

## **Curriculum Vitae**

5/16/09

### **LuAnne Thompson**

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## **EDUCATION**

Ph.D., Oceanography, November 1990

Massachusetts Institute of Technology and Woods Hole Oceanographic Institution

Joint Program in Oceanography and Oceanographic Engineering

Dissertation Advisor: Professor Glenn R. Flierl

A.M., Physics, March 1986, Harvard University, Graduate School of Arts and Sciences

B.S., Physics with Highest Honors, December 1983, University of California, Davis

## **HONORS AND AWARDS**

1995 Editors' Citation for Excellence in Refereeing for JGR-Oceans

National Science Foundation Young Investigator Award, 1994

Office of Naval Research Young Investigator Program Award, 1994.

College of Oceanography and Fisheries Sciences Postdoctoral Fellowship, 1990,  
University of Washington

Harvard Danforth Learning Center Certificate of Distinction in Teaching, 1985, Harvard University

Roger Daley Post-doctoral Publication Award for 2006 from CMOS (Canadian Meteorological and Oceanographic Society) to Jordan Dawe for the paper: Dawe, J. T. and L. Thompson, 2006, The effect of ocean surface currents on wind stress, heat flux, and wind power input. *Geophysical Research Letters* 33, L09604, doi:10.1029/2006GL025784.

## **PROFESSIONAL EXPERIENCE**

Adjunct Associate Professor, Department of Atmospheric Sciences, University of Washington, September 2007 to present

Associate Professor, School of Oceanography, University of Washington, September 2000 to present

Interim Director, Program on Climate Change, August 2007 to August 2008

Assistant Professor, School of Oceanography, University of Washington, September 1993 August, 2000.

Research Assistant Professor, School of Oceanography, University of Washington, June 1993 to August 1993

Acting-Research Assistant Professor, School of Oceanography, University of Washington, January 1993 to May 1993

Post-Doctoral Fellow, School of Oceanography, University of Washington, December 1990 to December 1992  
Graduate Research Assistant, Department of Earth, Atmospheric and Planetary Sciences, Massachusetts Institute of Technology January 1986 to November 1990  
Summer Fellow, Geophysical Fluid Dynamics Summer School, Woods Hole Oceanographic Institution, Summer 1989  
Teaching Fellow, Department of Physics, Harvard University, September 1984 to December 1985  
Summer Student Fellow, Department of Physical Oceanography, Woods Hole Oceanographic Institution, Summer 1985  
Research and Development Electrical Engineer, Gyro-amplifier Division, Varian Associates, January to September 1984

### **OTHER PROFESSIONAL ACTIVITIES**

Member, American Meteorological Society  
Member, American Geophysical Union  
Referee for: *Journal of Physical Oceanography*  
*Dynamics of Atmospheres and Oceans*  
*Geophysical and Astrophysical Fluid Dynamics*  
*Journal of Marine Research*  
*Journal of Geophysical Research*  
*Deep Sea Research*  
*Physics of Fluids*  
*Journal of Oceanography* (Japanese Journal)  
*Nature*  
*Progress in Oceanography*  
*Journal of Computational Physics*  
*Earth and Planetary Sciences Letters*  
*Ocean Modeling*  
*IPCC fourth assessment report*  
*Quaternary Research Journal*  
*Earth, Planets and Space*  
*Quarterly Journal of the Royal Meteorological Society*  
*Bulletin of the American Meteorological Society*  
*Journal of Climate*  
*Geophysical Research Letters*

#### Book Reviews

Wiley Publishing  
Rutgers University Press

#### Proposal Reviews

DOE INCITE  
National Oceanic and Atmospheric Administration  
National Science Foundation  
International Science Foundation  
National Environmental Research Council (Great Britain)

