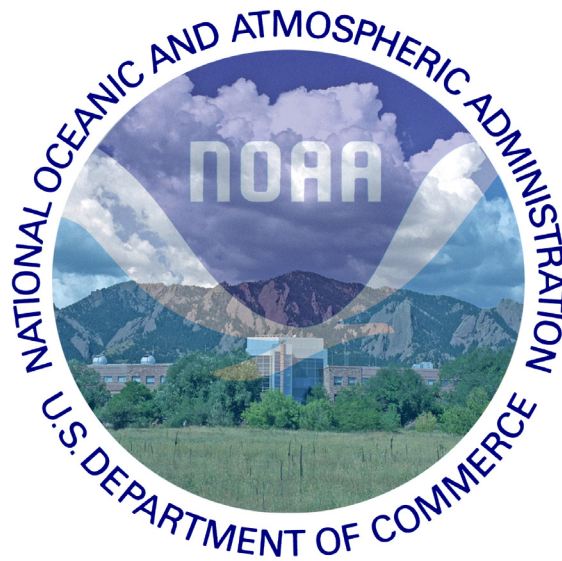


# D. Awards and Honors



## ESRL Physical Sciences Laboratory Review

David Skaggs Research Center  
Boulder, Colorado  
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## GSD Awards and Honors (1999-2009)

*A list of awards won by groups and individuals for research, development, and/or application*

### White House Awards

**2001 Presidential Rank Award - Meritorious to Alexander E. MacDonald** for sustained superior accomplishment of programs of the United States of America Government for noteworthy achievement of quality and efficiency in the public service.

**1999 Hammer Award to Margot Ackley, Russ Chadwick, Seth Gutman, Kirk Holub, and Nicole Radziwill**, who represented the Maritime Differential GPS Service Team/Nationwide Differential GPS Team for making significant contributions in support of reinventing government principles. This team “expanded an existing navigational locating system by using a combination of new and old technologies and facilities. By combining navigational systems they were able to provide increased capability, lower costs, improve quality, and develop new tools that support-commercial industries such as farming, transportation, weather predicting, and surveying.”

### DOC Gold Medal Awards

**2006 DOC Gold Medal Award for 2006** to the GPSMet team, **Seth I. Gutman, Kirk L. Holub, Stanley G. Benjamin, Susan R. Sahm** for its development of Global Positioning System (GPS) meteorology, a new low cost upper-air observing system that uses GPS to continuously measure the total amount of water vapor in the atmosphere. The team successfully demonstrated new applications for GPS meteorology that are essential to NOAA’s Integrated Earth Observing System/Global Earth Observing System of Systems. Their efforts have advanced weather forecasting, climate monitoring, and atmospheric research by providing a new way to monitor atmospheric water vapor.

**1999 DOC Gold Medal Award** to Advanced Weather Interactive Processing System (AWIPS) Project Management Group, **Denny Walts, Carl Bullock, Darien Davis, Joe Wakefield, and Herb Grote**, representing the entire FSL AWIPS Team, for the design, development, and integration of the AWIPS infrastructure software.

### DOC Silver Medal Awards

**2003 Department of Commerce Silver Medal to Jim Holitza** for extraordinary and distinguished leadership in the development, procurement, and implementation of a radically new supercomputer architecture at NOAA’s Forecast Systems Laboratory (FSL).

### DOC Bronze Medal Awards

**2004 Bronze Medal to GSD staff** for “developing and nationally deploying the AWIPS Linux Migration Project thereby reducing hardware, maintenance, and operations costs and improving warning lead times by nearly two minutes.”

**2003 Bronze Medal to GFESuite Team, Mark Mathewson, Tom LeFebvre, Tracy Hansen, and Mike Romberg** for “leadership in creating software to allow all Weather Service offices to generate high-resolution, digital and graphical forecasts in real-time operations.”

**1999 DOC Bronze Medal Award to Rhonda Lange** as member of a team recognized for representing FSL on the David Skaggs Research Center Common Space Committee.

1999 DOC Bronze Medal Award to NOAA/Boulder Networking Group Bob Clark and Brian Moore of FSL and Jerry Janssen, formerly of FSL, were all key in implementing the David Skaggs Research Center building network.

