

The 172nd Annual Report of the Royal Meteorological Society for the period 1 January – 31 December 2022

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Annex A: THE UK WEATHER OF 2022

Review of UK Weather for 2022

For the majority of the UK, 2022 was warmer, drier and sunnier than average. It was another recordbreaking year that will be remembered for breaking two significant records – a daily maximum temperature of 40.3°C at Coningsby, Lincolnshire on 19 July and a UK average temperature over the year of 10.03°C. Both these records were highly unlikely to have happened without the influence of human-induced climate change. While 2022 was the UK's warmest year on record overall, it also included a prolonged spell of cold and snowy weather in December. This was one of the most significant cold snaps since December 2010.

With 2022 being the warmest year on record, it is no surprise that approximately 70% of days were above the 1991-2020 average. There were also particularly notable warm or hot spells occurring in July, August, October and November.

Overall, the UK received 90% of its long-term annual average rainfall in 2022, which is relatively dry compared to the 1991-2020 average. The wettest periods were in February and November, but over the period January to August there was a significant, long-term rainfall deficit, the lowest since the drought of 1976 when water restrictions were enforced across parts of the country. However, a wetter-than-average autumn went some way towards a partial recovery.

It was the seventh sunniest year on record for the UK, dating back to 1910, the second sunniest for England, and the sunniest on record for East Anglia with records going back to 1919.

The year began with exceptionally high temperatures of 16.2°C recorded on 1 January at St James Park, London and a highest daily minimum temperature record for January of 13.2°C at Chivenor, Devon, with records dating back to 1884. February provided some exceptional weather, with three named storms in quick succession around the middle of the month. Two rare red weather warnings were issued for storm Eunice, which set a new England wind gust record of 122mph, recorded at Needles, Isle of Wight, and also caused widespread damage and disruption from the high winds.

It was the second sunniest March, the fifth warmest spring, fourth warmest summer and third warmest autumn in the UK record. The summer of 2022 will go down in UK history books for being the first year that temperatures exceeded 40°C with seven locations breaking this threshold.

It was the wettest autumn for the UK since 2000 and the 13th wettest in the UK series from 1836. During the first half of December the UK experienced the coldest spell of weather for the year, with temperature dropping to -17.3C at Braemar in Aberdeenshire, Scotland on 13 December. Although the UK has experienced severe cold spells in recent decades, the number and severity of them is declining.

UK Temperatures

The mean value was 10.03°C, which is 0.9°C above the 1991-2020 average.

UK Precipitation

The total was 1,051 mm, which is 90% of the 1991-2020 average.

UK Sunshine

The total was 1,530 hours, which is 109% of the 1991-2020 average.

Relative to the average (1991-2020)	Mean Max (°C)	Mean Min (°C)	Rainfall (%)	Sunshine (%)
UK	13.9 (1.1)	6.2 (0.6)	90	109
England	15.2 (1.3)	6.7 (0.6)	86	113
Wales	14.1 (1.1)	6.4 (0.5)	85	106
Scotland	11.9 (0.9)	5.1 (0.7)	95	103
Northern Ireland	13.4 (0.8)	6.3 (0.7)	96	102

Regional Breakdown (data from the Met Office)



Annex B: MEMBERSHIP AND ACCREDITATION

Membership

The Membership Development Board (MDB) is represented by members from academic, professional, student and enthusiast backgrounds who oversee the Society's membership strategic objectives, the development and delivery of products and services to members, and a programme of activities and initiatives to grow and retain an active membership.

The MDB is chaired by the General Secretary and sits alongside the Professional Accreditation Board within the Membership and Accreditation Business Area. The MDB met three times during 2022 providing invaluable input to the membership recruitment and retention strategy. In 2022 the board welcomed two new members, representing the student community and expertise from the insurance sector.

In 2022, the Society saw an increase in most levels of membership, this included our standard members, life fellows, honorary fellows, and corporate members. Fellowship and Student levels saw a small decline leading to a small decline in total membership of 1.7%.

Membership fees in 2022 were £96 for Fellowship and £88 for Members, with concessionary rates for students (50%), long-standing retired members (50%), reciprocal members (25% discount) and those taking the Weather journal online only (20% discount).

Since the launch of the Society's strategic plan, the board has pro-actively contributed with activities to support and promote membership. The Board is committed to engage and recruit a more diverse membership by creating an improved member value proposition. This includes providing more exclusive member only benefits relevant to their background and interests.

Key Activities in 2022:

New Member Acquisition: The Society was delighted to welcome 222 new members during 2022. Initiatives for recruitment included:

- Improved data capture to understand our members and their motivation to join.
- Engaged new members through improved and more frequent communication.
- Improved CRM functionality to track member recruitment leads and engage more effectively.
- Approved member exclusive benefits such as post event recordings available to members only.
- Raised awareness of the Society through keynote speaker role at leading flood management event.

Collaboration: The Society continued to collaborate with the University of Reading, hosting two more series of Met Masterclasses focussing on advances in weather and climate forecasting and winter storms and European Atlantic climate. The purpose of the masterclasses is to benefit meteorological practitioners and refresh knowledge and awareness of the latest science. In total since its inception the masterclass series has attracted over 3,600 registrants including a large international audience, helping to raise the Society's profile, and facilitating excellent Continuing Professional Development (CPD) for our professionally accredited members.

The Society continues to work with the Met Office, attending a number of Met Office hosted roadshows to explain the benefits of professional accreditation. Similar conversations with DTN, Royal Navy and Jersey Met have proved very positive and supports the Society's objective to professionalise the sector and support career development for individuals committed to progress their careers.

Communication: This is key to our engagement with new and existing members, and a crucial element of our membership activity. Work to promote the benefits of membership through our media channels continues to go from strength to strength. Improvements have been made to the content, frequency and brand of newsletters (Member eNews and MetMatters) and Society News. Updates on membership-related matters are communicated more frequently through our social media channels, events and targeted comms. See the Marketing and Communications section.



Reciprocal Membership: The Society continues to foster important strategic partnerships with organisations across the meteorological community and beyond. The Society has reciprocal membership agreements with the Canadian Meteorological and Oceanographic Society, the American Meteorological Society, the Australian Meteorological and Oceanographic Society, the Indian Meteorological Society, the Royal Photographic Society and the Institute of Physics. The Society has worked with all our reciprocal partners during 2022, engaging with activities to promote the mutual benefits to our respective memberships.



Corporate Membership: In 2022, the Society increased its number of corporate members to 16, an increase of 33%. Corporate members: Biral, DTN, Dundee Satellite Station, Equinox Instruments, FleetWeather, Fortis Facades, KISTERS, Lake Street Consulting, MetDesk Ltd, Meteo France International, OpenWeather, Rotronic, Royal Navy, StormGeo, Vaisala, and Weatherquest. The Society has been working to increase engagement with its corporate members, with a focus on supporting employees with continued professional development and achieving accreditation.



Student Ambassadors: The Society continues to have an active student community, with 334 student members at the end of 2022. Key to engagement and retention of our student community is through the important work of our 12 Student Ambassadors. Through their networks they have promoted a number of Society initiatives including the climate change forum, climate science for ecological forecasting and the Weather reader survey. Student Ambassadors: Aimee O'Donoghue, Alanna Power, Daniel Brener, Florentine Weber, Frederick Otu-Larbi, Holly Smith, Joanna Raymond, Laura Byrne, Ma Chen, Robert Campbell, Rowen Findler and Sarah Barr.

Science Engagement Fellowships: In June 2022 the Society sponsored three Science Engagement Fellowships. This created an opportunity for PhD, postdoctoral and early careers to engage with the Society's Science Engagement activities. Three special interest groups (SIGs) were initiated: Insurance, Energy and Youth and Early Careers. Through the three new SIGs, the Society aims to identify the needs of those working within the industries related to weather and climate and develop content / activities that helps the Society to engage new audiences, attract new members, and encourage audiences to engage in CPD (including professional accreditation). The work will provide opportunities for new partnerships in support of



our wider strategic objectives and to further diversify income. This work focusses on inspiring and supporting individuals during their early stages of their career, whilst aiming to lower the average age of membership across the Society, supporting the Society's commitment to improved equality, diversity and inclusion reporting.

Retention: Our member retention rate for 2022 was 90.4% achieved during another difficult year. This demonstrates that our members value their membership. Continuing through 2022 the Society's focus has been on the impact of COVID-19 on the sector. Subscription renewals have been closely monitored with additional communications on support available to members.

The MDB agreed an amendment to By-Law 34 extending the 50% reduction of the annual membership subscription beyond retired members to anyone no longer working for remuneration and who has been in membership for at least 20 years. The MDB agree to continue with the discretionary fund support for our members impacted by the cost-of-living crisis or other extenuating circumstances.

The Society's membership is made up of amateurs (26%), practitioners (32%), academics (32%) and students (10%). The following table shows a breakdown in membership in each category over recent years. In 2022, the Society started to report on the number of international members and whilst the majority, 80% are from the UK, the remaining 20% represent a healthy spread across several countries. These include USA with the highest number of members, followed by Australia, Hong Kong and Europe, notably Switzerland, Italy and Ireland.

Grade of Membership	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Honorary Fellow HonFRMetS	26	29	30	29	27	30	30	31	30	30	31
Life Fellow FRMetS	34	33	31	99	94	89	76	82	79	105	107
Fellow FRMetS	1,633	1,586	1,586	1,513	1,518	1,510	1,471	1,479	1,445	1,390	1,344
Member (Associate Fellow before 2018)	914	952	974	1,104	1,217	1,212	1,186	1,164	1,217	1,372	1,390
Student Member	308	260	261	416	473	471	464	464	378	367	334
Corporate Member	24	22	22	28	27	14	15	12	14	12	16
TOTAL	2,939	2,882	2,904	3,189	3,356	3,337	3,242	3,233	3,162	3,278	3,222





Professional Accreditation

The Society's activities around Professional Accreditation and Vocational Qualifications are overseen by the Professional Accreditation Board (PAB). Members of the Board come from across the breadth of the meteorological community, including the public and private sectors, along with academia. The PAB sits alongside the Membership Development Board (MDB) within the Membership and Accreditation Business Area. The PAB aims to work closely with the MDB and the Terms of Reference for each group reflect this closer cooperation, along with standing invitations for the Chairs to attend each other's meetings.

The PAB met twice during 2022, in May and October. It reports to Council and is supported by the Course Evaluation and Continuous Professional Development (CE/CPD) Panel and the Vocational Qualifications Committee (VQC).

Key Activities in 2022:

- Access to CPD videos from our extensive programme of events.
- Created a new suite of resources promoting uptake of accreditation applications:
 - <u>Top Tips Video</u>
 - o CMet and RMet Badges
 - CMet Progression advice
- Publicised CPD opportunities.
- Met Office engagement emphasising accreditation and personal development.
- Revised the dates CPD reports are submitted to summer from winter, acknowledging this especially busy time for professionals working in the sector.

The Society defines the scope of its accreditation activity as recognising excellence in people, in organisations, and supporting CPD. Providing the resources and support listed above to encourage professional development and learning for members is vital in delivering a meaningful experience whilst they complete their professional journey.

The tables below show the data relating to RMet and CMet over recent years. During 2022, the Society welcomed 3 new RMets and 7 new CMets taking the total number of accredited members to 194.

Registered Meteorologist (RMet): The RMet register can be found here.

Registered Meteorologists (RMet)	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of applications received	49	35	11	46	5	4	17	8	6
No. of accreditations granted	44	28	20	46	5	3	13	18	3
No. of RMets resigned/withdrawn					5	19	3	6	9
No. of applications outstanding at year end	2	7	4	7	2	3	8	2	3
No. of RMets transferred to CMet						8	1	4	3
No. of RMets on Dormancy Register			3	5	6	6	6	8	7
No. of accredited RMets at year end	44	72	92	124	123	99	106	114	112
RMet CPD reports	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of RMet CPDs reviewed				50	71	93	94	81	86
No. of RMet CPDs approved				50	71	92	93	81	86

Chartered Meteorologist (CMet): The number of CMets increased in 2022 to 82, the highest number of CMets since 2014. The CMet register can be found <u>here</u>.

Applications remain steady. Successful RMets identified as possible CMet candidates are contacted to encourage progression to the Chartered level. The PAB has set realistic targets and associated activities to continue this trend and increase numbers in 2023 and beyond.



Chartered Meteorologists (CMet)	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of applications received	6	1	5	5	6	4	9	7	7	7
No. of accreditations granted	7	1	3	3	4	5	8	3	8	7
No. of CMets resigned/withdrawn	5	0	3	1	5	1	8	1	2	5
No. of applications outstanding at year end	1	0	1	2	4	0	1	5	4	3
No. of CMets on Dormancy Register		5	4	3	2	2	1	1	0	0
No. of accredited CMets at year end	68	64	66	69	67	71	71	74	81	82
CMet CPD	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
No. of CMet CPDs reviewed	34	23	30	35	24	27	28	28	31	32
No. of CMet CPDs approved	34	23	30	35	23	27	28	28	31	32

CPD: The Society recognises that membership and professional accreditation are closely aligned offering benefits to both meteorological practitioners and their employers. CPD forms part of these benefits and the Society continues to support those across the community in recognising, publicising and delivering CPD. Compared to 2021 the number of members completing their CPD records has increased by 15%. The number of CPD events across the year was over 70, offered both in-person and virtual reflecting the higher levels of accessibility for our members.

