Updates on PHG4KalmanPatRec

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Progress

- Fix bug: forgot to change to SvtxCluster::get_rphi_error() at one place.
- Updated tuning: Ready to run single particles
  - tested with 100 particles/event, > 0.5 GeV
- Next: central Hijing:
  - Initial vertexing - could be off several cm's
  - Too many ghost seeds: 750'000 seeds with 6/8 seeding
    - Takes too long for my seed cleaner to finish
  - Christof's seed cleaner started to work with other blocks this morning:
    - Testing

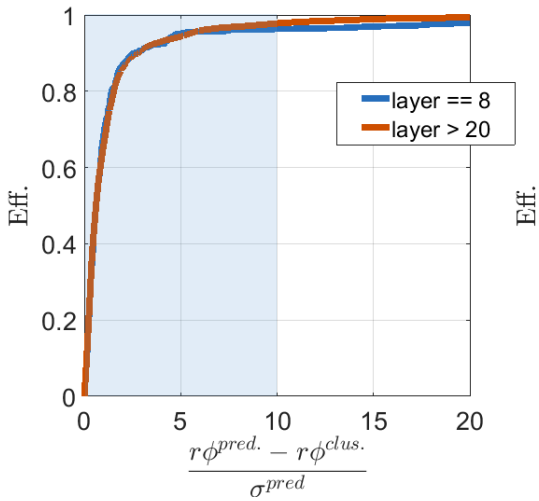
After bug fixing

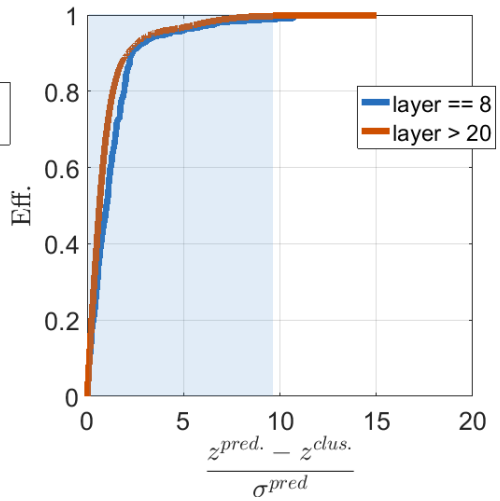
Search Win: 10
Chi2: 20

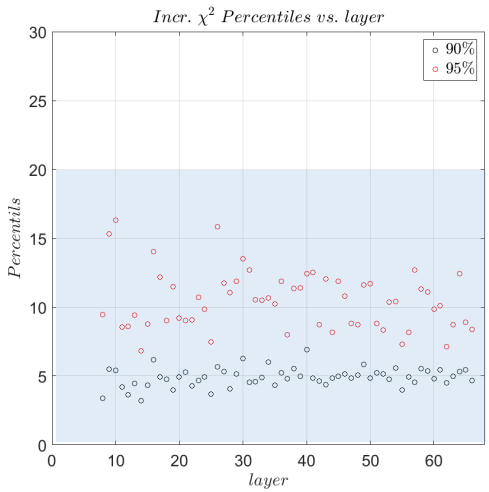
Search Win.

