# ECAL DOC/DGL Report

ECAL PFG Meeting

23rd July 2018

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# 16th July'18 (Monday) & 17th July'18 (Tuesday)

- Monday
  - Took ECAL Pedestals + Test pulses and ES pedestals
  - Normal data taking for the rest of the day

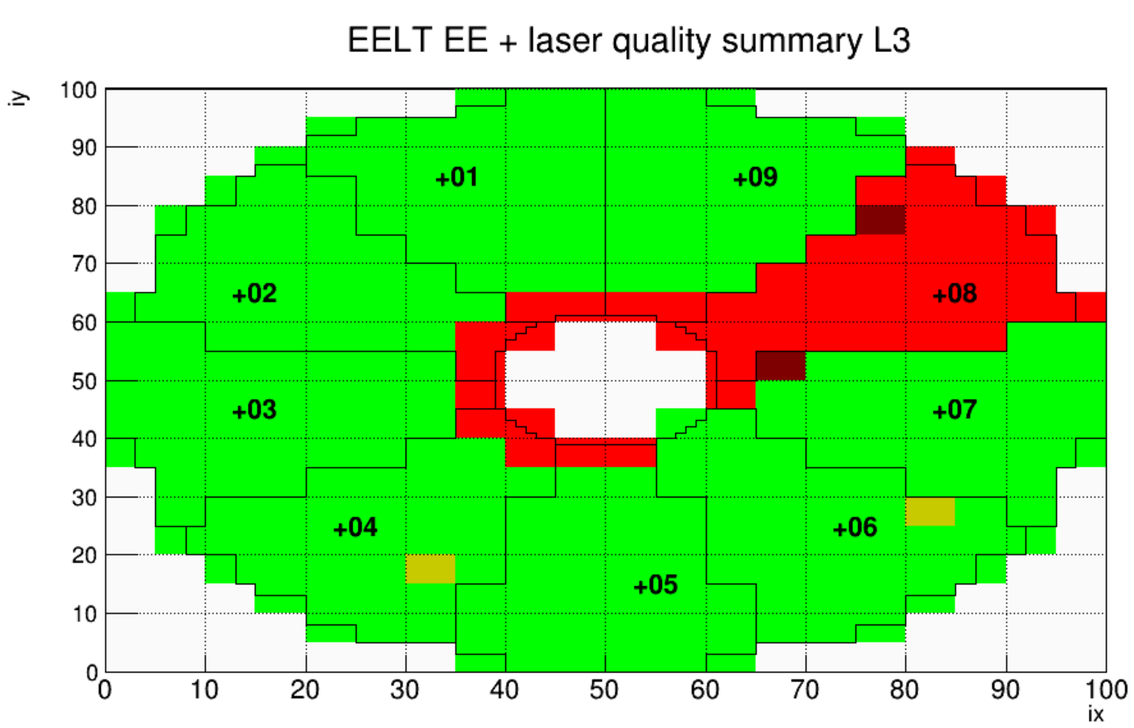
- Tuesday
  - Updated new laser transparency corrections
  - Following the beam dump (~10:45 h), asked for ES in local
    - Done to test a change in the ES code (take ES pedestals with just changing the key and not having to move the files); this was just tested in the development mode and not pushed to production mode.
  - Normal data taking for the rest of the day