Royalty Research Fund (UW)  
New York Sea Grant

Panel member, NSF Ocean Sciences, Physical Oceanography program, May 1995.  
Panel member, NSF Career Awards, Ocean Sciences Program, May 1995.  
Panel member, NSF Information Technology Research Program, May 2003  
Panel member, NSF Ocean Sciences Physical Oceanography program, May 2006  
Member of NSF ad-hoc committee on Petascale computing in the geosciences,  
Fall 2004 to Summer 2005  
Member of NSF/ONR committee on Women in Physical Oceanography, MPOWIR,  
Spring 2004 to Fall 2008  
Member of American Meteorological Association Committee on Atmospheric and  
Oceanic Waves and Stability, January 1996-December 1998.  
Review and visiting committee member for CICOR, NOAA/WHOI Joint Institute,  
Summer, 2005  
JISAO Senior Fellow, Summer 2005 to present  
Invited participant to Geosciences High performance Computing Research Consortium  
Workshop, NCAR, Boulder, CO, September 2006  
Committee member of the CLIVAR working group on western boundary current ocean-  
atmosphere interactions, January 2007 to present.  
Participant in WEBS (Women Evolving Biological Sciences) career development  
workshop, Pack Forest, October 2007  
Convened session at 2008 AGU Ocean Sciences Meeting  
Fidelity and Metrics of Ocean Models in Climate Simulations

### **WORKSHOPS/MEETINGS LEADERSHIP**

Organizing committee for MPOWIR workshop, October, 2005.  
Organizer with Julie McClean of Workshop on Metrics in Ocean Models, Honolulu  
Hawaii, February, 2006  
Lead organizer for 2008 PCC Summer Institute on “How Does Ocean Circulation Matter  
for Climate?”, Friday Harbor Labs, September, 2008.  
Organizing Committee for CLIVAR Western Boundary Current Working Group meeting,  
Phoenix AZ, January 2009

### **SERVICE**

Member, Climate Action Plan Team, Academic Committee, Winter, 2009.  
Member, School of Oceanography, Faculty Council, Fall 2008-present  
University of Washington Diversity Council, COFS representative, Fall 2008-present  
Program on Climate Change Executive Committee, Fall 2008-present  
Member of University of Washington Climate Action Plan Academic Working Team,  
Winter 2009  
Interim Director of the Program on Climate Change, Fall 2007-Fall 2008  
Board member, Program on the Environment, 2007-2008, 2008-2009 Academic Years  
Review committee for UW Bothell, Interdisciplinary Arts and Sciences BA,  
Environmental Sciences B.S. and Master of Arts in Policy Studies, May 2008  
Member of Search Committee for MGG Stratigraphy Position, Fall 2007

Chair of search committee for new Director of the Program on Climate Change, Spring 2006

Member of School of Oceanography subcommittee on APL/WOT positions, fall 2006.  
Volunteer mentor for Faculty and Graduate Student Mentoring Program at UW, 2006-2008

Faculty Council on Women in Academic, Fall 2005 to Spring 2008

Member of search Committee for new chair in ESS at UW, Winter, 2005

Search Committee for PCC faculty positions, spring 2004

Governing board of Program on Climate Change (September 2001 to Fall 2003, Fall 2004 to present)

Member: Graduate affairs committee, Fall 2004 to present

Led physical oceanography graduate student recruitment, winter, 2005 and 2006.

Member, Undergraduate majors curriculum committee, 2000-2001

Member, Open house committee, 2000-2001

Member, Faculty council, 2000-2001

Led effort to acquire a parallel computer within Physical Oceanography in the School, spring/summer, 1999.

College Council, July 1996-June 1999

Member of ad-hoc committee for climate modeling at the University of Washington, 1996

Recruitment Committee, School of Oceanography, 1993-94, 1994-95 Academic years

## **OUTREACH**

### *Women in Science*

On a panel on academic careers at WISE (Women in Science and Engineering) Conference in January, 2007

Panel discussion member on "Transitions for Women in Academia: Getting your first job in Academia" Northwest Center for Research on Women at the University of Washington, May 3, 1994.

