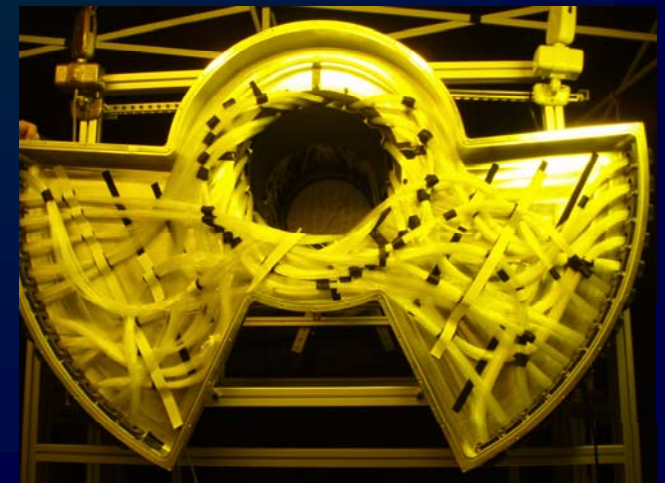


Tracker summary:

Tracker mechanical:

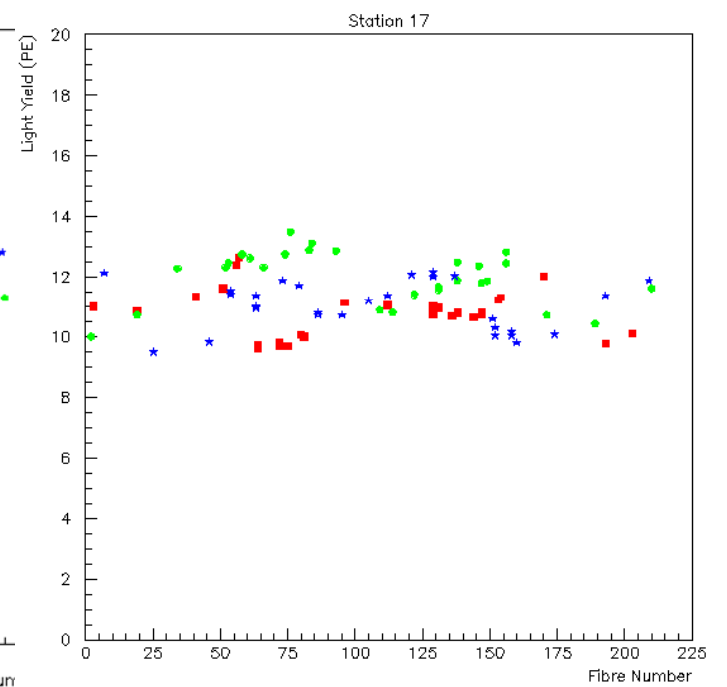
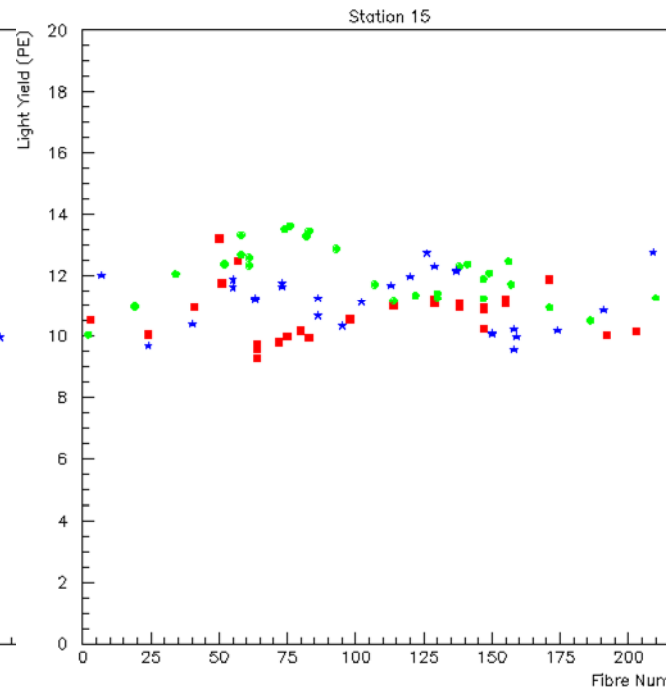
