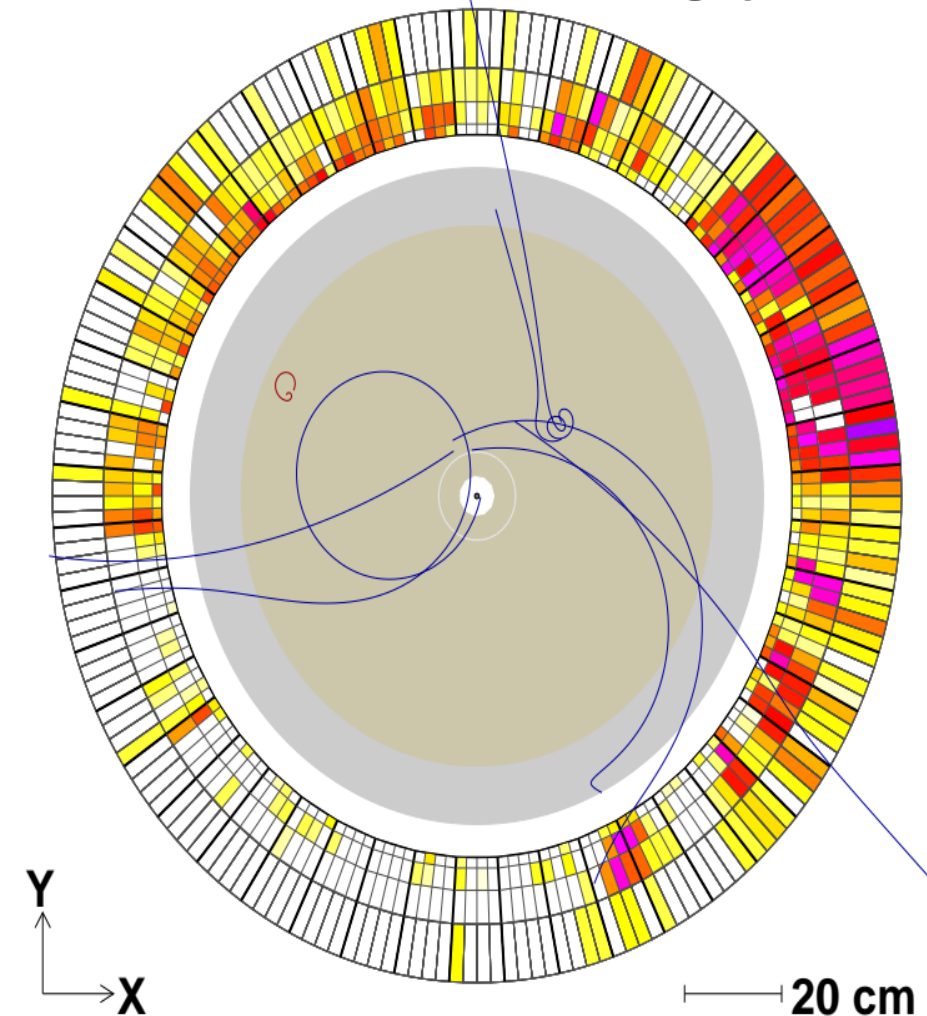


BCAL LED Pulsar Trigger & Quadrant Investigation

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- Investigating BCAL-LED FP trigger instability.
- BCAL-LED skim plugin uses **1)FP trigger** or **2)200 hits** or **3)12 GeV energy** in the BCAL (2&3 were not active due to a bug).
- Events with GTP trigger 1,3 (BCAL/FCAL physics) and 4 (PS trigger) leak into the skim due to conditions 2&3.

