



Welcome to the
EMS Annual Meeting 2022

EMS Annual Report

2022

EMS e.V.

provided by the EMS Council



*European
Meteorological
Society*

EMS Annual Report 2022

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The EMS Council is submitting this Annual Report 2022 to the EMS General Assembly 25.

EMS General Assembly - Rules of Procedure, Rule 61

“Council, and any other bodies established by the General Assembly, shall submit annual reports, including adequate financial reports, to the General Assembly.”

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Message by the President

The mission of EMS is to promote the advancement of the science, profession and application of meteorology and related sciences for the benefit of the whole population within Europe. In 2021 the EMS adopted a new strategic plan to pave out the way for further development of the EMS in the next four years. The plan is based on a set of four strategic objectives, that will contribute to realising the aim of the EMS whilst building upon past achievements. High priority will be given to (a) ensure that there remains a sustainable concept for the Annual Meeting, (b) enhance communication and collaboration with the EMS membership, and (c) make sure that the EMS has a robust infrastructure and its activities embrace the diversity within the meteorological community. The Annual Report of this year is structured following the four main objectives, highlighting the achievements during the year 2022.

In 2022 the EMS was delighted to organise the Annual Meeting as an in-person meeting again, and the meeting in Bonn was very well organised by the local hosts with the help by many volunteers in our society. The theme of the meeting on “Connecting communities to deliver seamless weather and climate science and services” was well received and attracted also the attention of various German media. As president of EMS I gave a short interview on the main newscast of the German television company ARD on the urgent actions needed to combat climate change and the increasing relevance of extreme weather forecasting. It is also nice to see that the participation of the annual meeting is back to the values of pre-covid times and that the new hybrid format worked well overall.

This will be my last year in office as the EMS President, and though I had imagined a quite different development which was overhauled by the pandemic. I have enjoyed immensely to serve the meteorological community and I appreciated the many interactions I had with a variety of persons. As part of the new strategy, much of my efforts was put into the set-up of a new Journal of the European Meteorological Society (JEMS). I hope that JEMS will be fully established in 2024 when we celebrate the 25th anniversary of the EMS.

The success of the EMS depends upon the activities of its various committees and its Council. The EMS is very fortunate in having a highly-effective Secretariat under leadership of Martina Junge. I thank her and all other involved persons for all they have done to ensure that EMS is successful. Finally, I wish my successor Liz Bentley all the best as the new President of EMS after she takes over in September 2023.

Bert Holtslag
EMS President

01 Strengthening, developing and promoting the discipline and its community

There is a forward-looking, responsive and cooperative European meteorological community that includes professionals from the academic, public and private sectors.

1. Develop and introduce a new sustainable concept (hybrid on-site/on-line) for the Annual Meeting that ensures safe physical presence as well as remote participation, but provides opportunities for exchange and interactions.
2. Strengthen the attractiveness of the Annual Meeting by (a) having more state-of-the-art reviews, cross-disciplinary sessions, high-quality papers and discussions on a variety of topics and (b) identifying emerging scientific developments and societal needs in order to organise related forums for foresight debates.
3. Organising open debates on major issues connecting the discipline with the needs of society
4. Highlighting achievements, challenges and outlooks of the discipline through high-level state-of-the-art reviews and strategic papers at the Annual Meeting.

EMS Annual Meeting 2022

One of the utmost priorities is to develop a new sustainable concept for the Annual Meeting that ensures safe physical presence as well as remote participation, and further strengthen the attractiveness of these meetings. The EMS2022, held 4 – 9 September 2022 at the University of Bonn in Germany, was the first one organised as a fully hybrid event. The EMS2022 theme: “Connecting communities to deliver seamless weather and climate science and services” was very timely, and nicely underlined the objective of all EMS meetings to provide opportunities for exchange and interactions.

The EMS2022 was attended by 815 participants from 48 countries: 671 onsite in Bonn and 144 online from across the globe (country statistic available from ems2022.eu/home.html). With this high attendance, the numbers were almost back to the pre-pandemic level, though now encompassing attendees present onsite as well as connecting virtually from around the world.

The conference did encompass 45 sessions in the three programme streams “Engagement with Society” (ES), “Operational Systems and Applications” (OSA) and “Understanding Weather & Climate Processes” (UP); some 650 presentations were given at the meeting, about 80% as talks and 20% as posters. The programme ran with five parallel sessions from Monday afternoon to Friday lunchtime.

Hybrid format The hybrid organisation in particular of the oral sessions worked relatively smoothly, the switch between presenters onsite and authors presenting remotely was no more time consuming than the switches between presenters onsite. It enabled a considerable number of scientists to participate and contribute to the meeting, which would not have been possible without the online options provided. This is seen as a workable format with the potential for

further development for future meetings. What needs to be improved on is the way the discussion in a hybrid session is moderated: often the online questions were not considered with the same priority as onsite interventions, and also the online audience appeared less active than those in the room.

The **poster sessions** were a challenge, and as many other organisations have also found, a hybrid setting for the author-in-attendance is currently not developed sufficiently well. While some organisations opt for poster sessions that are purely online, for onsite and online participants, so everyone is on the same platform and interacting, others have simply decided not to offer any online platform for posters, at least not with an interactive component, and poster sessions are then onsite only networking events. The first option to hold the poster session on gather.town for all posters was not popular with the EMS2022 PSC, but the route eventually chosen, onsite and online poster sessions at the same time, did work to the disadvantage of those presenting their poster online.

