The MINERνA Operations Report
All Experimenters Meeting

Howard Budd, University of Rochester

Oct 14, 2013

Taking Data

- We are taking data with very small downtimes
  - All parts of the detector are operating fine
- We have just had one PMT showing the “high voltage varying problem”.
  - A Cockcroft-Walton generator sets the HV on the tube
  - When difference between the set and actual values becomes wide (HV > 10v). The HV will vary around the set value. The HV varying will come and go if a tube has the problem.
  - This PMT box had this problem in the LE run. We removed it, replaced the parts inside except the PMT, and reinstalled it on the detector. It appear now that this did not fix the “HV varying problem” for this PMT box

Shutdown Tasks

- Replaced failed raid disks on 2 computer during down time.
  - mnvonline1 - One of these is our DAQ computers.
  - mnvonlinebck1 – Has veto software for online
  - Both disks came up fine after the replacement.
  - But its not clear this fixed either of these problems right now. Error is “smart-failure”
  - We sent a ticket to Service Deck to get a experts on raid systems involved.
- We replaced a FEB with one failed channel

Shutdown Tasks

- ¾ of the FESBs on the west side cannot be accessed, PPD is building a platform which will enable access these FESBs
  - A FESB powers a chain → 6 - 9 FEBs.
  - The fuse in FESB can blow when the FESB is power cycled. Sometimes, we need to do this to readout a chain.
  - A platform is being designed, most parts here. One part ordered.
  - Should be installed in 2-3 weeks.
  - This platform makes replacement of FEBs and PMTs on the far west side much easier.
- We could not access the FEB which has high PEDs ave in ½ the channels. The PED ave, > 2000, is much higher than the nominal ped, 450. This FEB can be replaced with this platform

CROC-E Firmware To Check CRC word

- We have decided on the method to insert the CDC word into our data structure. The version of the CROC-E firmware has been updated by Cristian Gingu.
  - We have tested the new version of the firmware. This version has some problems so further work will need to be done on the firmware.
  - This work on this has been delayed by other work on the 14th floor. We need to increase the priority of this work.

UROC Procedures

- We had a problem with one of our remote sites. Their UROC wasn't working when their shift started and they worked on fixing this. The previous shifter left before the fix was complete.
- We have addressed this by tightening the shift procedures.
  - The remote shift station must be rechecked 2 workdays before the shift starts
  - The shift person whose shift is ending must stay until there is someone replace them. We have a "shifter of last resort" that they can phone in this case.

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

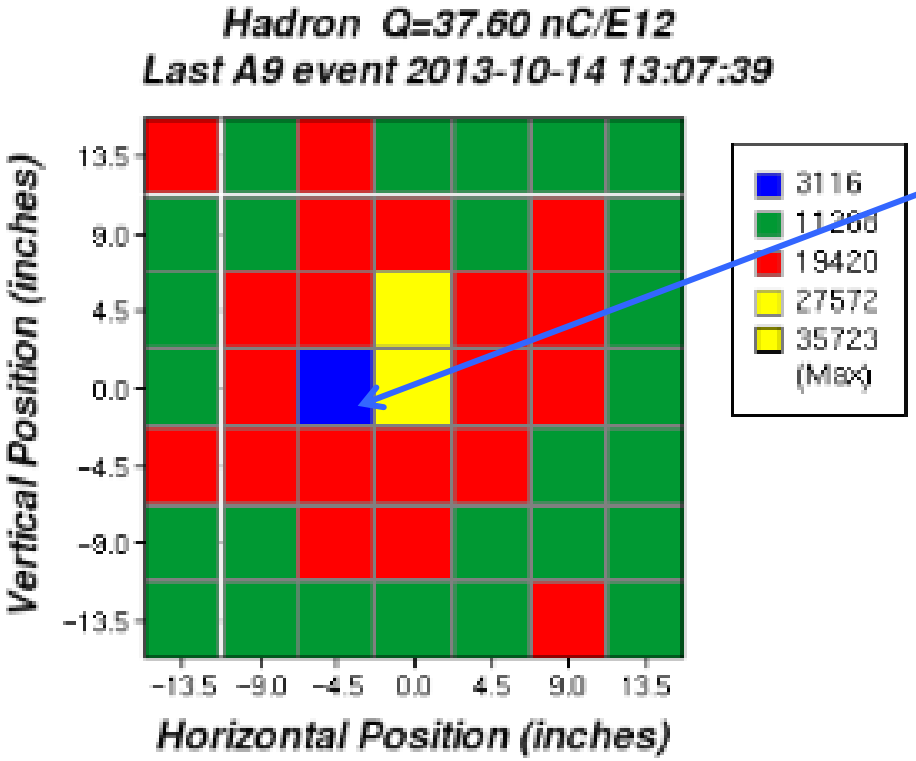
Shifters watch this page. It will turn red if there is a problem.

