CURRICULUM VITA

Mark Edward Luther

(revised February 23, 2024)

Education

Institution	Field of Study	<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; maritime safety and security.

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.

EPA Gulf of Mexico Program Gulf Guardian Award for Partnerships, 2011

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

Tampa Bay Physical Oceanographic Real-Time System (GTBMAC-PORTS, Inc.) Director of Operations, 1995-present.

Department of Homeland Security/US Coast Guard Area Maritime Security Committee of Western Florida, 2015-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, Member, 1997-present.

The Pier Aquarium, Inc., Board of Directors, Member, 2001-present, Chairman, 2008-present; Acting CEO, 2014-present.

International Seakeepers Society, Board of Directors, Member, 2018-present; Science Advisory Council, Chairman, 2010-present.

International Marine Minerals Society, Board of Directors, 2020-present.

Alliance for Coastal Technologies, Founding Partner, 2001-2017; Board Member, 2002-2010, Chairman, 2006-2010.

IEEE/MTS OCEANS'18 Conference Local Organizing Committee, Member, 2018

National Homeland Security Conference 2016 Local Organizing Committee, 2014-2016

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

Oatar 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 (Doctorate)

- 1. Monica C. Wilson, Ph.D., 2013
- 2. Heather H. Havens, Ph.D., 2009
- 3. Mark S. Vincent, Ph.D., 2002 (with Mark Ross)
- 4. Nancy J. Schmidt, Ph.D., 2001
- 5. David C. Burwell, Ph.D., 2001
- 6. Zaihua Ji, Ph. D., 1997
- 7. Lynn A. Leonard, Ph. D., 1994 (with A. C. Hine)
- 8. Tommy G. Jensen, Ph. D., 1989 (FSU with James J. O'Brien)

Students Supervised (Masters)

- 1. Richard Knudsen, M.S., 2015
- 2. Mary Janine Vara, M.S., 2014
- 3. Kristen Sopkin, M. S., 2008
- 4. Amanda Linville, M. S., 2007
- 5. Monica C. Wilson, M. S., 2007
- 6. Haiying Zhang, M. S., 2000
- 7. Dawn Olson, M. S., 1998
- 8. Danielle M. Bartolacci, M. S., 1996
- 9. M. Grey Valenti, M. S., 1995
- 10. James T. Potemra, M. S., 1990 (FSU with James J. O'Brien)
- 11. Pedro Tsai, M. S., 1990 (FSU with James J. O'Brien)
- 12. Karen E. Woodberry, M. S., 1988 (FSU with James J. O'Brien)
- 13. Raymond C. Simmons, M. S., 1987 (FSU with James J. O'Brien)
- 14. Alex H. Meng, M. S., 1985 (FSU 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 (doi: 10.1016/0079-6611(85)90017-5).
- 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 airsea 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 (doi: 10.1016/S0362-546X(98)00098-4).
- 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, doi:10.1080/08920750490275895.
- 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. C., S. D. Meyers, and M. E. 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, 2013. Alteration of residual circulation due to large-scale infrastructure in a drowned riverbed estuary. *Estuaries and Coasts*, doi:10.1007/s12237-013-9691-3.
- 55. Luther, M. E., G. Meadows, E. Buckley, S. A. Gilbert, H. Purcell, and M. Tamburri, 2013. Verification of Wave Measurement Systems. *J. Mar. Tech.*, 47(5), 104-116.
- 56. Wahl, T., F. M. Calafat, and M. E. Luther, 2014. Rapid changes in the seasonal sea level cycle along the US Gulf coast from the late 20th century. *Geophys. Res. Lett.*, 41, doi:10.1002/2013GL058777.