Cross-disciplinary discussions and keynote presentations: “Connecting communities to deliver seamless weather and climates science and services” - The additional focus of this EMS Annual Meeting 2022 addressed the needs, challenges and benefits of seamless inter- and transdisciplinary interactions within and between communities’ respective objectives, methodologies and partnerships. As a kick-off to the week’s theme, an opening discussion took place with the ultimate objective to lead to general and concrete recommendations towards communities associated with meteorology and climatology – for improving its growing role in society. High-level speakers from different communities related to weather and climate presented introductory views and inspirations that were debated, illustrated and challenged during the ensuing discussion, focussing on challenges and strategic visions for “connecting communities” towards future seamless actions and research in Europe.

All speakers emphasized the importance of working together and co-designing products together with users to get maximum benefits (e.g., for satellite infrastructure). Overall, the recommendation throughout is to put less emphasis on communication of scientific achievements, but to focus more on the impacts of research on society and improving public-private partnerships: "The whole is greater than the sum of its parts".

The recording of the discussion together with presentations by the panellists is available from <https://meetingorganizer.copernicus.org/EMS2022/session/44534> ; more information on the panellists can be found at <https://www.emetsoc.org/ems2022-plenary-speakers/>

Keynote presentations have been introduced to provide overview and/or state-of-art presentation that are of general interest and designed for a broad audience from the community that attends the Annual Meetings. These keynotes are scheduled as plenary events, following the good experience during the virtual conferences, they were scheduled in the afternoons as the last event of the day. One keynote was scheduled for each of the three programme streams:

This year the ES Keynote was given by Insa Thiele-Eich from the University of Bonn with [Science Communication – experiences with societal and community outreach](#) ; the OSA Keynote on [The Copernicus climate change service: current status and future perspectives](#) was presented by the Director of the Copernicus Climate Change Services at ECMWF, Carlo Buontempo; and the UP Keynote on [FESSTVal: connecting dense surface networks, supersites and citizen to catch atmospheric variability at kilo- and subkilometer scales](#) was delivered by Cathy Hohenegger, MPI Hamburg.

Workshops As before the pandemic, various organisations offered workshops as side meetings to the conference: the local hosts from the University of Bonn held a half-day workshop *Looking at clouds* on how to measure or classify the variability of clouds.

EUMETSAT and ECMWF offered a journey during which the monitoring and forecasting of recent intense wildfires or recent intense dust storms were demonstrated with remote sensing data and Copernicus services products. The demo did address key steps including access, discovery, data handling, visualization and animation of satellite and model-based data.

The atmosphere at the onsite meeting in Bonn was overwhelming: people were relaxed and enjoyed the possibility to meet again in person. The venue was friendly; guidelines for convenors and participants and, especially the technical support, made the hybrid sessions very smooth. Training sessions for convenors, followed by small receptions were a positive addition to the conference, that also helped the avoidance of technical hiccups during the sessions.

In summary, huge steps to the success of the primary objective to develop and introduce a new sustainable concept for hybrid Annual Meetings have already been made.

Future Meetings are planned

EMS Annual Meeting 2023: The University of Economics in Bratislava, Slovakia, 3 – 8 September 2023.

EMS Annual Meeting 2024: The Historical University of Barcelona, Spain, 2 – 6 September 2024.

For 2025, the option to convene in Croatia is under consideration.

Providing opportunities for early career scientists

Ways to increase involvement of early-career scientists and students (ECS) in the Annual Meeting were initiated and developed over the last five years, for example through career cafes at EMS2019, but had become challenging due to the Corona pandemic.

ECS Networking Icebreaker: MeteoXchange Opportunities for ECS to meet new people at live conferences had diminished over the previous years, and the EMS2022 in Bonn was for many of them the first large physical event they attended. Thus, the focus was on providing opportunities to meet and exchange experience. In collaboration with the MeteoXchange project all early career scientists were invited to a networking lunch.

The EMS traditionally has a large percentage of young researchers (one third tend to be in the process of their PhD study) and thus the Annual Meeting was a great opportunity to present their work to a larger audience; and go away with new ideas for their future work and new contacts for collaboration.

Since 2020, the Committee on Meetings also has a dedicated member from the ECS community, to ensure the interests of ECSs are paid attention to when developing the programme and the events at the Annual Meeting. In 2022, the ECS member on CoM represented the EMS at the AMS Annual Meeting: in a Townhall session the process of building an ECS network in Europe was highlighted and subsequently discussed with the AMS board for early career professionals how the network could expand, with a global perspective. A recording of the townhall meeting is available from the AMS website at

<https://ams.confex.com/ams/102ANNUAL/meetingapp.cgi/Session/61127>

Travel grants: Young Scientist Conference Awards to facilitate the attendance of this/other events The majority of awards given by the EMS is focussed on travel grants for early career scientists, to facilitate their attendance at the EMS Annual Meetings and other topical international conferences in relevant fields.

At the EMS Annual Meeting 2022 in Bonn four young scientists were selected and they all presented their work during the conference: these were

- Amandine Kaiser (University of Oslo, Norway): *Sensitivity of the Nocturnal and Polar Boundary Layer to Transient Phenomena*,
- Ivan Vujec (Meteorological Research and Development Division, Croatian Meteorological and Hydrological Service, Zagreb, Croatia): *Kalman Filter Post-Processing of the Wind Speed and Gusts NWP and Analog-Based Forecasts: Performing Sensitivity Tests*
- Alice Portal (University of Milano-Bicocca, Department of Earth and Environmental Sciences, Milan, Italy & LMD/IPSL, France): *How is the extratropical circulation affected by reduced Atlantic and Pacific land-sea thermal contrast?*
- Johannes Mikkola (Institute for Atmospheric and Earth System Research, University of Helsinki, Finland): *Along-valley winds in the Himalayas as simulated by the WRF-model*.

