Muons in UD rock for doug

$\langle Z/A \rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.49602	2.700	145.4	0.13775	3.0000	0.2000	3.0000	3.9450	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	6.508				6.508	8.550×10^{-1}
14.0 MeV	5.616×10^1	5.094				5.094	1.557×10^0
20.0 MeV	6.802×10^1	3.992				3.992	2.903×10^0
30.0 MeV	8.509×10^1	3.107				3.107	5.781×10^0
40.0 MeV	1.003×10^2	2.659				2.659	9.282×10^0
80.0 MeV	1.527×10^2	2.007				2.007	2.714×10^1
100. MeV	1.764×10^2	1.888				1.888	3.743×10^1
140. MeV	2.218×10^2	1.761				1.762	5.947×10^1
200. MeV	2.868×10^2	1.691				1.691	9.437×10^1
298. MeV	3.894×10^2	1.668			0.000	1.668	*Minimum ionization*
300. MeV	3.917×10^2	1.668			0.000	1.668	1.541×10^2
400. MeV	4.945×10^2	1.677			0.000	1.678	2.139×10^2
800. MeV	8.995×10^2	1.753	0.000		0.000	1.754	4.471×10^2
1.00 GeV	1.101×10^3	1.786	0.000		0.000	1.787	5.600×10^2
1.40 GeV	1.502×10^3	1.840	0.001	0.000	0.001	1.842	7.804×10^2
2.00 GeV	2.103×10^3	1.899	0.001	0.000	0.001	1.902	1.101×10^3
3.00 GeV	3.104×10^3	1.967	0.001	0.001	0.001	1.971	1.617×10^3
4.00 GeV	4.104×10^3	2.013	0.002	0.002	0.002	2.019	2.118×10^3
8.00 GeV	8.105×10^3	2.120	0.005	0.005	0.004	2.134	4.038×10^3
10.0 GeV	1.011×10^4	2.153	0.007	0.007	0.005	2.171	4.966×10^3
14.0 GeV	1.411×10^4	2.199	0.011	0.011	0.006	2.228	6.784×10^3
20.0 GeV	2.011×10^4	2.246	0.016	0.019	0.009	2.290	9.439×10^3
30.0 GeV	3.011×10^4	2.295	0.027	0.033	0.013	2.368	1.373×10^4
40.0 GeV	4.011×10^4	2.329	0.038	0.048	0.017	2.432	1.789×10^4
80.0 GeV	8.011×10^4	2.404	0.086	0.116	0.033	2.640	3.365×10^4
100. GeV	1.001×10^5	2.428	0.111	0.153	0.041	2.733	4.110×10^4
140. GeV	1.401×10^5	2.462	0.164	0.229	0.057	2.913	5.527×10^4
200. GeV	2.001×10^5	2.499	0.246	0.349	0.081	3.176	7.499×10^4
300. GeV	3.001×10^5	2.540	0.388	0.554	0.121	3.603	1.045×10^5
400. GeV	4.001×10^5	2.569	0.534	0.767	0.162	4.032	1.308×10^5
683. GeV	6.827×10^5	2.624	0.961	1.385	0.278	5.248	*Muon critical energy*
800. GeV	8.001×10^5	2.640	1.142	1.647	0.327	5.756	2.134×10^5
1.00 TeV	1.000×10^6	2.663	1.456	2.099	0.411	6.629	2.457×10^5
1.40 TeV	1.400×10^6	2.698	2.086	3.001	0.582	8.368	2.993×10^5
2.00 TeV	2.000×10^6	2.736	3.053	4.381	0.843	11.013	3.616×10^5
3.00 TeV	3.000×10^6	2.779	4.671	6.677	1.291	15.418	4.380×10^5
4.00 TeV	4.000×10^6	2.811	6.315	9.001	1.746	19.874	4.950×10^5
8.00 TeV	8.000×10^6	2.888	12.961	18.358	3.640	37.848	6.384×10^5
10.0 TeV	1.000×10^7	2.913	16.317	23.068	4.616	46.914	6.858×10^5
14.0 TeV	1.400×10^7	2.952	23.016	32.455	6.622	65.046	7.579×10^5
20.0 TeV	2.000×10^7	2.993	33.141	46.607	9.704	92.446	8.349×10^5
30.0 TeV	3.000×10^7	3.041	49.985	70.161	15.046	138.234	9.228×10^5
40.0 TeV	4.000×10^7	3.076	66.906	93.785	20.525	184.292	9.852×10^5
80.0 TeV	8.000×10^7	3.162	134.753	188.355	43.484	369.754	1.135×10^6
100. TeV	1.000×10^8	3.190	168.761	235.692	55.373	463.016	1.184×10^6