

INFORMATION NOTE

United Nations/Japan Workshop on Space Weather "Science and Data Products from ISWI Instruments"

2 – 6 March 2015, Fukuoka, Japan

1. Introduction

The United Nations Programme on Space Applications was established in 1971 to assist Member States with building capacity in the use and benefits of space technology and its applications and to promote international space cooperation. Since its inception, the Programme has organized more than 300 training courses, workshops, seminars and conferences and has provided funding support for more than 12,000 participants, mainly from developing countries. It has coordinated the establishment of five Regional Centres for Space Science and Technology Education, affiliated to the United Nations and cooperates with academic institutions around the World to offer long-term fellowship programmes.

When it was recognized that building capacity in space science was often a pre-requirement for developing and sustaining space technology and space application capabilities, the Basic Space Science Initiative (BSSI) was launched under the Programme on Space Applications in 1991. Initially the BSSI considered astronomy and astrophysics.

Over the last few decades a wide range of scientific programmes and international initiatives have been conducted to study space weather, increasing our understanding of space weather-related events and effects. Thus increasingly research activities and cooperation opportunities in the space weather domain came into the focus of the BSSI.

The International Heliophysical Year 2007 (IHY) drew scientists and engineers from around the globe in a coordinated observation campaign of the heliosphere and its effects on planet Earth. Building on these activities, the United Nations Committee on the Peaceful Uses of Outer Space launched the International Space Weather Initiative (ISWI) in 2009.

ISWI was a program of international cooperation to advance space weather science by a combination of instrument deployment, analysis and interpretation of space weather data from these instruments in conjunction with space data, and the communication of the results to the public. While the ISWI was formally concluded in 2012, most of the activities continued beyond the formal end of the initiative. They contribute to the discussion under a new agenda item on Space Weather in the Scientific and Technical Subcommittee of the Committee on the Peaceful Uses of Outer Space.

The key function of the present Workshop is to follow-up on ISWI recommendations and to maintain the capacity building momentum established by IHY and ISWI.

2. Workshop Objectives

Concrete objectives of the 2015 Workshop will be to:

- a) Assess the status of space weather instruments (in-situ, space-borne), data access, availability and collection and modeling efforts to advance space weather research improve space weather forecasting.
- b) Support the continued the deployment of ground-based ISWI instrument arrays and data exploitation.
- c) Continue efforts in space weather education, especially also for students from developing nations. IHY and ISWI have contributed to significant progress in the development of space science schools that encourage students to consider a career in space science.
- d) Review international cooperation activities and the role of international cooperation in addressing space weather-related issues, such as possible further cooperation towards a truly global space-weather monitoring capabilities
- e) Identify opportunities for international cooperation in the standardization, sharing and wider, timely use of data, also for operational purposes; data interoperability and formats will be considered, as those are important aspects for any standardization

The observations and recommendations emanating from the Workshop will be disseminated in form of report of the Committee on the Peaceful Uses of Outer Space to the United Nations General Assembly.

3. Workshop Programme

The Workshop will consist of a series of technical presentations, panel discussions and working group meetings. Sessions will cover:

- Space weather instrumentation: (a) Space-based, (b) Ground-based (ISWI)
- Solar weather
- Solar wind and inter-planetary medium
- Magnetosphere
- Ionosphere
- Atmosphere
- Coupling
- Sun-to-Earth space weather modeling
- Space weather impact or awareness

The programme may also include a field trip and a social events programme for all Workshop participants. The detailed Workshop programme will be made available at the Workshop webpage at http://www.unoosa.org/oosa/en/SAP/act2015/japan/index.html.

4. Participants

Applicants must generally have a university degree and well-established professional working experience in a field related to the theme of the Workshop. Applicants should be involved in space weather research activities in national or international organizations, research centres, academic institutions or industry. Applications from qualified female applicants are particularly encouraged. The co-sponsors of the Workshop will jointly select participants on a competitive basis. Successful applicants will be notified in January 2015.

5. Financial Support to Selected Participants

Within the limited financial resources available to the co-sponsors, a number of qualified applicants from developing countries, who have expressed the need for financial support, will be offered financial support to attend the Workshop. This may include the provision of a round-trip air ticket between Fukuoka and the applicant's international airport of departure and hotel accommodation (including breakfast) for the duration of the Workshop. En-route expenses, lunch and dinner expenses (approximately US\$ 40/day) as well as any changes made to the air ticket must be borne by the participants.

Due to the limited availability of financial resources it is usually not possible to provide assistance to all qualified applicants that express the need for financial support. Applicants and their nominating organizations are therefore strongly encouraged to find additional sources of sponsorship to allow them to attend the Workshop.

6. Dates and Location

The Workshop will be held from 2 to 6 March 2015 in Fukuoka, Japan. Selected participants will receive information with details on board and lodging and other local arrangements.

7. Language of the Workshop

Applicants must have a working knowledge of English, which will be the only language of the Workshop. Participants who receive funding support from the co-sponsors are expected to make a 10 to 20 minutes presentation on their work related to the Workshop theme.

8. Life and Health Insurance

Life and major health insurance is the responsibility of each selected participant or his/her nominating institution or government. The co-sponsors will neither assume any responsibility for life and major health insurance, nor for any other expenses related to medical treatment or accidental events.

9. Deadline for Submission of Applications

Applicants shall use the online application form available from http://www.unoosa.org/oosa/en/SAP/act2015/japan/index.html.

Applications must be received by the Office for Outer Space Affairs **no later than 30 November 2014**. Only complete applications with all the requested information and signatures will be considered.

10. Points of Contact

For questions related to the application process, please contact **Mr. Ahmed Osman** (ahmed.osman@unoosa.org, Tel: +43-1-26060-4977).

For questions related to the Workshop programme and to co-sponsorship opportunities, please contact **Mr. Werner Balogh** (werner.balogh@unoosa.org, Tel: +43-1-26060-4952).

Please frequently check http://www.unoosa.org/oosa/en/SAP/act2015/japan/index.html for the latest information on the Workshop.