Awards, Honors, and Other Recognition



ESRL Physical Sciences Division Science Review May 12-14, 2015

PSD Awards, Honors and Other Recognition

International

Gijs de Boer – Outstanding Early Career Presentation Award (2014), Global Energy and Water Exchanges Project: *Examples of unmanned aircraft systems use in Arctic atmospheric observation.*

Gijs de Boer – Outstanding Oral Presentation Award (2011), Arctic Science Summit Week: Characterization of the present-day Arctic atmosphere in CCSM4 (Highlights).

Mimi Hughes – Outstanding Early Career Presentation Award (2014), Global Energy and Water Exchanges Project: Objective identification of atmospheric rivers, and implications for extreme precipitation at the basin scale, GEWEX 7th International Scientific Conference, The Hague, Netherlands, July 2014 (M. Hughes, D. Jackson, E. Gutmann, and G. Wick).

Mimi Hughes – Outstanding Presentation Award (2011) - World Climate Research Program: *Low-frequency variability of and impact of climate change on Southern California's Santa Ana winds, WCRP Climate Research in Service to Society, Denver, CO, October 2011 (M. Hughes, D. Cayan, and A. Hall).*

George Kiladis – Distinguished Chair (2010), Pacific Institute of Mathematics, University of Victoria, British Columbia.

Vladimir Ostashev – Visiting Professor (2013), Ecole Centrale de Lyon, University de Lyon, France.

Klaus Wolter – International Journal of Climatology Prize (2014), Royal Meteorology Society: *For his work on the Multivariate El Niño-Southern Oscillation (ENSO) Index (MEI). His 2011 study published in the International Journal of Climatology with Michael S. Timlin became one of the most influential recent papers in the journal, with the current number of citations exceeding 110.*

Valery Zavorotny, et al. – The Creativity Prize (2014), Prince Sultan Bin Abdulaziz International Prize for Water: For development of a new, unexpected, and cost-effective technique, GPS Interferometric Reflectometry (GPS-IR), to measure soil moisture, snow depth, and vegetation water content.

Professional Society

Gilbert Compo, Prashant Sardeshmukh, Jeffrey Whitaker,...**Chesley McColl**, et al. – Cover Article (2013), *Geophysical Research Letters*: Compo, G. P., P. D. Sardeshmukh, J. S. Whitaker, P. Brohan, P. D. Jones, and C. McColl, 2013: Independent confirmation of global land warming without the use of station temperatures. *Geophys. Res. Letters*, 40, 12, 3170-3174.

Juliana Dias – *Quarterly Journal* Editor's Award (2013), Royal Meteorology Society: For exceptional dedication to the theoretical details as part of the review process.

Oleg Godin – Editor's Citation for Excellence in Refereeing (2014), American Geophysical Union.

Thomas Hamill and others – Cover Article (2011), *Bulletin of the American Meteorological Society*: Hirschberg, P.A., E. Abrams. A. Bleistein, W. Bua, L. Delle Monache, T. W. Dulong, J. E. Gaynor, B.

Glahn, T. M. Hamill, J. A. Hansen, D. C. Hilderbrand, R. N. Hoffman, B. H. Morrow, B. Philips, J. Sokich, N. Stuart, 2011: A weather and climate enterprise strategic implementation plan for generating and communicating forecast uncertainty information. *Bull. Amer. Meteor. Soc.*, 92, 1651-1666.

Sergey Matrosov – Editor's Award, *Journal of Atmospheric and Oceanic Technology* (2012), American Meteorological Society: *For several thorough and detailed reviews that greatly improved a number of manuscripts.*

Robert Pincus – Editor's Citation for Excellence in Refereeing (2013), American Geophysical Union: For consistently providing constructive and thoughtful reviews for the Journal of Geophysical Research - Atmospheres.

Matthew Shupe, et al. – Cover Article (2013), *Bulletin of the American Meteorological Society:* Shupe, M. D., D. D. Turner, V. P. Walden, R. Bennartz, M. Cadeddu, B. Castellani, C. Cox, D. Hudak, M. Kulie, N. Miller, R. R. Neely III, W. Neff, and P. Rowe, 2013: High and Dry: New observations of tropospheric and cloud properties above the Greenland Ice Sheet. *Bull. Amer. Meteor. Soc.*, 94, 169-186.