- 57. Wilson, M. C., S. D. Meyers, and M. E. Luther, 2014. Synoptic volumetric variations and flushing of the Tampa Bay estuary. *Climate Dynamics*, doi: 10.1007/s00382-013-1926-2.
- 58. Meyers, S. D. and M. E. Luther, 2015. Real-Time Oceanographic Data: From Safety to Science. 2014. Eos, Transactions American Geophysical Union, 95: 305-306
- 59. Torres, H., F. Muller-Karger, D. Keys, H. Thornton, M. Luther, and K. Alsharif, 2015. Whither the U.S. National Ocean Policy Implementation Plan? *J. Mar. Policy* (2015), pp. 198-212, doi: 10.1016/j.marpol.2014.11.013
- 60. Meyers, S., M. C. Wilson, and M. E. Luther, 2015. Observations of Hysteresis in the Annual Exchange Circulation of a Large Micro-Tidal Estuary. *J. Geophys. Res. Oceans, 120,* doi: 10.1002/2014JC010342.
- 61. Voytenko, D., T. H. Dixon, M. E. Luther, C. Lembke, I. M. Howat, and S. de la Peña, 2015. Observations of inertial currents in a lagoon in southeastern Iceland using terrestrial radar interferometry and automated iceberg tracking. *Computers & Geosciences*, 82, 23-30, doi: 10.1016/j.cageo.2015.05.012.
- 62. Wahl, T., S. Jain, J. Bender, S. D. Meyers and M. E. Luther, 2015. Increasing risk of compound flooding from storm surge and rainfall for major US cities. *Nature Clim. Change*, doi: 10.1038/nclimate2736.
- 63. Ulm, M., A. Arns, T. Wahl, S. D. Meyers, M. E. Luther, J. Jensen, 2016. The Impact of a Barrier Island Loss on Extreme Events in the Tampa Bay, *Frontiers of Marine Science*, doi: 10.3389/fmars.2016.00056.
- 64. Meyers, S., A. J. Linville, and M. E. Luther, 2017. Changes in residence time due to large-scale infrastructure in a coastal plain estuary. *J. Coastal Research*, doi: 10.2112/JCOASTRES-D-16-00118.1.
- 65. Arnold, W. S., S. D. Meyers, S. P. Geiger, M. E. Luther, D. Narváez, M. E. Frischer, and E. Hofmann, 2017. Predicting larval dispersal patterns of the eastern oyster (*Crassostrea virginica*) in Pensacola Bay, Florida, using a validated biophysical model. *J. Shellfish Research*, Vol. 36, No. 1, 101–118, doi: 10.2983/036.036.0112.
- 66. Soloviev, A. V., A. Hirons, C. Maingot, R. E. Dodge, A. E. Yankovsky, J. Wood, R. H. Weisberg, M. E. Luther, and J. P. McCreary, 2017. Southward flow on the coastal flank of the Florida Current. *Deep Sea Res.*, Vol. 125, 94–105, doi: 10.1016/j.dsr.2017.05.002.
- 67. Locascio, J., D. Mann, K. Wilcox, M. Luther, 2018. Incorporation of acoustic sensors on a coastal ocean monitoring platform for measurements of biological activity. *J. Mar. Tech.*, 52(3), 64-70; doi: 10.4031/MTSJ.52.3.9.
- 68. Luther, M. E., S. D. Meyers, and J. S. Scudder, 2018. Real Time Observations of Oceanographic and Meteorological Parameters for Maritime Transportation: Origins and Novel Applications. in *Proceedings*, *MTS/IEEE Oceans18 Conference*, Oct. 23, 2018, Charleston, SC; doi: 10.1109/OCEANS.2018.8604895.
- 69. Meyers, S. D., M. E. Luther, S. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, 2018. Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay. in *Proceedings, MTS/IEEE Oceans18 Conference*, Oct. 23, 2018, Charleston, SC; doi: 10.1109/OCEANS.2018.8604813.
- 70. Meyers, S. D. and M. E. Luther, 2019. Ship Wakes in Tampa Bay. Tampa Bay Estuary Program, St. Petersburg, FL. TBEP Technical Report #06-19. 68 pp.
- 71. Meyers, S. D. and M. E. Luther, 2020. Simulating the Impact of Sea Level Rise on Maritime Navigation within a Large, Channelized Estuary. *Maritime Policy & Management* (Invited), https://doi.org/10.1080/03088839.2020.1723810
- 72. Meyers, S. D, M. E. Luther, S. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, 2021. Ship Wakes and their Potential Shoreline Impact in Tampa Bay. *Ocean and Coastal Management*, in press.
- 73. Meyers, S. D, M. Ē. Luther, Š. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, 2020. Characterizing Vessel Traffic Using the AIS: a Case Study in Florida's Largest Estuary, *Journal of Waterway, Port, Coastal, and Ocean Engineering*; doi: 10.1061/(ASCE)WW.1943-5460.0000592.

- 74. Meyers, S. D, M. E. Luther, S. Landry, and M. Beck, 2021. Using Logistic Regression to Model the Risk of Sewer Overflows Triggered by Compound Flooding with Application to Sea Level Rise. *Urban Climate*, https://doi.org/10.1016/j.uclim.2020.100752.
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- 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.
- Luther, M. E., Z. Ji, and K. Chen, 1993. Near real-time modelling of the Indian Ocean winddriven 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, Triete, 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 Geodessey 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 Oceangoraphic 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 Geodesey 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. Seiter, J. K.; Gennaccaro, A. L.; Berg, T. L.; Ames, A.; Luther, M.; Huffman, D. E., 2004. Characterization of estuarine waters at the mouth of Tampa Bay for a novel desalination process. Abstracts of the General Meeting of the American Society for Microbiology, Vol. 104, 559 pp.
- 60. Luther, M. E., 2005. Successes from real-time ocean observing systems. Presented at the American Meteorological Society Conference, San Diego, CA, Jan. 10, 2005.
- 61. 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.
- 62. Luther, M. E., 2005. The US Integrated Ocean Observing System. Presented at the European Geosciences Union Conference, Vienna, Austria, Apr. 27, 2005.
- 63. 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.
- 64. 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.

- 65. 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.
- 66. 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.
- 67. 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.
- 68. 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.
- 69. 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.
- 70. 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.
- 71. 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.
- 72. 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.
- 73. Luther, M. E., 2006. Ocean observing and Maritime Security. Presented at the USF/USGS Brown Bag Seminar, St. Petersburg, FL, July 14, 2006.
- 74. 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.
- 75. 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.
- 76. 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.
- 77. 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.
- 78. 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.
- 79. 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.
- 80. 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.

- 81. 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.
- 82. Luther, M. E., 2007. The Tampa Bay Coastal Ocean Prediction System. IEEE/MTS Oceans07 Conference, Vancouver, BC, Oct. 1, 2007.
- 83. 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.
- 84. 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.
- 85. Luther, M. E., 2007. The US Integrated Ocean Observing System and the Gulf of Mexico. Clean Gulf, Tampa, FL, Nov. 15, 2007.
- 86. 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.
- 87. 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.
- 88. 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.
- 89. 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.
- 90. Luther, M. E., 2008. Ocean bserving Systems. Invited lecture at Eckerd College, Feb, 20, 2008.
- 91. 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.
- 92. 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.
- 93. 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.
- 94. 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
- 95. 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.

