# ISWI Steering Committee Meeting 2018 Conference Room C5, 7th floor, C-building Vienna International Centre (VIC), Vienna Austria 9 AM to 6 PM, January 31, 2018

#### Agenda

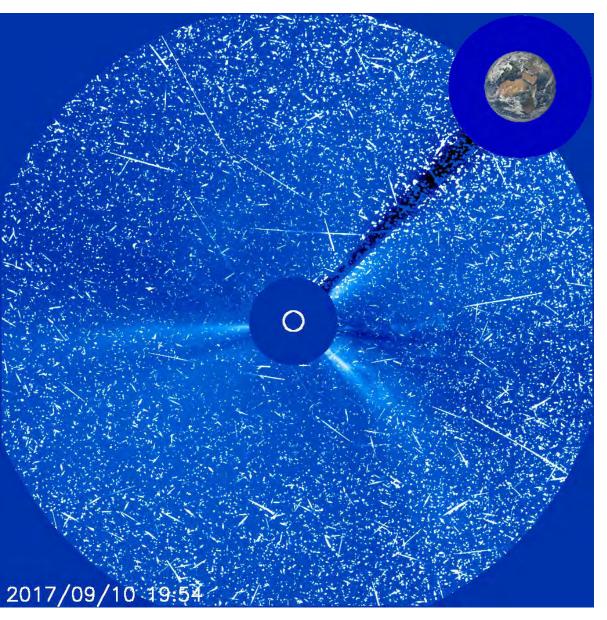
- 1. Introduction & Report (Nat Gopalswamy, Chair)
- 2. Secretariat update (Newsletter: George Maeda; Website: Mitko Danov)
- 3. Steering Committee update; SC member remarks
- 4. ISWI National Coordinators (Report by Christine Amory)
- 5. ISWI Instruments update (Shing Fung)
- 6. Data Subcommittee Report (Shing Fung)
- 7. ISWI UNOOSA Collaboration (Sharafat Gadimova Baku School)
- 8. Expert Group update (lan Mann)
- 9. ISWI/NASA report: Elsayed Talaat
- 10.UN/US Workshop on ISWI in Boston (Nat Gopalswamy, Patricia Doherty)
- 11. SunGeo Special Issue (Shing Fung)
- 12. ISWI/Mekelle Workshop report (Christian Monstein, Nat Gopalswamy)
- 13. VarSITI Report Katya Georgieva
- 14. National/Regional Coordinator reports
- 15. Baku School, COSPAR Capacity Building, COLAGE mini school (2018)
- 16. Any other matter

### Attendance

- 10 out of 18 Steering Committee members attended
- Apologies:

Keith Groves
Lika Guhathakurta
Terry Onsager
Jean-Pierre Raulin
Kazunari Shibata
Akimasa Yoshikawa
Babatunde Rabiu
Norbert Jakowski

Dr. Jean Lilensten resigned from the Steering Committee due to overload



### 2. Secretariat Update

Nat Gopalswamy Executive Director George Maeda Newsletter Editor Mitko Danov Webmaster Sharafat Gadimova UN Liaison Pat Doherty Workshop Coordinator Shing Fung Data Coordinator



Steering Committee
C Amory-Mazaudier S Gadimova K Georgieva
J A Gonzalez Esparza N Gopalswamy
K Groves M Guhathakurta N Jakowski I Mann
R Marshall C Monstein T Onsager B Rabiu
J-P Raulin K Shibata E S Talaat C Wang
A Yoshikawa

### 17 Newsletter issues in 2017

#### 508 subscribers





Editor – George Maeda Kyushu Institute of Technology Kitakyushu, JAPAN

All contents can be downloaded from iswi-secretariat.org

# Web Site Update

Katya Georgieva & Mitko Danov

### Main Activities

- ISWI-CALLISTO Workshop in Mekelle (Feb 19-25, 2017)
- UN/US Workshop on ISWI
- New ISWI Instrument network
- Final Data Policy in place



