



PFG Shifter Report

**ECAL PFG Meeting
23/10/2017**

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LHC and CMS Status

- Total recorded Lumi ~4.2 /fb last week - 16/10/2017-21/10/2017

Online Integrated Luminosity (preliminary data)

ATLAS: 4.47 fb⁻¹

ALICE: 1.43 pb⁻¹

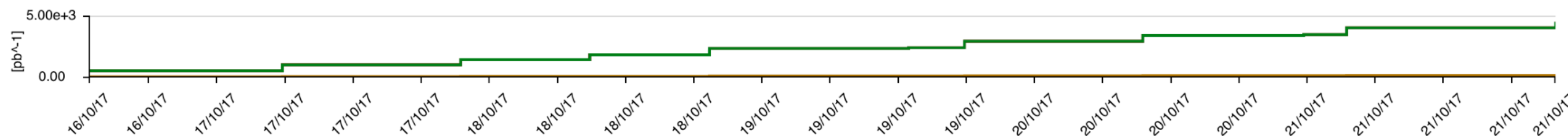
CMS: 4.47 fb⁻¹

LHCb: 129.3 pb⁻¹

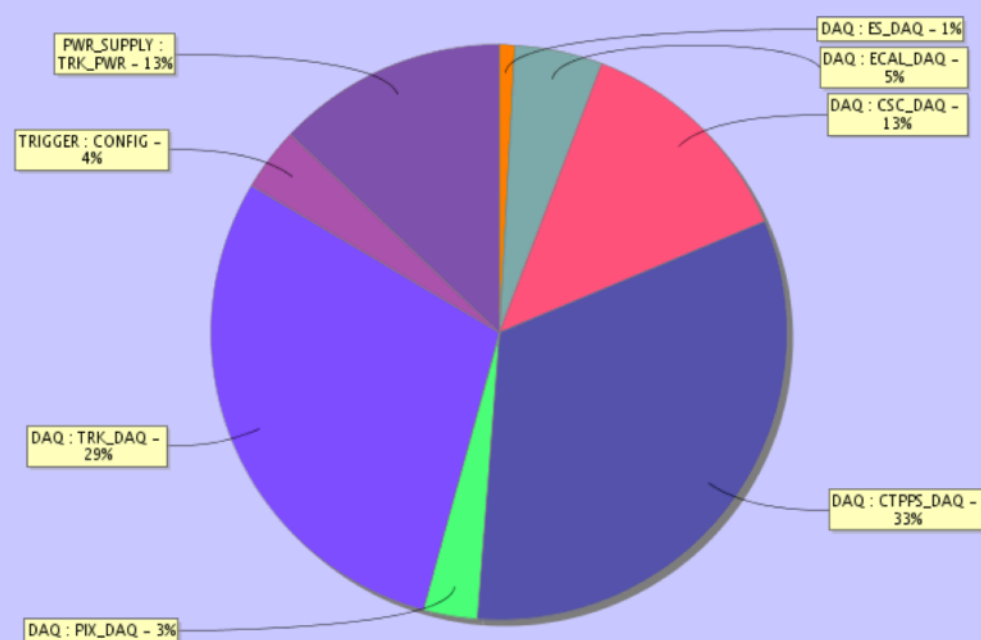
Integrated Luminosity Evolution (preliminary data)

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● ATLAS ● ALICE ● CMS ● LHCb



Lumi lost by categories



Details on next slide



LHC and CMS Status

ECAL Deadtime

- Fill 6304

- Run 305178 - part of ECAL in error
 - Stop and restart of run
 - Lumi lost : 2.19 pb -1

16/10/2017

Lumi Lost

ECAL - 8.86 pb -1
ES - 1.05 pb -1

- Run 305183 - ECAL SEU causing high L1 trigger rate
 - Lumi lost : 3.77 pb -1

- Fill 6305

- Run 305199 (Circulating)
 - EB+ stuck , TTC hard reset
 - Lumi lost : 0

17/10/2017

- Fill 6317

- Run 305405
 - High L1 trigger rates
 - ECAL was red recycled to fix the problem
 - Lumi lost : 2.89 pb-1