- 96. 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.
- 97. Luther, M. E., 2012: The Loop Current in the Southeastern Gulf of Mexico. presentation to participants in the Regatta del Sol al Sol, St. Petersburg Yacht Club, April 26, 2012.
- 98. Luther, M. E., 2012: The US Integrated Ocean Observing System: Tampa Bay Leads the Way. presentation at Sea Grant Salty Topics Marine Research Speaker Series, Weedon Island Preserve, Nov. 1, 2012 (video at http://youtu.be/FEHqgxgaVjc)
- 99. Luther, M. E., 2013: "The Loop Current in the Southeastern Gulf of Mexico;" M. E. Luther; presentation to participants in the Regatta del Sol al Sol, St. Petersburg Yacht Club, April 25, 2013.
- 100. "An estuarine monitoring and prediction system for Tampa Bay, Florida;" M. E. Luther and S. M. Meyers; invited presentation at Our Global Estuaries National Workshop, Harbor Branch Oceanographic Institute, Oct. 22, 2013.
- 101. Wahl, T., Calafat, F.M., Luther, M.E. (2013): Rapid changes in the seasonal sea level cycle along the US Gulf coast in the early 21st century, Poster presentation, Fall Meeting, American Geophysical Union, San Francisco, USA, 2013.
- 102. Wahl, T., Dangendorf, D., Luther, M.E. (2014): Seasonal sea level changes in the Gulf of Mexico and the implications for coastal flood risk, 11th International Conference on Hydroscience & Engineering (ICHE), Hamburg, Germany, 2014 (Abstract submitted)
- 103. "Circulation Changes in Tampa Bay due to Large-Scale Human Engineering", M. E. Luther and S. M. Meyers; invited presentation at the Tampa Bay Regional Planning Council Agency on Bay Management, October 2013.
- 104. Wahl, T., Dangendorf, D., Luther, M.E. (2014): Seasonal sea level changes in the Gulf of Mexico and the implications for coastal flood risk, 11th International Conference on Hydroscience & Engineering (ICHE), Hamburg, Germany, 2014.
- 105. Wahl, T., Jain, S., Bender, J., Meyers, S., Luther, M.: Increasing risk of compund flooding for major US coastal cities, Reklim Conference 2014: Our Climate Our Future, Berlin, Germany, 2014.
- 106. Observations of Hysteresis in the Annual Exchange Circulation of Tampa Bay. Steven D. Meyers, Monica Wilson and Mark E. Luther; AGU 2014 Fall Meeting
- 107. Modeling Larval Oyster Distribution in Pensacola Bay. Steven D. Meyers, Mark E. Luther, William S. Arnold, Stephen P. Geiger; Gulf Estuarine Research Society, 2014
- 108. Modeling Impacts of Mean Sea Level Rise in Tampa Bay. Steven D. Meyers and Mark E. Luther; Tampa Bay Regional Climate Adaptation Working Group, 2014.
- 109. A New Marine Discovery Center for the Port of St. Petersburg, <u>Mark E. Luther</u>; Presentation to the St. Petersburg City Council; May 21, 2015.
- 110. Real-Time Observations of Water Quality Parameters in Boca Ciega Bay, <u>Mark E. Luther;</u> Presentation to the Gulfport City Council; July 7, 2015.
- 111. Changes in Residence Time due to Large-Scale Infrastructure in a Coastal Plain Estuary, 2015; Steven D. Meyers, Amanda J. Moss, and Mark E. Luther; BASIS6 Conference; St. Petersburg, FL; Sept. 28, 2015.
- 112. How Losing Egmont Key Will Impact Tides and Storm Surge in Tampa Bay, 2015;
 Steven D. Meyers, Mark E. Luther, Marius Ulm, Arne Arns, Thomas Wahl, and Jurgen Jensen; BASIS6 Conference; St. Petersburg, FL; Sept. 29, 2015.

- 113. Long-Term Observations in Tampa Bay Reveal New Hydrodynamic Behavior, 2015; Steven D. Meyers, Monica Wilson and Mark E Luther; BASIS6 Conference; St. Petersburg, FL; Sept. 29, 2015.
- 114. The Loop Current in the Southeastern Gulf of Mexico; M. E. Luther; presentation to participants in the Regatta del Sol al Sol, St. Petersburg Yacht Club, April 23, 2015.
- 115. Observations of Hysteresis in the Annual Exchange Circulation of Tampa Bay, 2015; Steven D. Meyers, Monica Wilson and Mark E Luther; Presented to US Army Corps of Engineers, Vicksburg, MS; May 7, 2015.
- 116. Wahl, T., Jain, S., Bender, J., Meyers, S., Luther, M., 2015. Increasing risk of compound flooding from storm surge and rainfall for major US cities, Fall Meeting, American Geophysical Union, San Francisco, CA, December 2015.
- 117. Changes in Residence Time due to Large-Scale Infrastructure in a Coastal Plain Estuary, 2015; Steven D. Meyers, Amanda J. Linville, and Mark E. Luther; Coastal and Estuarine Research Federation Biannual Conference, Portland, OR; Nov. 12, 2015.
- 118. Changes in tidal circulation in a microtidal estuary due to barrier island loss, 2015;

