



THE IFMS NEWSLETTER

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HAPPY NEW YEAR

IFMS' UPDATES

MESSAGE FROM IFMS PRESIDENT: STRENGTHENING GLOBAL WEATHER ENTERPRISE (GWE)

MESSAGE FROM THE SECRETARY GENERAL OF WMO FOR FIRST NEWSLETTER OF IFMS

WORLD BANK WORKSHOP

INVITATION TO ATTEND THE IFMS MEETING 5

PROMOTING GLOBAL WEATHER ENTERPRISE (GWE)

GWE COLLABORATION IMPEDIMENTS AND SOLUTIONS

MEMBERS' UPDATES

TANZANIAN METEOROLOGICAL SOCIETY

UPDATES FROM SOCIETY OF HYDROLOGISTS AND METEOROLOGISTS-NEPAL

INDIAN METEOROLOGICAL SOCIETY (IMS)

ARGENTINA METEOROLOGICAL SOCIETY

THE XVII FLISMET'S CONGRESS OF METEOROLOGICAL SOCIETIES

THE 98TH AMS ANNUAL MEETING AND THE INCREASING ROLE OF METEOROLOGICAL SOCIETIES

PMS ANNUAL CONVENTION

AN AMOS 30TH ANNIVERSARY

EMS ANNUAL MEETING

NEWS ON THE 10TH SYMPOSIUM OF APMG

THE ROYAL METEOROLOGICAL SOCIETY (RMETS)

NEWS FROM THE INTERNATIONAL ASSOCIATION FOR URBAN CLIMATE



Dr. Harinder Ahluwalia

IFMS PRESIDENT'S MESSAGE ON STRENGTHENING GLOBAL WEATHER ENTERPRISE (GWE)

Welcome to the first Issue of the IFMS Newsletter which is meant to act as an information link between the current and would-be membership of IFMS and other interested parties including WMO, WB and HMEI.

IFMS was created in 2010 to foster and encourage communication and exchange of knowledge, ideas and resources among the world's more than sixty meteorological societies. However strong impetus to formalise and strengthen IFMS was generated by the Panel Discussions on "Strengthening the Global Weather Enterprise (GWE)" in the WMO Conference WWOSC-2014 (World Weather Open Science Conference) held in August 2014 in Montreal. After that Conference, CMOS and AMS sponsored IFMS Meeting #4 in New Orleans concurrently with the 96th Annual Conference of AMS in January 2016 where the decision to incorporate and strengthen IFMS was taken. Since then the IFMS has come a long way to become an incorporated entity with a strong value proposition which it is currently implementing.

To strengthen the GWE, it is necessary to involve all three sectors (Public, Private and Academic - PPA) in the dialogue in cooperation with IFMS' other partners WMO, WB and HMEI. We believe that IFMS which consists of the National Hydro-Meteorological Societies (NHMSocs) as well as related societies which in turn have membership from all three PPA sectors is well suited to take a key role in strengthening GWE.

This is possible only with the full cooperation of WMO, WB and HMEI. Therefore, IFMS plans to encourage communication not only between its members and associate members but also with the above three important organizations whose mission is essentially the same - strengthening GWE and creating a Weather Ready Globe.

With the mission of strengthening GWE in mind, on November 28, 2017, the Global Facility for Disaster Reduction and Reconstruction (GFDRR) of the World Bank Group (WBG) hosted a one-day seminar on "Developing International Co-operation in the Global Weather Enterprise". In addition to many senior executives of WB, WMO, HMEI, and PPA Sectors, IFMS was also one of the participants. The idea was to define steps to strengthen PPA collaboration and chalk out the path to achieve that. It is expected that like AMS did many years ago, a Commission called Weather Enterprise Liaison Commission (WELC) will be defined to lead the effort of strengthening GWE. This Committee will have some very experienced and learned people from all three sectors as well as from WMO, WB, HMEI and IFMS. IFMS is considering offering WELC a home to work under the IFMS structure with full cooperation of WMO, WB and HMEI.

In order for IFMS to achieve its full potential, all member societies and associate member societies must have very active participation in its activities. It is only through this participation that we can strengthen IFMS and international cooperation. Once IFMS shows its worth with its actions, it will be respected by our partners WMO, WB and HMEI - especially because we are a volunteer-based non-profit non-bureaucratic organization which can provide considerable assistance to these organizations.

Finally, I would like to wish you a very Happy and Prosperous New Year. May our effort to strengthen GWE get a big boost this year.



Message from the Secretary General of WMO for first Newsletter of IFMS

By Dr. Petteri Taalas, Secretary General, WMO



WMO Secretary-General welcomes the IFMS proposal for closer cooperation with the IFMS. Entities like IFMS provide an important contribution to the international meteorological community with their outreach to all levels of the weather enterprise.

WMO has long lasting partnerships with several national and international learned societies and establishing more formal working arrangements with the IFMS could provide an opportunity for even closer cooperation in the common areas of interest for a mutual benefit and reinforcement.



WORLD BANK WORKSHOP

By Vladimir Tsirkunov,
GFDRR Hydromet Lead, World Bank

2017 has clearly demonstrated the devastating power of weather-related natural disasters, which are now seen as one of the greatest risks facing humanity. It also showed that with high quality forecasts, and well-performing early warning systems that lead to actions, many lives can be saved and potential economic losses reduced. That presents a challenge but also a significant opportunity for the members of the Global Weather Enterprise (GWE) – a coalition of public, private and academic sectors - in which IFMS plays an important role. Together with the WMO, IFMS and other members, the Global Facility for Disaster Reduction and Recovery (GFDRR) is committed to the goals of the GWE to provide reliable and timely weather and climate information to contribute to safety of life and economic development. GFDRR is happy to partner with the IFMS to ensure sustainable and inclusive growth of the GWE.

Also, the GWE report is now published on the GFDRR Website:

<https://www.gfdrr.org/en/publication/report-global-weather-enterprise-seminar>

Dear Members and Friends of IFMS and Would Be Members,

The International Forum of Meteorological Societies (<http://www.ifms.org/ifms/>) and the Hungarian Meteorological Society (<http://www.mettars.hu/>) are delighted to jointly invite you to the Fifth Global meeting (IFMS GM5) of the International Forum of Meteorological Societies on 5th and 6th September 2018 to be held at the Headquarters of OMSZ – Hungarian Meteorological Service in Budapest, Kitaibel Pál utca 1, Hungary. The meeting will be organized in parallel with the European Meteorological Society (EMS) Annual Conference (3-8 September 2018) which will be held in Budapest Hungary. (<http://www.emetsoc.org/>).



INVITATION TO ATTEND THE IFMS MEETING 5 IN BUDAPEST, HUNGARY, SEPTEMBER 5 & 6, 2018



View of Hungarian Parliament, Budapest



OMSZ headquarters in 1911

The meeting will provide an update on the IFMS Progress up to September, 2018 and future direction and plans. It will also discuss implementation of Value Proposition and related matters. In addition, the Annual Meeting of the Society and Election will be held. Member and participating Societies will be able to make short presentations about their activities. A detailed Agenda will be prepared and distributed in the first quarter of 2018. Early Registration will help us in organizing a quality program(<http://www.mettars.hu/ifmsmeeting5/>). Thank you for your kind support.



