

The 168th Annual Report of the Royal Meteorological Society for the period 1st January – 31st December 2018

Annexes

Annex A -	The UK Weather of 2018	8
Annex B -	Membership	9
Annex C -	Awards and Prizes	11
Annex D -	Committee Updates	12
	Climate Science Communications Group	12
	House Committee	12
	Education and Outreach	12
	Meetings, Lectures and Conferences	14
	Professional Accreditation	16
	Scientific Publishing	17
	Strategic Programme Board	19
Annex E -	Reports from Other Representative Bodies	21
Annex F -	Reports from Local Centres	23
Annex G -	Reports from Special Interest Groups	27
Annex H -	Membership of Council (Trustees of the Society) and Committees of Council	29
Annex I -	Staffing at the Society	33
Annex J -	Background to the Society	34
Annex K -	Policy Statement on the Role of the Reserves	35

Page 7 of 36 Annual Report 2018

Annex A: THE UK WEATHER OF 2018

Review of UK Weather for 2018

2018 was warmer, drier and sunnier than average for the UK with May, June, July and December being much warmer than average. June was a very dry month, and May, June and July being particularly sunny. Notable events of 2018 were the *Beast from the East* and the summer heatwave.

Beginning on 24th February, the UK was affected by cold spell, dubbed the *Beast from the East* by the media, which brought widespread unusually low temperatures and heavy snowfall to large areas. This continued into March with temperatures remaining below freezing in many parts of the country for days on end, and night-time temperatures as low as -8°C at times. The cold spell combined with *Storm Emma* which made landfall in southwest England and southern Ireland on 2nd March bringing heavy snow and strong winds to southern England and Wales. There was up to 50 cm of snow in some elevated areas and freezing rain locally in the Southwest on 2nd March. This was the most significant spell of snow and low temperatures for the UK since 2010.

This cold weather situation repeated itself in the middle of March but was less severe and labelled the *Mini Beast from the East* by the media. Snow on the 17th and 18th March was accompanied by strong winds affecting large parts of the UK. Below average temperatures for much of March and the first half of April meant a delayed start to the growing season. The warmth of April 18th - 21st brought a dramatic change from wintry conditions to the heat of summer in the space of a couple of weeks. The UK experienced the hottest April day since 1949 when temperatures reached 29.1°C at St James's Park in London on 19th April. This was followed by the hottest London Marathon on record on 28th April, the early-May Bank Holiday was the warmest since its introduction in 1978, and May itself which was one of the warmest and sunniest on record.

High pressure dominated the summer leading to the warmest since 2006, the driest since 2003 and the sunniest since 1995. Some places experienced more than 50 consecutive days without rainfall and temperatures exceeded 30°C on 15 days during July and August. This led to a record-breaking series of wildfires burning across parts of Greater Manchester, Lancashire, Northern Ireland, and Wales.

Autumn weather was quite mixed with Storms *Ali* and *Bronagh* in September and *Callum* in October but interspersed with drier conditions. Storm *Deidre* brought freezing rain to parts of northern England in December.

UK Temperatures

The mean value was 9.5°C, which is 0.6°C above the 1981-2010 average.

UK Precipitation

The total was 1,063 mm, which is 92% of the 1981-2010 average.

UK Sunshine

The total was 1,581 hours, which is 115% 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 (per cent)	Sunshine (per cent)
UK	13.3	5.7	92	115
England	14.5	6.5	94	115
Wales	13.4	6.1	99	111
Scotland	11.3	4.4	89	118
Northern Ireland	12.8	5.6	95	110

Page 8 of 36 Annual Report 2018

Annex B: MEMBERSHIP

The Membership Development Group was renamed the Membership Development Board (MDB) after a review of all the Society's committees.

The Board is represented by members from academic, professional, student and amateur backgrounds who oversee a programme of activities / initiatives to drive-up membership by reducing the number of members leaving the Society and encouraging new members to join. In 2018, there was a 2.8% fall in total membership numbers. The MDB has agreed a series of initiatives for 2019 to stop the drop in overall membership and improve the retention rate.

The MDB is chaired by the General Secretary, and Catherine Heath-Muller, the Membership Development Project Manager. Dr Muller went on maternity leave in May 2018 and her Membership Development responsibilities were covered by Fiona Hewer.

Key Activities in 2018:

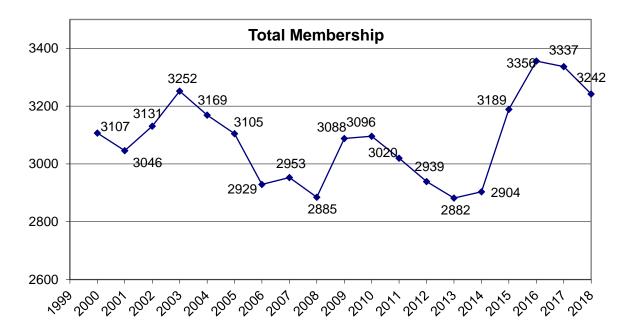
- Associate Fellows become Members: As part of the Fellowship review in 2017, Council agreed to change the
 name of 'Associate Fellows' to 'Members' requiring a change to the By-Laws approved at the AGM in 2018. The
 main benefit of the change is that it uses a membership category that is more widely understood. It also has the
 advantages that it brings the Society into line with similar societies and institutions, is gender neutral, provides a
 clearer distinction between Member and Fellow, and removes a potential barrier to weather enthusiasts joining
 the Society.
- New Fellowship Scheme: Following the Fellowship review in 2017, a new Fellowship scheme is being developed and the preparation work carried out in 2018 will allow the roll out of the new scheme in 2019. The new scheme is more inclusive, recognising vocational qualifications and long involvement in a variety of meteorological activities, as well as formal academic qualifications. It seeks to reward anyone who makes substantial contributions to promoting meteorology as a science, profession or interest. Early enquiries for applications have included a greater diversity of meteorologists including pilots, sea-cadet trainers and teachers.
- Communication: This remains an important activity for the Society, especially in a world where technology is advancing so quickly, and social media dominates communication routes. The Society's Digital Project delivered a new website that is compatible with more devices and is both more visually appealing and enables visitors to find, connect and navigate content more easily. The monthly membership email newsletter is received by 77% of members and in 2018 the proportion opening the email has risen from 46% to 48%. 20% of members who open the message click through to the links and content promoted. The Society is increasing the number of followers it has on Twitter, Facebook and Instagram, and Facebook Live continues to be used to stream many of our National Meetings and some of our Local Centre meetings.
- Accreditation and CPD: The Society defines the scope of its accreditation activity as recognising excellence in people, in organisations, and their Continuing Professional Development (CPD). The number of accredited members continues to increase, with 123 Registered Meteorologists (RMet) and 71 Chartered Meteorologists (CMet).
- Weather Photographer of the Year Competition: The Society partnered with the AccuWeather to run a Weather Photographer of the Year competition. The competition is going from strength to strength with participants doubling from around 2,000 in 2017 to over 4,000 in 2018. The winners were announced at our WeatherLive event in November 2018. The competition had media coverage from the BBC, The Sun, MSN, and Yahoo. Entries were submitted from across the world.
- Partnerships: The Society continues to foster important strategic partnerships with organisations across the meteorological community and beyond. New reciprocal membership agreements were reached with the American Meteorological Society and the Australian Meteorological and Oceanographic Society. The agreement with the Institute of Physics was also revised and renewed.
- Student Ambassadors: In 2018 the Society had 464 student members. The Student Ambassador programme offers free membership to ambassadors as an incentive and in return the individuals agree to share social media posts, distribute posters and leaflets, include content distributed to local mailing lists and encourage fellow students to join the Society. There are currently 24 student ambassadors signed up from 13 UK institutions and 2 international bodies.

Page 9 of 36 Annual Report 2018

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	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Honorary Fellow	20	20	20	20	26	29	30	29	27	30	30
Life Fellow	43	41	36	37	34	33	31	99	94	89	76
Fellow	1,747	1,704	1,672	1,662	1,633	1,586	1,586	1,513	1,518	1,510	1471
Member (Associate Fellow before 2018)	788	997	1,086	1,009	914	952	974	1,104	1,217	1,223	1186
Student Member	214	248	215	267	308	260	261	416	473	471	464
Corporate Member (including School Member before 2011)	73	78	67	25	24	22	22	28	27	14	15
TOTAL	2,885	3,088	3,096	3,020	2,939	2,882	2,904	3,189	3,356	3,337	3,242

In 2010 the Society abolished its 'Schools Membership' category, in order to make the education benefits freely available to all schools, not just members. These were counted under the 'Corporate Member' category, hence the decrease in this area and some impact on overall numbers from 2011. In 2016, the Society launched a new three-tier Corporate Membership structure aiming to forge stronger strategic partnerships with other organisations. The new structure led to a decrease in the number of Corporate Members in 2017, but an increase in income. The following graph shows how total membership of the Society has varied in recent years.