All four provided a report on their experience at EMS2022: details are accessible at

<https://www.emetsoc.org/awards/award-category/young-scientist-conference-awards/>

Awards

The EMS awards programme is developed to promote and strengthen all the key building blocks of the discipline from science and technologies to communication as well as for all experience levels (from early-career scientists to the most emeritus ones).

The objective on the one hand is to honour outstanding achievements of meteorologists and at the same time communicate the relevance and importance of the research and applications to a wider public. In particular those awards given to young scientists support developments to increase involvement of early-career scientists and students in community meetings.

The **EMS Silver Medal 2022** was awarded to Elena Mateescu, a researcher with a world leading expertise in the field of agrometeorology. This award recognizes her lifelong scientific contribution to the field of agrometeorology, her outstanding services to the European meteorological community, as well as her leading and coordinating research at national and European levels. Her most important contributions include assessing the impact of current and predictable climate change on agricultural production, based on specific methods and techniques of climate analysis and weather-harvest relationship modelling, and identifying new agricultural technologies adapted to climate change. <https://www.emetsoc.org/ems-silver-medal-2022-for-elena-mateescu/>

[The Weather Observation Website \(WOW\) Project](#) was highlighted as the recipient of the **EMS Technology Achievement Award 2022** for the open accessibility of near real time weather observations and photographs. These data assist forecasters in providing more accurate and timely warning systems and enable first responders to prepare for extreme events in good time – thereby lessening the impacts on lives and property. It also stimulates the public to take part in weather and climate science because of its open data policy. It has the potential to increase the general interest in and knowledge about weather factors and how forecasts and warnings are issued. Not just by welcoming private weather station observations, but also through WOW for Schools as an important contribution to spread knowledge. It is really “citizen science”.

The **Outstanding Poster Award** has been established in 2009, to highlight good quality posters presented at the EMS Annual Meetings. As the goal of this poster award is to foster the clear communication of scientific content also to non-specialists of the presented topic, the emphasis of the evaluation is put on the attractiveness of the graphical representation and on the clarity of the text.

[Impact-based warning information for ice-throw risk: A Norwegian survey](https://www.emetsoc.org/2022-poster-award-impact-based-warning-information-for-ice-throw-risk/), the work by Jelmer Jeuring and Anders Sivle from the Norwegian Meteorological Institute, was selected for the 2022 poster award; it presents outcomes from a survey into perceptions of the general public in Norway about ice-throw risk, perceived value of different communication tools and formats of ice-throw risk information for Norwegian wind farms: a systematic set of recommendations regarding communication and formatting of ice-throw risk warning information.

Citation "... The committee felt that in engaging with the user community to improve weather warning services and presenting a case of a specific, and dangerous, yet not well-known societal weather hazard in a clear and visually appealing way, this poster reflected the conference theme of 'Connecting Communities to Deliver Seamless Weather and Climate Science and Services' extremely well."

<https://www.emetsoc.org/2022-poster-award-impact-based-warning-information-for-ice-throw-risk/>

Biometeorology

With the **EMS Tromp Award for an outstanding achievement in biometeorology 2022**, Branislava Lalić, a Professor at the Faculty of Agriculture in Novi Sad, Serbia, was awarded for the publication: "*Identifying Crop and Orchard Growing Stages Using Conventional Temperature and Humidity Reports*", Proceedings of the Atmosphere 2022, 13, 700. Find more details at <https://www.emetsoc.org/branislava-lalic-wins-ems-tromp-award2022/>. In her research, she investigates modelling of forest-atmosphere interaction, land-atmosphere processes, boundary layer meteorology, agrometeorological modelling, predicting the occurrence of plant diseases in agriculture, biometeorological modelling and crop modelling.

Also, in collaboration with the Tromp Foundation, six **Tromp foundation travel awards to young scientists (TFTAYS)** are given to support scientists who present papers in the area of biometeorology at the EMS Annual Meetings. In 2022 the following recipients were supported:

- Andrea Novaro (Department of Earth Sciences, University of Turin, Italy): *The association between precipitation and the spread of shiga toxin-producing Escherichia coli infection in Lombardy, North of Italy*;
- Marcel Gangwisch (Research Centre Human Biometeorology, DWD, Germany): *Specific and localized heat warning system built upon normalized analysis of the UHI for the city of Karlsruhe*;
- Branimir Omazić (University of Zagreb, Faculty of Science, Department of Geophysics, Zagreb, Croatia): *Future change in viticulture phenological stages and early frost risk in Istria region*;
- Joanna Raymond (University of East Anglia, Norwich, UK): *Weatherproofing for a smarter, resilient and more sustainable agrisector*;
- Matej Žgela (Department of Geophysics, Faculty of Science, University of Zagreb, Croatia): *Comparison of land surface temperature of local climate zones in Croatia and estimation of the vulnerable population heat risk*; and
- Arianna Valmassoi (University of Bonn, Germany): *Investigating the drivers for crop yield changes during heatwaves and droughts*.

There is also a wide range of **Media Awards** that highlight best practice examples on making meteorological intelligence accessible for all parts of society (section 3).

