Status of PXD DQM

- DQM Decisions at last B2GM
- DQM at basf2 Level
- Work in Progress

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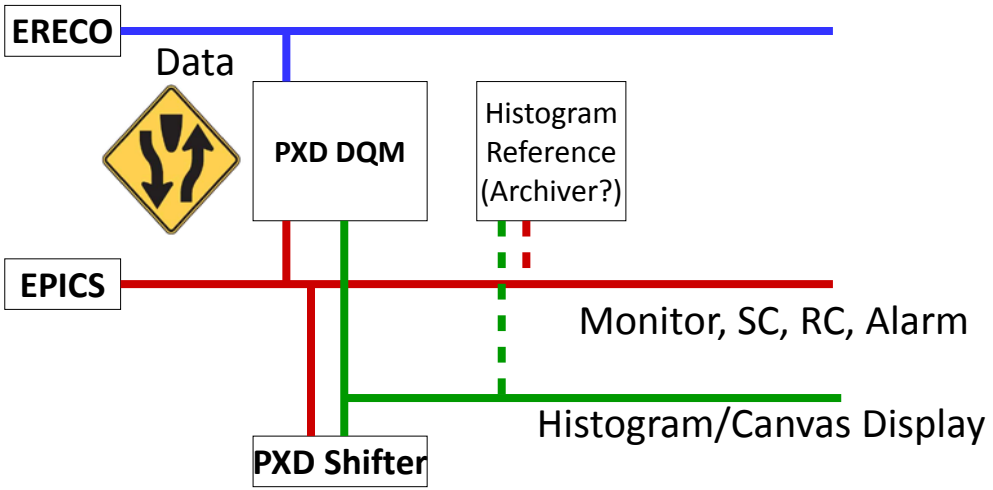
Decisions at last B2GM

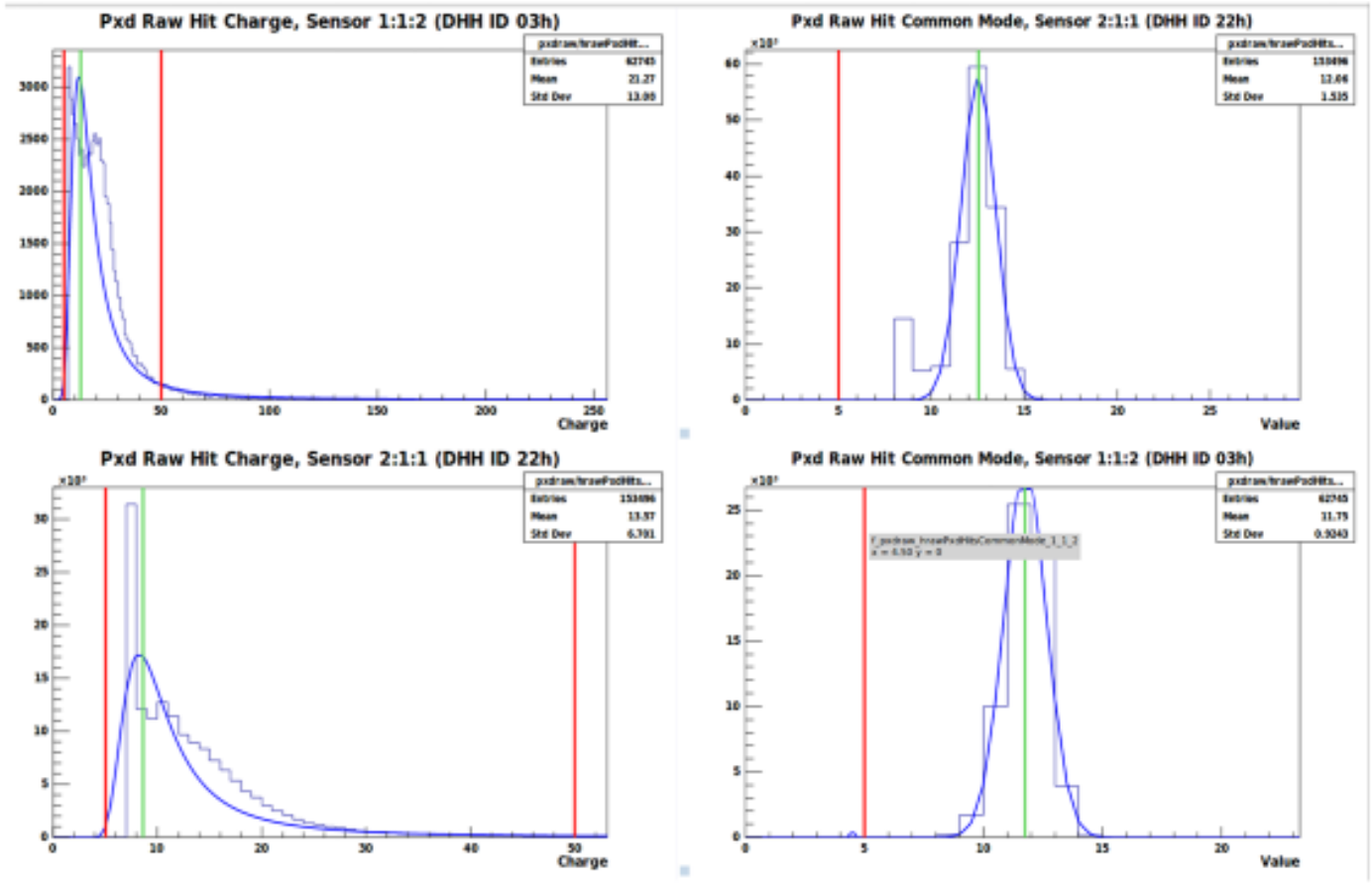
- Separate server for dedicated PXD DQM analysis needed
  - Funding for hardware not clarified yet
  - Required performance needs to be evaluated
  - Redundancy and Administration not clarified yet
  - Connection to relevant networks



