

DR. YONGGANG LIU

<i>Associate Research Professor</i> <i>Director, Ocean Circulation Lab</i> College of Marine Science University of South Florida 830 First Street South, St. Petersburg, FL 33701	E-mail: yliu@usf.edu Phone: (727) 553-3508 Google Scholar: j-DRSIQAAAAJ ORCID: 0000-0002-0281-9349 ResearcherID: B-1259-2012
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EDUCATION

<i>Ph.D., Physical Oceanography</i> College of Marine Science, University of South Florida (USF)	2000 – 2006
<i>M.Sc., Physical Oceanography</i> Second Institute of Oceanography, State Oceanic Administration, China	1993 – 1996
<i>B.Sc., Meteorology</i> Chengdu Institute of Meteorology, China	1989 – 1993

PROFESSIONAL EXPERIENCE

<i>Associate Research Professor</i> , College of Marine Science, USF	2022 – present
<i>Associate in Research</i> , College of Marine Science, USF	2008 – 2022
<i>Postdoctoral Associate</i> , School of Oceanography, University of Washington	2006 – 2008
<i>Assistant Scientist</i> , Second Institute of Oceanography, State Oceanic Administration, China	1998 – 2000
<i>Research Assistant</i> , Second Institute of Oceanography, State Oceanic Administration, China	1996 – 1998

HONORS & AWARDS

Excellence in Peer Review, <i>Continental Shelf Research</i> , Elsevier	2014
Editors' Citation for Excellence in Refereeing for <i>Journal of Geophysical Research Oceans</i> , AGU	2008
Sackett Prize for Excellence in Research Innovation, College of Marine Science, USF	2006
Von Rosenstiel Fellowship, College of Marine Science, USF	2000
Academic Distinction Award (top 1% in Chengdu Institute of Meteorology), Higher Education Committee of Sichuan Province, China	1993
Graduation with Highest Honor (<i>Suma Cum Laude</i> equivalent), Chengdu Institute of Meteorology	1993
Scholarships for Academic Excellence (all 4 years), Chengdu Institute of Meteorology	1990 – 1993

PROFESSIONAL SERVICES & LEADERSHIP

Scientific Committee, the 55 th International Liege Colloquium on Ocean Dynamics	2023 – 2024
Science Committee, Southeast Coastal Ocean Observing Regional Association (SECOORA)	2022 – present
Stakeholder Committee, SECOORA Southeast Ocean & Coastal Acidification Network	2020 – present
AGU Books Board Committee	2010 – 2012
Editorial Services:	

Guest Editor, <i>Deep-Sea Research, Part II</i>	2022 – present
Associate Editor, <i>Artificial Intelligence for the Earth Systems</i>	2022 – present
Lead Editor, <i>Coastal Ocean Observing Systems</i>	2014 – 2015
Oversight Editor, <i>Geophysical Monograph Series</i> , AGU	2011 – 2012
Lead Editor, <i>Monitoring and Modeling the Deepwater Horizon Oil Spill</i>	2011 – 2012
Session Co-Convener:	
AGU Fall Meeting	2010, 2021, 2022
Ocean Sciences Meeting	2012, 2014, 2016
Coastal & Estuarine Research Federation (CERF) Conference	2023
Mentoring/Supervising:	
Postdoc/Research Associates:	
Dr. Kaili Qiao, Research Associate	2023 – present
Dr. Sebin John, Postdoc Associate	2022 – present
Dr. Jing Chen, Postdoc Associate	2022 – present
Dr. Yunfang Sun, Research Associate	2022 – 2023
Graduate Students:	
Orion Witmer (MS)	2023 – present
Maliha Malek (PhD, co-advise with Dr. David F. Naar)	2023 – present
Siria Munoz (PhD, co-advise with Dr. Gary T. Mitchum)	2022 – present
Luis Sorinas (PhD, co-advise with Dr. Robert H. Weisberg)	2017 – present
Thesis/Dissertation Examining Committee or “External Panel”:	
Yao Yao	2024 – present
Alex Nickerson	2022 – present
Minghai Huang (University of Delaware)	2022 – present
Roberto Venegas (Deakin University, Australia)	2020 – present
Yingjun Zhang	PhD, 2022
Jing Chen	PhD, 2021
Benjamin. K. O’Loughlin	MS, 2016
Amanda S. Reinert	MS, 2016
PhD Dissertation Outside Examiner (Dissertation Reviewer):	
Julie E. Wood, University of New South Wales, Australia	PhD, 2014
Visiting Scholars:	
Haibo Xu, University of Puerto Rico Mayagüez	2023
Roberto Venegas, Deakin University, Australia	2022
Yang Yang, Nanjing University of Information Science & Technology, China	2019
Helios Chiri, Instituto de Hidráulica Ambiental "IHCantabria", Spain	2017
Undergraduate Intern (Paid):	
Logan Dudney, Eckerd College	2023 – present
High School Volunteers:	
Susana Toro, Hollins High School	Summer 2023
Laura Liu, Largo High School	Summer 2023
Proposal Review Panel for Federal Agencies:	
Department of Energy (DOE)	2021, 2023
NASA Postdoc Program	2018
Proposal Reviewer for Federal & International Funding Agencies:	
National Science Foundation (NSF)	2010, 2012 – 2019, 2022, 2023

