

The 170th Annual Report of the Royal Meteorological Society for the period 1st January – 31st December 2020

Annexes

Annex A -	The UK Weather of 2020	9
Annex B -	Membership and Accreditation	10
Annex C -	Awards and Prizes	15
Annex D -	Scientific Publishing	16
Annex E -	Societal Benefits	19
Annex F -	Underpinning Activities and Cross-Cutting Priorities	30
Annex G -	Reports from Other Representative Bodies	41

Annex A: THE UK WEATHER OF 2020

Review of UK Weather for 2020

Another year has passed and with it, more weather records have fallen. Recent reports from the Met Office show that 2020 was the UK's third warmest year since 1884 and it was Europe's warmest on record. Globally speaking, 2020 was one of the top three warmest years on record with the average global temperature across the year around 14.9°C which is around 1.2°C warmer than pre-industrial times, and the 10 years from 2011-2020 were the warmest decade on record.

In the UK, 2020 was also the sixth wettest year since 1862 and the eighth sunniest since 1919. Contributions to the total rainfall came, most significantly, from a series of three named storms (Ciara, Dennis and Jorge) which resulted in the wettest February since 1862, together with Storm Alex in October, which provided the UK with 31.7mm (as an area average) on 3rd October, its wettest individual day on record since 1891.

Other notable features were Storms Ellen and Francis within five days of each other in August, Aiden and Barbara in October, and Bella, which saw a wind gust of 106 mph on the Isle of Wight on Boxing Day. In total ten named storms affected the UK during 2020. By mid-December, some eastern areas of the UK had already had more than the usual month's rainfall and on Christmas Eve, Bedfordshire became the latest area to experience flooding.

In terms of sunshine, 2020 had both the sunniest April on record and the sunniest spring across all UK countries, with sunshine hours exceeding those of most summers. April was much drier than average with the UK overall only experiencing 40% of average rainfall for April. Rainfall was also well below average during May, with the UK figure for May only 47% of average. England had its driest May on record, and Wales its second driest. Unsurprisingly, this led to a very dry spring; fifth driest over the whole UK but, in areas of north east England and eastern Scotland, the driest spring since records began in 1862. Also noteworthy was a short hot spell over the Easter bank holiday weekend.

Overall, spring conditions did not extend into the summer, which was wetter and duller than average. In fact, all summer months were wetter than average and July was the only month during the year with temperatures generally below average. However, there were several hot spells including: 31st July, which was the third warmest day on record for the UK with a temperature of 37.8°C at Heathrow; temperatures exceeded 30°C somewhere in the UK on 13 days during the summer, including one final hot day on 15th September; and a pronounced summer heatwave in early August, when temperatures exceeded 34°C in at least one place on six consecutive days and some local night-time minimum temperatures stayed above 20°C (known as tropical nights). Autumn was generally close to normal with some fine and warm days in September. October and December were notably wetter than average. November was largely mild with fewer frosts than normal. In fact, on the whole, 2020 experienced fewer frosts than usual and the lowest temperature of the year, -10.2°C, was recorded on 30th December at Dalwhinnie (Inverness-shire).

UK Temperatures

The mean value was 9.6°C, which is 0.8°C above the 1981-2010 average.

UK Precipitation

The total was 1,308 mm, which is 114% of the 1981-2010 average.

UK Sunshine

The total was 1,495 hours, which is 109% of the 1981-2010 average.

Regional Breakdown (data from the Met Office)

Relative to the average (1981-2010)	Mean Max (°C)	Mean Min (°C)	Rainfall (%)	Sunshine (%)
<i>UK</i>	13.3	5.9	114	109
<i>England</i>	14.5	6.6	112	115
<i>Wales</i>	13.5	6.4	115	105
<i>Scotland</i>	11.4	4.7	115	104
<i>Northern Ireland</i>	12.9	5.8	115	101

Annex B: MEMBERSHIP AND ACCREDITATION

Membership

The Membership Development Board (MDB) is represented by members from academic, professional, student and amateur 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 3 times during 2020, providing invaluable input to the new membership recruitment and retention strategy. In response to COVID-19 the board approved a new discretionary fund for members who have been affected as a result of the pandemic and they approved a change to the qualifying age for concessionary rates, increasing it to 67 in line with government retirement age.

In 2020, membership saw a slight drop compared to 2019, with 2% fall in total membership bringing numbers to 3,162. Whilst the number of our standard Members grew by 4%, Fellowship and Student levels saw a decline. The MDB has agreed a series of initiatives for 2021 to maintain membership numbers and improve the retention rate. Membership fees in 2020 were £94 for Fellowship and £86 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). Being mindful of the impact of COVID-19 on our members, Council agreed to freeze membership fees for 2021.

A membership survey was circulated with the 2020 renewals and the results were reviewed as the Society developed a new Strategic Plan. The survey provided some positive feedback on our new videos and podcasts. We made improvements to the content on our website in response to our members asking us to keep them up to date and wanting to learn more about weather and climate. Our members agreed their membership provides value for money.

Key Activities in 2020:

- **New Member Acquisition:** The Society continues to recruit new members. Initiatives for recruitment during 2020 included:
 - a. developing a series of 'Meet our Members' videos <https://www.rmets.org/membership>;
 - b. capturing new member enquiries from online event attendance;
 - c. running a regular series promoting the key membership benefits;
 - d. the introduction of two new benefits: full access to all Society journals and running a closed Facebook page for student members;
 - e. during July we repeated the discounted six-month membership, welcoming 23 new members in July, 15 in August and 28 in September;
 - f. we again promoted the £10 student offer in September.
- **Collaboration:** The Society collaborated with the University of Reading to host a series of three Met Masterclasses focussed around the theme of winter storms. These were intended to benefit meteorological practitioners and refresh knowledge and awareness of the latest science. The series attracted 542 attendees including an international audience, helping to raise the Society's profile and facilitating excellent CPD for current members.
- **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 theWeather Club) 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.
- **Accreditation and CPD:** The Society recognises that membership and professional accreditation are closely aligned offering benefits to both meteorological practitioners and their employers. Continuing Professional Development (CPD) forms part of these benefits and the Society continues to support those across the community in recognising, publicising and delivering CPD.

- **Reciprocal Membership:** The Society continues to foster important strategic partnerships with organisations across the meteorological community and beyond. We have 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.
- **Corporate Membership:** The Society reviewed its corporate membership scheme in light of its strategic objective to focus on developing partnerships. The decision was made to revert to a single tier of corporate membership and strengthen the benefits of the programme in order to attract more corporate members. One long standing corporate member was reclassified as a partner, to better reflect the relationship and engagement between the organisations. At the end of 2020, the Society had 14 corporate members, including 3 new corporate members and 11 companies who renewed their corporate membership
- **Student Ambassadors:** The Society continues to have an active student community, with 378 student members at the end of 2020. Key to engagement and retention of our student community is through the important work of our 22 Student Ambassadors. During 2020 they supported the Society by promoting the student and early careers conference, the Met Masterclass series and the Careers in Meteorology leaflet. 2020 also saw an increase in the number of new student ambassadors with an additional 15 joining the group from 13 UK institutions and 2 international bodies.
- **Retention:** Processes are now in place to record the Society's retention rate. Throughout 2020 activities to improve retention were ongoing including: reminders to members to keep their contact details up to date; improved functionality to the members area of the website; and key messaging about how to renew. A lapsed member telephone campaign took place during summer and will conclude in February 2021. Of those already contacted 10% (30) members have renewed their membership and a further 21% (67) have indicated they intend to renew. A new discretionary fund formalising support to members who have been impacted as a result of COVID-19 is now available for members who would like to retain their membership but may not be in a position to do so.

The Society's membership is made up of amateurs (25%), practitioners (30%), academics (30%) and students (15%). The following table shows a breakdown in membership in each category over recent years.

Grade of Membership	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Honorary Fellow HonFRMetS	20	20	26	29	30	29	27	30	30	31	30
Life Fellow FRMetS	36	37	34	33	31	99	94	89	76	82	79
Fellow FRMetS	1,672	1,662	1,633	1,586	1,586	1,513	1,518	1,510	1,471	1,479	1,445
Member (<i>Associate Fellow before 2018</i>)	1,086	1,009	914	952	974	1,104	1,217	1,223	1,186	1,164	1,217
Student Member	215	267	308	260	261	416	473	471	464	464	378
Corporate Member (<i>including School Member before 2011</i>)	67	25	24	22	22	28	27	14	15	13	13
TOTAL	3,096	3,020	2,939	2,882	2,904	3,189	3,356	3,337	3,242	3,233	3,162

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 have been updated to reflect this closer cooperation, along with standing invitations for the Chairs to attend each other's meetings.

The PAB met twice in 2020, in February and in 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).

The Society defines the scope of its accreditation activity as recognising excellence in people, in organisations, and supporting Continuing Professional Development (CPD). The table below shows the data relating to RMet and CMet over recent years. During 2020, we experienced an 11% increase in the number of accredited members. This growth is in part



attributable to recent success broadening the appeal into new areas including insurance, marine and energy sectors but also through increased collaboration with employers. The number of Chartered Meteorologists (CMet) has increased to 74 and the number of Registered Meteorologists (RMet) has increased to 106.

Continuing Professional Development (CPD) and ACCSYS

The CPD Panel reviews members' CPD reports for renewals for RMet and CMet accreditation. The online CPD and application tool, ACCSYS, is the primary mechanism by which Society members may record their CPD activities, apply for RMet and CMet, and prepare CPD reports to maintain their accreditation. CPD records are also used by some members to contribute to their own job applications and performance assessments. A series of 'How to' videos illustrating accreditation specialisms, an introduction to ACCSYS, and how to upload CPD records were developed in 2020. The Society, in partnership with the University of Reading, has delivered a Met Masterclass series designed for practicing meteorologists to support their CPD and learning.

The table below shows the data relating to ACCSYS since it was launched in 2014. 2020 saw substantial increases in the number of CPD records and reports held on ACCSYS, indicating both reuse by existing users and new uptake by members. The PAB is considering a number of additional ACCSYS CPD types and a review of areas of meteorological specialism to encompass the breadth of applications of meteorology. A process for consideration of future additions was also agreed.

