

# **Minutes of the 22nd SOHO SWT Meeting**

Goddard Space Flight Center, Greenbelt, MD

17 January 1997



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## 1 Action Items SOHO SWT-22

**Action 22-1:** On PIs to contact J.-P. Gardelle at Matra and let him know their plans for the SM. Due date: ASAP.

**Action 22-2:** On ESA/Matra to present at the next SWT meeting the range of gyro experience from other satellites.

**Action 22-3:** 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.

## 2 Agree Agenda and Actions Revision

After V. Domingo's welcome address, F. Felici asked the PIs to contact J.-P. Gardelle at Matra and let him know about their plans for the SM (Action 22-1).

Agenda — annex 1

List of Participants — annex 2

### Actions revision

**Action 21-1:** closed for MDI, LASCO, CDS; open for UVCS  
On relevant PI teams to provide pointing information to Helmut Schweitzer (hschweit@pop400.gsfc.nasa.gov) for S/C trending analysis.

**Action 21-2:** closed (see annex 3)  
On PI teams to provide operational information for the time period 8-22 October 96. Input to Jean-Philippe Olive (jolive@pop400.gsfc.nasa.gov) before 30 November.

**Action 21-3:** closed (see also Sect. 4)  
On EIT/LASCO to develop and test event detection software for inter-instrument flag system and report at the next SPWG meeting.

**Action 21-4:** closed (new action on ESA/Matra to present range of gyro experience from other satellites (Action 22-2)).  
On ESA/Matra to study the effect of S/C rolls on lifetime of gyros. Report at the next SWT meeting.

**Action 21-5:** closed (input given at meeting, see below)  
On PIs to inform PS on when they plan to provide data and catalogue information for the SOHO archive. Input to PS before 30 November.

GOLF: awaiting document describing implementation of access control of SOHO archive

VIRGO: ready by end of month

MDI: catalogue and magnetograms next week

SUMER: done

CDS: done

EIT: done

UVCS: catalogue available, starting with data in a month or so

LASCO: meeting next week with L.Sanchez to clarify details; PB data soon

SWAN: no catalogue yet, will take another few months

CELIAS: ready by end of month/early Feb (procedure agreed with P.Wurz)

COSTEP: to be discussed

ERNE: to be discussed (probably similar to CELIAS)

There is an action on L. Sanchez to setup a web page so that the PIs can check and update the data rights tables (Action 22-3).

**Action 21-6:** closed  
On PIs to fill out mission extension questionnaire before 15 December.

**Action 21-7:** closed (see below)  
On PIs of CDS, EIT, LASCO, MDI, SUMER and UVCS to nominate a representative for the MEDOC working group. Input to PS before 15 December.

CDS: Richard Harrison

SUMER: Werner Curdt

UVCS: Ester Antonucci

MDI: Rock Bush

EIT: Jean-Pierre Delaboudinière

LASCO: Chris StCyr and Russ Howard

### 3 Science Priorities

Science priorities for the coming quarter are unchanged:

- i) MHD waves (coordinators: C. Deforest and J. Raymond)
- ii) Abundances (coordinator: A. Fludra)
- iii) Equatorial coronal holes (target of opportunity)

Mid-April to end May: high priority for coordinated observing campaigns with ground-based observatories.

Woods/Hassler (HAO) sounding rocket cross calibration flight (ICAL011) in mid April.

SUMER plans: will stay on central meridian until end of April. Then to approx.  $40^\circ$  to concentrate on prominence studies in May until the end of the month; then eventually further out. In March mainly oscillation studies.

This year the 2 months continuous contact will be extended to 90 days. Start date: 13 April.

Rock Bush presented plans for the roll manoeuvre in March. After some discussion it was agreed to do first a full roll for MDI with 30 min stops each  $22.5^\circ$ , followed by a  $90^\circ$  roll (+ or - TBD) of TBD hours for SWAN sensor crosscalibration. The duration of the whole roll manoeuvre shall not exceed 16 hours. An extended stay at  $180^\circ$  would hurt GOLF.

The next momentum management will take place on March 18. There is little flexibility to shift these activities on short notice (hot back-up from DSN required).

### 4 Use of Telemetry Submodes and Flag System

It was agreed that for the time being the flag system will not be used.

J.-P. Olive reported that tests at Saab with 16 additional packets did not work, tests with 8 additional packets on the other hand were successful. The day before the SWT meeting ESA has asked Saab to present a schedule for further tests. It was proposed to implement the 8 additional packets and in parallel proceed with further tests.

G. Brueckner asked for a new submode in which SUMER telemetry is redistributed to EIT/LASCO. Technical limitations: only one sub-mode is freely programmable, others have to be uploaded.