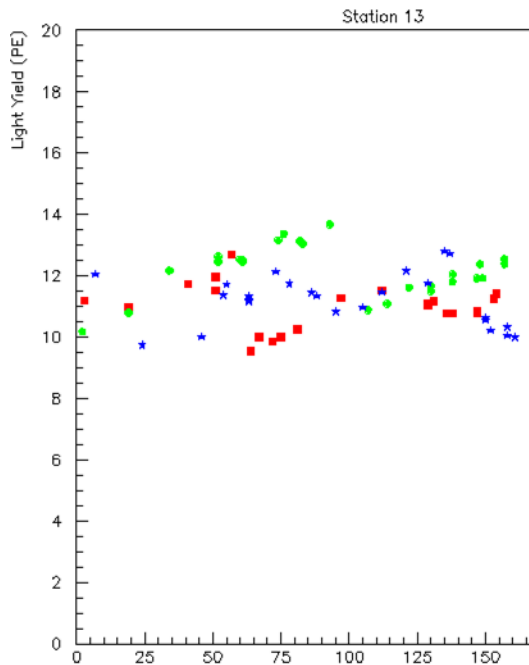
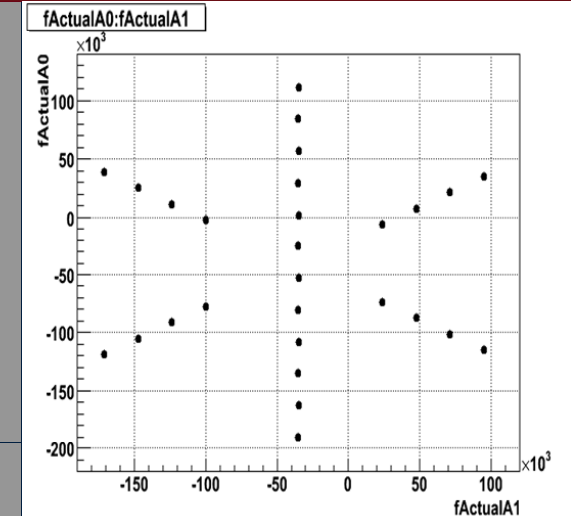
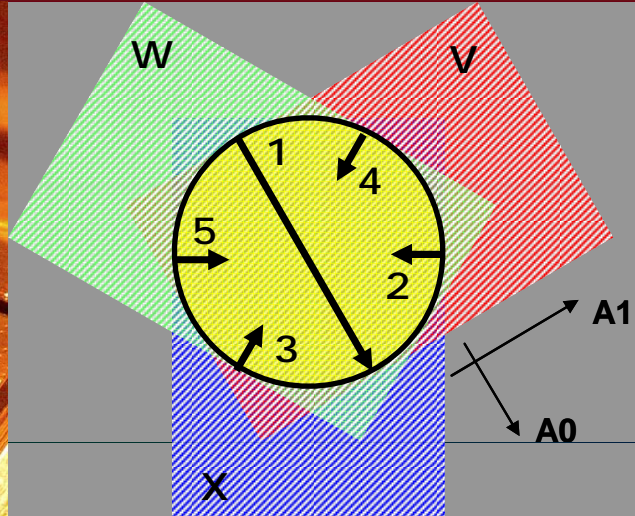
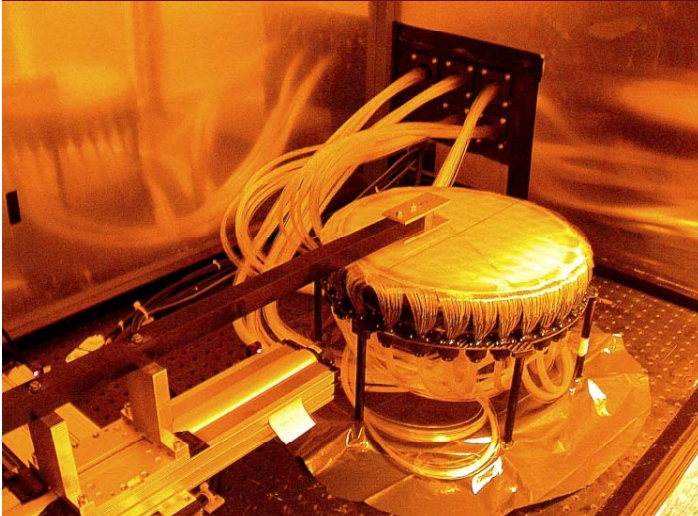
Barber