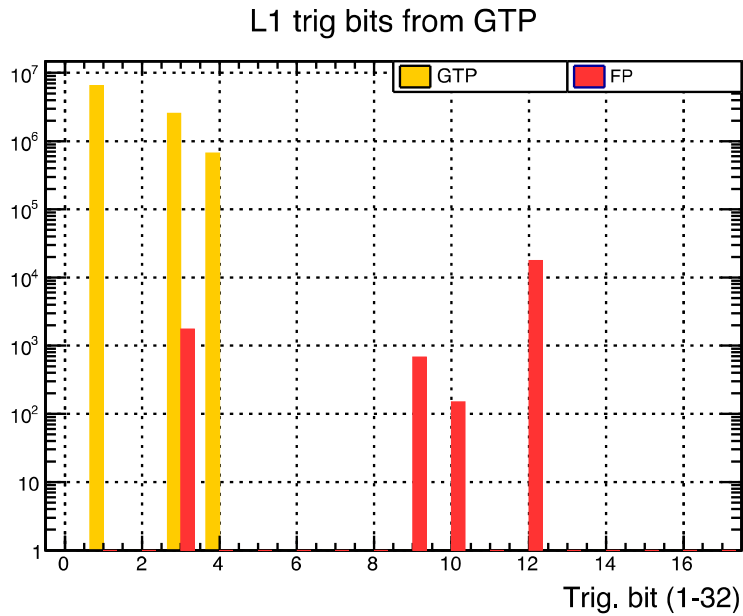
BCAL view from downstream looking upstream



