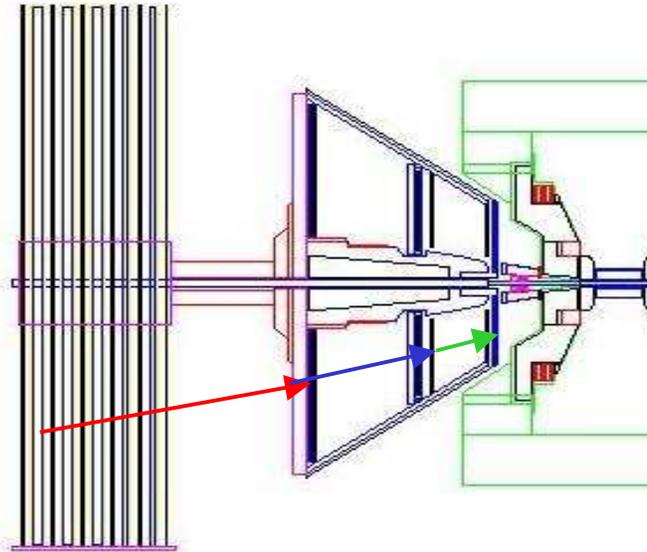


muTr Pattern Recognition Tuning – MJL – 6/10/2002

- Hit masking widths for projections to each station (starting with muID projection to station-3) (10,25,40 -> 15,20,20)
- Chisq/DF cut on stubs (100,100,50 -> 10)
- Selecting only “best” muID track to go with a particular muTr track (default allows multiple roads associated with identical muTr track, therefore generating multiple tracks that are ghosts of each other) Keep golden roads or best Chisq/DF roads.
- Eliminating ghost tracks
- Weeding bad hits from tracks
- Tighter Chisq/DF cut for tracks (5000,150 -> 20,20)

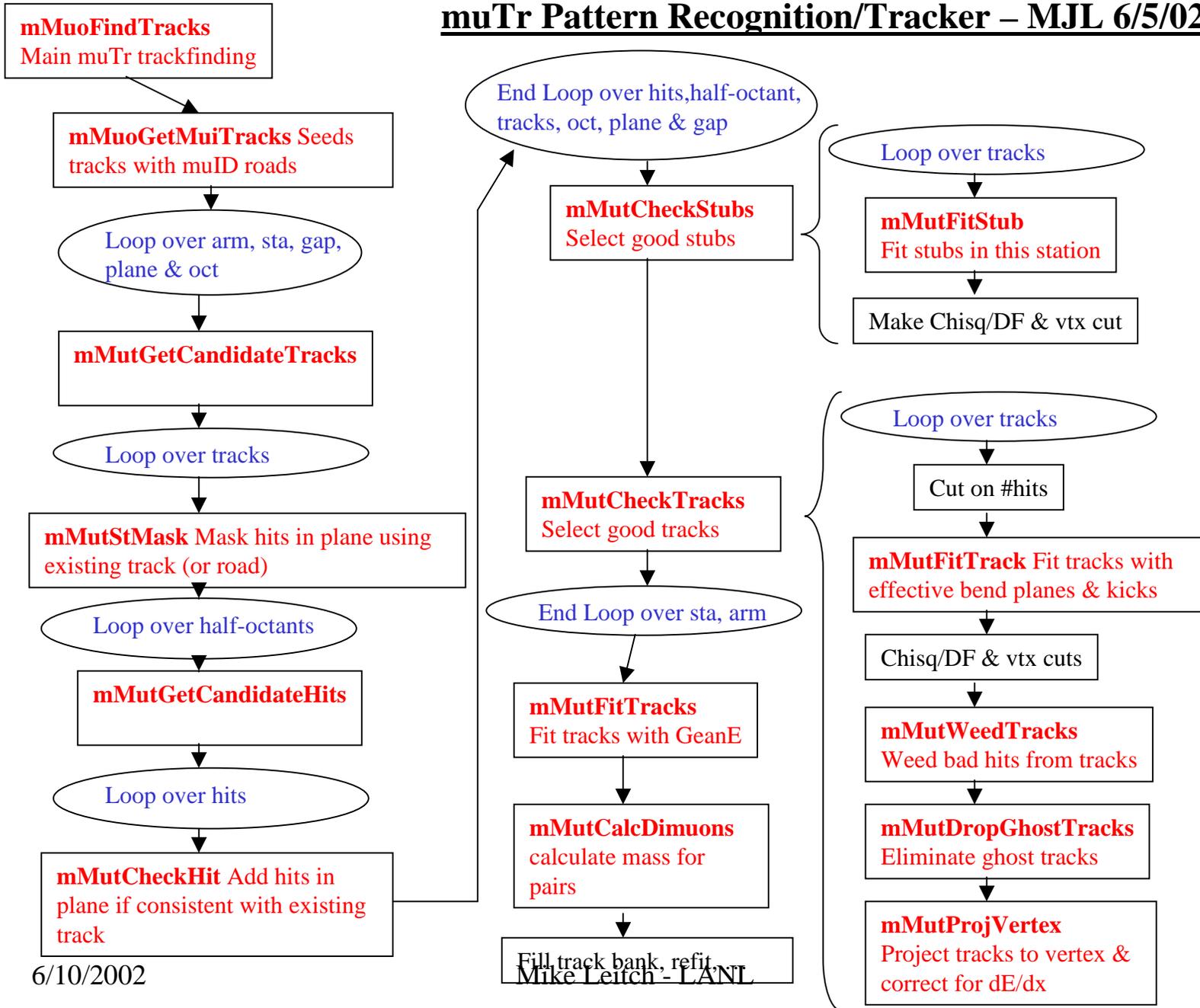
- See
<http://www.phenix.bnl.gov/phenix/WWW/publish/leitch/offline/offline.html>



