**Patricia Soupy Dalyander**

**Research Oceanographer - The Water Institute of the Gulf**

T: 504.475.6760

E: [sdalyander@thewaterinstitute.org](mailto:sdalyander@thewaterinstitute.org)

1110 River Road S., Suite 200

Baton Rouge, LA 70825

**Education**

**Ph.D. in Mechanical Engineering, 2008**

University of Florida, Gainesville, Florida

**M.S. in Mechanical Engineering, 2006**

University of Florida, Gainesville, Florida

**M.S. in Oceanography, 2001**

Oregon State University, Corvallis, Oregon

**B.S. in Physics and Mathematics, 1999**

Eckerd College, St. Petersburg, Florida

**Research Interests**

Coastal morphology and sediment transport; waves and nearshore hydrodynamics; interdisciplinary research; numerical modeling; coastal restoration decision support.

**Professional Experience**

**The Water Institute of the Gulf 2019-present**

Baton Rouge, Louisiana

* ***Senior Research Scientist***

**U.S. Geological Survey St. Petersburg Coastal and Marine Science Center 2013-2019**

St. Petersburg, Florida

* ***Research Oceanographer***

**U.S. Geological Survey Woods Hole Coastal and Marine Science Center 2010-2013**

Woods Hole, Massachusetts

* ***Research Oceanographer and Mendenhall Post-Doctoral Fellow***

**U.S. Army Corps of Engineers, Engineering Research and Development Center 2008-2010**

Vicksburg, Mississippi

* ***Research Physical Scientist***

**Integrated Statistics and the Environmental Careers Organization 2001-2008**

**Contracted to: U.S. Geological Survey Woods Hole Coastal and Marine Science Center**Woods Hole, Massachusetts

* ***Research Assistant***

**Technical Training**

USFWS/USGS Apprentice Level Certification in Structured Decision-Making 2021

USFWS/USGS Course ALC3191 – Decision Analysis: Tools 2021

USFWS/USGS Course ALC3176 – Adaptive Management 2019

USGS Leadership Intensive 2017

USFWS/USGS Course ALC3183 - An Overview of Structured Decision Making 2016

COAWST Training Workshop, Woods Hole, MA 2012

**Professional Society Memberships**

* American Geophysical Union
* Florida Association of Environmental Professionals (Tampa Bay Chapter)
* Association for Women Geoscientists (Florida Chapter)

**Honors and Awards**

* Presidential Early Career Award for Scientists and Engineers (PECASE) (2019).
* Sam D. Hamilton Award for Transformational Conservation Science (2015), as part of Gulf Coast Vulnerability Assessment team
* USGS Mendenhall Postdoctoral Fellowship (2010-2012)
* U.S. Army Corps of Engineers (USACE) Research and Development Achievement Award (2010)
* University of Florida, Dissertation of the Year Award (2008)
* Tau Beta Pi Engineering Honor Society (2008)
* National Science Foundation (NSF) Graduate Research Fellowship (2004-2007)
* U.S. Geological Survey, Special Thanks for Achieving Results (STAR) award (2005). Awarded as part of the Massachusetts Bay Project Team.