K. Wilhelm made another SUMER proposal for telemetry submode switching (see annex 4):

- Purpose
  - Prolong SUMER's detectors lives into the rising solar cycle (support of SOHO's extended mission).
  - Provide some high telemetry rate to EIT/LASCO.
  - Make high telemetry available for SUMER and CDS for certain periods of time. In this mode, SUMER's detectors can be operated more efficiently, as twice as much data can be read out of the detector in the spectral dimensions in many sequences. In addition, it will facilitate high-time resolution studies.
- Constraints
  - CDS wants to continue with the synoptic programme.
  - SUMER would prefer longer periods of mode changes.

It was agreed to have a subcommittee of EIT/LASCO, SUMER and CDS to discuss this issue once technical information has been received on the feasibility and implications of using programmable submodes.

## 5 Operations during Extended Mission

Has not been discussed (postponed to next SWT meeting).

## 6 Guest Investigators

82 GI proposals were received; they were evaluated and selected by an ESA/NASA selection committee, that recommended 69 of them as scientifically sound.

## 7 Archives

The archive status was presented and discussed at the mission extension review (see annex 6). For a description of the data rights implementation in the SOHO archive see annex 5.

## 8 PR matters

P. Martens presented plans for a second SOHO video:

- First version (unbalanced, unpolished) before the end of the month; definite, professional, version, in May/June.
- Inputs received so far:
  - MDI – magnetogram movies, Dopplergram movies
  - CDS – December Limb AR movie, Paal Brekke movies
  - SUMER – waiting for prominence movie (Hassler), prominence movie (Brekke)
  - EIT – too much to list, including December high cadence
  - LASCO – December high cadence movie, Hyakutake movie
  - UVCS – UVCS/EIT deep corona movie
  - SWAN – full sky Lyman Alpha movies, Hyakutake movies
- Input promised: COSTEP, CELIAS
- Key issue: how to represent helioseismology in a visually attractive manner?

## 9 Publications

B. Fleck presented the status of the SOHO First Results special in Solar Physics:

- Part I with 11 papers (2 VIRGO, 2 MDI, 2 SUMER, 3 CDS, 2 ERNE) will appear in the January issue.
- January issue will appear delayed (end of January/early February) due to late submission of (helioseismology) papers
- Backlog problem for “regular” Solar Physics issues.
- Papers submitted for Part II (so far):
  - CDS Coronal hole ... (Insley et al.)
  - CDS EUV Blinker ... (Harrison et al.)
  - LASCO C1 (Schwenn et al.)
  - LASCO (Simnett et al.)
  - SWAN (Bertaux et al.) ??
  - JOP39 Polar Plumes (Deforest et al.) ??
- Deadline for April issue just past (15 Jan)
- Suggestion: Postpone **Part II** of SOHO First Results Special to **July issue** of Solar Physics.
- NO Part III, i.e. July issue is final “First Results issue”
- **Deadline** for submission of manuscripts: **28 February**
- Kluwer (and the editors) are enthusiastic about including a CDROM with movies (still investigating technical matters)
- Option: Have Part I and Part I bound together as hardcopy book “First Results from SOHO”?
- Kluwer offer: approx. 70 Hfl (US\$ 40)
- Needed TODAY: approximate number of hardcopies for advance order

Eugen Degeus from Kluwer presented the plans to include CD-Rom. LASCO, MDI, EIT, SUMER and CDS expressed great interest. B. Fleck will coordinate efforts on SOHO side.

It was agreed to go for hardcopy book “First Results from SOHO”, similar as done with SOHO instruments book. Advance order has been placed according to input from PI teams.

Following suggestions by MDI team members, it was agreed to have another SOHO special in *Science*. Target date: spring 1998 (close to spring AGU meeting). Proposed topic: “The Whole Sun Month”. B. Fleck will contact *Science* and coordinate efforts.

## 10 Meetings and Workshops

Input from “Meetings” page on SOHO web pages:

- February 10-11, 1997  
SOHO Whole Sun Month workshop, SOHO EAF, GSFC. Contact: Sarah Gibson or Douglas Biesecker
- March 3-7, 1997  
First SOHO-Yohkoh Workshop, SOHO EAF, GSFC. Contact: Piet Martens, Hugh Hudson or Dominic Zarro
- CANCELLED  
Yosemite Meeting: Toward Solar Max 2001, at Yosemite, CA. Contact: jburch@swri.edu