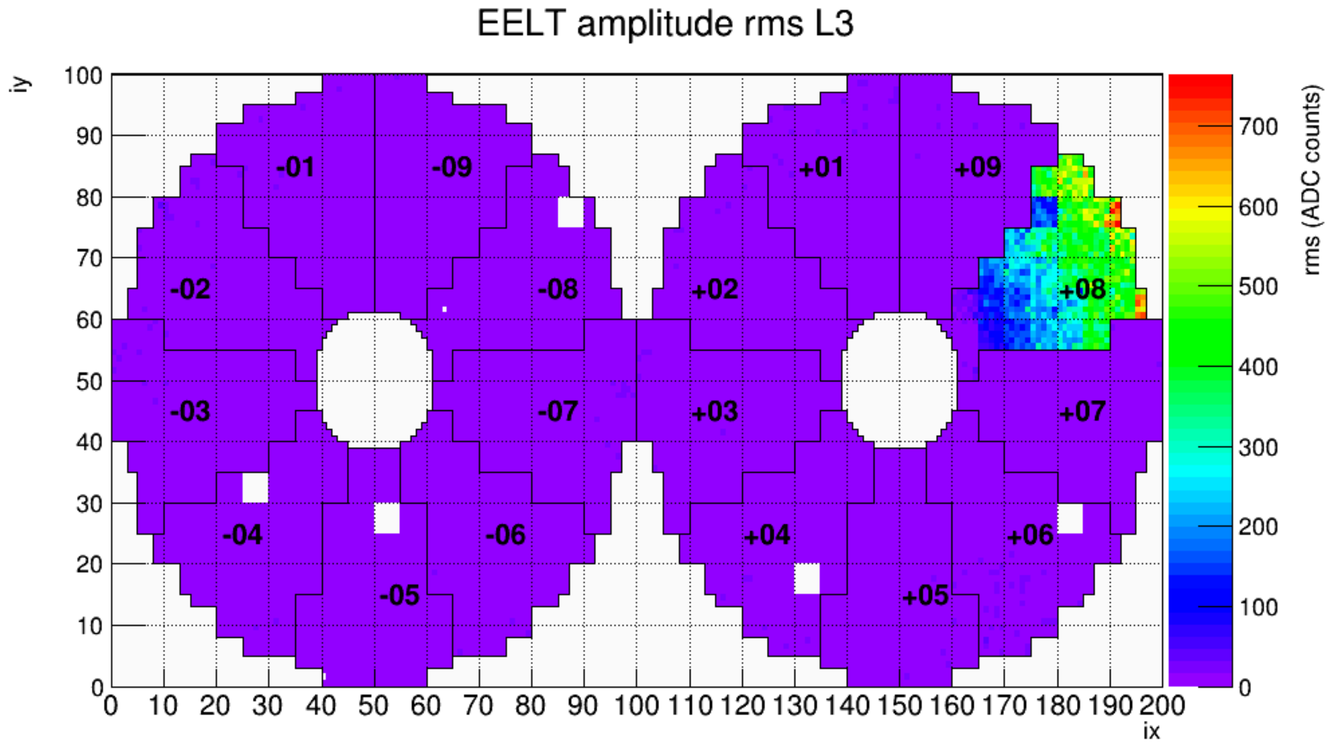
# 18th July'18 (Wednesday) (1)

- Following the beam dump at ~13:30h, a 3 hour UXC access was available to different sub-detectors
- The ECAL DCS experts used this opportunity to inhibit the bits for the TT55 at EB-9 (crate 3)
- EB-3 TT17 LV was inhibited since Jun 30th 2018 (due to inhibit line damage during fire alarm)
  - This problem was recognized on 5th Jul'18 but the LV experts decided to wait until the next opportunity for a UXC access to take actions
  - On Jul 18th, there was a 3 hour access during which this problem was solved
  - From Sasha's **elog**: It was a simple case of lost contact on the return wire which was repaired by making a connection to the adjacent TT18 ground line