22/10/2017

ES Deadtime

- Fill 6307

- Run 305237
 - TTS state error
 - Auto recovery
 - Lumi Lost : 0

18/10/2017

- Fill 6312

- Run 305341
 - Downtime only for 32 s
 - LumiLost : 0

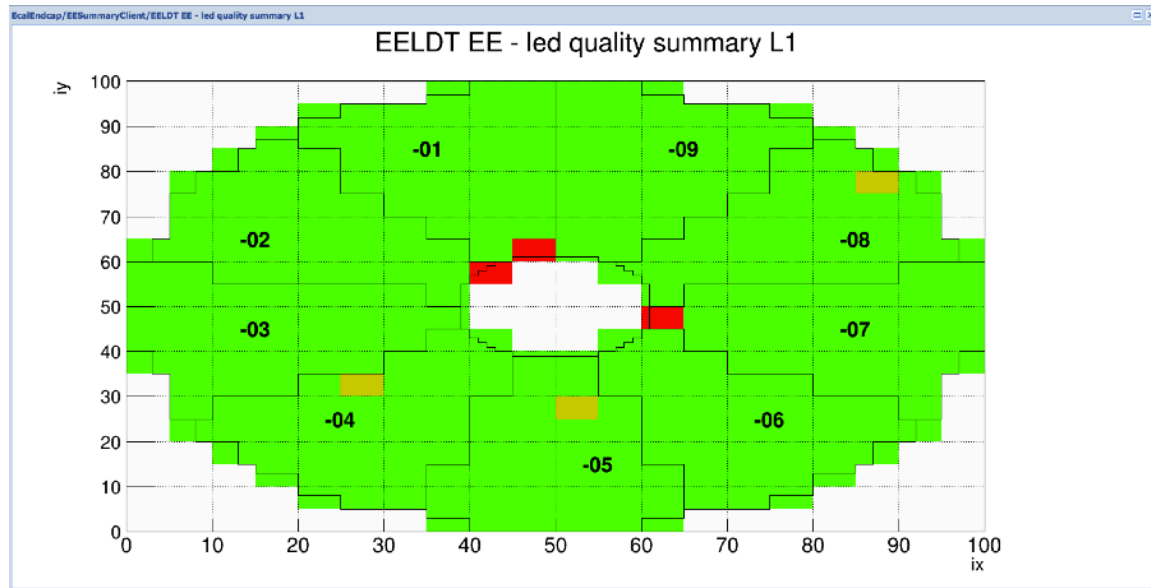
20/10/2017



Main Problems this Week

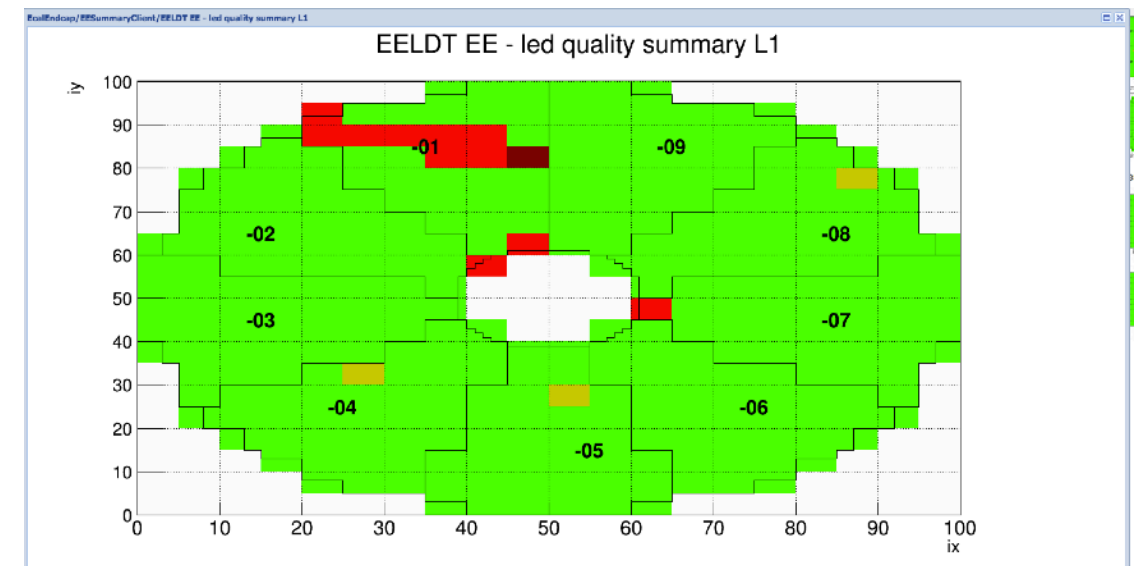
- Red channels in Online DQM LED Quality L1 summary plots