Chi2

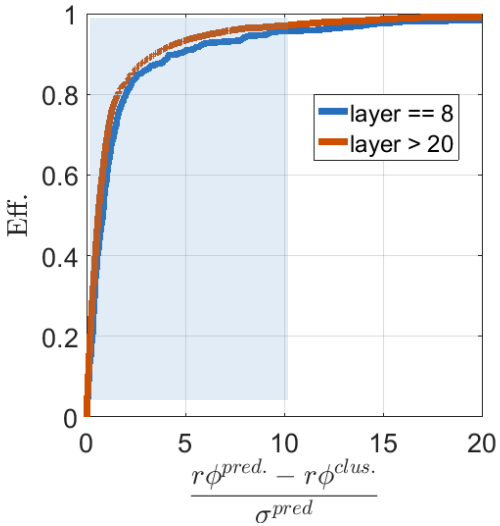
2GeV

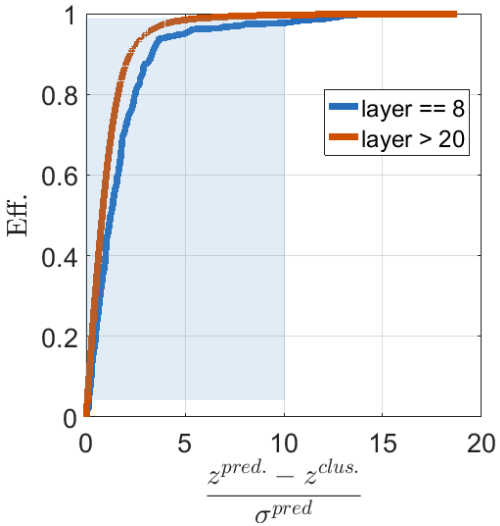


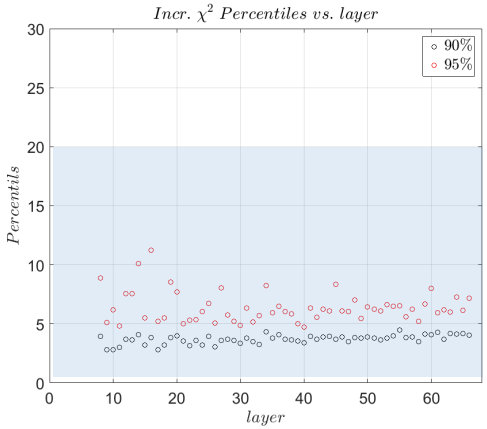




30GeV







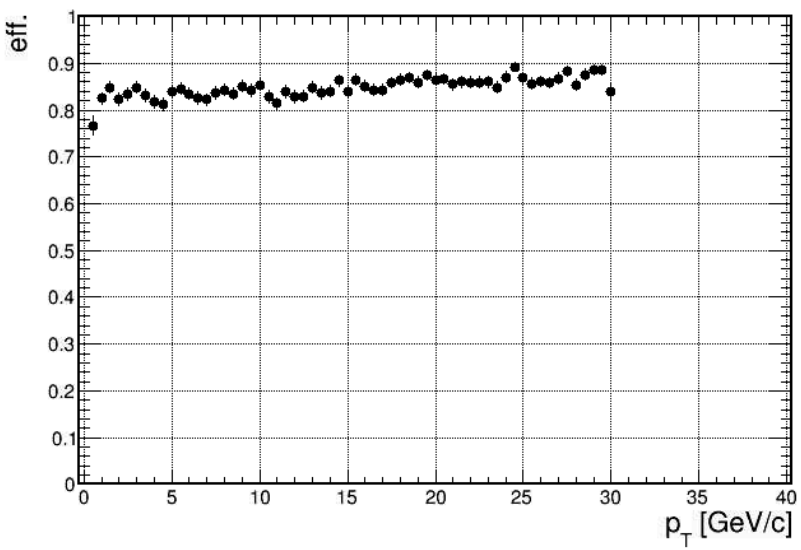
Single particle test

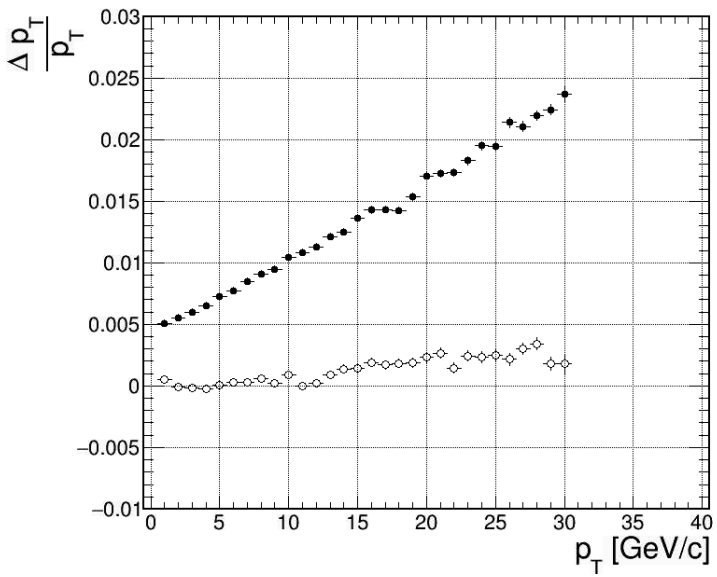
Configure:

