

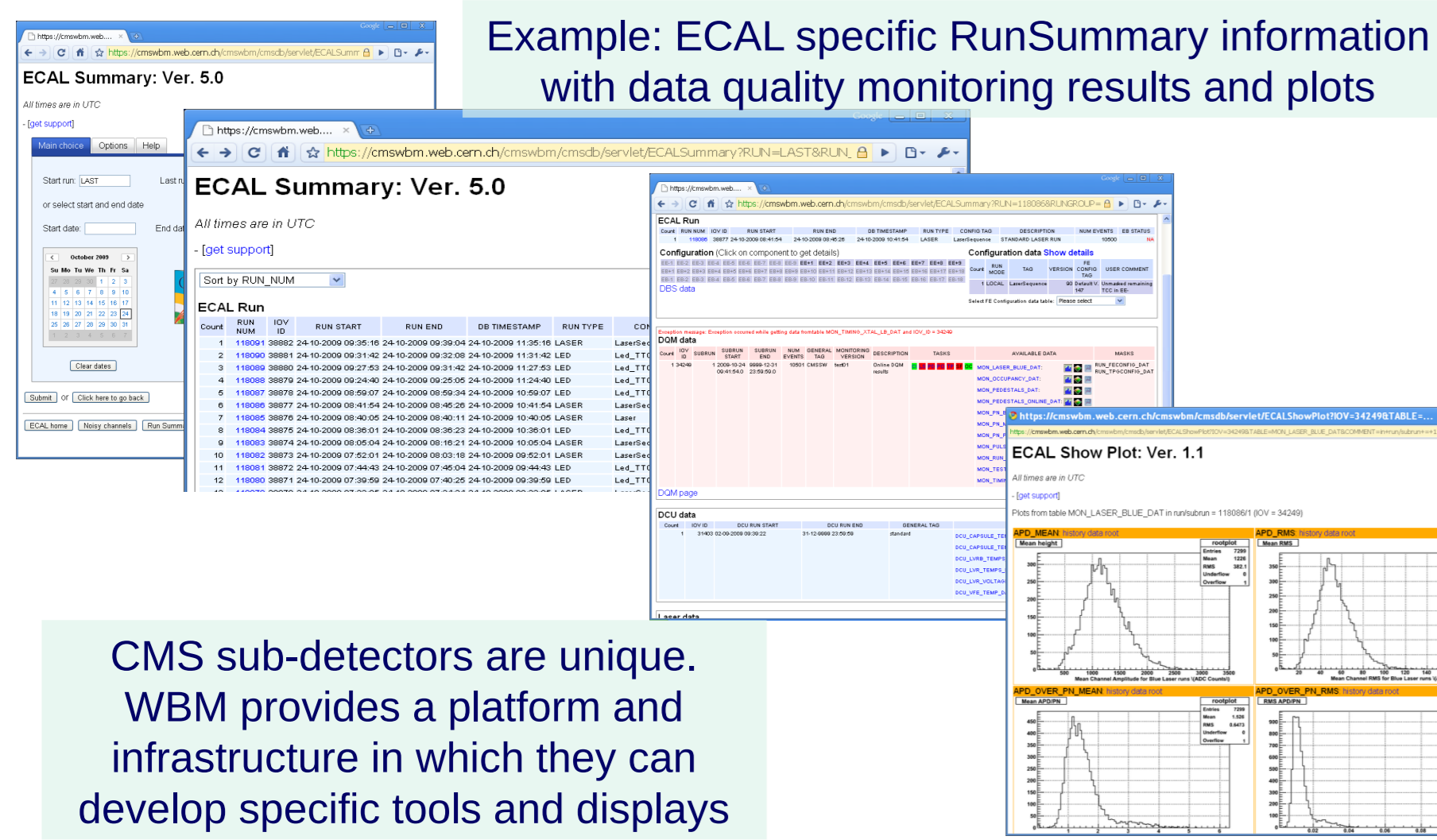
CMS Web-Based Monitoring

Central place for integrated CMS online information

Juan Antonio Lopez-Perez (Fermilab, IL, USA) from WBM team for CHEP 2016

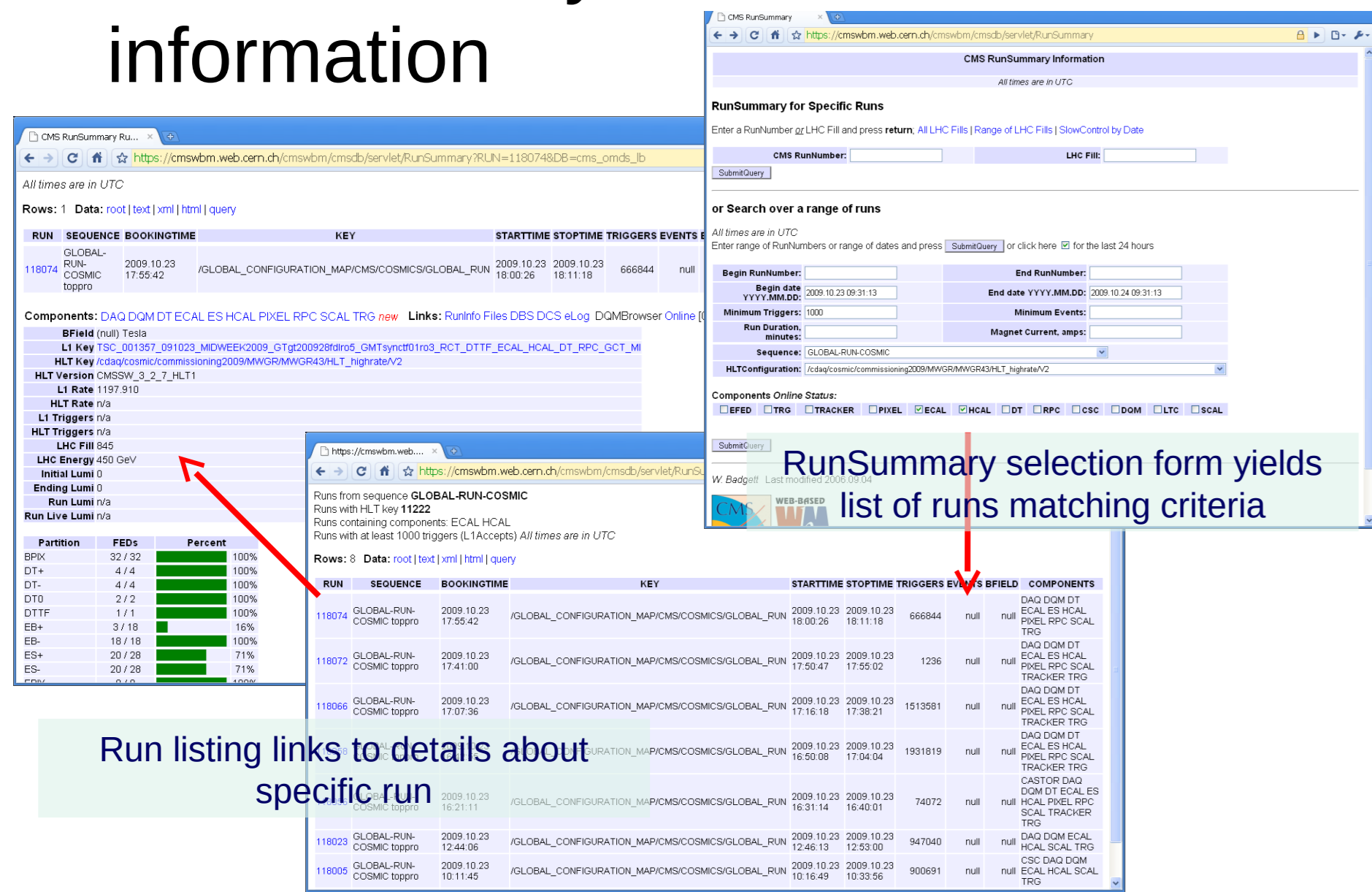