**PUBLICATIONS**

*Note: Last name Alexander prior to 2007*

1. Enwright, N.M., Kranenburg, C.J., Patton, B.A., Dalyander, P.S., Brown, J.A., Piazza, S.C., and Cheney, W.C., 2021, Developing bare-earth digital elevation models from structure-from-motion data on barrier islands. ISPRS J. Photogrammetry and Remote Sensing 180:269-292.
2. Miner, M., Dalyander, P.S., Di Leonardo, D., Windhoffer, E., Georgiou, I., Dudeck, N., Carruthers, T., Kiskaddon, E. 2021. Advancement of the Southeast Conservation Adaptation Strategy (SECAS) for Project Scale Planning: Chandeleur Islands (Breton National Wildlife Refuge) Restoration. The Water Institute of the Gulf, 104 pages.
3. Kiskaddon, E., Bienn, H., Hemmerling, S., Dalyander, P.S., Grismore, A., Parfait, J., Carruthers, T. 2021. Improving SECAS Gulf-wide Integration. The Water Institute of the Gulf, July 30, 2021, 305 pages.
4. Dalyander, P.S., Miner, M., Khalil, S., Lee, D.M., LeBlanc, W., Newman, A., Cameron, C., Di Leonardo, D. 2021. Barrier Island System Management (BISM): a Holistic System-Approach to Adaptively Manage Louisiana’s Barrier Islands and Headlands. The Water Institute of the Gulf, April 23, 2021, 115 pp.
5. Enwright, N.M., Wang, L., Dalyander, P.S., Wang, H., Osland, M.J., Mickey, R.C., Jenkins, R.L., Godsey, E.S., 2021, Assessing Habitat Change and Migration of Barrier Islands. Estuaries and Coasts, https://doi.org/ 10.1007/s12237-021-00971-w
6. Passeri, D. L., Bilskie, M. V., Hagen, S. C.; Mickey, R. C.; Dalyander, P. S., Gonzalez, V. M., 2021, Assessing the Effectiveness of Nourishment in Decadal Barrier Island Morphological Resilience. Water 13, no. 7: 944. https://doi.org/10.3390/w13070944
7. Georgiou, I., Foster-Martinez, M., Fitzpatrick, C., Jarrell, E., Bridgeman, J., Lee, D., Miner, M., Dalyander, S., & Dong, Z. (2020). 2023 Coastal Master Plan: Barrier Island Model Improvements. Version I. (p. 42). Baton Rouge, Louisiana: Coastal Protection and Restoration Authority.
8. Dalyander, P.S., Mickey, R.C., Passeri, D.L., Plant, N.G. (2020) Development and Application of an Empirical Dune Growth Model for Evaluating Barrier Island Recovery from Storms. J. Mar. Sci. Eng., 8, 977.
9. Mickey, R.C., Dalyander, P.S., McCall, R., Passeri, D., 2020, Sensitivity of storm response to antecedent topography in the XBeach Model, J. Marine Sci. Engr., 8(10), 829.
10. Passeri, D.L., Dalyander, P.S, Long, J.W., Mickey, R.C, Jenkins, R.L., Thompson, D.M., Plant, N.G., Godsey, E.S., Gonzalez, V.M., 2020, The roles of storminess and sea level rise in decadal barrier island evolution, Geo. Research Letters 47(18), 2020GLO89370.
11. Long, J.W., Dalyander, P.S., Poff, M., Spears, B., Borne, B., Thompson, D., Mickey, R.C., Dartez, S., and Grandy, G. 2020, Event and decadal-scale modeling of barrier island restoration designs for decision support. Shore and Beach, V. 99. No. 1, 49-57.
12. Enwright, N.M., Wang, L., Wang, H., Dalyander, P.S., Osland, M.J., Stelly, S.J., Mickey, R.C., Feher, L.C., Borchert, S.M., Day, R.H., 2020. Landscape-Position-Based Habitat Modeling for the Alabama Barrier Island Restoration Feasibility Assessment at Dauphin Island. Chapter A in: Enwright, N.M., Wang, H., Dalyander, P.S., and Godsey, E., eds., 2020, Predicting barrier island habitats and oyster and seagrass habitat suitability for various restoration measures and future conditions for Dauphin Island, Alabama: U.S. Geological Survey Open-File Report 2020–1003, 99 p.,  <https://doi.org/10.3133/ofr20201003>.
13. Wang, H., Enwright, N.M., Soniat, T.M., Herrmann, J.E., La Peyre, M.K., Kim, S.-C., Bunch, B., Stelly, S.J., Dalyander, P.S., Mickey, R.C., 2020, Oyster Habitat Suitability Modeling for the Alabama Barrier Island Restoration Feasibility Assessment at Dauphin Island. Chapter B in: Enwright, N.M., Wang, H., Dalyander, P.S., and Godsey, E., eds., 2020, Predicting barrier island habitats and oyster and seagrass habitat suitability for various restoration measures and future conditions for Dauphin Island, Alabama: U.S. Geological Survey Open-File Report 2020–1003, 99 p.,  <https://doi.org/10.3133/ofr20201003>.
14. Wang, H., Enwright, N.M., Darnell, K.M., La Peyre, M.K., Cebrian, J., Kim, S.-C., Bunch, B., Stelly, S.J., Couvillion, B.R., Dalyander, P.S., Mickey, R.C., Segura, M. Seagrass Habitat Suitability Modeling for the Alabama Barrier Island Restoration Feasibility Assessment at Dauphin Island. Chapter C in: Enwright, N.M., Wang, H., Dalyander, P.S., and Godsey, E., eds., 2020, Predicting barrier island habitats and oyster and seagrass habitat suitability for various restoration measures and future conditions for Dauphin Island, Alabama: U.S. Geological Survey Open-File Report 2020–1003, 99 p.,  <https://doi.org/10.3133/ofr20201003>.
