Minutes of the 23rd SOHO SWT Meeting

Matra Marconi Space, Toulouse, France

16-18 April 1997

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1 Action Items SOHO SWT–23

Action 23-1: on PIs to respond immediately to Alan Title (title@nice.space.lockheed.com) regarding the NASA Senior Science Review proposal (with cc to Art). What Alan needs is:

- Each PI team needs to *read* the proposal.
- Each PI team needs to make comments in terms of the conception
- EACH PI should produce two or three figures that show important results or capabilities.
- Describe the contribution to the agreed basic data set that is released in near real time for the use of the scientific community.

2 Agree Agenda and Actions Revision

After V. Domingo's welcome address, G. Brueckner informed the SWT that R. Tousey, one of the pioneers in space research, has died on April 15.

Agenda — annex 1

List of Participants — annex 2

Actions revision

Action 22-1: closed
The PIs in turn would now like to know from Matra when they can have their SMs back.

Action 22-2: closed (see annex 3)
On ESA/Matra to present at the next SWT meeting the range of gyro experience from other satellites.

Action 22-3: open
On L. Sanchez to setup a web page so that the PIs can check and update the data rights tables. Due date: End of February.

3 Spacecraft Status

— see annex 4

4 Science Priorities

– SUMER: similar as announced at last SWT meeting; will move slit out to 40° to 60° in first week of May; end of June: close to west limb until end of August
– CDS: campaign with THEMIS (JOP009 and 012); SOHO/EISCAT IPS campaign on solar wind flows and limb structures; JOP050 (small H-α filaments); early August: ephemeral active regions campaign with Tenerife/CDS/SUMER
– EIT: CME watch, wind outflows; [at the Science Workshop on Thursday, April 17, J.-P. Delaboudinière asked for another S/C offpointing by 25 arcmin which was not particularly enthusiastically received by the SWT; more detailed discussion deferred to next meeting]
– UVCS: Ulysses cooperation; CME watch
– SWAN: 6 June He interstellar focusing cone; will concentrate on region around the sun
– LASCO: once more thanked SUMER and CDS for telemetry donation; new compression

scheme under testing; if it works, LASCO will be able to run the instrument with high speed, no longer limited by telemetry rate, but by processor; in coming month: will reduce synoptic programme to run more special programmes (e.g. polar wind flows)

Next 90° roll in September (SUMER request: if possible not in week 38). Details to be discussed at next SWT meeting in July.

5 MEDOC Campaign

J.-C. Vial presented plans for the MEDOC campaign in weeks 21–23 (19 May - 8 June) (see annex 5). CDS expressed reservations about the duration; would prefer 2 rather than 3 weeks. SUMER will support campaign, but requested back-up at the EOF. UVCS did not yet have a clear picture of the interface between MEDOC and EOF; plans to have the lead observer at the EOF for one week and at MEDOC for two weeks.

After some discussion, the SWT unanimously endorsed the MEDOC campaign to take place for 3 weeks in week 21 – 23.

6 Use of Telemetry Submodes

K. Wilhelm asked R. Harrison whether SUMER could have high rate (subformat 4) from time to time (something like 2 days every few weeks). K. Wilhelm and R. Harrison agreed to work out plan.

7 Status of SOHO Archive

- see annex 6

8 PR Plans

Has not been discussed. Unfortunately, Simon Vermeer was not able to attend, and the demo CD-Rom showing animated results from SOHO did not arrive in time. Deferred to next meeting.

9 Publications

— see annex 7

10 Meetings and Workshops

— see annex 8

11 NASA Senior Science Review

A Title circulated and presented a draft of the "SOHO Solar Maximum Science Program" proposal to be submitted to NASA for the Senior Science Review.