Subdetector Contributions



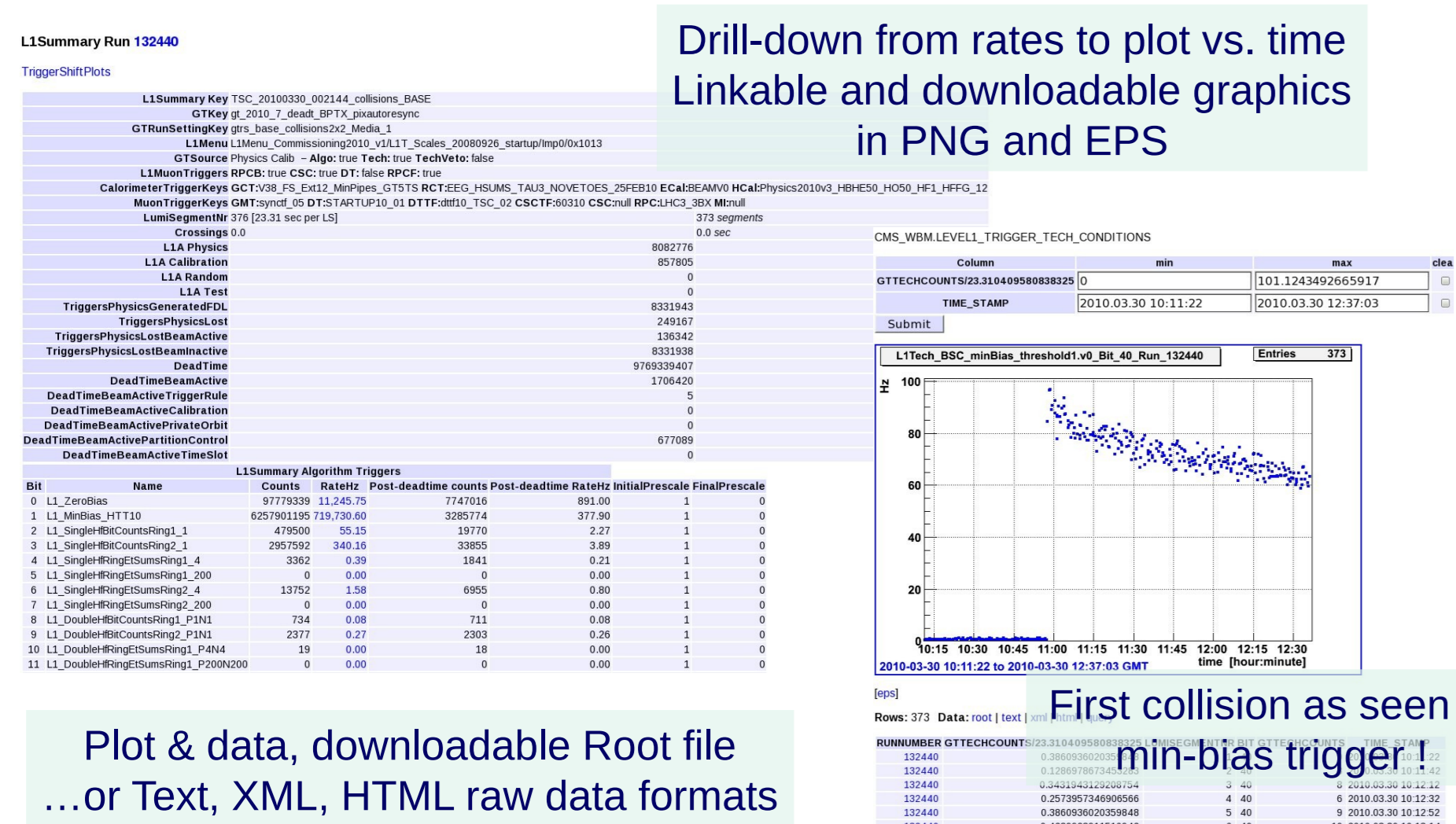
CMS sub-detectors are unique. WBM provides a platform and infrastructure in which they can develop specific tools and displays