Tracking Steps

- Project muID road to sta-3 and find stubs
- Then project sta-3 stub to sta-2 and find tracks through 2 stations
- Then project 2-station track to sta-1 and find full track
- Tracks use effective bend-planes with kick at effective z in between each pair of stations (“bend-plane tracks”)

muTr Pattern Recognition/Tracker – MJL 6/5/02



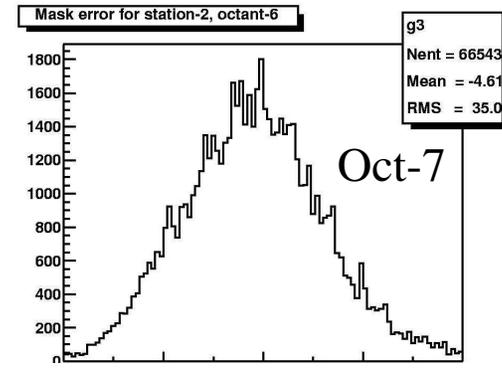
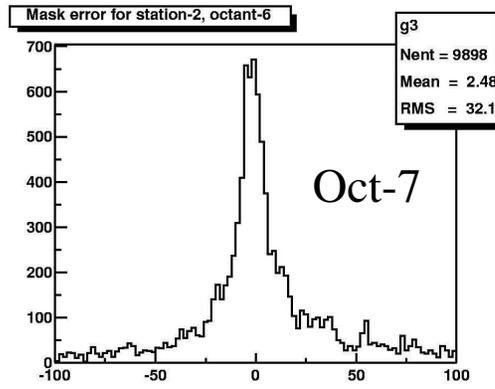
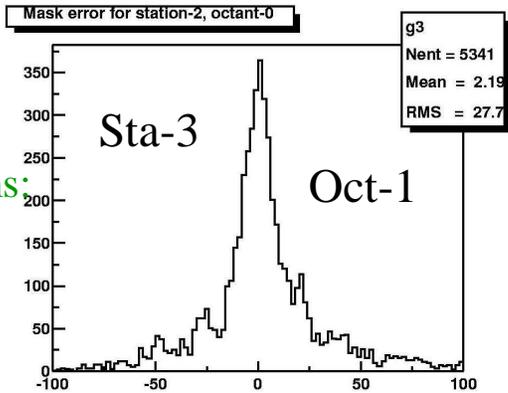
6/10/2002

