Muons in water as calc from steam to check code

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.55509	1.000	71.6	0.44251	3.0000	0.2000	2.0000	3.5017	0.00

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm^2/g]	Photonucl	Total	CSDA range [g/cm^2]
10.0 MeV	4.704×10^{1}	8.013				8.013	6.894×10^{-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}	2.280				2.280	3.087×10^{1}
140. MeV	2.218×10^{2}	2.131				2.131	4.910×10^{1}
200. MeV	2.868×10^{2}	2.047				2.047	7.793×10^{1}
300. MeV	3.917×10^{2}	2.018			0.000	2.018	1.273×10^{2}
308. MeV	4.000×10^{2}	2.018			0.000	2.018	*Minimum ionization*
400. MeV	4.945×10^{2}	2.027			0.000	2.027	1.768×10^{2}
800. MeV	8.995×10^{2}	2.105	0.000		0.000	2.105	3.704×10^{2}
1.00 GeV	1.101×10^{3}	2.139	0.000		0.000	2.140	4.646×10^{2}
1.40 GeV	1.502×10^{3}	2.194	0.000		0.001	2.195	6.491×10^{2}
2.00 GeV	2.103×10^{3}	2.254	0.001	0.000	0.001	2.256	9.185×10^{2}
3.00 GeV	3.104×10^{3}	2.321	0.001	0.001	0.001	2.324	1.355×10^{3}
4.00 GeV	4.104×10^{3}	2.367	0.001	0.001	0.002	2.371	1.781×10^{3}
8.00 GeV	8.105×10^{3}	2.472	0.004	0.003	0.004	2.483	3.424×10^{3}
10.0 GeV	1.011×10^{4}	2.504	0.005	0.005	0.005	2.519	4.224×10^{3}
14.0 GeV	1.411×10^{4}	2.552	0.007	0.008	0.007	2.574	5.794×10^{3}
20.0 GeV	2.011×10^{4}	2.600	0.011	0.013	0.009	2.634	8.097×10^{3}
30.0 GeV	3.011×10^{4}	2.653	0.019	0.023	0.013	2.709	1.184×10^{4}
40.0 GeV	4.011×10^{4}	2.690	0.027	0.034	0.018	2.768	1.549×10^{4}
80.0 GeV	8.011×10^{4}	2.774	0.060	0.081	0.034	2.950	2.946×10^{4}
100. GeV	1.001×10^{5}	2.800	0.078	0.107	0.042	3.028	3.616×10^{4}
140. GeV	1.401×10^{5}	2.838	0.116	0.161	0.059	3.174	4.906×10^{4}
200. GeV	2.001×10^{5}	2.879	0.174	0.246	0.084	3.383	6.736×10^{4}
300. GeV	3.001×10^{5}	2.925	0.275	0.391	0.125	3.717	9.554×10^{4}
400. GeV	4.001×10^{5}	2.958	0.379	0.542	0.167	4.046	1.213×10^{5}
800. GeV	8.001×10^{5}	3.037	0.814	1.171	0.337	5.359	2.069×10^{5}
1.00 TeV	1.000×10^{6}	3.063	1.038	1.496	0.423	6.021	2.421×10^{5}
1.03 TeV	1.035×10^{6}	3.067	1.077	1.551	0.439	6.135	*Muon critical energy*
1.40 TeV	1.400×10^{6}	3.103	1.491	2.142	0.601	7.336	3.022×10^{5}
2.00 TeV	2.000×10^{6}	3.145	2.186	3.132	0.870	9.333	3.746×10^{5}
3.00 TeV	3.000×10^{6}	3.193	3.352	4.781	1.332	12.658	4.663×10^{5}
4.00 TeV	4.000×10^{6}	3.228	4.537	6.452	1.803	16.021	5.363×10^{5}
8.00 TeV	8.000×10^{6}	3.315	9.338	13.185	3.763	29.601	7.172×10^{5}
10.0 TeV	1.000×10^{7}	3.343	11.766	16.575	4.773	36.458	7.780×10^{5}
14.0 TeV	1.400×10^{7}	3.386	16.613	23.331	6.854	50.184	8.711×10^{5}
20.0 TeV	2.000×10^{7}	3.433	23.944	33.521	10.051	70.948	9.712×10^{5}
30.0 TeV	3.000×10^{7}	3.486	36.151	50.475	15.600	105.713	1.086×10^{6}
40.0 TeV	4.000×10^{7}	3.525	48.424	67.484	21.296	140.730	1.168×10^{6}
80.0 TeV	8.000×10^{7}	3.621	97.657	135.575	45.199	282.053	1.365×10^{6}
100. TeV	1.000×10^{8}	3.652	122.347	169.661	57.590	353.250	1.428×10^{6}