LSU

WE BUILD TEAMS THAT WIN IN LOUISIANA FOR THE WORLD

Explore LSU at AGU25

Where Science Connects Us

The Annual American Geological Union (AGU)Meeting is the world's leading gathering of Earth and space scientists, bringing together tens of thousands of researchers, educators, and innovators to share breakthroughs that shape our understanding of the planet. Each year, AGU highlights cutting-edge science, interdisciplinary collaboration, and real-world solutions to global and regional challenges, including the pressing environmental issues facing Louisiana.

AGU's importance lies in its unique role as a hub for cross-cutting science: it enables researchers from traditionally separate fields to work together, compare findings, spot links, and develop solutions to global and regional challenges. Its conferences, journals, and data-sharing initiatives accelerate scientific discovery and help translate that knowledge into real-world impact for communities and the environment.

LSU stands out at AGU for its interdisciplinary, Louisiana-focused approach to science. With more than 30 academic and research units collaborating across coastal, climate, energy, water, environmental, and societal challenges, LSU brings a comprehensive research community to the conference. Our 250+ participating researchers and 150+ presentations highlight LSU's commitment to producing science that not only advances global knowledge but also delivers real-world impact for Louisiana and the Gulf Coast. Through visible, solutions-driven scholarship, LSU plays a leading role in shaping conversations that matter at AGU.

30+ interdisciplinary LSU units working together to address Louisiana's most pressing environmental, coastal, climate, energy, and water challenges.

250+ LSU researchers participating in AGU 2025 — one of the most diverse and collaborative university research groups represented at the meeting.

150+ LSU posters, presentations, and sessions accepted for AGU 2025, showcasing LSU's leadership in problem-driven, Louisiana-focused science.

LSU is hosting two booths at AGU25: Join us to share LSU research

Booth 1544: Interactive Booth: This 10x10 booth will allow attendees to participate in engaging experiences, including a virtual reality demonstration of flooding in Uptown New Orleans.

Booth 1437: Showcase Booth: Our larger booth, 20x20, will feature a looping presentation highlighting LSU academic programs, areas of expertise, current research, discoveries, and research tools. The space will also serve as a hub for LSU attendees to meet and network in engaging deep dive discussions!

LSU Research at AGU25

LSU at AGU25 is showcasing more than 30 interdisciplinary units of expertise tackling Louisiana's challenges.

Electrical Engineering	Center for Computation & Technology	Physics & Astronomy	Coastal Ecosystem Design Studio
Experimental Statistics	Biological Engineering	Environmental Sciences	Geography & Anthropology
Geology & Geophysics	Computer Science & Engineering	Center for GeoInformatics	Landscape Architecture
Biological & Agricultural Engineering	Louisiana Sea Grant College Program	Energy Institute	Civil & Environmental Engineering
Construction Management	School of Renewable Natural Resources	School of Plant, Environmental and Soil Sciences	Department of Oceanography & Coastal Sciences
Cain Department of Chemical Engineering	Craft & Hawkins Petroleum Engineering	Center for Energy Studies	Center for Advanced Microstructures and Devices
Mechanical & Industrial Engineering	Coastal Studies Institute	Entomology	Biological Sciences
Chemistry	Public Administration	Sociology	Center for River Studies

Monday, December 15, 2025

8:30 a.m. - 12:00 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Really Useful Geophysical Data Tools and Apps Poster	Hall EFG (Poster Hall)	Poster	Juan	Lorenzo
Fine-Grained Sedimentary Systems: Sediment Transport Dynamics, Depositional Patterns, Morphologic Expressions, and Climate Impact I Poster	Hall EFG (Poster Hall)	Poster	Adam	Gartelman
Natural and Nature-Based Features (NNBF) and Hydromorphodynamic Feedbacks in Enhancing Coastal and River Resilience I Poster	Hall EFG (Poster Hall)	Poster	Dilruba	Akter
Advances in Remote Sensing and Modeling of Tree and Forest Dynamics I Poster	Hall EFG (Poster Hall)	Poster	Alexander	Dunaway
General Topics in Oceanography I Poster	Hall EFG (Poster Hall)	Poster	Nehal Mahmud	Khan
Advances in Understanding the Causes, Mechanisms, and Impacts of Quaternary Abrupt Climate Changes and Their Implications for the Future I Poster	Hall EFG (Poster Hall)	Poster	Kristine	DeLong
Habitability Across the Solar System and Exoplanets I Poster	Hall EFG (Poster Hall)	Poster	Dewan Mohammad Enamul	Haque
Hydrologic Extremes: Understanding Drivers, Risks, and Uncertainty I Poster	Hall EFG (Poster Hall)	Poster	Rubayet Bin	Mostafiz
Advancing Precipitation Predictions with Physical Models and Artificial Intelligence I Oral	270	Oral	Wengui	Liang

10:30 a.m.- 12:00 p.m.