Panel member for WEBS Women Evolving Biological Sciences Conference, October, 2007, Networking/Mentoring and Designing Research Panels

Convened Town Hall meeting at 2008 AGU Ocean Sciences meeting for MPOWIR on Dual Career Couples

Lead discussion of the role of Women in the Geophysical Fluid Dynamics Summer School in Woods Hole, July 2008

Spoke to a group of 25 minority high school students about opportunities in climate change science at UW through the Women's Center Making Connection program. November 2008.

Mentor for a MPOWIR junior scientist group, 2008-present

### *Climate Change*

Led discussion on the movie "An Inconvenient Truth" at a SPEEA meeting (The Society of Professions Engineering Employees in Aerospace) at Boeing, December 6, 2006.

Led the UW effort for *Focus The Nation*, <http://depts.washington.edu/uwfocus/>, an education day on climate change and solutions, January 31, 2008.  
Climate 101 talk at Redmond branch of King County Library, March 25, 2007  
Climate 101 talk at Olympic College, Bremerton, WA, April 16, 2007  
Speaker at UW Environmental Opportunities fair, What can we do about global warming? Solutions, adaptations and Focus the Nation  
Worked with leaders of Greater Seattle Climate Dialog on Climate Briefing Document <http://www.climatedialogues.org/>, Fall 2007  
Reviewed Climate Curriculum for *Facing the Future*, [www.facingthefuture.org](http://www.facingthefuture.org), spring 2007.  
Science Consultant to a proposal for an art installation “Climate Clock” at San Jose State University (see <http://climateclock.blogspot.com/>) (spring 2008).  
Talk on Climate Modeling for Climate Quest, PCC/Burke Museum summer course for high school students, July 2008  
Interviewed by middle school students on climate change and oceans and climate for school projects, May 2009, April 2008

#### *Science, Faith and Climate Change*

Lead discussion on climate change and critical environmental and economic issues at St. Mark’s Cathedral, November 2008.  
Visiting speaker at the Alchemist’s guild to lead discussion on Science and Faith, July 2008.  
Taught middle school Sunday school class at Saint Mark’s on the topic of climate change and the Episcopal Church, May 2008  
Moderated Panel on “Science Faith and the Environment” at the Healing Our Planet Earth Conference, a National Episcopal Church Conference on Climate Change, April 12, 2008, Bellevue Washington. [www.healingourplanetearth.org](http://www.healingourplanetearth.org)  
Led discussion on the movie “An Inconvenient Truth” global warming and climate change at Saint Mark’s Episcopal Cathedral, Oct 1, 2006.

#### **TEACHING EXPERIENCE**

Teaching fellow Harvard University, Department of Physics, Laboratory and Recitation Instructor. Fall 1984, fall 1985: physics for non-science majors. Spring 1985: Physics for physics majors, electromagnetic theory  
OCE 548B Geophysical Fluid Dynamics III (Spring 1994)  
OCE 485C Topics in Physical Oceanography (Spring 1994)  
OCE 516 General Circulation: Theories (Fall 1994, Fall 1995, Fall 1996, fall 2000)  
OCE/ATM 509 Geophysical Fluid Dynamics I (Winter 1995, Winter 1999)  
OCE 500 Current Problems in Oceanography (Fall 1995 and Winter 1996)  
OCE 402 General physical oceanography (Winter, 1996, 1998, 2000)  
OCE 481 General physical oceanography (Spring 2002)  
OCE 420 General Physical Oceanography (Winter 2003, Winter 2005, Winter 2007)  
OCE 519A Graduate student seminar in physical oceanography (Spring, 1996)  
OCE 513 Geophysical Fluid Dynamics II (Spring, 1998, 1999, 2000, 2001, 2002, Spring 2006)

OCE 587 Climate Dynamics (Fall, 2002, 2006, 2007, 2008)  
OCE 586 Climate seminar, The thermohaline circulation (Spring 2005)  
OCE 210 Ocean Circulation (Winter 2006)  
OCE 558/PCC559 Climate Modeling (Spring 2008)  
OCE 600, Summer 2007 (Allison Rogers), Winter 2008 (Christopher Wells, Communication)  
PHY 402, Physics Independent study (Elizabeth McOCE 423 Ocean Circulation and Climate (Spring 2009)