- March 13-15  
MDI/VIRGO meeting, at Stanford Univ., CA. Contact: Phil Scherrer or Claus Froehlich.
- March 31 - April 4, 1997  
Workshop: Local Helioseismology, at Cambridge, UK. Contact: jane@ast.cam.ac.uk
- April 21-25, 1997  
EGS XXII General Assembly, at Vienna, Austria.
- April 28 - May 4, 1997  
IAU Colloquium 167: New Perspectives on Solar Prominences, at Aussois, France.  
Contact: david.rust@jhuapl.edu or schmieder@mesoph.obspm.fr
- May 22 - June 3, 1997  
3rd Volga International Summer School on Space Plasma Physics. Nizhniy Novgorod/  
Volga River, Russia. Contact: iss97@nirfi.sci-nnov.ru
- May 27-30, 1997  
AGU Spring Meeting at Baltimore, MD, USA. Contact: AGU <http://earth.agu.org/kosmos/homepage.html>.
- June 23-27, 1997  
International Symposium on Solar-Terrestrial Coupling Processes, in Paros, Greece.  
Contact: daglis@creator.space.noa.gr
- June 17-20, 1997  
5th SOHO Workshop: The Corona and Solar Wind near Minimum Activity, at Oslo,  
Norway. Contact: olav.kjeldseth-moe@astro.uio.no
- June 27 - July 1, 1997  
SPD meeting, at Bozeman, Montana, USA. Contact: lacton@solar.stanford.edu
- June 30 - July 4, 1997  
9th IRIS Workshop, Capodimonte, Italy. Contact: acacciani@solar.stanford.edu
- July 29-31, 1997  
2nd International Workshop on Artificial Intelligence Applications in Solar-Terrestrial  
Physics, at Lund, Sweden. Contact: iaga@irfu.se
- August 4-15, 1997  
8th IAGA Assembly and 9th STP Symposium of SCOSTEP, at Uppsala, Sweden. Con-  
tact: henrik@astro.lu.se
- August 18-22, 1997  
IAU Symposium 185: New Eyes to See Inside the Sun and Stars. Pushing the Limits of  
Helio- and Asteroseismology with New Observations from the Ground and from Space,  
at Kyoto, Japan, in conjunction with the XXIIIrd IAU General Assembly. Contact:  
deubner@astro.uni-wuerzburg.de
- August 18-30, 1997  
IAU XXIIIrd General Assembly, at Kyoto, Japan.
- September 22-25, 1997  
ESLAB Symposium 1997: Correlated Phenomena at the Sun, in the Heliosphere, and  
in Geospace, at ESTEC, Noordwijk, The Netherlands. Contact: eslab31@estec.esa.nl

## 11 SWT-meeting Calendar for '97

It was discussed whether one should switch back to the “old” schedule (May, August, November, February), or adopt a “new” cycle (January, April, July, October). There was a 6:4 vote (2 abstentions) to switch to new cycle. The calendar for the SWT meetings for the rest of the year therefore is:

16-18 April (Matra, Toulouse, in conjunction with a SOHO celebration at Matra on the 17th)  
16-18 July (RAL)  
15-17 October (GSFC)

There is an offer standing from IAS to host one of the future SWT meetings in Orsay.

## **12 SICWG**

After some discussion it was agreed to dissolve the SOHO Intercalibration Working Group. The efforts are done by individuals which interact directly with each other. There will be yearly meetings similar to the '96 Berlin meeting and the PIs will report back to the SWT. This year's intercalibration meeting will be held end of October in Orsay.

## **13 AOB**

*Next SWT meeting:* 16-18 April at Matra in Toulouse, in conjunction with a SOHO celebration at Matra on the 17th.

## **Annex 1: Agenda**

## **Annex 2: List of Participants**

### **Annex 3: 24 h Spacecraft Disturbance (J.-P. Olive)**

**Annex 4: SUMER Proposal for Telemetry Submode Switches  
(K. Wilhelm)**

**Annex 5: Implementation of SOHO Data Access Control  
(L. Sanchez)**

## **Annex 6: SOHO Status Review**

### **Agenda**



Spacecraft (H. Schweitzer & J.-P. Olive)

**Ground Segment (W. Worrall)**

**EOF (P. Martens)**

SOHO Archive (L. Sanchez)

**European Archives (J.-C. Vial & E. Antonucci)**

**GOLF (A. Gabriel)**

**VIRGO (C. Froehlich)**

**MDI (P. Scherrer)**



**SUMER (K. Wilhelm)**

**CDS (R. Harrison)**

**EIT (J.-P. Delaboudiniere)**

**UVCS (J.Kohl)**

**LASCO (G. Brueckner)**

**CELIAS (F. Ipavich)**

**COSTEP (H. Kunow)**

**ERNE (E. Valtonen)**



SWAN (J.-L. Bertaux)