Run 305282

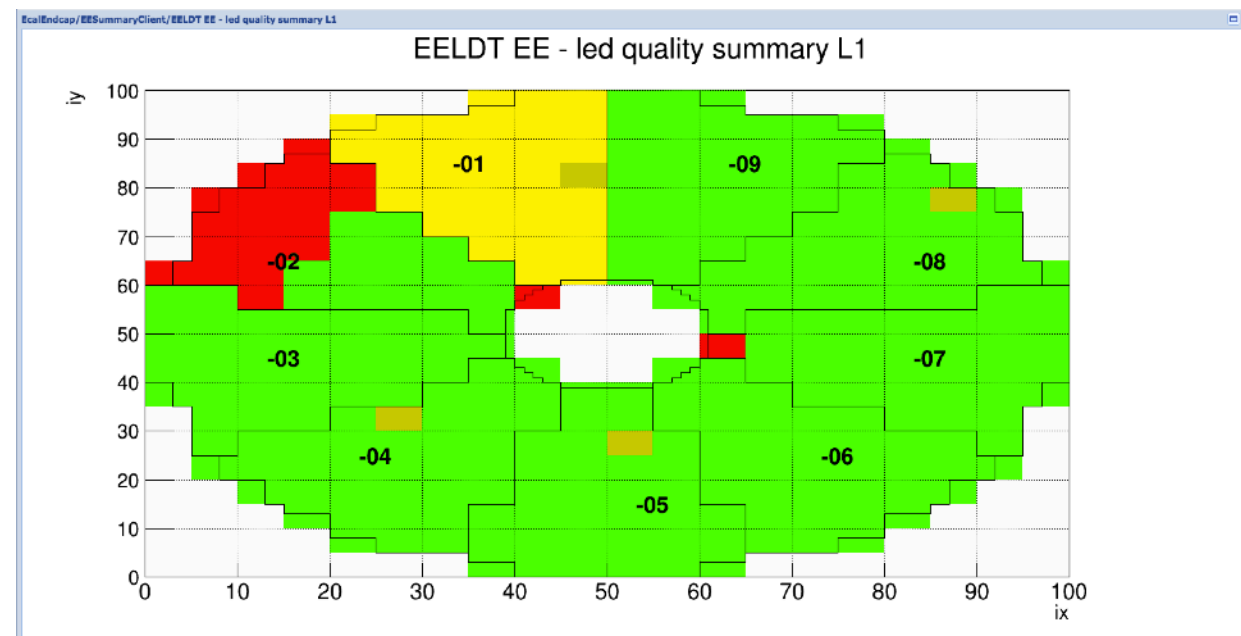


Runs

305310,305311,305312,305313,305314,305336,305341,305351



Run 305358

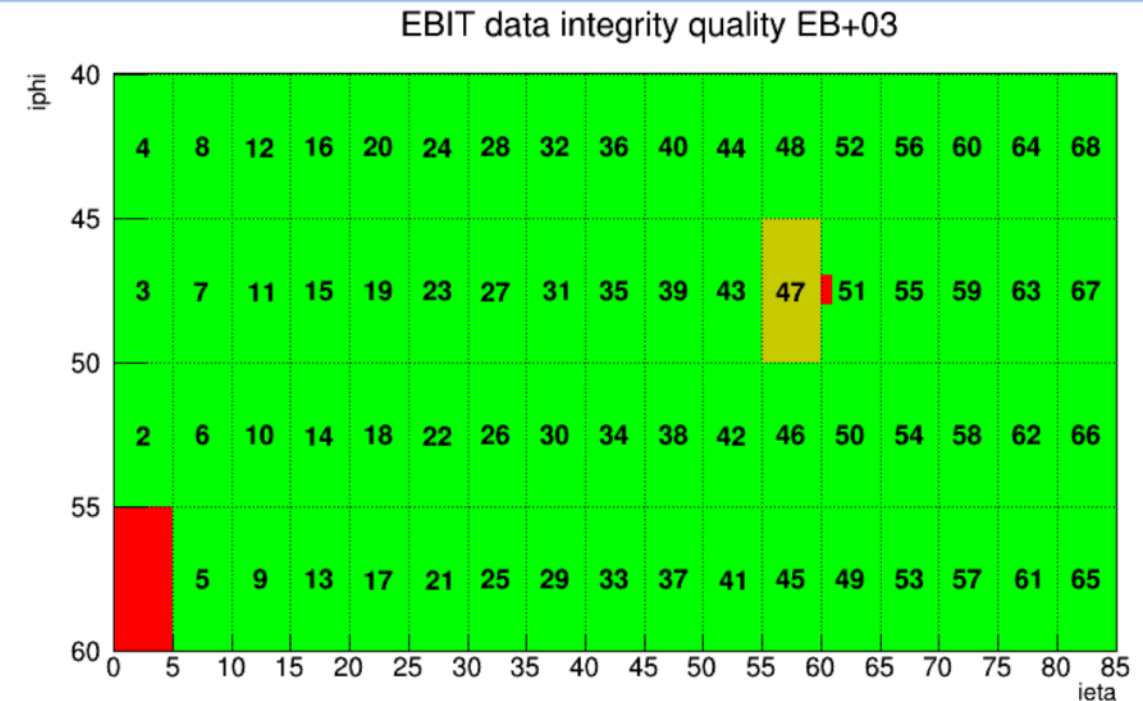




Main Problems this Week

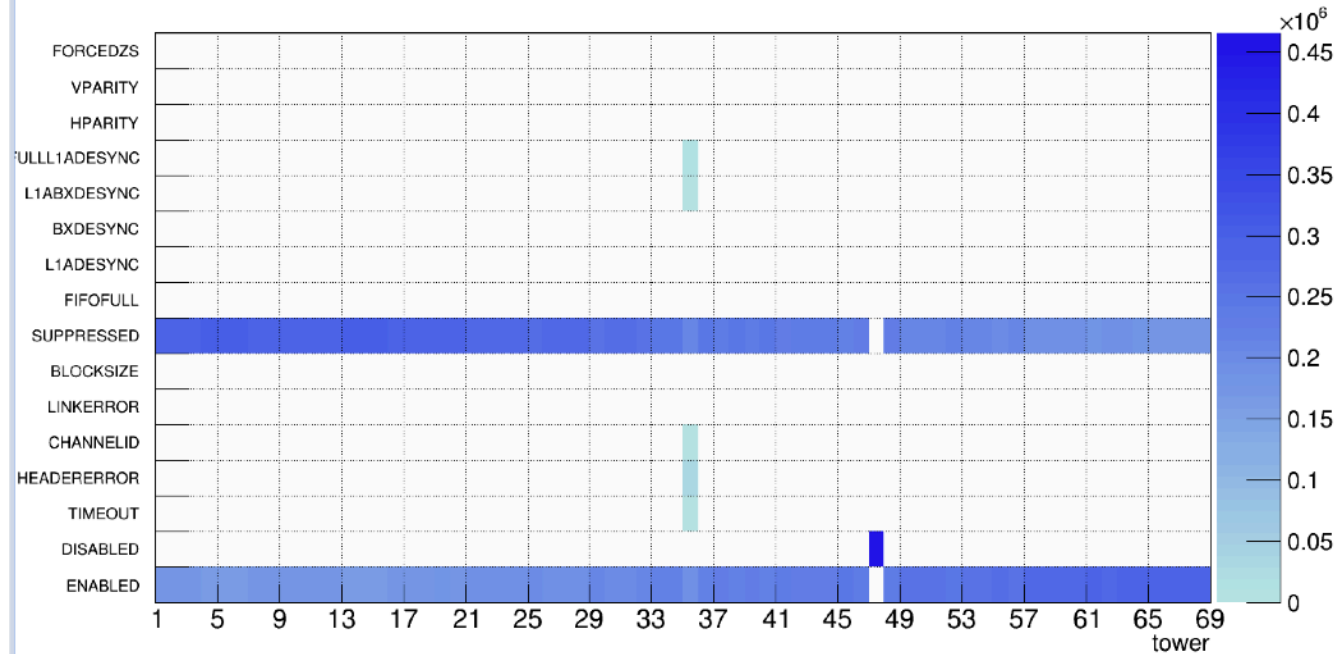
- Red channel in EB +03 Data integrity quality plot
- Recurrent problem in several runs - 304562, 304654, 304661, 306662, 304663 , 305045
- Similar red channels in data integrity quality also seen last week for EB+03

