

To advance the understanding of weather and climate and its application for the benefit of all

2021 IMPACT REPORT

Engage
Enthuse
Educate
Empower

The Royal Meteorological Society is the UK's Professional and Learned Society for weather and climate. Working to strengthen the science and raise awareness of the importance of weather and climate, support meteorological professionals and inspire enthusiasts.

The Society is owned by its membership but exists for the benefit of all. It plays a key role as the custodian of both the science and the profession of meteorology in the UK and has an important role to play internationally

as one of the world's largest meteorological societies. Programmes of work are broad and diverse, with activities and events held for members, the general public, educators, policy and decision makers, and the wider meteorological and climate community.

To find out more about the Royal Meteorological Society, discover a wealth of weather and climate resources, and become a member, please visit: rmets.org

CONTENTS

3	Foreword	11	Education and Careers
4-5	Our Year in Numbers	12	Finances
6-7	Highlights of our Work	13	Get Involved
8-9	Communicating Climate	14	2021 Awards and Prize Winners
10	MetMatters	15	Special Thanks



President's Foreword

How to measure impact is something I have wrestled with throughout my career. If you give a talk, hold a conference, or put out a blog, how can you know if you have had any influence on those attending or reading. So, I have come to the conclusion that all you can do is assess as carefully as you can what activities you think might have the greatest impact. Then you throw as many stones into the water as you can in the hope that the ripples cause as much impact as possible. So, I am consistently inspired by the Society and its staff in maintaining, and in many cases expanding, the number and range of activities undertaken.

This year's report highlights a few of these activities, such as the Society's work around COP26 in Glasgow, improvements to our public-facing and educational content online and a significant increase in event attendees - attracting speakers and audiences from all over the world.

As the learned Society for weather and climate, we must practise what we preach. Therefore, I am particularly pleased that the Society is committed to achieving net-zero direct carbon emissions (Scope 1 & 2) by 2025. In 2021, the Society also supported the Government of Jersey with the Jersey Citizens Assembly on Climate Change.

So, despite the uniquely difficult circumstances, the Society continues to go from strength to strength. But this has only been possible through the extraordinary efforts of the staff, an active and engaged community of volunteers, and the unstinting support from you, our members, for which I am eternally grateful.

Prof Dave Griggs FRMetS

Chief Executive's Welcome

At the beginning of 2021, we launched the Society's strategic plan 2021-2023. The plan is a progression on what has already been achieved in recent years and builds on that momentum to create a modern and progressive Society for weather and climate.

This year's report reflects that despite the past year's challenges, the Society has managed to deliver the vast majority of activities planned for 2021. One notable success has been the promising rise in membership after recent years of decline.

The Society's Council has long championed the benefits of diversity in decision-making and Council membership. In 2021, we completed the Science Council Equality, Diversity and Inclusion (EDI) progression framework and embedded EDI activities into our new strategy.

The Society further continues to strengthen its relationship with strategic partners from a range of organisations, including academic institutions, business and industry, NGOs and government, to support the delivery of its charitable objectives.

I'm pleased this year's report shows us to be in a strong financial position. However, the next few years remain challenging from the long-term impacts of COVID-19, with pressures on income across the meteorological community, the rising cost of living, and from scientific publishing continuing to transition to an Open Access model. However, I am confident that as we enter the next period on a firm financial footing and strong foundations in place to build on our recent successes that we will continue to advance the understanding of weather and climate and its application for the benefit of all.

Prof Liz Bentley

For further details on the work of the Society in 2021, you can read the <u>Annual Report and Accounts</u>.

OUR YEAR IN NUMBERS



Total membership increased by 3.7% to 3,278, including a 98% retention rate and 61 new international members



300+ volunteers, including
3 new student ambassadors and
20+ book reviewers



24 new Fellows (FRMetS) with 9 Members transferring to Fellowship. Our Fellows are amongst the most experienced and knowledgeable professionals in the meteorological industry



195 accredited Registered Meteorologists (RMet) and Chartered Meteorologists (CMet)



1,000+ attendees joined our two series of Meteorological Masterclasses in 2021, in partnership with the University of Reading



Supported 54 broadcast meteorologists, journalists and Heads of News at ITV with climate change training in the run up to and around COP26



3 new Corporate Members – DTN, WeatherQuest and Vaisala



Increased virtual events from 20 to 51, including 26 local centre events



Hosted a virtual Atmospheric Science Conference across three days. 11 parallel sessions and 17 keynote speakers



Attendance at National Meetings increased from 576 to 1,156 delegates



2,652 viewers watched event content back through YouTube



7,000+ new social media followers, broadening our audience and widening our reach across all channels



Website users grew by 210%, and page views increased by 77%



Launched 1 new journal – Climate Resilience and Sustainability



 successful new book in partnership with the Natural History Museum.