ASR – Conference proceedings of the EMS

The EMS is providing the journal Advances in Science and Research (ASR) : <https://www.advances-in-science-and-research.net/> as platform for disseminating scientific advances and developments in managing meteorological intelligence. ASR publishes original contributions on (a) advances in understanding weather and climate processes and (b) the development of operational systems and applications of meteorology, climatology, and related disciplines. This also includes new challenges and the role of communication, education and training, and engagement with society for the profession and its practices. ASR is an open-access journal for contributions presented at the Annual Meetings of the EMS and other related events. Submissions to ASR undergo a peer-review and convenors of sessions at the EMS Annual Meetings volunteer to be guest editors for their specific topics. Articles published in ASR are included in major data bases, including the Conference Proceeding Citation Index (CPCI) which is part of the Web of Science™ Core Collection, and SCOPUS. 16 volumes have been published so far, covering contributions from EMS Annual Meetings since 2006: <https://asr.copernicus.org/articles/volumes.html>

Volume 19 issued in 2022 contains 15 contributions from the EMS Annual Meeting 2021: <https://asr.copernicus.org/articles/19/index.html>

02 Providing added-value to and with the EMS membership

The activities of Member Societies and Associate Members are promoted and supported to maximize the benefits and outreach of those activities.

Role of the EMS: To inform the EMS membership and the wider meteorological community about actions and developments that (a) might have an impact on their own activities, (b) are useful learning experiences that can be applied to their own activities or (c) help create ideas for collaborative or enhanced activities.

One of the major aims which the Meteorological Societies in Europe had in mind when creating the EMS as a Europe-wide organisation was to establish structures and channels facilitating mutual communication and sharing experiences. Providing information about the endeavours of EMS Members, sharing examples of good practice, and fostering collaboration between the Members and Associate Members are objectives the EMS tries to implement with its channels of communication: the website [emetsoc.org](https://www.emetsoc.org), the electronic newsletter “ems-message” and social media channels. Discussions at the General Assembly also play an important role in the exchange of information.

WMD2022 video by EMS Members, webinars

At the opportunity of the World Meteorological Day (WMD2022), EMS Members provided videos about their activities related to the WMD2022 theme “Early Warning and Early Action – Hydrometeorological and Climate Information for Disaster Risk Reduction”, and beyond. To highlight EMS Member activities, the EMS Media and Communication Committee compiled a video from these contributions and published it on 23 March 2022, the World Meteorological Day on the EMS Channels. Contributions for the event were provided by the following EMS Member organisations:

- Meteorological Service of Catalonia
- Royal Meteorological Society
- AISAM Italian Association of Atmospheric Sciences and Meteorology
- Irish Meteorological Society
- EUMETNET – Meteoalarm
- Slovenian Meteorological Society

<https://www.emetsoc.org/worldmetday-activities-of-ems-members/>

The video at the occasion of WMD2023 is available at <https://www.emetsoc.org/2023-worldmetday-activities-of-ems-members/>

General Assembly & Council

The **General Assembly** is THE main body of the Society; it is composed of representatives of the Member Societies and convenes at least once a year, decides on constitutional and financial matters of the Society, hears the report of the Council and the statement of the Society's auditor. The General Assembly also elects rotating members to the EMS Council. Ten Members constitute a quorum. All Associate Members are eligible to attend the General Assembly as observer.

The General Assembly in September 2022 was the first one to take place as an in-person meeting after three years of virtual get-togethers. The session was held in Bonn on the eve of the EMS2022 at the University campus and provided good opportunities to exchange experience.

A vivid discussion on the implementation of the EMS Strategic Plan 2021 – 2024 noted the considerable progress that was made and pointed out the next steps:

- Prioritize the launch of a Journal of the EMS;
- The substantial progress made should be better communicated to the public/the membership;
- Further prioritising is advisable.

An important item for the 25th General Assembly in 2023 will be to consider ways for EMS to make its operations net zero, and in particular the Annual Meeting.

Council: The General Assembly elected two new Societies to the EMS Council for the three years:

- [Joanna Wibig](#), representing Polskie Towarzystwo Geofizyczne – Meteorological Section.
- [Ernesto Rodriguez-Camino](#) of Asociación Meteorológica Española, representing the Spanish Member Societies.

More information on the EMS Council & General Assembly session 2022 are available at <https://www.emetsoc.org/ems-council-and-general-assembly-2022/>

Member organisations

By the end of 2022 the EMS had **39 Member Societies**. In addition, there were **28 Associate Members**: National Meteorological and Hydrological Services, Service Providers, Manufacturers, Education and Research Institutions, and International Organisations. Each of these groups can delegate one observer to Council Sessions to represent their specific views on any issue and advise the Council. Two international organisations, ECMWF and EUMETSAT, have permanent observer status at the Council.

Members who left the EMS Two Associate Members left the organisation: MODEM and MeteoLab LLC, both from the manufacturers group, cancelled their EMS membership.