Year

Page 10 of 36 Annual Report 2018

Annex C: AWARDS AND PRIZES

The Society is delighted to have made the following Awards for the year 2018:

Award	Recipient
The Symons Gold Medal	Dr Clive D Rodgers
The Hugh Robert Mill Award	Prof Alan Blyth
The L F Richardson Prize	Dr Kirsty Hanley
The Michael Hunt Award	Gavin Pretor-Pinney
The Adrian Gill Prize	Dr Michael J Bell
The Innovation Award	Project - 'Surface Water Flood Forecasting in Urban Communities'
The Vaisala Award	Professor Tom Rippeth
The Malcolm Walker Award	Dr Matthew Menary
The Society's Outstanding Service Award	Dr Ian D Phillips
The Climate Science Communications Award	Professor Peter Stott
The Gordon Manley Weather Prize	John Kennedy et al
International Journal of Climatology Editor's Award (sponsored by Wiley-Blackwell)	Dr Sergio M. Vicente-Serrano
Atmospheric Science Letters Editor's Award	Dr Sven Erik Gryning
Quarterly Journal (QJ) Editor's Award	Professor Maarten H P Ambaum
QJ Reviewer's Certificate	Dr Alan Geer, Dr Nils Gustafssen
Meteorological Applications Editor's Award	Dr Anna Ghelli



IMAGE: Award winners from 2017 who were presented with their awards and prizes at the Society's May 2018 meeting at the Institute of Mechanical Engineering.

Page 11 of 36 Annual Report 2018

Annex D: COMMITTEE UPDATES

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 is co-chaired by Emily Shuckburgh and Peter Stott. The Society is at the heart of the debate on climate change. It plays a particularly important role in communicating some of the more complicated scientific and technical issues to the public at large and enabling them to understand and engage with what is one of the most important global issues that we face. Continued strong interest in climate change prompted the formation of the Society's Climate Science Special Interest Group (CSSIG) in 2016, which builds on the activities of the CSCG and is dedicated to furthering the understanding of climate change and effective responses amongst Society members, and the public.

This year the CSCG has continued to expand the range of topics covered by the Climate Science Briefing Papers, including podcasts on the *El Niño and the Southern Oscillation* and *Modelling the Earth's Climate* papers launched in 2018. The published briefing papers are available here. A number of subsequent papers have been in preparation, including topics on Arctic climate change, carbon budgets and solar variability. The Group is also keen to ensure that the climate science communication activities of the Society are well aligned with related activities from other organisations.

Two members of the committee led NERC funded projects in the "Engaging Environments" initiative, Climate Stories and the Climate Communication project. These projects were very successful and were highlighted in the <u>UK Government's Second National Adaptation Programme (2018-23)</u> as exemplars of ways to improve public engagement on climate change. The projects have also been featured in the Physics World publication and podcast. Climate Stories produced a book of poems, illustrations and short stories and song lyrics and material has been presented in a wide variety of venues including at science festivals and meetings on climate services. More information including films and podcasts is available on the website <u>www.climatestories.org.uk</u>.

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 2018 on 18th January (jointly with the Strategic Programme Board) and on 29th October.

Highlights from 2018:

- The House Committee reviewed the Standing Orders of the Society with a particular focus on Appendix 2, detailing the changes to the committee structure and updated terms of references. The House Committee oversees the Executive Team including proposed changes to roles and job descriptions; there were a number of staff changes/appointments due to maternity leave and a vacancy in the Head of IT role. In addition, a new role to oversee the scientific publishing activities of the Society was introduced with the Head of Scientific Publishing and Strategic Relations being taken up by Alison Brown in June. House also approved the revised job descriptions for the Head of Partnerships and the Digital Project Manager role, which are both planned to be filled in early 2019.
- 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; the Society's Risk Register is one mechanism that ensures
 ongoing monitoring. The House Committee reviewed updates to policies relating to GDPR, cyber security and to
 update and clarify a code of conduct for its Trustees.
- The recommendations of the Salary and Remuneration Committee were reviewed, including a 2% pay rise for staff to be implemented in 2019.
- Health and Safety issues continue to be carried out by professional experts with any major recommendations reported to House.

EDUCATION AND OUTREACH COMMITTEE

One of the core aims of the Society is to support the formal and informal teaching of weather and climate across the UK. The Society has two dedicated members of staff to deliver this important work, Sylvia Knight and Catherine Heath-Muller who has been covered whilst on maternity leave this year by Tara Thompson and Caroline Coch. They have had another very busy year, supported by a large number of volunteers from the Society's membership. The Education and Outreach Committee has been co-chaired by Felicity Liggins and Lindsay Bennett whilst Jenny Rourke has also been on maternity leave.

Page 12 of 36 Annual Report 2018

The Committee has representatives from the Institute of Physics, the Royal Geographical Society and the Geographical Association to ensure collaboration. The Education and Outreach Committee is aided by the Virtual Committee of teachers and educational professionals who support the work of the main Committee.

Highlights of our Formal Education Activities:

- We received the EMS Outreach and Communications Award for Come Rain or Shine, our online weather course aimed at secondary geography teachers and the general public
- We received a Geographical Association Silver Publishers' Award for the Climate Negotiations resource we developed for schools in 2017
- The Climate Negotiations resource was also Highly Commended by the Scottish Association for Geography Teachers
- Around 2,000 teachers receive regular updates from the Society
- 40 schools have benefitted from borrowing weather instruments kits from the Society. In addition, we have started lending instruments to individual A level students for project work.
- We are working with a Scottish geography teacher to improve our support for Scottish schools, building a
 dedicated section on MetLink, our schools' website, with a set of teaching resources tailored to the Scottish
 Curriculum.
- We ran a Careers Information Day at the Institute of Physics for young people interested in careers and courses
 in meteorology. With representation from many of the universities offering courses as well as a fantastic range of
 talks from early career and more established meteorologists, the day provided a valuable insight into a
 meteorological career. The talks were recorded and will form the basis of a lasting career-promoting resource on
 the Society's website.

Highlights of our Informal Education Activities:

- **theWeather Club (tWC):** tWC newsletters continue to be published and are received by approximately 2,200 members (the open rate for the newsletter is around 41%). The website (www.theweatherclub.org.uk) has continued to be developed and improved throughout 2018, with the introduction of new guest writers and loose themes for each newsletter. The website has an average of 4,000 page views per month from an average of 2,000 users, which has doubled from 2017.
- Social media and other online activities: The Society have continued to produce podcasts which can be found on our website podcast page. Our Twitter account now has 9,000 followers, 2,295 on Instagram (up from 300 followers this time last year) and 2,350 on Facebook. The Society has continued to use Facebook Live for streaming some of its events with great success. The Society continues to support the StormHour weather photo competition, which has been growing steadily on Twitter.
- Weather Photographer of the Year 2018: More than 4,000 photographs were submitted to the 2018 competition (an increase from 2,000 in 2017), which were shortlisted to the 30 best images from which the seven winners were chosen by a panel of judges. The exhibition tour started at WeatherLive in November 2018 and will continue into 2019. Our next exhibition will be at The Hive, University of Worcestershire, where it will be a dominant feature for their British Science week event. The Society had global media coverage with a great feature on BBC News and the BBC website. The overall winner, Stephen Cheatley, has had fantastic success since winning the competition, with personal interviews through a number of media channels.
- Media Coverage: The Society has continued to keep in regular contact with our media partners, with over 100 interviews throughout 2018. Our meeting around the 1.5 IPCC report generated fantastic interest and we continue to promote the work our fellows are doing with the IPCC. Weather Photographer of the Year gained great momentum in the media when the winners were announced. The competition and winners featured in news stories, media slideshows and weather photography articles across the globe.

New Resources:

- In collaboration with a production company, the Society has produced a video resource looking at the impact of rainforest deforestation on the water cycle, which will form the basis of a set of teaching resources.
- The Society has developed new Carbon, Water, Weather and Climate resources to support A-level geography.
- In conjunction with the University of Swansea, the Society has developed climate proxy (tree ring) resources for
 a variety of subjects and curriculum levels. This exciting collaboration has also involved working with Game and
 Interactive Multimedia Developers from the University Corporation for Atmospheric Research (UCAR) Center for
 Science Education to produce interactive resources, which are both online for use in schools and physical for
 use at events.

Around and About:

- Around 5,000 people have taken 'Come Rain or Shine', our three week, free, online weather course.
- The Society's Climate Negotiations resource is designed to allow schools to run mock climate change conferences in normal lessons without the direct involvement of any experts. The Society has supported runs of the resource with teachers or students in Coleraine in Northern Ireland, Clackmannanshire in Scotland and York and Sheffield in England.

Page 13 of 36 Annual Report 2018

- The Society has delivered one day weather and climate subject knowledge update training to teachers and trainee teachers in Belfast, Reading, Ormskirk, Manchester, Nottingham and Magherafelt.
- The Society has given talks to students in Stourbridge, Prestwich and Manchester.
- The Society has showcased its formal and informal education activities at the European Geophysical Union, European Meteorological Society, Geographical Association and Scottish Association for Geography Teachers meetings.
- The Society teamed up with the Royal Horticultural Society in 2018 to run events titled 'Gardening in a Changing Climate' in line with a report the Royal Horticultural Society published in 2017. The Society is looking to arrange another 2 regional events in 2019 and have contributed to an article in 'The Garden' magazine, which will be published in February 2019.