Weather - A Force of Nature: Spectacular images from Weather Photographer of the Year, which was also translated and licensed worldwide



An increase in the Impact Factor of
6 out of 7 of our journals. This is a
measure reflecting the average number
of citations to articles published in the
journal



188 media interview requests and 2,530 items of media coverage mentioning the Society, an increase of 9% and 52%, respectively



1 new marketing email system
to improve our member communications.
Lead-generation campaigns on the
new system resulted in 273
membership leads

HIGHLIGHTS OF OUR WORK



Weather Photographer of the Year 2021

Last year, a new mobile phone category and a 'Meet the Experts' webinar (100 delegates) were introduced to increase entries. A total of 8,908 photographs (52% increase in last two years) were received from 114 countries, taken by 3,312 photographers (+60% in last two years). 12,392 public votes were cast (+167% in last two years), and 410 pieces of media coverage appeared (+10%) across 40+ countries.

rmets.org/photography

Publications

938 national and international media outlets referenced our publications (journals and books). Highlights from articles we placed in the media included the annual State of the UK Climate Report in the International Journal of Climatology, which resulted in 1,100+ news items referencing the report, RMetS and/or the journal. It was ranked as the journal's highest article and in the top 5% of all research outputs scored by Altmetric. We now have over 27,000 full-text downloads to date, with almost 5,000 being in 2022 so the report has demonstrated value longer term.

Coverage was received in **25** media outlets for our new book <u>'Weather – A Force of Nature: Spectacular images from Weather Photographer of the Year'</u>, published in partnership with the Natural History Museum. We also released a series of climate essay videos to support the book launch.





Meteorological Masterclasses

We hosted two successful series of Meteorological Masterclasses with the University of Reading in 2021. The themes were 'Anticipating floods, droughts and heatwaves' and 'The Oceans and Atmosphere: Maritime Meteorology and Climate'. The Masterclasses continue to receive great feedback:

"These events are a splendid way of developing and increasing one's knowledge on a subject that affects all of us."

"I've never left a Masterclass without learning something new."

"The Masterclass Series is well organised with a good balance of theory and practice, and with good visual presentations that are clear and concise."

"The session I attended was useful in my continuing professional development and was directly related to the knowledge we need at work."



Getting Ahead with Accreditation

A fantastic result in 2021 for Fleetweather as **12** employees were awarded an RMet accreditation. FleetWeather's shipping clients and the general public rely on them to provide vital forecasts to operate ships more effectively, efficiently and safely. In 2020 we added the designation "RMet - Marine Routing" to our professional accreditation, providing a professional qualification for Operational Marine Forecasters. All Fleetweather forecasters must now be RMetS accredited. It's an easy way for them to demonstrate to clients and customers that they have a professional workforce and differentiate themselves in a busy marketplace. Since they introduced RMetS accreditation, it has also attracted more applicants when recruiting. Their staff feel a real sense of pride in their achievement.

Climate Communiqué

We released a <u>Joint International Climate Communiqué</u> with **42** other national meteorological societies and organisations for World Meteorological Day. The communiqué reiterated the critical importance of addressing climate change and was one of the top three <u>news stories</u> published in 2021 on the Society's website.





New MetLink Website

On 25 February, we relaunched MetLink, our schools' website, designed to encourage users to stay on the site longer thanks to the addition of related resources, easier navigation through the sidebar, and the new teaching resources search functionality. This resulted in a twentyfold increase (397 users) in email signups to the newsletter. New resources include chemistry, KS3/ Core maths, resources for geography teachers based on the 2021 IPCC report, and new infographics, films and animations.

Student & Early Career Scientists Conference

We hosted our annual Student & Early Career Scientists Conference as a virtual event in June. Students attended from as far as Argentina, Ghana, India, Turkey and Senegal. We partnered with Carbon Brief to offer some hardship funding for potential attendees.





RMetS at COP26

As an 'observer organisation,' RMetS was present in both the Blue Zone (where the negotiations took place) and Green Zone (public-facing area). We presented at two <u>events</u> and shared an exhibition stand with the Met Office and UKRI, featuring a sustainable glass installation and video content from all three partners. We also showcased our 3D print of a section of the <u>Central England Temperature Record</u>, featured content on a <u>virtual platform</u>, participated in formal meetings and provided valuable input into the negotiation process through the constituencies.

