

**The Secretariat
International Space Weather Initiative (ISWI)
Code 671, NASA Goddard Space Flight Center
Greenbelt, MD 20771, USA**



December 24, 2019

Dear ISWI colleague,

Season's Greetings and a Happy New Year 2020!

The year 2019 is coming to a close but proved to be a productive year for ISWI. We have two new Steering Committee members: Manuela Temmer (Austria) serving as the European ISWI coordinator and Mamoru Ishii (Japan) serving as the liaison to the Asia-Oceania Space Weather Alliance (AOSWA).

The ISWI instrument network is quite active with significant new developments from AWESOME, CALLISTO, and SEVAN.

The AWESOME group is building the world's largest repository of publicly available ELF/VLF/LF radio data, which is used to study the physics of lightning, the ionosphere, and the magnetosphere. The repository is called WALDO (Worldwide Archive of Low-frequency Data and Observations, <http://waldo.world/>). WALDO includes all the IHY/ISWI/AWESOME data starting in 2006. WALDO also has detailed information on the format, quick-look charts, calendars, and software tools that enable easy access to data and analysis. If you are interested, please contact Morris Cohen (mcohen@gatech.edu).

Recently two SEVAN detectors were installed at DESY (Deutsches Elektronen-Synchrotron) Hamburg and Zeuthen. Yerevan Physics Institute and DESY are active in educating and training young students. Data from SEVAN network will widely use in these activities. More details can be obtained from Ashot Chilingarian (chili@aragats.am).

The CALLISTO solar radio spectrometer located at the Prescott Observatory of Embry-Riddle Aeronautical University (ERAU), Prescott, AZ, USA has recently been reactivated using a VHF solar tracking antenna. A new CALLISTO station (KROC) with an Autonomous Radio Telescope to track the Sun will become operational in mid-2020 in the Rochester area (Ionia, NY, USA). A new CALLISTO has become operational in Centre de Recherche en Astronomie Astrophysique et Géophysique (CRAAG) in Algiers, Algeria. Details are available in the e-callisto status report #85 (<http://e-callisto.org/StatusReports/statusreports.html>).

On the Science side, ISWI cosponsored the 2019 African Geophysical Society Conference On Space Weather, 25-28 March 2019, Cairo, Egypt. The conference was attended by 80 participants: South Africa - 6, Japan - 1, Algeria - 1, Sudan - 2, USA - 2,

France - 1, UK - 1, Kenya -1, Korea -1, Saudi Arabia -1, China -2, Norway -1, Egypt - 60. Thirty-six oral and 8 poster presentations were made. Details can be found in the web site, <http://www.spaceweather.edu/AGS2019.html>.

ISWI also provided support to the space weather meeting held in San Juan, Argentina, in occasion of the total solar eclipse on 2 July 2019. A topical issue in the Solar Physics journal is planned with the title, "Towards Future Research on the Drivers of Space Weather". The deadline is January 24, 2020. You can submit a paper even if you did not attend the San Juan, Argentina eclipse meeting!

We had a successful ISWI workshop at the Abdus Salam International Center for Theoretical Physics (ICTP) during May 20-24, 2019, cosponsored by several organizations: United Nations Office for Outer Space Affairs, International Committee on Global Navigation Satellite Systems, Boston College, Scientific Committee on Solar Terrestrial Physics, National Aeronautics and Space Administration, International Space Weather Initiative, International Union of Geodesy and Geophysics, Centre for Atmospheric Research, National Space Research & Development Agency, European Space Agency. The workshop also featured the traditional ISWI topics with oral and poster papers dealing with science, capacity building, and outreach. The workshop was directed by Pat Doherty (ISR, Boston College), Sharafat Gadimova (ICG, UNOOSA), Nat Gopalswamy (NASA), Sandro Radicella (ICTP). Local organizer: Bruno Nava (ICTP). As in previous workshops, more than a dozen original research papers are being reviewed for a special issue of Sun and Geosphere (<http://www.sungeosphere.org/>) and guest-edited by Nat Gopalswamy, Susanna Finn, Sneha Yadav, Babatunde Rabi, and Pertti Mäkelä.

Details of the ISWI/ICTP workshop including observations and recommendations can be found in the United Nations Committee on the Peaceful Uses of Outer Space (UNCOPUOS) Report A/AC.105/1215, entitled, "Report on the workshop on the International Space Weather Initiative (Trieste, Italy, 20–24 May 2019)". A copy can be obtained from the ISWI web site or from the UNCOPUOS site.

There will be an ISW workshop to be hosted by the Space Physics Laboratory Vikram Sarabhai Space Centre, Thiruvananthapuram, Kerala, India in November 2020. ISWI will also be supporting other activities in 2020 and will be announced in one of the future ISWI Newsletters.

The ISWI Newsletter with George Maeda as editor has been issued approximately once a month. The ISWI web site (iswi-secretariat.org) with Mitko Danov as web master has tons of information on national and international space weather activities including presentations from various schools and workshops. Please make use of these channels to share anything of interest to the space weather community.

The Annual ISWI Steering Committee meeting will be held at the Vienna International Center, Vienna, Austria on February 7, 2020. If any of you can attend, please do so, and let me know if you would like to make a short presentation on any aspect of space

weather. I encourage the National Coordinators to make use of this opportunity to attend the Steering Committee meeting and provide updates to the ISWI community. The venue and tentative agenda are as follows:

ISWI Steering Committee Annual Meeting
2020 February 7
Conference Room, C0213, C-building, 2nd floor
Vienna International Center, Vienna, Austria
Start time: 10 AM (whole-day meeting)
Agenda

1. Introduction & Report (chair)
2. Secretariat update (Pat Doherty, Katya Georgieva)
3. Steering Committee update (welcome Manuela Temmer and Mamoru Ishii)
4. ISWI National Coordinators (Discussion by Christine Amory)
5. ISWI Instruments update
6. Data Subcommittee Report (Shing Fung)
7. ISWI – UNOOSA Collaboration (Sharafat Gadimova)
9. Expert Committee on Space Weather – summary of activities (Ian Mann)
10. ISWI/NASA report
11. ISWI/ICTP 2019 Workshop report (Nat Gopalswamy)
12. ISWI Workshop Nov 2020, India (Pat Doherty & Sharafat Gadimova)
13. ISWI Workshop April 2017 Boulder Discussion Data Focus
13. VarSITI Report (Katya Georgieva)
14. SCOSTEP/PRESTO report (Kazuo Shiokawa)
15. Discussion on ISWI Newsletter
16. Any other matter

Once again wish you a productive 2020 in doing your science for the benefit of humanity.

Sincerely,



Nat Gopalswamy
Executive Director
ISWI