



The United Nations Basic Space Science Initiative

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The basic space science initiative was a long-term effort for the development of astronomy and space science through regional and international cooperation in this field on a worldwide basis, particularly in developing nations. Basic space science workshops were co-sponsored and co-organized by ESA, JAXA, and NASA. A series of workshops on basic space science was held from 1991 to 2004 (India

1991, Costa Rica and Colombia 1992, Nigeria 1993, Egypt 1994, Sri Lanka 1995, Germany 1996, Honduras 1997, Jordan 1999, France 2000, Mauritius 2001, Argentina 2002, and China 2004; <http://neutrino.aquaphoenix.com/unesa/>) and addressed the status of astronomy in Asia and the Pacific, Latin America and the Caribbean, Africa, and Western Asia. Through the lead of the National Astronomical Observatory Japan, astronomical telescope facilities were inaugurated in seven developing nations and planetariums were established in twenty developing nations based on the donation of respective equipment by Japan. Pursuant to resolutions of the Committee on the Peaceful Uses of Outer Space of the United Nations (COPUOS) and its Scientific and Technical Subcommittee, since 2005, these workshops focused on the preparations for and the follow-ups to the International Heliophysical Year 2007 (UAE 2005, India 2006, Japan 2007, Bulgaria 2008, South Korea 2009; www.unoosa.org/oosa/SAP/bss/ihy2007/index.html). IHY's legacy is the current operation of 16 worldwide instrument arrays with more than

1000 instruments recording data on solar-terrestrial interaction from coronal mass ejections to variations of the total electron content in the ionosphere (<http://iswisecretariat.org/>). Instruments are provided to hosting institutions by entities of Armenia, Brazil, France, Israel, Japan, Switzerland, and the United States. Starting in 2010, the workshops focused on the International Space Weather Initiative (ISWI) as mandated in a three-year-work plan as part of the deliberations

of COPUOS. Workshops on ISWI were held in Egypt in 2010 for Western

Asia, Nigeria in 2011 for Africa, and Ecuador in 2012 for Latin America and the Caribbean. The International Center for Space Weather Science and Education at Kyushu University, Fukuoka, Japan (www.serc.kyushu-u.ac.jp/index_e.html), was established through the basic space science initiative in 2012. Similar research and education centres were also established in Nigeria (www.cbssonline.com/aboutus.html) and India (www.cmsintl.org). Activities of basic space science initiative were also coordinated with the Regional Centres for Space Science and Technology Education, affiliated to the United Nations (www.unoosa.org/oosa/en/SAP/centres/index.html). Prospective future directions of the initiative will be discussed in this paper.