The table below shows the data relating to ACCSYS since it was launched in 2014. CPD activities linked to Society publishing opportunities and event attendance can be captured directly as a CPD record in ACCSYS through the click of a button.

ACCSYS	2014	2015	2016	2017	2018	2019	2020	2021	2022
CPD records	642	1,644	4,782	7,820	9,237	11,984	14,297	16,400	19,232
CPD reports				321	391	604	718	825	971

Vocational Qualifications Committee: *The Vocational Qualifications scheme is currently dormant.* The Vocational Qualifications Committee (VQC) supports the Society's work to further the professional development of meteorologists through developing and promoting the uptake of high quality, competencybased, vocational qualifications. Included in the VQC's remit is overseeing the development and management of the Society's vocational qualifications and reviewing the performance of the Assessment Centres. The Society supports five qualifications in meteorology as part of the Regulated Qualifications Framework (RQF) previously provided by PAA\VQ-SET.

PAA\VQ-SET have since been acquired by GQA Qualifications, who specialise in providing vocational qualifications for the Glass, Construction and Print sectors. These qualifications are recognised throughout the EU. Assessments for the vocational awards are based in the workplace and are undertaken by Assessment Centres.



Annex C: Awards

The Society is incredibly proud of the work and achievements of all our award winners. Over recent decades the nature and extent of contributions of our members has broadened substantially, as meteorology and related disciplines have become more central to education, business and policy. It's important to the Society that our awards continue to reflect the breadth of work in the meteorological community, as well as maintaining a link to more than 170 years of Society history. The Society carried out an audit and membership survey to build a modernised award portfolio, launched in 2022.

The Society's basic principles of recognising and rewarding excellence to people and teams who have made outstanding and exceptional contributions to meteorology and related disciplines have not changed. Members asked for a broader range of awards, so new awards recognising innovation in use of observations and instrumentation and in use of models, computational tools and visualisation have been added. Members highlighted that awards and monetary prizes for early-career achievements were particularly helpful for career development. A new early career communication award has also been included and monetary prizes are now focused on early career awards. Some amendments to the remit of existing awards have been made to make these accessible to a broader range of nominees, including co-authors and teams/collaborations. Finally members said it was sometimes difficult to find the right award for the person they wanted to nominate so the new award portfolio is now split into 4 sections based on the activities of the Society and its members: "Advancing Science", "Educating, Inspiring and Enthusing", "Impact on Science, Policy and Society", and "Contribution or Service to the Society or Profession".

The Society's	Award winners	for 2022 are sho	own in the table below:
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Awards for Advancing Science	
Award	Recipient
The Symons Gold Medal and Lecture for Lifetime Achievement in Advancing Science	Professor Michael Edgeworth McIntyre, MAE FRS HonFRMetS
The Buchan Award for Scientific Advances	Not Awarded
The Hugh Robert Mill Award for Precipitation Research	Professor Ed Hawkins, FRMetS MBE
The Adrian Gill Award for Advances at the Interface of Atmospheric Science and Related Disciplines	Professor Dann Mitchell and Professor David J Brayshaw FRMetS, FHEA, MInstP
The L F Richardson Award and Lecture for Early-Career Researchers	Not Awarded
The Malcolm Walker Award for New Environmental Researchers	Not Awarded
Awards for Educating, Inspiring and Enthusing	
Award	Recipient
The Climate Science and Climate Science Communication Award	Dr Friederike E L Otto
The Michael Hunt Award for Increasing Public Understanding of Meteorology and its Applications	Mr Alex Deakin and Mr Aidan McGivern
The Education Award	Professor David M Schultz
The Emerging Communicator Award	Dr Ella Gilbert
The Gordon Manley Weather Award	Not Awarded



Awards for Impact on Science, Policy or Society								
Award	Recipient							
The FitzRoy Award for Professional Meteorology	David Walters, MPhys (Hons), MSc, PhD, FRMetS							
The Award for Impact	Kirklees Council							
	Energy & Climate Change Team							
The Award for Innovation in Development of Observations or Instrumentation	Rainfall Rescue Volunteers: Mike Baldock, John Brazier, Gill Hersee, Jacqui Huntley, Richard Meats, John O'Grady, Ian R Scrimgeour and Timothy Silk							
The Award for Innovation in Development of Computational Models, Tools or Visualisation	Professor Bryan Lawrence							
Awards for Contribution or Service to the Society or Prof	ession							
Award	Recipient							
Honorary Fellowship	Not Awarded							
The Award for Outstanding Contribution to The Society or Profession	Dr Roger Brugge, PhD, BSc, DIC, ARCS							
The Society Volunteer of the Year Award	Not Awarded							
The Meteorological Applications Editors' Award	Dr Meinolf Kossmann							
The International Journal of Climatology Editors' Award	Mr Mike Kendon, Dr Mark McCarthy, Dr Svetlana Jevrejeva, Professor Tim Sparks and co-authors							
The Quarterly Journal Editors' Award	Dr Silvio Davolio							
The Geoscience Data Journal Editors' Award	Dr Liqiang Xu and Professor Chris Reason							
The Atmospheric Science Letters Editors' Award	Dr Lili Lei							
The Climate Resilience and Sustainability Editors' Award	Professor Dr Wouter Peters and Dr Gerbrand Koren							

The Society plans to present the 2022 Awards in 2024.



Annex D: SCIENTIFIC PUBLISHING

Scientific publishing is one of the Society's strengths and aims to deliver a high-quality portfolio of journals and book programme and support scientific knowledge management and promotion of the science. This work is overseen, on behalf of Council, by the Scientific Publishing Committee and the Editorial Boards for each journal in the portfolio. The Society is committed to providing long-term, sustainable access to high-quality scientific research for everyone, whilst maintaining high value, trustworthy author and reader services that enhance scientific communication and progress.

The Society has eight international journals. Income from scientific publishing makes up a significant portion of the Society's total revenue allowing the Society to deliver many other important programmes of work and charitable activities. The dedication and hard work of our Editors in Chief, Editorial Boards and all those who support the peer review process not only support our journals but the meteorological community as a whole.

The transition to open access continues to be a key theme in scientific publishing. Transformational agreements¹ are helping researchers at affiliated institutions benefit from access to the millions of articles their subscriptions previously paid for, whilst also funding their open access publishing. As the demand for open access publishing agreements continues to increase, the Society's publishing partner Wiley is continuously working to negotiate new national and institutional agreements that deliver open access options whilst managing the transition to open access in a sustainable and considerate way. As well as early adopters renewing, new deals have been set up in 2022 further expanding reach across Europe and supporting significant growth in the Americas and Asia-Pacific. The Society is conscious that not all authors are in a position to move to a fully open access model and continues to provide choice to those who do not have such funding available. The Society is in discussion with Wiley to support lower income countries outside of the waivers and discounts already in place to corresponding authors based in low- and lower middle-income countries through Research4Life.

As one of the first Societies to request carbon data relating to scientific publishing activities, Wiley has asked the Society to work with them on a tool being developed that enables calculation of an individual journal's carbon footprint. The Society has been given the opportunity to review and feed into this process and has been provided with data for all its journals from 2019 onwards. The gathering of this data will be constantly improved as third-party suppliers become more efficient in providing their own data, but it is an extremely useful process to be a part of and allows us a broader understanding of what constitutes and needs to be considered for future carbon calculations.

Since our last *Weather* reader survey in 2019, the Society has made several changes to the journal based on member feedback. With this in mind, the Society carried out another reader survey in 2022 to understand how our members have found the implemented changes, to gather thoughts on *Weather* online, and to determine what might encourage members to view the journal online more frequently. The Society received 511 responses and the majority of the feedback was highly positive, indicating strong support for the changes made to *Weather* in recent years. It was also clear that there was a strong desire by members to keep the journal available in print but that there was also some information we could better share about additional features that are available online that our members may not be aware of. The Society will be compiling a summary of the results for insertion in a future issue of *Weather*.

The Society is extremely grateful to all the Editors and Editorial Boards for all the support and work they put into the journals whilst managing their own personal and work commitments.

¹ A transformational agreement is when a consortium enters into a partnership with a publisher to enable a large-scale transition towards open access.



Highlights from the journals in 2022:

Atmospheric Science Letters (ASL) has had a very good year with an increase in impact factor from 2.415 to 2.992 (nearly a 24% increase), 60 published research papers and over 120 submissions. The number of published papers and submissions in 2022 was higher than the two previous years. ASL continues to receive manuscripts on a variety of subjects from across the world. Around 40% of submissions and acceptances are from China and the ASL Board has successfully worked to increase the number of Associate Editors with expertise in China. The ASL Board continues to work with the Society and Wiley to decrease turnaround times for decisions and acceptances for manuscripts, and in 2022 median turnaround times decreased slightly. In mid-2022, both co-Editors-in-Chief expressed their desire to retire from the role after 5 years in office, both agreed to remain until replacements can be found and also to have staggered retirements so the appropriate handovers can be given. The current co-Editors-in-Chief look forward to seeing ASL grow and improve in various aspects with its new co-Editor-in-Chiefs in 2023.

Climate Resilience and Sustainability (*CRS*) is an interdisciplinary open-access journal studying the broad subject of understanding the implications of climate change for a sustainable environment and society. CRS is online only and open access, reflecting the goal to make the papers available to everyone. The journal is focused on research and practical experience of solutions that address the socioeconomic and biophysical impacts of climate change and lead to a sustainable and resilient environment, society and economy.

CRS opened submission in 2021 and the first issue was published in February 2022 - a special issue titled 'Climate Science for Service Partnership Brazil: Collaborative Research towards climate solutions in Brazil'. There were 17 articles including an overview. All of these are also featured on <u>www.viewpoint-brazil.org</u>, which showcases new climate research, climate services and free resources from the Climate Science for Service Partnership Brazil (CSSP Brazil). The project supports collaborative research between Brazil and UK partners to improve climate resilience and sustainability in Brazil.

The Editors in Chief published an editorial which highlighted the goals of the journal as outlined above and other papers published covered topics including: The impact of climate change on policy-relevant indicators of temperature extremes; Economic implications from high temperature disruption days; Population exposure to cyclones; Cultural heritage and risk assessments in adaptation; The effect of climate vulnerabilities on the discounting behaviour of farmers.

Geoscience Data Journal (GDJ) had a successful year, with an increase in impact factor from 1.77 to 3.48 and an increase in the number of high-quality submissions. The journal's editorial team is generally efficient and continually strives to reduce processing times to ensure a speedy peer review process. The journal is making good progress with special issues with a number also expected in 2023. GDJ has also made some efforts to improve its website and increase its visibility on social media.

International Journal of Climatology (*IJOC*), remains the largest of the Society's journals and the structure of 4 senior editors supported the triaging of 824 submissions by the end of November in 2022 (compared to 1,103 in 2021). The total rejection rate is 51% (35% before peer review). Therefore, roughly one of each two submissions to IJOC is finally published. Over a 40% of the articles originated in China, with India and the United States as the second and third contributors. IJOC published 10,481 pages in 2022, compared to 6,853 in 2021. The median days to first decision is 64 (60 in 2021) and 171 to final decision (160 in 2020). The number of open access articles remains around 100, with a large proportion of them funded via Transformational Agreements. The Senior Editors are working on two Special Issues: "Advances in homogenisation techniques of meteorological and other environmental time series", accepting submissions at this moment, and "The climate of the Mediterranean region at multiple time and spatial scales" (in preparation), and a Virtual Collection on "Climate and environment change in the Third Pole - extremes, mechanisms and future change". The last two titles, reflect the interest of the editorial team to focus on regional aspects, one of the topics discussed during the Senior Editors Meeting in Oxford in December 2022. Among other issues, the editors also updated the journals aims and scope to better reflect the current interests of climate science.



Meteorological Applications (*MetApps*) aims to serve the needs of applied meteorologists, forecasters and users of meteorological services by publishing papers on all aspects of meteorological science. In 2022, the journal saw an increase in submissions. The 'double blind reviews' process is fully implemented keeping the authors' names and affiliations anonymous. The journal has continued to expand the composition and expertise of the Editorial Board with two new members with very interdisciplinary backgrounds in ecology and the insurance sector. The Editors-in-Chief would like to express their appreciation to the entire Editorial Board, Wiley publishing Team, Society staff and countless reviewers for the journal who maintain high standards and help the journal improve its practices and output. The journal's continued success is due to their hard work and dedication.

