

CURRICULUM VITAE - ROBERT A. WELLER

Robert A. Weller

EDUCATION

- 1972 B.A., magna cum laude, Harvard University (Engineering and applied physics)
(advisor: Dr. D. James Baker)

1978 Ph.D., Scripps Institution of Oceanography, University of California, San Diego,
(advisor: Dr. Russ Davis)

PROFESSIONAL EMPLOYMENT

- | | |
|-----------|--|
| 1970-1972 | Research Assistant, 1970-1972, Division of Engineering and Applied Physics, Harvard University |
| 1972-1978 | Research Assistant, Scripps Institution of Oceanography (SIO) |
| 1978-1979 | Postgraduate Research Oceanographer, SIO |
| 1979-1980 | Postdoctoral Scholar, Woods Hole Oceanographic Institution (WHOI) |
| 1980 | Postdoctoral Investigator, WHOI |
| 1980-1984 | Assistant Scientist, WHOI |
| 1984-1988 | Associate Scientist, WHOI |
| 1988-1994 | Associate Scientist with Tenure, WHOI |
| 1994 - | Senior Scientist, WHOI |
| 1998-2011 | Director, Cooperative Institute for Climate and Ocean Research |
| 2006-2010 | Chair, Department of Physical Oceanography, WHOI |
| 2007-2019 | Principal, Co-Principal Investigator, Coastal and Global Scale Nodes of the NSF Ocean Observatory Initiative (OOI), WHOI |

RESEARCH INTERESTS

Upper ocean response to atmospheric forcing (wind stress and buoyancy flux) and the role of horizontal variability in air-sea interaction. The role of surface waves and related processes in upper ocean dynamics. Coupling between the upper ocean and the interior. Innovative ocean observations. The prediction of upper ocean variability on scales of meters to 10's of kilometers. Sustained, climate quality observations in the upper ocean and at the surface of the ocean. The ocean's role in climate. Air-sea interaction and upper ocean dynamics in the Bay of Bengal. Oceanic impacts on acoustics and Navy decision aids and operations.

CURRICULUM VITAE - ROBERT A. WELLER

RELATED PROFESSIONAL EXPERIENCE

Professional Societies

American Geophysical Union, American Meteorological Society, American Association for the Advancement of Science, IEEE, IEEE Oceanic Engineering Society

Federal government

Ocean Research Advisory Panel (ORAP), FACA panel
Member, 2011 - 2020; co-chair Observations subpanel 2011 - 2020 ;
Vice Chair, 2011-2013, Chair 2013-2020

National Research Council/National Academy of Sciences

Computer Science and Telecommunications Board, Committee
Toward A National Collaboratory, 1991-1993;
GOALS (Global Ocean Atmosphere Land System) Panel, 1995-1997;
GEWEX (Global Energy and Water Cycle Experiment) Panel, 1995-1997;
Panel on the Global Ocean Observing System, 1996-1997;
TOGA Panel on Near-Term Development of Operational Ocean
Observations, 1991-1993;
Committee on Radio Frequencies, 1990-1996;
Guidance Group for formation of a Committee to consider 'On Being
A Scholar in a Digital Age', 1998-2000;
Board on Atmospheric Sciences and Climate, 1999-2001.
Committee to Review the U.S. Climate Change Science Program
Strategic Plan, 2002-2004;
Committee on Implementation of a Seafloor Observatory Network
For Oceanographic Research, 2002-2004;
Committee on Environmental Satellite Data Utilization, 2002-2004;
Committee on Strategic Guidance for National Science Foundation
Atmospheric Sciences Division, 2004-2006;
Weather Panel of Committee on Decadal Study for Satellites, 2005-2008;
Chair, Committee on Assessment of Intraseasonal to Interannual
Climate Prediction and Predictability, 2009 - 2010;
Co-chair, Committee on a Strategic Vision and Implementation Plan for
the U.S. Antarctic Program, 2014-2015
Co-chair, Committee on Sustaining Ocean Observations to Understand Future
Changes in Earth's Climate, 2016-2017

CURRICULUM VITAE - ROBERT A. WELLER

RELATED PROFESSIONAL EXPERIENCE

International science panels

CCCO-JSC Ocean Observing System Development Panel (OOSDP) 1990-1995;
JSTC/WCRP Ocean Observations for Panel for Climate, 1995 - 2020;
International CLIVAR Scientific Steering Group, 1999-2007.
Chair, CLIVAR Pacific Implementation Workshop Organizing Committee, 1999-2004
WOCE International Indian Ocean Special Studies working group, 1991-1992.
TOGA (Tropical Ocean-Global Atmosphere) Program
TOGA Coupled Ocean Atmosphere Response Experiment (COARE) Science Working Group, 1990-1994;
International Scientific Oversight Team, 1992-1993;
VEPIC (VAMOS-EPIC Science steering group), 1999-2001;
IOC Data Exchange Policy Group, 2000-2001
GOOS Capacity Building Panel, 2000-2001;
GEOSS Science and Technology Committee, 2004-2010;
POGO (Partnership for Observations of the Global Ocean) 1999- ;
VAMOS Science Steering Committee, 2002 - 2012;
EuroSITES Steering Committee, 2010-2011;
FixO3 Advisory Committee, 2011-2017;
Ocean Networks Canada Science Advisory Board, 2011 - 2017;
EarthScope Science Advisory Committee, 2014-2015;
Observations Coordination Group (OCG), JCOMM-OPS, 2009- ;
OceanSITES, co-chair, 2000 – 2016; Executiev 2000- ;
Deep Ocean Observing Strategy (DOOS), Scientific Steering Committee, 2017- ;
Scientific Technical and Ethical Advisory Committee (STEAC) EMSO-ERIC, 2017- ;
Strategic Cooperation Council (SCC) Coop+ Coopeus, 2017-2020 ;
Scientific Advisory Board - COPAS Coastal Center, Chile, 2021- ;

National science panels

W.O.C.E. (World Ocean Circulation Experiment)
Working Group on the Surface Layer
Working Group on Technology Development,
Process Studies Implementation Panel (chairman)
Working Group for In-Situ Measurements for Fluxes
Organizing Committee for the Workshop on Atmospheric Forcing of Ocean Circulation
U. S. CLIVAR (Climate Variability)
Scientific Steering Committee, 1998- 2008
Co-Chair, Pacific Implementation Group, 1998 -2001
Co-Chair, U.S. CLIVAR SSC, 2001 – 2008
Chair, U.S. CLIVAR SSC, 2013 - 2016

CURRICULUM VITAE - ROBERT A. WELLER

RELATED PROFESSIONAL EXPERIENCE

U.S. Navy, Office of Naval Research

Coordinator for the Frontal Air-Sea Interaction Experiment (FASINEX), 1984-1988;
Coordinator for the Surface Wave Processes Program (SWAPP), 1989-1995;
Executive Committee for Marine Luminescence in the Mixed Layer (MLML), 1988-1991,
Executive Committee for Subduction program, 1990-1995;
Planning Committee for the Atlantic Stratocumulus Transition Experiment (ASTEX), 1990-1992
Secretary of the Navy Chair in Oceanography, 1998-
Deputy Undersecretary of Defense Technology Area Review and Assessment (TARA) panel for Battlespace Environments, 1998.
Chair, ONR Code 32/Battlespace Environments Board of Visitors, 2000
WHOI-Surface Warfare Development Group Workshop, 2000
Co-coordinator (with Jim Edson) ONR CBLAST-LOW, (Coupled Boundary Layer Air-Sea Interaction - Low wind), 2000-2003
Panel for 2008 ONR Discovery and Invention Review
Review Panel for ONR Ocean Optics Program, 2010;
Task Force Ocean, Executive Committee, 2017- ;
Task Force Ocean Technical Exchange (TOTEM), 2022 - ;

National Science Foundation

National Center for Atmospheric Research, Atmospheric Technology Division Review Panel, 1993-1996;
HIAPER Review Panel, 1998

NOAA

Chairman, science team and later science advisory group for the Surface and Upper Ocean Observations Project of the NOAA Climate and Global Change Program, 1990- 1994;
NOAA NODC/Joint Oceanographic Institutions, Sea Surface Temperature Working Group, 1991-1992;
Science Working Group, Pan American Climate Studies (PACS), 1997-2000;
Chair, EPIC (Eastern Pacific Investigation of Climate) Science Steering Group, 1997-2007;
Director, WHOI-NOAA Cooperative Institute for Climate and Ocean Research (CICOR), 1998-2011.
NOAA Climate Council, 1999-2000;
NOAA Climate Observing Systems Council, 1999-present
NEOOS (Northeast Ocean Observing System) Steering Group, 1999-2004;
NOAA Climate Working Group, 2008 – 2012

CURRICULUM VITAE - ROBERT A. WELLER

RELATED PROFESSIONAL EXPERIENCE

NOAA Environmental Information Services Working Group, 2013-2021

American Meteorological Society

Program Committee, Seventh Conference on Ocean-Atmosphere Interaction
Associate Editor, Journal of Atmospheric and Oceanic Technology, 1993-1998
AMS Councilor, 2006-2008

