Muons in LMP 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
0.49641	2.700	145.9	0.13803	3.0000	0.2000	3.0000	3.9511	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	6.510				6.510	8.548×10^{-1}
14.0 MeV	5.616×10^1	5.096				5.096	1.557×10^0
20.0 MeV	6.802×10^1	3.993				3.993	2.902×10^0
30.0 MeV	8.509×10^1	3.108				3.108	5.779×10^0
40.0 MeV	1.003×10^2	2.660				2.660	9.279×10^0
80.0 MeV	1.527×10^2	2.008				2.008	2.713×10^1
100. MeV	1.764×10^2	1.889				1.889	3.742×10^1
140. MeV	2.218×10^2	1.762				1.762	5.945×10^1
200. MeV	2.868×10^2	1.692				1.692	9.433×10^1
298. MeV	3.894×10^2	1.669			0.000	1.669	*Minimum ionization*
300. MeV	3.917×10^2	1.669			0.000	1.669	1.540×10^2
400. MeV	4.945×10^2	1.678			0.000	1.679	2.138×10^2
800. MeV	8.995×10^2	1.754	0.000		0.000	1.755	4.468×10^2
1.00 GeV	1.101×10^3	1.788	0.000		0.000	1.788	5.597×10^2
1.40 GeV	1.502×10^3	1.841	0.001	0.000	0.001	1.843	7.799×10^2
2.00 GeV	2.103×10^3	1.901	0.001	0.000	0.001	1.903	1.100×10^3
3.00 GeV	3.104×10^3	1.968	0.001	0.001	0.001	1.972	1.616×10^3
4.00 GeV	4.104×10^3	2.015	0.002	0.002	0.002	2.021	2.116×10^3
8.00 GeV	8.105×10^3	2.122	0.005	0.005	0.004	2.136	4.035×10^3
10.0 GeV	1.011×10^4	2.154	0.007	0.007	0.005	2.173	4.963×10^3
14.0 GeV	1.411×10^4	2.201	0.011	0.012	0.006	2.230	6.779×10^3
20.0 GeV	2.011×10^4	2.247	0.017	0.019	0.009	2.292	9.431×10^3
30.0 GeV	3.011×10^4	2.297	0.027	0.033	0.013	2.371	1.372×10^4
40.0 GeV	4.011×10^4	2.330	0.038	0.049	0.017	2.435	1.788×10^4
80.0 GeV	8.011×10^4	2.406	0.087	0.118	0.033	2.644	3.362×10^4
100. GeV	1.001×10^5	2.429	0.113	0.155	0.041	2.738	4.105×10^4
140. GeV	1.401×10^5	2.464	0.166	0.232	0.057	2.919	5.519×10^4
200. GeV	2.001×10^5	2.501	0.249	0.353	0.081	3.185	7.486×10^4
300. GeV	3.001×10^5	2.542	0.392	0.560	0.121	3.616	1.043×10^5
400. GeV	4.001×10^5	2.571	0.541	0.776	0.162	4.049	1.304×10^5
676. GeV	6.764×10^5	2.625	0.963	1.387	0.275	5.250	*Muon critical energy*
800. GeV	8.001×10^5	2.642	1.156	1.666	0.327	5.790	2.126×10^5
1.00 TeV	1.000×10^6	2.665	1.473	2.124	0.410	6.672	2.448×10^5
1.40 TeV	1.400×10^6	2.700	2.110	3.036	0.582	8.429	2.980×10^5
2.00 TeV	2.000×10^6	2.738	3.088	4.432	0.842	11.101	3.598×10^5
3.00 TeV	3.000×10^6	2.782	4.725	6.754	1.290	15.551	4.356×10^5
4.00 TeV	4.000×10^6	2.813	6.388	9.105	1.745	20.051	4.921×10^5
8.00 TeV	8.000×10^6	2.890	13.109	18.568	3.638	38.206	6.342×10^5
10.0 TeV	1.000×10^7	2.915	16.504	23.331	4.613	47.364	6.811×10^5
14.0 TeV	1.400×10^7	2.954	23.280	32.826	6.618	65.678	7.525×10^5
20.0 TeV	2.000×10^7	2.995	33.520	47.140	9.697	93.353	8.288×10^5
30.0 TeV	3.000×10^7	3.044	50.556	70.962	15.035	139.597	9.158×10^5
40.0 TeV	4.000×10^7	3.078	67.669	94.854	20.510	186.112	9.777×10^5
80.0 TeV	8.000×10^7	3.164	136.286	190.501	43.452	373.404	1.126×10^6
100. TeV	1.000×10^8	3.192	170.681	238.377	55.331	467.582	1.174×10^6