Accreditation Review

The RMet and CMet growth aspirations have been agreed within the context of a wider review of the Professional Accreditation Framework and the changing environmental factors, which may influence growth and status of the accreditation schemes. This review concluded in 2020 and the PAB agreed a series of priority activities falling into one of two broad themes:

1. Increased marketing and communications, encompassing an understanding and defining our 'offering'. Increased promotion and outreach, and managing relationships with key sectors and employers.
2. Improved technical focus which covers standards, processes, requirements for systems and relationships to other schemes.

ACCSYS	2013	2014	2015	2016	2017	2018	2019	2020
CPD records		642	1,644	4,782	7,820	9,237	11,984	14,297
CPD reports					321	391	604	718

Registered Meteorologist (RMet)

2020 saw an increase in the number of active RMets. A total of 13 new accreditations were approved taking the total number of RMets to 106.

Registered Meteorologists (RMet)	2013	2014	2015	2016	2017	2018	2019	2020
No. of applications received		49	35	11	46	5	4	17
No. of accreditations granted		44	28	20	46	5	3	13
No. of RMets resigned/withdrawn						5	19	3
No. of applications outstanding at year end		2	7	4	7	2	3	8
No. of RMets transferred to CMet							8	1
No. of RMets on Dormancy Register				3	5	6	6	6
No. of accredited RMets at year end		44	72	92	124	123	99	106
RMet CPD reports	2013	2014	2015	2016	2017	2018	2019	2020
No. of RMet CPDs reviewed					50	71	93	94
No. of RMet CPDs approved					50	71	92	93

Chartered Meteorologist (CMet)

The number of CMets also saw an increase in 2020 to 74. Applications remain steady and successful RMets identified as possible CMet candidates are being contacted to encourage progression to Chartered level.

At the end of 2020 there are a total of 5 applications to be processed and most encouraging were the far fewer number of CMets who have withdrawn or resigned. The PAB has set realistic targets and associated activities to continue this trend and increase numbers in 2021 and beyond.

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

Vocational Qualifications Committee

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, competency-based, 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) provided by PAA/VQ-SET, an awarding organisation that is nationally recognised and regulated. These qualifications are recognised throughout the EU. Assessments for the vocational awards are based in the workplace and are undertaken by Assessment Centres.

In 2020, the Met Office have advised they will no longer be running a full assessment centre, preferring instead to utilise the Aeronautical Meteorology Programme competence whilst utilising the RQF Briefing Award. They do however recognise on-going professional development schemes such as the RMet and CMet. With DTN's assessment centre being dormant and the Navy's move to make the RQFs optional rather than mandatory, the future of vocational qualifications in meteorology remains uncertain. The number of qualifications awarded in 2020 is shown below.

	Royal Navy		Met Office
	Registered	Qualified	
Diploma in Meteorological Observing (Level 3)	0	0	0
Award in Meteorological Briefing (Level 5)	0	0	3
Diploma in Meteorological Forecasting (Level 5)	0	0	1
Diploma in Operational Hydrometeorology (Level 5)	0	0	0
Diploma in Operational Hydrometeorology and Flood Forecasting (Level 6)	0	0	0

Annex C: AWARDS AND PRIZES

The Society is delighted to have made the following Awards for the year 2020:

Award	Recipient
Honorary Fellow	Dr John Eyre
The Symons Gold Medal	Professor Sue Grimmond
The Buchan Prize	Dr Antje Weisheimer
The L F Richardson Prize	Dr Steven Hardiman and Dr Declan Finney
The Adrian Gill Prize	Professor Sarah Dance
The Michael Hunt Award	Ms Felicity Liggins
The Hugh Robert Mill Award	Professor Emily Black
The Society's Outstanding Service Award	Mr Graham Denyer
The Gordon Manley Weather Prize	Mr Gavin Huggett
The Climate Science Communications Award	Dr Tamsin Edwards
The Innovation Award	Sqn Ldr Kenneth Horn
The Vaisala Award	Mr Malcolm Kitchen, Dr Edmund Stone & Mr Steve Addy
The Malcolm Walker Award	Mr Simon Lee
International Journal of Climatology Editor's Award (sponsored by Wiley-Blackwell)	Dr Stephen Blenkinsop
Atmospheric Science Letters Editors' Award	Dr Chaofan Li
Quarterly Journal (QJ) Editors' Award	Dr Tijana Janjić
QJ Reviewer's Certificate	Dr Michael Fischer and Dr Laure Raynaud
Geoscience Data Journal Editors' Award	Dr Philip Craig and Professor Ed Hawkins
Meteorological Applications Editors' Award	Dr Lorenzo Giovannini

The Society's Awards and Prize Winners recognise individuals and teams who have made exceptional contributions relating to weather, climate and associated disciplines. Due to COVID-19, it was not possible to have a physical presentation ceremony. However, the Society took this opportunity to showcase each of the 18 worthy winners on its website and on social media, outlining their achievements alongside a winner's acceptance message. See <https://www.rmets.org/news/2019-awards-and-prize-winners-announced> for more information.

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 now has eight international journals after launching a new journal in 2020. Income from scientific publishing makes up a significant portion of the Society's total income and allows the Society to deliver several other important programmes of work and charitable activities. 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 which enhance scientific communication and progress. The Society aspires to offer authors a choice including full open access journals as part of its portfolio. The Society's academic book aims to be recognised for its international, high-quality publications offering a more diverse choice of books.

Since updating our long-term open access strategy in 2019, the Society has been working with Wiley to deliver many of its goals, most notable of which is the launch of our new fully open access journal ***Climate Resilience and Sustainability***. This is an interdisciplinary journal studying the broad subject of understanding the implications of climate change for a sustainable environment and society. The journal will act as a forum for researchers and practitioners who are using the best weather and climate information available to propose policies and actions that are climate resilient and deliver sustainable outcomes. Inclusion of Impact Summaries written in plain English will be encouraged making the content accessible to a wider audience including practitioners across related industries and the general public. During 2020, the journal established its international editorial board and started to receive submissions, as well as planning for highly relevant and impactful special issues.

Overall, we have seen a significant growth in our open access submissions across the portfolio, including to our hybrid/subscription titles. This has been helped by Wiley's latest 'read and publish' deal with JISC which offers researchers at eligible UK universities access to the full Wiley portfolio of journals and the opportunity to publish open access in hybrid and full gold open access journals at no direct cost to them. Wiley is the first publisher to enter into such an agreement and it comes at a time when we are hearing that UK researchers are under increasing pressure from their funders to publish in fully open access titles. This agreement means that researchers funded by the major UK research funders can demonstrate compliance with those funders' open access policies when they publish in journals covered by the agreement.

The Society has also been working with Wiley to expand our reach into China. A huge amount of funding and research is coming out of China and increasing our portfolio's visibility and community engagement from this region is key to ensuring we are attracting the best talent from high performing academic institutions. In order to do this, we have expanded representation from China in many of our Editorial Boards in the last year as well as introducing senior editorial roles on a couple of our titles, whose specific focus is around growing good quality submissions, increasing our profile and supporting in the peer review process within that territory. Wiley have a team based in China who have been very supportive in this recruitment process as well as with any initiatives proposed by senior editors in this area such as Chinese focused journal webinars and special issues.

Leading on from this we now have a commissioning editor based in China's Wiley office who is proactively supporting our Editors in Chief (and Guest Editors) in the developments of special issues across the Society portfolio. This is a great resource and should be of benefit to all our journals in terms of future impact factors and recognition in key topics. The Society continues to look for ways to support its Editors and Editorial Board and is extremely grateful for the work they do to support the Society in the publication of its journals. The Society has welcomed a number of new Editors-in-Chief in 2020: Dr Vicky Pope and Habiba Gitay (*Climate Resilience and Sustainability*), Simon Lee (*Weather*) and Prof Kathryn Royse and Prof Jian Peng (*Geoscience Data Journal*) and Dr Andrew Ross (*Quarterly Journal*). We would like to thank our outgoing Editors in Chiefs, Dr Linden Ashcroft (*Geoscience Data Journal*) and Gavin Huggett (*Weather*), for all their outstanding contributions to the Society and growth of its journals.

Highlights from the journals in 2020:

In 2020 ***Atmospheric Science Letters*** (ASL) published 50 research papers and its Impact Factor increased to 1.879. This increase is testament to the dedication of ASL's Associate Editors (AEs) and the high-quality reviews they attain. As new topics areas emerge in submissions, e.g. Artificial Intelligence and Machine Learning, the ASL Board are working to welcome new AEs in these areas and in 2020 ASL welcomed three new AEs and said thank you to two who retired.

The COVID-19 pandemic has seen the number of manuscripts submitted to ASL decrease, however global reach and readership continue to be seen with submissions from across the world. In the coming year, the current Co-Editors in Chief are excited to start work on their first Special Issue focusing on Early Career Researchers (ECRs) and increase support for ECRs submitting to ASL through improved transparency of the publication process. The ASL Board continue to work with the Society and Wiley to improve the speed of high-quality, original manuscript publication with the aim to ensure ASL's impact factor continues to grow in future years.

Kathryn Royse and Jian Peng took over as Editors in Chief for **Geoscience Data Journal** (GDJ) in late Spring/early Summer. Since joining they have expanded the editorial board considerably ensuring good coverage of specialists across the geosciences and this has already had a positive impact on the journal, with submissions increasing and a diverse range of special issues planned. The journal put on its first webinar 'How and why you should publish your Geoscience Dataset' in conjunction with the Geological Society of London, which had 93 attendees (from a diverse range of organisations) on the day as well as growing download numbers post event through ongoing marketing campaigns. Junxuan Fan also joined the journal in early Summer as Regional Editor for China and with his 5 new associate editors, hosted a Chinese language version of the event which had over 700 attendees either through webinar or livestreaming platforms.

International Journal of Climatology (IJOC) is the largest of the Society's journals, with almost 6,700 pages published in 2020. The number of submissions continued to be high, exceeding 1,100, which is the new record number. The rejection rate remained over 50%, with more than 32% of submitted papers being rejected without review. The backlog has increased slightly to seven to eight months. The average time from submission of a new manuscript to initial decision is about 50 days. The special issue on the **State of the UK Climate** was published in close cooperation with the Met Office for the third time, thus becoming a tradition, which receives much publicity.

