

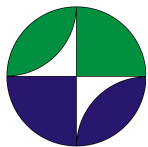
# Reprint of IAMAS contribution to



International Union of Geodesy and Geophysics (IUGG)  
*Union Géodésique et Géophysique Internationale (UGGI)*

## ANNUAL REPORT 2011





**INTERNATIONAL UNION OF GEODESY AND GEOPHYSICS  
UNION GEODESIQUE ET GEOPHYSIQUE INTERNATIONALE**

# **IUGG Annual Report 2011**

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## **International Association of Meteorology & Atmospheric Sciences (IAMAS)**

<http://www.IAMAS.org>

### **INTRODUCTION**

IAMAS is the specialized association of the International Union of Geodesy and Geophysics (IUGG) that deals with all aspects of the gaseous envelope around the Earth and other planets. The main research work is carried out, coordinated and communicated in IAMAS' ten International Commissions (IC), which are in alphabetical order the:

- *International Commission on Atmospheric Chemistry and Global Pollution (ICACGP),*
- *International Commission on Atmospheric Electricity (ICAE),*
- *International Commission on Climate (ICCL),*
- *International Commission on Clouds and Precipitation (ICCP),*
- *International Commission on Dynamical Meteorology (ICDM),*
- *International Commission on the Middle Atmosphere (ICMA),*
- *International Commission on Planetary Atmospheres and their Evolution (ICPAE),*
- *International Commission on Polar Meteorology (ICPM),*
- *International Ozone Commission (IOC),*
- *International Radiation Commission (IRC).*

All ICs, and IAMAS as a whole, play a leading role in global coordination, communication and discussion of the latest research through organization of and participation in a wide range of scientific meetings that are open to all scientists.

### **ADMINISTRATION**

During the XXV General Assembly of IUGG in Melbourne, the national members of the IAMAS General Assembly met twice (30 June and 4 July 2011). The most important items on the agenda were the approval of the updated statutes ([www.iamas.org/statutes /IAMAS\\_StatutesByLaws-2011.pdf](http://www.iamas.org/statutes/IAMAS_StatutesByLaws-2011.pdf)) and the election of new officers and members at large ([www.iamas.org/officers](http://www.iamas.org/officers)). For the term 2011-2015, the IAMAS Executive Committee consists of the following officers:

President:	Athéna Coustenis	FRANCE
Vice-Presidents:	Joyce Penner	USA
	John Turner	UK
Immediate Past President:	Guoxiong Wu	CHINA

Secretary General:	Hans Volkert	GERMANY
Assistant Secretary General (not voting)	Zheng (Jenny) Lin	CHINA
Members at large:	Ernest Hugo Berbery	USA/ARGENTINA
	Vladimir Kattsov	RUSSIA
	Colin Price	ISRAEL
	Daren Lu	CHINA
	Tetsuzo Yasunari	JAPAN
Commission presidents (ex officio):		
ICACGP:	John P. Burrows	GERMANY
ICAE:	Zen Kawasaki	JAPAN
ICCL:	Neil Holbrook	AUSTRALIA
ICCP:	Zev Levin	ISRAEL
ICDM:	Richard Swinbank	UK
ICMA:	Daniel Marsh	USA
IOC:	Christos Zerefos	GREECE
ICPAE:	Sanjay Limaye	USA
ICPM:	Tom Lachlan-Cope	UK
IRC:	Robert Cahalan	USA

Athéna COUSTENIS (France) was elected to serve as president, and Joyce PENNER (USA) and John TURNER (UK) as vice-presidents. Colin PRICE (Israel) and Daren LU (China) were elected as new members at large, serving from 2011-2019. The immediate past-president Guoxiong WU (China) and the assistant secretary general Zheng (Jenny) LIN (China; not voting) will continue contributing their expertise and experience to assist with IAMAS matters.

The past and present members of the IAMAS bureau continue to cooperate closely via email and monthly telephone conference calls. The Secretary General met with officers of most of the commissions and with officers of the other associations at IUGG-2011 and also met with several of his colleagues from IUGG and its associations at EGU in Vienna (April). Issues 11 and 12 of the IAMAS newsletter have been published and are accessible via [www.iamas.org/NewsLetters](http://www.iamas.org/NewsLetters). The website was refurbished and is receiving  $9000 \pm 1000$  hits per month (search engines excluded).

## ACTIVITIES

The primary activity of the Secretary General during 2010 and 2011 was representing IAMAS and its commissions in the planning for IUGG-2011 by joining monthly telephone conferences with the Local Organization Committee (LOC) and meeting the Scientific Programme Committee (SPC) members in person during the EGU assembly in Vienna, Austria (April). IAMAS and its commissions were represented in four Union symposia, took the lead in 13 joint symposia and organized 14 association symposia (see [www.iugg2011.com/pdf/IUGG2011\\_FinalEntireProgram.6June.pdf](http://www.iugg2011.com/pdf/IUGG2011_FinalEntireProgram.6June.pdf); Programme Book, p. 74). 607 participants (of 3392 in total) registered under IAMAS, the largest group among the 8 associations of IUGG. IAMAS covered the registration fee of 67 delegates (with support by LOC) and, additionally, provided 26 grants for local expenses. Generally the XXV General Assembly of IUGG-2011 was considered a considerable success; the collage below gives a flavour of the prevailing atmosphere.



