IAPSO-IAMAS-IAGA Joint Scientific Assembly 2017

The IAPSO-IAMAS-IAGA 2017 joint Scientific Assembly (SA) was successfully held over 27 August-1 September in Cape Town, South Africa. This was the first full IAMAS assembly to be held in Africa. The IAMAS registered participants constituted 36% of the total attendees of more than 1,000 scientists from 64 countries. IAMAS supported registration fee/accommodation of 21 young scientists and scientists from developing countries. We gratefully express our warm thanks to the Local Organizing Committee (Chair, Prof. Isabelle Ansorge) and the Scientific Programme Committee, and all others for making the scientific assembly a success in the beautiful city of Cape Town.

This Assembly was an effective platform for discussion and planning of cross association sciences, with 11 joint symposia involving the three associations. The four IAMAS-led joint symposia were:

- Observing Our Planet From Space (IAMAS, IAGA, IAPSO)
- Climate Variability and Change On All Scales (IAMAS, IAPSO)
- Thunderstorm Coupling to the Upper Atmosphere (IAMAS, IAGA)
- Future Climate for the African Continent (IAMAS, IAPSO)
There were also 15 IAMAS-only symposia:

- Atmospheric Chemistry and Physics for the 21st Century,
- Past Climate Changes: a key for the future,
- Aerosol-cloud session,
- Advances in Atmospheric Dynamics,
- Dynamics of Mountain Weather and Climate: Observations, Modeling and Prediction at all Scales / Precipitation at all scales,
- Tropical Circulation Systems,
- The Seasonal Cycle over the African Continent and Adjoining Oceans, Today and in the Past,
- Middle Atmosphere Symposium,
- Vertical Atmospheric Coupling the Polar Atmosphere,
- Energy balance of the Earth,
- Resilience: The science of Adapting to Climate Change,
- High-impact Weather and Climate Extremes,
- Advances and Frontier challenges in Global Monsoon Studies, and,
- Role of Ocean-Atmosphere Interactions in Climate Variability, Change and Predictability and Sub-seasonal to Seasonal Prediction—except extremes.

During this Assembly, IAMAS held some business meetings and the Reception Dinner. The minutes are uploaded at http://www.iamas.org/reports-downloads/.
Preamble

South Africa has a strong geographic advantage for conducting and directing research in the surrounding oceans (IAPSO) and atmosphere (IAMAS), the southern skies (IAGA) and as far south as Antarctica. Logistically, it is the closest African point to the South Pole and is a well-established gateway to Antarctica. Fundamental ongoing space physics research in South Africa includes the mechanisms of energy transfer across the upper atmosphere and the impact of space weather on modern electrical technologies. The South African Government has indicated its ongoing commitment to continued research through major financial investments in new state-of-the-art platforms and in addition, the establishment of a nationwide South African Environmental Observation Network and Centres of Excellence have further facilitated outstanding academic research, helping to ensure that South African marine, atmospheric and terrestrial science remains at the forefront of international recognition. Most recently, space research through the establishment of the South African National Space Agency (SANS) has been supported by Government. SANS operates an extensive array of ground-based instruments to monitor space weather from southern Africa and extending to Antarctica. The recent investment by South Africa into the internationally recognized Square Kilometer Array (SKA) as well as the SALT and the Meerkat facilities create further interest for all scientists working in the field of Geomagnetism and Aeronomy.

The surrounding oceans, atmosphere and the southern skies of Southern Africa provide excellent opportunities for raising public awareness and engaging with the future generation of earth-system scientists.

The IAPSO-IAMAS-IAGA Joint Assembly officially closed on Friday 1st September 2017. The conference was a highly successful Joint Assembly organised through Scatterlings Conference Company at Cape Town’s CTICC and the first of its kind between the three IUGG associations. Lasting a full 5 days, the Joint Assembly had a total of 1032 registrations. A total of 29 accompanying persons registered.

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A total of 64 country registrations were received with delegates from 54 countries on site.
On Thursday 31st August each association hosted their medal awards.

IAGA - Shen Kuo Award for Interdisciplinary Achievements - Prof Jeffrey Forbes

In recognition of Prof Forbes scientific achievements, including studies of the upper atmosphere environments of Earth, Mars, and other planets; coupling of these environments to lower altitudes and to solar variability; geomagnetic storm effects on satellite drag variability; the vertical propagation of tides and planetary waves in planetary atmospheres, and their electrodynamic and chemical effects.

IAGA - Long Service Medal - Dr Jean Rasson

In recognition of Prof Rasson’s efforts to continuously dedicate to produce the highest quality geomagnetic field data in many observatories around the world and repeat stations, and his devoted work to make Dourbes observatory a centre for absolute instrument and variometer development, comparison and testing.

IAGA - IAGA Young Scientist Award - Drs Emma Douma, Katarzyna Dudzisz, Federico Gasperini

IAMAS - IAMAS Early Career Scientist Medal - Prof Corinne Hoose

This medal is awarded to an early career scientist working in any area of atmospheric science, who has carried out excellent scientific research and has shown to have a potential to make a significant international contribution in the future.

IAPSO - Prince Albert I Medal - Prof Lynne Talley

The Prince Albert I Medal is an award offered by the Foundation Rainier III of Monaco to a scientist who has made outstanding contributions to the enhancement and advancement of the physical and/or chemical sciences of the oceans. It is awarded every two years to a most prominent scientist chosen by a specially appointed IAPSO Award Committee. One year prior to each IAPSO Assembly, the Secretary General of IAPSO will call for nominations for the award. Nominations must be sent to the Secretary General within three months after the announcement.

