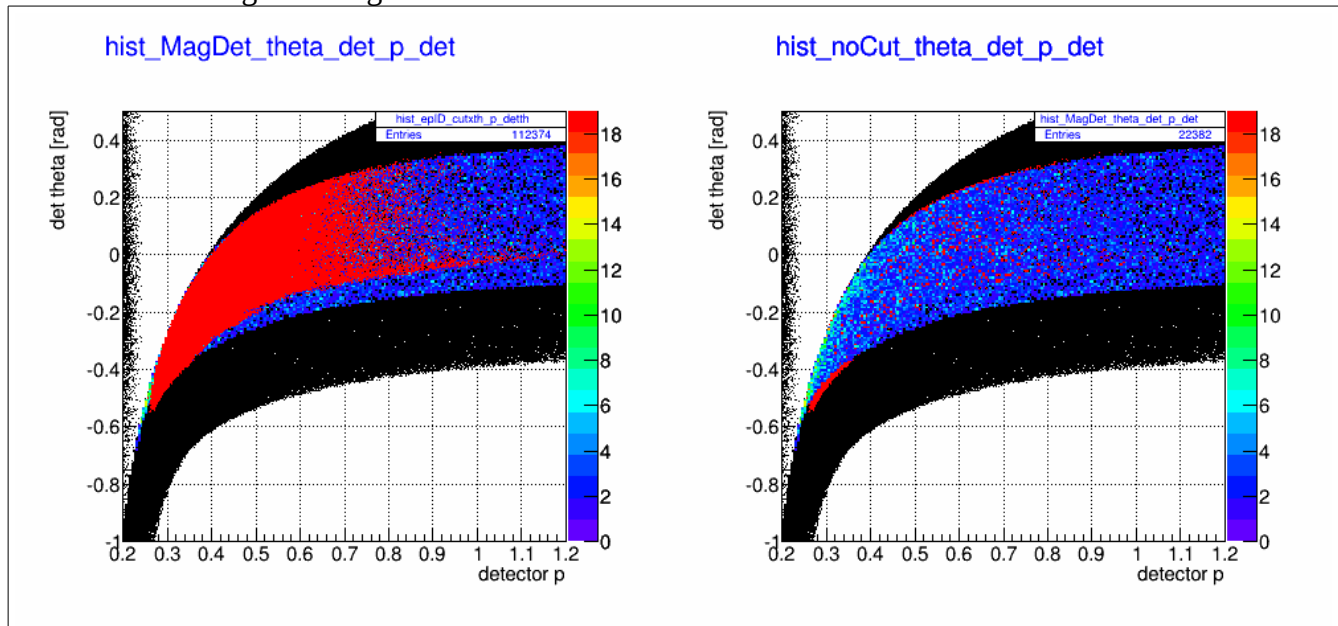


I. Testing the simulation with the data

Sum All Cuts: Magnetic height & active area of MWDC1&MWDC2&TP



