

SOT CO check list (ver. 2009.07.10)

CO Names / Date : _____

| 1. Before Hinode daily meeting (from 10:30 am) | Thu | Fri | Sat | Mon | Tue | Wed | Thu |
|--|-----|-----|-----|-----|-----|-----|-----|
| 1.1. Check emails sent to sot_co | | | | | | | |
| 1.2. Latest data check | | | | | | | |
| 1.3. Status check http://hinode.nao.ac.jp/forstaff/data/SOT_temp/ | | | | | | | |
| 1.4. Today's event check on the HINODE daily event page http://www.isas.jaxa.jp/home/solar/hinode_op/hinode_daily_events.php | | | | | | | |
| 1.5. Discuss today & tomorrow's SOT observations among SOT_COs | | | | | | | |

| 2. During the daily meeting | Thu | Fri | Sat | Mon | Tue | Wed | Thu |
|--|-----|-----|-----|-----|-----|-----|-----|
| 2.1. Today's plan (Pointing adjustment, SOT table upload) | | | | | | | |
| 2.2. Tomorrow's plan (Observing targets, SOT table upload) | | | | | | | |

| 3. After the daily meeting | Thu | Fri | Sat | Mon | Tue | Wed | Thu |
|--|-----|-----|-----|-----|-----|-----|-----|
| 3.1 Check the data volume and the wedge selection for the CT if pointing coordinates are changed, in particular for off-limb observations. | | | | | | | |
| 3.2. Restart the timeline tool, save planning files, and resubmit them with <i>plan_submit_pdl.sh</i> if the observation plan (timeline, FG/SP tables, or pointings, etc.) is modified. Pointing change affects the DSC file. | | | | | | | |
| 3.3. Check OP/OG sheet issued by CP http://www.isas.jaxa.jp/home/solar/hinode_op/hinode_planning_status_login.php | | | | | | | |

| 4. Daily planning work | Thu | Fri | Sat | Mon | Tue | Wed | Thu |
|---|---|-----|-----|-----|-----|-----|-----|
| 4.1. Change the default focus, alignment, or margin factor set by the environmental variables in ~/.cshrc upon request. | | | | | | | |
| 4.2. Restart terminal , and then make a timeline and observation tables. Check the following items carefully beforehand to keep the dead line (10AM). | | | | | | | |
| General | Check and avoid two commands at the same time. Generally a time interval of more than 30 sec is required between two commands. | | | | | | |
| | If pointing is changed after the timeline generation is started, you must import the pointing file again by restarting the timeline tool. | | | | | | |
| | Set "STOP ALL" at the end of the timeline, 2 min before OPERATION PROHIBITED at the latest. | | | | | | |
| | Set "STOP ALL" at least 25 sec before pointing change. | | | | | | |
| | Confirm that ROI number (region table) is correctly selected in all programs. | | | | | | |
| | Check FOV (Frame ID and ROI shift) in all programs (see .use file and FOV inspector to check field-of-view). | | | | | | |
| | Set appropriate margin factors for data rate prediction. Follow original values in most cases but you should take care of appropriate data transfer rate. | | | | | | |
| | Use up the telemetry allocation as much as possible. | | | | | | |
| | Add comments on observing targets (except for synoptic observations). | | | | | | |
| FG | Avoid frequent changes of NFI wavelengths. | | | | | | |
| | Reduce Q factor (75 or smaller). | | | | | | |
| | Check bit comp (LUT) for IV, IQUV, and DG. 16U→12 for Comp1 and 14.5S→12 for Comp2 are default for these MCs. Do not forget modifying SEQ when modifying comp params because the comp params in SEQ override them in PAR. | | | | | | |
| | Do not use a ROI shift for un-summed MG or DG. | | | | | | |
| | Be careful about signs and units of a region table (East → plus, West → minus, North → minus, South → plus. Unit: arcsec). | | | | | | |
| Do not use ratio observable "V/I" for limb observations. | | | | | | | |

