

2021 Awards



AMS101

101st Annual Meeting
VIRTUAL | 10-15 January 2021

AMS Fellow

Uma S. Bhatt

Professor, University of Alaska Fairbanks,
Fairbanks, Alaska



Uma was drawn to a career in climate science after experiencing the 1983-85 drought in East Africa where she served as a Peace Corps Volunteer. She is happy to report that after a few decades as a climate researcher, most of her projects now connect with society. She current focuses on seasonal forecasting of Alaska fire weather and Arctic sea ice, impacts of sea ice variations, and climate drivers of Arctic tundra vegetation change.

AMS Fellow

Kandis Y. Boyd

Deputy Divisional Director, Division of Grants and Agreements,
Office of Weather and Air Quality, National Science Foundation,
Alexandria, Virginia



Dr. Kandis Boyd, PMP is a member of the Federal Government's Senior Executive Service. Throughout Kandis' 26+ career she has excelled as a Science communicator, STEM advocate and mentor/advisor to several underrepresented groups. Kandis is also the 2020 Recipient of the AMS Charles E. Anderson Award, the 2020 Recipient of the Black Engineers of the Year Award for Career Achievement, and the 2020 Recipient of the National Weather Association Special Achievement Award for Lifetime Achievement.

AMS Fellow

Brian A. Colle

Professor, Stony Brook University,
Stony Brook, New York



Brian Colle is a professor and Division Head for the Atmospheric Division with the School of Marine and Atmospheric Sciences at Stony Brook University. He conducts research in orographic flows and precipitation, precipitation bands and microphysics within winter storms, coastal circulations, regional climate, and numerical weather prediction. He has served on the AMS Committee for Mesoscale Processes and Weather and Forecasting, received the AMS Editor's Award (MWR), and as Editor for AMS Weather and Forecasting.

AMS Fellow

Sarah T. Gille

Professor, Scripps Institution of Oceanography,
University of California San Diego, San Diego, California



Sarah Gille is a professor of physical oceanography at Scripps Institution of Oceanography, University of California San Diego. Her research interests focus on the Southern Ocean, air-sea interaction, and upper-ocean processes. In her work, she draws on a range of tools, including remote sensing and autonomous float observations. Gille received a B.S. in physics from Yale University and a Ph.D. in physical oceanography from the MIT-Woods Hole Oceanographic Institution Joint Program.

AMS Fellow

Rebecca Haacker

Director of Education and Outreach, NCAR,
Boulder, Colorado



Rebecca Haacker is a leader in science education in the geosciences, currently serving as the Director of Education and Outreach at the National Center for Atmospheric Research. Her work spans from public outreach, mentoring of students and postdoctoral fellows to supporting early career faculty. She has been an active member of the AMS since 2005, serving on several AMS boards and committees, such as the AMS Presidential Task Force for Diversity, Equity and Inclusion.

AMS Fellow

Marika M. Holland

Senior Scientist, Climate and Global Dynamics
Laboratory, NCAR, Boulder, Colorado



Dr. Marika M. Holland is a Senior Scientist in the Climate and Global Dynamics Laboratory at the National Center for Atmospheric Research. Her research focuses on the role of sea ice in the climate system and she has been active in the development of improved sea ice models for climate simulations. She is a contributing author on the Intergovernmental Panel on Climate Change assessment reports and an author on over 120 peer-reviewed scientific papers.

AMS Fellow

William W. Hsieh

Professor Emeritus, Department of Earth, Ocean and Atmospheric Sciences, University of British Columbia, Vancouver, British Columbia



William Hsieh is a professor emeritus in the Department of Earth, Ocean and Atmospheric Sciences, at the University of British Columbia in Canada. His research has been primarily on the development of machine learning in the environmental sciences. He is the author of "Machine Learning Methods in the Environmental Sciences", the first single-authored textbook on this topic.

AMS Fellow

Jean-François Lamarque

Senior Scientist, NCAR, Boulder, Colorado



Jean-François is a Senior Scientist at the National Center for Atmospheric Research. He is the current Climate and Global Dynamics Laboratory Director. Until early 2018, he was Community Earth System Model Chief Scientist. He was a Lead Author on Chapter 8 (Radiative forcing) of IPCC AR5. He received his Ph.D. from the Catholic University of Louvain (Belgium) in 1993. He has worked at NCAR since, except for one year at the NOAA Chemical Science Division.

AMS Fellow

Maureen McCann, CBM, CCM

Meteorologist, Spectrum News 13, Orlando, Florida



Maureen McCann is the morning meteorologist at Spectrum News 13 in Orlando, Florida. An active member of the American Meteorological Society, Maureen holds the Certified Broadcast Meteorologist and Certified Consulting Meteorologist designations. She currently serves as the AMS Commissioner on Professional Affairs. Originally from Arlington, Massachusetts, Maureen earned a B.S. in atmospheric science from Cornell University and a Master's of Emergency and Crisis Management from the University of Central Florida.

AMS Fellow

Amy McGovern

Professor, University of Oklahoma, Norman, Oklahoma



Dr. Amy McGovern is a Lloyd G. and Joyce Austin Presidential Professor in the School of Computer Science and School of Meteorology at the University of Oklahoma. Dr. McGovern leads the NSF AI Institute for Research on Trustworthy AI in Weather, Climate, and Coastal Oceanography. Dr. McGovern received her Ph.D. in computer science from the University of Massachusetts Amherst and has been at OU since 2005. Her research focuses on developing AI/ML techniques for high-impact weather.

AMS Fellow

Laura L. Pan

Senior Scientist, NCAR, Boulder, Colorado

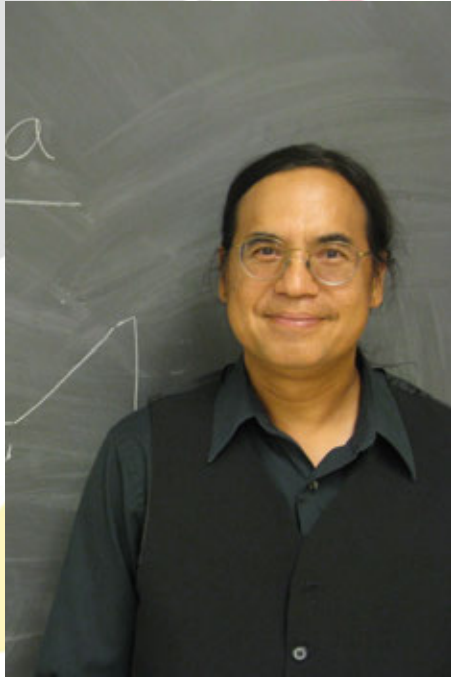


Laura Pan is a senior scientist at the National Center for Atmospheric Research. She studies the influence of dynamics and transport on atmospheric chemistry and composition. Her research uses satellite and airborne observations together with global chemistry climate models. She has been involved in a number of airborne field campaigns as a principal investigator and a mission scientist. She received her Ph.D. in physics from the Johns Hopkins University in 1987.

AMS Fellow

Kyaw Tha Paw U

Professor, Department of Land, Air and Water Resources, University of California, Davis, California



Dr. Kyaw Tha Paw U is a professor of atmospheric science and biometeorologist in the Agricultural Experiment Station. He studies trace gas exchange and turbulence using models, field, and lab experiments. He has over 150 publications. He was presented with the AMS Award for Outstanding Achievement in Biometeorology. He has been the program chair of several AMS conferences and chaired the AMS STAC Biometeorology and Aerobiology Board. He was Editor-in-Chief of Agricultural and Forest Meteorology.