Advances in Climate Engineering Science: Benefits, Risks, and Uncertainties	203-205	Oral	Gouri	Anil

Monday, December 15, 2025

2:15 p.m. – 5:45 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Targeting Methane Mitigation: Quantification of Anthropogenic Methane Sources at All Scales Through Atmospheric Measurements III Poster	Hall EFG (Poster Hall)	Poster	Kanchan	Maiti
Coastal Subsidence and Relative Sea Level Rise: Assessments, Processes, Projections, and Mitigation in Natural and Urban Environments II Poster	Hall EFG (Poster Hall)	Poster	George	Voyiadjis
The Role of the Reactive Silica Cycle in Climate and Ocean Evolution Poster	Hall EFG (Poster Hall)	Poster	Manab	Dutta
Climate-Informed Risk Assessment for Extreme Events I Poster	Hall EFG (Poster Hall)	Poster	Lakshmi Prasanna	Kunku
Applications at the Intersection of Science, Practice, and Policy to Proactively Address Natural Hazard Risk I Poster	Hall EFG (Poster Hall)	Poster	Luke	Mangney
Exploring Synergies and Trade-offs in Energetic Landscapes: Agrivoltaics, Ecovoltaics, and Other Multiuse PV Solar Energy III Poster	Hall EFG (Poster Hall)	Poster	Holly	Andrews
Subsurface Resources and Earth Processes at the Intersection of Energy, Sustainability, and Innovation Poster	Hall EFG (Poster Hall)	Poster	Ipsita	Gupta
Remote Sensing of Rivers, Lakes, Reservoirs, and Wetlands III Poster	Hall EFG (Poster Hall)	Poster	Lei	Wang
Advancements in Watershed Modeling to Support Water Management III Oral	220-222	Oral	Mariam	Valladares Castellanos
Impacts and Resiliency of Coastal Ecosystems to Transient Disturbances I Oral	295-296	Oral	Ziyan	Lei
Impacts and Resiliency of Coastal Ecosystems to Transient Disturbances I Oral	295-296	Oral	Mukseet	Mahmood
Advances in Machine Learning for Earth Science: Observation, Modeling, and Applications III Oral	New Orleans Theater B	Oral	Haq	Nazari

4:15- 5:45 p.m.

Advances in Machine Learning for Earth Science: Observation, Modeling, and Applications III Oral	New Orleans Theater B	Oral	Haq	Nazari

Tuesday, December 16, 2025

8:30 a.m. - 12:00 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Advances in Cloud and Precipitation Processes: Integrating Observations, Modeling, and Theory III Poster	Hall EFG (Poster Hall)	Poster	Vishal	Juneja
Understanding Erosional to Depositional Landscape Dynamics I Poster	Hall EFG (Poster Hall)	Poster	Vivian	Grom
Monitoring, Modeling, and Mitigation of Harmful Algal Blooms and Environmental Pathogens Poster	Hall EFG (Poster Hall)	Poster	Sayed Omar	Hofioni
Wireless Data Networking for Distributed Sensing in the Earth Sciences: Connecting the Sciences Poster	Hall EFG (Poster Hall)	Poster	Michael Nii Attoh	Agyiri
Understanding Erosional to Depositional Landscape Dynamics I Poster	Hall EFG (Poster Hall)	Poster	Yuqi	Song
Improved Observational and Modeling Skills to Understand Tropical Cyclones and Winter Storms and Their Impacts in the Coastal Zone I Poster	Hall EFG (Poster Hall)	Poster	Jesbin	George
Monitoring, Modeling, and Mitigation of Harmful Algal Blooms and Environmental Pathogens Poster	Hall EFG (Poster Hall)	Poster	Naresh	Suwal
Extreme Events and Hydrological Hazards During the Holocene and Common Era Poster	Hall EFG (Poster Hall)	Poster	Dakota	Sievers
Earth Observations for Monitoring and Assessment of Risk and Resilience of Communities and Infrastructure III Poster	Hall EFG (Poster Hall)	Poster	Ahmed	Abdalla
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Jacob	Reinhardt
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Md Nabid	Hashar
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Rongqing	Du
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Muhamad Farid	Geonova
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Nathan	Figueredo
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Jameson	Woodall
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Kaitlyn	Gooch
From Task-Specific Machine Learning to Foundation Models in Seismology and Geodesy I Poster	Hall EFG (Poster Hall)	Poster	John	Akutcha
Extreme Hazards Across the Earth: Observations, Modeling, Outlooks, Mitigation, and Restoration II Poster	Hall EFG (Poster Hall)	Poster	Lakshmi Prasanna	Kunku
Data-Driven Agriculture: Remote Sensing and Machine Learning Solutions for Food Security I Poster	Hall EFG (Poster Hall)	Poster	Maruf	Hossain
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Hemanta	Pokharel

