

S7 operation update

Eric Dufresne, TRR group meeting, April 25, 2006

- HG and EL installed new signal cable patch panels for 7ID-D, E, and control areas which should improve the cabling appearances and add significant connectivity. The work is 70% complete and will be completed before the next laser run.
- Two new labyrinths also were installed on top of 7ID-D in early April, to be used for controls. We plan to move dedicated motor controller on the roof of 7ID-D.
- The new AMO table is currently under modification, getting a 6th motorized axis.
- All timing signals have been moved to 7ID-E, and all VME timing electronics is now in the 7ID-E crate. ASD pulled for EL new timing signals (low jitter P0, injection trigger) with a single mode fiber.
- EL is also working with Steve Ross and others on two high resolution phase shifters.
- EL plans to have a service technician from Coherent come to service the Verdi diode-pumped laser next week. It is the first service call on the Verdi since 1999.

7ID operational update (cont)

- The diamond (111) Kohzu monochromator from 32ID is now at S7, and we plan to install it in the beamline in the May shutdown in 7ID-A. It should provide a more reliable monochromator for spectroscopy on 7ID. All the pumps are on order and should be in by mid-May.
- New sealed sources have been received Fe55, Cd 109 and Co57. All sources are exempt and HG is the main contact now.
- In the next run, we may have to investigate some ID steering issues as our flux now peaks at different gap than before (red shift) and the ID spectrum is wider than before.
- DW is designing a new Be window mount for the 7ID-C X-ray BPM that will enable continuous vacuum operation down to 7ID-D. He has also received new motorized JJ X-ray hutch slits for 7ID-C and 7ID-D to be installed in the next shutdown.
- The new cable tray between 7ID-B and 7ID-C was put up by Scheck in January. We still need to put clean power on the posts.
- Emergency power will be installed in the vacuum racks at the end of the sector at the end of this week. All the vacuum pumps need to be turned off.

7ID R&D

- The groups of Paul Evans and Roy Clarke had good runs in March and April.
- Although the monochromator back chamber had to be pumped with a turbo pump due to a leaky rotary seal, a resonant scattering experiment was performed at the Fe edge by the group of Paul Fenter in 7ID-C, over ~700 eV.
- Several SRI 2006 presentations are being prepared this month from the sector's staff and users (11).

Some recent pictures



New 7ID-D patch panels.



New AMO motorized table.

Recent pictures: new Kohzu.

