Table 1: Heavy flavor muon double differential cross section in $p + p$ collisions at $1.4 < |y| < 2.0$.

p_T	Ed^3p/dp^3	stat. uncertainty	sys. uncertainty
1.125	2.64e-04	9.06e-06	4.20e-05
1.375	8.38e-05	3.08e-06	1.35e-05
1.625	3.18e-05	1.32e-07	5.15e-05
1.875	1.27e-05	4.92e-07	2.18e-06
2.215	5.61e-06	2.77e-07	9.59e-07
2.375	2.55e-06	1.64e-07	4.72e-07
2.625	1.24e-06	1.04e-07	2.23e-07
2.875	6.69e-07	6.81e-08	1.32e-07
3.250	2.83e-07	2.71e-08	5.46e-08
3.750	8.22e-08	1.36e-08	1.68e-08
4.500	2.05e-08	4.06e-09	4.26e-09
6.000	2.43e-09	6.89e-10	4.69e-10

Table 2: Heavy flavor muon invariant yield in 0–100% $d+\mathrm{Au}$ collisions at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	p_T	$1/2\pi p_T\ d^2N/dp_Tdy$	stat. uncertainty	sys. uncertainty
S	1.125	5.85564e-05	1.15771e-06	8.25817e-06
S	1.375	2.28476e-05	3.84915e-07	3.25932e-06
S	1.625	8.20331e-06	1.66305e-07	1.16945e-06
S	1.875	3.82836e-06	5.84956e-08	5.60852e-07
S	2.125	1.66737e-06	3.16874e-08	2.44351e-07
S	2.375	7.64873e-07	1.83467e-08	1.18019e-07
S	2.625	4.05252e-07	1.13032e-08	6.09591e-08
S	2.875	1.89377e-07	7.36818e-09	3.09167e-08
S	3.250	7.22965e-08	2.86692e-09	1.19075e-08
S	3.750	2.27985e-08	1.42653e-09	3.88756e-09
S	4.500	5.18719e-09	4.15143e-10	9.07761e-10
S	6.000	4.15544e-10	6.37085e-11	7.58652e-11
N	1.125	3.14489e-05	1.1017e-06	4.53737e-06
N	1.375	1.27794e-05	3.54128e-07	1.8029e-06
N	1.625	4.90297e-06	1.43719e-07	6.90111e-07
N	1.875	2.28947e-06	4.95782e-08	3.32375e-07
N	2.125	9.8874e-07	2.62532e-08	1.44119e-07
N	2.375	4.58891e-07	1.53933e-08	7.11785e-08
N	2.625	2.36166e-07	9.33461e-09	3.5822e-08
N	2.875	1.1024e-07	6.02676e-09	1.84627e-08
N	3.250	4.28042e-08	2.33086e-09	7.26925e-09
N	3.750	1.51117e-08	1.19553e-09	2.60917e-09
N	4.500	3.27017e-09	3.45911e-10	5.99151e-10
N	6.000	2.64546e-10	5.7876e-11	5.22727e-11