 <u>Steven D. Meyers</u>, Mark E. Luther, Marius Ulm, Arne Arns, Thomas Wahl, and Jurgen Jensen; Coastal and Estuarine Research Federation Biannual Conference, Portland, OR; Nov. 10, 2015.
- 119. Changes in Residence Time due to Large-Scale Infrastructure in a Coastal Plain Estuary, 2016; Steven D. Meyers, Amanda J. Linville, and Mark E. Luther; Ocean Sciences Meeting, New Orleans, LA; Feb. 22, 2016.
- 120. Observations of Hysteresis in the Annual Exchange Circulation of Tampa Bay, 2016; Steven D. Meyers, Monica Wilson and Mark E Luther; Ocean Sciences Meeting, New Orleans, LA; Feb. 22, 2016.
- 121. Scudder, J., and M. E. Luther, 2016. Water Quality, Water Level, and Meteorological Monitoring at the USF COMPS Clam Bayou Station: A Successful Collaborative Effort as Demonstrated by the Continuous Monitoring Record during the 2015 St. Petersburg Sewage Overflow Event. Oral presentation at the 10th National Water Quality Monitoring Conference, Tampa, Florida, May 2 6, 2016.
- 122. Luther, M. E., 2016. Secure, Sustainable and Resilient Port and Marina Operations and Infrastructure. Presentation at the U.N. World Tourism Day Meeting Joint USF / Cuba Initiative, Havana, Cuba, September 28, 2016.
- 123. Luther, M. E., 2016. The COMPS Clam Bayou site and measurements of the August 2015 release of 15,000,000 gallons of untreated or partially treated sewage into Clam Bayou. Invited presentation at a public forum for the Gulfport City Council, April 27, 2016.
- 124. Luther, M. E., 2016. Real-time observing systems in Tampa Bay. Invited presentation at Jefferson High School in Tampa during the Great American Teach-In, November 17, 2016. Luther, M. E., 2017. Past, Present and Future of The Pier Aquarium. Presentation to the St. Petersburg Ocean Team, Jan. 25, 2017, St. Petersburg, Florida.
- 125. Luther, M. E., 2017. Flushing and Water Quality in Tampa Bay. Invited presentation to the St. Petersburg City Council, Feb. 23, 2017, St. Petersburg, Florida.

- 126. Luther, M. E., 2017. Real-Time Observations of Environmental Parameters in Tampa Bay. Invited presentation at the Florida Association for Water Quality Control Annual Conference, June 14-16, 2017, Naples, Florida.
- 127. Luther, M. E., 2017. Tampa Bay Physical Oceanographic Real-Time System. Invited presentation to the Tampa Port Authority Board of Directors, Aug. 15, 2017, Tampa, Florida.
- 128. Luther, M. E., 2018. Ocean Observations in Support of Maritime Transportation Operations and Infrastructure. Presentation to the USF College of Marine Science, Aug. 24, 2018, St. Petersburg, FL.
- 129. Luther, M. E., S. D. Meyers, and J. S. Scudder, 2018. Real Time Observations of Oceanographic and Meteorological Parameters for Maritime Transportation: Origins and Novel Applications. Presentation at the IEEE/MTS Oceans18 Conference, Oct. 23, 2018, Charleston, SC.
- 130. Meyers, S. D., and M. E. Luther, 2018. Use of AIS Data to Quantify Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay. Presentation at the IEEE/MTS Oceans18 Conference, Oct. 23, 2018, Charleston, SC.
- 131. Luther, M. E, 2018. Met-Ocean Observations in Support of Maritime Transportation. Invited presentation to the West Central Florida American Meteorological Society, Oct. 29, 2018, Tampa, FL.
- 132. Luther, M. E, 2018. Meteorological and Oceanographic Observations in Support of Maritime Transportation. Invited presentation to the Cruising Club of America, St. Petersburg Yacht Club, Nov. 8, 2018, St. Petersburg, FL.
- 133. Luther, M. E, 2019. Meteorological and Oceanographic Observations in Support of Maritime Transportation. Invited Guest Speaker for the 15th Annual Spoonbill Ocean Sciences Bowl, USF/CMS, Feb. 15, 2019, St. Petersburg, FL.
- 134. Luther, M. E., S. D. Meyers, and J. S. Scudder, 2019. Real Time Observations of Oceanographic and Meteorological Parameters for Maritime Transportation: Origins and Novel Applications. Presentation at the Univ. of North Carolina-Chapel Hill, Dept. of Marine Science Alumni Seminar Series, Feb. 6, 2019
- 135. Meyers, S. D., and M. E. Luther, 2019. Use of AIS Data to Quantify Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay. Presentation to the Tampa Bay Regional Planning Council Agency on Bay Management, Mar. 14, 2019.
- 136. Meyers, S. D., and M. E. Luther, 2019. Use of AIS Data to Quantify Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay. Presentation to the Tampa Bay Harbor Safety and Security Committee, Apr. 17, 2019.
- 137. Meyers, S. D., and M. E. Luther, 2019. Use of AIS Data to Quantify Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay. Presentation to the Tampa Bay Estuary Program Management Board, May 10, 2019.
- 138. Meyers, S. D., and M. E. Luther, 2019. Use of AIS Data to Quantify Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay. Presentation to the Tampa Bay Estuary Program Policy Board, May 17, 2019.

