

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		