NASA Postdoc Program	2016, 2017, 2018, 2019
Department of Energy (DOE)	2022, 2023
AAAS Research Competitiveness Program	2015
Israel Science Foundation (ISF)	2017
Israel Ministry of Science & Technology (MOST)	2017, 2018, 2019, 2023
National Sciences and Engineering Research Council (NSERC) of Canada	2024
Book Proposal Reviewer:	
Institution of Engineering and Technology (IET)	2019
Elsevier (Academic Press)	2015
Scientific Research Publishing (SCIRP)	2014
Reviewer for Professional Journals (selected):	
<i>Adv. Space Res.; Cont. Shelf Res.; Deep-Sea Res. Part I & Part II; Dyn. Atmos. Oceans; Est. Coast & Shelf Sci.; IEEE J. Ocean Engineering; J. Atmos. Oceanic Technol.; J. Geophys. Res. Oceans; J. Phys. Oceanogr.; Limnol. & Oceanogr.; Marine Pollution Bulletin; Ocean Dynamics; Ocean Modell.; Progr. Oceanogr.; Remote Sensing Environ.; Scientific Reports</i>	
Evaluator, NOAA Northern Gulf of Mexico Operational Forecast System	05/18/2020
Expert Judge:	
Spoonbill Bowl – NOSB Florida Regional Competition	2006, 2010, 2021, 2022
Pinellas Regional Science & Engineering Fair	02/02/2019
Services within USF:	
High Performance Computing Executive Committee, USF	2021
Physical Oceanography Faculty Search Committee, College of Marine Science, USF	2014
Non-Tenure Track Faculty Professional Development Leave Peer Review Committee, College of Marine Science, USF	2010
Media Reports (selected):	
Here's some good red tide news if you're going to the beach ..., <i>Tampa Bay Times</i>	3/31/2023
Here's the aerial view as red tide blooms off Pinellas County ..., <i>Tampa Bay Times</i>	3/10/2023
Here's how Tampa Bay-area scientists can forecast red tide , <i>WTSP 10 Tampa Bay</i>	3/6/2023
Red tide is back (again) in Pinellas County , <i>Tampa Bay Newspapers</i>	2/28/2023
Heading to the beach this weekend? Red tide blooms are declining ..., <i>Tampa Bay Times</i>	2/3/2023
Here's the latest red tide forecast as bloom persists around Anna ..., <i>Bradenton Herald</i>	1/13/2023
We flew above the Red Tide blooms offshore of Tampa Bay... , <i>Tampa Bay Times</i>	12/19/2022
Respiratory problems from Red Tide possible at some Pinellas ..., <i>Tampa Bay Times</i>	12/8/2022
Red tide research gets a \$840K funding boost from FWC , <i>Wink News</i>	11/29/2022
Small amounts of Red Tide were just measured in Tampa Bay... <i>Tampa Bay Times</i>	11/18/2022
Red Tide reached Anna Maria this week. Will Tropical Storm ...? , <i>Tampa Bay Times</i>	11/9/2022
How scientists are keeping their eyes on the oil spill , <i>ZD Net</i>	6/3/2010
Researchers track path of oil from rig spill , <i>Nature</i>	6/1/2010
Shift in Gulf could benefit Florida , <i>Herald-Tribune</i>	5/22/2010
Ecologists brace for oil spill damage , <i>Nature</i>	5/3/2010

RESEARCH GRANTS

(The \$ amounts are the portions for USF Ocean Circulation Lab only, not the total project costs.)

Pending Proposals:

- PI, Coastal Ocean Responses and Feedbacks to Hurricane Ian, \$470,617, U.S. Coastal Research Program, 9/30/2024 – 9/29/2026 (*pending*)

- PI, Advancing Coastal Ocean Modeling, Analysis and Applications for the West Florida Shelf, \$677,438, NOAA COMT, 9/1/2024 – 8/31/2027 (*pending*)
- Co-PI, Inflation Reduction Act, \$79,698, NOAA IOOS through SECOORA (PI, C. Hu), 8/1/2024 – 7/31/2029 (*pending*)
- USF PI, ECOHAB24 Targeted: Identifying and characterizing “seed populations” of *Karenia brevis* on the West Florida shelf, \$393,694, NOAA NCCOS through Mote Marine Laboratory (PI, V. Lovko; and other Co-PIs), 9/1/2024 – 8/30/2027 (*pending*)
- USF PI, ECOHAB24: Standing on the shoulders of giants (Targeted *Karenia brevis* observations and modeling to advance bloom initiation paradigms), \$436,944, NOAA NCCOS through FWRI (PI, K. Hubbard; and other Co-PIs), 9/1/2024 – 8/30/2029 (*pending*)
- PI, Hurricane Ian Relief Fund for USF COMPS Buoys, \$508,015, NOAA IOOS through SECOORA, 6/1/2024 – 5/30/2027 (*pending*)
- Co-PI, DISES-EX: Spatial Dynamics of Emerging Chemical Threats Along Social and Ecological Gradients in a Large Urban-to-Rural Estuarine System, \$52,746, NSF (PI, S. Murawski; and other co-PIs), 6/1/2024 – 5/30/2027 (*pending*)
- PI, Improving coastal ocean circulation model forecasts using satellite altimeter data, \$966,148, NASA (Co-PI, D. Chambers), 1/1/2024 – 12/30/2027 (*pending*)
- USF PI, Identification of main sources of nitrogen pollution from septic systems to inform policy and resilience planning in the Old Tampa Bay, **\$87,095**, EPA through University of Florida (PI, A. Canestrelli; Co-PIs, Y. Liu, T.E. Kyzar), 10/1/2023 – 9/30/2025 (*approved, pending paperwork*)
- USF PI, Prioritization and Validation of Tools for Oyster Restoration in the Caloosahatchee Estuary: Using Hydrodynamic and Ecological Models and Benthic Mapping, **\$315,384**, EPA through South Florida Water Management District (SFWMD) (PI, D. Sun; and other Co-PIs), 1/1/2024 – 12/31/2028 (*Approved, pending paperwork*)

Current Projects:

- Co-PI, Water Quality Analysis Pilot Study for the Statewide Ecosystem Assessment of Coastal and Aquatic Resources (SEACAR) Program, **\$80,289**, Florida DEP (PI, S. Landry; Co-PI, Y. Qiang), 9/1/2023 – 6/30/2024
- PI, Coastal-Inland Water Level Nesting for the Bowlees Creek/Pearce Drain/Gap Creek Basins in Manatee County, **\$25,000**, Streamlines Technologies, Inc., 8/8/2023 – 12/30/2023
- Co-PI, Developing an operational *Sargassum* HAB monitoring and forecasting system for the southeastern US and US Caribbean waters, **\$529,631**, NOAA MERHAB Program (PI, B.B. Barnes; and other Co-PIs), 9/1/2023 – 8/31/2028
- USF PI, Gulf Consortium for Offshore Risk Reduction Engaging Stakeholders (GulfCORES), **\$100,000**, National Academy of Sciences (NAS) Gulf Research Program through Texas A&M University (PI, S. DiMarco; Co-PIs, S. Glenn, A. Knap, Y. Liu, B. Magnell, M. Tenreiro, L. Shay, R.H. Weisberg), 3/1/2023 – 2/28/2025
- PI, Southeast Coastal Ocean Observing Regional Association (SECOORA): Implementation of the Infrastructure Investments and Jobs Act, **\$20,482**, NOAA IOOS through SECOORA, 6/1/2023 – 11/30/2024