AMS Fellow

Walter A. Petersen

Deputy Chief of the Science Research and Projects Division, NASA Marshall Space Flight Center, Huntsville, Alabama



Dr. Walt Petersen is the Deputy Chief of the Science Research and Projects Division at NASA Marshall Space Flight Center. He holds a Ph.D. and M.S. in atmospheric sciences from Colorado State University, and a B.S. in mathematics from Southern Utah University. Dr. Petersen's science interests and expertise span a range of topics including ground and satellite-based radar remote sensing of deep convection, precipitation, and cloud electrification processes.

AMS Fellow

Bo Qiu

Professor, University of Hawaii at Manoa, Honolulu, Hawaii



Bo Qiu is a Professor at the Department of Oceanography, University of Hawaii at Manoa. He received his PhD in Physical Oceanography from Kyoto University (1990). His scientific interests include large-scale ocean circulation variability, mid-latitude air-sea interaction, geophysical fluid dynamics, and satellite oceanography. He has published more than 160 papers in peer-reviewed journals and was contributing author to both IPCC 4th and 5th Assessment Reports.

AMS Fellow

Danny E. Satterfield, CBM

Chief Meteorologist, WBOC TV, Salisbury, Maryland



Dan is the Chief Meteorologist for WBOC TV in Salisbury, Maryland. An Oklahoma native, he is an Oklahoma University meteorology graduate and later earned a master's in earth science. He has worked on air in Oklahoma, Florida, Alabama and Maryland. Dan visited the South Pole in 2010 and spent two weeks on top of the Greenland Ice cap to help document the NEEM ice core retrieval. Dan teaches an undergraduate meteorology course at Salisbury University.

AMS Fellow

Adrian J. Simmons

Consultant, European Centre for Medium-Range
Weather Forecasts, United Kingdom



Adrian Simmons worked first at Cambridge and Reading Universities, on atmospheric dynamics and modelling. He joined ECMWF in 1978, where he contributed to developments in both modelling and data assimilation, including the ERA reanalyses. He also coordinated development of pilot services on atmospheric composition for Europe's Copernicus initiative. He is a past Chair of the Steering Committee for the Global Climate Observing System and currently a part-time consultant on reanalysis and climate monitoring at ECMWF.

AMS Fellow

Janet Sprintall

Research Physical Oceanographer, Scripps Institution of Oceanography, University of California San Diego, La Jolla, California



Janet Sprintall is a Research Physical Oceanographer at Scripps Institution of Oceanography. Her principal research working with colleagues and students aims to investigate the role of the ocean in the variability of the coupled air-sea climate system, with a particular focus within the Indonesian seas and the Southern Ocean. She is a sea-going scientist, collecting in situ observations from ships and moorings, and contributes to the global ocean observing system.

AMS Fellow

W. James Steenburgh

Professor, University of Utah, Salt Lake City, Utah



Dr. W. James "Jim" Steenburgh is a professor of atmospheric sciences at the University of Utah and recently served as a Fulbright visiting professor of natural sciences at the University of Innsbruck. His research and teaching interests include mountain weather and climate, orographic and lake-effect precipitation, and weather analysis and forecasting. He is currently a member of the AMS council.

AMS Fellow

Yukari N. Takayabu

Professor, Atmosphere and Ocean Research Institute of
the University of Tokyo, Chiba, Japan



Yukari N. Takayabu is a professor at the Atmosphere and Ocean Research Institute of the University of Tokyo, where she also received her Ph.D. Yukari's research interests include tropical meteorology, convection, precipitation, extreme weather and climate. She pursues the wonders of multi-scale interactions between convection and large-scale environments, with emphasis on utilizations of satellite remote sensing data.

AMS Fellow

Robert J. Trapp

Professor, Department of Atmospheric Sciences,
University of Illinois at Urbana-Champaign, Urbana,
Illinois



Robert J. Trapp is a professor and Head of the Department of Atmospheric Sciences at the University of Illinois at Urbana-Champaign. He conducts research on severe convective storms, their attendant hazards, and their connection with climate change and variability. He has also authored a textbook “Mesoscale-Convective Processes in the Atmosphere,” published by Cambridge University Press.

AMS Fellow

Huug M. van den Dool

Consultant, NOAA/NWS/NCEP, College Park, Maryland



Huug van den Dool worked at the Climate Prediction Center for 25 years, where he was instrumental in designing many of the methods that are used in real-time operational short term climate prediction. In 2018 he was awarded the NOAA Distinguished Career Award. Huug was born in The Netherlands and holds a Ph.D. in physics and mathematics from the University of Utrecht. Currently he is a part-time consultant with NCEP/EMC.

AMS Fellow

Susan C. van den Heever

Professor, Department of Atmospheric Science,
Colorado State University, Fort Collins, Colorado



Dr. Susan van den Heever is a Monfort Professor of Atmospheric Science at Colorado State University. She joined the faculty in 2008 after obtaining her B.S. in mathematics from the University of the Witwatersrand in Johannesburg, South Africa, and her Ph.D. in atmospheric science from CSU. Her research is focused on convective cloud processes, including updraft and cold pool dynamics, aerosol cloud interactions, convective organization, and the representation of these processes in numerical models.

AMS Fellow

Junhong Wang



Professor, University at Albany, State University of New York, Albany, New York

Dr. Junhong (June) Wang is an international leader in weather and climate observations and networks, surface and upper-air instrumentation and data quality, and ground-based GNSS meteorology. She has been playing important roles in designing, implementing, and operating of two observational networks, the Global Climate Observing System Reference Upper-Air Network and New York State Mesonet. June is passionate about and has been actively involved in K-12, undergraduate, graduate, and general public education throughout her long career.

AMS Fellow

Matthew C. Wheeler

Principal Research Scientist, Bureau of Meteorology,
Melbourne, Australia



Dr. Wheeler is the leader of the Climate Processes team at the Bureau of Meteorology. Matt obtained his Ph.D. from the University of Colorado in 1998 with his thesis on Convectively-Coupled Equatorial Waves. He was then an NCAR ASP postdoc before becoming a research scientist at the Bureau in 2000. He has worked on numerous topics including the Madden Julian Oscillation, the Australian monsoon, multi-week prediction of TCs, and seamless prediction from days to months.

AMS Fellow

Robert Wood

Professor, University of Washington, Seattle,
Washington



Robert Wood is a professor of atmospheric sciences at the University of Washington. Wood's work focuses upon understanding processes controlling clouds in the Earth's atmosphere and the roles that clouds play in determining climate variability and change, the formation of rain, and how tiny aerosol particles (both natural and anthropogenic) interact with them and affect their properties. Wood's research uses a combination of observational data collected with aircraft, satellites and from ground-based remote sensing, together with numerical and theoretical models.

The Robert E. Horton Lecturer in Hydrology

Abigail S. Swann

Associate Professor, University of Washington, Seattle, Washington

For fundamental, interdisciplinary advancements in discovering the processes by which terrestrial ecosystems influence climate, and for outstanding communication between the atmospheric and biological sciences



Abigail Swann is an associate professor jointly appointed in atmospheric sciences and biology at the University of Washington. She studies both the physical climate system and the underlying biological processes that govern ecosystems and characterize their response to environmental variability and change. Dr. Swann received a B.A. and Ph.D. from the Earth and Planetary Sciences Department at the University of California, Berkeley, and a M.A. from Earth and Environmental Sciences at Columbia University.