In 2020 **Meteorological Applications** transferred to be a fully Open Access journal, which has been a success with only a small drop in submissions (15%), and no significant drop in accepted and published papers. The journal continued to expand the composition and expertise of the Editorial Board with new members from China and Turkey. Two online Special Collections were published in July and September 2020: **Recent Developments and Application Examples on Forecast Verification** and **The use of unconventional observations in numerical weather prediction**, respectively, and two calls for new Special Collections were launched in 2020 and are now open: **The impact of the present pandemics** and **Atmospheric Processes and Applications in Urban, Coastal, and Mountainous terrain**. A new "Meet the Author" interactive webinar was organised and delivered online. Cristina Charlton-Perez (co-Editor in Chief) hosted two authors via online meeting platform to present their recent papers published in Met Apps. Questions from the audience were moderated by the Society staff and the Editor. The scientific discussion was excellent. The webinar was recorded and is available to watch online. The Editors-in-Chief have been impressed with the dedication and hard work of the many people who make it possible to publish this journal. They would like to thank the entire Editorial Board, Wiley publishing Team, Society staff and countless reviewers for the journal for helping to maintain productivity and even to innovate this year.

The **Quarterly Journal of the Royal Meteorological Society** (QJ) has had a buoyant year for submissions and publication of articles, despite the difficulties arising from the global COVID-19 pandemic for authors, editors, reviewers, editorial office staff and the production and typesetting offices. In 2020, 365 manuscripts were submitted and 219 were accepted for publication, giving a 60% acceptance rate. The journal sustained a quick turnaround at the editorial stage with an average first decision within approximately two months of submission. Although the editorial office and the majority of editors were able to keep working efficiently during the lockdown periods associated with the pandemic, there have been periods when some people have been unavailable or working shorter hours than usual. The production office was also impacted and there were some delays with throughput in production from March to July, but the backlog is being tackled by a schedule of larger issues to increase the rate of articles going through to completion. Having said all of this, we are very grateful for the effort that the editorial and production teams have put into the journal and it is a testament to their efforts that the average turnaround time from author submission to final publication has only increased by 5 days for 2020. The journal continues two virtual Special Collections: **INCOMPASS, on Indian Summer Monsoon dynamics**, and **Waves to Weather** a programme focusing on high impact weather and predictability research. A new Special Collection was started on the **Impact of Polar Observations on Predictive Skill** associated with the World Weather Research Programme's Polar Prediction Project. A further Special Collection is planned, spanning the Royal Meteorological Society journals associated with the African SWIFT project.

Despite the challenges posed by the COVID-19 pandemic, all issues of *Weather* were successfully published during 2020. Simon Lee joined as Co-Editor-in-Chief, replacing Gavin Huggett, as of September. New editorial board members have been recruited with expertise on a broad range of meteorological disciplines. Following on from a transition that began in the previous year, all content (except for photos) is now submitted through ScholarOne. Numerous changes have been made to the submission, copy-editing and proofing system following extensive author feedback. This includes the introduction of a new HTML-based proofing system which will streamline the manuscript acceptance-to-print workflow and bring it in-line with other journals – benefiting authors, Editors and Production Editors. Two editorial board members have taken up the position of Review Editor, handling the peer review process. A new article feature, “Spotlight”, was introduced, bringing timely high-level summaries of important recent weather events in-line with feedback from the readers survey. The first ‘Insights’ articles (short, explainer articles) have been accepted and published. Two Special Issues were published: *Student Conference 2019* and *Celebrating observing and 50 years of COL*. An online ‘weather quiz’ was held during the summer and proved very popular, with a prize draw for a year’s free Society membership including access to *Weather*.

WIREs Climate Change is an invitation-only review journal and online interdisciplinary reference work published by Wiley and affiliated with the Royal Meteorological Society and the Royal Geographical Society (with the Institute of British Geographers). Professor Mike Hulme continues as Editor-in-Chief, supported by a team of 14 Domain Editors who guide commissioning and peer-review. The journal received a 20120 Impact Factor of 6.099 and was ranked 5th of the 93 journals in Meteorology and Atmospheric Sciences and 9th of the 123 journals in Environmental Studies. In 2020, the journal published 55 review and opinion articles, of which 56% were Open Access. The articles spanned climate change research and scholarship in interdisciplinary fields including meteorology, geography, ecology, economics, urban planning and development, policy, human society and culture, and history. 2020 opened with a special issue of peer-reviewed opinion articles from authors who responded to the question “Is it too late (to stop dangerous climate change)?”. Access to *WIREs Climate Change* is free for our members.

Submissions and Decisions (All Journals Combined)

Submissions and Decisions / Year	2014	2015	2016	2017	2018	2019	2020
Number of Submissions	1527	1656	1693	1795	1841	1903	1996
Number Reaching Final Decision	1371	1564	1649	1709	1716	1847	1923
Number Accepted	715	824	873	853	844	944	1022
Average Journal Rejection Rate (%)	35.2	47.3	38	47.5	48	44*	45

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

Impact Factors

Journal / Year	2015	2016	2017	2018	2019	2020
<i>Quarterly Journal</i>	3.25	3.67	3.44	2.978	3.198	3.471
<i>Intl. Journal of Climatology</i>	3.16	3.61	3.76	3.1	3.601	3.928
<i>Meteorological Applications</i>	1.34	1.27	1.411	2.391	1.711	1.685
<i>Atmospheric Science Letters</i>	1.52	1.57	1.504	1.198	1.796	1.879
<i>Geoscience Data journal</i>		1.56	2.8	1.867	2.667	2.714
<i>Weather</i>	0.64	1.26	0.96	0.812	1.143	0.943
<i>WIREs</i>	3.42	3.31	4.57	5.124	7.057	6.099

Academic Book Programme

The Society started a new academic book series ‘Developments in Weather and Climate Science’ with Elsevier in 2020 and has four books in development. Prof Paul Williams is our Book Series Editor. ‘Dynamics of The Tropical Atmosphere and Oceans’ by Peter Webster was the last book to be published in March with Wiley and is available to view through our Wiley hub and on our Society website.

Non-Academic Books

The Society has been working with the Natural History Museum and our *Weather* Photo Editor (Matt Clark) to put together a coffee table book featuring a selection of photographs from our Weather Photographer of the Year competition. To highlight our changing weather and the threat posed by climate change the photographs in this book are accompanied by six essays on various aspects of climate change. The book will be available in 2021.

Regular discounts continue to be agreed with publishers on books that feature as Book Reviews in *Weather*.

Annex E: SOCIETAL BENEFITS

Societal Benefits Board

The Societal Benefits Board (SBB) reports direct to Council and will oversee the Societal Benefits area of the Society and its three programmes of work, each of which focusses on delivering the Society's charitable aims, these are Education, Events, and Science Engagement.

The initial meetings of the SBB in 2019 took place with the participation of the Education, Meetings, Climate Science Communications and Public & Policy Engagement Committees. However, it was proposed to merge the Climate Science Communications Group and the Public & Policy Engagement Committee to form the Science Engagement Committee. This work commenced in 2020, however, impeded by the onset of the pandemic, it was not concluded until towards the end of the year and the first meeting of the newly-formed Science Engagement Committee took place in October 2020. As a result, the SBB did not meet in 2020 and meetings will resume in 2021.

Science Engagement Committee (was Climate Science Communications Group)

The Climate Science Communications Group (CSCG) was established by Council in the autumn of 2011 to address an important and continuing need to communicate the science of climate change more effectively; the Group was co-chaired by Emily Shuckburgh and Peter Stott. In 2019, a review of the committee structure under the Societal Benefits area of the Society took place and it recommended that the CSCG take on a wider brief to also cover the communication of weather and broader science topics relating to meteorology. For this reason, during 2020 the CSCG transitioned into the Science Engagement Committee (SEC).

The 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 Peter Stott and Michelle Cain, the committee will help 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.

Due to staff changes and the transition of the CSCG into the SEC, no new Climate Science Briefing Papers were developed in 2020. However, the last remaining papers from the original ten were published in *Weather* throughout the year.

With the support and participation of the SEC, the Society delivered one training session to regional BBC weather forecasters, one session to Sky weather presenters and one session to regional ITV journalists on communicating climate science. The journalist training was specially developed in collaboration with Grantham and focused on how attendees could report on climate change more accurately and efficiently, whilst encouraging them to ask the right questions.

The first meeting of the SEC in October focused on plans for 2021, which included identifying potential future topics for Climate Science Briefing Papers and the Society's COP26 Action Plan.

Education Committee

A key long term strategic aim informed by our charitable object is to "share our enthusiasm about weather and climate and to extend our reach and impact within the teaching community, the wider public and with strategic partners, to provide informal and formal education in meteorology." Our staff, members, supporters, partners and volunteers support us, and this enables us to aspire to reach every student in the UK, so that they leave school with the basic weather and climate literacy to understand the impact of weather on their personal life, leisure activities and employment, and to engage with the climate conversation and make informed decisions about their own opportunities and responsibilities.

The Education Committee continues to oversee this important vision and work. Karl Shepherdson became Chair of the committee when Jenny Rourke stepped down from the role in March 2020.

Committee membership remains well supported, with volunteers from education, communications, meteorology and partner organisations such as the Institute of Physics, Royal Geographical Society, Geographical Association and the Met Office. We wish to thank all those who give up their time to share their experiences, skills and time with us to keep the committee functioning effectively.

During 2020 an organisational review was undertaken, and it was decided that informal education and outreach activities will be overseen by the Science Engagement Committee. Going forward, this committee will revert to the 'Education Committee', but we will be aligned closely with the Science Engagement Committee to ensure we continue to fulfil our charitable vision and strategy together.

As with all of the Society's programmes, the work of the committee was significantly affected by the COVID-19 pandemic, but we have been able to adapt and respond to the new opportunities.

Highlights from 2020

- In response to the first lockdown in March 2020, we made our online weather and climate course, Come Rain or Shine, permanently available from the end of March. Over 6,000 people have taken the course this year. It remains one of the top-rated 'nature and environment' courses on the FutureLearn platform.
- We developed a weather and climate textbook for teaching geography to 11-14 year olds: "Weather and Climate: A Teachers' Handbook", consisting of a printed teachers' guide, and an online collection of teaching resources and background information for teachers. This will be distributed to schools early in 2021.
- We redeveloped [MetLink](#), our schools' website, which will be live to all early in 2021.
- We refreshed our climate change negotiations resource and issued a number of podcasts in conjunction with our key education partners.
- We delivered vital teacher training to five universities, and provided guidance for two children's books, one textbook and a set of short films for BBC Bitesize Scotland.
- We sent a letter to government and the administrations of the devolved regions calling for climate science and climate change to be given greater emphasis in school curricula, to reflect the prominent role that a changing climate will play in the lives of young people now in school.
- We responded to the call for feedback about a proposed Natural History GCSE, and we awarded six schools with our 'MetMark' – a quality mark for weather and climate teaching.