- PI, Developing a Physical-Biological Model of *Karenia brevis* for the West Florida Shelf, **\$299,348**, State of Florida through FWC/FWRI, 1/1/2023 – 6/30/2024
- PI, Delivering Actionable Coastal and Ocean Information from High-Quality Science Observations (FVCOM Software Evaluation Project), **\$197,328**, NOAA IOOS through SECOORA, 9/1/2022 – 8/31/2024
- PI, Tampa Bay Circulation Water Quality Network, Modeling and Analysis, **\$1,875,944** (actually received Y1: \$356,455; Y2: \$395,588; Y3: \$372,906), Florida DEP (PI, Y. Liu; Co-PI, R.H. Weisberg), 2/1/2022 – 1/31/2027
- Senior Personnel (Co-PI since May 2022), Center for Ocean Mapping and Innovative Technologies (COMIT), **\$2,703,679** (actually received Y1: \$371,665; Y2: \$427,985; Y3: \$395,000; Y4: \$455,000), NOAA NOS/OCS (PI, S. Murawski; and other Co-PIs), 10/1/2020 – 9/30/2025
- Senior Personnel (USF PI since May 2022), ECOHAB19: Life and Death of *Karenia brevis* Blooms in the Eastern Gulf of Mexico, **\$738,675**, NOAA ECOHAB through Mote Marine Laboratory (PI, C. Heil; and other Co-PIs), 09/01/2019 – 08/31/2025
- Co-PI (PI since May 2022), A Coordinated Observing and Modeling Program for the West Florida Continental Shelf, **\$1,500,000**, NOAA IOOS through SECOORA (PI, R.H. Weisberg; Co-PI, Y. Liu), 08/01/2021 – 07/31/2026
- Co-PI, New Interdisciplinary Approaches to Red Tide Tracking and Forecasting on the West Florida Shelf, **\$650,000**, State of Florida through FWC/FWRI (PI, K. Buck; and other Co-PIs), 5/1/2020 – 6/30/2025

Completed Projects:

- PI, Air Sea Heat Exchange and Stratification Seasonal Cycles on the West Florida Shelf Identified from Long-term Mooring Data, **\$1,250**, SECOORA (2022 Vembu Subramanian Ocean Scholars Award – Luis Sorinas), 10/15/2022 – 2/15/2023
- Co-PI, Taking the Pulse of the West Florida Shelf at a Hypothesized Loop Current Control Point, **\$937,997**, NASEM UGOS-1 (PI, R.H. Weisberg; Co-PI, Y. Liu), 11/1/2018 – 10/31/2021
- Co-PI, Maintaining Moored Observations and West Florida Shelf Modeling for SECOORA, **\$755,380**, federal pass through from NOAA-IOOS (PI, R.H. Weisberg; Co-PI, Y. Liu), 6/1/2016 – 5/31/2021
- Co-PI (PI in 2020), Effects of Mesoscale Eddies on Three-Dimensional Oil Dispersion: Data Integration, Interpretation and Implications for Oil Spill Models, **\$709,456**, GOMRI (PI, X. Liang; Co-PIs, Y. Liu, R.H. Weisberg), 1/1/2018 – 12/31/2020
- Co-PI, Tampa Augmentation Project – Hillsborough Bay Inflow Modification Study, **\$31,820**, City of Tampa (PI, R.H. Weisberg; Co-PI, Y. Liu), 07/01/2019 – 06/30/2020
- Co-PI, Seasonal Forecasting of *Karenia brevis* Blooms in the Eastern Gulf of Mexico, **\$299,800**, NOAA PCMHAB (PI, R.H. Weisberg; Co-PI, Y. Liu), 9/1/2015 – 8/31/2018
- Co-PI, Moored Buoy Observations on the West Florida Continental Shelf as part of SECOORA, (amount unknown), SECOORA, federal pass through from NOAA-IOOS (PI, R.H. Weisberg; Co-PI, Y. Liu), 6/1/2013 – 5/31/2016
- Co-I, Satellite Altimetry Products in the Eastern Gulf of Mexico: Veracity Testing and Application, **\$408,942**, NASA OSTST (PI, R.H. Weisberg; Co-I, Y. Liu), 1/10/2013 – 1/09/2017

- PI, Monitoring and Modeling the Deepwater Horizon Oil Spill, **\$10,000**, BOEM, 2011

Awards to Students (I served as PI):

- 2023 *Vembu Subramanian Ocean Scholars Award* - Samantha D'Angelo, **\$1,250**, SECOORA, 11/6/2023 – 5/15/2024
- 2022 *Vembu Subramanian Ocean Scholars Award* – Luis Sorinas, **\$1,250**, SECOORA, 10/15/2022 – 2/15/2023

High Performance Computing Resources:

- PI, Coastal Ocean Circulation Modeling in the Eastern Gulf of Mexico, NSF ACCESS High Performance Computing Resources, 750,000 Service Units (SUs) renewal, 7/1/2023 – 6/30/2024
- PI, West Florida Coastal Ocean Model Applications, Oracle for Research, Oracle Cloud credit \$50,000 equivalent (PI, Y. Liu; Co-PI, R.H. Weisberg), 05/01/2022 – 05/12/2023
- PI, Coastal Ocean Circulation Modeling in the Eastern Gulf of Mexico, NSF XSEDE Super Computing Resources, various amounts of Service Units (SUs) each year (PI, Y. Liu; Co-PI, R.H. Weisberg), 7/1/2018 – 6/30/2023
- PI, A Very High-Resolution Coastal Circulation Modeling in the Eastern Gulf of Mexico, NSF XSEDE Super Computing Resources (PI, Y. Liu; Co-PI, R.H. Weisberg), 7/1/2017 – 6/30/2018

SEMINARS & INVITED PRESENTATIONS

- Physical Oceanography Tenure-Track Faculty Candidate Seminar, Coastal Ocean Responses & Feedbacks to Hurricane Ian, USF College of Marine Science, 11/1/2023
- Faculty Seminar, Nowcast/Forecast of the Piney Point Effluent Plume in Tampa Bay: A Rapid Response, USF College of Marine Science, 8/25/2023
- Panelist, University of North Carolina Wilmington (UNCW) Global Marine Science Summit, HABs, Toxicity and Environmental Impacts Panel, 5/19/2023
- Seminar, Coordinated Coastal Ocean Circulation Observing, Modeling and Applications on the West Florida Shelf, University of Florida (Water, Wetland & Watersheds Seminar Series), 2/8/2023
- Seminar (Virtual), West Florida Coastal Ocean Response to Hurricane Ian, South Florida Water Management District (SFWMD), 1/13/2023
- Panelist, GCOOS Virtual Fall Meeting, Coastal Hazards Panel, 11/16/2022
- Panelist, NOAA-USF COMIT Annual Meeting, 10/26/2022
- Faculty Seminar, Coastal Ocean Circulation Observing, Modeling and Applications on the West Florida Shelf, USF College of Marine Science, 8/26/2022
- Invited Talk (Virtual), Nowcast/Forecast of the Piney Point Effluent Plume in Tampa Bay: A Rapid Response, IEEE Newfoundland Ocean Engineering Society Chapter, 12/9/2021
- Panelist, Red Tide Forum, Barrier Island Parks Society, Boca Grande FL, 1/10/2020
- Webinar, The Coastal Ocean Circulation Influence on the 2018 West Florida Shelf *K. brevis* Red Tide Bloom, Florida Section of American Water Works Association, 8/1/2019