Membership 2022 in numbers

Member Societies: 39

- Number of individuals represented: 9,778 (2021: 9,746 | 2020: 9,975 | 2019: 9,733 | 2018: 10,301)

Associate Members: 28

- National Meteorological and Hydrological Services: 18
- Private Service Providers: 4
- Manufacturers: 3
- Education and Research Institutions: 1
- International Organisations: 2

EMS Member Societies 2022

Andorra

Asociació de Meteorologia i Ciències del Atmosferad Andorra

Austria

Österreichische Gesellschaft für Meteorologie

Belgium

Société Royale Belge d'Astronomie, de Météorologie et de Physique du Globe

Bosnia and Herzegovina

Udruženje meteorologa u Bosni i Hercegovini

Bulgaria

Aviometeorological Club of Bulgaria
Bulgarian Meteorological Society

Croatia

Hrvatsko Meteorolosko Društvo

Cyprus

Cyprus Meteorological Association

Czech Republic

Česká Meteorologická Společnost

Denmark

Dansk Meteorologisk Selskab

Estonia

Estonian Meteorological Society

Finland

Geofysikkojen Liitto
Geofysiikan Seura

France

Météo et Climat - Société Météorologique de France

Germany

Deutsche Meteorologische Gesellschaft

Greece

Elliniki Meteorologiki Etaireia

Hungary

Magyar Meteorológiai Társaság

Iceland

Veðurfræðifélagið

Israel

Israel Meteorological Society

Ireland

Irish Meteorological Society

EMS Member Societies 2022

Italy

Società Meteorologica Italiana
Associazione Italiana di AgroMeteorologia
Associazione Italianadi Scienze dell' Atmosfera e Meteorologica
Alpine-Adriatic Meteorological Society

The Netherlands

Nederlandse Vereniging ter Bevordering van de Meteorologie

North Macedonia

Zdruzenie naVozduhoplovni Meteorolozi –Meteo

Norway

Forskerforbundets Meteorologiforening

Poland

Polskie Towarzystwo Geofizyczne- Meteorological Section

Portugal

Associação Portuguesa de Meteorologia e Geofisica

Romania

Societatea Meteorologica Romana
Asociația Română de Meteorologie Aplicată și Educațiedea

Serbia

Meteorolosko Društvo Srbije

Slovakia

Slovenská Meteorologická Spoločnosť

Slovenia

Slovensko Meteorološko Društvo

Spain

Asociación MeteorologicaEspañola
Associació Catalanade Meteorologia

Sweden

Svenska Meteorologiska Sällskapet

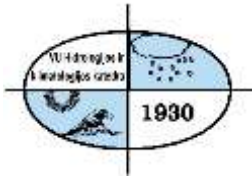
Switzerland

Schweizerische Gesellschaft für Meteorologie

United Kingdom

Royal Meteorological Society

Associate Members 2022



Website & social media

The most important tool of communication between the EMS and its Members is the EMS website: <https://www.emetsoc.org>. It provides information about the activities of the EMS, its Members and other initiatives and events of interest to the wider meteorological community:

- Information on each Member and Associate Member including links to reports about their most recent initiatives and activities.
- Many resources and links, plus announcements of awards and job opportunities.
- Additional topical information about the activities of the EMS, job announcements, upcoming conferences, and announcements and closing dates related to EMS awards are provided.

The EMS also posts information on current activities, the Annual Meeting, calls for award submissions, or videos on:

- Twitter: <https://twitter.com/EuropeanMetSoc>
- LinkedIn: <https://www.linkedin.com/company/european-meteorological-society>
- YouTube: <https://www.youtube.com/channel/UC5Ecbudpe7G8O-jpBcKe9fA/videos>

ems-message

The ems-message is an e-mail-based newsletter highlighting the latest news items published on www.emetsoc.org, informing the wider EMS membership and community about achievements, activities and events of Member societies and Associate Members, upcoming events of partner organisations, call for award nominations and applications, and also highlighting selected winners of awards. The editorial team of the ems-message, currently mainly consisting of the EMS secretariat, relies to a large extent on the input provided from the EMS Membership.

Four issues of the ems-message were published in 2022, with 4 to 8 articles in each edition.

- Edition April 2022 <https://www.emetsoc.org/?na=view&id=40>
- Edition May 2022 <https://www.emetsoc.org/?na=view&id=41>
- Edition August 2022 <https://www.emetsoc.org/?na=view&id=42>
- Edition October 2022 <https://www.emetsoc.org/?na=view&id=43>

Journal of the EMS

In 2022, the EMS made large steps to explore the feasibility of a newly set-up Journal of the European Meteorological Society (JEMS) with the intended scope to cover popular summaries of recent relevant articles and news items that reaches all the EMS Membership and national society members, and informs the European meteorological community as a whole about new developments (e.g. new field campaigns, satellite missions, technological developments, and tools for use in operations) with a focus on Europe. A working group to further define the scope and reach of the Journal and to start negotiations with potential publishers was established. From the outset, a main concern was that the new journal should be clearly distinct from any of the successful journals that are published by any of the EMS Member Societies.

Europhotometeo

The Spanish Meteorological Society AME has been running photo competitions for many years, and, at some point, suggested that the EMS would set up a competition as well, that should reach beyond national boundaries as a European project. The AME was involved from the start to

launch this project and supported this activity strongly through person power and engagement, promoting the EPM to their wider community. In 2009 the European photo competition on meteorological phenomena – Europhotometeo (EPM) was established and is now running with a biennial cycle. The competition is managed by an organising committee chaired by the coordinator Fernando Bullón (AME). Individuals from across the EMS Membership are involved in the various selection stages, and eventually the winning entries are determined by the votes of a jury consisting of the Presidents of all [EMS Member Societies](#) and the members of the [EMS Council](#). For the full details see the [Terms & conditions 2022](#).

