# 2013 AWARDS



# AMERICAN METEOROLOGICAL SOCIETY

# 2013 AWARDS



# AMERICAN METEOROLOGICAL SOCIETY

Society awards are presented at the Annual Meeting, specialized conferences, or other appropriate occasions during the year.

The objective of this Society is to advance the atmospheric and related sciences, technologies, applications, and services for the benefit of society. The Society shall be a nonprofit organization, and none of its net income or net worth shall inure to the benefit of its members. Its membership and activities shall be international in scope.

These awards are given because people took the time to submit a nomination for a qualified individual by following the procedures at http://www.ametsoc.org/awards/index.html.

American Meteorological Society 45 Beacon Street Boston, Massachusetts 02108 617-227-2425 email: amsmem@ametsoc.org http://www.ametsoc.org

#### 93RD ANNUAL REVIEW, NEW FELLOWS, AND FEATURED AWARDS

#### 6 JANUARY 2013





LAURENCE ARMI



**CRAIG H. BISHOP** 



THOMAS ANDREW BLACK



FEI CHEN



SHUYI S. CHEN



NANCY DEAN



MICHAEL D. EILTS



WANDA R. FERRELL



**ROBERT G. FOVELL** 



JOHN F. HENZ, CCM



GALE F. HOFFNAGLE, CCM



DAVID F. JONES



THOMAS R. KNUTSON



ZEV LEVIN



MICHAEL E. MANN



**DOMINIQUE MARBOUTY** 



JAMES D. MCFADDEN



JOHN B. MCLAUGHLIN, CBM



ADA R. MONZON, CBM



**BERRIEN MOORE III** 



MELINDA S. PENG



PATRICIA A. PHOEBUS



VINCENT R. SCHEETZ, CCM



**RUSSELL SCHNEIDER** 



SIEGFRIED SCHUBERT



**BRIAN JON SODEN** 



KA-KIT TUNG



PING YANG

# THE ROBERT E. HORTON LECTURER IN HYDROLOGY FOR 2013

is presented to

# W. JAMES SHUTTLEWORTH



For his research on hydrometeorological processes, and particularly on evaporative fluxes, synthesizing remote sensing and modeling to understand hydrologic variability and change.

**W. JAMES SHUTTLEWORTH,** Regents' Professor of Hydrology and Atmospheric Science, University of Arizona, Tucson, Arizona.

### THE BERNHARD HAURWITZ MEMORIAL LECTURER FOR 2013

is presented to

# **MICHAEL E. MCINTYRE**



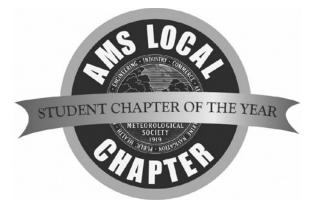
For his profound contributions to atmospheric dynamics and general circulation theory and understanding.

**MICHAEL E. MCINTYRE,** Centre for Atmospheric Science, Department of Applied Mathematics and Theoretical Physics, Cambridge, United Kingdom.

# THE AWARD FOR OUTSTANDING STUDENT CHAPTER OF THE YEAR

is presented to

# **IOWA STATE UNIVERSITY**



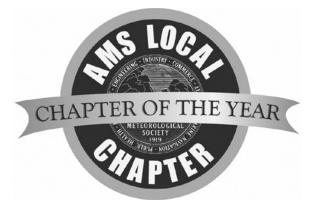
For its emphasis on the professional development of its members, extraordinary outreach to the local community and beyond, and organizing the Midwest AMS Web Conference.

IOWA STATE UNIVERSITY, Ames, Iowa.

# THE AWARD FOR OUTSTANDING CHAPTER OF THE YEAR

is presented to

# WEST CENTRAL FLORIDA



For implementing real-time streaming of its meetings to a worldwide audience, and for effective outreach to students and teachers in the local community.

WEST CENTRAL FLORIDA, Tampa, Florida.

#### EDITOR'S AWARD BULLETIN OF THE AMERICAN METEOROLOGICAL SOCIETY

is presented to

#### **MARTIN A. BAXTER**



For insightful and constructive reviews that served the *Bulletin* readership.

**MARTIN A. BAXTER,** Associate Professor of Meteorology, Central Michigan University, Mt. Pleasant, Michigan.

#### EDITOR'S AWARD WEATHER, CLIMATE, AND SOCIETY

is presented to

# MICHAEL C. MACCRACKEN



For writing a generous and thoughtful assessment of a manuscript submitted by an author just beginning her career, providing the author with invaluable mentoring.