- Ladder MAPS + INTT + Cylindrical TPC (nightly build)
- 100 pion/event
- 0.5 - 30 GeV, -0.5 < η < 0.5

Cuts:

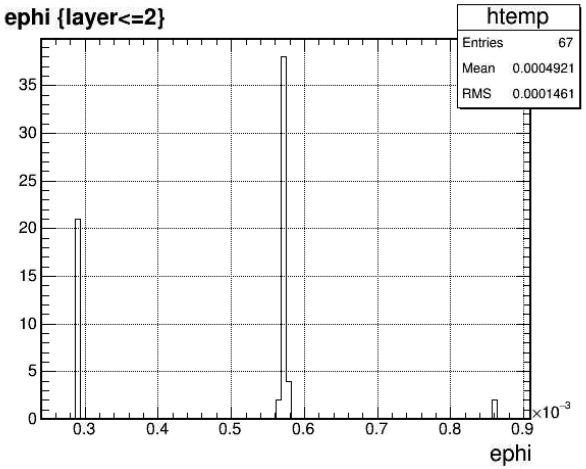
- 6/8 seeding (7 Silicon + 1 TPC)
- Search Win: 10σ
- chi2 < 20

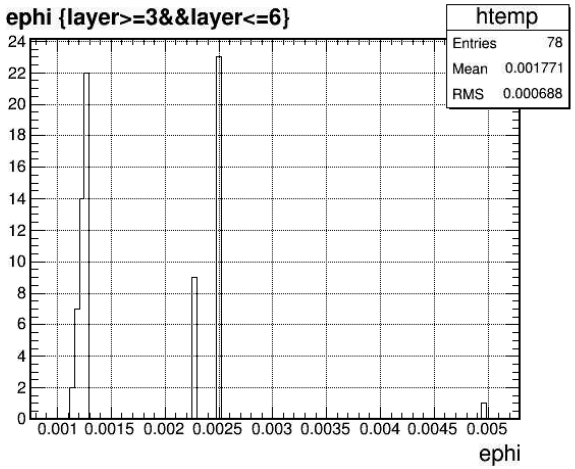


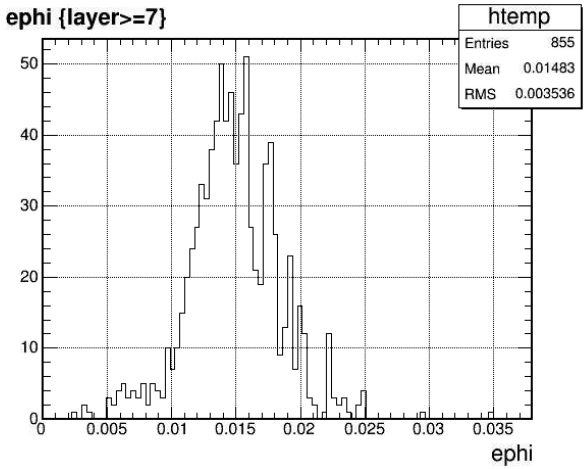


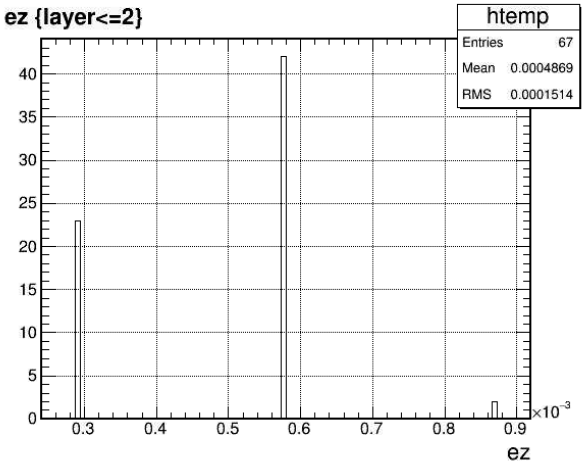
Backups

2017-05-09


ephi {layer<=2}
htemp
Entries 67
Mean 0.0004921
RMS 0.0001461
ephi


ephi {layer>=3&&layer<=6}
htemp
Entries 78
Mean 0.001771