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|---|---|--|--|--|--|--|--|--|
| SP | SAA-free period is preferable for SP observations. | | | | | | | |
| | To stop infinite loop SP program, use the sequence of commands: "SP Table Pause", "SP Stop", and "SP Stop". Or you can simply use "STOP ALL". | | | | | | | |
| | Be careful about signs and units of a region table (East → minus, West → plus. Unit: step, 1 step = 0.16 arcsec). | | | | | | | |
| | Use CCD 1-side for data-saving except for a special occasion. | | | | | | | |
| Table upload | Confirm the table content whenever you update any Program, Sequence, and Macro-command. | | | | | | | |
| | If you modify an observation table (any PRG, SEQ, or PAR), be sure that you check the appropriate FG or SP table upload button in the real time load widget. Set FG and/or SP RAM IDs by referring to the RAM ID of the last load (found in .tim or .orl files on the SOT web). | | | | | | | |
| | Make sure the DPL RAM ID (always 27D) is set for the DPL load that is done on Saturday for Monday's load (or on Monday for Tuesday's load when no table load is planned on Monday). | | | | | | | |
| | No command is allowed during a station pass in which SOT table upload is scheduled. | | | | | | | |
| | Include the TI commands in the real-time loads when FG and/or SP tables are to be uploaded. Do not include the TI commands when no table upload or only a DPL table is loaded. | | | | | | | |
| Focus | Do not move focus just for a synoptic observation. | | | | | | | |
| | Check and set "Focus position" appropriate for disk or limb, FG wavelengths or SP-dominant observation. Do not make a focus move of only 1 or 2 steps. | | | | | | | |
| | Stop observation at least 1 min before issuing Focus command (or the focus move will fail) and resume observation after that. | | | | | | | |
| | Run FG18 for the weekly focus scan in the first synoptic of Monday (or Tuesday if no OP upload on Monday), 3min after the FG19 synoptic. | | | | | | | |
| CT | Make sure that there is at least 1 min interval between CT Serve On and the start of observation. | | | | | | | |
| | Set "CT wedge" position appropriate for limb and AR observations. Be careful not to include a sunspot in the CT FOV. | | | | | | | |
| | Set "CT Servo On" or "CT wedge" with a margin of 3 min after pointing change. | | | | | | | |
| | Use " Hysteresis Removal " not "CT On" before an alignment calibration. | | | | | | | |
| | Insert a "CT Servo Cycle OFF/ON" command 1 min before an SP scan, if the SP scan starts more than 2 hour after a "CT ON" command. | | | | | | | |
| 4.3. Submit timeline with <i>plan_submit.sh</i> . Deadline is 10AM. | | | | | | | | |
| 4.4. Enter today's planned information into SOTGUI database. | | | | | | | | |
| 4.5. Circulate plan to sot_co (email) (by using tim2mail script including SOT data allocation). | | | | | | | | |

| 5. SOT weekly meeting (Thursday from 9:30 am) | Thu | Fri | Sat | Mon | Tue | Wed | Thu |
|---|-----|-----|-----|-----|-----|-----|-----|
| 5.0. Circulate a weekly summary report to sot_co (email). | | | | | | | |
| 5.1. Report the summary of the last observations and problems if there are. | | | | | | | |
| 5.2. Discuss new campaign observations or proposed observations. | | | | | | | |
| 5.3. Hand over knowledge about campaign observations, programs used in the campaigns, and the check list to new COs. | | | | | | | |
| 5.4. Write the following items at the web of daily event for the weekly meeting: Names of COs, HOP and campaign observations, table upload, and TI command. http://www.isas.jaxa.jp/home/solar/hinode_op/hinode_daily_events_login.php | | | | | | | |

| 6. Hinode weekly meeting (Friday, after daily meeting) | Thu | Fri | Sat | Mon | Tue | Wed | Thu |
|--|-----|-----|-----|-----|-----|-----|-----|
| 6.1. Report the next observations of SOT and decide the next-week plan | | | | | | | |
| 6.2. Discuss DR allocation (default, SOT: 70%, XRT: 15%, EIS: 15%) | | | | | | | |

If you have any comments to the check list, please contact Joten Okamoto (joten.okamoto@nao.ac.jp).
 Latest version: http://hinode.nao.ac.jp/sot_e/operation/SOT_CO_check_list.pdf