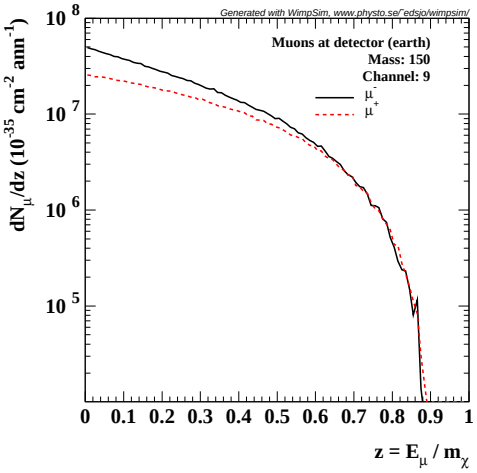
9.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





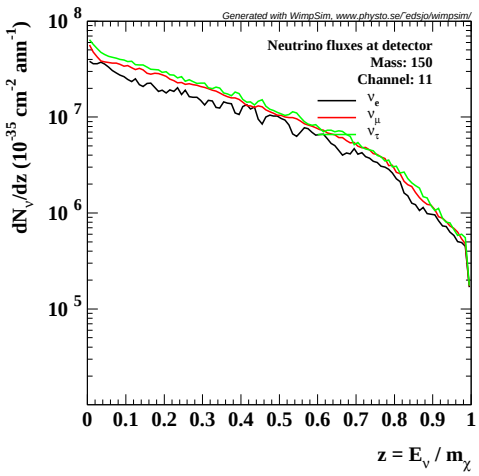
9.8.7 Muons at detector (Sun/Earth)

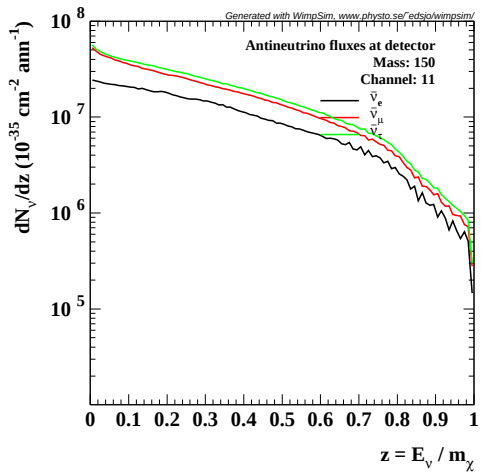




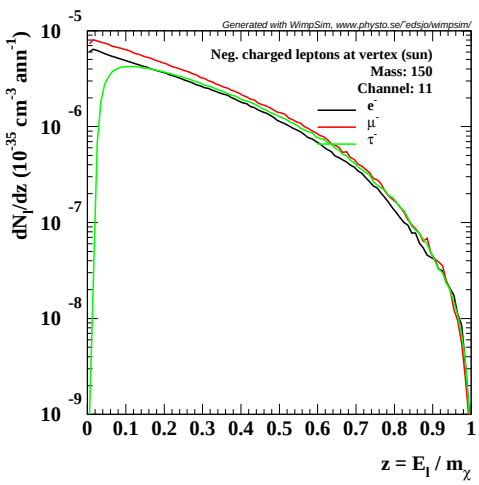
9.9 Channel 11 – $\tau^-\tau^+$

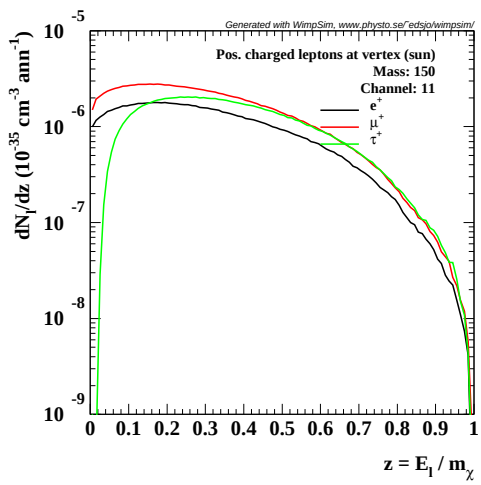
9.9.1 Neutrino fluxes at detector (Sun)



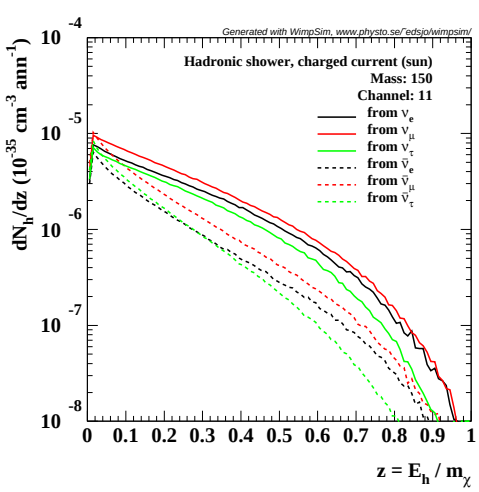


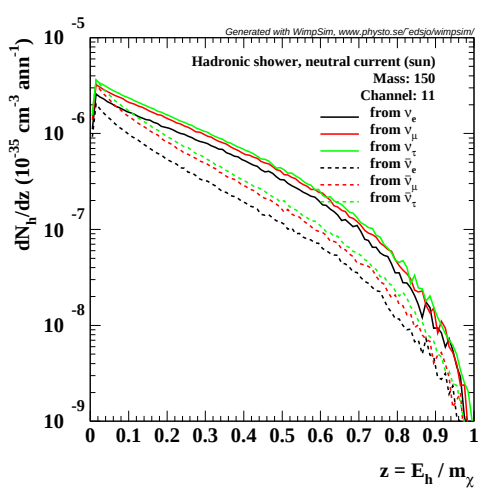
9.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



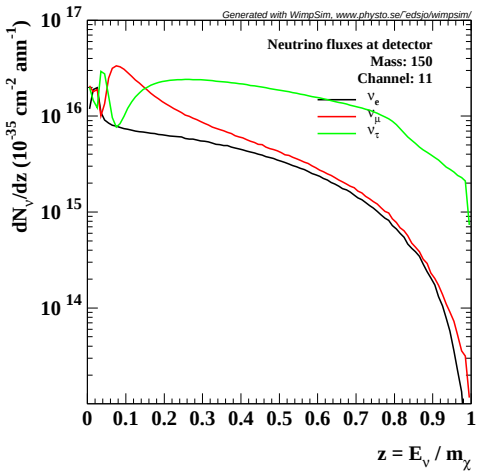


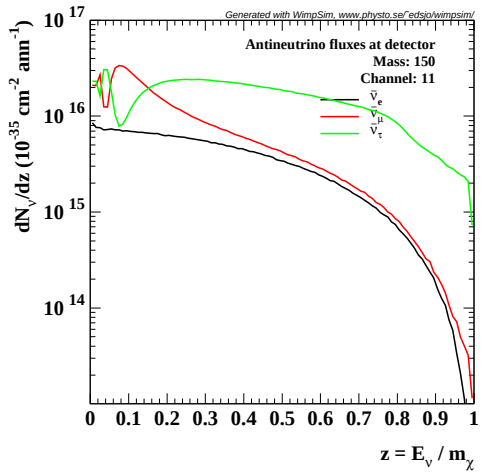
9.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



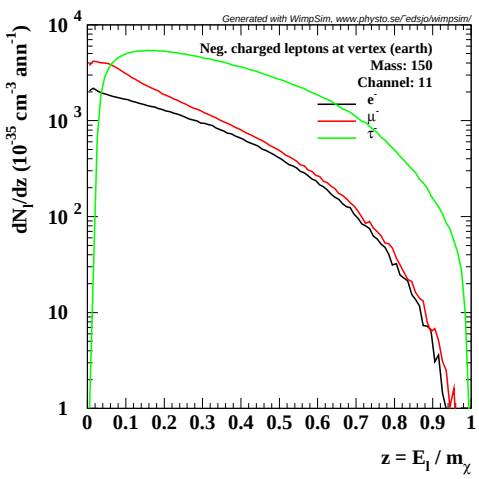


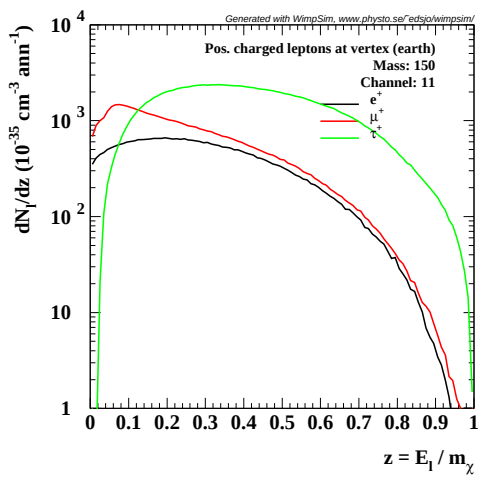
9.9.4 Neutrino fluxes at detector (Earth)



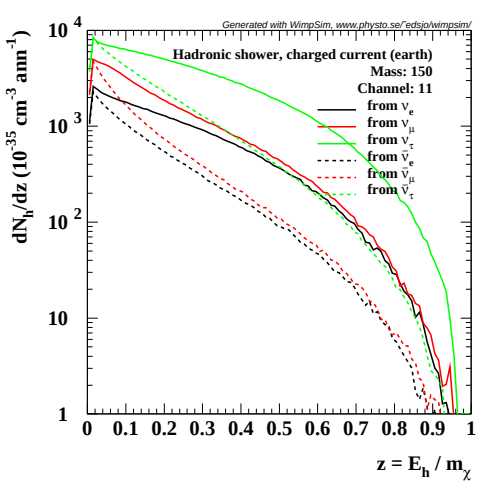


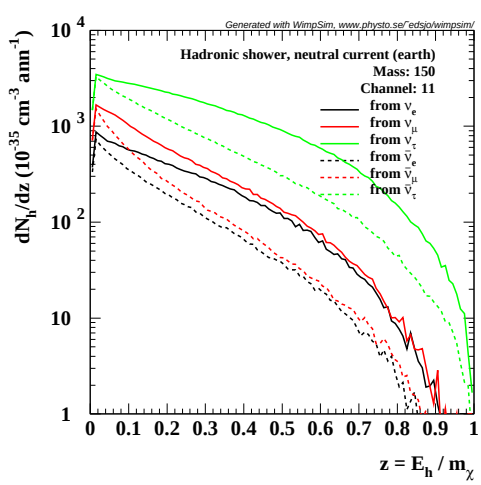
9.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



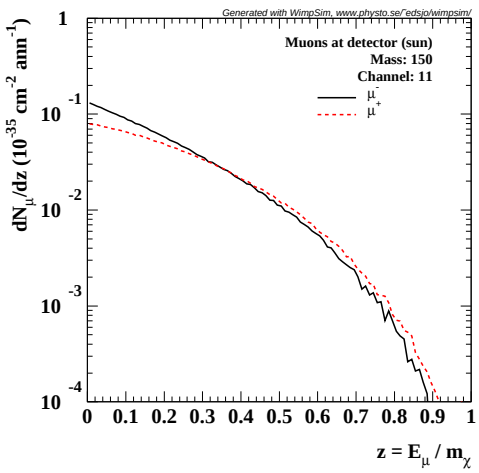


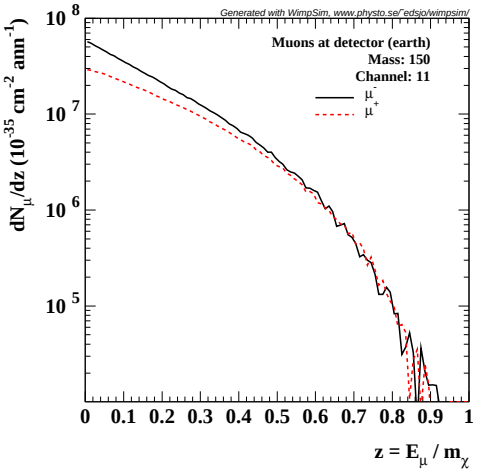
9.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





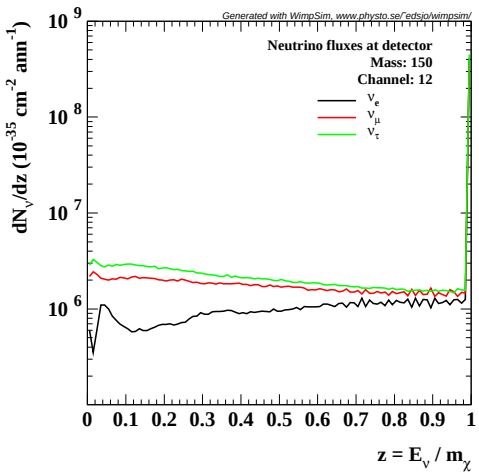
9.9.7 Muons at detector (Sun/Earth)

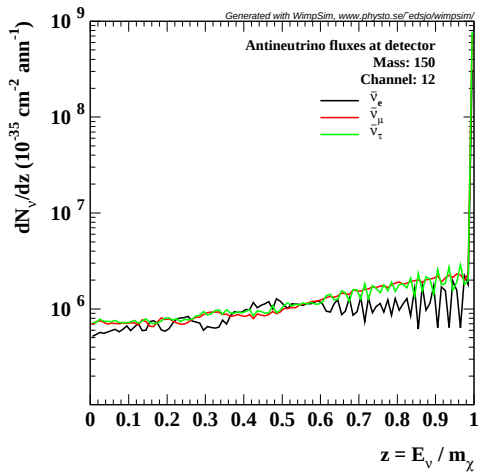




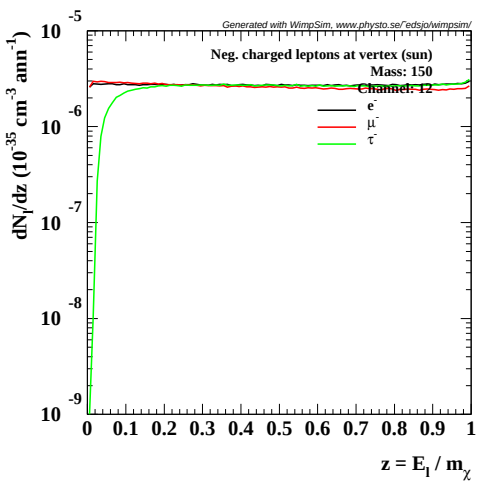
9.10 Channel 12 – $\nu_e\bar{\nu}_e$

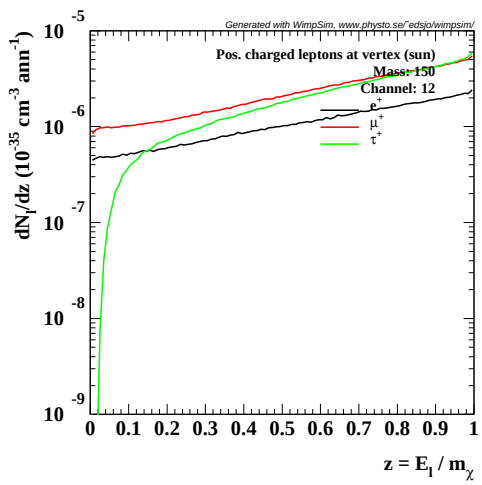
9.10.1 Neutrino fluxes at detector (Sun)



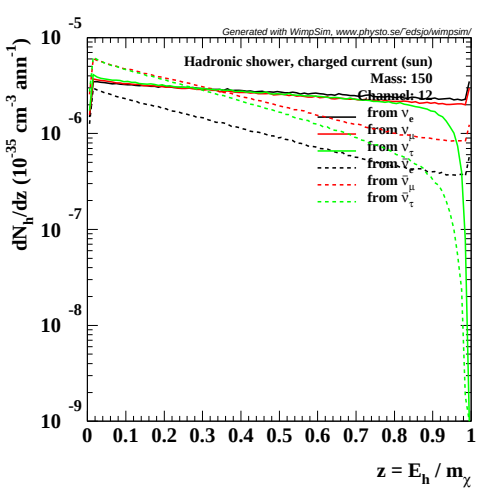


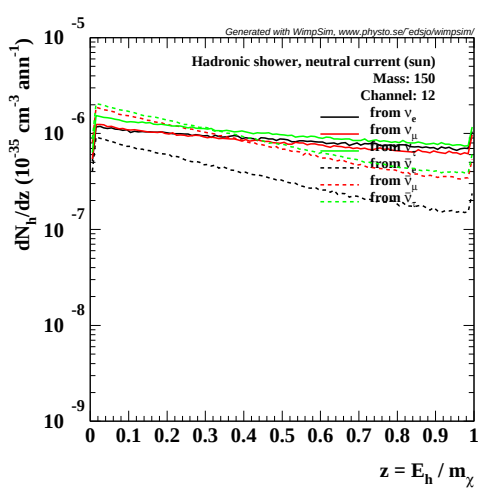
9.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



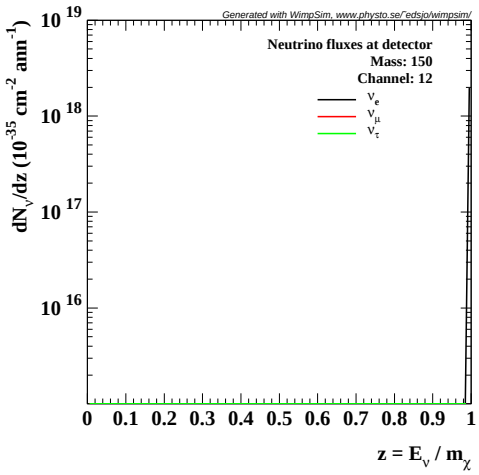


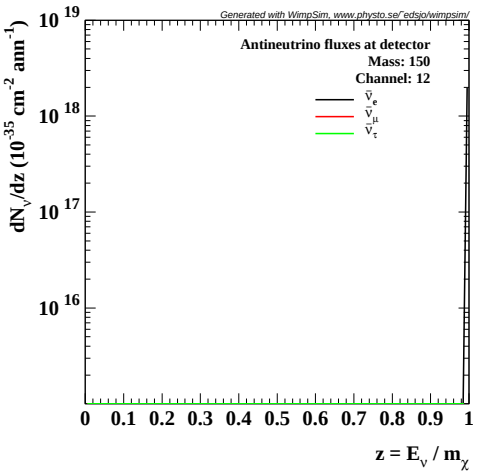
9.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



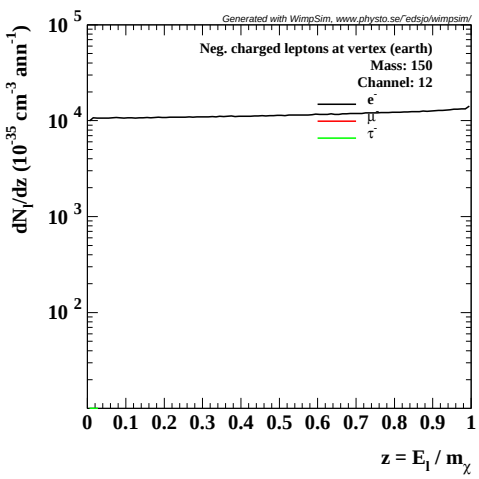


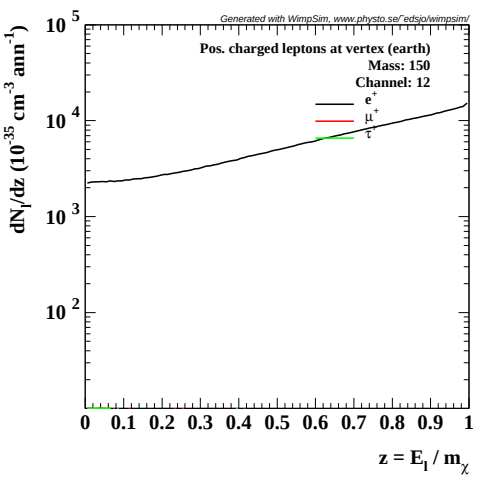
9.10.4 Neutrino fluxes at detector (Earth)



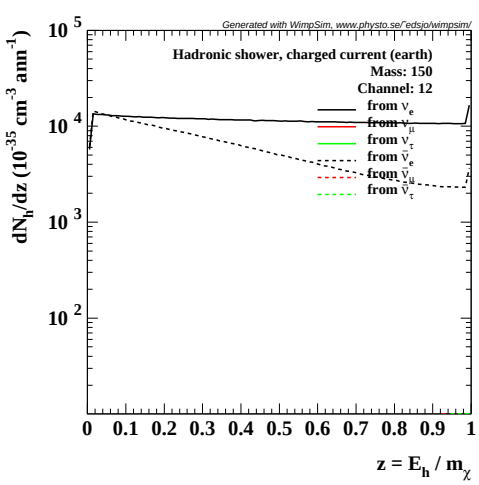


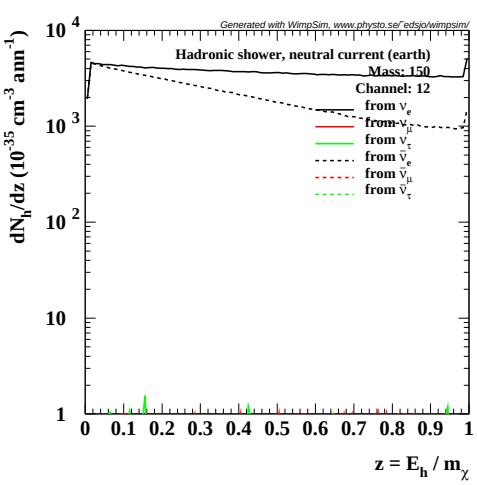
9.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



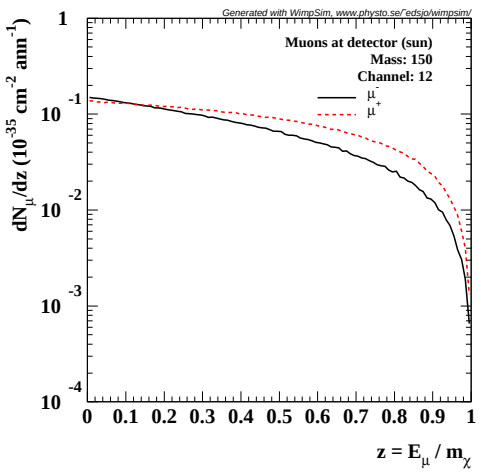


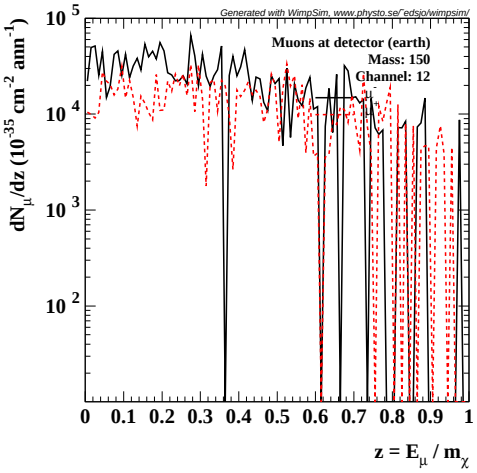
9.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





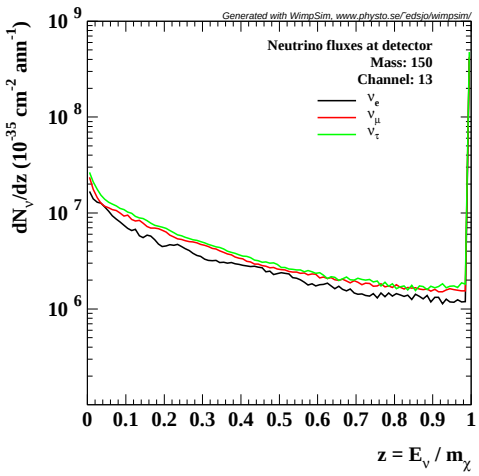
9.10.7 Muons at detector (Sun/Earth)

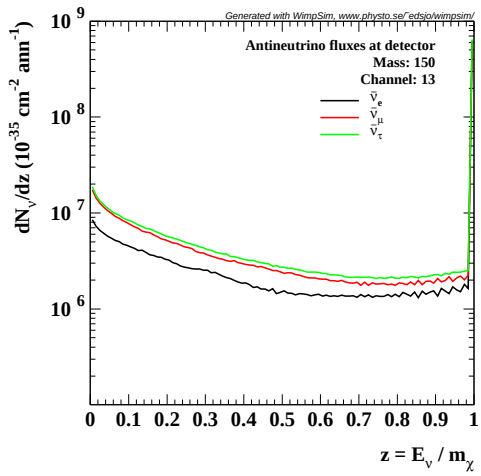




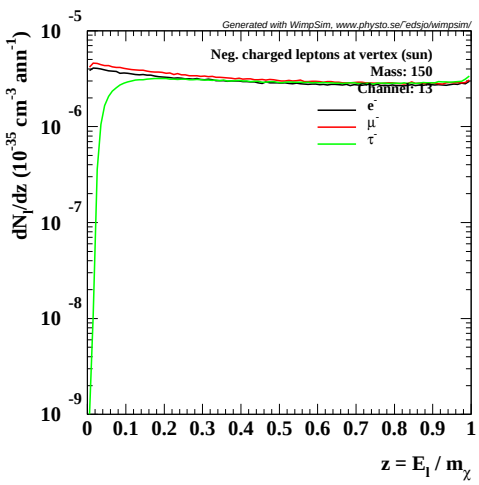
9.11 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

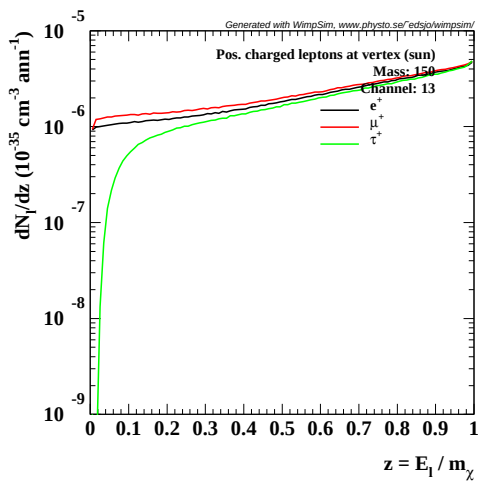
9.11.1 Neutrino fluxes at detector (Sun)



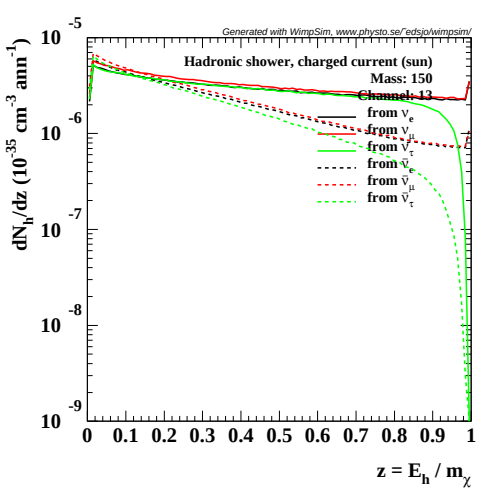


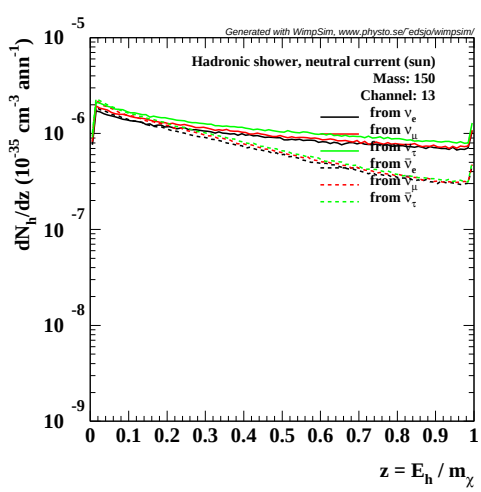
9.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



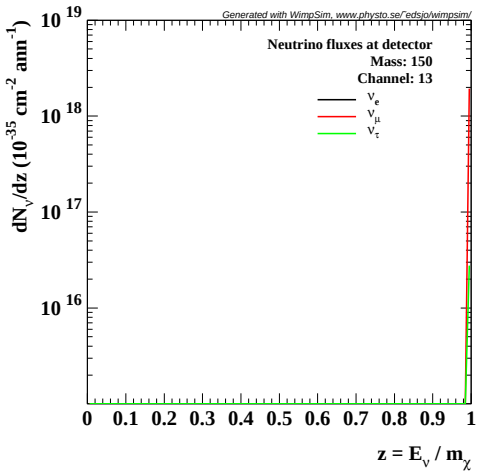


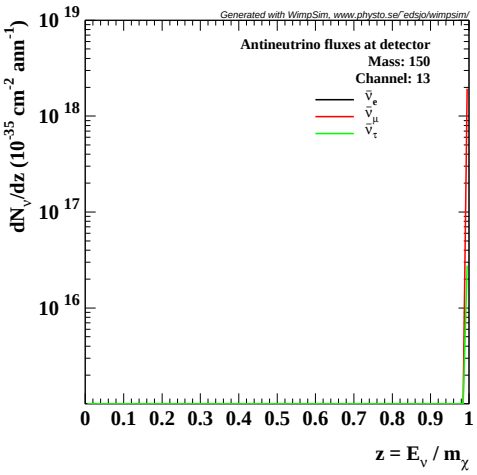
9.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



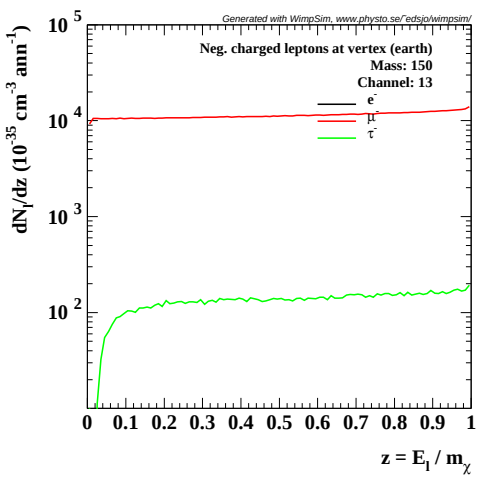


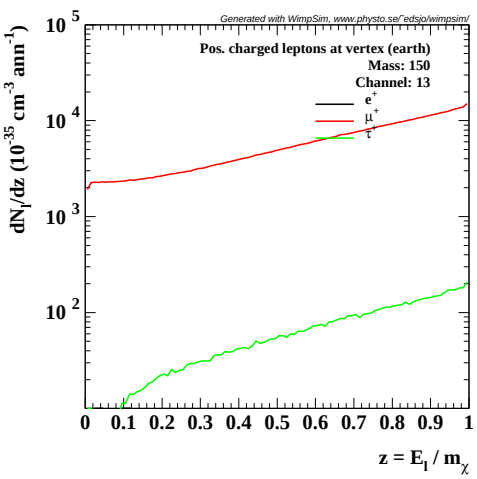
9.11.4 Neutrino fluxes at detector (Earth)



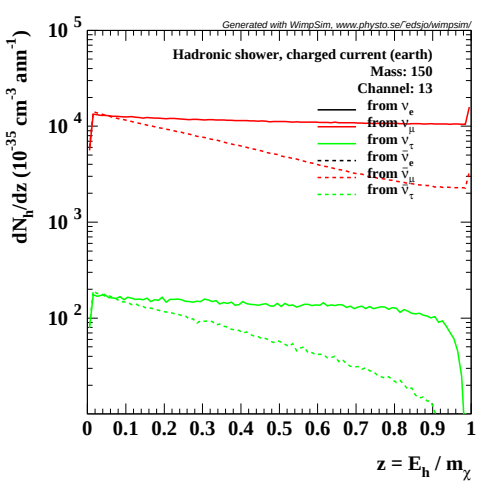


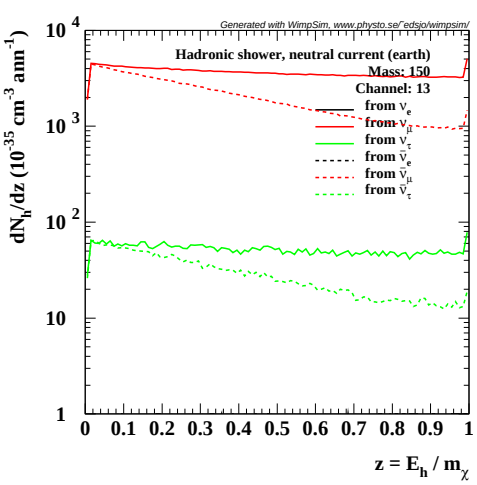
9.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



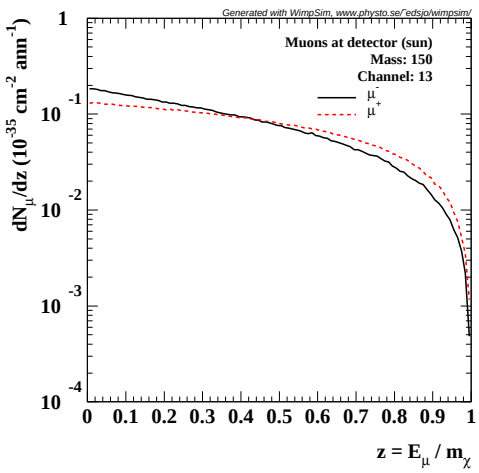


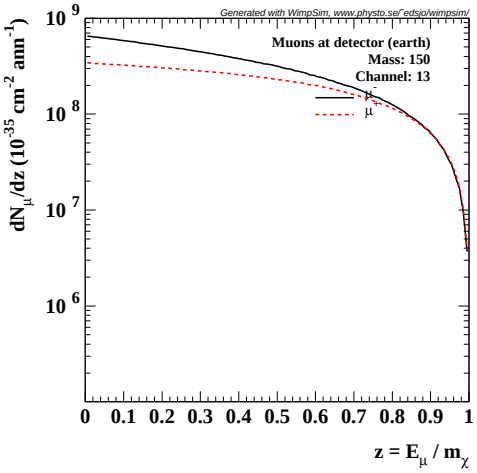
9.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





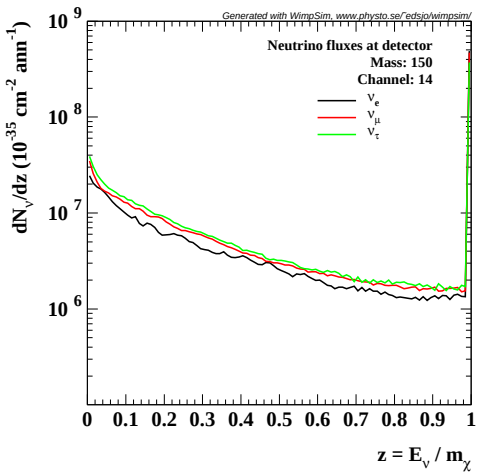
9.11.7 Muons at detector (Sun/Earth)

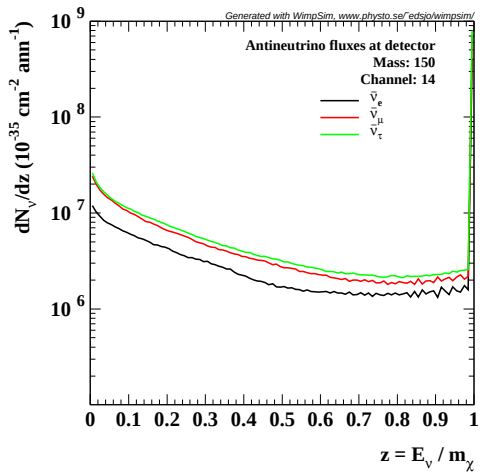




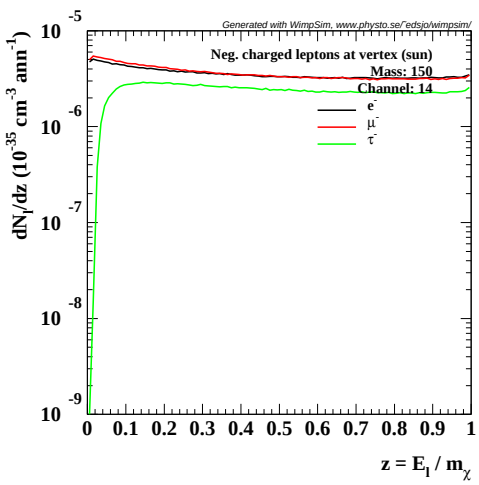
9.12 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

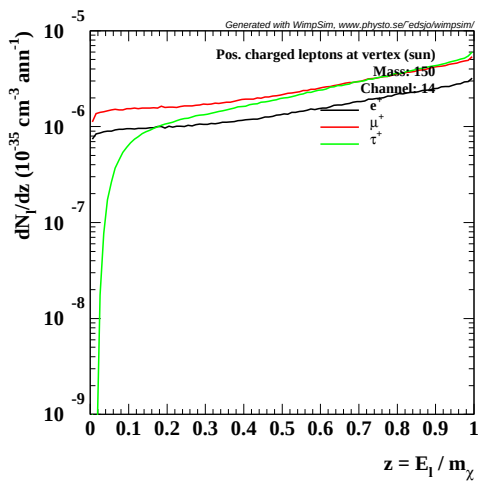
9.12.1 Neutrino fluxes at detector (Sun)



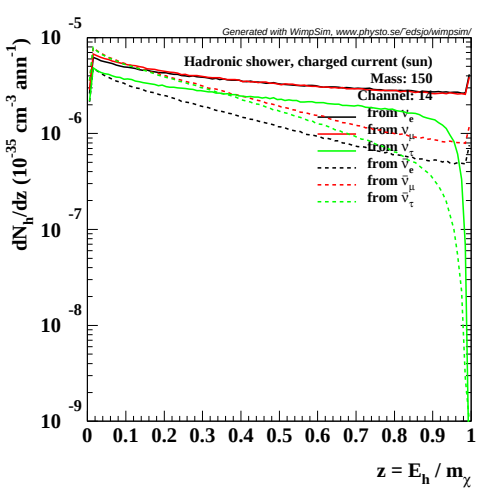


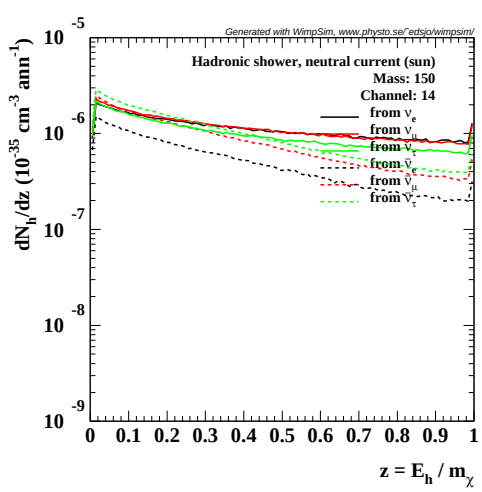
9.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



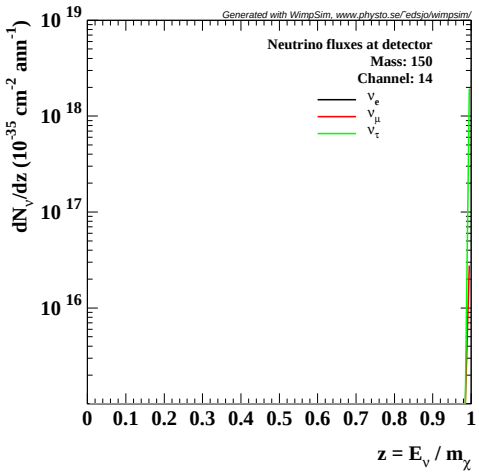


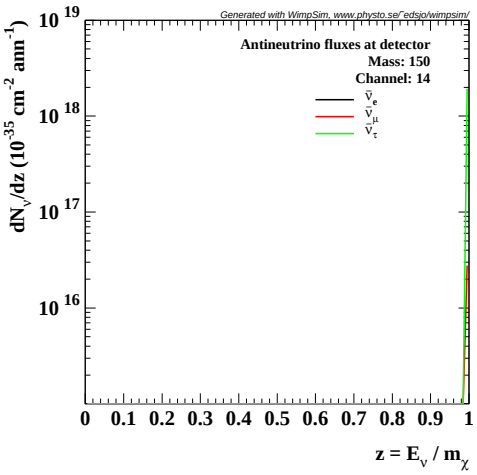
9.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



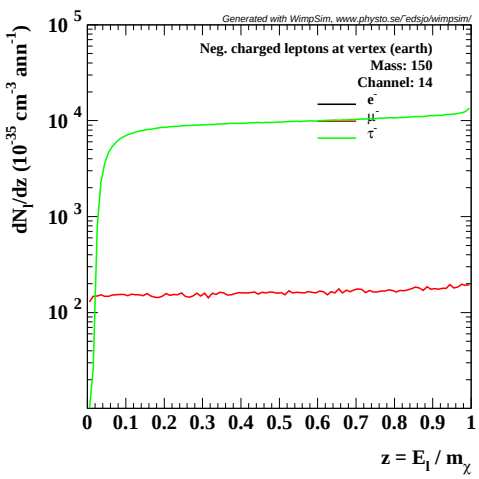


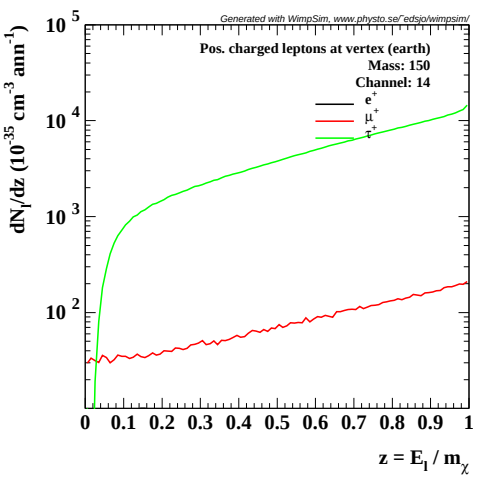
9.12.4 Neutrino fluxes at detector (Earth)



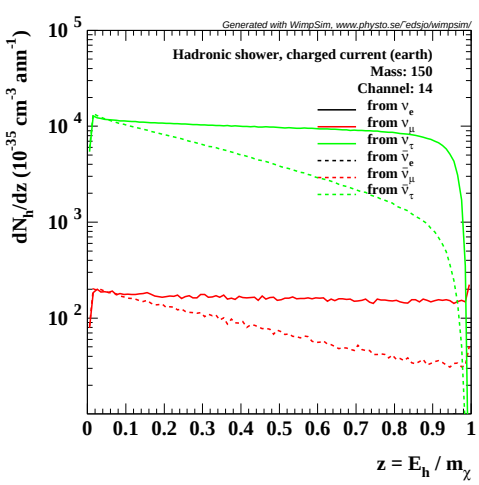


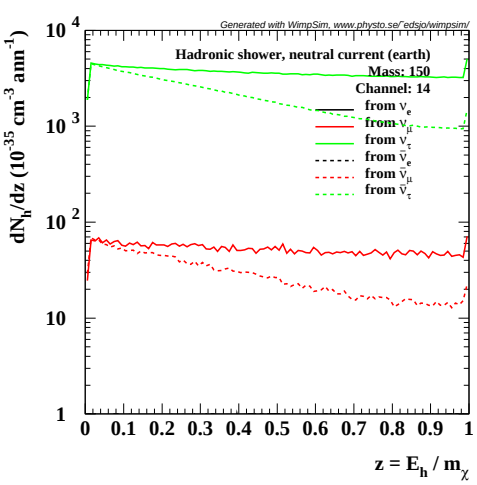
9.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



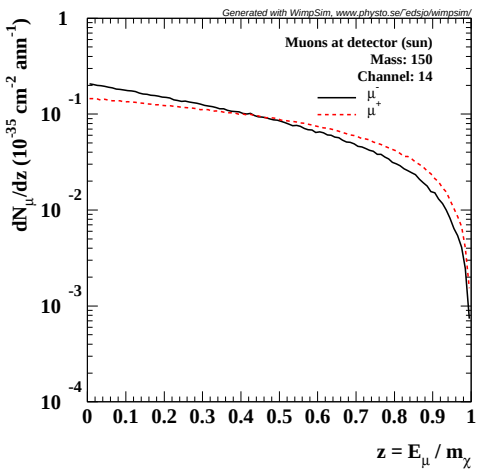


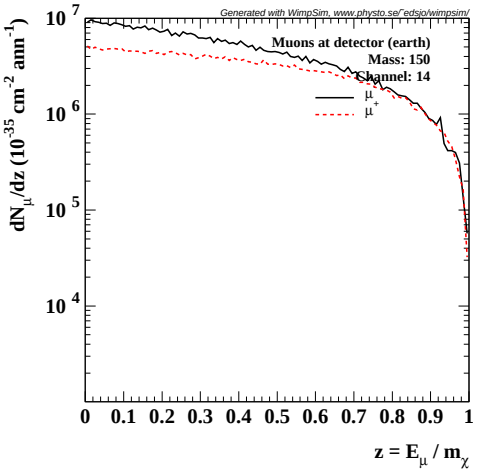
9.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





9.12.7 Muons at detector (Sun/Earth)

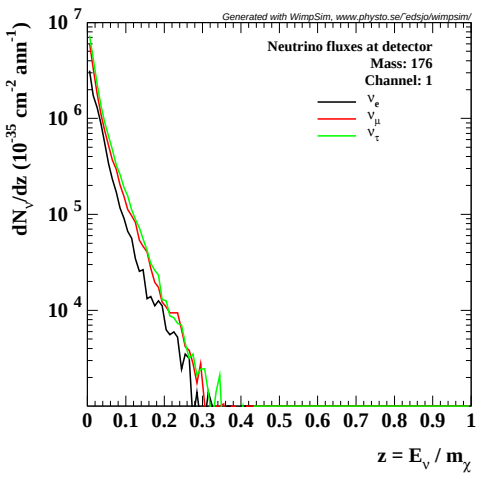


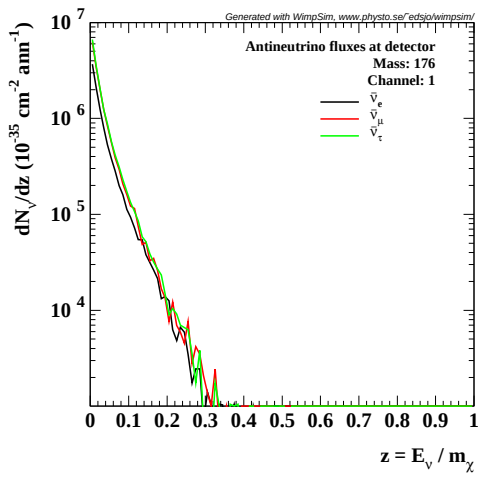


10 Mass 176

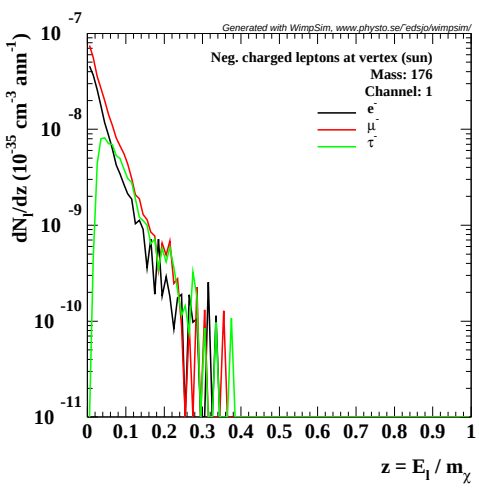
10.1 Channel 1 – $d\bar{d}$

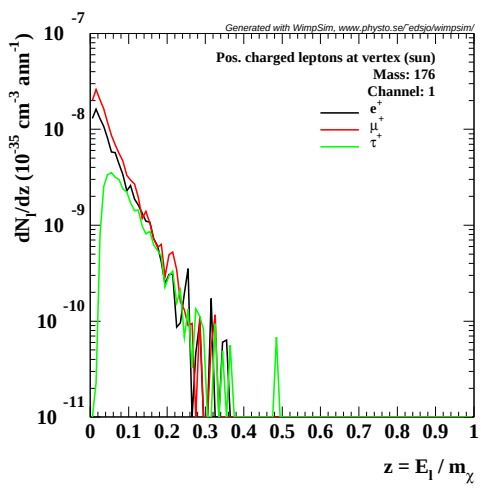
10.1.1 Neutrino fluxes at detector (Sun)



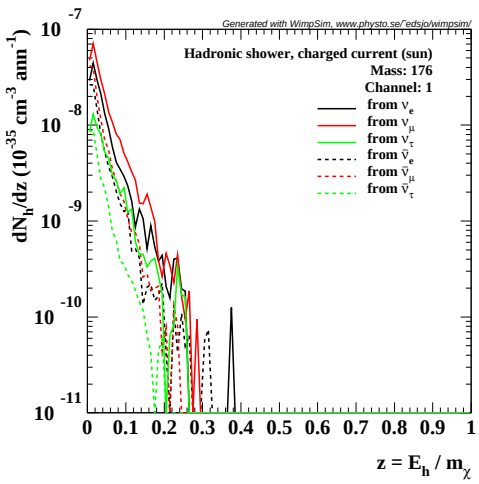


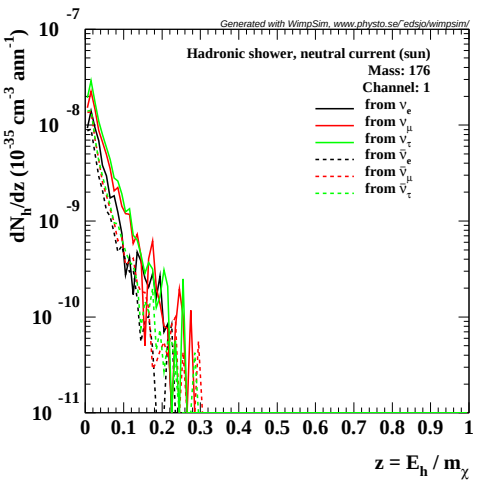
10.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



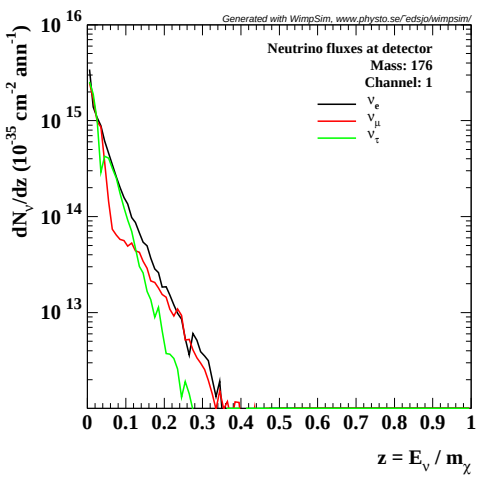


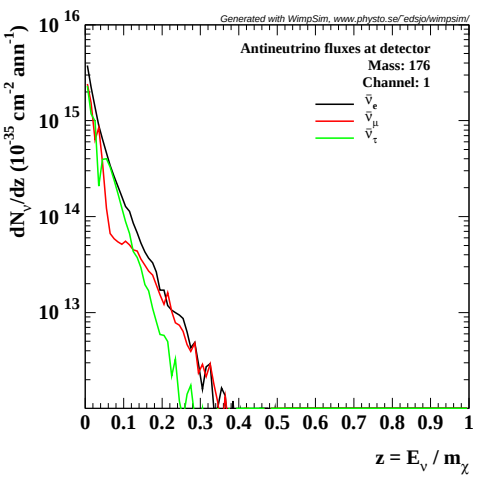
10.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



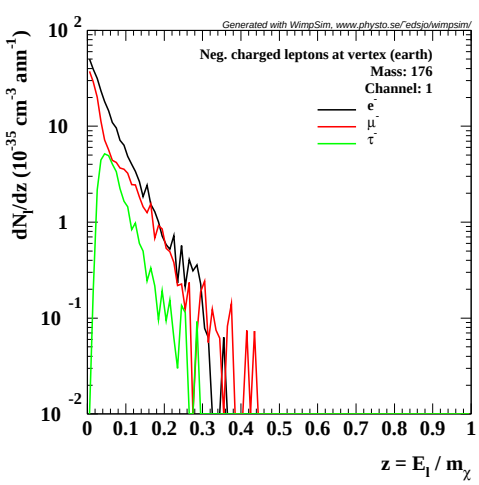


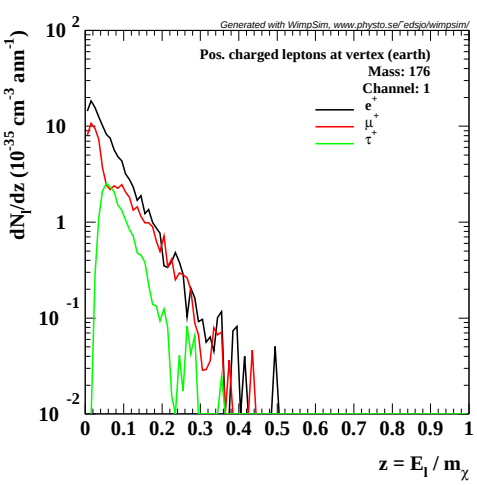
10.1.4 Neutrino fluxes at detector (Earth)



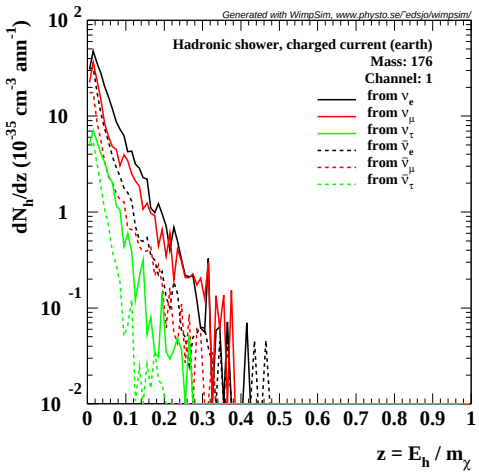


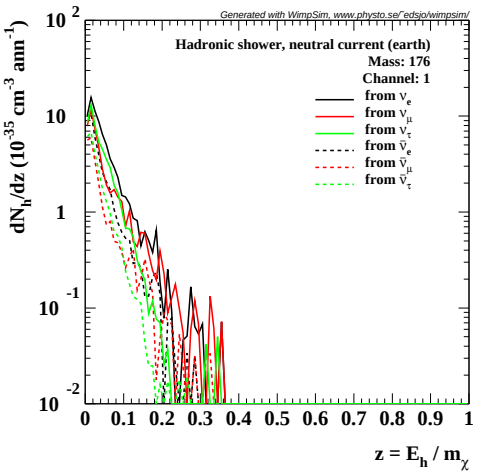
10.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



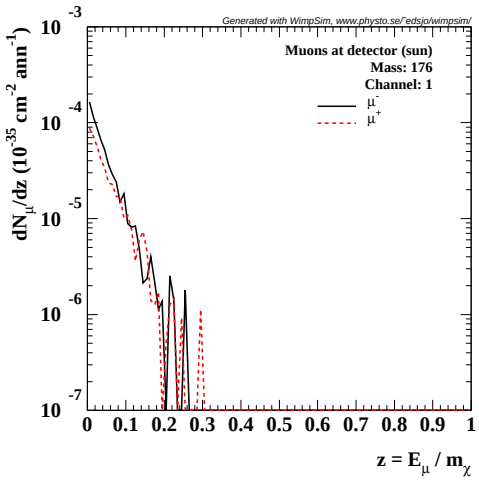


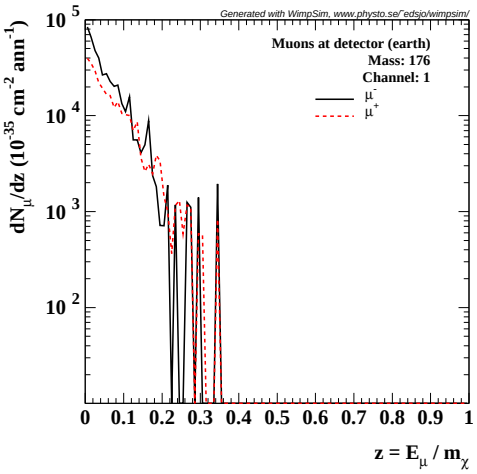
10.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





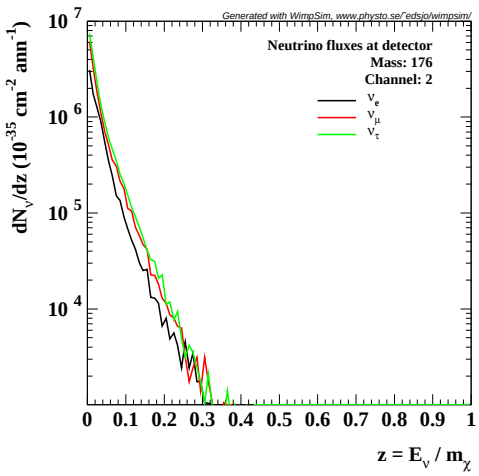
10.1.7 Muons at detector (Sun/Earth)

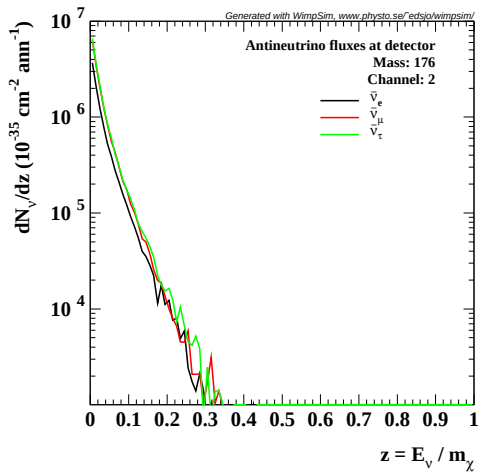




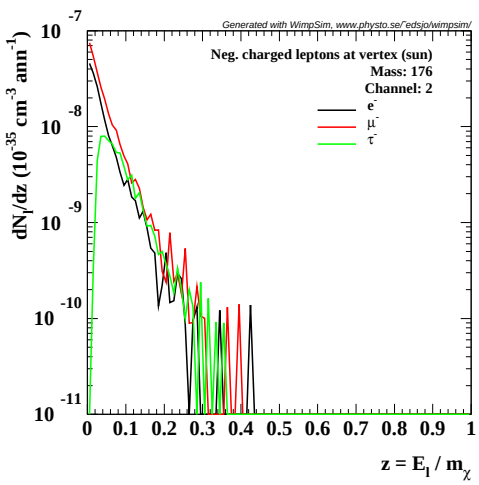
10.2 Channel 2 – $u\bar{u}$

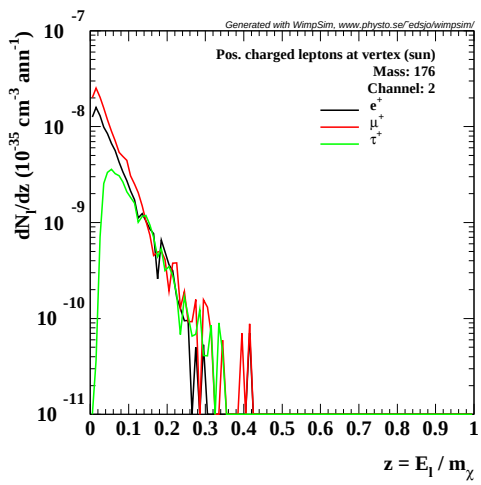
10.2.1 Neutrino fluxes at detector (Sun)



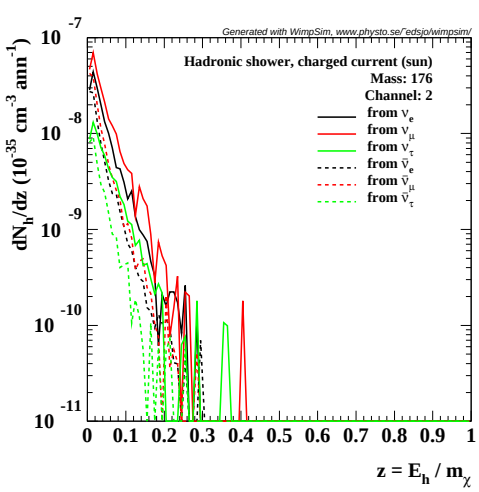


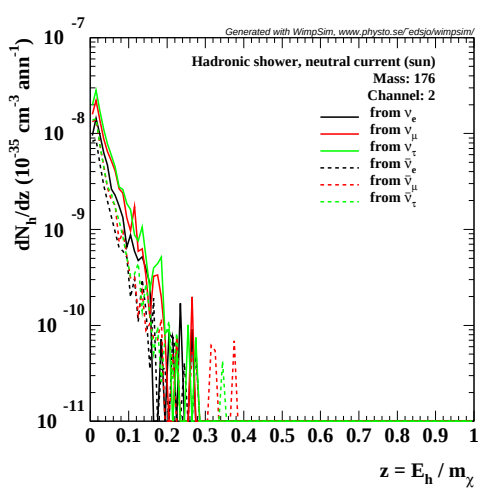
10.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



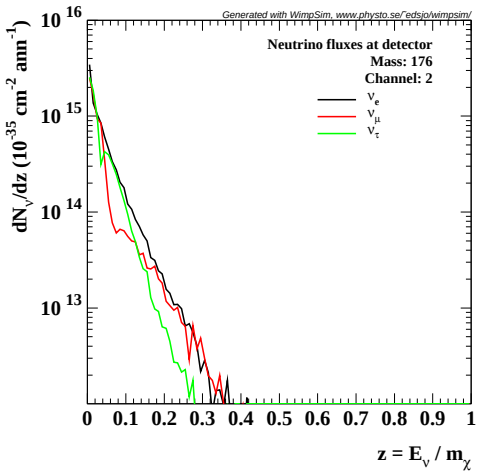


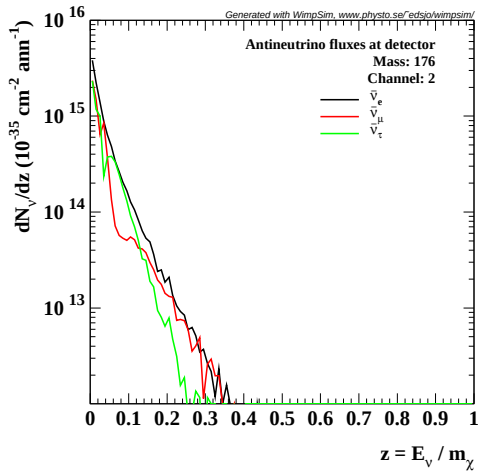
10.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



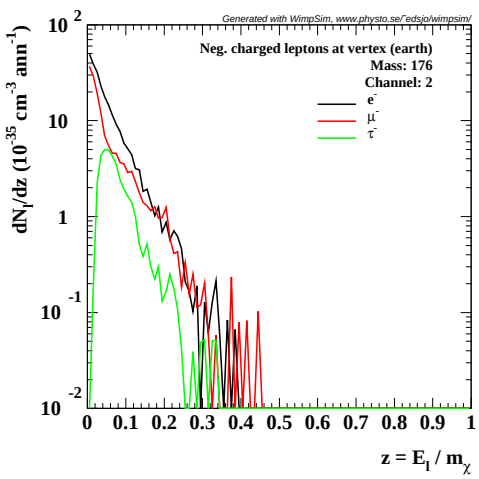


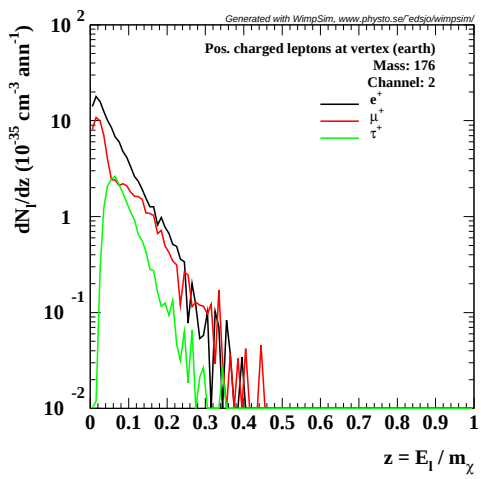
10.2.4 Neutrino fluxes at detector (Earth)



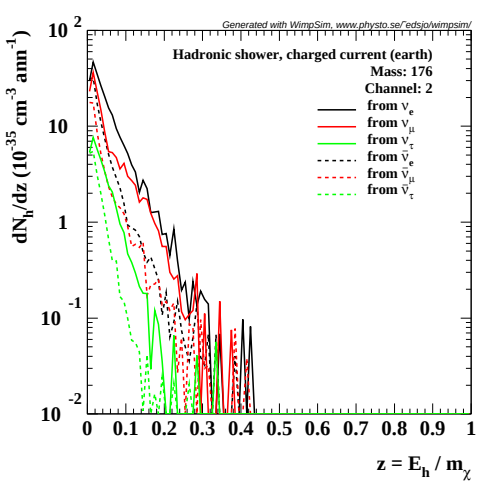


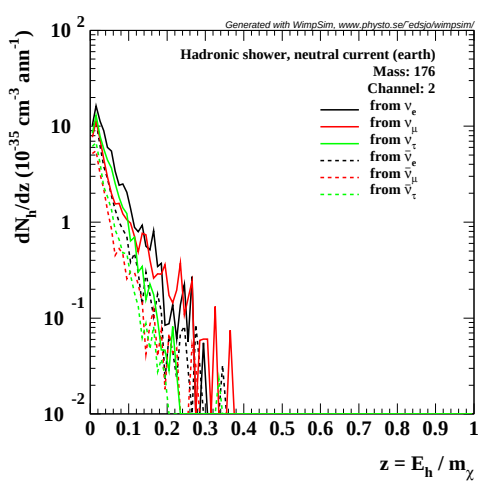
10.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



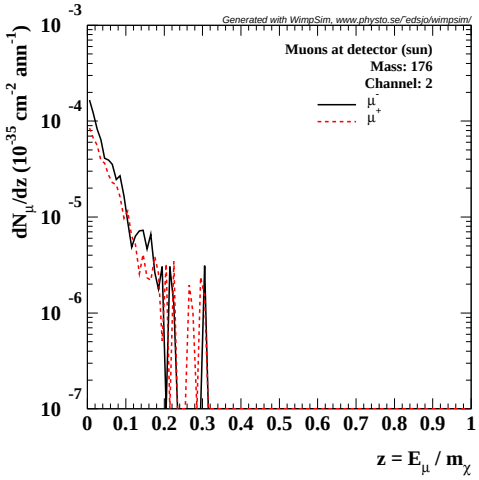


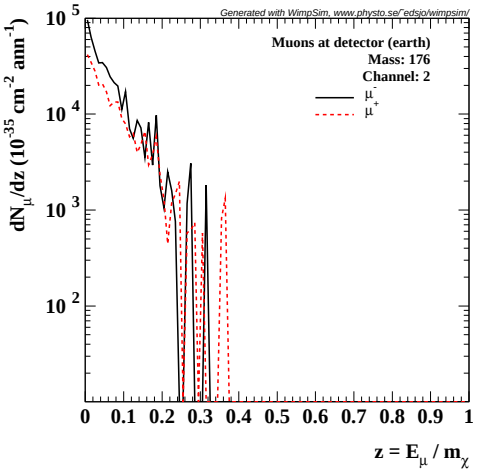
10.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





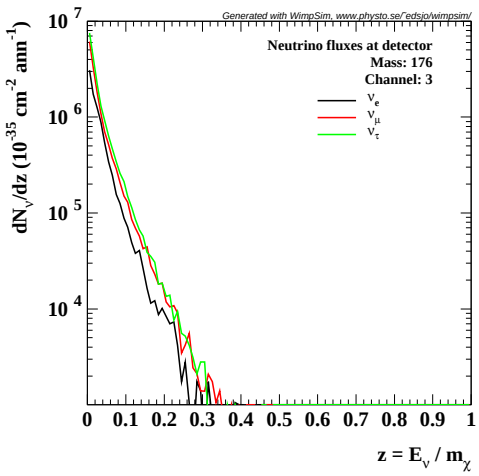
10.2.7 Muons at detector (Sun/Earth)

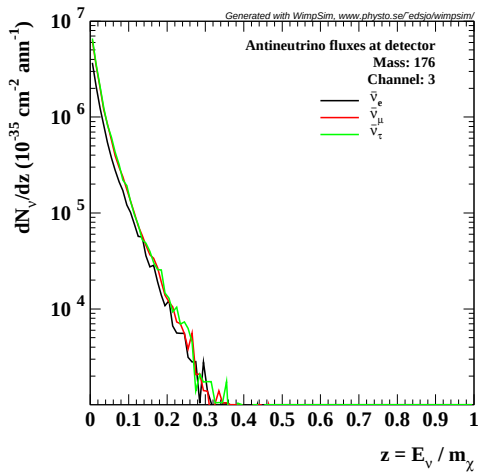




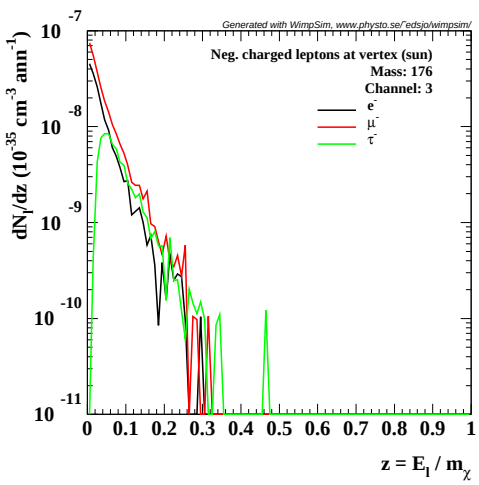
10.3 Channel 3 – $s\bar{s}$

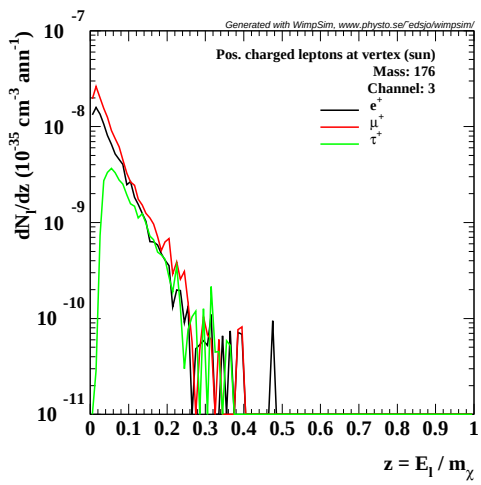
10.3.1 Neutrino fluxes at detector (Sun)



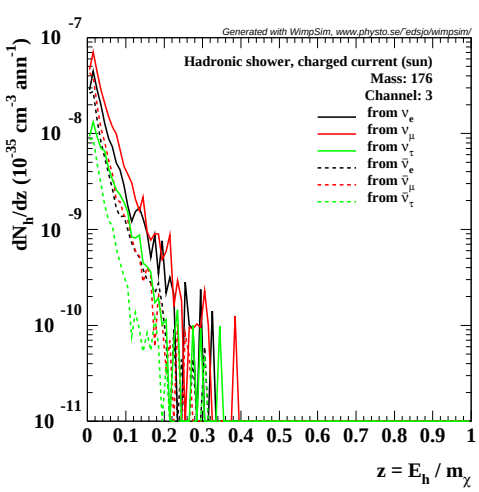


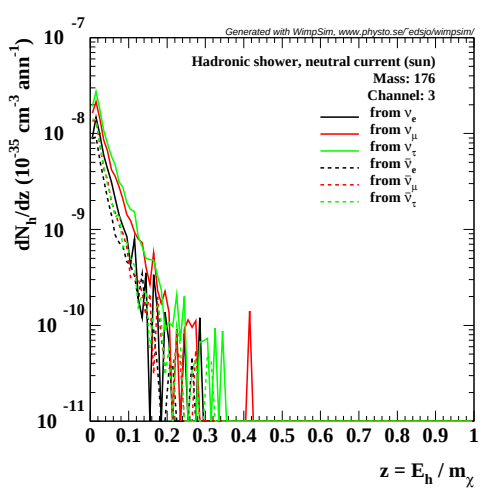
10.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



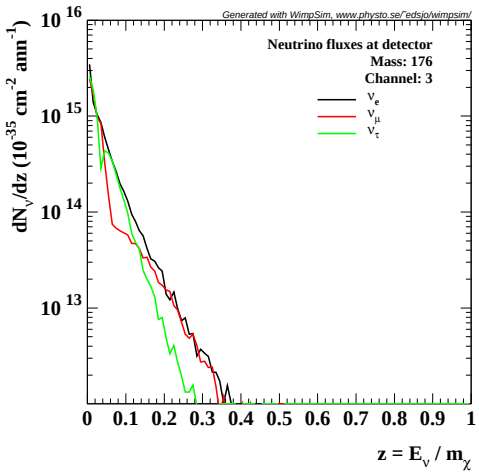


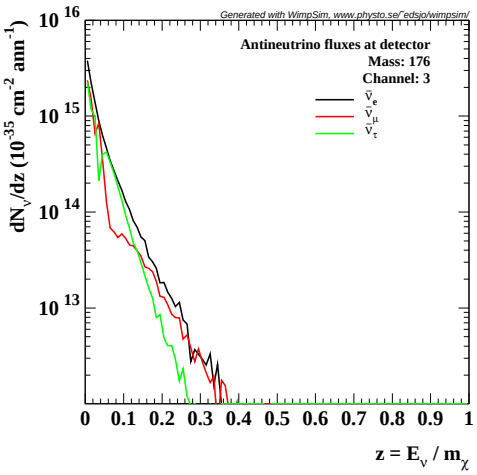
10.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



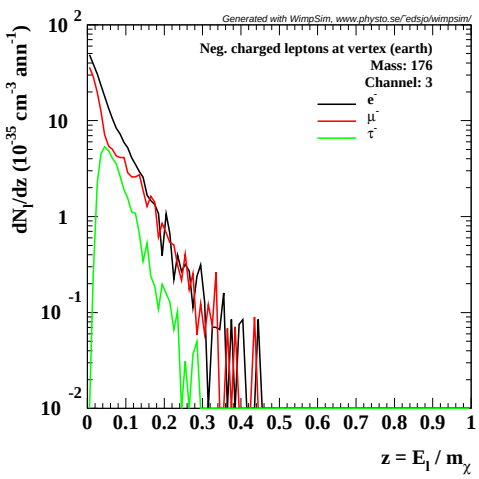


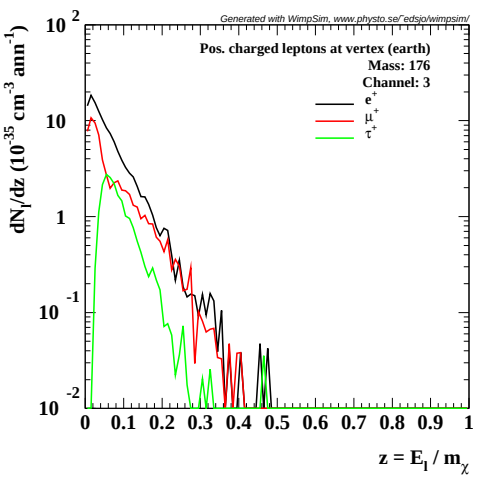
10.3.4 Neutrino fluxes at detector (Earth)



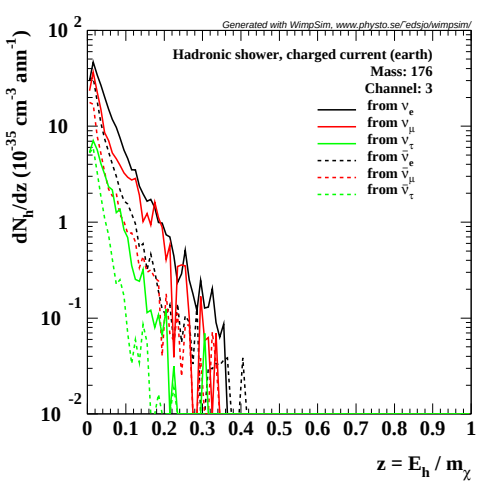


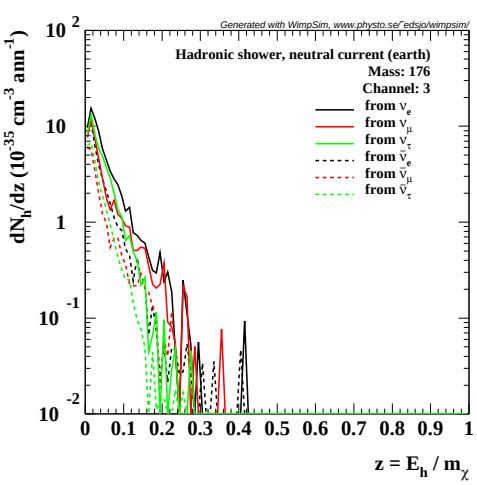
10.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



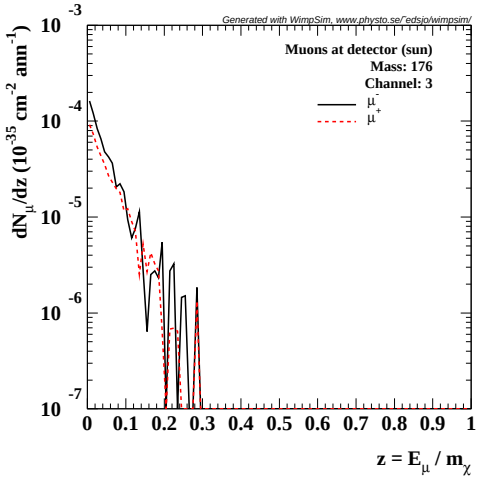


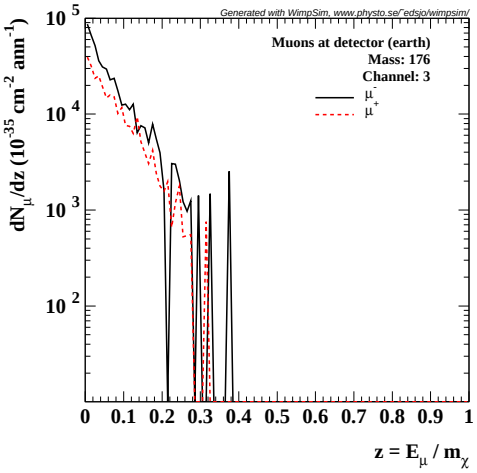
10.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





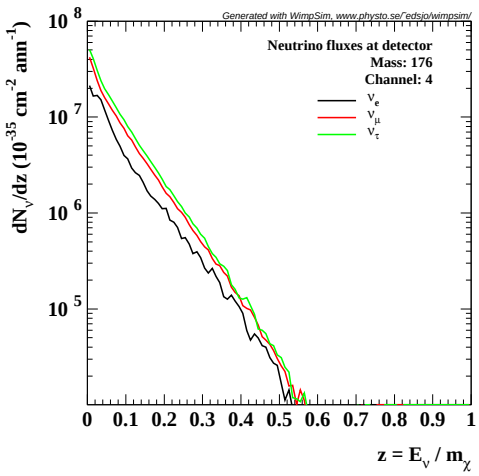
10.3.7 Muons at detector (Sun/Earth)

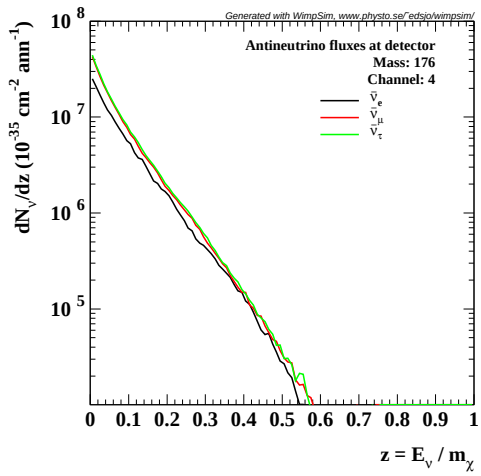




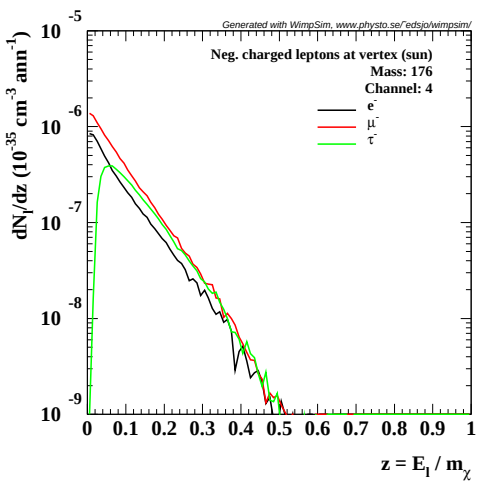
10.4 Channel 4 – $c\bar{c}$

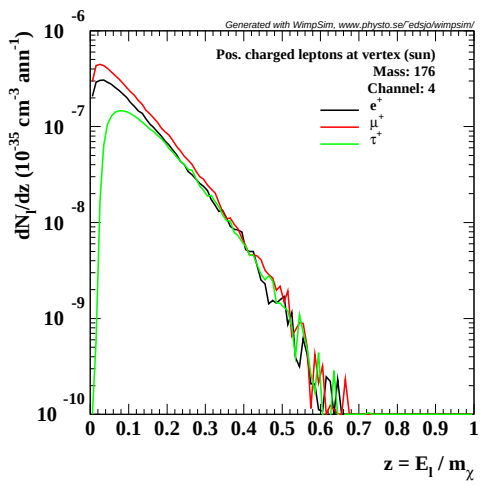
10.4.1 Neutrino fluxes at detector (Sun)



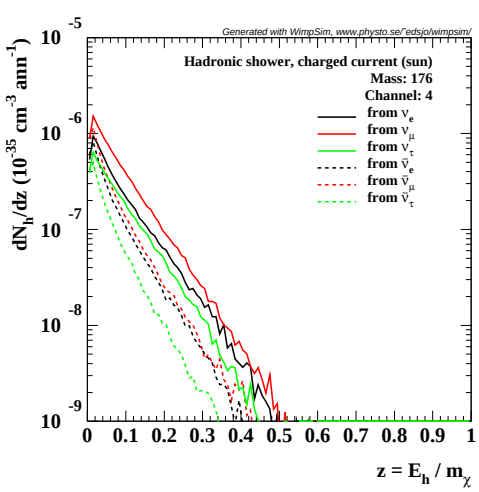


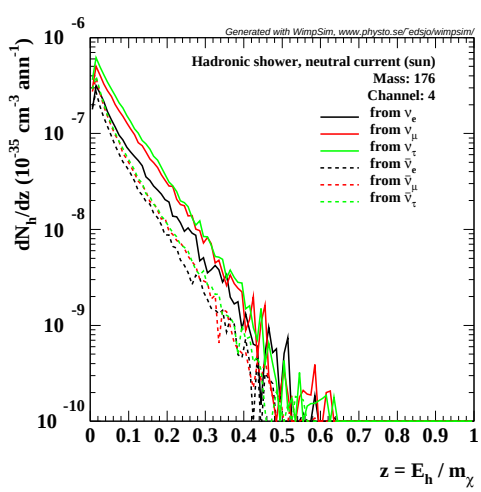
10.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



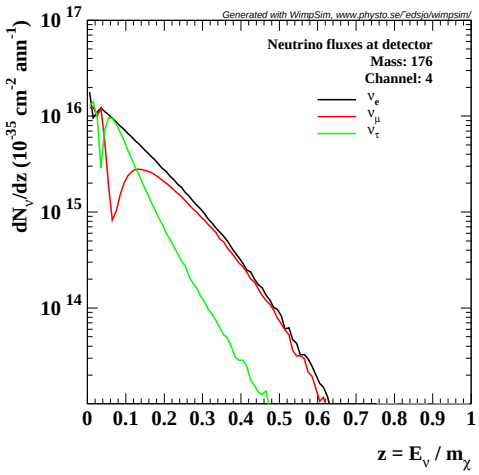


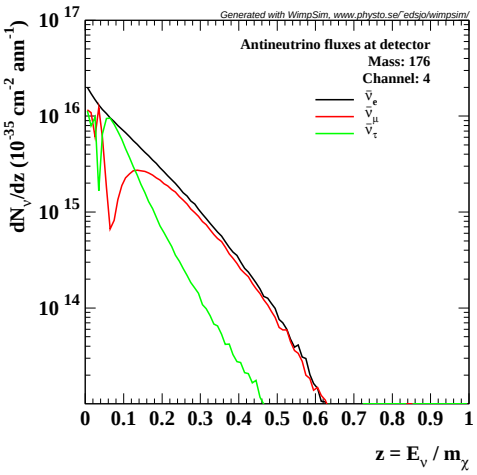
10.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



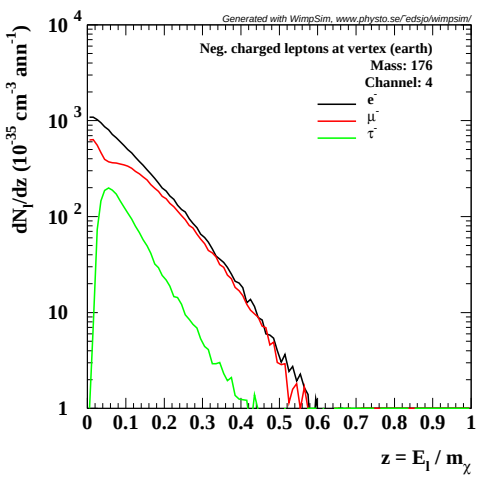


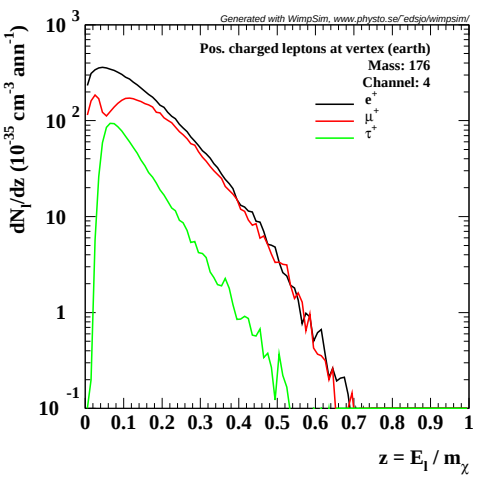
10.4.4 Neutrino fluxes at detector (Earth)



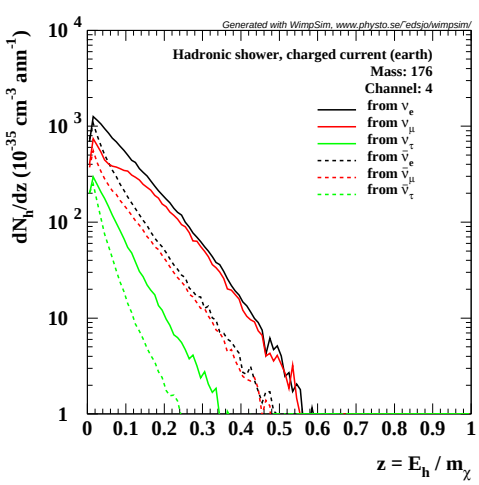


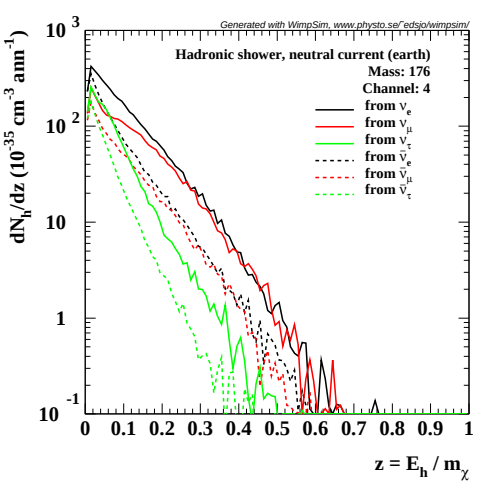
10.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



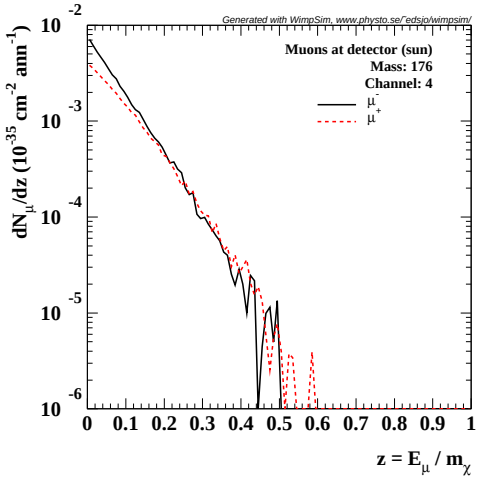


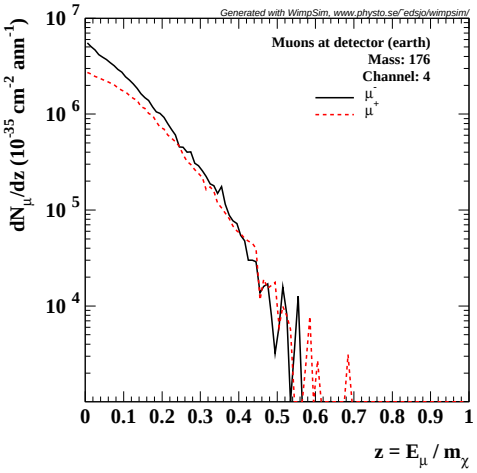
10.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





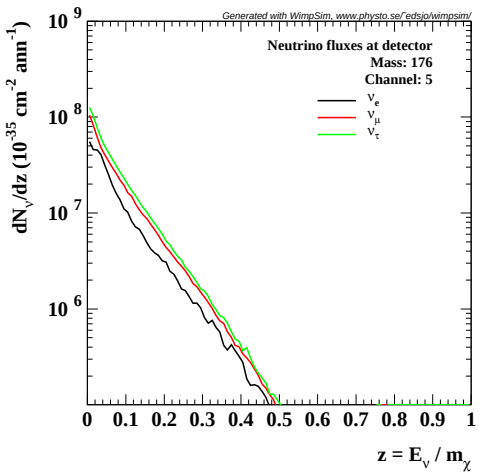
10.4.7 Muons at detector (Sun/Earth)

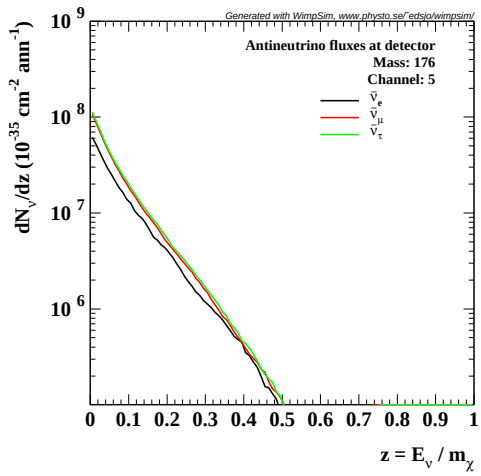




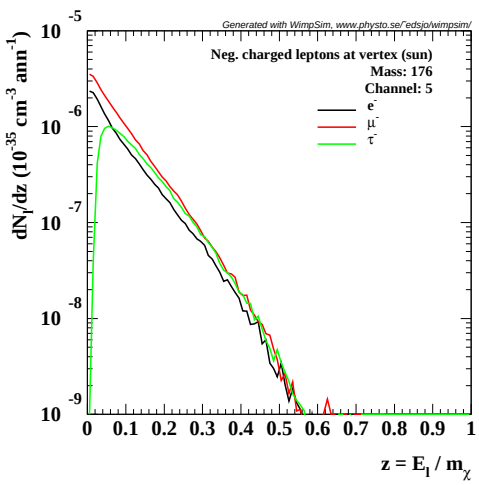
10.5 Channel 5 – $b\bar{b}$

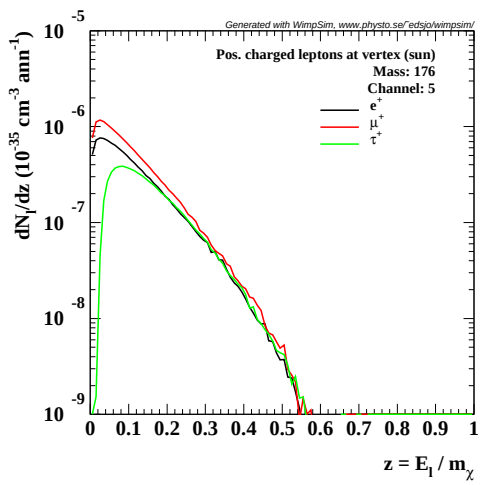
10.5.1 Neutrino fluxes at detector (Sun)



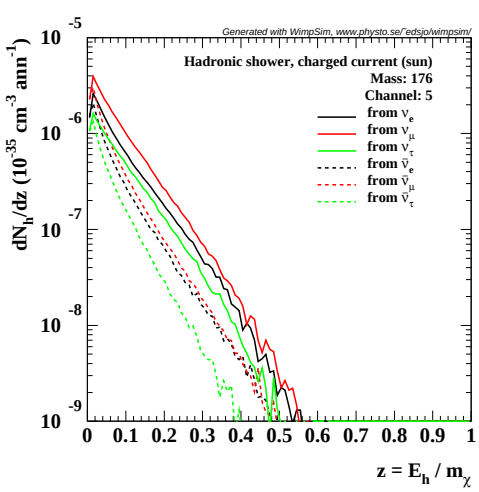


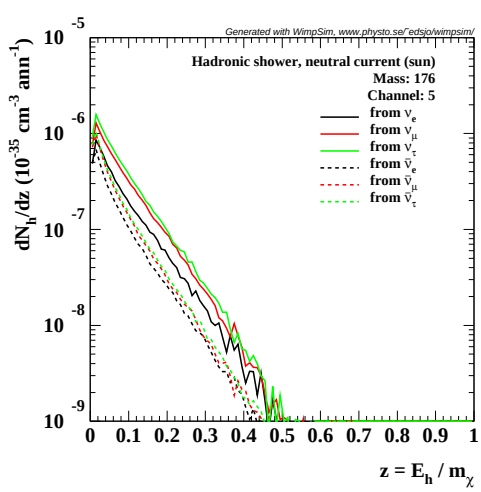
10.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



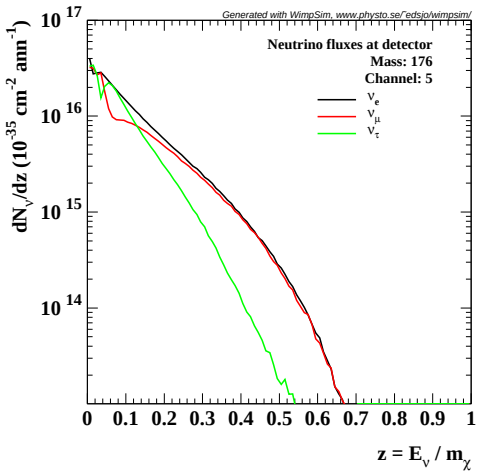


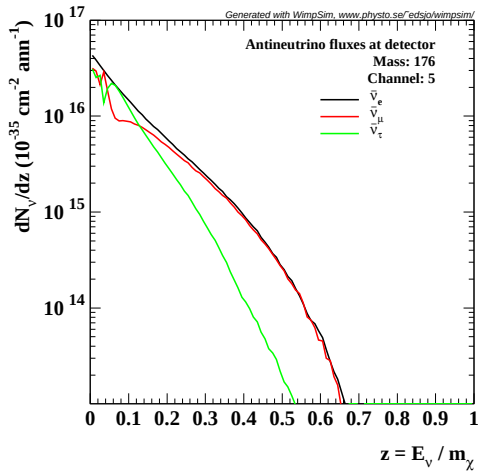
10.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



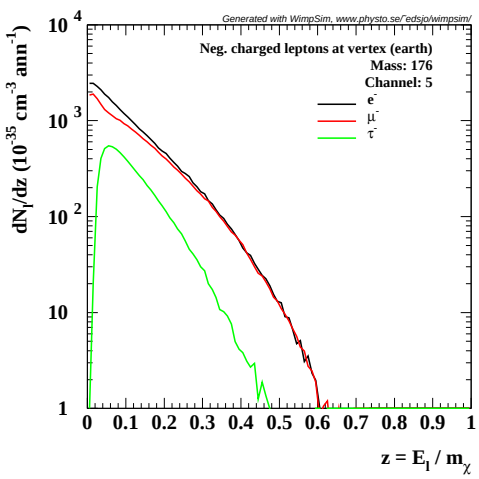


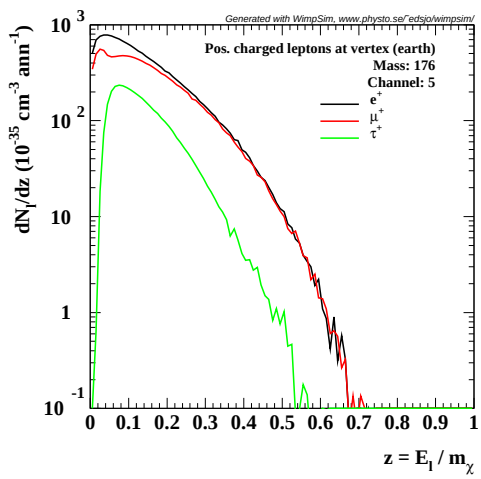
10.5.4 Neutrino fluxes at detector (Earth)



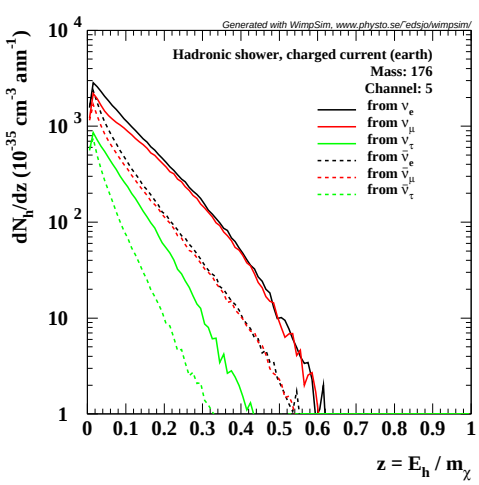


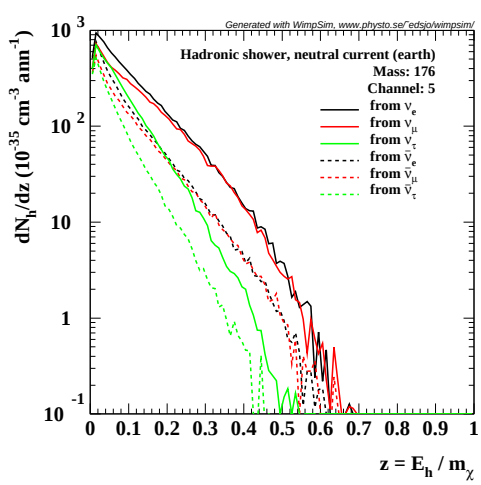
10.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



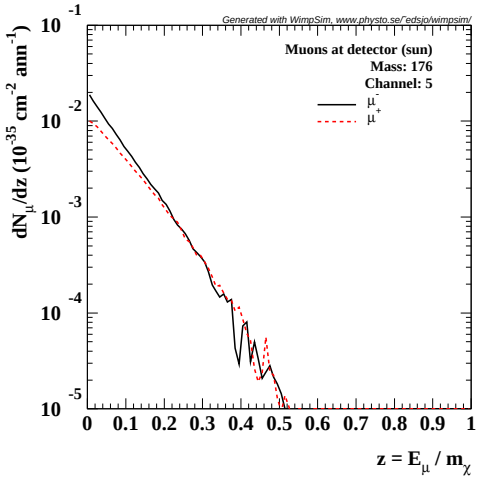


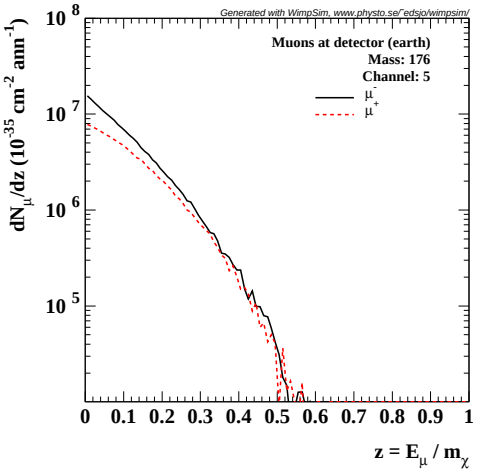
10.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





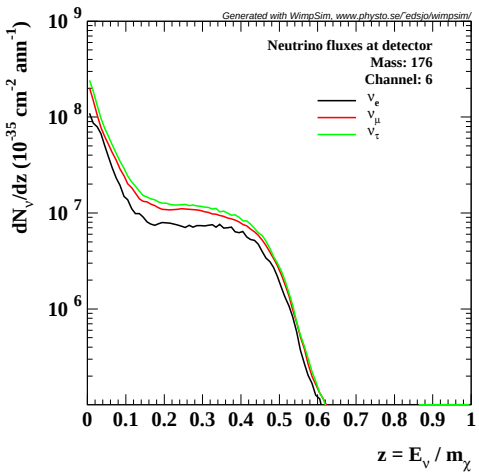
10.5.7 Muons at detector (Sun/Earth)

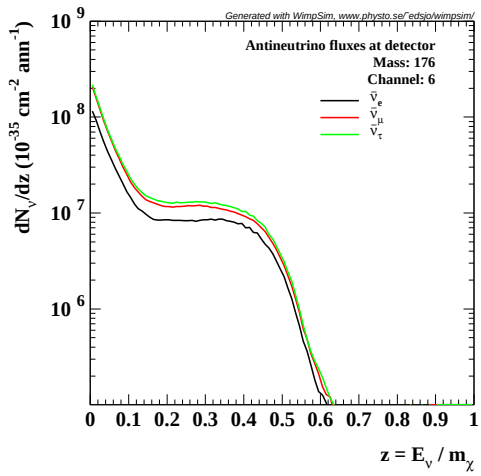




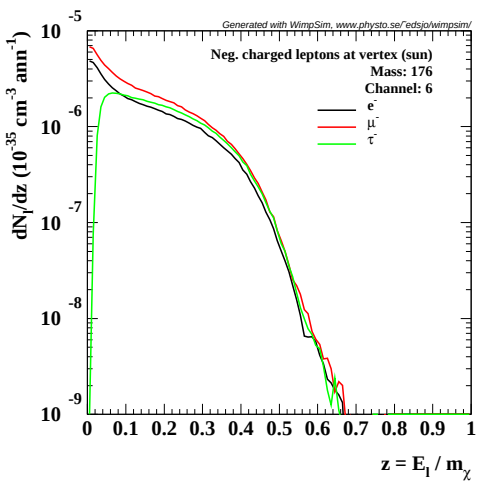
10.6 Channel 6 – $t\bar{t}$

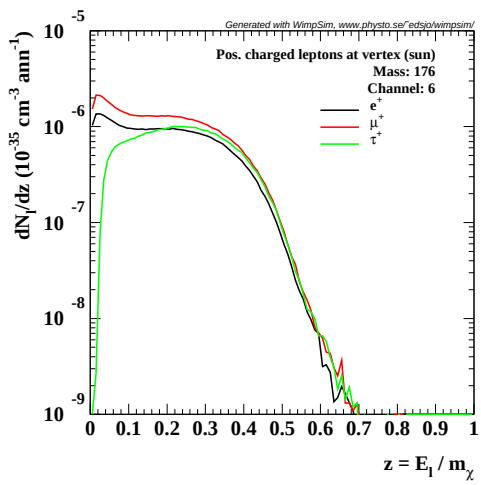
10.6.1 Neutrino fluxes at detector (Sun)



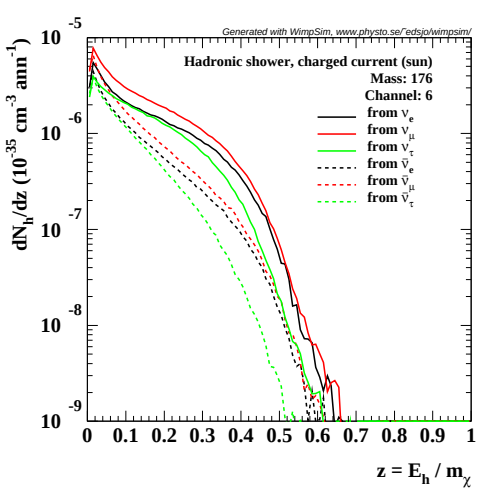


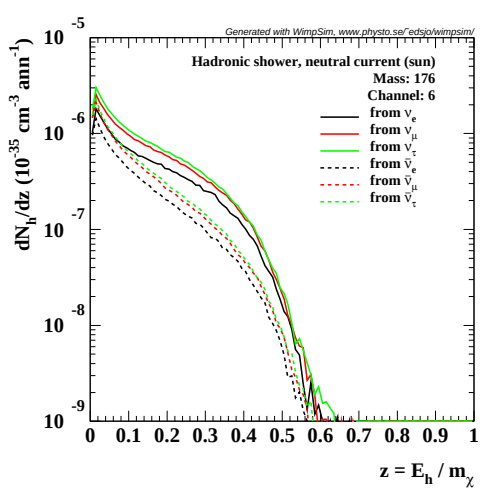
10.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



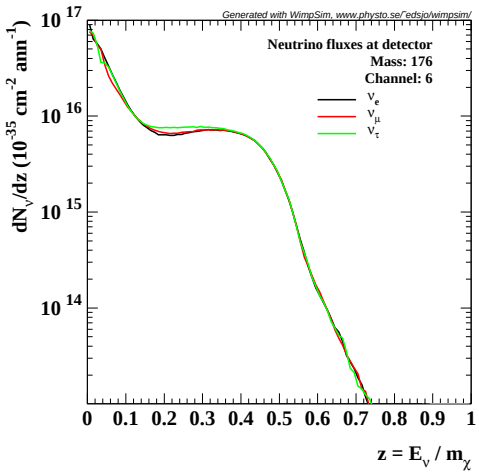


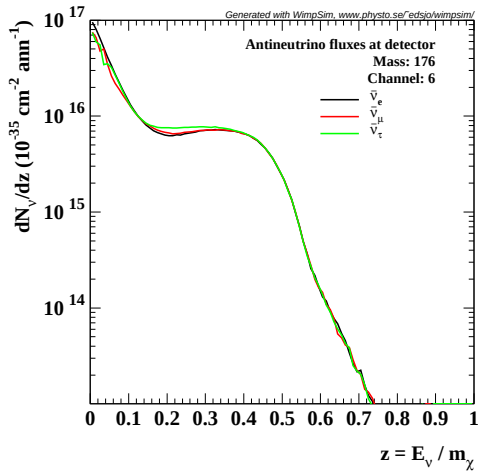
10.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



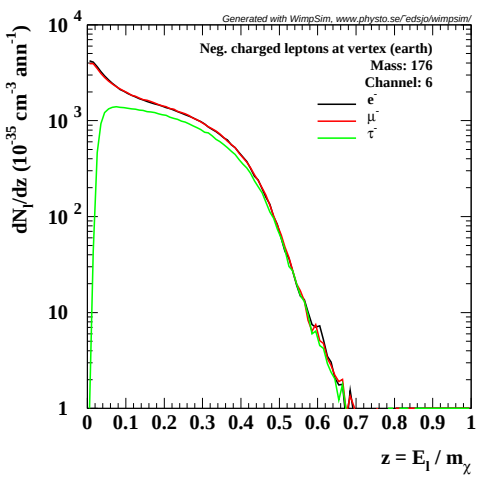


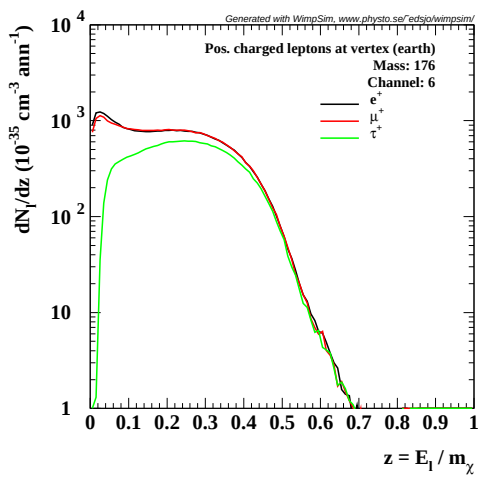
10.6.4 Neutrino fluxes at detector (Earth)



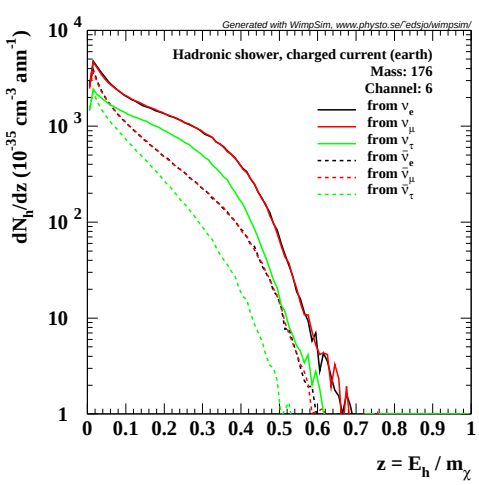


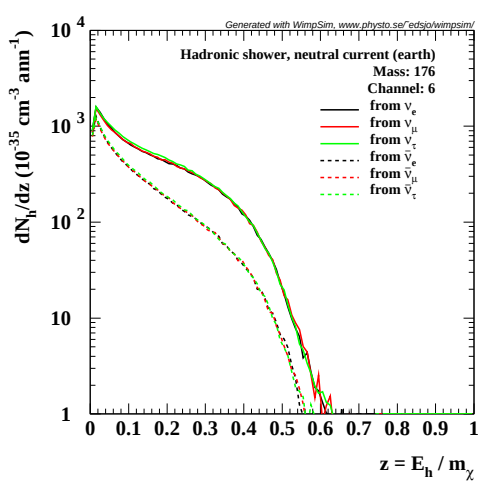
10.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



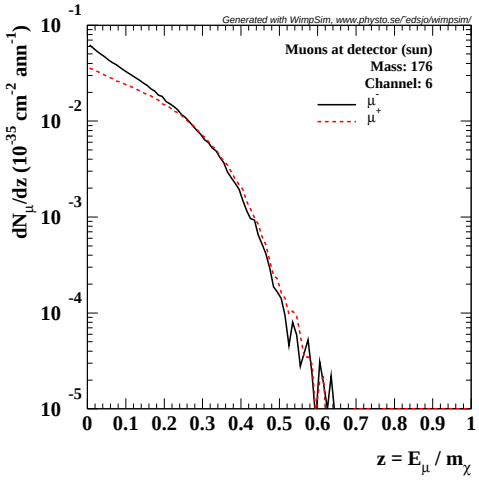


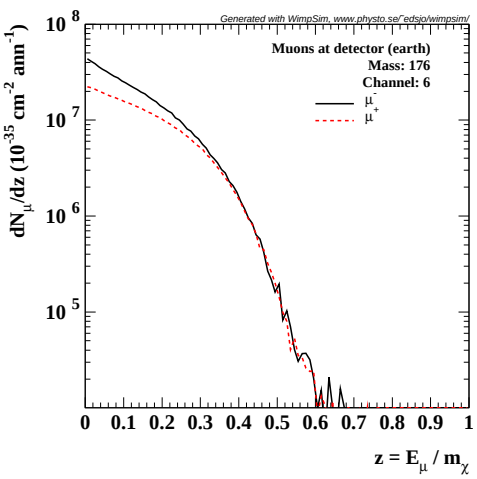
10.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





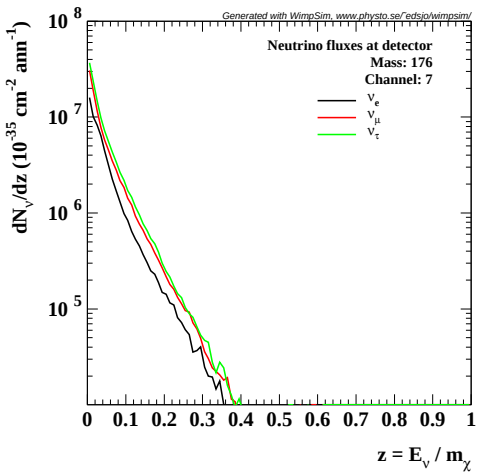
10.6.7 Muons at detector (Sun/Earth)

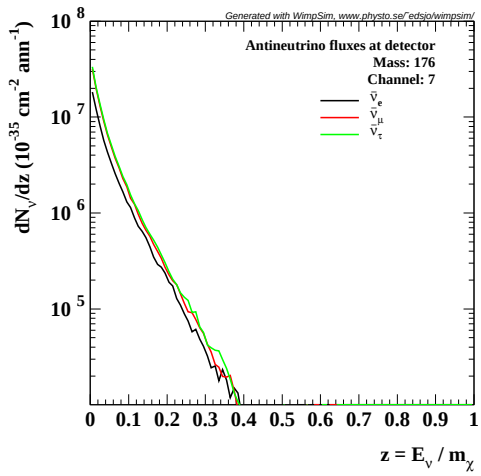




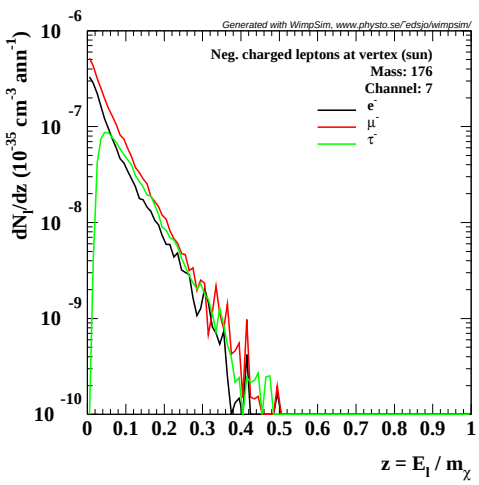
10.7 Channel 7 – gg

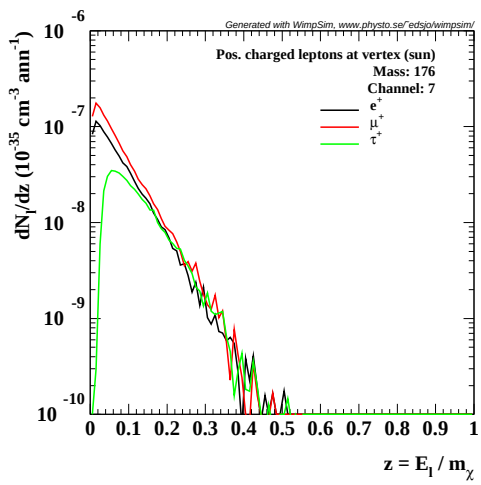
10.7.1 Neutrino fluxes at detector (Sun)



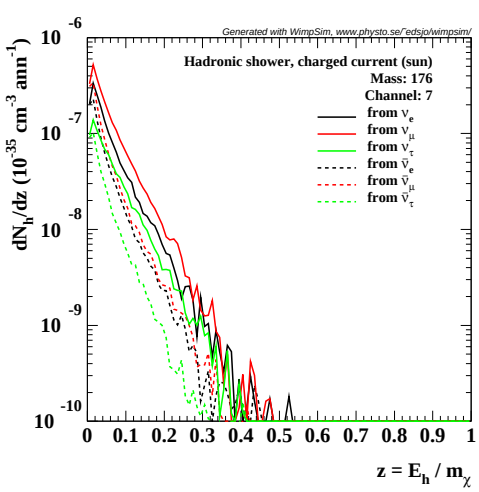


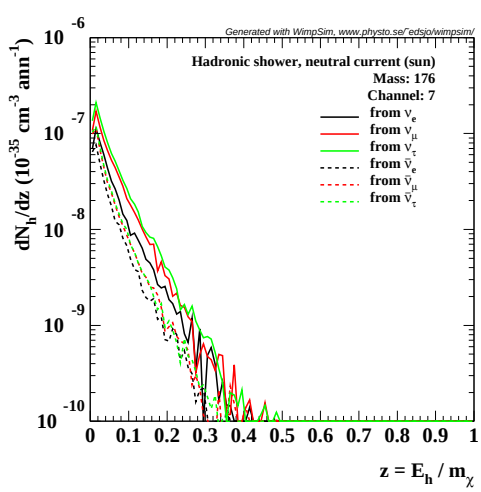
10.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



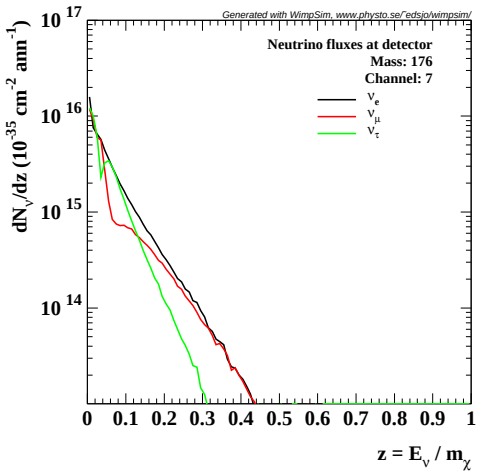


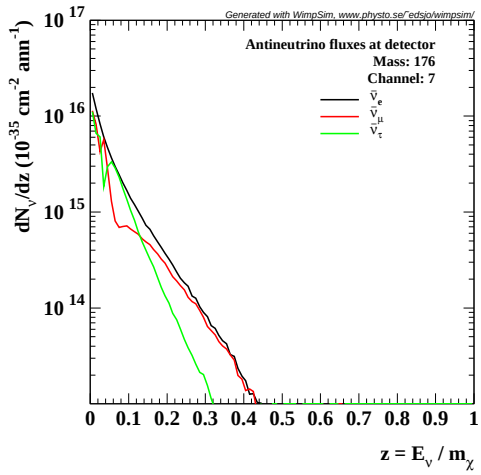
10.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



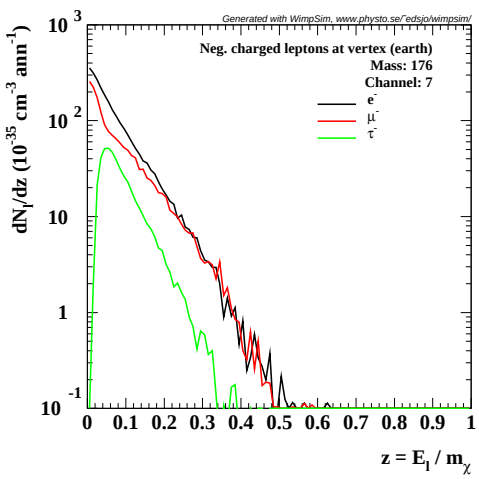


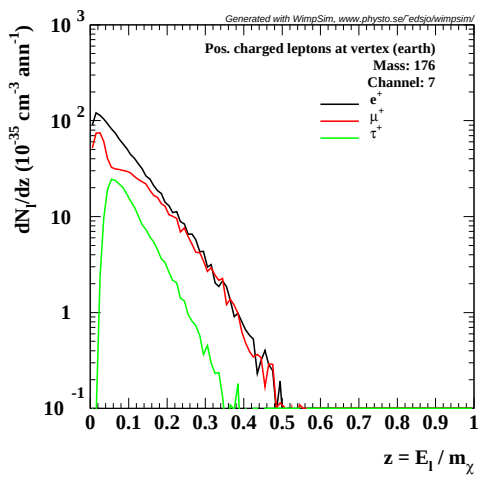
10.7.4 Neutrino fluxes at detector (Earth)



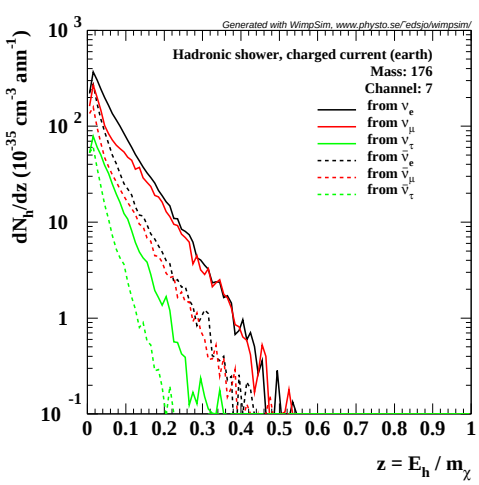


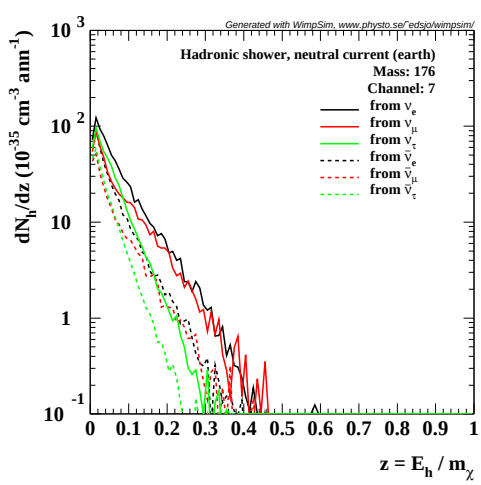
10.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



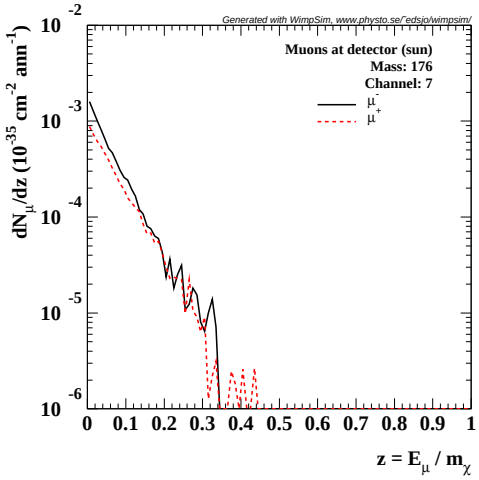


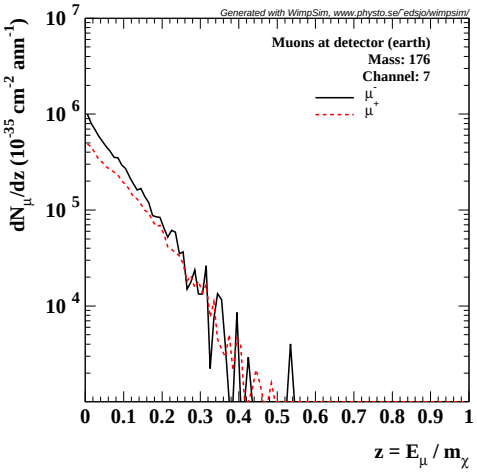
10.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





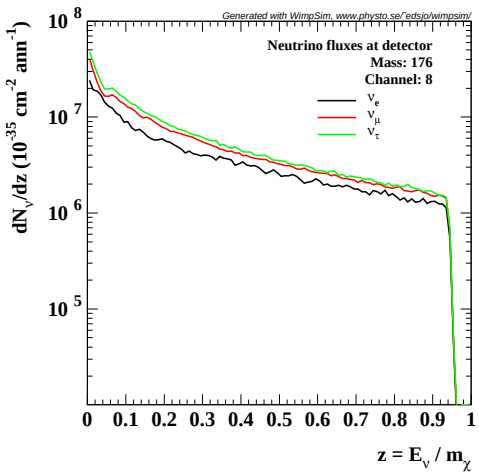
10.7.7 Muons at detector (Sun/Earth)

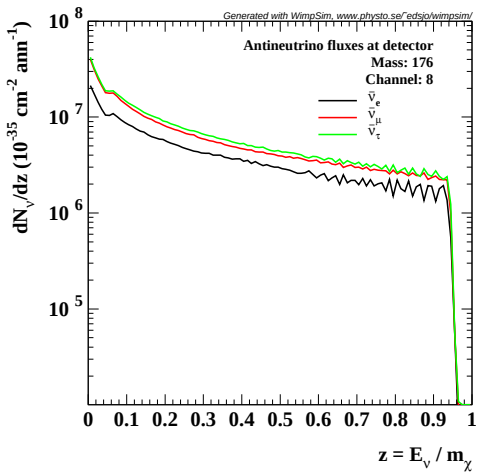




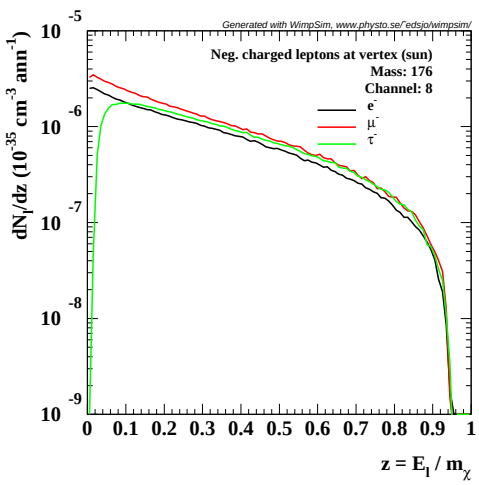
10.8 Channel 8 – W^-W^+

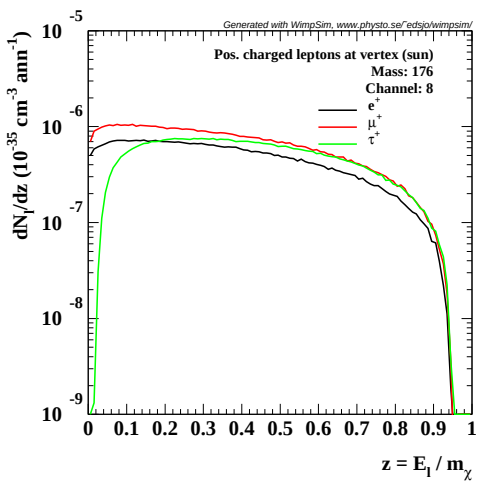
10.8.1 Neutrino fluxes at detector (Sun)



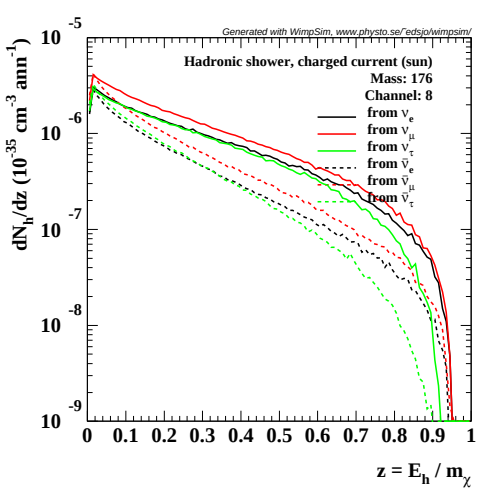


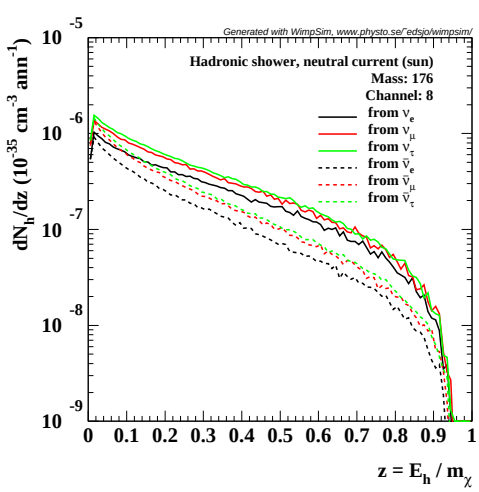
10.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



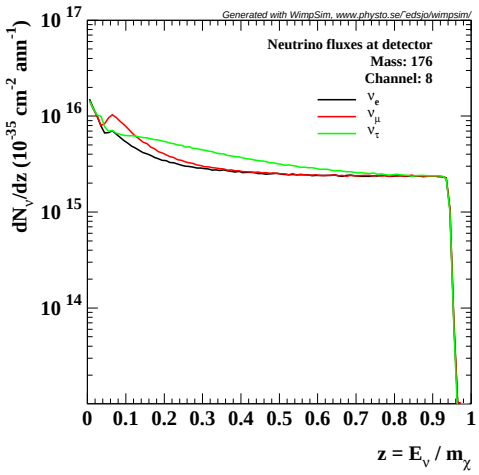


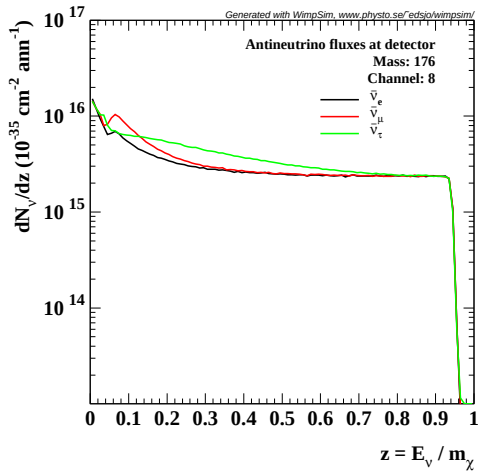
10.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



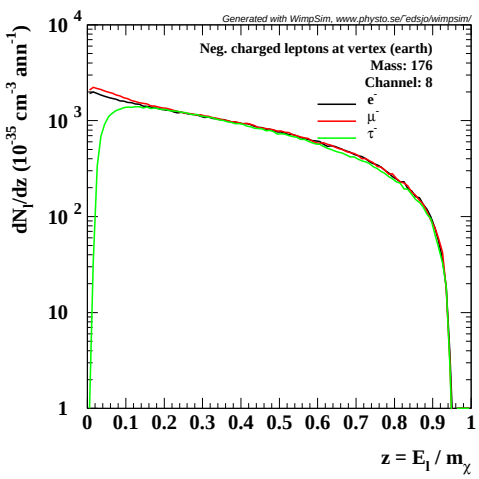


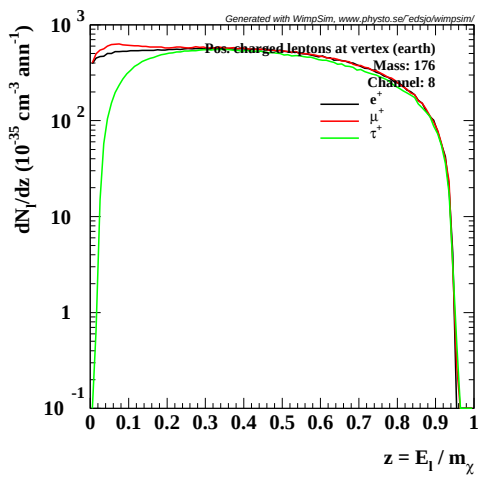
10.8.4 Neutrino fluxes at detector (Earth)



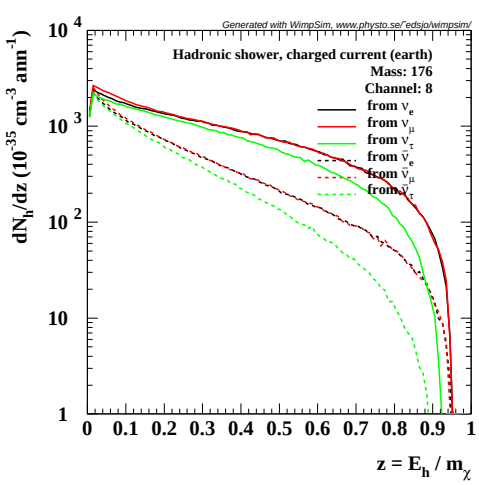


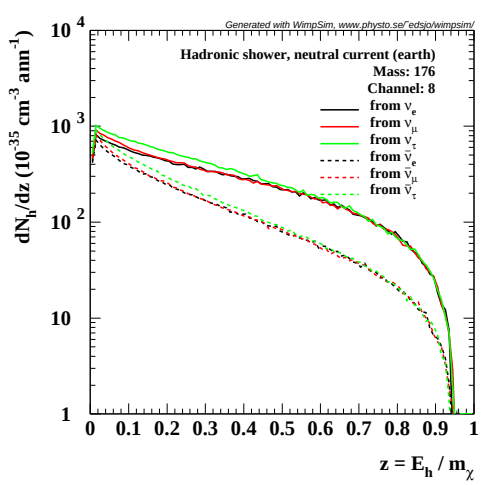
10.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



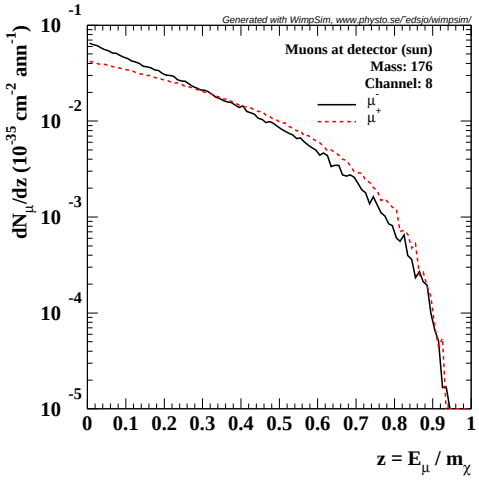


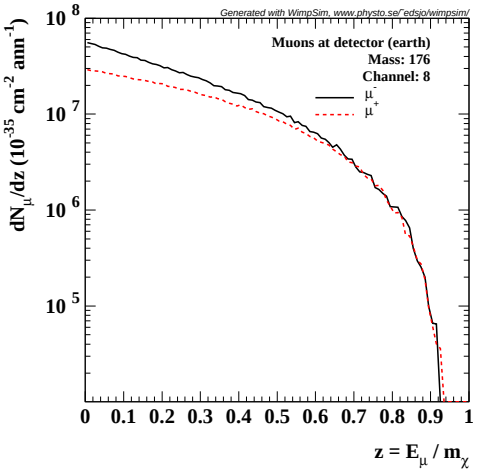
10.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





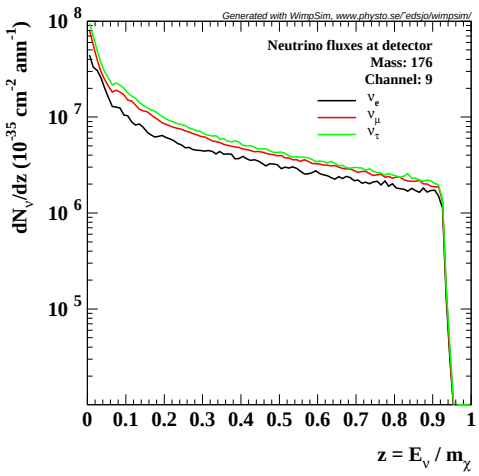
10.8.7 Muons at detector (Sun/Earth)

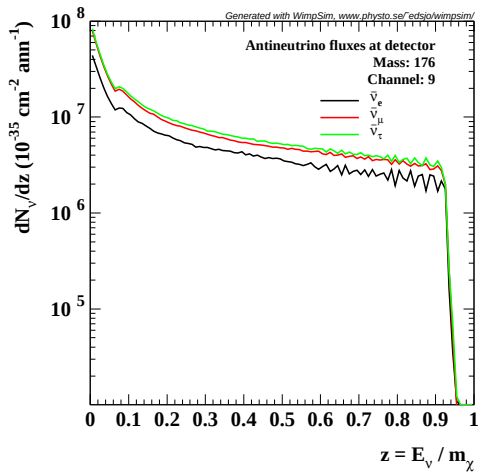




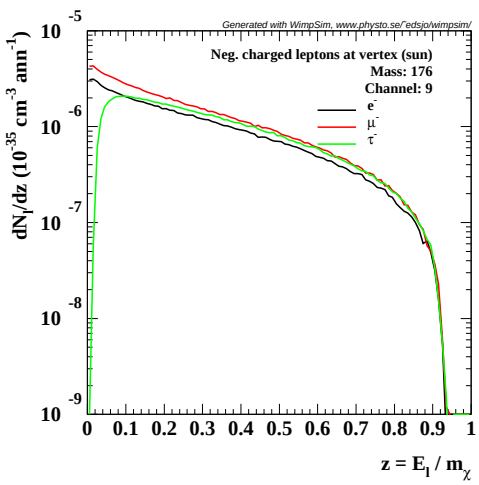
10.9 Channel 9 – $Z^0 Z^0$

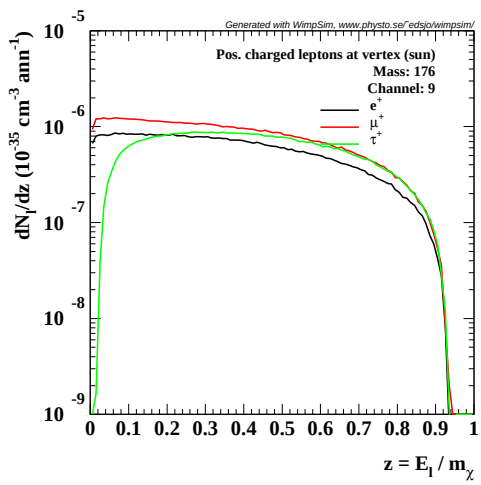
10.9.1 Neutrino fluxes at detector (Sun)



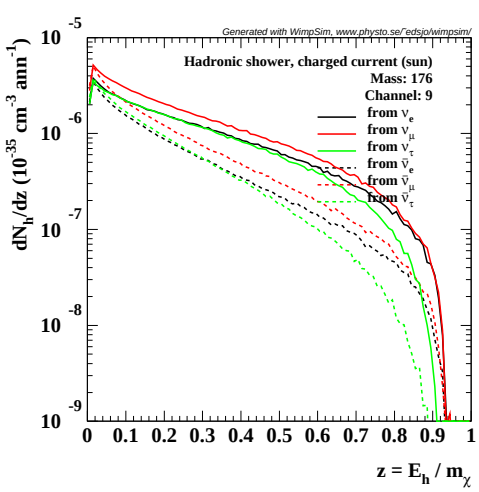


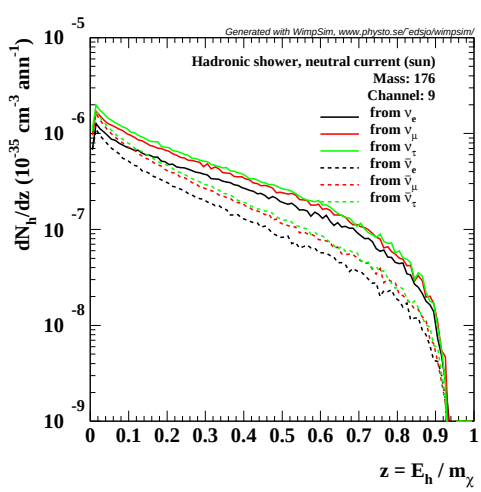
10.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



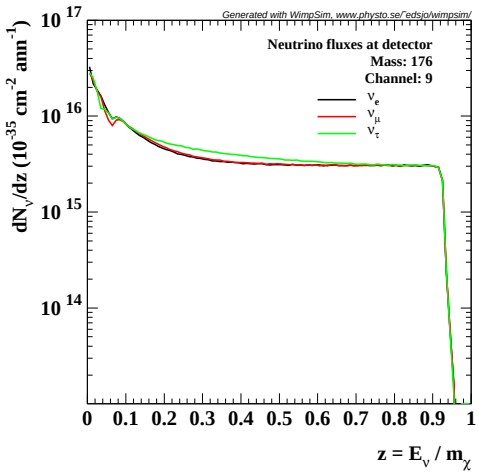


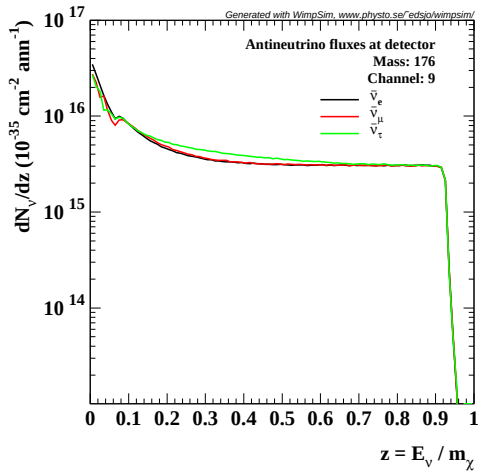
10.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



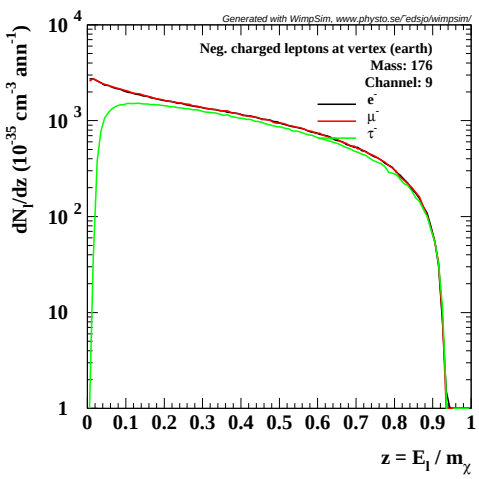


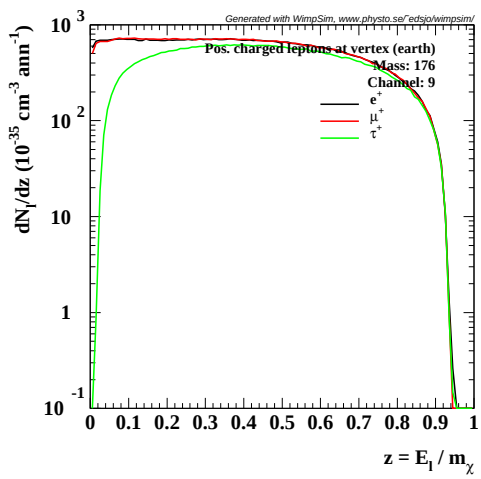
10.9.4 Neutrino fluxes at detector (Earth)



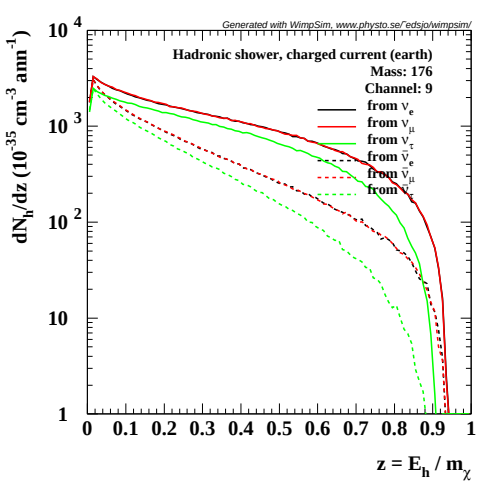


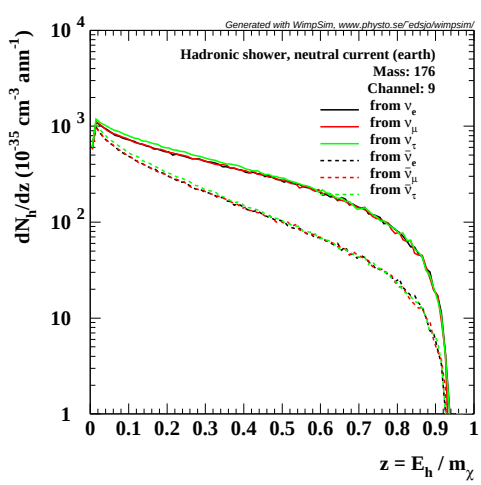
10.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



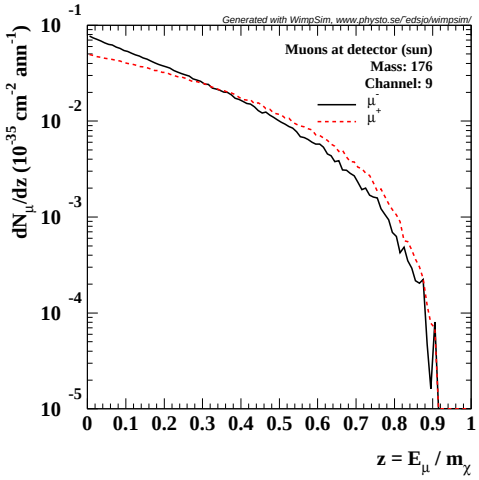


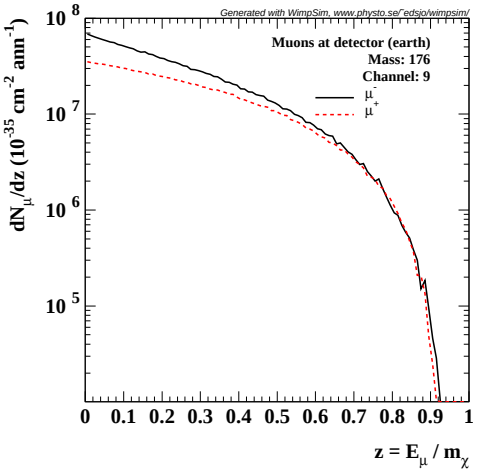
10.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





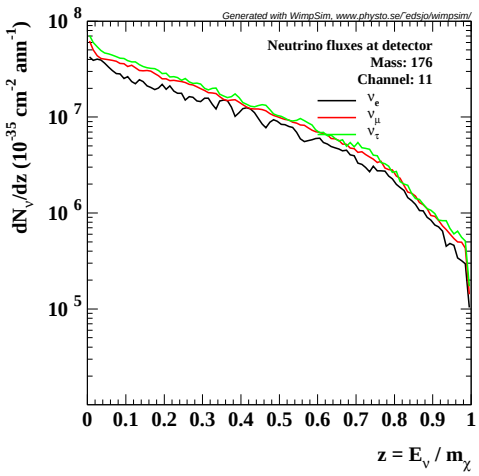
10.9.7 Muons at detector (Sun/Earth)

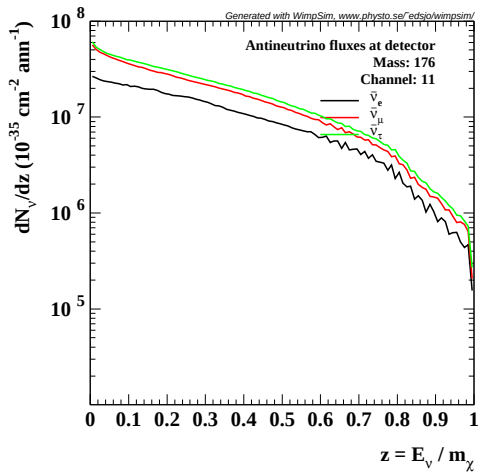




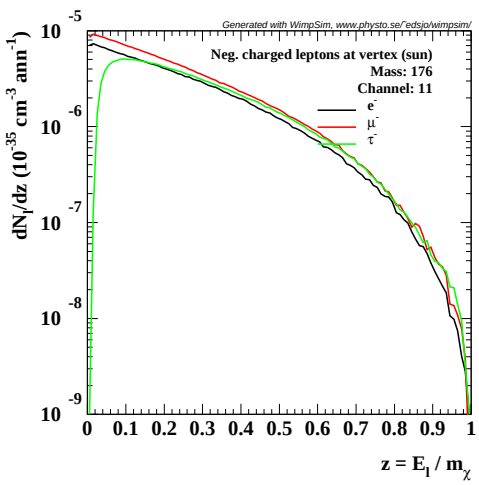
10.10 Channel 11 – $\tau^-\tau^+$

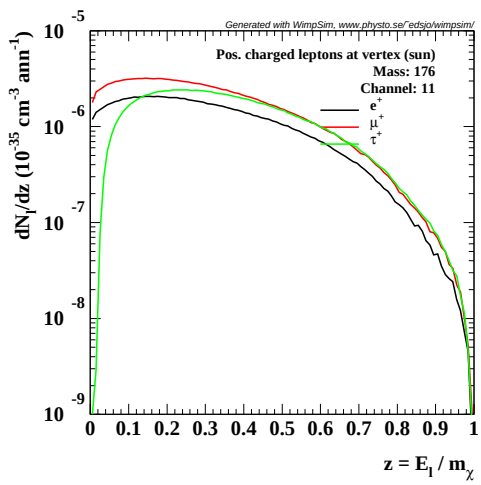
10.10.1 Neutrino fluxes at detector (Sun)



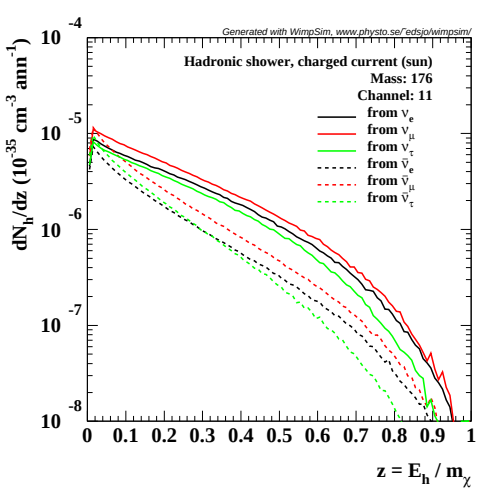


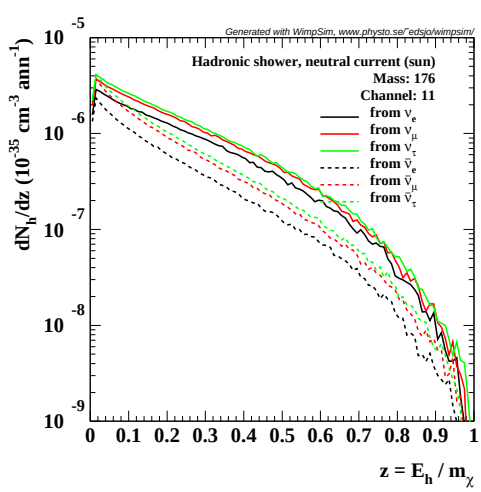
10.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



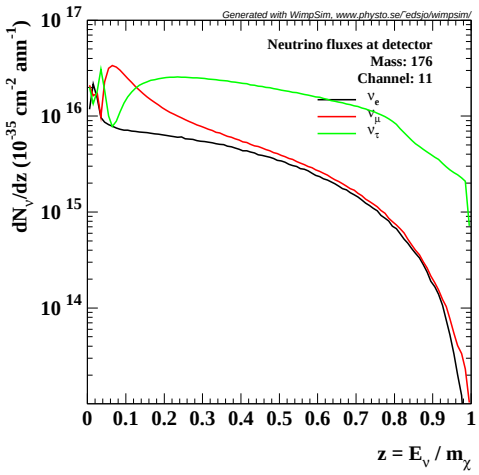


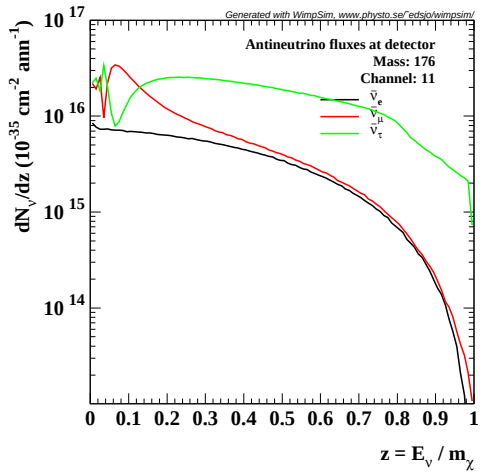
10.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



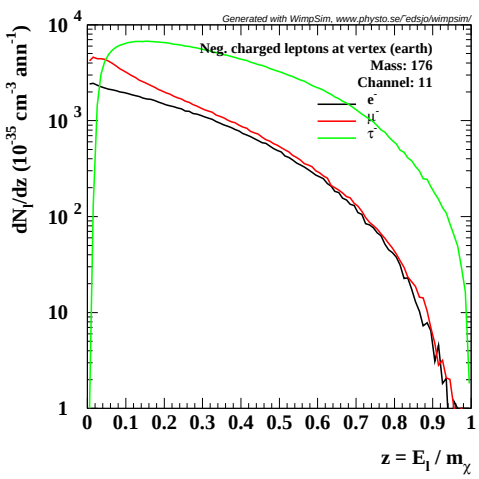


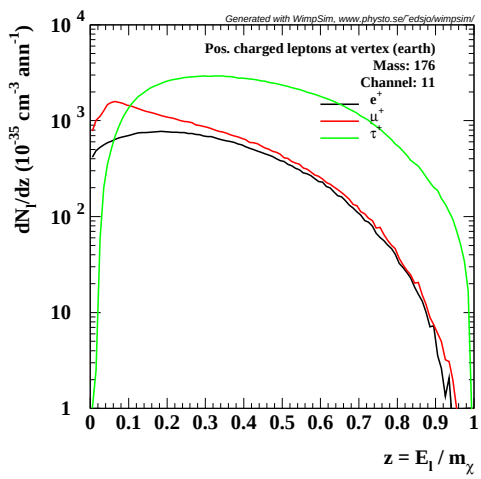
10.10.4 Neutrino fluxes at detector (Earth)



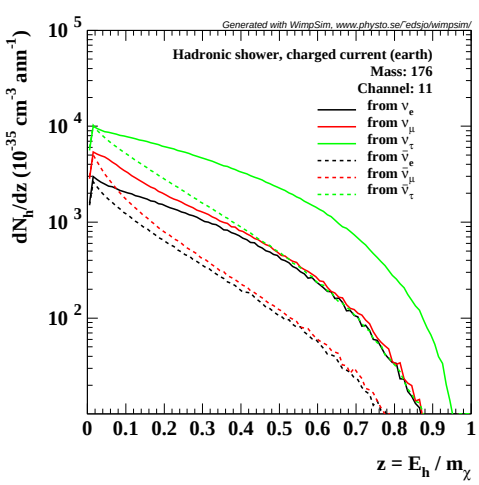


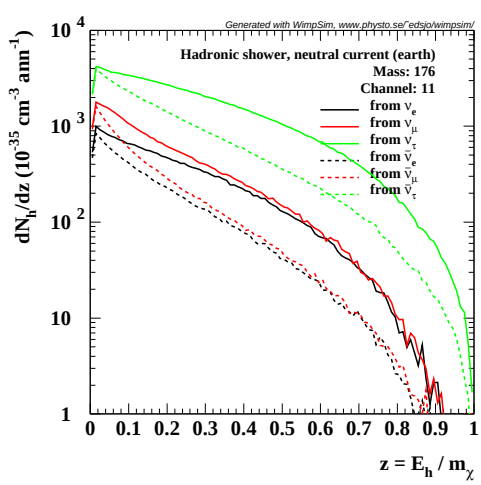
10.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



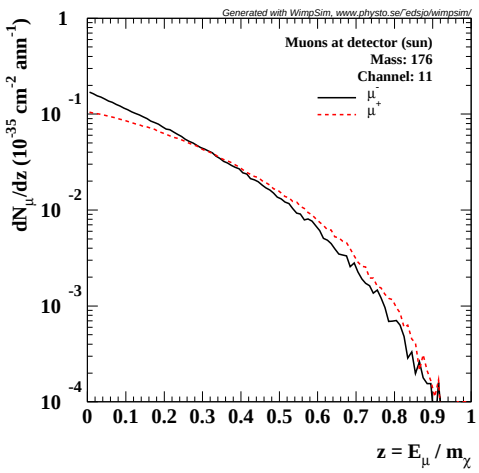


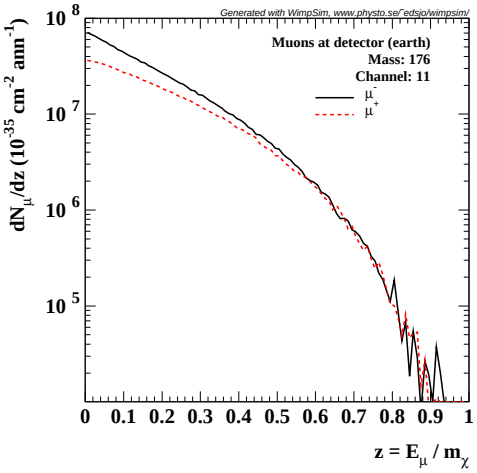
10.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





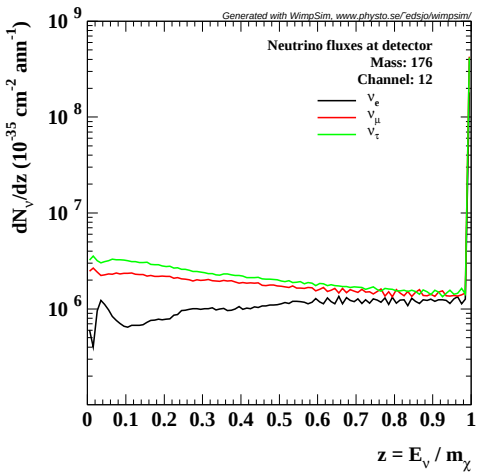
10.10.7 Muons at detector (Sun/Earth)

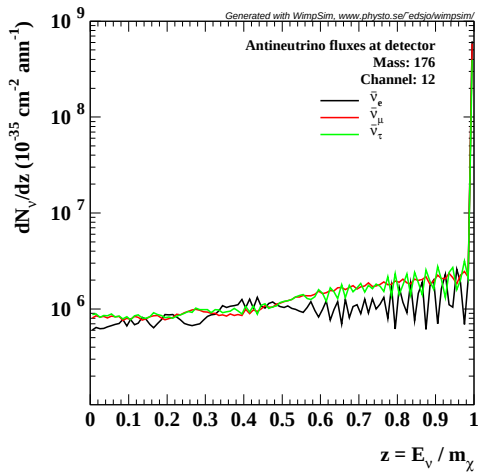




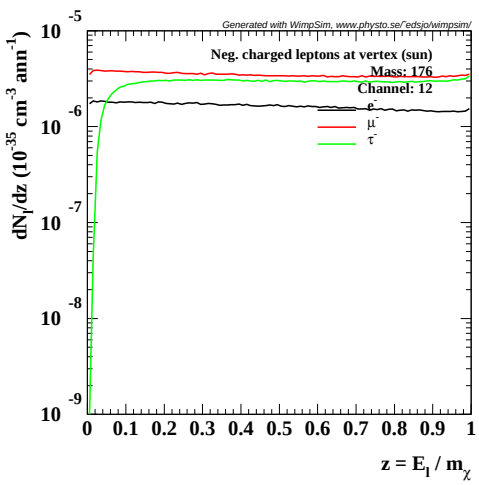
10.11 Channel 12 – $\nu_e\bar{\nu}_e$

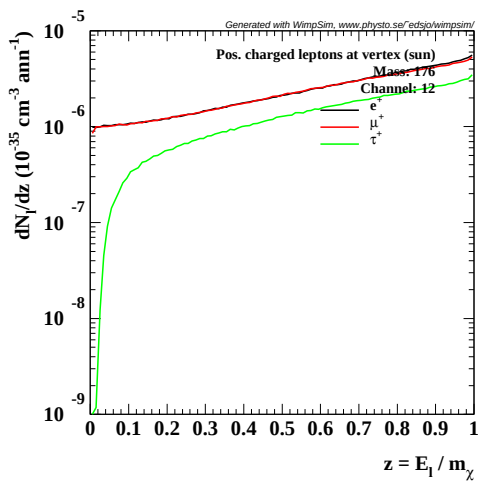
10.11.1 Neutrino fluxes at detector (Sun)



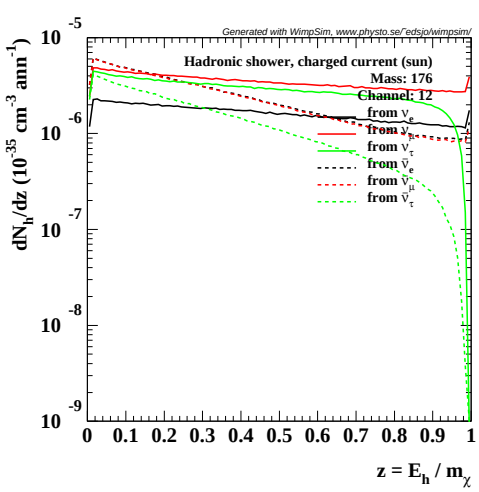


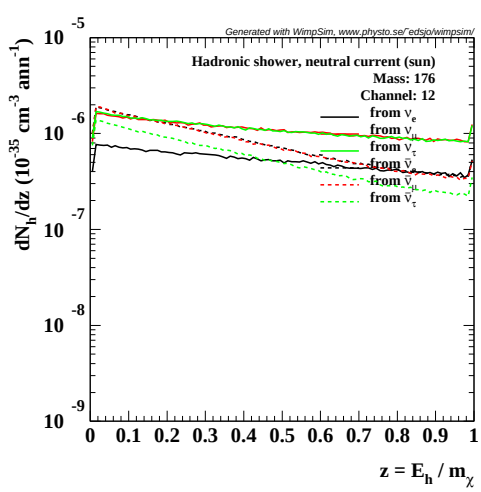
10.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



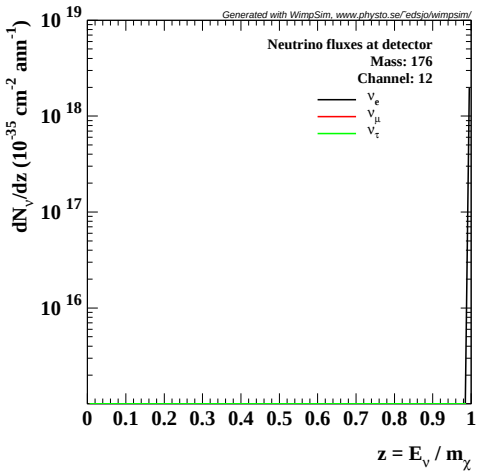


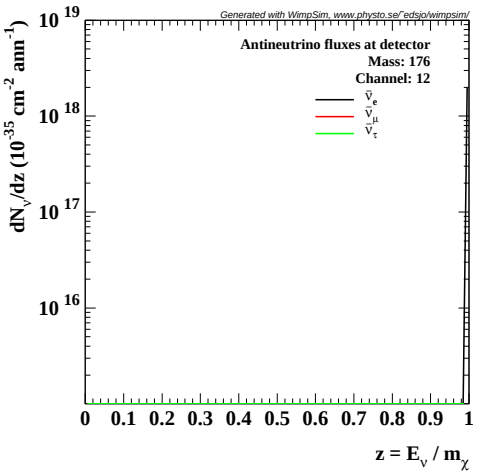
10.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



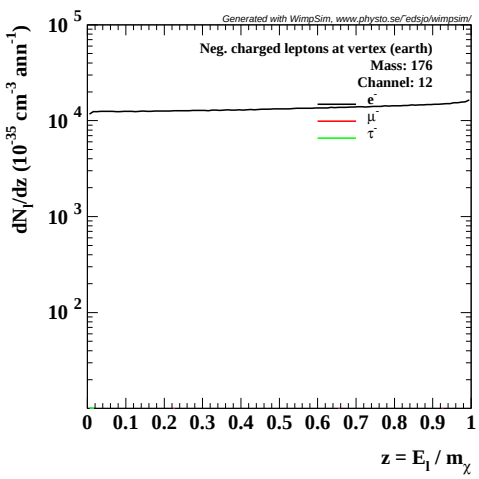


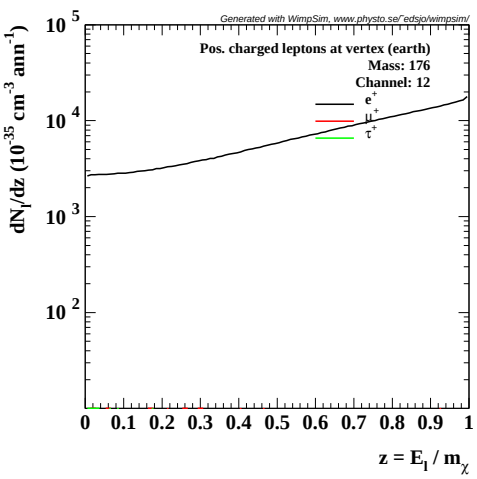
10.11.4 Neutrino fluxes at detector (Earth)



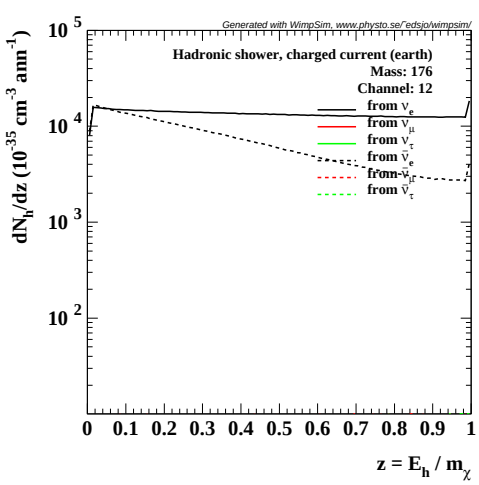


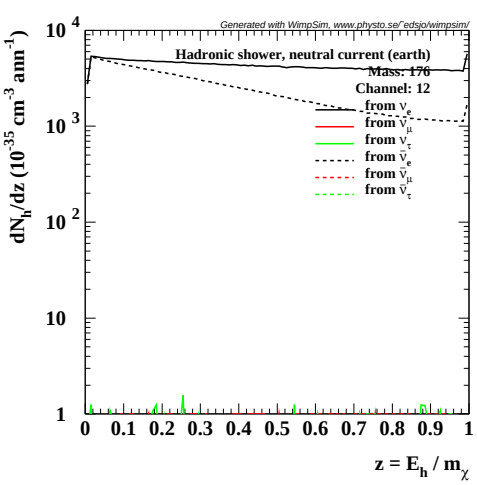
10.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



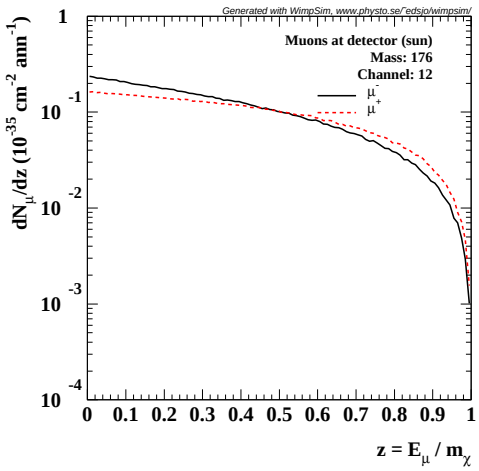


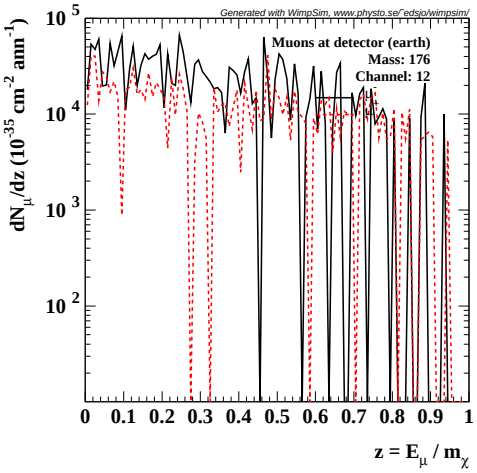
10.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





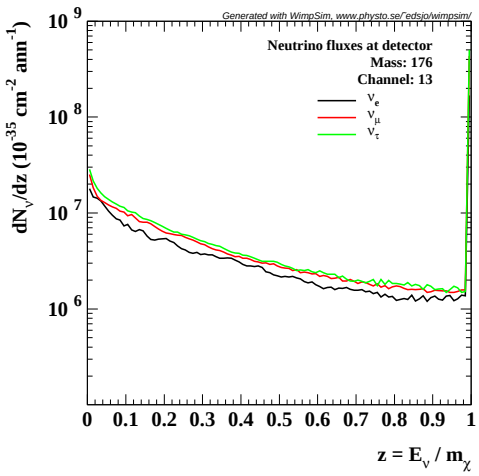
10.11.7 Muons at detector (Sun/Earth)

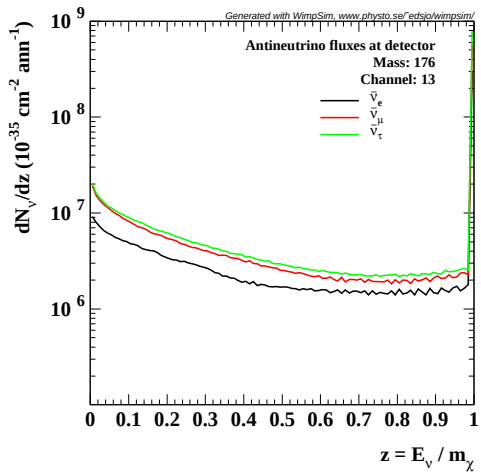




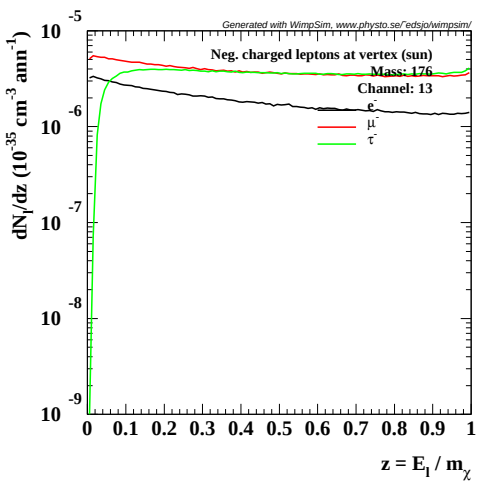
10.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

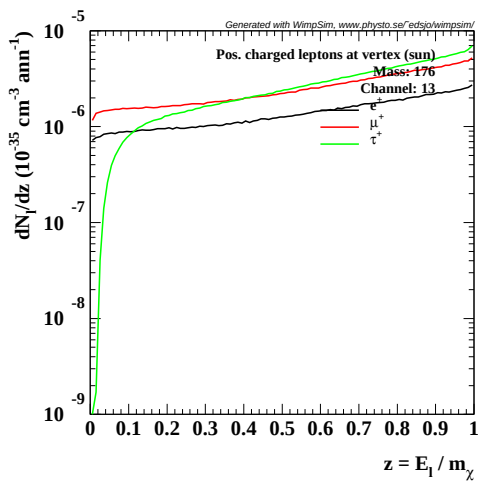
10.12.1 Neutrino fluxes at detector (Sun)



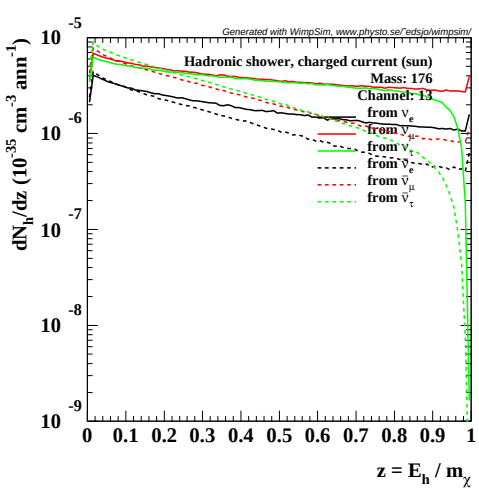


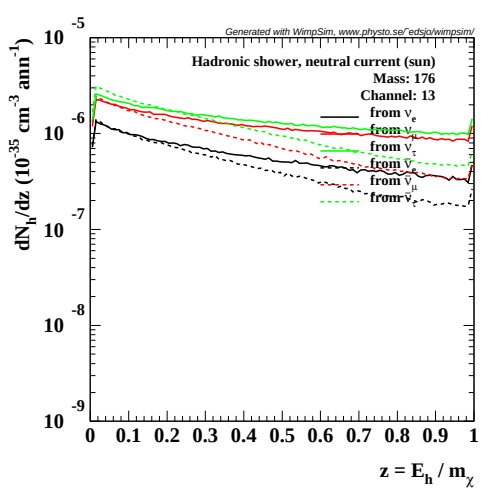
10.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



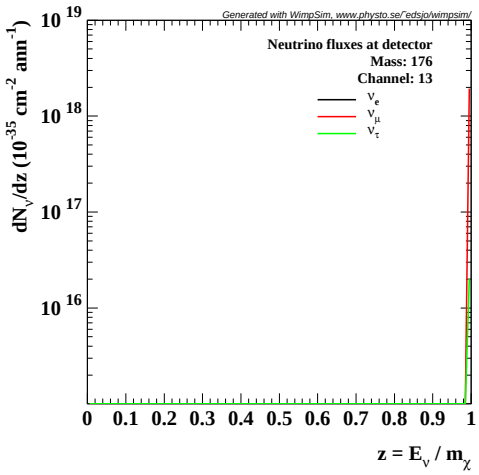


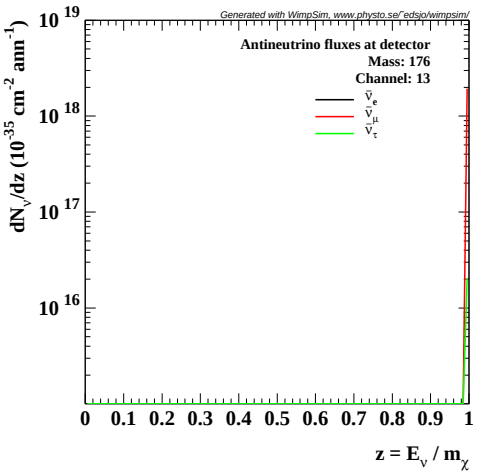
10.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



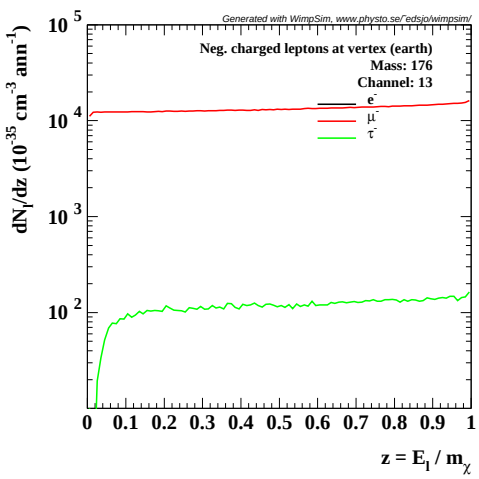


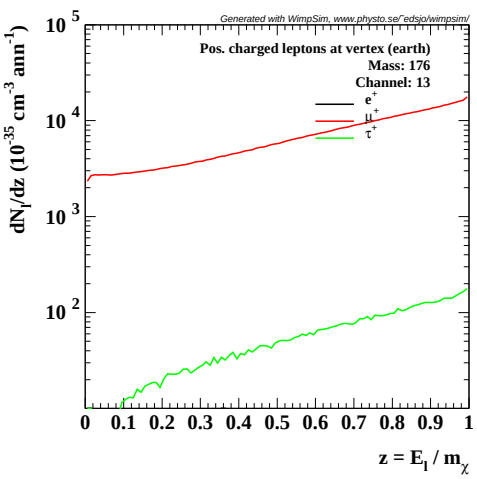
10.12.4 Neutrino fluxes at detector (Earth)



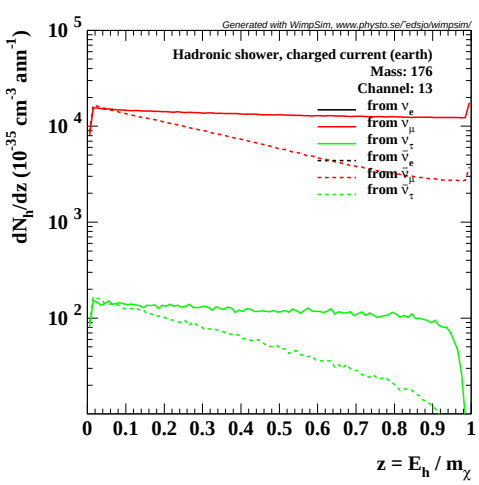


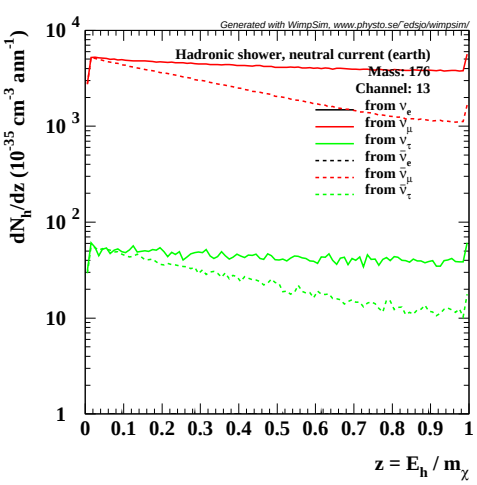
10.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



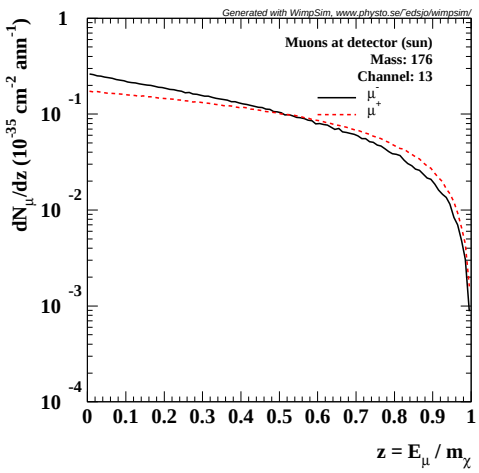


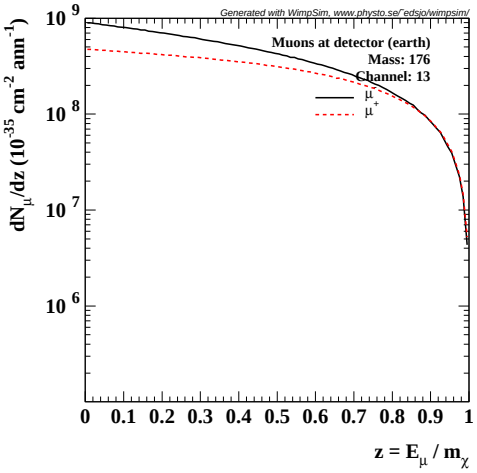
10.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





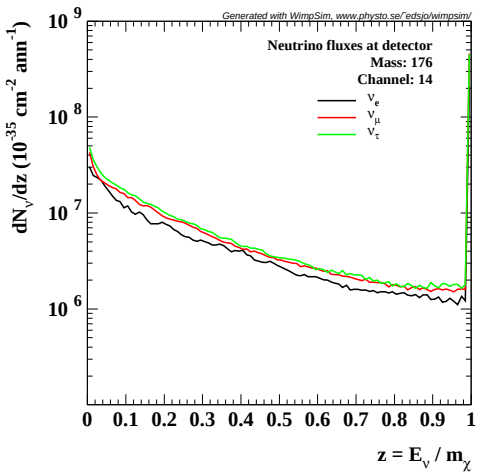
10.12.7 Muons at detector (Sun/Earth)

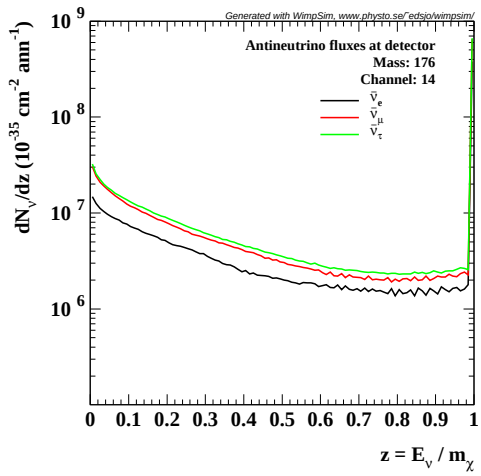




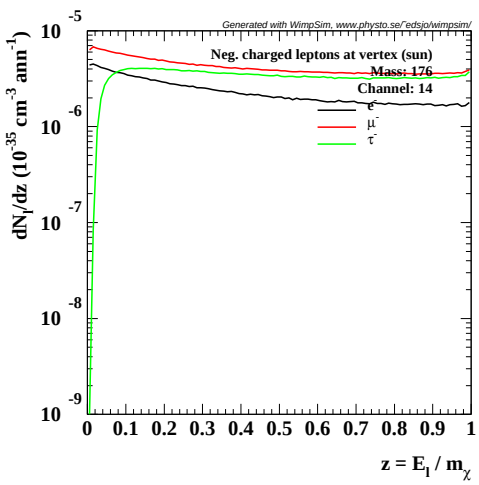
10.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

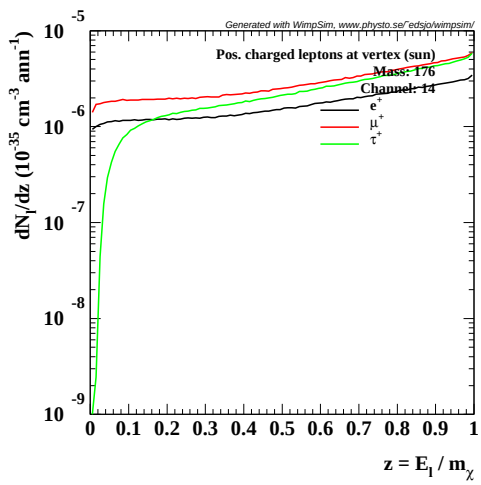
10.13.1 Neutrino fluxes at detector (Sun)



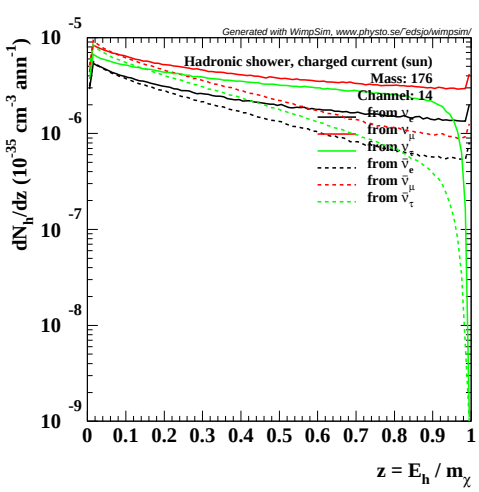


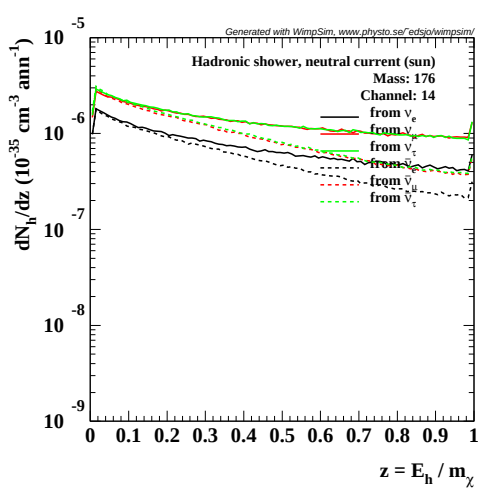
10.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



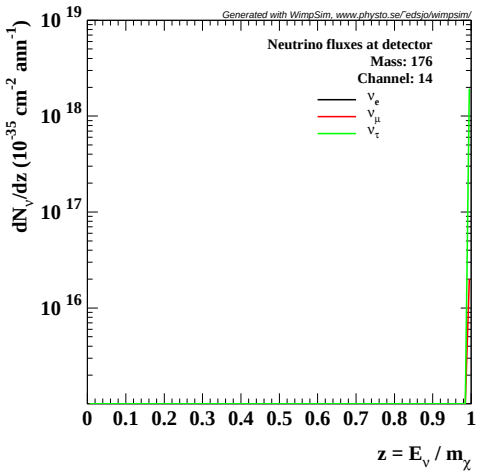


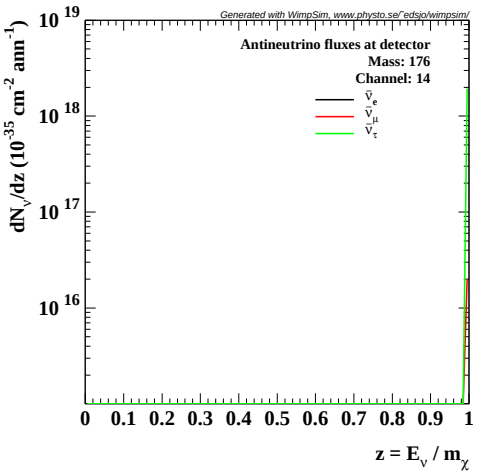
10.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



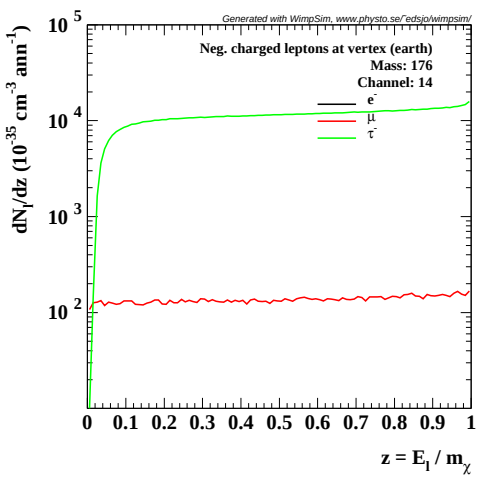


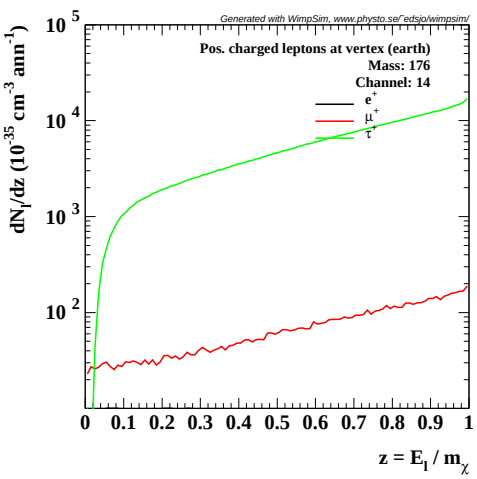
10.13.4 Neutrino fluxes at detector (Earth)



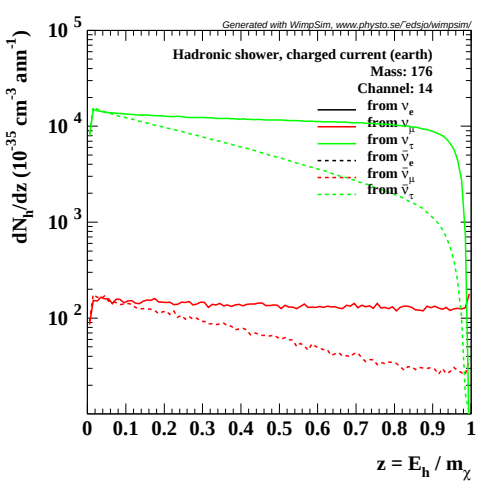


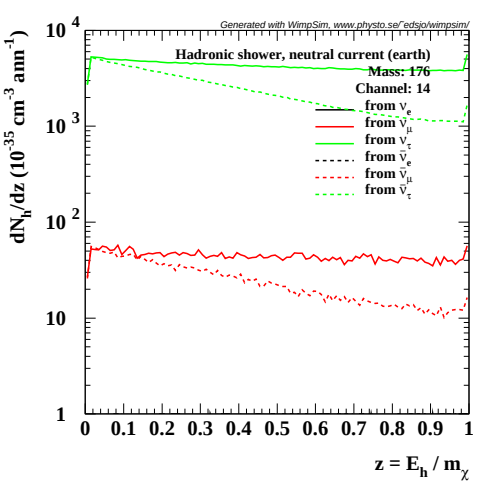
10.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



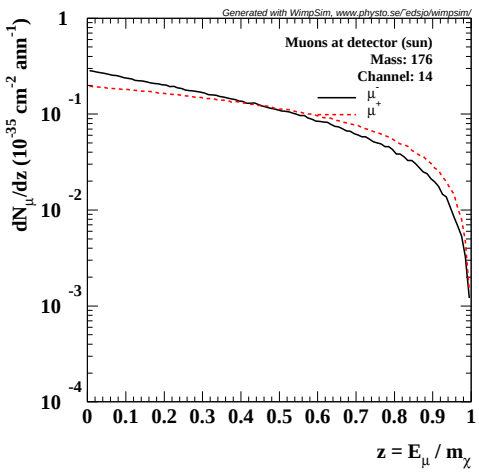


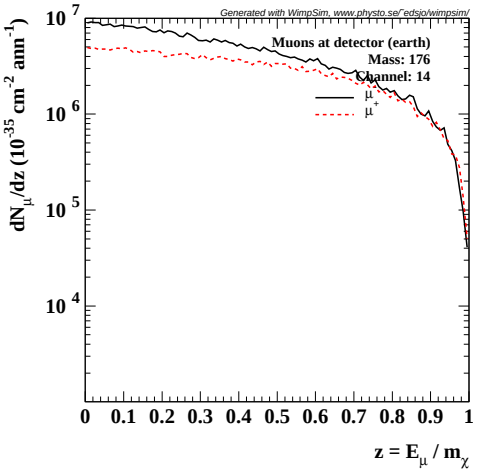
10.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





10.13.7 Muons at detector (Sun/Earth)

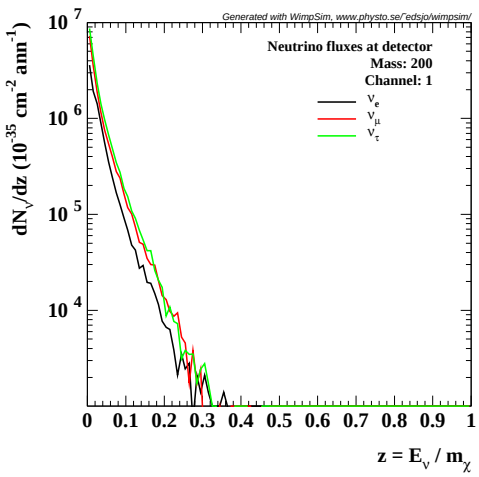


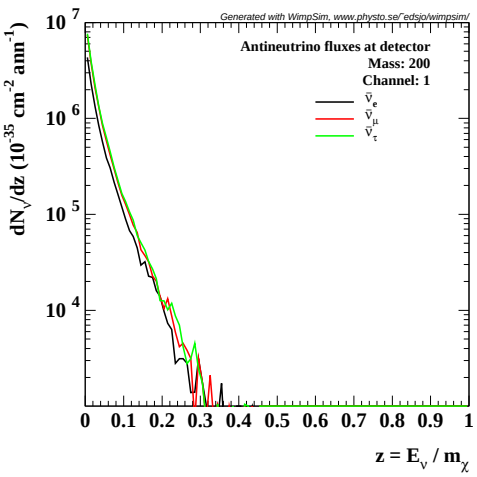


11 Mass 200

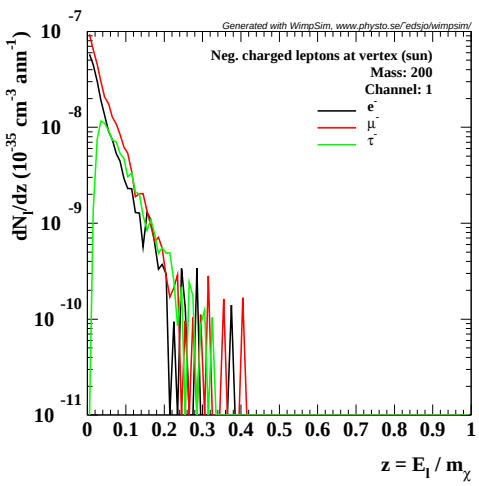
11.1 Channel 1 – $d\bar{d}$

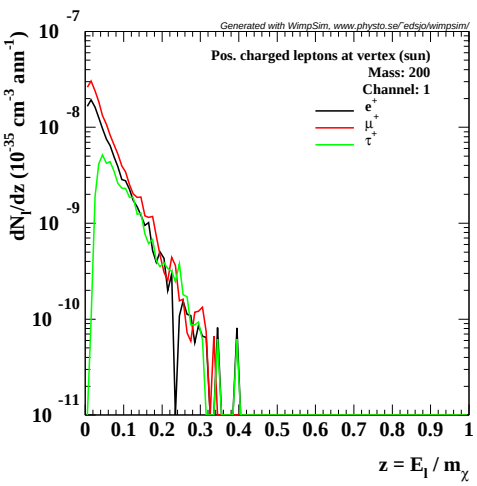
11.1.1 Neutrino fluxes at detector (Sun)



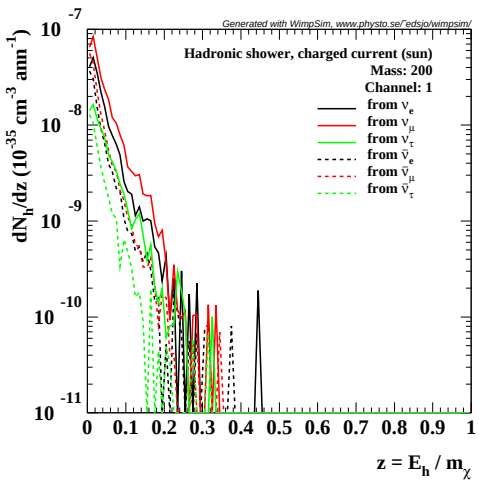


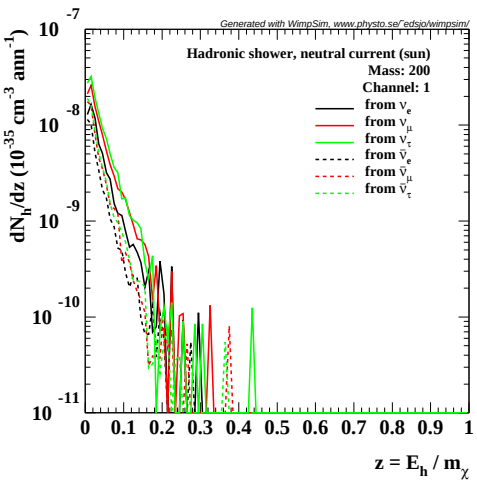
11.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



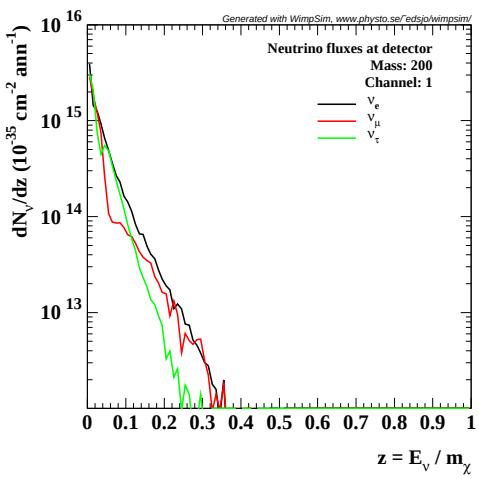


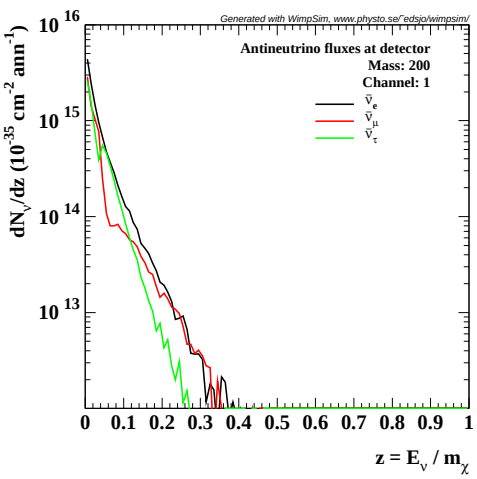
11.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



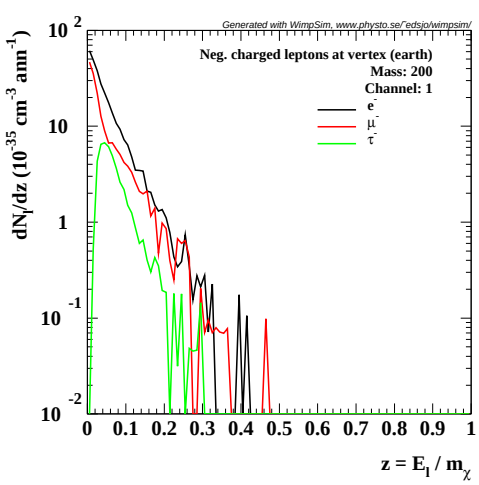


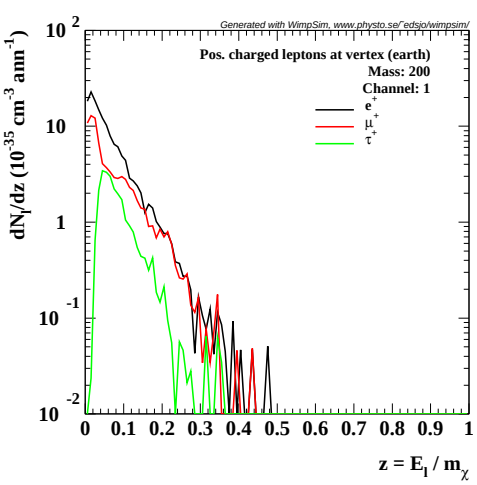
11.1.4 Neutrino fluxes at detector (Earth)



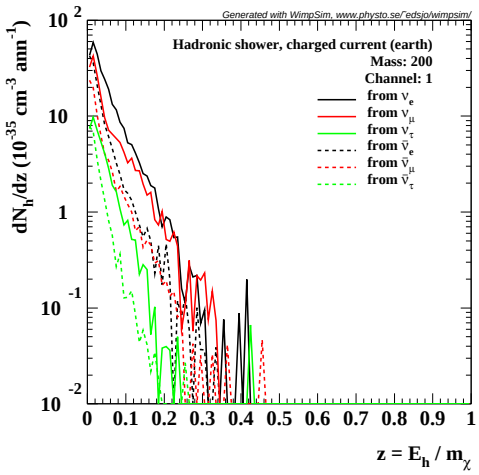


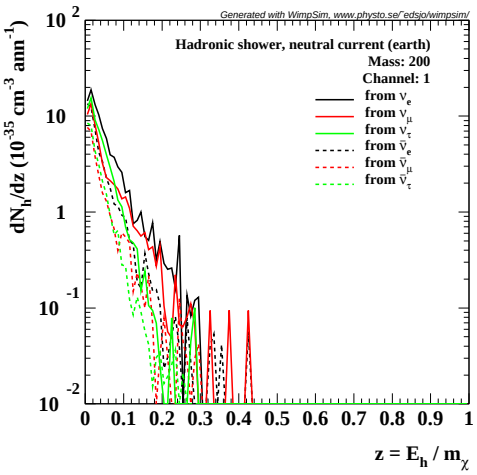
11.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



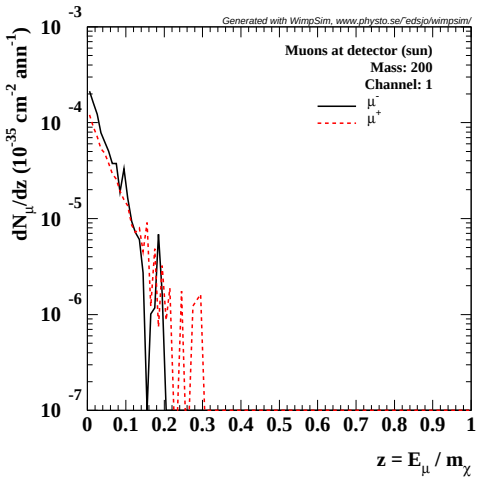


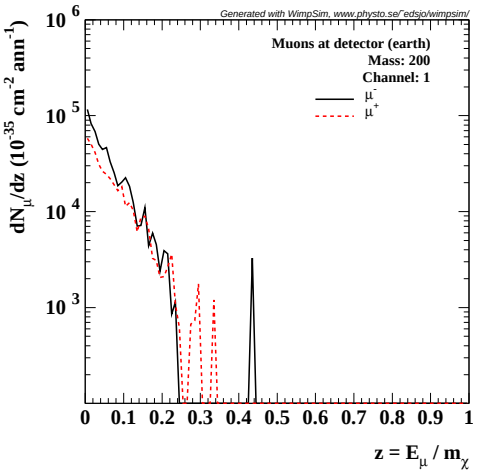
11.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





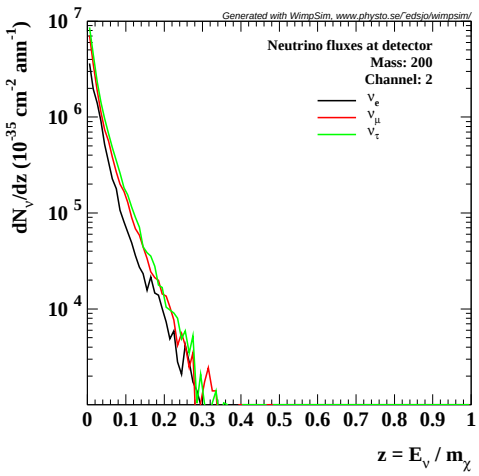
11.1.7 Muons at detector (Sun/Earth)

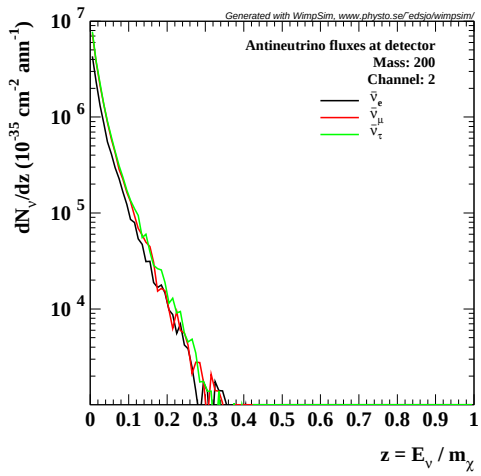




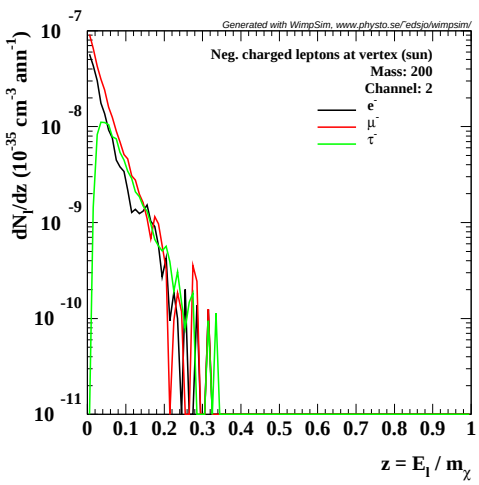
11.2 Channel 2 – $u\bar{u}$

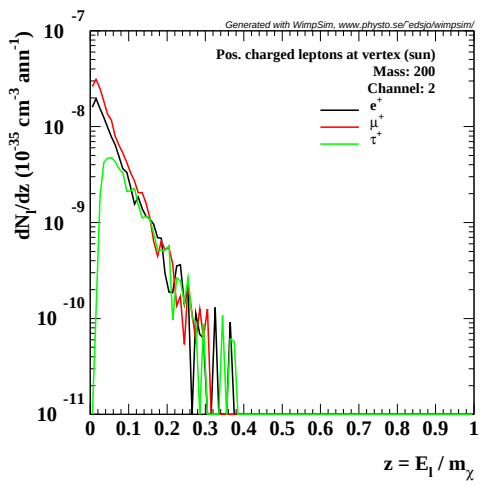
11.2.1 Neutrino fluxes at detector (Sun)



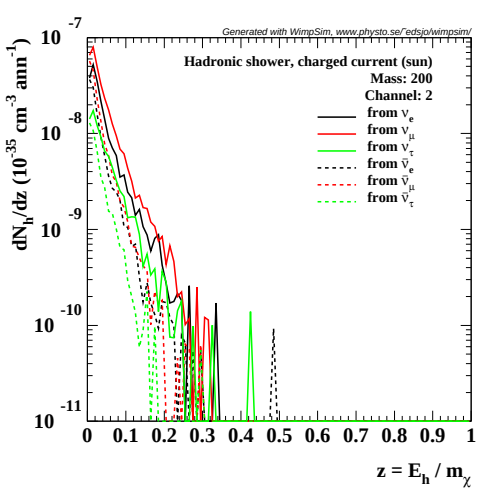


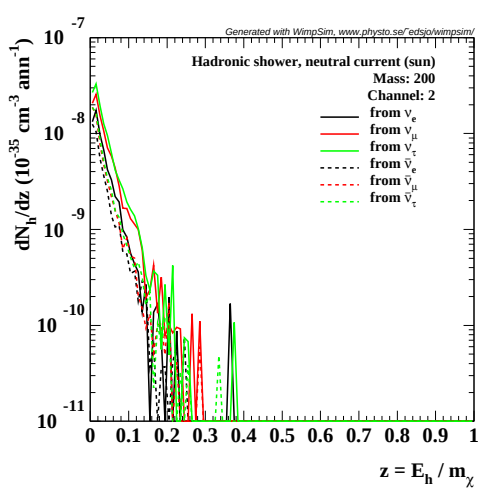
11.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



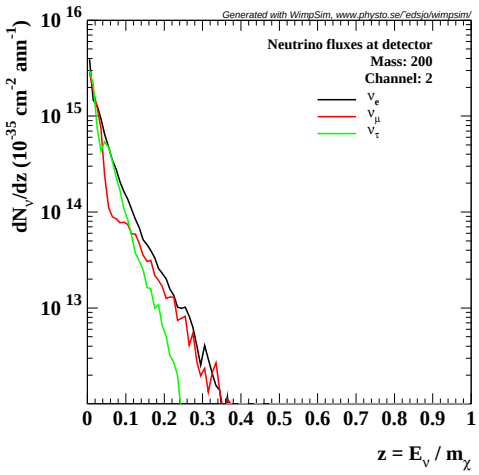


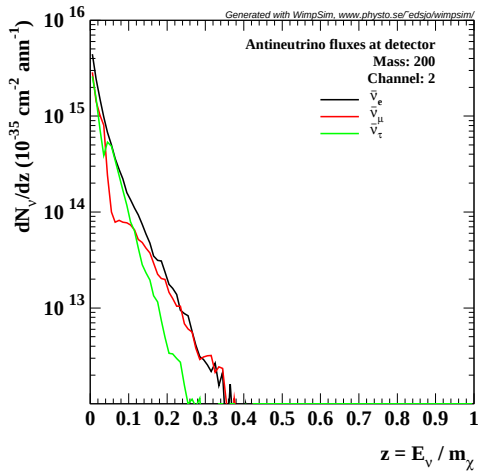
11.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



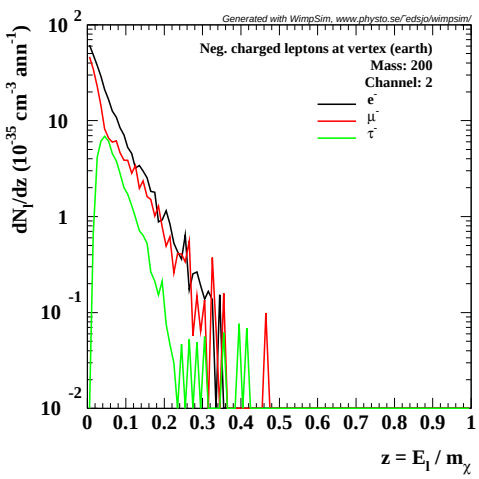


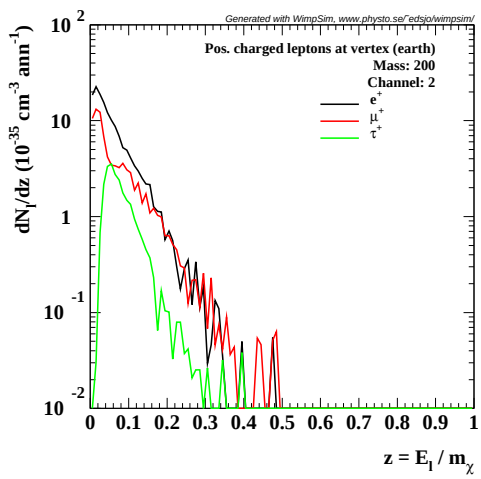
11.2.4 Neutrino fluxes at detector (Earth)



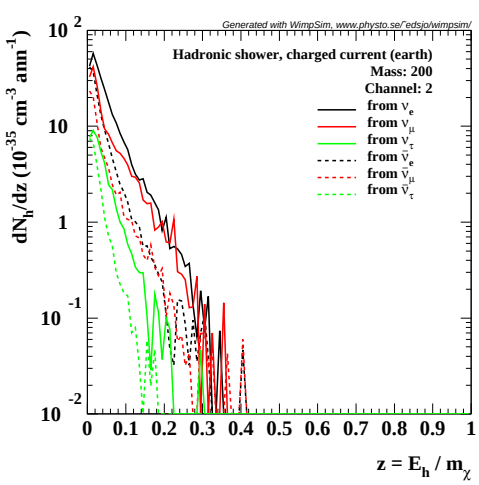


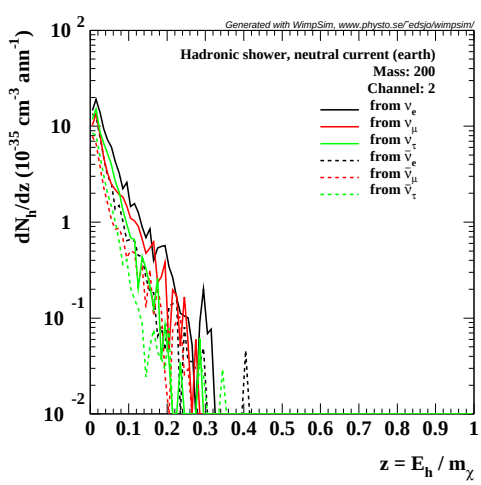
11.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



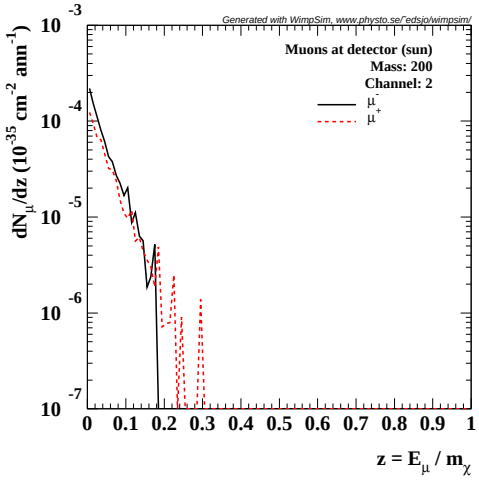


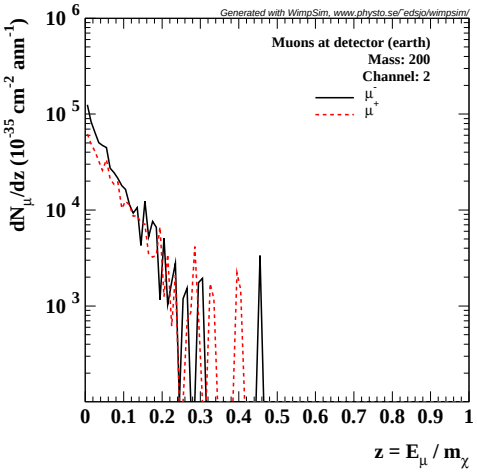
11.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





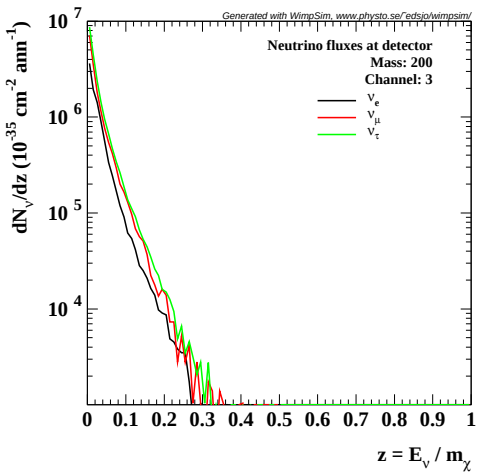
11.2.7 Muons at detector (Sun/Earth)

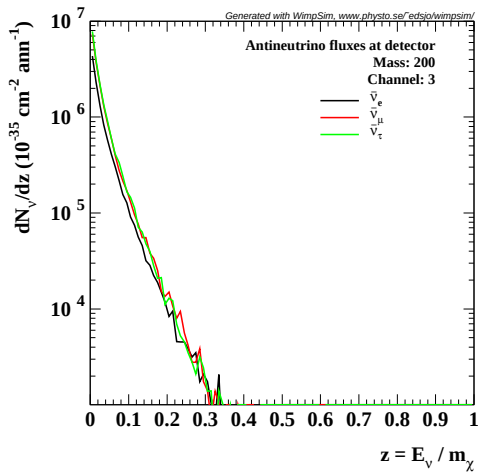




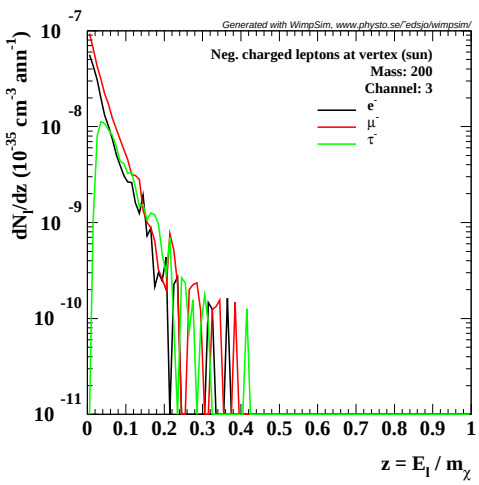
11.3 Channel 3 – $s\bar{s}$

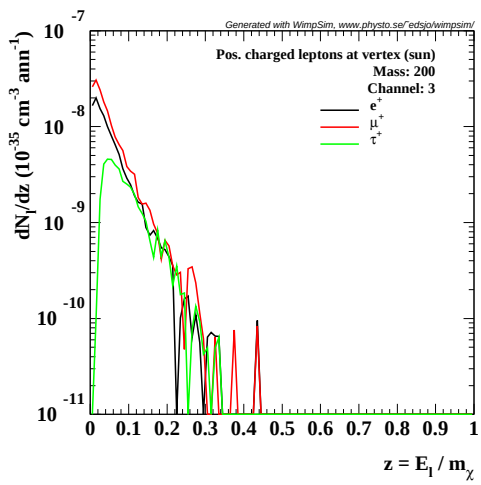
11.3.1 Neutrino fluxes at detector (Sun)



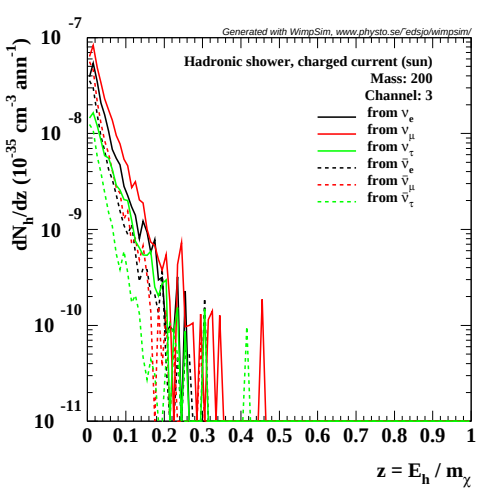


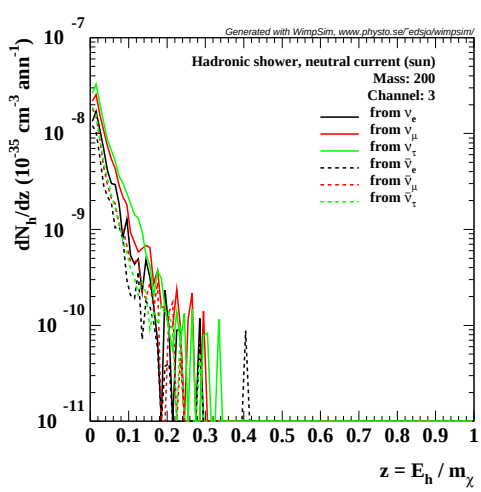
11.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



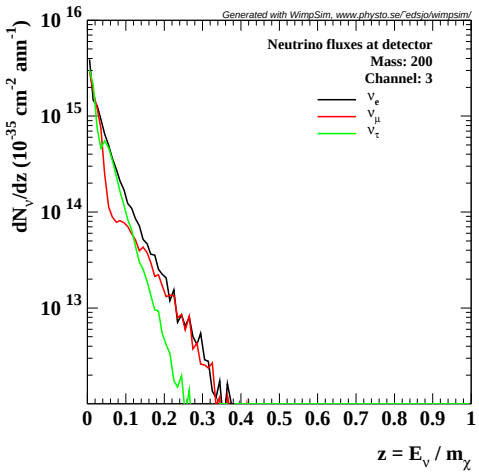


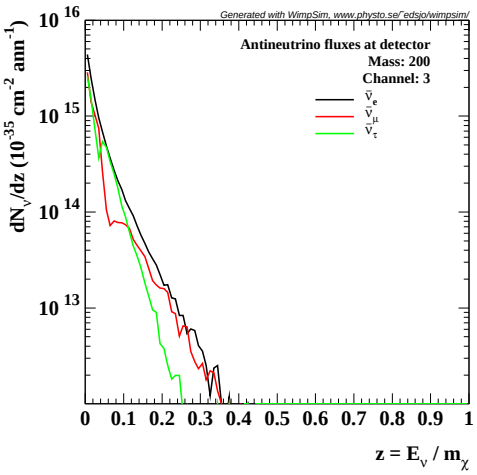
11.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



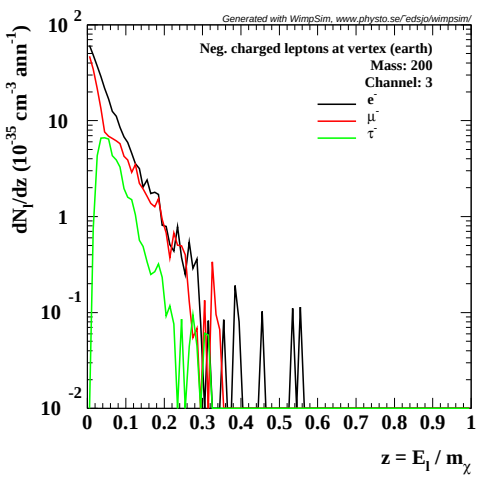


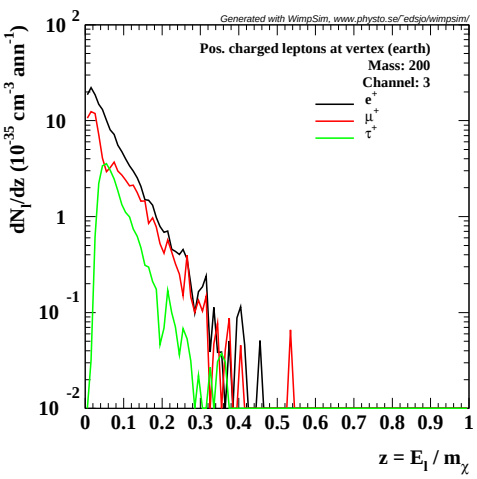
11.3.4 Neutrino fluxes at detector (Earth)



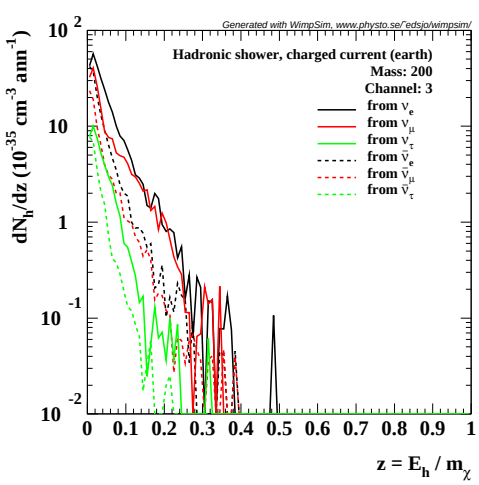


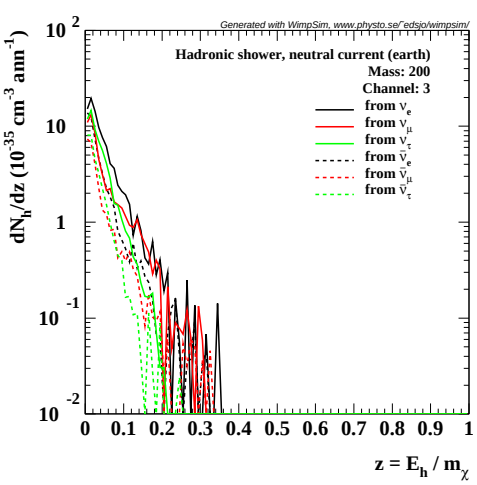
11.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



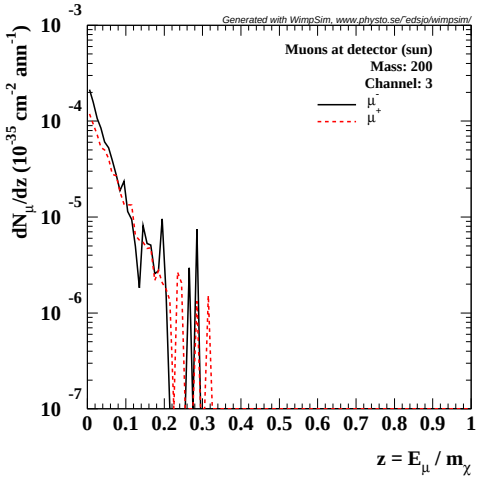


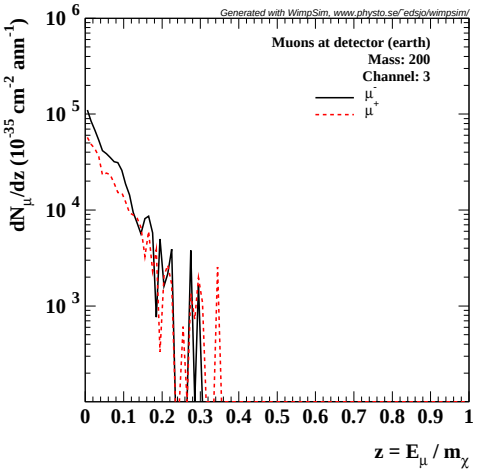
11.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





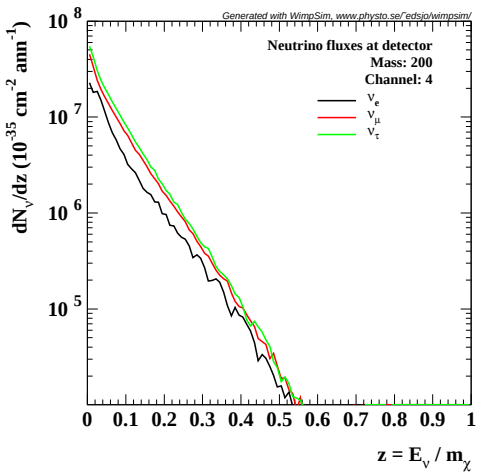
11.3.7 Muons at detector (Sun/Earth)

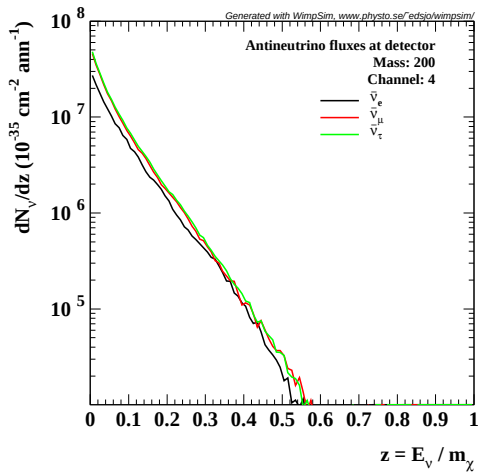




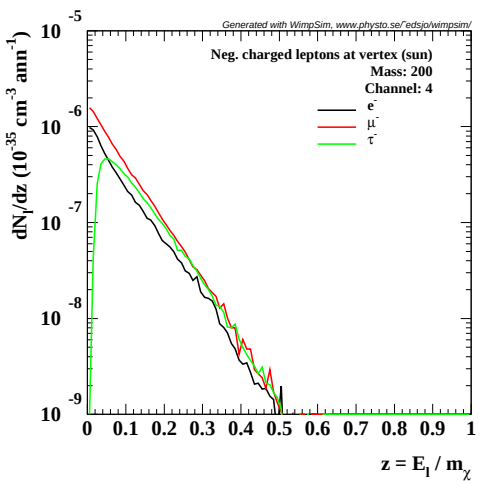
11.4 Channel 4 – $c\bar{c}$

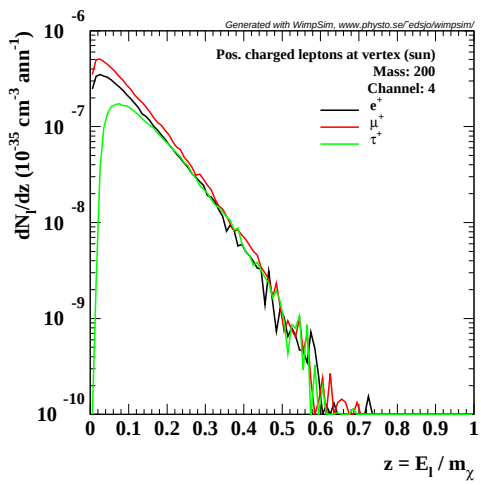
11.4.1 Neutrino fluxes at detector (Sun)



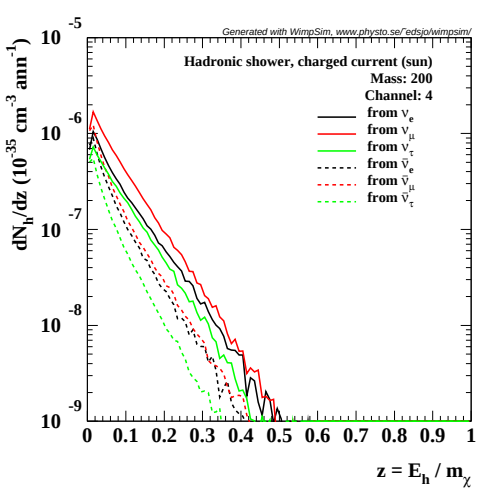


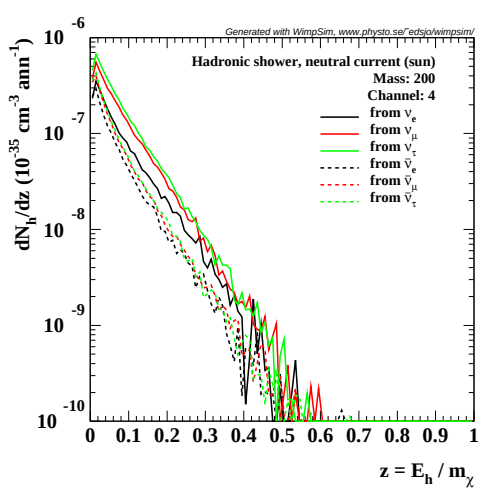
11.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



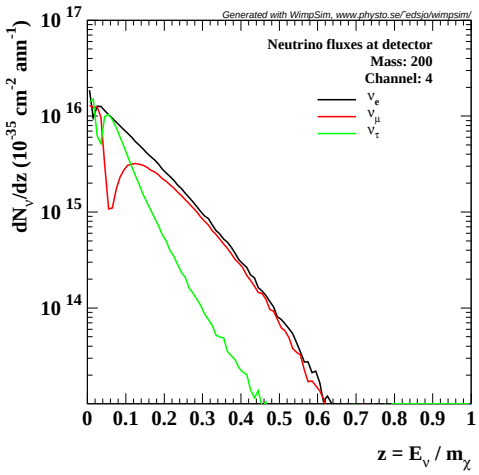


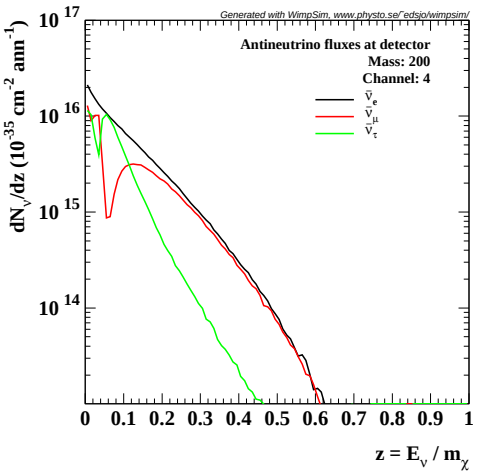
11.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



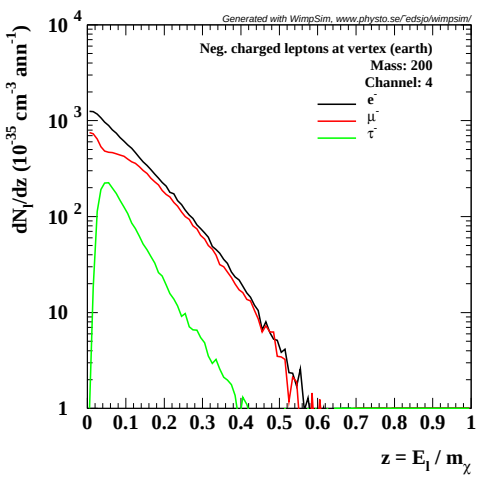


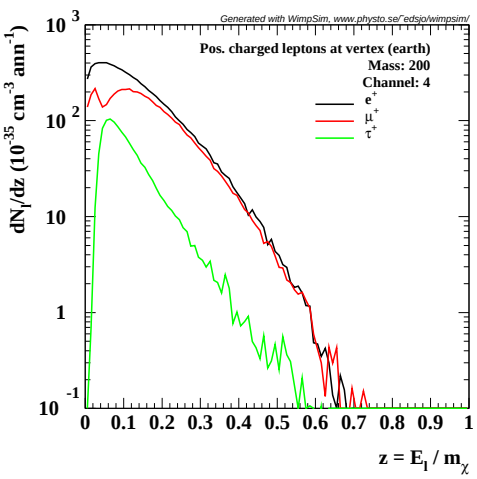
11.4.4 Neutrino fluxes at detector (Earth)



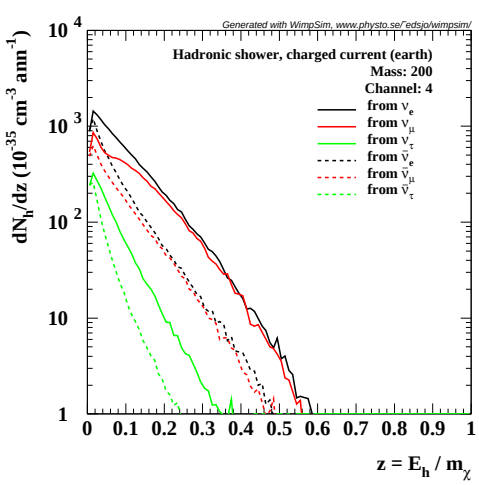


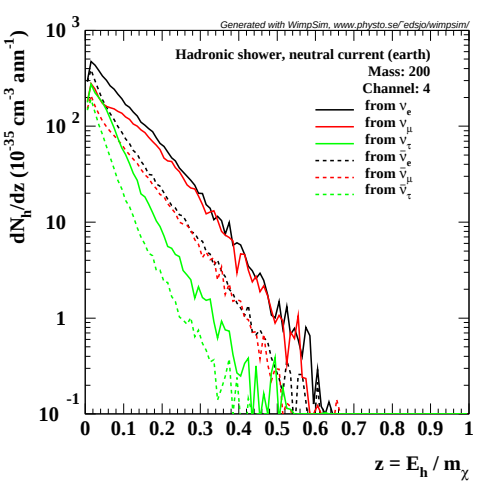
11.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



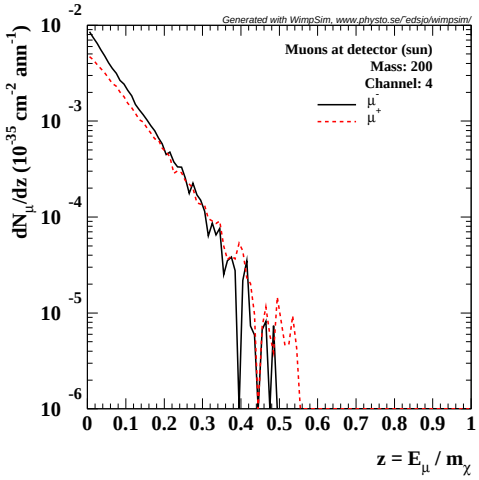


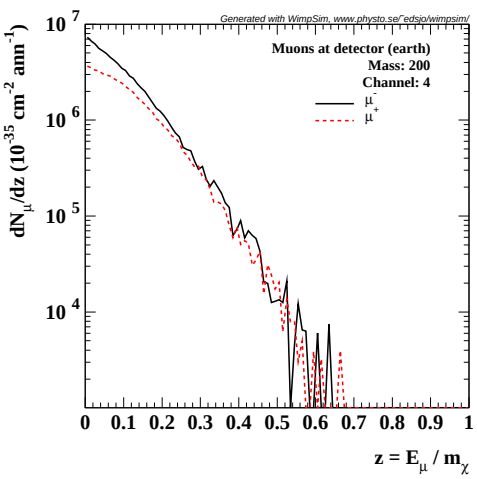
11.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





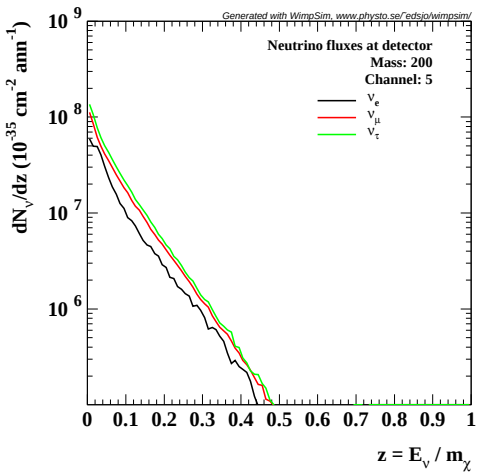
11.4.7 Muons at detector (Sun/Earth)

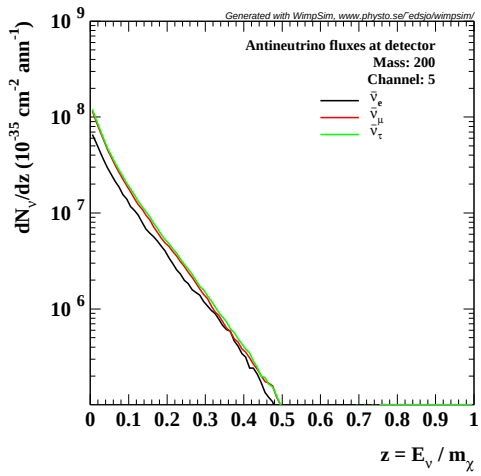




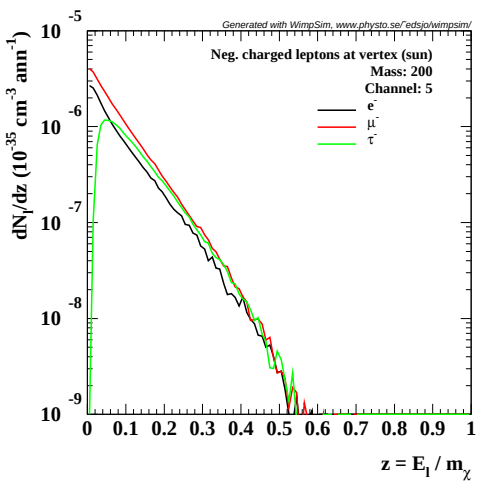
11.5 Channel 5 – $b\bar{b}$

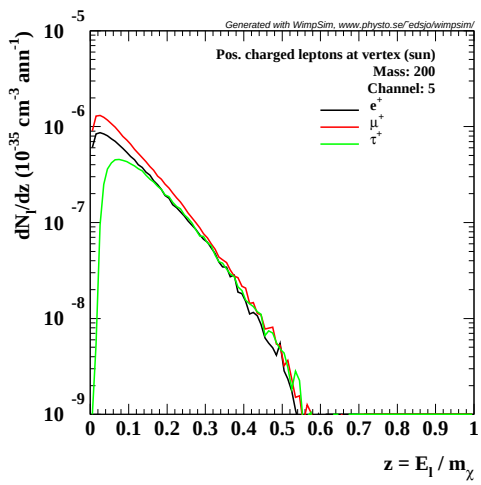
11.5.1 Neutrino fluxes at detector (Sun)



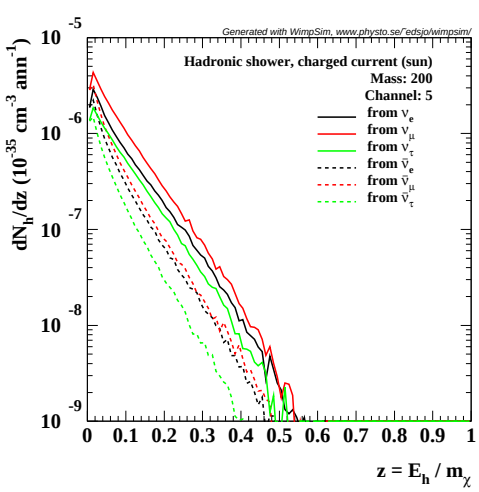


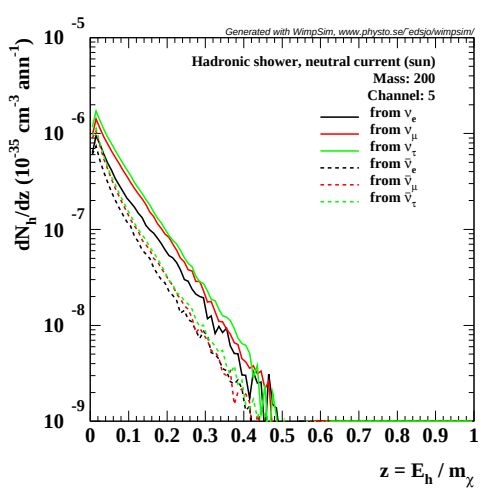
11.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



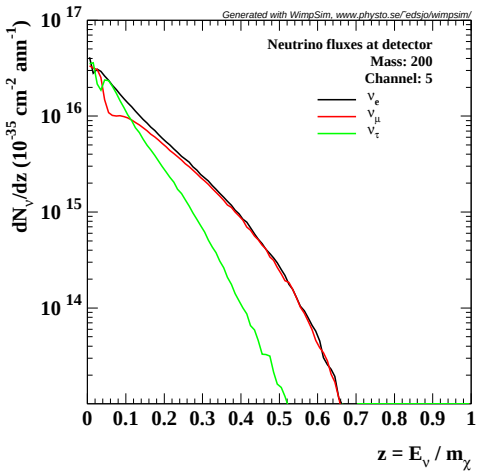


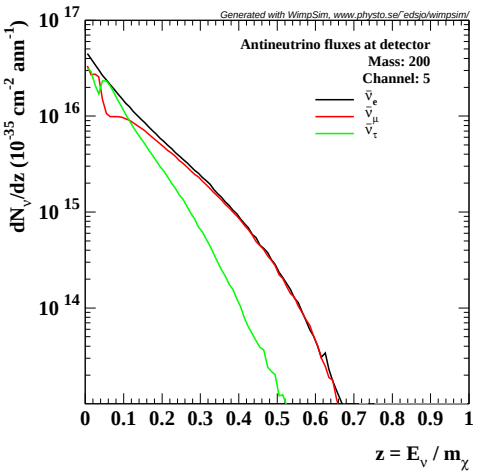
11.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