RMS 0.000688
ephi


ephi {layer>=7}
htemp
Entries 855
Mean 0.01483
RMS 0.003536
ephi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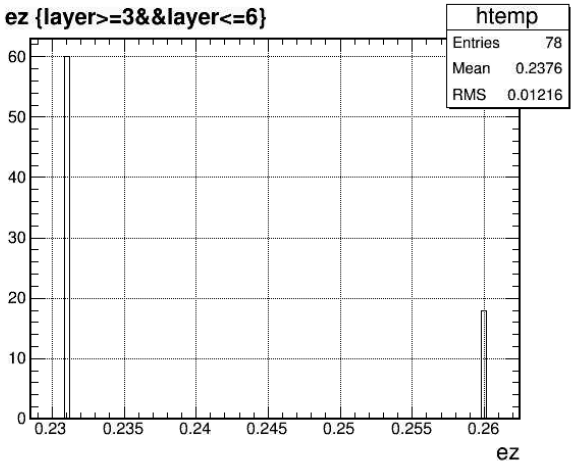
htemp
Entries 67
Mean 0.0004869
RMS 0.0001514
ez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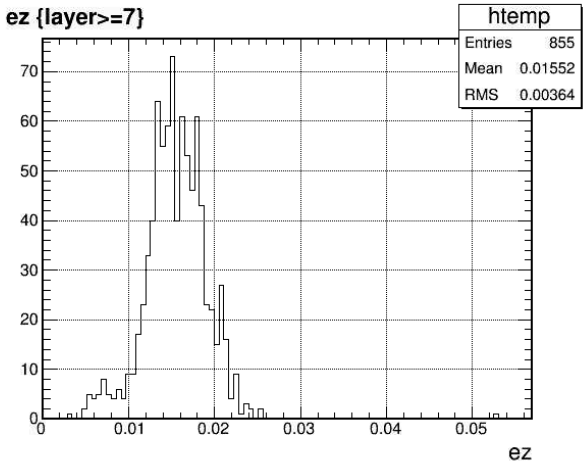
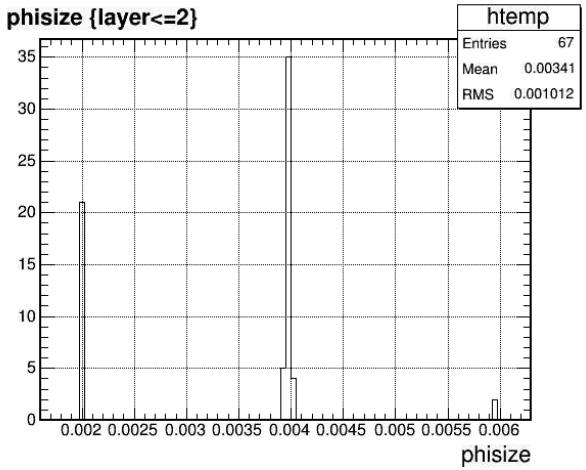
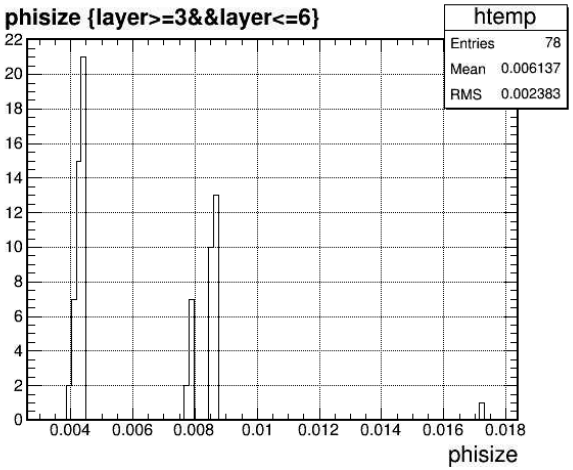
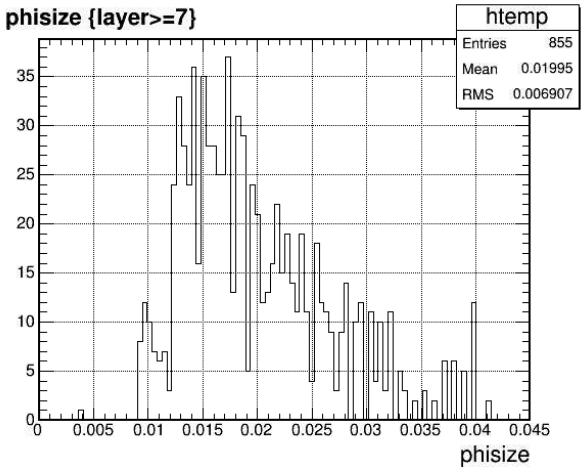
Entries 78
Mean 0.2376
RMS 0.01216
ez