EcalBarrel/EBIntegrityClient/EBIT data integrity quality EB+03



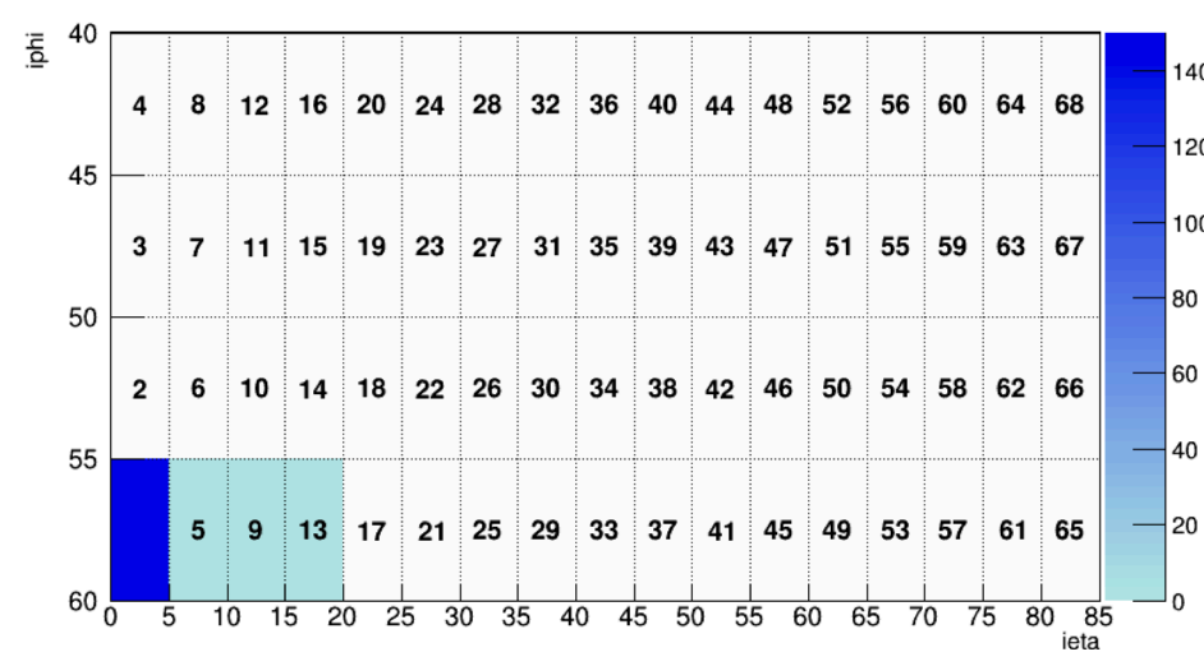
EcalBarrel/EBStatusFlagsTask/FESStatus/EBSFT front-end status bits EB+03

