

CURRICULUM VITA

Mark Edward Luther

(revised March 26, 2013)

Education

<u>Institution</u>	<u>Field of Study</u>	<u>Degree</u>	<u>Date</u>
University of North Carolina at Chapel Hill	Mathematics and Physics	A.B.	1976
University of North Carolina at Chapel Hill	Physical Oceanography	M.S.	1980
University of North Carolina at Chapel Hill	Physical Oceanography	Ph.D.	1982

Professional Background

1990-Present	Associate Professor, College of Marine Science, University of South Florida
1982-1990	Postdoctoral Fellow and Research Associate, Center for Ocean-Atmosphere Prediction Studies (formerly the Mesoscale Air-Sea Interaction Group), The Florida State University
1977 (summer)	Research Technician, Department of Marine Science and Engineering, North Carolina State University
1976-1982	Graduate Research Assistant, Curriculum in Marine Sciences, University of North Carolina at Chapel Hill

Areas of Specialization

Numerical modeling of ocean dynamics; dynamics of western boundary currents; coastal and estuarine dynamics; equatorial dynamics; climate variability; real-time oceanographic observing systems; operational oceanography.

Awards

Control Data Corporation PACER (Program for Advanced Computing in Engineering and Research) Fellow, 1984-1986.

City of St. Petersburg City Beautiful Commission Elva Rouse Award for contributions to environmental protection, 2007.

USF Million Dollar Researcher Award, 2006.

Professional Organizations, Offices, and Service Activities

Member of:

- American Association for the Advancement of Science
- American Geophysical Union
- American Meteorological Society
- The Oceanography Society
- The Coastal and Estuarine Research Federation
- Marine Technology Society
- The Coastal Society
- Alliance for Coastal Technologies, Founding Partner, 2001-present; Board Member, 2002-2010, Chairman, 2006-2010.
- International Seakeepers Society, Science Advisory Council, Chairman, 2010-present.
- Tampa Bay Physical Oceanographic Real-Time System (GTBMAC-PORTS, Inc.) Chief Operating Officer, 1995-present.
- Tampa Bay Regional Planning Council Agency on Bay Management, Member, 1996-present.
- Tampa Bay National Estuary Program Technical Advisory Committee, Member, 1991-present.
- Tampa Bay Harbor Safety and Security Committee, Vessel Movement Committee, Technical Subcommittee, Member, 1997-present.
- The Pier Aquarium, Inc., Board of Directors, Member, 2001-present, Chairman, 2008-present.
- Ocean Research and Resources Advisory Panel, Ocean Observing Subpanel, Member, 2008-2010.
- Gulf of Mexico Coastal Ocean Observing System (GCOOS) Board of Directors, Member, 2005-2010.
- U.S. Global Ocean Observing System (GOOS) Steering Committee, Member, 2002-2008; Vice Chair, 2003-2006; Chairman, 2006-2008.
- National Federation of Regional Associations for the Integrated Ocean Observing System (IOOS), Executive Committee, Member, 2004-2010.
- Marine Technology Society, Chairman, Florida Section, 2004-2011.
- International Oceans Institute-USA Coastal Cities Summit, Program Committee Co-Chair, 2007-2008.
- National Research Council US National Committee for the International Union of Geodesy and Geophysics, Member, 1996-2004.
- US National Correspondent to the International Association for the Physical Sciences of the Ocean, General Assembly, 1996-2004.
- US National Delegate to the International Association for the Physical Sciences of the Ocean, General Assembly, 1999, 2003.
- National Oceanic and Atmospheric Administration Working Group on Coastal Ocean Data Quality Assurance, Member, 1997-1998.
- National Aeronautics and Space Administration Sea-viewing Wide Field-of-view Sensor (SeaWiFS) Science Team, Member, 1992-1997.
- National Science Foundation Division of Ocean Sciences Review Panels, 1993, 1994, 1995, 1997, 1999.
- World Climate Research Programme-International Oceanographic Commission Indian Ocean Climate Studies Panel, Member, 1989-1998.

World Ocean Circulation Experiment Indian Ocean Scientific Steering Committee, Member, 1993-1998

Managing Editor, *HydroWire, An On-Line Newsletter for the Aquatic Sciences*, 1996-2000 (sponsored by the American Geophysical Union, The Oceanography Society, the American Society for Limnology and Oceanography, and the Estuarine Research Federation)

American Geophysical Union Ocean Sciences Section Executive Committee, Public Information Officer, 1996-2000.

American Geophysical Union Information Technology Committee, 1998-2000.

American Geophysical Union Regional Advisory Committee for United States and Canada, Member, 1991-1995.

American Geophysical Union Ocean Sciences Section Secretary, 1994-1996.

American Geophysical Union Western Pacific Geophysics Meeting Program Committee, Ocean Sciences Section Program Chairman, 1991-1994.

American Geophysical Union Fall Meeting Program Committee, Ocean Sciences Section Program Chairman, 1994-1995.

American Geophysical Union Spring Meeting Program Committee, Ocean Sciences Section Program Chairman, 1994-1996.

Estuarine Research Federation 2001 Conference Steering Committee, Chairman, 1997-2001.

Estuarine Research Federation Initiative in Biocomplexity and Climate Change Steering Committee, Member, 2001-2007.

U.S. Global Ocean Observing System (GOOS) Planning Workshop Steering Committee, Member, 2001-2003.

American Society for Limnology and Oceanography/The Oceanography Society Ocean Research Conference, Program Committee Member, 2002-2004.

The Oceanography Society Program Committee, 1993-1995.

The Oceanography Society Meeting Local Organizing Committee, Member, 1991.

Pinellas County Schools Center for Advanced Technology Advisory Board, Member, 1994-1998.

Greater Tampa Bay Marine Advisory Council, Member, 1993-2004.

Committee to Review the Outer Continental Shelf Environmental Studies Program, National Research Council, External Reviewer, Seattle, 1987.

NATO Advanced Study Institute on Physical Oceanographic Modelling, Banyuls-sur-Mer, France, Lecturer, 1985.

Indo/U.S. Science and Technology Initiative Planning Conference for Monsoon Oceanography, Bangalore, India, Member, U.S. Delegation, 1984.

University of South Florida Cyber-Infrastructure Committee, Member, 2008-present.

University of South Florida Faculty Senate, Member, 2001-2004.

University of South Florida College of Arts and Sciences Tenure and Promotion Committee, Member, 1998-2002.

University of South Florida College of Arts and Sciences Faculty Advisory Council, Member, 1993-1995.

University of South Florida College of Arts and Sciences Computing Advisory Committee, Member, 1991-1995.

University of South Florida College of Marine Science Faculty Search Committee, Member, 2008-2009.

University of South Florida College of Marine Science Information Technology (formerly Computer) Committee, Member, 1990-present; Chair, 1992-present.
University of South Florida College of Marine Science Long Range Planning Committee, Member, 1997-2002.
University of South Florida Department/College of Marine Science Faculty Evaluation Committee, Member, 1993, 2007; Chair, 1996, 2001.
University of South Florida Department of Marine Science Curriculum Committee, Co-chair, 1991-1994.
University of South Florida Department of Marine Science New Building Committee, Member, 1990-1991.
University of South Florida Department of Marine Science Personnel Committee, Member, 1990-1995.
University of South Florida Department of Marine Science Student Recruiting Committee, Member, 1990-1995.
University of South Florida Department of Marine Science Technical Support Positions Search Committee, Chair, 1994-1995, 1997-1998.
University of South Florida Dean of the Graduate School Search Committee, Member, 1993-1994.
University of South Florida Department of Geography Faculty Search Committee, Member, 1993-1994.
Florida State University Supercomputer Users' Executive Committee, Member, 1985-1990.
Florida State University Campus Networking Committee, Member, 1989-1990.
Florida State University Supercomputer Computations Research Institute Local Systems Operation Policy Committee, Member, 1988-1990.

Reviewer:

The Journal of Physical Oceanography
The Journal of Geophysical Research
The Journal of Marine Research
The Journal of the Oceanographical Society of Japan
Deep-Sea Research
Dynamics of Atmospheres and Oceans
Estuaries
Oceanologica Acta
Oceanography
Paleoceanography
Progress in Oceanography
Marine Technology Society Journal
Geological Society of London, Proceedings
Qatar University Science Buletin
Nonlinear World
CRC Press
The National Science Foundation
The National Oceanic and Atmospheric Administration
The National Aeronautics and Space Administration
The U.S. Department of State
The State of Louisiana Board of Regents

Students Supervised

Heather H. Havens, Ph.D., 2009
Kristen Sopkin, M. S., 2008
Amanda Linville, M. S., 2007
Monica C. Wilson, M. S., 2007
Mark S. Vincent, Ph.D., 2002 (with Mark Ross)
Nancy J. Schmidt, Ph.D., 2001
David C. Burwell, Ph.D., 2001
Haiying Zhang, M. S., 2000
Dawn Olson, M. S., 1998
Zaihua Ji, Ph. D., 1997
Danielle M. Bartolacci, M. S., 1996
M. Grey Valenti, M. S., 1995
Lynn A. Leonard, Ph. D., 1994 (with A. C. Hine)
James T. Potemra, M. S., 1990 (with James J. O'Brien)
Pedro Tsai, M. S., 1990 (with James J. O'Brien)
Tommy G. Jensen, Ph. D., 1989 (with James J. O'Brien)
Karen E. Woodberry, M. S., 1988 (with James J. O'Brien)
Raymond C. Simmons, M. S., 1987 (with James J. O'Brien)
Alex H. Meng, M. S., 1985 (with James J. O'Brien)

Publications – Refereed Articles

1. Luther, M. E., and J. M. Bane, Jr., 1985. Mixed instabilities in the Gulf Stream over the continental slope. *J. Phys. Oceanogr.*, 15, 3-23.
2. Luther, M. E., and J. J. O'Brien, 1985. A model of the seasonal circulation in the Arabian Sea forced by observed winds. *Prog. in Oceanogr.*, 14, 353-385.
3. Luther, M. E., J. J. O'Brien, and A. H. Meng, 1985. Morphology of the Somali Current System during the southwest monsoon. in *Coupled Ocean-Atmosphere Models*, J.C.J. Nihoul, ed., Elsevier, Amsterdam, 405-437.
4. Luther, M. E., 1986a. Advanced methods for steady problems - Direct elliptic solvers. *Advanced Physical Oceanographic Numerical Modelling*, Ch. 3b, James J. O'Brien, ed., D. Reidel, Dordrecht, Holland, 608 pp.
5. Luther, M. E., 1986b. Ocean modelling on supercomputers. *Advanced Physical Oceanographic Numerical Modelling*, Ch. 9c, James J. O'Brien, ed., D. Reidel, Dordrecht, Holland, 608 pp.
6. Simmons, R. C., M. E. Luther, J. J. O'Brien and D. M. Legler, 1988. Verification of a numerical ocean model of the Arabian Sea. *J. Geophys. Res.-Oceans*, 93, 15 437-15 455.