Harinder Ahluwalia
President – IFMS
On behalf of the IFMS Council



Zoltán Dunkel
President – MMT
On behalf of the MMT

PROMOTING GLOBAL WEATHER ENTERPRISE (GWE)



Dr. Harinder Ahluwalia, President of IFMS

1 Background

It is believed that there is a great amount of scientific development done by Public, Private and Academic (PPA) Sectors as well as a vast amount of meteorological data is collected by various types of users (e.g. National Hydro-Meteorology Services (NHMS), forestry departments, hydrology and power generation people, etc.). However, due to insufficient dialogue and collaboration, the usage of all these available resources is not optimum. The GWE is unable to realize its full potential to deliver society's growing needs and unfair competition between the sectors leads to inefficiencies and in the worst case existential threats for some organizations.

By engagement and partnership, all three sectors of the GWE can grow substantially so that the GWE can more rapidly fulfill the growing societal needs to save lives and property.

It was also the conclusion of the three Panel Discussions in the WMO sponsored WWOSC-2014 Conference in Montreal, Canada that the collaboration between three sectors (PPA) and between various countries is necessary for progress of GWE to create a Weather Ready Globe. In addition, it is also necessary to assist least developed countries and developing countries to have a viable infrastructure for data collection and trained personnel to be able to operate the infrastructure and make best use of its outputs. Readers are referred to the two documents available on the IFMS Website which were created as a summary of the above panel discussions. These documents present the ideas of the leaders of the GWE and inferences drawn from those ideas. These documents are an interesting introduction to this very important mission.

2 Introduction

Protecting society from hydro-meteorological and related hazards is a core element of achieving the World Bank's twin goals of ending extreme poverty and building shared prosperity. Therefore, a part of World Bank Group's (WBG) mission is to build hydro-meteorological capacity (both in terms of infrastructure and education) in developing and least developed countries.

In order to continue the above effort of strengthening GWE, the Global Facility for Disaster Recovery and Reconstruction (GFDRR) of the World Bank Group (WBG) organized a workshop to continue initiation of the stronger collaboration process between PPA sectors. They used the services of Prof. Alan Thorpe, Prof. David Rogers and AMS to organize this event.

3 Reasons for Nov. 28, 2017 GWE-GFDRR Workshop

The following factors show that GWE is undergoing major structural changes:

1. Private sector actors now have the capability to carry out far more than in the past.
2. Public-sector funding sources are under some pressure because of the consequences of the economic crisis over the past decade.
3. The societal need for more accurate and reliable weather information is growing fast as population density increases and climate change is taking place; nowhere is this need more acutely felt than in low and middle-income countries.
4. The science and technology of the GWE is also advancing rapidly providing the opportunity to satisfy societal needs.
5. The GWE has for decades been one of intertwined contributions from the public and private sectors but not in an organized and conscious manner – with some exceptions.
6. Strong collaboration between PPA will help strengthen GWE and hence help in reduction of losses caused by natural disasters.

4 Scope of the GWE-GFDRR Workshop

The scope of this Seminar was to discuss the following issues in an environment where participants could talk freely and real problems (and opportunities) could be brought to the table for discussion and potential resolution. Specific issues that were to be discussed included:

1. What is the optimum investment in the public sector NMHSs particularly in low and middle-income countries?
2. Are there socio-economic advantages if the private sector assumes a greater operational role?
3. What business models of private sector engagement in the sector can be sustainable?
4. How could more clearly defined and agreed roles and responsibilities for the public and private sectors be used to enhance the capacity of the GWE to deliver on the sustainable development goals?
5. Is the GWE utilizing the available innovative technologies effectively?

6. What are the opportunities and potential threats of private sector provision and sharing of global data? The growth of GWE by a factor of ten over the next decade to increase its effectiveness and maximize its benefits to society is envisaged by the organizers of the Workshop. The basis for a “10 x 10” growth (factor of ten in size over the next ten years) arises from a variety of quantitative and qualitative projections of recent growth trends in the GWE and in the avenues enabling the growth as previously listed.

5 Workshop Participants and Methodology

Approximately 80 key individuals participated representing WMO, WB, HMEI, IFMS, AMS, EMS, NHMS's of some advanced countries, international players such as ECMWF; weather service companies such as IBM, WeatherNews, Panasonic, AccuWeather, MeteoGroup; meteorological technology companies such as Harris, Spire, Vaisala, Cray, etc. The event was held at the Marriott Hotel near the World Bank Headquarters.

GFDRR prepared and distributed the scoping documents to participants prior to the meeting to set the tone for the discussion. Most of the meeting was in discussion mode with introductory points being presented by Conveners: William Hooke, Alan Thorpe and David Rogers and attendees getting opportunity to provide comments.

6 Expected Results

The expected Results included, but not limited to:

1. A better understanding of, and potential financing models for access to, private sector data services in support of global NWP;
2. Guidance on future strategic investments of WBG in GWE;
3. Better understanding of how the GWE is linked to SDGs (Sustainable Development Goals) at the national level;
4. A framework for potential investment in global centres to support common global, regional and national public goods;
5. A better understanding of the roles and responsibilities of the public sector and private sector in the delivery of services.

It was expected that a facilitated open dialogue between the main parties would lead to improved working arrangements that will benefit the entire GWE and help increase opportunities for collaboration and cooperation. It was also expected that the participants would agree upon priority activities, which would lead to the development of a more efficient and equitable GWE.

7 Required Follow-up

In order to facilitate future interaction and chart a course to ensure this collaboration becomes a reality, a working group – Weather Enterprise Liaison Commission (WELC) is required which will first define focused issues and problems and then have focused meetings on specific issues and problems. This group should not be larger than 15 persons selected from various sectors of GWE and organizations such as WMO, WB, HMEI and IFMS. Subject to the approval of the IFMS Council and availability of funding from WBG and WMO, IFMS, as a neutral body having members from all three sectors, should be prepared to host WELC.

A follow up meeting was held by WMO which was facilitated by AMS on behalf of IFMS in its Annual Conference in January, 2018. Its summary will be made available shortly by WMO.

Another such meeting is planned by WMO for InterMet Conference in Singapore in April 2018.

The next opportunity after that will be available in September 2018 during the 5th Biannual Meeting of IFMS along with European Meteorological Society's Annual Meeting.

A summary of comments has been prepared by the WBG and is available on the IFMS site.

8 Conclusions

The scientific progress achieved by PPA sectors in the past is impressive but its full impact is not being achieved due to insufficient collaboration between the three sectors. In addition, any current achievements implemented in advanced countries are not reaching the Least Developed and some Developing countries. Better impact can be achieved only by active collaboration between these three sectors as well as between countries. Without this active collaboration in a systematically orchestrated manner, GWE may have detrimental consequences due to competition between the public and private sector instead of the mutual co-operation that would allow growth to take place and for society to benefit from the anticipated growth.

All of these factors suggest that greater engagement between the public and private sectors of the GWE is essential with the shared benefit being the opportunity to enable the GWE to grow substantially over coming decades and for this growth to be managed for the benefit of all contributors and users.

The Agenda of the GFDRR was extensive. However, only second meeting of this type can be considered to be only start of the discussion. In such a short time, just the surface of topics could be touched. Creation of WELC and more focused and detailed meetings will be required to achieve real results.

GWE COLLABORATION IMPEDIMENTS AND SOLUTIONS



Dr. Harinder Ahluwalia, President of IFMS

1 Introduction

Recently, World Meteorological Organization (WMO) and World Bank Group (WBG) have started taking serious interest in promoting collaboration between Public, Private and Academic (PPA) Sectors to strengthen the Global Weather Enterprise (GWE). Various events are taking place to discuss ways to strengthen this collaboration. The purpose of this article is to summarize some of the impediments and solutions with more detailed information presented in the Report "GWE Collaboration Impediments and Solutions" which reader is encouraged to read to understand the points in this summary article.