MEETINGS AND CONFERENCES

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

National Meetings

Feb

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 in 2018:

Minimising Climate Risks (joint with Grantham Institute, Environmental Physics Group)

• The Indian Monsoon: Atmospheric Dynamics, Aerosol and the Ocean

<u>Understanding the Weather of 2017</u> (Saturday, joint with Met Office)

March • Space, Satellites and Solutions (joint with Grantham Institute)

• Gardening in a Changing Climate (Manchester, joint with Royal Horticultural Society and Manchester Met University)

April • Risky Business: Assessing the Risks from Weather and Climate (joint with Cabot Institute)

• Geophysical Fluid Dynamics with a Twist: in Honour of Professor Raymond Hide (joint with the Royal Astronomical Society and Imperial College London)

• The Micro-Climate of Heathrow Airport (Saturday, supported by Environmental Physics Group)

Engineering Meteorology & Annual General Meeting

June • Gardening in a Changing Climate (Bristol, joint with Royal Horticultural Society)

 Weather and Sailing (Saturday, joint with the Royal Institute of Navigation, Royal Museums Greenwich and Royal Yachting Association)

• How to Avoid the Worst Effects of Climate Change (Green Great Britain week, joint with Grantham Institute)

• Gardening in a Changing Climate (Birmingham, joint with Royal Horticultural Society)

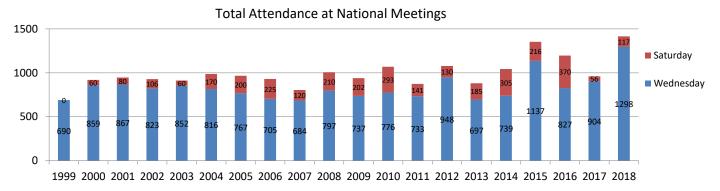
Nov • Meeting a 1.5C Global Temperature Goal (joint with Grantham Institute)

From HMS Challenger to Argo and Beyond (supported by Institute of Physics)

Arctic Prediction in a Changing Climate (supported by Centre for Polar Observation and Modelling)

• Progress in Weather Forecasting (joint with ECMWF)

National Meeting attendance as a function of year is plotted in the following graph.



It was a record breaking year for the Society with the total number of attendees at 1,298 partially due to the number of events hosted and also because some attendees participate in meetings remotely using Facebook Live.

Page 14 of 36 Annual Report 2018

Following the launch of the Royal Horticultural Society (RHS) report on Gardening in a Changing Climate in 2017, the Society held three successful meetings this year joint with the RHS in Bristol, Manchester, and Birmingham attracting a total of 176 participants. The Society continues to actively seek partners to co-sponsor meetings. Meetings were held in association with the Grantham Institute, Centre for Polar Observation and Modelling, Royal Museums Greenwich, Royal Institute of Navigation, Royal Yachting Association, RHS, Royal Astronomical Society, University of Bristol Cabot Institute, ECMWF, Environmental Physics Group / IoP, Met Office and University of Reading. The National Meetings were held in Reading, Leeds, London, Bristol and Exeter. 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 venues.

Conferences and Other Events

The Atmospheric Science Conference, hosted annually by the Society and the National Centre for Atmospheric Science, was themed 'Weather, Climate and Air Quality'. The conference was held from $3^{rd} - 4^{th}$ July at the University of York and was attended by 166 delegates. This was followed by the Society's annual Student and Early Career Scientists Conference on the 'Evolution of Science', also in York from $5^{th} - 6^{th}$ July, which had 53 attendees.



IMAGE: Delegates from the Student and Early Career Scientists Conference at University of York in July 2019.

The WeatherLive one-day conference on 'Extreme Weather' was held on Saturday 10th November at the British Antarctic Survey, Cambridge. This included presentations covering storm chasing, working in cold climates and measuring extreme weather using aircraft; the conference was enjoyed by 58 delegates.

In addition to the main conferences, the Society hosted a one-day careers focused conference on 23rd June titled: 'Want to be a Meteorologist?', at the Institute of Physics, London. This was targeted to 14-20 year olds interested in pursuing a career in meteorology and climate science and included presentations from the Met Office, BP, British Antarctic Survey and several universities. The conference was attended by 30 delegates.

Local Centres and Special Interest Groups

Society Local Centres continue to organise meeting programmes across the UK, providing opportunities for sharing common interests and enthusiasm on a wide range of topics. A total of 51 Local Centre meetings were held in 2018 with the Yorkshire, North East, Scottish and South East centres being particularly active. Several Local Centres have been issued with live streaming kits and are now streaming meetings via Facebook Live. The Local Centres are commended for their vitality in providing members in regions across the UK with regular access to Society events.

The activity levels of the Special Interest Groups (SIG) remained variable in 2018. The Atmospheric Electricity, Atmospheric Chemistry, Climate Science Communication and History groups all held meetings. It was decided that inactive SIGs should be closed to ensure they reflect current topics of interest and on this basis the Dynamical Problems, Physical Processes, Satellite Meteorology and Weather Forecasting SIGs were closed in 2018.

Meetings and Conferences Committee Changes

Following the outcomes of the Society's Business Development Review, some analysis was undertaken by the Meetings Manager, the Chief Executive and the Meetings Committee Chair to evaluate the current approaches to planning and delivering meetings. One issue identified was the inability for the meetings programme to respond to current and emerging topics due to the fact that meetings are generally planned 12-18 months in advance.

Page 15 of 36 Annual Report 2018

It was also identified that sometimes a stronger focus is placed on delivering meetings to a set calendar rather than determining which meeting topics are a priority in terms of delivering the Society's strategic goals and charitable activities. It was decided that from late 2019 onwards, a new strategy for meetings would be adopted in which the number of Wednesday National meetings would be reduced to around 6 per year, with ~4 additional meetings per year being delivered in other formats that may include shorter evening or lunch-time events. These changes are not being implemented to reduce meeting expenditure, but rather to allow the Society's strategic priorities to be met through serving its members and the broader scientific community and public by delivering an interesting, flexible and dynamic meeting programme.

The Committee has a regular turnover of membership and the Chair is eager to hear from anyone who would like to actively contribute to the organisation of the Society's vibrant meetings programme.

PROFESSIONAL ACCREDITATION

The Society's activities around Professional Accreditation and Vocational Qualifications are overseen by the Accreditation Board, which has membership from across the breadth of the meteorological community, including the public and private sectors along with academia. Following the Business Development Review, this Board now sits alongside the Membership Development Board (MDB) within the Membership and Accreditation Business Area. The Board aims to work closely with the MDB, and the Terms of Reference for each group have been updated to reflect this closer cooperation. The Accreditation Board met twice in 2018, in March and October. It reports to Council and is supported by the Course Evaluation and Continuous Professional Development (CE/CPD) Panel and the Vocational Qualifications Committee (VQC).

Continuing Professional Development (CPD) and ACCSYS

The CPD Panel has had another busy year reviewing members' CPD reports for applications and renewals for RMet and CMet accreditation. The online ACCSYS CPD and application tool is now the primary mechanism by which Society members may record their CPD activities and prepare CPD reports to support accreditation. CPD records are also used by some members to contribute to their own job applications and performance assessments. The number of CPD records held within ACCSYS grew substantially in 2018, and stood at over 9,000 by October, an increase of over 2,000 compared to October 2017.

As a consequence of the security issues around the Society's website in August, ACCSYS was unavailable to members for several weeks. This unavoidably caused some inconvenience to members in the process of preparing RMet/CMet applications using ACCSYS, though the CPD data remained secure and complete. Further enhancements to ACCSYS have been planned and are due for delivery in 2019.

Chartered Meteorologists (CMet)	2011	2012	2013	2014	2015	2016	2017	2018
No. of applications received	11	3	6	1	5	5	6	4
No. of accreditations granted	9	0	7	1	3	3	4	5
No. of CMets resigned/withdrawn	2	4	5	0	3	1	5	1
No. of applications outstanding at year end	2	3	1	0	1	2	4	0
No. of CMets on Dormancy Register				5	4	3	2	2
No. of accredited CMets at year end	68	65	68	64	66	69	67	71
CMet CPD	2011	2012	2013	2014	2015	2016	2017	2018
No. of CMet CPDs reviewed	37	17	34	23	30	35	24	27
No. of CMet CPDs approved	37	16	34	23	30	35	23	27

Registered Meteorologists (RMet)	2011	2012	2013	2014	2015	2016	2017	2018
No. of applications received				49	35	11	46	5
No. of accreditations granted				44	28	20	46	5
No. of RMets resigned/withdrawn								5
No. of applications outstanding at year end				2	7	4	7	2
No. of RMetS on Dormancy Register						3	5	6
No. of accredited RMets at year end				44	72	92	124	123
RMet CPD	2011	2012	2013	2014	2015	2016	2017	2018
No. of RMet CPDs reviewed							50	71
No. of RMet CPDs approved							50	71

Page 16 of 36 Annual Report 2018

ACCSYS	2011	2012	2013	2014	2015	2016	2017	2018
CPD records				642	1,644	4,782	7,820	9,237
CPD reports							321	391

FRMetS	2011	2012	2013	2014	2015	2016	2017	2018
Applications for FRMetS public use received	42	39	29	52	15	27	24	19
Applications for FRMetS approved	42	39	29	52	15	27	24	19
No. of FRMetS at year end	524	562	583	616	619	646	670	689

Registered Meteorologist (RMet)

The Accreditation Board has a target to increase the number of RMets to 300 by the end of 2020. By the end of 2018 there were 123 RMets. 5 members were granted RMet status in 2018, well below the 46 granted in 2017. The Board agreed that to a large extent the drop in applications was a consequence of the natural cycles of recruitment and training within the community, particularly in the larger organisations such as the Met Office. The Board also concluded that though a subsequent increase in applications was likely in the near future, this was not a given and it was agreed to adopt an increasingly proactive stance towards encouraging RMet applications, particularly within the larger supplier organisations and in emerging business meteorology areas such as the Risk Modelling and Energy sectors. The Board also agreed to ensure that the specialisms required within such emerging areas were recognised within the accreditation process, and new specialisms have already been added to cover the Risk Modelling sector.