Table 3: Heavy flavor muon invariant yield in 0–20% $d+\mathrm{Au}$ collisions at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	p_T	$1/2\pi p_T\ d^2N/dp_Tdy$	stat. uncertainty	sys. uncertainty
S	1.125	0.0001425	2.50827e-06	1.99238e-05
S	1.375	5.48111e-05	8.934e-07	7.64606e-06
S	1.625	2.04746e-05	3.99783e-07	2.85906e-06
S	1.875	8.78952e-06	1.49125e-07	1.27104e-06
S	2.125	3.71656e-06	8.45344e-08	5.38384e-07
S	2.375	1.66985e-06	5.12055e-08	2.56021e-07
S	2.625	8.27778e-07	3.23575e-08	1.24852e-07
S	2.875	4.16982e-07	2.14231e-08	6.75522e-08
S	3.250	1.46286e-07	8.35686e-09	2.43859e-08
S	3.750	4.18405e-08	4.29287e-09	7.39828e-09
S	4.500	1.11295e-08	1.268e-09	1.94945e-09
S	6.000	8.64418e-10	1.94654e-10	1.60586e-10
N	1.125	5.10828e-05	1.99114e-06	7.46956e-06
N	1.375	2.01546e-05	6.73908e-07	2.89776e-06
N	1.625	7.9045e-06	2.79881e-07	1.12852e-06
N	1.875	3.82454e-06	9.93572e-08	5.61763e-07
N	2.125	1.72278e-06	5.51845e-08	2.52457e-07
N	2.375	7.68564e-07	3.29704e-08	1.20829e-07
N	2.625	4.08919e-07	2.0662e-08	6.25645e-08
N	2.875	1.87682e-07	1.35011e-08	3.21817e-08
N	3.250	7.88383e-08	5.31613e-09	1.32883e-08
N	3.750	2.7043e-08	2.67849e-09	4.67492e-09
N	4.500	6.72032e-09	8.67691e-10	1.1914e-09
N	6.000	4.39216e-10	1.39246e-10	8.85173e-11

Table 4: Heavy flavor muon invariant yield in 20–40% $d+\mathrm{Au}$ collisions at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	p_T	$1/2\pi p_T\ d^2N/dp_T dy$	stat. uncertainty	sys. uncertainty
S	1.125	7.87833e-05	1.77588e-06	1.1328e-05
S	1.375	3.11564e-05	6.36786e-07	4.50221e-06
S	1.625	1.1703e-05	2.89775e-07	1.67385e-06
S	1.875	5.28896e-06	1.10252e-07	7.84392e-07
S	2.125	2.30829e-06	6.43388e-08	3.40395e-07
S	2.375	1.06457e-06	3.88081e-08	1.64688e-07
S	2.625	5.93122e-07	2.52695e-08	8.92132e-08
S	2.875	2.45373e-07	1.6632e-08	4.09918e-08
S	3.250	1.05653e-07	6.64511e-09	1.73069e-08
S	3.750	3.32096e-08	3.3888e-09	5.60431e-09
S	4.500	6.92887e-09	9.96432e-10	1.22259e-09
S	6.000	4.22601e-10	1.57461e-10	8.41146e-11
N	1.125	4.41814e-05	1.58397e-06	6.48953e-06
N	1.375	1.72475e-05	5.28496e-07	2.4794e-06
N	1.625	7.00586e-06	2.22086e-07	9.91077e-07
N	1.875	3.28328e-06	8.13347e-08	4.78065e-07
N	2.125	1.45008e-06	4.57309e-08	2.10981e-07
N	2.375	6.62288e-07	2.76857e-08	1.03053e-07
N	2.625	3.15347e-07	1.72927e-08	4.86715e-08
N	2.875	1.46579e-07	1.16094e-08	2.50406e-08
N	3.250	6.06536e-08	4.59532e-09	1.03001e-08
N	3.750	2.32846e-08	2.47852e-09	3.9738e-09
N	4.500	4.40867e-09	7.12463e-10	8.34314e-10
N	6.000	2.97442e-10	1.20948e-10	6.84856e-11

