

Content

Introduction by the new IAMAS Secretary-General Dr. Keith Alverson	1
IAMAS-related meetings supported by IUGG	2
IAMAS funding of meetings in 2024	2
The 2024 IUGG Grants Programme	2
Introducing Neil Holbrook, Member-at-Large	3
Report on the World Climate Research Programme Open Science Conference, Kigali, Rwanda	4
The 2025 IAMAS/IACS/IAPSO Scientific Assembly BACO-25	5
Seeking bids to hold the 2029 IAMAS Scientific Assembly	5
Attending COP28	5
Report of the meeting of the Chinese National IAMAS Committee	7
Upcoming Meetings	8

Introduction by the new IAMAS Secretary-General Dr. Keith Alverson

The International Association of Meteorology and Atmospheric Sciences is broad and open. Our executive officers are based in Australia, Canada, China, France, Germany, South Africa, UK, and USA. The disciplines covered by our commissions include the chemistry and physics of weather and climate, pollution, atmospheric electricity, clouds, ozone, radiation, polar regions, and even the atmospheres on other planets.



This breadth of membership and disciplines is certainly a great strength, but sometimes also a challenge. Our monthly executive zoom meetings, which we hold at noon “Universal Time Coordinated,” for example, accommodate most participants’ time zones effectively, but not all - that is 4am in California. Reviewing workshop proposals across such a wide range of disciplines also presents a challenge for the bureau trying to evaluate and compare them. This difficulty aside, the good news this year is that IAMAS, with some help from IUGG, was able to fund all the proposals that we received! So, if you are thinking about joining one of our commissions, or taking on a leadership role, keep in mind this 100% success rate as at least one small incentive.

When I was a postdoc, in the atmospheric physics department at the University of Toronto, there was an emeritus professor just down the hall who seemed to be coming into the office an awful lot considering he was a retiree. Roland List was his name and, though I was not fully aware of it at the time, one of the reasons he was so busy was that he was the longest ever serving secretary general of IAMAS. A record likely to stand forever since our latest statutes limit holders of the office to two four-year terms. Like Roland, and the SGs between us – Hans Volkert, Terry Nakajima and Steve Ackerman – I’m finding the work as Secretary General a bit overwhelming, but also great fun.

I spent most of my career in academia and the United Nations working on climate reconstructions, observing systems, adaptation, and mitigation. Seven years based in Switzerland, seven in France, five in Kenya, four in Japan and the last three in Canada has meant that the ‘country’ listed alongside my name in various IAMAS and IUGG documents has wandered all over the map. Almost thirty years after Roland List at the University of Toronto, I too am currently based in Canada (Ottawa), though employed remotely by the University of Massachusetts in Amherst, Massachusetts as Director of the World Climate Research Program Climate and the Cryosphere (CliC) project. The CliC Mission is to “advance understanding of climate-driven changes in the frozen parts of our planet and to support efforts to mitigate and adapt to their impacts on ecosystems and human society.” There’s plenty of complementary science with IAMAS, including our Polar Meteorology (ICPM) and Climate Commissions (ICCL). So I guess it won’t come as much of a surprise that my first role in IAMAS was as President of the ICCL, from 2003-2011, then as Member-at-Large on the Executive Committee from 2015-2023, and now Secretary-General. Over those same years I’ve attended, and organized, scientific sessions at IUGG General Assemblies in Sapporo, Perugia, Melbourne, Prague, Montreal and Berlin, and am looking forward to doing the same at the next IAMAS-IAPSO-IACS joint assembly in Busan in 2025, and the 2027 IUGG Assembly in Incheon, both in Korea. With so much time in Korea on my horizon, I have gone ahead and learned the alphabet with the ‘Duolingo’ app and very much look forward to saying 어서 오세요, to those of you who I may have the pleasure of seeing there.

IAMAS-related meetings supported by IUGG

Each year IUGG supports a number of symposia and workshops concerned with science areas within the scope of the Union. In the latest round seven IAMAS-related meetings in 2024 are to be supported and these are indicated by an asterisk in the list of upcoming meetings at the end of this newsletter.