Daily Bulletins

We shared a series of video bulletins and newsletters throughout the two weeks of COP26 (31 October – 12 November 2021), resulting in **93** new subscribers to YouTube.

In the classroom

Shown in schools during registration and available on our <u>YouTube channel</u>, the bulletins discussed the key daily themes of the Conference and provided some background information on the processes. The videos helped students better understand the messages in the news and on social media that day.

5,000+

unique views during COP26

~ 50,000

young people reached

Newsletter

Delivered by email each evening during COP26, we <u>took viewers behind the scenes</u>, met the people who matter, including the people of Glasgow, and discussed the key developments.

In order to increase email sign-ups and have more meaningful engagement with the audience, the videos were only available to those that signed up to read our daily COP26, newsletter and received positive feedback from Media Trust, Glasgow City Council, Royal Geographical Society, Science Council and AccuWeather.

283

contacts signed up to receive the daily bulletins in their inbox

189

1,700+

wiews on YouTube



Climate Briefing Papers

We published **five** new <u>climate briefing</u> papers in *Weather* with accompanying podcast episodes, including tipping points, how climate change will affect UK weather extremes and what an ice-free Arctic could mean for European weather.

The 6th Major IPCC Science Report and its Implications

In August, the Intergovernmental Panel on Climate Change (IPCC) published the <u>6th Assessment of the Science Report</u>. In September, **421** attendees joined our virtual one-day event on the report, supported by the Grantham Institute, BEIS, the Met Office and NCAS, to review its main findings and consider what it means for the ongoing development of our response to climate change. <u>The recordings are here</u>.

Content Creation and Sharing

We collaborated with various partners with content in the lead up to COP26. A couple of highlights are the Science Council's <u>Connected for COP26</u> campaign, including blogs and a Jargon Buster, and a piece for <u>BBC Bitesize</u>.

We produced a COP26 landing page on our publisher Wiley's website promoting relevant journal content. This received **1.5million** impressions, **152K** click-throughs and an average time on the page of **6.25mins**.

We also created a COP26 tab in MetMatters, <u>developed a glossary page</u>, and a webpage of <u>resources for media</u> in the lead up to COP26.

Climate Communications Training

We supported **54** broadcast meteorologists, journalists and Heads of News at ITV with climate change training in the run-up to and around COP26.

Last year, we extended this training in a new partnership with the <u>Public Relations and Communications</u> <u>Association</u> (PRCA).

RMetS Communications Team secured a place through a competitive process for Media Trust's first Weston Communicating Climate course, sharing learnings with colleagues over six months, and building new relationships with the other organisations taking part.

Media Interviews

We supported numerous media requests around climate change throughout the year and **10** broadcast media requests in the lead up to and during COP26, including ITV Tonight, BBC Earth and BBC World News TV.



In April 2021, theWeather Club migrated from a standalone website to its own section under rmets.org and was rebranded as <u>MetMatters</u>. This was done to maximise the impact with existing resources, strengthen the Society as an accessible and authoritative source of weather and climate information, and develop a logical user journey from weather enthusiast to member.

The impact of MetMatters is as follows:

146% increase in RMetS website visitors

from 224,138 in May – December 2020 to **551,461** during the same period in 2021, **36**% of which visited MetMatters content.

314% increase in the number of page views

theWeather Club website received a total of 47,281 users in May – December 2020 whereas, a year later, we saw a total of **195,649** users visit our MetMatters pages.

Improved user retention

The average time on site has gone up from 2 mins 19 seconds on the Weather Club to 3 mins 42 seconds on MetMatters.

New content and format strategy

We have produced and shared content in new formats, including infographics and video explainers.

New relevant and timely content

54 pieces of content since the launch: we have focused on adding new relevant and timely content weekly, which benefits the search engine algorithm.

Increase in organic traffic

375.5% increase in organic traffic: over-achieving one of our 2021 digital goals; to increase organic traffic to 45% of all rmets.org website traffic.



Careers in Meteorology Booklet

We ran an inbound marketing campaign with the <u>2021 Careers in Meteorology booklet</u> being offered as downloadable content in exchange for non-members' email addresses; this resulted in **140** membership leads.

Encouraged by so many young people leading the way in taking action to keep the climate crisis on the global political and news agenda, we produced a new series of 11 short videos: <u>"So you want to do something about climate change..."</u>. They explore some of the many careers in climate change that students can do with qualifications in STEM subjects, achieving **3,358** views on YouTube.

