

## VITA (abridged)

NAME: **DOUGLAS S. LUTHER**

CITIZENSHIP: USA

EDUCATION: Ph.D. (Oceanography) 1980 Joint Program in Oceanography  
Massachusetts Institute of Technology/  
Woods Hole Oceanographic Institution  
B.S. (Geophysics) 1973 Massachusetts Institute of Technology  
B.S. (Elec. Eng.) 1973 Massachusetts Institute of Technology

### POSITIONS HELD:

1993-date Professor of Oceanography, School of Ocean and Earth Science and  
Technology (SOEST), University of Hawaii at Mānoa, Honolulu, Hawaii  
2010-date Sr. Project Scientist, Ocean Observatories Initiative - Cabled Array  
1995-2000 Chairman, Division of Physical Oceanography  
SOEST, University of Hawaii at Manoa, Honolulu, Hawaii

### PROFESSIONAL ACTIVITIES:

2013-date Member, ITU-WMO-UNESCO IOC Joint Task Force (JTF) on  
Using Submarine Cables for Climate Monitoring and Disaster Warning,  
Science & Society Committee (chair: Rhett Butler);  
<http://www.itu.int/go/ITU-T/greencable>.  
1995-date Senior Fellow, Joint Institute for Marine and Atmospheric Research  
(JIMAR; <http://www.soest.hawaii.edu/jimar/>), National Oceanic and  
Atmospheric Administration and the University of Hawaii at Manoa  
1997-2013 Associate Editor, *Journal of Physical Oceanography*  
2008-2010 Member, National Academy of Sciences Committee for the “Review  
of the U.S. Tsunami Warning and Forecast System and Progress in  
Tsunami Preparedness.”  
2007-2007 Member, Ocean Observatories Initiative (OOI), Interim Observatory  
Steering Committee  
2005-2007 Chairman, Science and Technical Advisory Committee of the  
Ocean Research Interactive Observatory Networks (ORION), and  
ex-officio member, ORION Steering Committee. (ORION was the  
antecedent organization to OOI.)  
2002-2004 Member, Dynamics of Earth and Ocean Systems (DEOS) Steering  
Committee (antecedent organization to ORION).  
1996-2001 Council Member, JIMAR, NOAA/UHM  
1997-2002 Oversight Editor, American Geophysical Union Book Board  
1995-1999 Member, World Climate Research Prog., CLIVAR Upper Ocean Panel  
1991-1997 Editor, *Reviews of Geophysics*  
1991-1997 Member, San Diego Supercomputer Center Executive Committee

- 2014 Invited Speaker - NASA Workshop “From space to the deep seafloor: Using ‘Green’ submarine cable systems in the ocean observing system,” Keck Center, California Institute of Technology (CalTech), Pasadena, Calif.; October 9-10.
- 2014 Member, Review Committee (one of seven) for the quadrennial review of the research programs of the Atlantic Oceanographic and Meteorological Laboratory (AOML/NOAA), Miami, Florida. The on-site review occurred on March 4-6, 2014. The completed review was transmitted to Dr. Robert S. Detrick, Assistant Administrator, NOAA, in June, 2014.
- 2013 Invited Speaker – Symposium on the “Celebration of the Legacy of Prof. Klaus Wyrtki”, April 9, 2013, East-West Center, Honolulu, HI. Organizers: R. Lukas, A. Timmerman, N. Schneider
- 2012 Member, Review Panel for the “FRontiers in Arctic marine Monitoring (FRAM)” initiative. Invitation by Professor Wolfgang Marquardt, German Council of Science and Humanities, on behalf of the German Federal Government. Final panel meeting: Berlin, April 16-17, 2012.
- 2011 Invited Speaker – Axial Seamount RSN Science Workshop; co-sponsors: NSF and NOAA/PMEL; co-organizers: D. Butterfield, B. Chadwick, J. Huber, W. Wilcock and R. Pate; Seattle, WA; Oct. 5-7, 2011.
- 2011 Member, NASA Panel for Review of Proposals for the Aquarius Ocean Salinity Science Team, May 18-20, 2011. Invitation by E. Lindstrom, NASA.
- 2010 Member, NSF Panel for Review of Physical Oceanography Proposals, November 15-18, 2010.
- 2010 Member, Committee of Visitors for the quinquennial review of the NSF Major Research Instrumentation program, June 10-11, 2010.
- 2009 Invited Speaker & Session Leader - “Conceptual Exploration Workshop on Long-Term, Spatial-Temporal Co-Variations in Pressure within an Ocean Basin-Atmosphere System”; Univ. of Washington; July 23-24, 2009; Sponsor: Ocean Observatories Initiative - Regional Component.
- 2008 Invited Speaker - Nanotechnology as an Enabler for Ocean Observatories - A NNIN-RSN-UW Center for Nanotechnology Workshop, U. Washington, April 18-19, 2008. Conference Organizers: Francois Baneyx, UW, NNIN Site Director, and John Delaney, UW, Regional Scale Nodes Project Director.  
[https://depts.washington.edu/ntuf/about/docs/Nano\\_OceanSci\\_Report.pdf](https://depts.washington.edu/ntuf/about/docs/Nano_OceanSci_Report.pdf)
- 2008 Member, Review Committee (one of five) for the quadrennial review of the research programs of the Atlantic Oceanographic and Meteorological Laboratory (AOML/NOAA), Miami, Florida. The on-site review occurred on March 18-20, 2008. The completed review was transmitted to Dr. Richard Spinrad, Assistant Administrator, NOAA, in October, 2008.
- 2007 Member, Steering Committee, ORION Profiling Mooring Workshop, Denver, Colorado, 10-12 July 2007.  
[http://www.interactiveoceans.washington.edu/files/ooi\\_profilingworkshop2007\\_report.pdf](http://www.interactiveoceans.washington.edu/files/ooi_profilingworkshop2007_report.pdf)
- 2006 Member, Steering Committee, ORION Design and Implementation Workshop, Salt Lake City, Utah, 27-30 March, 2006, 288 registrants.  
<http://www.oceanleadership.org/programs-and-partnerships/ocean-observing/ooi/planning-and-history/design-and-implementation-workshop/>

