# The MINERνA Operations Report
# All Experimenters Meeting

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# Taking Data

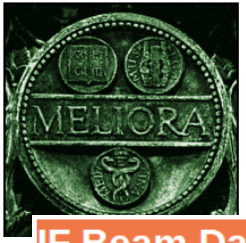
- We are taking data with very small  downtimes
- All parts of the detector seem to be operating fine
- For certain runs we have had a handful of events with long readout times > 0.1 sec.
  - About 0.15% of the events have this problem
  - For readout times > 1700 ms we do not read in the next gate, a very small % of events have this problem.


# Shutdown Tasks

- Replace failed raid disks on 2 computer. One of these is our DAQ computers.
- We may replace 2 FEBs tomorrow. One has a dead channel and one has high values in ½ the channels. We will have to see how easy it is to access the boards.
- We are not planning on installing firmware upgrade for the CROC-Es which checks the CRC word. We are not ready for that installation.


# MINOS Keepup & ROOT

- MINERvA Keepup can read the newer version of MINOS Keepup files. We will be switching to using the newer Keepup.
  - We have studied this on one MINERvA Run.
  - There are some differences in muon reconstruction especially at low momentum.
  - We continue to do comparisons between the two versions of MINOS Keepup.




# IF Beam Data Server

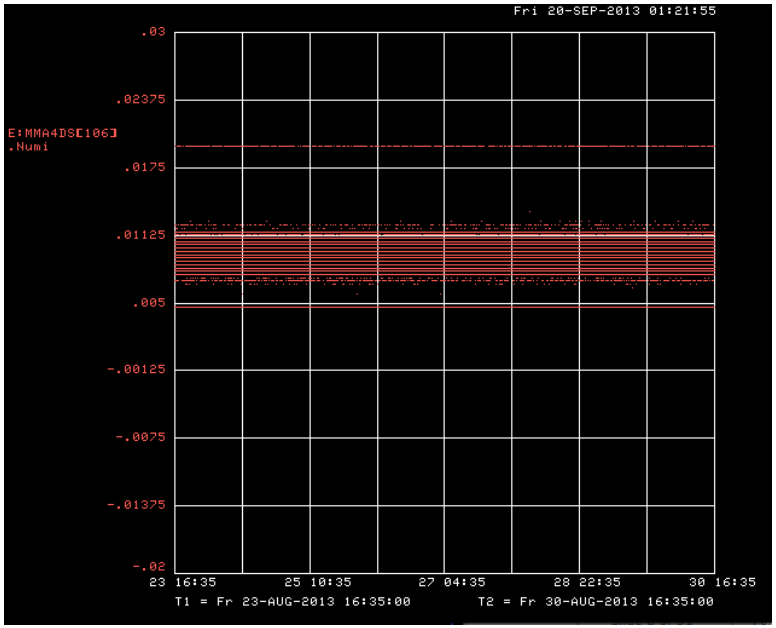
**IF Beam Data Server A9 Event Monitoring**

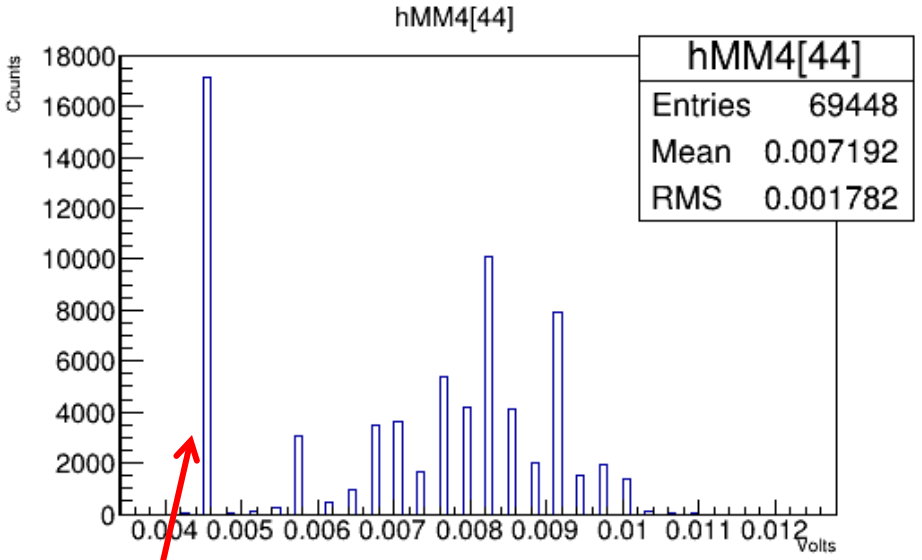
| | |
|---|---|
| Last update: | Mon Sep 30 2013 12:28:04 GMT-0500 (CDT) (1.0s ago) |
| Time since last 8F: | 1.3s |
| Last A9: | Mon Sep 30 2013 12:28:02 GMT-0500 (CDT) (2.7s ago) |
| Last A9 interval: | 1.73s |

