



International Heliophysical Year



IHY 2007

Developing Nations Participation in International Global Studies
of the Sun-Earth System through the United Nations





1957

The past: **International Geophysical Year (IGY) 1957**

In 1957, in a display of unprecedented international cooperation, more than 60,000 scientists and engineers from 67 nations at thousands of research stations around the world participated in the International Geophysical Year (IGY 1957).

The primary goal of the International Geophysical Year (IGY) was to study the global phenomena of Earth and geospace.

IGY: The start of space exploration and United Nations interest in outer space IGY heralded the start of space exploration with the launch of Sputnik 1 in October 1957. It was also directly responsible for the United Nations General Assembly's interest in outer space and the establishment of the United Nations Committee on the Peaceful Uses of Outer Space (UN-COPUOS): the UN's primary committee that deals with the use of outer space for peaceful purposes.



2007

The future: **International Heliophysical Year (IHY) 2007**

In 2007, fifty years on from IGY, scientists and engineers from all 191 Member States of the United Nations will participate in an international coordinated observation campaign on fundamental global questions of Earth and space sciences.

The IHY will provide a unique opportunity to coordinate observations from the current impressive fleet of international space missions, with data from ground-based observatories. Unprecedented, simultaneous observations with broad coverage of all associated solar, heliospheric, geospheric, geospace and atmospheric phenomena will be obtained. The resulting data will allow global studies of the complete heliophysical system.

What does "Heliophysical" mean? "heliophysical" is an extension of the word "geophysical," extending the connections from the Earth to the Sun and interplanetary space. The activities of IHY 2007 will build on the success of IGY 1957 by continuing the legacy of system-wide studies.

Objectives of IHY 2007

The objectives of IHY 2007 are to discover the physical mechanisms that drive the coupling of Earth's atmosphere to solar and heliospheric phenomena. The systematic global study of this interaction is to be the central theme of the IHY. In view of these aims, the objectives for IHY are:

- Advancing our understanding of the heliophysical processes that govern the Sun, Earth and heliosphere
- Continuing the tradition of international research and advancing the legacy on the 50th anniversary of the International Geophysical Year
- Demonstrating the beauty, relevance and significance of space and Earth science to the world

Data from IHY will be available to scientists and engineers of all nations, and the excitement of the scientific results will be communicated to the world through a series of press events and public lectures.

Sharing IHY results with students

Education and public outreach will also be an important component of IHY. The main objective will be to ensure that students and the public are aware of the worldwide cooperation and coordinated observations being performed throughout 2007 and beyond and its impact on scientific research today and for the future.

The IHY will organize visits to classrooms in countries around the world by scientists engaged in the IHY effort. It will allow students to actively participate in IHY research as well as organize exhibits at local museums and other venues. Through actively participating in the community, public lectures, press releases and TV and media interviews, the IHY will spread the news and excitement of the large scale international research and discovery underway.

Getting involved with IHY

Drawing on nearly 15 years of workshops on basic space science for the benefit of scientists and engineers from developing nations, the United Nations Office for Outer Space Affairs, through the United Nations Basic Space Science Initiative (UNBSSI), will assist scientists and engineers from all over the world in participating in IHY 2007.

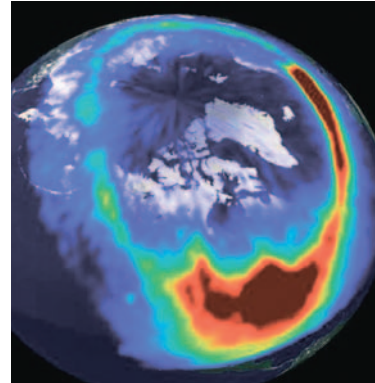
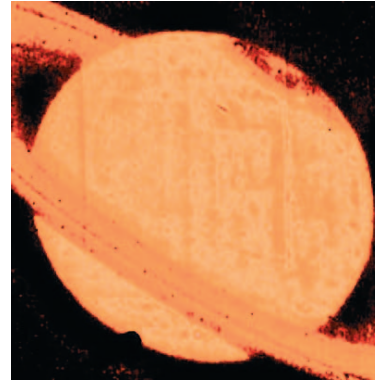
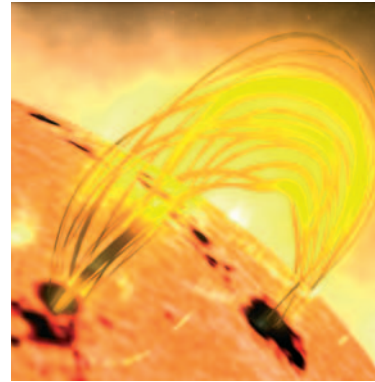
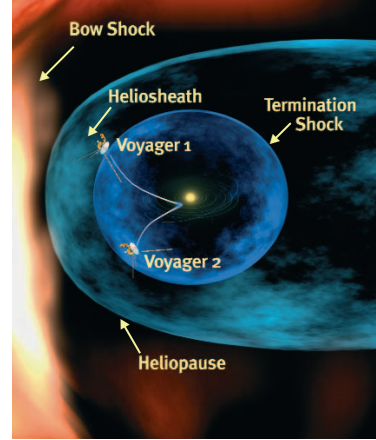
UNBSSI will be dedicating its 2005-2008 activities to planning IHY participation by developing nations. In collaboration with the IHY Secretariat, the UNBSSI will focus on initiatives that stimulate Space and Earth science activities in developing nations, such as supporting low-cost ground-based instrument array initiatives for worldwide studies in space science.

If you are interested in stimulating space science activities at your university or institute, please contact us at ihy_unbss@ihy.gsfc.nasa.gov and register your interests in the IHY Science Coordination Database.

IHY is also seeking Principle Investigators (PIs) for the collaborative programme that will facilitate partnerships between PIs and institutes in developing nations in order to support the deployment of ground-based instrumentation.

If you have an experiment or a plan for a ground-based instrument or observatory, and you believe that new and exciting space science can be achieved by establishing new international observing locations, please contact us at ihy_unbss@ihy.gsfc.nasa.gov.

We are also seeking support and contributions to provide for the deployment of these new observatories in several developing nations. If you or your organization may be able to help us identify support for these vital activities, please let us know.



First steps to get involved in IHY

If you are interested in IHY and would like to be kept informed of our activities, status and general IHY information, please sign on for the IHY e-mail list. As part of the list, you will receive the IHY newsletter as well as regular IHY e-mail updates keeping you up to date with the latest news!

To subscribe, unsubscribe or edit your personal preferences, please visit the IHY Info Mailing List WWW page at:

http://ihy2007.org/mail_list.shtml

IHY 2007

If you are interested in or think you might be interested in participating in IHY science, history, or outreach activities, please make an entry into the IHY Science Coordination Database. The database can be accessed through the WWW at:

<http://ihy2007.org/scd.shtml>

This database will serve as a means of tracking the activities and interests of our many participants.

Also visit the following website for updated information on IHY:

- IHY Secretariat:
<http://ihy2007.org/contact.shtml>
- United Nations Basic Space Science Initiative:
www.oosa.unvienna.org/SAP/bss/ihy2007/index.html

Contact details



United Nations Basic Space Science Initiative
United Nations Office for Outer Space Affairs
P.O. Box 500, 1400 Vienna, Austria
Phone: +43-1-26060-4949
Fax: +43-1-26060-5830
E-mail: oosa@unvienna.org
Web: <http://www.oosa.unvienna.org/SAP/bss/ihy2007>

International Heliophysical Year Secretariat
American Geophysical Union
2000 Florida, Ave. NW
Washington, DC 20009
USA
Web address: <http://ihy2007.org>