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* I S W I = International Space Weather Initiative *
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* Publisher: Professor K. Yumoto, SERC, Kyushu University, Japan *
* Editor-in-Chief: Mr. George Maeda, SERC (maeda@serc.kyushu-u.ac.jp) *
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Attachment:
(1) book review from COSPAR (549 KB).
Reviewed book:
″ Putting the 'I' in IHY: The United Nations Report
for the International Heliophysical Year 2007 ″.

Dear ISWI Participant:

This issue of the ISWI Newsletter contains two announcements
(both concerning books related to IHY).

An aside note:
The Scientific and Technical Subcommittee of UNCOPUOS is now
in session in Vienna, Austria. In the next issue of this
newsletter a document will be presented that was circulated
to all member States.

========== ANNOUNCEMENT 1 ==========

The book based on Asia-Pacific IHY School will be out soon.
This is the web link for information concerning it:
http://www.springer.com/astronomy/extraterrestrial+physics%2C+space+sciences/book/978-3-642-11340-6
The following text (between + and &) is from the publisher (Springer):

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Serves as reference work to research in the emerging field of heliophysics
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An outgrowth of the first Asia-Pacific Regional School on the
International Heliophysical Year (IHY), this volume contains a
collection of review articles describing the universal physical
processes in the heliospace influenced by solar electromagnetic
and mass emissions. The Sun affects the heliosphere in the short
term (space weather) and in the long term (space climate) through
numerous physical processes that exhibit similarities in various
spatial domains of the heliosphere. The articles take into account
various aspects of the Sun-heliosphere connection under a systems approach.

This volume will serve as a ready reference work for research in the
emerging field of heliophysics, which describes the physical processes
taking place in the physical space controlled by the Sun out to the
local interstellar medium.
&

========== ANNOUNCEMENT 2 ==========

Attached is a favorable book review of this book:

″ Putting the 'I' in IHY: The United Nations Report
for the International Heliophysical Year 2007 ″.
The book review is from COSPAR's information bulletin,
″Space Research Today″ (No. 176, December 2009).

End of this issue of the ISWI Newsletter.

George Maeda
SERC (staff member), Editor of ISWI Newsletter

host ICG-6 in 2011 and by China to host ICG-7 in 2012.

Further information on ICG and the Programme on GNSS Applications can be obtained from the United Nations Office for Outer Space Affairs, ICG Executive Secretariat at www.icgsecretariat.org; e-mail: sharafat.gadimova@unvienna.org

Publications

Advances in Space Research

Information on COSPAR's own journal, *Advances in Space Research (ASR)* is given in *Space Research Today* No. 169, pp.115-116. Details on submission of manuscripts can be found under 'Guide for Authors' available on the Elsevier website: http://ees.elsevier.com/asr

The all important parameter for judging the quality of any journal is the Impact Factor. The Impact Factor for *ASR* continues to show a healthy rise year-on-year, and was 0.86 for 2008.

Galileo Issue in *Advances in Space Research*: Scientific Applications of the Galileo Navigation Satellite System

Papers are invited for a special issue of *Advances in Space Research* entitled 'Scientific applications of Galileo and future Global Navigation Satellite Systems'. Articles derived from presentations (oral or poster) at the 2nd International Colloquium on Fundamental Aspects and Scientific Applications of Galileo and GNSS, co-sponsored by COSPAR, are encouraged as well as are any other original appropriate manuscripts. Foreseen topics include: first results derived using GIOVE data, Galileo system development and technology (ground receiver and satellites), experiments related to fundamental physics, future uses of current and future GNSS data for time and frequency transfer, relationships between internal GNSS times, atmospheric sciences (ionosphere, troposphere, climatology), geodetic and geophysical applications (terrestrial reference frame, plate tectonics, high-rate GPS positioning), combined use of multi GNSS data, satellite laser ranging tracking, interoperability of various GNSS, precise orbit determination for GNSS and for LEO satellites, mathematical and theoretical challenges related to the availability of future GNSS data, algorithms and models, constellation maintenance and space debris.

Papers must be submitted electronically through the EES website (http://ees.elsevier.com/asr) under the category 'S.I. Galileo'. All manuscripts will be submitted to a standard peer-review process.

