Table 277: Muons in Water (vapor) (H_2O)

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.55509	7.562×10^{-4}	71.6	0.08101	3.5901	1.7952	4.3437	10.5962	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	8.013				8.013	6.895×10^{-1}
14.0 MeV	5.616×10^1	6.249				6.249	1.261×10^0
20.0 MeV	6.802×10^1	4.879				4.879	2.360×10^0
30.0 MeV	8.509×10^1	3.784				3.784	4.720×10^0
40.0 MeV	1.003×10^2	3.231				3.231	7.598×10^0
80.0 MeV	1.527×10^2	2.425				2.425	2.234×10^1
100. MeV	1.764×10^2	2.281				2.281	3.087×10^1
140. MeV	2.218×10^2	2.139				2.139	4.907×10^1
200. MeV	2.868×10^2	2.066				2.066	7.772×10^1
260. MeV	3.496×10^2	2.052			0.000	2.052	*Minimum ionization*
300. MeV	3.917×10^2	2.056			0.000	2.056	1.264×10^2
400. MeV	4.945×10^2	2.082			0.000	2.083	1.747×10^2
800. MeV	8.995×10^2	2.219	0.000		0.000	2.220	3.606×10^2
1.00 GeV	1.101×10^3	2.277	0.000		0.000	2.278	4.496×10^2
1.40 GeV	1.502×10^3	2.372	0.000		0.001	2.373	6.214×10^2
2.00 GeV	2.103×10^3	2.479	0.001	0.000	0.001	2.480	8.684×10^2
3.00 GeV	3.104×10^3	2.604	0.001	0.001	0.001	2.608	1.261×10^3
4.00 GeV	4.104×10^3	2.695	0.001	0.001	0.002	2.700	1.638×10^3
8.00 GeV	8.105×10^3	2.902	0.004	0.003	0.004	2.913	3.055×10^3
10.0 GeV	1.011×10^4	2.958	0.005	0.005	0.005	2.972	3.735×10^3
14.0 GeV	1.411×10^4	3.036	0.007	0.008	0.007	3.058	5.060×10^3
20.0 GeV	2.011×10^4	3.112	0.011	0.013	0.009	3.146	6.993×10^3
30.0 GeV	3.011×10^4	3.190	0.019	0.023	0.013	3.246	1.012×10^4
40.0 GeV	4.011×10^4	3.241	0.027	0.034	0.018	3.319	1.316×10^4
80.0 GeV	8.011×10^4	3.351	0.060	0.081	0.034	3.527	2.483×10^4
100. GeV	1.001×10^5	3.383	0.078	0.107	0.042	3.611	3.043×10^4
140. GeV	1.401×10^5	3.429	0.116	0.161	0.059	3.765	4.128×10^4
200. GeV	2.001×10^5	3.475	0.174	0.246	0.084	3.979	5.677×10^4
300. GeV	3.001×10^5	3.525	0.275	0.391	0.125	4.317	8.089×10^4
400. GeV	4.001×10^5	3.560	0.379	0.542	0.167	4.648	1.032×10^5
800. GeV	8.001×10^5	3.642	0.814	1.171	0.337	5.963	1.790×10^5
1.00 TeV	1.000×10^6	3.668	1.038	1.496	0.423	6.626	2.108×10^5
1.23 TeV	1.231×10^6	3.692	1.299	1.868	0.526	7.385	*Muon critical energy*
1.40 TeV	1.400×10^6	3.707	1.491	2.142	0.601	7.941	2.659×10^5
2.00 TeV	2.000×10^6	3.749	2.186	3.132	0.870	9.937	3.333×10^5
3.00 TeV	3.000×10^6	3.798	3.352	4.781	1.332	13.263	4.201×10^5
4.00 TeV	4.000×10^6	3.833	4.537	6.452	1.803	16.626	4.873×10^5
8.00 TeV	8.000×10^6	3.919	9.338	13.185	3.763	30.206	6.633×10^5
10.0 TeV	1.000×10^7	3.948	11.766	16.575	4.773	37.063	7.229×10^5
14.0 TeV	1.400×10^7	3.991	16.613	23.331	6.854	50.789	8.148×10^5
20.0 TeV	2.000×10^7	4.037	23.944	33.521	10.051	71.553	9.138×10^5
30.0 TeV	3.000×10^7	4.091	36.151	50.475	15.600	106.318	1.028×10^6
40.0 TeV	4.000×10^7	4.130	48.424	67.484	21.296	141.334	1.109×10^6
80.0 TeV	8.000×10^7	4.226	97.657	135.575	45.199	282.658	1.305×10^6
100. TeV	1.000×10^8	4.257	122.347	169.661	57.590	353.855	1.369×10^6