Minutes of the 11th Hinode Monthly Meeting
September 19-20, 2007

The 11th Hinode Monthly Meeting was chaired by Prof. Watanabe and held on September 20, 2007 at 7:00 AM (JST). The Agenda circulated by Prof. Watanabe and was accepted.

1. Instrument Status
   - i) SOT: The SW upload and reboot were successfully completed on September 12. Testing of the new SW features one at a time has been proceeding, with no problems encountered so far. It will probably be finished in the coming week. The automatic procedure to stow the NFI blocking filter in the "safe" position is in routine use so the other filters are being protected to the maximum possible extent. Tarbell also stated that that October is a very good month for using the NFI, since the orbital Doppler shifts are at a minimum this month. Therefore, there will be several SOT core team observations for local helioseismology and wave propagation, for which they may ask to skip a synoptic observation, allowing 12-hour continuous runs. These will be coordinated with MDI, and so the scheduling will be influenced by the SOHO DSN telemetry coverage. The DSN schedule is said to be somewhat uncertain in October because of some NASA launches, so I do not yet have any specific dates and times from MDI yet. We will schedule these in weekly meetings with as much advance notice as possible.
   - ii) XRT: They are still working on the software to create the flat fields. And they may want to ask the spacecraft for more dithering of the pointing axis but have to look at their data more closely. The current plan is to move to an optimization code as the initial process produces dark structures turning into bright rings as expected when you have changed the temperature of the solar plasma that is shining through the spot. They are continuing to work on this problem. DeLuca asked Tarbell what the nature of their long running core programs were quiet sun or to track and follow an active region. Ted responded that one of the studies would be quiet sun with sun centered pointing that wouldn't affect the synoptics but they might get a request for an off-center active region. The programs are for wave propagation and local helio-seismology studies.
   - iii) EIS: The MHC software has been uploaded and is fully operational and there are no longer any restrictions. The next key event is the EUNIS rocket flight that will be used for cross calibration of the detectors. This will occur on or after October 30. Culhane stated that they might request extra telemetry during a two hour period to coincide with the flight. If launch slips are needed they will occur on one day intervals. However Culhane made it very clear that coordination with the rocket flight was EIS's number one priority and would have precedence over any other operations, including the

SUMER campaign if the launch slipped into November. EIS will hold its next science meeting on the 29 – 30 October in Washington DC with a primary topic the design and approval of the grating focus exercise. If approved it would be implemented later in the year and is expected to result in a two day hit on science operations.

iv) Shimizu stated that the spacecraft operations were normal and there were on unexpected events.

2. Campaign Review for August

Watanabe led the discussion and asked Tarbell to report on HOP 2 (Polar Campaign). This was operating for 8 -14 hrs per day was going well with no particular problems. Tsuneta and colleagues were looking at the data and were providing feedback. The campaign will continue running through the end of the month.

Tarbell also reported on HOP 14 (Canary Islands Campaign from 09/17 – 10/06) that had just started. They have not had time to receive much feedback. Bad seeing on the first day and had to repeat their program, however communications are good and the targets are well defined. The time requested was relatively short (8:00 – 12:30 UT) and is not taking up as much of the day as expected.

HOP 25 (9/24 – 9/16) was a collaboration between several ground based telescopes and the SOT SP. Sekii had heard no complaints and Tarbell commented that he was glad it was over as it was long, complicated and perhaps too ambitious but he believed they had satisfied all their requirements. DeLuca asked how one should go about getting the ground based data for comparison with XRT images. Watanabe suggested he should contact Kamio san who is the POC and responsible for collecting the ground based data.

Watanabe asked about HOP 37 and Culhane reminded him that this had been withdrawn as it required active region observations. TRACE was also going into eclipse and the investigators were evaluating whether TRACE could be used during this period. However it is still carried in the EIS weekly circular, but for reference only as it is not scheduled.

3. New Proposals

HOP 15 (Kosovichev). Sekii reintroduced this proposal which is for local helioseismology observations that will make use of a 3 day continuous contact with SOHO between 12/3 – 12/6 during which period the MDI will be run in the high resolution mode. He would like to make use of all the Hinode data allocation during this period. As a minimum he requested one 24 hr observation and two 12 hr observations. Davis suggested that perhaps the two twelve hours be placed adjacent to the 24 hour slot with a brief interval for the synoptics might be the optimum solution. The dates are approximate as they are dependent on the timing of the SOHO high data rate contact. Sekii was asked to contact Sara Gregory prior to the October monthly meeting at which time the actual dates and times will be allocated.