IAMAS funding of meetings in 2024

Last year IAMAS issued a call to our commissions for requests to fund meetings during the calendar year 2024. After careful assessment by the IAMAS Bureau, it was agreed to support the following meetings:

ICACGP Early Career Scientist conference
ICACGP Business Meeting September 2024, Kuala Lumpur, Malaysia
ICACGP 9th SOLAS Open Science Conference. Goa, India
ICAE Business Meeting, San Francisco December 2024
ICPAE Sessions at Europlanet Science Congress. Berlin, Germany
ICCL Conference, Qingdao October 2024
ICCL 9th GEWEX Open Science Conference. Sapporo, Japan
ICCP Conference, Jeju, Republic of Korea July 2024

The 2024 IUGG Grants Programme

IUGG operates a grants programme that provides funding for activities within the Earth and space sciences, such as knowledge creation, dissemination of knowledge, data and information, geoscience for sustainable development, geoscience and policy interface and geoscience education and outreach in developing countries.

Funding is for one or two year periods and the maximum grant for any one activity is \$20,000. The scheme complements IUGG's support for symposia and workshops. Applications are now invited for activities commencing after 1 July 2024 with the deadline for applications to be submitted to IUGG by 1 April 2024. Applications can only be submitted through the associations so if any of the IAMAS commissions would like to submit an application they are invited to contact the IAMAS Secretary-General by 25 March 2024. A further call for applications for the period 2025-2026 will be take place in early 2025 and details will be provided in advance through the IAMAS newsletter. More details of the IUGG grants programme are provided in the latest IUGG newsletter available at <https://iugg.org/wp-content/uploads/2023/12/IUGGGej2401.pdf>.

Introducing Neil Holbrook, Member-at-Large

I am Professor of Ocean and Climate Dynamics in the Institute for Marine and Antarctic Studies at the University of Tasmania, Hobart, Australia. I co-lead the Ocean Extremes research program in the ARC Centre of Excellence for Climate Extremes, in which I am one of the chief investigators. I will also be a chief investigator in the ARC Centre of Excellence for 21st Century Weather, which commences in 2024.

I completed my BSc (Hons) and PhD in physical oceanography at the University of Sydney. My BSc (Hons) included a double-major in applied mathematics and physical oceanography in my base degree, and a research thesis completed in 1989. Following a year working as a Research Assistant, I undertook and completed my PhD in physical oceanography at the University of Sydney in 1994. My PhD thesis focused on understanding the observations and ocean and climate dynamics underpinning ocean temperature variability and change in the upper southwest Pacific Ocean. I was one of Australia's original National Greenhouse Advisory Committee PhD scholars.



After completing my PhD, I worked as a postdoctoral fellow at Macquarie University, Sydney, for just over a year (1995). In 1996, I was appointed Lecturer in Atmospheric Science and was later promoted to Senior Lecturer. In 2008, I moved with my family – my wife and three young boys – to Hobart, Tasmania, to take up an appointment as Associate Professor in Climatology and Climate Change at the University of Tasmania. I have since been promoted to Professor of Ocean and Climate Dynamics.

My current research focuses primarily on understanding ocean and climate extremes and Pacific Ocean climate dynamics. Over the last 10 years, this has involved developing process-based understanding and improved knowledge of the predictability of ocean and climate extremes, in particular marine heatwaves – the ocean analogue of atmospheric heatwaves that can cause devastating impacts on life in the sea. Most recently, I designed and led the first global assessment of the drivers of marine heatwaves. The outcomes of this research set a baseline for future studies of marine heatwave processes and predictability. Since then, I led a follow-up international perspective study advancing the thinking around marine heatwave processes, predictability, and prediction. I also led a study of marine heatwave impacts/projections in the tropical western and central Pacific

Island nations and their communities. I co-lead an international working group on marine heatwaves that has made significant advances in our understanding of marine heatwaves. I am a member of an international CLIVAR Research Focus on Marine Heatwaves in the Global Ocean.