- 139. Meyers, S. D., and M. E. Luther, 2019. Potential Changes in Salinity Associated with Port Tampa Bay New Berth Construction in East Bay. Presentation to the Tampa Bay Regional Planning Council Agency on Bay Management, Sept. 12, 2019.
- 140. Meyers, S. D., M. E. Luther, Gary Raulerson, Ed Sherwood, Katie Conrad and Gianfranco Basili, 2019. Ship Wakes in Tampa Bay Estimated From AIS Ship Tracking Data. Presentation at the 2019 Coastal and Estuarine Research Federation Conference in Mobile, AL, Nov. 4, 2019.
- 141. Conrad, Katie, M. E. Luther, S. D. Meyers, Gary Raulerson, and Gianfranco Basili, 2019. Ship Wakes in Tampa Bay: A Potential Public-Private Partnership to Address Shoreline Erosion. Presentation at the 2019 Coastal and Estuarine Research Federation Conference in Mobile, AL, Nov. 4, 2019.
- 142. Luther, M. E., and C. S. Martens, 2020. Observations of Benthic Boundary Layer Processes for Marine Mineral Extraction. Presented at the 49th IMMS Underwater Minerals Conference, Sept. 30, 2020; St. Petersburg, FL (virtual).
- 143. Luther, M. E., 2020. Real Time Ocean Observations for Maritime Transportation: Novel Applications. Virtual presentation for St. Petersburg Innovation District State of Science, 10/13/20.
- 144. Luther, M. E., 2020. Real Time Ocean Observations for Maritime Transportation: Tampa Bay Physical Oceanographic Real-Time System. Virtual presentation for the Sunrise Rotary Club, 12/1/20.
- 145. Luther, M. E., 2020. Precision Navigation for Maritime Transportation: Research at the USF College of Marine Science. Virtual presentation for the Cruising Club of America, 12/10/20.
- 146. Meyers, Steven D., Laura Azevedo, and Mark E. Luther, 2021. A Bibliometric Analysis of Research on Maritime Traffic Data from the Automatic Identification System. Sixth Biennial Marine Transportation System Innovative Science and Technology Conference: Advancing the Marine Transportation System through Automation and Autonomous Technologies: Trends, Applications and Challenges, March 15, 2021.
- 147. Luther, Mark E., 2021. Real Time Ocean Observations for Maritime Transportation: Tampa Bay Physical Oceanographic Real-Time System. Invited NOAA National Ocean Service Congressional Staff Briefing, July 22, 2021.
- 148. Luther, Mark E., 2021. The Tampa Bay Physical Oceanographic Real-Time System: TB-PORTS. Glazer Jewish Community Center Men's Club, Tampa, FL, September 14, 2021.
- 149. Meyers, Steven D., Shawn Landry, and Mark E. Luther, 2021. Using Logistic Regression to Model the Risk of Sewer Overflows Triggered by Compound Flooding with Application to Sea Level Rise. Invited Florida Water & Climate Alliance Webinar on Climate Change Impacts on Wastewater & Stormwater Management, September 20, 2021.
- 150. Luther, Mark E., and Laura Azevedo, 2021. Deep Sea Minerals. Guest Lecture in International Environmental Law, Stetson University College of Law, September 22, 2021.

- 151. Luther, Mark E., 2021. Real Time Ocean Observations for Maritime Transportation. Invited Maritime Risk Symposium, Univ. of Houston (virtual), November 4, 2021.
- 152. Luther, Mark E., 2021. Precision Navigation for Maritime Transportation: Research at the USF College of Marine Science. Invited Virtual presentation to Ganpat University Marine Engineering Department, Ahmedabad, India, for the Indo American Education Society, November 15, 2021.
- 153. Luther, Mark E., 2021. Real Time Ocean Observations for Maritime Transportation: Tampa Bay Physical Oceanographic Real-Time System. Invited Panel presentation at the Navigational Technology Conference, Tampa, FL, December 1, 2021. (Luther was hospitalized at the time of the conference; Darren Wright of NOAA/NWS Maritime Services substituted and gave Luther's presentation)
- 154. Andrew M. Kramer, Steven Meyers, and Mark Luther, 2021. Estimating risk for epidemic spread via maritime shipping networks in the context of SARS-CoV-2, Epidemics, Bologna, Italy, Dec. 2.
- 155. Meyers, Steven D., and Mark E. Luther, 2021. Developing a Machine Learning Tool for the Prediction of High-Speed Cross-Currents Near South Florida Ports. NOAA Coastal Ocean Modeling Webinar, December 14, 2021
- 156. Meyers, Steven D., and Mark E. Luther, 2022. Initial Results: Predicting High Cross-Currents Near South Florida Ports Using Machine Learning. SECOORA Community Webinar January 25, 2022.
- 157. Luther, Mark E., 2022. Real Time Ocean Observations for Maritime Transportation: Tampa Bay Physical Oceanographic Real-Time System. Presentation to Bird Key Yacht Club, Sarasota, FL, March 2, 2022.
- 158. Meyers, Steven D., Shawn Landry, and Mark E. Luther, 2021. Using Logistic Regression to Model the Risk of Sewer Overflows Triggered by Compound Flooding with Application to Sea Level Rise. Presentation at the 7th Bay Area Scientific Information Symposium, March 3, 2022, St. Petersburg, FL.
- 159. Luther, M. E., S. D. Meyers, Gary Raulerson, Ed Sherwood, Katie Conrad and Gianfranco Basili, Ship Wakes in Tampa Bay and their Potential Shoreline Impacts. Presentation at the 7th Bay Area Scientific Information Symposium, March 3, 2022, St. Petersburg, FL.
- 160. Luther, Mark E., 2022. Precision Navigation for Maritime Transportation: Research at the USF College of Marine Science. Virtual presentation to the Cruising Club of America, March 16, 2022.
- 161. Luther, Mark E., 2022. Law of The Sea and It's Evolution: Ocean Policy. Guest lecture, Univ. of North Carolina at Chapel Hill, March 24, 2022.
- 162. Meyers, Steven D., and Mark E. Luther, 2022. Extreme Vessels Meet Extreme Values, Creating Hazards Near the Coast. Presentation at the 5th International Conference on Advances in Extreme Value Analysis and Application to Natural Hazards, May 18, 2022, Orlando, FL.