### **POST-DOCS SUPERVISED**

Helma Lindow (now a scientist at an oceanography lab in Sweden)  
Frederic Vivier (with Kathie Kelly, now at LODC in Paris)  
Ivan Lima (with Steve Emerson and Paul Quay, now at WHOI)  
Curtis Deutsch (with Steve Emerson) PCC post-doc, now at UCLA  
Taka Ito (with Steve Emerson, now at Colorado State University) JISAO post-doc  
Susan Bates (with Kathie Kelly) current

### **APEARANCES IN NEWSPAPERS/MAGAZINES ETC.**

Baker, L, Coming to a Campus Near You, 2007, *E : the Environmental Magazine*; Sep/Oct 2007; 18, 5;

Hines, S., UW to participate in national teach-in Jan. 31: Global warming solutions to be discussed, *University Week*, January 17, 2008.

<http://uwnews.org/uweek/uweekarticle.asp?visitsource=uwkmil&articleID=39082>

Olsen, J., 2008, UW to 'Focus the Nation' at Public Forum tonight, *The Daily*, January 31, 2008, <http://thedaily.washington.edu/2008/1/31/uw-to-focus-the-nation-at-public-forum-tonight/>

O'Sullivan, Kate, Fall 2008, in *The Quarterly Newsletter for the Bishop's Committee for the Environment, The Episcopal Diocese of Olympia, and the Eco-Justice Group Saint Mark's Cathedral*

### **GRADUATE ADVISING**

#### **Current**

Advisor, Jimmy Booth (Atmospheric Sciences) Summer 2007 to present  
Advisor, Kyle Armour (Physics) Summer 2007 to present  
Advisor, David Trossman, M.S. Summer 2007, Summer 2008-present.  
Advisor, Jinting Zhang, Fall 2008-present. Co-advisor with Kathie Kelly

#### **Past**

Advisor, Carol Ladd, Summer 1994-present, M. S. granted spring 1996, PhD Spring, 2000 (now a federal scientist at PMEL/NOAA).

Advisor, Emmanuel Boss, Spring 1993-Fall 1996, Ph. D. granted fall 1996 (now an Associate Professor at University of Maine).

Co-advisor with P. Rhines, Frances Evans, summer 1994-fall 1996 M. S. granted fall 1996

Advisor, Jordan Dawe, Fall 1999 M.S. Spring 2002, Ph. D. granted winter 2006. Now a post-doc at UBC.

Advisor, Rebecca Zanzig, M. S. Summer 2007

Advisor, Nathan Nutter, Summer 2006 to Summer 2008. Co-advisor Mark Warner

Advisor, Chuanli Jiang, Fall 2002 to Fall 2008. M. S. Winter, 2005 Co-advisor with Kathie Kelly, PhD granted Fall 2008. Now a post-doc at Scripps.

### **Current Student Committees**

Jessie Anderson

Byron Killbourne

Ana Ceclia Peralta Ferriz

Sally Warner

Kai-Chieh Yang

Julie Koester

Kari Pederson (Chemistry GSR)

Mike Bardaro (Chemistry GSR)

Mark Carson

Nicholas Beard

### **Past Student Committees**

Nathan Algren

Larissa Back (Atmos, GSR)

Angela Rae Bielefeldt (CEE, GSR)

Samantha Brody

Andy Chiodi

Dan Codiga

Jerome Cuny

Shenfu Dong

Julian Douglas

Catherine Greene

Robert Hallberg

Julia Jarvis (ESS GSR)

David Kaplan (Physics, GSR)

Young-Oh Kwon

Kristin Larsen (Atmos, GSR)

Debra Lebel

Bin Bin Ma

Amy MacPhayden

Eric McPhee

Sabine Mecking

David Meyers

Joanna Muench  
Li Ren  
Allison Rogers  
Ignatius Rigor (Atmos, GSR)  
Christopher Sherwood  
Shuangang Song  
Scott Springer  
Fiamma Straneo  
Natalia Stefanova  
Leif Thomas  
Junya Uchida (A Math, GSR)  
Gabe Vecchi  
Rachel Wade  
Weimin Wang  
Xueme Wang  
Xuebin Zhang