- Seminar, University of Texas at Austin (UTIG), 9/24/2010
- Keynote Speaker, SECOORA Annual Board & Member Meeting, Savanna, GA, 4/12/2010
- Guest Speaker, The Greater Plant City Chamber of Commerce, FL, 6/9/2010
- Panelist, Offshore Drilling Town Hall Meeting, City of Gulfport, Florida, 2009
- Seminar, Xiamen University (MEL), China, 1/2/2009
- Seminar, Oregon State University (COISS), Corvallis, OR, 11/6/2007
- Seminar, University of Washington, Seattle, WA, 4/25/2007
- Seminar, Naval Research Laboratory, Stennis Space Center, LA, 5/23/2006

PUBLICATIONS

Books

- **Liu, Y.**, H. Kerkering, Weisberg, R.H. (Eds) (2015) *Coastal Ocean Observing Systems*, 461 PP., ISBN 978-0-12-802022-7. Elsevier, London, UK.
- **Liu, Y.**, A. MacFadyen, Z.-G. Ji, Weisberg, R.H. (Eds) (2011) *Monitoring and Modeling the Deepwater Horizon Oil Spill: A Record-Breaking Enterprise, Geophysical Monograph Series*, 195, ISBN 978-0-87590-485-6. AGU, Washington, D.C.

Manuscripts in Progress

- Zhang, Y., C. Hu, D.J. McGillicuddy, Jr., **Y. Liu**, B.B. Barnes, and V.H. Kourafalou (2024), Mesoscale eddies in the Gulf of Mexico: A three-dimensional characterization based on global HYCOM, *Deep-Sea Research Part II* (revised)

Refereed Articles (Listed in reverse chronological order; Note student (*) or postdoc 1st-authored)

1. Zhang, Y., C. Hu, D.J. McGillicuddy, Jr., B.B. Barnes, **Y. Liu**, V.H. Kourafalou, S. Zhang, and F.J. Hernandez (2024), Pelagic *Sargassum* in the Gulf of Mexico driven by ocean currents and eddies, *Harmful Algae*, 132, 102556, <https://doi.org/10.1016/j.hal.2023.102566>
2. **Liu, Y.**, R.H. Weisberg, L. Zheng, Y. Sun, J. Chen, J. Law, C. Hu, J.P., Cannizzaro, and T.K. Frazer (2024), Nowcast/forecast of the Tampa Bay, Piney Point effluent plume: Rapid response to an environmental hazard, *Marine Pollution Bulletin*, 198, 115840, <https://doi.org/10.1016/j.marpolbul.2023.115840>
3. Law, J., R.H. Weisberg, **Y. Liu**, D. Mayer, and J. Donovan (2024), Mean circulation and its seasonal cycle on the West Florida Shelf as evidenced by multi-decadal time series, *Deep-Sea Research Part II*, 213, 105346, <https://doi.org/10.1016/j.dsr2.2023.105346>
4. *Nguyen, B.V.V., **Y. Liu**, C.D. Stallings, M. Breitbart, S.A. Murawski, R.H. Weisberg, M. Kerr, E.-M. S. Bønnelycke, and E.B. Peebles (2024), Retention and export of planktonic fish eggs in the northeastern Gulf of Mexico, *Fisheries Oceanography*, 33:e12655, <https://doi.org/10.1111/fog.12655>
5. Chen, J., **Y. Liu**, R.H. Weisberg, S. Murawski, S. Gilbert, D. Naar, L. Zheng, M. Hommeyer, C. Dietrick, M.E. Luther, C. Hapke, E. Myers, S. Moghimi, C. Allen, L. Tang, B. Khazaei, S. Peeri,

- N. Alvarado, and P. Wang (2023), Hydrodynamic response to bathymetry changes in Tampa Bay, Florida, *Deep-Sea Research Part II*, 212, 105344, <https://doi.org/10.1016/j.dsr2.2023.105344>
6. *Sorinas, L., R.H. Weisberg, Y. Liu, and J. Law (2023), Ocean-atmosphere heat exchange seasonal cycle on the West Florida Shelf derived from long term moored data, *Deep-Sea Research Part II*, 212, 105341, <https://doi.org/10.1016/j.dsr2.2023.105341>
 7. Liu, Y., R.H. Weisberg, L. Zheng, K.A. Hubbard, E.G. Muhlbach, M.J. Garrett, C. Hu, J.P. Cannizzaro, Y. Xie, J. Chen, S. John, and L.Y. Liu (2023), Short-term forecast of *Karenia brevis* trajectory on the West Florida Shelf, *Deep-Sea Research Part II*, 211, 105335, <https://doi.org/10.1016/j.dsr2.2023.105335>
 8. *Vasbinder, K., C., Ainsworth, Y. Liu, and R.H. Weisberg (2023), Gulf of Mexico larval dispersal: Combining concurrent sampling, behavioral, and hydrodynamic data to inform end-to-end modeling efforts through a Lagrangian dispersal model, *Deep-Sea Research Part II*, 211, 105323, <https://doi.org/10.1016/j.dsr2.2023.105323>
 9. Chen, J., R.H. Weisberg, Y. Liu, L. Zheng, J. Law, S. Gilbert, and S. Murawski (2023), A Tampa Bay Coastal Ocean Model nowcast/forecast system, *Deep-Sea Research Part II*, 211, 105322, <https://doi.org/10.1016/j.dsr2.2023.105322>
 10. *Nickerson, A.K., R.H. Weisberg, L. Zheng, and Y. Liu (2023), Sea surface temperature trends for Tampa Bay, West Florida Shelf and the deep Gulf of Mexico, *Deep-Sea Research Part II*, 211, 105321, <https://doi.org/10.1016/j.dsr2.2023.105321>
 11. Yang, Y., G. Fu, X.S. Liang, R.H. Weisberg, and Y. Liu (2023), Causal relations between the Loop Current penetration and the flow conditions in the Yucatan Channel and Florida Straits inferred with a rigorous quantitative causality analysis, *Deep-Sea Research Part II*, 209, 105298, <https://doi.org/10.1016/j.dsr2.2023.105298>
 12. Zang, Z., R. Ji, D.R. Hart, D. Jin, C. Chen, Y. Liu, C.S. Davis (2023), Effects of warming and fishing on Atlantic sea scallop (*Placochelytes magellanicus*) size structure in the Mid-Atlantic rotationally closed areas, *ICES Journal of Marine Science*, fsad063, <https://doi.org/10.1093/icesjms/fsad063>
 13. Zhang, Y., C. Hu, B.B. Barnes, Y. Liu, V.H. Kourafalou, D.J. McGillicuddy, Jr., J.P. Cannizzaro, D.C. English, and C. Lembke (2023), Bio-optical, physical, and chemical properties of a Loop Current eddy in the Gulf of Mexico, *Journal of Geophysical Research Oceans*, 128, e2022JC018726. <https://doi.org/10.1029/2022JC018726>
 14. Chen, J., R.H. Weisberg, Y. Liu, and L. Zheng (2023), Hillsborough Bay inflow modification study: An application of the Tampa Bay Coastal Ocean Model, *Estuarine, Coastal and Shelf Science*, 281(5), 108213, <https://doi.org/10.1016/j.ecss.2023.108213>
 15. Liu, Y., R.H. Weisberg, L. Zheng, C.A. Heil, and K.A. Hubbard (2022), Termination of the 2018 Florida red tide event: A tracer model perspective, *Estuarine, Coastal and Shelf Science*, 272, 107901, <https://doi.org/10.1016/j.ecss.2022.107901>
 16. Weisberg, R.H., and Y. Liu (2022), Local and deep-ocean forcing effects on the West Florida Shelf circulation and ecology, *Frontiers in Marine Science*, 9, 863227, <https://doi.org/10.3389/fmars.2022.863227>
 17. *Nickerson, A.K., R.H. Weisberg, and Y. Liu (2022), On the evolution of the Gulf of Mexico Loop Current through its penetrative, ring shedding and retracted states, *Advance in Space Research*, 69(11), 4058-4077, <https://doi.org/10.1016/j.asr.2022.03.039>