Europhotometeo 2022: Browse the [EPM2022 Photo Gallery](#) for all photos that were selected for display, and find out about all the winners at <https://www.emetsoc.org/awards/award-category/europhotometeo/>

03 Optimising the use of meteorological intelligence in society

Meteorological intelligence is information measured, gathered, compiled, exploited, analysed and disseminated by meteorologists, climatologists and hydrologists to characterize the current state and/or predict the future state of the atmosphere at a given location and time. Meteorological intelligence is a subset of environmental intelligence and is synonymous with the term weather intelligence. (Wikipedia https://en.wikipedia.org/wiki/Meteorological_intelligence)

With *Optimising the use of meteorological intelligence*, we mean that meteorological information is well understood and considered to the maximum possible extent by users, policy-makers and the public. In that respect, the public debate on *Connecting Communities* at EMS2022 (section 1) was an important contribution to this aim. The discussion was streamed, the interest of the Media was considerable and resulted in a number of requests for interviews during the week about the content of the conference and messages to the public; these were broadcast, mainly on TV stations in Germany.

Also, the project being awarded the EMS Technology Achievement Award, the Weather Observation Website (see section 1) is a good example of how meteorological intelligence is not only communicated to the public, but also created with input from the public. Highlighting such best practice examples and pioneers is one of the roles of the EMS in making valuable experience accessible to others.

Over recent years, many new sessions have been introduced that are relevant to users and policy makers, in both the Engagement with Society programme stream ES and the Operational Systems and Applications programme stream OSA; the bottom-up approach of the conference that provides the community with the opportunity to propose sessions and topics has been a very valuable approach: at the meeting the challenges and emerging areas are discussed.

In this context, the EMS Annual Meetings have developed into a facilitating neutral forum to engage NHMSs, the private sector, academia, research institutes, and to a lesser extent still NGOs – towards mutual understanding and joint initiatives.

Media and Communication Committee

The objectives of the Media and Communication Committee include investigating the way presentations have an impact on the public, serving as a forum for exchange of experience between meteorologists working in media in different countries, and co-operating with weather presenters that are members of the AMS, IABM, WMO expert team and IWF. The wealth of activities in that area in 2022 consisted of

- Producing a video about EMS Members' activities at the opportunity of the World Meteorological Day 2022;
- Organising the Media Session at the EMS Annual Meetings;
- Highlighting Best Practice examples through EMS Media Awards, and providing a forum to the winners at the Media Session, and
- Organising a training workshops [Effective communication of agrometeorological services](#).

Workshop on effective communication of agrometeorological services

The workshop “Effective Communication of Agrometeorological Services” was a joint endeavour of Met Éireann, the International Society of Biometeorology, the EMS Media and Communication Committee, the Slovenian Environment Agency, the Slovenian Meteorological Society, the S. W. Tromp Foundation, and WMO. The workshop and discussions centered around the question:

- The means for disseminating information have increased, but are we communicating more effectively, and how can we improve further?

The workshop gathered experiences from Europe and abroad, with a focus on the communication of agrometeorological services from a wide angle. The presentations at the workshop revealed that many NMHSs are strengthening their activities at communicating agrometeorological services, but differences are found from country to country, largely depending on the structure of each country’s agricultural sector. Specifically, the workshop addressed four main perspectives: services provided, communication, data and information sharing, and education. A [paper based on the outcomes from the workshop](#) was published in volume 19 of the ASR journal, and a second scientific paper is in preparation. Information is also available at

https://www.ems2022.eu/workshops_and_excursions/workshop_effective_communication_of_agrometeorological_services.html

Media Awards

One of the central objectives of the EMS since its foundation has been the exchange of views on how to improve communication of meteorological and climatological information between developers, users and decision makers, and to the general public. To highlight outstanding examples and achievements in this area, the EMS Media Awards have been established.

In 2022, two outstanding projects were honoured with the **EMS Outreach and Communication Award**: The ExtremeWeatherCongress, Germany, and the Podcast De Weerman, The Netherlands. They both fulfil communication needs on climate issues and are valuable tools to communicate weather and climate information.

The **ExtremeWeatherCongress** started in 2006 and is a huge long-term effort with an extensive press-coverage and alongside presence in media-channels, newspapers and social-networks, widening the interest in conference topics supplemented by comprehensive fact-sheets about the actual state of the climate in general and especially in Germany. It is organized and moderated by Frank Böttcher.

Citation: ExtremeWeatherCongress has a long tradition and is a milestone in climate communication. It is a good example that a continuous effort is worth trying and can be very successful and become institutional. The conference is highly relevant, because different groups of society are involved: science, communication, politics, educators, media.

The **Podcast De Weerman** is an attractive and popular format with an impressive community of followers. It is produced by the Dutch Public Broadcasting Association.

Citation: The combination of climate expertise, TV and journalistic expertise are a perfect mixture to communicate difficult facts. Interviews with relevant stakeholders, people involved in weather and climate are lively aspects of communication and relate to experience with all kinds of weather and climate issues reaching from the past to the future.

04 Being an effective, influential and well-run organisation

The EMS is an influential and well-run organization with effective governance and use of social platforms/networks, based upon the committed involvement of its membership. High priority will be given to [...] (c) making sure that the EMS has a robust infrastructure and its activities embrace the diversity within the meteorological community.