2 Background

In WWOSC Conference in Montreal, Canada on August 19 and 20, 2014, WMO organized three Panels with the assistance of the Canadian Meteorological and Oceanographic Society (CMOS) and the American Meteorological Society (AMS). The senior people from three sectors came together to form three panels:
Panel 1: Weather Services Infrastructure: Sustaining what we have and building for tomorrow
Panel 2: Weather Services – Present Status, Trends, and Innovations
Panel 3: Enhancing Weather Community Collaboration to Meet Shared Goals for the Weather Enterprise. This event resulted in a Report as an input to the WMOs 2015 Congress and a detailed report which is available on IFMS Website. In addition, decision was taken by member societies to strengthen IFMS to help build a "Weather Ready Globe".

On November 28, 2017, the Global Facility for Disaster Recovery and Reconstruction (GFDRR) of the World Bank Group (WBG) organized a workshop to continue initiation of the stronger collaboration process between PPA sectors. The Report of this event is available on the IFMS Website. The next Interaction was organized by WMO on January 11, 2018 at the AMS Conference in Austin, Texas. More interactions are planned in April, 2018 in InterMet Singapore and September 2018 in Budapest at the IFMS Meeting.

3 Collaboration Issues and Impediments

There are a number of issues which cause impediments in the growth of GWE. The list of some of these issues is outlined below. Summary of each issue along with potential solutions are also provided in the following sections with more details being provided in the Report mentioned in the Introduction.

1. Lack of proper infrastructure in Least Developed Countries (LDC's)
2. Non-Availability of data collected by NHMS to private sector
3. Fragmented Data Collection
4. Existence of Commercial wings of NHMSs.
5. Governments feeling threat from Private Sector
6. Difficulty of coordination of work of three (PPA) sectors
7. Private Sector involvement in Least Developed and Developing Countries
8. Legislative Issues and Attitude of Governments
9. Budget Allocations by National Governments
10. Public Education.

3.1 Lack of proper infrastructure

In many least developed countries (LDCs) there is very little infrastructure and in many developing countries there is deficient infrastructure. For quality weather forecasting, data is required from all parts of the world.

Assistance of WMO and WBG is required and whatever funds are provided to borrowing countries must be strictly monitored to ensure that the results are obtained. In addition, private sector should be encouraged to get involved and their investment must be protected by possibly WBG and WMO.

3.2 Non-Availability of data collected by NHMS to private sector

The NHMS's of most countries do not want to share their collected data because they feel that this data is collected with Tax Payers' money and it cannot be provided free to Private Sector users to make profit.

However, the way we see the reality is that this "un-depletable" goldmine of data if "mined/used" by a large number of users, will produce maximum value for the Society at large which the GWE is supposed to serve. WMO should encourage these countries to share data which can be very beneficial for the society at large.

3.3 Fragmented Data Collection

In a given country systems are installed by various types of users even within the Government e.g. systems are installed by National Hydro-Meteorological Service, Forestry Departments, Provincial Governments, Power Generation companies, etc. But data is not shared. Serious effort is required to create network of networks and to convince all players to share data. Private Sector networks should also be made a part of this network of networks through serious negotiations.

3.4 Existence of Commercial wings of NHMSs.

Some countries have NHMSs which also have commercial counterpart. Therefore, they compete with the Private Sector in those countries creating uneven playing field for the Private Sector (as compared to the countries where NHMSs share data), and hence creating tension between the Public and Private sectors. It is a very difficult issue to resolve because some of these NMHSs have been providing such services and products for a long time. It will require a lot of convincing to achieve any progress.

3.5 Feeling of Threat from Private Sector

Some NMHSs feel adversarial relationship with the Private Sector and feel that a strong Private Sector will be a threat to their existence. Recently, some NHMSs have complained to WMO about some Private companies especially from US providing services to the users in their countries.

This needs to be resolved through discussions and rational thinking keeping the betterment and progress of the GWE in the forefront. The stability provided by NHMS for a given country cannot be jeopardized.

However, the users need service and if it is not being provided by the NMHS, then they should allow these companies to serve clients.

3.6 Difficulty of coordination of work of three (PPA) sectors

First of all, there is a difficulty in getting the three sectors to agree on the rules of this engagement and then how to implement the resulting agreements is, to say the least, is not an easy task.

We have outlined some potential steps to promote collaboration between PPA in Section 4 of this article where the problems and opportunities have been discussed.

Involvement of Academic Sector with NHMSs is happening in many countries, WMO also deals with some Academic Sector. More thought is required on strongly involving Academic Sector with these organizations and especially with the Private Sector.

3.7 Private Sector involvement in LDC & Developing Countries

Some US Private Sector companies have tried to fulfill the needs of certain countries to a small extent but have met resistance from local NHMSs. One attendee in the GFDRR meeting on November 28, 2017 (referred to in the Background section 3) even complained that they were warned that the company could be charged for breaking local law.

The solution will require intervention at the higher Government level and not just NHMS of the country.

A Value Proposition showing the benefits to the country needs to be prepared to show that this kind of assistance from the Private Sector (PS) companies can have a strong impact on their local economy and safety of life.

3.8 Legislative Issues and Attitude of Governments

Certain legislations in most countries were developed to protect their NHMSs rather than for the betterment of the nation and its citizens. By virtue of the new realization that the effects of the Global Warming and its related events and disasters cannot be solved by any single nation or entity out of the PPA ensemble, there is more awareness to promote collaboration between these three sectors. Now that the venerable organizations like WMO, WBG as well as IFMS have taken up the job to develop and implement this collaboration, there is a need to educate not only NHMSs and NHMSocs but also the National Governments about the virtues of this collaboration.

3.9 Budget Allocations by National Governments

The value of accurate local weather information to mitigate avoidable loss of life and damage to property is not understood by most governments. If they did, they would pay more attention to building national capacity to withstand the effects of disasters and minimize their effect in terms of loss of life and property.

We need to prove to various governments the value of this investment in infrastructure and training by comparing it with the loss of life and cost of property caused by these disasters. A standard Value Proposition showing the value of investment in disaster forecasting and management would be very helpful.

3.10 . Public Education

Since politicians are accountable to the public needs, public needs to be educated (made aware) to strongly support the need for improved weather information to politicians so that they make adequate investment in disaster management infrastructure and development of related sciences.

Public Education can only be achieved through interesting and informative programs which need to be sponsored by WMO and WB as promotional activity to educate the public. This can take the form of quality TV Programs and videos proving the value of having the right infrastructure and right education and capacity to manage disasters. NHMSs and NHMSocs should cooperate to produce public education lectures and seminars and organize their presentation in the most effective way.

4 Activities Required for promoting Collaboration

Following are some of the activities required to achieve the proposed mission.

1. Create a WELC (Weather Enterprise Liaison Commission) and find it a home. Subject to the approval of its Council, the IFMS would welcome to have this Commission as a part of its activities as long as its operations are financed by WMO/WBG and any other interested parties.
2. WELC to define its activities in consultation with WMO, WBG, HMEI and IFMS.
3. Execute the activities defined above.

