

The MINERvA Operations Report

All Experimenters Meeting

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2015 Shutdown Status



- At this point we have a working detector and DAQ. We will be looking at the PED, LI, & beam to be sure it is working properly. We will need to start the calibrations. Up until now the detector had some problem which prevented us from taking good calibration data
- Thanks
 - Geoff Savage, Donatella Torretta, Steve Hahn – Neutrino Division.
 - Cristian Gingu, Paul Rubinov, Steve Chappa, Roberto Davila – EED.
 - Experimental Computing Division, SLAM Group.



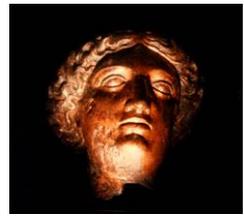
2015 Shutdown Tasks



- During our testing of V95 a chain failed and caused the DAQ to stop.
 - We have replaced FEB 1 three times. Often if a chain fails we don't know which FEB does causes it. FEB 1 would reset itself to power on configuration, stop the DAQ and no longer accept any commands.
 - After a session of interchanging cables & checking the power, it looked like the problem was the slot FEB 1 was in. This slot is defined by 2 elements – the power cable & the PMT.
 - We checked the power cable & replaced the PMT box & the FEB. Although the PMT cannot stop the DAQ, its possible the HV on the PMT base could arc to one of the lines which goes to the FEB and damage the FEB.
 - The detector ran fine over the weekend with just FEB 1 in the chain.
 - Today, we put the rest or the FEBs back in the chain & we are running PED & LI with the complete detector. Hopefully, this chain will not give another error.



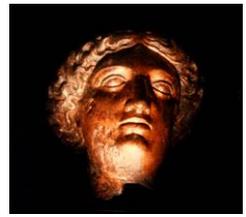
2015 Shutdown Tasks



- A PMT box had a HV problem over the last 2 weeks. Last week, we replaced the PMT box using a PMT box from the testbeam.
 - Unfortunately, the tube used had much bigger HV problems, so we replaced it again on Oct 15.
- We have installed 2 upgraded DAQ computers in the MINOS Hall to replace the old ones.
 - The upgrades include increasing disc size to 15 TB and increasing the number of serial ports to run 2 LI boxes with the DAQ computer.
 - The DAQ is using one of the new computers.
 - We will need to test the other one, this will comprise switching over to it.



2015 Shutdown Tasks



- 2 computer clones of logger, our online monitoring machine, have been brought into the MINOS Hall.
 - With the v95 problem and hardware problems on the detector, we need the old logger so we could understand what we were doing.
 - The logger on one the new machines works and we can now do online monitoring
- Want to replace the network switch for MINERvA, as it is old.



V96 Firmware



- V96 FEB & CROCE firmware, which increases the live time.
 - The firmware is written, but the unpacking needs to be done.
 - We now have the test beam DAQ as a 2 crate system. This is as close to the system underground DAQ as we can get it. We will use the test beam DAQ to test V96.
 - Once V96 is well tested, we plan on installing it at the appropriate time
 - This update will probably take 2 days and we plan on doing in a couple of months.
- After the run starts we will be recovering the FEBs which we have removed from the detector.
 - We will start by determining the FEB we replaced which did not fix the problem. This is probably 1/3-1/2 of the FEBs that were pulled on the detector.