

# CURRICULUM VITA FOR DAVID M. LEGLER

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Director, US CLIVAR (Climate Variability and Predictability) Office  
1717 Pennsylvania Ave. NW, Suite 250, Washington DC 20006 USA, legler@usclivar.org

## Education

PhD/ MS /BS in Meteorology, 1992/1984/1982 Florida State University

## Honors/Service

- 1982 American Meteorological Society Father James B. Macelwane Award for undergraduate research papers.
- 1988 Organizing committee; Workshop on Atmospheric Forcing of Ocean Circulation, New Orleans.
- 1989 - 1992 NASA Graduate Student Researchers Program (1989-1992)
- 1986 - 1999 Science Definition and Working Team, NASA NSCAT & QuikSCAT missions
- 1990 - 2000 Science Team, ERS-1 Altimeter and Scatterometer Projects.
- 1992 - 2000 Science Team, NASA EOS-A SeaWinds Project.
- 1995 Convenor, IAPSO/IUGG 1995 Symposium "Dynamics of the Open Ocean from New Satellites"
- 1995 - 1998 WOCE Synthesis and Modelling Working Group
- 1997 - 2000 JSC/SCOR Working Group on Air-Sea Fluxes
- 1998 - 2000 American Meteorological Society Committee on Interaction of Sea and Atmosphere
- 1998 - 2000 International Science Steering Team - Global Ocean Data Assimilation Experiment (GODAE)
- 1998 Interim Science Steering Team US Global Ocean Data Assimilation Experiment (USGODAE)
- 1998 NASA Group Achievement Award
- 1998 - 2000 Science Steering Team – U.S. Global Ocean Data Assimilation Experiment (GODAE)
- 1998 - 2002 Co-Chair, WOCE/CLIVAR Data Products Committee
- 1999 Scientific Organizing Committee – 1<sup>st</sup> International Conference on the Ocean Observing System for Climate
- 2002 - 2004 US Integrated Ocean Observing System Data Management Subcommittee (DMAC)
- 2002 - 2004 Chair, Local Organizing Committee, 1<sup>st</sup> CLIVAR International Science Conference, June 21-25, 2004
- 2003 GCOS Review Team: Global Observing System Information Center (GOSIC)
- 2004 American Water Resources Association Boggess Award for best paper in 2003(Thompson et. al.)

## Professional societies

American Geophysical Union, American Meteorological Society, The Oceanography Society

## Scientific Publications (• indicates refereed - 31 of 71 total)

- Busalacchi, A, D. Legler, H. Cattle, T. Palmer, and J. Gould, 2005: Climate change and variability—what can we predict? *WMO Bulletin*, **54**, 51-57.
- Legler, D. M., 2005: Climate variability and predictability: The ocean connection. *Sea Technology*, **46**, 30-31.
- White, W.B., D.R. Cayan, P.P. Niiler, J. Moisan, G. Lagerloef, F. Bonjean and D. Legler, 2005. The seasonal cycle of diabatic heat storage in the Pacific Ocean, *Prog. Oceanogr.*, **64**, 1-29.
- Smith, S. R., J. Servain, D. M. Legler, J. N. Stricherz, M. A. Bourassa, and J. J. O'Brien, 2004: In-situ based pseudo-wind stress products for the tropical oceans. *Bull. Amer. Meteor. Soc.*, **85**, 979-994.
- Hankin, S. and the DMAC Steering Committee, 2004, The U.S Integrated Ocean Observing System (IOOS) Plan for Data Management and Communications (DMAC), Part I, Ocean.US, Arlington, VA, 200+ pp
- Hankin, S., L. Bernard, P. Cornillon, F. Grassle, D. Legler, J. Lever, S. Worley, 2003: Designing the Data and Communications Infrastructure for the U.S. Integrated Ocean Observing System. *Marine Technology Society Journal*, **37** (3), 51-54.
- Bourassa, M. A., David M. Legler, and James J. O'Brien, 2003: Scatterometry Data Sets: High Quality Winds Over Water. Advances in the Applications of Marine Climatology - The Dynamic Part of the WMO Guide to the Applications of Marine Climatology. WMO/TD-No.1081 (JCOMM Technical Report No.13, WMO/TD-No. 1081), 159–174.