Informal Education Activities:

- **theWeather Club (tWC):** An independent review of theWeather Club was completed during 2020, see the Communications and Marketing section for more details. Regular content on weather and climate was produced inhouse and by guest speakers throughout the year and is freely available on www.theWeatherClub.org.uk website.
- **Citizen science:** In collaboration with the Open University, we launched the year-long 'Heatwaves Mission' in August, supported by the BBC. The project tracks people's experiences of heatwaves using nQuire, a citizen science platform, with the results expected to provide valuable information to help people plan for heatwaves in the future. During August's short heatwave we received over 1,200 entries.
- **Research summaries:** We have developed a new area on our website <https://www.rmets.org/node/309692> featuring a selection of articles from our journals using simpler language; making the often complex research more accessible to a broader audience. Since launching in July, we have published 12 research summaries, which have received over 1,000 pageviews.
- **Weather Photographer of the Year Competition 2020:** Over 7,600 photos were submitted from around the world. The judging panel, made up of photographers and meteorologists, shortlisted 24 images and the winners are shown below. The competition provides an opportunity to engage and educate with a new audience and has led to the development of a book due to be published in 2021.



Main Winner - Blizzard © Rudolf Sulgan. Photo location: Brooklyn Bridge, New York City.

Rudolf took this image in 2018, during a strong blizzard as El Nino's periodic warming of water often disrupts normal weather patterns. His main concern and inspiration is that his images hopefully do a small part in combating climate change.



Public Favourite - Baikal Treasure © Alexey Trofimov. Photo location: Kotelnokovsky cap, Lake Baikal, Russia.

Alexey took this photo during an expedition to the Lake. The light that the sun gave, refracting in blocks of ice, caught his attention. Lake Baikal is the world's deepest and largest freshwater lake – containing about one-fifth of the freshwater on Earth. As the temperature drops through winter, the uneven freezing of the lake results in some blocks being pushed up, which are then sculpted by the wind, sublimation, melting and refreezing. Lake Baikal is renowned for its many ice formations and their turquoise appearance.



Young Weather Photographer of the Year 2020 Winner © Stephanie Sergeevna Kolesnik. Photo location: Shakhty, Russia.

This photo depicts "part of sunny summer frozen in ice". Stephanie describes this as time seeming to have stopped for this leaf.

Events

The Society continues to support a diverse and ambitious programme of events. The continued success of these meetings and conferences is thanks to the voluntary contributions of organisers, speakers and members of the Meetings and Conferences Committee, together with the tremendous efforts made by Society staff.

COVID-19 has had a significant impact on our planned events programme in 2020 with some face-to-face events being postponed or cancelled. Despite the obvious challenges, the Society worked hard to deliver an exciting events programme made up of online events, including a full 2-day conference for students and early career scientists. The Society used the online Demio platform to host most of its events, except for the Society's AGM which was hosted on Microsoft Teams.

National Meetings

National Meetings offer a varied and stimulating programme for discussion of a breadth of topics covering all aspects of weather and climate science, bringing together people from academic, professional and other backgrounds to discuss topics of current interest.

The following National Meetings were held face-to-face in 2020:

- Jan** • [REMS 'At Home': Meteorology](#) (in association with Institute of Physics)
- Feb** • [Intensification of short-duration rainfall extremes and implications for flash flood risks](#) (with the Royal Society)
- March** • [Understanding the Weather of 2019](#) (with the Met Office)

After this period, the Society moved quickly to offer a virtual events programme and ran the following meetings for the rest of the year:

- June** • [RMetS 170th Anniversary and AGM](#)
- Nov** • [Science Behind the Greenhouse Effect](#)
- [Weather and Sailing: Forecasting for Dinghy Regattas](#)
- Dec** • [Nature's Calendar: recording phenology in the UK](#)
- [100 Years of Meteorology at Imperial](#)

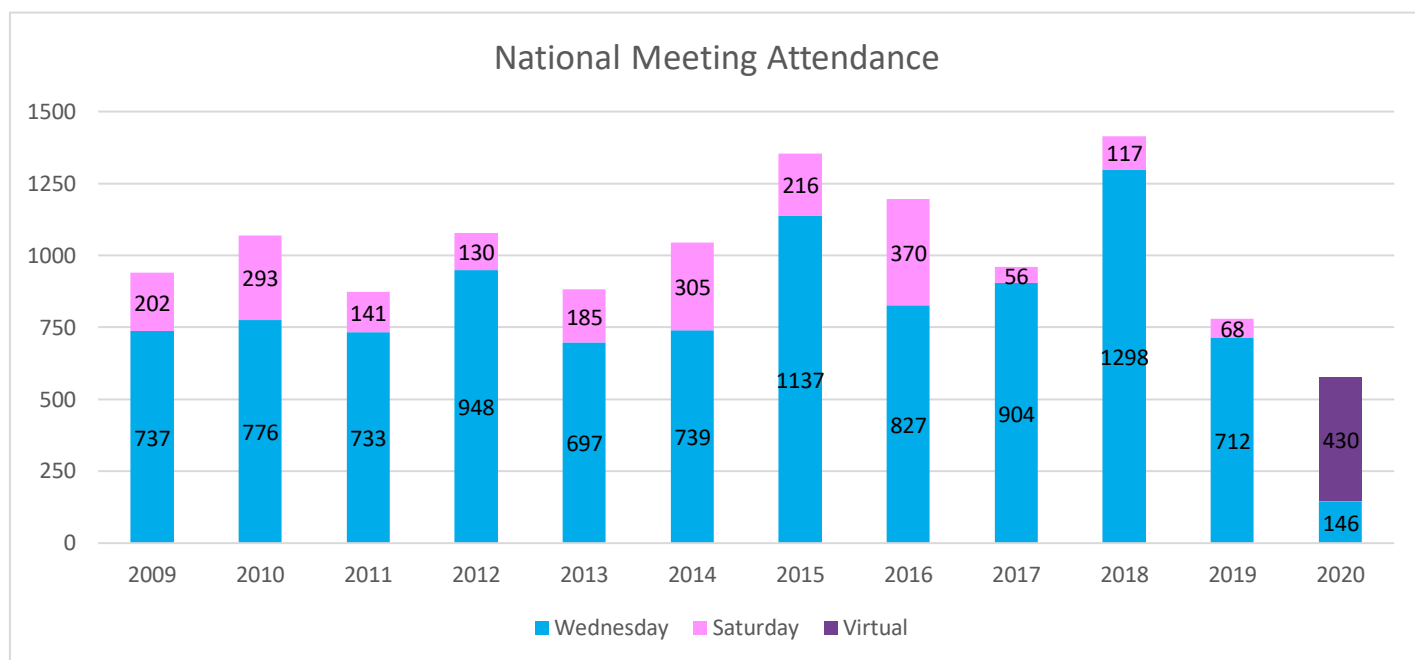
Most meetings in November and December were one-hour taster sessions consisting of a single speaker followed by a Q&A session. This meant that the committee were able to provide a flavour of some of the events that had been scheduled and then postponed due to COVID-19, whilst also enabling a wider audience of attendees to join both geographically and logistically. The virtual meetings were recorded and posted on the Society's YouTube channel <https://www.youtube.com/c/royalmetsoc/videos> as well as the event page of the website so that the content can continue to be viewed after the event.

Many events that have not been moved online will feature in the 2021/2022 events programme.

The Society actively seeks partners to co-sponsor meetings. In 2020 meetings were held in association with the Grantham Institute, the Royal Society, Met Office, the Institute of Physics, Imperial College, the Geological Society of London and the University of Reading.

The Society values feedback from attendees to ensure the National Meetings continue to be attractive and of high quality. Feedback continues to be obtained by emailing questionnaire links to those who have registered for a meeting. The feedback shows overall high levels of satisfaction with the National Meeting topics, the quality of the speakers and the online platform used to deliver the events.

Attendance at National Meetings over recent years is shown in the following graph.



The overall attendance numbers dropped for 2020 due to the planned reduction in the number of National Meetings and as a reflection of the pandemic which halted our programme for the first half of the year. The number of people attending our virtual programme however was almost 450, which is a great reflection of the hard work and commitment by the committee, speakers and staff to continue the events programme with the introduction of taster events in the second half of 2020. Of those virtual attendees it was encouraging to see that people joined from all over the world, really highlighting the work of the Society to a broader audience.

Conferences and Other Events

The Society's **Student and Early Career Scientists' conference** on 29th and 30th June was held as a virtual event for the first time ever. The conference was a huge success and attracted an international audience with delegates participating from across the globe including the Philippines, Indonesia, Ghana, Germany and India. Across the two-day period, 253 people registered to attend the conference in total. The keynote sessions were very popular with over a hundred people attending each session. A big thank you needs to be extended to the Student Organising Committee who really went above and beyond to put this conference on virtually.



IMAGE: Student Conference Keynote Speakers

WeatherLive: Past, Present and Future was held on Saturday 17th October in association with AccuWeather. Over 150 people registered to attend WeatherLive and delegates enjoyed an afternoon of presenters who looked back and reflected on changes that have occurred in weather and climate over the last two centuries, before looking to the future to discuss what we could expect under climate change. The conference was seen by delegates in the UK, America, Croatia, Brazil, Canada, and Vietnam. The winners of the Weather Photographer of the Year 2020 competition were also announced at this event.

Two new series of events were added to the calendar for the first time this year. The first is the introduction of **Met Masterclass** events in September and October with three afternoon sessions offering CPD opportunities to both members and non-members online. The sessions started with one speaker and had two responders who spoke about the subject and how they would apply the science within their workplace. These sessions were very popular with almost 200 delegates attending each event from across the UK and internationally.

The second series of events focussed on the Society Journals:

- *'How and Why You Should Publish Your Geoscience Dataset'* was held in partnership with The Geological Society of London and was a unique event enabling speakers to give all-round understanding of the benefits and options available in publishing dataset information.
- *'Meteorological Applications: Meet the Author'* showcased two papers from the *Meteorological Applications* journal and gave the audience the opportunity to speak to the authors directly about their own work. This series will be continued in the future.

The **Atmospheric Science Conference 2020** was postponed until 2021.