# 18th July'18 (Wednesday) (2)

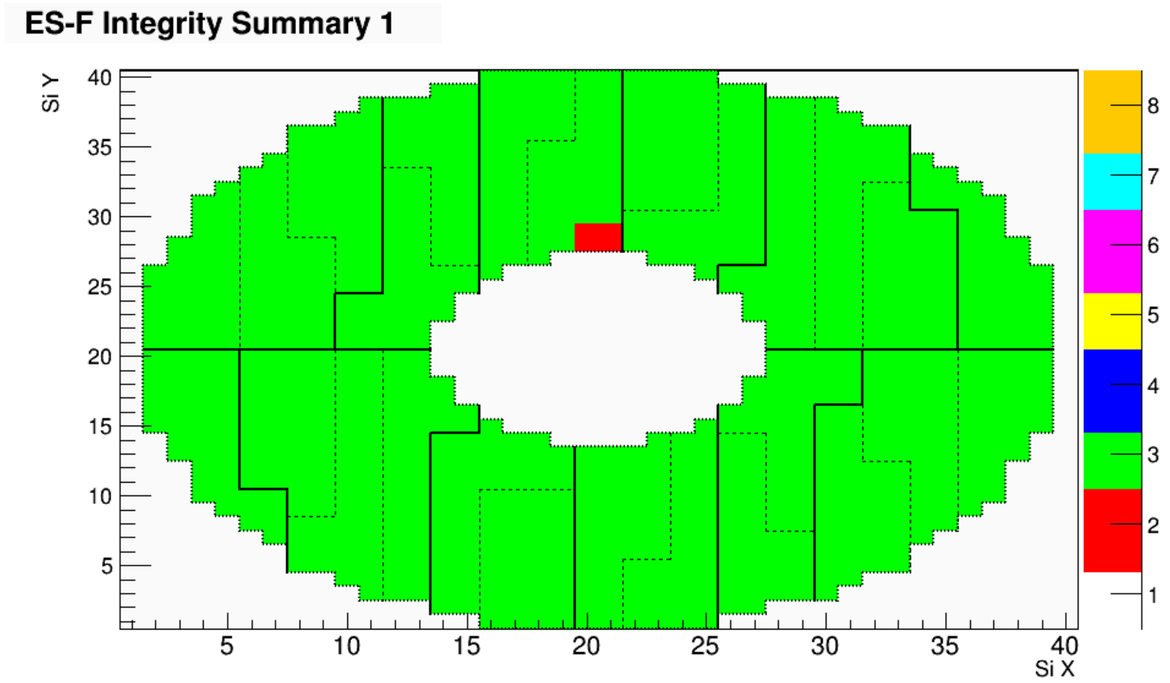
- cDQM shifter observed errors in the laser quality summary plot for the Blue laser (L3)
- These errors seem to be associated with high RMS
- ECAL laser expert was notified and he confirmed that this was the result of a temporary glitch and no action is needed

