

The MINERvA Operations Report

All Experimenters Meeting

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Taking Data



- We are taking data with no known downtimes
- All parts of the detector seem to be operating fine
 - No problems with the DAQ or hardware seen.
- All the tubes are set for gain corrected HV
 - We are taking analysis quality data
- One problem is the Runcontrol (RC) GUI will sometimes go away
 - RC is the user interface to the DAQ & data taking
 - Data taking continues, checking the online monitoring program will determine if data taking is continuing
 - RC GUI can be easily brought back
 - We are trying to understand why the RC GUI goes away



Taking Data



- Online monitoring information is giving us the information we need to monitor the detector
 - Corrected gains and PEDs are installed in the online monitoring
 - We are improving the way we monitor the data since we now have automated calibration procedures, which we did not have at the end of the LE Run.
- Not yet ready to present livetimes.



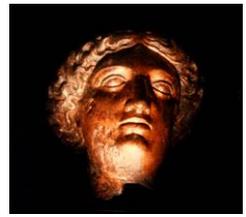
MINOS Near Detector Monitoring



- MINOS is doing only the day shift
- However, since we need the MINOS detector to analyze muons, we are monitoring the Near Detector 24/7.
 - We monitor MINOS Runcontrol (RC), slow controls (DCS), & online monitoring (OM) histograms.
- At the start of the ME run, we were able to run RC and DCS.
- We were unable to access OM. The name of the machine that OM ran on changed and the name was hard coded into the scripts.
- To fix this, the scripts have been changed so that the names of the machines that run these processes are now centrally controlled.
- We can now access OM.



CROC-E Firmware To Check CRC word



- We working on the firmware upgrade for the CROC-Es which checks the CRC word
 - Goal: The CRC word (cyclic redundancy check) for all the frames will be passed to the offline to check that there is no problem with the data.
 - We have decided on a scheme to do this. We are checking that the offline code can give us the information we need with this scheme.
 - When we are sure the scheme works, Cristian Gingu will finalized and test the firmware.
 - We are roughly 30% finished in this task



MINERvA Keepup Processing



- MINERvA is currently developing a system to process our data more regularly
- Our new plan is:
 - Creating root files with raw digits within 3-4 days
 - Calculate PEDs and Gains ~1/month
 - Do strip calibrations and timing for all strips ~1/month
- This allows for more frequent monitoring
- Allows full data processing on the order of couple of months
- Also updating monitoring will include POT from the new IF beam database
 - We are waiting on the final version of the IF beam database



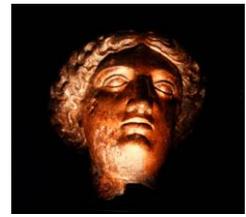
MINOS Keepup & ROOT



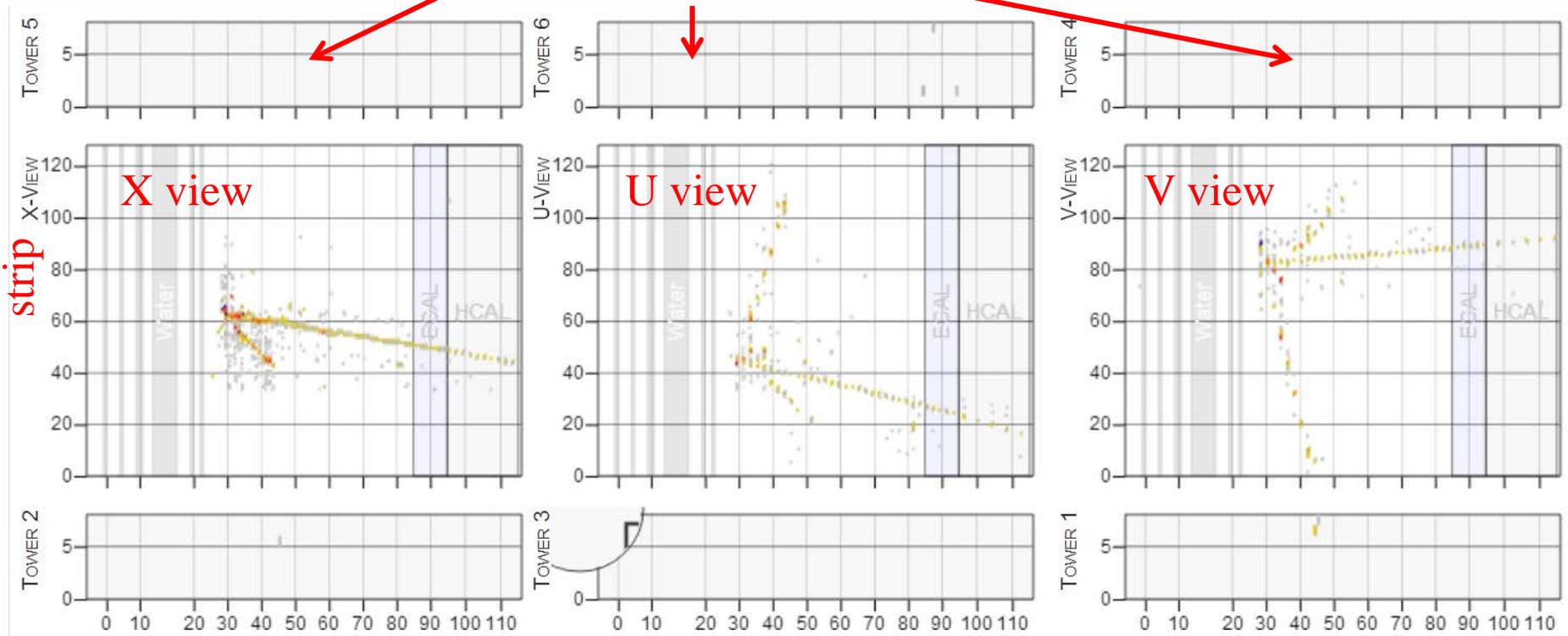
- MINOS is updating to a newer version of ROOT to make their Keepup data (daily processing) faster.
- MINERvA is not ready to update ROOT in our software
- We are investigating how this affects our ability to use the MINOS data
- Last time we updated ROOT, we experienced problems. Most important was memory leaks, which required ~8 months to solve
- We need MINOS to continue the older version of Keepup until we determine whether their updated Keepup works for us.



Neutrino Event



Outer Calorimeter





Neutrino Event