EBSFT front-end status bits EB+03



EcalBarrel/EBIntegrityTask/TTId/EBIT TTId EB+03

EBIT TTId EB+03

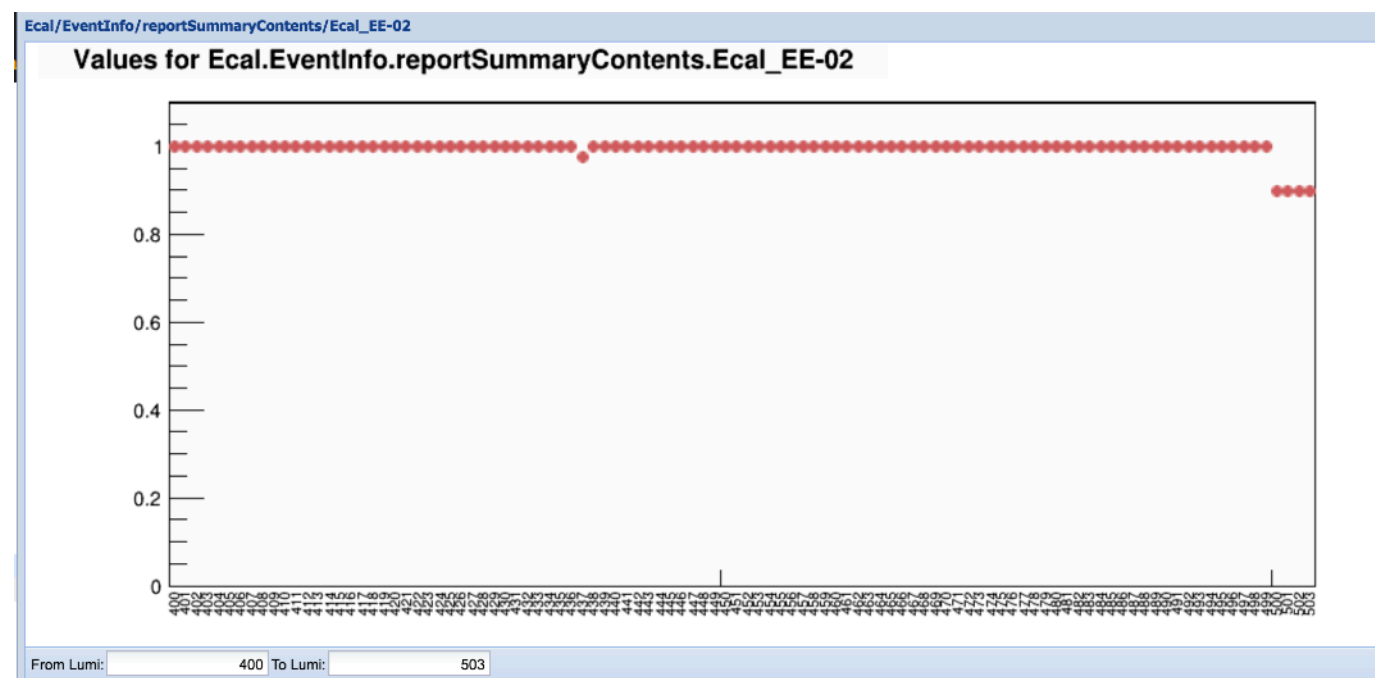
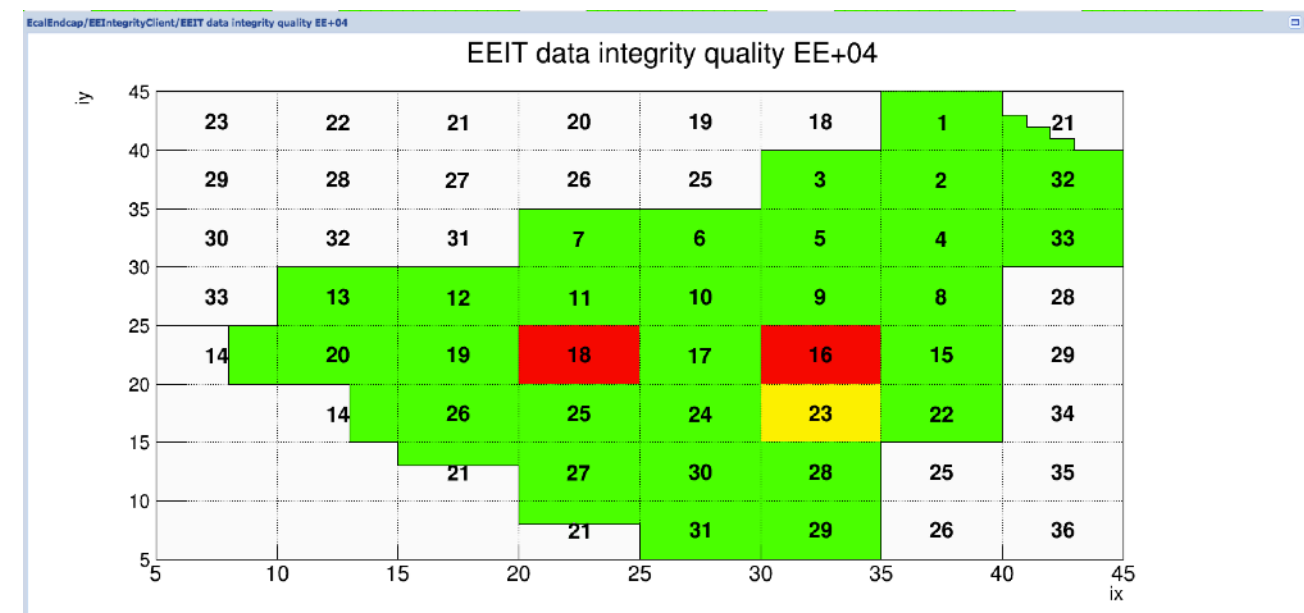
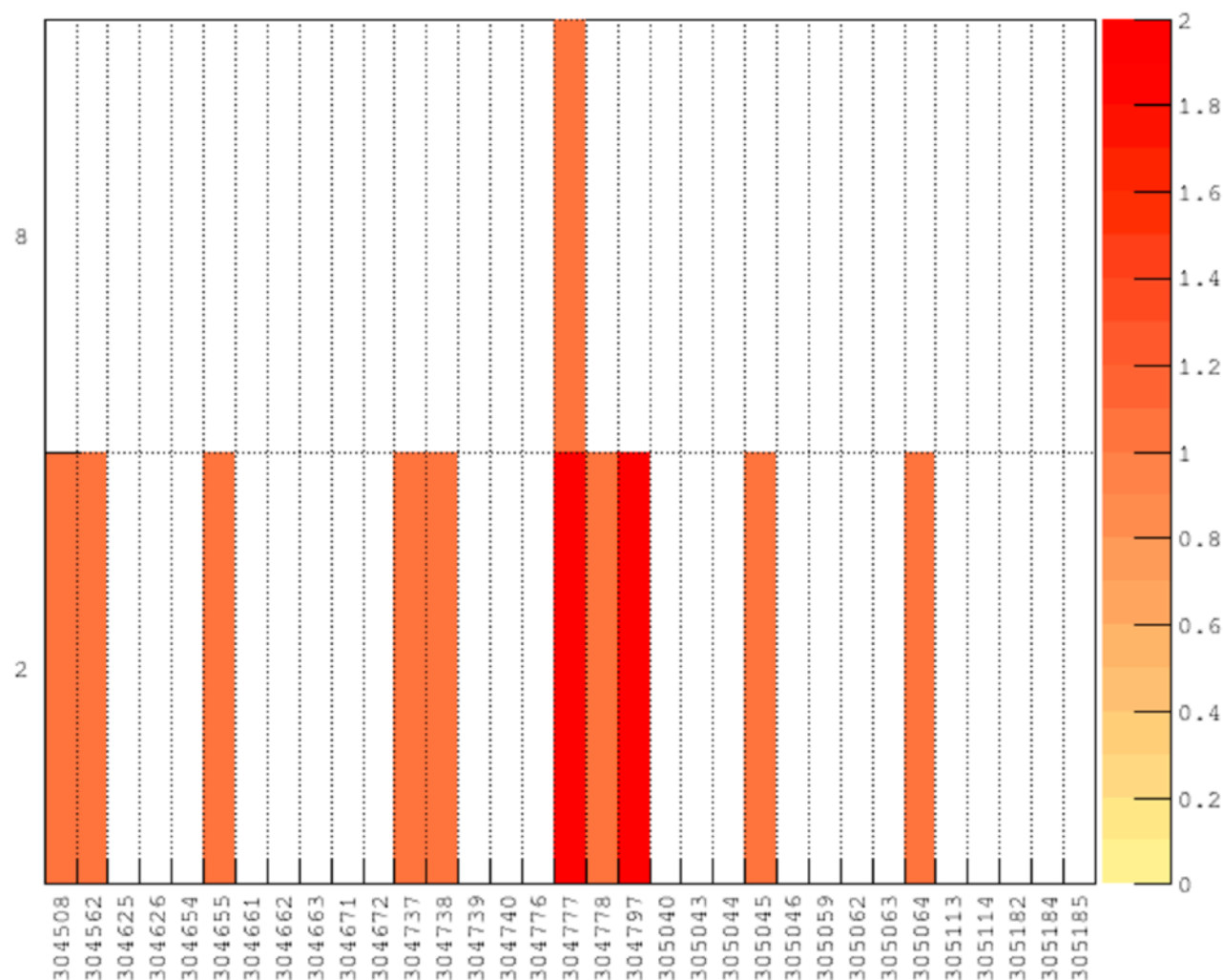


