

96TH ANNUAL REVIEW, NEW FELLOWS, AND FEATURED AWARDS

Sunday, 10 January 2016



ELECTED FELLOWS**Jeffrey Anderson**

After a postdoc at NCEP's Climate Analysis Center, Jeffrey Anderson spent the next decade at NOAA's GFDL building atmospheric models, developing software infrastructure for climate system models, and exploring ensemble prediction. Since 2001 he has been a scientist at NCAR, leading development of

the Data Assimilation Research Testbed, a community software facility for ensemble data assimilation. He has developed a number of algorithms that facilitate high-quality ensemble data assimilation for geophysical problems.

**Linnea M. Avallone**

Linnea Avallone is a chemist specializing in the development of instrumentation for measuring atmospheric trace gases. She has participated in more than 20 field campaigns to investigate ozone chemistry, the impact of rocket emissions, and cirrus cloud formation. Dr. Avallone has worked on several initiatives to foster inclusivity

and diversity in science. She is manager of NSF's Lower Atmosphere Observing Facilities and serves on interagency groups for research aviation and Earth observation.

ELECTED FELLOWS



David C. Bader

Dave Bader is the Climate Program Leader at Lawrence Livermore National Laboratory. He has been a researcher and project leader at three Department of Energy (DOE) Laboratories and has assisted DOE Office of Science leadership in program development, including serving as Advisor to the

Office of Science Director. Bader has held memberships on the AMS Applied Climatology Committee and Board on Data Stewardship. He received his Ph.D. from Colorado State University in 1985.



Lidia Cucurull

Lidia Cucurull received her Ph.D. in Physics on the Use of Global Navigation Satellite Systems in Numerical Weather Prediction. Since then, she has worked at UCAR, NASA, and NOAA. She has won several national awards, including the UCAR Outstanding Scientific and Technology Advancement Award and the NOAA David

Johnson Award. She currently leads the Global Observing Systems Analysis (GOSA) Group within the NOAA ESRL Global Systems Division and is the NOAA Program Scientist for the COSMIC-2 mission.

ELECTED FELLOWS**Christopher A. Davis**

Chris Davis received his Ph.D. in meteorology from MIT in 1990. After a fellowship in the NCAR Advanced Study Program (ASP), he became an NCAR Scientist and later the ASP Director. He now directs the Mesoscale and Microscale Meteorology Laboratory (MMM) of NCAR. Chris has published more than 100 peer-

reviewed papers in the areas of cyclone dynamics, mesoscale convective systems, orographic flows, forecast verification techniques, and tropical cyclones.

**Rong Fu**

Rong Fu is a professor in the Department of Geological Sciences, the University of Texas at Austin. She studies the mechanisms that control rainfall seasonality and variability over the Americas with focus on the role of land-atmospheric interaction. She has developed a drought early warning for the U.S. Great Plains with water

resource managers. Her earlier research addresses tropical convection and its transport of water vapor and pollutants over the global tropics and Asian monsoon-Tibetan Plateau.

ELECTED FELLOWS



Henry E. Fuelberg

Henry Fuelberg is a professor of meteorology at Florida State University. He has participated in 10 NASA airborne field projects, performed research to better forecast lightning, and worked with the NWS to improve various aspects of their forecasts. He has been the major professor for 105 theses and dissertations and

won numerous awards at FSU for outstanding graduate and undergraduate teaching and mentoring. He was the recipient of the 2011 AMS Teaching Excellence Award.



Rolando Garcia

Rolando R. Garcia is a Senior Scientist at the National Center for Atmospheric Research. He holds degrees from New York University (Physics) and the University of Miami (Atmospheric Science). His research interests include ozone and other minor species, atmospheric waves and their effects on atmospheric

circulation and chemistry, and numerical modeling of dynamics and chemistry. He has served twice as editor of JAS and was named Haurwitz Memorial Lecturer for 2010 by the AMS.

ELECTED FELLOWS**John R. Gyakum**

John Gyakum is the Canada Steamship Lines Professor and Chair of the Department of Atmospheric and Oceanic Sciences at McGill University. Since receiving his Ph.D. from MIT in 1981, he has published more than 100 refereed papers and has supervised more than 50 graduate students. His current research interests focus

on Arctic airmass formation, extreme freezing rain events, and oceanic cyclogenesis processes. He is a Fellow of the Canadian Meteorological and Oceanographic Society.

**Harry H. Hendon**

Harry Hendon is a Senior Principal Research Scientist at the Bureau of Meteorology, where he has led the Climate Processes Team since 2001. His main focus is on developing and improving intraseasonal to seasonal climate forecasts using coupled climate models. He studied Meteorology as an undergraduate at UCLA

and received a Ph.D. in Atmospheric Science at the University of Washington in 1985. He previously spent 13 years at the Climate Diagnostics Center in Boulder.

ELECTED FELLOWS



Albert A.M. Holtslag

Albert A.M. (Bert) Holtslag is a Senior Professor of Meteorology at Wageningen University, the Netherlands. His expertise is on atmospheric boundary layers; land-atmosphere interactions; and parameterization studies for weather, air quality, and climate. He also cochairs the GEWEX Atmospheric

Boundary Layer Study (GABLS). In the past he was affiliated with Utrecht University, the National Center for Atmospheric Research (NCAR) in Boulder, and the Royal Netherlands Meteorological Institute (KNMI) in De Bilt.



Anthony Illingworth

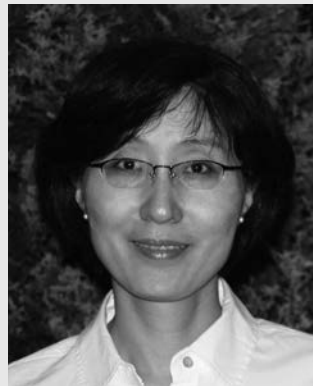
Anthony Illingworth obtained his Ph.D. at Cambridge University in 1972 studying lightning. While at the University of Manchester, he was converted to radar meteorology by a chance visit to Chilbolton on 6 July 1983, where was able to steer the 25m dish and observe values of differential reflectivity of

8.3dB. Since 1993 he has been at the University of Reading using polarisation radar to improve rainfall estimates. He is lead European scientist on the EarthCARE satellite to be launched in 2018.

ELECTED FELLOWS**George Kiladis**

George Kiladis is a research meteorologist at the Physical Sciences Division of the NOAA Earth System Research Laboratory. His work is focused on the dynamics of the tropical atmosphere and ocean, through comparisons of observations with theory and models. His interests include equatorial waves, tropical–

extratropical interaction, and the coupling between convection and large-scale circulations. Dr. Kiladis has served on several AMS Committees and was also an editor of the Journal of the Atmospheric Sciences.