I am an elected Fellow of the Australian Meteorological and Oceanographic Society and I'm an Associate Editor of the Journal of Southern Hemisphere Earth Systems Science. I am past Executive Secretary (2003-2011) and Past President (2011-2019) of the International Commission on Climate of IAMAS. I also previously served as Associate Editor of the Journal of Climate (2006-2008). I led Australia's National Climate Change Adaptation Research Network for Marine Biodiversity and Resources – one of eight National Climate Change Adaptation Research Facility adaptation networks – from 2009-2013. The Network contributed to social-ecological thinking nationally. In my role, I worked to amalgamate Australian marine stakeholder communities in understanding the issues and needs around climate change adaptation – the Network membership of >800 people nationally, included representatives and interested people from government, industry, and the public. During this time, I led stakeholder workshops across marine sectors to assess their needs, stakeholder engagement (with marine conservation, commercial fisheries, aquaculture industries, recreational fishing, and tourism sectors), and inaugurated information bulletins and information sheets, and gave numerous public seminars and lectures. I have been recently recognised as a Clarivate Highly Cited Researcher (2021-2023) and identified on the Reuters list of 1000 most influential climate scientists (2021).

I look forward to contributing to the advancement of IAMAS over the coming years as a Member-at-Large and member of the Executive Committee of the organisation.

Report on the World Climate Research Programme Open Science Conference, Kigali, Rwanda

More than 1,400 delegates participated the World Climate Research Programme 2023 Open Science Conference, which was held in Kigali, Rwanda from October 23 to 27, 2023, representing scientists from diverse research communities worldwide as well as practitioners, planners and politicians, to discuss urgently needed solutions to climate change and the evolution of inclusive international climate science.

This once-in-a-decade event was truly hybrid with around 700 delegates attending onsite at the conference centre and an equal number joining virtually from all around the world. The conference was instrumental in reaching audiences from the Global South: 32% of the delegates were from Africa and 26% from other regions of the Global South. At the same time, the event had a clear eye on the future, attracting many early career scientists.

The WCRP 2023 Open Science Conference was held in Africa in recognition of the disparities in the drivers and consequences of climate change around the world; persistent inequities in the global scientific community that undermines and disadvantages the knowledge contribution from communities in resource-poor nations; and a collective commitment to address both. As with other regions of the Global South, African countries face disproportionate burdens and impact risks arising from climate change-related, severe weather events and patterns, including prolonged droughts, heatwaves, devastating floods and landslides, disastrous tropical cyclones, and wild/forest fires.

There were three themes to the conference: Advances in Climate Research, Human Interactions with Climate and Co-produced Climate Services and Solutions. Each was made up of plenary talks, poster session, short and long presentations and a total of 40 sessions across five parallel sessions. There was also one day dedicated to a symposium for early and mid-career researchers and a session focussed on the African Institute of Mathematical Sciences. The conference output was the Kigali Declaration (available at https://wcrp-osc2023.org/images/KD/Kigali_Declaration_Final_Dec_11_2023.pdf) and Concept Papers published in *Frontiers in Climate*.

The 2025 IAMAS/IACS/IAPSO Scientific Assembly BACO-25

BACO-25 will take place in Busan, South Korea during 20-25 July 2025 (<https://www.baco-25.org/>). The IAMAS commissions have been asked to provide suggests on possible sessions to be held at the conference by 1 March 2024, after which the three associations will start to assemble the programme. It is hoped that the senior officers of the associations can make a site visit in mid-2024 to finalise the programme, liaise with the Local Organising Committee and agree the physical layout and room allocations for the meeting.

Seeking bids to hold the 2029 IAMAS Scientific Assembly

Although 2029 may seem a long way off, the Bureau of IAMAS is starting to think about the organisation of what will be the IAMAS Scientific Assembly to follow the Busan meeting in 2025. The assembly will possibly be held in conjunction with one or more IUGG associations. Large conference centres get booked up years in advance and it's necessary to start the planning of the 2029 assembly early so that a decision on its location can be made in Busan in 2025. Officers of IAMAS and our commissions, along with National Delegates are therefore invited to explore interest in their country in hosting the 2029 assembly and possibly preparing a bid to be presented in Busan. In the first instance it is suggested that anyone interested contact the IAMAS Secretary-General to discuss the preparation of a bid.

Attending COP28

by Dr Sheeba Chenoli, ICPM member

As an academic exploring various aspects of climate change, the Conference of the Parties (COPs) has continuously caught my interest since the outcomes and decisions made at these gatherings have the potential to affect our research significantly. Nevertheless, details of the conference procedures and negotiating processes have frequently been buried in mystery.