## NOAA Awards

**2008 NOAA General Counsel Awards to Bill Bendel**, a co-recipient of this award for his contributions to the Ocean Hall Team. Bill led the successful installation of NOAA's Science On a Sphere®, the showpiece and heart of the Ocean Hall exhibit at the Smithsonian Sant Ocean Systems Gallery ([http://ocean.si.edu/ocean\\_hall/Galleries/global\\_ocean\\_systems.html](http://ocean.si.edu/ocean_hall/Galleries/global_ocean_systems.html)).

**2006 Bronze Medal to Steve Ennis** a co-recipient of this award for voluntary service provided during FEMA post-disaster relief operations after multiple hurricane strikes in 2005.

**2006 Bronze Medal to Mike Kraus and Alexander MacDonald** among other team recipients for their role in designing and implementing the consolidation of six research organizations in Boulder, CO into the new NOAA Earth System Research Laboratory.

**2006 Bronze Medal to Mark Mathewson** as part of a team who “developed and deployed a new software warning tool which codifies and permits automated delivery of NWS warning products to users.”

**2006 Bronze Medal to Greg Pratt and Lynn Sherretz** in recognition for “their work in developing the Volcanic Ash Collaboration Tool, a new tool which provides forecasting capabilities during volcanic eruptions and is essential to preventing volcanic ash damage to lives and property.”

**2006 Bronze Medal to Sara Summers** as member of a team recognized for “demonstrating the usefulness of unmanned aircraft systems in accomplishing NOAA's mission, including operational research goals.”

**2004 NOAA Bronze Medal to Herb Grote, Darien Davis, and Mike Romberg** for “developing and nationally deploying the AWIPS Linux Migration Project thereby reducing hardware, maintenance, and operations costs and improving warning lead times by nearly two minutes.”

**2005 NOAA Administrator's Award to Leslie Hart and Scott Nahman** for their “extraordinary efforts, dedication, and teamwork in developing and issuing integrated requirements for a NOAA high performance computer system that realistically demonstrates our One-NOAA vision.”

**2005 NOAA Administrator's Award to Paul Schultz and Patricia Miller** for their work supporting the development of improved weather products and services that support the nation's surface transportation system.

**2004 NOAA Research Employee of the Year Award to Nita Fullerton** (FSL Writer/Editor) as

member of a team recognized for “communicating information about FSL’s scientific research and technology transfer to the public, academia, and research communities.”

**2003 NOAA Team Member of the Month Award to Leon Benjamin** for “excellence in support of the National Profiler Network.”

**2003 NOAA Tech Award to Dan Shaffer** for “Prototype of a NOAA computational Grid”.

**2002 NOAA Research Employee of the Year Award to Jennifer Mahoney** for the successful development and transfer of the first web-based Real-Time Verification System to improve aviation forecasts for the FAA, the NOAA/NWS Aviation Weather Center, and the private sector.

**1999 NOAA Transition Team Certificate of Recognition: Jim Holitza and Sandi Aschert** for their outstanding participation on the NOAA Transition Team and successful relocation of NOAA Boulder to the David Skaggs Research Center.

## **NOAA and Other Technology Transfer-Related Awards**

**2009 Technology Transfer Award** to a four-member team from GSD: **Tracy L. Hansen, Thomas J. LeFebvre, Mark A. Mathewson, and Mike Romberg** for continuing improvements to the Graphical Forecast Editor (GFE) allowing the system to be used in River Forecast and National Centers, as well as for tailoring GFE systems for the meteorological agencies of Taiwan and Australia.

**2007 Technology Transfer Award** to a four-member team from GSD; **John A. McGinley, John R. Smart, Linda S. Wharton, and Daniel L. Birkenheuer**, in recognition of the LAPS technology transfer to support development and implementation of the Precision Airdrop System that improves airdrop activities worldwide.

**2007 Distinguished Administrative Professional Award from Colorado State University to Jim Frimel** for his work on the team developing the Volcanic Ash Coordination Tool (VACT).

**2007 National Weather Certificate of Recognition** to FX-Net Project Researchers to **Sher Schranz**, FX-Net Project Manager, and **Jebb Stewart**, Development Lead “In Recognition of your leadership to ensure operational excellence via innovative development and maintenance of critical software for Incident Meteorologists (IMETS).”

**2005 NASA Award to William R. Moninger**, lead scientist for ESRL/GSD’s TAMDAR efforts and the TAMDAR Team, for “outstanding contributions to aviation weather safety research and development” at the 2005 NASA Aviation Weather Accident Prevention Project Review.