- 163. Luther, M. E., and S. D. Meyers, 2022. Exploratory Data Analysis/Synthesis in Support of Cook Islands Nodule Exploration. Presentation at the MTS 14th Biennial Buoy Workshop, September 19-22, 2022, Wilmington, NC.
- 164. Luther, M. E., C. S. Martens, and S. D. Meyers, 2022. Exploratory Data Analysis/Synthesis in Support of Cook Islands Nodule Exploration. Presentation at the 50th Underwater Minerals Conference, October 4, 2022, St. Petersburg, FL.
- 165. Luther, M. E., and S. D. Meyers, 2023. Decision Support Tools for Maritime Transportation in the Gulf of Mexico. Webinar presentation for the Gulf of Mexico Coastal Ocean Observing System (GCOOS), February 8, 2023.
- 166. Luther, Mark E., and Laura Azevedo, 2023. Deep Sea Minerals. Guest Lecture in International Environmental Law, Stetson University College of Law, September 20, 2023.
- 167. Meyers, Steven D., Mark E. Luther, Rebecca Riccardi, Christopher S. Martens, Howard P. Mendlovitz, and Richard D. Cole, 2023. Exploratory Data Analysis/Synthesis in Support of Cook Islands Nodule Exploration: Historical and Recent Data Analysis. Presentation at the 51th Underwater Minerals Conference, October 3, 2023, Rotterdam, NL.
- 168. GOMCON x2

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 (NVODS) 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. Weiand, 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-YR1;" M. Luther, PI; C. Merz, Co-PI; South Carolina Sea Grant/SECOORA; 08/01/2011 to 07/31/2012; \$37,923.
- 47. "Implementation of Regional Integrated Ocean Observing Systems: Support of RCOOS Development in SECOORA: University of South Florida Data Management-YR2;" M. Luther, PI; C. Merz, Co-PI; South Carolina Sea Grant/SECOORA; 08/01/2012 to 07/31/2013; \$43,406.
- 48. "Implementation of Regional Integrated Ocean Observing Systems: Support of RCOOS Development in SECOORA: University of South Florida Data Management-YR3;" M. Luther, PI; C. Merz, Co-PI; South Carolina Sea Grant/SECOORA; 08/01/2013 to 07/31/2014; \$49,557.
- 49. "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, 2016; \$207,900 (approx. \$69,300 Luther's portion).

- 50. "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
- 51. "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); June 1, 2011 to May 31, 2017; \$298,350.
- 52. "Implementation of Regional Integrated Ocean Observing Systems: Support of RCOOS Development in SECOORA: University of South Florida Data Management-YR4;" M. Luther, PI; C. Merz, Co-PI; South Carolina Sea Grant/SECOORA; 08/01/2014 to 07/31/2015; \$52,484.
- 53. "The erosion risk for Gulf beaches assessed with multivariate statistical models under current and future climate conditions A case study for Dauphin Island"; M. Luther, PI; U.S. Geological Survey; 04/01/2014 to 05/31/2015; \$50,066.
- 54. "Implementation of Regional Integrated Ocean Observing Systems: Support of RCOOS Development in SECOORA: University of South Florida Data Management-YR5;" M. Luther, PI; C. Merz, Co-PI; South Carolina Sea Grant/SECOORA; 06/01/2015 to 05/31/2016; \$55,761.
- 55. "Tampa Bay PORTS Cooperative II" M Luther, PI; Greater Tampa Bay Marine Advisory Council-PORTS; 4/9/2004-3/6/2019; \$445,313 cumulative as of 5/13/2020.
- 56. "Continued Development of the Gulf of Mexico Coastal Ocean Observing System;" 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, 2016 to November 30, 2021; \$422,971 (\$75,000 Luther's portion).
- 57. "SECOORA: Supporting Resilient Ecosystems, Communities and Economies Operate and Maintain USF Costal Stations as Part of SECOORA;" M. Luther, PI; J. Scudder and C. Merz, Co- Principal Investigators; South Carolina Sea Grant/SECOORA; 06/01/2016 to 11/30/2021; \$254,000.
- 58. "SECOORA: Supporting Resilient Ecosystems, Communities and Economies Operate and Maintain USF Costal Stations as Part of SECOORA-Hurricane Supplemental;" M. Luther, PI; J. Scudder and C. Merz, Co- Principal Investigators; South Carolina Sea Grant/SECOORA; 04/01/2019 to 03/31/2021; \$23,488.
- 59. "Ship Wakes in Tampa Bay"; M. Luther, PI; S. Meyers, Co-PI; Tampa Bay Estuary Program/USFWS; 11/01/2017 to 10/31/2018; \$14,000.
- 60. "Understanding Risk at Wastewater Treatment Plants in Tampa Bay During Extreme High-Precipitation Events"; M. Luther, PI; S. Landry and S. Meyers, Co-PI; Tampa Bay Estuary Program/Tampa Bay Environmental Restoration Fund; 02/11//2019 to 12/31/2020; \$42,849.
- 61. "COVID19 Contact tracing of ships and seaports in Florida"; M. Luther, PI; S. Meyers, A. Kramer, Co-PI; USF COVID-19 Rapid Response Research Grants; 6/1/2020 to 5/31/2021; \$ 20,741.
- 62. "Center for Ocean Mapping and Innovative Technologies (COMIT)"; PI: Steve Murawski; Multiple Co-PI's; NOAA/NOS Office of Coast Survey; 10/1/2020 to 9/30/2025; \$8,989,444 (\$240,000 Luther's portion).

