Space Weather Working Team / European Solar Physics Division Meeting Report
5 May 2010, EGU2010, Vienna, Austria

Prepared by Norma Crosby and Stefaan Poedts, 20 May 2010

The Space Weather Working Team (SWWT) / European Solar Physics Division (ESPD) Meeting was held during the European Geosciences Union 2010 (EGU2010) on 5 May 2010 in Vienna as a splinter meeting [13:30-15:00] in room SM1 followed by a mini-discussion meeting [15:30-17:00] in room SM1. The meeting was co-convened by Stefaan Poedts (SP) and Norma Crosby (NC) and was attended by 15 people (see Annex for list of people). The meeting was divided into two parts:

PART 1: Introductions and Updates – 1 HOUR

[NC: Norma Crosby, SP: Stefaan Poedts, LK: Ludwig Klein]

1. Welcome (NC and SP)

2. Goals of the joint SWWT/ESPD meeting (NC and SP)
   - Introductions to SWWT and ESPD (their background)

3. Introduction to ESPD (SP)

4. ESPD updates (SP)
   - EPS Council meeting in Mulhouse: report
   - FP7 ESSENSE proposal: status
   - ESPM-13: announcement and status
   - ESPD plans

5. Introduction to SWWT (NC)

6. SWWT updates (NC)
   - Upcoming SWWT Plenary
   - Launch of SWWT wiki
   - Space weather, solar physics, users

7. CESRA 2010 meeting (LK)

8. Any other business

PART 2: Brainstorming (ALL) – 30 MINUTES

PART 1: Introductions and Updates

[1.] Welcome

NC and SP welcomed the participants to the joint SWWT/ESPD meeting and presented the above agenda. Ludwig Klein thereafter presented his CESRA 2010 meeting presentation (Point 7 in agenda) as he also had to attend another meeting occurring during the same time slot.

[2.] Goals of the joint SWWT/ESPD meeting (NC and SP)

The background behind this meeting was to investigate how more contact between the space weather [SWWT] community and the solar physics [ESPD] community can be imagined with "applications" in mind. This was a continuation of the ESPD presentation that was given by SP at the ESWW6 SWWT Plenary meeting in November last year.

[3.] Introduction to ESPD (SP)

SP explained the background behind the new European Solar Physics Division (ESPD).

On 26 Sept. 2008, at the EPS Executive Committee meeting held in CERN, Geneva, the decision was taken to cease activity of the Joint Astrophysics Division (JAD). The Executive Committee decided, upon the suggestion of the Solar Physics Division (SPD) board, to set up a new, self standing European Solar Physics Division (ESPD) in its own right to serve the European Solar Physics Community. The various subject disciplines of the JAD within Particle Astrophysics, on the other hand, became the responsibility of the High Energy and Particle Physics Division of EPS. The EPS Council confirmed these decisions on 28 March 2009 during its meeting in Bad Honnef.

More information about ESPD (e.g. visions: strategy & master plan) can be found in the attached presentation. New web pages will be activated in the near future. Members of the new ESPD board (SP is currently president of the new board) are also listed in the attachment. Update: Following the SWWT/ESPD splinter meeting the new ESPD web-pages were released, for the time being on the following temporary link: [http://achilles.nascom.nasa.gov/~dmueller/espd/index.php]. A new link will be set up soon.

[4.] ESPD Updates (SP)

EPS Council meeting in Mulhouse: report:
New ESPD statutes and bylaws were prepared, thereafter modified after discussion in the ESPD board and finally submitted to the EPS Council who approved them recently at its meeting of 19-20 March 2010 in Mulhouse, France.

FP7 ESSENSE proposal: status:
SP gave an overview about the ESSENCE Coordination and Support Action (CSA) proposal that had been prepared and submitted by ESPD to SPACE call 2009 as a Support Action. Unfortunately, the proposal did not make the threshold (reviewer comments refer to 'lack of coordination although the proposal was submitted as a 'support' action rather than as a 'coordination' action). The proposal focused on:

- support for dedicated topic-centred small workshops with, if necessary, hand-picked participants to develop a coordinated work programme
- support for a working group on business-academia-agency links, or support for knowledge-transfer specialists in the space weather field
- production of position papers on topical areas for presentation to government/business/funding agencies etc. i.e. 'White Papers'
- co-ordination of a Europe-wide solar, solar-terrestrial, space weather jobs register including industry and academic areas

ESPM-13: announcement and status:
The upcoming 13th European Solar Physics Meeting (ESPM-13) will be held in Ixia, Rhodes, Greece, from 11 to 16 September 2011. Local organizers are Manolis K. Georgoulis (Academy of Athens) and Georgia Tsiropoula (National Observatory of Athens). Manolis is member of the ESPD board.