7. Luther, M. E., and J. J. O'Brien, 1989. Modelling the variability in the Somali Current. in *Mesoscale/Synoptic Coherent Structures in Geophysical Turbulence*, J.C.J. Nihoul and B. M. Jamart, eds., Elsevier, Amsterdam, 373-386.
8. Woodberry, K. E., M. E. Luther, and J. J. O'Brien, 1989. The wind-driven seasonal circulation in the southern tropical Indian Ocean. *J. Geophys. Res.-Oceans*, 94, 17,985–18,002.
9. Luther, M. E., J. J. O'Brien and W. L. Prell, 1990. Variability in upwelling fields in the northwestern Indian ocean; Part 1: Model experiments over the past 18,000 years. *Paleoceanography*, 5, 433–445.
10. Prell, W. L., R. E. Marvil, and M. E. Luther, 1990. Variability in upwelling fields in the northwestern Indian ocean; Part 2: Data-Model comparison at 9,000 years B.P. *Paleoceanography*, 5, 447–457.
11. Dube, S. K., M. E. Luther, and J. J. O'Brien, 1990. Relationships between interannual variability in the Arabian Sea and Indian summer monsoon rainfall. *J. Meteor. and Atmos. Phys.*, 44, 153–165.
12. Potemra, J. T., M. E. Luther, and J. J. O'Brien, 1991. The seasonal circulation of the upper ocean in the Bay of Bengal. *J. Geophys. Res.*, 96, 12,667–12,684.
13. Brock, J. C., C. R. McClain, M. E. Luther, and W. W. Hay, 1991. The phytoplankton bloom in the northwest Arabian Sea during the southwest monsoon of 1979. *J. Geophys. Res.*, 96, 20,623-20,642.
14. Tsai, T. H., J. J. O'Brien, and M. E. Luther, 1992. The 26-day oscillation observed in satellite SST measurements in the western equatorial Indian Ocean. *J. Geophys. Res.*, 97, 9605-9618.
15. Leonard, L. A., A. C. Hine, and M. E. Luther, 1995. Surficial sediment transport and deposition processes in a *Juncus Roemerianus* marsh, west-central Florida. *Journal of Coastal Research*, 11(2), 322-336.
16. Leonard, L. A., A. C. Hine, M. E. Luther, R. P. Stumpf, and E.E. Wright, 1995. Sediment transport processes in a west-central Florida open marsh tidal creek: The role of tides and extra-tropical storms, *Estuarine, Coastal and Shelf Sci.*, 41, 225-248.
17. Luther, M. E., 1995. Modelling climates and upwelling systems of the past, in *Upwelling in the Ocean: Modern Processes and Ancient Records.*, edited by C. P. Summerhayes, K.-C. Emeis, M. V. Angel, R. L. Smith, and B. Zeitzschel. John Wiley and Sons, London, 422pp.
18. Leonard, L. A., and M. E. Luther, 1995. Flow hydrodynamics in tidal marsh canopies. *Limnol. and Oceanogr.*, 40, 1474-1484.
19. Haines, M. A., M. E. Luther, and R.A. Fine, 1997. Model-validated parameterization for air-sea gas transfer in the north Indian Ocean. *Geophys. Res. Letters*, 24, 2545-2548.
20. Vincent, M., D. Burwell, M. Luther, and B. Galperin, 1998. Real-time data acquisition and modeling in Tampa Bay. in *Estuarine and Coastal Modeling*, M. Spaulding and A. Blumberg, eds., ASCE, Reston, VA, pp 427-440.
21. Luther, M. E., 1999. Interannual variability in the Somali Current, 1954–1976. *Nonlinear Analysis: Real World Applications*, 35, 59-83.
22. Haines, M. A., R.A. Fine, M. E. Luther, and Z. Ji, 1999. Particle trajectories in an Indian Ocean model and sensitivity to seasonal forcing. *J. Phys. Oceanogr.*, 29, 584-598.
23. Bartolacci, D. M., and M. E. Luther, 1999. Patterns of co-variability between physical and biological parameters in the Arabian Sea. *Deep-Sea Res.*, 46, 1933-1964.

24. Burwell, D., Vincent, M., Luther, M., Galperin, B., 2000. Modeling Residence Times: Eulerian vs Lagrangian. In: Estuarine and Coastal Modeling, M. L. Spaulding and H. L. Butler, eds., ASCE, Reston, VA, pp 995-1009.
25. Vincent, M., D. Burwell, and M. Luther, 2000. The Tampa Bay Nowcast-Forecast System. In: Estuarine and Coastal Modeling, M. L. Spaulding and H. L. Butler, eds., ASCE, Reston, VA, pp 765-780.
26. Shay, L. K., T. M. Cook, B. K. Haus, J. Martinez, H. Peters, A. J. Mariano, J. VanLeer, P. E. An, S. Smith, A. Soloviev, R. Weisberg, and M. Luther, 2000. VHF radar detects oceanic submesoscale vortex along Florida coast. *EOS, Transactions, American Geophysical Union*, 81:19, 209-213.
27. Schmidt, N., E. K. Lipp, M. E. Luther, and J. B. Rose, 2001. ENSO influences on seasonal rainfall and river discharge in Florida. *Journal of Climate*, 14, 615-628.
28. Wilson-Diaz, D., A. J. Mariano, R. H. Evans, and M. E. Luther, 2001. A principal component analysis of sea surface temperature in the Arabian Sea. *Deep-Sea Res.*, 48, 1097-1114.
29. Lipp, E. K., N. Schmidt, M. E. Luther, and J. B. Rose, 2001. Determining the effects of El Niño-Southern Oscillation events on coastal water quality. *Estuaries*, 24, 491-497.
30. Schmidt, N., and M. E. Luther, 2002. El Niño/Southern Oscillation impacts on salinity in Tampa Bay, Florida. *Estuaries*, 25, 976-984.
31. DiMarco, S., P. Chapman, W. D. Nowlin, P. Hacker, K. Donohue, M. E. Luther, G. C. Johnson, and J. Toole, 2002. Volume transport and property distributions of the Mozambique Channel. *Deep-Sea Res. II*, 49(7-8), 1481-1511.
32. Shay, L. K., T. M. Cook, H. Peters, A. J. Mariano, R. Weisberg, P. E. An, A. Soloviev, and M. E. Luther, 2002. Very high frequency radar mapping of surface currents. *Journal of Oceanic Engineering*, 27, 155-169.
33. Soloviev, A. V., R. J. Walker, R. H. Weisberg, and M. E. Luther, 2003. Coastal Observatory investigates energetic current oscillations on southeast Florida shelf. *EOS, Trans. Amer. Geophys. Union*, 84:42, 441-448.
34. Soloviev, A. V., M. E. Luther, and R. H. Weisberg, 2003. Energetic baroclinic super-tidal oscillations on the shelf off southeast Florida. *Geophys. Res. Lett.*, Vol. 30, No. 9, 10.1029/2002GL016603.
35. Seim, H., B. Bacon, C. Barans, M. Fletcher, K. Gates, R. Jahnke, E. Kearns, R. Lea, M. Luther, C. Mooers, J. Nelson, D. Porter, L. Shay, M. Spranger, J. Thigpen, R. Weisberg, F. Werner, (2003). SEA-COOS - A Model for a Multi-State, Multi-Institutional Regional Observation System, *MTS Journal*, 37(3), 92-101.
36. Poor, N, R. Tremblay, H. Kay, V. Bhethanabotla, E. Swartz, M. Luther, and S. Campbell, 2004. Atmospheric concentrations and dry deposition rates of polycyclic aromatic hydrocarbons (PAHs) for Tampa Bay, Florida, USA. *Atmospheric Environment*, 38:35. 6005-6015.
37. Schmidt, N., M. E. Luther, and R. A. Johns, 2004. Climate variability and estuarine water resources: A case study from Tampa Bay, Florida. *Coastal Management Journal*, 32(2), 101-116.
38. Mizak, C. A., S. W. Campbell, M. E. Luther, R. P. Carnahan, R. J. Murphy, and N. D. Poor, 2005. Below cloud ammonia scavenging in convective thunderstorms at a coastal research site in Tampa, FL, USA. *Atmospheric Environment*, 39, 1575-1584.
39. Katsaros, K. B., A. V. Soloviev, R. H. Weisberg, and M. E. Luther, 2005. Reduced horizontal sea surface temperature gradients under conditions of clear sky and weak winds. *Boundary-Layer Meteorology*, 116:175-185.
40. Henson, J. I., F. Muller-Karger, D. Wilson, S. L. Morey, G. A. Maul, M. Luther, and C. Kranenburg, 2006. Strategic geographic positioning of sea level gauges to aid in the early

- detection of tsunamis in the Intra-Americas Sea. *Science of Tsunami Hazards*, 25(3), 173-207.
41. Wilson, M., S.D. Meyers and M. Luther 2006. Changes in the Circulation of Tampa Bay Due to Hurricane Frances as recorded by ADCP measurements and reproduced with a Numerical Ocean Model. *Estuaries and Coasts*, Vol 29, No 6A, 914-918.
 42. Shi, J. Z., M. E. Luther, and S. Meyers, 2006. Modelling of wind wave-induced bottom processes during slack water periods in Tampa Bay, Florida. *International Journal for Numerical Methods in Fluids*, 52:1277-1292.
 43. Mizak, C., S. Campbell, K. Sopkin, S. Gilbert, M. Luther, and N. Poor, 2007. Effect of shoreline meteorological measurements on NOAA buoy model predictions of air-sea gas transfer. *Atmospheric Environment*, 41, 4304-4309.
 44. Sopkin K., C. Mizak, S. Gilbert, V. Subramanian, M. Luther, and N. Poor, 2007. Modeling Air/Sea Flux Parameters in a Coastal Area: A Comparative Study of Results from the TOGA COARE Model and the NOAA Buoy Model. *Atmospheric Environment*, doi:10.1016/j.atmosenv.2006.08.059.
 45. Luther, M. E., C. Merz, J. Scudder, S. Baig, J. Pralgo, D. Thompson, S. Gill, and G. Hovis, 2007. Water level measurements for storm surge. Invited review paper in *J. Mar. Tech.*, 41(1), 35-43.
 46. Meyers, S., M. Luther, M. Wilson, H. Havens, A. Linville, and K. Sopkin, 2007. A Numerical Simulation of Residual Circulation in Tampa Bay. Part I: Low-Frequency Temporal Variations. *Estuaries and Coasts*, 30(4), 679-697.
 47. Luther, M. E., S. A. Gilbert, and M. Tamburri, 2008. Status of Sensors for Physical Oceanographic Measurements. Invited review paper in *J. Mar. Tech.* 42(1), 84-92.
 48. Meyers, S., and M. E. Luther, 2008. A Numerical Simulation of Residual Circulation in Tampa Bay. Part II: Lagrangian residence time. *Estuaries and Coasts*, 31, 815-827.
 49. Wall, C. C., F. E. Muller-Karger, M. A. Roffer, C. Hu, W. Yao, and M. E. Luther, 2008. Satellite remote sensing of surface oceanic fronts in coastal waters off west-central Florida. *Remote Sensing of Environment*, 112(6), 2963-2976.
 50. Havens, H., M. E. Luther, S. D. Meyers, 2009. A coastal prediction system as an event response tool: Particle tracking simulation of an anhydrous ammonia spill in Tampa Bay. *Marine Pollution Bulletin*, 58, 1202-1209.
 51. Chen, Z., C. Hu, F. E. Muller-Karger, and M. E. Luther, 2010. Short-term variability of suspended sediment and phytoplankton in Tampa Bay, Florida. *Estuar. Coast. Shelf Sci.*, 89(1), 62-72, doi:10.1016/j.ecss.2010.05.014.
 52. Havens, H. H., M. E. Luther, S. D. Meyers, and C. Heil, 2010. Lagrangian particle tracking of a toxic dinoflagellate bloom within the Tampa Bay estuary. *Marine Pollution Bulletin*, 60(12), 2233-2241.
 53. Arnott, K. D., A. Valle-Levinson, and M. E. Luther, 2012. Friction-dominated exchange in a Florida estuary. *Estuarine, Coastal and Shelf Science*, 113, 248-258.
 54. Meyers, S., A. J. Linville, and M. E. Luther, 2012. Alteration of residual circulation due to large-scale infrastructure in a drowned riverbed estuary. *Estuaries and Coasts*, Submitted.
 55. Wilson, M. C., S. D. Meyers, and M. E. Luther, 2012. Effects of hurricanes on residual circulation in Tampa Bay, Florida. *Estuaries and Coasts*, Submitted (in revision).
 56. Wilson, M. C., S. D. Meyers, and M. E. Luther, 2012. Wavelet analysis of synoptic variability in Tampa Bay, FL. *Climate Dynamics*, Submitted.
 57. Soloviev, A. V., A. Hiron, C. Maingot, R. E. Dodge, A. E. Yankovsky, J. Wood, R. H. Weisberg, M. E. Luther, and J. P. McCreary, 2012. Southward flow on the coastal flank of the Florida Current. *J. Geophys. Res.-Oceans*, Submitted.
 58. Meyers, S., A. J. Linville, and M. E. Luther, 2012. Changes in residence time due to large-scale infrastructure in a coastal plain estuary. *Estuaries and Coasts*, Submitted.