Tuesday, December 16, 2025

8:30 a.m. - 10:00 a.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Forest Ecophysiology: Forest Physiological and Ecological Processes from Molecules to Ecosystems I Oral	267-268	Oral	Brett	Wolfe
21st Century Geodesy: Growing the Field by Highlighting Contributions and Careers in the Service of Society II Oral	357	Oral	Karen	Luttrell
Habitability Across the Solar System and Exoplanets II Oral	292	Oral	Thomas	Bornholdt
Habitability Across the Solar System and Exoplanets II Oral	292	Oral	Peter	Doran
Orogenic Belts and Plateaus: Growth, Collapse, and Climate Interactions I Oral	352	Oral	Guangsheng	Zhuang

10:30 a.m. – 12:00 p.m.

Advances in Measurements, Synthesis, Analysis, and Modeling of Greenhouse Gas Fluxes from Natural Ecosystems I Oral	New Orleans Theater C	Oral	Sophia	Lingo
Wetlands to Wetlandscapes: Wetland Hydrologic and Biogeochemical Functions Under Natural and Human Disturbances I Oral	342	Oral	Robert	Turner

Tuesday, December 16, 2025

2:15 p.m. -5:45 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Global Nitrous Oxide Budget and Nitrogen-Climate Interactions: Advances in Observations, Modeling, and Synthesis II Poster	Hall EFG (Poster Hall)	Poster	Madelyn	Hathcock
Physical and Biogeochemical Processes on the Warm Antarctic Continental Shelves II Poster	Hall EFG (Poster Hall)	Poster	Ziran	Wei
Magmatic and Hydrothermal Processes at Mid-Ocean Ridges II Poster	Hall EFG (Poster Hall)	Poster	Crystal	Luna
Understanding Gulf Ocean Systems: Advances in Improving Ocean Circulation Forecast Skill II Poster	Hall EFG (Poster Hall)	Poster	Bentao	Li
Fluvial Dynamics and Landscape Evolution in Tectonically Active Mountains III Poster	Hall EFG (Poster Hall)	Poster	Mehran	Basmenji
Navigating Risk in the 21st Century: A New Resilience Paradigm Poster	Hall EFG (Poster Hall)	Poster	Nina	Lam
Fluvial Dynamics and Landscape Evolution in Tectonically Active Mountains III Poster	Hall EFG (Poster Hall)	Poster	Adam	Forte
Global Data Synthesis in Marine Geology and Geophysics I Poster	Hall EFG (Poster Hall)	Poster	Emily	LaPrime
Climate Data and Assessments: Challenges and Opportunities for Enhanced Decision-Making II Poster	Hall EFG (Poster Hall)	Poster	Shilthia	Monalisa
Understanding Gulf Ocean Systems: Advances in Improving Ocean Circulation Forecast Skill II Poster	Hall EFG (Poster Hall)	Poster	Junhong	Liang

2:15 p.m. – 3:45 p.m.

Carbon Cycling in Global Wetlands and Peatlands III Oral	261-262	Oral	Gage	Hunter
Understanding Gulf Ocean Systems: Advances in Improving Ocean Circulation Forecast Skill I Oral	210	Oral	Jianguo	Yuan

4:15 p.m. – 5:45 p.m.

