

E-906/Seaquest Report

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for the SeaQuest Collaboration



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Target Status.

- Running well.
- H2 alarms were accidentally turned off → turned back on.
- Got a pressure alarm for D2 target on Thursday → issue was quickly addressed and the pressure was restored to its nominal value.

Station 1.

- **Survey completed** on Wednesday → necessary for our efficiency studies.
- Deuterium gas bottle was delivered on Tuesday.
- 3-way mixed gas (87% argon, 11.5% isobutane, 1.5% methylal) bottles were delivered on Friday → **currently flowing this**.
- **Monitoring St. 1 current and HV** → whenever the current is $0.2 \mu\text{A}$ higher than it should be, we ramp it to zero and then back up to its nominal.
- Status of St. 1 current was incorporated in our DAQ status page.

DAQ Status Page.

Page will refresh every 5s.
Ages shown are relative to the "Last Updated" time of the Status Block. Small negative times are normal.
This page last updated:
Mon Feb 01 2016 12:39:13 GMT-0600 (CST)

StatusMonitor Status

Last Updated: 2016-02-01 12:39:11

DiskSpace	In Warning
Time since this script started	3.1 days
Time since last BOS	22 s
Time since last EOS	18 s
Time since last Beam	18 s

DiskSpace Status

Last Updated: 2016-02-01 12:38:55

Available on /data2	1.0 T
Available on e906daq1/localdata	104.8 G
Available on e906daq1j	25.6 G
Available on e906beam3j	41.0 G
Available on e906beam3/home	378.5 G
e906sc3/home Available	16.4 G

Decoder Status

Last Updated: 2016-02-01 12:38:55

Scaler Dacoder Daemon Alive

Written by Brian G. Tice. [Approved NCLink](#).
Page last edited: 3/25/12

Target Status

Last Updated: 2016-02-01 12:39:11

Target Alarm Sounding?	No
Time Since Last Alarm	5.0 hr
FMag Current	1980
KMag Current	1592
Target Pos. (control)	1 (LH2)
Target Pos. (prox. sensor)	1 (LH2)

MainDAQ Status

Last Updated: 2016-02-01 12:38:52

Coda EventBuilder Alive?	Yes
Coda EventReader Alive?	Yes
Run Number	18103
Run Started	12:30:10
Run Ended	0
Run State	active
All components OK?	Yes
File Size (GB)	0.29

BeamDAQ Status

Last Updated: 2016-02-01 12:38:52

Is E906beamDAQ Running? Yes (e906beam3)	
Status Code	0
Čerenkov file age	39 s
BeamDAQ SpillID age	32 s
BeamDAQ Last SpillID	869336

Spillcounter Status

Last Updated: 2016-02-01 12:38:52

SpillID age 35 s
Local SpillID 869337

SlowControl Status

Last Updated: 2016-02-01 12:38:52

Slowcontrol file age 54 s
Slowcontrol spillID 869336
Keithley Monitor Alive? Yes

ScalerDAQ Status

Last Updated: 2016-02-01 12:38:53

Coda EventBuilder Alive?	Yes
Coda EventReader Alive?	Yes
Run Number	21476
Run Started	12:21:15
Run Age	17.7 min
Run Ended	0
Run State	active
All components OK?	Yes
Is E906FFT Running? Yes (e906sc3.fmaI.gov)	
Latest FFT Image age	56 s
ScalerDAQ SpillID age	56 s
ScalerDAQ Last SpillID	869336