Publications – Book Reviews

1. Luther, M. E., 1991. Dynamics of the Coupled Ocean and Atmosphere, edited by H. Charnock and S. Philander. *Bull. Am. Meteor. Soc.*, 72, 250-251.

Publications – Proceedings

1. Luther, M. E., 1982. Spatially unstable waves in the Gulf Stream over the Carolina continental slope. *Workshop on Gulf Stream Structure and Variability, Proceedings*, University of North Carolina at Chapel Hill, 394 pp.
2. Luther, M. E., and J. J. O'Brien, 1984. Indian Ocean modelling at FSU. *Proceedings of a Workshop on Oceanography of the Indian Ocean*, F. Schott, ed., RSMAS, University of Miami, pp. 3.1-3.6
3. Luther, M. E., 1987. Indian Ocean Modelling. *Further Progress in Equatorial Oceanography: A Report of the U.S. TOGA Workshop on the Dynamics of the Equatorial Oceans*, E. J. Katz and J. M. Witte, eds., Nova University Press, Ft. Lauderdale, FL, 450 pp.
4. Palmer, S., J. Ault, and M. Luther, 1997. Mathematical modeling in marine resource protection. in *Proceedings of the Bay Area Scientific Information Symposium 3*, S. F. Treat, ed., pp 17-24, Tampa Bay Regional Planning Council, St. Petersburg, FL.
5. Schmidt, N., M. Vincent, M. E. Luther, and B. Galperin, 1997. Development of an end-to-end marine contaminant system. in *Proceedings of the Bay Area Scientific Information Symposium 3*, S. F. Treat, ed., pp 25-41, Tampa Bay Regional Planning Council, St. Petersburg, FL.
6. Olson, D. M., M. E. Luther, R. P. Stumpf, and J. D. Althausen, 1997. A timeline of degradation in Florida Bay from 1972-1992: Change detection analysis of Landsat Multispectral Scanner data. In: *Proceedings of the Fourth International Conference on Remote Sensing for Marine and Coastal Environments*, Orlando, FL, 17-19 March, 1997.
7. Luther, M. E., D. Burwell, M. Haines, N. Schmidt, M. Vincent, R. Weisberg, and H. Yang, 1998. Real-time physical oceanographic monitoring in West Florida. In *Marine Technology Society Ocean Community Conference '98, Proceedings*, Vol. II, 1061-1065, MTS, Washington, DC.
8. Shi, Z., S. Meyers, and M. E. Luther, 2002. Modeling of wind wave-induced bottom currents and fine sand transport in Tampa Bay, Florida. *Proceedings of the International Conference on Estuaries and Coasts*, November 9-11, 2003, Hangzhou, China; pp. 865-871.
9. Tate, P., M. Begum, C. Mizak, N. Poor, B. Hartsell, E. Edgerton, M. Luther, V. Subramanian, S. Gilbert, J. Batten, C. Merchant, W. McClenny, K. Kronmiller, V. Bhethanabothla, C. King, 2003. A Comparison of Continuous and Integrated HNO₃ Ambient Air Concentrations and Atmospheric Deposition Rates. In *Proceedings of the Air and Waste Management Association 96th Annual Conference*.
10. Luther, M., S. Meyers, S. Gilbert, V. Subramanian, L. Wetzell, J. Scudder, M. Vincent, and D. Burwell, 2005. An integrated observing and modeling system for Tampa Bay. In: *Treat, S.F. (ed.), Proceedings, Tampa Bay Area Scientific Information Symposium, BSAIS4; October 27-30, 2003, St. Petersburg, FL; 295pp.*

Publications – Technical Reports

1. Luther, M. E., 1980. Coastal-trapped and frontal-trapped waves in a continuously stratified western boundary current. M. S. Thesis, University of North Carolina at Chapel Hill, 77 pp.
2. Luther, M. E., and J. M. Bane, Jr., 1980. Coastal-trapped and frontal trapped waves in a continuously stratified western boundary current. University of North Carolina Report no. CMS-80-1, 77 pp.
3. Luther, M. E., 1982. Mixed instabilities in the Gulf Stream over the continental slope. Ph.D. Dissertation, University of North Carolina at Chapel Hill, 132 pp.
4. Dube, S. K., M. E. Luther, and J. J. O'Brien, 1986. Documentation of the FSU Indian Ocean Model, FSU/NORDA Cooperative Indian Ocean Modelling Project Technical Report, 127 pp.
5. Simmons, R. C., M. E. Luther, J. J. O'Brien and D. M. Legler, 1987. Verification of a numerical model of the Arabian Sea. FSU Technical Report.
6. Woodberry, K. E., M. E. Luther, and J. J. O'Brien, 1988. The wind-driven seasonal circulation in the southern tropical Indian Ocean. FSU-SCRI Tech. Rept. No. FSU-SCRI-88-51.
7. Smith, S. L., K. Banse, J. K. Cochran, L. A. Cotispodi, H. W. Ducklow, M. E. Luther, D. B. Olson, W. T. Peterson, W. L. Prell, N. Surgi, J. C. Swallow, and K. Wishner, 1991: U. S. JGOFS: Arabian Sea Process Study, U. S. JGOFS Planning Report No. 13, WHOI, Woods Hole, MA, 164 pp.
8. Luther, M. E., J. L. Chapin, and D. M. Martin, 1992. Determination of Head Of Tide using a numerical model of tidal propagation in rivers. in *Florida Head of Tides Study II, Final Report*, Florida Department of Natural Resources Technical Report.
9. Luther, M. E., J. Marotzke, A. Semtner, 1992. Modelling considerations for the WOCE Hydrographic Program in the Indian Ocean, in "U.S. Contribution to WOCE Core Project 1: The Program Design for the Indian Ocean, edited by W. Nowlin and B. Warren.
10. Luther, M. E., 1992. Dynamics of the Northern Indian Ocean and Model Investigations, in Report of the Seventh Session of the CCCO Indian Ocean Panel, edited by J. S. Godfrey, IOC Report SCOR-IOC/CCCO-IND-VII/3.
11. Luther, M. E., 1993. Modelling studies of Arabian Sea Physics, in "Implementation Plan and Workshop Report for U. S. GLOBEC Studies in the Arabian Sea," H. Batchelder, C. Miller, D. Olson, and S. Smith, Editors, U.S. GLOBEC Report No. 9.
12. Chapin, J. L., and M. E. Luther, 1993. Preliminary Report: The use of Tampa Bay PORTS data for oil spill trajectory modeling during the August 10, 1993 oil spill. GTBMAC/PORTS Technical report.
13. Luther, M. E., and Z. Ji, 1994. Near-real-time simulations of the Indian Ocean circulation. In U.S. WOCE Report 1994, U.S. WOCE Implementation Report No. 6, pp. 37-38, U.S. WOCE Office, College Station, TX, 48 pp. (with 2 color plates).
14. Conkright, M., S. Levitus, T. Boyer, D. Bartolacci, and M. Luther, 1994. Atlas of the Northern Indian Ocean, USF-NOAA Technical Report, USF Dept. of Marine Science, St. Petersburg, FL, 150pp.
15. Luther, M. E., 1995. U. S. plans in the Indian Ocean, in Report of the Eighth Session of the Indian Ocean Climate Studies Panel, edited by J. S. Godfrey, World Climate Research Program Report.

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18. Luther, M. E., and D. M. Olson, 1995. The use of satellite imagery in mapping discolored water phenomena in Florida Bay. USF Department of Marine Science Technical Report prepared for the Florida Department of Environmental Protection, November, 1995, 52pp.
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Publications – Other Non-Refereed

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2. Luther, M. E., and J. J. O'Brien, 1983. Seasonal response of the Indian Ocean to monsoon wind forcing. *Research Activities in Atmospheric and Oceanic Modelling*, G. J. Boer, ed., WCRP Report No. 5, pp. 8.5-9.
3. Luther, M. E., and J. J. O'Brien, 1984. Numerical modeling of the circulation in the Indian Ocean using observed winds. *Research Activities in Atmospheric and Oceanic Modelling*, G. J. Boer, ed., WCRP Report No. 7, pp. 8.4-6.
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6. Luther, M. E., and J. J. O'Brien, 1988. Research in Indian Ocean Circulation at the Florida State University, *Research Activities in Atmospheric and Oceanic Modelling*, G. J. Boer, ed., WCRP Report No. 11, p. 8.34.
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8. Haines, M. A., M. E. Luther, Z. Ji, and R.A. Fine, 1995. Particle trajectories in an Indian Ocean model compared to chlorofluorocarbon distributions. *International WOCE Newsletter*, No. 20.
9. Haines, M. A., M. E. Luther, and R.A. Fine, 1995. Trajectory studies in a model of the Indian Ocean circulation. In *International WOCE Newsletter*, No. 20, pp18-22, WOCE International Project Office, Wormley, UK.
10. Cole, R., R. Weisberg, J. Donovan, C. Merz, R. Russell, V. Subramanian, and M. Luther, 2003. The evolution of a coastal mooring system. *Sea Technology*, Feb. 2003, pp 24-31.
11. Luther, M. E., S. D. Meyers, S. A. Gilbert, V. Subramanian, J. Scudder, H. Havens, M. Wilson, and M. McIntyre, 2008. A Coastal Ocean Prediction System for Tampa Bay, Florida. *Journal of Ocean Technology*, Vol. 3, No. 3, 25-32.

Publications – Abstracts and Presentations

Published Abstracts

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2. Luther, M. E., J. M. Bane, Jr., and D. A. Brooks, 1980. Rotary spectra of Gulf Stream Meanders over the continental slope off Onslow Bay, North Carolina. *Trans. Amer. Geophys. Union*, 61, p. 261. Presented at the AGU Spring Meeting, Toronto, Canada, May 1980.