ESPD plans:
Introductions to the various ESPD committees were given:

- Education and Public Outreach Committee [implementation of a ESPD Education and Public Outreach Program; responsible for modernizing and updating the web pages of the ESPD and the ESPD newsletter]
- Conference Committee [investigates the eligibility and opportunity of ESPD sponsoring when requested by organizers of conferences and workshops; stimulates collaborations with organizations - similar to ESPD - in other parts of the world (e.g. SPD/AAS)]
- Summer School Committee [sets up a new ESPD Summer School programme and organizes an annual ESPD summer school]
- Prizes and Awards Committee [submits nominations of ESPD members for existing EPS, EAS and EGU prizes]
- Nominating Committee [submits nominations to the ESPD Secretary for vacancies in the positions of Board members and Committee-persons]

More detail information about the individual committees is given in the attached presentation.

[5.] Introduction to SWWT (NC)

For those not familiar with the SWWT an introduction to the background and objectives of the SWWT was given by NC. For more information see:
http://www.esa-spaceweather.net/spweather/esa_initiatives/swwt/index.html

The SWWT Topical Groups were also introduced. They are listed here with their current spokesperson:

- Ground Effects: Larisa Trichtchenko
- Ionospheric Effects: Juha-Pekka Luntama
- Spacecraft Launcher and Aircraft Environments: Susan McKenna-Lawlor
- Fundamental Research: Henrik Lundstedt
- Atmospheric Effects: Sean Bruinsma
- Education, Outreach and Emerging Markets: Norma Crosby

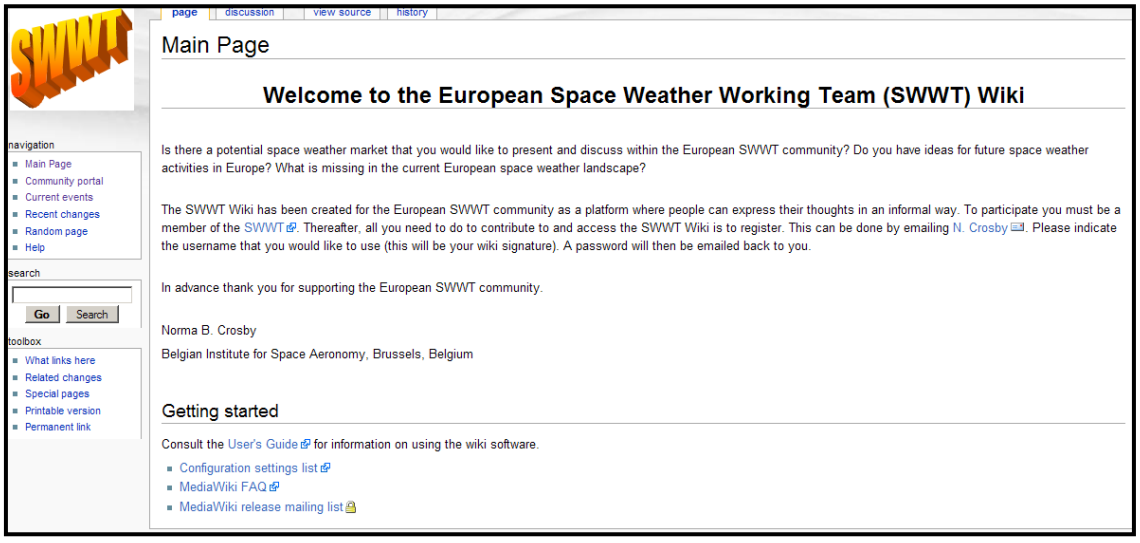
More information can be found in the attached presentation.

[6.] SWWT Updates (NC)

Upcoming SWWT Plenary:
The previous "Space Weather Working Team 26" Plenary meeting was held on 19 Nov. 2009, 14:00-16:00 [European Space Weather Week 6, 16-20 November 2009, Brugge, Belgium].

On Friday 18 June 2010 the upcoming "Space Weather Working Team 27" Plenary meeting will be held at the Royal Observatory of Belgium (room: la salle méridienne) in Brussels, Belgium [09:30-17:00]. Participants attended the SWWT/ESPD meeting were invited to attend the June 2010 meeting.

Launch of SWWT wiki:
The SWWT wiki was launched on March 29, 2010 and was a SWWT Steering Board Action item [AI SB 2009-2/6] for NC. With the support of BIRA-IASB the wiki has been created and is being maintained by NC [http://swwt.aeronomie.be]. It has been created for the European SWWT community as a platform where people can express their thoughts in an informal way.