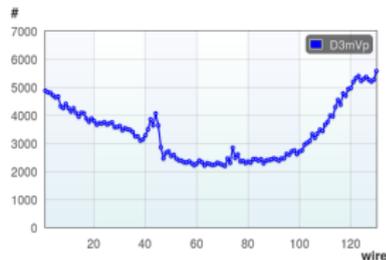
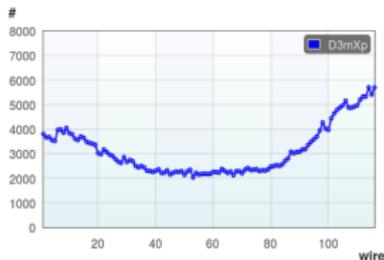
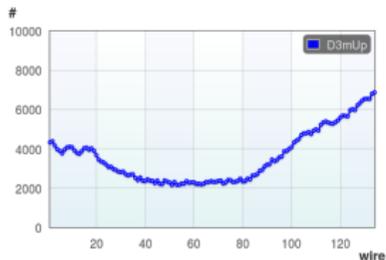
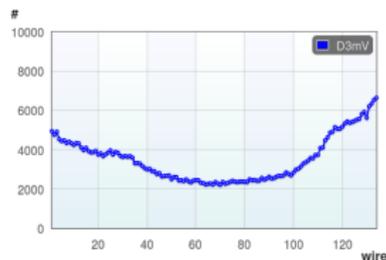
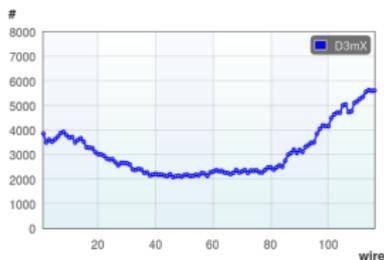
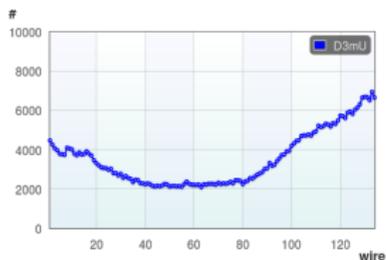
CAEN Status

Last Updated: 2016-02-01 12:38:57

rampCAEN Alive
Current w/o Beam 260.95

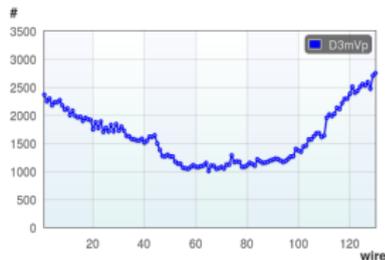
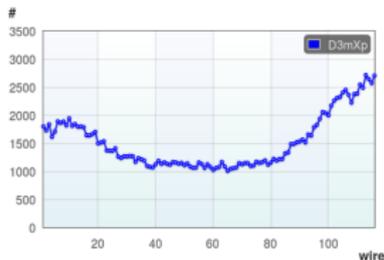
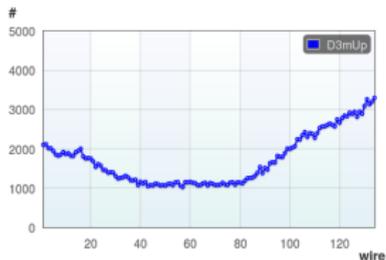
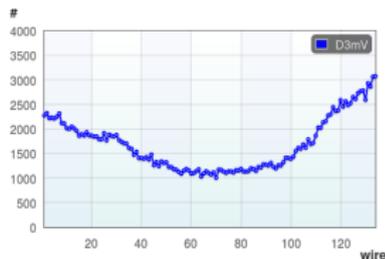
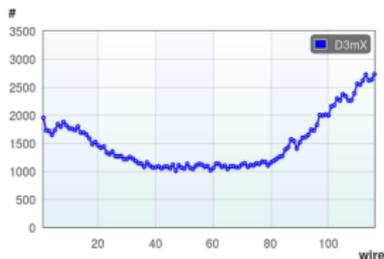
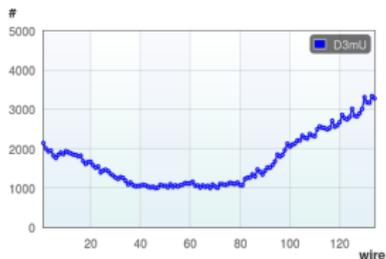
Stations 2, 3 and 4.

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- Found noisy channel on St. 3 → fixed by increasing threshold.



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- On the week before, we replaced one PMT on St. 1.
- The efficiency of this new PMT was analyzed and set to -1550 V.
- Trigger timing was studied after hodoscopes HV optimization.
- The change on the trigger timing was mostly of 0-2 ns.
- Trigger timing table was adjusted.

Summary.

- No big issues last week.
- Flowing new 3-mixed gas bottles into Chamber 1.
- Closely monitoring St. 1 current and HV.
- Taking nominal data most of the time.