American Geophysical Union

Translations Board, 1991 -1995;
Macelwane Medal Committee, 1992-1995,
GRL Editor Search Committee, 1995;
Bowie Medal Committee, 1997;
Ocean Sciences section Fellows Committee, 1997-2002;
Finance and Budget Committee, 1998-2002;
Editor, physical oceanography section of Contributions in
Oceanography, U. S. National Report 1987--1990.
Editor, Contributions in Oceanography, U. S. National Report, 1991-1994
Associate Editor, Journal of Geophysical Research, 1996-2000;
President-elect, Ocean Sciences Section, 1998-2000.
President, Ocean Sciences Section, 2000-2002.
Ocean Sciences Section Executive Committee, 2002-2004

*Consortium for Oceanographic Research and Education/Consortium for Ocean
Leadership (CORE/COL)*

Ocean Observatories Steering Committee, 2000-2006
ORAP subcommittee to review the Integrated Ocean Observing Plan, 2000
DEOS (Dynamics of Earth Ocean Systems) Executive Committee, 2002- 2006.
OOI Scientific Oversight Committee (SOC), Chair 2015-2019

Other

Vice Chairman, IEEE Current Meter Technology Committee, 1990-1995;
NASA Working Group on Science Requirements for Low Frequency
Passive Microwave Observations of the Earth, 1990-1991;
Scientific Organizing Committee, International Liege Colloquium on Ocean
Hydrodynamics: Sub-mesoscale air-sea interactions, Liege, May 1992
GOMOOS (Gulf of Maine Ocean Observing System), CEO Search Committee, 2000
Encyclopedia of Oceanography, Editorial Advisory Board 2008-2010, 2017- ;
SEAFLUX Organizing Committee (with Judy Curry, Bill Rossow and Jorg Schulz),
a project to look at producing turbulent air-sea fluxes from satellite data, 1998-2000
Hawaii Cabled Observatory Science Advisory Committee, 2010- ;

CURRICULUM VITAE - ROBERT A. WELLER

HONORS AND AWARDS

- 1972 Clement Herschel Prize in Hydraulics, 1972, Harvard University
1979 Patent: U.S. Patent No. 4,152,934, "Vector Measuring Current Meter"
1986 James B. Macelwane Award, 1986, American Geophysical Union
1986 Fellow, American Geophysical Union
1991 NASA Certificate of Recognition
1993-1997 Henry B. Bigelow Chair for Excellence in Oceanography, WHOI
1998-2002 Secretary of the Navy/CNO Chair in Oceanography
2003 Sverdrup Gold Medal, American Meteorological Society
2003 Fellow, American Meteorological Society
2011 Senior Member, IEEE
2012 Fellow, American Association for the Advancement of Science

CRUISE PARTICIPATION AND FIELD WORK

- 1972 U.S.C.G. *Evergreen*, Site D, February
1973 R.V. *Thomas Washington*, Kuroshio Current survey, August
1974 R.V. *Thomas Washington*, NORPAX (North Pacific Experiment) Pole Experiment, January-February
1976 R. V. *Alexander Agassiz*-7603, TWATE III, current meter test, February-March
1977 R.P. *FLIP* (FLoating Instrument Platform), thesis experiment, January
1980 R.P. *FLIP*, upper ocean response study, May
1980 R.V. *Oceanus*-85, Long Term Upper Ocean Study (LOTUS), August
1980 R.V. *Knorr*-85, Gulf Stream Extension and LOTUS, November
1981 R.V. *Knorr*-87, LOTUS, February, Chief Scientist
1981 R.V. *Oceanus*-103, LOTUS, September, Chief Scientist
1982 R.V. *Oceanus*-119, LOTUS, May
1982 R.P. *FLIP*, upper ocean studies, December, Chief Scientist
1983 R.P. *FLIP*, upper ocean studies, May, co-Chief Scientist;
1983 R.P. *FLIP*, October-November, 35-day Mixed Layer Dynamics Experiment (MILDEX), co-Chief Scientist
1984 R.V. *Oceanus*-145, LOTUS, January
1984 R. V. *Oceanus*, LOTUS, May
1986 R.V. *Knorr*-119, FASINEX (Frontal Air-Sea Interaction Experiment), co-Chief Scientist, January-February
1986 R.V. *Oceanus*-175, FASINEX, Chief Scientist, February-March
1986 R.V. *Knorr*-123, FASINEX, Chief Scientist, June
1989 R.V. *Endeavor*, Buoy Farm, test buoy deployment, January
1989 R.P. *FLIP*, surface wave and mixed layer study (SWAPP) trial cruise, July-August

CURRICULUM VITAE - ROBERT A. WELLER

CRUISE PARTICIPATION AND FIELD WORK (continued)

- 1990 R. P. *FLIP*, SWAPP (Surface Wave Processes Program), Co-chief Scientist, February-March
- 1991 R.V. *Oceanus* -240, leg 3, Subduction mooring deployment, Chief Scientist, June-July
- 1992 R. V. *Oceanus*-250, Subduction, Chief Scientist, January-February
- 1993 Stationed at the TOGA COARE Operations Center in Townsville, Australia for the month of February
- 1993 R. V. *Wecoma*, Chief Scientist, TOGA COARE mooring recovery cruise in western equatorial Pacific, March
- 1994 R. V. *Thomas Thompons*-TN040, mooring deployment cruise in Arabian Sea, October
- 1995 R. V. *Endeavor*-260, Chief Scientist, mooring deployment cruise on Georges Bank, January
- 1995 R. V. *Thomas Thompson*-TN046, Arabian Sea, Chief Scientist; mooring recovery and deployment cruise in Arabian Sea, April
- 1995 R. V. *Thomas Thompson*-TN052, mooring recovery cruise in Arabian Sea, October
- 1997 R.V. *Roger Revelle*, Chief Scientist, Lima to San Diego mooring deployment cruise, April
- 1997 R.V. *Thomas Thompson*, Chief Scientist, eastern Pacific mooring recovery and deployment cruise, November-December
- 1998 R.V. *Argo Maine*, Massachusetts Bay, mooring recovery cruise, Sept.
- 1999 R.V. *Gyre*, Gulf of Mexico, Navy field experiment, GOMEX99, September
- 2000 R.V. *Melville*, Cook 02, Chief Scientist, mooring deployment in South American Stratus cloud deck west of northern Chile, September-October
- 2001 F.V. *Nobska*, Coupled Boundary Layer Air-Sea Transfer (CBLAST) Low wind air sea interaction pilot experiment, July 2001, south of Martha's Vineyard
- 2001 R. V. *Ronald H. Brown*, Chief Scientist, EPIC (Eastern Pacific Investigation of Climate) Leg II, Galapagos to Arica, Chile; air-sea interaction studies and mooring recovery and deployment, October 2001.
- 2002 R. V. *Melville*, Chief Scientist, mooring recovery and deployment, air-sea interaction studies, Puerto Caldera Costa Rica to Arica, Chile, October
- 2003 F.V. *Nobska*, Coupled Boundary Layer Air-Sea Transfer (CBLAST) Low wind air sea interaction experiment, August
- 2003 R. V. *Roger Revelle*, Dana 03, Chief Scientist, mooring recovery and deployment and air-sea interaction studies, Manta Ecuador to Arica, Chile, November
- 2004 R.V. *KOK*, mooring deployment, Honolulu to Honolulu, July
- 2004 R.V. *Ronald H. Brown*, Chief Scientist, mooring recovery and redeployment and air-sea interaction studies, Arica, Chile to Valparaiso, Chile, December

CURRICULUM VITAE - ROBERT A. WELLER

CRUISE PARTICIPATION AND FIELD WORK (continued)

- 2005 R.V. *Melville*, mooring recovery and deployment, Honolulu to Honolulu, July
2005 R.V. *Ronald H. Brown*, climate studies and mooring recovery and deployment, Miami to Arica, Chile, October
2005 R.V. *Oceanus*, Chief Scientist, mode water formation experiment, mooring deployment, Woods Hole to Woods Hole, November
2006 R.V. *Revelle*, Chief Scientist, climate studies, mooring recovery and deployment, June
2006 NOAA Ship *Ronald H. Brown*, Chief Scientist, climate studies and mooring recovery and deployment, northern Chile, October
2006 R.V. *Oceanus*, Chief Scientist, mode water formation experiment, mooring recovery and deployment, Woods Hole to Woods Hole, November
2007 R.V. *Oceanus*, Chief Scientist, mode water formation experiment, mooring recovery and deployment, Woods Hole to Woods Hole, September-October
2007 NOAA Ship *Ronald H. Brown*, Chief Scientist, climate studies and mooring recovery and deployment, northern Chile, October
2008 R.V. *Kilo Moana*, Chief Scientist, mooring recovery and deployment, Hawaii, June
2008 NOAA Ship *Ronald H. Brown*, Chief Scientist, VAMOS Ocean Cloud Atmosphere Land Study (VOCALS), Charleston SC to Arica, Chile, Sept-Nov
2010 NOAA Ship *Ronald H. Brown*, Chief Scientist, Stratus Mooring, Charleston SC to Arica, Chile, January
2010 R.V. *Kilo Moana*, Chief Scientist, mooring recovery and deployment, Hawaii, July
2011 R.V. *Oceanus*, Chief Scientist, CGSN OOI At Sea Test 2, mooring deployment, September
2012 R.V. *Knorr*, Chief Scientist, CGSN OOI At sea Test 2, mooring recovery, April
2012 R.V. *Melville*, Chief Scientist, Stratus mooring recovery and deployment cruise, Valparaiso, Chile to Puerto Ayora, Galapagos
2014 NOAA Ship *Ronald H. Brown*, Chief Scientist, Stratus 13 and DART, RHB 14-01, mooring recovery and deployment, Valparaiso, Chile to Arica, Chile, February-March 2014
2014 R.V. *Knorr*, Chief Scientist, OOI Irminger Array deployment cruise, Reykjavik to Woods Hole, September 2014
2015 R.V. *Atlantis*, Chief Scientist, OOI Southern Ocean deployment cruise, Punta Arenas, Chile to Punta Arenas, February-March, 2015
2015 AGS 61 *Cabo de Hornos*, Chief Scientist, Stratus mooring cruise, Valparaiso, Chile to Valparaiso, April 2015
2015 NOAA Ship *Hi'ialakai*, Chief Scientist, WHOTS mooring cruise, Honolulu to Honolulu, July 2015
2015 R.V. *Atlantis*, Chief Scientist, OOI cruise to recover and redeploy Irminger Sea array, Woods Hole, MA to Nuuk, Greenland, August-September 2015