- Thomson, A. M., R. A. Brown, N. J. Rosenberg, R. C. Izaurralde, D. M. Legler, and R. Srinivasan, 2003, Simulated Impacts of El Niño/Southern Oscillation on U.S. Water Resources, *J of the Amer Water Res Assoc*, **39** (1), 137-148.
- Legler, D. M., 2002, U.S. Program on Climate Variability and Predictability (CLIVAR), *Sea Technology*, **43**, 14-16.
- Bourassa, M. A., D. M. Legler, J. J. O'Brien, and S. R. Smith, 2003: SeaWinds validation with research vessels. *J. Geo. Res.*, **108**, DOI 10.1029/2001JC001081.
- Legler, D. M., P. Freitag, P. Holliday, B. Keeley, S. Levitus, and R. Wilson, 2001: Essential elements of the data and information management system (DIMS) for the ocean observing system for climate. *Ocean and Atmospheric Data Management*, (published online: <http://www.elsevier.com/gej-ng/10/34/32/legler/legler.html> – now available from the author).
- Lindstrom, E. and D. M. Legler, 2001: Developing the WOCE Global Data System. *Ocean Circulation and Climate, Observing and Modelling the Global Ocean*, J. Church, J. Gould, and G. Siedler, Eds., Academic Press, pp. 181-190.
- Smith, S. R., D. M. Legler, and K. V. Verzone, 2001: Quantifying uncertainties in NCEP reanalysis using high-quality research vessel observations. *J. Climate*, **14**, 4062-4072.
- Pegion, P. J., M. A. Bourassa, D. M. Legler and J. J. O'Brien, 2000: Objectively derived daily "winds" from satellite scatterometer data. *Mon. Wea. Rev.*, **128**, 3150-3168.
- Putman, W. M., D. M. Legler, and J. J. O'Brien, 2000: Synthesis of FSU and NCEP reanalysis pseudostress products over the Pacific ocean. *J. Climate*, **13**, 3003-3016.
- Taylor, P. K., E. F. Bradley, C. W. Fairall, D. Legler, J. Schulz, R. A. Weller, and G. H. White, 1999: Surface Fluxes and Surface Reference Sites. Papers from International Conference on the Ocean Observing System for Climate, Saint Raphael, France, Solicited Paper, 215-235.
- Legler, D. M., S. R. Smith, and J. J. O'Brien, 1999: An archive of underway surface meteorology data from WOCE. Papers from CLIMAR, Vancouver, Canada, WMO, 42-45.
- Smith, S. R., D. M. Legler, and K. V. Verzone, 1999: Quantifying uncertainties in NCEP reanalysis using high-quality research vessel observations. Papers from CLIMAR, Vancouver, Canada, WMO, 223-230.
- Bourassa, M. A., D. M. Legler, and J. J. O'Brien, 1999: Scatterometry data sets: high quality winds over water. Papers from CLIMAR, Vancouver, Canada, WMO, 139-148.
- Smith, S. R., D. M. Legler, M. J. Remigio, and J. J. O'Brien, 1999: Comparison of 1997-1998 US Temperature and precipitation anomalies to historical ENSO warm phases. *J. Climate*, **12**, 3507-3515.
- Izaurralde, R. C., N. J. Rosenberg, R. A. Brown, D. M. Legler, M. Tiscareño-López, and R. Srinivasan, 1999: Modeled effects of moderate and strong "Los Ninos" on crop productivity in North America. *Ag. Forest Meteor.*, **94**, 259-268.
- Legler, D. M., K. J. Bryant, and J. J. O'Brien, 1999: Impact of ENSO-related climate anomalies on crop yields in the US. *Climatic Change*, **42**, 351-375.
- Putman, W. M., D. M. Legler, and J. J. O'Brien, 1998: Variational Blending Of FSU Tropical Pacific Wind Product into NCEP Reanalyses Fields. Papers from Proceedings Of The twenty-third Annual Climate Diagnostics and Prediction Workshop, Miami, Florida, USA, 131-134.