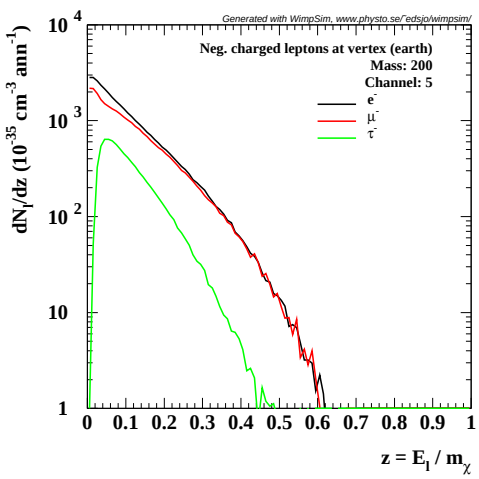


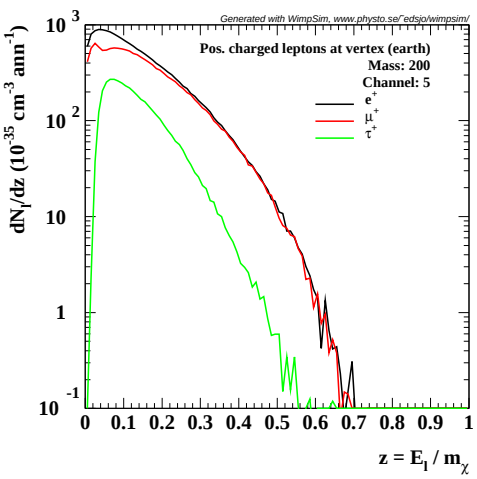
11.5.4 Neutrino fluxes at detector (Earth)



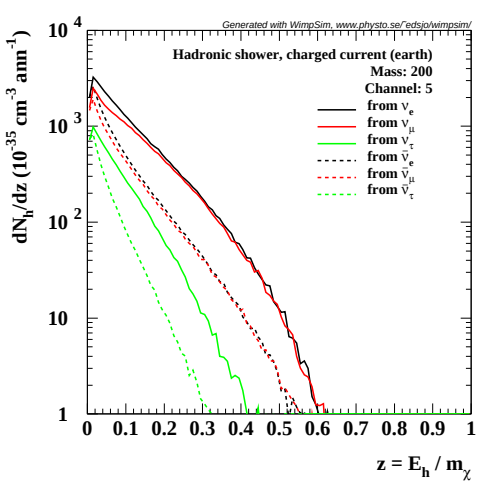


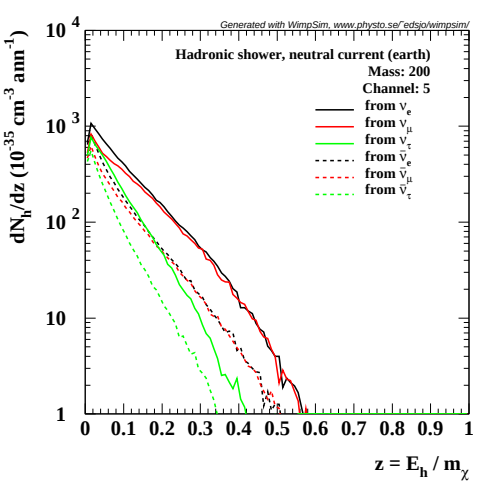
11.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



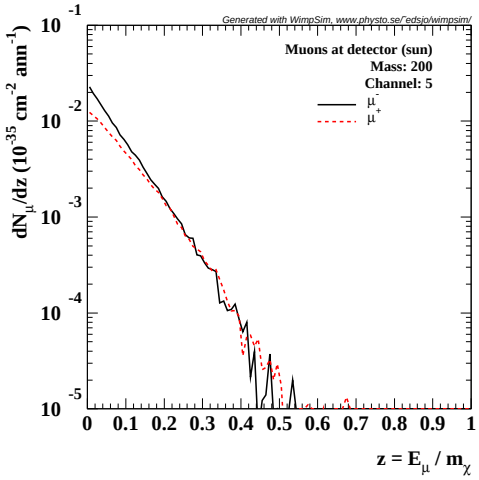


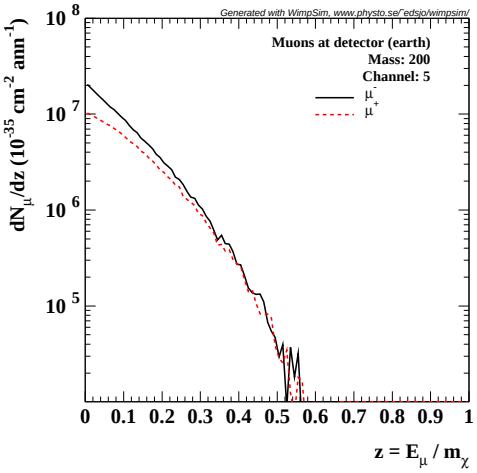
11.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





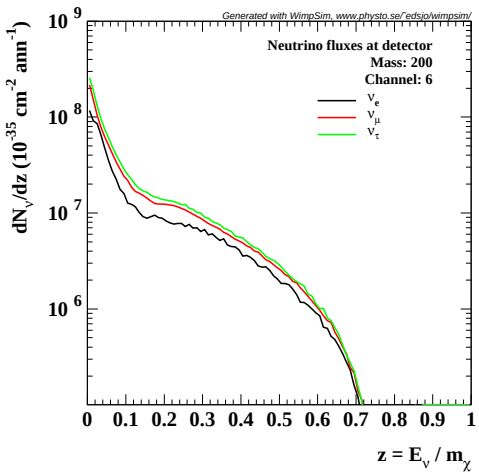
11.5.7 Muons at detector (Sun/Earth)

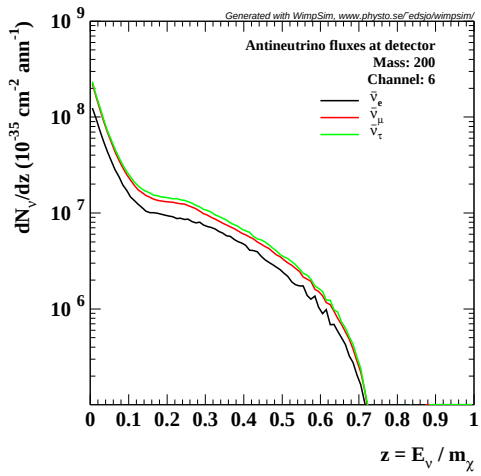




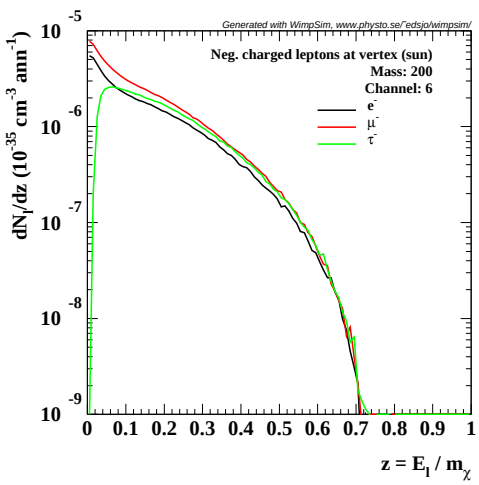
11.6 Channel 6 – $t\bar{t}$

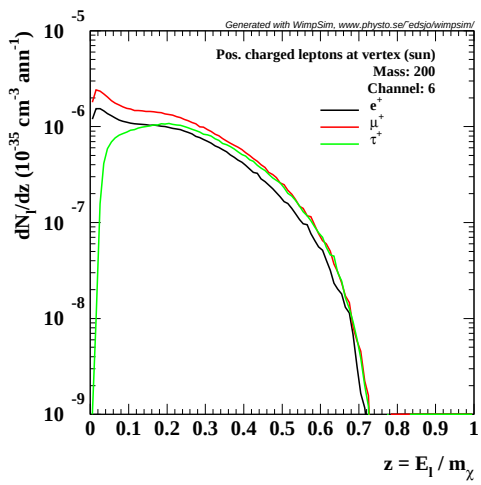
11.6.1 Neutrino fluxes at detector (Sun)



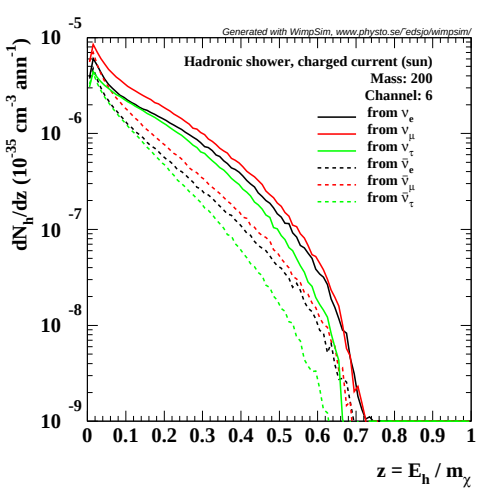


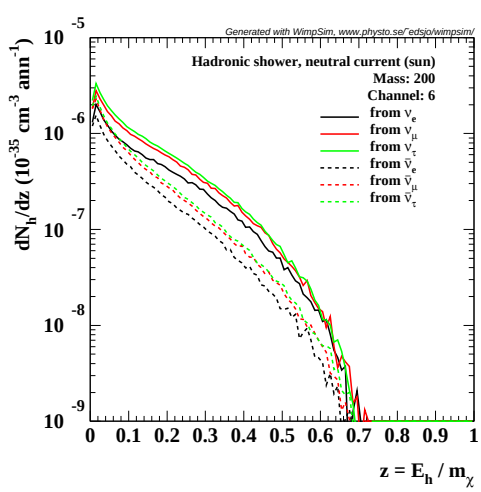
11.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



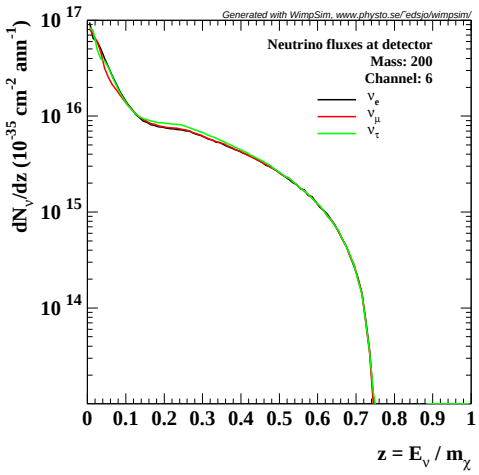


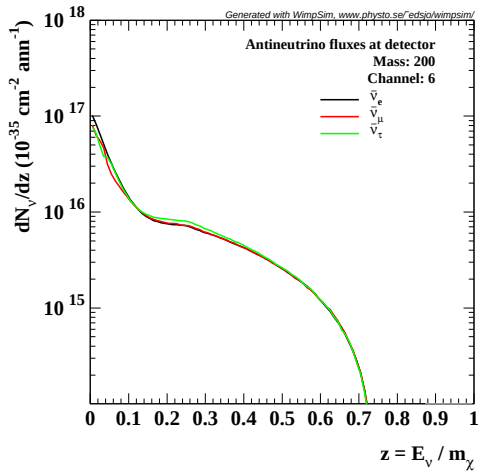
11.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



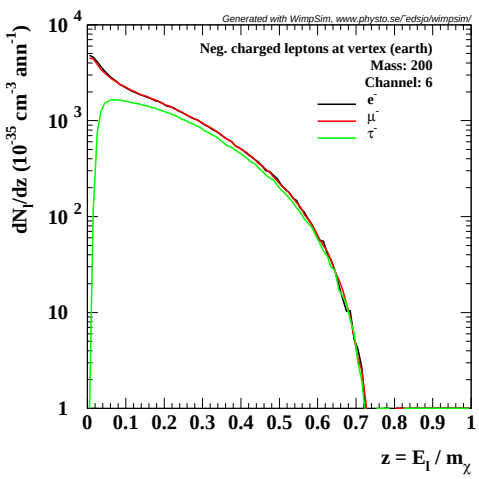


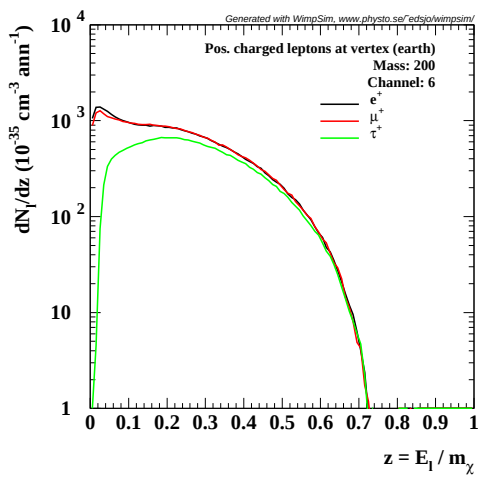
11.6.4 Neutrino fluxes at detector (Earth)



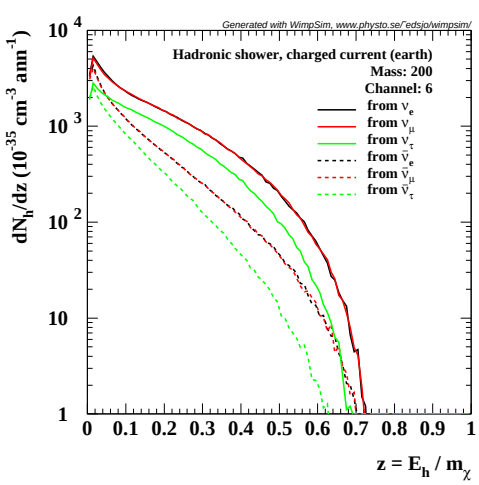


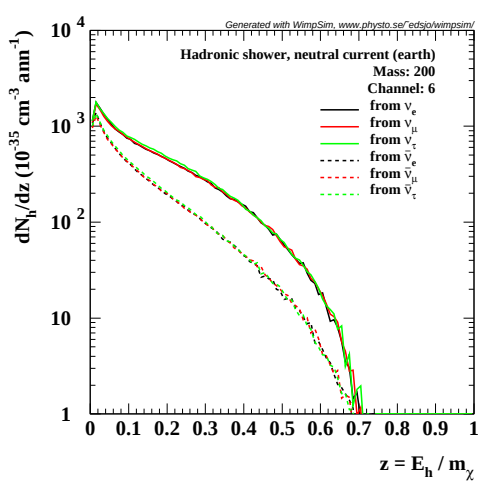
11.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



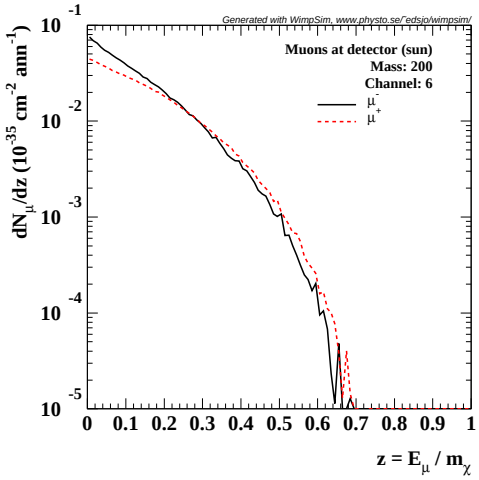


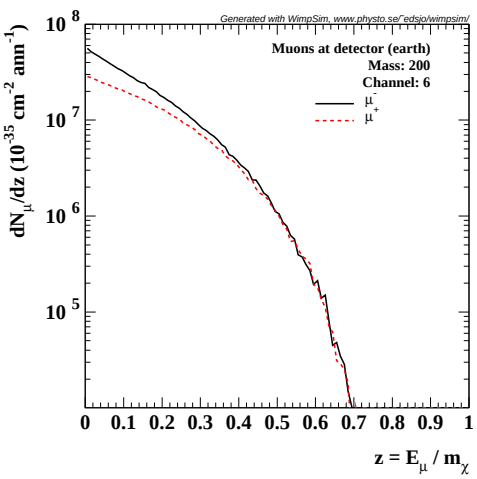
11.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





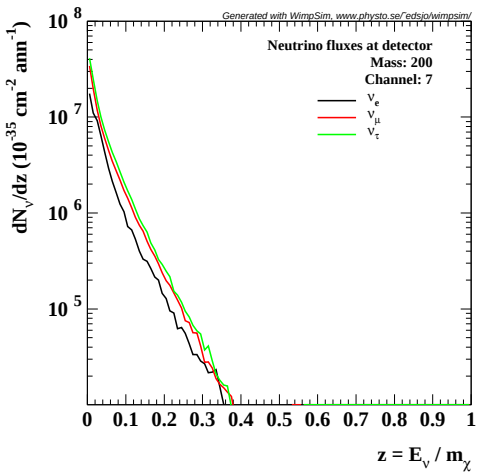
11.6.7 Muons at detector (Sun/Earth)

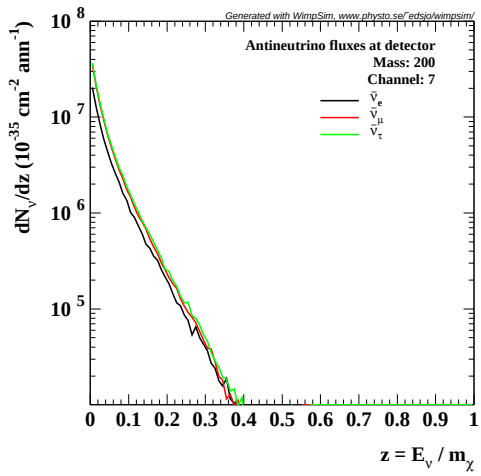




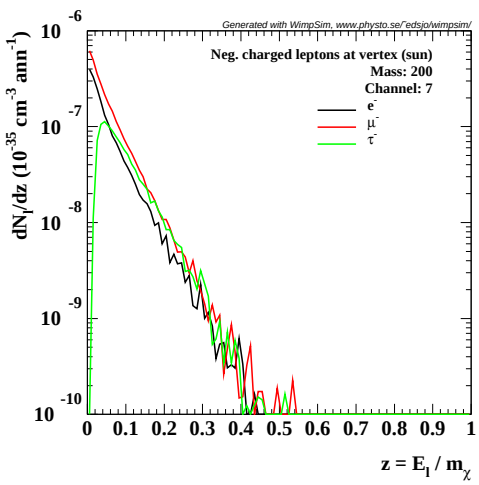
11.7 Channel 7 – gg

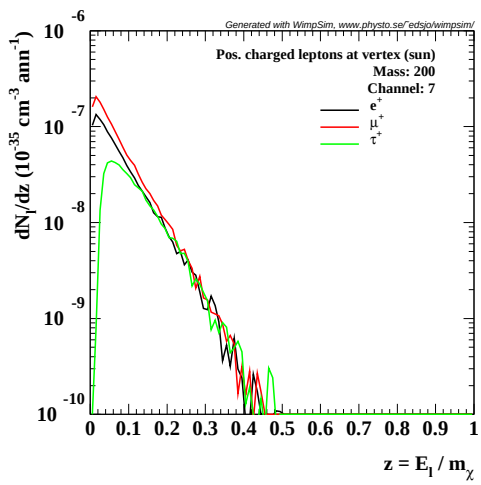
11.7.1 Neutrino fluxes at detector (Sun)



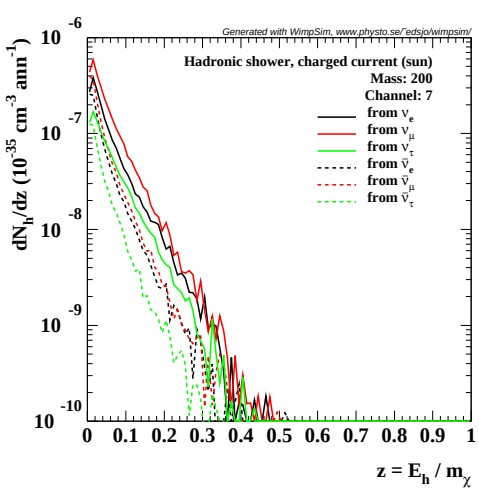


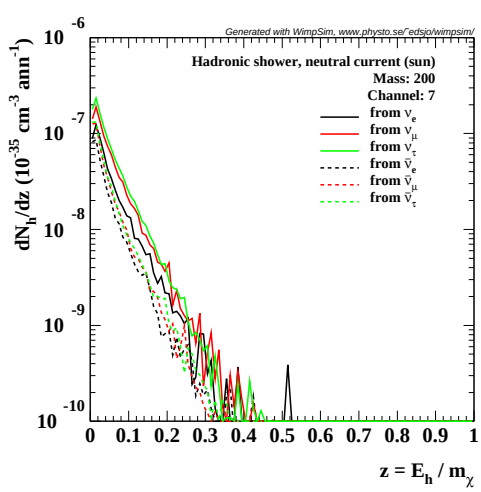
11.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



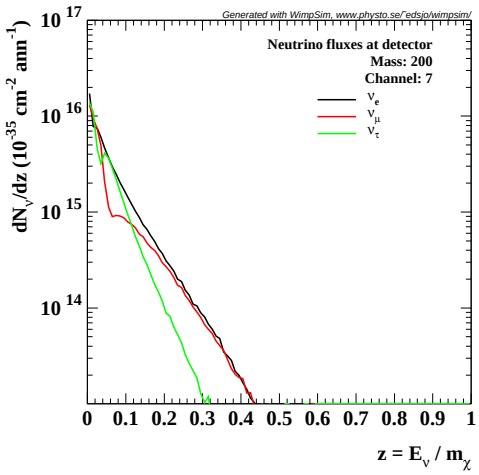


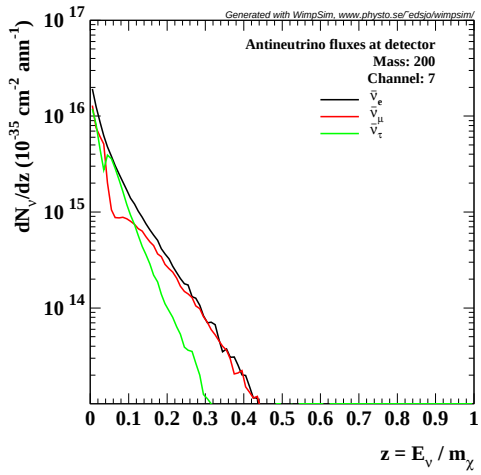
11.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



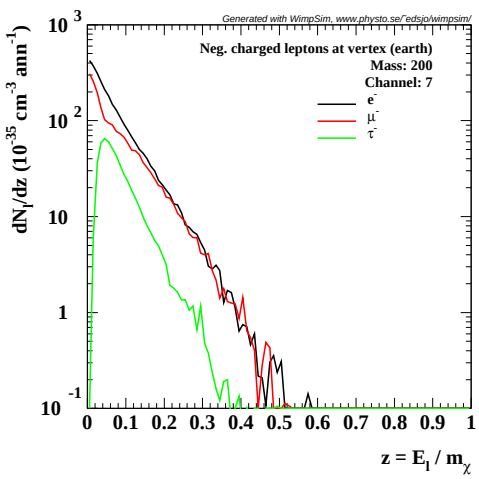


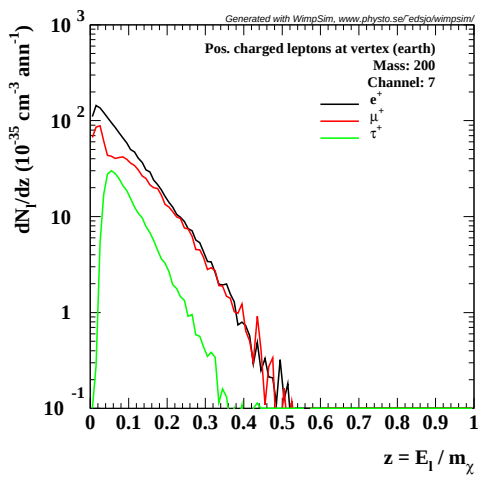
11.7.4 Neutrino fluxes at detector (Earth)



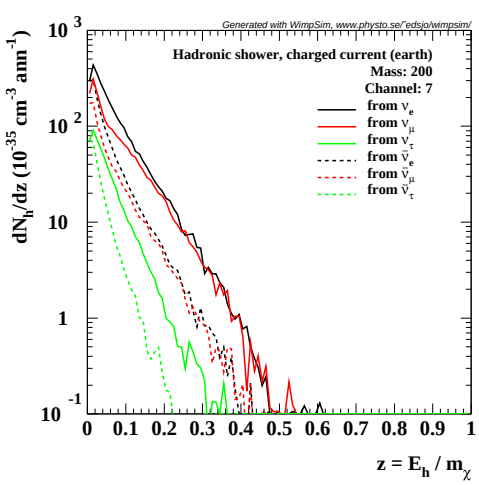


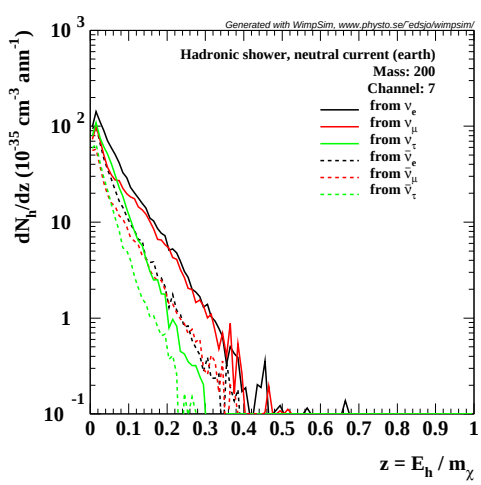
11.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



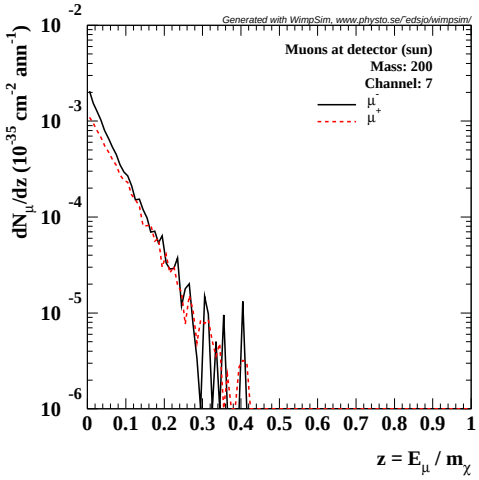


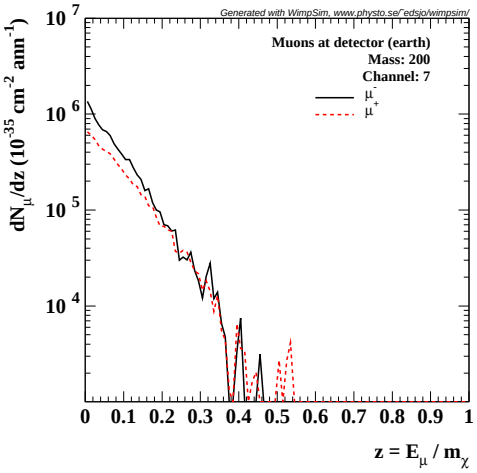
11.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





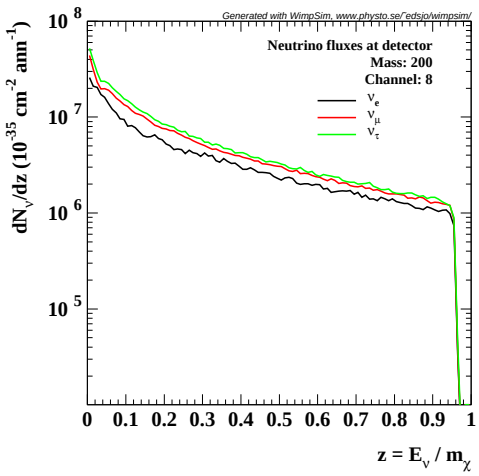
11.7.7 Muons at detector (Sun/Earth)

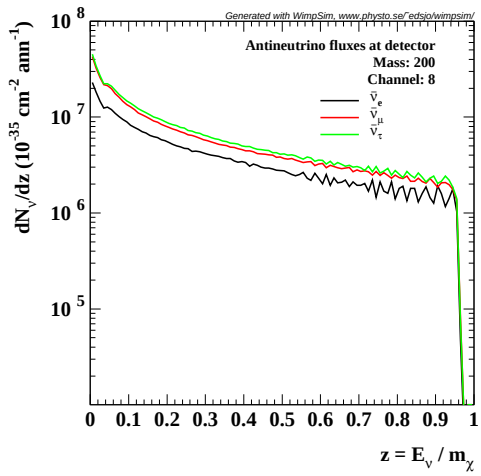




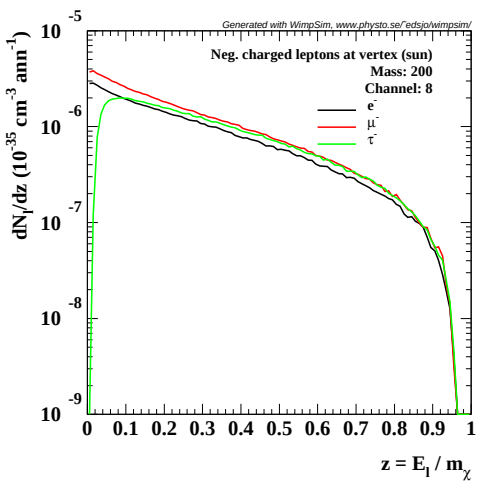
11.8 Channel 8 – W^-W^+

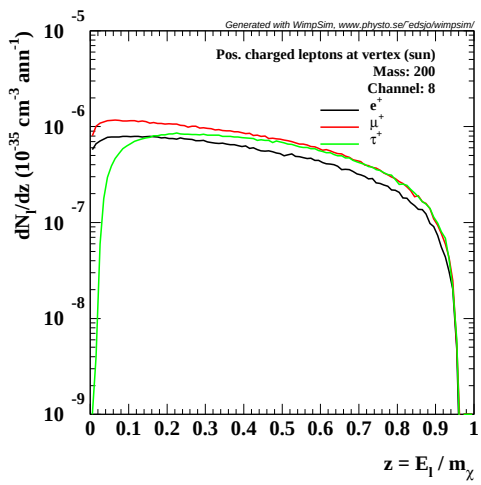
11.8.1 Neutrino fluxes at detector (Sun)



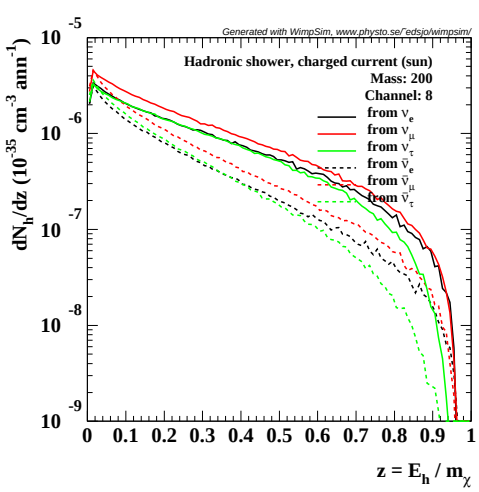


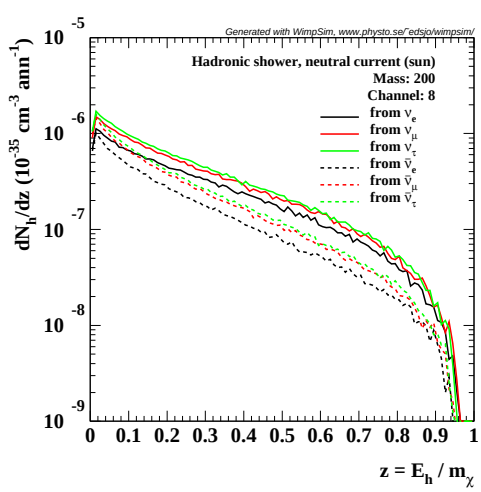
11.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



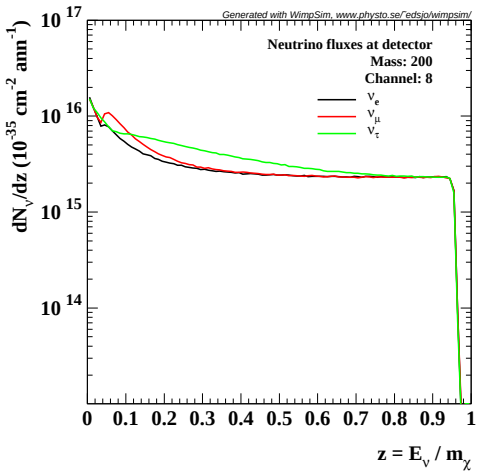


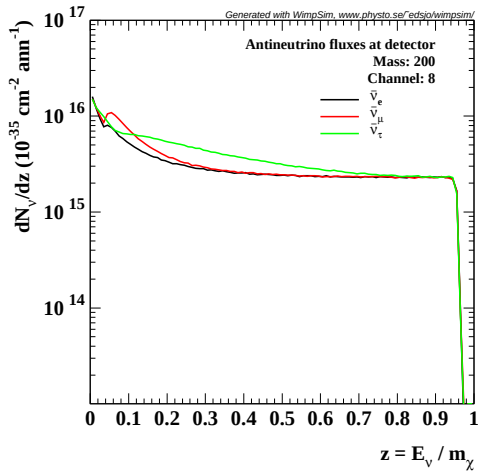
11.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



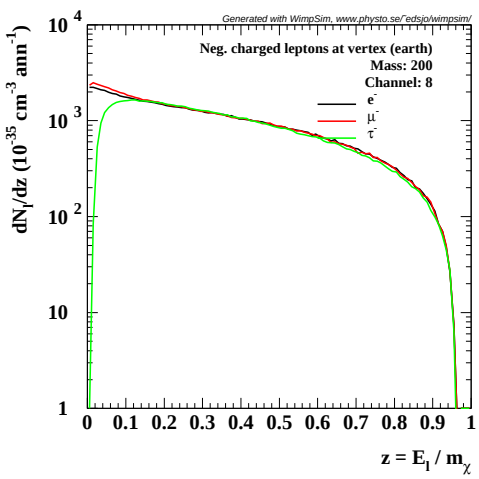


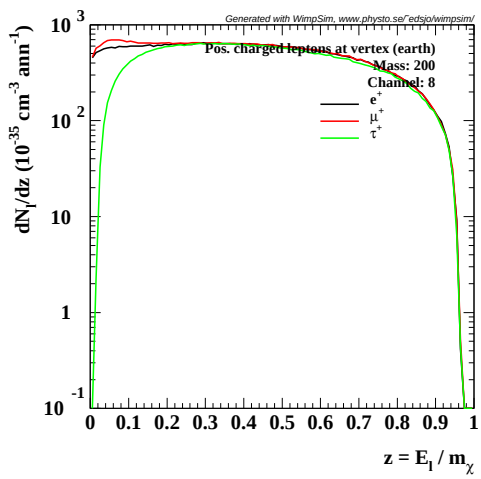
11.8.4 Neutrino fluxes at detector (Earth)



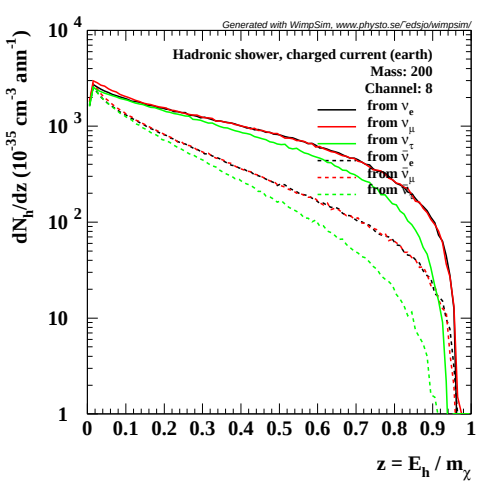


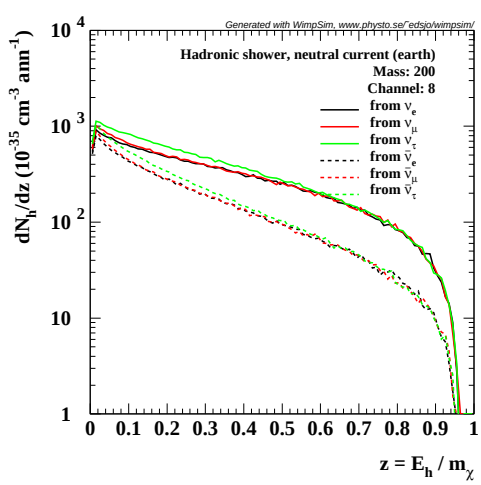
11.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



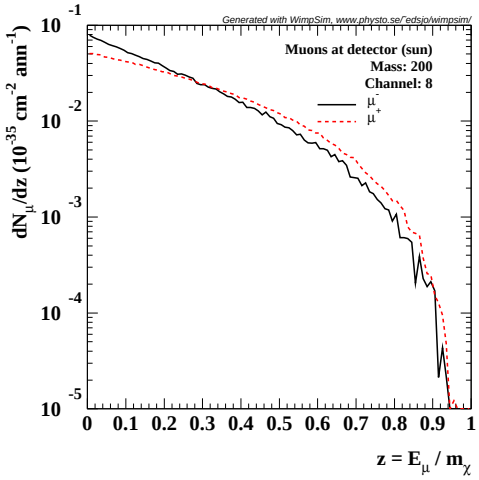


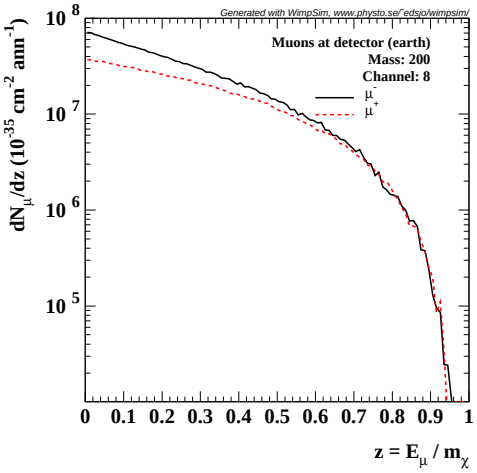
11.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





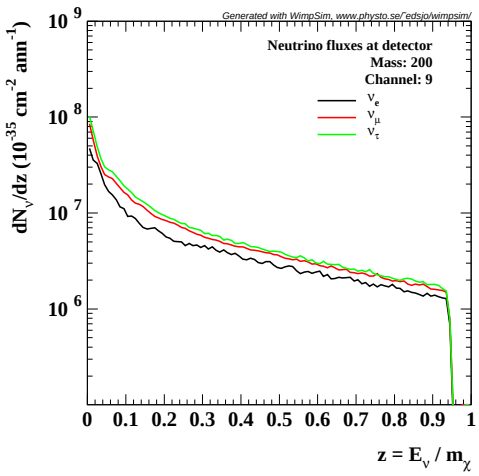
11.8.7 Muons at detector (Sun/Earth)

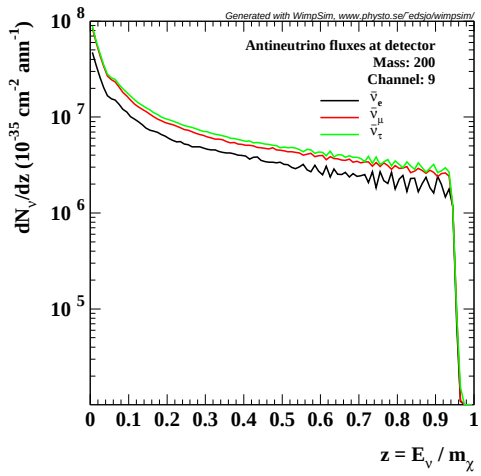




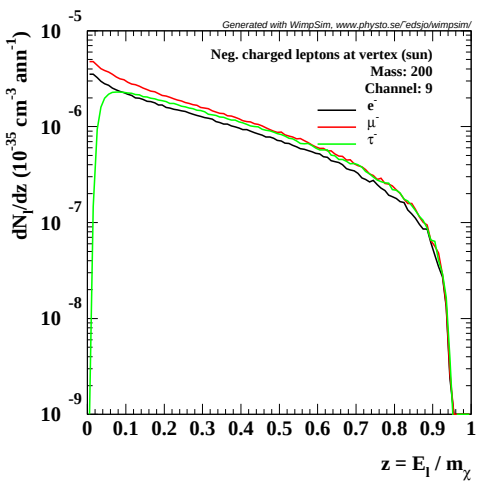
11.9 Channel 9 – $Z^0 Z^0$

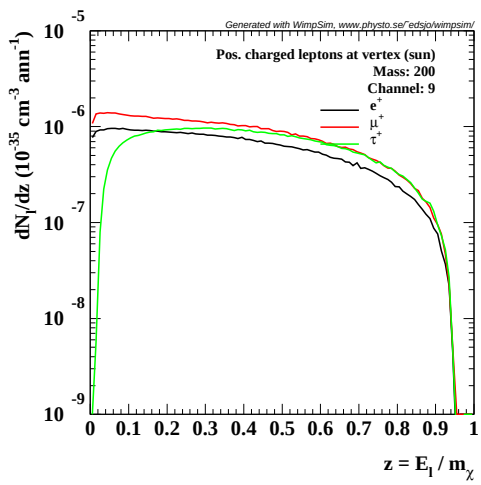
11.9.1 Neutrino fluxes at detector (Sun)



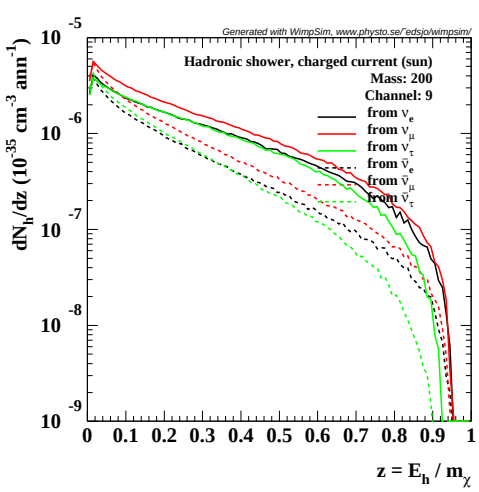


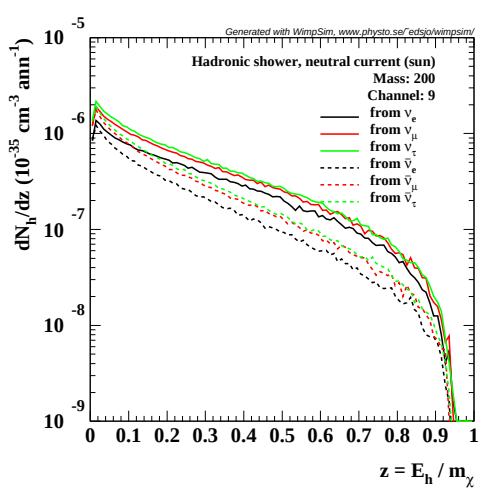
11.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



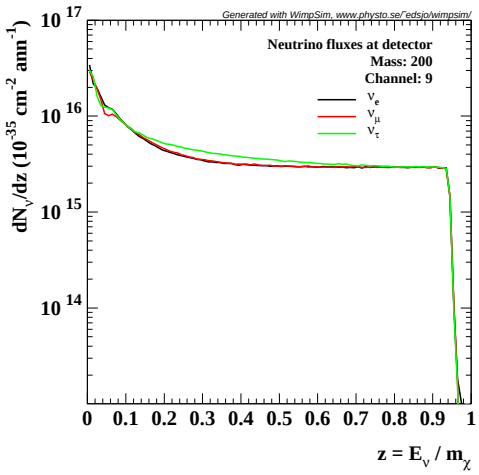


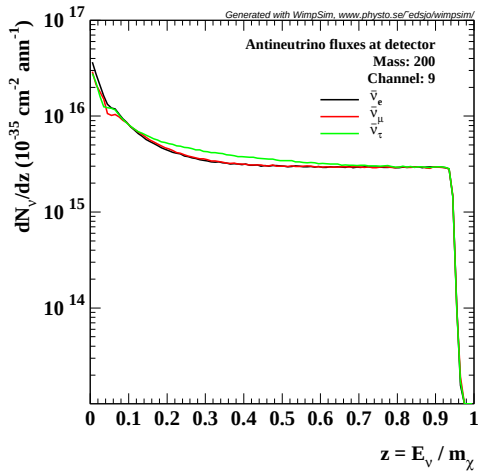
11.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



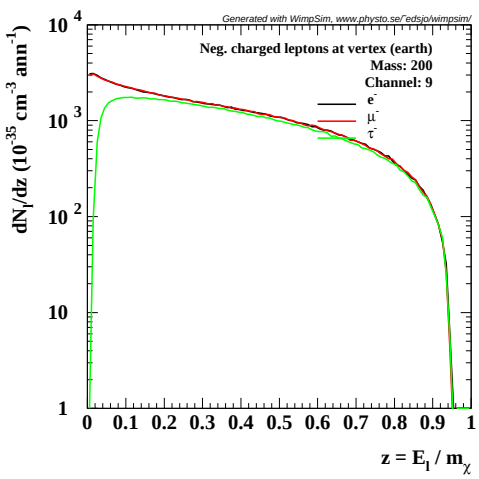


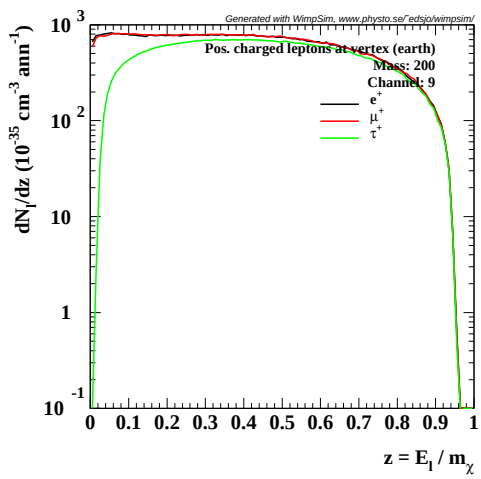
11.9.4 Neutrino fluxes at detector (Earth)



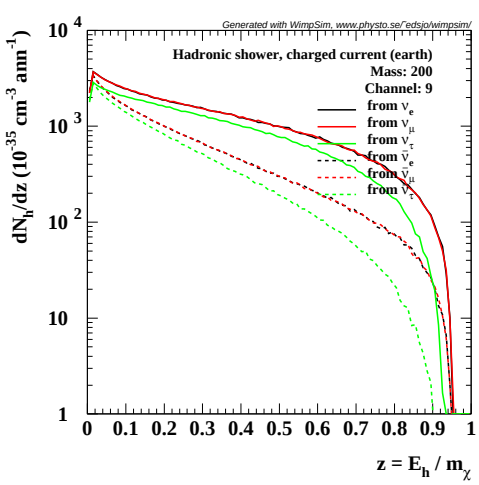


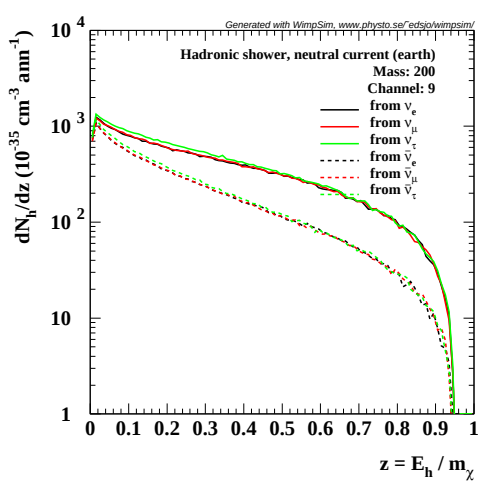
11.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



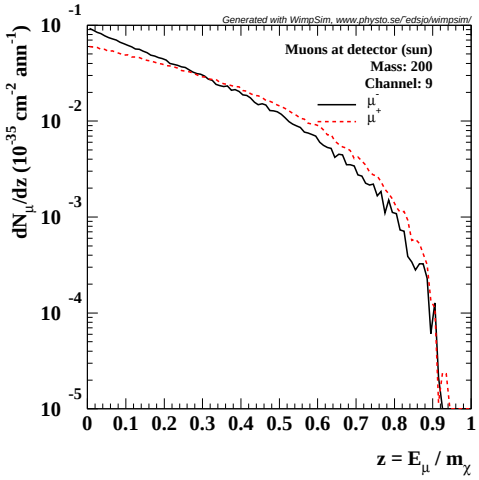


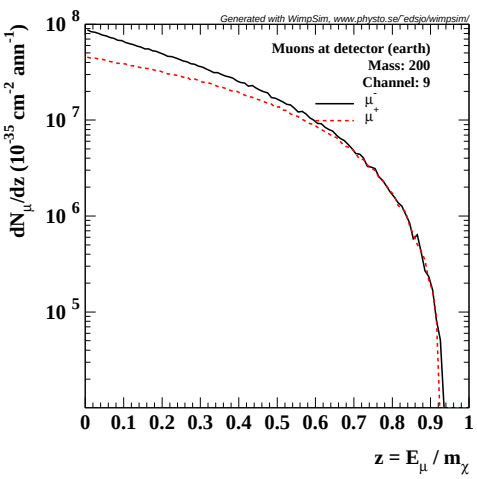
11.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





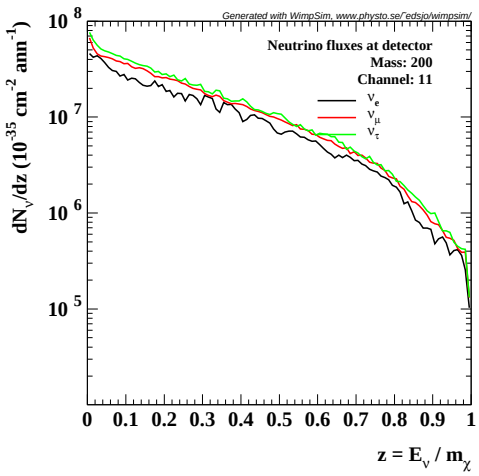
11.9.7 Muons at detector (Sun/Earth)

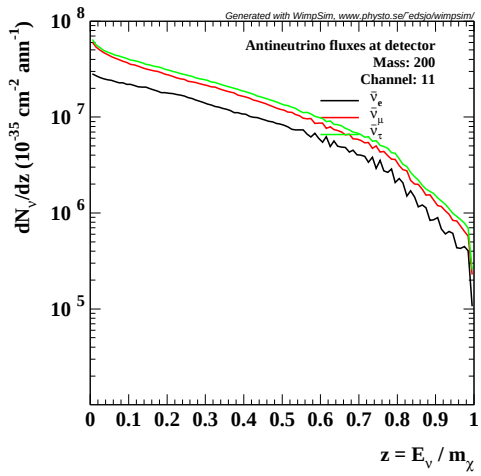




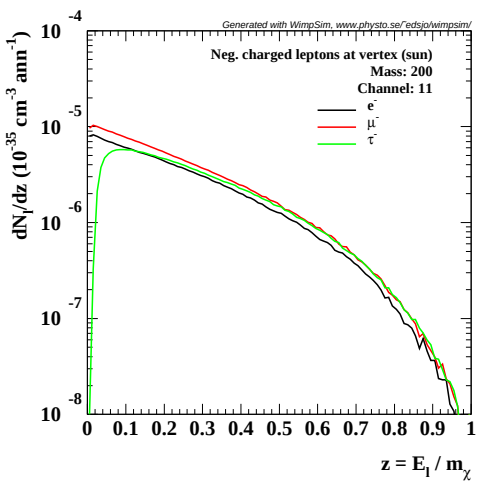
11.10 Channel 11 – $\tau^-\tau^+$

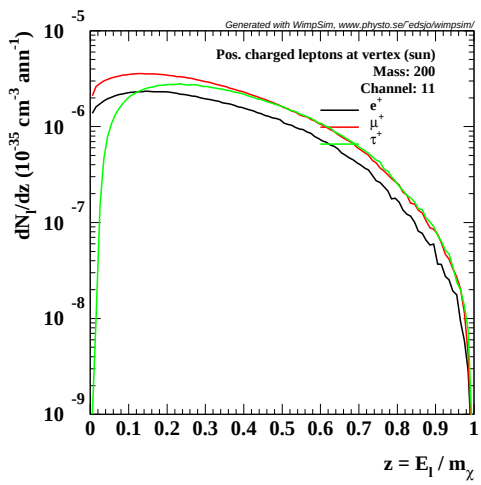
11.10.1 Neutrino fluxes at detector (Sun)



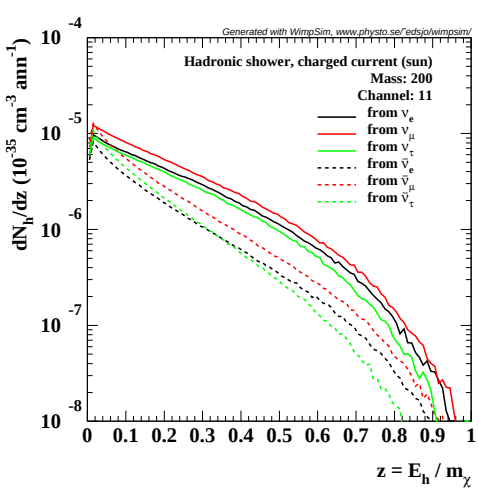


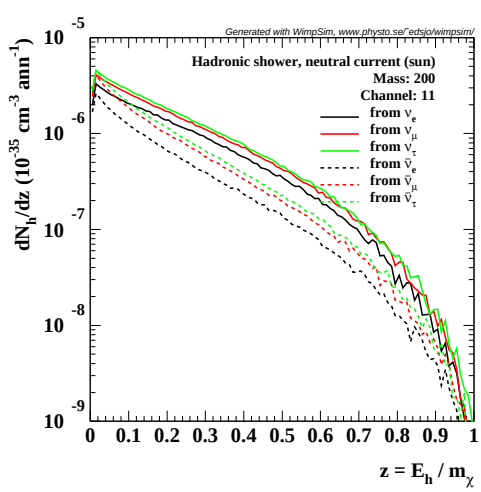
11.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



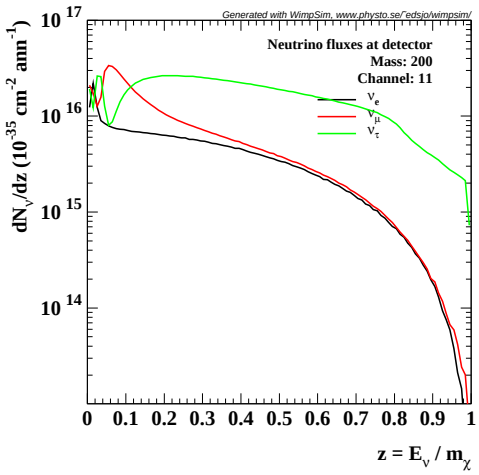


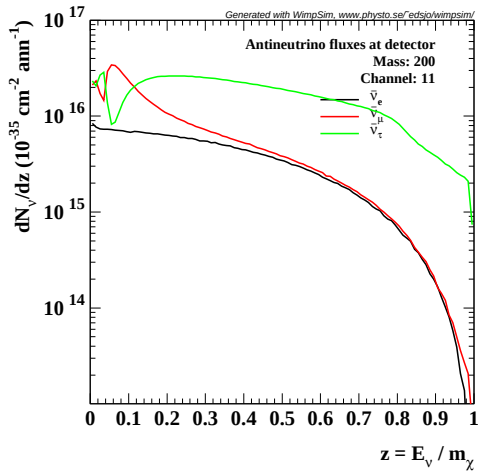
11.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



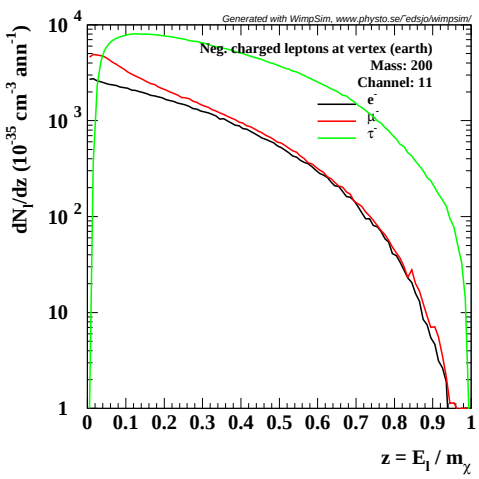


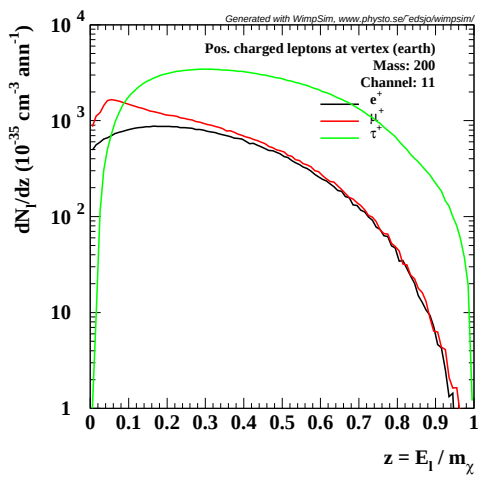
11.10.4 Neutrino fluxes at detector (Earth)



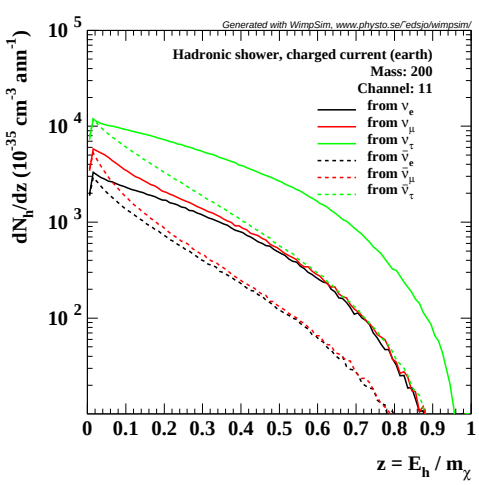


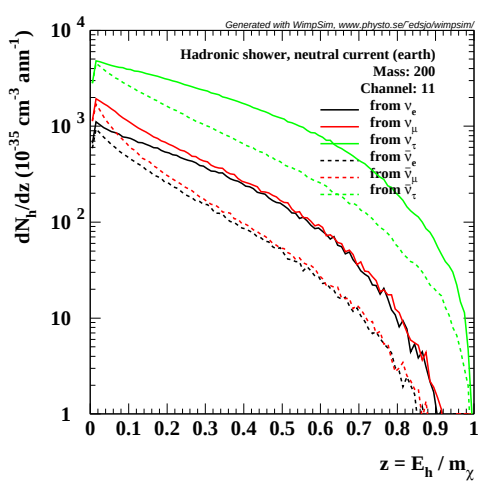
11.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



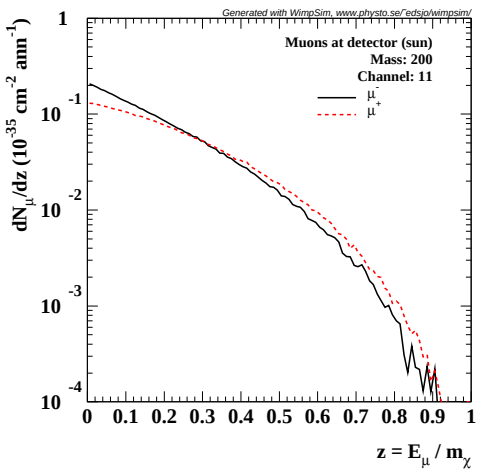


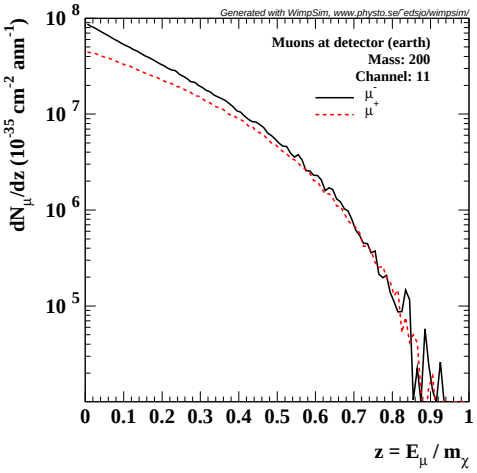
11.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





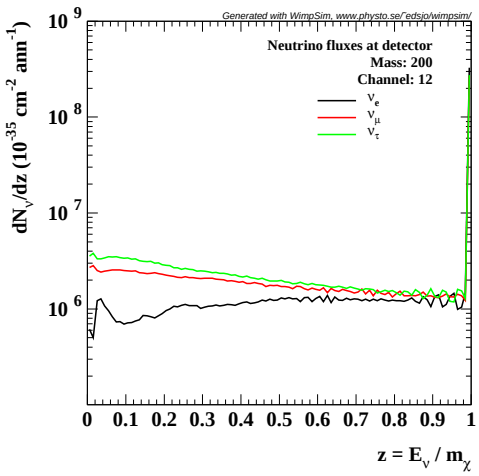
11.10.7 Muons at detector (Sun/Earth)

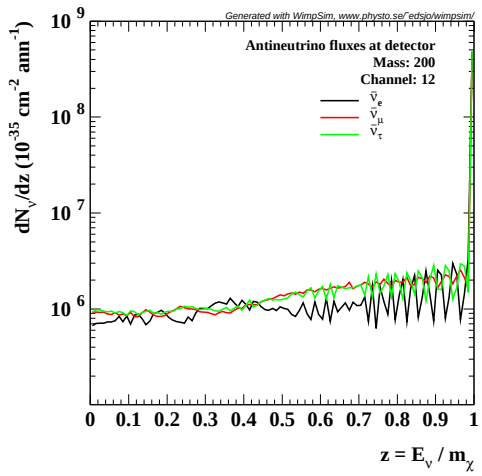




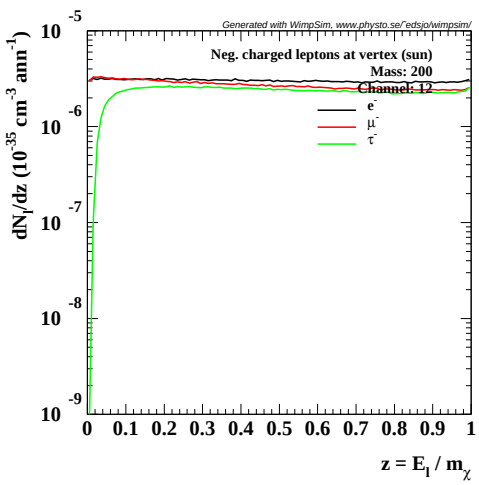
11.11 Channel 12 – $\nu_e\bar{\nu}_e$

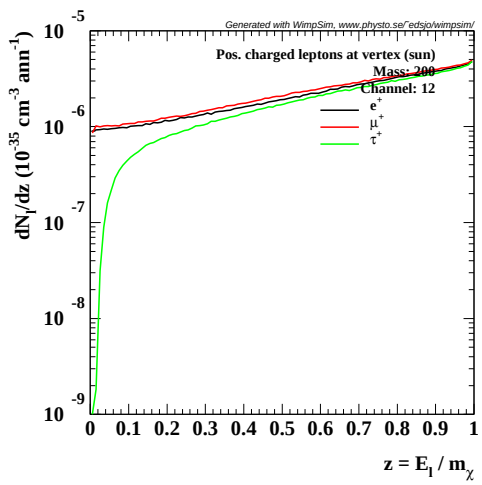
11.11.1 Neutrino fluxes at detector (Sun)



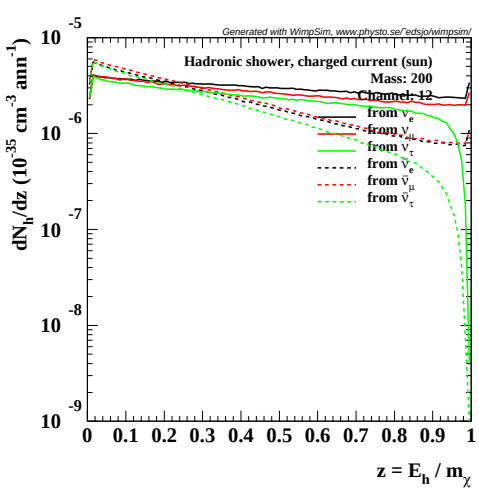


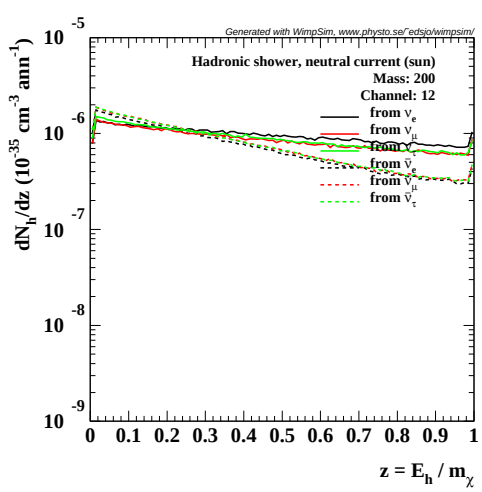
11.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



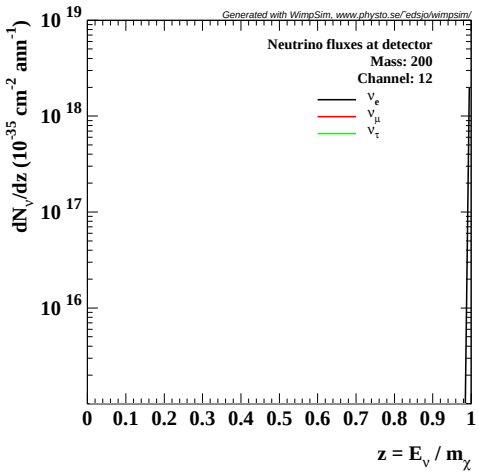


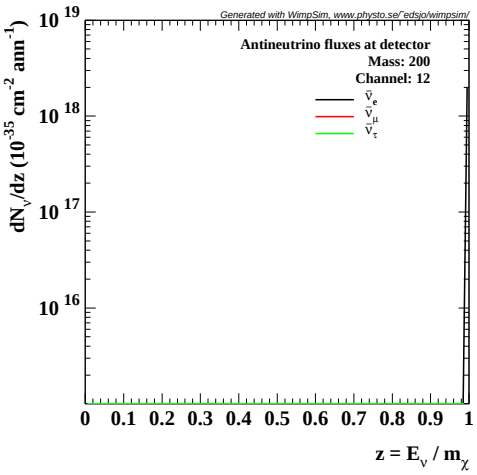
11.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



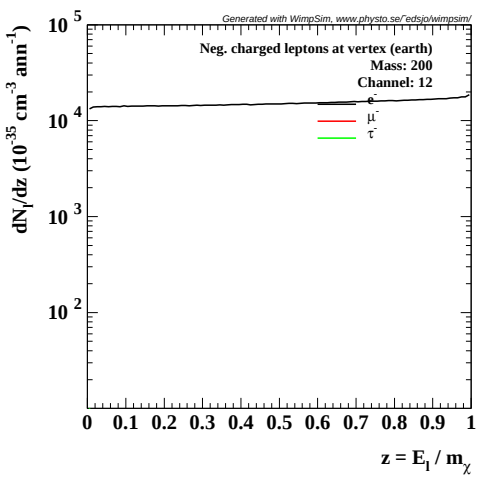


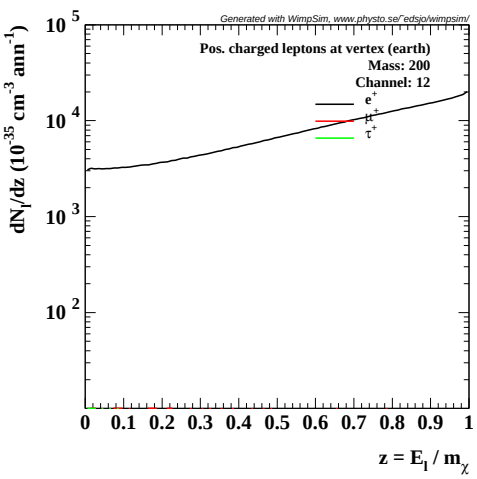
11.11.4 Neutrino fluxes at detector (Earth)



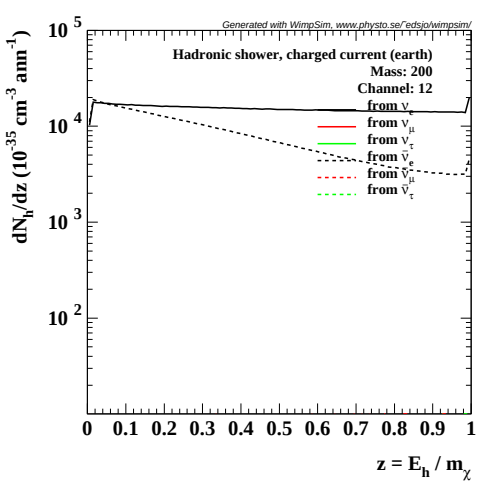


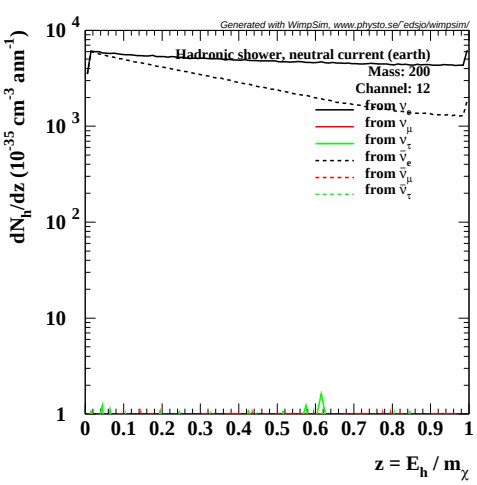
11.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



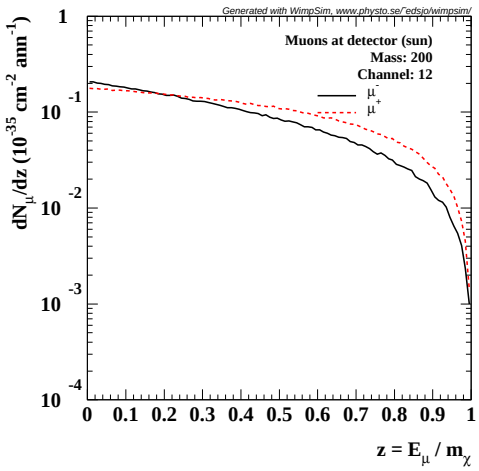


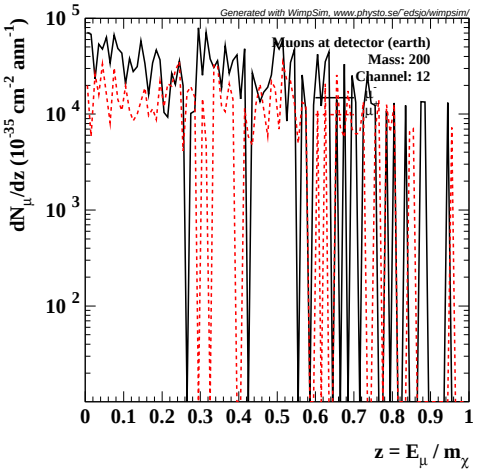
11.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





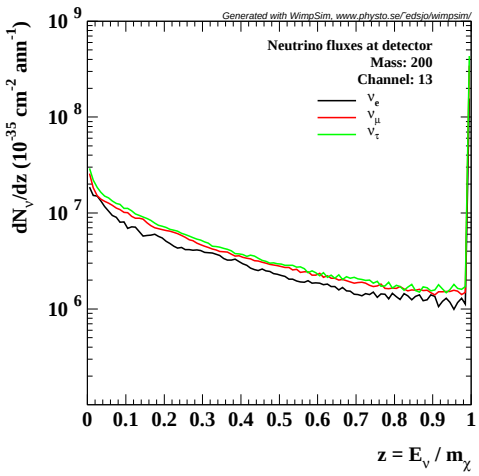
11.11.7 Muons at detector (Sun/Earth)

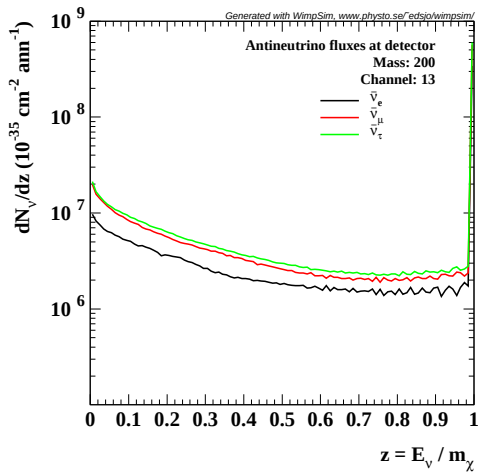




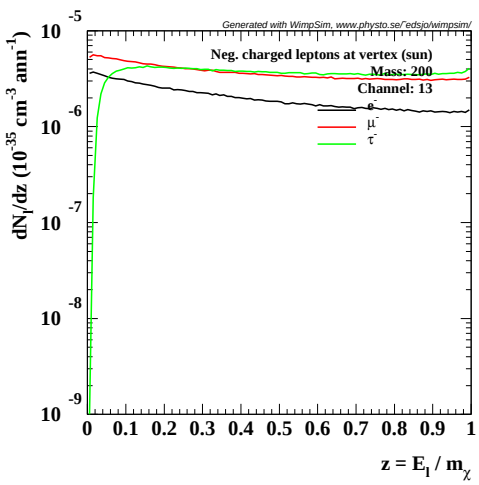
11.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

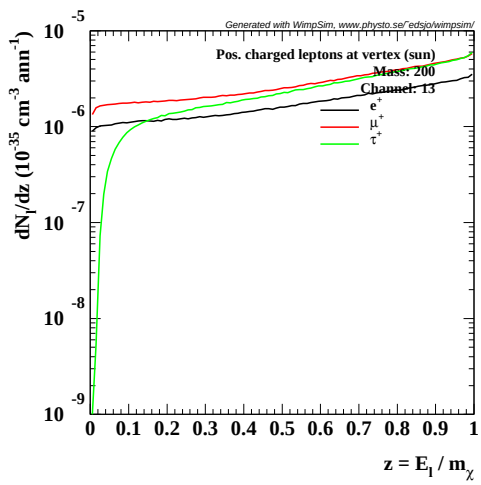
11.12.1 Neutrino fluxes at detector (Sun)



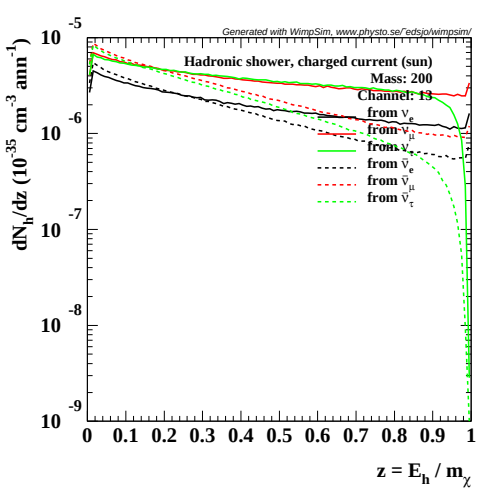


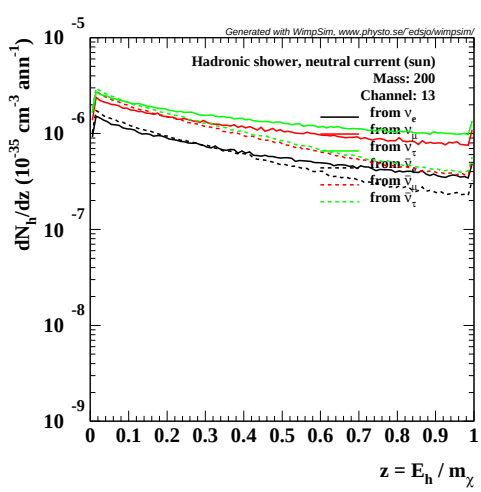
11.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



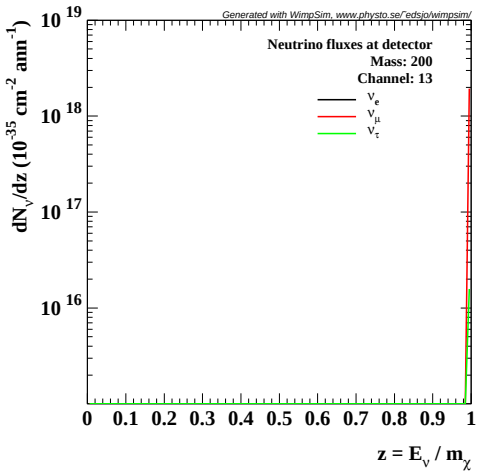


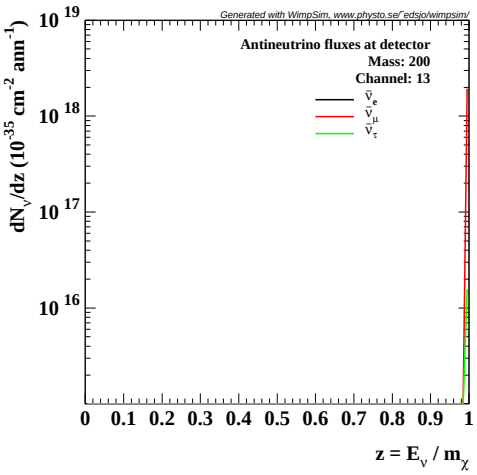
11.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



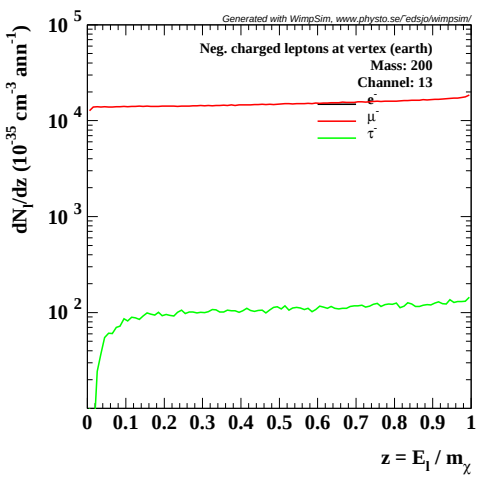


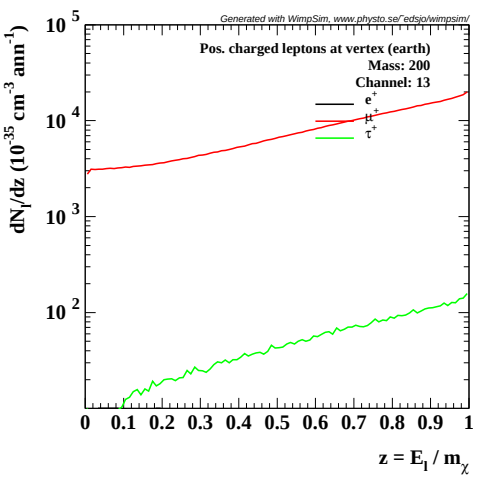
11.12.4 Neutrino fluxes at detector (Earth)



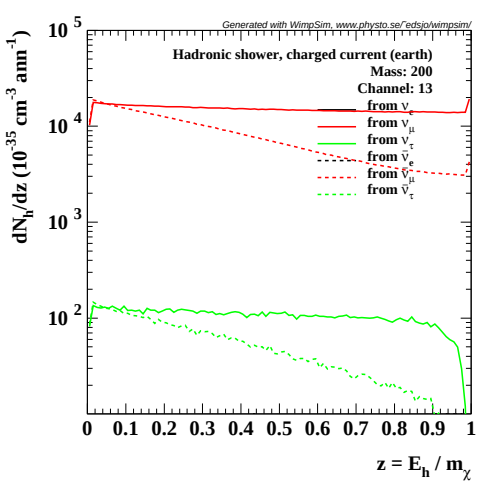


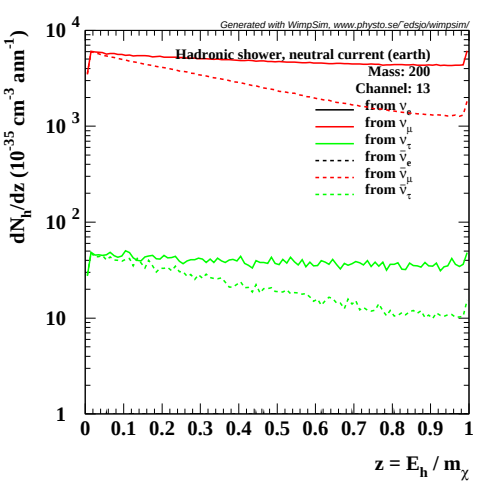
11.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



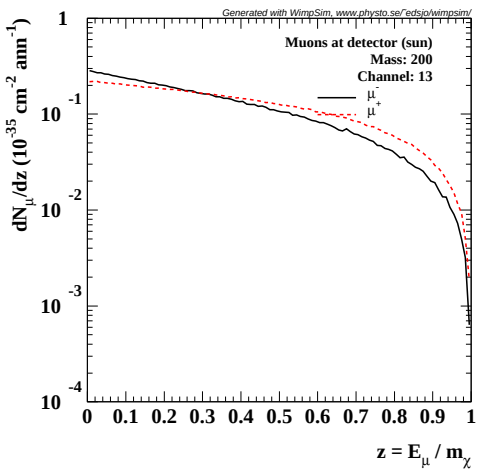


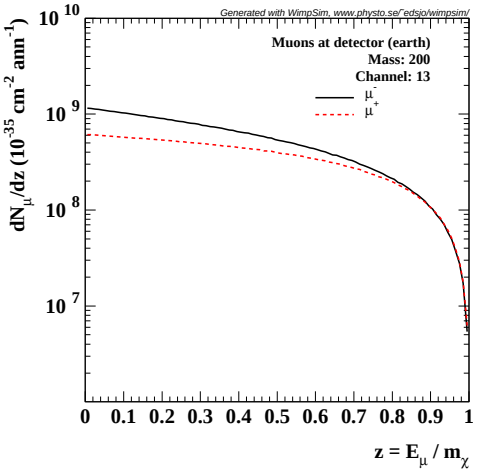
11.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





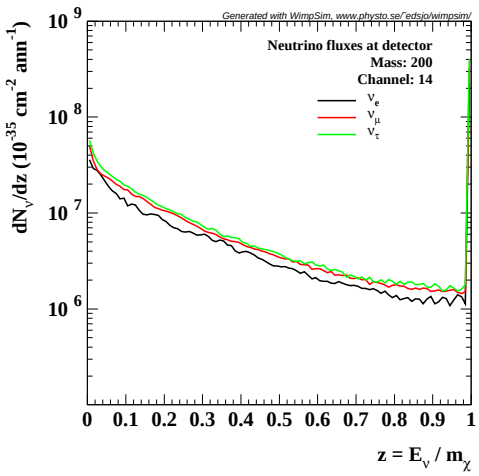
11.12.7 Muons at detector (Sun/Earth)

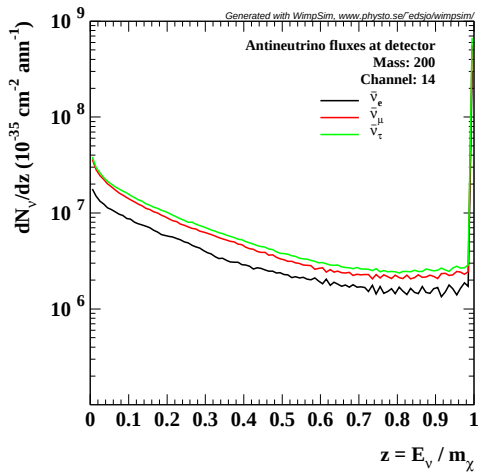




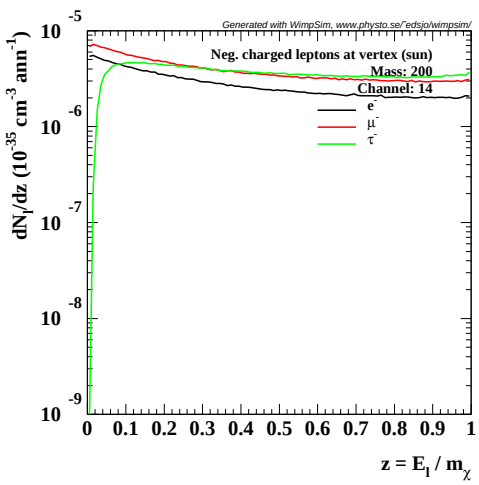
11.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

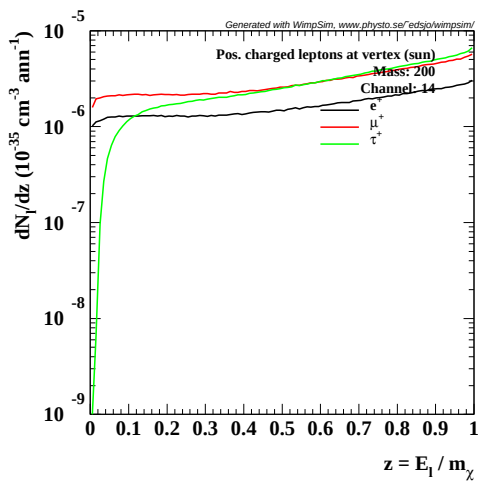
11.13.1 Neutrino fluxes at detector (Sun)



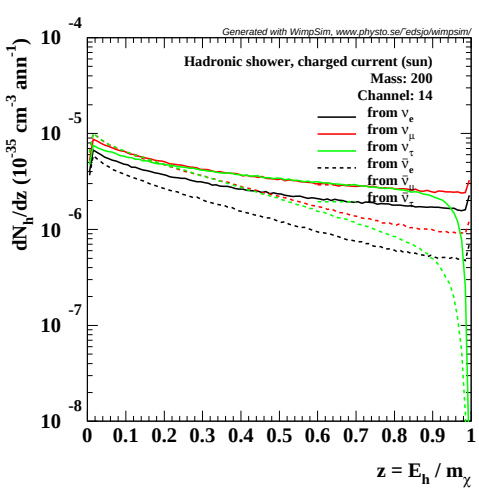


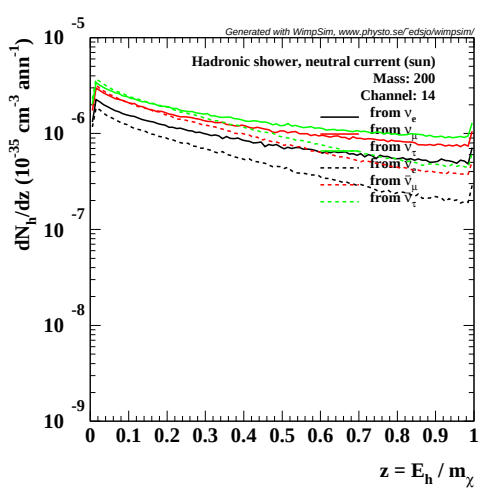
11.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



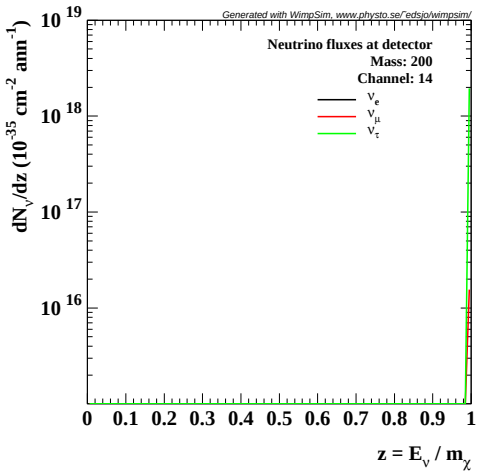


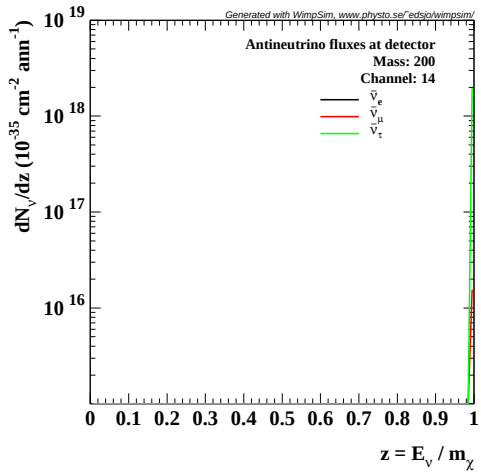
11.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



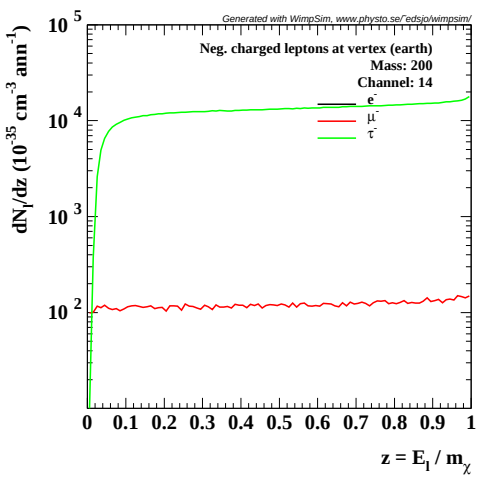


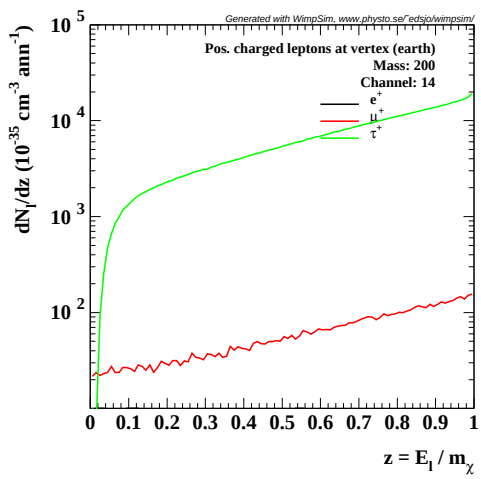
11.13.4 Neutrino fluxes at detector (Earth)



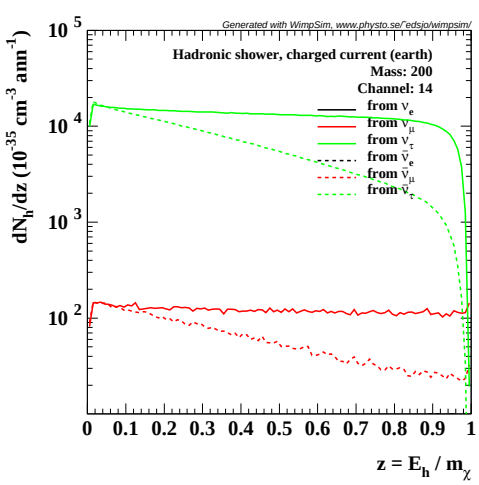


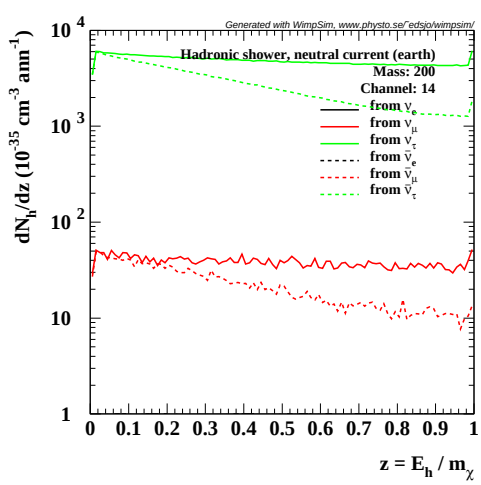
11.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



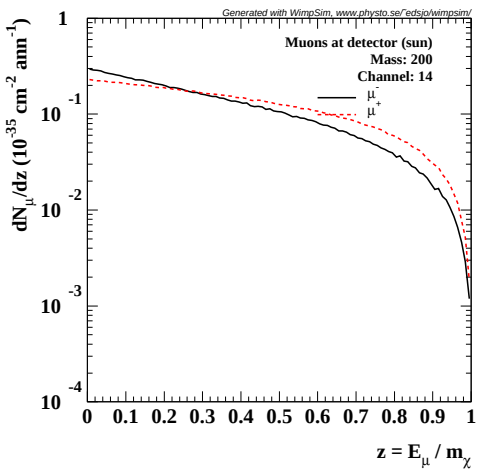


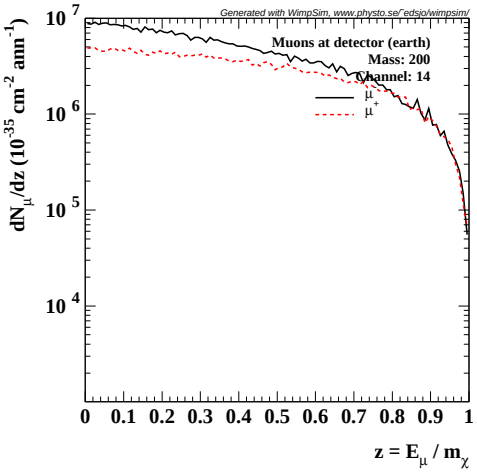
11.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





11.13.7 Muons at detector (Sun/Earth)

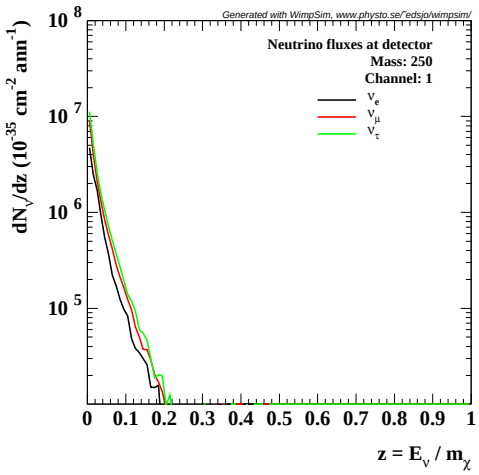


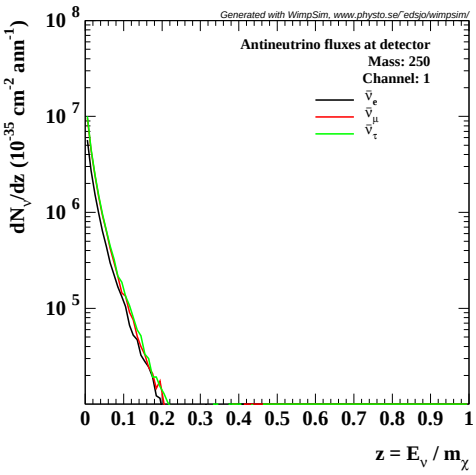


12 Mass 250

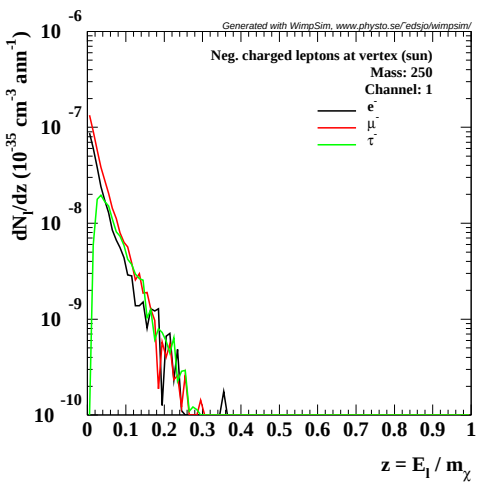
12.1 Channel 1 – $d\bar{d}$

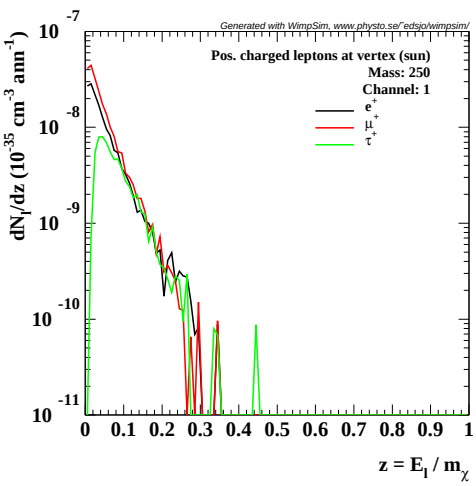
12.1.1 Neutrino fluxes at detector (Sun)



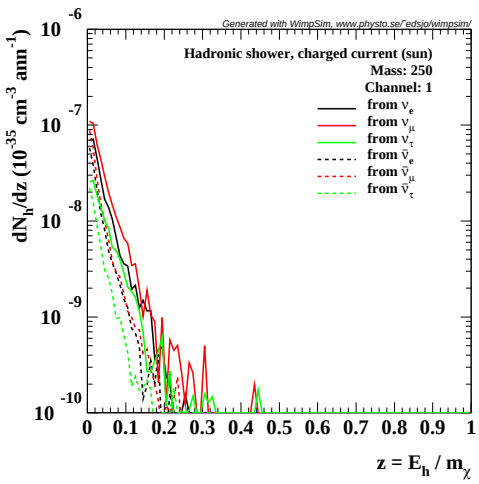


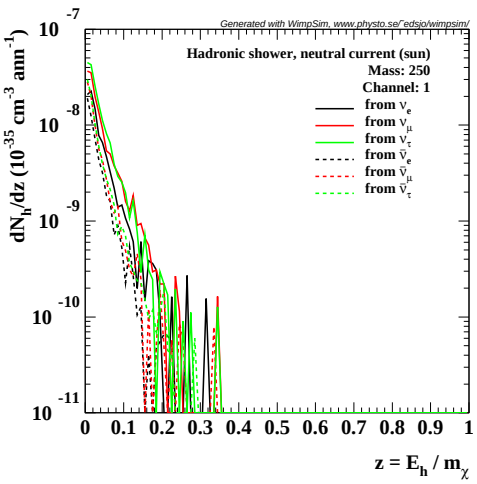
12.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



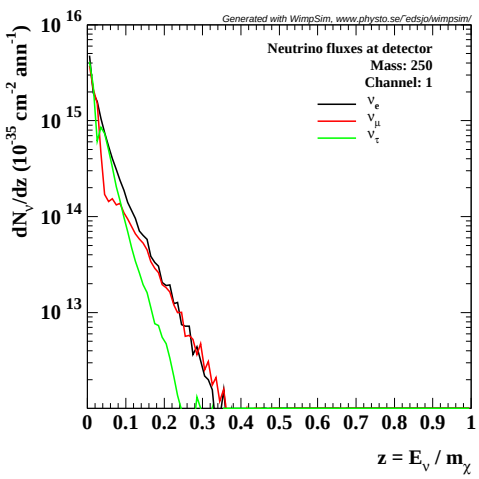


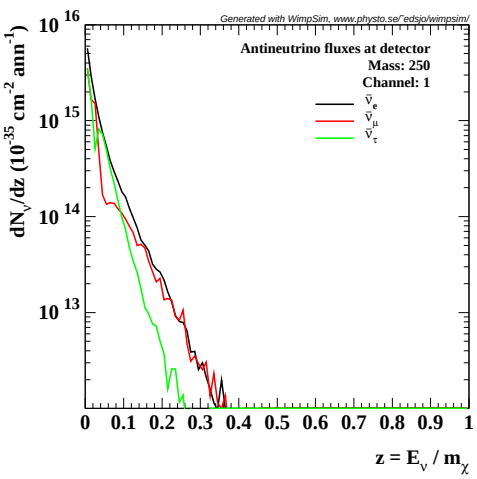
12.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



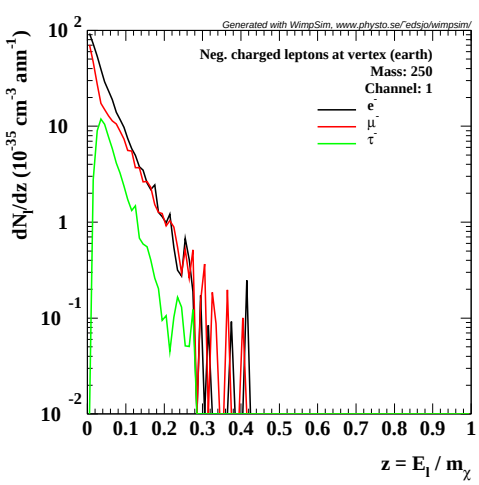


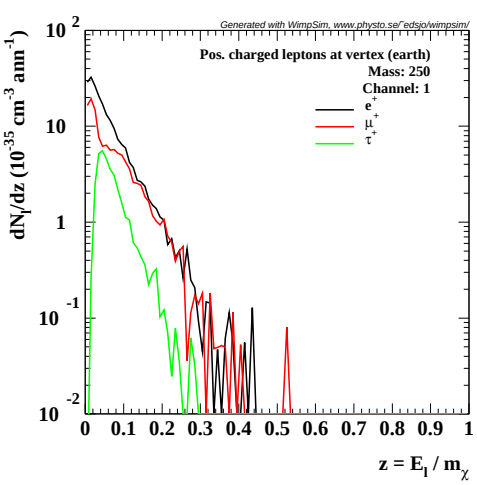
12.1.4 Neutrino fluxes at detector (Earth)



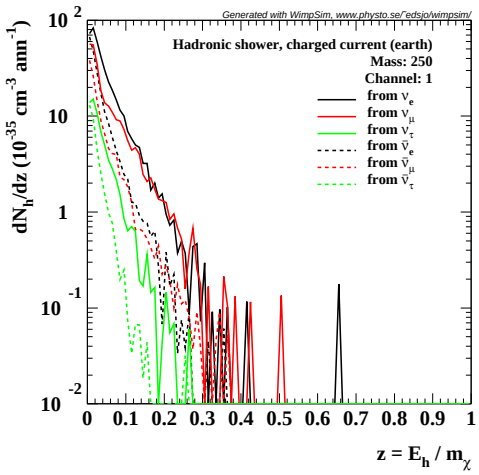


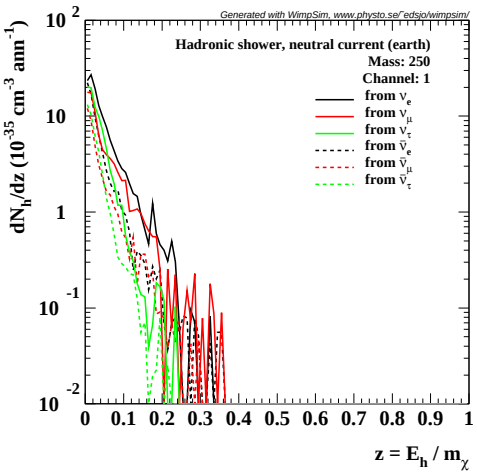
12.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



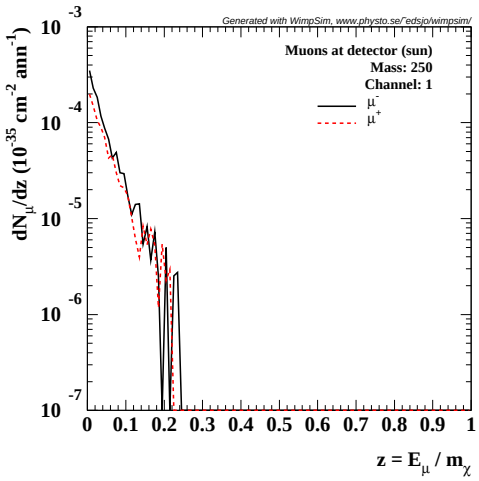


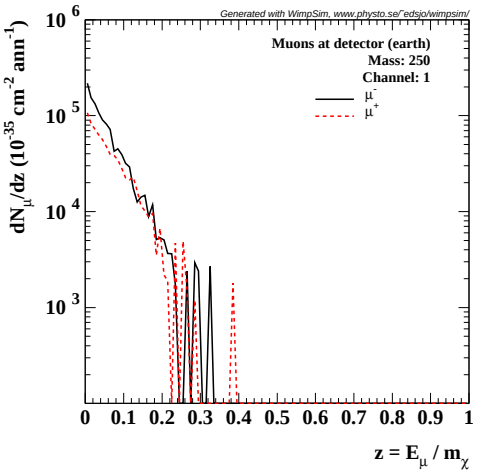
12.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





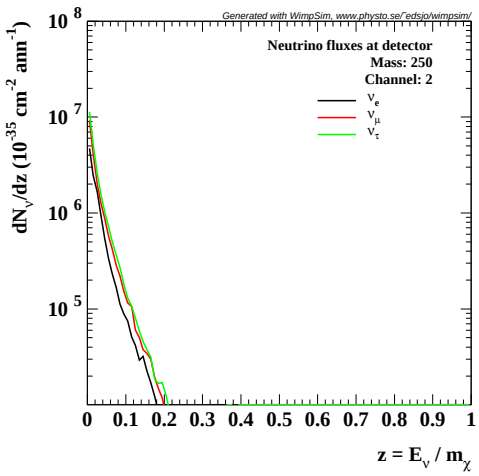
12.1.7 Muons at detector (Sun/Earth)

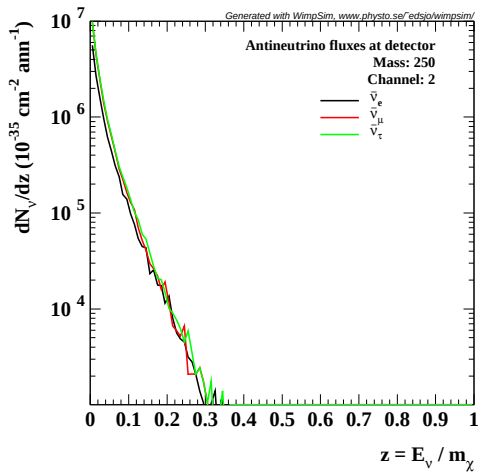




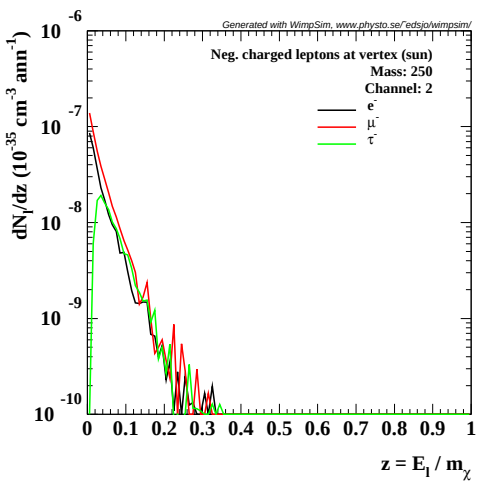
12.2 Channel 2 – $u\bar{u}$

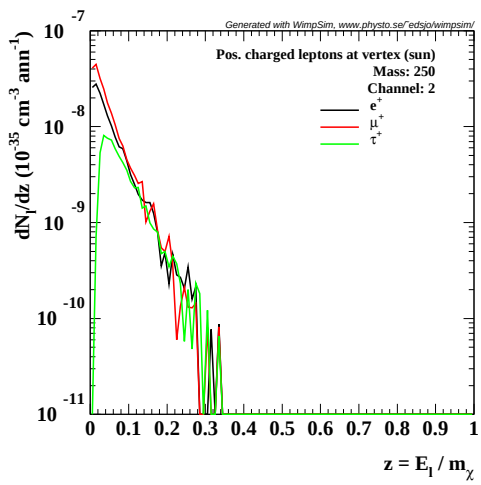
12.2.1 Neutrino fluxes at detector (Sun)



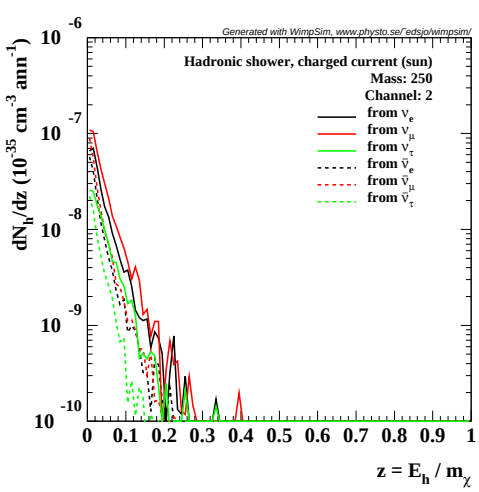


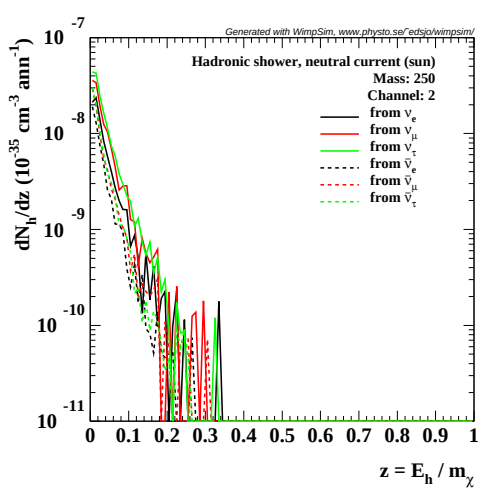
12.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



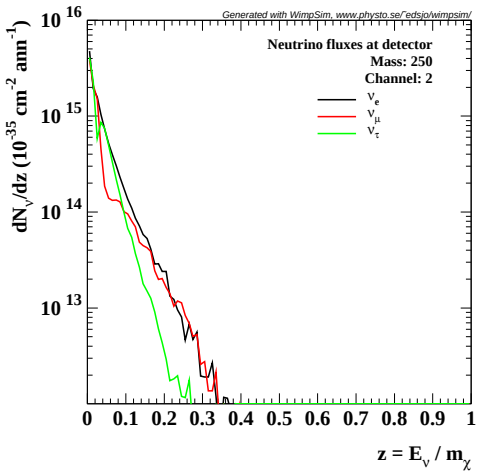


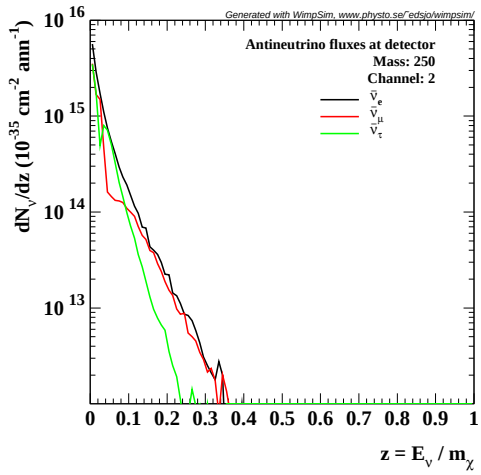
12.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



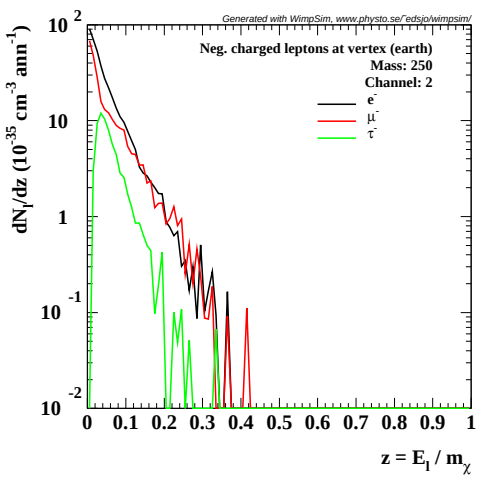


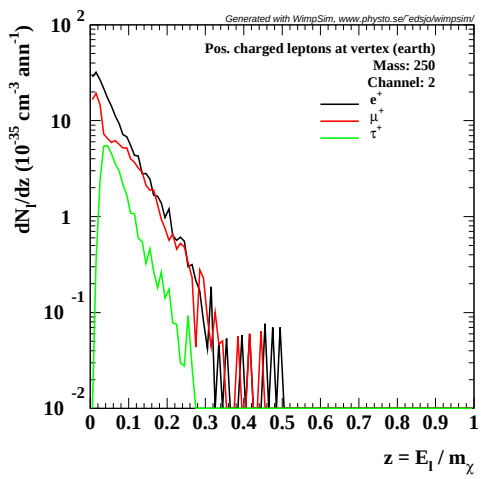
12.2.4 Neutrino fluxes at detector (Earth)



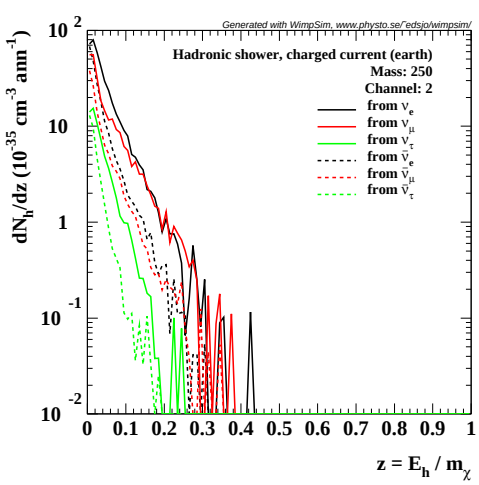


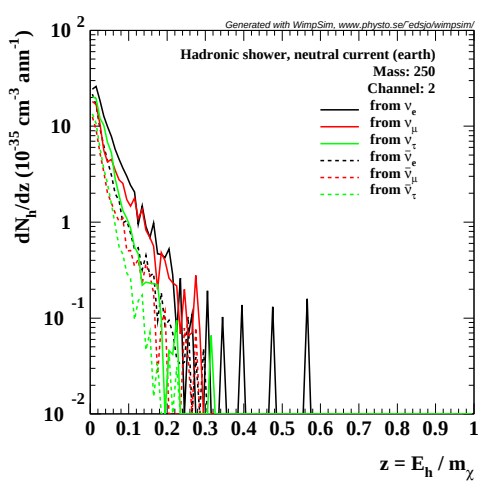
12.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



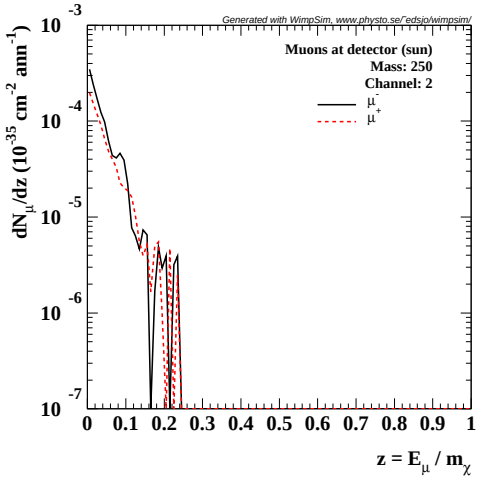


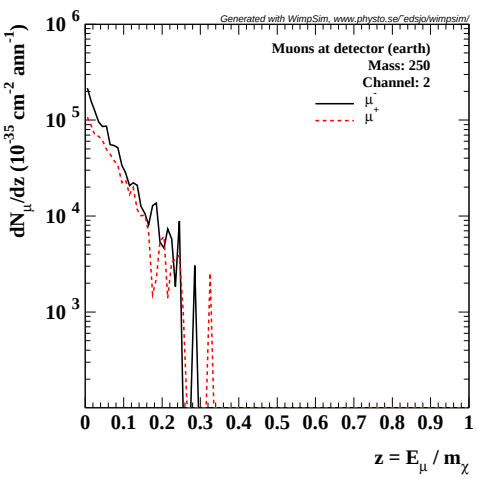
12.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





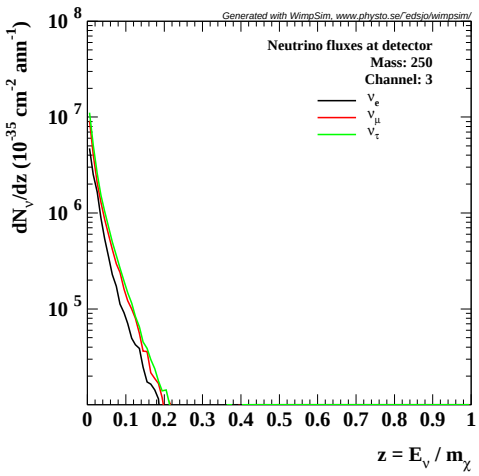
12.2.7 Muons at detector (Sun/Earth)

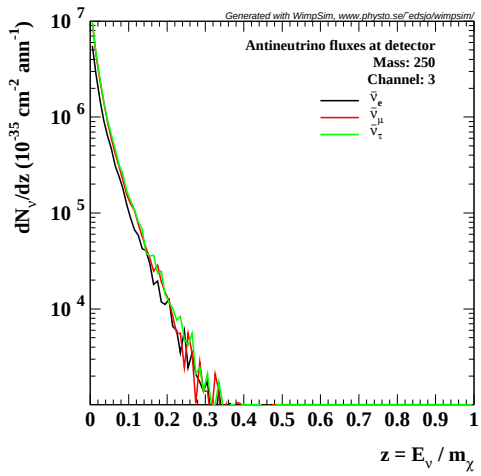




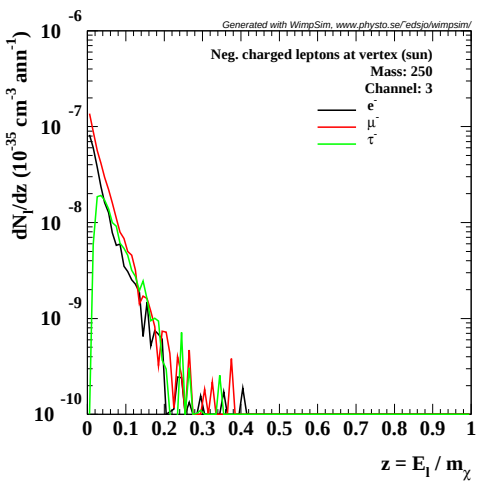
12.3 Channel 3 – $s\bar{s}$

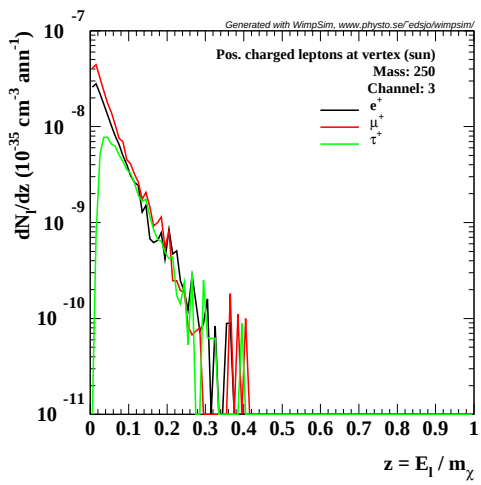
12.3.1 Neutrino fluxes at detector (Sun)



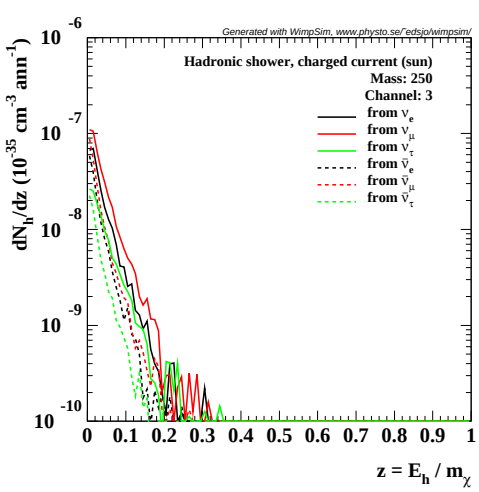


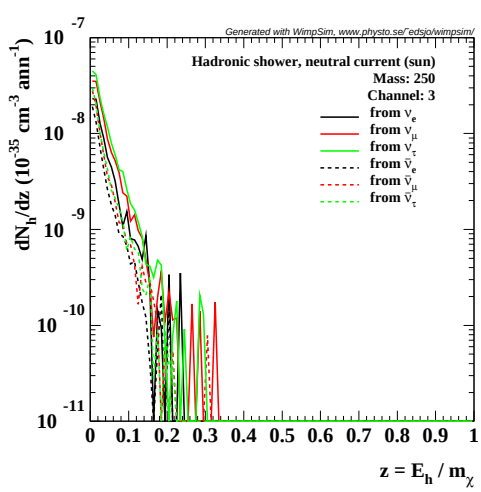
12.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



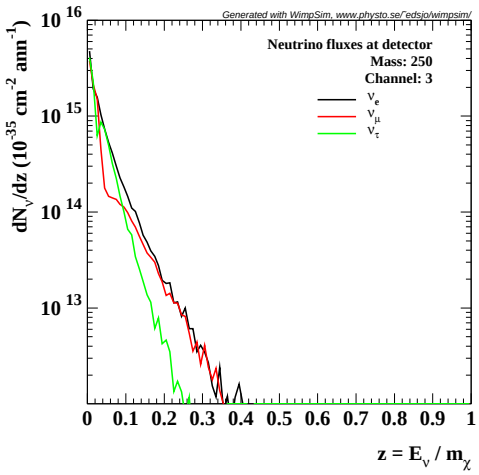


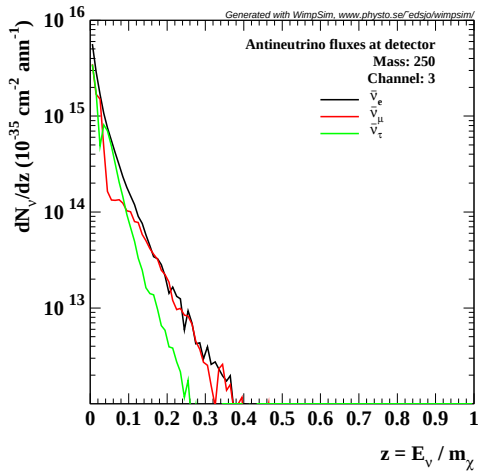
12.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



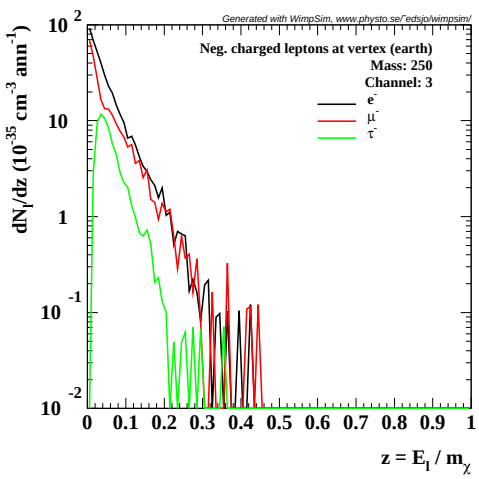


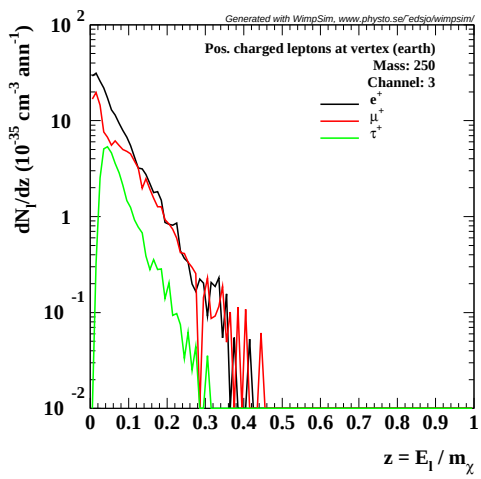
12.3.4 Neutrino fluxes at detector (Earth)



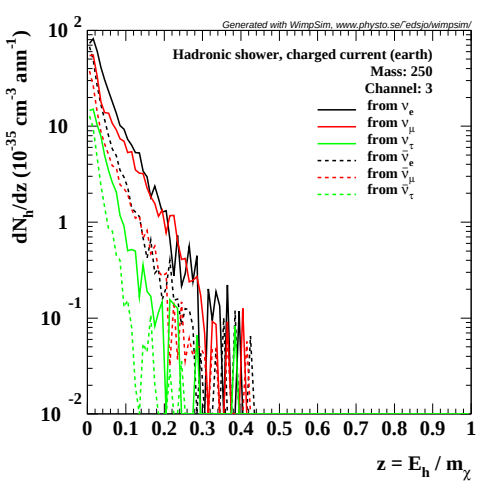


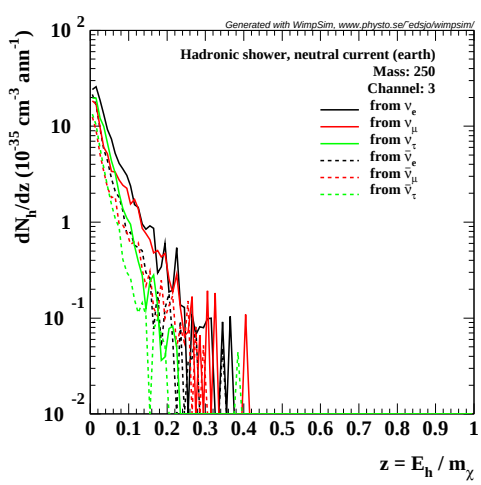
12.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



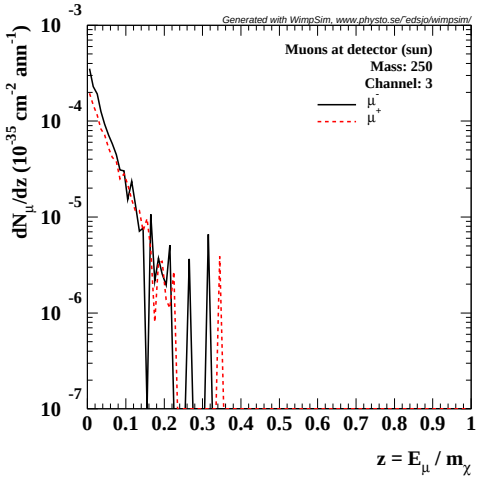


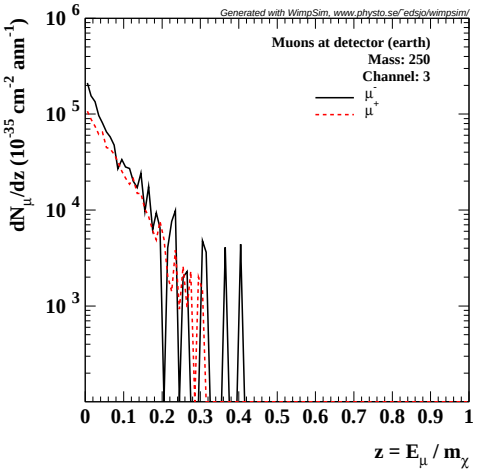
12.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





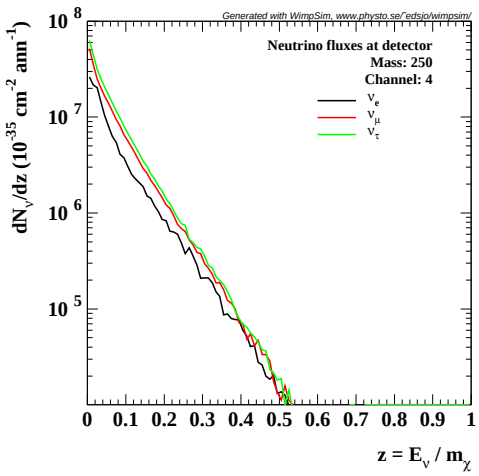
12.3.7 Muons at detector (Sun/Earth)

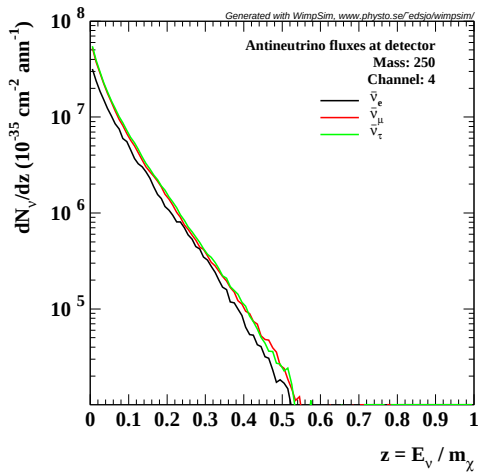




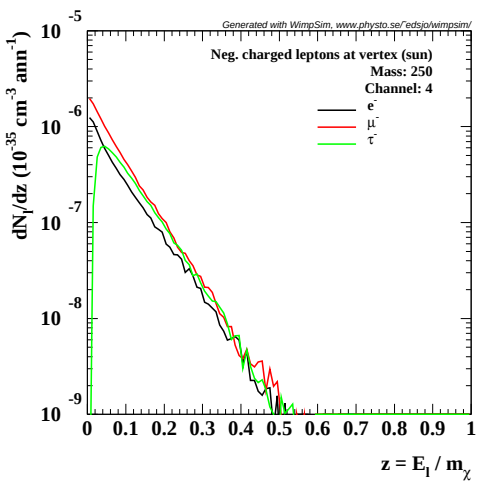
12.4 Channel 4 – $c\bar{c}$

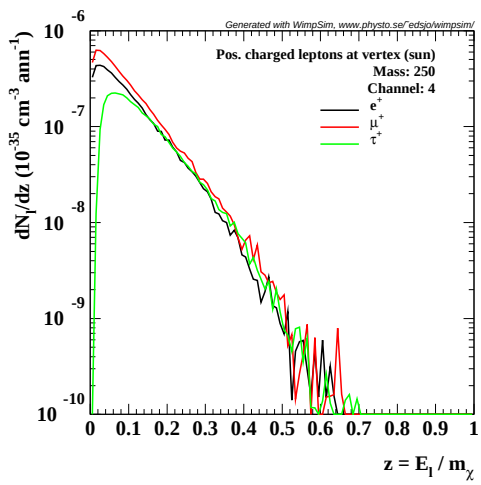
12.4.1 Neutrino fluxes at detector (Sun)



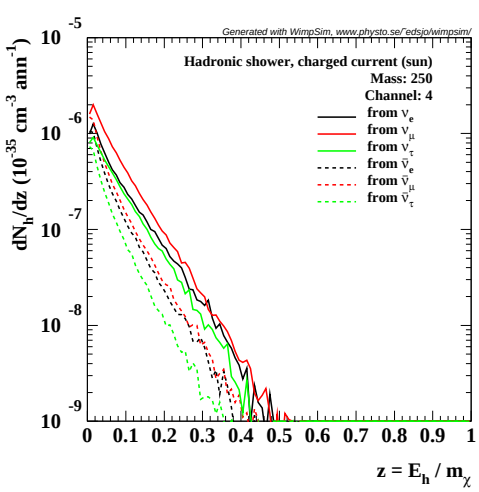


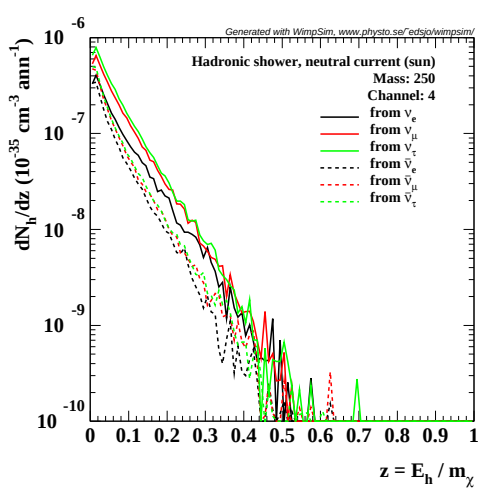
12.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



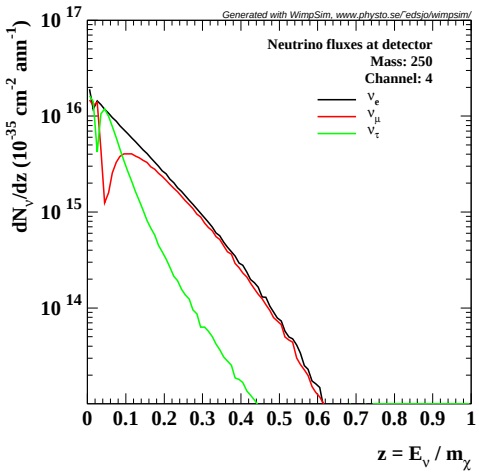


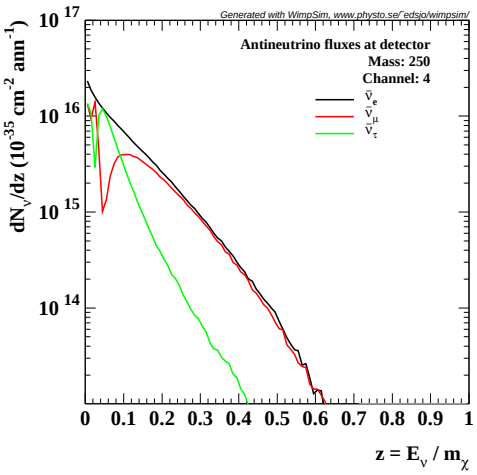
12.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



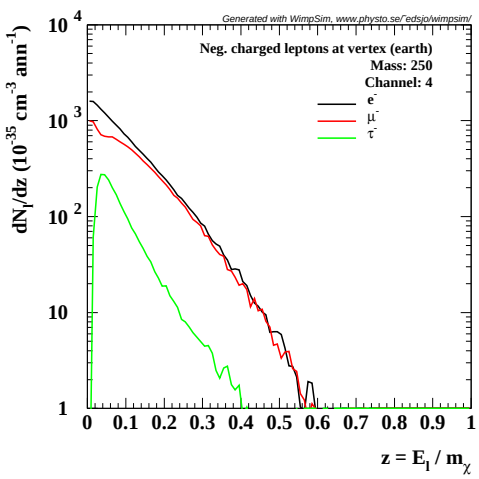


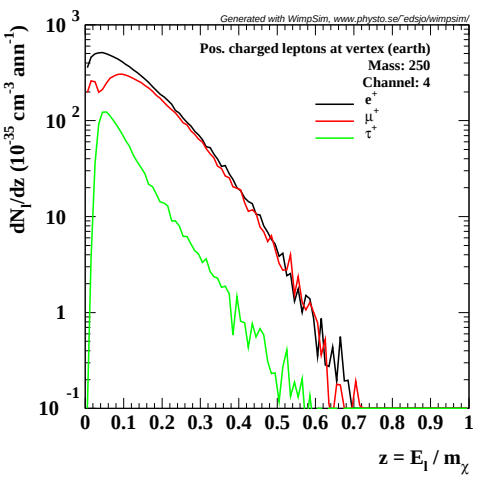
12.4.4 Neutrino fluxes at detector (Earth)



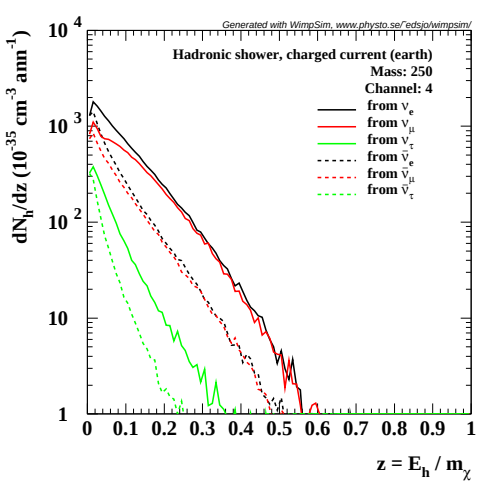


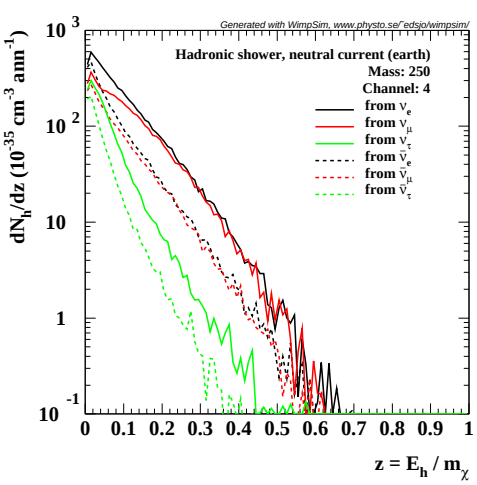
12.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



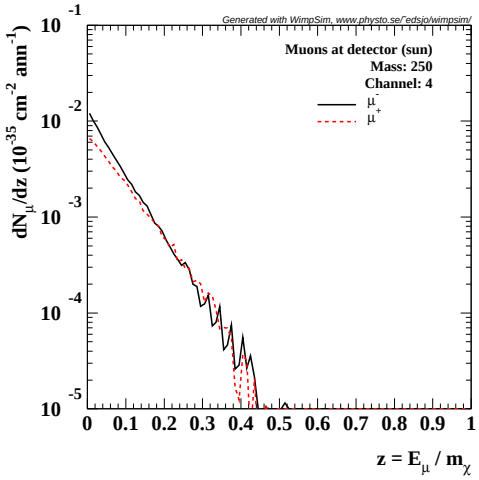


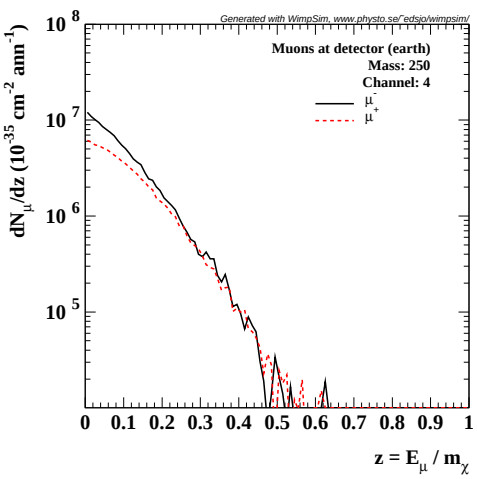
12.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





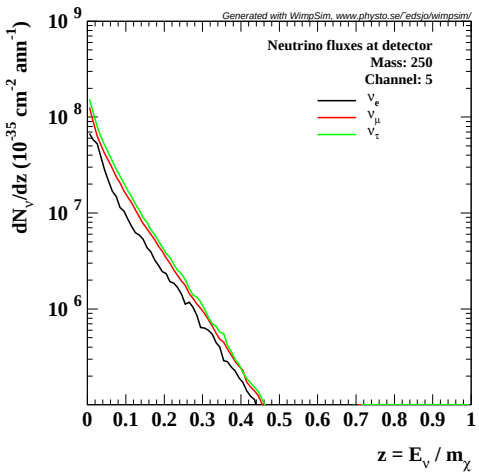
12.4.7 Muons at detector (Sun/Earth)

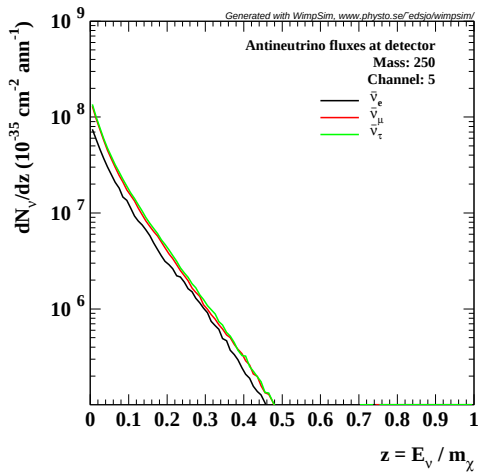




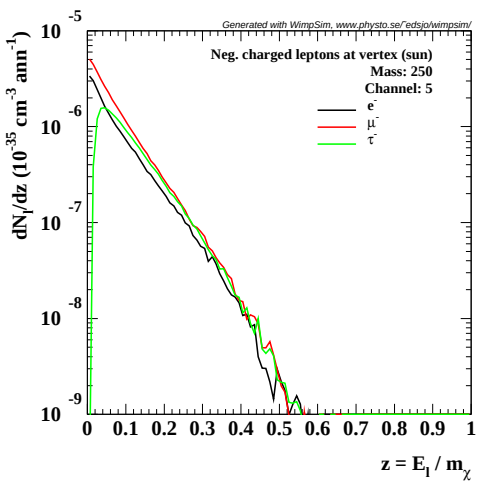
12.5 Channel 5 – $b\bar{b}$

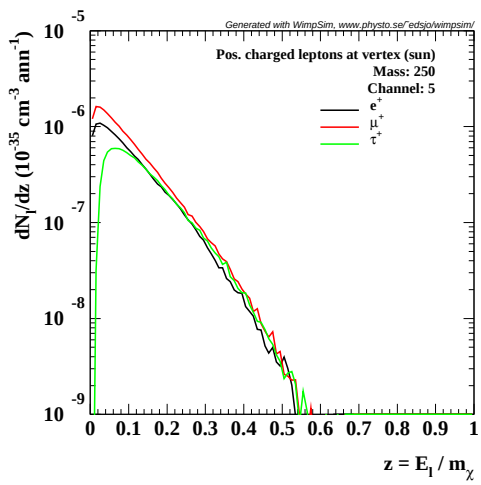
12.5.1 Neutrino fluxes at detector (Sun)



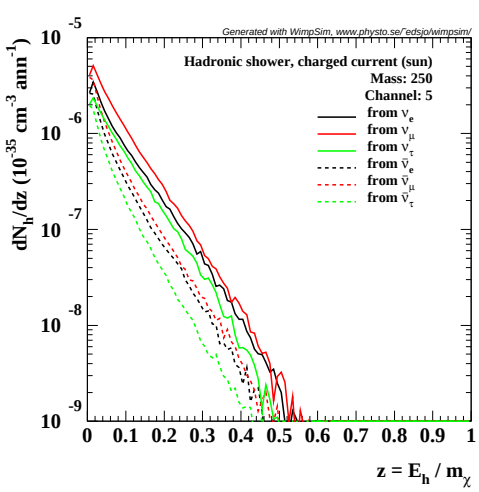


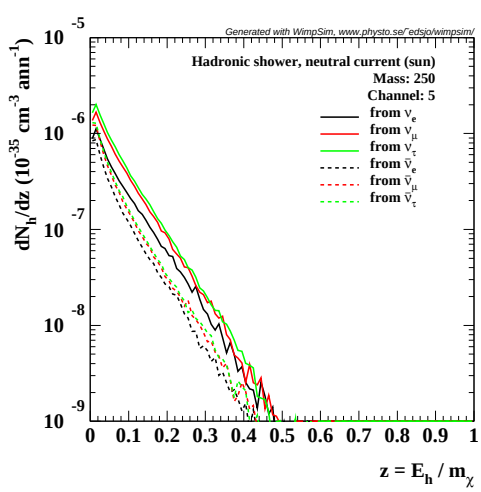
12.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



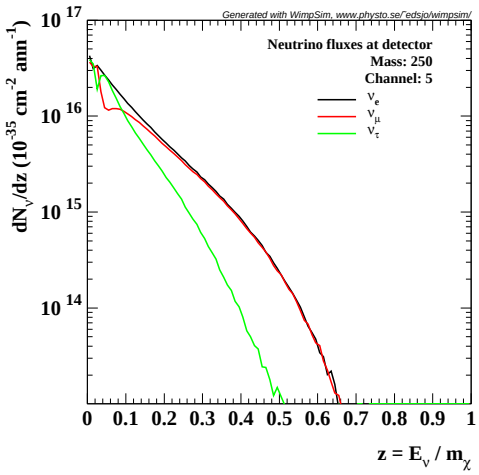


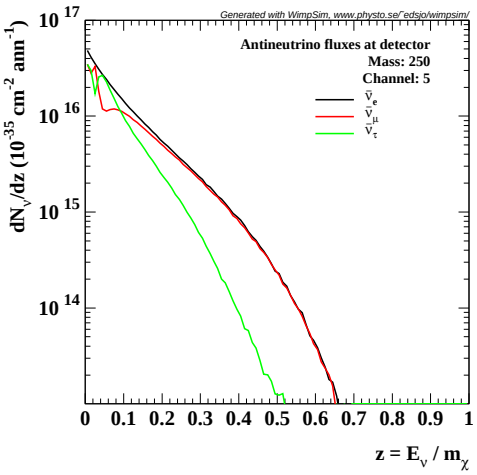
12.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



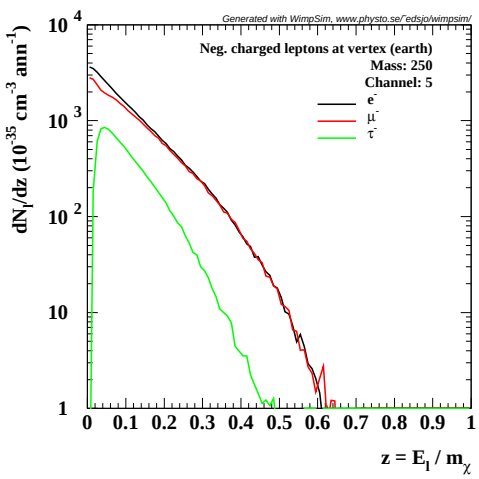


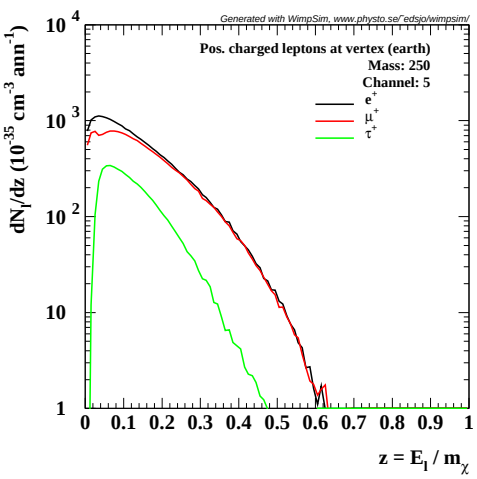
12.5.4 Neutrino fluxes at detector (Earth)



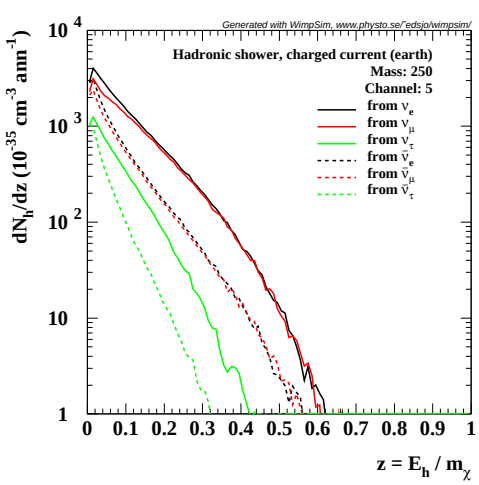


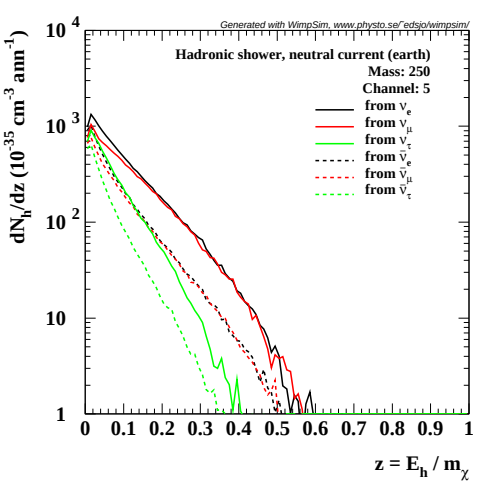
12.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



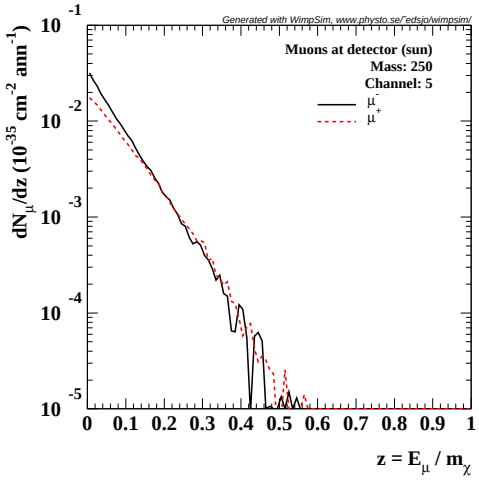


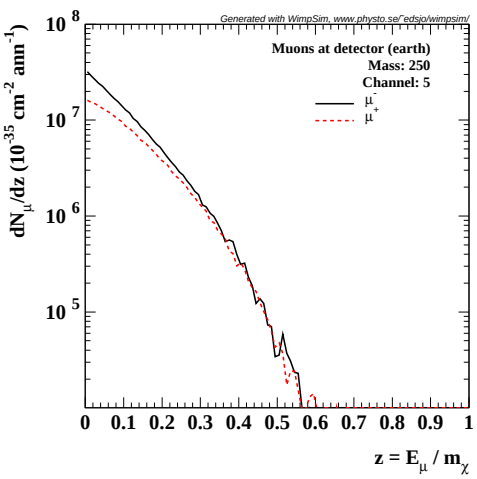
12.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





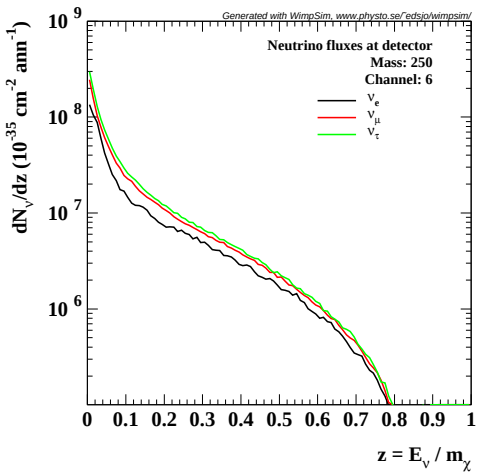
12.5.7 Muons at detector (Sun/Earth)

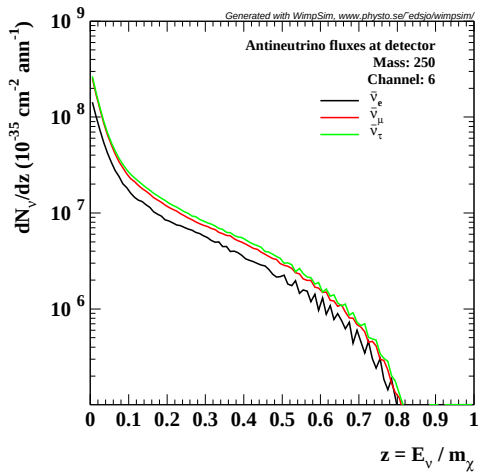




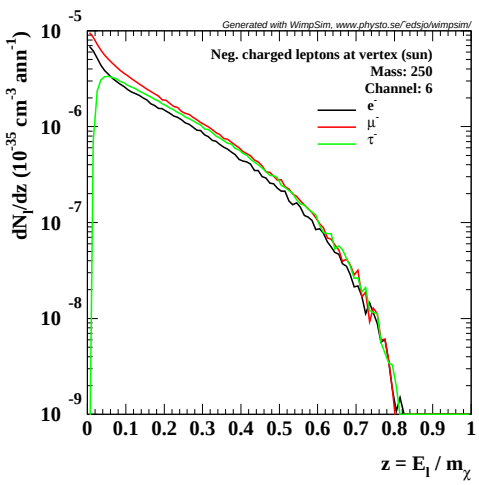
12.6 Channel 6 – $t\bar{t}$

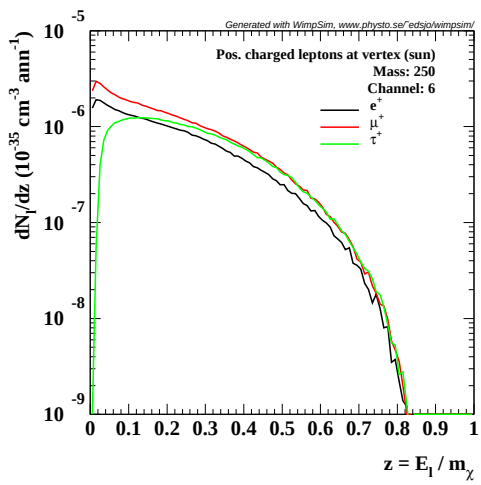
12.6.1 Neutrino fluxes at detector (Sun)



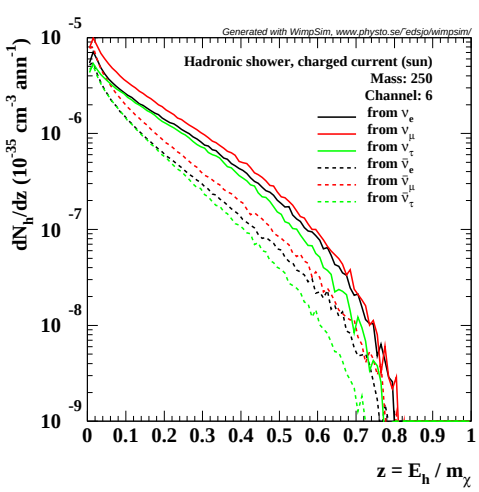


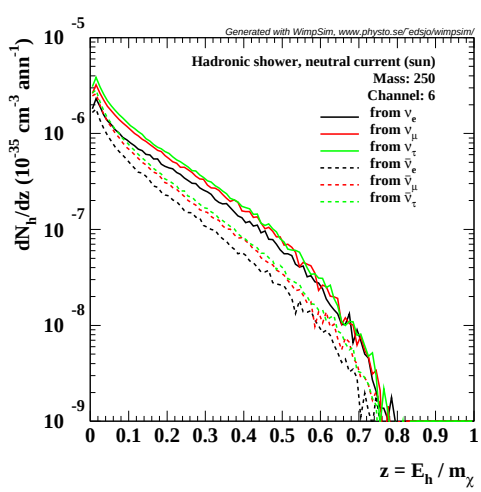
12.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



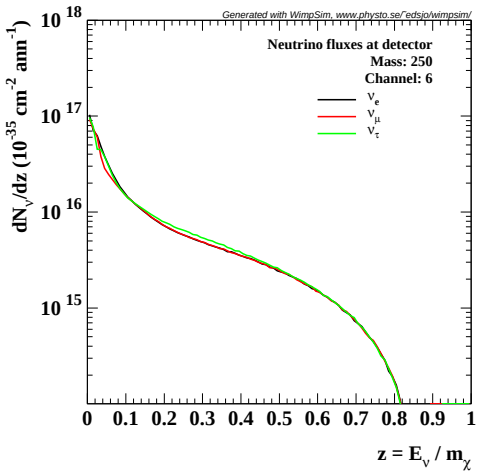


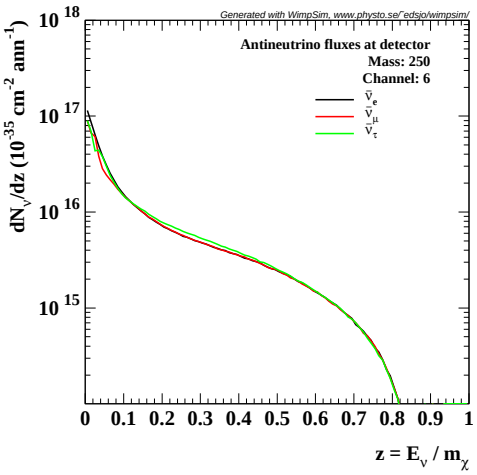
12.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



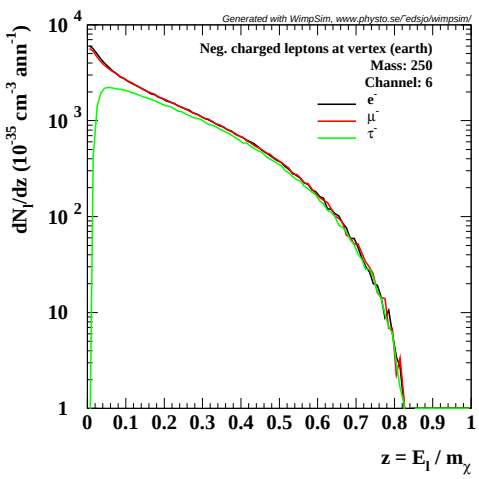


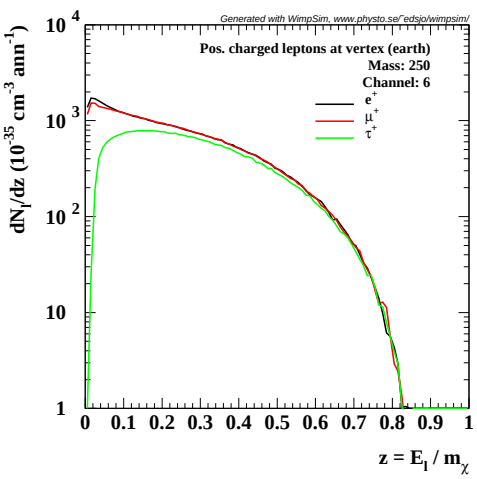
12.6.4 Neutrino fluxes at detector (Earth)



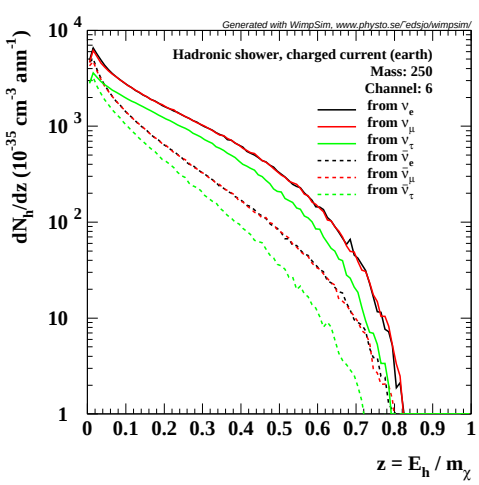


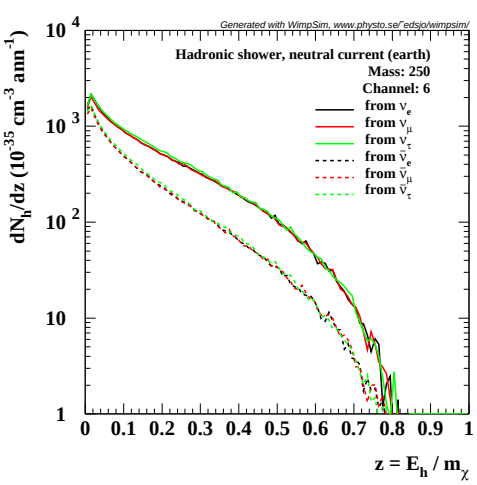
12.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



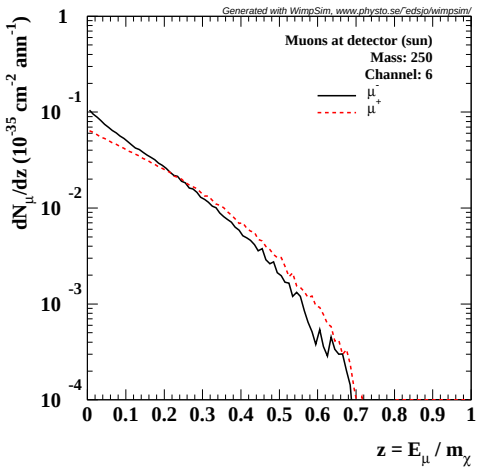


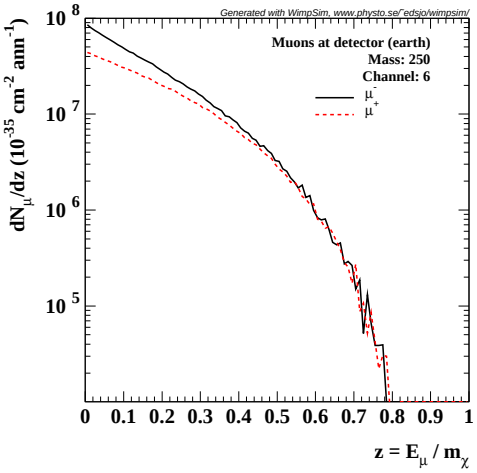
12.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





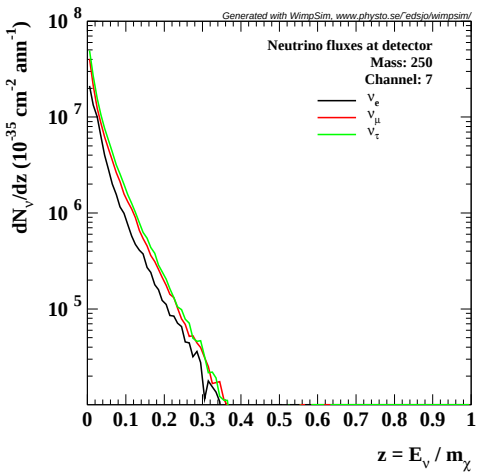
12.6.7 Muons at detector (Sun/Earth)

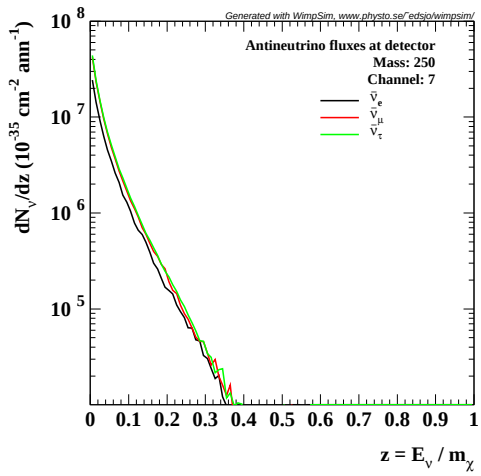




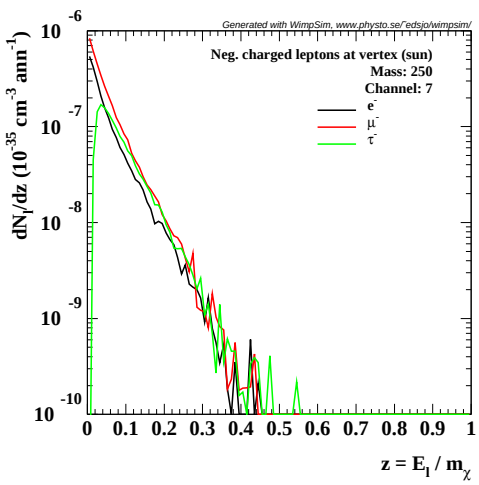
12.7 Channel 7 – gg

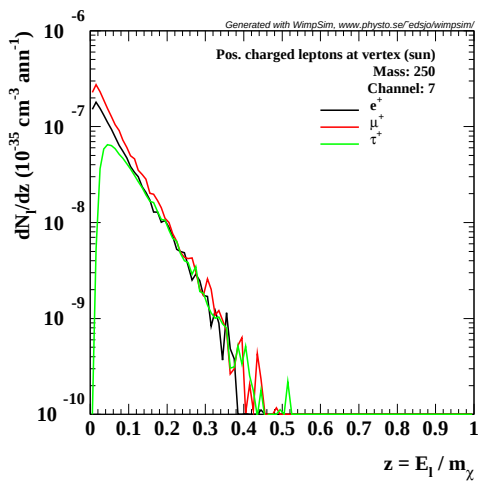
12.7.1 Neutrino fluxes at detector (Sun)



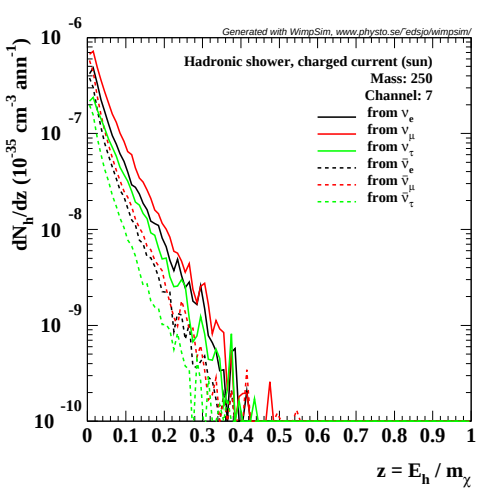


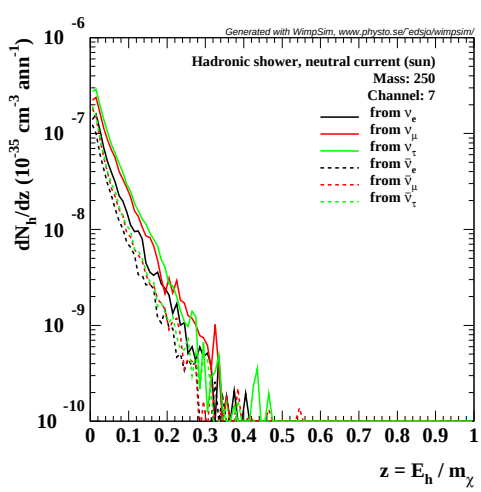
12.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



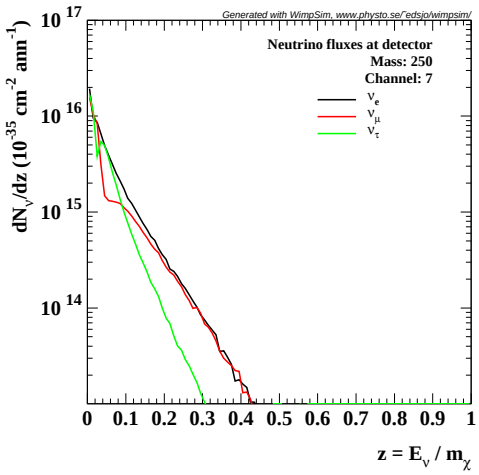


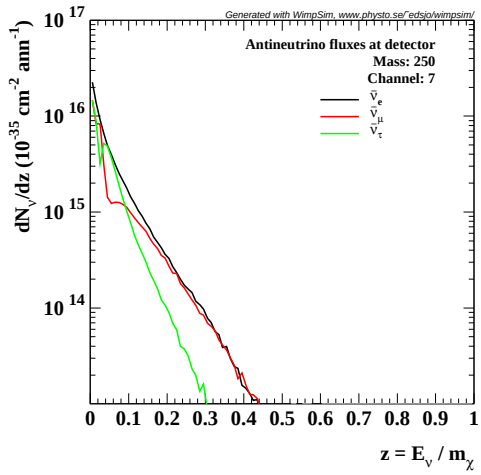
12.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



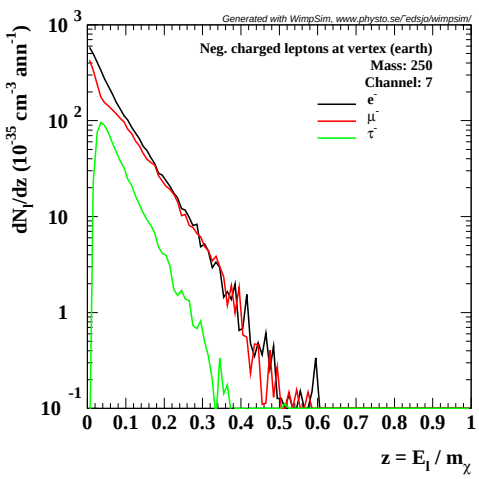


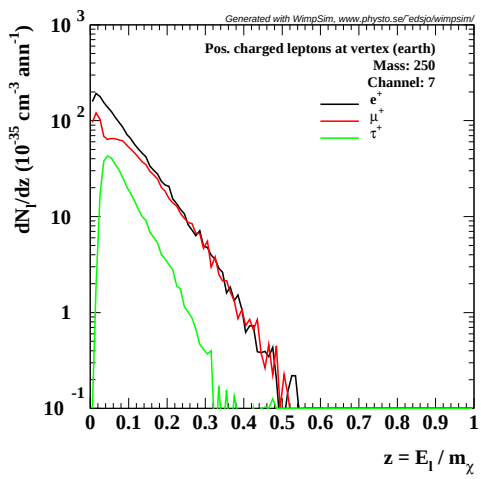
12.7.4 Neutrino fluxes at detector (Earth)



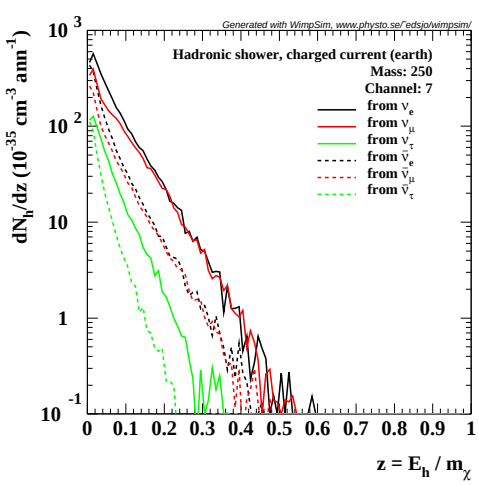


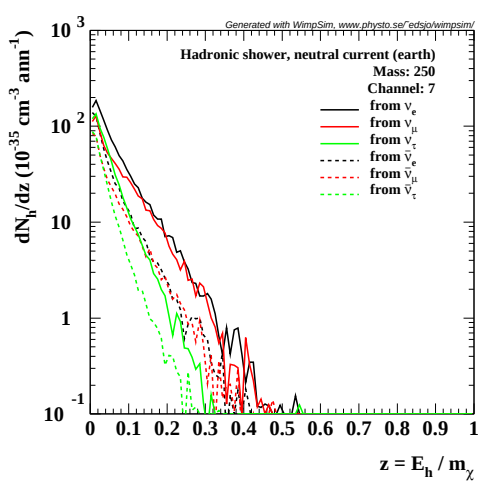
12.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



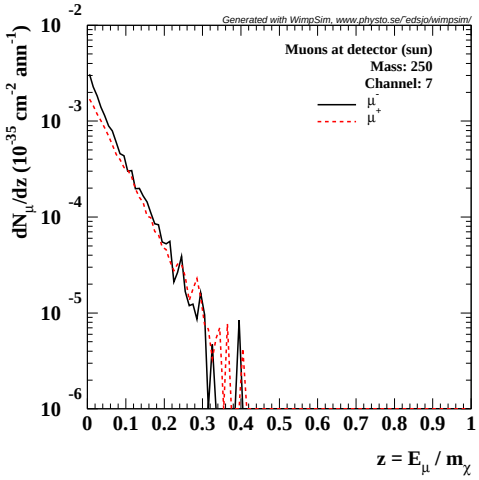


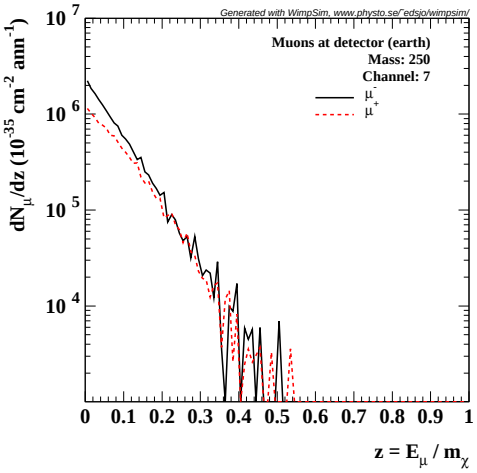
12.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





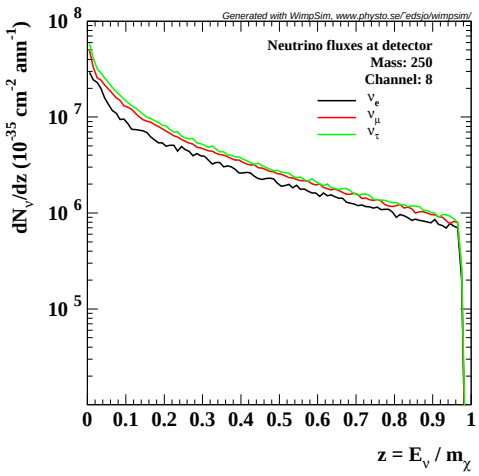
12.7.7 Muons at detector (Sun/Earth)

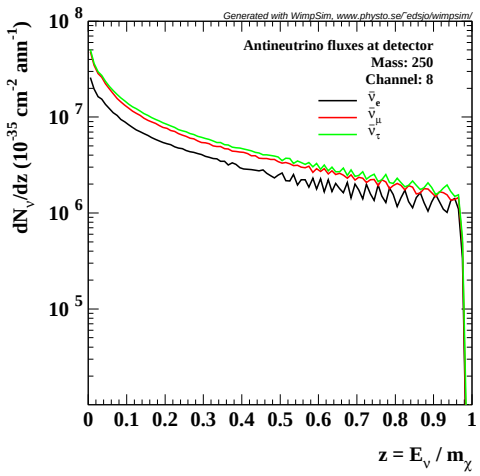




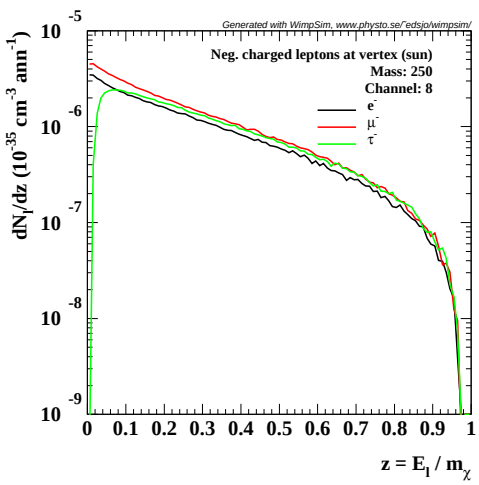
12.8 Channel 8 – W^-W^+

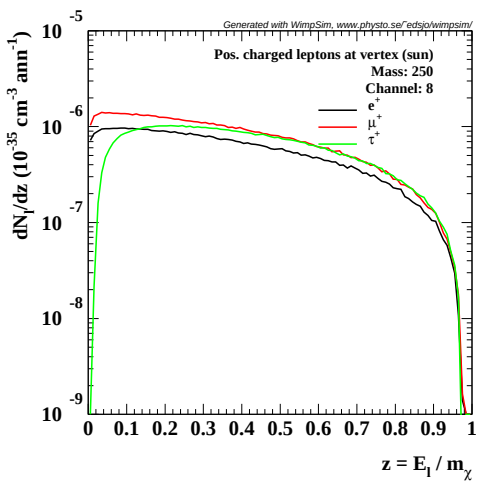
12.8.1 Neutrino fluxes at detector (Sun)



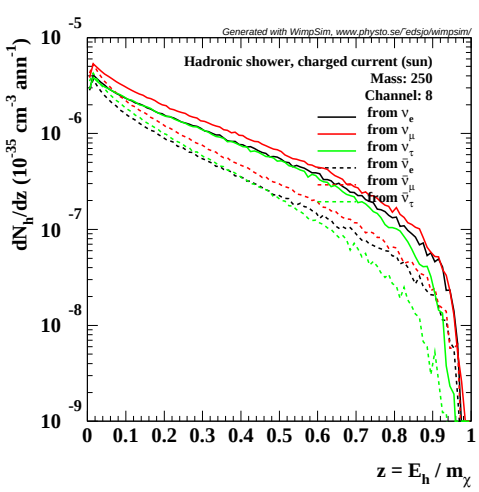


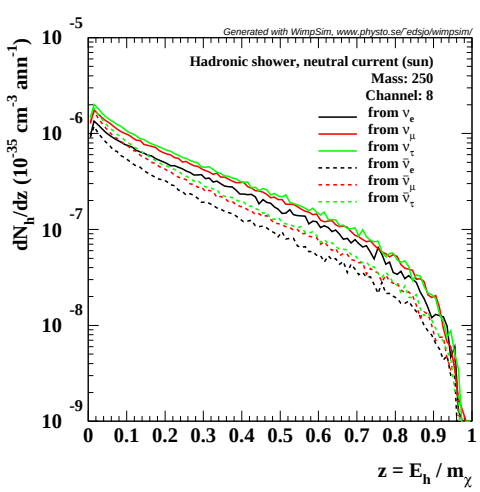
12.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



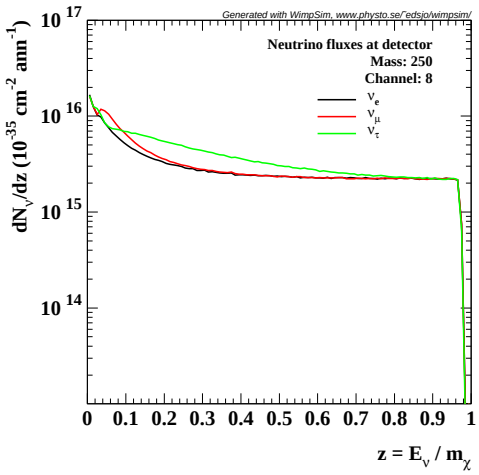


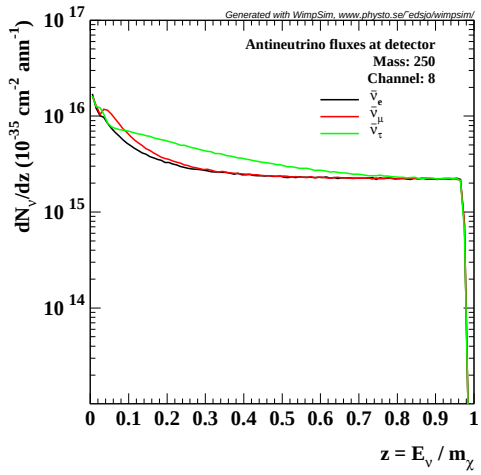
12.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



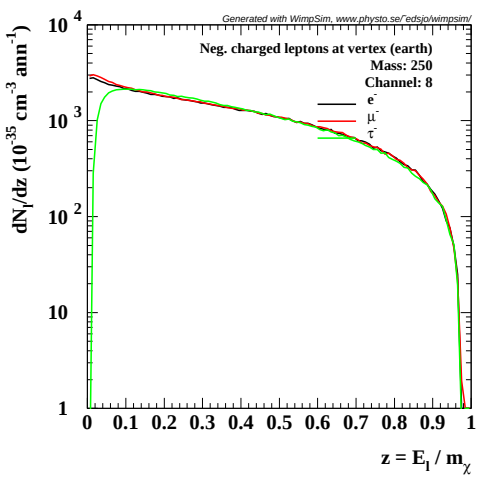


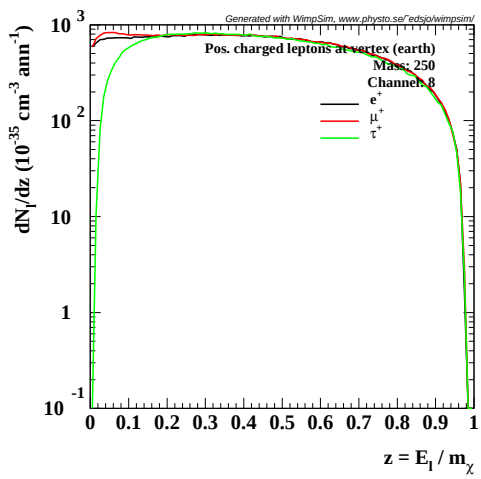
12.8.4 Neutrino fluxes at detector (Earth)



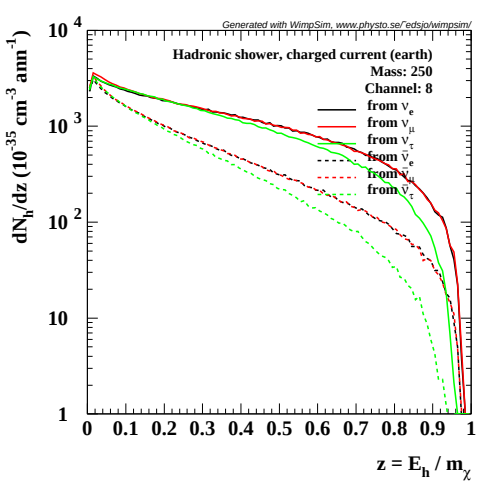


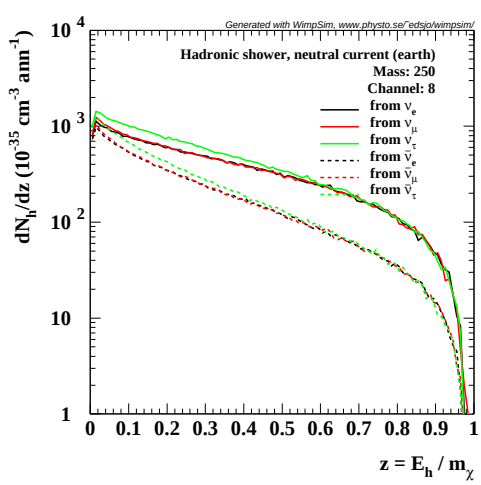
12.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



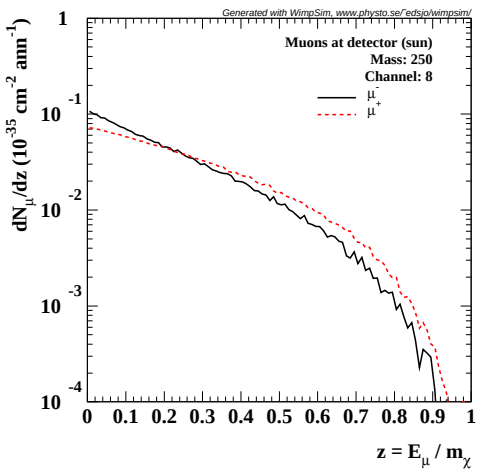


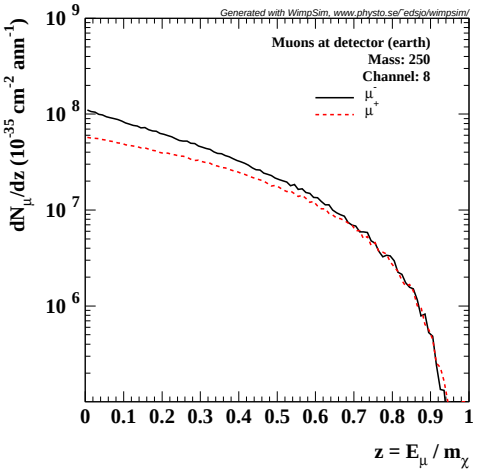
12.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





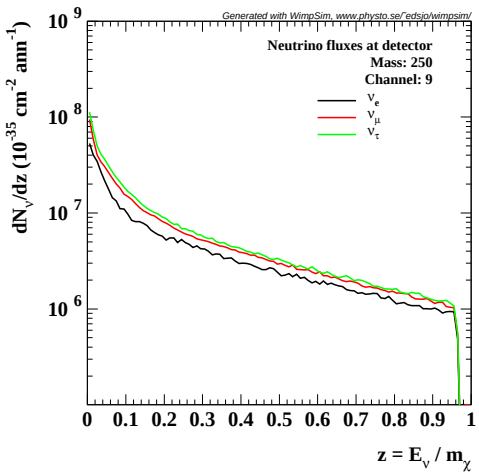
12.8.7 Muons at detector (Sun/Earth)

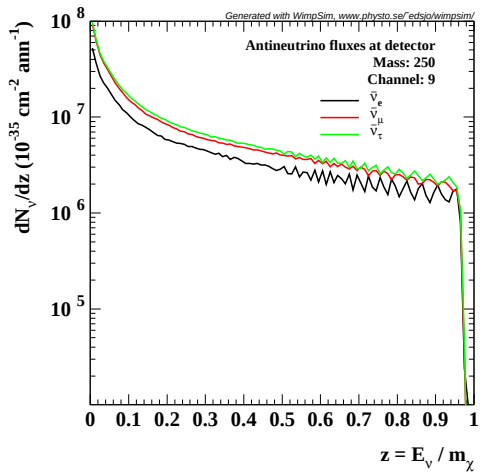




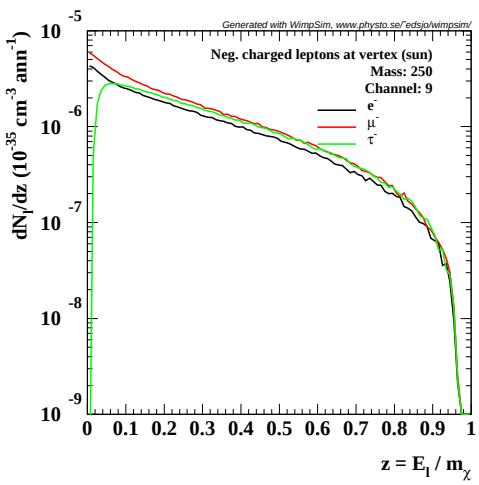
12.9 Channel 9 – $Z^0 Z^0$

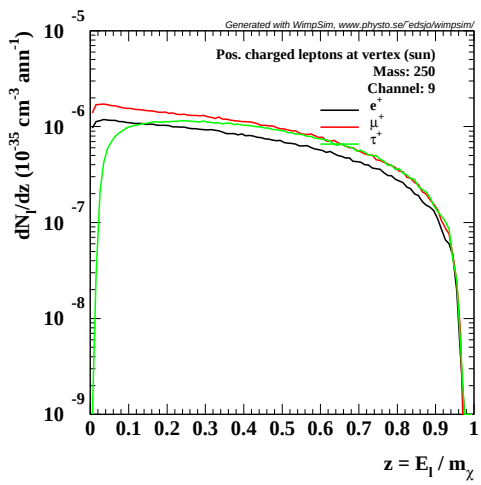
12.9.1 Neutrino fluxes at detector (Sun)



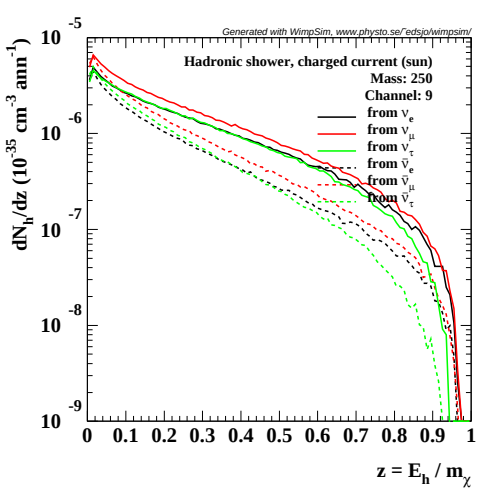


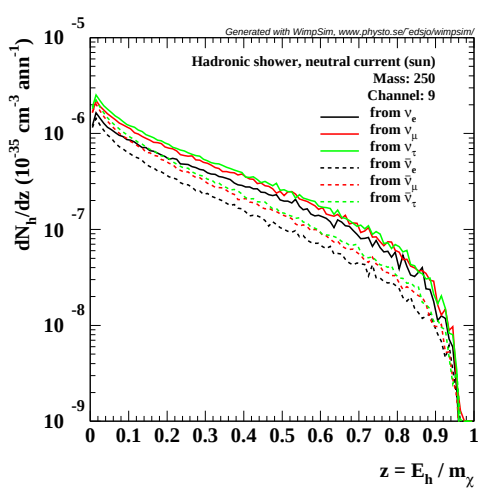
12.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



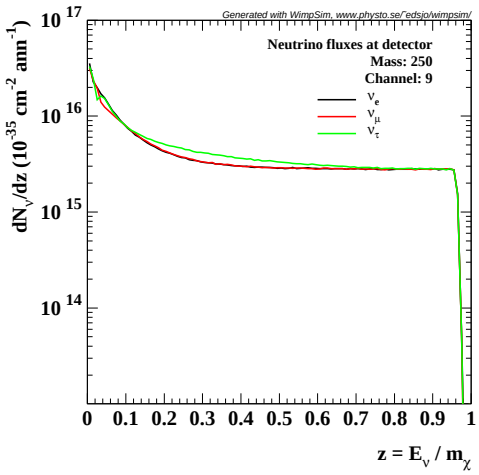


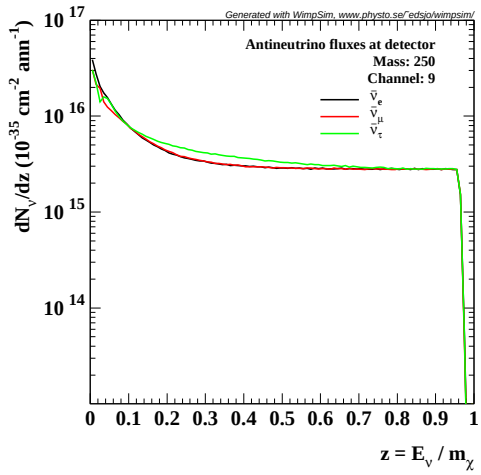
12.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



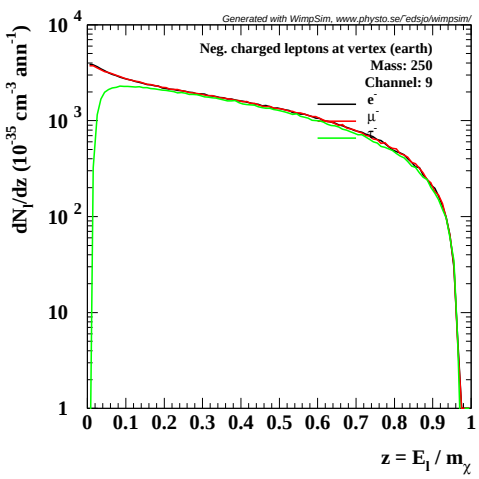


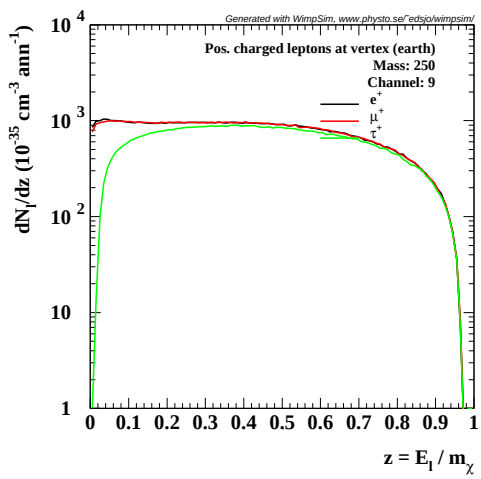
12.9.4 Neutrino fluxes at detector (Earth)



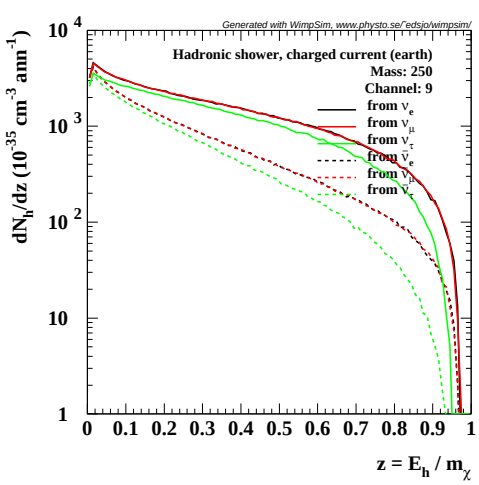


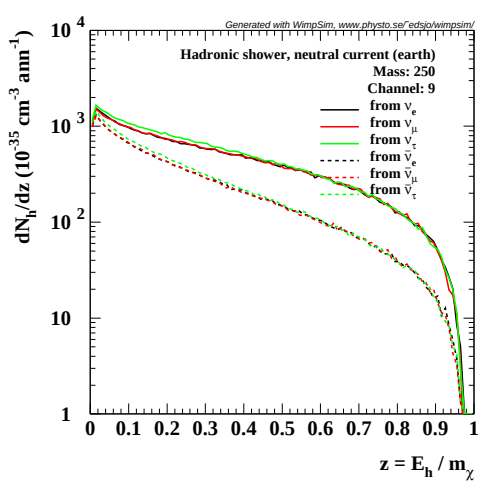
12.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



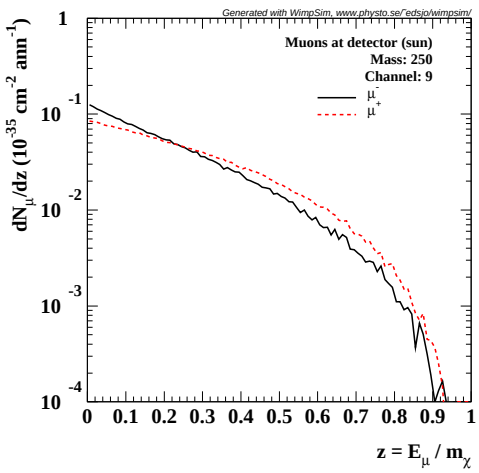


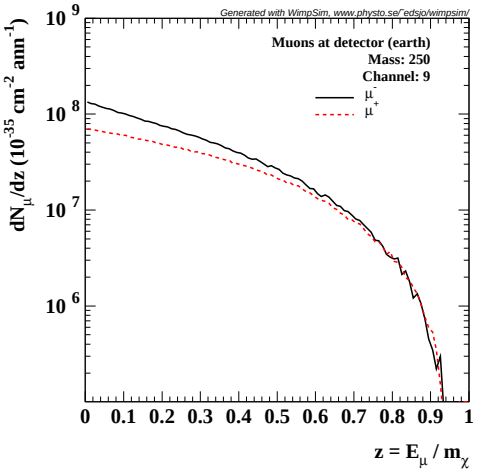
12.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





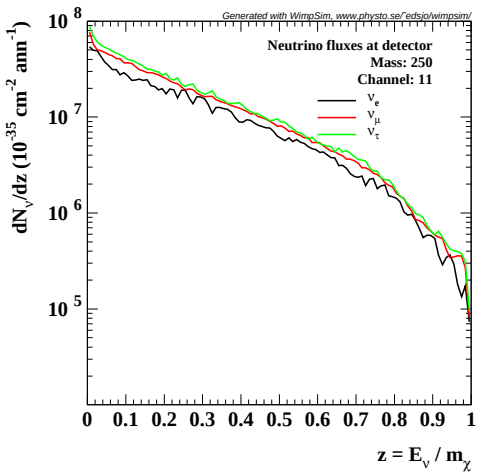
12.9.7 Muons at detector (Sun/Earth)

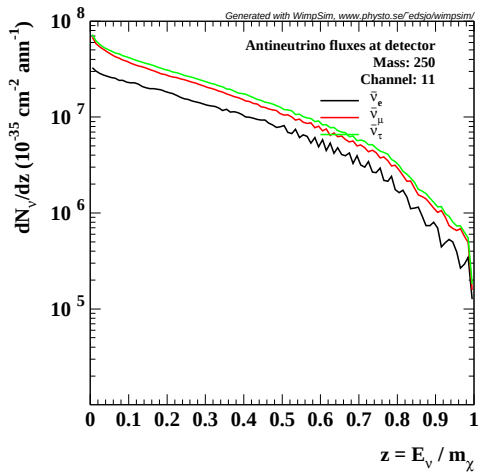




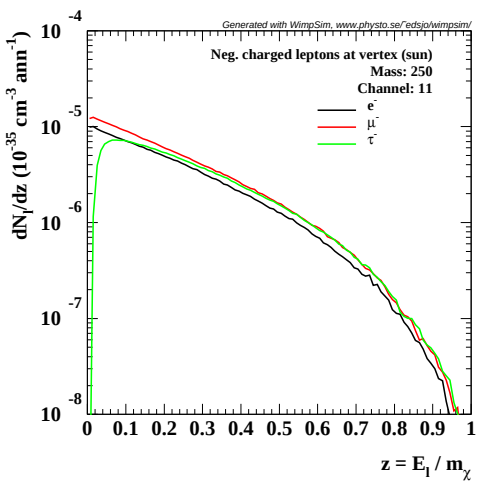
12.10 Channel 11 – $\tau^-\tau^+$

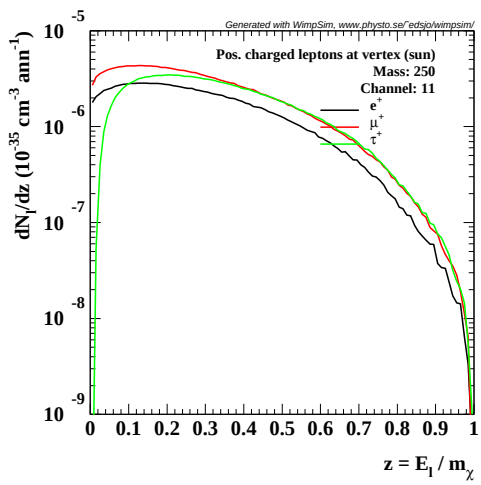
12.10.1 Neutrino fluxes at detector (Sun)



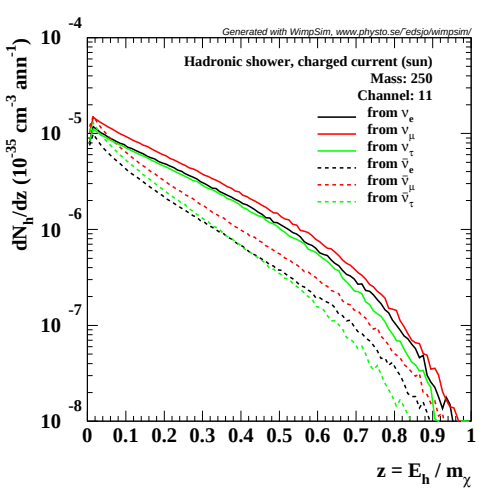


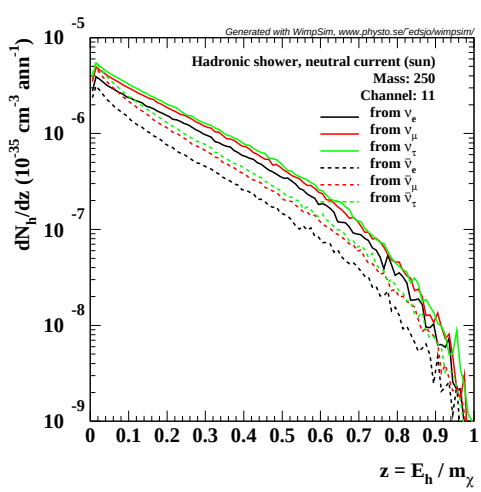
12.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



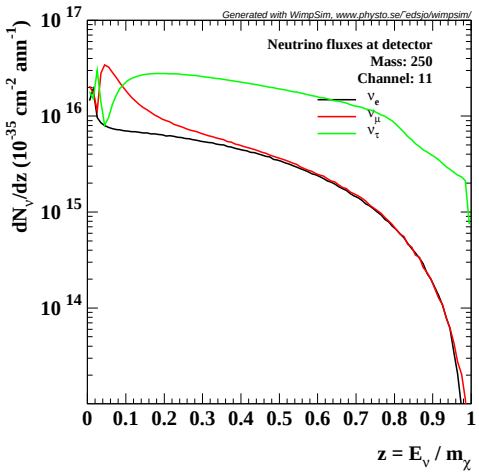


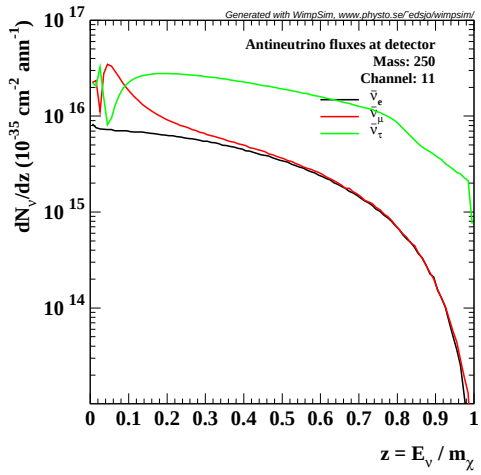
12.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



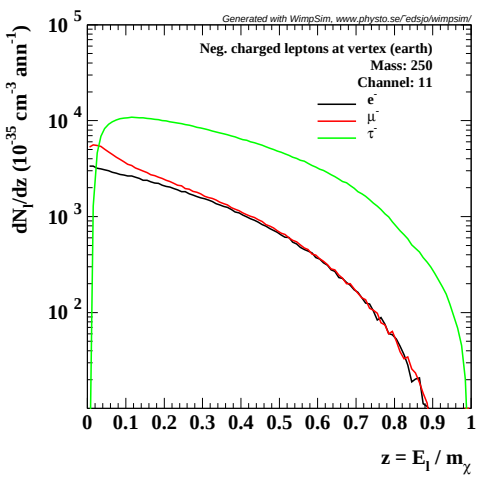


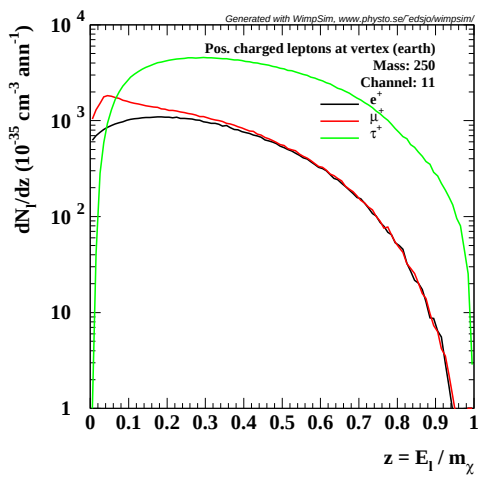
12.10.4 Neutrino fluxes at detector (Earth)



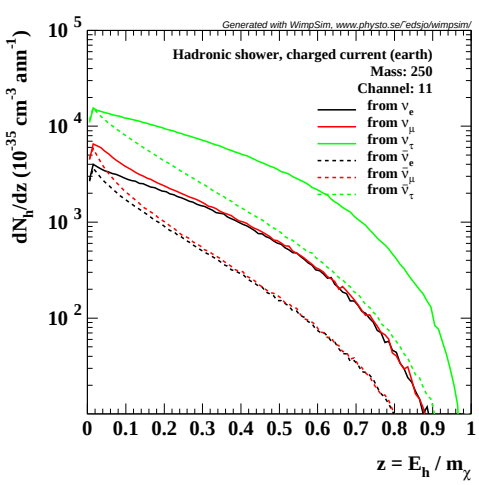


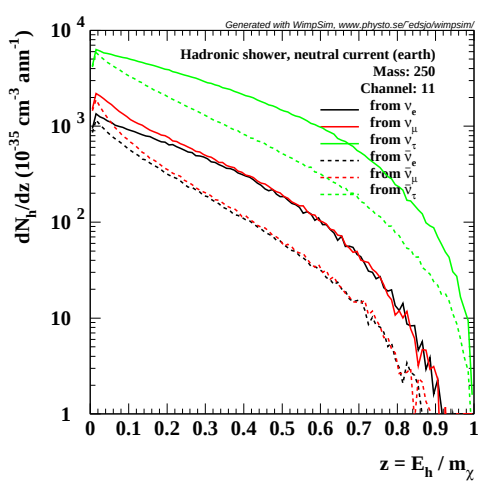
12.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



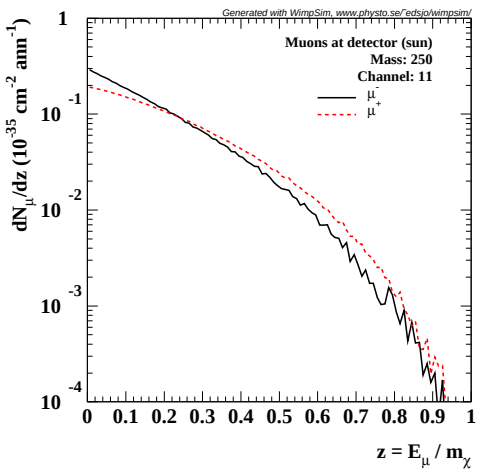


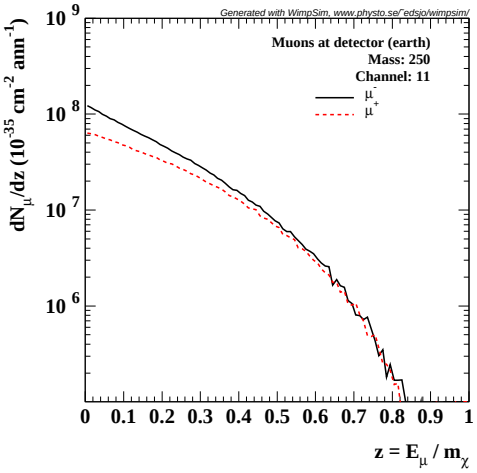
12.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





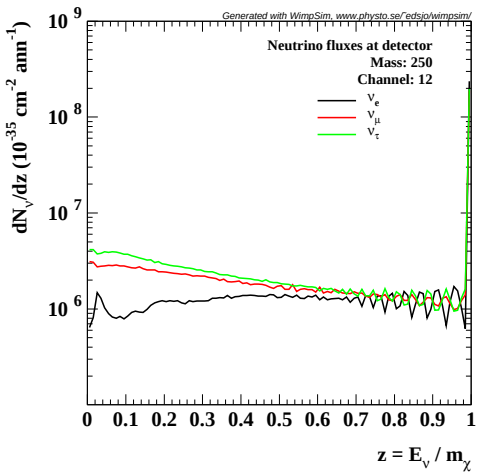
12.10.7 Muons at detector (Sun/Earth)

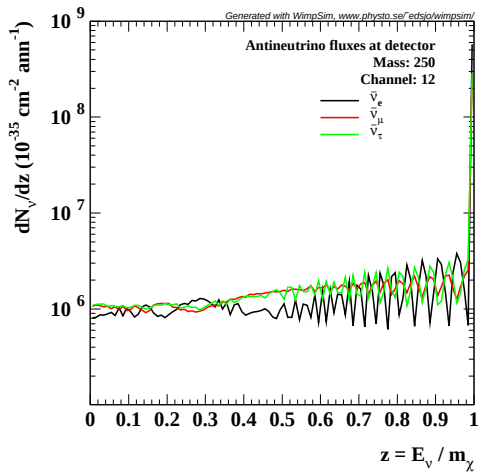




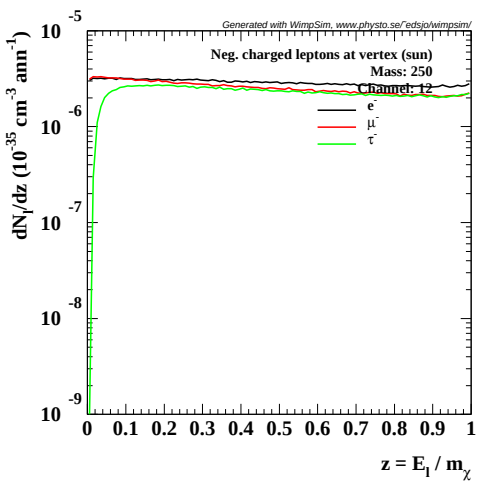
12.11 Channel 12 – $\nu_e\bar{\nu}_e$

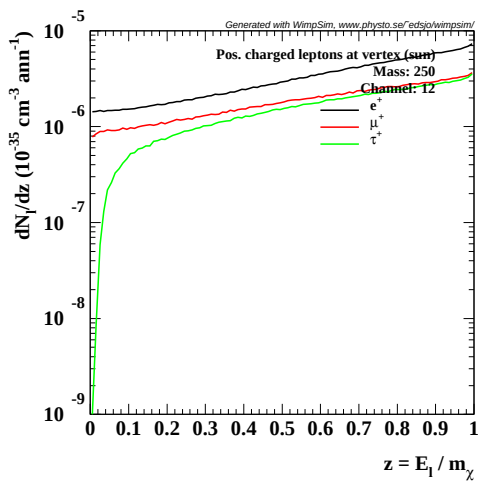
12.11.1 Neutrino fluxes at detector (Sun)



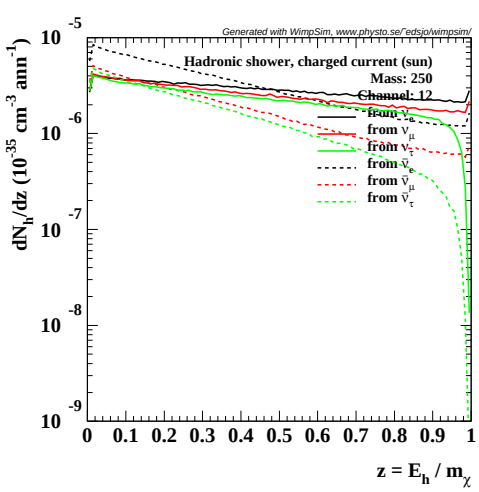


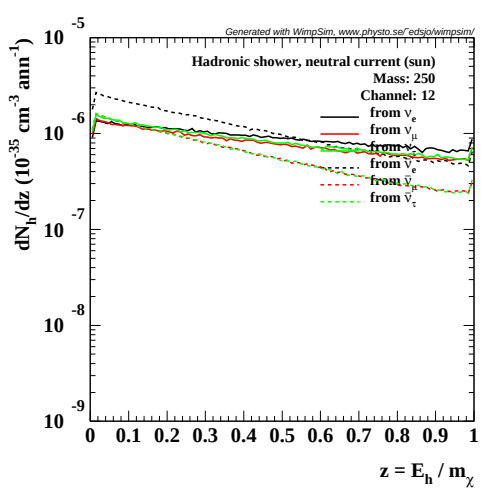
12.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



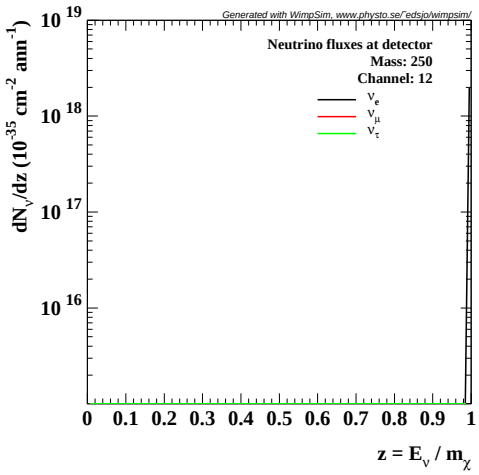


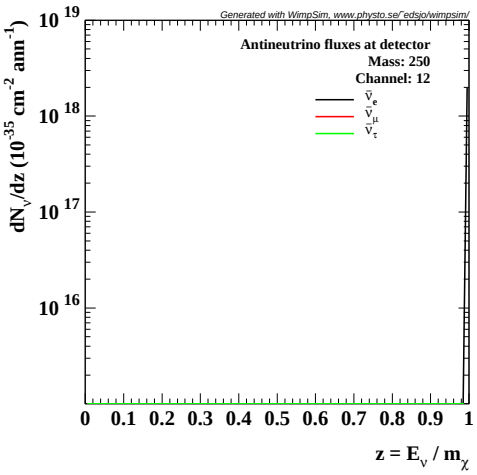
12.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



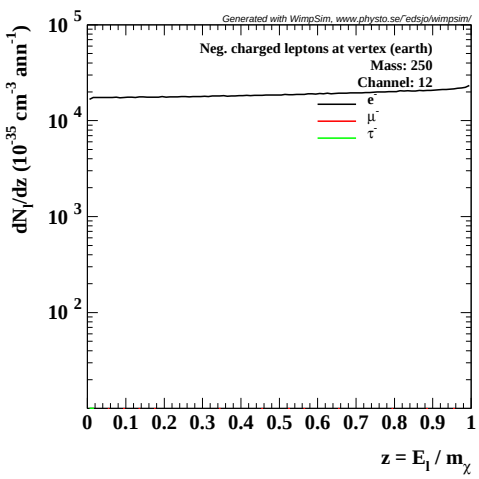


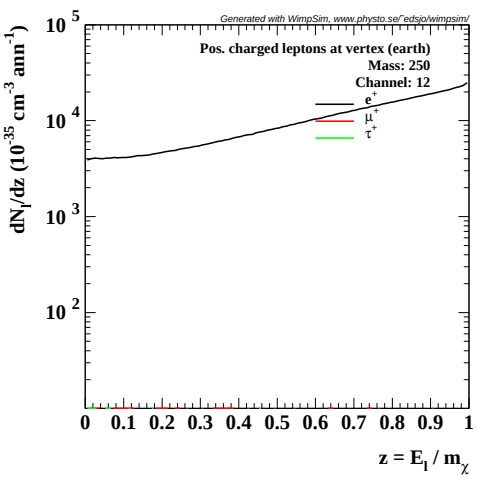
12.11.4 Neutrino fluxes at detector (Earth)



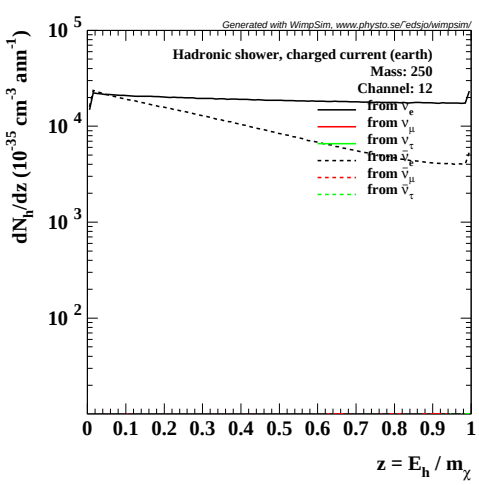


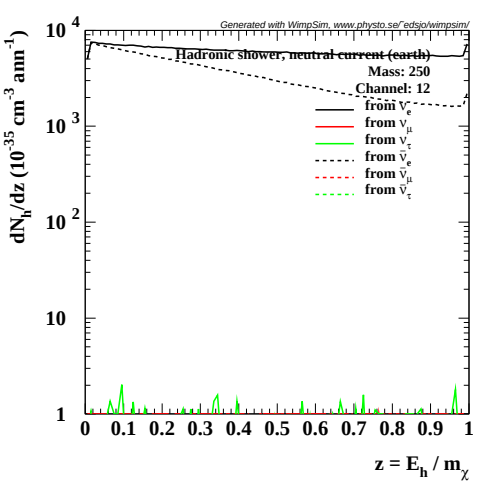
12.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



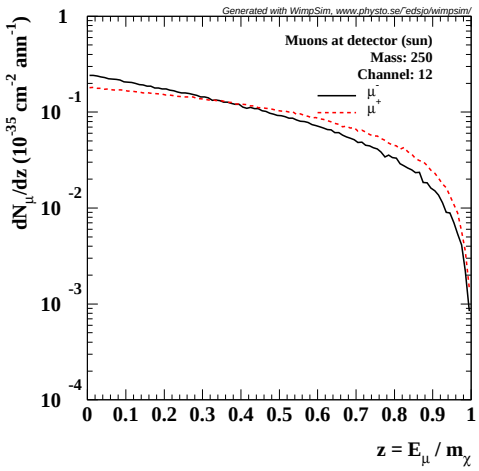


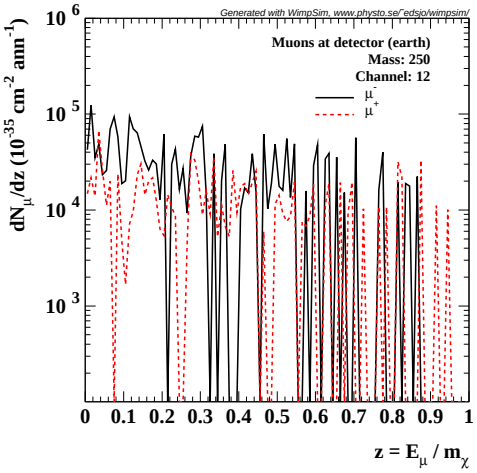
12.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





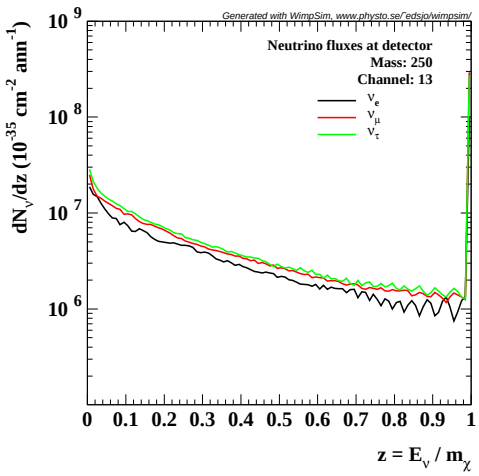
12.11.7 Muons at detector (Sun/Earth)

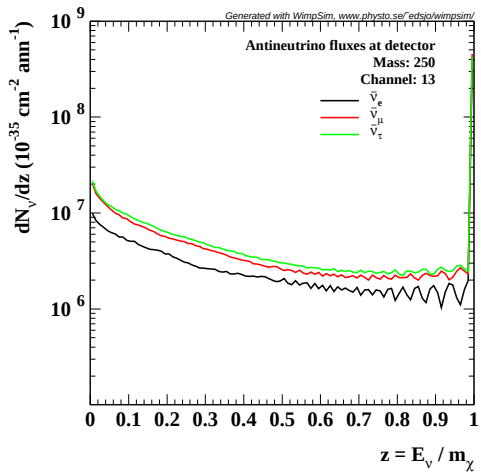




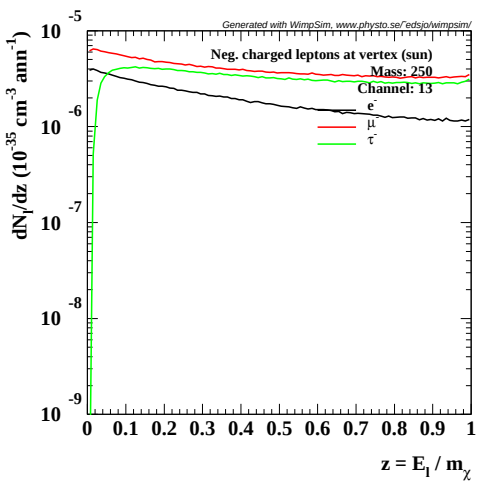
12.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

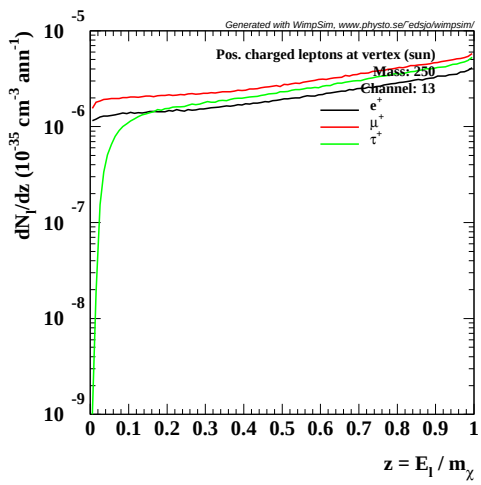
12.12.1 Neutrino fluxes at detector (Sun)



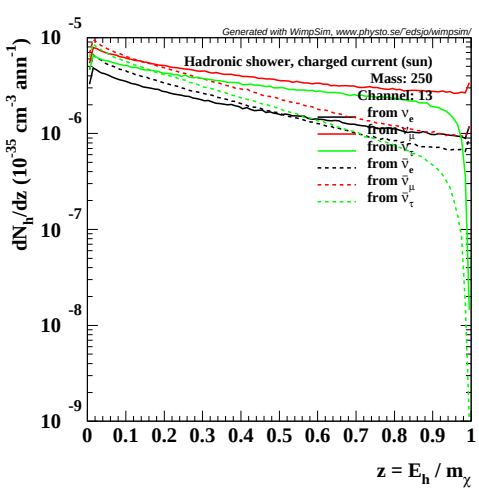


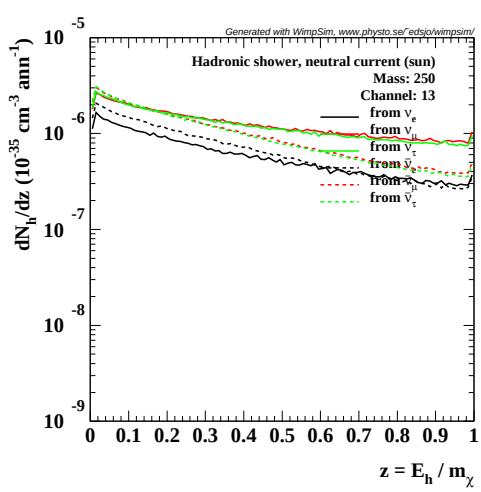
12.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



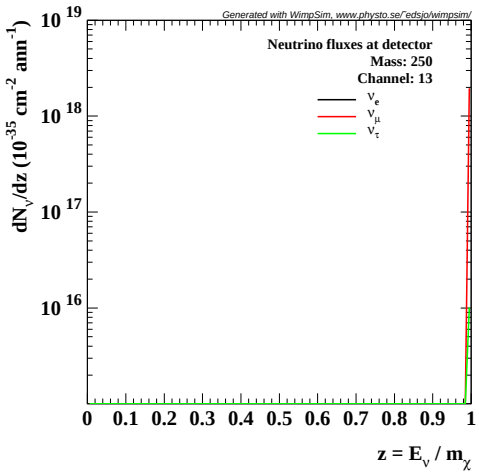


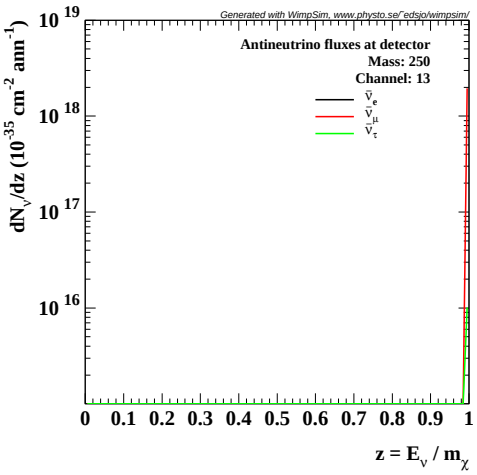
12.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



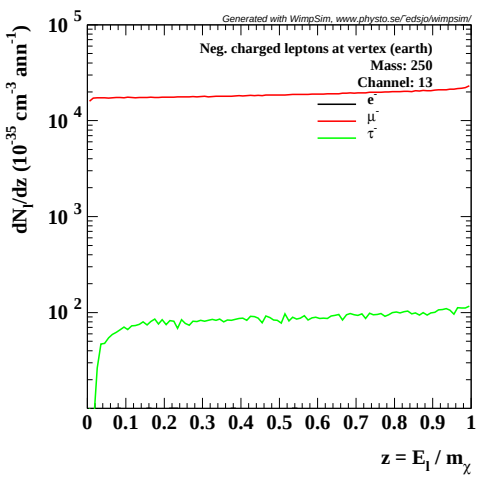


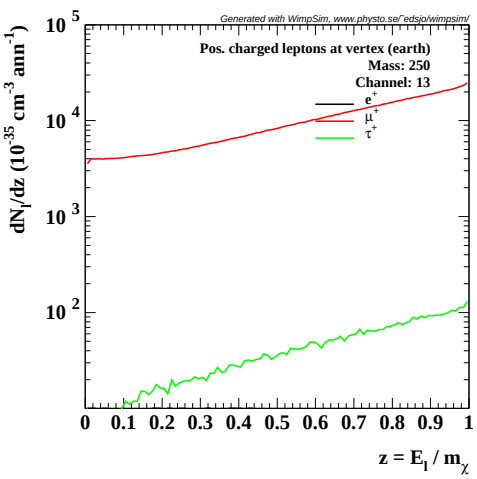
12.12.4 Neutrino fluxes at detector (Earth)



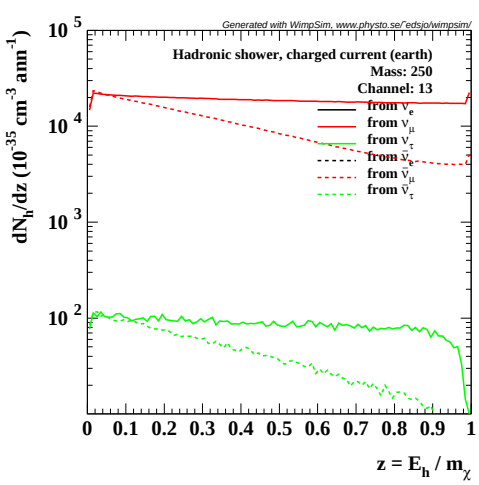


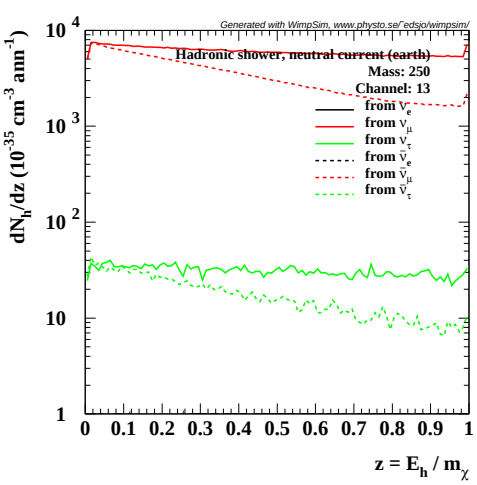
12.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



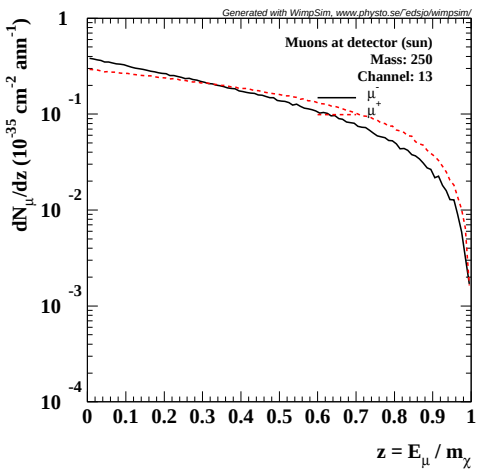


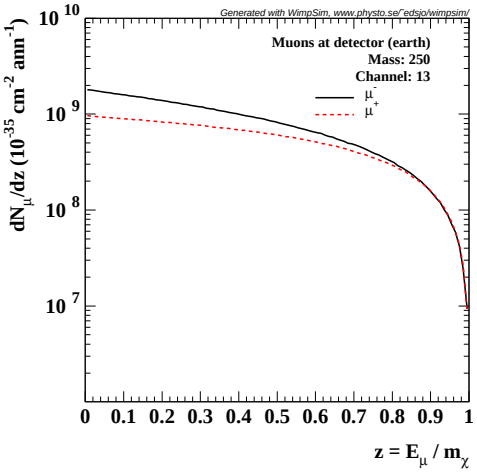
12.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





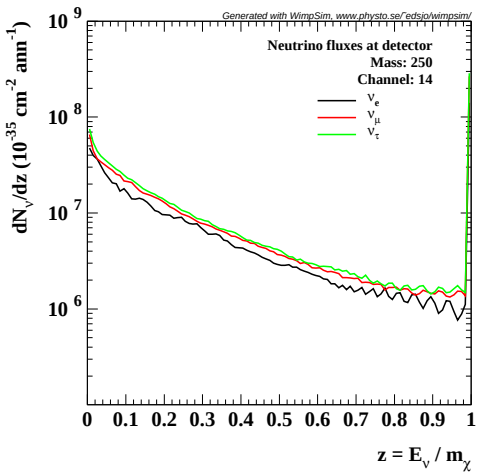
12.12.7 Muons at detector (Sun/Earth)

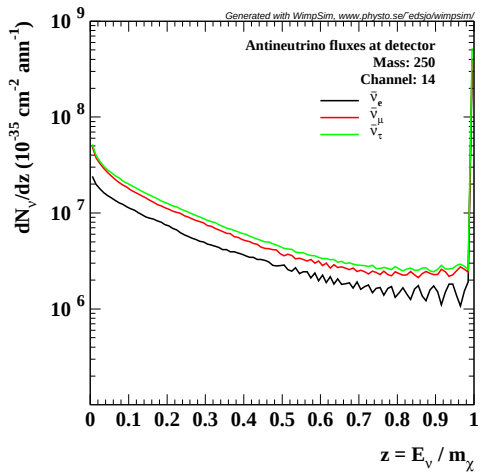




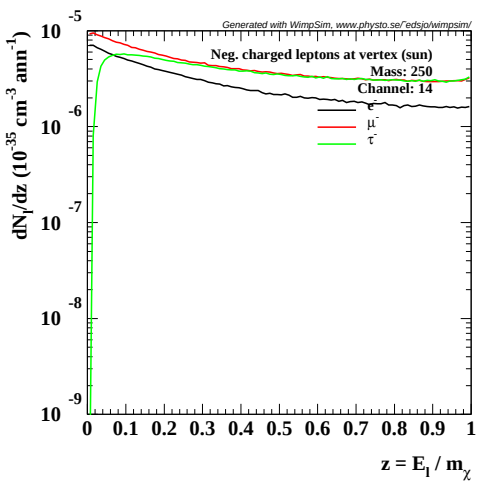
12.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

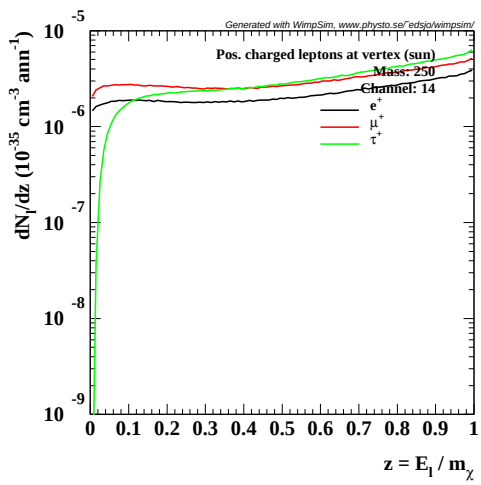
12.13.1 Neutrino fluxes at detector (Sun)



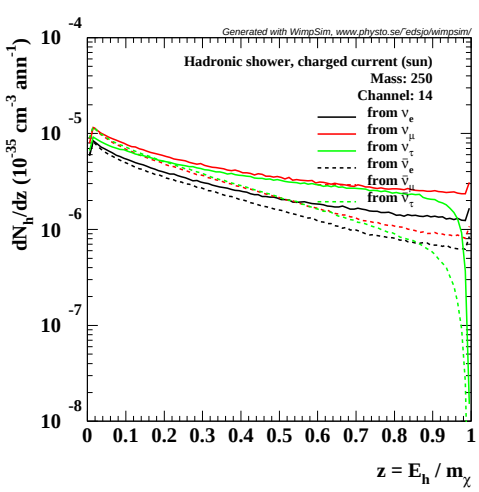


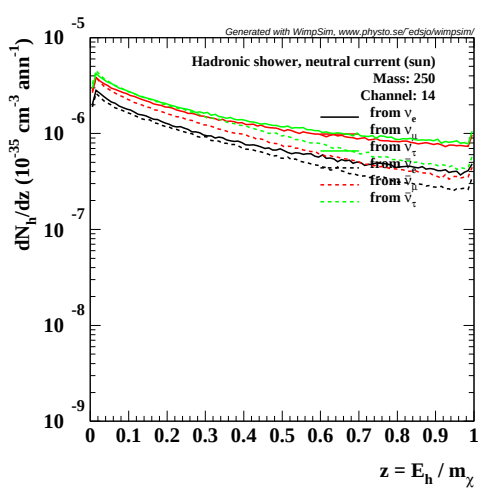
12.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



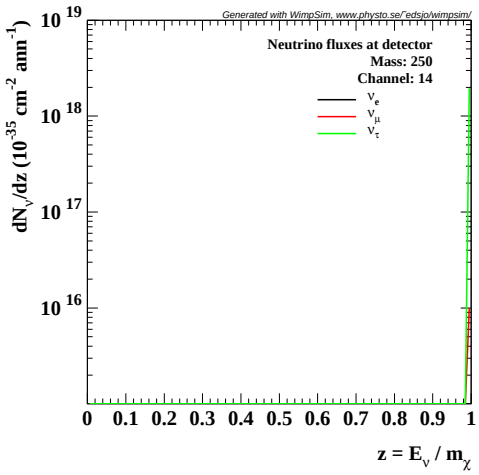


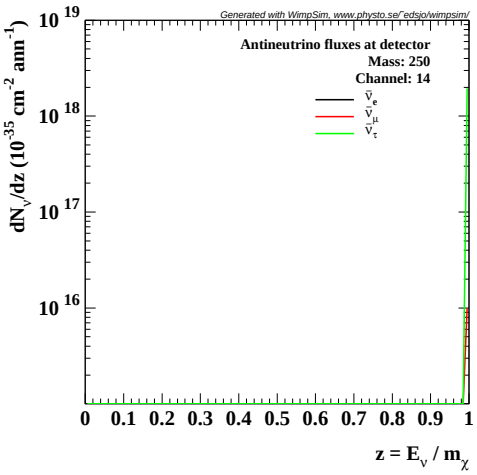
12.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



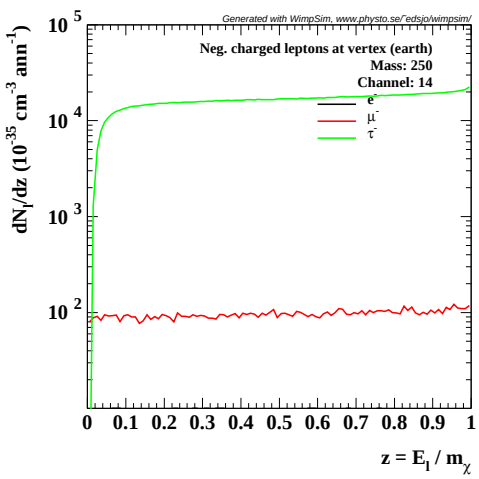


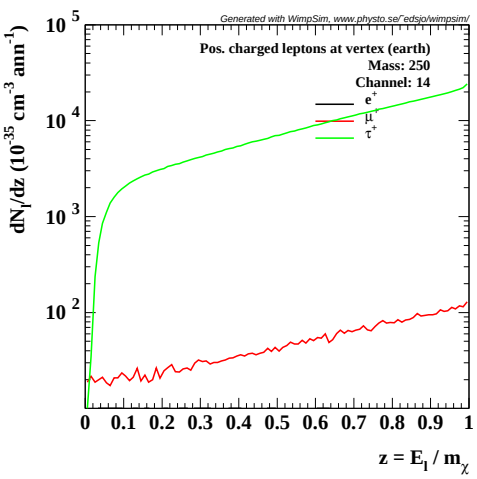
12.13.4 Neutrino fluxes at detector (Earth)



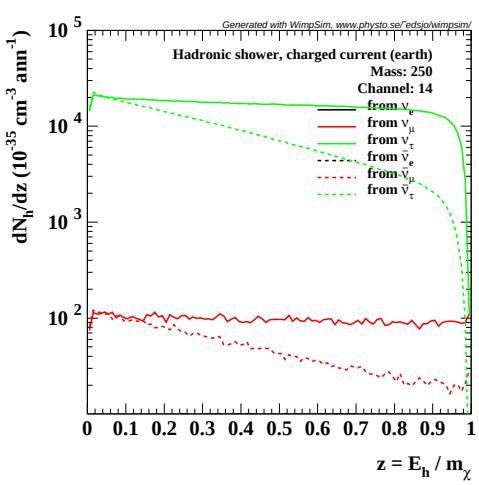


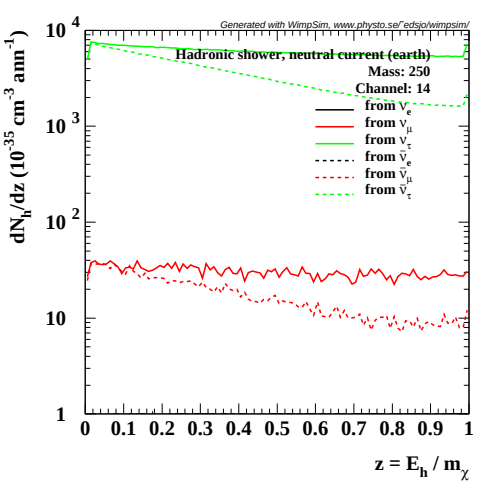
12.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



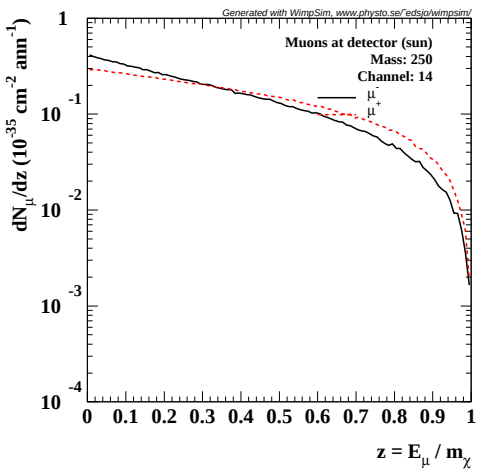


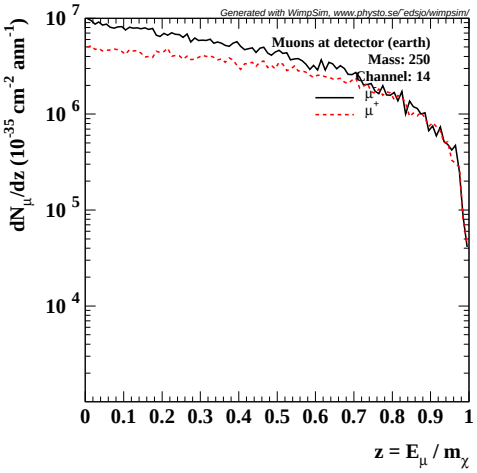
12.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





12.13.7 Muons at detector (Sun/Earth)

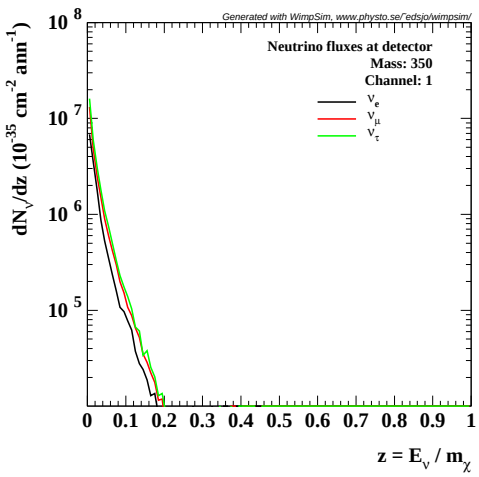


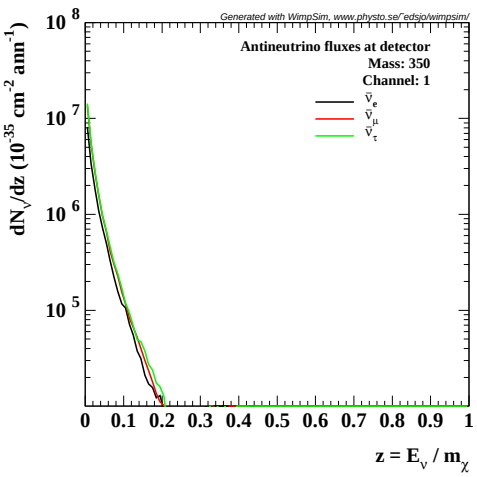


13 Mass 350

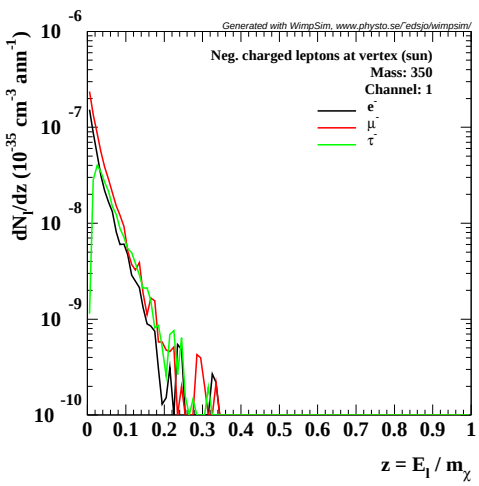
13.1 Channel 1 – $d\bar{d}$

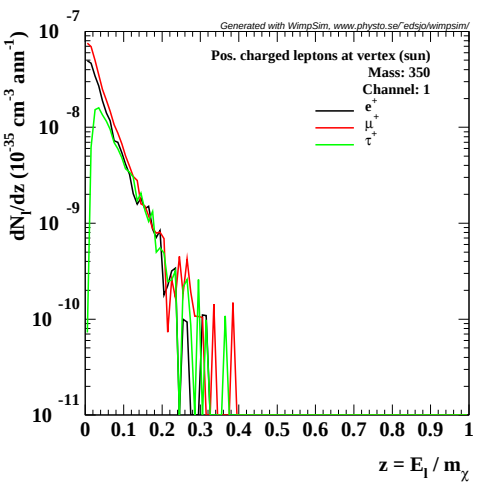
13.1.1 Neutrino fluxes at detector (Sun)



