

International collaboration driven by the STPP sub-committee under the Science Council of Japan

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To date, the Solar Terrestrial Physics Program (STPP) sub-committee has been promoting and supporting several international programs. For example, it supported International Heliophysical Year (IHY), a major initiative launched by the United Nations from 2007 to 2009. In broad terms, IHY dealt with the solar system, paying a particular attention to the effects of the Sun on the Earth's upper atmosphere and on the space environment in the vicinity of the Earth. The United Nations Office for Outer Space Affairs (UNOOSA) coordinated observation campaigns and drew scientists and engineers from all over the world to enhance its Basic Space Science Initiative (BSSI). Several international workshops were organized by UNOOSA to advance the benefits of IHY to all corners of the world. To maintain the international momentum created by IHY, UNOOSA developed the International Space Weather Initiative (ISWI) to achieve more basic understanding of the solar terrestrial relationship. ISWI ran from 2010 to 2014, and there was an international workshop for each year of ISWI (i.e., at Cairo, Abuja, Quito, and Graz).

From another vantage point, UNOOSA established in 2010 a new working group (WG): Long Term Sustainability of Outer Space Activity (LTSOSA). This working group was created to cover a wide area: From the natural space environment (Space Weather) to the artificial space environment (Space Debris). The LTSOSA WG set up four expert groups in 2011. Expert Group for Space Weather is one of the expert groups and the author (T. Obara) was assigned to be one of the co-chairs of the space weather expert group.

The space weather expert group members gathered several times, and compiled a 50-page working group report (A/AC.105/C.1/2014/CRP.1/UN COPUOS REPORT, 2014). This report contains:

- Identification of risks from space weather,
- Observations, models, tools for space weather prediction,
- Comprehensive network space weather services,
- Coordination on data and services to safeguard space activities,
- Engineering approaches to mitigate space environment effects,
- Recommended guidelines for the long-term sustainability of space activities.

The Solar Terrestrial Physics Program (STPP) sub-committee of the Science Council of Japan has been in charge of these UN-mandated programs for the interface with Japan. The STPP is considering to propose follow-on UN programs, and the STPP is also considering to take on responsibility for other programs such as multinational and international space weather programs, such as AOSWA (Asia Oceania Space Weather Alliance).

In this presentation, details shall be presented to give a better idea about the goals and functions of STPP.

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