Last year, Universiti Malaya (UM) was appointed to the Malaysian Ministry of Natural Resources, Environment, and Climate Change's Advisory Panel in preparation for COP28 in Dubai. Besides offering UM academics an avenue to convey our thoughts directly to the Minister, it also opened up the possibility of our being issued 'party overflow' credentials to attend COP28. The Blue Zone, accessible to UN-accredited participants, hosts formal negotiations, the World Climate Action Summit, the Global Climate Action Hub, pavilions, presidency events, and various side events during the UN climate conferences. Limited to world leaders, representatives, and official observers, it serves as the epicentre for crucial discussions. In contrast, the Green Zone, managed by the COP28

UAE Presidency, is open to all, providing a platform for diverse groups, including youth, civil society, NGOs, the private sector, and indigenous people. It aims to foster dialogue and raise awareness about climate action through inclusive events, such as panel discussions, talks, and presentations aligned with thematic days. As party overflow badge holders, we had access to the actual negotiations. While some of these negotiation sessions were openly publicized, others were not. Therefore, as first-time attendees, we had some difficulty finding rooms where significant negotiations were taking place. Malaysian negotiators, while friendly, were understandably very busy and unable to open up too many doors for us.

At the Malaysia Pavilion, the daily theme and key messages varied depending on the attendance of Malaysian VIPs and general conference attendees. Apart from high-level events such as the launch of the Malaysia Pavilion and investing in Green Growth: Opportunities in Malaysia, there were eight themes, including energy transition, adaptation and resilience, nature, water and biodiversity, cities, and communities. Universiti Malaya was actively involved at the Malaysia Pavilion. One of my colleagues talked about the creative and academic process behind her revolutionary project combining art and science to produce a music show highlighting the importance of protecting Malaysia's seagrass ecosystem. Another colleague was invited to be a panellist in a Harvard University side event on the Challenges and Opportunities of Reducing Global Methane Emissions. I was tasked with organizing a panel on The Role of Open Science in Fostering Collaborative Solutions for a Resilient Future, which involved notable speakers from Malaysia, foreign academicians, and a scientist from the Intergovernmental Panel on Climate Change. We were proud to be involved in supporting the country's mission to secure a just transition for our people. There were various country and organization pavilions, where exhibitors were given space to highlight their key achievements and plans for climate action, either through exhibits or talks. We obtained a wealth of knowledge by exploring the exhibits, attending talks and speaking to exhibitors. We also came across flash mobs, performances, and lively demonstrations. As educators, seeing all this gave us ideas on creatively engaging and communicating with our students about the climate. We met

researchers from all fields, youth activists, indigenous people's representatives, and those from businesses and other civil society groups. We could feel the attendees' passion, united in our quest for a better climate future.

Sometimes, COP outcomes can be underwhelming and riddled with controversy. However, experiencing the process was so valuable for us as educators and researchers. While there may be limited opportunity for non-negotiators to influence the outcomes of COP negotiations directly, our 'track two' involvement at side events, pavilions, and other spaces left us inspired to do more in our field.

Reflecting on COP 28, it became evident that attending a COP is a privilege not available to everyone. However, this is an opportunity not to be missed.

University of Malaya academics, including Sheeba Chenoli (third from the left), pictured with Nik Nazmi Nik Ahmad, the Minister of Natural Resources, Environment & Climate Change



Report of the meeting of the Chinese National IAMAS Committee

The 10th China National Committee of the International Association of Meteorology and Atmospheric Sciences (CNC-IAMAS) successfully held its first meeting in Haikou on January 20, 2024, with the meeting being organized by the Institute of Atmospheric Physics, Chinese Academy of Sciences. More than 70 academicians and expert members, including Zeng Qingcun, Lu Daren, Mu Mu, Zhu Tong, Tan Zheming, Dai Yongjiu, and Yu Rucong, attended the meeting. The main topics of the meeting included the re-election of the CNC-IAMAS committee, preparations for the 2025 IAMAS-IACS-IAPSO Joint Assembly, and discussions on how to enhance the international influence of Chinese scientists and the work plan of the Youth Working Group in 2024.



Group photo of attendees of the first meeting of the 10th CNC-IAMAS committee.