Main Problems this Week

Run 304777

- Integrity quality problems in EE+04 TT 16,18

FE Error cluster size



LS 500-503 invalidated

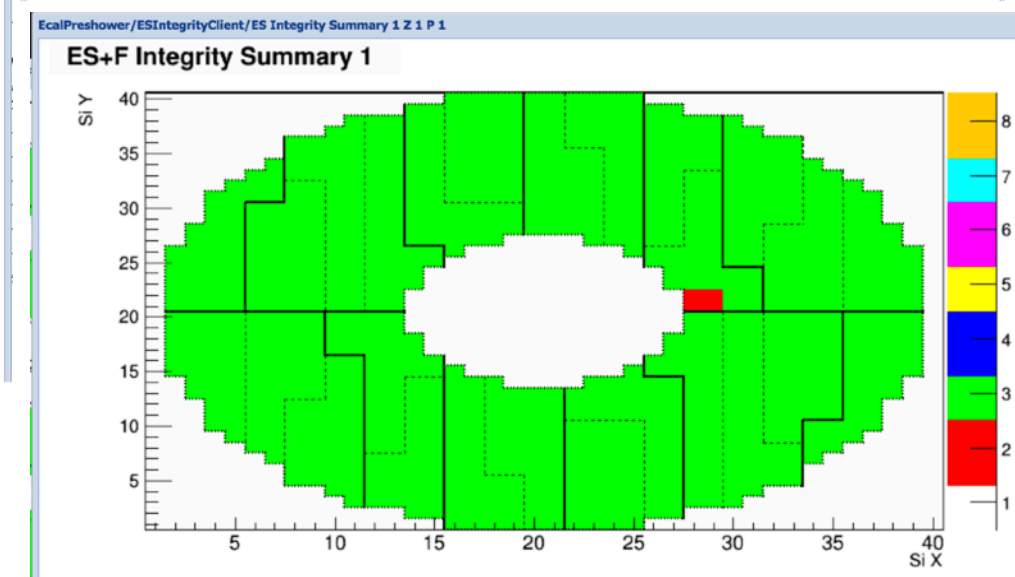
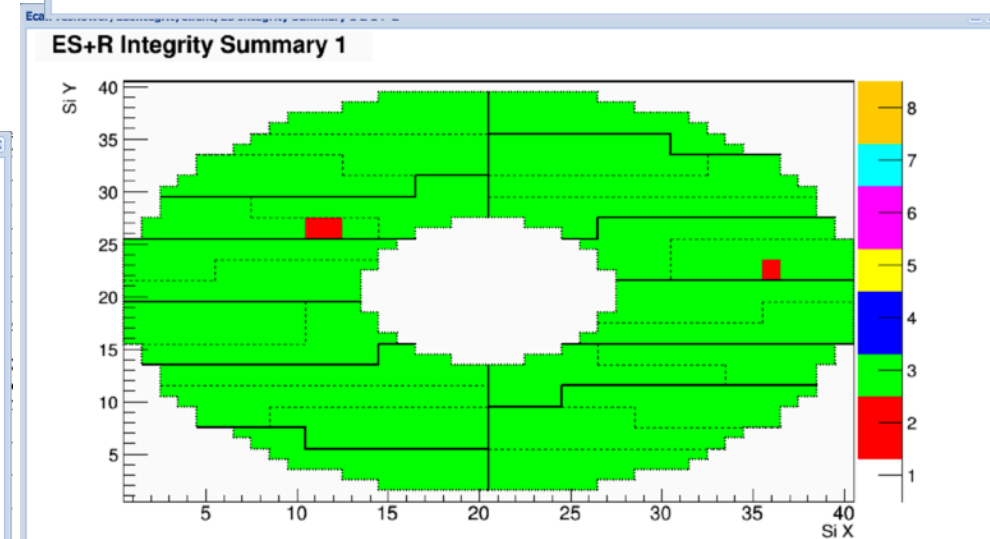
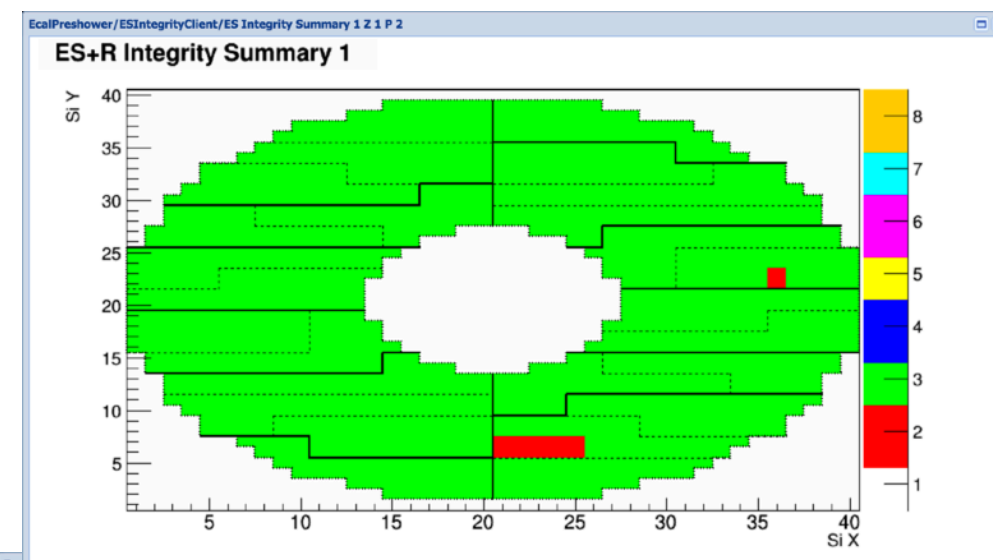
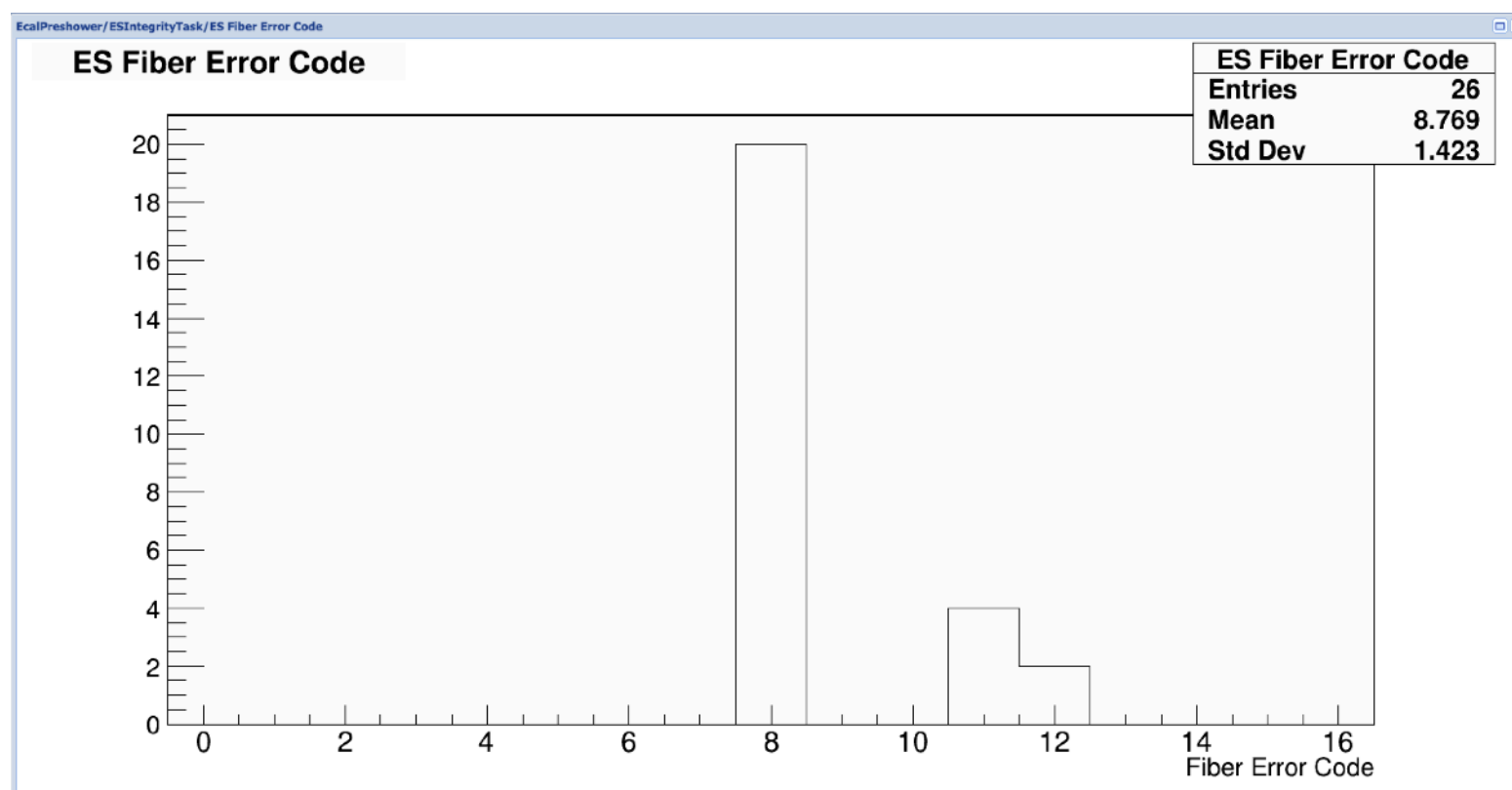
Main Problems this Week

