

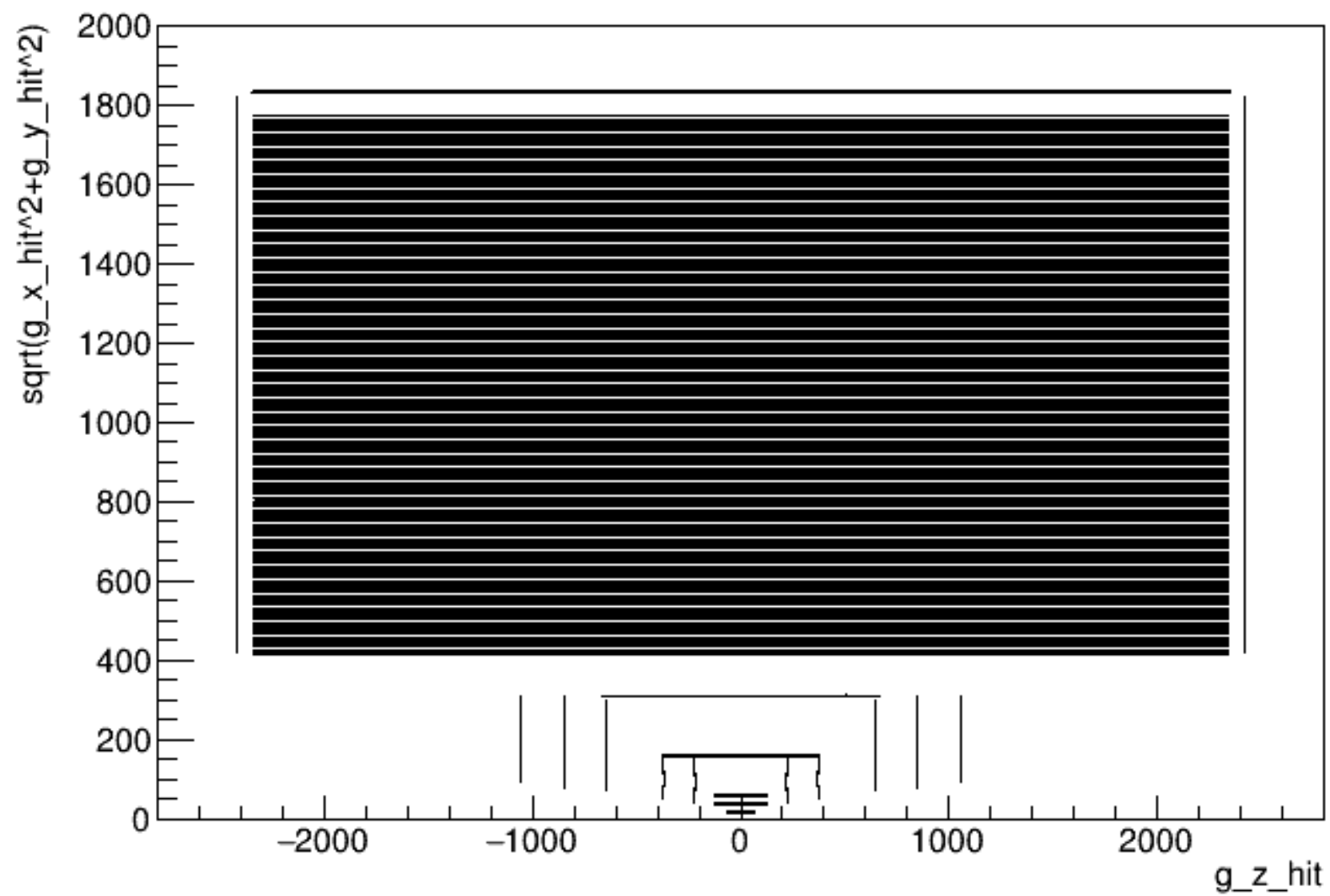
Weekly Report

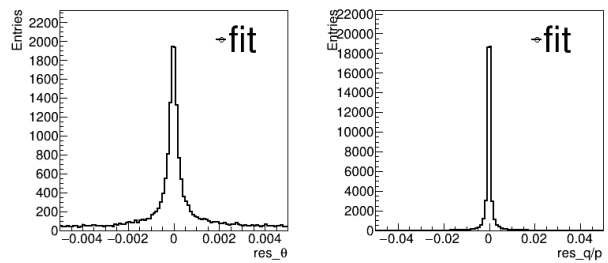
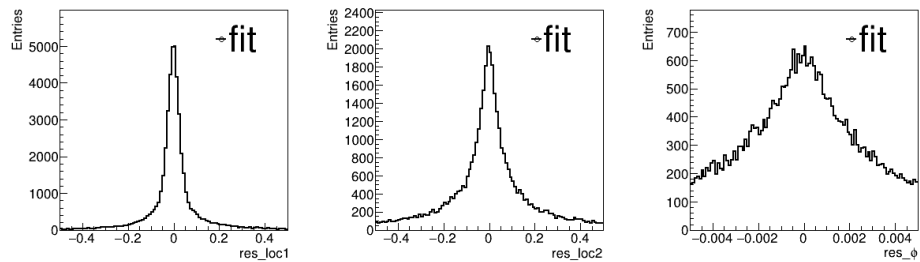
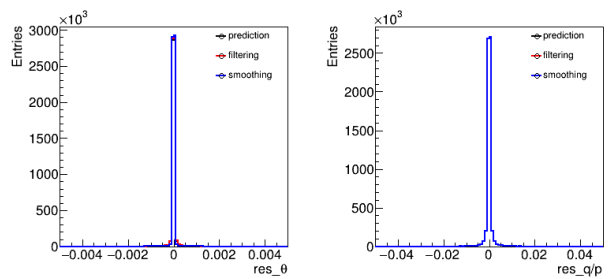
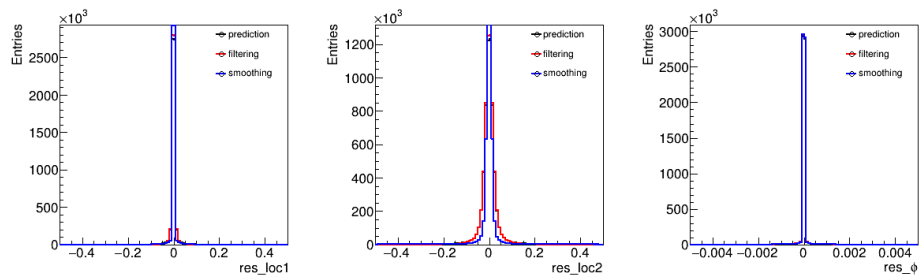
Yebo