18. Beck, M., A. Altieri, C. Angelini, M.C. Burke, J. Chen, D.W. Chin, J. Gardiner, C. Hu, K.A. Hubbard, **Y. Liu**, C. Lopez, M. Medina, E. Morrison, E.J. Philips, G.E. Raulerson, S. Scolaro, E.T. Sherwood., D. Tomasko, R.H. Weisberg, and J. Whalen (2022), Initial estuarine response to inorganic nutrient inputs from a legacy mining facility adjacent to Tampa Bay, Florida, *Marine Pollution Bulletin*, 178, 113598, <https://doi.org/10.1016/j.marpolbul.2022.113598>
19. *Zhang, Y., C. Hu, V.H. Kourafalou, **Y. Liu**, D.J. McGillicuddy, Jr., B.B. Barnes, and J.M. Hummon (2022), Physical characteristics and evolution of a long-lasting mesoscale cyclonic eddy in the Straits of Florida, *Frontiers in Marine Science*, 9, 779450, <https://doi.org/10.3389/fmars.2022.779450>
20. Zang, Z., R. Ji, **Y. Liu**, C. Chen, Y. Li, S. Li, and C.S. Davis (2022), Deep Scotian Shelf water inflow regulates spring phytoplankton bloom magnitude in the Gulf of Maine, *Limnology and Oceanography Letters*, <https://doi.org/10.1002/lo2.10245>
21. Justić, D., V.H. Kourafalou, G. Mariotti, S. He, R.H. Weisberg, Y. Androulidakis, C. Barker, A. Bracco, B. Dzwonkowski, C. Hu, H. Huang, G. Jacobs, M. Le Henaff, **Y. Liu**, S. Morey, J. Nittrouer, E. Overton, C.B. Paris, B.J. Roberts, K. Rose, A. Valle-Levinson, and J. Wiggert (2022), Transport processes in the Gulf of Mexico along the river-estuary-shelf-ocean continuum: A review of research from the Gulf of Mexico Research Initiative, *Estuaries and Coasts*, 45, 621-657, <https://doi.org/10.1007/s12237-021-01005-1>
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CONFERENCE PRESENTATIONS (Listed in reverse chronological order)

1. Sorinas, L., Weisberg, R.H., **Liu, Y.**, Law, J. (2024), Evaluation of Heat Fluxes from Reanalysis Products Using Long-term Moored Data on the West Florida Shelf. Abstract (AI14B-2323) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
2. Dangelo, S., Law, J., **Liu, Y.**, Chen, J. (2024), Implementation of the Tampa Bay Observing Network (TBON), a comprehensive approach to monitoring real-time water quality in Tampa Bay. Abstract (CE24A-0424) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
3. John, S., **Liu Y.**, Weisberg, R.H., Hubbard, K., Zang, Z., Sun, Y., Garrett, M., Gao, Y., Koester, J. (2024), Coupled Physical-Biological Model of *Karenia brevis* on the West Florida Shelf: An Application to the 2018 Bloom Event. Abstract (CP21A-02A) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (oral)