5 Coordination of Aid provided by different Entities

It is observed that in addition to WBG and WMO providing assistance in terms of advice and financing, many National Aid Agencies of advanced nations also invest money in building capacity in developing nations. Even UCAR (University Corporation of Atmospheric Sciences) provides aid to some countries for training, etc.

Many of these activities are not coordinated hence resulting in non-optimal use of investments in some cases. We believe that this issue needs some study and coordination.

IFMS can help in this area. As a minimum, IFMS Website can carry a list of such Programs and ongoing Projects. At least we can provide a summary of such Programs and Projects and link to their website.

6 Conclusions

- 1 The societal need for more accurate and reliable weather information is growing fast as population density increases and climate change is taking place; nowhere is this need more acutely felt than in low- and middle-income countries.
- 2 The GWE consists of Public, Private and Academic (PPA) sectors and all three of them share a common vision to support safety of life and property and to promote economic development everywhere.
- 3 This vision is greatly supported by advancing science and technology (S&T). However, the benefits of significant investment in the advanced economies are not reaching the least developed countries (LDCs) and Small Island Developing States (SIDS) effectively and efficiently.
- 4 While the GWE has been successful in delivering increasing quality weather information that helps save lives and property, its progress faces some impediments which are listed in this document and they need to be studied and resolved.
- 5 It is important to improve collaboration and build trust within GWE. Any lack of clarity in the respective roles and responsibilities of the different actors would contribute to mistrust which could result in destructive competition rather than collaboration, thus adversely affecting GWE.
- 6 The collaboration should be in development of science and infrastructure, their implementation and commercialization.
- 7 Up to now, the action to strengthen GWE has been too slow and it needs to be accelerated. The WWOSC-2014 Conference of WMO, was the first consolidated opportunity to discuss GWE and a Report of the three Panels as well as the transcripts of the speeches were produced. Some of the ideas generated in those panels were included in the WMO Congress in 2015. IFMS was reenergized to strengthen collaboration between meteorological societies and their constituents - PPA Sectors.
- 8 The GWE needs to act much more quickly and the November 28, 2017 Workshop organized by GFDRR of WBG gave a strong boost to the action required on this front. The follow up meetings at AMS Conference in Austin (January 11, 2018) and proposed meetings at InterMET Asia (April 11-12, 2018) in Singapore and IFMS Meeting #5 (September 5-6, 2018) in Budapest Hungary will give further boost to the idea.
- 9 However, it is important to form a WELC as soon as possible to conduct these activities in a more organized manner with well thought out topics of discussion.
- 10 The activities to be carried out by WELC need to be laid out and some of the topics of discussion are outlined in this document.
- 11 In order to remove the impediments on the way of GWEs development, action is required from WMO, WBG, NHMSs and National Governments and even United Nations.
- 12 The WMO committed itself to accelerate its process to develop a resolution for the WMO Congress in 2019 on the better integration and collaboration of the public, private and academic (PPA) sectors that contribute to the GWE. WELC could assist WMO in a major way on this endeavor.
- 13 This activity requires financing which needs to be committed by WMO, WBG and other organizations which are involved in Capacity Building against natural disasters caused by Global Warming.
- 14 In order to make data access and its exchange possible for both public and private sources, review of WMO Resolution 40 is required.
- 15 Strong effort is required for creating collaboration between the Academic and the Private Sectors and increasing collaboration between Public and Academic Sectors.
- 16 As stated in the Summary Report of November 28, 2017 meeting of GFDRR/WBG, Business models (and their risks for different actors) for sustainability of public and private data services as well as consequences of the ownership of data need to be explored and resolved.

MEMBERS' UPDATES (REGION I)

TANZANIAN METEOROLOGICAL SOCIETY

• INTRODUCTION

Tanzanian Meteorological Society (TMS) is a non-profit organization that aims to develop, advance, promote and disseminate the scientific knowledge and profession of meteorology, hydrology and other related fields in all its phases and application in Tanzania. Since early 2016 the Tanzania Meteorological Society's efforts have included sensitizing and recruiting more members, establishment of the TMS Academic Excellency Award, promoting Research and Climate Change Awareness to Secondary school students across the country, and enhancing participation of TMS Members in teaching Meteorology and other related fields in various institutions in the country. Furthermore TMS has started the development of its Five Year Strategic Plan that is expected to be completed early in 2018.



TMS ACADEMIC EXCELLENCE AWARD

Overall best student in B.Sc. Meteorology and winner of TMS Academic Excellence Award in 2016, Mr. Daniel Mwageni (second from left side holding a certificate) posing for a group photo with Members of TMS Executive Board. From left side is the TMS President, Dr. Buruhani Nyenzi; the third from left is the TMS Secretary, Dr. Ladislaus Chang'a and next to him to the right side is the TMS Vice President, Prof. Clavery Tungaraza.

Through the decision of TMS General Meeting held in 2016, the Society established TMS Academic Excellency Award to be awarded to the overall best student in B.Sc. Meteorology, and best student in Research Project at the University of Dar es Salaam (UDSM) as part of a strategy to promote the science of Meteorology in the Country and Region, and encourage and inspire professional excellence among the fresh graduating scientists. The provision of this Award effectively started in 2016, when the Overall best student was given the first ever TMS Academic Excellence Award. However, in 2017, apart from TMS Academic Excellence Award for the Overall Best student, the best student in Research project will also be given an Award consistent with the Decision of TMS General Meeting. November, 2017, TMS presented these Awards, being the second time since its introduction in 2016. Therefore, this year, the Awards were presented to the overall best student in Meteorology and the best student in Research Project. This is a notable achievement to TMS and its members.

• RECRUITMENT OF MEMBERS

As part of its revitalization programme, TMS has continued to recruit more members to the Society and made follow-up on collection of annual membership fees to ensure that members remain alive to the Society. Students and Lecturers from various Universities across the country, including University of Dar es Salaam and University of Dodoma have been sensitized and some have joined TMS.

MEMBERS' UPDATES (REGION I&II)

- RESEARCH AND TEACHING METEOROLOGY AND OTHER RELATED FIELDS



In line with the aim to offer professional advice to individuals, organizations and institutions on meteorological and hydrological matters TMS is proud of its members who have continued to provide academic support at higher learning institutions, such as the University of Dar-es-Salaam, under the arrangement involving the Society, Tanzania Meteorological Agency and the academic institutions. The number of professionals participating in promoting education and training in meteorology and hydrology has continued to grow steadily since TMS embark on the revitalization of these activities. In collaboration with other institutions, TMS Members have participated in giving lectures on relevant fields to students in various Primary and Secondary schools as part of making students understand issues patterning to climate change and its association to meteorology and the other related fields. Members have also continued to work with these institutions in carrying out relevant research work. Some of their work has been presented in meetings and submitted for publication in reputable journals.

- TMS STRATEGIC PLAN

TMS has just embarked on developing its five-year strategic plan as a vehicle to enhance efficiency and effectiveness in its activities geared towards achieving the society's goals and objective. The final draft of the strategy will be submitted for further deliberation and approval at the upcoming TMS General Meeting planned to be held early 2018.