The Walter Orr Roberts Lecturer

Wade T. Crow

Research Physical Scientist, USDA ARS Hydrology and Remote
Sensing Laboratory, Beltsville, Maryland

*For developing data analysis techniques that enabled important advances in the scientific
and operational application of terrestrial remote sensing products*



Dr. Crow received his Ph.D. in 2001 from Princeton University and is a research physical scientist at the USDA ARS Hydrology and Remote Sensing Laboratory in Beltsville, MD. His research focuses on the application of remote sensing, modelling and land data assimilation to improve the forecasting and monitoring of the terrestrial water cycle. He currently serves as chief editor of the American Meteorological Society's Journal of Hydrometeorology.

The Bernhard Haurwitz Memorial Lecturer

Rong Zhang

Senior Scientist, NOAA/GFDL, Princeton, New Jersey

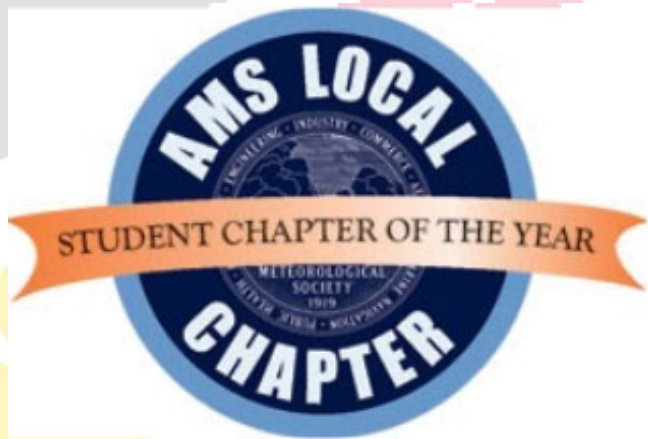
For advancing scientific understanding of the causes and impacts of Atlantic multidecadal variability and Arctic sea ice variations through insightful analysis of models and observations



Rong Zhang received her Ph. D. from MIT in 2001. She is head of the Ocean and Cryosphere division at NOAA/GFDL. Her research focuses on Atlantic multidecadal variability and associated decadal predictability, and the role of Atlantic meridional overturning circulation (AMOC) in many regional phenomena, such as Gulf Stream separation, Intertropical Convergence Zone shift, Atlantic hurricane activity, and Arctic sea ice extent. She is an AMS Fellow and serves as editor of Journal of Climate.

Student Chapter of the Year Award

For providing students with unique career, education, and service opportunities, and expanding the reach of the chapter to benefit members, alumni, and the local community

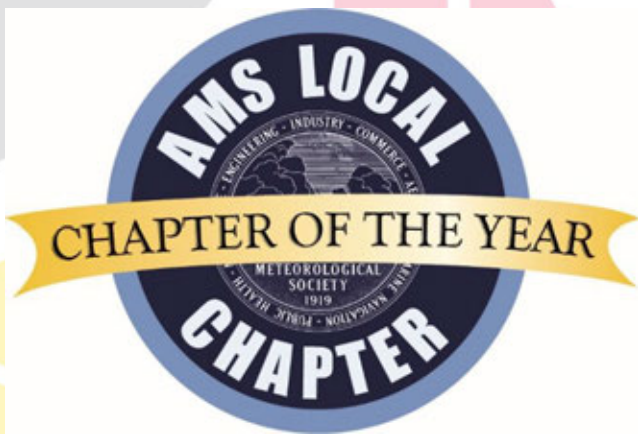


University of Oklahoma Student Chapter

University of Oklahoma, Norman, Oklahoma

Local Chapter of the Year Award

For expanding its professional development and networking opportunities for members, while strengthening its presence in both the community and with the national organization



North Florida Local Chapter

Tallahassee, Florida

The Award for an Exceptional Specific Prediction

Bryan T. Smith

Mesoscale/Outlook Forecaster, Storm Prediction Center, Norman, Oklahoma

For a highly specific and accurate prediction of a strong supercell event with long lead time that saved lives

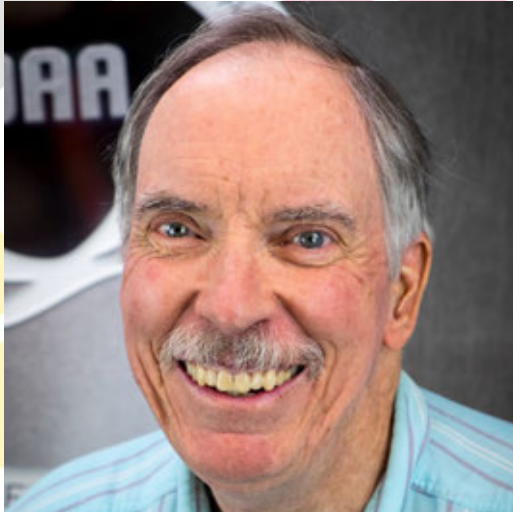


Bryan Smith is a mesoscale/outlook forecaster at the Storm Prediction Center, and he routinely forecasts severe thunderstorms and tornadoes. His research interests have focused on a 12-year effort to develop an operationally oriented severe thunderstorm database, to both improve the transfer of research to operations and to share with the broader severe storm community. Some of this work has resulted in improvements in the understanding of tornadoes for short-term and ongoing tornado intensity forecasts.

The Charles L. Mitchell Award is presented to **John M. Brown**

Meteorologist, Earth Prediction Advancement Division, NOAA/Global
Systems Laboratory, Boulder, Colorado

For selfless dedication during more than four decades of service in developing forecast techniques, advancing model performance, training forecasters, and forecasting for large field programs



From an early age John was fascinated with wind, clouds and storms. He received a bachelors and masters degree from UCLA and his PhD from MIT, all in meteorology. John strives to combine observational and theoretical understanding of weather processes to improve forecasting and has been privileged to work with outstanding colleagues over the years, most recently on development of NOAA's High-Resolution Rapid Refresh (HRRR) convection-allowing forecast model, a realization of a half-century dream.

Editor's Award - *Bulletin of the American Meteorological Society*

Kelly Mahoney

Research Meteorologist, NOAA/Physical Sciences Laboratory, Boulder, Colorado

For insightful, thorough, and constructive reviews that contributed to improving impactful manuscripts



Dr. Kelly Mahoney is a research meteorologist in NOAA's Physical Sciences Laboratory. Kelly's work focuses on extreme precipitation and the research applications thereof. Her current research spans weather and climate timescales, including understanding extreme precipitation in future climate scenarios, and also investigating shorter-term flood prediction challenges at the atmospheric-hydrologic interface. She is passionate about working with stakeholders at the local, state, and federal levels to better inform water management, forecasting, and emergency preparedness.

Editor's Award - *Bulletin of the American Meteorological Society*

Blair Trewin

Senior Research Scientist, Australian Bureau of Meteorology, Melbourne, Australia

For exemplary, thoughtful reviews that significantly improved manuscripts through careful attention to critical details



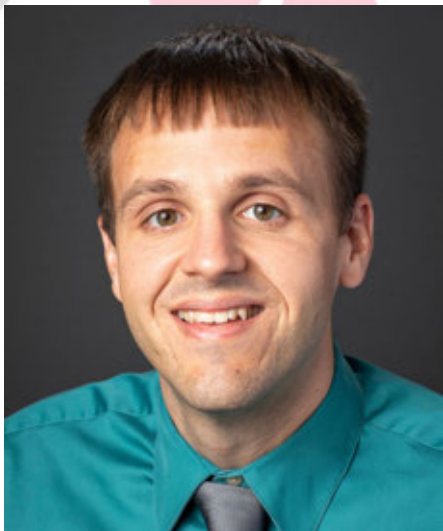
Blair Trewin is a senior research scientist in the Australian Bureau of Meteorology. His main areas of interest are the development of long-term historical instrumental data sets, including the ACORN-SAT temperature dataset used for climate change assessment in Australia, and global climate monitoring. He is a Lead Author for the IPCC Sixth Assessment report and the WMO's annual State of the Climate report, and is a past President of the Australian Meteorological and Oceanographic Society.