The meeting was chaired by Bian Jianchun, Vice President of CNC-IAMAS, and Dr. Mu Mu, President of CNC-IAMAS, as well as advisory committee members Lu Daren and Zeng Qingcun, who delivered opening speeches. They emphasized the importance of enhancing the international influence and discourse power of Chinese scientists, recognized the significant role of previous CNC-IAMAS committees in establishing the international status of atmospheric science in China, and hoped that the new committee could lead Chinese atmospheric science to play a more important role in resolving international affairs and greatly enhance international discourse power. The Secretary General Wang Lei from Fudan University presented a summary report on the work that took place in 2023. Bi Lei from Zhejiang University, Zhang Yang from Nanjing University, and Li Jing from Peking University also gave detailed introductions on the IRC Forum, ICDM, and the 2024 Youth Working Group plan, respectively.

The meeting continued with a discussion session, during which the participating experts fully recognized the achievements made by CNC-IAMAS in 2023, unanimously expressing support for the work plan of the new committee in 2024, and engaged in in-depth discussions on topics such as the preparation for the IAMAS-IACS-IAPSO Joint Assembly, international organization positions, logo design, and measures to strengthen international exchanges and enhance international influence. A number of practical suggestions were put forward, including recommending more young people to run for the next international committee, organizing more influential international conferences and academic activities, and promoting organized scientific research and interdisciplinary cooperation.

Finally, President Mu Mu made a concluding speech, stating that the meeting had achieved the expected goals and was a complete success. He emphasized that the new committee would devote itself to promoting the development of CNC-IAMAS, increasing the voice and influence of Chinese scientists on the international stage, and contributing Chinese wisdom to solving world's cutting-edge atmospheric science issues. He called for unity among all parties, expanding horizons, and actively embracing emerging disciplines and technologies such as artificial intelligence and their applications in atmospheric science.

Upcoming meetings

2024

Meetings partially supported by IUGG are marked with an asterisk.

Molecular Understanding of Atmospheric Aerosols Workshop and School, Cargèse, Corsica, France, 1-4 April 2024.* (ICACGP)

12th International Workshop on Long-Term Changes and Trends in the Atmosphere, Ourense, Spain, 6-10 May 2024.* (ICMA)

Quadrennial International Radiation Symposium 2024, Hangzhou, China, 17-21 June 2024.* (IRC)

International Atmospheric Rivers Conference 2024, La Jolla, CA, USA, 24-27 June 2024.* (ICPM)

9th GEWEX Open Science Conference (Sapporo, Japan) 7-12 July 2024. (ICCL)

The 19th International Conference on Clouds and Precipitation (ICCP) will be held in Jeju, Republic of Korea during 14 to 19 July 2024. Associated meetings will be cloud chamber and cloud probe workshops before the conference during 13 to 14 July 2024.* Also the International Cloud Modeling Workshop will take place during 8 to 12 July at Yonsei University.* (ICCP)

The next Quadrennial Ozone Assessment organized by the International Ozone Commission will take place in Boulder, Colorado, USA during 15-19 July 2024. The meeting will be held in-person with a hybrid option. Further details of the meeting will be put on the IOC web site (<https://www.io3c.org/>) as they emerge.* (IOC3)

Sessions at Europlanet Science Congress (Berlin, Germany) 9-14 September 2024. (ICPAE)

The 16th International Commission on Atmospheric Chemistry and Global Pollution (iCACGP) Symposium and 18th International Global Atmospheric Chemistry (IGAC) Science Conference (iCACGP-IGAC Conference 2024) is scheduled to take place at the World Trade Centre Kuala Lumpur (WTC KL) in Kuala Lumpur, Malaysia, from 9 to 13 September 2024. More details are available at <https://icacgp-igac2024.com/>. (ICACGP)

9th SOLAS Open Science Conference (Goa, India) 10-14 November 2024. (ICACGP)

2025

The IAMAS/IACS/IAPSO Joint Scientific Assembly BACO-25 (http://baco-25.org/2025/english/main/index_en.asp)
20-25 July 2025 Busan, Republic of Korea.

2027

The 29th IUGG General Assembly. This will be held in Incheon, Republic of Korea in the Boreal summer of 2027. The exact dates will be announced soon.