**Sukyoung Lee**

Sukyoung Lee is a professor of Meteorology at The Pennsylvania State University. Much of her research focus has been to understand the general circulation of the atmosphere. Her research topics include atmospheric zonal jets, storm tracks, planetary-scale overturning circulations, tropical waves,

and troposphere–stratosphere exchange. From a theoretical perspective, she has also performed Arctic climate research since 2011. She is currently serving as an editor of the Journal of the Atmospheric Sciences.

ELECTED FELLOWS



Xu Liang

Xu Liang is a William Kepler Whiteford Professor at the University of Pittsburgh, Pittsburgh. Her research interests include surface hydrology; land surface model development; data assimilation; data analytics; and integrated data and model system development through building cyberinfrastructure,

sensors, and wireless sensor networks for the hydrological sciences. She received a Ph.D. in hydrology from the University of Washington and completed postdoctoral work at Princeton University. Xu is the recipient of the 2014 Carnegie Science Environmental Award.



Norman G. Loeb

Dr. Norman G. Loeb is a Physical Scientist in the Science Directorate at NASA Langley Research Center. He is the Principal Investigator of NASA's Clouds and the Earth's Radiant Energy System (CERES) project, which observes Earth's radiation budget from space. Dr. Loeb has over 110 peer-reviewed

publications aimed at better understanding climate variability and change, Earth's energy budget, clouds, and aerosols. He received his Ph.D. from McGill University in Montreal, Canada.

ELECTED FELLOWS**James A. Moore**

James A. Moore, a 30+ year veteran Project Manager with the National Center for Atmospheric Research, has managed and participated in some of the most significant atmospheric science field projects of recent decades. He has worked with the top atmospheric scientists in the world to design and conduct

observational programs to better understand our weather and climate. He has provided data management support to NSF Arctic scientists and projects for the last two decades.

**Vernon R. Morris**

Dr. Morris is a Professor in the Department of Chemistry and jointly appointed in Atmospheric Sciences and Environmental Engineering at Howard University. He is the Program Director of the Atmospheric Sciences and Director of the NOAA Center for Atmospheric Sciences. Dr. Morris' research activities

include field measurements of aerosols and trace gases, laboratory studies of aerosol chemistry and microphysics, and environmental chemistry. Dr. Morris is the proud father of three daughters and the favorite uncle of six nieces and nephews.

ELECTED FELLOWS



Barry Lee Myers

Barry Lee Myers is CEO of AccuWeather, Inc. Recognized as a global expert in public/private relationships in the weather and weather media industries, Myers served as advisor to three directors of the U.S. National Weather Service. He has been an invited speaker at the World Meteorological Organization, World Federation

of Scientists, the United States Congress, and other venues. He holds a J.D. from Boston University Law School and served on the Graduate faculty of Penn State University.



Bette L. Otto-Bliesner

Bette Otto-Bliesner is a Senior Scientist at the National Center for Atmospheric Research. She is a nationally and internationally recognized leader in integrating climate models and proxy indicators to dissect the mechanisms that explain past climates, from the pre-Quaternary and glacial–interglacial to the last

millennium, and address their relevance to future change. She has served on numerous international and national committees, including two IPCC assessment reports. Bette received her B.S., M.S., and Ph.D. in Meteorology from the University of Wisconsin–Madison.

ELECTED FELLOWS**Robert S. Pickart**

Bob Pickart is a senior scientist at the Woods Hole Oceanographic Institution. He began his sea-going career in the Gulf Stream and has been moving north ever since. Currently he works in both the Pacific and Atlantic sectors of the Arctic Ocean studying shelf–basin exchange, deep water formation and circulation,

and air–sea interaction. When not at sea, he enjoys outdoor activities, especially Nordic skiing. He and his wife Anne have five children.

**Andrew Pitman**

Andy Pitman is a professor in climate science at the University of New South Wales and Director of the ARC Centre of Excellence for Climate System Science. His research extends across climate modeling, climate change, climate impacts, and land-cover change. He was a lead author on the Intergovernmental Panel

on Climate Change Third and Fourth Assessment Reports, and he is a review editor of the Fifth Assessment Report.

ELECTED FELLOWS



Steven Platnick

Steven Platnick is Deputy Director for Atmospheres in the Earth Science Division at the NASA Goddard Space Flight Center, a position he's held since January 2015, and the NASA Earth Observing System Senior Project Scientist (since 2008). His research includes theoretical/experimental studies of cloud and aerosol

remote sensing. He has participated in numerous airborne field campaign studies and leads the NASA algorithm development efforts for the MODIS and S-NPP VIIRS cloud optical and microphysical products.



Roger M. Samelson

Roger Samelson is a professor of Oceanic and Atmospheric Sciences in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University. His research focuses on the physics, dynamics, and interaction of the ocean and atmosphere, with emphasis on the coastal, mesoscale, and large-scale regimes and on

simplified models of fundamental processes. He is the author of a text on large-scale ocean circulation theory and a former editor of the Journal of Physical Oceanography.

ELECTED FELLOWS**Chris Snyder**

Snyder is a Senior Scientist at the National Center for Atmospheric Research, where he leads the Data Assimilation Section of the Mesoscale and Microscale Meteorology Laboratory. He has served on AMS conference committees and as editor of the Journal of the Atmospheric Sciences. He is a partially reformed

atmospheric dynamicist, whose current research interests include data assimilation, ensemble prediction, quantifying systematic errors in weather and climate models, and mesoscale dynamics.

**Kathryn D. Sullivan**

Dr. Kathryn Sullivan, Administrator of NOAA, plays a central role in directing work on weather, water, and climate science and services. Previously, Dr. Sullivan served as Director for a center for math and science education policy at The Ohio State University and President/CEO of a leading science museum. She was one

of the first female astronauts at NASA and the first American woman to walk in space. She holds a doctorate in geology from Dalhousie University.



J. (Vivek) Vivekanandan

Vivek's research is centered on his pioneering effort to characterize the microphysics of clouds and precipitation using remote sensors. He is among a handful of researchers in the international community who mastered the theory, modeling, and observational aspects of atmospheric remote sensing. He has made

significant contributions in applied research and technology transfer to the user community. The breadth of his research and development includes polarimetric radar, dual-wavelength radar, phased array radar, lidar, and microwave radiometer.



Minghua Zhang

Minghua Zhang is professor of Atmospheric Sciences, Dean and Director of the School of Marine and Atmospheric Sciences, Stony Brook University, State University of New York (SUNY). His research is on climate modeling, cloud-climate feedback processes, and integration of atmospheric

field experimental data for the development and evaluation of physical parameterizations in general circulation models.