p-p B=0

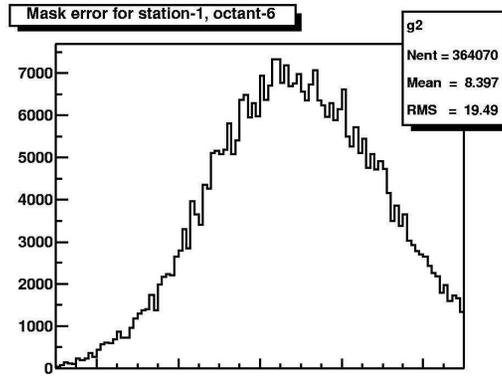
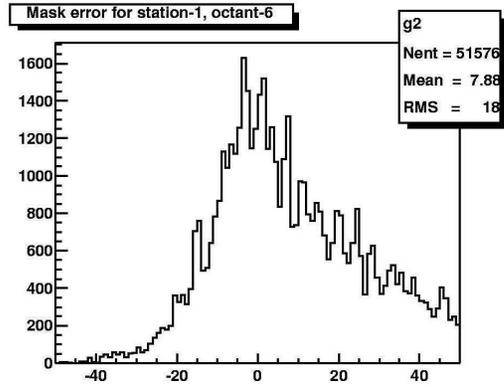
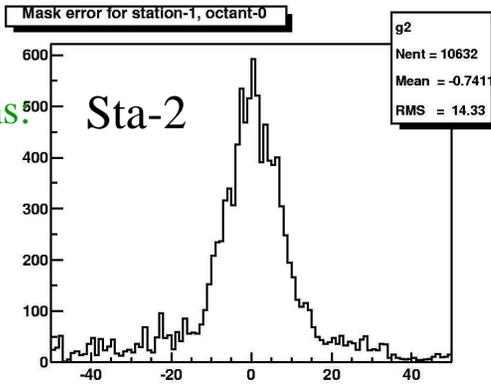
p-p

Au-Au

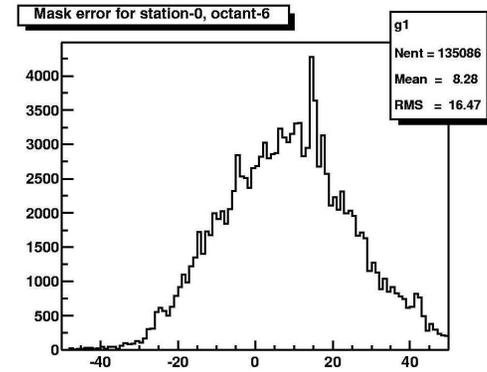
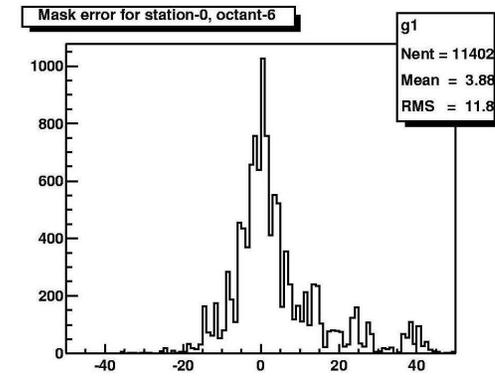
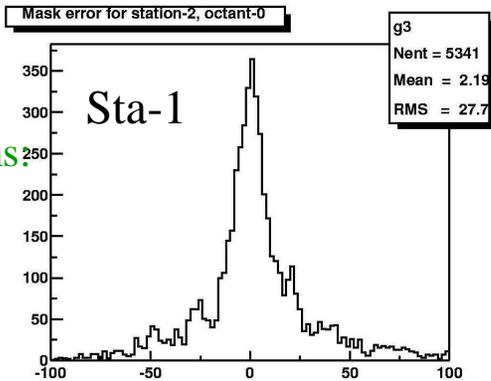
MC rms:
4 cm



MC rms:
2 cm



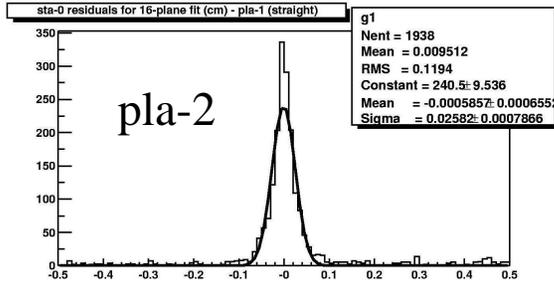
MC rms:
1 cm



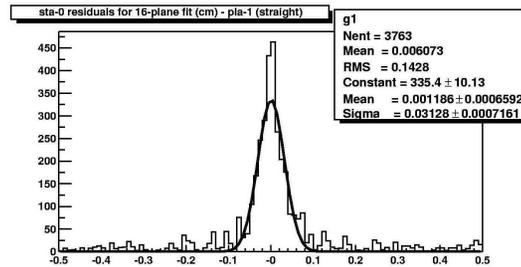
0/10/2002

Hit positions in straight planes compared to Projections (cm) – “masking”