Deploy radio telescope

- Train on space data
- Scientific collaboration to enhance science return

ISWI/CALLISTO Workshop Capacity Building in Space Weather:

Study using Ground-based and Space-based Data

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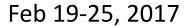
Research & Community

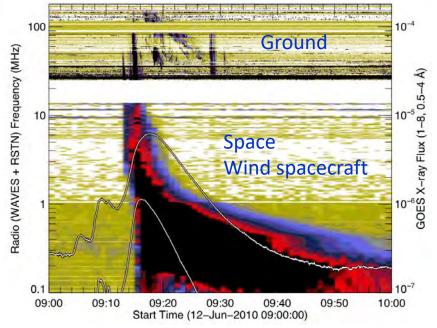
Collaboration

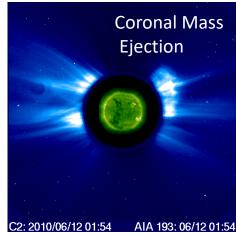
#### International Data Analysis Workshop on Coronal Mass Ejections ad Solar Radio Bursts:

Coronal and Interplanetary Shocks









SOHO/SDO Image

# ISWI/CALLISTO Workshop, Mekelle, Ethiopia





34 students from 6 countries 8 lecturers (US, Switzerland, India, Ethiopia)

Feb 19-25, 2017

#### United Nations A/AC.105/1160



Distr.: General 11 September 2017

Original: English

Committee on the Peaceful Uses of Outer Space

> Report of the United Nations/United States of America Workshop on the International Space Weather Initiative: the decade after the International Heliophysical Year 2007

(Boston, United States, 31 July-4 August 2017)

The document can be downloaded by googling "A/AC.105/1160"

#### United Nations A/AC.105/1160 – Item 45 for the Steering Committee to Note

- 45. The participants in the Workshop made the following recommendations:
- (a) Increased international cooperation should be promoted in order to meet current and future needs for space weather services, and a coordination mechanism should be established, with participation on a voluntary basis, and which would be substantially supported by the Office for Outer Space Affairs and guided under the framework of the Committee;
- (b) In order to enable effective international coordination and collaborations in space weather research and services, there should not be any barriers to data flows and communications. To that end, an open data policy, complete with rules of operation and data standards, should be promoted at the national level;
- (c) A process should be identified and adopted whereby ISWI activities are recognized by and reported to the Scientific and Technical Subcommittee through its space weather agenda item;
- (d) In addition to ISWI coordination, the partnerships already established with other international scientific organizations, as well as grass-roots and emerging initiatives, need to be strengthened to ensure that capacity-building activities are accomplished efficiently and for the benefit of all Member States;
- (e) New knowledge generated by ISWI activities should be effectively communicated to the public and the scientific community at large by means of ISWI newsletters, its website and other media;
- (f) The UNISPACE+50 process should be used to promote enhanced cooperation that would meet the identified needs of Member States for future space weather services.

Report of the United Nations/United States of America Workshop on the International Space Weather Initiative: the decade after the International Heliophysical Year 2007

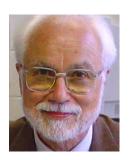


The Local Organizing Committee Patricia Doherty (Chair) Daneille Berzinis Andrea Murphy **Keith Groves** Kathleen Kraemer Sean O'Connell **David Webb** Susan Delay **Endawoke Yizengaw** 



#### Two New ISWI Instrument Networks

- Realistic Ionosphere Ionosphere (RI) headed by Drs Bodo Reinisch and Ivan Galkin from the University of Massachusetts Lowell
- BU All Sky Imagers (BU\_ASI) headed by Drs Carlos Martinis and Michael Mendillo from Boston University
- Another network (IPS) is preparing to become a member, which will be announced at a later date
- There are 19 networks now









## 3. SC Member Comments

#### 4. ISWI National Coordinators (Report by Christine Amory)

#### No ISWI coordinator for these 12 countries



#### Concerning Middle East =>

No coordinators for 12 countries

#### Concerning China => Nat

Dr Chi Wang who is member of the steering committee will propose 2 new coordinators for China