- Use JSROOT to display results
  - Display complete histogram+fit+values/labels/guidance lines etc
  - Plugs seamless into existing histogram and fitting server scheme

JSROOT Example – Fitting Data

Example with TB Data



(blue/green are fit result, red are „guide“ lines (=limits)

JSROOT Example – Importing from EPICS

Import Histograms from EPICS PVs (SVDDQM)

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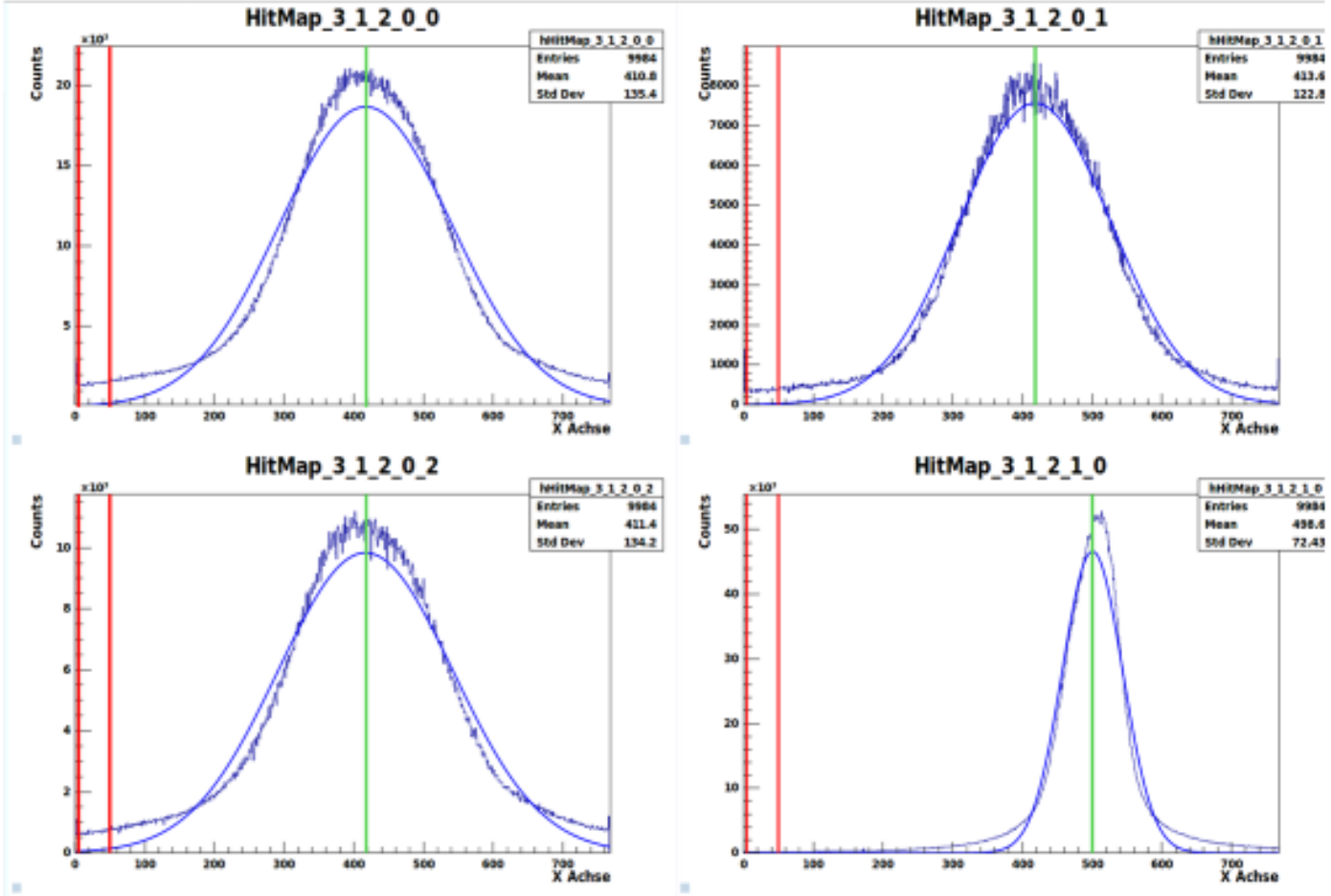
Replay of data file from last TB setup. Importing 1800 histograms from EPICS to basf2.
(Quite useless to fit a gauss to here, just to prove the principle)