The *Quarterly Journal of the Royal Meteorological Society* (*QJ*) has seen a slight drop in submissions in 2022, with 321 manuscripts submitted in total and China, India, UK and Germany being the top submitting countries. Of these, 176 manuscripts were accepted for publication maintaining the journal at a 63% acceptance rate. Open access continues to be increasingly popular as a publication choice for QJ authors, potentially supported by the JISC (Joint Information System Committee) transformative, open access agreement.

The journal continues to maintain a good pipeline of impactful special issues and last year also put together a virtual collection on the ParaCon Programme, bringing together papers describing the implementation and testing of convection schemes, alongside fundamental research on the physical processes which underpin the parametrisation scheme and novel numerical approaches to parametrising moist convection.

QJ saw a significant increase in its Impact Factor placing it 11th out of 94 journals in the Meteorology and Atmospheric Sciences citation category.

Weather published three Special Issues in 2022: "The January 2022 eruption of Hunga Tonga-Hunga Ha'apai" in March; "Student Conference 2021" in June; and "250th Anniversary of Luke Howard" in November; as well as two 'geographically themed' issues focusing on Nepal/East Asia (May) and Hong Kong (September). The Hunga-Tonga Special Issue was a notably successful rapid-response to the exceptional eruption, subsequently receiving citations in both *Nature* and *Science*.

Weather's Impact Factor grew once again for the second consecutive year, reaching a record-high 2.239, 40% greater than the previous year and more than twice that in the 2019 journal citation report. Seven Spotlight articles were published - a new feature introduced in 2020 to bring timely high-level summaries of important recent weather events. The online version of *Weather* was significantly improved by the addition of a "full PDF" option, allowing members to download each issue in a single file; this better translates the magazine-like presentation of *Weather* to a digital audience.

Further new Editorial Board members, including two new Associate Editors, were recruited bringing diverse expertise. David Bowker took over the crucial role as Weather log author in March, succeeding eight years of service by Bob Prichard. Additional minor but no less significant changes were made to the review, production and typesetting process to address inconsistencies, which helped ensure six issues were published online prior to the first of the month (compared to only one in 2021). This success is a culmination of changes in recent years.

WIREs Climate Change is a review journal published by Wiley and affiliated with the Society and the Royal Geographical Society (with the Institute of British Geographers). Prof Mike Hulme recently retired as Editorin-Chief. While Wiley searches for Prof Hulme's successor, the Managing Editor, Dr Georgianna Doffek, oversees the journal in close coordination with the 14 Domain Editors who are experts in their respective fields. The journal received an increased 2021 Impact Factor of 10.072 and was ranked 3rd of the 94 journals in Meteorology and Atmospheric Sciences. The journal is also indexed under the social sciences and in 2021, ranked 8th of the 128 journals in Environmental Studies. In 2022, the journal published 55 review and perspective articles, spanning climate change research and scholarship in the physical sciences, social sciences and humanities. WIREs Climate Change is known for its online Special Collections, many of which are resources for seminar classes and Massive Open Online Courses (MOOCs); they are often made available for free in advance of important academic meetings.



Submissions and Decisions (All Journals Combined)

Submissions and Decisions / Year	2016	2017	2018	2019	2020	2021	2022
Number of Submissions	1693	1795	1841	1903	1996	1961	1754
Number Reaching Final Decision	1649	1709	1716	1847	1923	1961	1712
Number Accepted	873	853	844	944	1022	1045	906
Average Journal Rejection Rate (%)	38	47.5	48	44*	45	47	42

*Average of rejection rate of each journal rather than as a collective

Impact Factors

Journal / Year	2017	2018	2019	2020	2021	2022
Quarterly Journal	3.44	2.978	3.198	3.471	3.739	7.237
Intl. Journal of Climatology	3.76	3.1	3.601	3.928	4.069	3.651
Meteorological Applications	1.411	2.391	1.711	1.685	2.119	2.451
Atmospheric Science Letters	1.504	1.198	1.796	1.879	2.416	2.992
Geoscience Data journal	2.8	1.867	2.667	2.714	1.778	3.488
Weather	0.96	0.812	1.143	0.943	1.596	2.239
WIRES	4.57	5.124	7.057	6.099	7.385	10.072

Academic Book Programme

The academic book programme aims to be recognised for its international, high-quality publications offering a diverse choice of books. Prof Paul Williams is the Society's Book Series Editor and continues to work with authors to develop our academic book programme. Two academic books were published in November 2022. These were: *Science of Weather, Climate and Ocean Extremes* by John Hay and *Climate Observations: Data Quality Control and Time Series Homogenization* by Peter Domonkos, Róbert Tóth, and László Nyitrai. Members are eligible for a 35% discount on all titles in the *Developments in Weather and Climate Science* series via the discount code on their member dashboard.

Non-Academic Book Programme

The Royal Meteorological Society: Weather A-Z was published in partnership with the Natural History Museum in May 2022. The book provides an A to Z guide to the Earth's spectacular weather phenomena and is illustrated with dramatic imagery from the annual Weather Photographer of the Year competition. As well as providing precise scientific and geographic detail, the entries often reveal the folklore that surrounds certain weather events and how they have affected human culture.



Annex E: SOCIETAL BENEFITS

Societal Benefits Board

The Societal Benefits Board (SBB) reports direct to Council and oversees the Societal Benefits area of the Society and its three programmes of work, each of which focuses on delivering the Society's charitable aims; these are Education, Events, and Science Engagement. The SBB is chaired by the Treasurer. The SBB meetings bring these three Committees together to discuss their work programmes and potential new projects, to ensure continuity, effectiveness and strategic alignment and to review the societal benefits being delivered. The SBB also encourages and reviews new project ideas and, once accepted, helps to develop the investment cases for submission to the Strategic Planning Board and then to Council.

In early 2022 the Society entered into discussions with specialist agency B2B Partnerships, with a view to commissioning them to help identify thematic and content opportunities to inform future partnership and business development opportunities. At our February meeting the SBB brought together the Chairs of our three member committees to discuss the proposals tabled by B2B, to evaluate the benefits and offer input to progress the discussions. Subsequent to incorporating this feedback, the Society entered into an agreement with B2B. This partnership has resulted in the Society prioritising new strategic projects, including its focus on sector engagement with the insurance and energy sectors, and launching the Youth and Early Career SIG.

B2B continue to provide partnership development support to the Society, in line with its objectives to diversify revenue streams.

Science Engagement Committee

The Science Engagement Committee (SEC) is responsible for developing and overseeing the delivery of the Society's strategy relating to communication and engagement with all audiences, whether that is the general public, government or other key stakeholders representing the interests of the meteorological profession. Chaired by Prof Peter Stott and Dr Michelle Cain, the committee helps the Society engage in important conversations within weather and climate, whilst providing evidence-based information through statements, briefing papers, events, training, and informal education activities.

A key focus for the SEC in 2022 was the development and delivery of activities within the Society's Climate Action Plan:

- Awarding three 1-year Science Engagement Fellowships to Dr Hannah Bloomfield, Matthew Wright and Daniel Skinner. Each works approximately one day a week for the Society and is responsible for helping to drive engagement with the insurance sector, energy sector and early careers respectively.
- Forming three new Special Interest Groups (Insurance, Energy, Youth and Early Career) to build relationships and engagement with the energy and insurance sectors, and ensure the Society is best supporting the needs of youth and early career individuals who are considering, or currently working in, a career related to weather and climate. All three new SIGs met for the first time in Autumn 2022, with initial actions including commissioning surveys to identify future activities and the Energy SIG hosting its first virtual event on 'Seasonal forecasts and their use in the energy sector' with over 180 attendees.
- Hosting a 1-day Climate Change Forum in London in October, which drew on the IPCC's Sixth Assessment Report to explore a 2050 vision for climate change and society's responses to it. Over 70 individuals attended on the day with the Institute of Food Science and Technology, Chartered Institution of Highways and Transportation, and Royal Institution of Chartered Surveyors supporting the afternoon breakout sessions. The Society submitted a summary of the outcomes from each breakout session to the Government's Net Zero Review in October.
- Attending COP27 in Egypt as an observer organisation in November. Across the two weeks, the Society sent one member of staff and one volunteer to participate in the formal meetings, input into the process through the constituencies, contribute to several side events and produce round-ups for MetMatters. In the lead up to COP27, the Society worked with the American Meteorological Society and the International Forum of Meteorological Societies to build a learning portal for the new African Regional Meteorological Society, which was then promoted in Egypt to those attending.
- Continuing to deliver climate change communication training to ITV through a mix of training sessions and short videos on recent climate science/policy updates. The Society also delivered a version of the



course to the Public Relations and Communications Association (PRCA) in February, June and October, and to Plant Network/the Botanical Gardens Education Network for the first time in March.

There were also several informal education activities outside of the Climate Action Plan which included:

- Securing funding, in partnership with the British Antarctic Survey, from the Natural Environment Research Council (NERC) 'Growing Roots' public engagement funding opportunity to share the Society's Climate Change Communication Training with community leaders across all UK regions. This project started in July and involved running two focus groups with Community Leaders in August and delivering four free virtual training sessions between October and December to 61 Community Leaders. The project will finish in February 2023.
- Running the Weather Photographer of the Year Competition for the seventh year and receiving over 3,000 photos from over 980 photographers around the world. A new competition platform (Zealous) was introduced for 2022 and after announcing the competition shortlist, over 5,400 votes were cast by the public. Some of the winning images are shown below.



Main Winner – Storm Eunice © Christopher Ison

Photo location: Newhaven, East Sussex, UK "When the storm was predicted and that it was carrying the first ever red warning for the south coast, I knew I had to find a spot to record it – this was going to be big!"



Public Favourite - Departing Storm over Bembridge Lifeboat Station © Jamie Russell

Photo location: Bembridge, Isle of Wight, UK

After chasing storms and showers west to east across the Isle of Wight to capture some incredible rainbows, Jamie reached Bembridge as the final shower left. "In a panic I waded into the waist-deep water, fully dressed, just to compose this scene".



Mobile Phone Category Winner – Sunset © Aung Chan Thar

Photo location: Kyaikto, Myanmar Following an overcast and rainy evening, the sun appeared through the clouds and mist just in time for Aung to capture this beautiful sunset photo. "Due to the sun, the pagoda became brighter".





Young Weather Photographer of the Year Winner - Mammatus Sunset © Eris Pil

Photo location: Pittsburgh, Pennsylvania, USA Eris said, "the sky was completely lit up in a way I had never seen before, like these beautiful backlit watercolour clouds", displaying these spectacular mammatus clouds overhead. "I love mammatus clouds; this was my first time ever witnessing them. I hope I have the opportunity to see them again, and I'm excited to share what they look like with others".

Education Committee

One of the pillars of the Society's charitable objective is education, and it is centred towards young learners and their teachers (often within a school context). Education is at the very heart of why we are a charity, and we are unique in what we do and how we do it. The Society is open to all, and is well placed to encourage the study, enjoyment, and personal progression in everything related to weather and climate.

The Society believes that every student should leave school with the basic weather literacy to understand the impact of weather on their personal life, leisure activities and employment; and that every student should leave school with the basic climate literacy that would enable them to engage with the messages put forward by the media or politicians, or to make informed decisions about their own opportunities and responsibilities.

During 2022, the Society commissioned the very first climate literacy survey of school leavers. This has created a benchmark as we continue to monitor climate literacy over the coming years. The survey found that half of school leavers (54%) said they have had education on climate change in the past year, but very few accurately knew how much the Earth has warmed since the start of the Industrial Revolution - the average answer given was 2.5°C versus the reality of 1.1°C. There is also misunderstanding around the sector which contributes most to global warming, with almost a quarter of school leavers selecting transport, when in fact industry, electricity and heat production comes first.

The Society also undertook a climate change curriculum review using a team of volunteers. More than 120 expert reviews spanning 112 GCSE specifications and KS3 documents were received. This enables the Society to continue to assist and advise exam boards, textbook creators, and to develop other teacher support resources. The Society is now able to highlight gaps, inaccuracies, opportunities, and best practice. Thank you to all those who have assisted with this important project. The Society is now consulting with teachers and will report to the exam boards and the wider education policy community during 2023.

The Society is part of a working group for the National Climate Education Action Plan, which was unveiled at COP26 in November 2021. The Society's focus within the working group is on exploring the possibility of Quality Assuring climate teaching resources, teacher training and supporting the Climate Ambassador scheme.

The Society staff and volunteers of the Education Committee continue to give their time and experience to help oversee the educational remit. The well attended Committee formally met twice in 2022, once fully virtually and once in a hybrid mode at the Society Headquarters, allowing members to come together once again in-person if they wished. The Committee undertakes the routine business of reviewing our formal education activities, strategies, priorities, and risks.

Many partners assist the Committee, including the Institute of Physics, Royal Geographical Society, Geographical Association and the Met Office. The Society would like to thank everyone for their generous support, significant efforts, and loyal dedication.