CURRICULUM VITAE - ROBERT A. WELLER

- 2016 AGS 61 *Cabo de Hornos*, Chief Scientist, Stratus mooring cruise, Valparaiso, Chile to Valparaiso, June 2016
2017 NOAA Ship *Ronald H. Brown*, Chief Scientist, Stratus 14 mooring recovery and deployment, Rodman, Panama to Arica, Chile, May 2017
2017 NOAA Ship *Hi'ialakai*, Chief Scientist, WHOTS mooring cruise, Honolulu to Honolulu, July 2017

EDUCATION EXPERIENCE

Teaching:

Course, 19.98, Air-Sea Interactions, with M. Briscoe and J. Price in fall 1981, with J. Price in spring 1983, with Jim Price in spring 1985; Course, 12.733, Air-Sea Interaction with J. Price and G. Terray in spring 1987; Lectures in W.H.O.I.-M.I.T. Joint Program Course, 12.758, Topics in Physical Oceanography, fall 1985; Laboratory (with Jim Edson) for 12.773, Air-Sea Interactions in spring 1991

Advising:

J. Lillbridge, Joint Program student, summer, 1981;
General Exam and Thesis committees for L. Rosenfeld, 1982-1986;
K. Speer, Joint Program student, 1982-1984;
Summer advisor to I. Fukomori, incoming Joint Program student, 1983;
Summer advisor to A. Gnanadesikan, Summer Student Fellow, 1986;
Summer advisor to Marjorie MacWhorter, summer fellow 1988,
incoming Joint Program student, 1989;
Thesis committee for Rich Signell, Joint Program student, 1987-1989;
Principal advisor for A. Gnanadesikan, Joint Program student, 1988-1996;
Thesis Committees for Andy Trivett, Rebecca Schudlich, and Markuu Santala,
Joint Program Students, 1989-1991;
Thesis Committee for Len Zedel, University of British Columbia, 1991;
Summer advisor for Summer Fellow, Maile O'Brien, 1991;
Thesis Committee for Ed Dever, Joint Program Student, 1991-1994;
Thesis Committee for Fred Thwaites, Joint Program Student, 1993-1995;
Summer advisor to A. Fischer, Summer Student Fellow, 1994;
Principal advisor for A. Fischer, Joint Program student, 1995-2000. .
Thesis Committee for Bob Helber, Univ. of South Florida PhD student, PhD 2003
Thesis Committee for Jyotika Virmani, Univ. of South Florida PhD Student
Principal advisor to Tom Farrar, Joint Program Student, 2000-2006
Thesis Reader for Rob Crofoot, WHOI/Navy Masters Student, 2004

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals)