Shifters watch this page. It will turn red if there is a problem.

- The IF Beam Data Server failed for about 4 hours on Sep 26 and 27
  - The IF Beam Data Server supplies ACNET information to the NuMI experiments.
  - MINERvA & MINOS cannot analyze the data unless they have the ACNET information.
- When the IF Beam Data Server fails, the procedures for the shifters are being developed.
- Presently, A method to recover the data to the IF Beam Database is in progress.

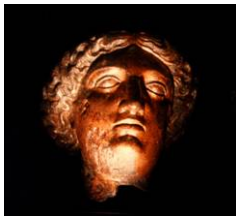
# MM4 Electronics Rack Status




- The SWIC for MM4 is the 1st scanner with Ethernet readout. The analogue front end is the same & the digitization portion has been redone.
- SWIC Scanner Update (Dan Mcarthur)
  - The card in the scanner which digitizes the data had a segmented ground plane. This caused the small problem shown above. The problem was fixed by providing a solid ground plane on the digitization board.

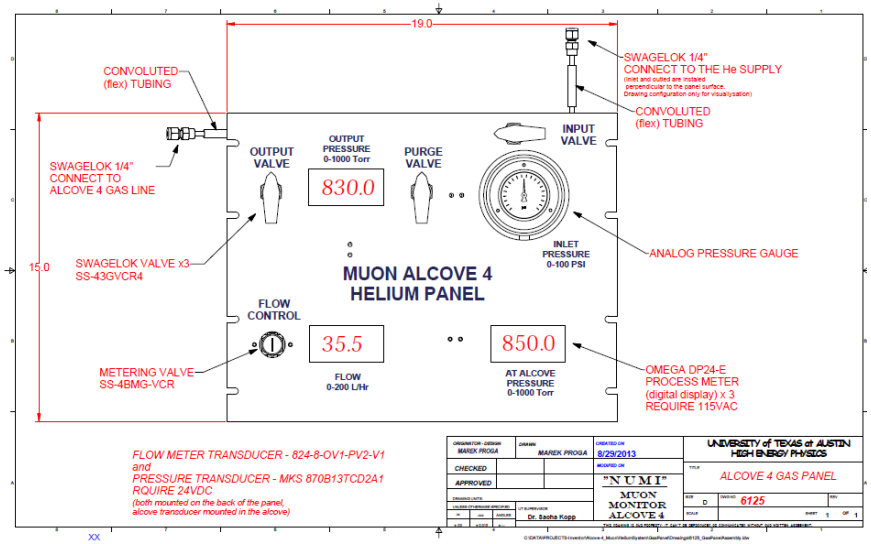
# MM4 Electronics



  - In addition there was 60 Hz noise. This was resolved by
    - Replacing internal power supply with an external AC/DC converter type power supply.
    - Ensuring cover is securely attached to the chassis.
- The improved scanner will be installed during the Oct. 8-10 down time.
  - Requires replacing chassis and mounting external AC/DC converter.
  - For the ORC, we will add an addendum to the current documentation with pictures. This will be ready during the shutdown. PPD has agreed this is sufficient. AD will also need to sign off.