ECR Webinar

In November, we organised a publishing webinar for early career researchers (ECR) with **255** registrants and 50% of those surveyed said they were 'very likely' or 'somewhat likely' to recommend or consider an RMetS journal for publication in the future. Additionally, **three** attendees requested to become peer reviewers.

Careers in Climate Change Virtual Fair

During COP26, we took part in <u>STEM Learning's Virtual Careers in Climate Change Fair</u> aimed at 13-18 year-olds.

Education

Our weather and climate textbook for 11-14 geography teaching Weather and Climate: a Teachers' Guide, was distributed to over **3,000** schools across the UK and won a 'Highly Commended' award from the Scottish Association for Geography teachers and Silver in the Geographical Association's Publisher Award. In addition, the Welsh exam board, WJEC, translated the Teacher's Guide into Welsh and made it available online to teachers in Wales.

Come Rain or Shine

Our online weather and climate course, Come Rain or Shine, is now permanently available and was taken by **3,000+** people in 2021.

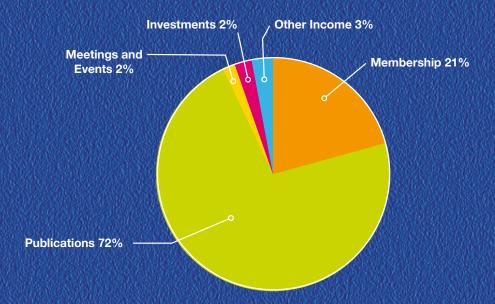
Teacher Training

Teacher training was delivered to **10** Universities and **one** large Academy Trust, using the opportunities for online teaching to reach a wider audience than has been previously possible.

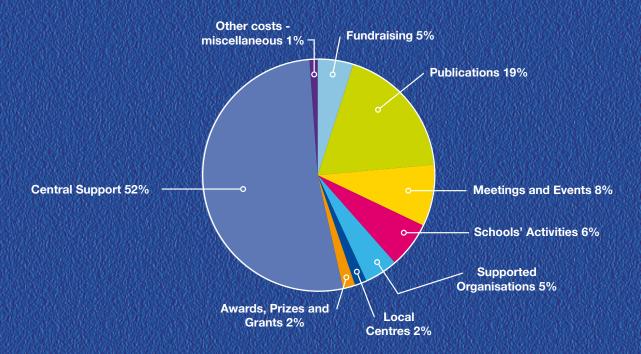
MetMark

Our quality mark for weather and climate teaching in schools was awarded to 8 schools.

OUR INCOME



OUR SPEND ON ACTIVITIES



The net surplus for the year was £222,000 transferred to our reserves. This gives the Society continued financial stability for the future. It also allows us to support and invest in projects to further the science of meteorology, support the profession and deliver on some key charitable activities, such as through our important education work. This is a summary of information extracted from the full audited and unqualified annual accounts of the Royal Meteorological Society for the year ending 31 December 2021.

This summary may not contain sufficient information for a full understanding of the financial affairs of the Society. Please visit rmets.org/about-the-society for the full Annual Report and Accounts 2021.

GET INVOLVED

Visit rmets.org, email info@rmets.org or call +44 (0)118 2080 142 for more information.



Become a Member

Our worldwide membership is open to all, from professionals and academics, students and teachers, enthusiasts and observers, there is something to suit everyone. Anyone interested or involved in meteorology or associated sciences can join. Plus, if you Gift Aid your membership for every £1 you give us, we can claim an extra 25p from the Government to support our vital work.



Develop your career

Our accreditation schemes enable you to demonstrate your accomplishments and commitment to your own professional development. Through ACCSYS, members can create, manage and submit personal Continuing Professional Development (CPD) records.



Join an event

We host events throughout the year in person and online, aimed at all levels of interest, from enthusiasts to professionals working in and studying weather and climate and associated disciplines.



Corporate memberships and partnerships

When your organisation gets involved with the Society, you become part of a group committed to supporting meteorology as a science, profession and interest, and helping to inspire the next generation of meteorologists. Your organisation can also benefit from a range of opportunities to help raise its profile, engage a relevant audience and support the professional development of your staff.



Volunteer

We have over 300 volunteers who provide invaluable support for the important work that we do. Many volunteers sit on committees, help run national and local meetings, support our special interest groups, sit on editorial boards, and participate in education or outreach activities. No specific experience is needed - if you have a passion for meteorology or climate science and are interested in helping broaden peoples' understanding and enthusiasm for the subject, please contact us.

2021 AWARDS AND PRIZE WINNERS

The Society's annual Awards and Prizes recognise people and teams who have made exceptional contributions relating to weather, climate and associated disciplines.