UPDATES FROM SOCIETY OF HYDROLOGISTS AND METEOROLOGISTS-NEPAL (SOHAM-NEPAL)

New Executive Committee

ELECTED (UNCONTESTED) NAME LIST OF 7TH EXECUTIVE COMMITTEE

Chairperson: Mr. Deepak Aryal

Vice Chairperson: Mr. Deepak Paudel

General Secretary: Mr. Bikram Shrestha Zoowa

Secretary: Mr. Binod Parajuli

Treasurer: Mr. Dinkar Kayastha

Members:

Mr. Prakash Regmi

Mr. Ghana Shyam Gautam

Mr. Madhav Prasad Dhakal

Mr. Rajesh Sigdel

Mr. Dhruba Lochan Adhikari

Ms. Manju Basi

NOMINATED MEMBERS

Dr. Dilip Kumar Gautam

Dr. Narayan Prasad Chaulagain

INTERNATIONAL CONFERENCE

Third International Conference on Mountain Hydrology and Meteorology for the Sustainable Development was held on 10-11 April in 2017 in Kathmandu Nepal. The conference was organized by SOHAM-Nepal, and in association with Department of Hydrology and Meteorology (DHM) and Government of Nepal (GoN). (Detail information: <http://soham.org.np/international-conference-2017/>)

MEMBERS' UPDATES (REGION II)

INDIAN METEOROLOGICAL SOCIETY

Indian Meteorological Society (IMS) is a not for profit scientific professional society engaged in the promotion of meteorology and allied sciences and their application for societal benefit. The IMS was started in at National Science Congress Session held in Kolkata in 1957. In last sixty years, the IMS has emerged as a premier scientific society with National Head Quarters at New Delhi and 30 chapters spread across all parts of the country. The society has 3,300 Life members drawn from more than 100 government, academic, and research institutions, industry and civil society. IMS has MoUs with American Meteorological Society (AMS) and Canadian Meteorological Oceanographic Society (CMOS). The IMS works for the advancement of meteorology and allied sciences by organizing International and National Conferences, Regional Workshops and subject specific Seminars. With view to recognize excellence in research the society has instituted a number of Awards and confers Fellowship for outstanding contribution. The IMS promotes public awareness, carries out capacity building and undertakes outreach programmes on issues related to weather and climate. With focus on drawing bright students in the field meteorology, the IMS has started Student membership, opened College/University Chapters and sponsors student participation in workshops/seminars.

The International Tropical Meteorology Symposium (INTROMET-2017) was organized by the Indian Meteorological Society, Ahmedabad Chapter and Space Applications Centre (SAC), Indian Space Research Organization (ISRO) at SAC campus in Ahmedabad. The symposium which lasted for four days from November 7th to 10th, 2017, was inaugurated on 7th November at the New Auditorium of SAC in the august presence of the Chief Guest, Shri A S Kiran Kumar, Chairman, ISRO & Secretary, DOS, Gol and the Guest of Honour, Dr. M Rajeevan, Secretary, MoES, Gol. The inaugural function was attended by many of the distinguished invitees including Dr. K J Ramesh, DG, IMD, AVM Dr. Ajit Tyagi (IMS President), Shri O P N Calla (Director, ICRS), Dr. George Joseph (Ex-Director, SAC) Dr. R. Krishnan (IITM) and Prof. Sulochna Gadgil (Emeritus Prof. IISc). INTROMET-2017 got its international flavor with the participation of about 25 foreign delegates which includes eminent meteorologist Prof. T N Krishnamurti, Dr. Ramesh Kakar (Program Scientist at NASA-HQ), Dr. Mark Bourassa, Dr. Ad Stofflen, Prof. Guosheng Liu, Dr. Upendra N Singh (NASA Technical Fellow), Dr. Z Haddad, Dr. Svetla Hristova Veleva and several other dignitaries. The symposium also attracted a huge gathering of over 500 national delegates including practicing meteorologists, academia, researchers and students, coming from across the country. Members of the industry sponsored and showed keen interests in utilizing the forum to their benefit. Optimism for the deliberations during the four days to bring out the specific observational needs of the meteorological community across the globe which can be translated to the design and development of meaningful satellite payloads for critical applications.



The symposium, based on the theme of “Advances in Space-based Earth Observations and Services for Weather and Climate”, comprised of four plenary sessions with a total of 12 talks by distinguished speakers. An overview of Indian Earth Science Program by Dr. M Rajeevan, Monsoon tele-connection with Arctic Ice Melt by Emeritus Prof. T N Krishnamurti and Shri D R Sikka Memorial Lecture by Prof. Sulochna Gadgil were the attractions of the symposium. A special lecture by Dr. Ramesh R Kakar was delivered on “The NASA Airborne Convective Processes Experiment (CPEX)”.

TROPMET 2018 will be organized by Varanasi Chapter at Banaras Hindu University in the last week of October. The theme of the Symposium is “Understanding Weather and Climate : Research and Application for Society”

MEMBERS' UPDATES (REGION III&IV)

THE XIII ARGENTINE CONFERENCE ON METEOROLOGY (CONGREMET XIII), OCTOBER 2018, ROSARIO CITY, ARGENTINA.

The CONGREMET is organized by the Argentine Meteorological Society (CAM) on a regular basis since 1970, becoming the most relevant scientific event for the field of Meteorology in the country. The CONGREMET gathers researchers and professionals in Meteorology and related sciences from Argentina and other neighboring countries every three years, counting on the participation of international exhibitors and keynote speakers.

In the forthcoming months, due communications will be released to present the theme of the Conference and its thematic areas as well as the conditions for abstract submission. For further information, please contact local CAM's organizers at this e-mail address: congrement@cenamet.org.ar.



THE XVII FLISMET'S CONGRESS OF METEOROLOGICAL SOCIETIES



IX CUBAN CONGRESS OF METEOROLOGY
XVII LATIN AMERICAN AND IBERIAN CONGRESS
OF SOCIETIES OF METEOROLOGY
II SEMINAR – WORKSHOP ON ATMOSPHERIC
POLLUTION
Hotel Tryp Habana Libre, 4th to 8th of December 2017

The Meteorological Society of Cuba (SOMETCUBA), in commemoration of its 25th Anniversary, is pleased to announce the joint meeting of the **IX Cuban Congress of Meteorology**, the **XVII Latin American and Iberian Congress of societies of meteorology**, and the **Workshop on atmospheric pollution**.

These events had been taking place at the Hotel Tryp Habana Libre, in the city of La Habana, from December 4th to 8th, 2017. SOMETCUBA extended their invitation to all researchers, professionals, civil servants, professors, teaching staff, graduate and undergraduate students of Meteorology and related disciplines, as well as those concerned with contingency plans for extreme weather situations. The grand Congress gathering would provide a forum to discuss and exchange views on current multidisciplinary research in the field of Atmospheric Sciences.

The Organizing Committee hoped that the presentations and round tables, panels, symposia, seminars and conferences that would take place during this multidisciplinary grand Congress would provide guidance and information on the various topics of interest, especially for economic policy makers and environmental planners in our society.

More information can be found at <http://www.insmet.cu/sometcuba/default.htm> or by e-mailing the Conference organizers at: sometcuba@insmet.cu.



The 98th AMS Annual Meeting and the increasing role of meteorological societies



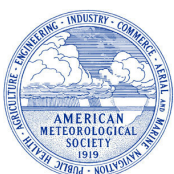
The 98th AMS Annual Meeting took place 7-11 January 2018 in Austin, Texas. The meeting was very successful with over 4200 attendees, over 400 scientific sessions throughout the week, and over 100 organizations represented in a very active exhibit hall. Many sessions dealt with international themes, and the meeting attendees included representatives from four dozen countries. The U.S. National Weather Service organized a meeting of WMO Permanent Representatives for the day after the AMS meeting, but most of the representatives attending that WMO meeting were able to attend all or part of the AMS Annual Meeting.