Local Centres and Special Interest Groups

The Society's Local Centres organise meeting programmes across the UK, providing opportunities for sharing common interests and enthusiasm on a wide range of topics. The Local Centres, this year, have had to adapt to the growing virtual environment due to COVID-19. Unfortunately, this has meant some Local Centres have been unable to be as active as usual, however, it has also seen some local centres be able to open out their work to the wider community.

The Local Centres held a total of 10 virtual meetings between July and December 2020. The two Local Centres that were the most active in delivering virtual meetings were the Scottish and Yorkshire Local Centres. The Local Centres were able to invite speakers and create a virtual meeting using the online Demio platform. These events were a great success and increased the exposure of the Society by reaching international audiences. The virtual meetings also meant international speakers could be invited, as well as sharing speakers among other Local Centres.

The virtual meetings were recorded and posted on the Society's YouTube channel [youtube.com/c/royalmetSOC/videos](https://www.youtube.com/c/royalmetSOC/videos) as well as the event page of the website so that the content can continue to be viewed after the event.

Several other Local Centres have now begun their training to create and deliver virtual meetings and so this is a programme we are expecting to expand further into 2021.

The Chairs of our Local Centres had a General Meeting on 5th August 2020 which was considered helpful to share ideas and discuss opportunities for Local Centres moving forward. A second General Meeting has been scheduled for 24th February 2021 with the anticipation to hold one meeting every six months in the future.

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 www.rmets.org/events. 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.

East Anglia Centre

Committee Members:

Chris Bell (Chair), Dr Steve Dorling (UEA Staff)

Activities:

The East Anglia Centre was inactive throughout 2020 but aim to schedule some virtual meetings during 2021.

East Midlands Centre

Committee Members:

Roger Phillips

Activities:

Weather Front is still being produced, and any suggestions for improvement are welcome. The Society is assisting Roger in creating an East Midlands Local Centre Committee to help reinvigorate this centre and its activities. The Society has received four keen volunteers and is now in the process of defining this committee with Roger.

North East Centre

Committee Members:

Dennis Wheeler, Ken Cook, Patricia Uttridge

Activities:

The North East Centre hosted one meeting with 12 people in attendance; all subsequent meetings were cancelled. The centre is not looking to hold any meetings whilst we are delivering a virtual events programme due to the demographic of their members.

- 14th February: [Drivers of Recent Heatwaves in the UK](#)
Dr Mark McCarthy (Met Office)

North West Centre

Committee members:

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

Activities:

The North West Centre hosted one meeting in March; the two meetings planned for April and June were cancelled. There is a virtual meeting planned for March 2021 and they are looking to continue with virtual meetings for the remainder of the year.

- 10th March: [Catastrophe Modelling in the Insurance Industry](#)
Dr Kelsey Mulder (Hiscox Group)

Scottish Centre

Committee Members:

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

Activities:

The Scottish Centre hosted five meetings with an average attendance of 41. There are currently four meetings planned for 2021. Titles of the meetings included:

- 14th January: [Cairngorm Automatic Weather Station: 40+ Years at the Top](#)
Dr Bill MacPherson (Heriot-Watt University)
- 21st February: [Post-Graduate Student Talks 2020](#)
Sarah Wilson-Kemsley (University of East Anglia), Chris Manktelow (University of Exeter)
- 9th October: [Cryogenic Energy Storage for a Net Zero Carbon Future](#)
Professor Yulong Ding (University of Birmingham)
- 6th November: [A Journey into Space: The Force of Vertical Winds in the Upper Atmosphere](#)
Daniel Brener (University of Edinburgh)
- 8th December: [Marine Cloud Brightening as an Emergency Brake on Climate Disaster](#)
Professor Stephen Salter (University of Edinburgh)

Other activities include Scottish weather observations and how to access them, a full day meeting at New Register House which has been postponed with a date still to be confirmed, and a climate conference at Royal Society of Edinburgh.

South East Centre

Committee Members:

Rob Thompson (Chair), Simon Lee, Arathy Menon, Thorwald Stein

Activities:

The South East Centre hosted three meetings with an average attendance of 24. Titles of the meetings included:

- 14th January: [Snowflake Aerodynamics – What? Why? and How?](#)
Dr Mark McCorquodale (University of Reading)
- 4th February: [Predicting the February 2018 Sudden Stratospheric Warming](#)
Simon Lee (University of Reading)
- 3rd March: [Subseasonal and Seasonal Forecasting Focussing on the ECMWF Model Performance](#)
Laura Ferranti (ECMWF)

South West Centre

Committee Members:

Dick Bateman (Chair), Penny Tranter (Co-Chair)

Activities:

In 2020 Bath Royal Literary and Scientific Institution (BRLSI) enjoyed its fourth 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 2020 we were lucky to fit in a lecture before lockdowns were implemented. It was a BRLSI Geography and Adventure lecture in conjunction with BRLSI Science, Royal Meteorological Society and Royal Geographical Society. Dr Parrington had been following the recent bushfires very closely and was able to give a comprehensive overview and explanation of the fires and smoke output in South Eastern Australia.

In August 2020 Penny Tranter, Co-Convenor for Geography and Adventure at BRLSI was interviewed by Jacki Hill-Murphy, FRGS, also a Co-Convenor at BRLSI, on her work for the Meteorological Office on "Severe Weather". The interview was recorded and posted on the Virtual BRLSI YouTube Channel at [youtube.com/watch?v=srWmEcHgRF0](https://www.youtube.com/watch?v=srWmEcHgRF0).

- 11th March: [The Australian Bush Fires 2020](#)
Dr Mark Parrington, Copernicus)

The centre now has various meetings scheduled throughout 2021 in partnership with the Royal Geographical Society. The meetings are held via Zoom so the Society assists in promoting the events, but does not have an active part in hosting.

Welsh Centre

Committee Members

Dr Michaela Bray (Chair), Dr Yunqing Xuan (Treasurer), Thomas Green (Cardiff University)

Activities:

The Welsh Centre was inactive throughout 2020.

West Midlands

Committee Members:

Dr Ian D Phillips (Chair)

Activities:

The West Midlands Centre hosted four meetings at which the average attendance was 20. Titles of the meetings included:

- 16th January: [Atmospheric Analysis of the Cold Late February and Early March 2018 over the UK](#)
Katie Greening (Weather Company, Birmingham)
- 13th February: [Extratropical Cyclone Clustering and its Impact on Western Europe](#)
Dr Matthew Priestley (University of Exeter)
- 20th February: [Copernicus Climate Change Service and the Climate Data Store](#)
Dr Bernd Eggen (Hadley Centre)
- 12th March: [A Brief History in the Life of a Met Man](#)
Ken Kemp (Former Met Office Employee)

Yorkshire Centre

Committee Members:

Kamalika Sengupta (Chair), John Goulding (Secretary), Lindsay Bennett (Treasurer), Beth Woodhams (Publicity Coordinator), Ben Pickering, Sarah Barr, Michael Baidu, Thomas Sharp, Suzanne Robinson, Victoria Smith, Dorian Speakman, David Cherry, Clive Mills-Hicks and Jim McQuaid (Committee Officers)

Activities:

The Yorkshire Centre hosted two physical meetings in January and February before holding five online meetings between July and December. The titles of the meetings included:

- 15th January: [Climate Science Meets Politics](#)
David Warrilow OBE, FRMetS (RMetS President)
- 19th February: [PhD Showcase](#)
- 14th July: [Air Pollution in the UK during COVID-19 Lockdown](#)
Professor James Lee (National Centre for Atmospheric Science and the University of York)
- 11th August: [The 'Godzilla' Saharan Dust Plume of June 2020](#)
Dr Claire Ryder (University of Reading)
- 26th August: [The Exceptional Winter of 2019-2020 explored through Global Teleconnections](#)
Nick Silkstone (Deputy Chief Meteorologist, Met Office)
- 23rd September: [The North Atlantic jet stream, Greenland blocking + climate change effects on UK extreme weather](#)
Professor Edward Hanna (University of Lincoln)
- 10th December: [Air Quality and Health Impacts of the Saddleworth Moor and Australian Wildfires](#)
Ailish Graham (PhD Student, University of Leeds)

Other activities:

The Yorkshire Centre did not organise the annual Christmas social in 2020 owing to COVID-19, but are working towards holding an online social to look back on the weather of 2020.

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.

Atmospheric Chemistry

Committee Members:

Dr Ryan Hossaini and Dr Ruth Purvis (Co-Chairs)

Activities:

No meetings were held during 2020; there are plans for a virtual meeting in 2021.

Atmospheric Electricity

Committee Members:

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

Activities:

The group virtually held the 'Wilson Meeting on UK Atmospheric Electricity' on 12th November; 67 people attended. A meeting report was produced in preparation for **Weather**, and work also began on a set of briefing notes on lightning and atmospheric electricity.

Aviation Meteorology

Committee Members:

Bob Lunnon (Interim Chair), Jacob Kollegger

Activities:

The Aviation Meteorology SIG was involved in planning a joint RMetS/GASCo (General Aviation Safety Council) seminar **Weather for Private Pilot License Holders** but the seminar was postponed due to COVID-19 until 2021. The group has over 20 members.

Climate Science

Committee Members:

Richard Betts (Chair), David Warrillow OBE, Nigel Arnell, Tom Burke, Peter Gibbs, Joanna Haigh, David Hone, Jo House, John Mitchell, Liz Parkes, Emily Shuckburgh, Stephen Smith, Richard Walker

Activities:

The group had a quiet year due to the added pressures of the pandemic on committee members' work. Tentative plans are being made for meetings in the coming year following the publication of the IPCC 6th Assessment Report Working Group 1 volume and the 3rd UK national Climate Change Risk Assessment.

Data Assimilation

Committee Members:

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

Activities:

The DA SIG held one meeting in 2020.

In March 2012, the DA SIG supported UK CEH and NCEO in the organization of the HydroJULES Land Surface Data Assimilation workshop. The purpose of the workshop was to take stock of land data assimilation activities across the UK, with a focus on soil moisture and hydrology.

The DA SIG also supported the organisation of the Joint Workshop on Representation Uncertainty in the Earth Sciences due to be held in April 2020. Unfortunately this event was postponed due to the COVID-19 pandemic; however, the meeting has been rescheduled for March 2021.