Chartered Meteorologist (CMet)

By October 2018, there were 71 CMets, with the status awarded to 5 members during 2018. The aspiration is to increase numbers to 100 by the end of 2020. As with RMet, targeted activities are being undertaken by Board members to encourage applications for accreditation. The Board is also keen to ensure that the CMet applications and renewal processes remain sufficiently straightforward to meet the needs and resource constraints of members and their employer organisations, whilst maintaining the standards appropriate for professional chartered status.

Vocational Qualifications Committee

The primary purpose of the Vocational Qualifications Committee (VQC) remains to support the Society's work to further the professional development of meteorologists, including hydrometeorologists, through developing and promoting the uptake of high quality, competency-based, vocational qualifications. Included in the VQC's remit are overseeing the development and management of the Society's vocational qualifications and reviewing the performance of the Assessment Centres. The Society supports five qualifications 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 located at the Met Office, Royal Navy Training Group and MeteoGroup. The number of qualifications awarded in 2018 is shown below.

	Royal	Navy	Met Office	MeteoGroup
	Registered	Qualified	Wiet Office	Weteogroup
Diploma in Meteorological Observing (Level 3)	5	8	0	0
Award in Meteorological Briefing (Level 5)	0	0	4	0
Diploma in Meteorological Forecasting (Level 5)	5	4	6	2
Diploma in Operational Hydrometeorology (Level 5)	0	0	0	0
Diploma in Operational Hydrometeorology and Flood Forecasting (Level 6)	0	0	0	0

Accreditation Review

At its October 2018 meeting, the Accreditation Board noted that its aspirations to achieve growth in numbers for accreditation and VQs was highly dependent on a number of factors within the wider meteorological community. To aid meeting its 2020 targets, the Board agreed to focus on understanding and respond to the changing environmental factors, both positive and negative, to meet these growth targets. A Professional Accreditation Framework is now underway, due to report in Autumn 2019.

SCIENTIFIC PUBLISHING

During 2018, a number of activities were carried out around the strategic development of the portfolio. The Society carried out a SWOT analysis for each of its seven journals to determine where to focus attention in the coming years and started to implement activities based on outcomes with Wiley's marketing and editorial teams and our journal editors. The Society also looked at ways to strengthen its portfolio as a whole and carried out a gap analysis and market research around a new open access journal in climate science with a potential launch in 2019.

Page 17 of 36 Annual Report 2018

Working closely with Wiley, the Society has focused heavily on ways to reduce all journal publication times. This has involved looking at the process pre and post-acceptance. Pre-acceptance, this has included tightening up various elements of the peer review process - shortening extensive response times and providing more specific deadlines for authors in line with competitor journal timelines. Post-acceptance, this has included the implementation of a standardisation stylesheet which has helped to speed up the editing stage within production, and the addition of 'Accepted Articles' whereby all articles for all journals are now available online 5 days after acceptance.

Enhancing author experience remains a key focus, and the Society has listened to author feedback with regards to user experience in the manuscript submission system, Scholar One. The Society has been working to simplify the requirements of the system and make things clearer and easier for authors when submitting their papers and associated files via ScholarOne. This is still a work in progress and it is acknowledged that there are still issues that need to be addressed. The Society has also started a project to simplify and standardise where possible the instructions for authors for its journals. An article transfer option is now available between journals in case a manuscript is a better fit for an alternative Society publication.

The Society continues to work hard 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 also continues to explore opportunities to expand its Associate Editors, editorial boards and reviewer pools and the successful Co-Editor in Chief formula will be rolled out to other journals as appropriate moving forward. Wiley have also been supportive with an extremely proactive Editorial Office team and a responsive Publisher, and there have been productive and informative collaborative gatherings including the latest Portfolio Meeting where Editors shared examples of things that worked well in their publication and we brainstormed ideas for activities to start, stop or continue across the journals.

Finally, the Society has had a number of terms of office coming to an end in 2018: Dr Rob Allan (Geoscience Data Journal), Prof lan James (Atmospheric Science Letters) and Prof Doug Parker (Quarterly Journal). The Society thanks all the outgoing Editors for their new initiatives, commitment and leadership to their journals over the years, without which these journals would not have seen such success.

Highlights from the journals in 2018:

Dr Linden Ashcroft took over as the Editor-in-Chief for *Geoscience Data Journal* in January 2018 and has made several changes in the last 12 months. These include additions to the Editorial Board to support wider geographical and field representation; adding a new Data Services article type; revising the questions for reviewers and strengthening connections with open data best practices. More than 20 articles were submitted to GDJ in 2018, a fourfold increase in submission received in 2017. The impact factor of the journal is 1.867, an increase on 2016.

As the Society's membership journal, *Weather* remains a key publication within the Society's portfolio. In March, a Special Issue was published describing the effects of solar eclipses on the weather, just part of a very wide-ranging series of papers from around the world, covering topics from oceanography and hydrology to weather events, climatology and phenology. A number of virtual Special Issues were also published. A series of short papers on the basics of climatic change "Climate Change Shorts", began in August and will continue in 2019. The number of submissions to the journal remains high, having reached 135 research papers, short contributions, meeting reports and letters. Fortunately, it has been possible to publish a higher number of articles this year than in any previous, however we still have a large backlog ready to be published in the journal. The *Weather* Journal readership survey also took place receiving 550 responses. The results have been analysed and outcomes will be built into activities in 2019. Jim Galvin steps down as Editor-in-Chief in March 2019 and we thank Jim for his commitment to the journal during his tenure.

International Journal of Climatology is the largest of the Society's journals. The number of submissions continued to be high in 2018, reaching almost 1,000. The rejection rate was close to 60%, with over 25% of submitted papers being rejected without review. The backlog, which had been an issue in previous years, has been reduced considerably to approx. six months thanks to publishing an extra issue with more than 1,000 pages available online only. The average time from submission of a new manuscript to initial decision is about 50 days. In 2018, the journal worked with the Met Office to publish its first special issue on the State of the UK Climate. This was the first time the report had been published in a peer review journal. It received much publicity and we are pleased it will be repeated in 2019.

The *Quarterly Journal* continues to maintain its position alongside the best meteorological journals in the world. In 2018, 374 manuscripts were submitted, and 204 were accepted for publication, giving a 43% rejection rate. The journal continues to provide an impressively quick turnaround with an average first decision within approximately two months of submission and rapid publication once the paper has been submitted. In 2018, the journal published a Special Section: Advances in Data Assimilation Methods, and a Special Issue: Advances in Remote Sensing of Rainfall and Snowfall. There were also a number of special issues started in 2018 for publication in 2019. Alan Blyth, Professor of Atmospheric Science at the University of Leeds, joined the journal as a Co Editor alongside Lesley Gray in April.

Meteorological Applications published 664 pages in four issues (Volume 25) in 2018. The impact factor of the journal increased (to 2.391) in comparison to our immediate competitors and submissions to the journal remain high (just under 200 in 2018). Production problems unfortunately delayed the publication of some papers, but these have largely been resolved. Peter Burt steps down as Editor-in-Chief in March 2019 and we thank Peter for his hard work over the last 10 years and for the support and direction he has provided to the journal.

Page 18 of 36 Annual Report 2018

In February 2018, Andrea Montani and Becky Hemingway took over as Co-Editors-in-Chief for *Atmospheric Science Letters*. In 2018, the journal published 63 research papers in 12 issues. Three new Associate Editors (AEs) joined the board in emerging scientific countries which we hope will increase reach, submissions and readership in these countries. The biggest issue is still time from submission to publication due to difficulty of finding reviewers, however we are working with the Wiley team to provide AEs with more tools and help with finding reviewers. The journal aims to increase its impact factor in the coming years through increased marketing campaigns emphasising the short paper, quick turnaround nature of ASL and social media highlighting published papers.

WIREs Climate Change is a review journal published by Wiley and affiliated with the Society and the Royal Geographical Society (with the Institute of British Geographers). Mike Hulme continues as Editor-in-Chief, supported by a team of 15 Associate Editors. The journal received an increased 2017 Impact Factor of 5.124 and was ranked 5th of the 86 journals in Meteorology and Atmospheric Sciences and 7th of the 108 journals in Environmental Studies. In 2018, the journal published 56 review articles, spanning climate change research and scholarship in the physical sciences, social sciences and humanities. WIREs Climate Change is known for its online Special Collections, many of which are resources for seminar classes and massive open online courses (MOOCs); they are often made available for free in advance of important academic meetings. WIREs curated two special collections in 2018 including "Conceptual Thinking in Climate and Social Change" which showcases some of the social science perspectives through which climate change can be interpreted as well as a second collection curated for and made freely available during the Nordic Adaptation Conference in 2018.