**2005 Technology Transfer Award** to a nine-member team, **Daniel Birkenheuer, Darien Davis, Herb Grote, John McGinley, Paul Schultz, John Smart, Joseph Wakefield, Linda Wharton, Susan Williams**, for work on the design, development, integration, testing, and implementation of the RSA (U.S. Air Force Range Standardization and Automation) Weather Support System, now running at the space launch sites at Cape Canaveral, FL and Vandenberg Air Force Base, CA. The RSA is a customized AWIPS system for the specific needs of launching space vehicles.

## NOAA Research (OAR) Awards

**2008 OAR Outstanding Scientific Paper Awards to Smith, T. L., S. G. Benjamin, S. I. Gutman, and S. Sahm**, 2007: Short-range forecast impact from assimilation of GPS-IPW observations into the Rapid Update Cycle. *Mon. Wea. Rev.* **135**, 2914-2930.

**2008 OAR Outstanding Scientific Paper Awards to McMillin, L. M., J. Zhao, M. K. Rama Varma Raja, S. I. Gutman, J.G. Yoe**, 2007: Radiosonde humidity corrections and potential AIRS moisture accuracy. *J. Geophys. Res.* **112**

**2007 OAR Outstanding Scientific Paper Award to F. Martin Ralph, Paul J. Neiman, Gary A. Wick, Seth I. Gutman, Michael D. Dettinger, Daniel R. Cayan, and Allen B. White**, 2006: Flooding on California's Russian River: Role of atmospheric rivers. *Geophys. Res. Lett.*, **33**: L13801, doi: 10.1029/2006GL026689.

**2005 OAR Outstanding Scientific Paper Award to Stan Benjamin, Dezső Dévényi, Steve Weingandt, Kevin Brundage, John Brown, Georg Grell, Dongsoo Kim, Barry Schwartz, Tatiana Smirnova, and Tracy Lorraine Smith**, 2004: An Hourly Assimilation–Forecast Cycle: The RUC, *Mon. Wea. Rev.* **132**, 495-518.

**2005 OAR Employee of the Year for Public Service to Bill Moninger** for his work to collect and effectively utilize weather data collected by commercial aircraft.

**2000 NOAA OAR Employee of the Year to Jenny Martinez**, FSL's Secretary to the Director, for her outstanding communication skills, her contributions to organizational effectiveness, and her dedication and commitment in providing sustained superior support since the establishment of FSL to present.

## Other Awards

**2009 R. R. Newton Award for Scientific History to Steve Albers** for proposing the fruitful idea of consulting historical satellite-search ms records of then-known planets when near geocentric conjunction with then-unknown planets, to find unwitting observations of the latter — an idea that led to Charles Kowal's world-famous 1980 find of Galileo's 1613 Neptune sightings.

**2008 Federal 100 Award to Eric Hackathorn**, one of *Federal Computer Week's* 2008 "Federal 100" for developing NOAA's presence in the online world "Second Life." Virtual worlds allow their users to project a nonphysical representation of themselves – an avatar – into a generated three-dimensional Web presence, and interact with other participants. Eric also is recognized for his lead in building collaborations between other federal and intergovernmental agencies in the virtual worlds' arena.

**2008 New Media Consortium Virtual World Award to Eric Hackathorn** for his "Exploring Weather and Climate Change Through a Climate Time Line," a proposal that will be developed by New Media Consortium for NOAA's Second Life virtual world.

**2008 CIRA Research Initiative Award Winners to Paul Hamer** for developing and supporting the Object Data System software architecture that underlies the success of the Central Facility data system of the NOAA ESRL Global Systems Division and Jeff Smith for significantly impacting the Global Systems Division in respect to web applications, web services, and java programming.

**2007 Silver Hard Hat Award** for the new computing facility that houses a NOAA supercomputer and is managed by ESRL's **Global Systems Division** in Boulder, Colorado for "Outstanding Mechanical/Electrical Project" by Colorado Construction magazine.

**2007 CIRA Research Initiative Award to Jebb Stewart** his technical leadership in the system design and development of enabling technology for the Gridded FX-Net System.

**2005 National Predictive Services Fire Weather Honor Award** to FX-Net Team, **Sher Schranz and Jebb Stewart** for "significant contributions to the Predictive Services Program. FX-Net has proven to be a reliable, cost-effective, and cutting edge system for providing meteorological information to predictive services meteorologists."

