

Sector 24 – RDO 4 issue

Background

- In the fast offline QA Lanny pointed out that it seems sector 4 has fewer hits and this has been the case since Monday.
- After today's QA-meeting I got a root file with all the the information with various information and looked at
 - 1) charge per pad/row
 - 2)cluster charge per pad/row
- I focused on row 39 which has two region from rdo 3 and rdo 4. From physics point of view they should have same #hits and charge per pad , in average.
- The file is from `run 25283030 in FastOffline,`

Analysis

- Looked at mean charge for clusters and adc in the two different parts, and took #hits recorded (average) for the two sections of 3 and 4 from plots shown in next slide. The hi plots are not shown (yet)
- The adcsum/events are 27.2 and 25.0 and the cluster adcsum 24.7 and 23.3 , respectively
- This is consistent with similar ADC and cluster info per hit.
- Thus, there seems to be fewer hits for RDO 4 than for 3 at same geometry
 - Rules out in my opinion issue with pedestals
 - Gains seems correct.
- Open questions
 - Is this feature the same for all events ? This would require special analysis of data e.g by looking at ratio (for a row) of hits in RDO 3 and RDO 4.
 - Would it be useful to reburn the RDO prom to see if this helps?
- Any suggestions are welcome.

Histograms