15. Wright, L.D., D’Elia, C., Draayer, J., Nichols, R., Resio, D., Weiss, R., Zarillo, G., Azevedo, L., Carnahan, L., Carabantes, E., Caruson, K., Cosby, A., Dalyander, P.S., Dixon, J., Ersing, R., Garey, J., Graves, S., Hapke, C., Howard, S., Ji, M., Lesen, A., Loftis, D., Luther, M., Mitchum, G., Myers, S., Ruppert, T., Thomas, L., Wahl, T., Watson, S., Weisberg, R., Xu, K. 2020. Assessing and Planning for the Impacts of Storms, Flooding and Sea Level Rise on Vulnerable Gulf of Mexico Coastal Communities: A White Paper and Program Prospectus. Washington DC, Southeastern Universities Research Association. 28 pp
16. Dalyander, P. S., Miner, M., Dausman, A., Cameron, C., Dudeck, N., & Georgiou, I. (2020). Numerical Modeling of the Louisiana, Mississippi, and Alabama Coastal System (LMACS): Model Inventory and Recommendations (p. 14). The Water Institute of the Gulf, Produced for and funded by the National Oceanic and Atmospheric Administration.
17. Mickey, R.C., Long, J.W., Dalyander, P.S., Jenkins, R.L., III, Thompson, D.M., Passeri, D.L., and Plant, N.G., 2019, Development of a modeling framework for predicting decadal barrier island evolution: U.S. Geological Survey Open-File Report 2019–1139, 46 p., https://doi.org/10.3133/ofr20191139.
18. Mickey, R.C., Godsey, E., Dalyander, P.S., Gonzalez, V., Jenkins, R.L., III, Long, J.W., Thompson, D.M., and Plant, N.G., 2020, Application of decadal modeling approach to forecast barrier island evolution, Dauphin Island, Alabama: U.S. Geological Survey Open-File Report 2020–1001, 45 p., <https://doi.org/10.3133/ofr20201001>.
19. Jenkins, R.L., Long, J.W., Dalyander, P.S., Thompson, D.M., Mickey, R.C. (2020). Development of a Process-Based Littoral Sediment Transport Model for Dauphin Island, Alabama.U.S. Geological Survey Open-File Report 2020-1011.
20. Mickey, R.C., Jenkins, R.L., Dalyander, P.S., Thompson, D.M., Plant, N.G., and Long, J.W., 2019, Dauphin Island decadal hindcast model inputs and results: U.S. Geological Survey data release, <https://doi.org/10.5066/P91ALL6C>.
21. Mickey, R.C., Jenkins, R.L., Dalyander, P.S., Thompson, D.M., Plant, N.G., and Long, J.W., 2020, Dauphin Island decadal forecast evolution model inputs and results: U.S. Geological Survey data release, https://doi.org/10.5066/P9PDM1OJ.
22. Torres-Garcia, L.M., Dalyander, P.S., Long, J.W., Zawada, D.G., Yates, K.K., Moore, C., Oabarrieta, M. (2018) Hydrodynamics and Sediment Mobility Processes Over a Degraded Senile Coral Reef. J. Geophys. Res. Oceans 123(10): 7053-7066.
23. Reece, J.S., Watson, A., Dalyander, P.S., Edwards, C.K., Geselbracht, L., LaPeyre, M., Tirpak, B.E., Tirpak, J.M., Woodrey, M. (2018) A multiscale natural community and species-level vulnerability assessment of the Gulf Coast, USA. PLOS One 13(6): e0199844.
24. Mickey, R.C., Long, J.W., Dalyander, P.S., Plant, N.G., and Thompson, D. (2018). A Framework for Modeling Scenario-based Barrier Island Storm Impacts to Inform Decision-Making. Coastal Engineering 138, 98-112.
25. Jenkins, R.L., Dalyander, P.S., Penko, Allison, Long, J.W., and \*Nelson, T.R. (2018). Laboratory observations of artificial sand and oil agglomerates: U.S. Geological Survey Open-File Report 2018–1010.
26. Dalyander, P.S., Mickey, R.C., Long, J.W., and Flocks, J. (2017). Update to previous OFR based on USFWS request for additional analysis. VERSION 2 of: Effects of proposed borrow pits on the near-shore wave climate and longshore sediment transport rate along Breton Island, Louisiana. USGS Open File Report OFR 2015–1055.
27. Thompson, D.M., Dalyander, P.S., Long, J.W., and Plant, N.G. (2017). Correction of elevation offsets in multiple co-located lidar datasets. USGS Open-File Report 2017-1031.
28. Mickey, R.C., Long, J.W., Plant, N.G., Thompson, D.M., and Dalyander, P.S. (2017). A methodology for modeling barrier island storm-impact scenarios. USGS Open-File Report 2017–1009.
29. Dalyander, P.S., Meyers, M., Mattsson, B., Steyer, G., Godsey, E., McDonald, J., Byrnes, M., and M. Ford (2016). Use of structured decision-making to explicitly incorporate environmental process understanding in management of coastal restoration projects: case study on barrier islands of the northern Gulf of Mexico. Journal of Environmental Management 183(3), 497-509.
30. Watson, A., J. Reece, B.E. Tirpak, C. K. Edwards, L. Geselbracht, M. Woodrey, M. LaPeyre, and P. S. Dalyander (2016). The Gulf Coast Vulnerability Assessment: Mangrove, Tidal Emergent Marsh, Barrier Islands, and Oyster Reef. Forest and Wildlife Research Center, Research Bulletin WFA421, Mississippi State University. 100 pp .
