

MCS Update

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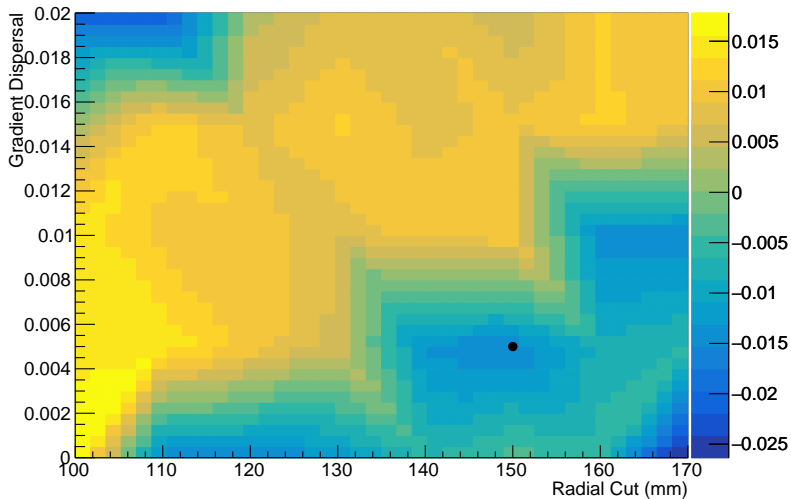
October 21, 2016

Fiducial Selection Update

- ▶ Acts on projection of upstream tracks to downstream.
- ▶ Fiducial selection includes a gradient term to contain potential scattering.
 - ▶ projection must be within 150 mm at DS plane 0.
- ▶ Fiducial angle should be half the measured scattering width for measurement.
 - ▶ Worst case; 25 mrad at 172 MeV/c.
 - ▶ Fiducial angle should be 12.5 mrad.

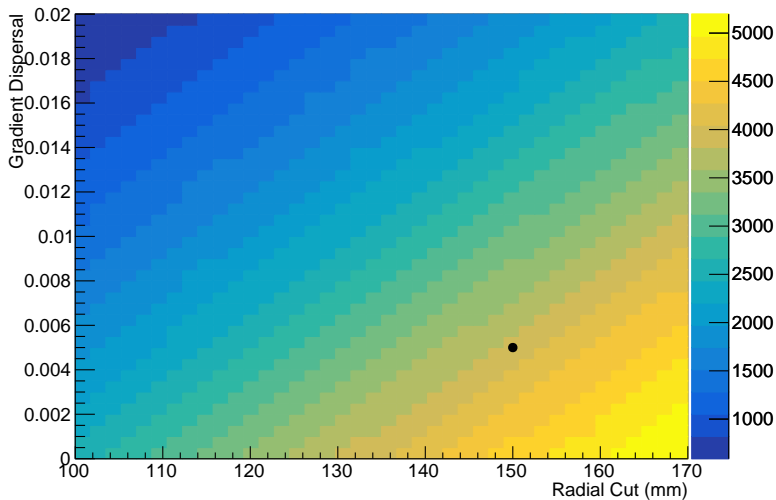
Effect of Fiducial Selection on 3-172 MeV/c beam

Difference between counts in left and right tails



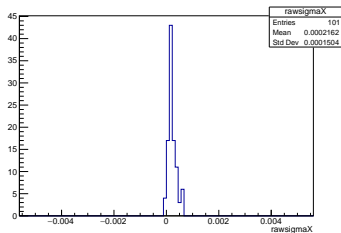
Effect of Fiducial Selection on 3-172 MeV/c beam

Number of Events Surviving Selection

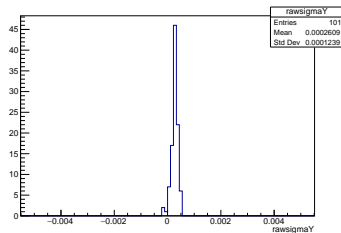


Alignment Systematic Evaluation

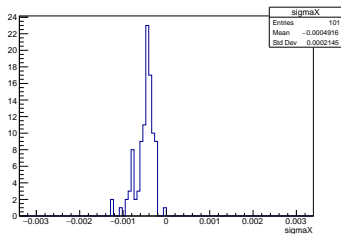
Raw $\sigma_{\theta X}$ distribution



Raw $\sigma_{\theta Y}$ distribution



$\sigma_{\theta X}$ distribution



$\sigma_{\theta Y}$ distribution