Table 5: Heavy flavor muon invariant yield in 40–60% $d+\mathrm{Au}$ collisions at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	p_T	$1/2\pi p_T\ d^2N/dp_Tdy$	stat. uncertainty	sys. uncertainty
S	1.125	4.76839e-05	1.19829e-06	6.7301e-06
S	1.375	1.78767e-05	4.40746e-07	2.58897e-06
S	1.625	5.8563e-06	2.08583e-07	8.53649e-07
S	1.875	3.0216e-06	8.12674e-08	4.48807e-07
S	2.125	1.40565e-06	4.74147e-08	2.06443e-07
S	2.375	6.62569e-07	2.91041e-08	1.01766e-07
S	2.625	3.57336e-07	1.92998e-08	5.37999e-08
S	2.875	1.5176e-07	1.25614e-08	2.50575e-08
S	3.250	6.35802e-08	5.08395e-09	1.0429e-08
S	3.750	2.16067e-08	2.6384e-09	3.59425e-09
S	4.500	4.61152e-09	7.78361e-10	7.98378e-10
S	6.000	4.79597e-10	1.38627e-10	8.1543e-11
N	1.125	3.46761e-05	1.16105e-06	5.01982e-06
N	1.375	1.33877e-05	3.8972e-07	1.87965e-06
N	1.625	5.13446e-06	1.65526e-07	7.19571e-07
N	1.875	2.18268e-06	6.27096e-08	3.18109e-07
N	2.125	9.75049e-07	3.57627e-08	1.42207e-07
N	2.375	4.81011e-07	2.14749e-08	7.46127e-08
N	2.625	2.46561e-07	1.38625e-08	3.74184e-08
N	2.875	1.11929e-07	9.22904e-09	1.87074e-08
N	3.250	3.8516e-08	3.61992e-09	6.63812e-09
N	3.750	1.36515e-08	1.97016e-09	2.39609e-09
N	4.500	2.87267e-09	5.57628e-10	5.47767e-10
N	6.000	2.79348e-10	1.03577e-10	5.55134e-11

Table 6: Heavy flavor muon invariant yield in 60–88% $d+\mathrm{Au}$ collisions at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	p_T	$1/2\pi p_T\ d^2N/dp_T dy$	stat. uncertainty	sys. uncertainty
S	1.125	2.04245e-05	5.57111e-07	3.89991e-06
S	1.375	8.05659e-06	2.10763e-07	1.55748e-06
S	1.625	2.68453e-06	1.01559e-07	5.17221e-07
S	1.875	9.69333e-07	4.09775e-08	1.98598e-07
S	2.125	4.04049e-07	2.46467e-08	8.17191e-08
S	2.375	2.40364e-07	1.51879e-08	4.9275e-08
S	2.625	1.39322e-07	9.96853e-09	2.73372e-08
S	2.875	6.03014e-08	6.57308e-09	1.3176e-08
S	3.250	2.12247e-08	2.66847e-09	4.70983e-09
S	3.750	8.8903e-09	1.42511e-09	1.92949e-09
S	4.500	1.8649e-09	4.30911e-10	4.16945e-10
S	6.000	1.61894e-10	7.03612e-11	3.64032e-11
N	1.125	2.45185e-05	5.9497e-07	4.41471e-06
N	1.375	8.25563e-06	1.99489e-07	1.47916e-06
N	1.625	2.87327e-06	8.95294e-08	5.18584e-07
N	1.875	1.15749e-06	3.39835e-08	2.19479e-07
N	2.125	5.47646e-07	1.91719e-08	1.04096e-07
N	2.375	2.25959e-07	1.17768e-08	4.64882e-08
N	2.625	9.96989e-08	7.47995e-09	2.03789e-08
N	2.875	5.52528e-08	5.12758e-09	1.21195e-08
N	3.250	2.31372e-08	2.04976e-09	4.99698e-09
N	3.750	7.12927e-09	1.09177e-09	1.59946e-09
N	4.500	1.94703e-09	3.35261e-10	4.32415e-10
N	6.000	9.41391e-11	5.77074e-11	2.64966e-11

Table 7: Heavy flavor muon $R_{d\mathrm{A}}$ in 0–100% centrality class at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity. Global uncertainty 10.4% is not included.

rapidity	p_T	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	1.125	1.22722	0.0485808	0.229366
S	1.375	1.50905	0.0608238	0.286656
S	1.625	1.42552	0.0656092	0.271463
S	1.875	1.66276	0.0686749	0.334925
S	2.125	1.64555	0.0865221	0.331397
S	2.375	1.65984	0.112818	0.363098
S	2.625	1.81125	0.158695	0.384111
S	2.875	1.56555	0.167536	0.36888
S	3.250	1.41405	0.14341	0.329274
S	3.750	1.53419	0.265131	0.377626
S	4.500	1.40072	0.291679	0.353309
S	6.000	0.945383	0.290077	0.232168
N	1.125	0.659105	0.0322648	0.124809
N	1.375	0.844061	0.0386078	0.159339
N	1.625	0.85201	0.0429636	0.161101
N	1.875	0.994379	0.0434925	0.199339
N	2.125	0.975799	0.0540043	0.195957
N	2.375	0.995834	0.0706888	0.218414
N	2.625	1.05552	0.0961878	0.22479
N	2.875	0.911338	0.101481	0.217416
N	3.250	0.837212	0.0883599	0.198007
N	3.750	1.01692	0.179879	0.251818
N	4.500	0.883059	0.188925	0.227831
N	6.000	0.601856	0.194292	0.154645