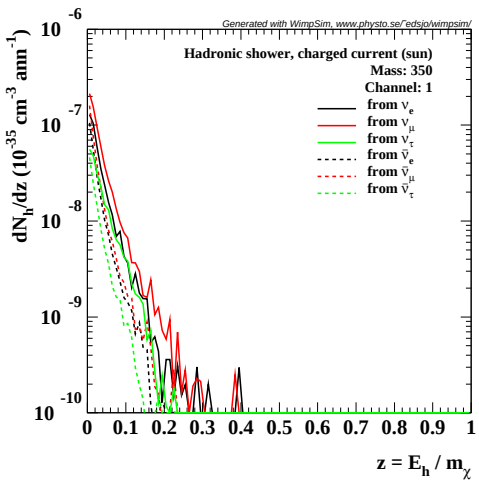


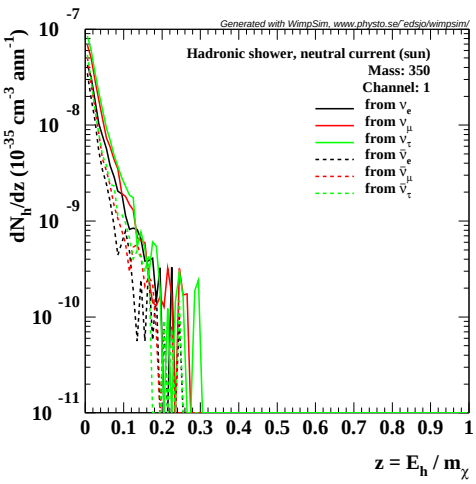
13.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



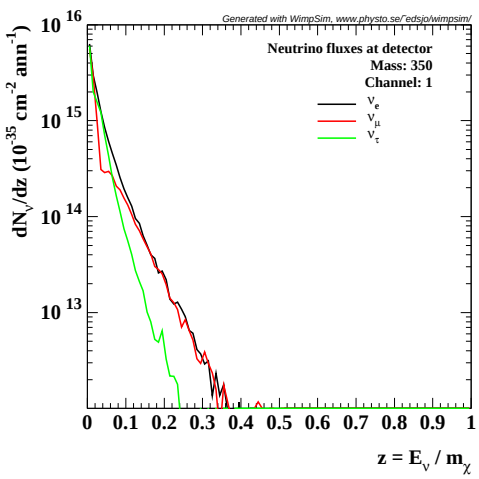


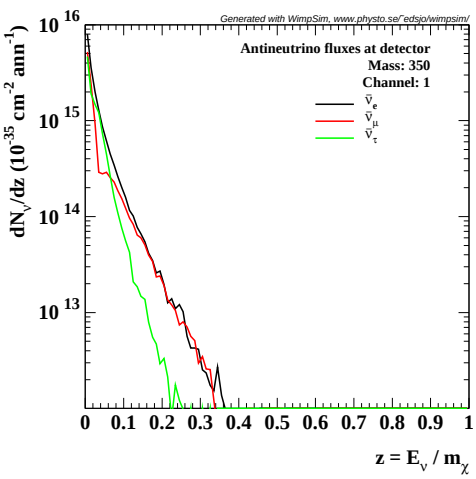
13.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



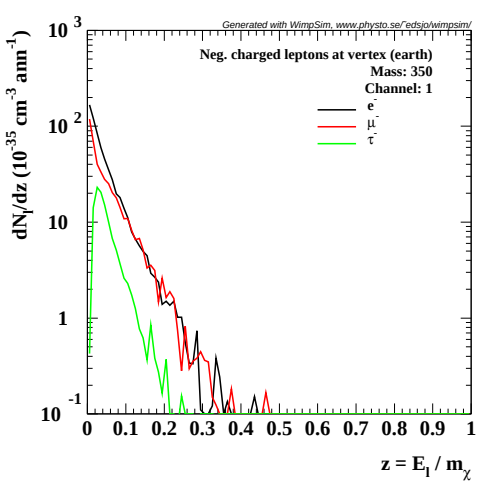


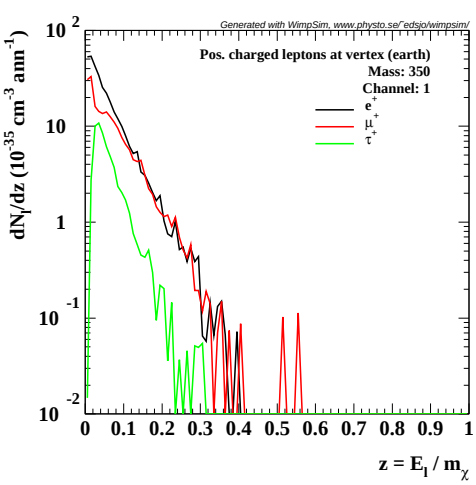
13.1.4 Neutrino fluxes at detector (Earth)



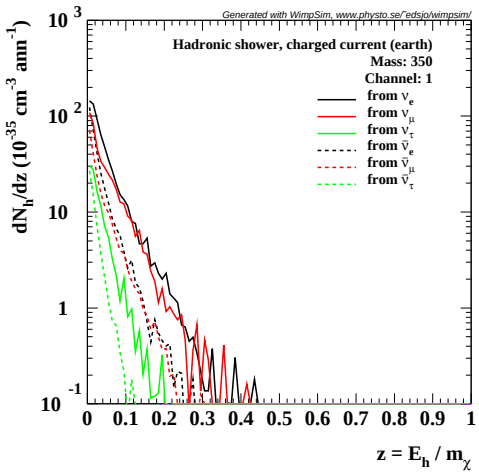


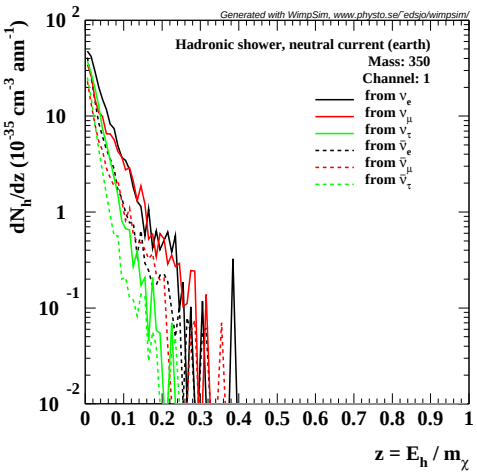
13.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



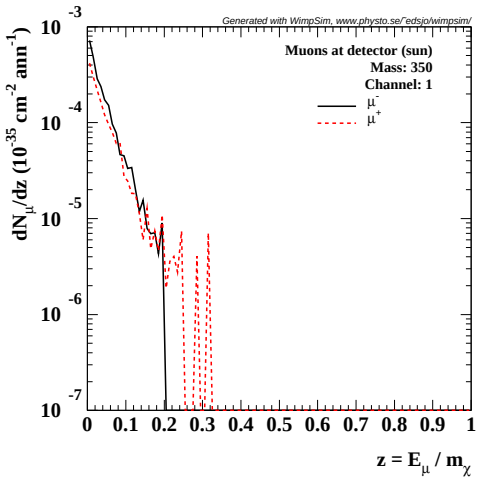


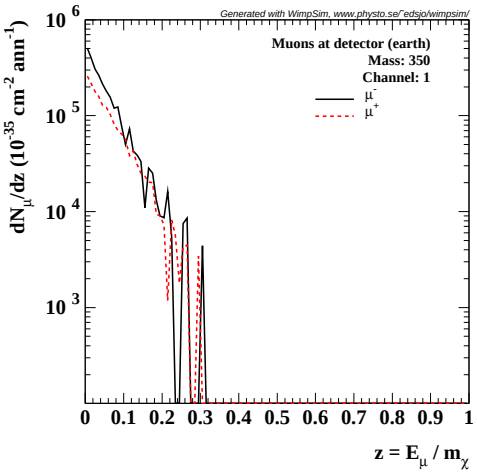
13.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





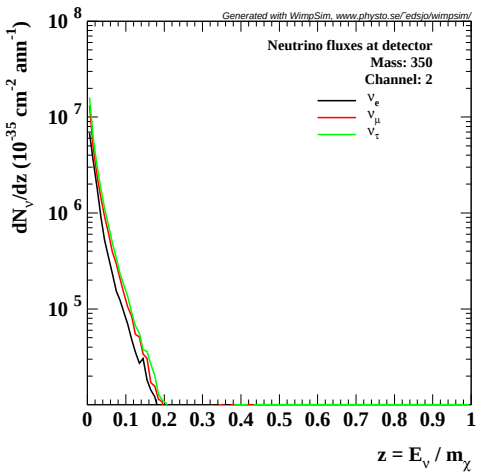
13.1.7 Muons at detector (Sun/Earth)

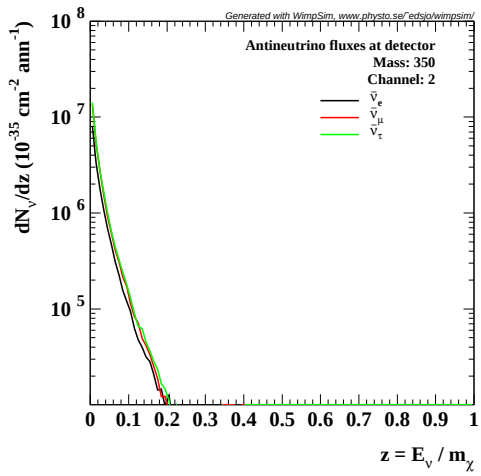




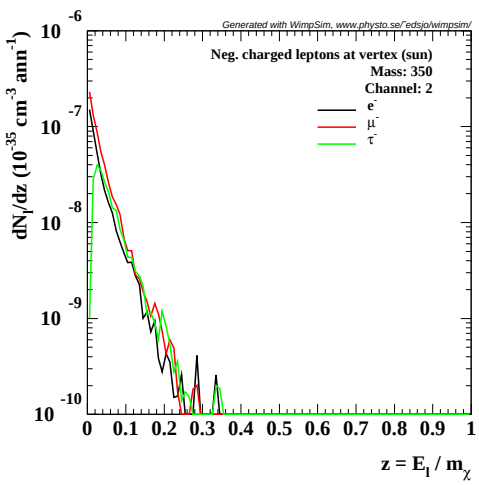
13.2 Channel 2 – $u\bar{u}$

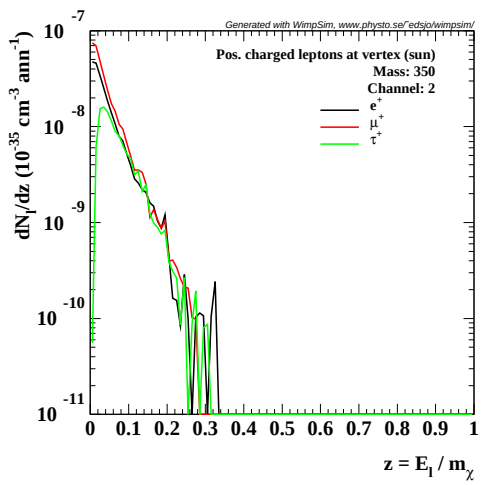
13.2.1 Neutrino fluxes at detector (Sun)



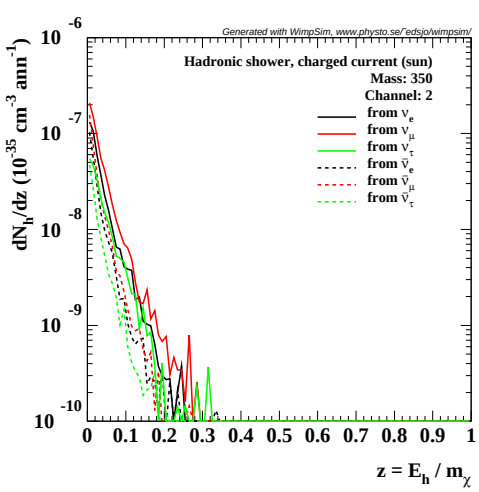


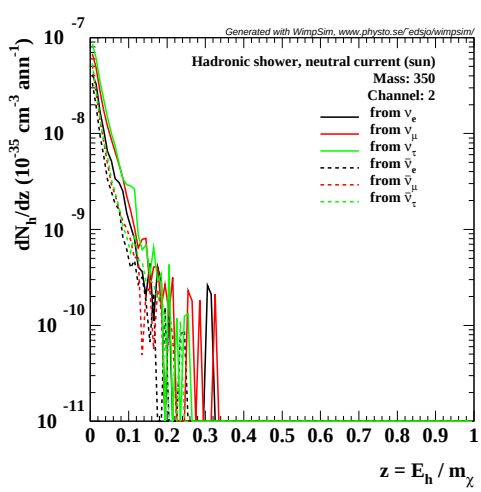
13.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



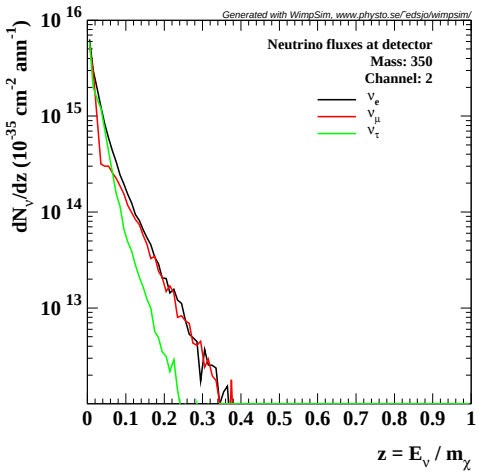


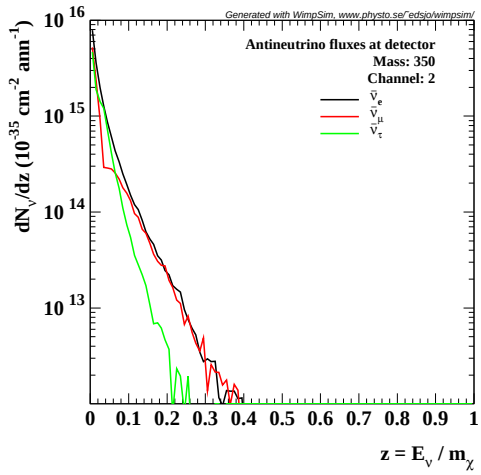
13.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



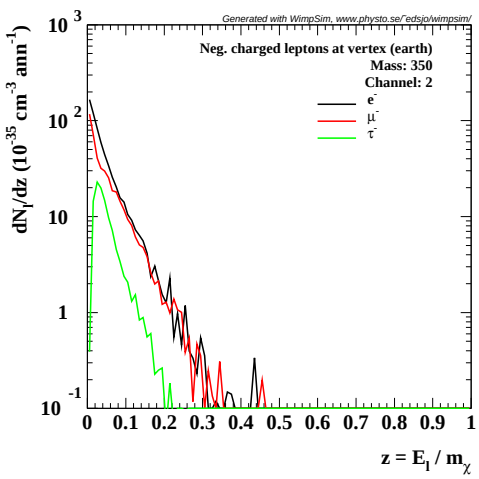


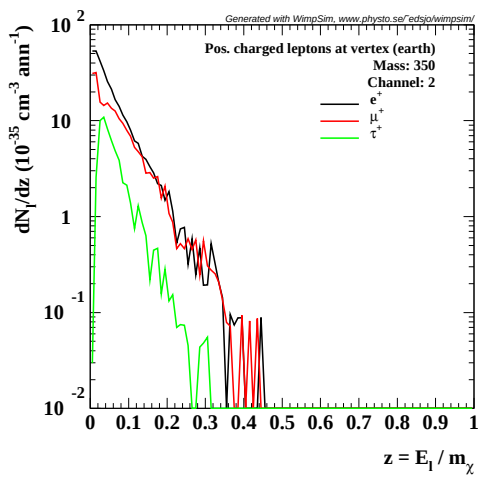
13.2.4 Neutrino fluxes at detector (Earth)



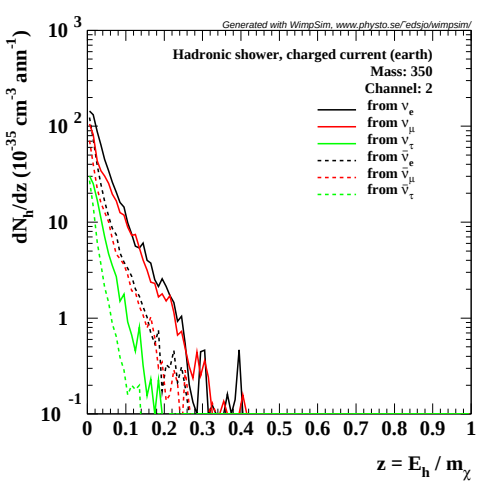


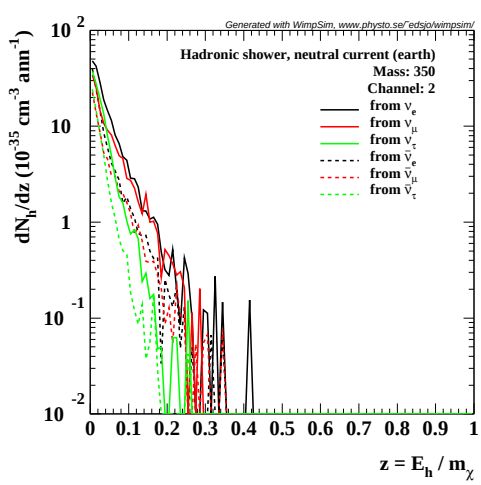
13.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



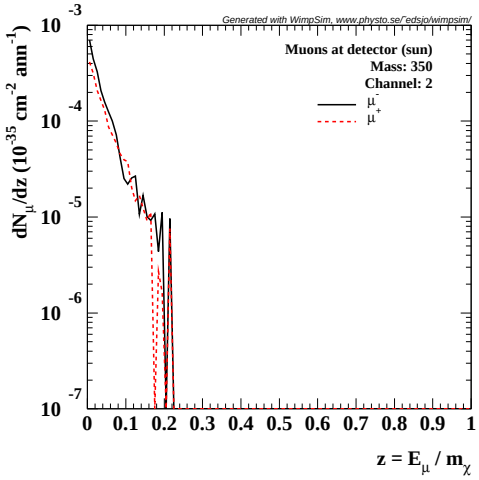


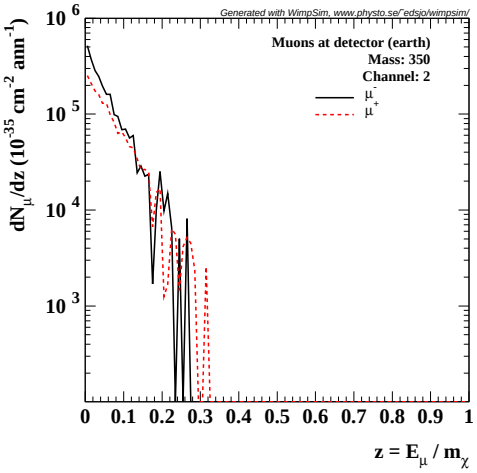
13.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





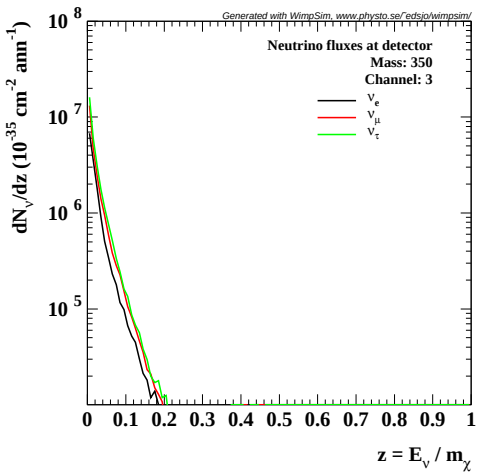
13.2.7 Muons at detector (Sun/Earth)

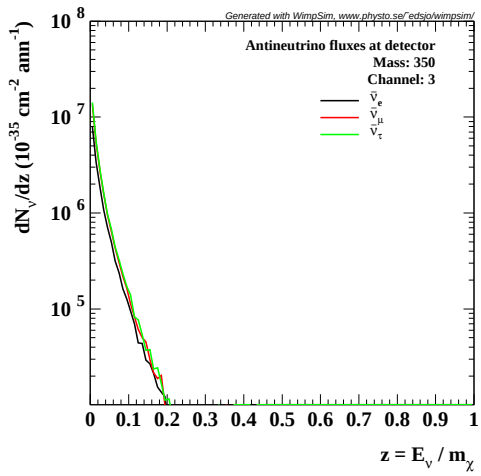




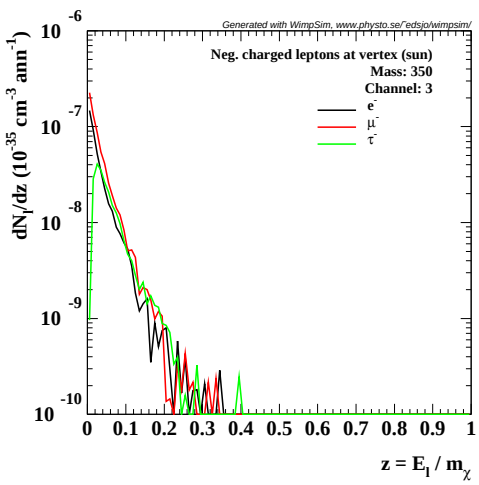
13.3 Channel 3 – $s\bar{s}$

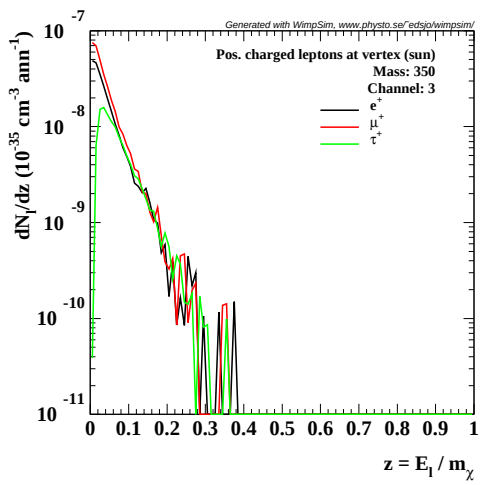
13.3.1 Neutrino fluxes at detector (Sun)



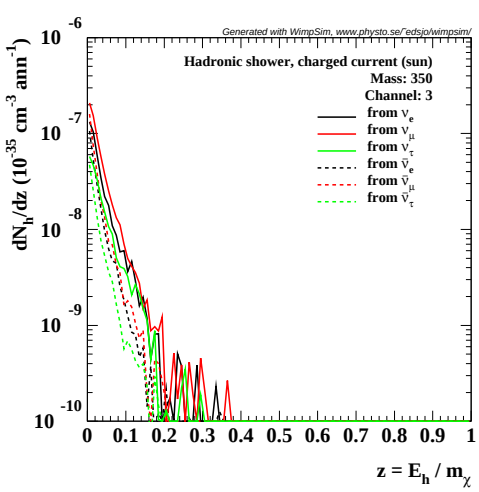


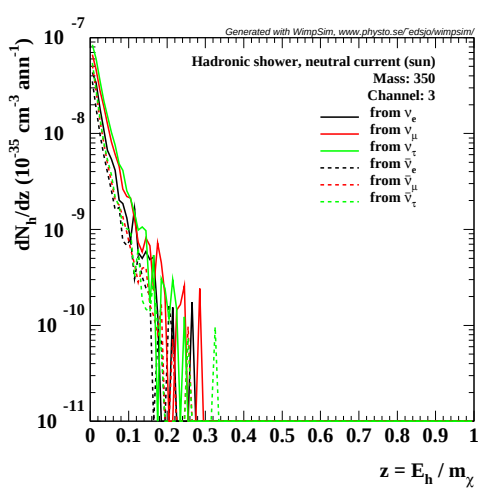
13.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



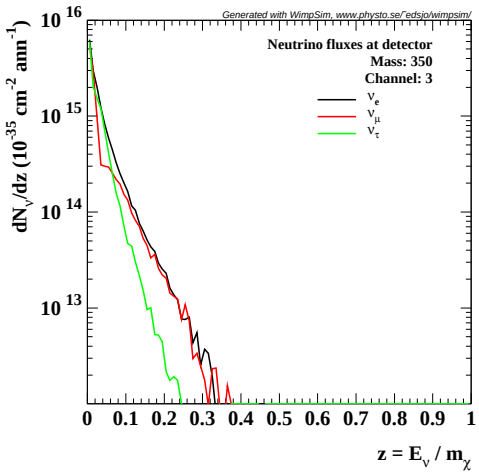


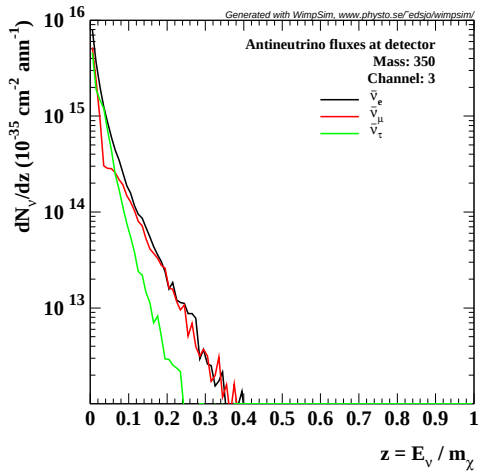
13.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



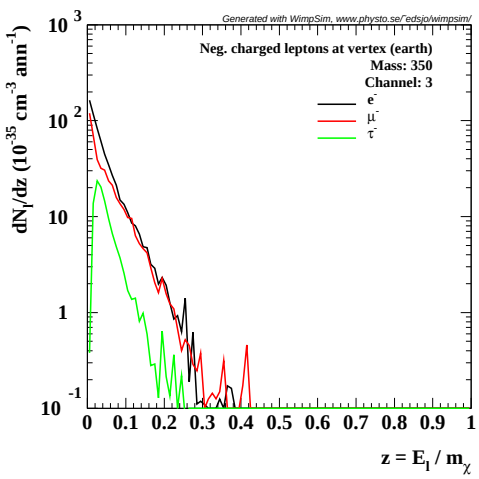


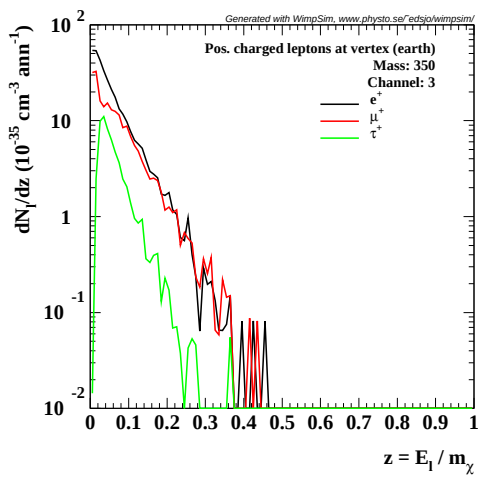
13.3.4 Neutrino fluxes at detector (Earth)



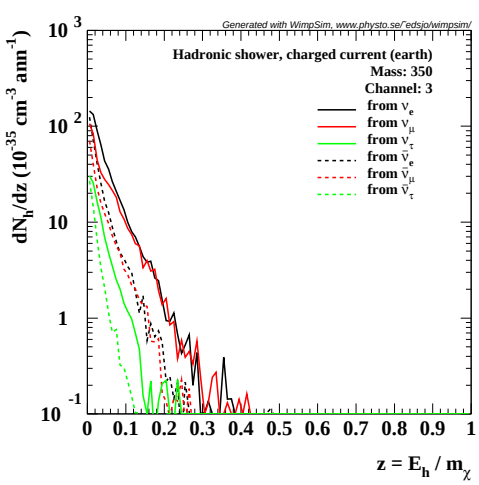


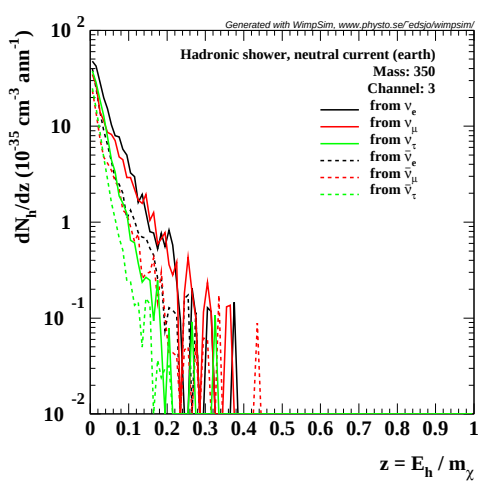
13.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



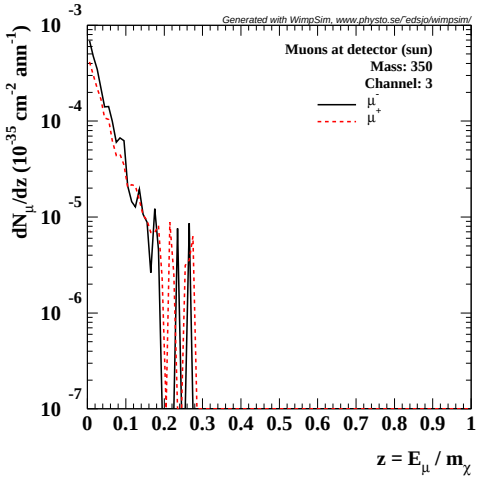


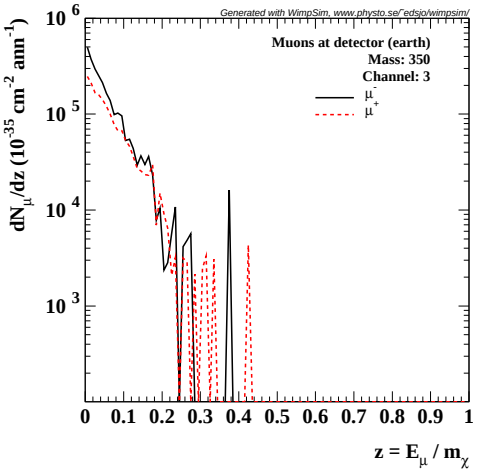
13.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





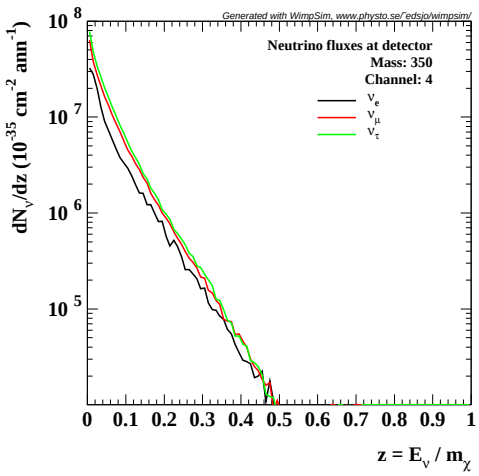
13.3.7 Muons at detector (Sun/Earth)

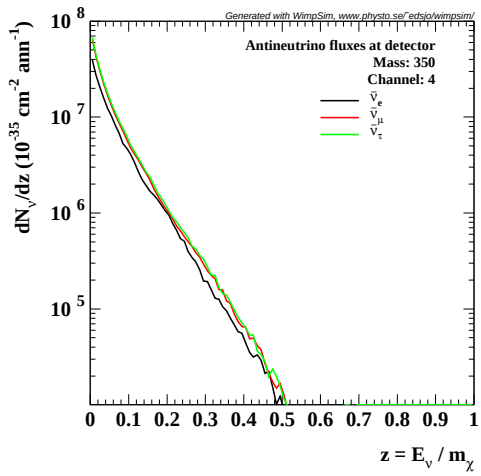




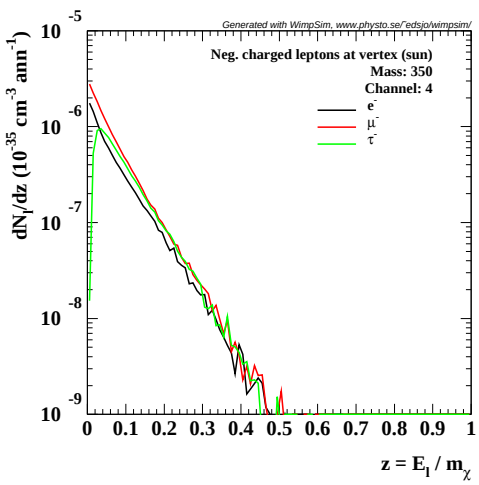
13.4 Channel 4 – $c\bar{c}$

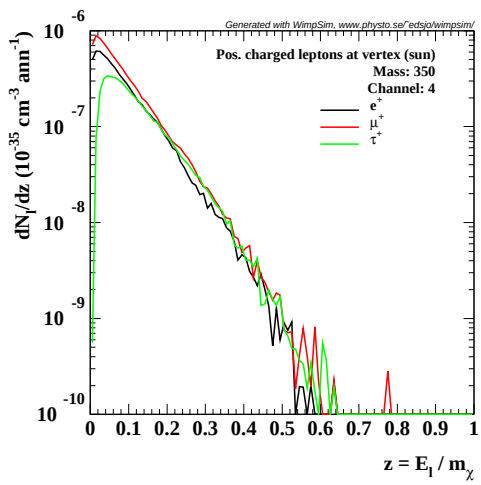
13.4.1 Neutrino fluxes at detector (Sun)



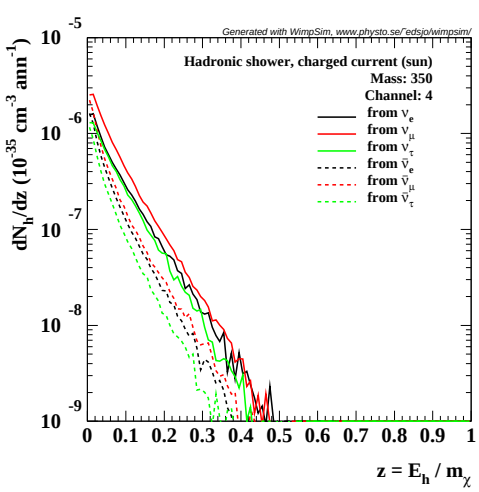


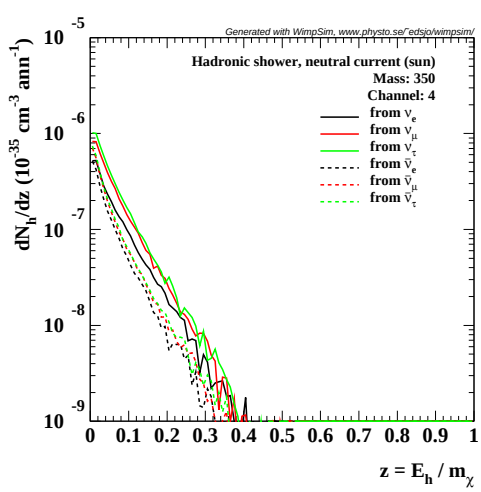
13.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



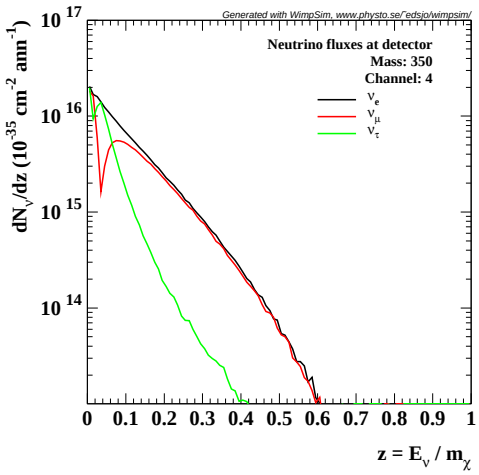


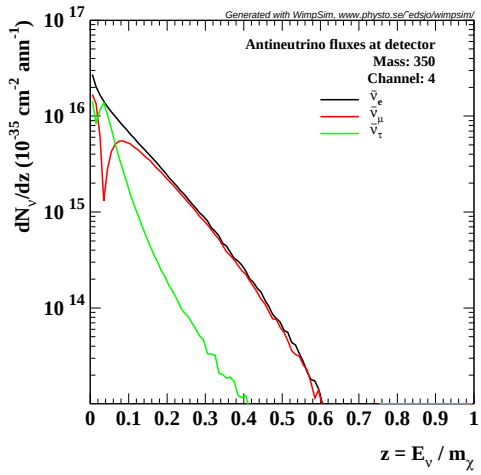
13.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



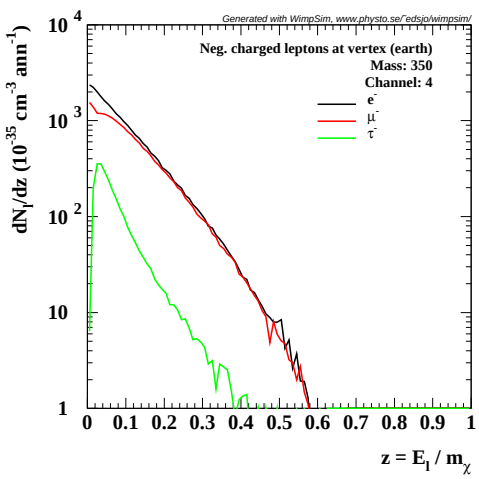


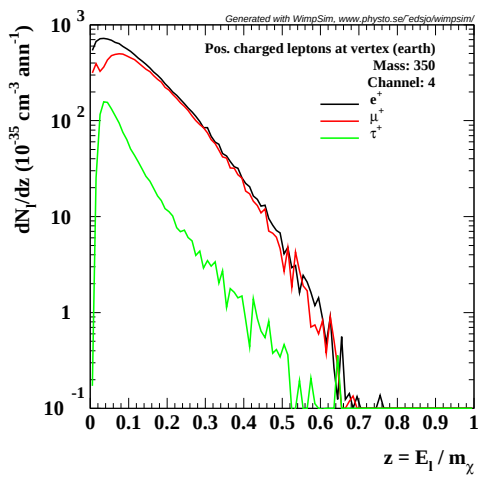
13.4.4 Neutrino fluxes at detector (Earth)



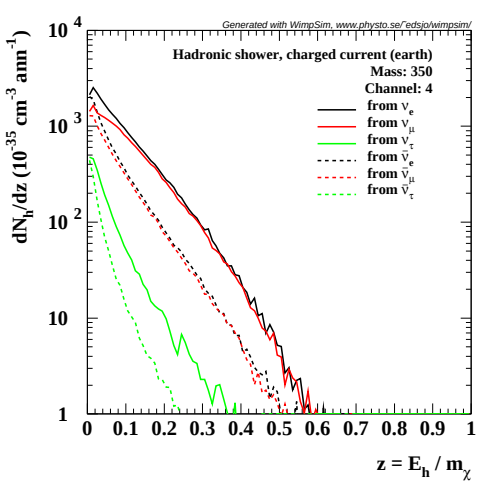


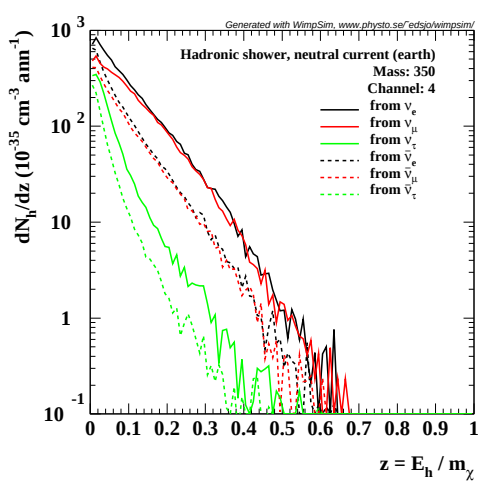
13.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



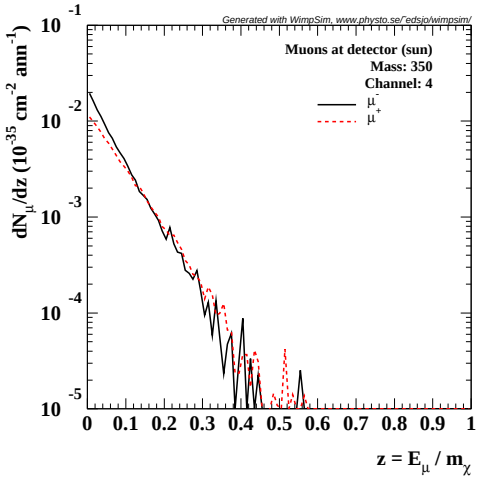


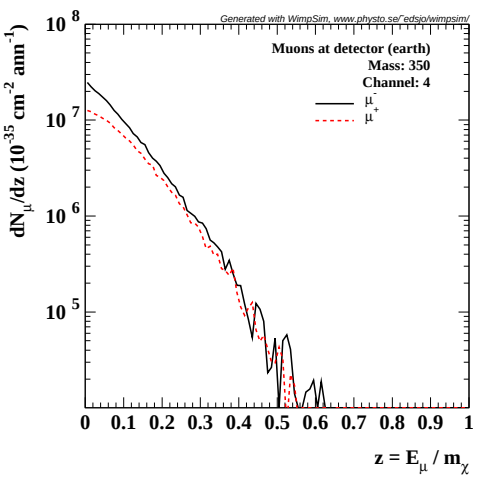
13.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





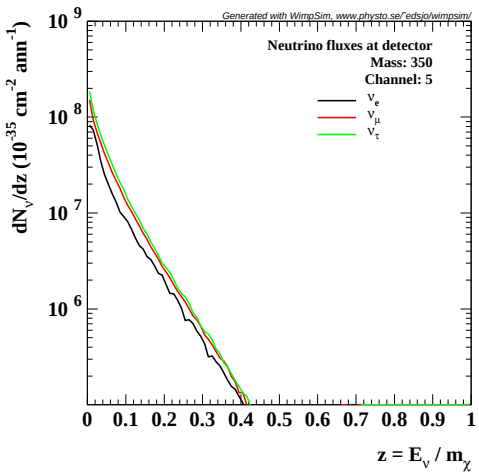
13.4.7 Muons at detector (Sun/Earth)

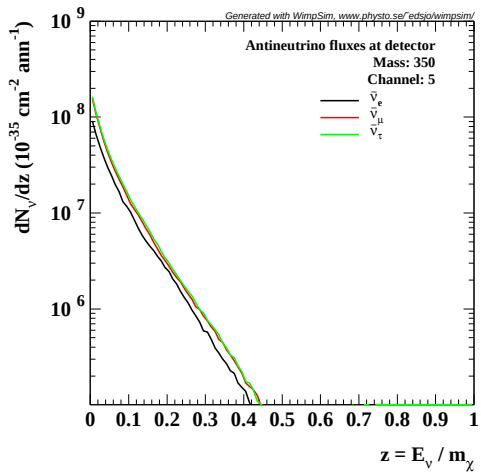




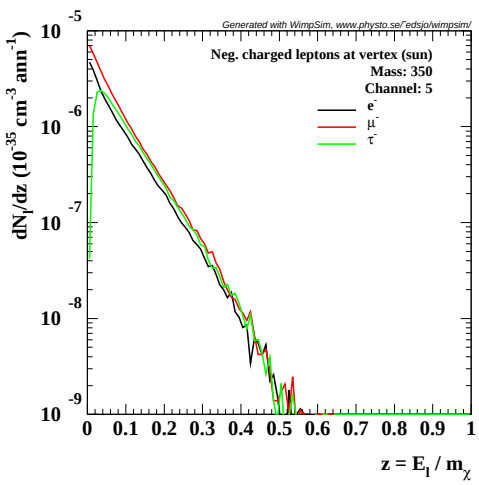
13.5 Channel 5 – $b\bar{b}$

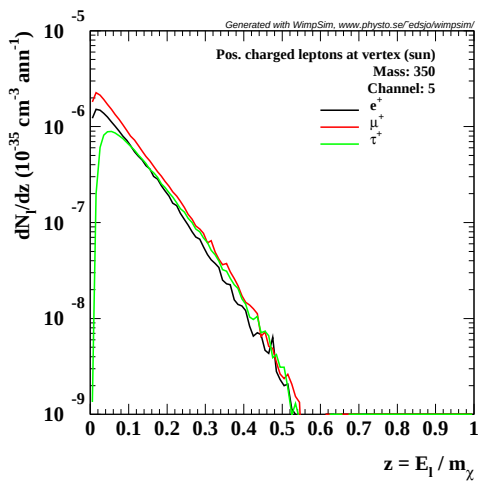
13.5.1 Neutrino fluxes at detector (Sun)



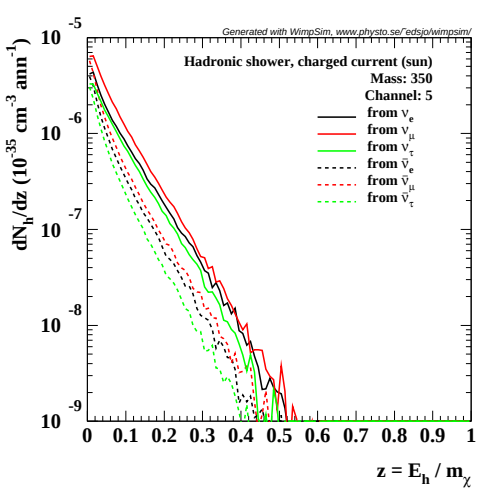


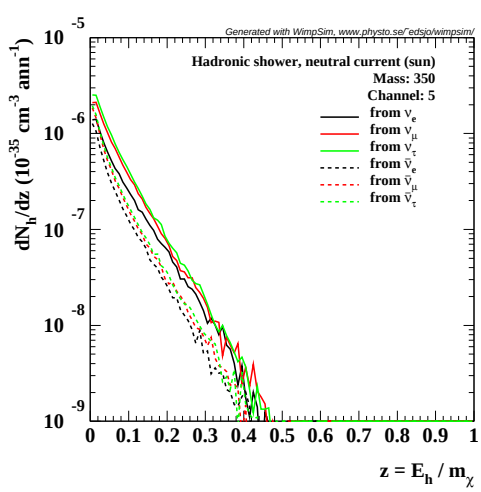
13.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



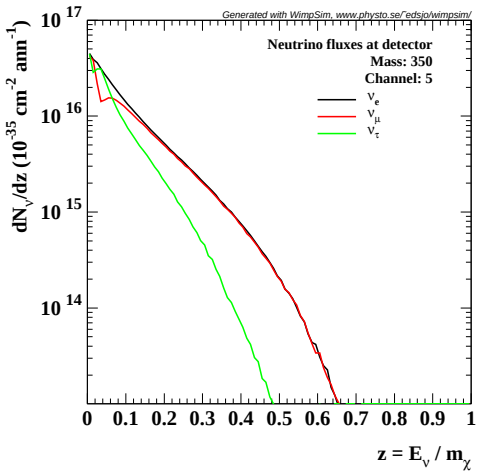


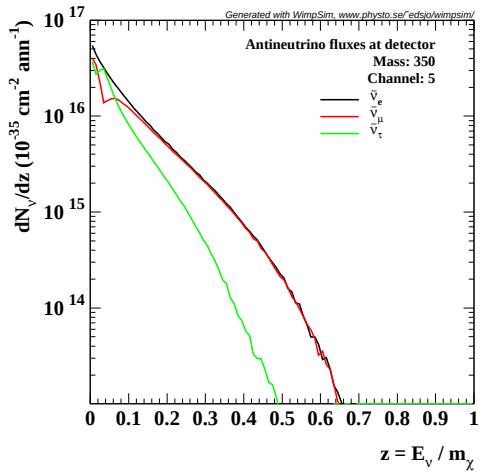
13.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



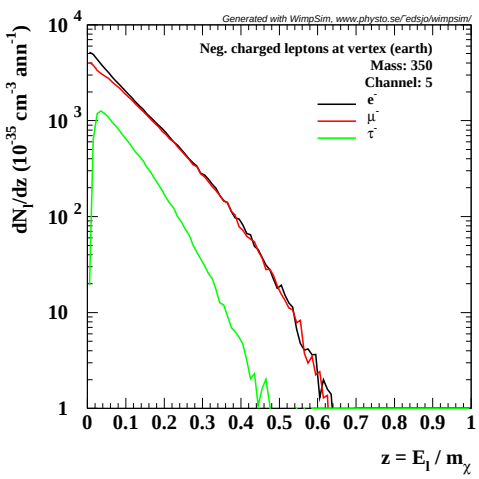


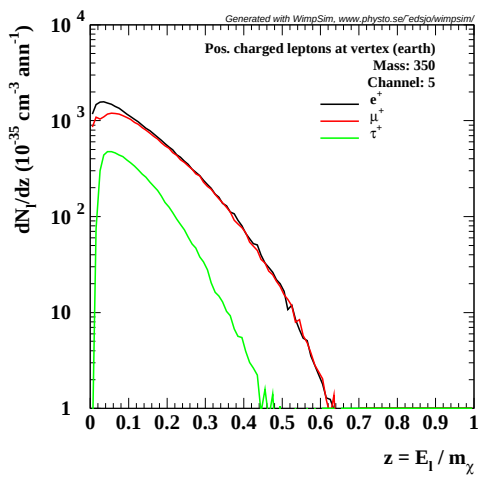
13.5.4 Neutrino fluxes at detector (Earth)



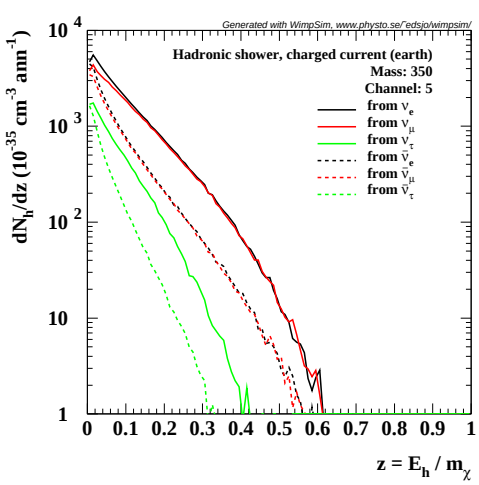


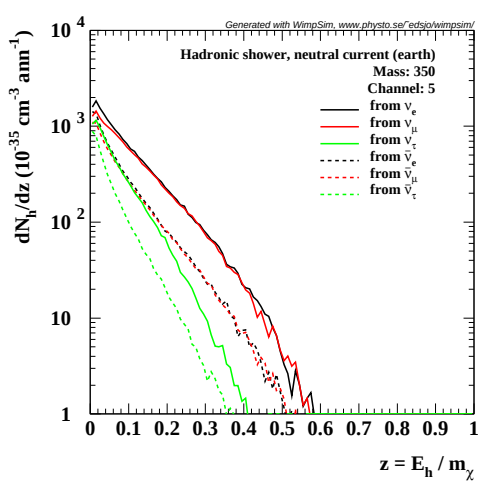
13.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



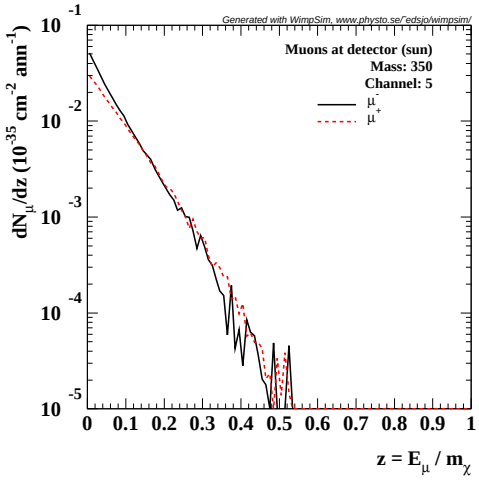


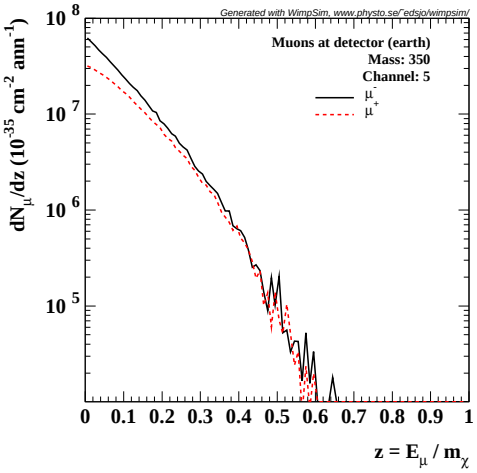
13.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





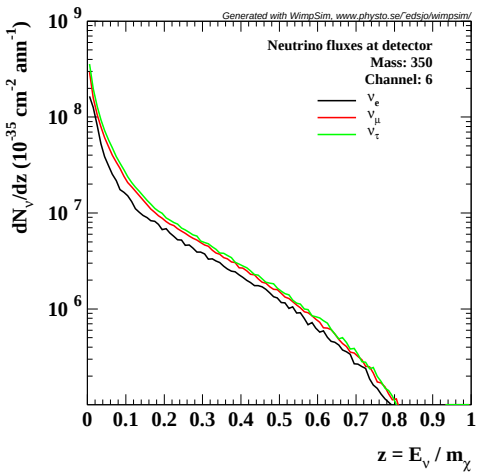
13.5.7 Muons at detector (Sun/Earth)

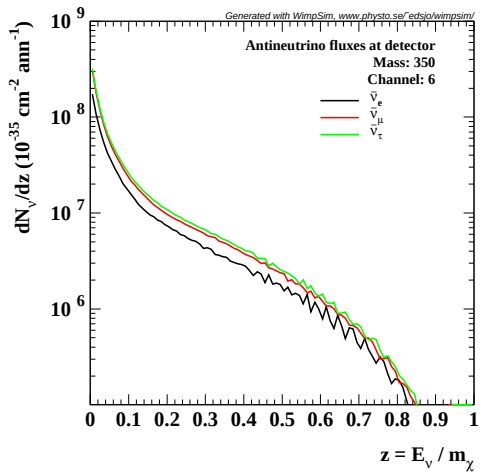




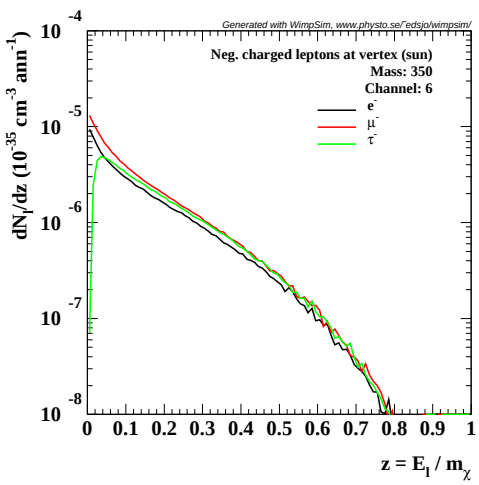
13.6 Channel 6 – $t\bar{t}$

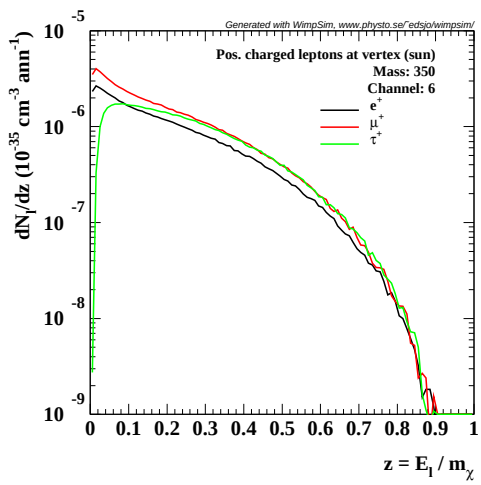
13.6.1 Neutrino fluxes at detector (Sun)



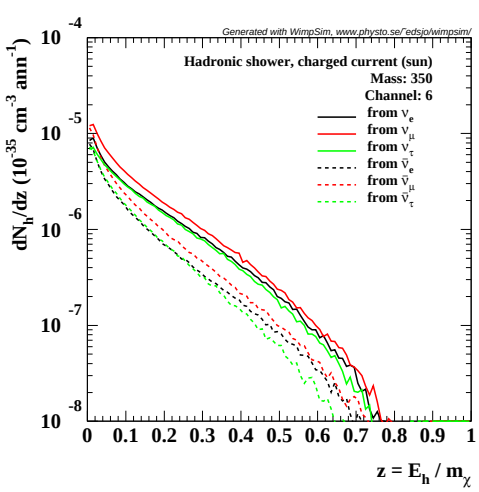


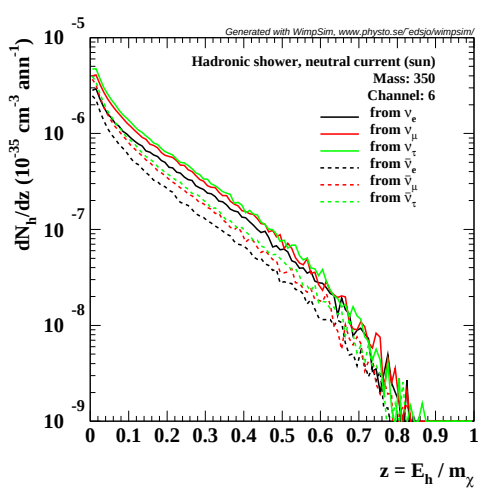
13.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



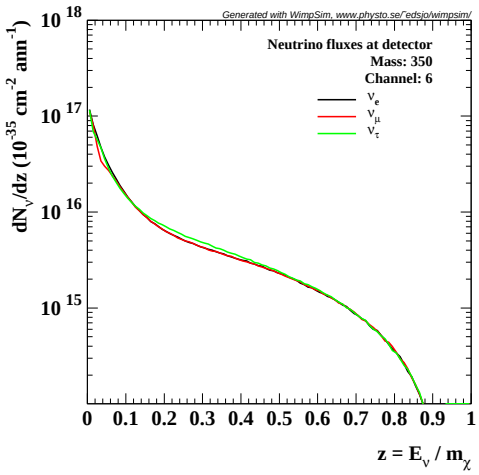


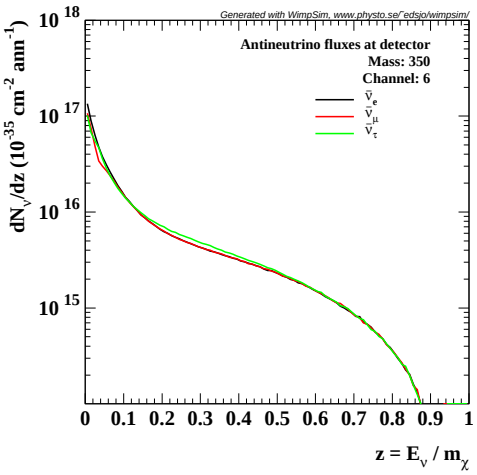
13.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



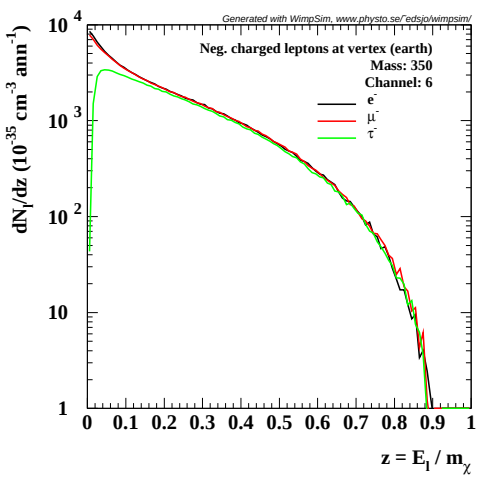


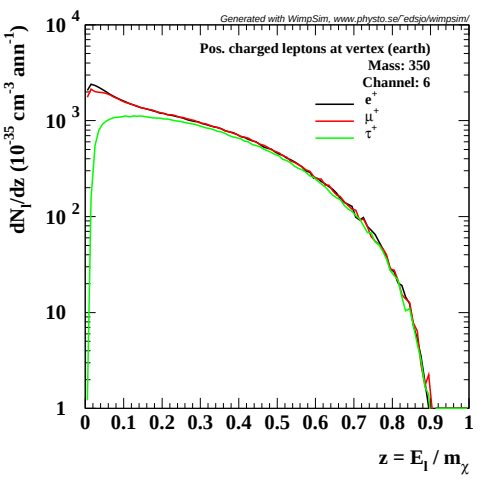
13.6.4 Neutrino fluxes at detector (Earth)



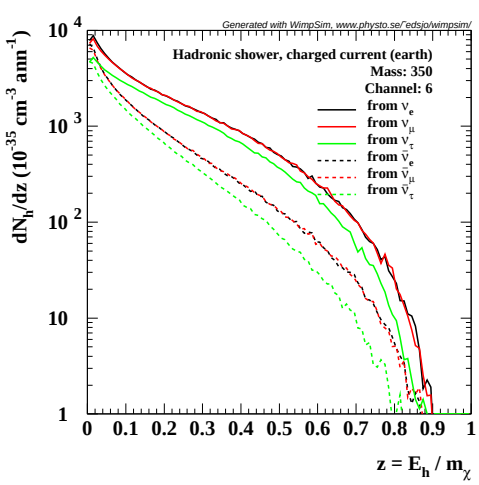


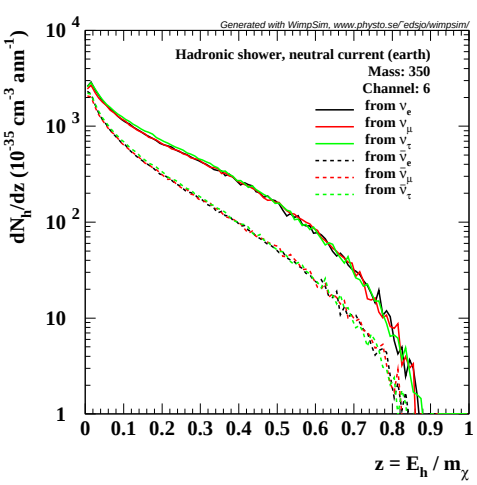
13.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



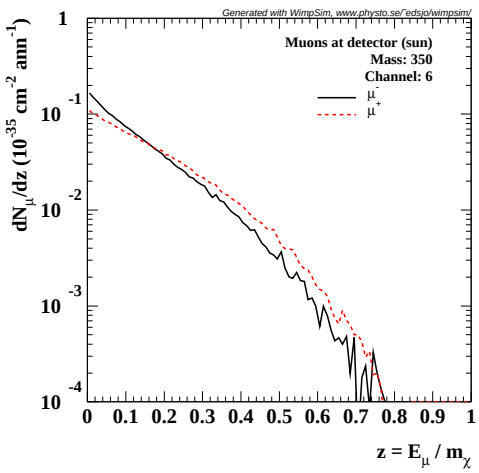


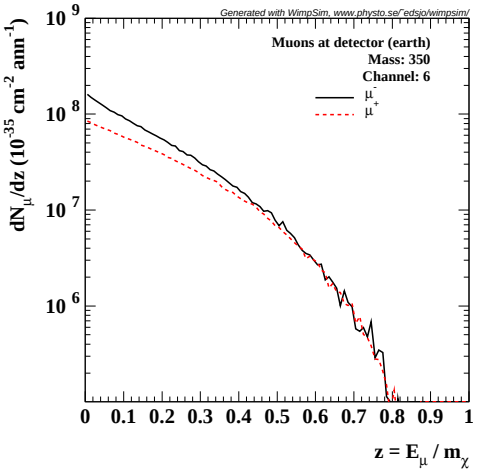
13.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





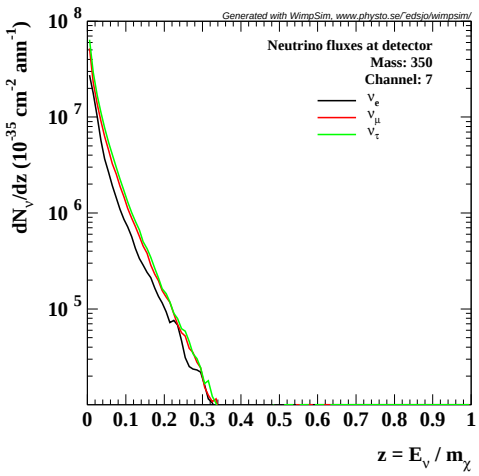
13.6.7 Muons at detector (Sun/Earth)

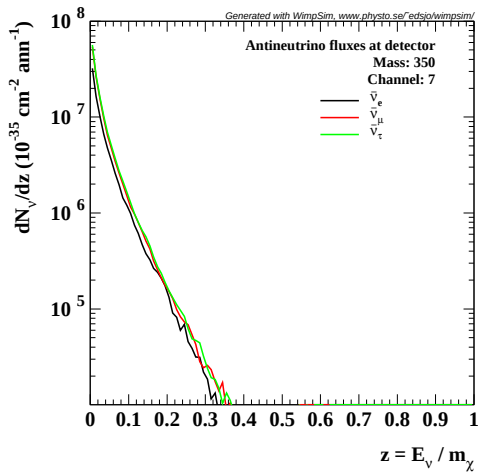




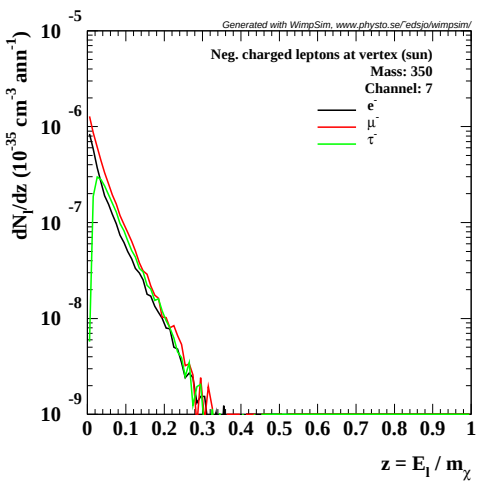
13.7 Channel 7 – gg

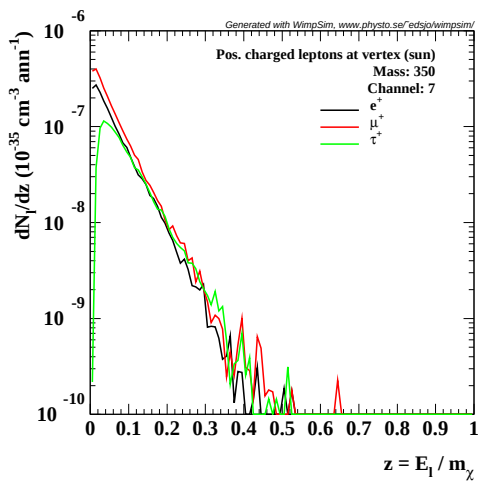
13.7.1 Neutrino fluxes at detector (Sun)



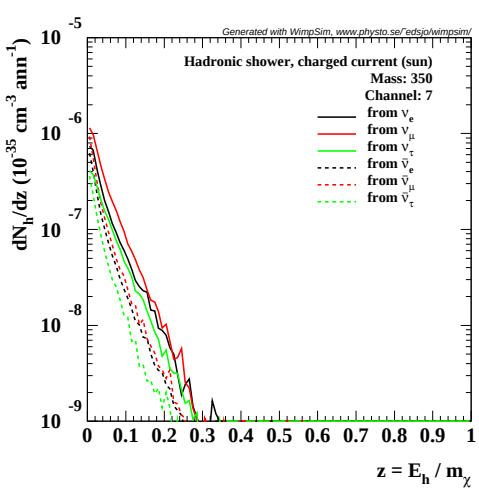


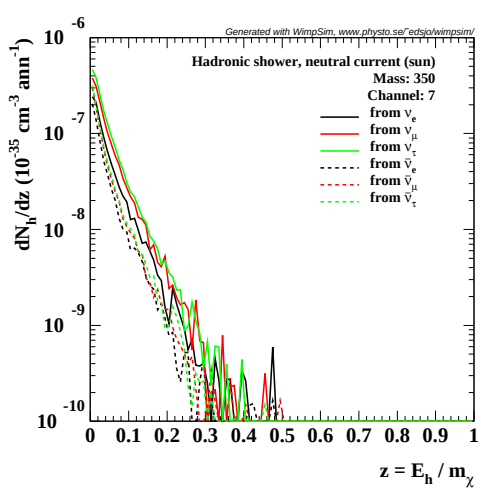
13.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



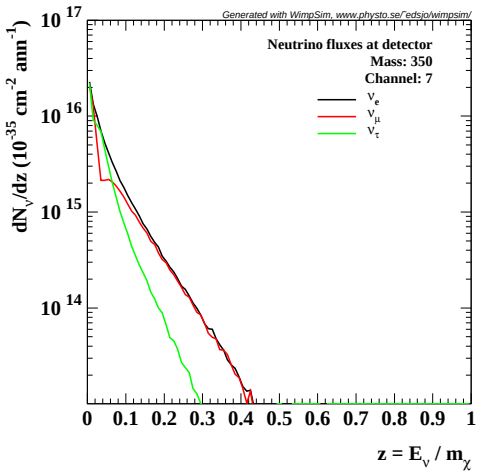


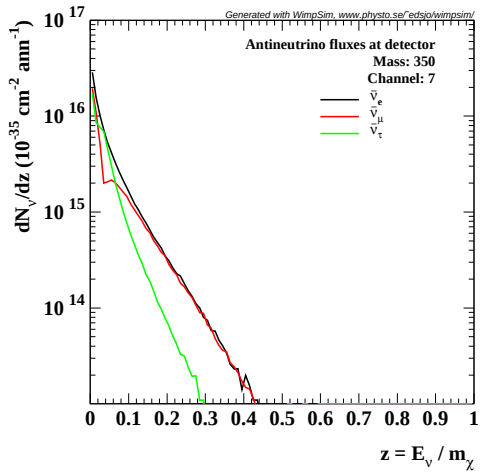
13.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



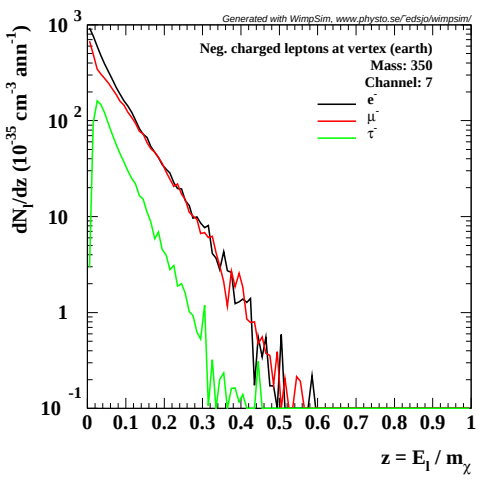


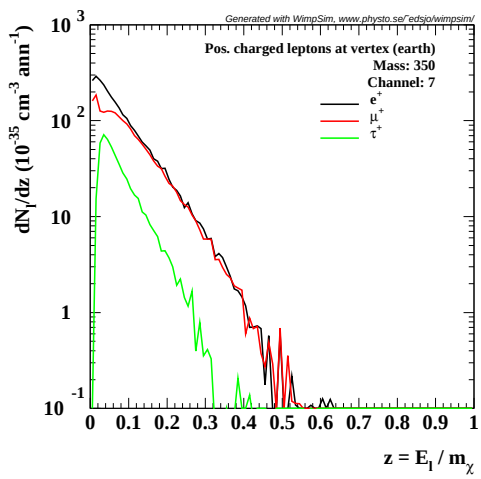
13.7.4 Neutrino fluxes at detector (Earth)



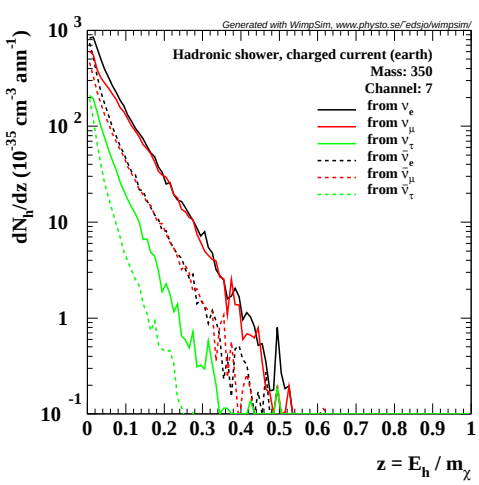


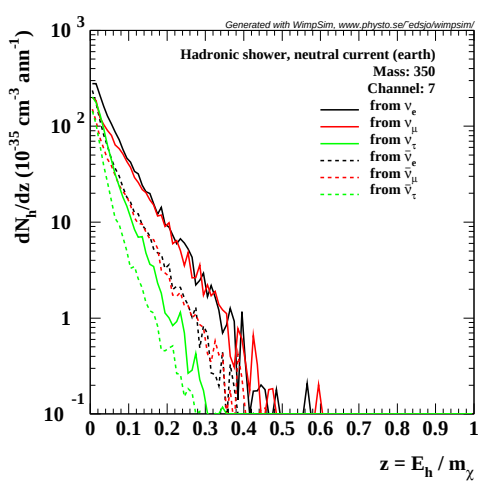
13.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



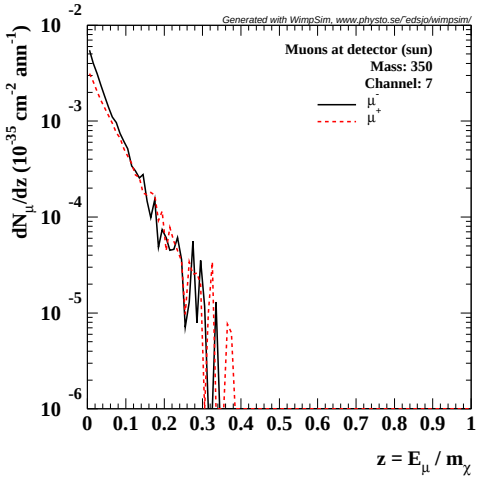


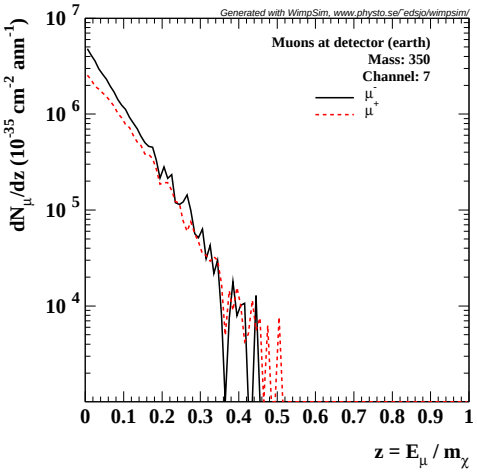
13.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





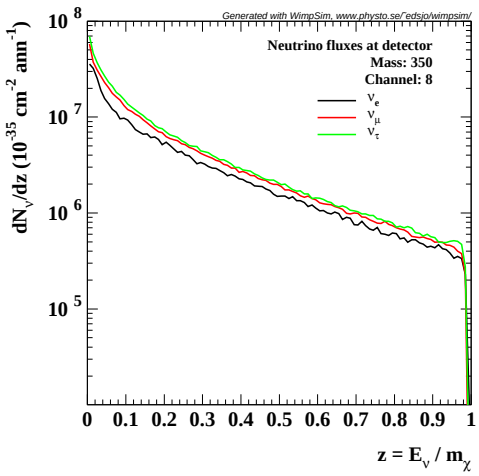
13.7.7 Muons at detector (Sun/Earth)

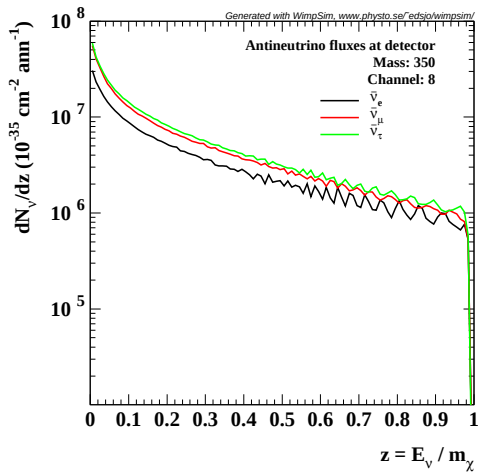




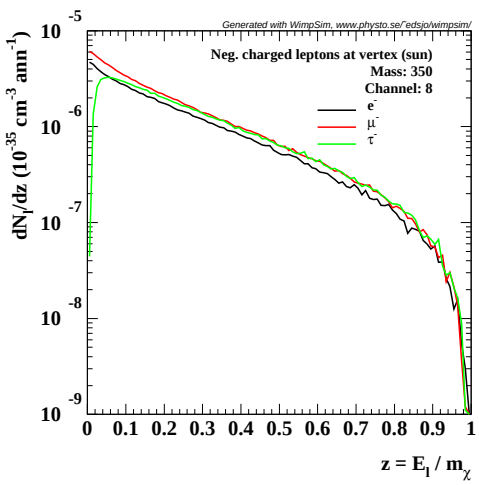
13.8 Channel 8 – W^-W^+

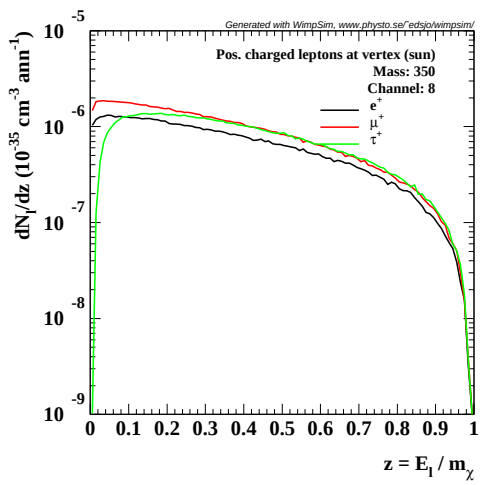
13.8.1 Neutrino fluxes at detector (Sun)



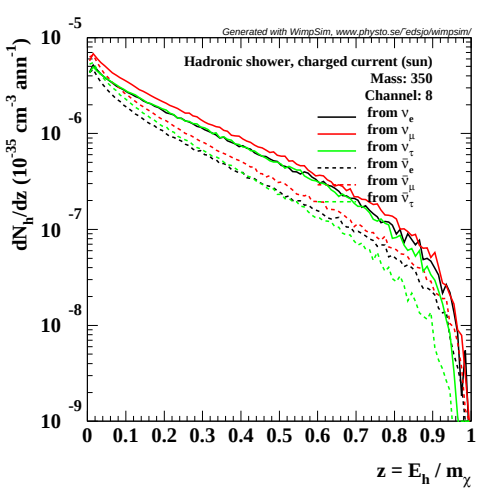


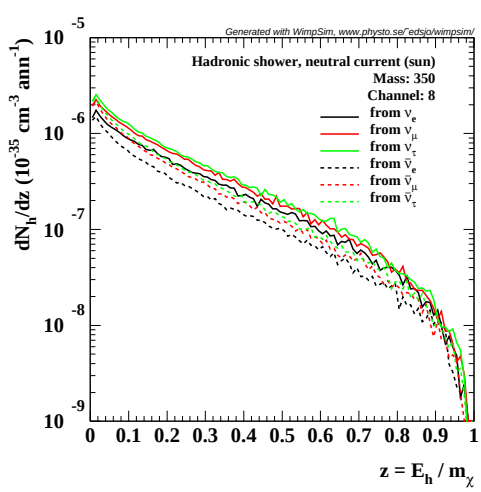
13.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



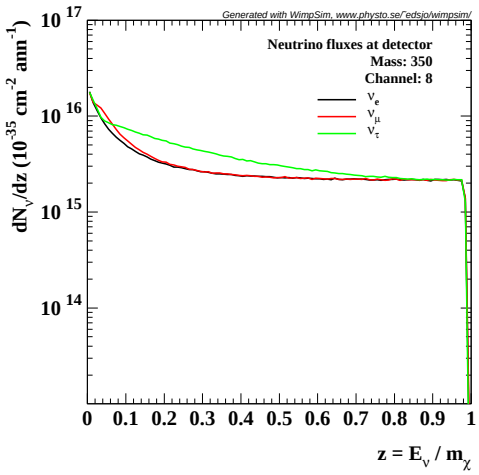


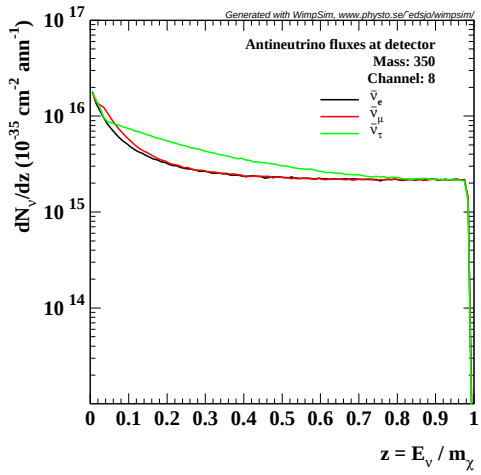
13.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



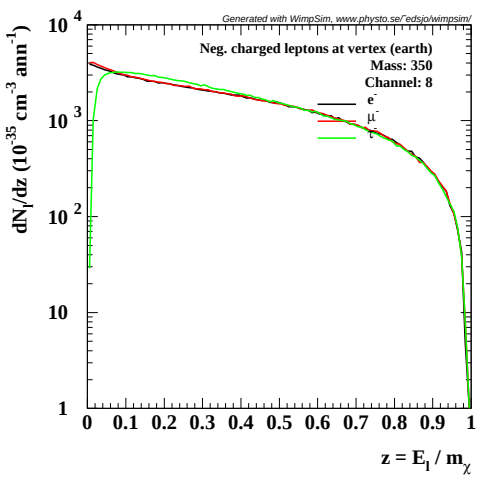


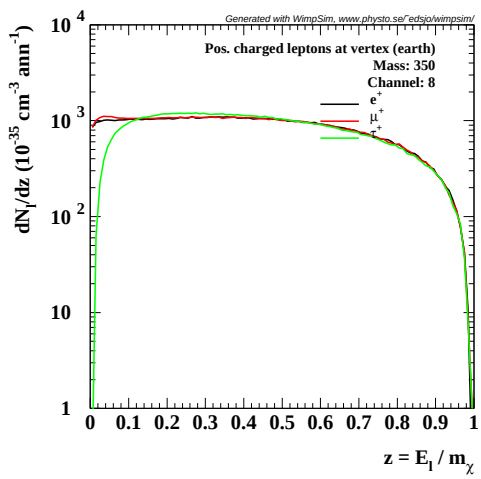
13.8.4 Neutrino fluxes at detector (Earth)



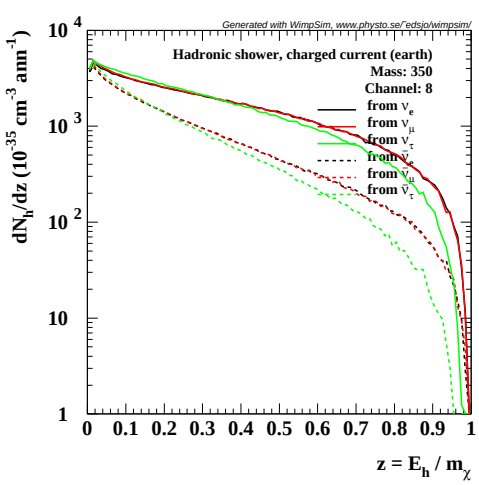


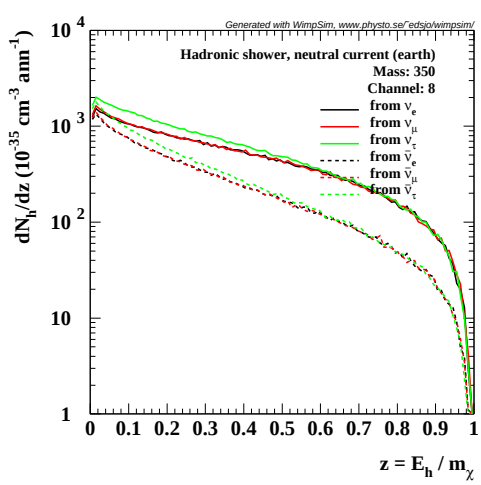
13.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



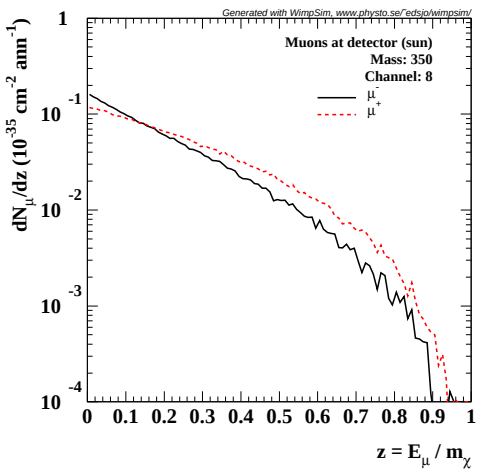


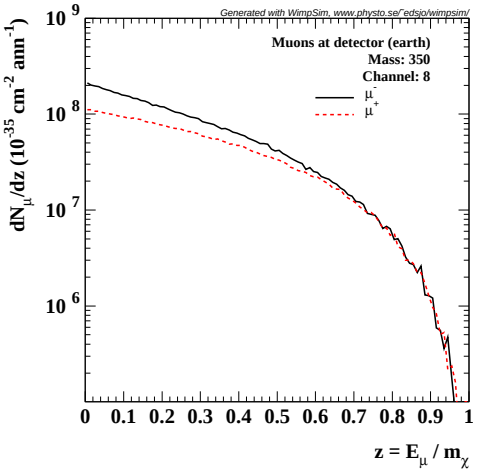
13.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





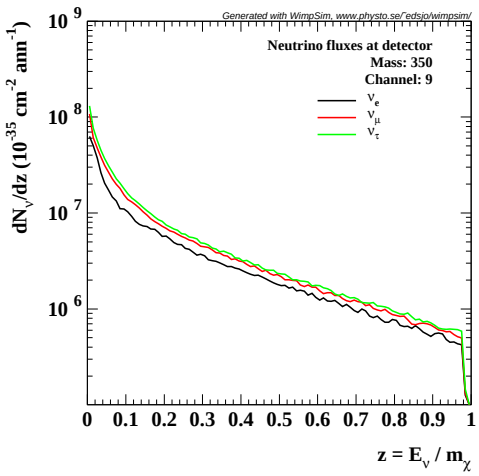
13.8.7 Muons at detector (Sun/Earth)

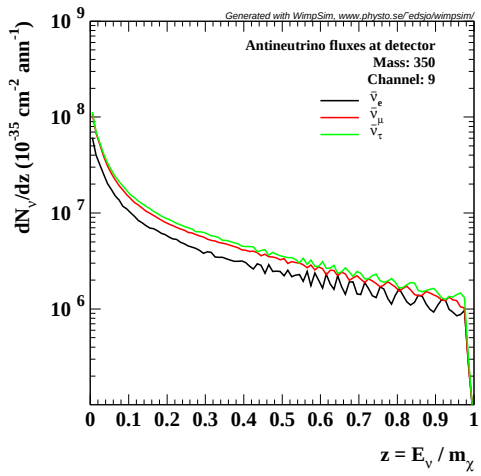




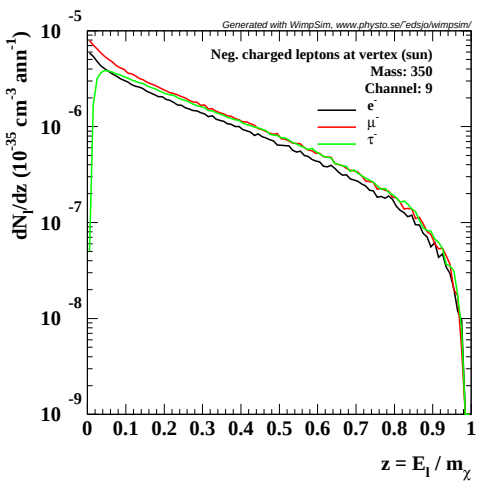
13.9 Channel 9 – $Z^0 Z^0$

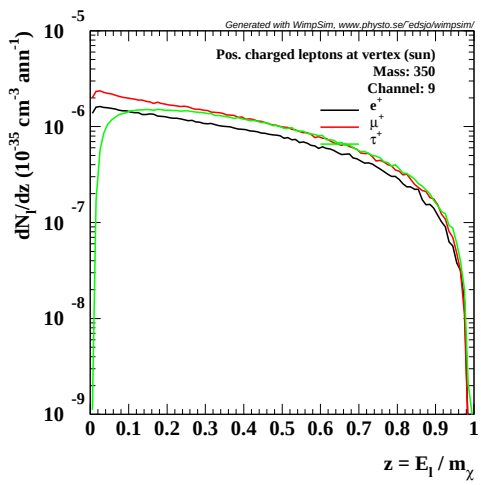
13.9.1 Neutrino fluxes at detector (Sun)



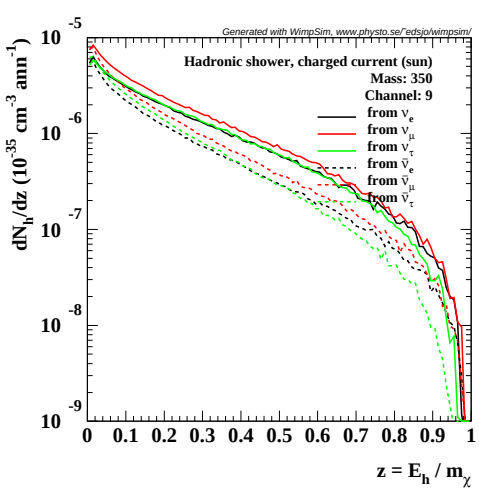


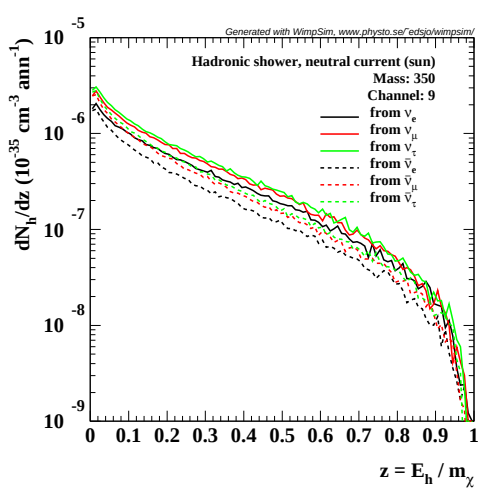
13.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



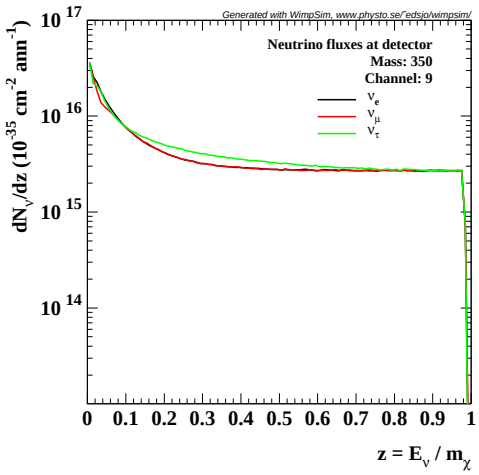


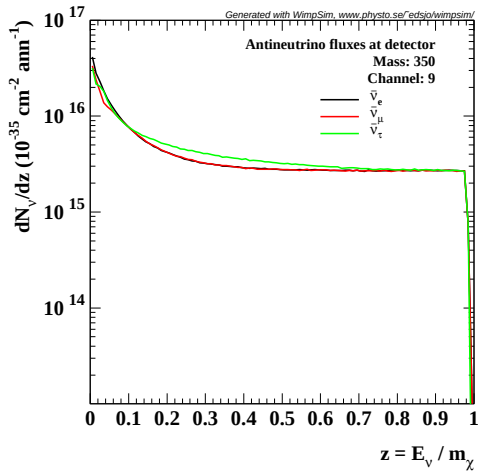
13.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



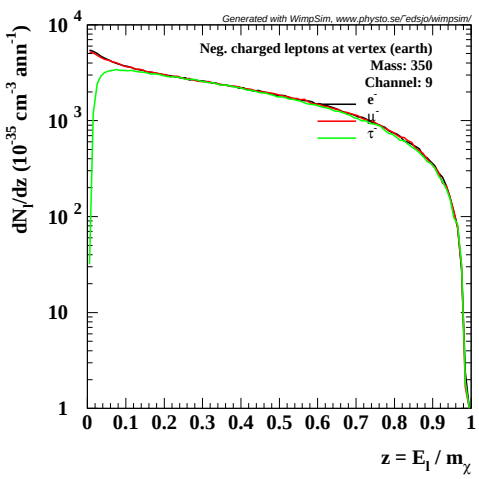


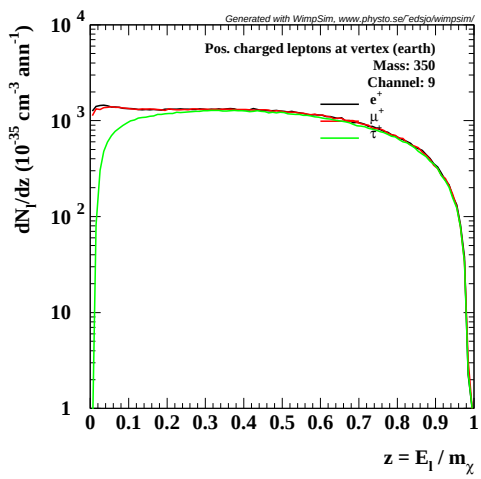
13.9.4 Neutrino fluxes at detector (Earth)



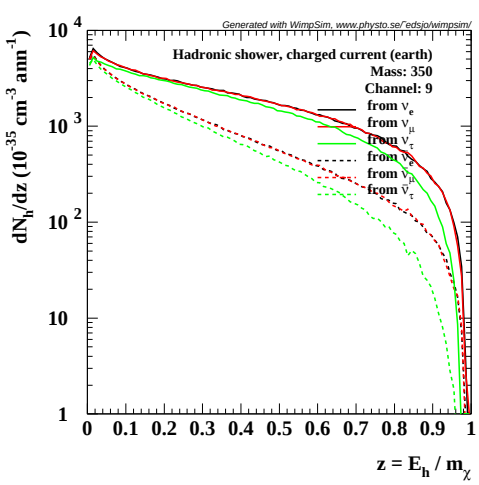


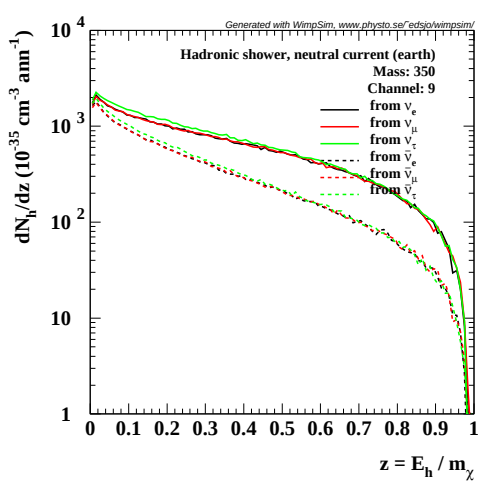
13.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



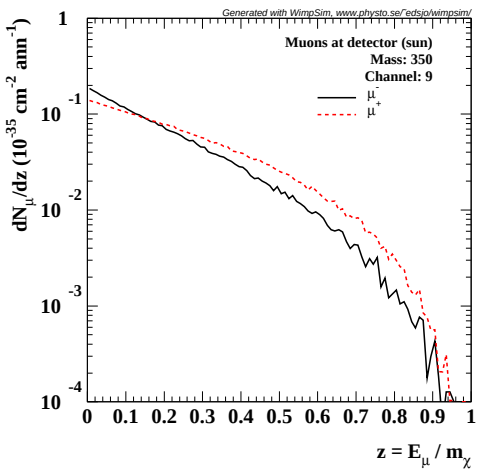


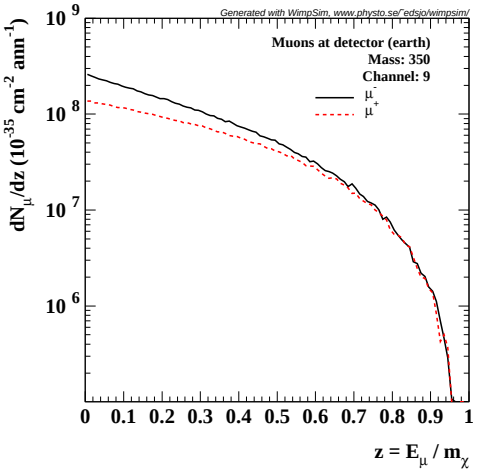
13.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





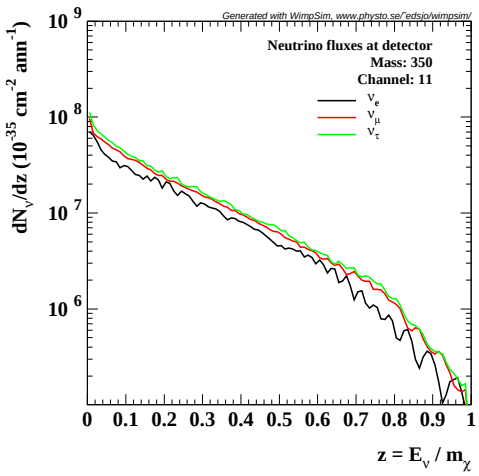
13.9.7 Muons at detector (Sun/Earth)

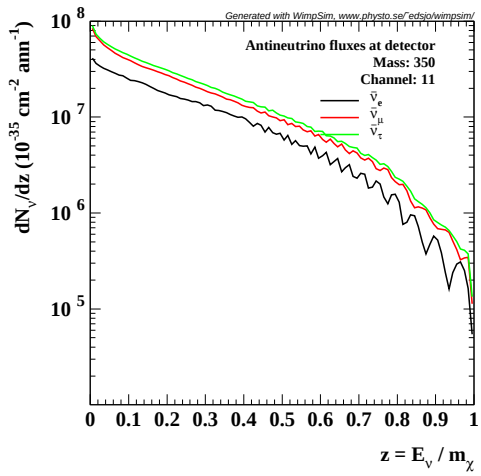




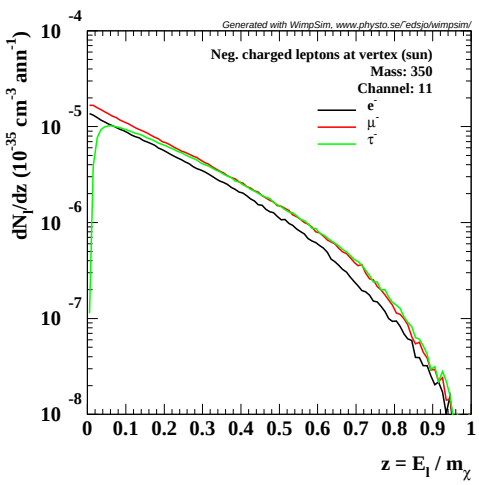
13.10 Channel 11 – $\tau^-\tau^+$

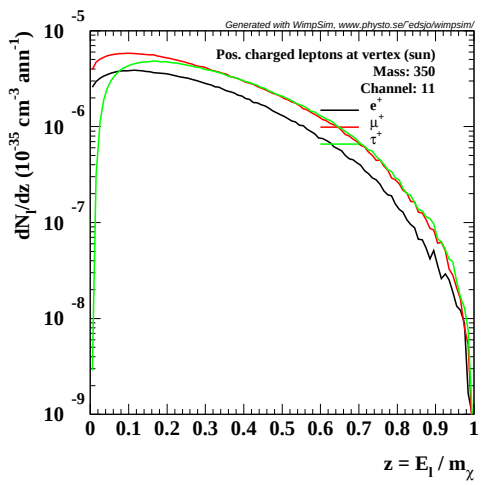
13.10.1 Neutrino fluxes at detector (Sun)



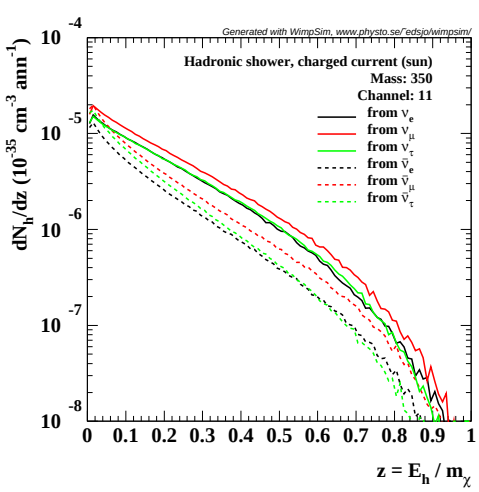


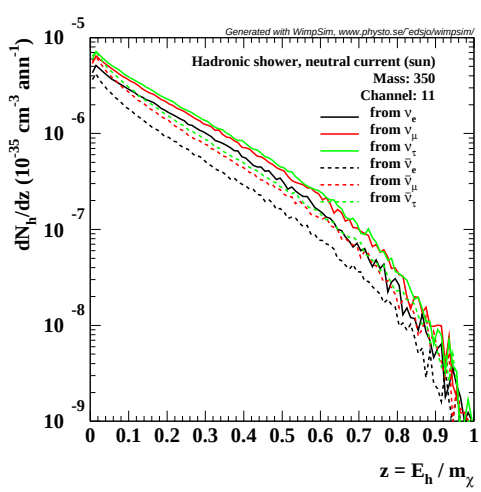
13.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



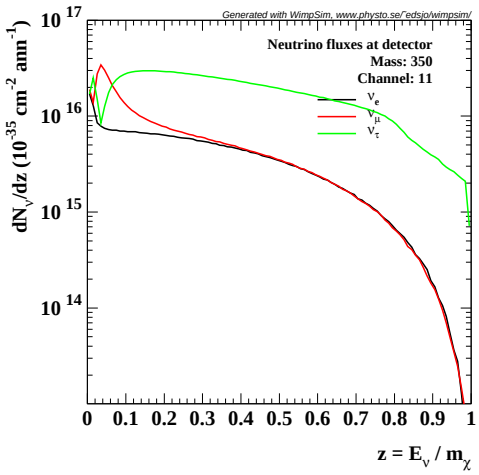


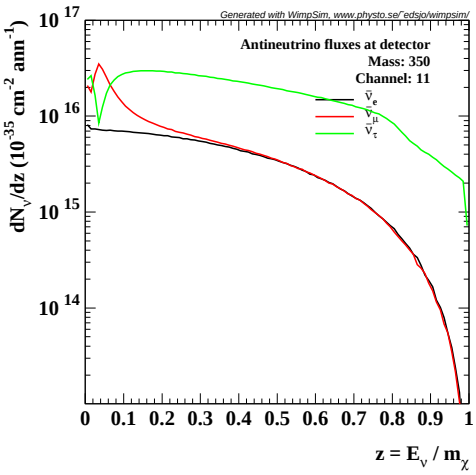
13.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



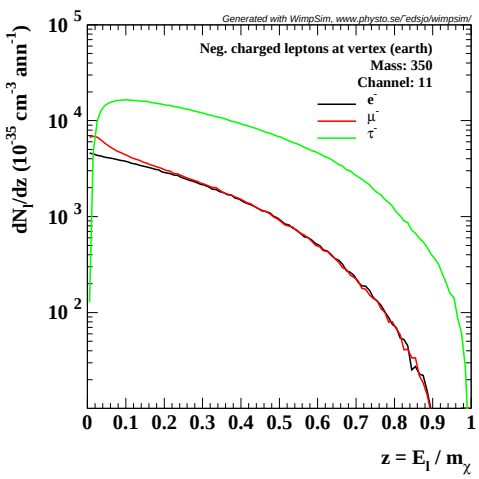


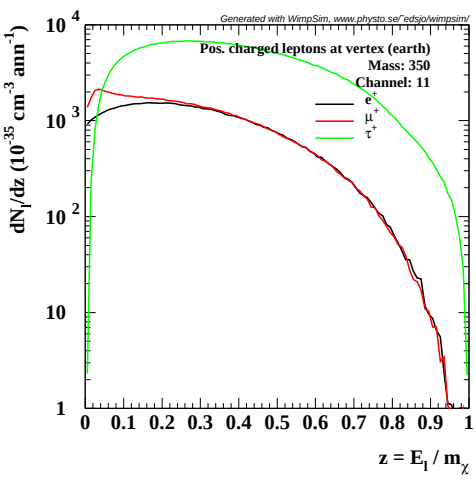
13.10.4 Neutrino fluxes at detector (Earth)



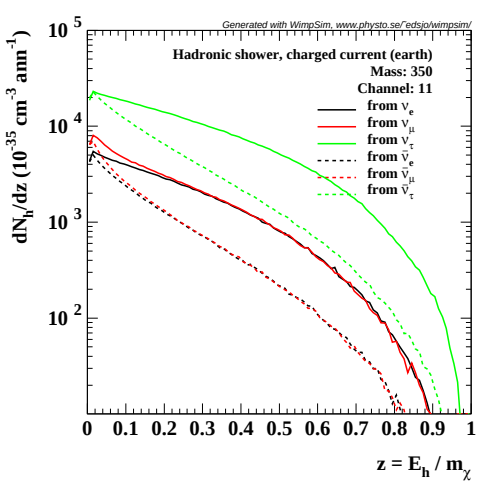


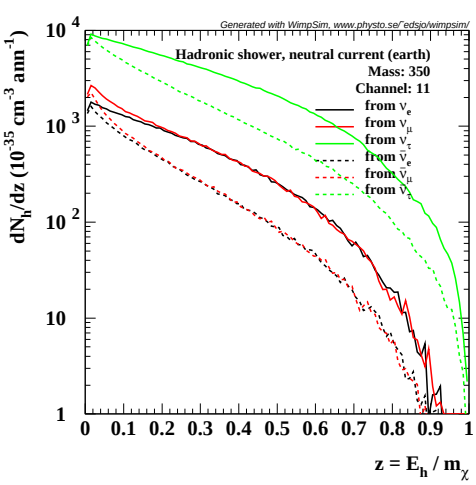
13.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



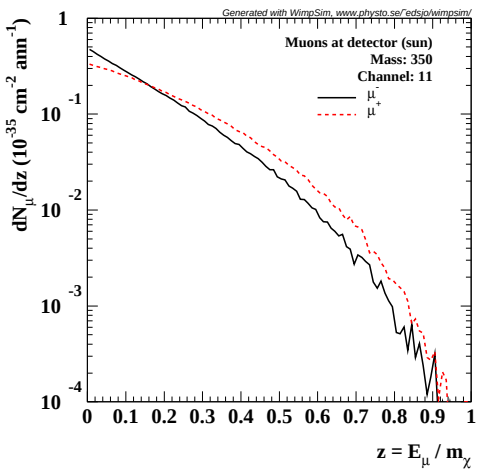


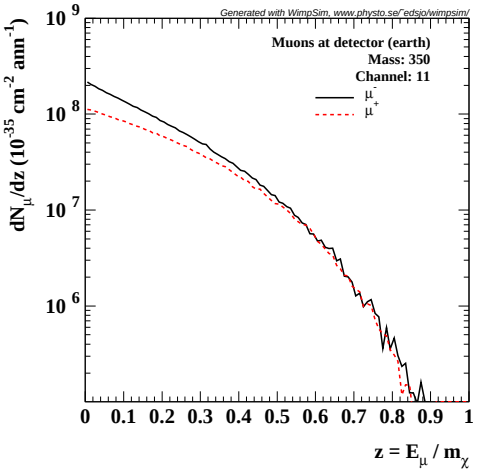
13.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





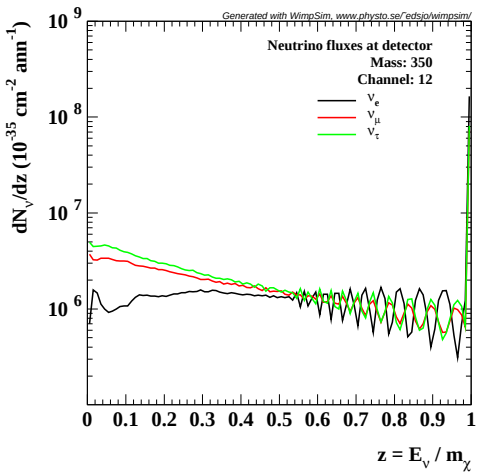
13.10.7 Muons at detector (Sun/Earth)

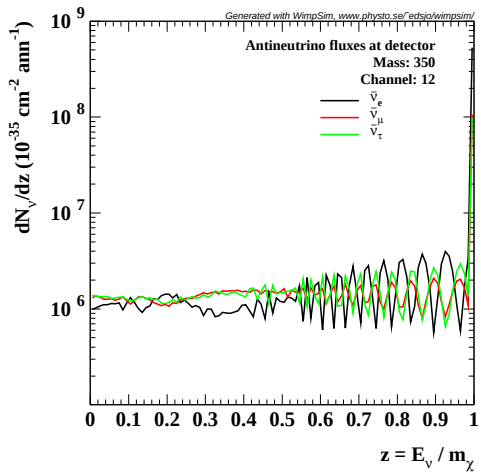




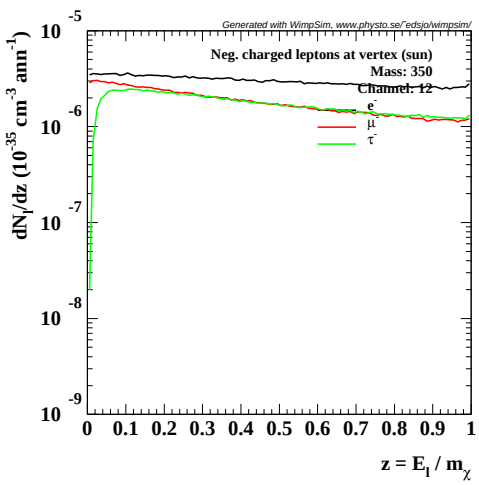
13.11 Channel 12 – $\nu_e\bar{\nu}_e$

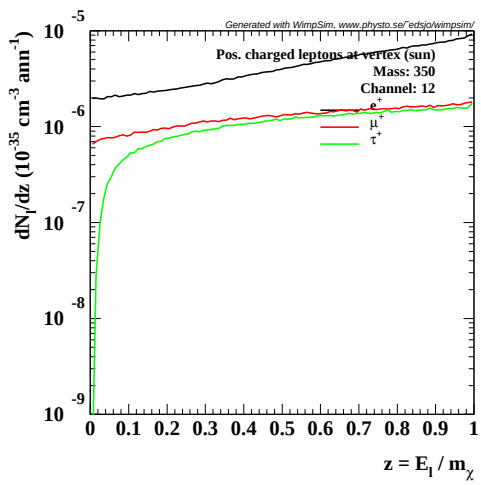
13.11.1 Neutrino fluxes at detector (Sun)



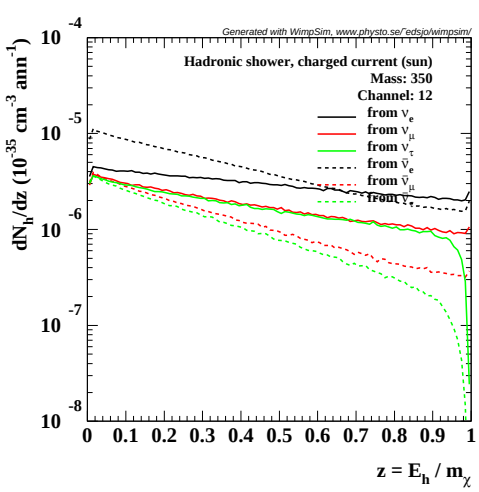


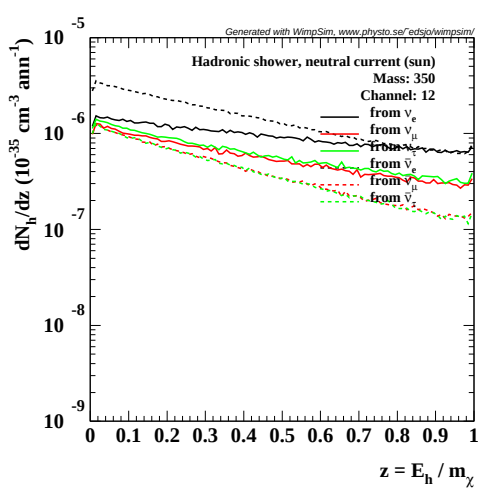
13.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



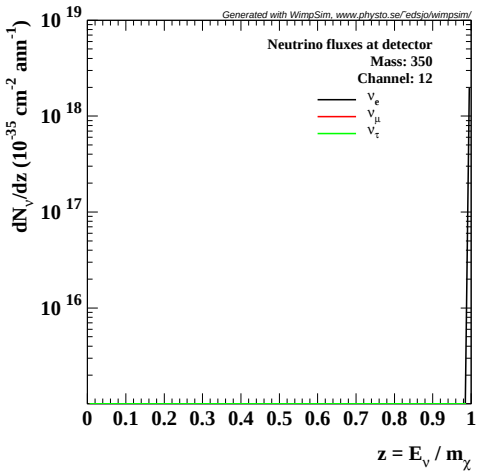


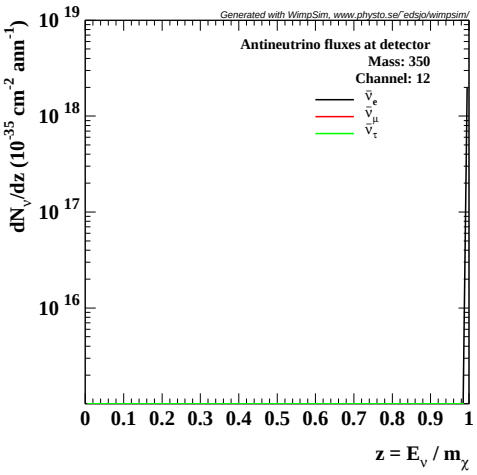
13.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



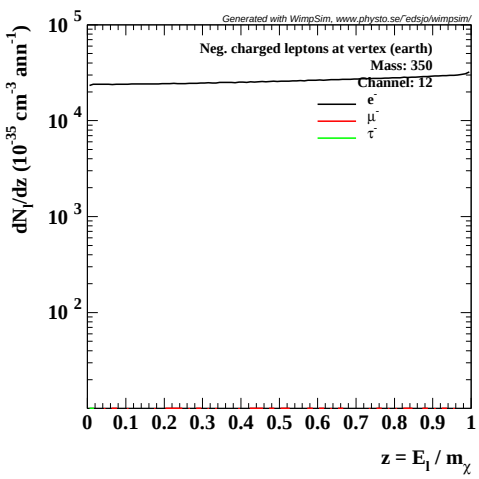


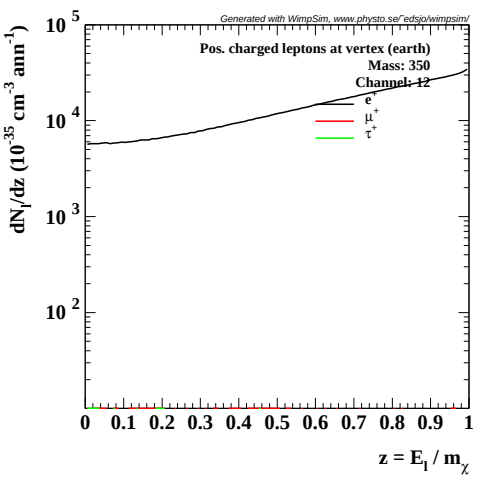
13.11.4 Neutrino fluxes at detector (Earth)



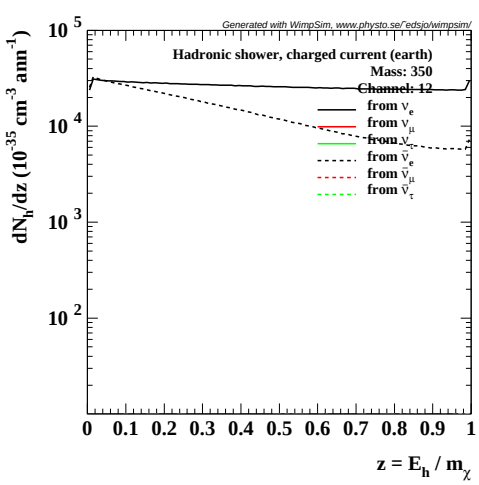


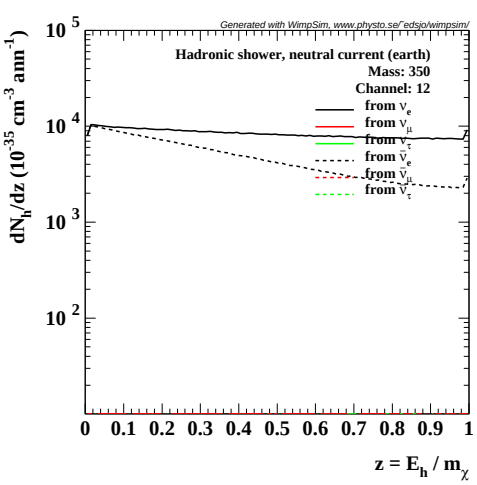
13.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



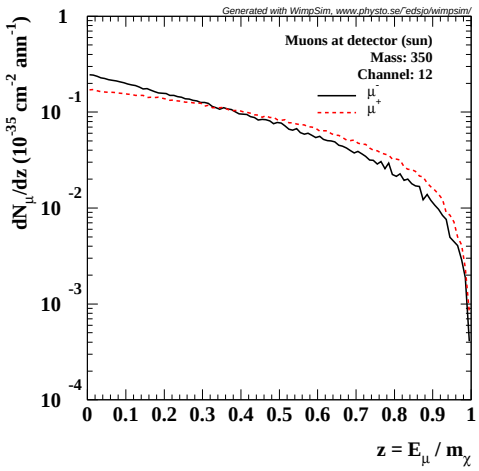


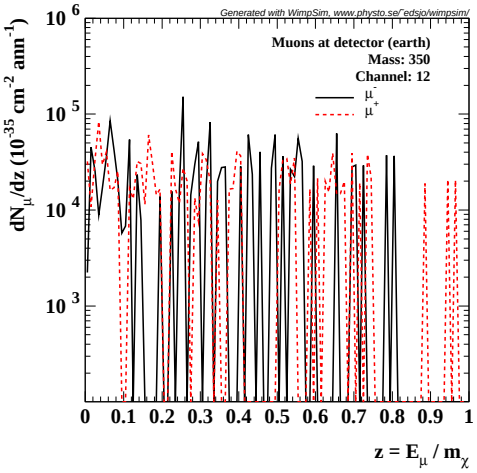
13.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





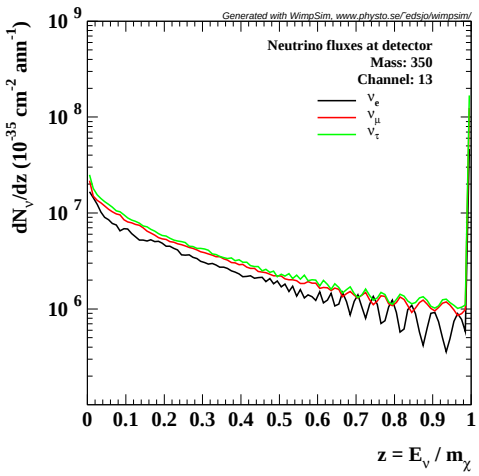
13.11.7 Muons at detector (Sun/Earth)

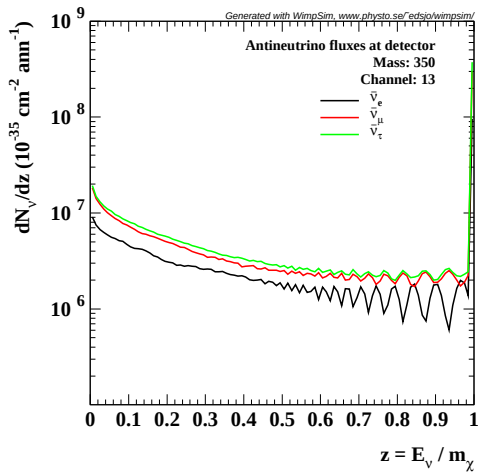




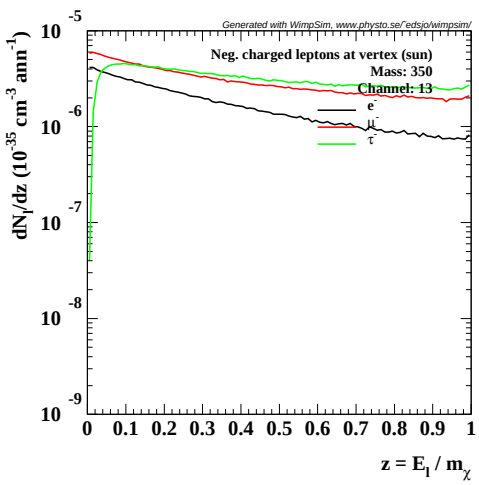
13.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

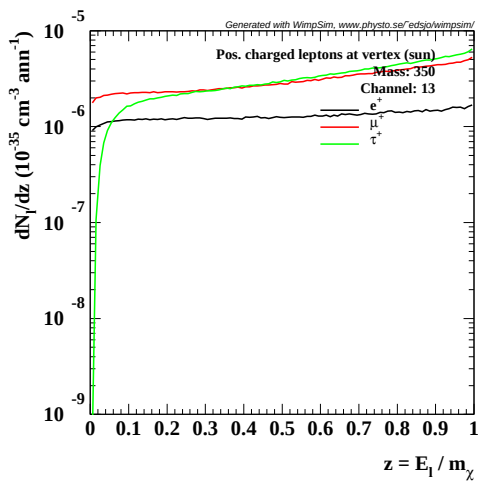
13.12.1 Neutrino fluxes at detector (Sun)



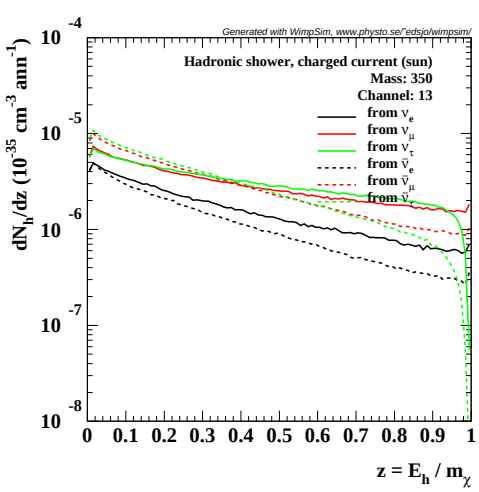


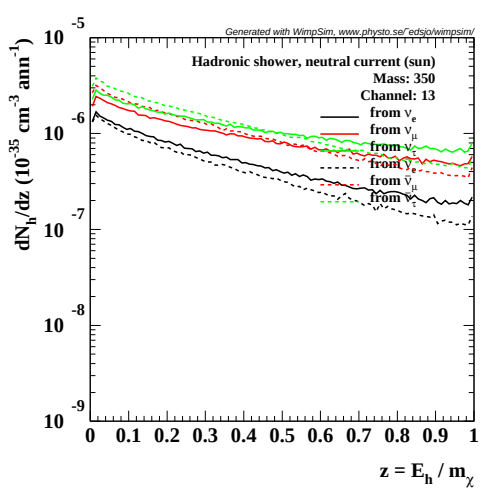
13.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



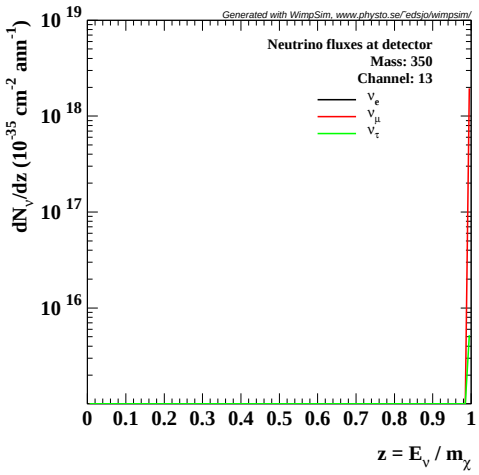


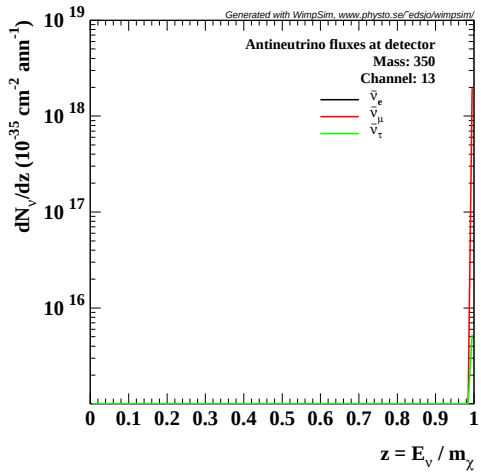
13.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



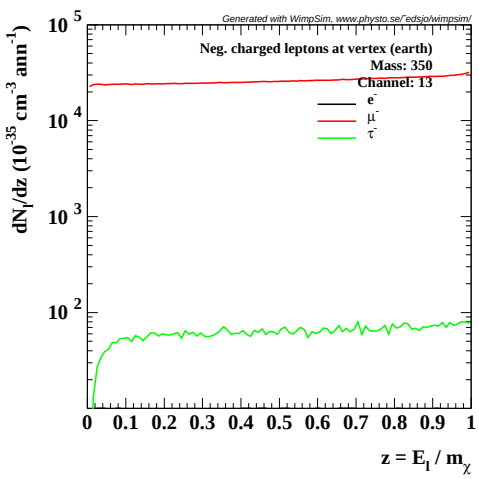


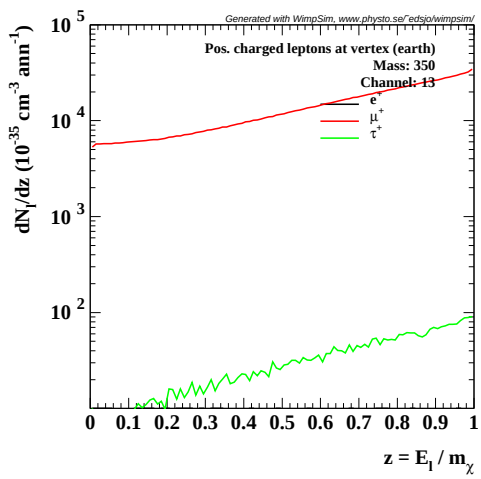
13.12.4 Neutrino fluxes at detector (Earth)



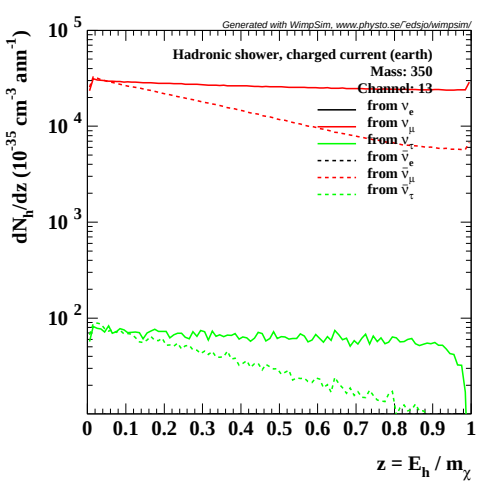


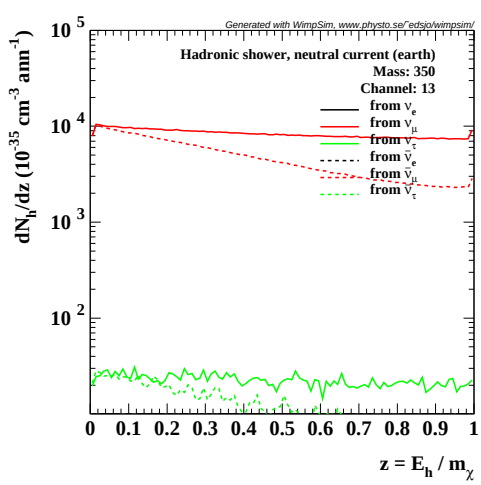
13.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



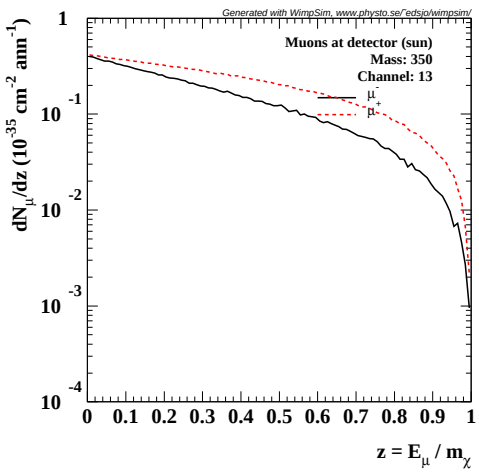


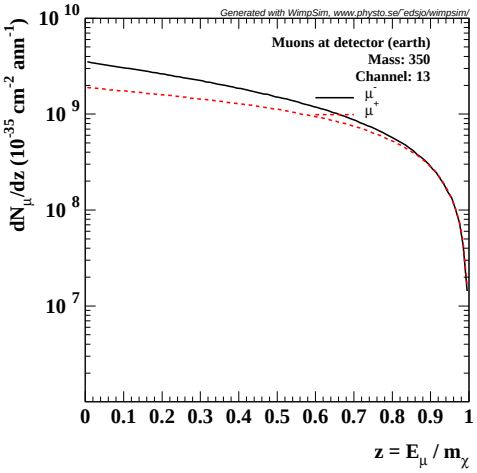
13.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





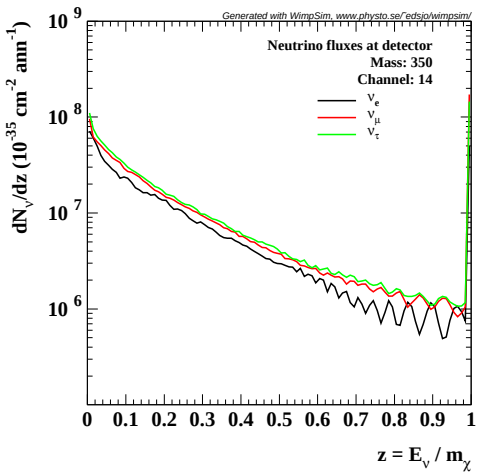
13.12.7 Muons at detector (Sun/Earth)

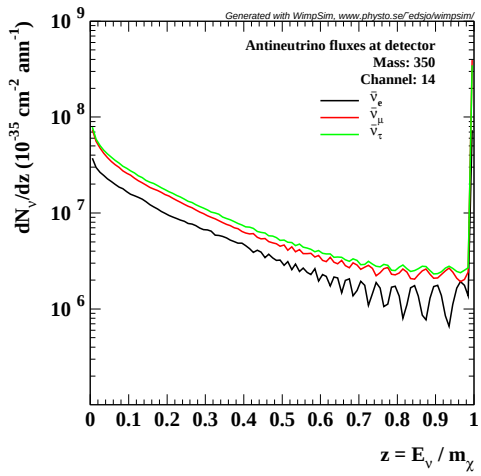




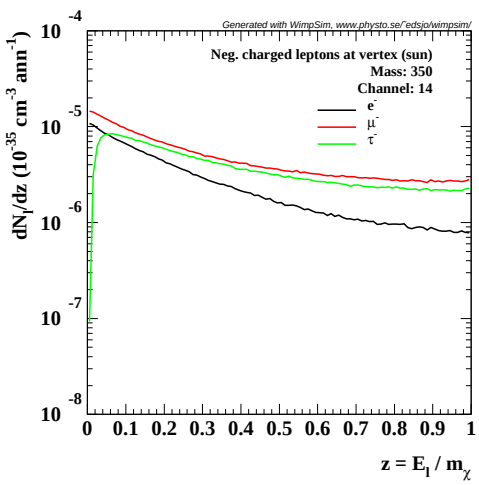
13.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

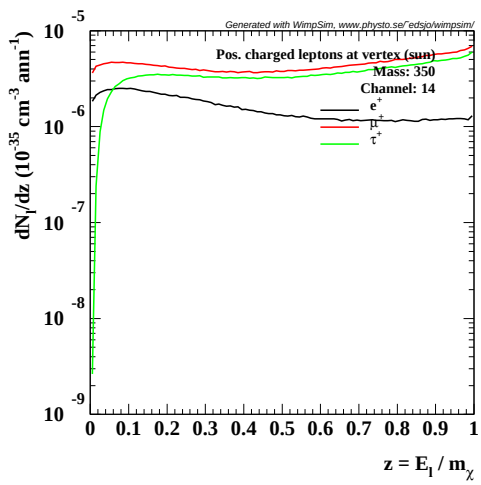
13.13.1 Neutrino fluxes at detector (Sun)



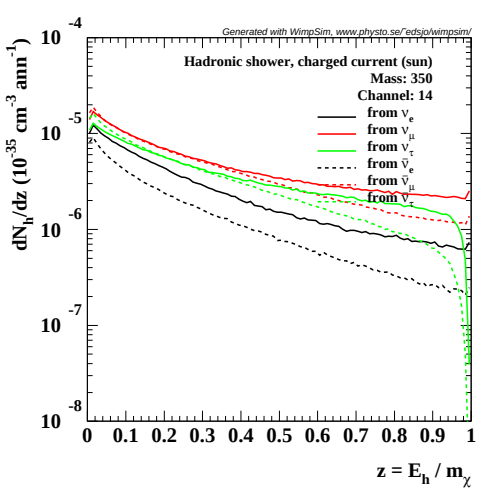


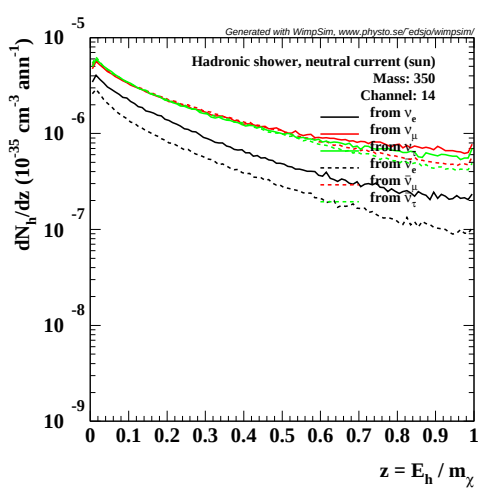
13.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



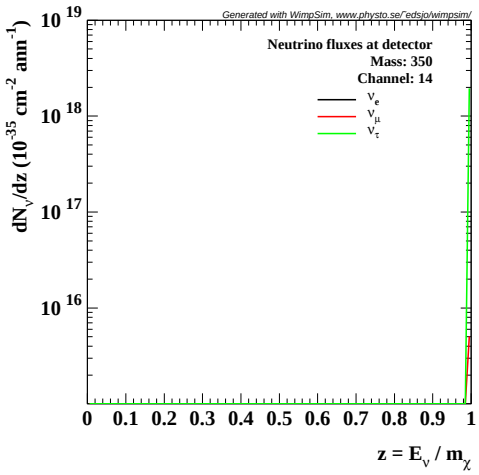


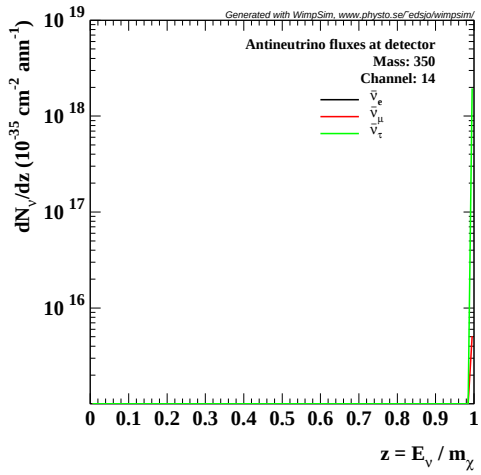
13.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



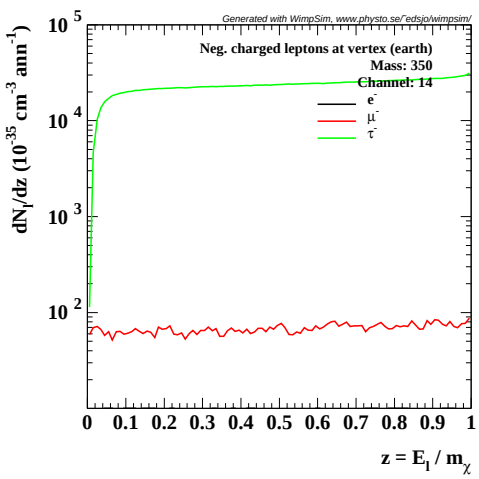


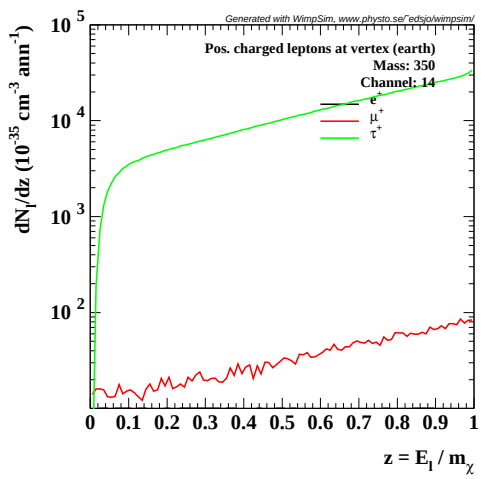
13.13.4 Neutrino fluxes at detector (Earth)



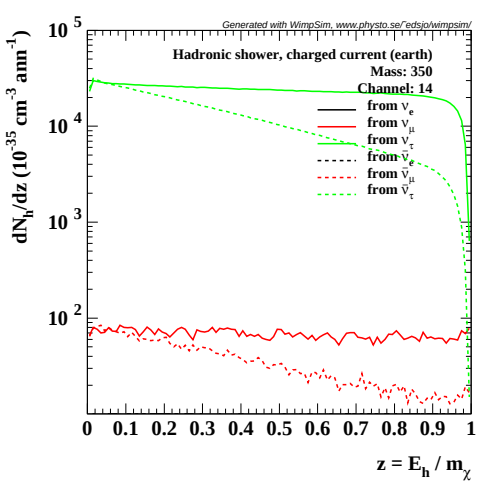


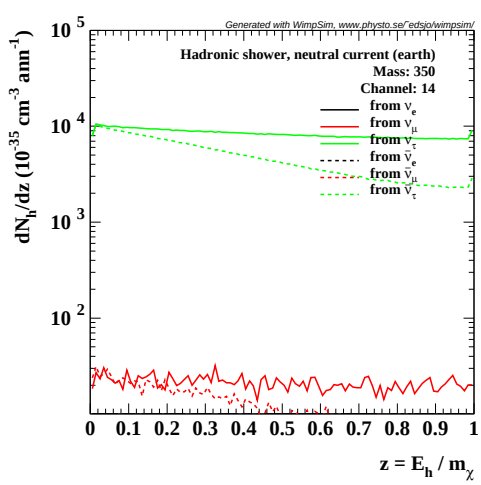
13.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



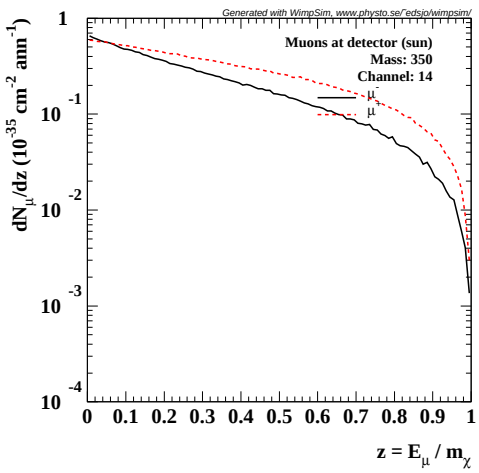


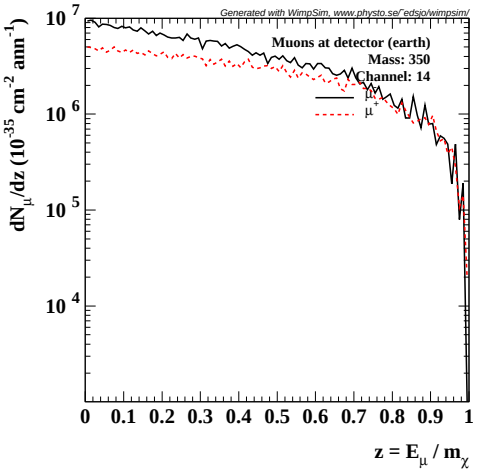
13.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





13.13.7 Muons at detector (Sun/Earth)

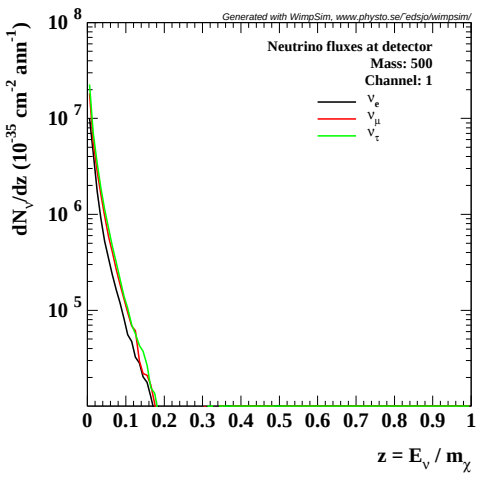


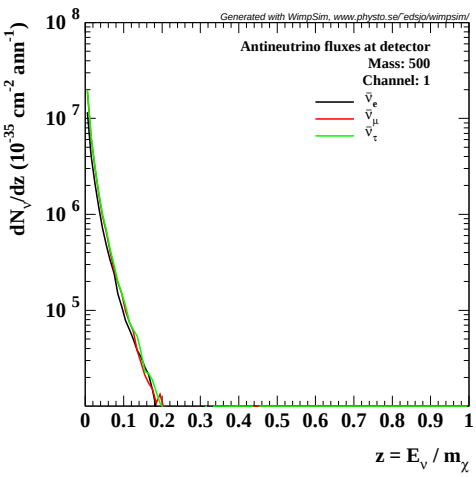


14 Mass 500

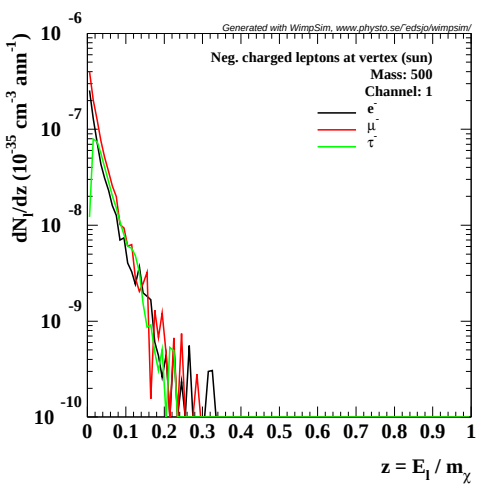
14.1 Channel 1 – $d\bar{d}$

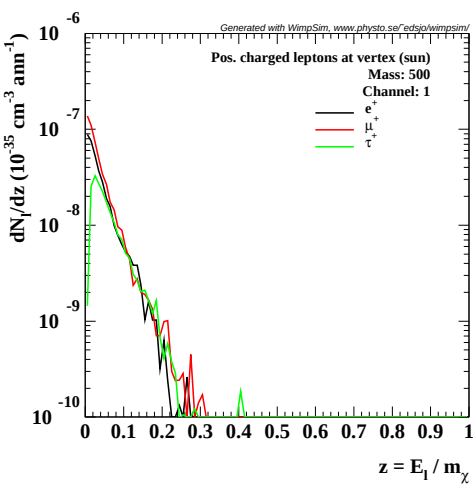
14.1.1 Neutrino fluxes at detector (Sun)



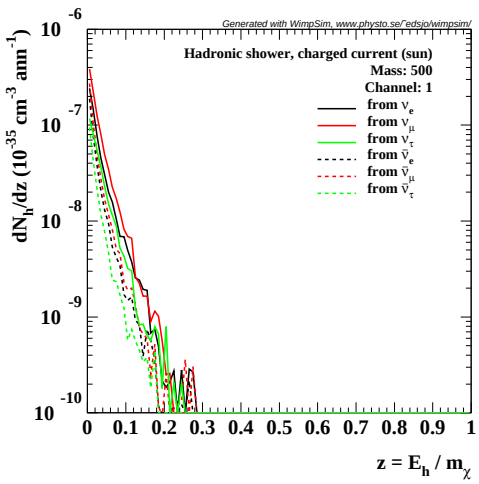


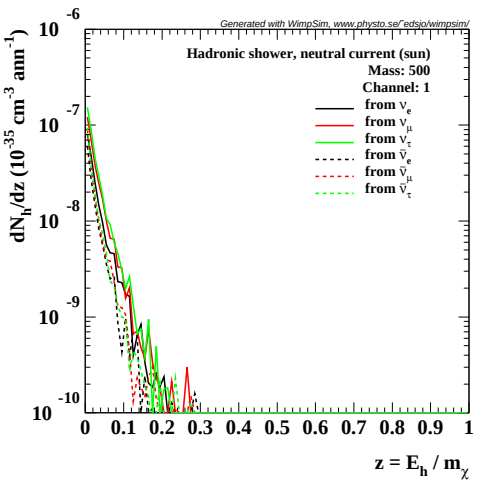
14.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



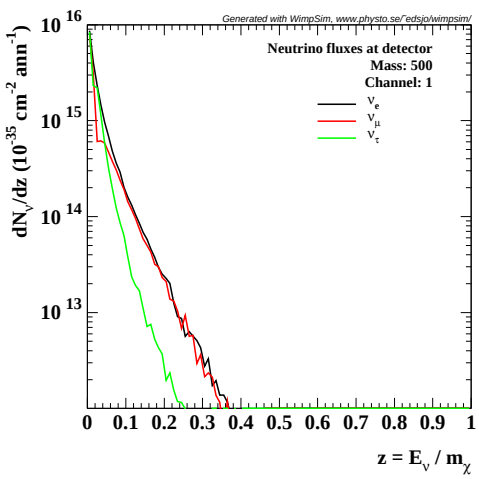


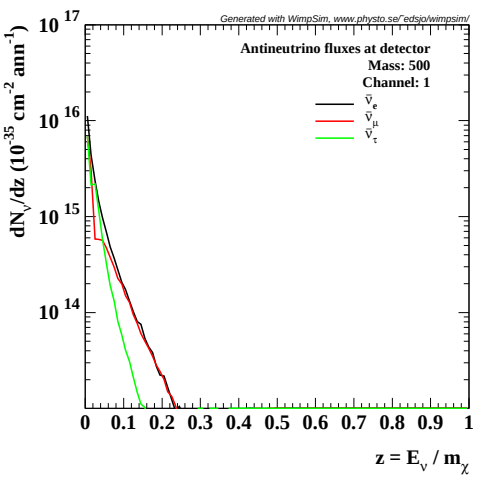
14.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



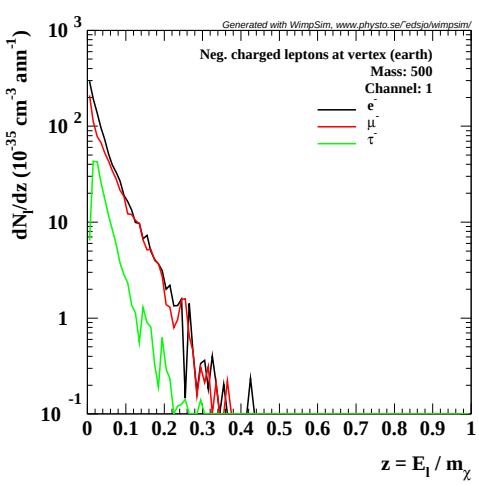


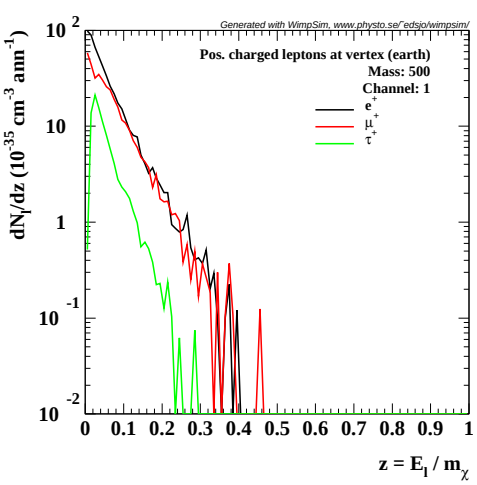
14.1.4 Neutrino fluxes at detector (Earth)



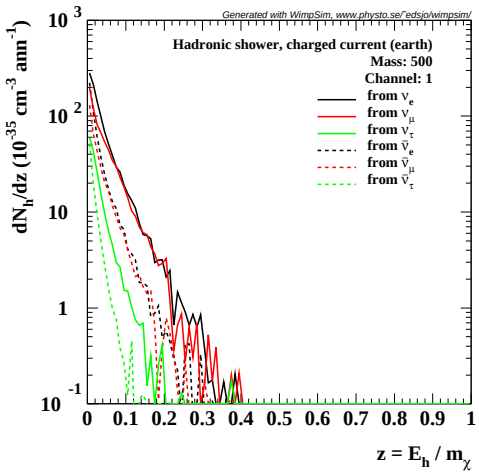


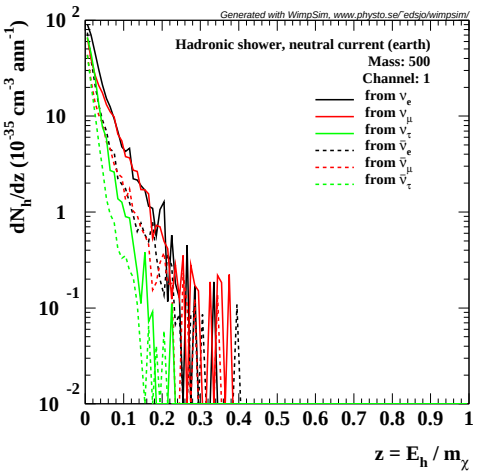
14.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



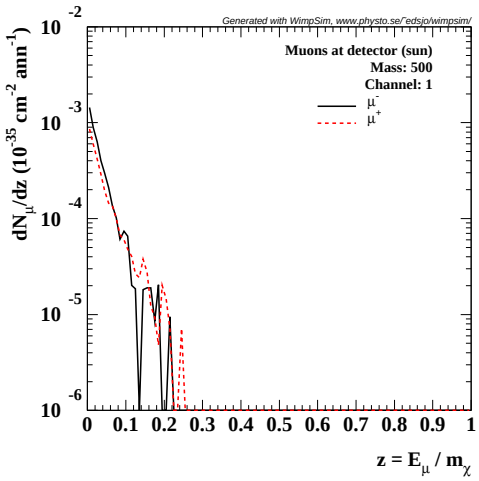


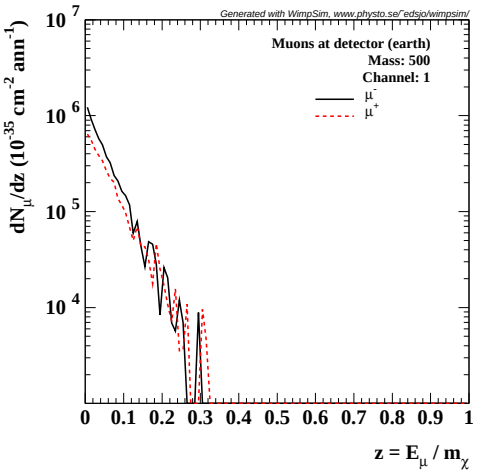
14.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





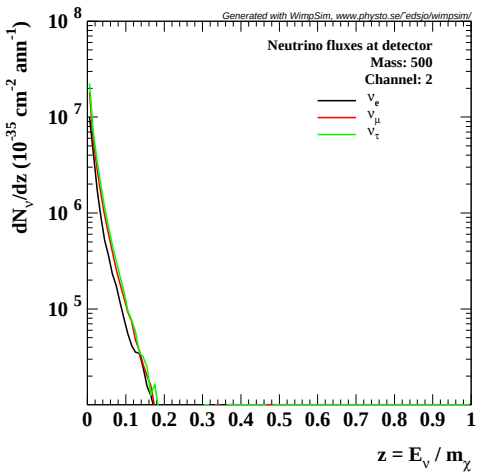
14.1.7 Muons at detector (Sun/Earth)

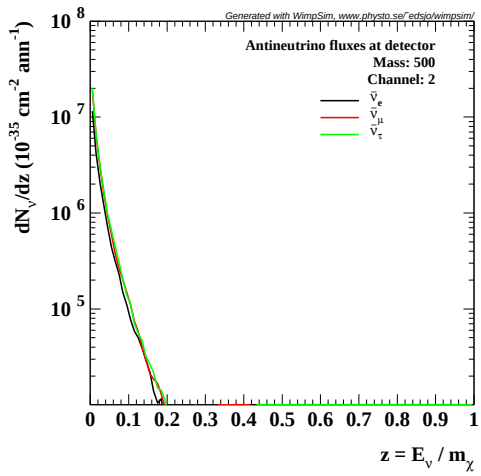




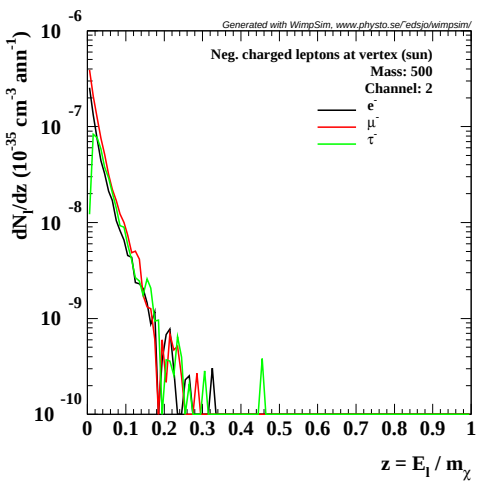
14.2 Channel 2 – $u\bar{u}$

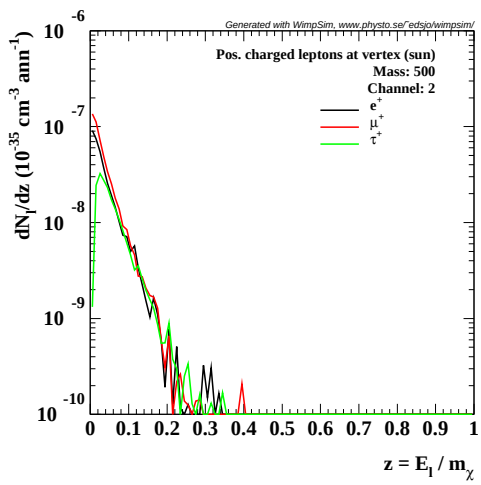
14.2.1 Neutrino fluxes at detector (Sun)



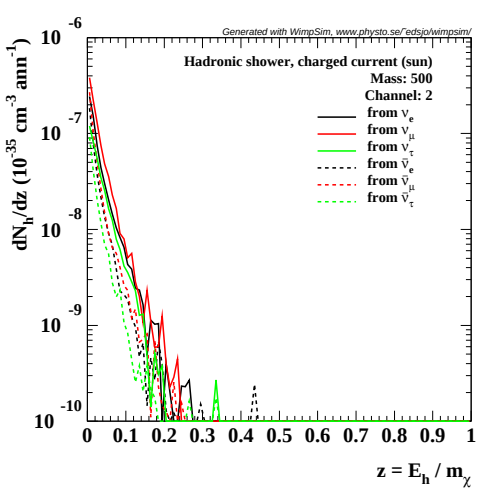


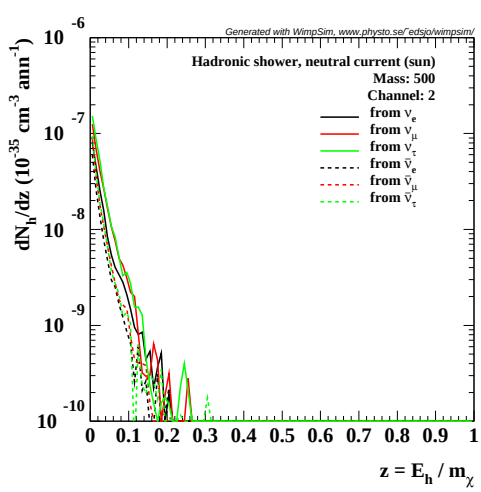
14.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



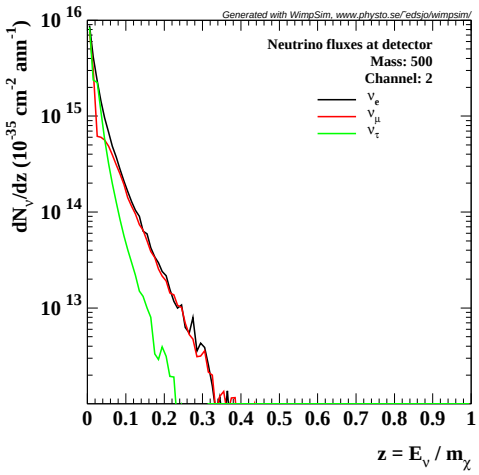


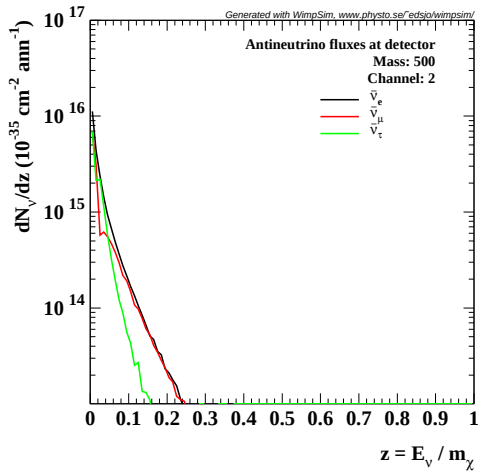
14.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



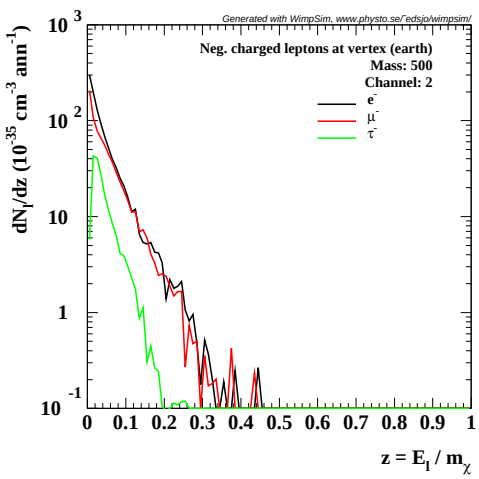


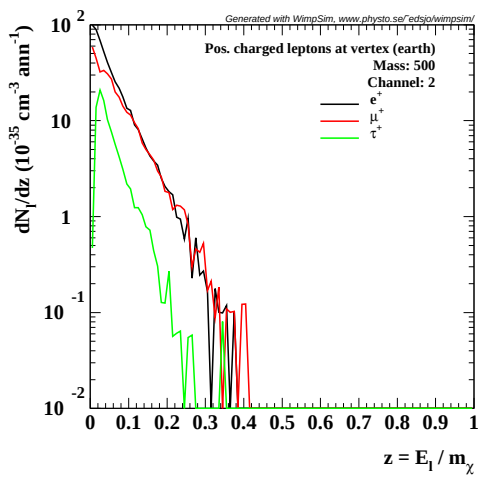
14.2.4 Neutrino fluxes at detector (Earth)



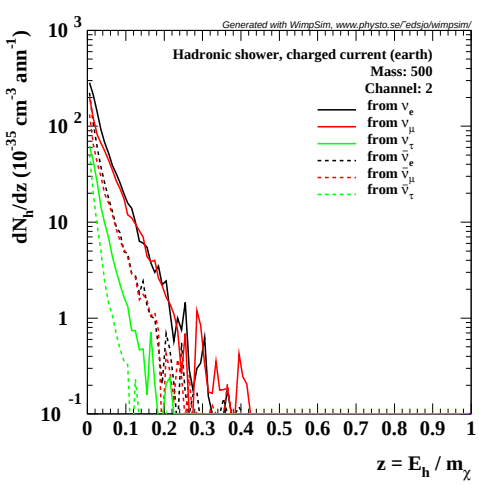


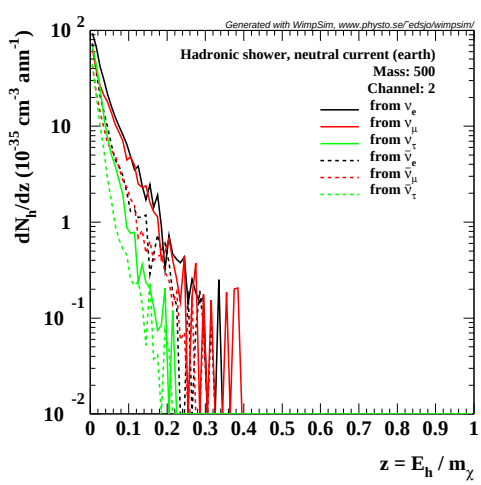
14.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



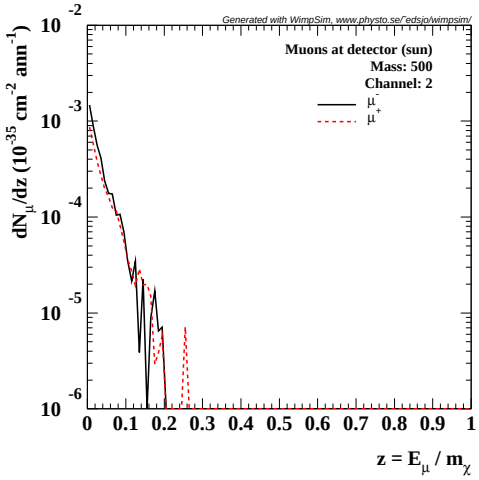


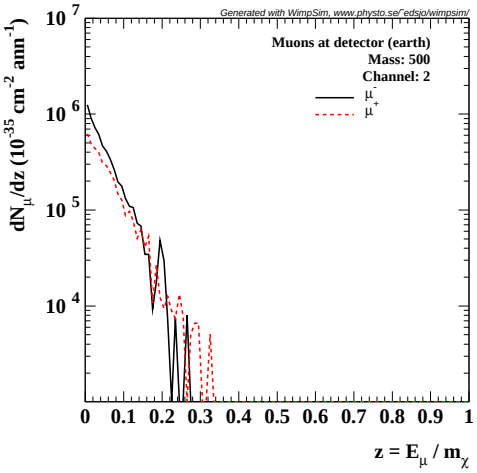
14.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





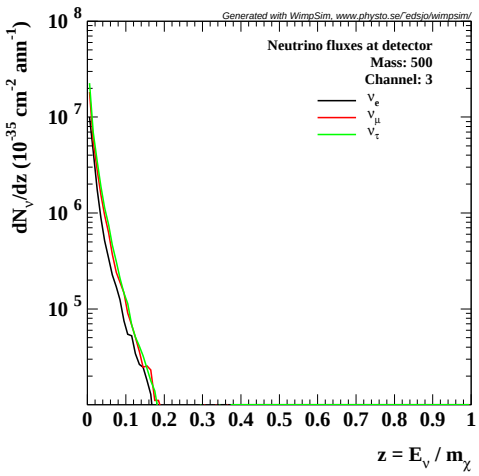
14.2.7 Muons at detector (Sun/Earth)

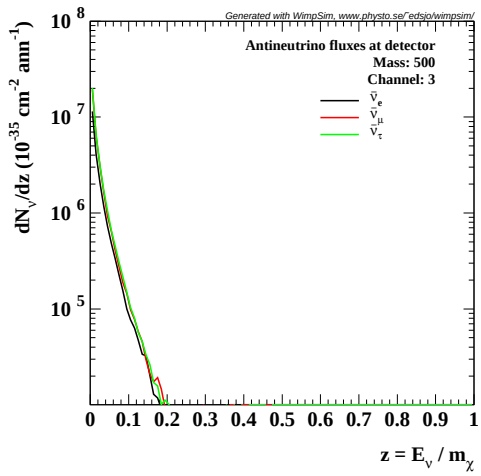




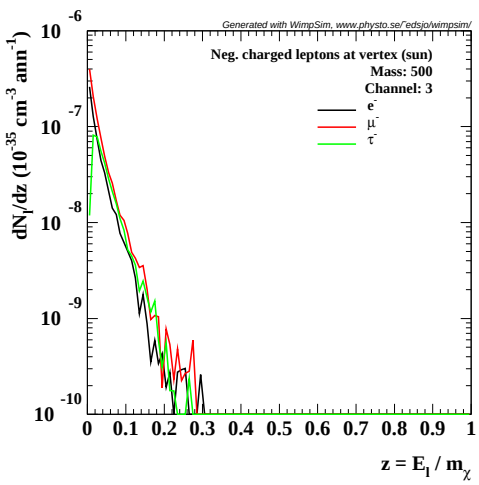
14.3 Channel 3 – $s\bar{s}$

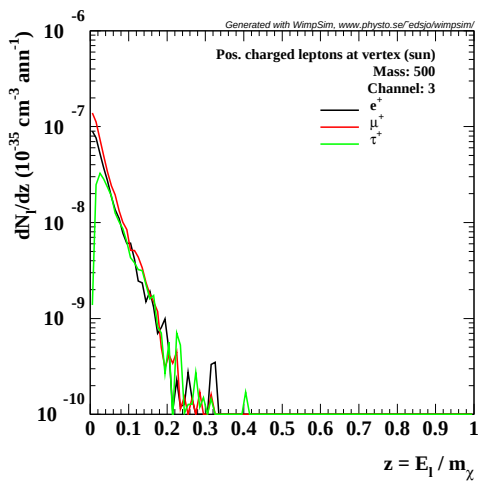
14.3.1 Neutrino fluxes at detector (Sun)



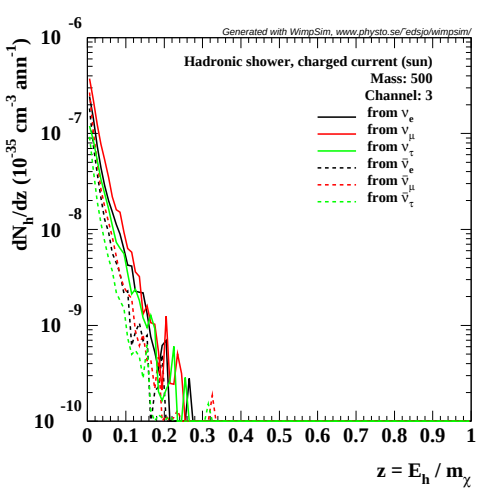


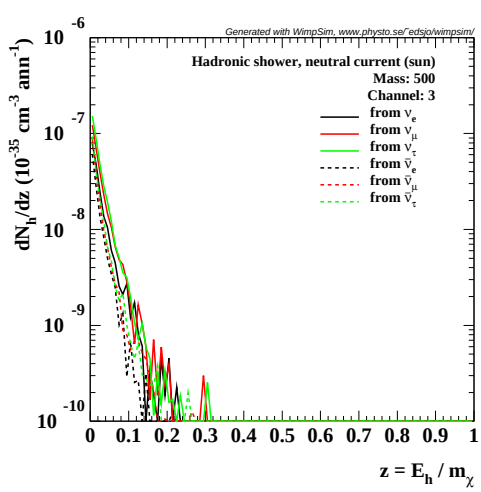
14.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



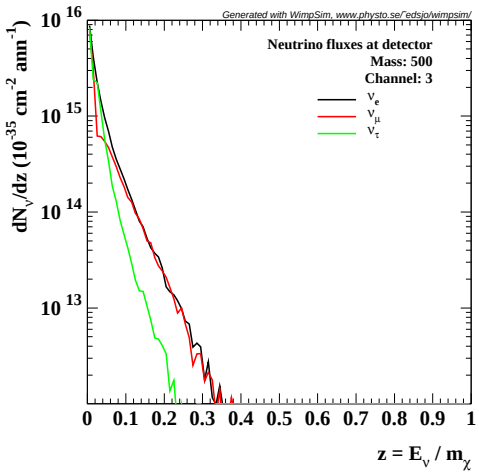


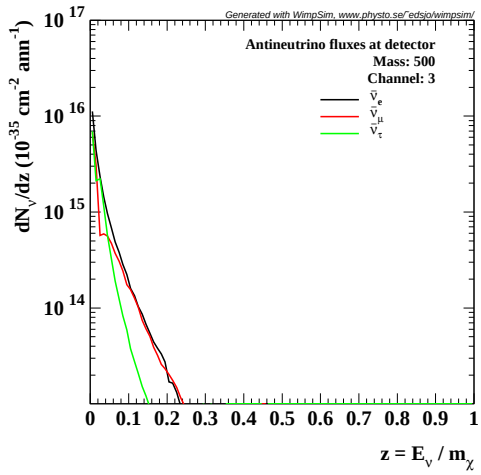
14.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



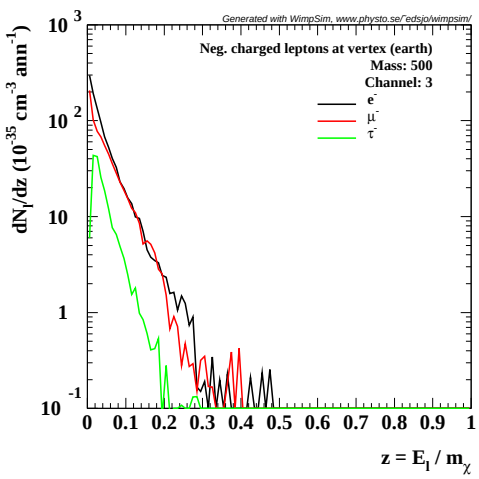


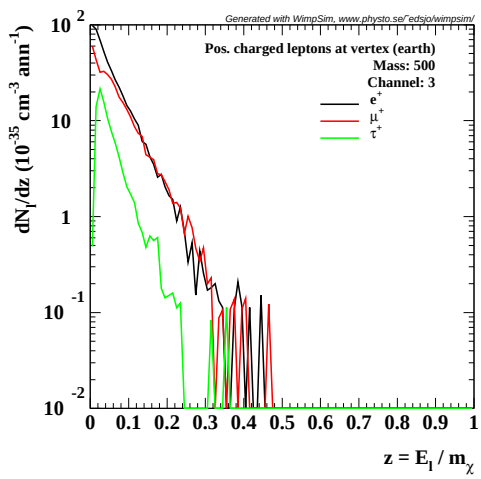
14.3.4 Neutrino fluxes at detector (Earth)



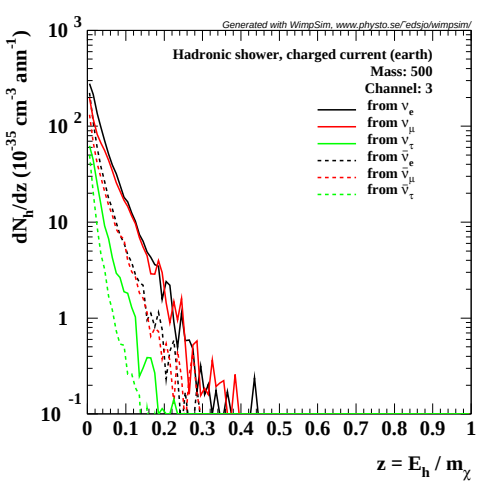


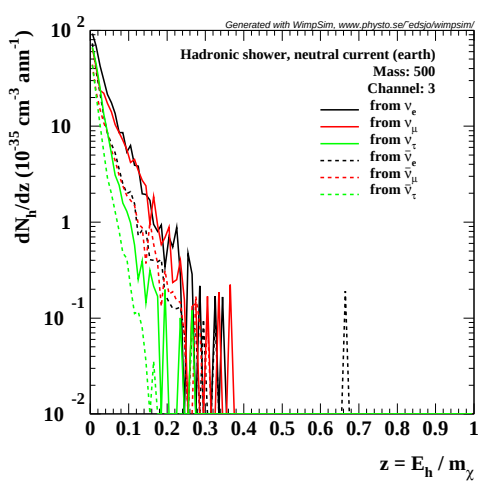
14.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



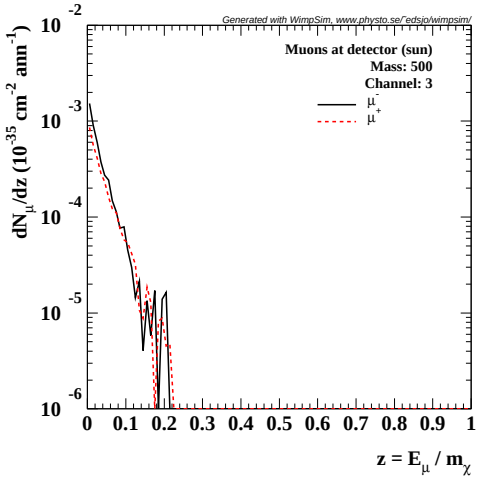


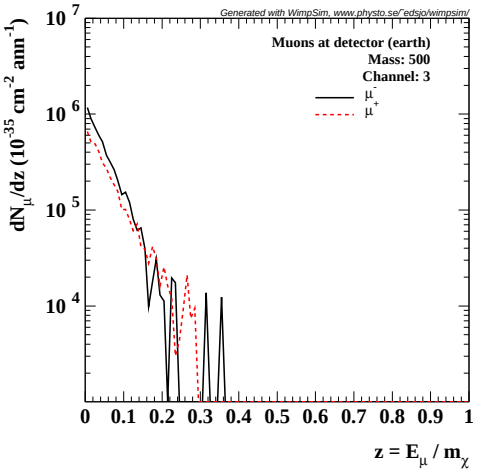
14.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





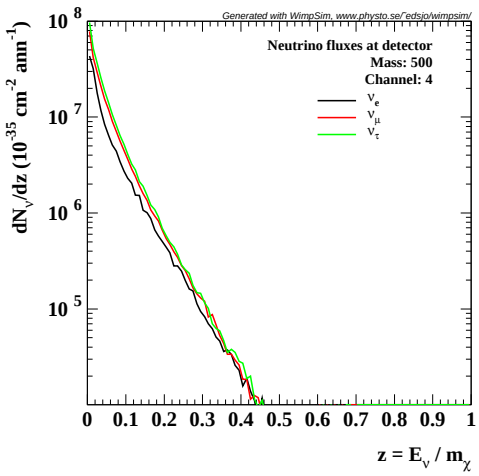
14.3.7 Muons at detector (Sun/Earth)

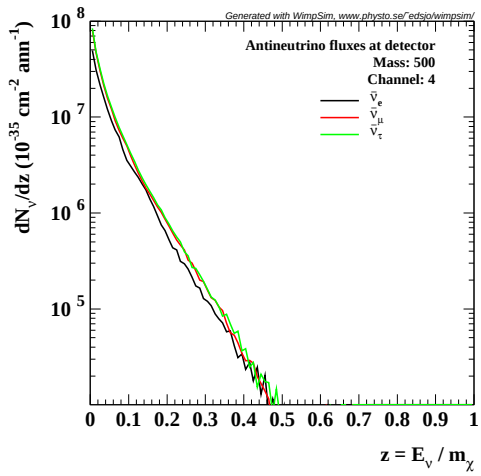




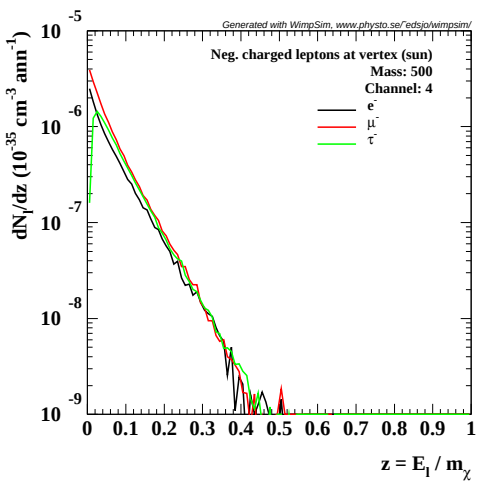
14.4 Channel 4 – $c\bar{c}$

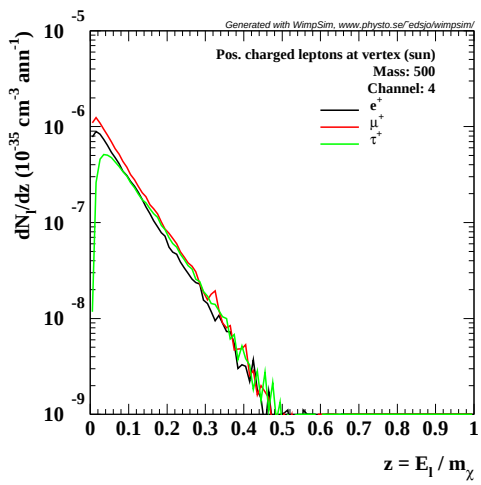
14.4.1 Neutrino fluxes at detector (Sun)



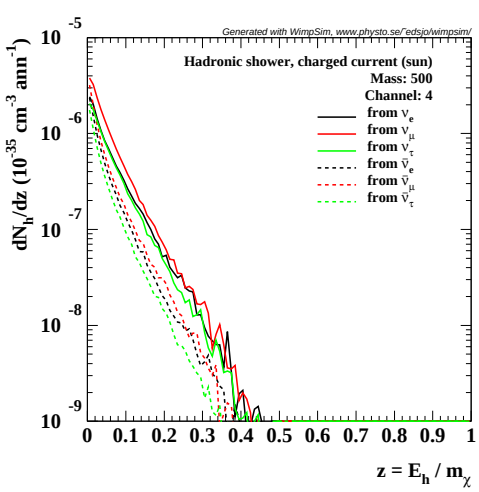


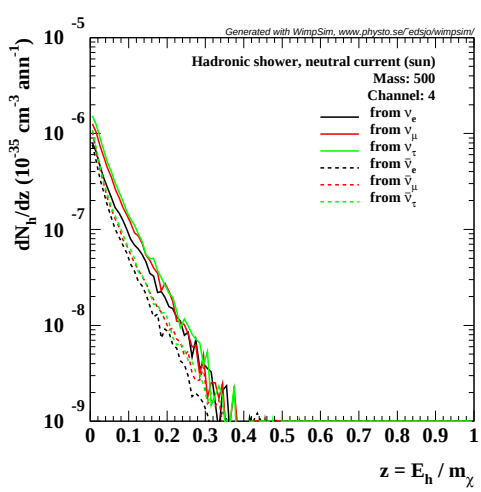
14.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



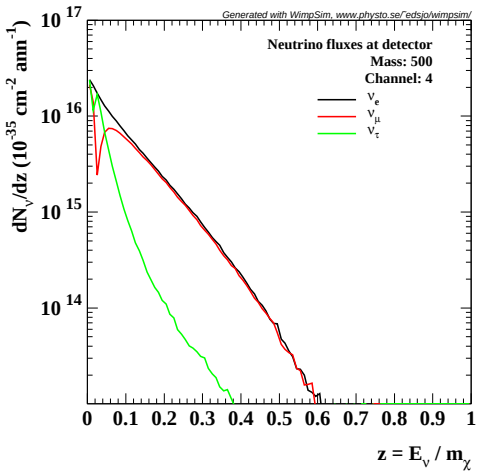


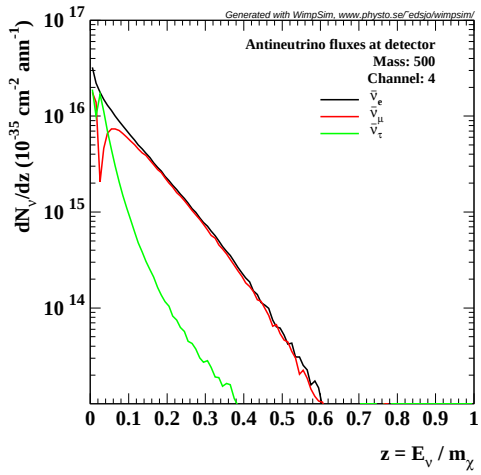
14.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



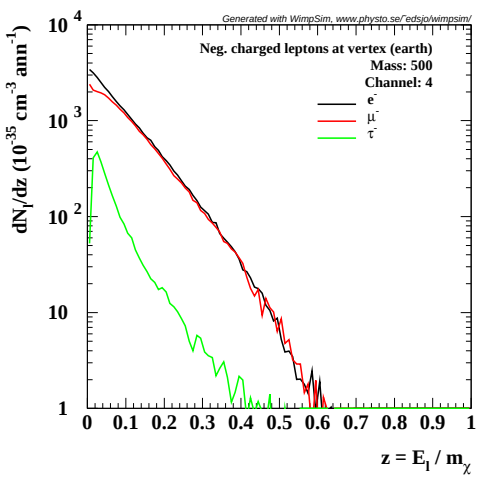


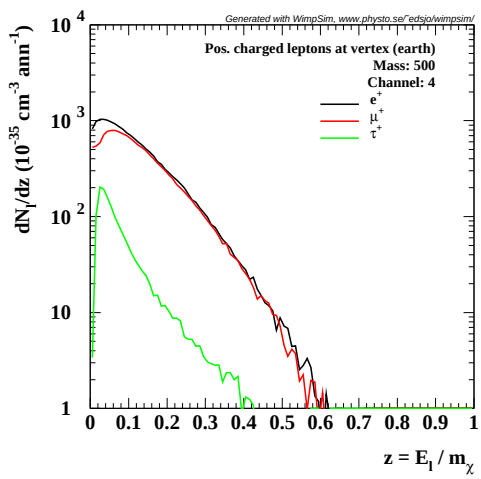
14.4.4 Neutrino fluxes at detector (Earth)



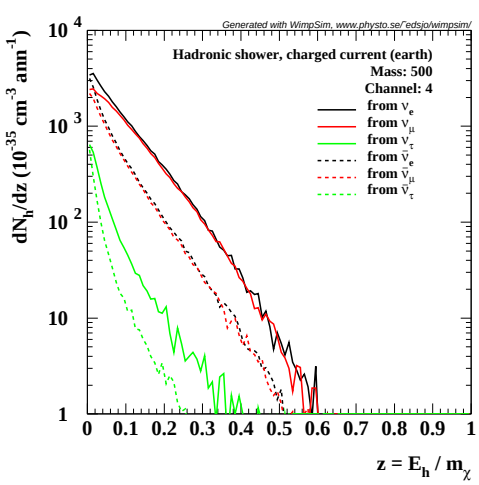


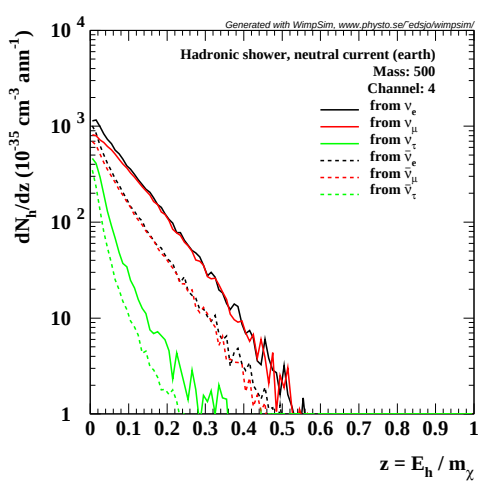
14.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



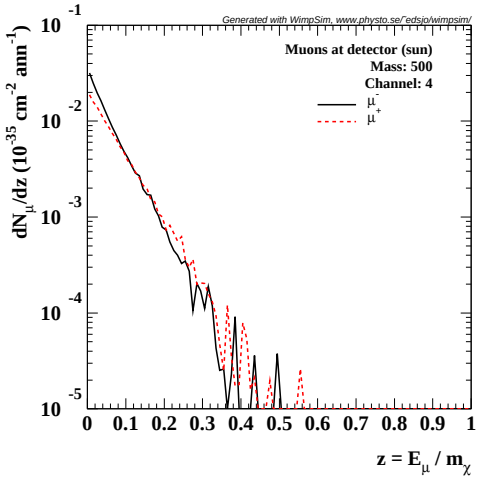


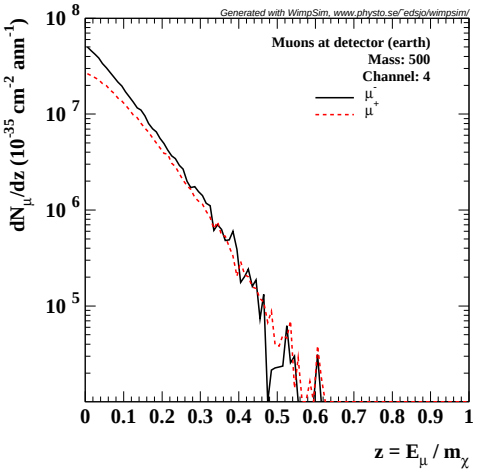
14.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





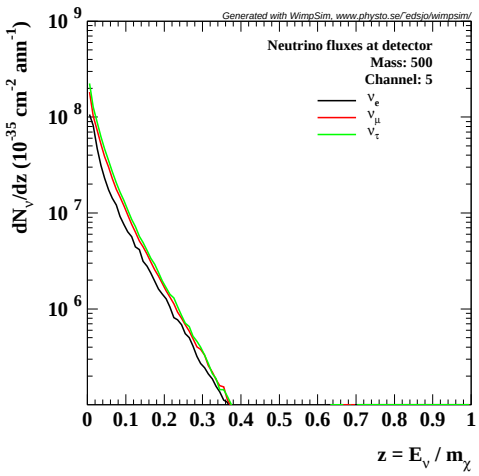
14.4.7 Muons at detector (Sun/Earth)

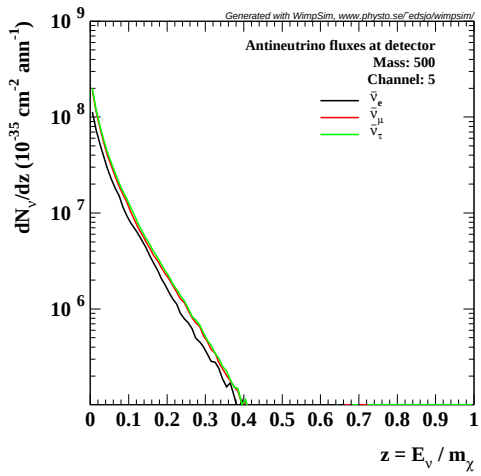




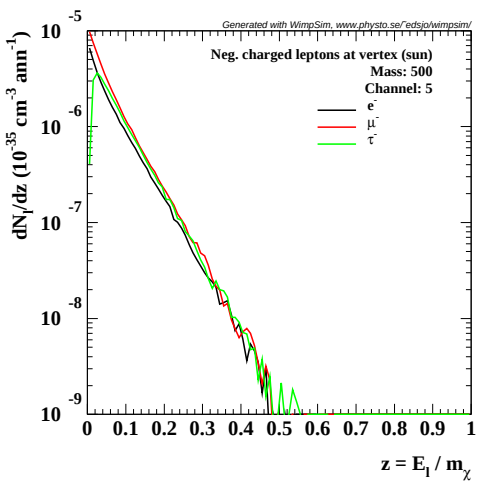
14.5 Channel 5 – $b\bar{b}$

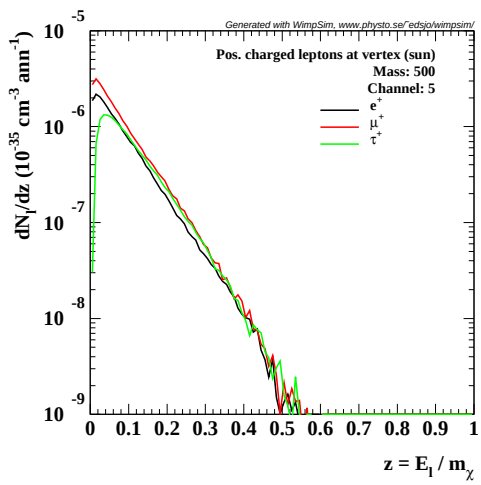
14.5.1 Neutrino fluxes at detector (Sun)



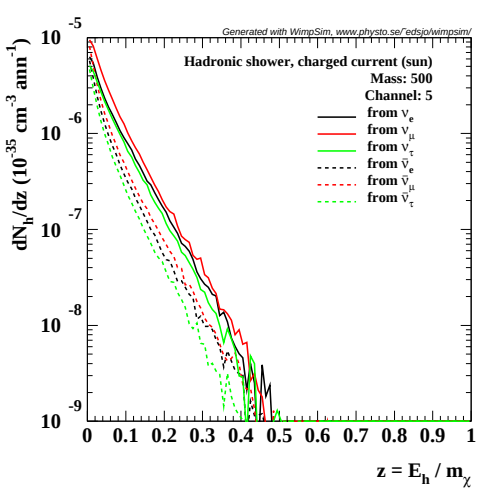


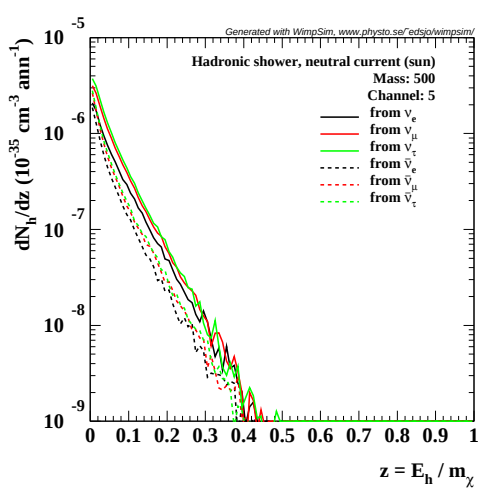
14.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



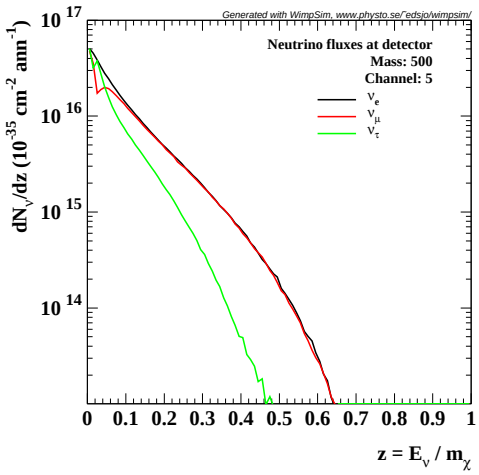


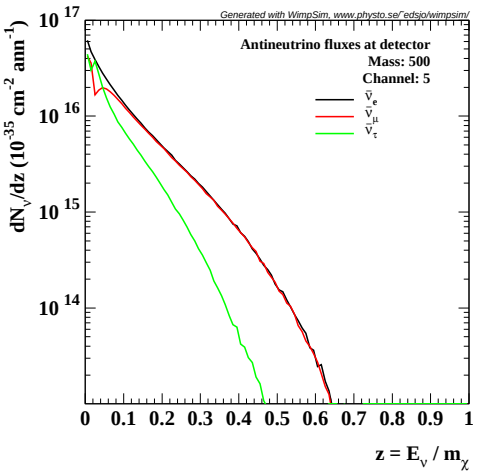
14.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



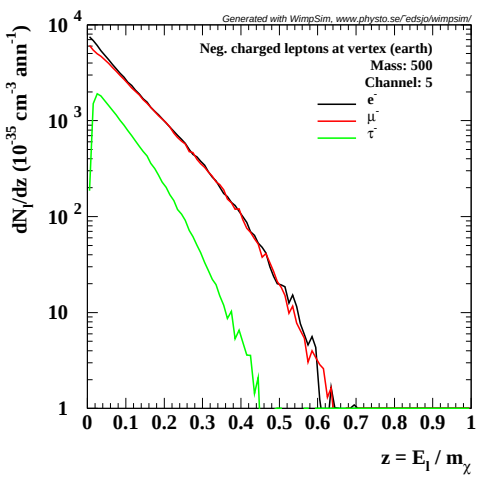


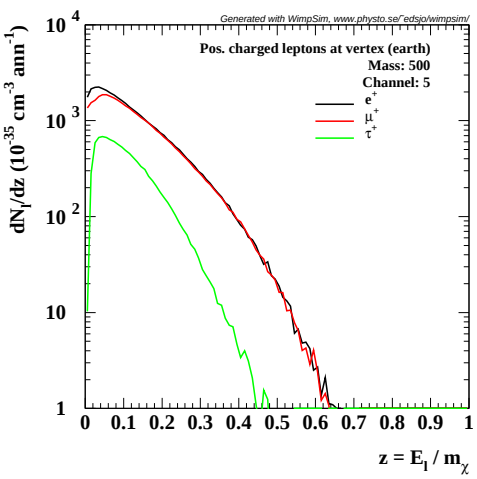
14.5.4 Neutrino fluxes at detector (Earth)



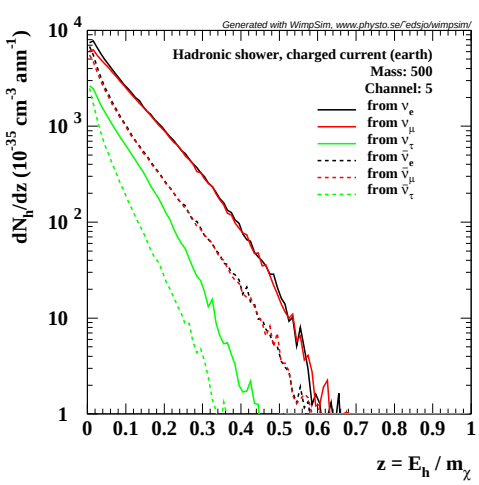


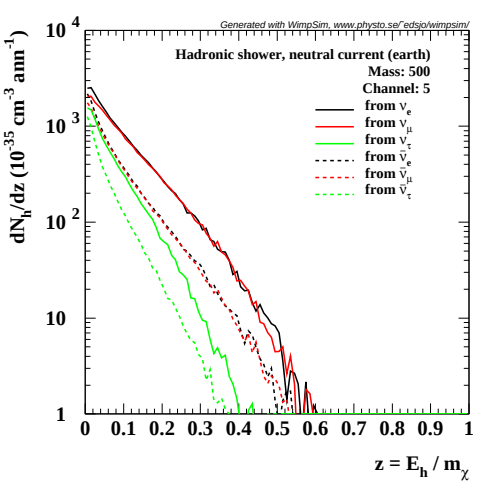
14.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



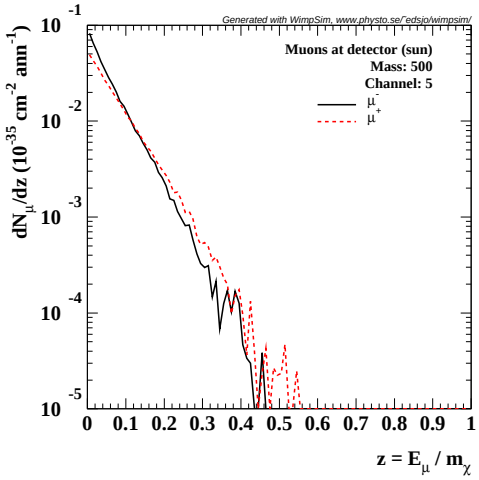


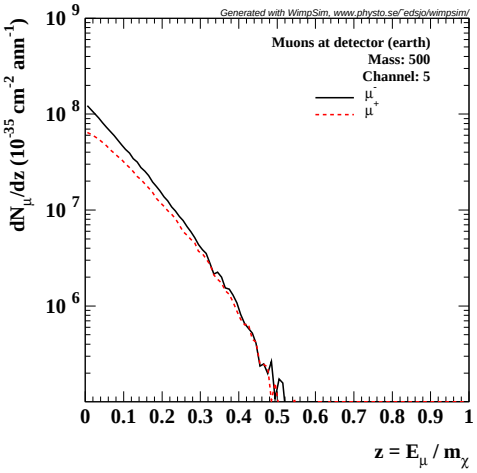
14.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





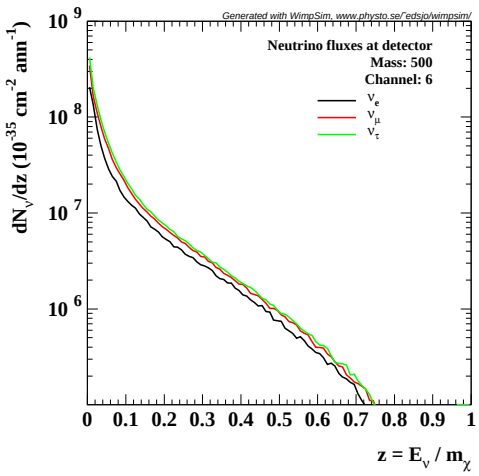
14.5.7 Muons at detector (Sun/Earth)

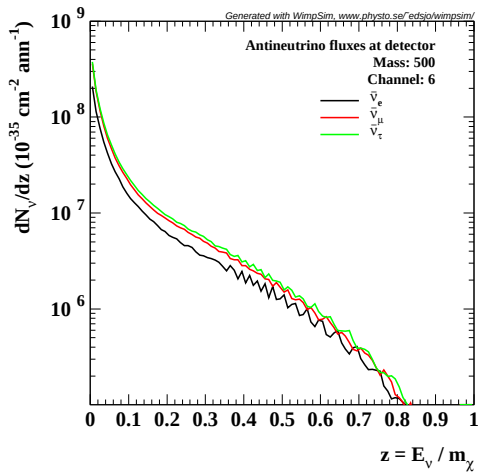




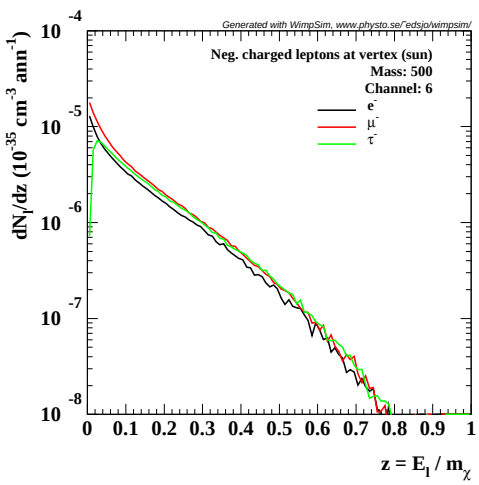
14.6 Channel 6 – $t\bar{t}$

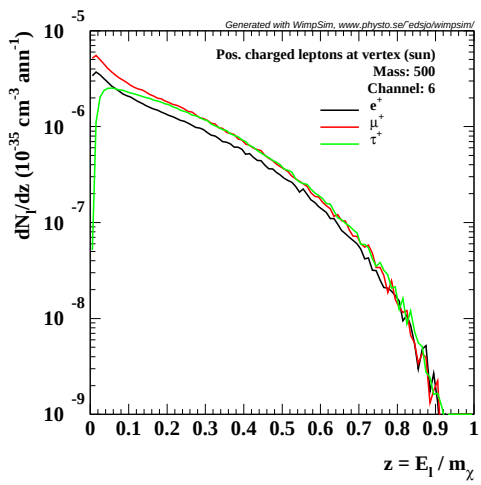
14.6.1 Neutrino fluxes at detector (Sun)



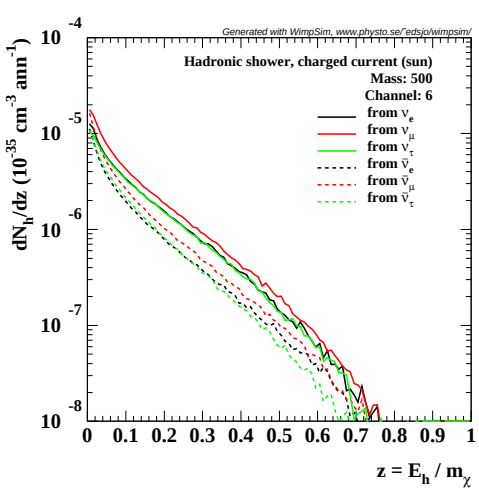


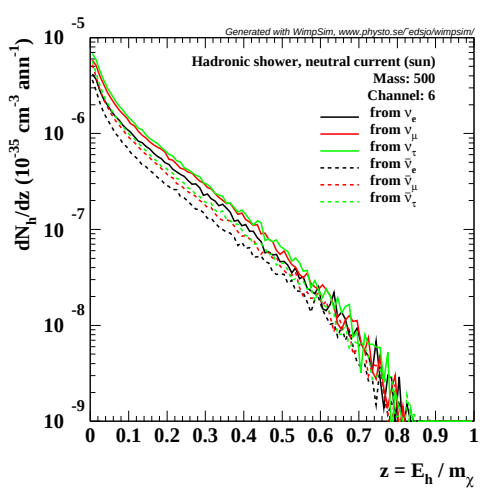
14.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



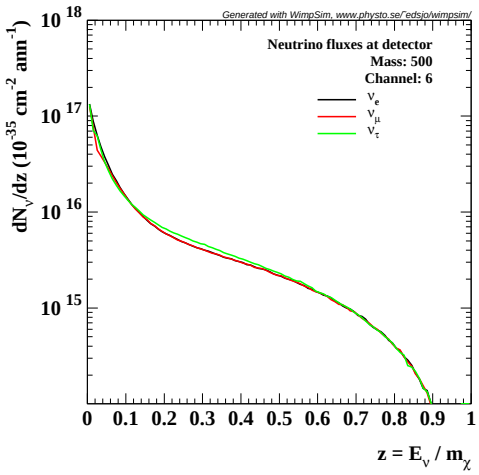


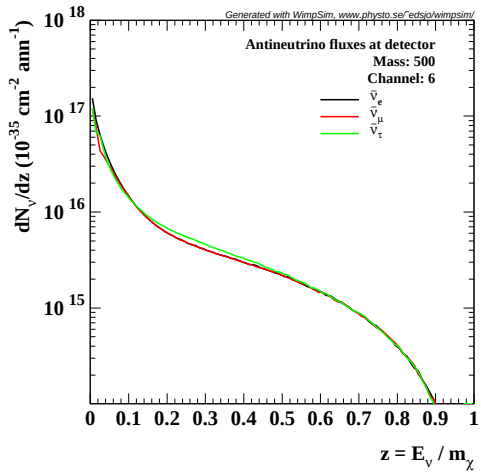
14.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



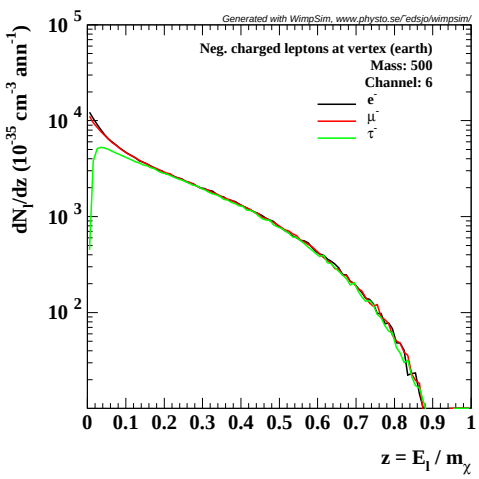


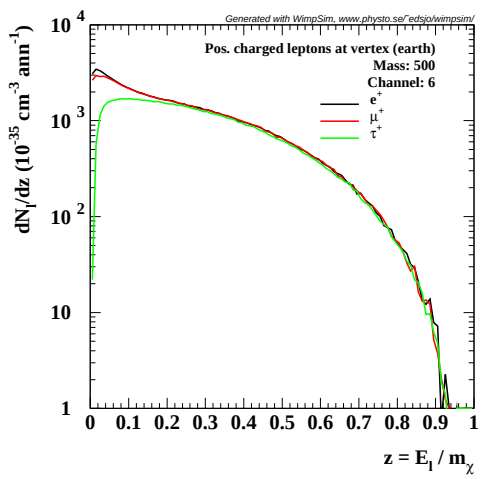
14.6.4 Neutrino fluxes at detector (Earth)



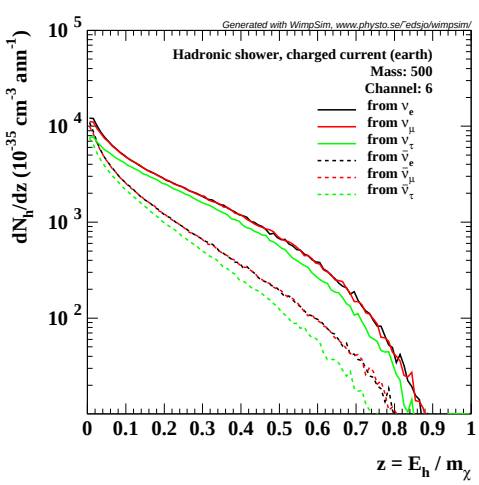


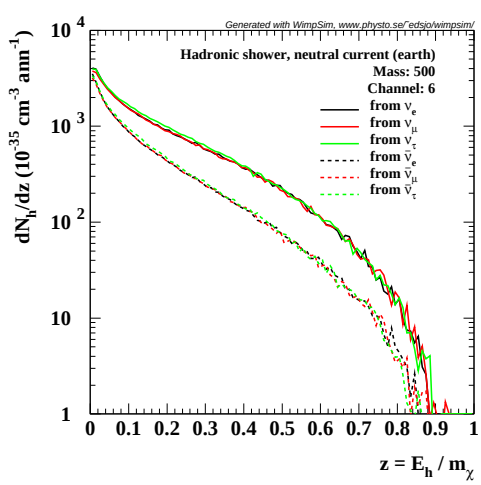
14.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



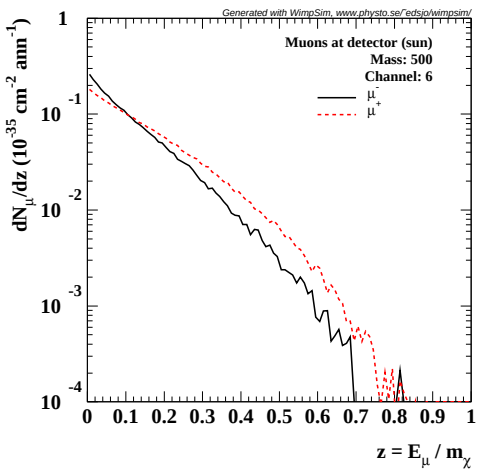


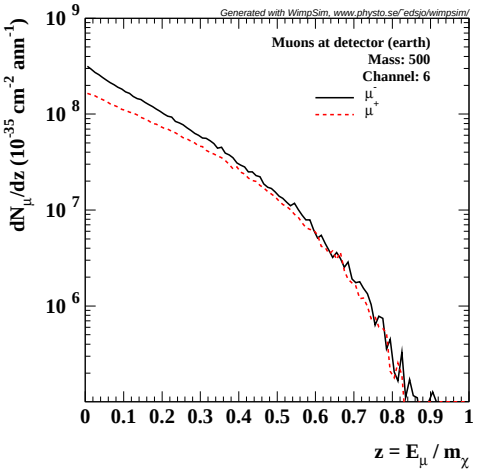
14.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





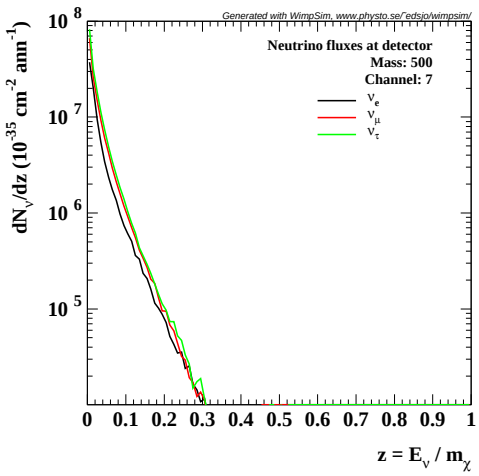
14.6.7 Muons at detector (Sun/Earth)

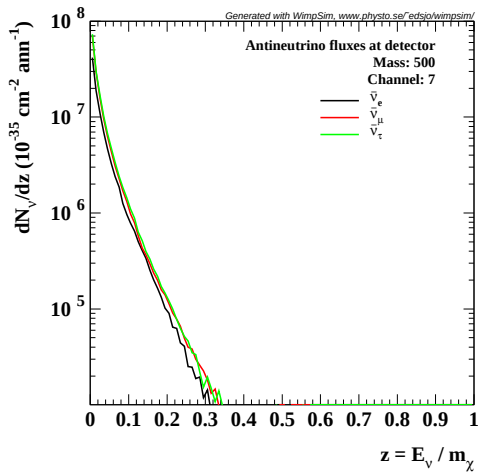




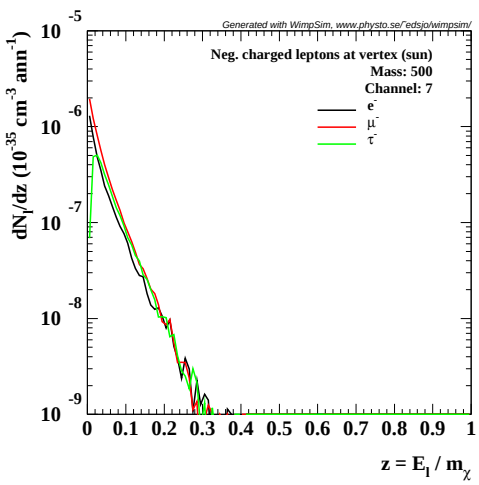
14.7 Channel 7 – gg

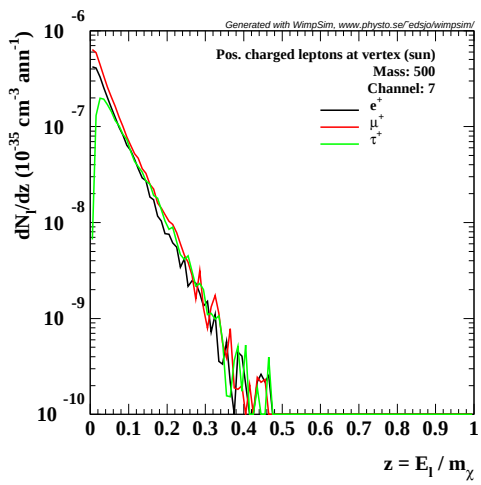
14.7.1 Neutrino fluxes at detector (Sun)



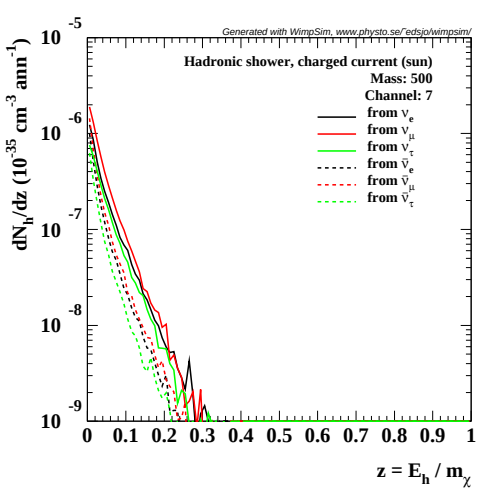


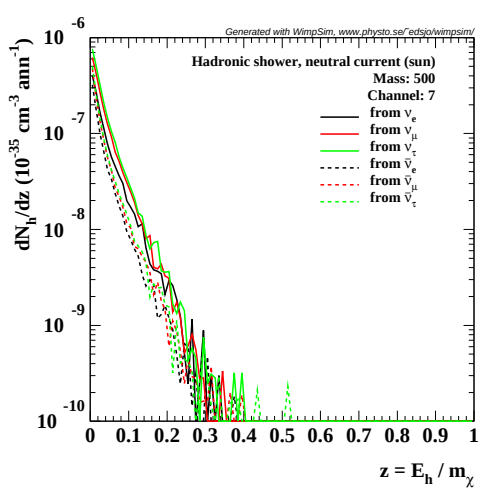
14.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



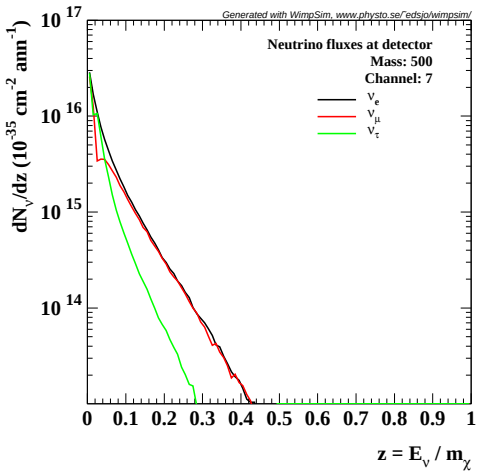


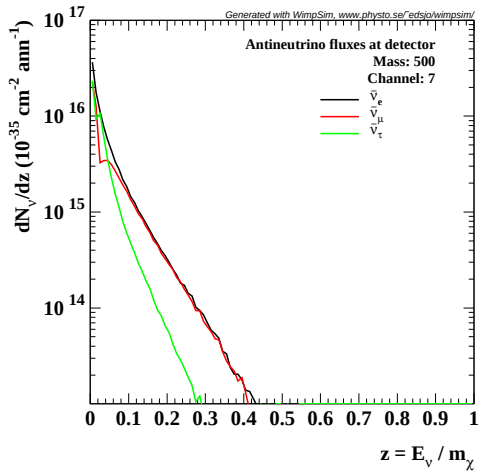
14.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



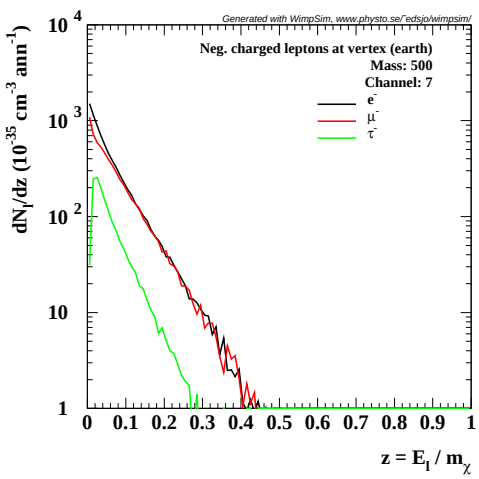


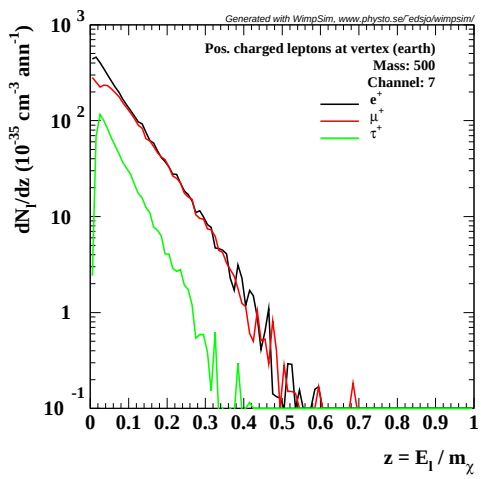
14.7.4 Neutrino fluxes at detector (Earth)



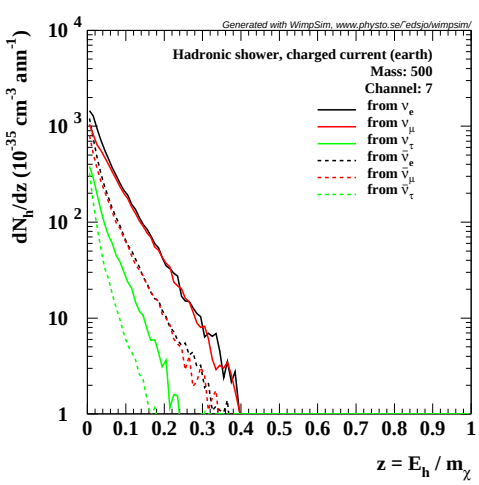


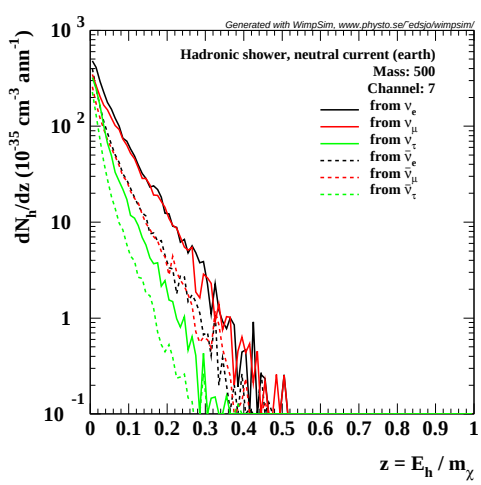
14.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



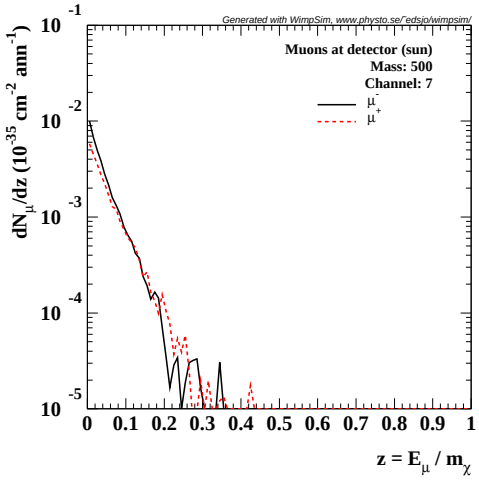


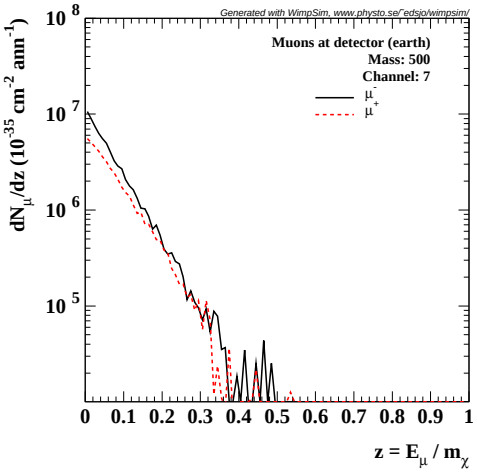
14.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





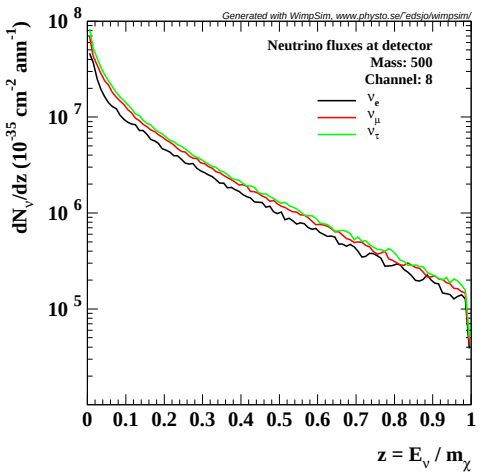
14.7.7 Muons at detector (Sun/Earth)

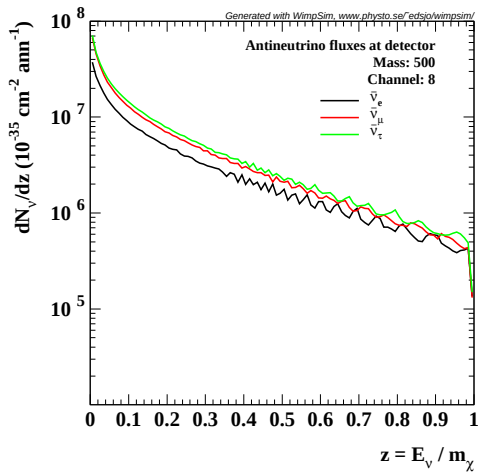




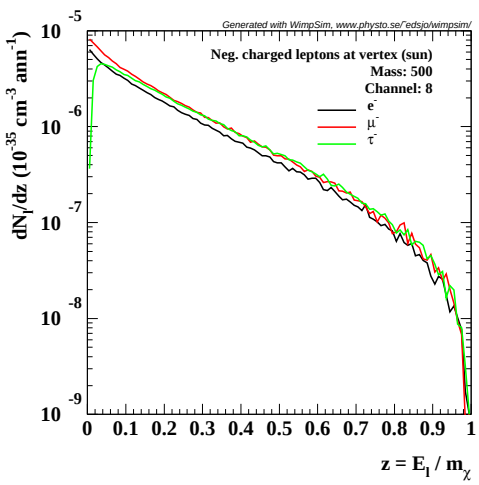
14.8 Channel 8 – W^-W^+

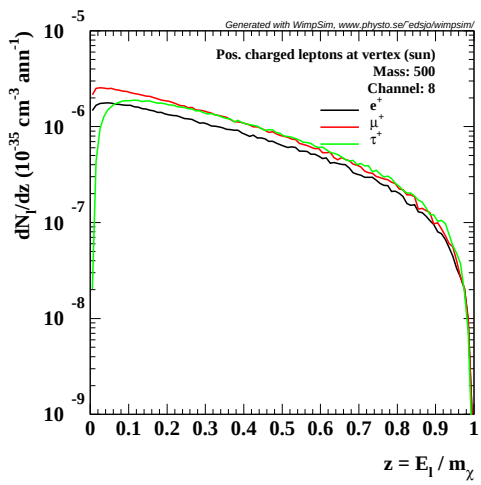
14.8.1 Neutrino fluxes at detector (Sun)



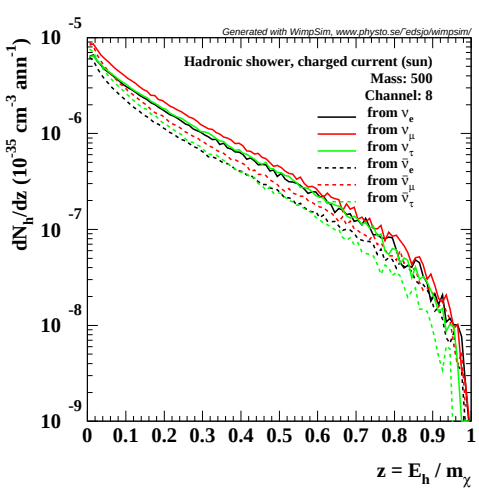


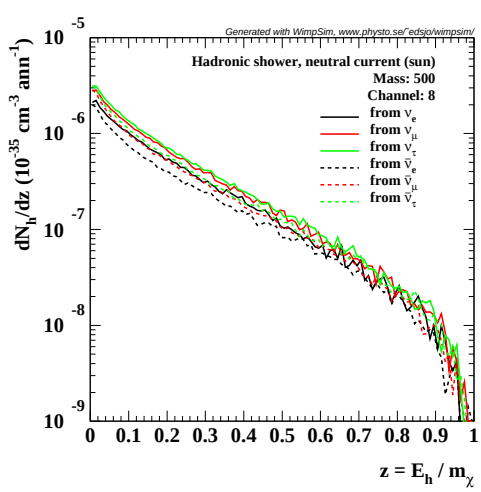
14.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



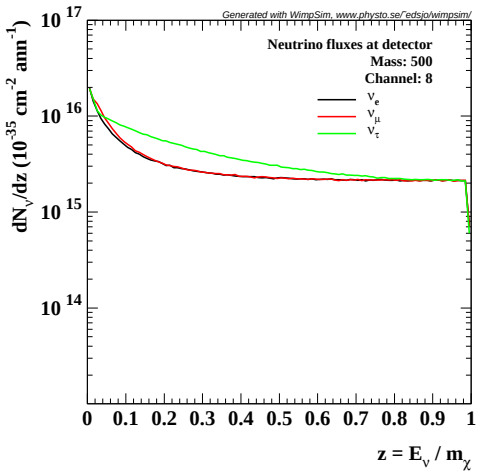


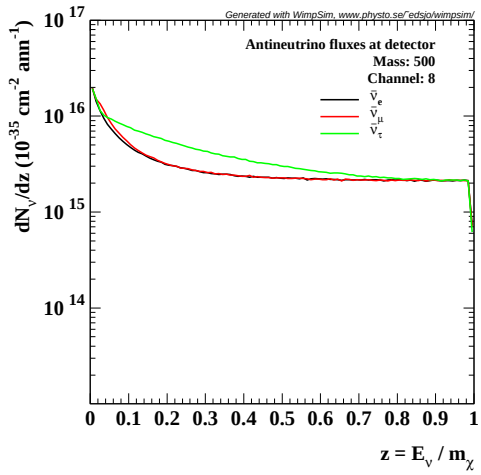
14.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



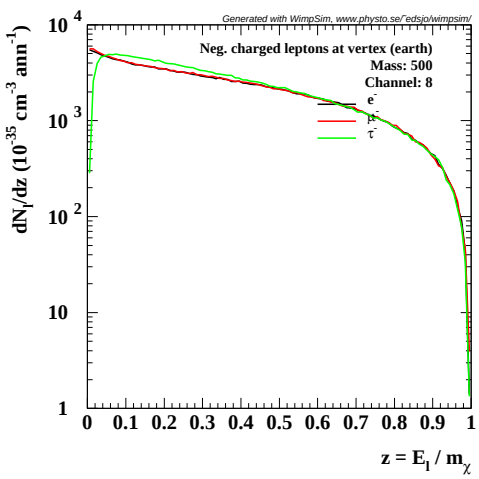


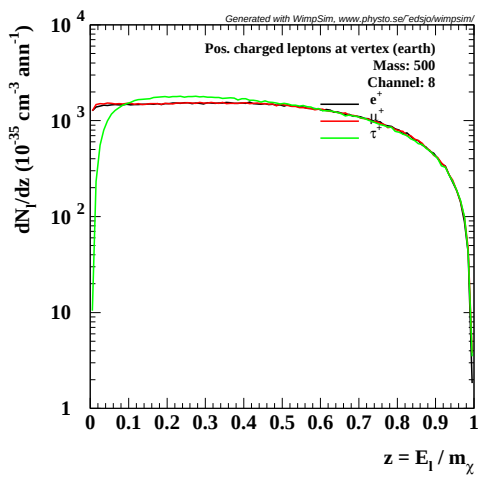
14.8.4 Neutrino fluxes at detector (Earth)



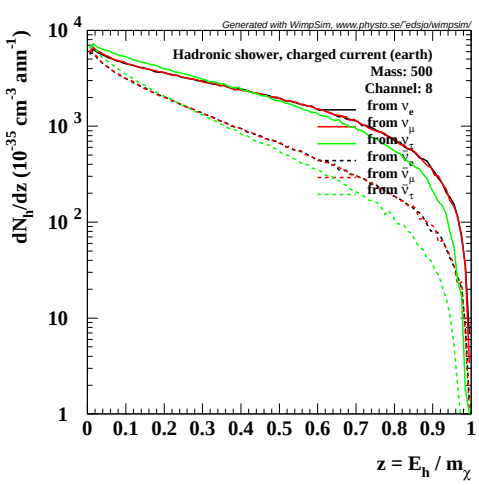


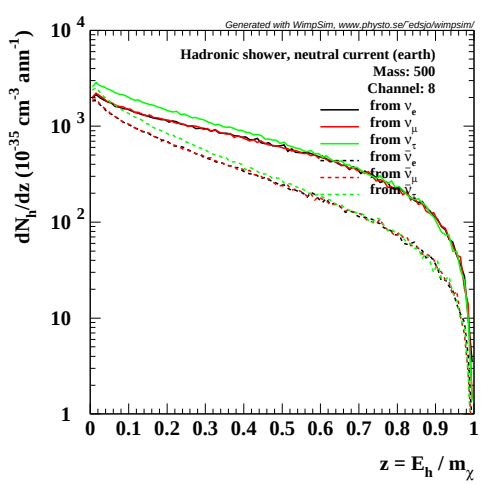
14.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



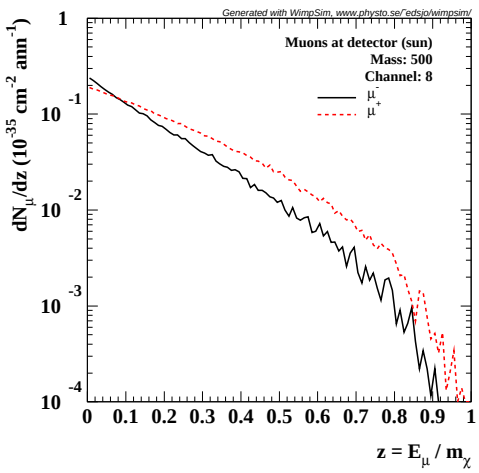


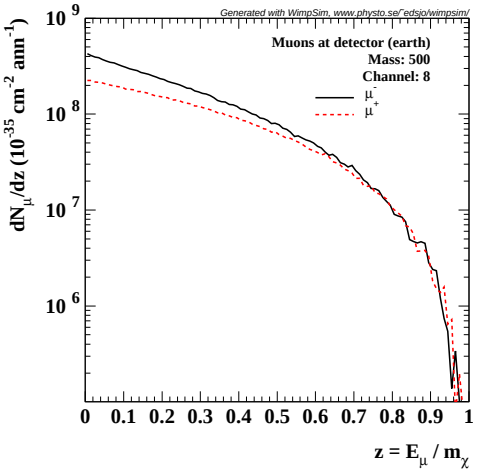
14.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





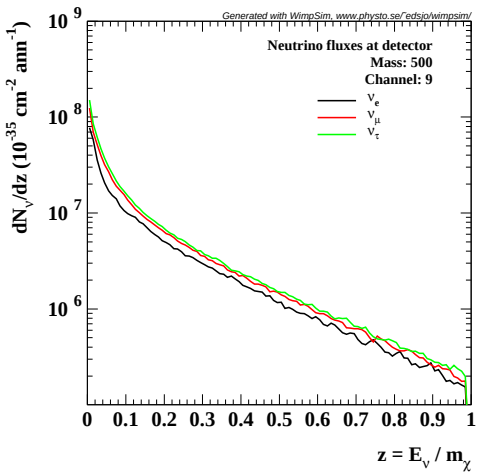
14.8.7 Muons at detector (Sun/Earth)

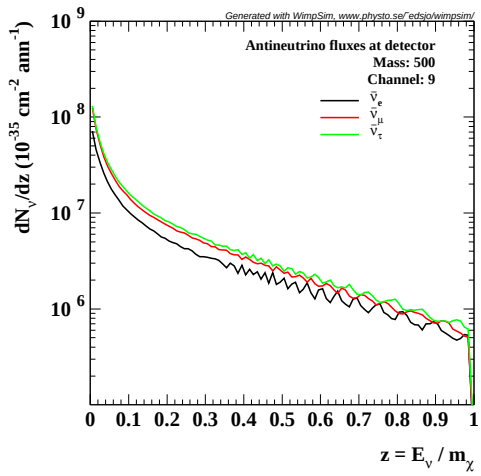




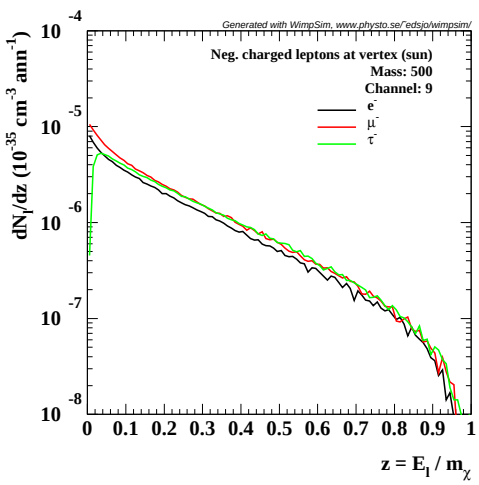
14.9 Channel 9 – $Z^0 Z^0$

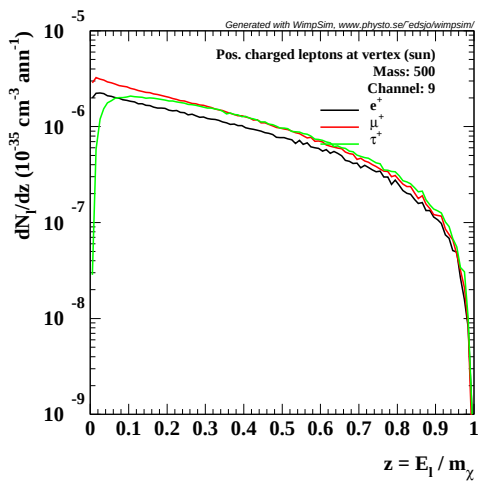
14.9.1 Neutrino fluxes at detector (Sun)



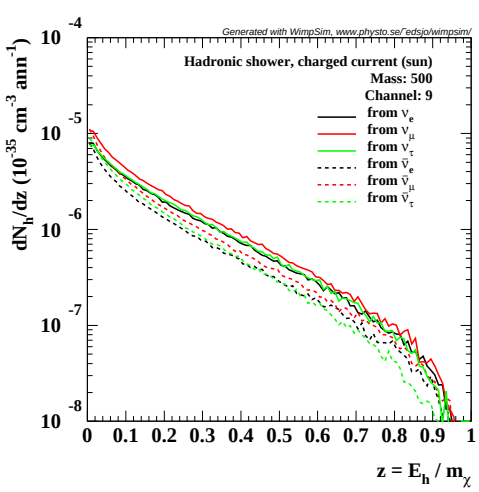


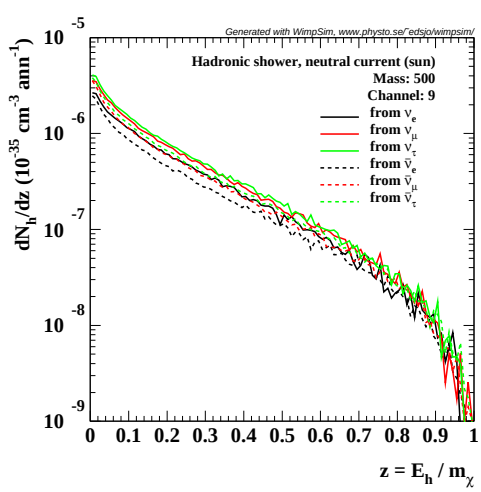
14.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



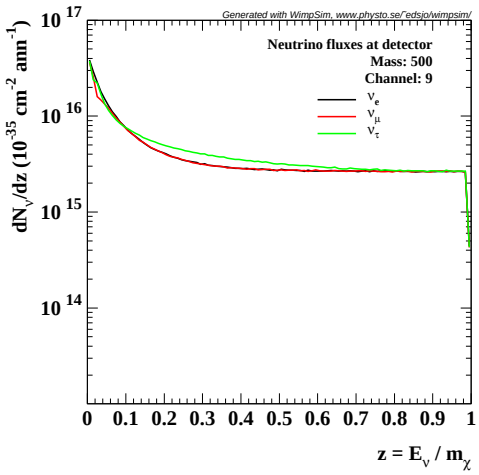


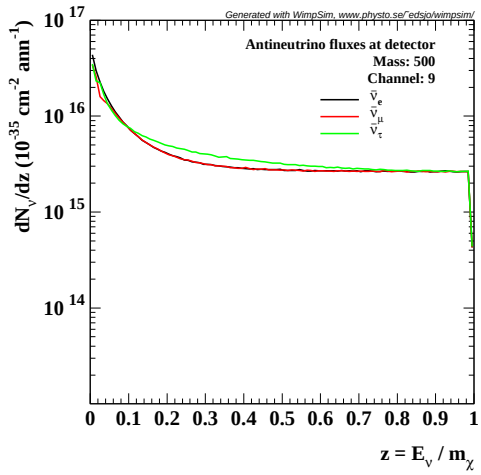
14.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



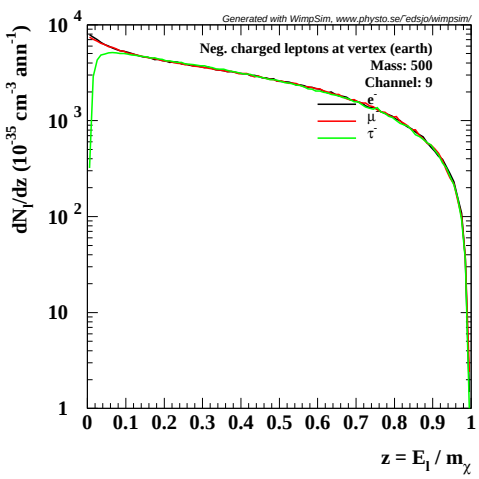


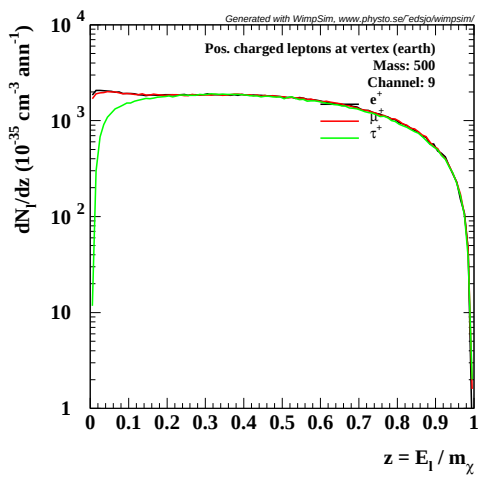
14.9.4 Neutrino fluxes at detector (Earth)



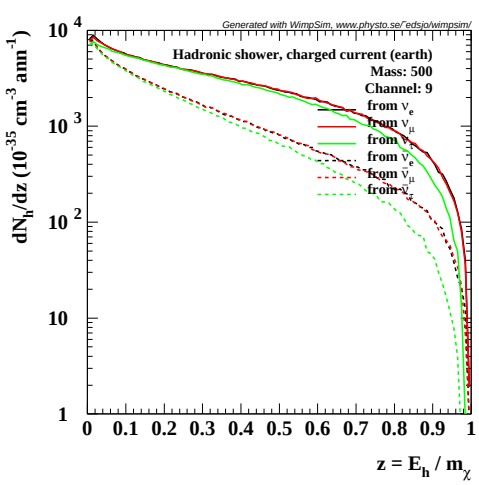


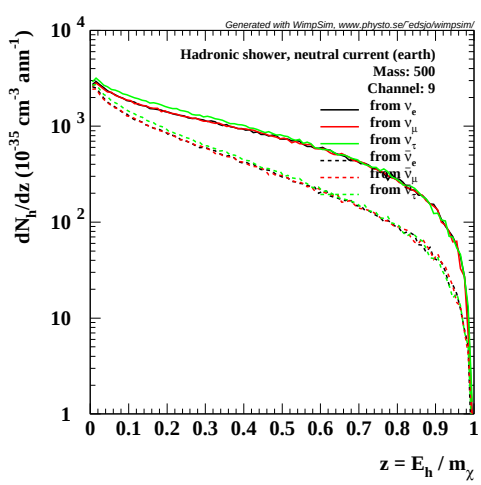
14.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