**2005 NASA Group Achievement Award to John Brown**, along with colleagues from several NASA laboratories, who served on a board to investigate the crash of Helios, a solar-powered "flying wing" Remotely Piloted Aircraft that suffered structural failure and fell into the Pacific Ocean during a long-duration test flight on June 26, 2003.

**2004 NWS Aviation Meteorology Award to Greg Pratt, Dennis Rodgers, Jim Frimel, Lisa Gifford, and Young Chun** for Excellence in Aviation Product Development and their exceptional sustained efforts to develop and implement operational enhancements for aviation services.

**2004 First Annual Postdoctoral Poster Symposium to Stephen Weygandt** received in recognition of his outstanding presentation at the First Annual Postdoctoral Poster Symposium, June 24, 2004, in Boulder, CO. This symposium was part of the 2004 celebration of the Boulder Laboratories 50th Anniversary.

**2003 USBE and Information Technology, Hispanic Engineer and Information Technology, and Women of Color Conference Magazine** –sponsored "**Woman of Achievement**" **Award to Joanne Edwards** for "significantly influencing the community as either an engineer, researcher, scientist or technologist, and whose contributions continue to advance technical career opportunities for other women of color".

**2003 Tech Museum Award to Alexander MacDonald** for one of five Tech Museum Award Laureates in the NASDAQ Stock Market Education category for his idea and creation of Science On a Sphere™.

**2002 FAA Excellence in Aviation Award to Forecast Systems Laboratory** for outstanding contributions to the Federal Aviation Administration Weather Research Program.

**2002 Air Force Weather Spengler Award to Brent Shaw** for being the Most Outstanding Air Force Weather Individual Mobilization Augmentee (IMA) during his most recent active duty tour with the Air Force Weather Agency at Offutt Air Force Base in Omaha, NE.

**2000 Government Technology Leadership Award to Lynn Sherretz** in recognition of his efforts supporting the FAA's Aviation Weather Research Program's (AWRP) and for his leadership in the development and implementation of Aviation Digital Data Service (ADDS).

**1999 Computerworld Smithsonian Institution Award** to FSL-developed Advance Weather Interactive Processing System (AWIPS) for being the best and most innovative technology in the "Environment, Energy, and Agriculture" category.

## PSD Awards and Honors (2000 and Later)

*A list of awards won by groups and individuals for research, development, and/or application*

### International

**Gary Bates and Marty Hoerling**, World Meteorological Organization (WMO) Norbert Gerbier-Mumm International Award (2009): Best paper for the study “Unraveling the Mystery of Indian Monsoon Failure during El Niño”

**Lev A. Ostrovsky**, Mandelstam Prize of the Russian Academy of Sciences (2009): For outstanding research in the fields of nonlinear acoustic phenomena in solids, structurally inhomogeneous media, anomalous nonlinearity, nonlinear waves, and non-destructive testing.

### National/Interagency and White House

**Thomas Hamill**, Presidential Early Career Award for Scientists and Engineers (PECASE) (2002)

**Gary Wick**, National Ocean Partnership Project (NOPP) Excellence in Partnering Award (2008): For Multi-sensor Improved Sea Surface Temperature (MISST) for GODAE Project Team.

### Professional Society

**Chris Fairall**, AMS Sverdrup Gold Medal (2009): For important continuing contributions to air-sea interaction research, particularly the observation and modeling of physical and gaseous transfers in conditions ranging from calm to storms, tropic to arctic.

**William Neff**, AMS Walter Orr Roberts Lecture in Interdisciplinary Sciences (2008): For his scientific and programmatic contributions crossing the boundaries of weather, climate, air quality meteorology and remote sensing, and for the influence these have had on public policy affecting air quality.

### University and Joint Institute

**Oleg Godin**, CIRES Outstanding Performance Award (2008): For the development of the theory of tsunami shadows (changes in ocean surface roughness induced by tsunami waves) and the proposed use of this phenomenon for tsunami detection from space. Also, for the discovery of the phenomenon of anomalous transparency of the air-sea interface, which enhances the possibility of acoustic communication through the interface and has important geophysical, biological, and national security implications.

**Sergey Matrosov**, CIRES Outstanding Performance Award (2009): For outstanding contributions to scientific research on determining the properties of clouds and precipitation from millimeter wavelength radar.

**Catherine Smith**, CIRES Outstanding Performance Award (2001): For outstanding contributions to the popularity of the Climate Diagnostics Center website.