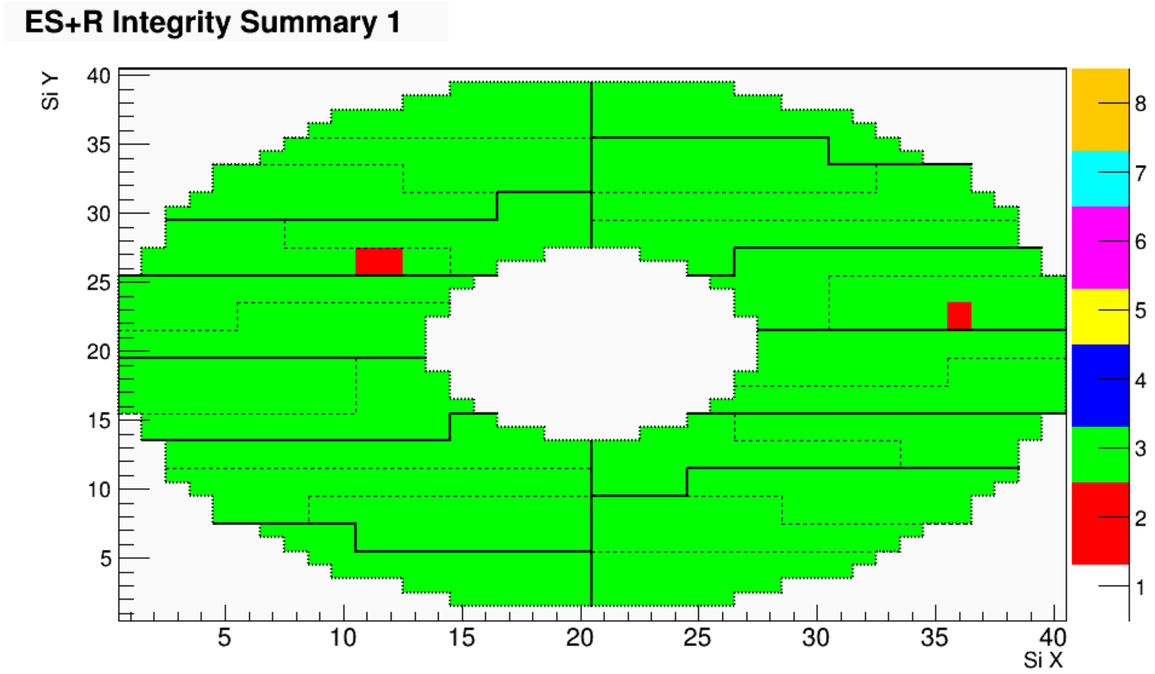


# 19th July'18 (Thursday)

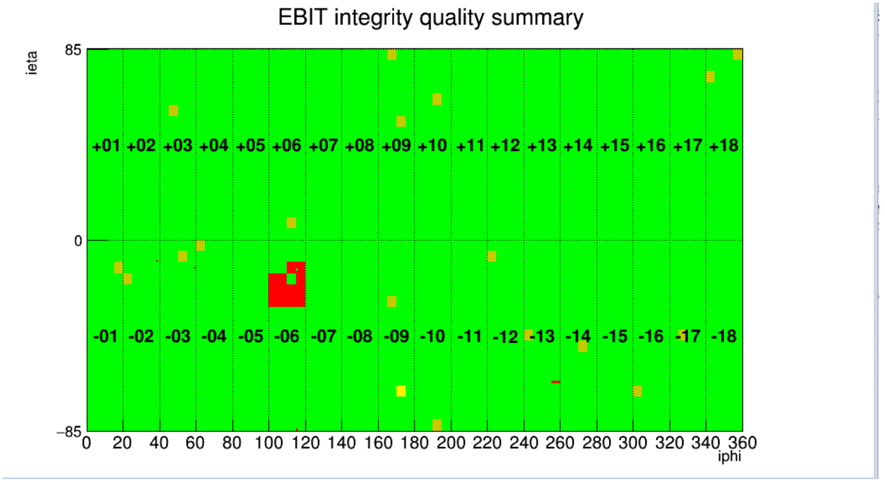
- During run 319910, the cDQM shifter reported errors in the ES-F and ES+R integrity summary plots
- It was observed that the number of entries in the ES fiber error plot were increasing with lumi-sections
- Asked for a parasitic RR of ES

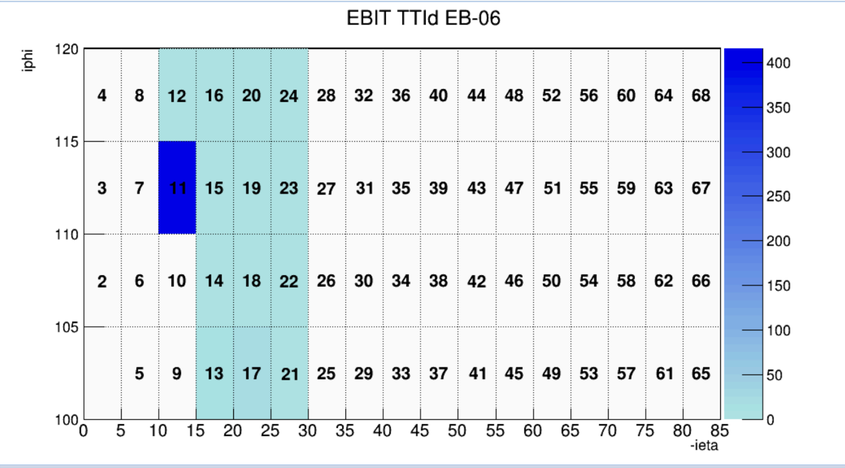


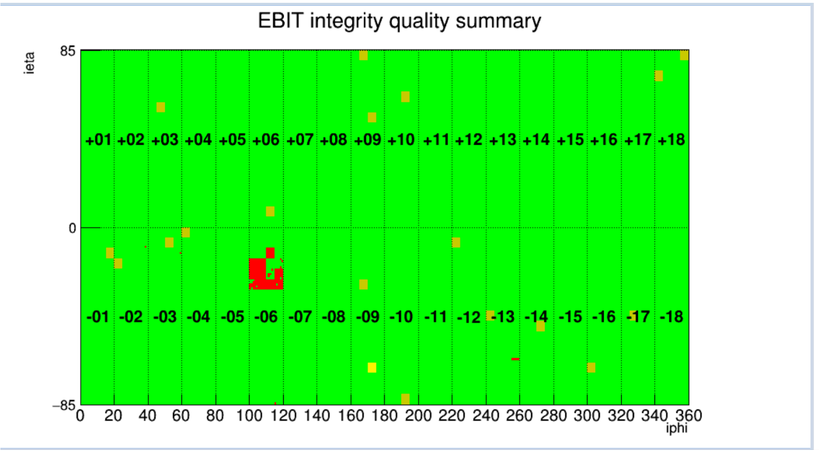
# 20th July'18 (Friday) (1)