The meeting kicked off with an outstanding lecture by Prof. Richard Alley, who was named AMS Honorary Member at this meeting. His Presidential Forum talk is available online here: <https://www.youtube.com/watch?v=1LjfwDXmna0&feature=youtu.be&t=1s>.

A highlight of the meeting was the Presidential Town Hall Meeting on the 2017 hurricane season (see <http://blog.ametsoc.org/news/revisiting-the-hurricane-town-hall-meeting/>), which included several moving presentations from those in affected areas. The full presentations are available here:

https://www.youtube.com/channel/UCnY6uUraPb_36luEnHJFaLA

The value that meteorological societies bring to the weather, water, and climate enterprise was evident throughout the meeting. The AMS and other organizations have played an important role in the U.S. to foster effective collaboration among the academic, government, and private sectors for the benefit of society. In a number of sessions throughout the week it was noted that nongovernmental organizations in other countries can play similar roles to reduce tensions and improve public-private partnerships. In these discussions, IFMS was mentioned frequently as a way for international meteorological societies to share experiences and develop mechanisms to foster better public-private-academic collaborations that will ultimately serve the Global Weather Enterprise.



By Keith Seitter,
Executive Director of American Meteorological Society (AMS)

MEMBERS' UPDATES (REGION V)

2018
PMS Annual Convention



*Theme: Recent Advances in Philippine
Weather, Climate & Hydrologic Information*

Rationale

Numerous sources of meteorological information (e.g., satellite, radar, numerical weather / hydrological prediction systems, weather observation networks, etc.) covering different timescales are generated at any point in time. Such information are collected, processed, and presented in the best possible and usable forms. The process of deriving these products is continuously evolving. Thus, it is important to recognize the recent advances that we have achieved in the formulation process, before the resulting information have reached and then properly utilized by the target recipients.

The crucial role of the different meteorological information in several aspects of our society is undeniable. Acknowledging such importance and the benefits of sharing information and technical expertise on how these data are being derived and made useful, the Philippine Meteorological Society, Inc. (PMS), in cooperation with the Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA), organizes this year's convention primarily aiming to showcase the recent advances in weather, climate, and hydrologic information in the country. The convention is expected to be actively participated by more than a hundred of meteorologists, scientists, weather enthusiasts, students, and local media personalities, among other experts who share the common goal of providing better meteorological information aimed for various applications.

Call for Papers

The convention committee invites interested individuals to present their research works related to this year's theme, which may include the following: analyses, derivation, and/or evaluation of meteorological information; advances in meteorological observations; and topics involving utilization and/or application of weather, climate and hydrological information.

Outstanding papers will have a chance to be included in the first volume of the *Proceedings of the Philippine Meteorological Society*.

Guidelines in Preparing Abstracts

- Abstracts should be written in English and should contain no more than 300 words.
- Abstracts should include the principal objectives and scope of the investigation, the methods employed, and the summary of the results/main findings.
- No figures and tables included, as well as no references cited or listed.
- Uncommon acronyms should be spelled out the first time they are used.
- Provide three to five keywords.
- Indicate the preferred presentation format (i.e., Oral or Poster).

Format

- Typewritten in A4 size paper with one-inch margin on all sides.
- Font: Times New Roman
- Title: Centered and bold at 12-pt font size
- Author(s): Centered at 11-pt font size; names written as: full First Name, Middle Initial, and full Family Name; use asterisk to indicate corresponding author
- Affiliations and addresses: (centered at 10-pt font size) use superscripts to indicate affiliations
- Provide contact details of corresponding author
- Abstract body: justified at 11-pt font size
- Submit the file in Microsoft Word (.doc) format

Authors are requested to send their abstracts to pms.convention.secretariat@gmail.com on or before **January 15, 2018**. Poster formatting guidelines will be provided upon acceptance. The convention is scheduled to be held on **March 8-9, 2018**; the venue (within Metro Manila) and registration details are going to be announced later.

MEMBERS' UPDATES (REGION V)



International collaboration at AMOS 30th anniversary: Ellie Highwood (President RMetS), Liz Bentley (CEO RMetS), Governor of Victoria the Hon Linda Dessau AC, Mary Voice (President AMOS), Stephanie Downes (Ed&Outreach Chair, AMOS)

AN AMOS 30TH ANNIVERSARY WITH AN INTERNATIONAL FLAVOR

BY MARY VOICE, AMOS PRESIDENT

A question: how does your Society celebrate your organization, its people and the professions you represent? Over and above, that is, supporting your membership through conferences, education and promoting the sciences. That is something the Australian Meteorological and Oceanographic Society (AMOS) gave consideration to during its 30th anniversary year of 2017.

To celebrate 30 years of AMOS we decided to host a special symposium from 22-23 August 2017, showcasing our sciences and bringing our audience up-to-date on developments across the wide range of our AMOS disciplines. It is not often we get the chance to span our disciplines in that way, since often at regular conferences, we face many parallel sessions and necessarily spend most time in sessions closely relevant to our current field of work.

The symposium was accompanied by a few side events, such as a citizen science data rescue workshop. The international flavor arose from the Royal Meteorological Society (RMetS) joining the celebrations (Ellie Highwood President, Liz Bentley Chief Executive and Brian Golding) since RMetS very much facilitated the establishment of the precursor to AMOS in Australia. And we were also lucky to have international participation from the WMO via David Grimes and Dave Carlson. Their participation added extra perspective and that all-important element of collaboration across boundaries (be they coastal, national, distance-driven or expertise-based).

MEMBERS' UPDATES (REGION V)

The program (weather, oceans, water, climate, with history interludes), worked well, and was generally appreciated by the audience. Showcasing new developments in our sciences to stakeholders was one element of the Symposium and was rated as valuable.

Anyone with an interest in the history of AMOS and its precursor (RMSAB) can find our report at: A Professional Society for Meteorology and Oceanography in Australia: 30th Anniversary Report



**BONUSES FROM
HOSTING AN
INTERNATIONAL
FLAVOURED
ANNIVERSARY**

Q and A at AMOS 30th Anniversary Symposium

1. SPECIAL EDITION OF RMetS WEATHER

One very welcome contribution came from James Galvin, editor of Weather, who compiled a collection of articles (AMOS 30th Anniversary Virtual Issue), free to read for a short time, and accessible at: Anniversary Virtual Issue. Many thanks to James for this interesting collection of articles.

2. EDUCATION AND STUDENTS

David Grimes (WMO President) reminded us that meteorological societies can help young people develop their scientific skills. Students who were able to attend found the Symposium useful from several counts -- presentations, inspiration and meeting speakers. David Grimes posed the challenge to our society in even stronger terms -- if we are thoughtful in our approach to scientific skills development for budding research and operational scientists, we indirectly help young people establish their values, and help to build trust in/respect for science. Surely, this is a challenge worth pursuing further.

MEMBERS' UPDATES (REGION V)

3. NEW HISTORY GROUP

One other outcome has been the establishment of an AMOS History Special Interest Group.

CONCLUSION

Just as we saw with hosting a special event by AMOS, there are likely to be bonuses or spinoffs from establishing IFMS that we do not now anticipate.

