180th Hinode SSC Meeting on 20th January, 2022 at 07:00 JST

Short Summary, Conclusions and Actions

a. Program Status

1. Instrument Status Review

Hinode off-line due to star tracker issue. Hope to be operational in March in time for Solar Orbiter campaign. A text by **Savage** for the community was agreed.

"Since December 27th, the Hinode Observatory has been offline due to a pointing anomaly that is currently undergoing review. Observations are anticipated to resume in early March. IHOPs are still being accepted at https://hinode.msfc.nasa.gov/hops.html."

SOT is off. Survival heaters are on and temperatures are in the appropriate range

XRT is off. Survival heaters are on. Team will get temperature information from Sakao-san.

EIS is off. Survival heaters are on and temperatures are in the appropriate range

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 useage is unusually high have been reported.

3. FM Calendar

Not relevant given current spacecraft status

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.

Information on NuSTAR data obtained during PSP coordination is still awaited Following completion of testing, **Matthews** will submit HOPs for Solar Orbiter target support **DeRosa** to discuss calibration issues related to **HOP 423** with the Solar Orbiter/PHI team **Savage** will discuss assessment of data quality from the recent eclipse observations with **Reeves**

c. Review/Discussion of Open HOPs and ToOs

- Reeves has no updates on NuSTAR data
- **DeRosa** has discussed HOP 423 with the SO/PHI team; new HOPs were submitted and were considered by the SSC (see below)
- movie of eclipse observations is available
- test data from EIS HOPs being designed to support Solar Orbiter observations is now available; completed HOPs will be submitted to the SSC

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

Five new HOP proposals were submitted

1. Joint SOLO-Hinode-IRIS Observations of EUV Small Brightenings – Parenti (susanna.parenti@ias.u-psud.fr), DeLuca/SSC, Reeves/SSC; HOP 429

- plasma and magnetic diagnostics of the tiniest EUV brightening detected by SOLO/EUI
- dates: $6^{th} 8^{th}$ March, 17th March and 30th March
- details of time windows and targets are given in the HOP list
- details of SOT, XRT, EIS and IRIS requests are given in the HOP list
- HOP is TLM intensive; SOT team would like additional telemetry in the period 6th 8th March
- EIS request not yet fully agreed; **Matthews** will discuss this further with **Parenti**; EIS TLM request is not currently excessive
- for XRT; need to clarify use of two filters and when high cadence observations are required
- HOP description should be updated

2. Bright Points Study with Solar Orbiter – Fludra (<u>andrzej.fludra@stfc.ac.uk</u>), Matthews/SSC, Culhane/SSC; HOP 430

- detect and track the evolution of quiet Sun bright points across the entire temperature range from the chromosphere to the corona, using EUV and magnetic field observations
- dates: 8th March; no conflict with proposal #1
- time window: 08:10 14:10 UTC
- targets: quiet sun near disc centre; details in HOP list
- SOT and EIS requests given in HOP list; proposer is aware of SOT TLM limits
- no XRT request, XRT will run CME watch
- IRIS request has been agreed; details will be uploaded to HOP list

3. Coronal He Abundance and Cross-calibration of the Solar Orbiter Polarimetric and Helioseismic Imager (SO/PHI) – Orozco-Suarez (<u>orozco@iaa.es</u>), Valori, Hirzberger, Lagg and the SO/PHI team, DeRosa/SSC, Shine/SSC; HOP 431

- perform coordinated observations with the Solar Orbiter PHI and the Hinode spectropolarimeter during the first remote sensing window of the SO nominal mission phase
- dates: 7th 8th March, further details in HOP list
- time windows: exact observing times will be provided at least two weeks before the observations
- targets: disc centre jointly with SO/HRT; active regions jointly with SO/FDT
- no requests for XRT, EIS and IRIS observations; XRT and EIS teams should suggest low data rate observations; IRIS team have already done so
- SOT TLM need is large for March 7th; allocation may be increased

4. Solar Orbiter Polarimetric and Helioseismic Imager (SO/PHI) Co-observations around Perihelion Passage – Valori (<u>valori@mps.mpg.de</u>), Orozco-Suarez, Hirzberger, Lagg and the SO/PHI team, DeRosa/SSC, Shine/SSC; HOP 432

- coordinated observations with the Solar Orbiter (SO) Polarimetric and Helioseismic Imager (PHI) High-Resolution Telescope (HRT), close to SO perihelion in the second remote sensing window (RSW2) of the first orbit of SO Nominal Mission Phase (NMP) in early March 2022
- dates: support calibration activities on March 22nd
- times: nominal times 09:40 UT 10:40 UT; exact times to be fixed two weeks before observation
- target: disc centre as seen from SO for HRT calibration
- SOT request is given in HOP list
- no requests for XRT, EIS and IRIS observations; XRT and EIS teams should suggest low data rate observations; IRIS team have already done so
- 5. Sources of slow wind and cross-calibration of the Solar Orbiter Polarimetric and Helioseismic Imager Valori (<u>valori@mps.mpg.de</u>), Orozco-Suarez, Hirzberger, Lagg and the SO/PHI team, DeRosa/SSC, Shine/SSC; HOP 433
- coordinated observations with the Solar Orbiter (SO) Polarimetric and Helioseismic Imager (PHI) and High-Resolution Telescope (HRT) of a tracked active region (AR) for the identification of sources of slow wind
- dates: $18^{th} 21^{st}$ March
- time window: details given in HOP list; exact times to be fixed two weeks before observations
- target: AR will be identified three days before first observation on 18th March; same AR should be tracked during the four observation days; SO position on these days is given in HOP list
- SOT request is given in HOP list
- no requests for XRT, EIS and IRIS observations; XRT and EIS teams should suggest low data rate observations; IRIS team have already done so

For items #3, #4 and #5 above, SOT team should discuss possible overlaps

Continuing monthly observations are:

- HOP 206 February dates are: 20th, 23rd and 26th though this HOP may not be run
- Polar Monitoring Shimojo; CORE HOP 81
- run on 7th February (N pole fast) and 10th February (S pole fast)
- Multi-temperature Full Disk Slot Scans Ugarte-Urra, Brooks, Warren; CORE HOP 130
- run on 8th February
- Synoptic SOT Irradiance Scans Egeland, Centeno; CORE HOP 412
- run on 17th February
- Cycle 25 Bright Points Bryans, Centeno, Savage; HOP 336
- run every Monday; 7th, 14th, 15th, 21st and 28th February
- Cycle 24/25 Equatorial Transition Egeland, Bryans, Centeno, Savage, Watanabe, De Pontieu; HOP 393
- run every Saturday; 4th, 11th, 18th and 25th February

Since HOP 206 depends on min B angle in March, HOP 206 and HOP 81 March dates are also listed

- HOP 206 1st, 4th, 7th, 10th, 13th, 16th, 19th and 22nd March
- HOP 81 3rd March (N pole fast) and 5th March (S pole deep)

Monthly Science Reports

- next **Hinode** monthly science report will be prepared by the **EIS Team** by **14th February**
- **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: 17th February, 2022 at 07:00 JST; 16th February, 2022 as appropriate in US/Europe

g. AOB

No other business