

Figure 1 is a plot showing the ratio of tracking particles to TP hits versus the number of simulated particles (N of sim). The top panel shows the ratio on a logarithmic scale from 10^0 to 10^4 . The bottom panel shows the ratio on a linear scale from 0.95 to 1.05. The plot compares five different methods: DQM mkFit TT retrain (blue circles), DQM mkFit TT NEWdefault specPless1 (red circles), DQM mkFit TT NEWdefault specPless2 (black circles), DQM mkFit TT NEWdefault specPless3 (orange circles), and DQM mkFit TT NEWdefault specPless4 (purple circles). The ratio is generally around 1.0, with some fluctuations at lower N of sim values.

Reconstructed TPs

Ratio

TP hits

The figure consists of two vertically stacked plots sharing a common x-axis labeled 'TP layers' ranging from 0 to 25.

The top plot has 'Tracking Particles' on the y-axis, which is on a logarithmic scale from 10^2 to 10^4 . The data points, represented by black squares with error bars, show a general increase from approximately 10^3 at layer 0 to a peak of about 5×10^3 around layer 12, followed by a sharp decline to approximately 10^2 by layer 25.

The bottom plot has 'Ratio' on the y-axis, which is on a logarithmic scale from 0.95 to 1.05. The data is shown as a series of vertical grey bars with a horizontal red line at the ratio of 1.0. The bars fluctuate around the 1.0 line, with a slight downward trend starting around layer 15, reaching approximately 0.97 by layer 25.

Figure 10 is a log-linear plot showing the ratio of TrackingParticles to TP pixel layers. The y-axis is logarithmic, ranging from 0.95 to 10^5 . The x-axis is linear, ranging from 0 to 8. Data points are shown as red circles with black error bars. A horizontal line is drawn at Ratio = 1.0. Shaded gray regions represent the uncertainty bands for the data points.

TP pixel layers	Ratio (approx.)
0	1.2
1	1.5
2	2.5
3	12
4	60
5	12
6	0.6
7	1.5

Figure 10 is a log-linear plot showing the ratio of reconstructed TPs to the number of TP pixel layers. The x-axis is labeled 'TP pixel layers' and ranges from 0 to 8. The y-axis is labeled 'Ratio' and is on a logarithmic scale from 0.95 to 100. Data points with error bars are plotted for 3, 4, and 5 layers. A shaded gray region highlights the area where the ratio is between 1 and 5 for 3 to 5 layers. A horizontal line is drawn at Ratio = 1.

TP pixel layers	Ratio (approx.)
3	1.0
3	25
4	1.0
4	50
5	0.5
5	25

Figure 1 consists of two vertically stacked plots sharing a common x-axis labeled 'TP 3D layers' ranging from 0 to 20.

The top plot shows 'TrackingParticles' on a logarithmic y-axis from 10^2 to 10^4 . Data points are represented by black crosses with horizontal error bars. The number of tracking particles starts around 10^3 at layer 0, peaks near 10^4 between layers 4 and 10, and then decreases sharply to around 10^2 by layer 16.

The bottom plot shows 'Ratio' on a logarithmic y-axis from 0.95 to 1.05. Data points are represented by black crosses with horizontal error bars. The ratio is mostly stable around 1.0, with a slight dip around layer 14 and a significant drop to approximately 0.97 at layer 16.

Figure 1 consists of two vertically stacked plots sharing a common x-axis labeled 'TP 3D layers' ranging from 0 to 20. The top plot shows 'Reconstructed TPs' on a logarithmic y-axis from 0.5 to 20. It displays data points with vertical error bars, showing an increasing trend from approximately 2.5 at 3 layers to about 18 at 8 layers, followed by a slight decrease and then a sharp drop to around 3 at 13 layers. The bottom plot shows the 'Ratio' on a linear y-axis from 0.95 to 1.05. It features a horizontal line at 1.0 and shaded gray regions representing the confidence interval, which is wider for lower numbers of layers and narrows as the number of layers increases, reaching a minimum width around 8 layers.