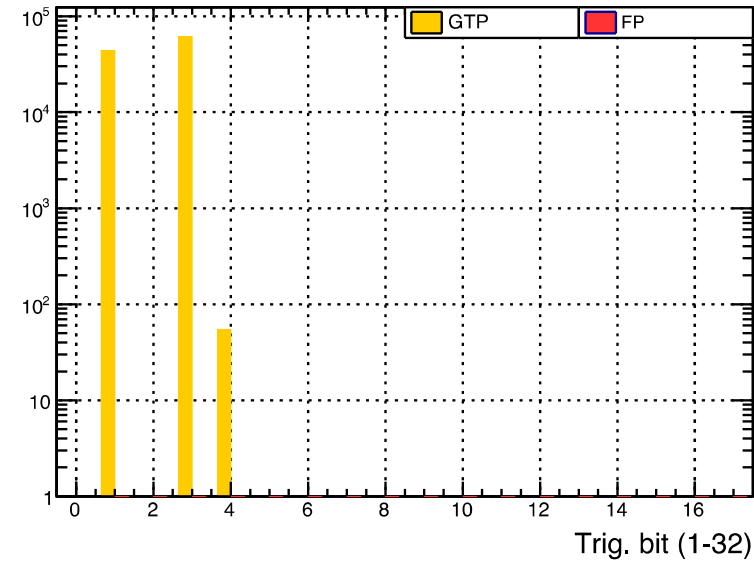
Example leaked event
Run 51262

Trigger Bit Histogram – Recreated by AF's code

- All hits

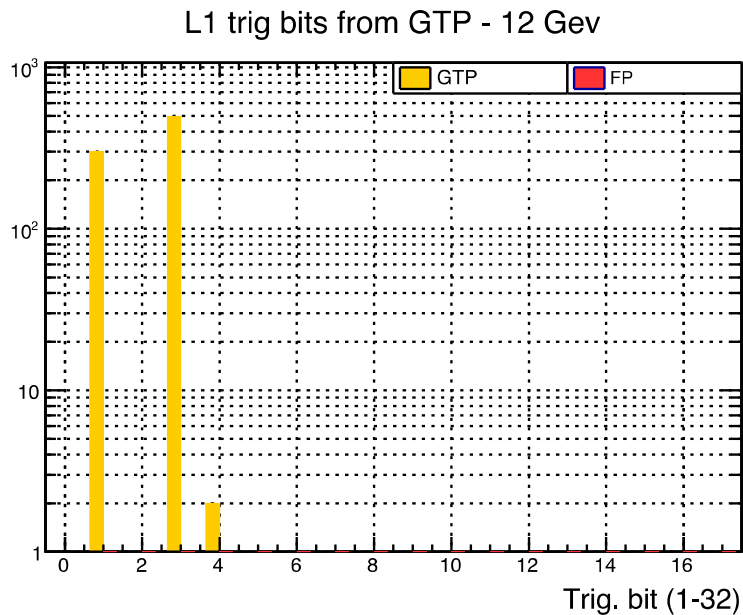


L1 trig bits from GTP - 200 hits

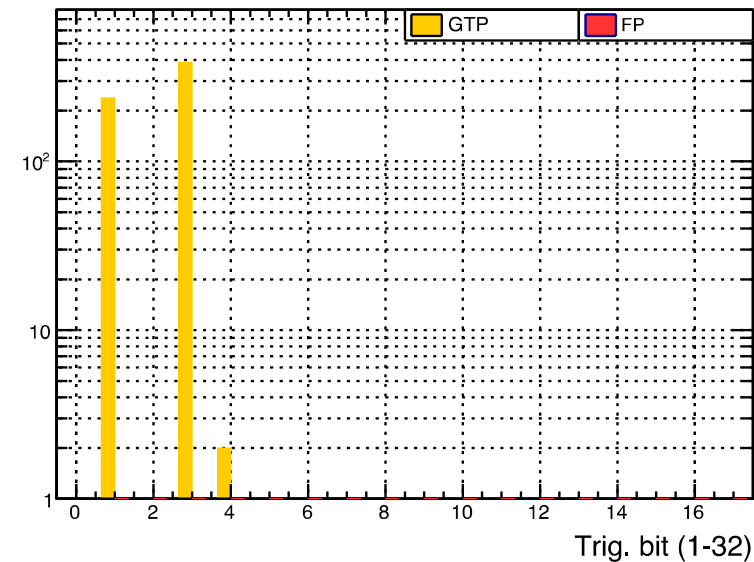


- More than 200 hits

- Hits with energy $y > 12$ GeV

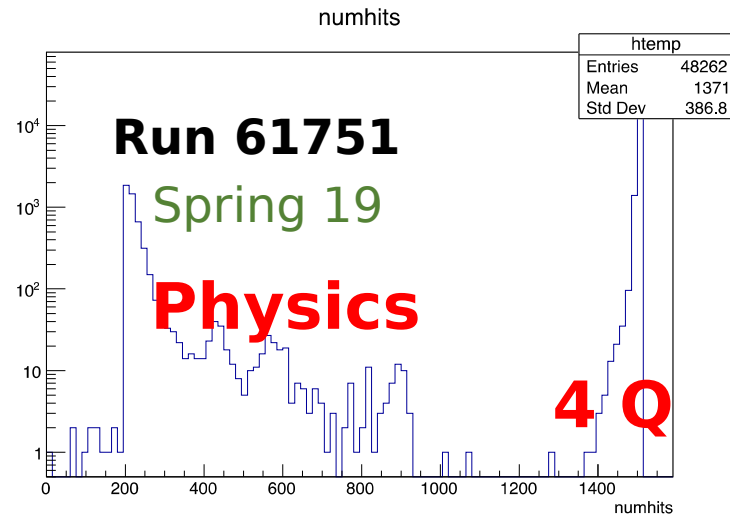