Accepted papers will be published in a special issue of *Advances in Space Research* (Elsevier, ISI Web of Science).

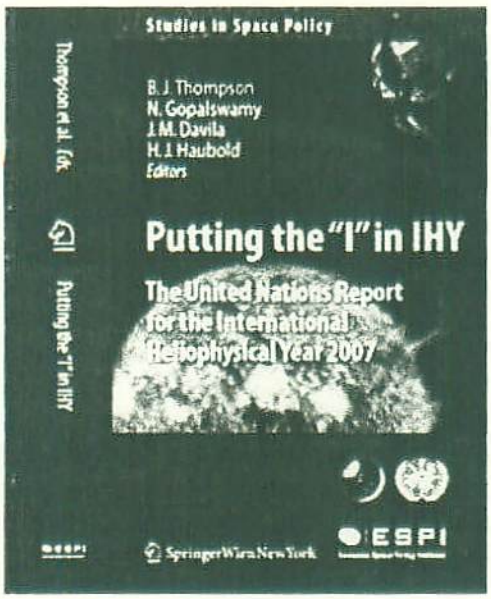
Deadline for submission is 1 March 2010. Authors are encouraged to contact the Guest Editor (Pascal Willis, willis@ipgp.jussieu.fr) for any additional information. They will be kept regularly informed on the progress of the special issue until its expected publication in late 2010. Papers will be available on the *ASR* website with a DOI as soon as they are accepted.

Book Review

Putting the 'I' in IHY: The United Nations Report for the International Heliophysical Year 2007
[Ed. B.J. Thompson, N. Gopalswamy, J.M. Davila & H.J. Haubold]. Springer 2009. ISBN 978-3-211-99179-4

We have often reported on the activities of the International Heliophysical Year (IHY) in *SRT*, perhaps driven slightly by the General Editor's

(cont'd next page)



personal involvement in the IHY. However, if anyone needed evidence that the IHY was a truly international activity with a range of benefits from education, through the distribution of instruments, in particular in developing countries, the UNBSS workshops, the so-called Coordinated Investigation Programmes, the celebration of the 50 years since IGY – they need look no further. This is not a lengthy, dry report to decorate the shelves, but a 'proper', high quality book which is unique. It spells out the international programme heritage leading to the IHY very deftly and includes an impressive list of national reports, educational activities, scientific collaborations and so on, which serve to show the breadth and nature of the activities which were spread around the globe. In effect, scientists and engineers were able to use the IHY approach to tackle a range of things at an international and national level, and these varied dramatically from country to country and between scientific fields. I found this book refreshing; it not only demonstrates the value of such an international activity, but showed that the IHY almost had a party atmosphere to it. It also demonstrates nicely that such an activity should not dictate, but should simply set up a framework which individuals can use in whatever way they wish, to the benefit of the field; the activities were extremely varied, but the global effect is one of raising awareness and driving the science forward.
[Reviewed by Richard Harrison]

Letter to the Editor

Aeronomic Nomenclature

[From W. Schröder (Geophysical Institute, Hechelstrasse 8, D-28777 Bremen, Germany)

This author believes that there needs to be better clarity in the general use of aeronomic terms such as 'noctilucent clouds', 'Polar Mesospheric Clouds' and 'Polar Mesospheric Summertime Echoes' for practical use. The current uses of these terms are not always clear. Thus, in this letter, I present practical definitions of the classification of these phenomena.

Noctilucent clouds (NLC) were first observed after the great Krakatoa event in June 1885 by Backhouse and Jesse (*cf.* Schröder 1975, 2001). They can be observed by eye in the evening twilight and during night if the Sun is 6 degrees below the horizon. They appear at *ca.* 82.1 km between the times of transitions in the mesosphere between May and August of the northern hemisphere. In this respect, we can note them as indicators for the transition of mesospheric circulation (Schröder 1971, 1975). They can also be observed during the summer of the southern hemisphere. They can be seen as wave forms, whirls, bands, and rips and patches in blue-white light, with variations in form and brightness. They move with different velocities.

Polar Mesospheric Clouds (PMC) have been known to researchers for some decades (see Thomas & Olivero 2001, Olivero & Thomas 1986). They can be observed by satellites, and occur during summer seasons, typically thirty days before the summer solstice to seventy days afterwards. It seems that NLC