History of Meteorology and Physical Oceanography

Committee Members:

Norman Lynagh (Chair), Julian Mayes (Secretary, Newsletter Editor), Mick Wood (Treasurer), Howard Oliver (Coordinator - Occasional Papers), Chris Folland (Coordinator - Pen Portraits of Past Presidents), Sarah Pankiewicz and Catherine Ross (Representatives from NMLA), Rob Allan, Catharine Bailey, John Gould, Richard Griffith, Peter Rowntree, Andrew Russ-Turner. Dennis Wheeler and Brian Booth are Corresponding Members.

Note: Norman Lynagh stood down as Chairman at the end of 2020. From 1st January 2021 Vladimir Jancovic will be Chairman. Norman Lynagh will continue as a member of the Committee.

Group Membership:

At the end of the year, the number of members of the group had remained steady at approximately 90 individuals.

Activities:

Due to the COVID-19 pandemic, Group activities were again limited in 2020. The Steering Committee meeting scheduled for April was cancelled. The October meeting did take place but it was a virtual meeting, held via a group Zoom call. Despite all of the difficulties this year, Julian Mayes managed to produce two newsletters which were distributed by e-mail. Two Occasional Papers were received during the year. These will be available via the Society website.

One meeting was scheduled for the year – “The History of Climate Science Ideas and their Applications”. It was booked for a date in April but had to be postponed due to the COVID-19 pandemic. There have been a few subsequent postponements and the latest idea is to hold the meeting in the Spring of 2022, possibly in March.

Meteorological Observing Systems

Committee Members:

Steve Colwell (Chair), Mark Dutton (Newsletter Editor), Mike Brettle (Treasurer), Ian Strangeways, Keri Nicoll, Stephen Burt, Dave Bullock, Simon Bell, Stuart Goldstraw

Activities:

The group held its AGM via zoom on 22nd October with 19 people attending which is a record for recent years. We did have two meetings planned for 2020 but due to COVID-19 these have been postponed and it is hoped that they will run in 2021.

Weather, Art and Music (WAM)

Committee Members:

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

Activities:

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: HRH The Prince of Wales, HonFRMetS

From 1st January to 30th September 2020 the constitution of the Council was as recorded in the Annual Report for 2019. On 1st October 2020, the following Council held office:

PRESIDENT

Prof David Griggs, PhD, FRMetS

VICE-PRESIDENTS

David Warrilow OBE, FRMetS

Prof Lesley Gray, PhD, FRMetS

Dr Jon Petch, PhD, FRMetS (also Chair, Strategic Programme Board)

VICE-PRESIDENT FOR SCOTLAND

Gary Johnston

GENERAL SECRETARY

Shanti Majithia FRMetS, FRSS (also Chair, House Committee)

TREASURER

Jennie Campbell

COMMITTEE CHAIRS

Dr Amanda Maycock, PhD (Meetings and Conferences Committee)

Karl Shepherdson, FRMetS (Education Committee)

Prof Peter Stott, PhD, FRMetS (Science Engagement Committee)

Dr Will Lang PhD, FRMetS, CMet (Professional Accreditation Board)

Dr Anna Ghelli, PhD, FRMetS (Scientific Publishing Committee)

MEMBERS OF COUNCIL

Aisling Creevey, FRMetS, RMet

Helen Rossington, FRMetS, RMet

Council met on three occasions during 2020 in February, June and November. They approved the Strategic Plan 2021-23 and associated budgets, the Society's Open Access Strategy, recommendations from the Weather Club Review, the risk register, and operational procedures for attracting volunteers. They also discussed the long-term implications of COVID-19 on the Society, vacancies arising on Council, the Society's COP26 action plan and an open letter to Government on climate science in formal education. Council agreed to freeze the 2021 membership and accreditation fees at the 2020 rate.

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. Council is currently 43% female. To identify the skills and knowledge it needs and inform future recruitment, the Society conducts an annual skills audit.

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 2020 on 19th May and 15th October.

Highlights from 2020:

- The House Committee reviewed the Standing Orders of the Society, to update on current practices and changes to Terms of Reference of committees.
- Monitoring Governance issues is an important activity for the House Committee. An overall governance health check has been completed and highlighted that the Society is in a good position. However, it is crucial that changes in the outside environment, including data protection, charity law and employment law are monitored closely to ensure the Society remains compliant. This year brought in extra challenges due to the impact of COVID-19. The Society's Risk Register is one mechanism that ensures ongoing risk is reduce and monitored.
- The House Committee reviewed updates to policies relating to GDPR and cyber security.
- The recommendations of the Salary and Remuneration Committee were reviewed.
- Health and Safety issues continue to be carried out by professional experts with any recommendations reported to House.
- House welcomed a new operational procedure to help encourage more people to volunteer.

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. However, during the year when the new strategy is being developed, the SPB meets more frequently and in 2020 met four times, in February, June, July and September, with the February meeting in-person and the others meeting virtually. The Chair of the SPB is President of the Society. The business of the SPB has taken place with the backdrop of COVID-19 imposed upon the business-as-usual of the Board.

The February meeting was facilitator led to review the current strategic plan, the strengths, weaknesses and values of the Society and to begin to shape the themes of the new strategy. The June meeting reviewed the wording for the vision and mission and the Board began to shape the strategic objectives and cross-cutting themes. In July the Board reviewed a proposal relating to the public engagement work of the Society as part of a review of theWeatherClub and provided recommendations to Council. In September the Board reviewed the first draft of the Strategic Plan 2021-23, recommending it to Council for approval at their November Council meeting.

Below is a table of the some of the strategic projects that were prioritised in 2020 and progress against each project.

Project	Description
Membership survey and SWOT analysis	Key items to work on were identified
COVID-19	Implications of COVID-19 on the Society were discussed, plans were developed and the SWOT analysis was revised
Purpose and Mission	Revised drafts of the Mission Statement and Strategic Objectives of the Society were developed
Diversity	Agreed this should be a strategic priority and a request made to the Diversity and Inclusion Committee to develop an action plan
theWeather Club	Discussed theWeather Club review and recommendations to Council on how to proceed
Strategic Plan	Draft Strategic Plan reviewed and recommended to Council
Public communications	Increased visibility and proactive stance in climate change conversation and related issues with recommendations to Council

Business Development and Strategic Partnerships

The Society partners with a range of organisations including academic institutions, business and industry, NGOs and government to support the delivery of its charitable objectives. The Society partners with: Grantham Institute, National Centre for Atmospheric Science, University of Reading, AccuWeather, Create Education, BBC, ITV, Sky, Met Office, ECMWF, Royal Horticultural Society, 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, European Meteorological Society, International Forum of Meteorological Societies, Royal Geographical Society, Geographical Association, BBC Bitesize Scotland, Royal Imperial College, Geological Society of London, Wiley, StormHour, TORRO and the World Energy and Meteorology Council.

In 2020, the Society delivered the following through its business development and strategic partnership activities:

- Hosted a series of three Meteorological Masterclasses, in partnership with the University of Reading, to support the continued professional development of meteorologists. The initial series, delivered in September/October 2020, attracted 542 delegates from across the world.
- Worked closely with the Met Office to support the professional development of its staff through membership and accreditation.
- Supported ITV, Sky and BBC with training aimed at enabling broadcast meteorologists and journalists to communicate effectively about climate change.
- Delivered the Weather Photographer of the Year competition in partnership with AccuWeather, significantly increasing engagement with the campaign.
- Developed a new educational resource with 3D printing company, Create Education, to support the teaching of past climate.
- Supported FleetWeather with the development of its staff through professional accreditation.
- Supported BBC Bitesize Scotland to develop new educational resources on weather and climate.

Partnership and business development activities have been significantly impacted by COVID-19, with a number of opportunities delayed until 2021.

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.

- **Media coverage:** We received 173 media interview requests and achieved 1,666 items of media coverage mentioning the Society (please note this coverage figure covers April-Dec, when a media monitoring contract was put in place).
- **Website statistics:** The number of website users grew by 33%, from 115,437 in 2019 to 155,713, in 2020. The number of pageviews grew by 36%, from 383,125 in 2019 to 520,111 in 2020.
- Our **social media** presence continues to grow across all our platforms; we have 12,100 followers on Twitter, 4,500 on Instagram and 3,900 on Facebook. We began to focus more on LinkedIn to reach a professional audience and now have over 1,000 followers on that platform.
- **Brand** guidelines, image policy and guidance and a tone of voice and key messages guidance have been issued to all staff to ensure consistency of brand, ultimately resulting in better brand awareness of the Society.

In 2020, the Society delivered the following key activities:

Membership

- Improved the content, frequency and brand of newsletters i.e. Member eNews, the Weather Club, and Society News.
- Two new regular newsletters to members: a monthly events newsletter which showcases all upcoming events and a **Weather** newsletter that makes **Weather** online only members aware of the release of a new issue each month.

- Regular contributions made to the European Meteorological Society and International Forum of Meteorological Societies newsletters and Met Office intranet, as well as working in partnership with communications teams across universities, Science Council, and Wiley.
- Through strategic planning a lot more thought is given to the membership user journey as well as providing targeted communications for existing members, driving people through to the RMetS website and signposting them to relevant content and calls to action.
- Society Awards were virtual in 2020 and given their own space on the RMetS website where we could showcase each recipient and their achievements. This led to a week-long social media campaign and press coverage in liaison with university and Met Office communications teams.

Accreditation

- Videos to support using ACCSYS were produced and promoted: “How to add CPD records” and “How to apply for an accreditation”, they have been viewed over 140 times since their launch in June.
- Each month eNews congratulates newly accredited members and Fellows and we share social media posts on their achievements.

Scientific Publishing

- Promotion of research summaries on the website (see informal education) to engage a wider audience with accessible summaries of often quite complex research papers in our journals.
- Content from the journals is promoted daily across social media channels.
- Potential news stories are identified within the journals and discussed with relevant comms teams to proactively gain media coverage.
- A closer working relationship with Wiley Marketing has been established with regular meetings and social media content has been improved as well as better brand recognition.
- A closer working relationship with the Met Office comms team has resulted in better RMetS recognition on the State of the UK Climate Report in IJOC.
- In 2020 there were 531 pieces of national and international coverage referencing our publications.

Events

- National meetings and conferences, as well as the Meteorological Masterclasses, now have a strategic communications plan for each event, with follow up evaluation to ensure we learn lessons and adapt as necessary for best results.
- The Local Centres now have a communications toolkit alongside design and social media templates.