**Allen White**, CIRES Outstanding Performance Award (2003): For innovative and widely impacting contributions to precipitation research, operational forecasting, and team leadership. Specific contributions include the design of a new radar for the California Land–Falling Jets experiment (CALJET) and the development of a new snow level detection algorithm.

**Christopher Williams**, CIRES Outstanding Performance Award (2006): For outstanding contributions to scientific research on precipitating cloud systems using radar profilers, in particular, for great initiative and creativity in developing methodologies to retrieve cloud microphysical properties from profiler spectra.

## Other–Agency

**Gilbert Compo, Jeffrey Whitaker, and Prashant Sardeshmukh**, Department of Energy (DOE) Innovative & Novel Computational Impact on Theory & Experiment (INCITE) Award (2007)

**Leslie Hartten**, 5 Years of Service Award for Science Research Mentoring, from UCAR’s Significant Opportunities in Atmospheric Research and Science (SOARS®) Program (2006).

Lundquist, J.D., **P.J. Neiman**, B.E. Martner, **A.B. White, D.J. Gottas, and F.M. Ralph**, California Department of Water Resources Climate Science Paper Award: For “Rain versus snow in the Sierra Nevada, California: Comparing Doppler profiling radar and surface observations of melting level” *Journal of Hydrometeorology*, 9, 194–211 (2008).

## Department of Commerce

**Lisa Darby, et al.**, Department of Commerce Bronze Medal Award (2003): For facilitating work-group meetings for NOAA’s Second Survey Feedback Action Program.

**Lisa Darby, et al.**, Department of Commerce Group Silver Medal Award (2004): For the discovery of a previously unrecognized major factor that causes ozone pollution in the Houston, Texas area.

**Randy Dole**, Department of Commerce Silver Medal Award (2002): For developing the NOAA–CIRES Climate Diagnostics Center into a unique and valuable national resource for climate research.

**Randall Dole, Roger Pulwarty, Robert Webb et al.**, Department of Commerce Bronze Medal Award (2006): For developing an integrated state, local, and federal strategy for a National Integrated Drought Information System endorsed by the Western Governors’ Association.

**William Neff, Randall Dole, Marty Ralph, Marty Hoerling, et al.**, Department of Commerce Group Bronze Medal Award (2007): For superior federal service for designing and implementing the consolidation of six research organizations in Boulder, Colorado into the new NOAA Earth System Research Laboratory.

**Marty Ralph**, NOAA Administrator’s Award (2009): For exemplary leadership of the NOAA Unmanned Aircraft System Program during its formative stage.

**Marty Ralph, et al.**, NOAA Administrator’s Group Award (2007): For the successful planning, implementation and initial deployment in the San Diego and Oxnard Hydrologic Service Areas of



the first NOAA/USGS Debris Flow Warning System.

**Marty Ralph and the PACJET Research and Development Team**, Department of Commerce Group Bronze Medal Award (2003): For the development of a new snow-level algorithm for boundary-layer wind profilers, which will improve national winter forecasts.

**Tim Schneider, Sergey Matrosov, Jan Gibson, Carroll Campbell, Duane Hazen, Roger Reinking, et al.**, Department of Commerce Group Gold Medal Award (2001): For development of a new remote sensing system to identify hazardous in-flight icing conditions in clouds.

**Robert Webb, Mary Cécile Penland De Garcia, et al.**, Department of Commerce Silver Medal Award (2009): For providing timely ocean information and capacity for improved global monitoring and management of coral reef ecosystems relative to climate change.

**Daniel Wolfe**, Department of Commerce Bronze Medal Award (2001): For coordinating the final integration of hardware and software into completed measurement systems which advanced the NOAA Environmental Technology Laboratory's research interests.

## NOAA

**Henry Diaz**, NOAA Distinguished Career Award (2009): For numerous and diverse contributions in climate research and monitoring that have enhanced NOAA's national visibility and international reputation over thirty-three years of service.

**Henry Diaz**, NOAA Administrator's Award (2004): For recognition of scientific research contributions to NOAA which have enhanced NOAA's visibility and reputation in climate science and have helped initiate national and international science efforts on topics of vital importance.

**Randall Dole**, NOAA Administrator's Award (2008): For outstanding leadership in and dedication to developing U.S. Climate Change Science Program Synthesis and Assessment products integrating climate research for decision support.