- 63. "Wave Monitoring in Philippe Park, Old Tampa Bay, for Living Shoreline Assessment"; M. Luther, PI; S. Meyers, Co-PI; NFWF Sub-contract through Pinellas County; 1/1/2020 to 12/31/2021; \$21,000.
- 64. "A QAPP for the Philippe Park Wave Study"; M. Luther, PI, S. Meyers, Co-PI; Tampa Bay Estuary Program; 06/17/21 to 12/31/21; \$3,066
- 65. "Decision Support Tools for Maritime Transportation in the Gulf of Mexico"; M. E. Luther, S. Meyers, Y. Yilmaz, Co- Principal Investigators; National Oceanic and Atmospheric Administration IOOS Sub-award from Texas A&M University Research Foundation/GCOOS; 6/1/2021 to 5/31/2026; \$ 450,000 (Luther's portion).
- 66. "Improving the Management of Maritime Traffic in Southeast US Waters Using Machine Learning"; M. Luther, PI; Steve Meyers, Yasin Yilmaz, Co-PI; NOAA IOOS sub-award through SECOORA/SC Sea Grant; 1/15/2021 to 12/31/2021; \$64,873.
- 67. "NSF Convergence Accelerator Track E: Linking the Green Economy to the Blue Economy at the Coast"; M. Trotz, PI; multiple Co-PIs; NSF; 09/2021 to 8/2022; \$750,000 (approx. \$50,000 Luther/Meyers portion).
- 68. "Designing a Genetic Algorithm for the Selection of Causeway Cut-Throughs in Old Tampa Bay: Planning and Prototyping"; M. Luther, PI, S. Meyers, Co-PI; Tampa Bay Estuary Program; 03/01/22 to 02/28/23; \$10,000.
- 69. "Cook Islands Nodule Exploration: Exploratory Data Analysis/Synthesis and Plume Modeling: Phase 1"; M. Luther, PI, S. Meyers, Co-PI; Odyssey Marine Exploration; 7/1/2022 to 6/30/2023; \$109,441.

Courses Taught

Introduction to Physical Oceanography (OCP 6050)

Sustainable, Resilient, and Secure Port Operations and Infrastructure (EOC 6441C)

Ocean Policy (OCE 6085)

Dynamics of Marine Ecosystems (OCB 6626)

Natural Sciences in Marine Estuaries (IDH 3350)

Advanced Undergraduate Oceanography (OCE 4930)

Physical-Biological Interactions in Marine Systems (OCE 6934)

Special Topics: Operational Oceanography (OCE 6934)

Special Topics: Role of MPAs in Ecosystem-Based Management (OCE 6934)

Special Topics: Numerical Ocean Modeling (OCE 6934)

Special Topics: Estuaries (OCE 6934)

Special Topics: Climate Dynamics (OCE 6934)

Interns and Visiting Scientists Hosted

- 1. Enza Labourdette, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2022
- 2. Abdullah Ali Mohammed, USF Environmental Science, Undergraduate Intern, November 2020-August 2021
- 3. Katherine Smith, USF Environmental Science, Undergraduate Intern, November 2020-August 2021
- 4. Madison Delgado, USFSP Environmental Science, Undergraduate Intern, November 2019-August 2020
- 5. Ayden Marrullier, USFSP Environmental Science, Undergraduate Intern, August-December 2019
- 6. Lindsey Meyer, USFSP Environmental Science, Undergraduate Intern, August-December 2019
- 7. Hannah Leary, Univ. of Texas, Undergraduate Intern, May-August 2019
- 8. Cassandra Cariaga, USFSP Environmental Science, Undergraduate Intern, January-May 2019
- 9. Rebecca George, USFSP Environmental Science, Undergraduate Intern, April 2017-November 2018
- 10. Ana Maria Quintero, USFSP Environmental Science, Undergraduate Intern, January-October, 2018
- 11. Kevin O'Hara, USFSP Environmental Science, Undergraduate Intern, December 2016-May, 2017
- 12. Katie Wagner, USFSP Environmental Science, Undergraduate Intern, December 2016-May, 2017
- 13. Fabien Locatelli, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2016
- 14. Romain Millet, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2016
- 15. Marjorie Queau, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2015
- 16. Guenole Conrad, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2015
- 17. Marius Ulm, Univ. of Siegen, Germany, Sept-Nov 2014
- 18. Arne Arns, Univ. of Siegen, Germany, Sept-Oct 2014
- 19. Clarisse Mesclon, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2014
- 20. Pauline Wech, SeaTech/Institute of Engineering Sciences, Univ. of Toulon, Toulon, France; Summer Intern, 2014
- 21. Alyssa Menz, Columbia Univ., Summer Intern, 2013
- 22. Marine Merlin, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2013
- 23. Thomas Wahl, Postdoctoral Associate, Univ. of Siegen, Germany, March 2013-March 2015
- 24. Stephanie Stefanski, Cousteau Divers Society, May 2012-August 2013
- 25. Audrey Michel, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2012
- 26. Willem Suez-Panama-Bouton, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2012