4. Chen, J., **Liu Y.**, Weisberg, R.H., Zheng, L. (2024), Inundation caused by Hurricane Idalia in the Tampa Bay Area and the Anticipated Impact of Sea Level Rise. Abstract (CP44C-1941) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
5. Toro, S., **Liu Y.** (2024), Tracking Hurricane Ian Runoff Water on the West Florida Shelf with Surface Drifters. Abstract (ED24A-0107) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
6. Keel, K., Kerr, M., Liu, L.Y., **Liu, Y.**, Kilborn, J.P, Zapfe, G., Peebles, E.B, Stallings, C., Breitbart, M. (2024), Exploring the Dynamics of September Fish Spawning on the West Florida Shelf Through the DNA Barcoding of Fish Eggs. Abstract (ME34C-0618) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
7. Caprara, S., Breitbart, M., Hu, C., Hubbard, K., Lembke, C., **Liu Y.**, Weisberg, R.H., Cannizzaro, J.P., Garrett, M., Navarro-Estrada, D., Murphy, N., Buck, K.N. (2024), INSIGHTS FROM REPEAT OBSERVATIONS OF TRACE METAL CONCENTRATIONS IN THE EASTERN GULF OF MEXICO. Abstract (OB44C-0968) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
8. Zhang, Y., Hu, C., McGillicuddy, D.J., Barnes, B.B., **Liu, Y.**, Kourafalou, V., Zhang, S., Hernandez, F. (2024), Pelagic Sargassum in the Gulf of Mexico driven by ocean currents and eddies. Abstract (PI44B-1741) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
9. Yang, Y., Fu, G., Liang, X., Weisberg, R.H., **Liu, Y.** (2024), Causal Relations Between the Loop Current Penetration and the Inflow/Outflow Conditions Inferred with a Rigorous Quantitative Causality. Abstract (PL14C-2234) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
10. **Liu, Y.**, Weisberg, R.H., Zheng, L., Chen, J., John, S., Qiao, K. (2024), Forecasting Storm Surges for the West Coast of Florida – A Tale of Three Major Hurricanes: Irma 2017, Ian 2022, and Idalia 2023. Abstract (RH34A-0303) Presented at the Ocean Sciences Meeting, New Orleans, 2/19-23/2024 (poster)
11. Chen, J., **Liu, Y.**, Weisberg, R.H., Murawski, S.A., Gilbert, S., Naar, D.F., Zheng, L., Hommeyer, M., Dietrick, C., Luther, M.E., Hapke, C., Myers, E., Moghimi, S., Allen, C., Tang, L., Khazaei, B., Peeri, S., Wang, P. (2024), Hydrodynamic response to bathymetry changes in Tampa Bay. Abstract Presented at Gulf of Mexico Conference (GOMCON), 2/19-22/2024 (poster)
12. Nickerson, A.K., Weisberg, R.H., Zhang, J.A., **Liu, Y.** (2024), Intensification of a Hurricane over Shallow Water. Abstract Presented at Gulf of Mexico Conference (GOMCON), 2/19-22/2024 (poster)
13. Dudney, L., **Liu, Y.** (2024), West Florida Shelf Flushing Events Recorded by the Long-Term Moored Observations: Supporting the Hypothesis of Red Tide Seasonal Prediction. Abstract Presented at Gulf of Mexico Conference (GOMCON), 2/19-22/2024 (poster)
14. Chen, J., **Liu, Y.**, Weisberg, R.H., Murawski, S.A., Gilbert, S., Naar, D.F., Zheng, L., Hommeyer, M., Dietrick, C., Luther, M.E., Hapke, C., Myers, E., Moghimi, S., Allen, C., Tang, L., Khazaei, B., Peeri, S., Wang, P. (2023), Hydrodynamic response to bathymetry changes in Tampa Bay. Abstract (OS43C-1813) Presented at AGU Fall Meeting, San Francisco, CA, December, 2023 (poster)
15. **Liu, Y.**, Weisberg, R.H., Hubbard, K.A. (2023), Seasonal Prediction of Harmful Algal Blooms Caused by *Karenia brevis* on the West Florida Shelf Using Satellite Altimetry Data. NASA OSTST Workshop, San Juan, Puerto Rico, November 2023 (poster)

16. **Liu, Y.**, Weisberg, R.H., Law, J., Chen, J., Zheng, L., Mayer, D.A., Hu, C., Zhang, Y. (2023), Coastal ocean response to Hurricane Ian as revealed by a coordinated coastal ocean observing and modeling system. CERF Biennial Conference), Portland, OR, November 2023 (talk)
17. Chen, J., **Liu, Y.**, Weisberg, R.H., Murawski, S., Gilbert, S., Naar, D., Zheng, L. (2023), Frontogenesis by Material Convergence for Tampa Bay and the Adjacent Gulf of Mexico. CERF Biennial Conference), Portland, OR, November 2023 (talk)
18. **Liu, Y.**, R.H. Weisberg, L. Zheng, Y. Sun, J. Chen (2023), Nowcast/Forecast of the Plume of the Piney Point Effluent in Tampa Bay: A Rapid Response. The 2023 Annual FVCOM-NOAA Workshop (Virtual), 8/9/2023 (talk)
19. Muhlbach, E. Gao, Y., Iorillo, A., Garrett, M., Barnard, S., Chen, J., **Liu, Y.**, Weisberg, R., Hu, C., Cannizzaro, J., Brosnahan, M., Villac, M., Henschen, K., Keller Abbe, S., Markley, L., Hubbard, K. (2023), Implementing the imaging flowcytobot (IFCB) within Florida's Harmful Algal Boom observation network to evaluate estuarine dynamics during *Karenia brevis* blooms. Phycological Society of America 2023 Annual Meeting, Providence, Rhode Island, June 25-29, 2023
20. (Invited talk) **Liu, Y.**, Weisberg, R.H., Hubbard, K.A., Muhlbach, E., Garrett, M., Zheng, L., Chen, J., John, S. (2023), Seasonal prediction and short-term forecast of red tide on the West Florida Shelf, University of North Carolina Wilmington (UNCW) Global Marine Science Summit, 5/19/2023
21. **Liu, Y.**, Weisberg, R.H., Chen, J., John, S., Law, J., Nickerson, A., Sorinas, L., Munoz, S. (2023), Hurricane Ian: Coastal ocean observing and modeling, SECOORA 2023 Annual Meeting, Jacksonville, FL, May 10-11, 2023 (PI lightning talk)
22. **Liu, Y.**, John, S., Weisberg, R.H. (2023), NOAA model evaluation: New York Harbor – Cook Inlet, SECOORA 2023 Annual Meeting, Jacksonville, FL, May 10-11, 2023 (PI lightning talk)
23. Singhofen, P., **Liu, Y.** (2023), Hurricane Ian: Could we have known about the flooding in advance? 2023 Florida Floodplain Managers Association (FFMA) Annual Meeting, Miami, FL, 4/12/2023 (talk)
24. **Liu, Y.** (2023), Coordinated coastal ocean circulation observing, modeling and applications on the West Florida Shelf, NOAA SECART 2023 Winter Meeting, St. Petersburg, FL, March 28, 2023 (talk)
25. **Liu, Y.**, Weisberg, R.H., Zheng, L., Chen, J., Hu, C., Law, J., Sun, Y., 2022: Coastal ocean response to Hurricane Ian as simulated by the WFCOM and TBCOM nowcast/forecast systems, Abstract (NH43C-05) Presented at AGU Fall Meeting, Chicago, Illinois, December, 2022 (talk)
26. Weisberg, R.H., Sorinas-Morales, L., **Liu, Y.**, 2022: Air sea heat exchange and stratification seasonal cycles on the West Florida Shelf identified from long-term mooring data, Abstract (OS35D-1050) Presented at AGU Fall Meeting, Chicago, Illinois, December, 2022 (poster)
27. Chen, J., **Liu, Y.**, Weisberg, R.H., Sun, Y., Zheng, L., Law, J., 2022: Storm surge simulations based on an Ian-like Hurricane over Tampa, Abstract (NH45G-2542) Presented at AGU Fall Meeting, Chicago, Illinois, December, 2022 (poster)
28. Law, J., **Liu, Y.**, Fraticelli, Weisberg, R.H., Donovan, J., 2022: The USF Coastal Ocean Monitoring and Prediction System (COMPS) buoys: Surviving Hurricane Ian, Abstract (NH45G-2544) Presented at AGU Fall Meeting, Chicago, Illinois, December, 2022 (poster)
29. Gao, Y., Muhlbach, E., Iorillo, A., Eguia, L., Garrett, M., Chen, J., **Liu, Y.**, Weisberg, R.H., Brosnahan, M., Hubbard, K., 2022: Enhancing Florida's HAB monitoring capabilities using the