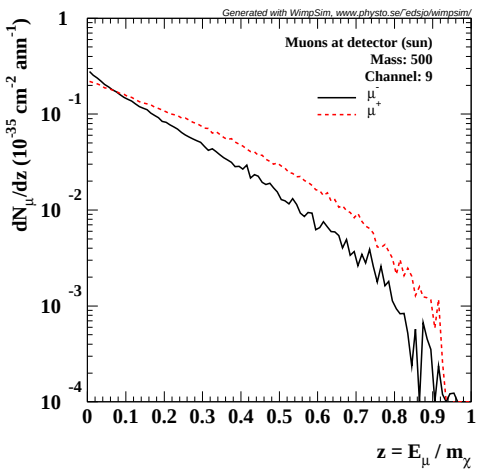


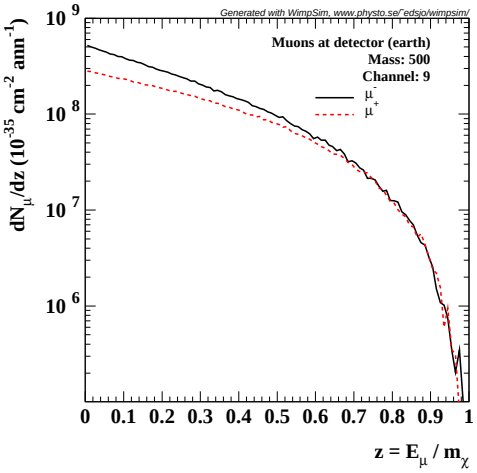
14.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





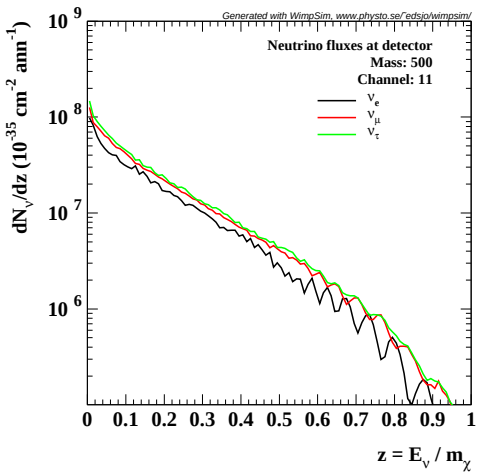
14.9.7 Muons at detector (Sun/Earth)

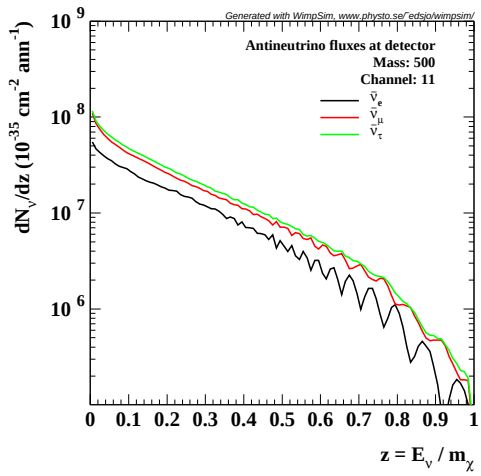




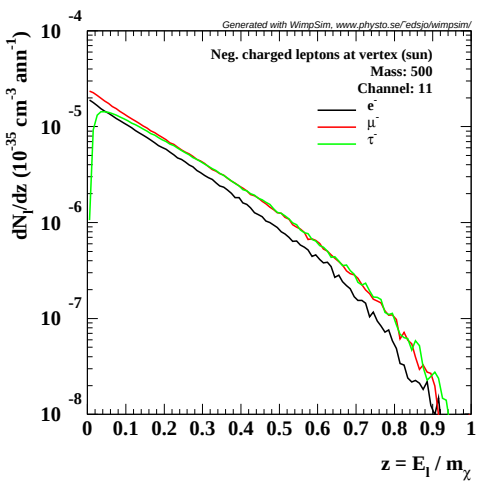
14.10 Channel 11 – $\tau^-\tau^+$

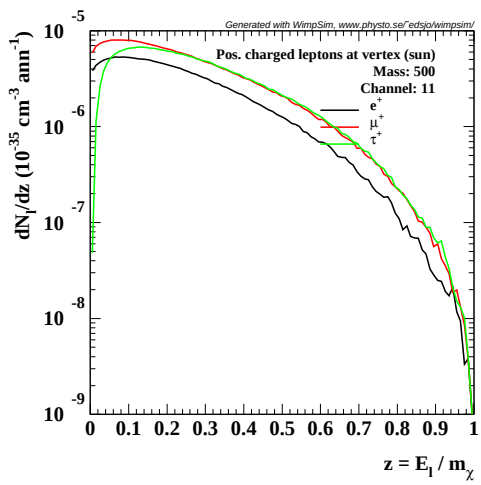
14.10.1 Neutrino fluxes at detector (Sun)



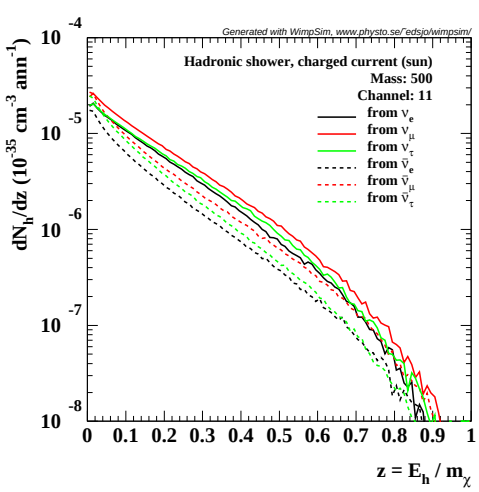


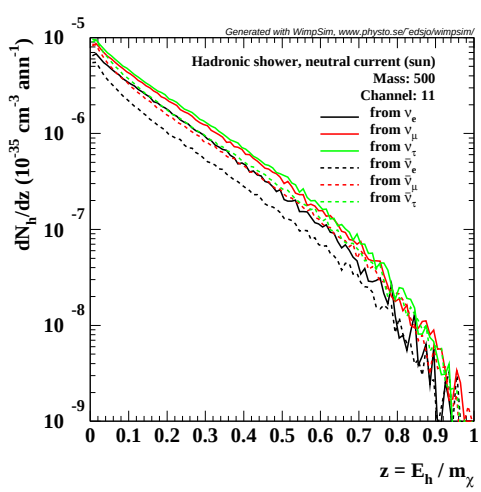
14.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



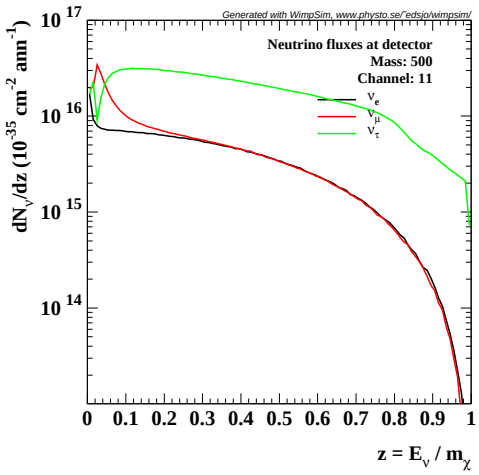


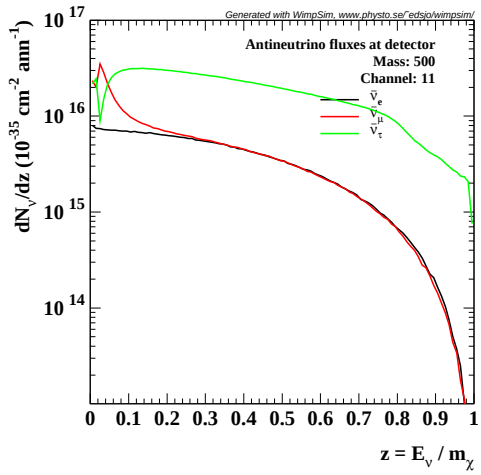
14.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



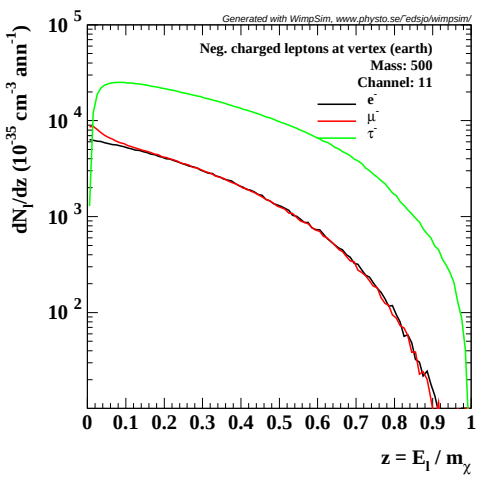


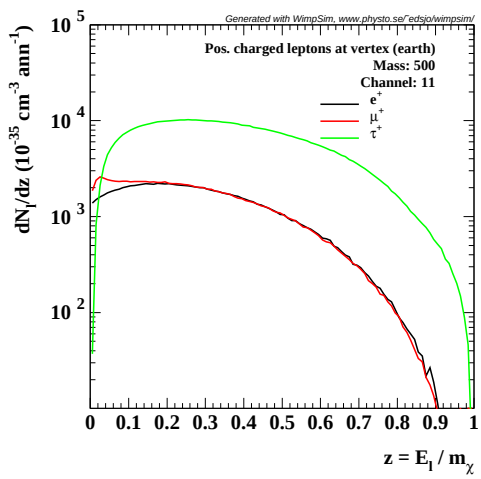
14.10.4 Neutrino fluxes at detector (Earth)



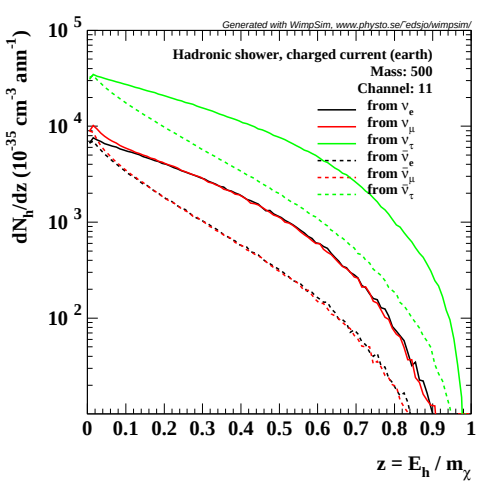


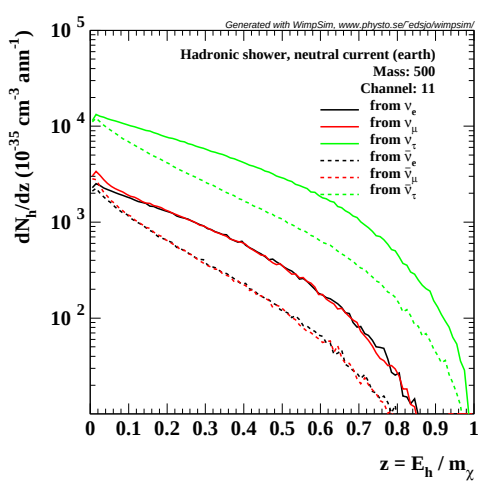
14.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



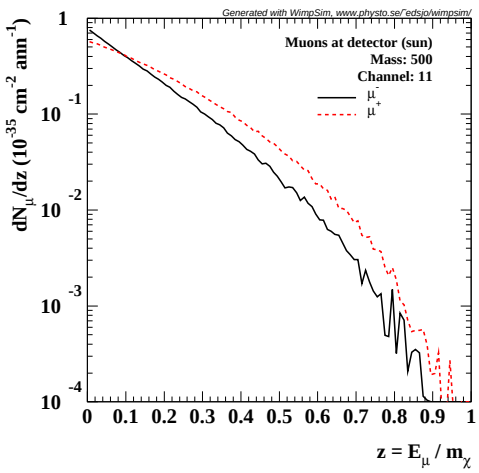


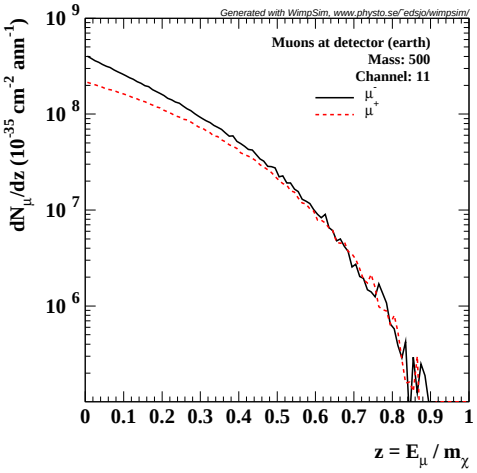
14.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





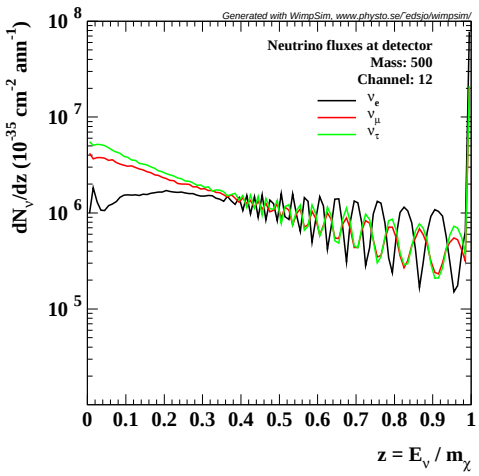
14.10.7 Muons at detector (Sun/Earth)

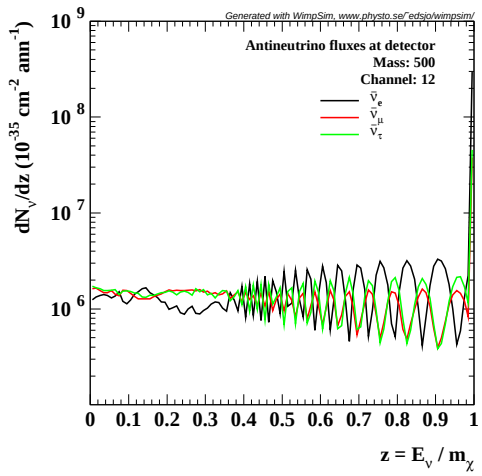




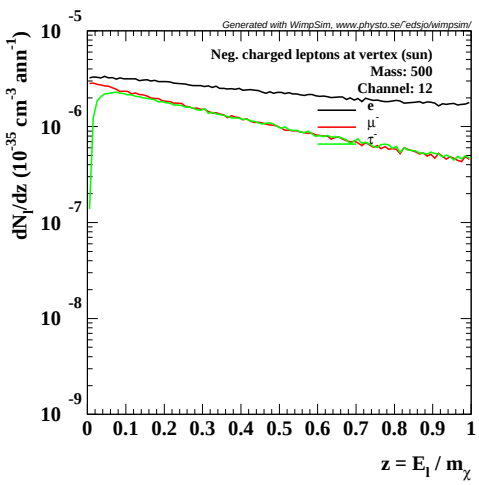
14.11 Channel 12 – $\nu_e\bar{\nu}_e$

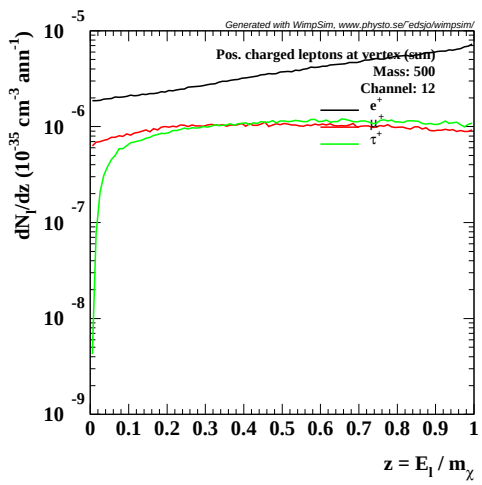
14.11.1 Neutrino fluxes at detector (Sun)



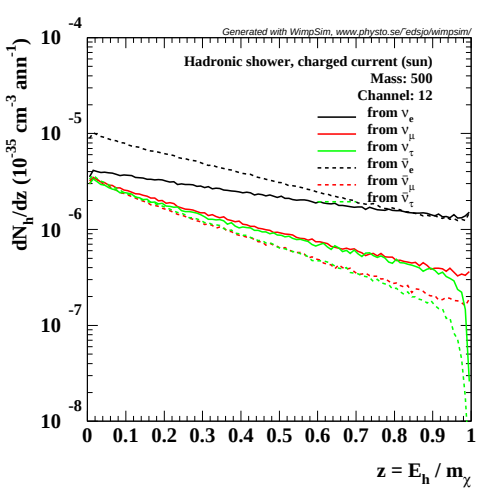


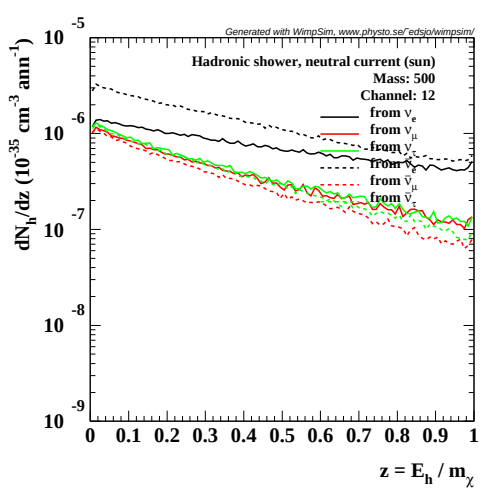
14.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



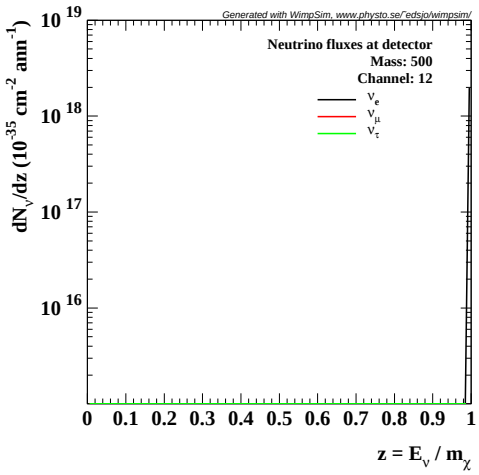


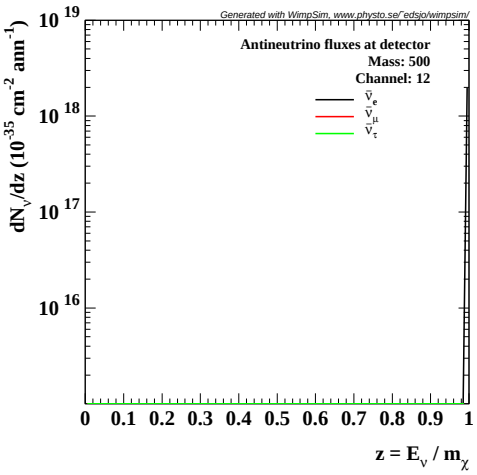
14.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



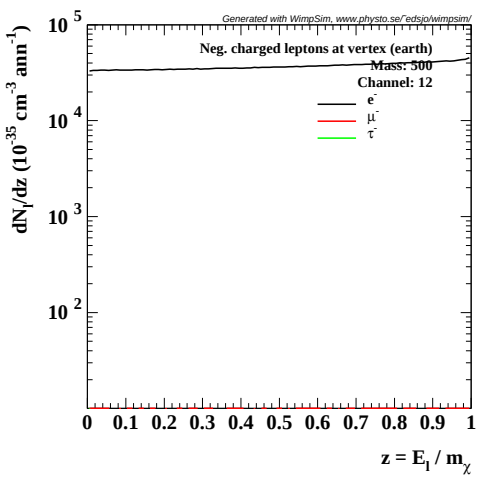


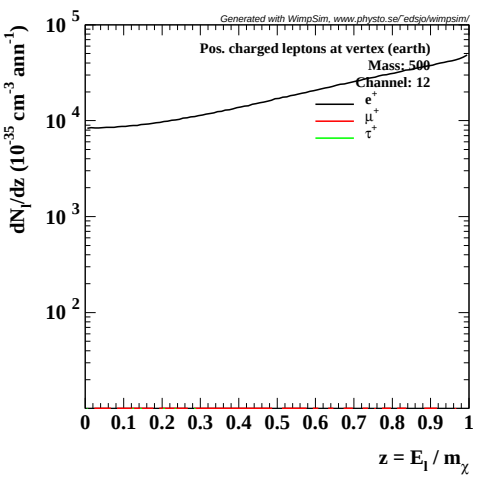
14.11.4 Neutrino fluxes at detector (Earth)



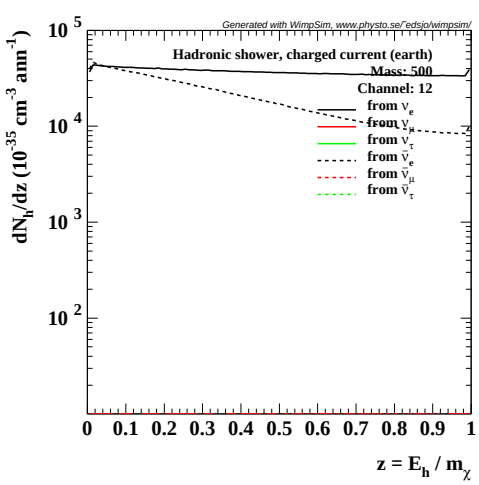


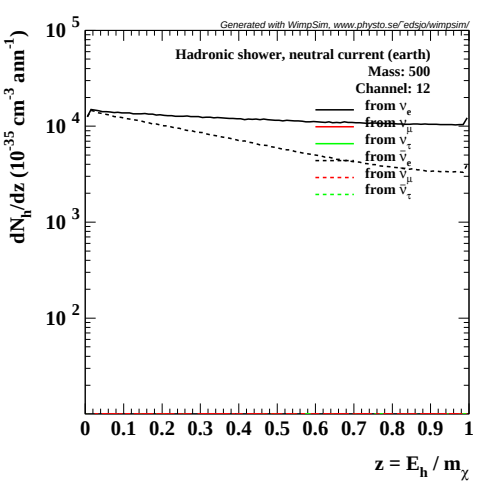
14.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



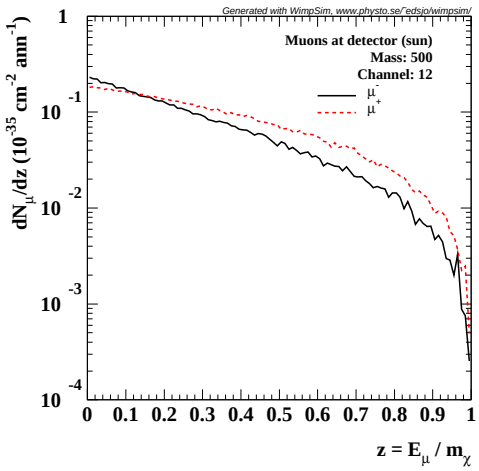


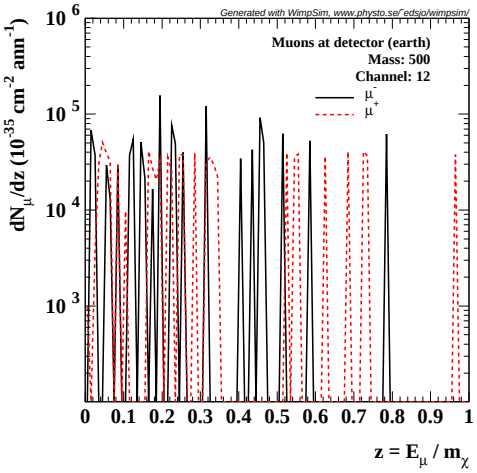
14.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





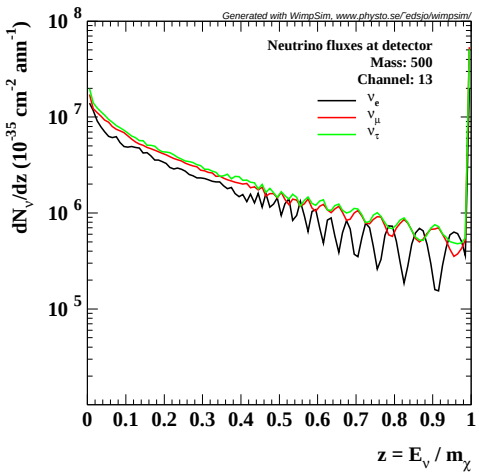
14.11.7 Muons at detector (Sun/Earth)

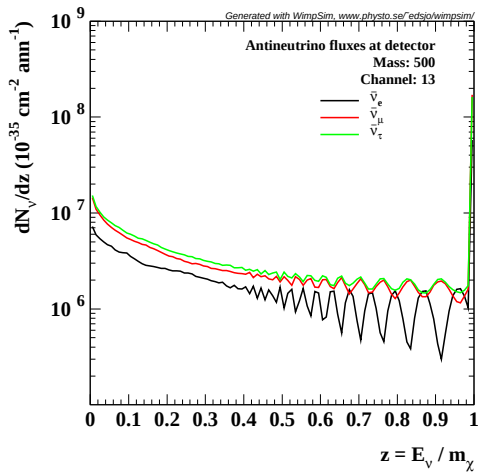




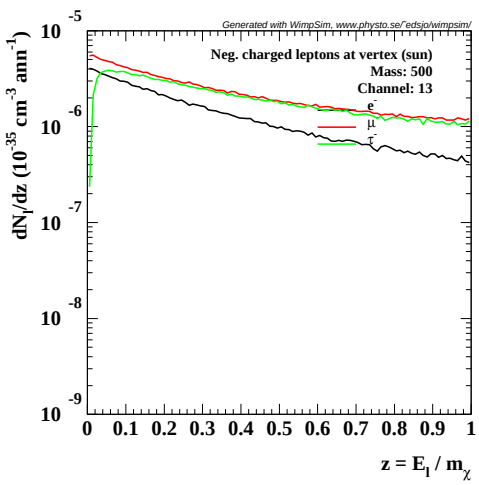
14.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

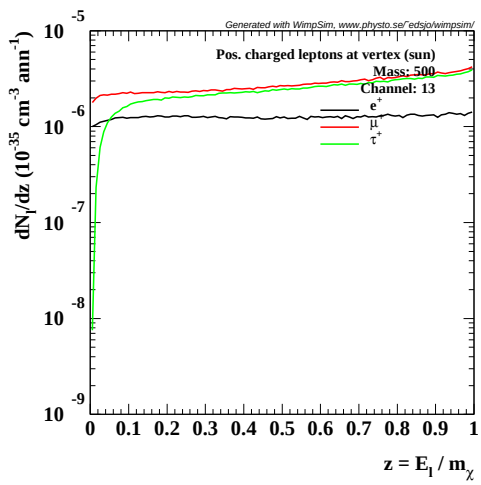
14.12.1 Neutrino fluxes at detector (Sun)



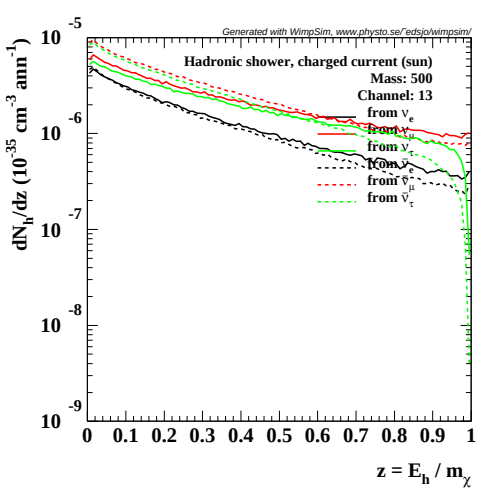


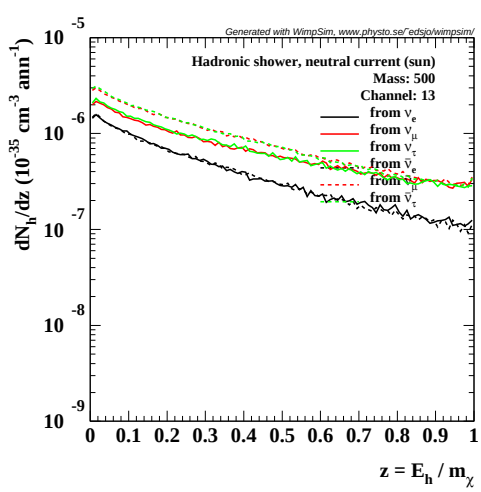
14.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



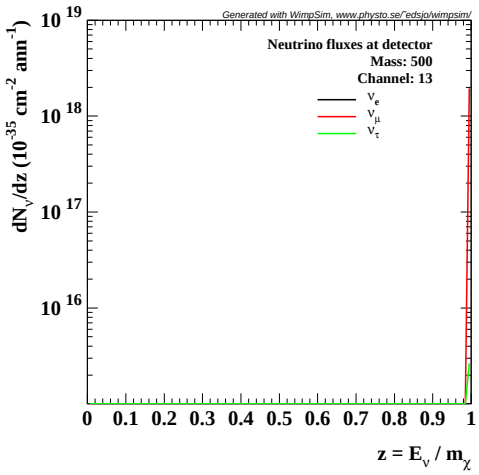


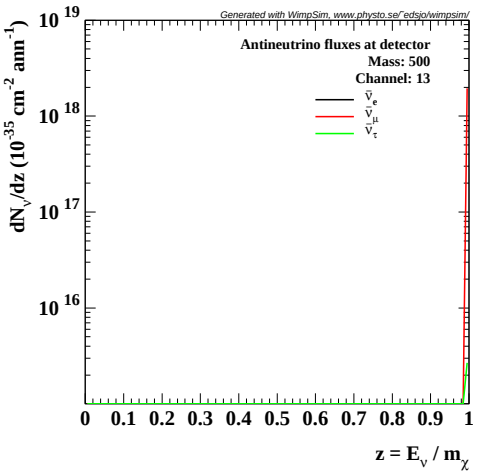
14.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



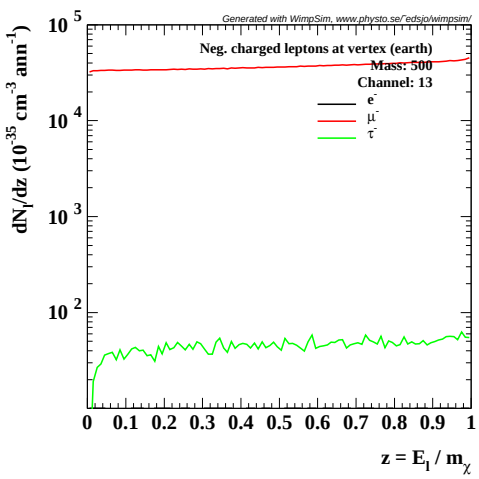


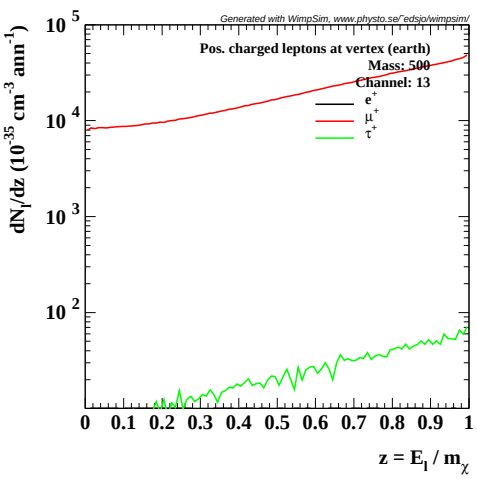
14.12.4 Neutrino fluxes at detector (Earth)



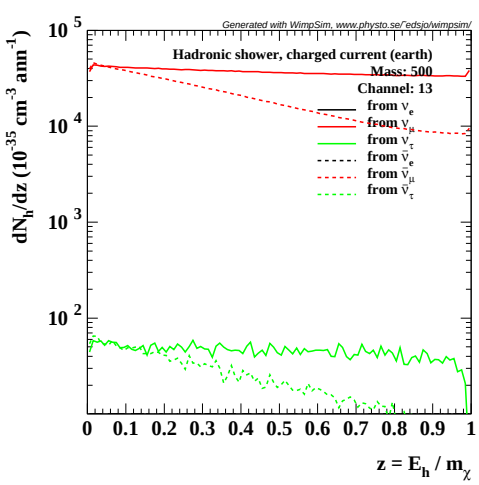


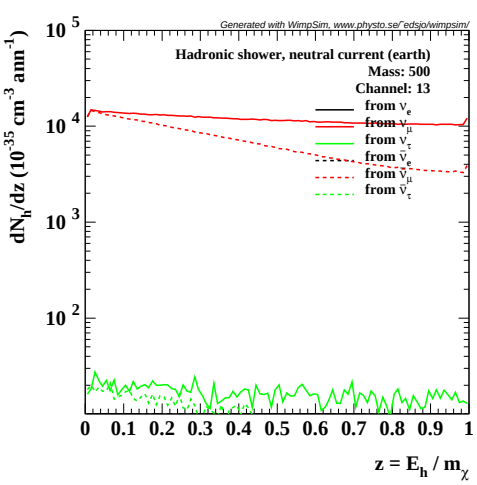
14.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



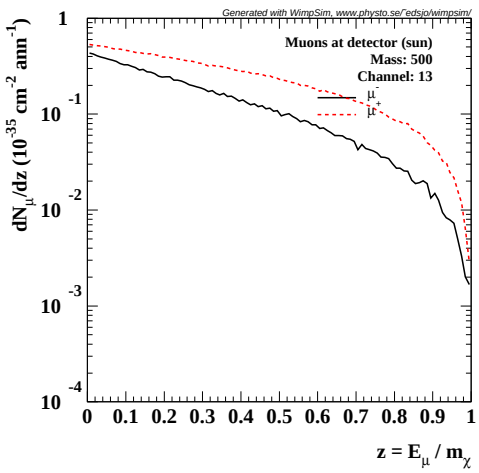


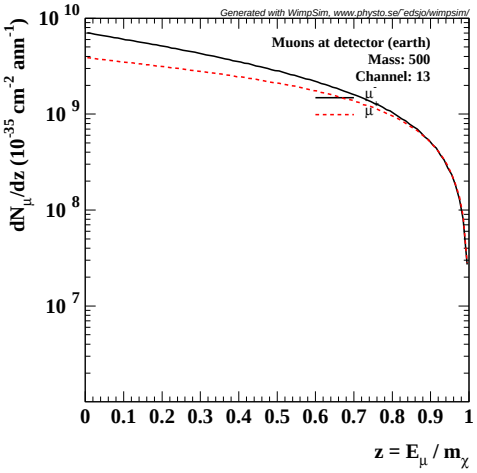
14.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





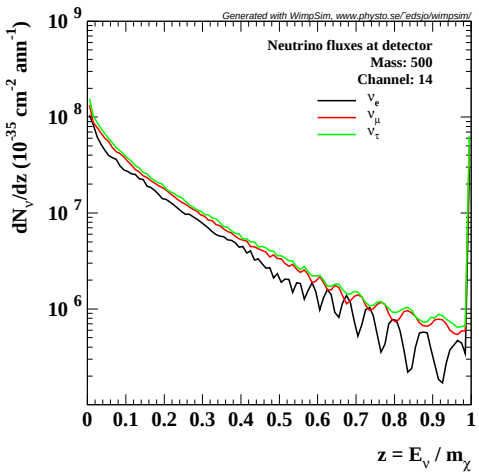
14.12.7 Muons at detector (Sun/Earth)

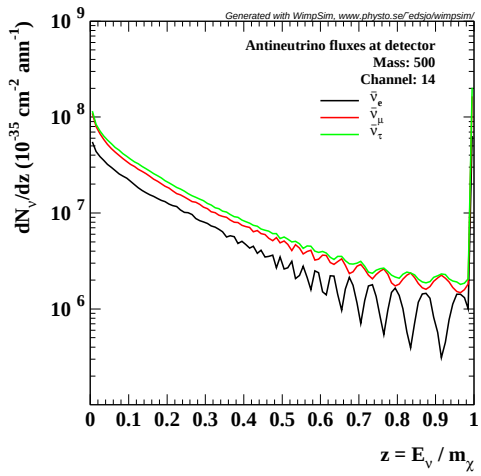




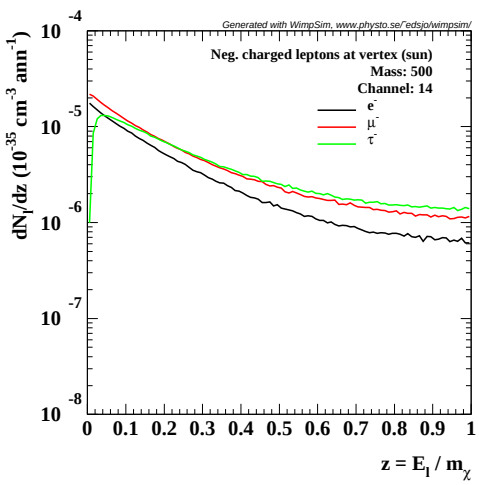
14.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

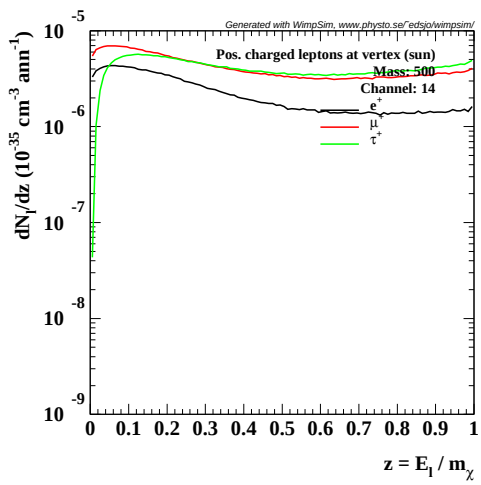
14.13.1 Neutrino fluxes at detector (Sun)



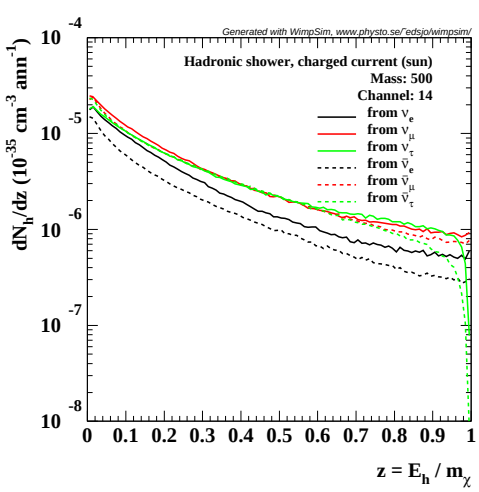


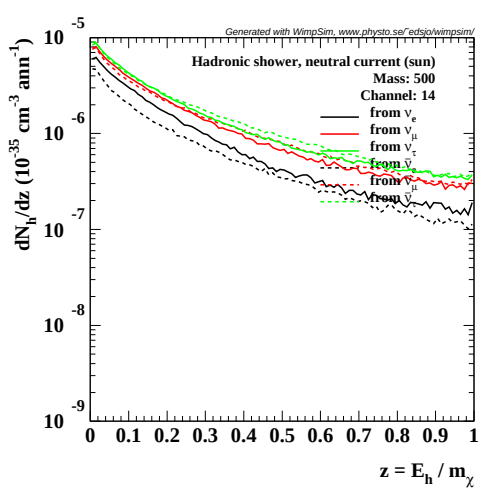
14.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



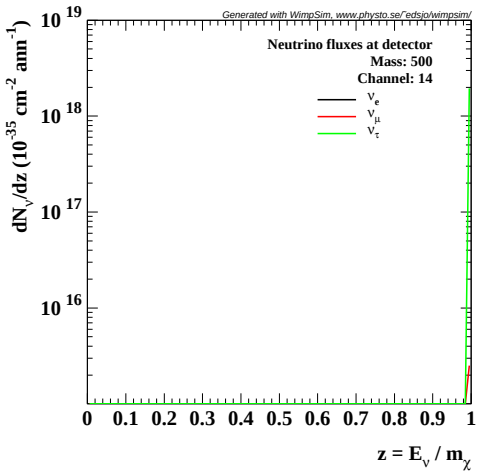


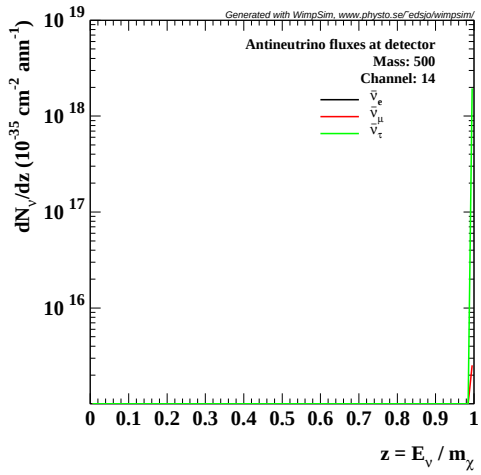
14.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



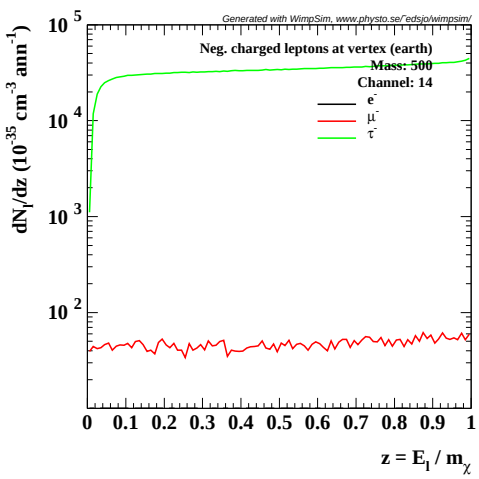


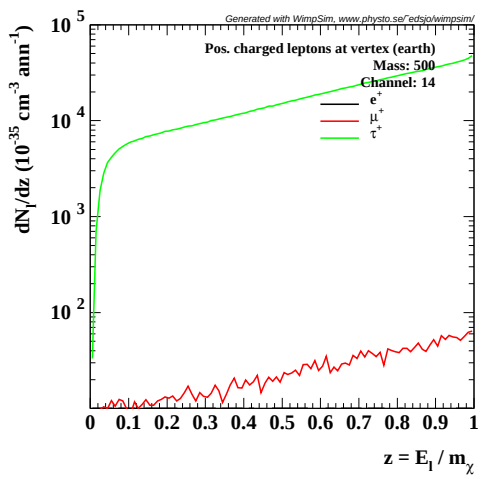
14.13.4 Neutrino fluxes at detector (Earth)



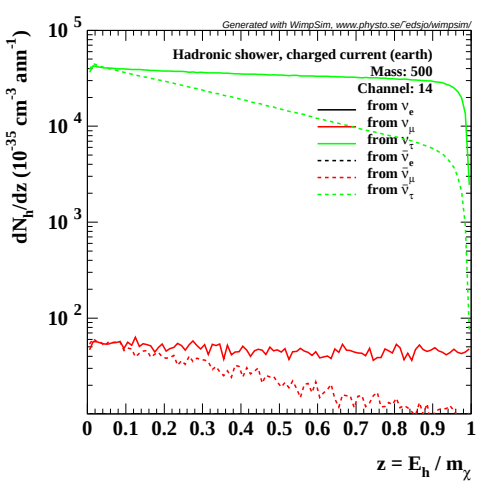


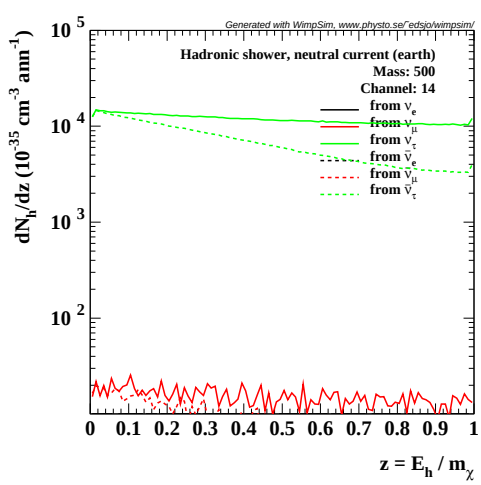
14.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



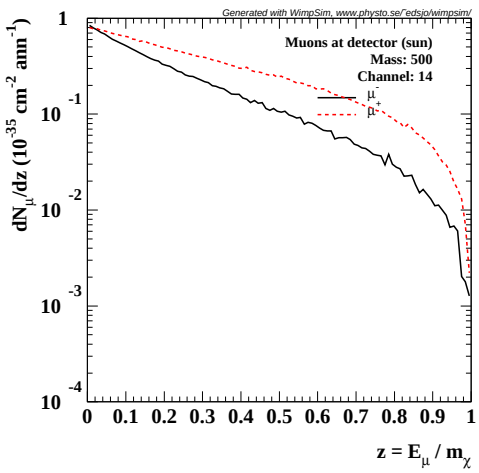


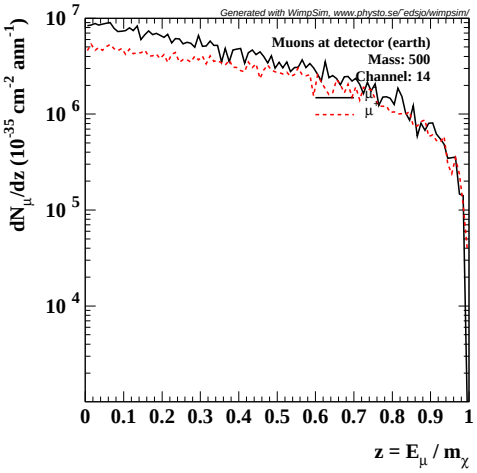
14.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





14.13.7 Muons at detector (Sun/Earth)

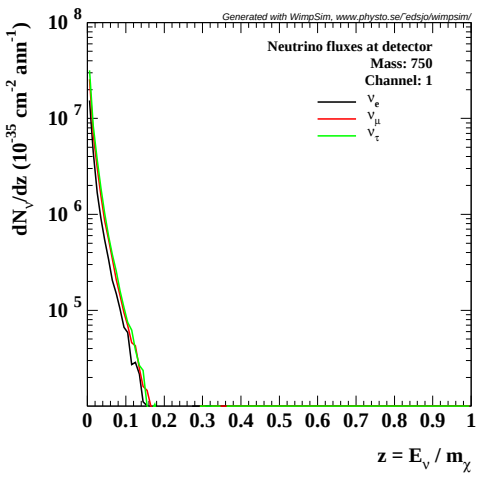


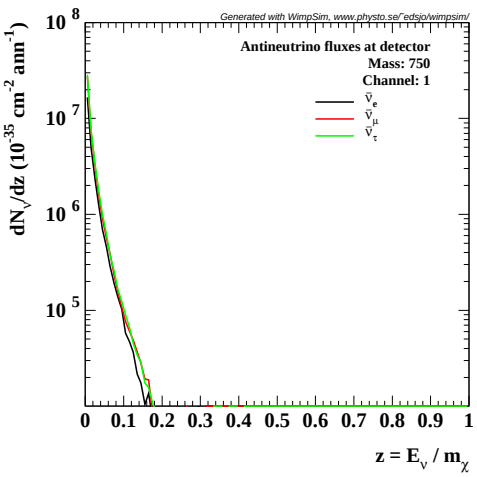


15 Mass 750

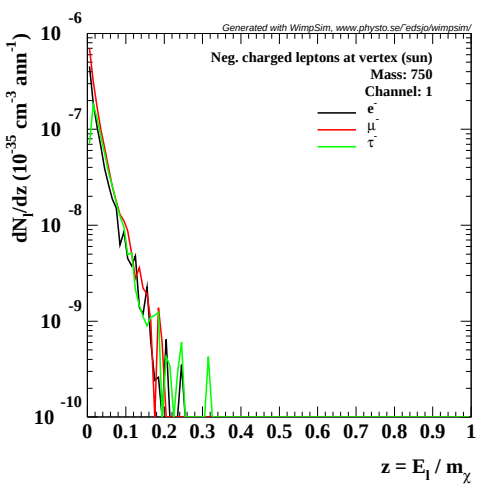
15.1 Channel 1 – $d\bar{d}$

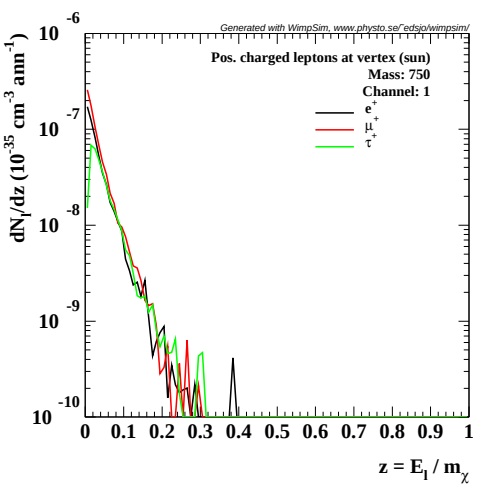
15.1.1 Neutrino fluxes at detector (Sun)



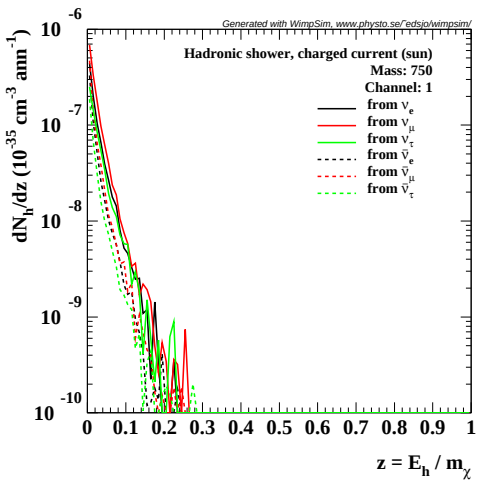


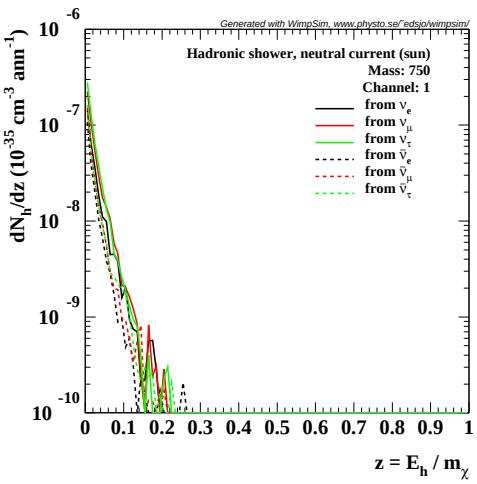
15.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



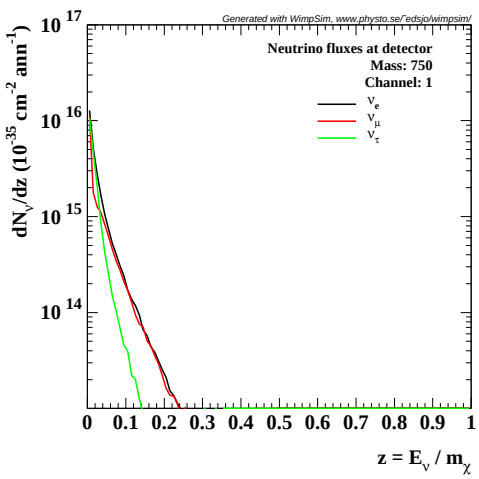


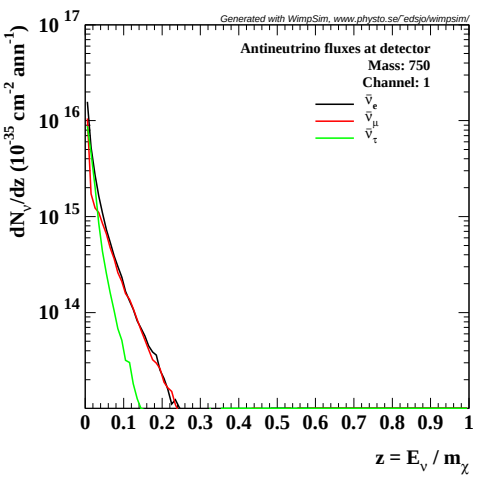
15.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



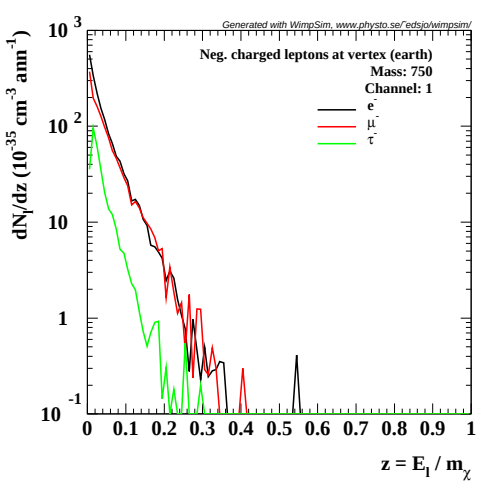


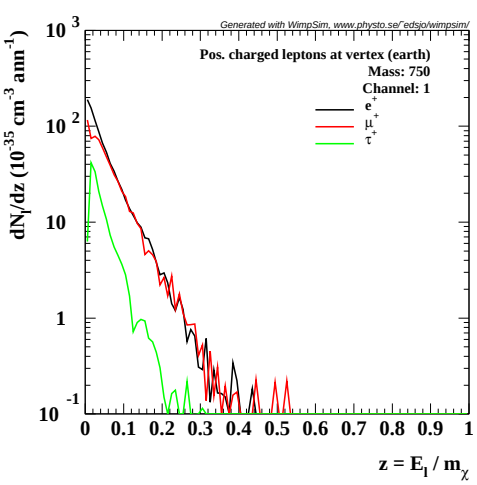
15.1.4 Neutrino fluxes at detector (Earth)



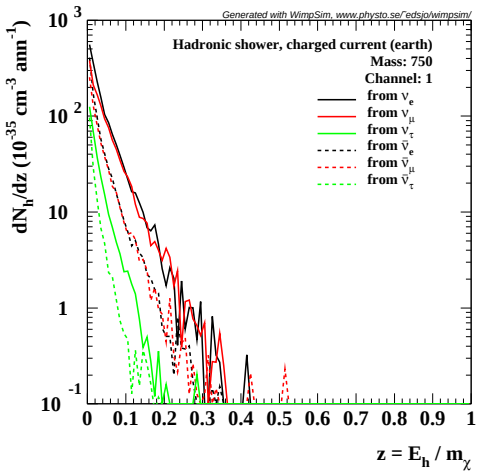


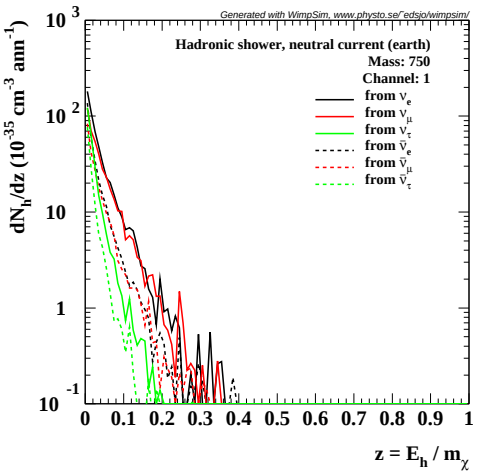
15.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



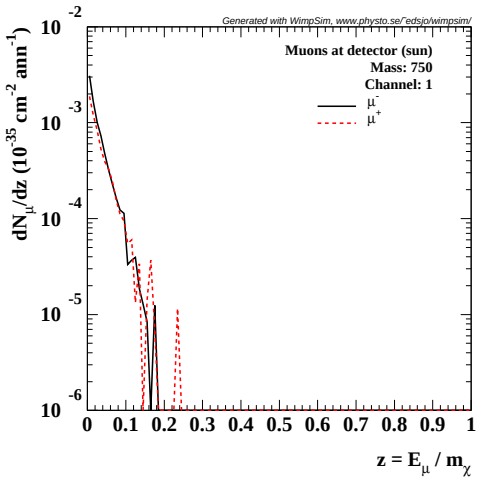


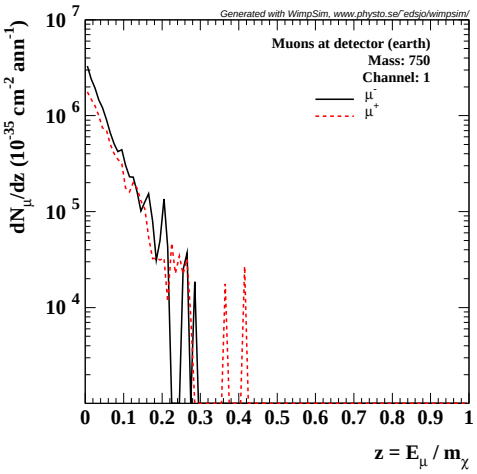
15.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





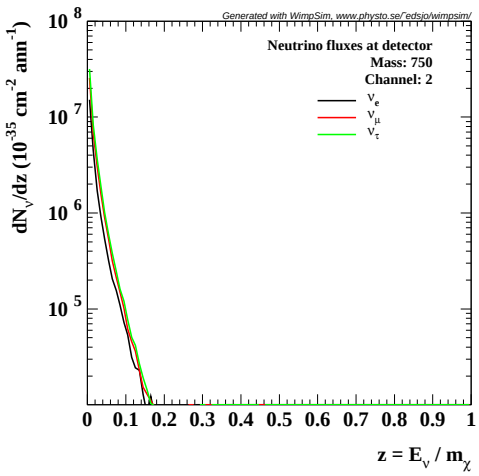
15.1.7 Muons at detector (Sun/Earth)

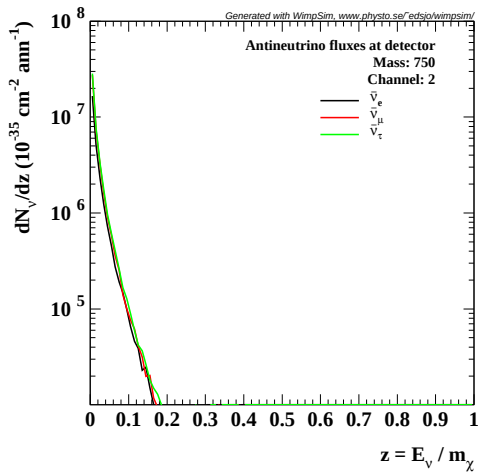




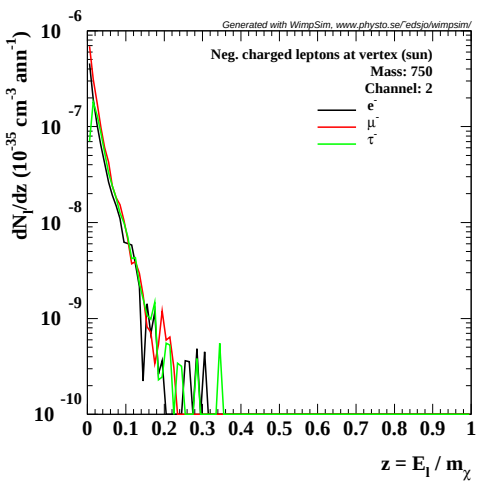
15.2 Channel 2 – $u\bar{u}$

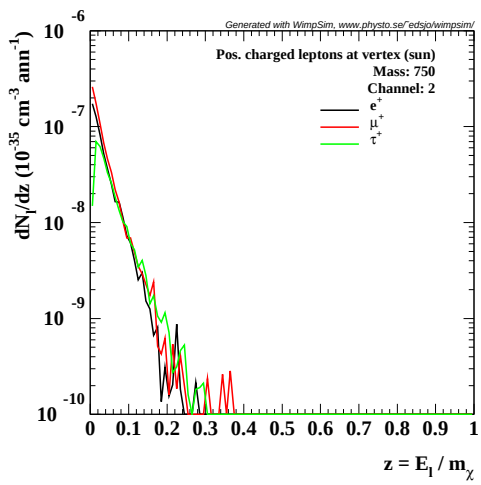
15.2.1 Neutrino fluxes at detector (Sun)



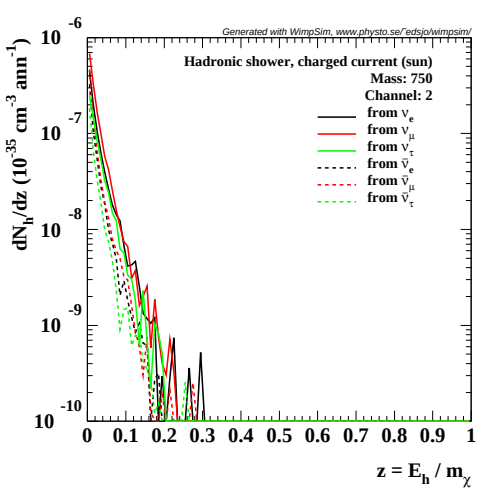


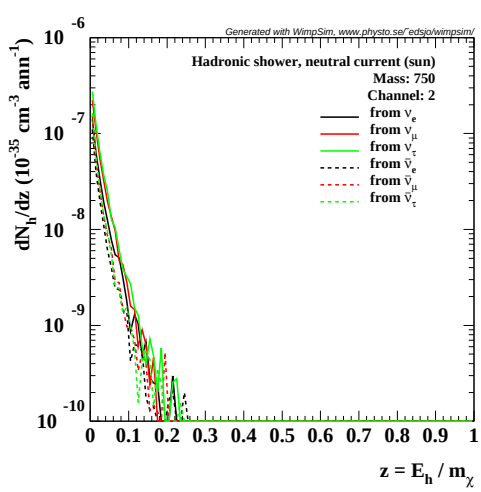
15.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



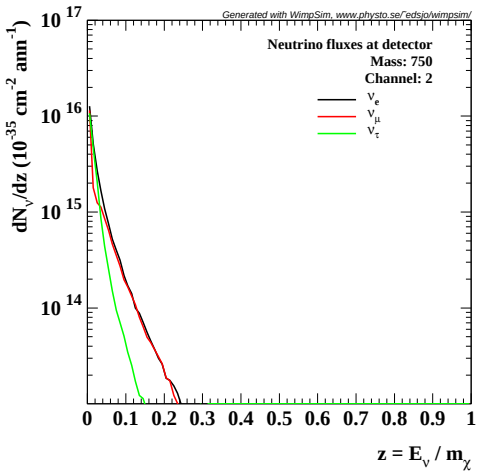


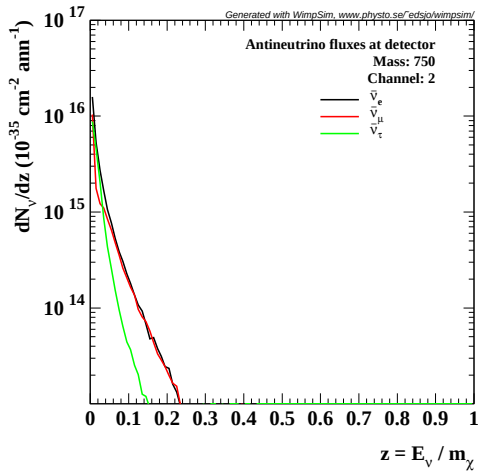
15.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



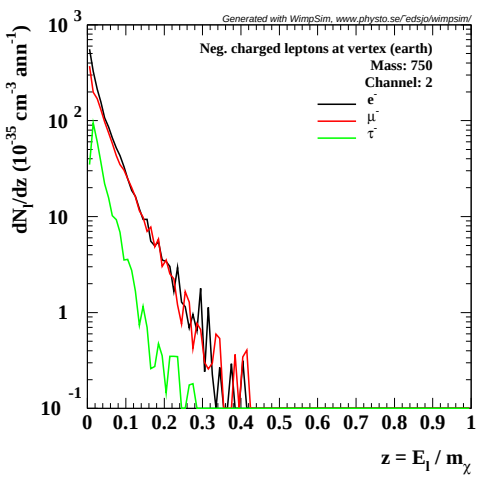


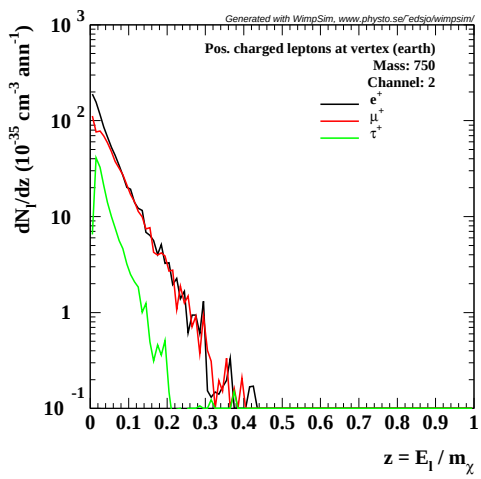
15.2.4 Neutrino fluxes at detector (Earth)



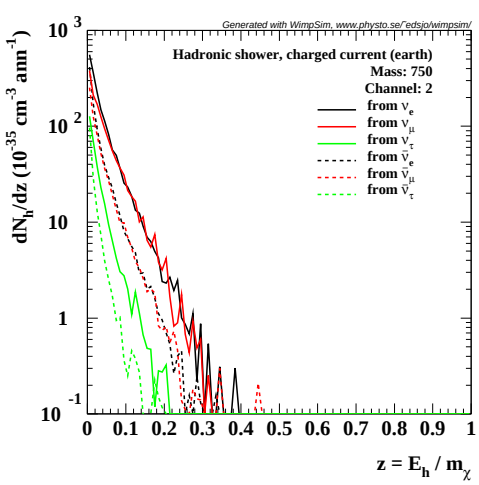


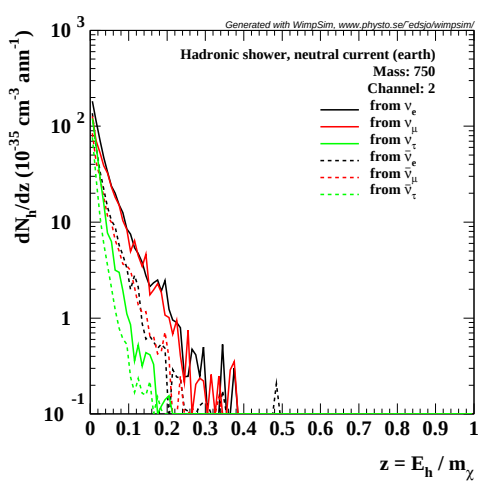
15.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



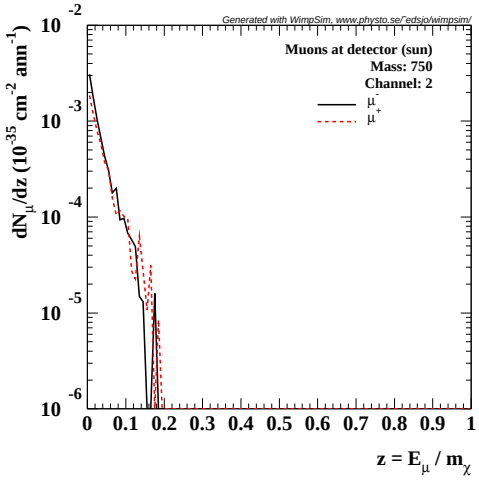


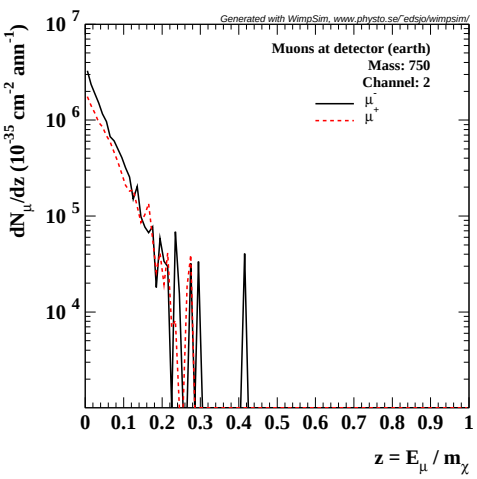
15.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





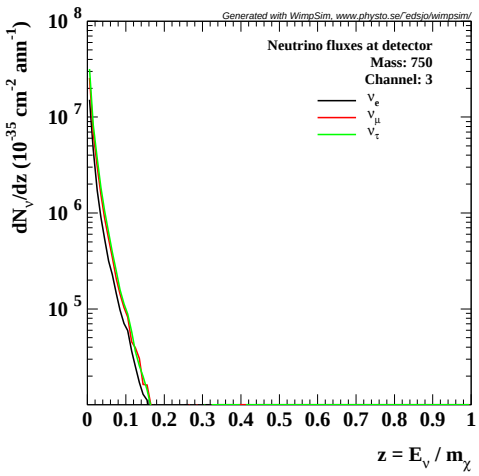
15.2.7 Muons at detector (Sun/Earth)

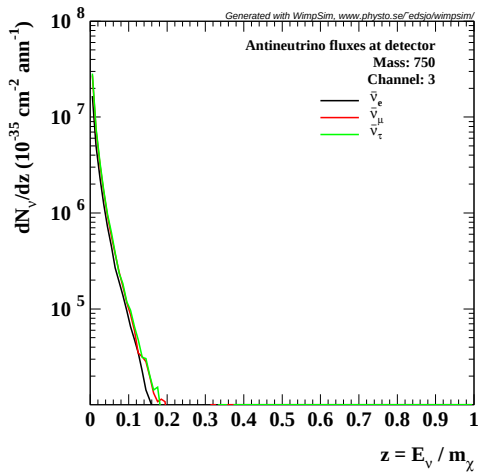




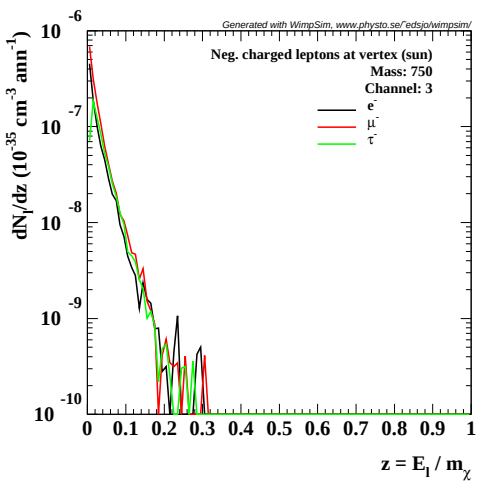
15.3 Channel 3 – $s\bar{s}$

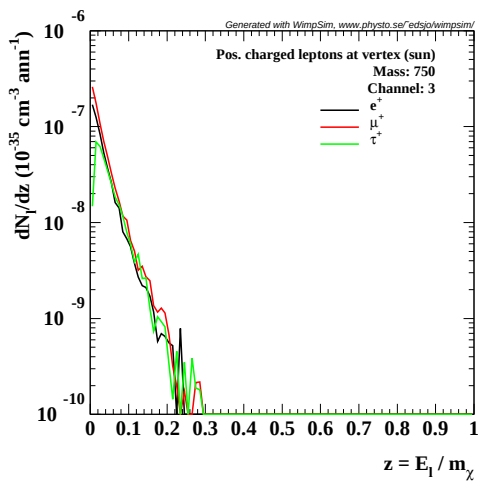
15.3.1 Neutrino fluxes at detector (Sun)



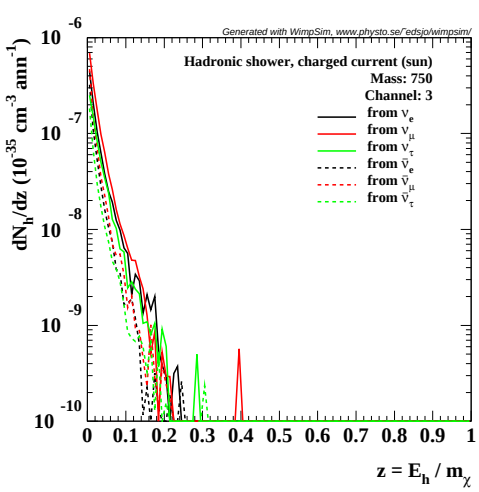


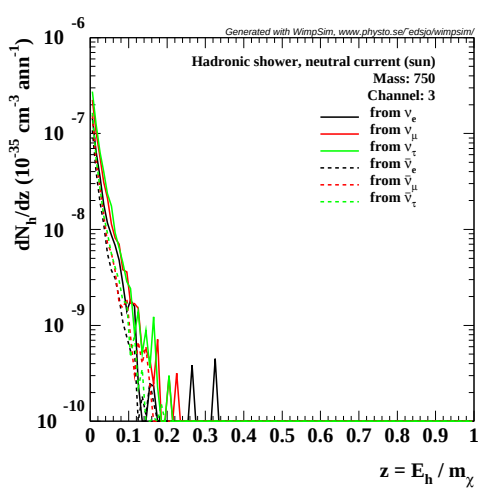
15.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



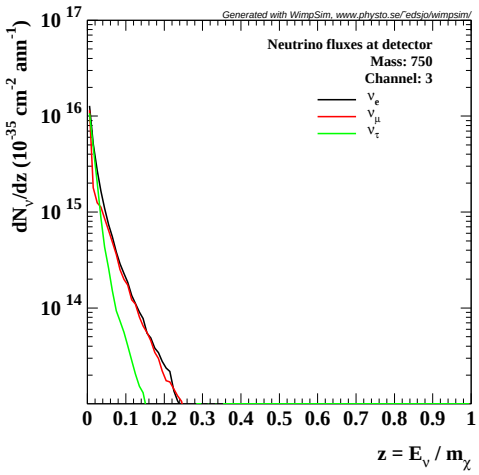


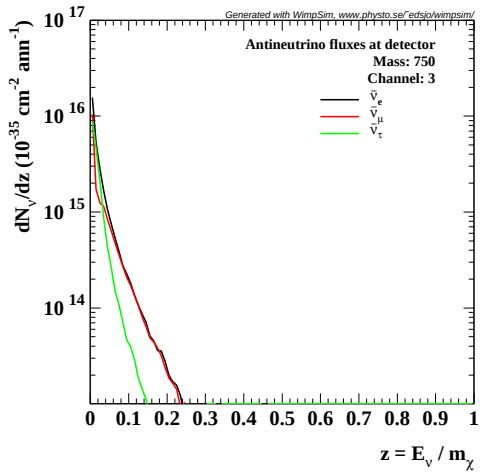
15.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



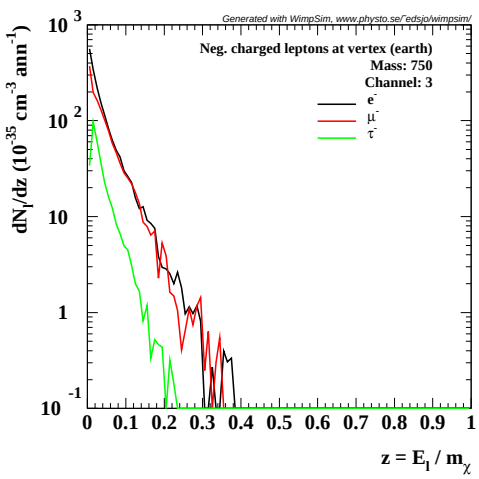


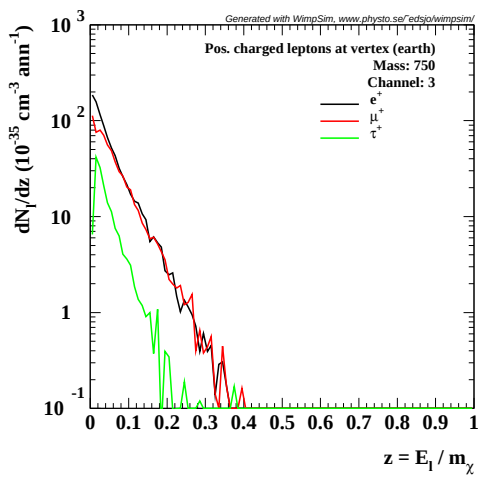
15.3.4 Neutrino fluxes at detector (Earth)



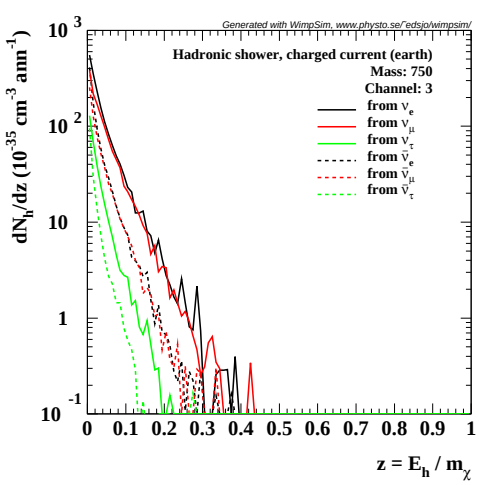


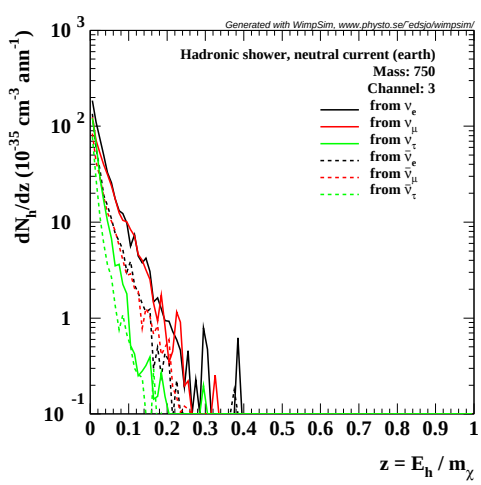
15.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



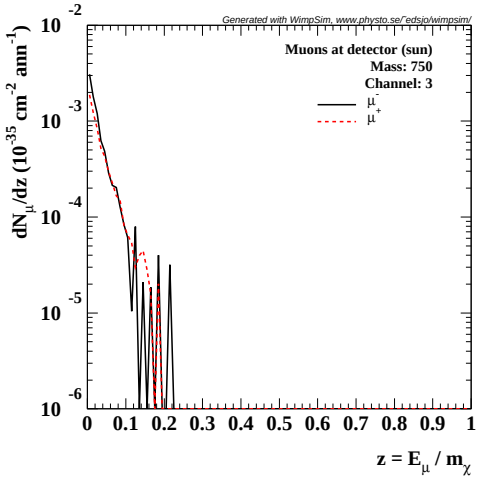


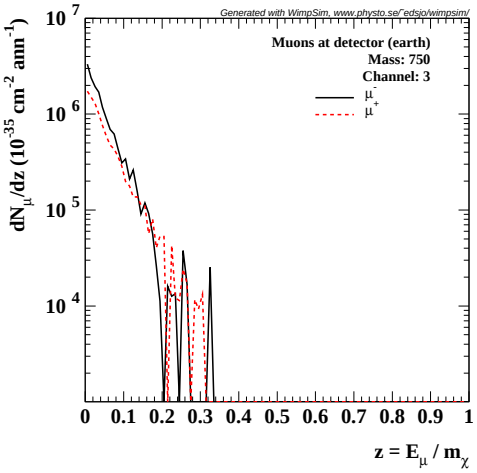
15.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





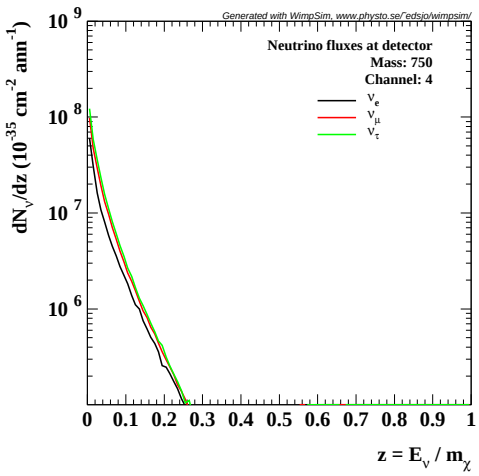
15.3.7 Muons at detector (Sun/Earth)

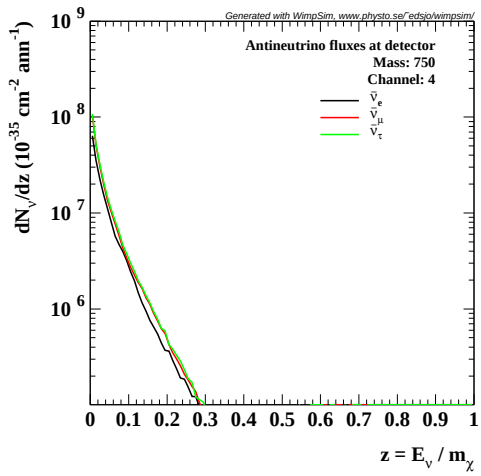




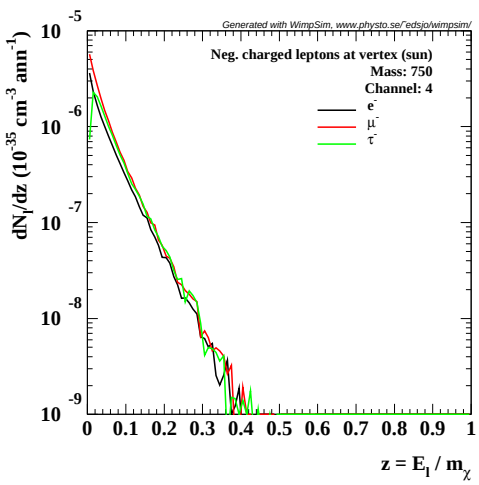
15.4 Channel 4 – $c\bar{c}$

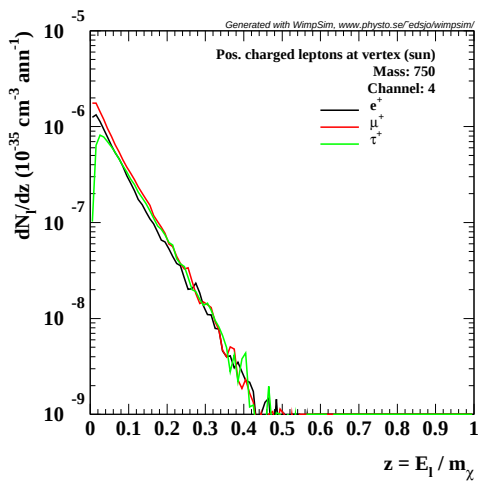
15.4.1 Neutrino fluxes at detector (Sun)



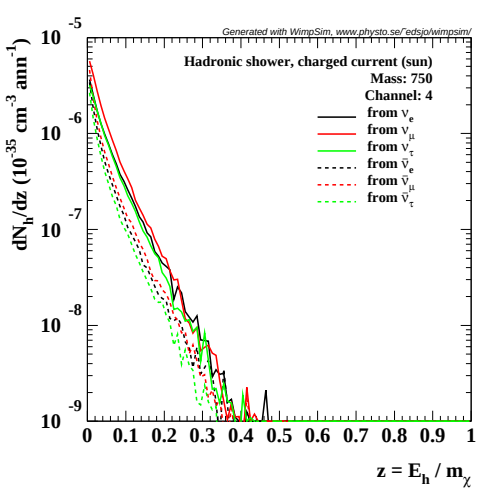


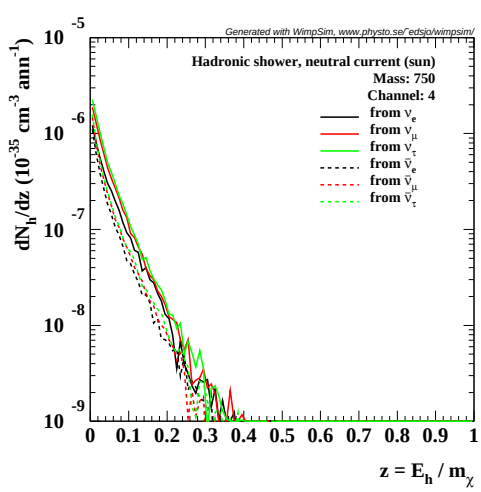
15.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



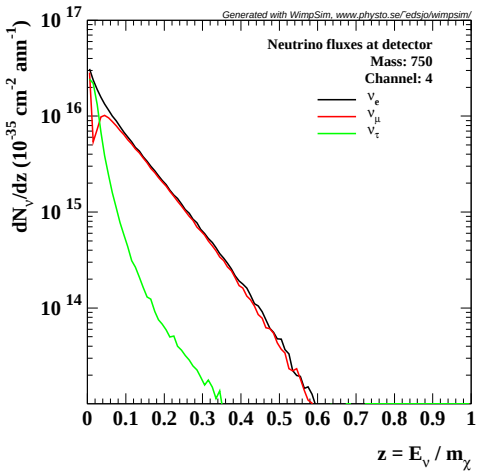


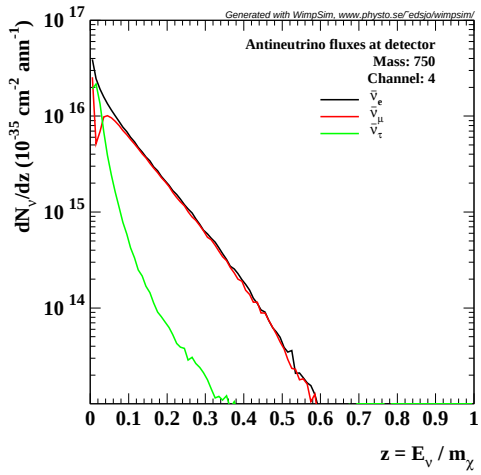
15.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



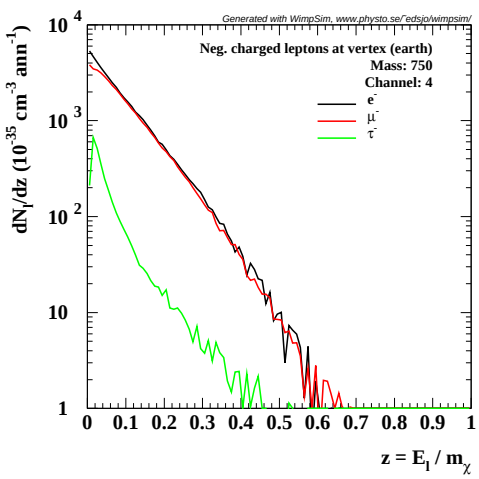


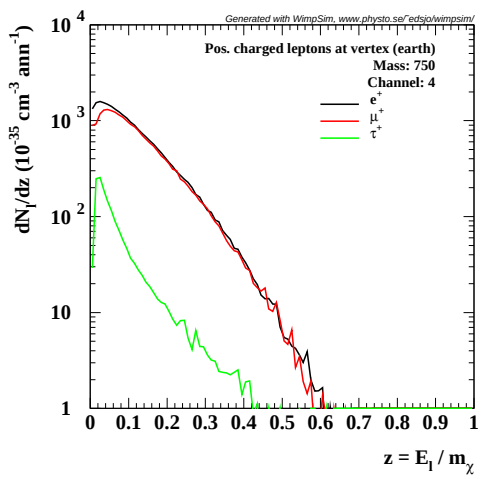
15.4.4 Neutrino fluxes at detector (Earth)



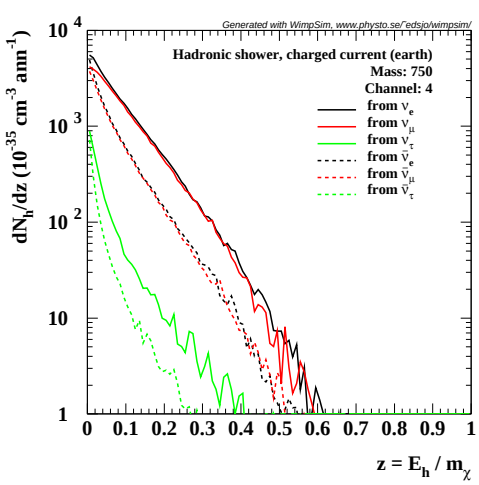


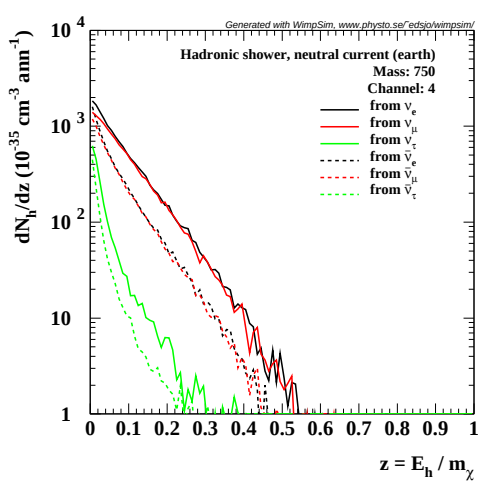
15.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



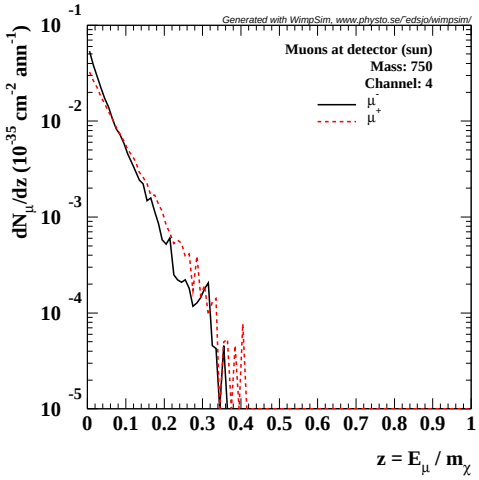


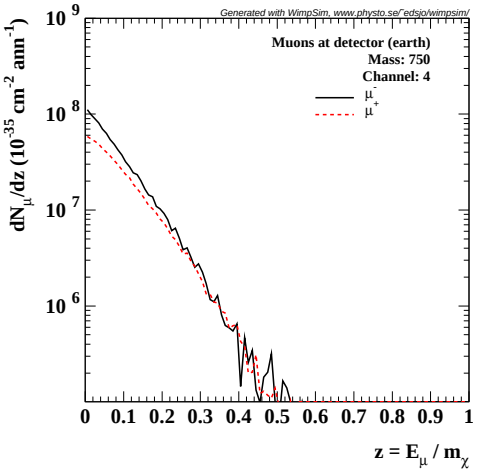
15.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





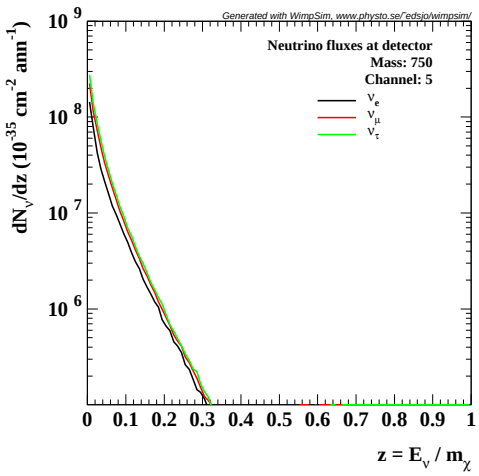
15.4.7 Muons at detector (Sun/Earth)

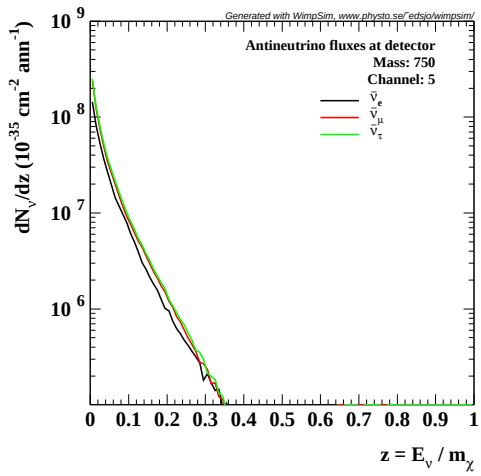




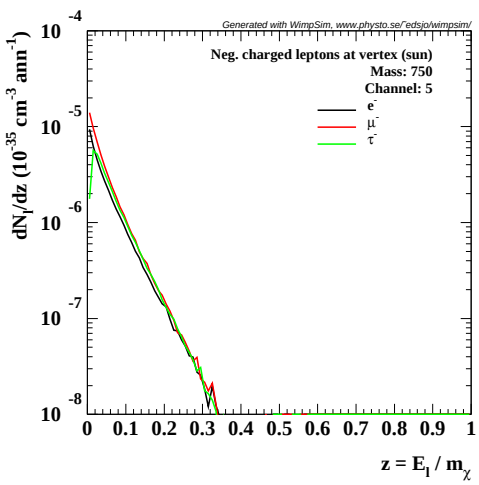
15.5 Channel 5 – $b\bar{b}$

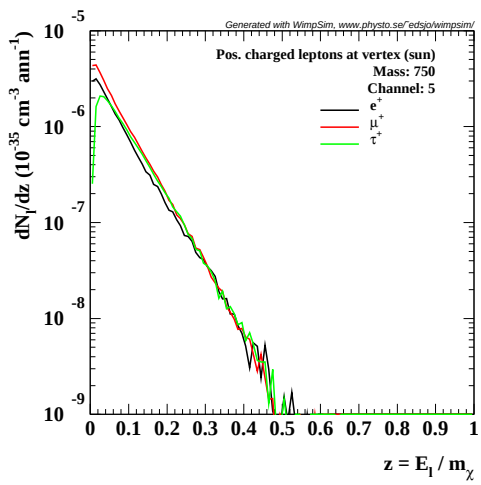
15.5.1 Neutrino fluxes at detector (Sun)



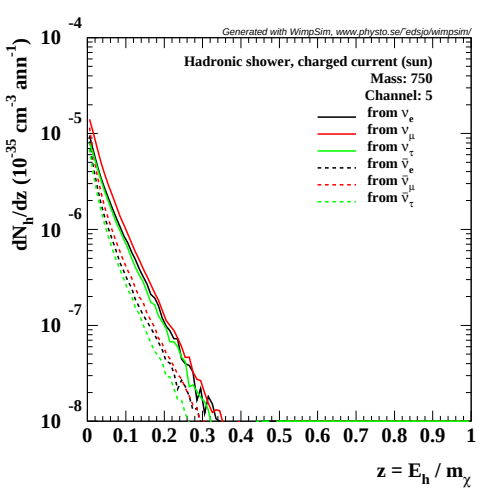


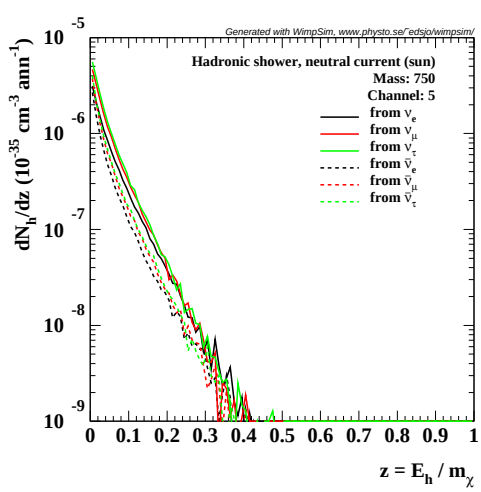
15.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



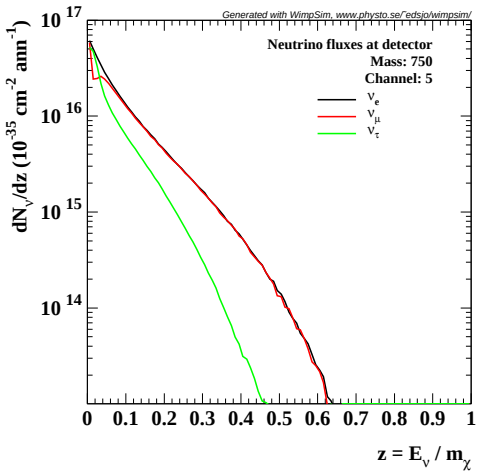


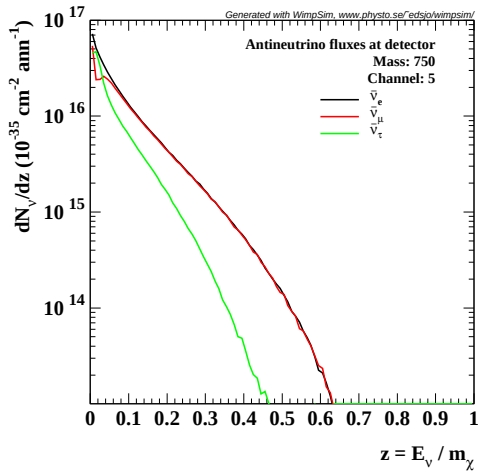
15.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



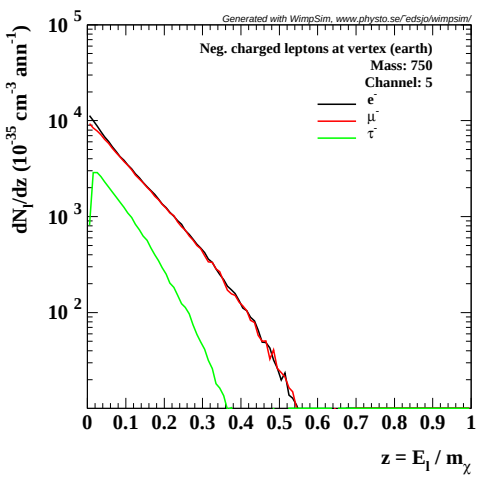


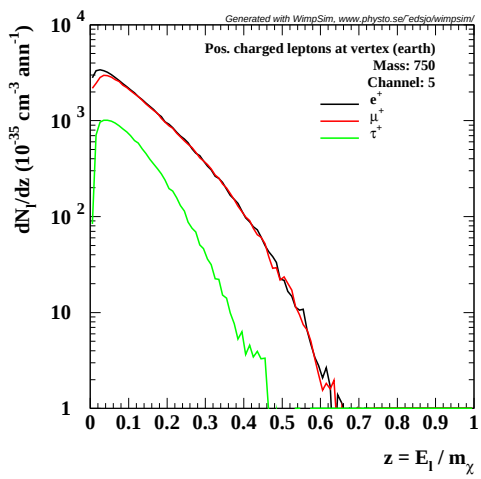
15.5.4 Neutrino fluxes at detector (Earth)



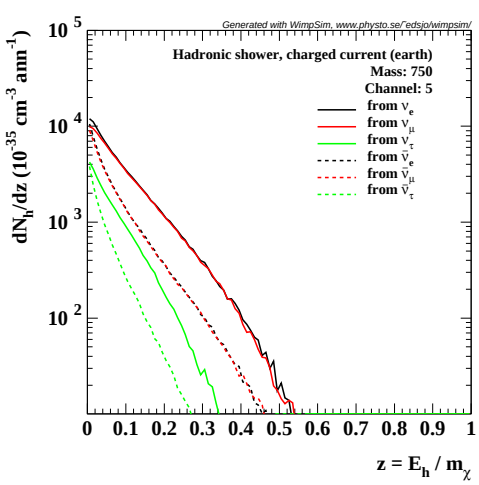


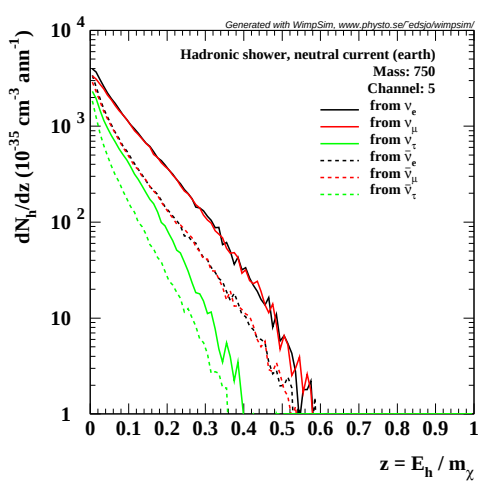
15.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



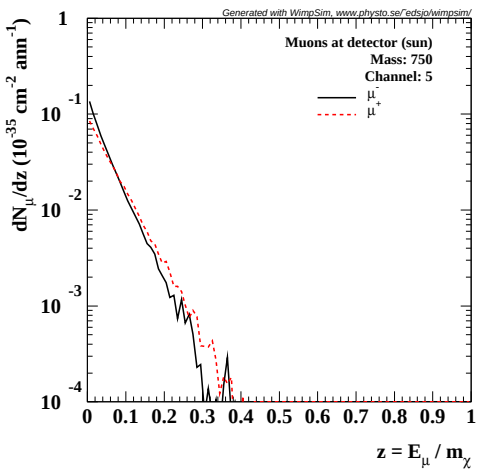


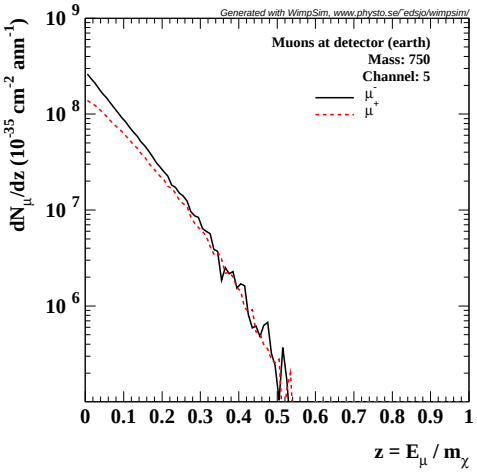
15.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





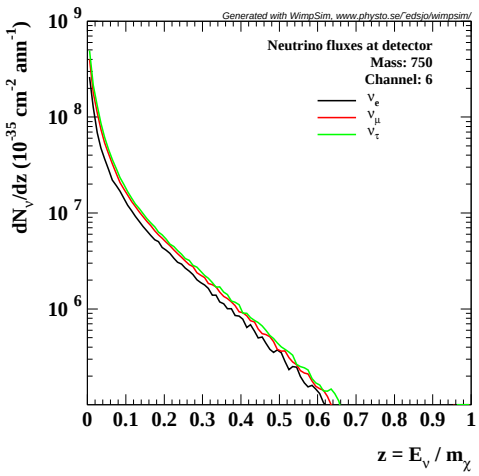
15.5.7 Muons at detector (Sun/Earth)

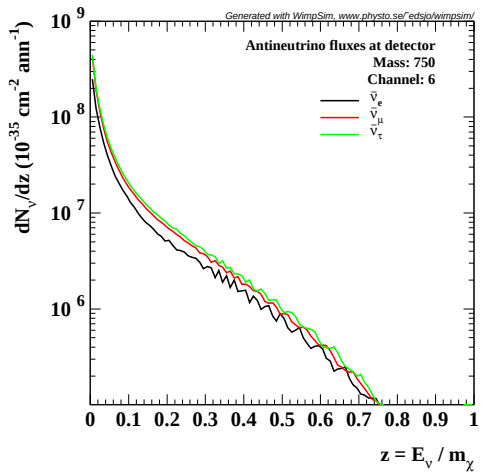




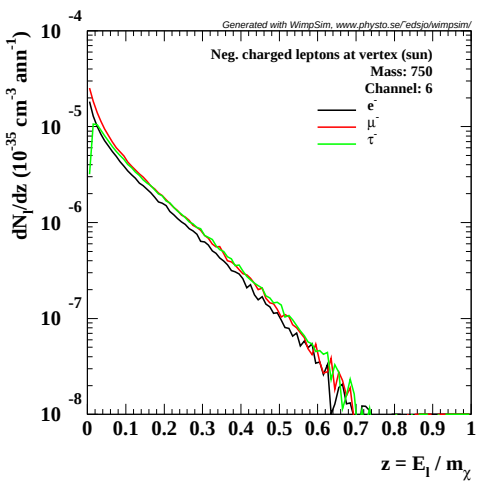
15.6 Channel 6 – $t\bar{t}$

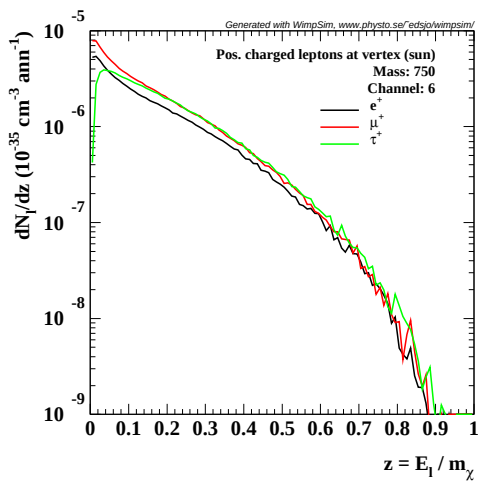
15.6.1 Neutrino fluxes at detector (Sun)



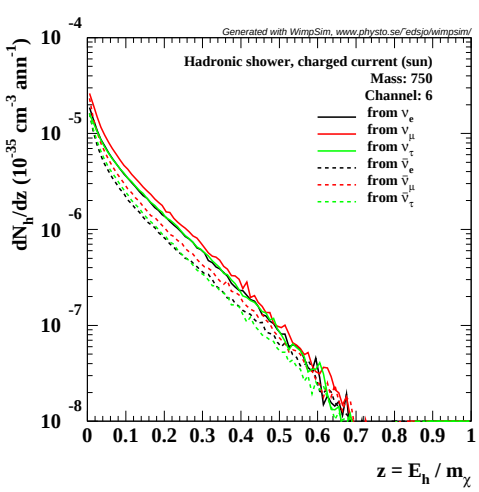


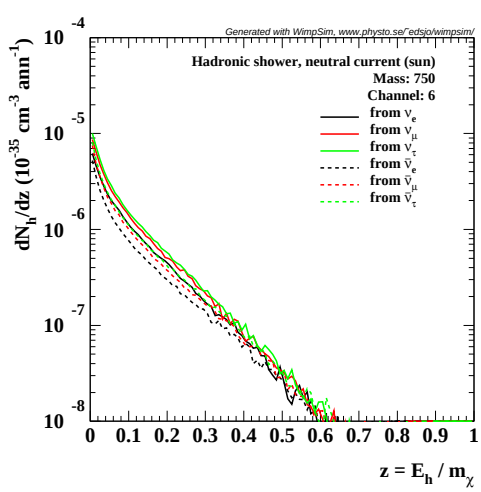
15.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



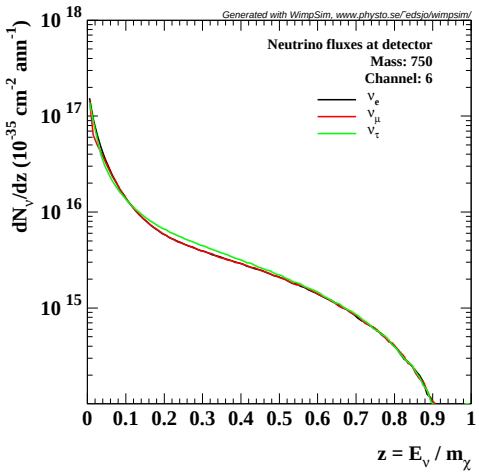


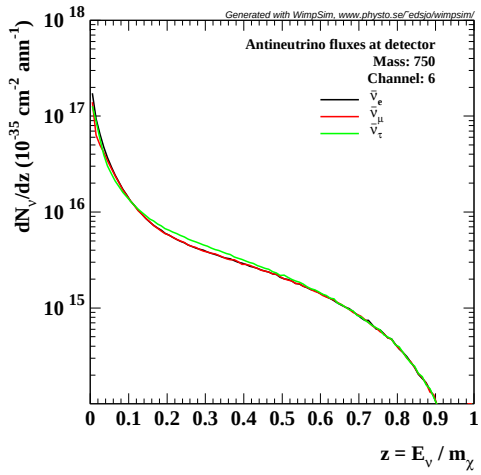
15.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



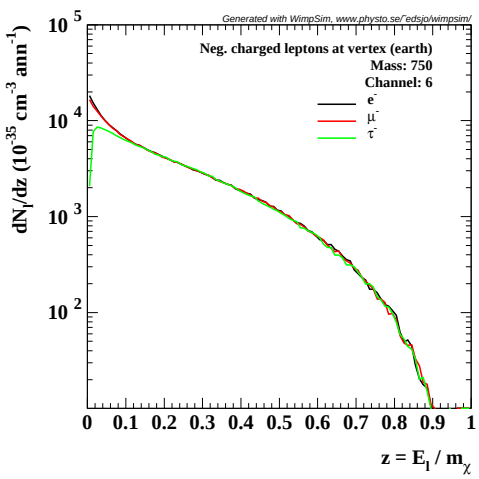


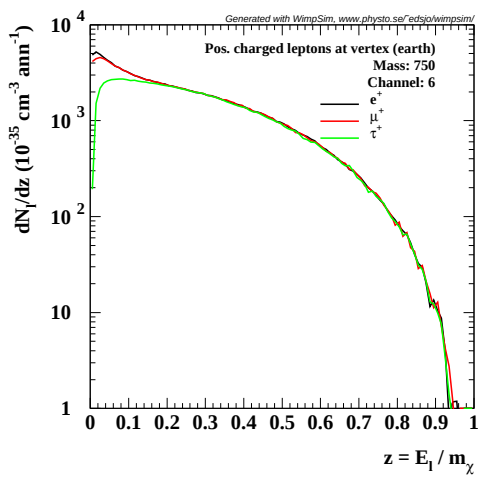
15.6.4 Neutrino fluxes at detector (Earth)



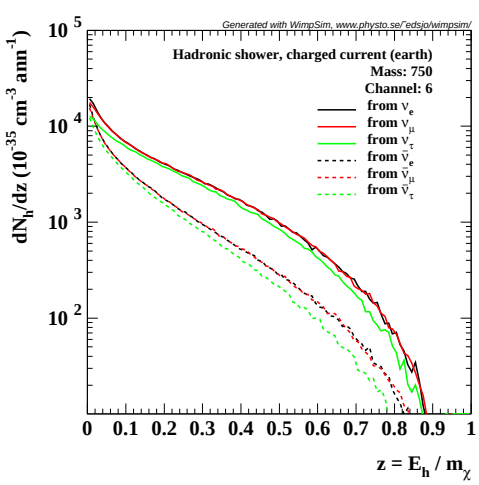


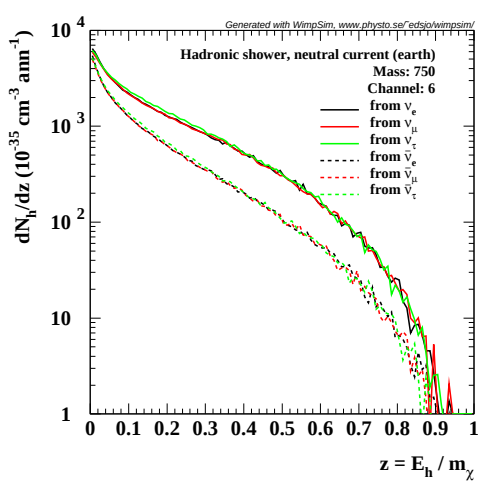
15.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



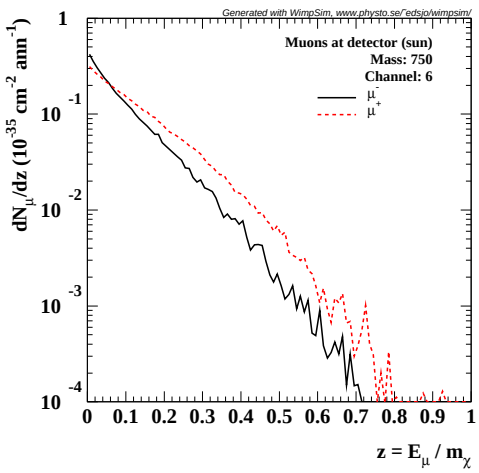


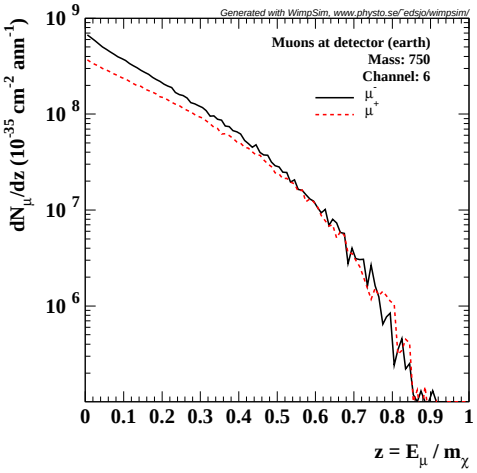
15.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





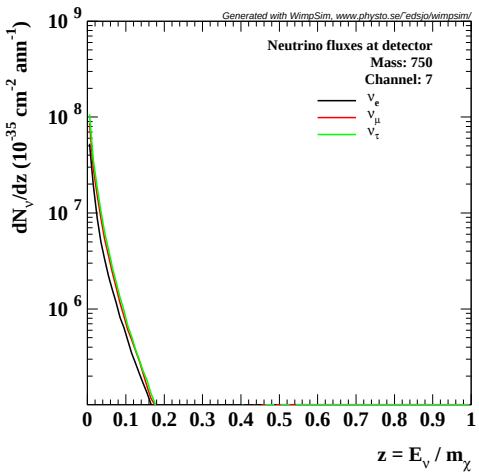
15.6.7 Muons at detector (Sun/Earth)

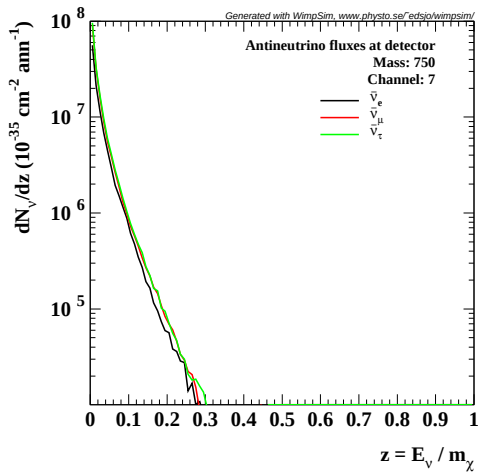




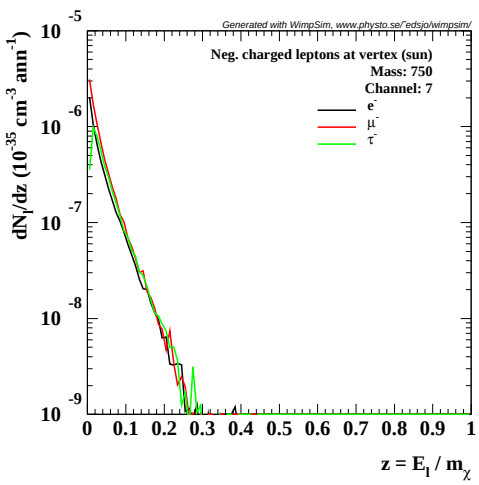
15.7 Channel 7 – gg

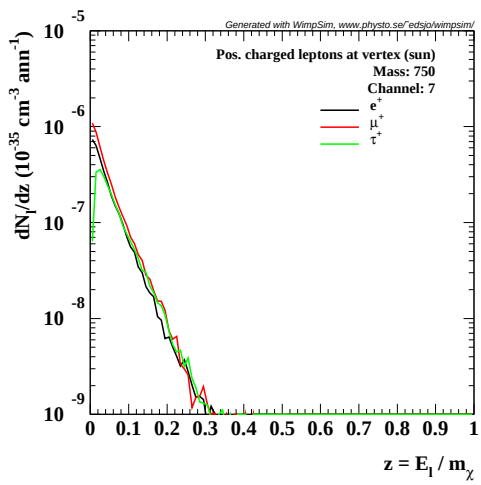
15.7.1 Neutrino fluxes at detector (Sun)



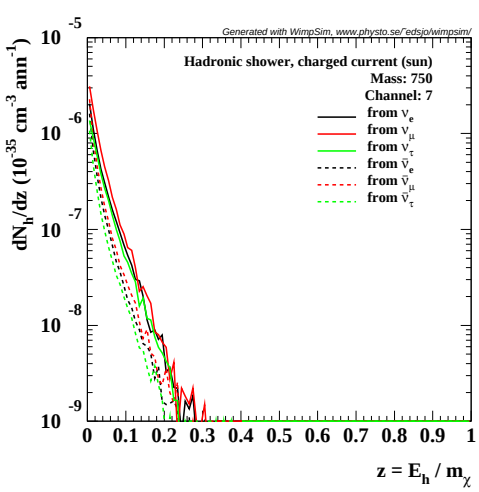


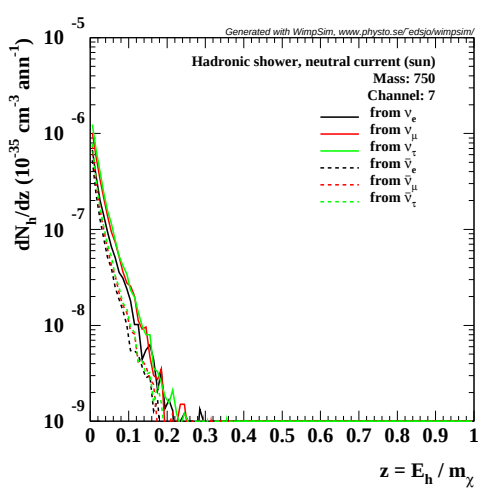
15.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



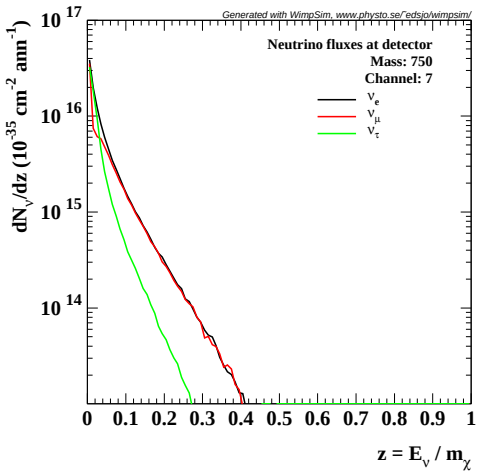


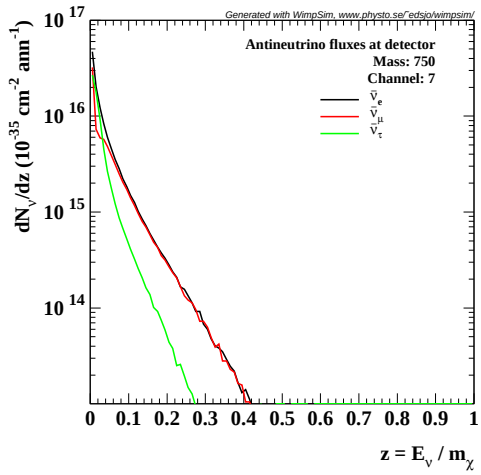
15.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



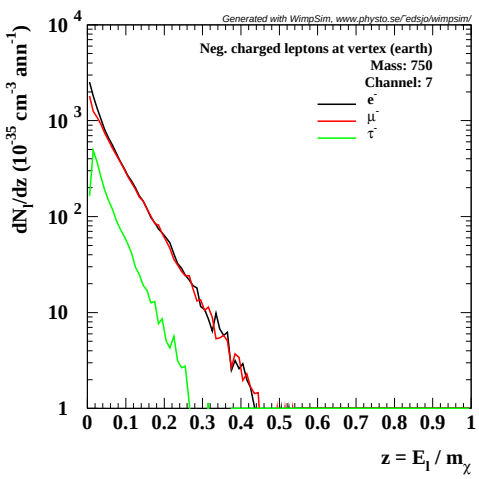


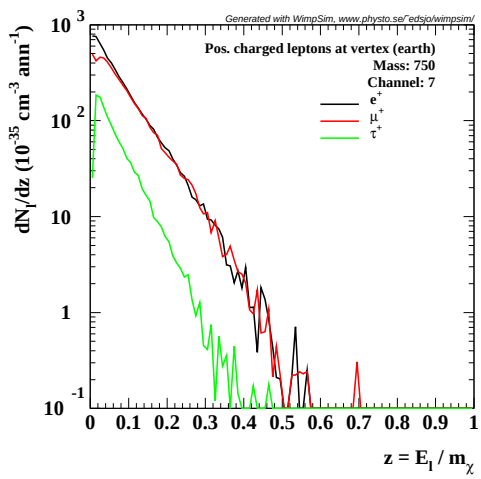
15.7.4 Neutrino fluxes at detector (Earth)



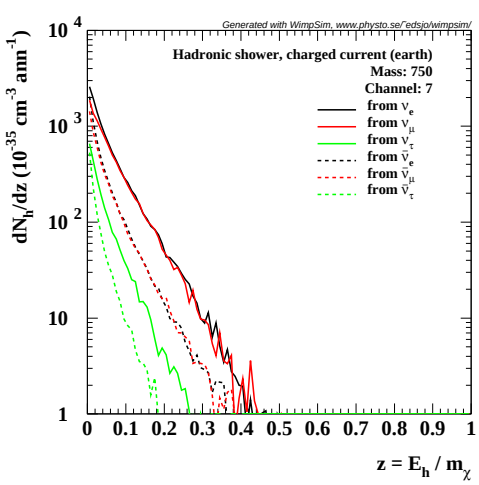


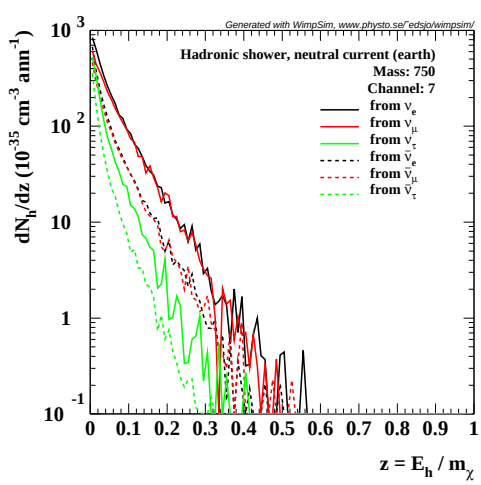
15.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



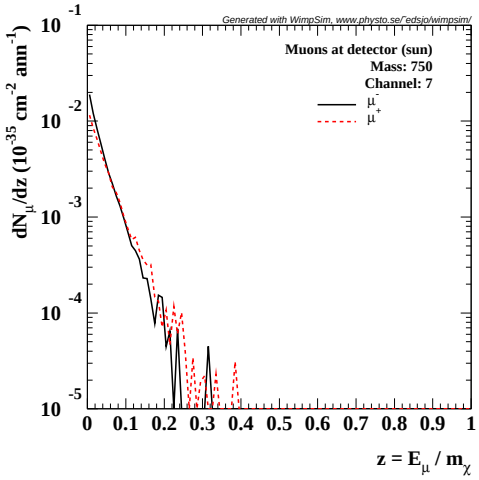


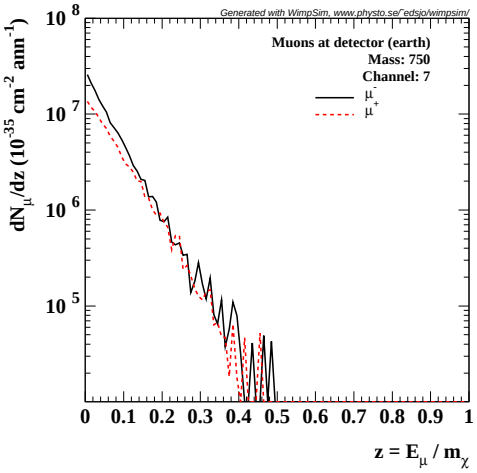
15.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





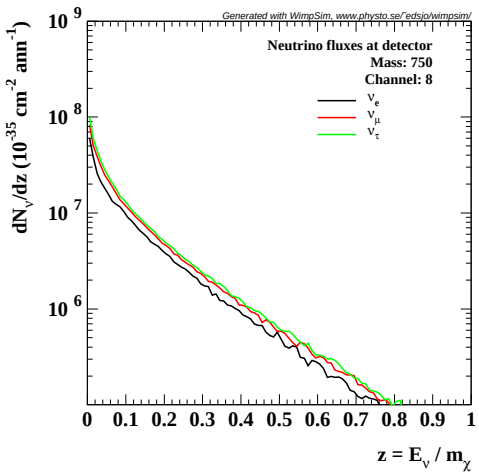
15.7.7 Muons at detector (Sun/Earth)

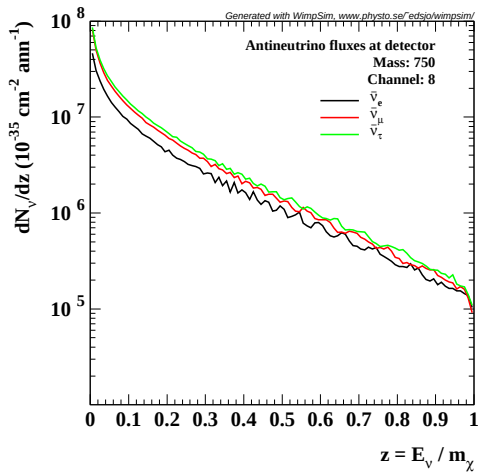




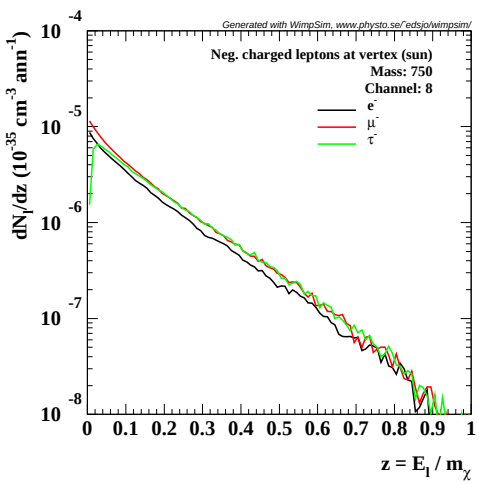
15.8 Channel 8 – W^-W^+

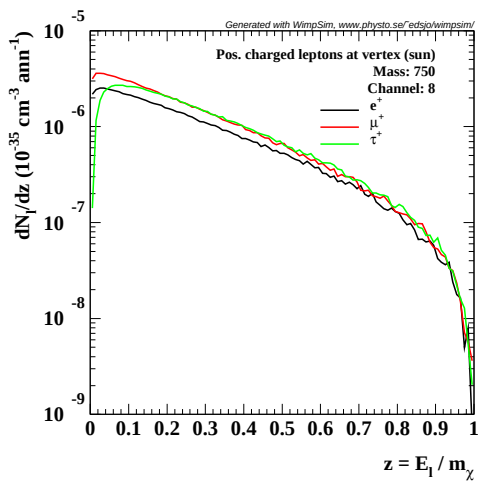
15.8.1 Neutrino fluxes at detector (Sun)



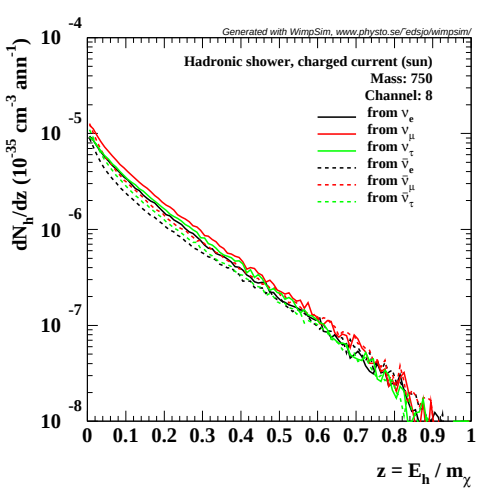


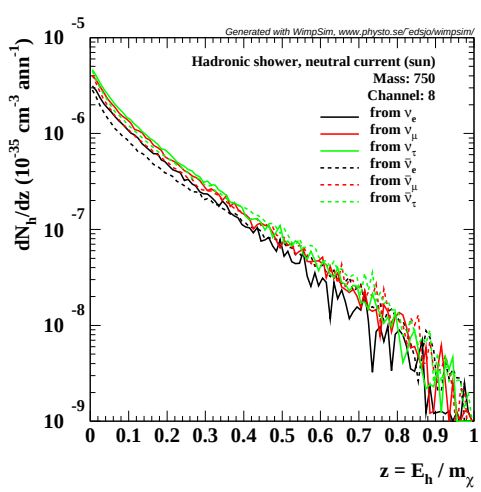
15.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



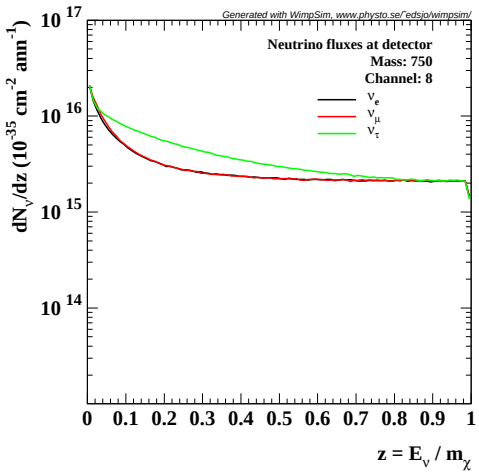


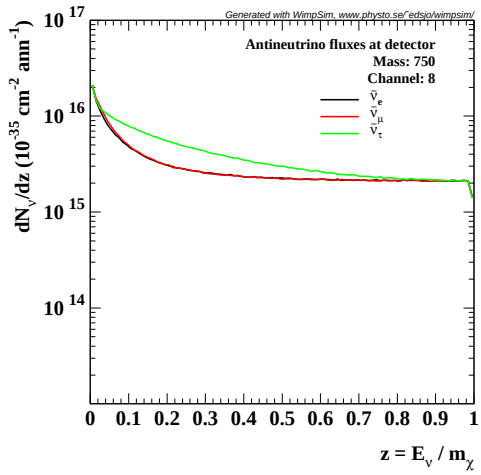
15.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



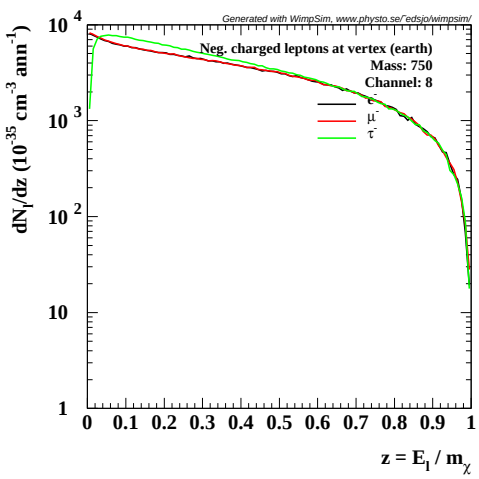


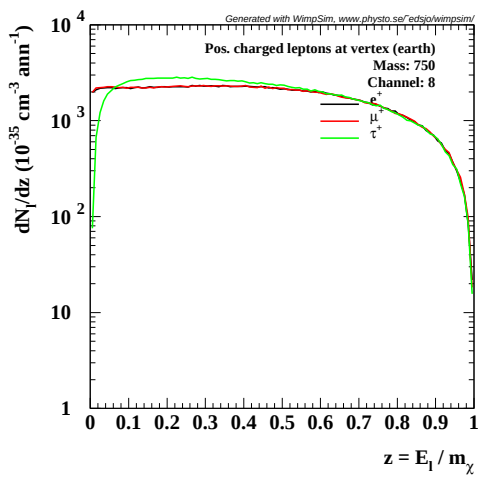
15.8.4 Neutrino fluxes at detector (Earth)



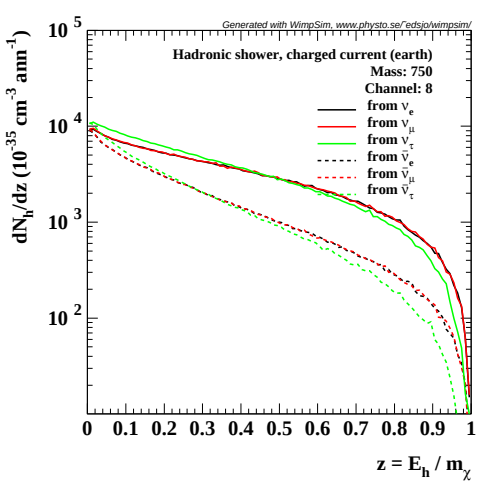


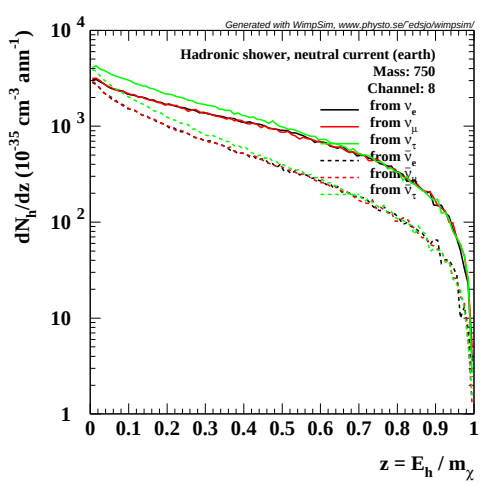
15.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



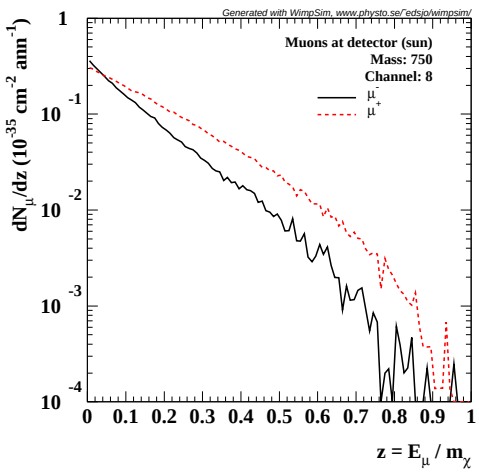


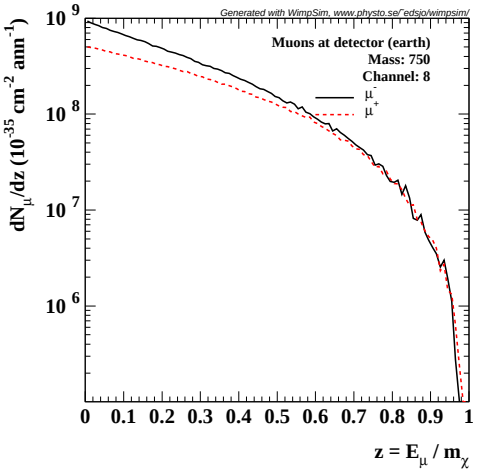
15.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





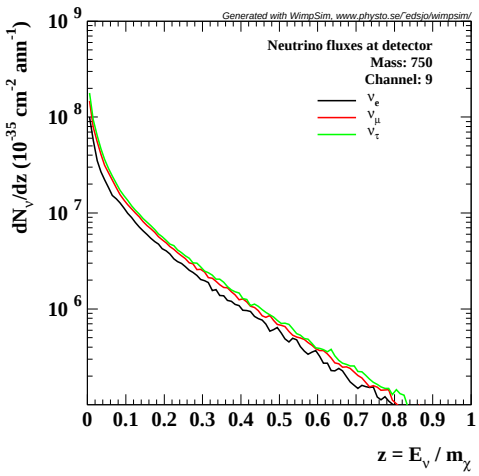
15.8.7 Muons at detector (Sun/Earth)

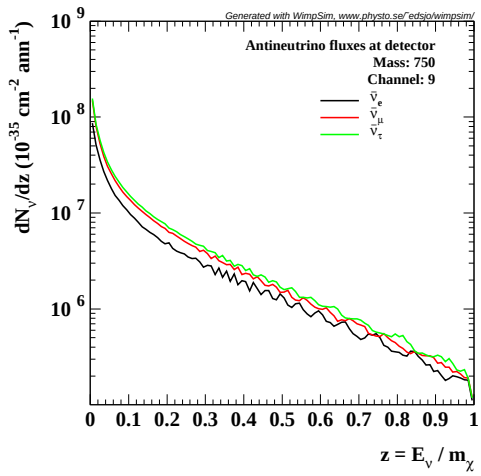




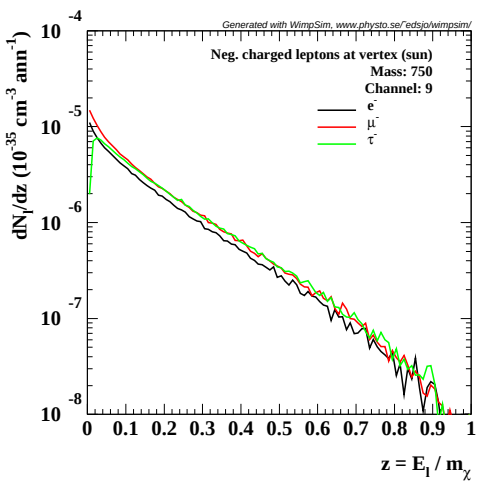
15.9 Channel 9 – $Z^0 Z^0$

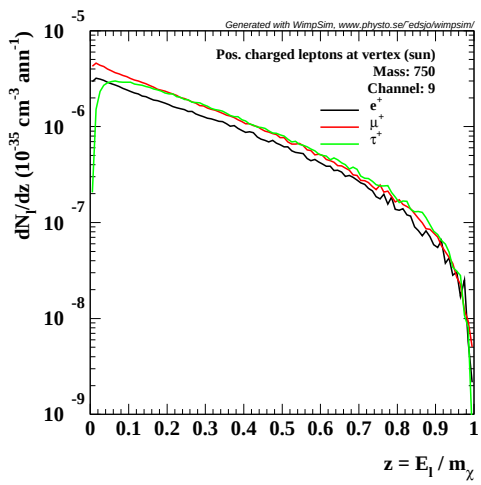
15.9.1 Neutrino fluxes at detector (Sun)



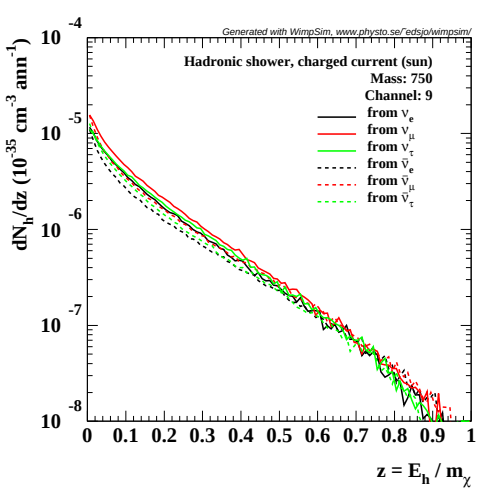


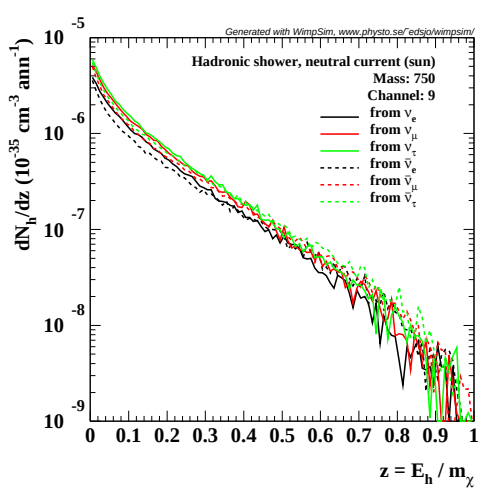
15.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



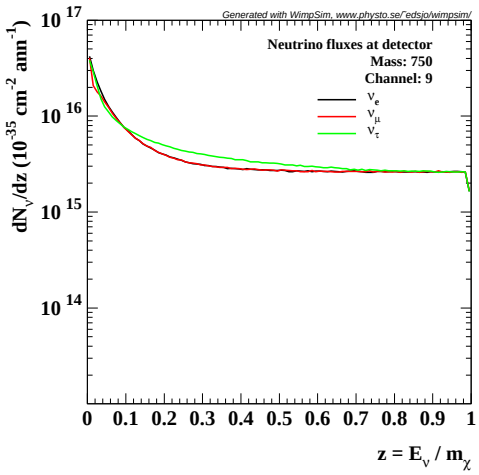


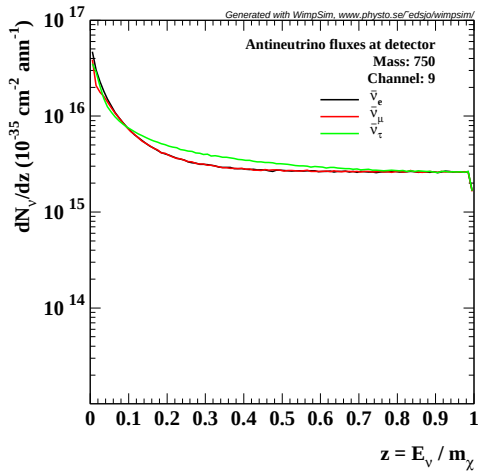
15.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



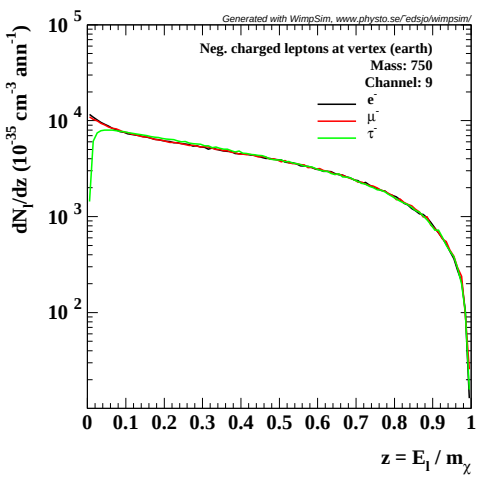


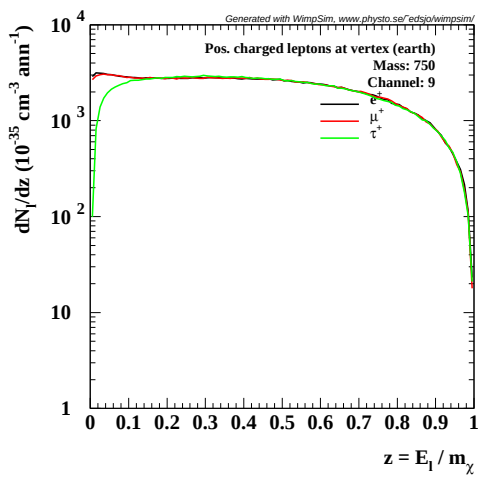
15.9.4 Neutrino fluxes at detector (Earth)



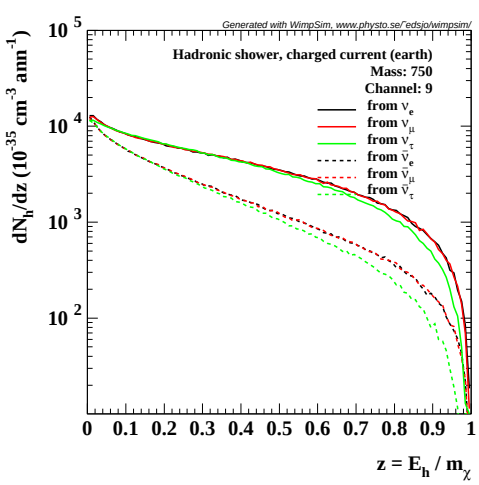


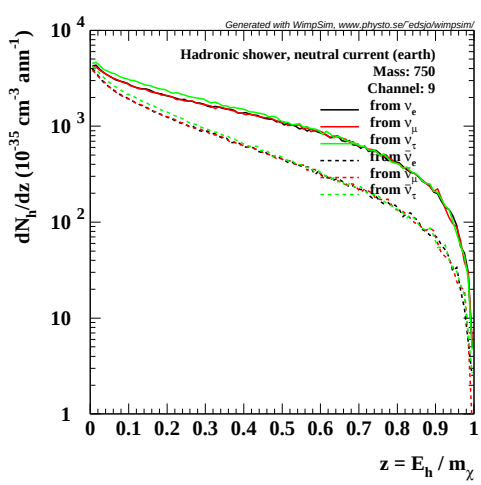
15.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



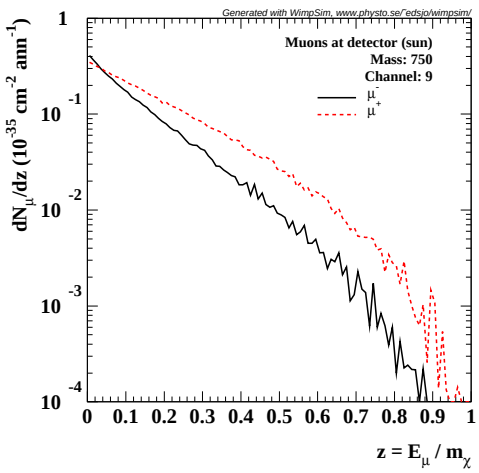


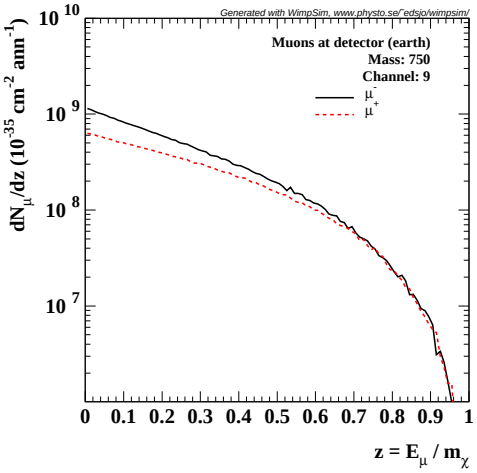
15.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





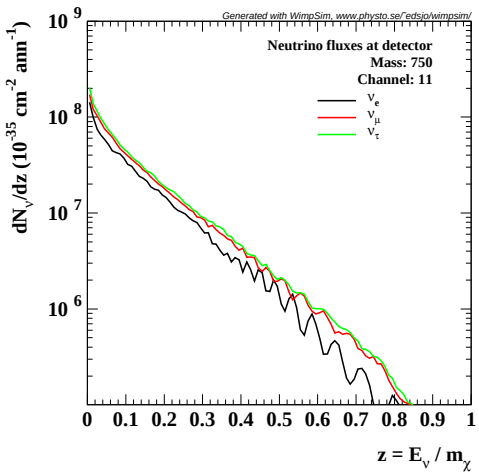
15.9.7 Muons at detector (Sun/Earth)

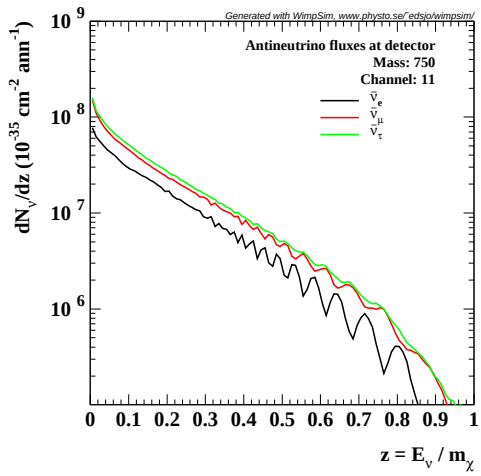




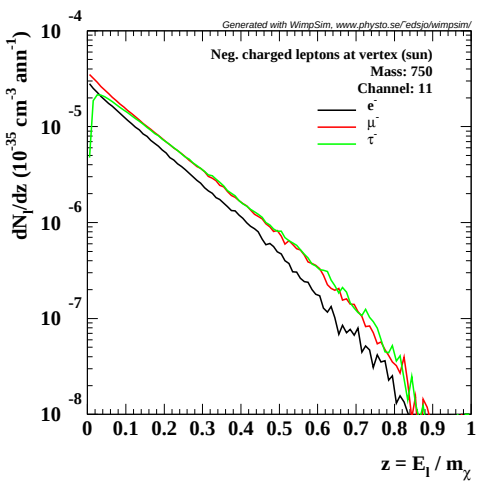
15.10 Channel 11 – $\tau^-\tau^+$

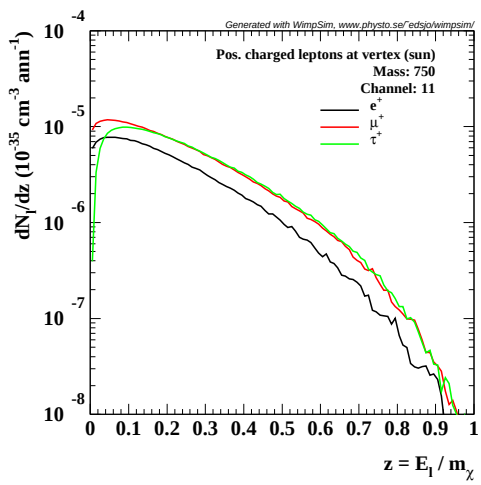
15.10.1 Neutrino fluxes at detector (Sun)



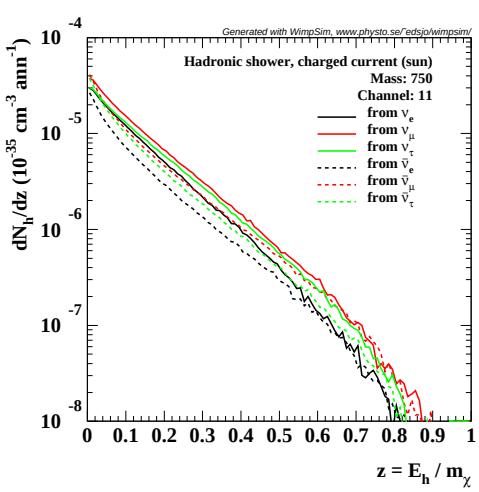


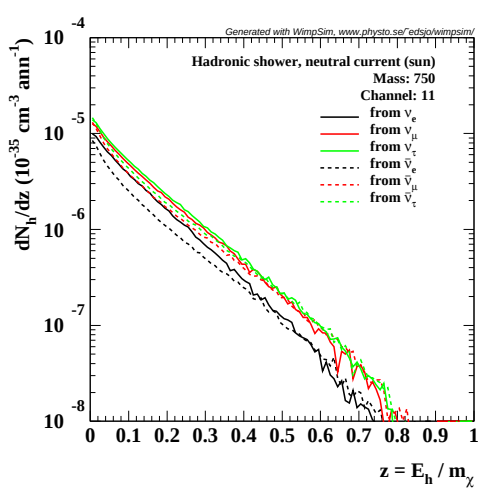
15.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



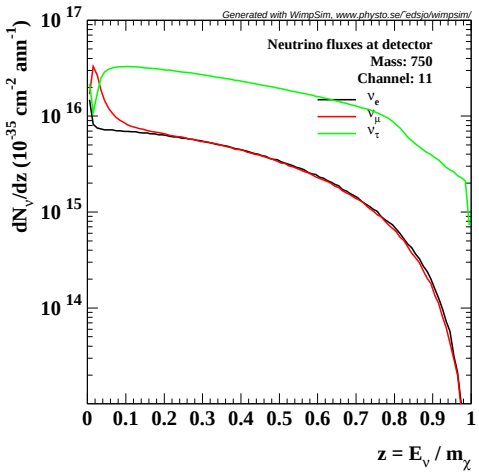


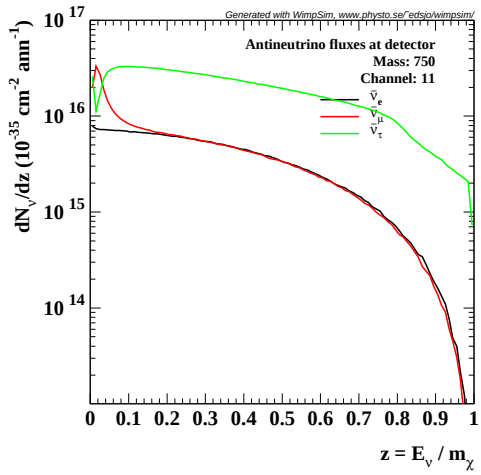
15.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



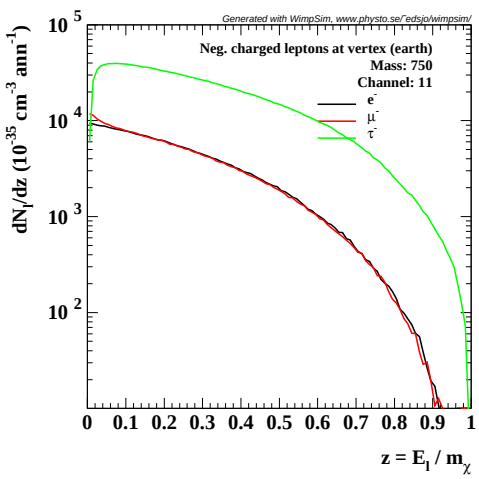


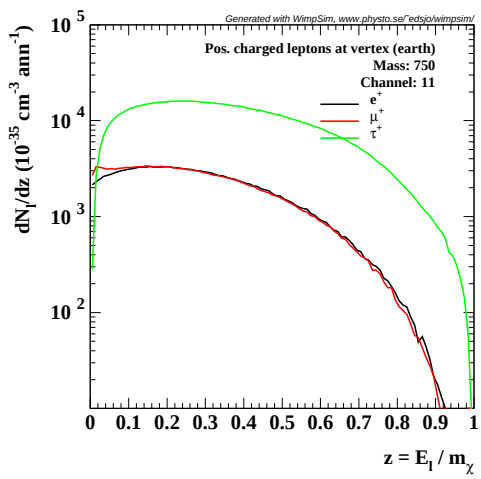
15.10.4 Neutrino fluxes at detector (Earth)



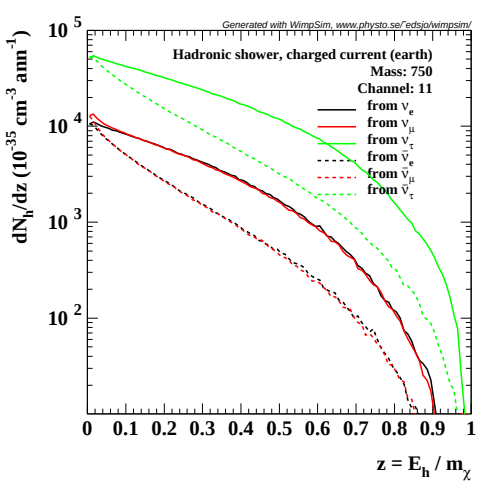


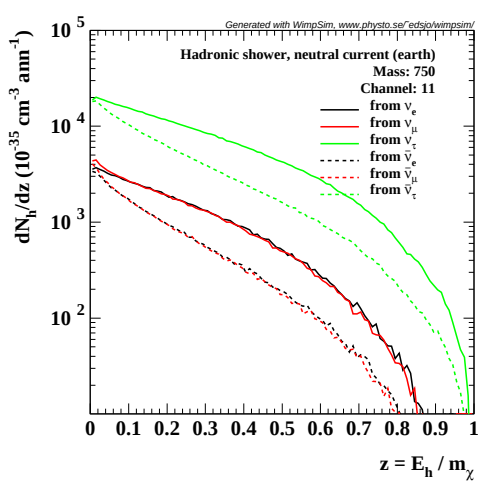
15.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



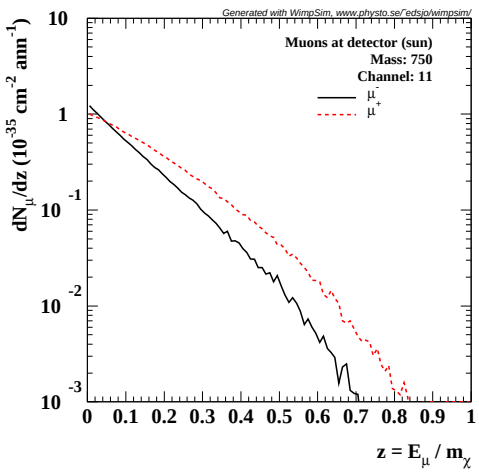


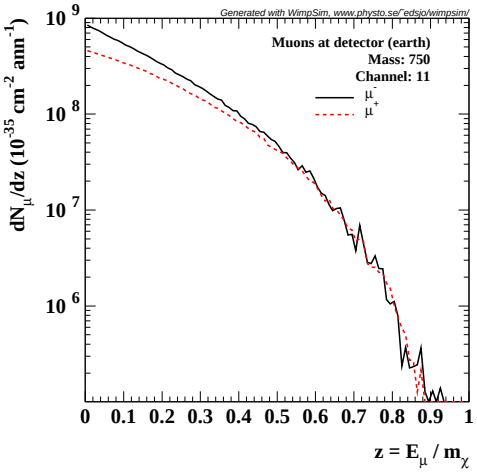
15.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





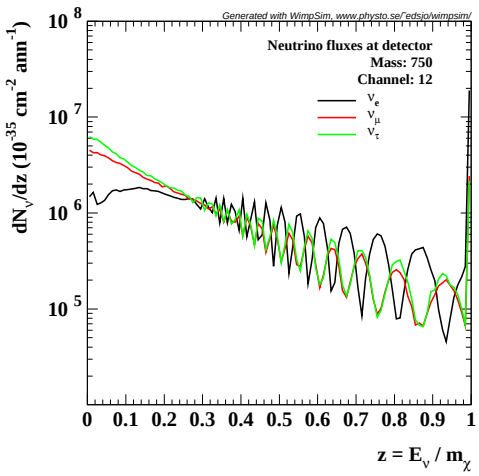
15.10.7 Muons at detector (Sun/Earth)

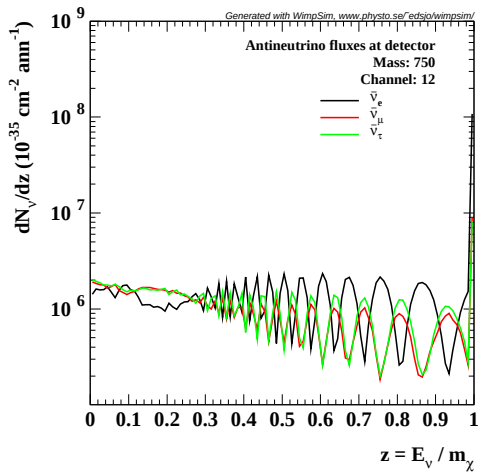




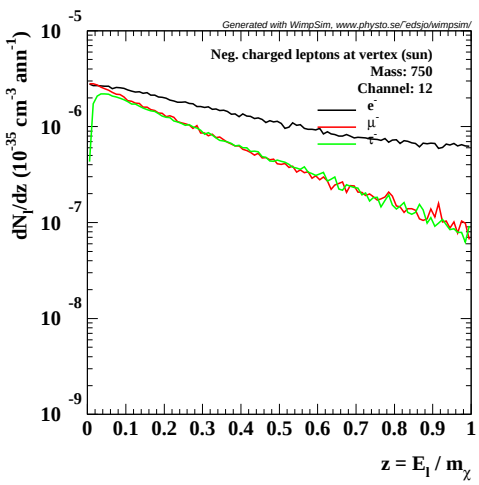
15.11 Channel 12 – $\nu_e\bar{\nu}_e$

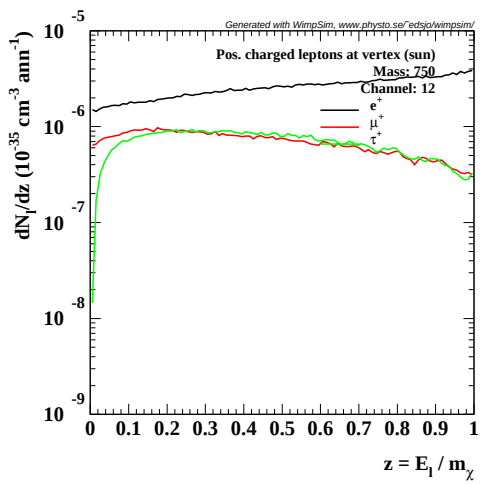
15.11.1 Neutrino fluxes at detector (Sun)



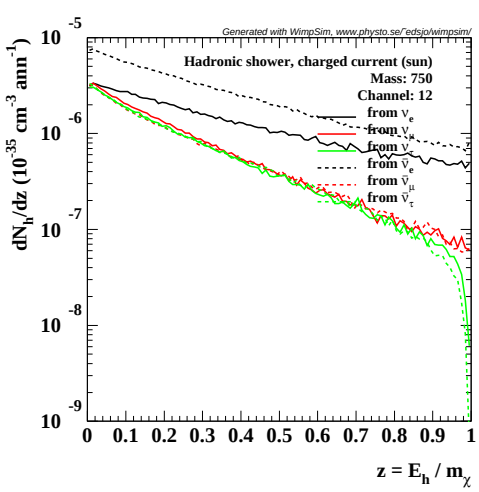


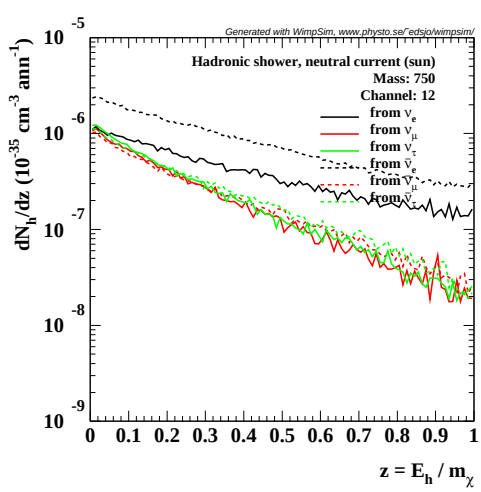
15.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



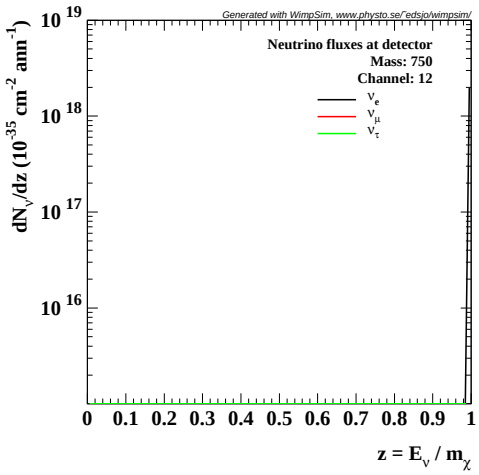


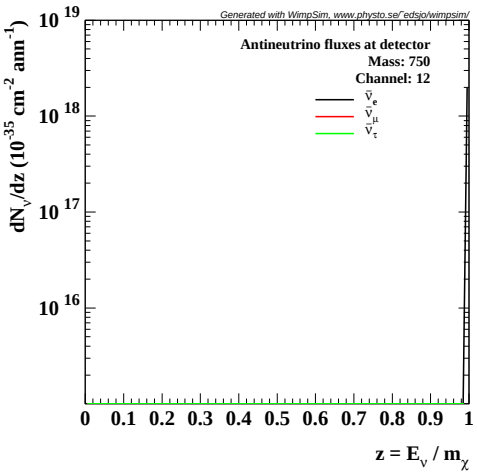
15.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



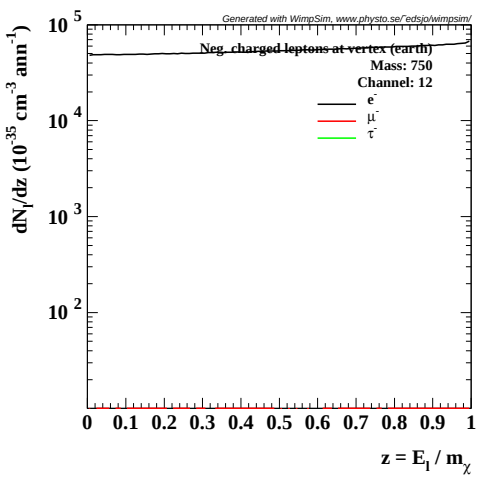


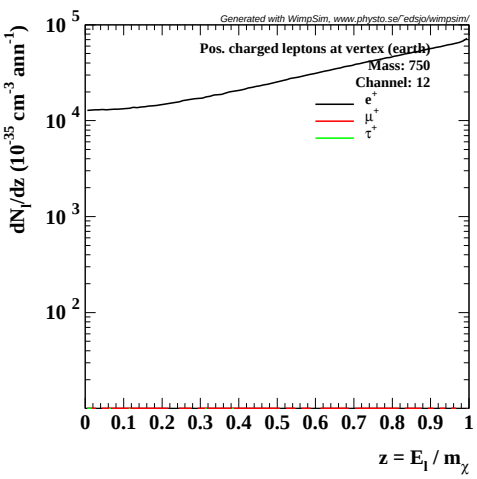
15.11.4 Neutrino fluxes at detector (Earth)



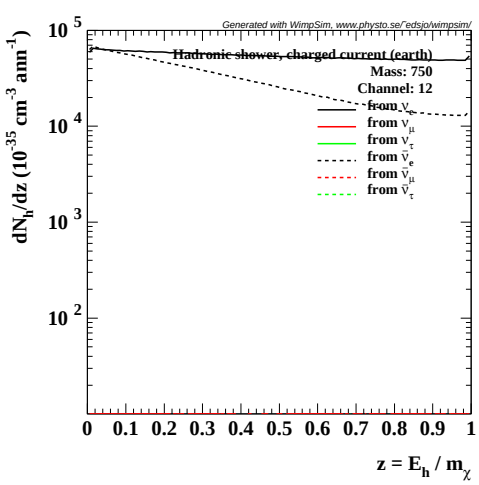


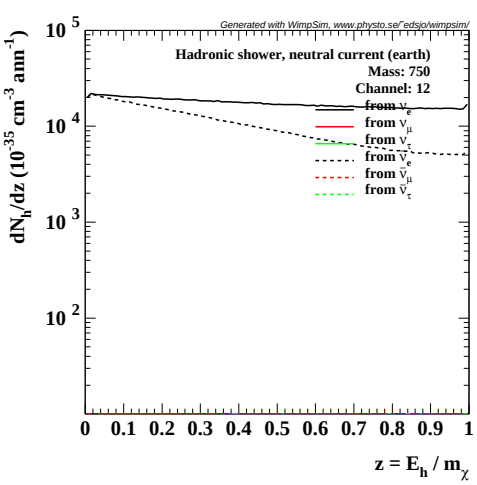
15.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



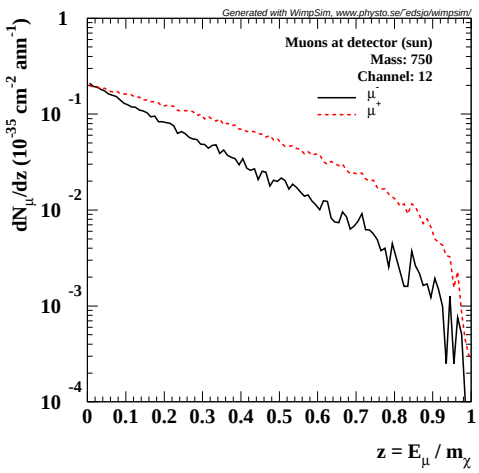


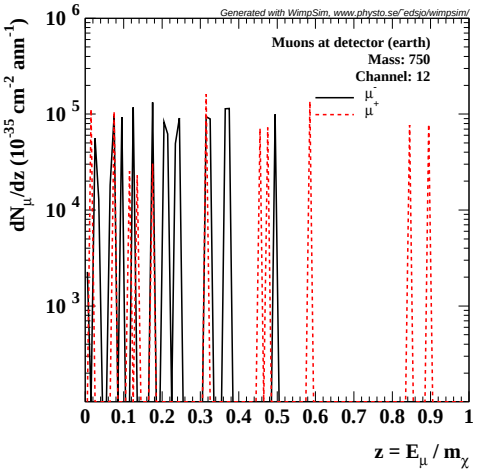
15.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





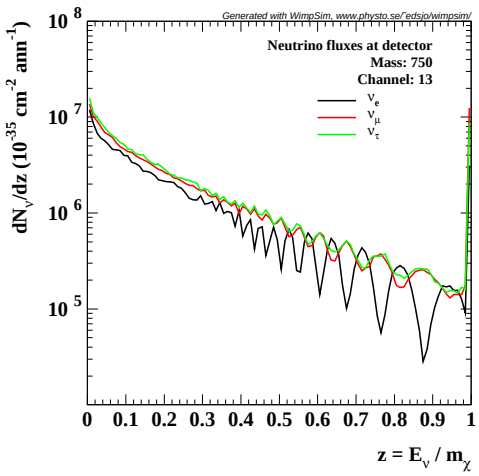
15.11.7 Muons at detector (Sun/Earth)

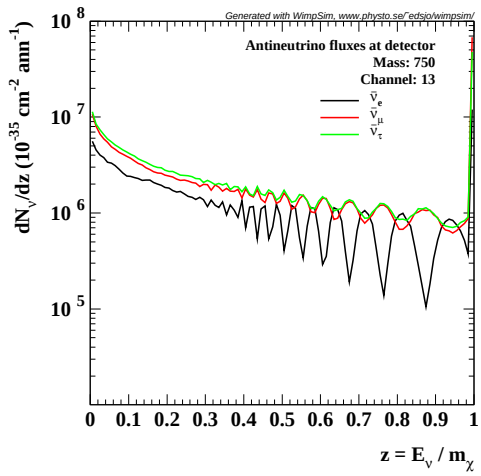




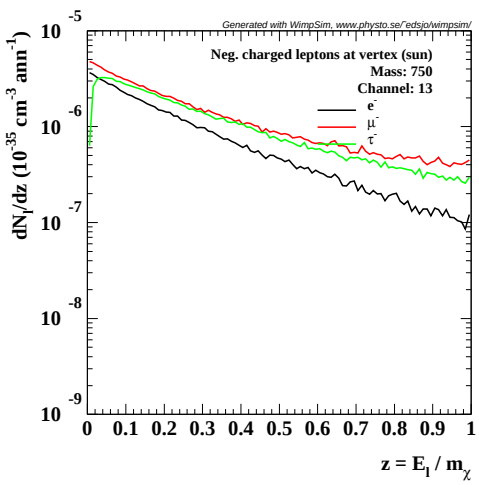
15.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

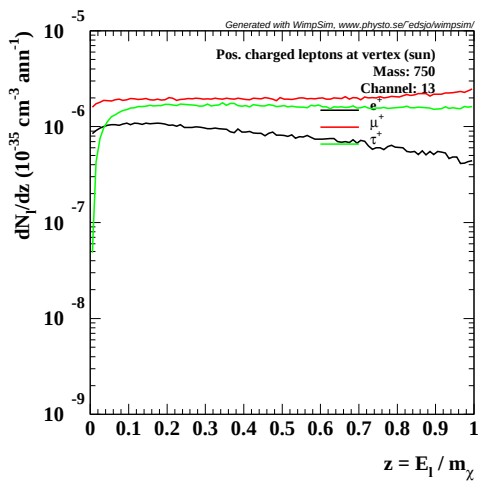
15.12.1 Neutrino fluxes at detector (Sun)



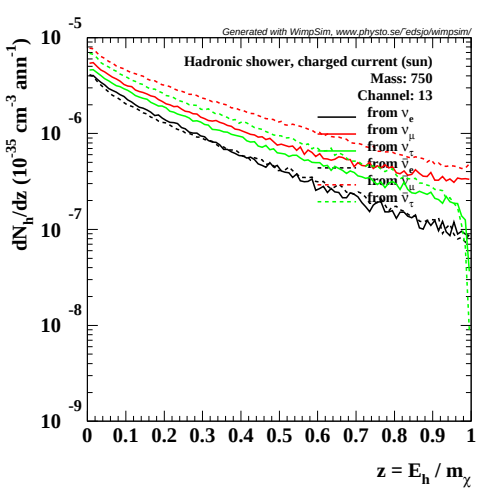


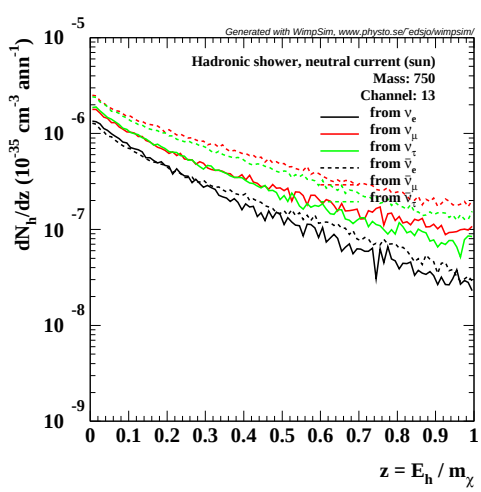
15.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



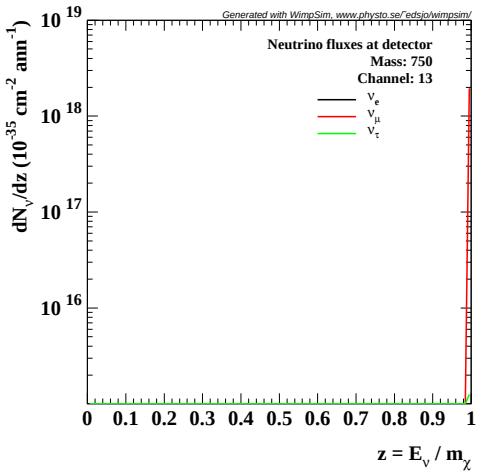


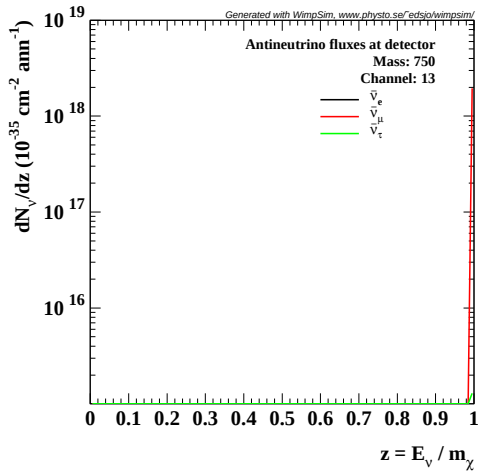
15.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



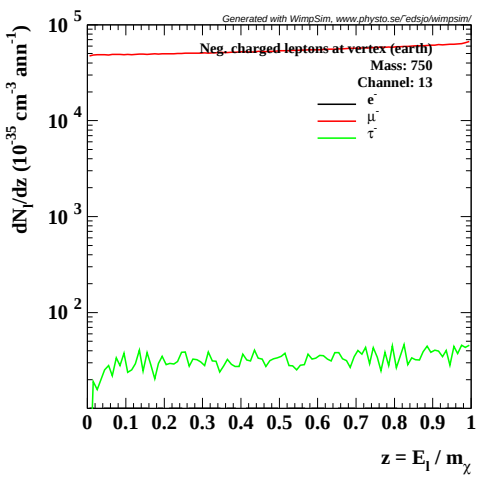


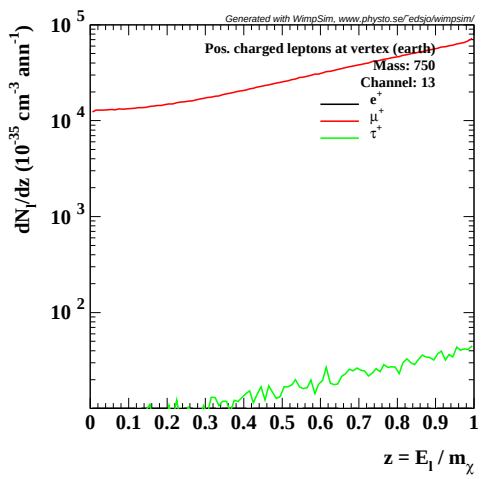
15.12.4 Neutrino fluxes at detector (Earth)



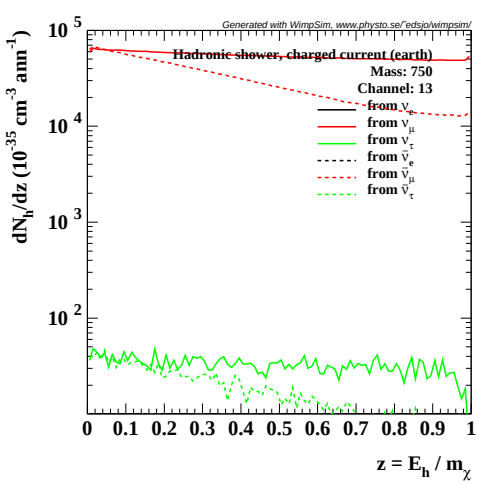


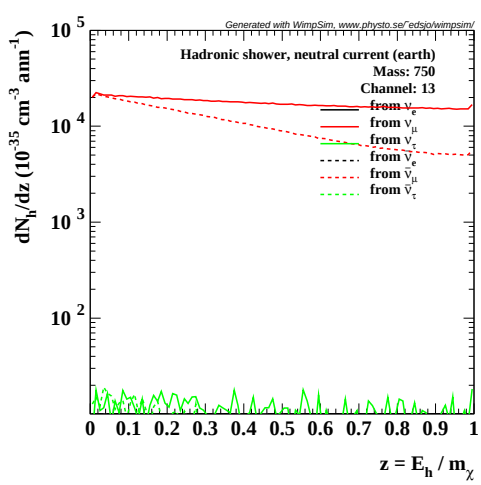
15.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



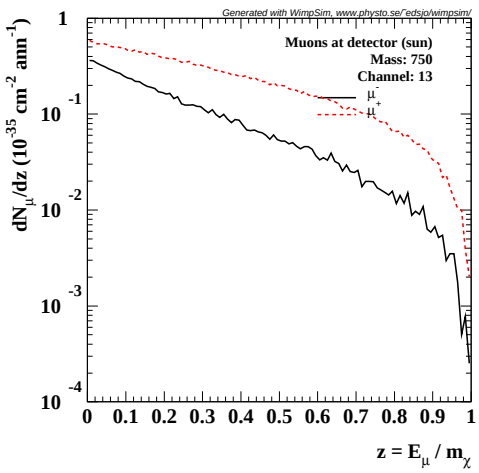


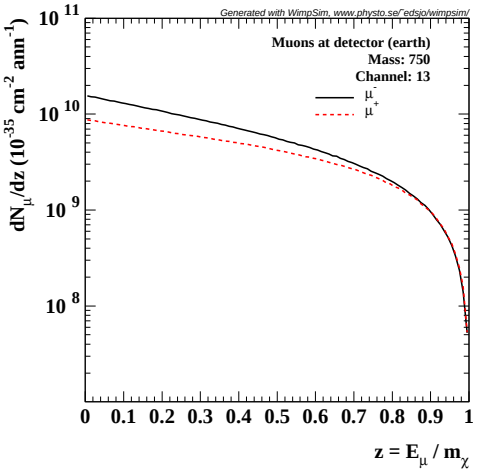
15.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





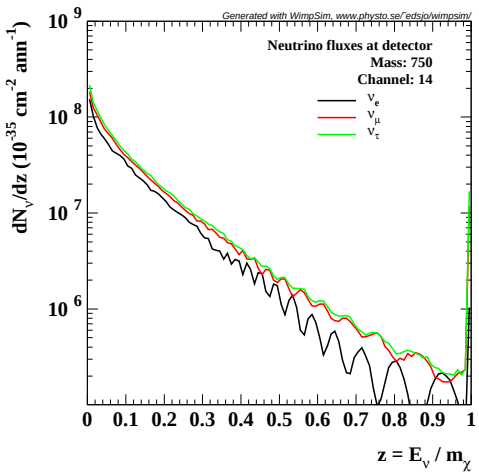
15.12.7 Muons at detector (Sun/Earth)

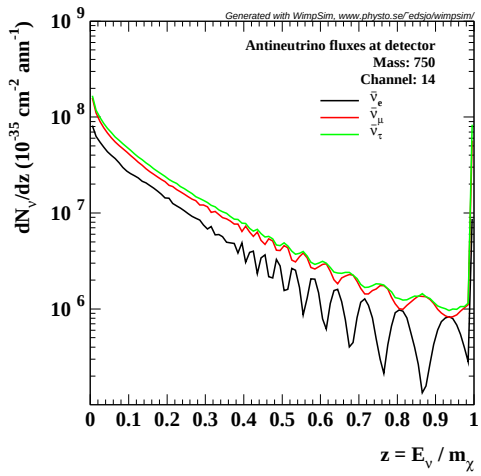




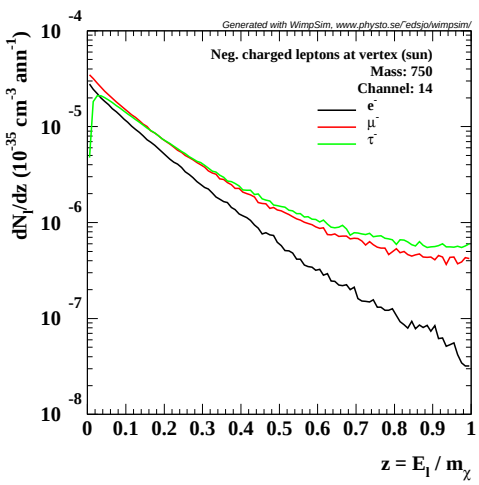
15.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

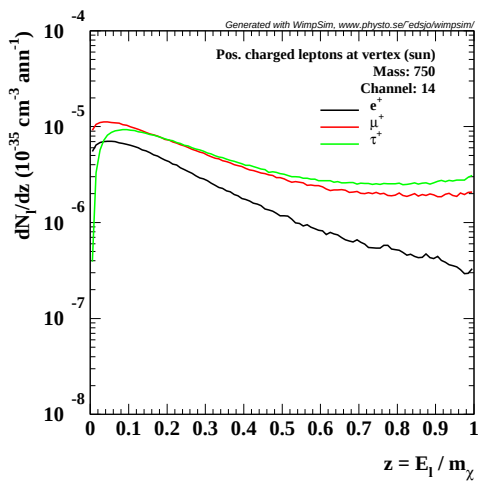
15.13.1 Neutrino fluxes at detector (Sun)



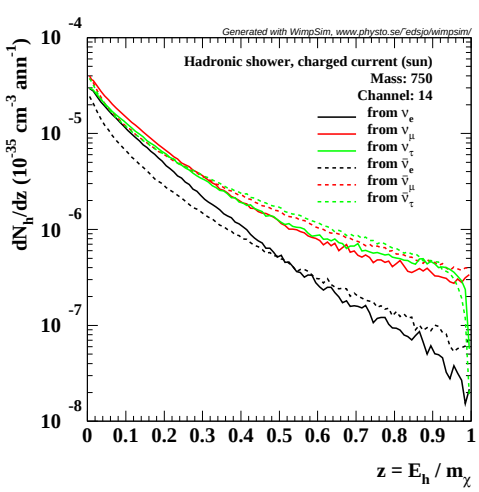


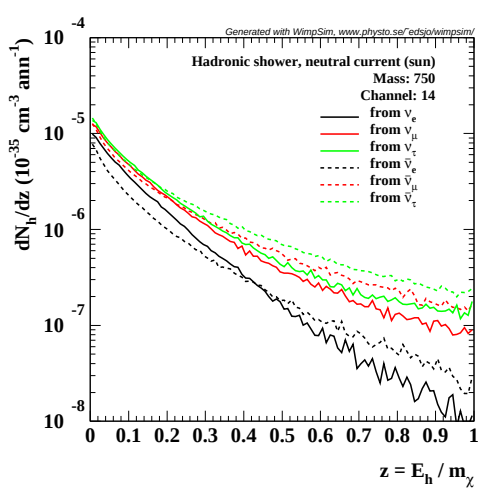
15.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



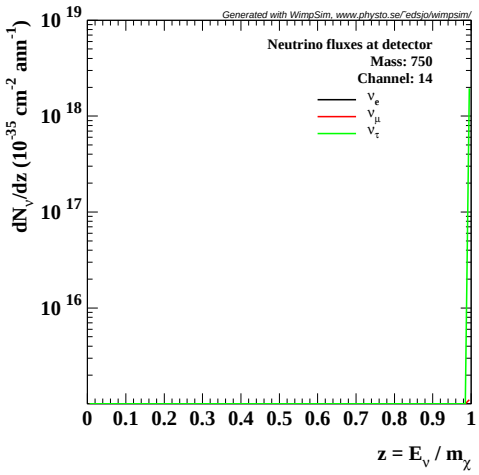


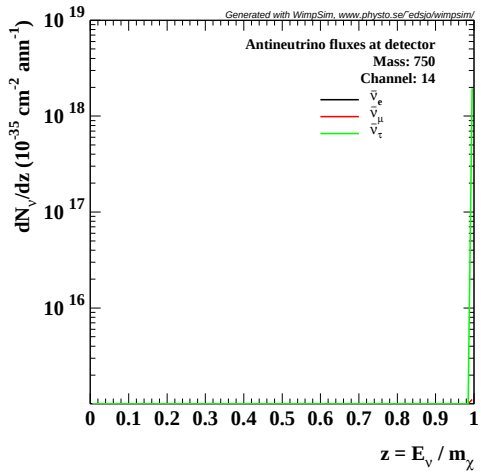
15.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



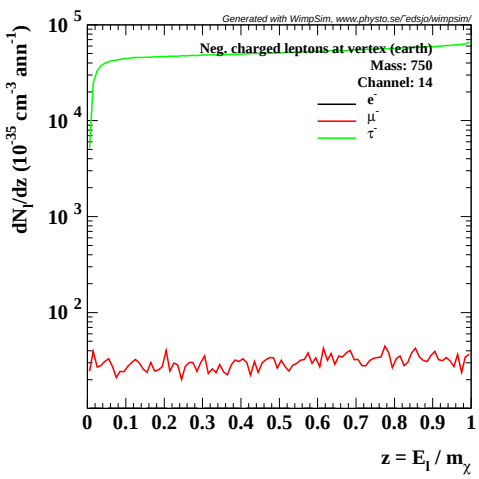


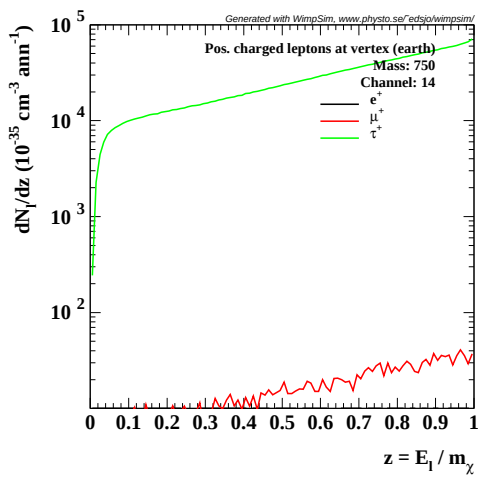
15.13.4 Neutrino fluxes at detector (Earth)



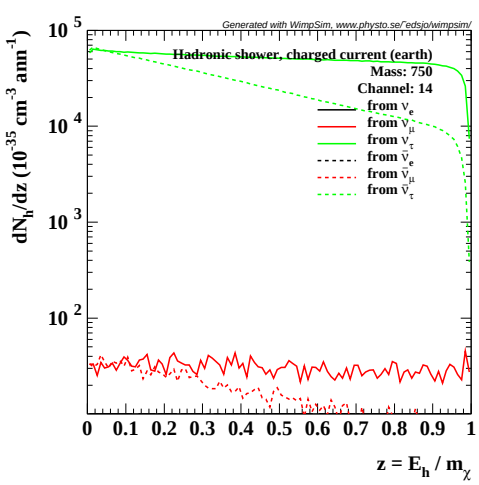


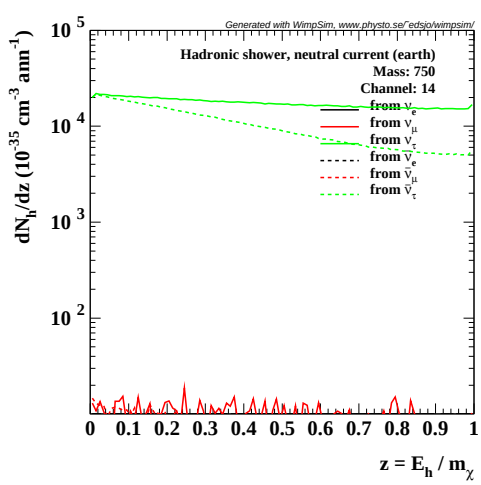
15.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



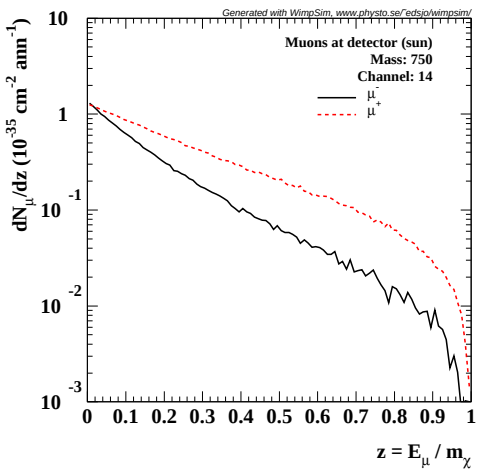


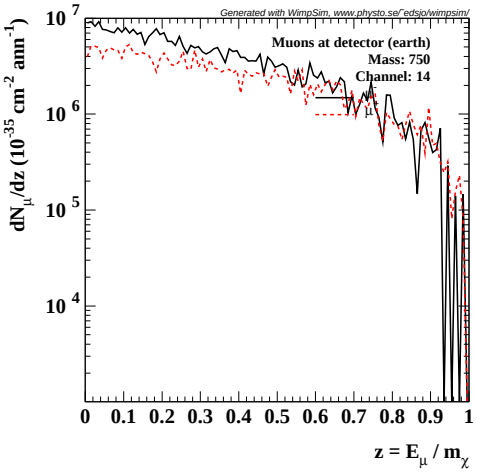
15.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





15.13.7 Muons at detector (Sun/Earth)

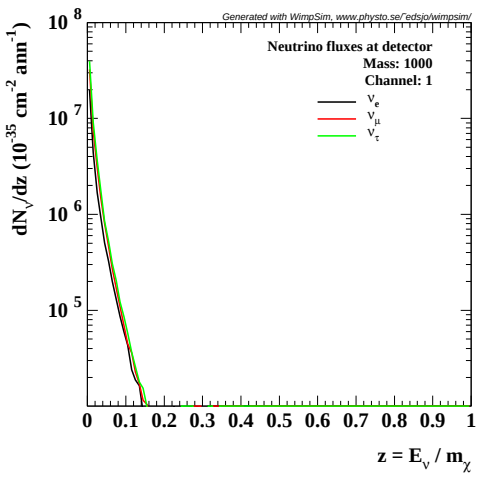


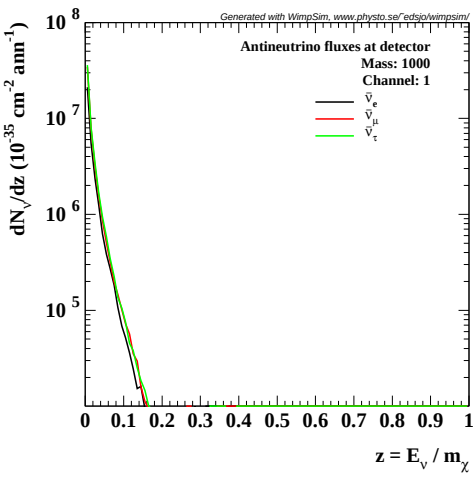


16 Mass 1000

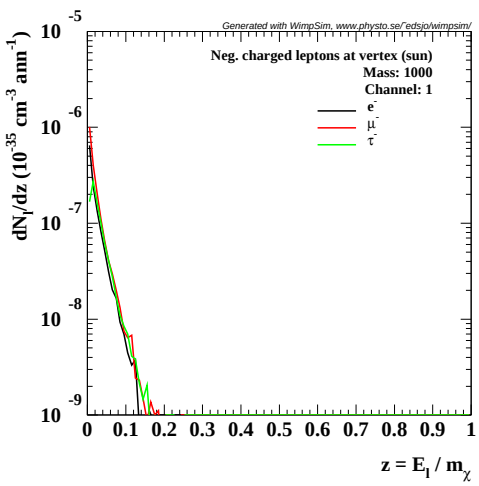
16.1 Channel 1 – $d\bar{d}$

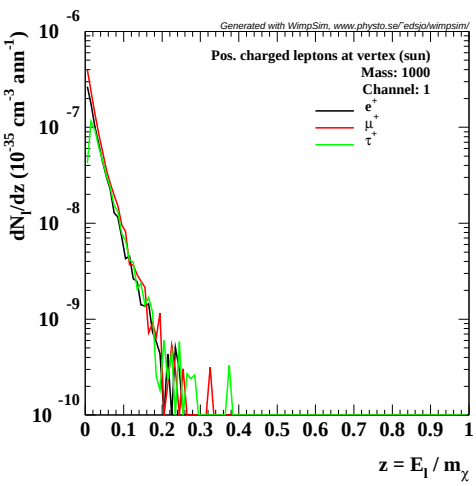
16.1.1 Neutrino fluxes at detector (Sun)



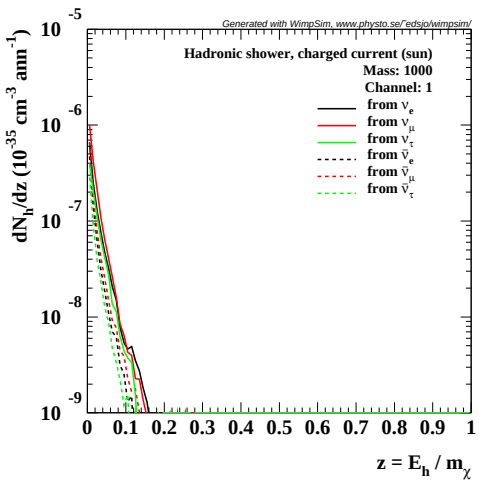


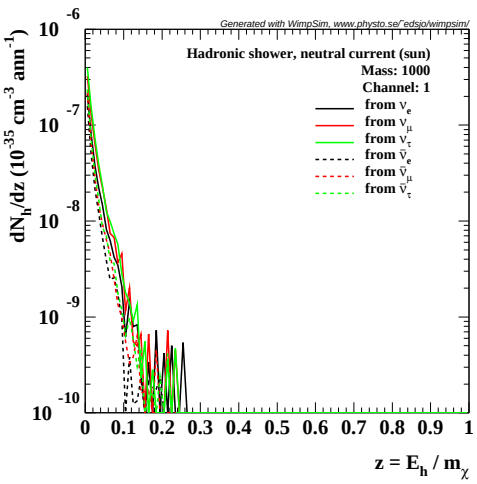
16.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



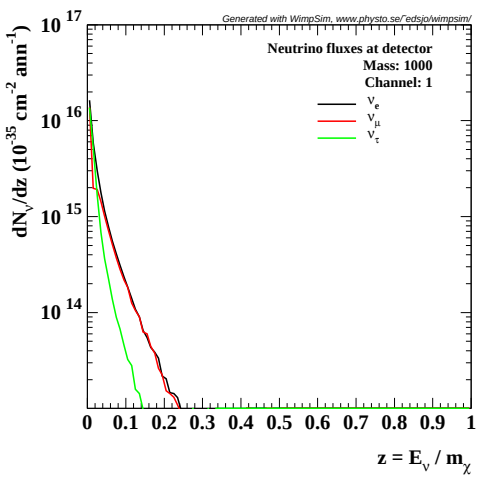


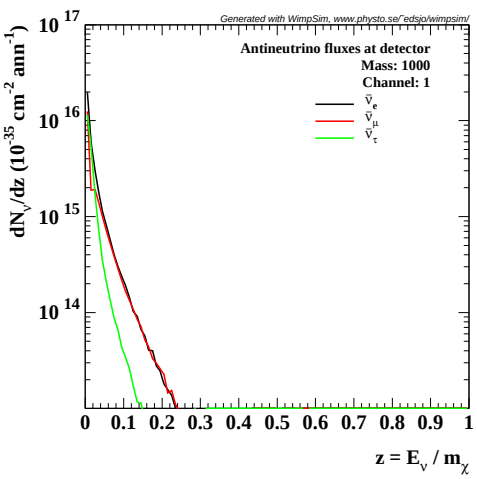
16.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



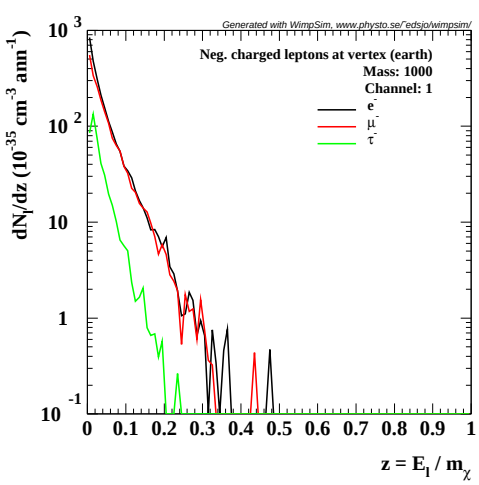


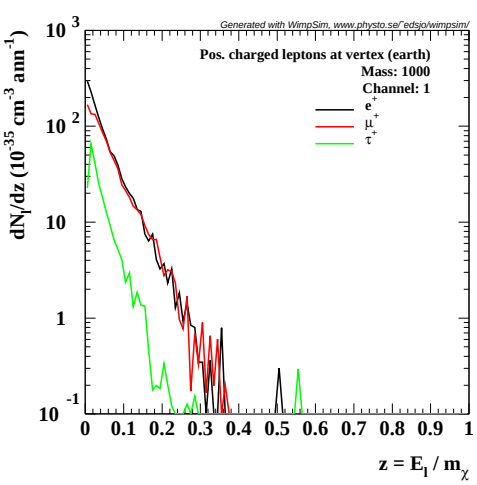
16.1.4 Neutrino fluxes at detector (Earth)



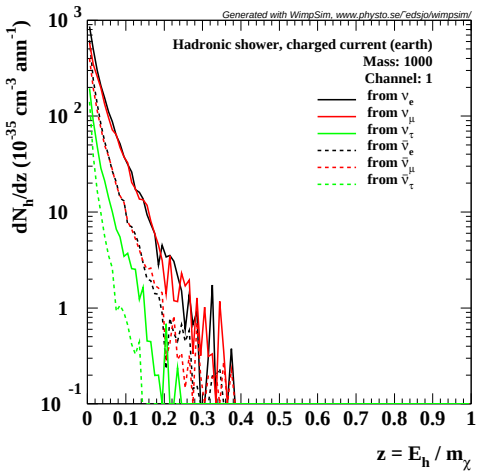


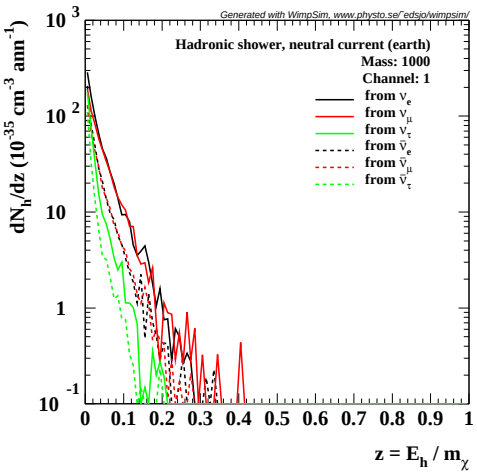
16.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



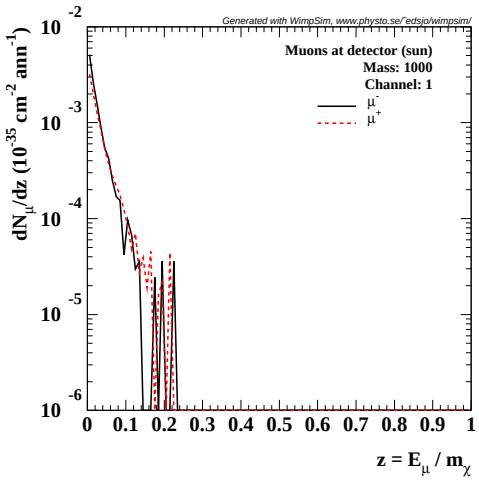


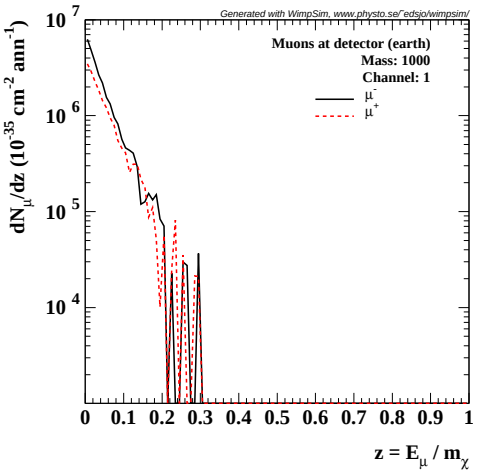
16.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





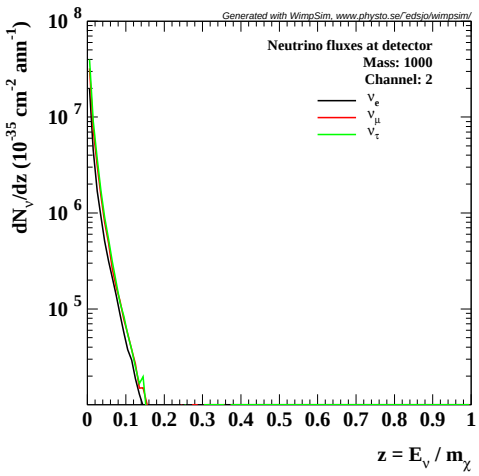
16.1.7 Muons at detector (Sun/Earth)

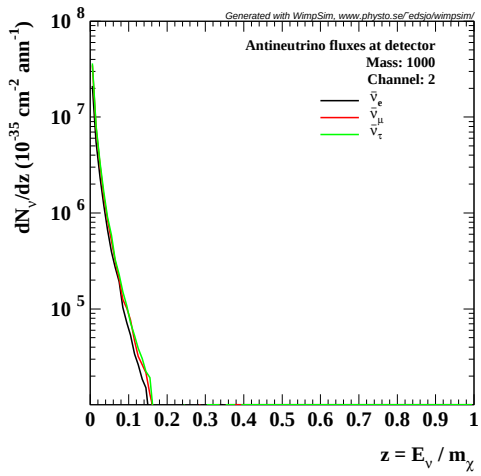




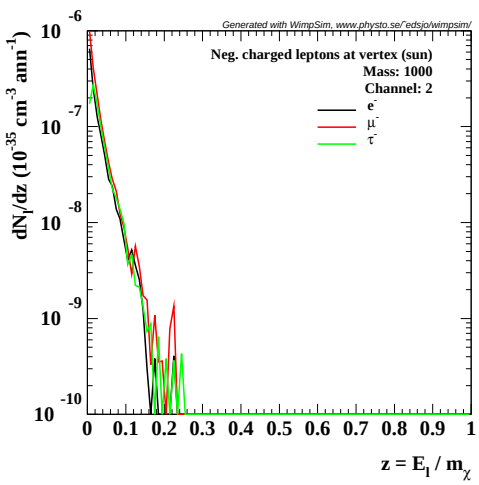
16.2 Channel 2 – $u\bar{u}$

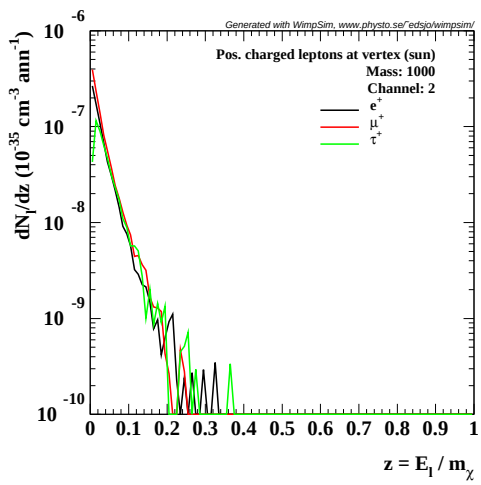
16.2.1 Neutrino fluxes at detector (Sun)



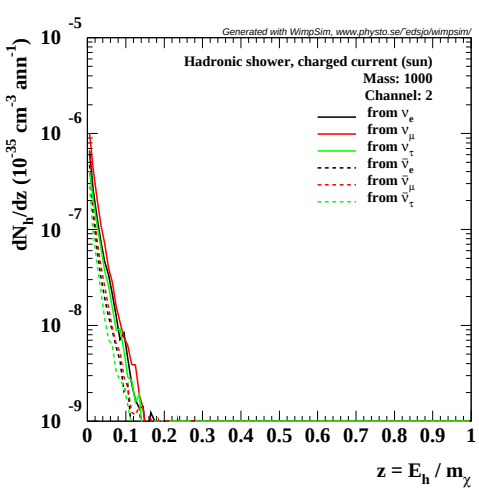


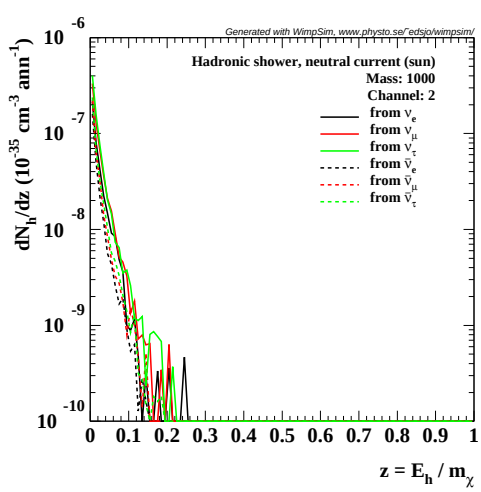
16.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



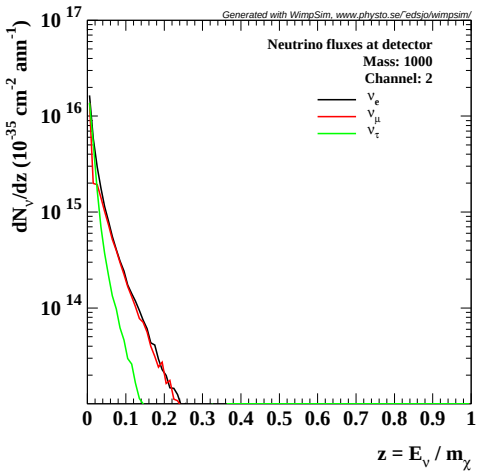


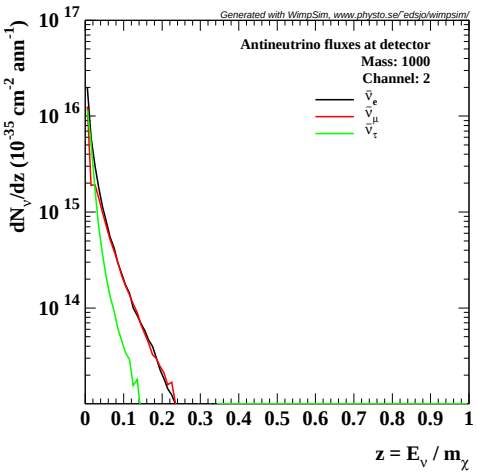
16.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



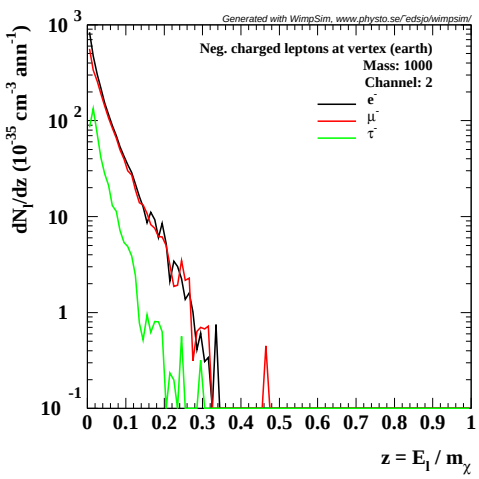


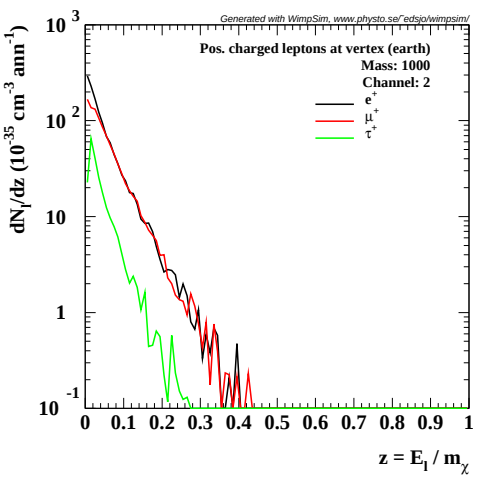
16.2.4 Neutrino fluxes at detector (Earth)



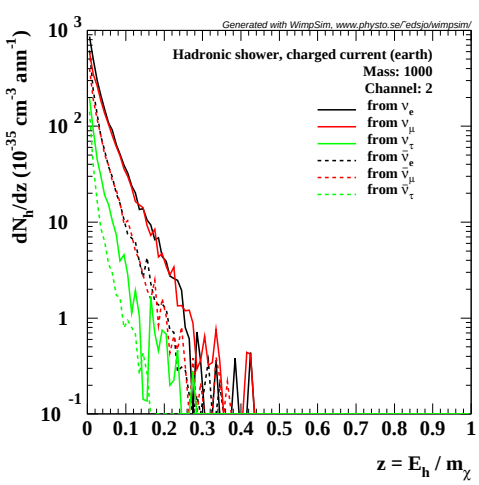


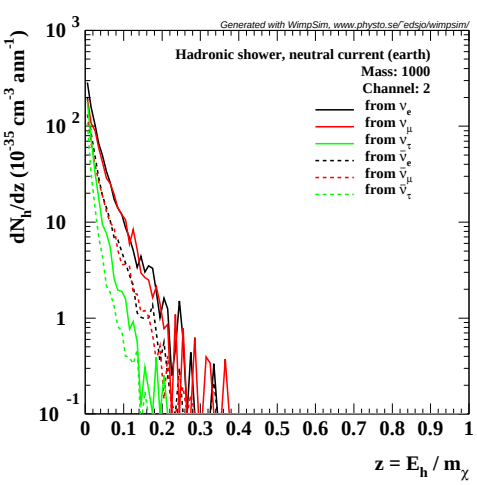
16.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



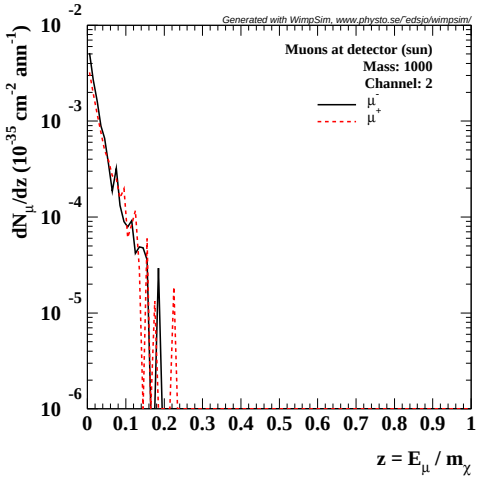


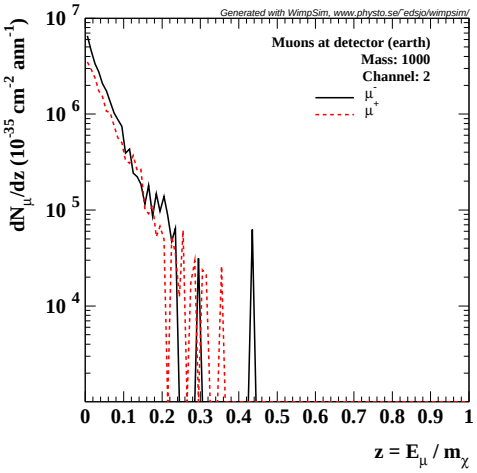
16.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





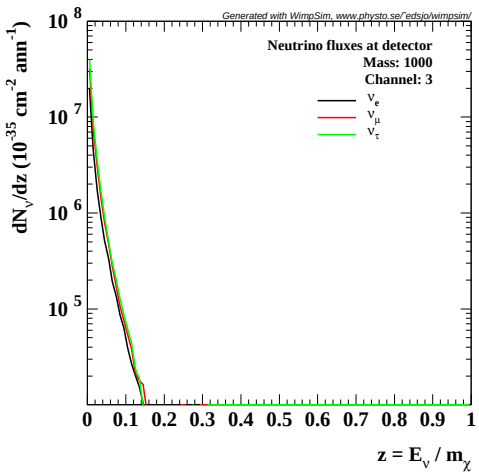
16.2.7 Muons at detector (Sun/Earth)

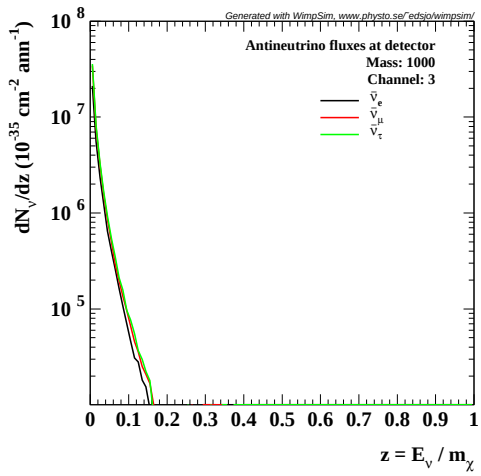




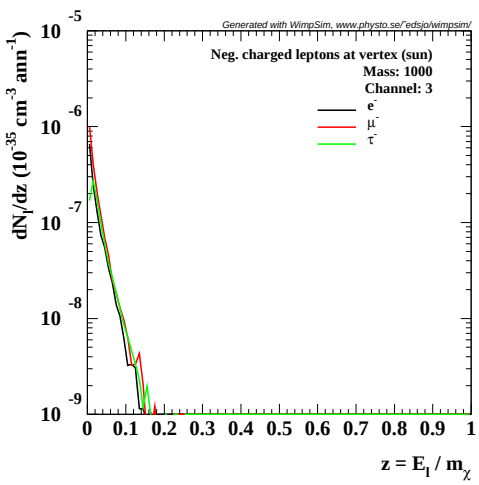
16.3 Channel 3 – $s\bar{s}$

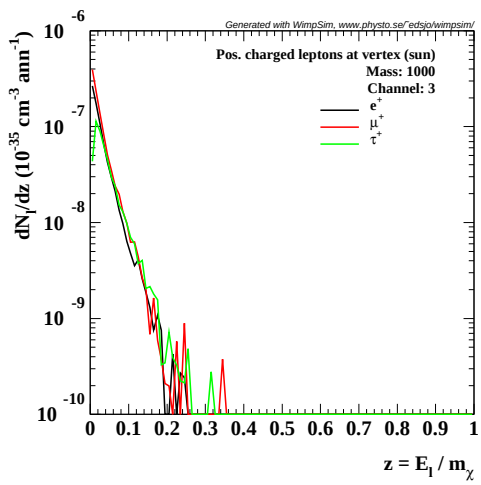
16.3.1 Neutrino fluxes at detector (Sun)



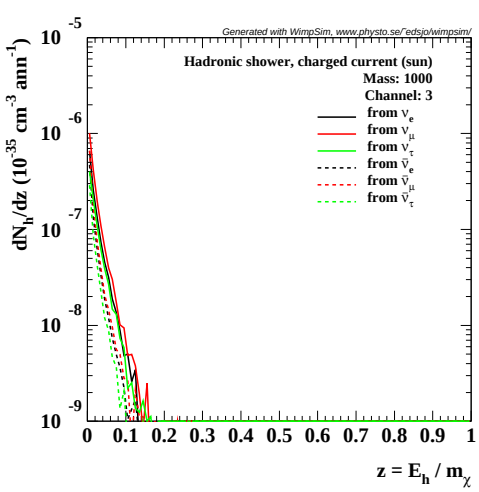


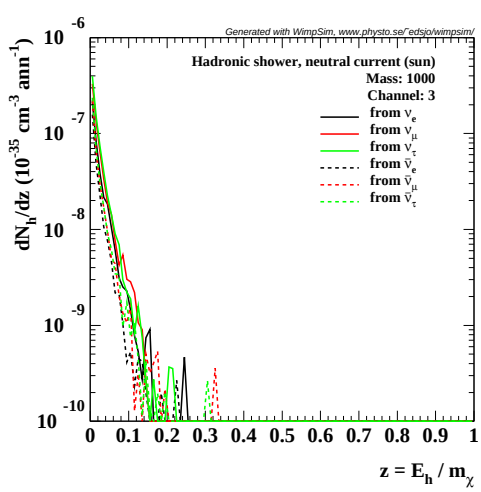
16.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



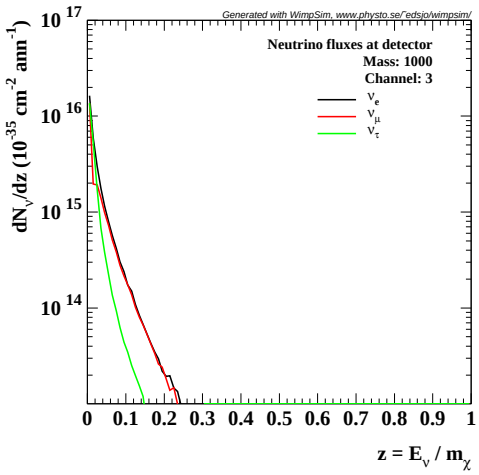


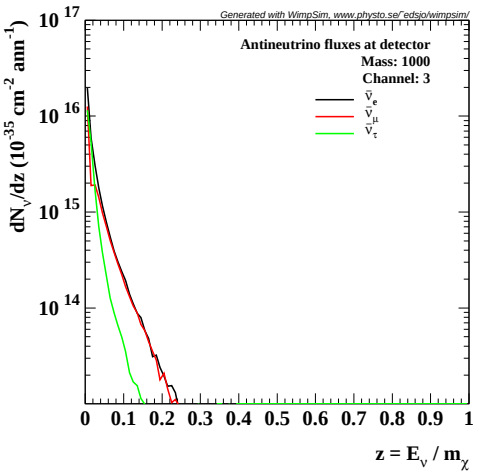
16.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



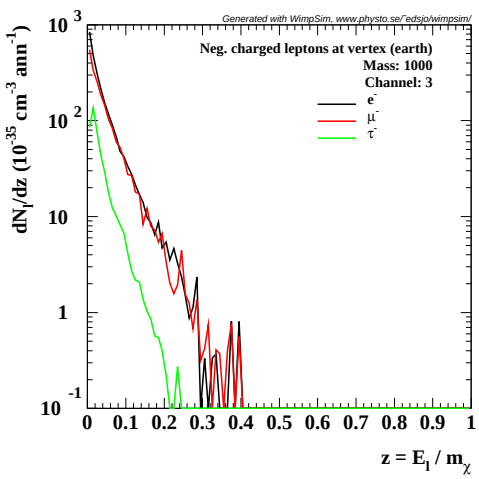


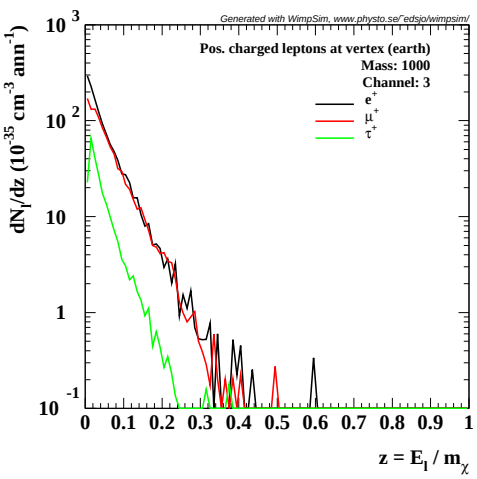
16.3.4 Neutrino fluxes at detector (Earth)



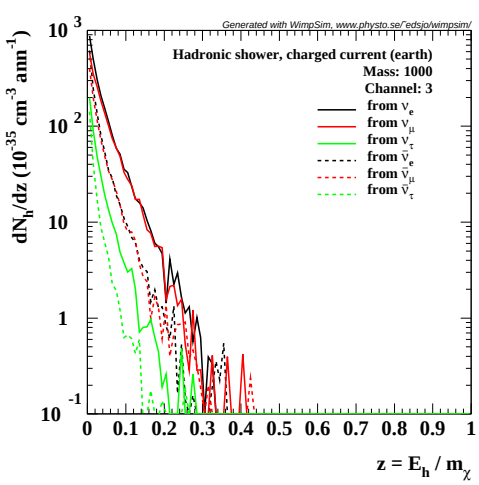


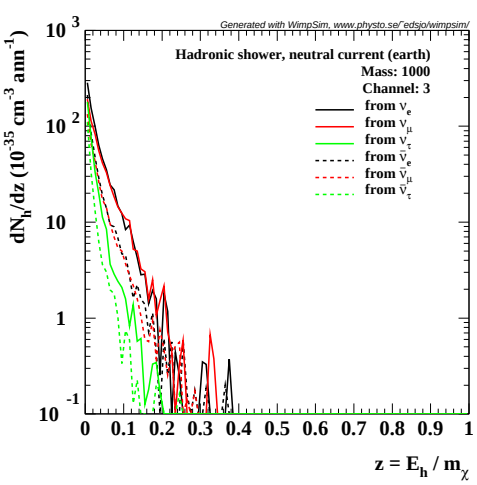
16.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



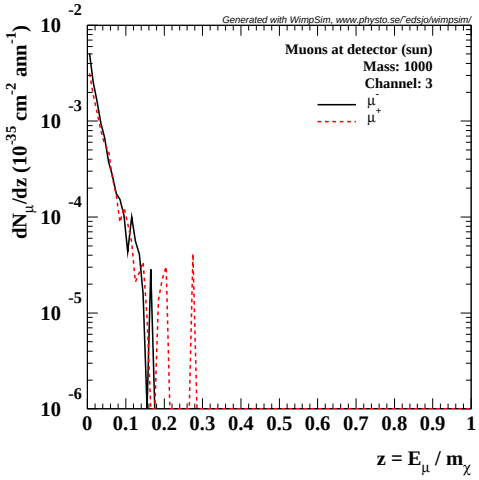


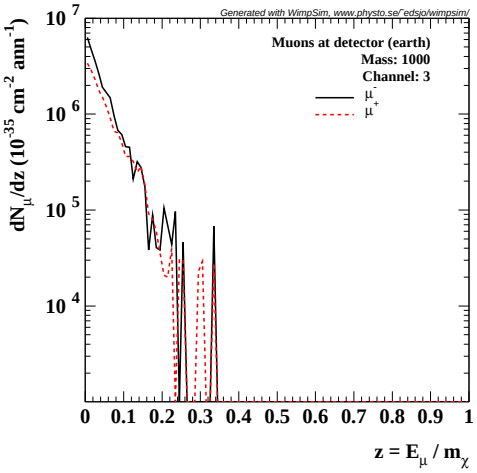
16.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





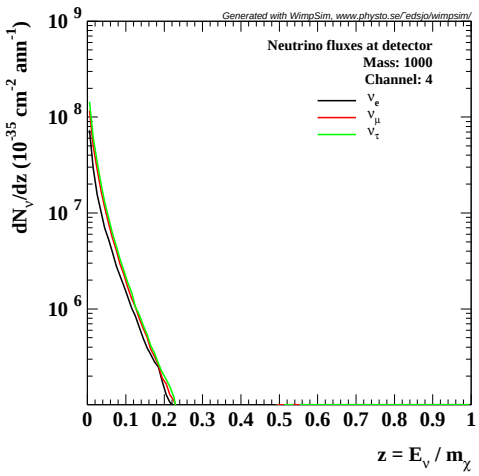
16.3.7 Muons at detector (Sun/Earth)

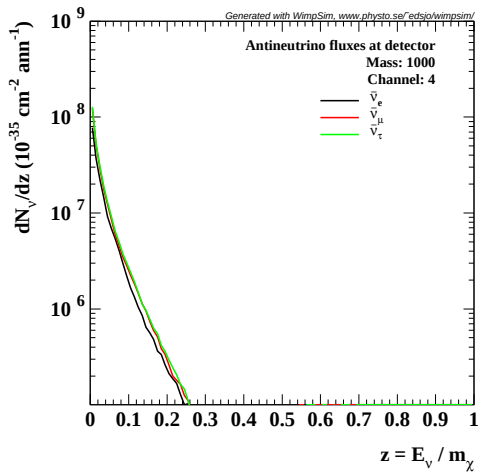




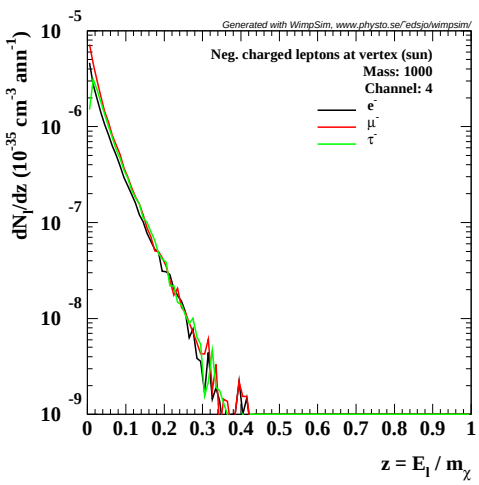
16.4 Channel 4 – $c\bar{c}$

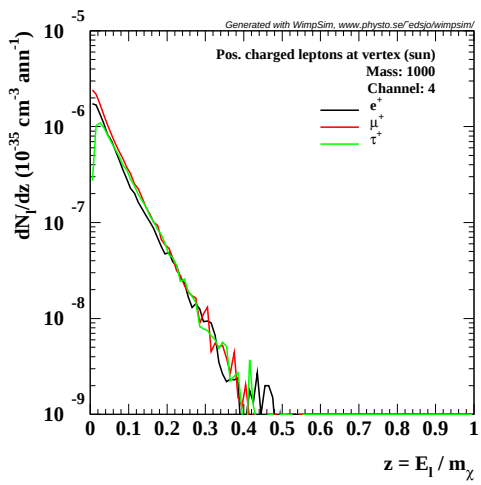
16.4.1 Neutrino fluxes at detector (Sun)



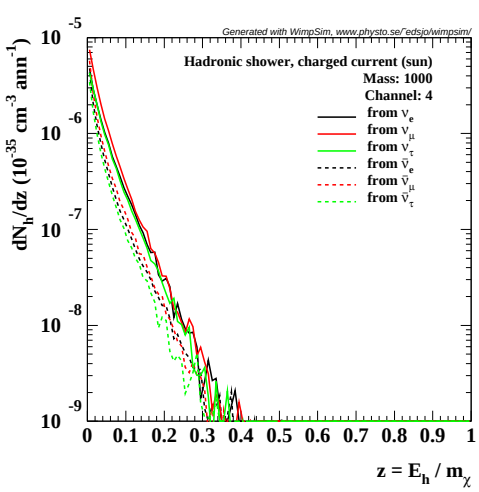


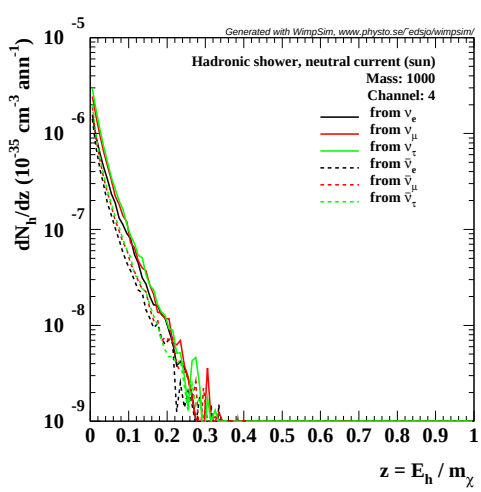
16.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



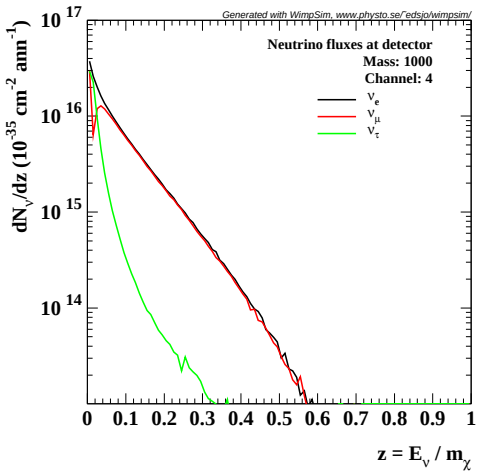


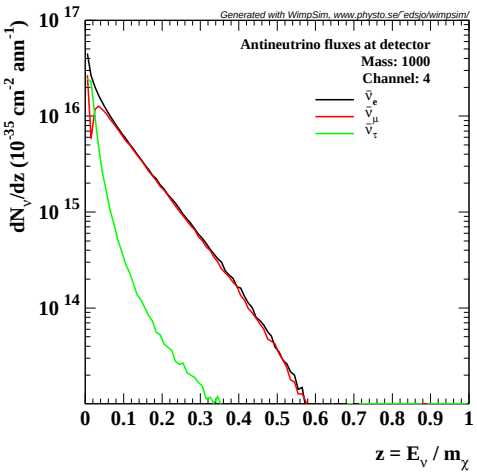
16.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



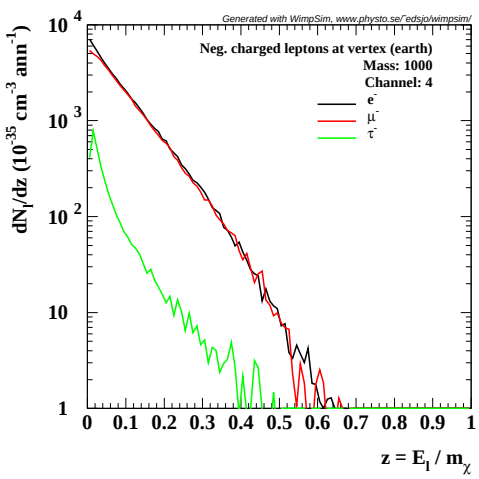


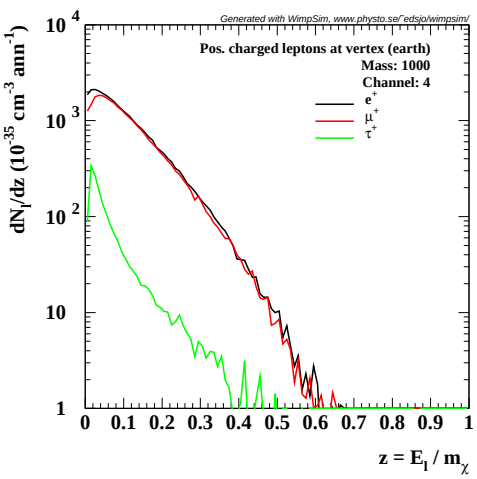
16.4.4 Neutrino fluxes at detector (Earth)



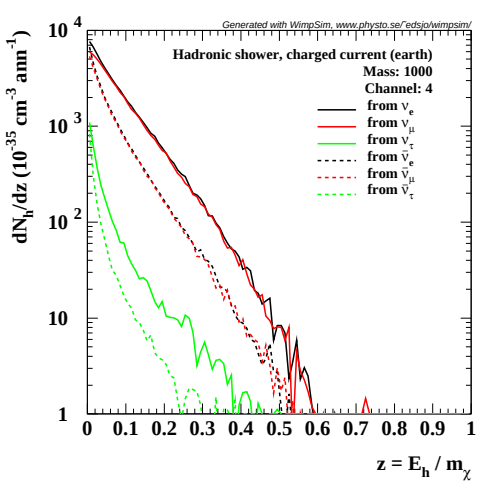


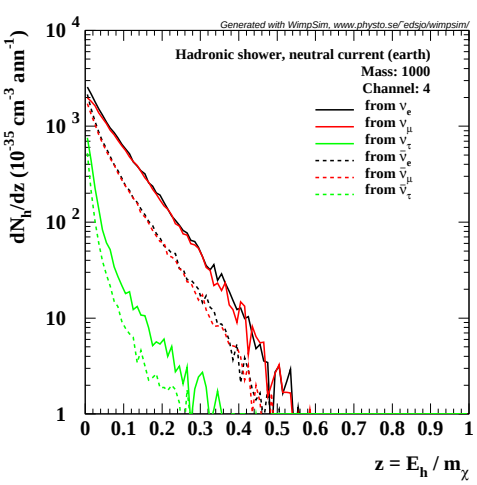
16.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



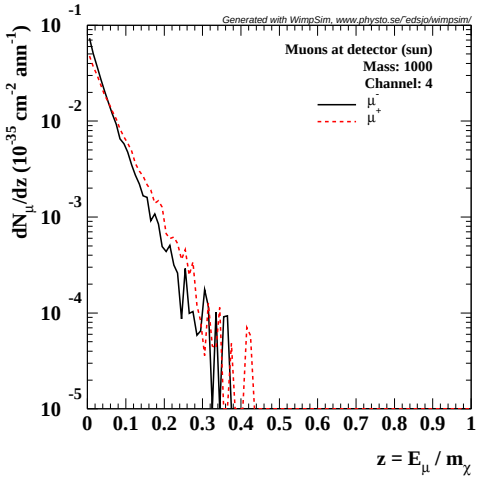


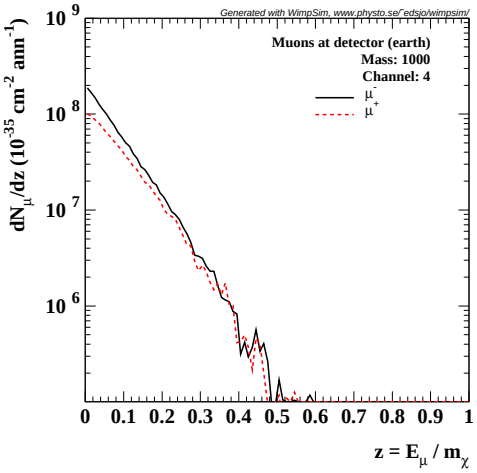
16.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





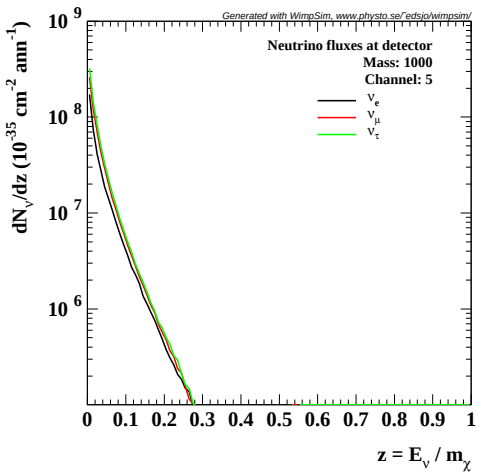
16.4.7 Muons at detector (Sun/Earth)

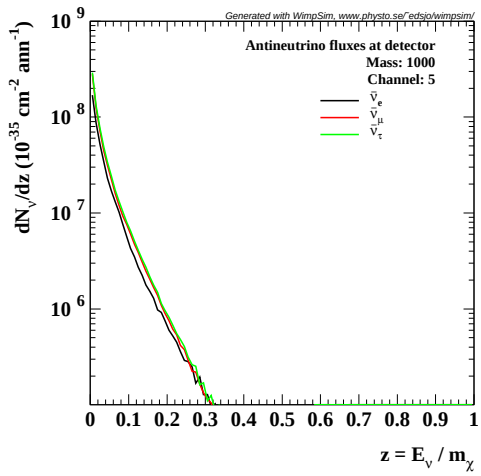




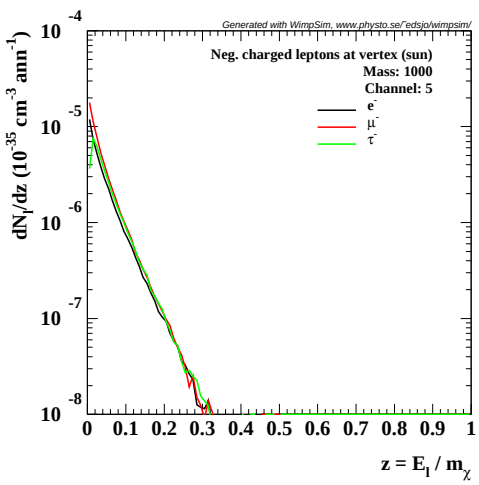
16.5 Channel 5 – $b\bar{b}$

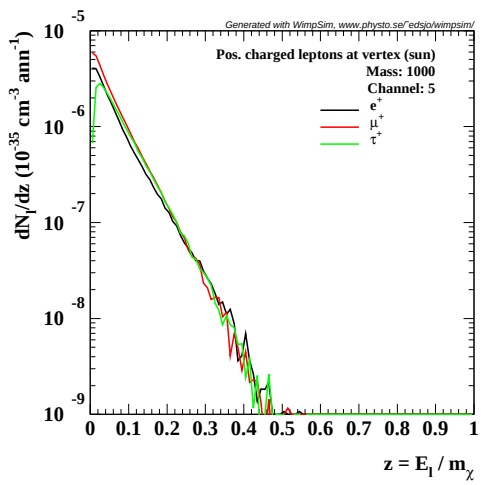
16.5.1 Neutrino fluxes at detector (Sun)



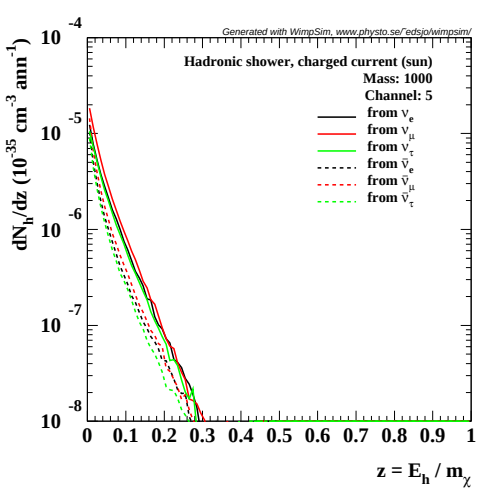


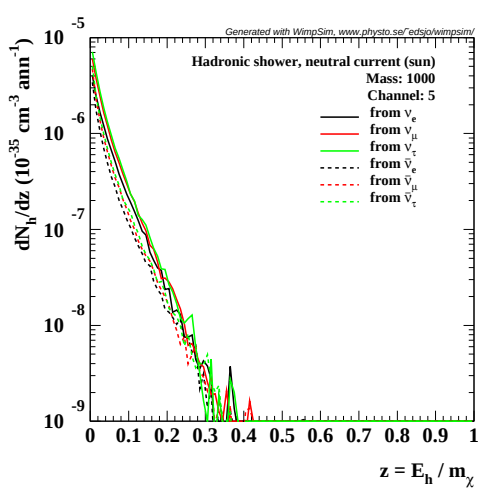
16.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



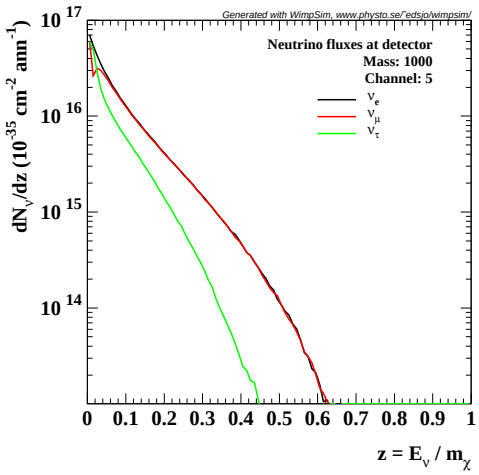


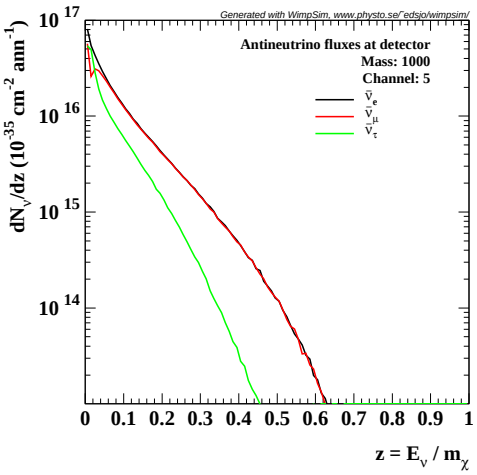
16.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