<u>Concerning Americas</u> => **J Americo** For Puerto Rico: Abe Pacini is interested

#### **Concerning Africa => Pat and Babatunde**

Pat will contact K. Groves to know if there is still a contact in Cape Verde (there is a SCINDA GPS in Cape Verde)

Babatunde is in charge to find new coordinators for Benin and South Africa

#### Puerto Rico

- ARECIBO Observatory Puerto Rico: Request to be part of ISWI (from Alessandra Abe Pacini)
- I'm a Space Physicist working at the APL/JHU (Maryland- SA) and now as a visiting scientist at Arecibo Observatory (AO), Puerto Rico.
- Since my background is in Solar Radio Physics (I started my career in Brazil, in the Pierre Kaufmann's group, then I went to INPE for my first PhD), I'm interested in starting some Solar Radio Observations here at the AO. After discussing that with the Director of the Arecibo's Space and Atmospheric Dept, Dr. Christiano Brum (who is cc'ed in this message), we decided to talk to you about the possible implementation of the Callisto instruments here at the AO. Could you please send us a quotation and explanation of how it would work if we have one of your receivers here?
- Action: Americo Gonzalez-Esparza to contact Alessandra and confirm her and Dr. Brum could be ISWI coordinators for Puerto Rico

## 5. ISWI Instruments update (Shing Fung)

- ULF/ELF/VLF Network has been removed from ISWI as requested by PI (Colin Price).
- Two new instruments have joined ISWI
  - Boston U. All Sky Imagers (Michael Mendillo & Carlos Martinis)
  - Realistic Ionosphere (Bodo Reinisch & Ivan Galkin)
- CIDR status uncertain
  - PI (Trevor Garner) appears to have moved on
  - Lead Scientist (Ayman Mahrous) declines to take over
- Total number of ISWI instruments: 19

## Updates on GIFDS & SOPHIE

(extracted from Report submitted by N. Jakowski)

#### GIFDS-Global Ionospheric Flare Detection System

- GIFDS stations measures amplitude and phase of VLF waves from several transmitters to monitor solar flare occurrences.
- Two new installations in progress (Brazil & South Africa) will join existing 5 stations (in Europe, N. America, Asia).
- Boston and Stanford stations made observations during Great American Eclipse on Aug 21, 2018.

#### SOFIE-SOlar Flares detected by Ionospheric Effects

4 new stations (Poland, Egypt, South Africa, Taiwan) will join existing
 14 stations

## 6. Data Subcommittee Report (Shing Fung)

- ISWI Data Policy released and posted on ISWI website
  - ISWI Newsletter, Vol 10, No. 001, Jan 16, 2018
- ISWI Data Policy includes
  - Policy statements & Rules of the Road; and
  - Instrument project data management plans (PDMPs)
- Several PDMPs remain outstanding
  - Existing ISWI instruments [AMBER, AMMA, CIDR, RENOIR, SCINDA]
  - New instrument [Realistic Ionosphere]

# 7. ISWI – UNOOSA Collaboration (Sharafat Gadimova – Baku School)

- How to provide ISWI report to STSC?
- Oct 8-12 in Baku
- Shafa to meet Elchin Bbayev in March 18
- Target: Eastern Europe

## 8. Expert Group update (Ian Mann)

- We are reaching a crux point for TP-4 (UNISPACE+50)
- Big picture: opportunity to secure SWx in the UN system
- SWx services to be emphasized
- The achievements of UN/US workshop on ISWI in 2017 at Boston College is appreciated
- EG recognizes ISWI contributions to Space Weather
- EG is happy to see that ISWI role in the UN system is going strong