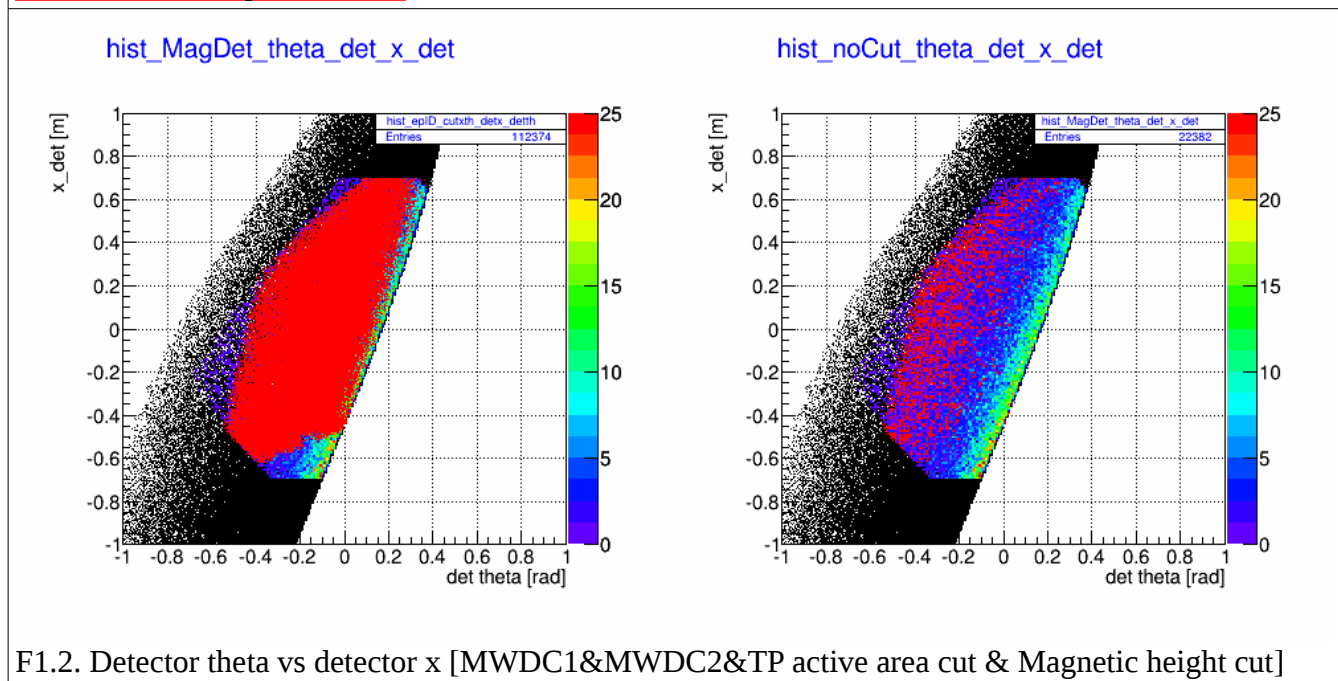
F1. Detector theta vs detector momentum

[MWDC1&MWDC2&TP active area cut & Magnetic height cut]