Run Summary information



Run listing links to details about specific run

L1 trigger Summary information

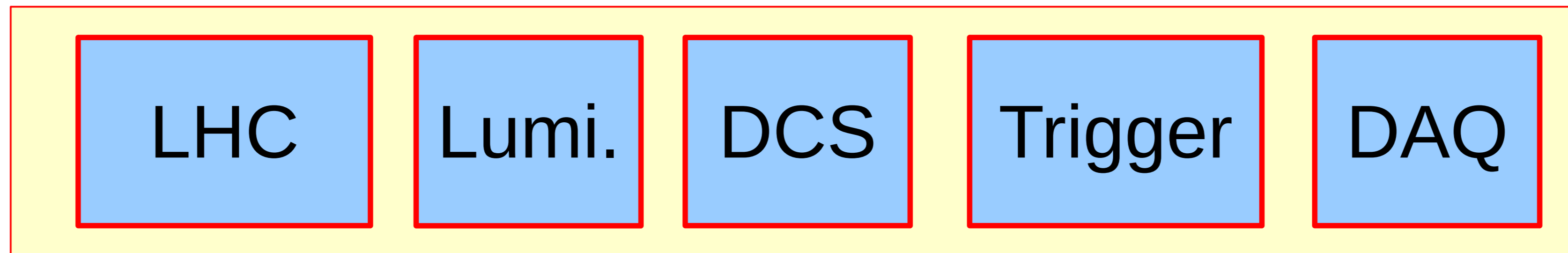
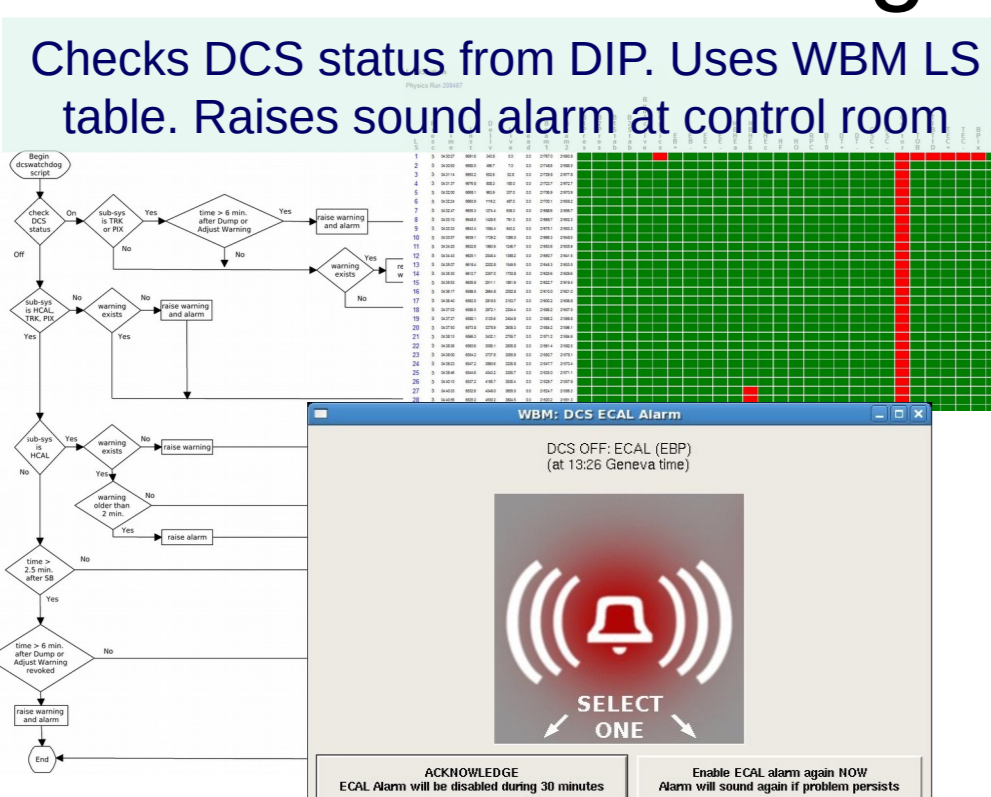