2020.06.16

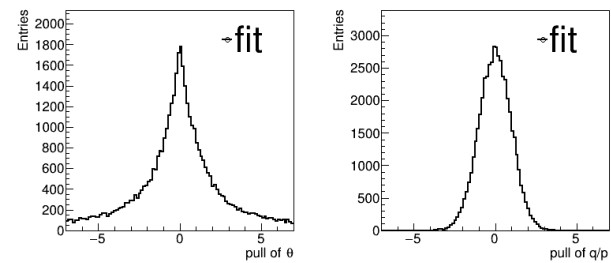
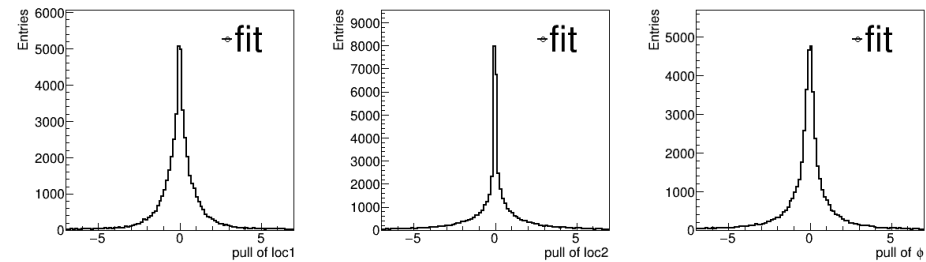
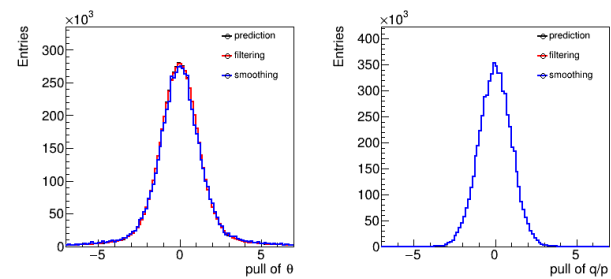
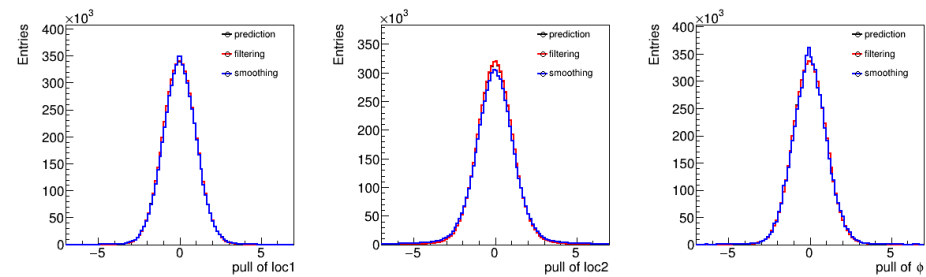
```
./ActsSimFatrasDD4hep \  
--evg-input-type gun \  
--dd4hep-input ../../Detectors/DD4hepDetector/compact/CEPC/cepc_v04_master.xml \  
--dd4hep-envelopeR 0.1 \  
--dd4hep-envelopeZ 0.1 \  
--pg-pt-range 1 100 \  
--pg-phi-range -3.14159 3.14159 \  
--pg-eta-range -4 4 \  
--pg-nparticles 1000000 \  
--events 1 \  
--output-root 1
```