Highlights from 2022 include:

 New resources that support learners and teachers in physics and geography, <u>www.metlink.org/blog/climate-change/climate-change-resources-for-physics/</u> and <u>www.metlink.org/blog/climate-change/new-ipcc-linked-teaching-resources/</u>



- Educational climate change related content to link in with International Women's day and COP27, <u>www.metlink.org/blog/climate-change/new-resource-for-international-womens-day-2022/</u> and <u>www.metlink.org/blog/climate-change/resources-for-cop27/</u>
- *"Weather and Climate: a Teachers' Guide*" won a silver medal from the Geographical Association. It was also selected as a finalist in the Teach Secondary awards 2022. This vital teaching publication remains free of charge, is available online via <u>www.Metlink.org</u>.
- Sylvia Knight, Head of Education, has been granted a Visiting Professorship at the University of Reading, jointly in the School of Mathematical, Physical and Computational Sciences and the Institute for Education.
- We had stands at the Geographical Association annual conference and the Geography SW conference and presented at the European Geosciences Union conference highlighting the Society's educational activities.
- Come Rain and Shine, an online learning course on weather and climate, always remains available with three facilitated periods a year. The Society continues to provide vital teacher training at a number of universities, and issues instrument kit loans to schools a term at a time.

Events

The Society successfully delivered an ambitious programme of events throughout 2022. Across the 53 events: 13 were held in-person; 5 live streamed; and 35 virtual conferences and meetings spanning programmes that lasted just an hour or 2, to full complex conferences with parallel sessions. The continued success of these meetings and conferences is thanks to the voluntary contributions of organisers, committees, speakers and members of the Meetings and Conferences Committee, together with the tremendous efforts made by Society staff.

The Society's events once again saw an increase in delegate numbers and demographic reach online. Highlights of the year included topical subjects such as those featured at the Climate Change Forum and National Meetings on subjects such as Machine Learning and Seasonal Forecasting for the Energy sector. The Society is pleased to be able to provide events for all our members and the following chart shows the % breakdown of members across the different groups and the number of events provided to each group during 2022:



To align with the Society's Net Zero pledge the Events team started to collate data from attendees about how they travelled to and from events, the distance travelled and their mode of transport. This data is used alongside information taken from the venue to collate the carbon footprint of each event. To go alongside these efforts to reduce our carbon footprint, the Society decided that all catering provided would be vegetarian or vegan exclusively. The Society also became a signatory to 'Net Zero Carbon Events' - a pledge developed as a result of global collaboration throughout the events industry.

The events team has taken steps to make both the registration process and the way the events are laid out on the website more accessible for attendees. All users must now create an online account on the first time of use if not a member already. After this, delegates will be able to see what events they have registered for or



previously attended, as well as the ability to amend abstracts submitted. This should speed up the registration process and prove a useful tool for members. Events can now be viewed on our website in a <u>calendar layout</u>. After listening to feedback from the members, the Society hopes that this will help people see what events are coming over the next few months. All online meetings are now delivered on the Zoom platform, again to help with accessibility for all, although Teams will be used as an alternative option when necessary.

The Society continued to ensure that COVID-19 safety measures were in place at all in-person events for the safety of delegates and RMetS staff.

National Meetings

The National Meeting programme offers a wide variety of events to cater for all aspects of the meteorological community. Diversity within the programme remains one of the key priorities and brings people together from academic, professional and other backgrounds to discuss and challenge current topics of interest. Last year the annual WeatherLive Conference was moved within the National Meetings programme.

The following National Meetings and Taster sessions were held in 2022:

Feb	Understanding the Weather of 2021			
March	History of Climate Science Ideas and their Applications			
	Gardening for Wildlife in a Changing Climate			
April	Climate Change & the World's Three Poles: The Arctic, Antarctic & Himalaya			
May	Tailoring Seasonal Climate Forecasts for the Utility Sector			
June	COVID-19 and Climate Change: what lessons can we learn? and AGM			
Sept	Machine Learning for Atmospheric Sciences: Values and Controversies			
Oct	Weather and Sailing 2022			
	WeatherLive 2022			
Nov	The Heat is On: The Major Heatwaves of 2022			
Dec	Challenging Forecasts, Difficult Decisions			

2022 saw the long-awaited return to in-person meetings and whilst this was welcomed by many, it became clear that the National Meetings needed to diversify, and that audiences' requirements had changed and adapted since before COVID-19. In order to ensure opportunity was available for all members and non-members to be able to attend events throughout the year, the Society offered a variety of in-person, virtual and live streamed events - of various durations - aiming to ensure that we reached the right target audiences in their preferred format.

In 2022 the Society partnered and co-sponsored with the RHS, Grantham Institute, BAS, RIN, Met Office, University of Reading, NCAS and ECMWF.



Attendance at National Meetings (and Tasters) over recent years is shown in the following graph.



*Figures for 2020, 2021 and 2022 include Taster sessions in the National Meeting figures

The overall number of attendees for 2022 was slightly down from 2021, which was due to a combination of factors. There was still some apprehension at returning to in-person events and as more events started to return, delegates priorities on which events they attended had changed. The Society found that delegates were attending fewer events in general and wanted shorter virtual events. The Society also faced challenges with meeting postponement due to industrial strike action. The number of requests and views for event recordings increased as people could watch the event at a time that was suitable to them. The Society received continued support from the Meetings and Conferences Committee, international speakers and chairs, and other volunteers who aided the events team to ensure the programme could be delivered.

Conferences and Other Events

In 2022, the Society ran 5 conferences spanning a diverse and broad range of subjects. Each conference seeks to meet the strategic aims of the Society as well as being inclusive for the membership. Both online and live events were included within the programme.

The **Student and Early Career Scientists Conference** was held for the first time as a hybrid conference at Manchester University on the 4-5 July. The opportunity to attend both in-person and online was offered for all sessions, as well as the chance to present virtually. The conference attracted 76 delegates in-person and 16 online. Keynote sessions were very successful and included a joint talk from Prof Penny Endersby, CEO, Met Office and Clare Barclay, CEO, Microsoft UK. The in-person conference allowed for the return of traditional poster sessions and networking throughout the conference. 38 posters were presented in total. A big thank you needs to be extended to the <u>Student Organising Committee</u> who once again delivered an outstanding event for the early career and student community.

In the same week as the Student and Early Career Conference, the **Atmospheric Science Conference** returned in the first of a 3-part series of events at the Mercure Hotel in Manchester. The day started with a keynote speech from Dr Ella Gilbert which set the scene for the day following the theme of the conference 'Science for Society'. The day then broke into parallel workshops and poster presentations. The conference was attended by 125 delegates and it was great to see academics and industry return to live events. The 2nd event in the series was a virtual 1-day event on 22 November. This online event focussed on oral and keynote presentations in parallel sessions. The final event in this series will conclude on 21 March 2023.

On 20 October, the Society saw the return of the **Climate Change Forum: A Vision for 2050 and Implications for Action**. This conference was last held in 2019 but returned for an in-person event in London. The 1-day programme led with industry professionals discussing an overview of the IPCC's 6th Assessment Report and then moved into Climate Change in the UK by 2050 and talks on multiple sector visions for 2050. The conference focused on 3 sectors - buildings, food and transport - and the Society partnered with organisations key in those sectors - namely Institute of Food Science and Technology, Chartered Institution of Highways and Transportation, and Royal Institution of Chartered Surveyors - to run



parallel sessions on sector specific challenges. The conference had 83 delegates with 11 poster presentations.

Two series of **Met Masterclasses** took place in 2022, one in March and the other in October. These afternoon sessions are co-organised alongside the University of Reading and offer CPD opportunities to both members and non-members online. We were fortunate enough to have the spring series sponsored by FleetWeather, enabling these workshops to be run free to the Met community. These sessions proved extremely popular for the third year running, attracting almost 200 delegates per session.

Local Centres and Special Interest Groups

The Local Centres have continued to organise meetings across the UK with a wide variety of talks attracting attendees (and speakers) from all over the world. A benefit of the virtual talks has been the opportunity to work with speakers who they may not have otherwise had the opportunity to due to their location.

The Local Centres held a total of 18 meetings in 2022 with the Scottish Centre and the Yorkshire Local Centre continuing to be the most active.

Reports from Local Centres

The Society's Local Centres offer an extensive programme of events and meetings which are of great interest to Society members and the general public all around the country. The meeting details, speakers and dates are available at <u>rmets.org/events</u>. The Society and its Local Centres offer grateful thanks to all their speakers, who have provided an interesting and varied programme, to the Society's staff for their support, and of course to all the regular and enthusiastic audiences for supporting the Local Centres.

Activities of the Society's Local Centres during 2022 are detailed below:

East Anglia Centre

The East Anglia Centre was inactive throughout 2022.

East Midlands Centre

This is the East Midlands Centre's second year of operation since its restart in 2021. Two virtual meetings were held during 2022:

- 31 March: <u>Weather stories from the archives</u> Prof. Georgina Endfield (University of Liverpool)
- 6 October: <u>How climate change is transforming mountain environments across the world</u> Dr Ioana Colfescu (National Centre for Atmospheric Science)

Attendance was 33 for Prof. Endfield, with 69 subsequent views of the video, and 38 for Dr Colfescu, with 186 subsequent views. The policy at the East Midlands Centre is to try to identify and reach out to local groups who might be interested in the topic presented. Online polling indicates a roughly even split between enthusiasts, students/early career professionals and established meteorologists, with roughly 10% joining from abroad. The East Midlands Centre plans to continue mainly with online meetings, but will be trialling a hybrid meeting later in 2023.

The <u>Weather Front</u> (established 1981) is now produced monthly and entirely online. There are currently 13 observers in the regional network, which the editor is working to expand.

North East Centre

The North East Centre was inactive throughout 2022.

North West Centre

The North West Centre was inactive throughout 2022.



Scottish Centre

The Scottish Centre hosted six meetings with an average attendance of 27 in real time plus 138 viewing the recordings. Titles of the meetings included:

- 14 January: <u>Atmospheric processes and their impact on the 79° North Glacier, northeast Greenland</u> Dr Jenny Turton (Arctic Frontiers)
- 18 February: <u>Post graduate student talks</u> Ms Megan Pearce (Met. Office), Mr Charlie Suitters (University of Reading)
- 25 March: <u>Extreme design: building for future climates</u> Prof. Sue Roaf (Heriot-Watt University)
- 7 October: <u>The nowcasting project/meso-analyst role as developed at the UK Met. Office</u> Mr Nick Silkstone (Met. Office)
- 8 November: <u>A history of the Dundee Satellite Receiving Station and the follow-on DSS Ltd ground</u>
 <u>station</u>
 - Mr Neil Lonie (Dundee Satellite Receiving Station)
- 6 December: <u>Beyond clean air zones and traffic electrification: lessons from covid lockdowns and clean</u> <u>air interventions</u>
 Prof. Zongbo Shi (University of Birmingham)

South East Centre

The South East Centre hosted 2 meetings in 2022. Titles of the meetings included:

- 11 October: <u>New and On-Going Research at the University of Reading; A PhD Mini Conference</u> Brian Lo, Hannah Croad, Isabel H Smith
- 24 November: Long-Range Transport of Coarse Mineral Dust Particles: Can a Model Match Observations?
 Natalie Ratcliffe

South West Centre

In 2022, Bath Royal Literary and Scientific Institution (BRLSI) enjoyed its sixth year as the Royal Meteorological Society's South West Local Centre; our aim is to host at least one meteorological lecture per year and in 2022 we were again able to provide lectures via Zoom. We intend to continue to provide lectures through BRLSI Geography and Adventure, in conjunction with BRLSI Science, Royal Meteorological Society and Royal Geographical Society – as appropriate.

- 2 February <u>Climate Change and The Country Diary</u> Grahame Madge
- 2 March <u>Surviving the Last Ice Age: Move, Adapt or Die</u> Prof Danielle Schreve
- 23 May 2022: <u>Would You Join the Resistance if Your Country Was Occupied?</u> Dr Halik Kochanski
- 1 June: <u>A Road to Extinction: Can Paleolithic Africans Survive in the Andaman Islands?</u> Dr Jonathan Lawley
- 8 September 2022: <u>Did the Phoenicians Reach America Before Columbus?</u> Philip Beale

Welsh Centre

The Welsh Centre was inactive throughout 2022.