3. Luther, M. E., and J. M. Bane, Jr., 1982. Spatially unstable waves in the Gulf Stream over the Carolina continental slope. *Trans. Amer. Geophys. Union*, 63, p. 362. Presented at the AGU Spring Meeting, Philadelphia, PA, May 31-June 4, 1982.
4. Luther, M. E., and J. J. O'Brien, 1983. Seasonal response of the Indian Ocean to monsoon wind forcing. *Research Activities in Atmospheric and Oceanic Modelling*, G. J. Boer, ed., WCRP Report No. 5, pp. 8.5-9.
5. Luther, M. E., and J. J. O'Brien, 1983. A numerical model of the seasonal circulation in the Indian Ocean. *Trans. Amer. Geophys. Union*, 64, p. 247.
6. Luther, M. E., and J. J. O'Brien, 1983. Seasonal response of the Indian Ocean to monsoon wind forcing. *IUGG XVIII General Assembly, IAPSO Programme and Abstracts*, pp. 198-199, Hamburg, Germany, August 1983.
7. Luther, M. E., and J. J. O'Brien, 1983. The circulation in the Arabian Sea forced by observed winds. *Trans. Amer. Geophys. Union*, 64, p. 733. Presented at the AGU Fall Meeting, San Francisco, CA, December, 1983.
8. Luther, M. E., and J. J. O'Brien, 1984. Development of the currents in the northwest Indian Ocean during the summer and winter monsoons. *Trans. Amer. Geophys. Union*, 65, p. 945. Presented at the AGU Fall Meeting, San Francisco, CA, December, 1984.
9. Luther, M. E., and J. J. O'Brien, 1985. Response of the Somali Current system to observed monsoon wind forcing. *IAMAP/IAPSO Joint Assembly Abstracts*, p. 48.
10. Luther, M. E., 1985. Large-scale numerical modelling of the wind-driven Indian Ocean circulation. *Trans. Amer. Geophys. Union*, 66, p. 831. Presented at the AGU Fall Meeting, San Francisco, CA, December, 1985.
11. Luther, M. E., and J. J. O'Brien, 1986. Modelling of the mesoscale features in the northwest Indian Ocean. *Trans. Amer. Geophys. Union*, 67, 292. Presented at the AGU Spring Meeting, Baltimore, MD, May 19-22, 1986.
12. Luther, M. E., S. K. Dube and J. J. O'Brien, 1986. Interannual Variability of the Northwest Indian Ocean Circulation 1954-1976. *Trans. Amer. Geophys. Union*, 67, p. 1035. Presented at the AGU Fall Meeting, San Francisco, CA, Dec. 8-12, 1986.
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15. Woodberry, K. E., M. E. Luther, and J. J. O'Brien, 1987. Modelling the seasonal circulation in the southern tropical Indian Ocean. *Trans. Amer. Geophys. Union*, 68, p. 1327. Presented at the AGU Fall Meeting, San Francisco, CA, December, 1987.
16. Luther, M. E., and J. J. O'Brien, 1988. Interannual and seasonal variability in upwelling patterns in the Northwest Indian Ocean. *Joint Oceanographic Assembly 1988 Abstracts*, Acapulco, Mexico, August 23-31.
17. Luther, M. E., 1988. Island effects in the seasonal circulation of the Indian Ocean. *Trans. Amer. Geophys. Union*, 69, p. 1232. Presented at the AGU Fall Meeting, San Francisco, CA, December, 1988.
18. Luther, M. E., and J. J. O'Brien, 1989. Research in Indian Ocean circulation at the Florida State University (Invited presentation at the European Geophysical Society General Assembly, March 1989). *Annales Geophysicae*, 7 (Special Issue), p. 181.

19. Luther, M. E., J. J. O'Brien and W. L. Prell, 1989. A model of paleo-upwelling fields in the northwestern Indian Ocean: Comparison with sediment data. (Invited paper) *Trans. Amer. Geophys. Union*, 70, p. 368.
20. Luther, M. E., T. G. Jensen and J. J. O'Brien, 1989. Visualization of Somali Current variability in numerical models. *Trans. Amer. Geophys. Union*, 70, p. 1140. Presented at the AGU Fall Meeting, San Francisco, CA, December, 1989.
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23. Potemra, J. T., M. E. Luther, and J. J. O'Brien, 1990. The seasonal circulation of the upper ocean in the Bay of Bengal. *Trans. Amer. Geophys. Union*, 71, 1381. Presented at the AGU Fall Meeting, San Francisco, CA, Dec. 3-7, 1990.
24. Luther, M. E., and T. G. Jensen, 1990. Modelling the variability in the wind-driven circulation in the Indian Ocean on intraseasonal to interannual time scales, International TOGA Scientific Conference, Abstracts, 16-20 July 1990, Honolulu, HI.
25. Luther, M. E., 1991. Seasonal and interannual variability in numerical models of the Indian Ocean circulation. IAPSO Proceedings No. 18, p. 96. Presented at the IUGG XX General Assembly, Vienna, Austria, August 11-24, 1991.
26. Luther, M. E., 1991. Seasonal and interannual variability in numerical models of the Somali Current. *Trans. Amer. Geophys. Union*, 72, no.51(suppl), 16. Presented at the AGU Ocean Sciences Meeting, New Orleans, LA, Jan 27-31, 1992.
27. Luther, M. E., 1992. Use of numerical models in support of the JGOFS Arabian Sea Process Study, *Trans. Amer. Geophys. Union*, 73 (suppl), no 25, p. 39. Presented at the AGU Western Pacific Geophysics Meeting, Hong Kong, Aug. 17-21, 1992.
28. Leonard, L. A., Hine, A. C., Luther, M. E., and Stumpf, R. P., 1993. Sediment transport processes in a west-central Florida open marine marsh tidal creek. *In: Southeastern section of the Geological Society of America 1993 Abstracts with Programs*, Tallahassee, Florida.
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30. Leonard, L. A., Luther, M. E., Hine, A. C., and Reed, D. J., 1993. Free surface flow in marsh canopies. *In: ASLO/SWS '93 Abstracts with Programs*, Edmonton, Canada. Lynn won the award for Best Student Paper for this poster presentation.
31. Leonard, L.A., M.E. Luther, A.C. Hine, D.J. Reed, and R.P. Stumpf, 1993. Processes controlling sediment deposition in two Gulf of Mexico marsh systems; west-central Florida and south-east Louisiana. *In: The Science & Management of Coastal Estuarine Systems*, Estuarine Research Federation Annual Meeting 1993 Proceedings, Hilton Head, South Carolina.
32. Luther, M. E., and Z. Ji, 1994. Near-real-time modelling of the Indian Ocean wind-driven circulation. *Trans. Amer. Geophys. Union*, 75, no 3(suppl), p. 148. Presented at the AGU Ocean Sciences Meeting, February 21-25, 1994, San Diego, CA.

33. Luther, M. E., and M. G. Valenti, 1994. Interannual Variability in the Indian Ocean Wind-Driven Circulation 1977-1992. *Trans. Amer. Geophys. Union*, 75, no 25 (suppl), p. 41. Presented at the AGU Western Pacific Geophysics Meeting, July 25-29, 1994, Hong Kong.
34. Ji, Zaihua, and M. E. Luther, 1994. Mixed-layer model and its application to meridional heat transport in the Indian Ocean. *Trans. Amer. Geophys. Union*, 75, no 25 (suppl), p. 41. Presented at the AGU Western Pacific Geophysics Meeting, July 25-29, 1994, Hong Kong.
35. Bartolacci, D. M., M. E. Luther, K. Banse, and D. C. English, 1994. Relationships between physical and biological parameters in the Arabian Sea. *Trans. Amer. Geophys. Union*, 75, no 44(suppl), p. 375. Presented at the AGU 1994 Fall Meeting, Dec. 8, 1994, San Francisco, CA.
36. Valenti, M. G., and M. E. Luther, 1994. Interannual Variability in the Indian Ocean Wind-Driven Circulation 1977-1992. *Trans. Amer. Geophys. Union*, 75, no 44(suppl), p. 366. Presented at the AGU 1994 Fall Meeting, Dec. 8, 1994, San Francisco, CA.
37. Haines, M. A., and M. E. Luther, 1994. Particle trajectories in an Indian Ocean model compared to chlorofluorocarbon distributions. *Trans. Amer. Geophys. Union*, 75, no 44(suppl), p. 359. Presented at the AGU 1994 Fall Meeting, Dec. 7, 1994, San Francisco, CA.
38. Valenti, M. G., and M. E. Luther, 1995. Interannual Variability in the Indian Ocean Wind-Driven Circulation 1977-1992. Presented at the International TOGA Conference, Melbourne, Australia, April 5, 1995.
39. Schmidt, N. J., J. L. Chapin, and M. E. Luther, 1995. On-line access to oceanographic and meteorological data from Florida's west coast and the Caribbean. Presented at the 1995 meeting of The Oceanography Society, Newport, RI, April 18, 1995.
40. Vincent, M., B. Galperin, and M. Luther, 1995. Development and application of a real-time three-dimensional hydrodynamic model of Tampa Bay, Florida. Presented at the Coastal Zone '95 Conference, Tampa, FL, July 17-22, 1995.
41. Luther, M. E., Z. Ji, H Liu, M. G. Valenti, and D. M. Bartolacci, 1995. Real-time ocean modelling and data transmission in support of shipboard research in the Arabian Sea. *Trans. Amer. Geophys. Union*, 76, no 46(suppl), p. F294. Presented at the AGU 1995 Fall Meeting, Dec. 12, 1995, San Francisco, CA.
42. Schmidt, N. J., J. L. Chapin, and M. E. Luther, 1995. Real-time oceanographic and meteorological data from Florida's west coast and the Caribbean. *Trans. Amer. Geophys. Union*, 76, no 46(suppl), p. F295. Presented at the AGU 1995 Fall Meeting, Dec. 12, 1995, San Francisco, CA.
43. Schmidt, N. J., M. S. Vincent, and M. E. Luther, 1996. Oil spill modeling in Tampa Bay, Florida: An integrated approach. *Trans. Amer. Geophys. Union*, 77, no 17(suppl), p. S154. Presented at the AGU 1996 Spring Meeting, May 21, 1996, Baltimore, MD.
44. Luther, M. E., M. A. Haines, and Z. Ji, 1996. Pathways of cross-equatorial fluxes in an Indian Ocean circulation model. *Trans. Amer. Geophys. Union*, 77, no 46(suppl), p. F392. Presented at the AGU 1996 Fall Meeting, Dec. 16, 1996, San Francisco, CA.
45. Ji, Z., M. E. Luther, and M. A. Haines, 1996. Cross-equatorial heat fluxes in an Indian Ocean circulation model. *Trans. Amer. Geophys. Union*, 77, no 46(suppl), p. F391. Presented at the AGU 1996 Fall Meeting, Dec. 16, 1996, San Francisco, CA.

46. Haines, M. A., M. E. Luther, and Z. Ji, 1996. Surface boundary conditions for CFC-11 in an Indian Ocean circulation model. *Trans. Amer. Geophys. Union*, 77, no 46(suppl), p. F392. Presented at the AGU 1996 Fall Meeting, Dec. 16, 1996, San Francisco, CA.
47. Luther, M. E., N. Schmidt, and D. Burwell, 1997. The Tampa Bay Physical Oceanographic Real-Time System (PORTS). *Trans. Amer. Geophys. Union*, 78, no 17(suppl), p. S120. Presented at the AGU 1997 Spring Meeting, May 30, 1997, Baltimore, MD.
48. Luther, M. E., N. Schmidt, and D. Burwell, 1997. The Tampa Bay Physical Oceanographic Real-Time System (PORTS). Presented at the Estuarine Research Federation 1997 Meeting, October 16, 1997, Providence, RI.
49. Schmidt, N., M. E. Luther, M. Vincent. B. Galperin, and D. Burwell, 1997. An Integrated End-to-End Marine Contaminant Management System for Tampa Bay. Presented at the Estuarine Research Federation 1997 Meeting, October 14, 1997, Providence, RI.

