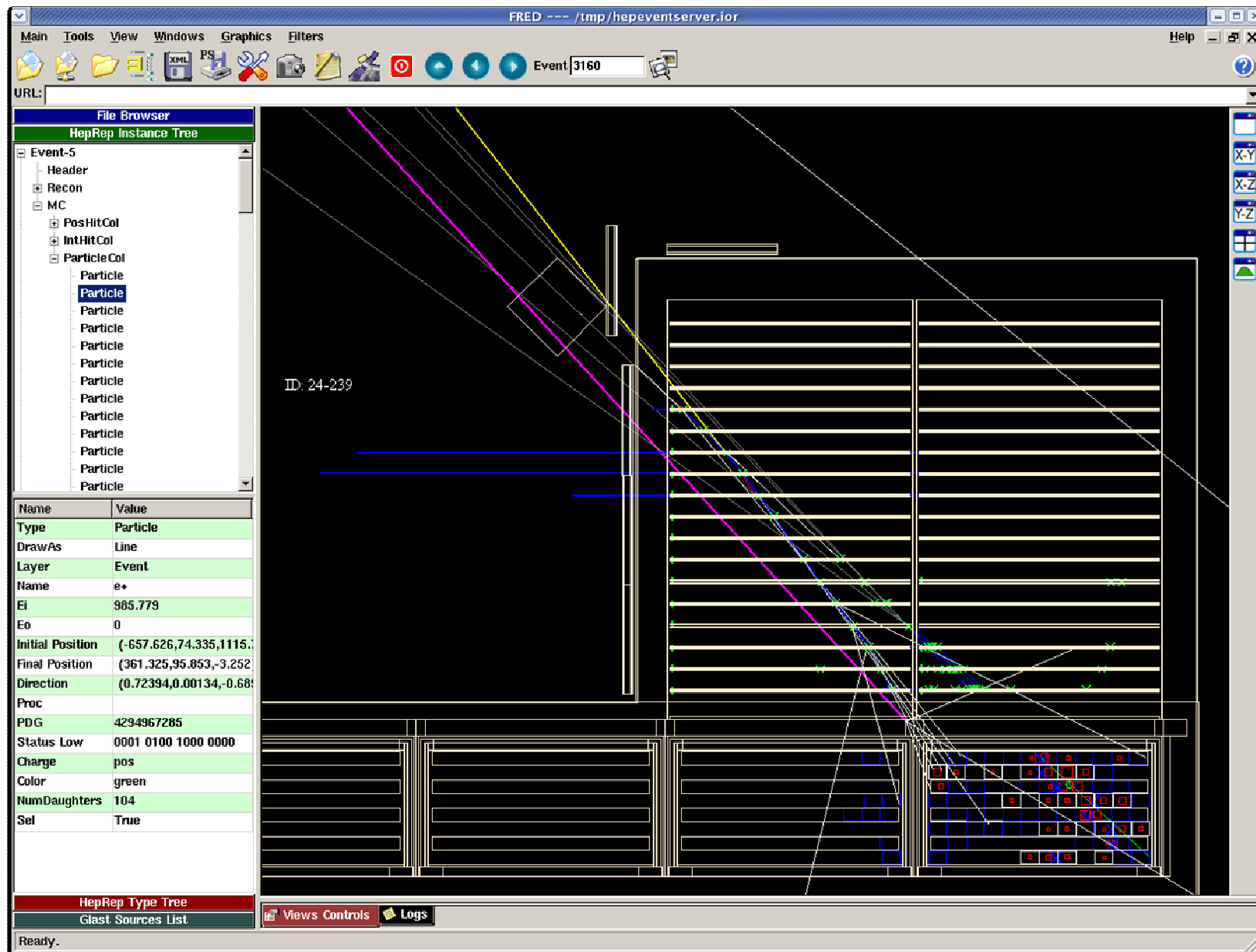


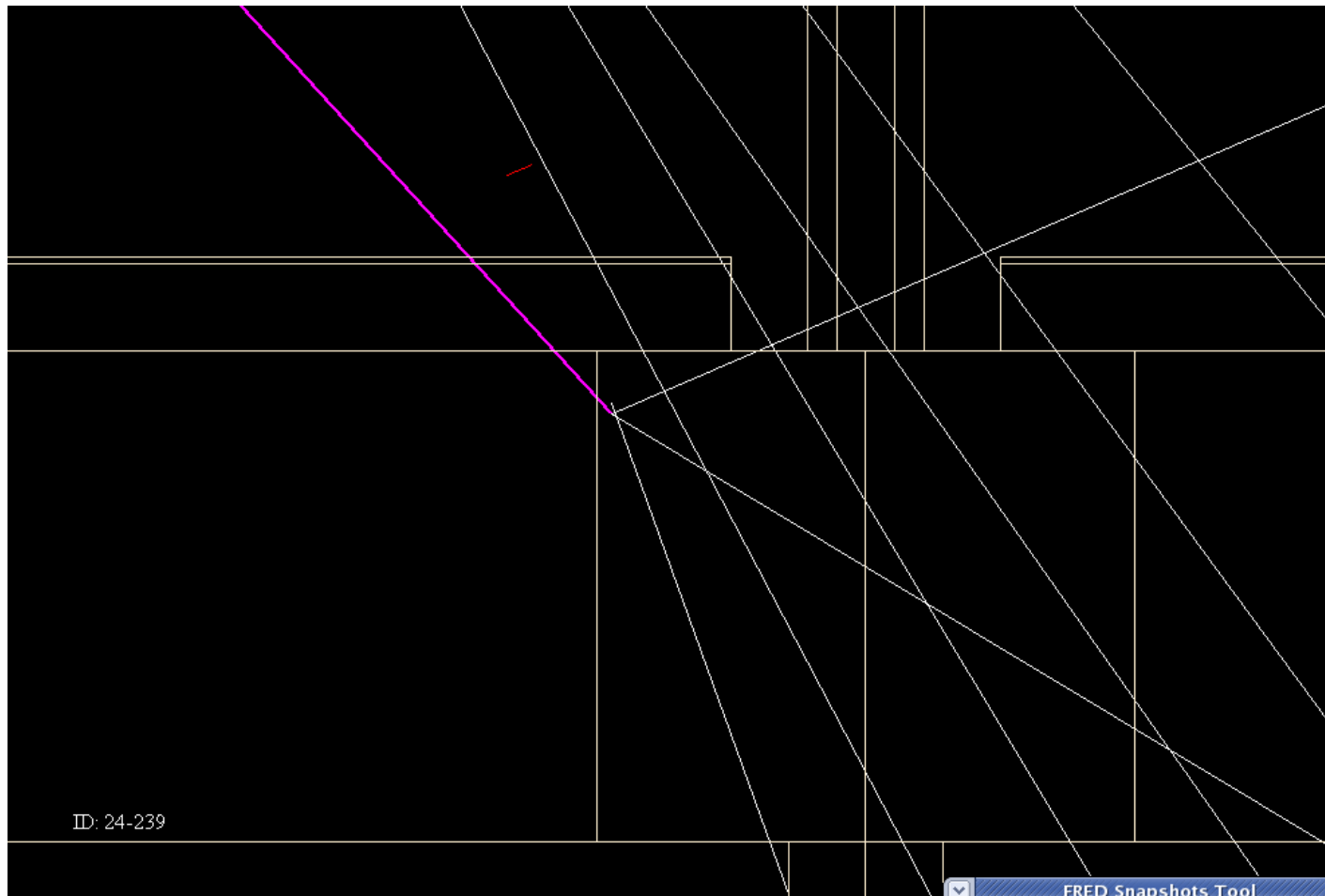
# BT-1356

- Official MC run BT-1356 (1 GeV positrons run with the MMS target).
- First ~13k events examined, searching for annihilation events (`AcdTileCount == 0` + geometrical cuts on the track position).
- In many cases the events surviving after the cuts, as displayed with FRED, show strange/unexpected features (see the following) – not clear if and how many of the remaining events/runs are possibly affected.
- Digi, recon and MC chunks merged together with a small script, but the single chunks seem to behave the same (most likely not a bug in the merging script).