- Barnett, T. P., R. A. Knox and R. A. Weller, 1977. Space/time structure of the near surface temperature field during the Norpax Pole Experiment. *Journal of Physical Oceanography*, **7**(4), 572-579.
- Weller, R.A. and R. E. Davis, 1980. A vector measuring current meter. *Deep-Sea Research*, **27A**, 565-582.
- Halpern, David, Robert A. Weller, Melbourne G. Briscoe, Russ E. Davis and James R. McCullough, 1981. Intercomparison tests of moored current measurements in the upper ocean. *Journal of Geophysical Research*, **86(C1)**, 419-428.
- Weller, Robert A., 1981. Observations of the velocity response to wind forcing in the upper ocean. *Journal of Geophysical Research*, **86(C3)**, 1969-1977.
- Weller, Robert A., 1982. The relation of near-inertial motions observed in the mixed layer during the JASIN (1978) experiment to the local wind stress and to the quasi-geostrophic flow field. *Journal of Physical Oceanography*, **12(10)**, 1122-1136.
- Weller, R.A. and D. Halpern, 1983. The velocity structure of the upper ocean in the presence of surface forcing and mesoscale oceanic eddies. *Philosophical Transactions of the Royal Society of London, A* **308**, 327-340.
- Prangsma, G. J., T. H. Guymer, P. Kruseman, R. T. Pollard and R. A. Weller, 1983. Development of the temperature and salinity structure of the upper ocean over two months in an area 150 km x 150 km. *Philosophical Transactions of the Royal Society of London, A*, **308**, 311-325.
- Levine, M. D., C. A. Paulson, M. G. Briscoe, R. A. Weller, and H. Peters, 1983. Internal waves in JASIN. *Philosophical Transactions of the Royal Society of London, A*, **308**, 389-405.
- Weller, Robert A., Richard E. Payne, W. G. Large and Walter Zenk, 1983. Wind measurements from an array of oceanographic moorings and from F/S *Meteor* during JASIN 1978. *Journal of Geophysical Research*, **88(C14)**, 9689-9705.
- Briscoe, Melbourne G. and R. A. Weller, 1984. Preliminary results from the Long-Term Upper Ocean Study (LOTUS). *Dynamics of Atmospheres and Oceans*, **8**, 243-265.
- Weller, Robert A., Jerome P. Dean, John Marra, James F. Price, Erika A. Francis and David C. Boardman, 1985. Three dimensional flow in the upper ocean. *Science*, **227(4694)**, 372-385.
- Weller, Robert A., 1985. Near surface velocity variability at inertial and subinertial frequencies in the vicinity of the California Current. *Journal of Physical Oceanography*, **15(4)**, 372-385.
- Stage, Steven A. and Robert A. Weller, 1985. The Frontal Air-Sea Interaction Experiment (FASINEX); Part I: Background and scientific objectives. *Bulletin of the American Meteorological Society*, **66(12)**, 1511-1520.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Stage, Steven A. and Robert A. Weller, 1986. The Frontal Air-Sea Interaction Experiment (FASINEX); Part II: Experimental Plan. *Bulletin of the American Meteorological Society*, **67**(1), 16-20.
- Stramma, Lothar, Peter Cornillon, Robert A. Weller, James F. Price, and Melbourne G. Briscoe, 1986. Large diurnal sea surface temperature variability: satellite and *in situ* measurements. *Journal of Physical Oceanography*, **16**, 827-837.
- Price, James F., Robert A. Weller, and Robert Pinkel, 1986. Diurnal cycling: Observations and models of upper ocean response to diurnal heating, cooling, and wind mixing. *Journal of Geophysical Research*, **91**(C7), 8411-8427.
- Smith, Jerome, Robert Pinkel, and Robert A. Weller, 1987. Velocity structure in the mixed layer during MILDEX. *Journal of Physical Oceanography*, **17**(4), 425-439.
- Price, James F., Eugene A. Terray, and Robert A. Weller, 1987. Upper Ocean Dynamics. *Reviews of Geophysics*, **25**(2), 193-203.
- Price, James F., Robert A. Weller, Clarke M. Bowers, and Melbourne G. Briscoe, 1987. Diurnal response of sea surface temperature observed at LOTUS (34°N, 70°W) in the Sargasso Sea. *Journal of Geophysical Research*, **92**(C13), 16-20.
- Price, James F., Robert A. Weller, and Rebecca R. Schudlich, 1987. Ekman transport and wind-driven ocean velocity. *Science*, **238**, 1534-1538.
- Weller, Robert A. and James F. Price, 1988. Langmuir Circulation within the oceanic mixed layer. *Deep-Sea Research*, **35**(5A), 711-747.
- Paduan, Jeffrey D., Roland A. DeSzoek, and Robert A. Weller, 1989. Inertial oscillations in the upper ocean during the Mixed Layer Dynamics Experiment (MILDEX). *Journal of Geophysical Research*, **94**(C4), 4835-4842.
- Weller, Robert A., Daniel L. Rudnick, Nancy J. Pennington, Richard P. Trask, and James R. Valdes, 1990. Measuring upper ocean variability from an array of surface moorings in the subtropical convergence zone. *Journal of Atmospheric and Oceanic Technology*, **7**, 68-84.
- Weller, Robert A., Daniel L. Rudnick, Richard E. Payne, Jerome P. Dean, Nancy J. Pennington, and Richard P. Trask, 1990. Measuring near-surface meteorology over the ocean from an array of surface moorings in the subtropical convergence zone. *Journal of Atmospheric and Oceanic Technology*, **7**, 85-103.
- Li, F.K.; Neumann, G.; Weller, R. H., "Observations Of Ocean Ku-band Radar Cross Section At Low Wind Speed During Fasinex," *Geoscience and Remote Sensing Symposium, 1990. IGARSS '90. 'Remote Sensing Science for the Nineties', 10th Annual International*, vol., no., pp.2143,2147, 20-24 May 1990. doi: 10.1109/IGARSS.1990.688956 [typo in name R. H. Weller]
- MacWhorter, M. A. and R. A. Weller, 1991. Error in measurements of incoming shortwave radiation made from ships and buoys. *Journal of Atmospheric and Oceanic Technology*, **8**(1), 108-117.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Weller, Robert A., 1991. FASINEX, A study of air-sea interaction in a region of strong oceanic gradients. *Journal of Geophysical Research*, **96(C5)**, 8501-8516.
- Eriksen, C. C., R. A. Weller, D. L. Rudnick, R. T. Pollard, K. H. Brink, and L. A. Regier, 1991. Ocean frontal variability in FASINEX. *Journal of Geophysical Research*, **96(C5)**, 8569-8591.
- Weller, R. A., D. L. Rudnick, C. C. Eriksen, K. L. Polzin, N. S. Oakey, J. W. Toole, R. W. Schmitt, and R. T. Pollard, 1991. Forced ocean response during the Frontal Air-Sea Interaction Experiment (FASINEX). *Journal of Geophysical Research*, **96(C5)**, 8611-8638.
- Weller, R. A., M. A. Donelan, M. G. Briscoe, and N. E. Huang, 1991. Riding the crest: A tale of two wave experiments. *Bulletin of the American Meteorological Society*, **72**(2), 163-183.
- Park, M. M., R. C. Singer, A. J. Plueddemann, and R. A. Weller, 1991. High-speed, real-time data acquisition for Vector-Measuring Current Meters. *IEEE Journal of Oceanic Engineering*, **16**(4), 360-367.
- O'Brien, M. M., A. J. Plueddemann, and R. A. Weller, 1991. The response of ocean mixed layer depth to physical forcing: modelled vs observed. *Biological Bulletin*, **181**(2), 360-361.
- Crescenti, G. H. and R. A. Weller, 1992. Analysis of surface fluxes in the marine atmospheric boundary layer in the vicinity of rapidly intensifying cyclones. *Journal of Applied Meteorology*, **31**(8), 831-848.
- Rudnick, D. L. and R. A. Weller, 1993. The heat budget in the North Atlantic subtropical frontal zone. *Journal of Geophysical Research*, **98**(C4), 6883-6893.
- Rudnick, D. L. and R. A. Weller, 1993. Observations of superinertial and near-inertial wind-driven flow. *Journal of Physical Oceanography*, **23**, 2351-3708.
- Dickey, T. D., D. V. Manov, D. A. Siegel, and R. A. Weller, 1994. Determination of net longwave heat flux at the air-sea interface using measurements from ship and buoy platforms. *Journal of Atmospheric and Oceanic Technology*, **11**(4), 1057-1078.
- Dickey, T., J. Marra, M. Stramska, C. Langdon, T. Granata, R. Weller, A. Plueddemann, and J. Yoder, 1994. Bio-optical and physical variability in the Sub-Arctic North Atlantic Ocean during the spring of 1989. *Journal of Geophysical Research*, **99**, 22,541-22,556.
- Reider, K. F., J. A. Smith, and R. A. Weller, 1994. Observed directional characteristics of the wind, wind stress, and surface waves on the open ocean. *Journal of Geophysical Research*, **99**(C11), 22,589-22,596.
- Plueddemann, A. J., R. A. Weller, M. Stramska, T. Dickey, and J. Marra, 1995. The vertical structure of the upper ocean during the Marine Light-Mixed Layer experiment. *Journal of Geophysical Research*, **100**(C4), 6605-6619.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Weller, R. A., D. L. Rudnick, and N. J. Brink, 1995. Meteorological variability and air-sea fluxes at a closely spaced array of surface moorings. *Journal of Geophysical Research*, **100**(C3), 4867-4883.
- Stramska, M., T. Dickey, J. Marra, A. Plueddemann, C. Langdon, and R. Weller, 1995. Bio-optical variability associated with phytoplankton dynamics in the North Atlantic Ocean during spring and summer of 1991. *Journal of Geophysical Research*, **100**(C4), 6621-6632.
- Gnanadesikan, A. and R. A. Weller, 1995. Structure and instability of the Ekman spiral in the presence of surface gravity waves. *Journal of Physical Oceanography*, **25**(12), 3148-3171.
- Hosom, D. S., R. A. Weller, R. E. Payne, and K. E. Prada, 1995. The IMET (Improved METeorology) Ship and Buoy System. *Journal of Atmospheric and Oceanic Technology*, **12**(3), 527-540.
- Weller, R. A. and S. P. Anderson, 1996. Surface meteorology and air-sea fluxes in the western equatorial Pacific warm pool during the TOGA Coupled Ocean-Atmosphere Response Experiment. *Journal of Climate*, **9**(8), 1959-1990.