THE AWARD FOR OUTSTANDING CHAPTER OF THE YEAR

WEST CENTRAL FLORIDA

Tampa, Florida

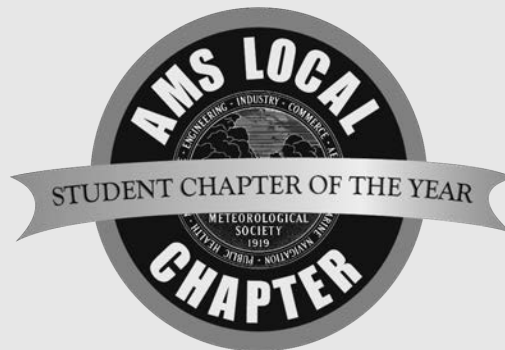


For its strong membership programs and active community involvement, including educational workshops for teachers and becoming a Weather-Ready Nation Ambassador.

THE AWARD FOR OUTSTANDING STUDENT CHAPTER OF THE YEAR

OHIO UNIVERSITY

Athens, Ohio



For its commitment to community service, including hosting an annual symposium open to the public, support of StormFest, and outreach to local elementary schools.

**THE AWARD FOR AN EXCEPTIONAL
SPECIFIC PREDICTION**

NOAA NATIONAL WEATHER SERVICE FORECAST
OFFICE, BUFFALO, NEW YORK



For unprecedented forecast accuracy, detail, and warning lead time for the record-breaking 17–21 November 2014 lake-effect snowfall event in western New York.

**THE AWARD FOR DISTINGUISHED
SCIENCE JOURNALISM IN THE
ATMOSPHERIC AND RELATED SCIENCES**

IAN JAMES

Reporter, *The Desert Sun*, Palm Springs, California.



For weaving together science, history, economics, and data analysis to create a comprehensive, compelling, and engaging picture of the prolonged drought in the southwestern United States.

Ian James is a reporter who writes about water, climate change, and environmental issues for *The Desert Sun* in Palm Springs. He is a member of the newspaper's investigative team and his work also regularly appears in *USA Today*. His recent projects include a series about the impacts of groundwater depletion in the United States and other parts of the world. James previously worked as a foreign correspondent and bureau chief for the Associated Press.

THE LOUIS J. BATTAN AUTHOR'S AWARD

ADAM H. SOBEL

Professor, Department of Applied Physics, Columbia University, New York, New York.



For Storm Surge: Hurricane Sandy, Our Changing Climate, and Extreme Weather of the Past and Future, which makes accessible the sophisticated science behind Hurricane Sandy, highlighting the critical connection of severe weather prediction to our lives and a warming world.

Adam Sobel is a professor at Columbia University's

Lamont-Doherty Earth Observatory and School of Engineering and Applied Sciences. He studies the dynamics of climate and weather phenomena, particularly in the tropics, and directs the Columbia Initiative on Extreme Weather and Climate. In recent years Sobel has received awards from the American Meteorological Society, the AXA Research Fund, and the American Geophysical Union. He is author or coauthor of over 100 peer-reviewed scientific articles.

THE LOUIS J. BATTAN AUTHOR'S AWARD K-12

EMILY MORGAN

Author, NSTA Press, Washington, D.C.



For an engaging, inquiry-based book, Next Time You See a Sunset, which stimulates readers' sense of wonder as they learn about our atmosphere by observing the Sun.

Emily Morgan is the author of the *Next Time You See* nonfiction picture-book series and coauthor of the *Picture-Perfect Science Lessons* series, both

from the NSTA Press. She is a former elementary and middle school science teacher. Emily has a bachelor's degree in education from Wright State University and a master's in education from the University of Dayton. Her work focuses on the integration of science and literacy in the elementary grades.

EDITOR'S AWARD*Bulletin of the American Meteorological Society***MARK W. GOVETT**

Chief, High Performance Computing Section, NOAA Earth System Research Laboratory, Boulder, Colorado.



For outstanding reviews that improved the quality and accessibility of manuscripts relating to high-performance computing applications.

Mark leads the High Performance Computing Section at NOAA's Earth System Research Laboratory. The group supports development, porting, and parallelization of weather

prediction models to high-performance computers and conducts research on new and emerging computing architectures including GPU and MIC processors. Mark received his master's degree in Computer Science in 1992 from the University of Colorado. He has a background in compiler development and has created two directive-based Fortran compilers.

EDITOR'S AWARD*Journal of Hydrometeorology***VIVIANA MAGGIONI**

Assistant Professor, George Mason University, Fairfax, Virginia.



For very thorough reviews of several manuscripts, including excellent insights on precipitation error modeling.

Viviana Maggioni is an assistant professor of Environmental and Water Resources Engineering at George Mason University. Dr. Maggioni received her Ph.D. degree in Environmental Engineering from the

University of Connecticut in 2012 and her B.S. and M.S. degrees from the Politecnico of Milan, Italy, in 2003 and 2006, respectively. Her research activity focuses on the analysis and validation of Earth observations—including satellite retrievals—for hydrologic applications, stochastic error modeling, and land data assimilation systems.

EDITOR'S AWARD
Journal of Hydrometeorology

W. TROY BAISDEN

Senior Scientist, Isotope Biogeosciences, National Isotope Centre, GNS Science, Lower Hutt, New Zealand.



For a series of rigorous and detailed reviews on an isotope modeling manuscript, resulting in a substantially improved paper.

Troy Baisden started his career with an Earth Sciences degree from Dartmouth College, where he published research on the delivery of trace elements and acidity in snowfall. He earned his Ph.D. in the Department

of Environmental Science, Policy and Management at the University of California, Berkeley, and has worked for the last 15 years in New Zealand on isotope techniques to constrain carbon, nitrogen, and water dynamics.

EDITOR'S AWARD
Weather and Forecasting

NATHAN M. HITCHENS

Assistant Professor, Department of Geography, Ball State University, Muncie, Indiana.



For consistently providing many in-depth and insightful reviews that have maintained the quality of the journal.

Nathan Hitchens is an assistant professor at Ball State University. He received his Ph.D. from Purdue and completed a postdoctoral fellowship through the National Research Council at the National Severe Storms

Laboratory. His research interests include forecast evaluation and verification, hazardous and severe weather, weather and society, and heavy and extreme precipitation.

EDITOR'S AWARD
Journal of Climate

JUSTIN J. WETTSTEIN

Assistant Professor, College of Earth, Ocean, and Atmospheric Sciences, Oregon State University, Corvallis, Oregon.



For consistently outstanding and insightful reviews of manuscripts on atmospheric and climate dynamics.