Matthew Shupe and others – Cover Article (2013), *Nature*: Bennartz, R., M. D. Shupe, D. D. Turner, V. P. Walden, K. Steffen, C. J. Cox, M. S. Kulie, N. B. Miller, and C. Pettersen, 2013: July 2012 Greenland melt extent enhanced by low-level liquid clouds. *Nature*, 496, 83-86.

Catherine Smith – Special Award (2013), American Meteorological Society: For producing and sustaining an extremely user-friendly, web-based interface, making weather and climate data widely accessible to users at all levels.

Christopher Williams – Editor's Award, Journal of Atmospheric and Oceanic Technology (2012), American Meteorological Society: *For numerous, detailed, and thorough reviews of manuscripts on atmospheric and oceanic technology.*

Valery Zavorotny – Recognition of Best Reviewers for the IEEE Transactions on Geoscience & Remote Sensing (2014-2016), IEEE Geoscience and Remote Sensing Society.

Valery Zavorotny – Distinguished Lecturer (2010), IEEE Geoscience and Remote Sensing Society.

University and Joint Institute

Leslie Hartten – Director's Diversity Award (2011), Cooperative Institute for Research in Environmental Sciences: For her extensive volunteer effort with the Significant Opportunities in Atmospheric Research and Science (SOARS) program over the last ten years.

Paul Johnston, David Costa and **David Carter** –Outstanding Performance Award for Scientific and Engineering Achievement (2011), Cooperative Institute for Research in Environmental Sciences: *For designing, prototyping, building, and deploying a new network of snow-level radars in California for a joint project with the California Department of Water Resources and Scripps Institution of Oceanography.*

May 12-14, 2015 3

Other-Agency

Joseph Barsugli, et al. – **Partners in Conservation Award** (2012), U.S. Department of the Interior: *Given jointly to the NOAA/ESRL/Physical Sciences Division and CU/Western Water Assessment for work with the Bureau of Reclamation on the Colorado River Basin Supply and Demand Study.*

Robert Cifelli, et al. – **Education and Outreach Award** (2010), NCAR Earth Observing Laboratory: For the organization of the 2009 Advanced Study Program Colloquium, "Exploring the Atmosphere: Observational Instruments and Techniques."

Tom Hamill and **Jeff Whitaker** – **Leadership Computing Challenge Award** (2010), U.S Department of Energy Advanced Scientific Computing Research: *14,500,000 processor hours to use Department of Energy (DOE) high-performance computational resources for creating a next-generation multi-decadal "reforecast" data set.*

David Reynolds – **Special Recognition Award** (2012), California Extreme Precipitation Symposium: *In appreciation and recognition of your contributions over 40 years to improving weather forecasting and operational hydrology.*

Allen White, et al. – Climate Science Services Award (2013), California Department of Water Resources: These scientists led NOAA implementation of a cooperative partnership between the NOAA Hydrometeorology Testbed program and DWR's Enhanced Flood Response and Emergency Preparedness program to develop and install a 21st century observing system for extreme precipitation in California.

Gary Wick, et al. – **Group Achievement Award** (2011), NASA: For outstanding achievements during the NASA Genesis and Rapid Intensification Processes (GRIP) airborne Earth science mission.

Christopher Williams, et al., – **Robert H. Goddard Award** (2104), NASA: *Awarded to the NASA PMM Ground Validation (GV) Team in the category of Exceptional Achievement in Science.*

Department of Commerce

Randall Dole, et. al., – Bronze Medal Award (2012): For developing a NOAA Administrative Order on Scientific Integrity Policy and accompanying Handbook on Scientific Misconduct

Thomas Hamill and **Jeffrey Whitaker** – Bronze Medal Award (2013): For excellence in research and development of ensemble-based and hybrid data assimilation techniques that improve operational weather forecasts.

Martin Hoerling, Chad McNutt and **Roger Pulwarty** – Silver Medal Award (2014): For outstanding scientific assessment of the origins of the 2012 Central Great Plains Drought.

Roger Pulwarty et al. – Gold Medal Award (2010): For producing a major scientific report detailing the impacts of global climate change in the United States.

Allen White, Paul Nieman, et al. – Bronze Medal Award (2011): For comprehensive flood mitigation efforts in response to a severely weakened Howard Hansen Dam project with the potential of catastrophic flooding.

NOAA

Martin Hoerling, Robert Webb, et al., – Administrator's Award (2011): For support to the Interagency Working Group addressing flooding and development of a NOAA Decision Support System for Devils Lake.