- 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 is to contact the MINOS-MINERvA Liaison.
- A method to recover the data to the IF Beam Database is in progress. We should be able to recover the data.

MM4

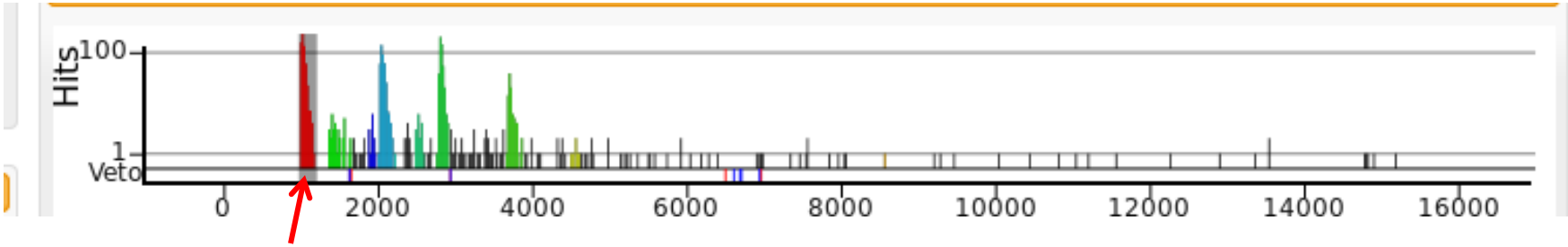
- The SWIC scanner which was installed downstairs has been replaced by the SWIC scanner with the modified grounding.
  - The ORC for the electronics rack should be ready this week.
- Work is continuing on the documentation for the electronics for the gas system

Hadron Monitor

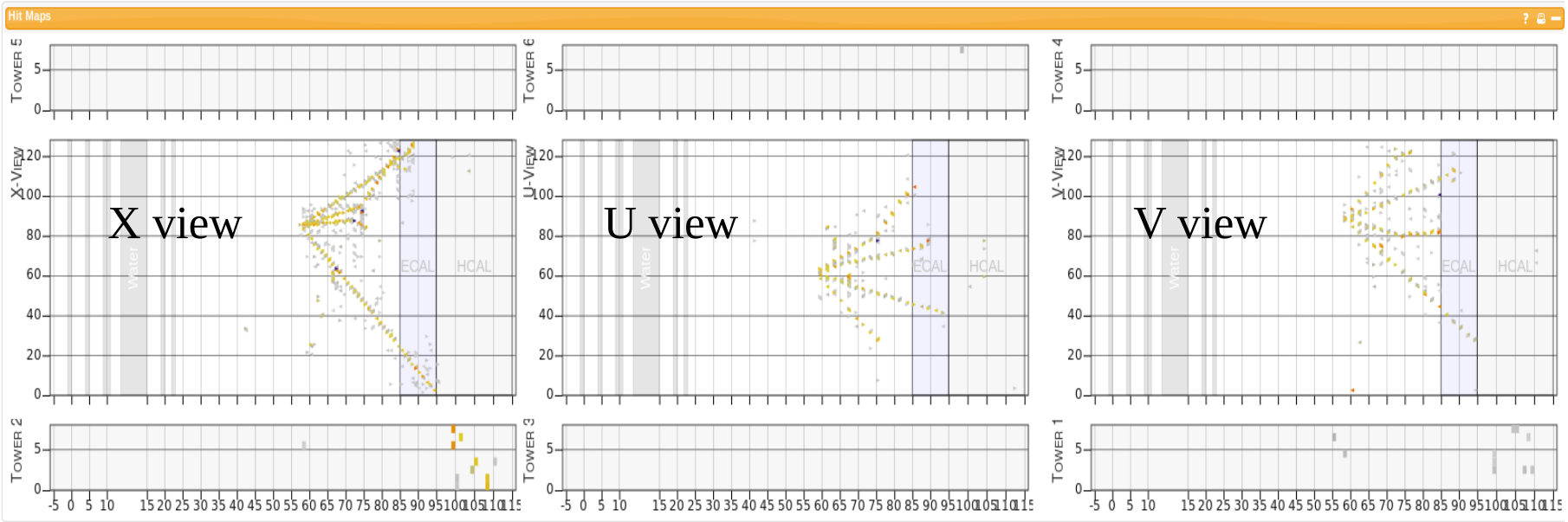


- Alberto Marchionni has verified that the problem is a bad pixel which has a problem holding voltage. He as disconnected this pixel from the HV supply
- He will look at it in the next down time and try to bring it up on voltage.

Event Display



Hit Times, Timing slice that is displayed



- Neutrino event