

## **Report of the IAMAS President for the Period 2001 - 2003**

In recent years there have been enormous advances in Meteorology and the Atmospheric Sciences. These advances have been spurred on by the recognition that many of the major scientific challenges and societal concerns confronting humankind are related to the composition and state of the atmosphere. In turn these advances, challenges and concerns are reflected in the nature, scale and scope of IAMAS's activities during the period 2001-2003.

The overall nature of IAMAS's activities is influenced by its role as one of the constituent Associations of the International Union of Geodesy and Geophysics (IUGG) and by the establishment of several IAMAS-related programmes by the International Council for Science (ICS) - the parent organization of the IUGG. Thus IAMAS operates within the IUGG and concurrently recognises that its natural constituents - meteorologists and atmospheric scientists - are also strongly linked to, for example, the CLIVAR, SPARC and GEWEX sub-programmes of the World Climate Research Programme (WCRP) and the Inter-governmental Panel on Climate Change (IPCC). Likewise the overall changes in the scale and scope of IAMAS activities is a response to the new vistas of its constituents in relation to the societal and economic significance of air quality, weather forecasts, and climate change projections. From the standpoint of basic science the scale and scope has been broadened by the rapid advances in our observational capabilities, enhanced by the availability of powerful high-speed computers, and inspired by new theoretical perspectives and challenges.

These aspects were exemplified by the IAMAS Assembly held in Innsbruck, Austria between the 10-18 July, 2001. For example the themes of the President's Lectures ranged from "Anthropogenic Climate Change: the IPCC's 2001 Assessment" (given by Sir John Houghton, co-chair of Working Group I of the IPCC), "A Vision of Global Weather Services in 2025- An Update (by Rick Anthes, President of UCAR), Atmosphere-Ocean Biogeochemical Coupling (by Robert A. Duce, immediate Past President of IAMAS), and "Numerical Weather Prediction at the Meso-gamma Scale: Soon a Reality " (by Phillippe Bougeault of Meteo France & Head of Research Designate of ECMWF).

Again the series of innovative Lunchtime Lectures that provided young scientists with an opportunity to address the Assembly in plenary sessions featured contributions on the dynamics of orographic flow (by S. Mobbs), the socio-economic aspects of global warming (by R.A. Pielke Jnr.) and atmospheric flow predictability (by M. Ehrendorfer). In addition the Assembly Programme included an overview of the IPCC Third Assessment Report, and a palette of 33 symposia organized by the Commissions. The latter encompassed consideration of processes and phenomena spanning the aerosol space-scale and lightning time-scale to global-scale climate and paleoclimatological-time scales.

The Assembly was a notable success in terms of the breadth, depth and number of the scientific contributions, and in terms of the scale of financial support made available for young participants. The convivial setting of the Conference Centre (- that had just been awarded the coveted title of World's Best Conference Centre for 2000) was conducive to fostering informal scientific contacts and added significantly to the sense of occasion. The overall success was attributable in no small part to the tremendous effort and careful planning of our Innsbruck hosts - Prof. Michael Kuhn and his team. Also central to the

success was the diligence of the Commission Officers and Symposia Convenors that ensured the timeliness of the Assembly's themes and the scientific quality of the individual contributions. Organizational oversight for the entire proceedings was in the competent and capable hands of Prof. Roland List (- the IAMAS Secretary General), and his Herculean efforts deserve special mention and acknowledgement.

During the Assembly both the IAMAS Bureau and the IAMAS Executive met twice. First significant steps were laid for the scientific component of IAMAS's contribution to the IUGG General Assembly in Sapporo, Japan in 2003, and after formal consideration of the invitation extended by China it was agreed that preparations commence for holding the IAMAS Assembly in Beijing in 2005.

IAMAS links with other international Committees and Commissions continue to be strong. The immediate past President of IAMAS (Prof. R.A. Duce) in recent years served as Chairman of the Executive Committee of SCOR. This linkage of the atmospheric and ocean sciences illustrates neatly the inter-disciplinarity that is one feature of today's research agenda and of IAMAS activities. Indeed Prof. Duce was also instrumental in setting-up the new international research programme on Surface Ocean-Lower Atmosphere Study (SOLAS). One current IAMAS Vice-President (Prof. R. Vincent) plays a lead role in the middle atmosphere STEP programme, and another current IAMAS Vice-President (Dr. R. Carbonne) chairs the influential WMO initiative entitled the World Weather Research Programme (WWRP). Again the IAMAS Secretary-General (Prof. Roland List) continues in his liaison role with the WMO and the WCRP. These contacts are central to the IAMAS mission.

A major effort after the Innsbruck Assembly has been devoted to preparing for the IUGG General Assembly to be held in Sapporo, Japan in summer 2003. The Assembly's overall theme will be "State of Planet Earth" entailing a series of Flagship Union Symposia with complementary contributions from the Union Lectures. Prof. T. Matsuno, a former member of the IAMAS Executive, will deliver one of these prestigious Lectures, and IAMAS will also play a role in two of the Flagship Symposia. In addition to participation in inter-Association and IAMAS symposia and workshops, IAMAS will also pioneer a series of plenary lunchtime lectures and contribute to presentations to the general public. The Secretary-General has invested a major effort to the organisation of these varied activities.

At the Commission level it is hoped that the revision of the IAMAS Statutes that accomplished during the IUGG Birmingham Assembly in 1999 will be mirrored by an overhaul of the Statutes of the Commissions in Sapporo.

The newly-revised IAMAS Statutes state that it is tasked to :- promote the study of the science of the atmosphere; initiate, facilitate, and coordinate international cooperation; stimulate discussion, presentation and publication of scientific results; and promote education and public awareness. These are far-reaching goals that merit the effort of the community, and our plenary meetings in Sapporo will provide an opportunity to fashion our activities to match these objectives. The need for a global, independent and non-governmental voice that encompasses the entire spectrum of activities in Meteorology and the Atmospheric Sciences is strong, and in this context IAMAS can play a unique role.

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