

NSTX Weekly Report (Dec. 1, 2006)

FY 2007 NSTX plasma operations

Planned: TBD

Completed: 0 weeks

- The NSTX Research Forum for FY 2007 research on NSTX will be held on **December 5, 2006 through noon, December 7, 2006**. The Research Forum is intended to provide team members the opportunity to present ideas for experiments to be conducted on NSTX in the forthcoming run. Both well-developed and new ideas in the early stages of development are welcomed. Please see http://nstx.pppl.gov/DragNDrop/Research_Forum_2006/2006%20Forum%20Announcement.pdf for further details. The Research Forum agenda for the NSTX Research forum is posted at http://nstx.pppl.gov/DragNDrop/Research_Forum_2006/Agenda.pdf.

The first NCSX Research Forum will be from **noon, December 7 through noon, December 8, 2006**. The Research Forum will discuss the NCSX research priorities and opportunities, and identify areas of expected research interest and capability. Please visit http://ncsx.pppl.gov/Research_Forum/ResFor_index.html for more details.

- The NSTX Team Meeting was held on Tuesday, Nov. 28 for the NSTX outage and NSTX Research Forum update. The presentation material is available on the NSTX web page.

Engineering Operations (A. von Halle, C. Neumeier)

The NSTX outage continued this past week with the completion of the alignment of the collection optics for the Poloidal CHERS diagnostics. A photometric calibration of this diagnostic is in progress and will continue through most of this week. Upon completion of this work the interior of the vacuum vessel will be cleaned and photographed, and the neutral beam to torus transition duct reinstalled. Pump down of the vessel is scheduled to start before the holidays. The high-k scattering diagnostic collection mirror has been reinstalled in the NSTX vacuum vessel and tested through its full range of steering. Cooling lines have been reinstalled at the top of the machine in preparation for coil system hydrostatic testing and insulation checks (HiPots).

The test cell will remain in free (card reader) access through most of the coming week.

Research Operations (M. Bell)

Boundary Physics Operations (H. Kugel)

- Reinstallation of about 80% the graphite tiles that were returned from analysis at SNL was completed. The remainder of the installation is awaiting completion of other work.

Diagnostic Operations (R. Kaita)

- The spatial calibrations for the new poloidal rotation (PCHERS) diagnostic was completed. Spectrometer preparations will continue through the weekend, and photometric calibrations are scheduled for next week.
- The modified launching mirror assembly and new collection mirror with a shorter focal point have been installed for the high-k microwave turbulence diagnostic. Laser alignments of the components are in progress, and various thermal and acoustic calibrations will continue through the weekend.
- The spatial calibration of the hydrogen-alpha imaging diagnostic was completed. Its photometric calibration will be conducted next week.
- A short was repaired for the lower continuous halo current Rogowski coil on the center stack. The new segmented halo current Rogowski coil was installed above it without any problems during the present outage.
- A peer review was held on Wednesday, November 29, to discuss visors for protecting windows for the multipoint Thomson scattering and high-k turbulence diagnostics during the lithium evaporation. The review was successful, and the visors are being fabricated for them.