- 2006 Organized and convened (with B. Arbic) special session on Observing and Modeling Oceanic Internal Tides and Their Impacts, ASLO/AGU Ocean Sciences Meeting, Honolulu, Hawaii, 20-24 February, 2006.
- 2006 Member, Technical Program Committee, 4th Intern. Workshop on the Scientific Use of Submarine Cables and Related Technologies, Dublin, Ireland, Feb. 7-10.
- 2005 Invited Speaker, Deep-ocean Assessment and Reporting of Tsunamis (DART) Network Optimization Workshop, 6-7 July, 2005, Pacific Marine Environmental Lab., Seattle, WA. Organizers: Frank Gonzalez, PMEL, & Eric Geist, USGS. See <http://soundwaves.usgs.gov/2005/10/meetings.html> for meeting summary.
- 2005 Invited Speaker, NOAA Atlantic Oceanographic and Meteorological Laboratory, Miami, FL, March 14, 2005.
- 2004 Invited Participant, NASA Ocean Surface Topography Science Team Review Panel, February 2004, Washington, D.C. Program Manager: E. Lindstrom.
- 2004 Organized and convened (with R. Pinkel and M. Levine) special session OS28 - Internal Tides and Deep Ocean Mixing, AGU Ocean Sciences Meeting, Portland, Oregon, 26-30 January, 2004.
- 2004 Invited Working Group Moderator, DEOS/ORION International Science Planning Workshop on Observational & Interactive Oceanography, San Juan, Puerto Rico, 4-8 January, 2004. Co-Chairs: Oscar Schofield and Meg Tivey. Sponsors: NSF, CORE. (<http://www.interactiveoceans.washington.edu/file/show/101> )
- 2003 Invited participant, Cabled Regional Observatory Workshop, San Francisco, Calif., 7-9 October, 2003. Co-Chairs: Michael Purdy and Dave Karl. Sponsors: NSF, CORE. (<http://www.interactiveoceans.washington.edu/file/show/136> )
- 2003 Co-convenor, Symposium JSS03 at IUGG2003, Sapporo, Japan, 30 June to 11 July, 2003. Symposium title: "Long-Term In Situ Ocean Observatories and Observations".
- 2003 Member, Executive Committee, 3rd International Workshop on Scientific Use of Submarine Cables and Related Technologies, 25-27 June 2003, Tokyo, Japan. (<http://www.ieee-jp.org/japancouncil/chapter/OE-22/SSC03/index.html> )
- 2003 Invited participant, NEPTUNE Pacific Northwest Workshop, Portland State University, Oregon, 23-24 April, 2003. Chair: Bruce Howe. (<http://www.interactiveoceans.washington.edu/file/show/126> )
- 2002 Invited Speaker, Workshop on Global Bathymetry for Oceanography, Geophysics and Climatology. Scripps Institution of Oceanography, La Jolla, Calif., 24-26 October, 2002. Conveners: David Sandwell, Walter Smith, Sarah Gille, John Orcutt. Sponsors: NSF, NASA, NOAA, IGPP Green Foundation. (<http://topex.ucsd.edu/workshop> )
- 2002 National Science Foundation, Ocean Sciences Review Panel, 20-24 May, 2002
- 2002 Organized and convened (with R. Pinkel, J. Ledwell and M. Levine) special session OS05 - Maintaining Deep Ocean Stratification, ASLO/AGU Ocean Sciences Meeting, Honolulu, Hawaii, 11-15 February, 2002.
- 2002 Organized and convened (with R. Pinkel, J. Ledwell and M. Levine) special session OS06 - Oceanic Internal Tides, ASLO/AGU Ocean Sciences Meeting, Honolulu, Hawaii, 11-15 February, 2002.