Here a brief selection of activities is reported by IAMAS commissions; the full compilation of commission reports will be posted on [www.IAMAS.org/Reports](http://www.IAMAS.org/Reports). Information is also available on the specified web-sites. Brief statements by the liaisons to other international organizations are also given.

### **IAMAS-ICACGP**

(<http://www.icacgp.org>)

A number of meetings with international participation were co-organised. These included: the first Regional Workshop on “Changing Chemistry in a Changing Climate: Human and Natural Impacts over Southern Africa – C4-SAR”, 31 May - 2 June, Midrand, South Africa; the ACCENT workshop in Urbino, Italy; the Symposium on Stratospheric Ozone and Climate Change, 7-10 November, Washington, DC, USA; a session at the AGU fall meeting about “Remote sensing of trace gases and aerosols: Air quality applications”. At IUGG-2011, the commission held its business meeting and contributed to symposia that now encompass both classical atmospheric pollution and the biogeochemical cycling of species. Early in 2012, the second regional workshop was planned in Santiago, Chile (9-12 January). Strong input will be given to the 12<sup>th</sup> IGAC and Open Science Conference in Beijing (China; 17-21 September; [http:// www.igbp.net/5.1b8ae20512db692f2a6800015595.html](http://www.igbp.net/5.1b8ae20512db692f2a6800015595.html) ).

### **IAMAS-ICAE**

(<http://icae.jp>)

The 14<sup>th</sup> International Conference on Atmospheric Electricity took place in Rio de Janeiro, Brazil (8–12 August) with 191 participants from 24 countries. 80 oral and 200 poster presentations dealt with a broad selection of topics ([www.icae2011.net.br/](http://www.icae2011.net.br/)). Two detailed newsletters enhance the internal communication. The 15<sup>th</sup> conference is scheduled for 2014 in Oklahoma, USA, one year prior to the next General Assembly of IUGG.

### **IAMAS-ICCL**

(<http://www.iccl-iamas.net>)

At IUGG-2011, Neil HOLBROOK (Australia) was elected as president and Jianping LI (China) as executive secretary. The election of 2 new members brought the membership to 34 persons. The

commission was involved in the organisation of 3 inner-IAMAS and 7 joint symposia. One of the latter on Monsoons received over 200 abstracts, ran over 5 days and was by far the largest symposium of the entire assembly. ICCL contributes to the establishment of a new Union Commission on Climatic and Environmental Change (CCEC).

#### **IAMAS-ICCP**

(<http://www.iccp-iamas.org>)

At IUGG-2011, six symposia were led or supported by the commission. The regular business meeting was held and the planning continued for the 16<sup>th</sup> quadrennial International Conference on Clouds and Precipitation, which is scheduled to take place in Leipzig, Germany (30 July – 3 August 2012; <http://iccp2012.tropos.de/>). During the previous week a cloud modelling workshop will be held in Warsaw, Poland.

#### **IAMAS-ICDM**

(<http://icdm.atm.ucdavis.edu/ICDM.html>)

At IUGG-2011, Richard SWINBANK (UK) was elected as president and Richard GROTHJAHN (USA) as secretary. Three new members were welcomed. One IAMAS-only and five joint symposia were co-convened. In 2012, a special workshop is being planned in Kunming (China; 6-9 August; <http://icdm2012.csp.escience.cn>) entitled “Dynamics and Predictability of High-impact Weather and Climate Events”.

#### **IAMAS-ICMA**

([www.icma-iamas.org](http://www.icma-iamas.org))

At IUGG-2011, Daniel MARSH (USA) was elected as president and Ulrike LANGEMATZ (Germany) as vice-president/secretary. Twelve new members were welcomed. Five joint and four IAMAS-only symposia were co-convened. In October, the co-sponsored 10<sup>th</sup> international workshop “Layered Phenomena in the Mesopause Region” in Blacksburg (USA) was attended by 40 scientists including 8 students ([www.cpe.vt.edu/lpmr/](http://www.cpe.vt.edu/lpmr/)). In 2012, the 7<sup>th</sup> international workshop “Long-Term Changes and Trends in the Atmosphere” is being co-organised in Buenos Aires (Argentina; 11-14 September; [www1.herrera.unt.edu.ar/faceyt/trends2012/](http://www1.herrera.unt.edu.ar/faceyt/trends2012/)).

#### **IAMAS-IO3C**

(<http://ioc.atmos.illinois.edu>)

The commission issued press statements on the conditions of stratospheric ozone in spring and autumn. Commission members were engaged in the compilation of the latest WMO ozone assessment, which appeared in January ([http://montreal-protocol.org/Assessment\\_Panels/SAP/](http://montreal-protocol.org/Assessment_Panels/SAP/)). Further reports are being planned in cooperation with WMO and SPARC. The next Quadrennial Ozone Symposium is scheduled to take place in Toronto (Canada; [www.cmos.ca/QOS2012](http://www.cmos.ca/QOS2012); 26-31 August 2012).