West Midlands

The West Midlands Centre hosted two meetings at which the average attendance was 15. Titles of the meetings were:

17 February: <u>A review of extratropical cyclones: observations and conceptual models over the past 100 years</u>

Helen Dacre, Department of Meteorology, Reading University

• 17 March: <u>My 40 years in meteorology - the highs and lows of weather forecasting</u> Martin Young, Met Office (retired), Exeter



Yorkshire Centre

The Yorkshire Centre hosted 5 online talks in 2022. The titles of the meetings included:

- 19 Jan: <u>VIRTUAL | How the Polar vortex Influences your life in Winter</u> Dr Simon H. Lee (Columbia University)
- 22 Feb: <u>VIRTUAL | Yorkshire Local Centre Annual PhD Showcase</u> Eszter Kovacs (CAS), Jonathan Coney (ICAS), Lauren Burton (ICAS)
- 3 May: <u>HYBRID | Planes Brains and Atmospheric Aerosols</u> Sarah Barr (University of Leeds)
- 7 Jun: <u>HYBRID | The Challenges of Weather Forecasting in Africa</u> Dr Caroline Bain
- 19 Oct: <u>Meteorology to Methane... How did I get here?</u> Emily Dowd (Student at University of Leeds)

Reports from Special Interest Groups

The Special Interest Groups (SIGs) of the Society are informal groups interested in specific areas of meteorology. The groups are primarily a means of bringing together those with a specialised interest that cannot be explored fully by the general Society meetings.

Four new SIGS formed in 2022: Energy SIG, Insurance SIG, Youth and Early Career SIG and the Climate Dynamics SIG. These new SIGS will provide reports from 2023 onwards.

Atmospheric Chemistry

The group held a virtual meeting titled '<u>Atmospheric Chemistry and Data Science – The Final Frontier?</u>' on 8 December. The meeting was well attended, with around 50 participants. It included several invited speakers from outside of the UK, including prominent scientists based in Germany and the US. The topic stimulated much interesting discussion.

Atmospheric Electricity

The group virtually held the 'Wilson Meeting on UK Atmospheric Electricity' on 24 November. 70 people attended internationally; there were 21 presentations including two invited international speakers. A meeting report was produced in preparation for *Weather*.

Aviation Meteorology

The main activity was the joint RMetS/GASCo (General Aviation Safety Council) webinar on Weather in the English Channel and in France, held in April 2022. Four of the six members of the SIG committee were involved in the meeting. Phil Nicol Gent, RMetS representative on GASCo, acted as champion for the meeting, Mike O'Donohoe, CE of GASCo, introduced the meeting and gave a presentation on GA accident rates in the near continent of UK registered aircraft, James Morrison gave a talk on Decision Making, and Bob Lunnon gave a presentation on wind and density issues over southern France.

Climate Science

Nothing to report.

Data Assimilation

Nothing to report.

History of Meteorology and Physical Oceanography

In 2022, the Group gained a number of new members and had a variety of activities. An article on the group was published in the May 2022 issue of *Weather*.

Committee member Chris Folland coordinated the Society's meeting <u>The History of Climate Science Ideas</u> and their <u>Applications</u> which was held on 12 March 2022 in London bringing together a distinguished range of speakers.

We started a series of evening online meetings at the height of the pandemic to maintain activities. These have now continued in their own right and three have taken place this year. In January, Martin Young spoke Page 23 of 42



on <u>The Evolution of Weather Forecasting in the UK</u> - the changing role of the forecaster from the precomputer age to the modern day, attracting an online audience of almost 100. This was followed in May with Jonathan Martin, author of the recent biography of Reginald Sutcliffe; he spoke on <u>Chasing a Giant –</u> <u>Reginald Sutcliffe</u> and the invention of modern weather systems science. In September, Stephen Burt spoke on <u>Oxford and Durham – the two longest climatological observations in England</u>.

The Group's page on the Society's website was updated (www.rmets.org/special-interest-groups/historygroup). Two further issues of the Group's long-running newsletter were published - back-issues remain available on the Society's website. The Distinguished Voices podcast now includes a large number of recordings with preparation for an interview with John Mitchell planned for early 2023 (www.rmets.org/distinguished-voices). A Pen Portrait of former Society President Henry Charnock was completed by John Gould and has been submitted for publication in *Weather*. The Group produces Occasional Papers on behalf of the Society and work started on another this year. Finally, with the 150th anniversary of the founding of the Quarterly Journal in 2023, the Group has overseen the compilation of a timeline of classic papers that have appeared throughout its history.

Meteorological Observing Systems

A meeting on Making Weather and Climate Measurements in Difficult Places had been planned for October 2022 but this had to be postponed until March 2023 due to train strikes. The SIG held its AGM on 27 September and produced both a spring and autumn newsletter.

Weather, Art and Music (WAM) Nothing to report.

Weather Service Providers Nothing to report.

Association of British Climatologists Nothing to report.



Annex F: UNDERPINNING ACTIVITIES AND CROSS-CUTTING PRIORITIES

Council and Committees

MEMBERSHIP OF COUNCIL (TRUSTEES OF THE SOCIETY)

Patron: King Charles III, HonFRMetS

From 1 January to 30 September 2022 the constitution of the Council was as recorded in the Annual Report for 2021. On 1 October 2022, the following Council held office:

PRESIDENT Lesley Gray, PhD, FRMetS (also Chair, Strategic Planning Board and Awards Committee)

> VICE-PRESIDENTS David Griggs, PhD, FRMetS Robert A Varley, FRMetS, CMet Catherine Senior

VICE-PRESIDENT FOR SCOTLAND Gary Johnston

GENERAL SECRETARY Shanti Majithia FRMetS, FRSS (also Chair, House Committee, Salary and Remuneration Committee and Membership development Board)

> TREASURER Jennifer Campbell (also Chair, Societal Benefits Board)

COMMITTEE CHAIRS Anna Ghelli, PhD, FRMetS (Scientific Publishing Committee) Edmund Henley (Meetings and Conferences Committee) Karl Shepherdson, FRMetS (Education Committee) Peter Stott, PhD, FRMetS (Science Engagement Committee) Rebecca Venton, FRMetS, CMet (Professional Accreditation Board)

> MEMBERS OF COUNCIL Aisling Creevey, FRMetS, RMet Indrani Roy, FRMetS

Council met on three occasions during 2022 in February, June and November. In addition to routine business, Council had an update on theWeather Club transition to MetMatters, had discussion items on scientific publishing, diversity and inclusion, education activities, strategic planning process, marketing and communications activities, and membership. Council also has pre-meeting presentations on: RMetS thematic content and partnership opportunities, the balance between member and non-member activities and engagement, and diversity and inclusion including unconscious bias.

Council Diversity

The Society's Council has long championed the benefits of diversity on decision-making and seeks to have a diverse range of individuals on its Council and committees in terms of protected characteristics and in terms of diversity of background and experience. To identify the skills and knowledge it needs and inform future recruitment, the Society conducts an annual skills audit, and asks for nationality details. The current Council membership has an equal gender balance, with some representation from ethnically diverse communities.

House Committee

The House Committee reviews and develops the key functions that underpin the general activities of the Society in order to achieve its strategic aims. The Committee, chaired by the General Secretary, normally meets ahead of the Council meetings. The House Committee met twice in 2022 on 10 February and 16 November.



Highlights from 2022:

- Monitoring Governance issues is an important activity for the House Committee. An overall governance health check confirmed that the Society is in a good position.
- The Society's Risk Register is one mechanism that ensures ongoing risk is reduced and monitored. Possible development work on the land adjacent to the Society's Headquarters has been added as a new risk to the register and has led to the uptake the services of a planning consultant and a heritage expert.
- Health and Safety issues continue to be carried out by professional experts with recommendations reported to and monitored by the House.
- Changes to Standing Orders required separation of the Reserves and Investment policies resulting in a
 full review of the Society's investment policy with the provider. The House is responsible for overseeing
 the Society's 'responsible investments' in alignment with its mission and values whilst holding a
 concurrent duty to ensure the financial returns. The Council expects companies in which they invest to
 demonstrate sustainable environmental practices, a strong sense of ethical social responsibility
 internationally and that they conduct all their operations ethically with honesty, integrity and openness.
- Society has made good progress towards its Net Zero pledge including capturing scope 1 and 2 emissions data² and starting to capture scope 3³ data, and developing feasibility studies to help steer the Society's Net Zero roadmap. See Net Zero section on page 27.
- House was updated on the Society's donations and legacies plan, including ways to attract donations by framing specific projects aligned with charitable objectives and online donation platforms.
- House were informed of reviews relating to our insurance, auditors and bank services.
- House reviewed the proposed changes from the Society's employment policies and benefits. This review
 considered what is affordable and attractive to current and potential future employees. Proposed
 employment policies were approved.
- House reviewed the Business Plan and budget for 2023 and recommended them to Council. The budget supports the everyday operations and regular activities of the Society and plan for strategic and charitable expenditure from funds available to maximise the opportunity of partnership and project related grant income. In view of the high level of surpluses taken to the reserves since 2014, and the Society's good financial position, the House supported a deficit budget of £187k for 2023 before any gains or losses on investments.

Strategic Planning Board

The Strategic Planning Board (SPB) supports the development of the Society's Strategic Plan. It normally meets biannually to ensure the Strategic Plan remains fit for purpose, to provide guidance on cross-cutting themes and potential strategic partnerships, and to review and prioritise strategic project proposals. The Chair of the SPB is the President of the Society.

The SPB met once in 2022 on 12 October. At that meeting the Board reviewed the Strategic Plan, including a review of potential threats and opportunities that have arisen since the plan was launched. The Board confirmed that the Plan was still fit for purpose. The Board also provided broad support for a deficit budget to be worked up, which would be reviewed by House. The Board reviewed the proposed mid-term strategic plan activities, approved the plan and is recommending it to Council. The Board also agreed that the Society should follow a similar process next year when extending the current Plan from 3 years to 6 years up to 2026.

Business Development and Strategic Partnerships

The Society partners with a range of organisations, including academic institutions, businesses and industry, NGOs and government, to support the delivery of its charitable objectives.

In 2022, the Society partnered with: University of Exeter, University of Reading, University of Bristol, University of Chester, University of East Anglia, University of Oxford, Swansea University, University of

² Scope 1 emissions include direct organisational sources from natural gas and petrol/diesel fleet

vehicles. Scope 2 emissions are from electricity used directly by the organisation.

³ Scope 3 emissions encompass those not produced by the organisation itself but from upstream and downstream value chain activities.



Newcastle, University of Sheffield, University of Leeds, University of Lancaster, University of Manchester, Columbia University, University of Bath, Grantham Institute, National Centre for Atmospheric Science, NERC, NCAS, BAS, ITV, Carbon Brief, Met Office, ECMWF, AccuWeather, DTN, FleetWeather, Royal Navy, Jersey Met Dept, StormHour, TORRO, Royal Geographical Society, Geographical Association, Royal Horticultural Society, Canadian Meteorological and Oceanographic Society, American Meteorological Society, Australian Meteorological and Oceanographic Society, Indian Institute of Tropical Meteorology, Royal Photographic Society and Institute of Physics, European Meteorological Society, International Forum of Meteorological Societies, African Regional Meteorological Society, Climate Action for Associations, Mathematics Education Innovation, Public Relations and Communications Association, STEM Learning, Global Action Plan/Transform Our World, the Science Museum, Young People's Trust for the Environment, IPSOS, Plant Network, Botanic Gardens Education Network, Institute of Food Science and Technology, Chartered Institution of Highways and Transportation, and Royal Institution of Chartered Surveyors, Royal Institute of Navigation, Bath Royal Literary and Scientific Institution (BRLSI), GASCo and UK Flight Safety Committee, Pearson, OCR, Energy Networks Association, CEFAS, Aurora Energy, Citadel, AXA XL, Lloyds Banking Group, Bank of England, Inigo Insurance, Brit Insurance, Liberty Special Markets, Willis Towers Watson, B2B, Wiley, BEIS, EDF Energy, National Grid ESO, Shell, SSE, Ofgem.

Highlights from the activities delivered through the Society's business development and strategic activities in 2022:

- Delivered Climate Change Communications Training for Community Leaders, funded by the Natural Environment Research Council, part of UK Research & Innovation. As part of the Growing Roots public engagement funding opportunity.
- Delivered the Weather Photographer of the Year competition in partnership with AccuWeather, increasing media engagement and coverage of the campaign for the third year in a row.
- Launched a partnership with IPSOS to deliver RMetS ground-breaking research into the "Climate Literacy" of school leavers.
- Delivered the "Gardening for Wildlife in a Changing Climate" event in partnership with the Royal Horticultural Society.
- Continued partnerships with ITV, the PR & Communications Association, Plant Network/Botanic Gardens Education Network and Climate Action for Associations to provide training on Climate Change Communications to professional communicators and educators.
- Continued partnership with the University of Reading to deliver two further "Meteorological Masterclasses" providing continued professional development opportunities for operational meteorologists.
- Welcomed four new Corporate Members to the Society, bringing the total number of corporate members to 16.
- Launched a new public donations campaign aimed at increasing funding support for RMetS work on Climate Education.

Equality, Diversity and Inclusion (EDI)

In 2022, the Society appointed an external consultant to provide overarching coordination for the Society's work on EDI and support for the Society with reporting. The Society launched a new EDI Working Group to provide advice and guidance to the Society as it continues to deliver and improve its work on EDI. The Society has established clear actions and priorities for improving EDI and begun to make progress e.g. through improving the accessibility of its communications.