Submissions and Decisions (All Journals Combined)

Submissions and Decisions / Year	2011	2012	2013	2014	2015	2016	2017	2018
Number of Submissions	1093	1233	1456	1527	1656	1693	1795	1841
Number Reaching Final Decision	915	1159	1238	1371	1564	1649	1709	1716
Number Accepted	571	648	679	715	824	873	853	844
Average Journal Rejection Rate	37.6	44.3	35.2	35.2	47.3	38	47.5	48%

Impact Factors

Journal / Year	2010	2011	2012	2013	2014	2015	2016	2017
Quarterly Journal	2.79	2.91	3.33	5.13	3.25	3.67	3.44	2.978
Intl. Journal of Climatology	2.48	2.91	2.89	3.4	3.16	3.61	3.76	3.1
Meteorological Applications	1.4	1.41	1.32	1.53	1.34	1.27	1.411	2.391
Atmospheric Science Letters	1.43	1.93	1.75	1.88	1.52	1.57	1.504	1.198
Geoscience Data journal						1.56	2.8	1.867
Weather	0.58	1.11	1.54	1.04	0.64	1.26	0.96	0.812
WIRES		2.91	3.46	4.4	3.42	3.31	4.57	5.124

STRATEGIC PROGRAMME BOARD

The Strategic Programme Board (SPB) oversees the development activities of the Society. However, recommendations from the Business Development review led to a restructuring of the Society's programmes of work under four business areas, introduced in November 2018, which meant the SPB was no longer required. Instead the Strategic Planning Board, which would normally only meet every three years to develop the Society's 3-year Strategic Plan, will meet biannually to ensure the Strategic Plan remains fit for purpose, provide guidance on cross-cutting themes and potential strategic partnerships and to review and prioritise strategic project proposals.

The Strategic Programme Board did meet once in January 2018 (jointly with the House Committee). The Chair of the SPB was Steve Noyes, Vice-President of the Society.

The business of the SPB has again been 'business as usual' this year with scrutiny of strategic projects, and business development plans and projects.

Below is a table of the strategic projects that were prioritised in 2018 and progress against each project.

Page 19 of 36 Annual Report 2018

	<u> </u>
Climate Videos	A project to develop a set of animations and videos to support the Ladybird climate change book and the NCAS IPCC booklets for teachers, which will bring the material to life and make it available through new channels (such as YouTube). Three videos have been produced each in a slightly different format to help decide on the animation style that could be taken forward. The first two were produced ahead of the Hay Festival – watch via the links here . The other videos were produced as class topic introductions and were curriculum focused – view here .
Remote Participation at the Society's Local Centre & SIG Meetings	Local Centres and SIGs have talks on topics that are of interest to people that can't attend an event because of distance or timing. Remote participation delivers in a cost effective way that enables Local Centres and SIGs to deliver talks/lectures that a remote audience can view or interact with. Five of the Local Centres now have the equipment to live stream their meetings: North West, South West, Yorkshire, Welsh and South East.
Climate Proxy Education Resource	This project is developing cross curricula Climate Proxy Teaching resources using an external developer for an online, interactive teaching resource. The project partner for this is Swansea University's Geography Department who have been collecting the data and UCAR, USA who will develop the interactive resource. View details.
Digital Strategy 2 – Website Redesign	The website redesign moved into the design and build stage in 2018 and the new website was launched in Sept 2018 www.rmets.org
Digital Strategy 3 – Audience & Engagement	The Society continues to coordinate its content and messaging across its websites, social media and email channels. The Jobs Board is up and running and there is an ongoing effort to reach out to people, institutions and companies who may want to advertise on it. Weekly targets of site visits, number of live jobs etc are reviewed.
Digital Strategy 4 – Content & Social Media	The Society has produced a number of promotional, informational and interview videos and aims to grow its YouTube audience. These videos have supported Society meetings, competitions and other activities by creating short video 'adverts' to be shared across social platforms. The Society is working with Peter Gibbs to produce a number of short informational videos about 'measuring the weather' and have recently launched a 15 minute video in association with the RHS about how to protect plants from frost. The Society has used Facebook Live to broadcast from several National Meetings over the last 12 months and will continue to use this functionality at future events. Videos from these events continue to be viewed and several have received hundreds of views. The Society released 5 episodes of its podcast, which are available to download from iTunes and other platforms and is scheduling further episodes over the coming months.
A to Z Book	The aim of the project is to complete the A to Z series, collating the content into a book. The book is pitched as a light, informative and humorous look at the weather from A to Z, with stunning imagery to illustrate the wonderful and sometimes dramatic side to the weather. The content and design is complete and the copy editing phase is about to begin.

Page 20 of 36 Annual Report 2018

Annex E: 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 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.

Over the last year or so there have been a number of changes at the Science Council Executive including an Extraordinary General Meeting (EGM) that was called at the beginning of 2018 requested by the Members. The Chair of the Board, David Croisdale-Appleby, resigned in January and shortly after the EGM the Chief Executive, Belinda Phipps, stepped down. Helen Pain, a Trustee, provided leadership throughout the remainder of the year as Chair of the Board and to oversee the appointment of a new Chief Executive, Helen Gordon in early 2019. There is broad support from the Members that the Science Council is now moving forward in the right direction. The Society continues to be a Member of the Science Council.

General Aviation Safety Council (GASCo) & UK Flight Safety Committee (UKFSC)

The Flight Safety Committee (FSC) comprises commercial operators including airlines such as EasyJet, Ryanair, and smaller concerns down to British Antarctic Survey. 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. The Society attended 3 of the 6 FSC Safety Information Exchange meetings and 1 of the 3 GASCo meetings during 2018. As in recent years, meteorology did not feature explicitly in any of the meetings, but came up indirectly in all.

In the January FSC meeting the Air Accidents Investigation Branch representative reported that there had been a couple of incidents of cabin crew sustaining injuries in turbulence. An incident was also reported in which an aircraft left the runway while landing (not through meteorological factors) but then recovery was very slow due to poor visibility and the lack of radar cover below 1,000 feet.

In the July FSC meeting there was a report of a heavy landing due to strong crosswinds where the procedure followed by the pilot was reviewed. Also at that meeting the representative of the Royal Aeronautical Society said there was interest in ensuring that data from angle of attack sensors was available to pilots of large transport aircraft so that this could be used in the event of the airspeed sensor being subjected to icing and therefore being unreliable. The Society raised their concern about the angle of attack sensors being prone to icing and we were reassured that the angle of attack data would be used with suitable caution.

In the November FSC meeting there was a presentation about Voluntary Industry Resilience Group (VIRG). The aim of this group is to improve, in a systematised manner, the way in which the UK aviation network is planned and operated, to reduce delays. The group has a "weather playbook" – a set of scenarios for which the weather is defined which can then be used to simulate actions by aviation actors to assess the delays associated. Although it was reported that convection had had a significant impact, there was significant discussion of the effect of crosswinds. The Society did point out that, compared to other meteorological factors, wind is very predictable.

The Society also attended the December GASCo meeting in order to re-establish contact with the General Aviation community in anticipation that the Society will repeat the 2016 "Weather for PPL holders" seminar in the future. At the meeting there was no mention of any accidents caused by meteorological factors. One thing that was mentioned was that in 2018 records were set for the longest distances ever flown continuously in a glider, due to the exceptional meteorological conditions. For example, on 21 June a glider flew 1,010km in 10 hours 25 minutes following repeated legs over central southern England.

European Meteorological Society (EMS)

EMS Membership and RMetS Representation

The European Meteorological Society (EMS) is an Association of 37 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 has a permanent member on the EMS Council and the RMetS General Secretary is the Society's representative on the EMS Council.

Page 21 of 36 Annual Report 2018

The following meetings have taken place:

- 38th EMS Council in Norrköping, Sweden on 10/11 April 2018 chaired by Bob Riddaway, EMS President who also acted as the RMetS representative at the meeting.
- 39th EMS Council and 20th EMS General Assembly in Budapest on 2 September 2018 where Liz Bentley represented the RMetS.

Annual Meetings

The EMS Annual Meeting 2018 "Weather and Climate: Global change and local hazards" was held in Budapest from 3 to 7 September 2018. There were 732 participants from 50 countries. As well as the conference presentations, there were workshops and side meetings which have now become a key component of these events. Future EMS Annual Meetings will be as follows.

- 2019 EMS Annual Meeting will take place in Copenhagen, Denmark, from 9 to 13 September 2019.
- 2020 EMS Annual Meeting will take place in Bratislava, Slovakia, from 7 to 11 September 2020.
- 2021 EMS Annual Meeting will take place in Barcelona, Spain from 6 to 10 September 2021.

EMS Silver Medal Award

Tillmann Mohr, Germany, was selected to receive the EMS Silver Medal 2018. The award has been presented at the EMS Annual Meeting 2018 in Budapest where he gave the Silver Medal Lecture on Architecture for Climate Monitoring from Space.