IAPSO - Eugene la Fond - Dr Jonathan Durgadoo

This medal is awarded to an early career scientist from a developing country who presents an outstanding presentation or poster.

A huge thank you to all Association Presidents and Secretary Generals as well as the LOC and particularly Karin du Preez, Tammy Maart and Simone Solomons from Scatterlings for all their hard-work and efforts over the years!

Isabelle Ansorge
Vice President of IAPSO
Chair of Local Organising Committee
The IAMAS Plenary Session in Cape Town

The IAMAS Plenary Session was held on 31 August during the Cape Town Assembly 2017, which was a great opportunity for the whole IAMAS community to meet together and discuss the possible future direction of our association.

John Turner, the president of IAMAS, gave an overview of IAMAS activities since IUGG 2015, which was followed by a panel discussion. The president highlighted the great success of the 2015 IUGG assembly in Prague, the eight major goals of the IUGG Strategic Plan, the establishment of an IAMAS Facebook page, the focus on trying to engage with Early Career Scientists involved with the atmospheric sciences, the membership of the IAMAS President on the Executive of SCOR, the success of the relationship between IAMAS and Advances in Atmospheric Sciences, and others topical issues.

The panel discussion confirmed the active role of the IAMAS commissions in promoting the atmospheric sciences and encouraging early career scientist initiatives such as Young Earth System Scientist (YESS) and the Association of Polar Early Career Scientists (APECS). But, at the same time, we agreed on some desirable changes for our assemblies, such as lectures by outstanding scientists reflecting the progress in our science, a child policy for scientists who attend the assembly, accompanying person’s programme, archiving and broadcasting of lectures and presentations, and further development of IAMAS information dissemination to raise the profile of IAMAS.

Richard Grotjahn asked attendees the following questions, and received these answers:

Q1. How many people at this meeting looked at the iamas.org website this year?  
- Yes  
- No

Q2. How do you find out about meetings you attend?  
- Past habit/here to that meeting before  
- Read from colleagues  
- Posted/forward information  
- Social media

Q3. Would having a place where meeting talks are archived be useful?  
- Yes  
- No

Q4. Would having a group event/excursion be of interest?  
- Yes  
- No

Another highlight of the plenary session was the presentation of the 2017 IAMAS Early Career Scientist Medal to Corinna Hoose (Karlsruhe Institute of Technology, Germany). The citation was read out by Prof. Joyce Penner, the chair of the Awards Committee. Dr Hoose’s research has been concerned with modeling of mixed-phase clouds on different scales, with a focus on the parameterization of heterogeneous ice nucleation. Prof Hoose made an acceptance speech and expressed her gratitude to the audience. And also she acknowledged people who have support her.  

Corinna Hoose, the Medal Awardee (Right)  
Joyce Penner, the chair of the Awards Committee (Left)
The 2017 IAMAS Early Career Scientist Event

During the IAPSO-IAMAS-IAGA Scientific Assembly in Cape Town IAMAS held an early career scientist (ECS) event on the evening of Thursday 31 August. About 40 scientists participated, including ECSs, officers of IAMAS and its commissions, mid-career scientists and scientists involved with other ECS organisations. Food and drink were provided and the event was a mixture of talks and networking.

John Turner (President of IAMAS) welcomed those attending and gave a brief introduction to IAMAS, its history, the 10 IAMAS commissions and the relationship of the organisation to IUGG. He described the work of the IAMAS Bureau, our major meetings and how we promote our activities via the IAMAS web site and the newsletter.

There were two talks on ECS organisations, with Julia Keller first describing the Young Earth System Scientists (YESS) group. YESS currently has 1,000 members in 83 countries and promotes its activities via workshops and a webinar series on earth science (see http://www.yess-community.org/). They published an article on their work in the Bulletin of the American Meteorological Society in 2017 (https://doi.org/10.1175/BAMS-D-16-0025.1). Marius Rossouw then gave an overview of the Association of Polar Early Career Scientists (APECS), which was established in 2007. APECS has been a great success and currently has a global membership of 7,500 in 101 countries. More information on APECS can be found on their web site at www.apecs.is.

The 2017 IAMAS ECS Medal awardee, Dr Corinna Hoese, gave a fascinating account of her career to date, focusing on some of the highs and lows. The presentation was useful for students and ECSs and focused on how to keep your motivation during difficult periods in a research career and in your personal life.

A highlight of the evening was a ‘speed networking’ session where the ECSs could spend time with four groups, consisting of (1) IAMAS officers, (2) atmospheric scientists moving into their mid-career, (3) senior scientists and (4) representative of YESS and APECS. There were lively discussions on many aspects of working in the atmospheric sciences and issues relevant to career development, getting involved with IAMAS and how the organisation could help those in the early stages of their career.

The event was enjoyed by those attending and hopefully similar events can be organised at future IAMAS and IUGG assemblies.

John Turner
President of IAMAS

Upcoming IAMAS-related meetings

- 14-18 May, 2018
  The 10th workshop on “Long-Term Changes and Trends in the Atmosphere”
  Anhui, China
  Web: http://trends2018.ustc.edu.cn/home.html

- 17-22 June, 2018
  The 16th ICAE conference (ICAE2018)
  Nara, JAPAN
  Web: http://icae2018.saej.jp/