# MM4 Gas Rack Status

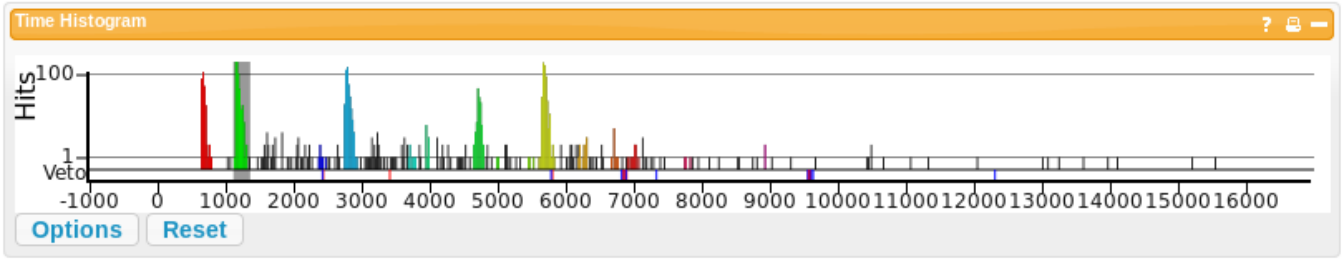
- Gas panel has arrived from University of Texas at Austin.
- Testing of panel, with support from PPD, will commence once schematics are complete.
- We are working on the documentation required for the ORC review.
  - Flow diagrams--DONE.
  - Electronics schematics--in progress.
  - Rack Protection options being investigated.

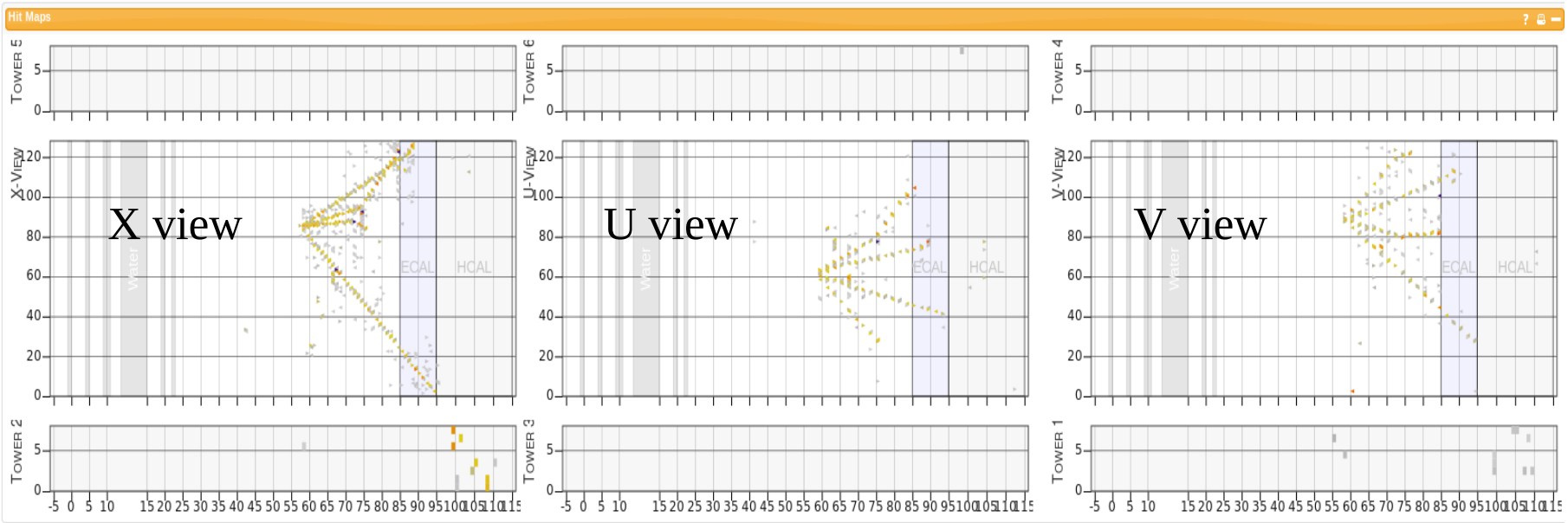



- Expect to have full system documented, tested, and ready for installation in November
- We will need AD support to interface with the current gas system.

# Event Display

## Hit Times




- Neutrino event in the gate