$\sqrt{g_{x_hit}^2 + g_{y_hit}^2} : g_{z_hit}$





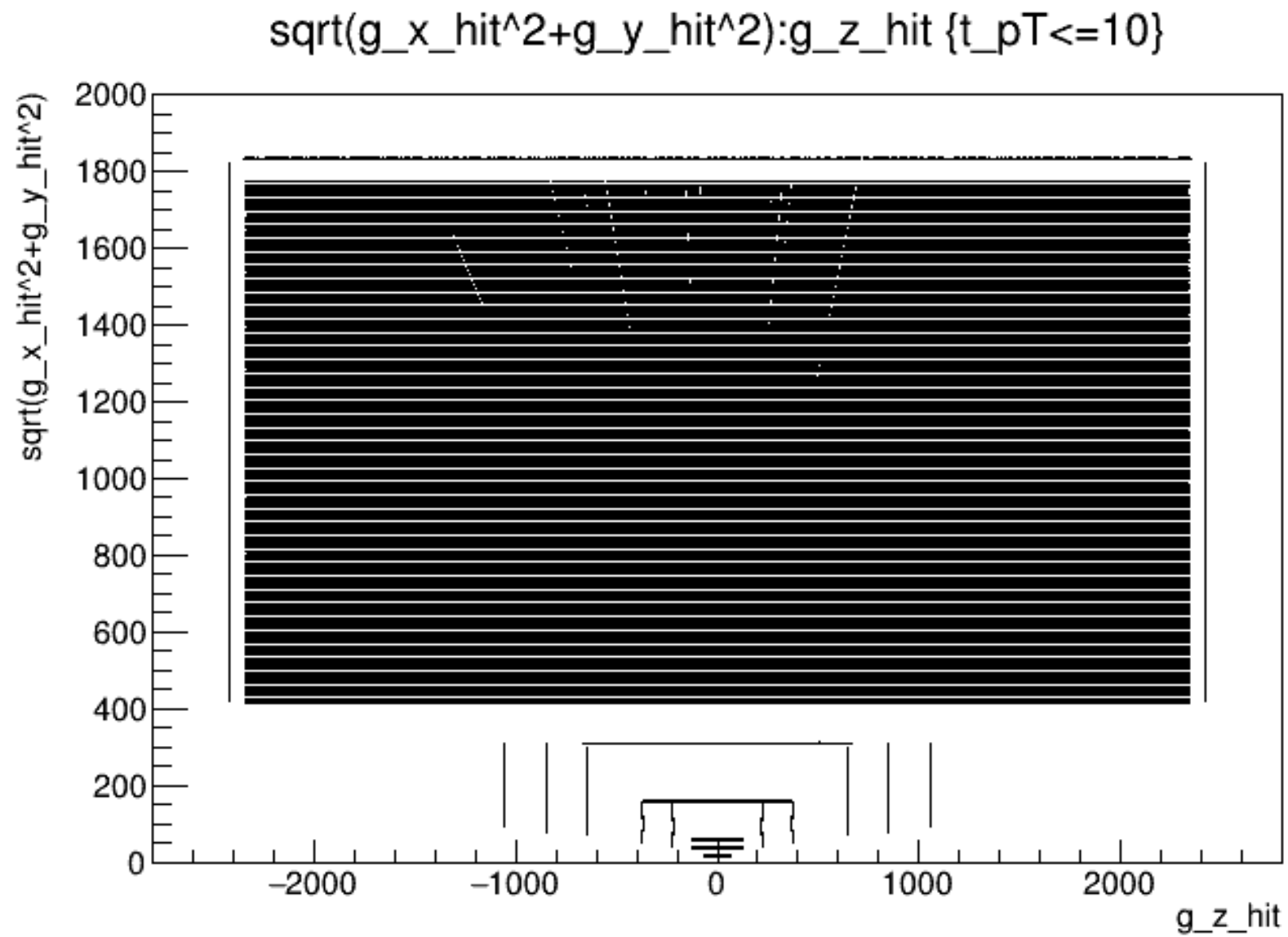
residual



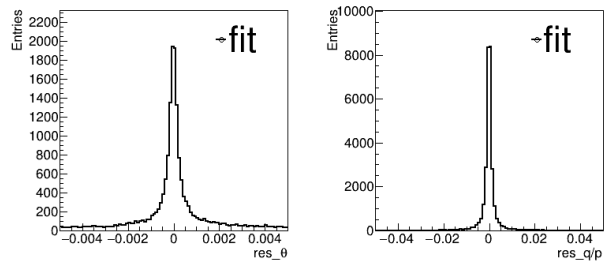
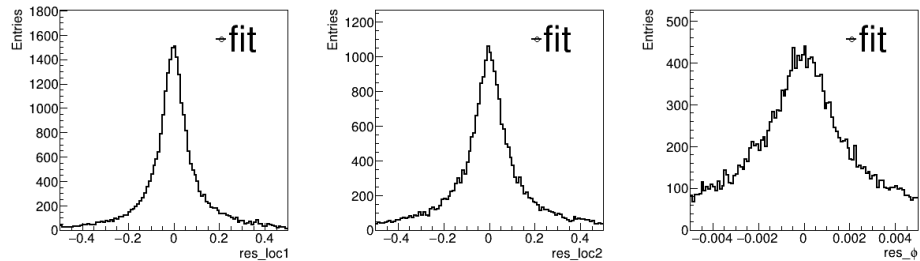
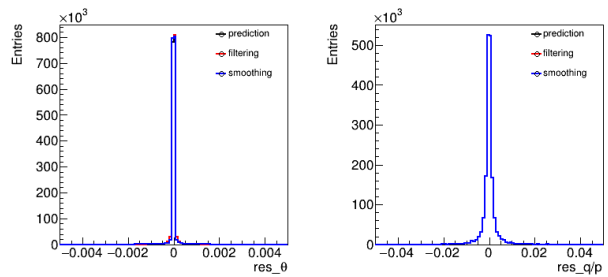
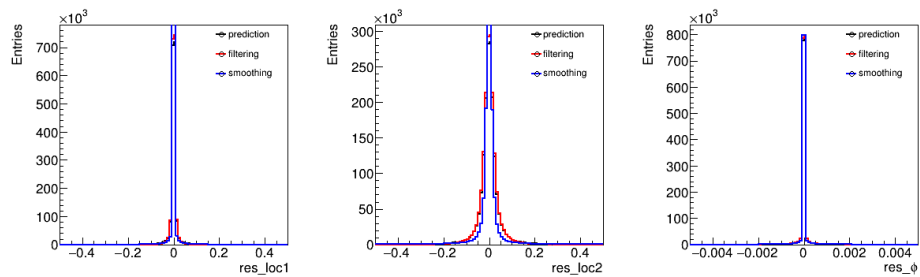
pull

*predict
filter
smooth*

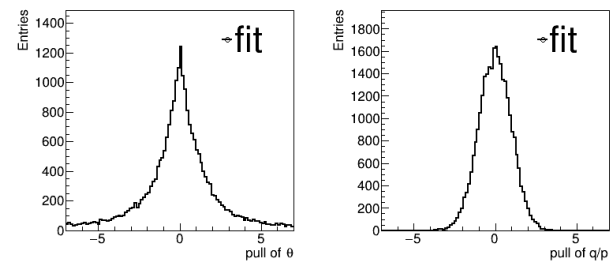
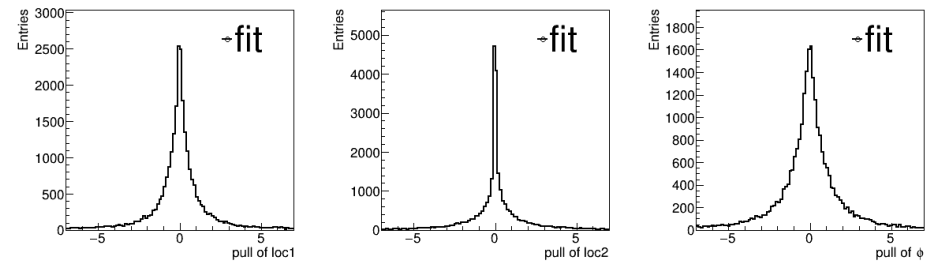
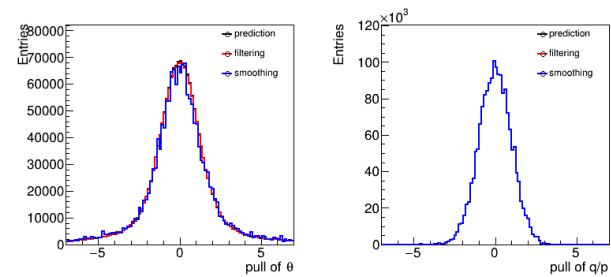
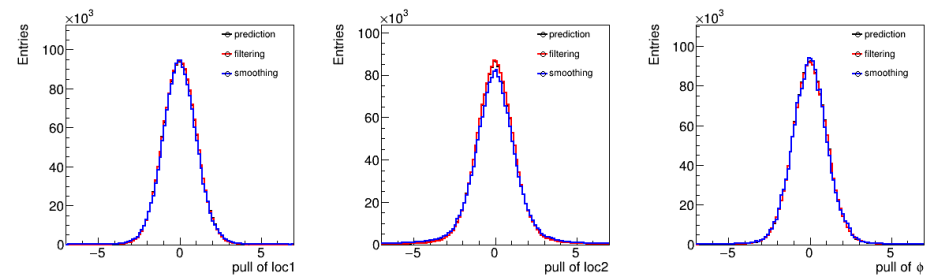
fit