Presentations

1. Luther, M. E., and J. J. O'Brien, 1983. Modelling of the seasonal circulation in the Arabian Basin. Invited paper presented at the Mabahiss/John Murray International Symposium on Marine Science of the North-West Indian Ocean and Adjacent Waters, Alexandria, Egypt, 3-7 September, 1983.
2. Luther, M. E., 1991. Equatorial waves in the Indian Ocean in models and observations. Equatorial Theoretical Panel Meeting Abstracts, Univ. Rhode Island, July 1991.
3. Luther, M. E., 1991. Indian Ocean Modelling activities related to WOCE. WOCE/WHP Indian Ocean Expedition Planning Meeting, Univ. Miami, November 12-15, 1991.
4. Luther, M. E., 1992. Modelling the variability of upwelling in the Arabian Sea. Presented at the Bedford Institute of Oceanography, April 14, 1992, Dartmouth, Nova Scotia.
5. Luther, M. E., 1992. Dynamics of upwelling in the Arabian Sea. Presented at the Global Ecosystems Dynamics Experiment (GLOBEC) Arabian Sea Expedition Planning Meeting, June 16, 1992, Denver, CO.
6. Luther, M. E., 1992. Coupled Physical-Biological Models. Invited presentation at the Workshop on Variation in the Marine Environment and Ecosystem Around the Hawaiian Archipelago, East-West Center, University of Hawaii, Honolulu, Hawaii, December 3-4, 1992.
7. Luther, M. E., 1992. Dynamics of the Northern Indian Ocean, invited presentation at the Seventh Session of the SCOR-IOC Indian Ocean Climate Studies Panel, Bangalore, India, August 24-28, 1992.
8. Luther, M. E., 1992. Upwelling in the Arabian Sea, invited presentation at the Indian Ocean Marine Affairs Cooperation (IOMAC) International Scientific Workshop on Marine Scientific Cooperation in the Indian Ocean, Colombo, Sri Lanka, October 18-25, 1992.
9. Luther, M. E., 1992. Modelling the Circulation of the Indian Ocean. Invited presentation at the meeting of the WOCE Working Group on Numerical Modelling, Rutgers University, October 5-6, 1992.

10. Luther, M. E., Z. Ji, and K. Chen, 1993. Near real-time modelling of the Indian Ocean wind-driven circulation. Invited presentation at The Oceanography Society Meeting, Seattle, WA, April 12-16, 1993.
11. Luther, M. E., 1993. Coupled Physical-Biological Models of the Indian Ocean/Arabian Sea. Presented at the First SeaWiFS Science Team Meeting, Annapolis, MD, January 21, 1993.
12. Luther, M. E., 1993. Modelling the Circulation of the Indian Ocean. Invited presentation at the University of Hawaii, Honolulu, Hawaii, March 30, 1993.
13. Luther, M. E., 1993. Seasonal variability in the Indian Ocean and the WOCE Hydrographic Program. Presented at a meeting of the WOCE Indian Ocean Science Steering Committee, La Jolla, CA, August 2-5, 1993.
14. Luther, M. E., 1993. Ocean Modelling and Remote Sensing. Presented at the monthly meeting of the ACM/SIGGRAPH Tampa Bay Chapter, St. Petersburg, FL, September 8, 1993.
15. Luther, M. E., 1993. Modelling the variability of upwelling in the Arabian Sea. Invited presentation at the Office of Naval Research, Arabian Sea Expedition Program Managers Meeting, October 25, 1993.
16. Luther, M. E., 1993. Indian Ocean circulation and the global climate system. Invited presentation in the Department of Marine Science, Eckerd College, October 27, 1993.
17. Luther, M. E., 1994. Modelling the Indian Ocean Circulation. Lecture presented at Scripps Institution of Oceanography, Univ. of California at San Diego, La Jolla, CA, April 22, 1994.
18. Luther, M. E., 1994. Interannual variability in the wind-driven circulation of the Indian Ocean. Invited presentation at the World Climate Research Programme Workshop on Monsoon Predictability, Trieste, Italy, May 13, 1994.
19. Luther, M. E., 1994. Activities of the World Ocean Circulation Experiment (WOCE) and the Joint Global Ocean Flux Study (JGOFS) in the Indian Ocean. Invited presentation at the Eighth Session of the SCOR-IOC Indian Ocean Climate Studies Panel, Trieste, Italy, May 16-17, 1994.
20. Luther, M. E., 1994. Modelling and remote sensing of ocean circulation. Invited lecture at the Ocean University of Qingdao, Qingdao, China, August 1, 1994.
21. Luther, M. E., 1995. Real-Time monitoring and modelling of Ocean Processes. Invited lecture at the NOAA National Ocean Service, August 11, 1995.
22. Luther, M. E., 1996. Indian Ocean Circulation and Climate Variability. Invited lecture in the Dept. of Oceanography, Texas A&M Univ., Oct. 7, 1996.
23. Luther, M. E., 1996. The Tampa Bay Physical Oceanographic Real-Time System. Invited lecture in the Dept. of Marine Science, Stony Brook University, Oct. 16, 1996.
24. Luther, M. E., and M. A. Haines, 1998. The West Florida Coastal Ocean Monitoring and Prediction System (COMPS). 12th annual Governors Hurricane Conference, Tampa, FL, June 1-5, 1998.
25. Luther, M. E., 1998. Seasonal to interannual variability in the heat budget of the Indian Ocean. Invited presentation at A Workshop on the Variability of the Asian-Australian Monsoon, July 29-31, 1998, St Michaels, MD.
26. Luther, M. E., 1998. Real-time physical oceanographic monitoring and modeling in West Florida. Invited lecture at Eckerd College, October 14, 1998.

27. Luther, M. E., D. Burwell, M. Haines, N. Schmidt, M. Vincent, R. Weisberg, and H. Yang, 1998. Real-time physical oceanographic monitoring in West Florida. Invited presentation at the Marine Technology Society Ocean Community Conference '98, Baltimore, MD, November 19, 1998.
28. Luther, M. E., 1999. The West Florida Coastal Ocean Monitoring and Prediction System (COMPS). presented at the 13th Annual Governor's Hurricane Conference, June 7-11, 1999, Tampa, Florida.
29. Luther, M. E., D. Burwell, M. Haines, N. Schmidt, M. Vincent, R. Weisberg and H. Yang. The coastal ocean monitoring and prediction system for west Florida. presented at the International Union of Geodesy and Geophysics XXII General Assembly, Birmingham, UK, 19-30 July 1999.
30. Luther, M. E., D. Burwell, M. Haines, N. Schmidt, M. Vincent, R. Weisberg and H. Yang. Real-Time Physical Oceanographic Monitoring in Tampa Bay and the West Florida Coastal Ocean, Estuarine Research Federation '99, September 25-30, 1999, New Orleans, LA.
31. Vincent, M., D. Burwell, M. Luther, and B. Galperin, 1999. The Tampa Bay nowcast-forecast system. presented at the 6th International Conference on Estuarine and Coastal Modeling, New Orleans, LA, November 3-5, 1999, by M. Vincent.
32. Burwell, D., M. Vincent, M. Luther, and B. Galperin, 1999. Modeling of estuarine residence times. presented at the 6th International Conference on Estuarine and Coastal Modeling, New Orleans, LA, November 3-5, 1999, by D. Burwell.
33. Luther, M. E., R. H. Weisberg, and C. R. Merz, 2000. The coastal ocean monitoring and prediction system for west Florida. presented at the American Meteorological Society Annual Conference, Long Beach, CA, 9-14 January, 2000.
34. Zhang, H., M.E. Luther, D.M. Legler, S.D. Meyers and R. He. High frequency wind forcing from NSCAT in a model of the Indian Ocean circulation. Presented at the 2000 Ocean Sciences Meeting, American Society of Limnology and Oceanography, American Geophysical Union, San Antonio, Texas, January 24-28, 2000.
35. Soloviev, A., M. E. Luther, and R. H. Weisberg, 2000. Response of the Coastal Ocean to Hurricanes Floyd and Irene at the South Florida Ocean Measurement Center. Presented at the American Meteorological Society Conference, Ft. Lauderdale, FL, May 31, 2000.
36. Schmidt, N, E.K. Lipp, M.E. Luther and J.B. Rose. Exploring the combined impacts of NAO and ENSO on Florida's climate and coastal water quality. Presented at the Chapman Conference, The North Atlantic oscillation, University of Vigo (Ourense Campus) Ourense, Galicia, Spain, November 28 – December 1, 2000.
37. Luther, M. E., R. H. Weisberg, and A. V. Soloviev, 2001. Energetic supertidal oscillations with ~10-hr period off southeast Florida. Presented at The Oceanography Society Conference, Miami, Apr. 2, 2001.
38. Luther, M. E., M. S. Vincent, D. C. Burwell, and B. Galperin, 2001. Numerical modeling of proposed fresh water withdrawals and desalination concentrate discharges in Tampa Bay, Florida. Presented at the 16th Biennial Conference of the Estuarine Research Federation, St. Pete Beach, FL, Nov. 8, 2001.
39. Schmidt, N., and M. E. Luther, 2001. ENSO impacts on salinity in Tampa Bay, Florida. Presented at the 16th Biennial Conference of the Estuarine Research Federation, St. Pete Beach, FL, Nov. 7, 2001.