- Weller, R.A. and A. J. Plueddemann, 1996. Observations of the vertical structure of the oceanic boundary layer. *Journal of Geophysical Research*, **101**(C4), 8789-8806.
- Plueddemann, A. J., J. A. Smith, D. M. Farmer, R. A. Weller, W. R. Crawford, R. Pinkel, S. Vagle, and A. Gnanadesikan, 1996. The structure and variability of Langmuir circulation during the Surface Wave Processes Program. *Journal of Geophysical Research*, **101**(C2), 3525-3543.
- Nowlin, W. D., Jr., N. Smith, G. Needler, P. K. Taylor, R. Weller, R. Schmitt, L. Merilvat, A. Vezine, A. Alexiou, M. McPhaden, and M. Wakatsuchi, 1996. An ocean observing system for climate. *Bulletin of the American Meteorolgical Society*, **77**(10), 2243-2273.
- Anderson, S. P., R.A. Weller, and R. B. Lukas, 1996. Surface buoyancy forcing and the mixed layer of the Western Pacific Warm Pool: Observations and 1-D model results. *Journal of Climate*, **9**(12), 3056-3085.
- Reider, K.. F., J.A. Smith, and R.A. Weller, 1996. Some evidence of colinear wind stress and wave breaking. *Journal of Physical Oceanography*, **26**(11), 2519-2524.
- Moyer, K. A. and R. A. Weller, 1997. Observations of surface forcing from the Subduction experiment: A comparison with global model products and climatological data sets. *Journal of Climate*, **10**, 2725-2742.
- Rudnick, D. L., R. A. Weller, C. C. Eriksen, T. Dickey, J. Marra, and C. Langdon, 1997. One-year moored observations of the Arabian Sea. *EOS, Transactions, American Geophysical Union*, **78**, 120-121.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Hagan, D., D. Rogers, C. Friehe, and E. Walsh, 1997. Aircraft observations of sea surface temperature variability in the tropical Pacific. *Journal of Geophysical Research*, **102**(C7), 15733-15748.
- Serra, Y. L., D. P. Rogers, D. E. Hagan, C. A. Friehe, R. L. Grossman, R. A. Weller, and S. Anderson, 1997. The atmospheric boundary layer over the central and western equatorial Pacific Ocean observed during COARE and CEPEX, *Journal of Geophysical Research*, **102**(C10), 23,217-23,238.
- Lagerloef, G. S. E., R. Lukas, R. A. Weller, and S. P. Anderson, 1997. Pacific warm pool sea surface temperature regulation during TOGA COARE: Upper ocean feedback. *Journal of Climate*, **11**, 2297-2309.
- Anderson, S. P., A. Hinton, and R. A. Weller, 1998. Moored observations of precipitation temperature. *Journal of Atmospheric and Oceanic Technology*, **15**, 979-986.
- Walsh, E. J., D. E. Hagan, D. P. Rogers, R. A. Weller, C. W. Fairall, C. A. Friehe, S. P. Burns, D. Khelif, D. C. Vandemark, R. N. Swift, and J. F. Scott, 1998. Observations of sea surface mean square slope under light wind during the TOGA Coupled Ocean-Atmosphere Response Experiment. *Journal of Geophysical Research*, **103**(C6), 12,603-12,612.
- Walsh, E. J., R. Pinkel, D. E. Hagan, R. A. Weller, C. W. Fairall, D. P. Rogers, S. P. Burns, and M. Baumgartner, 1998. Coupling internal waves on the main thermocline to the diurnal surface layer and SST during the TOGA Coupled Ocean Atmosphere Response Experiment. *Journal of Geophysical Research*, **103**(C6), 12,613-12,628.
- Godfrey, J. S., R. A. Houze, R. Lukas, J.-L. Redelsberger, A. Sumi, and R. A. Weller, 1998. The Coupled Ocean Atmosphere Response Experiment (COARE): An interim report, *Journal of Geophysical Research*, **103**(C7), 14,935-14,450.
- Dickey, T., J. Marra, D. E. Sigurdson, R.A. Weller, C. S. Kinkade, S. E. Zedler, J. D. Wiggert, and C. Langdon, 1998. Seasonal variability of bio-optical and physical properties in the Arabian Sea: October 1994-1995. *Deep-Sea Research II*, **45**, 1391-1400.
- Weller, R. A., M. F. Baumgartner, S. A. Josey, A. S. Fischer, and J. C. Kindle, 1998. Atmospheric forcing in the Arabian Sea during 1994-1995: observations and comparisons with climatology and models. *Deep-Sea Research, II*, **45**, 1961-1999.
- Marra, J., T. D. Dickey, C. Ho, C. S. Kinkade, D. Sigurdson, R. Weller, and R. T. Barber, 1998. Estimated primary production as observed from moored observations in the central Arabian Sea in 1995. *Deep-Sea Research II*, **45**, 2253-2267.
- Halpern, D., M. H. Freilich, and R. A. Weller, 1998. Arabian sea surface winds and ocean transports determined from ERS-1 scatterometer, *Journal of Geophysical Research*, **103**, 7799-7805.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Wiggert, J., B. H. Jones, T. D. Dickey, K. Brink, R. A. Weller, J. Marra, and L. Codispoti, 2000. The northeast monsoon's impact on mixing, phytoplankton biomass and nutrient cycling in the Arabian Sea. *Deep-Sea Research*, 1353-1385.
- Zhang, S. A. A. J. Plueddemann, S. P. Anderson, and R. Weller, 2000. Surface fluxes and their influence on sea surface temperature in the western equatorial Pacific during COARE, *Journal of Geophysical Research*, **105**, 6341-6357.
- Rochford, P. A., J. C. Kindle, P. C. Gallacher, and R.A. Weller, 2000. Sensitivity of the Arabian Sea mixed layer to the 1994-95 operational wind products. *Journal of Geophysical Research*, **105**, 14141-14362
- Spall, M. R. A. Weller, and P. W. Furey, 2000. Modeling the three-dimensional upper ocean heat budget and subduction rates during the subduction experiment, *Journal of Geophysical Research*, **105** (C11), 26,511-26,166.
- Kinkade, C. S., J. Marra, T. D. Dickey, C. Langdon, D. E. Sigurdson, and R. Weller, 1999. Diel bio-optical variability observed from moored sensors in the Arabian Sea. *Deep-Sea Research II*, **46**(8-9), 1813-1831.
- Waliser, D. E., R. A. Weller, and R. D. Cess, 2000. Comparisons between buoy-observed, satellite-derived and modeled shortwave flux over the subtropical north Atlantic during the Subduction experiment. *Journal of Geophysical Research*, **104**, 31,301-31,320.
- Feng, M., R. Lukas, P. Hacker, R. Weller, and S. Anderson, 2000. Upper ocean heat and salt balances in the western equatorial Pacific in response to intraseasonal oscillations during TOGA COARE. *Journal of Climate*, **13**, 2409-2427.
- Burns, S. P., D. Khelif, C. A. Friehe, P. Hignett, A. G. Williams, A. L. M. Grant, J. M. Hacker, D. E. Hagan, Y. L. Serra, D. P. Rogers, E. F. Bradley, R. A. Weller, C. W. Fairall, S. P. Anderson, C. A. Paulson, and P. A. Coppin, 2000. Comparisons of aircraft, ship, and buoy radiation and SST measurements from TOGA COARE. *Journal of Geophysical Research*, **105**, 15,627-15,652.
- McCreary, J. P., Jr., K. E. Kohler, R. R. Hood, S. Smith, J. Kindle, A. Fischer, and R. A. Weller, 2001. Influences of diurnal and intraseasonal forcing on mixed-layer and biological variability in the central Arabian Sea. *Journal of Geophysical Research*, **106**(C4), 7139-7155.
- Roemmich, D., J. Gilson, B. Cornuelle, and R. Weller, 2001. Mean and time-varying meridional transport of heat at the tropical/subtropical boundary of the North Pacific Ocean. *Journal of Geophysical Research*, **106**(C5), 8957-8970.
- Medovaya, M., D. E. Waliser, R. A. Weller, and M. J. McPhaden, 2002. Assessing ocean buoy shortwave observations using clear-sky model calculations. *Journal of Geophysical Research*, **107**(C2), pp.6-1-6-22.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Weller, R. A., A. S. Fischer, D. Rudnick, C. Eriksen, T. Dickey, J. Marra, C. Fox, and R. Leben, 2002. Moored observations of upper-ocean response to the monsoons in the Arabian Sea during 1994–1995. *Deep-Sea Research II*, **49**, 2195–2230.
- Fischer, A. S., R. A. Weller, D. L. Rudnick, C. C. Eriksen, C. M. Lee, K. H. Brink, C. A. Fox, and R. R. Leben, 2002. Mesoscale eddies, coastal upwelling, and the upper-ocean heat budget in the Arabian Sea. *Deep-Sea Research II*, **49**, 2231–2264.
- Grosenbaugh, M., S. Anderson, R. Trask, J. Gobat, W. Paul, B. Butman, and R. Weller, 2002. Design and performance analysis of a horizontal mooring for upper ocean research. *Journal of Atmospheric and Oceanic Technology*, **19**, 1376–1389.
- Yu, L., R. A. Weller, and W. T. Liu, 2003. Case analysis of a role of ENSO in regulating westerly wind bursts in the western equatorial Pacific. *Journal of Geophysical Research*, **108**, 3128, doi:10.1029/2002JC001498.
- Sun, B., L. Yu, and R. A. Weller, 2003. Comparisons of surface meteorology and turbulent heat fluxes over the Atlantic: NWP model analyses versus moored buoy observations. *Journal of Climate*, **16**, 679–695.
- Lentz, S. J., R. C. Beardsley, J. D. Irish, J. Manning, P. C. Smith, and R. A. Weller, 2003. Temperature and salt balances on Georges Bank February–August 1995. *Journal of Geophysical Research*, **108**(C11), 8006, doi:10.1029/2001JC001220.
- Beardsley, R. C., S. J. Lentz, R. A. Weller, R. Limeburner, J. D. Irish, and J. B. Edson, 2003. Surface forcing on the southern flank of Georges Bank February–August 1995. *Journal of Geophysical Research*, **108**(C11), 8007, doi:10.1029/2002JC001359.
- Bretherton, C. S., T. Uttal, C. W. Fairall, S. E. Yuter, R. A. Weller, D. Baumgardner, K. Comstock, R. Wood, and G. Raga, 2004. The EPIC 2001 stratocumulus study. *Bulletin of American Meteorological Society*, **85**(7), 967–977, doi:10.1175/BAMS-85-7-967.
- Weller, R. A., P. Furey, M. A. Spall, and R. E. Davis, 2004. The Large-Scale Context for Oceanic Subduction in the Northeast Atlantic. *Deep-Sea Research*, **51**, 665–699.
- Weller, R. A., E. F. Bradley, and R. Lukas, 2004. The interface or air-sea flux component of the TOGA Coupled Ocean-Atmosphere Response Experiment and its Impact on Future Air-Sea Interaction Studies. *Journal of Atmospheric and Oceanic Technology*, **21**, 223–257.
