

Figure 2: Inclusive cross section $d\sigma^{\text{inc}} / d\Delta y$ [pb] as a function of Δy for heavy-ion collisions. The top panel shows the absolute cross section on a logarithmic scale from 10^{-2} to 10^8 pb. The bottom panel shows the ratio of the cross section to the CMS data on a linear scale from 0.5 to 2.5. The x-axis for both panels is Δy from 0 to 8.

Legend:

- $\blacksquare$ CMS
- $\circ$ Herwig++ 2.7.1 default
- $\square$ Herwig 7.2.1 default
- $\blacktriangle$ Pythia 8.315 default
- $\blacktriangledown$ Pythia 8.315 vincia-default
- $\blacklozenge$ Sherpa 2.2.9 default

Top Panel Data (Approximate values):

Δy	CMS	Herwig++ 2.7.1	Herwig 7.2.1	Pythia 8.315	Pythia 8.315 vincia	Sherpa 2.2.9
0.5	10^6	10^6	10^6	10^6	10^6	10^6
1.0	10^6	10^6	10^6	10^6	10^6	10^6
1.5	8×10^5	8×10^5	8×10^5	8×10^5	8×10^5	8×10^5
2.0	6×10^5	6×10^5	6×10^5	6×10^5	6×10^5	6×10^5
2.5	4×10^5	4×10^5	4×10^5	4×10^5	4×10^5	4×10^5
3.0	2×10^5	2×10^5	2×10^5	2×10^5	2×10^5	2×10^5
3.5	1.2×10^5	1.2×10^5	1.2×10^5	1.2×10^5	1.2×10^5	1.2×10^5
4.0	7×10^4	7×10^4	7×10^4	7×10^4	7×10^4	7×10^4
4.5	4×10^4	4×10^4	4×10^4	4×10^4	4×10^4	4×10^4
5.0	2×10^4	2×10^4	2×10^4	2×10^4	2×10^4	2×10^4
5.5	1×10^4	1×10^4	1×10^4	1×10^4	1×10^4	1×10^4
6.0	5×10^3	5×10^3	5×10^3	5×10^3	5×10^3	5×10^3
6.5	2×10^3	2×10^3	2×10^3	2×10^3	2×10^3	2×10^3
7.0	1×10^3	1×10^3	1×10^3	1×10^3	1×10^3	1×10^3
7.5	2×10^2	2×10^2	2×10^2	2×10^2	2×10^2	2×10^2
8.0	1×10^1	1×10^1	1×10^1	1×10^1	1×10^1	1×10^1

Bottom Panel Data (Approximate ratios to CMS):

Δy	Herwig++ 2.7.1	Herwig 7.2.1	Pythia 8.315	Pythia 8.315 vincia	Sherpa 2.2.9
0.5	0.8	0.8	1.2	0.8	0.8
1.0	0.9	0.8	1.2	0.8	0.9
1.5	1.0	0.9	1.2	0.8	1.0
2.0	1.0	0.9	1.2	0.8	1.0
2.5	1.0	0.9	1.2	0.8	1.0
3.0	1.0	0.9	1.2	0.8	1.0
3.5	1.0	0.9	1.2	0.8	1.0
4.0	1.0	0.9	1.2	0.8	1.0
4.5	1.0	0.9	1.2	0.8	1.0
5.0	1.0	0.9	1.2	0.8	1.0
5.5	1.0	0.9	1.2	0.8	1.0
6.0	1.0	0.9	1.2	0.8	1.0
6.5	1.0	0.9	1.2	0.8	1.0
7.0	1.0	0.9	1.2	0.8	1.0
7.5	1.0	0.9	1.2	0.8	1.0
8.0	1.0	0.9	1.2	0.8	1.0