Imaging FlowCytobot (IFCB) during the 2020-2021 *Karenia brevis* bloom, the 11th U.S. Symposium on Harmful Algae, October 23-28, Albany, New York, [2022](#) (talk)

30. Law, J., Weisberg, R.H., **Liu, Y.**, Mayer, D., Donovan, J., Dorton, J., 2022: The USF Coastal Ocean Monitoring and Prediction System: Nearly 25 years of lessons learned on the West Florida Shelf, The 14th MTS Buoy Workshop, Wilmington, North Carolina, [2022](#) (talk)
31. **Liu, Y.**, Weisberg, R.H., 2022: Coordinated coastal ocean circulation observing, modeling and applications on the West Florida Shelf, The Southeast Acoustics Consortium Workshop and Forum, FWRI, St. Petersburg, FL, September 11-13, [2022](#) (talk)
32. **Liu, Y.**, Weisberg, R.H., Zheng, L., Sun, Y., Chen, J., 2021: Nowcast/forecast of the Tampa Bay, Piney Point effluent plume: A rapid response, in: Abstract (Os35b-1036) Presented at AGU Fall Meeting, New Orleans, Louisiana, December, [2021](#)
33. **Liu, Y.**, Weisberg, R.H., Zheng, L., Sun, Y., Chen, J., 2021: Nowcast/forecast of the plume of the Piney Point effluent in Tampa Bay: A rapid response, CERF Biennial Conference (Virtual), November [2021](#)
34. **Liu, Y.**, Weisberg, R.H., Zheng, L., 2020: Termination of the 2017-2018 Florida red tide – A tracer model perspective, AGU Fall Meeting (Virtual), 7 December [2020](#) (talk)
35. **Liu, Y.**, Merz, C.R., Weisberg, R.H., Shay, L.K., Glenn, S., Smith, M., 2020: Comparisons of altimetry and model products with high-frequency radar observed radial currents in the Straits of Florida, Ocean Surface Topography Science and Technology (OSTST) Virtual Meeting, 19–23 October [2020](#)
36. **Liu, Y.**, and R.H. Weisberg, 2020: Deep ocean interactions with the West Florida Shelf: the role of the “Pressure Point” on both across shelf transport and the penetration of the Loop Current into the Gulf of Mexico, Ocean Sciences Meeting, San Diego, February [2020](#) (talk)
37. Yang, Y., R.H. Weisberg, **Y. Liu**, and X.S. Liang, 2020: Instabilities and multiscale interactions underlying the Loop Current eddy shedding in the Gulf of Mexico, GoMOSES, Tampa, February [2020](#) (talk)
38. Weisberg, R.H., and **Y. Liu**, 2019: The coastal ocean circulation influence on the 2018 West Florida Shelf *K. brevis* red tide bloom, AGU Fall Meeting, San Francisco, December [2019](#) (poster)
39. **Liu, Y.**, and R.H. Weisberg, 2019: Deep ocean interactions with the West Florida Shelf: the role of the “Pressure Point” on both across shelf transport and the penetration of the Loop Current into the Gulf of Mexico, AGU Fall Meeting, San Francisco, December [2019](#) (poster)
40. Singhofen, P.J., **Y. Liu**, and R.H. Weisberg, 2019: Automated hyper-resolution flood forecasting in a coastal urban setting, AGU Fall Meeting, San Francisco, December [2019](#) (talk)
41. **Liu, Y.**, R.H. Weisberg, J. Chen and L. Zheng, 2019: West Florida Shelf response to Hurricane Irma, 2019 GoMRI Synthesis Workshop, Tallahassee, FL, Jan [2019](#) (talk)
42. **Liu, Y.**, R.H. Weisberg, K. Hubbard, M. Garrett, J. Chen and L. Zheng, 2019: Short-term and seasonal forecast of harmful algal bloom on the West Florida Shelf, 2019 Gulf of Mexico Oil Spill & Ecosystem Conference, New Orleans, LA, Feb [2019](#) (poster)
43. **Liu, Y.**, R.H. Weisberg, C.R. Merz, J. Law, L. Zheng, and J. Chen, 2018: West Florida Shelf response to hurricane Irma, Ocean Sciences Meeting, Portland Oregon, Feb [2018](#) (talk)
44. **Liu, Y.**, R.H. Weisberg, S. Vignudelli, and G.T. Mitchum, 2018: Dual Self-Organizing Map (SOM) and joint SOM-wavelet analyses: An application in the Gulf of Mexico Loop Current system, 2018 AGU Fall Meeting, Washington DC, Dec [2018](#) (poster)