- 27. Pierre Bernard, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2012
- 28. Bernadette Jobbe-Duval, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2012
- 29. Nicolas Degrain, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2012
- 30. Rolf Riethmüller, Ph.D., Helmholtz-Zentrum Geesthacht Institute of Coastal Research, Germany, February-August 2011
- 31. Pierre Recoules, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2010
- 32. Pierre Rizzo, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2009
- 33. Eric J. Hochberg, Ph.D., Assistant Professor, Nova Southeastern University Oceanographic Center, 2008
- 34. Patricia Lourenco, Univ. of Lisbon, Portugal, Spring 2008, Fall 2005
- 35. Prof. Ivan Ferrer, La Universidad Juarez Autonoma De Tabasco, Biological Science Division; January-February 2008
- 36. Damien Marigliano, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2007
- 37. Fabien Martinez, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2007
- 38. Aurelie Bencharel, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2006
- 39. Emilie Ratabouil, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2005
- 40. Laëtitia Perreau, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2005
- 41. Fabrice Pottier, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2002
- 42. Juliette Teyrat, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 2002
- 43. Clock Shi, Shanghai Technical University, China, Fall 2001
- 44. Yun C. Jung, Korean Maritime University, Fall 2001-Spring 2003
- 45. Emmanuelle Payer, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 1999
- 46. Ludwig Gilbert, Institute of Engineering Sciences of Toulon and the Var, Toulon, France; Summer Intern, 1999
- 47. 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

- Oceaneering, 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, 2009-2014 (provide environmental impact analyses for offshore energy projects for BOEMRE formerly MMS)
- Greenberg Traurig, P.A., 2012-present (provide analysis of phosphate process water spill trajectory and fate in support of litigation; provide expert testimony in depositions and hearings)
- Collins Law Group, 2017-present (provide analysis of proposed sand dredging project in Big Sarasota Pass, FL in support of litigation; provide expert testimony in depositions and hearings)
- Pinellas County Sheriff's Office, 2017-present (provide analysis of oceanographic conditions in support of a homicide investigation)
- Robert L. Parks, P.L., 2018 (provide analysis of position of the Gulf Stream boundary in support of wrongful death litigation)

Expert Witness Testimony

Tampa Bay Water v. Hillsborough County; 1998; Richard A. Harrison, Allen Dell, P.A., atty.; multiple depositions; case dropped by Hillsborough County.

Tampa Bay Water v. Alafia River Basin Council; 1999; Florida Div. of Administrative Hearings Case No. 98-4925; Richard A. Harrison, Allen Dell, P.A., atty.; multiple depositions; testimony at hearing.

Save Our Bays, Air and Canals, Inc., v. Tampa Bay Desal and Department of Environmental Protection; 2001; Florida Div. of Administrative Hearings Case No. 01-1948, 01-1949; Richard A. Harrison, Allen Dell, P.A., atty.; multiple depositions; testimony at hearing.

Blue Water Marine Towing v. *Natalita III*; 2008; United States District Court, Southern District of Florida, "In Admiralty"; Case No. 08-20739 CIV; Michael T. Moore, atty.; deposition; case settled out of court.

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St. Johns Riverkeeper, Inc., City of Jacksonville, and St. Johns County, v. St. Johns River Water Management District and Seminole County; 2008; Florida Div. of Administrative Hearings Case No. 08-1316; multiple depositions; testimony at hearing.

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.; case settled out of court.

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.; multiple depositions; testimony at trial.

The Siesta Key Association of Sarasota, Inc., and Michael S. Holderness, v. City of Sarasota, U.S. Army Corps of Engineers, Department of Environmental Protection, and Board of Trustees of the Internal Improvement Trust Fund; 2017; Florida Div. of Administrative Hearings Case No. 17-1449; Martha Collins, atty.; multiple depositions; testimony at hearing.

Howard Curd, *et al.*, Plaintiffs, v. Mosaic Fertilizer, LLC, Defendant; 2017; Circuit Court of The Thirteenth Judicial Circuit, Hillsborough County, Florida, Civil Division; Case No. 04-8653, Division L; Greenberg Traurig, P.A., attys.; multiple depositions; testimony at hearing.

National Media

Washington Post, July 28, 2017

https://www.washingtonpost.com/graphics/2017/health/environment/tampa-bay-climate-change/

NBC Today Show, Interview with Jeff Rossen, Sept. 10, 2017 https://www.today.com/video/why-tampa-is-so-vulnerable-to-hurricane-irma-s-havoc-1043378243555

Last Week Tonight with John Oliver (HBO), Oct 30, 2017 https://www.youtube.com/watch?v=pflt7cs9dkc

Washington Post, Sept. 26, 2022

https://www.washingtonpost.com/climate-environment/2022/09/26/hurricane-ian-tampa-flood-risk/

CNN New Day Interview with John Berman, Hurricane Ian impacts, Sept. 28, 2022.

NBC News NOW Interview with Chuck Todd, Hurricane Ian impacts, Sept. 28, 2022.

Scripps News evening broadcast, Interview with Del Walters, Hurricane Idalia approach, Aug. 28, 2023

Washington Post Interview with Dino Grandoni, Hurricane Idalia approach, Aug. 29, 2023 https://www.washingtonpost.com/climate-environment/2023/08/29/hurricane-idalia-storm-surge-florida-flooding/