Plot & data, downloadable Root file ...or Text, XML, HTML raw data formats

Trigger History plots



DCS watchdog



Database
DIP GMT
flashlists



CMS Web Based Monitoring

online

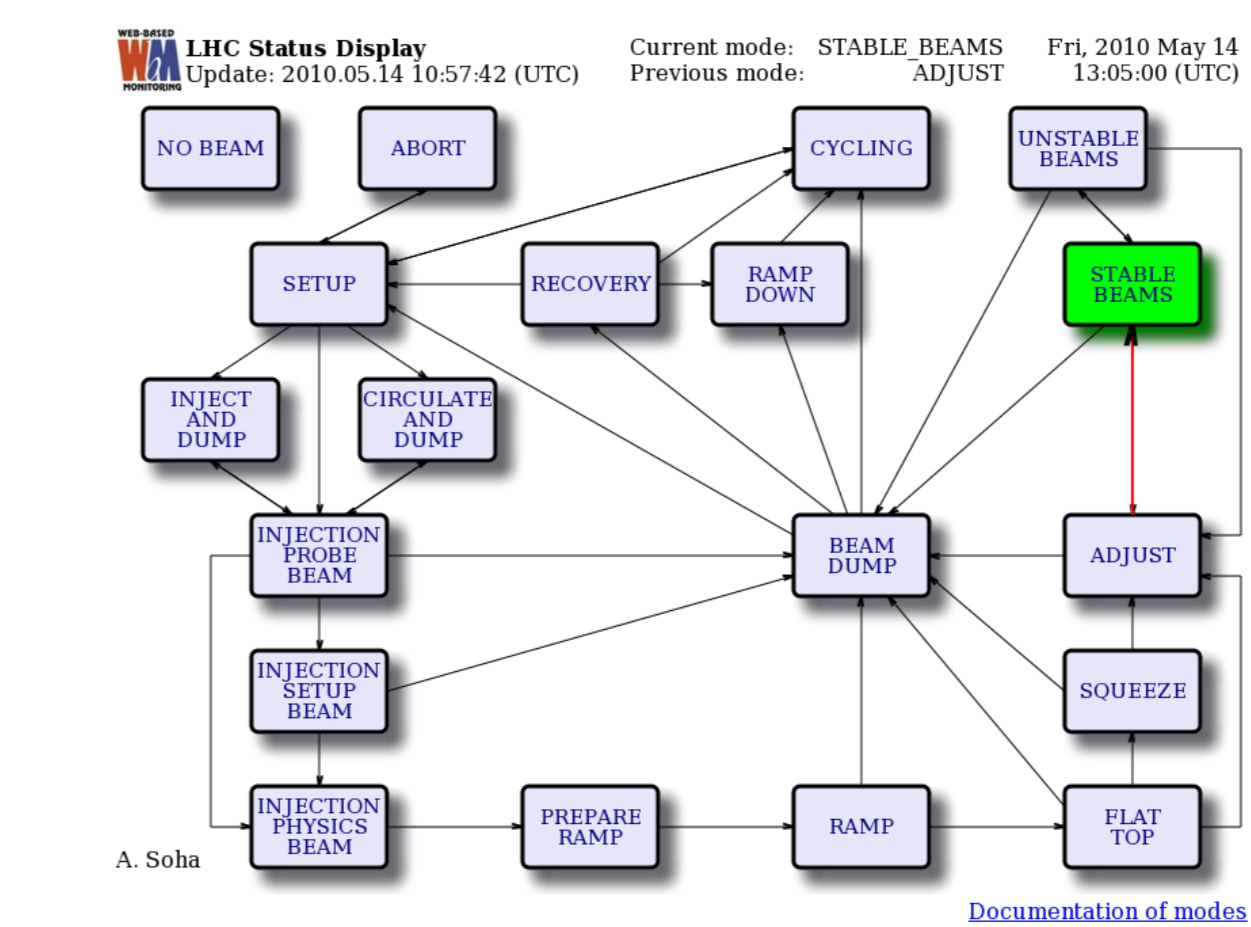


- Subdetectors WBM**
- ECALSummary
 - DTSummary
 - RPCSummary
 - HCALHome
 - CSCSummary
 - BRSMSnapshots
 - BCM1F Bunch Info
 - TriggerModes
 - TrackerTools
 - PixelHome
 - ScreenSnapshots

- Core Services**
- RunSummary [24h] [24h+1+trig]
 - RunTimeSummary [LHC Fills] Deadtime
 - FillReport [Latest Fill] DataSummary
 - LumiScalers | Automatic Fill eMails
 - Online DataQualityLogger β
 - TriggerHistory | TriggerRunListing
 - TriggerRates [Pre-DT L1] [Post-DT L1] [HLT]
 - LastValue | ConditionBrowser [iPlot]
 - MagnetHistory | CurrentBunches | BunchFill
 - LhcMonitor | LHCStatusDisplay | BLM | BPM | DIP
 - LhcCollimators | AbortGaps
 - ShiftAccountingTool
 - PageZero | CMS Page 1

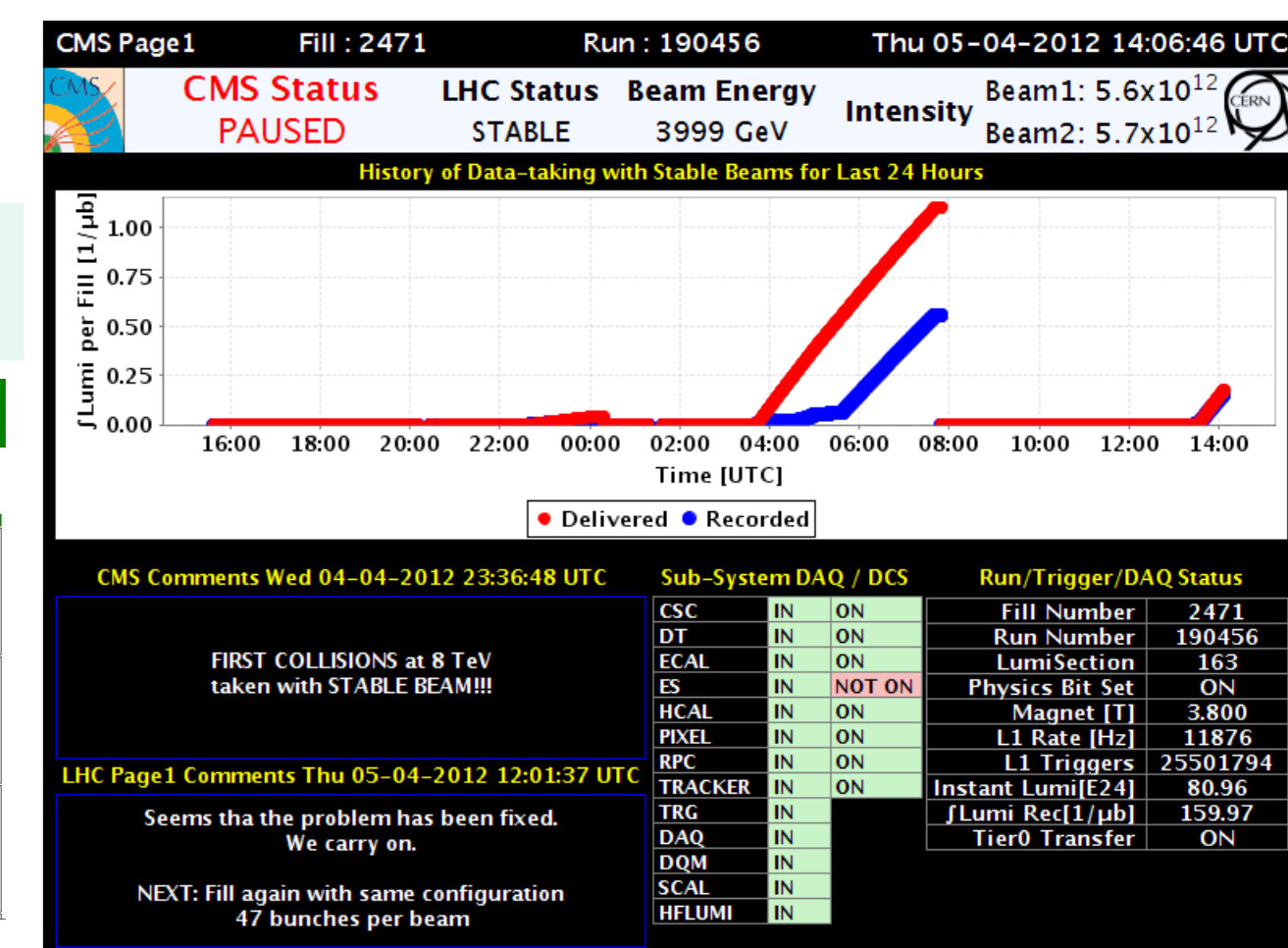
- Links**
- DQM Run Registry
 - Online DQM GUI
 - FNAL ROC
 - Commissioning & Run Coordination
 - CMS Twiki: OnlineWB TriDAS
 - CMS Online
 - Shift eLog
 - Snappy eLogViewer
 - LHC Page 1