The Governance of the EMS is based on

- ➔ the General Assembly – in which all Member Societies have a vote – decides on constitutional and financial matters, provides strategic direction, and elects representative Members to the Council;
- ➔ the Council, composed of six rotating representatives elected by the General Assembly and three permanent members (from RMets, Météo et Climat, and DMG); the Council elects the officers of the Bureau and can establish committees as required for the activities planned and prioritized;
- ➔ and the secretariat that coordinates and assists the work of the Officers, the Council and the General Assembly.

This governance is functioning relatively well, given the limited resources available to the EMS. However, it also relies on knowledge and experience of persons who have been involved in the EMS work for a considerable time: apart from secretariat staff also the Treasurer and Vice-President have been involved in various roles over almost a decade; to ensure the knowledge transfer to successors in a manageable way, the EMS Bureau set out to review and document the most important procedures for a safe running of the EMS also in future.

Council and Council Bodies 2022

New Council members: At the General Assembly 2022 Joanna Wibig, representing Polskie Towarzystwo Geofizyczne – Meteorological Section (PTG), and Ernesto Rodriguez-Camino, representing Asociación Meteorológica Española (AME) and the Spanish Member Societies, were elected as new Councillors for a three-year term until September 2026. Jordi Mazon (ACAM, Spain) and Paulína Valová, (SMS, Slovakia) left the Council after three years.

Handover of CoM chair After the General Assembly and Council meeting in September, the chair of the [EMS Committee on Meetings](#), Sylvain Joffre, handed over the office to [Dick Blaauboer](#) to take over the work at the centre of EMS activities and continue to transform the Annual Meeting into events of the future. Sylvain Joffre was honoured for his outstanding contributions and commitment to develop the Annual Meeting to the forum it is today.

Secretariat : In 2022 a new Media Assistant was employed who further developed the activities of the EMS in particular on the social media channels of the organisation. The posts that EMS publishes on Twitter and LinkedIn are mainly focussed on awards, e.g. call for award nominations, winner announcements and all information around the EMS Annual Meeting, e.g. advertise EMS conference, activities during the EMS conference. The week of the Annual Meeting is also the

most relevant time of high attention for the EMS channels; these channels reach a wider membership of the meteorological societies, complementing emails sent directly to Member contacts and the newsletters.

Principles of Diversity and inclusion: As the EMS essentially works bottom-up, ensuring diversity in its governing structures is not easily achieved: representatives on the Council, members for committees or working groups are proposed by the Members of the EMS, so it also depends on the structure and relevance of diversity in these organisations. Similarly, nominations for awardees are in many instances the responsibility of the boards of EMS Members.

One step the EMS Council decided to address diversity in award nominations was, that starting with the Silver Medal in 2023, nominations of female and male candidates will be alternating each year. For 2023 nominations of female candidates were accepted; nominations of male candidates will then be invited for the 2024 Silver Medal. But, as before, not selected nominees will be considered in the subsequent year as well.

The Committee of Meetings and the Programme and Science Committee have strengthened their efforts to invite plenary speakers from all backgrounds for the Annual Meetings. It is also a concern of the Council that all people do feel welcome at the conferences; to ensure respectful conduct of debates, exchange, and any other type of interactions by all participants, rules of conduct are clear and in addition a conduct committee is established for each event to ensure any breach can immediately be addressed.

Ensure that EMS's activities, including the Annual Meeting, and EMS's governance, including the composition of the EMS Council and its Committees, conform to the principles of diversity and inclusion.

EMS Council

From 5 September 2022:

President Albert A.M. Holtslag

Vice-President Dominique Marbouty

Treasurer K. Heinke Schlünzen

Permanent representatives:

Météo et climat, France: Dominique Marbouty

DMG, Germany: K. Heinke Schlünzen

RMetS, UK: Shanti Majithia

Rotating Members of Council:

NVBM, The Netherlands: Gert-Jan Steeneveld

ARMAE and **SMR**, Romania: Meda Andrei

VeF, Iceland: Guðrún Nína Petersen

SMD, Slovenia: Tanja Cegnar

PTG, Poland: Joanna Wibig

AME, Spain: Ernesto Rodriguez-Camino

Committee on Meetings

Dick Blaauboer (Chair, The Netherlands)

Carlo Buontempo (ECMWF)

Carola Detring (Germany)

Martina Junge (EMS)

Peter Kalverla (The Netherlands)

Haleh Kootval (Switzerland)

Jaakko Nuottokari (Finland)

Victoria Sinclair (Finland/UK)

Media and Communications Committee

Tanja Cegnar (Chair, Slovenia)

Rasmus Benestad (Norway)

Gerald Fleming (Ireland)

Inge Niedek (Germany)

Jay Trobec (USA, AMS-liaison)

Awards Committee

Patricia de Rosnay (Chair, France/ECMWF)
 Mojca Dolinar (Slovenia)
 Vincent Guidard (France)
 Anisora Irimescu (Romania)
 Gunilla Svensson (Sweden)
 Carlos Yagüe (Spain)

Working Group on Journal of the EMS

Johannes Schmetz (Chair, Germany)
 Gert-Jan Steeneveld (The Netherlands)
 Clemens Simmer (Germany)
 Bert Holtslag (The Netherlands; EMS)
 Martina Junge (EMS)

TAA Committee

Robert Mureau (Chair, The Netherlands)
 Sorin Burcea (Romania)
 Paul Halton (Ireland)
 Dominique Marbouty (France)
 Mats Olofsson (Sweden)
 Tarja Riihisaari (Finland)

EPM2022 Organising Committee

Fernando Bullón, Spain (Chair)
 Andrea Oestreich, EMS
 Petra Grasse, Germany
 Eugenio Arenas Marjalizo, Spain

Staff

Executive Secretary: Martina Junge
 Assistant: Andrea Oestreich
 Media Assistant: Ge Cheng
 e-mail: ems-sec@emetsoc.org

The Free University of Berlin kindly hosts the EMS secretariat at the premises of the Institute for Meteorology.

