



L1Calo Status: 23-30 Aug

- Special run being analysed for new filters and noise cuts
 - NB if LHC increases lumi & pileup significantly we may need another one...
- Preprocessor "Sat80" algorithm also used for that run
 - Bug identified (minor effect) => new firmware in preparation
- PPM nMCM replaced in MD has 1 bad (unused) channel
 - Either unlucky or PPM problem: check again next MD/TS
- New CMX "base support" firmware tried in MD
 - Fix unreliable VME access to some registers (reliable SW workaround)
 - Looks OK but not enough testing time so back to stable firmware for now
- Tile gains updated
 - Normal adjustment (1-2%) following change of Tile caesium constants
- Cluster processor readout error (2 runs) - cured by power cycle
- Good to have updated P1MON (after a long wait)
 - Though it seems still not the latest requested tags...?
 - Hope for rapid updates in future (eg for new L1Topo monitoring)



L1Topo Status: 23-30 Aug

- New firmware version 4.4.9 tested OK => new stable FW
 - Fixes EM isolation bug affecting a few algorithms
 - Needs a different isolation bug fixed in the simulation
 - NB topo firmware may now have fewer bugs than the simulation!?
 - This firmware now reads out "delayed muon TOBs" in preparation for future algorithms using delayed muons
 - Also error flags in readout now enabled and should be correct
- Remaining algorithm problems
 - KalmanXE, RatioSum (simulation?), Muon invariant mass (granularity?)
- Complex deadtime: longer readout buffers, bucket3 removed
- Short/medium term plans (before/during MD&TS)
 - Try and fix remaining algorithm problems
 - Investigate underlying cause of "40 MHz muons" in test lab
 - Fix some remaining link status errors
 - Various optimisations to infrastructure firmware