Justin is an assistant professor in the College of Earth, Ocean, and Atmospheric Sciences at Oregon State University and also an adjunct associate professor in Large-Scale Atmospheric Dynamics with the Geophysical Institute

at the University of Bergen in Norway. Justin's research is concentrated on the wave-mean flow dynamics of large-scale atmospheric variability patterns and on their interactions with other climate system components, including how anthropogenic forcing projects onto midlatitude jets and storm tracks.

EDITOR'S AWARD
Journal of Climate

BRUCE T. ANDERSON

Professor and Associate Chair, Department of Earth and Environment, Boston University, Boston, Massachusetts.



For frequent and consistently high-quality reviews of manuscripts on various topics in climate dynamics.

Bruce T. Anderson is a professor in Boston University's Department of Earth and Environment. He has also been a Visiting Fellow in The Frederick S. Pardee Center for the Study of the Longer-Range Future, a Grantham

Institute for Climate Change Visiting Fellow, a Royal Society Visiting Scientist, a National Research Council Fellow, and a NOAA Visiting Scientist Fellow. His research interests include global and regional climate variability and change, atmosphere and ocean dynamics, and hydrology.

EDITOR'S AWARD*Journal of Atmospheric and Oceanic Technology***HASSAN AL-SAKKA**

Scientist, Radar and Meteorology,
Selex ES GmbH, Neuss, Germany.



For generously agreeing to review a large number of manuscripts and returning clear reviews promptly.

Dr. Hassan Al-Sakka received his Ph.D. in Radar and Meteorology from University of Versailles, France, a Masters in Technology and Information Systems from University of Technology of Compiègne, France, and an Engineering

Diploma in Telecommunication and Electronics from Lebanese University, Lebanon. He currently works at Selex ES GmbH as a scientist in radar and meteorology. Dr. Al-Sakka worked as a researcher for four and a half years in the Radar R&D department at Meteo France.

EDITOR'S AWARD*Journal of Atmospheric and Oceanic Technology***ANDREW STEWART**

Assistant Professor, Department of Atmospheric and Oceanic Sciences, University of California, Los Angeles, California.



For providing careful, insightful, and constructive reviews of several papers for multiple editors.

Andrew Stewart is an assistant professor in the Department of Atmospheric and Oceanic Sciences at UCLA. His research explores the physical processes that support the ocean circulation, particularly around the margins of Antarctica and

in the abyssal ocean, via a combination of theoretical analysis and numerical simulations. Major themes include the dynamics of mesoscale eddies, exchanges of water masses across the Antarctic shelf break, and ventilation of the abyssal ocean via Antarctic Bottom Water production.

EDITOR'S AWARD**Monthly Weather Review****THOMAS J. GALARNEAU**

Assistant Professor, Department of Atmospheric Sciences,
University of Arizona, Tucson, Arizona.



For an impressive ability to deliver a large number of high-quality reviews with short deadlines.

Tom received his Ph.D. in atmospheric science in 2010 from the University at Albany. In August 2010, he began postdoctoral study at NOAA/ESRL. In June 2011, he joined NCAR as a project scientist I in the MMM Laboratory. After

four years at NCAR, Tom joined the faculty of the University of Arizona in August 2015. His research interests are in synoptic–dynamic and mesoscale meteorology, with an emphasis on dynamics and prediction of rotating convective systems.

EDITOR'S AWARD**Monthly Weather Review (and) Weather and Forecasting****MATTHEW R. KUMJIAN**

Assistant Professor, Department of Meteorology,
Pennsylvania State University, University Park, Pennsylvania.



For providing timely, penetrating, and constructive reviews that have ensured the publication of high-quality research.

Matt received his Ph.D. in Meteorology from the University of Oklahoma in 2012. Afterwards, he served as an Advanced Study Program postdoctoral fellow at NCAR. He has been at Penn State since

January 2014, where he uses radar observations and numerical models to study cloud and precipitation microphysics in high-impact weather events such as severe convective storms and winter storms. In addition, Matt is the principal violist in the Nittany Valley Symphony Orchestra.

EDITOR'S AWARD*Journal of Physical Oceanography***JONATHAN NASH**

Professor, College of Oceanic and Atmospheric Sciences,
Oregon State University, Corvallis, Oregon.



For contributing a prolific number of reviews possessing substantial physical insight and logical clarity across an array of disciplines.

Jonathan Nash is a professor of physical oceanography at Oregon State University, Corvallis. He seeks to use novel instruments and analytical techniques to understand the dynamics of small-scale

physical processes, internal waves, and turbulence, and to quantify their effects on the overlying flow. His studies span from deep ocean to coastal internal tides, river plumes, nonlinear internal waves, small-scale near-surface processes in the tropics, and high-latitude ice-ocean interactions.

EDITOR'S AWARD*Journal of Applied Meteorology and Climatology***TANYA L. SPERO**

Research Physical Scientist, Atmospheric Modeling and
Analysis Division, U.S. Environmental Protection Agency,
Research Triangle Park, North Carolina.



For timely, detailed and thought-provoking reviews that led to significant manuscript improvements.

Tanya Spero (formerly Tanya Otte) develops and applies regional-scale meteorological models for operations and research. Her current research focuses on improving regional climate modeling techniques to examine the impacts of climate

change on air quality, human health, and ecosystems. She holds degrees from Rutgers and Penn State. A federal government employee for 20 years, Tanya is currently working for the U.S. EPA. She is also the proud Mom of three active boys.

EDITOR'S AWARD
Journal of the Atmospheric Sciences

EDWIN P. GERBER

Associate Professor, Courant Institute of Mathematical Sciences, New York University, New York, New York.



For clear, insightful, and well-reasoned reviews on a broad range of topics, from basic fluid dynamics to climate modeling.

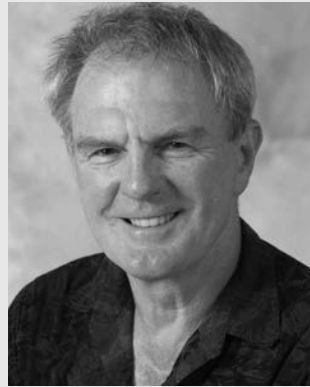
Edwin Gerber is an associate professor at the Courant Institute of Mathematical Sciences at New York University. His research focuses on the dynamics and circulation of the atmosphere, with the goal of better understanding

the climate system and improving our ability to simulate and predict it. He is particularly interested in links between natural variability and climate change, and the use of idealized models to connect theory with the real atmosphere.

EDITOR'S AWARD
Weather, Climate, and Society

PETER J. WEBSTER

Professor of Earth and Atmospheric Sciences, Georgia Institute of Technology, Atlanta, Georgia.



For accepting difficult and complex assignments and helping ensure the scientific accuracy of the final papers.