40. Luther, M. E., 2002. Impacts of fresh water diversions and concentrate discharge from a seawater desalination facility on water quality in Tampa Bay, Florida. Presented at the American Meteorological Society Third Symposium on Environmental Applications, Orlando, FL, Jan. 15, 2002.
41. Schmidt, N., and M. E. Luther, 2002. ENSO Impacts on Fresh Water Input and Salinity in Tampa Bay, Florida. Presented at the 2002 Ocean Sciences Meeting, Honolulu, HI, Feb. 14, 2002.
42. Luther, M. E., R. H. Weisberg, and A. Soloviev, 2002. Internal Tides on the Shelf off Southeast Florida. Presented at the 2002 Ocean Sciences Meeting, Honolulu, HI, Feb. 13, 2002.
43. Peebles, E. B., and M. E. Luther, 2002. Spawning and Habitat Responses of the Bay Anchovy *Anchoa mitchilli* to ENSO-related Variation in Inflows to Florida Estuaries. Presented at the 2002 Ocean Sciences Meeting, Honolulu, HI, Feb. 14, 2002.
44. Meyers, S. D., and M. E. Luther; Simulations of Altered Freshwater Flow Into Tampa Bay and Impact on Salinity. *Eos Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract OS21D-12, 2002. Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2002.
45. Gilbert, S. A., S. Meyers, and M. Luther; Wind-Driven Waves in Tampa Bay, Florida. *Eos Trans. AGU*, 83(47), Fall Meet. Suppl., Abstract OS72A-0341, 2002. Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2002.
46. Luther, M. E., S. D. Meyers, S. A. Gilbert, V. Subramanian, and M. E. Hansen, 2003. An Integrated Observing and Modeling System for Tampa Bay, Florida. Presented at the EPA Conference on Emerging Technologies, Tools, and Techniques To Manage Our Coasts in the 21st Century, January 27-31, 2003.
47. Luther, M. E., S. D. Meyers, S. A. Gilbert, V. Subramanian, L. M. Wetzell, M. S. Vincent, and D. C. Burwell, 2003. An Integrated Observing and Modeling System for Tampa Bay, Florida. Presented at The Oceanography Society Conference, New Orleans, LA, June 2003.
48. Luther, M. E., S. D. Meyers, S. A. Gilbert, V. Subramanian, L. M. Wetzell, M. S. Vincent, and D. C. Burwell, 2003. An Integrated Observing and Modeling System for Tampa Bay, Florida. Presented at the International Union of Geodesy and Geophysics, Sapporo, Japan, July 2003.
49. Luther, M. E., B. Galperin, S. D. Meyers, S. A. Gilbert, V. Subramanian, L. M. Wetzell, M. A. Vincent, and M. E. Hansen, 2003. An Integrated Observing and Modeling System for Tampa Bay, Florida. Presented at the Fourth Tampa Bay Area Scientific and Information Symposium (BASIS4), St. Petersburg, FL, October 2003.
50. Sopkin, K. L., M. E. Luther, S. A. Gilbert, V. Subramanian, J. Scudder, and L. M. Wetzell, 2003. Heat fluxes in Tampa Bay, FL. *Eos Trans. AGU*, 84(46), Fall Meet. Suppl., Abstract A42A-0743, 2003. Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, Dec. 2003.
51. Luther, M. E., R. Heinmiller, and P. Bogden, 2004. Telemetry technologies for coastal ocean observing systems. Presented at the ASLO/TOS Ocean Research Conference, Honolulu, HI, Feb. 15-20, 2004.
52. Luther, M. E., R. Weisberg, C. Merz, S. Meyers, V. Subramanian, S. Gilbert, L. Wetzell, R. Cole, J. Donovan, J. Scudder, M. Vincent, and D. Burwell, 2003. Real-time ocean

- observations in the Eastern Gulf of Mexico. Presented at the Clean Gulf Conference, New Orleans, LA, Nov. 20, 2003.
53. Luther, M. E., R. Weisberg, C. Merz, S. Meyers, V. Subramanian, S. Gilbert, L. Wetzell, R. Cole, J. Donovan, J. Scudder, M. Vincent, and D. Burwell, 2004. The Tampa Bay Physical Oceanographic Real-Time System (PORTS). Presented at the Industry-IOOS Workshop, Houston, TX, Mar. 2, 2004.
 54. Luther, M. E., R. Weisberg, C. Merz, S. Meyers, V. Subramanian, S. Gilbert, L. Wetzell, R. Cole, J. Donovan, J. Scudder, M. Vincent, and D. Burwell, 2004. The Tampa Bay Physical Oceanographic Real-Time System (PORTS) and the Coastal Ocean Monitoring and Prediction System (COMPS). Presented at the NOAA-Gulf of Mexico Coastal Ocean Observing System Harmful Algal Bloom Workshop, St. Petersburg, FL, April 13, 2004.
 55. Luther, M. E., 2004. Success stories from Ocean Observing Systems. Presented to the US House of Representatives Ocean Caucus, The Capitol, Washington, DC, Mar. 30, 2004.
 56. Luther, M. E., 2004. Private sector involvement in the Southeast and Gulf of Mexico Coastal Ocean Observing Systems. Presented to the National Association of Maritime Organizations, New York, NY, July 30, 2004.
 57. Luther, M. E., 2004. Applications of Tampa Bay PORTS data. Presented to Gen. Jack Kelly, Deputy Administrator of NOAA, and other NOAA administrators, Dept. of Commerce Building, Washington, DC, Aug. 4, 2004.
 58. Luther, 2004. Integrated Coastal Ocean Model/Data Products for Tampa Bay, West Florida, and the Southeast US. Presented at the Global Ocean Data Assimilation Experiment Conference, St. Petersburg, FL, Nov. 1, 2004.
 59. Luther, M. E., 2005. Successes from real-time ocean observing systems. Presented at the American Meteorological Society Conference, San Diego, CA, Jan. 10, 2005.
 60. Luther, M. E., 2005. Integrated Coastal Ocean Model/Data Products for Tampa Bay, West Florida, and the Southeast US. Presented at the International Association for Science, Technology, and Society, Baltimore, MD, Feb. 11, 2005.
 61. Luther, M. E., 2005. The US Integrated Ocean Observing System. Presented at the European Geosciences Union Conference, Vienna, Austria, Apr. 27, 2005.
 62. Luther, M., S. Meyers, B. Galperin, S. Gilbert, V. Subramanian, J. Scudder, M. Vincent, R. Pribble, and T. Janicki, 2005. An Integrated Observing and Modeling System for Tampa Bay. Presented at the Oceans05 Conference, September 2005.
 63. Meyers, S., M. Luther, B. Galperin, S. Gilbert, V. Subramanian, J. Scudder, M. Vincent, R. Pribble, and T. Janicki, 2005. An Integrated Observing and Modeling System for Tampa Bay. Presented at the Estuarine Research Federation 18th Biennial Conference, Norfolk, VA, October 2005.
 64. Luther, M., and C. Heil, 2005. Sensor needs for Regional Coastal Ocean Observing Systems. Presented at the Estuarine Research Federation 18th Biennial Conference, Norfolk, VA, October 2005.
 65. Holm, H., M. Luther, S. Meyers, J. Seiter, K. Sopkin, M. Wilson, A. Linville, V. Subramanian, and S. Gilbert, 2005. Lagrangian analysis of harmful algal blooms and human pathogens within the Tampa Bay estuary. Presented at the Estuarine Research Federation 18th Biennial Conference, Norfolk, VA, October 2005.

66. Sopkin, K., C. Mizak, S. Gilbert, V. Subramanian, M. Luther, and N. Poor, 2005. Comparison of estimates of air-water fluxes for Tampa Bay, Florida. Presented at the Estuarine Research Federation 18th Biennial Conference, Norfolk, VA, October 2005.
67. Wilson, M., M. Luther, S. Meyers, H. Holm, A. Linville, S. Gilbert, and V. Subramanian, 2005. Effects of Extreme Events on Residual Circulation and Residence Time for Tampa Bay, Florida. Presented at the Estuarine Research Federation 18th Biennial Conference, Norfolk, VA, October 2005.
68. Luther, M. E., 2006. The US Integrated Ocean Observing System and the State of Florida. Presented to the Florida Department of Environmental Protection, Tallahassee, FL, Apr. 7, 2006.
69. Luther, M. E., S. Gilbert, and M. McIntyre, 2006. The Alliance for Coastal Technologies and the US Integrated Ocean Observing System. Presented at The Coastal Society Conference, St. Pete Beach, FL, May 15-17, 2006.
70. Luther, M. E., 2006. The US Integrated Ocean Observing System and the State of Florida. Presented to the Florida Coastal Ocean Observing System Caucus, Melbourne, FL, June 19, 2006.
71. Luther, M. E., 2006. The US Integrated Ocean Observing System and Public Health in the State of Florida. Invited Presentation at the Florida Environmental Health Association Conference, Sarasota, FL, July 13, 2006.
72. Luther, M. E., 2006. Ocean observing and Maritime Security. Presented at the USF/USGS Brown Bag Seminar, St. Petersburg, FL, July 14, 2006.
73. Luther, M. E., S. Gilbert, and M. McIntyre, 2006. The Alliance for Coastal Technologies and the US Integrated Ocean Observing System. Presented at The Sierra Club Red Tide Forum, St. Pete Beach, FL, July 30, 2006.
74. Luther, M. E., 2006. The US Global Ocean Observing System Steering Committee. Presented at the Southeast Coastal Ocean Observing System Regional Association Workshop, Jacksonville, FL, Sept. 11, 2006.
75. Luther, M. E., 2006. The Tampa Bay Physical Oceanographic Real-Time System. Presented at the Tampa Bay Ocean Technology Forum, Tampa, FL, Oct. 30, 2006.
76. Luther, M. E., 2006. The US Global Ocean Observing System Steering Committee. Presented at the National Federation of Regional Associations Workshop, Chicago, IL, Nov. 7, 2006.
77. Luther, M. E., 2007. The US Integrated Ocean Observing System and the Gulf of Mexico. Invited Presentation at the Gulf of Mexico Alliance Nutrients Conference, Gulf Breeze, FL, Jan. 18, 2007.
78. Luther, M. E., 2007. The Alliance for Coastal Technologies and the US Integrated Ocean Observing System. Presented at The Canada Technology Forum, Tampa, FL, Feb. 23, 2007.
79. Luther, M. E., 2007. Biological Sensor Technologies for Ocean Observing Systems. Invited presentation at Capitol Hill Oceans Week, US House of Representatives, Washington, DC, June 6, 2007.
80. Luther, M. E., 2007. The Alliance for Coastal Technologies: Sensor needs for Coastal Ocean Observing Systems. Invited presentation at the Biosense Workshop, Mote Marine Lab, Sarasota, FL, June 18, 2007.
81. Luther, M. E., 2007. The Tampa Bay Coastal Ocean Prediction System. IEEE/MTS Oceans07 Conference, Vancouver, BC, Oct. 1, 2007.

82. Luther, M. E., Meyers, S.; Gilbert, S.; Subramanian, V.; Wilson, M.; Holm, H.; Linville, A.; Scudder, J., 2007. A Coastal Ocean Observing and Prediction System for Tampa Bay, Florida. Estuarine Research Federation 2007 Biennial Conference, Providence, RI, Nov. 6, 2007.
83. Wilson, M.; Luther, M.; Meyers, S.; Holm, H.; Linville, A.; Gilbert, S.; Subramanian, V., Effects of Extreme Events on Residual Circulation for Tampa Bay, Florida. Estuarine Research Federation 2007 Biennial Conference, Providence, RI, Nov. 6, 2007.
84. Luther, M. E., 2007. The US Integrated Ocean Observing System and the Gulf of Mexico. Clean Gulf, Tampa, FL, Nov. 15, 2007.
85. Hudon, A L, Moulton, E L, Luther, M E, Gilbert, S, Scudder, J, Merz, C R, 2008. The Watershed Watchers program: a collaborative effort to integrate ocean observing data into a K-5 marine science curriculum. Ocean Sciences Meeting, Orlando, FL, Mar. 3, 2008.
86. Meyers, S D, Luther, M E, Linville, A, Wilson, M, Havens, H, 2008. Residence time in Tampa Bay and its variation with natural and anthropogenic influences. Ocean Sciences Meeting, Orlando, FL, Mar. 4, 2008.
87. Luther, M E, Meyers, S D, Gilbert, S A, Subramanian, V, McIntyre, M, Wilson, M C, Havens, H H, Linville, A, 2008. A coastal ocean prediction system for Tampa Bay, Florida. Ocean Sciences Meeting, Orlando, FL, Mar. 4, 2008.
88. Gilbert, S A, Luther, M E, Tamburri, M, Johengen, T, The Alliance For Coastal Technologies: Sensor needs for coastal ocean observing systems. Ocean Sciences Meeting, Orlando, FL, Mar. 4, 2008.
89. Luther, M. E., 2008. Ocean Observing Systems. Invited lecture at Eckerd College, Feb, 20, 2008.
90. Luther, M. E., 2008. The US Integrated Ocean Observing System in the Southeast. Invited presentation at the annual meeting of the Southeastern Association of Marine Laboratories, Mote Marine Lab, Mar. 28, 2008.
91. Luther, M. E., S. D. Meyers, S. A. Gilbert, V. Subramanian, J. Scudder, H. Havens, M. Wilson, and M. McIntyre, 2008. A Coastal Ocean Prediction System for Tampa Bay, Florida. Invited presentation at the Ocean Innovation Conference, St. Johns, Newfoundland, Canada, October 21, 2008.
92. Havens, H., M. E. Luther, S. D. Meyers, 2008. A coastal prediction system as an event response tool: Particle tracking simulation of an anhydrous ammonia spill in Tampa Bay. *Eos Trans. AGU*, 89(53), Fall Meet. Suppl., Abstract U41A-0001; Presented at the American Geophysical Union Fall Meeting, San Francisco, CA, December 18, 2008.
93. Meyers, S., and M. E. Luther, 2010. Circulation Changes in Tampa Bay Due to a Freshwater Pulse; presented at The Southeastern Estuarine Research Society (SEERS), St. Augustine, FL, November 4-6, 2010
94. Wilson, M. C., S. D. Meyers, and M. E. Luther, 2011. Wavelet analysis of synoptic variability in Tampa Bay, Florida. Coastal and Estuarine Research Federation Conference, Daytona Beach, FL; November 6-10, 2011.
95. Meyers, S., A. Linville, and M. E. Luther, 2011: The alteration of estuarine circulation due to large-scale construction: A Tampa Bay example. Coastal and Estuarine Research Federation Conference, Daytona Beach, FL; November 6-10, 2011.