River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes III Oral	252-254	Oral	Giulio	Mariotti
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes III Oral	252-254	Oral	Giancarlo	Portocarrero
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes III Oral	252-254	Oral	Faith	Walton
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes III Oral	252-254	Oral	Sarah	Brannum

Wednesday, December 17, 2025

8:30 a.m. - 12:00 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Impacts and Resiliency of Coastal Ecosystems to Transient Disturbances II Poster	Hall EFG (Poster Hall)	Poster	Ziran	Wei
Coastal Hydrology: Observation, Modeling, and Prediction of Surface and Subsurface Processes and Patterns I Poster	Hall EFG (Poster Hall)	Poster	Ting-Jui	Nieh
Coastal Hydrology: Observation, Modeling, and Prediction of Surface and Subsurface Processes and Patterns I Poster	Hall EFG (Poster Hall)	Poster	Noah	Flaherty
Miocene Climate Dynamics: From Poles to Tropics and Land to Sea I Poster	Hall EFG (Poster Hall)	Poster	Sophie	Warny
Bridging Scales and Systems: Advances in Regional Earth System and Hydroclimate Modeling for Extremes, Impacts, and Decision Support I Poster	Hall EFG (Poster Hall)	Poster	Yixuan	Wang
Coastal Wetland Carbon and Nitrogen Cycles: Recent Advances in Measurements, Modeling, and Syntheses I Poster	Hall EFG (Poster Hall)	Poster	Anamika	Dristi
Fundamentals of Geological Storage: Geochemistry, Geomechanics, Fluid Dynamics, and Caprock Integrity II Poster	Hall EFG (Poster Hall)	Poster	Mohammad	Zamehrian
Continental to Oceanic Rifts: Formation and Evolution III Poster	Hall EFG (Poster Hall)	Poster	Sarah	Seale
The Coastal Workforce in Science, Engineering, and Design Professions: Expanding Workforce Pathways to Face Present and Future Challenges Poster	Hall EFG (Poster Hall)	Poster	Supuni Dhameera	Silva
Exploring Planetary Materials Through Computational Simulations and Machine Learning II Poster	Hall EFG (Poster Hall)	Poster	Bijaya	Karki
The Coastal Workforce in Science, Engineering, and Design Professions: Expanding Workforce Pathways to Face Present and Future Challenges Poster	Hall EFG (Poster Hall)	Poster	Mariam	Afuwape
Bridging Scales and Systems: Advances in Regional Earth System and Hydroclimate Modeling for Extremes, Impacts, and Decision Support I Poster	Hall EFG (Poster Hall)	Poster	Xiaochen	Zhao
Coastal Wetland Carbon and Nitrogen Cycles: Recent Advances in Measurements, Modeling, and Syntheses I Poster	Hall EFG (Poster Hall)	Poster	S. M. Mahatab	Uddin
Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes, and Morphodynamics I Poster	Hall EFG (Poster Hall)	Poster	Nelson	Tull
Bridging Scales and Systems: Advances in Regional Earth System and Hydroclimate Modeling for Extremes, Impacts, and Decision Support I Poster	Hall EFG (Poster Hall)	Poster	Daoyang	Bao
Continental to Oceanic Rifts: Formation and Evolution III Poster	Hall EFG (Poster Hall)	Poster	Jonathan	Snow
Exploring Planetary Materials Through Computational Simulations and Machine Learning II Poster	Hall EFG (Poster Hall)	Poster	Abin	Shakya
Coastal Wetland Carbon and Nitrogen Cycles: Recent Advances in Measurements, Modeling, and Syntheses I Poster	Hall EFG (Poster Hall)	Poster	Jeydon	DeWaters
Fluvial Reorganization: Linking Mechanics, Morphology, and Biological Impacts on Reach and Network Scale I Poster	Hall EFG (Poster Hall)	Poster	Dylan	Shoemaker
Implications of Climate Change for Global Agriculture: Impacts, Adaptation, Mitigation IV Poster	Hall EFG (Poster Hall)	Poster	Tanvir	Hossain
The Coastal Workforce in Science, Engineering, and Design Professions: Expanding Workforce Pathways to Face Present and Future Challenges Poster	Hall EFG (Poster Hall)	Poster	Taseen	Rahman
River Deltas: Observing, Modeling, and Predicting Natural and Anthropogenic Changes I Poster	Hall EFG (Poster Hall)	Poster	Hemanta	Pokharel

Wednesday, December 17, 2025

8:30 a.m. - 10:00 a.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Advances in Urban Flood Risk Assessment and Adaptation I Oral	295-296	Oral	Israt Jahan	Tama
Climate of the Common Era II Oral	215-216	Oral	Gwendal	Dolou
The Coproduction, Implementation, and Communication of Climate Services in the United States and Abroad I Oral	346-347	Oral	Yao	Wang

10:30 a.m. – 12:00 p.m.