Current LHC Beam Status

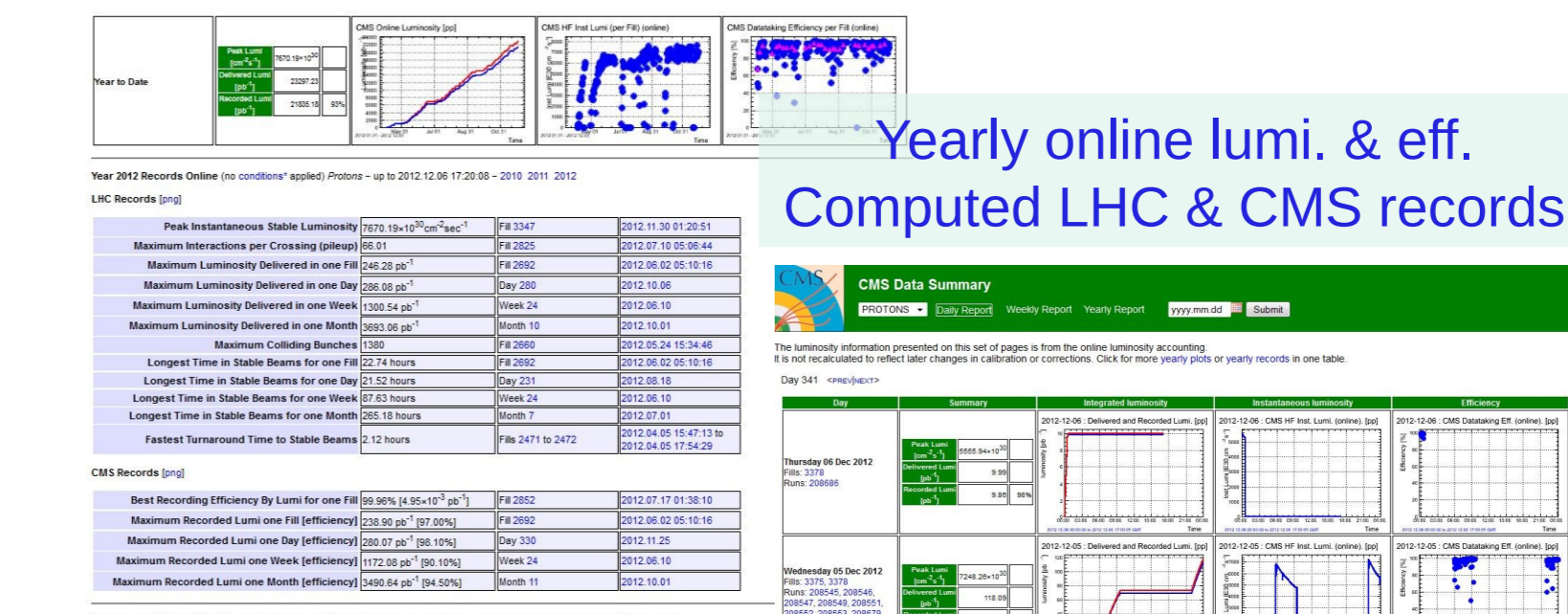


CMS Page Zero

CMS Page 1

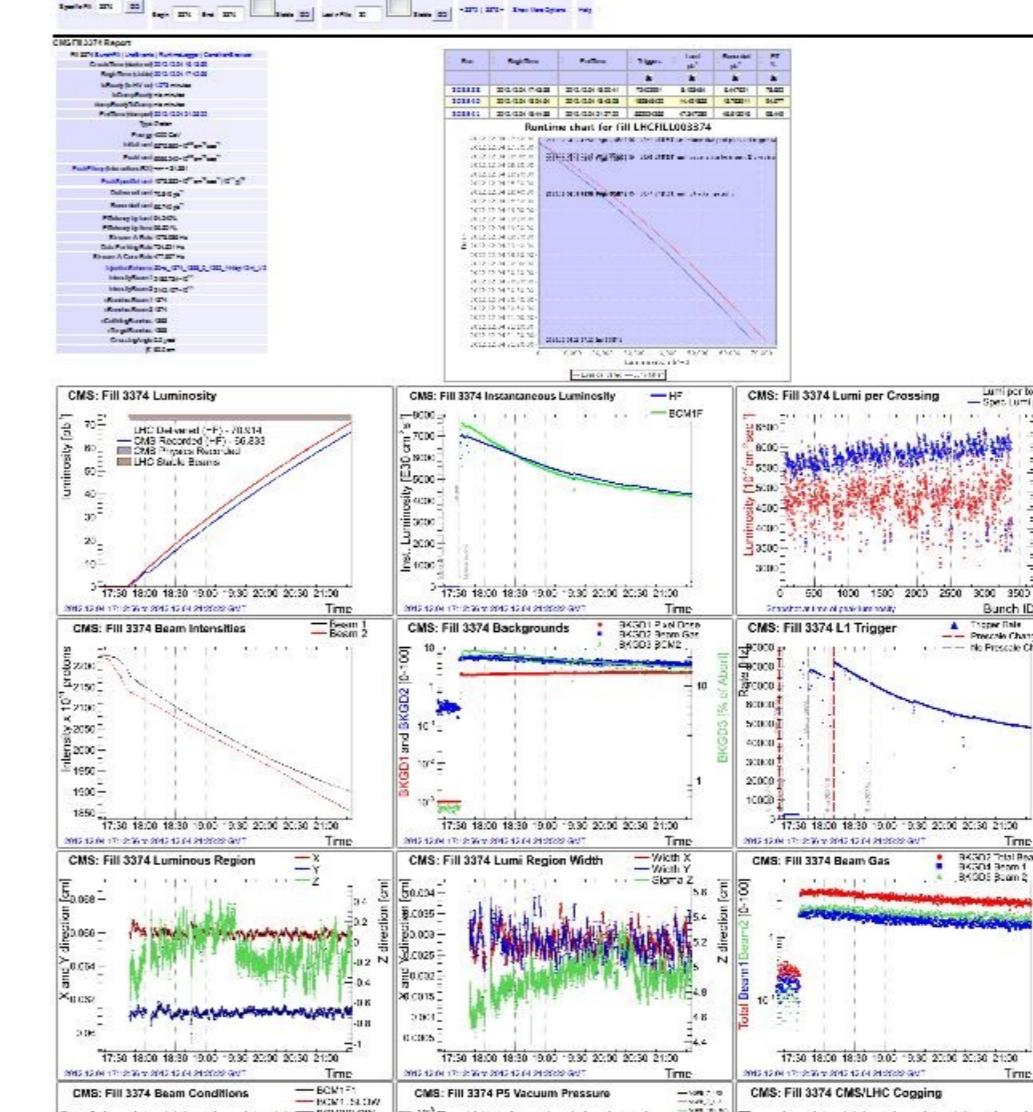