AUSTRALIAN METEOROLOGICAL AND OCEANOGRAPHIC SOCIETY

Announcing the Journal of Southern Hemisphere Earth Systems Science (JSHESS)

JSHESS is a journal for meteorology, climate, oceanography, hydrology and space weather focused on the Southern Hemisphere. It is published four times a year by the Australian Bureau of Meteorology in association with the Australian Meteorological and Oceanographic Society (AMOS). It is an open-access peer-reviewed journal with no publication charges. JSHESS solicits high-quality submissions on topics relevant to the Southern Hemisphere Earth system. Further information about the scope of the journal, its Editorial Board, and the submission process can be found on the website: <http://www.bom.gov.au/jshess/>.

Introducing the new AMOS Executive, elected at the AMOS Annual General Meeting on 6 February 2018.

AMOS President: Andrew Marshall (Bureau of Meteorology)

AMOS Vice-President: Angela Maharaj (University of New South Wales)

AMOS Treasurer: Mitchell Black (Bureau of Meteorology)

AMOS Secretary: Sonya Fiddes (University of Melbourne)

The Executive is supported by the AMOS Executive Officer (Jeanette Dargaville), the Immediate Past President (Mary Voice), and the AMOS National Council.

MEMBERS' UPDATES (REGION VI)

EMS ANNUAL MEETING, 3-7 SEPT 2018, BUDAPEST



The 2018 Annual Meeting of the European Meteorological Society – European Conference for Applied Meteorology and Climatology will take place from 3 to 7 September 2018 at the Corvinus University, Budapest, Hungary.

The Venue:

www.ems2018.eu/venue.html

The 2018 conference theme, 'Weather and climate: global change and local hazards' addresses the growing challenges for meteorology: Citizens, decision-makers, indeed all of society require information on the consequences of our changing climate, and especially on weather and climate hazards that seem to occur more frequently, and to have a significant impact on humans, nature and infrastructure. The essential role of meteorology since the start of operations remains unchanged - the provision to society of reliable forecasts and trustworthy warnings. However in this 21st century impact predictions and long-term projections of climate change are also needed to support national strategic decisions aimed at saving lives and reducing the costs of natural hazards.

CALL-FOR-SESSION-PROPOSALS

Everyone is invited to take an active part in organising the scientific programme of the conference by suggesting Sessions and Conveners based on the present Skeleton Programme at:
<http://meetingorganizer.copernicus.org/EMS2018/provisionalprogramme>

This public Call-for-Session-Proposals will be open until 4 January 2018.
From early February 2018 to 13 April 2018, the entire community is then invited to submit Abstracts. For details consult the timeline at <https://www.ems2018.eu>

MEMBERS' UPDATES (REGION VI)

NEWS ON THE 10TH SYMPOSIUM OF APMG – LISBON, 20-22 MARCH 2017

The Portuguese Meteorological and Geophysical Association (APMG) carried out its 10th Symposium, whose main theme was “Risks Associated to Meteorological and Geophysical Phenomena”. The meeting, that has taken place in Lisbon on 20-22 March 2017, included the 18th Portuguese-Spanish Meeting of Meteorology and the celebration of the 20th anniversary of APMG.



Aspect of the opening ceremony

Left to right: Olavo Rasquinha (APMG), Miguel Miranda (IPMA), Fong Soi Kun (SMG-Macao), Alejandro Roa (AME)

The Symposium was attended by more than 100 experts from different institutions, namely the Portuguese Institute for Sea and Atmosphere (IPMA), the Spanish State Agency of Meteorology (AEMET), and Spanish and Portuguese universities and Institutes. Also participated, as invited lecturers, the Chief of the Disaster Risk Reduction Services Division of WMO, Mr. Alasdair Hainsworth, and the Chief of the Earthquake Hazard Research Division of the National Disaster Management Institute (NDMI), Dr. Oh Keumho, who have delivered, respectively, presentations on Multi-Hazard Early Warning Systems and on the South Korea's Policy and Research Direction for Earthquake Hazard Resilience.

The president of the Spanish Association of Meteorology (AME) was represented by Mr. Alejandro Roa, Head of the Area of Prediction Techniques and Applications of AEMET.

The success of this meeting was mainly due to the interest that the theme raised in the community of meteorologists and geophysicists and also to the international collaboration.

MEMBERS' UPDATES (REGION VI)

THE ROYAL METEOROLOGICAL SOCIETY (RMETS)

The Royal Meteorological Society (RMetS) was founded in 1850 and is the UK's Learned and Professional Society for weather and climate. The Society's mission is to promote the understanding and application of meteorology for the benefit of all.

Membership to RMetS is open to anyone with an interest in weather and climate, as a science, profession or interest, or those at the interface with related disciplines. Our membership includes scientists, practitioners, students and weather enthusiasts, with a worldwide membership of 3,300 people from over 50 countries.

The RMetS has just launched its 3-year strategic plan for 2018-2020, which recognises the achievements in recent years and builds on the momentum to create a modern and progressive Professional and Learned Society that makes an important contribution to meteorology.

RMetS is responsible for:

- the stewardship of both the profession and science of meteorology.
- supporting people's understanding, interest and enthusiasm in weather and climate.
- underpinning the development of high-quality science.
- raising the profile of the profession, the importance of professional accreditation in meteorology.
- encouraging the next generation of meteorologists.
- supporting learning in weather and climate through education and outreach activities.
- responding to the future challenges in delivering our programmes of work.
- facilitating collaboration with strategic partners.
- informing policy-makers.
- demonstrating its benefit to the wider community.
- recognising excellence in the community.

To achieve these aims and objectives, the Society conducts a wide programme of activities throughout the year:

Public engagement with weather and climate. This includes the WeatherClub.org.uk (our public outreach website which is free to join), participating in outreach events, climate science communication activities, providing information booklets, running competitions, social media channels and working with the media.

Education and schools programme. RMetS supports the teaching of weather and climate in UK schools by continuously developing new teaching resources, training materials and subject knowledge information which can be accessed via our educational website, called MetLink (www.MetLink.org). The Society also runs an online FutureLearn course in conjunction with the University of Reading called 'Come Rain or Shine', which is a free introduction to weather.

MEMBERS' UPDATES (REGION VI)

Events. The Society hosts around 75 events each year, many of which are run in partnership with other organisations. These include National Meetings, Local Centre Meetings and Special Interest Group Meetings for those who are interested in particular areas of meteorology, as well as three annual conferences for the meteorological community.

Scientific Publishing. Society's publishes seven international journals, three of which are fully open access. The journals can be accessed online via the *RMetSJournals.org* hub and via apps.

Accreditation. The Society runs two accreditation schemes, which are linked to the WMO BIP-M / BIP-MT's science and practice guidelines, and both are competency-based. The aim of both schemes is to maintain and improve professional standards in meteorology: the Registered Meteorologist (RMet) is an accreditation aimed at those who are within the early stages of pursuing a career in meteorology, or working in a role supporting meteorological services. The Chartered Meteorologist (CMet) is the highest professional qualification available in meteorology within the UK, and is well recognised by both employees and employers.

Membership Benefits. There are a number of additional benefits to becoming a member:

- **Funding and bursaries** are available for members to apply for to support research or travel expenses, including a new bursary for carers.
- **Mentoring:** A cross-sector mentoring scheme which was recently launched to support members in their careers.
- **Career support:** Access to the accreditation schemes, an online CPD tool and a jobs board.
- **Remote access** to meetings and access to audio and presentations after the event.
- **Journals:** Members also receive a copy of Weather journal each month and can access all our journals online for just £10 / year.
- **Discounts** on events, books and other reciprocal society membership fees.
- **Awards.** The annual Society awards scheme recognises individual excellence in a number of met-related fields, for which members nominate their peers.