**Chris Fairall**, NOAA Administrator's Award (2003): For advancing the science and engineering of air-sea interaction measurements and producing vastly improved parameterizations that have now been widely adopted in global climate and weather models.

**Marty Hoerling, Roger Pulwarty, and Robin Webb**, NOAA Administrator's Award (2008): For outstanding dedication to developing U.S. Climate Change Science Program synthesis and assessment products integrating climate research for decision support.

**C. Penland, R. Webb, L. Matrosova, et al.**, DOC Group Silver Medal Award (2009): For providing timely ocean information and capacity for improved ocean monitoring and managing of coral reef ecosystems relative to climate change.

**M.J. Post**, NOAA Technology Transfer Award (2001): For development and transfer to industry of an unattended cloud radar. The radar was originally developed for use at Department of Energy (DOE) Atmospheric Radiation Measurement (ARM) sites.

**M.J. Post, Daniel Wolfe, Sergio Pezoa, David Welsh, et al.**, NOAA Administrator's Award

(2001): For development and installation of the Ronald H. Brown motion–stabilized wind profiler radar

**Catherine Smith**, NOAA Research Partner of the Month (2002): For research and support in preparing a report to Congress on the May 2003 tornado outbreak.

**Daniel Wolfe, David Welsh, Sergio Pezoa, M.J. Post, et al.**, NOAA Administrators Award (2001): For innovative engineering development of a new observing system to improve NOAA's forecasts of weather and climate.

## OAR

### *Employee of the Year*

**Thomas E. Ayers**, (2001): For playing a critical role in constructing, testing, improving, and deploying five millimeter cloud radars used at several international sites. Because of the importance of this radar as a new atmospheric sensor, it has been commercialized through a Cooperative Research and Development Agreement (CRADA) between ETL and Radian.

**Lisa Darby** (2000): For her outstanding research contributions, including exemplary leadership in field programs, involving Doppler lidar data, and for her critical contributions to the success of several high visibility experiments.

**Barbara Herrli, et al.**, (2003): For outstanding administrative support during a very busy and productive year for the Aeronomy Laboratory.

**Martin Hoerling**, (2001): For his work on the advancement of understanding our seasonal climate predictability, the advancement progress on NOAA's seasonal–to–internannual climate prediction effort, and the advancement of understanding on the dynamics of climate change.

### *Outstanding Scientific Paper Award*

**Darby, L., et al.**, (2005): Effect of petrochemical industrial emissions of reactive alkenes and NO<sub>x</sub> on tropospheric ozone formation in Houston, Texas, *J. Geophys. Res.*, 108(8), 4249 (2003).

**Fairall, C.W., J.E. Hare, et al.**, (2000): Parameterization and micrometeorological measurement of air–sea gas transfer, *Boundary Layer Meteorology*, 96, 63–105.

**Hamill, T.M., J.S. Whitaker, et al.**, (2008): Reforecasts: an important dataset for improving weather predictions, *Bull. Am. Meteor. Soc.*, 87, 33–46 (2006).

**Hoerling, M.P.**, (2000): Understanding and Predicting Extratropical Teleconnections Related to ENSO, Chapter 2 (pp 57–88) in *El Niño and the Southern Oscillation: Multi–scale Variability, and Global and Regional Impacts* [eds. H. Diaz and V. Markgraf], Cambridge University Press.

**Hoerling, M.P.**, (2002): The Perfect Ocean for Drought, *Science*, 299, 691–694.

**Neiman, P.J., F.M. Ralph, G.A. Wick, et al.** (2008): Meteorological characteristics and overland precipitation impacts of atmospheric rivers affecting the West Coast of North America based on

eight years of SSM/I satellite observations. *J. Hydrometeor.*, **9**, 22–47.

**Ralph, R.M., P.J. Neiman, G.A. Wick, A.B. White, et al.**, (2007): Flooding on California's Russian River: role of atmospheric rivers, *Geophys. Res. Lett.*, 33 (2006).

**Ralph, F.M., P.J. Neiman, D.E. Kingsmill, P.O.G. Persson, A.B. White, et al.** (2004): The impact of a prominent rain shadow on flooding in California's Santa Cruz Mountains: A CALJET case study and sensitivity to the ENSO cycle, *J. Hydrometeor.*, 4, 1243–1264 (2003).

**Sardeshmukh, P., G. Compo, and C. Penland** (2001): Changes of Probability Associated with El Niño. *J. Climate*, 13, 4268–4286 (2000).