31. Dalyander, P.S., Plant, N.G., Long, J.W., and M. McLaughlin (2015). Nearshore dynamics of artificial sand and oil agglomerates. Marine Pollution Bulletin 96(1-2), 344-355.
32. Dalyander, P.S., and B. Butman (2015). Characteristics of storms driving wave-induced seafloor mobility on the U.S. East Coast continental shelf. Continental Shelf Research 104, 1-14.
33. Birchler, J.J., Dalyander, P.S., Stockdon, H. F., and K.J. Doran (2015). National Assessment of Nor’easter-Induced Coastal Erosion Hazards: Mid- and Northeast Atlantic Coast. USGS Open File Report OFR 2015-1154.
34. Dalyander, P.S., Mickey, R.C., Long, J.W., and J. Flocks (2015). Effects of proposed borrow pits on the near-shore wave climate and longshore sediment transport rate along Breton Island, Louisiana. USGS Open File Report OFR 2015–1055.
35. Dalyander, P.S., Long, J.W., Plant, N.G., McLaughlin, M.R., and R.C. Mickey (2015). Field Observations of Artificial Sand and Oil Agglomerates. USGS Open File Report OFR 2015-1057.
36. Dalyander, P.S., Long, J.W., Plant, N.G., and D.M. Thompson (2014). Assessing mobility and redistribution patterns of sand and oil agglomerates in the surf zone. Marine Pollution Bulletin 80 (1-2), 200-209.
37. Dalyander, P.S., Long, J.W., Plant, N.G., and D.M. Thompson (2014). Use of Wave Scenarios to Assess Potential Submerged Oil Mat (SOM) Formation Along the Coast of Florida and Alabama. Appendix D in Operational Science Advisory Team (OSAT3), Investigation of Recurring Residual Oil in Discrete Shoreline Areas in the Eastern Area of Responsibility.
38. Long, J.W., Plant, N.G., Dalyander, P.S., and D.M. Thompson, (2014). A probabilistic method for constructing wave time-series at inshore locations using model scenarios. Coastal Engineering (89), 53-62.
39. Plant, N.G., Flocks, J., Stockdon, H.F., Long, J.W., Guy, K., Thompson, D.M., Cormier, J.M., Smith, C.G., and P.S. Dalyander. (2014). Prediction of the evolution of a barrier-island berm restoration in a time-varying storm climatology. Journal of Geophysical Research – Earth Surface 119 (2), 300-316.
40. Sherwood, C.R., Long, J.W., Dickhudt, P. J., Dalyander, P.S., Thompson, D.M., and N.G. Plant (2014). Inundation of a barrier island (Chandeleur Islands, Louisiana, U.S.A.) during a hurricane: Observed water-level gradients and modeled seaward sand transport. Journal of Geophysical Research – Earth Surface 119, 1498-1515.
41. Butman, B., Aretxabaleta, A.L., Dickhudt, P.J., Dalyander, P.S., Sherwood, C.R., Anderson, D.M., Keafer, B.A., and R.P. Signell (2014). Investigating the importance of sediment resuspension in Alexandrium fundyense cyst population dynamics in the Gulf of Maine. Deep Sea Research II 103, 79-95.
42. Aretxabaleta, A.L., Butman, B., Signell, R.P., Dalyander, P.S., Sherwood, C.R., and D.J. McGillicuddy, Jr. (2014). Near-bottom circulation and dispersion of sediment containing Alexandrium fundyense cysts in the Gulf of Maine during 2010-2011. Deep Sea Research II 103, 96-111.
43. Dalyander, P.S., Butman, B., Sherwood, C., Signell, R., and J. Wilkin. (2013). Characterizing Wave- and Current- Induced Bottom Shear Stress: U.S. Middle Atlantic Continental Shelf. Continental Shelf Research 52, 73-86.
44. Plant, N.G., Long, J.W., Dalyander, P.S., Thompson, D.M., and E.A. Raabe (2013). Application of a hydrodynamic and sediment transport model for guidance of response efforts related to the Deepwater Horizon oil spill in the Northern Gulf of Mexico along the coast of Alabama and Florida. USGS Open File Report OFR 2012-1234.
45. Dalyander, P.S., Butman, B., Sherwood, C., and R.P. Signell (2012). Documentation of the U.S. Geological Survey Sea Floor Stress and Mobility Database. USGS Open File Report OFR 2012-113.
46. Dalyander, P.S., and C.F. Cerco (2010). Integration of a Fish Bioenergetics Model into a Spatially Explicit Water Quality Model: Application to Menhaden in Chesapeake Bay. Ecological Modelling 221 (16), 1922-1933.
47. Dalyander, P.S., and J. C. Fischenich (2010). CEMCAT: Conceptual Ecological Model Construction Assistance Toolbox. Information Exchange Bulletin. EMRRP Bulletin No. 10-1. U.S. Army Corps of Engineers, Vicksburg, MS.
48. Dalyander, P.S., and C.F. Cerco (2010). Integration of an Individual-Based Fish Bioenergetics Model into a Spatially Explicit Water Quality Model (CE-QUAL-ICM). Technical Note. ERDC-TN-SWWRP-10-01. U.S. Army Corps of Engineers, Vicksburg, MS.