Andrea Ray, et al. - General Counsel Award (2013): For exceptional performance and significant contributions to the Office of the General Counsel. The Susitna River Hydropower Project Team was recognized for its outstanding work in identifying the need for important climate studies in the Alaska Susitna River Hydropower Project licensing process, and for prevailing on NOAA's request to the Federal Energy Regulatory Commission that these studies be conducted.

Office of Oceanic and Atmospheric Research

Michael Alexander and **James Scott** – Outstanding Scientific Paper Award (2011): Forecasting the dynamics of a coastal fishery species using a coupled climate population model. *Ecological Applications*, 20, 452-464 (J. Hare, M. Alexander, M. Fogarty, E. Williams, J. Scott, 2010).

Amy Solomon, Ola Persson, Matthew Shupe and **Jian-Wen Bao** – Outstanding Scientific Paper Award (2010): Investigation of microphysical parameterizations of snow and ice in Arctic clouds during M-PACE through model-observation comparisons. *Monthly Weather Review*, 137, 3110-3128 (A. Solomon, H. Morrison, P. O. G. Persson, M. D. Shupe, and J.-W. Bao, 2009).

Other

Gilbert Compo – High Performance Computing Innovation Excellence Award (2011), International Data Corporation: *International study has enabled much more detailed and longer (100 years) record of past weather, to improve climate studies.*

Gilbert Compo, Jeffrey Whitaker, Prashant Sardeshmukh, et al., – Great Long-term Datasets (2011), *Wired Magazine*: Completed just this year, the 20th Century Reanalysis Project combines historical records from a hodgepodge of sources - the records of sea captains and explorers, doctors and old news accounts - into detailed weather maps, giving the late-19th and 20th centuries a modern level of meteorological coverage.

Leslie Harrten – Ten Years of Service Award (2010), UCAR SOARS (Significant Opportunities in Atmospheric Research and Science) Program.

Martin Hoerling, et al. – The Leading Global Thinkers of 2013, Foreign Policy Magazine: The Bulletin of the American Meteorological Society published a special report in 2013, which sought to explain the natural and human-caused climate factors that shaped some of 2012's extreme weather events. Foreign Policy's editors chose the co-editors of this report for coordinating this groundbreaking collection of studies that "pointed problem-solvers in the right direction" of how to answer tough questions about the role of natural variability and global warming in extreme weather and climate events.

James Wilczak, et al. – Annual Achievement Award (2015), Utility Variable-Integration Group (UVIG): For contributions to improve wind energy forecasts through the Wind Forecast Improvement Project.

May 12-14, 2015 5

Klaus Wolter – Governor's Award for High Impact Research (2014), CO-LABS: For his work in Sustainability for Helping Colorado Plan for Drought. Dr. Wolter has researched connections between the El Niño-Southern Oscillation (ENSO) and drought, and applied his expertise to support water resource management and drought planning in the state of Colorado and throughout the Southwest.

Robert Zamora, et al. – Governor's Award for High Impact Research (2014), CO-LABS: A team of several dozen scientific colleagues in CIRES and NOAA were selected for investigating the atmospheric impacts of rapidly expanding oil and gas development across the West. The researchers relied on careful independent measurements and rigorous analysis to provide the public and policymakers with the hard data needed to improve understanding about air quality challenges in Colorado, Utah, Wyoming and beyond.

Fellowships

AMERICAN METEOROLOGICAL SOCIETY

- Henry Diaz
- Randall Dole
- Christopher Fairall
- Martin Hoerling
- David Reynolds

ACOUSTICAL SOCIETY OF AMERICA

- Oleg Godin
- Vladimir Ostashev
- Lev Ostrovsky
- Alexander Voronovich

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS

Valery Zavorotny

COOPERATIVE INSTITUTE FOR RESEARCH IN ENVIRONMENTAL SCIENCES

- Randall Dole
- Christopher Fairall
- William Neff
- Judith Perlwitz
- Prashant Sardeshmukh

Postdoctoral Research Fellowships

- John Albers (2014-2015), National Academy of Sciences, National Research Council
- Linyin Cheng (2014-2015), Cooperative Institute for Research in Environmental Sciences
- Jessie Creamean (2012-2013), National Academy of Sciences, National Research Council
- Kelly Mahoney (2009-2011), University Corporation for Atmospheric Research, Postdocs Applying Climate Expertise
- Katherine McCaffrey (2014-2015), National Academy of Sciences, National Research Council
- Michael Scheuerer (2013-2014), National Academy of Sciences, National Research Council

Testimonials

Gilbert Compo, et al. – Various national and international expressions of support for <u>A Practical Guide to Wavelet Analysis</u>. Example:

• I have been using the online Torrence & Compo interactive wavelet plot site for many years to make students familiar with wavelet analysis, as it is simple and user friendly for the students. Utrecht University in the Netherlands (2014).