Basic Conception (Overview)

- SOHO is part of ISTP
- SOHO is making fundamental contributions to the understanding of the Sun
- SOHO will yield understanding of the solar cycle
- SOHO will make contributions to society
- SOHO data will be a *central* part of the tools of the ISTP community

What Allan still needs is (action 23-1):

- Each PI team needs to *read* the proposal.
- Each PI team needs to make comments in terms of the conception
- EACH PI should produce two or three figures that show important results or capabilities.
- Describe the contribution to the agreed basic data set that is released in near real time for the use of the scientific community.

All PIs agreed on a basic "variability data set" available to the public for scientific use:

– GOLF: frequencies on 6 month basis.
– VIRGO: daily intensities in all spectral bands and LOI daily averages; frequencies on a 6 month basis.
– MDI: magnetograms on a 96 minute cadence; Doppler velocities averaged over 96 minutes every 96 minutes; structure program frequencies on a 6 month basis; LOI proxies daily.
– SUMER: Full resolution spectra 465-1480Å in both quiet and active Sun (if possible) weekly.
– LASCO: Near real-time coronal images in C1-C2-C3 as MPEG movies available online; direct access to digital images that form movie.
– UVCS: Spectral atlas weekly.
– CDS: Synoptic maps from daily North-South scans; weekly spectral atlas at disk center.
– EIT: Full sun iamges in all spectral bands daily; all image data.
– SWAN: Full-sky map in Ly-α weekly.
– CELIAS: Real-time EUV flux; realtime and playback solar wind speed.
– COSTEP: Key parameters.
– ERNE: Key parameters; near real-time proton and He-4 intensities (two-hour averages).

The MDI/SOI and EIT PIs have announced their intention to make all data from an extended mission public as soon as the data are reformatted into scientifically useful formats.

12 SOHO Re-engineering Status Report

B. Worral gave a brief introduction with some background information: ISTP operation costs are about 40 M$/year (about 20M$ each for GSFC part and DSN); SOHO share is about 50% (both for GSFC and DSN part). DSN will charge usage in fiscal year 1998.

K. Walyus gave a report on the re-engineering status (see annex 9).

13 Operations during Extended Mission

– CDS: Britain has earmarked money for 6 years; review towards end of year; funding expected as now for the next 4 years; plans to continue as now.
– EIT: operations done by US team; plans to continue as now.
– SUMER: *nominal mission*: funding by DARA ok; U. Schühle is MPAe staff and will move back to Lindau this summer; P. Lemaire is also leaving middle of this year; therefore big staffing problem at EOF already in September this year. *Extended mission*: so far only verbal information available which is fairly negative, i.e. no funding available from DARA; nothing in writing yet, however. IAS position: costs to keep N. Morisset and P. Lemaire at the EOF are a major element in the SOHO line; expects that SOHO will continue to be funded.
– GOLF: expects that SOHO will continue to be funded.
– UVCS: no commitment yet in Italy (too early), but reasonably confident to continue as now (2 EOF operators).
– LASCO: have asked HQ to continue present support throughout fiscal year 1998; no commitment yet from NASA; waiting for outcome of senior review; MPAe special support end 1997.
– MDI: 2 modes of operation: helioseismology (autonomous mode) + campaign mode; awaiting outcome of senior science review and future budget figures.
– COSTEP: special support until end of next year; assumes that they will get some support in the future
– ERNE: nobody can guarantee funding, but confident that they will get appropriate funding in the future as SOHO is the most important space project in Finland.
– SWAN: travel money from CNES + technician from CNRS; CNRS will stop funding of technician who applied for CNRS position; hopes to get travel money in future.
– VIRGO: in principle should be ok.

R. Bush asked how teams envision the role of the EOF: operations only, or operations and science planning. LASCO (G. Brueckner and R. Schwenn) strongly emphasized the importance of the EOF in the future for planning and coordination. For SUMER, the campaign mode is a necessity (personnel + detector lifetime).

There was broad agreement that the EOF is critical to the success of the SOHO mission, and the general intent is to bascially continue as now.

14 AOB

Next SWT meeting: 16-18 July at RAL.

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