Black: simulation with no cut

Blue: Simulation with MWDC1&MWDC2&TP active area cut & Magnetic height cut

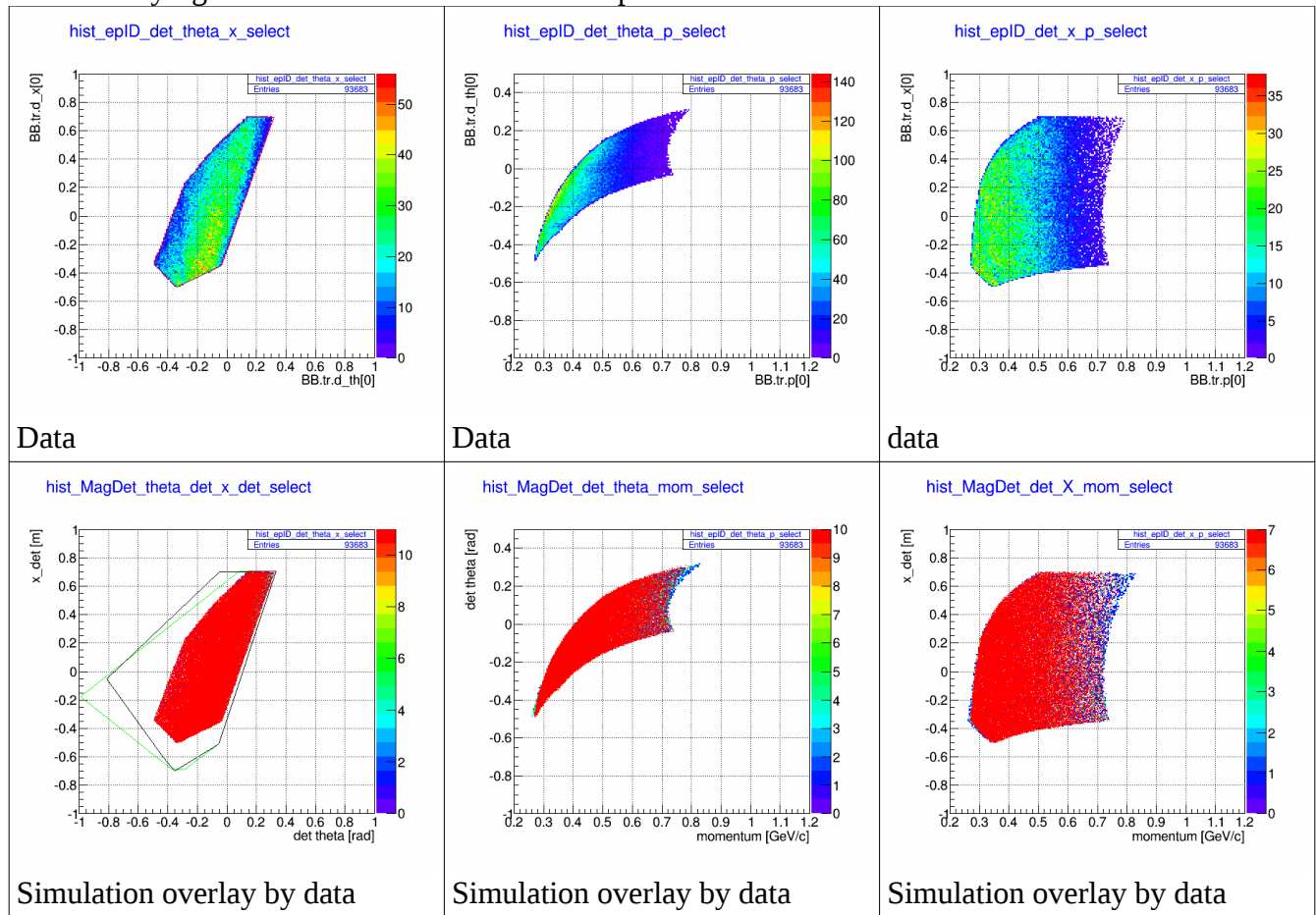
Red: Reconstruct proton data.



F1.2. Detector theta vs detector x [MWDC1&MWDC2&TP active area cut & Magnetic height cut]

The data are “within” the area of the simulation.

Make a very tight cut into the actual data and impose the same cut on simulation.