**Advisor, Graduate Certificate in Climate Sciences**

Kirsten Feifel  
Alyssa Atwood  
Andrea Fassbender

**Past Undergraduate Interactions**

Bruce Titus  
Alison Shaw  
Julian Kelly  
April Bailey  
Elizabeth McHugh

**SUPPORT**

**Current and Pending**

Current: NSF Ice-ocean interactions on the Okhotsk Sea Shelf, \$442,188, 1-September-2005-30-august-2009. With Dr. Cecilia Bitz (Atmospheric Sciences)

Current: NASA The Impact of Ocean Current Systems on the Atmosphere: a study using Vector Winds and atmosphere-ocean modeling (PI: K. Kelly), \$1,162,492, 1-January-2006-31-December-2009, with Dr. Kathie Kelly, APL

Current: NSF A Modeling and Data Study of Dissolved Oxygen and pCFC Age Variability in the Thermocline of the Southern Ocean, \$499,428, 1-September-2005-30-August-2008. with Mark Warner.

Current: NOAA Frontal dynamics and lateral mixing at the equator with application to the EPIC/IOP, \$85,000, with Leif Thomas, WHOI, 1-April-2009-31-March-2009.

Current: NOAA: CFC Mixed Layer Boundary Conditions in the North Pacific and Implications for Interpretation of Repeat Tracer Age Data and Carbon Cycling Estimates, NOAA, \$69,450, 1-May-2007 to 30 April 2010, with Sabine Mecking (APL) and Mark Warner (Oceanography).

Current: NSF, Ocean circulation and climate impacts of proglacial lake outbursts into the northeastern Pacific Ocean, \$689,539, 1 Jul 2007 to 30 Jun 2011 with Susan Hautala and Paul Johnson (UW Oceanography).

Current: NASA, Assessing Meridional Transports in the North Atlantic Ocean, \$1,200,000, 1 July 2008 to 30 June 2012 with Kathryn A. Kelly (APL)

### **Past**

Current: NASA Altimetric Derived Estimates of the North Atlantic Upper Ocean Heat Budget: Consequences for Climate Prediction and Ocean Modeling, \$700,000, 11-November-2004-31-July-2008, with Dr. Kathie Kelly, APL

NSF: Models of Eddy and Wave Forcing of Deep Western Boundary Currents and Abyssal Recirculations, \$140,000, 1 June 1993 to 30 November 1996.

ONR(Young Investigator Program): Frontal Evolution in Layered Models: Mixed Layer Dynamics and the Stability of Forced Fronts, \$225,000, 1 June 1994 to 31 May 1997.

NSF, Young Investigator Award, \$125,000, 1 September 1994 to 31 August 1999.

ONR: Stratified Coastal Trapped Waves and Mean Flows, \$63,514. 1 October 1995 to 30 September 1997 (with Dr. Dan Ohlsen, University of Colorado).

ONR: Scattering of Baroclinic Long Waves by Complex Coastal Topography: an Application of an Isopycnal Model, \$75,000, 1 October 1999 to 30 September 2001 (with Dr. Barbara Hickey)

ONR: Graduate student support for Stratified and Coastal Trapped Waves and Mean Flows, AASERT program, June 1, 1996-May 31, 1999, \$109,524

NASA, Transport Fluctuations in the North Pacific Subtropical Gyre, January 1, 1997-December 31, 1999, \$122,800 (with Dr. Kathryn Kelly, Applied Physics Laboratory, University of Washington).  
Support

NSF:Interaction of Dynamics and Thermodynamics along the Boundaries of the North Pacific Subtropical Gyre (with co-PI K. Kelly), 3/1/99 – 2/29/04 \$415,815

NSF: Mechanisms Controlling the Biological Pump and CO<sub>2</sub> Uptake Rates in the North Pacific (with co-PIs S. Emerson and P. Quay), 4/15/01 – 3/31/04 , \$450,000

ONR: Evaluation of the NRL High-Resolution Pacific Ocean Circulation Model, 11/1/03 – 10/31/05, \$281,618, with co-PI K. Kelly.