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- Legler, D. M., M. A. Bourassa, A. D. Rao, and J. J. O'Brien, 1998: NSCAT Surface Wind Fields Using Optimally Tuned Direct Minimization Techniques. Papers from 9th Conference on Interaction of Sea and Atmosphere, Phoenix, AZ, American Meteorological Society, 32-35.
- Bourassa, M. A., D. M. Legler, J. J. O'Brien, J. N. Stricherz, and J. Whalley, 1998: High temporal and spatial resolution animations of winds observed with the NSCAT scatterometer. Papers from 14th Internation conference on IIPS, Phoenix, AZ, American Meteorological Society, 556-559.
- Solow, A., R. M. Adams, K. J. Bryant, D. M. Legler, J. J. O'Brien, B. A. McCarl, W. Nayda, and R. Weiher, 1998: The value of improved ENSO prediction to US agriculture. *Climatic Change*, **39**, 47-60.
- Siefridt, L., B. Barnier, D. M. Legler, and J. J. O'Brien, 1998: 5-day average winds over North-West Atlantic from ERS1 using a variational analysis. *The Global Atmosphere and Ocean System*, **5**, 317-344.
- Rosenberg, N. J., R. C. Izaurralde, M. Tiscareño-Lopéz, D. Legler, R. Srinivasan, R. A. Brown, and R. D. Sands, 1997: Sensitivity of North American Agriculture to ENSO-based Climate Scenarios and their Socio-Economic Consequences: Modeling in an Integrated Assessment Framework. PNL-11699/UC-0000, Pacific Northwest National Laboratory, Washington, DC, 146 pp.
- Jones, J., D. M. Legler, G. F. Arkin, and J. W. Hansen, 1997: Climate impacts—major finds and recommendations for agriculture. Papers from Workshop on climate variability and water resource management in the southeastern United States, Nashville, TN, NASA, 29-34.
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- Smith, S. R., C. Harvey, and D. M. Legler, 1996: Handbook of Quality Control Procedures and Methods for Surface Meteorology Data. WOCE Report 141/96, COAPS Report 96-1, WOCE Data Assembly Center, COAPS, Florida State University, Tallahassee, FL 32310, 56 pp.
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- Stricherz, J., J. J. O'Brien, and D. M. Legler, 1992: Atlas of Florida State University Tropical Pacific Winds for TOGA 1966-1985. Florida State University-COAPS, Tallahassee, FL 32306-3041, 275 pp.
- Legler, D. M., 1991: Producing surface wind products for oceanographers. Papers from Joint IOC/WMO Seminar on IGOSS Products, Tokyo, IOC/WMO, 59-76.
- Legler, D. M., 1991: Errors of 5-day mean surface wind and temperature conditions due to inadequate sampling. *J. Atmos. Ocean. Technol.*, **8**, 705-712.
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  - Legler, D. M., and I. M. Navon, 1991: VARIATM - A FORTRAN program for objective analysis of pseudo-stress with large-scale conjugate-gradient minimization. *Computers and Geosciences*, **17**, 1-21.
  - Legler, D. M., I. M. Navon, and J. J. O'Brien, 1989: Objective analysis of pseudo-stress over the Indian ocean using a direct-minimization approach. *Mon. Wea. Rev.*, **117**, 709-720.
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  - Barnett, T., N. Graham, M. Cane, S. Zebiak, S. Dolan, J. O'Brien, and D. Legler, 1988: On the prediction of the El Niño of 1986-1987. *Science*, **241**, 192-196.
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