

Minutes of the 3rd Hinode Monthly Meeting February 1, 2007

The 3rd Hinode Monthly Meeting was chaired by Watanabe and held on February 1, 2007 at 9:00 AM (JST) on February 1, 2007. The Agenda was published on the JAXA website and was accepted.

1. Instrument Status

- i) SOT (Tarbell)
 - i. The spectropolarimeter (SP) and the broad band filter imager (BFI) performance is excellent. The narrow band imager (NFI) is set at the Fe 6302 line where it is taking longitudinal magnetograms.
 - ii. Laboratory testing of a prototype NFI filter is underway to see if cooling the filter might cause the bubbles in the index matching fluid to be reabsorbed has appeared to show no improvement. As a result the cool down test that was scheduled for the last week in February was placed on hold and is likely to be cancelled.
 - iii. Software modifications have been made to improve the performance (tuning) of the NFI by rotating different elements. The software is currently under review and should be ready for installation in late February or early March.
- ii) XRT (DeLuca)
 - i. FW1 still remains in position #1 thin Al Poly. It is expected that a detailed plan for changes in filter wheel positions at the high and low operating temperatures will be an outcome from the XRT review following this meeting.
 - ii. Preparations for the high data rate observations were made only this now seems improbable since SOT may not go into a cool down period.
 - iii. The Polar Regions campaign was very successful and a mini-workshop, organized by Lorraine Lundquist for those involved will be held on February 4 following the SWG meeting.
- iii) EIS (Harra)
 - i. EIS is working well and successfully a coarse pointing maneuver though 130 arc sec was completed successfully on 1/24.
 - ii. The testing of the EIS reformatter is progressing.
 - iii. Slit changes during the SAA are still not possible and this creates operational difficulties. Tests are ongoing at MSSL to see if it is possible to overcome this restriction,
- iv) MDP Problem

The MDP had an unexpected reset which caused the XRT to go into safe hold. At the time of the meeting the XRT was not accepting previously accepted commands. Planning was underway to upload new commands at today's (2/1) evening passes.

2. Observation Plans for February

- i) Berger stated that SOT team was planning a series of irradiance studies. They would involve a series of pointings across the disk (equator). They were refining the details of the program which would involve a few minutes at each position. It was pointed out that the point and settle time for each observation would be longer than the observation time. DeLuca stated that they would perform full disk synoptic observations simultaneously and EIS (Hara) thought that they could perform a calibration study of line widths as a function of angle. HAO (Lites) had suggested expanding the program to include a North South scan and collect a set of full FOV vector magnetograms with the SP. This would require 12 observations each of approximately one hour duration. Mariska stated that the one hour observations would take more time to program and he requested an accurate time for each observation. Watanabe suggested that the equatorial scan (short sequences) might be scheduled for early February. Culhane reported that the SUMER campaign planning was continuing.
- ii) Shimizu provided information on the restrictions on ground coverage that would occur during the second half of February as a result of a JAXA launch scheduled for 2/15 that would use the new ground network. Hinode would be restricted to the use of the Uchinoura ground station for 1-2 command uplinks per day. Shimizu also stated that there will be a partial solar eclipse (5% coverage) on 2/17 and three larger eclipses on 3/18, one of which will be total. During an eclipse the spacecraft will shift to gyro control and slight pointing drifts should be expected. The spacecraft will also switch to battery power during this time. The eclipses would provide opportunities to calibrate scattering and perhaps opportunities to for higher resolution imaging during de-occultation as a shutter to uncover fine scale structure (Golub).
- iii) Shimizu also reported that the ACS contains a problem that prevents the star tracker from always locking on to Canopus when the telescope pointed toward the poles; placing restrictions on polar observations. The three software patches are required to fix the problem. The process will require switching from the main to the backup computer and will require two days to install and test. No observations will be scheduled during this period. Three weeks of ground testing are required before the installation takes place. Opportunities are early March after the ground networks are released from the JAXA launch but before 3/10, to avoid the eclipse events or after 3/19. Concerns (Watanabe and Tarbell) were expressed about performing the installation right before the eclipse orbits and it was suggested that it might be more prudent to wait until 3/19.

3.0 Meeting Schedule

The next monthly meeting was scheduled for March 1 at 7:00 AM JST (28 February in the USA and UK).

John Davis, February 9, 2007

Attendees: Shibasaki, Watanabe, Sekii, Davis, Culhane, Harra, DeLuca, Berger, Shimizu, Sakao, Mariska, Cobb, Doschek, Williams, Tarbell, Shine, Ichimoto, Suematsu, Matzusaki, Webber , Lundquist, Hara, Sterling, Golub and others.