Table 8: Heavy flavor muon $R_{d\mathrm{A}}$ in 0–20% centrality class at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity. Global uncertainty 11.0% is not included.

rapidity	p_T	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	1.125	1.50505	0.0580309	0.279917
S	1.375	1.82439	0.073155	0.342255
S	1.625	1.79303	0.0820153	0.337548
S	1.875	1.92385	0.0806596	0.384877
S	2.125	1.84845	0.0997342	0.369996
S	2.375	1.82618	0.128116	0.398226
S	2.625	1.86446	0.169869	0.395934
S	2.875	1.73719	0.192534	0.407817
S	3.250	1.44191	0.154265	0.337803
S	3.750	1.41892	0.260937	0.355508
S	4.500	1.51455	0.329885	0.382188
S	6.000	0.991064	0.32744	0.245757
N	1.125	0.539525	0.0279606	0.102968
N	1.375	0.670848	0.0330657	0.127999
N	1.625	0.692226	0.0373826	0.13193
N	1.875	0.837114	0.0383232	0.168851
N	2.125	0.856834	0.0495966	0.172553
N	2.375	0.840515	0.0627771	0.185603
N	2.625	0.921036	0.0878861	0.197015
N	2.875	0.781902	0.0917625	0.188741
N	3.250	0.777094	0.0859809	0.18308
N	3.750	0.917098	0.168074	0.227235
N	4.500	0.914528	0.203528	0.232128
N	6.000	0.503566	0.180839	0.130923

Table 9: Heavy flavor muon $R_{d\mathrm{A}}$ in 20–40% centrality class at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity. Global uncertainty 10.7% is not included.

rapidity	p_T	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	1.125	1.22289	0.0501773	0.23111
S	1.375	1.5241	0.0638579	0.291636
S	1.625	1.50621	0.0724621	0.287358
S	1.875	1.70134	0.0739602	0.344938
S	2.125	1.68722	0.0945801	0.340918
S	2.375	1.71102	0.123847	0.374776
S	2.625	1.96335	0.181772	0.416355
S	2.875	1.50235	0.175428	0.357971
S	3.250	1.5305	0.168024	0.355421
S	3.750	1.65516	0.307104	0.405386
S	4.500	1.38575	0.318049	0.350927
S	6.000	0.712072	0.286119	0.183758
N	1.125	0.685791	0.0339761	0.131229
N	1.375	0.843709	0.0400933	0.160967
N	1.625	0.901673	0.0467109	0.170969
N	1.875	1.05616	0.047767	0.212052
N	2.125	1.05992	0.0611642	0.212647
N	2.375	1.06445	0.0792206	0.233835
N	2.625	1.04386	0.101516	0.224293
N	2.875	0.897461	0.108239	0.21623
N	3.250	0.878633	0.1003	0.207799
N	3.750	1.1605	0.216516	0.285762
N	4.500	0.881718	0.20479	0.231289
N	6.000	0.501182	0.195929	0.14175

Table 10: Heavy flavor muon $R_{d\mathrm{A}}$ in 40–60% centrality class at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity. Global uncertainty 11.1% is not included.