If anybody has a suggestion for a SWWT logo for the SWWT wiki the logo suggestion(s) is(are) to be sent to NC [norma.crosby AT oma.be] by the end of May 2010. The logo contest winner will be announced at the upcoming SWWT Plenary scheduled for Friday 18 June 2010 [09:30-17:00], Royal Observatory of Belgium, Brussels, Belgium.

Participants attending the SWWT/ESPD meeting were invited to register to the SWWT wiki. Currently, around 10 people have registered to the wiki. A reminder will be sent out prior to the upcoming SWWT Plenary to encourage people to actively participate in the wiki.

Space weather, solar physics, users:
Space weather is an application-oriented discipline and addresses the needs of "users". It is the merging of science and engineering. Basic research in the field of solar-terrestrial physics (STP) is necessary for space weather applications.

Traditionally data has been flowing from STP research to space weather applications. Hanna Rothkaehl noted though that there has been a change in this one-way flow between the two fields during the last years and that a two-way flow has emerged. Now large scale monitoring and data outputs from space weather tools are sometimes used as input to STP data analysis and models, whereafter the output of the STP research is sent back to the space weather tools. LOFAR (LOw Frequency Array), a multi-purpose sensor array, is such an example [http://www.lofar.org/]. Its main application is astronomy at low frequencies (10-250 MHz) but it also has geophysical and agricultural applications.

SOLAR-TERRESTRIAL PHYSICS		SPACE WEATHER
- Basic Research	← →	- Application Oriented
- Scientific Observations		- Continuous Monitoring
- Scientific Products		- Service Products

With new missions such as the Solar Dynamics Observatory (SDO) fundamental science will improve models that consequently will improve application space weather tools. And the tools will provide improved data for models closing the loop.

More interaction between the planetary community and space weather community should be promoted as both communities provide useful catalogues, codes and data. However, often these communities do not know about the work of each other. Jean Lilensten

mentioned the upcoming European Planetary Science Congress 2010, Angelicum Centre – Pontifical University of Saint Thomas Aquinas, 19–24 September 2010, Rome, Italy [http://meetings.copernicus.org/epsc2010/] as a platform where such interactions with for example the COST ES0803 Action community could occur.

International collaboration between all world-wide space weather efforts will also improve space weather tools. Data quality is an important issue and exchange of data (data policy) between groups should be performed in the spirit of collaboration. What is actually meant by "detector effects" needs to be clarified, as data documentation does not always explain how the provider goes from raw data to the available data.

The European space weather "user community" continues to expand and new users of space weather products continue to grow. Andrew Coates commented that following the recent extended period of solar minimum users from the insurance industry have started to contact the scientists again. This is a good sign and supports efforts in space weather education to attract potential space weather users.

Pål Brekke highlighted the magnetometer chain that the University of Tromsø owns and operates, while providing services to drilling companies.

[7.] CESRA 2010 meeting (LK)

Ludwig Klein (LK) presented the next Community of European Solar Radio Astronomers (CESRA) 2010 workshop to be held in La-Roche-en-Ardenne, Belgium, from 15 to 19 June 2010. The title of the workshop is "Energy storage and release through the solar activity cycle – models meet radio observations" [http://sidc.be/CESRA2010]. Christophe Marqué is the contact person [christophe.marque AT oma.be].

Additionally, LK presented the upcoming CESRA summer school on solar radio physics that will be held at the Nançay Radio Observatory in France from 20 to 24 September 2010 [http://www.lesia.obspm.fr/cesra/summer2010/].

For more information see attached presentation.

[8.] Any other business

7th Canadian Solar Workshop:
On behalf of Larisa Trichtchenko from Natural Resources Canada, Canada, NC advertised the "7th Canadian Solar Workshop" to be held in "La Petite Rouge", Canada from 15 to 18 October 2010. "La Petite Rouge" is a resort in Quebec [2 hours to drive from Montreal or 2 hours to drive from Ottawa]. The reason for the location is very simple: it is the equidistant from the "Forecast Centre" in Ottawa and from Université de Montreal where most solar physics resides. The meeting is held on a regular basis to better coordinate efforts in developing better forecast models. For more information and if you would like to attend the workshop, please contact Larisa Trichtchenko at the following email address [Larisa.Trichtchenko AT NRCan-RNCan.gc.ca] .

