# 110th Hinode SSC Meeting on 24th March, 2016 at 07:00 JST

# **Short Summary, Conclusions and Actions**

#### a. Program Status

#### 1. Instrument Status Review

**SOT** currently operating without its Filtergraph (FG) camera following an electronic fault. Spectro-Polarimeter (SP) and Correlation Tracker (CT) are nominal and operating. SOT limb observations will be significantly reduced.

#### **XRT** is nominal.

**EIS** is nominal. Bakeout completed successfully. Hot pixels down 64%; Warm pixels down 8%. Future bakeout schedule - at ~ 2 month intervals, will be established.

# 2. Changes to Instrument Telemetry Allocation

Following SOT/FG camera fault, revised allocation agreed by SWG for Hinode normal mode operation:

	SOT	XRT	EIS
Disk Mode	54%	23%	23%
Limb Mode	14%	43%	43%

Since variable allocation may be more difficult in 7 day focus mode planning, the above arrangement will be assessed again prior to start of the next Hinode focused mode operation on 26<sup>th</sup> May

# 3. Increasing Science Productivity following Telemetry Allocation Change

Following discussion and recognizing the upcoming Agency assessments of Hinode post-launch support levels, it was agreed that a draft outline of the scientific productivity following the above change would be prepared and circulated to the SSC members.

ACTION: Savage and Tarbell to prepare and circulate draft outline

## 4. Revision of SSC Observation Priorities

A small change to the order of the above list was agreed. The new list is:

- 1. ARs: long-term programs such as flux emergence, waves in sunspots, flare monitoring, etc.
- 2. CHs
- 3. Filaments
- 4. Disk-center: long baseline synoptic scans
- 5. Polar magnetic network
- 6. Prominences/Cavities

where prominences/cavities have been removed from #3 and placed at #6

## 5. Consider Science Focus Topics for the Next Round of Funding Reviews

Both NASA and ESA will begin consideration of continued funding for Hinode operations later this year and presentations will need to made to reviewing groups. Following discussion, it was agreed that SSC members would send relevant science focus input to **Savage (NASA)** and **Fleck (ESA)** 

## 6. Community Announcement on FG Camera Problem

This is being prepared by **Tarbell** and **Savage** and will be circulated to the community

#### 7. HOP Prioritisation

- SSC asked by SWG to prioritise HOPs i) with associated ground-based observations that were overlapping in a time zone and ii) in cases that generated mission telemetry use conflicts.

ACTION: Culhane to ensure that such cases were highlighted in SSC meeting notes; Ongoing

#### **b.** Previous Action Items

- coordination of targets and timing for HOP 298 eclipse observation proposers completed by Savage

# c. Review/Discussion of Open HOPs and ToOs

- routine HOPs 130, 79 and 81 were run as planned during March
- one additional runnung of **HOP 206** was agreed for 1<sup>st</sup> **April**
- following discussion, dates for the April running of HOPs 130, 79 and 81 were agreed

# d. Review of New or Updated Proposals and Scheduling of Observations

- 1. Coronal Loop Magnetic Field Determination and Evolution through Coronal Rain Tracing Coobservation between SST, Hinode, IRIS and Meudon Antolin (<a href="mailto:patrick.antolin@nao.ac.jp">patrick.antolin@nao.ac.jp</a>), Katsukawa (<a href="mailto:yukio.katsukawa@nao.ac.jp">yukio.katsukawa@nao.ac.jp</a>); HOP 300
- infer full magnetic field vector along coronal loops through coronal rain observation
- observe with Hinode (SOT, EIS), IRIS, SST, Meudon
- observing intervals:  $4^{th}$   $17^{th}$  April and  $30^{th}$  May  $10^{th}$  June; 07:30 UT 12:00 UT and 15:00 UT 17:00 UT which are optimum times for SST

NOTE: Meudon is already committed to supporting HOP 255 for 4<sup>th</sup> - 15<sup>th</sup> April, 08:00 UT - 11:00 UT; HOP 300 will need to follow the HOP 255 target to obtain Meudon support during this imterval

- 2. Coordinated Observations with the MinXSS Cubesat and SDO/EVE Calibration Rocket Launch-Moore (<a href="mailto:christopher.moore-1@colorado.edu">christopher.moore-1@colorado.edu</a>), Woods, Caspi, Warren, Ugarte-Urra (<a href="mailto:ignacio.ugarte-urra.ctr.sp@nrl.navy.mil">ignacio.ugarte-urra.ctr.sp@nrl.navy.mil</a>), Mariska (<a href="mailto:jtmariska@gmail.com">jtmariska@gmail.com</a>); HOP 301
- perform EIS cross calibration with rocket, SDO-EVE spectra and XRT cross calibration with MinXSS cubesat spectra
- XRT: full-sun images at sun centre; EIS: as for HOP 130; detailed timings given in HOP text
- rocket launch date: 25<sup>th</sup> May at ~ 19:00 UT to be confirmed in early May

ACTION: Savage to check for possible conflicts with Hinode Focus Mode schedule

# 3. Pore Study to Search for MHD Waves - Norton (<u>aanorton@stanford.edu</u>), Shine (<u>shine@lmsal.com</u>); ToO HOP 302

- acquire SOT SP time series for a small to medium-sized pore; search for oscillations that could indicate photospheric MHD waves
- observing windows: 28<sup>th</sup> March 3<sup>rd</sup> April and 16<sup>th</sup> 30<sup>th</sup> April; observe: 11:00 UT 15:00 UT; target: pore or naked sunspot
- IRIS participation requested; no request to XRT or EIS

# 4. Magnetic and Dynamical Properties of Filaments - Gömöry (gomory@astro.sk)

- submitted as request for re-run of **HOP 180** in support of ground-based **GREGOR** observations with telescoes in Austria, Poland and Slovakia also involved
- observing window: 18th 26th June; 07:30 UT 13:30 UT
- EIS and IRIS participation requested; no request to XRT or SOT
- SSC requested a re-submission of the HOP request to next meeting (20<sup>th</sup>/21<sup>st</sup> April) giving more detail on the observations requested from EIS and IRIS and how they connect with the GREGOR observation

The **SSC** suggested that for the upcoming transit of Mercury on **9**<sup>th</sup> **May**, it would be helpful to have a single HOP request describing the Hinode observations

Rocket launch support observations will be requested for Hi-C 2: ~ July 18th

The continuing monthly observations are:

- Polar Monitoring Shimojo; CORE HOP 81
- run on 12<sup>th</sup> April (N pole fast), and 14<sup>th</sup> April (S pole fast)
- Synoptic SOT Irradiance Scans Tarbell; CORE HOP 79
- run on **19<sup>th</sup> April** (N/S only)
- Multi-temperature Full Disk Slot Scans Ugarte-Urra, Brooks, Warren; CORE HOP 130
- run on 5<sup>th</sup> April and 26<sup>th</sup> April

# e. Monthly Science Reports

- next **Hinode** monthly science report is being prepared by the **EIS Team (Warren/Doschek)** for  $\sim 8^{th}$  April, **2016**
- see <a href="http://hinode.msfc.nasa.gov/science\_charts/">http://hinode.msfc.nasa.gov/science\_charts/</a> for template and previous charts

## f. Date of Next Meeting

- next meeting: 21st April, 2016 at 07:00 JST; 20th April, 2015 as appropriate in US/Europe

### g. AOB

Savage is awaiting NASA approval for travel support for the upcomong SPD and Hinode 10 meetings