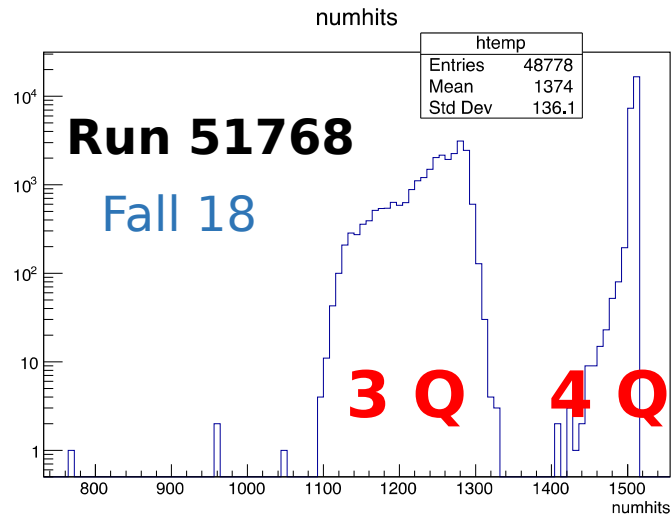
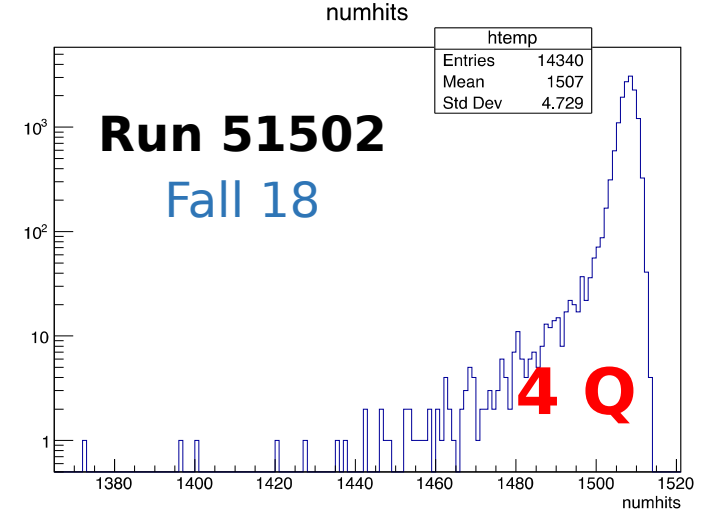
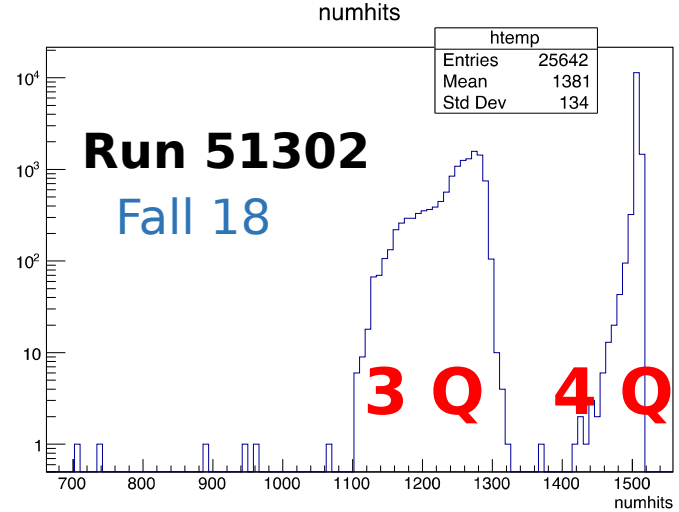
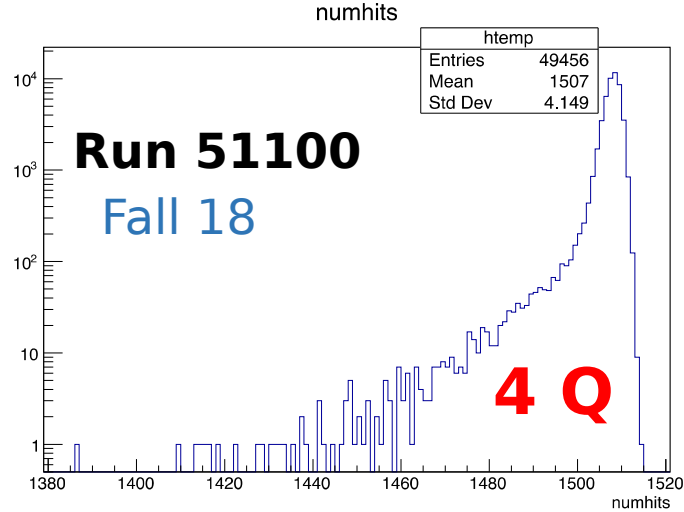


L1 trig bits from GTP - LED



- Both conditions

Quadrants - Controller not firing?



- Plugin histograms the number of BCAL hits per event in BCAL-LED skim files.