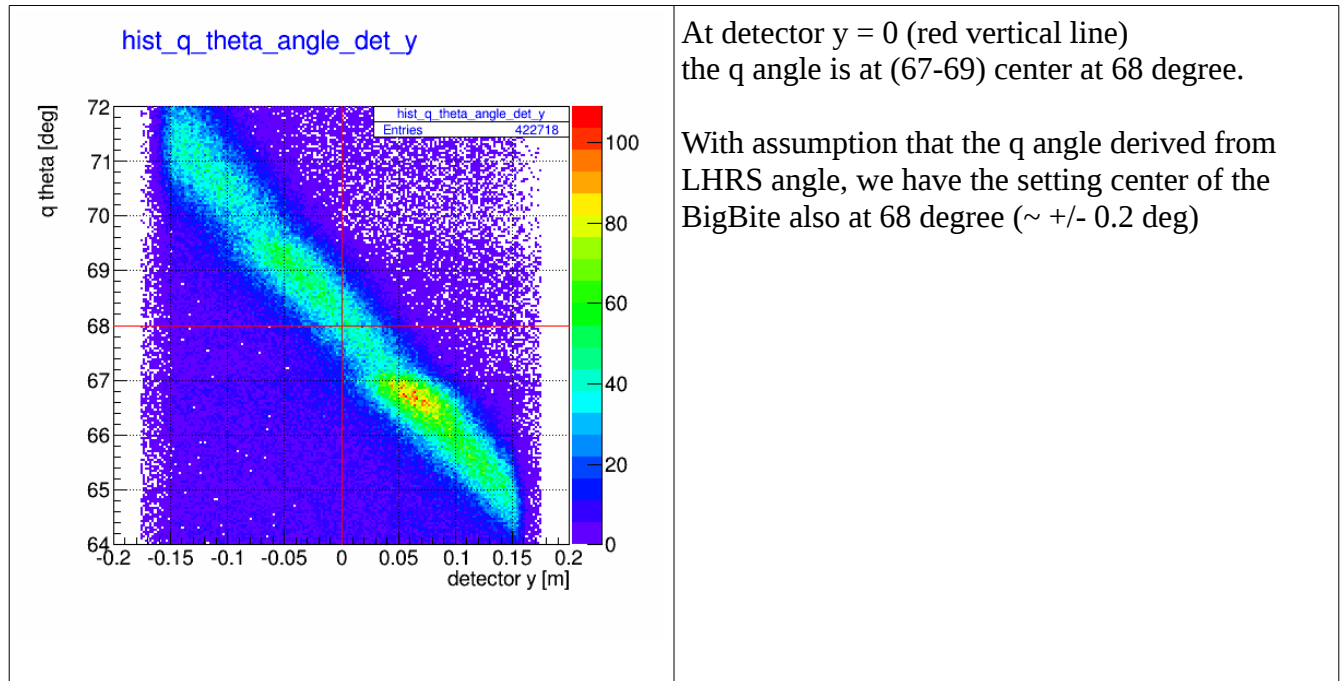


The simulation & the data are almost the same shape with the same cut.

II. testing the elastic q parameters with the simulation & the reconstruction of BB.

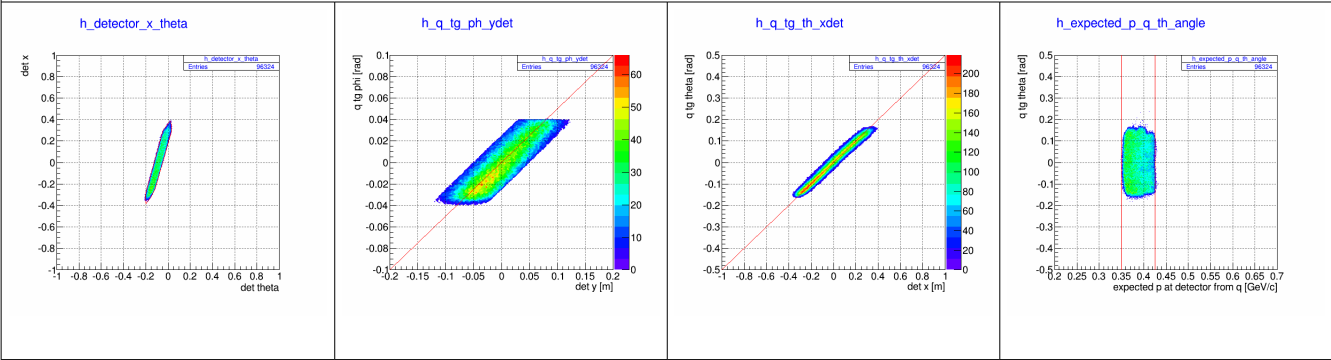
1. checking the q angle respected to the center angle of BB.

The q angle that coming into the center of Bigbite will hit at the center of the detector ($y \sim 0$).