**Our Resources: Financial Accounts 2022**

The two main sources of income are the payment of Membership fees by Member Societies and Associate Members on the one hand, and license fees from the EMS Annual Meetings. The first income is relatively stable and predictable; the second one from the license fee however is very uncertain, depends on costs for venues and facilities, number of participants, and relies on safe and secure circumstances to hold the event; in the first year of the pandemic the Annual Meeting, cancelled altogether, did not provide any income at all, but rather incurred costs due to the work already undertaken in the preparation. Thus, in the planning of budgets and reserves such risks need to be kept in mind.

In 2022, the amount on EMS bank accounts as at 31 December was 288,957.82 and has increased by 85,188.38€ as compared to 31 December 2021. This positive balance is mainly due to the very successful EMS2022 in Bonn. On 31 December 2022, an amount of 46,196.35€ was held on the current account at Deutsche Bank and 143,439.82€ on the account at GLS; 99,321.65€ are held on the daily account at Triodos Bank.

Financial summary

	2022	2021
INCOME		
Income Societies Membership Fees	21 741,22	19 627.99
Income Associate Membership Fees	38 500,00	31 800.00
Annual Meeting license fee	138 205,50	72 728.59
VAT Annual Meeting	9 674,39	7 160.94
Interest	0,00	2 48
Employee energy costs supp. paid by gov.	300, 00	
TOTAL INCOME	208 421,11	131 320.00
EXPENDITURE		
Salaries (incl. expenses for employer)	103 818,90	99 795.78
Energy cost supp. repaid to empl. by EMS	300,00	
Awards, Europhotometeo	5 614,97	3 200.00
Publications	1 689,47	1 471.62
Honoraries, Fees, Insurances	5 672,59	4 709.88
Travel	4 294,72	201.02
Banking charges	280,10	247.09
Office costs	1 111,83	1 531.56
Other costs	95,35	50.00
VAT prior year	69,14	0.00
Other taxes	-233.33	-69.11
Payments on fixed and intangible assets	518,99	1 001.99
TOTAL EXPENDITURE	122 194,75	125 491.57
INCOME – EXPENDITURE	85 188.38	19 230.17
ACCOUNT BALANCE 1 JANUARY	203 769.44	184 539.27
ACCOUNT BALANCE 31 DECEMBER	288 957.82	203 769.44

All financial figures are given in Euro.

Audit

The financial accounts have been audited on 27 June 2023 by the auditor appointed by the EMS General Assembly 2022. The auditor's report is submitted to the EMS General Assembly 2023.

Auditors:

Dipl.-Finanzwirt
Matthias Keil
Wirtschaftsprüfer
Steuerberater
Dr. Broll Schmitt Kaufmann & Partner
Taubenstraße 20-22
10117 Berlin, Germany

Synergies with international organisations

The EMS as an international organisation strives to maximise the effectiveness and efficiency of its activities by engaging and collaborating with other organisations in the meteorological, climatological and related areas. As with other activities of the EMS are carried out within the framework of the Annual Meeting, also collaboration with many of our partners culminate during the weeks of the conference and its preparation.

The collaboration with **PRIMET** continued to strive in 2022 with the further development of the session connecting service providers and users of meteorological intelligence and highlighting and discussing the value of meteorological services to benefit societies. This session is also organized together with ECOMET, the Economic interest grouping of the National Meteorological Services of the European Economic Area (until 2022). For this year's session a keynote from the European Commission could be organised outlining the next steps towards more open data for high-value datasets. Additionally, EMS provided logistics for the side meetings and encourages private-sector participants through a special arrangement for PRIMET members.

The **Tromp Foundation**: continued to support the EMS Annual Meetings by funding the Tromp Foundation Travel Funds for Young Scientists to enable young scientists to present their work about aspects of biometeorology at the EMS conference (see section 2, Awards). Also, the EMS Tromp Award for an outstanding achievement in biometeorology is presented to the awardee at the Annual Meeting and the award lecture given during the meeting. The MoU between EMS and the Tromp Foundation on this continued collaboration was extended for another five years.

Though the Harry Otten Prize is given biennially, with the next one in 2023, the **Harry Otten Foundation** continued to support the EMS Annual Meetings, and used the opportunity to promote this prestigious prize for innovative ideas in meteorology to participants of the EMS2022.

The EMS continued to support the establishment of the regional **African Meteorological Society (AfMS)**, their structure built on the model of the EMS as an association of national meteorological societies. The President of the AfMS was invited to attend a Council Session in 2022, to get first-hand experience on how the EMS works and develops and discusses its activities. A member of the EMS Bureau also participated in the inauguration ceremony of the AfMS and also at an international meeting in November to provide lessons learned and expertise to support capacity building in Africa.

Collaboration with **EUMETSAT** and **ECMWF** on the organisation of workshops within the framework of the Annual Meeting continued at EMS2022 with data demos to visualize data for wildfire events and data for dust storm events in Europe (section 2, EMS2022).

The successful Memorandum of Understanding with the ESSL, **European Serve Storms Laboratory** was extended for another five years and the letter signed during the event in Bonn.