49. Butman, B., Dalyander, P.S., Bothner, M.H., Borden, J., Casso, M.A., Gutierrez, B.T., Hastings, M.E., Lightsom, F.L., Martini, M.A., Montgomery, E.T., Rendigs, R.R., and W.S. Strahle (2009). Long-term oceanographic observations in Massachusetts Bay, 1989-2006: USGS Digital Data Series DDS-74, Version 3.0, U.S. Geological Survey, Reston, VA.
50. Dalyander, P.S., and D. W. Hahn (2008). Excimer Laser Photofragmentation/Fragment Detection for Analysis of the Oxygenated Hydrocarbon Ethyl-3-Ethyoxypropionate (EEP): Implications for Atmospheric Monitoring. Applied Spectroscopy 62 (9), 1028-1037.
51. Dalyander, P.S., Gornushkin, I., and D. W. Hahn (2008). Numerical Simulation of Laser-Induced Breakdown Spectroscopy: Modeling of Aerosol Analysis with Finite Diffusion and Vaporization Effects. Spectrochimica Acta B 63 (2), 293-304.
52. Butman, B., Sherwood, C., and P.S. Dalyander (2008). Northeast storms ranked by wind stress and wave-generated bottom stress observed in Massachusetts Bay, 1990-2006. Continental Shelf Research 28 (10-11) 1231-1245.
53. Warner, J.C., Butman, B., and P.S. Dalyander (2008). Storm-driven sediment transport in Massachusetts Bay. Continental Shelf Research 28 (2) 257-282.
54. Butman, B., Dalyander, P.S., Bothner, M.H., and W.N. Lange (2008). Time-series photographs of the sea floor in western Massachusetts Bay, Version 2, 1989 - 1996: USGS Digital Data Series DDS-265, Version 2.0, U.S. Geological Survey, Reston, VA.
55. Butman, B., Dalyander, P.S., Bothner, M.H., and W.N. Lange (2008). Time-series photographs of the sea floor in western Massachusetts Bay, 1996 - 2005: USGS Digital Data Series DDS-266, U.S. Geological Survey, Reston, VA.
56. Butman, B., Dalyander, P.S., Bothner, M.H., and W.N. Lange (2007). Time-series photographs of the sea floor in western Massachusetts Bay, Version 1, 1989-1993: USGS Digital Data Series DDS-265, Version 1.0, U.S. Geological Survey, Reston, VA.
57. Butman, B., Alexander, P.S., Scotti, A., Beardsley, R.C., and S.P. Anderson (2006). Large internal waves in Massachusetts Bay. Continental Shelf Research 26 (17-18), 2029-2049.
58. Butman, B., Alexander, P.S., Anderson, S.P., Lightsom, F.L., Scott, A., and R.C. Beardsley (2006). The Massachusetts Bay Internal Wave Experiment, August 1988: Data Report. USGS Data Series DS-85. U.S. Geological Survey, Reston, VA.
59. Scotti, A., Butman, B., Beardsley, R.C., Alexander, P.S., and S.P. Anderson (2005). A modified beam-to-Earth transformation to measure short-wavelength internal waves with an Acoustic Doppler Current Profiler. Journal of Atmospheric and Oceanic Technology 22 (5), 583-591.
60. Butman, B., Signell, R.P., Warner, J.C., and P.S. Alexander (2005). Oceanographic Setting. Section 4 in: Bothner, M.H., Butman, B. (Eds.), Processes Influencing the Transport and Fate of Contaminated Sediments in the Coastal Ocean – Boston Harbor and Massachusetts Bay. USGS Circular 1302. U.S. Geological Survey, Woods Hole, MA.
61. Butman, B., Warner, J.C., Bothner, M.C., and P.S. Alexander (2005). Predicting the transport and fate of sediments caused by northeast storms. Section 6 in: Bothner, M.H., Butman, B. (Eds.), Processes Influencing the Transport and Fate of Contaminated Sediments in the Coastal Ocean – Boston Harbor and Massachusetts Bay. USGS Circular 1302. U.S. Geological Survey, Woods Hole, MA.
62. Alexander, P.S., and R.A. Holman (2004). Quantification of Nearshore Morphology Based on Video Imaging. Marine Geology 208 (1), 101-111.
63. Butman, B., M.H. Bothner, P. S. Alexander, F.L. Lightsom, M.A. Martini, B.T. Gutierrez, and W.S. Strahle (2004). Long-term Oceanographic Observations in Western Massachusetts Bay Offshore of Boston, Massachusetts: Data Report for 1989-2002: USGS Digital Data Series DDS-74, Version 2, Reston, VA.
64. Butman, B., Alexander, P.S., and M.H. Bother (2004). Time-series Photographs of the seafloor in western Massachusetts Bay: June 1997 to June 1998: USGS Data Series DS-87. U.S. Geological Survey, Reston, VA.
65. Butman, B., Alexander, P.S., and M.H. Bothner (2004). Time-Series Photographs of the Sea Floor in Western Massachusetts Bay: June 1998 to May 1999: USGS Data Series DS-96. U.S. Geological Survey, Reston, VA.
66. Butman, B., Alexander, P.S., and M.H. Bothner (2004). Time-Series Photographs of the Sea Floor in Western Massachusetts Bay: May to September 1999; May to September, 2000; and October, 2001 to February, 2002: USGS Data Series DS-97. U.S. Geological Survey, Reston, VA.
67. Butman, B., Alexander, P.S., Harris, C.K., Traykovski, P.A., ten Brink, M.B., Lightsom, F.S., and M.A. Martini (2003). Oceanographic Observations in the Hudson Shelf Valley, December 1999-April 2000: Data Report: USGS Open File Report OFR02-217. U.S. Geological Survey, Reston, VA.