- During run 319950, the cDQM shifter called about errors in the integrity summary plot for EB-6
- The 'by lumi-section' plots appeared fine and errors appeared to be related to a large number of TT errors



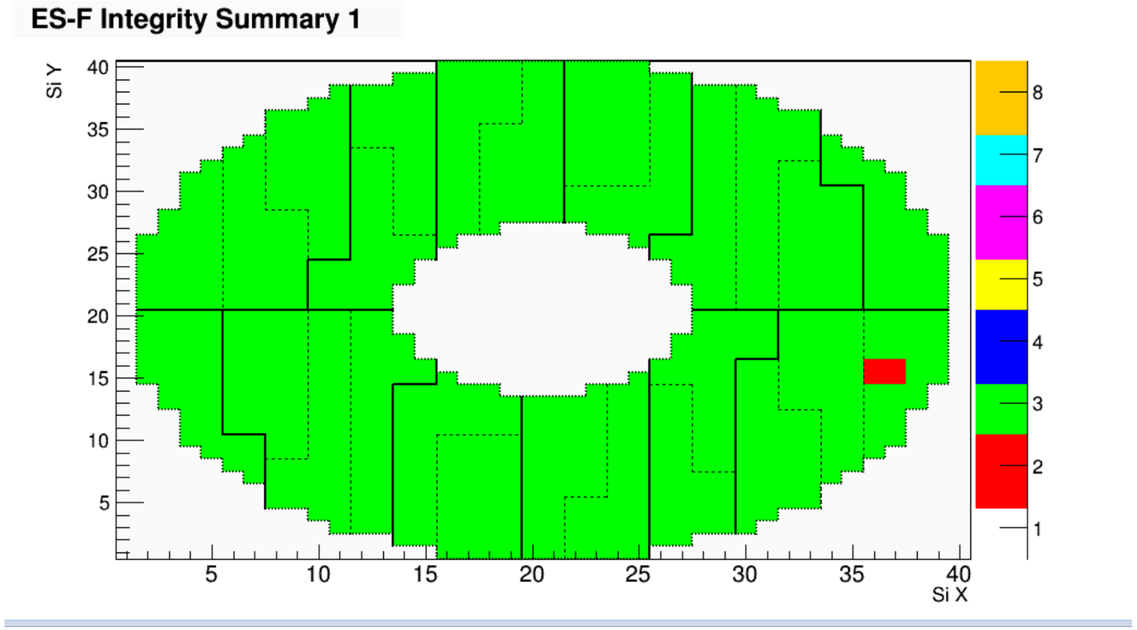

- After some lumi-sections, the red area was decreasing and no action was taken



# 20th July'18 (Friday) (2)

- Laser calibrations were updated and deployed (by asking for a RR of ECAL)

- Another instance of error in ES integrity summary plot was noted by the cDQM shifter — number of entries in the ES fiber error code plot were not increasing this time and no action was taken




- cDAQ shifter posted an elog about partition EB- going into error TTS state and blocking triggers
  - This is because of the clock instabilities during ramp as ECAL moves to the LHC clock
  - SL shifter instructions include "RR ECAL at flat top"
  - Maybe this should also be added to the cDAQ instructions?

# 21st July'18 (Saturday) & 22nd July'18 (Sunday)

- Saturday
  - Nothing to report :)
- Sunday
  - PFG shifter observed that during two intervals of runs 320021-320035 and 320038-320040, there were a large number of clusters being reconstructed in EB+10 TT43 and this was also visible as high rechit energy strips
  - TT43 looked noisy from the trigger primitive plot (but still below COKE threshold); according to the rechit map, only a few strips may have been responsible
  - Since the noisy strips affect the energy and cluster reconstruction, they were masked in the offline channel status
  - Tag (thanks to Pierre! ) : EcalChannelStatus_v1_prompt with 2 new IOV's **elog**
  - Evgueni suggested that probable causes could be bad contact b/w FE and VFE card or due to aging of CCU
  - This issue was not observed since Run 320041
    - For the future, should we rely on being able to promptly spot such errors or look for a different solution?