Other activities and developments

The **EMS Liaison Committee**, chaired by Emily Gleeson (Irish Meteorological Society), has been proactive over the last 12 months or so in providing the community with more regular and interesting information via the EMS website, the newsletter EMS-message and social media.

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 36 meteorological societies or related organisations.

IFMS Council Elections were held in August 2018 which were ratified at the General Meeting (IFMS GM5). Dr Harinder Ahluwalia (CMOS, Canada) was re-elected as President of the IFMS. Prof Liz Bentley is the Society's representative on the IFMS Council as Councillor for the WMO Region VI. The Council meets every month via teleconference.

IFMS General Assembly Meetings

The 5th Global Meeting of IFMS General Body took place on September 5 and 6, 2018 in Budapest Hungary. The participants from over 22 countries attended this meeting. We warmly thank the attendees for taking time to attend this meeting and making it a success. We also profusely thank the President of Hungarian Meteorological Society (MMT) Dr Zoltan Dunkel and Hungarian Meteorological Service President Dr (Mdm.) Kornélia Radics for hosting the meeting and making all the arrangements. The Meeting was held in two parts:

- 1) The first part consisted of attending the half day meeting on Global Weather Enterprise (GWE) organized by PRIMET and ECOMET during the first half day of September 5, 2018. It was attended by a number of IFMS Global Meeting attendees. A Report of the Meeting was created and widely distributed. This Report is also available on the IFMS Website.
- 2) The second part of the meeting lasted the rest of the one and a half day. All items of the Agenda covering all aspects of IFMS. A Report of this main part of the meeting was also created and is available on IFMS Website.

Other activities and developments

Value proposition documentation has been developed and meetings with the WMO to discuss further collaboration have taken place. The IFMS website has been updated and a regular newsletters are being distributed to members. A Webinar on Professional Accreditation was presented by Prof Liz Bentley (RMets) and Keith Seitter (AMS) and is available on the IFMS website. The IFMS were represented at the WMO-WBG GWE Meeting, CBMET conference held in Maceió in November and at the European Meteorological Society and American Meteorological Society conferences.

Page 22 of 36 Annual Report 2018

Annex F: 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 hosted 3 meetings with an average attendance of 25-40. These talks were also streamed through Facebook Live for anyone to watch live or after the event – there have been 1,800 views in 2018 of these 3 meetings.

- 23rd January: <u>Storm Chasing in Tornado Alley, Part I</u>
 Chris Bell (Weatherquest Ltd / University of East Anglia)
- 27th February: Storm Chasing in Tornado Alley, Part II
 Dan Holley and Adam Dury (Weatherguest Ltd)
- 24th April: <u>Atmosphere, Ocean and Ice Interactions in West Antarctica</u>
 Dr Richard Jones (University of East Anglia / Weatherquest Ltd)

East Midlands Centre

Committee Members:

Roger Phillips

Activities:

Weather Front is now distributed via email and can be viewed www.rmets.org/local-centres/east-midlands-local-centre. The publication contains a summary of 13 stations around the East Midlands together with some comments by the observers. There is also a historical summary of observations from Brocklesby Hall. This station was located on the eastern side of the Lincolnshire Wolds. The summary for this station aims to reflect the weather for the month 100 years ago. Supplementing these data is a shortened version of the Monthly Weather Report of the Meteorological Office for that month together with historical comments from current observers. Where possible data from British Rainfall and press comment is included. Seasonal Summaries are also produced. The publication is constantly under editorial review and additional, possibly more scientific, items may be introduced.

North East Centre

Committee Members:

Dennis Wheeler, Ken Cook, Patricia Uttridge

Activities:

The North East Centre hosted 9 meetings with an average attendance of 15. The Annual Gordon Manley Lecture for attracted 50 attendees. Titles of the meetings included:

- 9th February: <u>Rediscovering Forgotten Hazards</u>
 Dr. Conor Murphey (Msynooth University, Eire)
- 9th March: Rainfall, Fell: A Writer's Response to the Cumbria Floods of December 2015

 Sarah Thomas (Freelance writer)
- 13th April: <u>Looking Back at the Weather of 2017</u>
 John Goulding (Amateur Meteorologist)
- 18th May: <u>The Changing Arctic: Does it Make a Difference to our Weather?</u>
 Dr Richard Hall (University of Lincoln)
- 15th June: <u>A Joint Effect of the Double Dynamo and Solar Inertial Motion</u> *Prof Valentina Zharkova (Northumbria University)*
- 12th October: Member's Evening: A Review of the Summer of 2018
- 9th November: <u>Storm Katie: New Perspectives on Mid-Latitude Events</u> Steven Ramsdale (UK Met Office)
- 14th December: What's Cooking in Copley? Ken Cook (NE Centre Treasurer)

Page 23 of 36 Annual Report 2018

The Gordon Manley Lecture was held on 29th November and was presented by Prof Rob Allan (UK Met Office). The talk was entitled 'The International ACRE Initiative and Interlinked Activities: Recovering Climate Data in the 21st Century'.

North West Centre

Committee members:

Hugo Ricketts (temporary Chair), Emma Simpson, Eoghan Derbyshire

Activities:

The North West Centre hosted 5 meetings with an average attendance of 10-30, with remote participation introduced for those streaming online. Titles of the meetings included:

- 5th February: New Observations of the North Atlantic Jet Stream

 Dr Ben Harvey (University of Reading)
- 24th April: <u>Filming and Photographing Cumbria in all Weathers and Seasons</u>
 Terry Abraham (BBC film maker and photographer)
- 5th June: <u>Lancaster's Critical Infrastructure Collapse Following Intense Rainfall on 4/5 December 2015</u> *Dr Emma Ferranti (University of Birmingham)*
- 9th October: <u>Woodland Response and Resilience in a Changing Environment</u> Rob MacKenzie (University of Birmingham)
- 27th November: <u>Antarctica's Forgotten Ice</u> Gillian Young (British Antarctic Survey)

Scottish Centre

Committee Members:

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

Activities

The Scottish Centre hosted 9 meetings with an average attendance of 34. Titles of the meetings included:

- 19th January: Post-Graduate Student Talks 2018
 - Contrasting northern hemisphere impacts of regional arctic sea-ice loss Christine McKenna (BAS)
 - Relating El Nino-Southern Oscillation and global warming shifts in tropical precipitation Alexander Todd (University of Exeter)
- 7th February: Satellites and Weather Forecasting
 - Chris Nankervis (Weather Logistics Ltd)
- 20th February: <u>Scotland's Sea Birds, Climate Change and Extreme Events</u>

 Prof Sarah Wanless (formerly CEH)
- 20th March: Weather Forecasting How Good Have We Got? Geoff Monk (MWIS)
- 3rd October: <u>Flash Flooding: The Physical Processes Involved in Heavy Rain</u> *Prof Alan Blyth (University of Leeds)*
- 12th October: <u>Strawberries</u>, <u>Ice Cream and Climate Statistics</u>
 Dr Mark McCarthy (Met Office)
- 14th November: <u>The New International Cloud Atlas</u>
 - George Anderson (Met Office)
- 16th November: <u>The Ben Nevis Weather Observatory and Operation Weather Rescue</u> Marjory Roy
- 11th December: <u>The State of Things to Come: The 1.5° Target</u>
 Prof D Stevenson (University of Edinburgh)

South East Centre

Committee Members:

Ross Reynolds (Chair), Ross Herbert, Simon Lee, Rob Thompson

Activities:

The South East Centre hosted 8 meetings with an average attendance of 25-30. Titles of the meetings included:

Page 24 of 36 Annual Report 2018

- 10th January: <u>How Cool are Trees? The Impact of Forests on the Climate from Local to Global Scales</u>
 Dr Cat Scott (University of Leeds)
- 7th March: <u>The Science of National Climate Policy</u>

Dr Jolene Cook (Department of Business, Energy & Industrial Strategy)

2nd May: <u>Polar Forecasting in a Melting World</u>

Dr Jonny Day (ECMWF)

6th June: Gardens in a Changing Climate

Dr Sally Woodhouse (Royal Horticultural Society)

25th June: Ancient Skies: The Music of Weather from the Geologic Past

Prof Jeff Nytch (University of Colorado)

- 3rd October: <u>The Largest Airspace Shutdown Since World War II: Volcanic Ash Prediction and its Challenges</u>
 Dr Helen Dacre (Dept of Meteorology, University of Reading)
- 7th November: Department of Meteorology Current PhD Students Annual Prize Winners 2018
 - Available potential energy and tropical cyclone intensification Bethan Jones
 - Modelling convection with conditional averaging Will McIntyre
- 5th December: <u>Climate Science Meets Politics</u>
 David Warrilow (President of the Royal Meteorological Society)

South West Centre

Committee Members:

Dick Bateman (Chair)

Activities:

In 2018 Bath Royal Literary and Scientific Institution (BRLSI) enjoyed its second year as the Royal Meteorological Society's South West Local Centre; our aim is to host two or three meteorological lectures per year. Titles of the meetings included:

