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The INTERNATIONAL SPACE WEATHER INITIATIVE (ISWI)  
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This is the 3-year plan for ISWI as it was presented and discussed at the 18 February 2009 meeting of the UN COPUOS (Committee on the Peaceful Uses of Outer Space) Science and Technical Subcommittee. This is a recommendation to the COPUOS adopted by STSC, and will be part of the October 2009 UN General Assembly resolution.

The International Heliophysical Year (IHY), an international program of scientific collaboration to understand the external drivers of planetary environments, has come to an end. The IHY was a major international event of great interest to the member States, which involved the deployment of new instrumentation, new observations from the ground and in space, and an education component. We propose to continue the highly successful collaboration between the heliophysics science community and the United Nations Basic Space Science (UNBSS) program.

One of the major thrusts of the IHY was to deploy arrays of small instruments such as magnetometers, radio antennas, GPS receivers, all-sky cameras, particle detectors, etc. around the world to provide global measurements of heliospheric phenomena. The United Nations Basic Space Science Initiative (UNBSSI) played a major role in this effort. Scientific teams were organized through UNBSS, which consisted of a lead scientist who provided the instruments or fabrication plans for instruments in the array. As a result of this program, scientists from UNBSS member states now participate in the instrument operation, data collection, analysis, and publication of scientific results, working at the forefront of science research. As part of this project, support for local scientists, facilities and data acquisition is provided by the host nation. In addition, support at the Government level is provided for local scientists to participate.

Building on momentum of the IHY, we propose to continue the highly successful collaboration with the UNBSS program to continue the study of universal processes in the solar system that affect the interplanetary and terrestrial environments, and to continue to coordinate the deployment and operation of new and existing instrument arrays aimed at understanding the impacts of Space Weather on Earth and the near-Earth environment. Toward this end, we propose a new program, the International Space Weather Initiative (ISWI).

The study of energetic events in the solar system will pave the way for safe human space travel to the Moon and planets in the future, and it will serve to inspire the next generation of space physicists.

The ISWI strongly complements the International Living With a Star (ILWS) program, providing more attention nationally, regionally, and internationally for the ILWS program.

To complement the ground-based data, huge amounts of data from space-based missions on Earth and heliospheric phenomena are freely accessible. Support of local Governments and institutions is needed for local scientists to participate in the analysis and interpretation of this data.

This work has already begun. UNBSSI, since June 2004, in cooperation with IHY organizers has begun a worldwide outreach to disseminate basic information on IHY.

The timeline for the ISWI is as follows.

- 2009: Synthesis from regional to international plans, merging of science working groups and campaigns, "backfilling" missing initiatives; Planning and organize UNBSS Workshop in South Korea; Continue operation of existing instrument arrays, and encourage new instrument deployments.
- 2010: Plan and organize UNBSS Workshop; Continue operation of existing instrument arrays, and encourage new instrument deployments.
- 2011: Plan and organize UNBSS Workshops; Continue operation of existing instrument arrays, and encourage new instrument deployments.

A three-year agenda item on ISWI would provide the opportunity for scientists around the world to participate in this exciting quest to understand the effect of space disturbances on our Earth environment.

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