Education and Outreach

- Redevelopment of our MetLink website focusing on improving its navigability, usability and visual design.
- Come Rain or Shine was widely promoted with over 6,000 people taking the course in 2020.
- The Climate Negotiations resource was promoted in the Autumn, highlighting the updates, sharing it as a resource for the Youth Climate Summit and linking to the 5th Anniversary of the Paris Agreement.
- Following an independent review of theWeather Club, Council approved the decision to integrate the content into the main RMetS website in 2021, whilst retaining the concept as a source of popular, accessible content for a general audience and associated more closely with the Society’s brand. This will maximise its impact with existing resources, strengthen the Society as an accessible and authoritative source and develop a logical user journey from weather enthusiast to member. Subscribers to theWeather Club email newsletters doubled in 2020. Following a theWeather Club users’ survey, we increased the frequency of our newsletters and now send these monthly to over 4,000 subscribers.
- The Weather Photographer of the Year Competition ran for the 5th year in 2020 and the second time it has been supported by AccuWeather. During a challenging year to grab media and public attention, a strategic plan was put in place to grow the competition. We received 7,626 entries (39% increase), 2,656 photographers (38% increase) and 11,275 public votes (157% increase). Media coverage was across 370 outlets in 54 countries.

- Citizen Science Heatwave Mission supported the promotion of the collaboration with the Open University and BBC, we launched the year-long 'Heatwaves Mission' in August, supported by the BBC. (see Informal Education). Coverage included Hannah Mallinson being interviewed by BBC Breakfast, with traffic being driven to the RMetS website (we saw a record of 655 users browsing the site at the same time), BBC regional radio interviews with Liz Bentley and an article in the Daily Telegraph.



The Daily Telegraph

NEWS BULLETIN

Your heat experience may help future strategy

Prepare for climate change by tracking how you cope this weekend, the public has been urged.

The UK is expected to be hotter than Ibiza and Tenerife today with the mercury soaring to 37C (98.6F) in London and the South East.

It coincides with the launch of the Heatwaves mission, a project tracking people's experiences of heatwaves.

The public is being asked to log the temperature where they are and say how they are coping on an online database managed by the Open University and the Royal Meteorological Society. Researchers hope the results will inform about how we can prepare for global warming.

Membership of Committees of Council

The Committees listed below are the standing Committees of the Society as at 31st December 2020. Membership of other sub-committees, working groups and similar *ad hoc* bodies are not detailed.

Accreditation Board

Will Lang (Chair), Paul Davies, Andrew Eccleston, Alan Hisscott, Pete Inness, Derek Swannick, Julian Mayes, Ross Reynolds, Bob Riddaway, Keith Thomson, Becky Venton, Emma Boorman, Ewen McCallum.

Awards Committee

Dave Griggs (President and Chair), Eddy Graham (Co-Editor, Weather), Simon Lee (Co-Editor, Weather), John Methven (Co-Editor, QJ), Andrew Ross (Co-Editor, QJ), Becky Hemingway (Co-Editor, ASL), Andrea Montani (Co-Editor, ASL), Cristina Charlton-Perez (Co-Editor, Met Apps), Dino Zardi (Co-Editor, Met Apps), Radan Huth (Editor, IJOC), Kate Royse (Co-Editor, GDJ), Jian Peng (Co-Editor, GDJ), David Warrilow (Vice-President), Jo Haigh, Liz Kent, Alan Thorpe.

Course Evaluation and Continuous Professional Development Panel

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

Education Committee

Karl Shepherdson (Chair), Lindsay Bennett, Andrew Charlton-Perez, Simon Foster, Geoff Jenkins, Ellen Phillips/Taj Bhutta (representatives of the Institute of Physics), James Rae, Paula Richardson (Representative of the Geographical Association), Jeremy Thomas, Simon Pinfield/Steve Brace (representatives of the Royal Geographical Society) Felicity Liggins/Rebecca Griffiths (representatives of the Met Office), Phoebe Smith-Barnes.

House Committee

Shanti Majithia (Chair), Anna Ghelli (Chair of Scientific Publishing Committee), Lesley Gray (Vice-President), Jennie Campbell (Treasurer).

Meetings and Conferences Committee

Amanda Maycock (Chair), Natalie Harvey, Edmund Henley, Simon Levey, Mark Rodwell, Steve Colwell.

Membership Development Board

Shanti Majithia (Chair), Daniel Brener, Sarah Dennis, Richard Griffiths, Sarah Hewitt, Amethyst Johnson, Roger Webber.

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.

Scientific Publishing Committee

Eddy Graham (Co-Editor, Weather), Simon Lee (Co-Editor, Weather), John Methven (Co-Editor, QJ), Andrew Ross (Co-Editor, QJ), Becky Hemingway (Co-Editor, ASL), Andrea Montani (Co-Editor, ASL), Cristina Charlton-Perez (Co-Editor, Met Apps), Dino Zardi (Co-Editor, Met Apps), Radan Huth (Editor, IJOC), Kate Royse (Co-Editor, GDJ), Jian Peng (Co-Editor, GDJ). Representatives of Wiley are also invited to attend.

Strategic Planning Board

David Griggs (President and Chair), David Warrilow (Vice President), Jennie Campbell (Treasurer), Shanti Majithia (General Secretary), Steve Noyes, Rob Varley, Will Owen.

Student Conference Organising Committee

Hannah Brown (Co-Chair), Joanna Raymond (Co-Chair), Kris Boykin, Shaun Dempsey, Jinghua Li, Paloma Trescasa Castro, Amethyst Johnson, Tom Faherty, Ben Pickering, Joshua Hampton.

Vocational Qualification Group

Bob Riddaway (Chair), Julian Mayes, Jodie Ramsdale, David Goldsworthy, Ann Randall.

Other Representatives Appointed by Council

Atmospheric Science Letters

Editors: R Hemingway and A Montani

Associate Editors: K Bhaganagar, E Black, J Booth, A Bott, A Dosio, V Ferracci, S Ghosh, S Hardiman, C Holloway, I Hoteit, M Kretschmer, C Li, C Liu, O Martinez-Alvarado, J McQuaid, A Miller, A Mohebalhojeh, R Neely, S Pal, R Parfitt, M Pritchard, H Reider, A Subramanian, N Theeuwes, D Woolf.

GeoScience Data Journal

Editor: K Royse and J Peng

Associate Editors: J Fan, L Brocca, R Crouthamel, Y Chen, P Diviacco, D Franco, B Hassler, G Lasslop, J Lawrimore, G Leng, C Reason, S Rennie, Y Shi, L Slater, V Slonosky, Y Su, J Tedds, C Vitolo, J Wagemann, J Wang, Y Wang, L Xu, M Zhang.

International Journal of Climatology

Editor: R Huth

Associate Editors: J Abatzoglou, E Aguilar, A Cherchi, J Marengo, I McKendry, V Moron, M Roth, T Zhou

Meteorological Applications

Editors: C Charlton-Perez and D Zardi

Associate Editors: C Archer, J Barre, J Bech, S Bell, D Brayshaw, M Brunetti, L Carvalho, E Cattani, B Chen, X Chen, A Cherchi, C Coelho, F Costabile, M Dorninger, R Emerton, E Ferrero, A Ghelli, L Giovannini, N Petersen, X Huang, C Kiel, M Kobmann, S Kotthaus, S Lerch, J Lundquist, G Marshall, C Mazzoleni, A Merlone, S Orlandini, E Tan, J Waller, M Yan.

Quarterly Journal

Editors: J Methven and 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 Lamprey, 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, V Wirth, N Zagar.

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, S Pulver, S Rodder, J Rozenberg, H Schroeder, E Zorita.

Weather

Editors: E Graham and S Lee

Associate Editors: T Blackmore, M Clark, S Hardy, S Keates, P Knightley, R McElwee, J Ramsdale, A Sibley, D Smart, C Sweeney, B Venton, Y Xuan.

Representative with the:

UK Flight Safety Committee (UKFSC):

R Lunnon

General Aviation Safety Committee (GASCo):

P Nicol-Gent

European Meteorological Society (EMS):

S Majithia

International Forum for Meteorological Societies (IFMS):

Chief Executive

Science Council:

Chief Executive

Without Whom

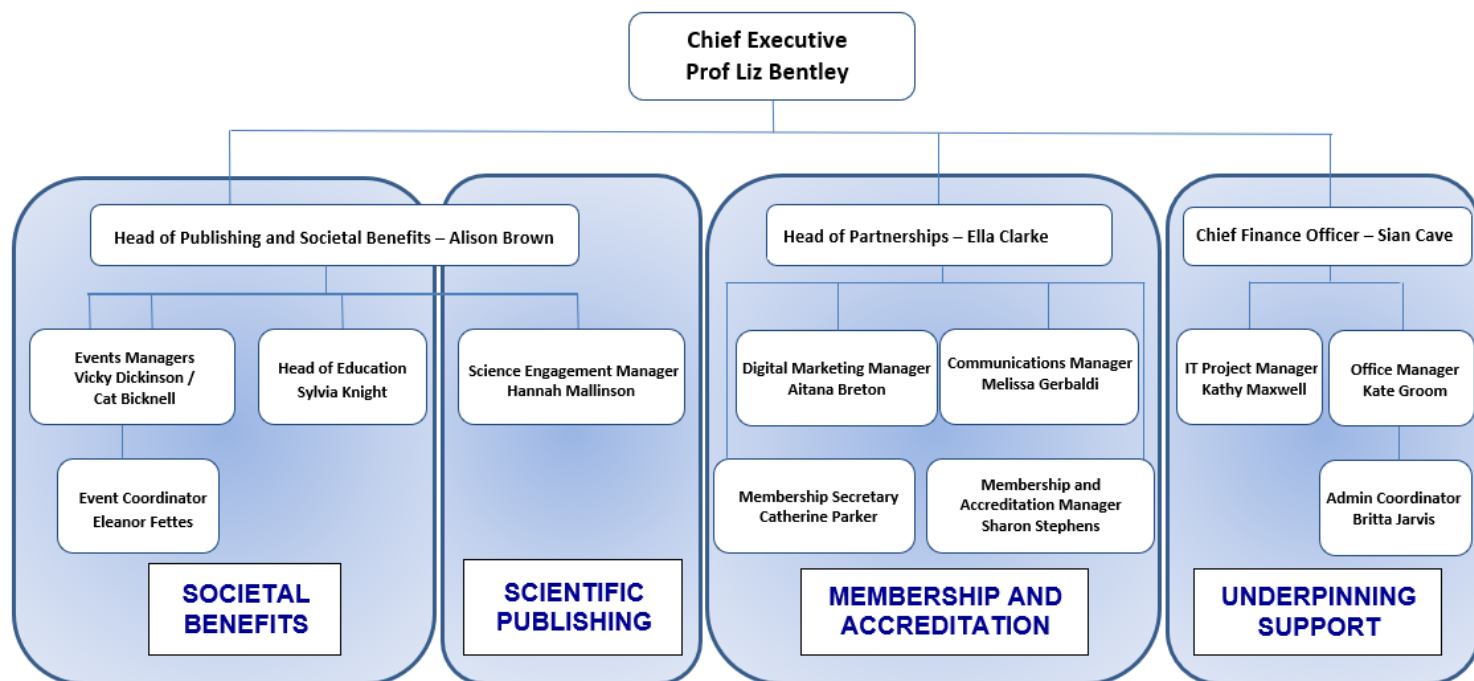
During the year, the following Officers and Council Members retired from office with our grateful thanks. Their successors are shown above.