MICHAEL C. MACCRACKEN, Chief Scientist, Climate Change Programs, Climate Institute, Washington, DC.

#### EDITOR'S AWARD WEATHER, CLIMATE, AND SOCIETY

is presented to

# ANTHONY LEISEROWITZ



For providing critical input that greatly improved a manuscript through attention to both detail and the broader issues involved.

**ANTHONY LEISEROWITZ,** Director, Yale Project on Climate Change Communication, School of Forestry & Environmental Studies, Yale University, New Haven, Connecticut.

#### EDITOR'S AWARD JOURNAL OF HYDROMETEOROLOGY

is presented to

# JONATHAN J. GOURLEY



For insightful, timely, and thorough reviews.

**JONATHAN J. GOURLEY,** Research Hydrometeorologist, NOAA/National Severe Storms Laboratory, Norman, Oklahoma.

#### EDITOR'S AWARD JOURNAL OF CLIMATE

is presented to

# TIANJUN ZHOU



For numerous, timely, and constructive reviews.

**TIANJUN ZHOU,** Professor, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China.

### EDITOR'S AWARD JOURNAL OF CLIMATE

is presented to

# ALICE M. GRIMM



For multiple, constructive, and thorough reviews that were instrumental in making a promising, but initially flawed, manuscript publishable.

ALICE M. GRIMM, Professor, Federal University of Parana-Brazil.

#### EDITOR'S AWARD WEATHER AND FORECASTING

is presented to

# **DARAN L. RIFE**



For thorough reviews that are particularly helpful.

**DARAN L. RIFE**, Global Head of Mesoscale Modeling, GL Garrad Hassan, San Diego, California.

#### EDITOR'S AWARD JOURNAL OF ATMOSPHERIC AND OCEANIC TECHNOLOGY

is presented to

#### **EVAN P. RUZANSKI**



For dedicated service to the editors, by providing insightful, high-quality, and prompt reviews of many papers.

**EVAN P. RUZANSKI,** Scientist, Vaisala, Louisville, Colorado.

#### EDITOR'S AWARD JOURNAL OF ATMOSPHERIC AND OCEANIC TECHNOLOGY

is presented to

#### **JEFFREY D. PADUAN**



For thorough, insightful, and constructive reviews that improved the quality of manuscripts published.

**JEFFREY D. PADUAN,** Vice President and Dean of Research, Naval Postgraduate School, Monterey, California.

#### EDITOR'S AWARD MONTHLY WEATHER REVIEW

is presented to

# PAUL E. ROUNDY



For a large number of prompt and high-quality reviews, and for assistance to the editors in making decisions on controversial papers.

**PAUL E. ROUNDY,** Associate Professor, University at Albany, State University of New York, Albany, New York.

#### EDITOR'S AWARD MONTHLY WEATHER REVIEW

is presented to

# TODD P. LANE



For dedicated service in reviewing several particularly difficult manuscripts and always being amenable to performing reviews.

**TODD P. LANE,** Australian Research Council Future Fellow, School of Earth Sciences & ARC Centre of Excellence for Climate System Science, The University of Melbourne, Melbourne, Australia.

#### EDITOR'S AWARD JOURNAL OF PHYSICAL OCEANOGRAPHY

is presented to

### JIM LERCZAK



For insightful and clarifying reviews of multiple, difficult, and complex papers.

**JIM LERCZAK,** Associate Professor, Oregon State University, Corvallis, Oregon.

#### EDITOR'S AWARD JOURNAL OF APPLIED METEOROLOGY AND CLIMATOLOGY

is presented to

# **RAFIQ HAMDI**



For carefully considered and timely reviews of multiple manuscripts.

**RAFIQ HAMDI,** Senior Research Associate, Royal Meteorological Institute, Bruxelles, Belgium.

#### EDITOR'S AWARD JOURNAL OF THE ATMOSPHERIC SCIENCES

is presented to

# MING-JEN YANG



For his frequent, penetrating, and thorough reviews.

**MING-JEN YANG,** Professor, Department of Atmospheric Sciences, National Central University, Taiwan, ROC.

#### EDITOR'S AWARD JOURNAL OF THE ATMOSPHERIC SCIENCES

is presented to

# **STEVE ECKERMANN**

No Photo Available

For thorough and detailed reviews with well-informed, well-posed, and carefully argued questions for authors.