**PROCEEDINGS AND PRESENTATIONS**

1. Dalyander, P.S., Di Leonardo, D., Dudeck, N., Miner, M.D., Georgiou, I.Y., Mickey, R.C. 2021. Characterizing Storm-Driven Sediment Transport Patterns at a Barrier Island for Varying Ecosystem Restoration Approaches: Case Study at the Chandeleur Islands, Gulf of Mexico, USA. American Geophysical Union (AGU) Fall Meeting, 13-17 December 2021.
2. Miner, M.D., Dalyander, P.S., Georgiou, I.Y., FitzGerald, D. 2021. The Role of Laterally Accreted Spit and Inlet Fill Deposits in Sand Conservation During Barrier Island Transgressive Submergence. American Geophysical Union (AGU) Fall Meeting, 13-17 December 2021.
3. DeJong, A, Dalyander, P.S., Dausman, A., McHugh, C., Kiskaddon, E., Hemmerling, S.A., Cooper, L., Sutcliffe, C., Vorhoff, H., 2021. Evaluating Consequences to Ecological, Societal, and Economic Objectives through Decision Analysis under Uncertainty in Louisiana’s Climate Action Planning Process. American Geophysical Union (AGU) Fall Meeting, 13-17 December 2021.
4. Georgiou, I.Y., Baustian, M.M., Cobell, Z., Courtois, A., Bregman, M., Dalyander, P.S., Di Leonardo, D., Esposito, C.R., Hemmerling, S.A., Jung, H., Liu, B., Foster-Martinez, M., McMann, B., Messina, F., Miner, M., Parfait, J., Yuill, B., 2021. Coastal evolution and resiliency management for a working coast: data and model integration for a transgressive headland: Port Fourchon, Louisiana, USA. American Geophysical Union (AGU) Fall Meeting, 13-17 December 2021.
5. Dausman, A., Dalyander, P.S., McHugh, C., DeJong, A., Kiskaddon, E., Hemmerling, S.A., LaGrone, L., Vorhoff, H., Sutcliff, C., Cooper, L. 2021. Innovatively Applying a Structured Decision-Making Framework to Louisiana Climate Action Planning to Reach Net Zero Emissions by 2050 while Maximizing Equity Outcomes. American Geophysical Union (AGU) Fall Meeting, 13-17 December 2021.
6. Dalyander, P.S., Miner, M., Khalil, S., Lee, D.M., LeBlanc, W., Newman, A., Cameron, C., Di Leonardo, D. 2021. An Objectives-Orientated Approach to Regional Sediment Management: the Louisiana Barrier Island System Management (BISM), Texas General Land Office Sediment Workshop, 10 Nov 2021.
7. Kiskaddon, E., Bienn, H., Hemmerling, S., Dalyander, P.S., Grismore, A., Parfait, J., Miner, M., Hopkins, T.E., Allen, Y., Jones-Farrand, D., Martin, M., Tirpak, B.E., Carruthers, T. A strategic conservation blueprint for natural resource management in the northern Gulf of Mexico, Coastal and Estuarine Research Federation (CERF) 1-11 Nov 2021.
8. Carruthers, T., Dalyander, P.S., Darnell, K.M., DeMargo, K.E., DiLeonardo, D., Georgiou, I.Y., Jung, H., Liu, B., Miner, M., Moss, L.C., Matthews, M.C. Maximizing potential seagrass area through coastal restoration – numerical modeling to support decision making, Coastal and Estuarine Research Federation (CERF) 1-11 Nov 2021.
9. Georgiou, I.Y., Dalyander, P.S., Miner, M., Foster-Martinez, M.R., DiLeonardo, D., Fitzpatrick, C., Lee, D.M., Jarrell, E.R. Barrier Island Model Improvements for the 2023 Coastal Masterplan, Coastal and Estuarine Research Federation (CERF) 1-11 Nov 2021.
10. Dalyander, P.S., Miner, M., DiLeonardo, D., Dudeck, N., Georgiou, I.Y., Mickey, R.C. Characterizing the Short- and Long-term Value of Restoration Alternatives at the Chandeleur Islands, Louisiana, Coastal and Estuarine Research Federation (CERF) 1-11 Nov 2021.
11. Mickey, R.C., Dalyander, P.S., Ciarletta, D., Expansion of the Parameterized Island Gaussian Fit model for representing cross-shore profiles: Beyond the Bell, Coastal and Estuarine Research Federation (CERF) 1-11 Nov 2021.
12. Dalyander, P.S., Miner, M., Khalil, S., Lee, D.M., LeBlanc, W., Newman, A., Cameron, C., Di Leonardo, D. 2021. An Objectives-Orientated Approach to Regional Sediment Management: the Louisiana Barrier Island System Management (BISM), Texas General Land Office Sediment Workshop, 10 Nov 2021.
13. Di Leonardo, D., Dalyander, P.S., Miner, M., Georgiou, I.Y., Dudeck, N., Cameron, C. Using XBeach to evaluate dune versus marsh restoration end member fill templates for enhanced barrier island resiliency: Chandeleur Islands, Gulf of Mexico. American Shore and Beach Preservation Association (ASBPA), 28 Sept – 1 Oct 2021.
14. Dalyander, P.S. A Structured Decision-Making Approach to Regional Sediment Management: Informing Louisiana's Barrier Island System Management (BISM) Program. State of the Coast, 2-4 June 2021.
15. Di Leonardo, D., Baustian, M., Bregman, M., Cobell, Z., Courtois, A., Dalyander, P.S., DeMyers, C., Esposito, C., Georgiou, I., Hermmerling, S., Jung, H., McMann, B., Messina, F., Miner, M., Yuill, B. Coastal Evolution Management for a Resilience Working Coast: Incorporating Local Knowledge into Numerical Modeling in Port Fourchon, Louisiana, USA. Geological Society of America (GSA), 26-30 October 2020.
16. Dalyander, P.S. [Invited]. Presentation at the Young Professionals forum of Global Oceans 2020, September 2020.
17. Dalyander, P.S., Miner, M., LeBlanc, W., Khalil, S., Merrifield, J., Grandy, G., Dausman, A. Louisiana Barrier Island System Management. Florida Shore and Beach Technical Conference, 5-7 February 2020.
18. Dalyander, P.S. [Invited]. Physics in the Coastal Sciences: Public and Non-Profit Sector Applications. American Association of Physics Teachers Winter Meeting, 18-21 January 2020.
19. Passeri, D.L., Bilskie, M.V., Dalyander, P.S. Accounting for future sea level rise in barrier island restoration strategies to reduce storm-driven inundation and erosion. American Geophysical Union Fall Meeting, 9-13 December 2019.
20. Codiga, D.L., Dalyander, P.S., Keay, K.E., Butman, B. Integrated wind and wave stresses reveal long-term increases in storm intensity and frequency 1990-2018. Gulf of Maine 2050 International Symposium, 4-8 November 2019.
