International Space Weather Initiative (ISWI)

Informal summary of the deliberations of the Forty-seventh session of the Scientific and Technical Subcommittee of UNCOPUOS on agenda item 13. ISWI, 8-19 February 2010

In accordance with paragraph 10 of General Assembly resolution 64/86, the Scientific and Technical Subcommittee considered agenda item 13, "International Space Weather Initiative" under the workplan agreed for this item (A/AC.105/C.1/933, Annex I, paragraph 16).

The representatives of Canada, China, India, Indonesia, Japan and the United States made statements under agenda item 13. The observer for WMO also made a statement.

The Subcommittee heard the following scientific and technical presentations: need to check

- (a) "International experiments of the Russian Academy of Sciences in the framework of the Space Weather Program", by the representative of the Russian Federation;
 - (b) "International Space Weather Initiative", by the representative of the United States;
 - (c) "Space Weather Impact on Radio Systems", by the representative of Germany;
- (d) "Canadian space weather activities in support of the International Space Weather Initiative" by the representative of Canada;
 - (e) "Japan's contribution to the ISWI", by the representative of Japan; and
- (f) "Space debris, near-Earth Objects and space weather research and observation in Indonesia" by the representative of Indonesia.

The Subcommittee had before it reports on regional and international activities related to the International Space Weather Initiative (A/AC.105/967 and Add.1 and A/AC.105/C.1/2010/CRP.8).

The Subcommittee noted that International Space Weather Initiative (ISWI) would contribute to the observation of space weather through the deployment of instruments arrays and by means of sharing observed data among researchers around the world.

The Subcommittee noted that ISWI would explore the solar corona, deepen understanding of the function of the Sun and the effects that the variability of the Sun could have on Earth's magnetosphere, environment and climate, explore the ionized environments of planets, determine the limits of the heliosphere and deepen understanding of its interaction with interstellar space.

The Subcommittee welcomed that participation in ISWI was open to scientists from all countries, as instrument hosts or instruments providers.

The Subcommittee noted that ISWI offered Member States with the opportunity to coordinate global monitoring of space weather using space and ground-based assets, assist in consolidating common knowledge and develop essential forecast capabilities to improve the safety of space-based assets.

The Subcommittee noted that space weather related events were of significant concern to all countries due to technological and economic interdependence, and the growing dependence on space assets to deliver vital services.

The Subcommittee noted with appreciation that information on the ground-based world-wide instrument arrays was being distributed through a Newsletter being published by the Space Environment Research Centre (SERC) of Kyushu University of Japan and through the ISWI website http://www.iswi-secretariat.org.

The Subcommittee noted with appreciation that the Office for Outer Space Affairs had joined the study of the effect of sudden disturbances on the ionosphere with the installation of a Sudden Ionospheric Disturbance Monitor (SID) instrument at its permanent outer space exhibit. The SID daily data sets recorded by the Office were being transferred to Stanford University of the United States for scientists worldwide to use in their analysis of the complex relationship between the Earth and the Sun.

The Subcommittee welcomed that the United Nations Programme on Space Applications had organized, in 2009, in the Republic of Korea, the first of a series of United Nations workshops, co-sponsored by ESA, NASA and JAXA to address ISWI and that the next workshop was scheduled to take place in Egypt in November 2010. The third and fourth workshop in the series would be hosted by Nigeria in 2011, and Ecuador in 2012.