$$p_T \leq 10$$



residual

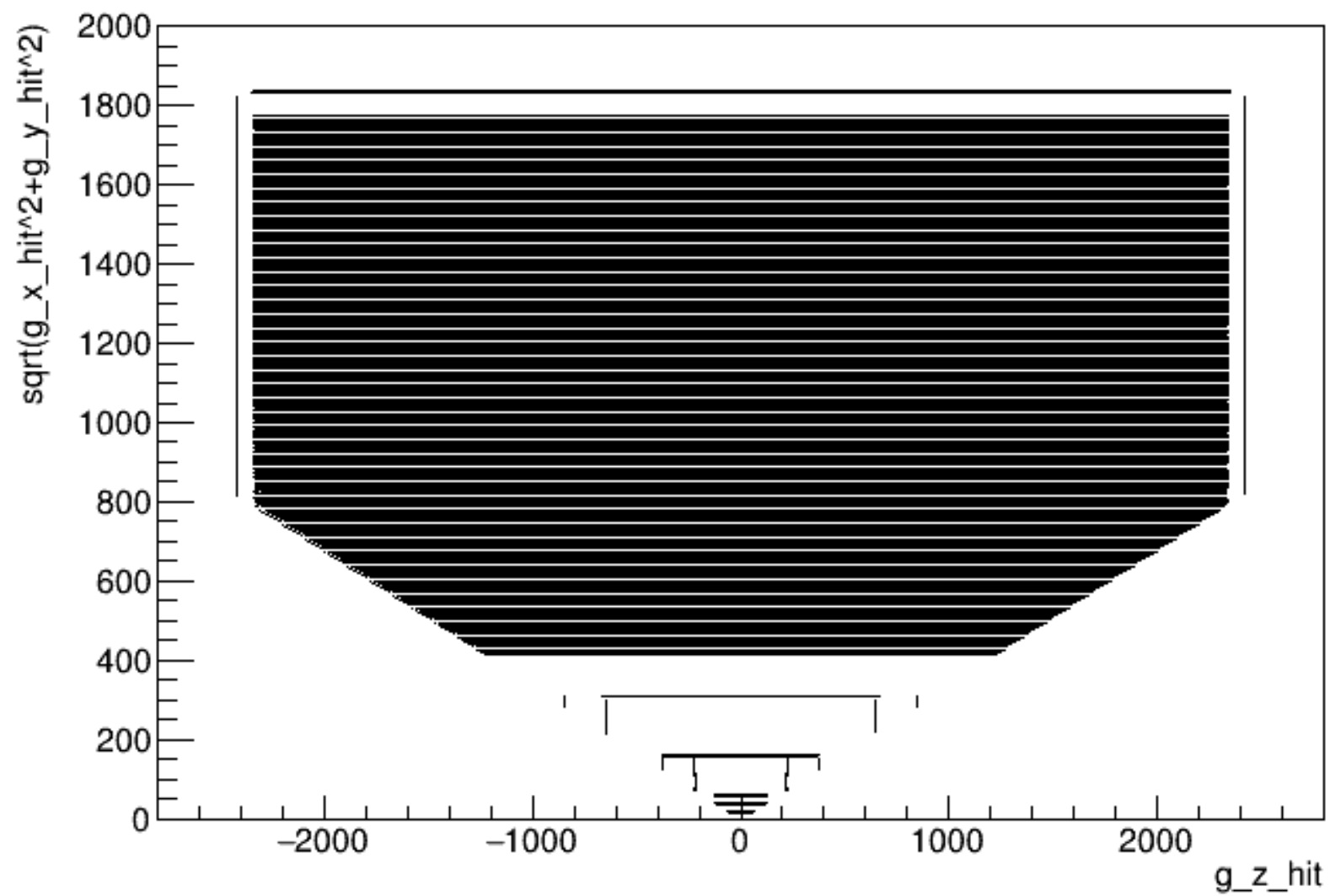


pull

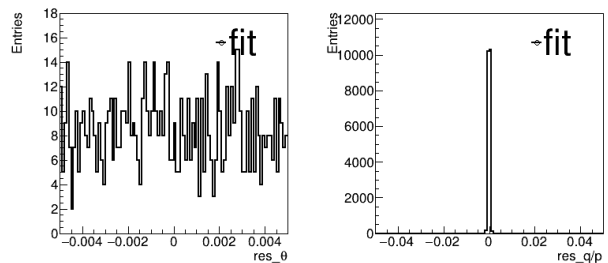
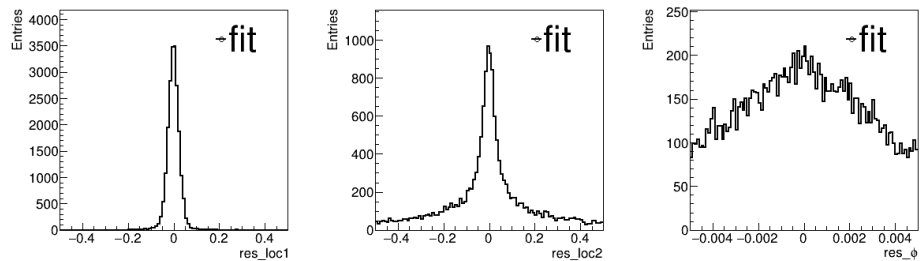
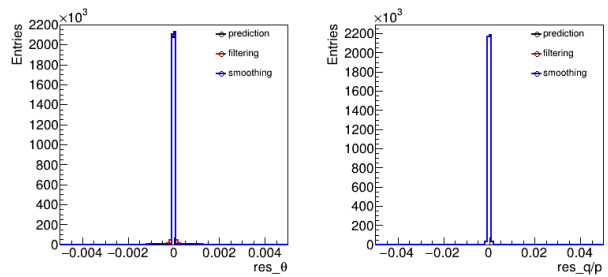
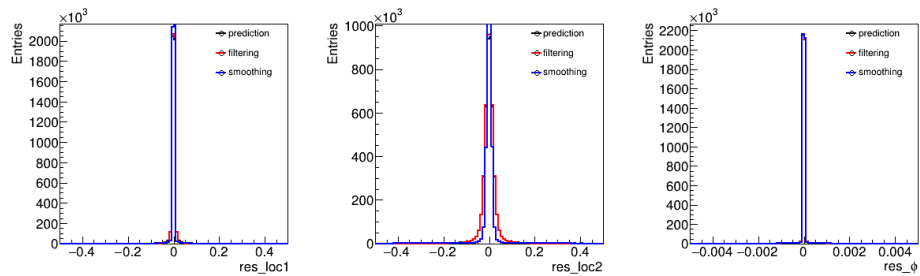
*predict
filter
smooth*

fit

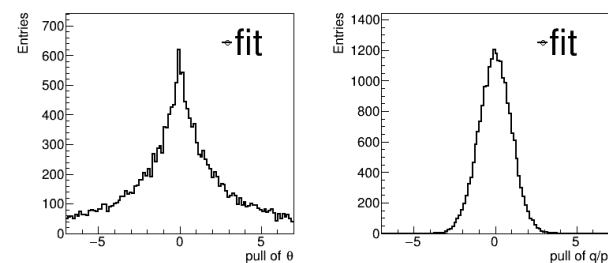
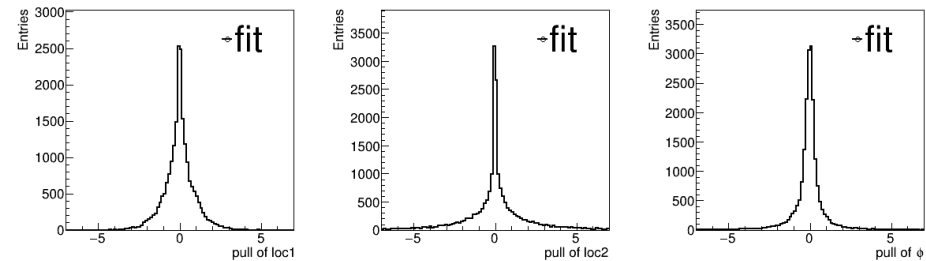
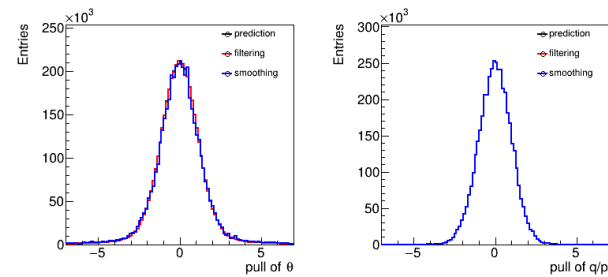
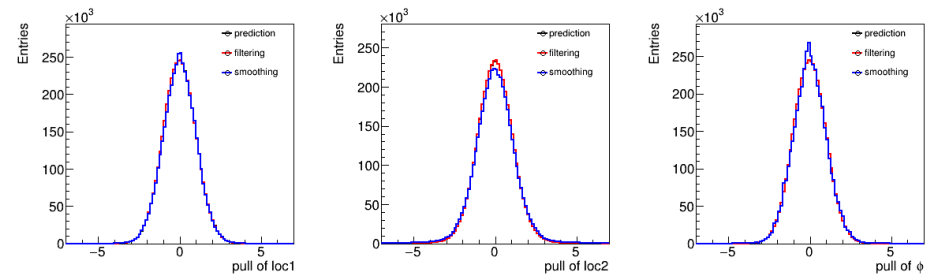
$\sqrt{g_{x_hit}^2 + g_{y_hit}^2} : g_{z_hit} \{t_{pT} > 10\}$