Data Summary



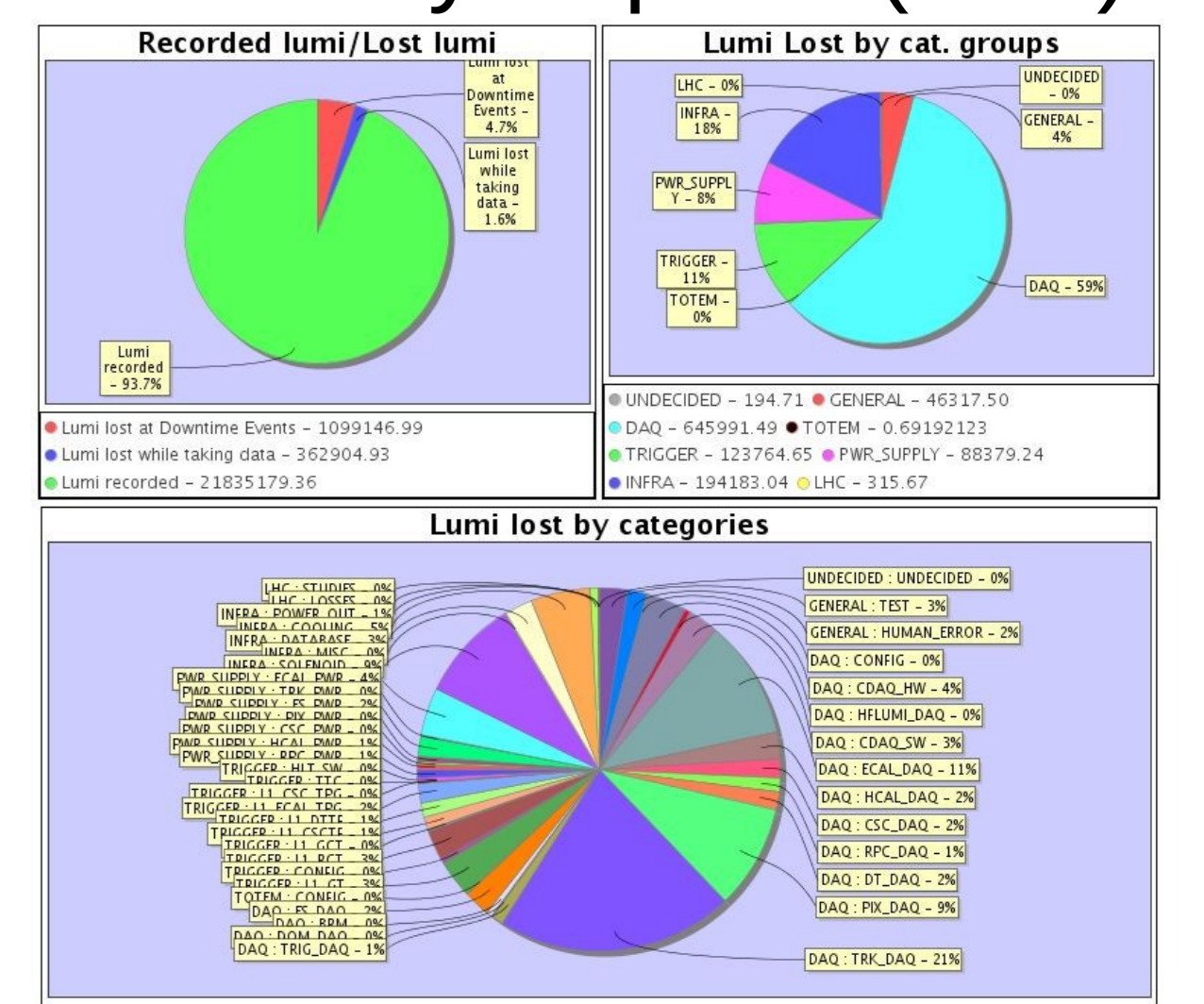
Daily & weekly accumulated lumi. & info.