21. Di Leonardo, D., Miner, M.D., Carruthers, T., Hemmerling, S., Clark, R., Cobell, Z., Dalyander, P.S., DeMyers, C., McHugh, C., Yuill, B. The Role of Geosciences in Coastal Community Resilience Strategies. Louisiana Geological Society Coastal Symposium, 17-18 October 2019.
22. Di Leonardo, D., Miner, M.D., McHugh, C., Carruthers, T., Clark, R., Cobell, S., Dalyander, P.S., Hemmerling, S., DeMyers, C., Yuill, B. The role of geosciences in coastal community resilience strategies: A case study at Port Fourchon in the Mississippi River delta plain, USA. Geological Society of America Conference, 22-25 September 2019.
23. Dalyander, P.S., Long, J.W., Mickey, R.C., Jenkins, R.L., Enwright, N., Godsey, E. Decadal-Scale Morphodynamic Modeling in Support of Coastal Restoration: Sensitivity of Barrier Island Response to Storms, Sea Level Rise, and Restoration Actions. American Geophysical Union Fall Meeting, 10-14 December 2018.
24. Long, J.W., Dalyander, P.S., Jenkins, R.L., Mickey, R.C., Passeri, D.L., Thompson, D., Plant, N.G. [Invited] An integrated approach to modeling decadal-scale barrier island evolution. 8th International Symposium on Environmental Hydraulics, Notre Dame, IN, 4-7 June 2018.
25. Grandy, G.M., Spears, B., Long, J., Poff, M., Dartez, S., Borne, B., Emmanuel, G. Dalyander, P.S., Breton Island Restoration Evolution Modeling (BIREM). State of the Coast Conference, New Orleans, LA, May 30-June 1 2018.
26. Torres-Garcia, L.M., Dalyander, P.S., Olabarrieta, M., Yates, K.K., Zawada, D.G. Hydrodynamics and sediment mobility processes of a senile coral reef. Ocean Science Conference, Portland, OR, 11-16 February 2018.
27. Nelson, T.R., Dalyander, P.S., Frank, D.P., Braithwaite, E.F., Penko, A., Calantoni, J., Jenkins, R.L. Incipient motion threshold of variable density, size, and shape sand and oil agglomerates. Ocean Science Conference, Portland, OR, 11-16 February 2018.
28. Zettle, B., Godsey, E., McDonald, J., Rees, S., Meyers, M., Dalyander, P.S., Enwright, N. Baseline conditions assessment for the Mississippi Coastal Improvements Program, Comprehensive Barrier Island Restoration Project in Mississippi, USA. 31st Annual national Conference on Beach Preservation Technology, Panama City Beach, FL, 7-9 February 2018.
29. Dalyander, P.S., Mickey, R.C., Passeri, D.L., and Plant, N.G. Development of a Barrier Island Empirical Dune Growth (EDGR) Model. American Geophysical Union (AGU) Fall Meeting, New Orleans, LA, 3-9 December 2017.
30. Dalyander, P.S., Mickey, R.C., Long, J.W., Thompson, D., Jenkins, R., Passeri, D., Plant, N. Development of a Decadal-Scale Morphodynamic Model in Support of Barrier Island Restoration. Coastal and Estuarine Research Federation, Providence, RI, 5-9 November 2017.
31. Schippers, M.M.A., Jacobsen, N.G., Dalyander, P.S., Nelson, T.R., McCall,R. Incipient motion of sand-oil agglomerates. Coastal Dynamics, Helsingør, Denmark, 12-16 June 2017.
32. Nelson, T.R., Dalyander, P.S., Jenkins, R.L., Penko, A.M., Long, J.W., Frank, D.W., Braithwaite, E.F., Calantoni, J. Incipient Motion of Sand and Oil Agglomerates. Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, LA, 6-7 February 2017.
33. Dalyander, P.S., Birchler, J.J., Stockdon, H.F., Thompson, D. Quantifying the relative impact of continental shelf and storm characteristics on nearshore waves during hurricanes. American Geophysical Union Fall Meeting, San Francisco, CA, 12-16 December 2016.
34. Nelson, T.R., Dalyander, P.S., Jenkins, R.L., Penko, A., Long, J.W., Frank, D.P., Braithwaite, E.F., Calantoni, J. Incipient motion of sand and oil agglomerates. American Geophysical Union Fall Meeting, San Francisco, CA, 12-16 December 2016.
35. Flocks, J.G., Terrano, J., Dalyander, P.S. Characterizing barrier-island response to storm and human impact: a century of observations from Breton Island, Louisiana. American Geophysical Union Fall Meeting, San Francisco, CA, 12-16 December 2016.
36. Dalyander, P.S., Long, J.W., Thompson, D. Parameterization of beach and dune recovery to inform decadal scale prediction of barrier island evolution. Ocean Sciences Conference, New Orleans, LA, 21-26 Feb 2016.
37. Long, J.W., Thompson, D., Dalyander, P.S. Combining remotely sensed data and numerical modeling to investigate the impacts of vegetation on barrier island erosion. Ocean Sciences Conference, New Orleans, LA, 21-26 Feb 2016.
38. Torres-Garcia, L., Long, J.W., Dalyander, P.S., Zawada, D. Evaluation and application of wave and ocean circulation models to understand coral reef processes. Ocean Sciences Conference, New Orleans, LA, 21-26 Feb 2016.
39. Dalyander, P.S., Birchler, J., Stockdon, H., Doran, K. Assessing coastal vulnerability to extratropical storms. Coastal and Estuarine Research Federation (CERF) Conference, Portland, OR, 8-10 Nov 2015.
40. Meyers, M.B., Steyer, G.D., Mattsson, B., Dalyander, P.S., Godsey, E., McDonald, J. Structured Decision Making to Facilitate Sustainable Barrier Island Restoration Practices in Mississippi, USA. Coastal and Estuarine Research Federation (CERF) Conference, Portland, OR, 8-10 Nov 2015.
41. Dalyander, P.S., Sand and Oil Agglomerates in the Surf Zone: Using Science to Aid Deepwater Horizon Clean-up Efforts. Presented at the “Navigating shifting sands: Oil on our beaches” forum. Organized by Mississippi-Alabama SeaGrant. 5-August-2015.
42. Dalyander, P.S., Sand and Oil Agglomerates in the Surf Zone: Using Science to Aid Deepwater Horizon Clean-up Efforts. Presented at the “Oil Spill Science Seminar: Impacts of Oil on Coastal Habitats” forum. Organized by Florida Department of Environmental Protection and Florida SeaGrant. 22 July 2015.
43. Miselis, J.L., Long,J.W., Dalyander, P.S., Flocks, J.G., Buster, N.A., Mickey, R.C. Integrating geophysical and oceanographic data to access interannual variability in longshore sediment transport. Coastal Sediments Conference, San Diego, CA, 11-15 May 2015.