Computer-Produced Motion Pictures

Spatially unstable waves in the Gulf Stream, 4 min., 1982, 16mm color film.

A model of the Indian Ocean forced by FGGE winds, 6 min., 1985, 16mm color film.

Interannual Variability in the Somali Current 1954-1976, 55 min., 1987, 16mm color film.

Numerous videotapes on aspects of Indian Ocean circulation.

Grants and Contracts Awarded

1. "Mixed Layer Parameterizations in Models of the Indian Ocean Circulation," M. E. Luther, Principal Investigator. Institute for Naval Oceanography; \$64,773; May 1, 1991 to March 31, 1992.
2. "Modelling of Tidal Propagation in Rivers Using Data Assimilation," M. E. Luther, Principal Investigator. Florida Department of Natural Resources; \$10,000; May 1, 1991 to January 15, 1992.
3. "Mixed Layer Parameterizations in Models of the Indian Ocean Circulation," M. E. Luther, Principal Investigator. Office of Naval Research; \$121,623; January 1, 1992 to December 31, 1993.
4. "Modelling Primary Production in the Arabian Sea," M. E. Luther, Principal Investigator. National Science Foundation; \$259,569; December 15, 1992 to December 14, 1995.
5. "Incorporation of SeaWiFS Data into Coupled Physical/Biological Models of the Arabian Sea," M. E. Luther, Principal Investigator, John C. Brock, Co-Investigator. National Aeronautics and Space Administration; \$550,438; April 1, 1993 to September 30, 1997.
6. "Upwelling and Mixed-Layer Dynamics in the Arabian Sea," M. E. Luther, Principal Investigator. Office of Naval Research; \$601,525; January 1, 1994 to September 30, 1998.
7. "Modelling chemical tracer distribution in the Indian Ocean," M. E. Luther, Principal Investigator, R. A. Fine, Co-Investigator. National Science Foundation; \$323,357; January 1, 1994 to June 30, 1997.
8. "Satellite Data Products for Florida Waters on CD-ROM," M. E. Luther, Principal Investigator. Florida Department of Environmental Protection; \$30,700; June 9, 1993 to February 21, 1994.
9. "Support of research activities of a Marine Engineering Institute at the University of South Florida," M. E. Luther, Co-Principal Investigator (among many others); Office of Naval Research; \$2,000,000 (\$85,816 for Luther's portion); June 1, 1994 to May 31, 1996.
10. "Biophysical interactions in the surface layer of the equatorial Pacific Ocean," M. E. Luther, Principal Investigator. National Aeronautics and Space Administration; \$22,000; 9-1-94 to 8-31-95.
11. "The design of a modeling strategy for Florida Bay," Boris Galperin, Principal Investigator, M. E. Luther, M. A. Haines, and A. F. Blumberg, Co-Investigators. U.S. Dept. of the Interior/Everglades National Park; \$41,070; 8-30-94 to 8-29-95.
12. "A study to determine the use of satellite imagery in mapping the discolored water phenomena occurring in Florida Bay," M. E. Luther, Principal Investigator. Florida Department of Environmental Protection; \$15,000; February 15 to October 31, 1995.
13. "The Northeastern Gulf of Mexico Circulation Modeling Study," Y. Hsueh (FSU), Principal Investigator, R. Weisberg, USF Co-Principal Investigator, M. Luther, Co-Investigator;

- Minerals Management Service; \$753,156 total USF sub-contract; October 1, 1995 to March 31, 2000.
14. "Development of an Integrated End-to-End Marine Contaminant Management System," M. E. Luther, Principal Investigator, B. Galperin, E. VanVleet, N. Schmidt, M. Vincent, and C. Friel, Co-Investigators; Environmental Protection Agency; \$588,777; October 1, 1996 to March 31, 2000.
 15. "Regional Assessments and Applications for Effects of Seasonal-to-Interannual Climate Variability," M. E. Luther, Principal Investigator; National Oceanic and Atmospheric Administration, through a subcontract with the Univ. of Miami; \$30,000; January 1, 1997 to December 31, 1997.
 16. "Observations and Modeling of the West Florida Shelf Circulation," R. H. Weisberg, Principal Investigator, M. E. Luther, Co-Principal Investigator; Office of Naval Research; \$2,971,084; October 1, 1997 to July 31, 2003.
 17. "A Real-Time Oceanographic Data System for Florida," P. R. Betzer, M. E. Luther, and R. H. Weisberg, Co-Principal Investigators; Florida Department of Environmental Protection; \$400,000; October 29, 1997 to September 30, 1998.
 18. "Characterization of Changes in Salinity and Tidal Residual Circulation in Tampa Bay due to Desalination Concentrate Discharge," M. E. Luther, Principal Investigator; S & W Water, LLC; \$110,000; October 29, 1999 to December 31, 2000.
 19. "A Real-Time Oceanographic Data System for Florida." Funded \$300,000 for 5.3 positions for Coastal Ocean Modeling and Prediction Systems (COMPS). P. R. Betzer, A. C. Hine, M. E. Luther, and R. H. Weisberg, Co-Principal Investigators. (Annually recurring E&G funds).
 20. "I-4 Corridor funding for the Coastal Ocean Modeling and Prediction System (COMPS)." Funded \$ 69,276.00 for engineer position and \$ 78,520.50 for expenses. P. R. Betzer, M. E. Luther, and R. H. Weisberg, Co-Principal Investigators. (Annually recurring E&G funds).
 21. "Real-time monitoring in Brooker Creek Preserve," M. Luther, Principal Investigator; Pinellas County; \$39,450; April 1, 2000 to September 30, 2000.
 22. "Salinity and Residence Time in McKay Bay in the USF College of Marine Science Three-Dimensional Hydrodynamic Circulation Model of Tampa Bay." M. E. Luther, Principal Investigator; Southwest Florida Water Management District; \$69,943.00; 06/01/01 to 12/31/04. (one person-month)
 23. "Coupling of a Wave Model and Water Quality Model with the USF 3-Dimensional Hydrodynamic Circulation Model for Tampa Bay." M. E. Luther, Principal Investigator; US Geological Survey; \$20,000; 06/01/01 to 06/30/03.
 24. "Air-water turbulent flux measurements in Tampa Bay." M. E. Luther, Principal Investigator; Florida Department of Environmental Protection; \$160,533; January 1, 2002 to June 30, 2004. (one person-month)
 25. "To Establish a Regional Node for the National Virtual Ocean Data System (NVOADS) at the University of South Florida College of Marine Science;" Subcontract #: S030021; Texas A&M Research Foundation; PI-Mark Luther; 10/01/2002 to 08/31/2003; \$19,834
 26. "Coordinated Regional Benefit Studies of Coastal Ocean Observing Systems;" ONR subcontract through Woods Hole Oceanographic Institution; PI - K. Weiland, COBA, Co-PI - M. Luther, D. Colie; 9/15/02-7/31/04; \$49,939.
 27. "Flushing/Residence Times for Discharges from the Piney Point Phosphate Plant in the USF College of Marine Science Three-Dimensional Hydrodynamic Circulation Model." M. E.

- Luther, Principal Investigator; Florida Department of Environmental Protection; \$30,000; 4/9/03-2/14/06.
28. "An Integrated Circulation, Water Quality, Wave and Sediment Transport Model for Tampa Bay, Florida;" US Geological Survey, M. Luther, Principal Investigator; \$40,079; 5/1/04 to 8/31/05.
 29. "The Alliance For Coastal Technologies (ACT): Partnership Activities at the University of South Florida." M. E. Luther, Principal Investigator; National Oceanic and Atmospheric Administration through subcontract with the Univ. of Maryland; \$1,458,924; May 1, 2002 to April 30, 2008.
 30. "An autonomous genosensor for environmental water quality." J. Paul, PI; M. Luther, Co-PI (with others); National Science Foundation; \$1.29M (\$288,973 Luther's portion); 10/01/02 to 9/30/07.
 31. "Enhancements to the Coastal Ocean Monitoring and Prediction System for West Florida: A Component of The Integrated Ocean Observing System;" NOAA National Ocean Service (Award # NA04NOS4730174); M. Luther and R. Weisberg, Co-Principal Investigators; \$1,938,943 (\$509,977 Luther's portion); 8/1/04 to 7/31/08.
 32. "Observations and Modeling of the West Florida Continental Shelf Circulation" PI- R. Weisberg, Co-PI M. Luther; Office of Naval Research; 11/1/97-2/28/05; \$3,221,084
 33. "South East Atlantic Coastal Ocean Observing System (SEA-COOS)" PI-R. Weisberg, Co-PI M. Luther; University of North Carolina; 9/1/02-12/31/07; \$1,384,046
 34. "Integration of Everglades National Park observing systems." PI- S. Vargo, Co-PI's- M. Luther and F. Muller-Karger (\$27,087 Luther's portion)
 35. "Tampa Bay PORTS Cooperative" M Luther, PI; Greater Tampa Bay Marine Advisory Council-PORTS; 3/7/94-3/6/04; \$230,186
 36. "Hurricane Surge Height Measurement System;" M. Luther, PI; Florida Hurricane Alliance; 1/1/07 to 12/31/09; \$158,125.
 37. "Numerical Simulation of the Circulation in Pensacola Bay;" M. Luther and S. Meyers, Co-PI's; NOAA through Florida Fish and Wildlife Conservation Commission; May 5, 2007 to May 31, 2012; \$150,000
 38. "The Alliance for Coastal Technologies (ACT): Partnership Activities at the University of South Florida (Phase II);" M. E. Luther, Principal Investigator; National Oceanic and Atmospheric Administration through subcontract with the Univ. of Maryland (Award Number CA07-13); August 1, 2007 to July 31, 2011; \$345,000.
 39. "Ocean Observations as a Component of a Tampa Bay Maritime Domain Awareness System;" Mark E. Luther, Principal Investigator; SRI International; July 1, 2007 to June 30, 2012; \$925,000 (award delayed until Jan. 17, 2008 and year 1-2 funds reduced to \$171,850).
 40. "Standardization of Local Data Network Nodes in the GCOOS-RA;" M. E. Luther, F. Muller-Karger, Chuanmin Hu, and V. Subramanian, Co- Principal Investigators; National Oceanic and Atmospheric Administration through subcontract from Texas A&M University Research Foundation; October 1, 2007 to September 30, 2010; \$149,509
 41. "Support for a Workshop on *Technologies and Methodologies for the Detection of Harmful Algae and their Toxins*;" M. Luther, PI, Florida Fish and Wildlife Research Institute, Sept. 1, 2008 to Feb. 28, 2009; \$15,008.
 42. "Karenia Detection Study: Support and Coordination for the Evaluation and Comparison of Karenia Detection Methodologies and Technologies;" M. Luther, PI; Florida Fish and Wildlife Research Institute (pass-thru from US-EPA); 2/15/2009 – 2/11/11; \$51,000.