ONR, Development of a strategy for supporting careers of women in Physical Oceanography, 5/15/04-5/14/07 \$18,286, With Dr. Susan Lozier, Duke University (no-cost extension).

NSF Exploratory Research on the causes of salinity errors in the CCSM coupled climate model with focus on the subpolar North Pacific. \$99,694. 1-December 2004-30 November 2006.

DOE: Eulerian and Lagrangian Studies of Turbulent Transport in the Global Ocean, funded through Innovative and Novel Computational Impact on Theory and Experiment (INCITE) program. January 2006-January 2007. With Synte Peacock (University of Chicago), Frank Bryan (NCAR) and others. For computer time only at the National Energy Research Scientific Computing center for a century long 1/10 degree simulation. No monetary support.

## **PUBLISHED AND SUBMITTED PAPERS**

1. Thompson, L. and W.R. Young. 1989. An upper bound on the size of sub-mesoscale coherent vortices. *Journal of Physical Oceanography*, **19**, 233-237.
2. Cessi, P. and L. Thompson. 1990. Geometrical control of the inertial recirculation. *Journal of Physical Oceanography*, **20**, 1867-1875.
3. Thompson, L. 1993. Frictional Taylor columns on the beta-plane. *Geophysical and Astrophysical Fluid Dynamics*, **68**, 37-57.
4. Thompson, L. 1993. Two-layer quasi-geostrophic flow over finite isolated topography. *Journal of Physical Oceanography*, **23**, 1297-1314.
5. Thompson, L., and G.R. Flierl. 1993. Barotropic flow over finite isolated topography: steady solutions on the beta-plane and the initial value problem. *Journal of Fluid Mechanics*, **250**, 553-586.
6. Thompson, L., and M. Kawase. 1993. The non-linear response of an equatorial ocean to oscillatory forcing. *Journal of Marine Research*, **51**, 467-496.
7. Thompson, L. 1995. The effect of continental rises on the wind-driven ocean. *Journal of Physical Oceanography*, **25**, 1296-1316.
8. Boss, E. and L. Thompson. 1995. Energetics of nonlinear geostrophic adjustment. *Journal of Physical Oceanography*, **25**, 1521-1529.
9. Thompson, L., and G. C. Johnson, 1996. Abyssal currents generated by diffusion and geothermal heating over rises. *Deep-Sea Research I*, Vol 43, No. 2, 193-211
10. Boss, E., N. Paldor and L. Thompson, 1996. Stability of a potential vorticity front: from quasi-geostrophy to shallow-water. *Journal of Fluid Mechanics*, **315**, 65-84.