Editor's Award - *Earth Interactions*

Trent Ford

Illinois State Climatologist, University of Illinois' Prairie Research Institution,
Champaign, Illinois

For providing thorough and quality reviews that were helpful for the authors and resulted in improved manuscripts



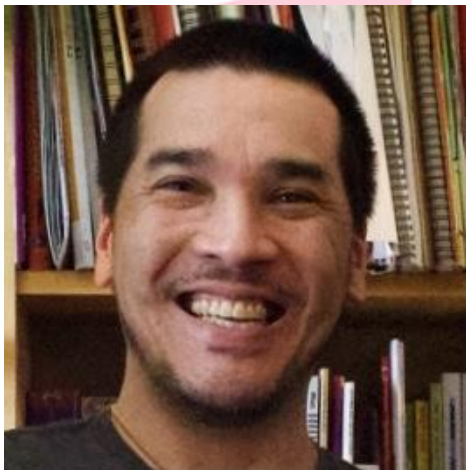
Trent Ford is the Illinois State Climatologist at the Illinois State Water Survey, as part of the University of Illinois' Prairie Research Institute. His research interests include soil moisture, land-atmosphere interactions, and monitoring and predicting extreme climate events such as drought and heat waves. A native of Roanoke, Illinois, Ford received his B.S. in geography from Illinois State University and his M.S. and Ph.D in geography from Texas A&M University.

Editor's Award - *Journal of Applied Meteorology and Climatology*

Alex Cannon

Research Scientist, Climate Research Division of Environment and Climate
Change Canada, Victoria, British Columbia, Canada

For consistently producing great reviews and exemplifying consistent, selfless service to the discipline



Dr. Alex Cannon is a research scientist with Climate Research Division of Environment and Climate Change Canada. His research contributes to understanding of the state, trends, variability, extremes, and future projections of climate at both global and regional scales. Recent work has included development of novel multivariate bias adjustment/downscaling algorithms and assessments of future changes in variables relevant to infrastructure design in Canada.

Editor's Award - *Journal of Atmospheric Science*

Edmund Kar-Man Chang

Professor, School of Marine and Atmospheric Sciences, Stony Brook University,
Stony Brook, New York

For numerous constructive, insightful, and thorough reviews



Dr. Chang is a native of Hong Kong, and is currently a professor at the School of Marine and Atmospheric Sciences, Stony Brook University, State University of New York. He studied at Caltech and Princeton, and taught at MIT and the Florida State University before joining the faculty of Stony Brook. His research interests include atmospheric and climate dynamics, weather and climate forecasting, global climate change, as well as extreme weather and impacts.

Editor's Award - *Journal of Climate*

Dietmar Dommenges

Associate Professor, Monash University, Melbourne, Australia

For providing timely and constructive reviews on a wide range of topics



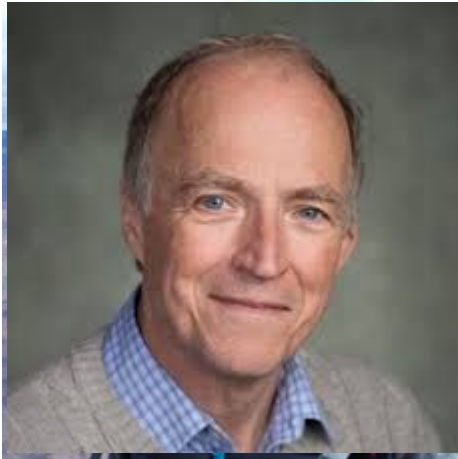
Associate professor Dietmar Dommenges started at Max Planck in 1996 and finished his Ph.D. in 2000. After a postdoc at Scripps, a junior professor at GEOMAR, he moved to Melbourne, Australia for a faculty position at Monash University. Dietmar Dommenges's work focusses on modelling and understanding of large-scale climate variability, including El Nino and anthropogenic climate change. He developed the Monash Simple Climate Model, an online interactive web-tool for education in climate and climate modelling.

Editor's Award - *Journal of Climate*

Francis Zwiers

Director, Pacific Climate Impacts Consortium, University of Victoria, British Columbia, Canada

For consistently insightful reviews on some of the journal's most challenging papers



Dr. Francis Zwiers is a statistician and climatologist who directs of the Pacific Climate Impacts Consortium at the University of Victoria. He previously served in multiple roles at the Climate Research Division of Environment and Climate Change Canada and has served as Lead Author, Coordinating Lead Author and Bureau member in the IPCC. Dr. Zwiers is a Fellow of the Royal Society of Canada, the American Geophysical Union and the American Meteorological Society.

Editor's Award - *Journal of Climate*

Qinghua Ding

Associate Professor, University of California Santa Barbara, Santa Barbara,
California

For providing numerous constructive reviews on various topics in climate dynamics



Qinghua Ding is a climate scientist studying the extent to which future climate variability can be predicted on broad timescales from years to decades by using observations and numerical models of the ocean, atmosphere, cryosphere, and their coupled system. The focus of his current research is to pursue more reliable future projections of polar climate response to anthropogenic and natural climate forcing by exploring observed polar-lower latitude connections and improving models' skill in replicating these features.

Editor's Award - *Journal of Hydrometeorology*

Jackson Tan

Associate Scientist, Universities Space Research Association at NASA Goddard
Space Flight Center, Greenbelt, Maryland

For insightful and timely reviews of numerous manuscripts in the field of precipitation remote sensing



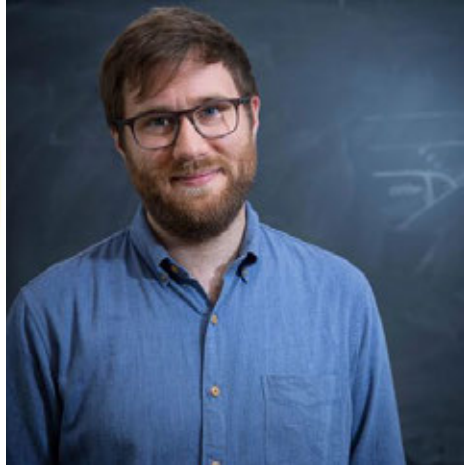
Jackson Tan is an associate scientist with the Universities Space Research Association at NASA Goddard Space Flight Center. His research focuses on satellite retrievals of precipitation, the Global Precipitation Measurement mission, the ground validation of precipitation products, and the relationship between clouds and precipitation. He is part of the algorithm development team for the NASA IMERG precipitation product. He received his Ph.D. in atmospheric sciences from Monash University in Australia in 2014.

Editor's Award - *Journal of Physical Oceanography*

Jörn Callies

Assistant Professor, California Institute of Technology, Pasadena, California

For deeply constructive reviews in a wide variety of subdisciplines



Jörn Callies is Assistant Professor for Environmental Science and Engineering at the California Institute of Technology. He received a B.S./M.S. from the University of Hamburg, Germany, and a Ph.D. from the MIT–WHOI Joint Program in Oceanography. In his work, he seeks to better understand the ocean's circulation and how it regulates the climate on Earth.

