

Minutes of the 4th Hinode Monthly Meeting March 1, 2007

The 4th Hinode Monthly Meeting was chaired by Watanabe and held on March 1, 2007 at 9:00 AM (JST). The Agenda was published on the JAXA website and was accepted.

1. Instrument Status

- i) SOT (Tarbell) Current status of SOT is basically unchanged. SP and BFI continue to operate normally and the NFI continues making longitudinal magnetic field observations in Fe I 6302. As a result of careful experiments in Palo Alto the cold soak treatment of the tunable filter is no longer considered an option and has been removed from the schedule. The alternative approach to modify the filter control software is turning out to slightly more difficult than initially appreciated. It is currently undergoing verification using the simulator in Palo Alto. Additional testing and documentation are needed before seeking approval from NASA and agreement among the SOT team. The operational process for making the upload requires six different stages with multiple uploads and stopping observing with SOT. The current plan is to separate the uploads in to two phases. The first phase would span two days, during the week of March 12, and the second phase 3 days during the week of April 2. Tunable filter testing will be planned along together with the science observations and as far possible undertaken on a non-interference basis. Sakao noted that we may have to have double uploads for internal checking and also that the uploads may affect XRT exposures and Tarbell agreed that there may be short interruptions during TM passes.
- ii) XRT (Weber) reported that the Filter Wheel 1 (FW1) operation had been demonstrated at cold (normal) temperatures in the stepping mode. They had gained sufficient confidence to start semi-automatic operations in the stepping mode. This consists of giving a command that contains enough steps to move from one filter position to the next. Weber also reported that they were planning to perform an experiment to determine if the scattered light from the LED encoders could be used as an alternate method for determining the position of FW1. This might be possible if there is a different light scatter pattern for the 6 phases corresponding to the 6 motor/encoder positions. Davis asked if there was a reason for the rather frequent safe-holds experienced by XRT. Weber replied that it was believed that they were all caused by cosmic ray generated single bit upsets.
- iii) EIS (Watanabe reported for Harra). The reformatter is now dealing with merging the data automatically and has been operating successfully for two weeks. A few minor problems with the headers remain to be corrected. The 'final' release version of our planning tool onto SSW is delayed partly due to the fact that RAL software is running under ISO-9000 now and needs a more thorough check before

release. This should take no more than a couple of weeks. In the meantime for people wishing to observe with EIS, a web page that is available and is linked from the new Hinode EIS home page:

<http://msslxr.mssl.ucl.ac.uk:8080/SolarB/EisStudies.jsp>

It describes studies that are available, so that non-Hinode team members can treat this like a 'menu' to choose from.

- iv) Spacecraft (Watanabe and Shimizu) Watanabe reported that the Hinode experienced no problems during the February solar eclipse and that a larger eclipse will occur on March 19 with a duration of about three hours. A more accurate prediction will become available once the updated orbital elements are received. The patch to fix the AOCS will be uploaded during the third week of March. Shimizu stated that this sequence would begin on the evening of March 20 and normal operations would resume on March 23. He confirmed Sakao's statement that no scientific observations would be performed during this period. However the instruments would remain powered up.

2.0 Report from the SSCs

Several general issues from the SSCs meeting were raised. The first question raised by the external community was "Is there someone with whom they can talk to start the detailed observation planning for Hinode once their observations were approved. The consensus was that once it was accepted by the SSCs and approved at the Monthly Review then the PI would be encouraged to the Chief Observer through one of the SOTCO, XRTCO, or EISCO addresses. The second issue was data access for the SUMER campaign investigators. The consensus was that the SUMER PIs should be given sample data to help them in the planning process but that they should not be allowed access to the data before the general release.

The process for scheduling the different SUMER sub campaigns was not obvious and it was recognized that a considerable amount of work was still needed to coordinate the campaigns. A question was asked whether the SOHO operations were to be orchestrated from ESA or from GSFC? Unfortunately Dr. Culhane was unavailable to answer these questions as he was still in transit because of weather related flights delays.

The March operation schedule includes a second polar campaign during the second week of March. During the third week the observations will be restricted during the 2.5 day period when the pointing system upload is occurring and as a result of the solar eclipse.

Tarbell reiterated that SOT will not be available for 24 observations during the month of April as they will be uploading and testing the modified control software for the narrow band filter (NFI).

Hoffman noted that the campaigns (HOPs – Hinode Operating Plans) are described in some detail on the on the JAXA website that is currently password protected. However the information is at a level and doesn't describe what the instruments are

doing. It was agreed that there is room for improvement in the display of the data for these pages.

Watanabe noted that for both the upgrade of the NFI control software and the performance of the first major campaign April will be a very important month.

3.0 Meeting Schedule

The next monthly meeting was scheduled for March 29 at 7:00 AM JST (28 March in the USA and UK).

John Davis, March 23, 2007

Attendees: Shibasaki, Watanabe, Sekii, Davis, Berger, Shimizu, Sakao, McKenzie, Cobb, Owens, Doschek, , Tarbell, Hoffman, Shine, Ichimoto, Suematsu, Matzusaki, Webber , Lundquist, Hara, and others.