To find out more about joining the RMetS and our programme of activities, visit www.rmets.org

MEMBERS' UPDATES (International)

NEWS FROM THE INTERNATIONAL ASSOCIATION FOR URBAN CLIMATE

*James Voogt, President, International
Association for Urban Climate*

The International Association for Urban Climate (IAUC) congratulates IFMS on their initiation and their inaugural newsletter.

By way of information to IFMS members, the IAUC is a free, member drive organization established in 2000 with over 1000 members representing 100 countries. Our goals are to:

- foster an interest in education and scholarship related to urban climate and meteorology;

- facilitate communication with policy makers and applied end-users of urban meteorological and climatological data;

- encourage the use of urban climate and meteorological information into the design, planning and operation of urban areas in order they may become safer, healthier and more sustainable.

There are two current IAUC events relevant to IFMS members.

First, the IAUC will be holding the **10th International Conference on Urban Climate (ICUC-10)** joint with the American Meteorological Society 14th Symposium on the Urban Environment in New York City, August 6-10, 2018. The conference theme is Sustainable and Resilient Urban Environments, recognizing that accelerated urban development in many parts of the world is challenged by the risks and consequences of extreme weather and climate events in an environment of global socio-economic disparity. Abstract submission is open until December 15, 2017.

<https://www.ametsoc.org/ams/index.cfm/meetings-events/ams-meetings/10th-international-conference-on-urban-climate-14th-symposium-on-the-urban-environment/icuc10-call-for-papers/>

*We welcome all IFMS members with interests related to
urban meteorology to consider attending.*

MEMBERS' UPDATES (International)

Second, the IAUC is currently collaborating with WMO on a **Guide for Integrated Urban Weather, Environment and Climate Services**. This is part of a broader IAUC-WMO agreement of cooperation following from the WMO decision that urban activities should be an integral part of all the priorities of the WMO Strategic Plan for 2016-19, so as to strengthen cross-sectorial climate services in urban areas. The Guide is part of the WMO goal to build services that can meet the special needs of cities through a combination of dense observation networks, high-resolution weather forecasts, multi-hazard early warning systems, and climate services.

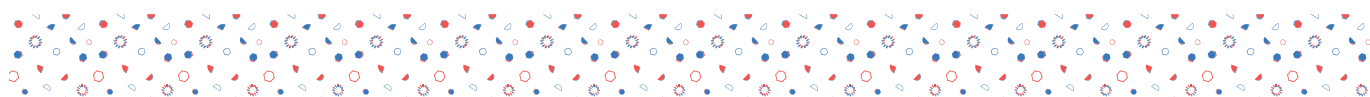


NEWS FROM THE
INTERNATIONAL
ASSOCIATION FOR URBAN
CLIMATE

The Guide will document and share best available practices, knowledge and technologies to allow WMO members to provide relevant services to cities. These services will improve the resilience of urban areas to a range of hazards and help inform long-term urban planning.

The Guide is expected to cover a wide range of themes including urban air quality, weather forecasting in all scales focused on high impact weather, hydrology and hydrological forecasting/information, climate information for urban planning, urban impact to climate, climatological observations in urban environment, integrated systems for information services and evaluation, specific requirements for modeling for urban needs.

Work on the draft Guide is underway. We would be interested to hear from IFMS members who can help inform the guide by identifying value-added services for cities that they may already have developed. The draft is scheduled to be open for community review in March 2018 and finalized by April 2018. Please contact me (*James Voogt*, javoogt@uwo.ca) or Alexander Baklanov (abaklanov@wmo.int) for more information.



EVENT INTRODUCTION

Event Introduction



Asia's dedicated **meteorology and climate** services event

11-12 April 2018 | Suntec, Singapore
www.intermet.asia

MANAGING THE RISKS AND IMPACTS OF EXTREME WEATHER & CLIMATE CHANGE...

2018 marks the 5th anniversary InterMET Asia conference and the focus will be on the technologies supporting extreme weather early warning systems and their application in developing countries.

In addition a full programme of workshops will cover key areas, including 'Building Business Resilience to Extreme Weather', and 'Advances in Flood Forecasting'.

As in past years, the conference features the Special Sessions on Public-Private Engagement held in conjunction with the World Bank and the Global Facility for Disaster Reduction & Recovery (GFDRR). And the day after the conference & exhibition, a 1-day World Bank Workshop will give the inside track in USD500m of NMHS modernisation projects.

To top it all off, delegates have the opportunity to meet the world's leading hydromet technology companies and forecasting service providers at the InterMET Asia International Exhibition and to network at the Official Cocktail reception proudly sponsored by Earth Networks.

What you will get from the 2-day InterMET Conference:

- Understanding of the application and reliability of extreme weather early warning technologies & systems in developing countries.
- Insight into innovative new observing technologies and ICT systems, including the application of 'Big Data'.
- Knowledge of the latest advances in numerical weather prediction-driven or enabled flood forecasting systems.
- Learn how end-users and service providers exchange information (e.g. using crowd sourcing and social media) to improve the delivery of warnings.
- Insight into different approaches to developing, implementing and using impact-based forecast and warnings services.
- Overview of new disaster management tools which optimize the use of flood warnings based in impact forecasts to ensure early response.

Plus an added bonus for InterMET Delegates – Free entry to the new InterFLOOD Asia event!

In 2018, InterMET will be complemented by InterFLOOD Asia. This 2-day conference & international exhibition will focus on innovations in thinking, funding, technology and design of critical infrastructure that is resilient and adaptable to flood events caused by extreme weather and climate change.

MAIN INTERNET ASIA CONFERENCE

Wednesday 11 & Thursday 12 April

The focus will be the technologies supporting the development and implementation of end to end extreme weather early warning systems and their suitability for use in developing countries. Taken together, these presentations would cover the entire end-to-end system from hydromet observations to service delivery and end user feedback.

11 April

SESSION 1: OBSERVING SYSTEMS TECHNOLOGIES

Focus: The latest innovations in key observation technologies, including radar systems and satellite platforms, an examination of how modern integrated meteorological systems support aviation.

SESSION 2: ADVANCES IN WEATHER AND FLOOD FORECASTING SYSTEMS

Focus: Latest developments, including accuracy and reliability, of longer-term weather forecasts with a particular focus on the forecasting of flood events.

SESSION 3: FORECASTER VISUALISATION TOOLS

Focus: Latest developments with the hardware and software systems needed to produce forecasts.

SESSION 4: TOOLS FOR COMMUNICATING EXTREME WEATHER RISK

Focus: Tools for communicating risk and feedback, including mass media, social media, text messaging, crowd sourcing, plus the expanded use of private-public partnerships, such as citizen-based weather observing programs.

12 April

SESSION 5: OVERVIEW OF IMPACT-BASED FORECAST AND WARNING SERVICES

Focus: Presentations from practitioners on the development, implementation and use of impact based forecast and warning services.

SESSION 6: IMPACT-BASED FLOOD FORECASTING AND EARLY RESPONSE

Focus: Optimising the use of warnings based on impact forecasts, and new tools for use by disaster managers.

SESSION 7: IMPLEMENTING IMPACT-BASED FORECAST AND WARNING SERVICES IN DEVELOPING COUNTRIES AND WRAP-UP

Focus: Case studies on progress to date, the experience gained and lessons learned from the introduction of impact-based forecasting services. The Wrap Up will feature a panel discussion considering recommendations for future action.

THE IFMS NEWSLETTER
EVENT INTRODUCTION

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