

Gap fraction

Gap fraction vs Δy (LJ) ($240 < p_T < 270$)

- ATLAS
- ▲ Pythia 8.205 default
- ▲ Pythia 8.205 default-noCR

2

1.5

1

0.5

0

ATLAS_2011_S9126244

Rivet 3.1.0, $\geq 100k$ events

mcplots.cern.ch [arXiv:1306.3436]

Ratio to ATLAS

2

1

0.5

2

1

0.5

0

2

4

6

$|\Delta y|$

The figure displays two panels comparing ATLAS experimental data with Pythia 8.205 Monte Carlo models for gap fractions in 7000 GeV pp collisions. The top panel shows the gap fraction as a function of the absolute rapidity difference $|\Delta y|$ (ranging from 0 to 6). The bottom panel shows the ratio of the gap fraction to the ATLAS data, with shaded regions indicating uncertainty bands.

$ \Delta y $	ATLAS (Gap Fraction)	Pythia 8.205 default (Gap Fraction)	Pythia 8.205 default-noCR (Gap Fraction)	Ratio to ATLAS (Default)	Ratio to ATLAS (noCR)
0.3	0.95	0.95	0.95	1.0	1.0
0.8	0.78	0.78	0.78	1.0	1.0
1.3	0.65	0.62	0.65	0.95	1.0
1.8	0.55	0.58	0.55	1.05	1.0
2.3	0.48	0.52	0.45	1.08	0.9
2.8	0.38	0.35	0.35	0.92	0.85
3.3	0.35	0.35	0.35	1.0	1.0
3.8	0.32	0.32	0.32	1.0	1.0
4.3	0.33	0.45	0.25	1.35	0.7
4.8	0.35	0.42	0.22	1.2	0.6
5.8	0.0	-	-	-	-