Editor's Award - *Journal of Physical Oceanography*

Daniel Whitt

Project Scientist, Climate and Global Dynamics Laboratory, NCAR, Boulder,
Colorado

For well thought-out reviews of some particularly difficult papers, as well as many other high-quality reviews



Since 2017, Dan has been a project scientist in the oceanography section in NCAR's Climate and Global Dynamics Lab. He studies the ocean circulation and how it structures marine biogeochemistry and ecosystems using mathematical and computational techniques. Previously, he spent two years as an NSF international post-doctoral fellow at the University of Cambridge after receiving a Ph.D. from Stanford in 2015.

Editor's Award - *Journal of Atmospheric and Oceanic Technology*

John Abraham

Thermal Scientist, University of St. Thomas, Saint Paul, Minnesota

For exceptionally prompt reviews of a number of papers



John Abraham is a thermal scientist at the University of St. Thomas, Minnesota. He currently works on ocean monitoring and climate change.

Editor's Award - *Journal of Atmospheric and Oceanic Technology*

Gabriel Diaz-Hernandez

Professor and Senior Researcher, Institute of Environmental Hydraulics of
Cantabria, Spain

For reviewing numerous papers in a timely fashion



Gabriel holds master's degrees in Hydraulic Engineering (UNAM-2001), Integrated Management of Coasts and Ports at the University (Universidad de Cantabria-2002), and a Ph.D. in Coastal and Port Engineering (Universidad de Cantabria-2006). He currently serves as a Professor in the Civil Engineering Faculty of the Universidad de Cantabria and Senior Researcher of the Institute of Environmental Hydraulics of Cantabria (IHCantabria). In 2012 he was awarded first prize of the "Modesto Vigueras Award".

Editor's Award - *Monthly Weather Review*

Rachel Mauk

Research Scientist, The Ohio State University, Columbus, Ohio

For providing insightful, timely, and constructive reviews that helped authors to improve the quality of their manuscripts



Dr. Rachel Mauk is a research scientist at The Ohio State University. She received her Ph.D. in atmospheric science from Ohio State in 2016, and has served as an associate editor for *Monthly Weather Review* since 2017. Her interests include tropical cyclone rapid intensification, eyewall replacement processes, tropical transition, and severe weather climatology.

Editor's Award - *Monthly Weather Review*

Michael Scheuerer

Data Scientist, Norwegian Computing Center, Oslo, Norway

For providing a large number of high-quality reviews extremely quickly



Dr. Michael Scheuerer just started a new position as a data scientist at the Norwegian Computing Center in Oslo (Norway). Previously he has been affiliated with NOAA's Physical Sciences Laboratory where he has been developing statistical algorithms and forecast products providing probabilistic weather forecasts. As of this month, Michael is an editor of *Monthly Weather Review*. He earned his Ph.D. in mathematics from the University of Göttingen (Germany) in 2009.

Editor's Award - *Weather and Forecasting/Monthly Weather Review/Journal of Applied Meteorology and Climatology*

John A. Knaff

Meteorologist, NOAA/NESDIS/Center for Satellite Applications and Research, Fort Collins, Colorado



For providing multiple rigorous, timely, and constructive reviews across three AMS journals, and also for contributing consistently excellent reviews over a period of many years

Dr. John A. Knaff is a tropical cyclone and satellite meteorology expert with NOAA NESDIS co-located at Colorado State University. He has extensive experience in the development of statistical and statistical-dynamical tropical cyclone forecast models, using satellite data to diagnose tropical cyclone structure including intensity, tropical cyclone temporal evolution, and satellite climatologies. He currently serves as an associate editor for both *Monthly Weather Review* and *Weather and Forecasting*.

Editor's Award - *Weather and Forecasting*

Michael Coniglio

Research Meteorologist, National Severe Storms Laboratory, Norman, Oklahoma

For consistently providing high-quality, constructive, and rigorous reviews that help to uphold the high standards of AMS journals



By way of Buffalo, NY, the State University of New York at Oswego, and the University of Oklahoma, Michael is a research meteorologist with the National Severe Storms Laboratory. He currently works on understanding severe storm processes and environments through focused field programs and interactions with the Storm Prediction Center. Outside of work Michael enjoys photography, traveling, and spending time with family.

Editor's Award - *Weather, Climate, and Society*

Graham Clarkson

Senior Research Fellow and Project Manager, University of Reading, Reading,
United Kingdom

For exceptionally thorough, insightful, and committed reviews of a challenging manuscript



Graham Clarkson is a Senior Research Fellow and Project Manager for the Participatory Integrated Climate Services for Agriculture (PICSA) approach. His research integrates both qualitative and quantitative methods with expertise in participatory approaches for research and practical application. He has considerable experience of research into agricultural innovation systems in sub-Saharan Africa, the Caribbean, South America and Asia.

The Award for Early-Career Professional Achievement

Lawrence C. Gloeckler, III

Product Manager, Resilience360/Riskpulse, San Marcos, California

For exceptional efforts to advance private-sector applications of meteorology, and a passionate commitment to bridge the gap between academic training and the needs of industry



Larry is a product manager at Resilience360/Riskpulse. He has chaired the AMS Energy Committee and is currently a member of the AMS Board on Enterprise Economic Development (BEED). He was also a co-organizer of the July 2019 Mind the Gap workshop, which brought together a group of students, university faculty, and industry professionals in the field of meteorology to address the need to better prepare meteorology students for private sector careers.

The Nicholas P. Fofonoff Early- Career Award

Eleanor Frajka-Williams

Principal Research Scientist, National Oceanography Centre, England, United Kingdom

For innovative contributions to observing and understanding the physical mechanisms responsible for variability of the Atlantic Meridional Overturning Circulation



Eleanor is a physical oceanographer who uses ocean observations to investigate ocean circulation and dynamics. She has a particular interest in problems spanning scales (from micro- to large-scale) or spheres (biogeosphere, cryosphere, atmosphere), and in methods that leverage traditional observations with new platforms and satellite data. Eleanor's current research focus is on the Atlantic meridional overturning circulation, and how it influences and responds to climate change.

The Henry G. Houghton Early-Career Award

Kerri A. Pratt

Associate Professor, University of Michigan, Ann Arbor, Michigan

For pioneering field and theoretical studies that have significantly advanced the understanding of atmospheric chemistry in the Arctic boundary layer



Kerri Pratt is an associate professor of Chemistry and Earth & Environmental Sciences at the University of Michigan, where her research focuses on atmospheric trace gases, particles, and snow in the Arctic and wintertime environments. She was previously a NOAA Climate & Global Change Postdoctoral Fellow and NSF Postdoctoral Fellow in Polar Regions Research at Purdue University. She received her Ph.D. from the University of California, San Diego and B.S. from The Pennsylvania State University.

The Clarence Leroy Meisinger Early-Career Award **Russ S. Schumacher**

Associate Professor, Colorado State University, Fort Collins,
Colorado



*For fundamental advances in our understanding of
flash-flood-producing storms and other mesoscale weather
phenomena through innovative analyses of observations and
model simulations*

Russ Schumacher is associate professor in the Department of Atmospheric Science at Colorado State University, and serves as Colorado State Climatologist and Director of the Colorado Climate Center. His research and teaching interests include mesoscale meteorology, extreme precipitation, weather systems, and Colorado's weather and climate. He received his B.S. from Valparaiso University and his M.S. and Ph.D. from Colorado State University. Russ is an editor for the AMS Journal Monthly Weather Review.