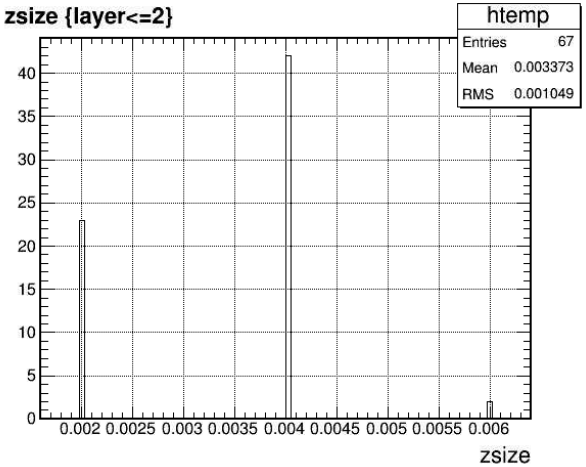

ez {layer>=7}
htemp
Entries 855
Mean 0.01552
RMS 0.00364
ez

2017-05-09


phisize {layer<=2}
htemp
Entries 67
Mean 0.00341
RMS 0.001012
phisize


phisize {layer>=3&&layer<=6}
htemp
Entries 78
Mean 0.006137
RMS 0.002383
phisize


phisize {layer>=7}
htemp
Entries 855
Mean 0.01995
RMS 0.006907
phisize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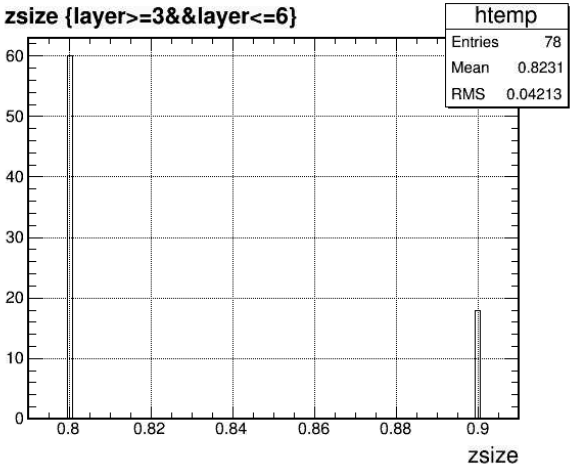
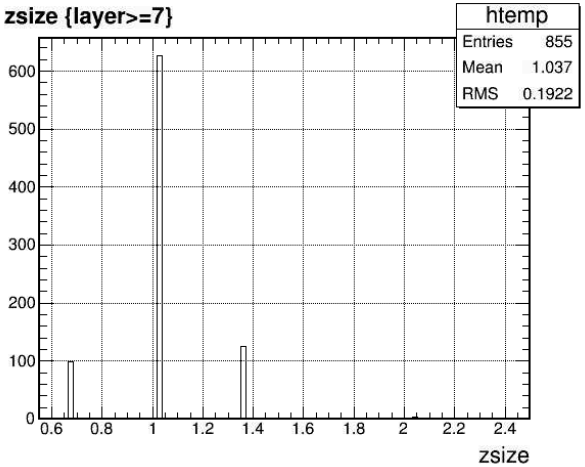
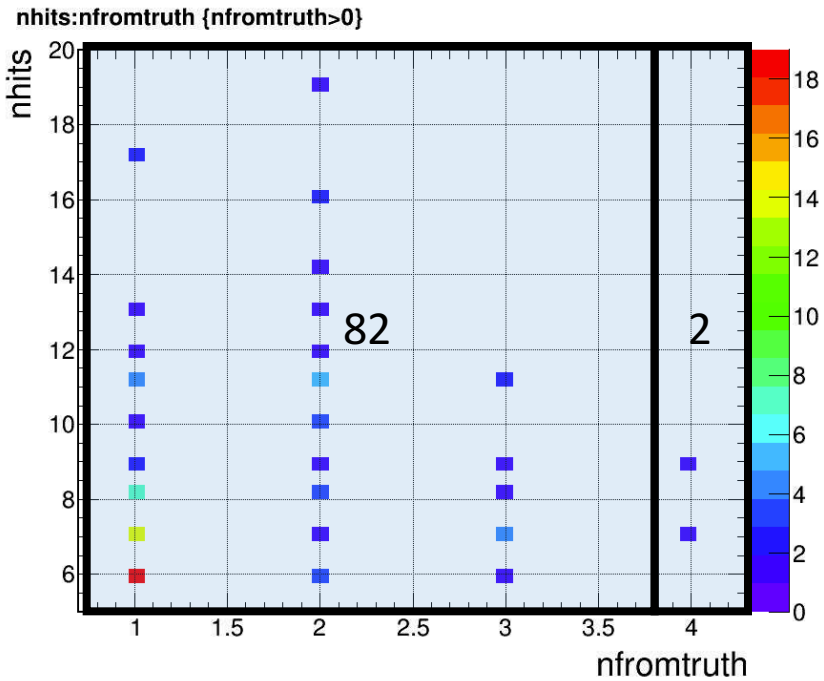
htemp
Entries 67
Mean 0.003373
RMS 0.001049
zsize