- Babu, K. N., R. Sharmi, N. Agrawal, V. K. Agarwal, and R. A. Weller, 2004. Study of the mixed layer depth variations within the north Indian Ocean using a 1-D model. *Journal of Geophysical Research*, **109**, doi: 10.1029/2003JC002024.
- Yu, L., R. A. Weller, and B. Sun, 2004: Mean and variability of the WHOI daily latent and sensible heat fluxes at in situ flux measurement sites in the Atlantic Ocean. *Journal of Climate*, **17**(11), 2096–2118.
- Ali M. M., D. Swain, and R. A. Weller, 2004. Estimation of ocean subsurface thermal structure from surface parameters: A neural network approach. *Geophysical Research Letters*, **31**, L20308, doi:10.1029/2004GL021192.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Yu, L., R. A. Weller, and B. Sun, 2004. Improving latent and sensible heat flux estimates for the Atlantic Ocean (1988-1999) by a synthesis approach. *Journal of Climate*, **17**, 373-393.
- Feng, M., R. Lukas, P. Hacker, A. Plueddemann and R. Weller, 2005. Upper ocean momentum balances in the Western Equatorial Pacific on the intraseasonal time scale. *Deep-Sea Research I*, **52**, 749-765.
- Pritchard, M. and R.A. Weller, 2005. Observations of internal bores and waves of elevation on the New England inner continental shelf during summer 2001. *Journal of Geophysical Research*, **110**, C03020, doi:10.1029/2004JC002377.
- Farrar, J. T. and R. A. Weller, 2006. Intraseasonal Variability near 10N in the Eastern Tropical Pacific Ocean. *Journal of Geophysical Research*, **111**, doi:10.1029/2005JC002989.
- Yu, L., X. Jin, and R. A. Weller, 2006. Role of net surface heat flux in seasonal variations of sea surface temperature in the tropical Atlantic Ocean. *Journal of Climate*, **19**(23), 6153-6169.
- Ali, M.M., A. K. S. Gopalan, K. N. Babu, R. Sharma, and R. A. Weller, 2006. Predicting upper ocean mixed layer depth in the north Indian Ocean using surface fluxes from a medium range weather forecast system. *Indian Journal of Marine Sciences*, **35**(2), 14-110.
- Cronin, M. F., N. A. Bond, C. Fairall, and R. A. Weller, 2006. Surface cloud forcing in the east Pacific stratus deck/cold tongue/ITCZ complex. *Journal of Climate*, **19**(23), 392-409.
- Colbo, K. and R.A. Weller, 2007. The variability and heat budget of the upper ocean under the Chile-Peru stratus. *Journal of Marine Research*, **65**, 607-637
- Yu, L., X. Jin, and R. A. Weller, 2007. Annual, Seasonal, and interannual variability of air-sea heat fluxes in the Indian Ocean. *Journal of Climate*, **20**, 3190-3209.
- Weller, R. A., Bradley, E. F., Edson, J., Fairall, C., Brooks, I., Yelland, M. J., and Pascal, R. W., 2008. Sensors for physical fluxes at the sea surface: energy, heat, water, salt. *Ocean Sci. Discuss.*, **5**, 327-373.
- Yu, L., R. A. Weller, 2008. Objectively Analyzed air-sea heat Fluxes (OAFlux) for the global ice-free oceans. *Bulletin of the American Meteorological Society*, **88**(4), 527-533.
- Vialard, J., et al., 2009. Cirene: Air-sea interactions in the Seychelles --- Chagos Thermocline Ridge region. *Bulletin of the American Meteorological Society*, **90**(1), 45-61.
- Colbo, K. and R. A. Weller 2009. The accuracy of the IMET sensor package in the subtropics. *Journal of Atmospheric and Oceanic Technology*, **26**(9), 1867-1890.
- Ghate, V. P., B. A. Albrecht, C. W. Fairall, R. A. Weller, 2009: Climatology of surface meteorology, surface fluxes, cloud fraction and radiative forcing over south-east Pacific from buoy observations. *Journal of Climate*, **22**, 5527-5540.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Cronin, M., Bond, N., Booth, J., Ichikawa, H., Joyce, T., Kelly, K., Kubota, M., Qiu, B., Reason, C., Rouault, M., Sabine, C., Saino, T., Small, J., Suga, T., Talley, L., Thompson, L. and Weller, R., (2010). "Monitoring Ocean - Atmosphere Interactions in Western Boundary Current Extensions" in *Proceedings of OceanObs '09: Sustained Ocean Observations and Information for Society (Vol. 2)*, Venice, Italy, 21-25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.20
- Fairall, C., Barnier, B., Berry, D., Bourassa, M., Bradley, E., Clayson, C., de Leeuw, G., Drennan, W., Gille, S., Gulev, S., Kent, E., McGillis, W., Quartly, G., Ryabinin, V., Smith, S., Weller, R., Yelland, M. and Zhang, H., (2010). "Observations to Quantify Air-Sea Fluxes and their Role in Climate Variability and Predictability" in *Proceedings of OceanObs '09: Sustained Ocean Observations and Information for Society (Vol. 2)*, Venice, Italy, 21-25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.27
- Send, U., Weller, R., Wallace, D., Chavez, F., Lampitt, R., Dickey, T., Honda, M., Nittis, K., Lukas, R., McPhaden, M. and Feely, R., (2010). "OceanSITES" in *Proceedings of OceanObs '09: Sustained Ocean Observations and Information for Society (Vol. 2)*, Venice, Italy, 21-25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.79
- Cronin, M., Bond, N., Booth, J., Ichikawa, H., Joyce, T., Kelly, K., Kubota, M., Qiu, B., Reason, C., Rouault, M., Sabine, C., Saino, T., Small, J., Suga, T., Talley, L., Thompson, L. and Weller, R., (2010). "Monitoring Ocean - Atmosphere Interactions in Western Boundary Current Extensions" in *Proceedings of OceanObs '09: Sustained Ocean Observations and Information for Society (Vol. 2)*, Venice, Italy, 21-25 September 2009, Hall, J., Harrison, D.E. & Stammer, D., Eds., ESA Publication WPP-306, doi:10.5270/OceanObs09.cwp.20
- Wood, R., C.S. Bretherton, C. R. Mechoso, R. A. Weller et al., 2010. The VAMOS Ocean-Cloud-Atmosphere-Land Study Regional Experiment (VOCALS-Rex): goals, platforms, and field operations. *Atmos. Chem. Phys. Discuss.*, 10, 1-53. Doi:10.5194/acpd-10-1-2010.
- Cowles, T., J. Delaney, J. Orcutt, R. Weller, 2010. The Ocean Observatories Initiative: Sustained Ocean Observations Across a Range of Spatial Scales. *Mar. Tech. Soc. Jnl.*, 44(6), pp.54-64.
- Duenebier, F. K., R. Lukas, E-M Nosal, J. Aucan, and R. Weller, 2012. Wind, waves, and acoustic background levels at Station ALOHA. *J. Geophys. Res.*, 117, C3, doi:10.1029/2011JC007267.
- Cronin, M. F., R.A. Weller, and R.S. Lampitt, 2012. Ocean Reference Stations. In *Earth Observation*, R.B. Rustamov and S.E. Salahova (eds.), InTech, ISBN: 978-953-307-973-8. Available from: <http://www.intechopen.com/books/earth-observation/ocean-reference-stations>, 2012.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Weller, R.A., S. P. Bigorre, J. Lord, J. D. Ware, and J. B. Edson, 2012. A surface mooring for air-sea interaction research in the Gulf Stream. Part 1: Mooring design and instrumentation. *J. Atmos. Oceanic Tech.*, 29, 1363-1376.
- Holte, J., F. Straneo, C. Moffat, R. Weller, and J. Tom Farrar, 2012. Structure, properties, and heat content of eddies in the southeast Pacific Ocean. *J. Geophys. Res.*, 118, 2295–2309, doi:[10.1002/jgrc.20175](https://doi.org/10.1002/jgrc.20175).
- Bigorre, Sébastien P., Robert A. Weller, James B. Edson, Jonathan D. Ware, 2013: A Surface Mooring for Air–Sea Interaction Research in the Gulf Stream. Part II: Analysis of the Observations and Their Accuracies. *J. Atmos. Oceanic Technol.*, **30**, 450–469. doi: <http://dx.doi.org/10.1175/JTECH-D-12-00078.1>
- Kato, S., N. G. Loeb, F. G. Rose, D. R. Doeling, D. A. Rutan, T. E. Caldwell, L. Yu, and R.A. Weller, 2013. Surface irradiances consistent with CERES-derived top-of-atmosphere shortwave and longwave irradiances. *J. Climate*, **26**, 2719–2740. doi: <http://dx.doi.org/10.1175/JCLI-D-12-00436.1>
- Davis, X. J., R. A. Weller, S. Bigorre, and A. J. Plueddemann, 2013. Local oceanic response to atmospheric forcing in the Gulf Stream region. *Deep-Sea Research. Part 2, Topical Studies in Oceanography*, 91, 71-83.
- Watts, D. Randolph, M. A. Kennelly, K. A. Donohue, K. L. Tracey, T. K. Chereskin, R. A. Weller, and I. Victoria, 2013: Four current meter models compared in strong currents in Drake Passage. *J. Atmos. Oceanic Tech.*, **30**, 2465-2477.
- Subramanian, A. C., A. J. Miller, B. D. Cornuelle, E. Di Lorenzo, R.A. Weller, and F. Straneo, 2013. A data assimilative perspective of oceanic mesoscale eddy evolution during VOCALS-Rex. *Atmos. Phys. And Chem.*, *Atmos.*, 13, 3329-3344, 2013 www.atmos-chem-phys.net/13/3329/2013/ doi:10.5194/acp-13-3329-2013
- Edson, J., V. Jampana, R. Weller, S. Bigorre, A. Plueddemann, C. Fairall, S. Miller, L. Mahrt, D. Vickers, and H. Hersbach, 2013. On the exchange of momentum over the open ocean. *Jrnl. Phys. Oceanogr.*, **43**, 1589-1610.
- Prytherch, J., J. T. Farrar, and R. A. Weller, 2013. Observations and models of the diurnal warm layer. *J. Geophys. Res.*, **118**(9), 4553-4569.
- Mechoso, C. R., R. Wood, R. Weller, C. S. Bretherton, A. D. Clarke, H. Coe, C. Fairall, J. T. Farrar, G. Feingold, R. Garreaud, C. Grados, J. McWilliams, S. P. de Szoeke, S. E. Yuter, and P. Zuidema, 2014. Ocean-Cloud-Atmosphere-Land Interactions in the Southeastern Pacific: The VOCALS Program. *Bull. Amer. Meteor. Soc.*, **95**, 357–375. doi: <http://dx.doi.org/10.1175/BAMS-D-11-00246.1>
- Stramma, L., Weller, R. A., Czeschel, R. and Bigorre, S., 2014: Eddies and an extreme water mass anomaly observed in the eastern south Pacific at the Stratus mooring. *Journal of Geophysical Research - Oceans*, 119 (2). pp. 1068-1083. DOI [10.1002/2013JC009470](https://doi.org/10.1002/2013JC009470).