STEVE ECKERMANN, E. O. Hulburt Center for Space Research, Naval Research Laboratory, Washington, DC.

# THE ROBERT LEVITON STUDENT PRIZE

is presented to

# ALLISON CHARLAND



For her paper, "Application of a Portable Doppler Wind Lidar for Wildfire Plume Measurements," (with C. B. Clements).

ALLISON CHARLAND, Ph. D. Candidate, University of Utah, Salt Lake City, Utah.

# THE MAX A. EATON STUDENT PRIZE

is presented to

# DAN CHAVAS



For his paper, "Equilibrium Tropical Cyclone Size in an Idealized State of Axisymmetric Radiative-Convective Equilibrium."

**DAN CHAVAS,** Graduate Student, Massachusetts Institute of Technology, Cambridge, Massachusetts.

#### THE MAX A. EATON STUDENT PRIZE

is presented to

# ZACHARY HANDLOS



For his paper, "Estimating Vertical Motion Profile Shape within Tropical Weather States."

ZACHARY HANDLOS, University of Wisconsin-Madison, Madison, Wisconsin.

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

is presented to

# ALEXANDRA WITZE



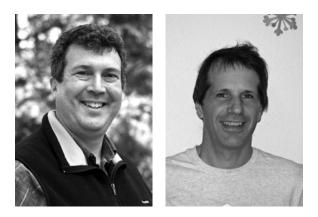
For "Rivers in the Sky," which skillfully brought to public attention new research on atmospheric bands of water vapor and their role in West Coast flooding events.

ALEXANDRA WITZE, Contributing Editor, Science News, Boulder, Colorado.

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

is presented to

# MARK CASSINO AND JON NELSON



For *The Story of Snow: The Science of Winter's Wonder*, a beautiful and informative book, revealing the mysteries of ice crystals to readers of all ages.

MARK CASSINO, Author, Photographer, Mark Cassino Photography, Kalamazoo, Michigan.

**JON NELSON,** Consultant, Redmond Physical Sciences, Redmond, Washington. Researcher, Laucks Foundation Research, Seattle, Washington.

### THE LOUIS J. BATTAN AUTHOR'S AWARD

is presented to

# PAUL N. EDWARDS



For his book, *A Vast Machine: Computer Models, Climate Data, and The Politics of Global Warming*, a comprehensive and engaging account of the evolution of the infrastructure required to observe and simulate weather and climate.

**PAUL N. EDWARDS,** School of Information, University of Michigan, Ann Arbor, Michigan. Sciences Po, Paris, France.

#### THE BANNER I. MILLER AWARD

is presented to

# MARK DEMARIA



For his paper, "A Simplified Dynamical System for Tropical Cyclone Intensity Prediction."

MARK DEMARIA, Research Meteorologist, NOAA/NESDIS/STAR, Fort Collins, Colorado.

#### THE CHARLES L. MITCHELL AWARD

is presented to

# **GREG MURDOCH**



For developing and applying new tools to forecast fire weather, and over 15 years of outstanding efforts to promote public safety in Texas.

**GREG MURDOCH,** Senior Forecaster, NOAA/ National Weather Service, Midland, Texas.

# THE AWARD FOR AN EXCEPTIONAL SPECIFIC PREDICTION

is presented to

# NOAA/NWS WEATHER FORECAST OFFICE



For recognizing the potential for severe weather days in advance of the massive April 2011 tornado outbreak and using innovative services to warn the public.

NOAA/NWS, WEATHER FORECAST OFFICES, Jackson, Mississippi; Birmingham, Alabama; and Huntsville, Alabama.

#### 93RD ANNUAL AWARDS BANQUET

#### 9 JANUARY 2013



#### SPECIAL AWARD

is presented to

#### KARYN SAWYER



For invaluable and exemplary support and organization of numerous atmospheric and oceanic field expeditions over more than three decades.

**KARYN SAWYER,** Director, Joint Office of Science Support, University Corporation of Atmospheric Research, Boulder, Colorado.

#### THE AWARD FOR OUTSTANDING SERVICES TO METEOROLOGY BY A CORPORATION

is presented to

# AMERICAN WEATHER AND CLIMATE INDUSTRY ASSOCIATION



For promoting and leading a new paradigm of cooperation and mutual support across all sectors of the American weather and climate enterprise.

