



# Online Monitoring Update

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**CM43**  
**RAL**

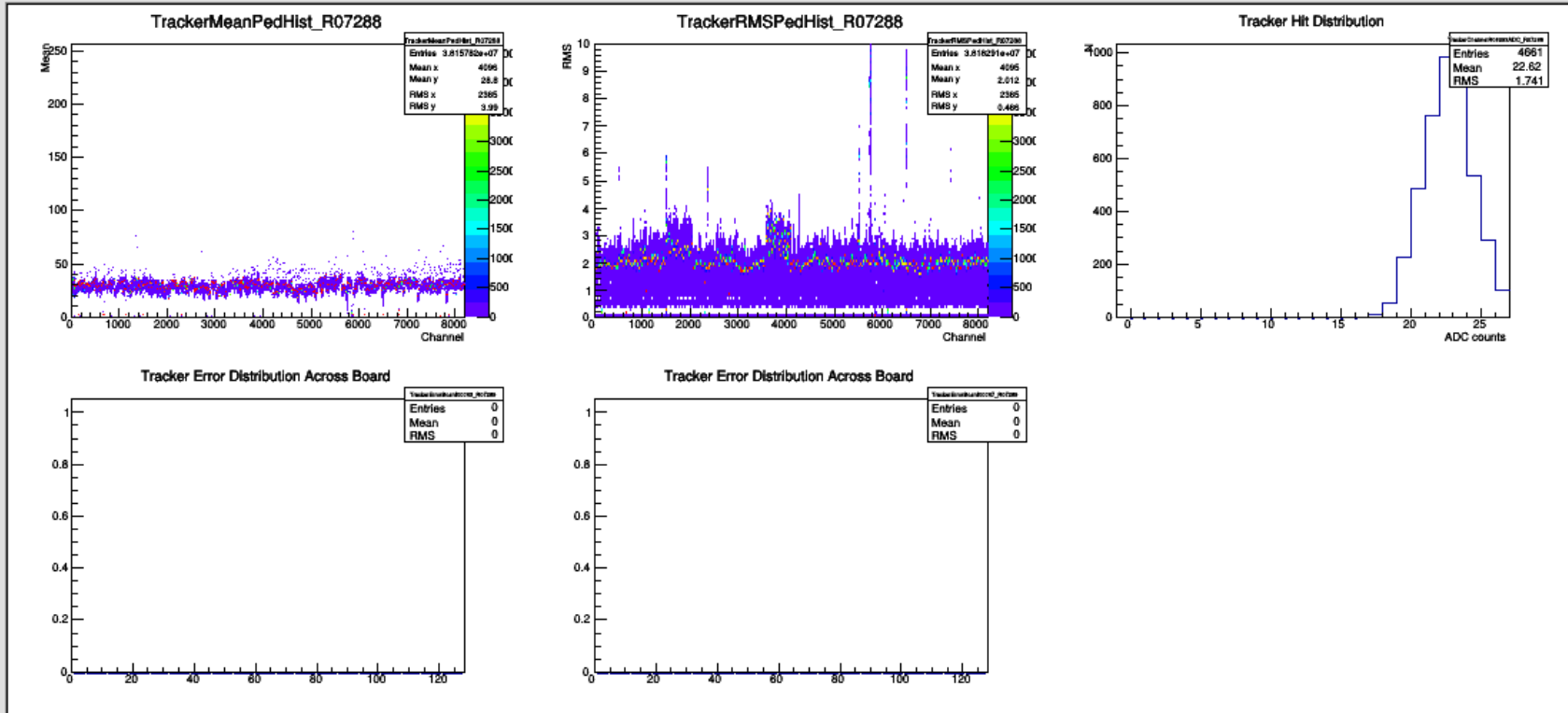
# General Updates (since last CM)



- Online Monitoring/EPICS communication is running
  - Currently ends error signals in case of unpacking exception
- New Tracker plots
  - Mean and RMS over the pedestal per channel
  - Dist. of mean per channel.
  - Primarily for automatic checking of tracker data.
- ctrl-c signal catching.
  - OnMon plots should be OK if ctrl-c is used to exit.

Data comparison will soon be ready after I've had a chance to do some testing.

Reference Plots



rogram" to add clicked histogram into screen.



# Automatic Checks

- Have been waiting for data sets from StepIV running for testing
- Can now do some testing with recent data collected in September/October.
- Reference data will be stored in 1 root file.
  - Tracker data possible exception...
- Selectable by expert should the need arise.
  - Through GUI or command line option when running script.



Reference Plots

TrackerMeanPedHist\_R07288

Reference Plot Configuration

Load Reference Data

Get Root File

File Name

controlRoom/miceonlinemonitori

Load Reference Data

Enable Histogram Overlay

Tracker Error Distribution Across Board



# Tracker Updates

- Tracker data is compared slightly differently..
- Only mean/RMS of pedestal is compared to reference data.
  - ~90% done, 1 issue remains..
- Signal can be sent to epics should mean/RMS exceed limit
  - Limit to be decided?
- This is also an option for other detector groups if this sounds tasty.



# Conclusions/ToDo

- Tracker monitoring/auto checks at minimum to be implemented in MLCR by end of November
- To do: Ensure alarm handler classes contain OnMon.
- To do: OnMon on all Onrec machines, + EPICS.