Full details of the worthy winners are available on our website (<u>rmets.org/awards2021</u>), outlining their achievements alongside a winner's acceptance message. Their awards were presented at the AGM in June 2022.

Mason Gold Medal

Not Awarded

The Buchan Prize

Professor Michael T Montgomery, Naval Postgraduate School

The L F Richardson Prize

Dr Beth Woodhams, Institute of Meteorology and Climate Research – Troposphere Research, Karslruhe Institute of Technology

The FitzRoy Prize

Dr Hazel Thornton, Met Office

The Adrian Gill Prize

Not Awarded

The Climate Science Communications Award

Professor Dan Lunt, University of Bristol

The Society's Outstanding Service Award

Michael Wood, Retired

The Gordon Manley Weather Prize

Rebecca Venton, Consultant

The Malcolm Walker Award

Chloe Brimicombe, University of Reading and European Centre for Medium-Range Weather Forecasts (ECMWF)

Honorary Fellow

Professor Andrew Lorenc, Met Office

Journal Prizes

International Journal of Climatology Editors' Award

Dr Radan Huth, Institute of Atmospheric Physics, Czech Academy of Sciences and Dept. of Physical Geography and Geoecology, Faculty of Science, Charles University

Quarterly Journal of the Royal Meteorological Society Editors' Award

Professor Nedjeljka Žagar, Universität Hamburg, Meteorological Institute

Quarterly Journal of the Royal Meteorological Society Reviewer's Certificate

Dr Sergey Frolov, Physical Sciences Laboratory, National Oceanic and Atmospheric Administration Dr Lina Boljka, Geophysical Institute, University of Bergen and Bjerknes Centre for Climate Research

Meteorological Applications Editors' Award

Dr Rebecca Emerton, European Centre for Medium-Range Weather Forecasts (ECMWF)

Geoscience Data Journal Editors' Award

Dr Claudia Di Napoli, University of Reading
Christopher Barnard, European Centre for Medium-Range
Weather Forecasts (ECMWF)
Professor Christel Prudhomme, European Centre for

Professor Christel Prudhomme, European Centre for Medium-Range Weather Forecasts (ECMWF), UK Centre for Ecology and Hydrology UKCEH, Loughborough University Professor Hannah L Cloke, University of Reading Dr Florian Pappenberger, European Centre for Medium-Range Weather Forecasts (ECMWF)

Atmospheric Science Letters Editors' Award

Dr Ana Paula M. A. Cunha, National Centre for Monitoring and Early Warning of Natural Disasters – CEMADEN

Our Patron

HRH The Prince of Wales, HonFRMetS

Chief Executive

Prof Liz Bentley, FRMetS

President

David Griggs, PhD, FRMetS, Retired

Our Council

Vice-President

Lesley Gray, PhD, FRMetS, University of Oxford

Vice-President

Catherine Senior. Met Office

Vice-President

Robert A Varley, FRMetS, CMet, Consultant

Vice-President for Scotland

Gary Johnston, Millbank PWS

Treasurer

Jennifer Campbell, Consultant

General Secretary

Shanti Majithia FRMetS, FRSS, Energy & Climate Advisor

Committee Chairs

Meetings and Conferences Committee

Amanda Maycock, PhD, University of Leeds

Scientific Publishing Committee

Anna Ghelli, PhD, FRMetS, ECMWF

Education Committee

Karl Shepherdson, FRMetS, Met Office

Science Engagement Committee

Peter Stott, PhD, FRMetS, Met Office

Accreditation Board

Will Lang, PhD, FRMetS, CMet, Met Office

Members of Council

Aisling Creevey, FRMetS, RMet, ITV Anglia Indrani Roy, FRMetS, University College London

With special thanks to

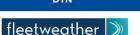
We exist to support our membership and none of the work we do would be possible without the reciprocal support of our members and partners. The following deserve a special mention for their generosity during the year:

Corporate Members









Equinox Instruments Ltd





Fondazione Osservatorio Meteorologico do Milano Duomo







Lake Street Consulting Ltd



MetDesk Ltd



MeteoFrance International



Rotronic Instruments Ltd



StormGeo Ltd



Vaisala

WeatherQuest

Partners





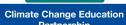
AccuWeather



BBC Bitesize

Climate Change Education Partnership Alliance

Climate Action for Associations













Government of Jersey



Grantham Institute





Met Office





Natural History Museum





NCAS



University of Reading



Wiley



Royal Meteorological Society 104 Oxford Road | Reading | RG1 7LL Tel: +44 (0)118 2080 142 RMetS is a registered charity No. 208222