AMERICAN WEATHER AND CLIMATE INDUSTRY ASSOCIATION, Edmond, Oklahoma.

#### THE HELMUT E. LANDSBERG AWARD

is presented to

#### **ANTHONY J. BRAZEL**



For fundamental contributions to the field of urban climatology, especially those related to understanding urban heat islands in desert environments.

**ANTHONY J. BRAZEL**, Professor Emeritus, School of Geographical Sciences & Urban Planning, Arizona State University, Tempe, Arizona.

#### THE AWARD FOR EXCELLENCE IN SCIENCE REPORTING BY A BROADCAST METEOROLOGIST

is presented to

# JIM GANDY



For pioneering efforts to educate viewers about climate change and explaining how it already affects them.

**JIM GANDY,** Chief Meteorologist, WLTX-TV, Columbia, South Carolina.

# THE AWARD FOR BROADCAST METEOROLOGY

is presented to

# JAMES SPANN



For his tireless efforts to advance the public's awareness of and engagement in the science of meteorology, particularly severe weather forecasting and response.

**JAMES SPANN,** Chief Meteorologist, ABC 33/40-TV, Birmingham, Alabama.

# THE AWARD FOR OUTSTANDING ACHIEVEMENT IN BIOMETEOROLOGY

is presented to

#### THOMAS FOKEN



For many contributions, as a researcher and educator, to the understanding and measurement of atmosphere-biosphere interactions and the surface energy balance.

**THOMAS FOKEN,** Professor of Micrometeorology, University of Bayreuth, Bayreuth Center of Ecology and Environmental Research, Bayreuth, Germany.

# THE AWARD FOR OUTSTANDING CONTRIBUTION TO THE ADVANCE OF APPLIED METEOROLOGY

is presented to

#### **RICHARD T. MCNIDER**



For innovative contributions to dealing with agricultural drought by improving monitoring and forecasting technology, and for promoting sustainable irrigation in the Southeast.

**RICHARD T. MCNIDER,** Distinguished Professor of Science, Emeritus, Department of Atmospheric Science, The University of Alabama in Huntsville, Huntsville, Alabama.

#### THE NICHOLAS P. FOFONOFF AWARD

is presented to

# LEIF N. THOMAS



For groundbreaking work on the impact of strongly stratified ocean fronts on near-surface 'mixing' forced by air-sea buoyancy and momentum exchange.

**LEIF N. THOMAS,** Assistant Professor, Department of Environmental Earth System Science, Stanford University, Stanford, California.

# THE HENRY G. HOUGHTON AWARD

is presented to

# JOEL A. THORNTON



For groundbreaking contributions to understanding chemical processes in the atmosphere, especially those that occur between the condensed phases of wet atmospheric particles and the gas phase.

**JOEL A. THORNTON,** Associate Professor, Department of Atmospheric Sciences, University of Washington, Seattle, Washington.

# THE CLARENCE LEROY MEISINGER AWARD

is presented to

# GABRIEL A. VECCHI



For outstanding contributions to the understanding of tropical climate variability and change.

**GABRIEL A. VECCHI,** Geophysical Fluid Dynamics Laboratory, National Oceanic and Atmospheric Administration, Princeton University, Princeton, New Jersey.

# THE JOANNE SIMPSON MENTORSHIP AWARD

is presented to

# **MARGARET A. LEMONE**



For exceptional, life-long mentoring of young colleagues including students of all ages, especially women and minorities, and its profound effect on our profession.

**MARGARET A. LEMONE**, National Center for Atmospheric Research, Boulder, Colorado.

### THE KENNETH C. SPENGLER AWARD

is presented to

# JOHN SNOW



For exceptional foresight and leadership in melding a diverse group of people in designing a new Commission of the AMS to meet ever-expanding weather and climate enterprise needs.

**JOHN SNOW,** Regents' Professor of Meteorology, Dean Emeritus, College of Atmospheric and Geographic Sciences, The University of Oklahoma, Norman, Oklahoma.

#### THE CHARLES E. ANDERSON AWARD

is presented to

# **ANTHONY REYNES**



For dedicated service promoting community educational and preparedness programs throughout the Tampa Bay area, and especially for reaching the Spanish-speaking population with vital weather information in the state of Florida.