zsize {layer>=3&&layer<=6}
htemp
Entries 78
Mean 0.8231
RMS 0.04213
zsize

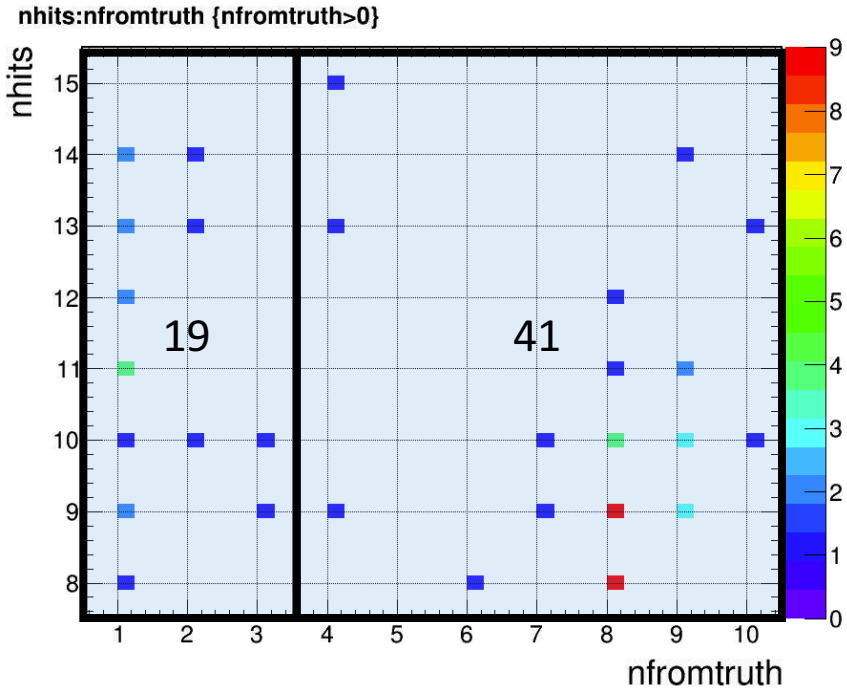

zsize {layer>=7}
htemp
Entries 855
Mean 1.037
RMS 0.1922
zsize

Seeding with initial vertexing - 2017-05-09

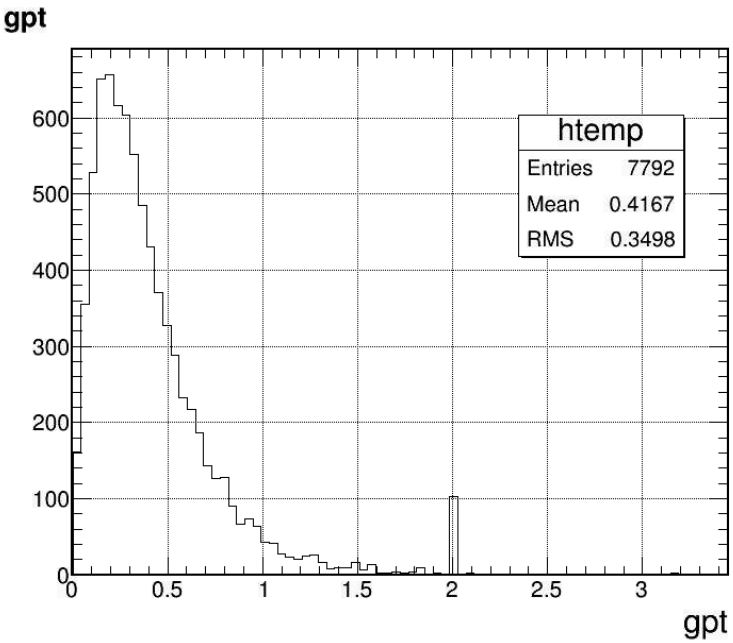
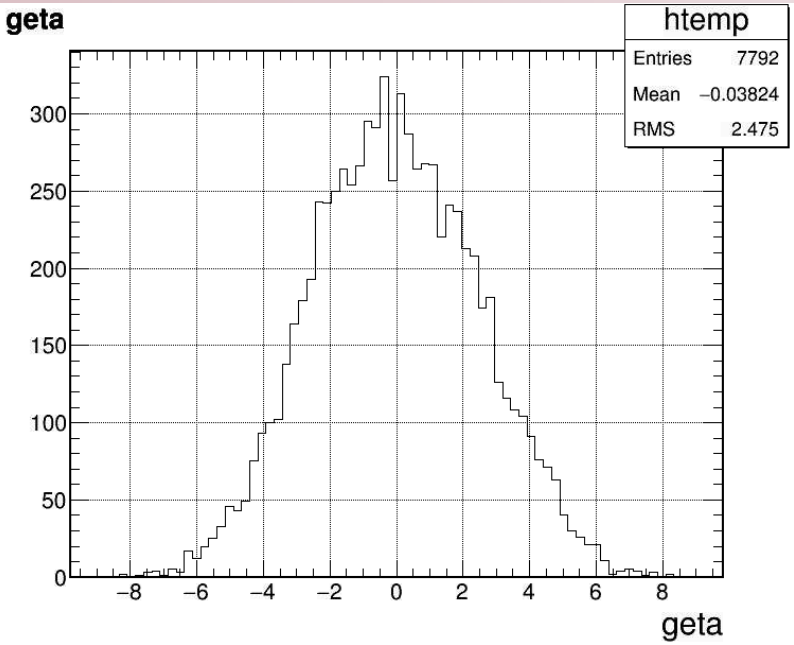
