

## 160<sup>th</sup> Hinode SSC Meeting on 21<sup>st</sup> May, 2020 at 07:00 JST

### Short Summary, Conclusions and Actions

#### a. Program Status

##### 1. Instrument Status Review

SOT operating without its Filtergraph (FG) camera following an electronic fault. Spectro-Polarimeter (SP) and Correlation Tracker (CT) are nominal.

XRT is nominal.

EIS is nominal.

##### 2. Report on Changes to Instrument Telemetry Allocation

There are no further reports on telemetry allocation changes

##### 3. FM Calendar

**Hinode** will continue to operate in focus mode. **Reeves (XRT)** stated that the long period in focus mode was making it increasingly difficult to avoid errors when loading complex observing programmes. **SOT** and **EIS** teams agreed with this. **XRT** team requested two weeks of normal mode operation in July if possible. **Savage** agreed to discuss this with **Shimizu-san**.

##### 4. 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.

EIS team to check studies available for **HOP 398**

#### c. Review/Discussion of Open HOPs and ToOs

- routine **HOPs 79, 81 and 130** were run as planned during **May**; dates for these HOPs were agreed at the meeting for **June**
- **HOP 336** and **HOP 393** dates were also confirmed
- **EIS** and **IRIS** will continue Solar Orbiter collaborative observations through end of **May**; no conflicts with routine HOPs
- **EIS** team wish to perform a full-disc mosaic following the upcoming PSP encounter but, given in Hinode eclipse season, may need to restrict its extent; **Warren** will discuss this with **Brooks**
- **IRIS** team would like to begin a full-disc scan after **15<sup>th</sup> June**

- meeting began a discussion of the upcoming PSP encounter #5: **01 June – 13 June, 2020**
- what should be the Hinode team response to release of multiple targets by the PSP modelers
- note: pointing changes are not possible during a 7-day focus mode interval
- could focus mode be suspended during the PSP support interval; if not, need to use pre-agreed target pointings; **Savage** agreed to discuss this with **Shimizu-san**.
- following the meeting it was agreed that normal mode would operate between 9<sup>th</sup> and 15<sup>th</sup> June
- PSP discussion will continue by email following the meeting
- launch dates for upcoming sounding rocket flights – EUNIS, MaGIXS and EVE, remain on hold pending resolution of the virus crisis

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

There were three new HOP proposals.

##### **1. Solar Wind Outflow in Coronal Holes – Hofmeister ([stefan.hofmeister@uni-graz.at](mailto:stefan.hofmeister@uni-graz.at)), Matthews/SSC, Culhane/SSC; ToO HOP 400**

- study of solar wind outflow in the individual magnetic funnels within coronal holes
- dates: run in **September**
- time window: coordinate with BBSO/GST; require 4 hours observing time without interruption on at least one day with good ground-based observing conditions
- target: low-latitude coronal hole with a size of about 300"x400", with a maximum distance of 500" to disk center
- no request for **SOT**
- for **EIS**, requested study not in EIS data base; new study to be prepared and validated by **September**
- **XRT**: all available filters with maximum exposure time at the beginning and end of the observations; during observation: Al-mesh and Al-poly, cadence: 1 min; FOV: 512"x512", centered at the target.
- **IRIS**: proposal submitted to IRIS: IRIS ObsID: 3621414073

##### **2. Coordination with SST and IRIS - Dynamics of Flux Cancellation in Neutral Lines – Chintzoglou ([gchintzo@lmsal.com](mailto:gchintzo@lmsal.com)), Savage/SSC, Watanabe/SSC, De Pontieu/SSC; HOP 401**

- IRIS+SST coordinated observations of the dynamics of flux cancellation in emerging or decaying active region neutral lines
- dates: every other day during the LMSAL shift at the SST/IRIS-SST coordination: **June 4<sup>th</sup> to 17<sup>th</sup>**
- time window: 8-10 UT coordinated with SST; avoid short interruptions if possible to maximize coordination coverage during potentially good seeing conditions at the SST
- targets: 1) neutral line of an emerging AR; 2) Neutral line of a decaying AR/opposite polarity plage
- no request for **EIS**
- **SOT**: similar to that for HOP 330 on 2017 April 22 at 14UT, but twice as wide (i.e. 20").
- **XRT**: observe AR or decaying AR for sigmoids at the start or near the time of the SOT observations; Al-poly - 512x512; no rapid time sequences needed
- request submitted to **IRIS** team
- for suitable target, may sacrifice cadence for additional 20" along x-direction; double raster time to 3.2 minutes

**3. AR Outflow Dynamics with IRIS, SST and Hinode/EIS – Polito ([polito@baeri.org](mailto:polito@baeri.org)), De Pontieu ([bdp@lmsal.com](mailto:bdp@lmsal.com)), Brooks ([dhbrooks.work@gmail.com](mailto:dhbrooks.work@gmail.com)), Savage/SSC, Watanabe/SSC, de Pontieu/SSC; HOP 402**

- study the dynamics of the low atmosphere counterpart of the AR outflows using IRIS and SST
- dates: SST-IRIS coordinated campaign will be run from **June 4<sup>th</sup> – 17<sup>th</sup>**; coordination with **Hinode** should be run in this period if suitable AR is available; consecutive days desired but not essential
- time window: 07:30 UT -12:00 UT is tentative time window for coordinated SST-IRIS campaign; ideally SST, IRIS and Hinode should observe same target for 2-3 hr during this window
- target: edge of AR with stronger outflows
- no request for **XRT**
- **SOT**: large SP raster map covering 120" x 170" with duration of ~ 1 hr
- **EIS**: run repeated fast scans to fill the 2-3 hr window and two large context scans, one at start and one at end of observation window
- **IRIS**: observation has been agreed with IRIS team

Continuing monthly observations are:

- **Polar Monitoring - Shimojo; CORE HOP 81**
- run on **2<sup>nd</sup> June** (N pole fast) and **3<sup>rd</sup> June** (S pole fast)
- **Multi-temperature Full Disk Slot Scans – Ugarte-Urra, Brooks, Warren; CORE HOP 130**
- run on **18<sup>th</sup> June**
- **Synoptic SOT Irradiance Scans – Tarbell; CORE HOP 79**
- run on **23<sup>rd</sup> June** (N/S only)
- **Cycle 25 Bright Points - Bryans , Centeno, Savage; HOP 336**
- run on every Monday throughout **May**
- **Cycle 24/25 Equatorial Transition - Egeland, Bryans, Centeno, Savage, Watanabe, De Pontieu; HOP 393**
- run on every Saturday throughout **May**

**e. Monthly Science Reports**

- next **Hinode** monthly science report will be prepared by the **SOT Team** by **17<sup>th</sup> June**
- **NOTE**: Science chart site access has been changed due to IT requirements; **Savage** has established a new Google drive site for template and previous chart
- provide one summary slide for Hinode team management at MSFC and two additional slides for NASA HQ

**f. Date of Next Meeting**

- next meeting: **18<sup>th</sup> June, 2020** at **07:00 JST**; **17<sup>th</sup> June, 2020** as appropriate in US/Europe

**g. AOB**

Senior Review proposal due **3<sup>rd</sup> June**