## 9. ISWI/NASA report: Elsayed Talaat

- New Space weather element in NASA Announcement of Opportunities for O2R (operations to research) applications. It will be announced in ROSES 2018
- GOLD (Global-scale Observations of the Limb and Disk) instrument on SES-14 satellite was launched last Thursday. GOLD data are highly relevant to space weather. Will provide continuous upper atmospheric densities and night-time ionospheric densities
- Will revolutionize predictions like meteorology satellites did for terrestrial weather
- Data assimilation opportunities to combine with ISWI data



# 10.UN/US Workshop on ISWI in Boston (Nat Gopalswamy, Patricia Doherty)

- Keynote speeches & panel discussions on UNISPACE+50
- Economic Impact & Response to Extreme Space Weather
- Regular workshop with invited talks, contributed talks, poster papers
- Report will be available at iswi-secretariat.org

# 11. SunGeo Special Issue (Shing Fung)

- A Sun & Geosphere (www.sungeosphere.org) special issue will publish papers presented at the UN/US ISWI Workshop held at Boston College, Chestnut Hill, MA, USA (July 31-Aug 4, 2017)
- Special issue has been opened to the entire ISWI community, not just workshop participants
- To date, we have received "intention to submit" from 9 workshop participants with 1 actual submission.
- Submission deadline has been extended to 3/31/2018 (reminder sent to workshop participants on Jan 30, 2018).

# 12. ISWI/Mekelle Workshop Report (Christian Monstein, Nat Gopalswamy)

- ISWI mini workshop
- Designed to introduce solar and solar terrestrial physics in Africa an area currently lacking
- Lectures + Hands on activities
- Details will be available at iswi-secretariat.org

## 13. VarSITI Report Katya Georgieva

• Details will be available at iswi-secretariat.org

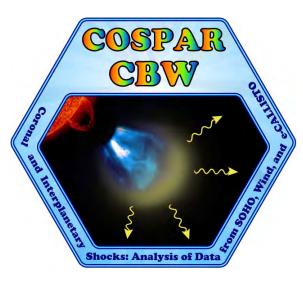
## 14. National/Regional Coordinator reports

- IMCP Chi Wang
- Africa Christine Amory
- Africa Babatunde Rabiu
- Morocco
- Kazakhstan
- Indonesia
- These reports will be available at iswi-secretariat.org

# 15. Baku School, COSPAR Capacity Building, COLAGE mini school (2018)

- Latin American School on Data Analysis and Simulations for Space Physics
- April 23-26, 2018, Buenos Aires, Argentina
- 3 Lecturers supported by ISWI
- Planetary Magnetospheres, Dr. Frances Bagenal (University of Colorado, USA)
- Particle acceleration and shocks, Dr. David Ruffolo (Mahidol University, Thailand)
- Turbulence in the Solar Wind, Dr. William H. Matthaeus (University of Delaware, USA)
- Space Weather, Dr. Clezio DeNardin (INPE, Brazil)
- - Solar and Heliospheric Physics, Dr. Nat Gopalswamy (NASA GSFC, USA)
- COSPAR Capacity Building May 20-June 1, 2018 Mekelle, Ethiopia
- International Space Science School in Baku, Azerbaijan Oct 8-12, 2018

# COSPAR Capacity Building Workshop on Shock Waves from the Sun May 21 - June 1, 2018, Mekelle, Ethiopia



- The main objective of the COSPAR Capacity-Building Workshops is to encourage the scientific use of space data by scientists in developing countries.
- Accordingly, the Mekelle workshop will involve analysis of data from SOHO, STEREO, ACE, Wind missions in conjunction with ground based radio data from ISWI instruments
- To benefit about 30 PhD students from Ethiopia, African countries, and other countries in the region
- Scientists from Ethiopia, Greece, India, Italy, UK, USA will lecture and run hands-on activities in analyzing space- and groundbased data
- Agencies interested in space weather are co-sponsoring













## 2019 Workshop Year

- ICTP: Pat Doherty to talk to Sandro Radicella
- India: Nat Gopalswamy to contact Manju Gopala Pillai
- Other Suggestions?

# 16. Any Other Business?

• None