(ES+R) Runs 304508,304663,304562,304625,304654,304655,304663,304671,304738

(ES+F) Runs 305114,305113,305064

- Number of entries with errors are less than 1%
- Runs certified as **GOOD**

Run 304508

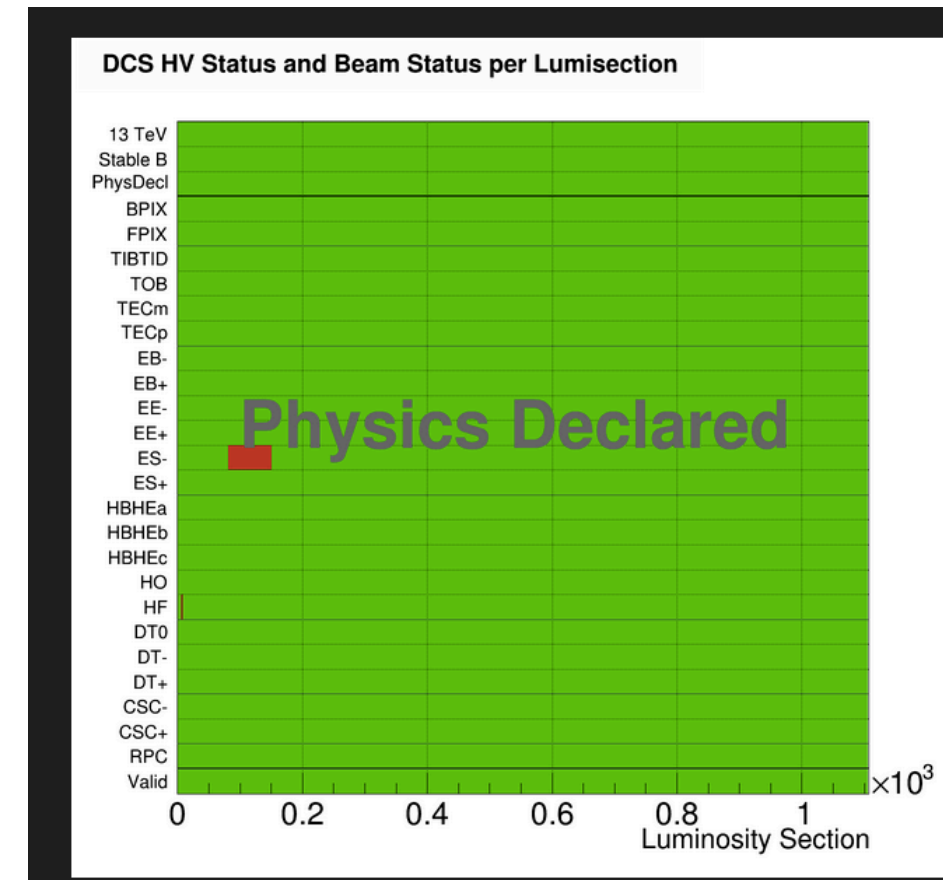




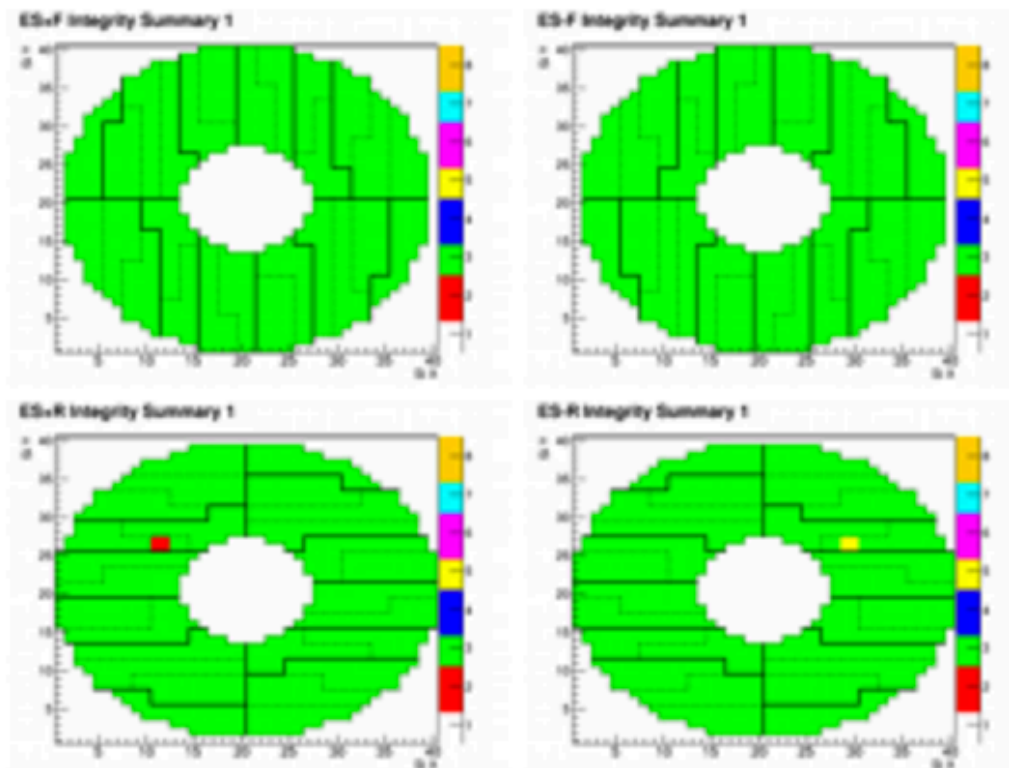
Main Problems this Week

Run 305377

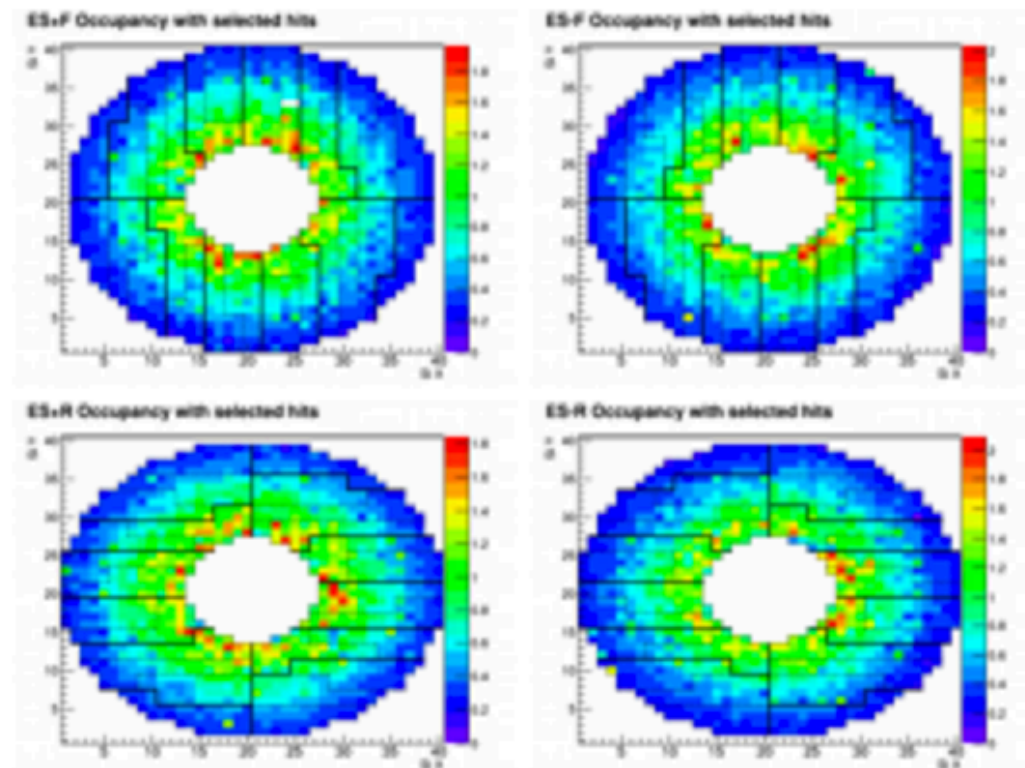
- Problem with ES HV channel
- Run consisted of 1537 LS
- HV fail happened naturally during LS 81-151
- Since data quality on DQM looked OK it was decided to not mask the LS's as BAD

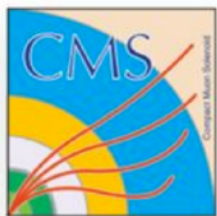


01-IntegritySummary-EcalPreshower



02-GoodRechitOccupancySummary-





Offline Run Certification

- 41 Runs were certified last week (Express Stream Runs):

305178, 305179, 305180, 305182, 305183, 305184, 305185, 305186, 305187, 305188,
305202, 305203, 305204, 305207, 305208, 305234, 305236, 305237, 305247, 305248,
305249, 305250, 305252, 305282, 305310, 305311, 305312, 305313,
305314, 305336, 305338, 305341, 305349, 305350, 305351, 305358, 305364, 305365, 305366,
305376, 305377

- All GOOD

Data Certification for this Week

- Runs to be certified by Oct 23'17 23:59 :

304508, 304562, 304625, 304626, 304654, 304655, 304661, 304662, 304663,
304671, 304672, 304737, 304738, 304739, 304740, 304776, 304777, 304778, 304797,
305040, 305043, 305044, 305045, 305046, 305059, 305062, 305063, 305064, 305113,
305114, 305182, 305184, 305185, 304899, 304906, 304907

- Xe-Xe runs - Runs
- Run 304777 - LS invalidated 500-503 (8 FE cluster size errors)

Good : Single Photon and Single Electron dataset based Offline DQM plots look as expected,
still need final certification in RR