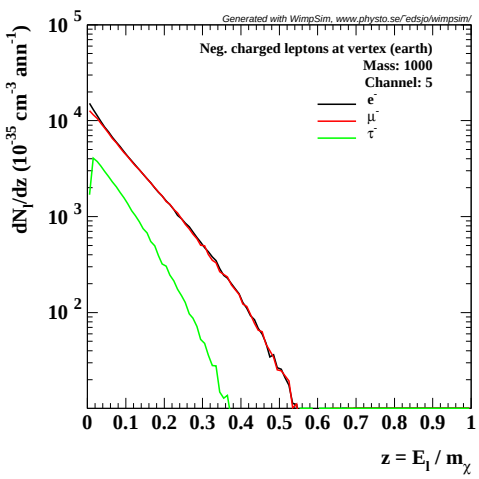


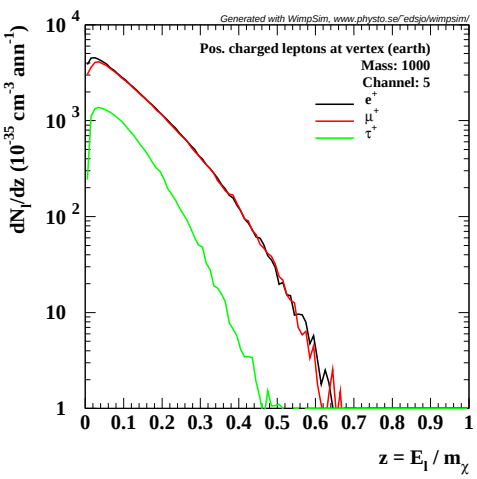
16.5.4 Neutrino fluxes at detector (Earth)



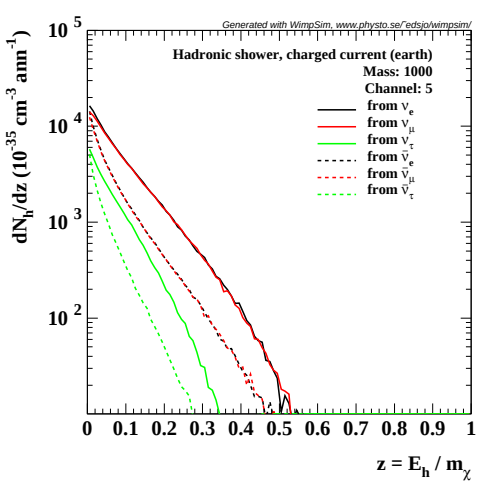


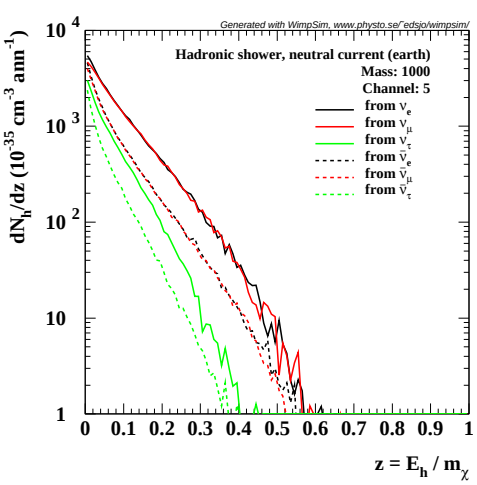
16.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



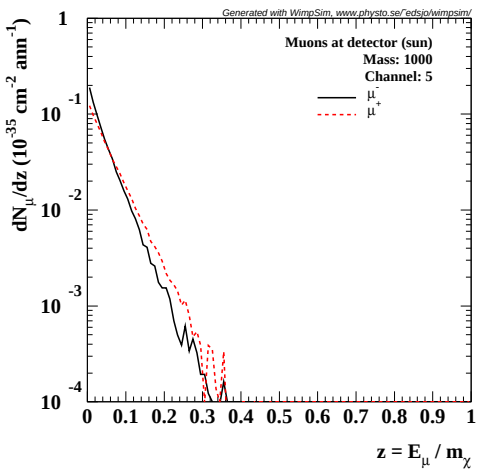


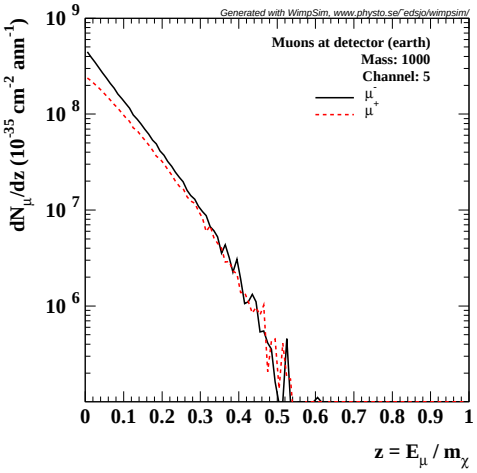
16.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





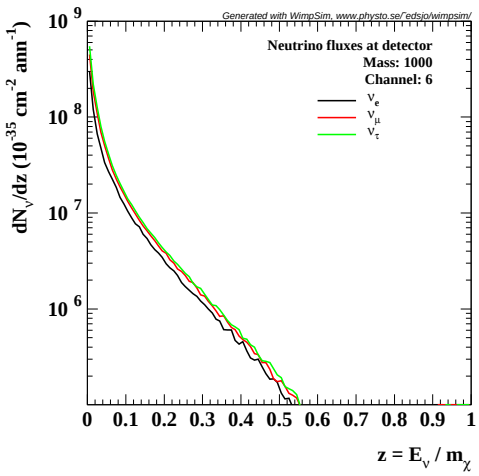
16.5.7 Muons at detector (Sun/Earth)

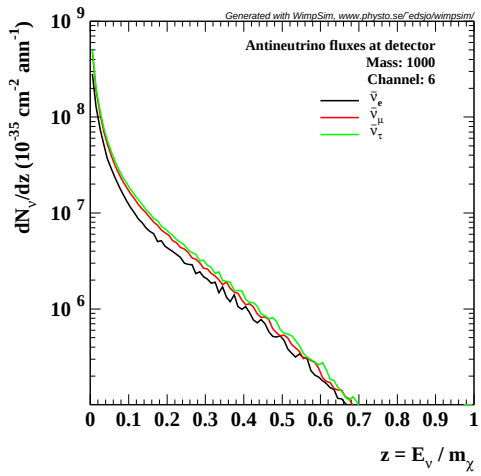




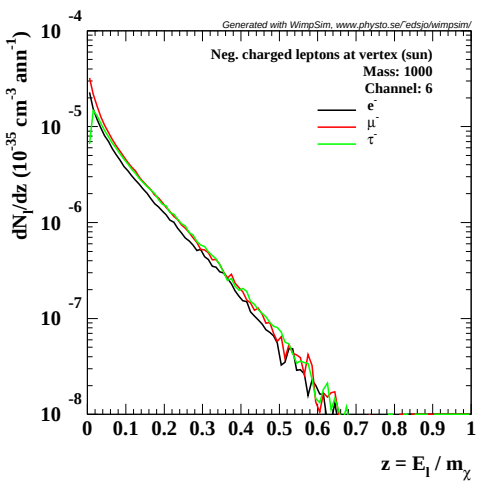
16.6 Channel 6 – $t\bar{t}$

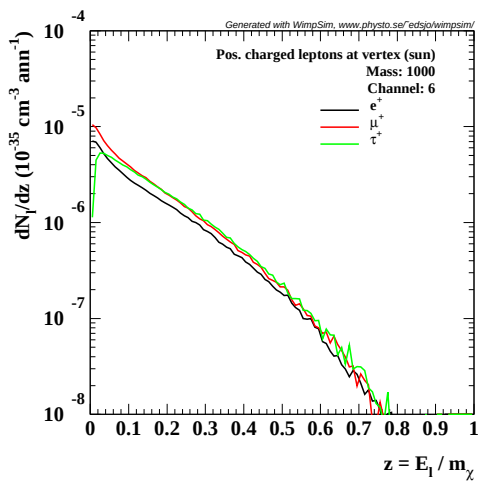
16.6.1 Neutrino fluxes at detector (Sun)



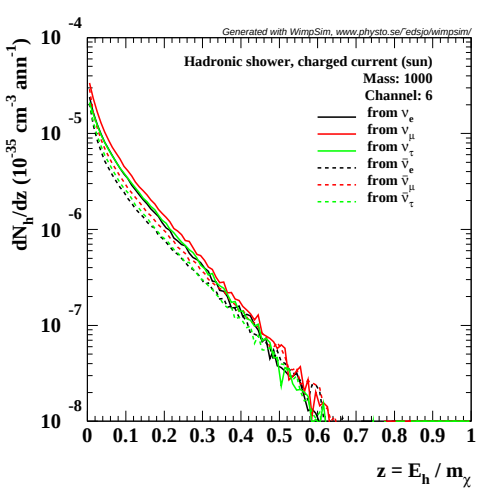


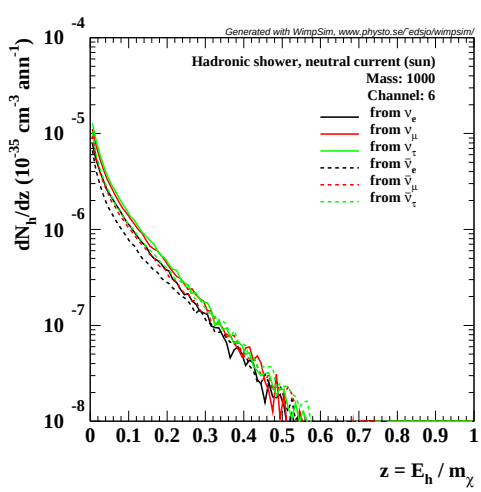
16.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



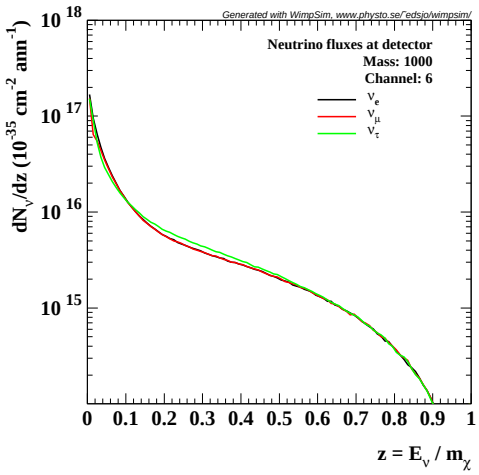


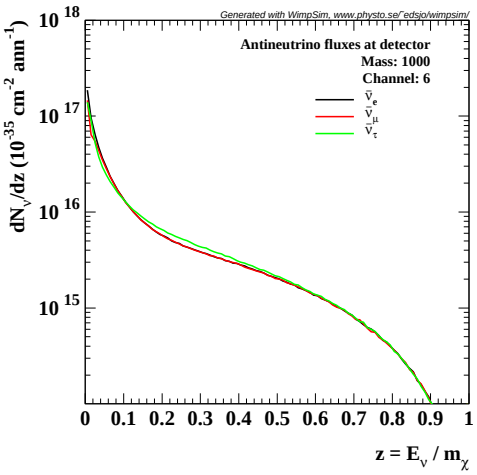
16.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



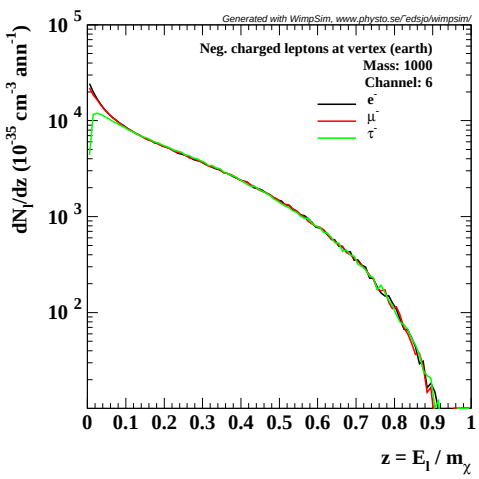


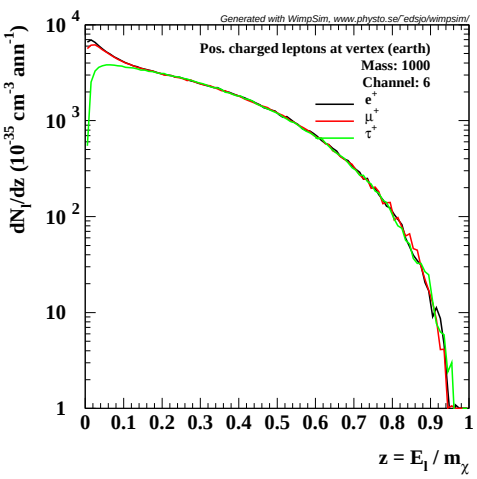
16.6.4 Neutrino fluxes at detector (Earth)



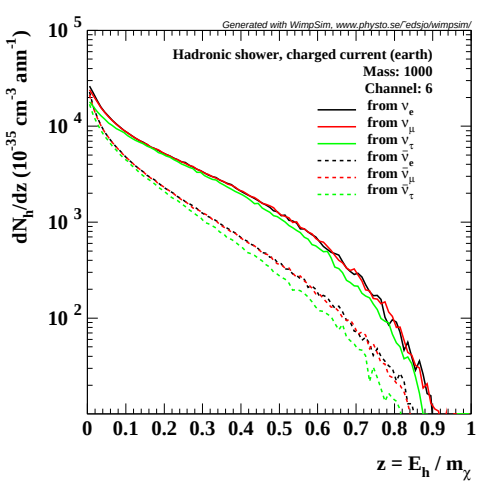


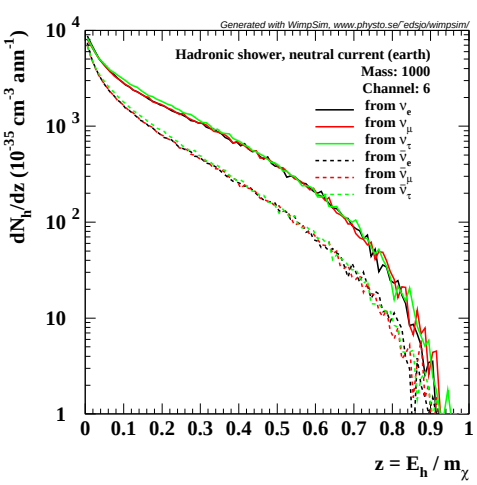
16.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



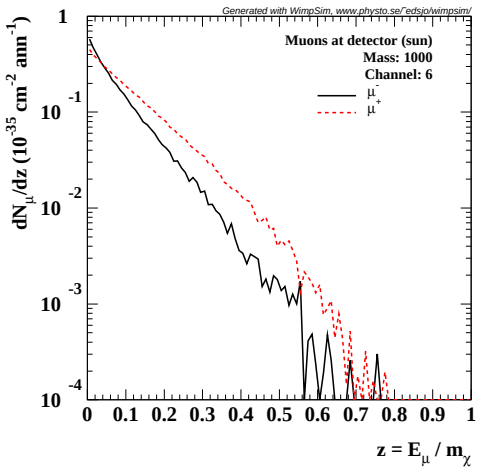


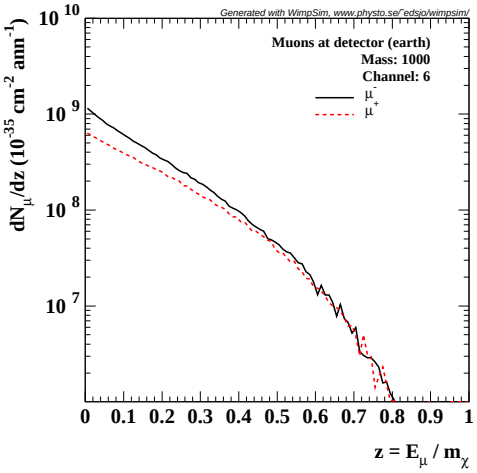
16.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





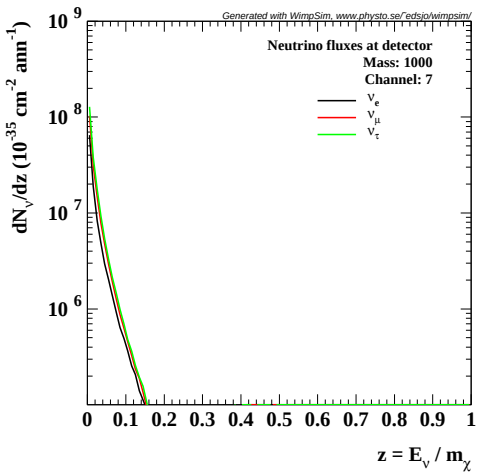
16.6.7 Muons at detector (Sun/Earth)

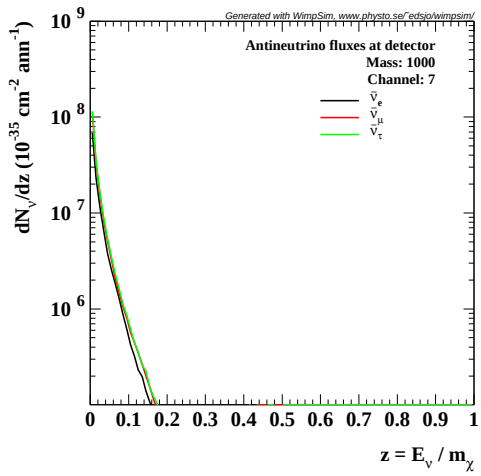




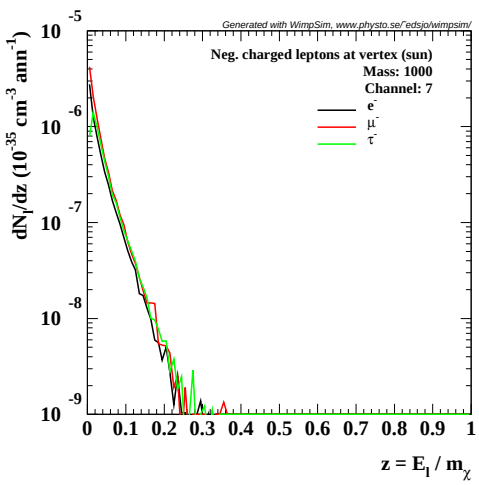
16.7 Channel 7 – gg

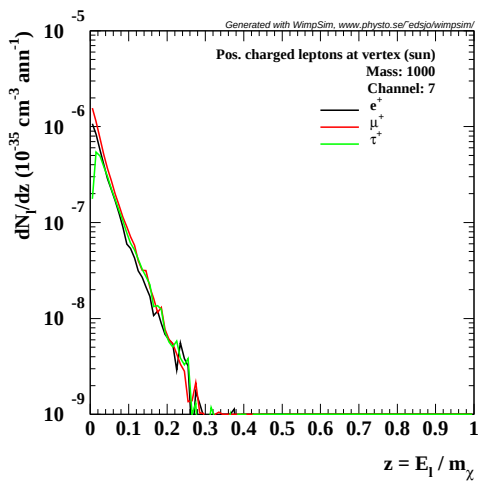
16.7.1 Neutrino fluxes at detector (Sun)



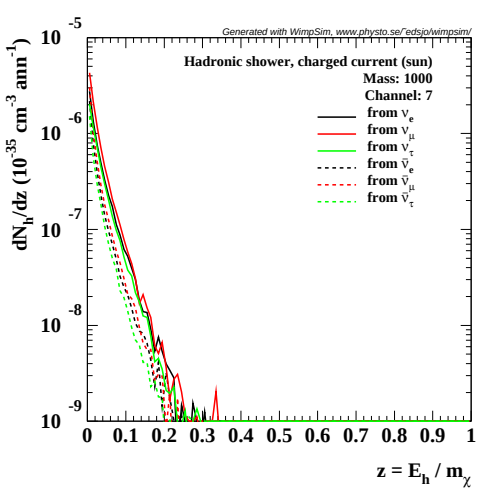


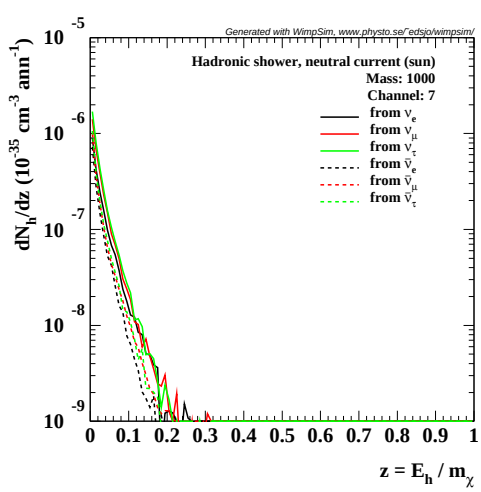
16.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



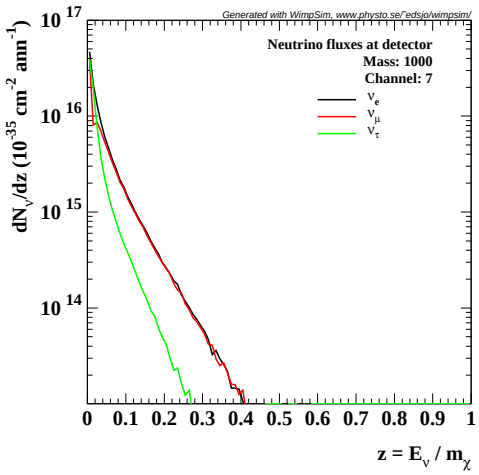


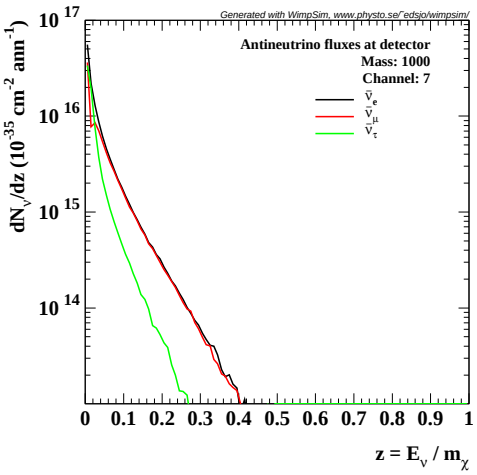
16.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



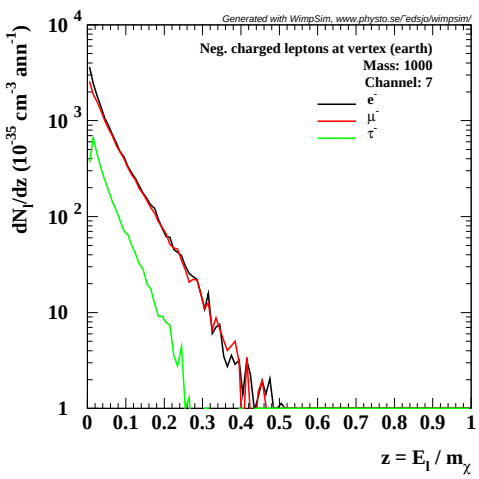


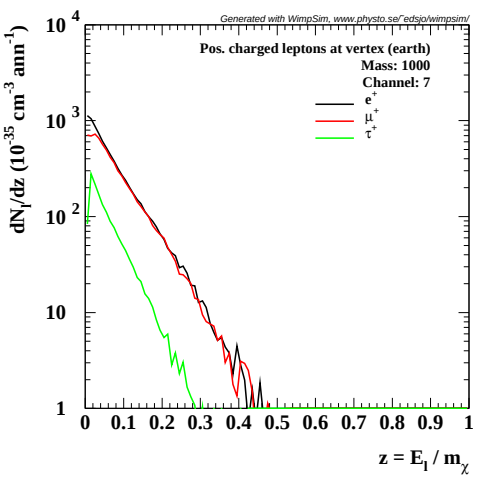
16.7.4 Neutrino fluxes at detector (Earth)



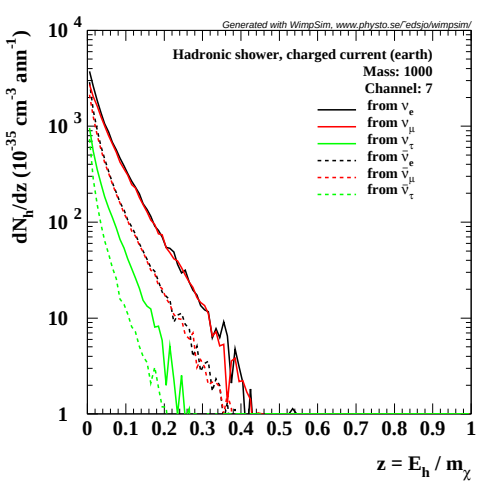


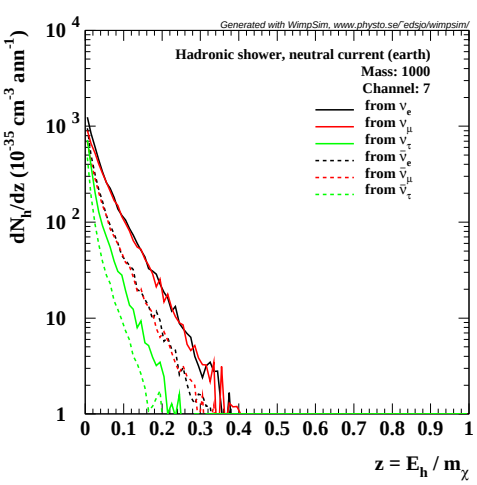
16.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



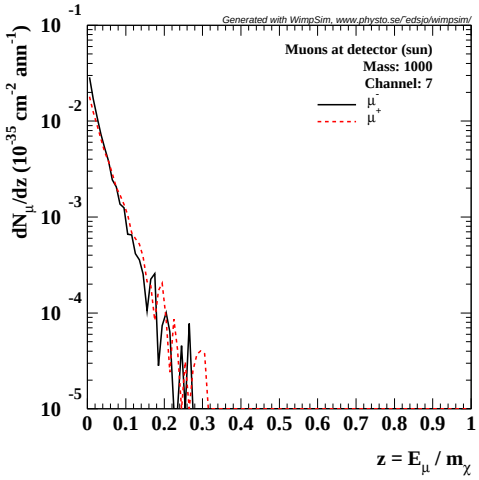


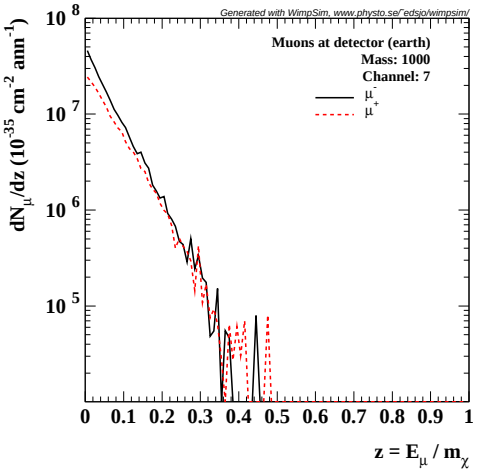
16.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





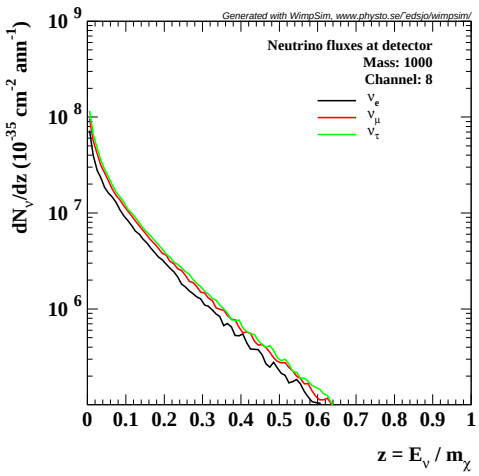
16.7.7 Muons at detector (Sun/Earth)

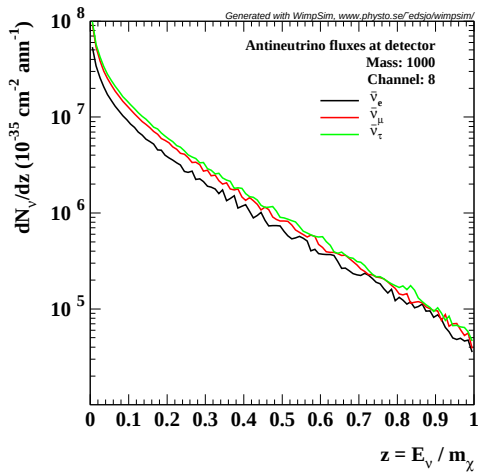




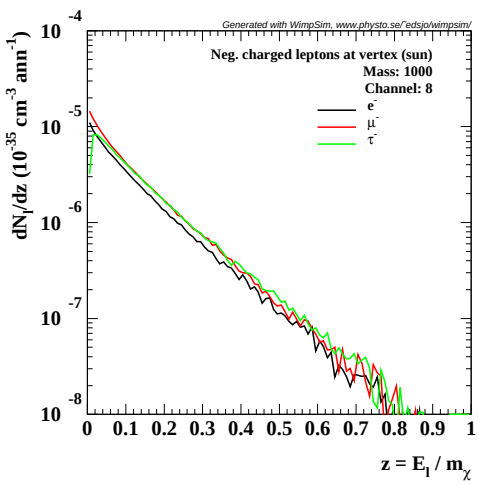
16.8 Channel 8 – W^-W^+

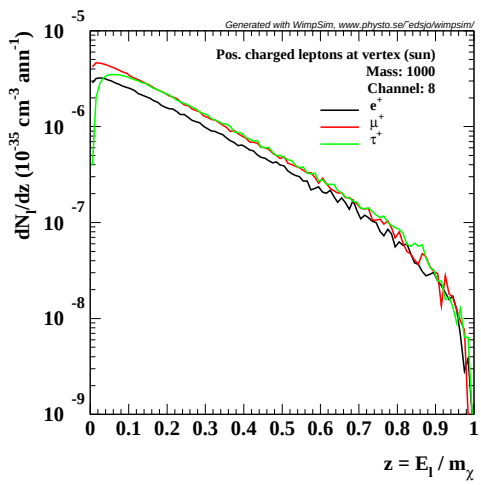
16.8.1 Neutrino fluxes at detector (Sun)



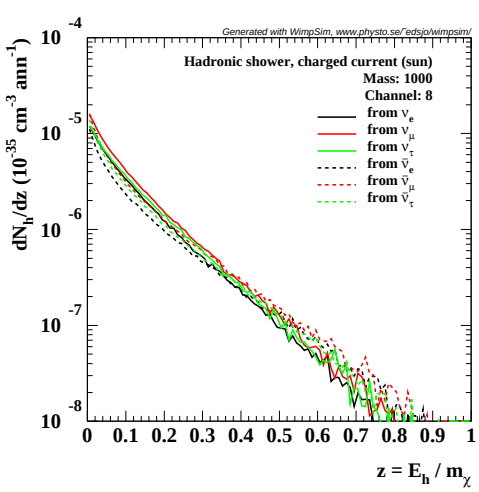


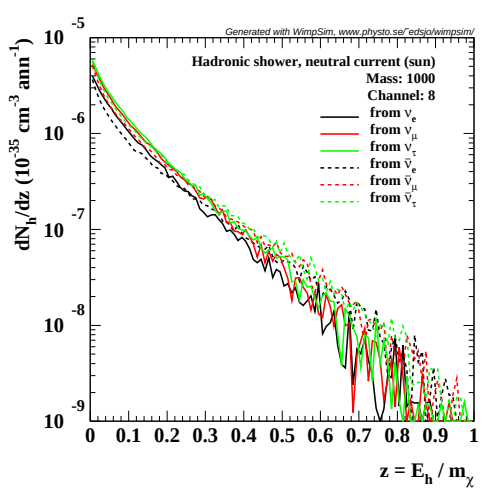
16.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



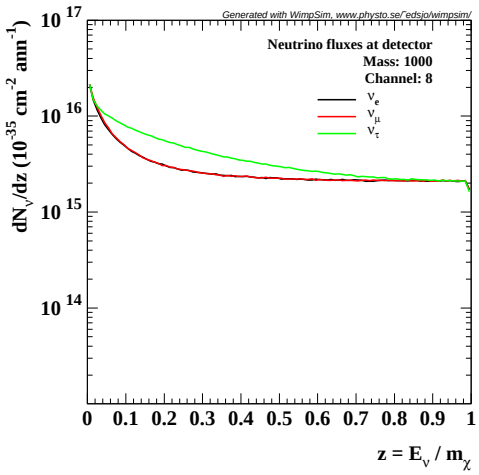


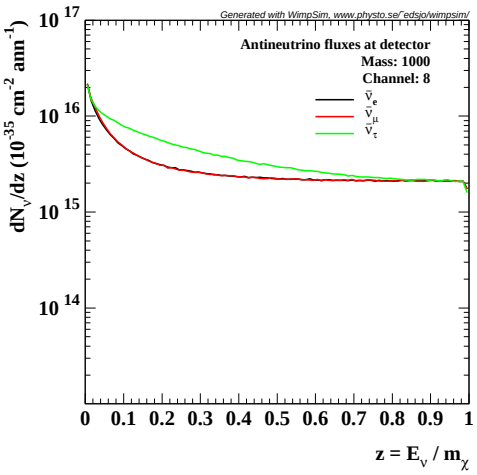
16.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



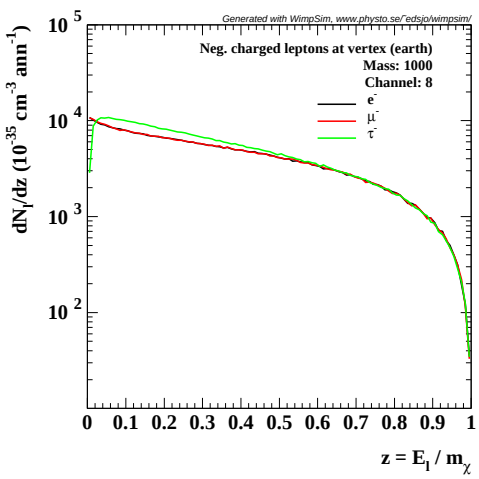


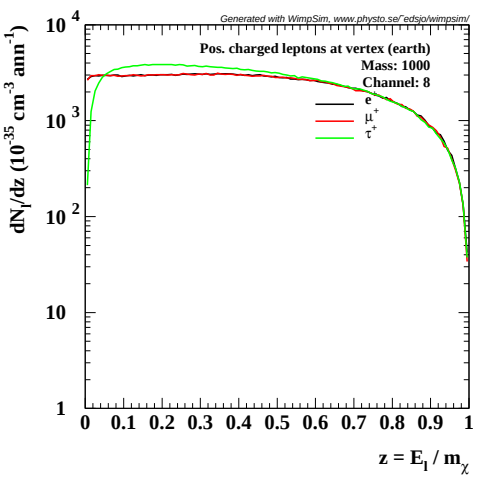
16.8.4 Neutrino fluxes at detector (Earth)



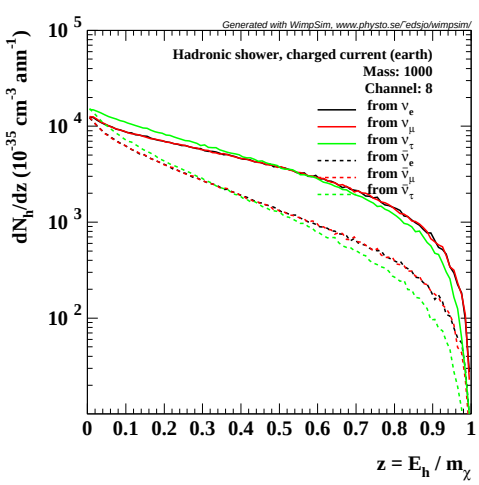


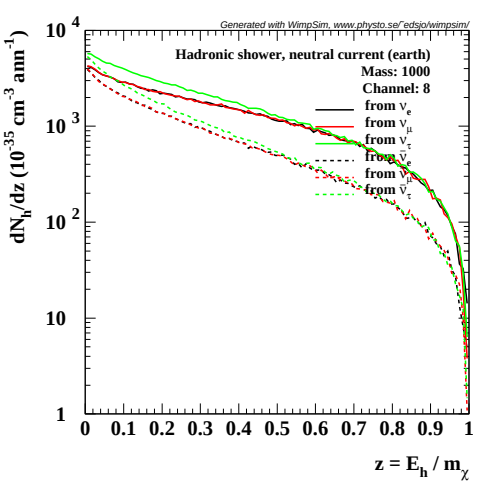
16.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



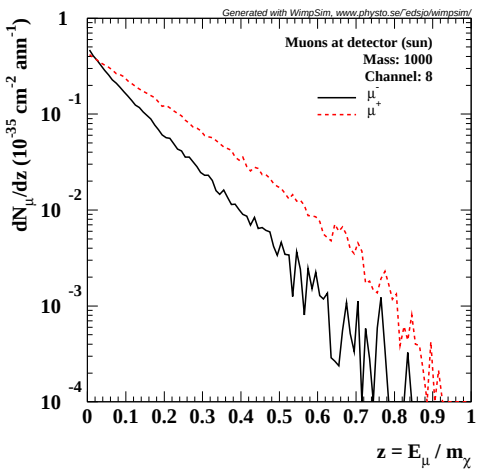


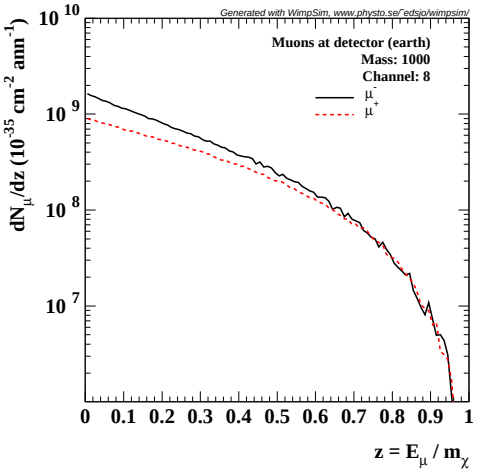
16.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





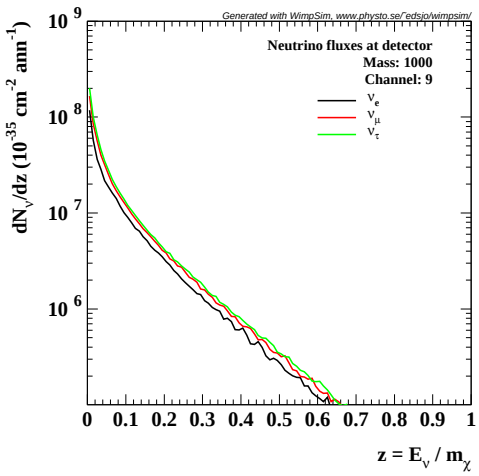
16.8.7 Muons at detector (Sun/Earth)

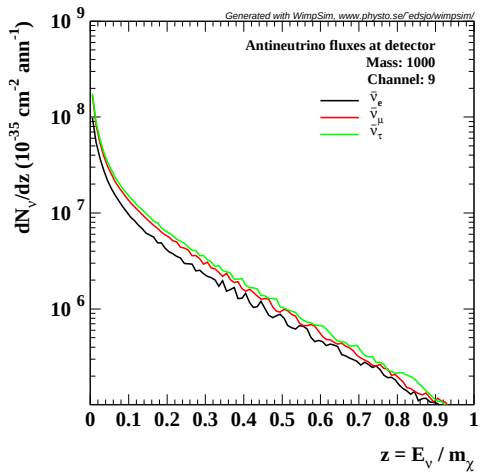




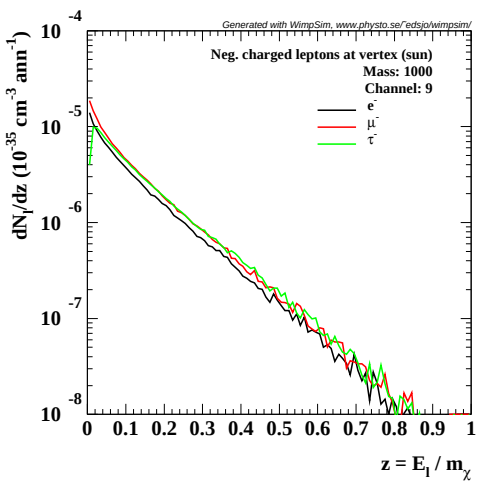
16.9 Channel 9 – $Z^0 Z^0$

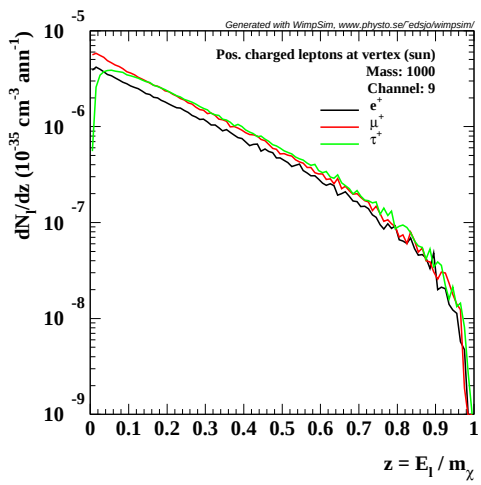
16.9.1 Neutrino fluxes at detector (Sun)



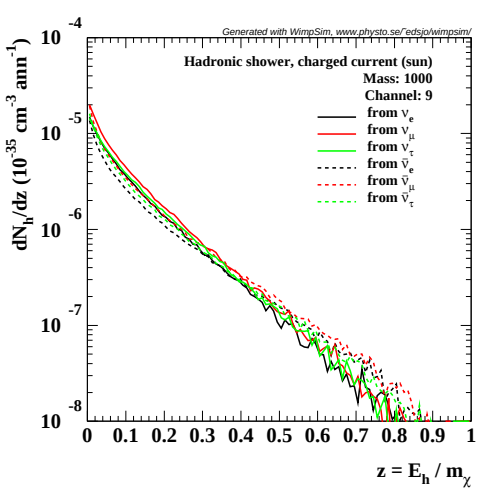


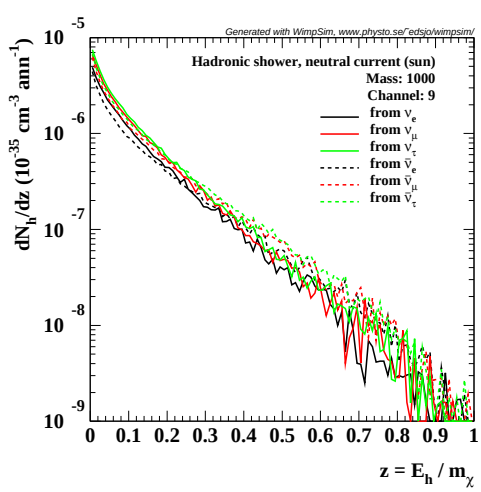
16.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



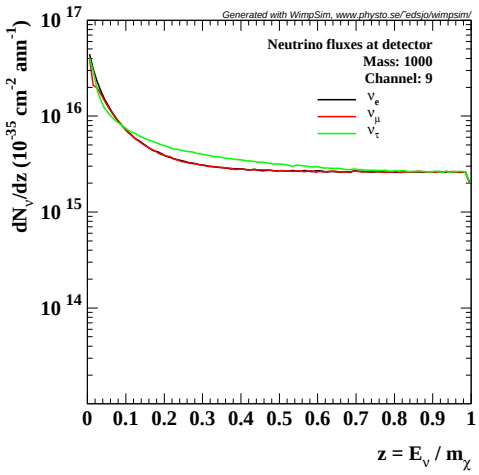


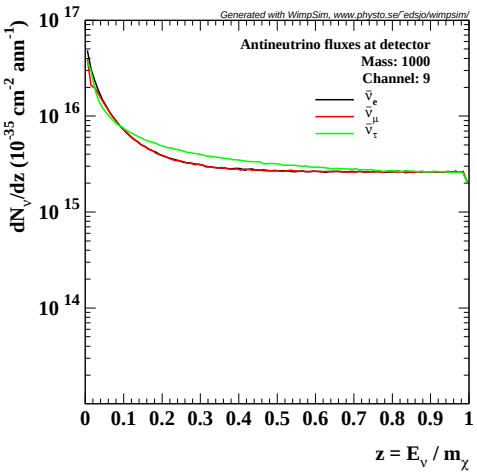
16.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



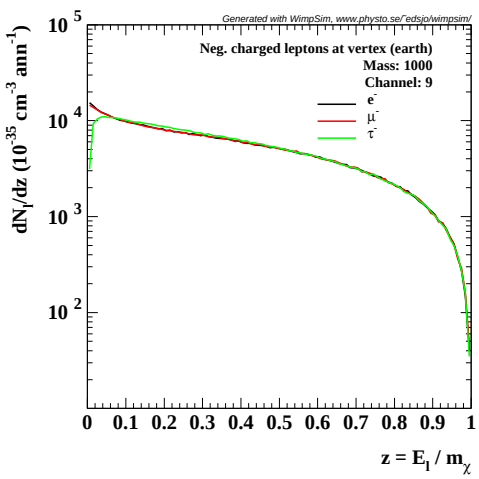


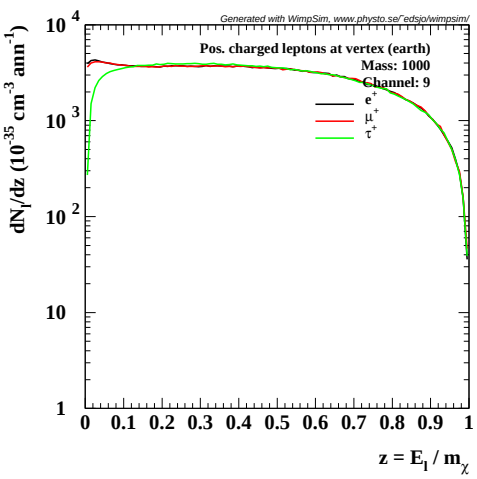
16.9.4 Neutrino fluxes at detector (Earth)



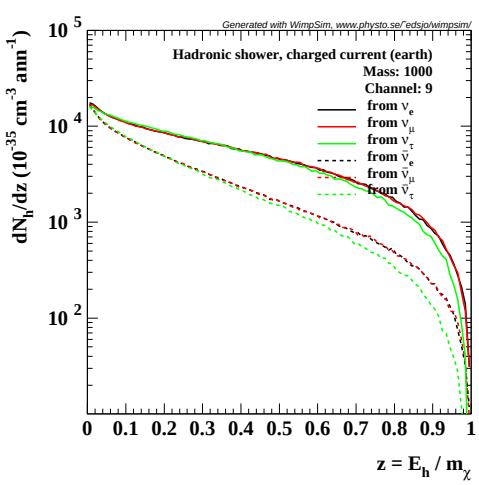


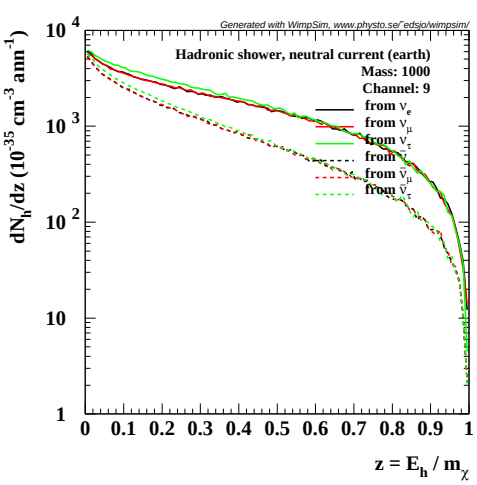
16.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



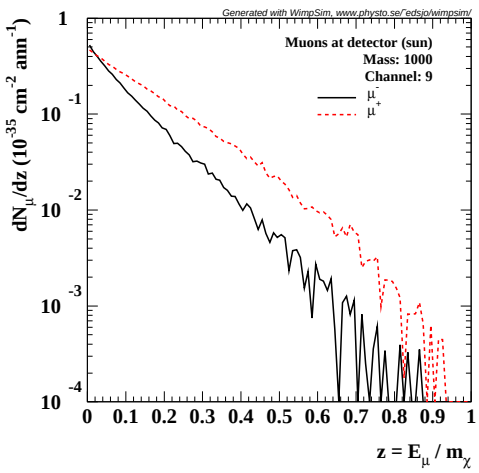


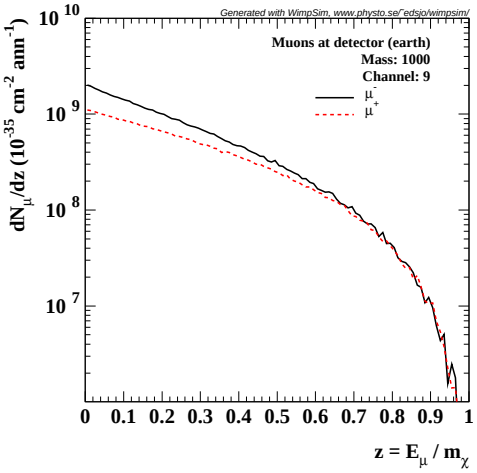
16.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





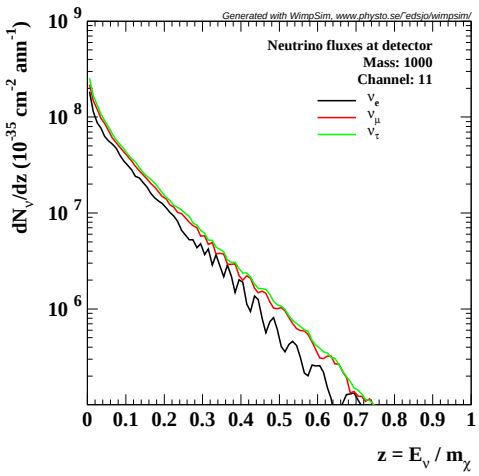
16.9.7 Muons at detector (Sun/Earth)

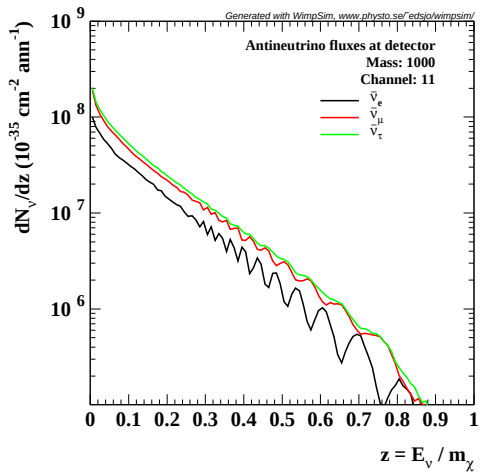




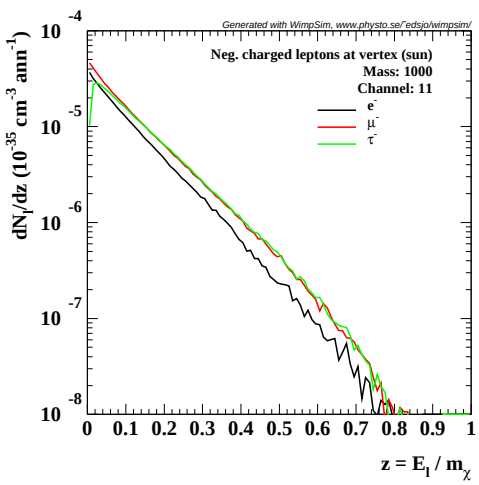
16.10 Channel 11 – $\tau^-\tau^+$

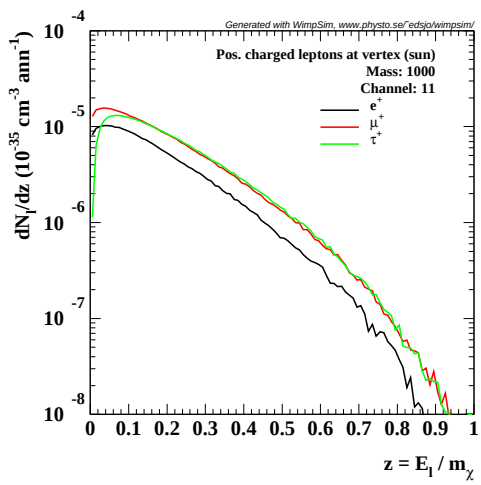
16.10.1 Neutrino fluxes at detector (Sun)



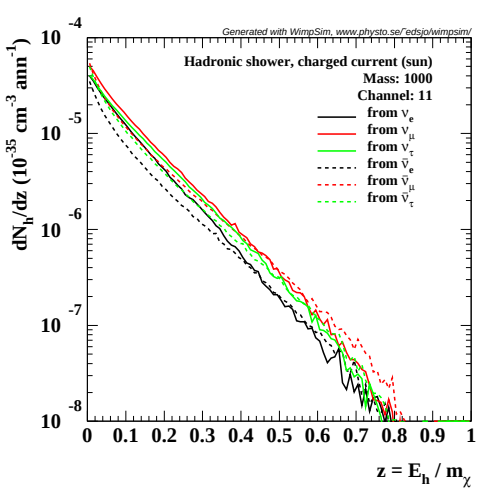


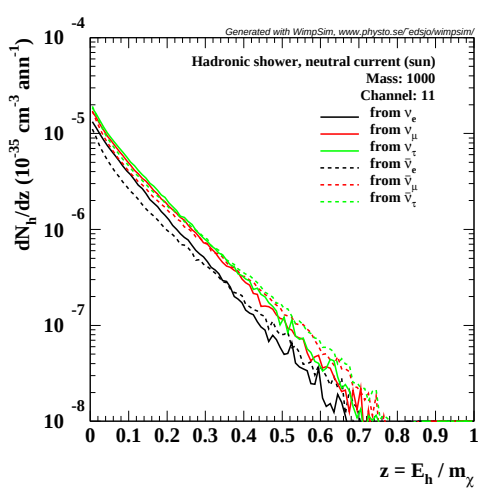
16.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



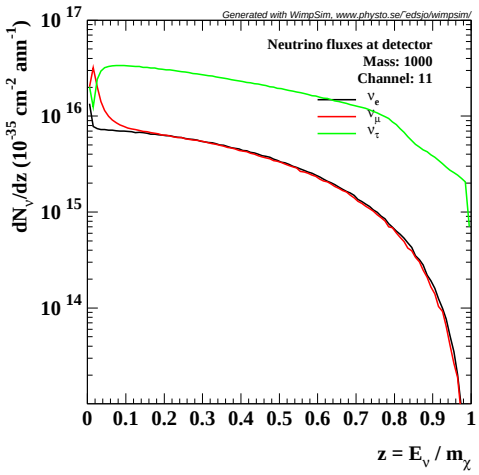


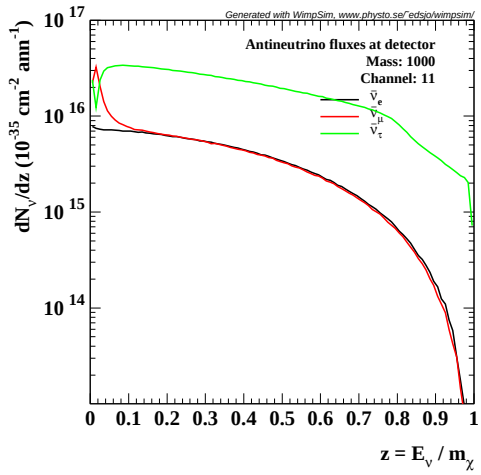
16.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



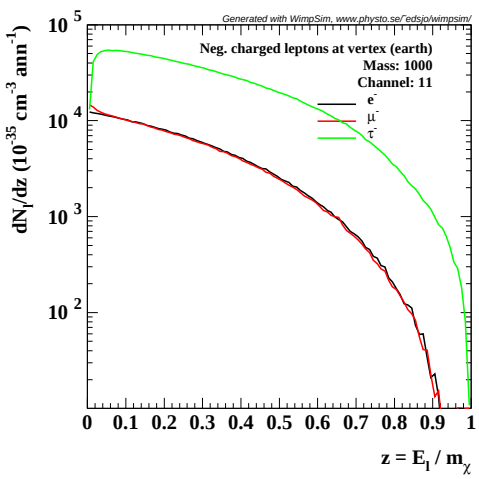


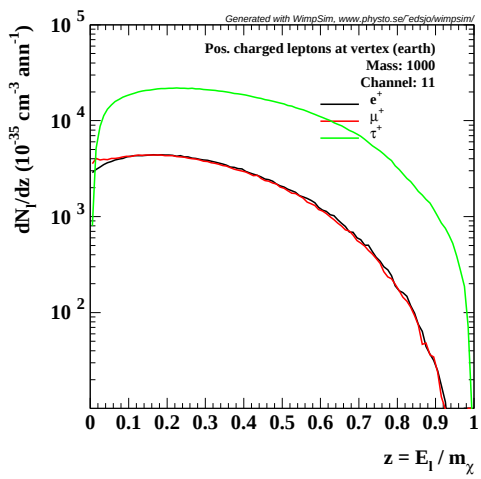
16.10.4 Neutrino fluxes at detector (Earth)



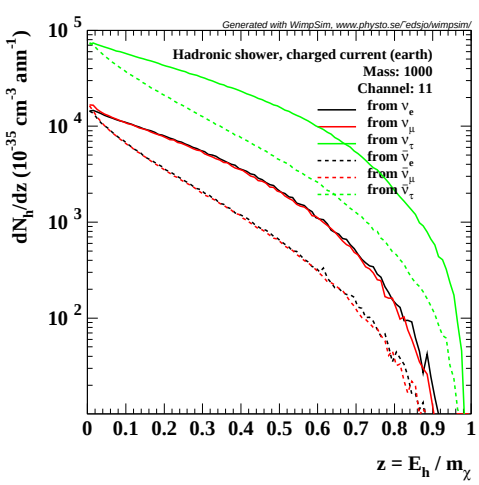


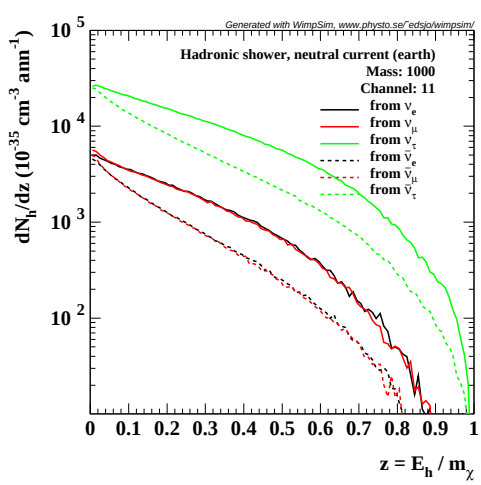
16.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



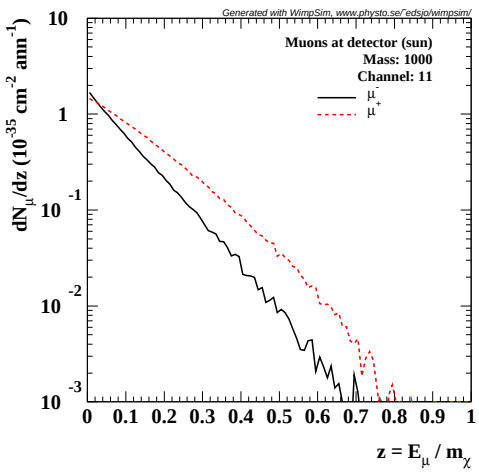


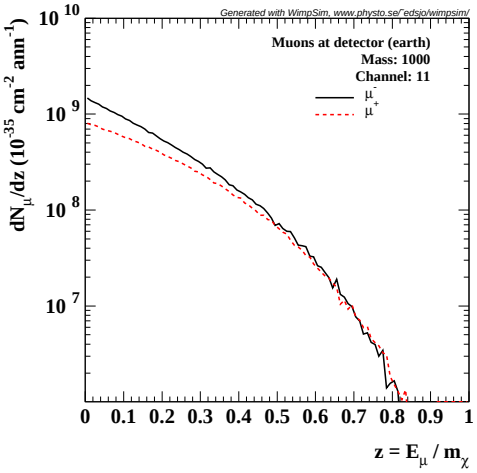
16.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





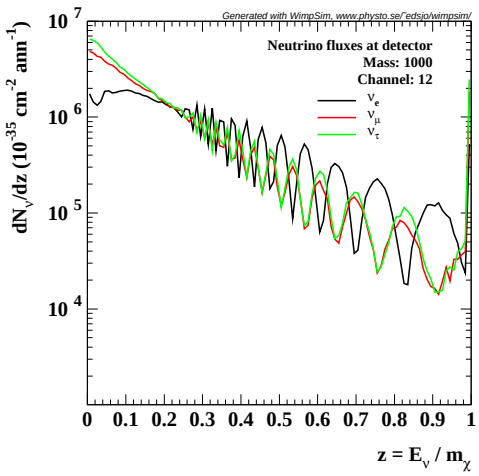
16.10.7 Muons at detector (Sun/Earth)

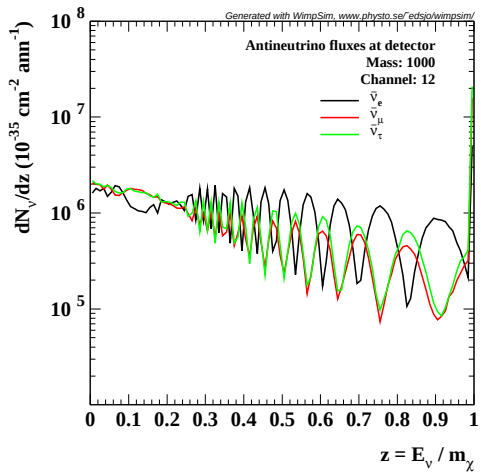




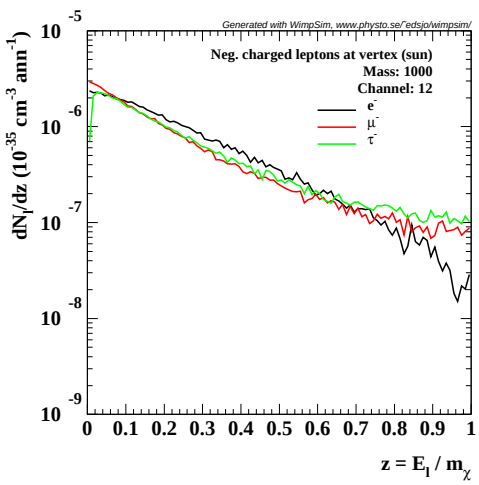
16.11 Channel 12 – $\nu_e\bar{\nu}_e$

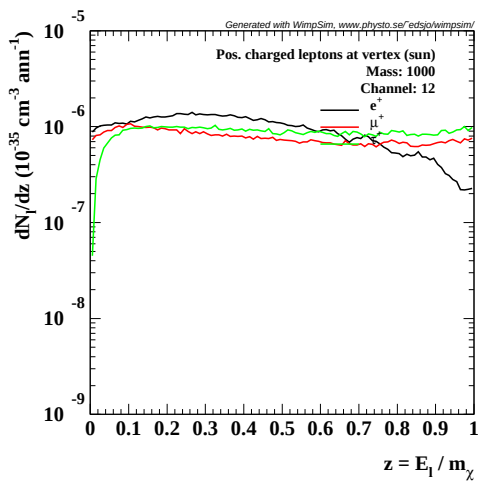
16.11.1 Neutrino fluxes at detector (Sun)



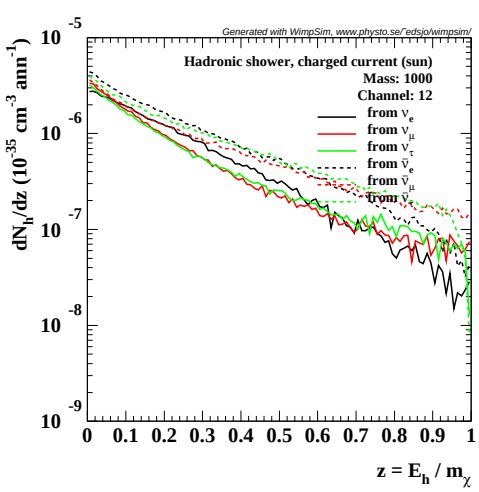


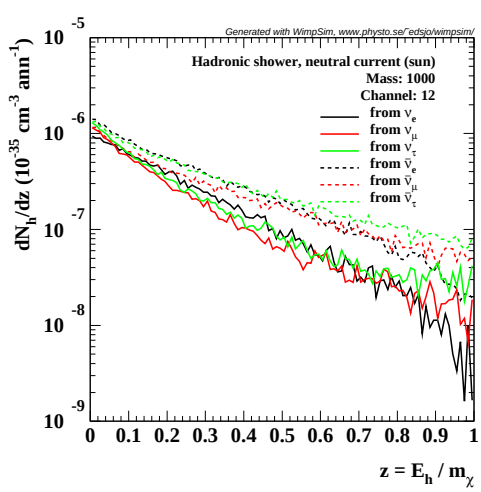
16.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



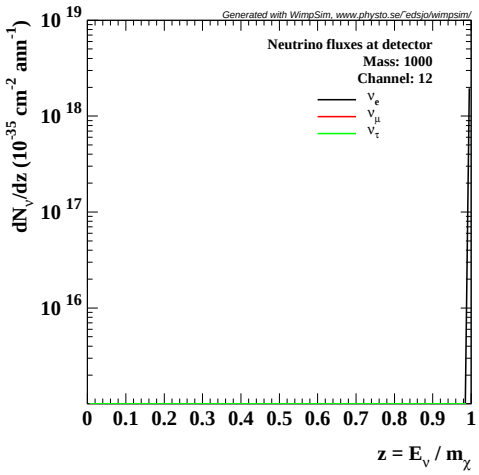


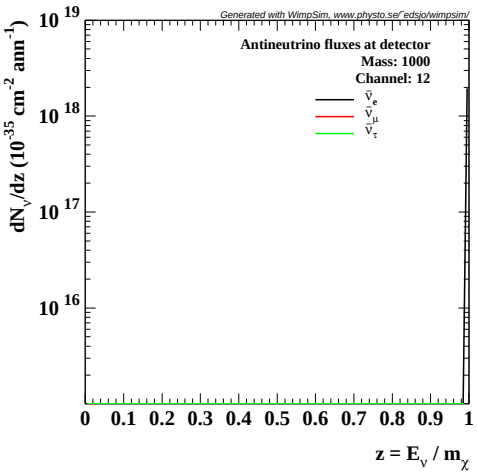
16.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



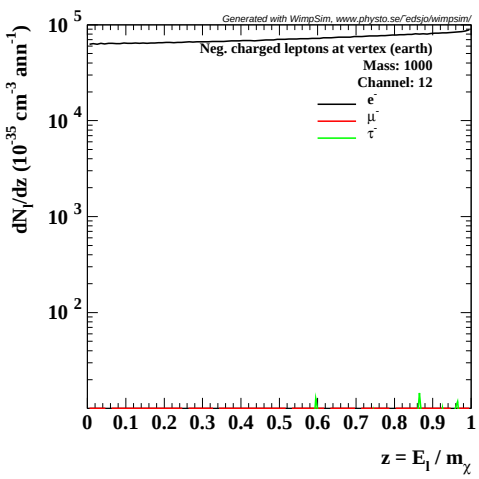


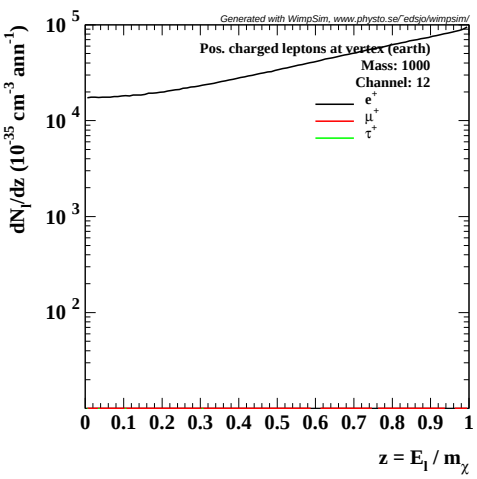
16.11.4 Neutrino fluxes at detector (Earth)



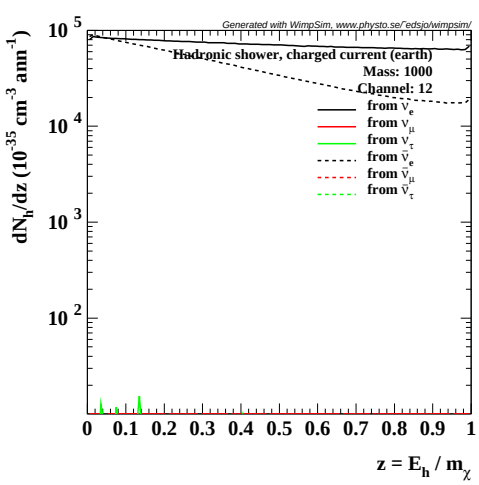


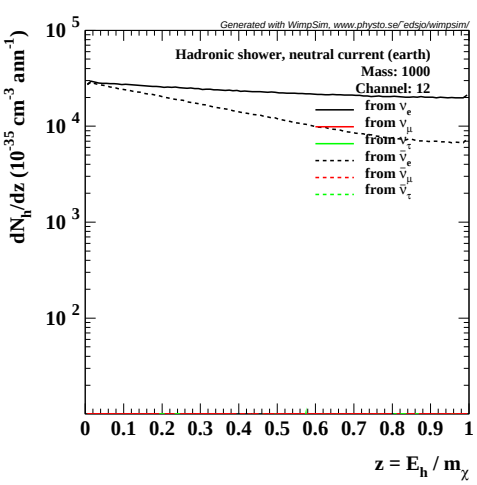
16.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



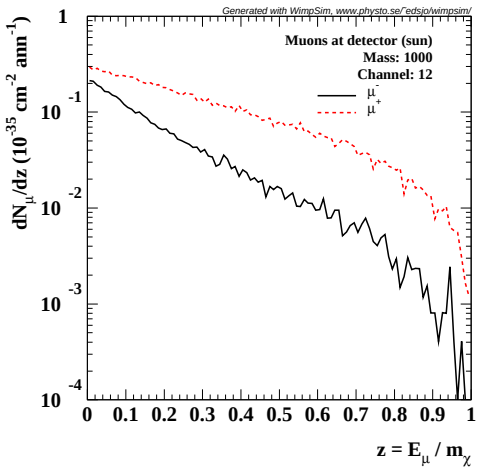


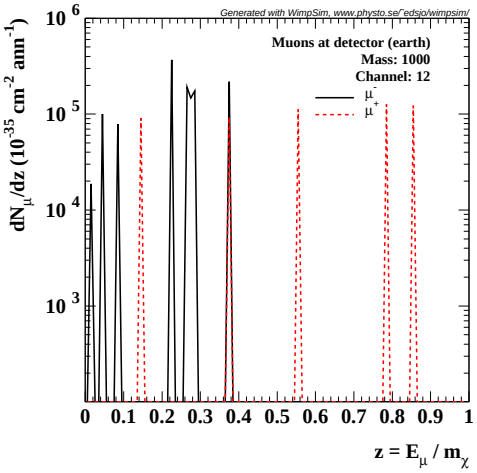
16.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





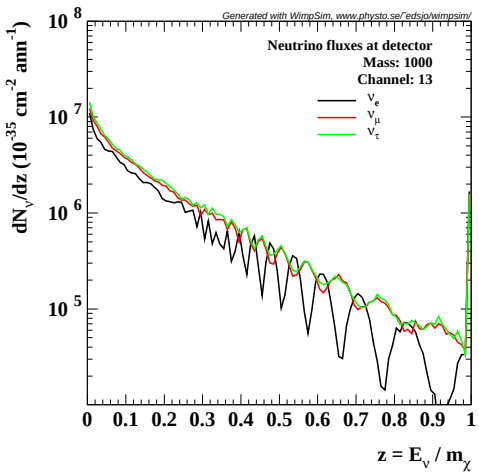
16.11.7 Muons at detector (Sun/Earth)

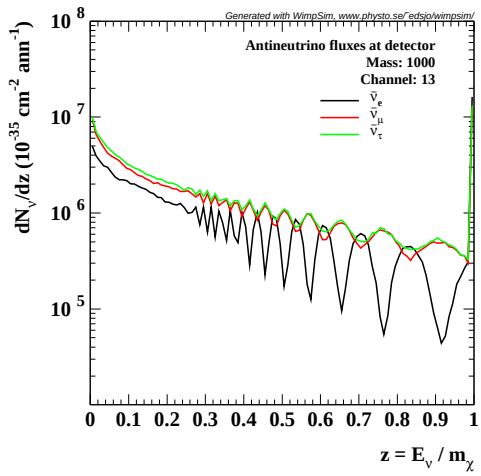




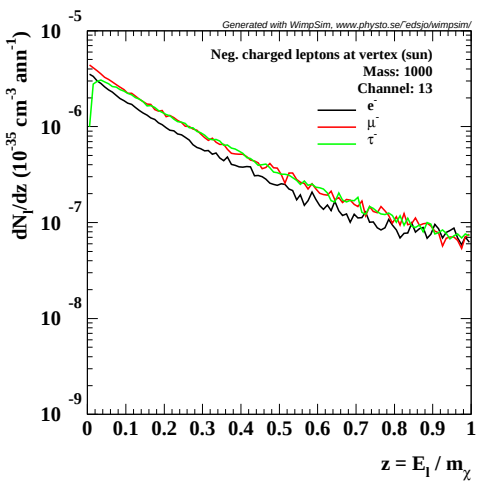
16.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

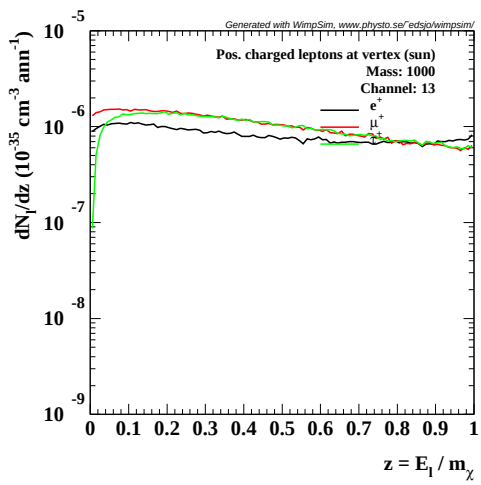
16.12.1 Neutrino fluxes at detector (Sun)



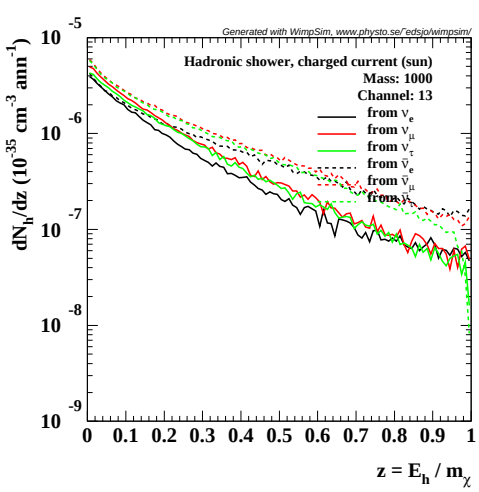


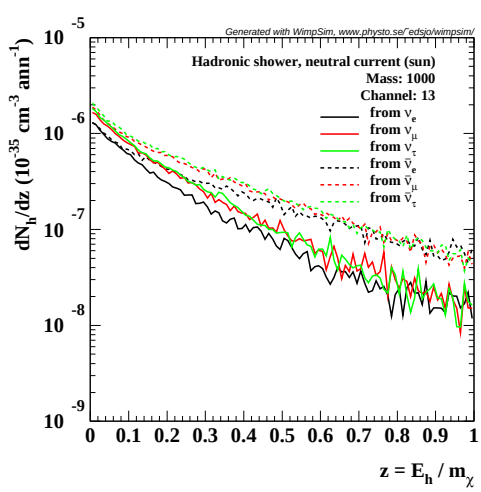
16.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



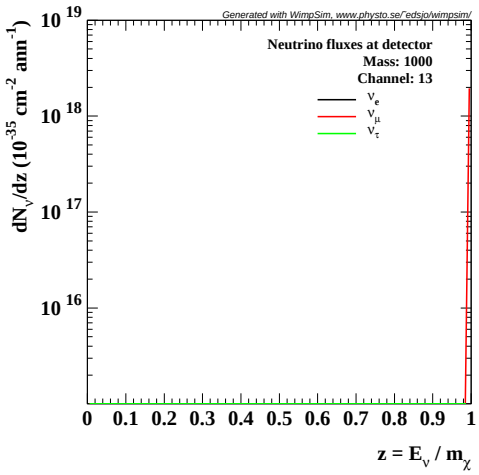


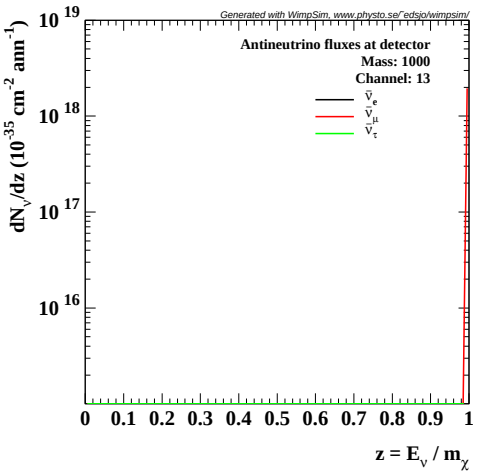
16.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



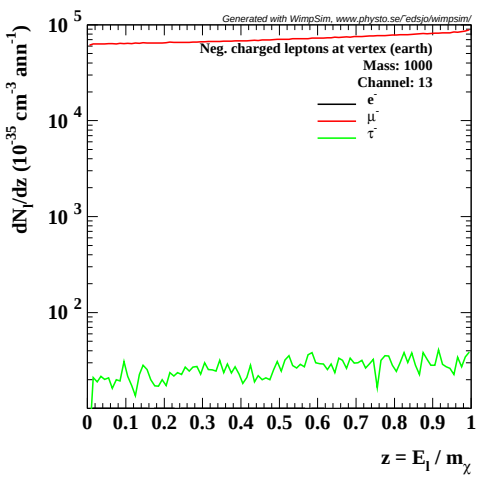


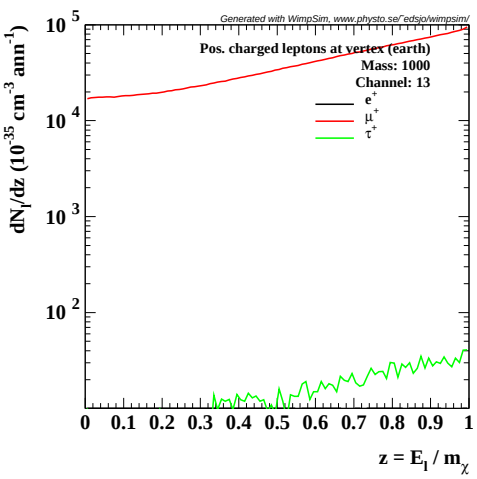
16.12.4 Neutrino fluxes at detector (Earth)



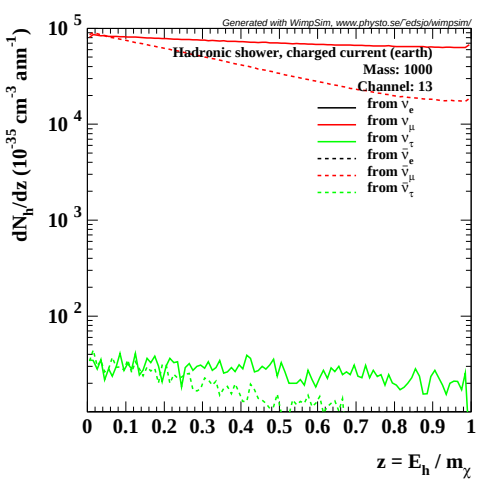


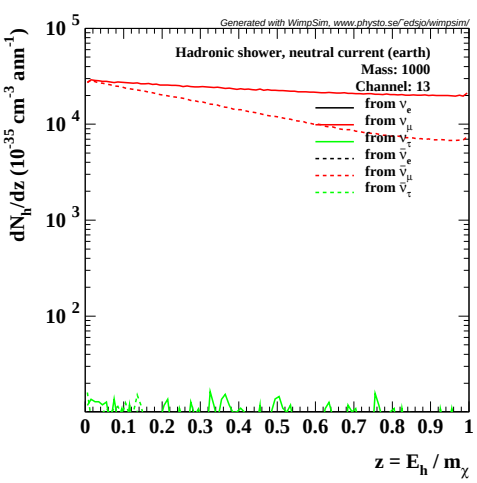
16.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



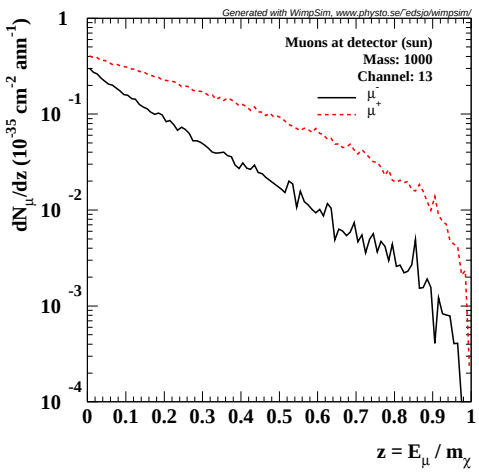


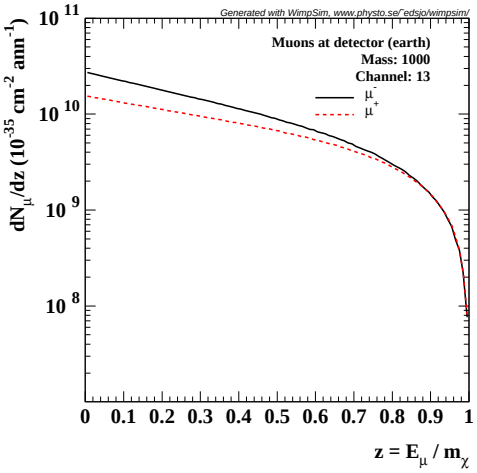
16.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





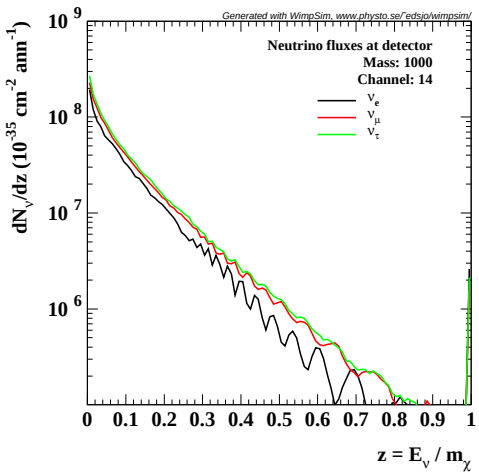
16.12.7 Muons at detector (Sun/Earth)

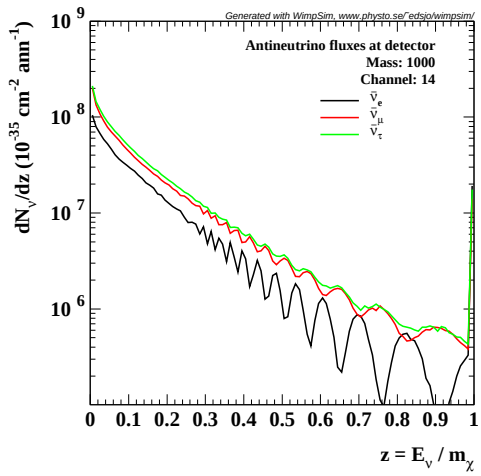




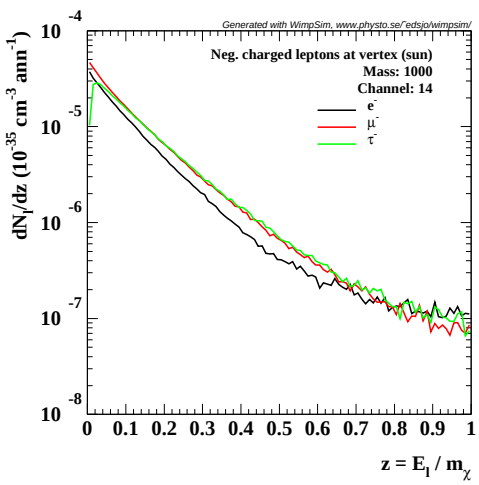
16.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

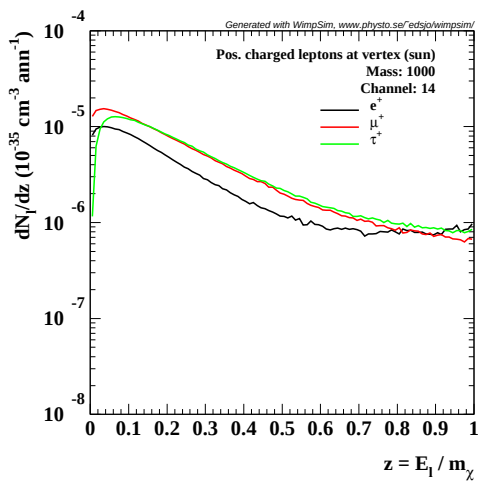
16.13.1 Neutrino fluxes at detector (Sun)



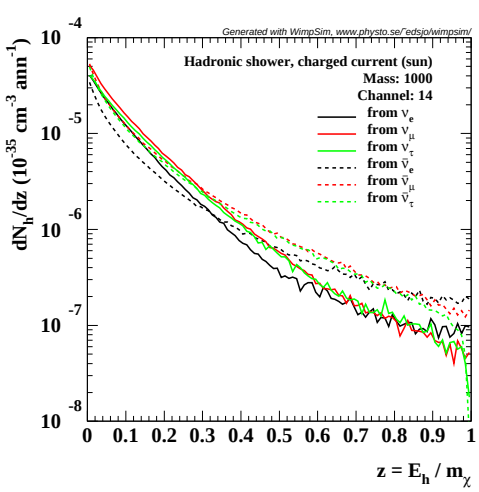


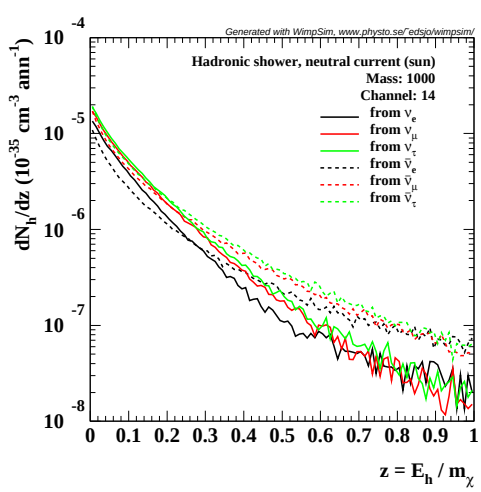
16.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



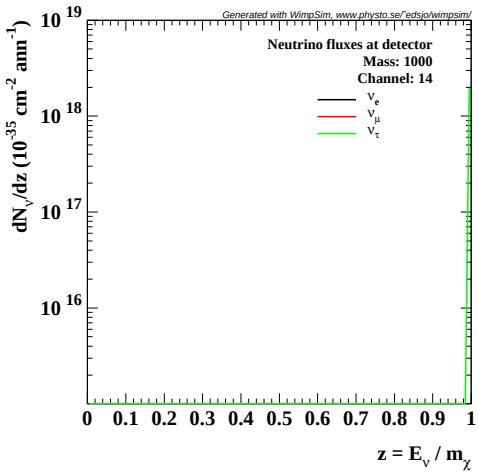


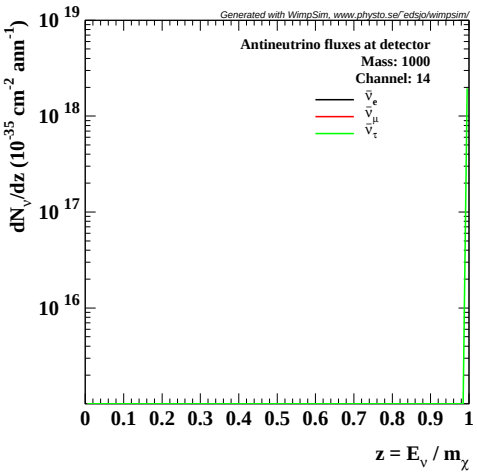
16.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



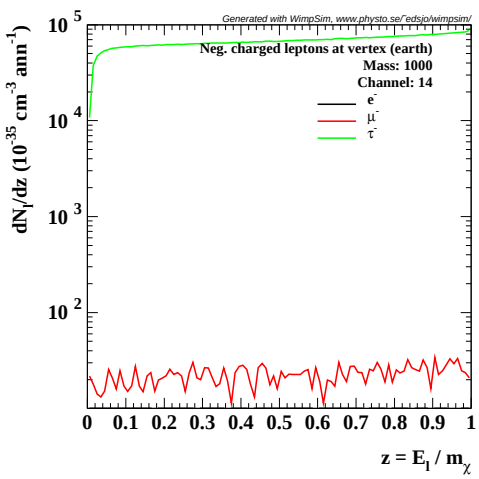


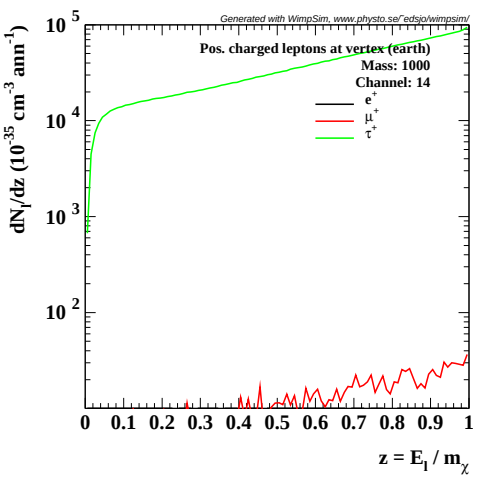
16.13.4 Neutrino fluxes at detector (Earth)



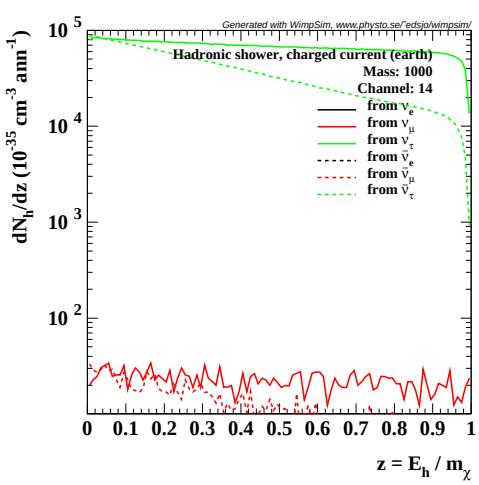


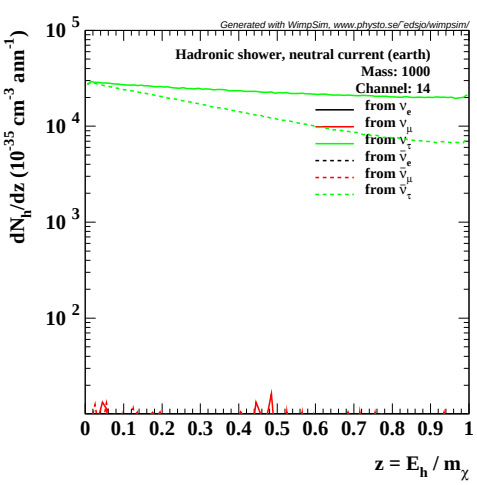
16.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



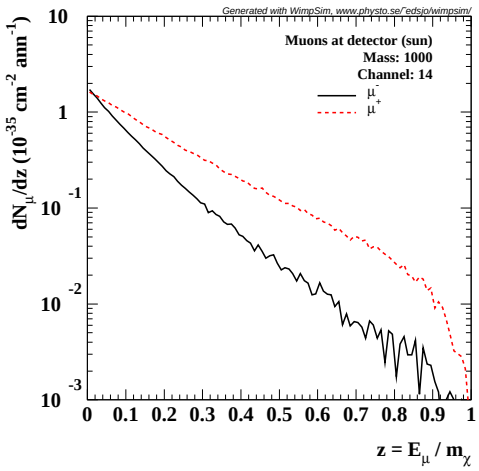


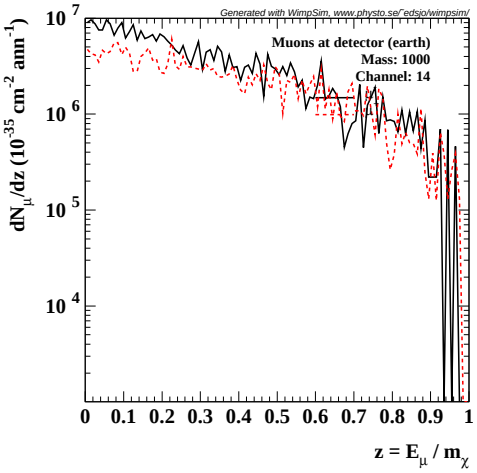
16.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





16.13.7 Muons at detector (Sun/Earth)

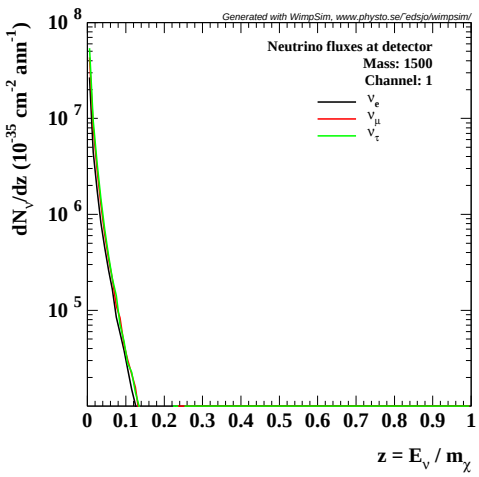


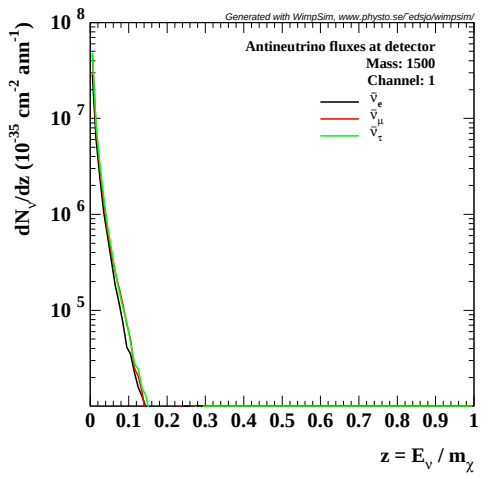


17 Mass 1500

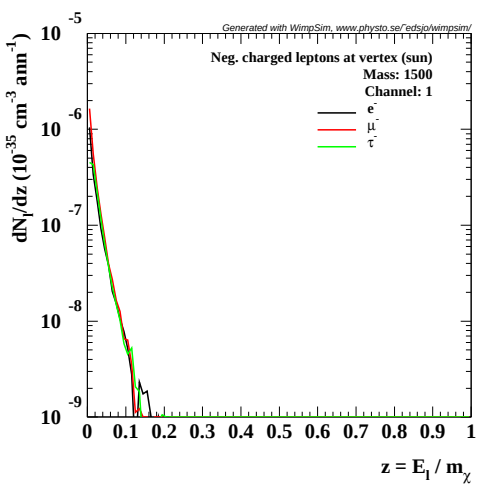
17.1 Channel 1 – $d\bar{d}$

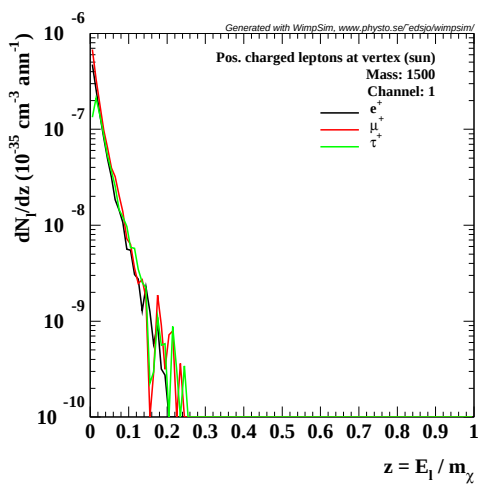
17.1.1 Neutrino fluxes at detector (Sun)



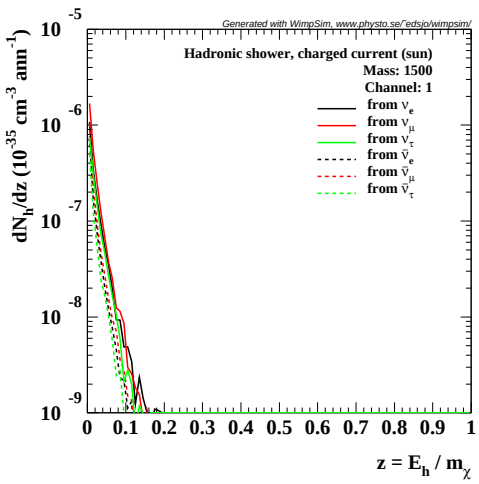


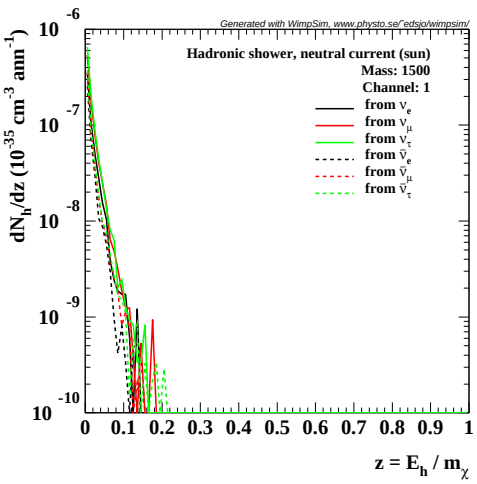
17.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



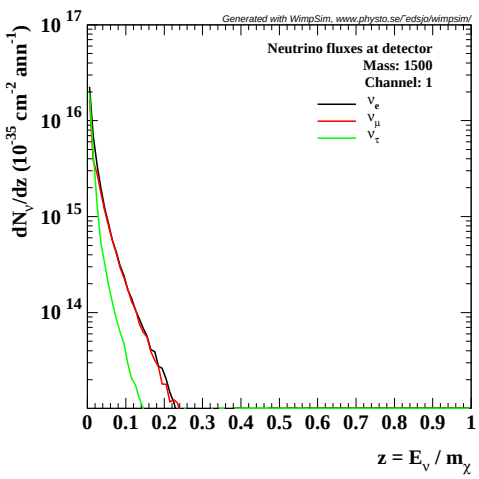


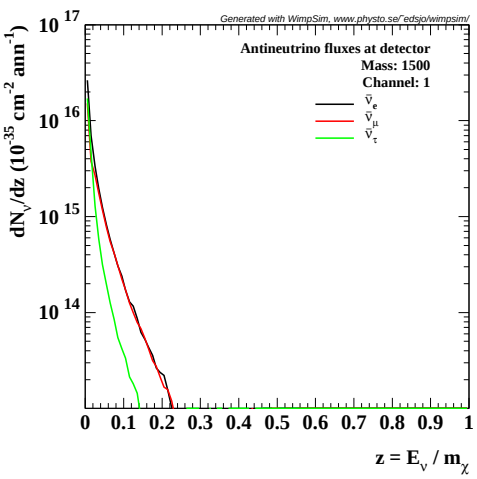
17.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



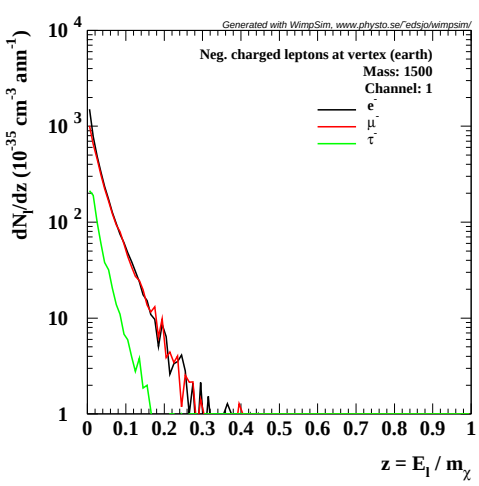


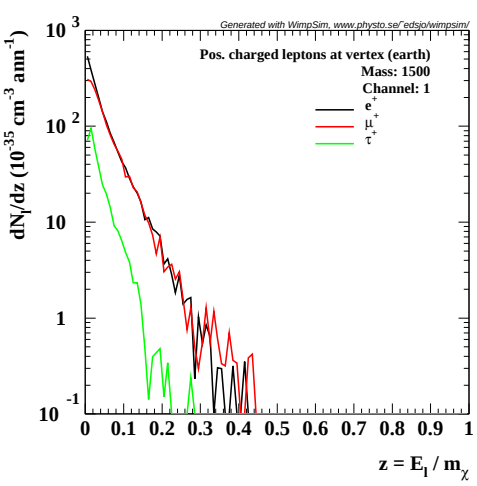
17.1.4 Neutrino fluxes at detector (Earth)



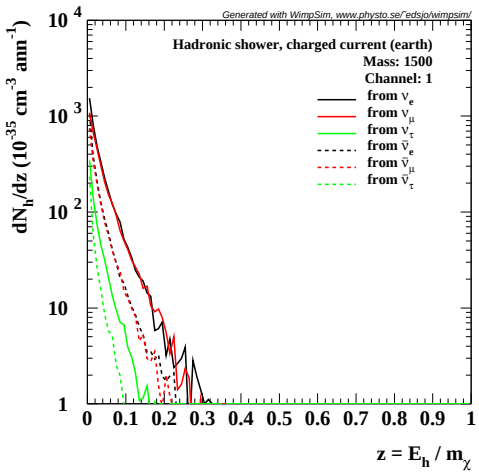


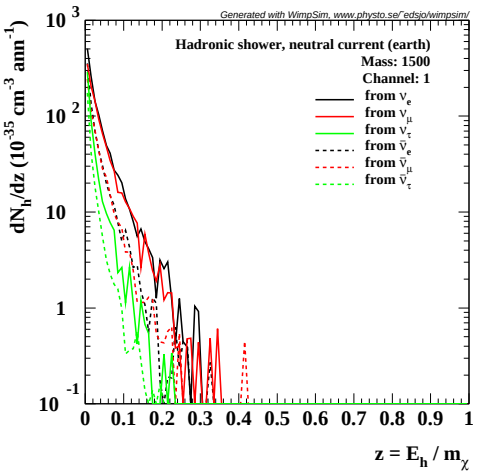
17.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



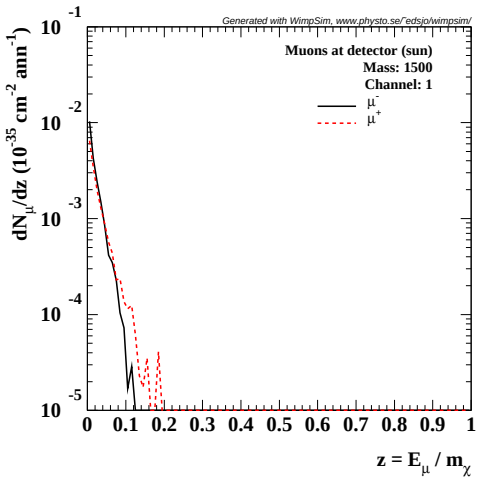


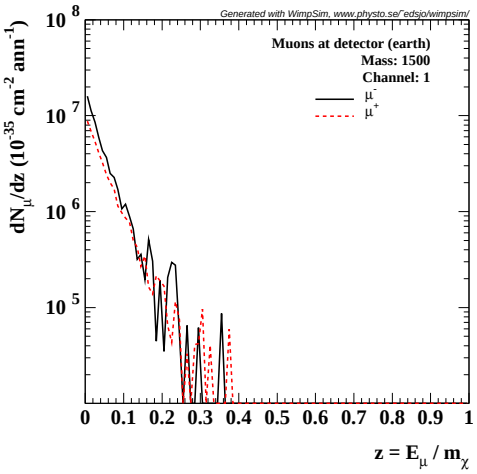
17.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





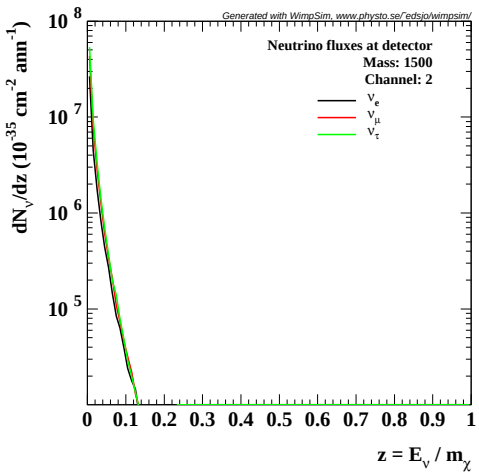
17.1.7 Muons at detector (Sun/Earth)

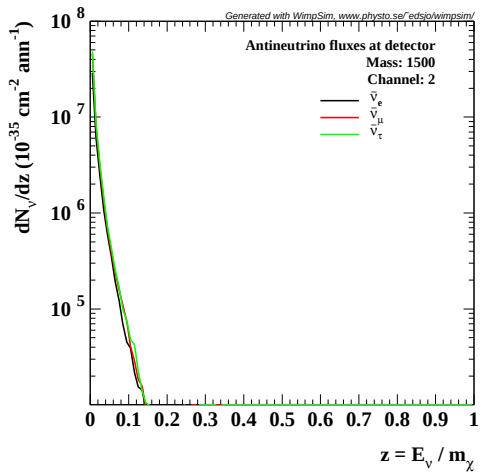




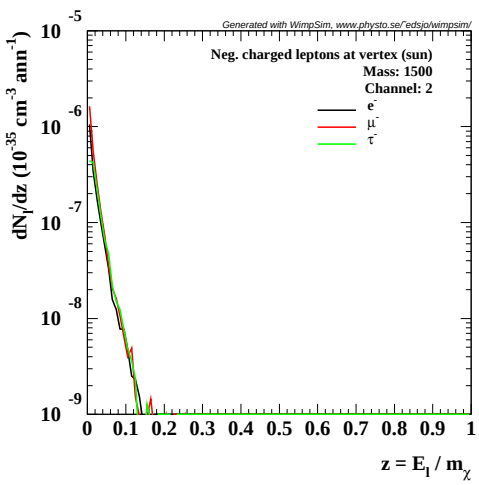
17.2 Channel 2 – $u\bar{u}$

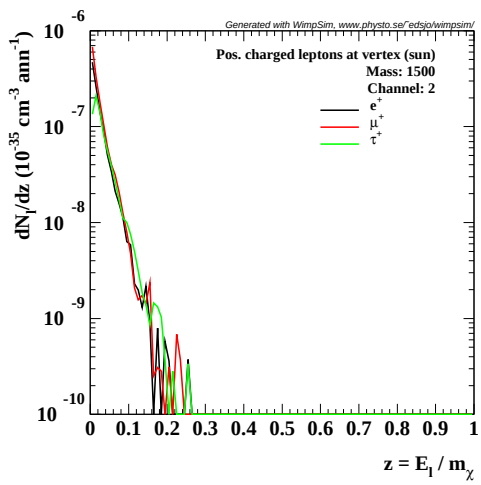
17.2.1 Neutrino fluxes at detector (Sun)



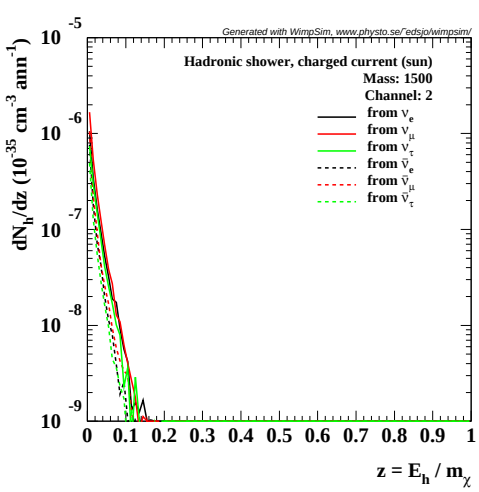


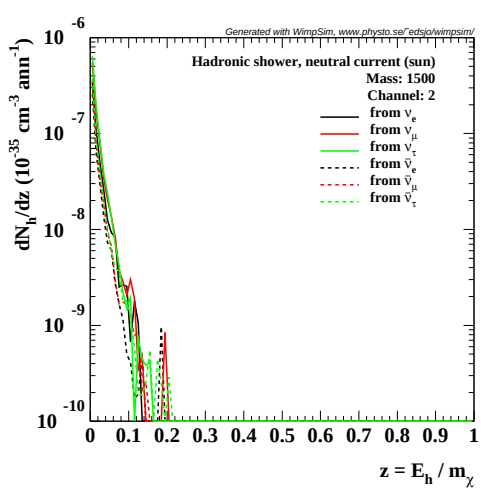
17.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



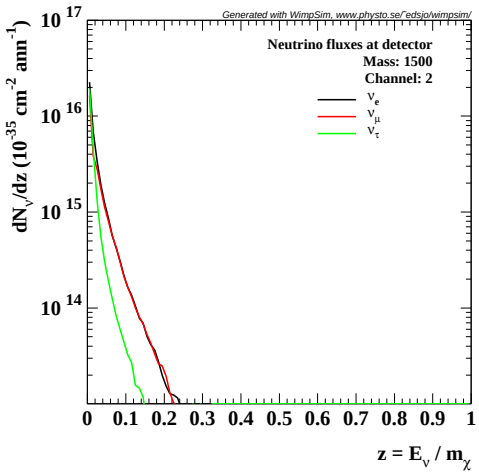


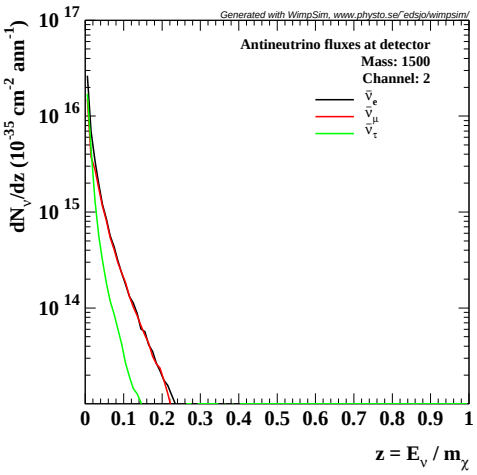
17.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



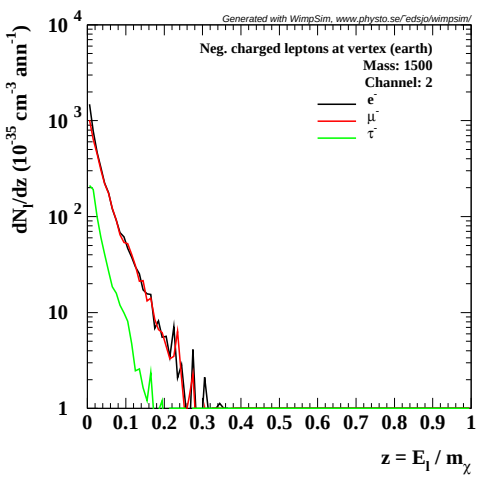


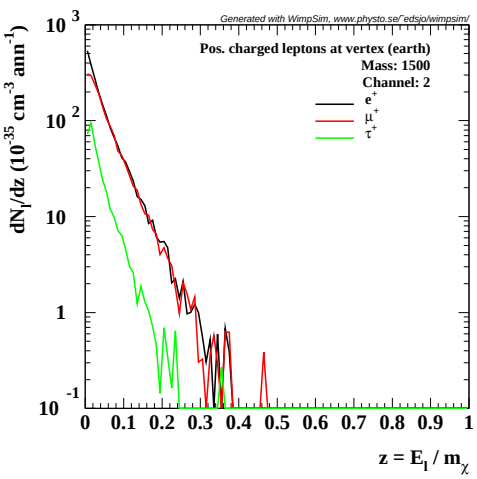
17.2.4 Neutrino fluxes at detector (Earth)



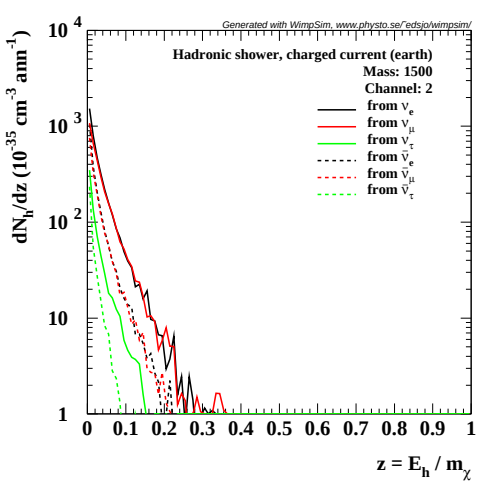


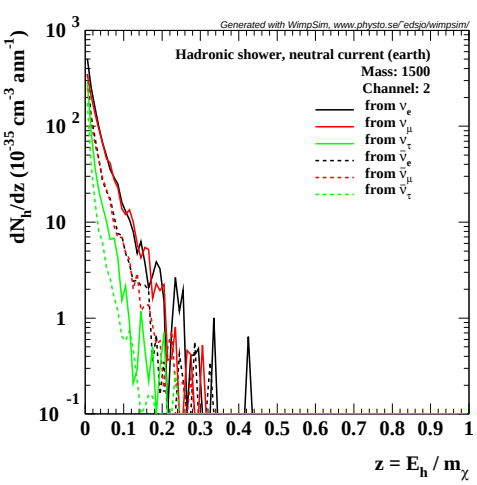
17.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



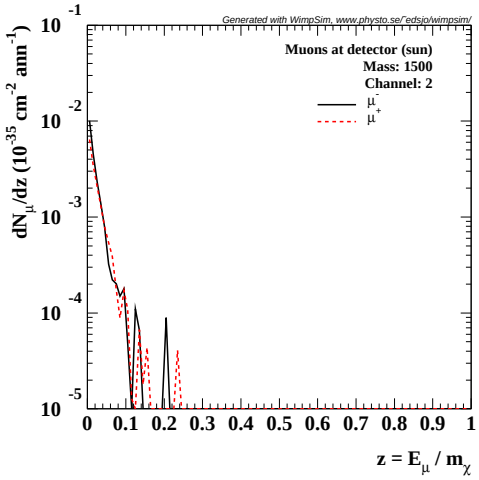


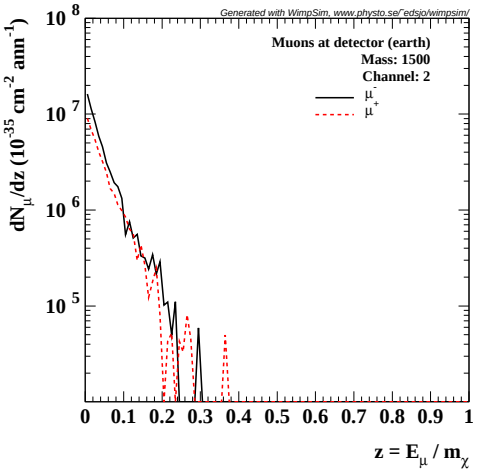
17.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





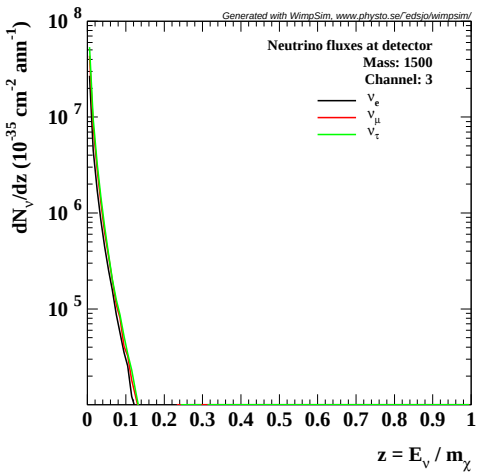
17.2.7 Muons at detector (Sun/Earth)

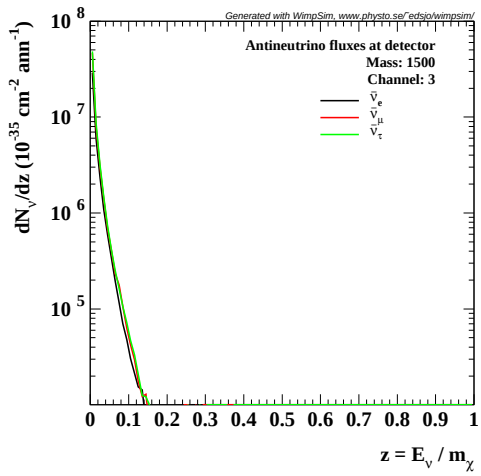




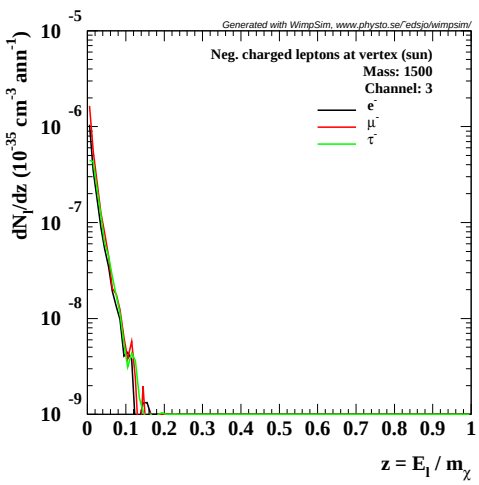
17.3 Channel 3 – $s\bar{s}$

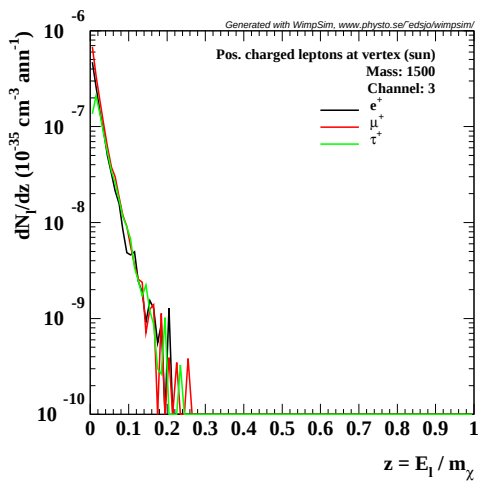
17.3.1 Neutrino fluxes at detector (Sun)



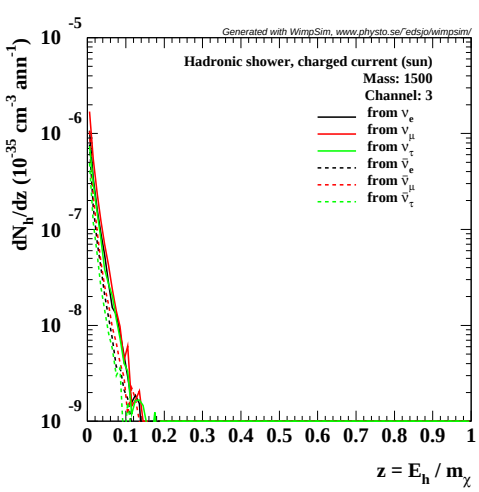


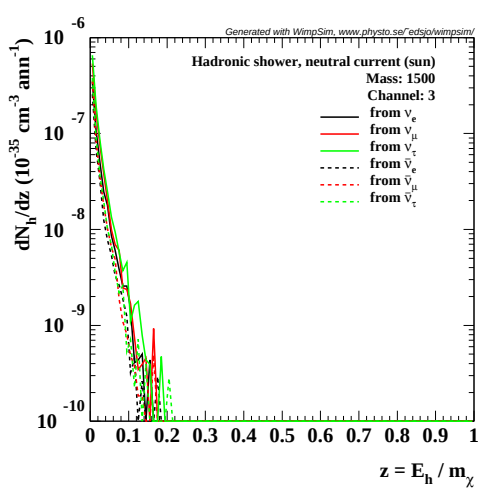
17.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



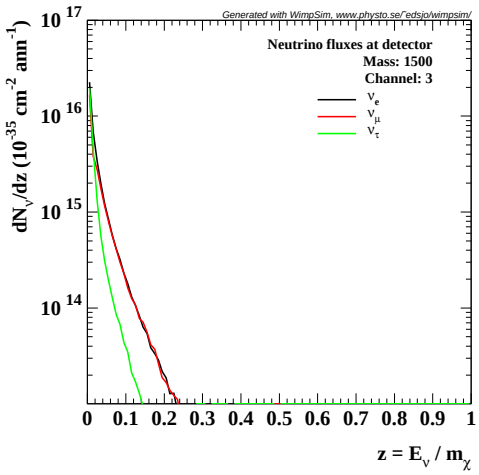


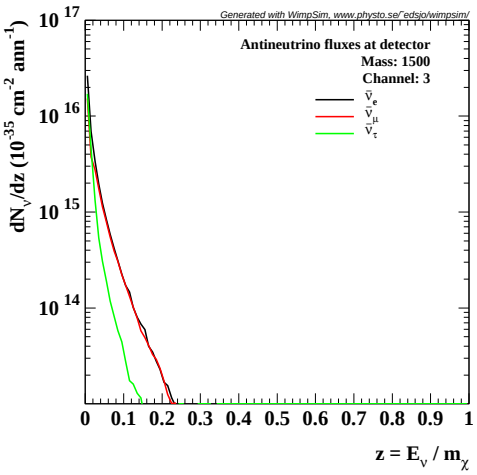
17.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



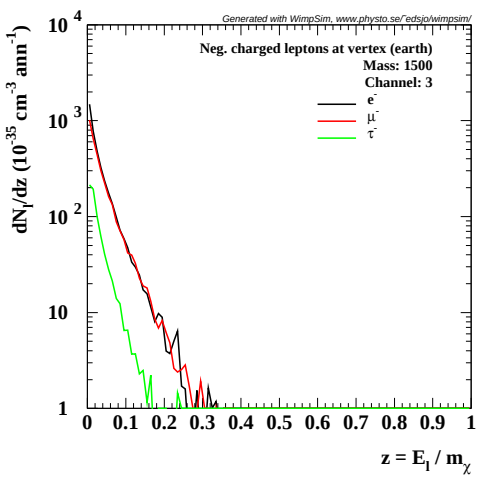


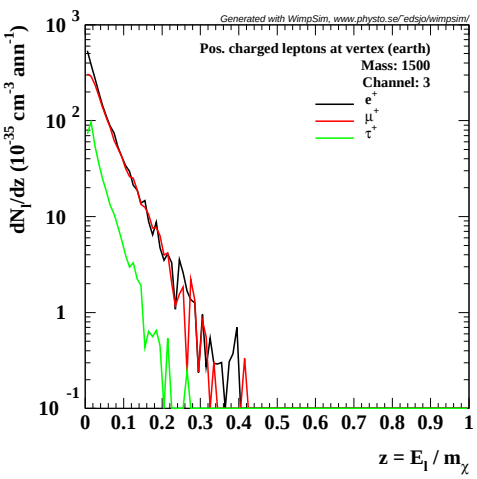
17.3.4 Neutrino fluxes at detector (Earth)



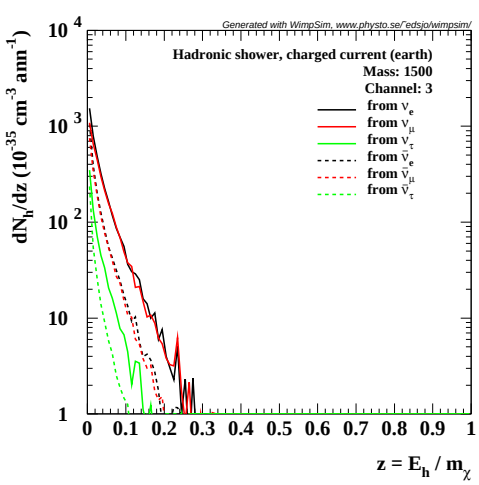


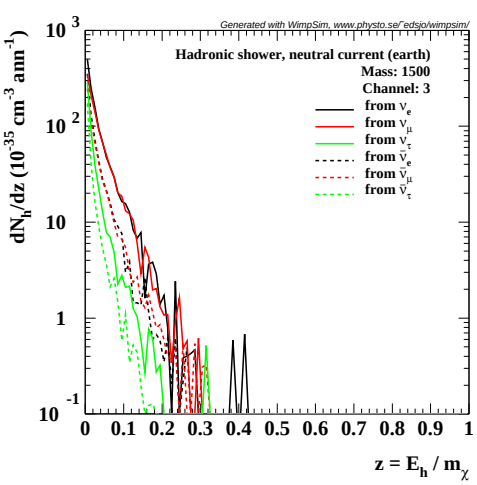
17.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



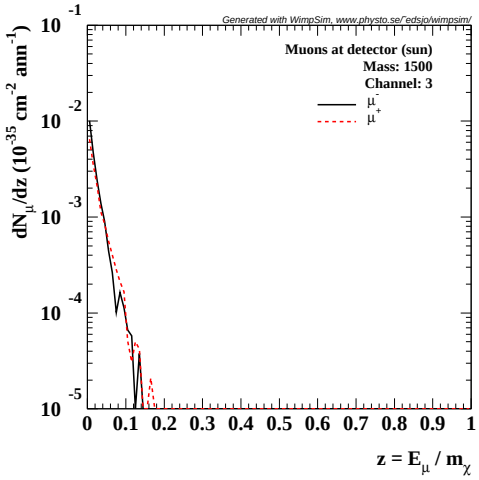


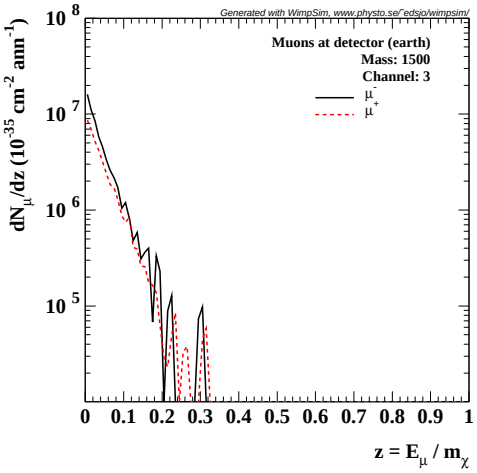
17.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





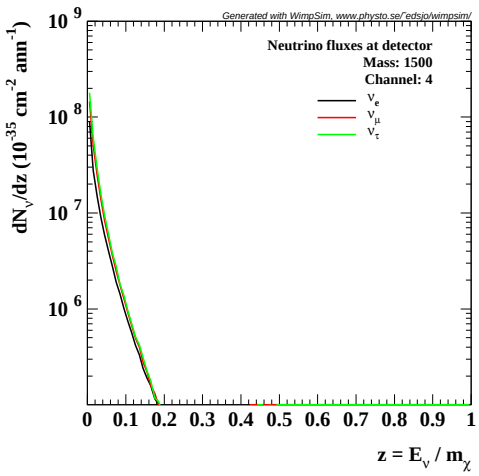
17.3.7 Muons at detector (Sun/Earth)

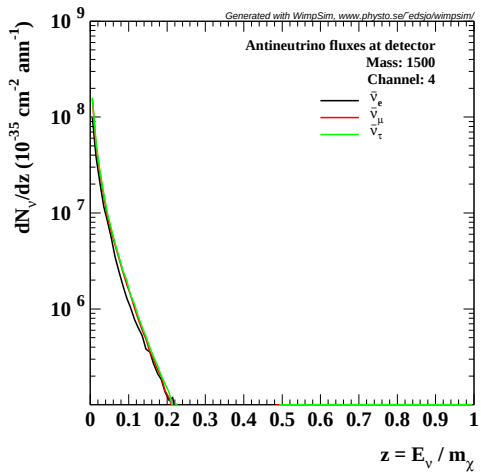




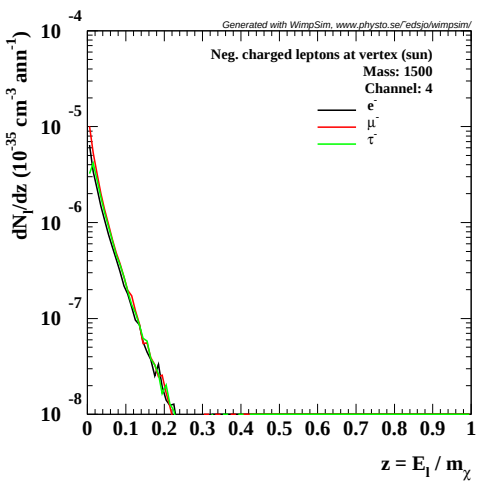
17.4 Channel 4 – $c\bar{c}$

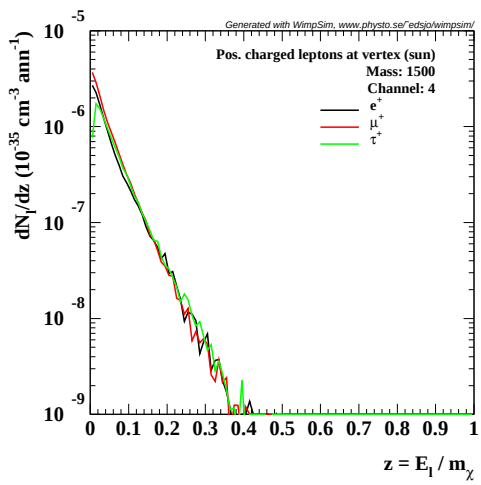
17.4.1 Neutrino fluxes at detector (Sun)



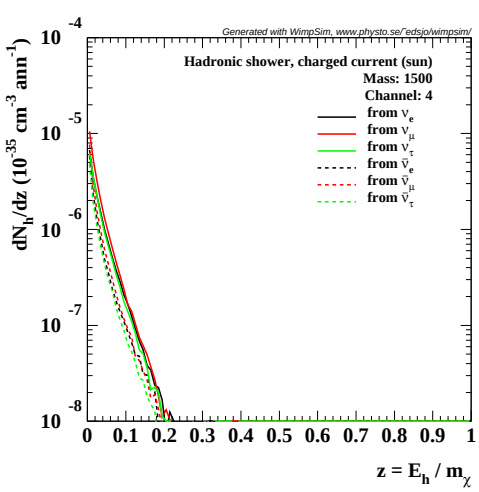


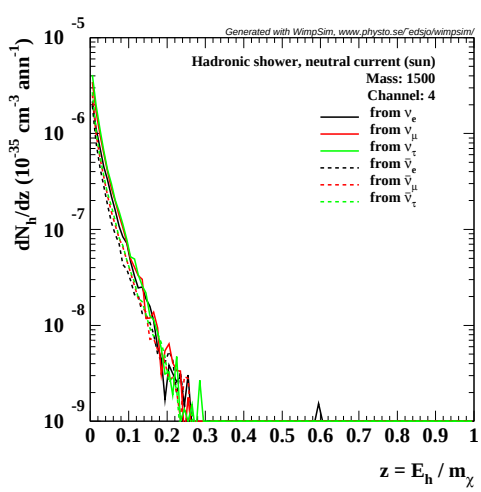
17.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



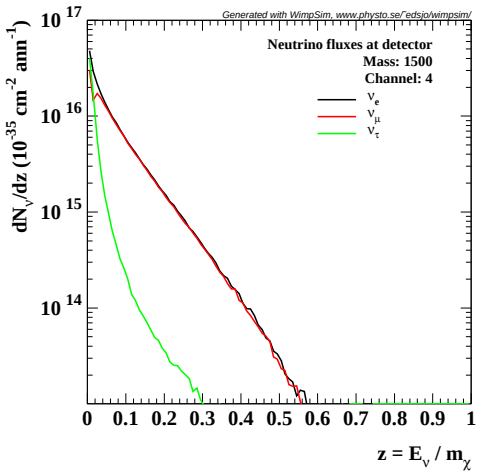


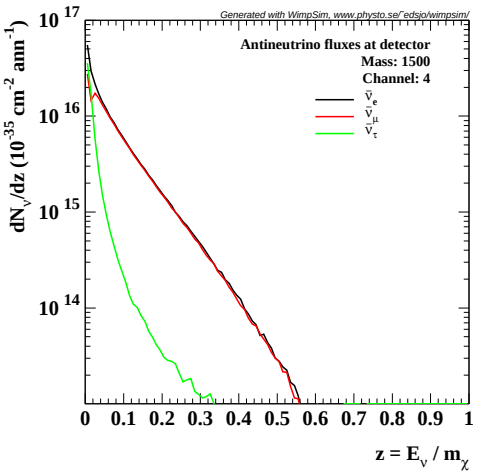
17.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



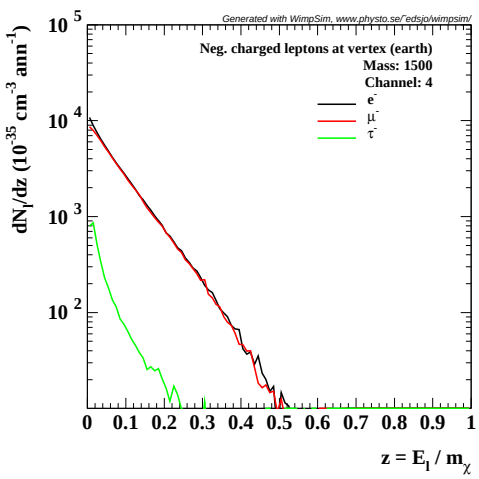


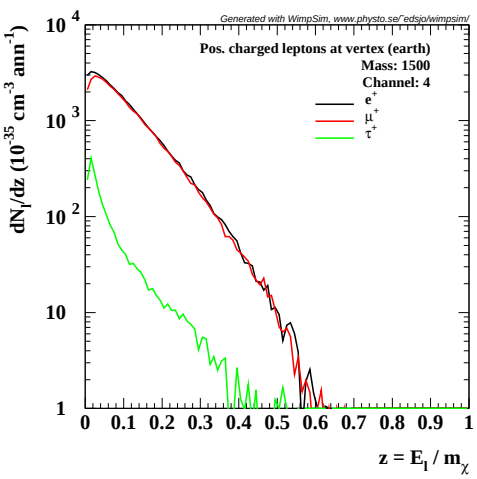
17.4.4 Neutrino fluxes at detector (Earth)



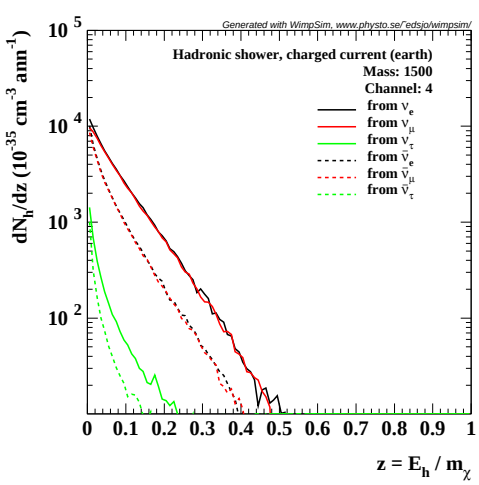


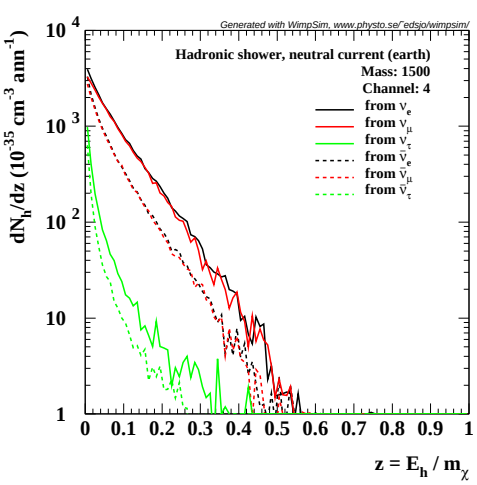
17.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



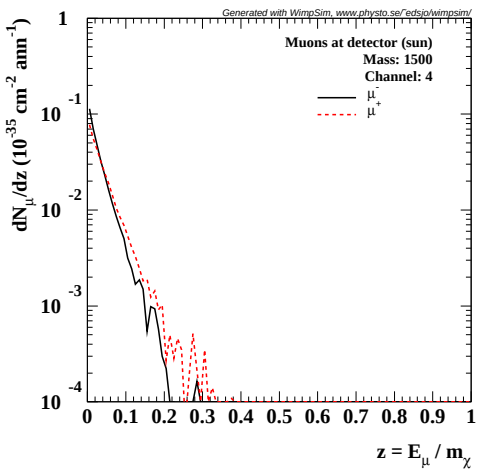


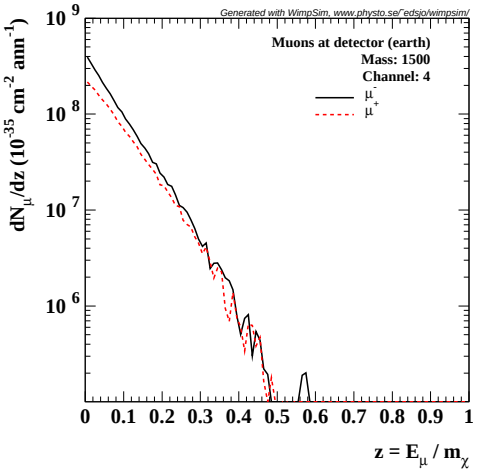
17.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





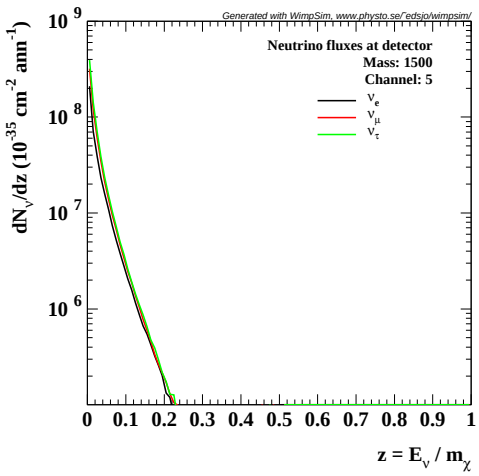
17.4.7 Muons at detector (Sun/Earth)

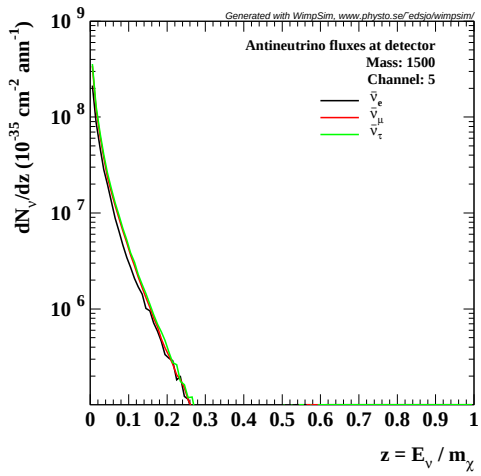




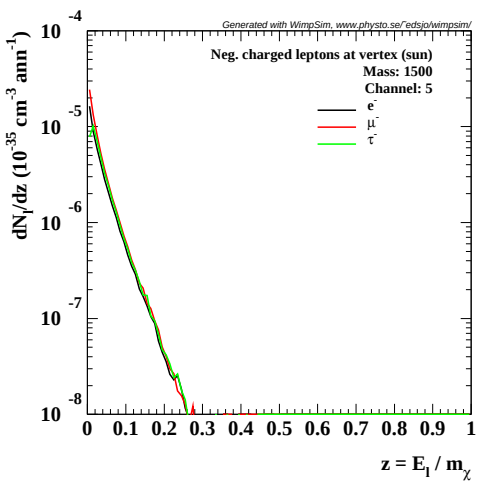
17.5 Channel 5 – $b\bar{b}$

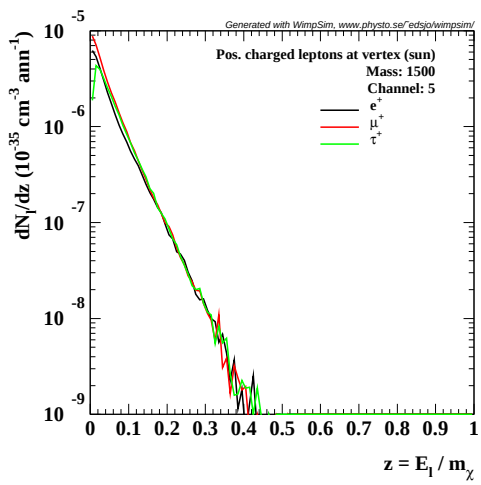
17.5.1 Neutrino fluxes at detector (Sun)



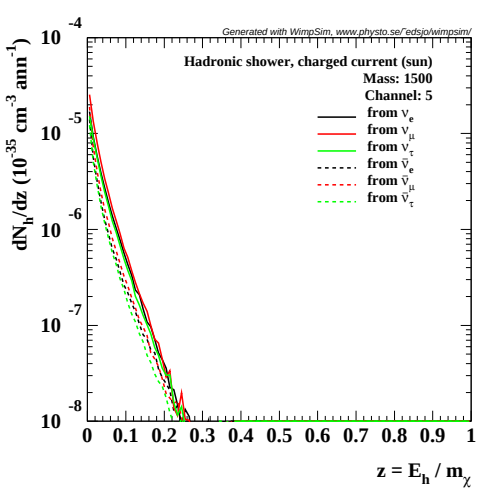


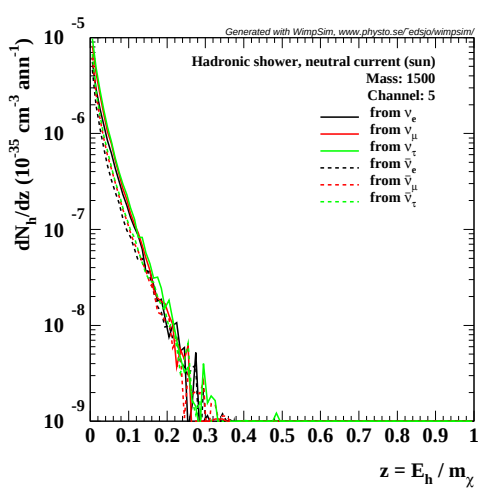
17.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



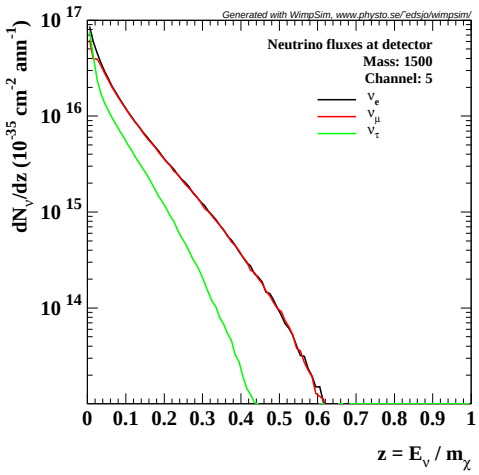


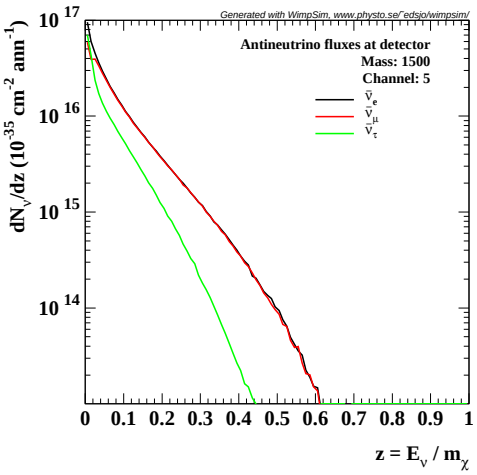
17.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



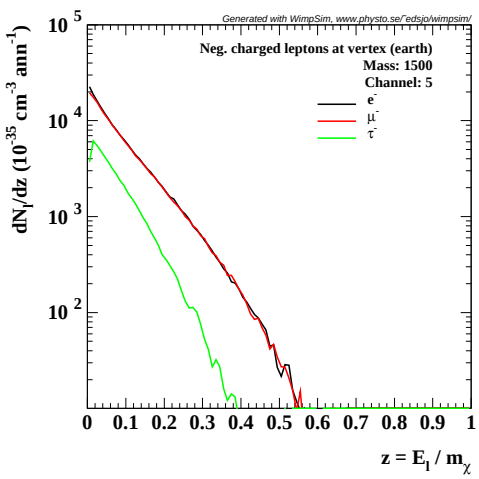


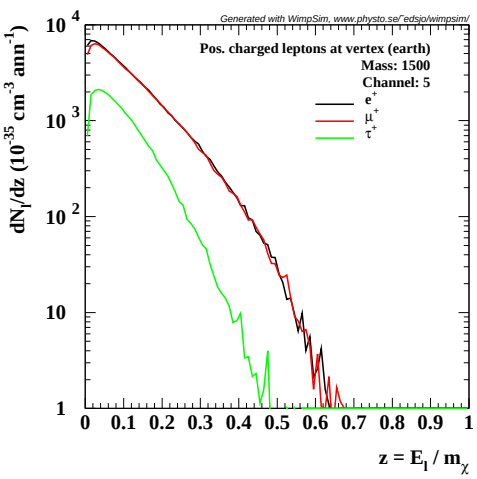
17.5.4 Neutrino fluxes at detector (Earth)



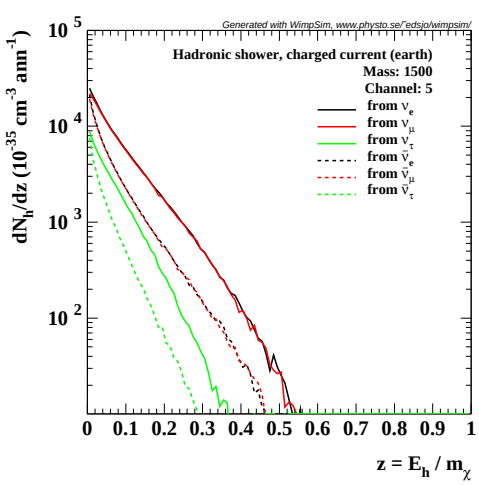


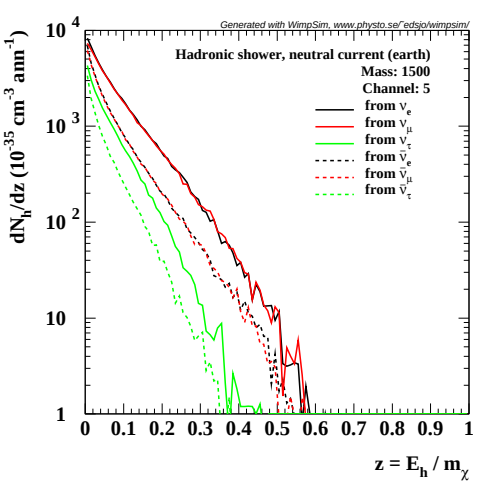
17.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



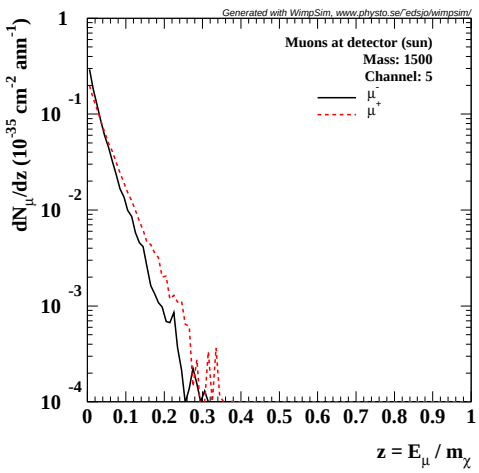


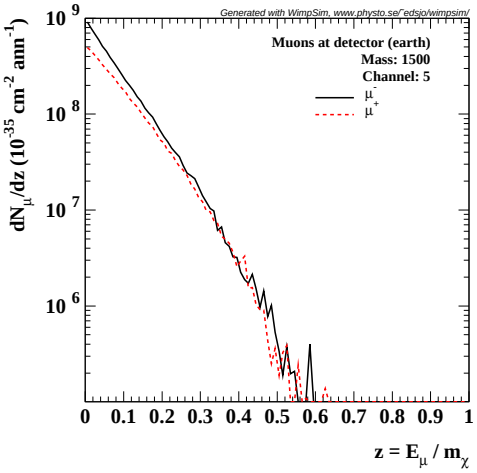
17.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





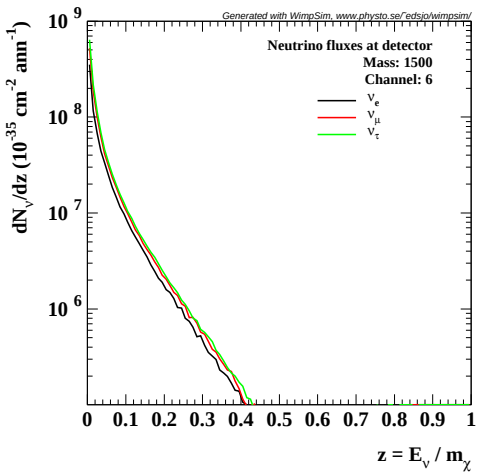
17.5.7 Muons at detector (Sun/Earth)

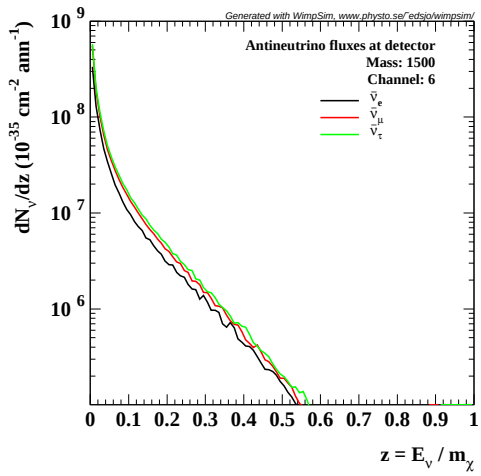




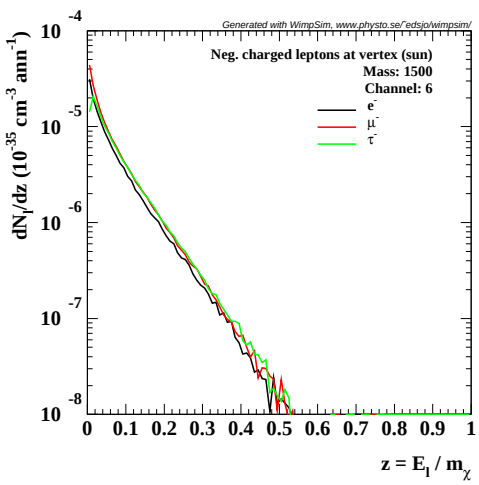
17.6 Channel 6 – $t\bar{t}$

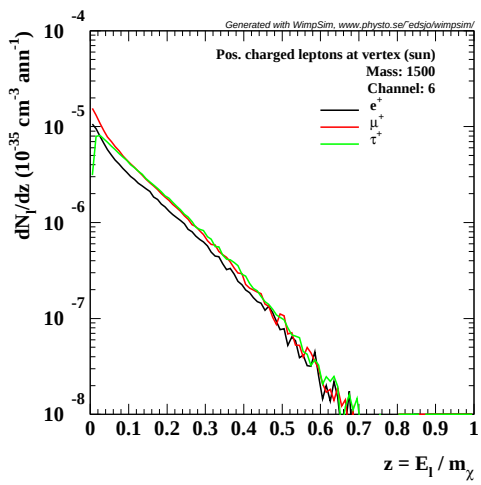
17.6.1 Neutrino fluxes at detector (Sun)



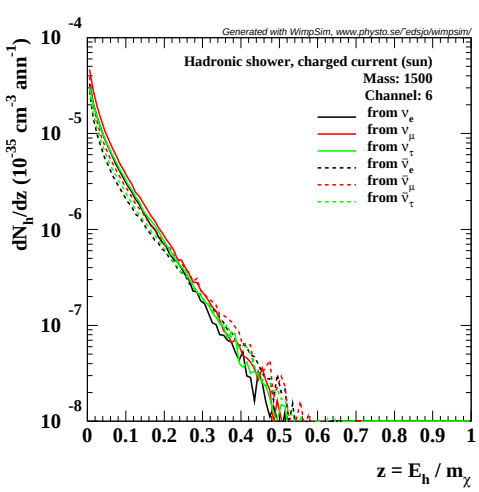


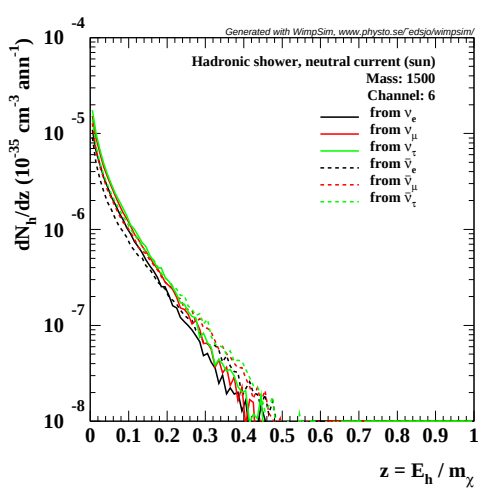
17.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



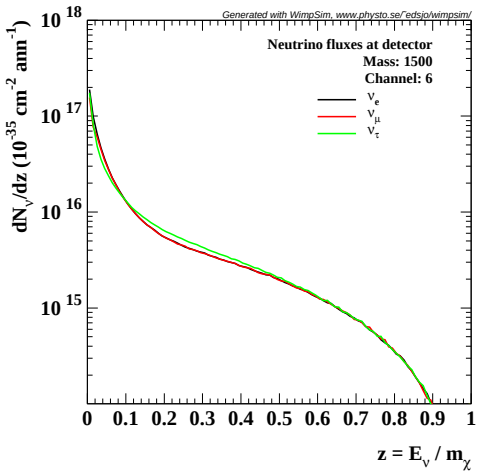


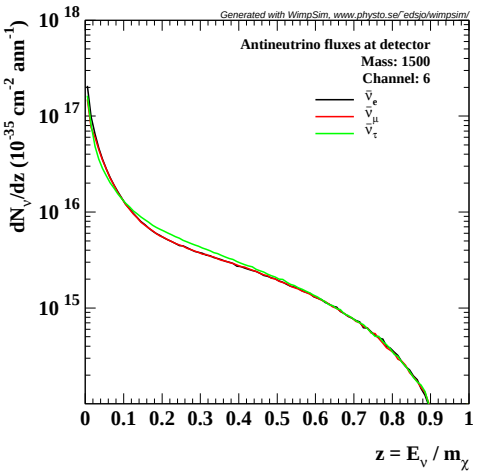
17.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



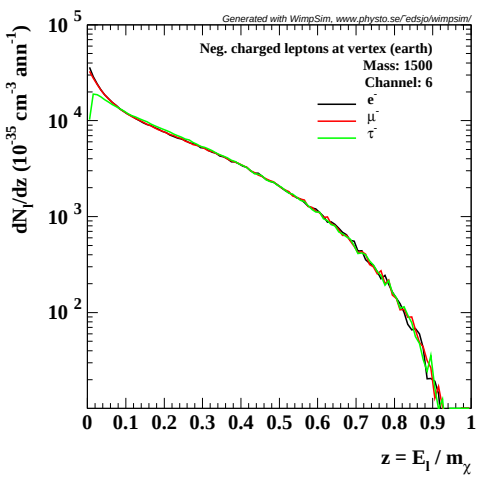


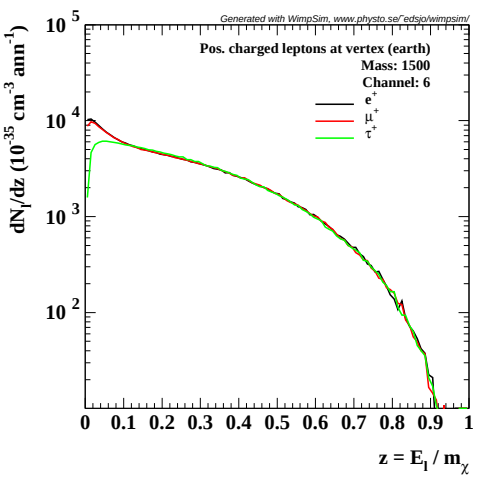
17.6.4 Neutrino fluxes at detector (Earth)



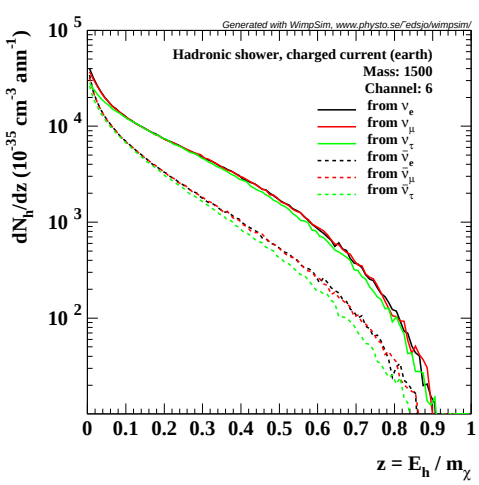


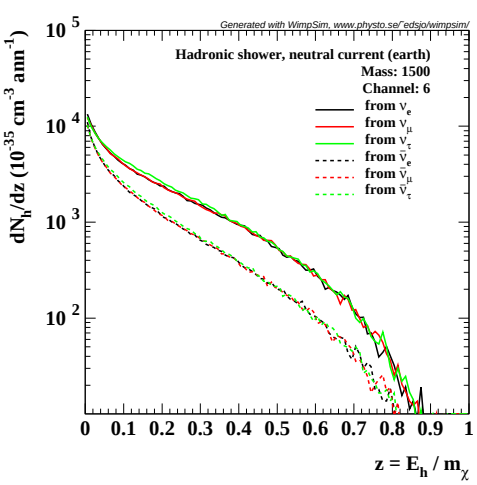
17.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



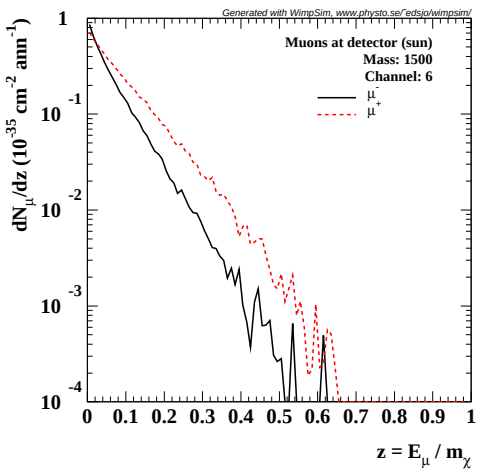


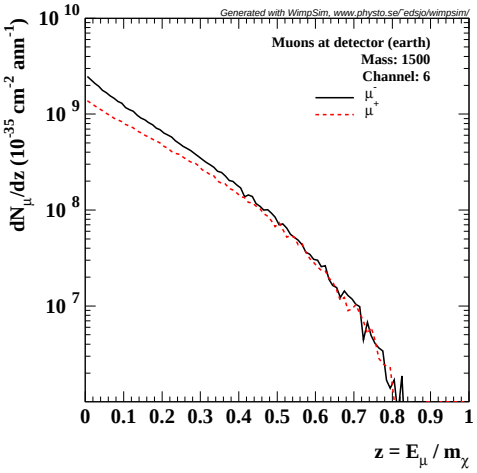
17.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





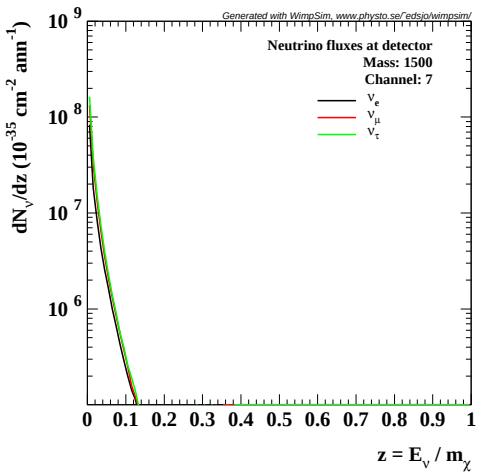
17.6.7 Muons at detector (Sun/Earth)

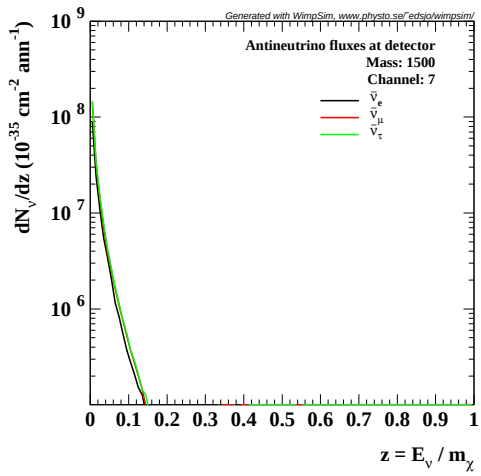




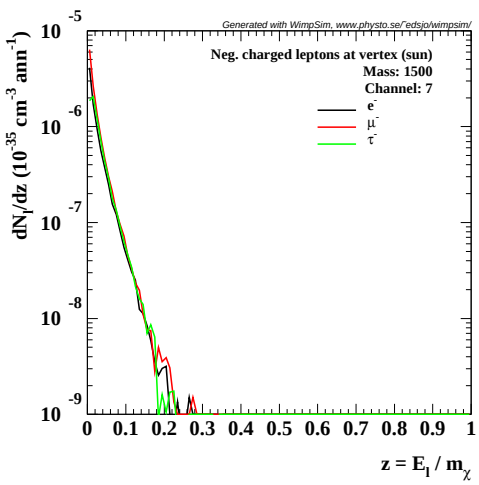
17.7 Channel 7 – gg

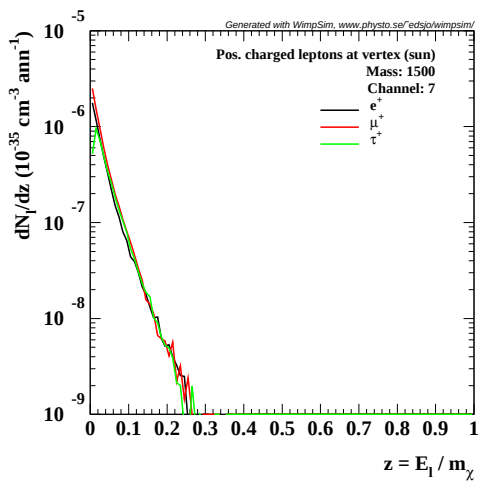
17.7.1 Neutrino fluxes at detector (Sun)



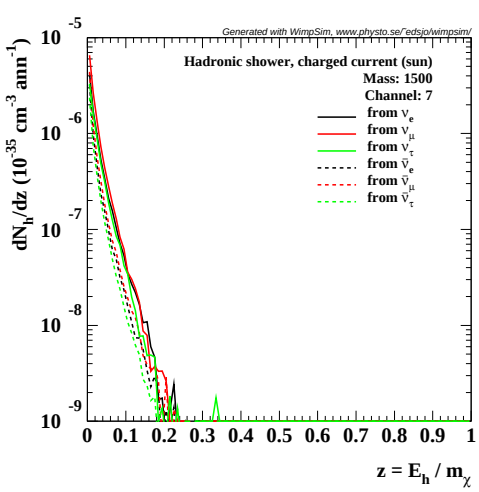


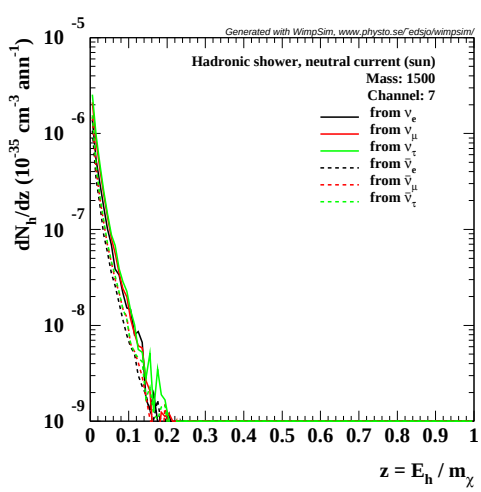
17.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



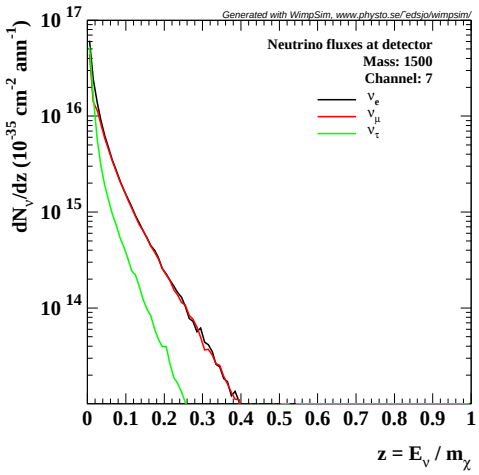


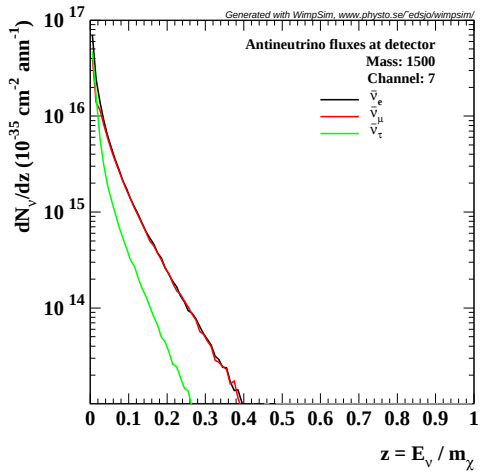
17.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



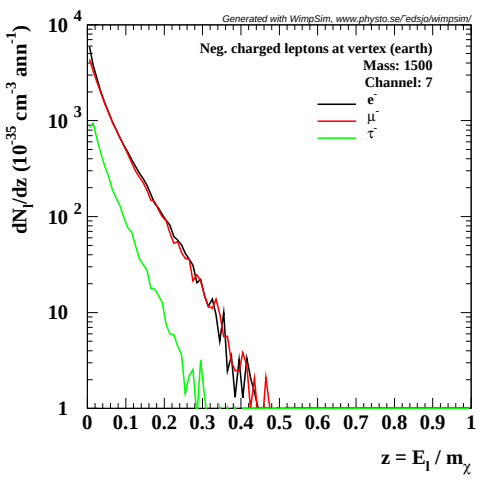


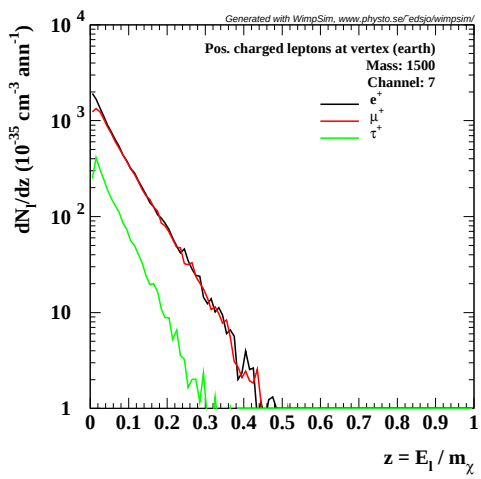
17.7.4 Neutrino fluxes at detector (Earth)



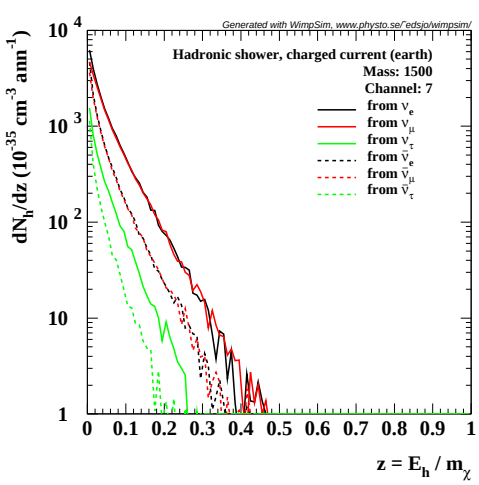


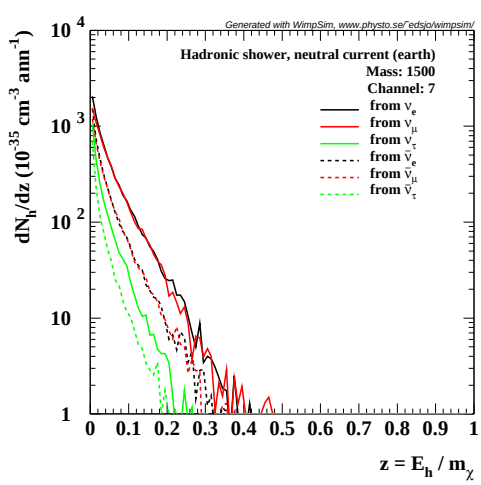
17.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



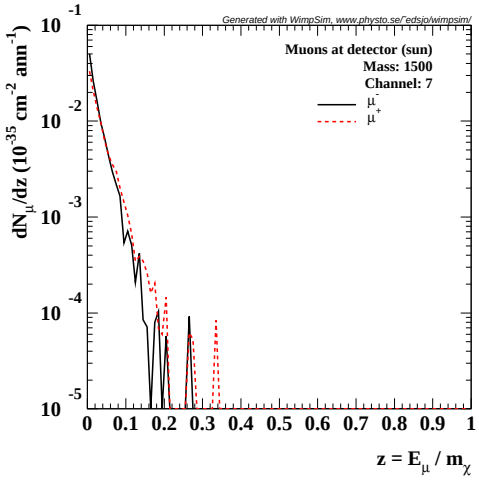


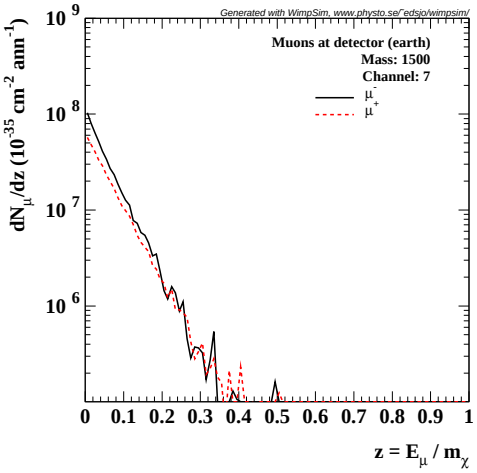
17.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





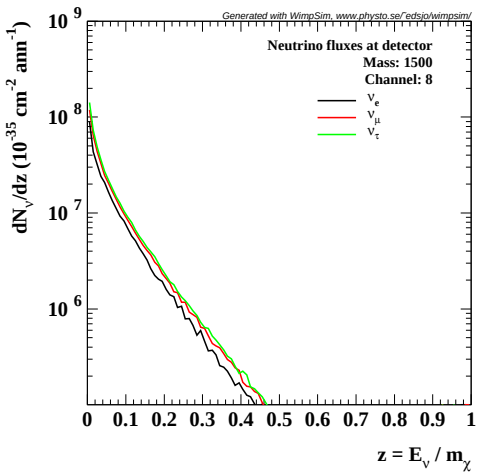
17.7.7 Muons at detector (Sun/Earth)

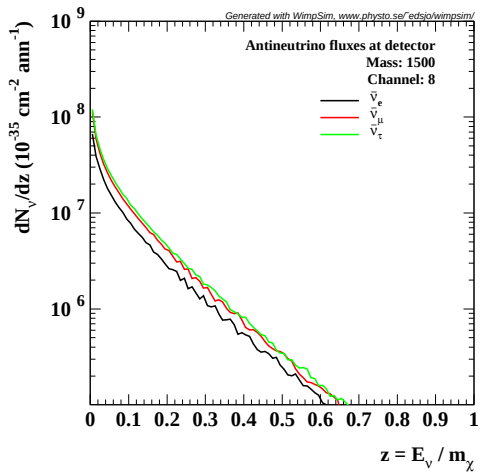




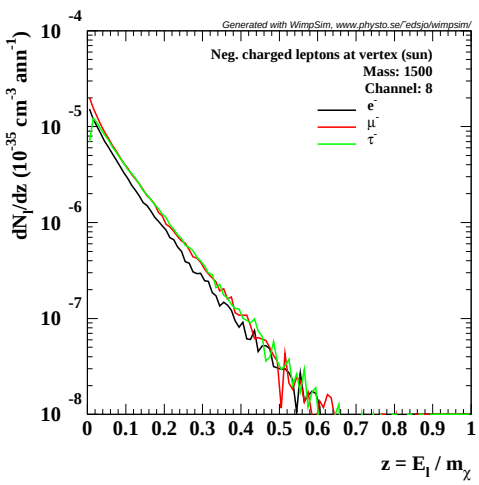
17.8 Channel 8 – W^-W^+

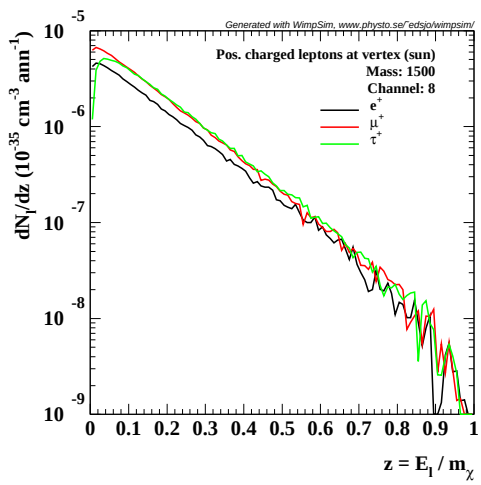
17.8.1 Neutrino fluxes at detector (Sun)



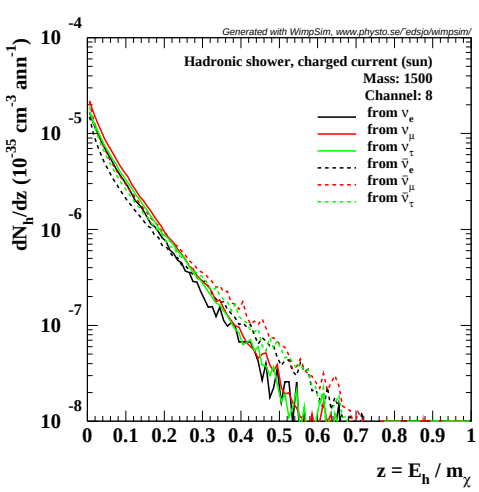


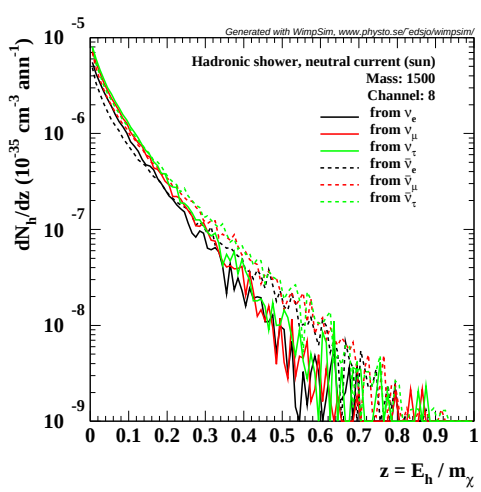
17.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



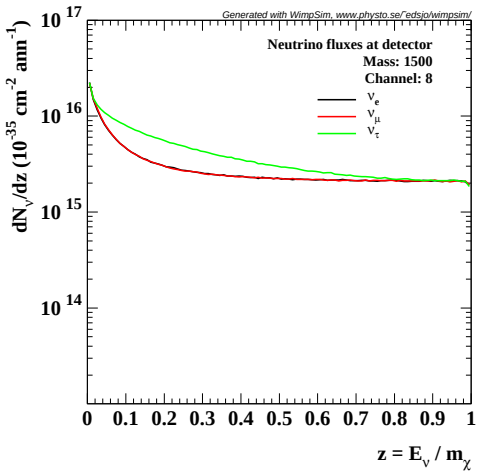


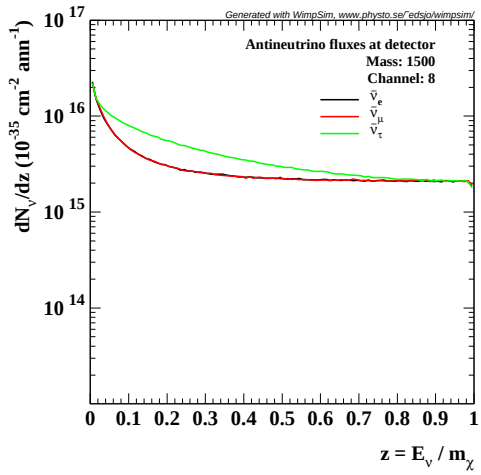
17.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



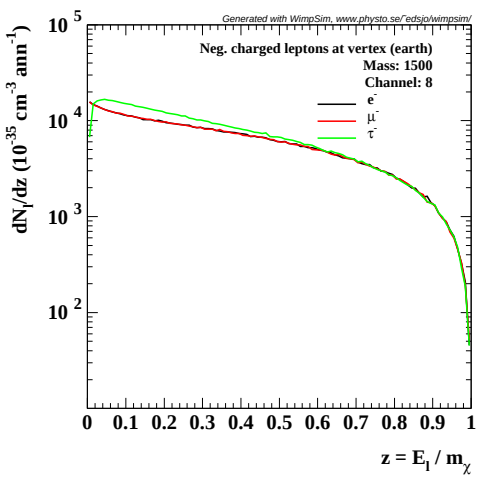


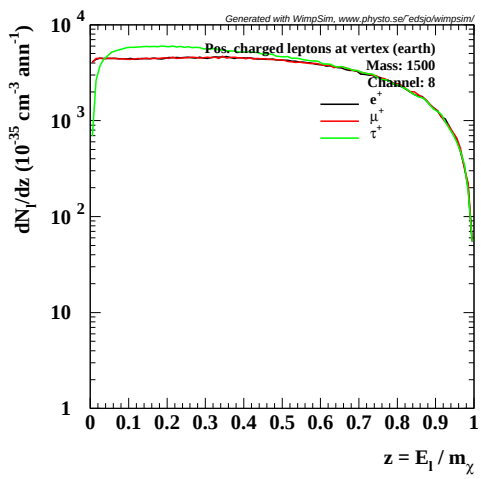
17.8.4 Neutrino fluxes at detector (Earth)



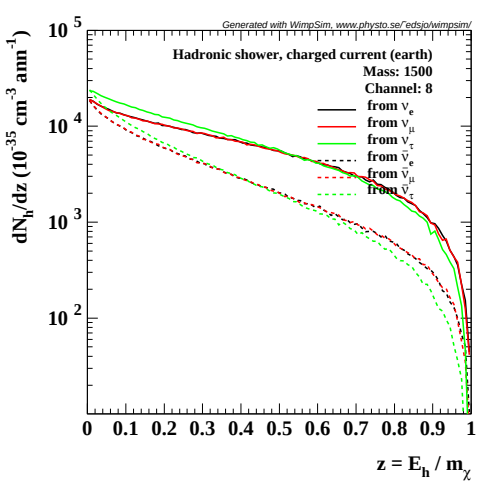


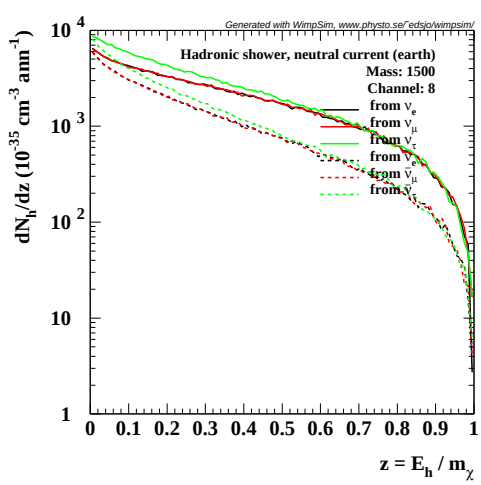
17.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



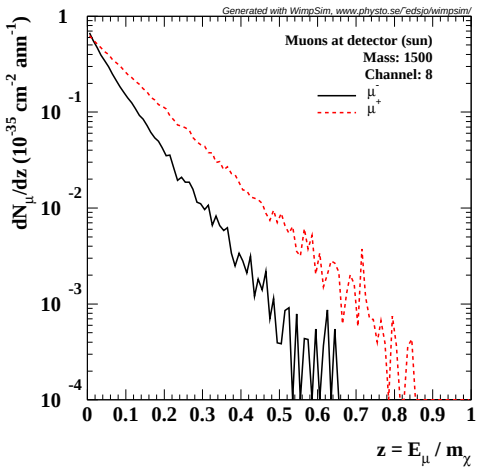


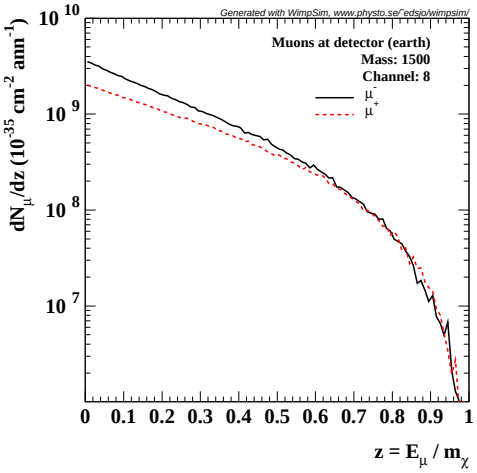
17.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





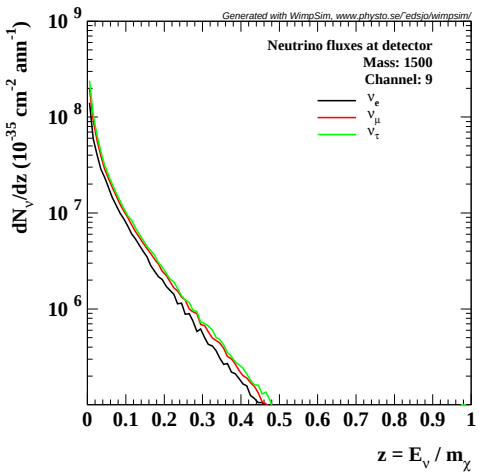
17.8.7 Muons at detector (Sun/Earth)

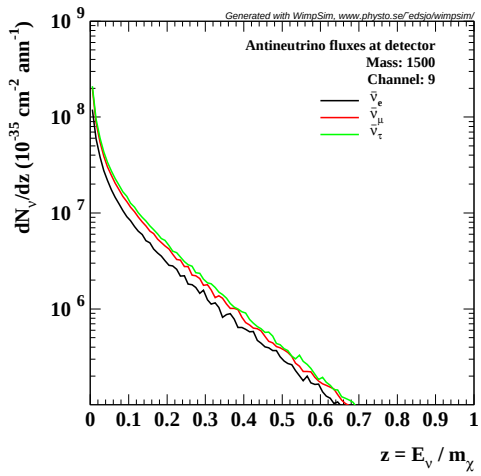




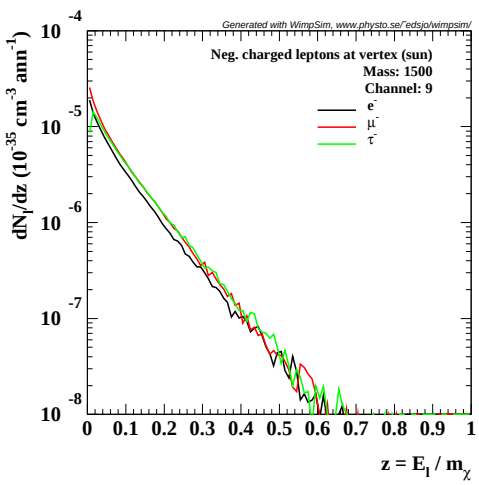
17.9 Channel 9 – $Z^0 Z^0$

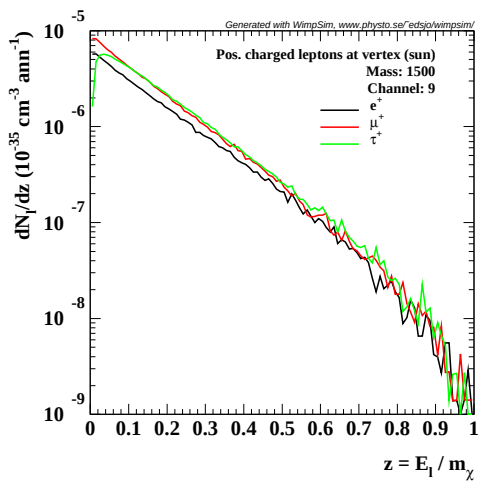
17.9.1 Neutrino fluxes at detector (Sun)



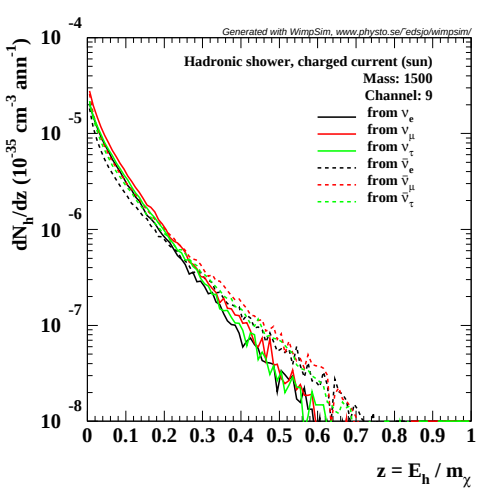


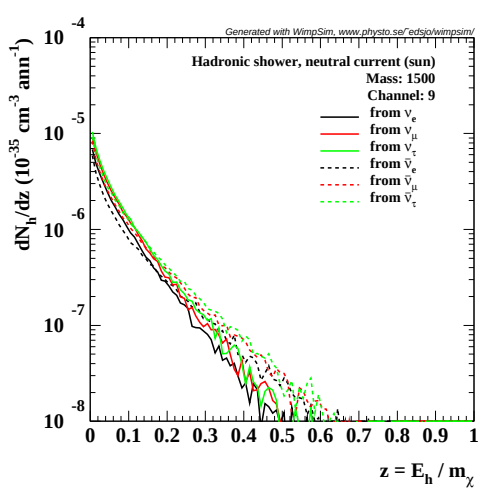
17.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



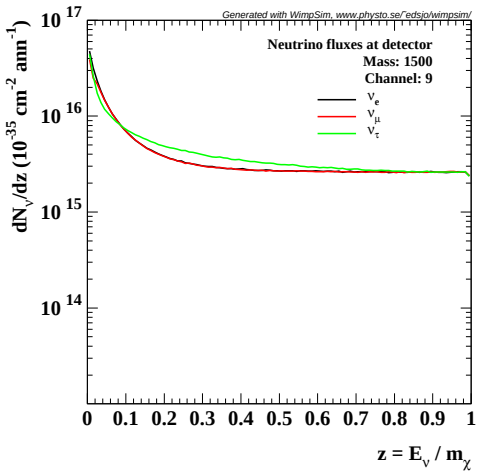


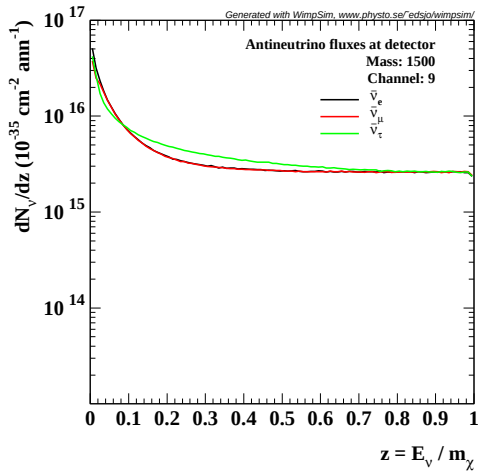
17.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



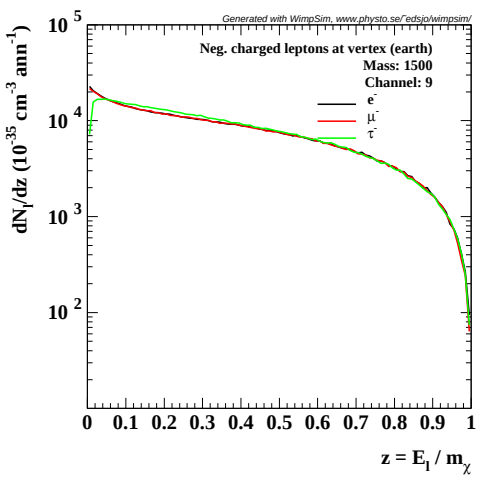


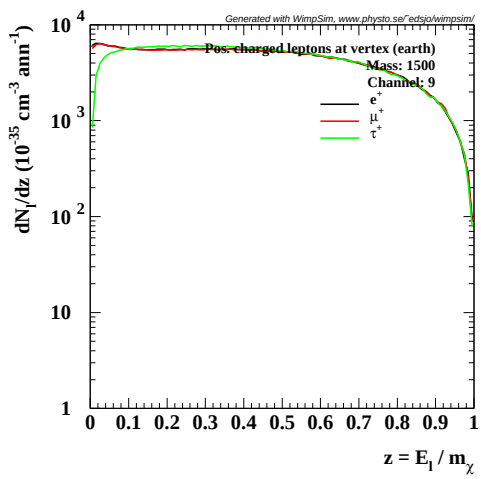
17.9.4 Neutrino fluxes at detector (Earth)



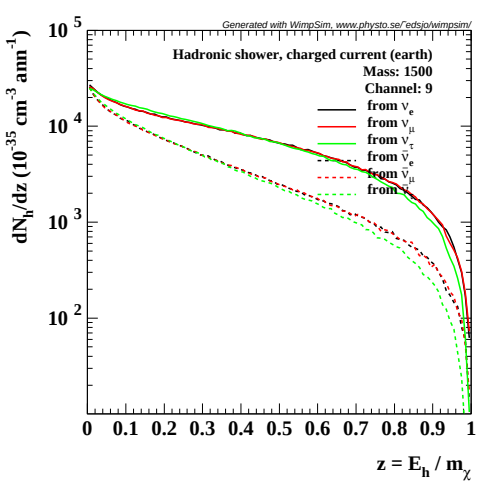


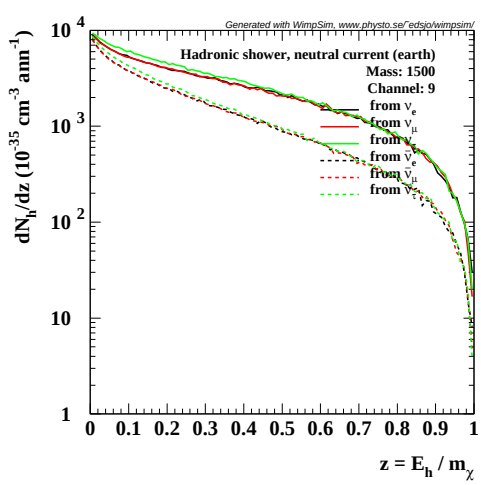
17.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



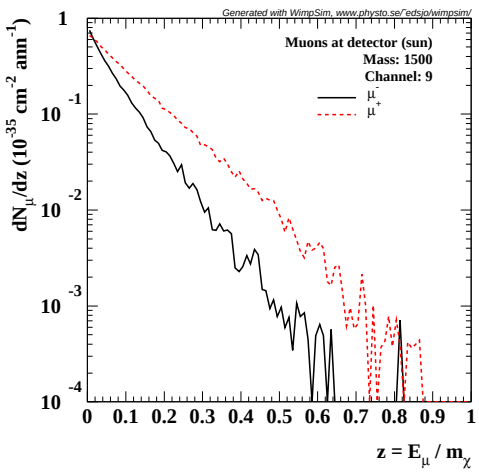


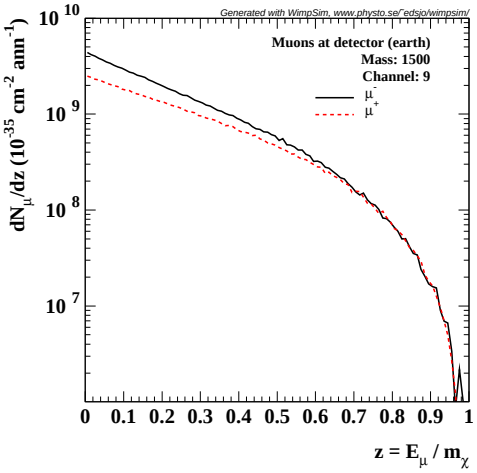
17.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





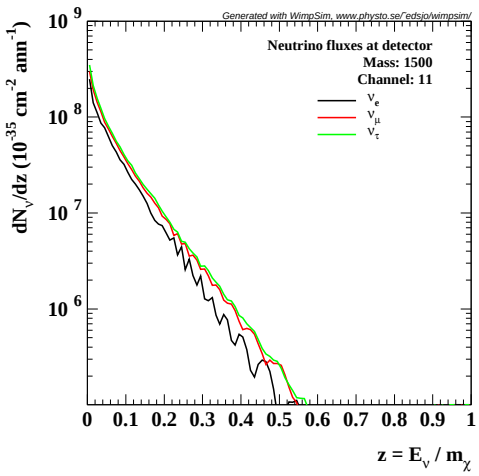
17.9.7 Muons at detector (Sun/Earth)

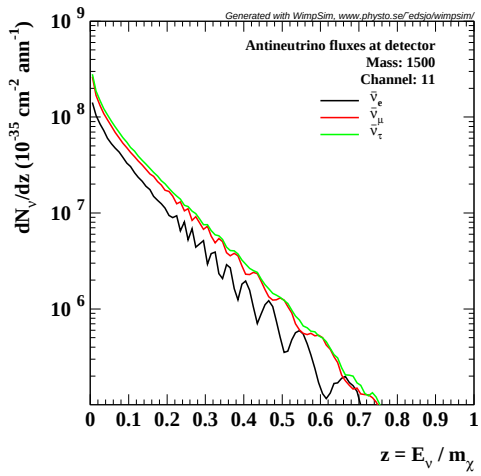




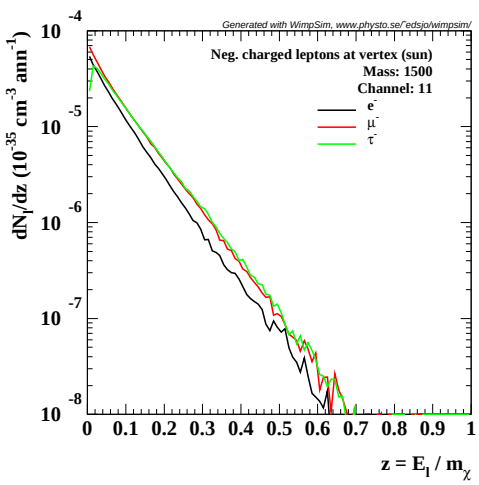
17.10 Channel 11 – $\tau^-\tau^+$

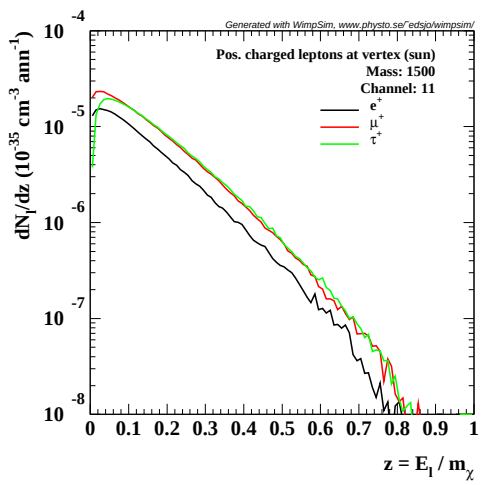
17.10.1 Neutrino fluxes at detector (Sun)



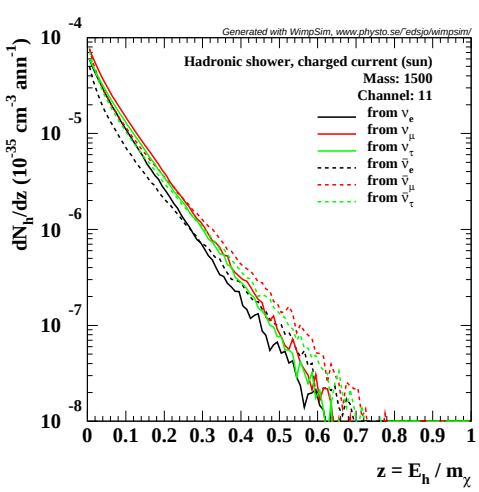


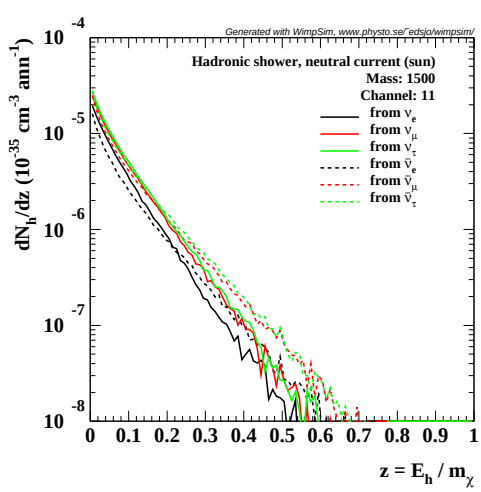
17.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



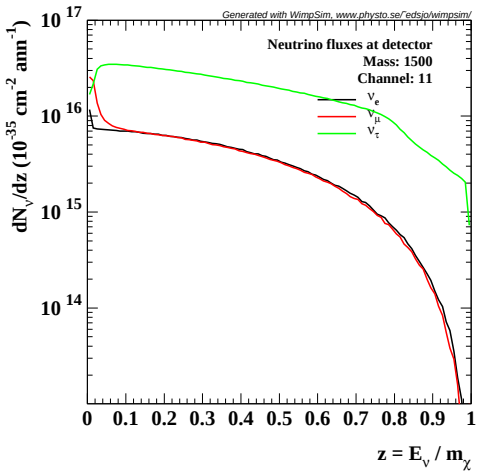


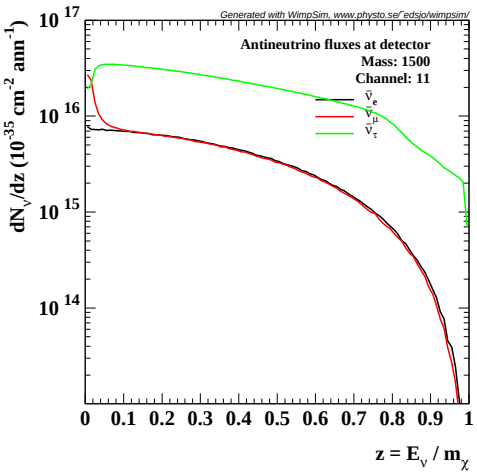
17.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



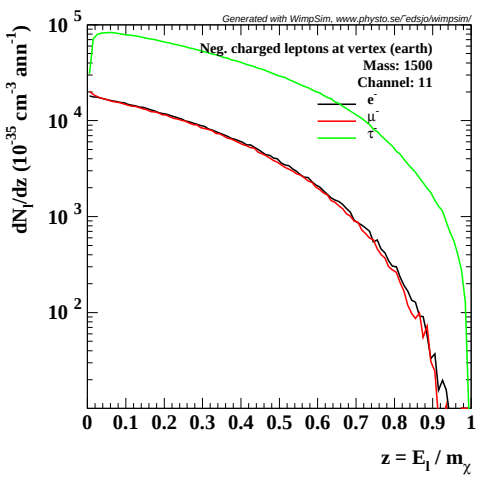


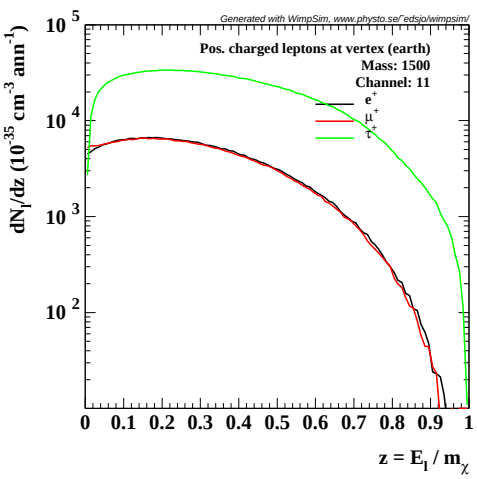
17.10.4 Neutrino fluxes at detector (Earth)



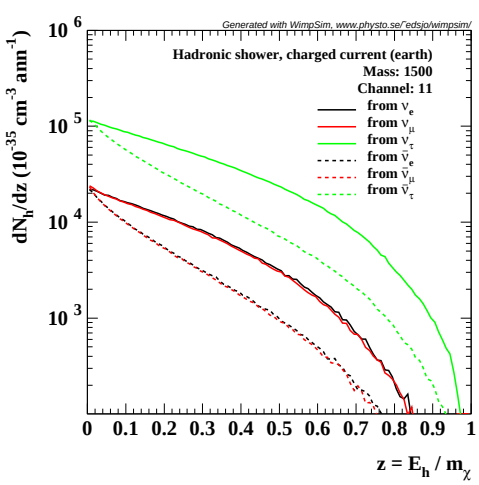


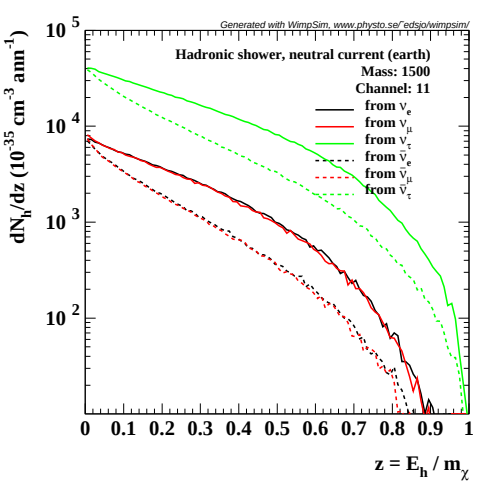
17.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



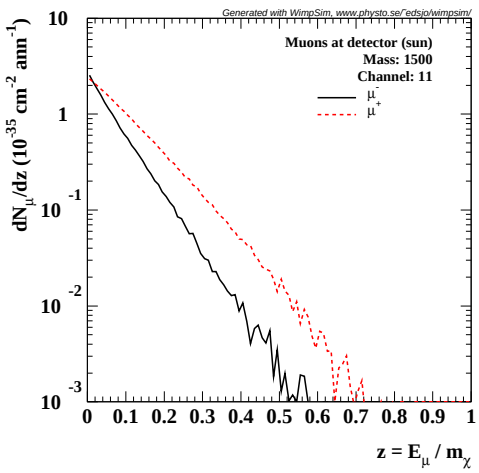


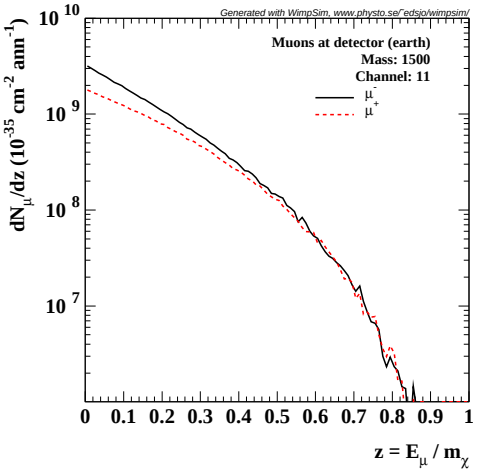
17.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





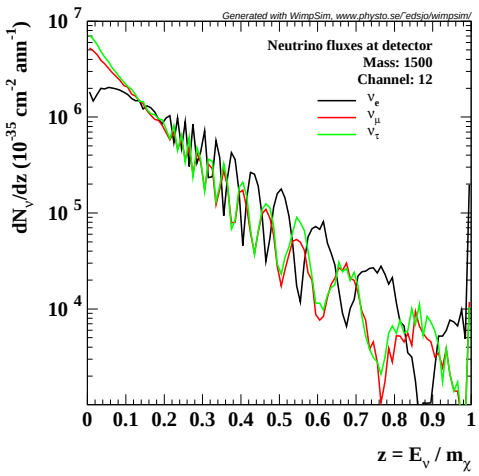
17.10.7 Muons at detector (Sun/Earth)

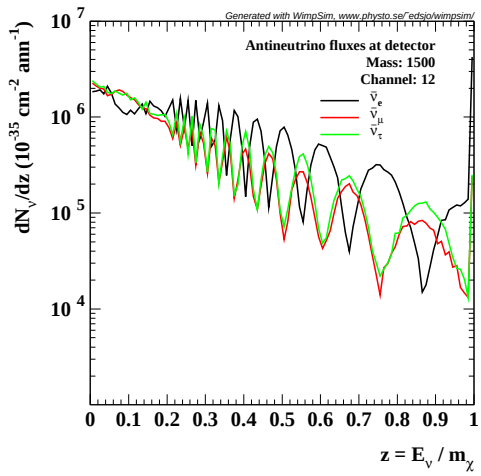




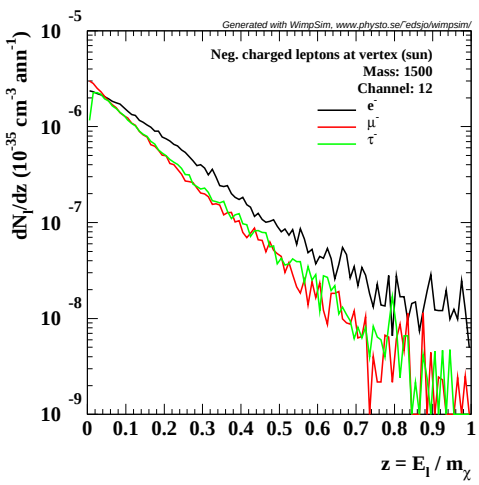
17.11 Channel 12 – $\nu_e\bar{\nu}_e$

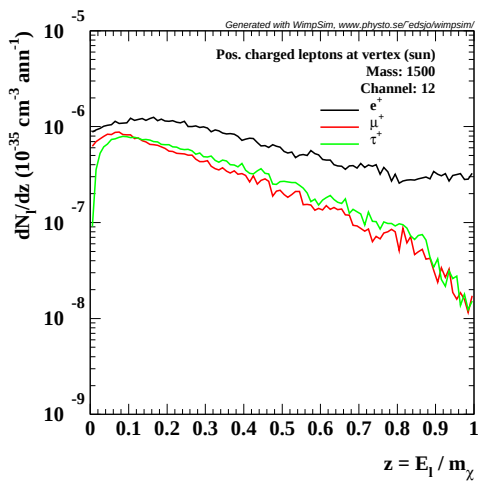
17.11.1 Neutrino fluxes at detector (Sun)



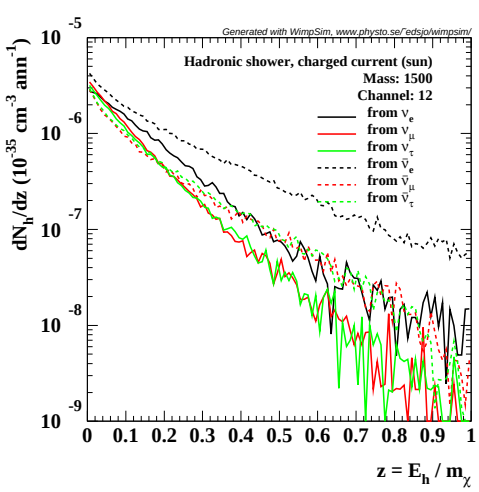


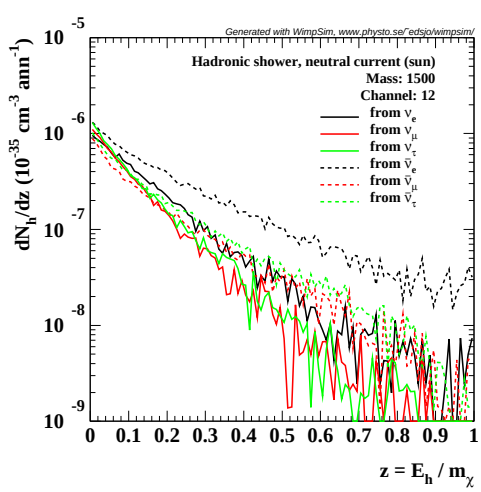
17.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



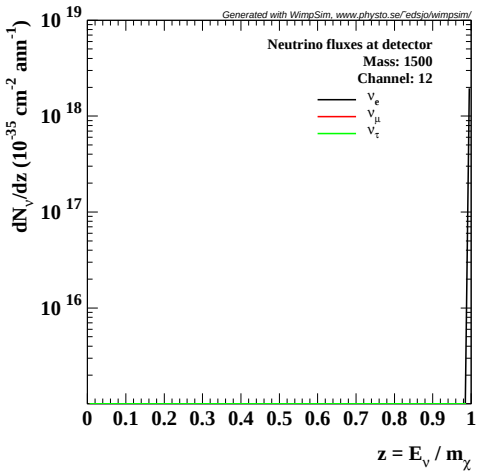


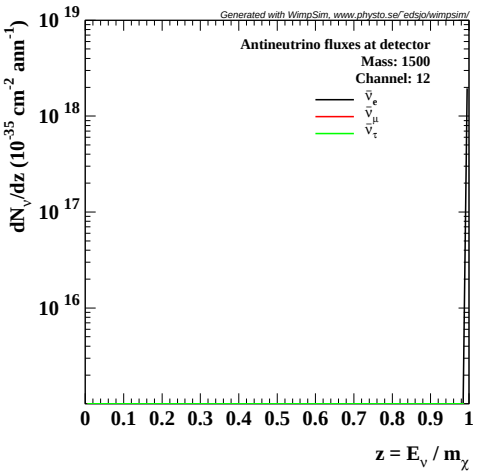
17.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



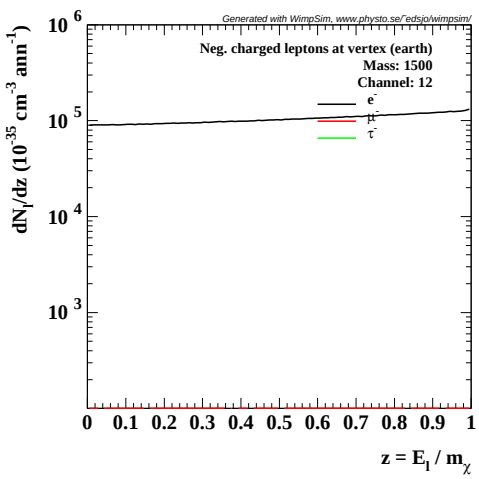


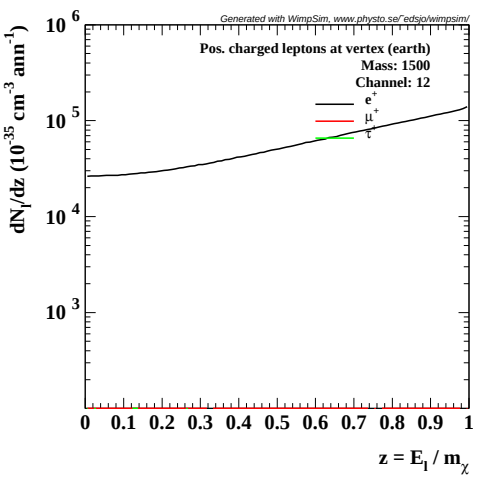
17.11.4 Neutrino fluxes at detector (Earth)



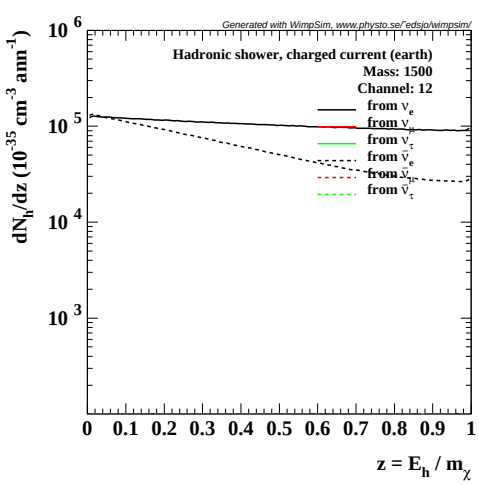


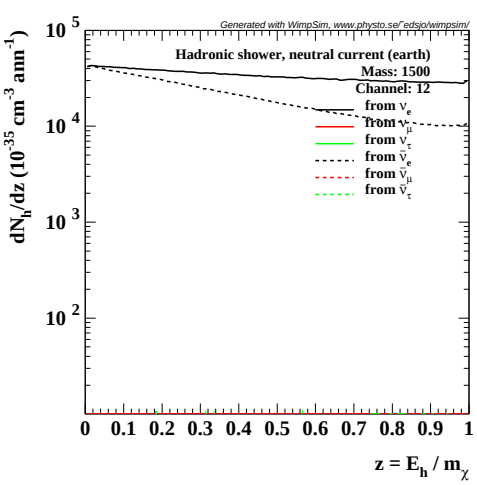
17.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



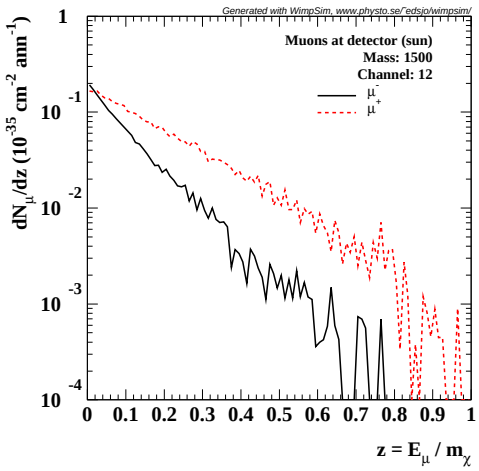


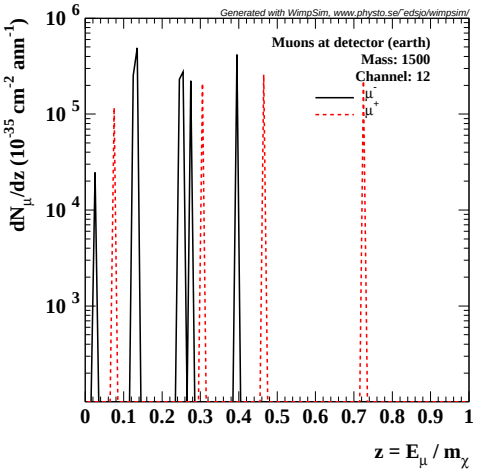
17.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





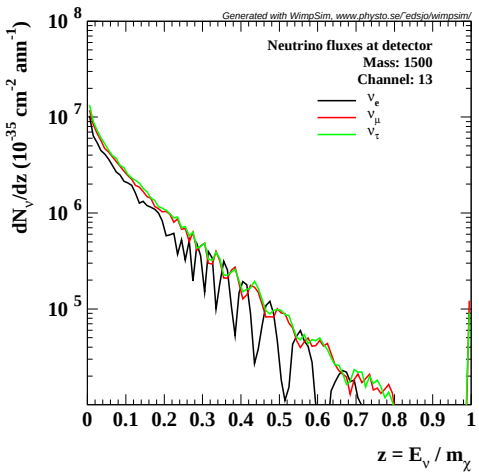
17.11.7 Muons at detector (Sun/Earth)

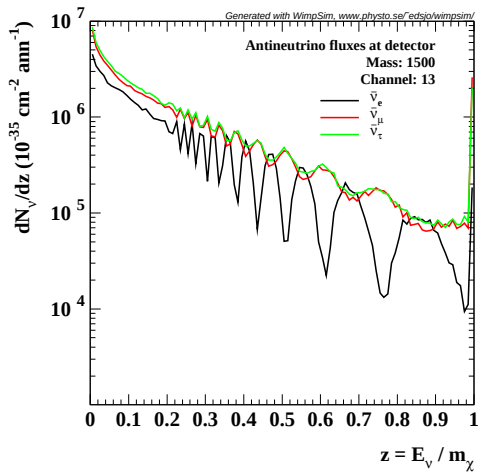




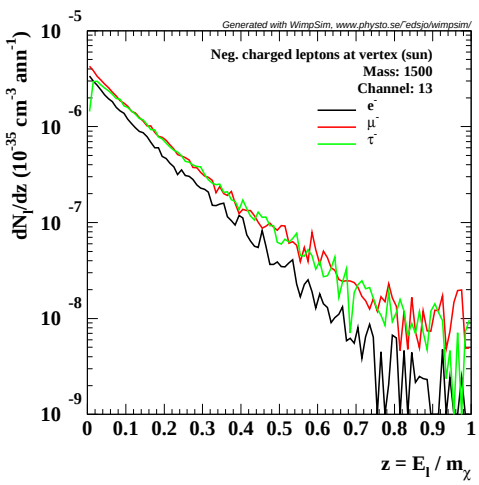
17.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

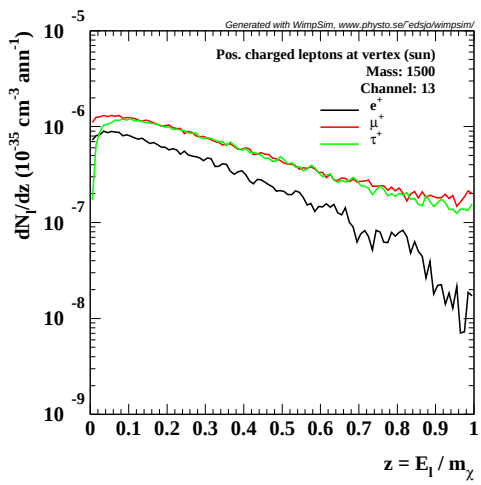
17.12.1 Neutrino fluxes at detector (Sun)



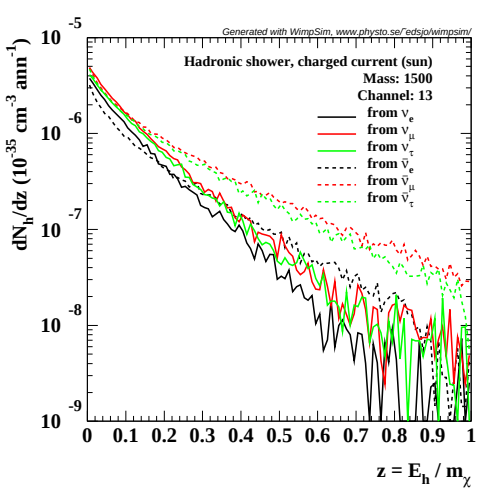


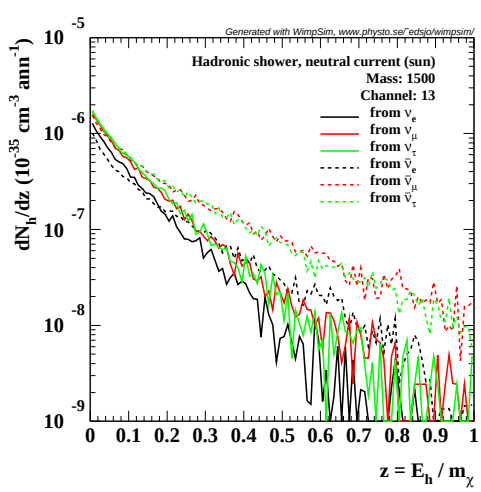
17.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



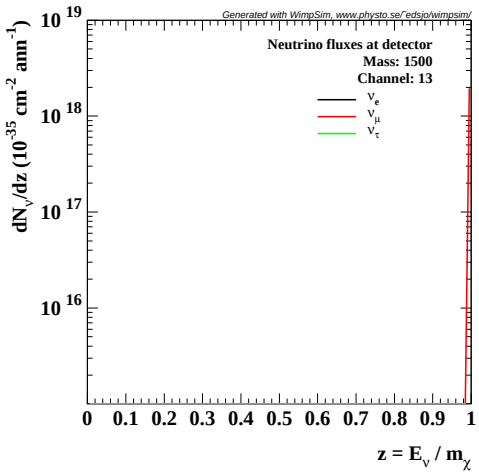


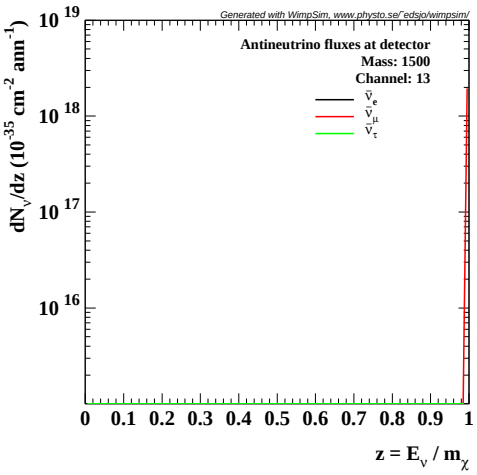
17.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



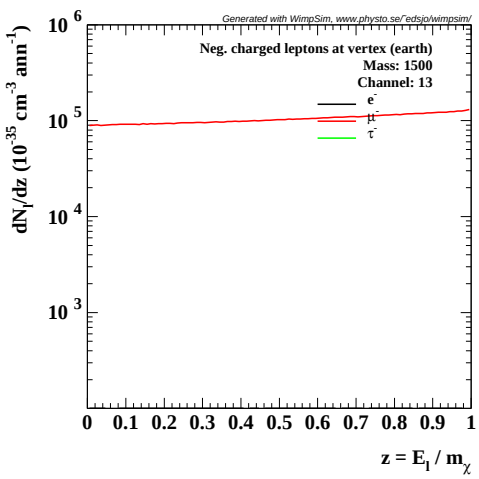


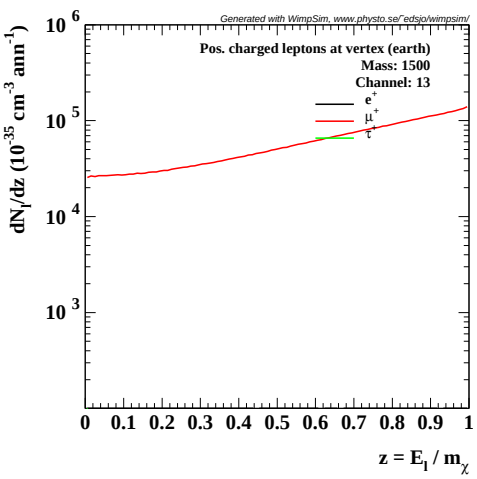
17.12.4 Neutrino fluxes at detector (Earth)



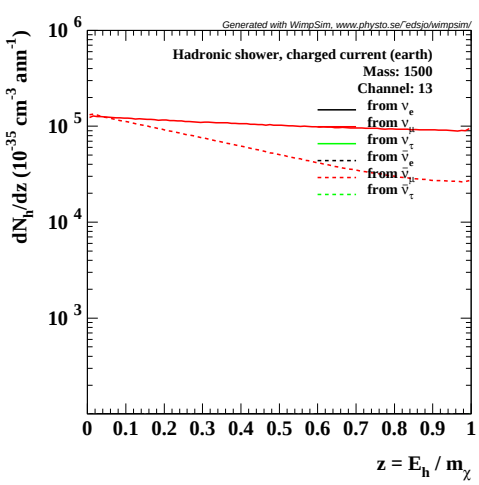


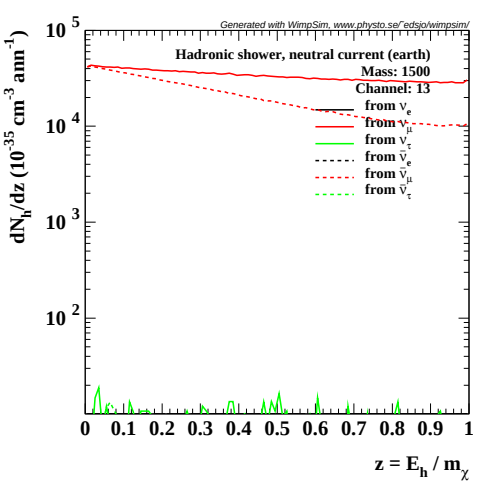
17.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



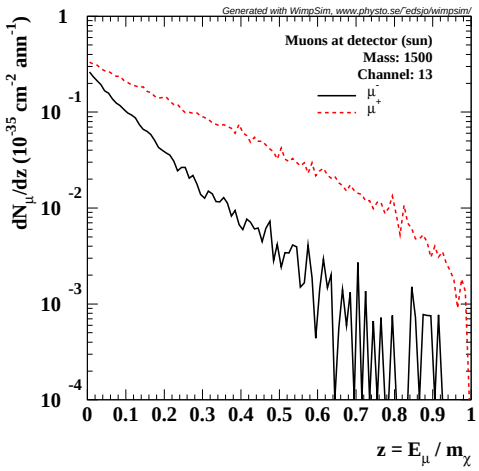


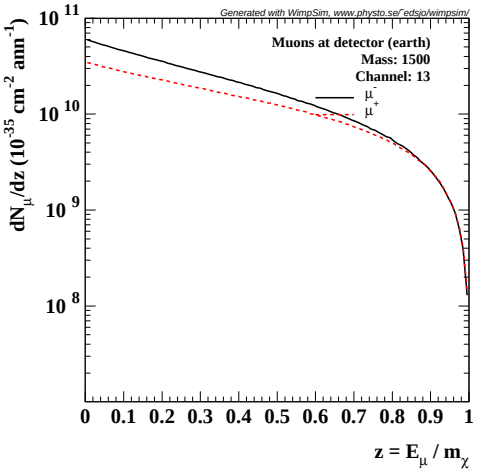
17.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





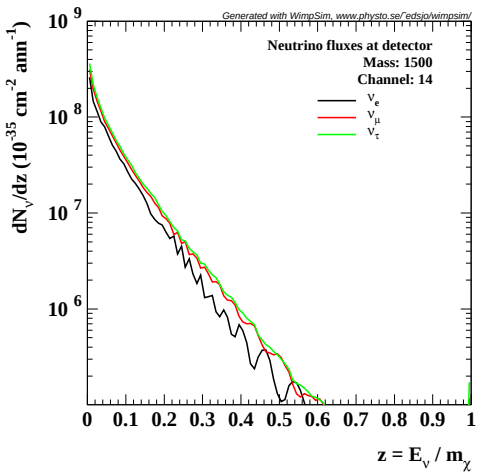
17.12.7 Muons at detector (Sun/Earth)

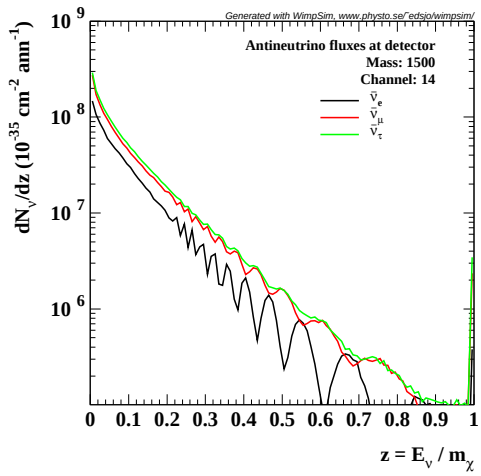




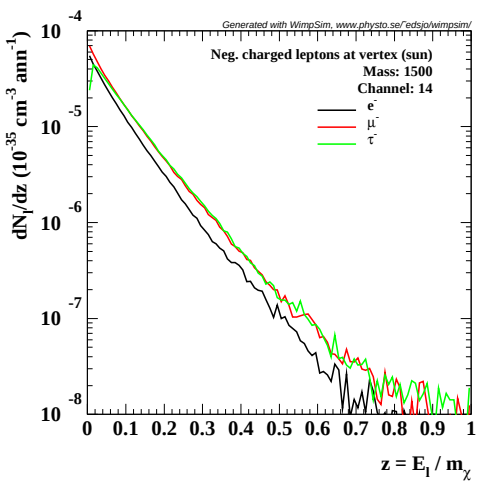
17.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

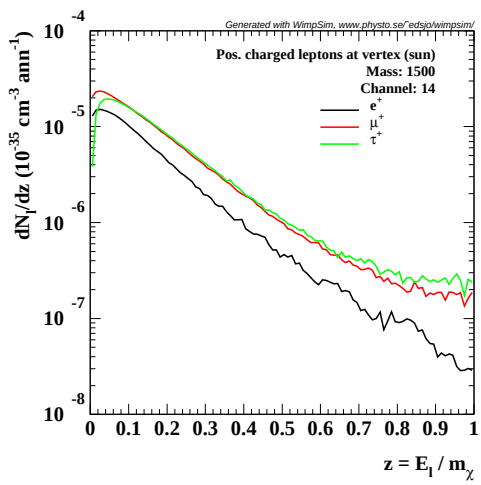
17.13.1 Neutrino fluxes at detector (Sun)



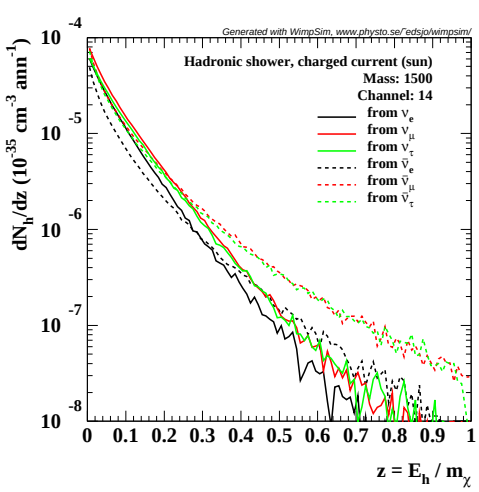


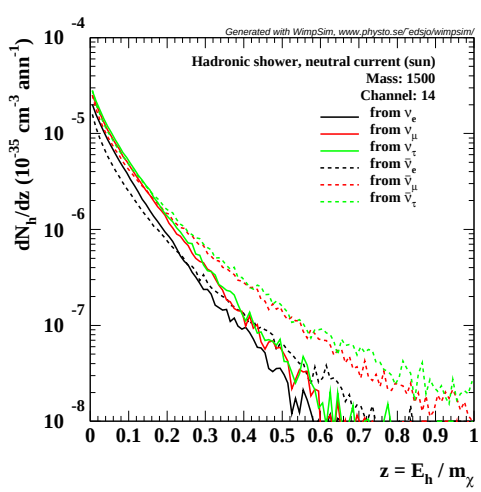
17.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



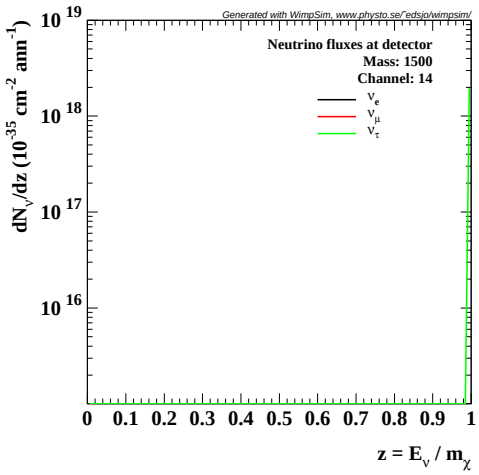


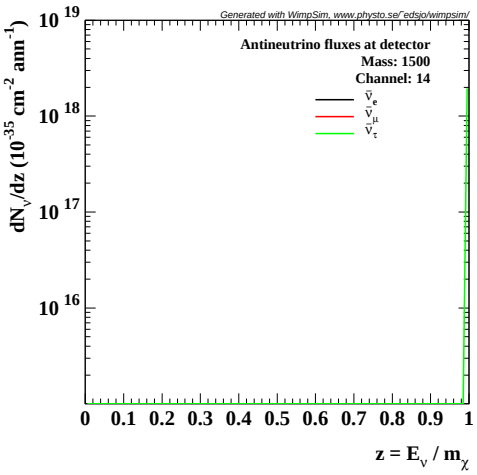
17.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



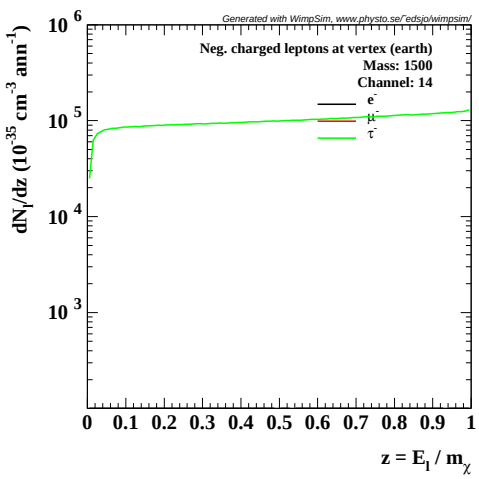


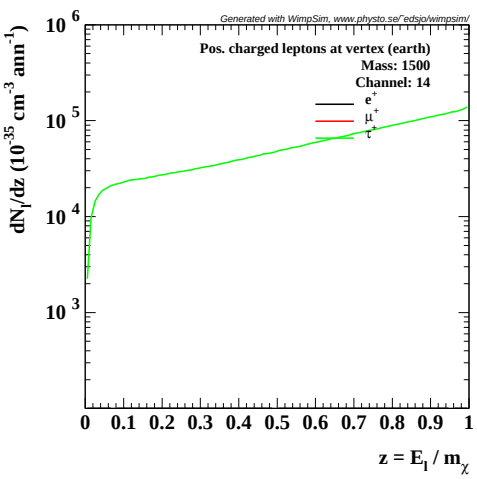
17.13.4 Neutrino fluxes at detector (Earth)



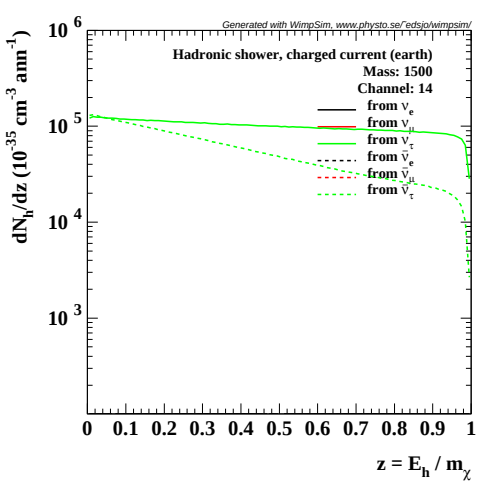


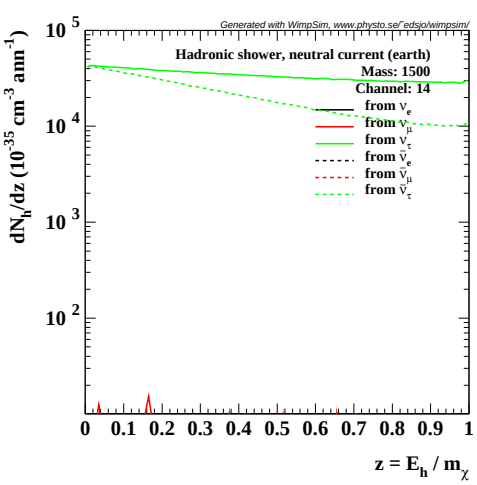
17.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



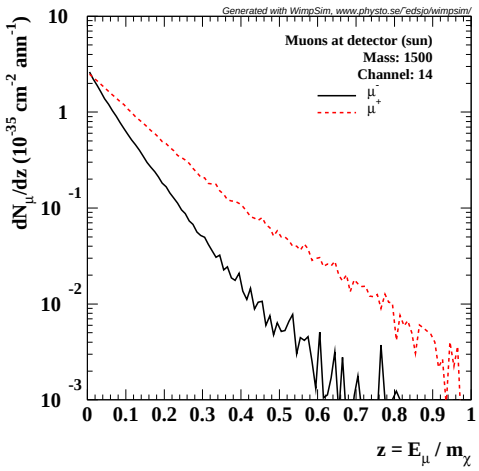


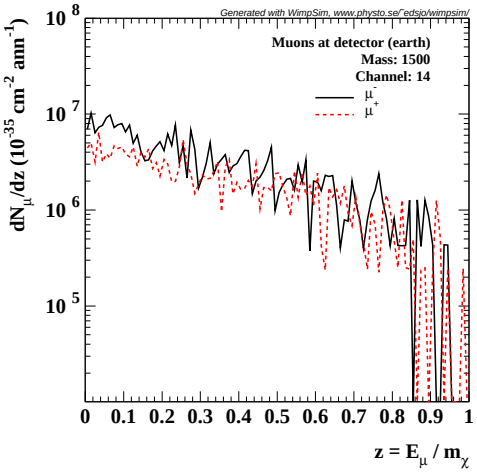
17.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





17.13.7 Muons at detector (Sun/Earth)

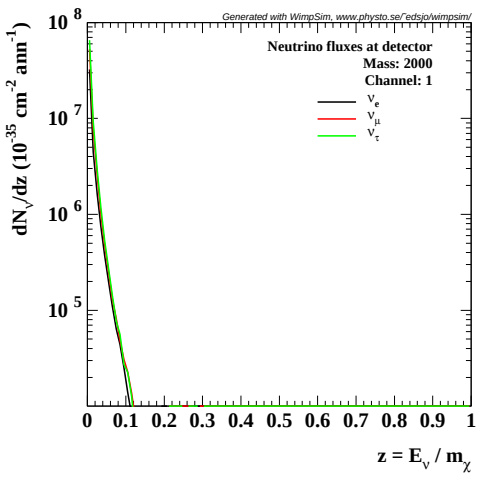


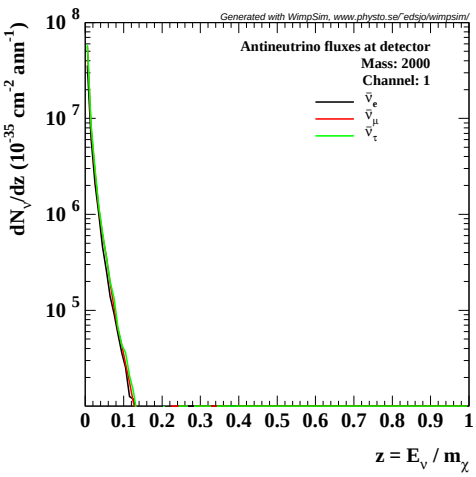


18 Mass 2000

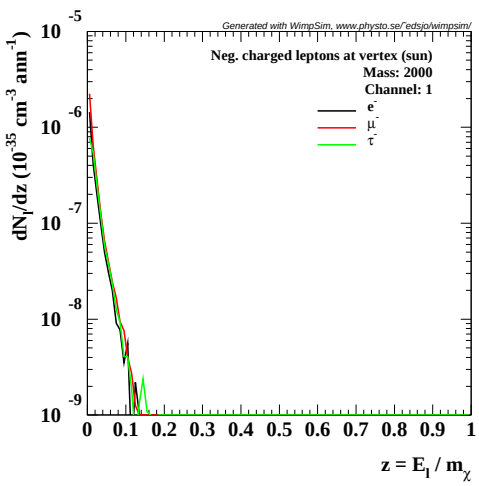
18.1 Channel 1 – $d\bar{d}$

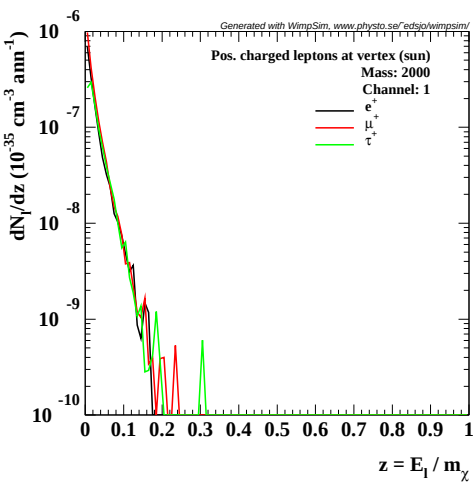
18.1.1 Neutrino fluxes at detector (Sun)