Peter J. Webster is a Professor of Earth and Atmospheric Sciences at the Georgia Institute of Technology, Atlanta, Georgia. His main interests are the atmospheric and oceanic dynamics of the tropics with a particular interest in monsoons.

During recent years he has worked on developing extended prediction schemes for intraseasonal variations of the monsoons and hazards in developing countries especially slow-rise floods and tropical cyclones.

EDITOR'S AWARD

Weather, Climate, and Society

WALKER S. ASHLEY

Associate Professor, Meteorology Program, Department of Geography, Northern Illinois University, DeKalb, Illinois.



For providing an outstandingly thorough, specific, and thoughtful review, ensuring the highest scientific standards of WCAS are upheld.

Dr. Walker Ashley is an atmospheric scientist and physical geographer with interests in hazards and societal interactions, severe storms, and applied meteorology. As a professor in the Meteorology

Program at Northern Illinois University, he teaches courses in meteorology, climatology, and disaster science. His research focuses on quantifying how human exposure contributes to weather-related disasters, how urbanization and other land uses influence thunderstorm formation, severe thunderstorm climatologies, and weather hazard impacts on transportation systems.

THE SPIROS G. GEOTIS STUDENT PRIZE

CAMERON KLEINKORT

Graduate Research Assistant, Electrical and Computer Engineering Department at Colorado State University, Fort Collins, Colorado.



For his paper, "3D Shape Reconstruction of Snowflakes from Multiple Images, Meshing, Dielectric Constant Estimation, Scattering Analysis, and Validation by Radar Measurements."

Cameron Kleinkort is currently pursuing his M.S. in electrical engineering in the Electromagnetics Lab at Colorado State University. His

research focuses on the computational scattering characteristics of individual snowflakes and their comparison with dual-polarization radar. His interests include image processing, three-dimensional reconstruction techniques, computational electromagnetic scattering, hydrometer modeling, and large data processing techniques.

96TH ANNUAL AWARDS BANQUET

Wednesday, 13 January 2016



THE ROBERT E. HORTON LECTURER IN HYDROLOGY FOR 2016

EFI FOUFOULA-GEORGIOU

Distinguished McKnight University Professor, Joseph T. and Rose S. Ling Chair in Environmental Engineering, Department of Civil, Environmental, and Geo-Engineering, University of Minnesota, Minneapolis, Minnesota.



For outstanding scientific, programmatic, and educational contributions distinguished by their breadth, quality, sophistication, and creativity, advancing the science of hydrometeorology.

Efi Foufoula-Georgiou is a University of Minnesota McKnight Distinguished Professor and the Joseph T. and Rose S. Ling Chair in Civil,

Environmental and Geo- Engineering. Her research focuses on hydrology and geomorphology, with special interest on space-time modeling of precipitation and landforms. She is the recipient of the John Dalton Medal of EGU, the Hydrological Sciences Award of AGU, and Fellow of AGU and AMS. She is the President of the Hydrology section of AGU.

THE BERNHARD HAURWITZ MEMORIAL LECTURER FOR 2016

JOHN C. MARSHALL

Cecil and Ida Green Professor of Oceanography , Department of Earth, Atmospheric, and Planetary Sciences, Massachusetts Institute of Technology, Cambridge, Massachusetts.



For seminal contributions to atmospheric, oceanic, and climate dynamics and the creation of innovative modeling tools and educational resources.

John Marshall is the Cecil and Ida Green Professor of Oceanography in the Department of Earth, Atmospheric and Planetary Sciences at MIT. He has broad

interests in climate and the general circulation of the atmosphere and oceans. His research is directed at understanding the cause of the general circulation of the oceans, its interaction with the atmosphere and its role in the global climate and climate change.

**THE WALTER ORR ROBERTS LECTURER IN
INTERDISCIPLINARY SCIENCES FOR 2016**

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VENKATACHALAM RAMASWAMY

Director, NOAA, Geophysical Fluid Dynamics Laboratory, Princeton,
New Jersey.



*For pioneering scientific achievements
that have synthesized atmospheric
radiation, physics of greenhouse gases
and aerosols, and state-of-the-art
Earth system modeling.*

Venkatachalam (“Ram”) Ramaswamy
is Director of NOAA’s Geophysical
Fluid Dynamics Laboratory (GFDL,
Princeton, NJ) since 2008. Ram got
his master’s (Physics) from Delhi
University (India) and Ph.D. in
Atmospheric Sciences from State

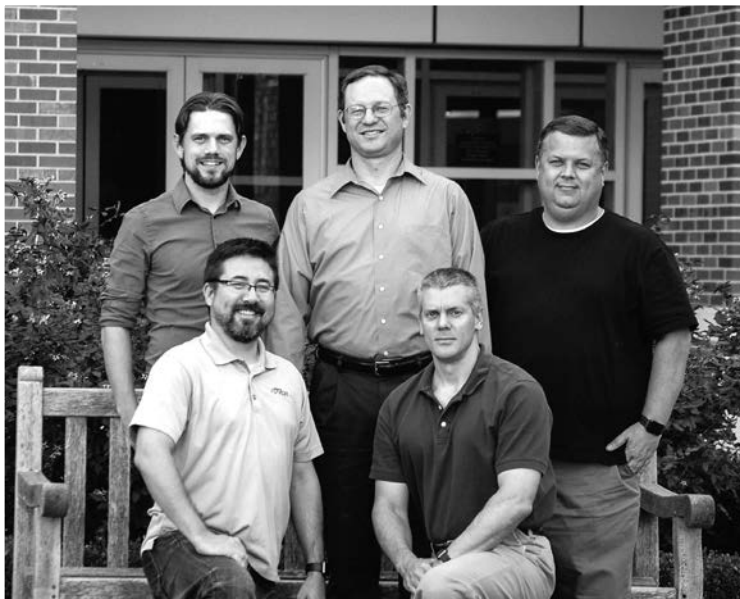
University of New York at Albany, and he was a postdoctoral Fellow
at the National Center for Atmospheric Research (Boulder, CO). His
research at GFDL focuses on modeling Earth’s climate system and
understanding the mechanisms driving climate change and how they
impact global-to-regional climate.

SPECIAL AWARD

WEATHER DECISION TECHNOLOGIES, INC.

Norman, Oklahoma

Mobile Development Team



Back, left to right: Ross Kimes, Mike Wolfinbarger, Justin Greenfield.
Front, left to right: Stdrovia Blackburn, Robb Young.

MIKE WOLFNBARGER, VP Mobile Development
JUSTIN GREENFIELD, Senior Mobile Software Engineer
ROBB ANDREW YOUNG, Senior Software Engineer
STDROVIA BLACKBURN, Mobile Creative Director
ROSS KIMES, Mobile Developer

For tireless efforts to develop and improve their RadarScope mobile application, enabling widespread access to professional quality weather radar information by meteorologists and the public.