Fill Report

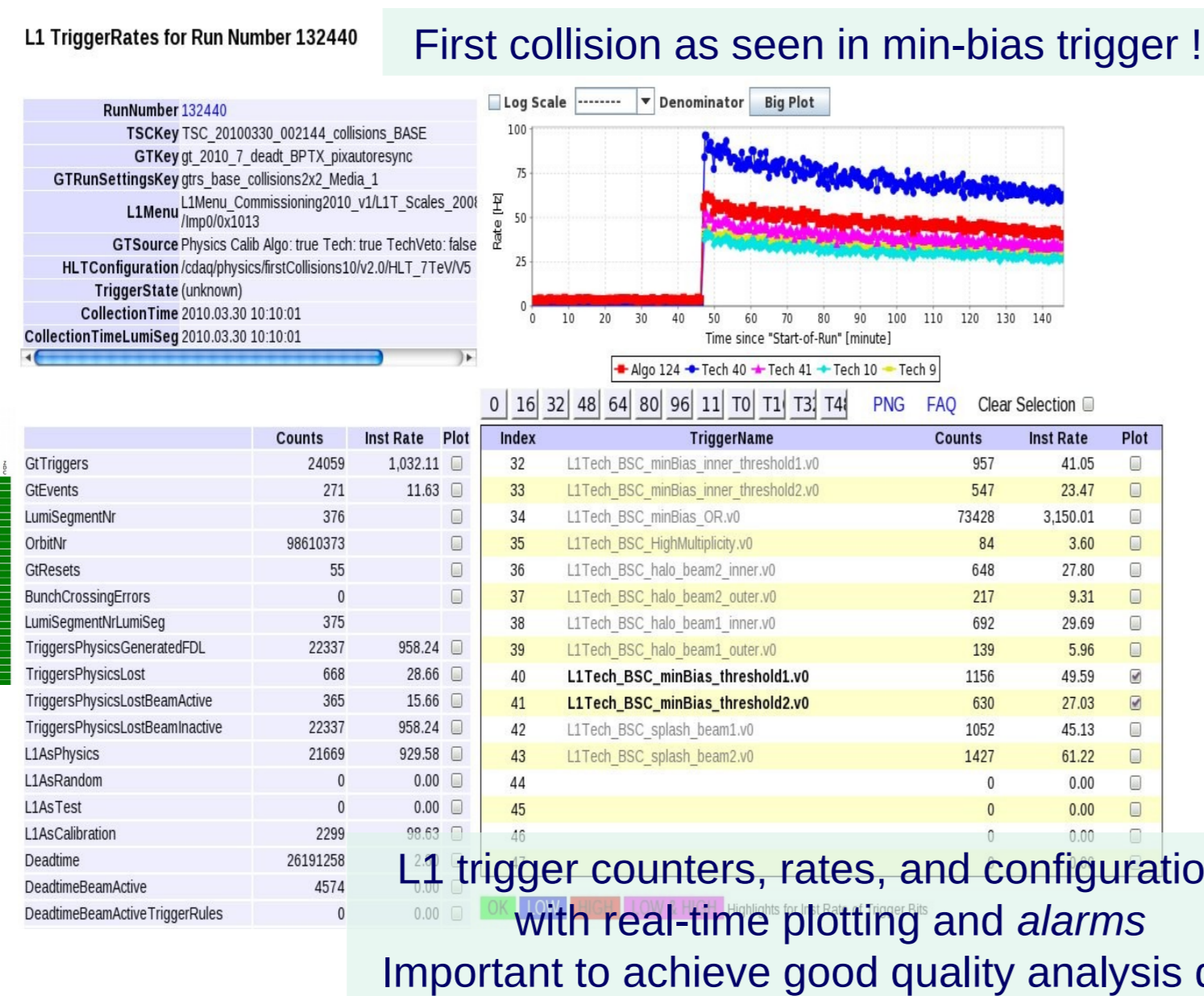


Fill related information (online lumi., efficiency, downtime, deadtime, runs, bunch scheme, beam info...)