Coastal Geomorphology and Morphodynamics II Oral	243-244	Oral	Kehui	Xu
Coastal Geomorphology and Morphodynamics II Oral	243-244	Oral	Shanki Amaya	Wanni Arachchige Don
Coastal Geomorphology and Morphodynamics II Oral	243-244	Oral	Michael	Rabalais
Global Environmental Change Student and Early Career GeoBurst Session I GeoBurst	343	GeoBurst	Gouri	Anil

Wednesday, December 17, 2025

2:15 p.m. -5:45 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Earth and Planetary Cores: Interdisciplinary Insights on Structure, Dynamics, and Evolution II Poster	Hall EFG (Poster Hall)	Poster	Sajin	Satyal
Advances in Remote Sensing, AI, and Modeling for Hydrology and the Terrestrial Water Cycle I Poster	Hall EFG (Poster Hall)	Poster	Caitlin	Turner
Advances in Remote Sensing and Modeling of Wetlands I Poster	Hall EFG (Poster Hall)	Poster	Victoria	Ayala
Integrating Perspectives on Carbon Cycling Across the Marine Continuum II Poster	Hall EFG (Poster Hall)	Poster	Ogooluwa	Adeagbo
Plastic and Plastic-Associated Chemicals in the Hydrosphere: From Source to Sink I Poster	Hall EFG (Poster Hall)	Poster	Matthew	Weirich
Digital Tools and Earth Observations for Resilient Coastal and Inland Agroecosystems II Poster	Hall EFG (Poster Hall)	Poster	Frank Anyoka	Adekilae
Multisector Dynamics: Modeling Earth System–Energy–Human Interactions in Urban Environments I Poster	Hall EFG (Poster Hall)	Poster	Brad	Jennings
Integrating Perspectives on Carbon Cycling Across the Marine Continuum II Poster	Hall EFG (Poster Hall)	Poster	Matthew	Parker
Coastal Geomorphology and Morphodynamics III Poster	Hall EFG (Poster Hall)	Poster	Maia	Woodard
Earth and Planetary Cores: Interdisciplinary Insights on Structure, Dynamics, and Evolution II Poster	Hall EFG (Poster Hall)	Poster	Olaniyi	Anisere
Coastal Geomorphology and Morphodynamics III Poster	Hall EFG (Poster Hall)	Poster	Carol	Wilson
Coastal Geomorphology and Morphodynamics III Poster	Hall EFG (Poster Hall)	Poster	Madelyn	Kurtz
Monitoring, Prediction, and Mitigation of Harmful Algal Blooms (HABs) II Poster	Hall EFG (Poster Hall)	Poster	Lee	Potter
Science and Society: Community Science and Citizen Science II Poster	Hall EFG (Poster Hall)	Poster	Dilruba	Akter
Earth and Planetary Cores: Interdisciplinary Insights on Structure, Dynamics, and Evolution II Poster	Hall EFG (Poster Hall)	Poster	Jianwei	Wang
Advances in Remote Sensing and Modeling of Wetlands I Poster	Hall EFG (Poster Hall)	Poster	Basant	Awasthi
Global Environmental Change Student and Early Career GeoBurst Session II Poster	Hall EFG (Poster Hall)	Poster	Gouri	Anil

Wednesday, December 17, 2025

2:15 p.m. – 3:45 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Tropical Cyclones: Observations, Modeling, and Predictability—Today and into the Future III GeoBurst	275-277	GeoBurst	Vishal	Juneja
Tropical Cyclones: Observations, Modeling, and Predictability—Today and into the Future III GeoBurst	275-277	GeoBurst	Harish	Uppu
Advances in Ecohydrology: Quantifying the Influence of Land Use/Land Cover Change on Hydrology and Climate II Oral	228-230	Oral	Kolin	Bilbrew
Integrating Perspectives on Carbon Cycling Across the Marine Continuum I Oral	215-216	Oral	Kaitlyn	Hall
Ices and Volatiles on Solid Bodies: Implications for Planetary Evolution and In Situ Resources II Oral	293	Oral	Roodra	Manogaran

4:15 p.m. – 5:45 p.m.