Justin created the first version of RadarScope based on software developed at the Oklahoma Climatological Survey. Mike, Justin, and Stdrovia formed Base Velocity, LLC, to further develop RadarScope and market it to a wide audience. Robb joined the team to bring RadarScope to Android. Ross joined in 2012 and has been instrumental in enhancing the user experience and feature set. The team joined WDT in 2012, where RadarScope is now backed by world-class content, operations, and support teams.

THE AWARD FOR EXCELLENCE IN SCIENCE REPORTING BY A BROADCAST METEOROLOGIST

PIERCE LEGEION, CBM

Meteorologist & Digital Journalist—WNCT-TV
Greenville, North Carolina.



For raising the scientific literacy of his audience by clearly explaining the regional impacts of climate change.

Pierce graduated from The Pennsylvania State University in 2005. He started his career at his hometown TV station, WNCTV, in West Newton, PA. Then, in 2012, he went on to work for WDTV in Clarksburg,

WV where he served as morning and noon meteorologist and reporter for 2½ years. Pierce currently works as the weekend morning meteorologist and digital journalist at WNCT in Greenville, NC. His three-part series “Climate Change & WV” is recognized tonight.

THE AWARD FOR BROADCAST METEOROLOGY

DANNY SATTERFIELD, CBM

Chief Meteorologist, WBOC TV, Salisbury, Maryland.



For a distinguished career of serving his viewers as a trusted source of weather information and as a tireless educator of atmospheric and Earth sciences.

Dan Satterfield has worked as a broadcast meteorologist for over 35 years. He’s a graduate of the University of Oklahoma with a degree in meteorology, and a master’s in Earth science.

Dan is Chief Meteorologist for WBOC TV in Maryland and writes about science for the American Geophysical Union and his 42,000 followers on social media. In 2010 he was a guest of the NSF at the South Pole and later witnessed the recovery of the NEEM ice core in Greenland.

**THE HENRY T. HARRISON AWARD FOR
OUTSTANDING CONTRIBUTIONS BY A
CONSULTING METEOROLOGIST**

WALTER A. LYONS, CCM

President, FMA Research, Inc., Fort Collins, Colorado.



For a career crossing several sectors of meteorological education and practice, consistently demonstrating innovative solutions, integrity, and client focus.

Walter A. Lyons, CCM received his B.S. from Saint Louis University (1964) and Ph.D. from the University of Chicago (1970). Interests in mesoscale processes, atmospheric

electricity, and public outreach were pursued within academia, private consulting, and broadcasting. Investigations have explored coastal meteorology, air pollution transport, mesoscale modeling, lightning detection networks, and transient luminous events above thunderstorms, serving as PI on awards from over three dozen agencies and organizations while conducting 400+ forensic investigations.

THE HELMUT E. LANDSBERG AWARD

MICHAEL SCHATZMANN

Professor Emeritus, Meteorological Institute,
University of Hamburg, Hamburg, Germany.



For exceptional leadership, mentorship, and contributions to fundamental knowledge of urban boundary layers, bridging meteorology and engineering with practical applications for the urban environment.

Dr. Michael Schatzmann graduated in 1971 from the Technical University of Hanover and received a Ph.D.

in 1976 from the University of Karlsruhe. In 1982 he joined Hamburg University as a professor of Meteorology. During several sabbaticals he worked at the Imperial College of London, Cambridge University, Argonne National Laboratory, U.S. Environmental Protection Agency, and Colorado State University. He chaired the Meteorological Institute in Hamburg for many years. He retired 30 September 2011.

THE AWARD FOR OUTSTANDING ACHIEVEMENT IN BIOMETEOROLOGY

WILLIAM J. MASSMAN

Meteorologist, Forest Service, Rocky Mountain Research
Station, Fort Collins, Colorado.



For innovative and rigorous theoretical advances that have improved the biomicrometeorological measurement and modeling of mass and energy exchange between plants and the atmosphere.

William Massman is an atmospheric scientist and forest micrometeorologist with the U.S. Forest Service. For his Ph.D. degree (University of Wisconsin–

Madison) he conceived the global atmospheric gravity wave part of the TWERLE, a Southern Hemisphere balloon experiment. After graduating he researched the hydrology of an aerial aquatic ecosystem (old-growth Douglas fir canopies) and participated in the stratospheric ozone program at NASA Goddard, where he also worked on land surface modeling for GCMs. At present he continues researching and modeling the exchange of energy and trace gases between the atmosphere and the terrestrial biosphere.

THE AWARD FOR OUTSTANDING CONTRIBUTION TO THE ADVANCE OF APPLIED METEOROLOGY

MICHAEL A. STEINBERG

Senior Vice President, AccuWeather, Inc.,
State College, Pennsylvania.



For numerous visionary innovations and accomplishments in meeting public and industrial needs for weather information.

Michael Steinberg is AccuWeather Senior Vice President and Emeritus member of the Board of Directors, interacting in a wide variety of scientific, tactical, and strategic areas. Mike has specialized

over the past 40 years in severe and disruptive weather events and their impact on public safety, health, logistics, and infrastructure. Mike specified and managed the development of many AccuWeather systems and innovations, including the first complex operational digital forecast database, the AccuWeather Global Forecast Engine.

THE FRANCIS W. REICHELDERFER AWARD

JOHN D. HOREL

Professor, Department of Atmospheric Sciences,
University of Utah, Salt Lake City, Utah.



For development and leadership of the MesoWest observational network in support of operations, research, and education to improve understanding and forecasting of mountain meteorology.

Professor John Horel has been a member of the Atmospheric Sciences faculty at the University of Utah since

1986. His research focusses on the observation, analysis, and simulation of weather and climate processes in mountainous regions. He has coordinated collaboration between University of Utah staff and students, National Weather Service personnel, and individuals at many other institutions since the 1990's to provide environmental observations for public safety, research, and educational applications.

THE NICHOLAS P. FOFONOFF AWARD

JOSH WILLIS

Scientist, NASA's Jet Propulsion Laboratory,
Pasadena, California.



For creative research in determining the circulation and heat content of the ocean and their contribution to sea level change.

Josh Willis received his doctorate in Physical Oceanography from the Scripps Institution of Oceanography before coming to NASA's Jet Propulsion Laboratory, where he continues to study sea level

rise and its causes. He currently serves as the Project Scientist for the Jason missions to measure sea level from space and is the Principal Investigator on NASA's new airborne mission, Oceans Melting Greenland (OMG), which will study ocean-ice interactions in Greenland.