Net Zero

The Society is a part of <u>Pledge to Net Zero</u> along with over 100 signatories, which is an initiative tackling greenhouse gas emissions within the UK's environmental services sector. This initiative strengthens the Society's longstanding efforts to address the global climate emergency.

The Society is committed to achieving net zero direct carbon emissions (Scope 1 & 2) by 2025, where there is direct control through avoiding, reducing and substituting. It is also working towards net zero indirect emissions (Scope 3) by 2030, subject to a full feasibility assessment.



In 2022, the Society worked closely with <u>CAFA</u> (Climate Action For Associations), which aims to increase climate and sustainability leadership, drive change and reach net zero using the collective power and influence of professional, trade associations and membership organisations. All CAFA members are committed to the same overarching goal: to become a net zero organisation and support their members to accelerate their collective net zero position.

The Society also helped develop and signed <u>The Charter for Climate Action</u>. This Charter aims to leverage greater collective ambition through interdisciplinary coordination and is supported by many other professional bodies.

2022 Carbon Emissions Data



Reporting year:

01 January 2022 to 31 December 2022

Reporting Boundary:

Reading Headquarters (104 Oxford Road, Reading RG1 7LL)

Emissions measured:

Electricity, T&D Losses, Natural Gas, Water, Onsite Renewables, Business Travel, Waste, Paper, Homeworking (excluded from footprint)

The Society will report on progress annually and has already been collating information about scope 1 and 2 emissions for 2019 and 2020. It has been mindful of reducing its carbon footprint for over a decade and is taking steps to eliminate scope 1 emissions by replacing an end-of-life gas boiler with a new electric system. The Society has already cut its scope 2 electricity emissions to net zero by switching to a 100% renewable energy tariff, switching to efficient lighting and installing solar panels on the roof to contribute to its energy demands. Work to fully understand scope 3 emissions is currently underway, and the roadmap will be updated after feasibility studies are complete.

Marketing and Communications

The role of communications and marketing is to promote the Society's work and the understanding of weather and climate. The Society recognises the importance of increasing its visibility, raising awareness and being an independent, authoritative voice about weather and climate science.

Highlights from 2022:

- **Media coverage**: 311 media interview requests fulfilled and 3,516 items of media coverage, an increase of 65% and 39% respectively. The majority of coverage name checks the Society, which is important for brand awareness.
- **Website statistics**: Website users grew by 37% in 2022, with 952,596 unique users visiting the website. The number of page views increased by 40%, from 922,865 in 2021 to 1,294,601 in 2022.



- Our **social media** presence continues to grow steadily across all our platforms. The most significant increase has been on LinkedIn, where followers grew by 55% from 2,000 to 4,441. In addition, we have 15,056 followers on Twitter, 6,564 on Instagram and 4,700 on Facebook.
- **Impact Report**: the second Impact Report (<u>rmets.org/impactreport</u>) published in June 2022 focussed on key priorities of the work of the Society in 2021. The report is also a useful membership tool for events in a printed format. The Impact Report landing page and news story were viewed 323 times.
- Media training: Training for Science Engagement Manager with a BBC news reporter.
- Awards finalist: The Communications team were finalists for Team of the Year at last year's MemCom Excellence Awards.
- **HM The Queen**: The Society had prepared for the announcement in advance and had a plan in place for when the news of the Queen's passing was announced to ensure the appropriate tone and timing of communications.
- Accessibility: Supporting and training colleagues in the production of accessible documents, feeding into the EDI working group.

In 2022, the Society delivered the following key marketing and communications activities:

Membership

- The Society continues to see a high engagement through Members' eNews, with stats performing above average. In 2022 the average open rate was 40%, and the average click-through rate was 8%. According to <u>Campaign Monitor</u>, the benchmark for non-profits is 26.6% and 2.7%, respectively.
- Completing a user journey project. The Society has defined a series of member personas and tailored key messaging for each. These will be used throughout the year to ensure we are targeting members with tailored content.
- The Society is using Microsoft Dynamics to segment member data and send targeted renewals letters based on member personas and more tailored benefits.
- Focus on increasing awareness of the professional accreditation scheme. Developed an animated <u>Top</u> <u>Tips Accreditation video</u> to encourage more members to start their accreditation journey. Designed digital and physical badges to recognise our RMet and CMet members.
- Delivering a <u>promotional Society video</u> that can be used to increase RMetS awareness at events. The video was filmed at three events and conferences throughout the year and features some of our members and close partners.
- Society Awards were able to be hosted in-person again at the AGM, with <u>our landing page</u> on the RMetS website used to highlight each recipient and their achievements. Conducted a social media campaign to support the winner announcements, and press coverage was coordinated with the relevant university and Met Office communications teams.
- The summer saw trolling across the community with reports of the record-breaking heatwaves. The Society worked with the new BBC Climate Misinformation Reporter to share stories across the media and will be working with partners on a toolkit and event to support our early career members with handling media and social media criticism, harassment and misinformation. The Society also raised several editorial complaints on behalf of our membership.

Scientific Publishing

- Another strong year, despite changes in the team at Wiley, for the State of the UK Climate Report in IJOC (International Journal of Climatology). The Society now has an established relationship and comms template with Wiley, the Met Office, the National Oceanography Centre and Woodland Trust, including a well-attended media briefing with the Science Media Council ahead of publication. The Met Office led on the interview requests this year, which resulted in the Society halving its direct coverage referencing RMetS and/or the journal.
- Despite the drop in coverage for State of the UK Climate in connection with RMetS, the Society sustained its overall coverage for publications. In 2022, there were 931 national and international coverage items directly referencing our publications, this is at the same level as 2021.
- Content from the journals continues to be actively promoted on Twitter and LinkedIn. This promotion provides brand awareness and a regular content source that benefits the social media algorithm and allows us to reach wider audiences.



Education and Outreach

- The Society supported the Climate Literacy project with press coverage of the report and built a donations page and campaign to support our education work.
- Since the launch of the revamped <u>metlink.org</u> website in February 2021, the number of users signing up to the MetLink teachers' newsletter has increased by 22%.
- MetMatters content continues to grow in recognition with a content strategy that allows us to be relevant and timely, with more guest blogs, infographics, animations, and video content. The number of users browsing MetMatters content has increased by 64%, from 204,653 to 572,929. MetMatters is the main landing page for most RMetS website users; 60% of the total userbase is browsing MetMatters.
- MetMatters is now in the Society's media coverage top keywords as the media are picking up on articles and explainers that are timely to the news. Whilst MetMatters may not always be directly referenced it shows that its content is now more searchable, targeted and timely.
- The 7th year of Weather Photographer of the Year, and the third and final time in partnership with AccuWeather. Despite a decrease in entries due to moving to a new competition platform and the decision to not allow entries from Russia and Belarus, the Society has seen significant engagement and a better quality of entries and larger geographical demographic. At the end of 2022, media coverage was across 464 outlets in 37 countries – a 13% increase, this included some key channels such as BBC Breakfast and The New Scientist.
- The Society formed a partnership with Canon to provide the competition prizes.
- The Society also trialled a digital photography exhibition, displayed in three venues with an estimated reach of 25,000 visitors.
- The Society formed a media partnership with The Week Junior Science+Nature to support the Young Weather Photographer of the Year with regular content and we also helped them produce a feature in the magazine for the 250th anniversary of Luke Howard.



Annex G: Membership of Committees, Boards, Local Centres and SIGs

The Committees listed below are the standing Committees of the Society as at 31 December 2022. Membership of other sub-committees, working groups and similar *ad hoc* bodies are not detailed.

Atmospheric Science Conference Scientific Programming Committee

Jennifer Rourke (Chair), Alcide Zhao, Beena Sarojini, Helen Macintyre, Paul Williams, Vikki Thompson

Accreditation Board

Becky Venton (Chair), Andrew Eccleston, Alan Hisscott, Pete Inness, Derek Swannick, Julian Mayes, Ross Reynolds, Bob Riddaway, Keith Thomson, Emma Boorman, Ewen McCallum, Alex Kubara, Baden Hall.

Awards Committee

Lesley Gray (President and Chair), Alan Thorpe, Liz Kent, Jo Haigh, Cristina Charlton-Perez, Simon Lee, Ruth Purvis, Dudley Shalcross.

Climate Change Forum Planning Committee

David Warrilow (Chair), Anastasia Mylona, Dann Mitchell, Erik Mackie, Jim Watson, Jose Garibaldi, Pete Smith, Rhian Rees-Owen, Steve Smith, Simon Levey.

Course Evaluation and Continuous Professional Development Panel

Keith Thomson (Chair), Andrew Eccleston, Peter Jonas, Norman Lynagh, Paul Monger, Penny Tranter, Becky Venton, Michael de Villiers.

Education Committee

Karl Shepherdson (Chair), Andrew Charlton-Perez, Simon Foster, Geoff Jenkins, Melissa Lord, Taj Bhutta (representatives of Institute of Physics), James Rae, Paula Richardson (Representative of Geographical Association), Jeremy Thomas, Simon Pinfield/Steve Brace (representatives of Royal Geographical Society), Rebecca Griffiths/Lisa Tomkins (representative of Met Office), Phoebe Smith-Barnes (representative of the Geological Society).

House Committee

Shanti Majithia (Chair), Catherine Senior (Vice-President), Anna Ghelli (Chair of Scientific Publishing Committee), Jennifer Campbell (Treasurer).

Meetings and Conferences Committee

Edmund Henley (Chair), Natalie Harvey, Mark Rodwell, Simon Levey, Steve Colwell, Alcide Zhao, Dafni Sifnioti, Ioana Colfescu, Malcolm Newman, Greg Dewhurst, Rachel Perks.

Membership Development Board

Shanti Majithia (Chair), Daniel Brener, Sarah Dennis, Richard Griffiths, Sarah Hewitt, Amethyst Johnson, Katherine Latham, Rachel Yan.

Science Engagement Committee

Peter Stott (Co-Chair), Michelle Cain (Co-Chair), Emily Shuckburgh, Pierre Friedlingstein, Alyssa Gilbert, Candice Howarth, Adam Scaife, David Warrilow OBE, Clare Heaviside, Dann Mitchell, Chloe Brimicombe, Hannah Bloomfield, Matthew Wright, Daniel Skinner.

Scientific Publishing Committee

Eddy Graham and Simon Lee (Co-Editors, Weather), John Methven and Andrew Ross (Co-Editors, QJ), Becky Hemingway and Andrea Montani (Co-Editors, ASL), Cristina Charlton-Perez and Dino Zardi (Co-Editors, Met Apps), Bill Collins and Enric Aguilar (Co-Editors, IJOC), Kate Royse and Jian Peng (Co-Editors, GDJ), Vicky Pope and Habiba Gitay (Co-Editors, CRS). Representatives of Wiley are also invited to attend.



Strategic Planning Board

Lesley Gray (President and Chair), David Griggs (Vice President), Jennifer Campbell (Treasurer), Shanti Majithia (General Secretary and Chair of House Committee), Robert Varley.

Student Conference Organising Committee

Tim Banyard (Co-Chair), Lisa Degenhardt (Co-Chair), Michael Baidu, Megan Pearce, Zhongwei Liu, Francesca Morris, Phoebe Noble, Ned Williams.

Vocational Qualification Group

This committee is dormant.

Local Centres

East Anglia Centre Chris Bell (Chair), Dan Holley (Co-Chair).

East Midlands Centre

Michael Steven (Chair), Roger Phillips (Editor: Weather Front), Alan Jones, Mike Longman, Florentine Weber (student representative).

North East Centre Deborah Smith, Ken Cook, Patricia Uttridge.

North West Centre

Emma Simpson (Chair), Hugo Ricketts (Vice-Chair), Andy Smedley, John Wilmer, Michael Woolley, Jonny Taylor, Keith Bower, Ron McLone, Doug Lowe, Ernesto Reyes Villegas.

Scottish Centre

Mr G H Johnston (Chair), Mr D Brener, Prof. R L H Essery, Prof. D Fowler, Mr G Gunn, Dr V Ingram, Ms A McLure, Mr G G Meldrum, Ms M G Roy, Dr J A Smith, Mr D Steele, Prof. D Stevenson, Prof. S Tett, Dr V Thompson, Mr G Wolverson, Mr A G McDonald (Treasurer) and Mr R C Tabony (Secretary).

South East Centre Rob Thompson (Chair), Isabel Smith.

South West Centre Dick Bateman (Chair), Penny Tranter (Co-Chair).

Welsh Centre Dr Michaela Bray (Chair), Thomas Green.

West Midlands Dr Ian D Phillips (Chair).

Yorkshire Centre

Sarah Barr (Chair), John Goulding (Secretary), Thomas Sharp (Treasurer), Suzanne Robinson (Publicity Officer), Michael Baidu (Publicity Officer), Ben Pickering, Victoria Smith, Dorian Speakman, David Cherry, Jim McQuaid.