- Tracker #1 complete in R8
- Tracker #2:
 - All stations available and QAed
 - Waveguides in production
 - Expect to polish at FNAL in March
 - All components for space frame available
 - *Agreed:*
 - Complete fabrication of tracker #2 by end of March
- Location pieces for installation in solenoid all manufactured
 - Need to discuss installation procedure
- Spare stations:
 - Bodies being machined, will complete and QA



Station QA:

Sakamoto



Station QA summary:

Station	Mean LY (p.e.)	RMS (p.e.)
5	11.52	0.98
6	11.52	1.00
7	11.48	0.99
9	11.35	1.00
10	11.36	0.97
11	11.37	0.96
12	11.39	0.99
13	11.37	0.97
14	11.35	1.00
15	11.32	1.62
16	11.27	1.05
17	11.27	0.99



Current Status

Essentially Complete:

- CA server framework
- CA client framework
- AFEIt hardware access code
 - But may require added (as yet unforeseen) functionality
- AFEIt CA server
- AFEIt CA client library

Remaining Tasks:

- Configuration GUIs
- AFEIt client applications
 - Configuration
 - Run control (DATE?)
 - Monitoring
- Extensive testing
 - Very little access to 'real' hardware so far...
 - Setup at Imperial either in use for QA testing, or non-operational
 - Hope to schedule work around final station QA run

Just for fun (including simple beam monitor written using the same CA client / server framework):

- Total Physical Source Lines
of Code (SLOC)_____ 36,443

- Development Effort Estimate,
Person-Years (Person-Months)_____ 8.72 (104.69)

- Schedule Estimate, Years (Months)___ 1.22 (14.64)

- Estimated Average Number of
Developers (Effort/Schedule)_____ 7.15

- Total Estimated Cost to Develop___ \$ 1,178,519

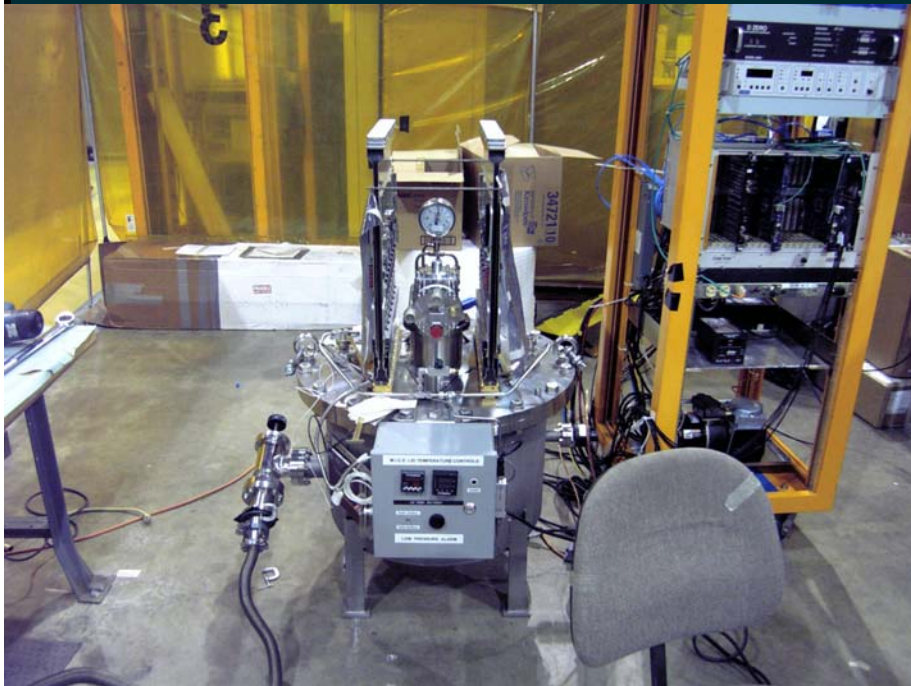
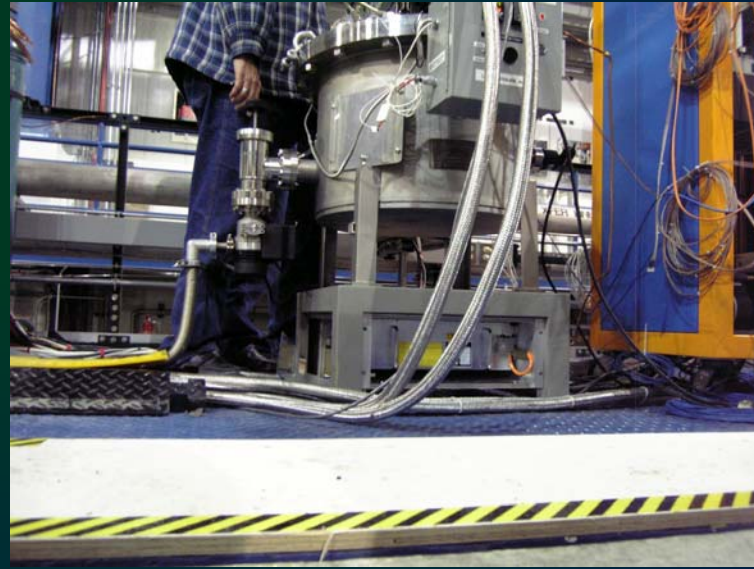
Generated using David A. Wheeler's 'SLOCCount'