The Award for Excellence in Science Reporting by a Broadcast Meteorologist **Deborah Martorell**

Senior Meteorologist, WAPA TV, Guaynabo, Puerto Rico

*For going beyond the forecast to explain the effects of hurricanes, droughts, and earthquakes on
Puerto Rico*



Journalist and AMS Television Seal Holder with over 25 years of experience. Ambassador for NASA JPL, with multiple awards from the Overseas Press Club, and several Emmy nominations and a win in 2019 as Weather News Anchor. Senior Meteorologist for Wapa TV (Television), NotiUno (Radio) and El Nuevo Día (Newspaper). Studied communications and journalism at the University of Puerto Rico, and broadcast meteorology and geosciences at the University of Mississippi. Deborah is married and has two daughters.

The Award for Broadcast Meteorology

Ginger Zee, CBM

Chief Meteorologist, ABC News, New York City, New York

For an accomplished broadcasting career, and whose passion has inspired young women to pursue science and whose courage has advanced the cause for mental health



Ginger Zee is the Chief Meteorologist for ABC News. She fell in love with weather when she was 8. Since then she received her B.S. in Meteorology from Valparaiso University and chased almost every major natural disaster from Katrina on. Ginger is the host/writer/producer of “Food Forecast” and “It’s Not Too Late”, a NYT best selling author, mental health advocate, author STEM trilogy (Chasing Helicity), and above all, proud mom (two boys) and wife to Ben Aaron.

The Award for Distinguished Science Journalism in the Atmospheric and Related Sciences

Jonathan Mingle

Freelance Journalist, Lincoln, Vermont

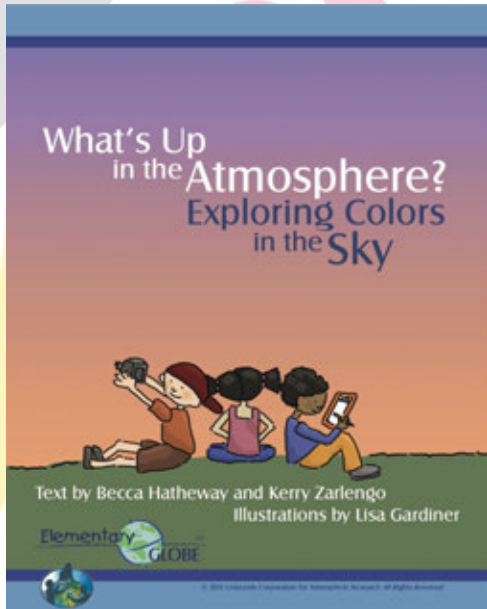


For transforming an evolving, complex topic into a gripping narrative on the process, progress, and inherent uncertainty of methane's role in the changing climate system

Jonathan, an independent journalist based in Vermont, has written about climate, energy and the environment for many publications, including The New York Times, New York Review of Books, Undark and Yale Environment 360. His 2015 book *Fire and Ice: Soot, Solidarity, and Survival on the Roof of the World* examined the health and climate impacts of black carbon pollution. Jonathan's been a Middlebury Fellow in Environmental Journalism and is a 2020 Alicia Patterson Foundation Fellow.

The Louis J. Battan Author's Award - K-12

Becca Hatheway, Kerry Zarlengo, and Lisa Gardiner



*For **What's Up in the Atmosphere? Exploring Colors in the Sky**, a delightful, comprehensive story that walks young children through the scientific process to explore aerosols and air quality measurement*

What color is the sky today? Anita, Simon and Dennis want to know why the sky isn't always blue. They learn that there's a lot more than air in the atmosphere, which can affect the colors we see in the sky. In this storybook, the GLOBE Kids investigate colors in the sky and learn how air pollution affects sky color and our health.

The Louis J. Battan Author's Award - Adult

Christopher Dewdney

Author, Freelance, Ontario, Canada

*For **18 Miles: The Epic Drama of Our Atmosphere and its Weather**, a story for broad audiences that weaves the evolution of the atmosphere with the history of civilization from its beginning to today*



Christopher Dewdney has authored five books of non-fiction and eleven books of poetry. A four-time nominee for the Governor General's Award he won first prize in the CBC Literary Competition for poetry and was awarded the Harbourfront Festival Prize. A feature documentary based on his book, *Acquainted With the Night*, garnered a Gemini Award in 2011. His most recent non-fiction title is *18 Miles*. Dewdney teaches at York University in Toronto.

Special Award

Jason P. Samenow

Weather Editor and Chief Meteorologist,
Washington Post, Washington, DC

For years of exemplary, groundbreaking journalism and outstanding articles that entertain, inform, and educate the public about weather, climate, and the environment



Jason Samenow is The Washington Post's weather editor and chief meteorologist for its weather team, the Capital Weather Gang. He also provides radio forecasts for Washington's NPR affiliate.

Special Award

Ozone Monitoring Instrument (OMI) International Team

For providing a stellar example of international collaboration to produce novel satellite observations that have transformed atmospheric chemistry research, especially air quality and health applications



The Ozone Monitoring Instrument (OMI) is a Dutch-Finnish instrument on NASA's Aura satellite (launched 2004). The international OMI team worked together to provide the scientific community with high quality data products (O₃, NO₂, SO₂, HCHO, BrO, aerosol, clouds, UV, solar irradiance) used in numerous studies worldwide covering the stratospheric ozone layer, air quality, and climate change. For analyzing this year's COVID-19 pandemic impact on air pollution, OMI's long and stable data record was essential.

The Award for Outstanding Achievement in Biometeorology

Gabriel G. Katul

Professor, Duke University, Durham, North Carolina

For major theoretical advances in formulating surface-atmosphere exchanges of mass, energy, and momentum, and distilling theory into reduced numerical models to study these exchanges



Gabriel is a past president of the D.C. Chapter of the American Meteorological Society and earned degrees in atmospheric science from the University of Virginia (BA) and University of Wisconsin-Madison (MS).

The Helmut E. Landsberg Award

Hiroyuki Kusaka

Professor, University of Tsukuba, Tsukuba, Ibaraki Japan

For advancements in urban canopy modeling, adopted by international research communities, and pioneering contributions to downscaling past, current, and future urban climates



Hiroyuki Kusaka is a professor at the Centre for Computational Sciences, University of Tsukuba, Japan. Before that, he worked at Japan's Central Research Institute of Electric Power Industry. Prof. Kusaka uses models and field data to study urban climate and local winds, and is passionate about supervising and teaching. He is best known worldwide for designing the WRF model's first urban canopy scheme. He earned a Ph.D. in science from University of Tsukuba in 2002.

The Francis W. Reichelderfer Award

Chad M. Gravelle

Techniques Development Meteorologist, NOAA/NWS Southern
Region Headquarters, Fort Worth, Texas

For leadership, dedication, and the innovative use of technology in preparing forecasters to integrate GOES-R imagery and associated products into NWS operations



Dr. Chad Gravelle is a Techniques Development Meteorologist with the Science and Technology Services Division at the National Weather Service's Southern Region Headquarters, located in Fort Worth, Texas. He develops, implements, and manages advanced techniques for preparing forecasts and warnings, with an emphasis on applying new datasets and technology to improve forecasts that drive NWS Decision Support Services. Previously, he was a GOES-R Satellite Liaison for seven years at the NWS Operations Proving Ground in Kansas City.

