Muons in water (ice) (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	0.918	79.7	0.09116	3.4773	0.2586	2.8190	3.5873	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	2.106				2.107	4.966×10^1
200. MeV	2.868×10^2	2.018				2.018	7.887×10^1
300. MeV	3.917×10^2	1.985			0.000	1.985	1.290×10^2
314. MeV	4.065×10^2	1.984			0.000	1.985	*Minimum ionization*
400. MeV	4.945×10^2	1.992			0.000	1.992	1.793×10^2
800. MeV	8.995×10^2	2.069	0.000		0.000	2.069	3.764×10^2
1.00 GeV	1.101×10^3	2.103	0.000		0.000	2.104	4.722×10^2
1.40 GeV	1.502×10^3	2.160	0.000		0.001	2.161	6.597×10^2
2.00 GeV	2.103×10^3	2.222	0.001	0.000	0.001	2.224	9.331×10^2
3.00 GeV	3.104×10^3	2.293	0.001	0.001	0.001	2.296	1.375×10^3
4.00 GeV	4.104×10^3	2.342	0.001	0.001	0.002	2.347	1.806×10^3
8.00 GeV	8.105×10^3	2.455	0.004	0.003	0.004	2.466	3.463×10^3
10.0 GeV	1.011×10^4	2.489	0.005	0.005	0.005	2.504	4.268×10^3
14.0 GeV	1.411×10^4	2.539	0.007	0.008	0.007	2.561	5.847×10^3
20.0 GeV	2.011×10^4	2.588	0.011	0.013	0.009	2.622	8.161×10^3
30.0 GeV	3.011×10^4	2.642	0.019	0.023	0.013	2.697	1.192×10^4
40.0 GeV	4.011×10^4	2.679	0.027	0.034	0.018	2.757	1.558×10^4
80.0 GeV	8.011×10^4	2.763	0.060	0.081	0.034	2.939	2.961×10^4
100. GeV	1.001×10^5	2.789	0.078	0.107	0.042	3.017	3.633×10^4
140. GeV	1.401×10^5	2.828	0.116	0.161	0.059	3.163	4.927×10^4
200. GeV	2.001×10^5	2.868	0.174	0.246	0.084	3.372	6.764×10^4
300. GeV	3.001×10^5	2.914	0.275	0.391	0.125	3.706	9.591×10^4
400. GeV	4.001×10^5	2.947	0.379	0.542	0.167	4.035	1.218×10^5
800. GeV	8.001×10^5	3.026	0.814	1.171	0.337	5.348	2.076×10^5
1.00 TeV	1.000×10^6	3.052	1.038	1.496	0.423	6.010	2.428×10^5
1.03 TeV	1.031×10^6	3.056	1.073	1.545	0.437	6.112	*Muon critical energy*
1.40 TeV	1.400×10^6	3.092	1.491	2.142	0.601	7.325	3.030×10^5
2.00 TeV	2.000×10^6	3.134	2.186	3.132	0.870	9.322	3.755×10^5
3.00 TeV	3.000×10^6	3.182	3.352	4.781	1.332	12.647	4.673×10^5
4.00 TeV	4.000×10^6	3.217	4.537	6.452	1.803	16.010	5.374×10^5
8.00 TeV	8.000×10^6	3.304	9.338	13.185	3.763	29.590	7.184×10^5
10.0 TeV	1.000×10^7	3.332	11.766	16.575	4.773	36.447	7.792×10^5
14.0 TeV	1.400×10^7	3.375	16.613	23.331	6.854	50.173	8.723×10^5
20.0 TeV	2.000×10^7	3.422	23.944	33.521	10.051	70.937	9.724×10^5
30.0 TeV	3.000×10^7	3.475	36.151	50.475	15.600	105.702	1.087×10^6
40.0 TeV	4.000×10^7	3.514	48.424	67.484	21.296	140.719	1.169×10^6
80.0 TeV	8.000×10^7	3.610	97.657	135.575	45.199	282.042	1.366×10^6
100. TeV	1.000×10^8	3.641	122.347	169.661	57.590	353.239	1.429×10^6