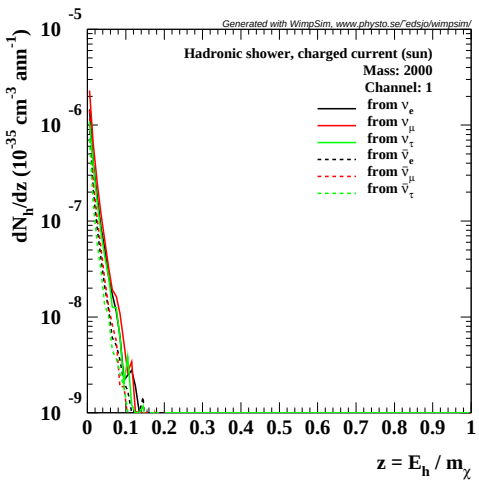


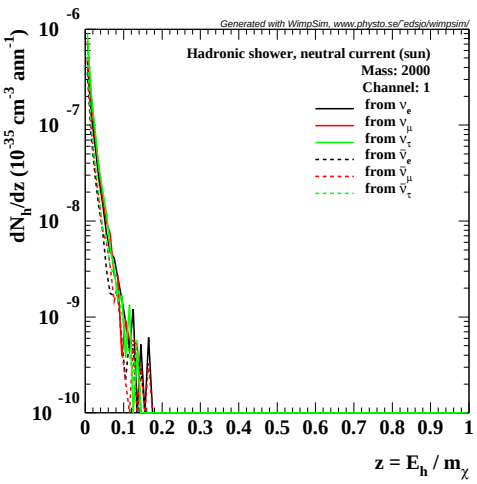
18.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



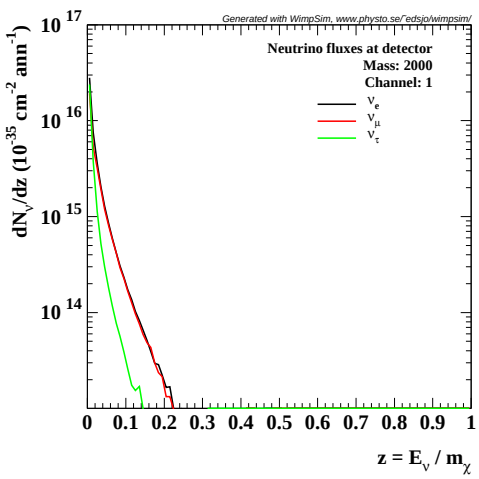


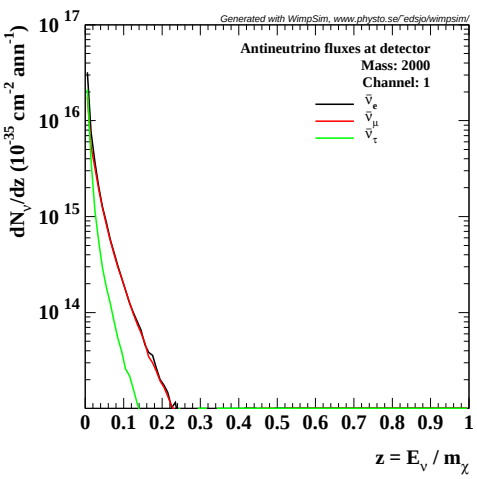
18.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



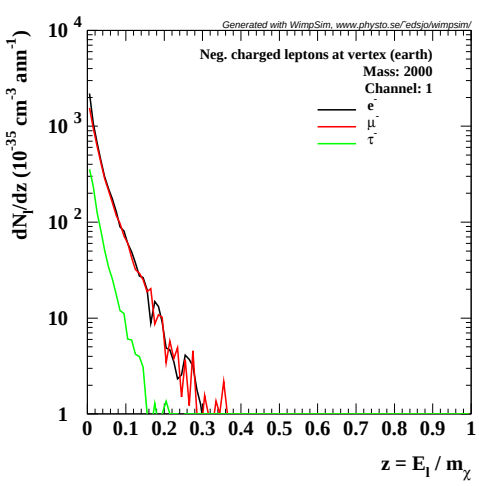


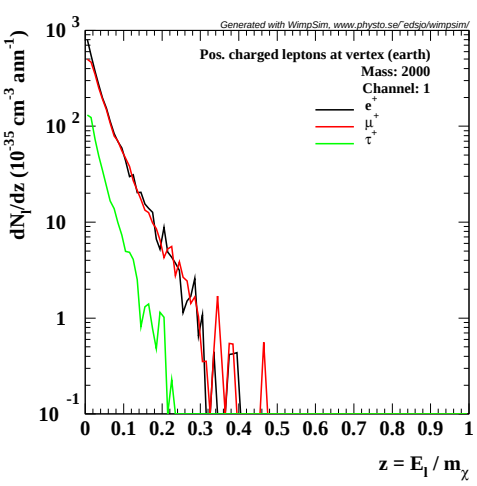
18.1.4 Neutrino fluxes at detector (Earth)



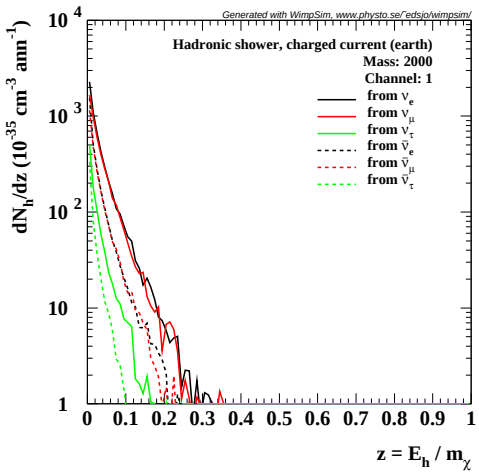


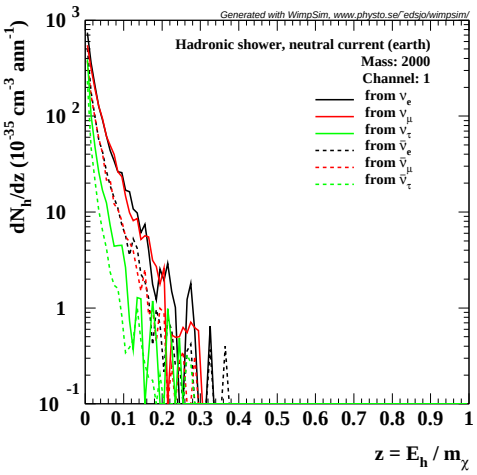
18.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



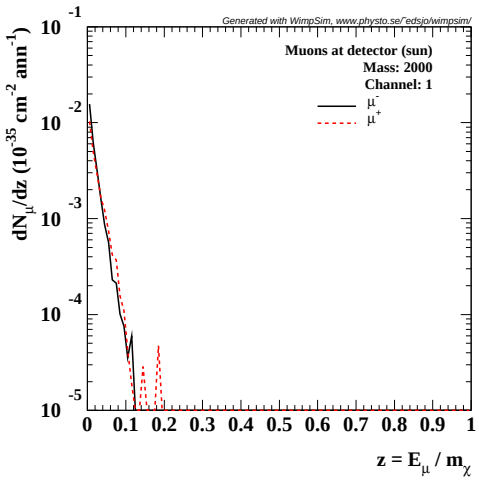


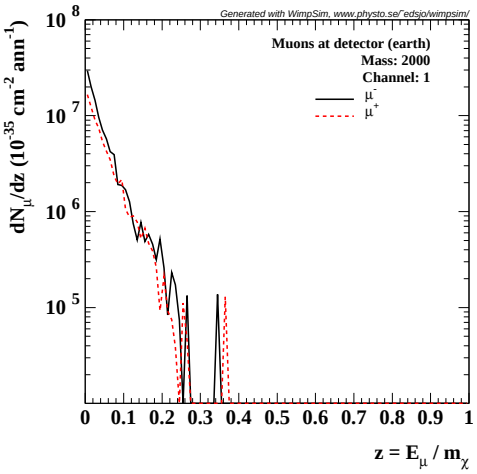
18.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





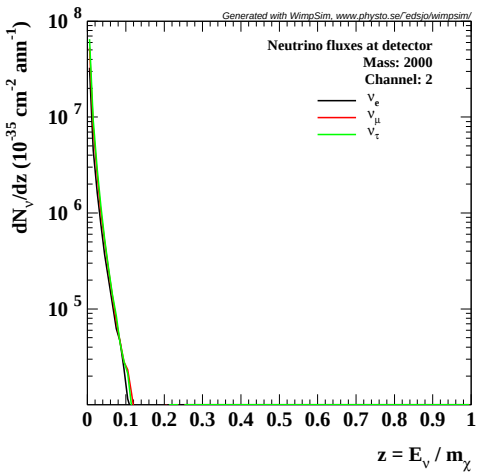
18.1.7 Muons at detector (Sun/Earth)

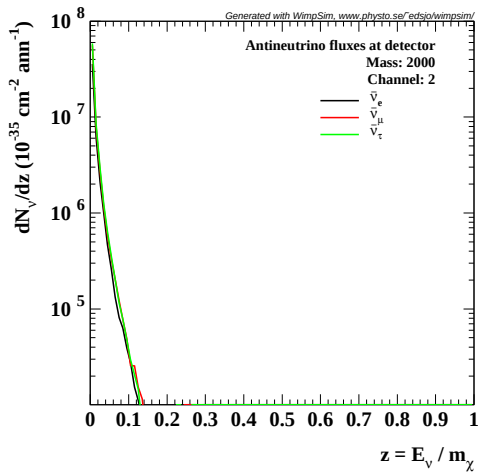




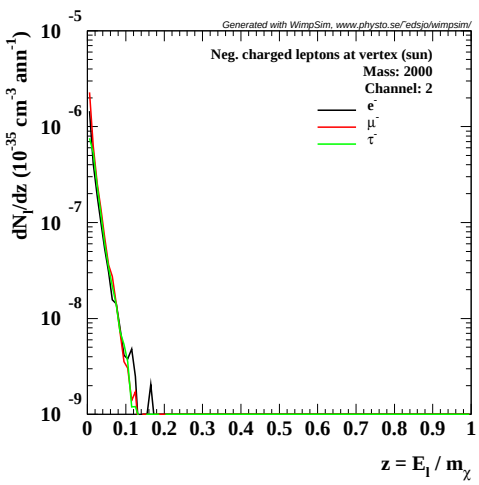
18.2 Channel 2 – $u\bar{u}$

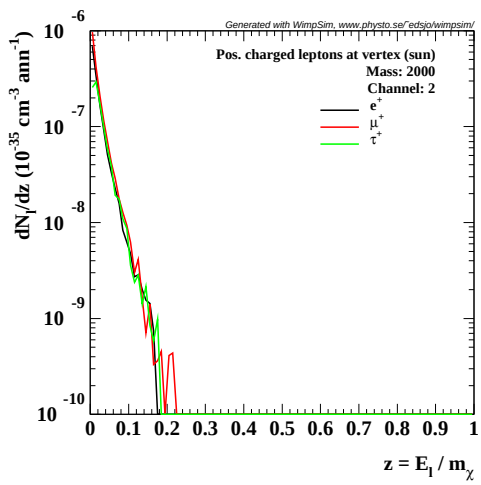
18.2.1 Neutrino fluxes at detector (Sun)



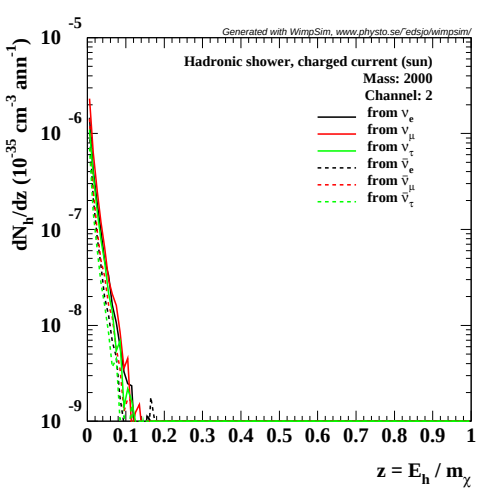


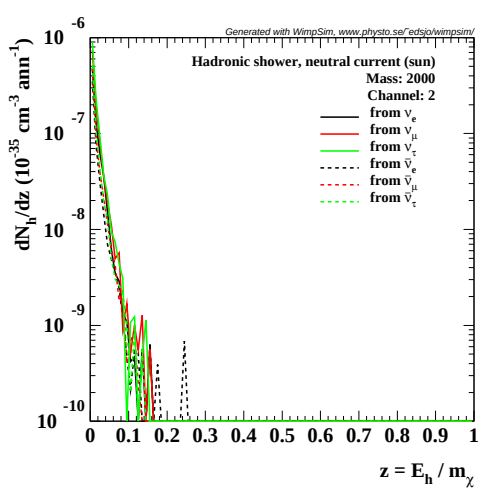
18.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



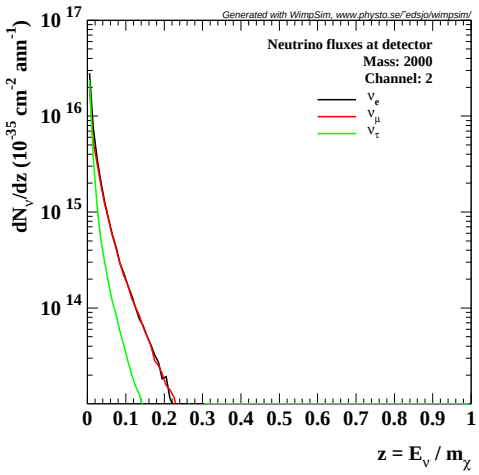


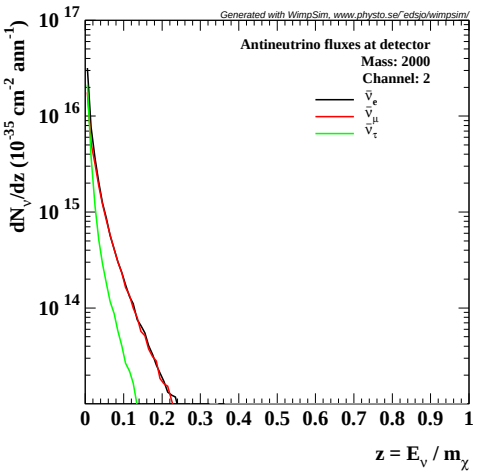
18.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



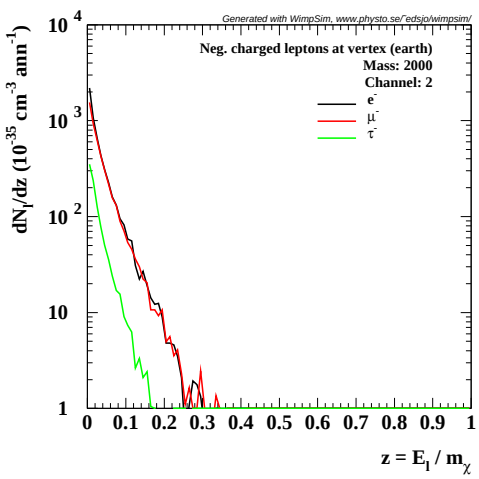


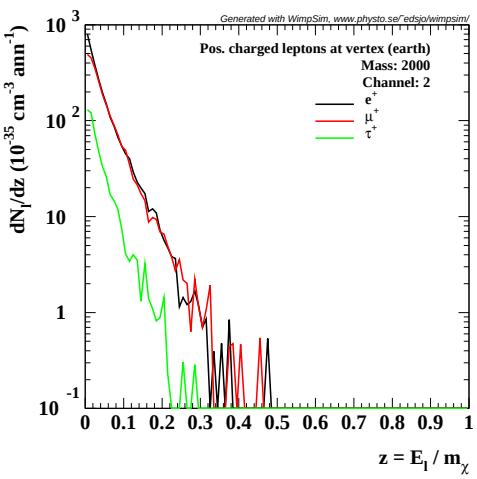
18.2.4 Neutrino fluxes at detector (Earth)



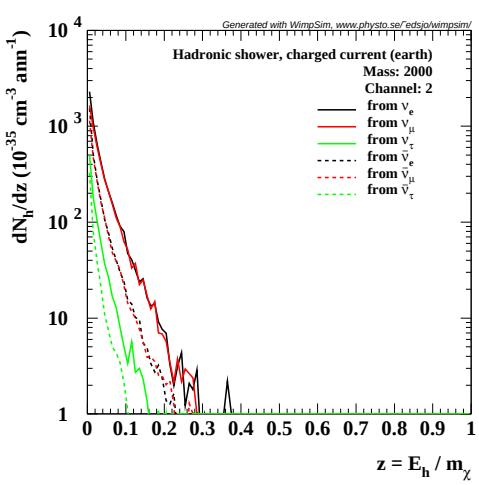


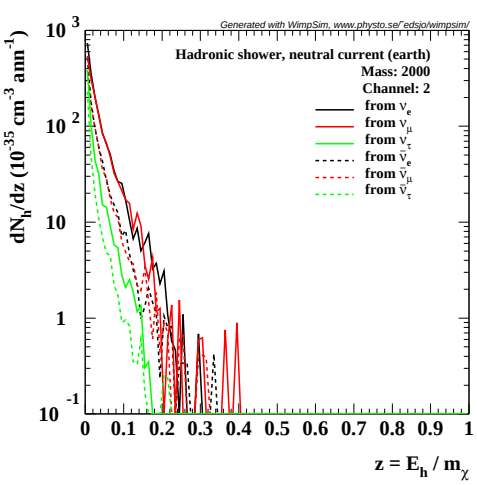
18.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



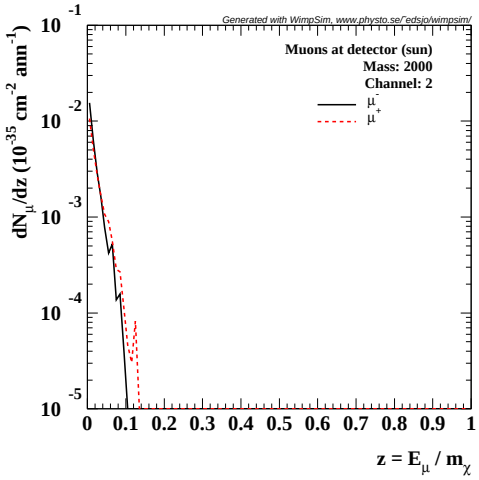


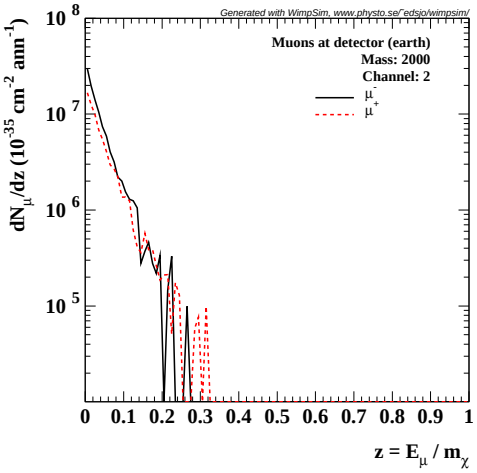
18.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





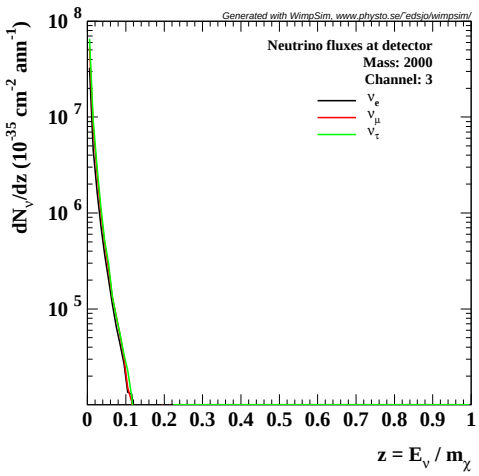
18.2.7 Muons at detector (Sun/Earth)

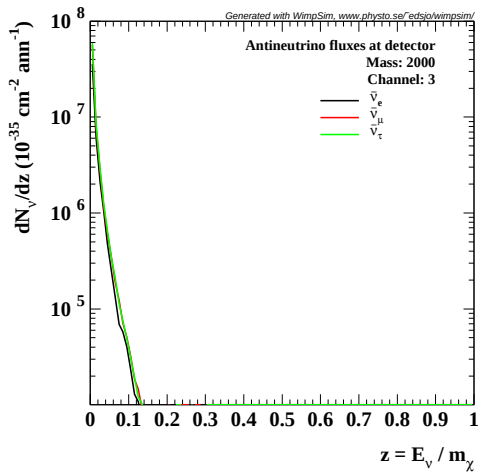




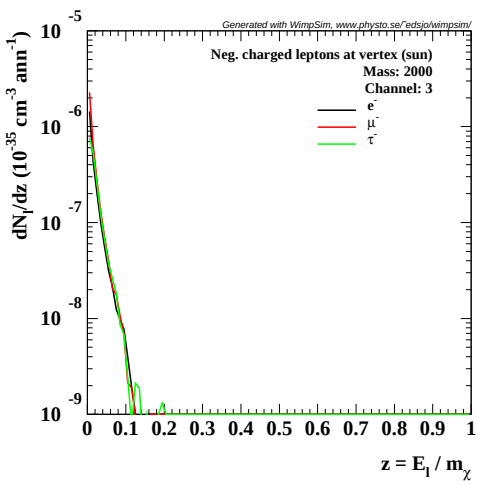
18.3 Channel 3 – $s\bar{s}$

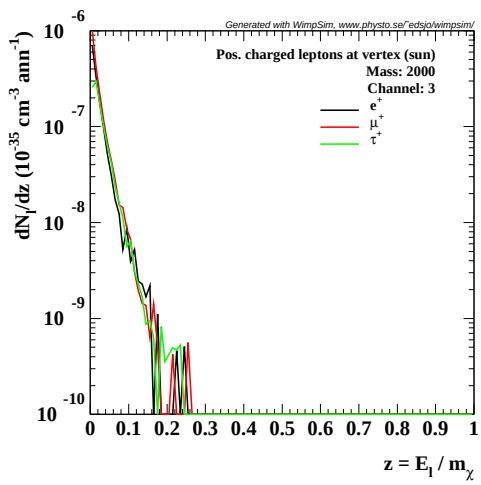
18.3.1 Neutrino fluxes at detector (Sun)



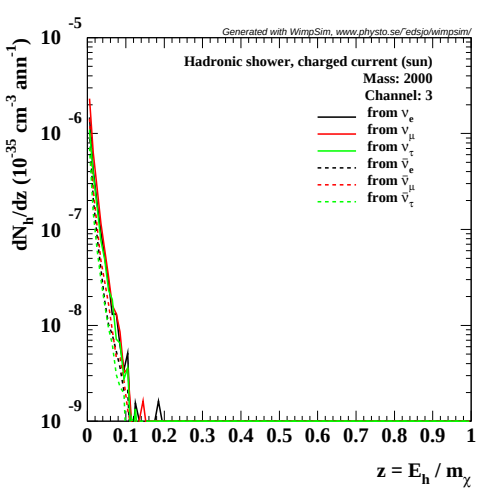


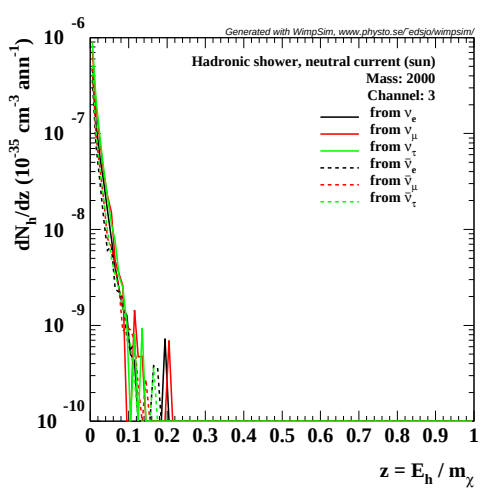
18.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



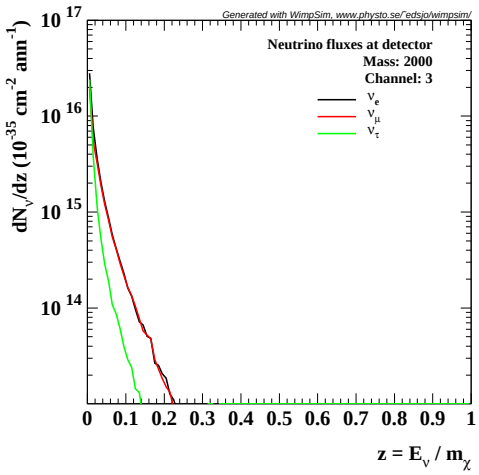


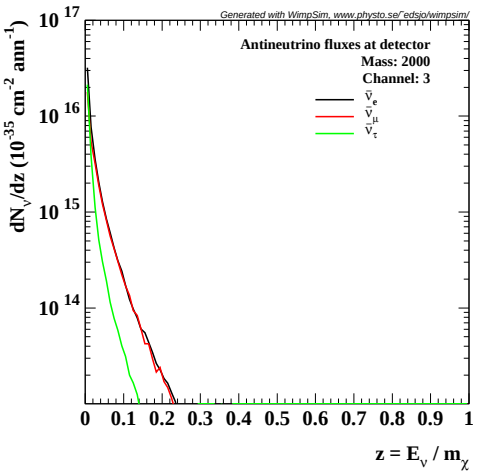
18.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



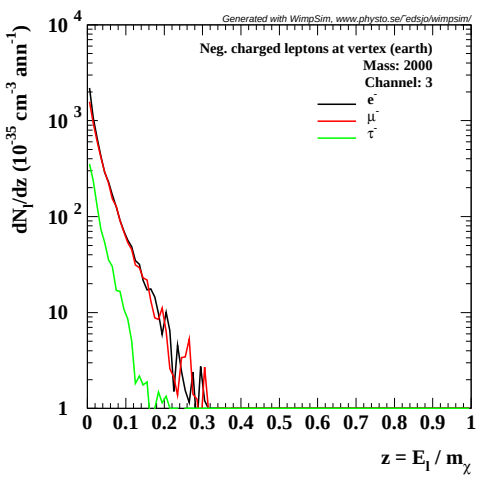


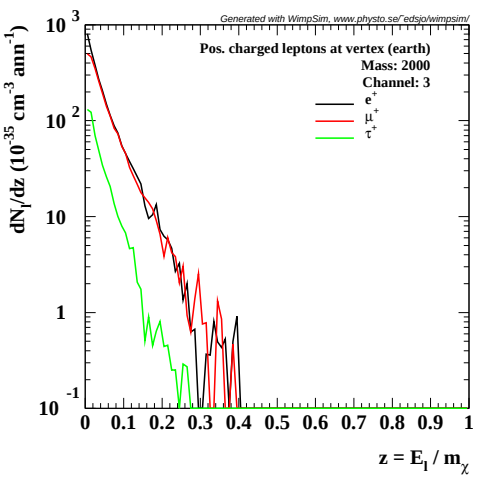
18.3.4 Neutrino fluxes at detector (Earth)



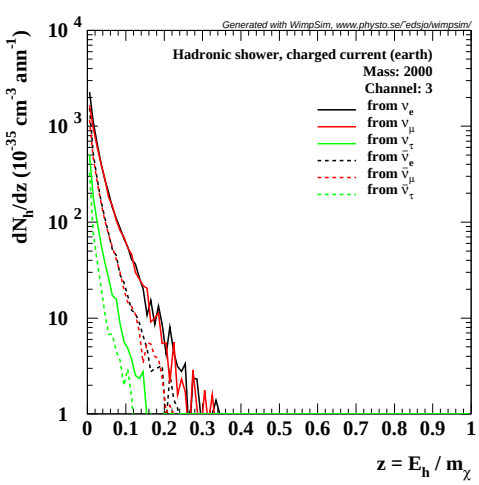


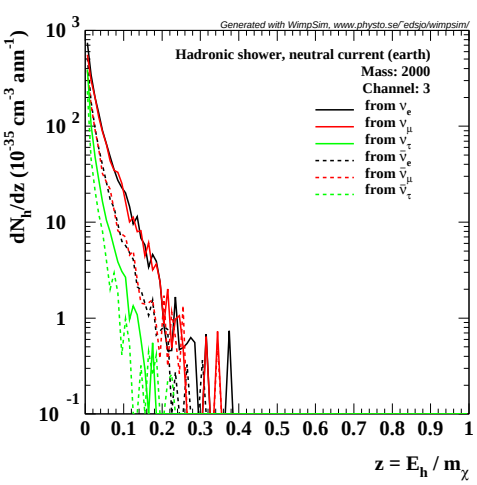
18.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



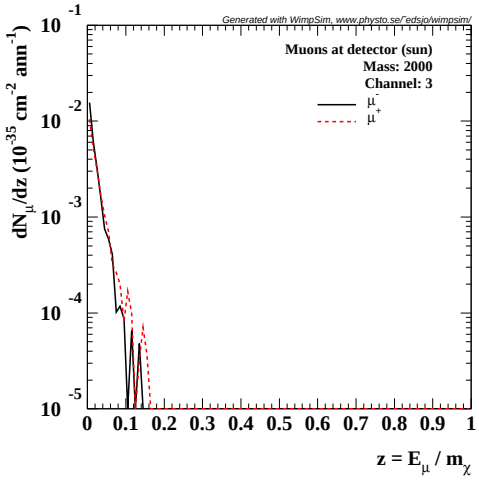


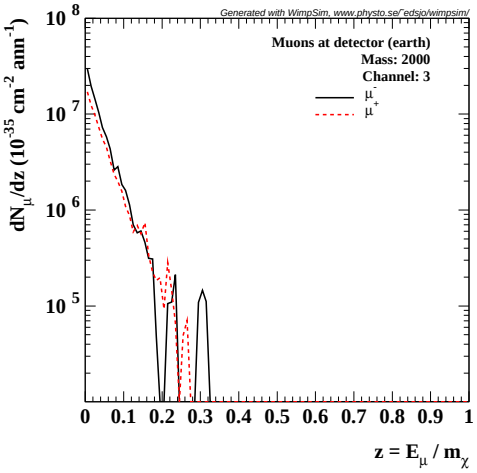
18.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





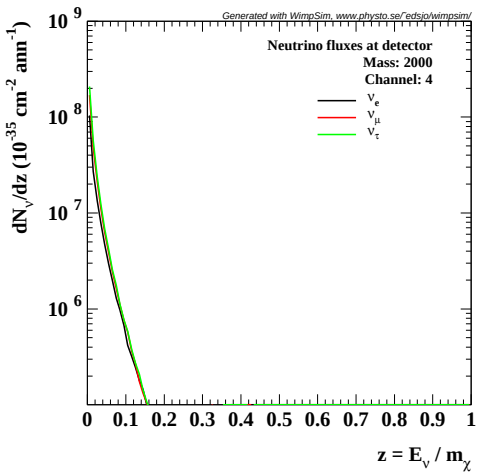
18.3.7 Muons at detector (Sun/Earth)

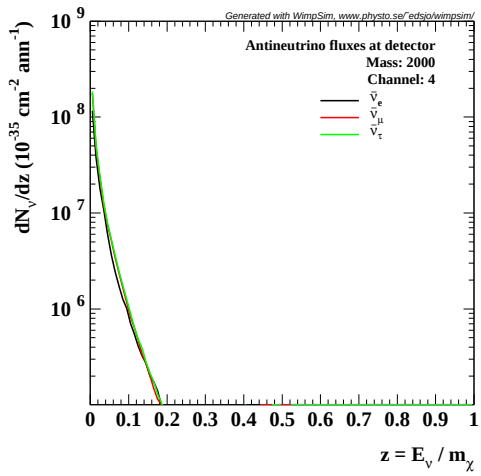




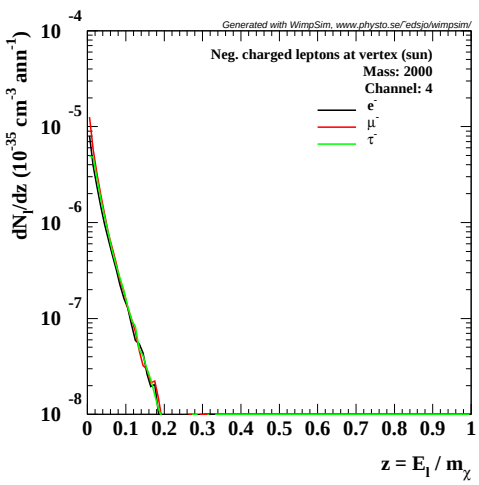
18.4 Channel 4 – $c\bar{c}$

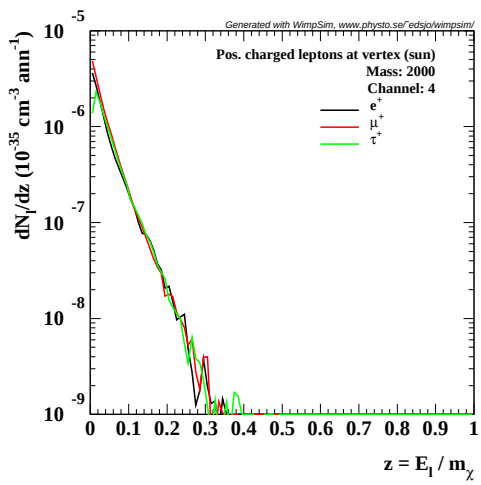
18.4.1 Neutrino fluxes at detector (Sun)



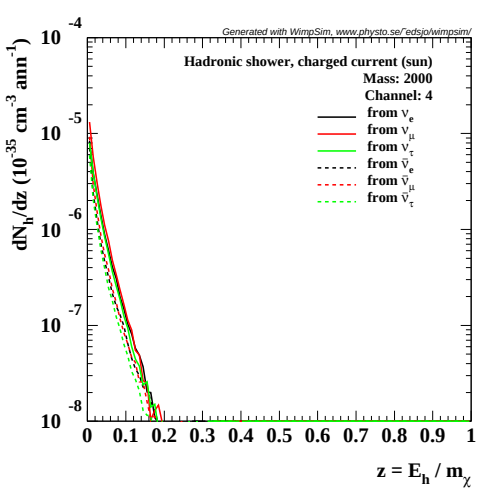


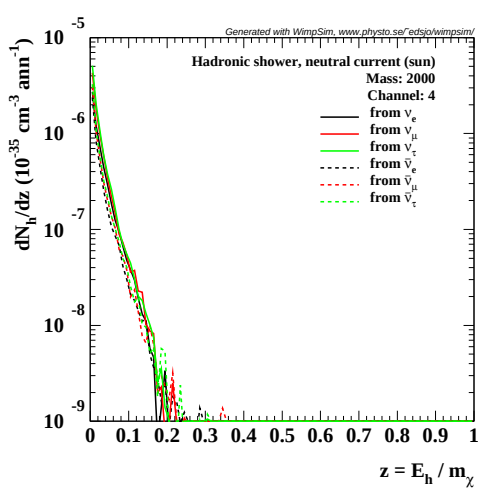
18.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



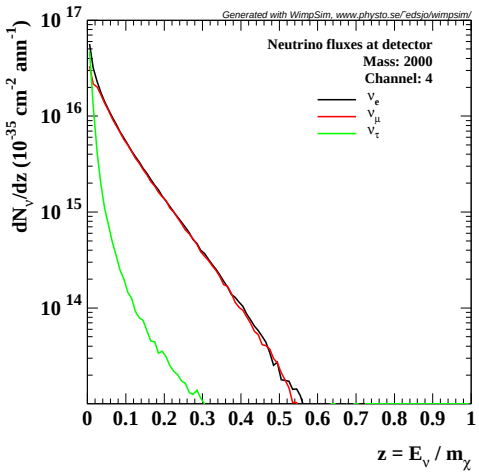


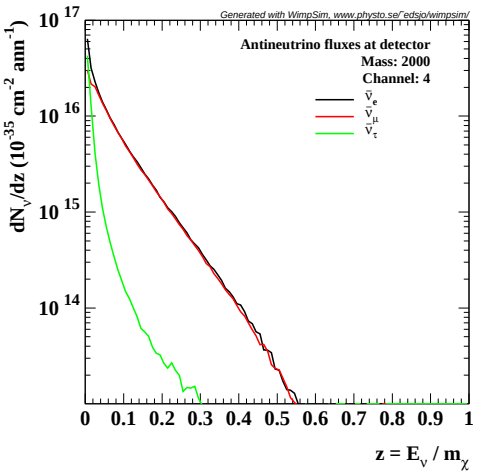
18.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



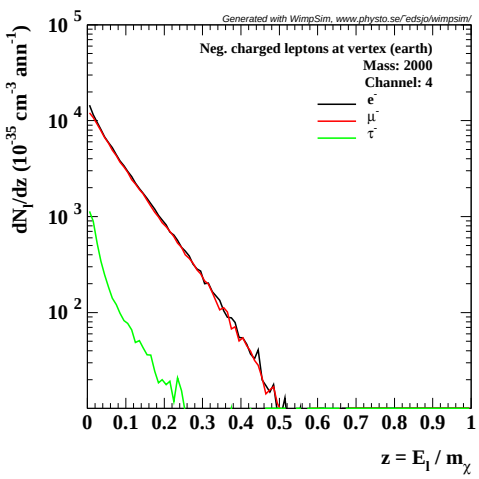


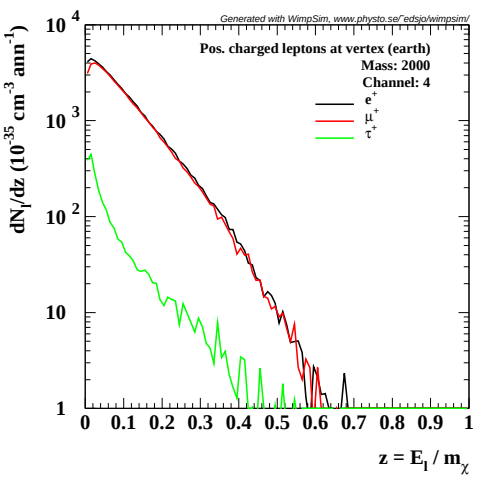
18.4.4 Neutrino fluxes at detector (Earth)



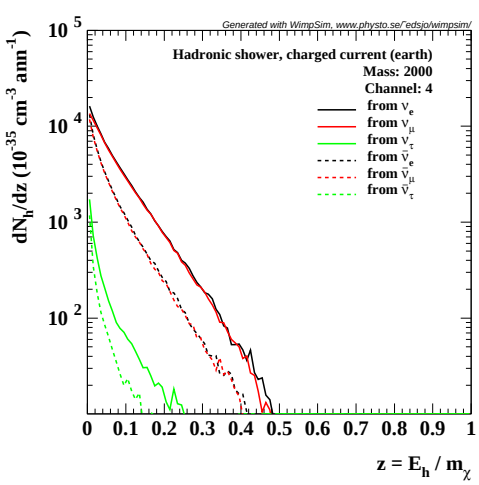


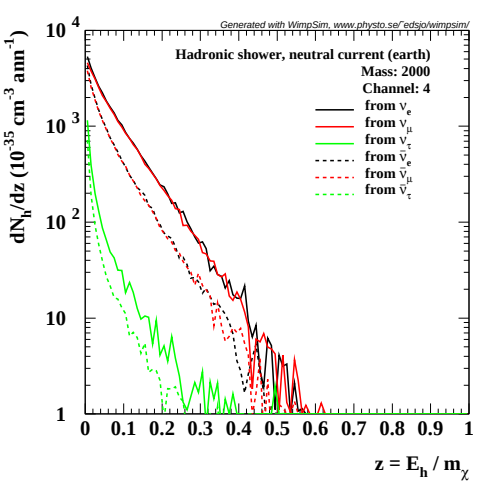
18.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



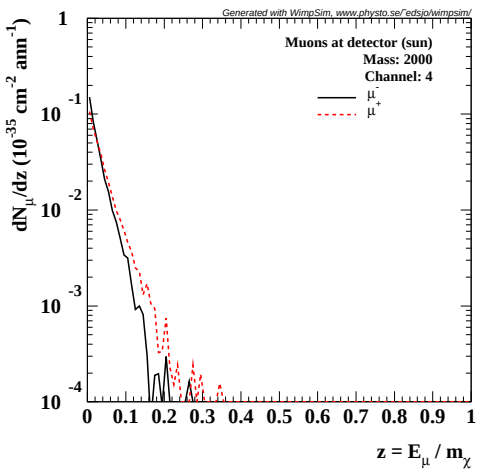


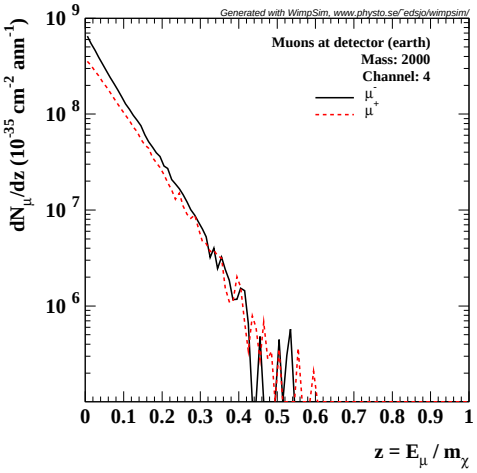
18.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





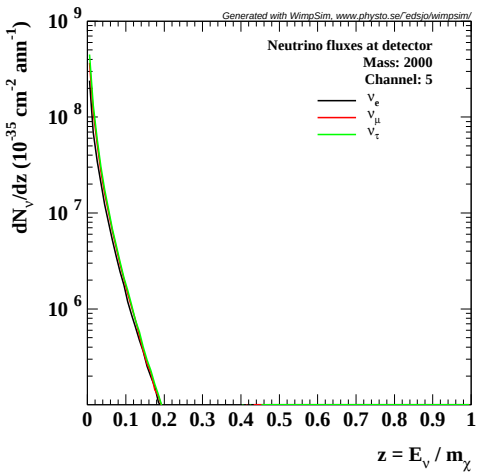
18.4.7 Muons at detector (Sun/Earth)

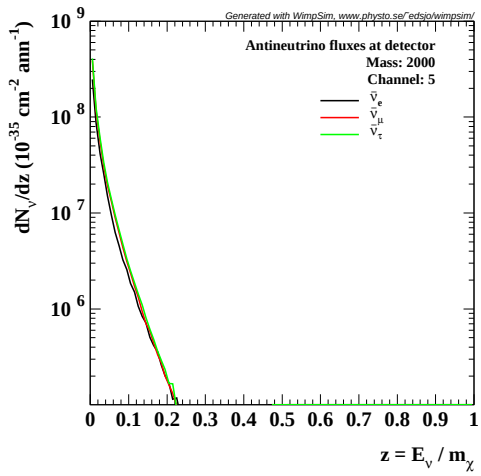




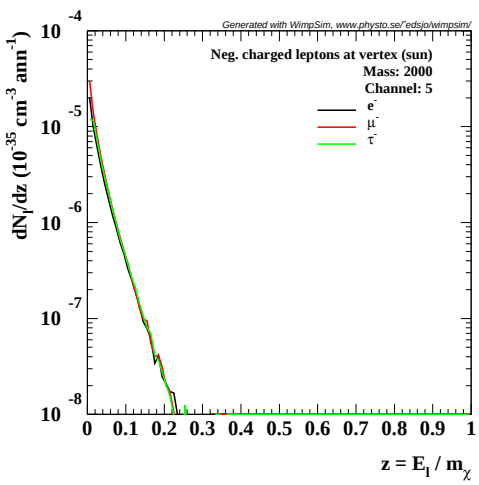
18.5 Channel 5 – $b\bar{b}$

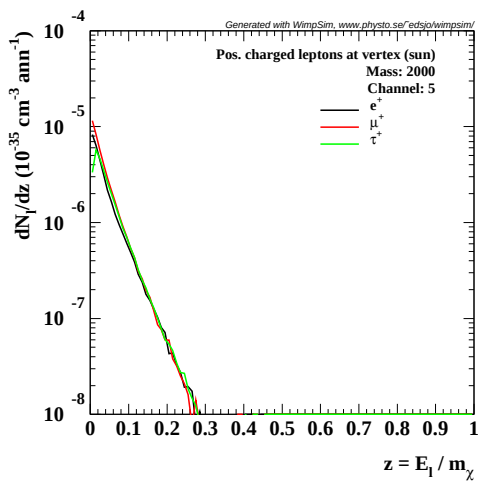
18.5.1 Neutrino fluxes at detector (Sun)



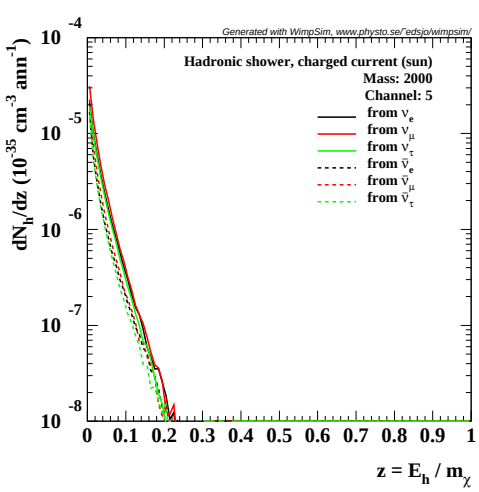


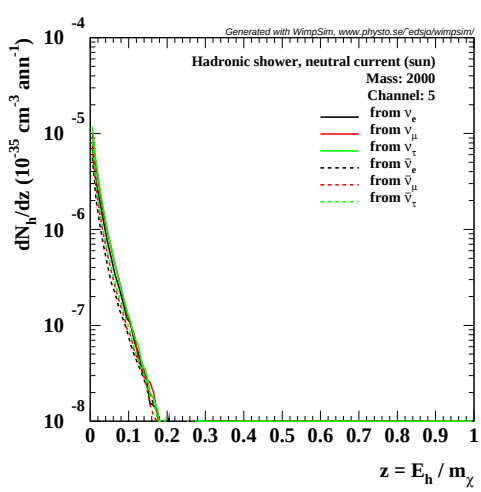
18.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



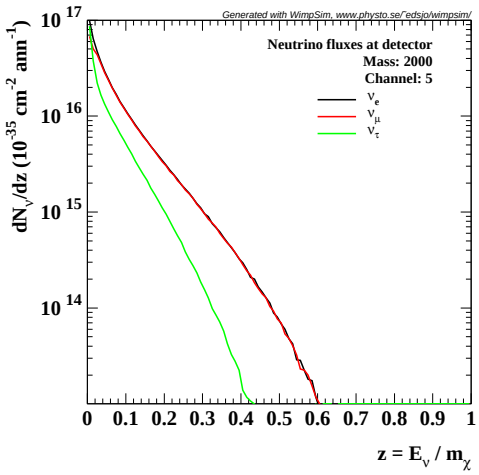


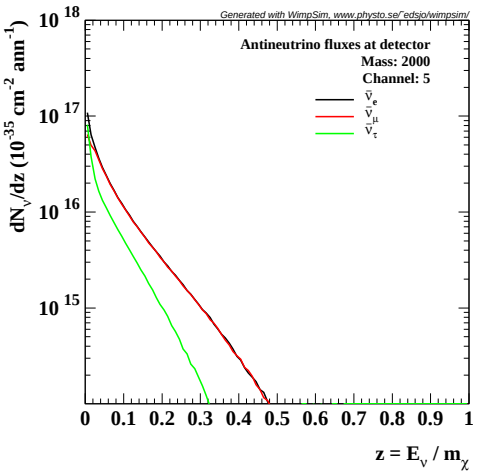
18.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



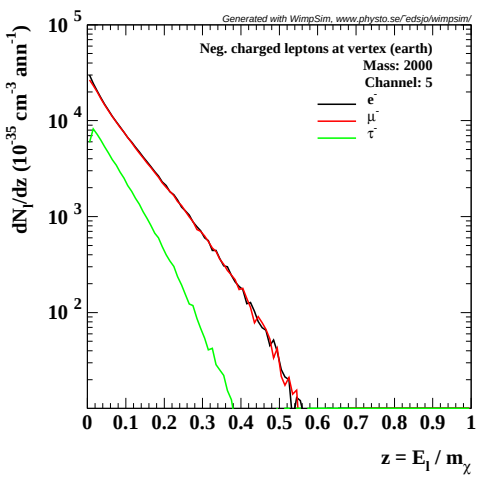


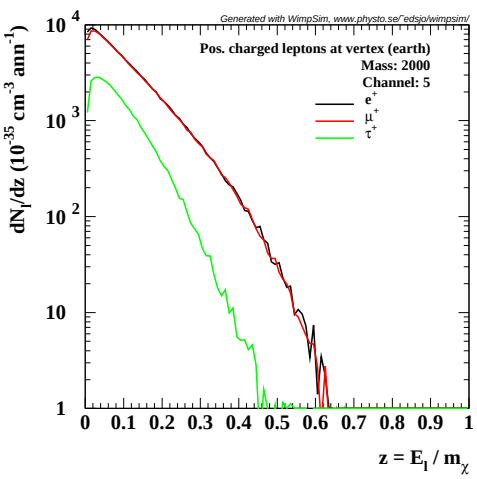
18.5.4 Neutrino fluxes at detector (Earth)



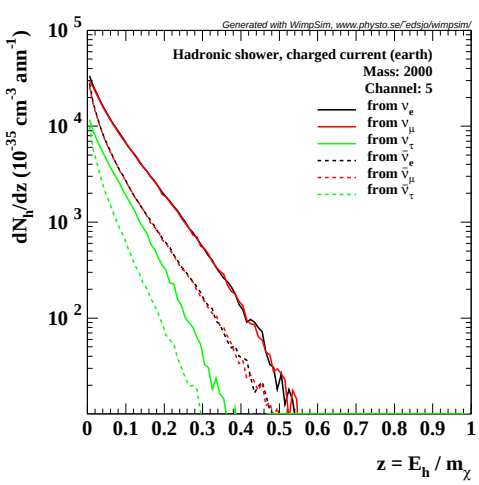


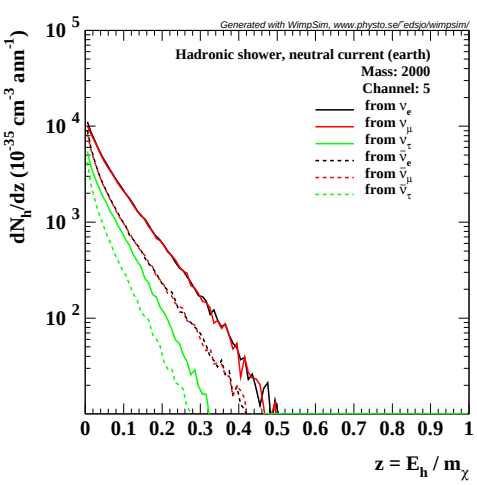
18.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



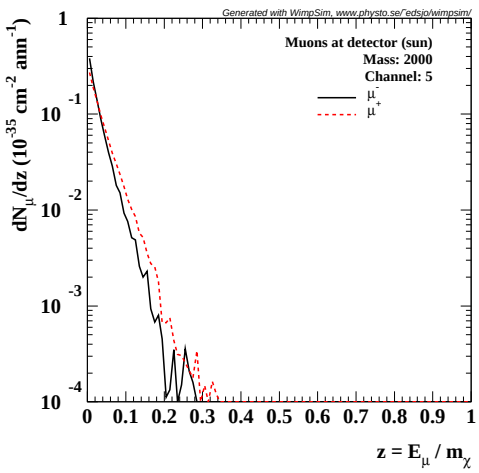


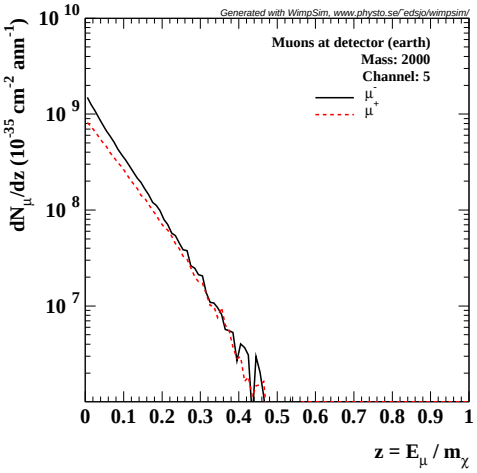
18.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





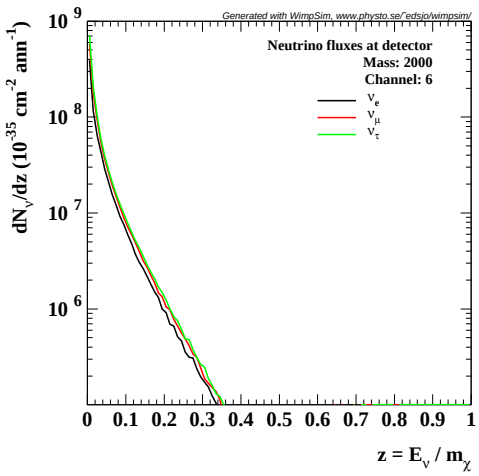
18.5.7 Muons at detector (Sun/Earth)

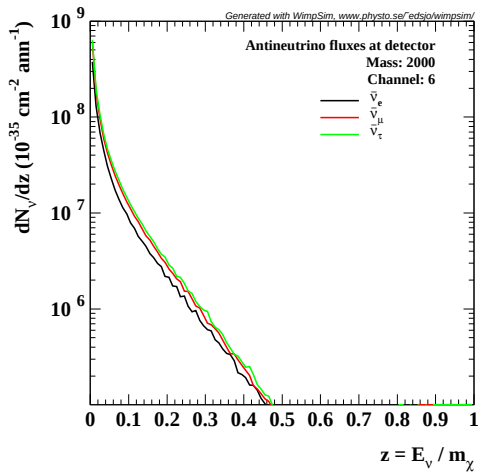




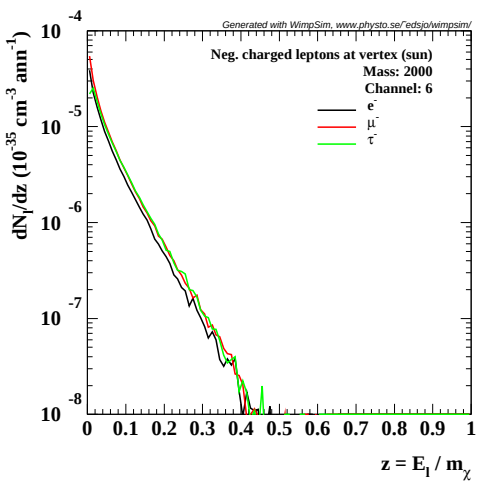
18.6 Channel 6 – $t\bar{t}$

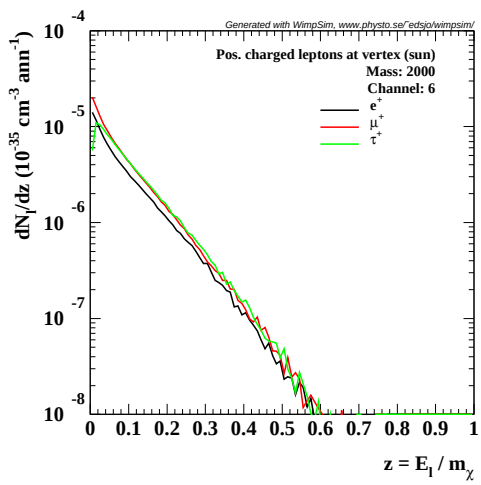
18.6.1 Neutrino fluxes at detector (Sun)



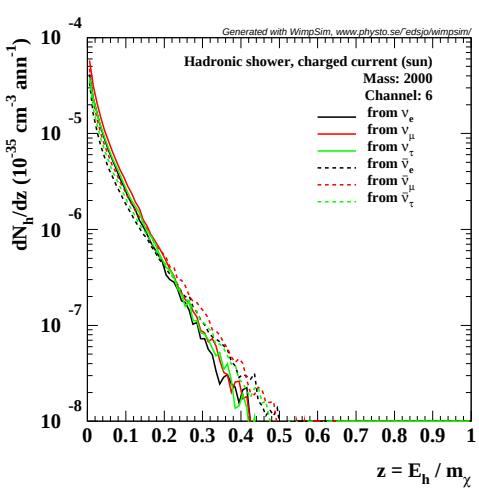


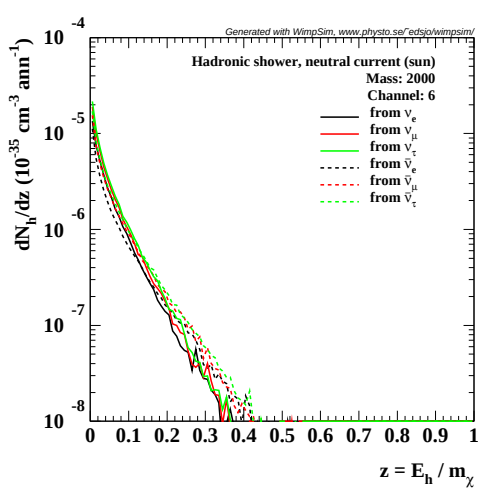
18.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



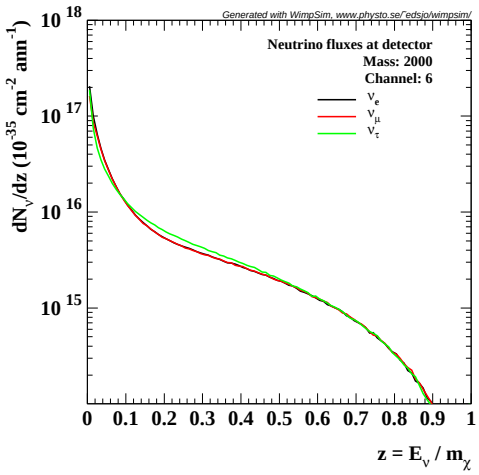


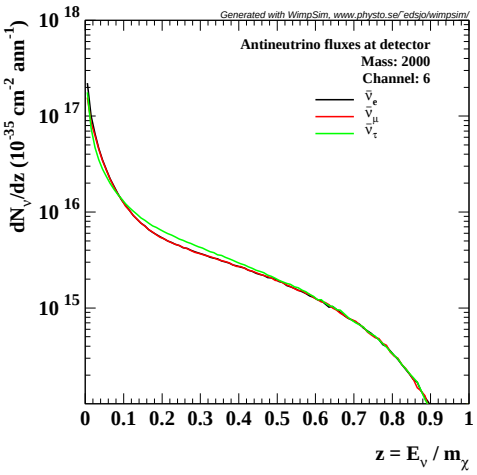
18.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



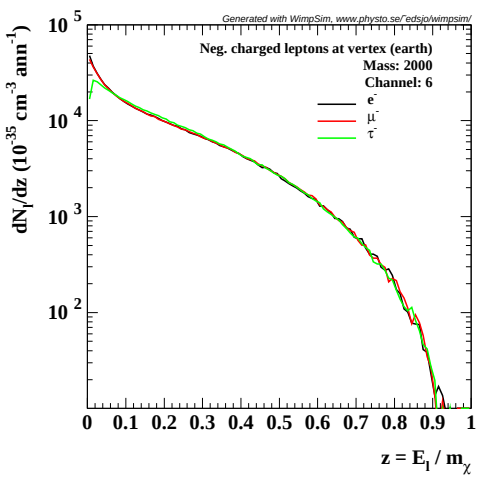


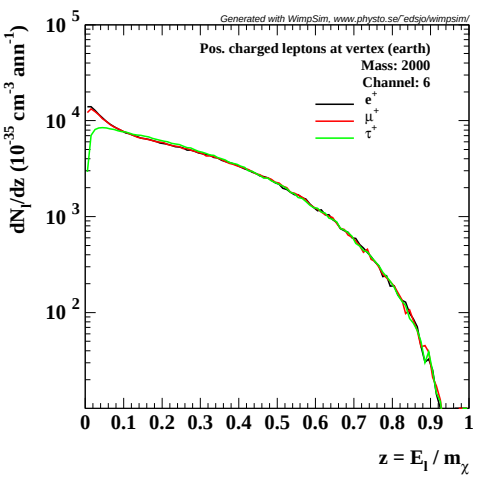
18.6.4 Neutrino fluxes at detector (Earth)



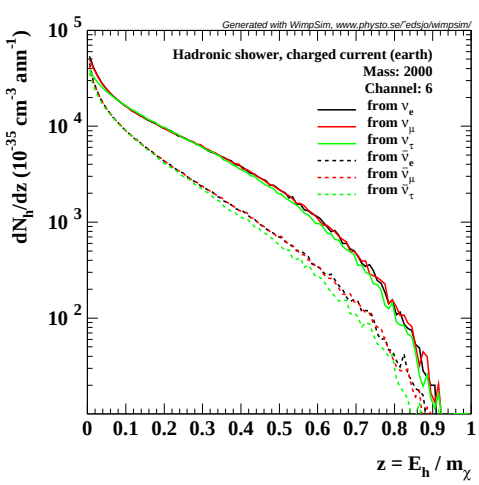


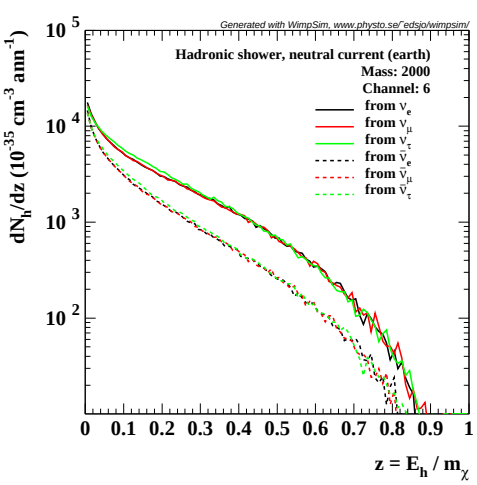
18.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



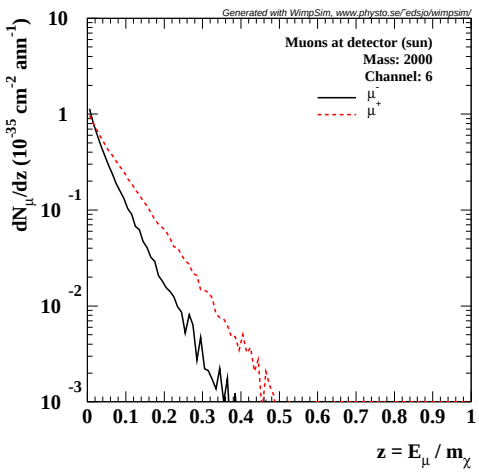


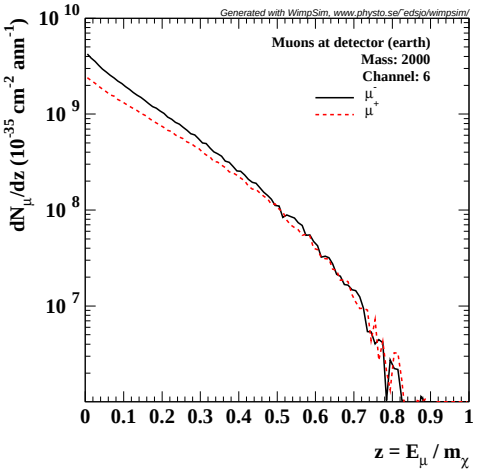
18.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





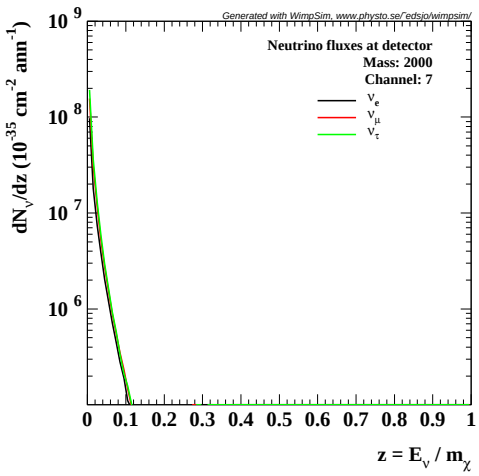
18.6.7 Muons at detector (Sun/Earth)

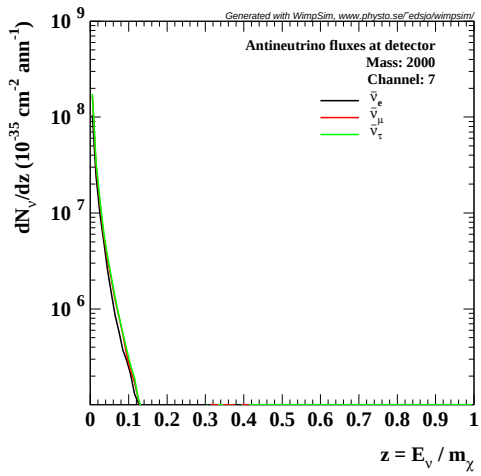




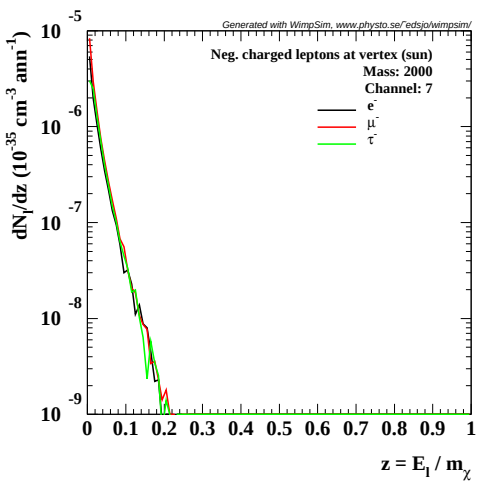
18.7 Channel 7 – gg

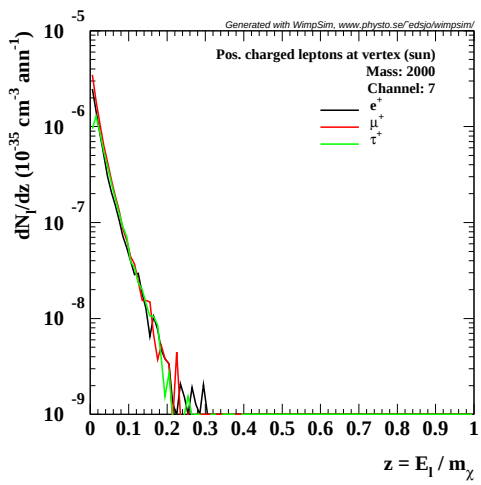
18.7.1 Neutrino fluxes at detector (Sun)



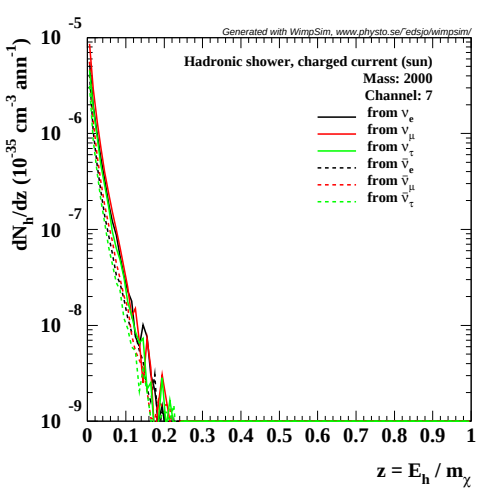


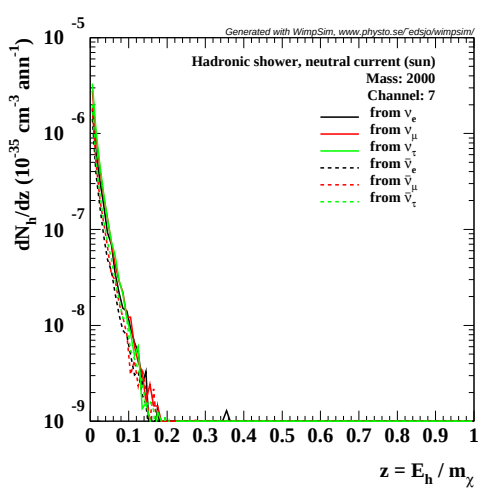
18.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



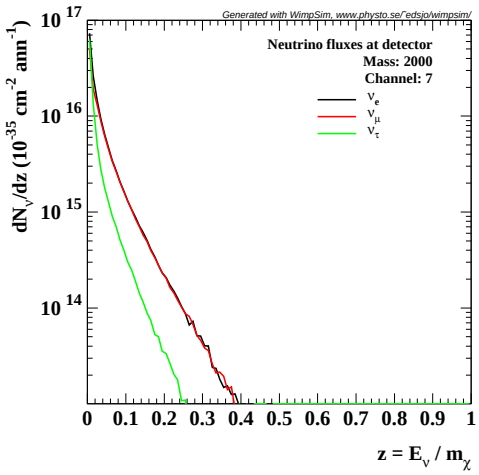


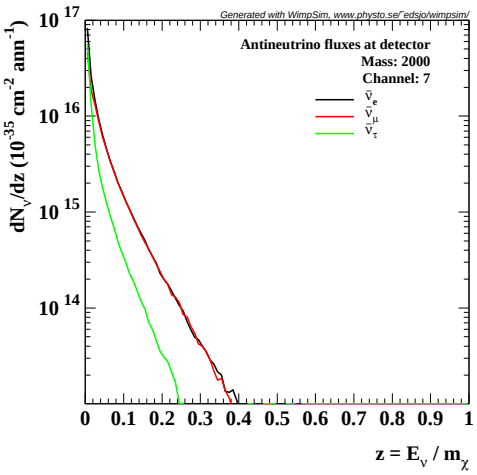
18.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



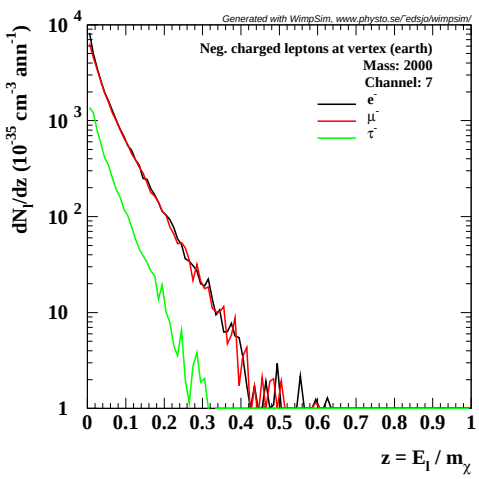


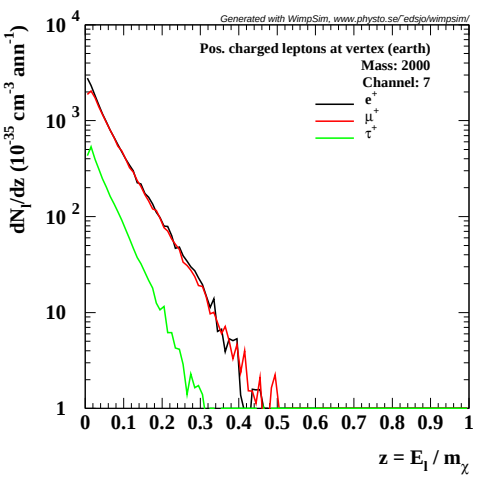
18.7.4 Neutrino fluxes at detector (Earth)



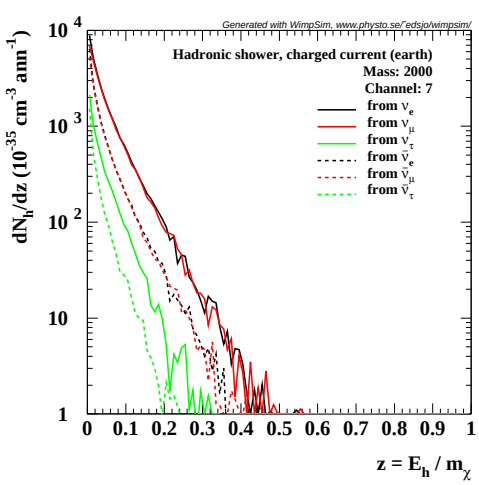


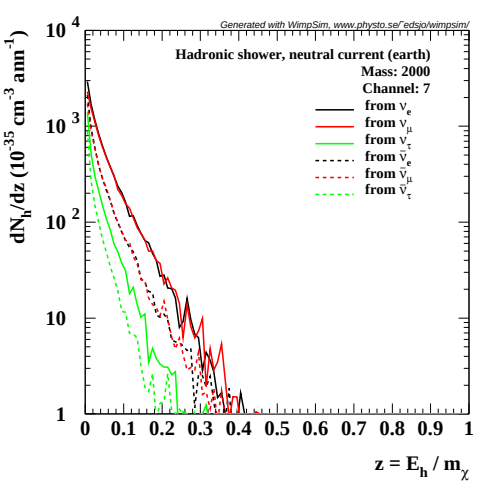
18.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



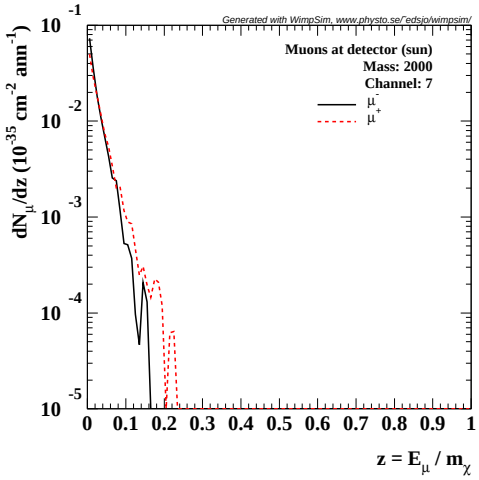


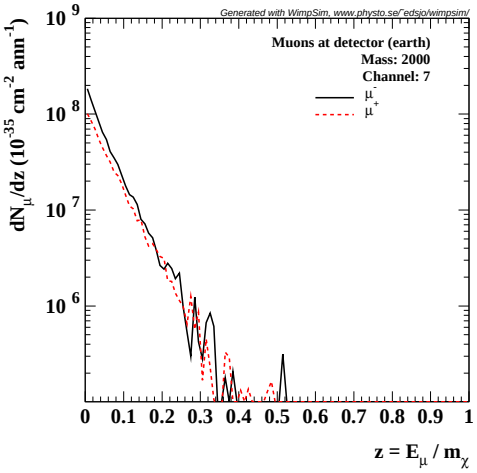
18.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





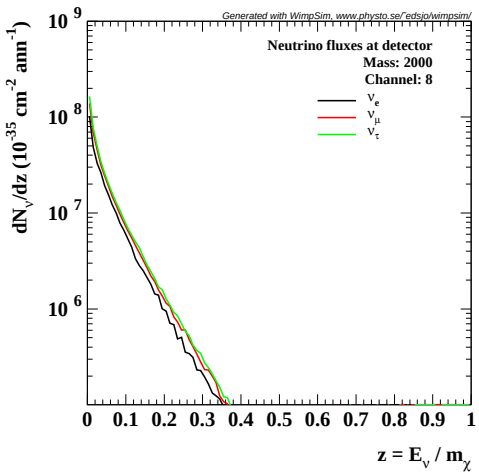
18.7.7 Muons at detector (Sun/Earth)

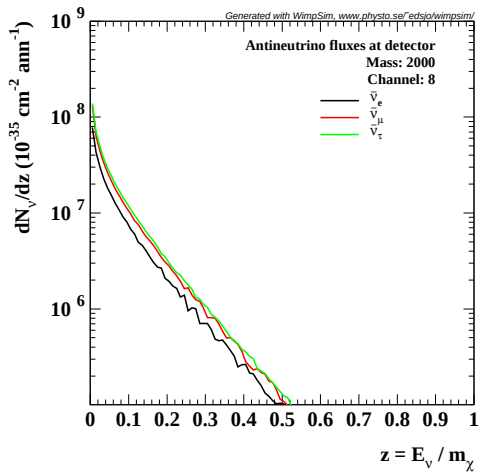




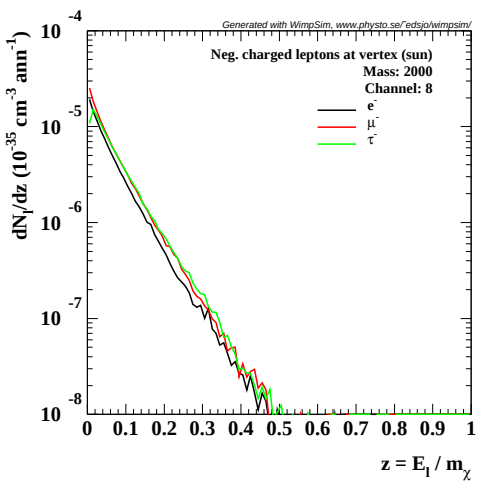
18.8 Channel 8 – W^-W^+

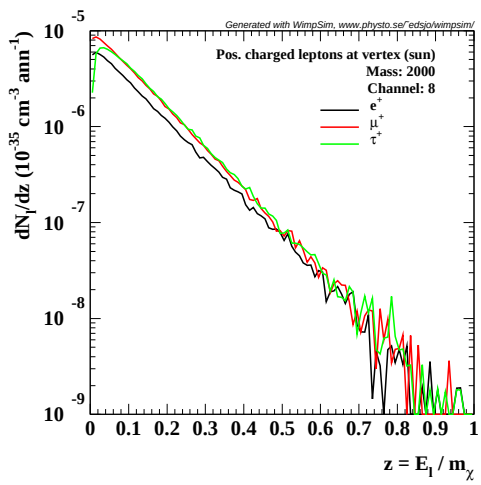
18.8.1 Neutrino fluxes at detector (Sun)



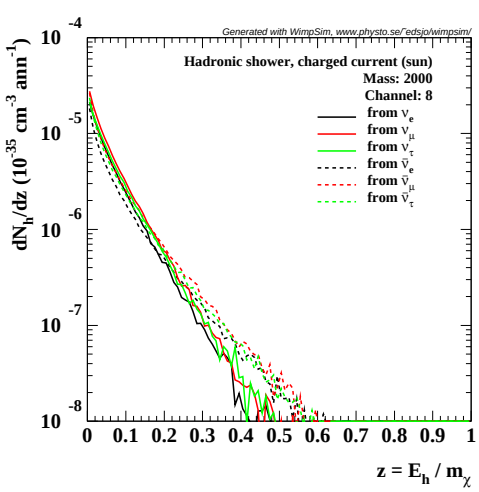


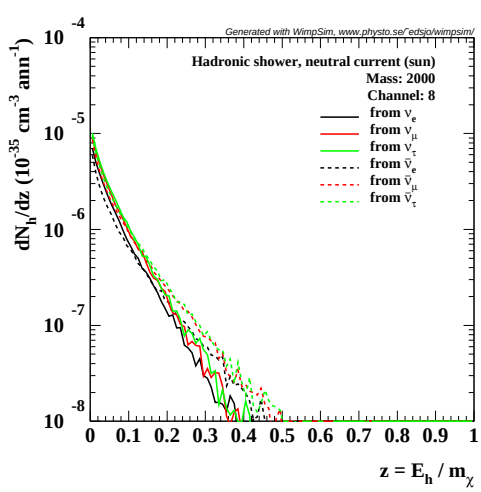
18.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



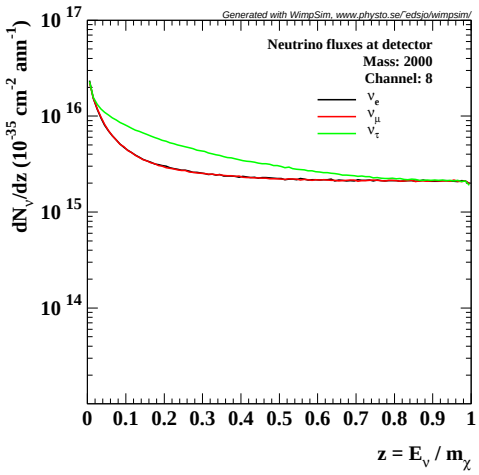


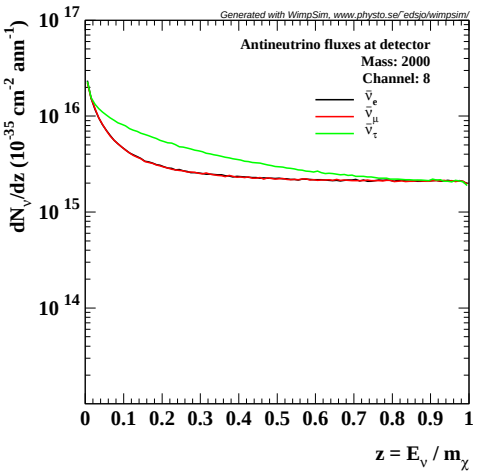
18.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



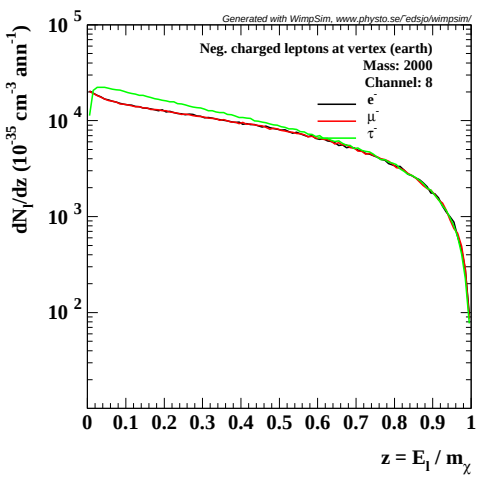


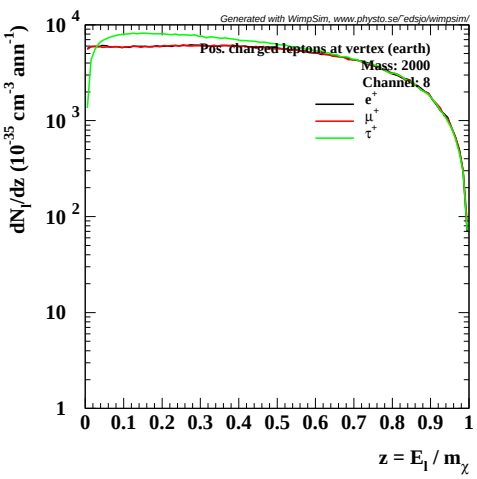
18.8.4 Neutrino fluxes at detector (Earth)



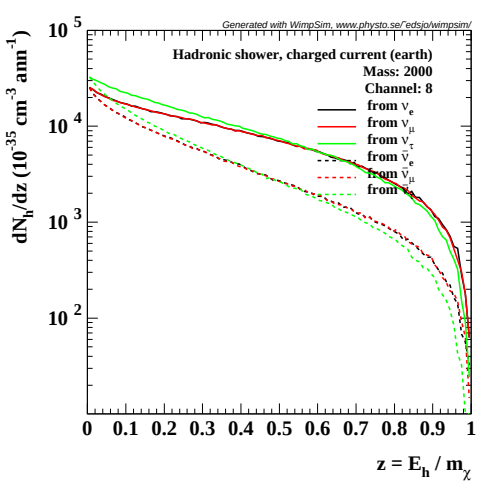


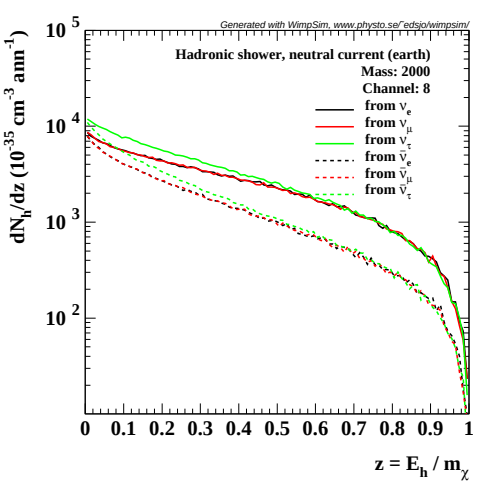
18.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



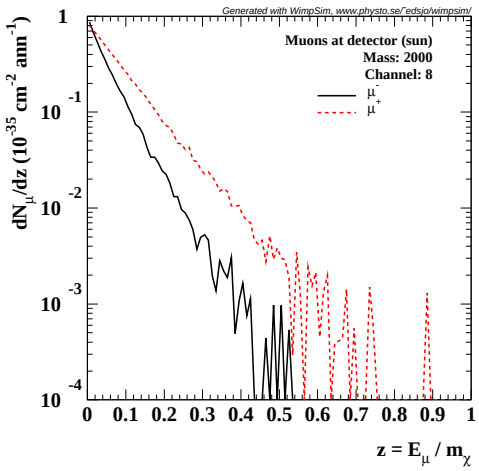


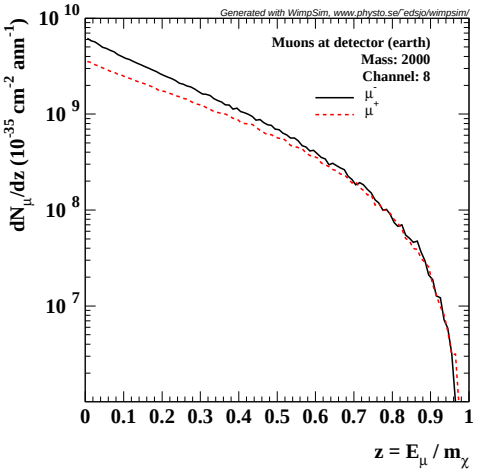
18.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





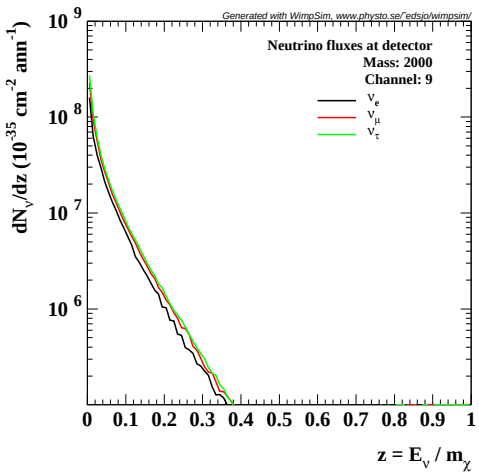
18.8.7 Muons at detector (Sun/Earth)

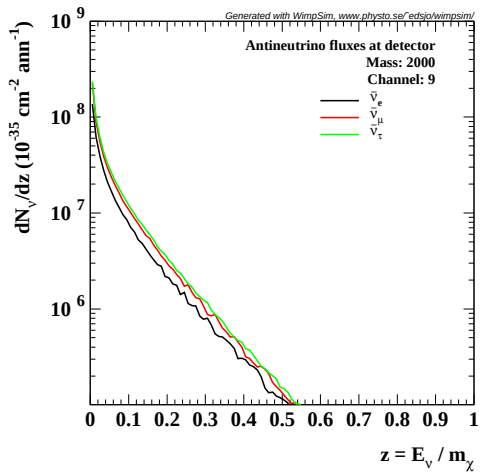




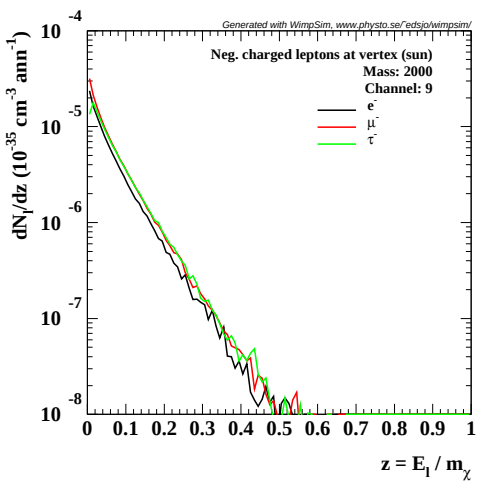
18.9 Channel 9 – $Z^0 Z^0$

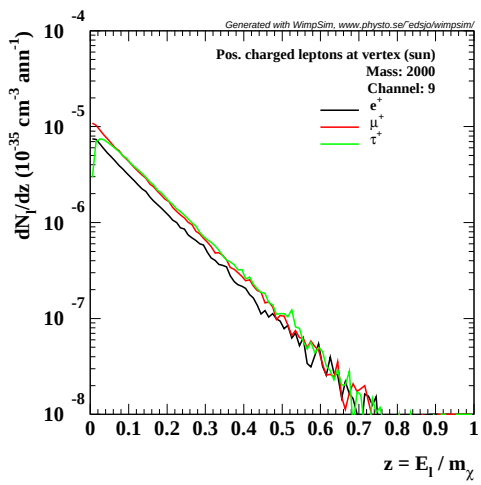
18.9.1 Neutrino fluxes at detector (Sun)



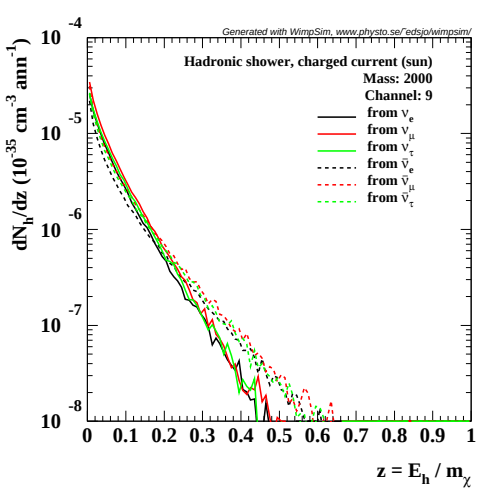


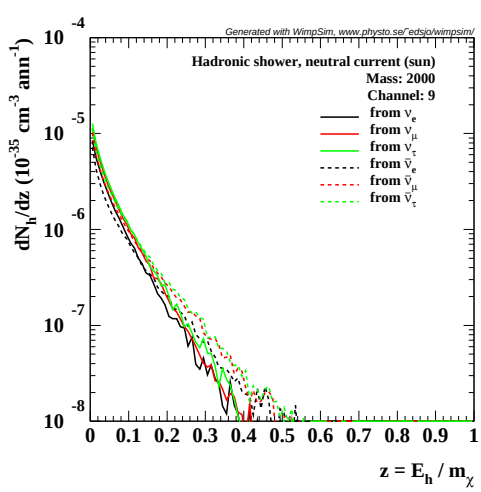
18.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



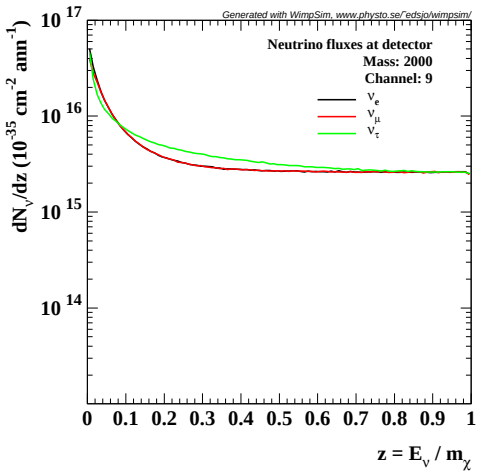


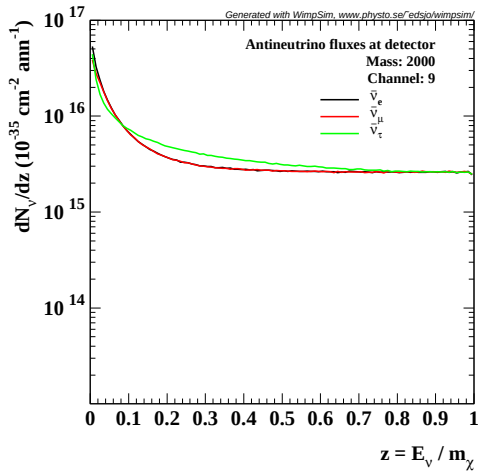
18.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



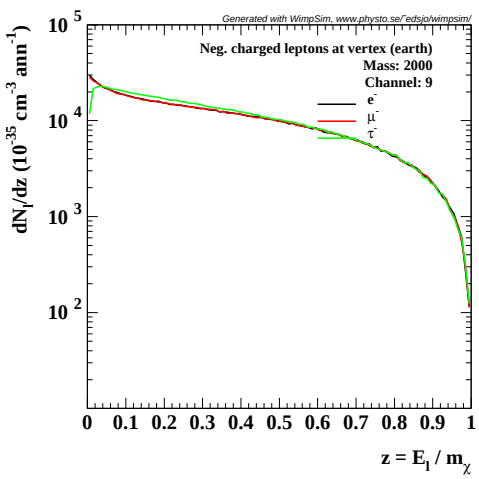


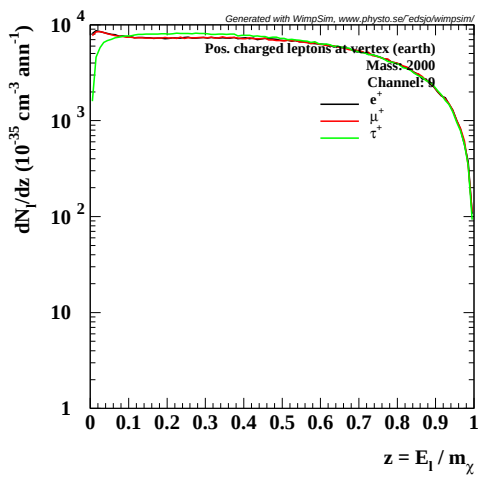
18.9.4 Neutrino fluxes at detector (Earth)



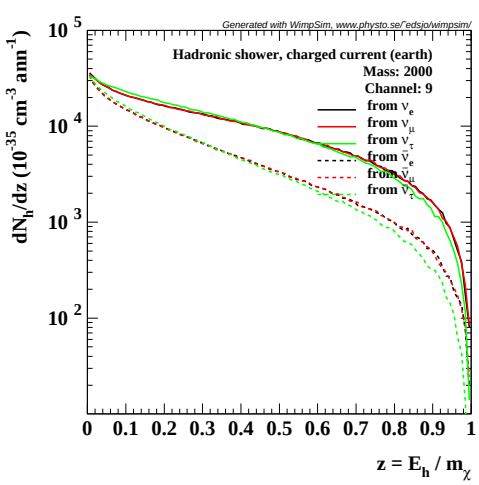


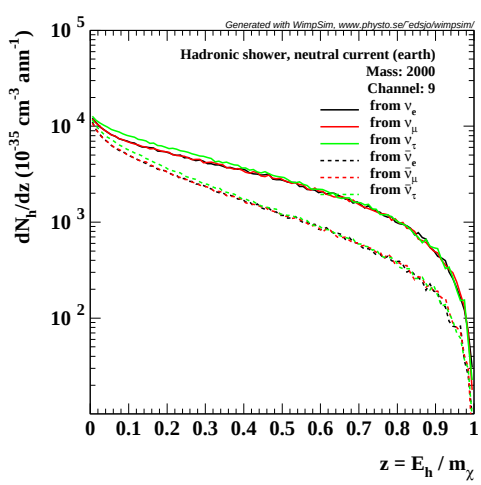
18.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



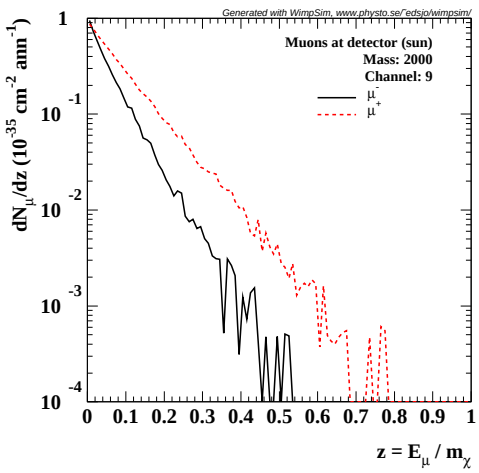


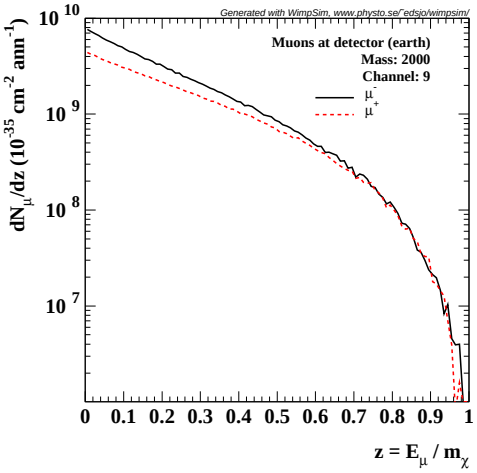
18.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





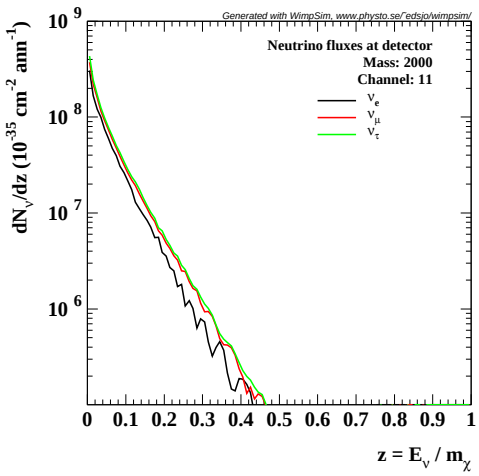
18.9.7 Muons at detector (Sun/Earth)

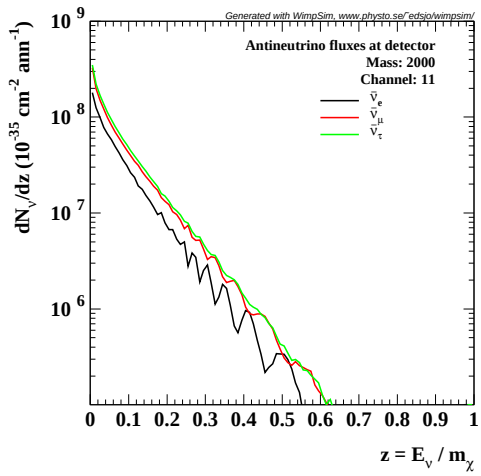




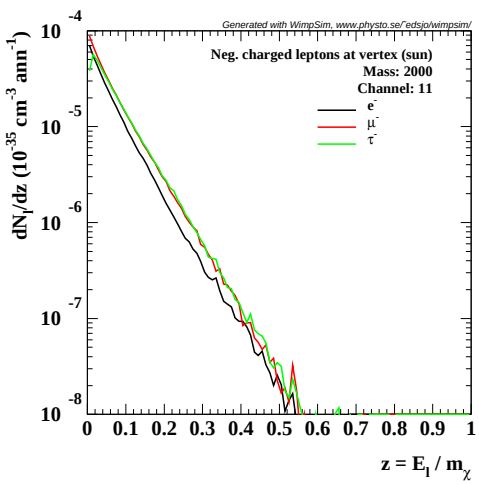
18.10 Channel 11 – $\tau^-\tau^+$

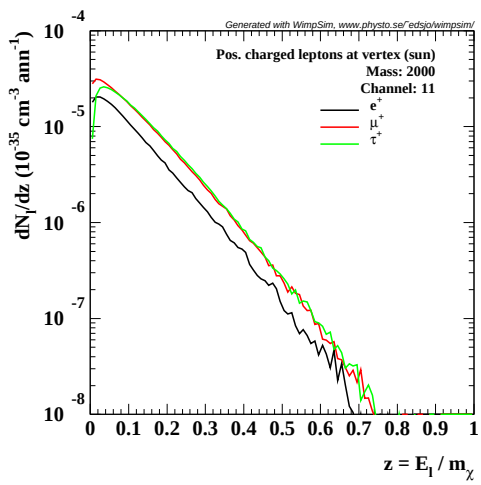
18.10.1 Neutrino fluxes at detector (Sun)



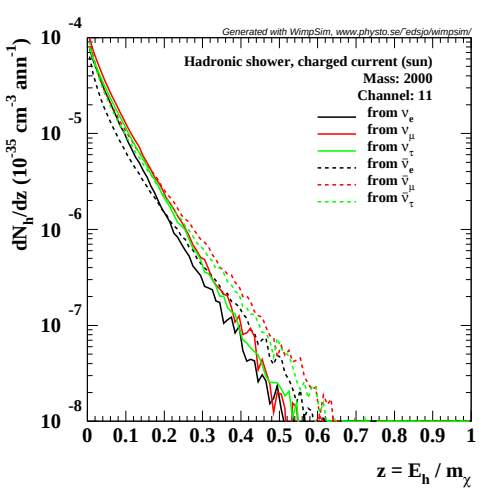


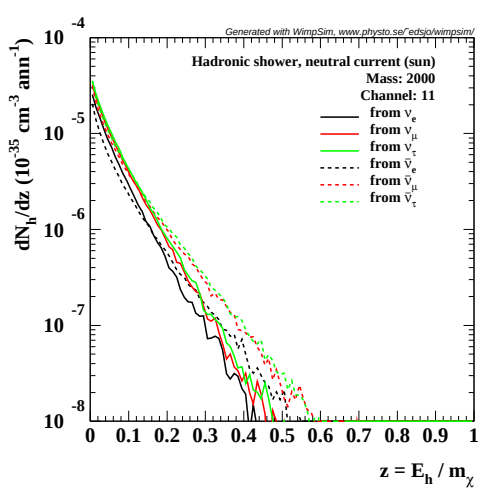
18.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



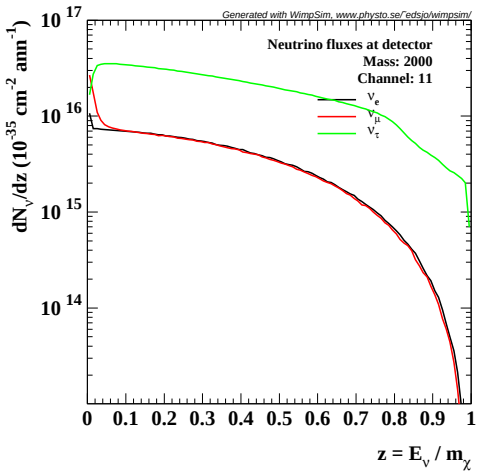


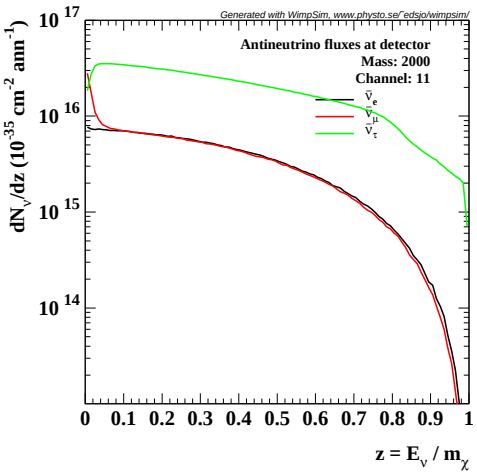
18.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



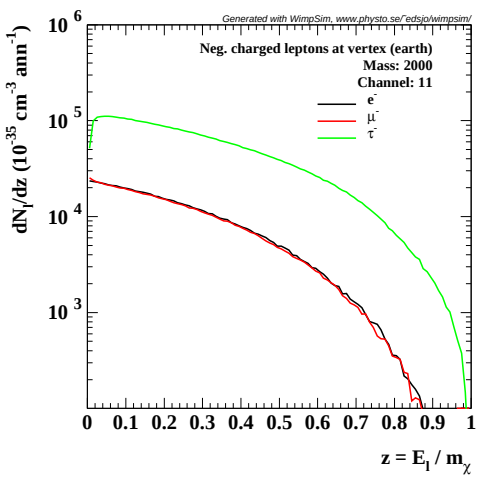


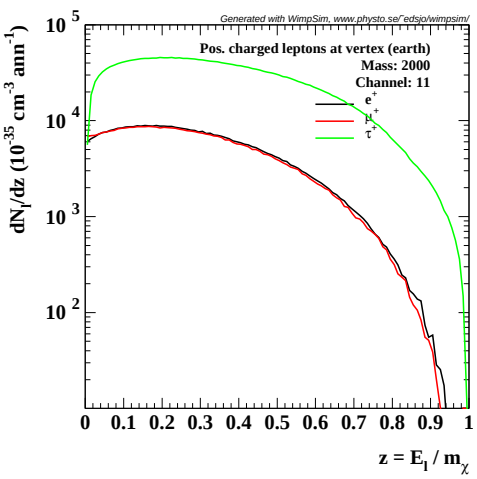
18.10.4 Neutrino fluxes at detector (Earth)



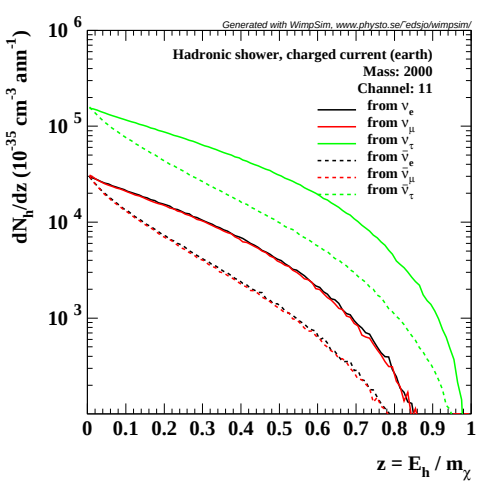


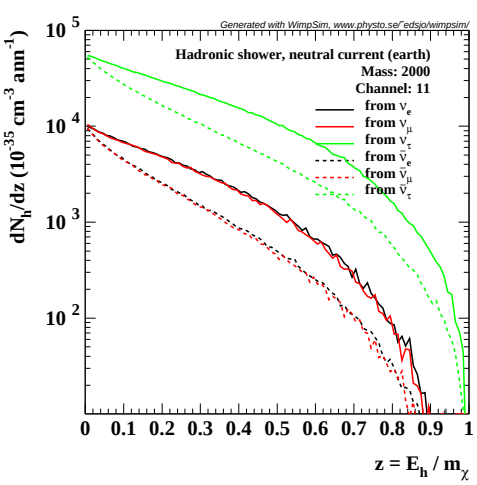
18.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



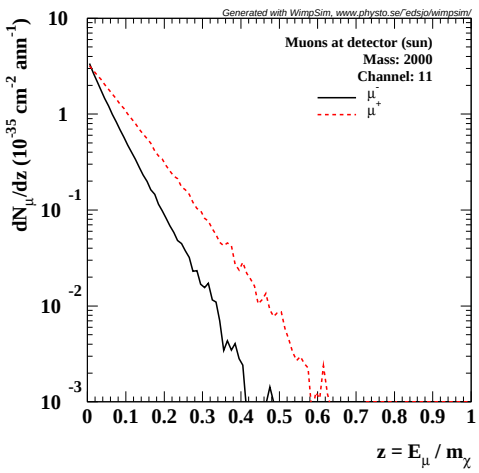


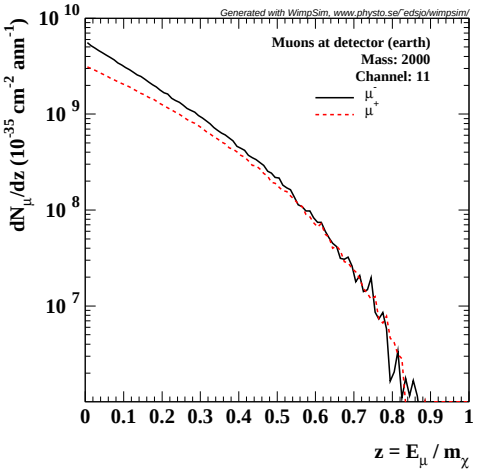
18.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





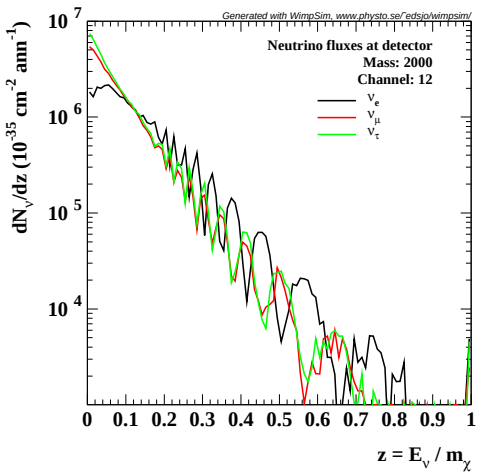
18.10.7 Muons at detector (Sun/Earth)

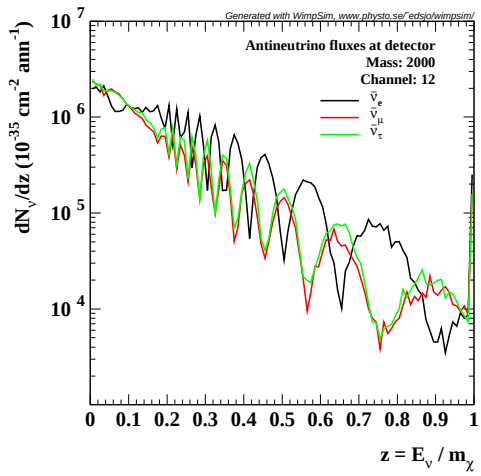




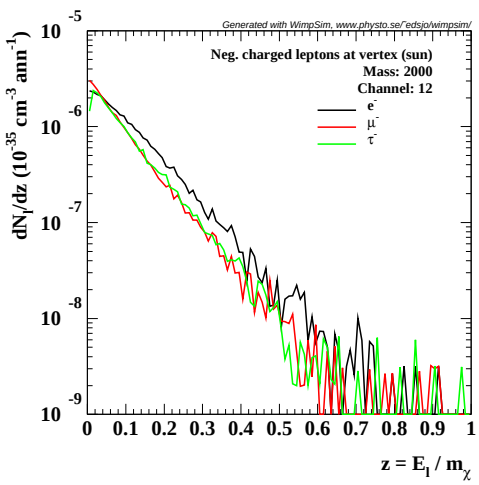
18.11 Channel 12 – $\nu_e\bar{\nu}_e$

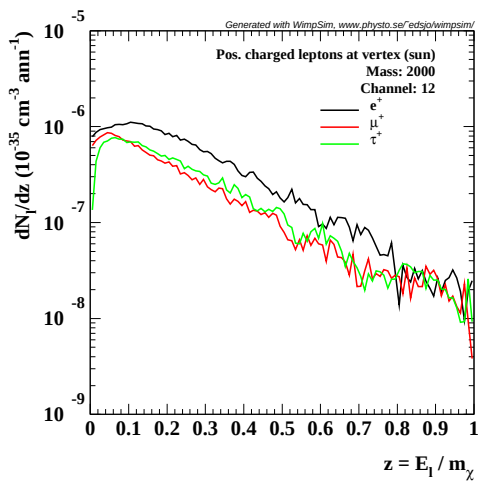
18.11.1 Neutrino fluxes at detector (Sun)



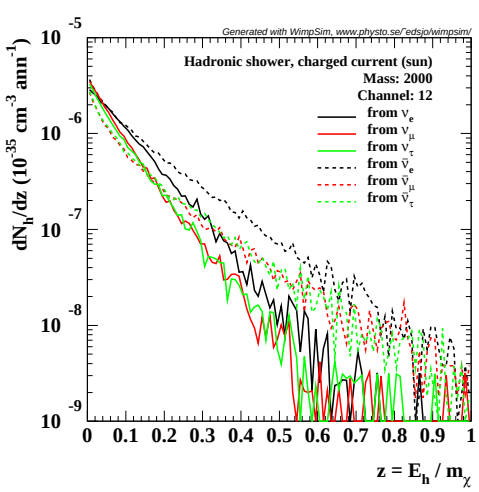


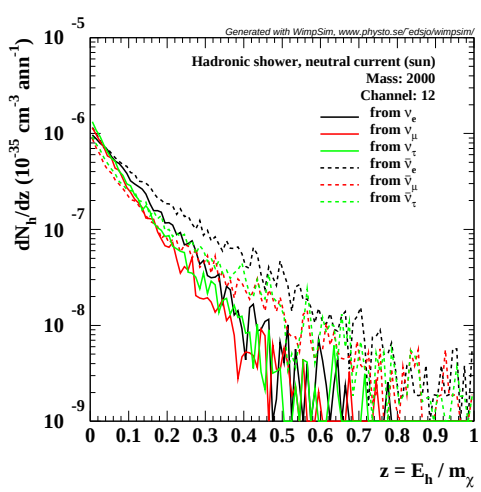
18.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



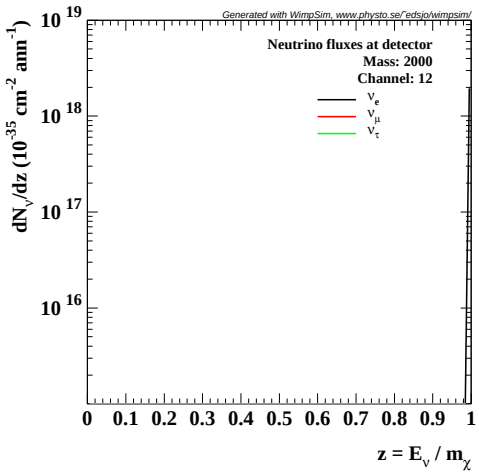


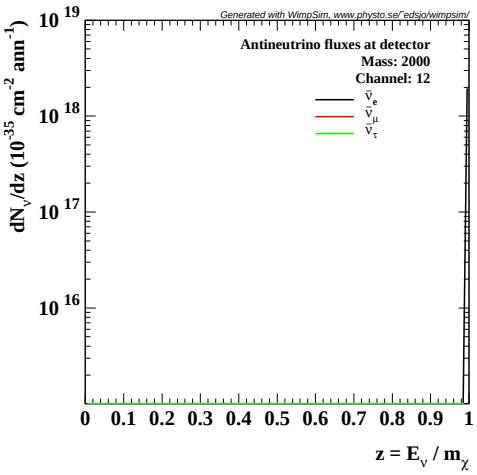
18.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



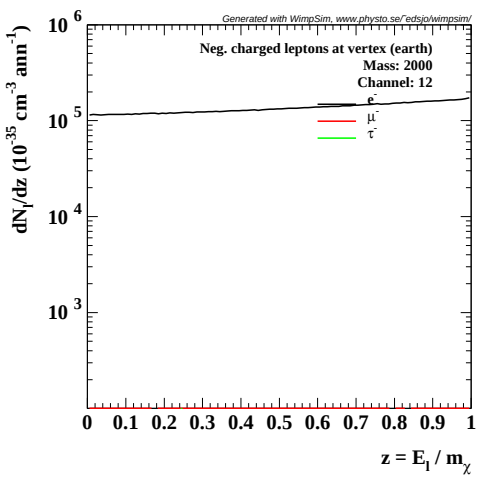


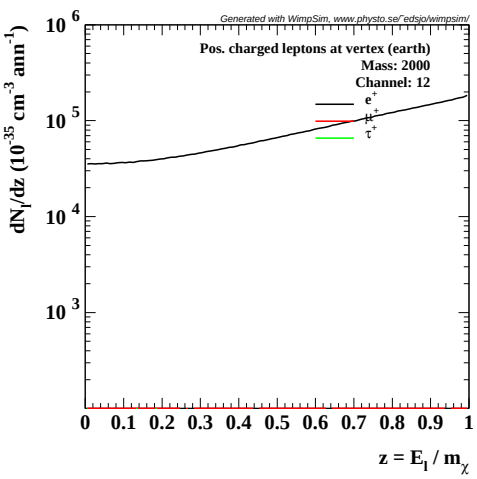
18.11.4 Neutrino fluxes at detector (Earth)



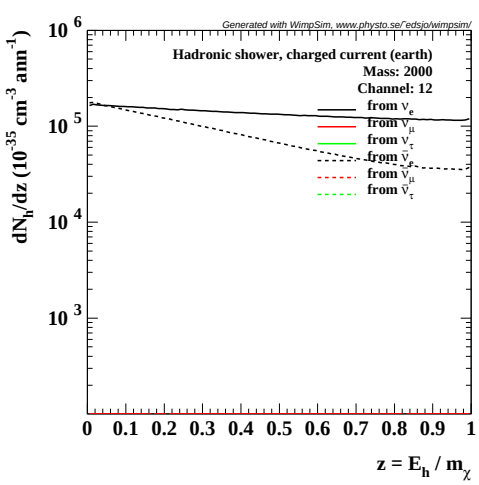


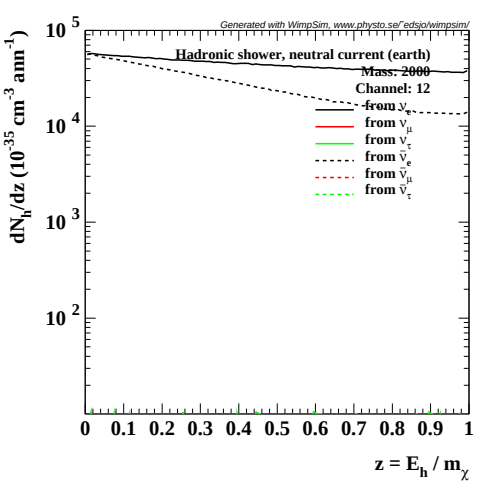
18.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



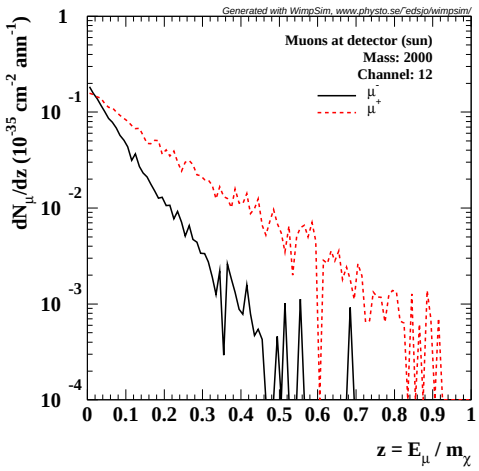


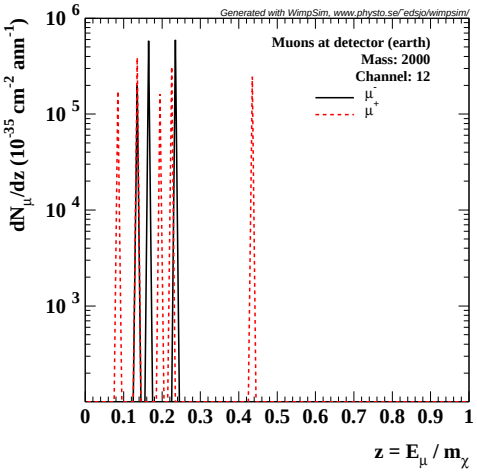
18.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





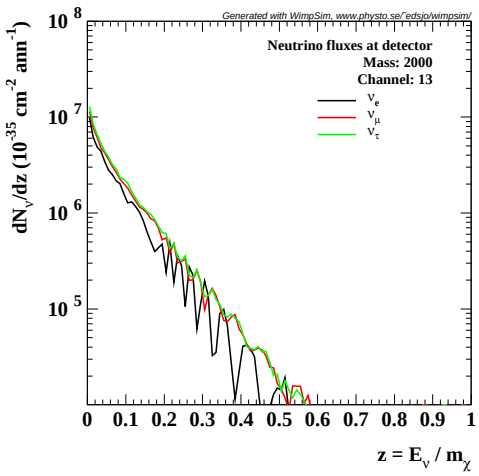
18.11.7 Muons at detector (Sun/Earth)

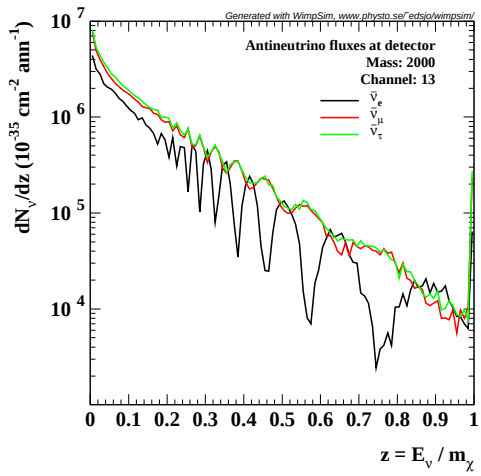




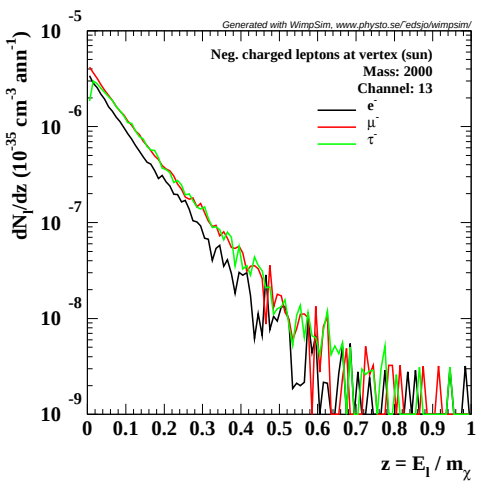
18.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

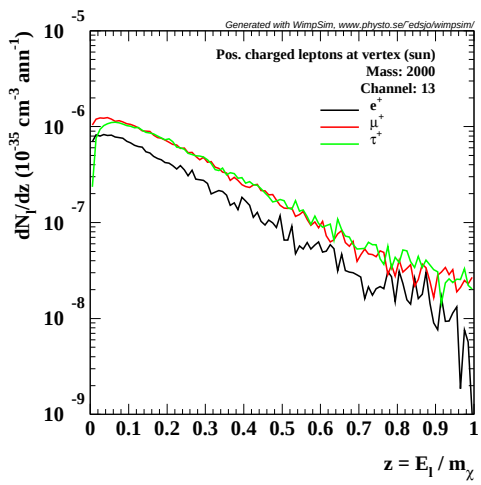
18.12.1 Neutrino fluxes at detector (Sun)



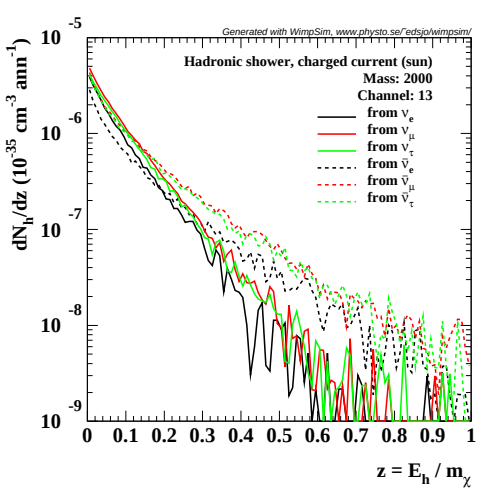


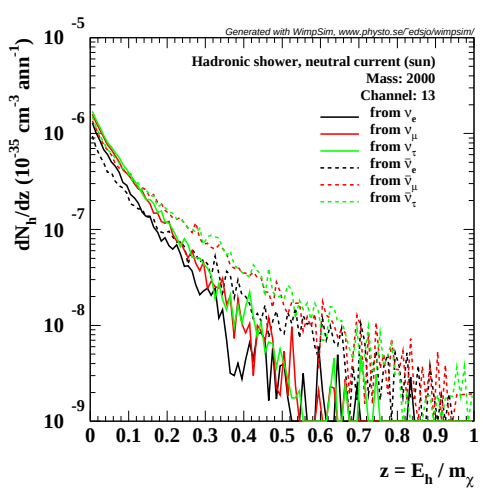
18.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



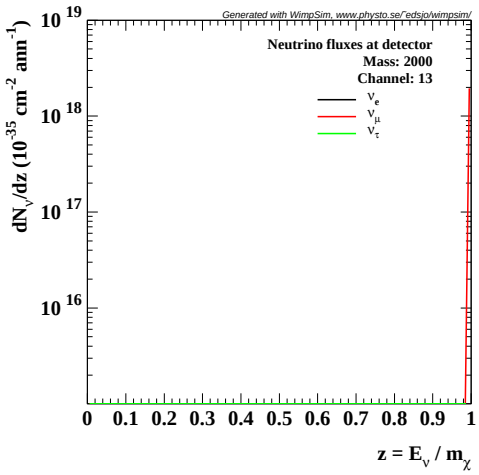


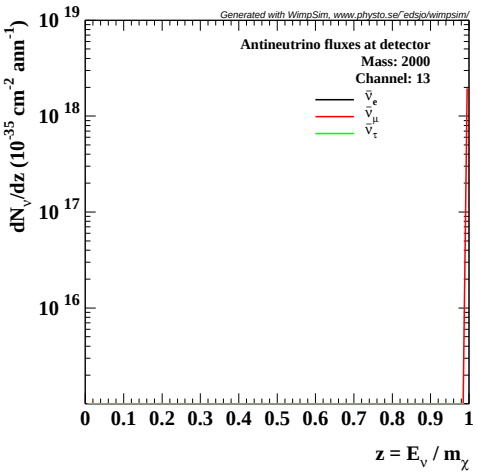
18.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



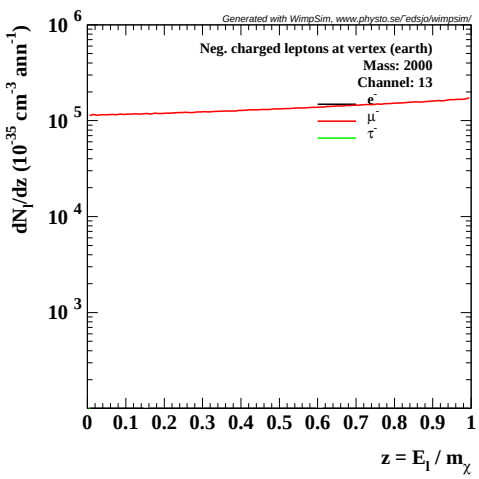


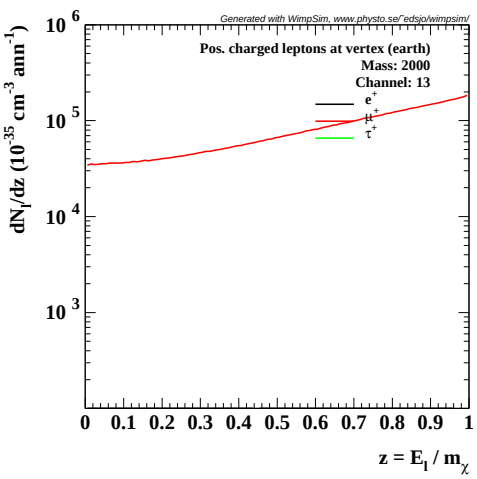
18.12.4 Neutrino fluxes at detector (Earth)



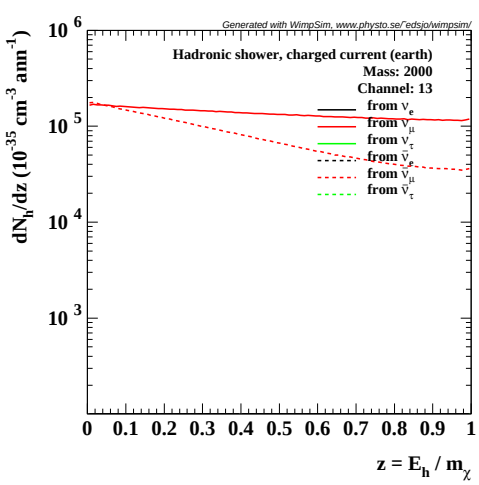


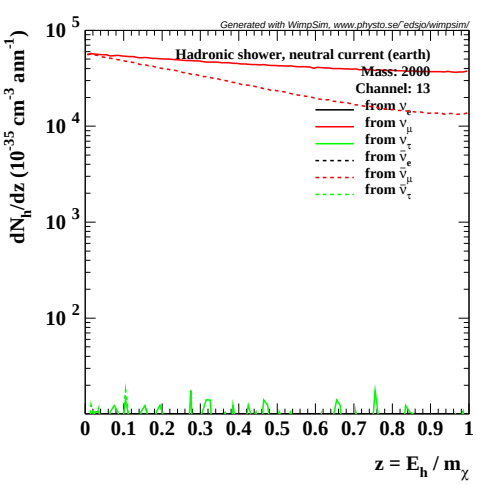
18.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



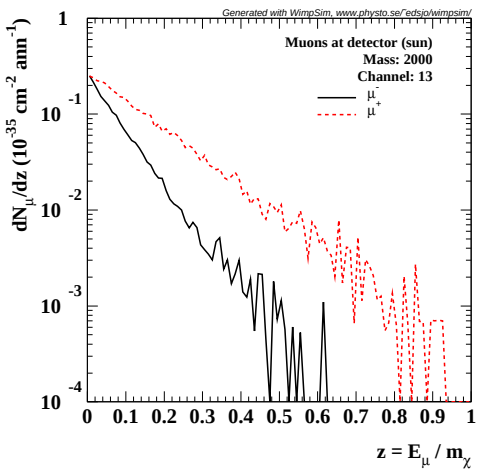


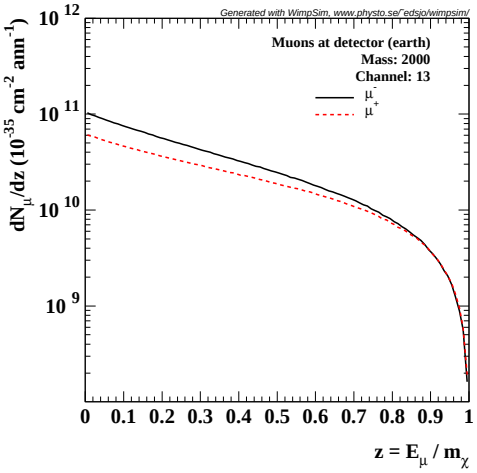
18.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





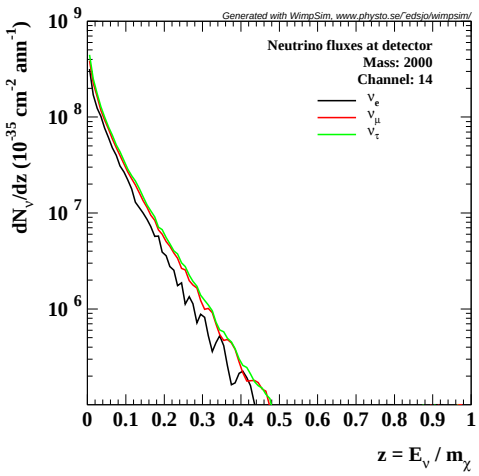
18.12.7 Muons at detector (Sun/Earth)

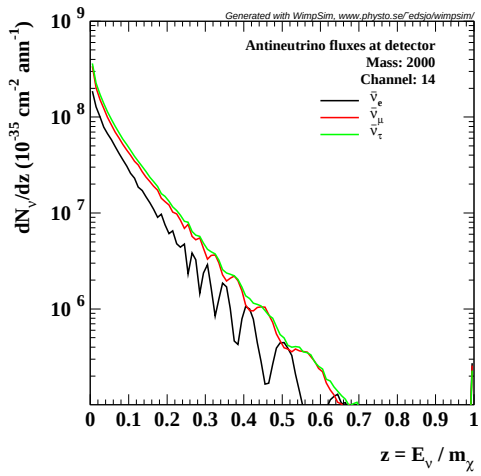




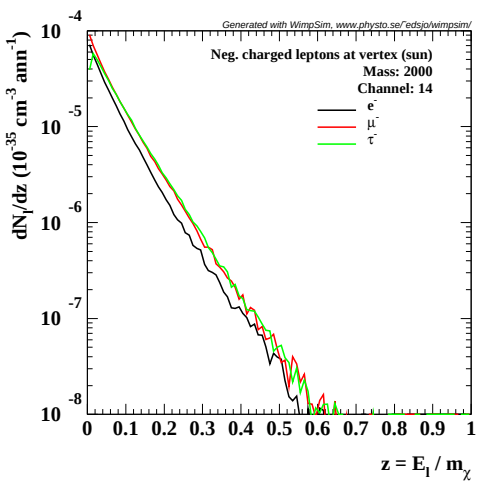
18.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

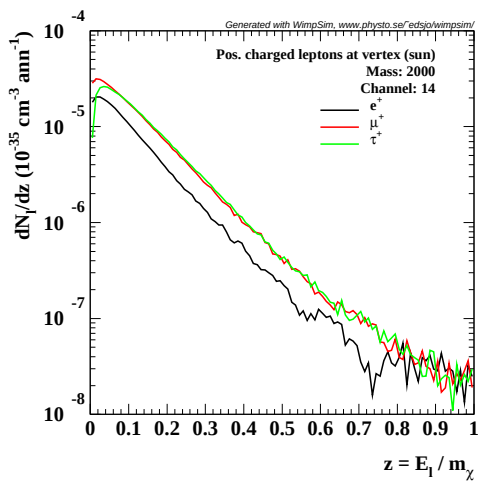
18.13.1 Neutrino fluxes at detector (Sun)



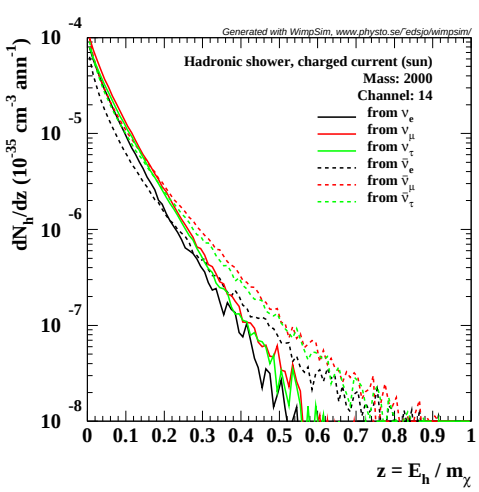


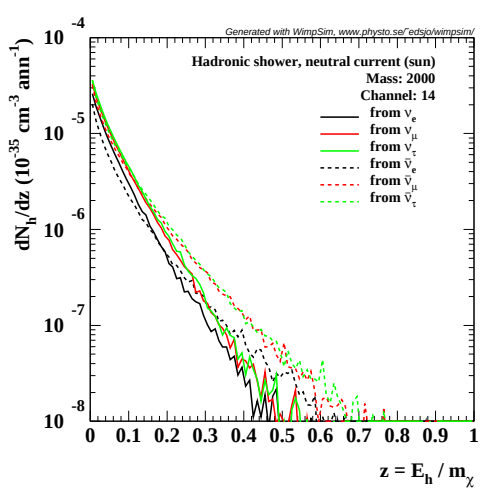
18.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



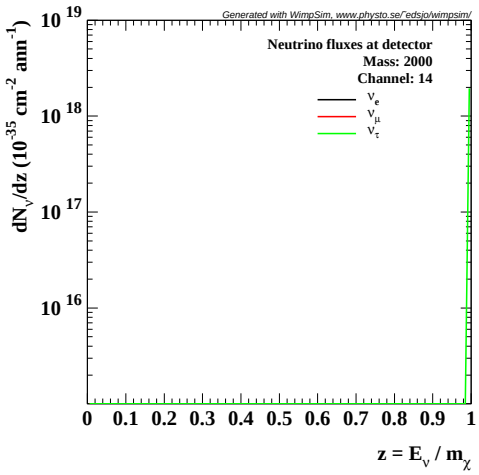


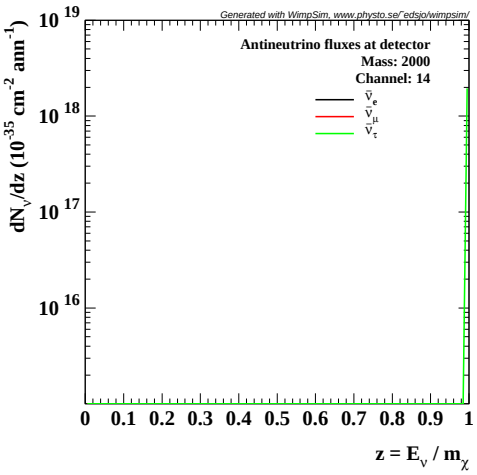
18.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



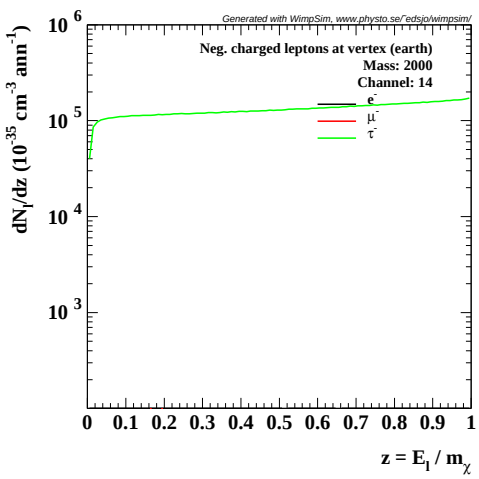


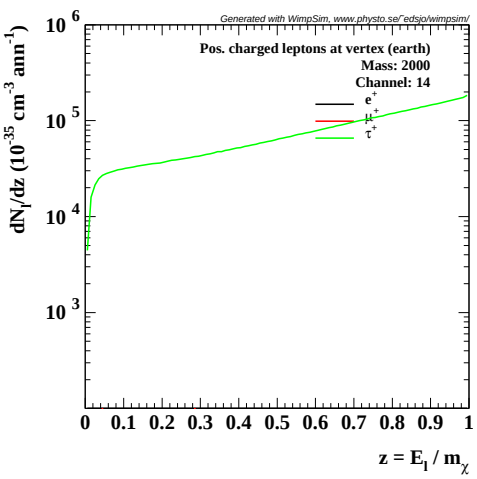
18.13.4 Neutrino fluxes at detector (Earth)



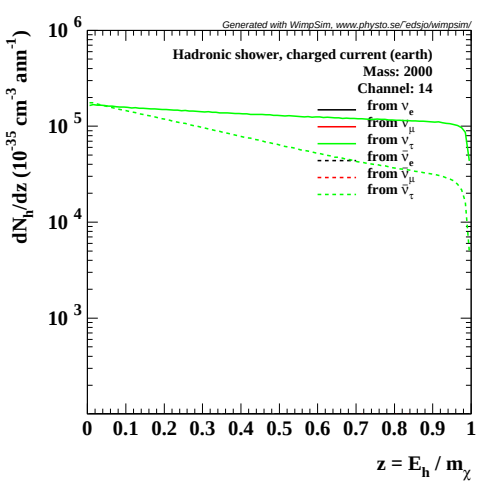


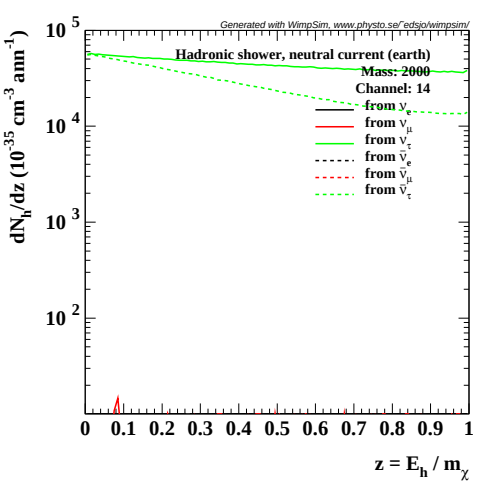
18.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



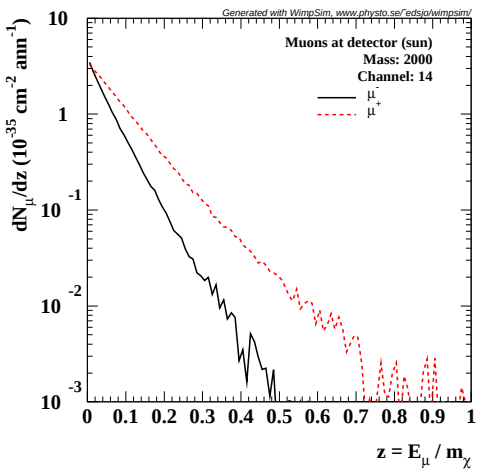


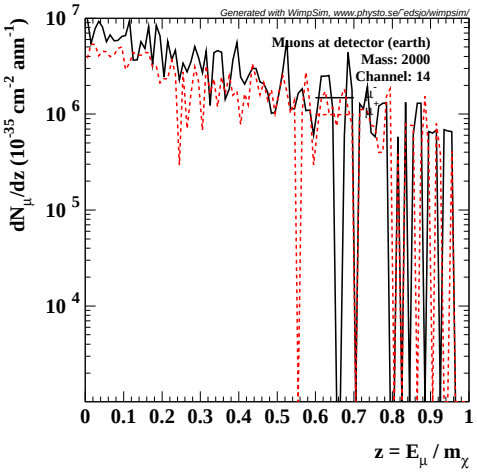
18.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





18.13.7 Muons at detector (Sun/Earth)

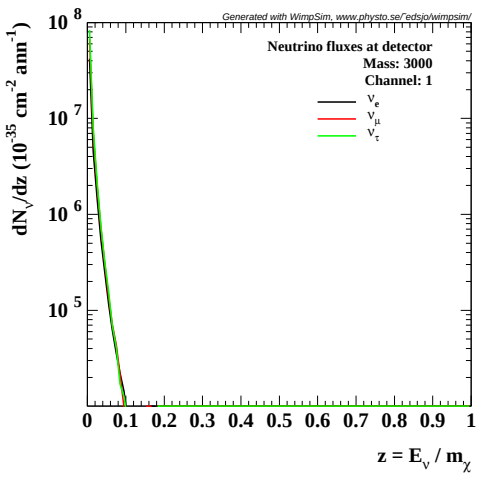


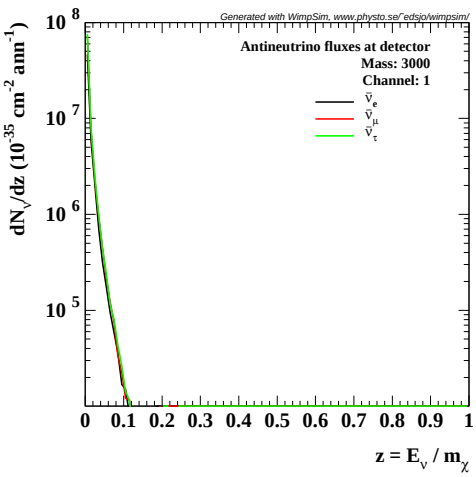


19 Mass 3000

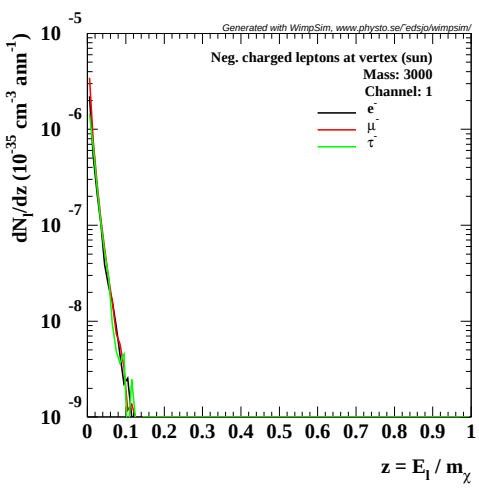
19.1 Channel 1 – $d\bar{d}$

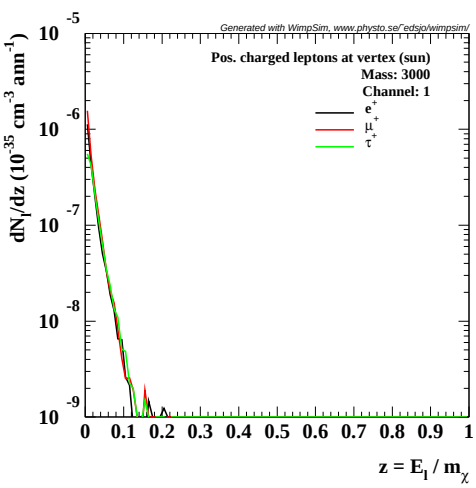
19.1.1 Neutrino fluxes at detector (Sun)



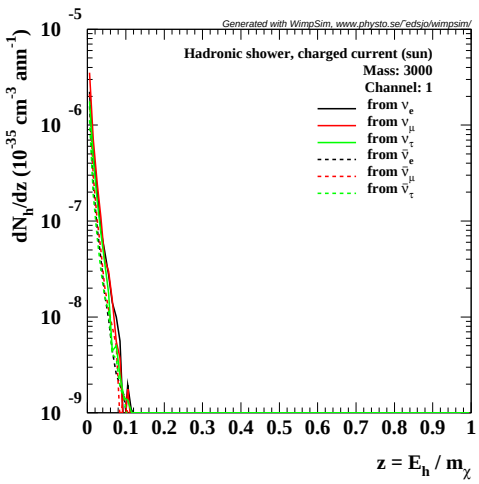


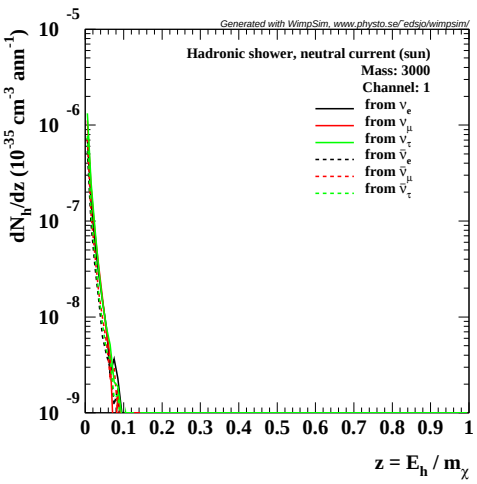
19.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



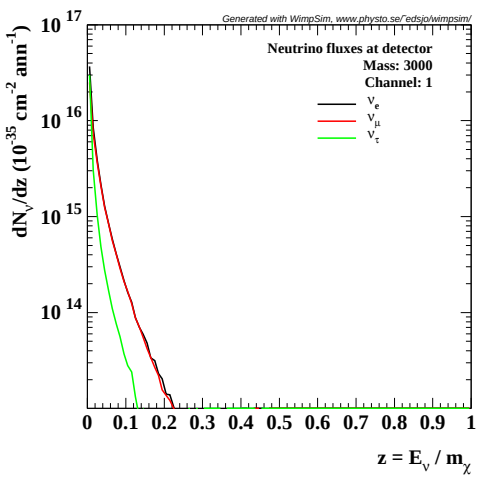


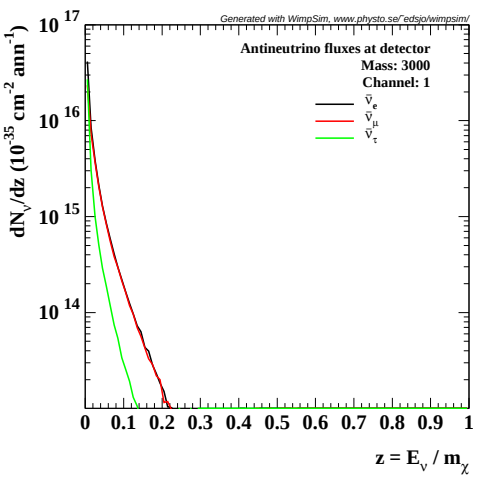
19.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



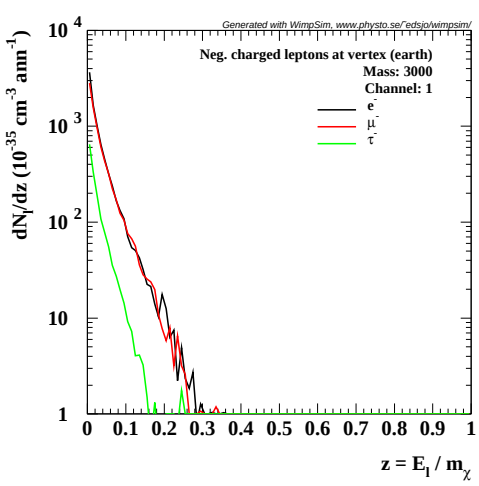


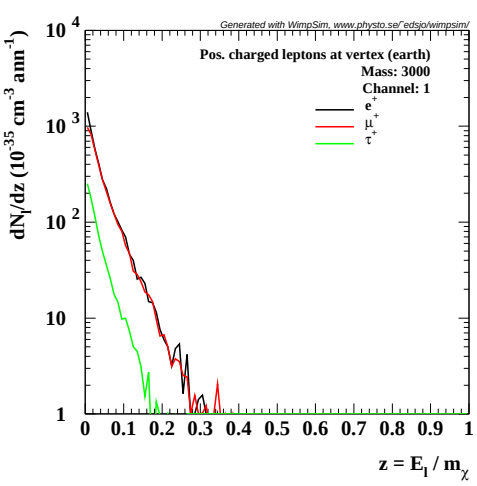
19.1.4 Neutrino fluxes at detector (Earth)



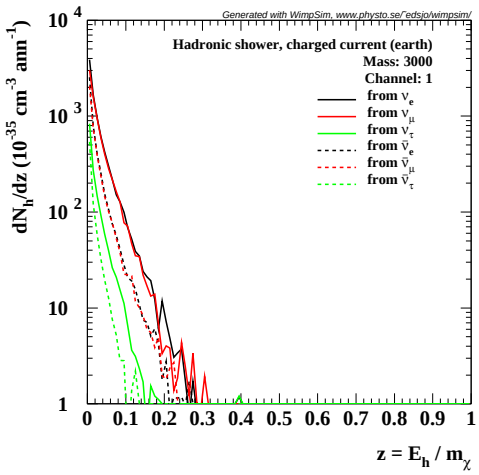


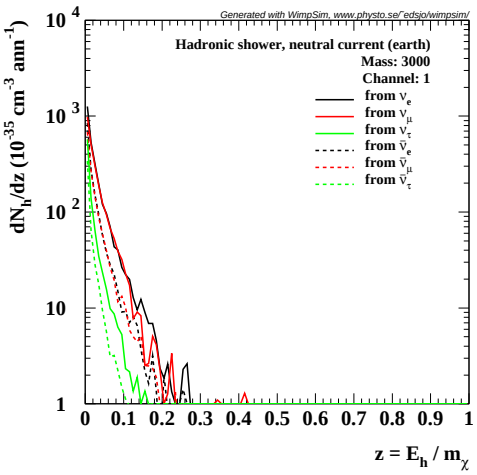
19.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



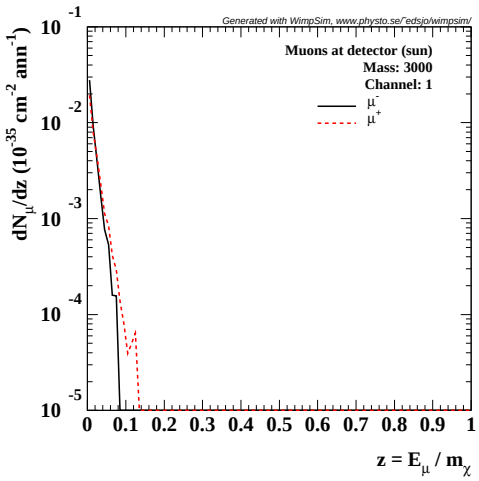


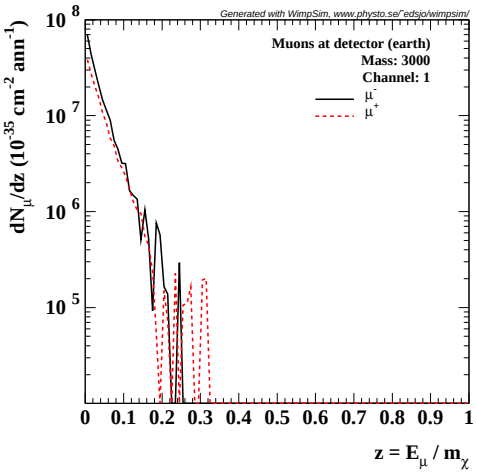
19.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





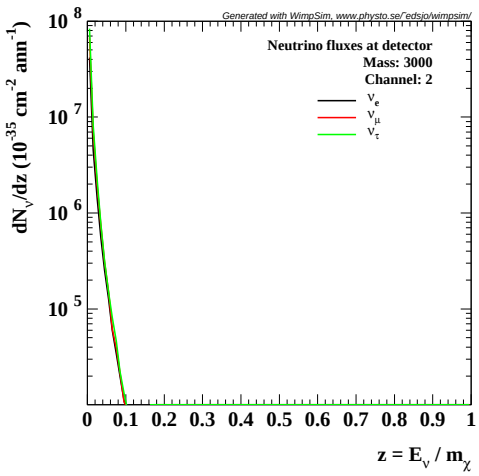
19.1.7 Muons at detector (Sun/Earth)

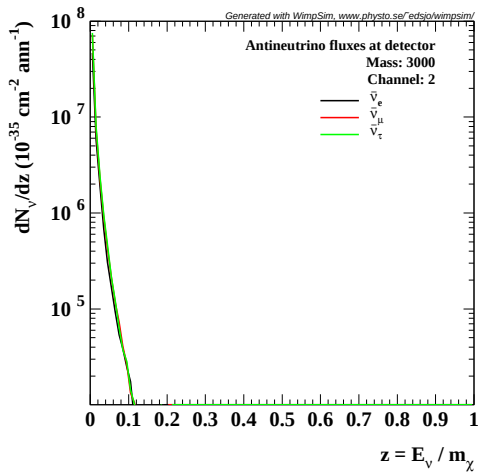




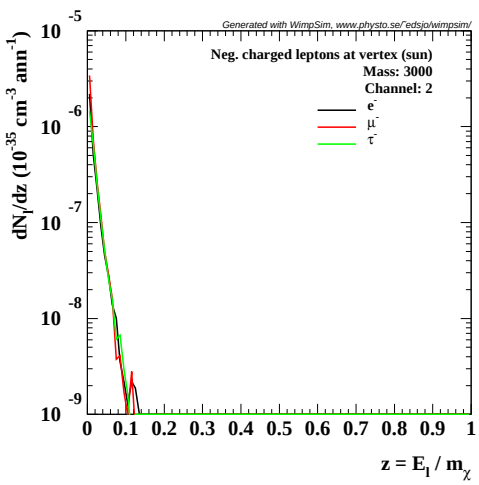
19.2 Channel 2 – $u\bar{u}$

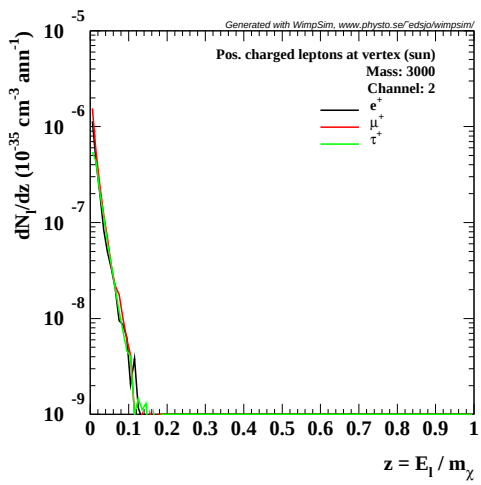
19.2.1 Neutrino fluxes at detector (Sun)



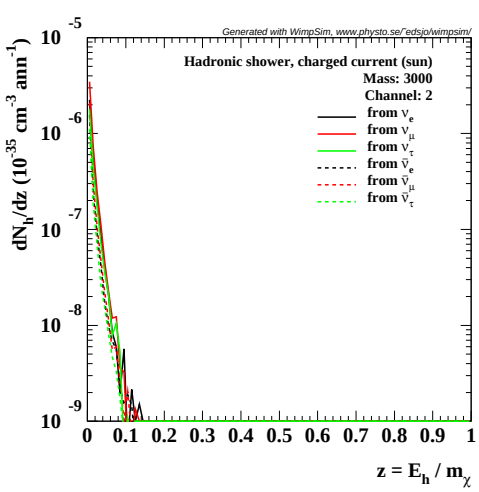


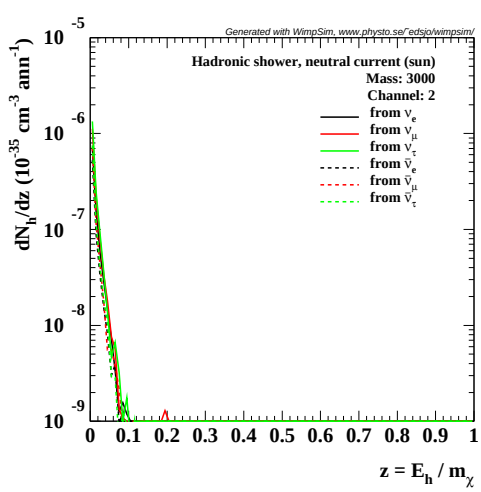
19.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



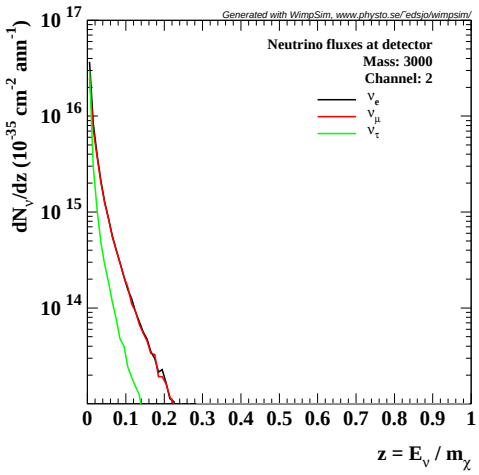


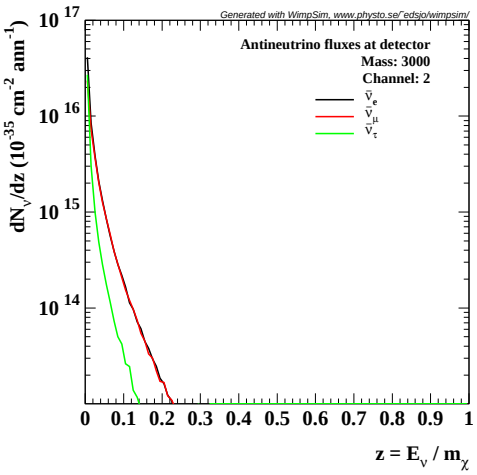
19.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



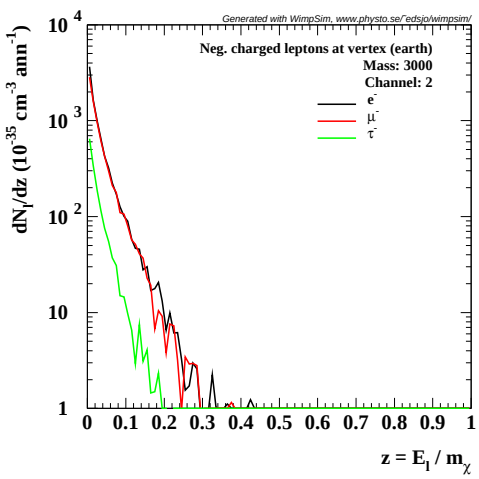


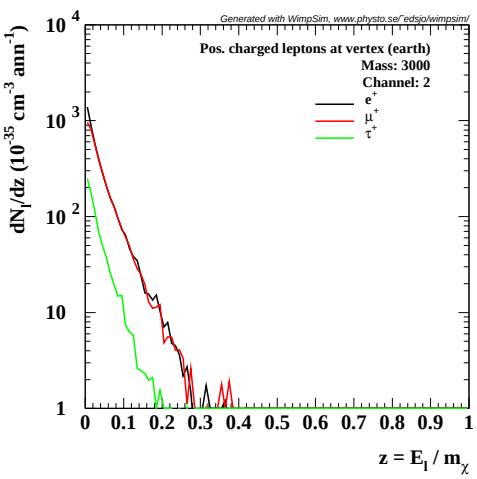
19.2.4 Neutrino fluxes at detector (Earth)



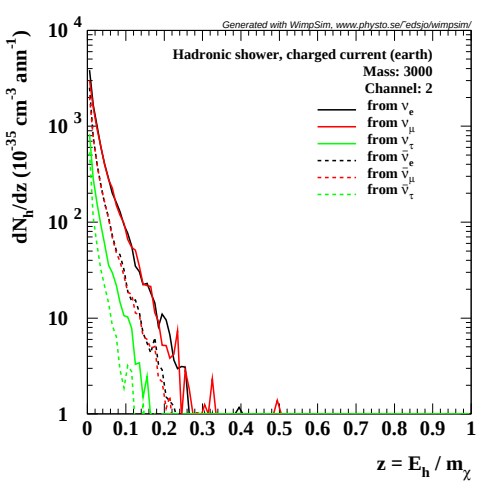


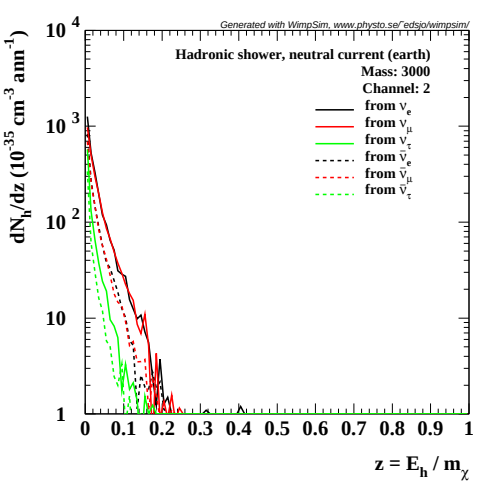
19.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



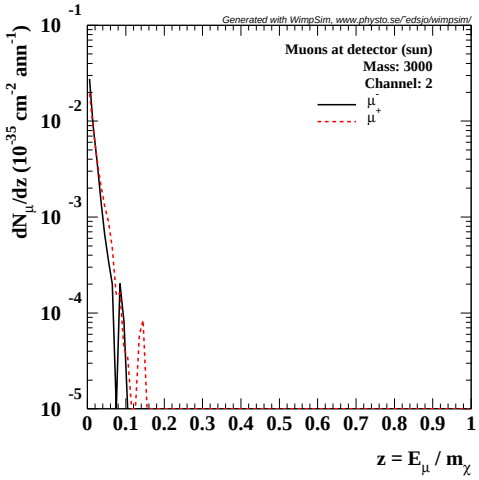


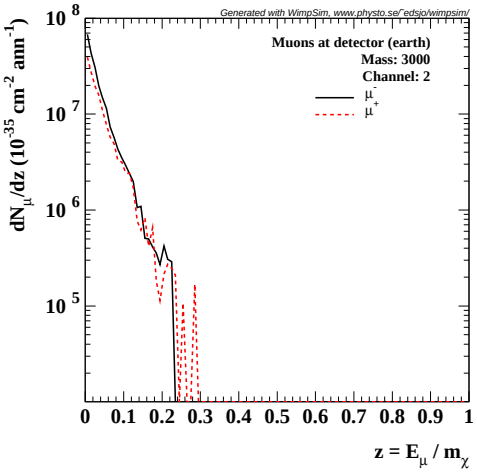
19.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





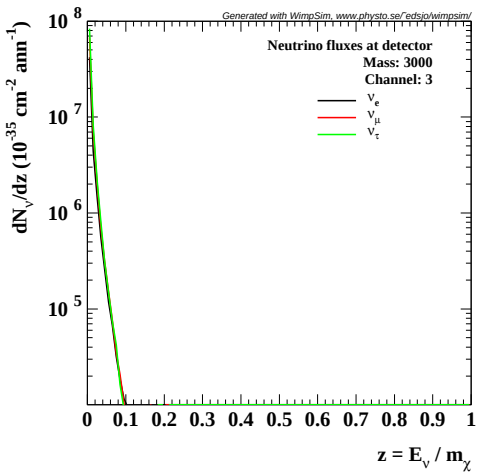
19.2.7 Muons at detector (Sun/Earth)

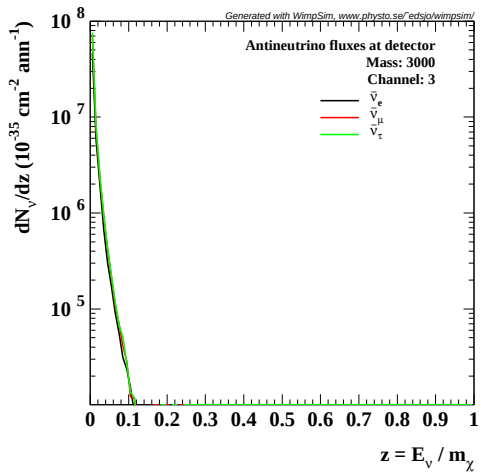




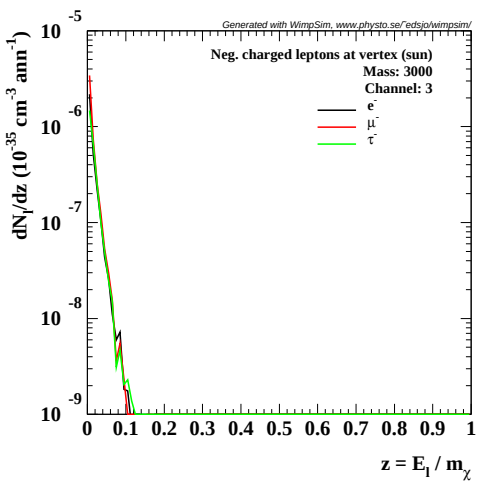
19.3 Channel 3 – $s\bar{s}$

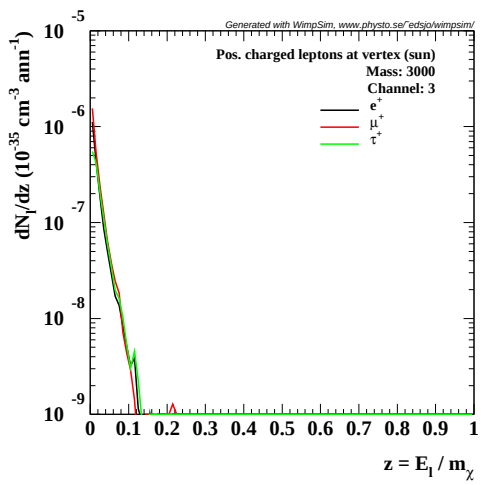
19.3.1 Neutrino fluxes at detector (Sun)



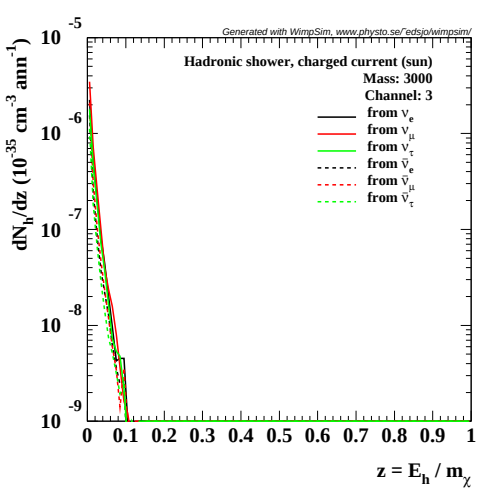


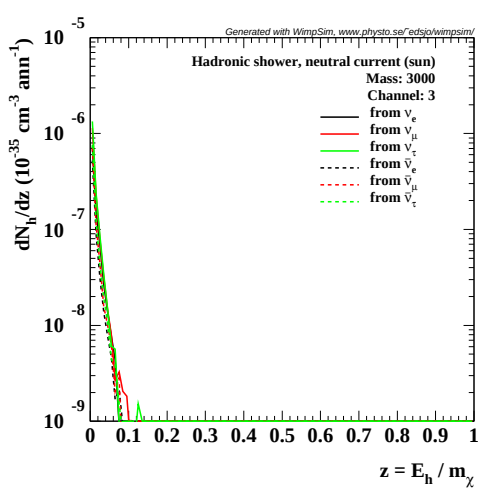
19.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



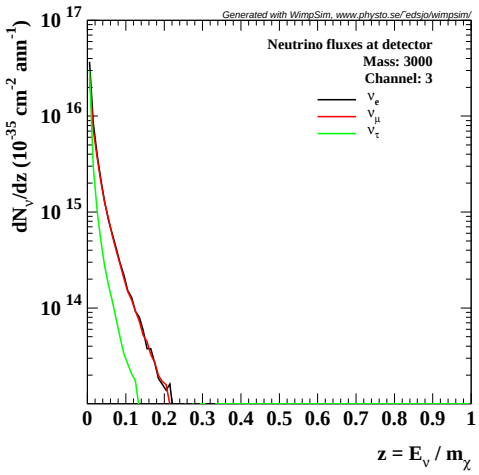


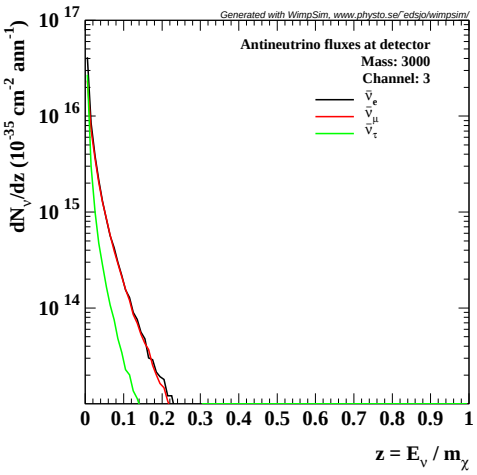
19.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



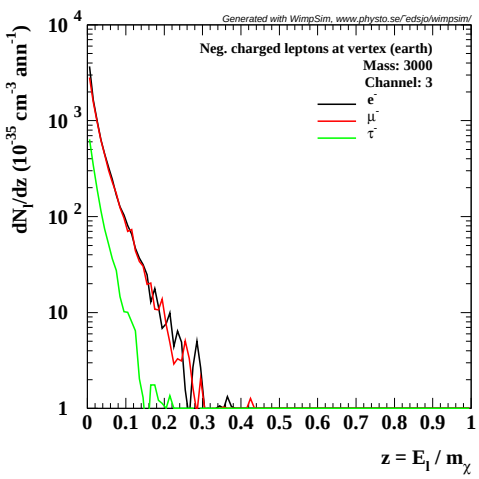


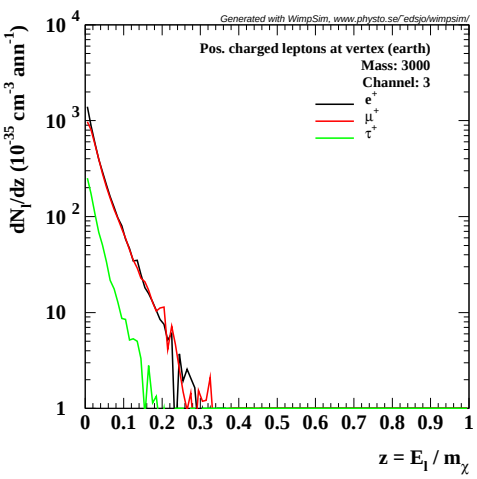
19.3.4 Neutrino fluxes at detector (Earth)



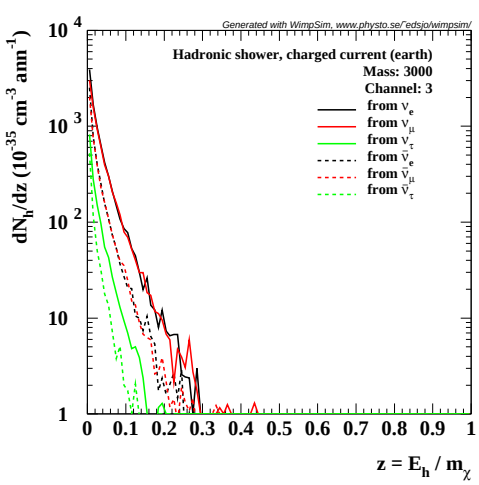


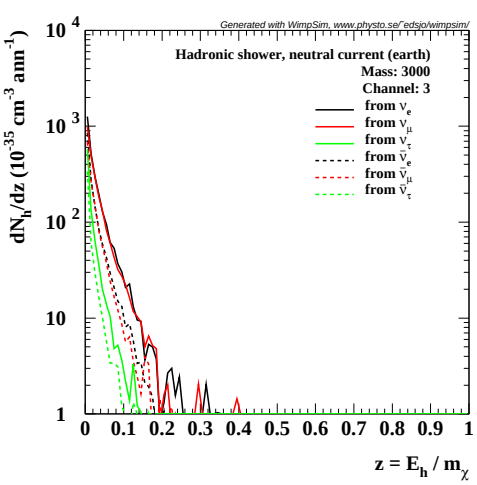
19.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



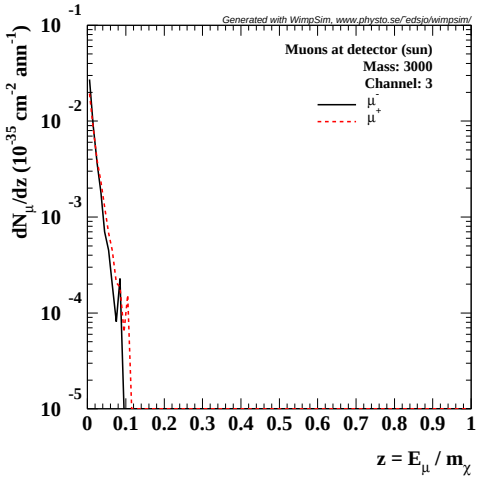


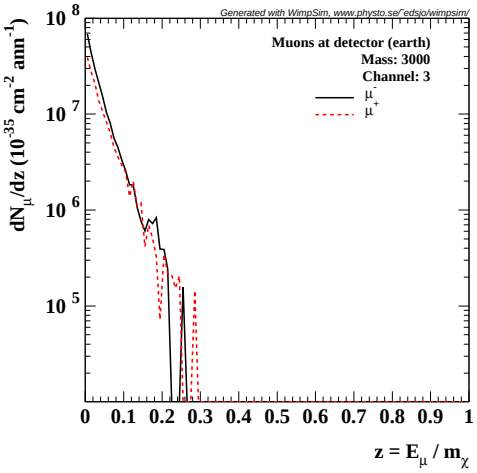
19.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





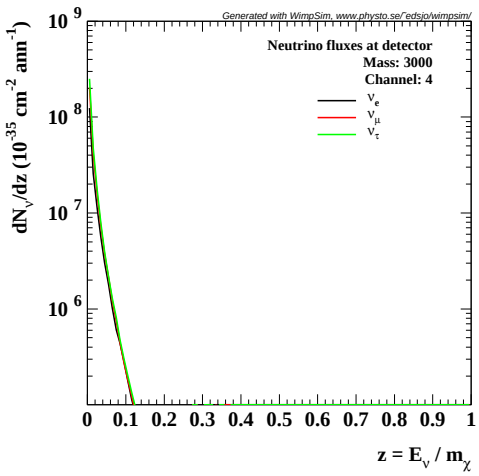
19.3.7 Muons at detector (Sun/Earth)

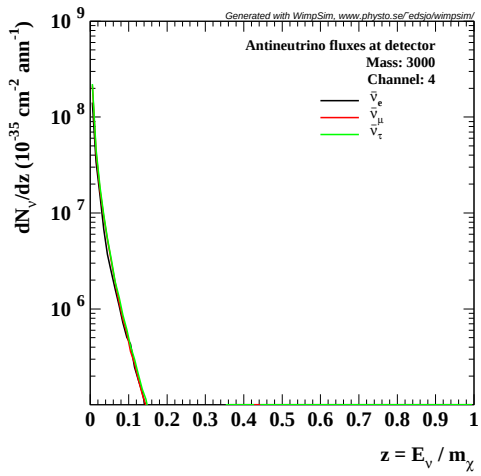




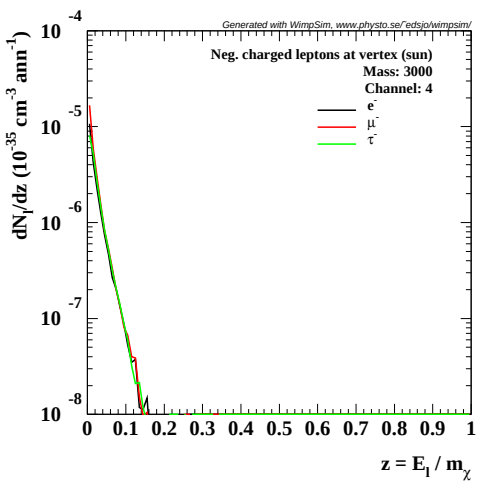
19.4 Channel 4 – $c\bar{c}$

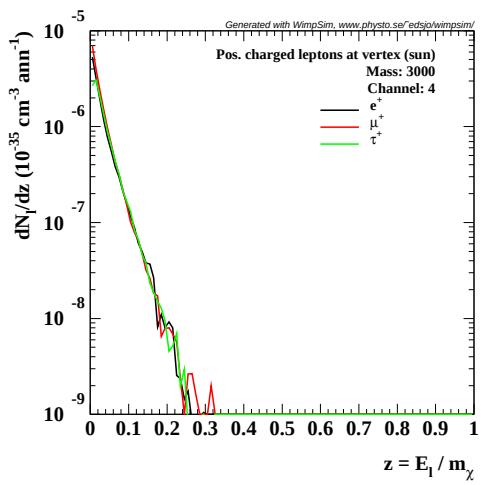
19.4.1 Neutrino fluxes at detector (Sun)



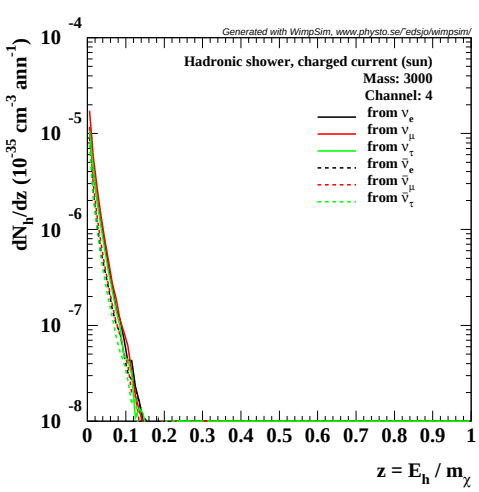


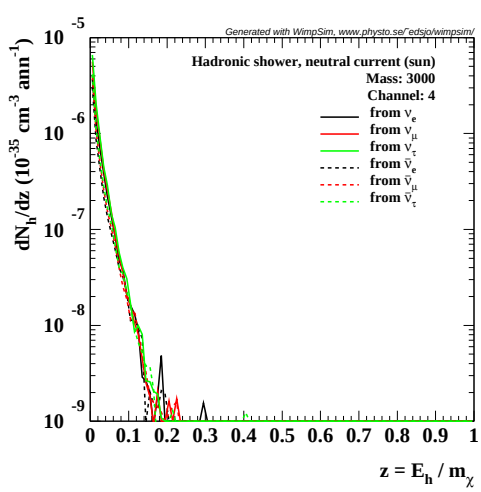
19.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



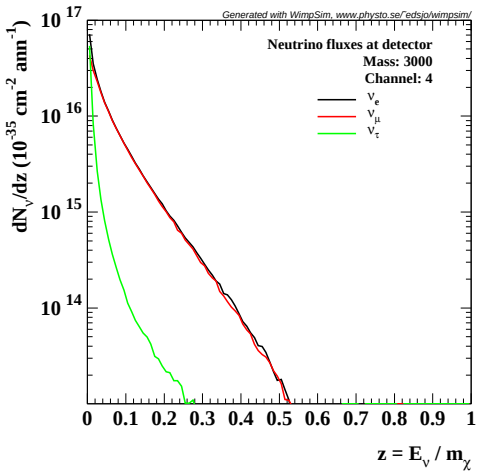


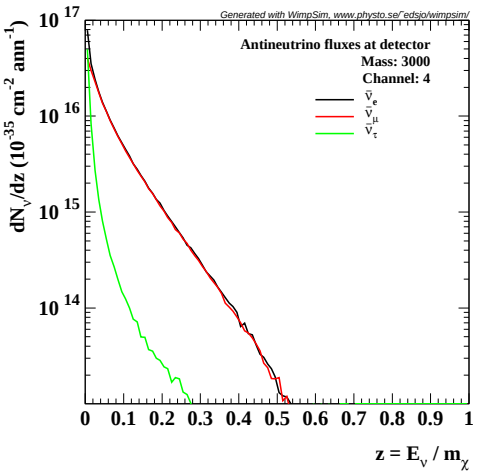
19.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



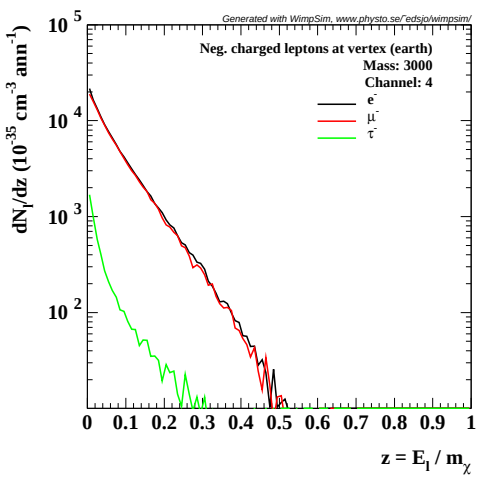


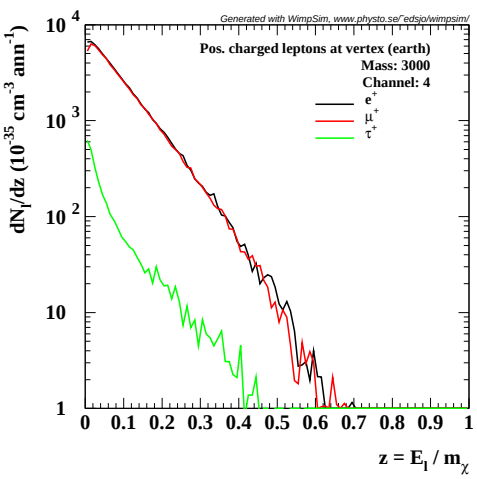
19.4.4 Neutrino fluxes at detector (Earth)



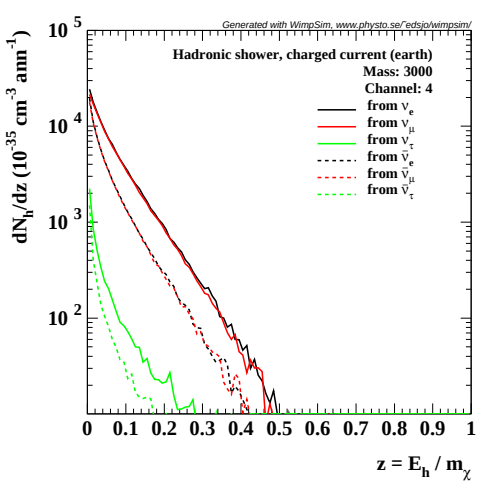


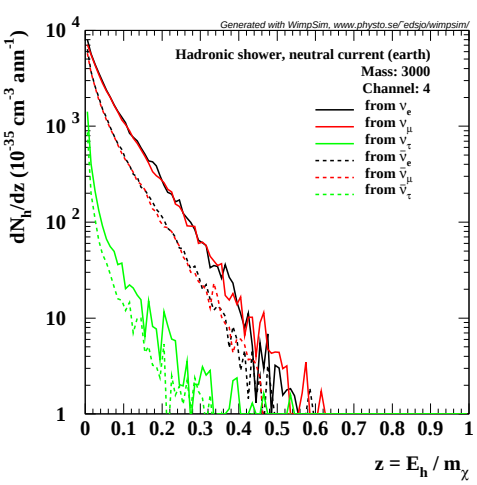
19.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



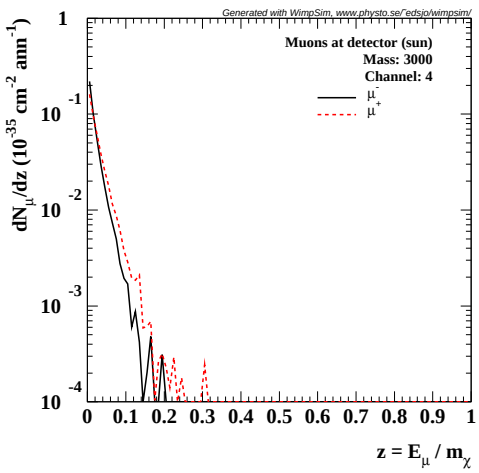


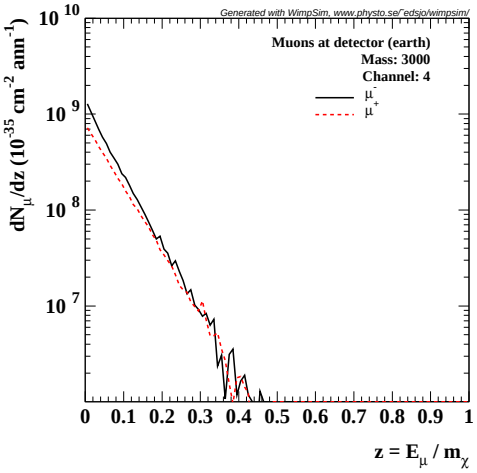
19.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





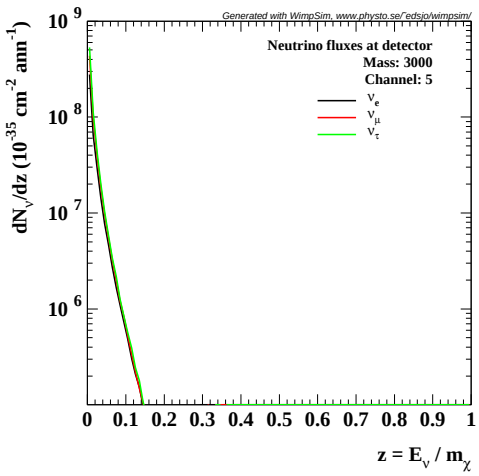
19.4.7 Muons at detector (Sun/Earth)

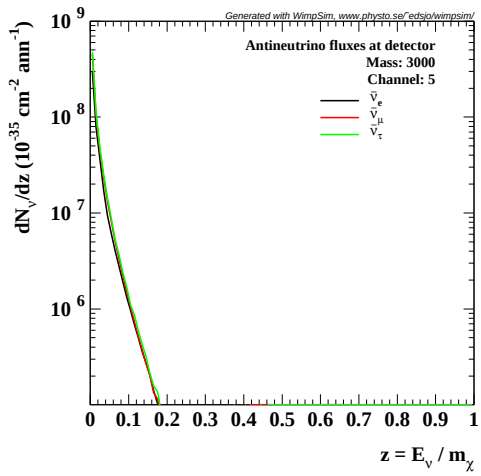




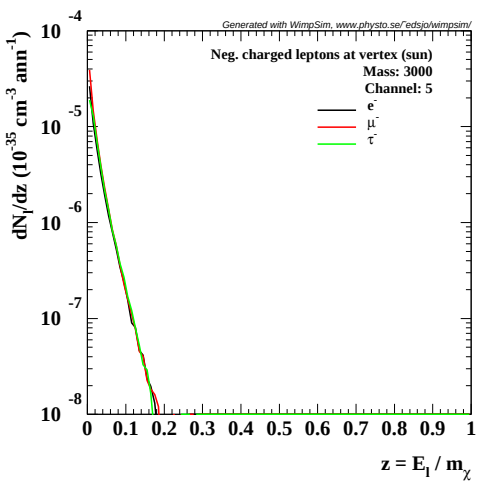
19.5 Channel 5 – $b\bar{b}$

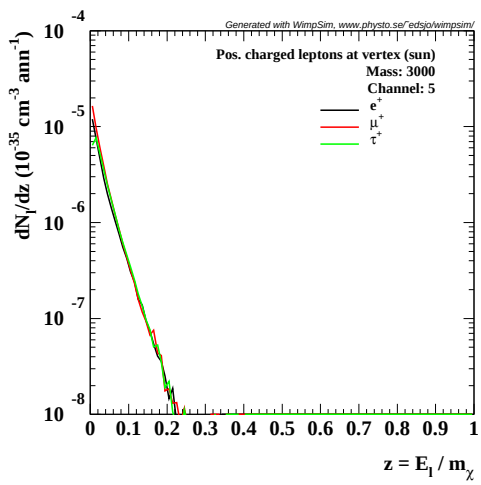
19.5.1 Neutrino fluxes at detector (Sun)



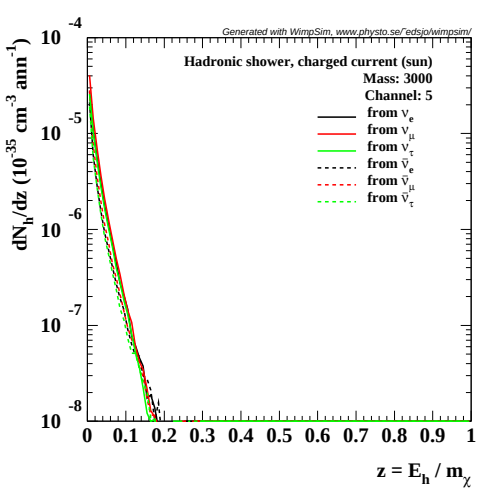


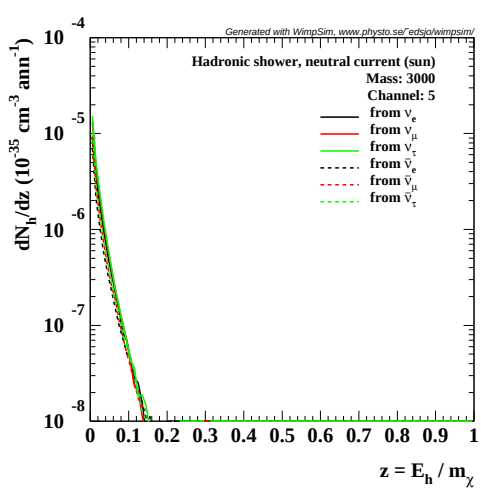
19.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



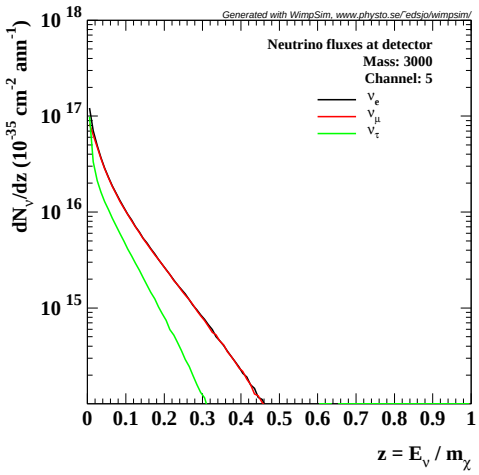


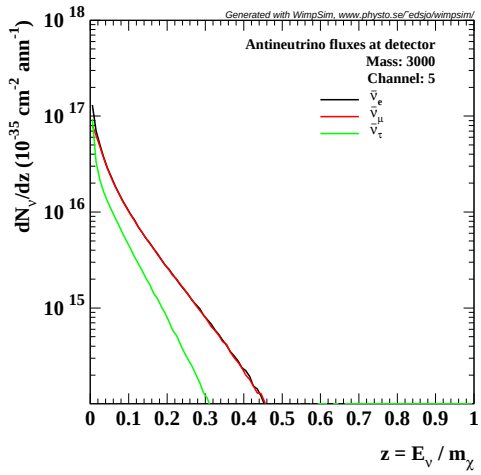
19.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



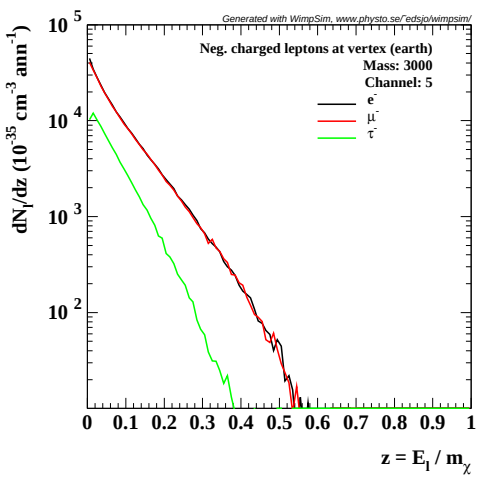


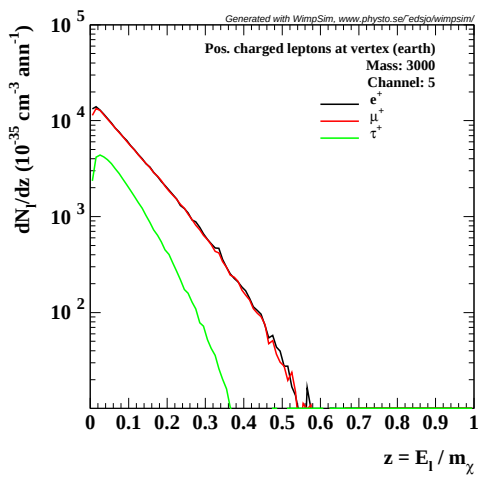
19.5.4 Neutrino fluxes at detector (Earth)



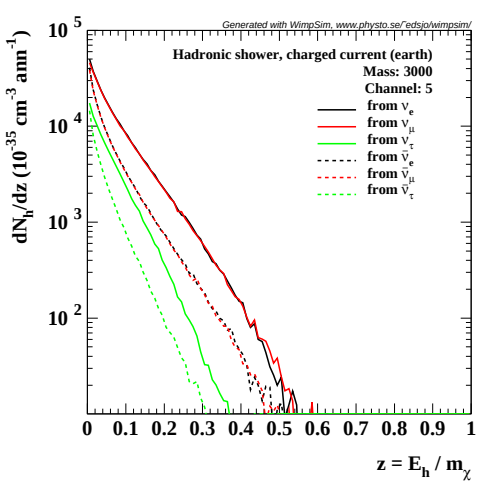


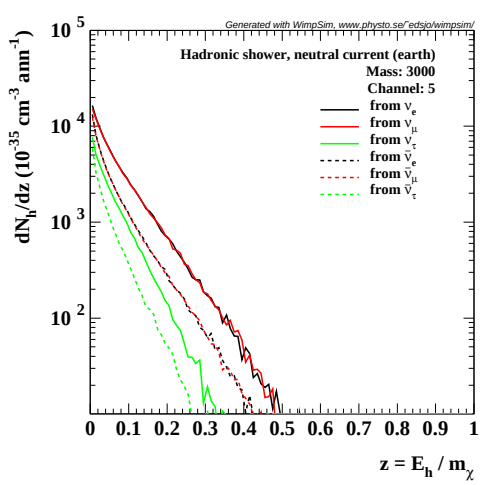
19.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



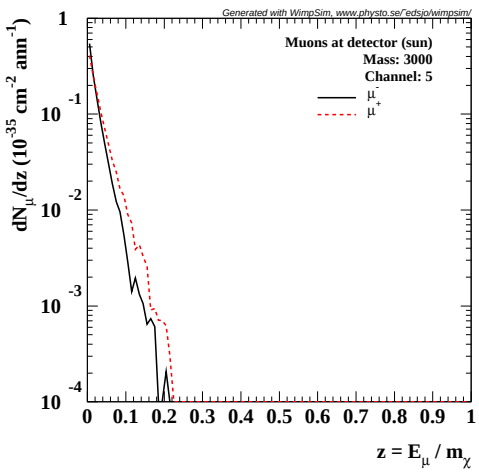


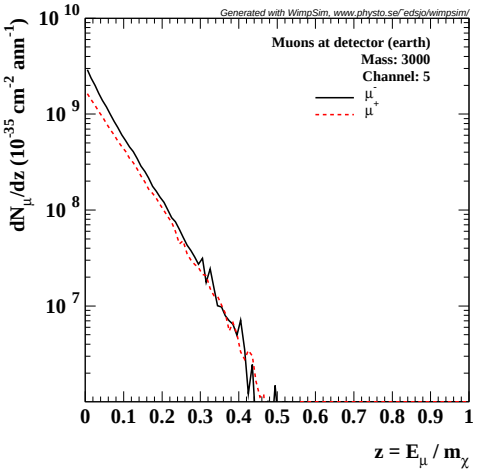
19.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





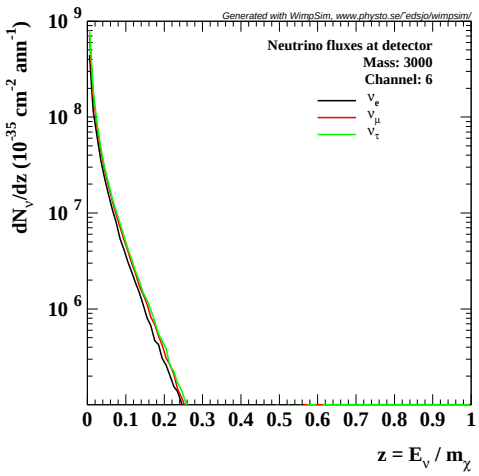
19.5.7 Muons at detector (Sun/Earth)

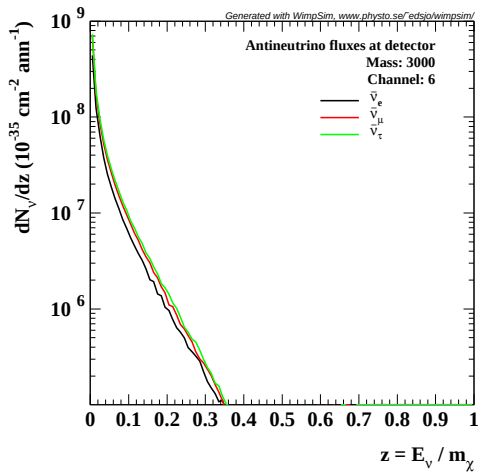




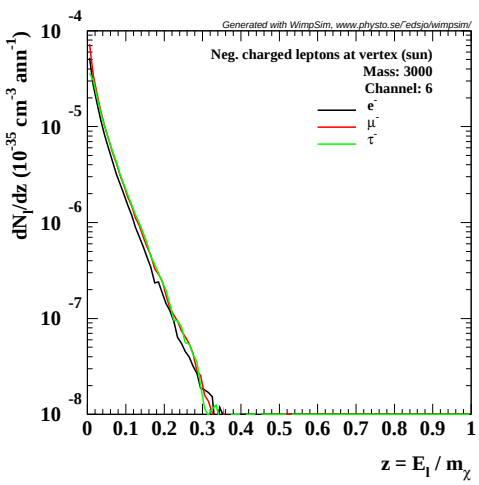
19.6 Channel 6 – $t\bar{t}$

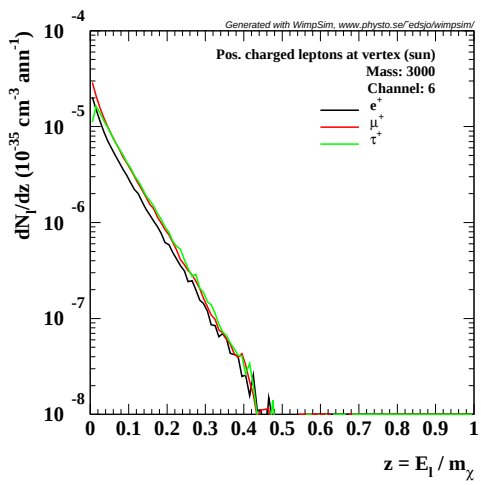
19.6.1 Neutrino fluxes at detector (Sun)



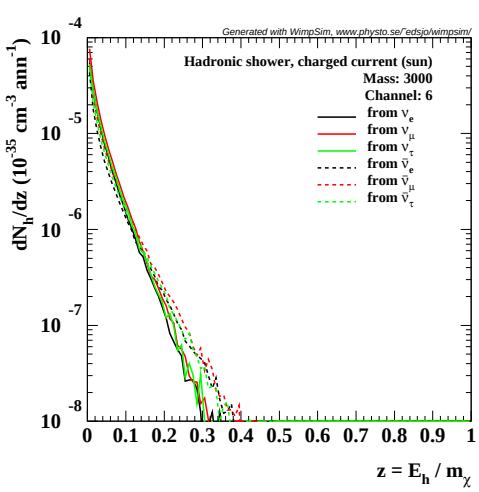


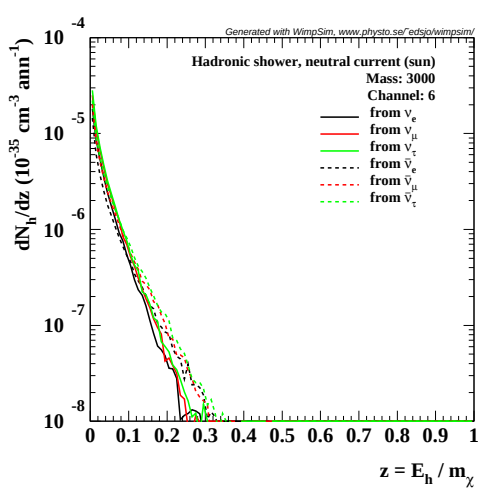
19.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



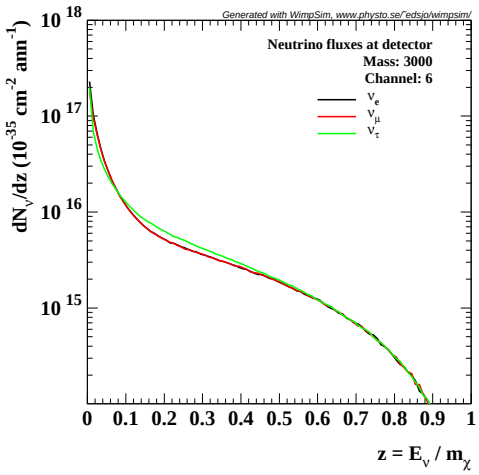


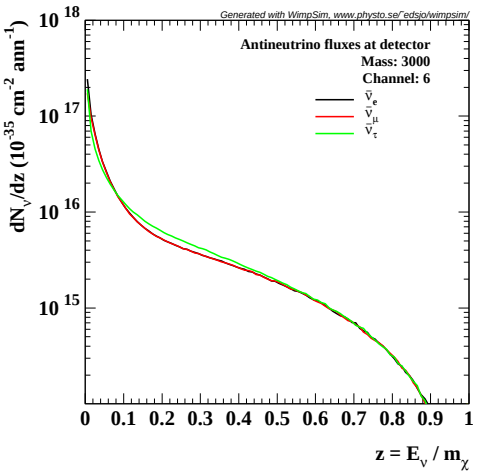
19.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



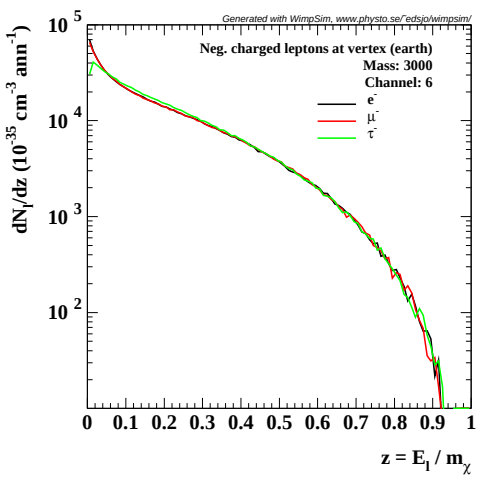


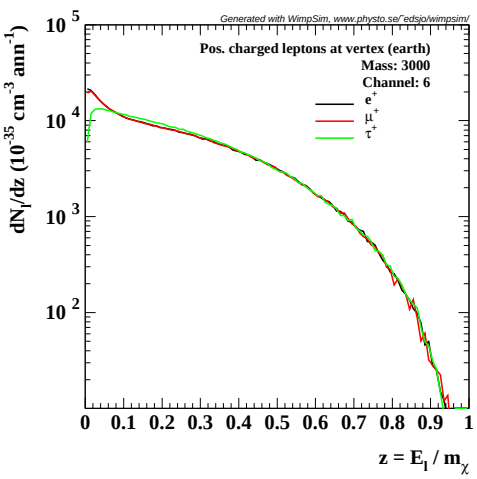
19.6.4 Neutrino fluxes at detector (Earth)



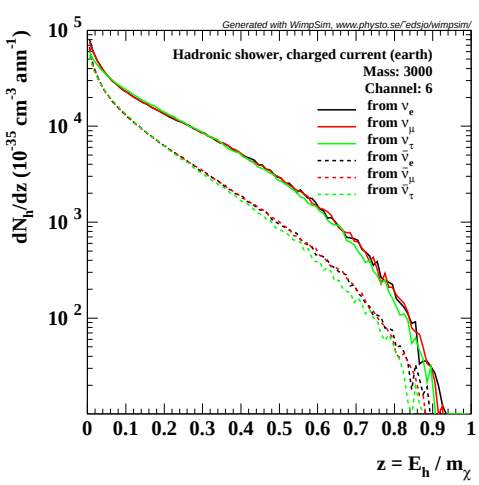


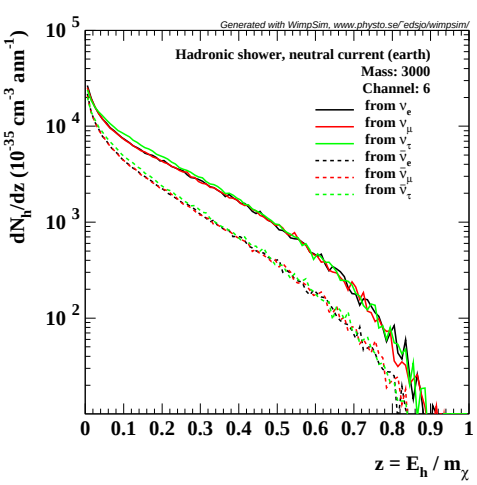
19.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



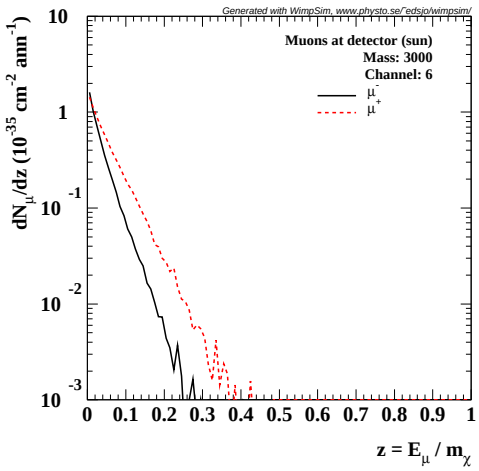


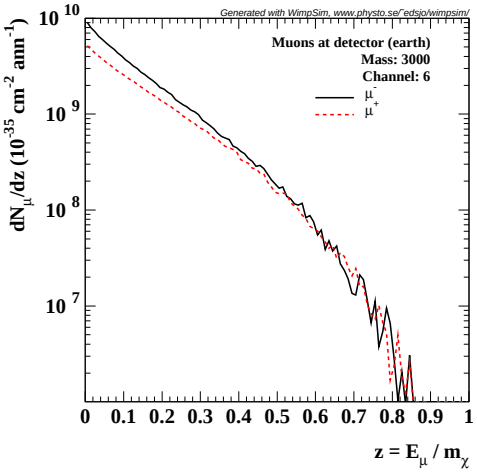
19.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





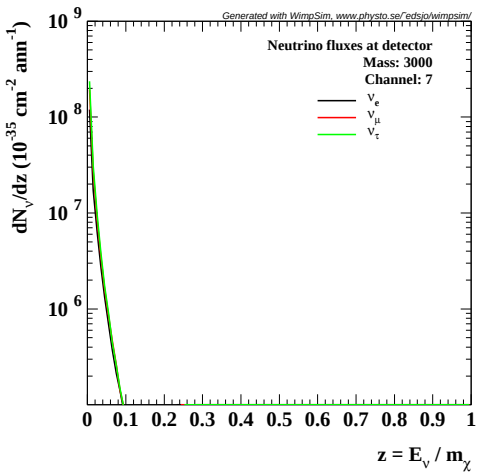
19.6.7 Muons at detector (Sun/Earth)

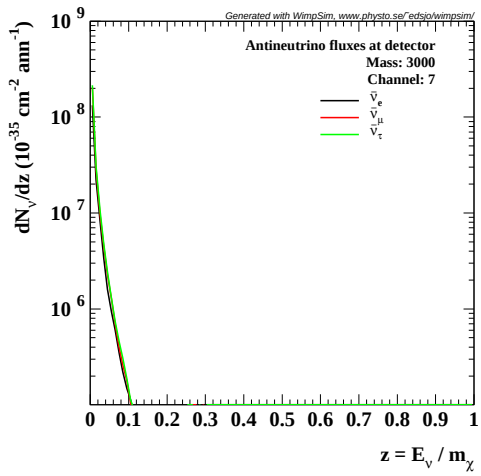




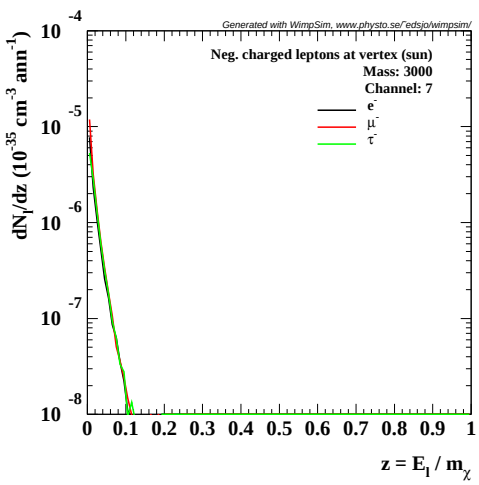
19.7 Channel 7 – gg

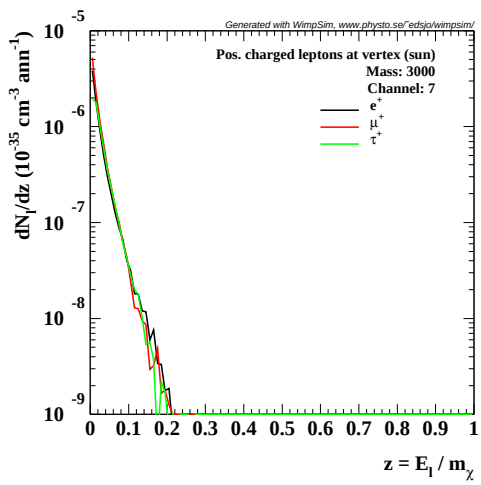
19.7.1 Neutrino fluxes at detector (Sun)



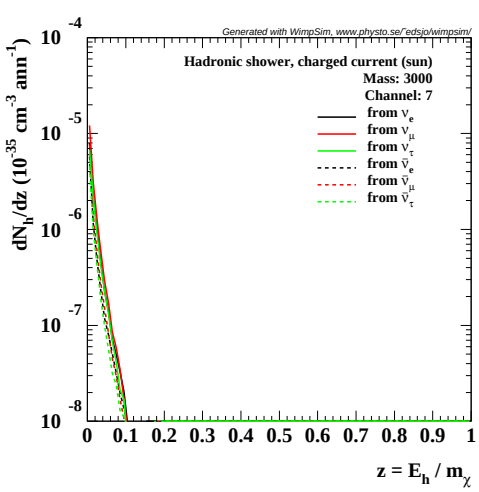


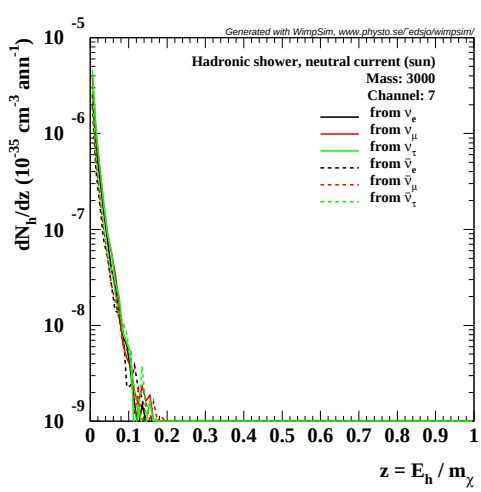
19.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



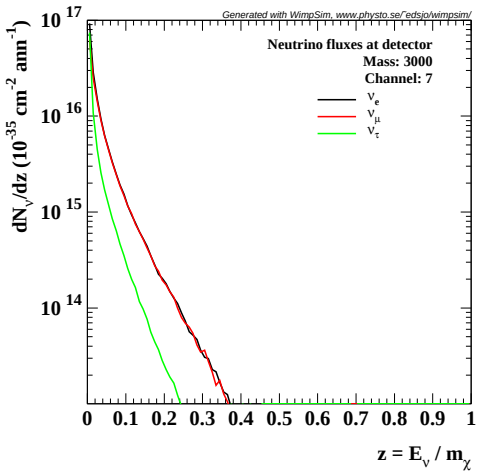


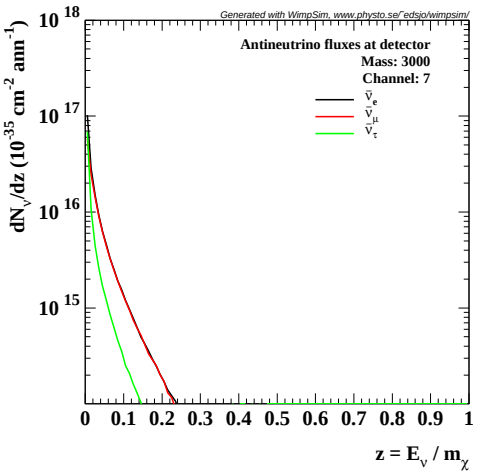
19.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



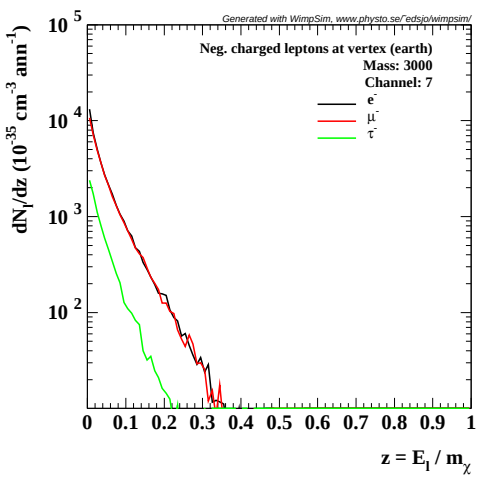


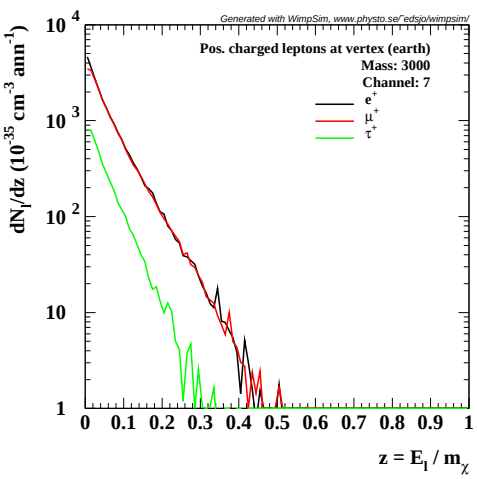
19.7.4 Neutrino fluxes at detector (Earth)



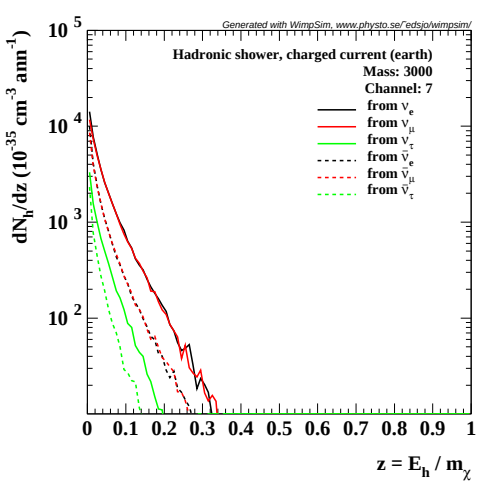


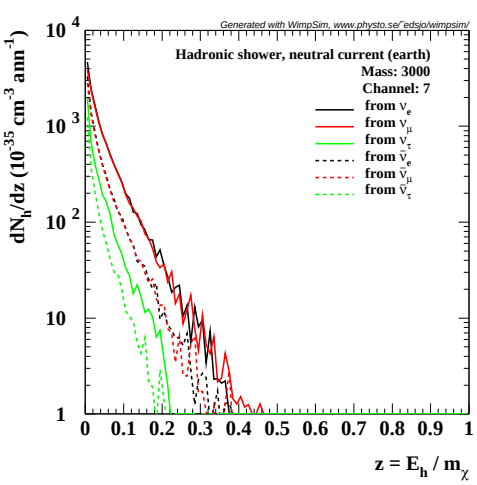
19.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



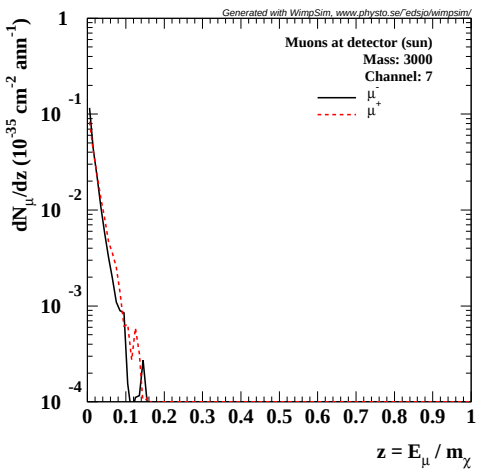


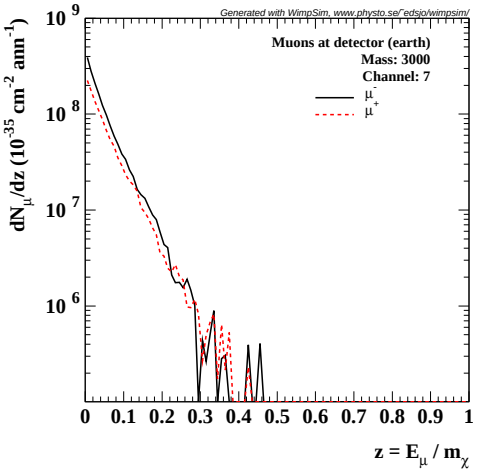
19.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





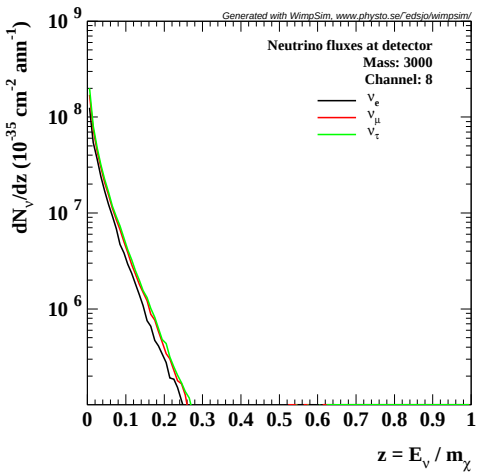
19.7.7 Muons at detector (Sun/Earth)

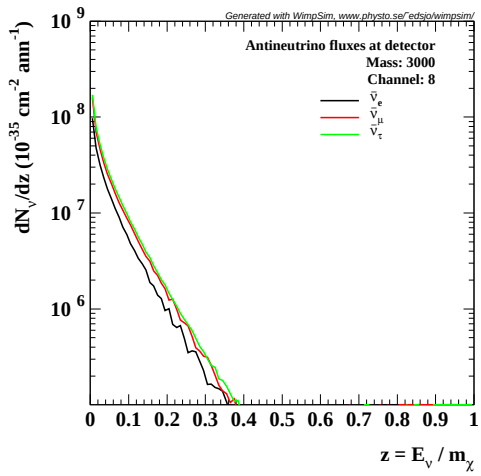




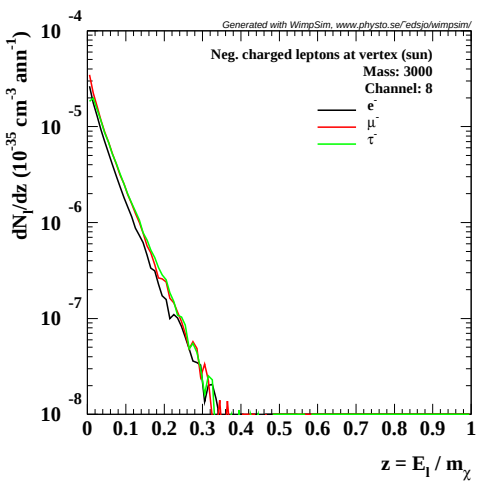
19.8 Channel 8 – W^-W^+

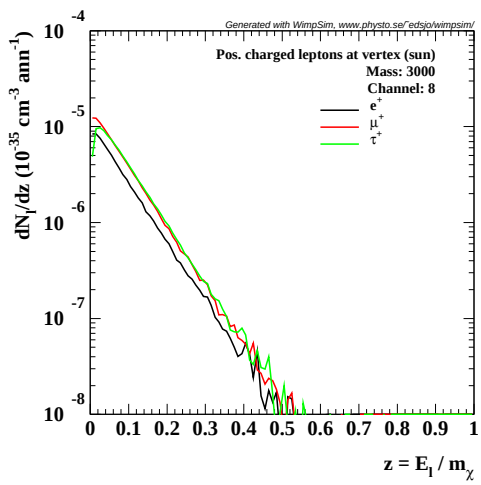
19.8.1 Neutrino fluxes at detector (Sun)



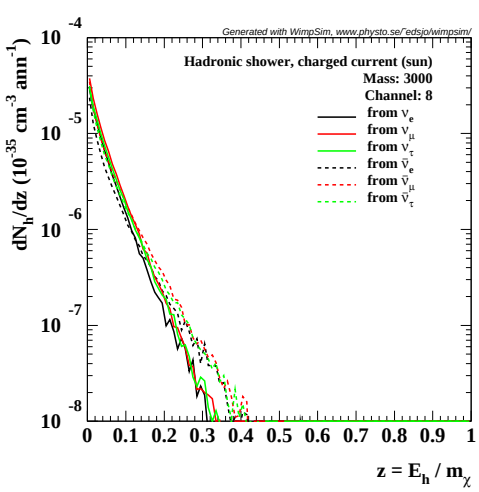


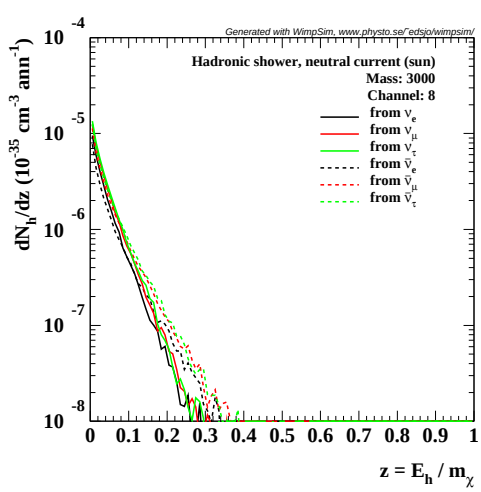
19.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



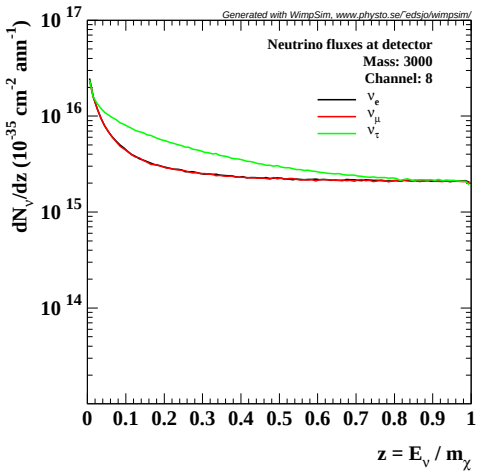


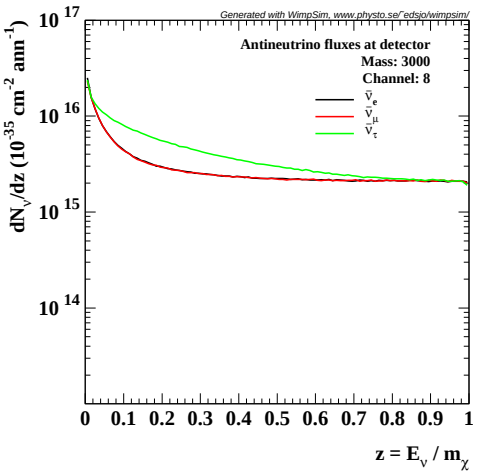
19.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



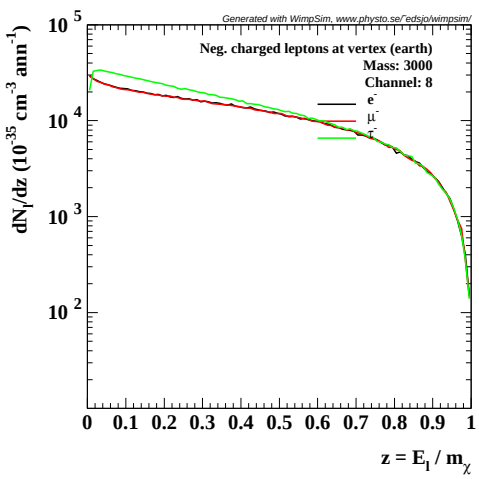


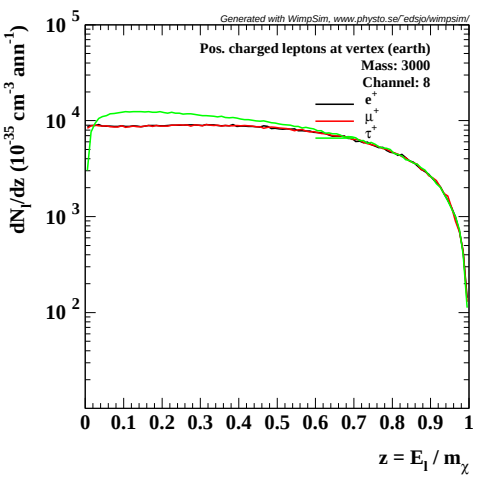
19.8.4 Neutrino fluxes at detector (Earth)



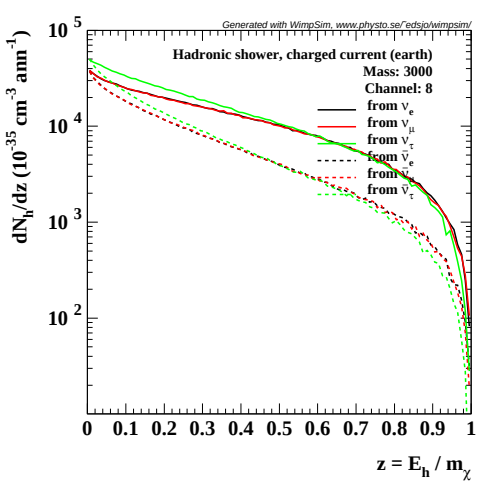


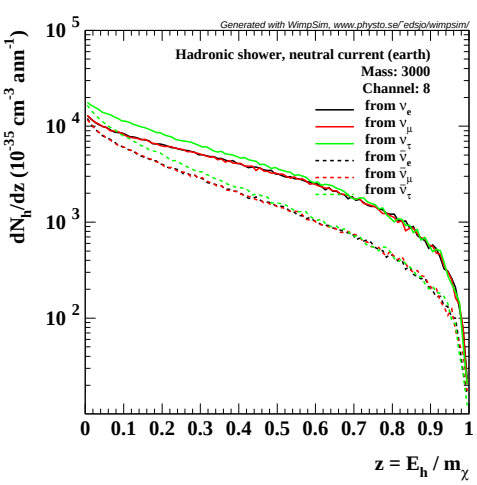
19.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



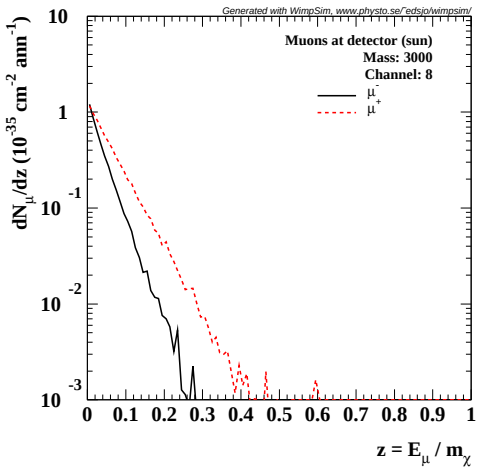


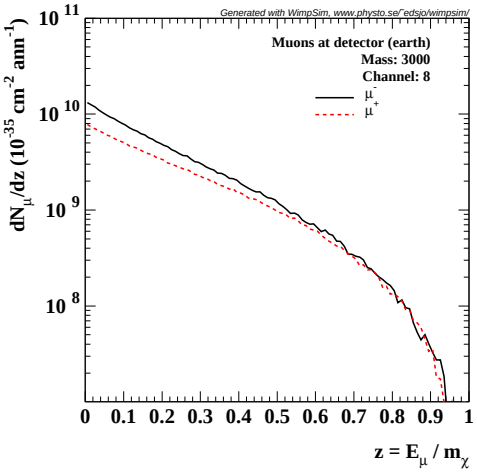
19.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





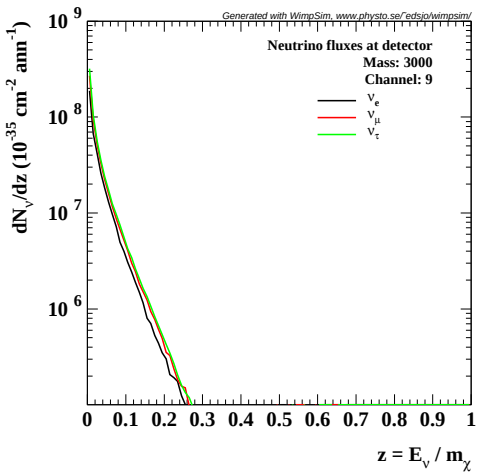
19.8.7 Muons at detector (Sun/Earth)

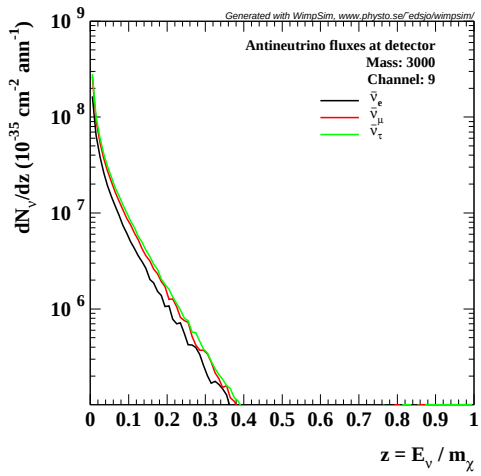




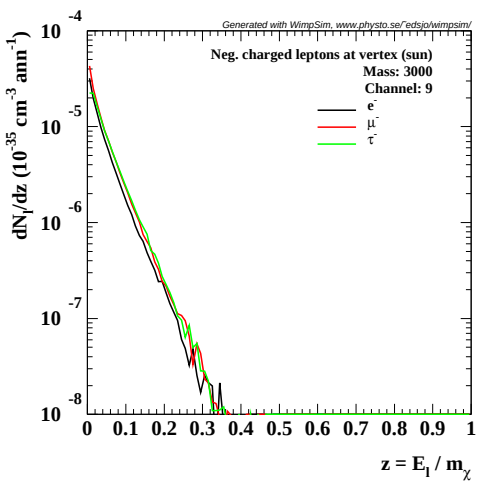
19.9 Channel 9 – $Z^0 Z^0$

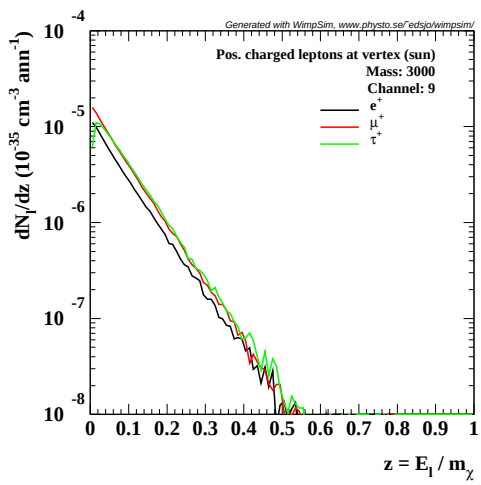
19.9.1 Neutrino fluxes at detector (Sun)



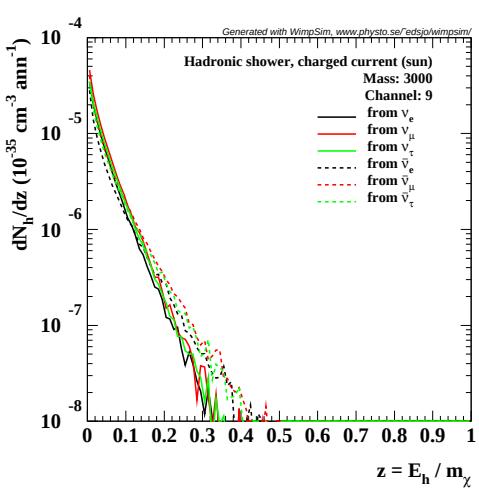


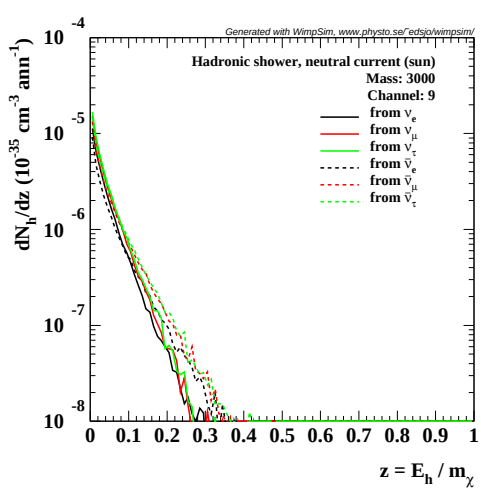
19.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



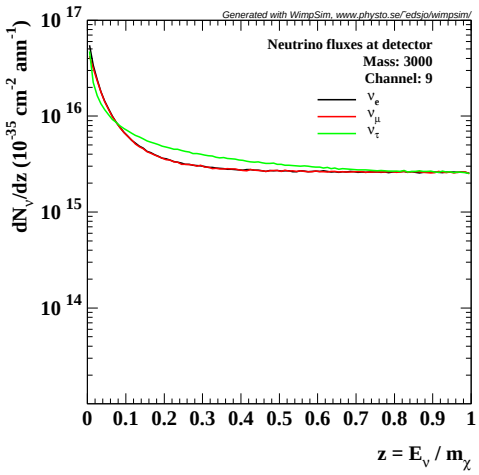


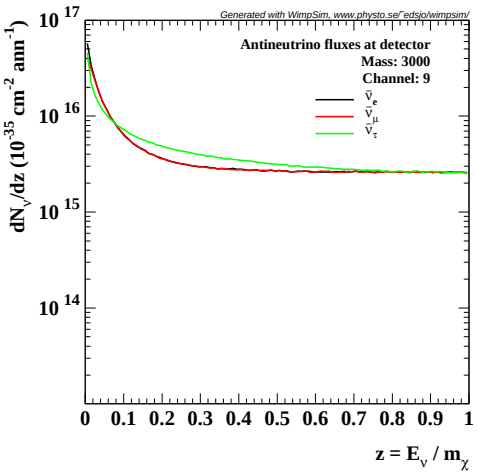
19.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



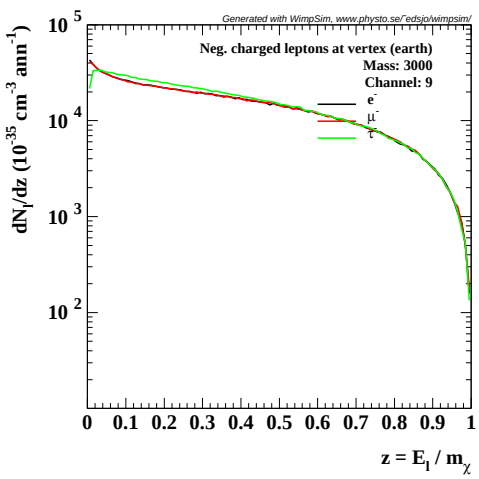


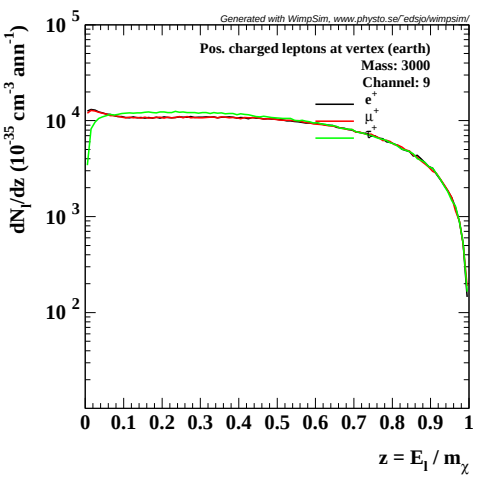
19.9.4 Neutrino fluxes at detector (Earth)



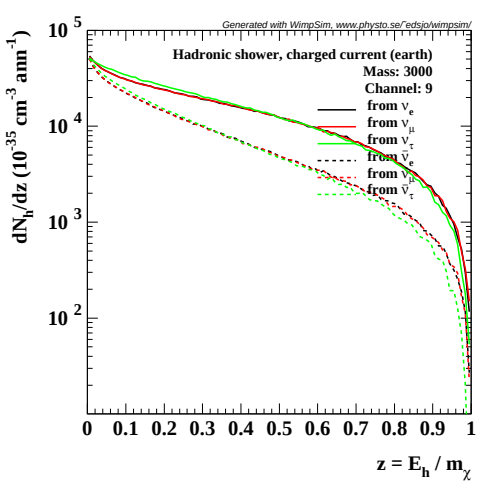


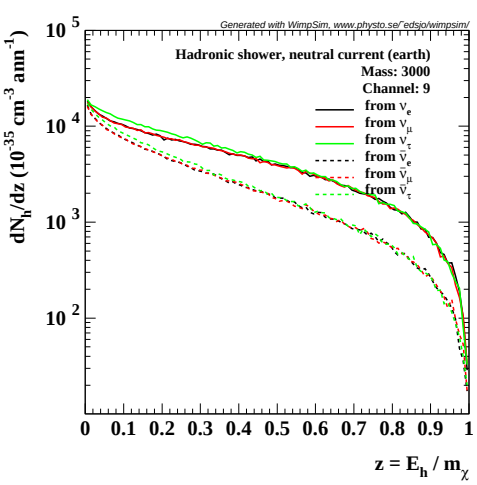
19.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



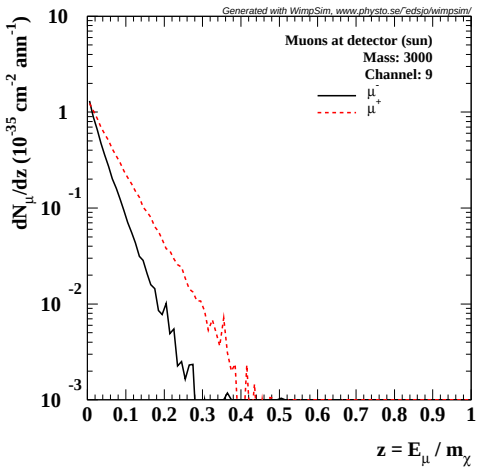


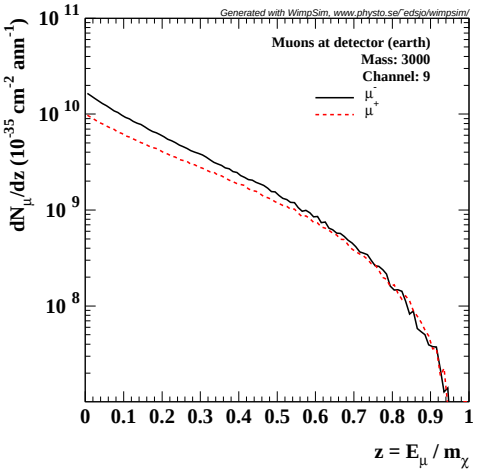
19.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





