Minutes of the 6th Hinode Monthly Meeting
April 25-26, 2007

The 6th Hinode Monthly Meeting was chaired by Prof. Watanabe and held on April 26, 2007 at 8:00 AM (JST) at NAOJ. The Agenda was circulated by Prof Watanabe and was accepted.

1. Instrument Status

   i) SOT: Tarbell reported that the new software to control the FPP had been uploaded and is working as expected. However it is more difficult to use than expected. They have now observed all the lines and are concentrating on Stokes profiles and plus a fixed wavelength at H-alpha. In the coming months they will try the other lines that are selectable by the NFI. The team believes that it will be possible to make observations during the eclipse season; however they still don't know how long it will take to reach thermal equilibrium after each eclipse.

   ii) XRT: DeLuca reported that filter wheel #1 was ongoing; however they had been able to move the filter wheel, in the stepping mode, to all positions in both directions at the nominal operating temperature. This appears to rule out problems with the encoder. They had planned to start testing closed loop operations earlier this week but had an upload problem and this is now scheduled for next Monday (April 30). The source of the problem is still unknown however the current temperature is 5-6 degrees C warmer than the temperature when the sticking problems first occurred. During the eclipse season the heaters will be turned on to maintain or perhaps slightly raise the wheel temperature.

   iii) EIS: Harra reported that the results of the testing of the slit slot assembly to determine whether it could be operated during SAA passage had been presented to NASA. Although the general conclsions were positive the meeting resulted in a number of action items that need to be addressed before proceeding to operations. A date for implementing the changes has not yet been set.

   iv) Spacecraft: Shimizu noted that the current prediction for the start of the eclipse season is May 8. However the Sun will be obscured by the Earth's tmophere starting two days earlier. During eclipses the spacecraft is controlled only by the gyros that sense velocity not position from which a drift rate is estimated. The transition to gyros only will occur moments after the loss of the signal from the sun sensors and will be accompanied by a jump in the pointing direction that could be as large as 40 arcsec but will usually be less. There will also be some deformation of the structure that is expected to result in misalignments of 6 arcsec or less. The control software may bgin to sense these affects as early as May 2nd. DeLuca asked how long after

the start of the eclipse should the observers wait to avoid the jump before beginning observations? Shimizu responded that probably one minute or less. Shimizu stated that the orbital elements will have margin built in to allow for more severe effects than expected. He also predicted that the longest eclipse will be 19.4 minutes.

2. Monthly Planning
Watanabe reported the opening of the Monthly Event Page. Since this occurred during the "turmoil" of the SUMER campaign it will benefit from the establishment of some general rules that are planned for the next month. Once these are in place it is expected to be more widely used. The page can be found at:

http://www.isas.jaxa.jp/home/solar/hinode_op/hinode_monthly_events.php

3. Discussion of Existing Proposals

HOP 9 Watanabe asked what kind of support were we able to provide to Engvold? Berger responded that there two filaments were observed on the disk by SOT in H-alpha and Ca H. However the ground based results were poor as a result of bad weather. This HOP is now closed.

SUMER Campaign: Culhane reported that all but 5 of the 32 studies were addressed by EIS. The campaign was judged a success but providing this level of support was not without its challenges. These included:

i) Disputes between ground based observers,
ii) Late changes to the planning schedule
iii) Daily decisions were not always made known to everyone.

Watanabe believed it was essential to have a single channel for communications. He also wished to establish a set of ground rules, namely:

1. Establish detailed scheduling at the Monthly Meeting (MM). No decisions on real time schedule before this time.
2. Collaborations with ground based observatories need a schedule that they can rely on.
3. The observing hours should be announced for collaboration with multiple spacecraft.
4. When collaborations with multiple facilities are planned the Hinode planning team should deal with only one member of the consortium, who would in turn coordinate all the activities of the consortium.
5. When studies are approved at the MM a Point of Contact should be named to act as the interface between the Hinode team and the external observer. The POC's function is to help the external investigator with his proposal, field questions and to shield the COs from having to answer lots of questions.

6. Establish a firm baseline that non-core proposals need to be submitted at least 3 months before the time they are to be implemented (Culhane).
7. The external proposals need to have been well thought through and provide adequate detail to understand the operational needs. An example or template would be helpful (Berger).

N.B. XRT has an observation request form that is available at:

http://solar.physics.montana.edu/Hinode/XRT/

and EIS has a planning tool at:

http://msslxr.mssl.ucl.ap.uk:8080/SolarB/PlanningToolGuide.jsp

8. External requests should in the first instance be limited to no more than 12 hours per day. This is to allow for more than one external request per day and time to perform the core program. N.B. In this respect SUMER was a special case due to its serious lifetime concerns and is unlikely to be repeated.

A participant at ISAS stated that Dave Williams was preparing a set of instructions that fit these requirements and might be able to put together a handout for the Hawaii SPD.

4. New Proposals
   i) HOP 7: Ulysses Quadrature, SOHO CDS & UVCS plus Ulysses; Culhane is the POC. The sun is cooperating as an active region is appearing that should be in an ideal position near the West limb. Time period 7 – 20 May. Since this requires limb pointing Shimizu was asked whether there were additional constraints because this would be at the start of the eclipse season. He answered that there were no additional constraints. Julio delZahn (sp?) is the investigation PI.
   ii) HOP 8: STEREO: Mariska is the POC. They are requesting up to 5 hours per day of limb pointing observations if the Sun remains quiet. In the event that the activity that is appearing at the limb continues its passage they may change their target. Since they will be observing continuously there appears to be little conflict with HOP 7. Mariska was asked to have the PI Plunkett discuss any requirements he may have for SOT and XRT with their PIs.
   iii) HOP 10: Joint observations (EIS, SOT, XRT) with the Norikura Observatory for non-thermal line broadening. The investigators (Hara, Suematsu, Ichimoto) are all members of the core team and Hara is assigned as the POC. The joint observations will take place from mid-June through the end of July.
   iv) HOP 12: Cooperative observations with the Hida Observatory to study emerging flux, cool jets and Ellerman bombs. The study is led by Shibata (Kyoto). The request is for two observational periods 28 May

to June 3 and from 6 August to 12 August and the observing time each day would start at 2100 UT and run for a duration of six hours. Since this coincides with the eclipse season if there are problems a backup period would be from 13 to 23 August. Watanabe will act as the POC.

v) HOP 13: 1. DeForest: Hinode Collaboration with SHAZAM-P was introduced by Sekki who is assigned to be the POC.The request involves SOT observations – g-band bright point, chromospheric heating and magnetic field - during the period of 25–29 June, between 1400-2000 UT. He is interested in quiet sun observations near disk center. Because Hinode is in the eclipse season he will be happy with intermittent support for periods of 10-30 minutes. He is also requesting support from MDI and TRACE.

5. Other Business

Shimizu asked for more frequent co-alignment observations during the eclipse season, starting on May 9th and for a duration of approximately 10 days to study the effect of the rapid changes of temperature during the night time periods caused by the eclipse. These observations may continue less frequently throughout the summer. DeLuca suggested that XRT may have to go G-band for this.

The 7th Monthly Meeting will be held on April 24 at 7:00 AM JST and on April 23 in the US and the UK at the usual times.

John Davis, April 27, 2007

Attendees: Shibasaki, Watanabe, Sekii, Davis, Shimizu, Sakao, Cobb, Doschek, Mariska, Tarbell, Berger, Hoffman, Shine, DeLuca, Golub, Webber Harra, Culhane, Sakurai, Brooks, Berger, Shimizu and others.