

## Muons in Kolar Gold Fields rock

	$\langle Z/A \rangle$	$\rho$ [g/cm <sup>3</sup> ]	$I$ [eV]	$a$	$k = m_s$	$x_0$	$x_1$	$\bar{C}$	$\delta_0$
	0.48605	3.020	183.4	0.15473	3.0000	0.2000	3.0000	4.3177	0.00
$T$	$p$ [MeV/c]	Ionization	Brems	Pair prod	Photonucl	Total	CSDA range [g/cm <sup>2</sup> ]		
				[MeV cm <sup>2</sup> /g]					
10.0 MeV	$4.704 \times 10^1$	6.167				6.168	$9.047 \times 10^{-1}$		
14.0 MeV	$5.616 \times 10^1$	4.834				4.834	$1.645 \times 10^0$		
20.0 MeV	$6.802 \times 10^1$	3.793				3.793	$3.062 \times 10^0$		
30.0 MeV	$8.509 \times 10^1$	2.957				2.957	$6.089 \times 10^0$		
40.0 MeV	$1.003 \times 10^2$	2.533				2.533	$9.766 \times 10^0$		
80.0 MeV	$1.527 \times 10^2$	1.916				1.916	$2.849 \times 10^1$		
100. MeV	$1.764 \times 10^2$	1.804				1.804	$3.927 \times 10^1$		
140. MeV	$2.218 \times 10^2$	1.688				1.688	$6.231 \times 10^1$		
200. MeV	$2.868 \times 10^2$	1.625				1.625	$9.867 \times 10^1$		
283. MeV	$3.738 \times 10^2$	1.607			0.000	1.607	<i>Minimum ionization</i>		
300. MeV	$3.917 \times 10^2$	1.607			0.000	1.608	$1.607 \times 10^2$		
400. MeV	$4.945 \times 10^2$	1.620			0.000	1.620	$2.227 \times 10^2$		
800. MeV	$8.995 \times 10^2$	1.700	0.000		0.000	1.700	$4.637 \times 10^2$		
1.00 GeV	$1.101 \times 10^3$	1.734	0.000		0.000	1.734	$5.801 \times 10^2$		
1.40 GeV	$1.502 \times 10^3$	1.788	0.001	0.000	0.001	1.790	$8.070 \times 10^2$		
2.00 GeV	$2.103 \times 10^3$	1.848	0.001	0.000	0.001	1.850	$1.136 \times 10^3$		
3.00 GeV	$3.104 \times 10^3$	1.916	0.002	0.001	0.001	1.920	$1.666 \times 10^3$		
4.00 GeV	$4.104 \times 10^3$	1.963	0.002	0.002	0.002	1.969	$2.180 \times 10^3$		
8.00 GeV	$8.105 \times 10^3$	2.069	0.006	0.006	0.004	2.084	$4.148 \times 10^3$		
10.0 GeV	$1.011 \times 10^4$	2.101	0.008	0.008	0.005	2.121	$5.099 \times 10^3$		
14.0 GeV	$1.411 \times 10^4$	2.147	0.011	0.013	0.006	2.178	$6.959 \times 10^3$		
20.0 GeV	$2.011 \times 10^4$	2.193	0.018	0.021	0.009	2.241	$9.673 \times 10^3$		
30.0 GeV	$3.011 \times 10^4$	2.242	0.029	0.036	0.013	2.320	$1.406 \times 10^4$		
40.0 GeV	$4.011 \times 10^4$	2.275	0.041	0.053	0.017	2.386	$1.830 \times 10^4$		
80.0 GeV	$8.011 \times 10^4$	2.349	0.093	0.126	0.033	2.602	$3.433 \times 10^4$		
100. GeV	$1.001 \times 10^5$	2.372	0.121	0.166	0.041	2.700	$4.188 \times 10^4$		
140. GeV	$1.401 \times 10^5$	2.406	0.178	0.249	0.056	2.890	$5.619 \times 10^4$		
200. GeV	$2.001 \times 10^5$	2.442	0.267	0.379	0.080	3.169	$7.601 \times 10^4$		
300. GeV	$3.001 \times 10^5$	2.482	0.421	0.601	0.120	3.624	$1.055 \times 10^5$		
400. GeV	$4.001 \times 10^5$	2.511	0.579	0.831	0.160	4.082	$1.315 \times 10^5$		
624. GeV	$6.238 \times 10^5$	2.555	0.944	1.360	0.251	5.111	<i>Muon critical energy</i>		
800. GeV	$8.001 \times 10^5$	2.580	1.238	1.785	0.323	5.927	$2.124 \times 10^5$		
1.00 TeV	$1.000 \times 10^6$	2.603	1.577	2.276	0.406	6.863	$2.437 \times 10^5$		
1.40 TeV	$1.400 \times 10^6$	2.637	2.260	3.253	0.576	8.726	$2.953 \times 10^5$		
2.00 TeV	$2.000 \times 10^6$	2.674	3.306	4.748	0.834	11.562	$3.548 \times 10^5$		
3.00 TeV	$3.000 \times 10^6$	2.717	5.057	7.233	1.277	16.284	$4.274 \times 10^5$		
4.00 TeV	$4.000 \times 10^6$	2.747	6.836	9.750	1.727	21.060	$4.812 \times 10^5$		
8.00 TeV	$8.000 \times 10^6$	2.823	14.024	19.878	3.599	40.324	$6.162 \times 10^5$		
10.0 TeV	$1.000 \times 10^7$	2.848	17.653	24.974	4.562	50.038	$6.606 \times 10^5$		
14.0 TeV	$1.400 \times 10^7$	2.885	24.900	35.134	6.544	69.464	$7.282 \times 10^5$		
20.0 TeV	$2.000 \times 10^7$	2.926	35.852	50.449	9.587	98.815	$8.002 \times 10^5$		
30.0 TeV	$3.000 \times 10^7$	2.973	54.064	75.941	14.860	147.839	$8.824 \times 10^5$		
40.0 TeV	$4.000 \times 10^7$	3.007	72.355	101.509	20.267	197.139	$9.408 \times 10^5$		
80.0 TeV	$8.000 \times 10^7$	3.091	145.699	203.858	42.914	395.563	$1.081 \times 10^6$		
100. TeV	$1.000 \times 10^8$	3.119	182.463	255.089	54.637	495.308	$1.126 \times 10^6$		