Special Interest Groups

Atmospheric Chemistry

Dr Ryan Hossaini and Dr Paul Griffiths (Co-Chairs).



Atmospheric Electricity

Giles Harrison (Chair), Martin Füllekrug, Karen Aplin, Alec Bennett, Keri Nicoll.

Aviation Meteorology

Bob Lunnon (Chair), Mike O'Donohoe, Piers Buchanan, Frank Barrow, Phil Nicol-Gent, James Morrison.

Climate Dynamics Doug Smith and Adam Scaife (co-Chairs)

Climate Science Richard Betts (Chair).

Data Assimilation

Amos Lawless (Chair), Joanne Waller (Secretary), Cristina Charlton-Perez, Stefano Ciavatta, Keith Haines, Bruce Ingleby, Matthew Martin.

Energy

Dafni Sifnioti (co-Chair), David Brayshaw (co-Chair), Amelia Adcroft, Daniel Drew, Daniel Skinner, David Hone, Emily Wallace, Francis Mosley, Hannah Bloomfield, Jon Rees, Joseph Howe, Josie Rogers, Mark Dunk, Matthew Wright, Peter Mcaward, Philip Selwood, Samuel Fisher.

History of Meteorology and Physical Oceanography

Vladimir Jankovic (Chair), Julian Mayes (Secretary, Newsletter Editor), Howard Oliver (Coordinator -Occasional Papers), Chris Folland (Coordinator - Pen Portraits of Past Presidents), Sarah Pankiewicz and Catherine Ross (Representatives from NMLA), Norman Lynagh, John Gould, Richard Griffith, Peter Rowntree, Andrew Russ-Turner. Rob Allan, Deborah Smith, Joan Kenworthy and David Pedgley are Corresponding Members.

Insurance

Katherine Latham (Chair), Alec Vessey, Alex Baker, Chris Webber, Daniel Skinner, Hannah Bloomfield, Hayley Fowler, Jason Lowe, Kelsey Mulder, Len Shaffrey, Matt Priestley, Matthew Wright, Oliver Halliday, Richard Dixon, Stefan Doerr, Tom Perkins, Vikki Thompson.

Meteorological Observing Systems

Steve Colwell (Chair), Mark Dutton (Newsletter Editor), Steve Turner (Newsletter Editor), Mike Brettle (Treasurer), Ian Strangeways, Keri Nicoll, Stephen Burt, Dave Bullock, Simon Bell and Katie Muchan.

Weather, Art and Music (WAM)

Pierrette Thomet, (Chair), Peter Stott, (Secretary), John Thornes, (Treasurer).

Youth and Early Career

Ayesha Tandon, Daniel Skinner, Ella Gilbert, Elliott Sainsbury, Florence Shannon-Vines, Florentine Webber, Fran Morris, Frederick Otu-Larbi, Hannah Bloomfield, Kit Marie Rackley, Laura Byrne, Matthew Wright, Megan Pearce, Ned Williams, Phoebe Fulcher, Rachel Yan, Simon Clark.

Journal Editorial Boards

Atmospheric Science Letters

Editors:R Hemingway and A Montani.Associate Editors:K Bhaganagar, E Black, J Booth, T Diomede, V Ferracci, S Ghosh,
S Hardiman, I Hoteit, M Kretschmer, L Lei, H Letu, C Li, C Liu, O Martinez-Alvarado,
J McQuaid, A Mohebalhojeh, A Miller, R Neely, S Pal, R Parfitt,
H Reider, T Stein, A Subramanian, N Theeuwes, M Valipour, D Woolf.

Climate Resilience and SustainabilityEditors:V Pope, H Gitay.



Associate Editors: Y Xu (Deputy Editor), K Monk (Deputy Editor), D Bernie, V Boult, E Boyd, M Ekström, K Halsnæs, W Jiang, G Nagy, A Sharifi, J Supriatna, M Thompson-Hall, G Wang, C Weaver.

GeoScience Data Journal

Editor: K Royse and J Peng
 Associate Editors: J Fan (Regional Editor, China), L Brocca, P Canziani, R Crouthamel, Y Chen, P
 Diviacco, D Franco, D Gampe, B Hassler, E Hawkins, A Kingdon, G Lasslop, G Leng,
 D Lorrey, C Reason, S Rennie, Y Shi, Y Su, J Tedds, C Vitolo, J Wagemann, J Wang,
 Y Wang, L Xu, M Zhang, F Zhou.

International Journal of Climatology

Editors: W Collins and E Aguilar
Associate Editors: C White (Deputy Editor), R Wu (Deputy Editor), J Abatzoglou, A Argiriou, A Cherchi, J Marengo, I McKendry, V Moron, M Roth, Q You.

Meteorological Applications

Editors: C Charlton-Perez, D Zardi. *Associate Editors:* C Archer, J Bech, S Bell, H Bloomfield, V Boult, D Brayshaw, M Brunetti, L Carvalho,

- E Cattani, A Ceppi, X Chen, A Cherchi, C Coelho, M Dorninger, R Emerton,
 - E Ferrero, L Giovannini, X Huang, C Keil, M Koßmann,
 - S Kotthaus, S Lerch, J Lundquist, G Marshall, C Mazzoleni, A Merlone, S Orlandini, G N Petersen, V Sinclair, E Tan, J Waller, H Ward, M Yan.

Quarterly Journal

 Editors: J Methven, A Ross
 Associate Editors: C Bishop, M Bocquet, D Bouniol, J Broecker, H Coe, C Cotter, S Davolio, A Dornbrack, T Frame, E Gerber, R Hart, S Havemann, A Illingworth, J Inoue, T Janjic-Pfander, B Lamptey, S Marras, G McFarquhar, Z Meng, A Mitra, M Reeder, P de Rosnay, R Scott, B Sinha, G Steeneveld, A Turner, M Vellinga, N Vercauteren, A Weisheimer, C Westbrook, V Wirth, N Žagar.

Weather

 Editors: E Graham, S Lee
 Associate Editors: T Blackmore, R Dixon, E Gascon, E Gilbert, D Harris, D Holley, S Keates, P Knightley, R McElwee, M Pearce, B Pickering, J Ramsdale, D Smart, C. Sweeney, K Thomas, B Venton, Y Xuan.

WIREs Climate Change

Editor:M Hulme.Associate Editors:M Blomfield, S Capstick, T Carter, L Dilling, B Henley, M Heymann, B Larson,
I Lorenzoni, LO Naess, J Patterson, S Pulver, S Rödder, J Rozenberg, C Singh, E
Zorita.

Representative with the:

- UK Flight Safety Committee (UKFSC):
- General Aviation Safety Committee (GASCo):
- European Meteorological Society (EMS):
- International Forum for Meteorological Societies (IFMS):
- Science Council:

Without Whom

During the year, the following Officers and Council Members retired from office with our grateful thanks.

R Lunnon P Nicol-Gent S Majithia Chief Executive Chief Executive



Chair of Meetings and Conferences Committee: Amanda Maycock Chair of Professional Accreditation Board: Will Lang

The Society depends heavily on the valuable and unstinting work done each year by those who hold voluntary office. The Society would like to record its grateful thanks to all of those who give up their time and who contribute with great dedication to the work of the Society. The Society could not achieve all that it does without the kind support of all of its volunteers – thank you.

Staffing at the Society

The Society has a secretariat that supports the day-to-day running of the Society and carries out its executive functions. A detail of the secretariat team and the organisational structure on 31 December 2022 is shown below.



The Society welcomed Hayley Proudlock as Events Assistant during 2022. The following member of staff left the Society during 2022: Kelly Fletcher.

Background to the Society

The British Meteorological Society was founded in 1850 and was incorporated by Royal Charter in 1866. In 1883 the name was changed to the Royal Meteorological Society. A separate Scottish Society had existed from 1855, but in 1921 was merged with the Royal Meteorological Society. The Society is a United Kingdom Charity with a national and international reach and reputation.

The Royal Charter states that the Society was established "for the advancement of Meteorological Sciences". That remains the aim of the Society and includes advancement of applications of the science and related sciences, including climatology and climate science, the interaction between the atmosphere and the oceans, and environmental awareness. Copies of the Society's Charter and By-Laws are available on request.

The Society's Annual Report and Annual Accounts are submitted to the Annual General Meeting by the Trustees, the Society's Council, who are elected or re-elected each year at the Annual General Meeting. The Annual Report illustrates activities during the year, which reflect Council's policies in pursuit of the aim of the Society.



Trustees' responsibilities statement

The trustees are responsible for preparing the Trustees' Annual Report and the financial statements in accordance with applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

The law applicable to charities in England and Wales requires the trustees to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the charity and of the incoming resources and application of resources of the charity for that period.

In preparing these financial statements, the trustees are required to:

- select suitable accounting policies and then apply them consistently;
- observe the methods and principles in the Charities Statement of Recommended Practice (SORP) 2019 (FRS 102);
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the charity will continue in operation.

The trustees are responsible for keeping proper accounting records that disclose with reasonable accuracy at any time the financial position of the charity and enable them to ensure that the financial statements comply with the Charities Act 2011 and the provisions of the trust deed. They are also responsible for safeguarding the assets of the charity and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The trustees are responsible for the maintenance and integrity of the charity and financial information included on the charity's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions. The Royal Meteorological Society (Registered Charity No 208222):

Address: Telephone: E-Mail: Web:	104 Oxford Road Reading RG1 7LL 0118 2080 142 <u>info@rmets.org</u> <u>www.rmets.org</u>			
Bankers:	Lloyds Bank plc PO Box 1000 BX1 1LT	Solicitors:	Blandy and Blandy 1 Friar Street Reading RG1 1DA	
Auditors:	Porter Garland Communication House Victoria Avenue Camberley Surrey GU15 3HX	Investment Ad	visors:	Rathbone Investment Management Ltd 1 Curzon Street London, W1J 5FB

Investment Powers: By-Laws (July 2011) 82 and 83 read:

82 The monies of The Society which are not subject to any specific trust purpose, and which are not required to meet current expenditure, may be invested in any securities quoted in the official list of any recognised Stock Exchange or placed on deposit with a reputable organisation. Council may only delegate its powers to select and make investments to the extent permitted by the provisions



of The Royal Charter and the relevant legislation governing responsibilities of Trustees and Charities⁴.

83 The Society's premises shall not be sold or disposed of except with the sanction of a General Meeting of The Society.

THE RESERVES POLICY OF THE SOCIETY

Principal Objectives

The principal objectives of the Society's reserves are to maintain and make use of capital reserves to:

- Ensure the viability of the Society in the short/medium term.
- Provide an assurance against significant financial risks and unforeseen costs.
- Enable the medium to long-term development of the Society's aims and objectives in line with its Strategic Plan.

Background and Introduction

The Statement of Recommended Practice (SORP) for charities requires a statement of a charity's reserves policy within its annual report which should explain to existing and potential members, donors and other stakeholders that the level of reserves set in this policy is considered to be required to ensure financial stability. The setting of a reserves policy forms an important part of the financial management of a charity and helps trustees to fulfil their charity trustee duties.

The Society derives its primary annual income from a combination of members' subscriptions, publishing revenues and income from investments. The Society holds three types of fund: Tangible Assets (the Society headquarters at 104 Oxford Road), a Designated Legacy Fund and a General (free) Reserve. Council first approved the policy on management of the last two items on 5 December 2001 and this is kept under regular review, and at least annually.

Historically the only major demand (> £100,000) on the reserves has been in relation to the purchase of the Oxford Road Headquarters. Other demands have been comparatively small (~£60,000 spread over several years) relating to upgrade of the IT equipment and the replacement of the office heating system (~£30,000). Any world economic instability highlights a need for increased resilience to support assured future financial stability and therefore increased levels of reserves.

The medium and long-term investment strategy of the Society has been formulated by Council, is overseen by the Society's House Committee and is being implemented by the Chief Executive, who reports to Council three times a year. This policy statement provides guidelines on how the reserves may be used inter alia to fund non-recurring costs resulting from proposals on strategic development projects of the Society and to mitigate the major risks of the Society. Individual items of expenditure are presented for Council approval in the normal way.

The Annual Budget

The annual budget covers the income and expenditure of the Society in all its activities, including the reserves. Council sets the budget for the Society and at each quarter receives a forecast of out-turn against the budget. The management accounts format is broken down into the four business areas of Publishing, Societal Benefits, Membership and Accreditation, and Underpinning Support.

Overall, the budget shall normally be set at break even, with the exception of expenditure on strategic development projects, which may fall across some or all of the business areas. The budget for strategic development projects may be funded from previous years' reserves surplus, which may have been specifically identified as ringfenced for this purpose. The budget shall be set by taking into account the gains on investments available for furthering investment in the Society's charitable objectives.

⁴ Reference should be made to Part IV, Section 11(3) of the Trustees Act 2000.



