

Muons in baksan rock

	$\langle Z/A \rangle$	ρ [g/cm ³]	I [eV]	a	$k = m_s$	x_0	x_1	\bar{C}	δ_0
	0.49228	2.740	175.6	0.15462	3.0000	0.2000	3.0000	4.3153	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	6.286				6.286		8.871×10^{-1}	
14.0 MeV	5.616×10^1	4.926				4.926		1.613×10^0	
20.0 MeV	6.802×10^1	3.864				3.864		3.004×10^0	
30.0 MeV	8.509×10^1	3.011				3.011		5.976×10^0	
40.0 MeV	1.003×10^2	2.579				2.579		9.587×10^0	
80.0 MeV	1.527×10^2	1.950				1.950		2.798×10^1	
100. MeV	1.764×10^2	1.836				1.836		3.857×10^1	
140. MeV	2.218×10^2	1.717				1.718		6.121×10^1	
200. MeV	2.868×10^2	1.653				1.653		9.695×10^1	
287. MeV	3.779×10^2	1.635			0.000	1.635			<i>Minimum ionization</i>
300. MeV	3.917×10^2	1.635			0.000	1.635		1.579×10^2	
400. MeV	4.945×10^2	1.647			0.000	1.648		2.189×10^2	
800. MeV	8.995×10^2	1.728	0.000		0.000	1.729		4.559×10^2	
1.00 GeV	1.101×10^3	1.762	0.000		0.000	1.763		5.704×10^2	
1.40 GeV	1.502×10^3	1.818	0.001	0.000	0.001	1.819		7.936×10^2	
2.00 GeV	2.103×10^3	1.878	0.001	0.000	0.001	1.881		1.118×10^3	
3.00 GeV	3.104×10^3	1.947	0.002	0.001	0.001	1.951		1.639×10^3	
4.00 GeV	4.104×10^3	1.994	0.002	0.002	0.002	2.000		2.145×10^3	
8.00 GeV	8.105×10^3	2.102	0.005	0.005	0.004	2.117		4.082×10^3	
10.0 GeV	1.011×10^4	2.134	0.007	0.007	0.005	2.154		5.019×10^3	
14.0 GeV	1.411×10^4	2.181	0.011	0.012	0.006	2.211		6.851×10^3	
20.0 GeV	2.011×10^4	2.228	0.017	0.020	0.009	2.274		9.525×10^3	
30.0 GeV	3.011×10^4	2.277	0.028	0.034	0.013	2.353		1.385×10^4	
40.0 GeV	4.011×10^4	2.310	0.040	0.050	0.017	2.418		1.804×10^4	
80.0 GeV	8.011×10^4	2.386	0.090	0.121	0.033	2.630		3.387×10^4	
100. GeV	1.001×10^5	2.409	0.116	0.160	0.041	2.726		4.134×10^4	
140. GeV	1.401×10^5	2.443	0.171	0.239	0.057	2.911		5.554×10^4	
200. GeV	2.001×10^5	2.479	0.257	0.365	0.080	3.183		7.524×10^4	
300. GeV	3.001×10^5	2.520	0.405	0.578	0.121	3.624		1.047×10^5	
400. GeV	4.001×10^5	2.549	0.557	0.800	0.161	4.067		1.307×10^5	
654. GeV	6.541×10^5	2.599	0.957	1.378	0.264	5.199			<i>Muon critical energy</i>
800. GeV	8.001×10^5	2.620	1.191	1.717	0.325	5.853		2.123×10^5	
1.00 TeV	1.000×10^6	2.643	1.518	2.191	0.408	6.759		2.440×10^5	
1.40 TeV	1.400×10^6	2.677	2.175	3.131	0.579	8.562		2.965×10^5	
2.00 TeV	2.000×10^6	2.715	3.182	4.568	0.837	11.303		3.573×10^5	
3.00 TeV	3.000×10^6	2.758	4.868	6.961	1.282	15.870		4.317×10^5	
4.00 TeV	4.000×10^6	2.789	6.581	9.384	1.735	20.489		4.870×10^5	
8.00 TeV	8.000×10^6	2.865	13.504	19.135	3.616	39.122		6.259×10^5	
10.0 TeV	1.000×10^7	2.891	17.001	24.043	4.585	48.519		6.717×10^5	
14.0 TeV	1.400×10^7	2.929	23.981	33.825	6.577	67.313		7.414×10^5	
20.0 TeV	2.000×10^7	2.970	34.533	48.572	9.635	95.710		8.158×10^5	
30.0 TeV	3.000×10^7	3.018	52.077	73.118	14.937	143.150		9.006×10^5	
40.0 TeV	4.000×10^7	3.052	69.699	97.737	20.373	190.862		9.609×10^5	
80.0 TeV	8.000×10^7	3.137	140.364	196.287	43.149	382.939		1.106×10^6	
100. TeV	1.000×10^8	3.165	175.788	245.614	54.942	479.509		1.153×10^6	