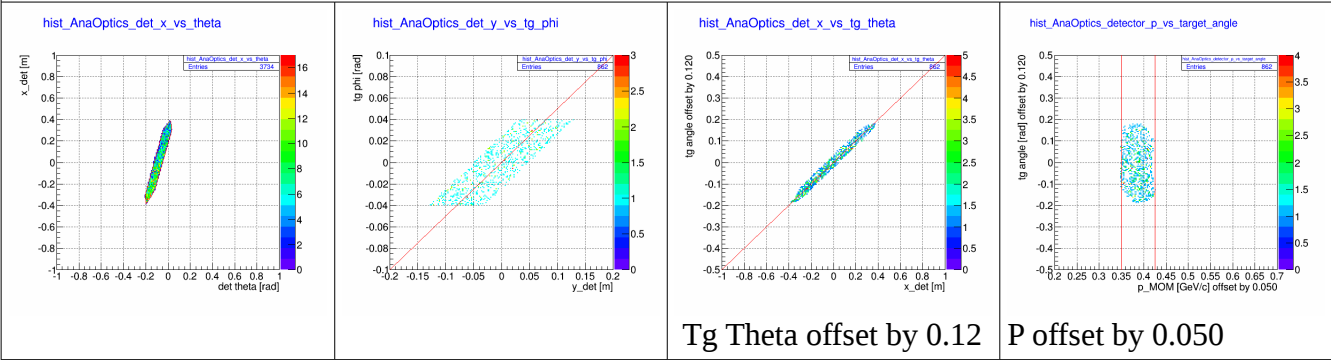


With this, we translate the scattering angles of q in term of in-plane and out-of-plane angles.

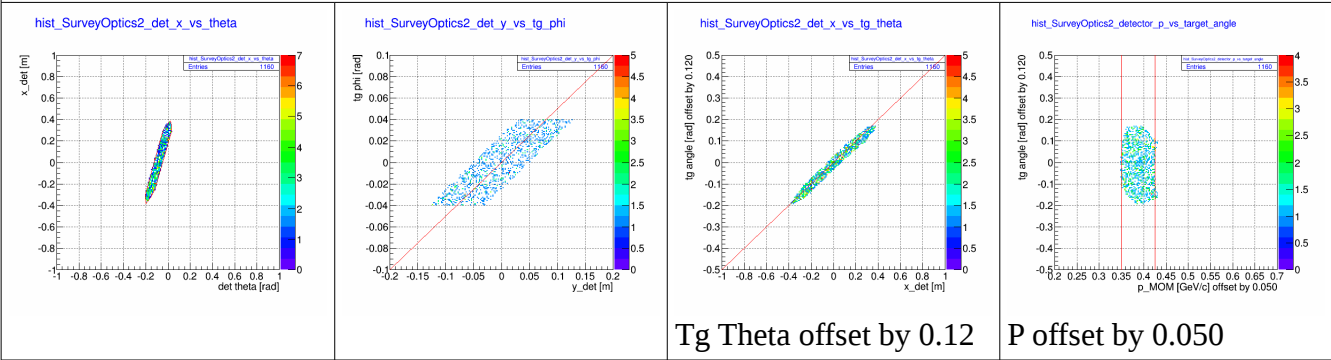
Elastic data at the center of BB



Simulation with same setting of the db



Simulation with change to actual location of detector but keep the same Magnet in db.



The reconstructions at the center of the BB give the same shape in term of tg angle and p with offset 0.12 and 0.050 respectively.

Expand to cover the sides of BB we have,

Elastic data :BB 68 degree cut $|\det_x| \leq 0.3$ && $|q_tg_phi| \leq 0.08$

			<p>With the offset by (-0.04945 in the db) plus -0.07344 = -0.123 rad (7 degree), the tg theta from q will be the same as BB tg theta. (at least at the center of BB 2033 run)</p>
<p>Expect vs reconstruct</p>			
	<p>det_phi = $(0.3625)*det_y - 0.0025$</p>	<p>Expect vs reconstruct</p>	<p>** not fit *** why???</p>
		<p>The offset to momentum by -0.050 is ok for the center of BB but not at the sides.</p>	