The Charles E. Anderson Award

Kandis Y. Boyd

Deputy Divisional Director, Division of Grants and Agreements, Office of Weather and Air Quality, National Science Foundation, Alexandria, Virginia

For career-long efforts through mentoring, education, and community service to champion diversity for women and under-represented minorities to promote a more inclusive workforce



Dr. Kandis Boyd, PMP is a member of the Federal Government's Senior Executive Service. Throughout Kandis' 26+ career she has excelled as a Science communicator, STEM advocate and mentor/advisor to several underrepresented groups. Kandis is also the 2020 Recipient of the AMS Charles E. Anderson Award, the 2020 Recipient of the Black Engineers of the Year Award for Career Achievement, and the 2020 Recipient of the National Weather Association Special Achievement Award for Lifetime Achievement.

The Henry T. Harrison Award for Outstanding Contributions by a Consulting Meteorologist

Elizabeth J. Austin, CCM

CEO and Founder, WeatherExtreme Ltd., Fallbrook, California

For serving the meteorological profession, her clients, and the Society with integrity and professionalism over the course of an exemplary career



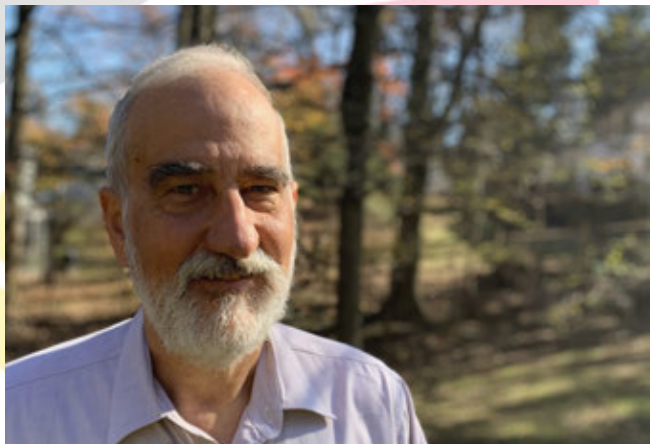
Dr. Elizabeth Austin, CCM, is CEO and Founder of WeatherExtreme Ltd. Elizabeth has over 27 years of experience in consulting meteorology including projects for NASA, the U.S. Department of Justice, United Airlines, Air France, Cal Fire and AIRBUS. She is the Chief scientist on The Perlan Project, the team that made the highest subsonic flight in history in a glider. Her projects range from forensic meteorology to weather problem-solving to specialty weather forecasting.

The Award for Outstanding Contribution to the Advance of Applied Meteorology

David P. Ruth

Division Chief, NOAA, Silver Spring, Maryland

For extraordinary leadership in developing and implementing software for primary National Weather Service systems, including the Interactive Forecast Preparation System and National Digital Forecast Database



David Ruth works at the Meteorological Development Laboratory of the National Weather Service. He played a lead role in the design, development, and testing of forecast preparation software deployed at forecast offices nationwide. He oversaw the implementation of the National Digital Forecast Database, which harvests forecaster-prepared grids for use by the weather community. Presently, Mr. Ruth is prototyping use of the public cloud to visualize probabilistic information from the National Blend of Models.

The Syukuro Manabe Climate Research Award

Joyce E. Penner

Professor, University of Michigan, Ann Arbor, Michigan

For scientific leadership in merging atmospheric aerosols and their chemistry with climate models to understand the breadth of human activities driving climate change



Joyce E. Penner is the Ralph J. Cicerone Distinguished University Professor of Atmospheric Science in the Department of Climate and Space Sciences and Engineering at the University of Michigan. Dr. Penner's research focuses on improving climate models through the addition of interactive chemistry and the description of aerosols and their direct and indirect effects on the radiation balance in climate models.

The Joanne Simpson Tropical Meteorology Research Award

Kerry H. Cook

Professor, Jackson School of Geosciences, The University of Texas at Austin, Austin, Texas

For expanding our knowledge of the physics and dynamics of tropical monsoon regimes, especially the West African Monsoon and related phenomena, using observations and models



Kerry Cook is a professor at The University of Texas at Austin. She began her career at NOAA's Geophysical Fluid Dynamics Lab, followed by a lengthy professorship at Cornell University. Dr. Cook's research centers on understanding the climates of tropical continents, especially Africa, and leveraging that understanding into reliable decadal-scale projections using numerical modeling and observational analysis. Her teaching includes graduate courses in Climate Dynamics and Atmospheric Dynamics, and an undergraduate course on Global Warming.

The Kenneth C. Spengler Award

Robert G. Goldhammer

IAEM Liaison, NWS and WMO WeatherReady Nation(s) Programs,
International Association of Emergency Managers



For forging extensive collaboration and partnerships linking emergency management and the weather, water, and climate enterprise

Mr. Goldhammer's career in public safety began in 1969. Bob has been a certified emergency manager through the International Association of Emergency Managers (IAEM) since 1994. Bob has a Masters in Teachers in Geosciences. He currently does a variety of activities related to emergency preparedness. Bob is the IAEM liaison to the National Weather Service WeatherReady Nations program. He is the former chairperson of the AMS Emergency Management Committee.

The Robert H. and Joanne Simpson Mentorship Award

Daphne LaDue

Senior Research Scientist, University of Oklahoma, Norman, Oklahoma



For generous, thoughtful, and caring mentorship to students and their supervisors during more than 20 years of directing the Oklahoma Research Experience for Undergraduates program

Daphne LaDue is a meteorologist-turned-social scientist who, as one of her funded projects, has run The University of Oklahoma's NSF-funded weather-related Research Experiences for Undergraduates program since 2001. Over 200 U.S. undergraduate students have gone through the program under her directorship, benefitting from her unique career path and innate curiosity about our disciplines. One of her greatest satisfactions is helping undergraduates learn about career opportunities to help them find a good career fit.

The Edward N. Lorenz Teaching Excellence

Award **Sonia G. Lasher-Trapp**

Professor, University of Illinois, Urbana, Illinois

For creating active learning and welcoming classroom environments, expanding student experiences, and advocating for women in science



Sonia Lasher-Trapp is a Blue Waters Professor in the Department of Atmospheric Sciences at the University of Illinois. Her research interests include cloud physics, climate change and extreme weather, and improving science education. She has a B.S. from Saint Louis University, and a M.S. and Ph.D. from the University of Oklahoma. She was an ASP postdoc at NCAR, and was on the faculty of Purdue University before joining the University of Illinois.

The Cleveland Abbe Award for Distinguished Service to the Atmospheric and Related Sciences

Frederick H. Carr

Professor Emeritus, School of Meteorology, University of Oklahoma, Norman, Oklahoma



For tireless, selfless, wide-ranging service to the community that has had an immeasurable impact on the nation's weather, water, and climate efforts

Frederick Carr is the McCasland Foundation Presidential Professor Emeritus in the School of Meteorology at OU, where he served as Director for 14 years and received the Regents Award for Superior Professional and University Service. He is an AMS Fellow and served as AMS President in 2016. He is also a Founder of COMET, served on the UCAR Board of Trustees, and co-chaired several modeling advisory committees for NCEP, NWS and NOAA.

The Charles Franklin Brooks Award for Outstanding Service to the Society

Xubin Zeng

Professor and Director, Climate Dynamics and Hydrometeorology
Center, University of Arizona, Tucson, Arizona



For skillful and effective service in senior leadership roles that has materially improved the Society's meetings and other activities

Dr. Xubin Zeng is the Agnese N. Haury Chair in Environment, Professor of Atmospheric Sciences, and Director of the Climate Dynamics and Hydrometeorology Center at the University of Arizona. He served on the AMS Council and its Executive Committee, and co-chaired the 2019 AMS Annual Meeting with 3,800 attendees. His awards include AMS and AAAS Fellowship and NSF Special Creativity Award. He received his Ph.D. in 1992 from Colorado State University.