$p_T > 10$



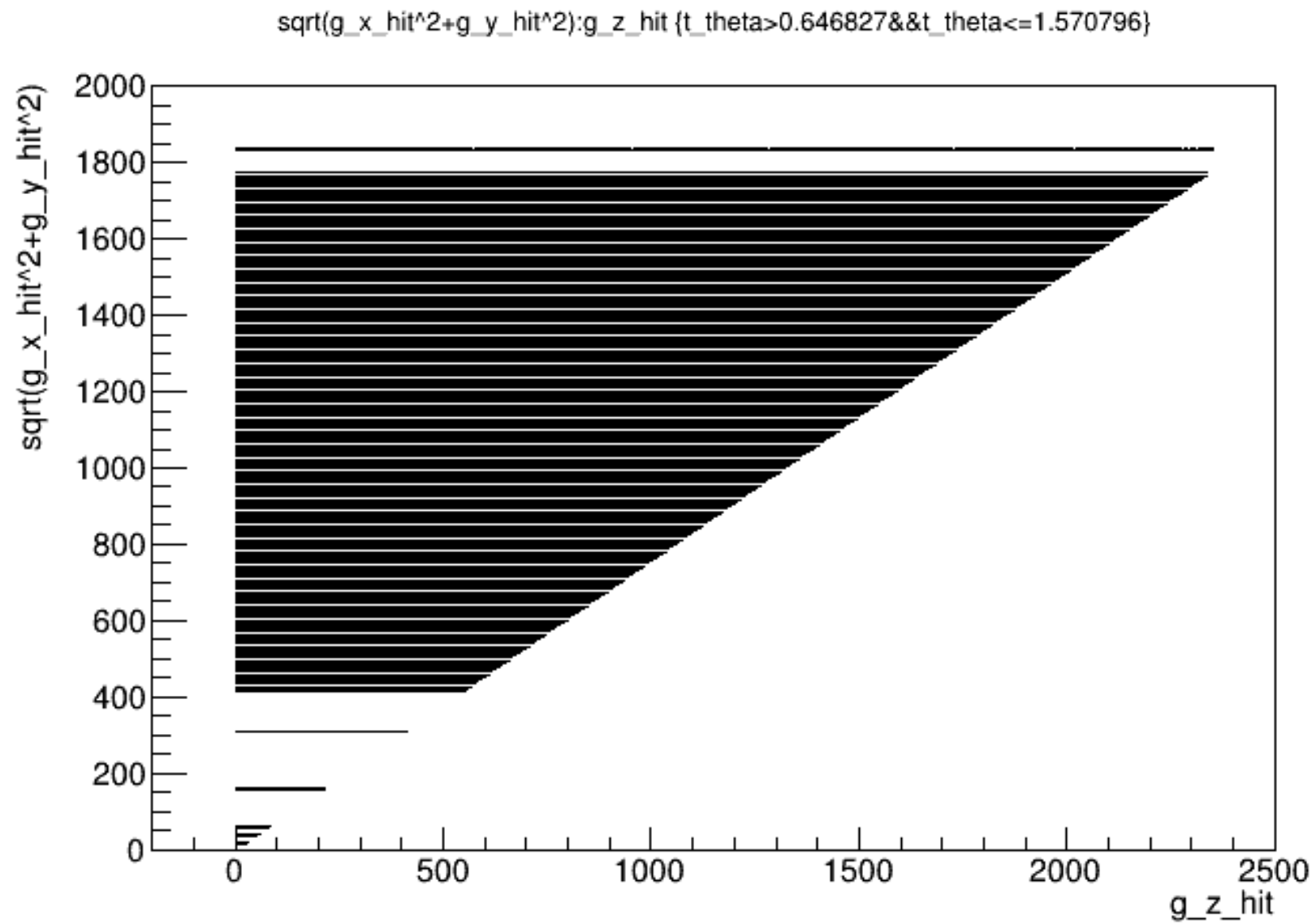
residual



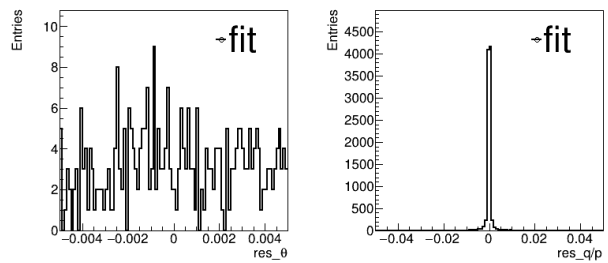
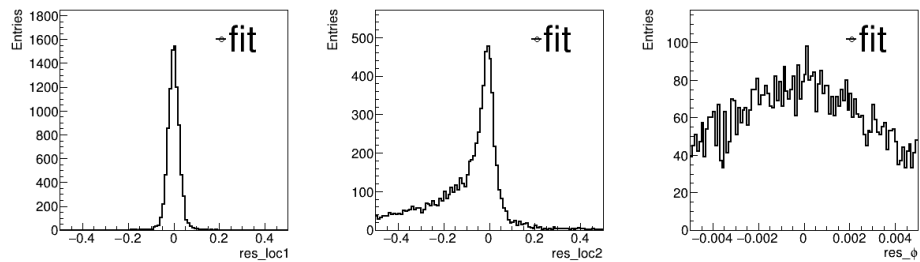
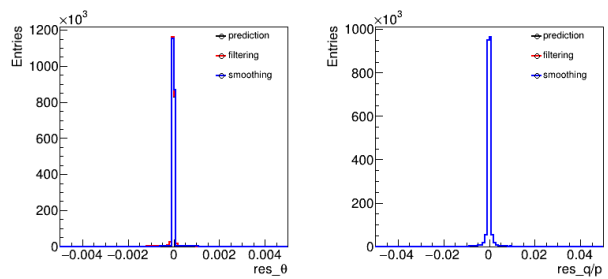
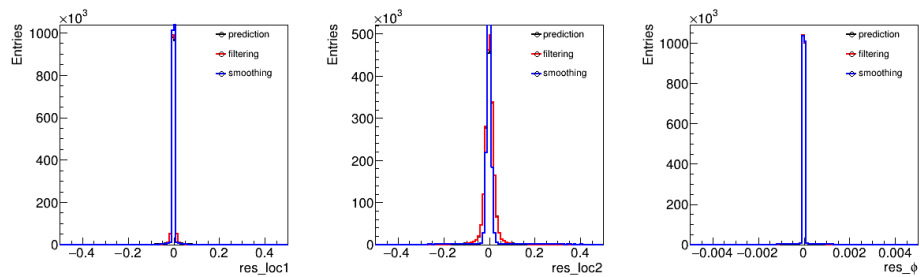
pull