HOP 35 (Romano) is for filament eruption studies during the period 12/1 – 12/9. Sekii knew little about this proposal and Culhane also had concerns because of two apparent Pocks (Romano and Francesca Zaccarello). Sekii asked that Culhane take responsibility for this HOP and he agreed to talk to Romano and clarify the role of Zacharella and ask for a unified proposal for proceeding.
HOP 41 (Judge) is a search for Parker's nanoflares that requires joint observations with the three instruments but does not have a ground based component so is not time critical. No one had contact with Judge. Watanabe stated that his requirements are quite specific and Tarbell claimed that he didn't need a particularly long observation sequence. As this was primarily a request for SOT observations Watanabe asked the SOT team to review the plan and Tarbell was assigned to ask Tom Berger to review the plan for the next monthly meeting.
HOP 42 is for the EUNIS collaboration discussed earlier. Culhane expects to have the final dates shortly and emphasized once again that this is the absolutely highest priority for EIS.
HOP 43-45 The 2nd SUMER campaign. Culhane said that there are more than just the three listed for the two week period of the campaign and these can be found on SUMER planning tool. He is alarmed that at least for the moment there are several days when the 12 hour limit is exceeded. However Werner Curdt is due in Japan and will meet with the J-side on October 12 to discuss the SUMER observations. However Culhane had an agreement with Werner that the campaign would be limited to 12 hours per day and the October 12 meeting is a good opportunity to achieve agreement on the limits on the campaign. Culhane will talk to Watanabe off line as he has some historic requirements that are not being met and there are inconsistencies that need to be resolved.
HOP 43 requires coordination with ground based observations during 11/2 to 11/11 with the DST and appears to be coherent. HOP 44 is to look at coronal hole plumes at either the North or South Pole. This will be the principal plume observation of this campaign. The preferred time is between 11/2 and 11/5. There appears to be a possibility for conflict with HOP 45 (Teriaca: Waves in the Solar Atmosphere). Culhane will contact the proposers and try to bring coherence to the program prior to the October meeting.
HOP 46 The SOT Irradiance Campaign. Tom Berger has communicated the desire to institute this program on a regular (monthly) basis. The program will require approximately 18 hours, 12-13 hrs for the N-S scan and 6 hrs for the E-W scan. DeLuca wondered why this core team observation received a HOP designation. Watanabe responded that because the observation required 18 hrs of observation it was deemed necessary to identify it as a HOP to ensure that it could be regularly scheduled once a month. Mariska asked if the observation had been made before. Tarbell replied that it had been performed in March but they had not thought it made any sense to run it during the eclipse season but now that the spacecraft was out of the eclipse season they planned to run it regularly. DeLuca suggested it might be a good idea to have EIS and XRT run complementary programs to record the higher temperature material above the regions SOT was recording. A discussion followed on whether EIS should look at a single or multiple lines. The argument resolved around the dwell time at each position and

the number of lines scanned versus the area covered. Mariska was asked to take an action to develop an EIS program to optimize temperature and spatial coverage that was consistent with the SOT dwell times.

Watanabe was interested in defining a date for this program as October was a busy month (HOPs 11, 14, 28, 36). Tarbell suggested later in the month before the SUMER excitement. DeLuca suggested picking a date and see if the ground based observers can work around it. Tarbell noted that he had heard that Norikura was off the air which would create a gap between 10/6-14. Mariska said that October 6th was rapidly approaching and it would take them time to create their studies. Tarbell suggested 10/12-14 and Mariska concurred.

Watanabe summarized the discussion that Hinode would support 4 HOPs (11, 14, 28, and 36) in October and HOP 46 would be run for 18 hrs between 10/12-14. Watanabe also suggested that we need to try and support Carlson (Oslo) who had time at La Palma (10/7-11/2) but he had not assigned them a HOP since they had not submitted a request. Davis pointed out that the SSCs had asked Berger to contact them suggesting the 10/12-14 time period which had been available then but now was scheduled for the irradiance observations (HOP 46). Watanabe thought that we should set 3-4 days aside for the Oslo group. Tarbell suggested that you could do two the two observations on the same day i.e. 6 hrs for La Palma followed by an 18 hr irradiance run. This solution was agreed to by all parties.

Watanabe then commented that the main topic for the next Monthly Meeting would be the SUMER campaign. Culhane agreed and that the key meeting would occur on 10/11 and he would attempt to get the observers to abide by the 12 hour rule. DeLuca said that it was OK for observers to request longer periods but that they should be aware that they may more than 12 hours. Culhane wanted to make sure that he had the support of the meeting to enforce the 12 hour rule. This was agreed.

The 12th monthly meeting will be held on October 25 at 7:00 A.M. JST and at various times on October 24 in the US and UK.

John Davis, October 4, 2007

Attendees: Shibasaki, Watanabe, Sekii, Sakurai, Shimizu, Kasakawa, Doschek, Mariska, Tarbell, DeLuca, Golub, Culhane, Williams, and others.