The Warren Washington Research and Leadership Medal **James W. Hurrell**

Professor, Colorado State University, Fort Collins, Colorado

For highly influential climate system research, and a distinguished and impactful record of national and international leadership



James (Jim) W. Hurrell is a Professor and the Scott Presidential Chair of Environmental Science and Engineering at Colorado State University. Jim's research has centered on empirical and modeling studies and diagnostic analyses to better understand climate variability and climate predictability. He has most recently served as the President of the Atmospheric Sciences Section of the American Geophysical Union (AGU). He is a Fellow of the Royal Meteorological Society, the AGU, and the AMS.

The Jule G. Charney Medal

Clara Deser

Senior Scientist, NCAR, Boulder, Colorado

For fundamental insights into the structure, genesis, and predictability of decadal variability in the atmosphere, ocean, and cryosphere



Clara Deser is a senior scientist and head of the Climate Analysis Section at the National Center for Atmospheric Research. She studies global climate variability and change in observations and models, with an emphasis on interactions among the atmosphere, ocean, and sea ice. She received her B.S. degree from MIT and her Ph.D. from the University of Washington, and was a Research Associate at the University of Colorado before joining NCAR.

The Sverdrup Gold Medal

Sarah T. Gille

Professor, Scripps Institution of Oceanography, University of California San Diego, San Diego, California

For seminal work on ocean circulation and air-sea interaction in the Southern Ocean and their impact on the cryosphere, ocean ecosystems, and Earth's climate



Sarah Gille is a professor of physical oceanography at Scripps Institution of Oceanography, University of California San Diego. Her research interests focus on the Southern Ocean, air-sea interaction, and upper-ocean processes. In her work, she draws on a range of tools, including remote sensing and autonomous float observations. Gille received a B.S. in physics from Yale University and a Ph.D. in physical oceanography from the MIT-Woods Hole Oceanographic Institution Joint Program.

The Verner E. Suomi Technology Medal

Eric A. Smith

Retired Professor / NASA Mission Scientist / CRCES Senior Scientist,
Tallahassee, Florida

For innovative technological achievements that fundamentally changed the use of satellite observations in meteorology and hydrometeorology



Dr. Smith received undergraduate degrees in Mathematics & Comparative Literature from UW-Madison, obtaining his MS/PhD degrees from CSU. He served as Research Specialist at Prof. Suomi's Space Science & Engineering Center; Research Faculty at CSU; Professor at both KAAU-Jeddah & FSU; Director of NASA-MSFC/UAH Global Hydrology & Climate Center; Assoc. Faculty at both UVa & UMD; initial GPM Mission Scientist at NASA/GSFC; Senior Scientist at CRCES (non-profit) and following retirement in 2015, he manages EAS Enterprises at home in Tallahassee.

The Henry Stommel Research Medal

Bo Qiu

Professor, University of Hawaii at Manoa, Honolulu, Hawaii

For seminal contributions using observations, models, and theory to understand the dynamics of the North Pacific Ocean circulation and its role in the climate system



Bo Qiu is a Professor at the Department of Oceanography, University of Hawaii at Manoa. He received his PhD in Physical Oceanography from Kyoto University (1990). His scientific interests include large-scale ocean circulation variability, mid-latitude air-sea interaction, geophysical fluid dynamics, and satellite oceanography. He has published more than 160 papers in peer-reviewed journals and was contributing author to both IPCC 4th and 5th Assessment Reports.

The Hydrologic Sciences Medal

Soroosh Sorooshian

Distinguished Professor, University of California Irvine, Irvine,
California



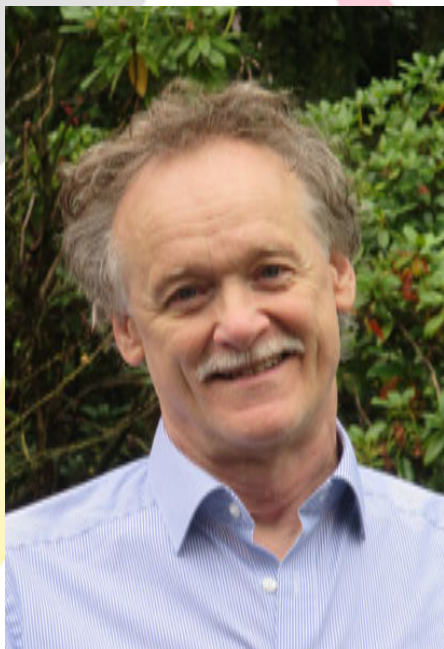
For ingenious, groundbreaking work on surface hydrology and the remote sensing of precipitation that has profoundly impacted the field of hydrometeorology

Soroosh Sorooshian is a Distinguished Professor of Civil & Environmental Engineering and Earth system science at the University of California, Irvine and Director, Center for Hydrometeorology and Remote Sensing (CHRS). His expertise is in hydrology, water resources systems engineering and remote sensing applications in hydrology. Sorooshian is a member of NAE; Fellow, AMS, AGU, IUGG, IAA, TWAS, IWRA. He served ten years as Chair of the Scientific Steering Group of the World Climate Research Programme.

The Carl-Gustaf Rossby Research Medal

David S. Battisti

Professor, University of Washington, Seattle, Washington



For original, insightful contributions to understanding climate variability for phenomena ranging from the El Niño/Southern Oscillation and the Pacific Decadal Oscillation to paleoclimate

David's research focus is on climate variability, including ENSO, abrupt climate change during the last glacial period, orbitally-induced changes in monsoons, recent trends in polar climate, and the impact of climate variability and climate change on global food production. He received his MS and PhD from the University of Washington. David is a Fellow of the AMS, AGU, and the Food Security Institute at Stanford University, and was named the Carnegie Centennial Professor of Scotland.

Honorary Member

William H. Hooke



Associate Director and Senior Policy Fellow,
American Meteorological Society, Washington DC

William H. Hooke has advanced atmospheric science, fostered US and international efforts to understand and reduce disaster risk, and nurtured career development of hundreds of future leaders across the geosciences, receiving the Joanne Simpson Mentorship Award in 2014. He authored *Living on the Real World* (AMS, 2014), also posting some 1000 times on his blog by the same name. He was elected a member of the American Philosophical Society in 2006.

Honorary Member

Florence Rabier

Director-General, European Centre for Medium-Range
Weather Forecasts, Reading, United Kingdom



Dr Florence Rabier is Director-General at ECMWF. She is an internationally recognised expert in Numerical Weather Prediction, whose leadership has contributed to delivering major changes at ECMWF and Météo-France. She played a key role in implementing the cutting-edge 4D-Var data assimilation method at ECMWF, and in advancing the use of satellite observations at Météo-France. She has been awarded the Légion d'Honneur, and the Great Prize of the Air and Space Academy for the IASI project.

Honorary Member

Sir Robert Watson



Professor, University of East Anglia, Norwich, United Kingdom

Sir Robert Tony Watson, CMG, FRS Former scientific advisor in OSTP, White House; chief scientist, World Bank; chief scientific advisor, UK DEFRA; and strategic director for the Tyndall Center, UEA, UK. Chaired, co-chaired or directed the WMO/UNEP stratospheric ozone depletion assessments, Global Biodiversity Assessment, Millennium Ecosystem Assessment, IPCC, IAASTD, and IPBES, and UK National Ecosystem Assessment and its Follow-on. Fellow UK Royal Society and Member American Philosophical Society; awarded the Asahi Glass Blue Planet Prize