*predict
filter
smooth*

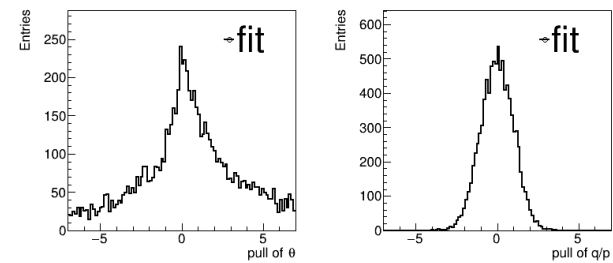
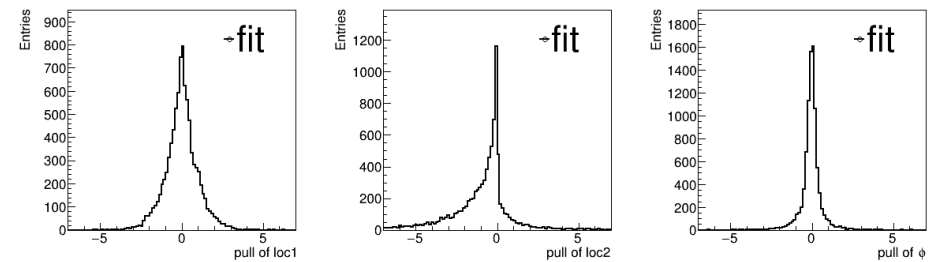
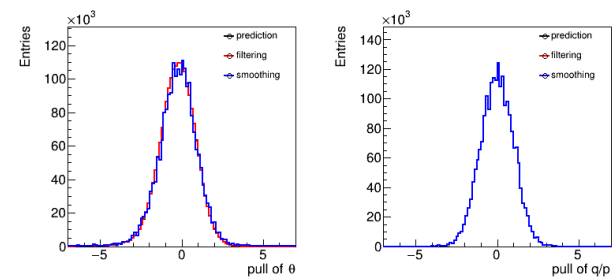
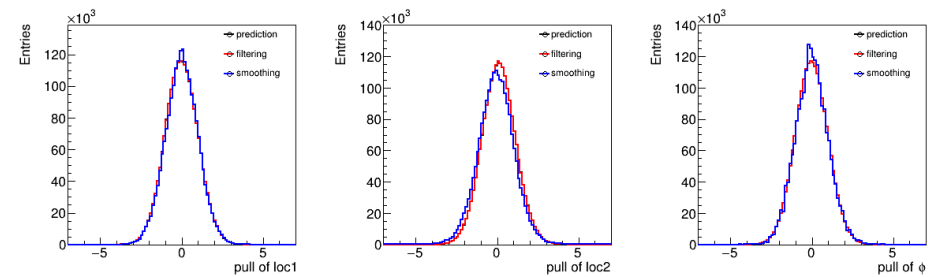
fit