THE HENRY G. HOUGHTON AWARD

FOTINI KATOPODES CHOW

Associate Professor, Civil and Environmental Engineering,
University of California, Berkeley, California.



For insightful studies of the atmospheric boundary layer and flows over complex terrain using large-eddy simulation.

Tina's current research interests are in performing large-eddy simulations of atmospheric boundary layer flows, with a focus on the development and testing of new turbulence models and improved boundary conditions. She and her students

have worked on applications to mountain meteorology, urban dispersion, wind energy, and land-atmosphere coupling, among others. Tina received a B.S. in Engineering Sciences from Harvard University and M.S. and Ph.D. degrees in Civil and Environmental Engineering from Stanford University.

THE CLARENCE LEROY MEISINGER AWARD

ANKUR R. DESAI

Associate Professor, Department of Atmospheric and
Oceanic Sciences, University of Wisconsin-Madison,
Madison, Wisconsin.



For innovative contributions toward improving the observation and modeling of biosphere-atmosphere exchanges across a range of spatial and temporal scales.

Ankur Desai lives in Madison with his wife and three daughters. He teaches and studies biosphere-atmosphere interactions at the University of Wisconsin. His lab addresses

roles of spatial and temporal scales in these interactions using eddy covariance flux towers and land surface model data assimilation. Ankur is honored to receive this award and hopes to not meet the same fate of disappearing in a hot air balloon as Dr. Meisinger.

THE JOANNE SIMPSON MENTORSHIP AWARD

ADA R. MONZÓN, CBM
Meteorologist, Univision Radio, WKAQ 580 AM,
San Juan, Puerto Rico.



For selfless, dedicated mentoring of Latino students and early career professionals, exemplary commitment to STEM education, and inspiring a new generation of Puerto Rican scientists.

Ada Monzón is the first female meteorologist from Puerto Rico, AMS Fellow and CBM, and the Founder/President of the Board of Directors of the

EcoExploratorio: Science Museum of Puerto Rico. Currently, she is the meteorologist for Univision Radio (WKAQ 580 am) and lenteviral.com. Her professional career began as Forecaster in NOAA NWS WSFO San Juan in 1989, and later she became Chief Meteorologist of Univision P.R. She is dedicated to producing STEM and disaster mitigation educational campaigns and social media, as well as production of science exhibitions for the museum.

THE KENNETH C. SPENGLER AWARD

PAUL A. PISANO
Team Leader, Federal Highway Administration,
Washington, D.C.



For working strategically and collaboratively to raise awareness of weather's impact on surface transportation and guiding the development of tools to enhance public safety.

Mr. Paul Pisano is the Team Leader of the Road Weather and Work Zone Management Team in the Federal Highway Administration (FHWA), Office of Transportation Operations.

Mr. Pisano has worked for the FHWA for over 30 years, and in his current capacity he is responsible for two programs: the program that addresses the effects of weather on transportation safety and operations, and the program that seeks to improve transportation safety and mobility in and around work zones.

THE CHARLES E. ANDERSON AWARD

JOSÉ DELORES FUENTES

Professor, Department of Meteorology, The Pennsylvania State University, University Park, Pennsylvania.



For outstanding, sustained efforts to promote diversity in the atmospheric and environmental sciences through education, research, and community service.

Jose D. Fuentes is a professor in the Department of Meteorology at The Pennsylvania State University. He received his graduate degrees in micrometeorology

from the University of Guelph, Canada, and his bachelor of science from Millersville University, Pennsylvania. Fuentes has made contributions to the promotion of diversity in the atmospheric and environmental sciences. His research focuses on the understanding of the processes controlling emissions, atmospheric transport, and chemistry of reactive gases produced by the biosphere.

THE CLEVELAND ABBE AWARD FOR DISTINGUISHED SERVICE TO ATMOSPHERIC SCIENCES

GORDON A. MCBEAN

Professor Emeritus, Western University, London, Ontario, Canada.



For exceptional service to the meteorological community through leadership of national and international programs aimed at advancing the atmospheric and related sciences and their application.

Gordon McBean is now President, International Council for Science and Professor Emeritus at Western University, Canada. He was earlier a

professor at the University of British Columbia. He was a weather forecaster, leading researcher on atmosphere–ocean systems, and Chair of the World Climate Research Program (1988–94) and Integrated Research on Disaster Risk (2006–11). He was Assistant Deputy Minister, Meteorological Service of Environment Canada, and member, WMO Executive Council (1994–2000). He is a Member, Order of Canada, and Fellow, AMS, RSC, and AGU.

**THE EDWARD N. LORENZ
TEACHING EXCELLENCE AWARD**

JONATHAN E. MARTIN

Professor, Department of Atmospheric and Oceanic Sciences,
University of Wisconsin–Madison, Madison, Wisconsin.



For outstanding teaching and mentoring that combine boundless enthusiasm with consummate skill to educate and inspire a generation of undergraduate and graduate students.

Professor Jonathan Martin joined the Wisconsin faculty in 1994 after completing his Ph.D. in Atmospheric Sciences at the University of Washington.

He is a native of Peabody, MA, and a graduate of St. Louis University where interactions with a number of inspirational faculty encouraged his pursuit of an academic life. His research expertise is in midlatitude weather systems and he has authored over 50 scientific papers as well as a leading textbook on midlatitude atmospheric dynamics.

**THE CHARLES FRANKLIN BROOKS
AWARD**

JAMES F. KIMPEL, CCM

Scientist Emeritus, NOAA/NSSL/OU, Norman, Oklahoma.



For decades of faithful service and enlightened leadership in the Society, guiding it to remain vigorous, relevant, and focused on the future.

James (Jeff) Kimpel became a meteorologist while serving in the U.S. Air Force including a tour in Vietnam (Bronze Star). He earned a Ph.D. at the University of Wisconsin before joining the faculty at the University of Oklahoma. He served as Department Chair, Dean, and Provost before joining NOAA as Director of the National Severe Storms Laboratory. He is a Fellow, CCM, and Past President of the AMS where he led several initiatives including the Ethics and Societal Impacts Committees.

THE HYDROLOGIC SCIENCES MEDAL

RANDAL D. KOSTER

Research Scientist, Global Modeling and Assimilation Office,
NASA/GSFC, Greenbelt, Maryland.



For ground-breaking contributions to the understanding of land–atmosphere interactions and their effects on hydroclimatic predictability and prediction.

Dr. Koster received his B.S. at Caltech and his M.S. and Sc.D. at MIT. He has worked at NASA/GSFC since 1987 and is currently with GSFC's Global

Modeling and Assimilation Office. Most of his tenure at GSFC has been dedicated to two research thrusts: (i) the development of improved treatments of land surface physics for Earth system models, and (ii) the analysis of interactions between the land and atmosphere, using these models.