#### **IAMAS-ICPAE**

([www.atm.ox.ac.uk/icpae](http://www.atm.ox.ac.uk/icpae))

At IUGG-2011, Sanjay LIMAYE (USA) was elected as president, Leigh FLETCHER (UK) as vice-president, and Mathieu HIRTZIG (France) as secretary. Two symposia were convened. The website was moved to Oxford and re-launched. Results from several inter-planetary satellite missions were combined in 17 articles of a special issue in the journal “Planetary and Space Science”, Volume 61 ([www.sciencedirect.com/science/journal/00320633/61](http://www.sciencedirect.com/science/journal/00320633/61)).

## **IAMAS-ICPM**

([www.icpm-iamas.aq](http://www.icpm-iamas.aq))

At IUGG-2011, Tom LACHLAN-COPE (UK) was elected as president and Matthew LAZZARA (USA) as secretary. Two well attended symposia were convened. In 2012 the commission will contribute to the 32th SCAR and Open Science Conference in Portland (USA; 16-19 July 2012; <http://scar2012.geol.pdx.edu>) and an Antarctic Weather Station workshop in Boulder (USA).

## **IAMAS-IRC**

([www.irc-iamas.org](http://www.irc-iamas.org))

At IUGG-2011, the commission held its business meeting, where work in the seven working groups was reviewed and the proposal to install a new one 'Polarized Radiative Transfer' was accepted. Four symposia were co-convened. The next quadrennial International Radiation Symposium is scheduled to take place in Berlin (Germany; [www.irs2012.org](http://www.irs2012.org); 6-10 August 2012).

## **Reports of IAMAS liaisons to other organizations**

Commission on Climate and Environmental Changes (CCEC): A committee of Tom BEER (Chair), Jianping LI (Vice-Chair) and Keith ALVERSON (Secretary) plus Association representatives prepared a proposal to build scientific capacity for responsibly addressing the broad, multi-disciplinary issues involved in climatic and environmental change; to provide useful information, understanding, and support to the public and governmental organizations; to interact and cooperate with outside activities that would benefit from the capabilities and resources of the IUGG Associations; and to strengthen links across the Scientific Associations within IUGG, to build new external links to organizations outside IUGG, to strengthen existing links to external organizations and to promote IUGG's contribution to global change research. The proposal was presented to the new IUGG Executive Committee following the General Assembly.

Scientific Committee on Antarctic Research (SCAR): John TURNER, the liaison to SCAR, maintained close contact with the organization during the year. He chairs the SCAR Expert Group on Antarctic Climate Change and the Environment (ACCE) and ensures that the work of IAMAS and particularly the International Committee on Polar Meteorology (ICPM) feeds into the reports prepared by the ACCE group. He is on the organizing committee for the next SCAR Open Science Conference to be held in Portland, Oregon in July 2012, where IAMAS will co-sponsor several sessions. There will be a session on Antarctic clouds that will build on the successful ICPM clouds workshop held during 2010.

Scientific Committee on Oceanic Research (SCOR): Michael MacCRACKEN, substituting for Athéna COUSTENIS as one of IUGG's two new liaisons to SCOR participated in the annual meeting of the SCOR Executive Committee in Helsinki, Finland (12-15 September). The meeting reviewed the status of SCOR Working Groups and the many international ocean research programmes that SCOR oversees, and evaluated proposals for new working groups, moving forward on only one of them due to funding limitations. On the week-to-week activities of SCOR, Athéna COUSTENIS took over as liaison to SCOR following confirmation of her appointment at IUGG-2011.

World Climate Research Programme (WCRP): Tom BEER, past president of IUGG, attended the WCRP Open Science Conference in Denver, USA (24-28 October) as new liaison to WCRP. He replaces Guoxiong Wu who was also a member of the Joint Science Committee (JSC) of WCRP. To maintain this continuity it has been recommended to the IUGG Executive that IUGG should write to WCRP specifically requesting that the IUGG liaison becomes an observer to the meetings of the JSC.

World Meteorological Organization (WMO): The traditional link to WMO was resumed by a visit of the Secretary General (since July also IUGG-liaison to WMO) in Geneva. Meanwhile he accepted an invitation to represent IAMAS within the Management Group of WMO-CAS.

## **FUTURE ACTIVITIES**

As mentioned above, six IAMAS commissions will be involved in the organisation of larger international conferences in 2012 (entries in bold face under [www.iamas.org/meetings](http://www.iamas.org/meetings)).

Planning for the next assembly, jointly with the sister association for the cryosphere (IACS) is well on its way. It will take place in Davos, Switzerland, in July 2013 ([www.daca13.org](http://www.daca13.org)). The new 'Early Career Award' recognizing the achievement of young scientists will be presented there for the first time. The Swiss National Organisation Committee (SNOC) continued its series of planning meeting towards DACA-13; the Secretary General joined one of them in October.

Discussions have started with two other IUGG associations about joining forces for the regular assemblies in 2017, after the next General Assembly to be held in Prague, Czech Republic, in 2015.

Submitted by  
Athéna Coustenis, IAMAS President  
Hans Volkert, IAMAS Secretary General