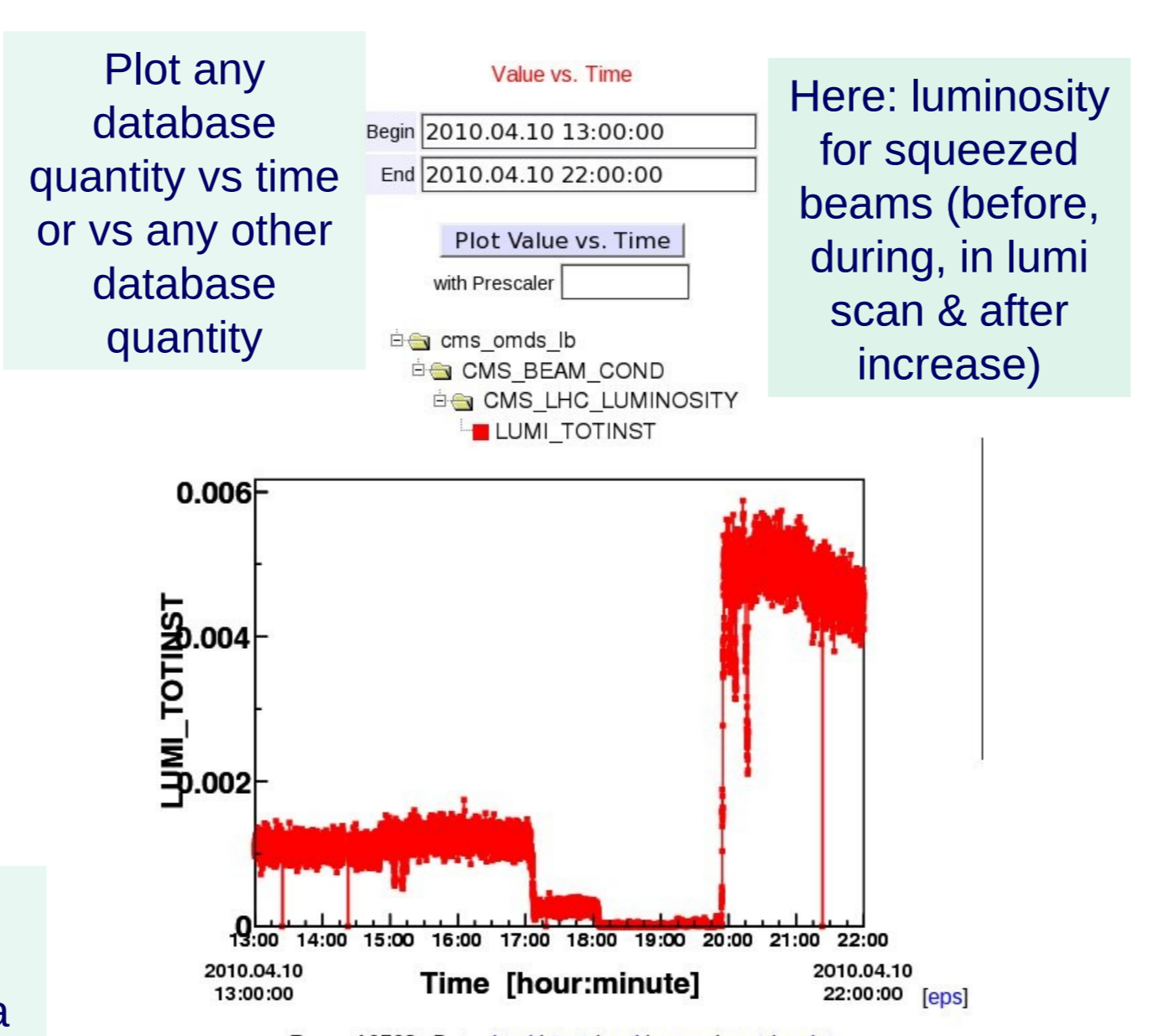
Efficiency reports (RTL)



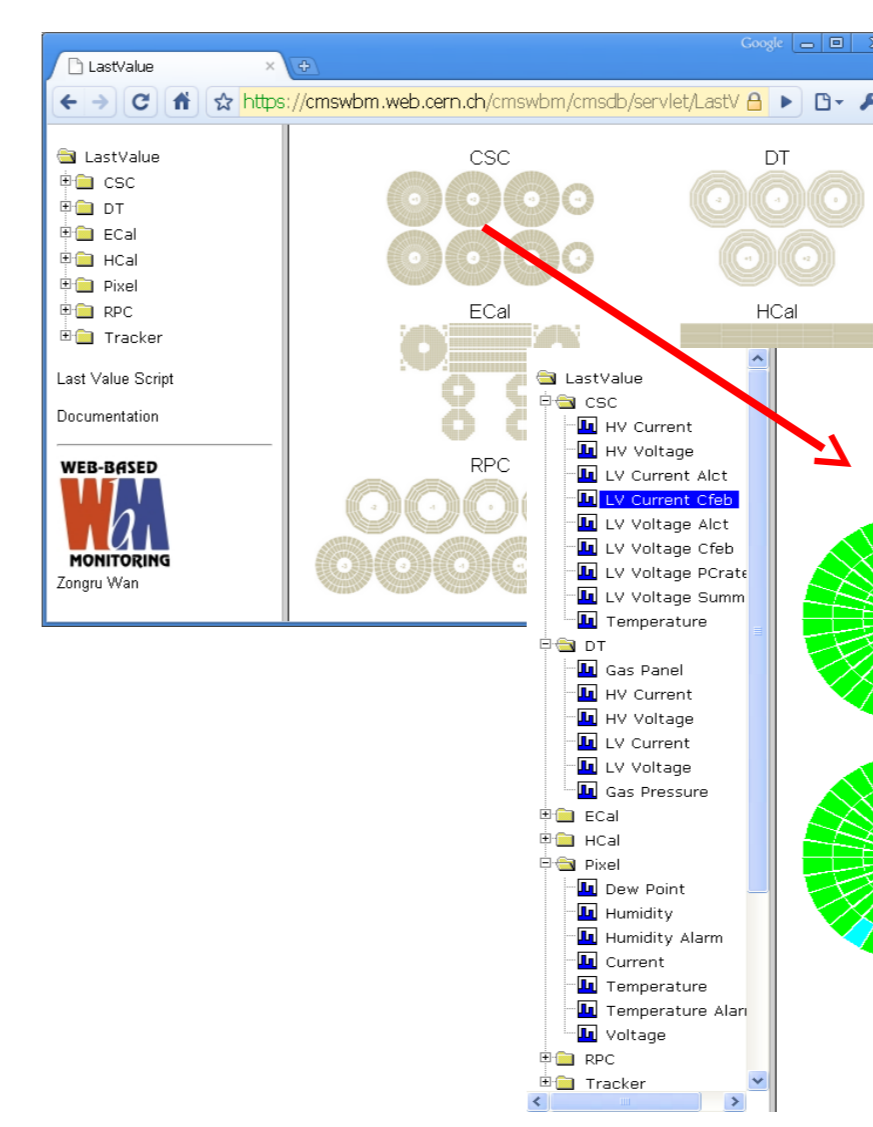
Real-time trigger displays (L1 pre/post-deadtime & HLT)



ConditionBrowser (custom plots)



Sub-detector status displays



Deadtime reports