Gilbert Compo, et al. – Various national and international expressions of support for the <u>20th Century</u> <u>Reanalysis Dataset</u>. Examples:

- I'd like to thank you for providing this wonderful long-term data set. I have used it to study Western US's climate variability and found it very useful. (Department of Plants, Soil and Climate, Utah Climate Center, Utah State University, 2011).
- Thank you for the earlier reanalysis you have already completed. They have been of great value to science! (Hydrologic & Environmental Systems Modeling, South Florida Water Management District, 2013).
- I wanted to thank you so much for your efforts in putting together the 20th Century Reanalysis. This product has been an invaluable resource in our efforts to look at the skill of our seasonal hurricane predictors over a longer period of time. (Department of Atmospheric Science, Colorado State University, 2014).

Catherine Smith – Various expressions of support for the Physical Sciences Division <u>Climate and Weather</u> <u>Data Portal and User Tools</u>. Examples:

• I just wanted to provide a quick note on the usefulness of the Daily Mean Composites page that you provide through your web site. What an awesome tool! We (NWS Pocatello) have been using it to generate graphics that are used during outreach activities to the general public and also for retrospective end-of-season reports that are prepared for our partners each season. This is an extremely valuable tool and I want to say, "Job well done!" (Mike Huston, NWS Pocatello, 2011).

May 12-14, 2015 7

- I use this page to make monthly, yearly and water year composites for presentations to a number of water resource groups. I also use this for monthly internal reports. (Aldis Strautins, Service Hydrologist NWS, Grand Junction, CO, 2015).
- At the undergraduate level I use your pages all the time in the following undergraduate and graduate classes:
 - ATM 305: Global Physical Climatology
 - ATM 409/509: Atmospheric Precipitation Processes
 - ATM 401/501: Synoptic Laboratory II
 - ATM 611: Advanced Synoptic-Dynamic Meteorology
 - ATM 622: General Circulation of the Atmosphere
 - ATM 641: Mesoscale Processes
- I use your pages in support of classroom instruction and for student projects (every class I teach has a required student project in which the students have to do a project using real data). Bottom line: Great resource! (Lance Bosart, professor U of Albany, 2012).
- No other website widely available is as good as the one you maintain there at NOAA. To lose it would be a big blow to energy meteorologists around the world. (Jess Torpey Senior Meteorologist, E.ON Global Commodities Düsseldorf, Germany, 2014).
- This online tool is fantastic! I am a Ph.D. student at the University of Alaska Fairbanks, and this resource is an amazing way to show synoptic overviews for the case study days in my research without laborious data manipulations. (Derek Starkenburg, University of Alaska Fairbanks student, 2014).
- I have used ESRL PSD online plotting and analysis tool extensively. This tool is of great help and highly time saving one. The way you have created and designed it is simply superb. It gives access to huge and diverse amount of data without actually downloading it. (Chinmay Khadke, Research Fellow India Meteorological Department Pune, India, 2013).
- We used the Monthly/Seasonal Climate Composites page in my Biogeochemical Cycles class today (taught by Dr. Oliver Wingenter), to model the Pacific Decadal Oscillation. Being able to visualize T, P and wind speed variations associated with phase changes in PDO was a great help. (Annie Riggins, Kottlowski Graduate Fellow, New Mexico Institute of Mining and Technology, 2014).
- I'd like to thank you for providing this wonderful long-term data set. I have used it to study Western US's climate variability and found it very useful. (Department of Plants, Soil and Climate, Utah Climate Center, Utah State University, 2011).

Jeffrey Whitaker – Climate Corporation (2015): Recognized for his development and maintenance of a software repository of community python software for GRIB, netCDF data access, for plotting data on maps, and for spherical harmonic transforms:

• By using Jeff's packages, we and the collective scientific community have saved a tremendous amount of time over the past several years...Jeff's packages are robust, well written, and have met essential needs for weather and climate scientists...we have always found Jeff to be eager to help when we have questions or suggestions.