Table 279: Muons in Heavymet as in ATLAS calorimeter

$\langle Z/A\rangle$	ρ [g/cm^3]	I [eV]	a	$k = m_s$	x_0	x_1	$\overline{C}$	δ_0
0.40594	19.300	727.0	0.15509	2.8447	0.2167	3.4960	5.4059	0.14

T	p [MeV/c]	Ionization	Brems	Pair prod [MeV cm^2/g]	Photonucl	Total	CSDA range [g/cm^2]
10.0 MeV	4.704×10^{1}	4.109				4.109	1.387×10^{0}
14.0 MeV	5.616×10^{1}	3.254				3.254	2.492×10^{0}
20.0 MeV	6.802×10^{1}	2.577				2.577	4.586×10^{0}
30.0 MeV	8.509×10^{1}	2.028				2.028	9.017×10^{0}
40.0 MeV	1.003×10^{2}	1.747				1.747	1.436×10^{1}
80.0 MeV	1.527×10^{2}	1.336				1.336	4.133×10^{1}
100. MeV	1.764×10^{2}	1.263				1.263	5.676×10^{1}
140. MeV	2.218×10^{2}	1.192				1.193	8.950×10^{1}
200. MeV	2.868×10^{2}	1.159				1.159	1.407×10^{2}
242. MeV	3.316×10^{2}	1.155	0.000			1.155	*Minimum ionization*
300. MeV	3.917×10^{2}	1.160	0.000		0.000	1.160	2.271×10^{2}
400. MeV	4.945×10^{2}	1.178	0.000		0.000	1.178	3.127×10^{2}
800. MeV	8.995×10^{2}	1.258	0.001		0.000	1.259	6.407×10^{2}
1.00 GeV	1.101×10^{3}	1.290	0.001		0.000	1.292	7.974×10^{2}
1.40 GeV	1.502×10^{3}	1.341	0.002		0.001	1.344	1.101×10^{3}
2.00 GeV	2.103×10^{3}	1.396	0.004	0.001	0.001	1.402	1.537×10^{3}
3.00 GeV	3.104×10^{3}	1.458	0.006	0.003	0.001	1.470	2.233×10^{3}
4.00 GeV	4.104×10^{3}	1.502	0.009	0.006	0.002	1.519	2.902×10^{3}
8.00 GeV	8.105×10^{3}	1.600	0.023	0.021	0.003	1.647	5.421×10^{3}
10.0 GeV	1.011×10^{4}	1.630	0.030	0.029	0.004	1.693	6.618×10^{3}
14.0 GeV	1.411×10^{4}	1.672	0.046	0.047	0.005	1.771	8.926×10^{3}
20.0 GeV	2.011×10^{4}	1.715	0.071	0.078	0.007	1.872	1.222×10^{4}
30.0 GeV	3.011×10^{4}	1.759	0.117	0.136	0.011	2.024	1.735×10^{4}
40.0 GeV	4.011×10^{4}	1.789	0.165	0.201	0.014	2.170	2.212×10^{4}
80.0 GeV	8.011×10^{4}	1.856	0.373	0.484	0.028	2.742	3.848×10^{4}
100. GeV	1.001×10^{5}	1.876	0.483	0.637	0.035	3.032	4.541×10^{4}
140. GeV	1.401×10^{5}	1.905	0.710	0.951	0.049	3.616	5.748×10^{4}
154. GeV	1.544×10^{5}	1.913	0.792	1.067	0.054	3.828	*Muon critical energy*
200. GeV	2.001×10^{5}	1.935	1.064	1.450	0.069	4.519	7.230×10^{4}
300. GeV	3.001×10^{5}	1.969	1.667	2.282	0.104	6.024	9.142×10^{4}
400. GeV	4.001×10^{5}	1.993	2.291	3.145	0.139	7.569	1.062×10^{5}
800. GeV	8.001×10^{5}	2.051	4.867	6.680	0.280	13.879	1.447×10^{5}
1.00 TeV	1.000×10^{6}	2.070	6.189	8.488	0.352	17.100	1.576×10^{5}
1.40 TeV	1.400×10^{6}	2.099	8.838	12.094	0.498	23.531	1.775×10^{5}
2.00 TeV	2.000×10^{6}	2.130	12.888	17.596	0.721	33.336	1.988×10^{5}
3.00 TeV	3.000×10^{6}	2.165	19.647	26.739	1.102	49.655	2.232×10^{5}
4.00 TeV	4.000×10^{6}	2.191	26.495	35.978	1.488	66.154	2.406×10^{5}
8.00 TeV	8.000×10^{6}	2.254	54.090	73.113	3.091	132.550	2.825×10^{5}
10.0 TeV	1.000×10^{7}	2.274	67.991	91.778	3.914	165.959	2.960×10^{5}
14.0 TeV	1.400×10^{7}	2.306	95.718	129.021	5.601	232.648	3.162×10^{5}
20.0 TeV	2.000×10^{7}	2.340	137.544	185.120	8.187	333.193	3.377×10^{5}
30.0 TeV	3.000×10^{7}	2.379	207.173	278.459	12.652	500.665	3.620×10^{5}
40.0 TeV	4.000×10^{7}	2.408	277.042	372.014	17.221	668.687	3.792×10^{5}
80.0 TeV	8.000×10^{7}	2.478	556.905	746.476	36.290	1342.151	4.206×10^{5}
100. TeV	1.000×10^{8}	2.501	697.059	933.871	46.135	1679.567	4.339×10^{5}