44. Dalyander, P.S., Long, J.W., Plant, N.P., Penko, A., Calantoni, J., Thompson, D., McLaughlin, M. Physical Dynamics of Sand and Oil Agglomerates: Field and Laboratory Studies of Artificial Proxies. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Houston, TX, 16-19 February 2015.
45. Dalyander, P.S., Long, J.W., Plant, N., Penko, A., Calantoni, J., Thompson, D., McLaughlin, M. Observational Data Analysis and Numerical Model Assessment of the Seafloor Interaction and Mobility of Sand and Weathered Oil Agglomerates (Surface Residual Balls) in the Surf Zone. American Geophysical Union Fall Meeting, San Francisco, CA, 15-19 December 2014.
46. Elko, N., Feddersen, F., Foster, D., Holman, R., McNinch, J., Ozkan-Haller, H., Plant, N., Raubenheimer, B., Elgar, S. Hay, A., Holland, K.T., Kirby, J., Lippmann, T., Miller, J., Stockdon, H., Ashton, A., Boehm, A., Clark, D., Cowen, E., Dalyander, P.S., Gelfenbaum, G., Hapke, C., MacMahan, J., McNamara, J., McNamara, D., Mulligan, R., Palmsten, M., Ruggiero, P., Sherwood, C., and T.-J. Hsu. The Future of Nearshore Processes Research. American Geophysical Union Fall Meeting, San Francisco, CA, 15-19 December 2014.
47. Plant, N.G., Dalyander, P.S., and J.W. Long. Review of Nearshore Morphologic Prediction. American Geophysical Union Fall Meeting, San Francisco, CA, 15-19 December 2014.
48. Dalyander, P.S., Assessing Mobility and Redistribution Patterns of Sand and Oil Agglomerates in the Surf Zone, Using Science to Aid Deepwater Horizon Clean-up Efforts. Presented at U.S. Coast Guard and Environmental Protection Agency Regional Response Team 9 Quarterly Meeting, Signal Hill, CA, 12-13 August 2014.
49. Dalyander, P.S., and B. Butman. Patterns of Storm Driven Wave-Induced Bottom Shear Stress on the U.S. East Coast Continental Shelf. American Geophysical Union Ocean Sciences Conferences, Honolulu, HI, 23-28 February 2014.
50. Long, J.W., Plant, N.G., Dalyander, P.S., and D.M. Thompson. A Method for Constructing Wave Time-Series at Inshore Locations Using Model Scenarios. American Geophysical Union Ocean Sciences Conferences, Honolulu, HI, 23-28 February 2014.
51. Dalyander, P.S., Long, J.W., Plant, N.G., and D. M. Thompson. Estimating the Potential Cross-shore Distribution of Oil Mat Formation in the Surf Zone during the Deepwater Horizon Oil Spill. Gulf of Mexico Oil Spill & Ecosystem Science Conference, Mobile, AL, 26-29 January 2014.
52. Dalyander, P.S., Long, J.W., Plant, N.G., and D. Thompson. Surf-Zone Mobilization and Alongshore Movement of Residual Sediment and Oil Balls Left from the Deepwater Horizon Oil Spill. Gulf of Mexico Oil Spill & Ecosystem Science Conference, New Orleans, LA, 21-23 January 2013.
53. Long, J.W., Dalyander, P.S., Sherwood, C.R., Thompson, D.M., and N.G. Plant. Nested modeling approach to quantify sediment transport pathways in temporal variability of barrier island evolution. American Geophysical Union (AGU) Fall Meeting, San Francisco, CA, 3-7 December 2012.
54. Dalyander, P.S., and B. Butman. Investigation of Wave-Induced Bottom Shear Stress on the U.S. East Coast and Gulf of Mexico Using the SWAN Numerical Wave Model. Ocean Sciences, Salt Lake City, UT 20-24 Feb 2012.
55. Dalyander, P.S., Butman, B., and J. Wilkin. Characterizing Wave- and Current-Induced Bottom Shear Stress: U.S. Middle Atlantic Bight. American Geophysical Union (AGU) Fall Meeting, San Francisco, CA, 5-9 December 2011.
56. Dalyander, P.S., Butman, B., and J. Wilkin. Characterizing Wave- and Current-Induced Bottom Shear Stress: U.S. Middle Atlantic Bight. Gordon Research Conference (GRC), Coastal Ocean Modeling, South Hadley, MA, 26 June-1 July 2011.
57. Dalyander, P.S., Butman, B., Sherwood, C.R., Signell, R.P., Valentine,P.C., and J.W. Warner. Characterizing Wave and Current Stress on the Sea Floor of the U.S. Atlantic Continental Margin for Coastal and Marine Spatial Planning. Marine Geological and Biological Habitat Mapping Conference (GEOHAB), Helsinki, Finland, 3-6 May 2011.
58. Dalyander, P.S., Butman, B., Sherwood, C., Signell, R.P., and J.C. Warner. Characterizing Bottom Stress for Marine Spatial Planning. National Conference on Science and the Environment (NCSE), Washington, D.C., 19-21 January 2011.
59. Cerco, C.F., and P.S. Dalyander. Multiple Approaches to Coupling the Chesapeake Bay Eutrophication Model with Higher Trophic Levels. American Society of Limnology and Oceanography (ASLO) and the North American Benthological Society (NABS) Joint Summer Meeting, Santa Fe, NM, 6-10 June 2010.
60. Fischenich, C., Dalyander, P.S., and Miller, S. CEMCAT: Conceptual Ecological Model Construction Assistance Toolbox. U.S. Army Corps of Engineers (USACE) Planning Community of Practice Conference, Orlando, FL, 7-10 June 2010.
61. Cerco, C.F., and P.S. Dalyander. From Airshed to Fish: An Interactive Modeling Approach to Chesapeake Bay. US EPA Symposium on Integrated Modeling for Large Aquatic Ecosystems, Washington, D.C., 20-21 January 2010.
62. Dalyander, P.S., and C. Fischenich. CEMCAT: Conceptual Ecological Model Construction Assistance Toolbox, Description of Concept and Solicitation of Feedback. USACE District Planners Webinar, 6 August 2009.
63. Dalyander, P.S. Integration of an Individual-Based Fish Bioenergetics Model into a Spatially Explicit Water Quality Model: Chesapeake Bay. National Conference on Ecosystem Restoration, Los Angeles, CA, 20-24 July 2009.
64. Scotti, A., Butman, B., Beardsley, R.C., Alexander, P., and Anderson, S.P. Using ADCPs to map the current field associated with short-wavelength internal waves; challenges and opportunities. AGU Ocean Sciences Meeting, Portland, OR, 26-30 January 2004.
65. Alexander, P.S., Holman, R., and G. Symonds. Quantitative Analysis of Beach Morphology Based on Video Imaging. American Geophysical Union Fall Meeting, San Francisco, CA, 15-19 December 2000.
66. Alexander, P.S., and R. Holman. Statistical Classification of Beaches. American Geophysical Union Fall Meeting, San Francisco, CA, 13-17 December 1999.