The Reserves - Tangible Assets

Tangible assets, which comprise the premises, the furnishings and equipment are essential for conducting the business of the Society. These shall be routinely maintained primarily through the annual budget at a level appropriate to provide accommodation and facilities to support the normal operational activities of the Society. This includes committee meetings, but not necessarily the regular Society meetings and conferences. Major changes to tangible assets would be funded on a case-by-case basis through the General Reserve and could include external contributions (e.g. on appeal).

The Free Reserves - The General Reserve

The role of the General Reserve is to provide the financial security to enable the long-term achievement of the Society's strategic objectives, to mitigate against the major risks of the Society and to provide the financial stability to enable the flexibility to commit to short term expenditure requirements. In line with the Society's Risk Register and its strategic and development requirements, the General Reserve shall:

- provide some resilience against "single event" failures, e.g. a significant failure of a large conference (~£100,000);
- allow front-loaded strategic spend-to-save measures (~£200,000);
- allow some "one-off" expenditures in the short and medium term (~£100,000);
- allow a recovery period for significant changes in the income/expenditure balance (~£150,000);
- create a margin for medium term market fluctuations (~£100,000).

It is considered that the level of reserves appropriate to meet the above requirements is within the range of 12-24 months of annual expenditure.

The Reserves - The Legacies Fund

The policy for this fund is for protection and growth of the fund. Subject to this policy, capital gains on investments and investment dividends are used to support, in a sustained manner, the benefits primarily to individuals through Grants, Awards and Bursaries. The number and level of grants and bursaries shall be determined by the level of available funds and by second priority call on the General Fund.

THE INVESTMENT POLICY OF THE SOCIETY

The Management of Investments

The Council, advised by the House Committee, are responsible for overseeing the Society's investments in ways which align with the Society's mission and values. In doing so they have a primary commitment to ensure that the Society holds 'responsible investments' with a secondary duty to ensure that the financial returns on investments are maximised.

Council expects companies in which they invest to demonstrate sustainable environmental practices, a strong sense of ethical social responsibility internationally and that they conduct all their operations ethically, with honesty, integrity and openness. Council actively encourages investment in companies which have a firm Net Zero commitment by 2050 and have a good ESG rating. Should Fund Managers or Council become aware that these practices are not adhered to by individual companies they will be specifically excluded from the investment portfolio. The Society specifically excludes direct investment in companies involved in arms or weapons, fossil fuels or tobacco.

The management of investments is delegated by Council to a professional Fund Manager. The portfolio is kept under regular review, in addition the House Committee formally reviews performance of the portfolio twice a year and Council reviews investments at least annually. The choice of Fund Manager is kept under annual review in line with performance and the Society's investment requirements.

The Fund Manager is committed to the evaluation and reporting on the environmental, social and governance scores or the direct investments which are held. ESG factors and benchmarking form an important part of this investment policy and strategy.



Choice of Investments

Within the policy laid out above, investments may be made in cash deposits, bonds, equities, property and other alternatives. This may be done in such proportions as to keep within the Society's agreed level of exposure to investment risk (The portfolio is currently managed within a risk level of 3 out of 6 – the lower end of medium risk). The Fund Manager shall endeavour to maximise the total return to the Society over the longer term, typically a period of the Society's Strategic Plan, in order to deliver the required revenues to support the Society's development programme and to mitigate the Society's other major risks.

Where investment is made in equity shares no purchase of a single equity should represent more than 5% of the total portfolio value. This guideline excludes shares held indirectly through, for example, Investment Trusts, where there is already an underlying diversity. If any one holding reaches 20% of the value of the portfolio a partial sale should be considered. The portfolio should be diversified over both market sectors and geographic markets, and no one market sector should represent more than 25% of the total portfolio value.

Cash Flow Requirements

Council, when considering the budget, shall identify the likely demand for withdrawing funds from the investments over the next financial year and this shall be communicated to the Fund Manager so that they are able to anticipate the requirement for sales of investments whilst maximising profits and minimising losses. Any surplus cash on deposit may also be transferred at any time to the Fund Manager for investment at the recommendation of the Society's Chief Financial Officer and with the specific approval of The Treasurer.

Trustee Liability

Charity trustees are responsible for the efficient management of the organisation's assets and may be held personally liable for the financial state of their charity. Delegation and effective performance monitoring of the management of the funds to suitably qualified professionals adequately discharges that responsibility.

The Society carries trustee indemnity insurance against claims of up to £1m (excluding cases of wilful fraud). It is important that all those Trustees and Fellows involved in managing the Society's funds are seen to take and act upon relevant professional advice and ensure that the Society Investment Policy is adhered to.



Annex H: REPORTS FROM OTHER REPRESENTATIVE BODIES

Science Council

The Science Council is a membership organisation for professional bodies and learned societies across science, bringing together a range of disciplines and sectors to reflect the multi-disciplinary practice of science in today's society. The Science Council plays an important role in ensuring public trust and confidence in the scientific workforce and transparency in the process of science. The Science Council's registers (CSci and RSci) provide independent peer-led recognition of achievement and evidence of the profession. The organisation was formed 20 years ago from an informal network of professional science bodies; the Science Council's membership now stands at 36 organisations with many more associated through the Employer Champion and Technician Commitment programmes. It brings the science community together to harness its collective expertise in the pursuit of professional excellence and uses that expertise to inform public policy. The Science Council set standards for professional registration of scientists and science technicians and fosters debate and the exchange of ideas across the network. It also supports member organisations to be more effective in meeting the needs of the science community and attracting the next generation into fulfilling science careers. The Science Council was established under Royal Charter in October 2003 and the current Chief Executive is Helen Gordon, with Professor Carole Mundell as the President.

The Science Council has four key themes in its current strategy: registers and licenses; community and membership; policy and influence; and EDI. The Society continues to be a Member of the Science Council.

General Aviation Safety Council (GASCo)

GASCo is a body aimed at facilitating good communication of relevant safety information amongst private flyers. It comprises umbrella organisations in general aviation, such as the Aircraft Owners and Pilots Association, British Balloon and Airship Club, British Gliding Association, British Hang Gliding and Paragliding Association. The Society is a member of GASCo.

In 2022 the Society continued its participation in GASCo through virtual meetings but also welcomed a return to physical meetings, the first of these being hosted at Farnborough by the Air Accident Investigation Branch. On 30 April the Society ran an online training event supported by GASCo. The seminar was titled 'Weather - venturing across the Channel' and was intended to catch those private pilots who were keen to return to continental flying after the enforced gap caused by COVID-19. We were fortunate to have experienced presenters from Jersey Met for those only looking as far as the Channel Islands as well as presentations on density and risk assessments for those heading to the more mountainous areas in Southern Europe. The webinar was well timed for the start of the flying season reminding pilots of the importance of looking carefully at the weather when flight planning.

UK Flight Safety Committee (UKFSC)

The Flight Safety Committee (FSC) comprises commercial operators including airlines such as EasyJet, Ryanair, and smaller concerns down to British Antarctic Survey.

Bob Lunnon attended all four FSC Safety Information Exchange meetings this year (one in-person, the other three online).

At the March meeting there were two reports of tail strikes associated with strong winds in the last two months. Tail strikes are at present not particularly serious, although they can be costly to repair. However it is anticipated that for aircraft powered by hydrogen, as being developed by, for example, AIRBUS, they could be more of a problem because it is planned for the fuel to be stored in the tail section of the aircraft.

The June meeting included a discussion with NATS (National Air Traffic Services) about drones. There is an official UK classification of drones which NATS use, which is on the CAA website. There was some concern shared that strong, localised winds could cause the drones to be blown into the buildings.



In the December meeting it was reported that there were three encounters of General Aviation (GA) aircraft with wake vortices in November. The wake vortices were all generated by commercial transport aircraft. Air traffic management rules specify minimum separation distances between transport aircraft and GA aircraft such that in the majority of meteorological conditions any wake vortices will have been dissipated before the GA aircraft encounters them. In the cases reported in November the distances between the aircraft exceeded these minima. Clearly therefore these cases are associated with very low Eddy Dissipation Rates (EDRs). Low EDRs are particularly unlikely over land during daylight hours and these are the conditions under which most GA flights take place. It appears therefore that there may be scope for predicting low EDRs and providing warnings to the GA community to reduce the risk of wake vortex encounters.

It was also reported in the December meeting that some RAF aircraft had encountered carburettor icing. Qualitatively, carburettor icing is fairly well understood – it occurs as a result of pressure and temperature drop as air is "sucked" into an aircraft carburettor. However the dependency of carburettor icing on the geometry of the carburettor is less well understood and documented. Carburettor icing can cause a piston engine to cut out, however most aircraft have a system for heating the affected area which, if deployed, can prevent the problem. Further research to establish which aircraft carburettor geometry renders the aircraft particularly susceptible to carburettor icing could be useful.

Snow, starting on 11 December and affecting a lot of south east England, had caused significant disruption to flights at several London airports. It was suggested at the December meeting that there should be another look at the Begg report, written after the cancellation of 4,000 flights over 5 days following heavy snowfall in December 2010. However, it was pointed out that the 2010 disruption was associated with a shortage of equipment (snow ploughs, de-icing equipment) and materials, whereas this year the problem was a shortage of staff.

European Meteorological Society (EMS)

EMS Membership and RMetS Representation

The European Meteorological Society (EMS) is an Association of 39 Meteorological Societies from 31 European countries. In addition, EMS has 28 Associate Members made up of National Meteorological Services, international institutions, research and education institutions, and commercial companies.

The Society is a permanent member on the EMS Council and the RMetS General Secretary is the Society's representative on the EMS Council. The aim of the EMS is to advance the science, profession and application of meteorology, and of sciences related to it, at the Europe-wide level, for the benefit of the whole population.

The EMS General Assembly of representatives of all the Member Societies convenes at least once a year and decides on constitutional and financial matters of the EMS, hears the report of the Council and the statement of the EMS's auditor.

The following meetings have taken place:

- 48th EMS Council on 29-30 March 2022
- 49th EMS Council on 3 September 2022

Shanti Majithia, General Secretary, attended the meetings via video conferencing and Prof Liz Bentley, the Society's Chief Executive, attended the September meeting in-person in Bonn, Germany. These were chaired by Bert Holtslag, EMS President.

EMS Annual Meetings

The EMS Annual Meeting 2022 was on 4-9 September on the topic of 'Connecting communities to deliver seamless weather and climate science and services' <u>EMS Annual Meeting 2022</u> and was attended by 815 participants from 48 countries: 671 onsite in Bonn and 144 online from across the globe.

- 2023 EMS Annual Meeting: 3-8 September 2023, University of Economics in Bratislava, Slovakia
- 2024 EMS Annual Meeting: likely 2-6 September 2024, Historical University of Barcelona, Spain.



EMS Silver Medal Award

Elena Mateescu was selected as the recipient of the EMS Silver Medal 2021. This award recognises 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.

International Forum of Meteorological Societies (IFMS)

IFMS Membership and RMetS Representation

The International Forum of Meteorological Societies (IFMS) is an organisation that aims to foster and encourage communication and exchange of knowledge, ideas and resources among the world's meteorological societies. It is an association of around 40 meteorological societies and related organisations. The IFMS has a Council comprised of officers and representatives from the six WMO regions. Prof Liz Bentley, the Society's Chief Executive, is the IFMS Councillor for the WMO Region VI. The Council meets every few months via teleconference.

The IFMS website is updated regularly and a newsletter is produced and distributed twice a year. The IFMS hosts webinars and during 2021 there were four webinars on Education and Training, Creating National Met Societies, Global Campus Initiative and COMET Training Programs, all are available on the IFMS website <u>ifms.org</u>.

In 2022, the IFMS led on the establishment of the African Regional Meteorological Society, AfMS, (similar to the EMS but across the African continent). The AfMS held its inaugural event on 30 November 2022 hosted online. As part of this launch and because COP27 was taking place in Africa in November 2022, being hosted by Egypt, the Society lead a project to provide a Learning Portal of weather and climate resources for Africa.

The project was led by Rob Varley, Vice-President, and included a small team comprised of UK-based meteorologists with considerable experience of meteorological training, and of working on met-related international development projects in Africa. The project team was advised by an international review team, comprising experts from Africa, Asia and Europe, all with a particular interest and expertise in African Meteorology. The Society is grateful to staff at the American Meteorological Society who provided web development support. The project ran from June to December 2022.

The project team collated, reviewed and grouped over 70 learning resources for different audiences, and made these accessible through a <u>portal</u> hosted in the IFMS web site <u>ifms.org</u> and linked from the <u>AfMS</u> <u>home page</u>. The portal offers a suite of materials and learning resources and provides a clear, single point of reference for people across Africa to access recommended courses and resources that have been subject to expert scrutiny. Altogether, there are seven lists of learning resources, each one developed with a specific audience in mind e.g. school children and teachers. In every list, there is some detail about each resource, such as who created it. There is also a brief description of what it contains, the languages it is available in, a website link, and the connectivity requirements for accessing the resource. Each list can be used online or downloaded from the website.