**ANTHONY REYNES,** Meteorologist, NOAA/ National Weather Service, Honolulu, Hawaii.

#### THE CLEVELAND ABBE AWARD FOR DISTINGUISHED SERVICE TO ATMOSPHERIC SCIENCES BY AN INDIVIDUAL

is presented to

#### WANDA R. FERRELL



For skillful, dedicated leadership in managing the Atmospheric Radiation Measurement Climate Research Facility, which has improved knowledge about the interactions among clouds, radiation, and aerosols.

WANDA R. FERRELL, ARM Program Manager, U.S. Department of Energy, Germantown, Maryland.

# THE FRANCIS W. REICHELDERFER AWARD

is presented to

# W. DOUGLAS WILSON



For design and implementation of the Chesapeake Bay Interpretive Buoy System, providing critical environmental data to operational users and the public.

W. DOUGLAS WILSON, President, Caribbean Wind LLC, Annapolis, Maryland. Retired Oceanographer, AOML/NOAA, Annapolis, Maryland.

# THE TEACHING EXCELLENCE AWARD

is presented to

#### **BRUCE A. ALBRECHT**



For dedicated and innovative teaching inside and outside the classroom, and for his leading role in developing a dynamic undergraduate and graduate meteorology program.

**BRUCE A. ALBRECHT,** Professor, Rosenstiel School of Marine and Atmospheric Sciences, University of Miami, Miami, Florida.

# THE CHARLES FRANKLIN BROOKS AWARD FOR OUTSTANDING SERVICES TO THE SOCIETY

is presented to

#### **ROGER M. WAKIMOTO**



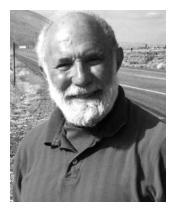
For improving the Society's processes through unselfish and highly effective service on numerous committees and as Councilor and Commissioner.

**ROGER M. WAKIMOTO,** Director, National Center for Atmospheric Research, Boulder, Colorado.

# THE HENRY STOMMEL RESEARCH AWARD

is presented to

# LAURENCE ARMI



For his deeply insightful studies of stratified flow, his pioneering work on boundary mixing and other turbulent mechanisms.

**LAURENCE ARMI,** Professor, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, California.

# THE SVERDRUP GOLD MEDAL AWARD

is presented to

# W. KENDALL MELVILLE



For pioneering contributions in advancing knowledge on the role of surface wave breaking and related processes in air-sea interaction.

**W. KENDALL MELVILLE,** Distinguished Professor, Scripps Institution of Oceanography, University of California, San Diego, La Jolla, California.

#### THE VERNER E. SUOMI AWARD

is presented to

# **RICHARD H. JOHNSON**



For exquisite design of rawinsonde networks in field campaigns and insightful analysis of interactions between convective clouds and the large-scale atmospheric circulation.

**RICHARD H. JOHNSON,** Professor, Department of Atmospheric Science, Colorado State University, Fort Collins, Colorado.

#### THE JULE G. CHARNEY AWARD

is presented to

# R. ALAN PLUMB



For fundamental contributions to the understanding of geophysical fluid dynamics, stratospheric dynamics, chemical transport, and the general circulation of the atmosphere and oceans.

**R. ALAN PLUMB,** Professor of Meteorology, Massachusetts Institute of Technology, Cambridge, Massachusetts.

# THE CARL-GUSTAF ROSSBY RESEARCH MEDAL

is presented to

# **DENNIS L. HARTMANN**



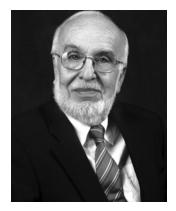
For significant contributions to the synthesis of knowledge of radiative and dynamical processes leading to a deeper understanding of the climate system.

**DENNIS L. HARTMANN,** Professor, Department of Atmospheric Sciences, University of Washington, Seattle, Washington.

#### **ELECTED HONORARY MEMBER**

is presented to

#### WILLIAM D. BONNER



WILLIAM D. BONNER, formerly, University Corporation for Atmospheric Research, Boulder, Colorado.

#### **ELECTED HONORARY MEMBER**

is presented to

# **RONALD D. MCPHERSON**



**RONALD D. MCPHERSON,** Executive Director Emeritus, American Meteorological Society, Boston, Massachusetts.

#### **ELECTED HONORARY MEMBER**

is presented to

# SUSAN SOLOMON



**SUSAN SOLOMON,** Ellen Swallow Richards Professor of Atmospheric Chemistry and Climate Change, Massachusetts Institute of Technology, Cambridge, Massachusetts.