

Conference Theme:

Serving Society with better Weather and Climate Information.

A key challenge for the meteorological and climatological communities is how best to harness the wealth of data now available – both observational and modelled – to generate and communicate effectively relevant, tailored and timely information ensuring the highest quality support for users' decision-making.

This is relevant for the whole spectrum of users: from specific user groups such as the emergency management agencies, local planners and enterprises that are weather sensitive to individual members of the general public. Realising the value of meteorological and climate information to government, industry and all sectors of society is the focus of this conference.

Some of the prevalent issues to be discussed include the following:

- **Observation data:** How can basic monitoring systems be enhanced through incorporation of data from other sources and the deployment of resilient technological solutions to support real-time collection, analysis, visualisation and dissemination?
- **Instrumentation:** How can the meteorological community engage collaboratively in research and development projects to provide better operational weather and climate services at national and international level?
- **User focus and support tools:** How can users define their information needs, and how can they have access to data and information?
- **Big data:** How can they be harnessed, what can they tell, what are the strategies and platforms to combine them, and what are the challenges for accessing and combining versatile data?
- **Open data:** How free can they be, what are the limitations, who decides?
- **Communication:** How can weather and climate information be communicated better to a variety of end users and sectoral interests?
- **Decision-making under uncertainty:** How can uncertainties be provided in useable formats and their use assured to enable effective decision-making?
- **Weather and climate predictions and projections:** Improving and extending the skill of such predictions and related information to make them more useful and meaningful to the (end) users.

4 – 8 SEPTEMBER 2017
Dublin | Ireland

DEADLINES 2017

Call for abstracts: *early February*

Travel award applications: *14 March*

Abstract submission and waiver applications: *21 April*

Letter of schedule: *1 July*

CONTACT

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Challenging times require new responses: the programme

Atmospheric sciences and their actors are ever more involved with a broad range of authorities, practitioners and decision-makers from various societal and economic sectors (safety on roads, seas and air, climate negotiation, infrastructure protection, public health, energy production predictions, agriculture, etc.) where immediate impacts (from prevailing weather) and long-term climatic changes are becoming mixed.

Furthermore, European organisations and activities such as ECMWF, EUMETSAT, EUMETNET and Copernicus concur further towards this integration of actions, needs and actors. Through the concept of a weather-ready globe, integration will be achieved by enhancing collaboration across the entire weather enterprise (public, private, academic, users and NGOs) to benefit society worldwide.

Facilitating these interactions of scientific fields, applications and actors is a core objective of the EMS Annual Meetings. Therefore, the Programme and Science Committee has developed a new framework for the session programme that highlights the core purposes and challenges of meteorological and climatological research and applications and thus offers better opportunities for cooperation and multidisciplinary.

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The three new programme streams and their interactions:

Operational Systems and Applications (OSA)

Sessions will address our efforts to develop and optimise the end-to-end process of state-of-the-art operational weather, climate and atmospheric composition services. This encompasses a wide range of methodologies, analyses and applications, some operational, that take stock of scientific advances combined with evolving capacities: HPC, GIS, new observations, internet, telecommunications, big data, etc. This entails developing methods for consolidating the wealth of available data into easily interpretable information.

Engagement with Society (ES)

Sessions will address our efforts and challenges in creating stronger links between meteorological and climate activities and the socio-economic environment, providing a platform for users to present their requirements and use of applications. Such links help optimise how forecasts, advice and warnings are effectively communicated to launch appropriate actions, in particular to cope with weather and climate extremes with high impacts. Sessions will also address education and training practices, and ways to communicate scientific advances.

Understanding Weather and Climate Processes (UP)

Sessions will address recent progress and future challenges in observing and understanding atmospheric processes and the climate system. This includes interactions with related subsystems: the hydrosphere, cryosphere, biosphere and pedosphere, and changes and feedback mechanisms within an integrated Earth system approach. The relationship between observables, processes and modelled quantities has to be investigated. Finally, the scientific community must respond to evolving needs of society towards new knowledge.

We invite you to suggest new sessions and conveners.

Please send any proposals to ems-sec@emetsoc.org by 7 January 2017