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Lucas, A.J., E. L. Shroyer, H. W. Wijesekera, H. J. S. Fernando, E. D'Asaro, M. Ravichandran, S. U. P. Jindasa, J. A. MacKinnon, J. D. Nash, R. Sharma, L. Centurioni, J. T. Farra, R. Weller, R. Pinkel, A. Mafadevan, D. Sengupta, and A. Tandon, 2014. Mixing and monsoons: Air-sea interactions in the Bay of Bengal. *EOS, Transactions, American Geophysical Union*, 95(30), 269-270.
- Weller, R. A., S. Majumder, and A. Tandon, 2014. Diurnal restratification events in the Southeast Pacific trade wind regime. *J. Phys. Oceanogr.*, 44, 2569–2587.
- Holte, J., Straneo, F., Farrar, J. T., and R.A. Weller, 2014. Heat and salinity budgets at the Stratus mooring in the Southeast Pacific. *J. Geophys. Res., Oceans*, 8162–8176.
- Czeschel, R., L. Stramma, R.A. Weller, and T. Fischer, 2015. Circulation, eddies, oxygen and nutrient changes in the eastern tropical South Pacific Ocean. *Ocean Sci.*, 11, 455–470, doi:10.5194/os-11-455-2015
- Weller, R.A., 2015: Variability and Trends in Surface Meteorology and Air–Sea Fluxes at a Site off Northern Chile. *J. Climate*, **28**, 3004–3023. doi: <http://dx.doi.org/10.1175/JCLI-D-14-00591.1>
- Marra, J. F., T. D. Dickey, A. J. Plueddemann, R. A. Weller, C. S. Kinkade, and M. Stramska, 2015. Phytoplankton bloom phenomena in the North Atlantic Ocean and Arabian Sea. *ICES Journal of Marine Science*, ICES. doi: 10.1093/icesjms/fsu241
- Nagami, P. V., M. M. Ali¹, G. J. Goni², T. V. S. Udaya Bhaskar³, J. P. McCreary⁴, R. A. Weller⁵, M. Rajeevan⁶, V. V. Gopala Krishna⁷, and J. C. Pezzullo⁸, 2015. Heat Content of the Arabian Sea Mini Warm Pool Is Increasing. *Atm. Sci. Letters*, DOI:10.1002/asl.596.
- Sutton, A.J., C. L. Sabine, R. A. Feely, W-J Cai, M. F. Cronin, M. J. McPhaden, J. M. Morel, J. A. Newton, J-H Noh, S. R. Olafsdottir, J. E. Salisbury, U. Send, D. C. Vandermark, and R.A. Weller, 2016: Using present-day observations to detect when anthropogenic change forces surface ocean carbonate chemistry outside pre-industrial bounds. *Biogeosciences Discuss.*, doi:10.5194/bg-2106-104.
- Weller, R.A., J. T. Farrar, J. Buckley, S. Mathew, R. Venkatesan, J. Sree Lekha, D. Choudhuri, N.Suresh Kumar, and B. Praveen Kumar, 2016: Air-sea interaction in the Bay of Bengal. *Oceanography*. **29**(2), 8-37.
- Thangaprakasj, V.P., M.S. Girishkumar, K. Suprit, N. Sureshkumar, Dipanjan Chaudhuri, S. Shivaprasad, J. Thomas Farrar, R. Sundar, and Robert A. Weller, 2016. What controls seasonal evolution of sea surface temperature in the Bay of Bengal? *Oceanography*, 29(2):202–213, <https://doi.org/10.5670/oceanog.2016.52>.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Lozier, M. S., S. Bacon, A. S. Bower, S. A. Cunningham, M. Femke de Jong, L. de Steur, B. de Young, J. Fischer, S. F. Gary, B. J. W. Greenan, P. Heimbach, N. P. Holliday, L. Hupert, M. E. Inall, W. E. Johns, H. L. Johnson, J. Karstensen, F. Li, X. Lin, N. Mackay, D. P. Marshall, P. G. Myers, R. S. Pickart, H. R. Pillar, F. Straneo, V. Thierry, R. A. Weller, R. G. Williams, C. Wilson, J. Young, J. Zhao, and J. D. Zike, 2016: Overturning in the subpolar North Atlantic program: a new international ocean observing system. *Bull. Amer. Met. Soc.*, **98** (4), 737-752.
- Wijesekera, H. W., E. Shroyer, A. Tandon, M. Ravichandran, D. Sengupta, S. U. P. Jinadasa, H. J. S. Fernando, N. Agarwal, K. Arulananthan, G. S. Bhat, M. Baumgartner, J. Buckley, L. Centurioni, P. Conry, J. T. Farrar, A. L. Gordon, V. Hormann, E. Jarosz, T. G. Jensen, S. Johnston, M. Lankhorst, C. M. Lee, L. S. Leo, I. Lozovatsky, A. J. Lucas, J. Mackinnon, A. Mahadevan, J. Nash, M. M. Omand, H. Pham, R. Pinkel, L. Rainville, S. Ramachandran, D. L. Rudnick, S. Sarkar, U. Send, R. Sharma, H. Simmons, K. M. Staford, L. S. Laurent, K. Venayagamoorthy, R. Venkatesan, W. J. Teague, D. W. Wang, A. F. Waterhouse, R. Weller, and C. B. Whalen (2016), ASIRI: An ocean-atmosphere initiative for Bay of Bengal, Bulletin of the American Meteorological Society, doi:10.1175/BAMS-D-14-00197.1.
- Sutton, A. J., R. Wanninkhof, C. L. Sabine, R.A. Feeley, M. F. Cronin, and R.A. Weller, 2017: Variability and trends in surface seawater $p\text{CO}_2$ and CO_2 flux in the Pacific Ocean. *Geophys Res. Letters*, **44**, 5627-5635, doi:10.1002/2017GL073814
- Smith, L. M., J. A. Barth, D. S. Kelley, A. Plueddemann, I. Rodero, G. A. Ulises, M. F. Vardaro, and R. Weller, 2018. The Ocean Observatories Initiative. *Oceanography*, **31**(1), 16{35, <https://doi.org/10.5670/oceanog.2018.105>.
- Weller, R. A. 2018: Observing surface meteorology and air-sea fluxes. In: Observing the oceans in real time – Instruments, Measurement and Experience. Eds. R. Venkatesen, A. Tandon, E. D'Asaro, and M. A. Atmanand. Springer. Doi: 10.1007/978-3-319-66493-4.
- Czeschel, R. F. Schutte, R. A. Weller, and L. Stramma, 2018: Transport, properties, and life cycles of mesoscale eddies in the eastern tropical South Pacific. *Ocean Sci. Discuss.*, **14**, 731-750. <https://doi.org/10.5194/os-14-731-2018..>
- Pinker, R. T., B. Zhang, R. A. Weller, and W. Chen, 2018: Evaluating surface radiation fluxes observed from satellites in the Southeastern Pacific Ocean. *Geophys. Res. Lett.*, <https://doi.org/10.1002/2017GL076805>
- Ramachandran, S., A. Tandon, J. MacKinnon, A. J. Lucas, R. Pinkel, A. F. Waterhouse, J. Nash, E. Shroyer, A. Mahadevan, R.A. Weller, and J. T. Farrar, 2018. Submesoscale processes at shallow salinity fronts in the Bay of Bengal: Observations during the winter monsoon. *J. Phys. Oceanogr.* <https://doi.org/10.1175/JPO-D-16-0283.1>