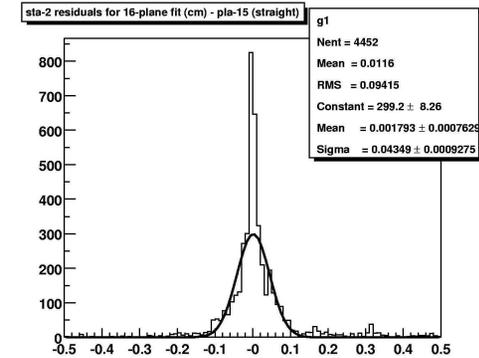
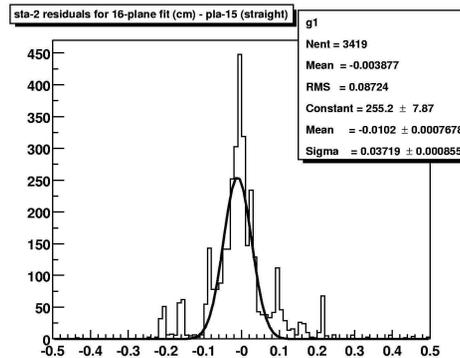
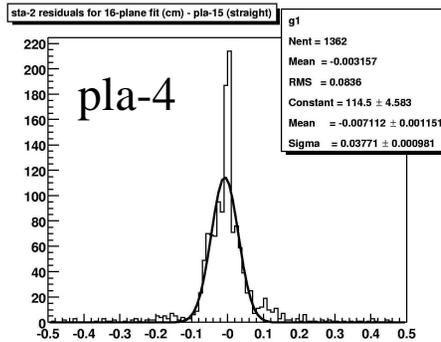
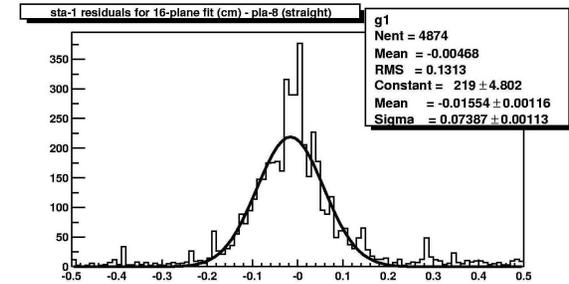
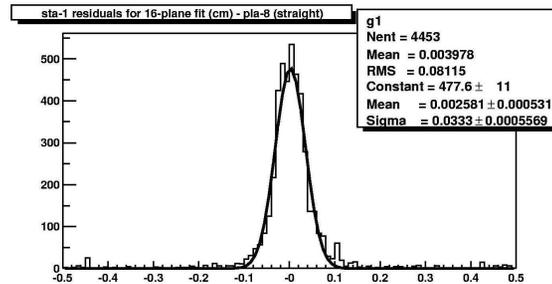
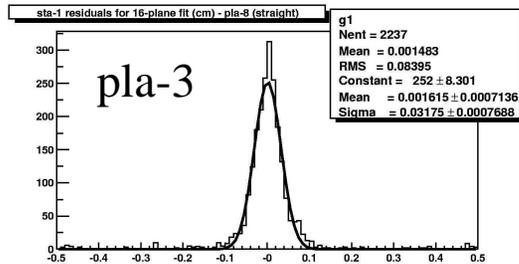
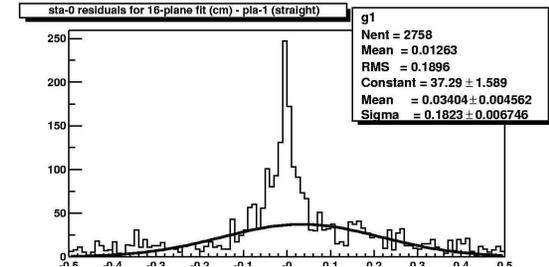
p-p B=0



p-p



Au-Au



Residuals in straight planes for tracks (cm)