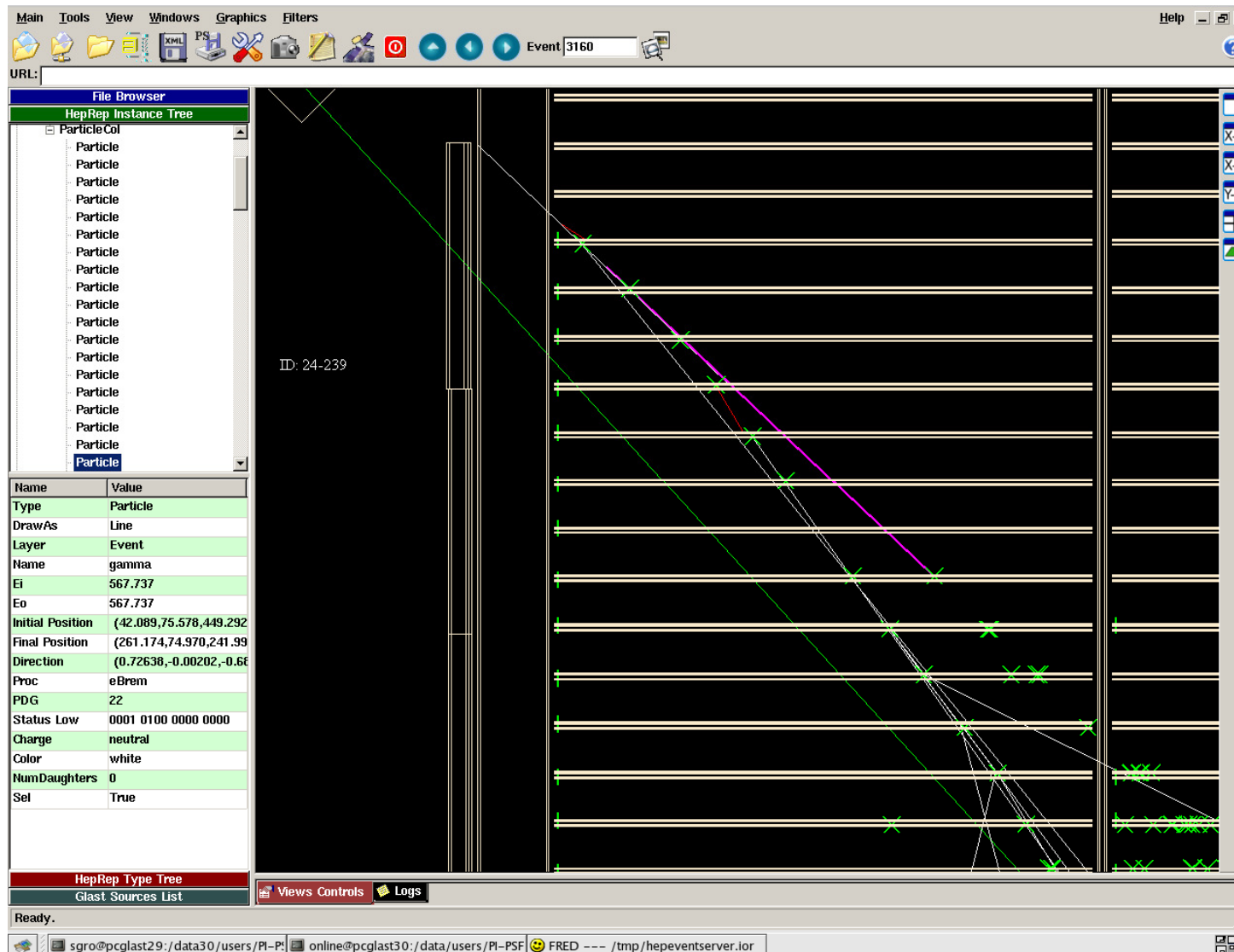
e<sup>+</sup> (pink track) does not leave any signal in the ACD or TKR



$e^+ 986 \text{ MeV} \rightarrow 2 \text{ photons } 511 \text{ KeV each}$   
(\*not\* back to back).



Secondary particles created “from the vacuum” & TKR hits apparently not associated to any real particle.



# Other events...

- Other “interesting” events in the run: see table (3160 shown in the screenshot before.)
- Please take a look at them independently!
- Need to figure out where the issue comes from (whether it’s due to a mistake, to a bug in the MC generation/file I/O or a bug in the event display)
- If it’s a problem with the MC, then we need to know asap.

Event seq.	ID
1394	11-490
1458	11-969
3160	24-239
7759	58-275
10172	75-551
12034	89-554
12223	90-819