VLPC system:

Bross

- Production cryostats 1 and 2 ran smoothly at operating temperature
 - But, cassette 109 in cryo #2 has developed an internal leak and will have to be pulled
- Cryo #3 is cooling down
 - Operating not yet satisfactory (6.2K at 60Hz?)
- Cryo #4 has its cassettes installed
 - Almost ready for cooldown
- AFE power mods complete for Cryo #1,2,3
 - No longer have low voltage power problems
- Target is to ship system (Cryo #1 and Cryo #3) by 3rd or 4th week of this month

VLPC system: photos:



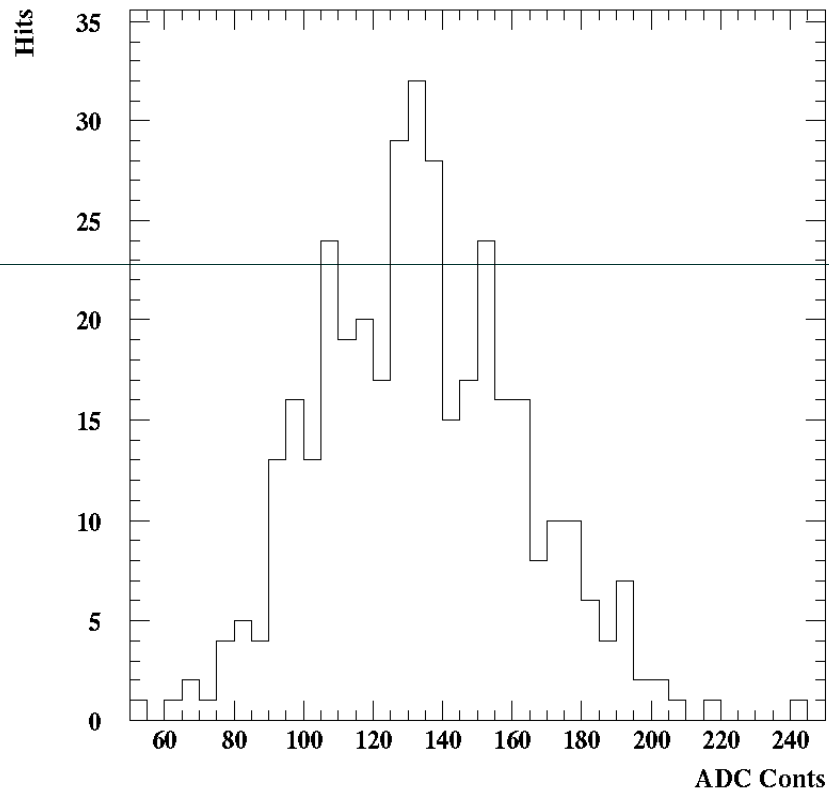
Read-out and DAQ:

Hart

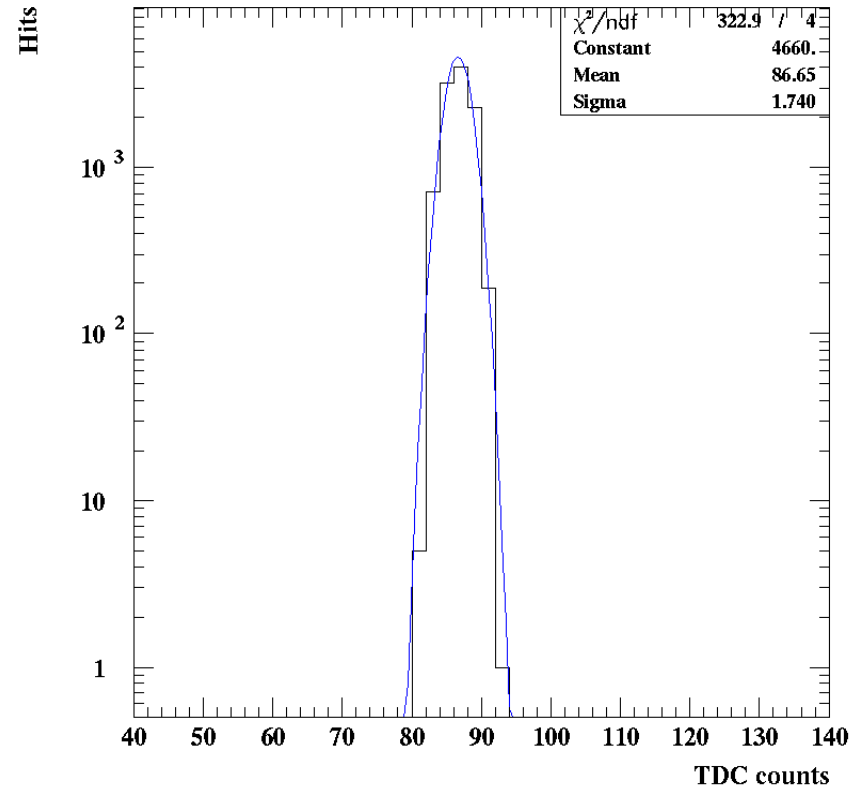
- **Significant progress in D & A FPGA code:**
 - **Issues:**
 - Programmable look-up table code (S.Galagadera) support
 - Phone meeting today
 - Debugging of AFPGA buffer
 - Ongoing
 - Test of PLL on frequency-varying ISIS clock
 - **Goal: complete 'in a couple of months'**
- **Zero-suppression scheme implemented**
- **Fast-clear implemented**
- **Testing of VLSB has revealed some issues:**
 - Set-up time unacceptably long, implementation of correction for this uncovered some 'bugs'
 - Work is in hand to correct this
- **Goal: send system back to RAL in March**

Read-out and DAQ: timing signals:

New AFE and VLSB Firmware



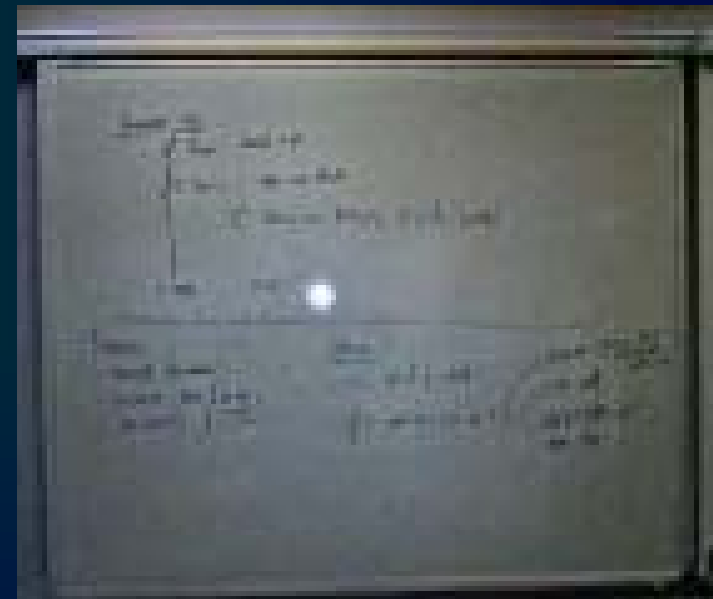
New AFE and VLSB Firmware

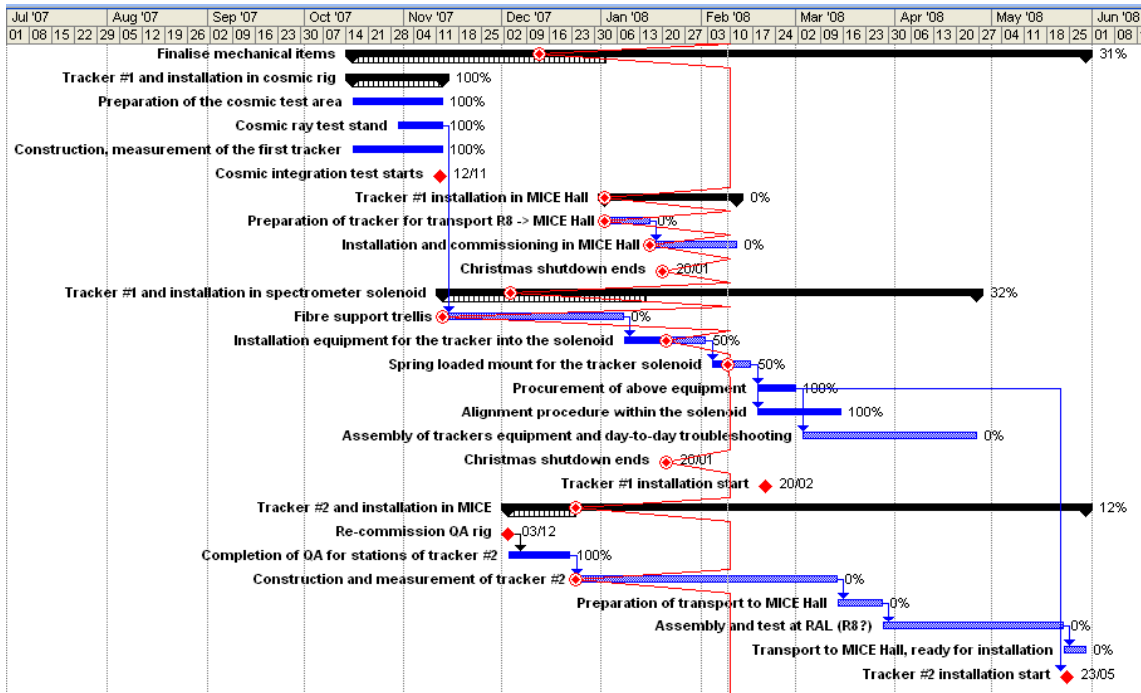


Tracker installation:

Nichols

- **Schedule of heavy civil installation work was presented by A.Nichols**
 - Discussion of how tracker installation for step 1 can be done in parallel
- **Principal issues:**
 - Concrete dust
 - Metal swarf
 - Crane operations with heavy equipment
 - Time required for a run:
 - Install, take data, remove: perhaps 3 weeks
- **Need to continue to discuss as infrastructure build clarified to see whether a Step I(.5) run is possible**





Conclusions:

- Now have most of the information required to revisit schedule:
 - Tracker #2 to be fabricated by end March '08
 - (means assembled space frame in coffin)
 - Cosmic ray test #2 by end March '08
 - Continuing resolution of installation:
 - Run with cosmics, install in solenoid, run with cosmics?
 - Run with cosmics, install/deinstall in Hall, run with beam?