43. "Ocean Observations from Ships of Opportunity;" M. Luther, PI; Chuanmin Hu, L. Langebrake, G. Brown, and G. Morrison, Co-I's; USF Level II Center of Excellence funding; \$519,750.
44. "The Alliance for Coastal Technologies (ACT): Partnership Activities at the University of South Florida to Develop a National Waves Plan;" M. E. Luther, Principal Investigator; National Oceanic and Atmospheric Administration through subcontract with the Univ. of Maryland (Award Number CA10-23); May 1, 2010 to April 30, 2011; \$80,000.
45. "Knauss Marine Fellowship – Heather Havens;" M. Luther, PI; Florida Sea Grant/NOAA; 2/1/10 – 1/31/11; \$42,578.
46. "Implementation of Regional Integrated Ocean Observing Systems: Support of RCOOS Development in SECOORA: University of South Florida Data Management;" M. Luther, PI; South Carolina Sea Grant/SECOORA; 08/01/2011 to 07/31/2012; \$37,923.
47. "Standardization of Local Data Network Nodes in the GCOOS-RA;" M. E. Luther, F. Muller-Karger, Chuanmin Hu, and S. Meyers, Co- Principal Investigators; National Oceanic and Atmospheric Administration through subcontract from Texas A&M University Research Foundation; June 1, 2011 to May 31, 2013; \$77,916.
48. "Numerical Simulation of the Circulation in Pensacola Bay: Simulation of Larval Transport." M. Luther and S. Meyers, Co-PI's; NOAA through Florida Fish and Wildlife Conservation Commission; May 15, 2012 to August 31, 2012; \$45,000
49. "The Alliance for Coastal Technologies (ACT): Partnership Activities at the University of South Florida (Phase III);" M. E. Luther, Principal Investigator; National Oceanic and Atmospheric Administration through subcontract with the Univ. of Maryland (Award Number CA10-24); May 1, 2010 to April 30, 2015; \$435,001.
50. "Tampa Bay PORTS Cooperative II" M Luther, PI; Greater Tampa Bay Marine Advisory Council-PORTS; 4/9/2004-3/6/2014; \$381,913 cumulative as of 3/1/2012.

Interns and Visiting Scientists Hosted

Thomas Wahl, Postdoctoral Associate, March 2013-March 2015

Stephanie Stefanski, Cousteau Divers Society, May 2012-present

Audrey Michel, Institute of Engineering Sciences of Toulon and the Var, Toulon, France;
Summer 2012

Willem Suez-Panama-Bouton, Institute of Engineering Sciences of Toulon and the Var, Toulon,
France; Summer 2012

Pierre Bernard, Institute of Engineering Sciences of Toulon and the Var, Toulon, France;
Summer 2012

Bernadette Jobbe-Duval, Institute of Engineering Sciences of Toulon and the Var, Toulon,
France; Summer 2012

Nicolas Degrain, Institute of Engineering Sciences of Toulon and the Var, Toulon, France;
Summer 2012

Rolf Riethmüller, Ph.D., Helmholtz-Zentrum Geesthacht Institute of Coastal Research, Germany,
February-August 2011

Pierre Recoules, Institute of Engineering Sciences of Toulon and the Var, Toulon, France;
Summer 2010

Pierre Rizzo, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer
2009

Eric J. Hochberg, Ph.D., Assistant Professor, Nova Southeastern University Oceanographic Center, Summer 2008
Patricia Lourenco, Univ. of Lisbon, Portugal, Spring 2008, Fall 2005
Prof. Ivan Ferrer, La Universidad Juarez Autonoma De Tabasco, Biological Science Division; January-February 2008
Damien Marigliano, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2007
Fabien Martinez, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2007
Aurelie Bencharel, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2006
Emilie Ratabouil, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2005
Laëtitia Perreau, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2005
Fabrice Pottier, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2002
Juliette Teyrat, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 2002
Clock Shi, Shanghai Technical University, China, Fall 2001
Yun C. Jung, Korean Maritime University, Fall 2001-Spring 2003
Emmanuelle Payer, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 1999
Ludwig Gilbert, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer 1999
Prof. S. K. Dube, Indian Institute of Technology, New Delhi, India; April-May 1994

Licenses/Certifications

US Coast Guard Captains License, 2006 (Operator of Uninspected Passenger Vessels)
PADI Open Water SCUBA Diver Certification, 1976

Consultant Services

Oceanering, Inc., 1994 (assisted with prediction of Indian Ocean currents for salvage of a downed Navy jet off the coast of Somalia)
Greater Tampa Bay Marine Advisory Council - PORTS, Inc., 1995-present (provide management services for the Tampa Bay Physical Oceanographic Real-Time System)
Post, Buckley, Schuh, and Jernigan, Inc., 1998-2005 (provided simulations of salinity and circulation changes in Tampa Bay from proposed water supply projects; assisted in design and implementation of a comprehensive hydro-biological monitoring plan for permitted water supply projects)
Tampa Bay Water, a Regional Water Supply Authority, 1998-2005 (provided expert testimony on the effects of water supply projects on the Tampa Bay estuary)

Nova Southeastern University, 1998-2004 (provided coordination of design and implementation of a real-time environmental observing array for the South Florida Ocean Measurement Center)

ENSR, 1999-2006 (evaluated environmental effects of a natural gas pipeline to be built through Tampa Bay)

Conrod Associates, 2000-2001 (provided field instrumentation for real-time monitoring of the Brooker Creek Preserve, Pinellas County)

Marine Desalination Systems, LLC, 2001-2006 (provided analyses of oceanographic data for the Tampa Bay region)

Taiwan National Center for Ocean Research, 2001 (provided optical instrumentation for calibration of satellite remote sensing of ocean color)

Woods Hole Group, 2001 (provided installation and retrieval of oceanographic instrumentation in Tampa Bay, FL, for monitoring permit compliance at the TECO Big Bend power plant)

S and W Water, LLC, 2001 (provided expert testimony in permit hearing for Big Bend desalination facility)

Carnival Cruise Lines, 2002 (provided analyses of oceanographic data in support of legal proceedings)

The Boeing Company, 2004-2009 (provided advice on demonstration projects for the Integrated Ocean Observing System)

Janicki Environmental, Inc., 2004-2007 (participated in review of St. Johns River Water Management District modeling program for Indian River Lagoon; collaborated in development of a coupled hydrodynamic-water quality model of Tampa Bay using ECOM3D and CEQUAL-ICM for application to Piney Point phosphate discharges and to Tampa Bay Water's Downstream Augmentation Program)

HSW Engineering, Inc. 2005-2006 (assisted in review of Minimum Flows and Levels for the Lower Suwannee River/Fanning Springs/Manatee Springs and for the Waccasassa River/Levy Blue Springs for the Suwannee River Water Management District)

Industrial Economics, Inc., 2005-2007 (provided simulations of hydrodynamics in Tampa Bay during Hurricanes Frances and Jeanne for analysis of phosphate process water spill trajectory and fate)

Water Resource Solutions, 2005-2006 (provided summary of hydrodynamic conditions and residence times in Safety Harbor, Tampa Bay, in support of desalination discharge permitting)

Mote Marine Lab, 2005-2006 (provided model simulations of discharge plume from TECO power plants in Hillsborough Bay in support of discharge permit renewal)

Coastal Resources Group, Inc., 2007-present (obtain water level, wave, and current measurements at multiple locations in Tampa Bay and Rookery Bay in support of seagrass and mangrove restoration)

SAIC, 2008-2009 (provided support for NOAA contract services in ocean observing systems)

Fugro-GEOS, 2008-present (provide support for water level and current measurements)

Ocean Energy Systems LLC, 2008 (provided analyses of wave motions and other oceanographic parameters for siting of wave power generation systems)

Moore and Company, PA, 2008-present (provided analyses of wind, wave, and tide conditions and vessel trajectories in maritime casualty cases: Blue Water Marine Towing v. *Natalita III*; 2008; United States District Court, Southern District of Florida, Case No. 08-20739 CIV; Sea Tow Key Biscayne v. Barge OSG 209 *in rem* and OSG 209 LLC; 2010; United States District

Court, Southern District of Florida, “In Admiralty”; Case No. 09-CV-61410-CMA; Mark E. Luther, Ph.D., v. M/V Ouro do Brasil et al.; 2012; United States District Court, Middle District of Florida, “In Admiralty”; Case No. 8:09-CV-2267-T-35TGW)
St. Johns RiverKeepers, 2008 (provided expert testimony in Consumptive Use Permit hearing, St. Johns Riverkeeper, Inc., City Of Jacksonville, and St. Johns County, v. St. Johns River Water Management District and Seminole County, DOAH Case No. 08-1316)
CH2M-HILL, 2009 (provided water quality and flushing analyses for Port of Tampa construction projects)
Lewis Environmental, 2009-present (provide measurements and numerical model circulation studies for mangrove restoration projects)
Continental Shelf Associates, 2009-present (provide environmental impact analyses for offshore energy projects for BOEMRE – formerly MMS)
Greenberg Traurig, P.A., 2012 (provide analysis of hazardous material spill trajectory and fate in support of litigation)

Expert Witness Testimony

Tampa Bay Water v. Hillsborough County; 1998; Richard A. Harrison, Allen Dell, P.A., atty.

Tampa Bay Water v. Alafia River Basin Council; 1999; Richard A. Harrison, Allen Dell, P.A., atty.; Dept. of Administrative Hearings Case No. 98-4925, Florida Department of Environmental Protection

S&W Water v. Save Our Bays And Canals; 2001; Dept. of Administrative Hearing. Case No. 01-1948, Florida Department of Environmental Protection; Richard A. Harrison, Allen Dell, P.A., atty.

Blue Water Marine Towing v. *Natalita III*; 2008; United States District Court, Southern District of Florida, Case No. 08-20739 CIV; Michael T. Moore, atty.

St. Johns Riverkeeper, Inc., City Of Jacksonville, and St. Johns County, v. St. Johns River Water Management District and Seminole County; 2008; DOAH Case No. 08-1316

Sea Tow Key Biscayne v. Barge OSG 209 *in rem* and OSG 209 LLC; 2010; United States District Court, Southern District of Florida, “In Admiralty”; Case No. 09-CV-61410-CMA; Michael T. Moore, atty.

Mark E. Luther, Ph.D., v. M/V Ouro do Brasil et al.; 2012; United States District Court, Middle District of Florida, “In Admiralty”; Case No. 8:09-CV-2267-T-35TGW; Michael T. Moore, atty.