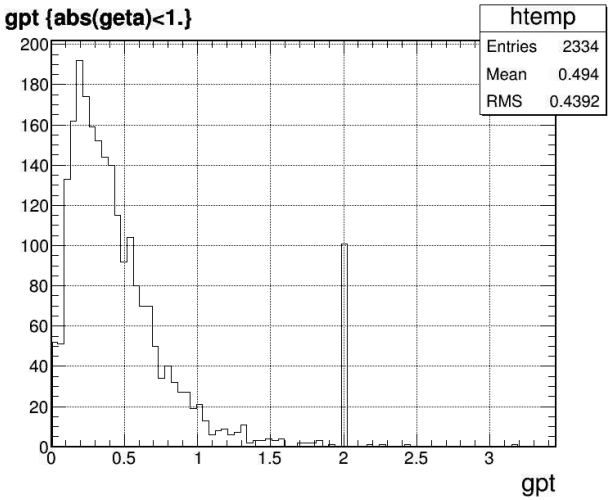
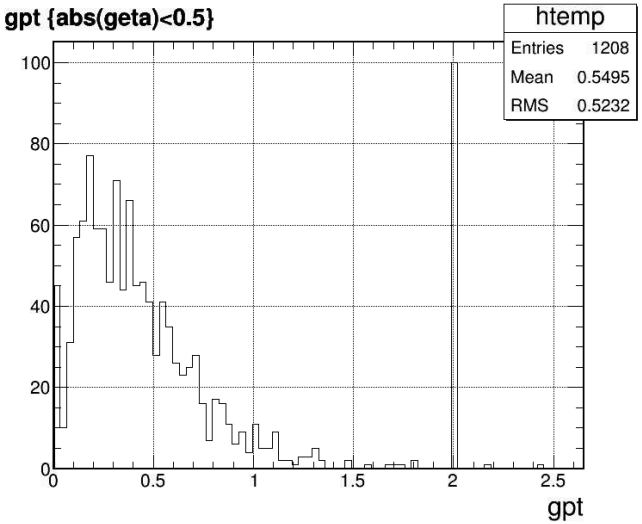
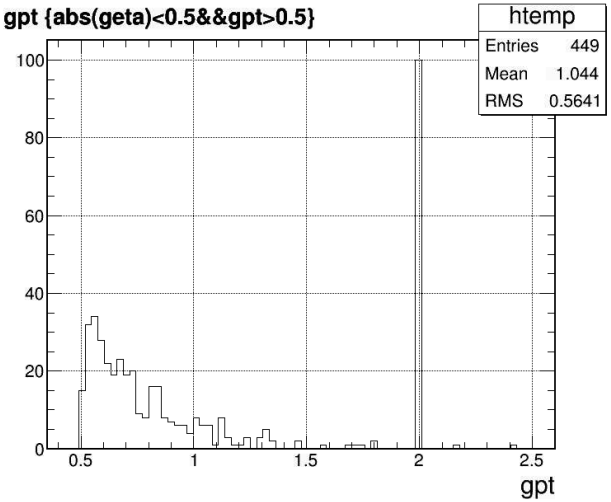
0,1,2,3,4,5,6,7 (6/8)



0,1,2,3,5,7,30,60 (8/8)



Seeding with initial vertexing - 2017-05-09

seed layers	description	ntruth > 0	ntruth >= 4	ntruth >= 6	ntruth >= 8
0,1,2,3,4,5,6 (7/7)	7 Silicon	65	47	45	
0,1,2,3,4,5,6,7 (8/8)	7 Silicon + 1 TPC	79	56	53	51
0,1,2,3,4,5,6,7 (6/8)	7 Silicon + 1 TPC	84	2	0	0
0,1,2,3,4,5,6,7,30,60 (10/10)	7 Silicon + 3 TPC	62	36	35	35
0,1,2,3,5,7,30,60 (8/8)	3 MAPS + 2 INTT + 3 TPC	60	41	38	35
0,1,2,7,20,35,50,66 (8/8)	3 MAPS + 5 TPC	53	34	33	31

pT and eta for central Hijing