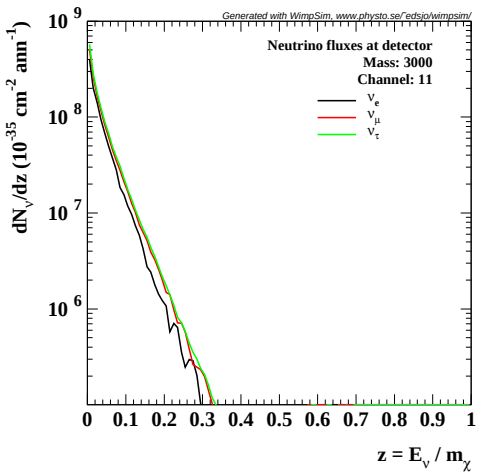
19.9.7 Muons at detector (Sun/Earth)

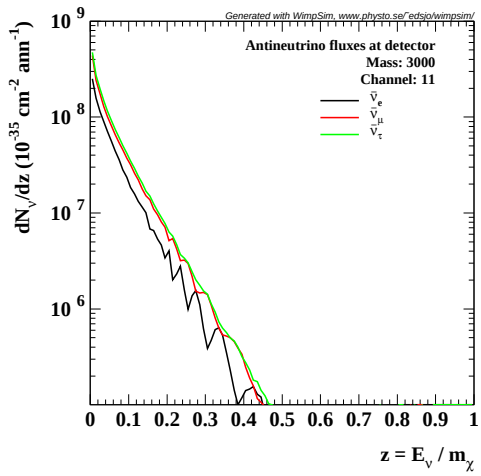




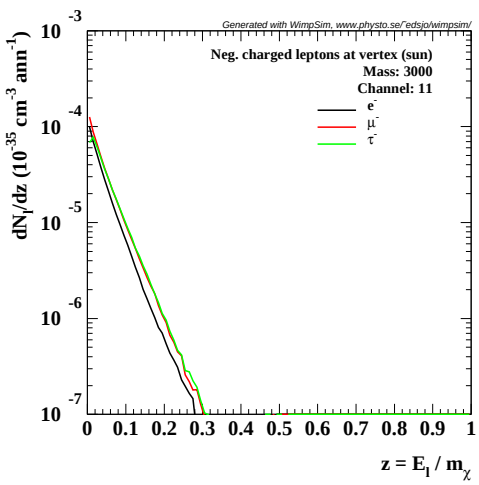
19.10 Channel 11 – $\tau^-\tau^+$

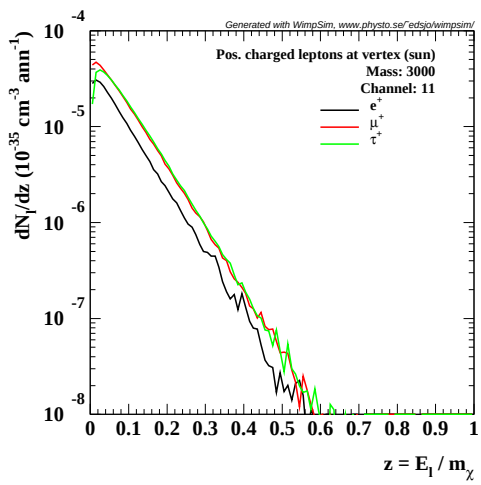
19.10.1 Neutrino fluxes at detector (Sun)



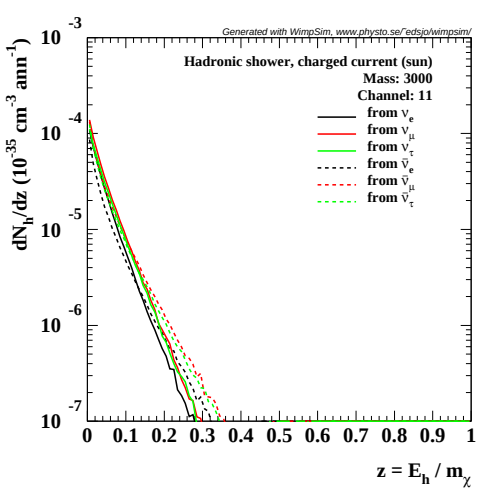


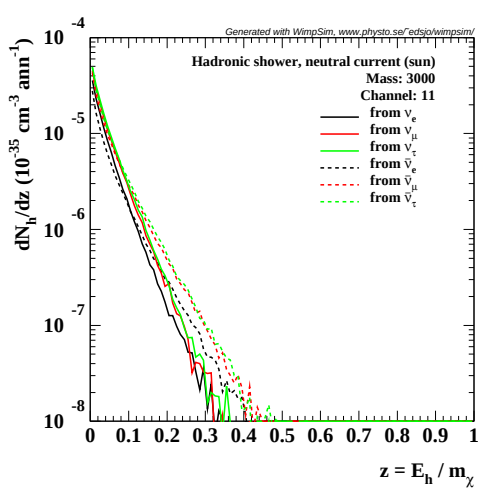
19.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



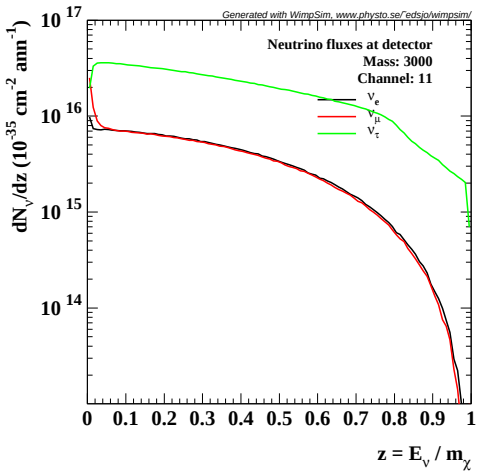


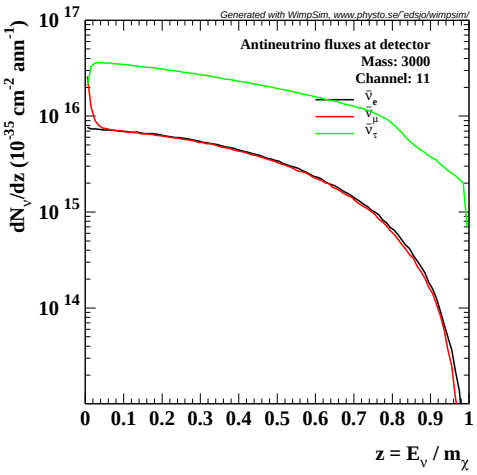
19.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



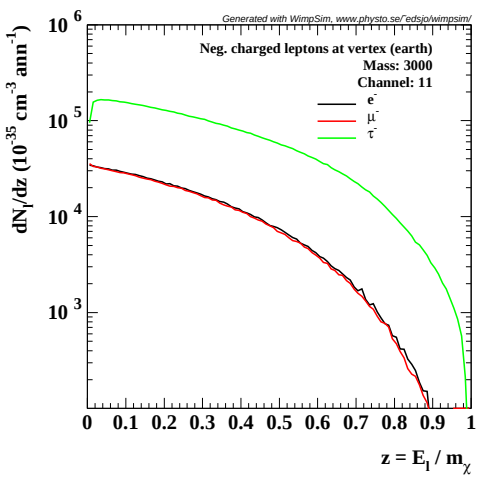


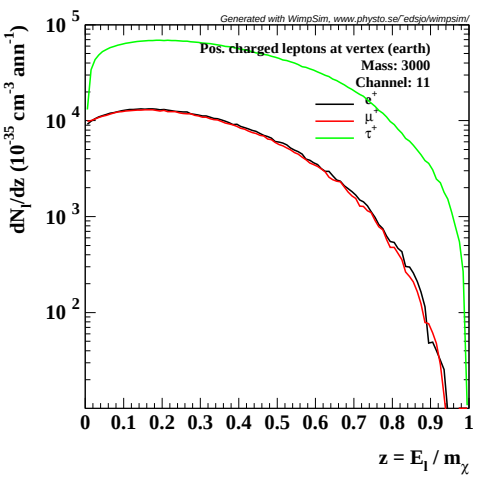
19.10.4 Neutrino fluxes at detector (Earth)



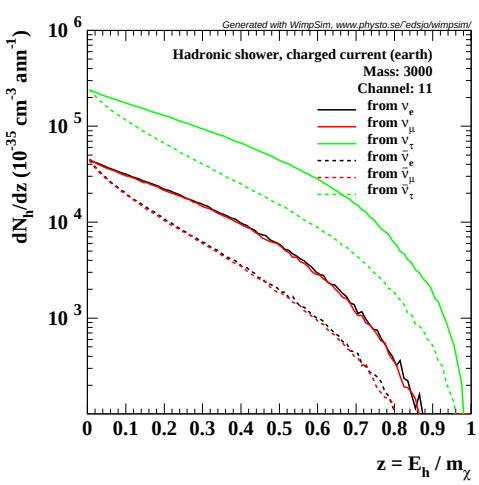


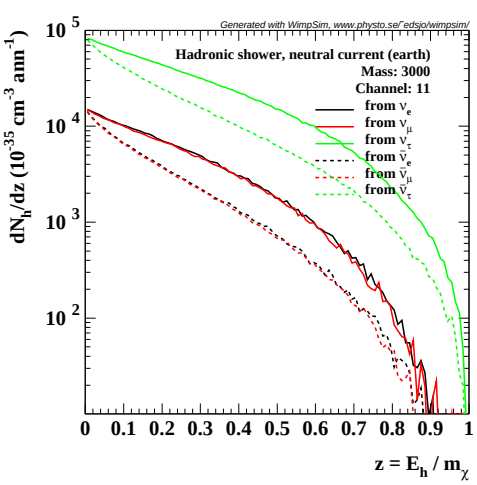
19.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



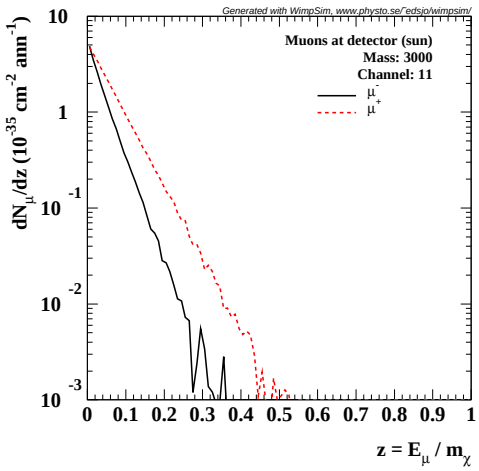


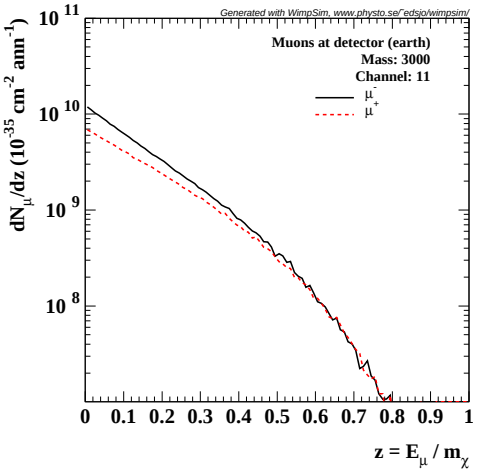
19.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





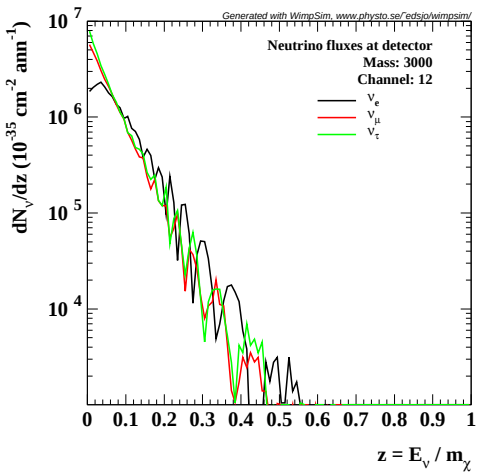
19.10.7 Muons at detector (Sun/Earth)

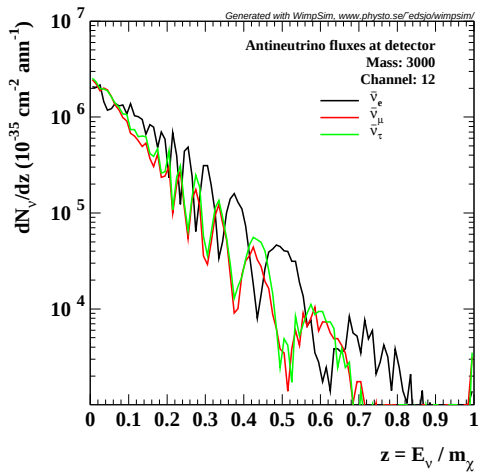




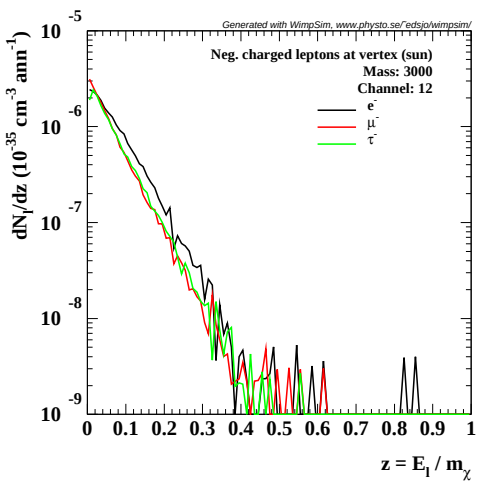
19.11 Channel 12 – $\nu_e\bar{\nu}_e$

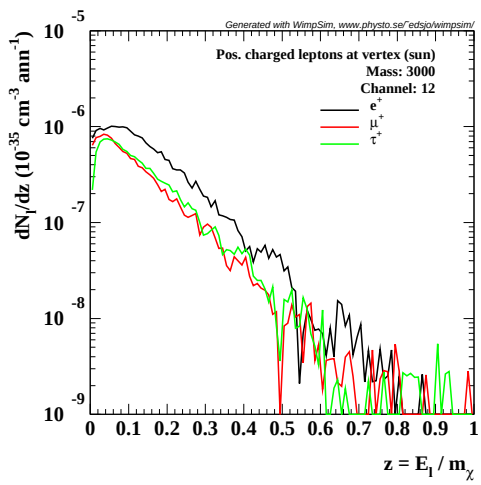
19.11.1 Neutrino fluxes at detector (Sun)



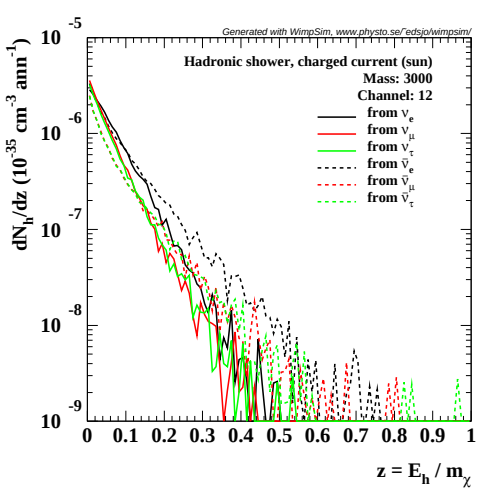


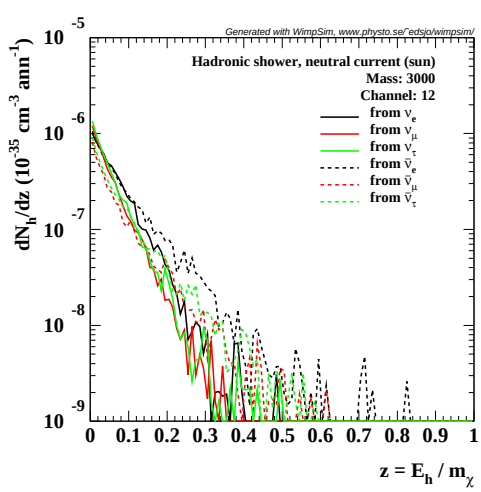
19.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



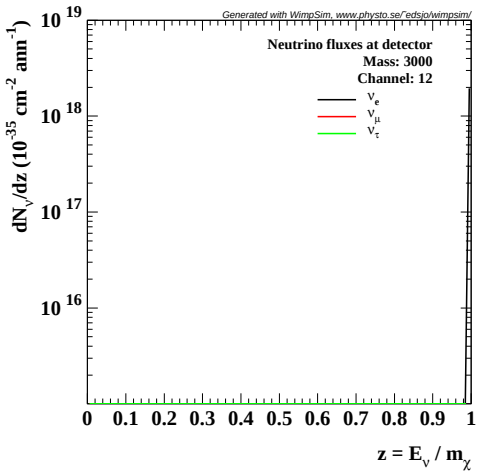


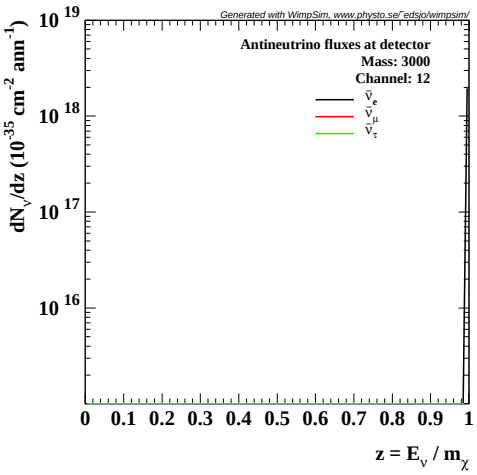
19.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



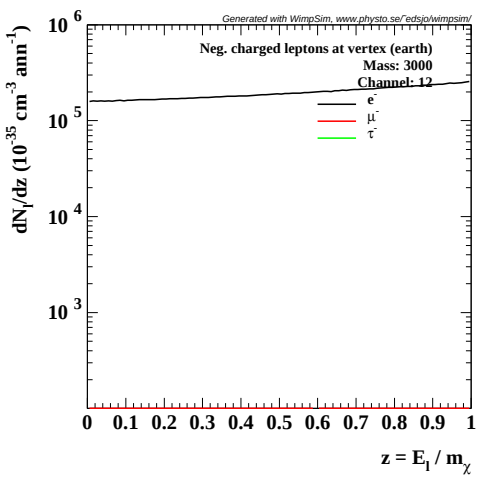


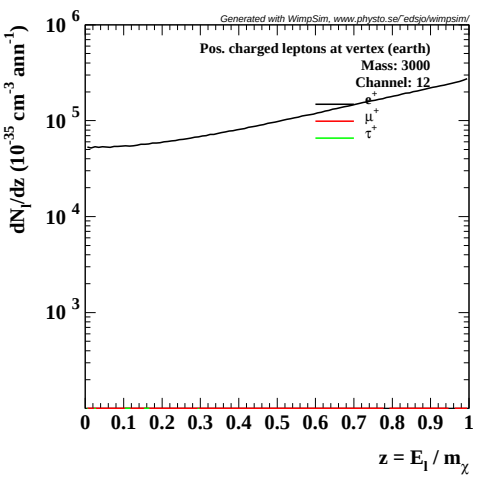
19.11.4 Neutrino fluxes at detector (Earth)



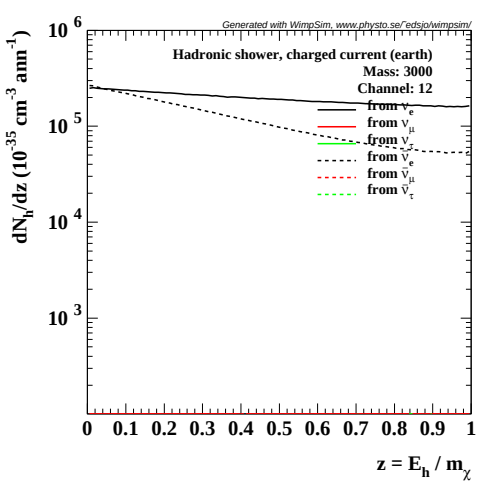


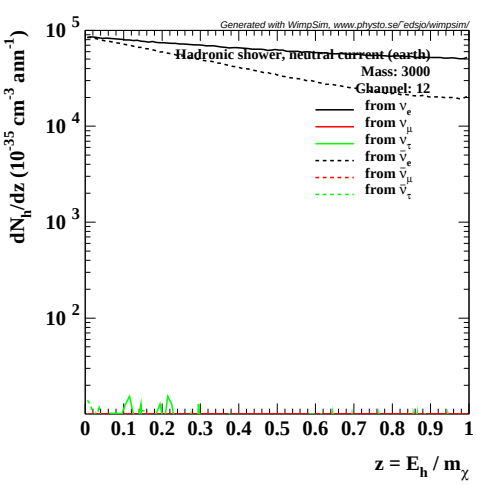
19.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



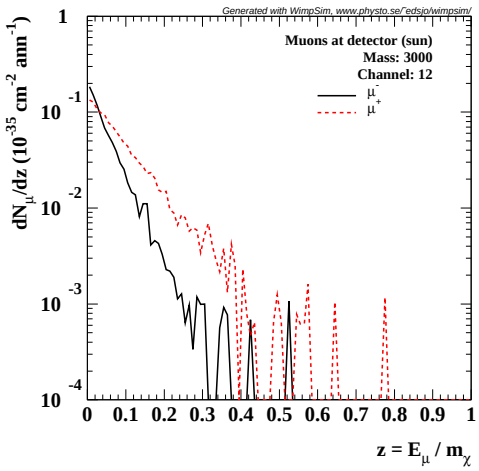


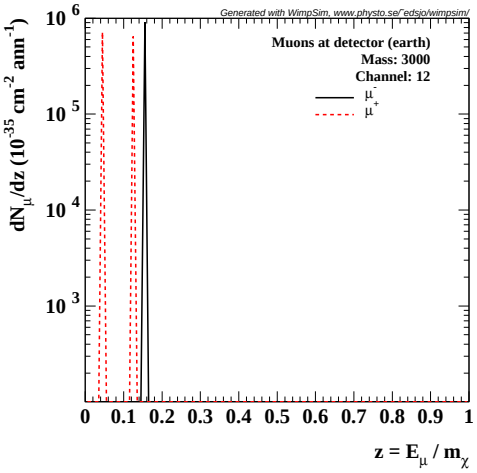
19.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





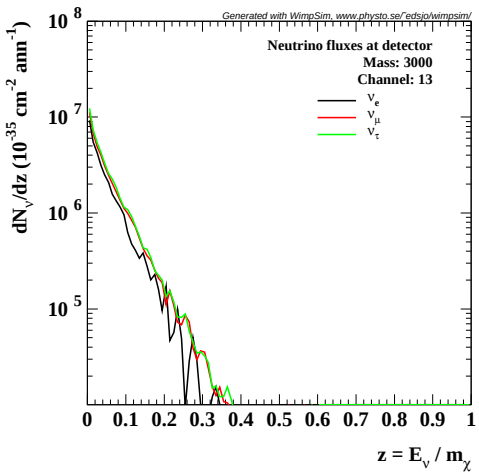
19.11.7 Muons at detector (Sun/Earth)

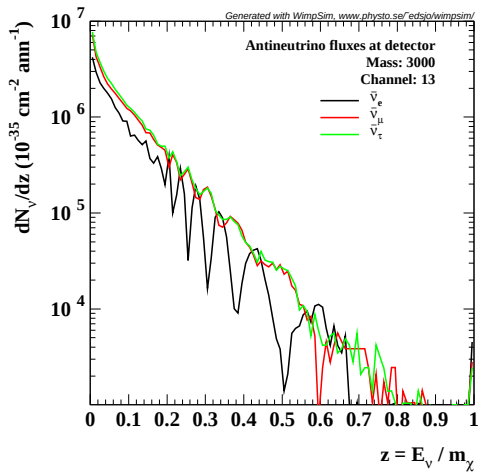




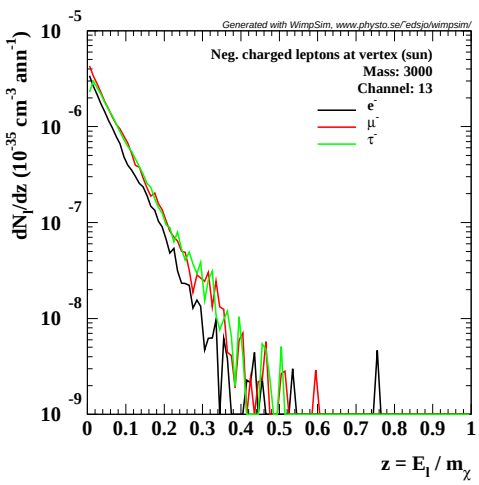
19.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

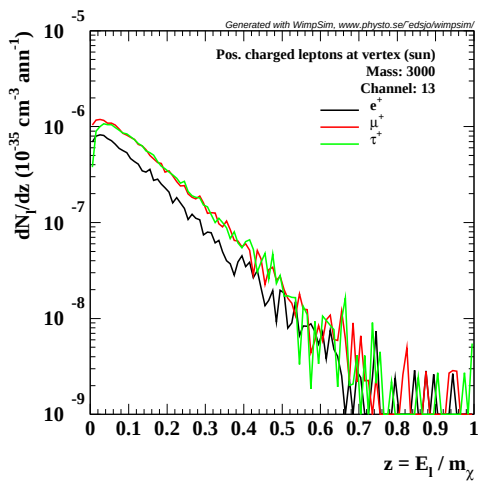
19.12.1 Neutrino fluxes at detector (Sun)



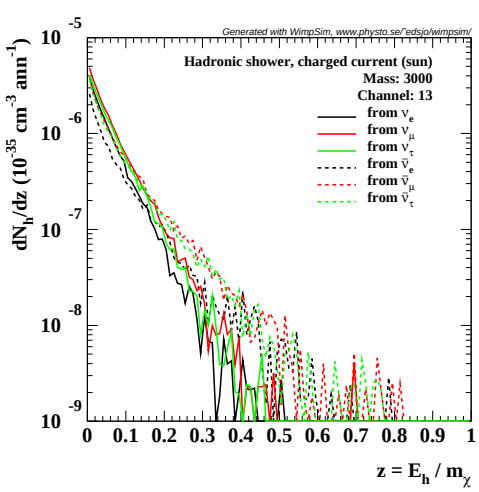


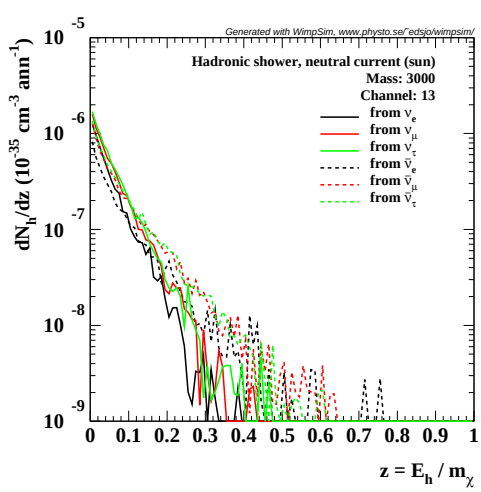
19.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



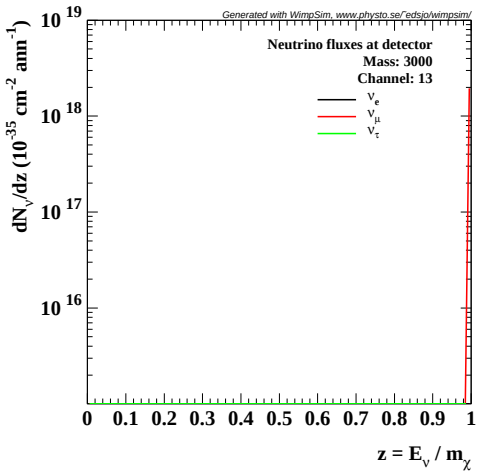


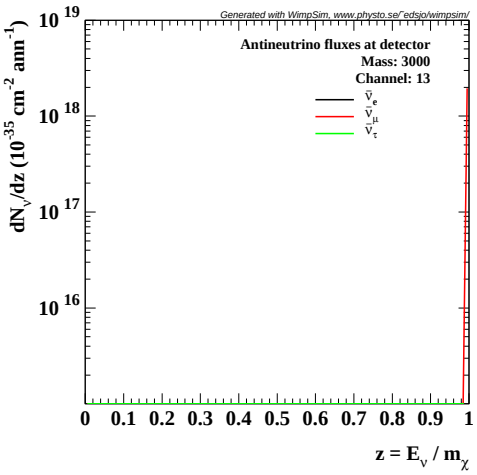
19.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



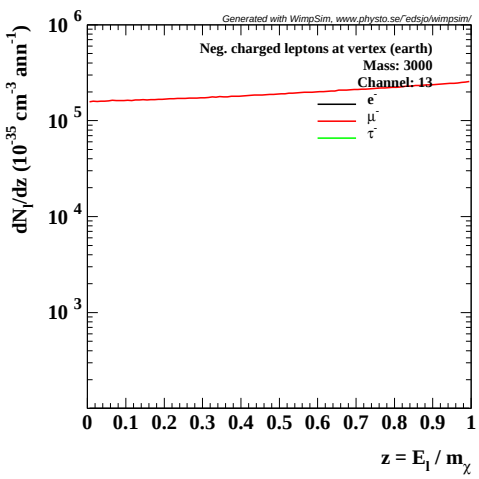


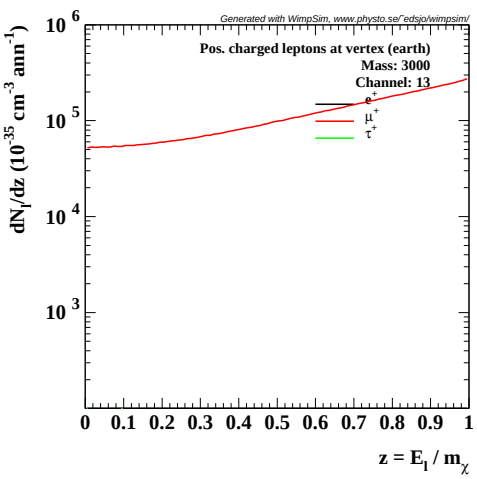
19.12.4 Neutrino fluxes at detector (Earth)



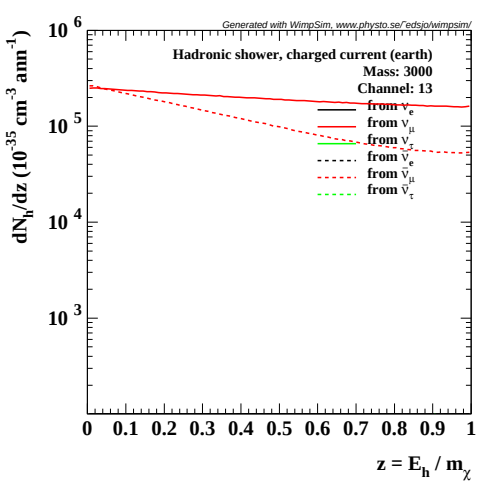


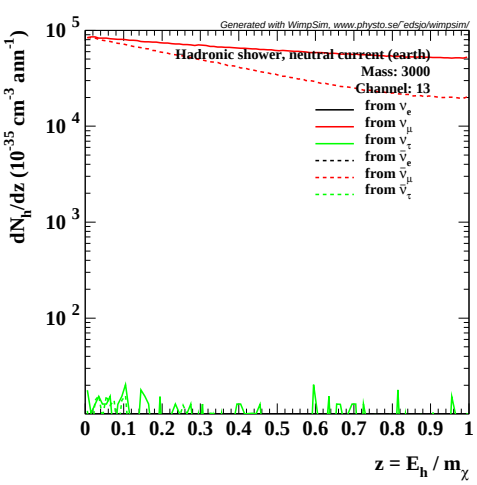
19.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



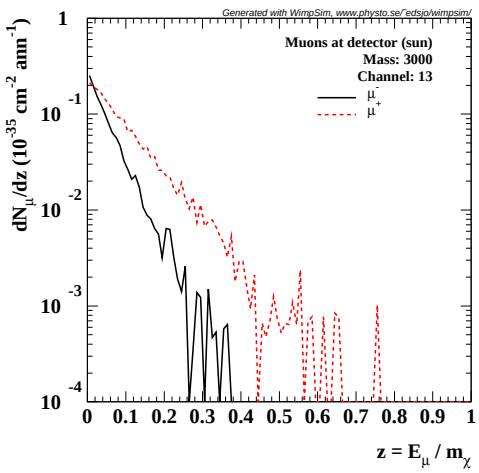


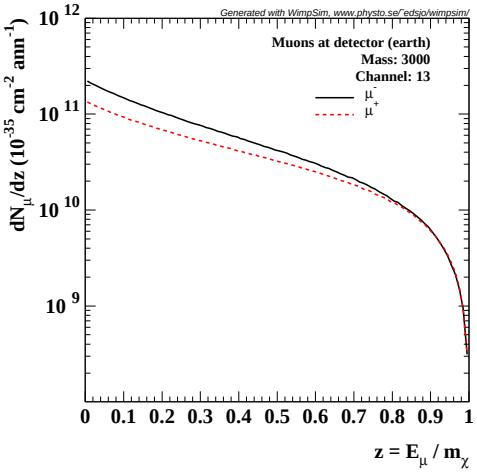
19.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





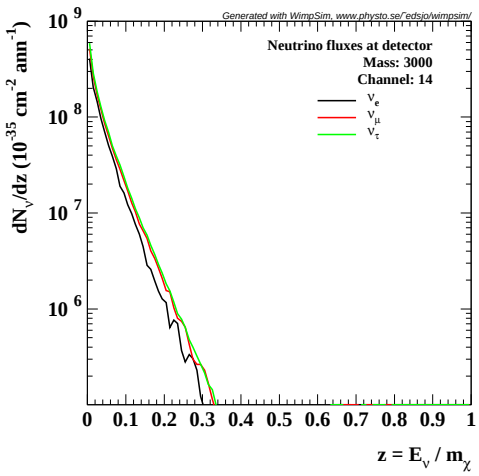
19.12.7 Muons at detector (Sun/Earth)

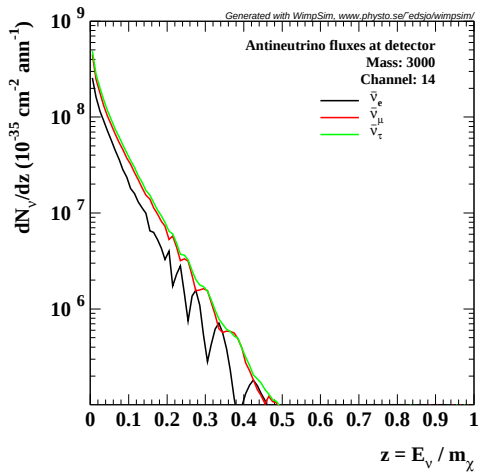




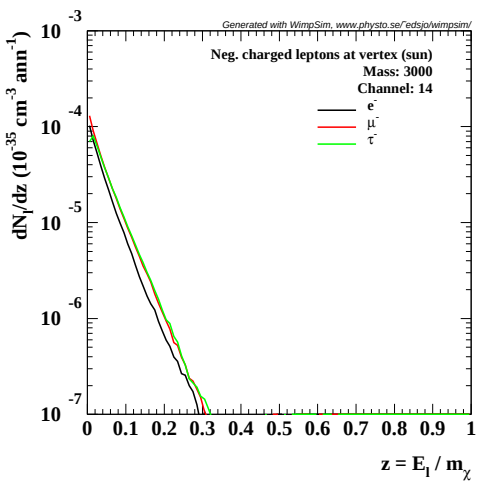
19.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

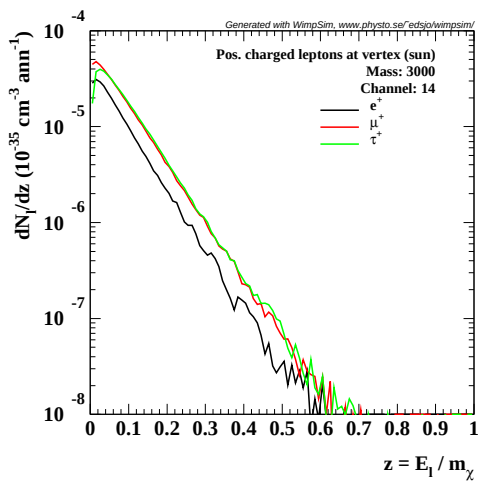
19.13.1 Neutrino fluxes at detector (Sun)



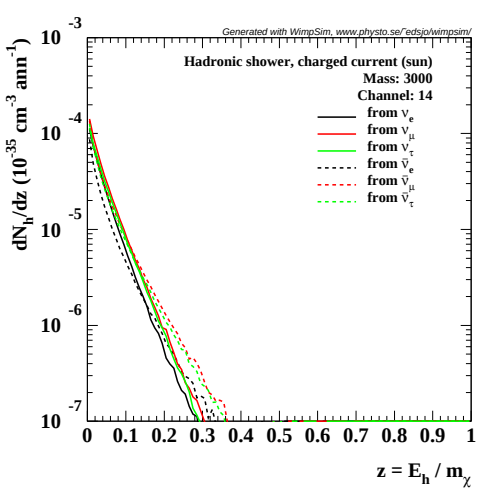


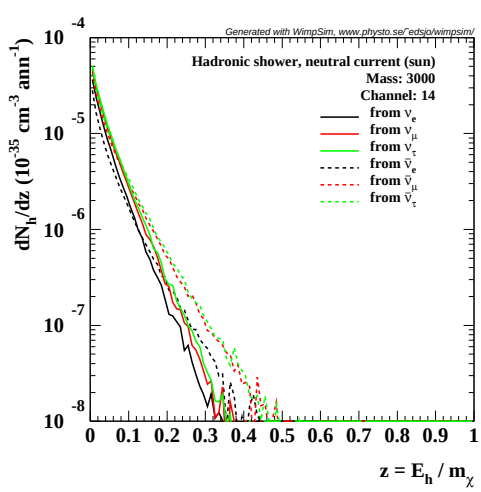
19.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



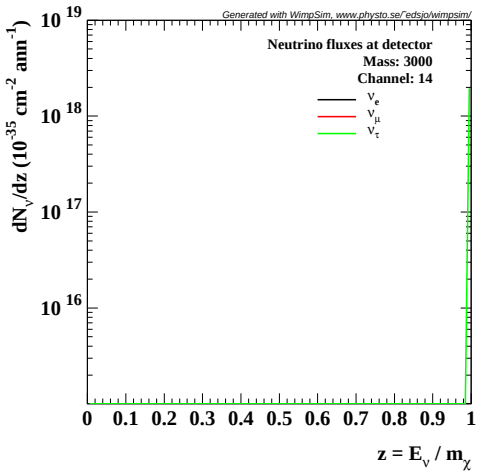


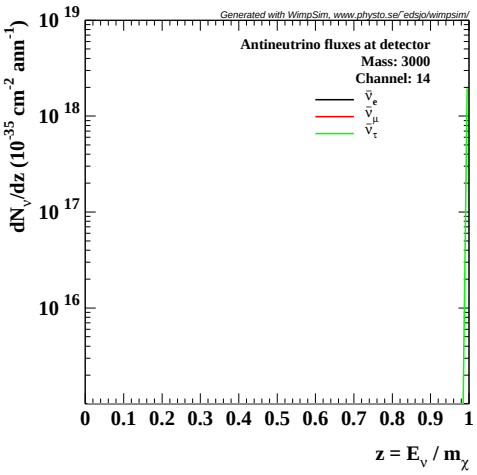
19.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



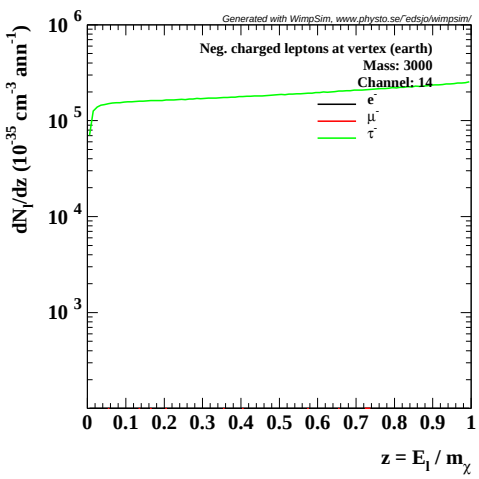


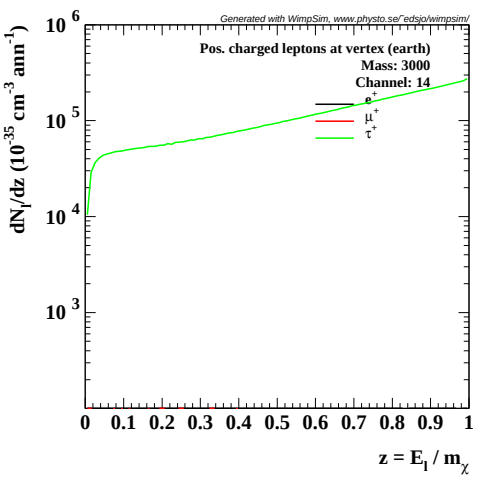
19.13.4 Neutrino fluxes at detector (Earth)



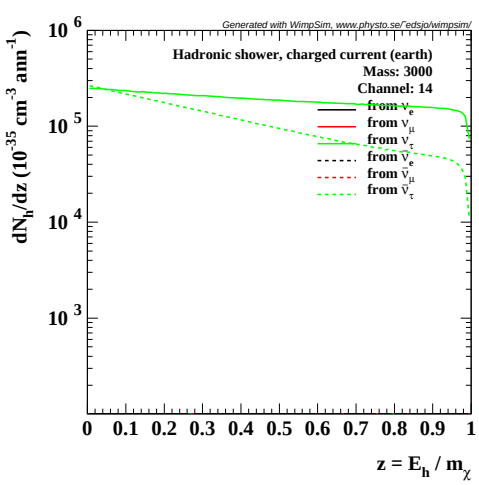


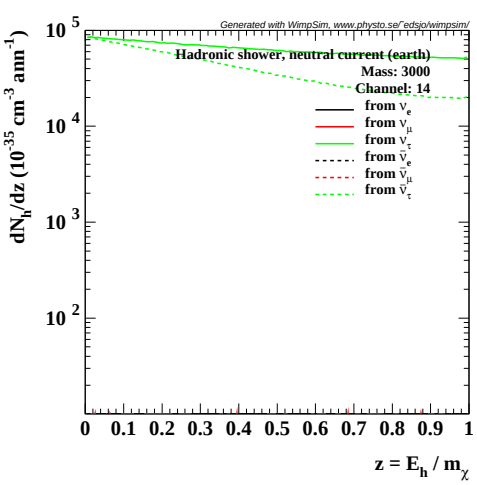
19.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



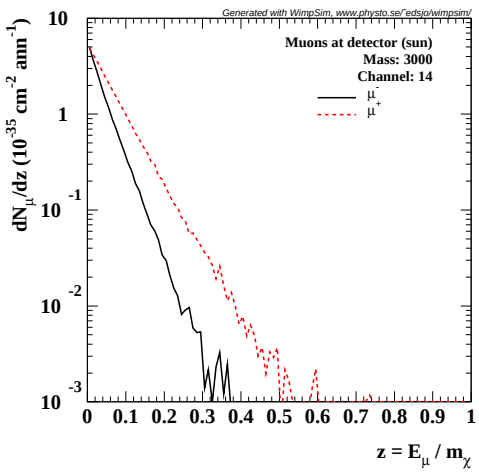


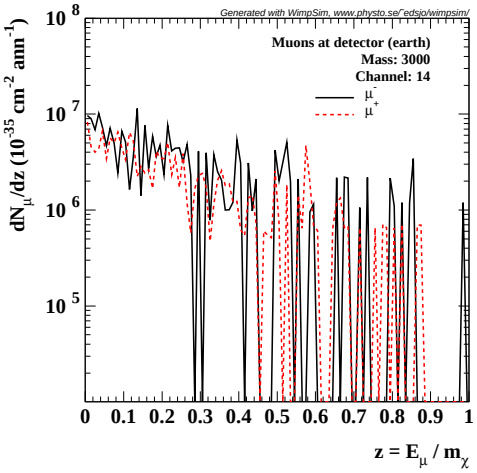
19.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





19.13.7 Muons at detector (Sun/Earth)

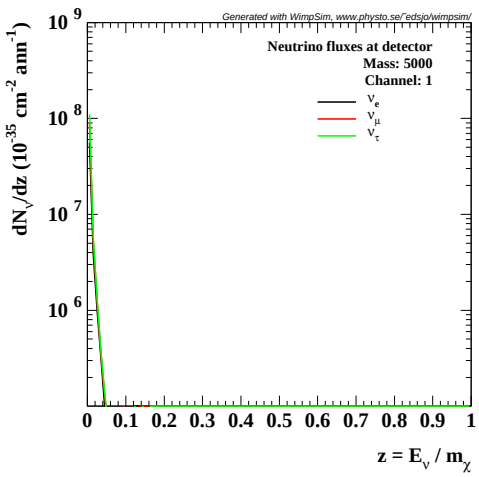


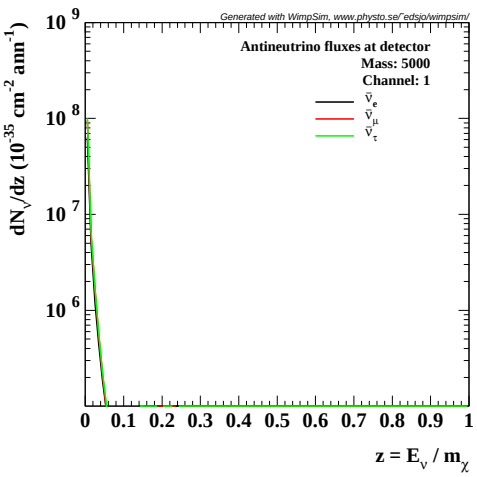


20 Mass 5000

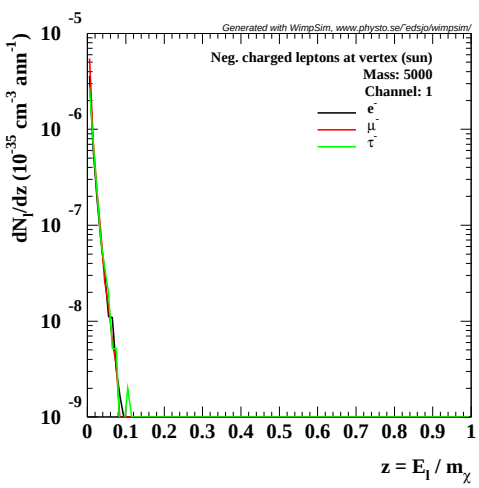
20.1 Channel 1 – $d\bar{d}$

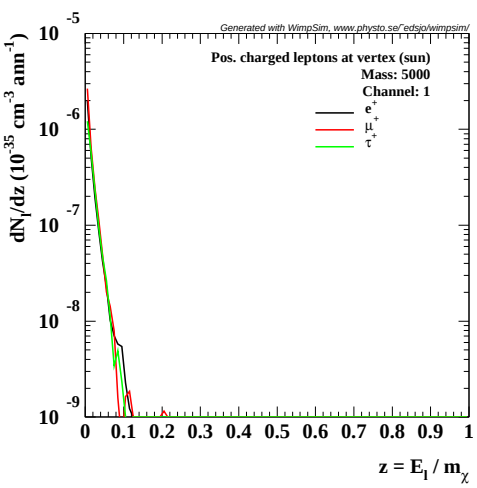
20.1.1 Neutrino fluxes at detector (Sun)



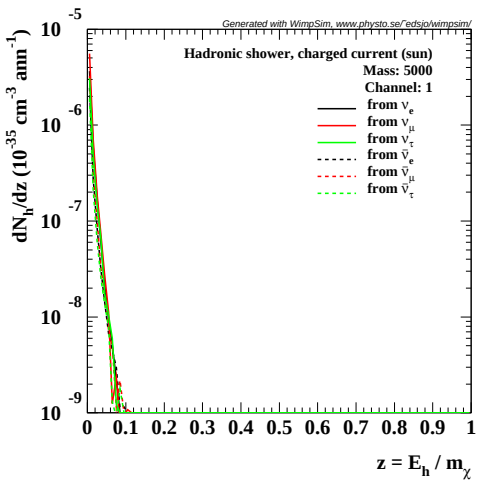


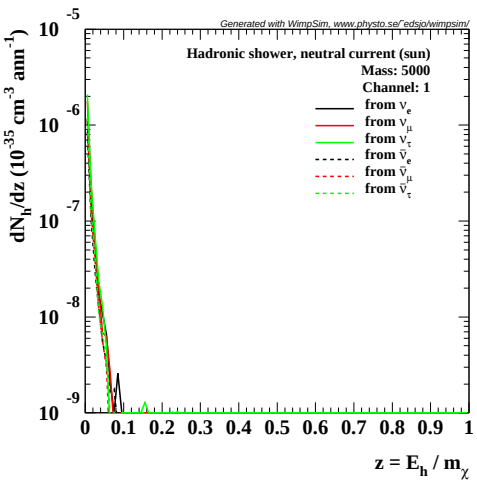
20.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



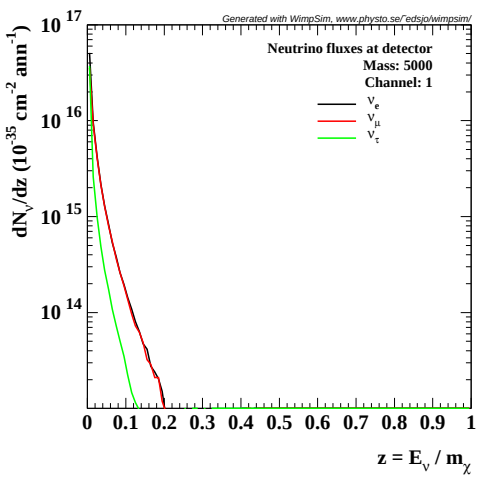


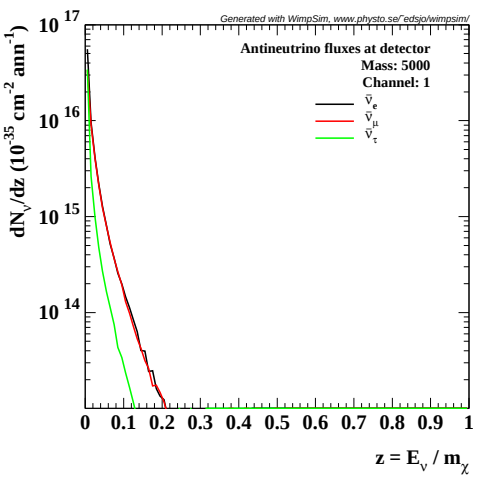
20.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



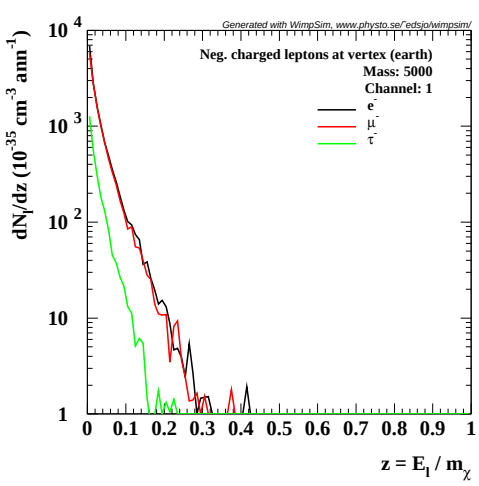


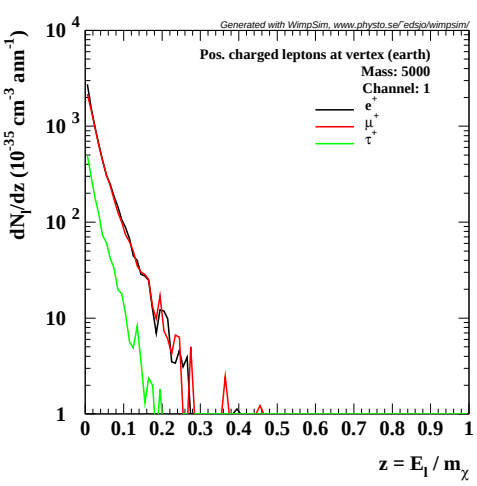
20.1.4 Neutrino fluxes at detector (Earth)



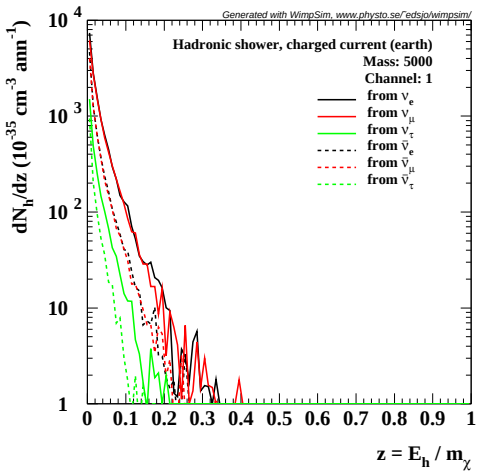


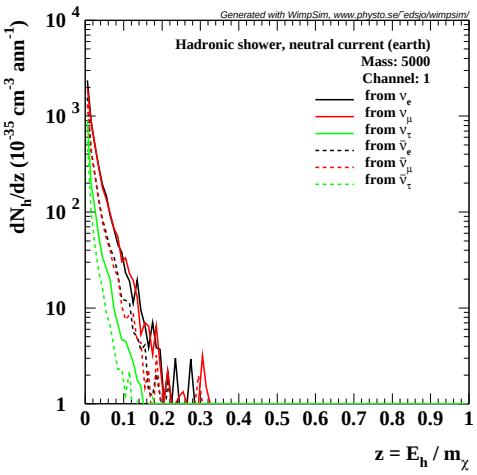
20.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



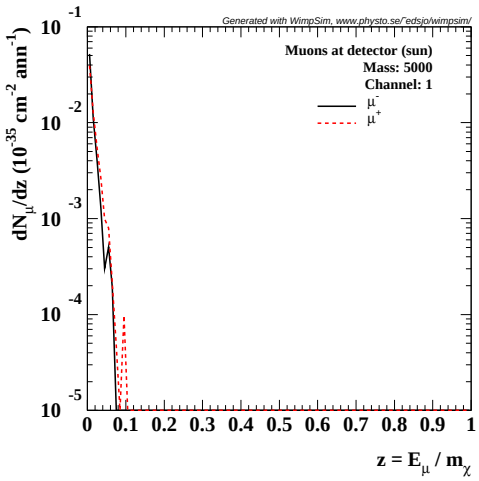


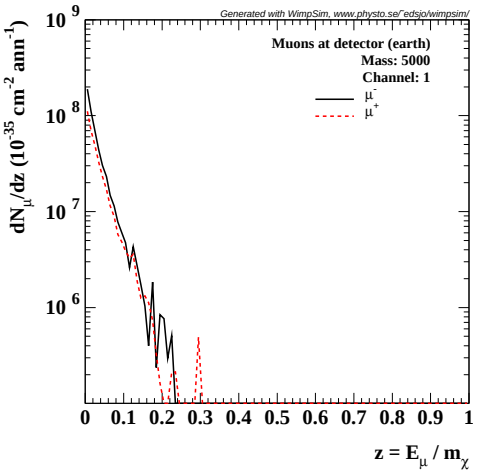
20.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





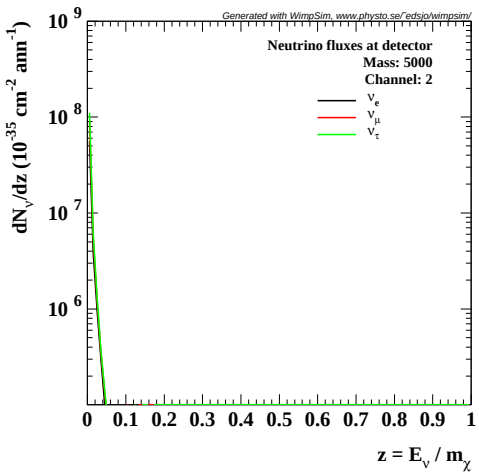
20.1.7 Muons at detector (Sun/Earth)

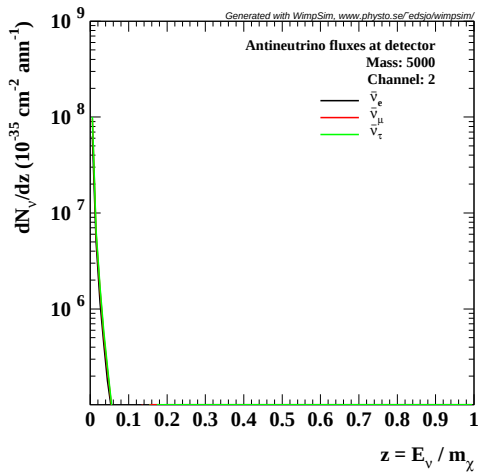




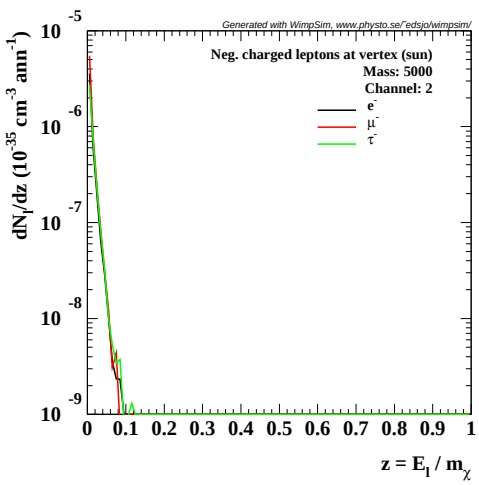
20.2 Channel 2 – $u\bar{u}$

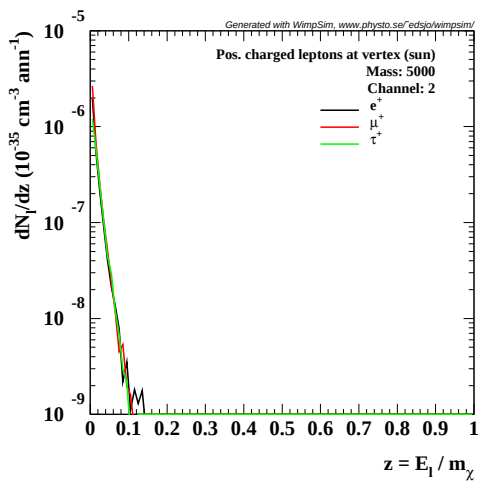
20.2.1 Neutrino fluxes at detector (Sun)



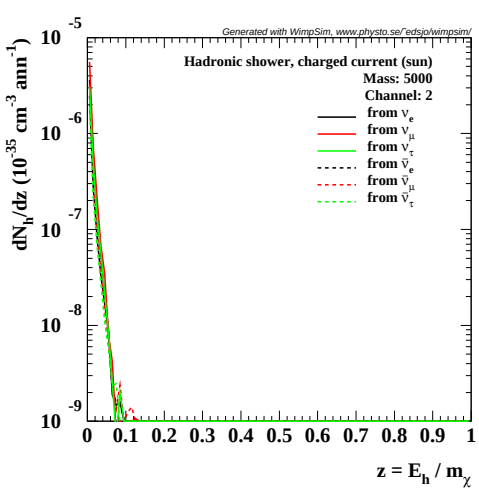


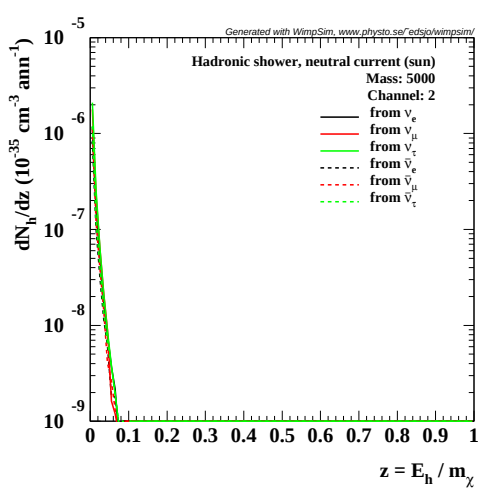
20.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



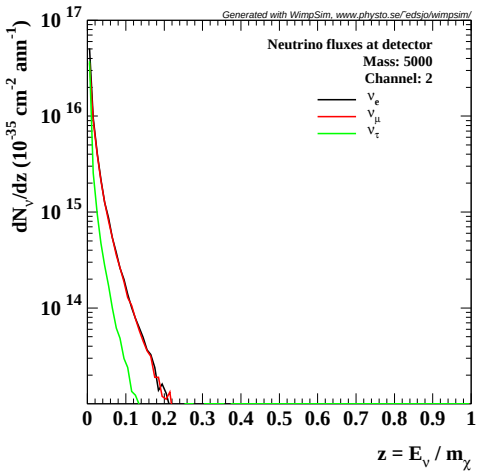


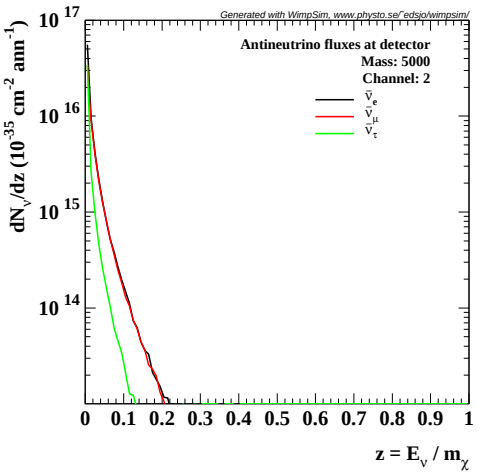
20.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



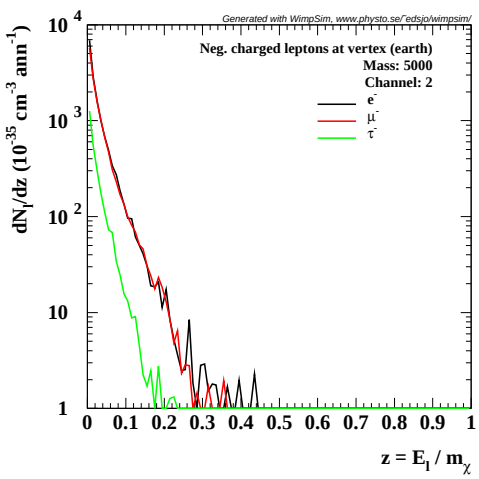


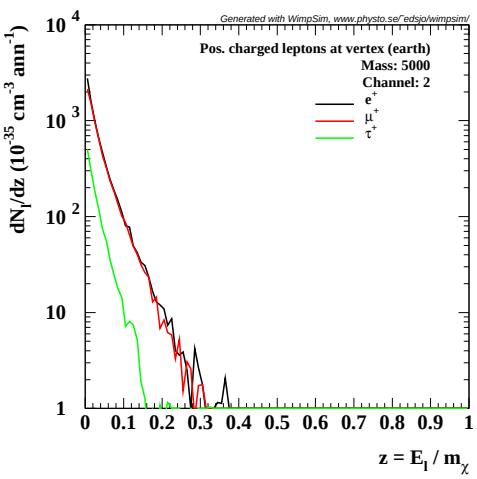
20.2.4 Neutrino fluxes at detector (Earth)



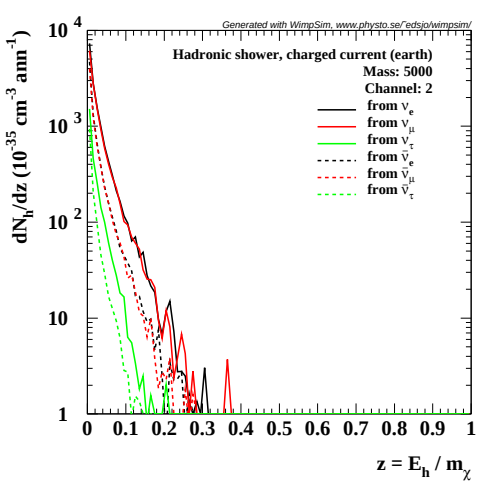


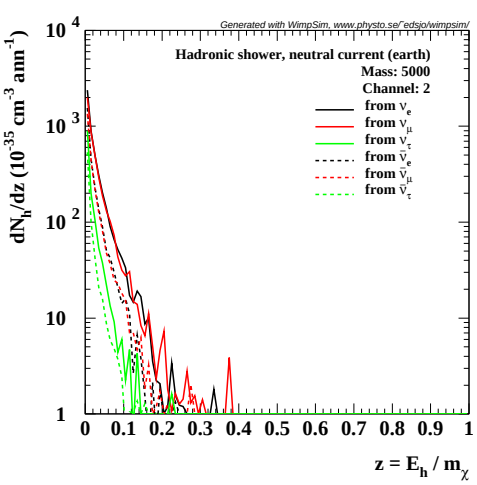
20.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



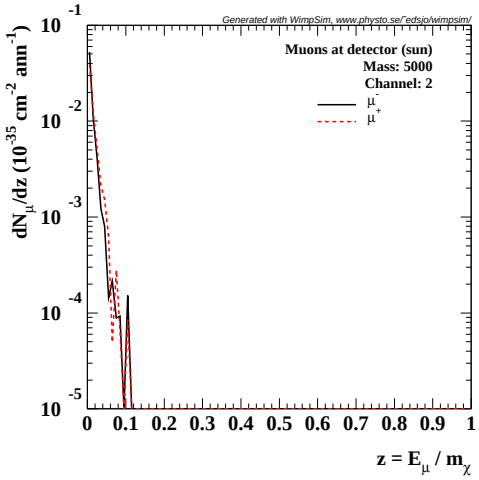


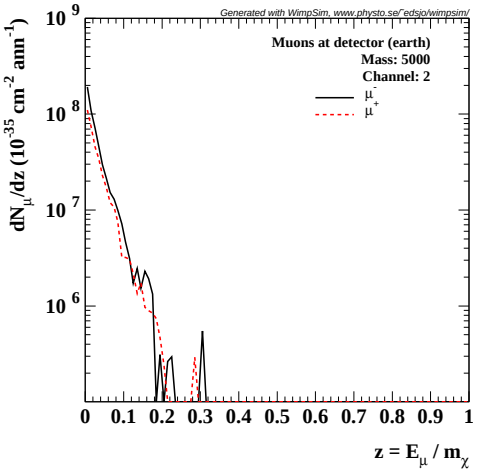
20.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





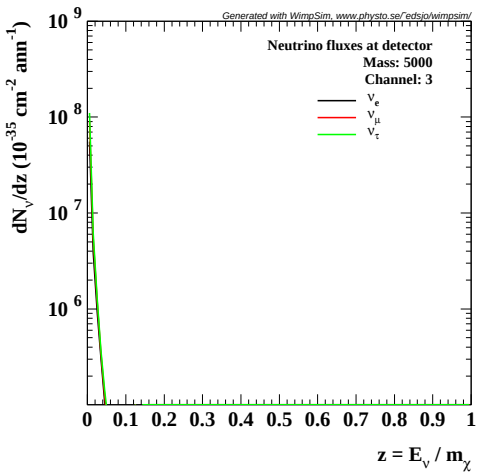
20.2.7 Muons at detector (Sun/Earth)

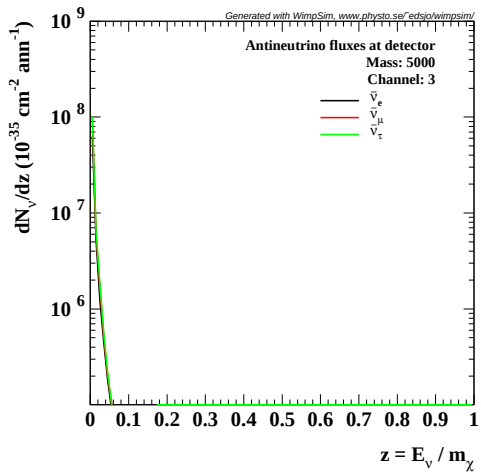




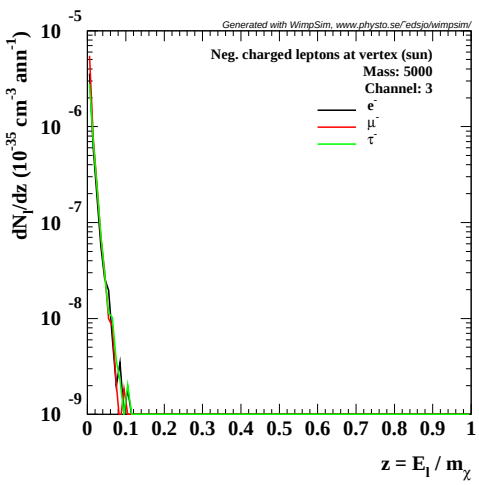
20.3 Channel 3 – $s\bar{s}$

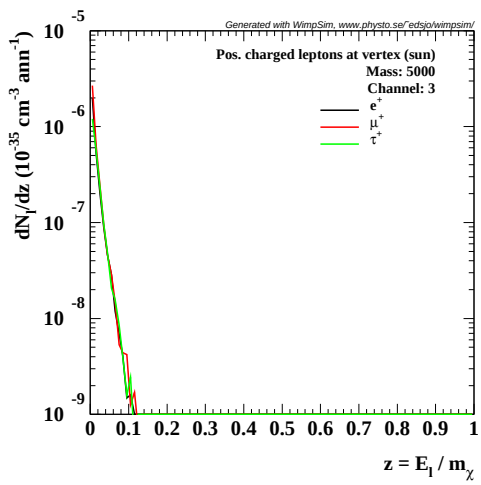
20.3.1 Neutrino fluxes at detector (Sun)



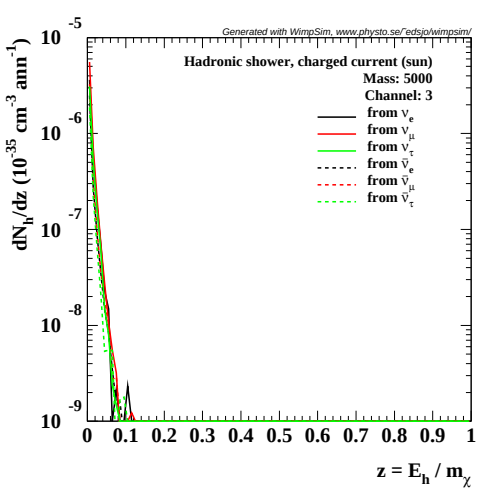


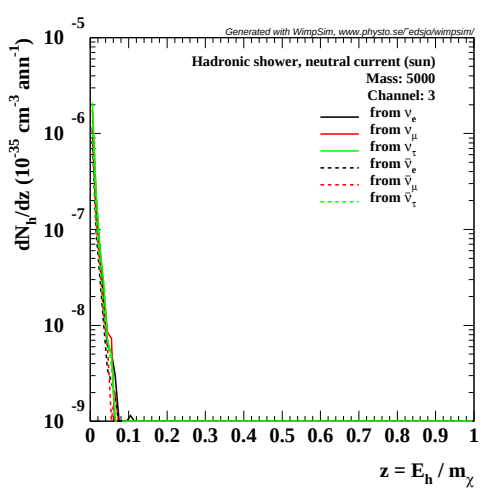
20.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



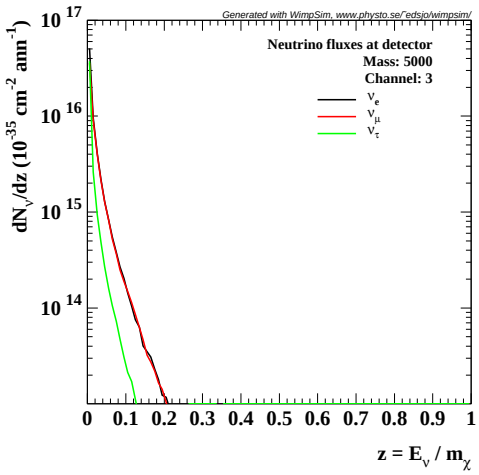


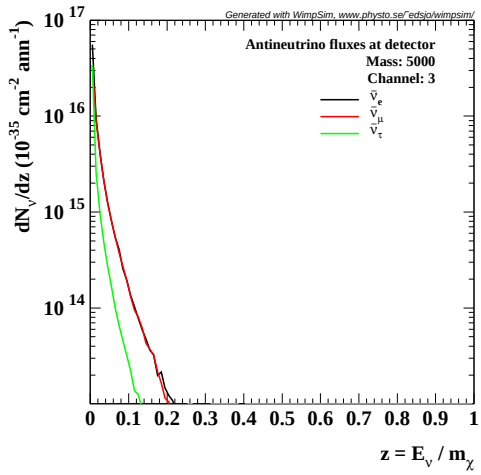
20.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



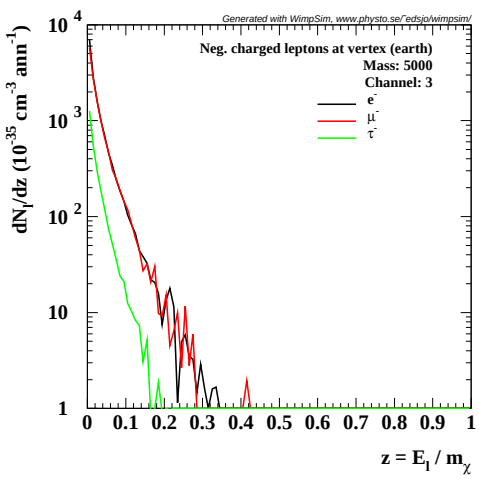


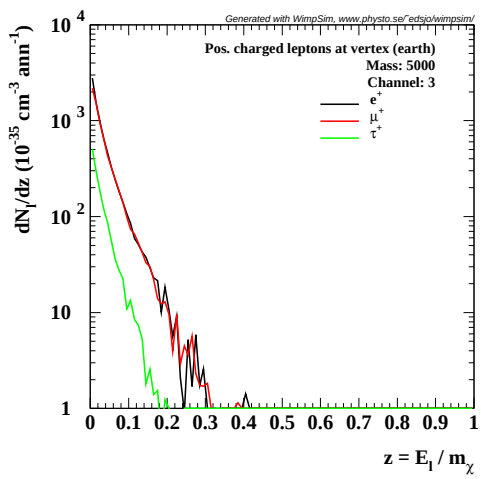
20.3.4 Neutrino fluxes at detector (Earth)



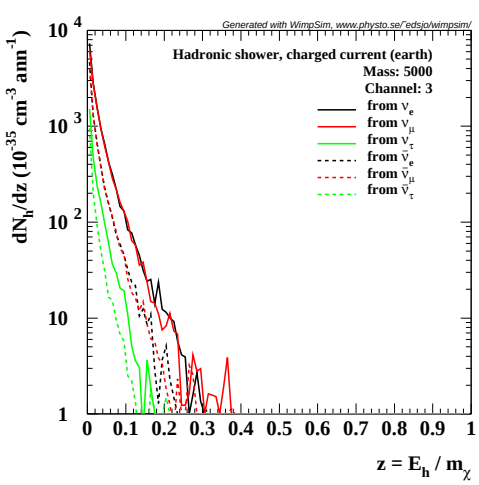


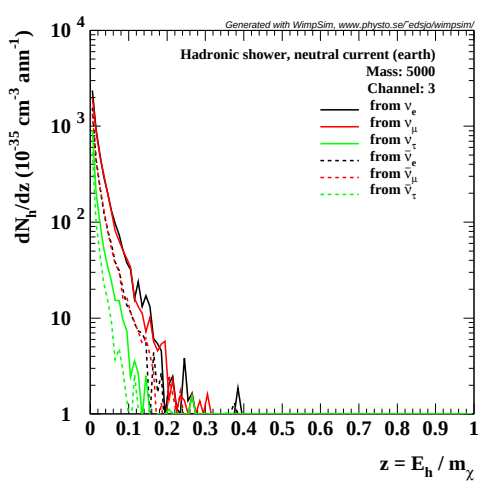
20.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



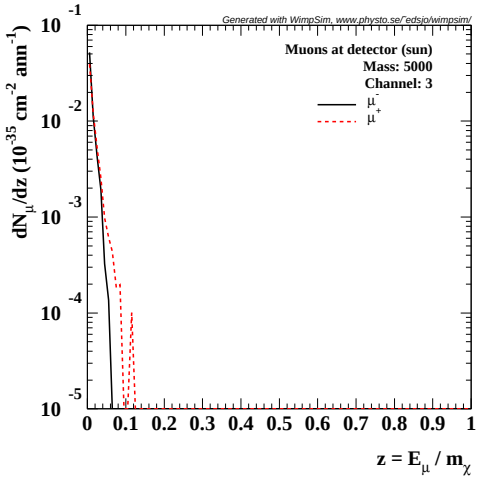


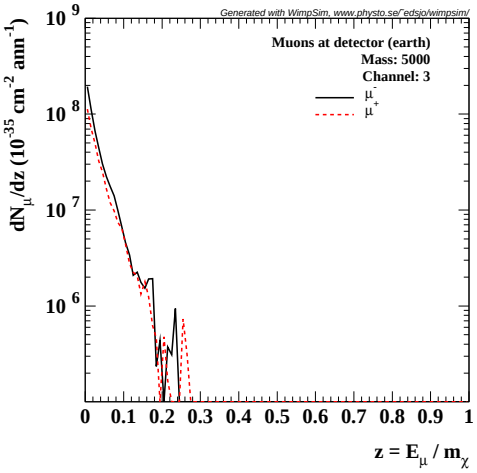
20.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





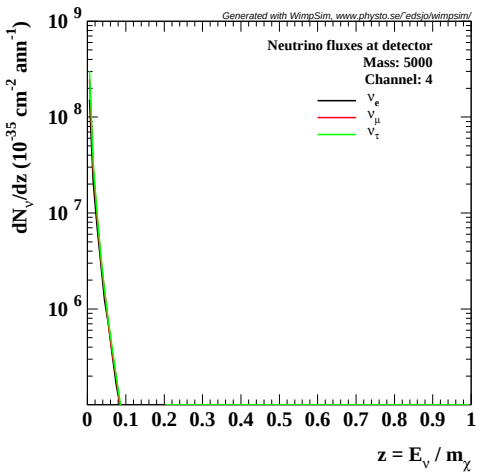
20.3.7 Muons at detector (Sun/Earth)

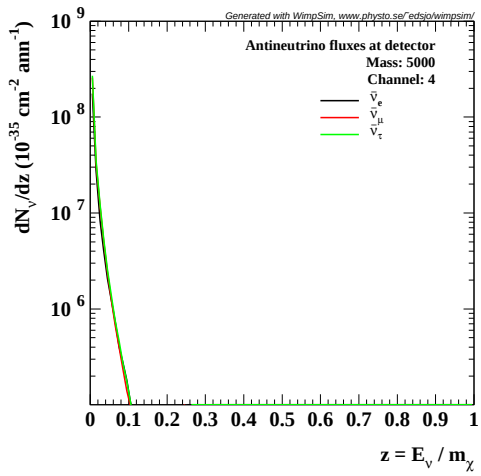




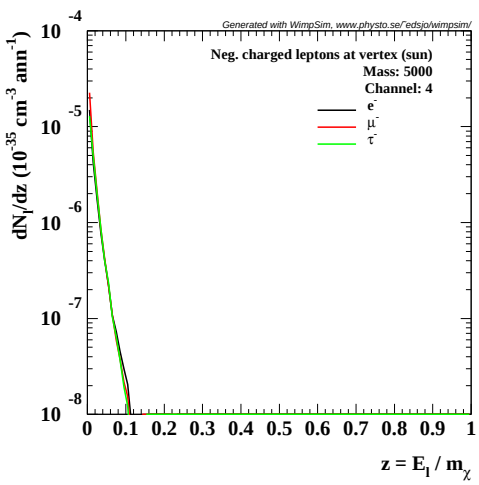
20.4 Channel 4 – $c\bar{c}$

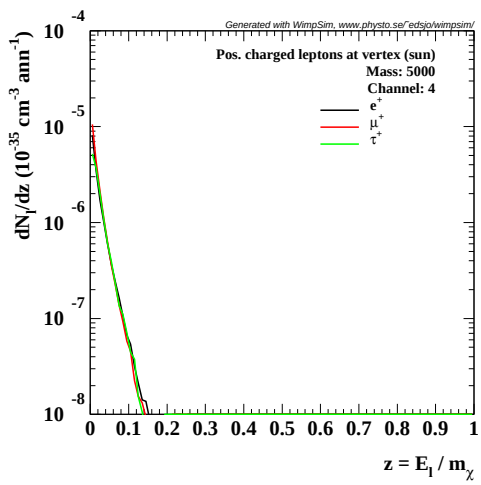
20.4.1 Neutrino fluxes at detector (Sun)



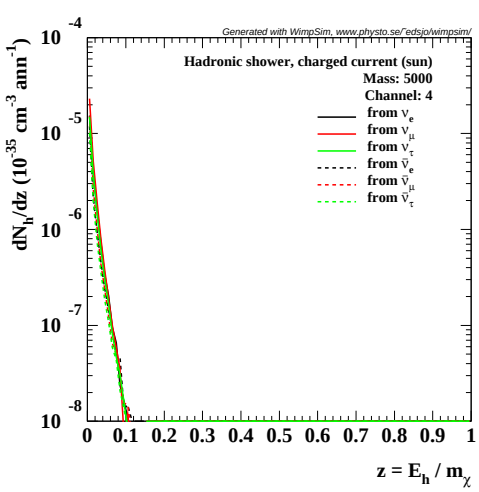


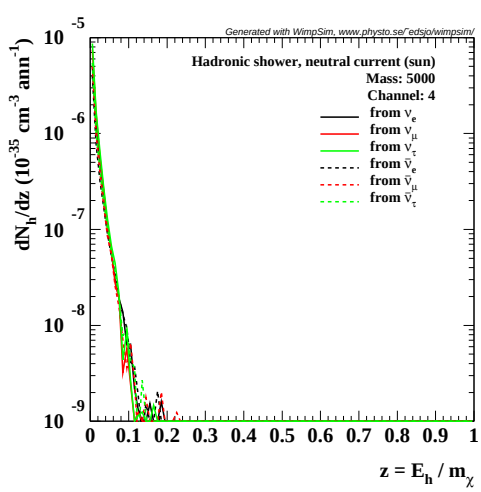
20.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



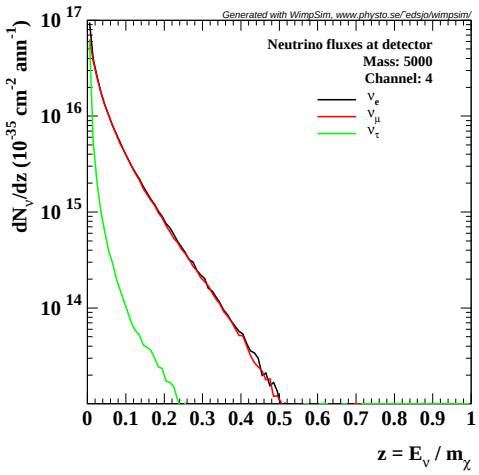


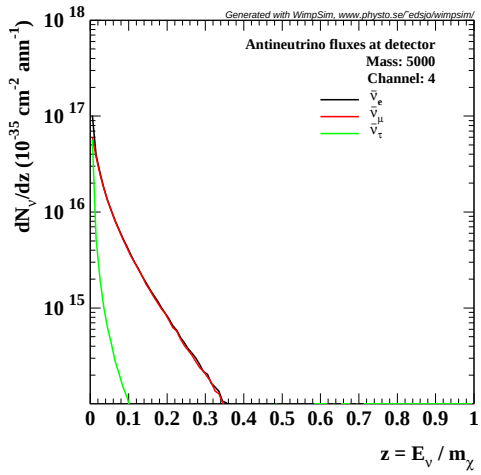
20.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



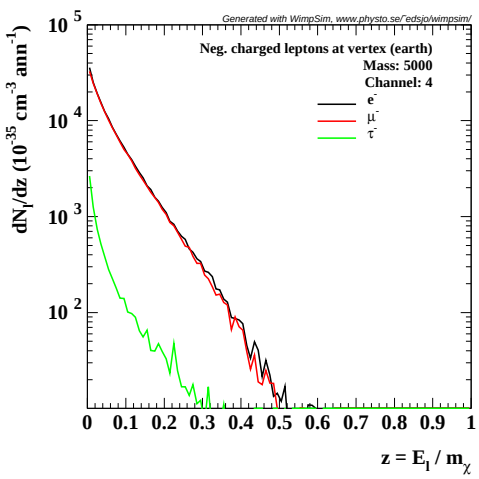


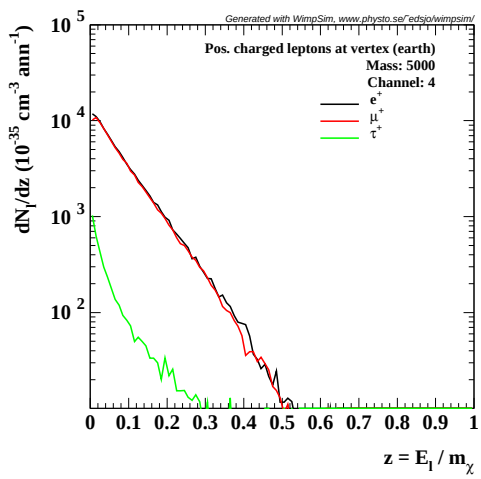
20.4.4 Neutrino fluxes at detector (Earth)



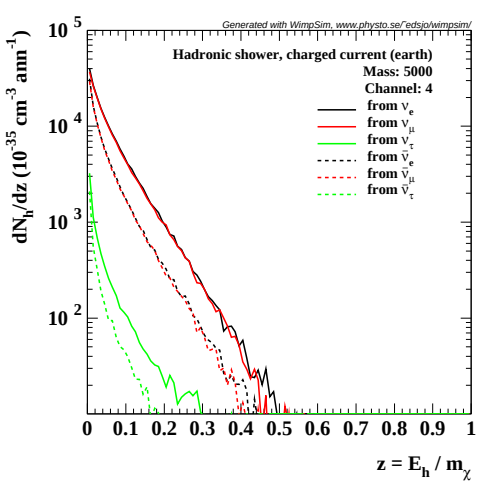


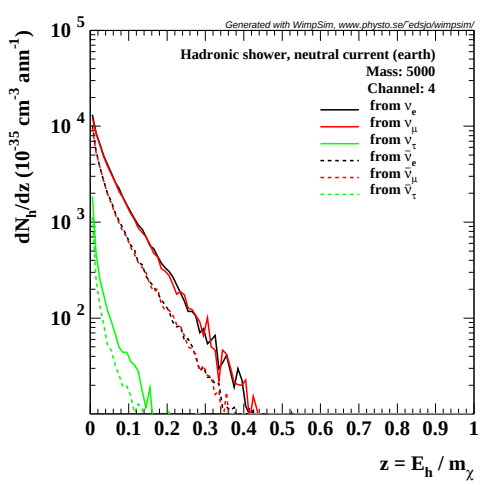
20.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



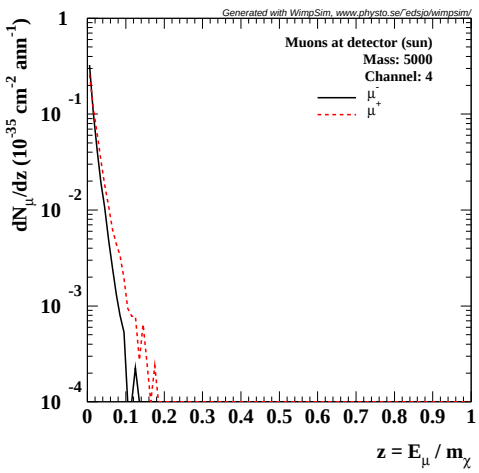


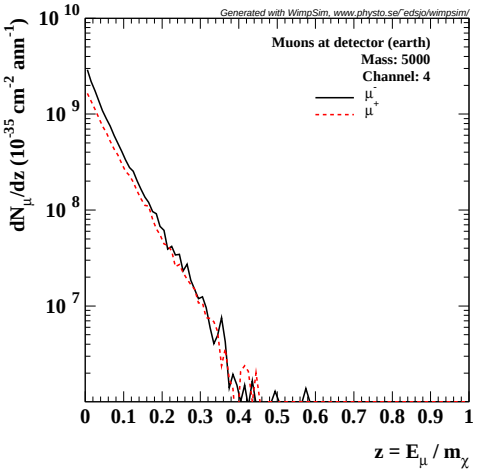
20.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





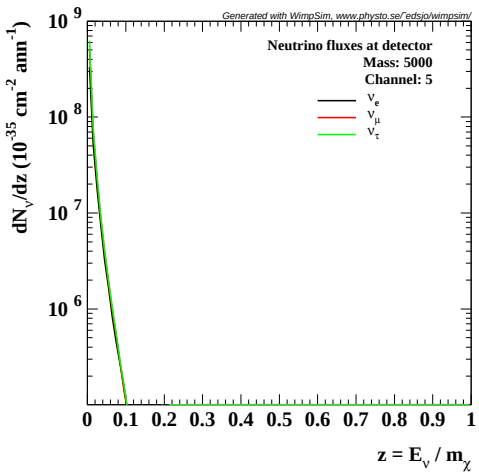
20.4.7 Muons at detector (Sun/Earth)

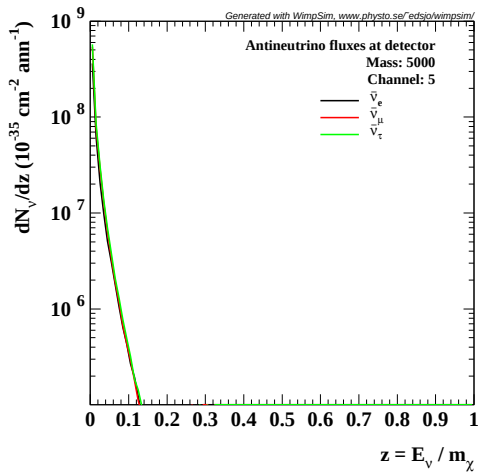




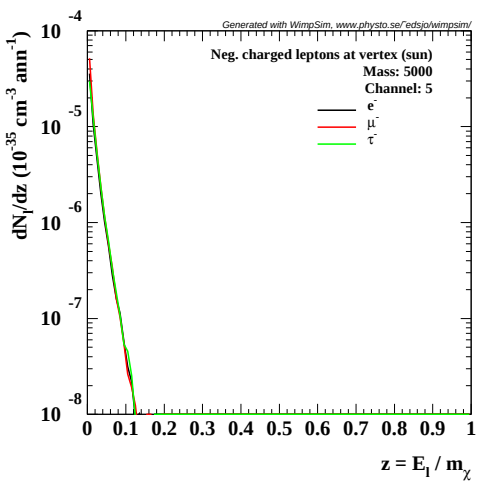
20.5 Channel 5 – $b\bar{b}$

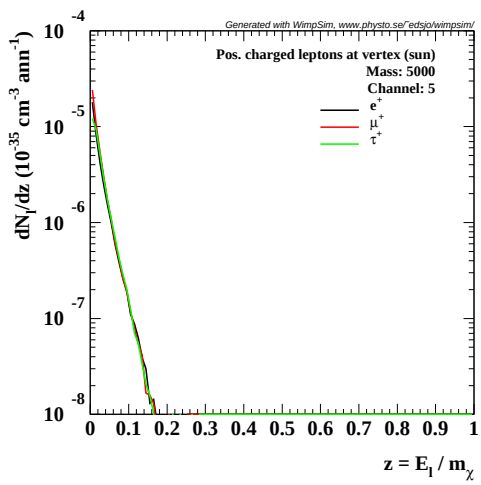
20.5.1 Neutrino fluxes at detector (Sun)



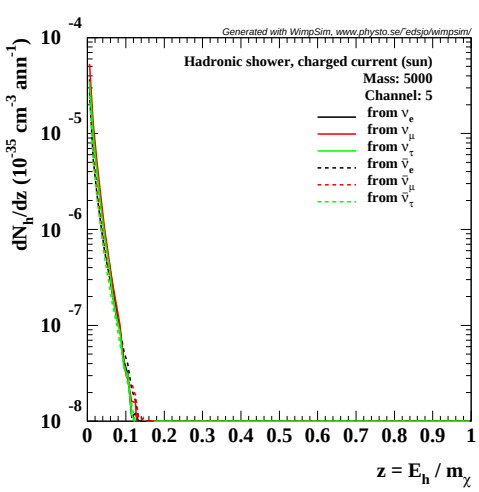


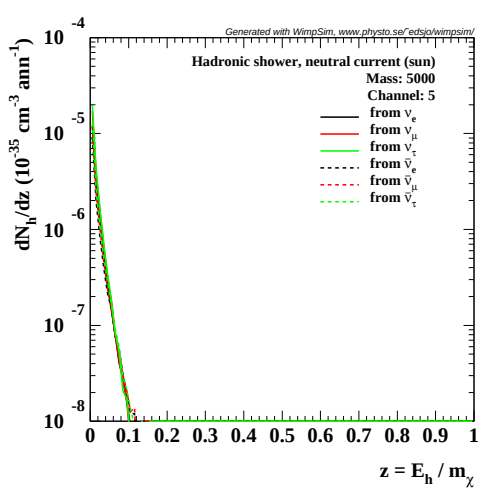
20.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



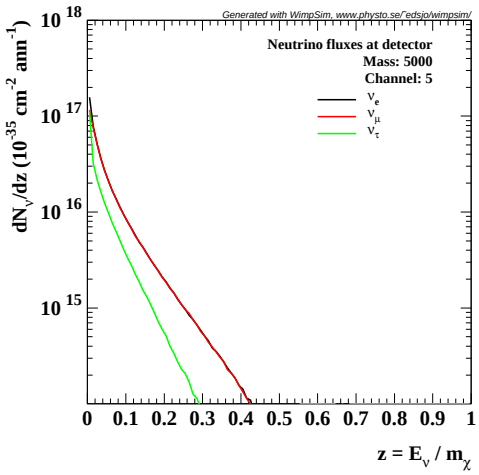


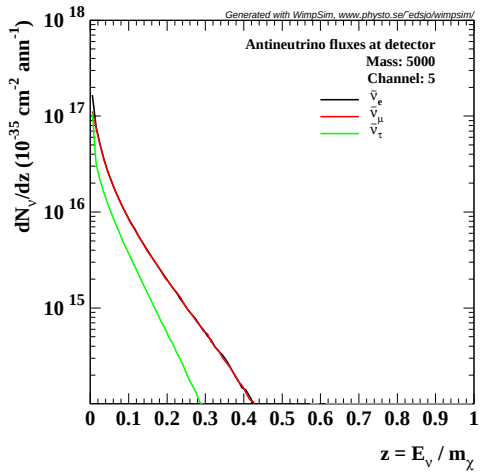
20.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



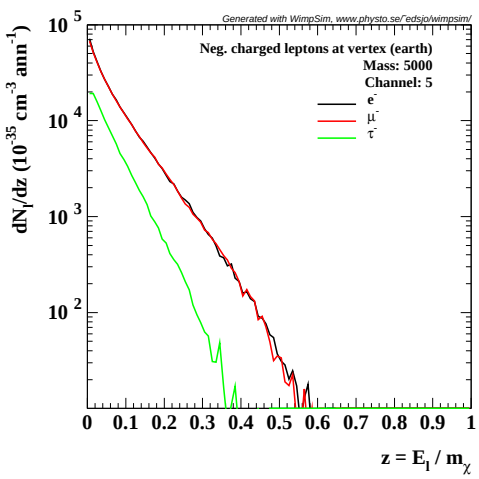


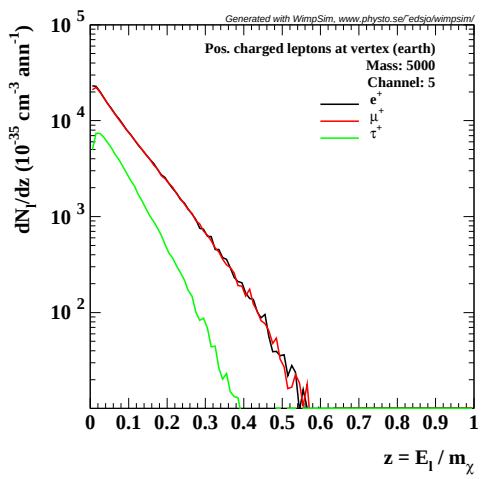
20.5.4 Neutrino fluxes at detector (Earth)



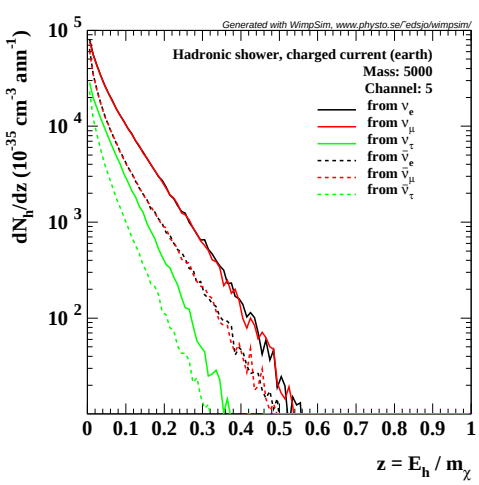


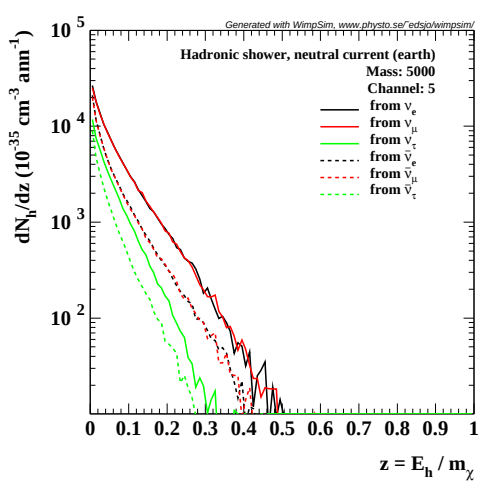
20.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



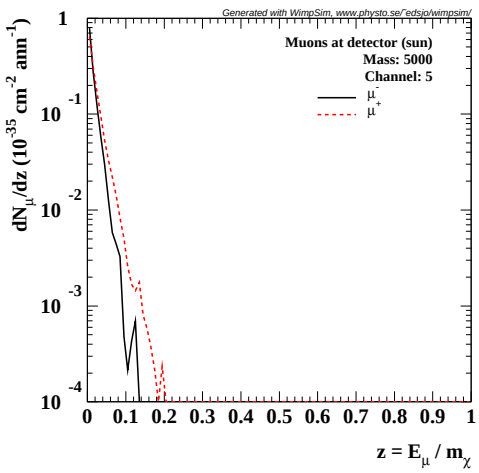


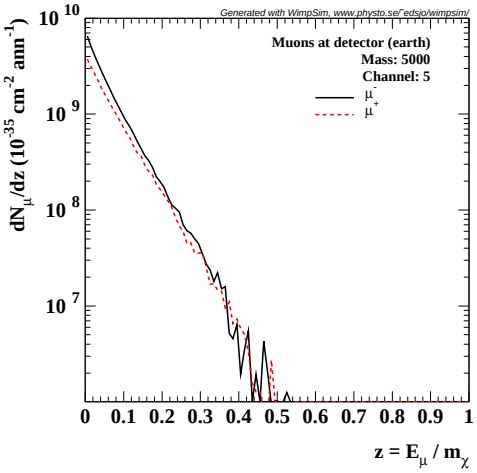
20.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





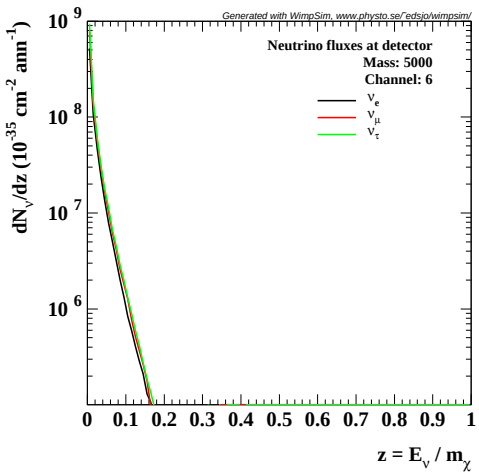
20.5.7 Muons at detector (Sun/Earth)

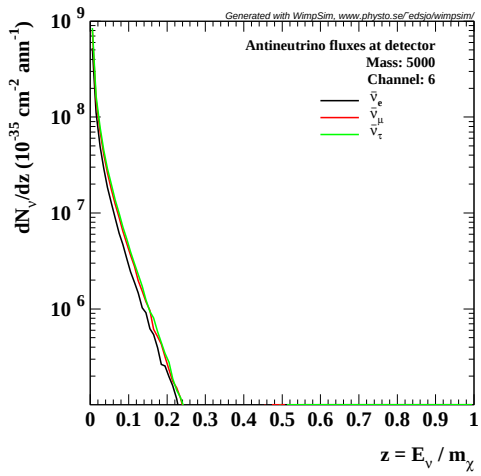




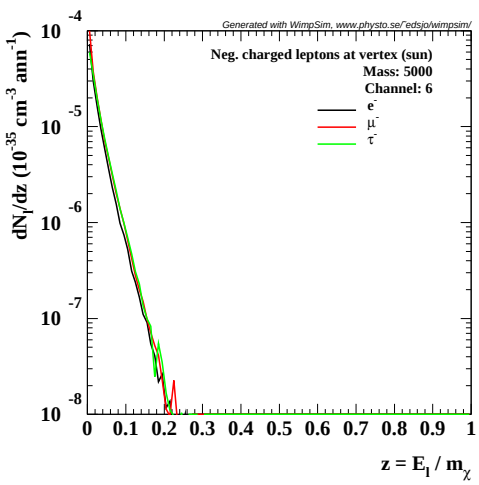
20.6 Channel 6 – $t\bar{t}$

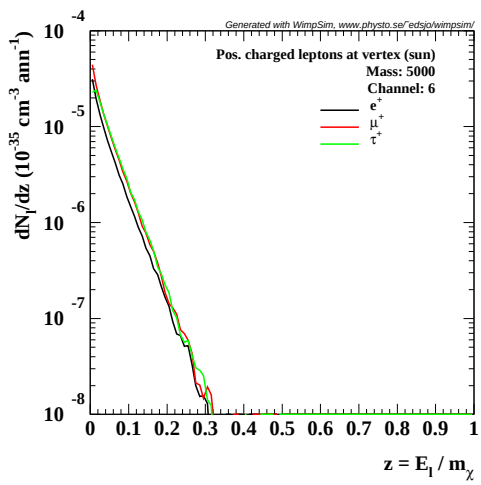
20.6.1 Neutrino fluxes at detector (Sun)



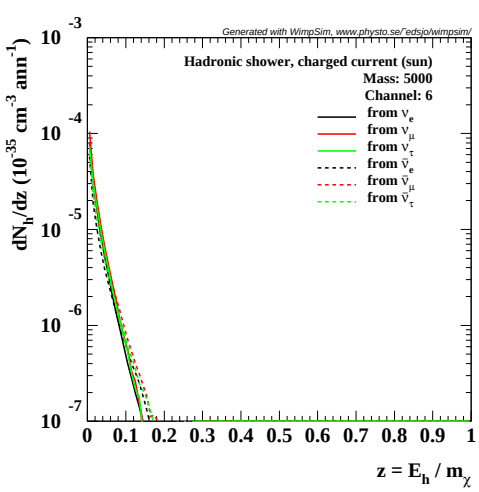


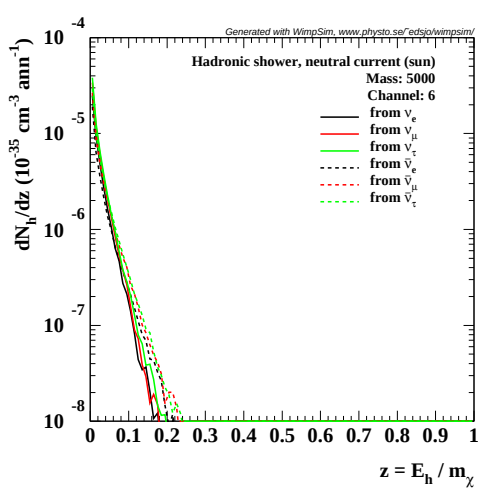
20.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



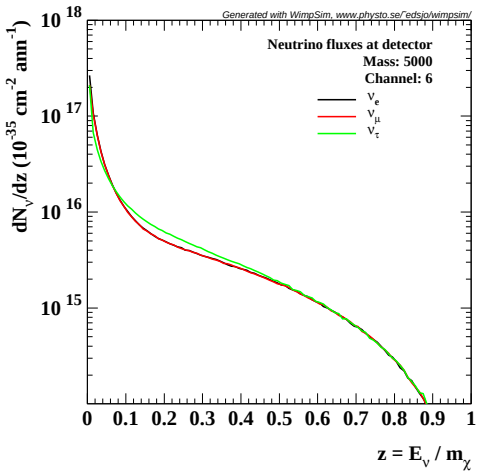


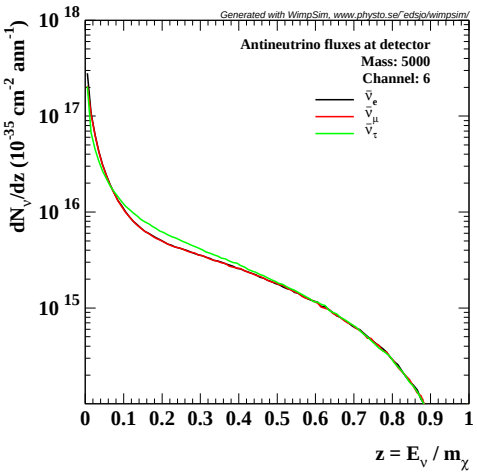
20.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



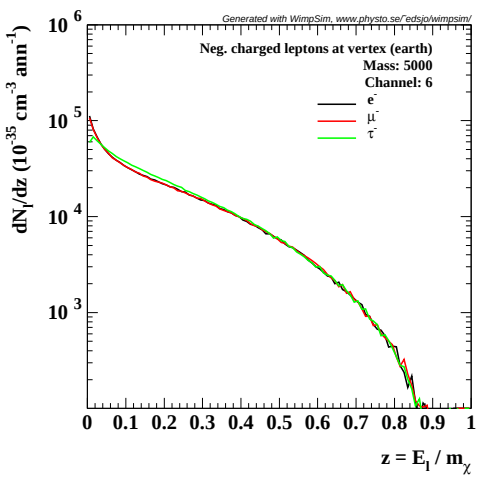


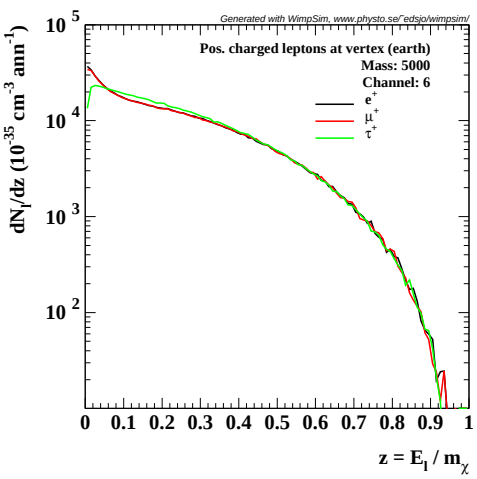
20.6.4 Neutrino fluxes at detector (Earth)



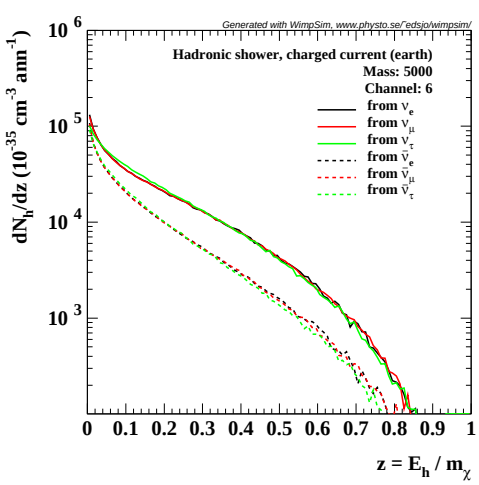


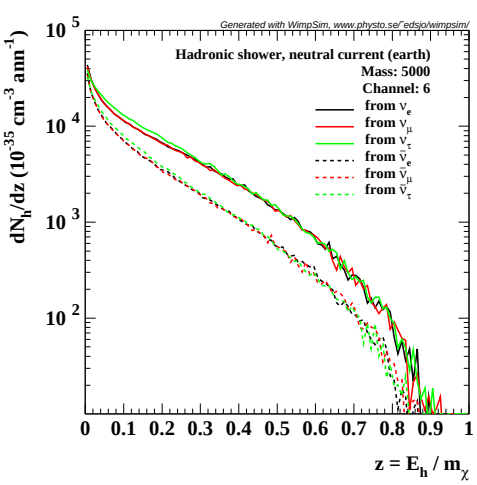
20.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



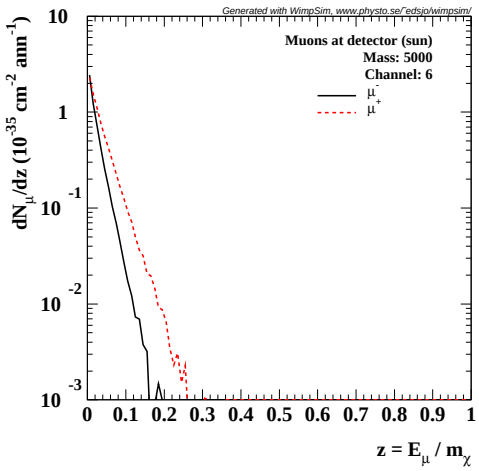


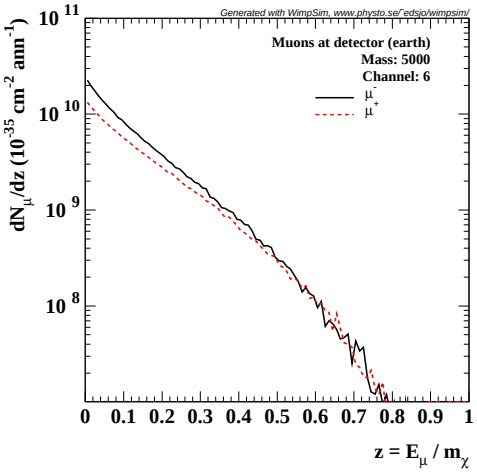
20.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





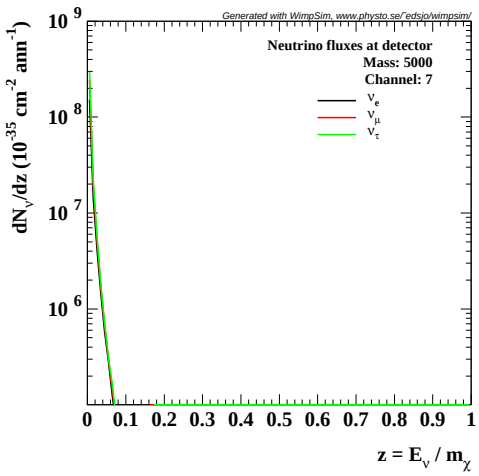
20.6.7 Muons at detector (Sun/Earth)

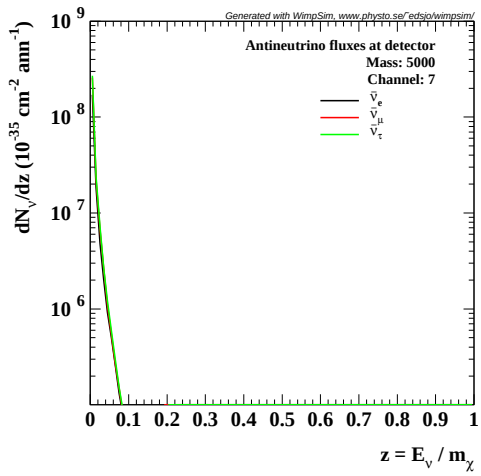




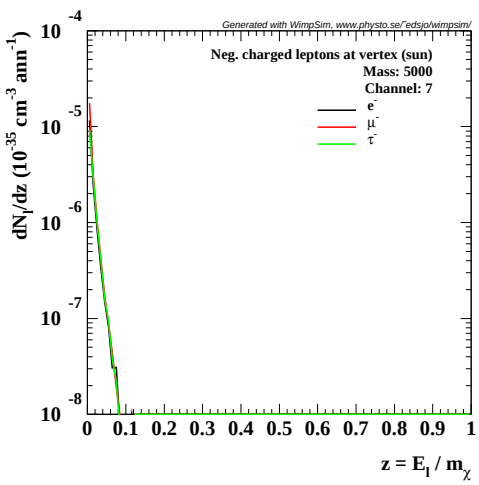
20.7 Channel 7 – gg

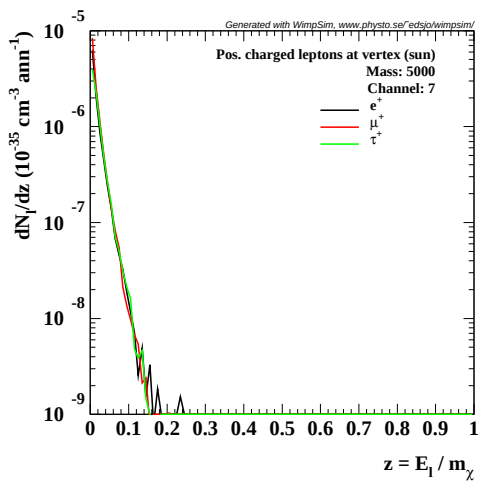
20.7.1 Neutrino fluxes at detector (Sun)



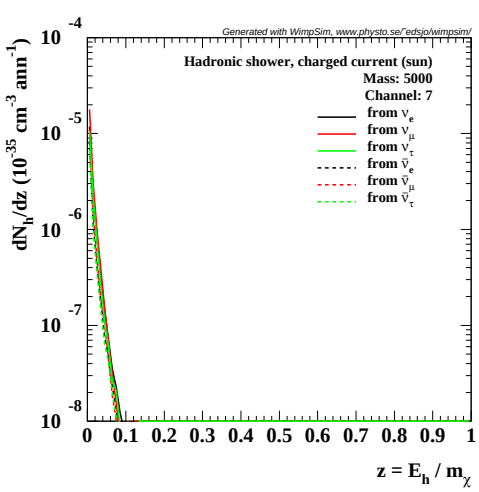


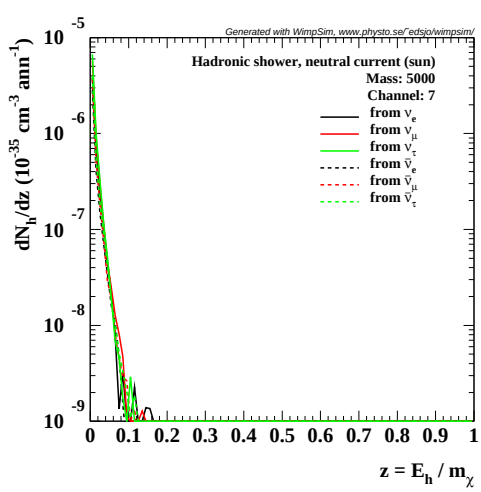
20.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



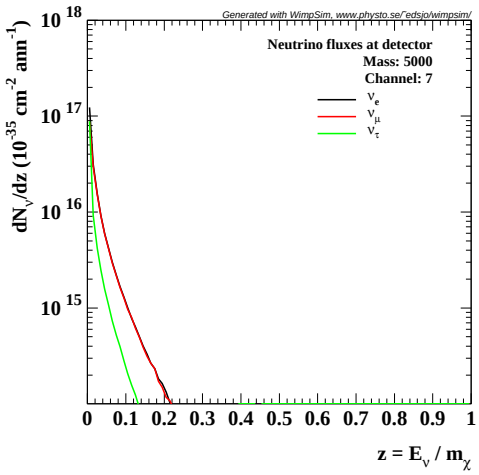


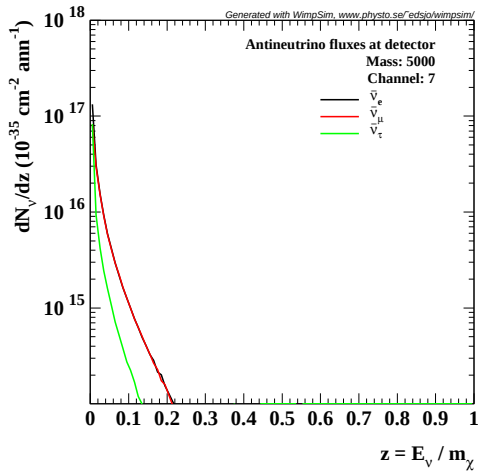
20.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



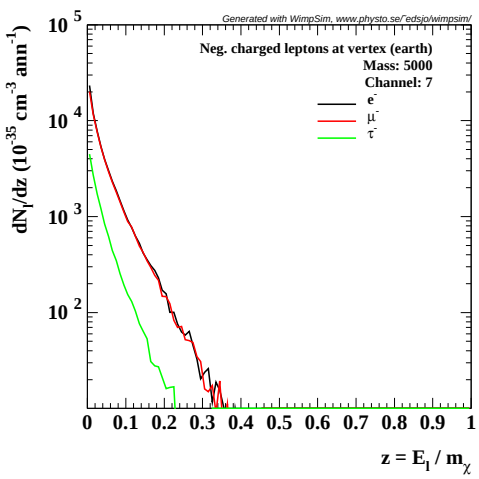


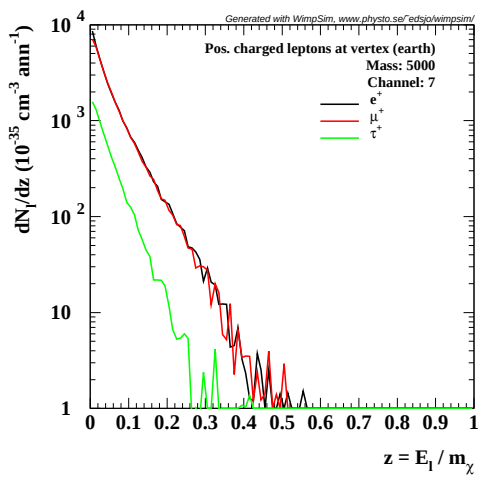
20.7.4 Neutrino fluxes at detector (Earth)



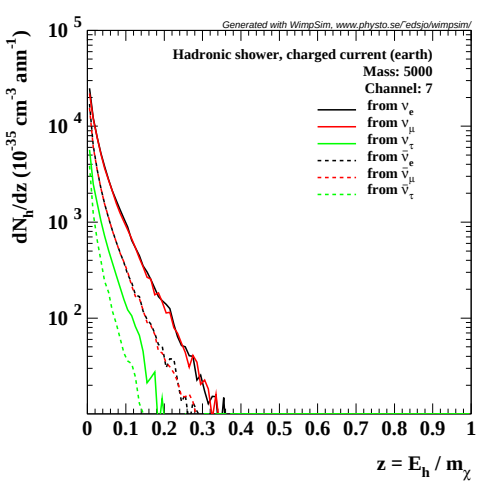


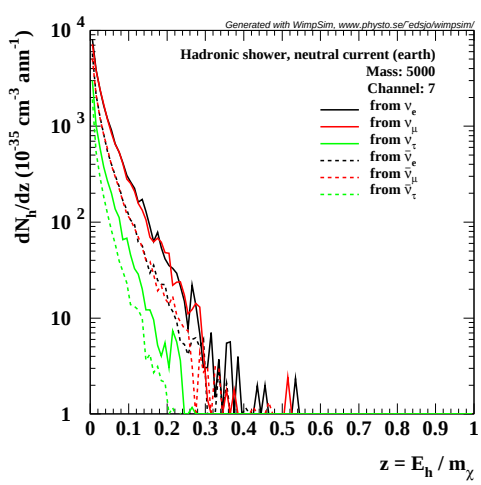
20.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



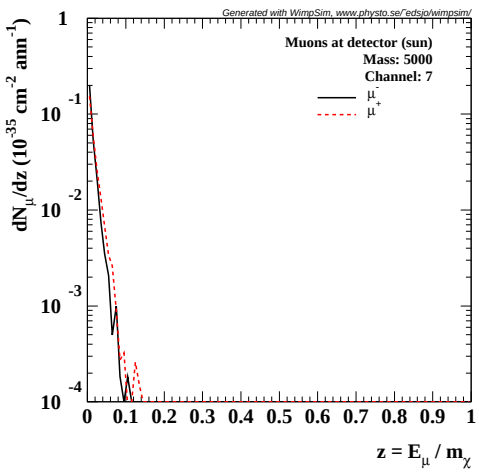


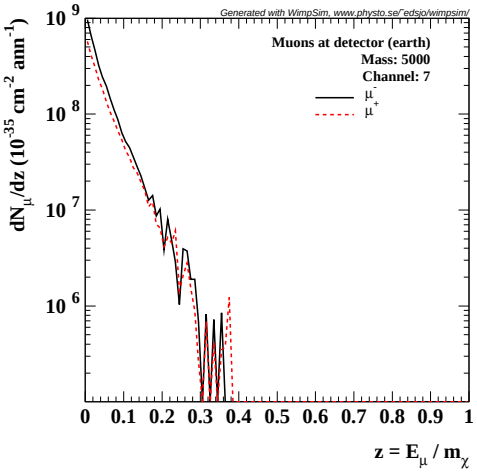
20.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





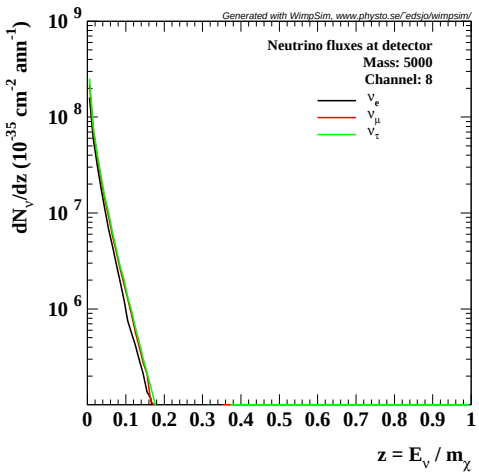
20.7.7 Muons at detector (Sun/Earth)

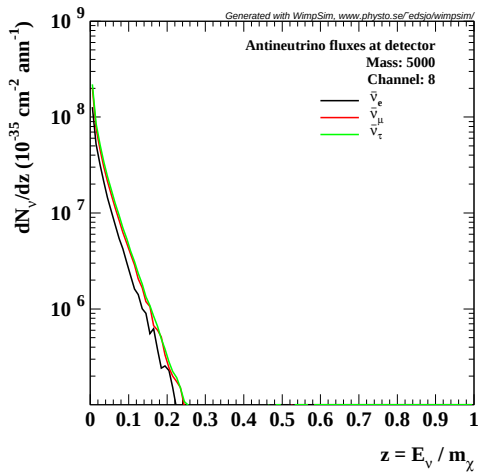




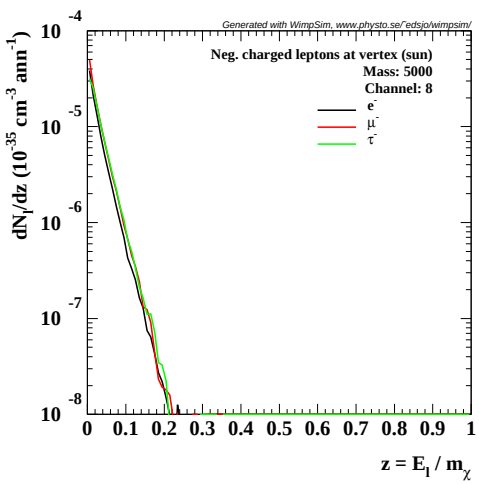
20.8 Channel 8 – W^-W^+

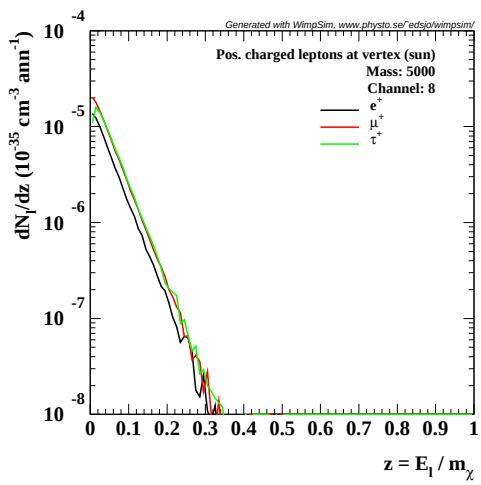
20.8.1 Neutrino fluxes at detector (Sun)



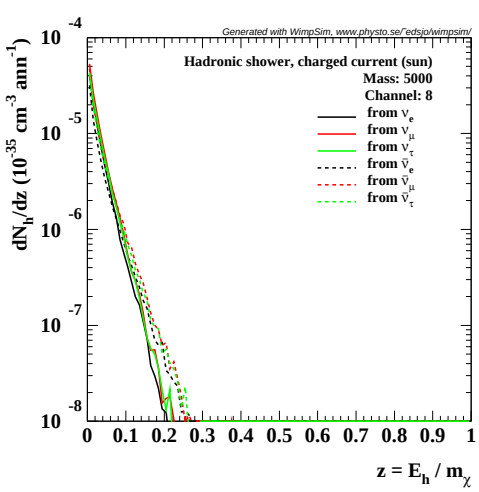


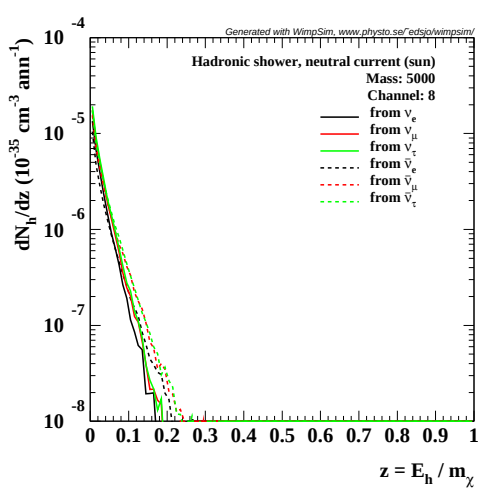
20.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



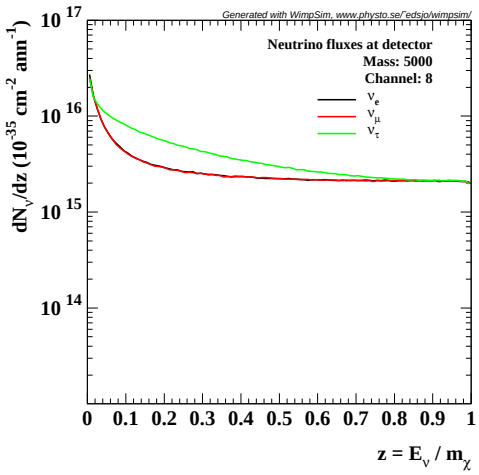


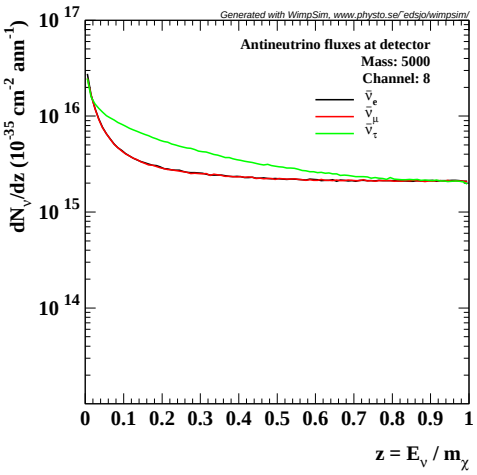
20.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



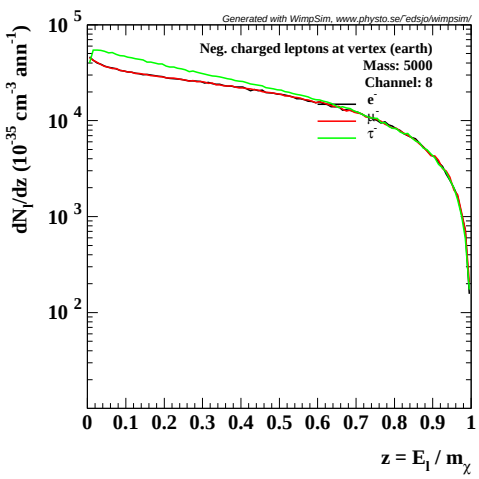


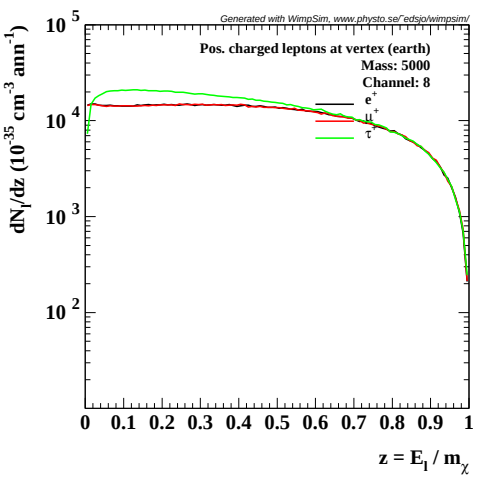
20.8.4 Neutrino fluxes at detector (Earth)



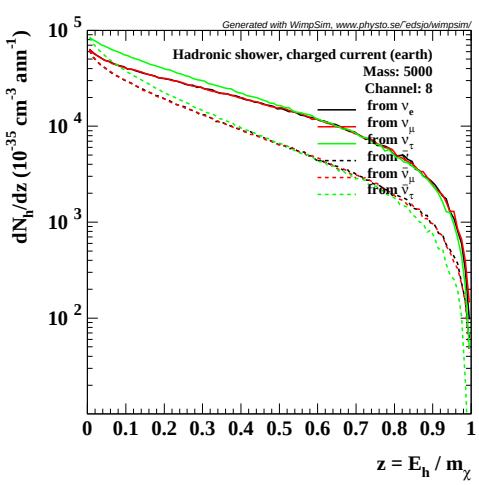


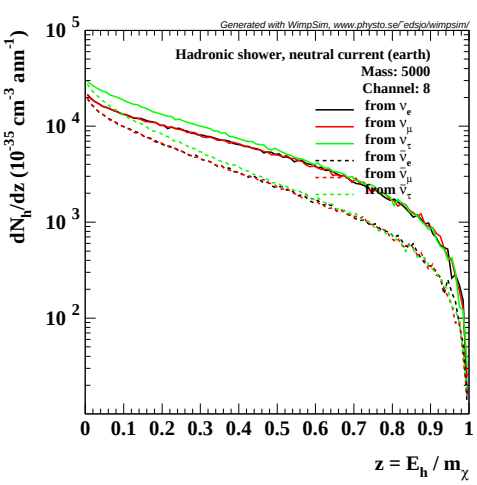
20.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



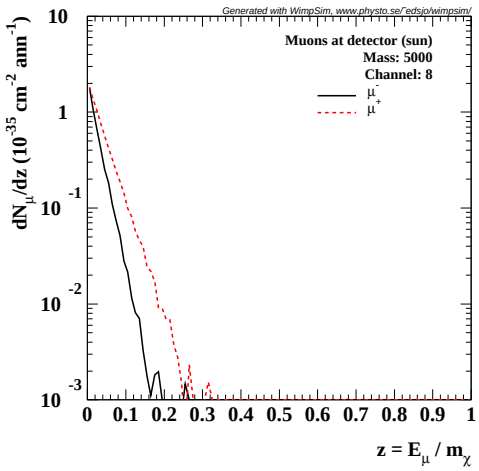


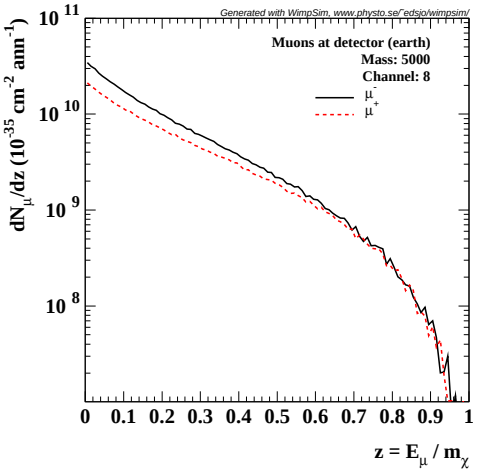
20.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





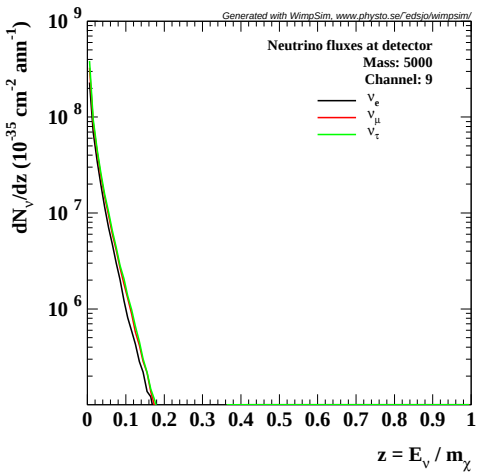
20.8.7 Muons at detector (Sun/Earth)

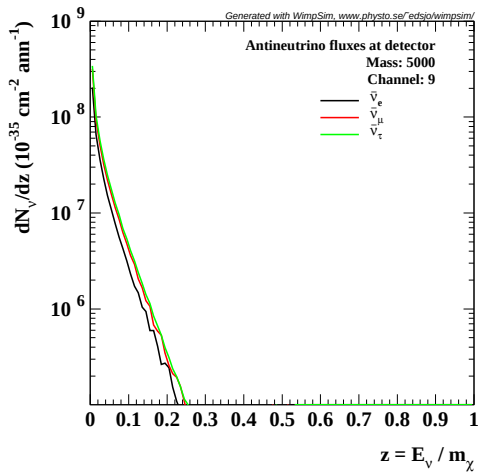




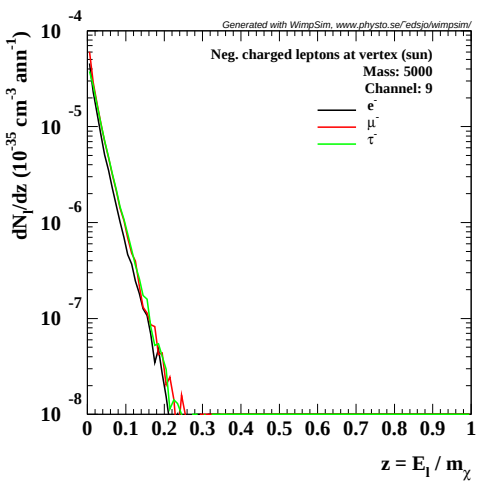
20.9 Channel 9 – $Z^0 Z^0$

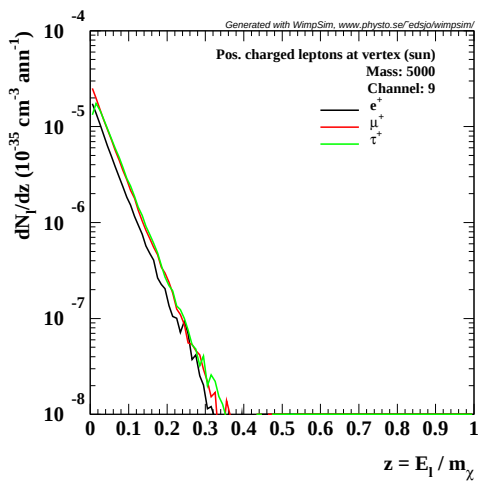
20.9.1 Neutrino fluxes at detector (Sun)



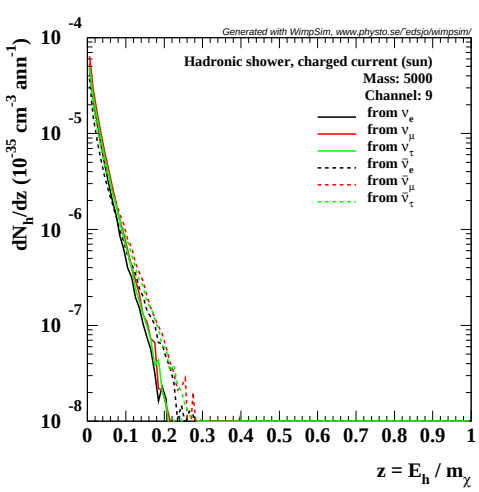


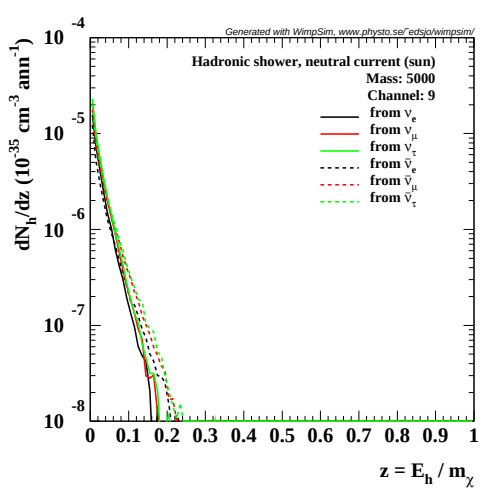
20.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



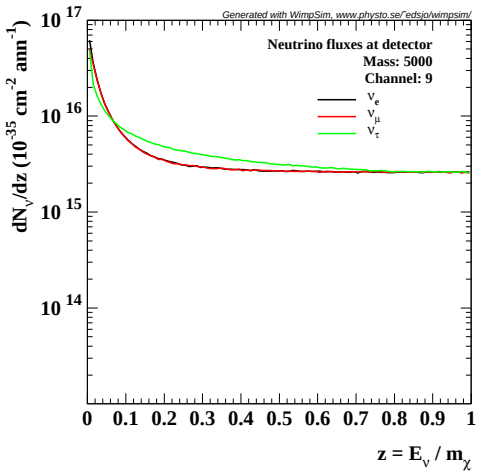


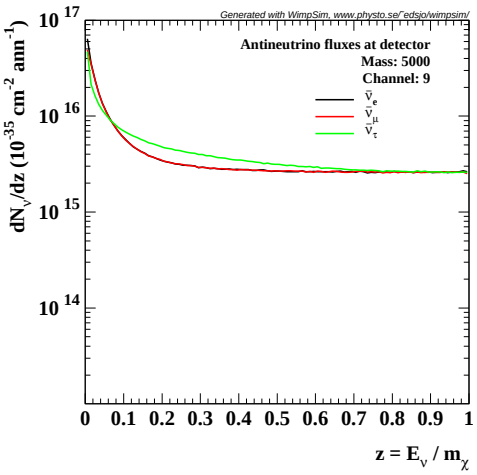
20.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



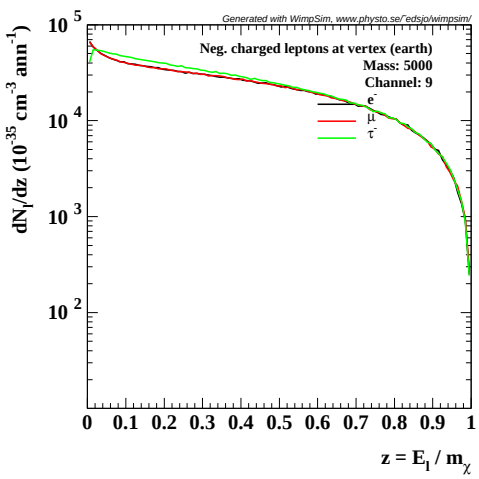


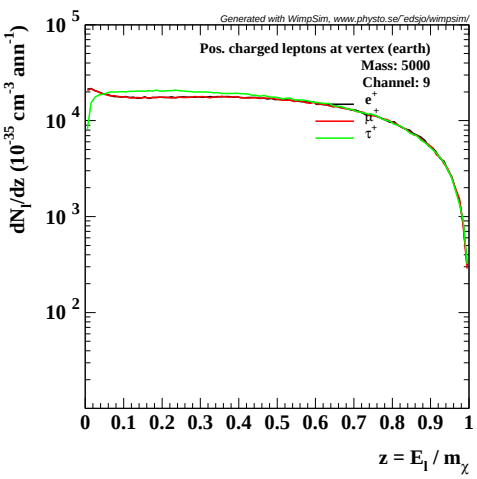
20.9.4 Neutrino fluxes at detector (Earth)



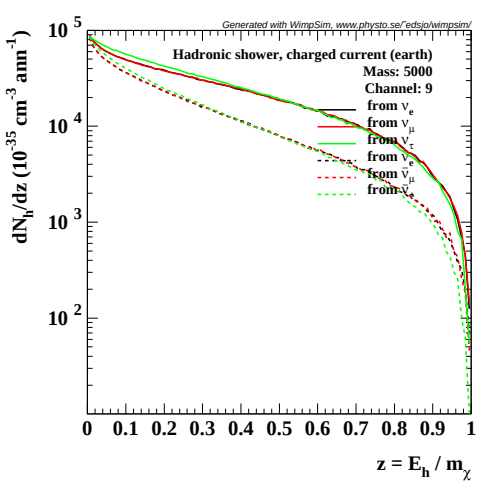


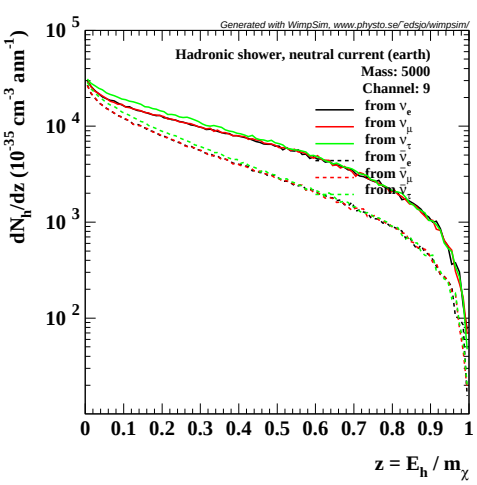
20.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



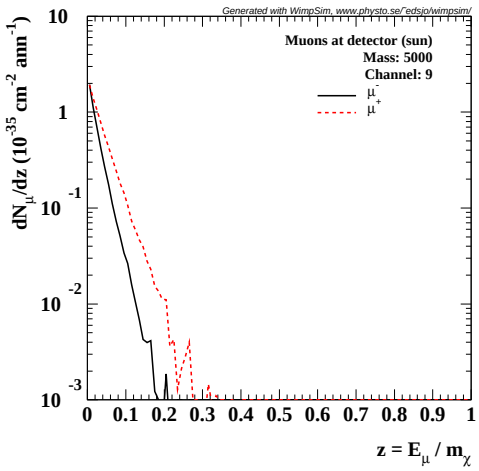


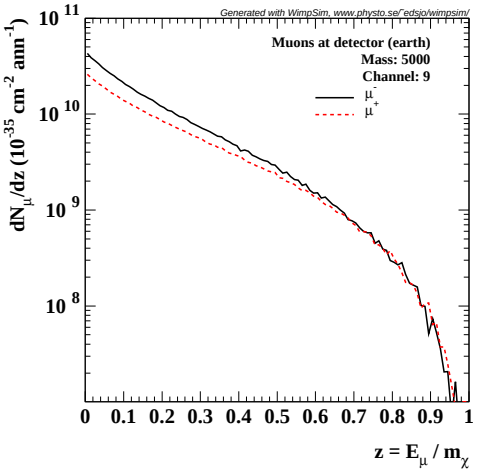
20.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





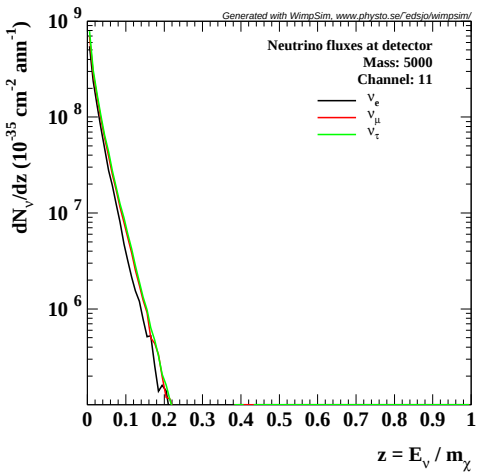
20.9.7 Muons at detector (Sun/Earth)

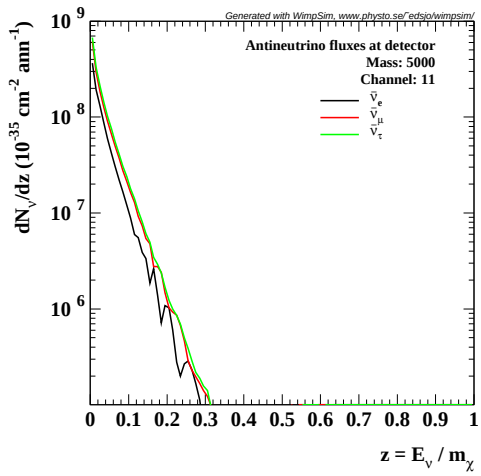




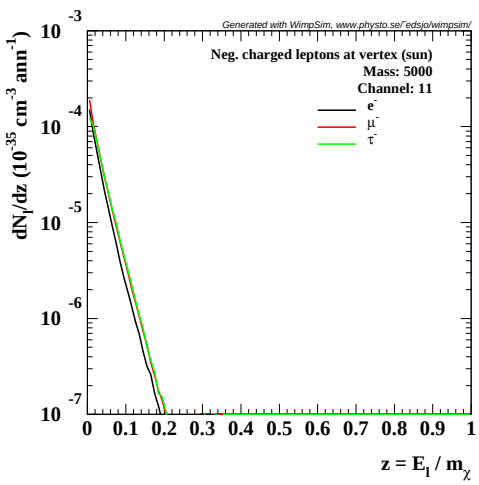
20.10 Channel 11 – $\tau^-\tau^+$

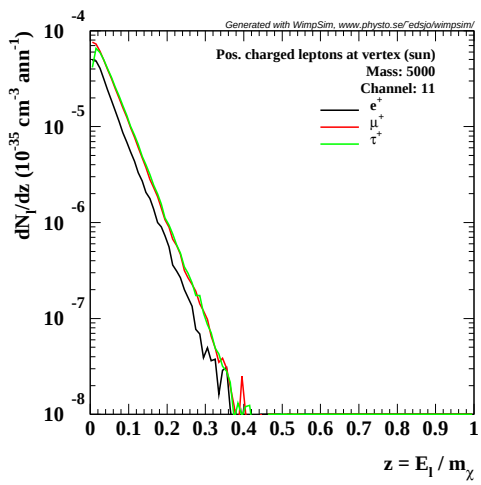
20.10.1 Neutrino fluxes at detector (Sun)



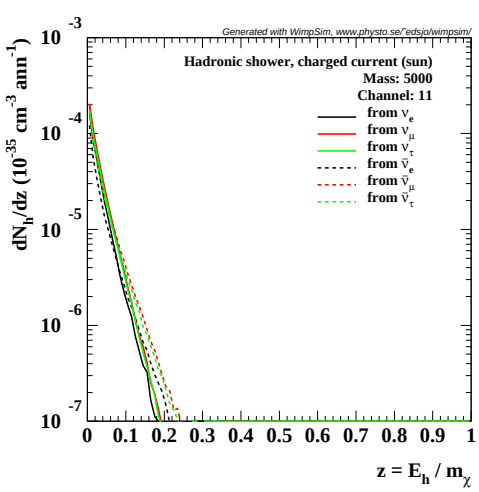


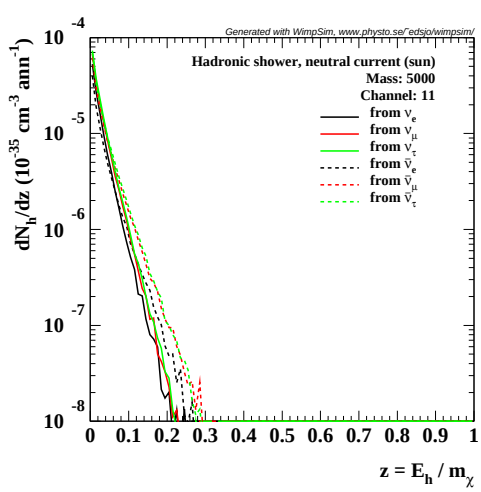
20.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



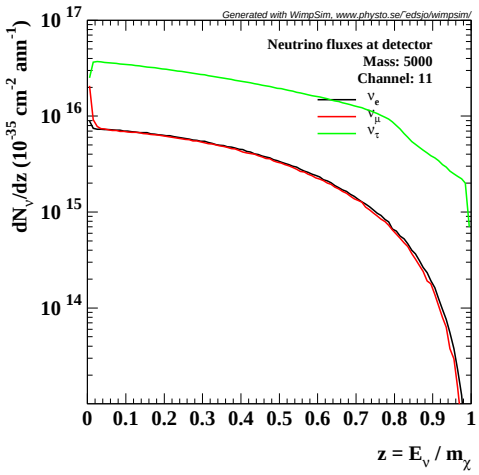


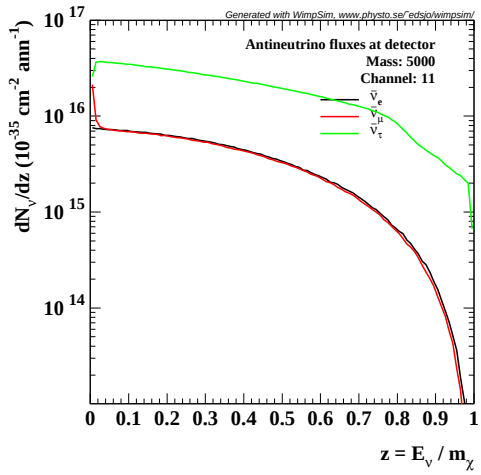
20.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



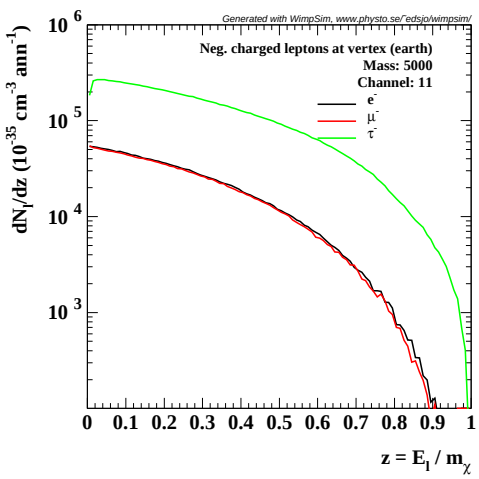


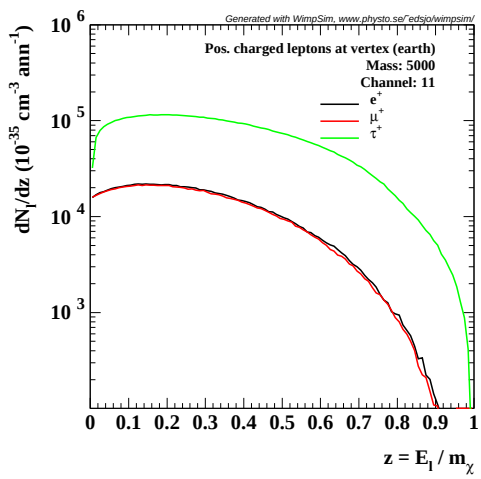
20.10.4 Neutrino fluxes at detector (Earth)



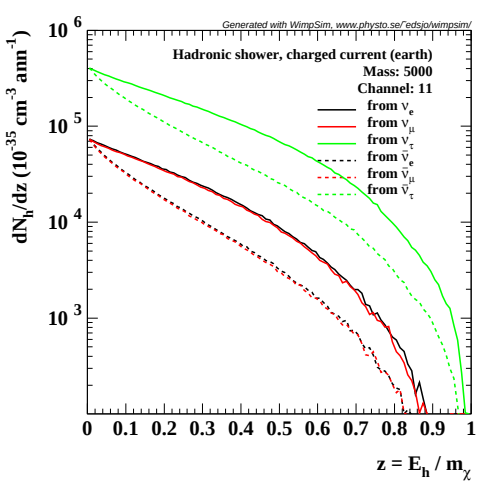


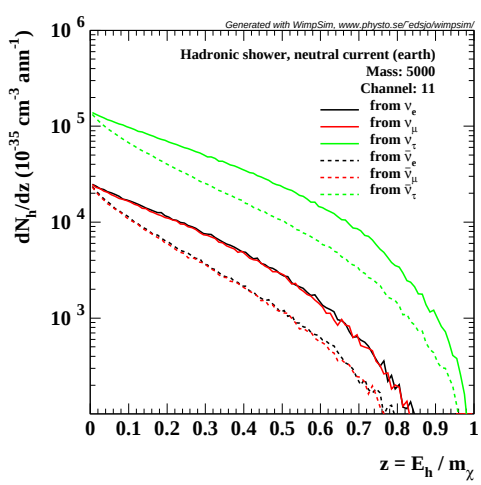
20.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



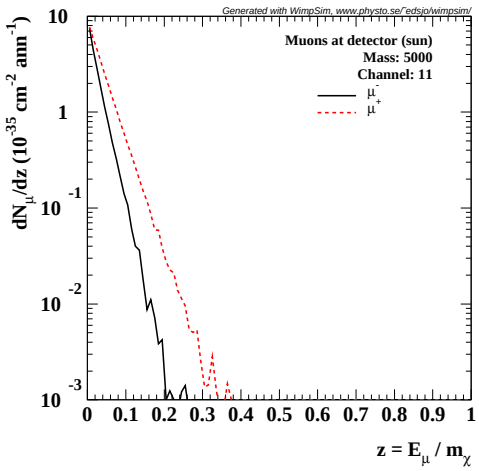


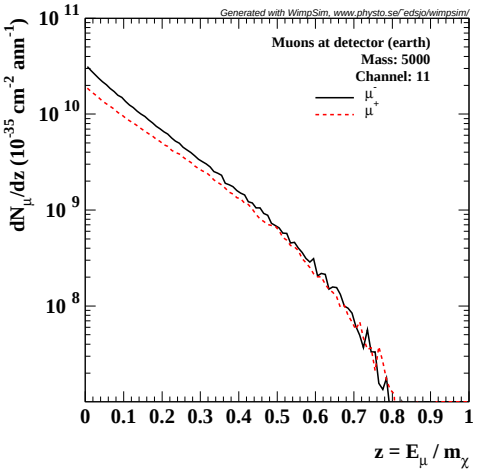
20.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





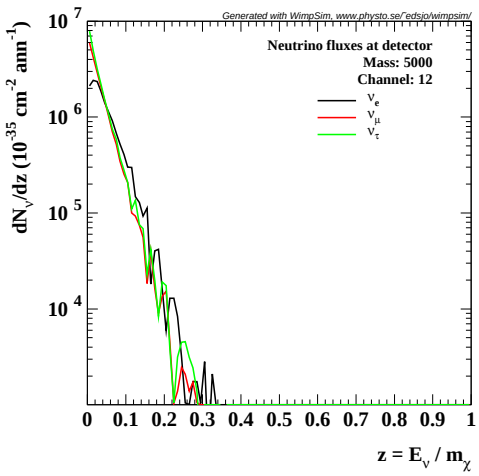
20.10.7 Muons at detector (Sun/Earth)

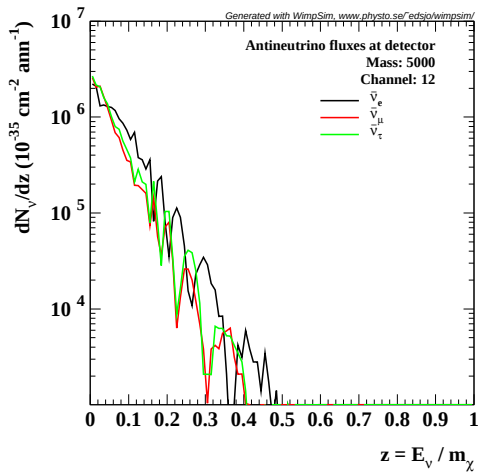




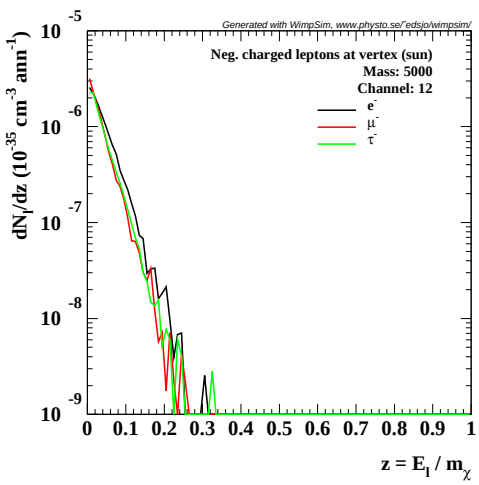
20.11 Channel 12 – $\nu_e\bar{\nu}_e$

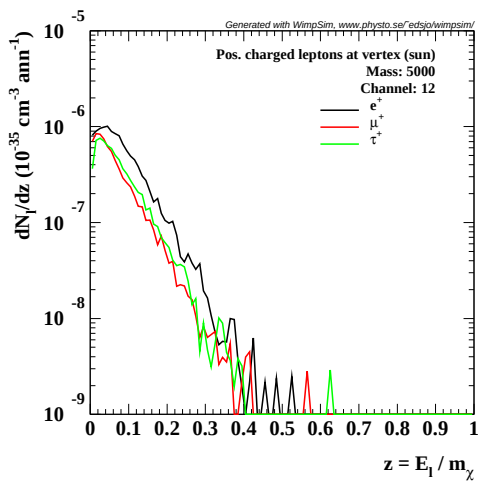
20.11.1 Neutrino fluxes at detector (Sun)



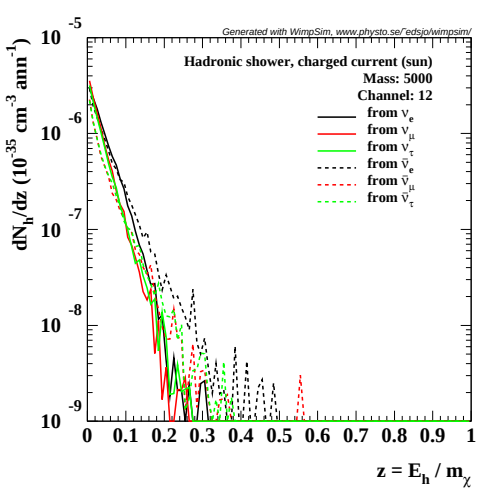


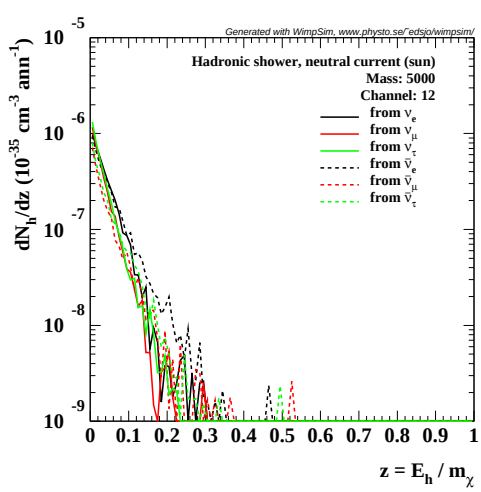
20.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



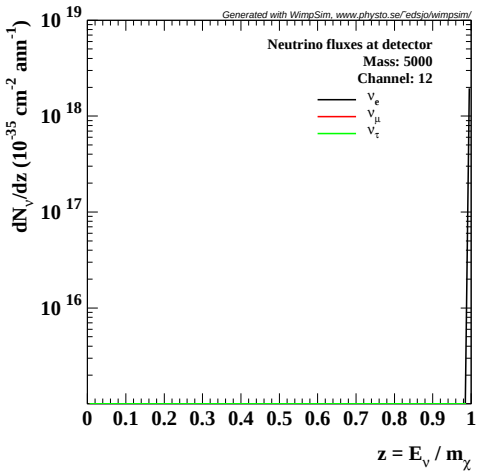


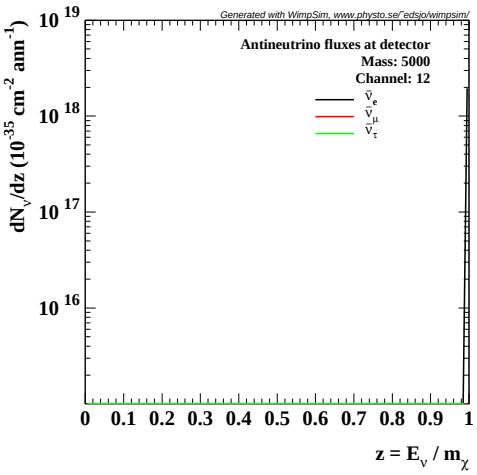
20.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



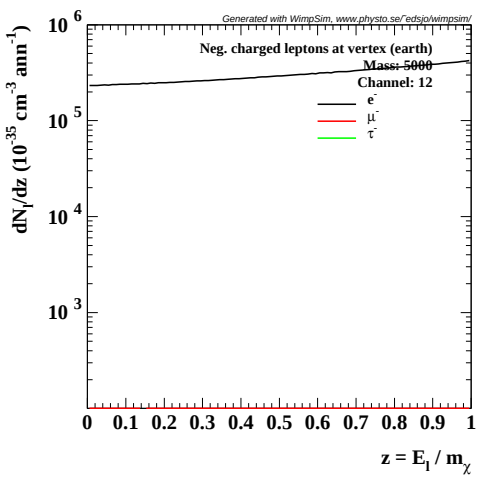


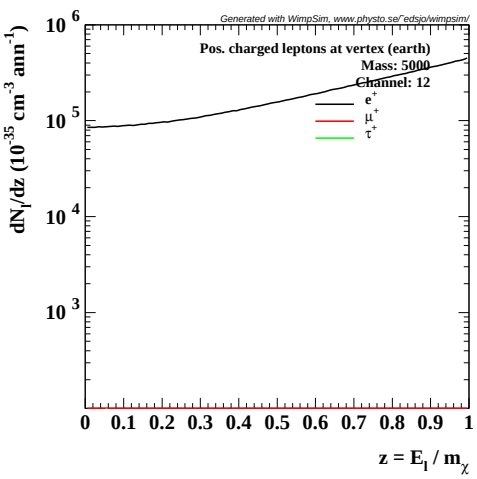
20.11.4 Neutrino fluxes at detector (Earth)



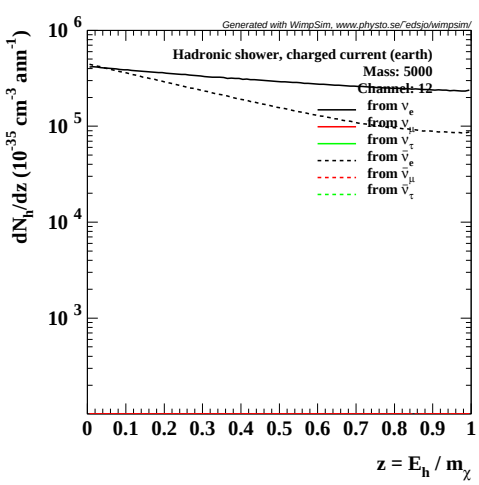


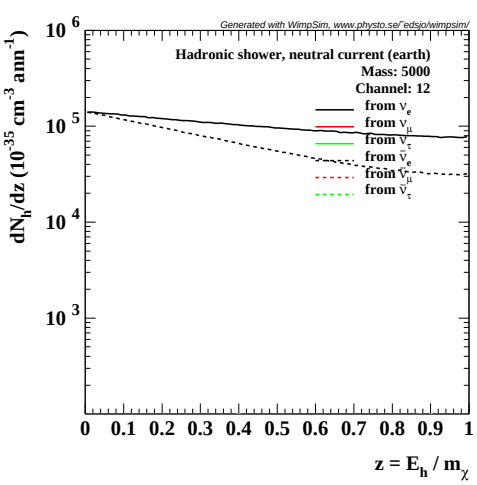
20.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



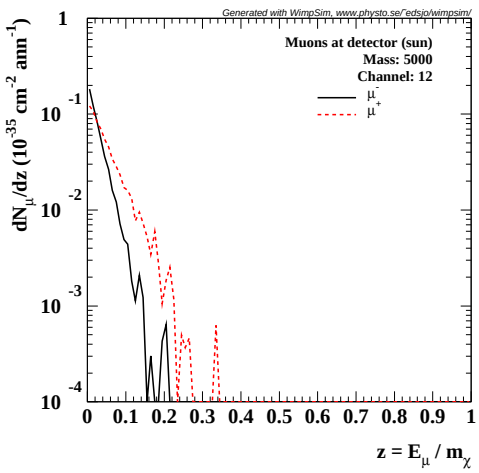


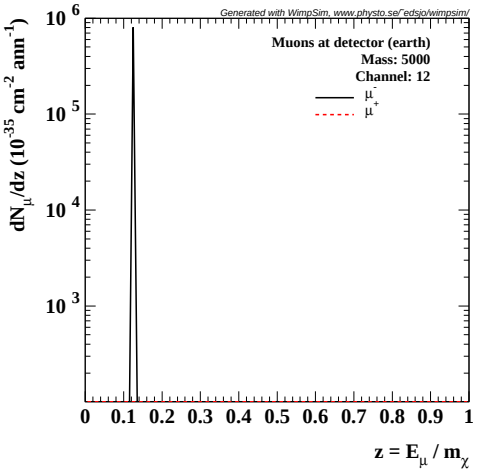
20.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





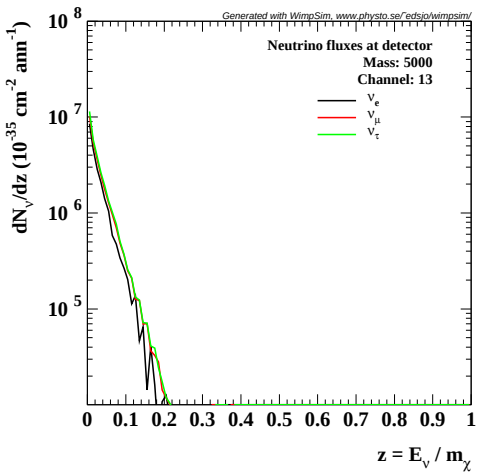
20.11.7 Muons at detector (Sun/Earth)

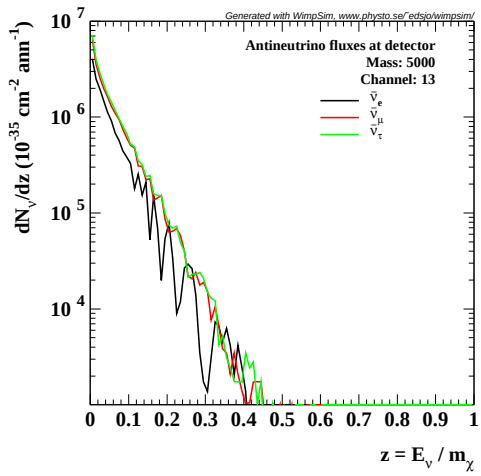




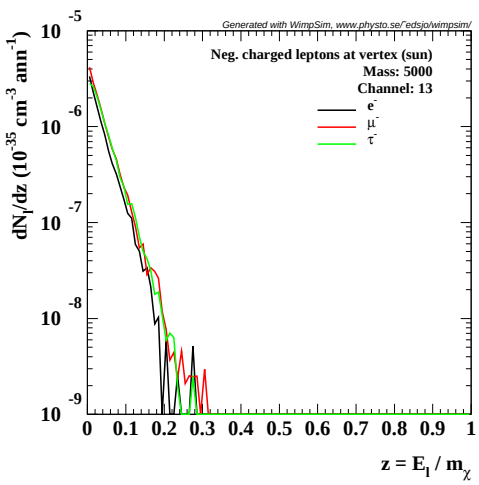
20.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

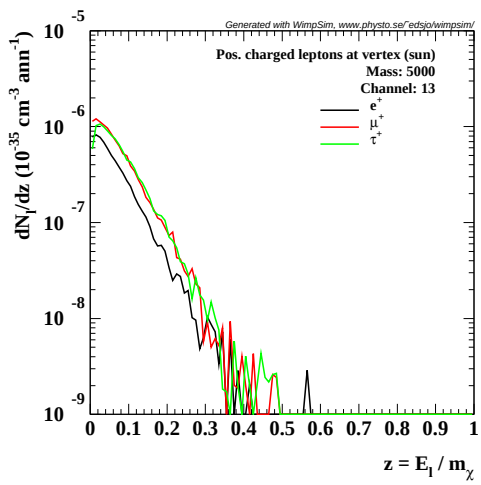
20.12.1 Neutrino fluxes at detector (Sun)



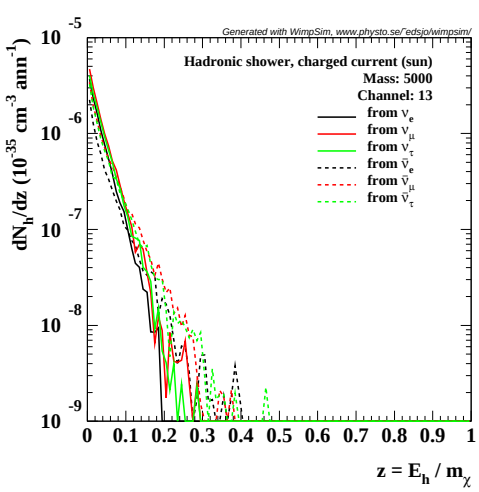


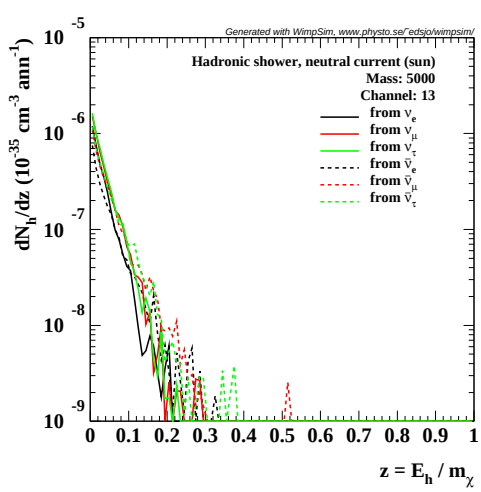
20.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



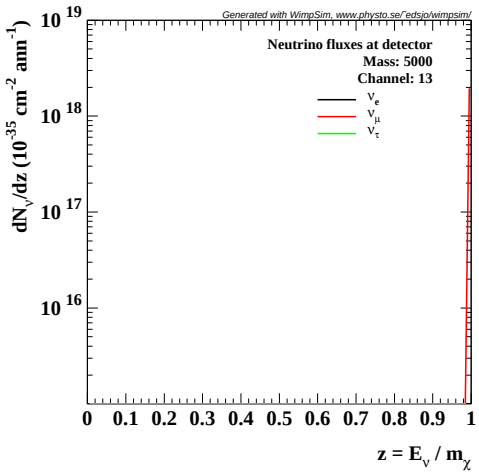


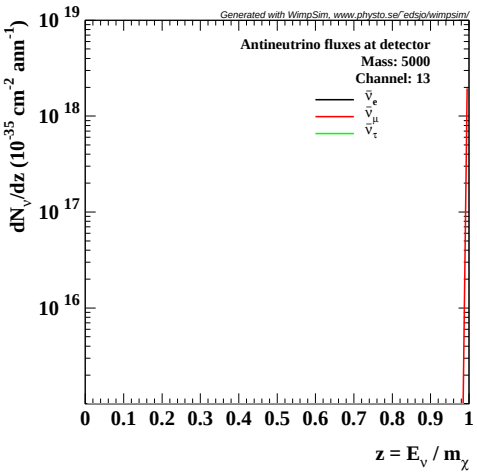
20.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



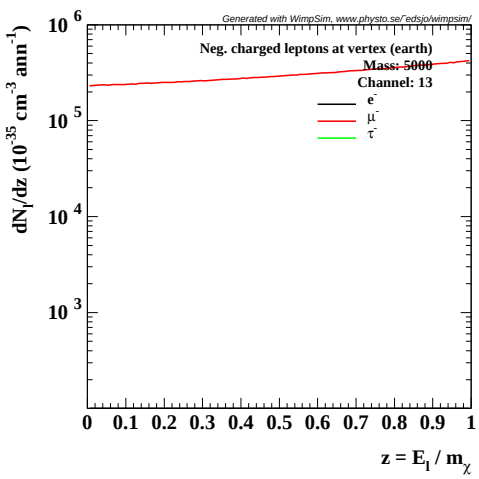


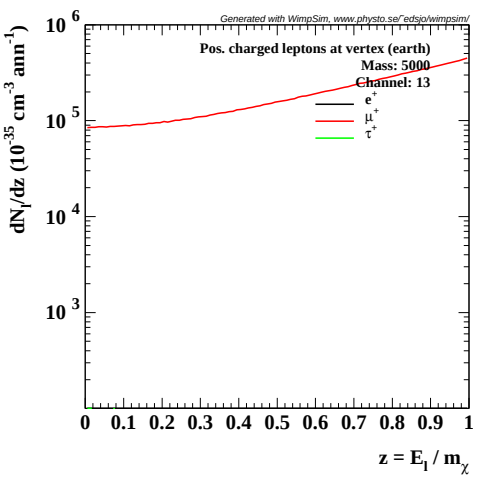
20.12.4 Neutrino fluxes at detector (Earth)



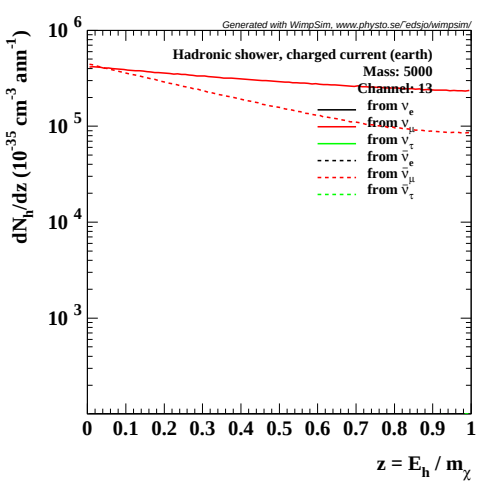


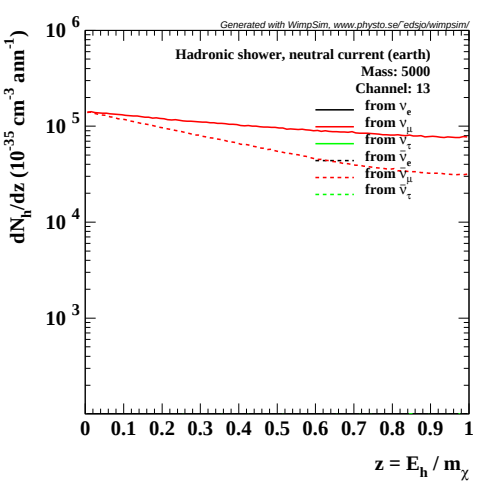
20.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



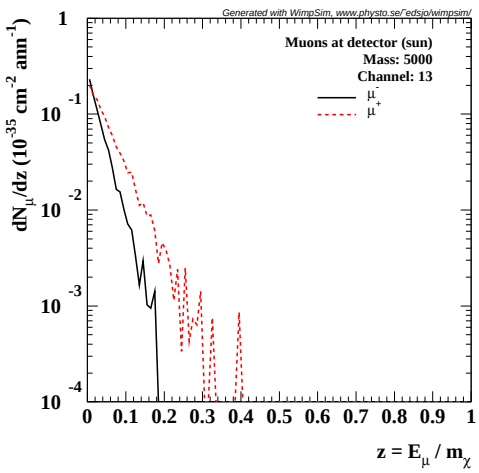


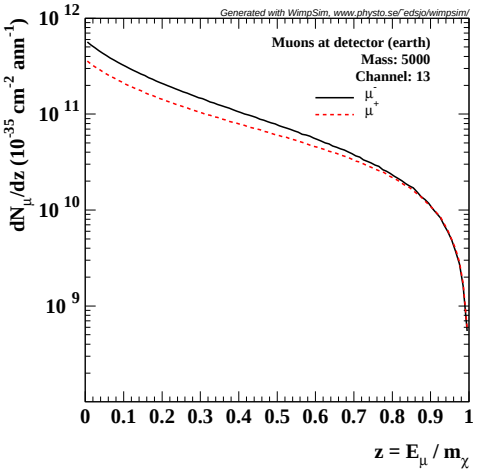
20.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





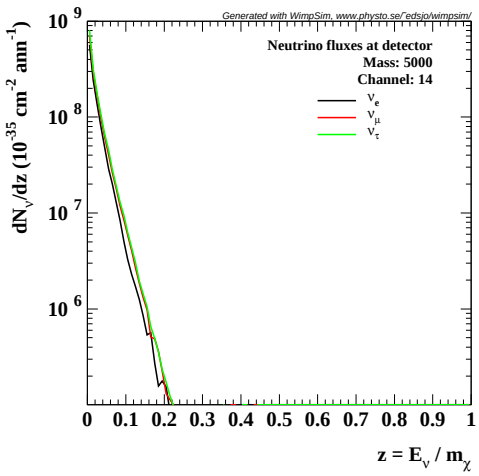
20.12.7 Muons at detector (Sun/Earth)

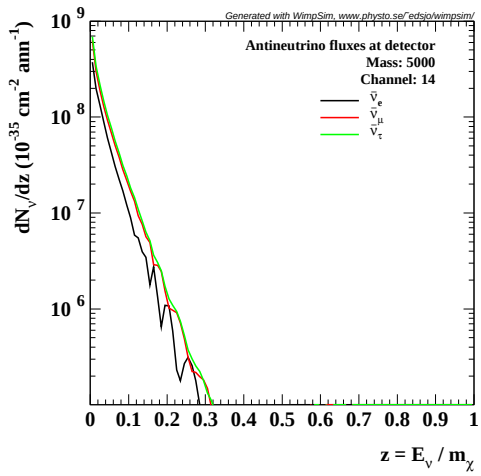




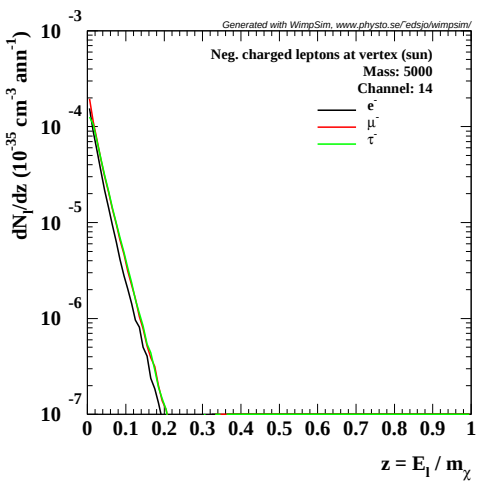
20.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

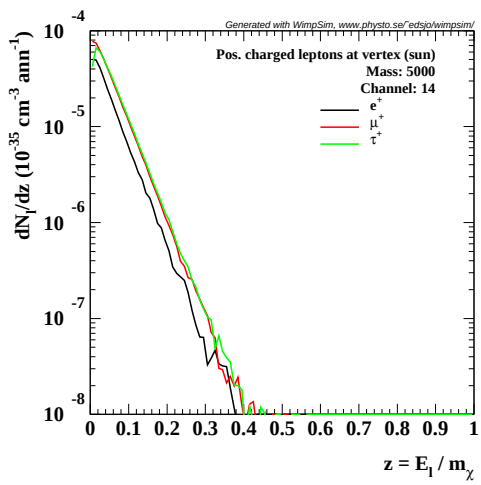
20.13.1 Neutrino fluxes at detector (Sun)



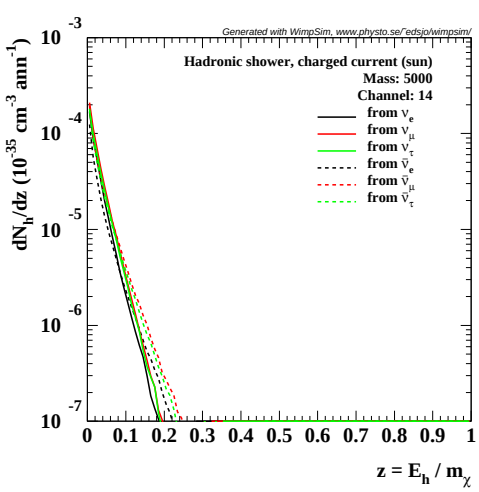


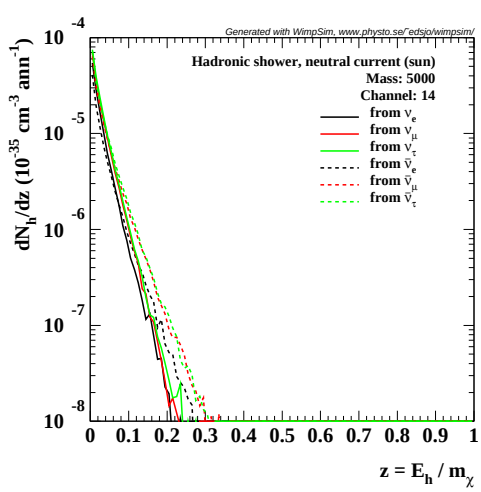
20.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



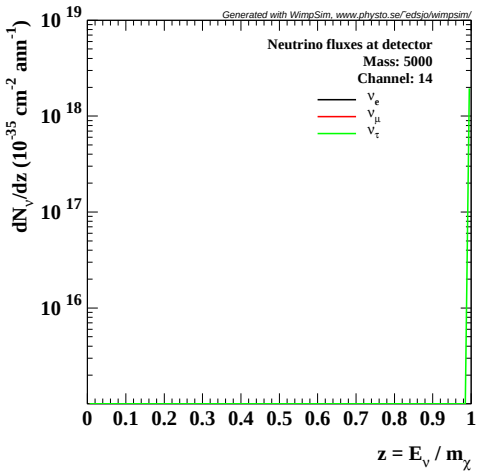


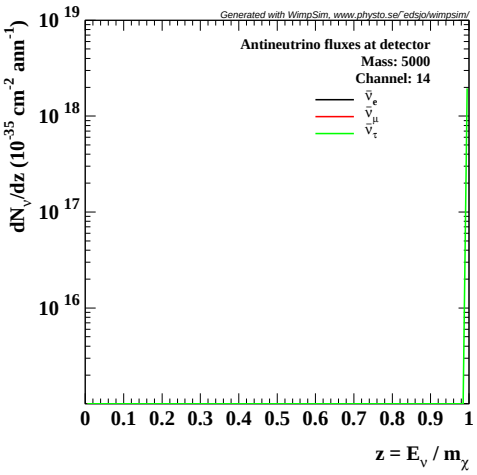
20.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



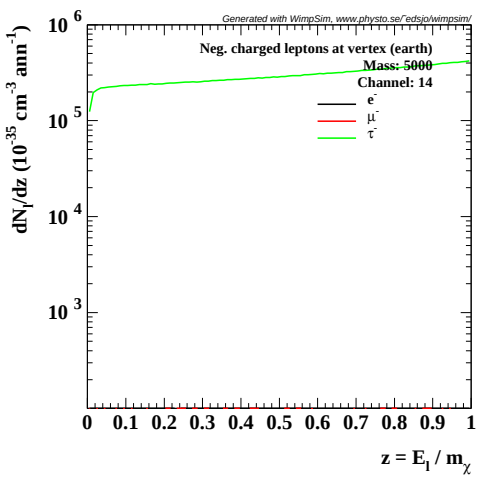


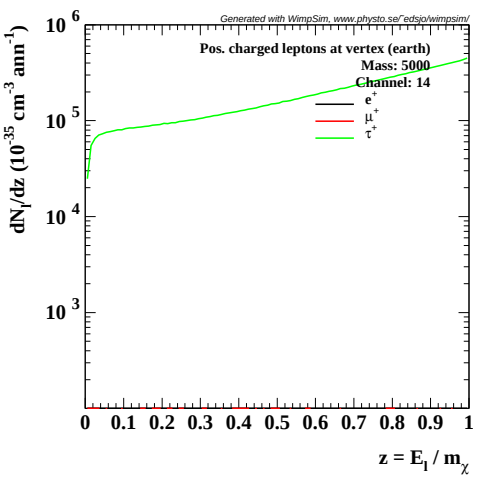
20.13.4 Neutrino fluxes at detector (Earth)



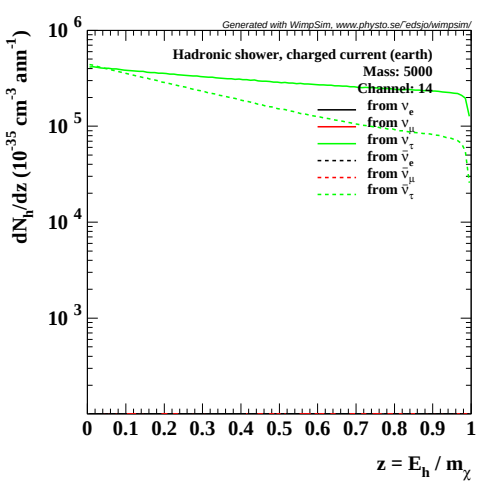


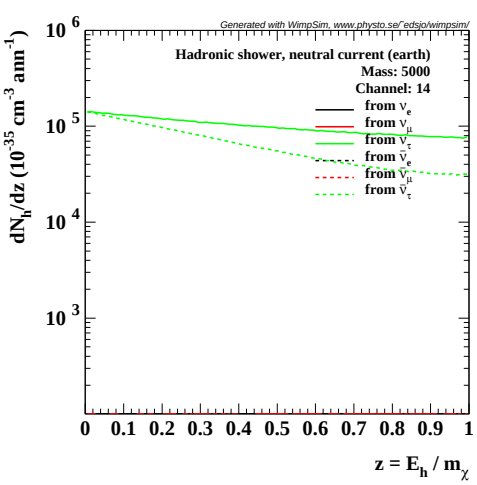
20.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



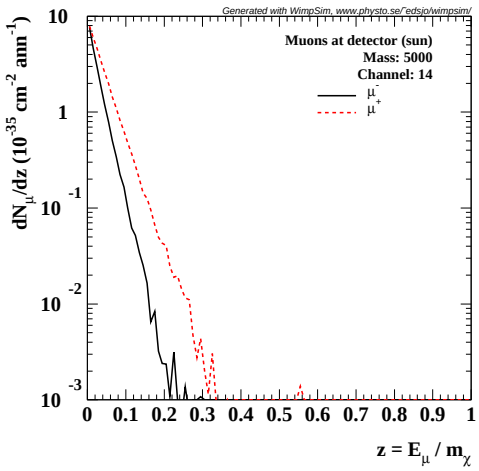


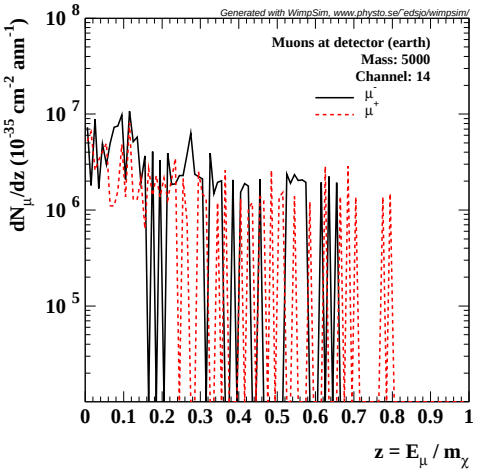
20.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





20.13.7 Muons at detector (Sun/Earth)

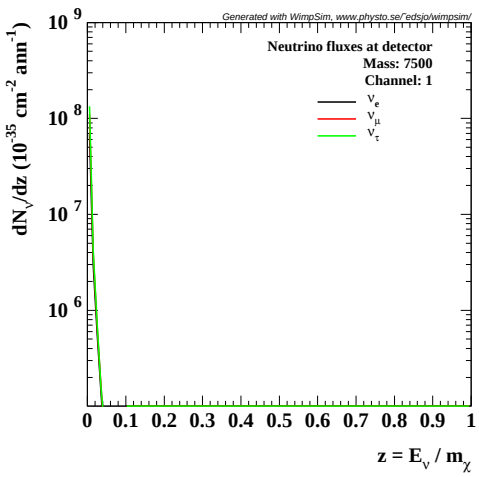


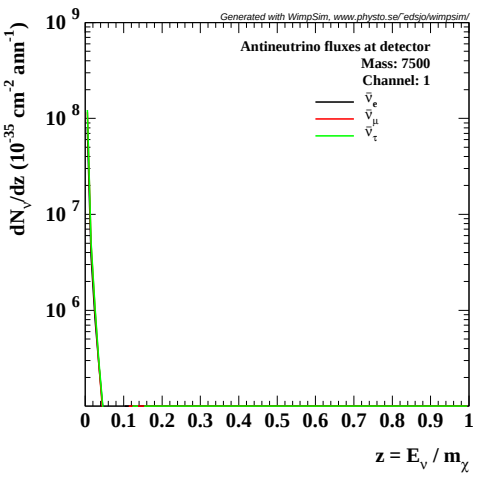


21 Mass 7500

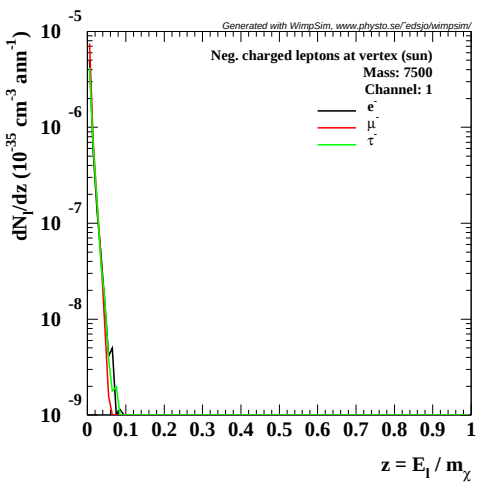
21.1 Channel 1 – $d\bar{d}$

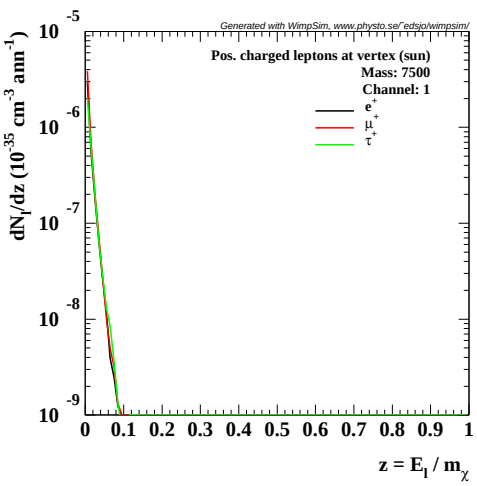
21.1.1 Neutrino fluxes at detector (Sun)



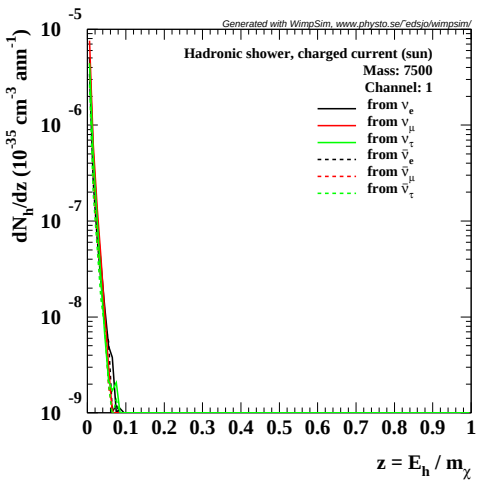


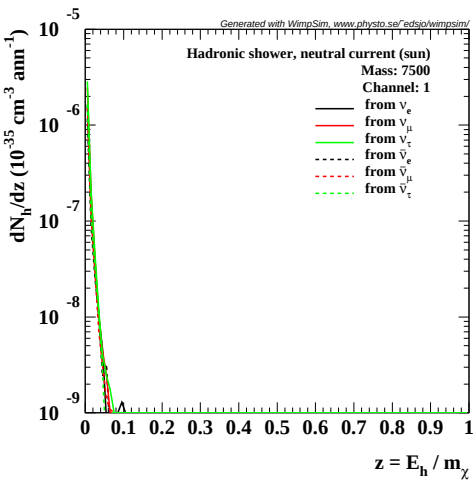
21.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



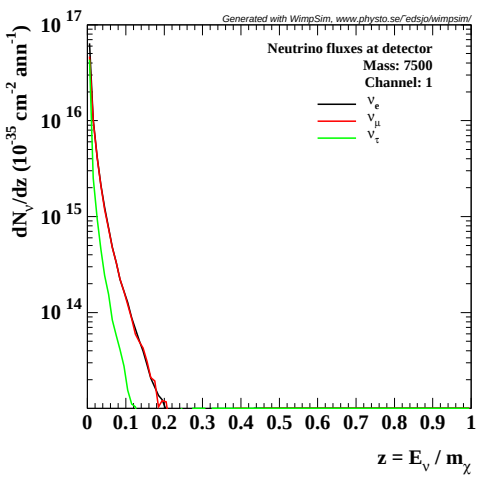


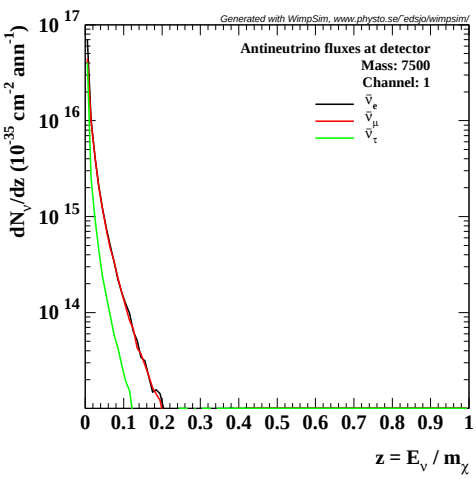
21.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



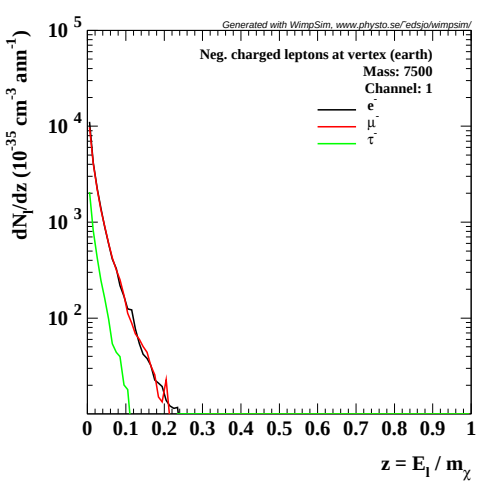


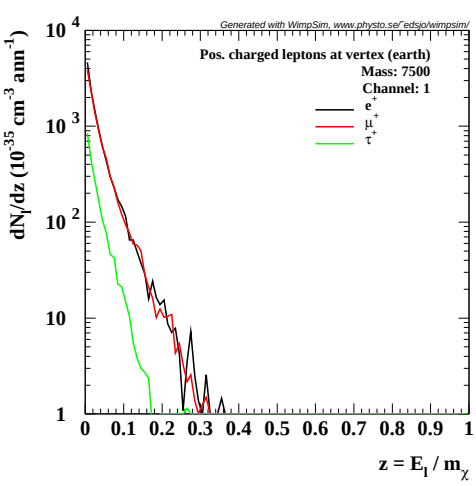
21.1.4 Neutrino fluxes at detector (Earth)



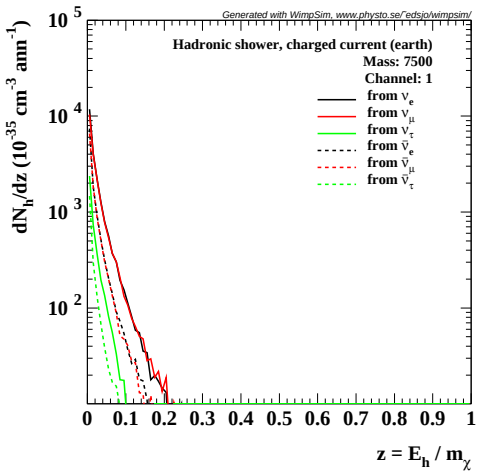


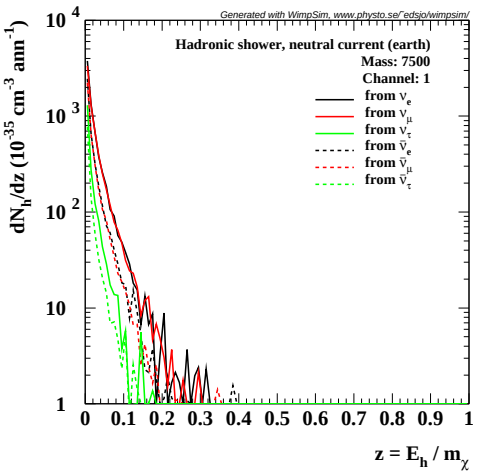
21.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



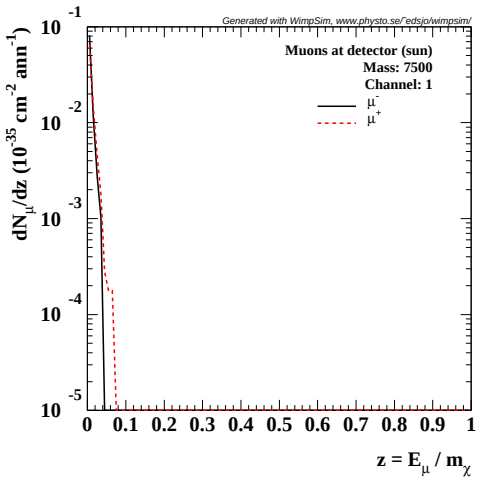


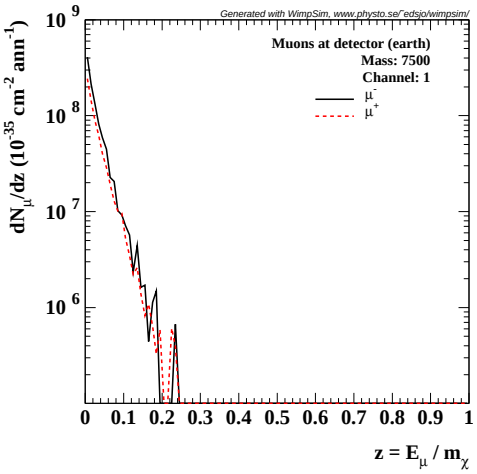
21.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





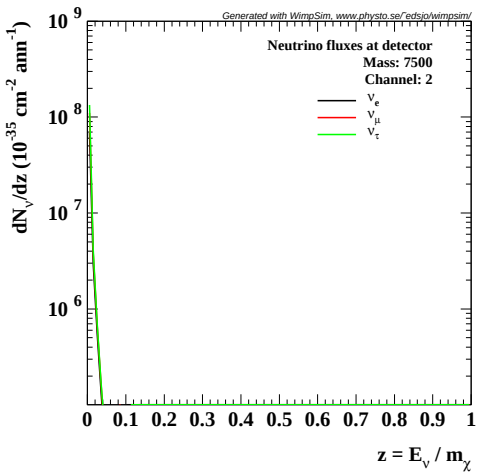
21.1.7 Muons at detector (Sun/Earth)

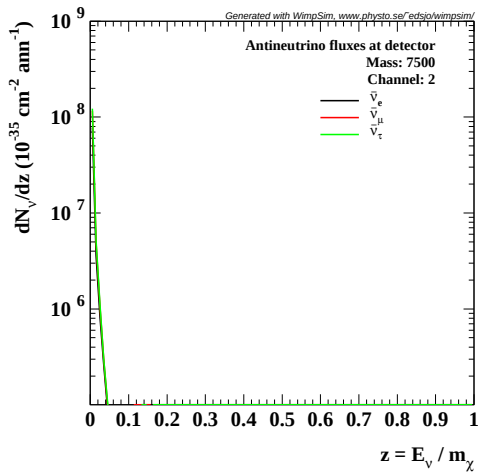




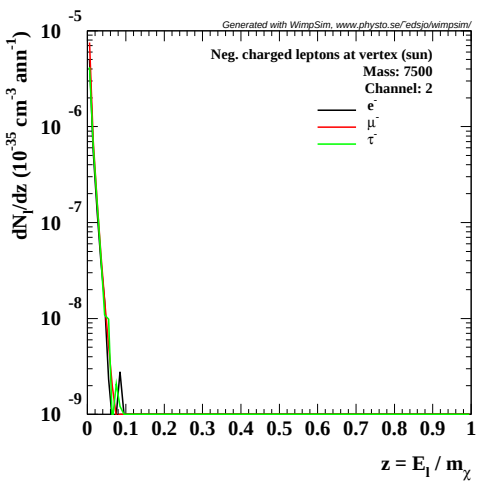
21.2 Channel 2 – $u\bar{u}$

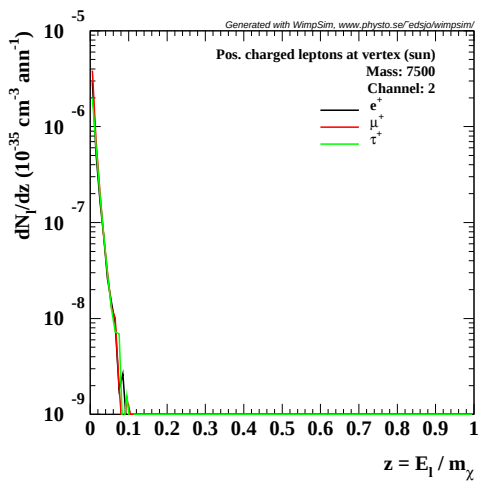
21.2.1 Neutrino fluxes at detector (Sun)



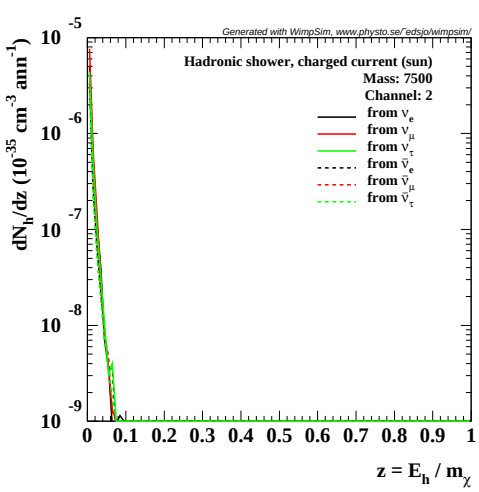


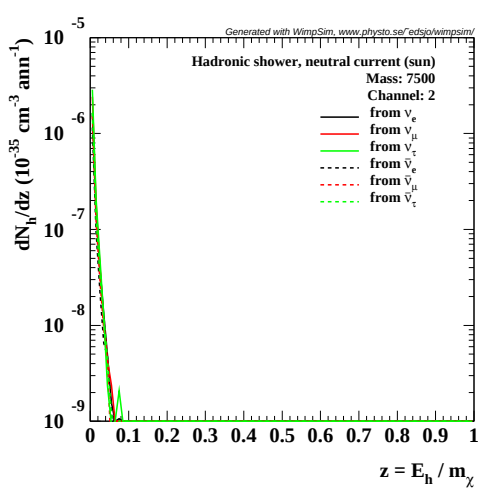
21.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



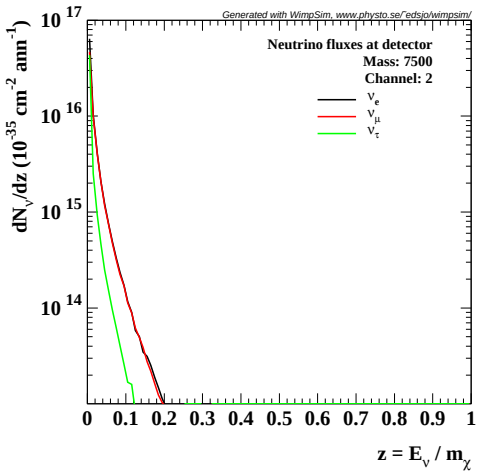


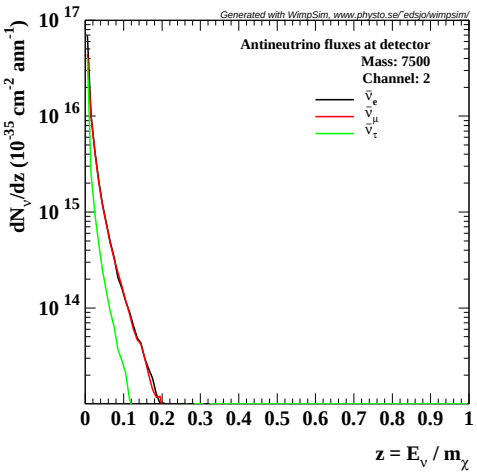
21.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



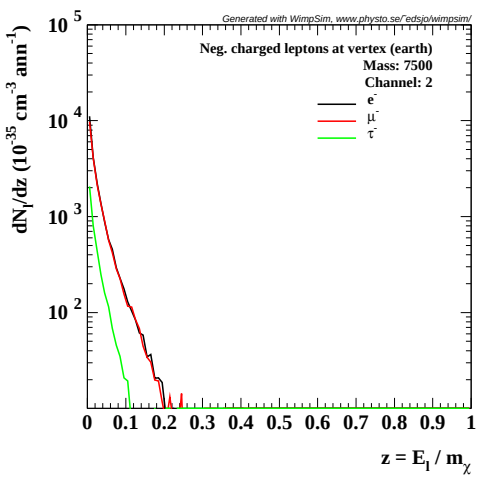


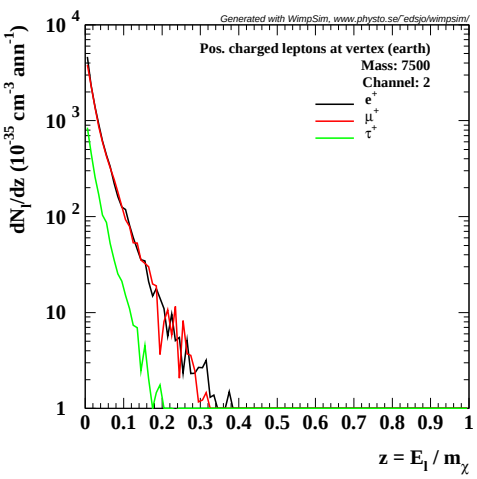
21.2.4 Neutrino fluxes at detector (Earth)



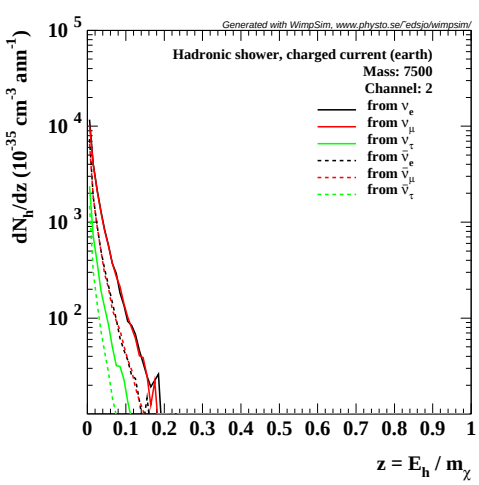


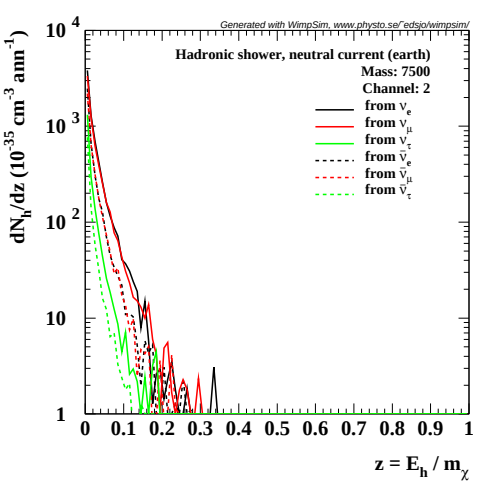
21.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



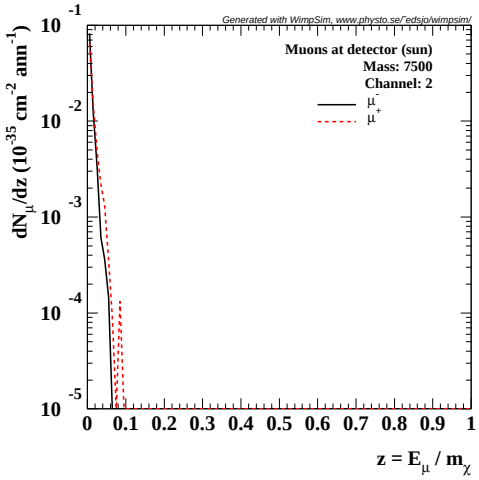


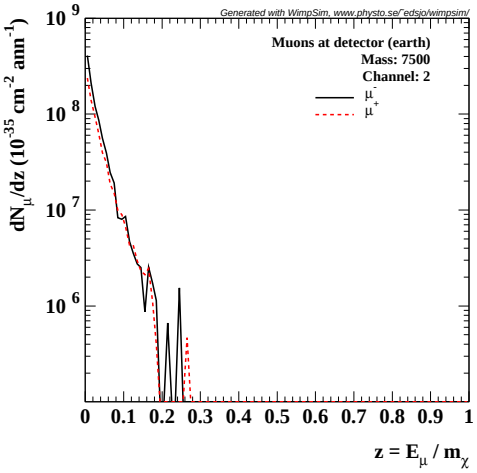
21.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





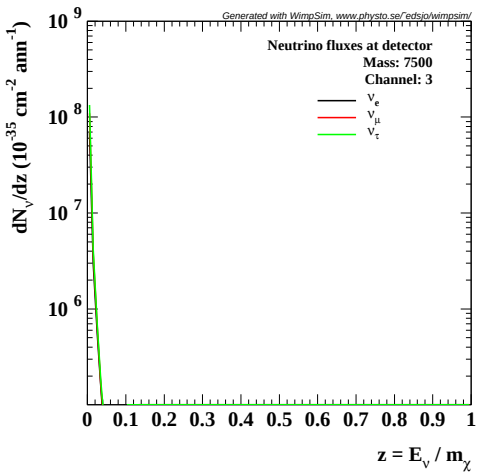
21.2.7 Muons at detector (Sun/Earth)

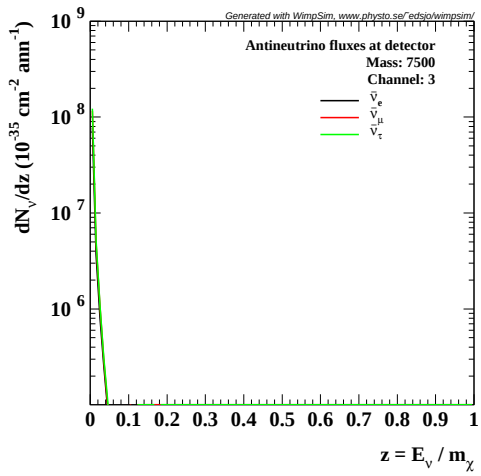




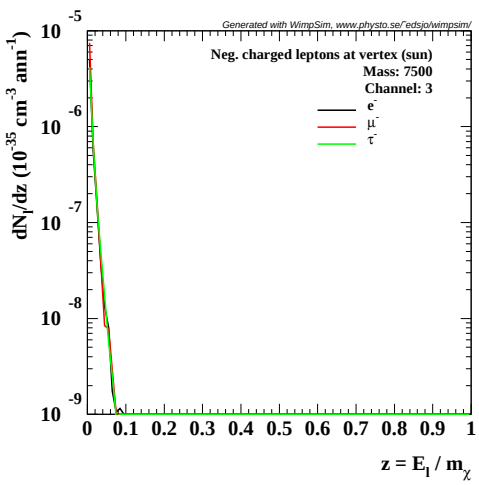
21.3 Channel 3 – $s\bar{s}$

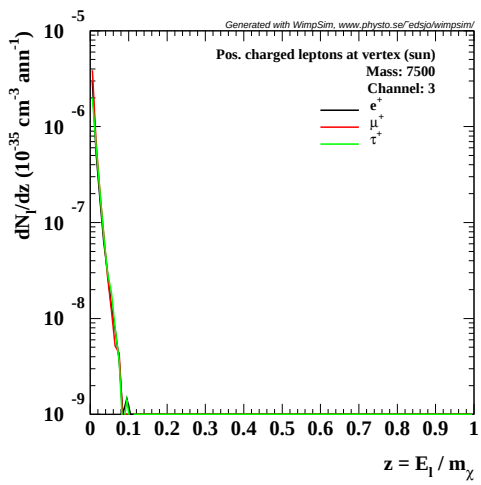
21.3.1 Neutrino fluxes at detector (Sun)



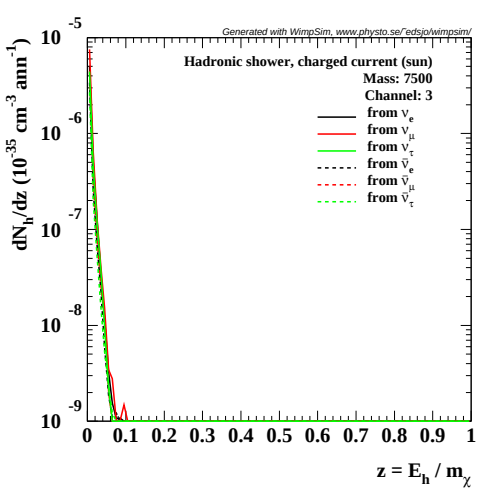


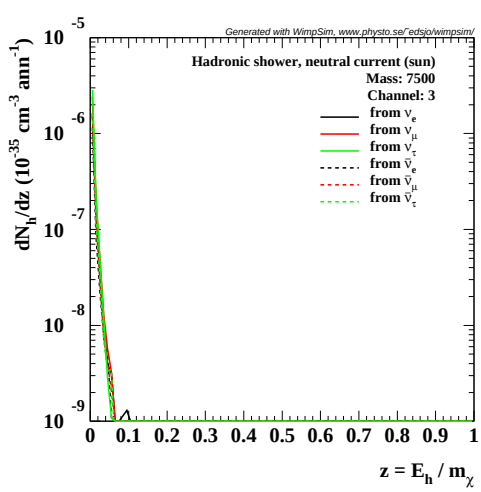
21.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



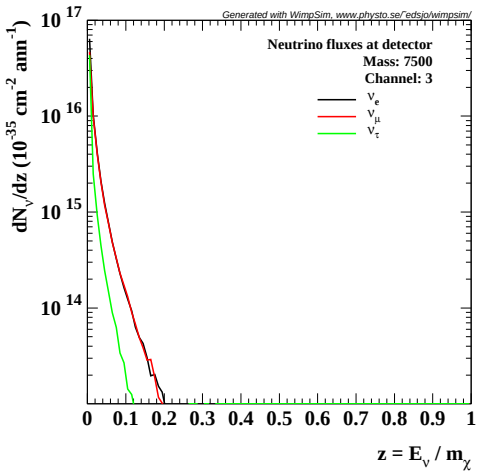


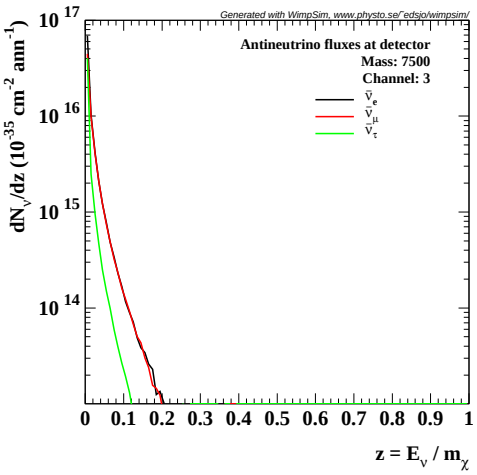
21.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



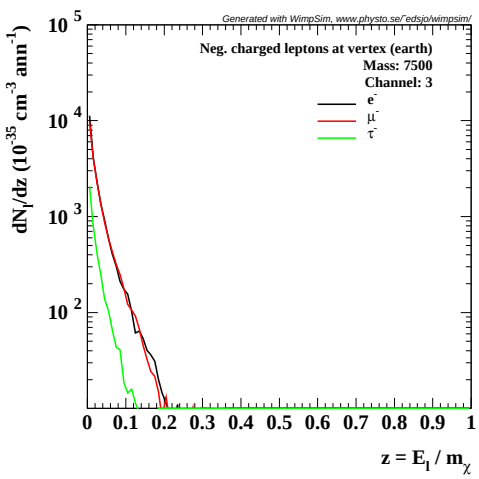


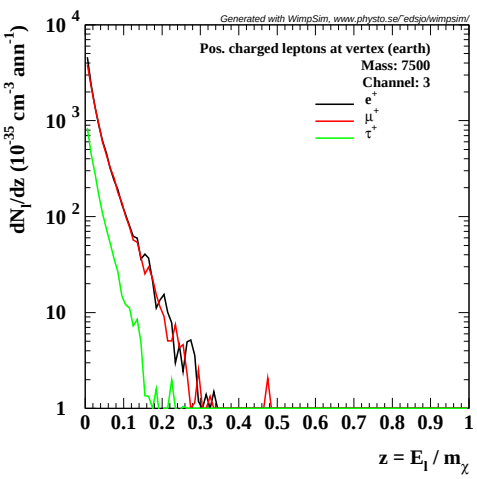
21.3.4 Neutrino fluxes at detector (Earth)



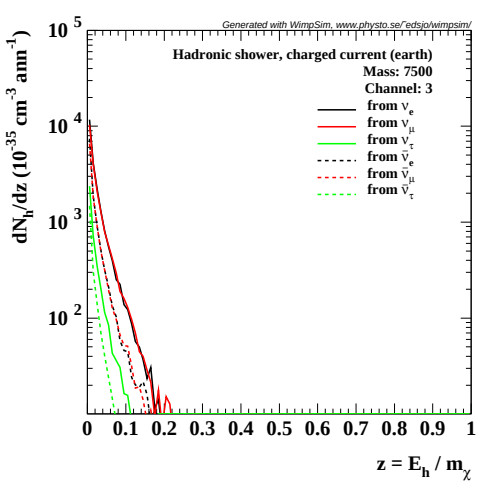


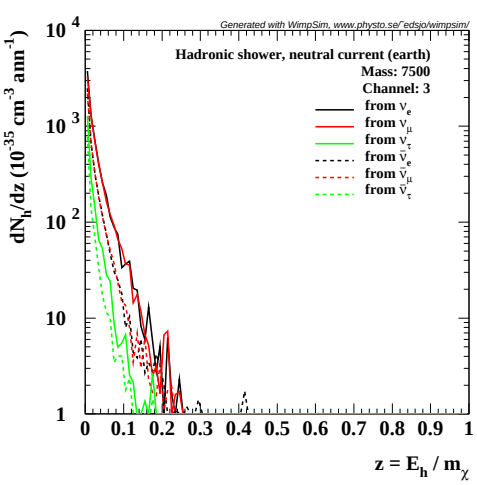
21.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



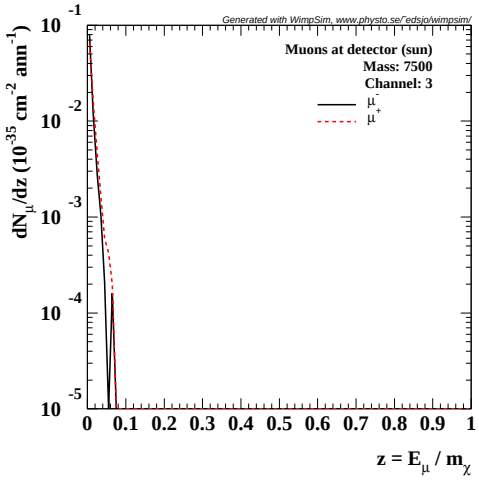


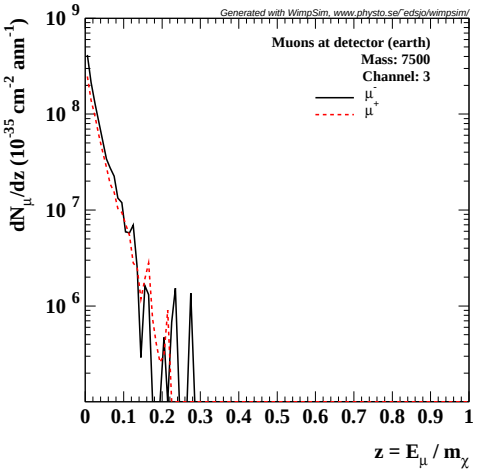
21.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





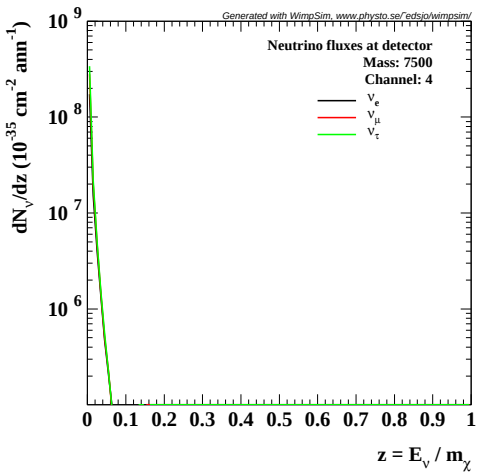
21.3.7 Muons at detector (Sun/Earth)

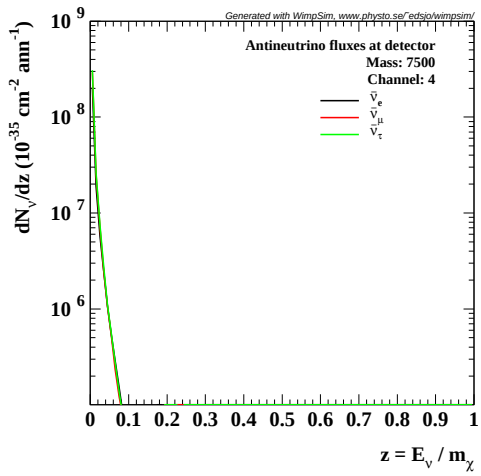




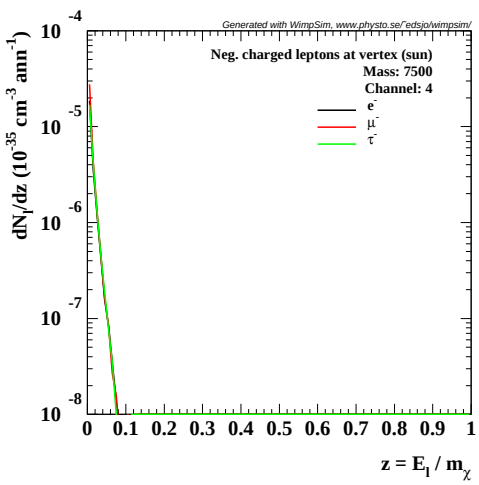
21.4 Channel 4 – $c\bar{c}$

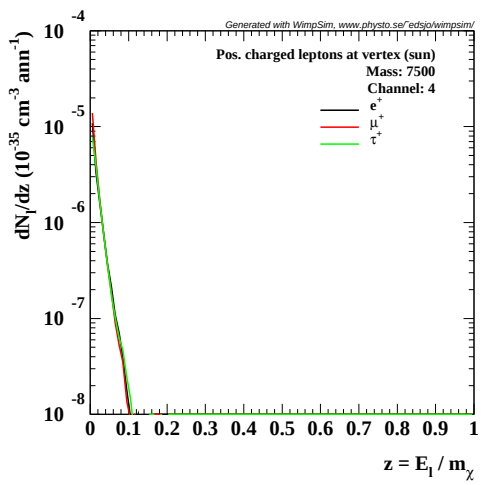
21.4.1 Neutrino fluxes at detector (Sun)



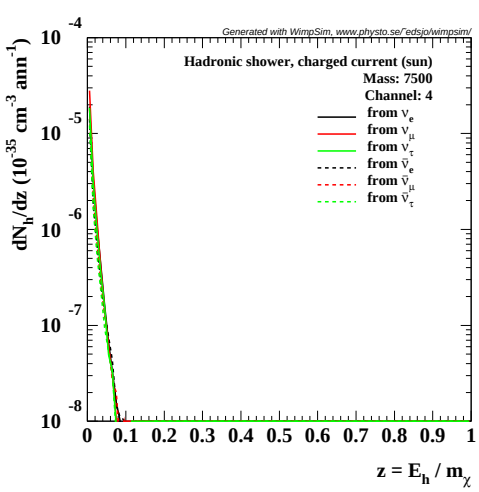


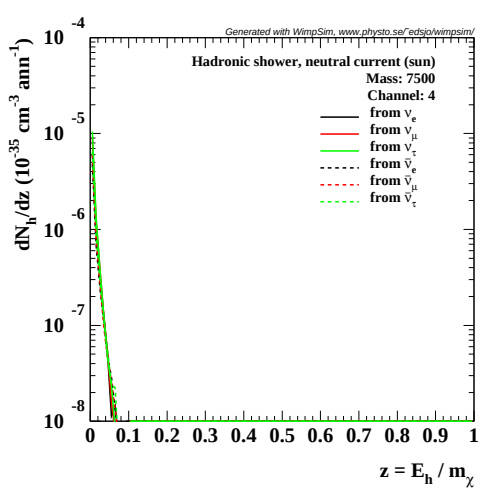
21.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



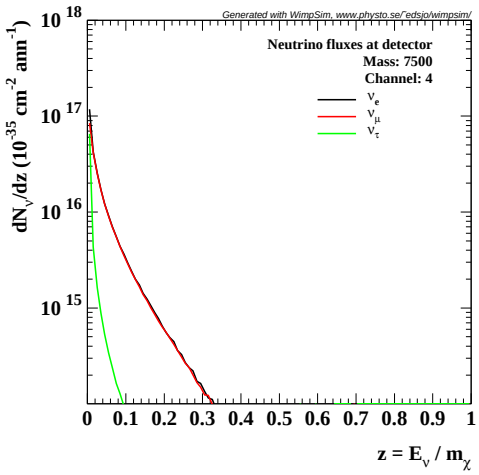


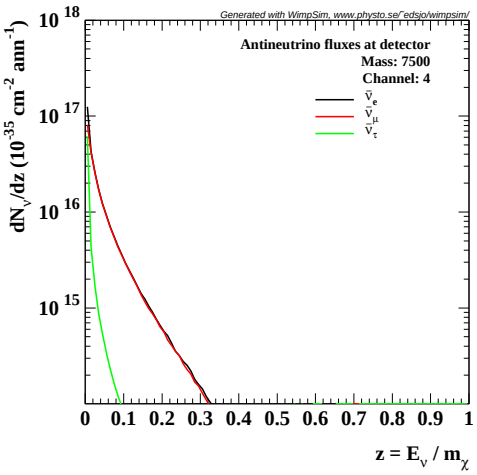
21.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



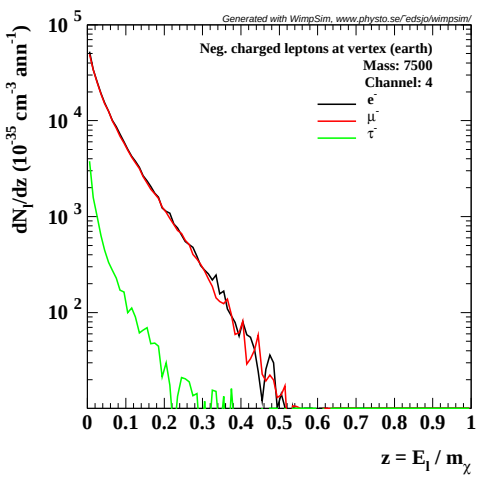


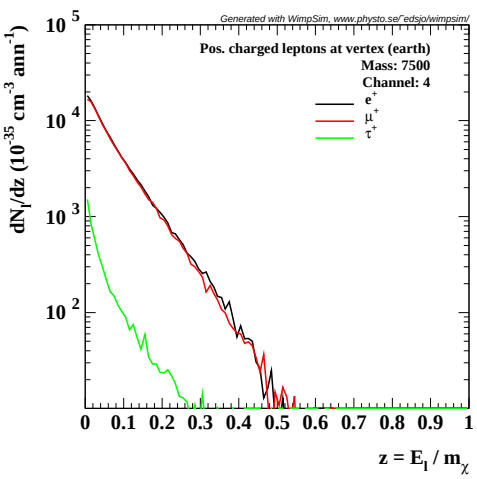
21.4.4 Neutrino fluxes at detector (Earth)



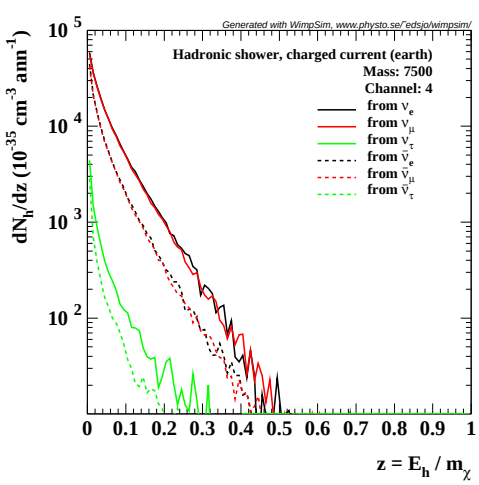


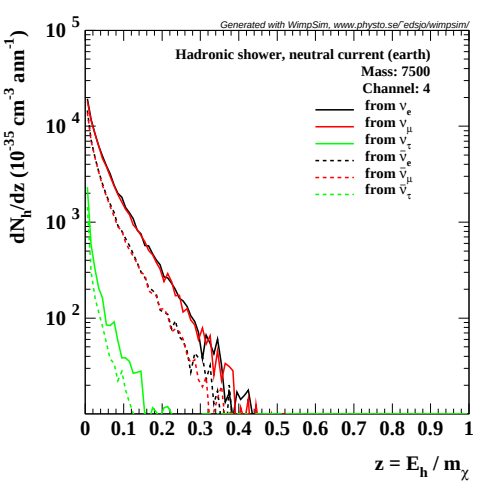
21.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



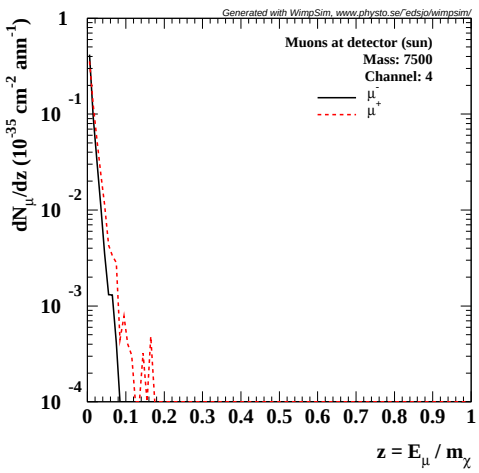


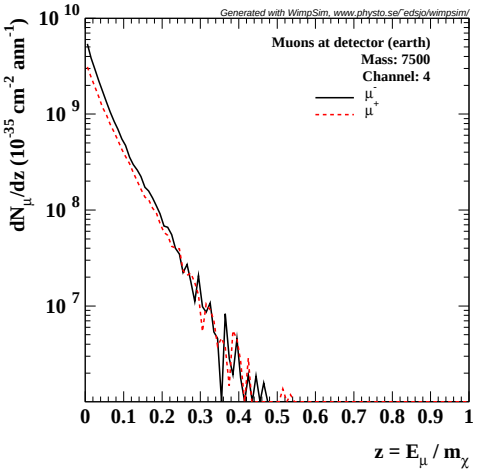
21.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





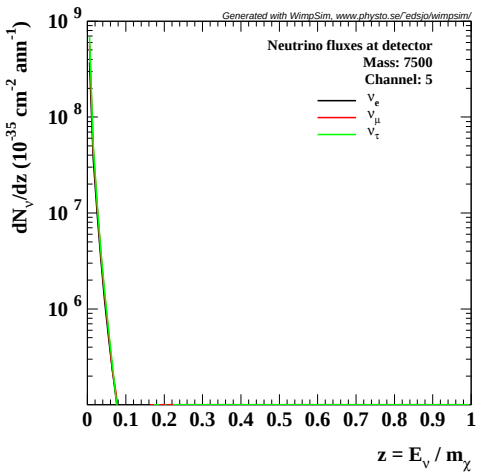
21.4.7 Muons at detector (Sun/Earth)

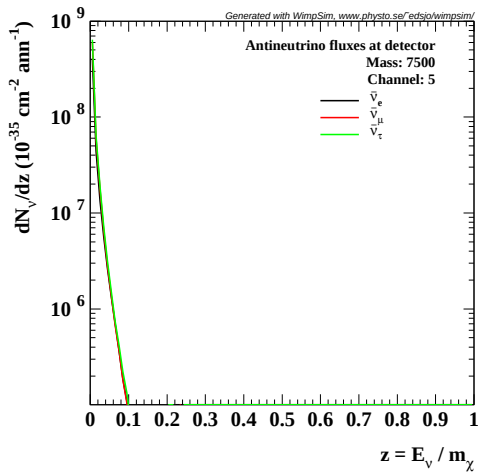




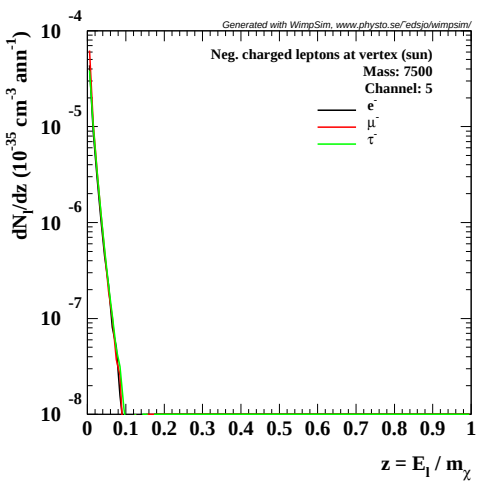
21.5 Channel 5 – $b\bar{b}$

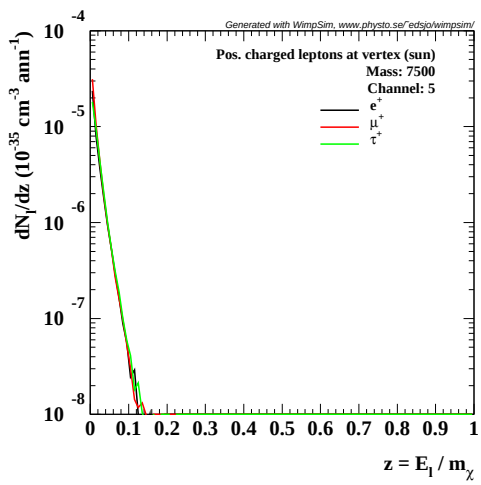
21.5.1 Neutrino fluxes at detector (Sun)



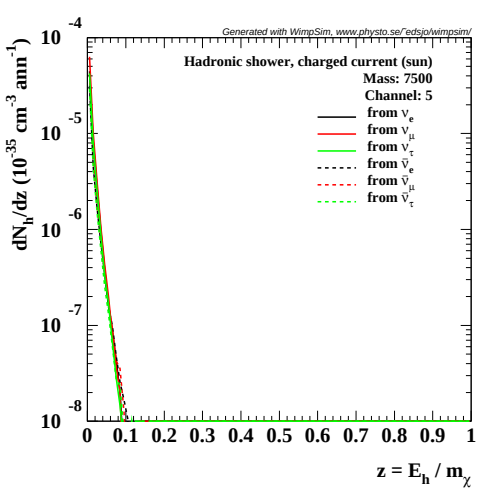


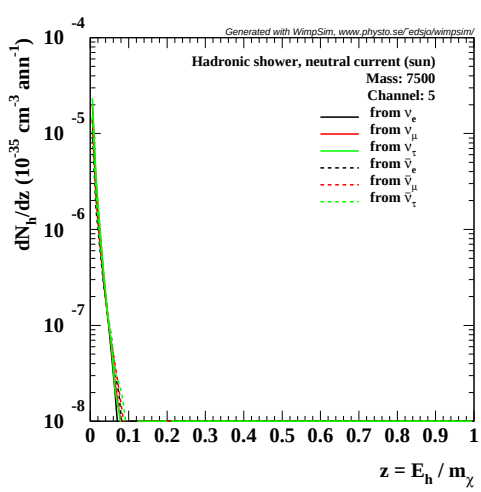
21.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



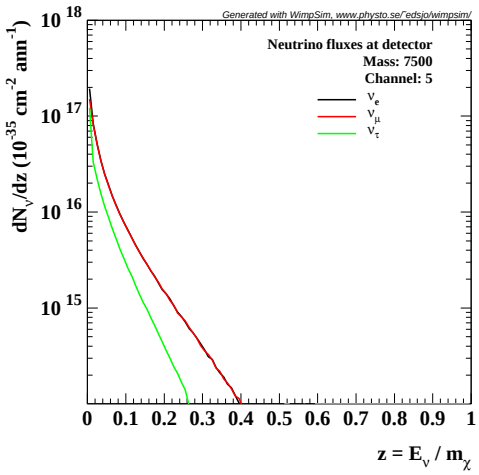


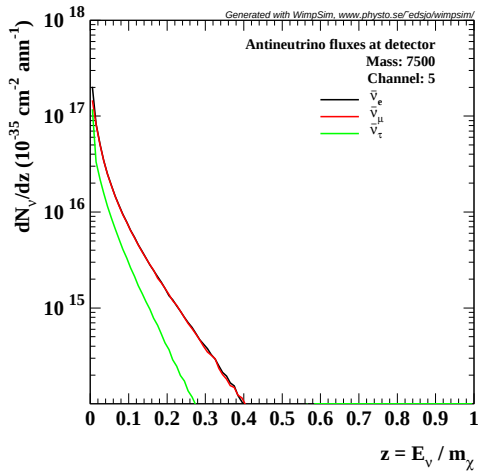
21.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



