

## 173<sup>rd</sup> Hinode SSC Meeting on 17<sup>th</sup> June, 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.

No issues with the new arrangement for periods when telemetry usage is unusually high have been reported.

However HOP 421 (MaGIXS coordination) on **30<sup>th</sup> July** and HOP 361 (Solar Orbiter coordination) in **September/October** will require high telemetry usage that should be specified.

##### 3. FM Calendar

The next FM period will begin on **22<sup>nd</sup> June**.

##### 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.

**Hinode team and proposers** to ensure more explicit coordination for **HOP 415/416** observations

Further **HOP 411** observations should be delayed until after the focus mode interval

**Reeves** will request more detail of the required observations from the **HOP 418** proposers

Post meeting, **Savage** circulated available IRIS support times/dates to the Hinode teams

**Savage** to inform **HOP 418** proposers how to coordinate with Hinode during focus mode and to give dates/times by which targets should be specified

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

- **Shine** sees no conflicts for **July** open HOP observations
- next PSP encounter (#9): **August 4<sup>th</sup> to August 15<sup>th</sup>**; **Shine** will add to calendar
- next Solar Orbiter encounter will require coordination on **August 17<sup>th</sup>**
- **HOP 411** will be run after end of focus mode on **9<sup>th</sup> August**

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

Four new HOP proposals were submitted

##### **1. Coordination with SST to Study Flares over a Wide Spectral Range – Panos**

**([brandon.panos@fhnw.ch](mailto:brandon.panos@fhnw.ch)), Francesco, Kleint, Harra, Savage/SSC, Watanabe/SSC, De Pontieu/SSC; HOP 419**

- investigate effects and energetics of flares on the lower atmosphere by analysing how flare B-field geometry changes at different heights and how continuum emission evolves
- dates: ToO programme; **11<sup>th</sup> to 19<sup>th</sup> August**; note observing time with SST
- targets: flares in complex ARs; will alert planners for suitable AR targets; backup programme: supersonic AR downflows; target ends of AR loops visible in AIA 171
- time window: best SST seeing: 07:30 UT – 11:30 UT; prioritize 08:00 UT – 10:00 UT; if promising AR available, welcome coordinated observations 11:30 UT – 17:00 UT; short interruptions allowed
- SOT, EIS, XRT and IRIS requests are given in HOP list; XRT team need guidance re high cadence

##### **2. Study of MHD Waves in the Chromosphere Related to the Variation of Solar Abundances – Lee**

**([lsun@astro.snu.ac.kr](mailto:lsun@astro.snu.ac.kr)), Chae, Kwak, Savage/SSC, Watanabe/SSC, De Pontieu/SSC; HOP 420**

- examine the effect of the waves propagating in the lower solar atmosphere on the abundance variation (First Ionization Potential (FIP) fractionation)
- dates: two observing periods coordinating with BBSO/GST and IRIS: **30<sup>th</sup> June to 6<sup>th</sup> July and 17<sup>th</sup> to 23<sup>rd</sup> July**
- FISS, BFI, and NIRIS of GST and IRIS will mainly observe sunspots with a high cadence mode to investigate the waves in the chromosphere.
- no need for observations on consecutive days; at least, two days of coordinated observations for each period are desired.
- time window: 17:00 UT – 21:00 UT; coordinate with IRIS and BBSO/GST
- targets: sunspots, quiet regions, equatorial coronal holes; main target: sunspot (strong magnetic patch) near disk center; if no sunspot, request a quiet sun or equatorial coronal hole near disk center for accurate measurements of the line-of-sight Doppler velocity and magnetic field strength.
- SOT, EIS, XRT and IRIS requests are given in HOP list
- for BBSO/GST: require FISS, BFI and NIRIS

##### **3. Coordinated Observation with the MaGIXS Sounding Rocket – Savage**

**([sabrina.savage@nasa.gov](mailto:sabrina.savage@nasa.gov)), Winebarger, Kobayashi, Savage/SSC, Watanabe/SSC, De Pontieu/SSC; HOP 421**

- distinguish heating frequency modes in AR core
- dates: launch scheduled for **30<sup>th</sup> July**
- time window: 19:00 UT +/- 1 hr; window open for 1 hr; rocket team will supply more refined timing
- target: AR required; rocket team will coordinate in advance with planners
- SOT, EIS, XRT and IRIS requests are given in HOP list
- note SAA effects but keep observing during SAA transits; launch window will avoid eclipses
- **Reeves** to comment on observation cadence; need for NuSTAR coordination; **Savage** will discuss

##### **4. EPO Campaign Observation Mainly for High School Students – Yaji ([kentaro.yaji@gmail.com](mailto:kentaro.yaji@gmail.com)), Savage/SSC, Watanabe/SSC, De Pontieu/SSC; HOP 173**

- observe active regions

- continuation of a HOP that allows high school students to compare Hinode observations with their own observation data
- dates: **2<sup>nd</sup> to 7<sup>th</sup> August**; time window: 02:00 UT – 06:00 UT
- HOP has been running since August, 2010

### **Additional Requests**

**Harra** requests that HOP 361 be run during **September** for joint observations with Solar Orbiter; interval: **20<sup>th</sup> September to 11<sup>th</sup> October**; need to discuss EIS TLM requirements  
 New HOP will be submitted by the EIS team for SPICE coordination  
 CLASP launch is scheduled for **5<sup>th</sup> October**; related HOP request will be submitted

Continuing monthly observations are:

- **Polar Monitoring - Shimojo; CORE HOP 81**
- run on **6<sup>th</sup> July** (N pole) and **8<sup>th</sup> July** (S pole)
- **Multi-temperature Full Disk Slot Scans – Ugarte-Urra, Brooks, Warren; CORE HOP 130**
- run on **13<sup>th</sup> July**
- **Synoptic SOT Irradiance Scans – Egeland, Centeno; CORE HOP 412**
- run on **16<sup>th</sup> July** (N/S only)
- **Cycle 25 Bright Points - Bryans , Centeno, Savage; HOP 336**
- run on every Monday throughout **July**
- **Cycle 24/25 Equatorial Transition - Egeland, Bryans, Centeno, Savage, Watanabe, De Pontieu; HOP 393**
- run on every Saturday throughout **July**

### **e. Monthly Science Reports**

- next **Hinode** monthly science report will be prepared by the **XRT Team** by **12<sup>th</sup> July**
- **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: **22<sup>nd</sup> July 2021** at **07:00 JST**; **21<sup>st</sup> July, 2021** as appropriate in US/Europe

**g. AOB**

MSFC advertisement for hiring a term civil service employee to help with Hinode duties in the next few months has been circulated; Hinode team are asked to inform potential candidates.

On-going reminder: press-worthy Hinode highlights to be sent to **Savage** prior to publication.

14<sup>th</sup> Hinode meeting will be organised as a hybrid meeting if possible; deadline for decision: **20<sup>th</sup> August**.

An article on Venus has appeared in Scientific American; **Reeves** will forward a copy to **Savage**.

Upcoming Hinode launch 15<sup>th</sup> anniversary should be discussed by the team.

**Scott McIntosh** would welcome guest editor contributions for 15<sup>th</sup> anniversary for submissions to **Frontiers** journal. **Reeves** will circulate his related email..