

37th Hinode SSC Meeting on 18th February, 2010 at 07:00 JST

Short Summary, Conclusions and Actions

a. Instrument Status:

SOT nominal; remote CO operation being undertaken today.

XRT nominal;

EIS nominal; beginning testing of internal event trigger and XRT flare trigger responses, expect readiness in ~ 5 – 6 weeks time.

b. Review and Discussion of Action Items from Meeting #36

- need confirmation that proposers of Solar Oxygen Abundance (Vitas et al), were informed of SSC decision from meeting #35; **ACTION: Certain**

- other outstanding actions from 36th and previous meetings have been completed

c. Review/Discussion of Open HOPS and ToOs

1. Scheduling of QS and CH HOPS in conditions of increasing solar activity

HOP 151

- following the recent need to twice interrupt **HOP 151** to accommodate AR observations, it was suggested that this HOP be run for at least 40 hours, preferably for 50 hours, of quiet disc centre tracking

- XRT is unable to support high resolution long exposure observations during active solar conditions due to concern about damage to the instrument; it can operate safely in a 4x4 pixel binning mode when the AEC system may be used to reduce exposure time in response to flaring or increased activity

- agreed that the XRT team should develop ground rules for their support of high resolution long exposure observations by SOT and EIS and communicate these to the relevant HOP proposers

ACTION: Golub to discuss modified XRT support of HOP 81 with Shimojo

- as agreed at the last meeting, proposers of synoptic HOPs should clearly state any scheduling flexibility

ACTION: Berger to list the scheduling flexibility in the web notes for HOP 79

ACTION: Berger to contact Shimojo and establish the scheduling flexibility for HOP 81

- agreed that **HOP 151** be scheduled during weekends (**28th February/1st March and 28th/29th March**) when it is in general not possible to alter the planned programme

HOP 101

- following discovery of a N-S alignment and increased depth of polar supergranules in previous running of this HOP, it was suggested that the HOP be run in 16 hour blocks every three days during March when the B-angle is favourable for polar observing; need to establish lifetime of observed polar supergranule features and their alignment

- the March polar observing interval rather than September offers a preferable period to follow up on this discovery given the growing level of activity

- gaps in the proposed schedule risk the validity of any lifetime estimate; an occasional gap is tolerable if very significant activity were to occur; 4x4 binned operation of XRT is acceptable to the proposers

- agreed that **CORE HOP 101** should be run as requested unless interrupted by a highly active AR; efforts should be made to achieve advance warning of activity from STEREO-B though this does not necessarily give a good indication of magnetic complexity

- run on **4th, 6th, 8th, 12th and 14th March**

Increasing Activity

- discussion of the Hinode planning response to the incidence of highly active AR targets was continued from the last meeting

- given the inevitably qualitative nature of specifying what constitutes a “highly active” AR, other possible measures were discussed including i) ad-hoc telecons by SSC members, ii) CP to play an active part in resolving schedule issues in real-time JST, iii) one SSC member or PI to be available for consultation during planning meetings

- agreed that SSC members and PIs would consider the issues involved and send their views to the SSC Chair and other members

ACTION: SSC members and PIs to circulate their views on programme choice mechanisms

d. Review of New Proposals and Scheduling of Observations

1. EIS Multi-line Observations of Flares and ARs – Fang, Ding, Li;

- observe multi-spectral Doppler velocities during flare impulsive phase; further understand chromospheric evaporation and heating mechanisms
- use of EIS and Nanjing Solar Tower for visible chromospheric lines proposed; possible observing slot at Nanjing in early June, 2010.
- resubmit as a flare ToO following discussion with EIS team

ACTION: Watanabe to discuss Hinode scheduling and use of EIS with proposers

2. Coronal Heating and Connectivity between the Transition Region and Coronal Emission in ARs – Fludra, Young; HOP154

- observe transition region and coronal lines to identify the O V 62.9nm emission associated with coronal loop footpoints and that involved in short non-coronal loops
- joint observation by Hinode EIS and SOHO CDS
- **run on 24th March**

3. Prediction of EUV Helium Line Intensities in the Solar Atmosphere – Giunta, Fludra; HOP 155

- observe a range of He I and He II lines to better understand the lower transition region; seek to represent the observed fluxes with DEM distributions; assess why He lines are enhanced compared to other transition region line intensities
- use Hinode EIS and SOHO CDS to observe the He lines from active region targets; **run on 25th March**

4. Search for High frequency oscillations and diagnostics of coronal loops – Banarjee, Doyle; HOP 156, ToO

- use strong EIS emission lines to search for high frequency oscillations in active region loops; measure loop densities

- observe with Hinode (EIS SOT, XRT), TRACE and later SDO; **run on 26th March if suitable AR**

5. Multi-wavelength Observations of the Flaring Chromosphere – Milligan, Fletcher; HOP 157, ToO

- compare multi-wavelength observations of the flaring chromosphere with detailed hydrodynamic and radiative transfer models

- data will also be addressed by an upcoming ISSI International Team on Chromospheric Flares coordinated by Fletcher

- observe with Hinode (EIS, SOT, XRT), SOHO CDS, TRACE, RHESSI and if possible DST/ROSA; wait for flare producing AR (> C class) to be designated by Max Millenium COs

- **run on 27th March if suitable AR**

6. In addition to the above, the continuing monthly observations

- **Multi-temperature Full Disk Slot Scans – Ugarte-Urra, Brooks, Warren; CORE HOP 130**

- programme has been scheduled for **9th March**

- **Synoptic SOT Irradiance Scans – Berger, CORE HOP 79** will be scheduled for

- **30th March** (N – S) and **31st March** (E – W)

- **Polar Monitoring - Shimojo, CORE HOP 81** scheduled for six days; **18th to 23rd March**

d. Other Business and Date of Next Meeting

- SSC will continue to monitor the status of ToO HOPs at each monthly meeting and where necessary discuss status with the proposers

- next meeting on 18th March, 2010 at 07:00 JST; 17th March, 2010 as appropriate in US and UK