rapidity	p_T	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	1.125	1.15293	0.0489963	0.215577
S	1.375	1.36217	0.0599837	0.260982
S	1.625	1.17406	0.0635807	0.22641
S	1.875	1.51404	0.0701466	0.307214
S	2.125	1.60043	0.0942284	0.322682
S	2.375	1.65879	0.125448	0.362043
S	2.625	1.84251	0.179551	0.39092
S	2.875	1.44738	0.178477	0.342903
S	3.250	1.43467	0.168208	0.333391
S	3.750	1.67742	0.325305	0.408068
S	4.500	1.43663	0.345494	0.360504
S	6.000	1.25878	0.465929	0.29758
N	1.125	0.838419	0.0401368	0.159075
N	1.375	1.02012	0.0475133	0.192059
N	1.625	1.02935	0.0536311	0.194167
N	1.875	1.09368	0.051584	0.219694
N	2.125	1.11016	0.0668415	0.223009
N	2.375	1.20424	0.0911031	0.264129
N	2.625	1.27133	0.124698	0.270821
N	2.875	1.0675	0.130827	0.254415
N	3.250	0.869104	0.106235	0.207129
N	3.750	1.05983	0.212875	0.264565
N	4.500	0.894925	0.219583	0.235684
N	6.000	0.733193	0.283512	0.189031

Table 11: Heavy flavor muon $R_{d\mathrm{A}}$ in 60–88% centrality class at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.. Global uncertainty 12.4% is not included.

rapidity	p_T	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	1.125	1.01593	0.0444864	0.230554
S	1.375	1.26292	0.0566647	0.291036
S	1.625	1.10718	0.0615109	0.255039
S	1.875	0.999204	0.0550255	0.246961
S	2.125	0.946403	0.0707376	0.231795
S	2.375	1.23797	0.105123	0.318212
S	2.625	1.47786	0.156612	0.364549
S	2.875	1.18313	0.15994	0.327472
S	3.250	0.985263	0.137371	0.272219
S	3.750	1.41988	0.300034	0.398105
S	4.500	1.19519	0.323683	0.344295
S	6.000	0.874146	0.393189	0.243415
N	1.125	1.21957	0.0512223	0.265693
N	1.375	1.29412	0.0566427	0.283042
N	1.625	1.18502	0.0610169	0.261016
N	1.875	1.19315	0.056677	0.279985
N	2.125	1.28275	0.076199	0.301409
N	2.375	1.16378	0.0918931	0.299825
N	2.625	1.05756	0.112921	0.267811
N	2.875	1.08408	0.137701	0.300777
N	3.250	1.07404	0.129499	0.291656
N	3.750	1.13863	0.233737	0.32574
N	4.500	1.24783	0.301555	0.358021
N	6.000	0.508304	0.248902	0.165648

Table 12: Heavy flavor muon p_T integranted $R_{d\mathrm{A}}$ for $1.0 < p_T < 3.0$ GeV/c at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	$\langle N_{\mathrm{coll}} \rangle$	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	15.061	1.61589	0.0431298	0.203374
S	10.248	1.33546	0.0375694	0.169593
S	6.579	1.22164	0.0358754	0.155549
S	3.198	1.07617	0.0325824	0.165974
N	15.061	0.59627	0.0205498	0.0758311
N	10.248	0.756535	0.0250276	0.0964502
N	6.579	0.907248	0.029359	0.115688
N	3.198	1.23132	0.0361499	0.185668

Table 13: Heavy flavor muon p_T integranted $R_{d\mathrm{A}}$ for $3.0 < p_T < 5.0$ GeV/c at backward (**S**outh, $-2.0 < y < -1.4$) and forward (**N**outh, $1.4 < y < 2.0$) rapidity.

rapidity	$\langle N_{\mathrm{coll}} \rangle$	$R_{d\mathrm{A}}$	stat. uncertainty	sys. uncertainty
S	15.061	1.44459	0.130096	0.249339
S	10.248	1.54113	0.142309	0.263446
S	6.579	1.48402	0.147834	0.251471
S	3.198	1.09445	0.132282	0.213344
N	15.061	0.81931	0.0762939	0.139793
N	10.248	0.936014	0.0906309	0.160128
N	6.579	0.910326	0.0972223	0.157632
N	3.198	1.10466	0.115742	0.218173