ECAL conditions

78 tags in `140X_dataRun3_HLT_v3`
172 tags in `140X_dataRun3_v8`

PCL

- ECAL pedestals (only the G12; G1 and G6 are updated **manually** every week)
  - Mean and RMS of all three gains in one single record
- In Prompt: EcalPedestals_prompt is available, one per run, `Created copying tag EcalPedestals_express from oracle://cms_orcon_prod/CMS_CONDITIONS` --> So this is the one that comes from the PCL
- In HLT: EcalPedestals_hlt is available
  - In HLT we only have the weekly update!!! But also all three change...
- On other hand, I see ALL THREE of them changing also in Prompt

Laser corrections

- ELMONK (What is this?)
  - Available at HLT per fill (correct)
  - Tag with 40 minutes granularity for offline
    There is a tag called EcalLaserAPDPNRatios_weekly_hlt, but it is actually fill by fill. They skip the fill when it is very tiny (e.g. fill 10109 had less than 15 min of stable beams)
    Conversely, EcalLaserAPDPNRatios_prompt_v3 for the offline, and has the "large number IOV" (e.g. 7410764162835415000)

Alignment

As far as I understand, this is done only once per magnet cycle. Irrelevant for us?

Pulse shapes

"Pulse shape workflow fully integrated in the automation" nice :)
"~3 days from collisions to new conditions deployed (including 48h T0 delay)"

EcalPulseShapes_hlt available in HLT ... biweekly updates? Also goes through FastTrackValidation

EcalPulseShapes_Run1_Run2_Run3_v06_offline available in offline --> IOV > 10000 runs

Timing calibrations

ECAL has two timing algorithms in 2024

- Ratio timing at the HLT and online DQM
- Cross Correlation (CC) timing in prompt and express reconstruction
  But why?

"Timing calibration workflow is fully integrated in the automation in 2024"

EcalTimeCalibConstants_v3_hlt available in HLT, goes through Fast Track Validations
EcalTimeCalibConstants_Run1_Run2_Run3_v06_offline available in offline
EcalTimeCalibConstants_Run1_Run2_ratiotiming_Run3_cctiming_v05_offline available in offline (CC) --> IOV > 10000 runs
EcalTimeOffsetConstant_Run1_Run2_ratiotiming_Run3_cctiming_v01_offline available (CC) IOV > 10000 runs

Intercalibrations

EcalIntercalibConstants_V1_hlt available in HLT, goes through FastTrackValidation
EcalIntercalibConstants_Run1_Run2_Run3_v05_offline available in offline --> IOV > 10000 runs

"Eta scale and crystal inter-calibrations require 2-3/fb of data for eta scale and harness corrections and 25/fb for phi IC and absolute scale. Partially automated"

ADCtoGeV constants

In both cases, IOV > 10000 runs

EcalADCToGeVConstant_V1_hlt available in HLT
EcalADCToGeVConstant_Run1_Run2_V04_offline available in offline

All the ParticleFlow / GED constants