11. Ladd, C. and L. Thompson, 1998. The influence of eddies on tracer transport in the abyssal ocean, *Journal of Physical Oceanography*, **28**, 1717-1738.
12. Boss, E. and L. Thompson, 1999. Mean flow Evolution of a Baroclinically Unstable Potential Vorticity Front, *Journal of Physical Oceanography*, **29**, 273-287.
13. Boss, E. and L. Thompson, 1999. Lagrangian and tracer dynamics in the vicinity of an unstable jet., *Journal of Physical Oceanography*, **29**, 288-303.
14. Vivier, F., K. A. Kelly, L. Thompson, 1999, The contribution of waves, wind forcing and surface heating to sea surface height observations of the North Pacific Ocean, *Journal of Geophysical Research*, **104**(C9), 20767-20784.
15. Kelly, K., F. Vivier and L. Thompson, 1999, Heat content Changes in the Pacific Ocean. *Science*, **284**(5421), 1735.  
<http://www.sciencemag.org/cgi/content/full/284/5421/1735a>
16. Ladd, C. and L. Thompson. 2000. Formation mechanisms for North Pacific Central and Eastern Subtropical mode waters. *Journal of Physical Oceanography* **30**, 868-887.
17. Thompson, L, 2000, Ekman layers and two-dimensional frontogenesis in the upper ocean, *Journal of Geophysical Research*, **105** (C3), 6437-6451.
18. Ladd, C. and L. Thompson, 2001, Water Mass Formation in an Isopycnal Model of the North Pacific. **31**, 1517-1537, *Journal of Physical Oceanography*.
19. Ladd, C., and L. Thompson, 2002: Decadal Variability of North Pacific Central Mode Water. *J. Phys. Oceanogr.*, **32**, 2870-2881.
20. Vivier, F., K. A. Kelly and L. Thompson, 2002. Heat budget in the Kuroshio Extension region: 1993-1999. *Journal of Physical Oceanography*, **32**, 3436-3454.
21. Kelly, K. A. and L. Thompson, 2002, Scatterometer Winds Explain Damped Rossby Waves. *Geophysical Research letters*, **29**, 52-1.
22. Thompson, L. K. A. Kelly, D. Darr and R. Hallberg, 2003. Buoyancy and mixed-layer effects on the Sea Surface Height Response in an isopycnal model of the North Pacific. *J. Phys. Oceanogr.* **32**, 3657-3670.
23. Thompson, L, and C. Ladd, 2004. The Response of the North Pacific Ocean to Decadal Variability in Atmospheric Forcing: Wind Versus Buoyancy Forcing, **34**, 1373-1389. *Journal of Physical Oceanography*.
24. Dawe, J. T. and L. Thompson, 2005, Viscosity-dependent internal variability in a model of the North Pacific, *Journal of Physical Oceanography*, **35**, 747-756.
25. Jiang, C, M. Cronin, K, Kelly and L Thompson, 2005, Evaluation of a hybrid Satellite NWP based turbulent heat flux product using TAO buoys.  
*J. Geophys. Res.* 110(C9) C09007, doi:10.1029/2004JC002824
26. Deutsch, C. ; Emerson, S.,; Thompson, L., 2005, Fingerprints of climate change in North Pacific oxygen *Geophys. Res. Lett.*, Vol. 32, No. 16, L16604  
doi:10.1029/2005GL023190.
27. Dawe, J. T. and L. Thompson, 2006, The effect of ocean surface currents on wind stress, heat flux, and wind power input. *Geophysical Research Letters* **33**, L09604, doi:10.1029/2006GL025784.

28. Deutsch, Curtis; Emerson, Steven; Thompson, LuAnne 2006, Physical-biological interactions in North Pacific oxygen variability, *J. Geophys. Res.*, Vol. 111, No. C9, C09S90 <http://dx.doi.org/10.1029/2005JC003179>
29. Thompson, L, and J. T. Dawe, 2007, Propagation of wind and buoyancy forced density anomalies in the North Pacific: dependence on ocean model resolution. *Ocean Modeling*. **16**, 277-284.
30. Dawe, J. T. and L. Thompson, 2007, PDO-related heat and temperature budget changes in a model of the North Pacific. *Journal of Climate*, **20**, 2092-2108.
31. Kelly, K. A., L. Thompson, W. Cheng, and E. J. Metzger, 2007, Evaluation of HYCOM in the Kuroshio Extension region using new metrics, *J. Geophys. Res.*, **112**, C01004, doi:10.1029/2006JC003614.
32. Jiang, C, L. Thompson and K. A. Kelly, 2008, Influence of QuikSCAT winds in an isopycnal ocean model compared to NCEP2 winds, *Ocean Modeling*, **24**, 65-71.
33. Thompson, L., and W. Cheng, 2008: Water Masses in the Pacific in CCSM3, *Journal of Climate*, **21**, 4514-4528
34. Trossman, D., L. Thompson, K. A. Kelly, and Y. O. Kwon, 2009, Estimates of North Atlantic Ventilation and Mode Water Formation for Winter 2002-2006. Accepted *Journal of Physical Oceanography*.
35. Jiang, C, L. Thompson, K. A. Kelly, and M. F. Cronin, 2009, The roles of intra-seasonal Kelvin waves and tropical instability waves in SST variability along equatorial Pacific in an isopycnal ocean model, accepted *J. Climate*.
36. Kelly, K. A., L. Thompson, and S Dickinson, 2009 The Gulf Stream: Conveyor or Switch? Underrevision *Geophysical Research Letters*.
37. Booth, J. F., L. Thompson, J. Patoux, and K. A. Kelly, 2009. The Signature of the Midlatitude Tropospheric Stormtracks in the Surface Winds, under revision *J. Climate*.