THE REMOTE SENSING PRIZE

RICHARD JAMES DOVIK

Senior Engineer, NOAA/NSSL, National Weather Center,
Norman, Oklahoma.



For fundamental contributions to weather radar science and technology, with applications to observations of severe storms and tropospheric winds.

Dr. Dick Doviak received a BSEE from Rensselaer Polytechnic Institute and a MSEE and Ph.D. from the University of Pennsylvania. He is Senior Engineer at the National Severe Storms

Laboratory and affiliate professor of Meteorology and EE, University of Oklahoma. His short-term affiliations include the University of Kyoto, Australian National University, National Center for Atmospheric Research, National Institute for Environmental Disasters—Tsukuba, Indian Institute of Science—Bangalore. He's an IEEE and AMS Fellow.

THE HENRY STOMMEL RESEARCH AWARD

ROBERT S. PICKART

Senior Scientist, Woods Hole Oceanographic Institution,
Woods Hole, Massachusetts.



For pioneering work in the exploration of high-latitude water masses and currents and for advancing the understanding of their climatic impact.

Bob Pickart is a Senior Scientist at the Woods Hole Oceanographic Institution. He began his sea-going career in the Gulf Stream and has been

moving north ever since. Currently he works in both the Pacific and Atlantic sectors of the Arctic Ocean studying shelf–basin exchange, deep water formation and circulation, and air–sea interaction. When not at sea, he enjoys outdoor activities, especially Nordic skiing. He and his wife Anne have five children.

THE VERNER E. SUOMI AWARD

STEVEN PLATNICK

Deputy Director for Atmospheres, Earth Science Division,
NASA Goddard Space Flight Center, Greenbelt, Maryland.



For cutting-edge research and leadership in spaceborne observations of the atmosphere, particularly remote sensing of cloud properties.

Steven Platnick is Deputy Director for Atmospheres in the Earth Science Division at the NASA Goddard Space Flight Center, a position he's held since January 2015, and the

NASA Earth Observing System Senior Project Scientist (since 2008). His research includes theoretical/experimental studies of cloud and aerosol remote sensing. He has participated in numerous airborne field campaign studies and leads the NASA algorithm development efforts for the MODIS and S-NPP VIIRS cloud optical and microphysical products.

THE SVERDRUP GOLD MEDAL AWARD

MICHAEL J. MCPHADEN

Senior Scientist, NOAA/Pacific Marine Environmental Laboratory, Seattle, Washington.



For fundamental and extensive contributions to understanding, observing, and forecasting tropical oceanic and atmospheric climate variability.

Michael J. McPhaden is a NOAA Senior Scientist whose research has focused on large-scale ocean dynamics, ocean-atmosphere interactions, and the ocean's role in climate. He received his Ph.D. in physical

oceanography from the Scripps Institution of Oceanography in 1980 and has published over 250 articles in the refereed literature. He is a fellow of the American Meteorological Society, the Oceanography Society, and the American Geophysical Union. He is also a Past President of the American Geophysical Union.

THE JULE G. CHARNEY AWARD

WAYNE H. SCHUBERT

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



For landmark advances in theoretical understanding of convective parameterization, marine stratocumulus, balanced atmospheric flows, and tropical cyclone intensity and structure.

Wayne Schubert joined the CSU Atmospheric Science Faculty in 1973 after completing his Ph.D. at UCLA. He has taught classes in atmospheric dynamics and

tropical meteorology. His research areas have included the parameterization of deep convection, the marine boundary layer, simplified models of balanced flows, and the dynamics of tropical cyclones. He has had the great pleasure of working with an outstanding group of approximately 30 research colleagues and graduate students over the last several decades.

THE CARL-GUSTAF ROSSBY RESEARCH MEDAL

EDWARD J. ZIPSER

Professor, Department of Atmospheric Sciences,
University of Utah, Salt Lake City, Utah.



For fundamental contributions to tropical meteorology through insightful analysis of observed moist convective systems, and for sustained leadership in airborne field programs.

Zipser has been a professor of Atmospheric Sciences at the University of Utah since 1999. Before that, he was a professor of Atmospheric Sciences at Texas A&M University. From

1966 to 1989 he was a scientist at NCAR. He has emphasized the involvement of students and junior scientists, often on board research aircraft, in some 35 field campaigns studying the structure of storms over tropical oceans, in midlatitudes, and aimed at validating data from satellites, notably the Tropical Rainfall Measuring Mission.

HONORARY MEMBER

DONALD R. JOHNSON

Emeritus professor and research scientist, SSEC,
University of Madison-Wisconsin, Madison, Wisconsin.



Donald R. Johnson received his Ph.D. in 1965 from the University of Wisconsin-Madison, where he taught for 30 years. An expert on global circulation and atmospheric energetics, Johnson was instrumental in developing a pedagogy of Earth system science recognized by the AMS and the AGU. Johnson led numerous scientific committees

and continues to mentor former students and colleagues. He is a recipient of the Charles Franklin Brooks Award and an AMS and AAAS Fellow.

HONORARY MEMBER

ROBERT RYAN

Consultant-CCM/CBM, McLean, Virginia.



Bob Ryan was born loving the weather. When he watched freezing rain form on the bill of his Brooklyn Dodgers cap on his paper route, he knew he wanted to be a meteorologist. But after Sputnik, learning about shift work, knowing he loved to sleep late, he decided he would build rockets and pursue a career

in physics. Most of his model rockets blew up, but he made it through Maxwell and met Dr. Bernard Vonnegut at just the right time in his life. He has been a cloud physics researcher, author, broadcaster, president of the AMS, a devoted spouse, father, and grandfather. He still loves weather, especially snowstorms.

HONORARY MEMBER

JAGADISH SHUKLA

University Professor, George Mason University,
Fairfax, Virginia.



Jagadish Shukla is a University Professor at George Mason University (GMU). His research interests include weather and climate predictability, monsoon dynamics, land-climate interactions and deforestation. He is a fellow of AMS, AGU, and India Met Soc. (IMS). He received Walker Gold Medal from IMS; Rossby Medal from AMS; International Meteorological Organization Prize from WMO, and Exceptional Scientific Achievement

Medal of NASA. He is author/co-author of 200 scientific papers, and Ph.D. advisor to 20 students. He has contributed to a large number of national and international weather and climate research programs. He has helped in the establishment of weather and climate research institutions in India, Italy, Korea and Brazil. In the US he is the founding director of COLA, and founded AOES Department, and Climate Dynamics Ph.D. program at GMU. He has also established Gandhi College in his native village in India for education of girls.