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

Ogle, S. V. Tamsitt, S.A. Josey, S. T. Gille, I. Cerovecki, L. D. Talley, and R. A. Weller, 2018. Episodic Southern Ocean Heat Loss and Its Mixed Layer Impacts Revealed by the Farthest South Multiyear Surface Flux Mooring. *Geophys. Res. Lett.*, <https://doi.org/10.1029/2017GL076909>.

Josey, S. A., M. F. De Jong, M. Oltmanns, G. K. Moore, and R.A. Weller, 2018. Extreme variability in Irminger Sea winter heat loss revealed by Ocean Observatories Initiative mooring and the ERA5 reanalysis. *Geophys. Res. Lett.* **46**, 293-302. doi.org/10.1029/2018GL080956

Davis, R. E., L. D. Talley, D. Roemmich, W. B. Owens, D. L. Rudnick, J. Toole, R. Weller, M.J. McPhaden and J. A. Barth, 2018. 100 Years of Progress in Ocean Observing Systems, In "The American Meteorological Society at 100 Years," *Meteor. Monogr.* (2018) **59**: 3.1–3.46.

Prend, C. J., H. Seo, R. A. Weller, and J. T. Farrar, 2019. Impact of freshwater plumes on intraseasonal upper ocean variability in the Bay of Bengal. *Deep-Sea Res. Part II: Topical Studies on Oceanography*, **161**, 63-71.

Weller, R.A., J. T. Farrar, H. Seo, C. Prend, D. Sengupta, J. Sree Lekha, and M. Ravichandran, 2019. Moored observations of the surface meteorology and air-sea fluxes in the northern Bay of Bengal in 2015. *J. Climate.*, **32**, 549-573. DOI: 10.1175/JCLI-D-18-0413.1.

Thakur, R., E. L. Shroyer, R. Govindarajan, J. T. Farrar, R. A. Weller, and J. N. Moum, 2019. Seasonality and buoyancy suppression of turbulence in the Bay of Bengal, *Geophys. Res. Letters.*, **46**, 4346-4355.

Trowbridge, J., R. Weller, D. Kelley, E. Dever, A. Plueddemann, J. A. Barth and O. Kawka, 2019. The Ocean Observatories Initiative. *Frontiers in Marine Science*, **6**:74, doi:10.3389/fmars.2019.00074.

Sloyan, B. M., J. Wilkin, K. L. Hill, M. P. Chidichimo, M. F. Cronin, J. A. Johansen, J. Kartsenesen, M. Krug, T. Lee, E. Oka, M. D. Palmer, B. Rabe, S. Speich, K. von Shuckmann, R. A. Weller, and W. Yu, 2019. Evolving the Physical Global Ocean Observing System for Research and Application services Through International Coordination. *Frontiers in Marine Science*, <https://doi.org/10.3389/fmars.2019.00449>

Weller, R. A., D. J. Baker, M. Glackin, S.J. Roberts, R. W. Schmitt, E. S. Twigg, D. J. Vimont, 2019. The Challenge of Sustaining Ocean Observations. *Frontiers in Marine Science*, <https://doi.org/10.3389/fmars.2019.00105>.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Cronin, M. F., C. L. Gentemann, J. Edson, I. Ueki, M. Burassa, S. Brown, C. A. Clayson, C. W. Fairall, J. T. Farrar, S. T. Gille, S. Gulev, S. A. Josey, s. Kato, M. Katsumata, E. Kent, M. Krug, P. J. Minnett, R. Prifti, R. T. Pinker, P. W. Stackhouse, S. Swart, H. Tomita, D. Vandemark, R. A. Weller, K. Yoneyama, L. Yu, and D. Zhang, 2019. Air-Sea Fluxes with a focus on heat and momentum. *Frontiers in Marine Science*, doi: 10.3389/fmars.2019.00430
- Benway, H. M., L. Lorenzini, A. E. White, B. Fiedler, N. M. Levine, D. P. Nicholson, M. D. DeGrandpre, H. M. Sosik, M. J. Church, T. D. O'Brien, M. Leinen, R. A. Weller, D. M. Karl S. A. Henson, and R. M. Letelier, 2019. Ocean time series observations of changing marine ecosystems: An era of integration, synthesis, and societal applications. *Frontiers in Marine Science*, doi: 10.3389/fmars.2019.00393.
- Levin, L. A., B. J. Bett, A. R. Gates, P. Heimbach, B. M. Howe, F. Janssen, . McCurdy, H. A. Ruhl, P. Snelgrove, K. I. Stocks, d. Bailey, S. Baumann-Pickering, C. Beaverson, M. C. Benfield, D. J. Booth, M. Carreiro-Silva, A. Colaco, M. C. Eble, A. M. Fowler, K. M. Gerde, D. O. B. Jones, K. Katsumata, D. Kelley, N. LeBris, A. P. Leonardi, F. Lejzerowicz, P. I. Macreadie, D. McLean, F. Meitz, T. Morato, A. Netburn, J. Pawlowski, C. R. smith, S. Sun, H. Uchida, M. F. Vardaro, R. Venkatsen, and R.A. Weller, 2019. Global observing needs in the deep ocean. *Frontiers in Marine Science*, doi: 10.3389/fmars.2019.00241.
- Smith, L. M., K. Yarincik, L. Vaccari, M. B. Kaplan, J. A. Barth, G. S. Cram, J. P. Fram, M. Harrington, O. E. Kawka, D.S. Kelley, P. Matthias, K. Newhall, M. Palanza, A. J. Plueddemann, M. F. Vardaro, S. N. White, and R. A. Weller, 2019. Lessons learned from the United States Ocean Observatories Initiative. *Frontiers in Marine Science*, doi: 10.3389/fmars.2018.00494.
- Swart, S. S. T. Gille, B. Delille, S. Josey, M. Mazloff, L. Newman, A. F. Thompson, J. Thompson, B. Ward, M. D. du Plessis, E. C. Kent, J. Girton, L. Gregor, P. Heil, P. Hyder, L. P. Pezzi, R. B. de Souza, V. Tamsitt, R. A. Weller, amd C. J. Zappa, 2019. Constraining Southern Ocean air-sea-ice fluxes through enhanced observations. *Frontiers in Marine Science*, **6**:421.doi: 10.3389/fmars.2019.00421.
- Yu, L. X. Jin, P. W. Stackhouse, A. C. Wilber, S. Kato, N. G. Loeb, and R. A. Weller, 2019: Global ocean heat freshwater [in “State of the Climate in 2018”]. *Bull. Amer. Meteor. Soc.*, **100** (9), S81–S85, doi:10.1175/2019BAMSStateoftheClimate.1.
- Trask, R. P. and R. A. Weller, 2019. Moorings. In Encyclopedia of Ocean Sciences (Third Edition), Volume 5, 2019, Pages 133-149. doi.org/10.1016/B978-0-12-409548-9.11334-X.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

- Kantha, L., R. Weller, J. T. Farrar, H. Rahaman, and V. Jampana, 2019. A note on modeling mixing in the upper layers of the Bay of Bengal: Importance of water type, water column structure, and precipitation. *Deep-Sea Res. Part II.*, 168, 104643, <https://doi.org/10.1016/j.dsr2.2019.104643>.
- Shroyer, E. L., A. L. Gordon, G. S. Jaeger, M. Frelich, A. F. Waterhouse, J. T. Farrar, V. V.S.S. Sarma, R. Venkatsen, R. A. Weller, J. N. Moum, and A. Mahadevan, 2020. Upper layer thermohaline structure of the Bay of Bengal during the 2013 Northeast Monsoon. *Deep-Sea Res.*, Volume 172, 104632, <https://doi.org/10.1016/j.dsr2.2019.07.018>
- Schlundt, M., J. T. Farrar, S. P. Bigorre, A. J. Plueddemann, and R. A. Weller, 2020. Accuracy of wind observations from open-ocean buoys: Correction for flow distortion. *J. Atmos. Oceanic Tech.*, 37 (4): 687–703.
- Venkatsen, R., N. Vedachalam, G. Vengatesan, R. A. Weller, A. Tandon and M. A. Atmanand, 2020. Fuel for cyclones: Ocean-atmosphere energy exchange during tropical cyclones in the Bay of Bengal using Indian Ocean moored observatories. *Marine Technology Society Journal*, 54(4), 81-92.
- Zippel, S.F., J. T. Farrar, C. J. Zappa, L. Miller, L. St. Laurent, T. Ijichi, R.A. Weller, L. McRaven, S. Nytstund, and D. Le Bi, 2021. Moored turbulence measurements using pulse coherent Doppler sonar. *J. Atmos. Oceanic. Tech.*, <https://doi.org/10.1175/JTECH-D-21-0005.1>
- Joseph, K. J., A. Tandon, R. Venkatsen, J. T. Farrar, and R.A. Weller, 2022. Longwave radiation corrections for the OMNI buoy network. *J. Atmos. Oceanic. Tech.*, 39(2), 271-282. [10.1175/JTECH-D-21-0069.1](https://doi.org/10.1175/JTECH-D-21-0069.1)
- Weller, R., Lukas, R., Potemra, J., Plueddemann, A., Fairall, C., & Bigorre, S., 2022. Ocean Reference Stations: Long-term, open ocean observations of surface meteorology and air-sea fluxes are essential benchmarks. *Bull. Amer. Met. Soc.*. <https://doi.org/10.1175/bams-d-21-0084.1>
- Miller, U. K., C. J. Zappa, S. Zippel, J. T. Farrar, and R. A. Weller, 2022. Scaling of moored surface ocean turbulence measurements in the Southeast Pacific Ocean. *J. Geophys. Res.-Oceans*, in review.
- Ranganathan, S., R. A. Weller, R. Venkatsen, A. Tandon, and M. Mohapatra, 2022. Cyclone Amphan: Real time observations in the Bay of Bengal and the challenges. *J. Atmos. Oceanic Tech.*, accepted.

CURRICULUM VITAE - ROBERT A. WELLER

Publications (Reviewed Journals) continued

Martin, M. V., R. Venkatsen, R. A. Weller, A. Tandon, and K. J. Joseph, 2022. The abyssal ocean is not quiet: observation of seasonal temperature variability. *Nature Scientific Reports*, accepted.