$$0 < \cos\theta < 0.798$$



residual

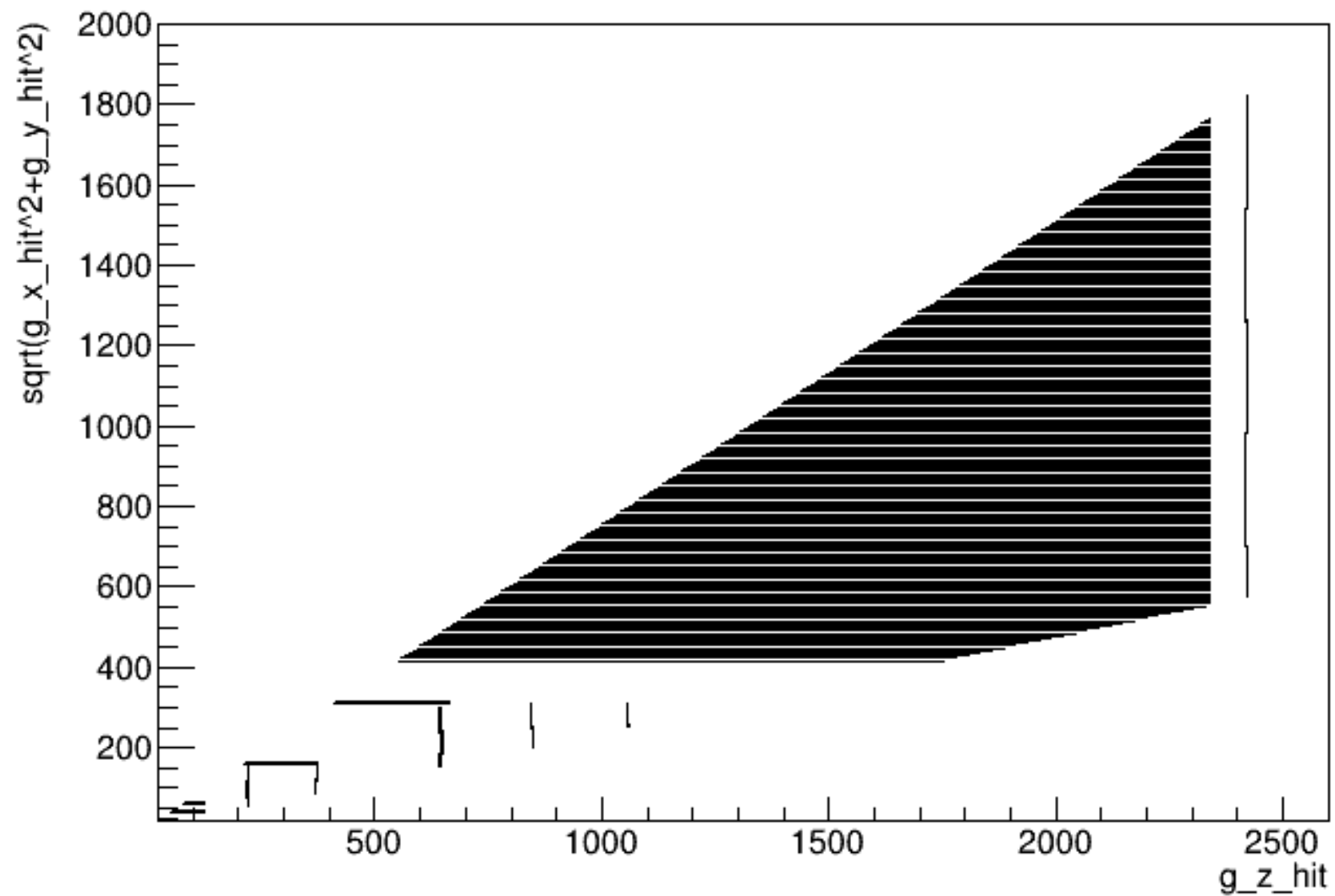


pull

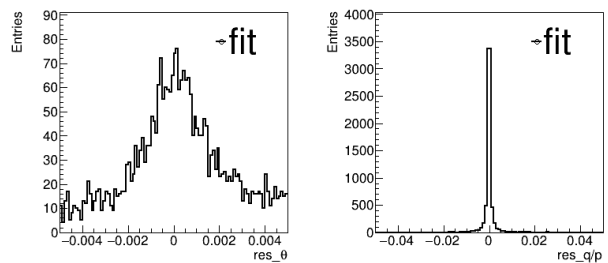
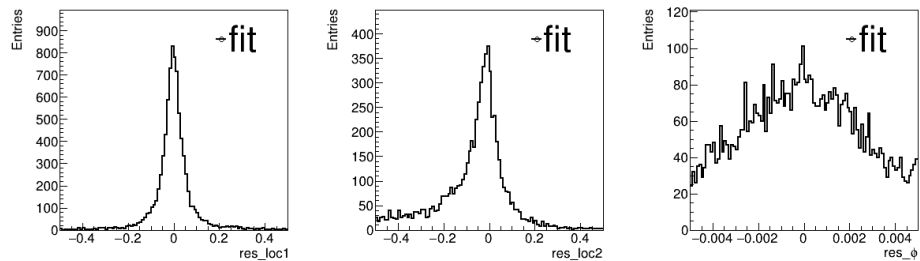
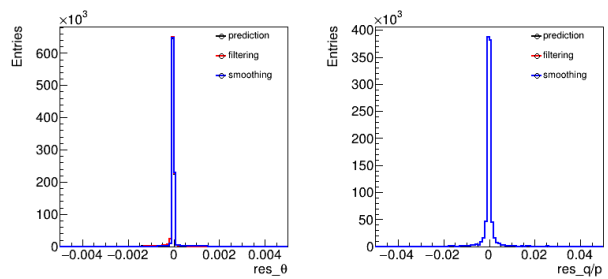
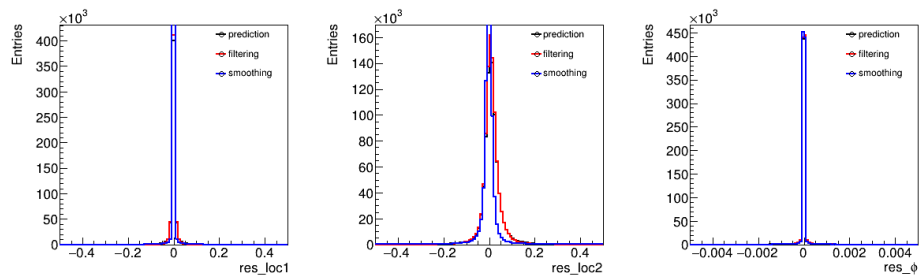
*predict
filter
smooth*

fit

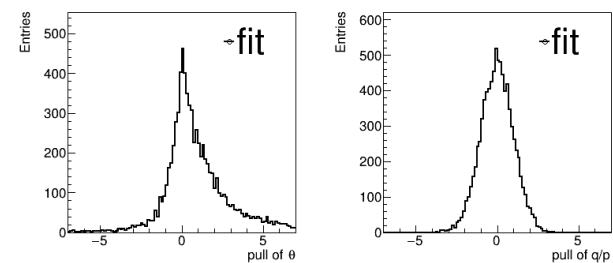
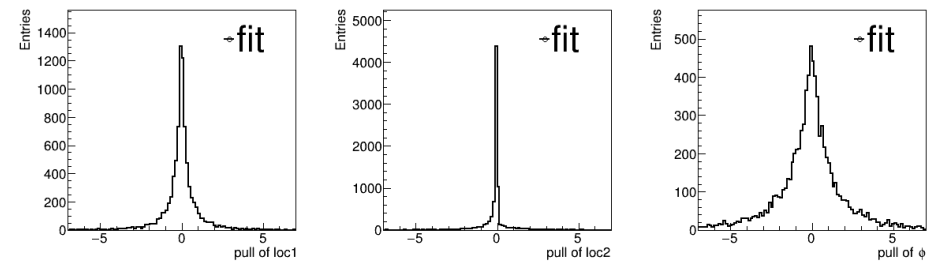
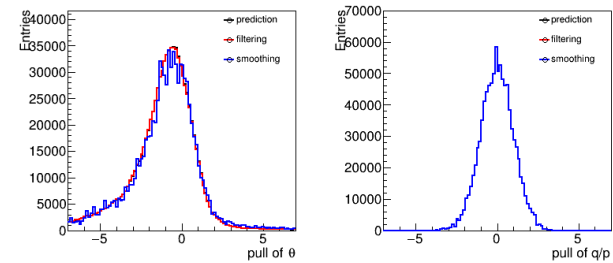
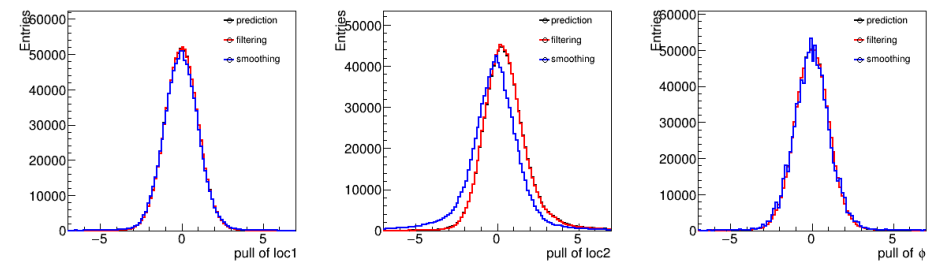
$\sqrt{g_{x_hit}^2 + g_{y_hit}^2} : g_{z_hit} \{t_{\theta} \geq 0.232905 \& t_{\theta} \leq 0.646827\}$