45. **Liu, Y.,** R.H. Weisberg, and L. Zheng, 2018: Northeastern Gulf of Mexico coastal ocean response to Hurricane Michael, 2018 AGU Fall Meeting, Washington DC, December 2018. (poster)
46. (*Invited talk*) **Liu, Y.,** R.H. Weisberg, J.M. Lenes, L. Zheng, K. Hubbard, and J.J. Walsh, 2017: An altimetry-derived index of the offshore forcing on the “pressure point” of the West Florida Shelf: Anomalous upwelling and its influence on harmful algal blooms, AGU Fall Meeting, New Orleans, Dec 2017
47. **Liu, Y.,** R.H. Weisberg: A skill score of trajectory model evaluation using reinitialized series of normalized cumulative Lagrangian separation, AGU Fall Meeting, New Orleans, Dec 2017 (talk)
48. **Liu, Y.,** R.H. Weisberg, J. Chen, C.R. Merz, J. Law, and L. Zheng: West Florida Shelf response to hurricane Irma, AGU Fall Meeting, New Orleans, Dec 2017 (poster)
49. **Liu, Y.,** R.H. Weisberg, and J.M. Lenes: Gulf of Mexico Loop Current interactions with the West Florida Shelf and its influence on harmful algae blooms, 2016 Ocean Sciences Meeting, New Orleans, Louisiana, USA, February 24, 2016
50. **Liu, Y.,** R.H. Weisberg, S. Vignudelli, 2015: Patterns of the Loop Current system and regions of sea surface height variability in the eastern Gulf of Mexico revealed by Self-Organizing Maps, The 9th Coastal Altimetry Workshop, Reston, Virginia, USA, 18-19 October 2015
51. **Liu, Y.,** R.H. Weisberg et al., 2015: Accomplishments SECOORA IOOS Award 2010-2015: In situ observations - buoys, shore stations, SECOORA Annual Meeting, Jacksonville, FL, May 2015
52. Weisberg, R.H., C.R. Merz, **Y. Liu,** and L. Zheng, 2015: A coordinated coastal ocean observing and modeling system on the West Florida Shelf, SECOORA Annual Meeting, Jacksonville, FL, May 2015
53. **Liu, Y.,** R.H. Weisberg, and C.R. Merz, 2014: Assessment of CODAR and WERA HF radars in mapping currents on the West Florida Shelf, 2014 Ocean Sciences Meeting, Honolulu, Hawaii, February 25, 2014
54. **Liu, Y.,** R.H. Weisberg, and S. Vignudelli, 2013: Evaluation of altimetry-derived surface current products using Lagrangian drifter trajectories in the Eastern Gulf of Mexico, The 7th Coastal Altimetry Workshop, Boulder, Colorado, October, 7-8, 2013
55. **Liu, Y.,** and R.H. Weisberg, 2012: Seasonal variation of currents and sea level on the West Florida Shelf as revealed by long-term moorings, The 15th Ocean Sciences Meeting, Salt Lake City, Utah, USA, February 19-24, 2012
56. (*Invited talk*) Weisberg, R.H., and **Y. Liu,** 2011: Response to the Deepwater Horizon oil spill by the USF Ocean Circulation Group: A review, Deepwater Horizon Oil Spill Principal Investigator Conference, Sponsored by the NSTC Subcommittee on Ocean Science and Technology, St. Petersburg, FL October 25-26, 2011
57. **Liu, Y.,** R.H. Weisberg, S. Vignudelli, L. Roblou, and C. Merz, 2011: Altimetry on the West Florida Shelf, The 5th Coastal Altimetry Workshop, San Diego, California, October, 16-18, 2011
58. (*Invited talk*) **Liu, Y.,** R.H. Weisberg, C. Hu, and L. Zheng, 2011: Combining numerical ocean circulation models with satellite observations in a trajectory forecast system: a rapid response to the Deepwater Horizon oil spill, SPIE Conference 8030 - Ocean Sensing and Monitoring, Orlando, Florida, April 25-29, 2011

59. **Liu, Y.,** R.H. Weisberg, C. Hu, and L. Zheng, 2010: Trajectory forecasts based on numerical ocean circulation models and satellite observations: A rapid response to Deepwater Horizon oil spill, AGU Fall Meeting, San Francisco, California, USA, December 13-17, [2010](#)
60. (*Invited talk*) Weisberg, R.H., **Y. Liu,** L. Zheng, C. Hu, and C. Lembke, 2010: Rapid response to Deepwater Horizon oil spill from University of South Florida: Numerical models, remote sensing, and in-situ observations, AGU Fall Meeting, San Francisco, California, USA, December 13-17, [2010](#)
61. (*Keynote talk*) Weisberg, R.H., **Y. Liu,** L. Zheng, and C. Hu, 2010: The Oil Trajectory: How it behaved in the Gulf of Mexico and why, and where might residual oil be heading? CSDMS Meeting, San Antonio, Texas, USA, October 14-17, [2010](#)
62. (*Invited talk*) **Liu, Y.,** and R.H. Weisberg, 2010: Lessons learned from an integrated coastal ocean observing system on the West Florida Shelf. 38th COSPAR Scientific Assembly, Bremen, Germany, July 18-25, [2010](#)
63. (*Keynote talk*) **Liu, Y.,** R.H. Weisberg, L. Zheng, and C. Hu, 2010: Tracking Gulf of Mexico oil Spill with numerical models and satellite imagery. Southeast Coastal Ocean Observing Regional Association (SECOORA) 2010 Annual Board & Member Meeting, Savannah, Georgia, USA, April 12-13, [2010](#)
64. **Liu, Y.,** R.H. Weisberg, and D.A. Mayer, 2010: Climatology of West Florida Shelf circulation observed with long-term moorings. The 15th Ocean Sciences Meeting, Portland, Oregon, USA, February 22-26, [2010](#)
65. **Liu, Y.,** R.H. Weisberg, S. Vignudelli, and L. Roblou, 2009: Validation of X-TRACK Coastal Altimetry on the West Florida Shelf. The 3rd Coastal Altimetry Workshop, Frascati, Italy, September 17-18, [2009](#)
66. Weisberg, R.H., **Y. Liu,** and D.A. Mayer, 2009: West Florida Shelf mean circulation observed with long-term moorings. MABPOM-SECOM Conference, Raleigh, North Carolina, USA, August 17-18, [2009](#)
67. Weisberg, R.H., L. Zheng, and **Y. Liu,** 2009: Why the red tide over the West Florida Shelf in 2008 is mild? A view from ocean circulation. NOAA ECOHAB PI Meeting, VIMS, Virginia, USA, May 21-22, [2009](#)
68. **Liu, Y.,** C.R. Merz, and R.H. Weisberg, 2008: HF radar performance on a low energy environment as found using CODAR SeaSonde on the West Florida Shelf. 2008 AGU Fall Meeting. San Francisco, California, USA, December 15-19, [2008](#)
69. **Liu, Y.,** P. MacCready, and B.M. Hickey, 2008: Columbia River plume influence on shelf circulation as revealed by a coastal ocean circulation hindcast. The 14th Ocean Sciences Meeting, Orlando, Florida, USA, March 2-7, [2008](#)
70. **Liu, Y.,** and R.H. Weisberg, 2006: Ocean current structures and sea surface height estimates across the West Florida Shelf. *The 13th Ocean Science Meeting*, Honolulu, Hawaii, USA, 20-24 February [2006](#)
71. **Liu, Y.,** R.H. Weisberg and R. He, 2005: Sea surface temperature patterns on the West Florida Shelf using Growing Hierarchical Self-Organizing Maps. *The 85th AMS Annual Meeting - Fourth Conference on Artificial Intelligence Applications to Environmental Science*. San Diego, California, USA, January [2005](#)
72. **Liu, Y.,** and R.H. Weisberg, 2005: On the optimal wind direction in changing the coastal sea level along the West Florida Shelf. *The 85th AMS Annual Meeting - Sixth Conference on Coastal Atmospheric and Oceanic Prediction and Processes*. San Diego, California, USA, January [2005](#)

73. **Liu, Y.**, and R.H. Weisberg, 2004: Ocean current spatial patterns from West Florida Shelf velocity time series using the Self-Organizing Map. *Eos Trans. AGU*, 85(47), Fall Meet. Suppl., Abstract NG43A-0438, [2004](#)