

Muons in water (liquid) (H₂O)

| | $\langle Z/A \rangle$ | ρ [g/cm ³] | I [eV] | a | $k = m_s$ | x_0 | x_1 | \bar{C} | δ_0 |
|----------|-----------------------|-----------------------------|----------|--------------------------|-----------|---------|------------------------------------|------------------------|-----------------------------|
| | 0.55509 | 1.000 | 79.7 | 0.09116 | 3.4773 | 0.2400 | 2.8004 | 3.5017 | 0.00 |
| T | p [MeV/c] | Ionization | Brems | Pair prod | Photonucl | Total | CSDA range [g/cm ²] | | |
| | | | | [MeV cm ² /g] | | | | | |
| 10.0 MeV | 4.704×10^1 | 7.902 | | | | 7.902 | | 6.998×10^{-1} | |
| 14.0 MeV | 5.616×10^1 | 6.166 | | | | 6.166 | | 1.279×10^0 | |
| 20.0 MeV | 6.802×10^1 | 4.817 | | | | 4.817 | | 2.392×10^0 | |
| 30.0 MeV | 8.509×10^1 | 3.738 | | | | 3.738 | | 4.782×10^0 | |
| 40.0 MeV | 1.003×10^2 | 3.192 | | | | 3.192 | | 7.696×10^0 | |
| 80.0 MeV | 1.527×10^2 | 2.398 | | | | 2.398 | | 2.261×10^1 | |
| 100. MeV | 1.764×10^2 | 2.256 | | | | 2.256 | | 3.124×10^1 | |
| 140. MeV | 2.218×10^2 | 2.103 | | | | 2.104 | | 4.968×10^1 | |
| 200. MeV | 2.868×10^2 | 2.015 | | | | 2.015 | | 7.894×10^1 | |
| 300. MeV | 3.917×10^2 | 1.981 | | | 0.000 | 1.981 | | 1.291×10^2 | |
| 317. MeV | 4.096×10^2 | 1.981 | | | 0.000 | 1.981 | | | <i>Minimum ionization</i> |
| 400. MeV | 4.945×10^2 | 1.987 | | | 0.000 | 1.988 | | 1.796×10^2 | |
| 800. MeV | 8.995×10^2 | 2.064 | 0.000 | | 0.000 | 2.064 | | 3.771×10^2 | |
| 1.00 GeV | 1.101×10^3 | 2.098 | 0.000 | | 0.000 | 2.099 | | 4.732×10^2 | |
| 1.40 GeV | 1.502×10^3 | 2.154 | 0.000 | | 0.001 | 2.156 | | 6.611×10^2 | |
| 2.00 GeV | 2.103×10^3 | 2.216 | 0.001 | 0.000 | 0.001 | 2.218 | | 9.353×10^2 | |
| 3.00 GeV | 3.104×10^3 | 2.287 | 0.001 | 0.001 | 0.001 | 2.290 | | 1.378×10^3 | |
| 4.00 GeV | 4.104×10^3 | 2.336 | 0.001 | 0.001 | 0.002 | 2.341 | | 1.810×10^3 | |
| 8.00 GeV | 8.105×10^3 | 2.448 | 0.004 | 0.003 | 0.004 | 2.459 | | 3.472×10^3 | |
| 10.0 GeV | 1.011×10^4 | 2.482 | 0.005 | 0.005 | 0.005 | 2.497 | | 4.279×10^3 | |
| 14.0 GeV | 1.411×10^4 | 2.531 | 0.007 | 0.008 | 0.007 | 2.553 | | 5.862×10^3 | |
| 20.0 GeV | 2.011×10^4 | 2.581 | 0.011 | 0.013 | 0.009 | 2.615 | | 8.183×10^3 | |
| 30.0 GeV | 3.011×10^4 | 2.635 | 0.019 | 0.023 | 0.013 | 2.690 | | 1.195×10^4 | |
| 40.0 GeV | 4.011×10^4 | 2.671 | 0.027 | 0.034 | 0.018 | 2.749 | | 1.563×10^4 | |
| 80.0 GeV | 8.011×10^4 | 2.755 | 0.060 | 0.081 | 0.034 | 2.931 | | 2.969×10^4 | |
| 100. GeV | 1.001×10^5 | 2.781 | 0.078 | 0.107 | 0.042 | 3.009 | | 3.642×10^4 | |
| 140. GeV | 1.401×10^5 | 2.820 | 0.116 | 0.161 | 0.059 | 3.156 | | 4.940×10^4 | |
| 200. GeV | 2.001×10^5 | 2.861 | 0.174 | 0.246 | 0.084 | 3.365 | | 6.780×10^4 | |
| 300. GeV | 3.001×10^5 | 2.907 | 0.275 | 0.391 | 0.125 | 3.698 | | 9.614×10^4 | |
| 400. GeV | 4.001×10^5 | 2.940 | 0.379 | 0.542 | 0.167 | 4.028 | | 1.220×10^5 | |
| 800. GeV | 8.001×10^5 | 3.019 | 0.814 | 1.171 | 0.337 | 5.341 | | 2.080×10^5 | |
| 1.00 TeV | 1.000×10^6 | 3.045 | 1.038 | 1.496 | 0.423 | 6.003 | | 2.433×10^5 | |
| 1.03 TeV | 1.029×10^6 | 3.048 | 1.071 | 1.542 | 0.436 | 6.097 | | | <i>Muon critical energy</i> |
| 1.40 TeV | 1.400×10^6 | 3.084 | 1.491 | 2.142 | 0.601 | 7.318 | | 3.036×10^5 | |
| 2.00 TeV | 2.000×10^6 | 3.127 | 2.186 | 3.132 | 0.870 | 9.315 | | 3.761×10^5 | |
| 3.00 TeV | 3.000×10^6 | 3.175 | 3.352 | 4.781 | 1.332 | 12.640 | | 4.679×10^5 | |
| 4.00 TeV | 4.000×10^6 | 3.210 | 4.537 | 6.452 | 1.803 | 16.003 | | 5.381×10^5 | |
| 8.00 TeV | 8.000×10^6 | 3.296 | 9.338 | 13.185 | 3.763 | 29.583 | | 7.191×10^5 | |
| 10.0 TeV | 1.000×10^7 | 3.325 | 11.766 | 16.575 | 4.773 | 36.440 | | 7.799×10^5 | |
| 14.0 TeV | 1.400×10^7 | 3.368 | 16.613 | 23.331 | 6.854 | 50.166 | | 8.731×10^5 | |
| 20.0 TeV | 2.000×10^7 | 3.414 | 23.944 | 33.521 | 10.051 | 70.930 | | 9.732×10^5 | |
| 30.0 TeV | 3.000×10^7 | 3.468 | 36.151 | 50.475 | 15.600 | 105.695 | | 1.088×10^6 | |
| 40.0 TeV | 4.000×10^7 | 3.507 | 48.424 | 67.484 | 21.296 | 140.711 | | 1.170×10^6 | |
| 80.0 TeV | 8.000×10^7 | 3.603 | 97.657 | 135.575 | 45.199 | 282.035 | | 1.367×10^6 | |
| 100. TeV | 1.000×10^8 | 3.634 | 122.347 | 169.661 | 57.590 | 353.232 | | 1.430×10^6 | |