B. Spruck, Uni Mainz, 5.4.2016, p. 28

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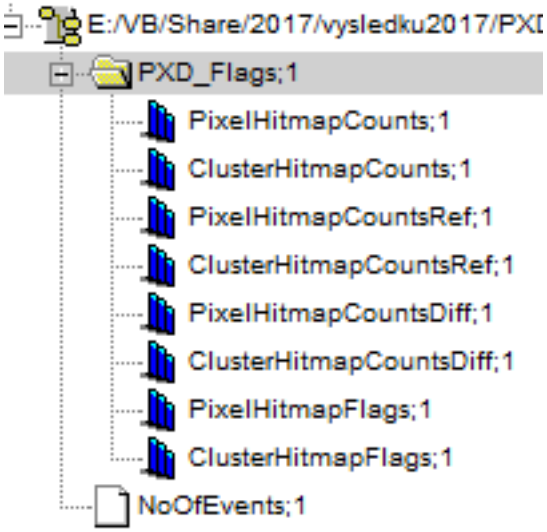
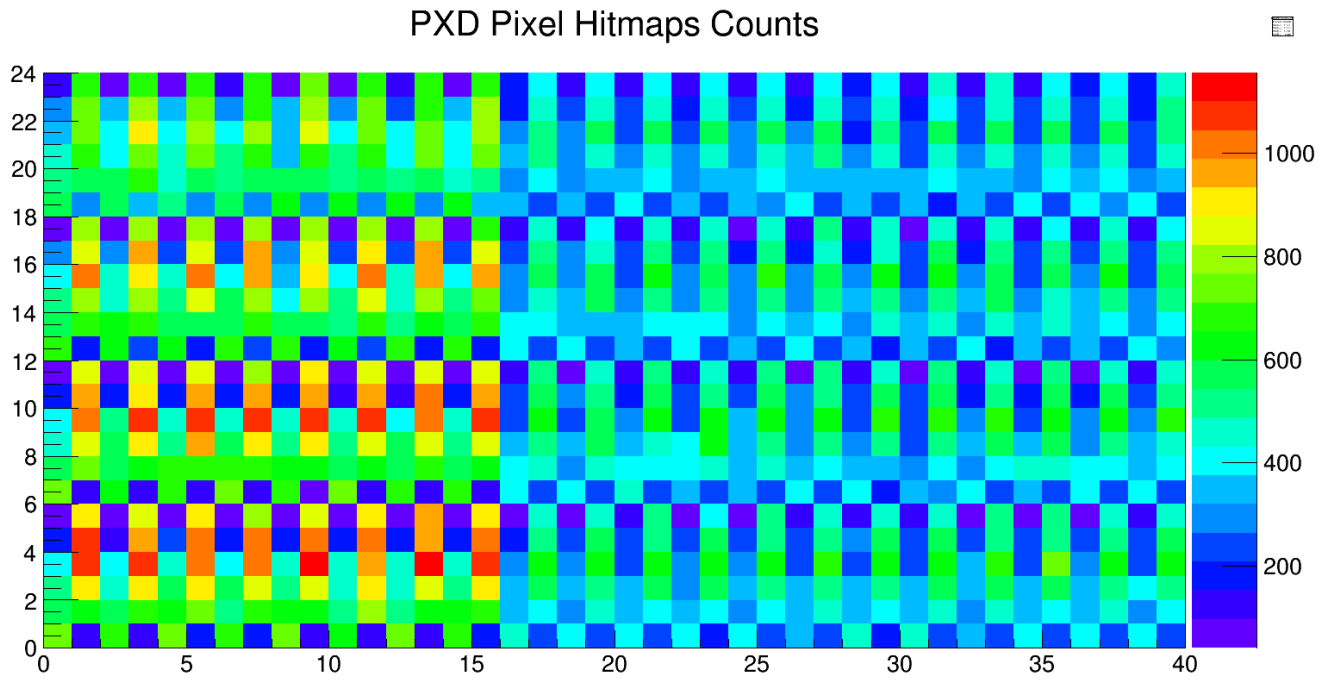
DQM on **basf2** Level (Peter Kodyš)

- Most expert level histograms done
- Create DQM of PXD cluster shape correction
- Using conditional local and global (PNNL) database
- PXD DQM in master branch of basf2





Work in Progress

- Borrowed server from Itoh-san (used by TOP)
  - 24 2.67GHz Xeon core , >10Gb RAM and 500Gb HDD
  - Björn is going to set up this server for DQM purposes while in Japan
  - **But SC/RC work for Phase 2 takes precedence!**
- Next Steps
  - Check performance of DQM server
  - Continue to define **meaningful** monitoring variables
- basf2
  - Add efficiency plots based on Ulf and Benjamin work
  - Collect requests from experts and apply (mainly to Express Reco On-line monitors)
  - Improve flag creation mechanism
  - Apply advance corrections based on tracking study