- 12th July: <u>Turbulence Ahead! How Climate Change Affects Air Travel</u> Dr Paul Williams (Department of Meteorology, University of Reading)
- 11th October: And Now the Shipping Forecast...
 Dr Michael Sharpe FRMetS DipStat [Open] (Met Office)

Welsh Centre

Committee Members

Dr Michaela Bray (Chair), Cdr Nicholas Rodgers (Vice-Chair), Dr Yunqing Xuan (Treasurer), Thomas Green (Cardiff University)

Activities:

The Welsh centre hosted 2 meetings. The titles of the meetings were:

- 6th February: <u>Turbulence Ahead! How Climate Change Affects Air Travel</u> Paul Williams (University of Reading)
- 21st March: How to Extract Useful Energy from our Oceans Prof Ian Masters (Swansea University)

West Midlands

Committee Members:

Dr Ian D Phillips (Chair)

Activities:

The West Midlands Centre hosted 3 meetings at which the average attendance was 30. Titles of the meetings included:

- 8th February: <u>Turbulence Ahead! How Climate Change Affects Air Travel</u> *Dr Paul Williams (University of Reading)*
- 22nd March: <u>Can Less Precise Models Yield More Accurate Forecasts of Weather and Climate?</u>
 Dr Tobias Thornes (University of Oxford)
- 4th October: <u>Attribution of Extreme Rainfall Events to Anthropogenic Climate Change</u> Dr Jonathan Eden (Coventry University)

Page 25 of 36 Annual Report 2018

Yorkshire Centre

Committee Members:

Dr Dorian Speakman (Chair), John Goulding (Secretary), Dr Lindsay Bennett (Treasurer), Dr Jim McQuaid (e-media/publicity/ICAS representative), Kamalika Sengupta (Publicity Officer), Beth Woodhams (Publicity Officer), Ben Pickering (Publicity, 2018-19), Emily Cooke (Publicity, 2017-18), Dr Victoria Smith, Dave Cherry, and Clive Mills-Hicks

Activities:

The Yorkshire Centre hosted 9 meetings plus a summer social at which the average attendance was 30-40. The titles of the meetings included:

- 25th January: Meteorological Tsunamis
 Dr David Williams (University of Liverpool)
- 21st February: <u>Lancaster's Critical Infrastructure Collapse Following Intense Rainfall on 4/5 Dec 2015</u>

 Dr Emma Ferranti (University of Birmingham)
- 14th March: Extreme Global Warming: Paleocene-Eocene Thermal Maximum Dr Tracy Aze (University of Leeds)
- 18th April: <u>PhD Research Showcase Evening</u>
 Anne Barber, Niall Gandy, Ben Pickering (University of Leeds)
- 16th May: <u>Flying on Nothing but Fresh Air</u> Tony Flannery (Burn Gliding Club)
- 12th June: <u>Flying over West Africa's Polluted Air</u> *Prof Mat Evans (University of York)*
- 18th October: Weather Forecasting How Good Have We Got? Geoff Monk (Mountain Weather Information Service)
- 21st November: <u>The Beast from the East and the Stratosphere</u> Dr Amanda Maycock (University of Leeds)
- 12th December: Christmas Photo Competition and Weather of 2018

 John Goulding (Yorkshire Local Centre), Keeley Donovan (BBC Weather Presenter)

Other activities:

The 2018 Christmas Event included a photographic competition, which included the categories 'Best in Yorkshire' and 'Best Outside Yorkshire'; there were 38 entries (up to 2 entries per entrant). A RMetS Yorkshire summer social barbecue event was held on Tuesday 4 September at the School of Earth and Environment, University of Leeds.

Page 26 of 36 Annual Report 2018

Annex G: 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 Ruth Purvis (Co-Chairs)

Activities:

A meeting took place on 21 March at which the attendance was 40, titled: 'Advances in Airborne Monitoring of Atmospheric Composition & Chemistry'.

Atmospheric Electricity

Committee Members:

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

Activities:

The group held a meeting on 15th November with an attendance of approx. 50, titled: Wilson Meeting 2018

Aviation Meteorology

Committee Members:

Jacob Kollegger (Chair), Bob Lunnon (Secretary)

Activities:

No meetings were held in 2018.

Other activities:

SKYbrary.aero's Meteo section was revised by the group, the Chair has been nominated to SKYbrary's content development team. A short video, known as a "SKYclip", is being produced with the subject title "Mountain Waves". Continued representation in the UK Flight Safety Committee and the General Aviation Safety Council on behalf of the Society.

Climate Science

Committee Members:

David Warrilow OBE (outgoing Chair), Richard Betts (incoming Chair), 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 organised two National Meetings in London: "Minimising Climate Risks" on 17th January and "Meeting A Global Temperature Goal of 1.5C" on 14 November. Both meetings attracted a lot of interest and were very well attended: over 260 people for the second meeting which explored the recently published IPCC report on a 1.5 C goal. David Warrilow, who became Society's President in October, stood down as Chair in November, to be replaced by Richard Betts. The Group continued to work closely with the Climate Science Communications Group.

Data Assimilation

Committee Members:

Peter Jan van Leeuwen (Chair), Cristina Charlton-Perez (Secretary), Matthew Martin, Stefano Ciavatta, Bruce Ingleby, Keith Haines

Activities:

No meetings were held in 2018.

Page 27 of 36 Annual Report 2018

History of Meteorology and Physical Oceanography

Activity picked up somewhat during 2018. Two Newsletters were published. One meeting was organised, jointly with the History Group of the Challenger Society, titled "From HMS 'Challenger' to Argo and beyond". It was held at the National Oceanography Centre in Southampton on 21 November. There were over 50 attendees at what proved to be a very interesting and enjoyable meeting. Our Joint Organisers were John Gould and Chris Folland who can be very happy with the results of their efforts. A Pen Portrait of Past President, Sir John Mason was prepared by Chris Folland and John Mason, for publication in "Weather".

Committee Members:

Norman Lynagh (Chair), Julian Mayes (Secretary, Newsletter Editor), Mick Wood (Treasurer), Howard Oliver (Co-Ordinator - Occasional Papers), Chris Folland (Co-Ordinator - 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, Brian Booth (corresponding member)

Group Membership:

At the end of the year, approximately 90 individuals were listed as members of the group.

Norman Lynagh would like to step down from the post of Chair as soon as a suitable replacement can be found. Anyone interested in taking over should e-mail history@rmets.org.

Meteorological Observing Systems

Committee Members:

Steve Colwell (Chair), Mark Dutton (Newsletter Editor), Mike Brettle (Treasurer), Joelle Buxmann (Secretary – stepped down in October), Ian Strangeways, Keri Nicoll (on maternity leave), Stephen Burt, Dave Bullock, Simon Bell

Activities:

The group held had its AGM and summer visit at Chilbolton Observatory, Hampshire on Thursday 28 June 2018. 16 people attended and there were three presentations given about the work carried out at the observatory and this was then followed by a tour of the site.

Weather, Art and Music (WAM)

Committee Members:

Pierrette Thomet, (Chair), Peter Stott, (Secretary), John Thornes, (Treasurer), Liz Bentley, Paul Hardaker, Giles Harrison, Charlie Hooker, Holger Zschenderlein, Karen Aplin, Paul Williams, Ingrid Jensen, Gavin Pretor-Pinney, Ewan Woodley, Ewen McCallum, Barry Gromett

Activities:

This year <u>WAM</u> activities were concentrated on delivering Climate Stories, one of 5 'sector-changing' projects funded by NERC under their Engaging Environments programme.

Elaborated under the leadership of Peter Stott (Secretary, Science Fellow at the Met Office, and Professor of Detection and Attribution at the University of Exeter) and Pierrette Thomet (SIG Chair), Climate Stories brought a number of arts practitioners and partners together, including RMetS, the University of Exeter, the Institute of Physics, Double Elephant Print Workshop, the Met Office and UCL, and took a cohort of 20 Devon-based climate scientists through a process of active personal engagement with the arts through participation in workshops and public engagement opportunities. The process created by the Climate Stories team proved highly effective in fostering innovative approaches to communicating climate change to the wider public. Following the successful delivery of the project the team decided to submit its own proposal called 'Earth Stories' to the follow-up call for phase 2 of Engaging Environments.

Our Climate Stories website at <u>www.climatestories.org.uk</u> acts as a legacy site where we are gathering all the outcomes of the project - an ongoing process as a lot material was generated through the year.

Weather Service Providers

Nothing to report.

Association of British Climatologists

Nothing to report.

Page 28 of 36 Annual Report 2018

Annex H: Council and Committees

MEMBERSHIP OF COUNCIL (TRUSTEES OF THE SOCIETY)

Patron: HRH The Prince of Wales, HonFRMetS

From 1 January to 30 September 2018 the constitution of the Council was as recorded in the Annual Report for 2017. On 1 October 2018, the following Council held office:

PRESIDENT

David Warrilow OBE, FRMetS

VICE-PRESIDENTS

Prof Ellie Highwood, PhD, FRMetS
Capt. Derek Swannick, FRMetS
Dr Jon Petch, PhD, FRMetS (also Chair, Strategic Programme Board)

VICE-PRESIDENT FOR SCOTLAND

Dr Vicky Ingram, PhD

GENERAL SECRETARY

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

TREASURER

Jennie Campbell

COMMITTEE CHAIRS

Dr Amanda Maycock, PhD (Meetings and Conferences Committee)
Dr Lindsay Bennett, PhD, FRMetS, (Education and Outreach Committee)
Prof Peter Stott, PhD, FRMetS (Climate Science Communications Group)
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 Will Owen, FRMetS

Page 29 of 36 Annual Report 2018

MEMBERSHIP OF COMMITTEES OF COUNCIL

The Committees listed below are the standing Committees of the Society as at 31st December 2018. Membership of other sub-committees, working groups and similar *ad hoc* bodies are not detailed.

