

Update on TKR MIP response with recent MC

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New MC proton runs with strip noise occupancy $5 \cdot 10^{-6}$

Runs (identified by the text color):

- **1423**: 6 GeV/c protons of tower 3, normal incidence
Data v7r1215p0 - MC v8r130101p1
- **2363**: 100 GeV/c protons of tower 2, normal incidence
Data v7r1215p0 - MC v8r130101p1
- **752**: μ of tower 3, normal incidence
Data v6r0922p4

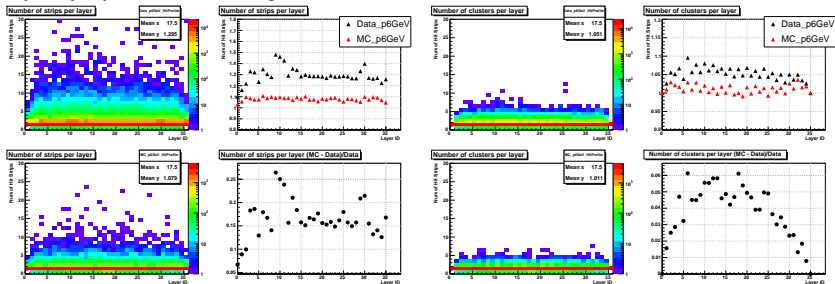
MIP selection:

- `CalEnergyRaw > 5 && CalCsIRLn > 4 && TkrNumTracks == 1`
- `CalNumHit[1] == 0 && CalNumHit[BADTWR] == 0 && CalNumHit[GOODTWR] == 8`
- `TkrNumClusters[GOODTWR][0][1] == 1 && TkrNumClusters[GOODTWR][17][1] == 1`
- `EventGtccFifo == 0`

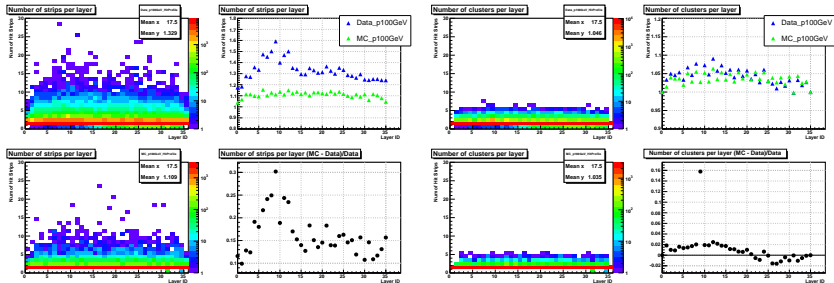
For μ only:

`Tkr1X0 < 730 && Tkr1X0 > 380 && Tkr1Y0 < 150 && Tkr1Y0 > -150 && Tkr1ZDir < -.95`

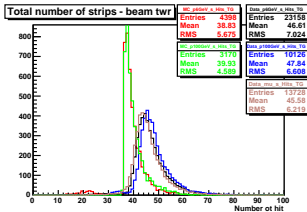
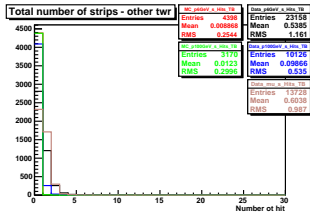
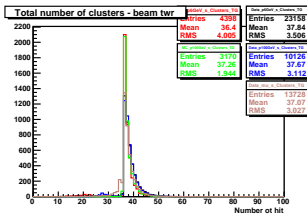
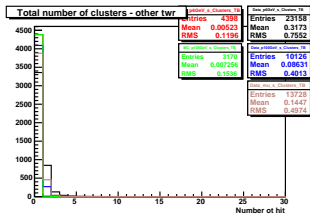
Layer by layer Data vs MC agreement:

Average number of hit strips: $\sim 15 \%$ Average number of clusters: $\sim 5 \%$

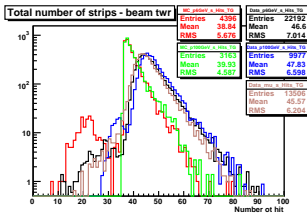
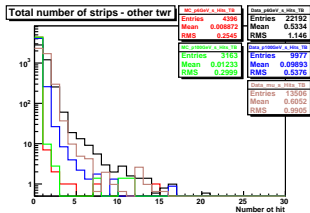
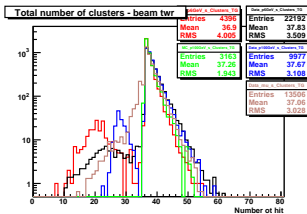
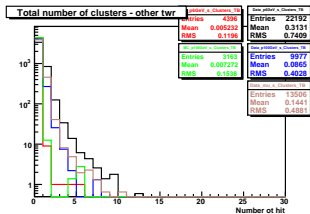
Layer by layer Data vs MC agreement:

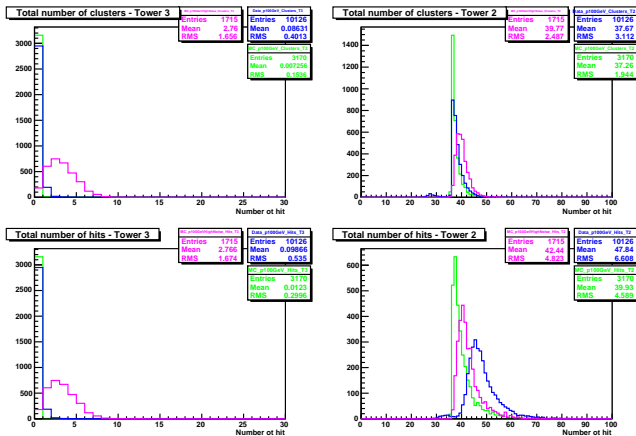
Average number of hit strips: $\sim 15\%$ Average number of clusters: $\sim 2\%$

Cluster Hit summary

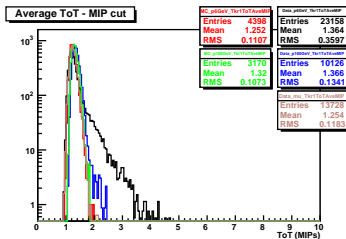
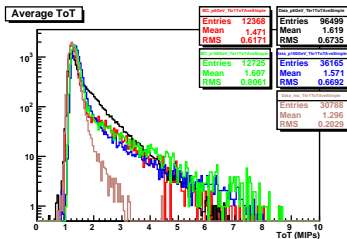
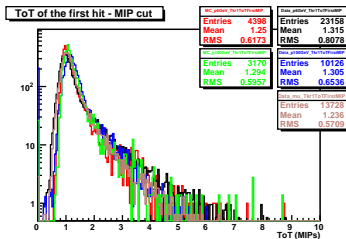
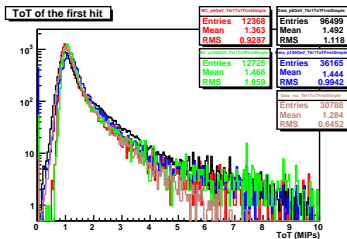


Same as previous slide, but with log scale





Previous MC **v7r1215p0** with noise occupancy $5 \cdot 10^{-5}$: about 2.7 noisy strips per event.



Plots on the left are with “simple” selection:

CalEnergyRaw > 5 && *CalCsIRLn* > 4 && *TkrNumTracks* == 1