- 2001 Invited Reviewer of the National Tsunami Hazard Mitigation Program (Invitation by Dr. E.N. Bernard, Director, PMEL). Review occurred August 7, 2001. The NTHMP, completing its first five years, was being reviewed for possible continuation for an additional five years. Five year budget: \$77M.
- 2000 Invited Session Chair, Symposium on Seafloor Observatories, Key Largo, Florida. Organized by the Ocean Studies Board of the National Research Council and by Dr. William Ryan, chairman of the Committee on Seafloor Observatories, 10-12 January, 2000. Sponsor: NSF.
- 1999 Invited speaker, Workshop on Ocean Bottom Pressure Variability, 13-15 April, 1999, Royal Society, London, England. Organized by Dr. Carl Wunsch, MIT, and Dr. Victor Zlotnicki, JPL. Sponsored by NASA.
- 1999 Invited speaker, Equatorial Theoretical Panel Meeting to Honor Professor Taroh Matsuno on the 33rd anniversary of the publication of his seminal paper on "Quasi-geostrophic Motion in the Equatorial Area." 22-24 March, 1999, Honolulu, HI. Sponsored by JIMAR/IPRC.
- 1999 Invited speaker, 3rd Technical Committee Meeting of the International Experiment on Ocean CO2 Sequestration, Honolulu, 18-19 February, 1999.
- 1999 Invited speaker, 11th 'Aha Huliko'a Hawaiian Winter Workshop on Internal Wave Modeling, Honolulu, HI, 19-22 January, 1999
- 1997 Invited panel leader (1 of 8) and co-author of the "Advances and Primary Research Opportunities in Physical Oceanography Studies (APROPOS)" Workshop - An NSF-sponsored workshop on the future of physical oceanography, 15-17 December 1997, Monterey, CA.
- 1997 Convenor, Symposium on Circulation, fluxes and dynamics of the Southern Ocean, 1997 IAMAS/IAPSO Joint Assembly, Melbourne, Australia, 1-9 July, 1997.
- 1997 Invited participant, International Sea Level Workshop for the design of a Global Network of Tide Gauge Stations to support Prediction of Climate Variability at all Time Scales and for the Detection of Long Term Sea Level Change, NOAA, Honolulu, HI, 10-11 June, 1997.
- 1997 National Science Foundation, Ocean Sciences Review Panel, May, 1997
- 1996 Invited Speaker, Plenary Meeting, U.S. Contribution to the International Program on Climate Variability and Prediction (CLIVAR), San Antonio, TX, June 10-12.
- 1996 Co-Chairman (w/C.P. Mullen) of session titled "Circulation and Transport in Western Boundary Currents", AGU Ocean Sciences Meeting, San Diego, Calif., 12-16 February, 1996.
- 1995 Chairman, Local Organizing Committee, XX1st General Assembly of the International Association for the Physical Sciences of the Oceans, Hilton Hawaiian Village Hotel, Honolulu, Hawaii, 5-12 August, 1995
- 1995 Invited speaker, 8th 'Aha Huliko'a Hawaiian Winter Workshop on Topographic Effects in the Ocean, Honolulu, HI, 17-20 January, 1995

EDUCATIONAL ACTIVITIES:

Courses Taught: Introduction to Ocean Waves (annual)  
Advanced Ocean Waves (occasional)

Co-advisor & thesis committee member for Claude Lumpkin, UH M.S. rc'd 1995.

Advisor & thesis committee chairman for

Reka Domokos, UH M.S. rc'd 1996.

Thomas Decloedt, UH M.S. rc'd 2006.

Sherry Chou, UH M.S.. rc'd 2013.

Advisor & dissertation committee chairman for

Reka Domokos, UH Ph.D. rc'd 2003.

Martin Guiles, UH Ph.D. rc'd 2009.

Thomas Decloedt, UH Ph.D. rc'd 2010.

Assaf Azouri, UH Ph.D. candidate.

Post-doctoral Fellowship Advisees:

Timothy Finnigan, 1999-2001;

Christopher Meinen, 2000-2002;

Martin Guiles, 2009-2012;

Thomas Decloedt, 2010-2014.

PROFESSIONAL SOCIETY MEMBERSHIPS:

American Association for the Advancement of Science

American Geophysical Union

American Meteorological Society

The Oceanography Society

PUBLICATIONS: Author or co-author of 51 refereed papers and 106 unrefereed presentations (e.g., technical reports, conference proc., published and unpublished abstracts).