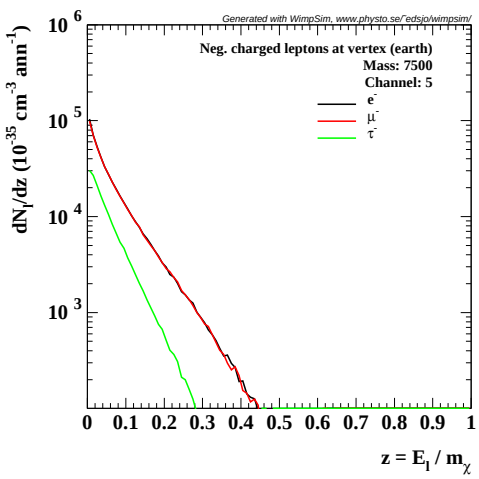


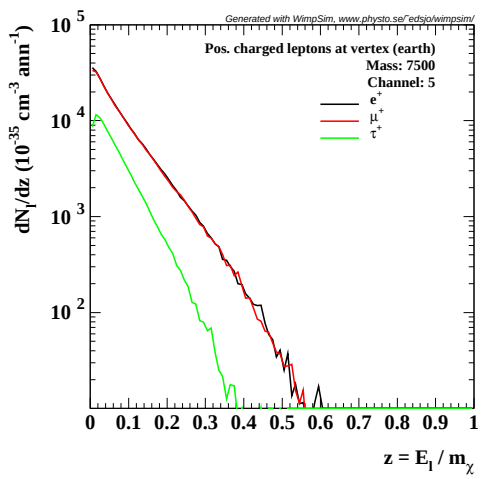
21.5.4 Neutrino fluxes at detector (Earth)



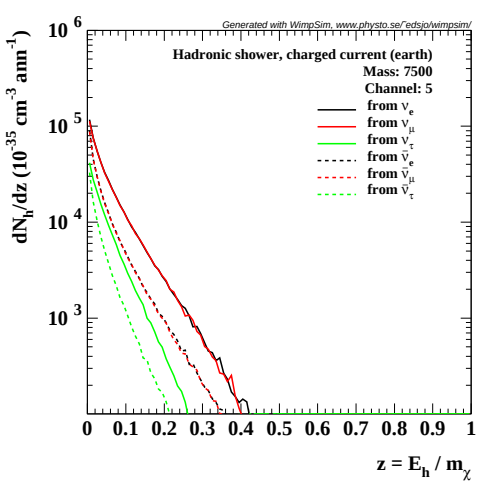


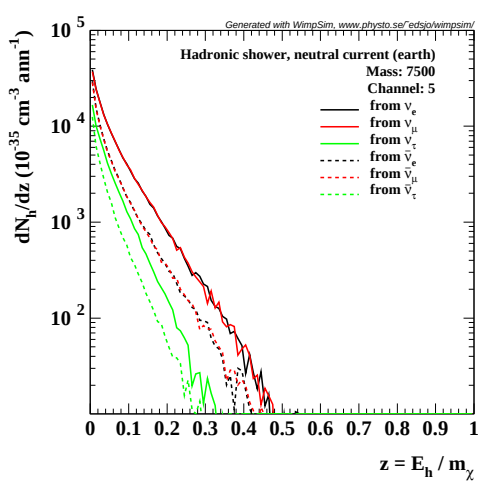
21.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



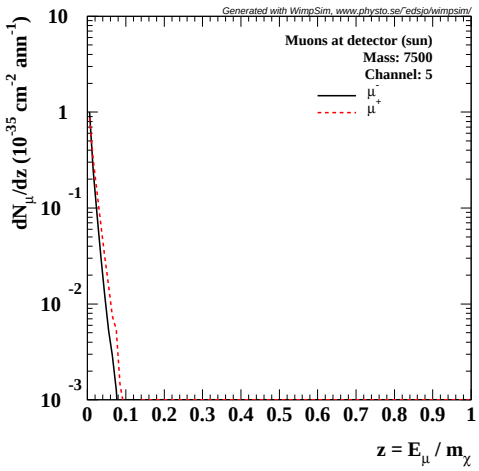


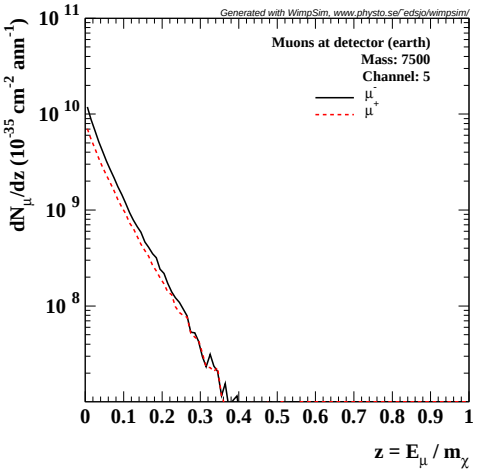
21.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





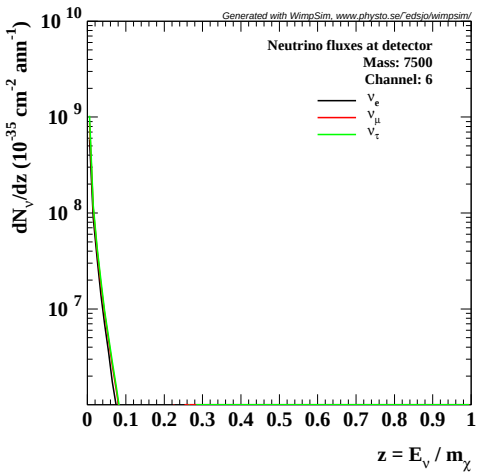
21.5.7 Muons at detector (Sun/Earth)

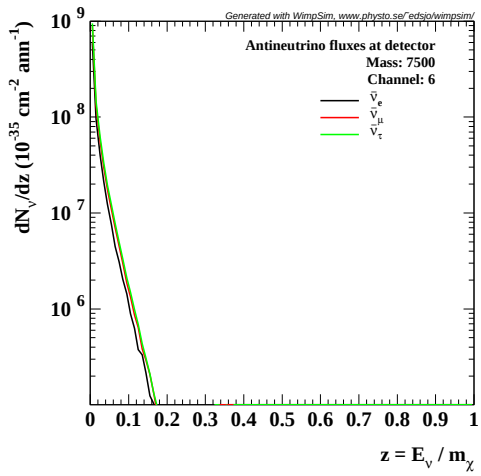




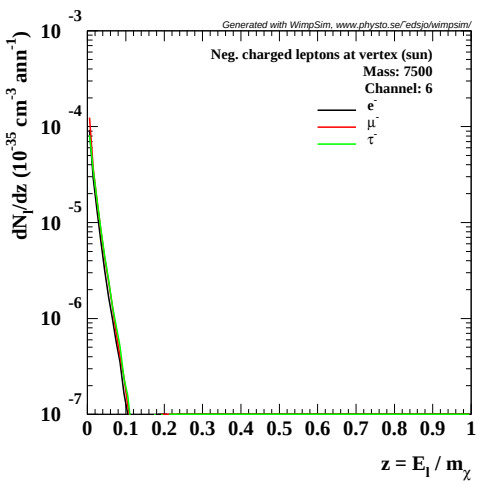
21.6 Channel 6 – $t\bar{t}$

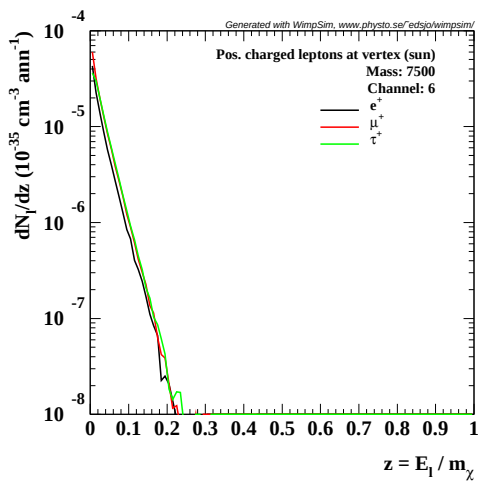
21.6.1 Neutrino fluxes at detector (Sun)



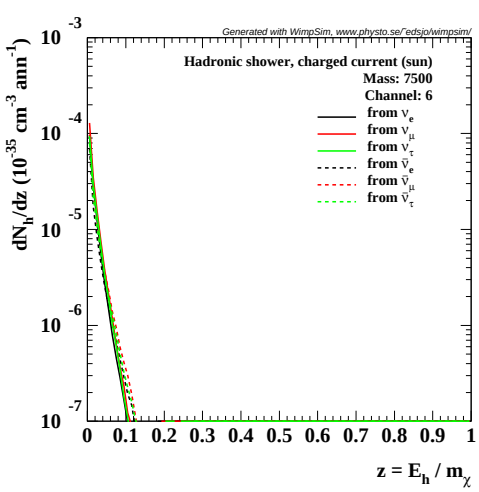


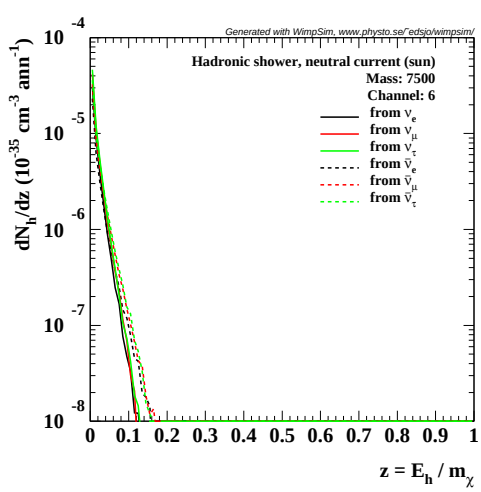
21.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



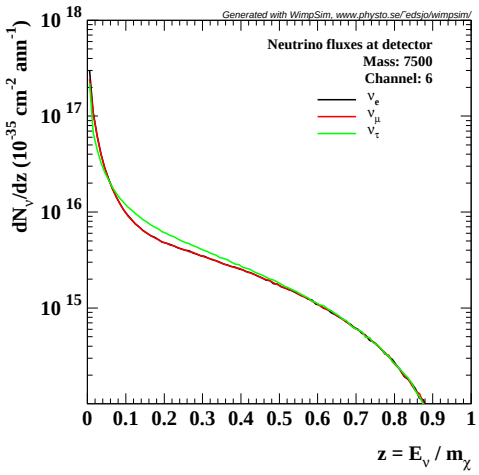


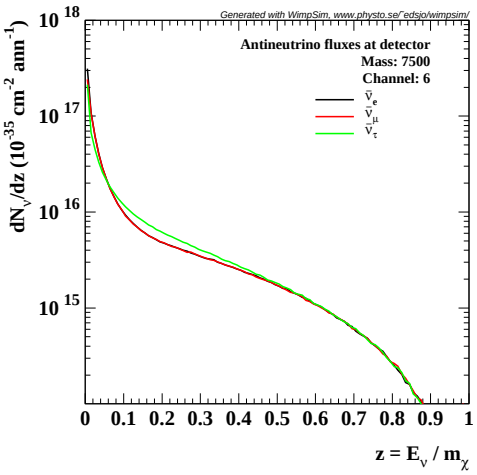
21.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



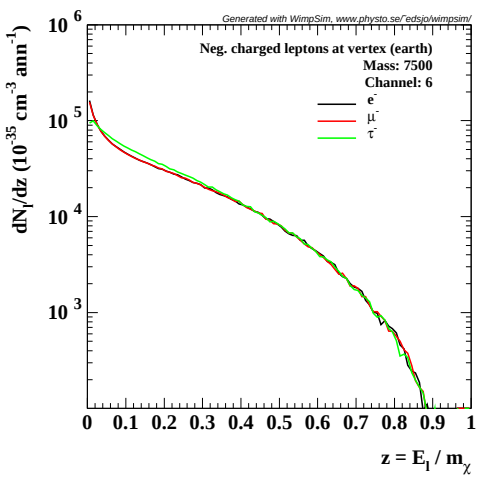


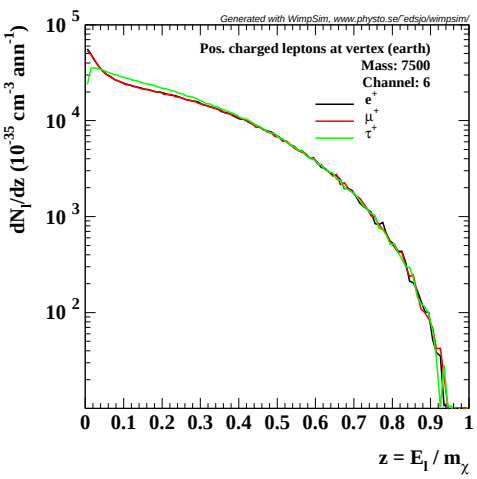
21.6.4 Neutrino fluxes at detector (Earth)



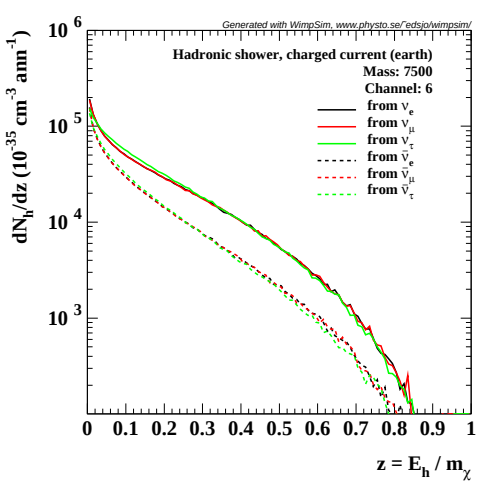


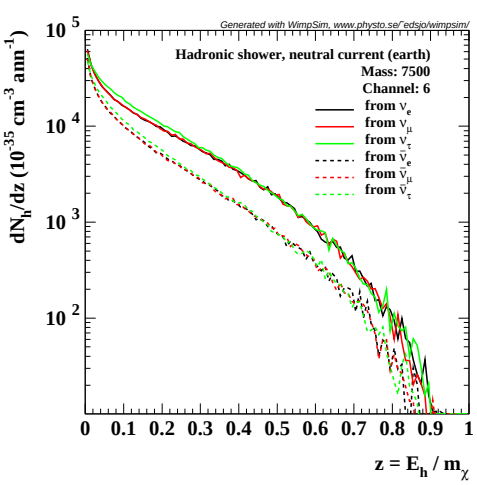
21.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



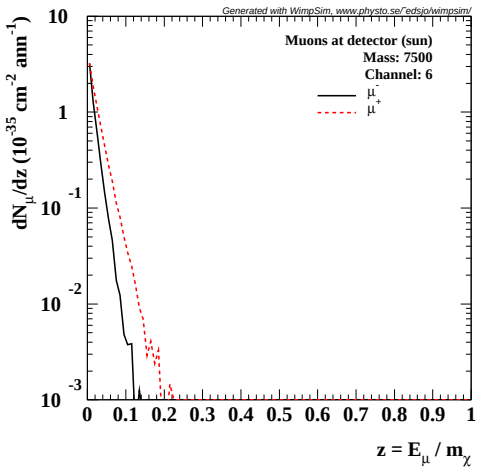


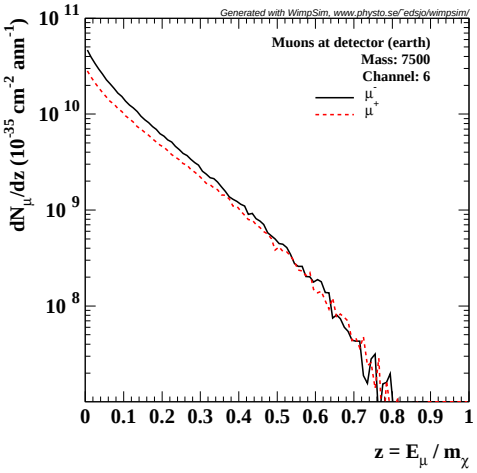
21.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





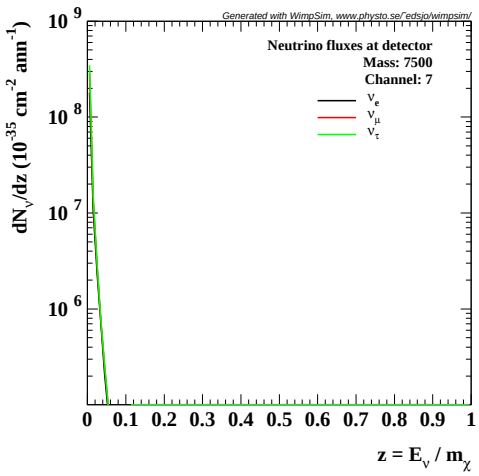
21.6.7 Muons at detector (Sun/Earth)

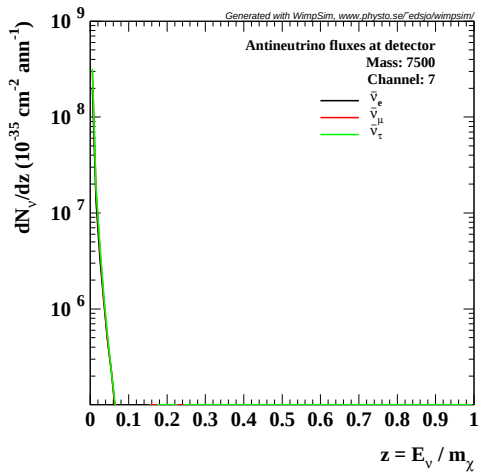




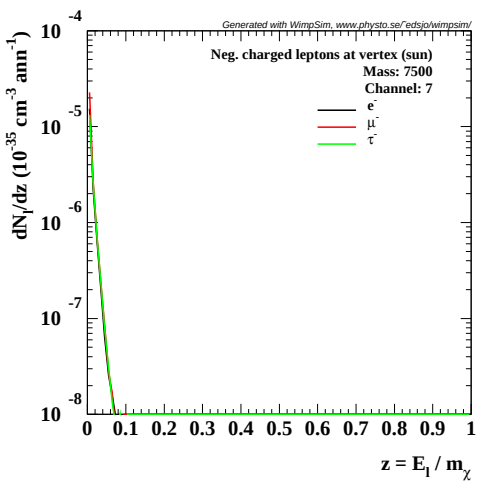
21.7 Channel 7 – gg

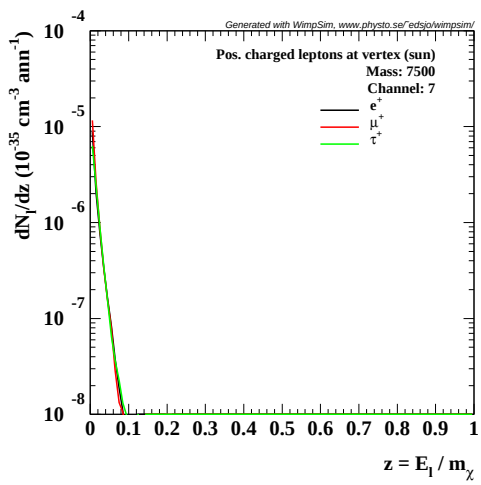
21.7.1 Neutrino fluxes at detector (Sun)



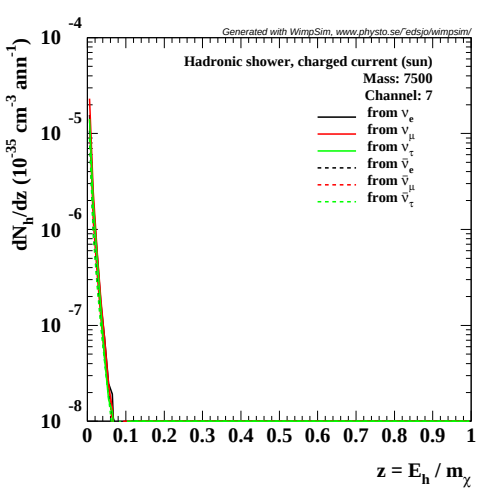


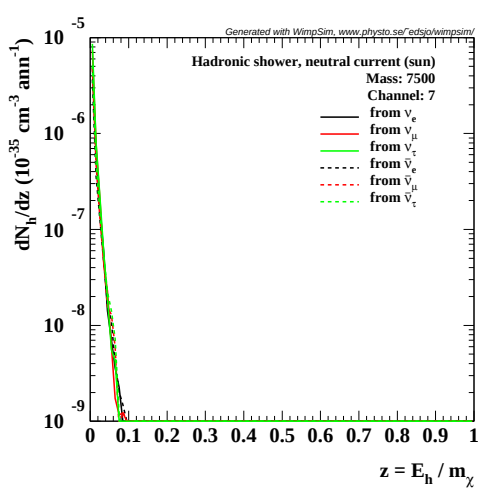
21.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



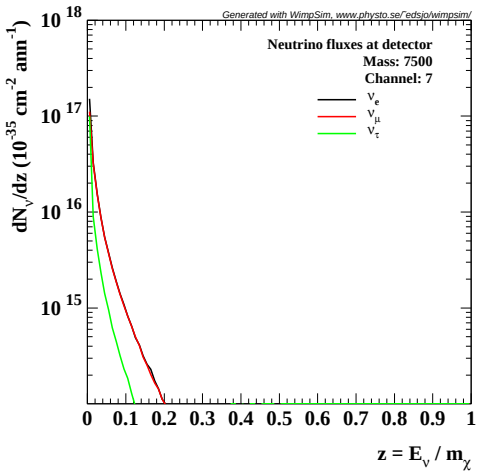


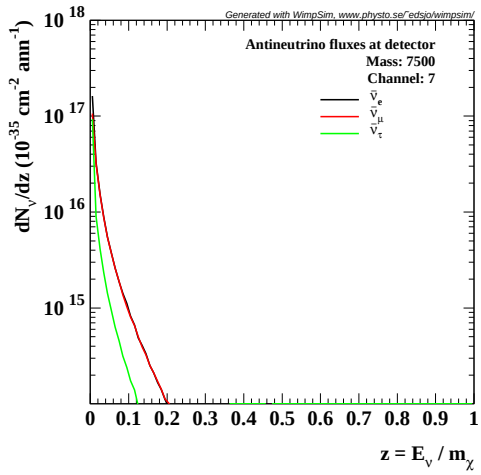
21.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



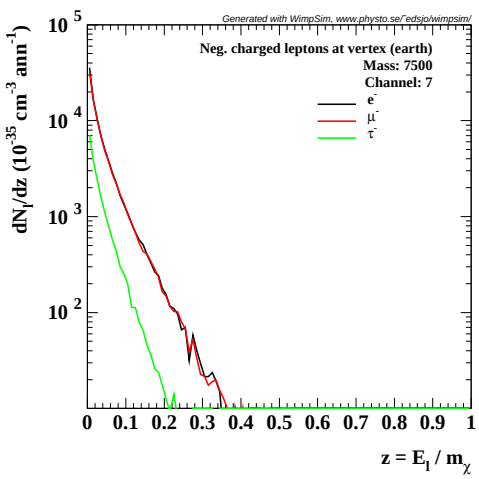


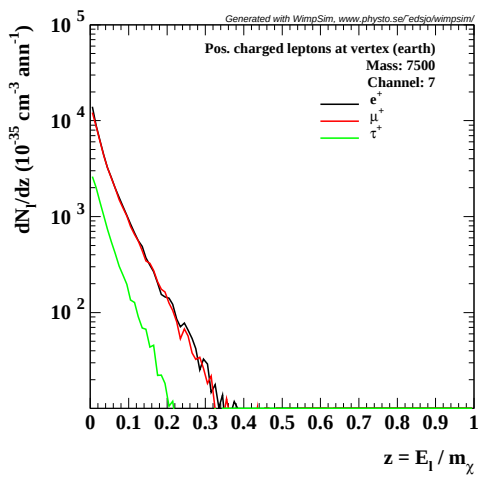
21.7.4 Neutrino fluxes at detector (Earth)



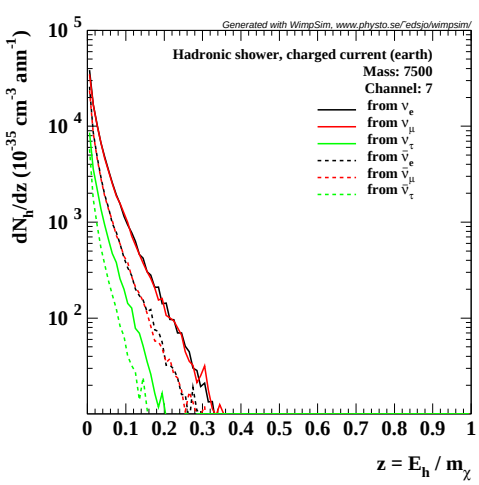


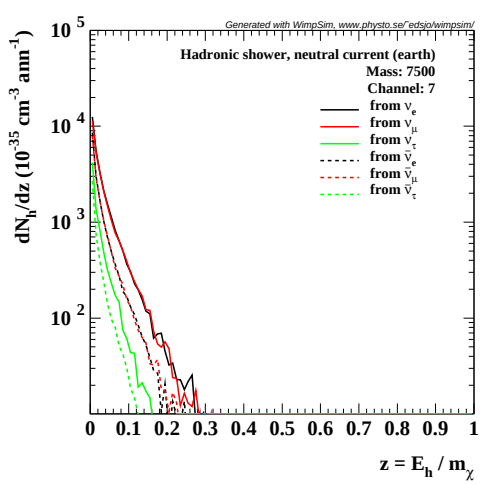
21.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



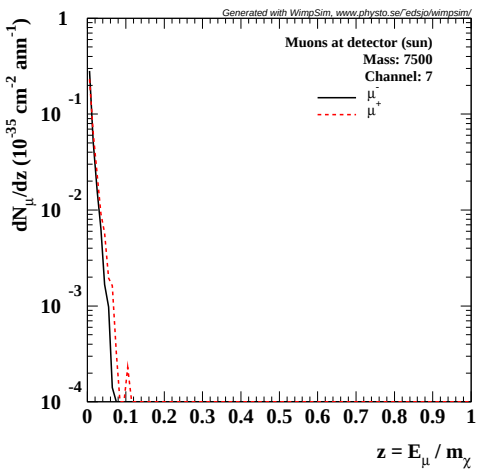


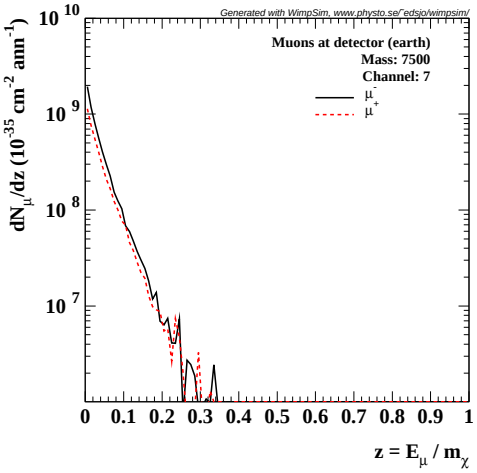
21.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





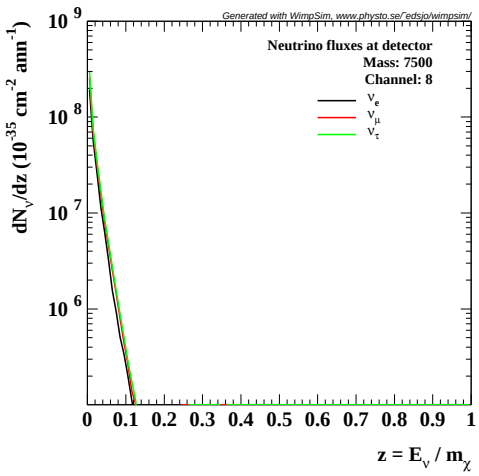
21.7.7 Muons at detector (Sun/Earth)

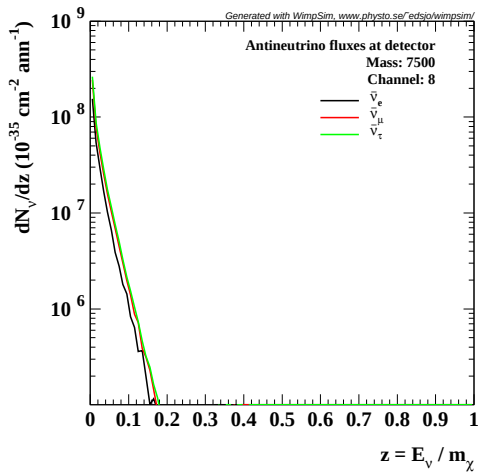




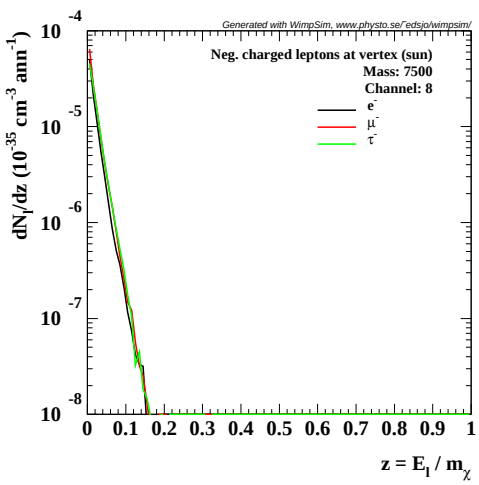
21.8 Channel 8 – W^-W^+

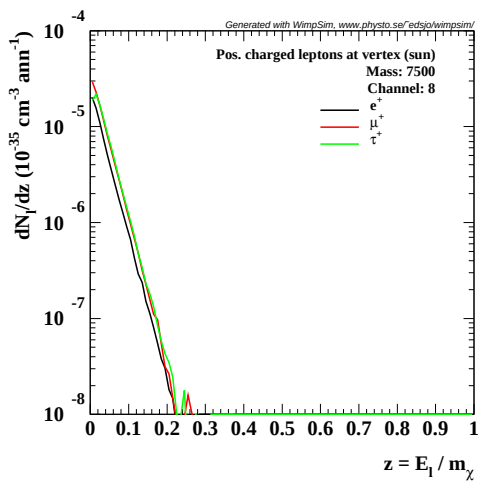
21.8.1 Neutrino fluxes at detector (Sun)



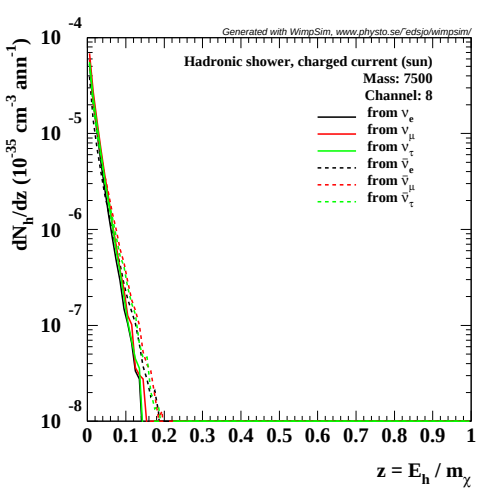


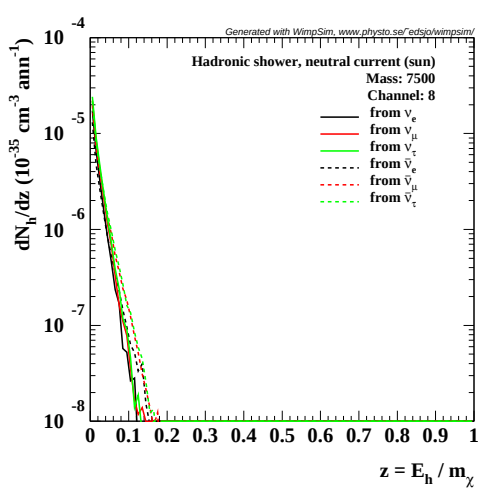
21.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



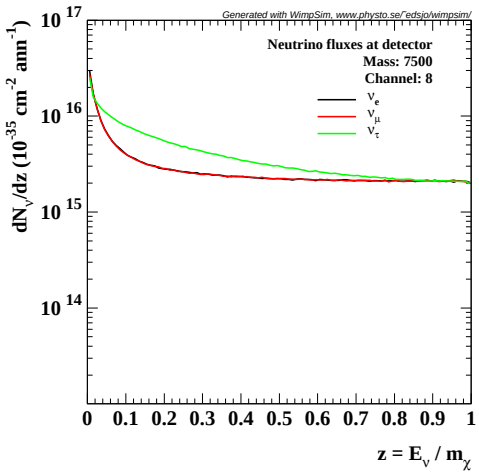


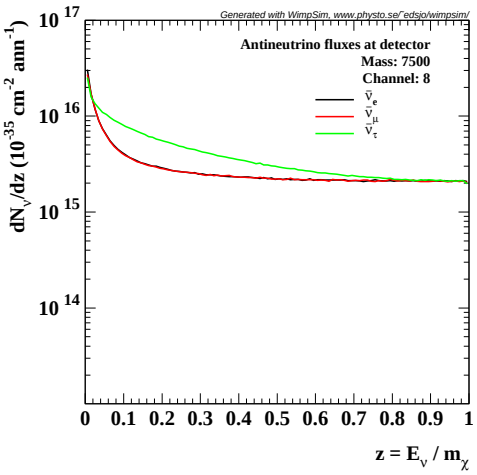
21.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



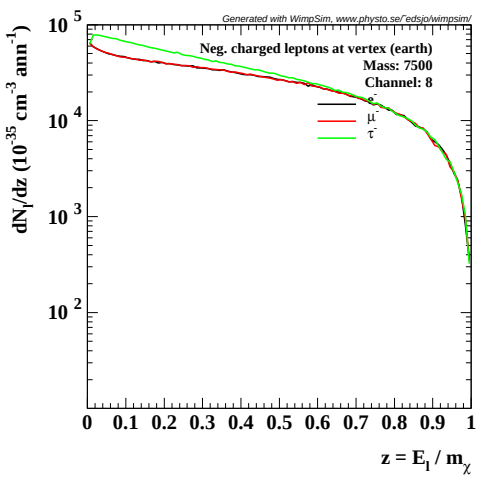


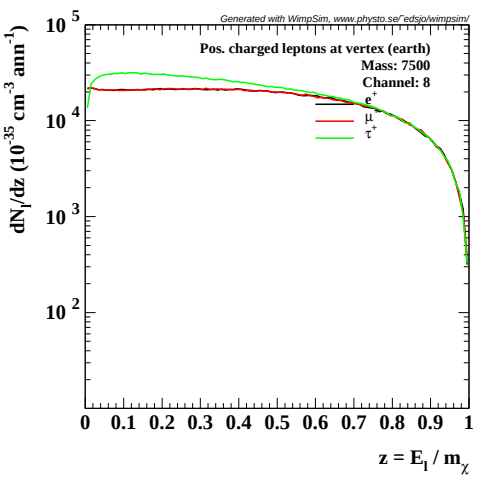
21.8.4 Neutrino fluxes at detector (Earth)



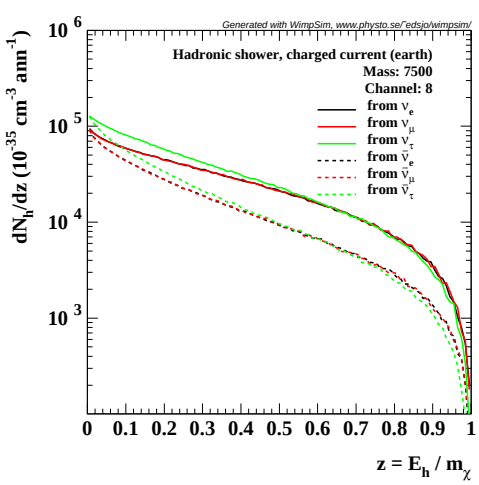


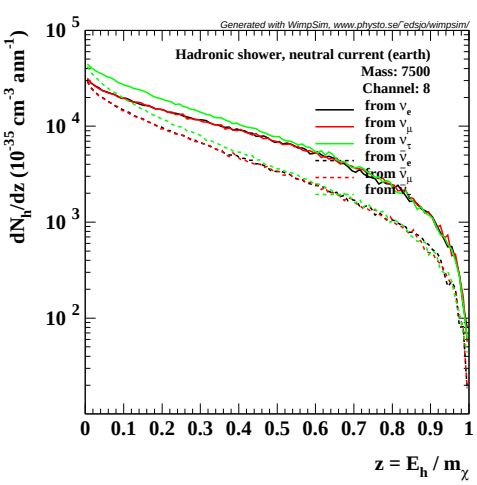
21.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



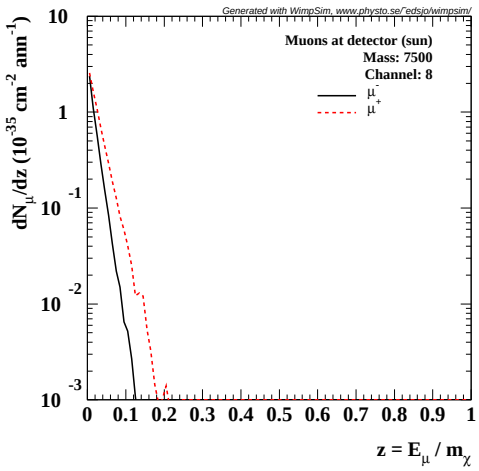


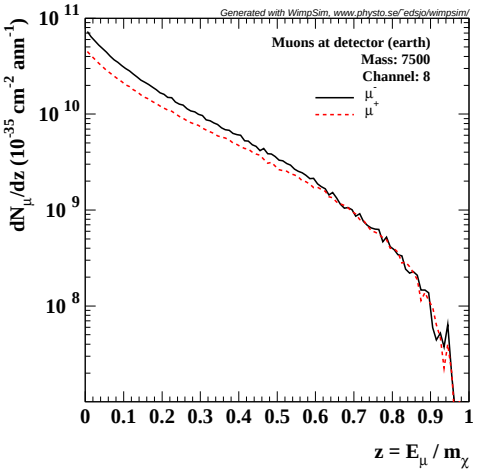
21.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





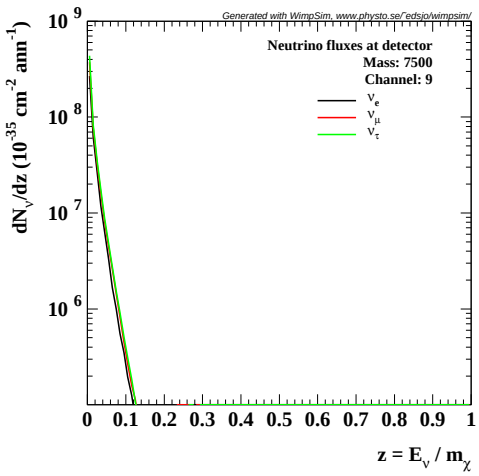
21.8.7 Muons at detector (Sun/Earth)

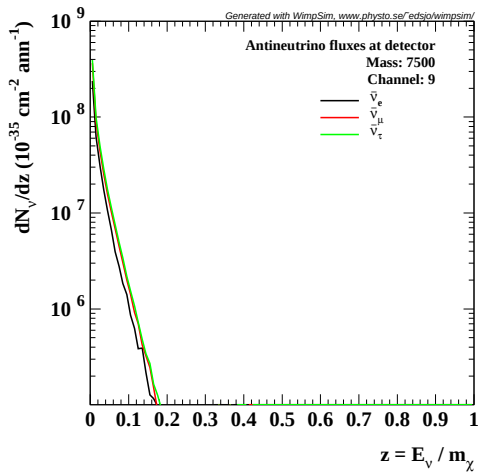




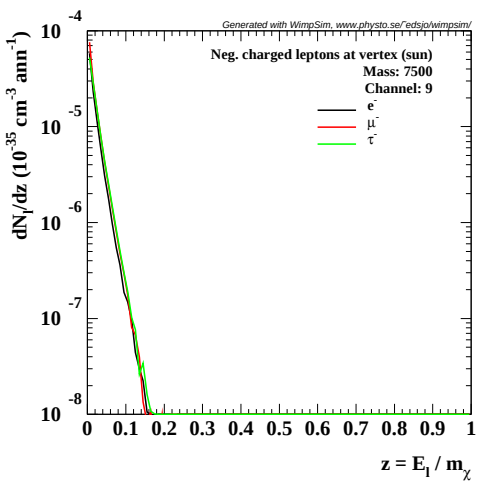
21.9 Channel 9 – $Z^0 Z^0$

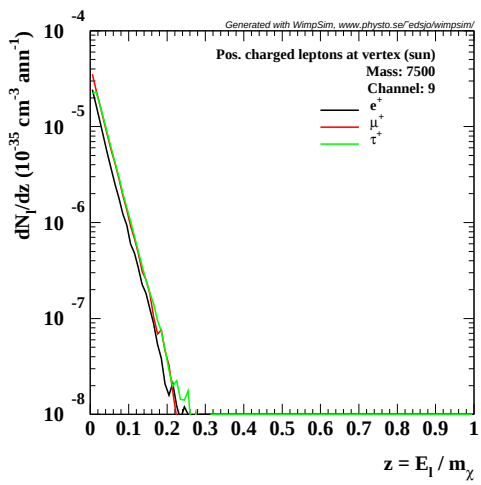
21.9.1 Neutrino fluxes at detector (Sun)



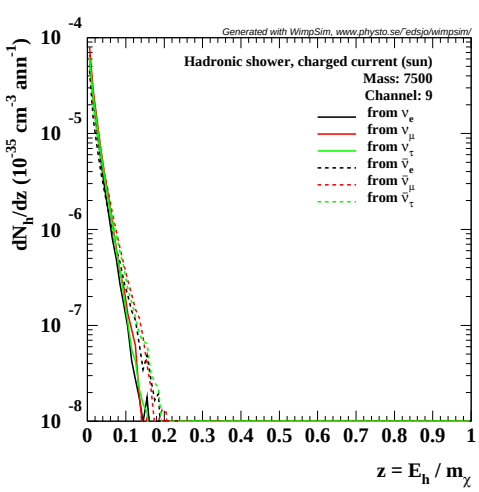


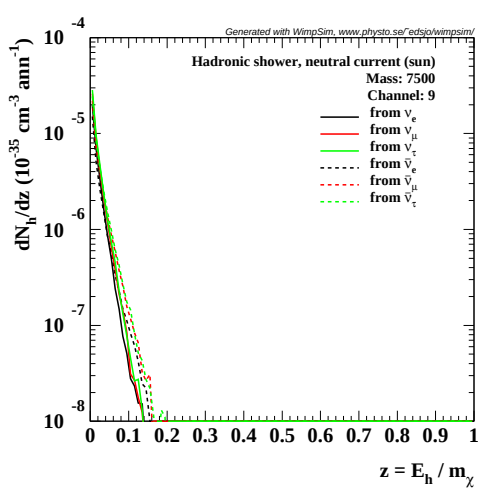
21.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



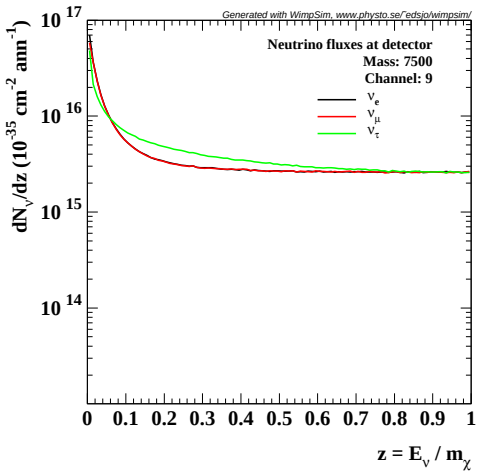


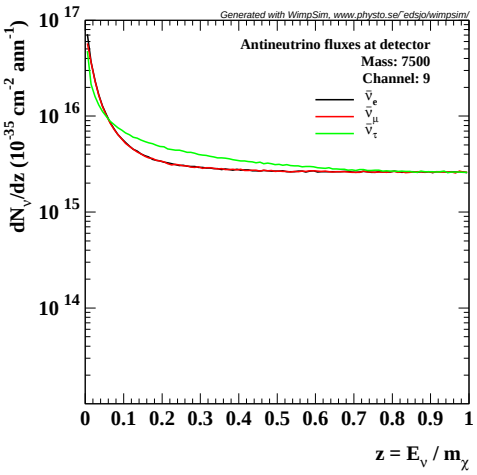
21.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



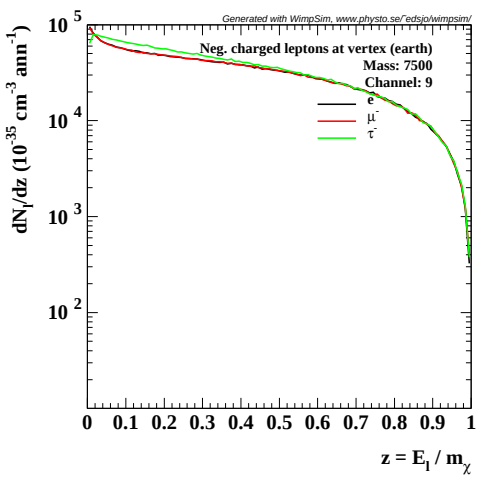


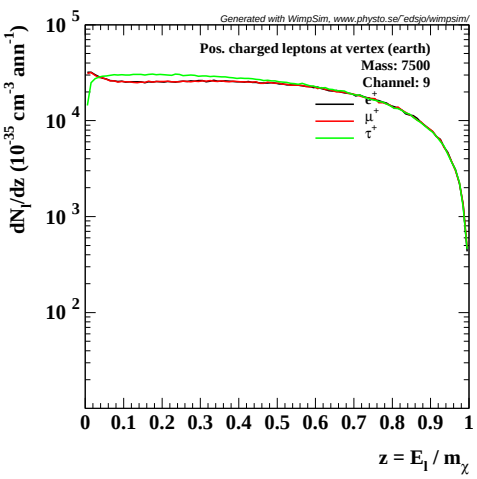
21.9.4 Neutrino fluxes at detector (Earth)



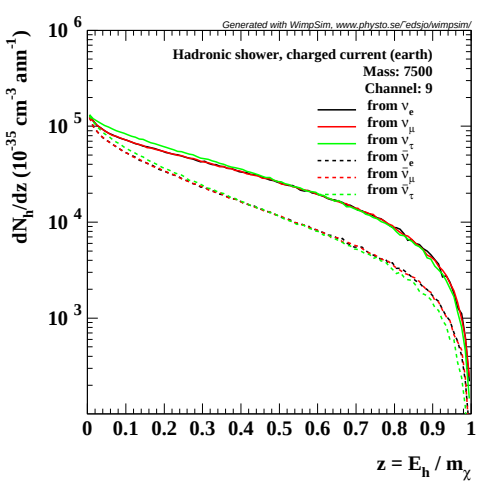


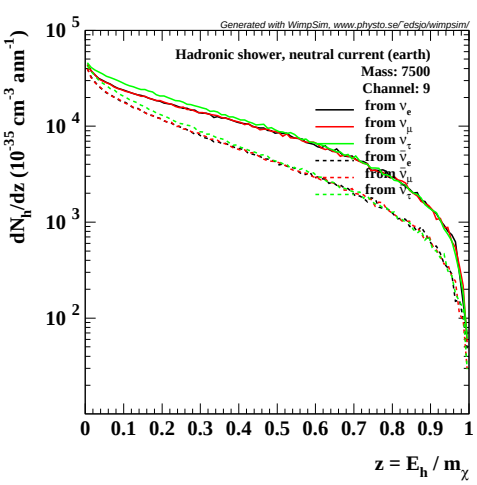
21.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



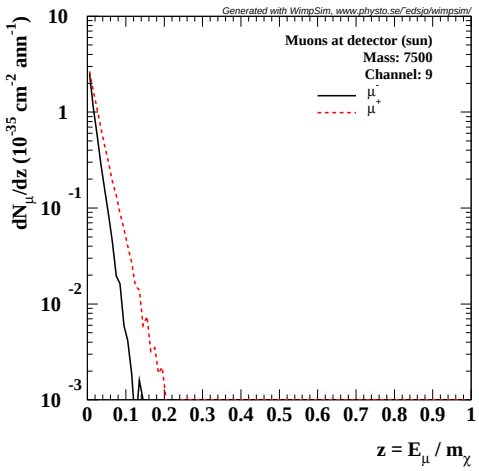


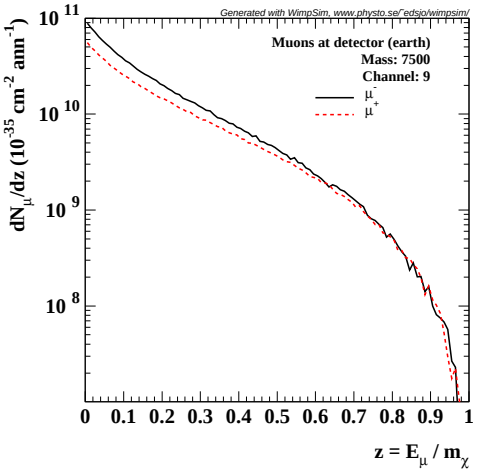
21.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





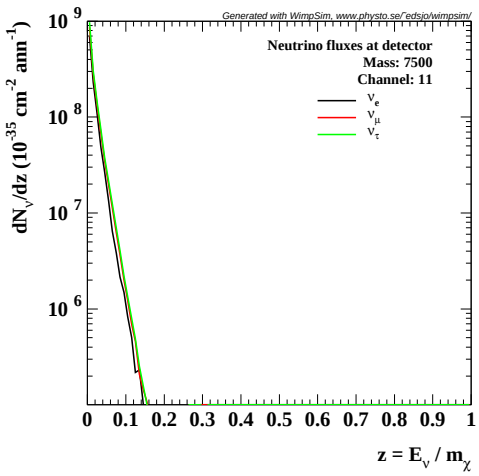
21.9.7 Muons at detector (Sun/Earth)

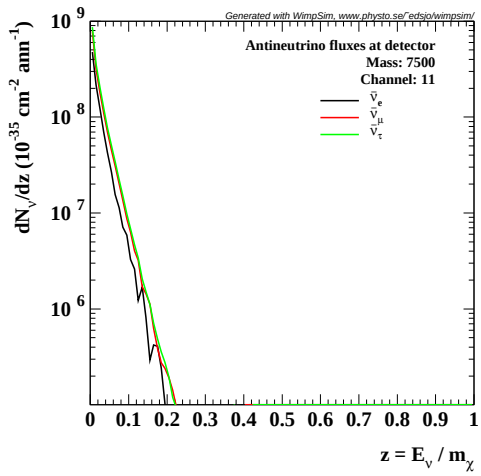




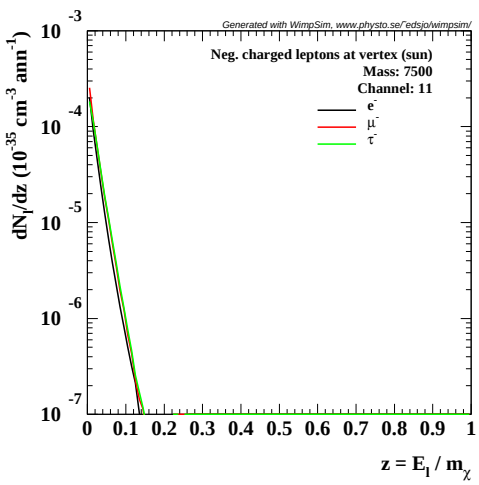
21.10 Channel 11 – $\tau^-\tau^+$

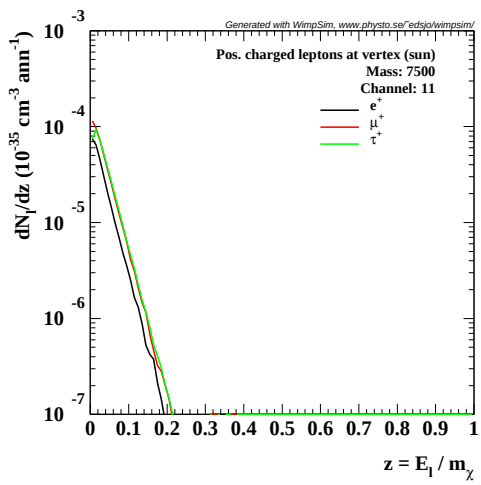
21.10.1 Neutrino fluxes at detector (Sun)



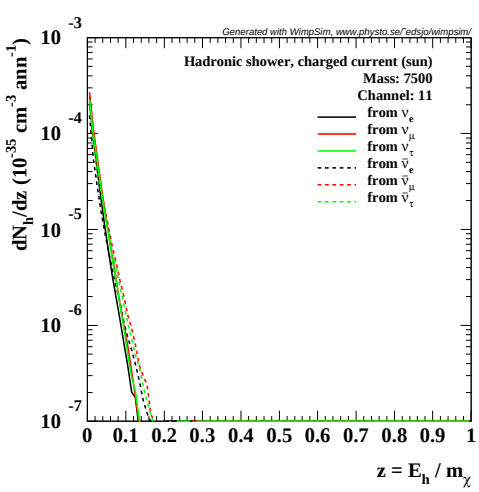


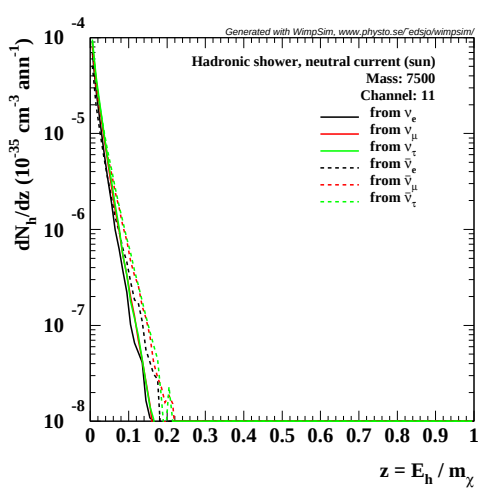
21.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



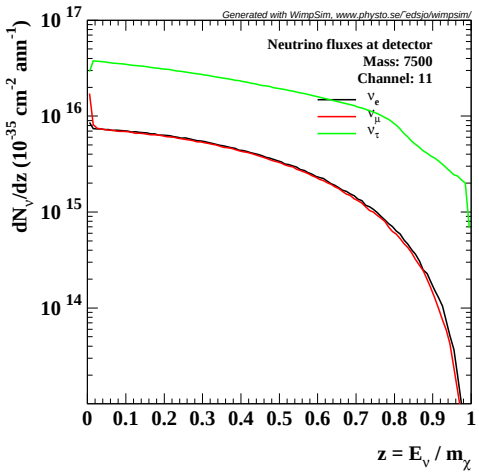


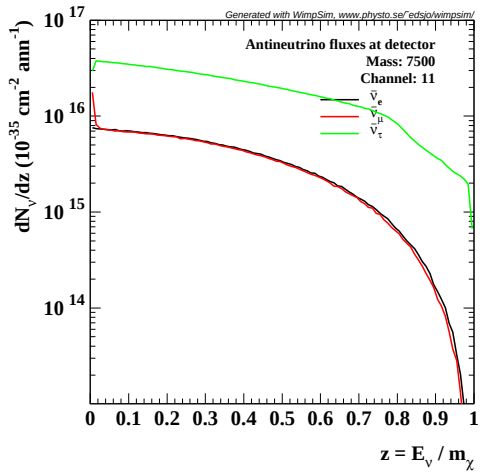
21.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



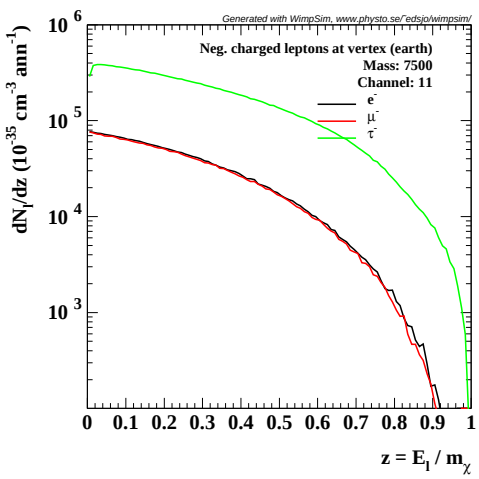


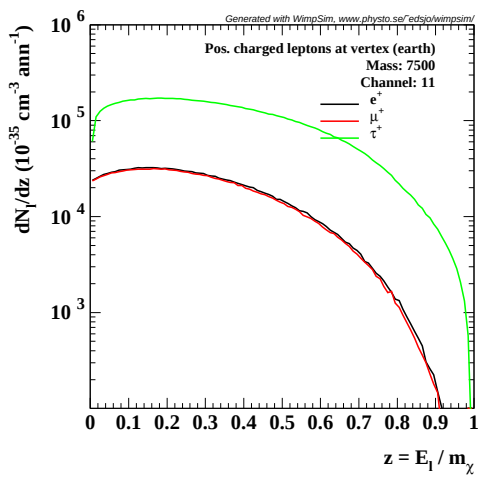
21.10.4 Neutrino fluxes at detector (Earth)



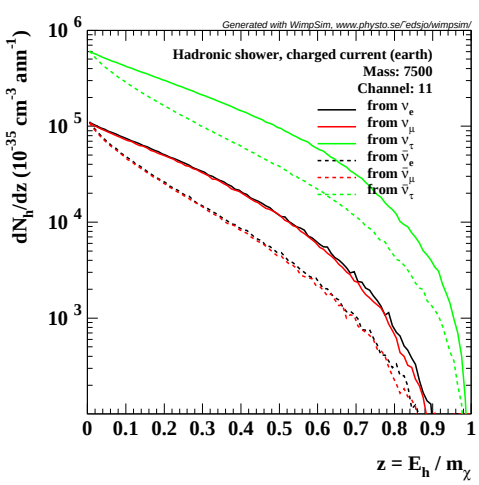


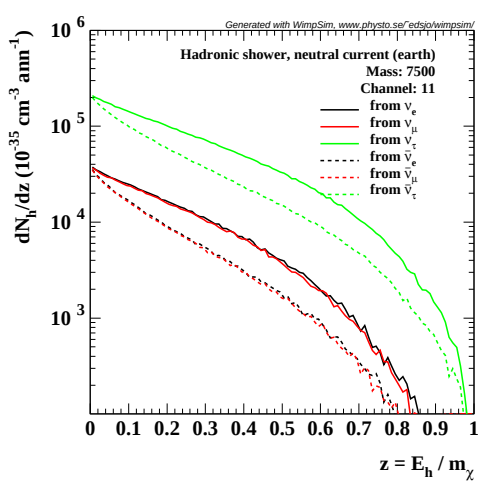
21.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



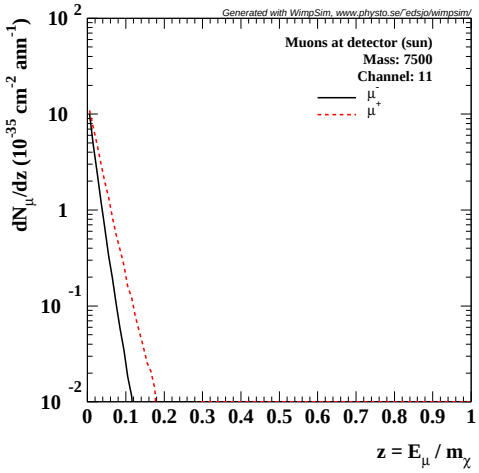


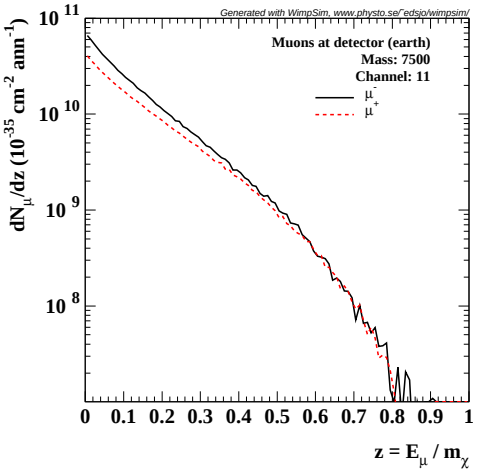
21.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





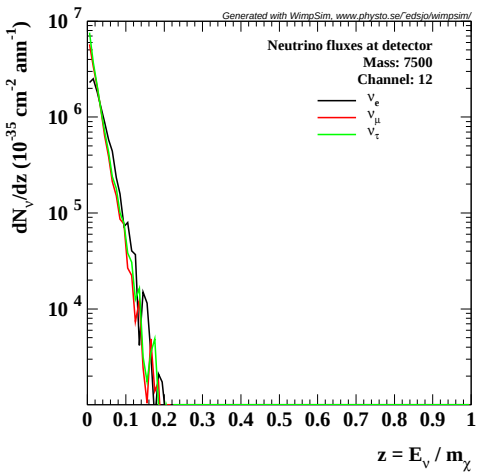
21.10.7 Muons at detector (Sun/Earth)

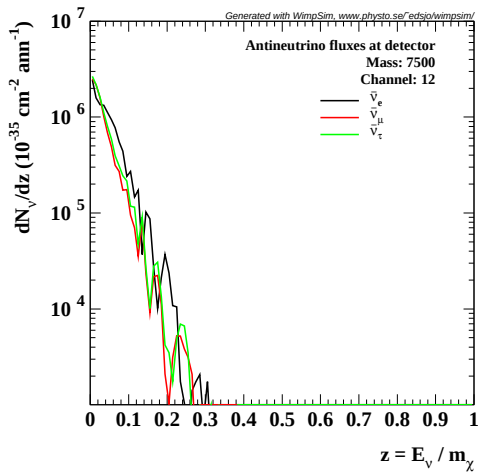




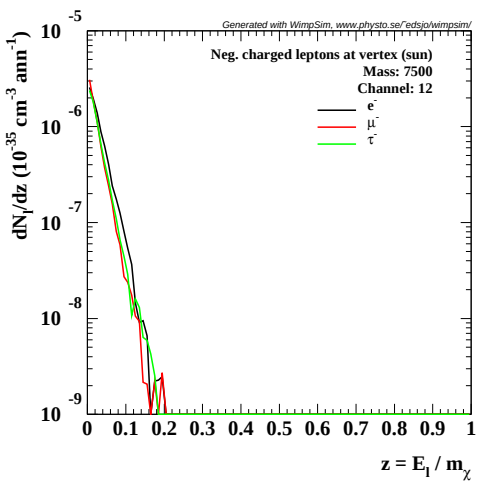
21.11 Channel 12 – $\nu_e\bar{\nu}_e$

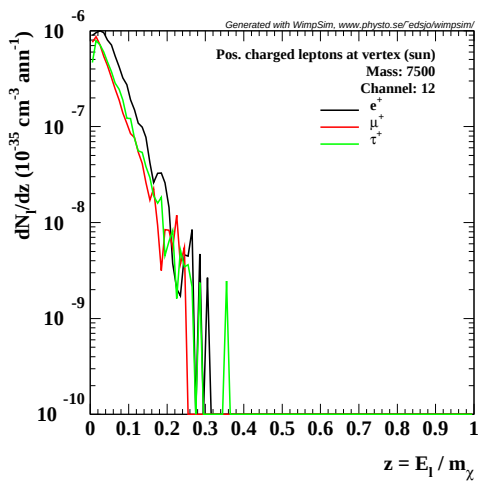
21.11.1 Neutrino fluxes at detector (Sun)



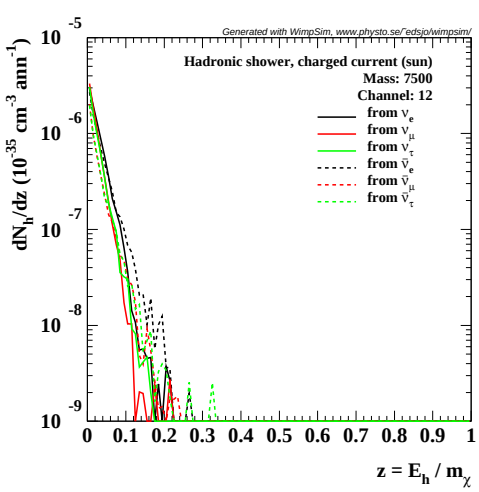


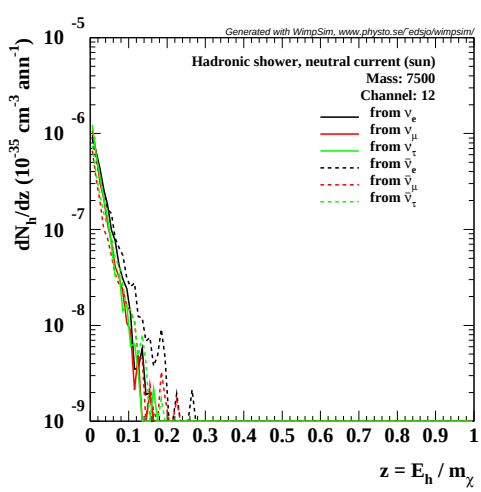
21.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



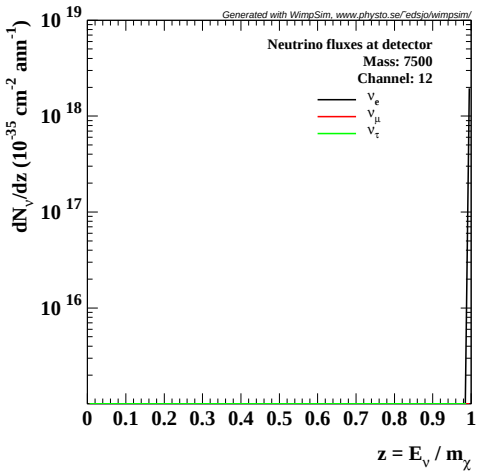


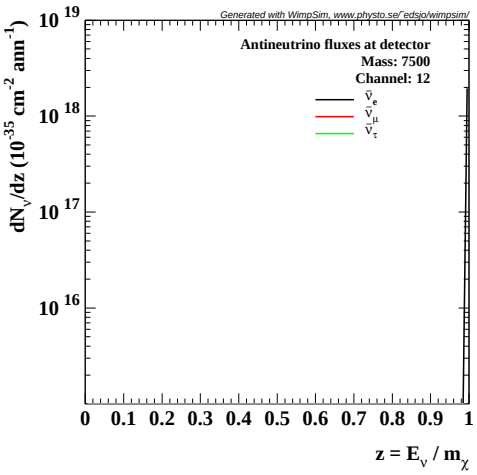
21.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



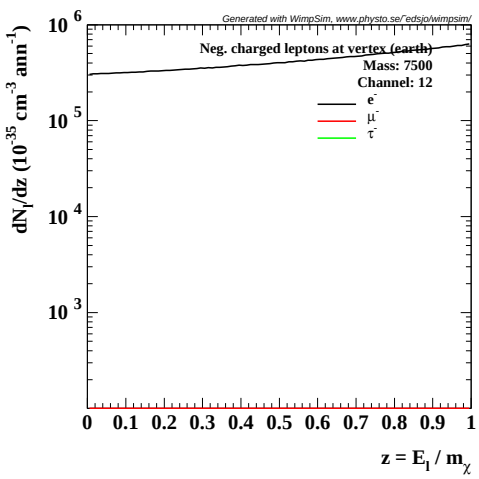


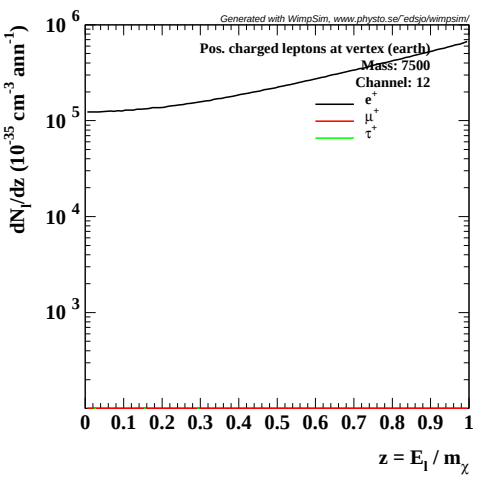
21.11.4 Neutrino fluxes at detector (Earth)



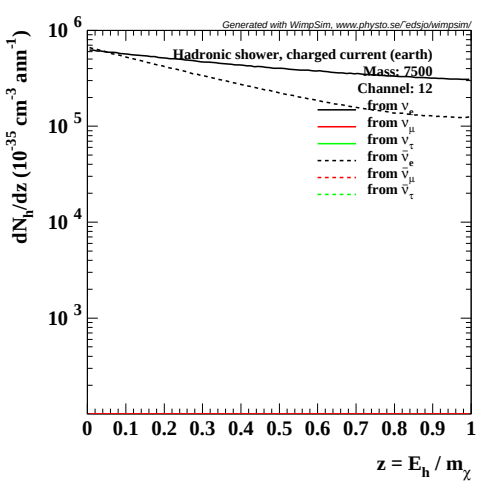


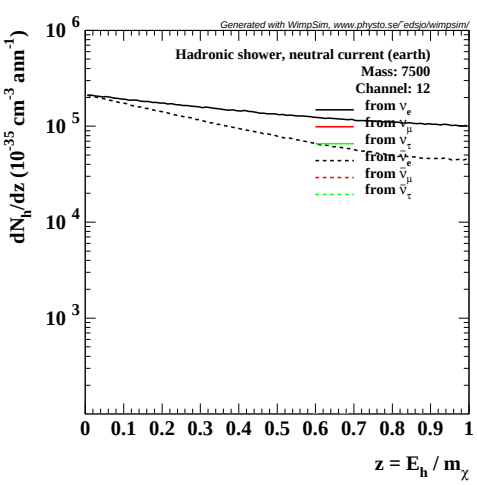
21.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



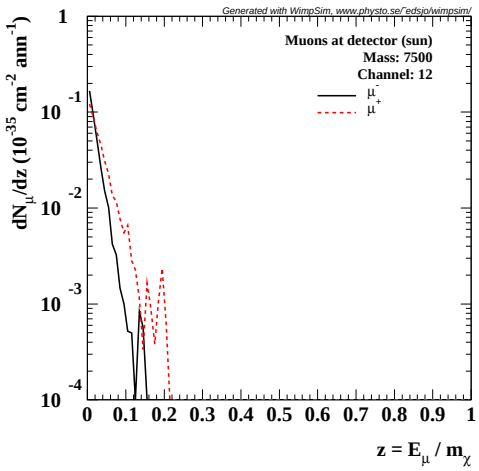


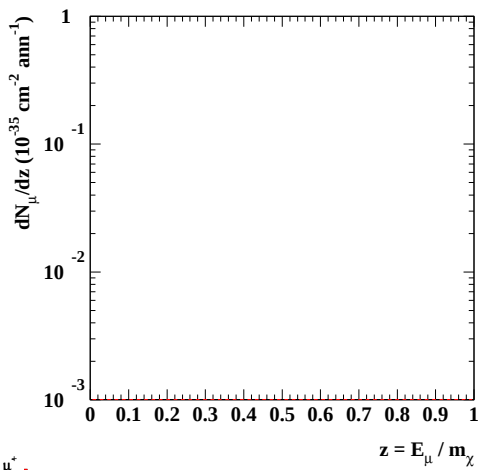
21.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





21.11.7 Muons at detector (Sun/Earth)

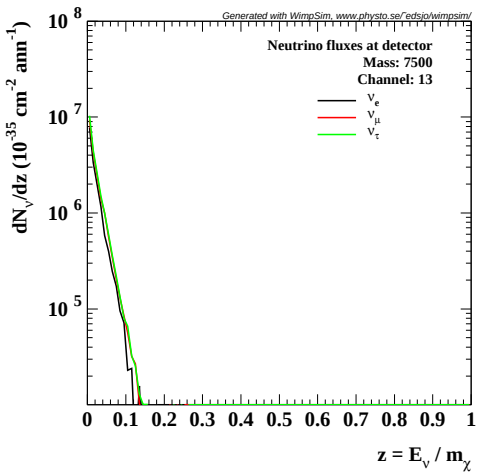


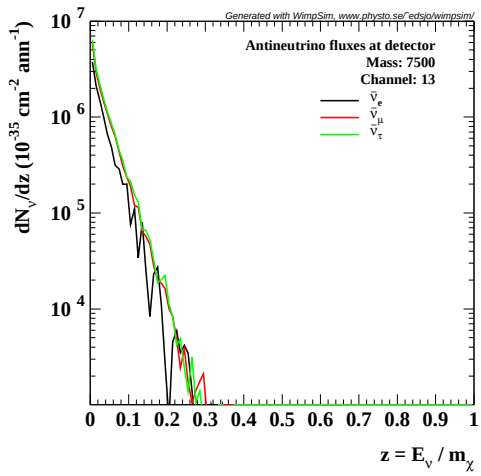


u+ -

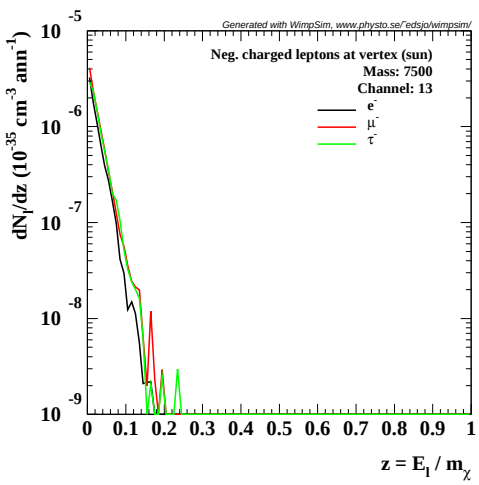
21.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

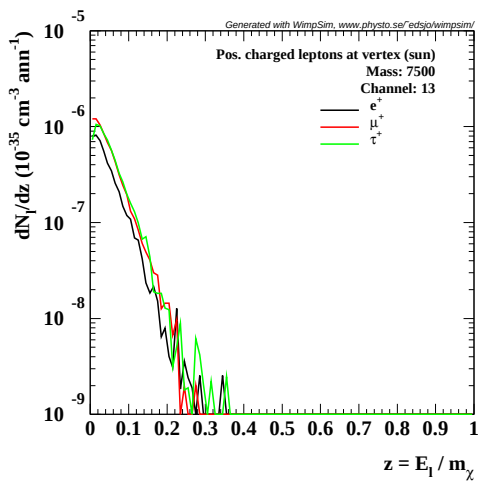
21.12.1 Neutrino fluxes at detector (Sun)



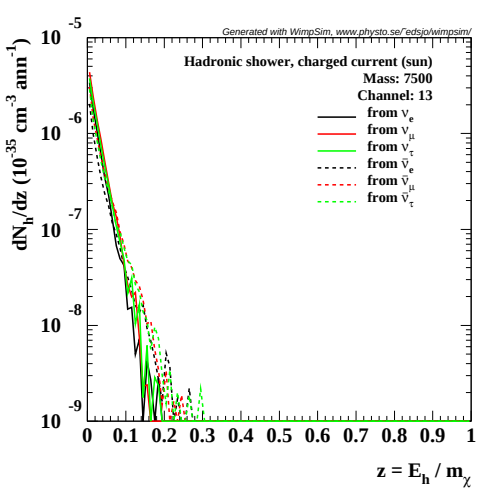


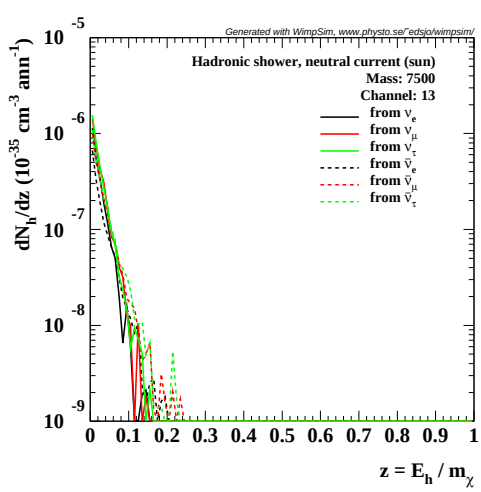
21.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



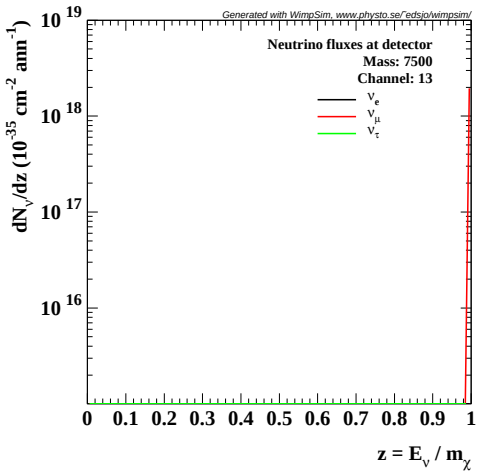


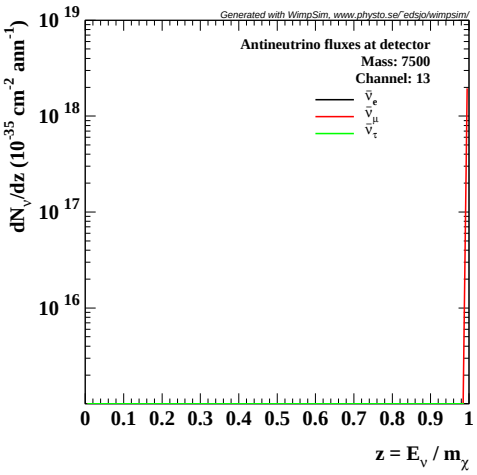
21.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



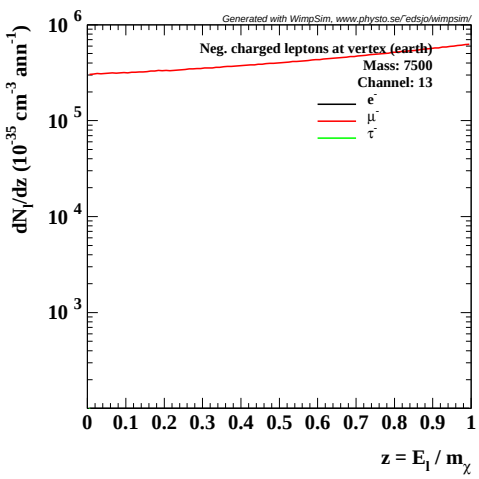


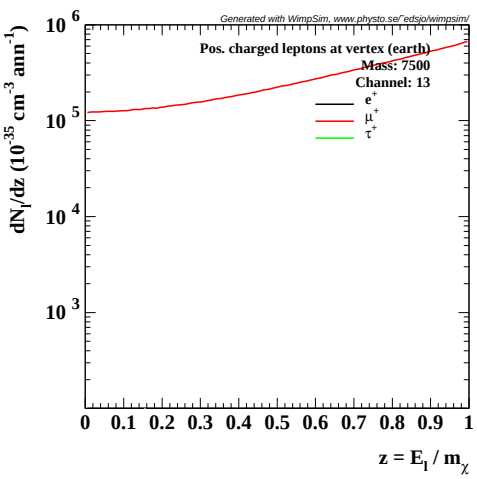
21.12.4 Neutrino fluxes at detector (Earth)



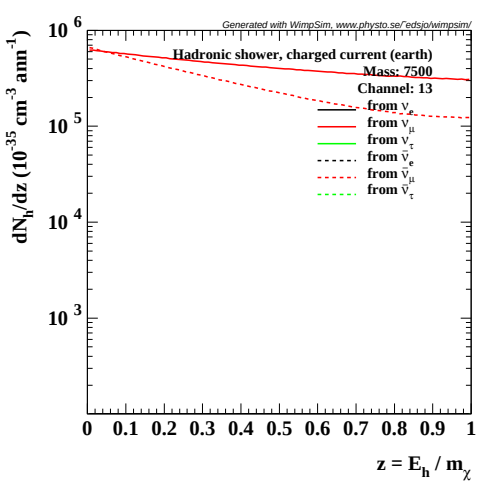


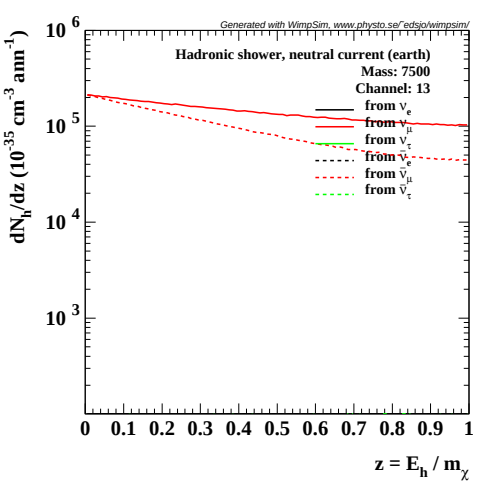
21.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



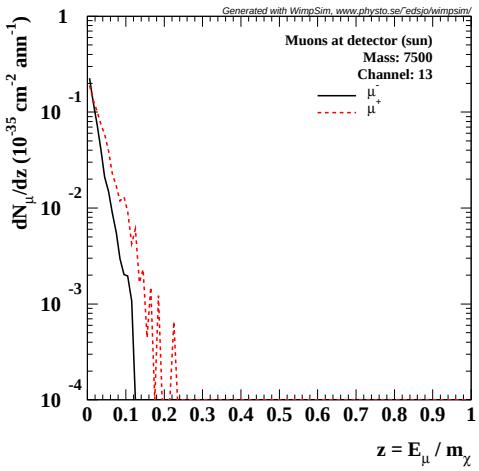


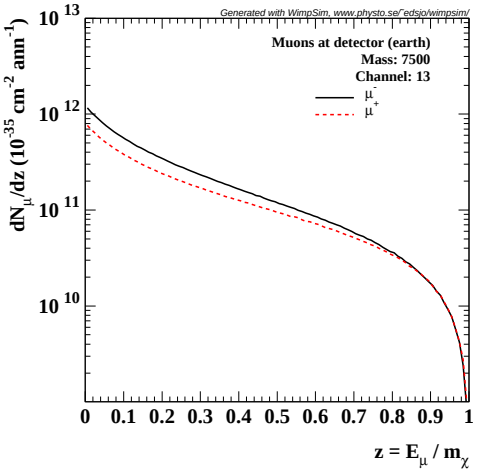
21.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





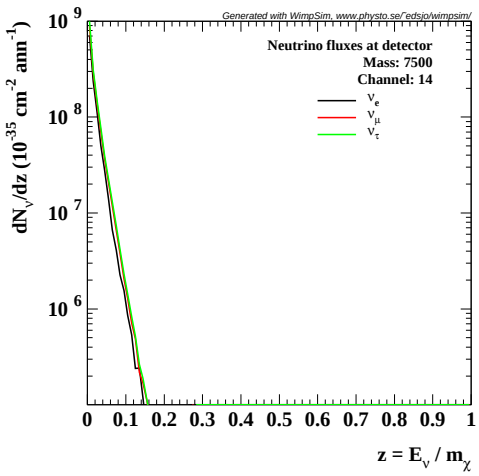
21.12.7 Muons at detector (Sun/Earth)

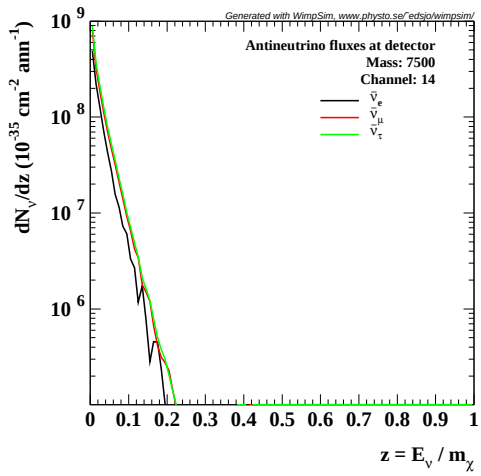




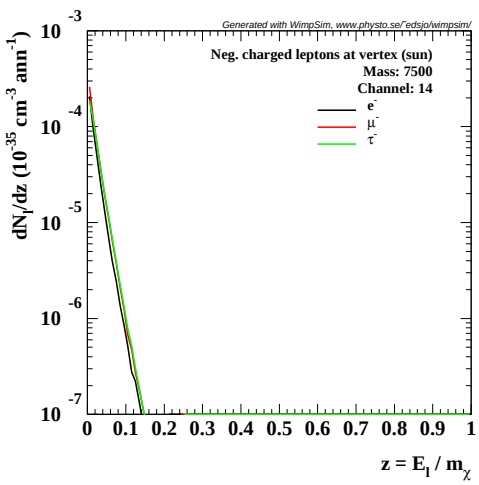
21.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

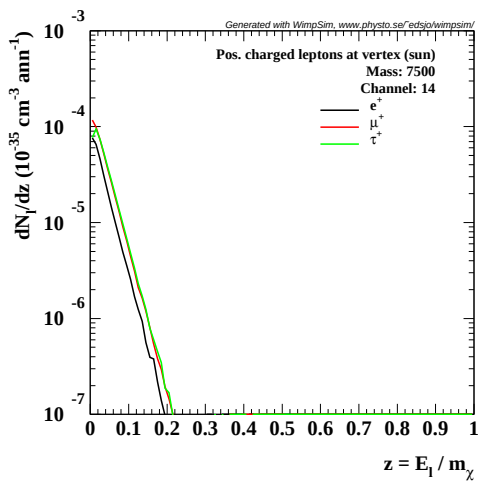
21.13.1 Neutrino fluxes at detector (Sun)



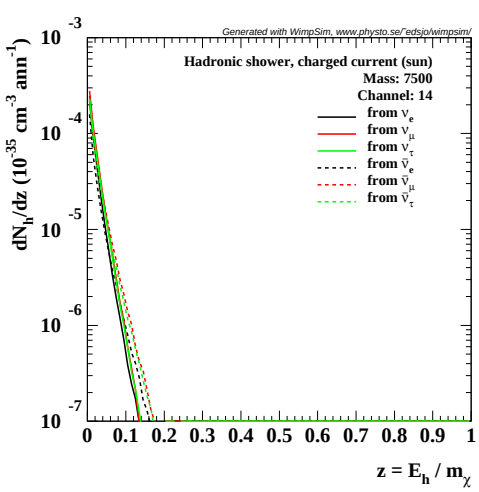


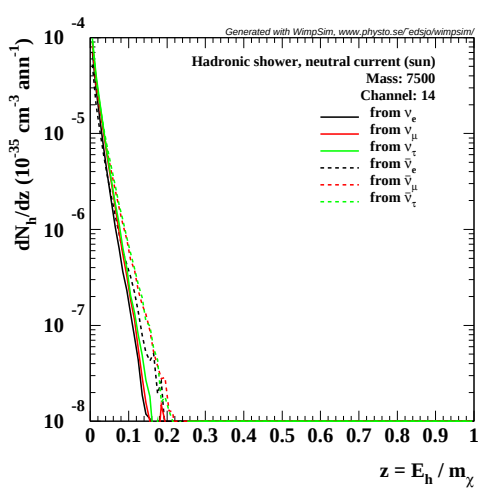
21.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



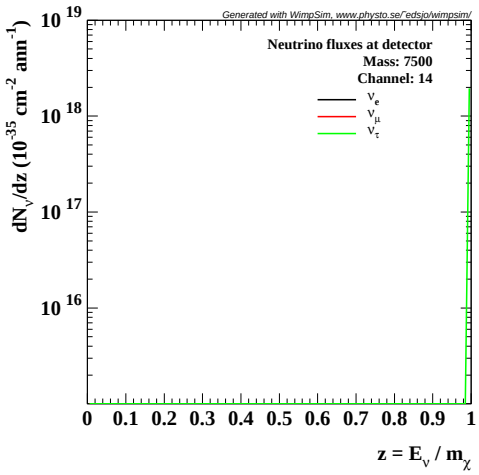


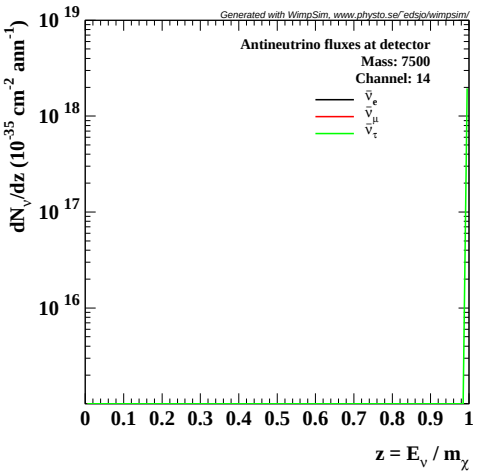
21.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



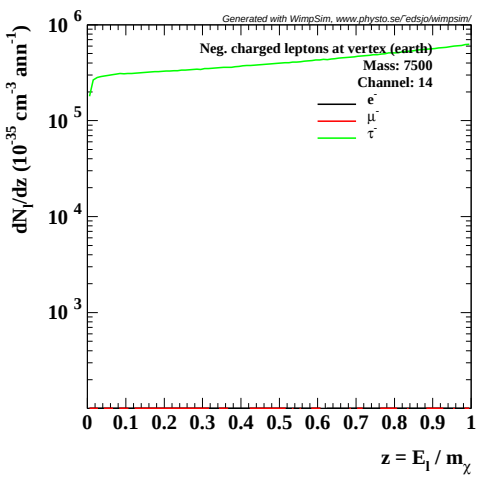


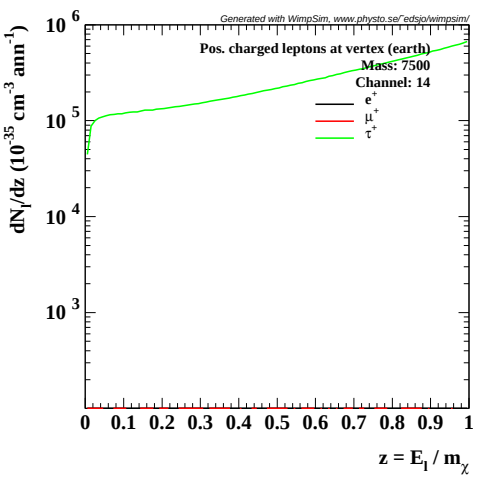
21.13.4 Neutrino fluxes at detector (Earth)



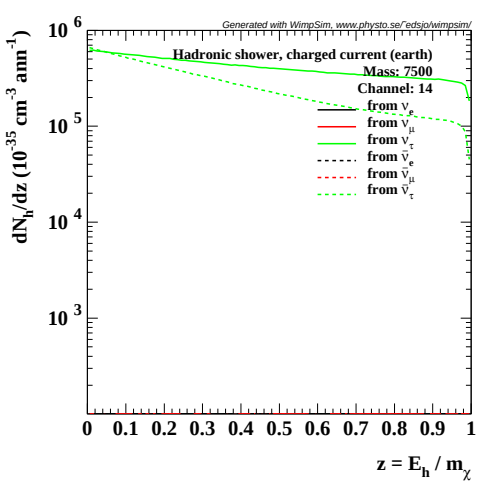


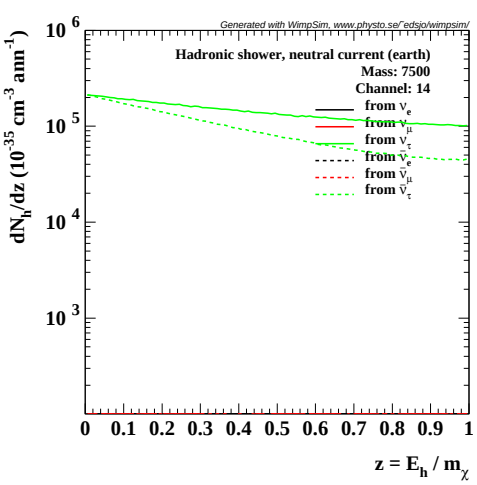
21.13.5 Charged leptons at neutrino-nucleon vertex (Earth)



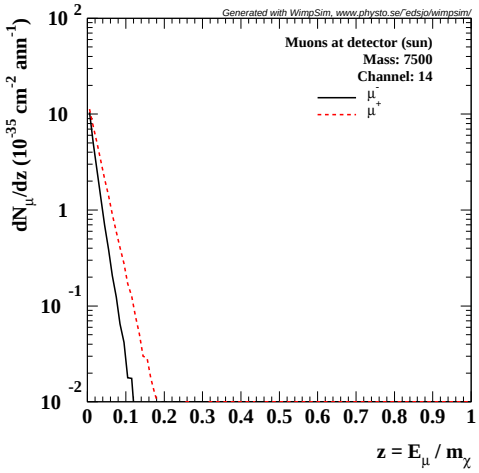


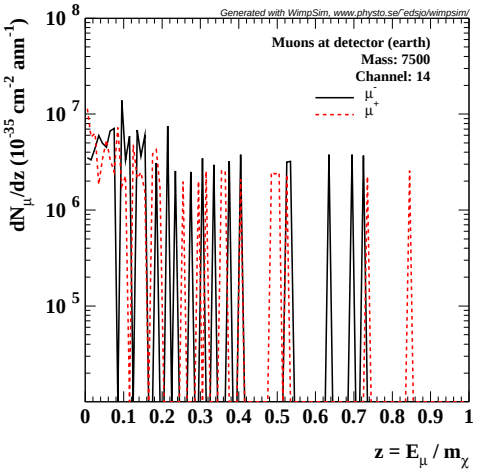
21.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





21.13.7 Muons at detector (Sun/Earth)

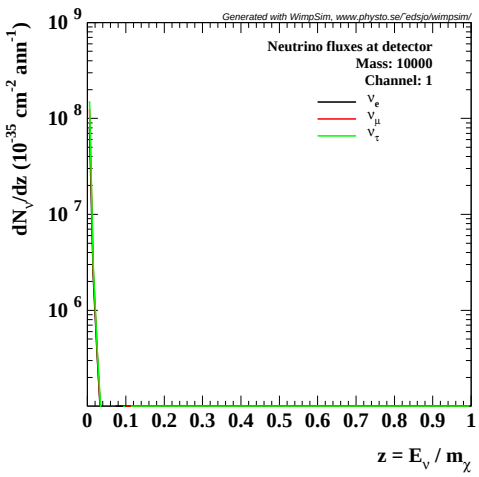


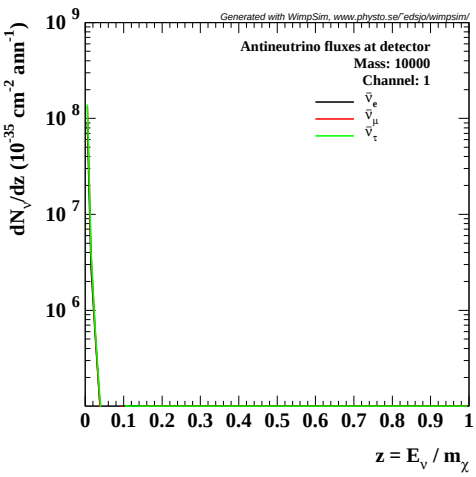


22 Mass 10000

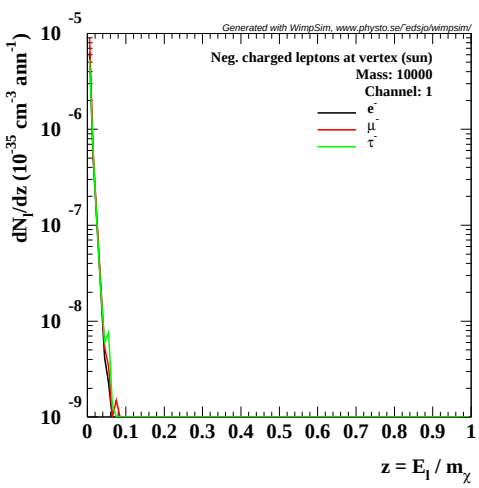
22.1 Channel 1 – $d\bar{d}$

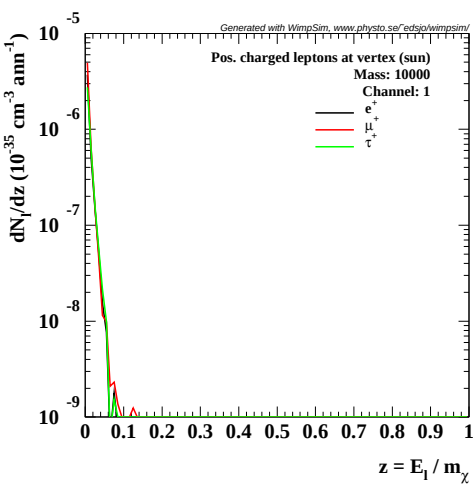
22.1.1 Neutrino fluxes at detector (Sun)



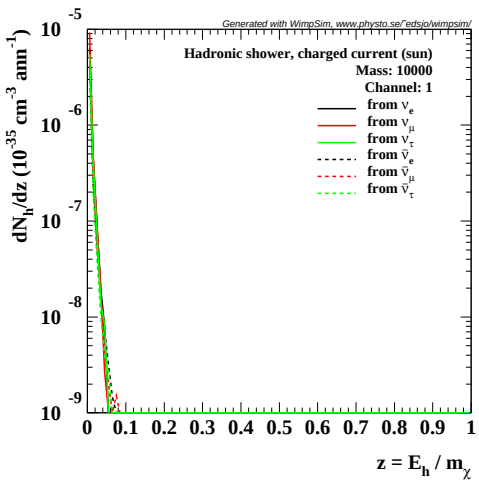


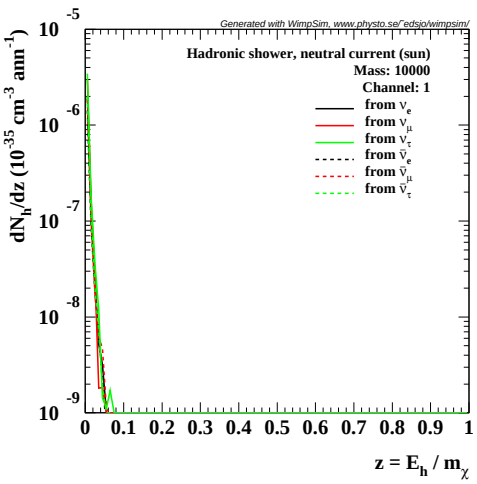
22.1.2 Charged leptons at neutrino-nucleon vertex (Sun)



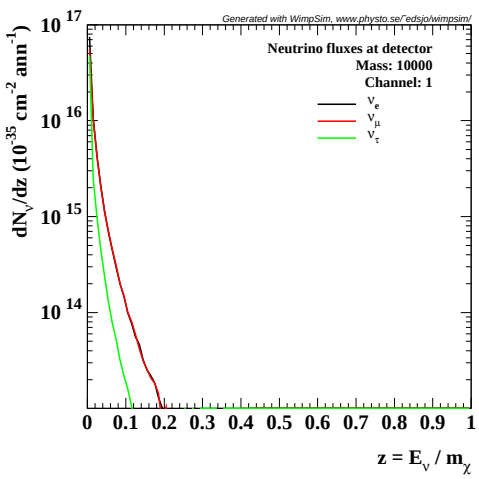


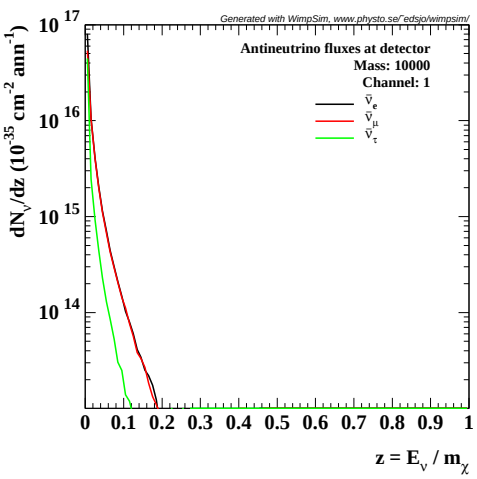
22.1.3 Hadronic shower at neutrino-nucleon vertex (Sun)



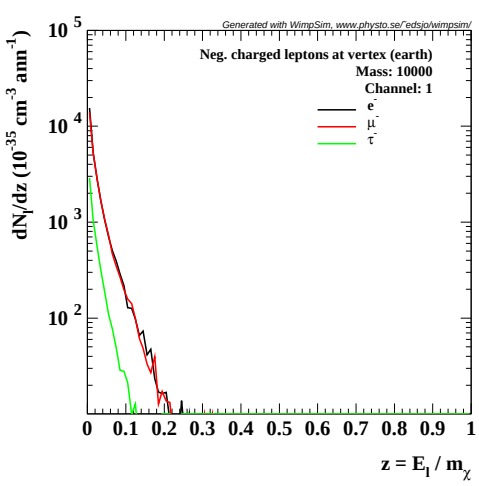


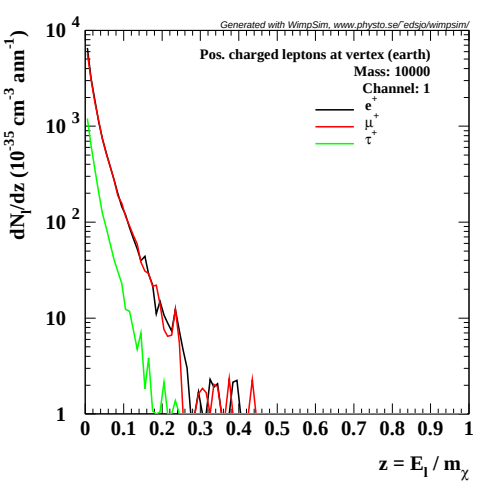
22.1.4 Neutrino fluxes at detector (Earth)



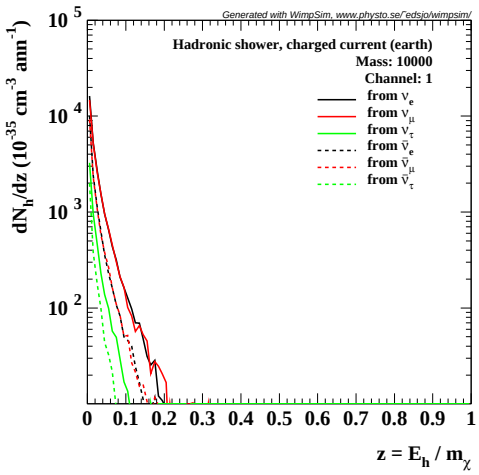


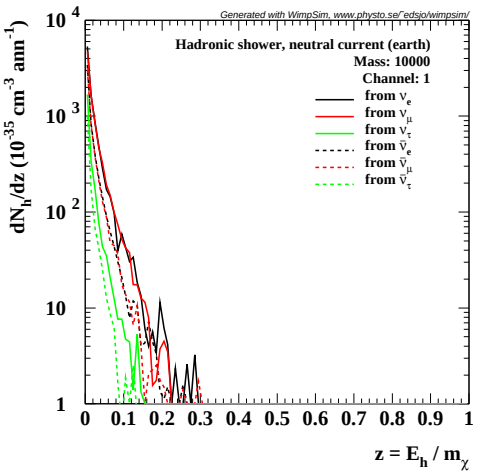
22.1.5 Charged leptons at neutrino-nucleon vertex (Earth)



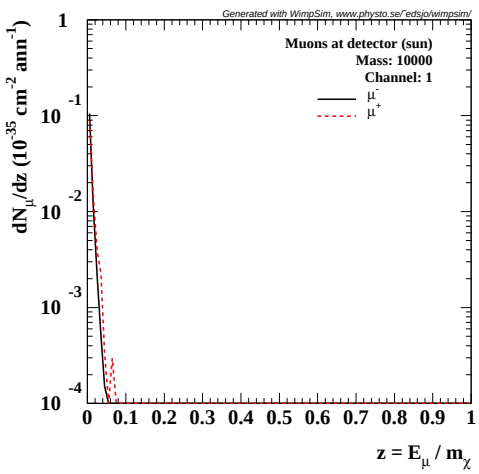


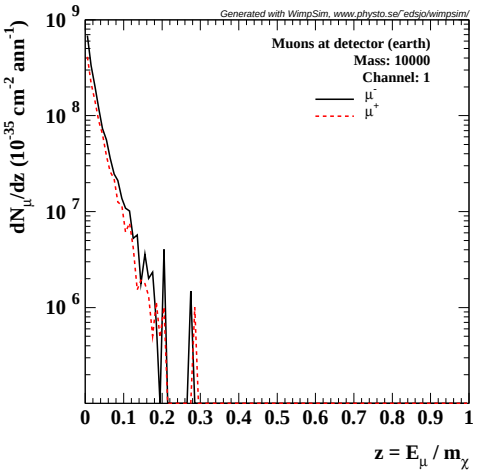
22.1.6 Hadronic shower at neutrino-nucleon vertex (Earth)





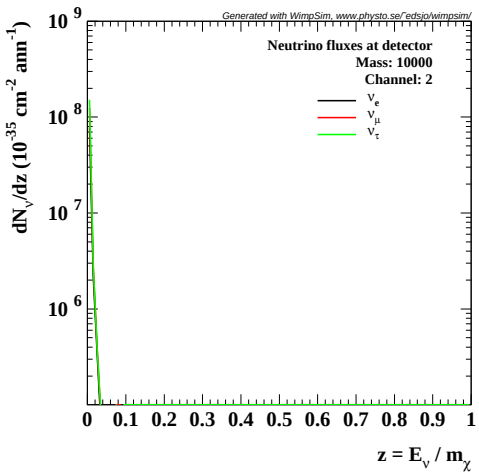
22.1.7 Muons at detector (Sun/Earth)

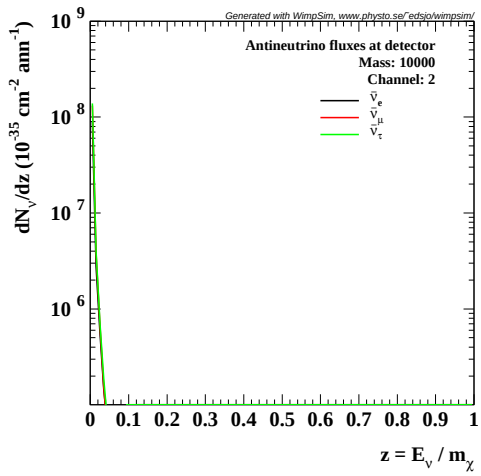




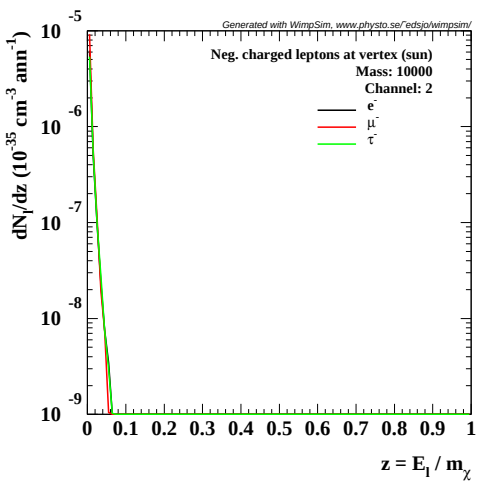
22.2 Channel 2 – $u\bar{u}$

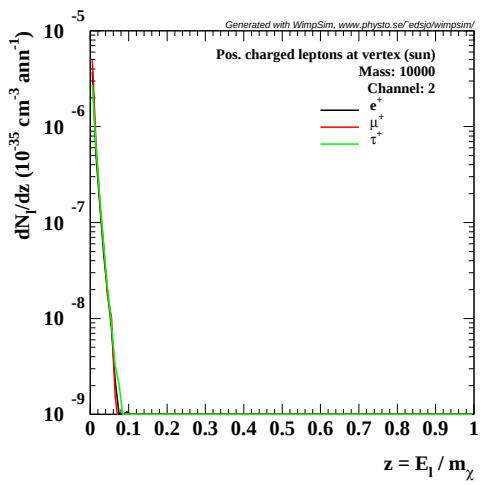
22.2.1 Neutrino fluxes at detector (Sun)



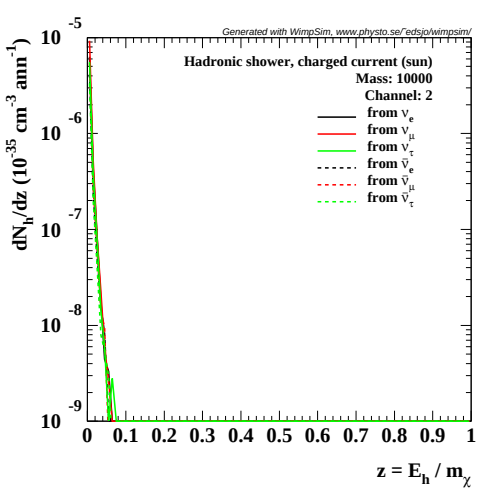


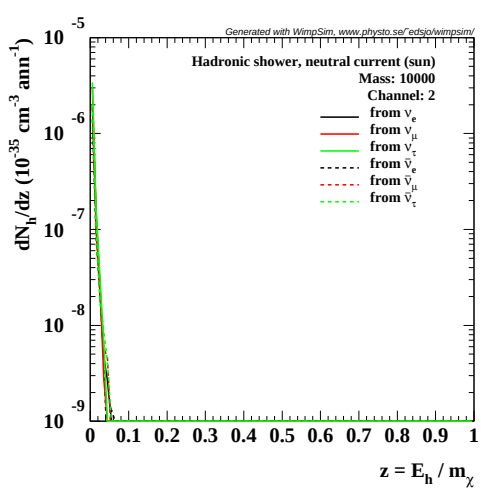
22.2.2 Charged leptons at neutrino-nucleon vertex (Sun)



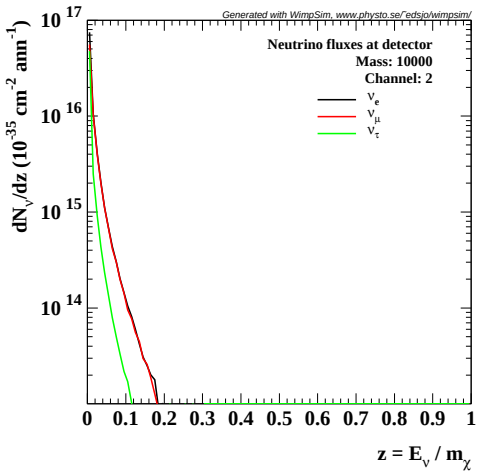


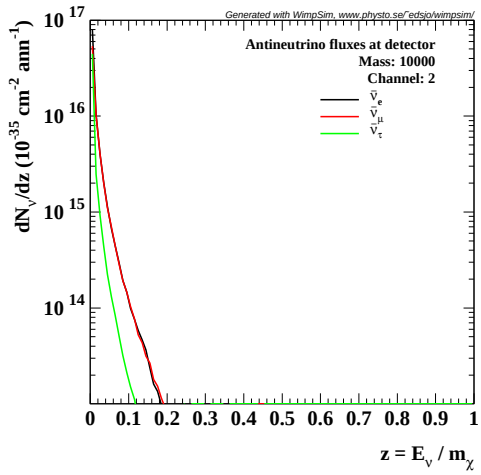
22.2.3 Hadronic shower at neutrino-nucleon vertex (Sun)



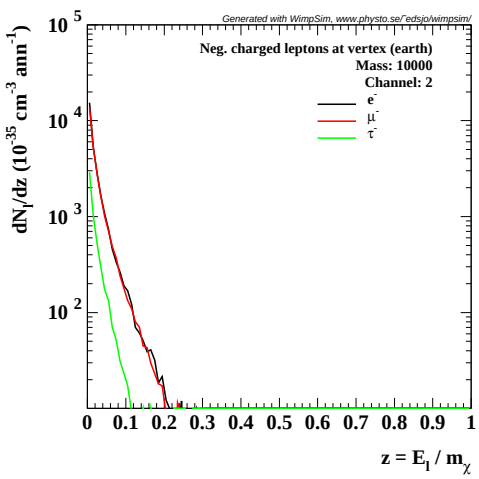


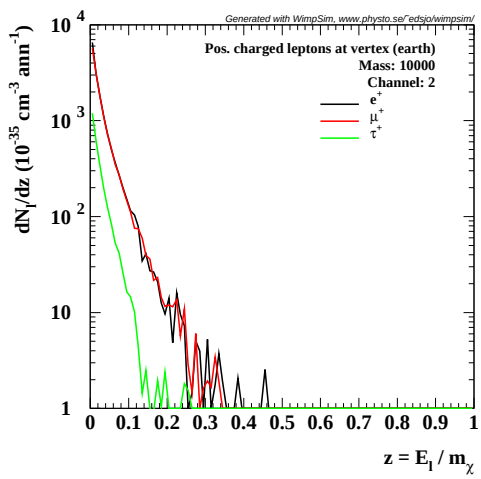
22.2.4 Neutrino fluxes at detector (Earth)



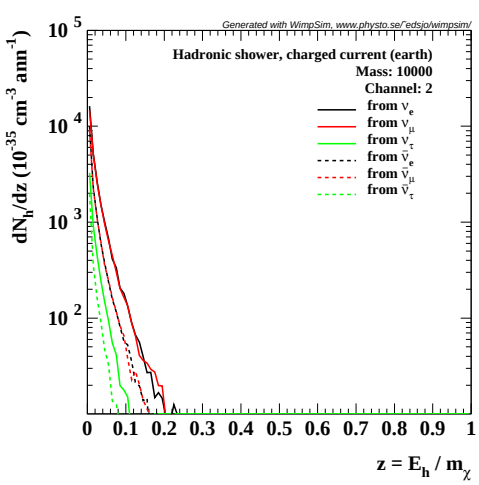


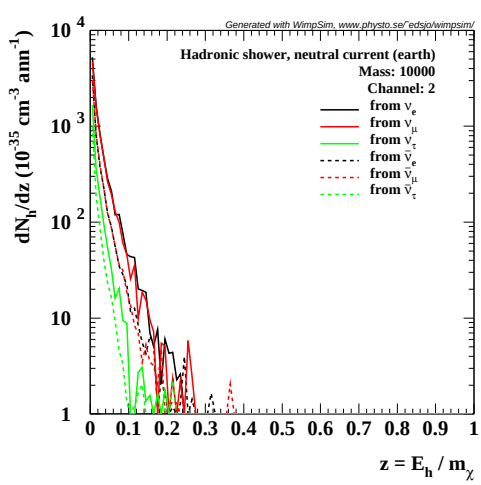
22.2.5 Charged leptons at neutrino-nucleon vertex (Earth)



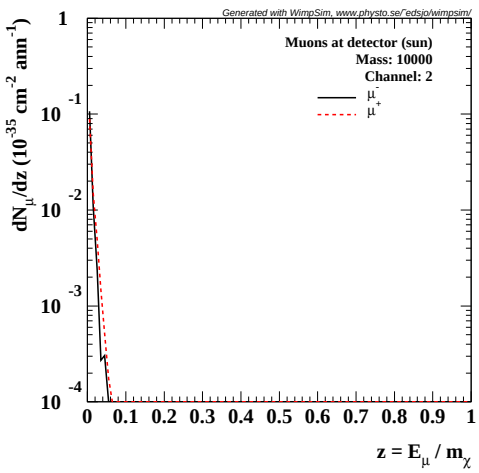


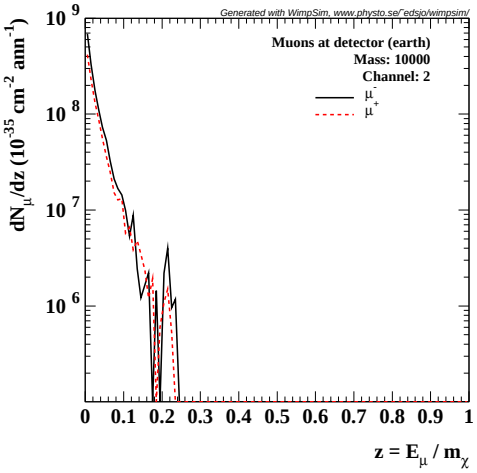
22.2.6 Hadronic shower at neutrino-nucleon vertex (Earth)





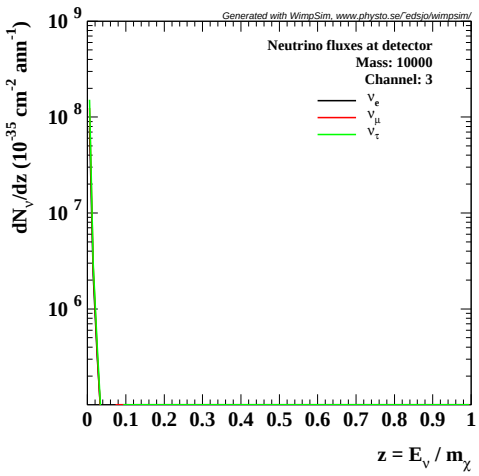
22.2.7 Muons at detector (Sun/Earth)

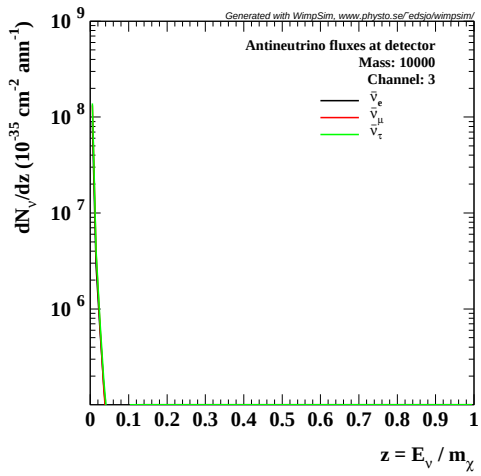




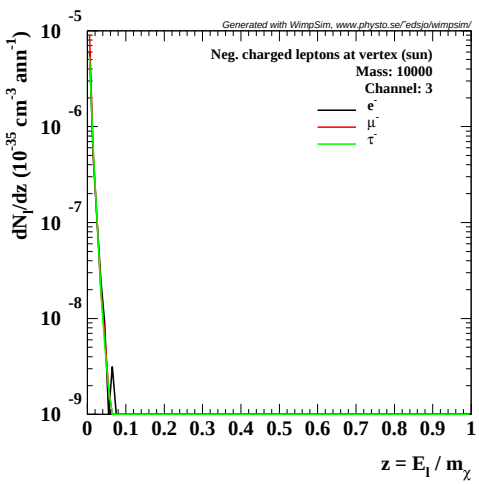
22.3 Channel 3 – $s\bar{s}$

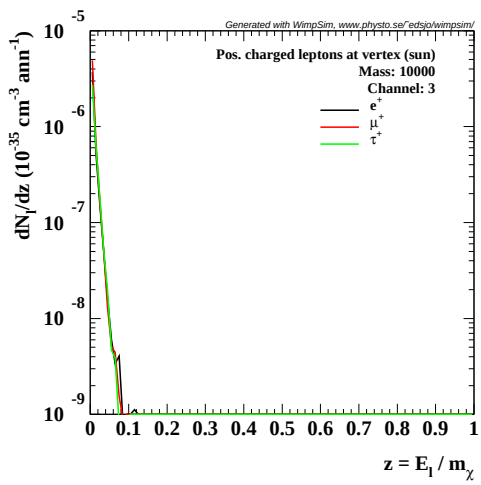
22.3.1 Neutrino fluxes at detector (Sun)



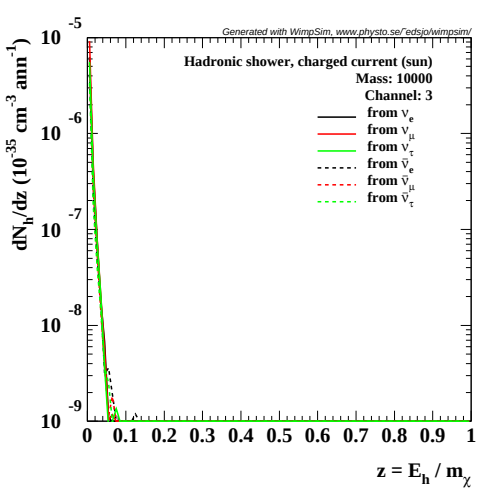


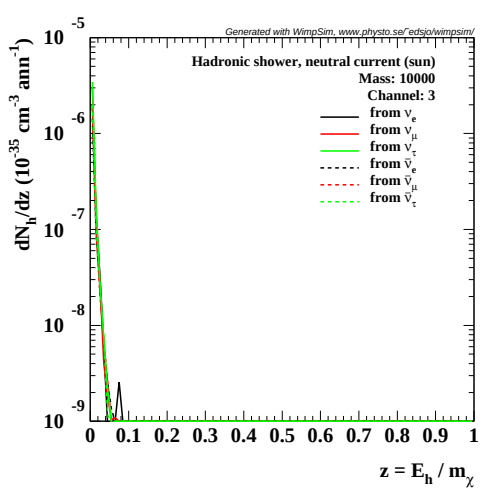
22.3.2 Charged leptons at neutrino-nucleon vertex (Sun)



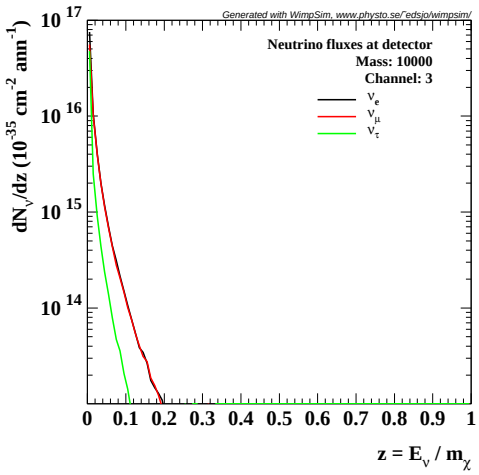


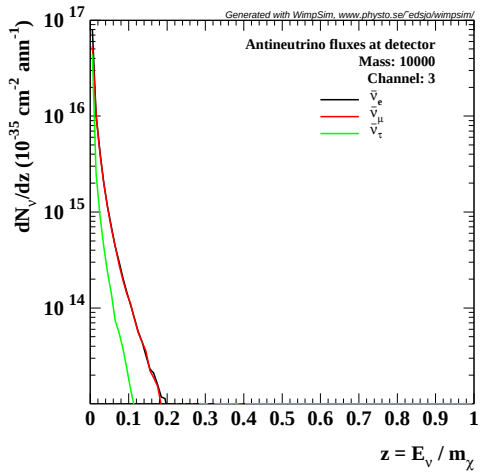
22.3.3 Hadronic shower at neutrino-nucleon vertex (Sun)



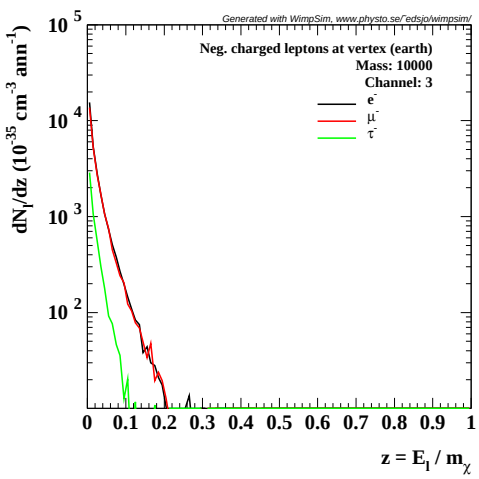


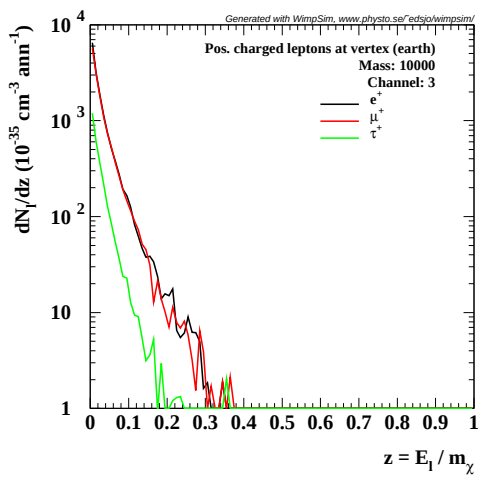
22.3.4 Neutrino fluxes at detector (Earth)



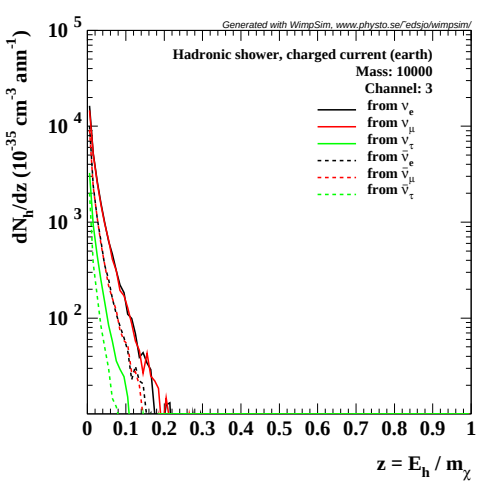


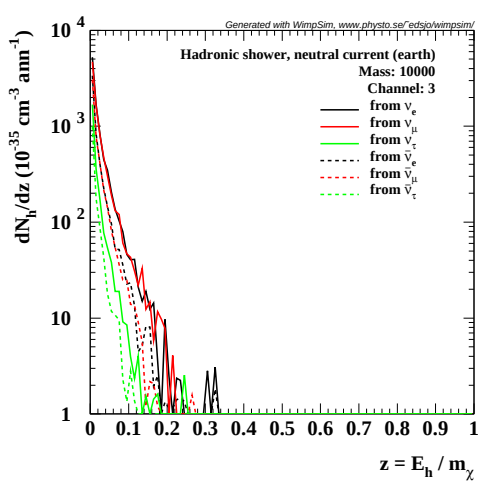
22.3.5 Charged leptons at neutrino-nucleon vertex (Earth)



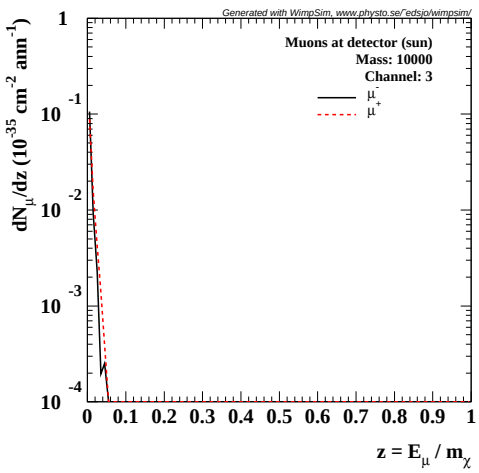


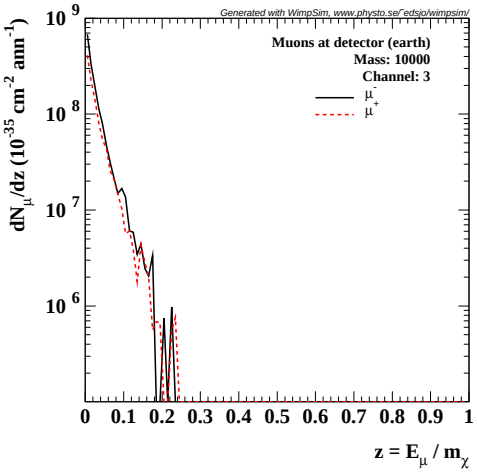
22.3.6 Hadronic shower at neutrino-nucleon vertex (Earth)





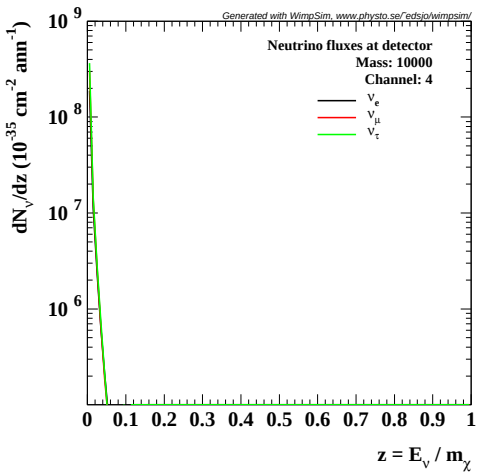
22.3.7 Muons at detector (Sun/Earth)

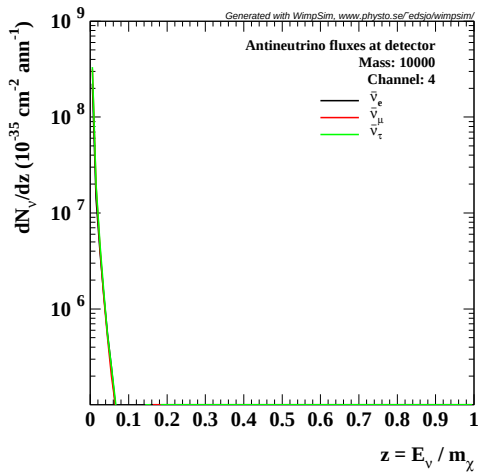




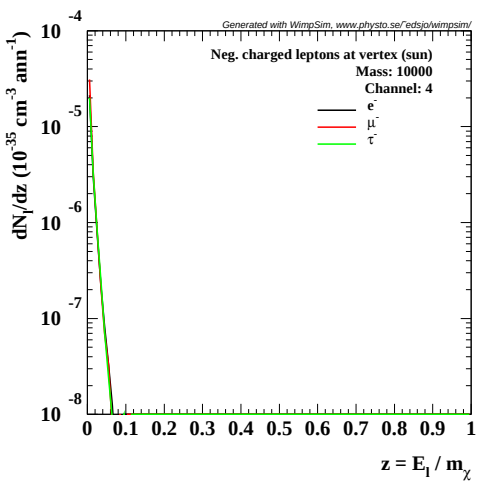
22.4 Channel 4 – $c\bar{c}$

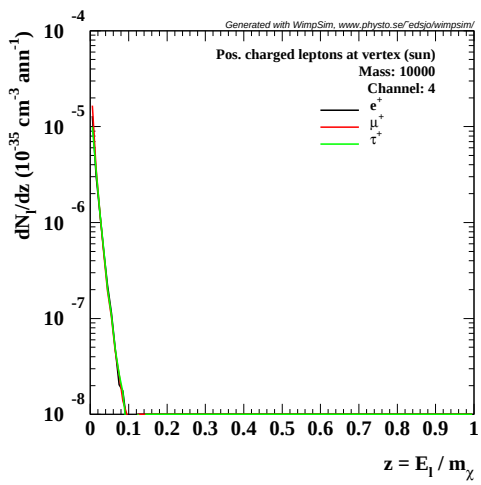
22.4.1 Neutrino fluxes at detector (Sun)



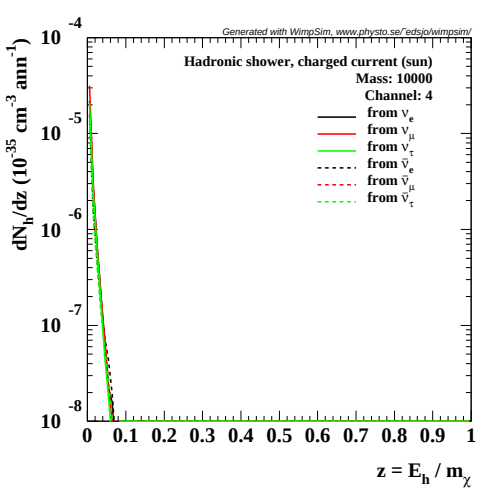


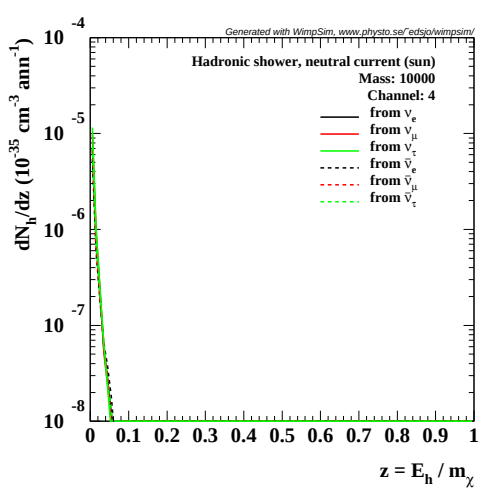
22.4.2 Charged leptons at neutrino-nucleon vertex (Sun)



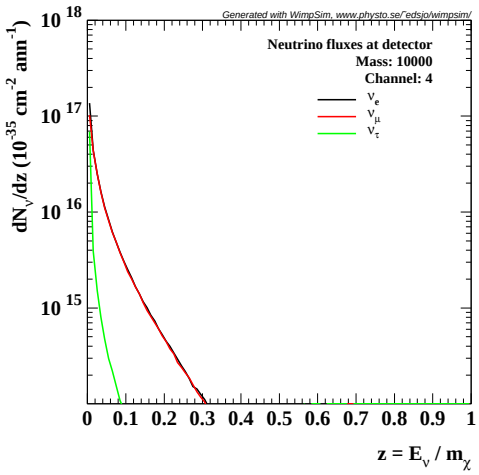


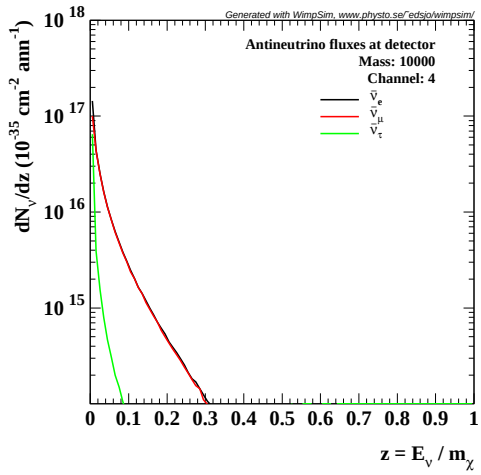
22.4.3 Hadronic shower at neutrino-nucleon vertex (Sun)



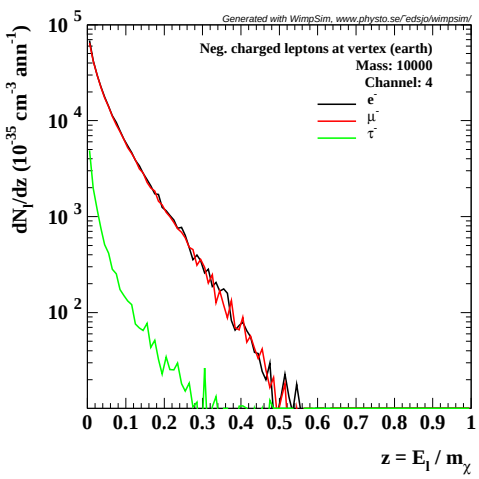


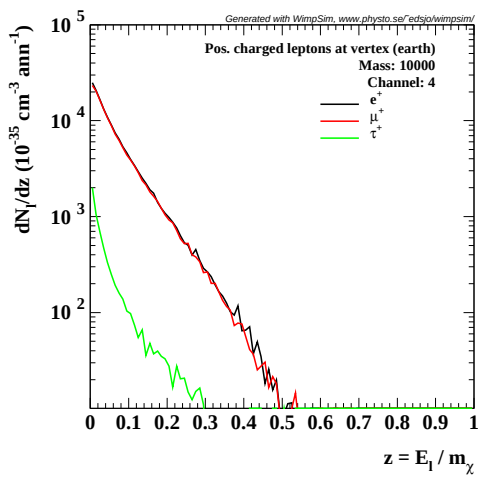
22.4.4 Neutrino fluxes at detector (Earth)



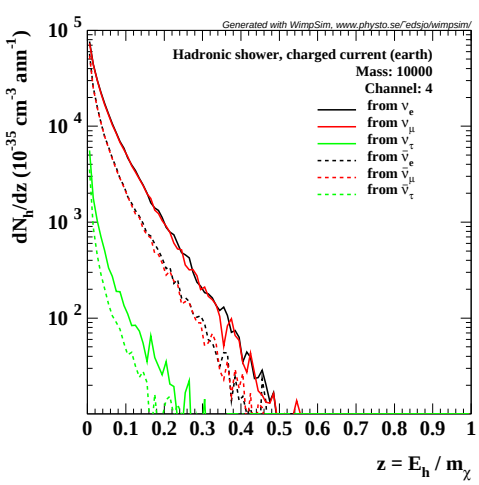


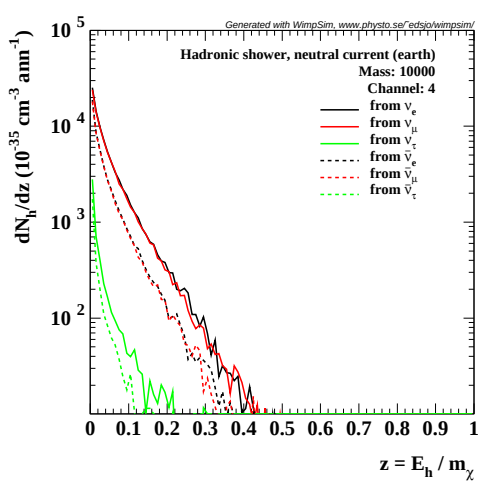
22.4.5 Charged leptons at neutrino-nucleon vertex (Earth)



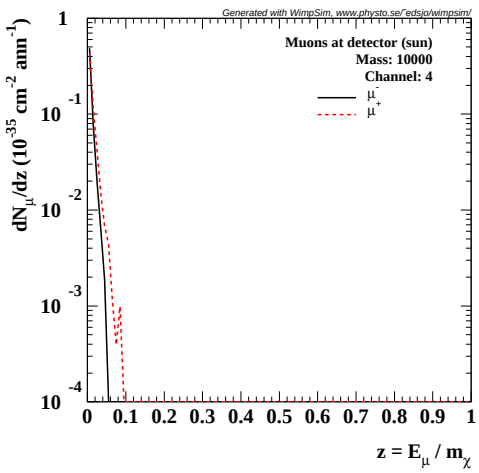


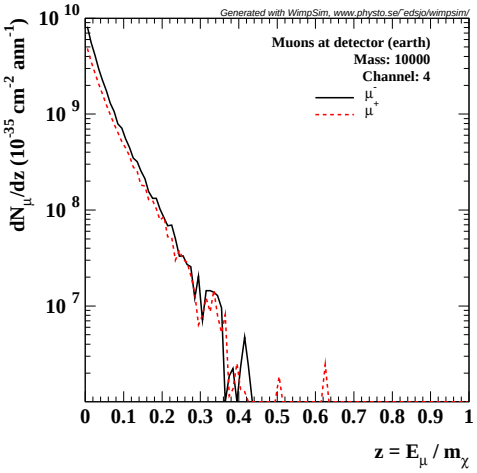
22.4.6 Hadronic shower at neutrino-nucleon vertex (Earth)





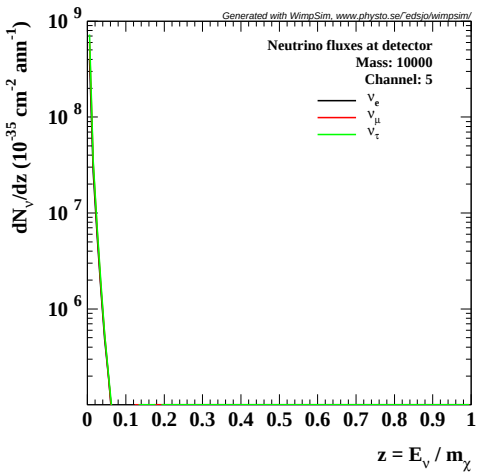
22.4.7 Muons at detector (Sun/Earth)

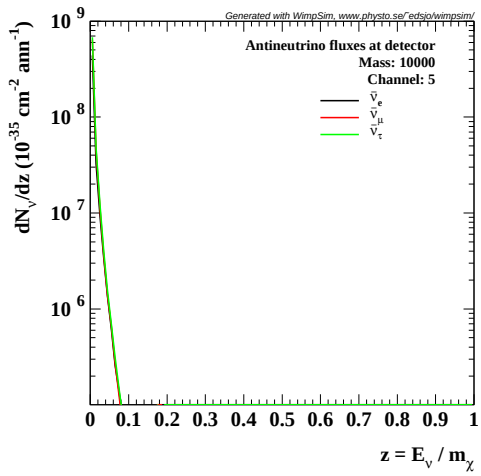




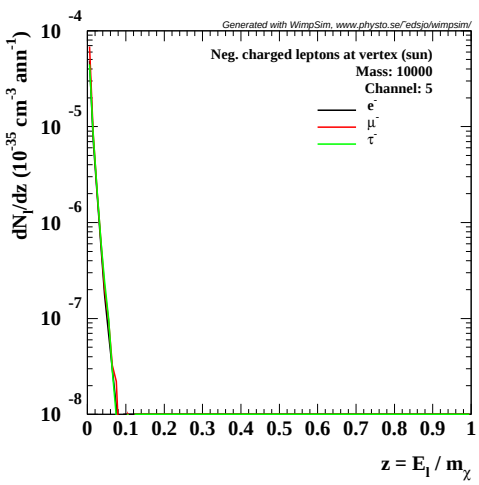
22.5 Channel 5 – $b\bar{b}$

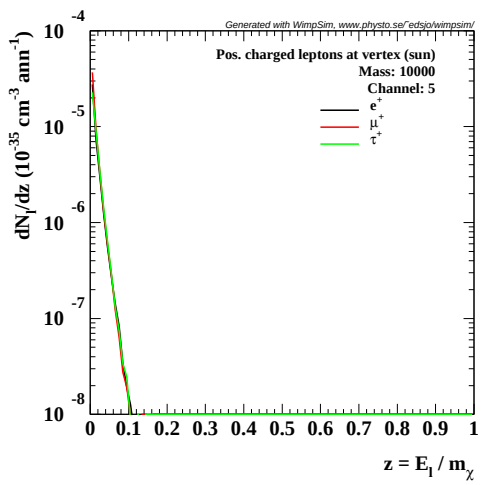
22.5.1 Neutrino fluxes at detector (Sun)



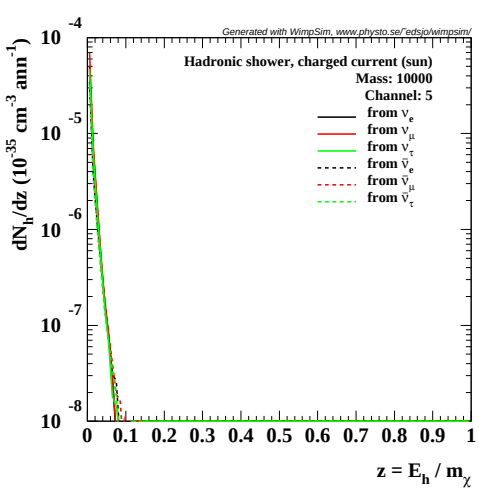


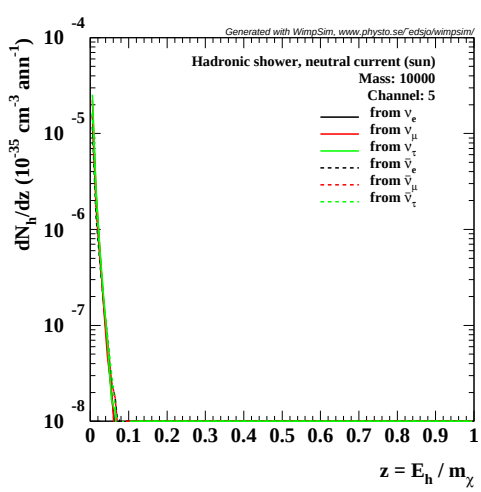
22.5.2 Charged leptons at neutrino-nucleon vertex (Sun)



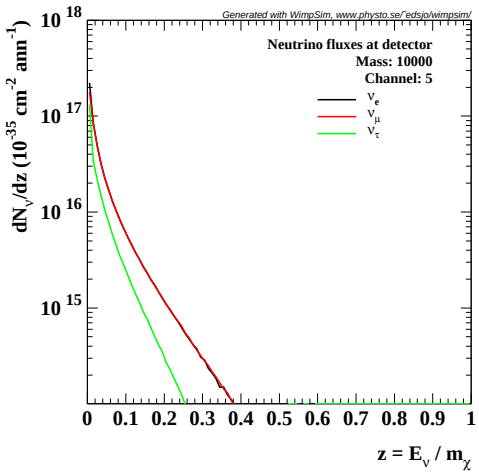


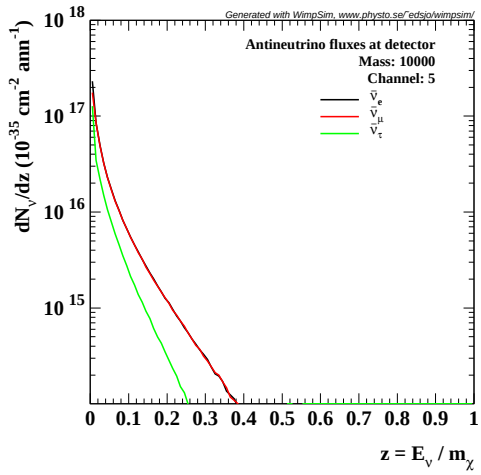
22.5.3 Hadronic shower at neutrino-nucleon vertex (Sun)



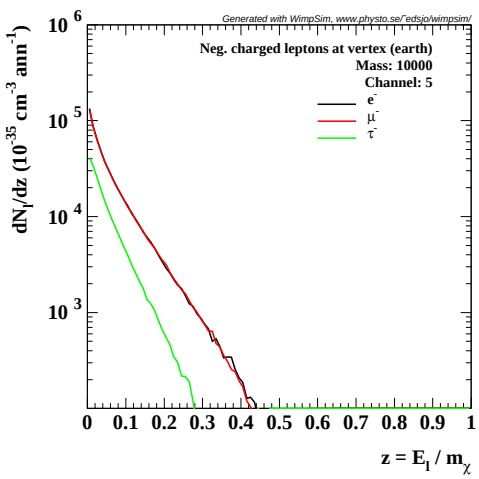


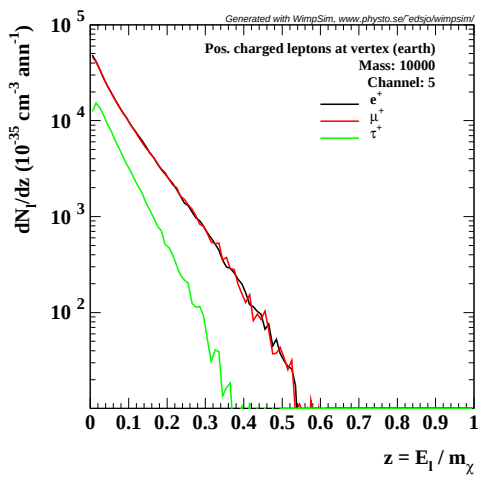
22.5.4 Neutrino fluxes at detector (Earth)



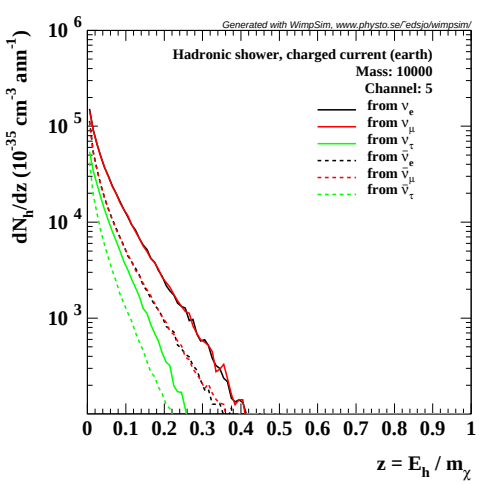


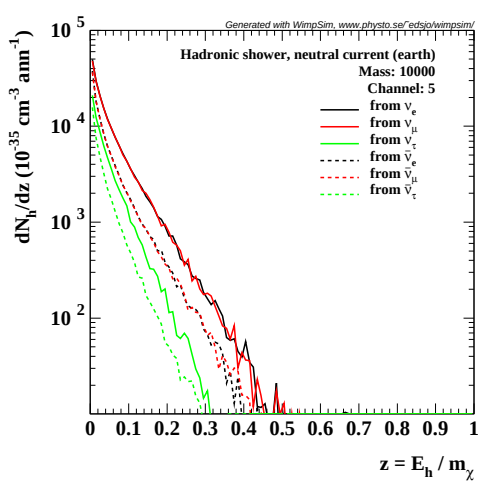
22.5.5 Charged leptons at neutrino-nucleon vertex (Earth)



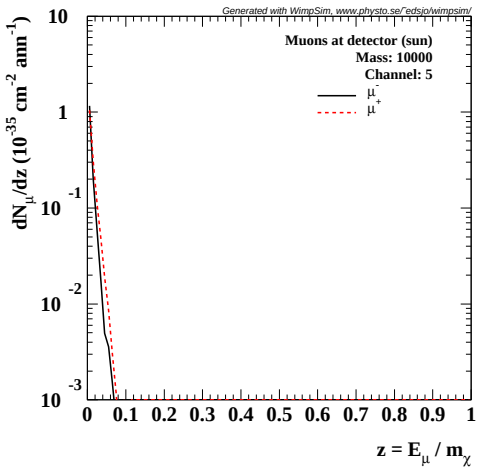


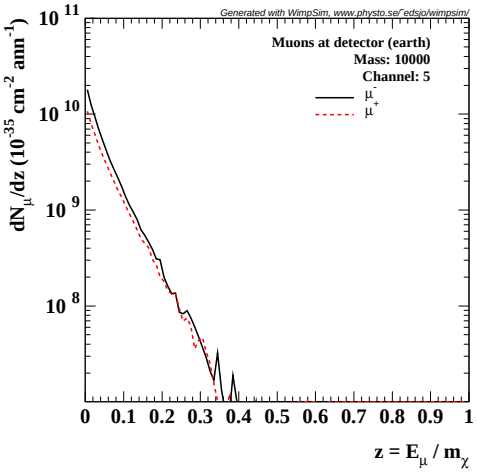
22.5.6 Hadronic shower at neutrino-nucleon vertex (Earth)





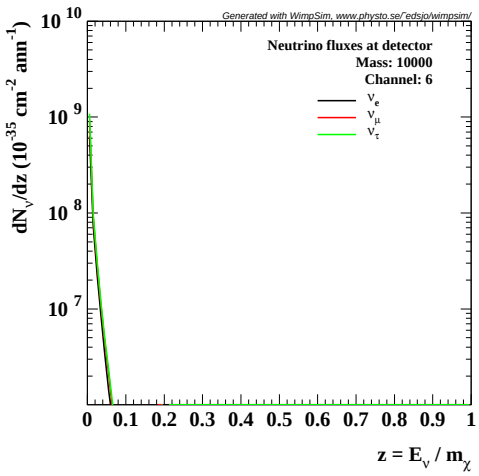
22.5.7 Muons at detector (Sun/Earth)

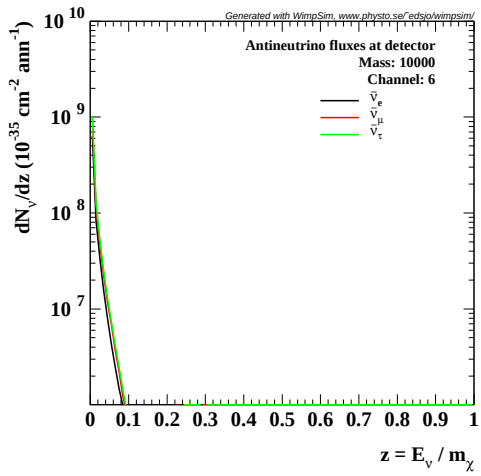




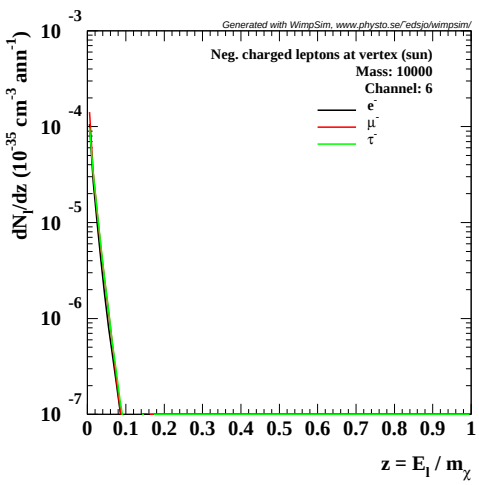
22.6 Channel 6 – $t\bar{t}$

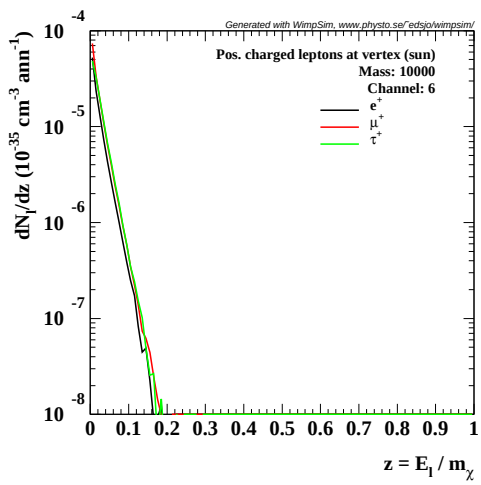
22.6.1 Neutrino fluxes at detector (Sun)



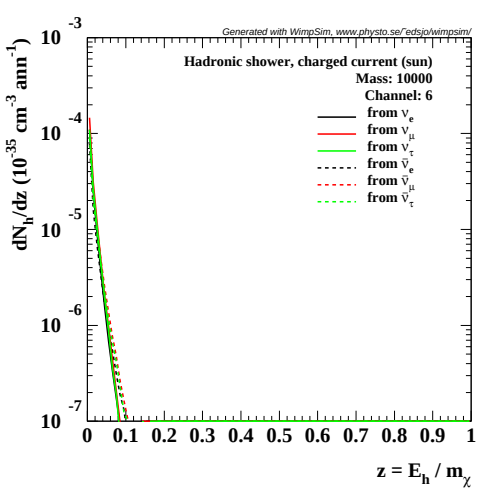


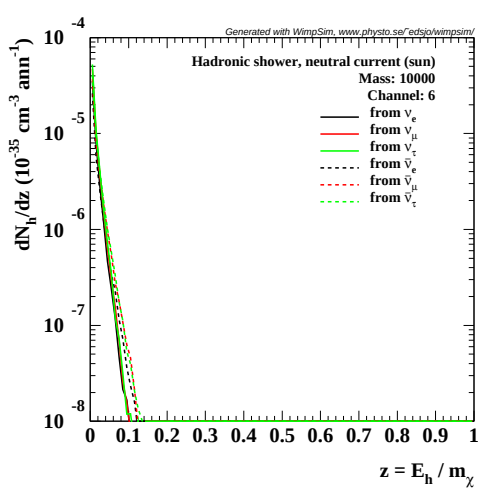
22.6.2 Charged leptons at neutrino-nucleon vertex (Sun)



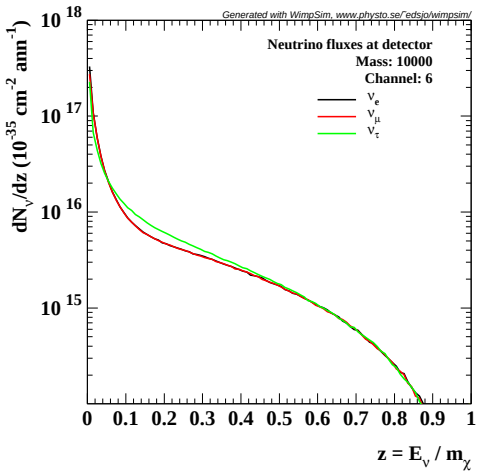


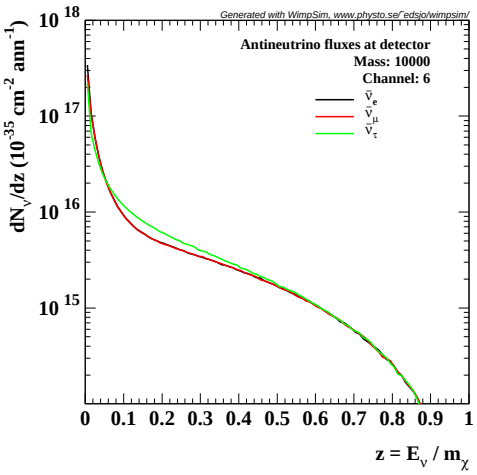
22.6.3 Hadronic shower at neutrino-nucleon vertex (Sun)



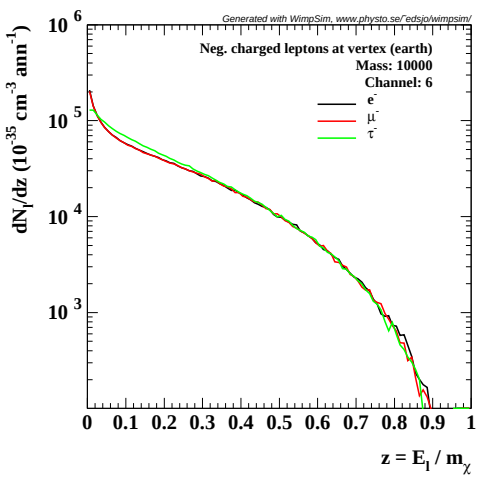


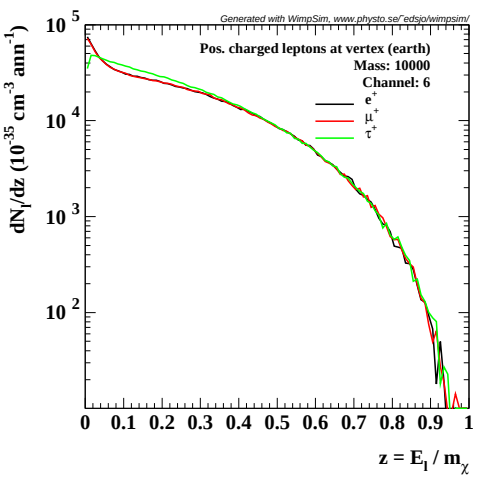
22.6.4 Neutrino fluxes at detector (Earth)



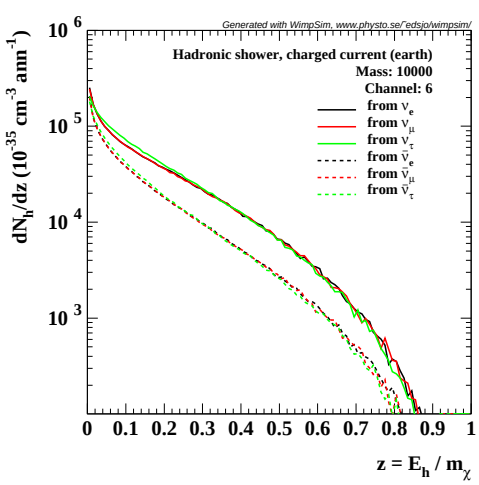


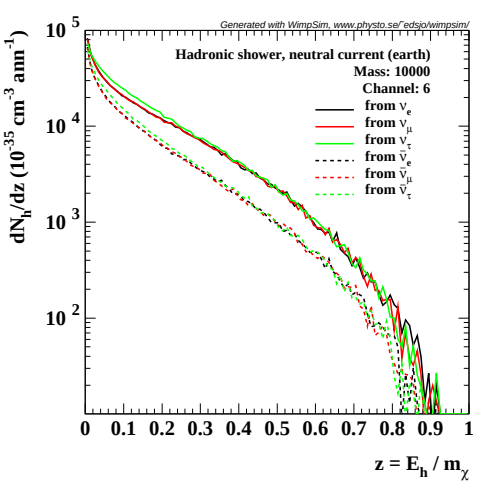
22.6.5 Charged leptons at neutrino-nucleon vertex (Earth)



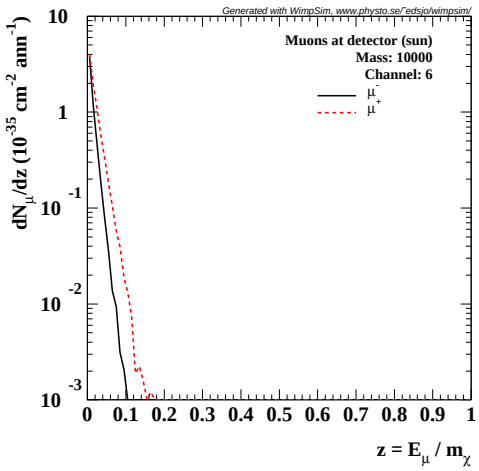


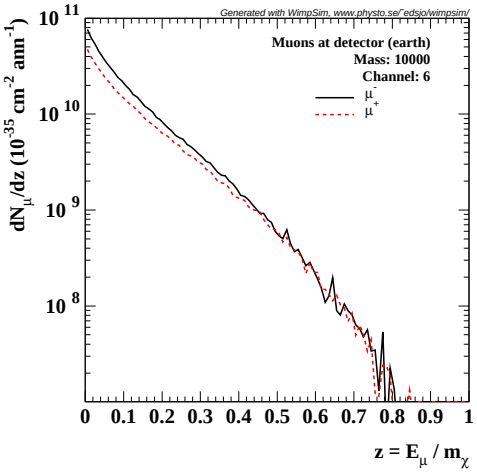
22.6.6 Hadronic shower at neutrino-nucleon vertex (Earth)





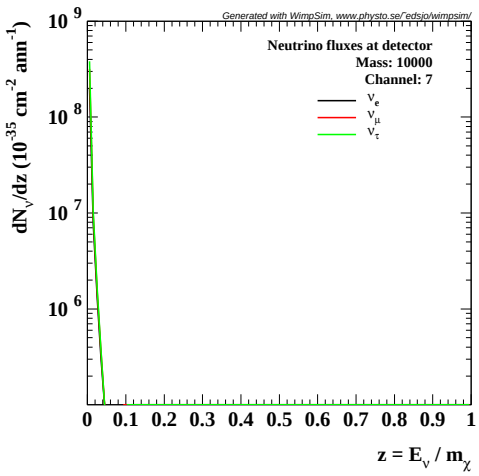
22.6.7 Muons at detector (Sun/Earth)

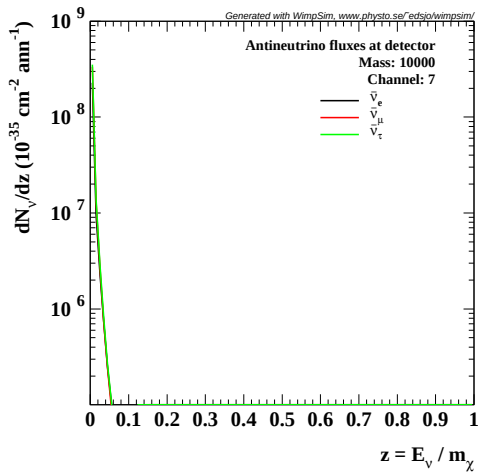




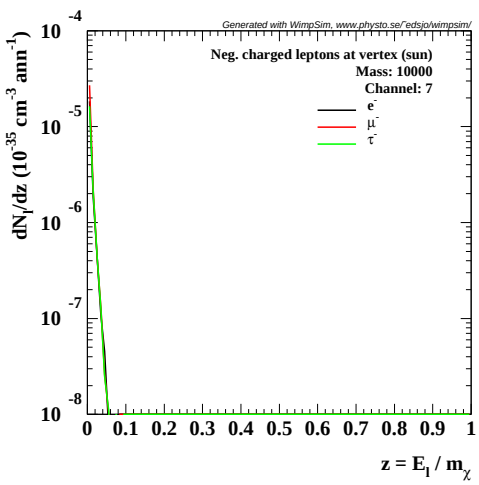
22.7 Channel 7 – gg

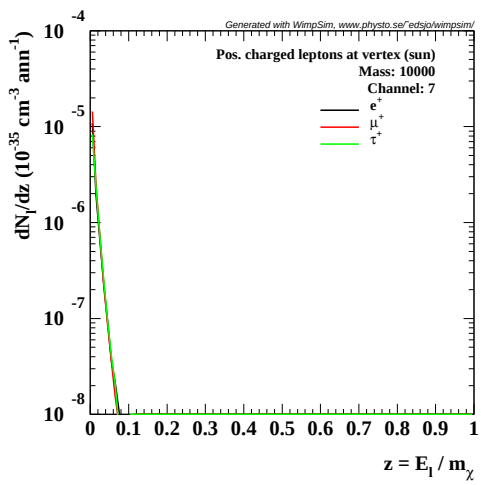
22.7.1 Neutrino fluxes at detector (Sun)



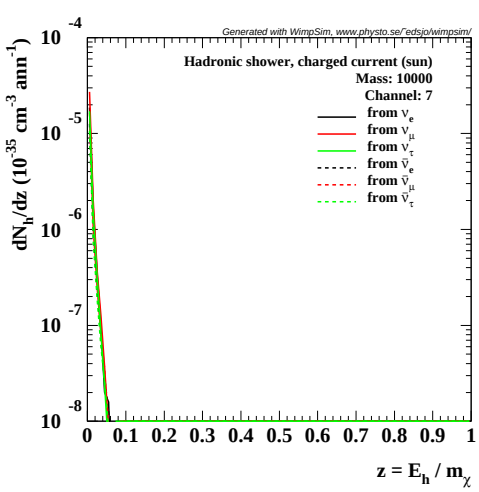


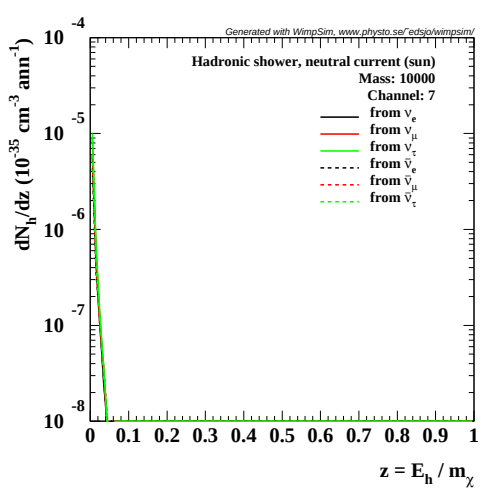
22.7.2 Charged leptons at neutrino-nucleon vertex (Sun)



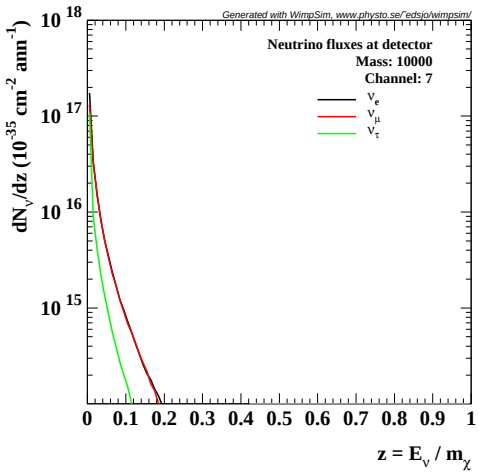


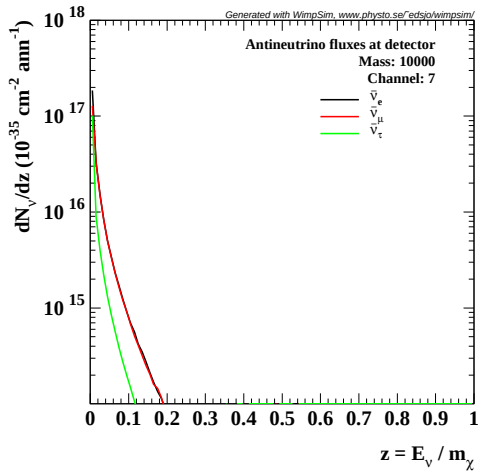
22.7.3 Hadronic shower at neutrino-nucleon vertex (Sun)



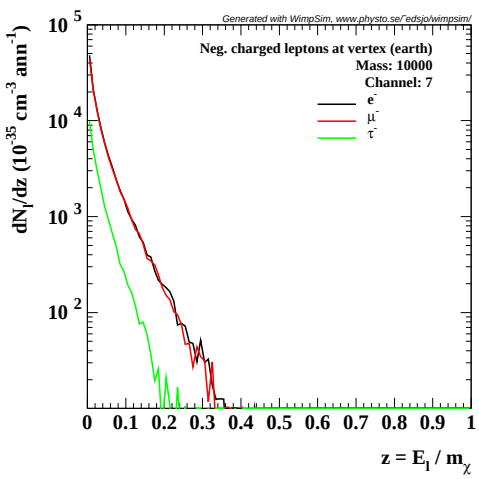


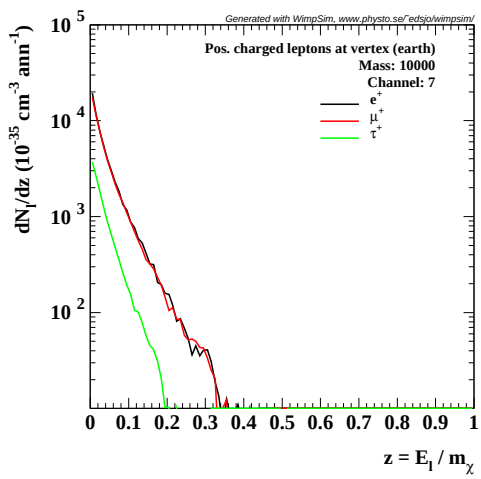
22.7.4 Neutrino fluxes at detector (Earth)



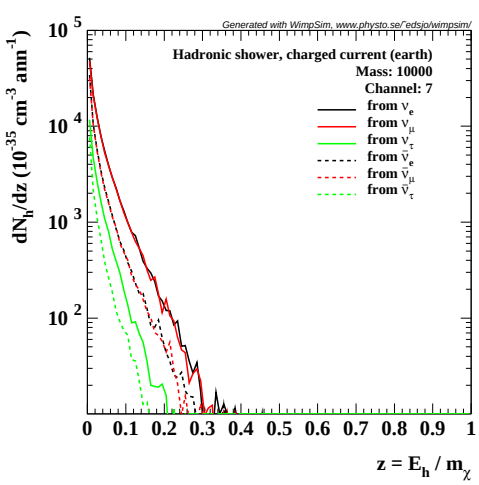


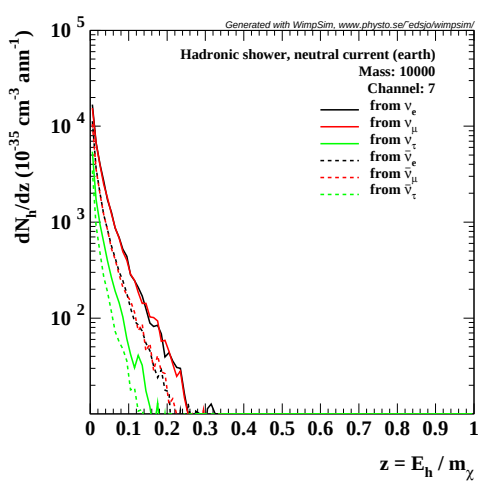
22.7.5 Charged leptons at neutrino-nucleon vertex (Earth)



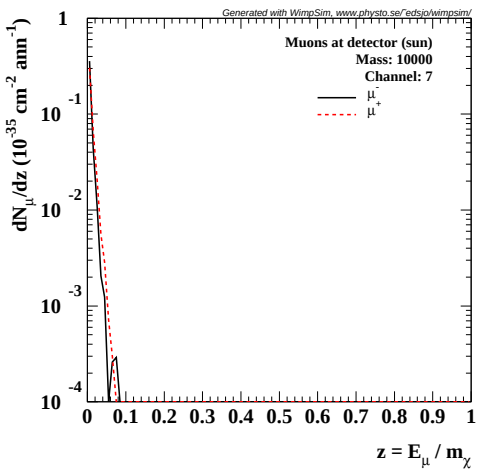


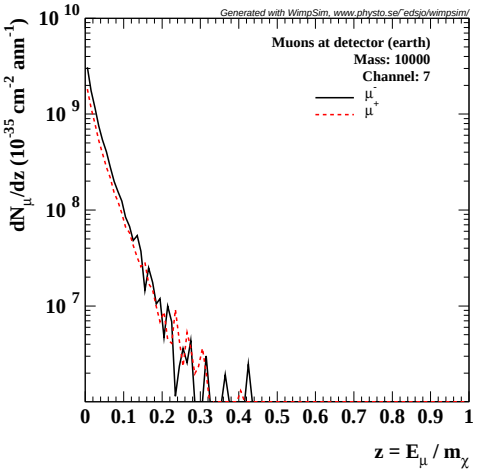
22.7.6 Hadronic shower at neutrino-nucleon vertex (Earth)





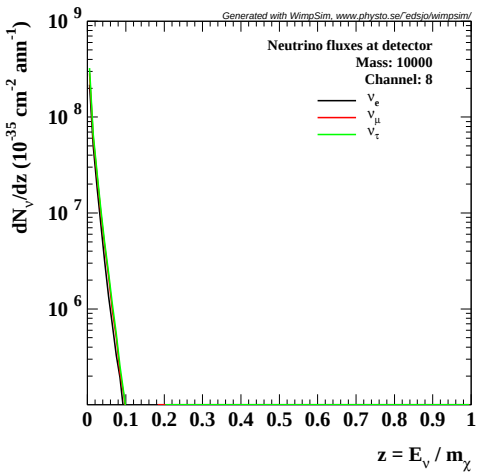
22.7.7 Muons at detector (Sun/Earth)

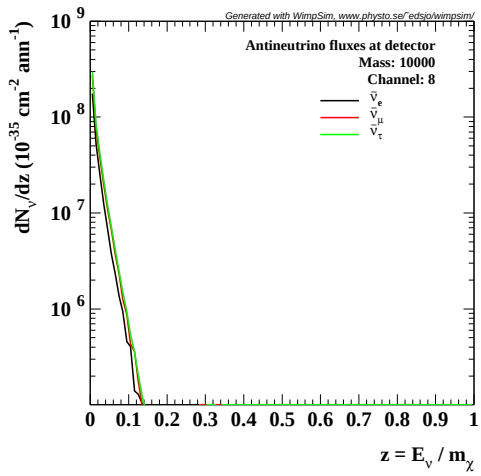




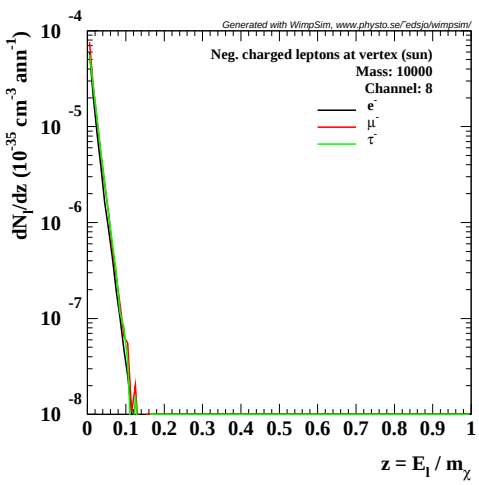
22.8 Channel 8 – W^-W^+

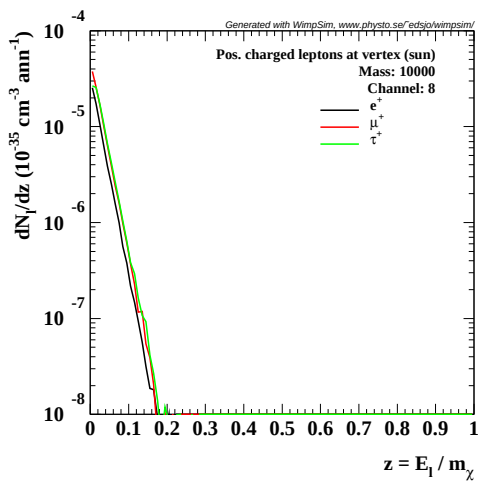
22.8.1 Neutrino fluxes at detector (Sun)



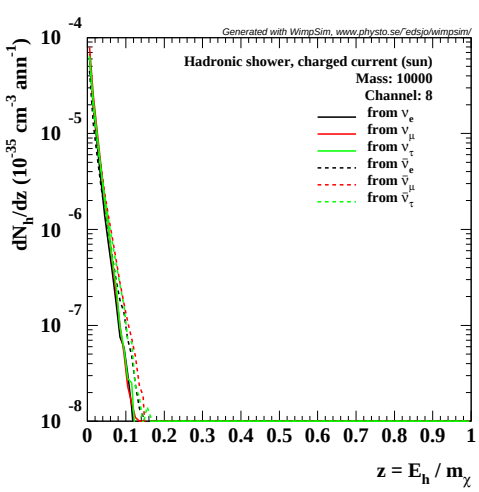


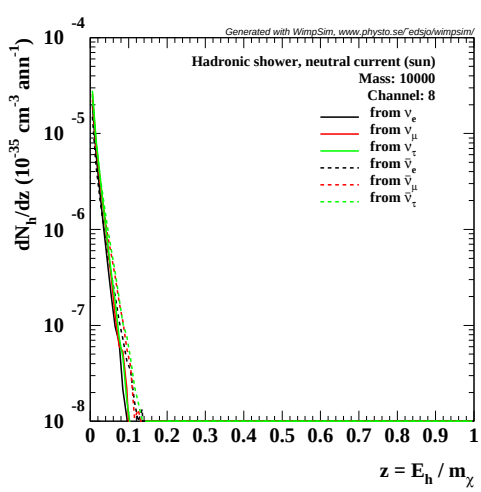
22.8.2 Charged leptons at neutrino-nucleon vertex (Sun)



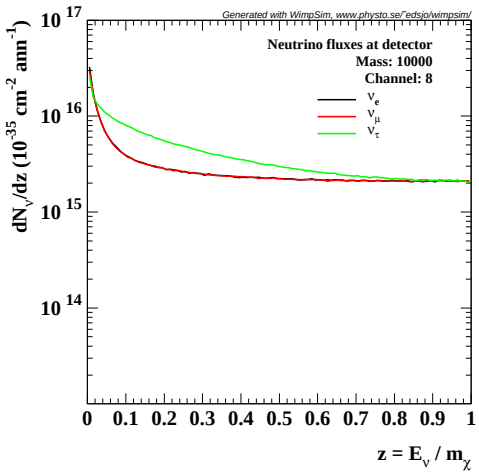


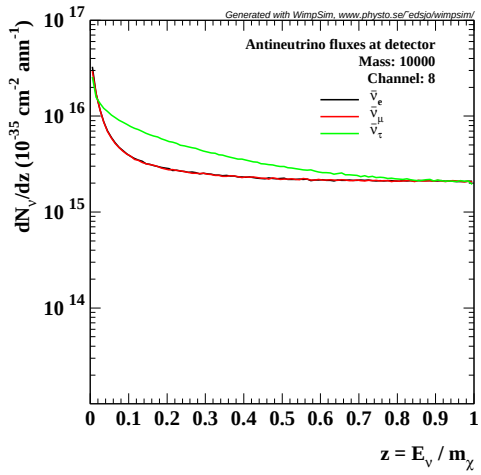
22.8.3 Hadronic shower at neutrino-nucleon vertex (Sun)



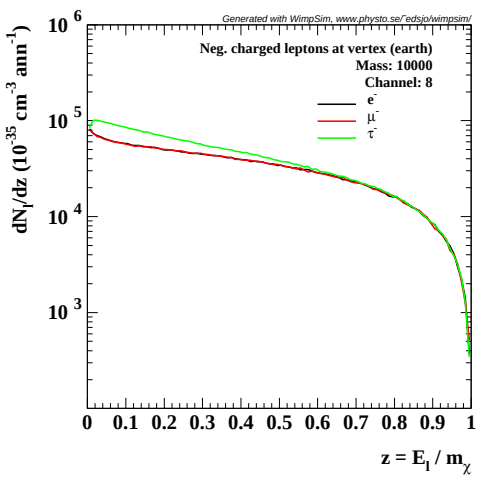


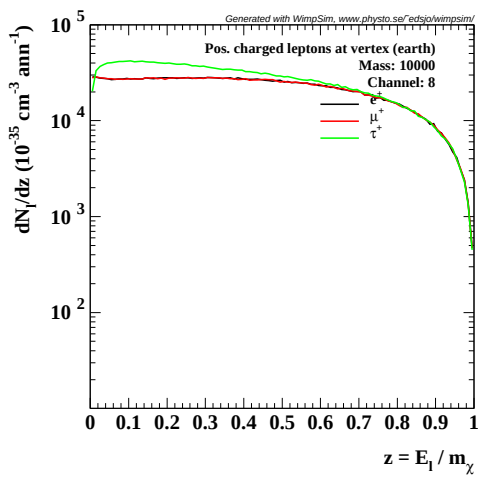
22.8.4 Neutrino fluxes at detector (Earth)



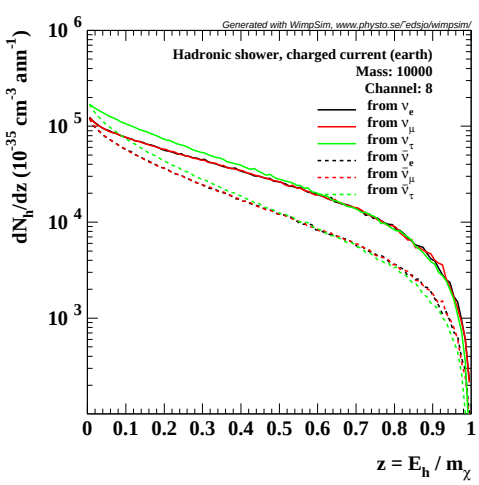


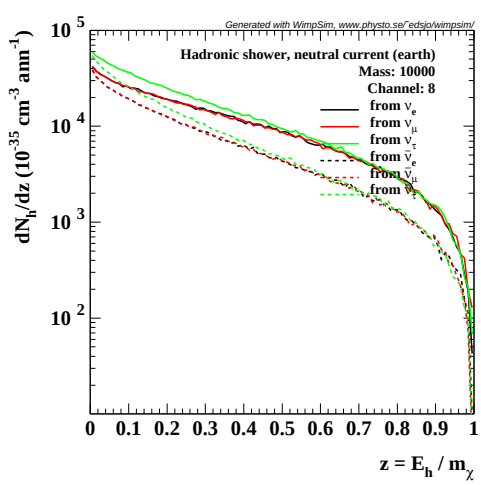
22.8.5 Charged leptons at neutrino-nucleon vertex (Earth)



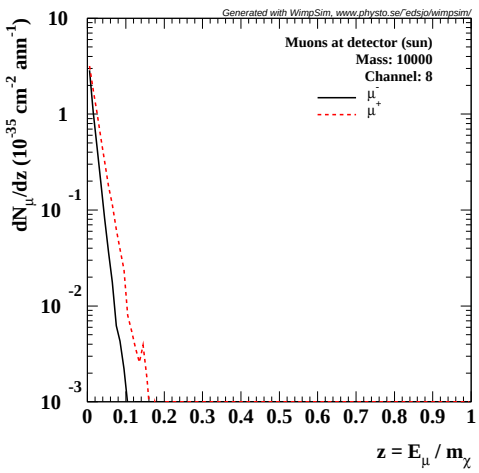


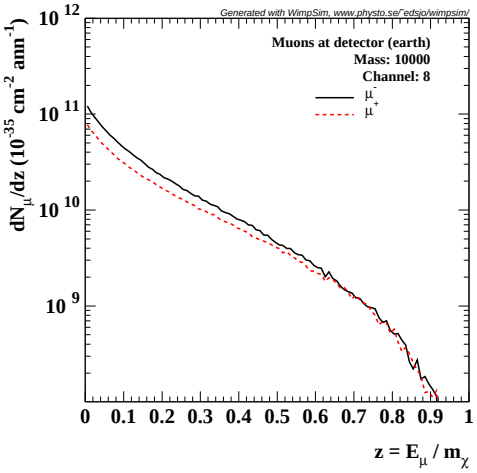
22.8.6 Hadronic shower at neutrino-nucleon vertex (Earth)





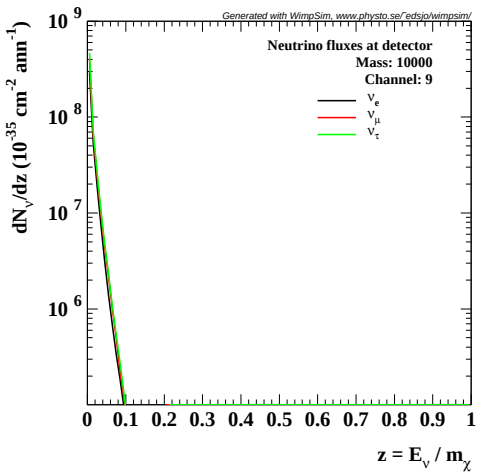
22.8.7 Muons at detector (Sun/Earth)

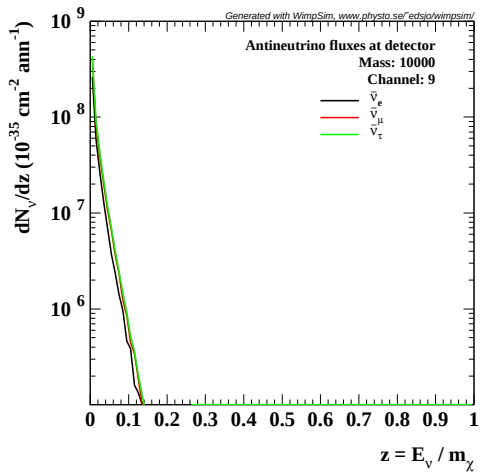




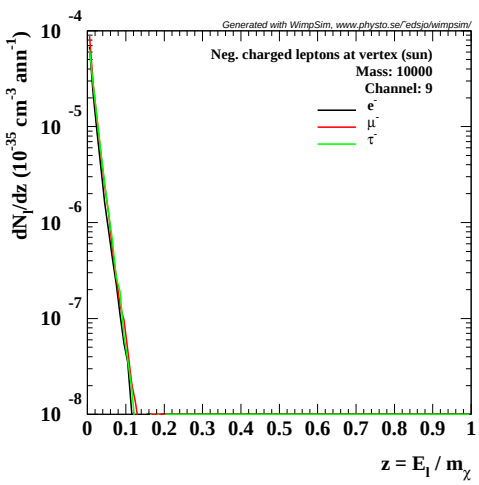
22.9 Channel 9 – $Z^0 Z^0$

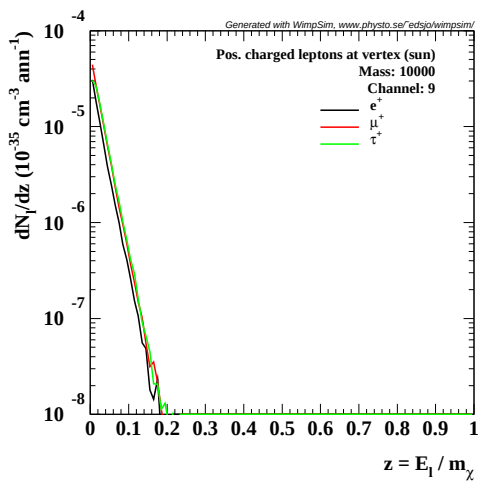
22.9.1 Neutrino fluxes at detector (Sun)



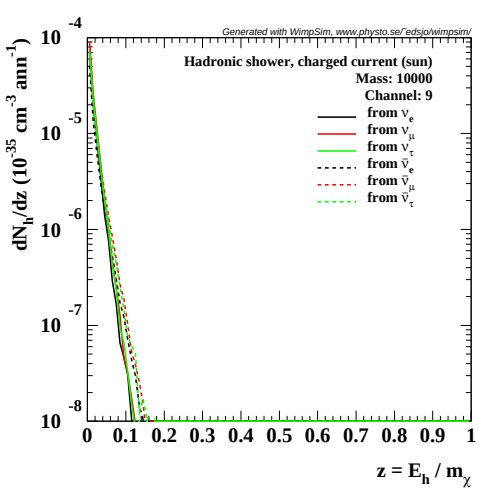


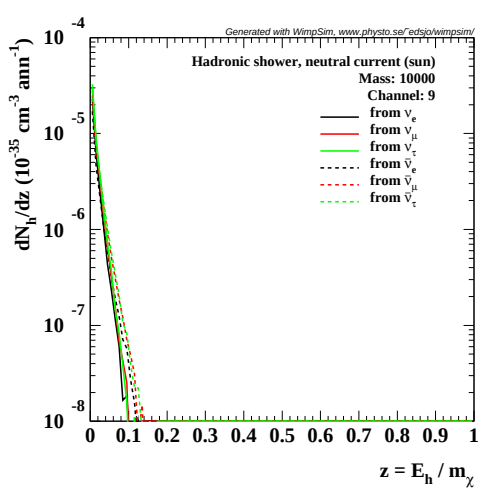
22.9.2 Charged leptons at neutrino-nucleon vertex (Sun)



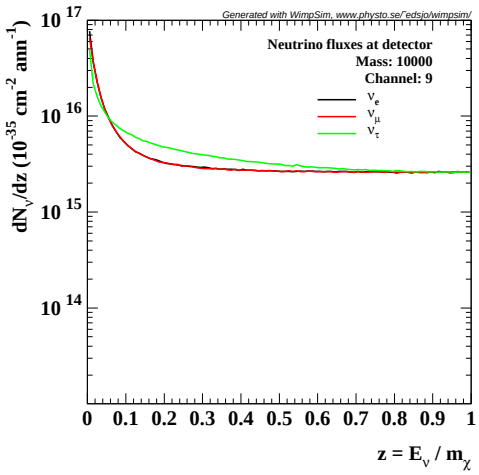


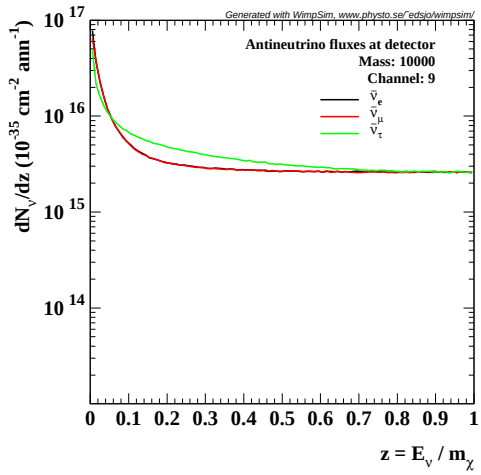
22.9.3 Hadronic shower at neutrino-nucleon vertex (Sun)



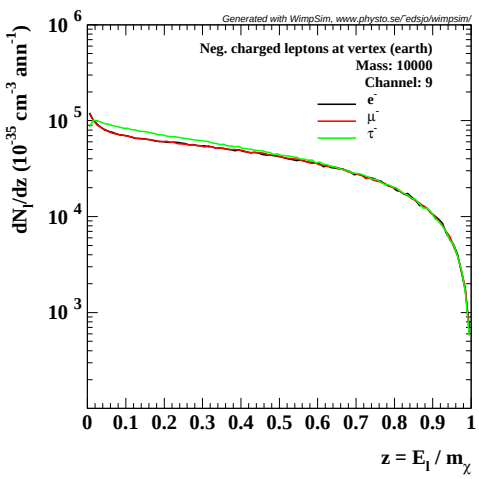


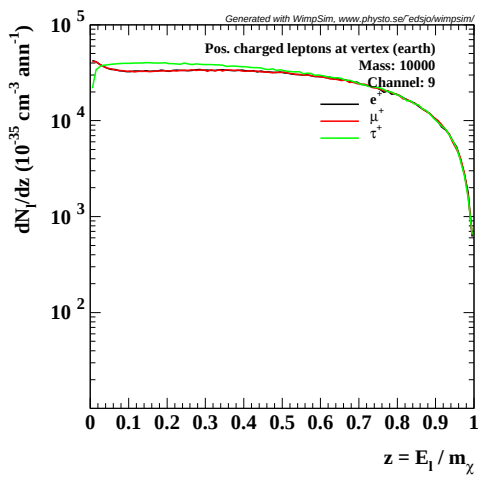
22.9.4 Neutrino fluxes at detector (Earth)



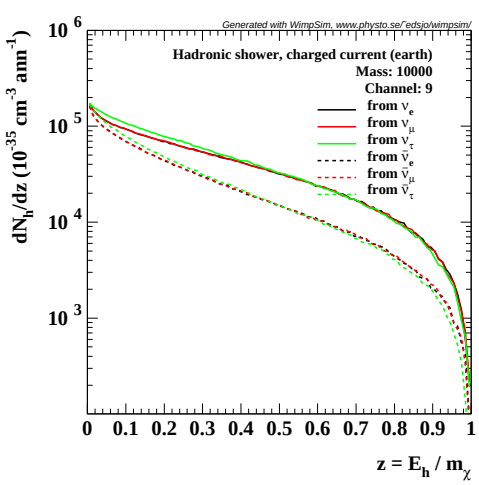


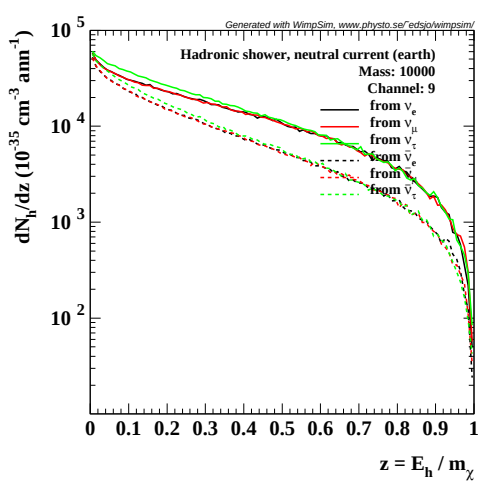
22.9.5 Charged leptons at neutrino-nucleon vertex (Earth)



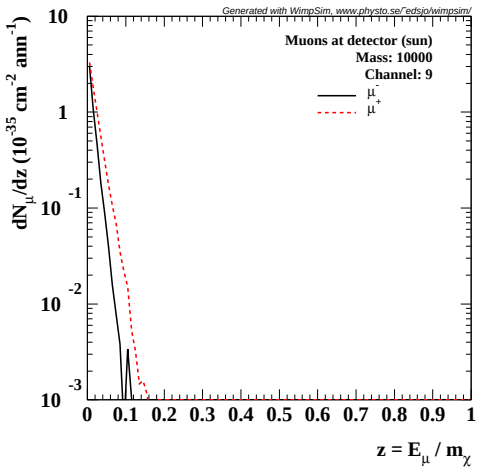


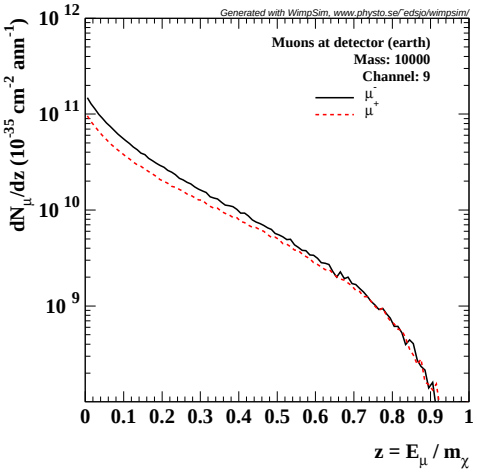
22.9.6 Hadronic shower at neutrino-nucleon vertex (Earth)





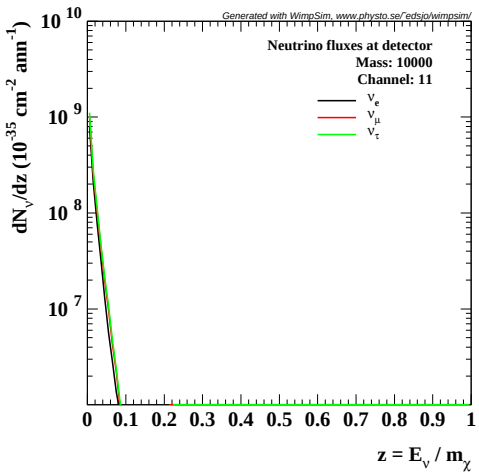
22.9.7 Muons at detector (Sun/Earth)

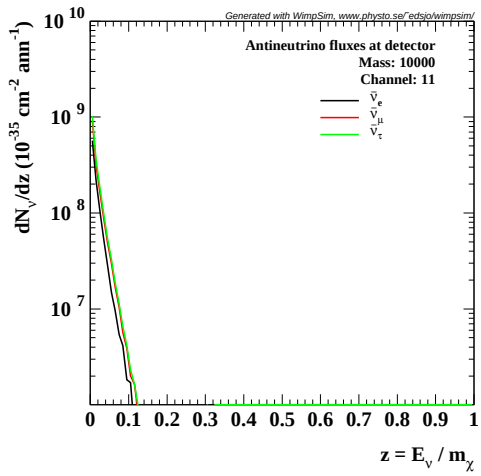




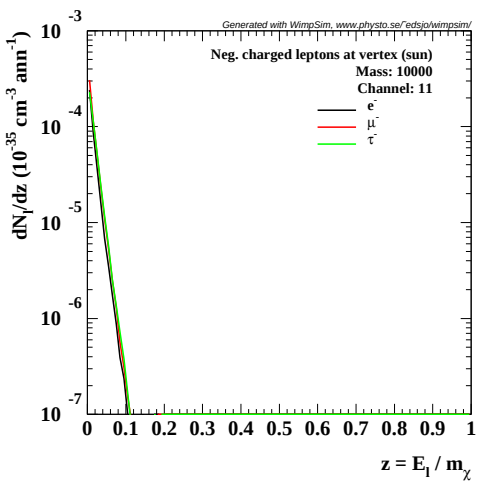
22.10 Channel 11 – $\tau^-\tau^+$

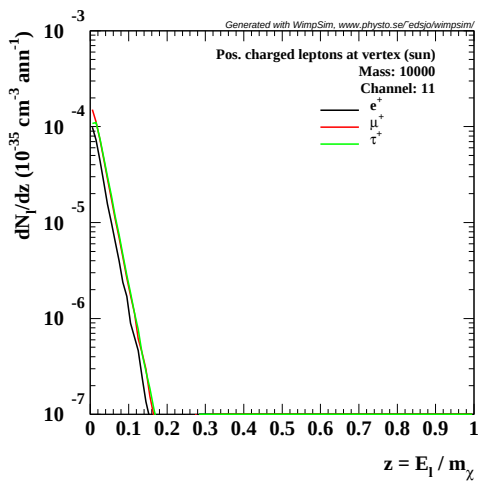
22.10.1 Neutrino fluxes at detector (Sun)



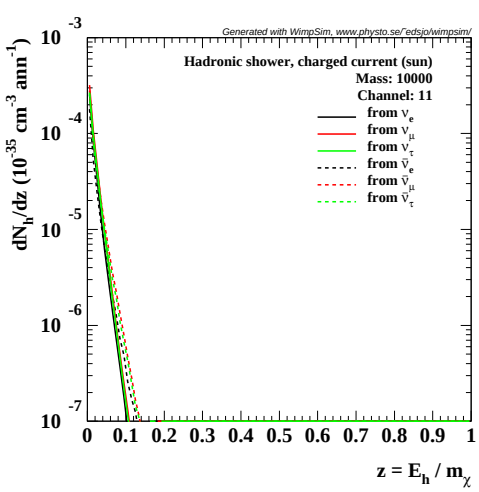


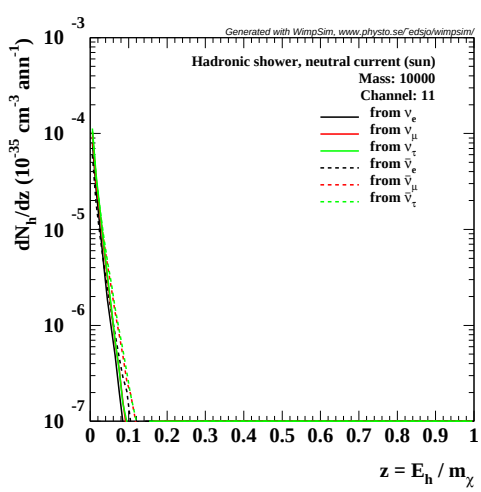
22.10.2 Charged leptons at neutrino-nucleon vertex (Sun)



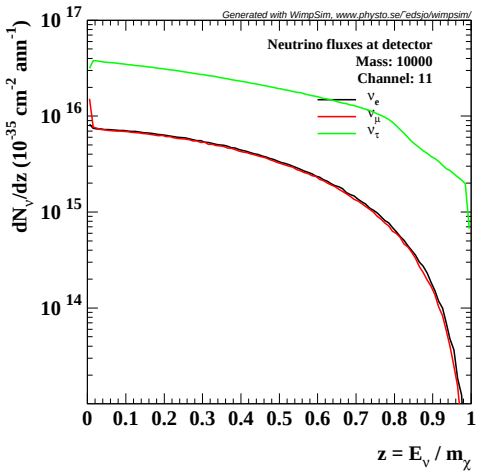


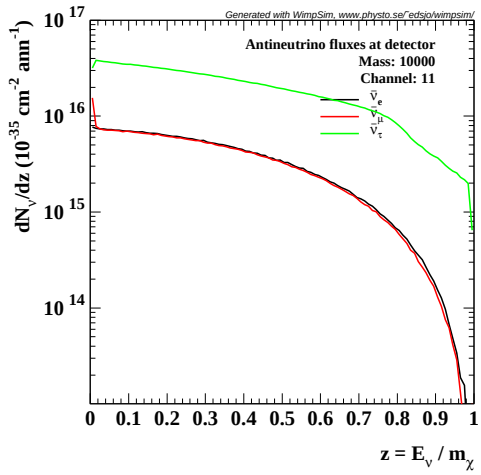
22.10.3 Hadronic shower at neutrino-nucleon vertex (Sun)



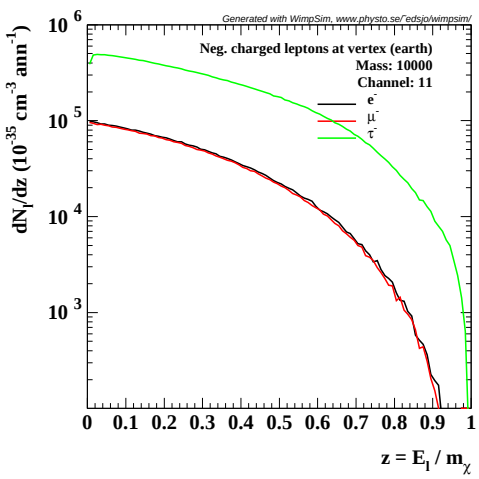


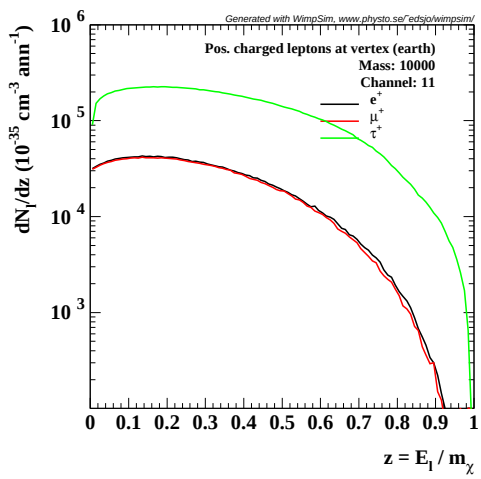
22.10.4 Neutrino fluxes at detector (Earth)



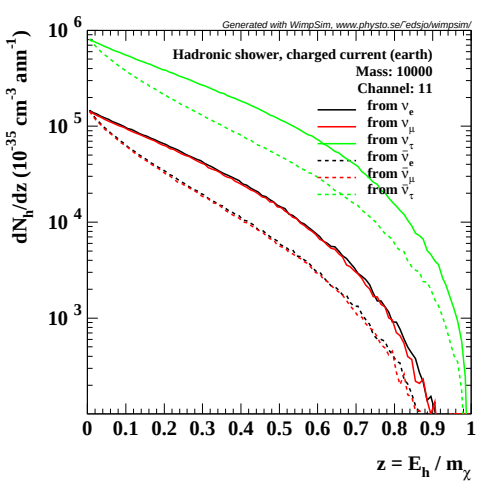


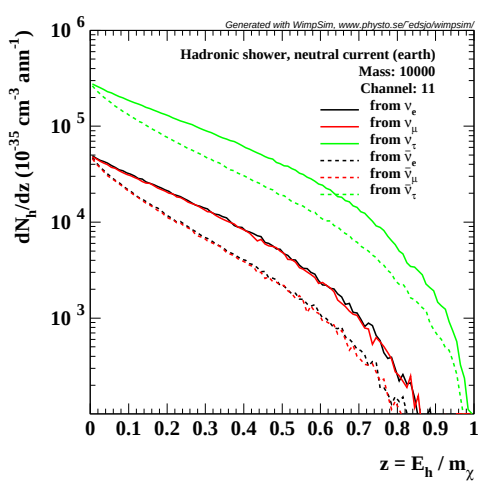
22.10.5 Charged leptons at neutrino-nucleon vertex (Earth)



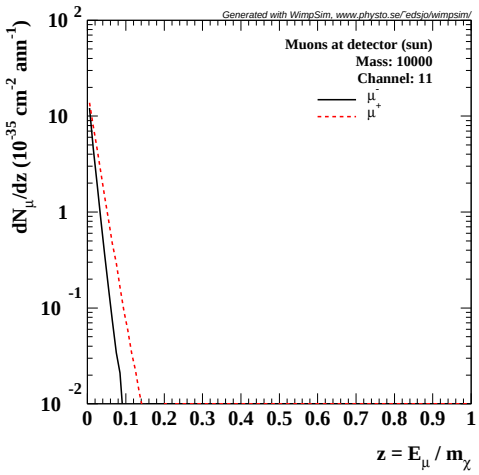


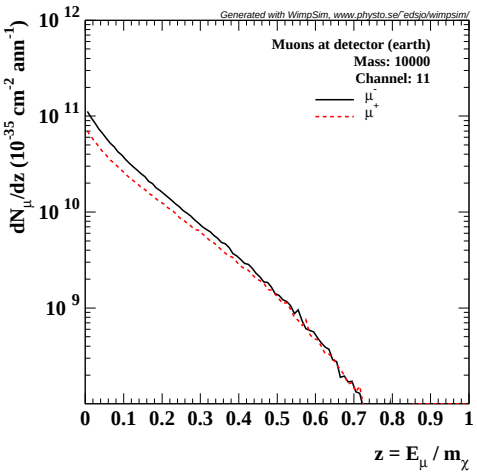
22.10.6 Hadronic shower at neutrino-nucleon vertex (Earth)





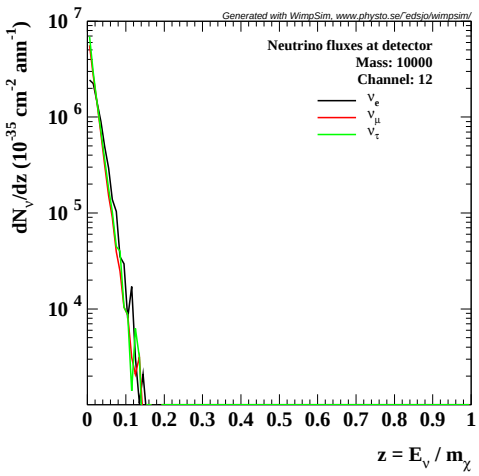
22.10.7 Muons at detector (Sun/Earth)

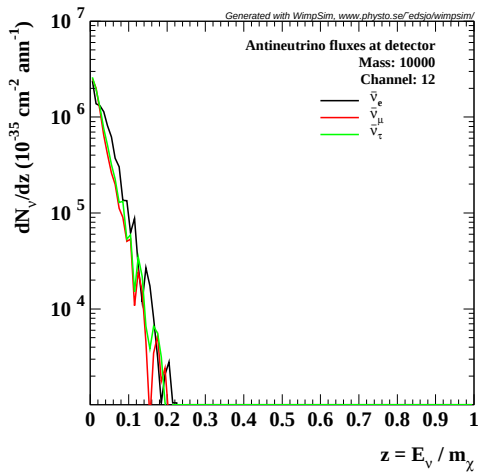




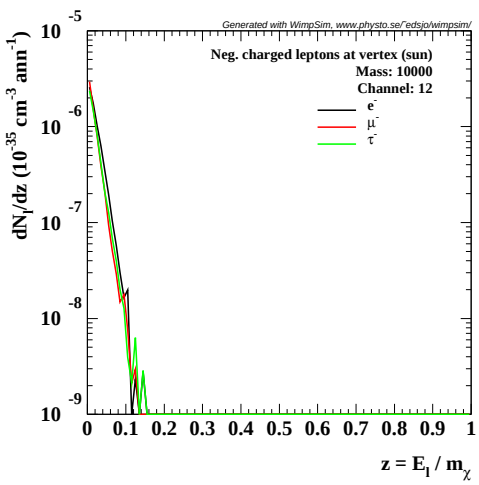
22.11 Channel 12 – $\nu_e\bar{\nu}_e$

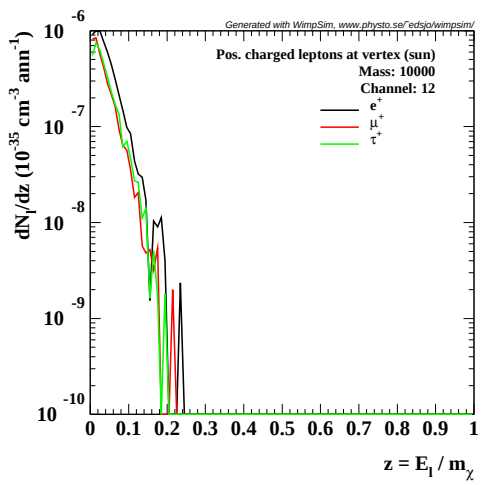
22.11.1 Neutrino fluxes at detector (Sun)



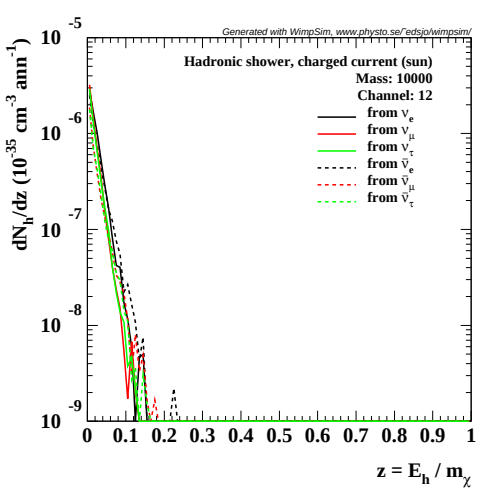


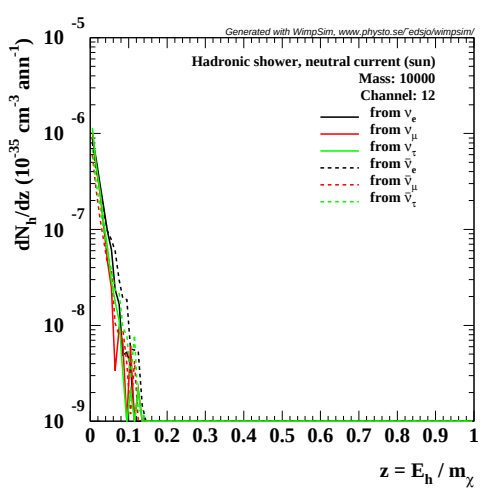
22.11.2 Charged leptons at neutrino-nucleon vertex (Sun)



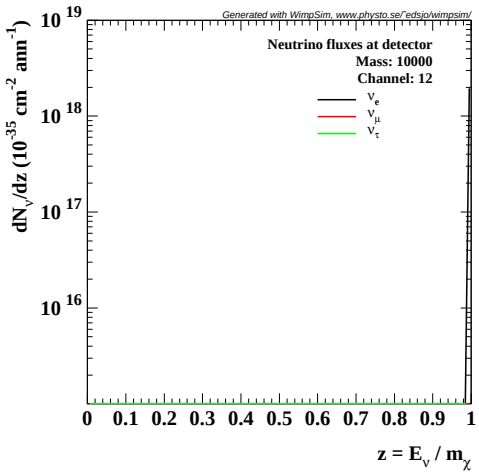


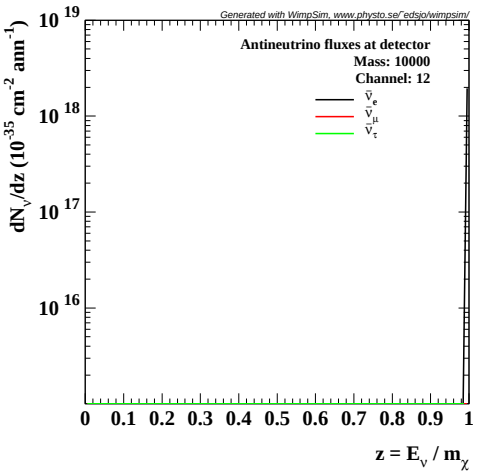
22.11.3 Hadronic shower at neutrino-nucleon vertex (Sun)



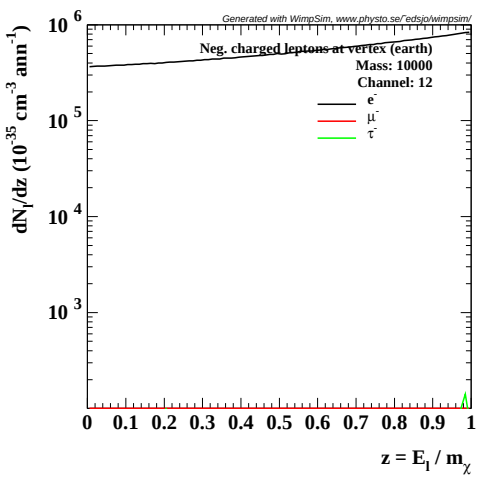


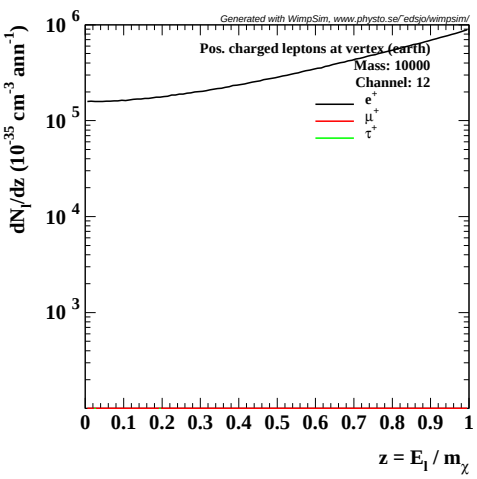
22.11.4 Neutrino fluxes at detector (Earth)



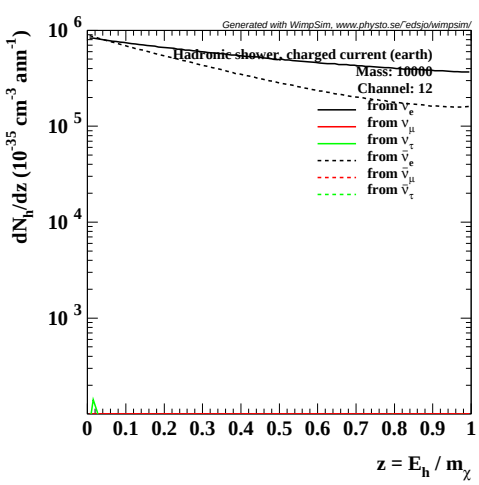


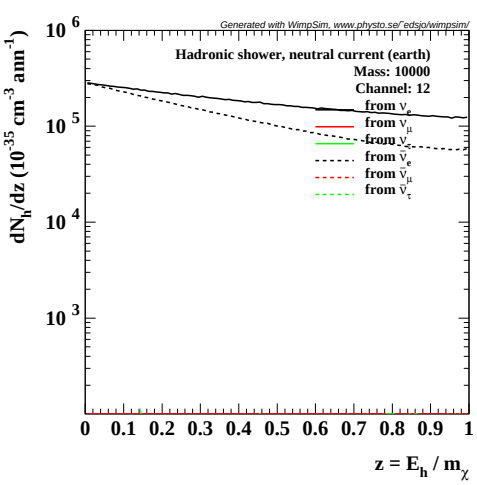
22.11.5 Charged leptons at neutrino-nucleon vertex (Earth)



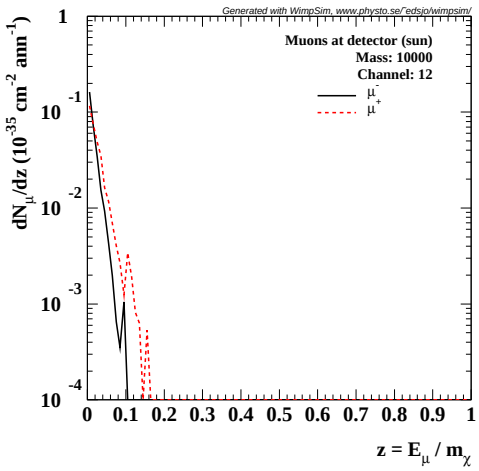


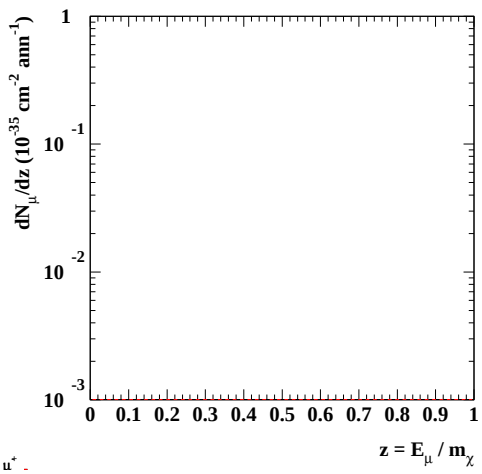
22.11.6 Hadronic shower at neutrino-nucleon vertex (Earth)





22.11.7 Muons at detector (Sun/Earth)

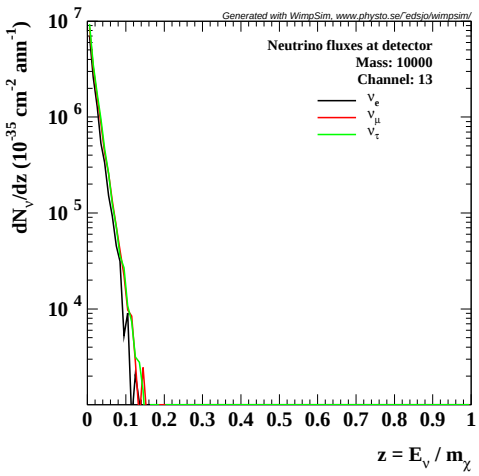


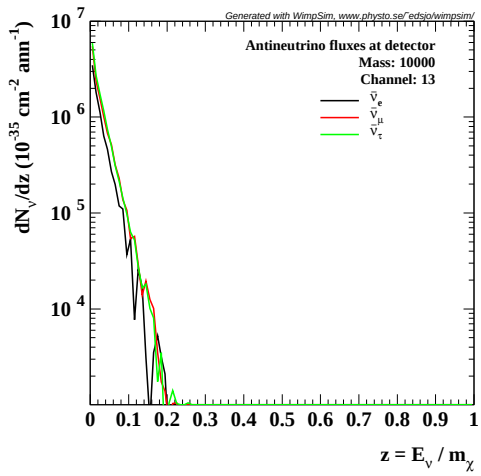


u+ -

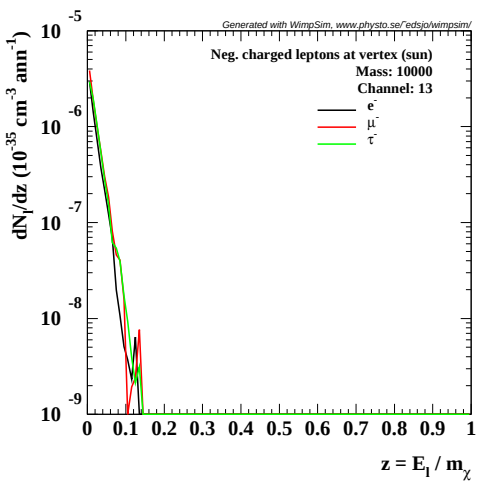
22.12 Channel 13 – $\nu_\mu \bar{\nu}_\mu$

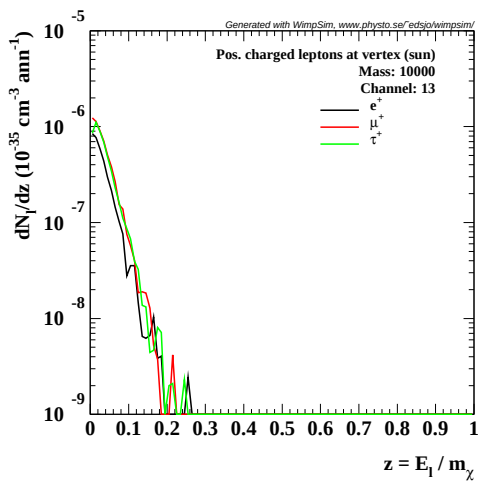
22.12.1 Neutrino fluxes at detector (Sun)



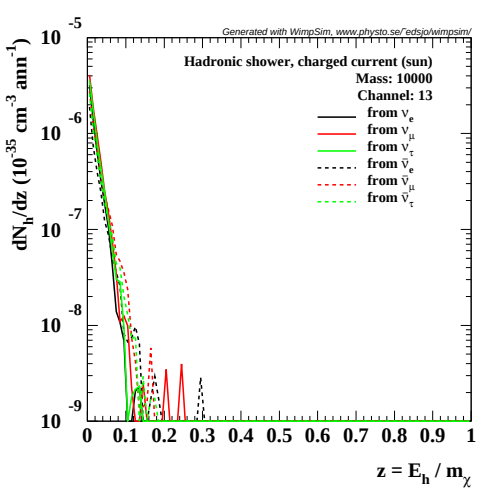


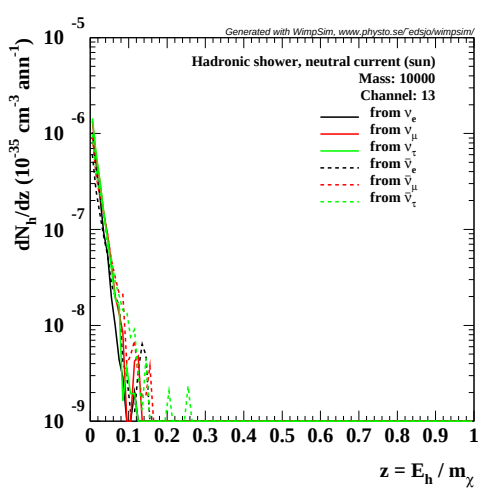
22.12.2 Charged leptons at neutrino-nucleon vertex (Sun)



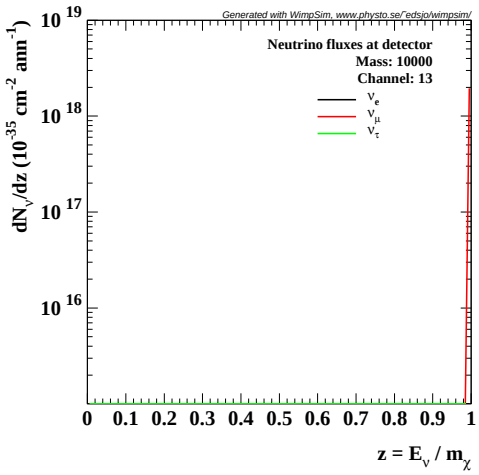


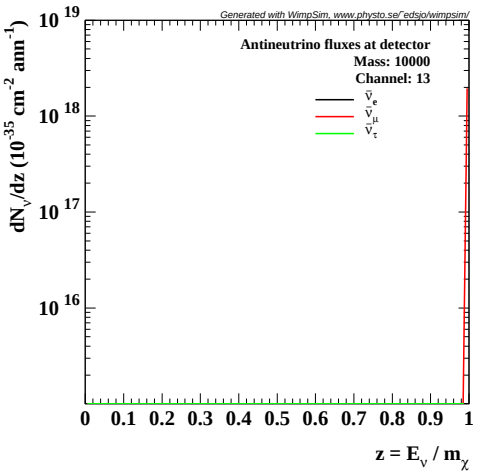
22.12.3 Hadronic shower at neutrino-nucleon vertex (Sun)



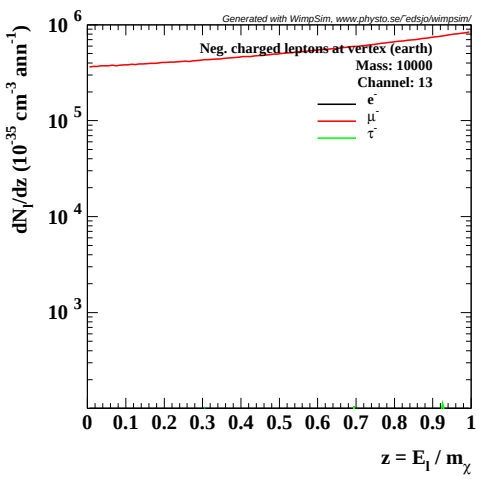


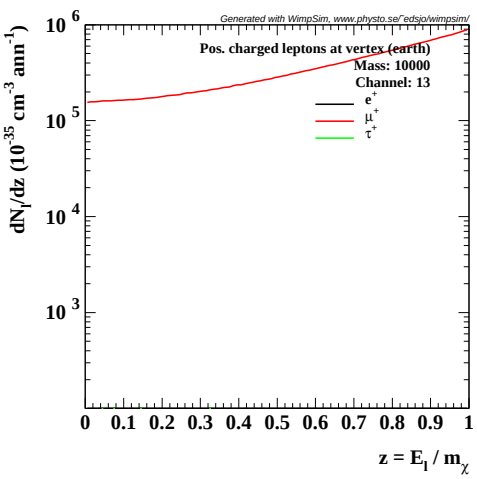
22.12.4 Neutrino fluxes at detector (Earth)



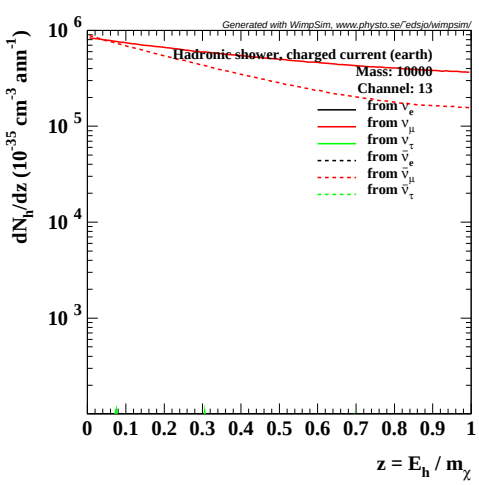


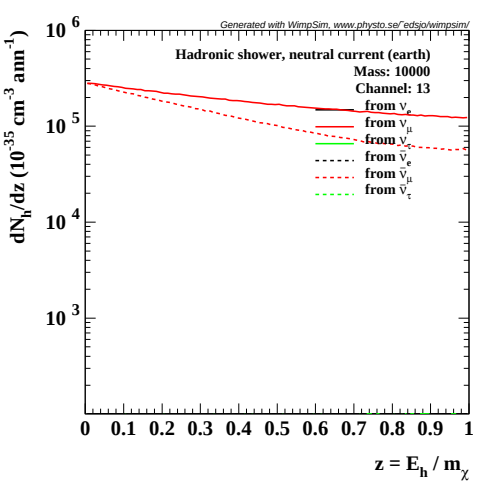
22.12.5 Charged leptons at neutrino-nucleon vertex (Earth)



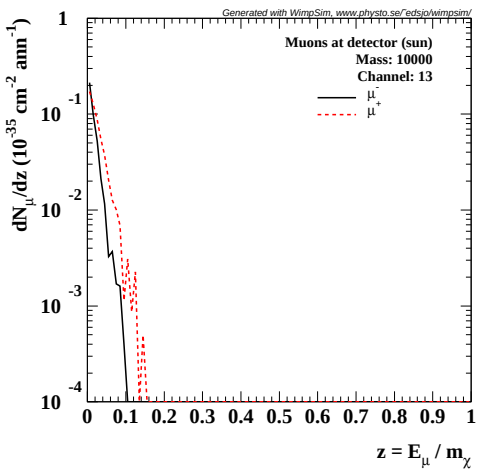


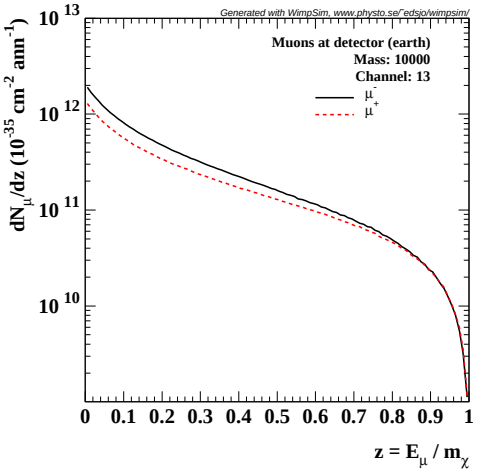
22.12.6 Hadronic shower at neutrino-nucleon vertex (Earth)





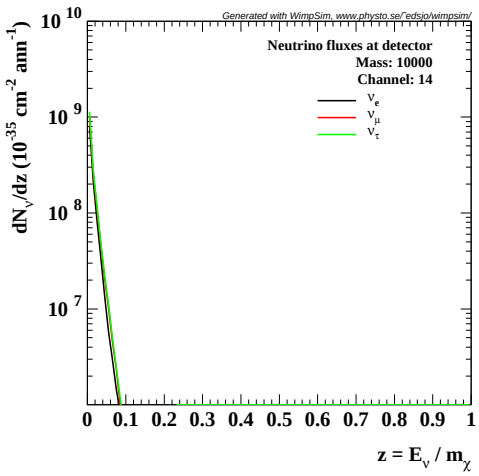
22.12.7 Muons at detector (Sun/Earth)

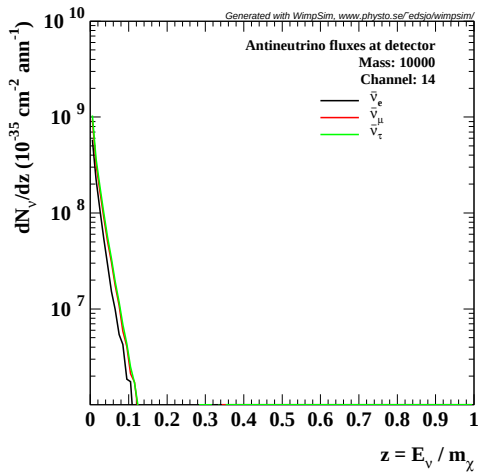




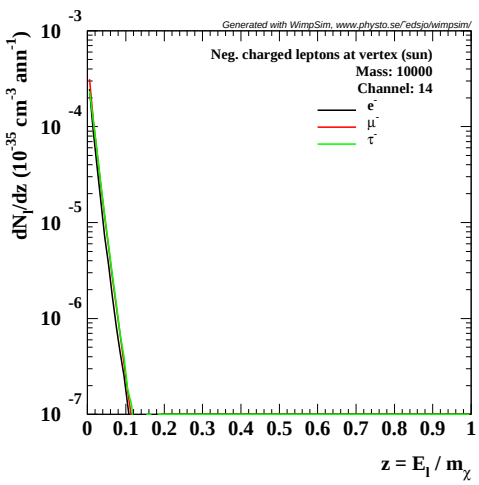
22.13 Channel 14 – $\nu_\tau \bar{\nu}_\tau$

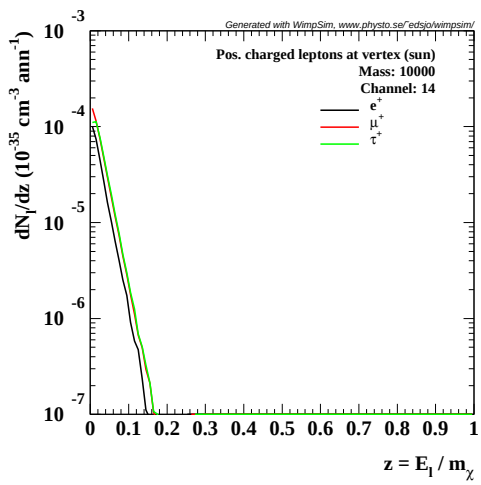
22.13.1 Neutrino fluxes at detector (Sun)



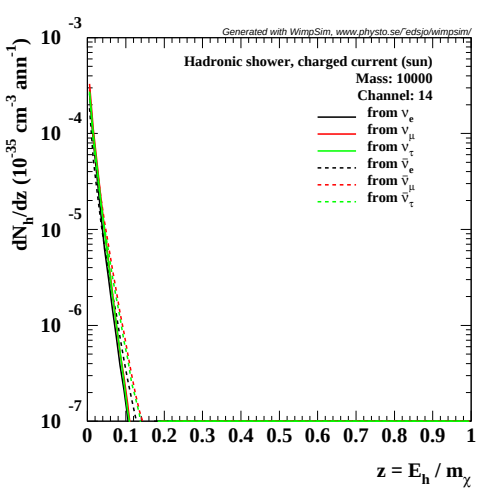


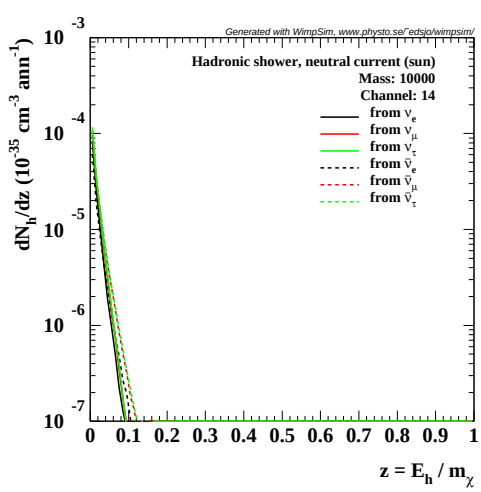
22.13.2 Charged leptons at neutrino-nucleon vertex (Sun)



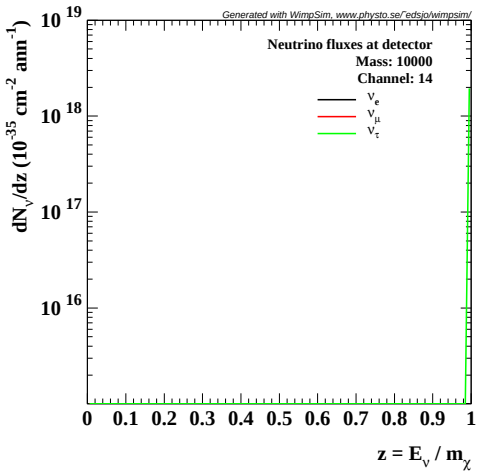


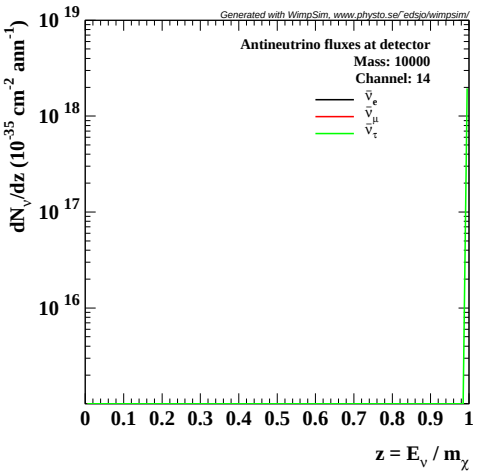
22.13.3 Hadronic shower at neutrino-nucleon vertex (Sun)



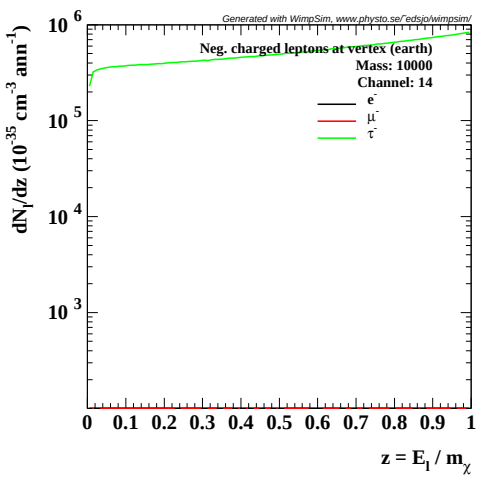


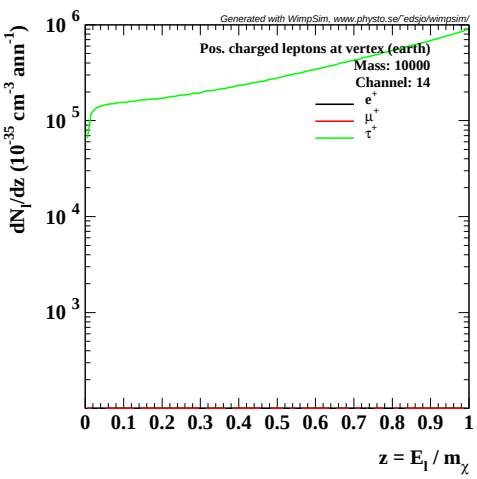
22.13.4 Neutrino fluxes at detector (Earth)



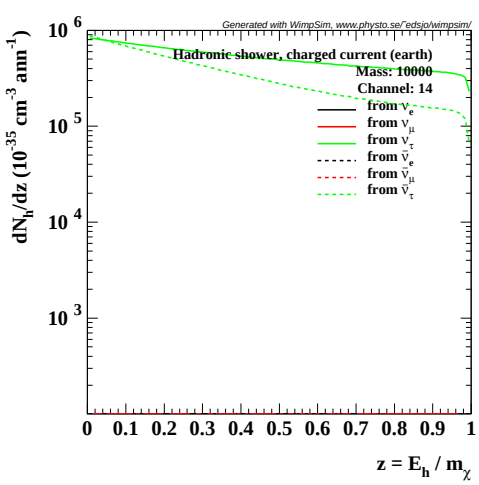


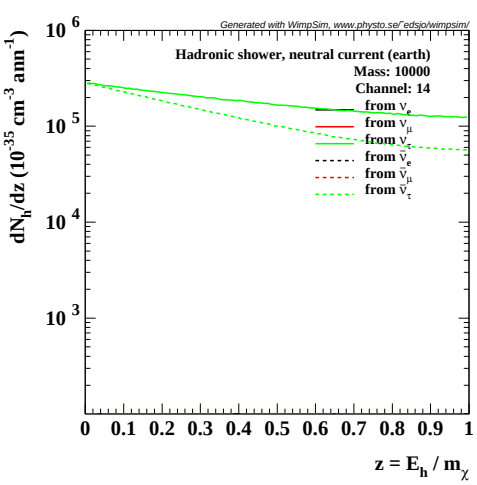
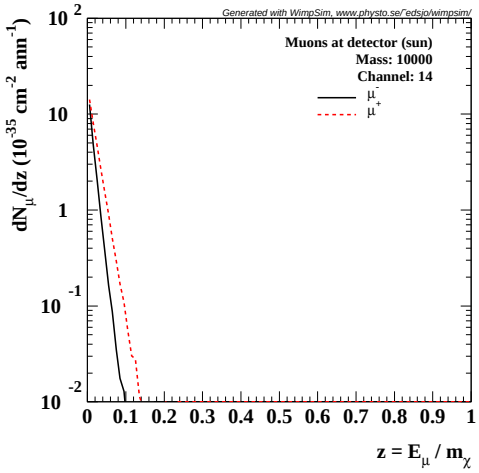
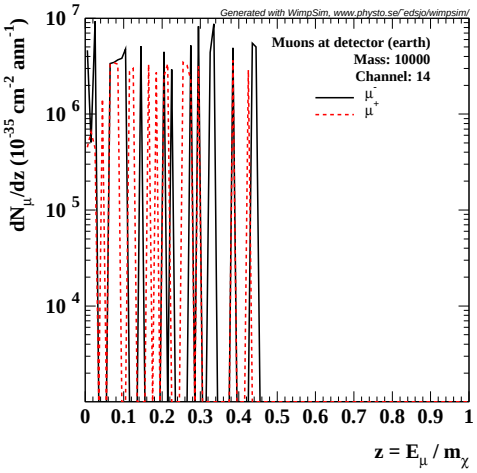
22.13.5 Charged leptons at neutrino-nucleon vertex (Earth)





22.13.6 Hadronic shower at neutrino-nucleon vertex (Earth)





22.13.7 Muons at detector (Sun/Earth)