## REPORTS

- Thompson, L. 1989. Can Potential Vorticity Homogenize in Closed Gyres? Proceedings, Geophysical Fluid Dynamics Summer Program, Woods Hole Oceanographic Institution Technical Report WHOI-89-54, 448-469.
- Thompson, L. and E. Brady. 1989. The pilot moorings of the Gibraltar Experiment: flow over the Camarinal Sill. In *Seminario Sobre la Oceanografía Fisca Estrecho de Gibraltar*, edited by J.L. Almazan, H. Bryden, T. Kinder, and G. Parrilla, SECEG, Spain, 151-165.
- Thompson, L. 1991. Flow over finite isolated topography. Ph.D. Thesis. MIT/WHOI, WHOI-91-05.
- R.E. Davis, W.S. Kessler, D.W. Behringer, D.R. Cayan, D.B. Chelton, C. Eriksen, S. Esbensen, R.A. Fine, M.C. Gregg, E. Harrison, G.C. Johnson, T. Lee, R. Lukas, N.J. Mantua, J.P. McCreary, M.J. McPhaden, J.C. McWilliams, A.J. Miller, H. Mitsudera, P.P. Niiler, B. Qiu, D. Raymond, D. Roemmich, D.L. Rudnick, N. Schneider, P.S. Schopf, D. Stammer, L. Thompson, R.A. Weller, W.B. White, 1999, IMPLEMENTING PBECS: Implementation Plan for the Pacific Basin Extended Climate Study

- Barth, J, K Brink, P MacCready, A Maxworth, J. McWilliams, S. Meacham, D. Roemmich, D Rudnick, and L. Thompson, 1999, Physical Oceanography, Past and Future, Interfaces with other Disciplines, in *The Future of Physical Oceanography*, compiled by T. Royer and W. Young, 13-14.
- Kessler, W. S., J. N. Moum, M. F. Cronin, P. S. Schopt, D. L. Rudnick, and L. Thompson, 2004. *Pacific Upwelling and Mixing Physics*. A report to CLIVAR. [http://www.pmel.noaa.gov/~kessler/clivar/PUMP\\_revised\\_Jan05.pdf](http://www.pmel.noaa.gov/~kessler/clivar/PUMP_revised_Jan05.pdf)
- Bryan, F. , R. Cohen, I. Fung, T. Gambosi, J. Kinter, B. Smyth, L Thompson, and J. Tromp (2005). “*Establishing a Petascale Collaboratory for the Geosciences*”. A report to the Geosciences Community, 80 pages. [http://www.isse.ucar.edu/HP\\_rick/NSA/petascale\\_science.pdf](http://www.isse.ucar.edu/HP_rick/NSA/petascale_science.pdf)
- Lozier, M. S., A. Adcroft, L. Beal, A. Bower, D. Byrne, A Capotondi, V. Coles, K. Lavender, C. M. Lee, J. MacKinnon, K. Shearman, L. St. Laurent, L. Thompson, and D. Witter. 2006. *MPOWIR: Mentoring physical oceanography to increase retention. Report of a workshop held October 9-12, 2005*. 32 pp. (Online available at: <http://www.mpowir.org>.)
- Thompson, L., J. McClean, G. Jacobs, W. Large and S. Gille, 2007, Ocean Model Metrics: What we currently use and how we can advance these methodologies, Report on a workshop held at IPRC, Honolulu, Hawaii, 25 February 2006, 8 pp.
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