

Curriculum Vitae
Steven D. Meyers

Chief Scientist
Center for Maritime and Port Studies
College of Marine Science
University of South Florida
St. Petersburg, FL 33701-5001

Office Phone: 727.553.1188
FAX: 727.553.1189
E-mail: smeyers@usf.edu
ORCID #0000-0003-1592-9050

Education

Florida State University, Tallahassee, FL	Oceanography	postdoc, 1991-1993
University of Texas at Austin, Austin, TX	Physics	Ph.D., 1990
University of Rochester, Rochester, NY	Physics	B.S., 1984
University of Rochester, Rochester, NY	Mathematics	B.A., 1984

Appointments and Positions

Handling Editor, *Transportation Research Record*, National Academy of Sciences, 2020-present
Chief Scientist, Center for Maritime and Port Studies, USF, 2016-present.
Senior Scientist, Ocean Modeling and Prediction Laboratory, USF, 2001-2016 (30 hr/wk, 0.75 FTE).
Visiting Assistant Professor, University of South Florida, 1998-2001.
Co-Assoc. Director, Center Ocean-Atmosphere Prediction Studies, Florida State University. 1994-1998.
Research Associate, Center Ocean-Atmosphere Prediction Studies, Florida State University. 1993-1994.
ONR Educator Postdoctoral Fellowship, Mesoscale Air-Sea Interaction Group, Florida State University. 1991-1993.

Current Research Topics and Achievements

- Modeling the impact of sea level rise on vessel navigation in coastal regions
- Machine learning to examine increased risk of sewer overflows due to sea level rise
- Mining vessel records to examine emergency response to Puerto Rico following Hurricane Marie
- Bibliometric study of changing national priorities in maritime navigation research
- Using big data to examine vessel activity in Tampa Bay, wake generation, and shoreline impacts
- First demonstration and explanation of hysteresis of subtidal estuarine circulation
- Pioneered the introduction of wavelet techniques in the meteorological and oceanographic communities
- Developed the new version of the Tampa Bay Nowcast-Forecast Model
(suspended due to lack of funding)

Synergistic Activities

- Working with the Tampa Bay Estuary Program to assess shoreline erosion from ship wakes
- Partner with international team modeling the impact of barrier island loss on tides and storm surge
- Worked with scientists from NOAA and Florida Fish and Wildlife to model retention of oyster larvae
- Member of Climate Science Advisory Panel, Tampa Bay
- Supervised numerous postdoctoral researchers, graduate and undergraduate students

Professional Organizations and Associations

American Geophysical Union
Florida Climate Institute
Coastal and Estuarine Research Federation
American Meteorological Society, West Central Florida
Tampa Bay Climate Science Advisory Panel

Recent Peer-Reviewed Publications

- 2020: Meyers, S.D, L. Azadevo, M.E. Luther, A Scopus-based Bibliometric Study on the Use of Maritime Automatic Identification System Data in Artificial Intelligence and Related Research, final preparation.
- 2020: Meyers, S.D, S.M Landry, M. Beck, M.E. Luther, Using Logistic Regression to Model the Risk of Sewer Overflows Triggered by Compound Flooding with Application to Sea Level Rise, Urban Climate, revised.
- 2020: Meyers, S.D, M.E. Luther, S. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, Ship Wakes in Tampa Bay, Ocean and Coastal Management, accepted with minor revision.
- 2020: Meyers, S.D, M.E. Luther, S. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, Characterizing Vessel Traffic using the AIS: a Case Study in Florida's Largest Estuary, Journal of Waterway, Port, Coastal, and Ocean Engineering, 10.1061/(ASCE)WW.1943-5460.0000592.
- 2020: Meyers, S.D. and M.E. Luther, Simulating the Impact of Sea Level Rise on Maritime Navigation within a Large, Channelized Estuary, Maritime Policy & Management, (Invited) doi.org/10.1080/03088839.2020.1723810.
- 2017: Meyers, S. D., A. Linville, and M. E. Luther, Changes in Residence Time Due to Large-Scale Infrastructure in a Coastal Plain Estuary. Journal of Coastal Research, 33(4), 815-828.
- 2017: Arnold, B., S. D. Meyers, M. E. Luther, S. Geiger, D. Narvaez, E. Hoffman, and M. E. Luther, Salinity and Larval Dispersal in Pensacola Bay and Its Implications for Restoration of Oyster Reefs, Journal of Shellfish Research, 36(1), 101-118.
- 2016: Ulm, M., Arns, A., Wahl, T., Meyers, S.D., Luther, M.E. and J. Jensen, The Impact of Barrier Island Loss on Extreme Events in Tampa Bay. Frontiers in Environmental Science, doi: 10.3389/fmars.2016.00056.
- 2015: Wahl, T., S. Jain, J. Bender, S.D. Meyers and M.E. Luther, Increased Risk of Compound Flooding from Storm Surge and Rainfall for Major US Cities, Nature Climate Change, doi:10.1038/nclimate2736.
- 2015: Meyers, S.D., Wilson, M., Luther, M.E., 2015. Observations of hysteresis in the annual exchange circulation of a large microtidal estuary. Journal of Geophysical Research, Oceans 120, 2904-2919.

Recent Non-Reviewed Publications

- 2019: Meyers, S.D, M.E. Luther, S. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, 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.
- 2019: Meyers, S.D and M.E. Luther, Potential Changes in Salinity Associated with Port Tampa Bay New Berth Construction in East Bay, Port Tampa Bay, 22 pp.
- 2018: Meyers, S.D, M.E. Luther, S. Ringuet, G. Raulerson, E. Sherwood, K. Conrad and G. Basili, Wakes from Large Vessels and the Risk to the Shoreline Environment in Tampa Bay, Proceedings OCEANS 2018, Charleston, SC.
- 2018: Luther, M.E., S.D. Meyers, and J. Sudder. Real Time Observations of Oceanographic and Meteorological Parameters for Maritime Transportation: Origins and Novel Applications, Proceedings OCEANS 2018, Charleston, SC.