PART 2: Brainstorming

Prior to the meeting NC and SP had prepared a list of discussion items for the brainstorming session:

- How to better connect the space weather (SWWT) and the solar (ESPD) community with "applications" in mind?
- How to make the European solar and space environmental research community better/tighter/stronger?
- Collaboration between sub-structures
- Joint conference and workshop agenda (avoiding overlap)
- Would network tools (incl. member database) be useful?
- .....

The various European solar related communities include:

- SWWT (Space Weather Working Team)

[http://www.esa-spaceweather.net/spweather/esa_initiatives/swwt/index.html]

- ESPD (European Solar Physics Division)

[http://achilles.nascom.nasa.gov/~dmueller/espd/index.php]

- CESRA (Community of European Solar Radio Astronomers)

[http://www.lesia.obspm.fr/cesra/]

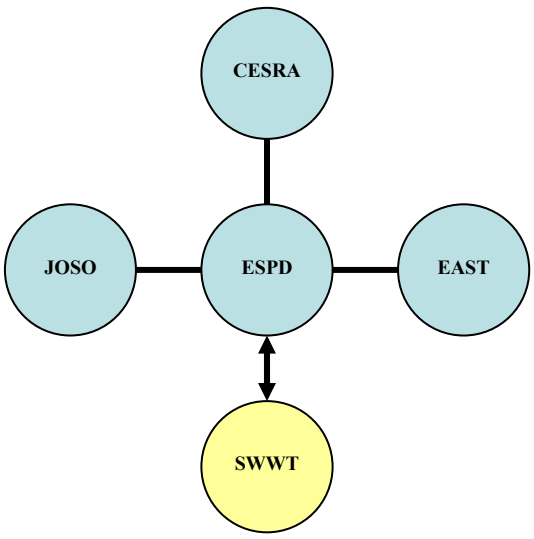
- JOSO (Joint Organization for Solar Observations)

[http://www.joso-info.org/JOSO_PROJEKT/main/index.htm]

- EAST (European Association for Solar Telescopes)

[http://www.astro-east.org/].

The relationship between these five communities is illustrated below. ESPD includes CESRA, JOSO, EAST completely and a part of SWWT.



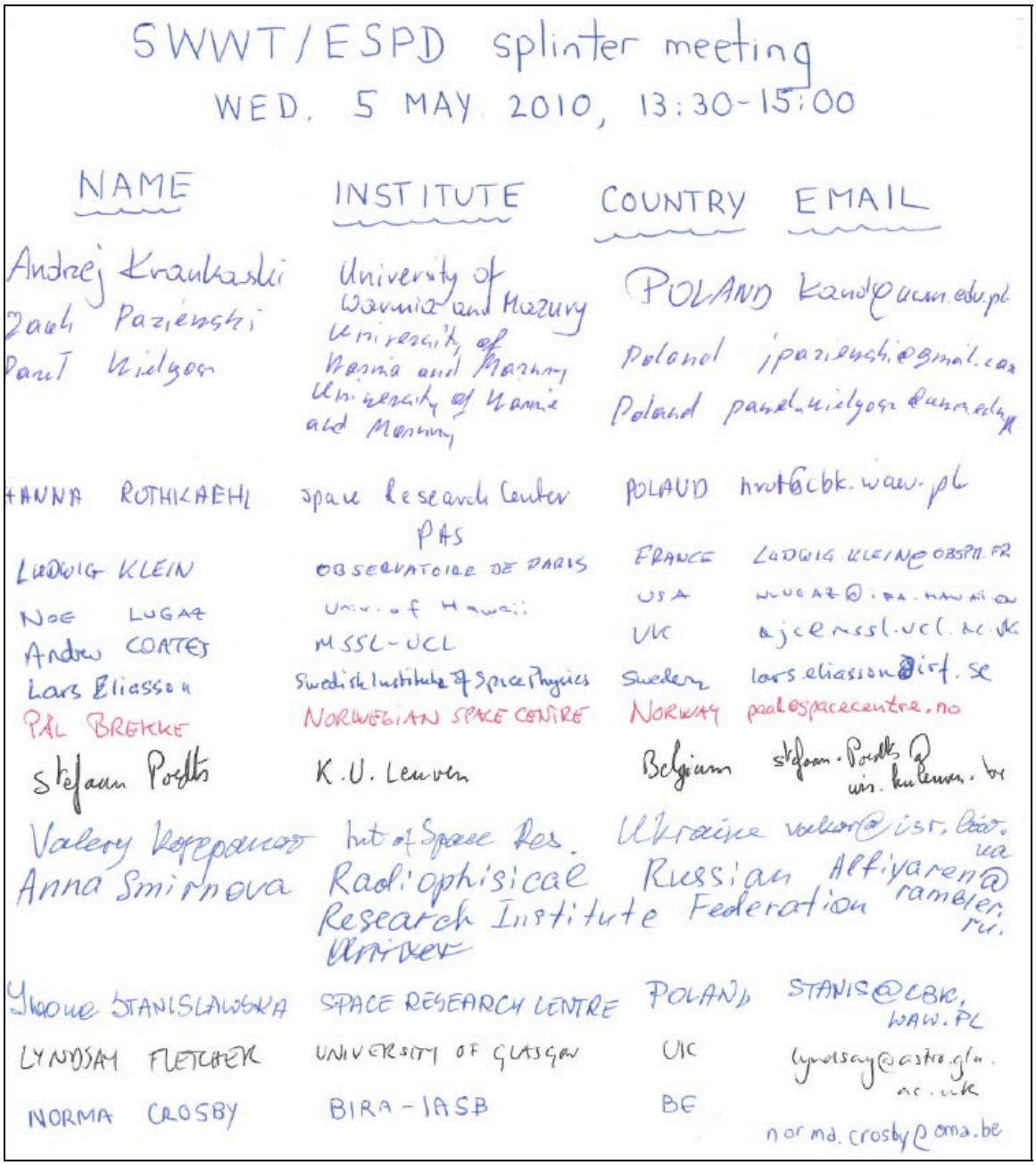
It was emphasized that the five communities in the future should better coordinate meetings among themselves so as to avoid meetings overlapping. All participants agreed that web-page updates and especially a joint calendar would be useful for this purpose. People are simply receiving too many emails and there are also too many sources of information available (e.g. webpages, wikis). One might think of centralizing some of the overlapping information.