$$0.798 < \cos\theta < 0.973$$



residual

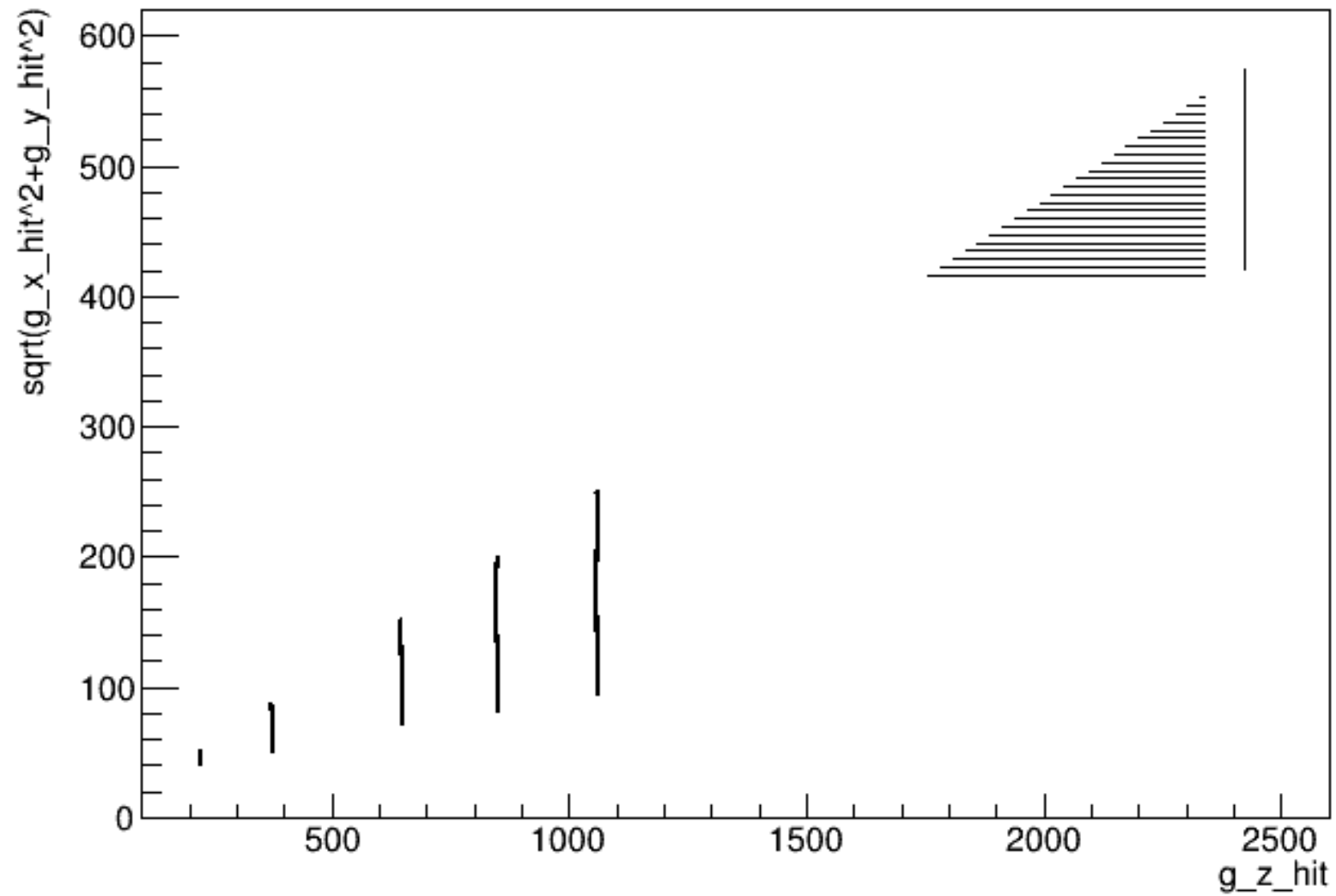


pull

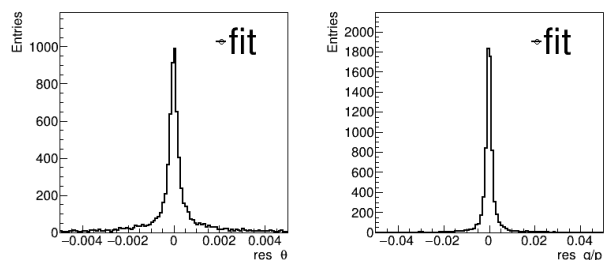
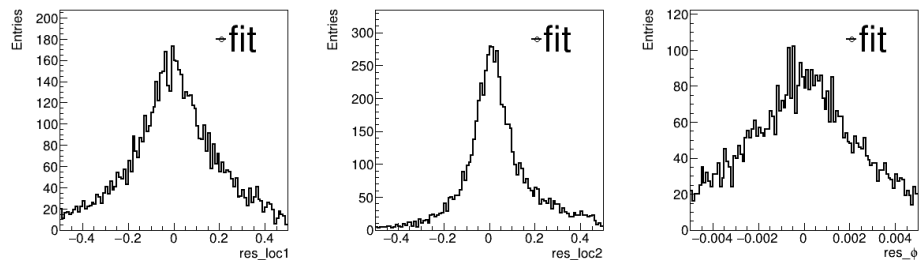
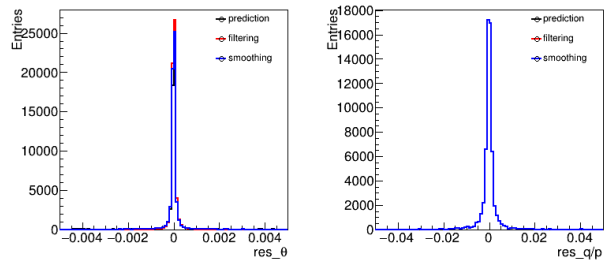
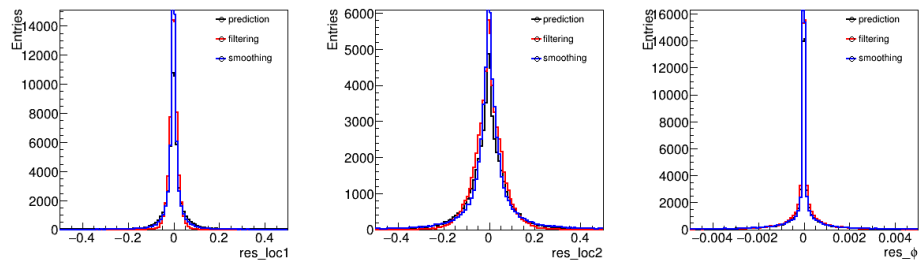
*predict
filter
smooth*

fit

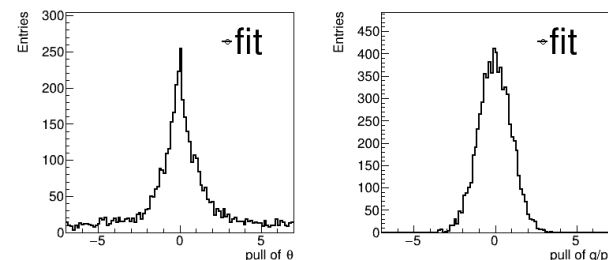
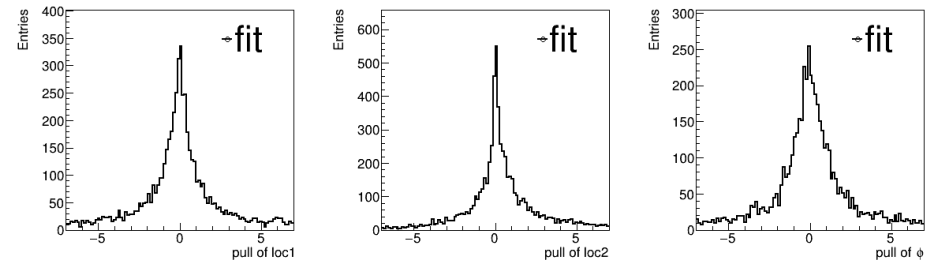
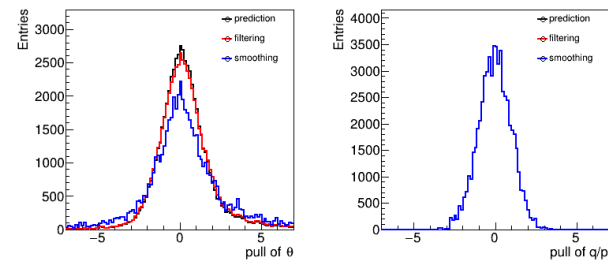
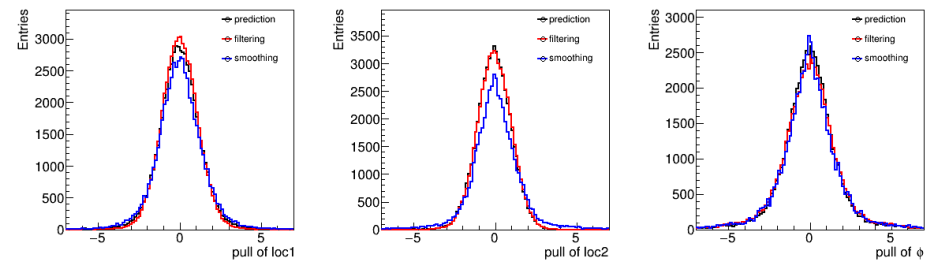
$\sqrt{g_{x_hit}^2 + g_{y_hit}^2} : g_{z_hit} \{t_{\theta} \geq 0 \& \& t_{\theta} < 0.232905\}$



$$0.973 < \cos\theta < 1$$



residual



pull

*predict
filter
smooth*

fit