Accreditation Board

Will Lang (Chair), Alec Bennett, Paul Davies, Andrew Eccleston, Alan Hisscott, Pete Inness, Gordon Jones, Derek Swannick, Julian Mayes, Ross Reynolds, Bob Riddaway, Keith Thomson.

Awards Committee

David Warrilow OBE (President and Chair), Linden Ashcroft (Editor, GDJ), Alan Blyth (Co-Editor, QJ), Peter Burt (Editor, Met Apps), Jim Galvin (Editor, Weather), Lesley Gray (Co-Editor, QJ), Becky Hemingway (Co-Editor, ASL), Ellie Highwood (Vice-President), Radan Huth (Editor, IJOC), Andrea Montani (Co-Editor, ASL), Jo Haigh, Joel Hirschi, Martin Miller, Glenn Shutts.

Climate Science Communications Group

Emily Shuckburgh (Co-Chair), Peter Stott (Co-Chair), Michelle Cain, Piers Forster, Pierre Friedlingstein, Alyssa Gilbert, Ed Hawkins, Candice Howarth, Dan Jones, John Mitchell, Tim Palmer, Adam Scaife, Ian Strangeways, David Warrilow OBE.

Course Evaluation and Continuous Professional Development Panel

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

Education and Outreach Committee

Felicity Liggins (Co-Chair), Jenny Rourke (Co-Chair), Lindsay Bennett, Steve Brace (Representative of the Royal Geographical Society), Richard Allan, Andrew Charlton-Perez, Simon Foster, Peter Gibbs, Geoff Jenkins, John Lyon, Ellen Phillips, James Rae, Paula Richardson (Representative of the Geographical Association), Karl Shepherdson, Richard Allan, Jeremy Thomas, Simon Pinfield.

House Committee

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

Meetings and Conferences Committee

Amanda Maycock (Chair), Karen Aplin, Natalie Harvey, Edmund Henley, Matt Hugo, Simon Levey, Mark Rodwell, Andrew Russell, Sally Woodhouse (Student Representative). Representatives of Special Interest Groups and Local Centres are also invited to attend.

Membership Development Board

Shanti Majithia (Chair), Daniel Brener, Sarah Dennis, Richard Griffiths, Baden Hall, Kaja Milczewska.

Scientific Publishing Committee

Anna Ghelli (Chair), Linden Ashcroft (Editor, GDJ), Alan Blyth (Co-Editor, QJ), Peter Burt (Editor, Met Apps), Jim Galvin (Editor, Weather), Lesley Gray (Co-Editor, QJ), Becky Hemingway (Co-Editor, ASL), Radan Huth (Editor, IJOC), Andrea Montani (Co-Editor, ASL). Representatives of Wiley are also invited to attend.

Strategic Programme Board

Steve Noyes (Chair and Vice-President), Jennie Campbell (Treasurer), Shanti Majithia (General Secretary), Lindsay Bennett.

Vocational Qualification Group

Bob Riddaway (Chair), Gordon Jones, Julian Mayes, Phil Merritt, Paul Railton, Ann Randall, Derek Swannick.

Page 30 of 36 Annual Report 2018

OTHER REPRESENTATIVES APPOINTED BY COUNCIL

Atmospheric Science Letters

Editors: R Hemingway and A Montani

Associate Editors: E Black, A Bott, J Booth, A Dosio, T Economou, Z Fleming, S Ghosh, S Hardiman,

C Holloway, I Hoteit, O Martinez-Alvarado, J McQuaid, A Miller, A Mohebalhojeh, R Neely, M Pritchard, N Schaller, A Subramanian, N Theeuwes, J Vanneste, D Woolf,

Y Yin, S Pal, C Li, P Rhys

GeoScience Data Journal

Editor: L Ashcrof

Associate Editors: M Brunet, R Crouthamel, P Fox, J Lawrimore, C Reason, K Royse, V Slonosky, J Tedds,

C Vitolo, J Wagemann, D Paolo F Daniel X Liqiang H Birgit

International Journal of Climatology

Editor: R Huth

Associate Editors: J Marengo, I McKendry, V Moron, M Roth, T Zhou

Meteorological Applications

Editor: PJ Burt

Associate Editors: J Bech, S Bell, L Carvalho, C Charlton-Perez, B Chen, C Coelho, A Ghelli, A Kulkarni,

G Marshall

Quarterly Journal

Editors: L Gray and A Blyth

Associate Editors: G Bhat, C Bishop, M Bocquet, D Bouniol, J Broecker, H Coe, C Cotter, S Davolio,

A Dornbrack, J Dufresne, T Frame, E Gerber, R Hart, A Illingworth, T Janjic, P Knippertz, E Kolstad, S Marras, F McFarquhar, A Montani, S Newman, M Reeder, A Ross, R Scott, B Sinha, G Steeneveld, A Turner, M Vellinga, A Weisheimer, V Wirth, N Zagar, T Zhou

WIREs Climate Change

Editor: M Hulme

Associate Editors: T R Carter, L Dilling, A Engels, M Heymann, A Karnein, S Lewis, LO Naess, I Lorenzoni, S

Pulver, J Rozenberg, M Rusticucci, J Settele, H Schroeder, L Whitmarsh, E Zorita

Weather

Editor: J Galvin

Associate Editors: M Clark, H Rossington, D Bowker, M de Villiers, C Muller, G McCarthy, A Sibley,

E Graham, Y Xuan, S Hardy, P Knightley, R McElwee

Representative with the:

UK Flight Safety Committee (UKFSC): R Lunnon

General Aviation Safety Committee (GASCo): J Morrison

European Meteorological Society (EMS): E McCallum

International Forum for Meteorological Societies (IFMS): Chief Executive

Science Council: Chief Executive

Page 31 of 36 Annual Report 2018

WITHOUT WHOM

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

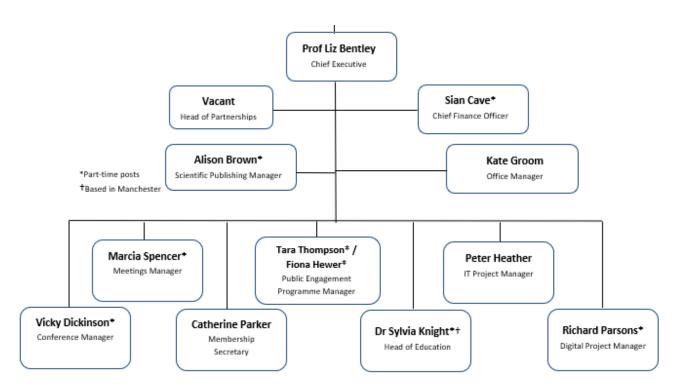
Vice President:Steve NoyesTreasurer:Alan RadfordGeneral Secretary:Ewen McCallumCouncil Members:Roger BruggeHelen Roberts

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.

Page 32 of 36 Annual Report 2018

Annex I: STAFFING AT THE SOCIETY

The Society has a secretariat that supports the day-to-day running of the Society and carries out its executive functions. A detail of the secretariat team and the organisational structure on 31 December 2018 is shown below.



Dr Cat Muller went on maternity leave in May 2018 with Fiona Hewer and Tara Thompson taking on a job - share role to cover this.

The following staff left the Society during 2018.

David Brookfield

Page 33 of 36 Annual Report 2018

Annex J: 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.

The Royal Meteorological Society (Registered Charity No 208222):

Address: 104 Oxford Road

Reading RG1 7LL 0118 956 8500

Telephone: 0118 956 8500
E-Mail: chiefexec@rmets.org
WWW: http://www.rmets.org

Bankers: Lloyds Bank plc

PO Box 1000 BX1 1LT Solicitors: I

Blandy & Blandy 1 Friar Street Reading RG1 1DA

Auditors: Porter Garland

Communication House

Victoria Avenue

Camberley Surrey GU15 3HX Investment Advisors:

Rathbone Investment Management Ltd

1 Curzon Street London, W1J 5FB

Investment Powers:

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

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

Page 34 of 36 Annual Report 2018

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

Annex K: 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 5 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. From 1 January 2019, the management accounts format will fall in line with the recommendations of the Business Development Review, which were adopted by Council in February 2018. Management reporting 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).

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).

Page 35 of 36 Annual Report 2018

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. At present the management of investments is delegated by Council to a professional Fund Manager. The House Committee reviews performance of the Fund Manager twice a year and Council reviews investments normally quarterly, but 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, typically a period of the Society's Strategic Plan, in order to deliver the required investment for the Society's development programme and to mitigate the Society's major risks. To this end investments should not be 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.

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.

Page 36 of 36 Annual Report 2018