It was noted that each year the European Space Weather Week (ESWW) meeting grows not only in the number of participants, but also in the number of splinter meetings, etc. This is all in all a very positive trend and promising for the future of space weather activities in Europe. For this reason it was investigated how one could increase the size of the ESWW in the future without compromising the quality of the meeting. Participants suggested that the meeting could start with more general talks in one global session (two-three general talks concerning each specialized session) followed by parallel specialized sessions in a mini-EGU type style. This would also give more flexibility in organizing more specialized splinter / business meetings in parallel.

Jean Lilensten highlighted three European efforts that are bringing together space weather being performed all over Europe:

- Solar Terrestrial Centre of Excellence [http://stce.be/]
- European Space Weather Portal [http://www.spaceweather.eu/]
- European Space Weather Journal [EDP Sciences publications]

2010 is an exciting year for European space weather activities including the start of several FP7 space projects. However, the community must already start thinking about future project ideas that can complement current efforts. Input from the community is also very important for the output of the SWWT roadmap activity – How does the community see the future role of SWWT?



SWWT/ESPD splinter meeting

WED. 5 MAY 2010, 13:30-15:00

NAME	INSTITUTE	COUNTRY	EMAIL
Andrej Krankarski	University of Warmia and Mazury	POLAND	kand@uwm.edu.pl
Jacek Paziewski	University of Warmia and Mazury	Poland	jpaziewski@gmail.com
Paweł Wielgosz	University of Warmia and Mazury	Poland	pawel.wielgosz@uwm.edu.pl
ANNA ROTHKAEHL	Space Research Center PAS	POLAND	hrot@cbk.waw.pl
LUDWIG KLEIN	OBSERVATOIRE DE PARIS	FRANCE	LUDWIG.KLEIN@OBSPM.FR
NOE LUGAZ	Univ. of Hawaii	USA	NOUGAZ@IFA.HAWAII.EDU
ANDREW COATES	MSSL-UCL	UK	ajc@mssl.ucl.ac.uk
Lars Eliasson	Swedish Institute of Space Physics	Sweden	lars.eliasson@irf.se
PÅL BREKKE	NORWEGIAN SPACE CENTRE	NORWAY	pal@spacecentre.no
Stefaan Poedts	K.U. Leuven	Belgium	stefaan.poedts@wis.kuleuven.be
Valery Koreparov	Inst of Space Res.	Ukraine	valkor@ist.caos.ua
Anna Smirnova	Radiophisical Research Institute	Russian Federation	Alfiyarem@ramelen.ru
YWONNE STANISLAWSKA	SPACE RESEARCH CENTRE	POLAND	STANIS@CBK.WAW.PL
LYNDSAY FLETCHER	UNIVERSITY OF GLASGOW	UK	lynsay@astro.gla.ac.uk
NORMA CROSBY	BIRA-IASB	BE	norma.crosby@oma.be