Vice President:	Derek Swannick
Vice President for Scotland:	Vicky Ingram
Chair of Education Committee:	Jenny Rourke

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 31st December 2020 is shown below.



The Society

Catherine Bicknell went on maternity leave in May 2020 with Samantha Hargreaves recruited to provide maternity cover for the role. Vicky Dickinson returned from maternity leave in June and Ella Clarke returned from maternity leave in September. The Society welcomed Hannah Mallinson as Science Engagement Manager, Aitana Breton as Digital Marketing Manager, Melissa Gerbaldi as Communications Manager, Sharon Stephens as Membership and Accreditation Manager, Britta Jarvis as Administration Coordinator and Eleanor Fettes as Event Coordinator during 2020.

The following staff left the Society during 2020:

- Amanda Callard (Maternity cover for Ella Clarke)
- Samantha Hargreaves (Maternity cover for Catherine Bicknell)
- Suzie Kelly
- Tara Thompson

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 & 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 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: 104 Oxford Road
Reading RG1 7LL
Telephone: 0118 2080 142
E-Mail: info@rmets.org
Web: www.rmets.org

Bankers: Lloyds Bank plc
PO Box 1000
BX1 1LT

Solicitors: Blandy & Blandy
1 Friar Street
Reading RG1 1DA

Auditors: Porter Garland
Communication House
Victoria Avenue
Camberley
Surrey GU15 3HX

Investment Rathbone Investment Management Ltd
Advisors: 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 Charities¹.
- 83 The Society's premises shall not be sold or disposed of except with the sanction of a General Meeting of The Society.

Policy Statement on the Role of the Reserves

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 on a year-by-year basis and in the long term as an assurance against significant financial risks.
- Enable the medium to long-term development of the Society's aims and objectives.

Background and Introduction

The Society derives its primary annual income from a combination of members' subscriptions, sales of publications, and income from investments. The Society holds three types of investments: Tangible Assets, a General Reserve, and a Legacies Fund. Council first approved the policy on management of these two last items on 5th December 2001 and this is kept under regular review.

Historically the only major demand (> £100,000) on the reserves has been the purchase of the Oxford Road Headquarters, pending the sale and resolution of the problems with the previous Headquarters (James Glaisher House, in Bracknell). Other demands have been comparatively small (~£50,000 spread over several years) and relate to upgrade of the IT equipment.

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 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 have been specifically identified as ringfenced for this purpose. The budget shall be set by taking into account the gains on the reserve available for investment in the Society's charitable objectives. This is informed by the Charity Commission's guidelines on the ratio of annual turnover to capital reserve.

The Reserves - Tangible Assets

Tangible assets, which comprise the premises, the furnishings and equipment are essential for conducting the business of the Society and are an effective way of providing "rent free" accommodation. 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).

¹ Reference should be made to Part IV, Section 11(3) of the Trustees Act 2000.

The Reserves - The General Reserve

The role of the General Reserve is basically to provide a degree of financial robustness to the long-term survival and mitigation of the major risks of the Society. 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 on an opportunist basis (~£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).

For this model to work at these sorts of levels over a long period the fund needs to have a topping up mechanism. This has to be through income or growth in the market. This gives a target value of the General Fund and the Legacies Fund together which is approximately equivalent to the annual turnover of the Society.

The Reserves - The Legacies Fund

The policy for this fund is to protect and grow it. Subject to this policy, capital gains and dividends are used to support, in a sustained manner, 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

The Management of Investments

The Council, advised by the House Committee, are responsible for overseeing the Society's investments. The management of investments is delegated by Council to Rathbones Investment Management. 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.

Choice of Investments

Investments may be made in cash deposits, property, gilts and equities in such proportions as to endeavor to maximise the total return to the Society over the longer term, in order to deliver the required investment return for the Society's development programme and to mitigate the Society's major risks. The ethical policy in place does not allow direct investment in tobacco or fossil fuel providers. Over the last 10 years the Society has sought to divest from equities held in companies whose activities are contrary to the aims of the Society or its social, environmental and ethical responsibilities as the Professional Body and Learned Society for meteorology. Rathbones is committed to the evaluation and reporting on the environmental, social and governance scores of the direct investments which are held.

Where investment is made in equity shares, these should be mainly in FTSE-100 companies and 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 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 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 discretion of the Society's Chief Financial Officer.

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 willful 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 G: 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 set standards for professional registration of scientists and science technicians and provides a voice on policy and ethical issues affecting the science community, fostering 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 Sir Keith Burnett as the President.

The Science Council has three key themes in its current strategy: registers and licenses; community and membership; and policy and influence.

The Society continues to be a Member of the Science Council.

General Aviation Safety Council (GASCo)

As with many aspects of 2020 the COVID-19 pandemic affected the Society's participation on the General Aviation Safety Council (GASCo), a body aimed at facilitating good communication of relevant safety information amongst private flyers. The Council's meetings of GASCo moved seamlessly online in March however the planned joint seminar between the Society and GASCo on **Weather for Private Pilot License Holders** postponed due to COVID-19 until April 2021 ahead of what is hoped to be a return to flying both as lockdown ends and the weather improves.

UK Flight Safety Committee (UKFSC)

The Flight Safety Committee (FSC) comprises of commercial operators including airlines such as EasyJet, Ryanair, and smaller concerns down to British Antarctic Survey; the General Aviation Safety Council (GASCo) 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.

Bob Lunnon attended two of the three FSC Safety Information Exchange meetings. As in 2018 and 2019, meteorology did not feature explicitly in any of the meetings but came up indirectly in all. Normally meetings are bi-monthly but after the January meeting ad-hoc arrangements were put in place to cope with COVID-19.

The meetings provided opportunities to discuss some meteorological related topics including turbulence, wind shear, climate change, and geometric height of pressure surfaces.

Some miscellaneous events included:

- A Gulfstream had caused an aeroplane to go off the side of the runway at Liverpool in conditions of significant crosswinds, but the incident was blamed on the pilot having "clumsy feet".
- A £15,000 drone which is claimed to be weatherproof is actually such that in rain, water can cause engine failure.
- A UK operator had had a succession of fume events inside the aircraft and it has been shown that these events are partly dependent on meteorological conditions – they are associated with convective weather and rain.

European Meteorological Society (EMS)

EMS Membership and RMetS Representation

The European Meteorological Society (EMS) is an Association of 38 Meteorological Societies from 30 European countries. In addition, EMS has 30 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:

- 42nd EMS Council on 24th March 2020
- 43rd EMS Council on 12th May 2020
- 44th EMS Council and 3rd September 2020

Shanti Majithia, General Secretary, attended the meetings via video conferencing, which were chaired by Bob Riddaway, EMS President.

Annual Meetings

The EMS Council decided to cancel the EMS Annual Meeting 2020, planned for 7th – 11th September 2020 in Bratislava, agreeing instead to hold three virtual events on 8th / 9th September 2020 on open science, COVID-19 and meteorology and Weather Enterprise in Europe.

Future EMS Annual Meetings are planned as follows.

- **2021 EMS Annual Meeting** will take place in Barcelona, Spain from 6th to 10th September 2021.
- **2022 EMS Annual Meeting** will take place in Bonn.

EMS Silver Medal Award

Jean Jouzel was selected as the recipient of the EMS Silver Medal 2020. This award recognises his fundamental and pioneering scientific contributions to the understanding of paleo, present and future climate processes, as well as his outstanding contribution to increase public knowledge and awareness of climate change.

Other activities and developments

The EMS is developing its new strategic plan which it hopes to launch in 2021. The 44th Council Meeting was the last Council Session that was chaired by Bob Riddaway as President of the EMS. The new EMS President, Bert Holtslag from the Netherlands, took up office on 10th September 2020 – an interview with the new President can be found [here](#).

International Forum of Meteorological Society (IFMS)

IFMS Membership and RMetS Representation

The International Forum of Meteorological Society (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 40 meteorological societies and related organisations.

The IFMS has a Council comprising of officers and representatives from the six WMO regions. IFMS Council Elections were held in August 2020 and Prof Liz Bentley was re-elected as the Society's representative on the IFMS Council as Councillor for the WMO Region VI. The Council meets every few months via teleconference.

IFMS General Assembly Meeting

The 6th Global Meeting of IFMS Global Meeting took place on 14th and 16th January 2020 in Boston, Massachusetts concurrently with the American Meteorological Society's (AMS) centennial celebration conference. The Global Meeting comprised of presentations from guest speakers and updates from Chairs of IFMS committees and the representatives of Member Societies. Guest speakers included Prof. Petteri Taalas (Secretary General of WMO), Dr. Vladimir Tsirkunov, (Head of GFDRR), Dr. Tim Spangler and Dr. Patrick Parrish (Chief of Training Activities Division of the WMO Education and Training Office) on the Global Campus Initiative, Dr. Walter Dabberdt on Volunteer Force, Dr. Mary Glackin (AMS President), Dr. Louis Uccellini (Director of US-NWS) and Dr. Bob Riddaway (President of the European Meteorological Society).

The IFMS website is updated regularly and a newsletter is produced and distributed twice a year. The IFMS hosts webinars and during 2020 there were two webinars on GWE Initiative: Public, Private, and Academic Collaboration for Strengthening the Weather Enterprise and the WMO's Open Consultative Platform PPA Collaboration, both available on the IFMS website.