Bridging Scales and Systems: Advances in Regional Earth System and Hydroclimate Modeling for Extremes, Impacts, and Decision Support III Oral	New Orleans Theater A	Oral	Z. George	Xue

Thursday, December 18, 2025

8:30 a.m. - 12:00 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Advancing Geological Realism in Groundwater Hydrology: Building on the Work of Graham Fogg I Poster	Hall EFG (Poster Hall)	Poster	Yuqi	Song
Advancing Geological Realism in Groundwater Hydrology: Building on the Work of Graham Fogg I Poster	Hall EFG (Poster Hall)	Poster	Mohammed	Elkharakany
Spatial Fingerprints of Climate Extremes: Impacts on Ecosystem Processes, Vegetation Function, and Biodiversity I Poster	Hall EFG (Poster Hall)	Poster	Andrew	Nelson
Frontiers in Hydroclimatic Extremes, Stormwater, and Compound Flooding: Modeling, Monitoring, and Management IV Poster	Hall EFG (Poster Hall)	Poster	Taofiq	Yusuf
Planetary Analog Field Work to Support and Enable Crewed and Robotic Exploration of Our Solar System Poster	Hall EFG (Poster Hall)	Poster	Juan	Lorenzo
Remote Sensing of Soil Processes Poster	Hall EFG (Poster Hall)	Poster	Parvin	Momenian
Global Change Impacts and Adaptation for Urban Resiliency II Poster	Hall EFG (Poster Hall)	Poster	Xinyang	Zhang
Dust in a Changing Climate: From Small-Scale Insights to Large-Scale Understanding II Poster	Hall EFG (Poster Hall)	Poster	Edwin	Torres-Moya
Spatial Fingerprints of Climate Extremes: Impacts on Ecosystem Processes, Vegetation Function, and Biodiversity I Poster	Hall EFG (Poster Hall)	Poster	Nicholas	Lonergan
Exploring Earth System Complexity with Digital Twins and ≥3D Visualization and Sonification I Poster	Hall EFG (Poster Hall)	Poster	Shilthia	Monalisa
Earth and Planetary Surface Processes General Contributions Poster	Hall EFG (Poster Hall)	Poster	Reilly	Corkran
Interdisciplinary Advances in Catastrophe Modeling and Disaster Resilience: Bridging Science, Policy, and Practice I Poster	Hall EFG (Poster Hall)	Poster	Nehal Mahmud	Khan
Frontiers in Hydroclimatic Extremes, Stormwater, and Compound Flooding: Modeling, Monitoring, and Management IV Poster	Hall EFG (Poster Hall)	Poster	Samuel	Zapp
AI/ML and Remote Sensing for Water and Wetlands: Integrating Spatial Analytics and Participatory Approaches for Climate-Resilient Ecosystem Management I Poster	Hall EFG (Poster Hall)	Poster	Manisha	K C
Tropical Cyclones: Observations, Modeling, and Predictability—Today and into the Future GeoBurst Session VI Poster	Hall EFG (Poster Hall)	Poster	Vishal	Juneja
Tropical Cyclones: Observations, Modeling, and Predictability—Today and into the Future GeoBurst Session VI Poster	Hall EFG (Poster Hall)	Poster	Harish	Uppu

Thursday, December 18, 2025

10:30 a.m. – 12:00 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Evapotranspiration (ET): Advances in In Situ ET Measurements and Remote Sensing-Based ET Estimation, Mapping, and Evaluation III Oral	217-219	Oral	Tanvir	Hossain
Hydrogeophysics: Subsurface Characterization and Monitoring Using Geophysical Methods, Remote Sensing, and Hydrogeological Methods II Oral	238-239	Oral	Yuqi	Song
Advancing Reproducible and FAIR Science: Tools, Practices, and Incentives I GeoBurst	292	GeoBurst	Dewan Mohammad Enamul	Haque
Geothermal Energy: Technical Advancements in Deep Sedimentary Basins, Extreme Superhot Environments, and Energy Storage to Create Potential for Clean, Resilient Baseload Power I Oral	245	Oral	Richard	Budiman

Thursday, December 18, 2025

2:15 p.m. – 5:45 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
Hydrologic Intensification, Aridification, and Compound Extremes: Drivers, Impacts, and Governance I Poster	Hall EFG (Poster Hall)	Poster	Zoe	Whitton
Connecting Science and Communities: Cocreated and Integrated Approaches for Understanding and Addressing Water Hazards in a Shifting Hydroclimatic Landscape I Poster	Hall EFG (Poster Hall)	Poster	Mackendy	Ceragene
Carbon Dioxide Removal at Scale: Science, Technology, Policy, and Market I Poster	Hall EFG (Poster Hall)	Poster	Yanda	Ou
The Cascadia Megathrust and Beyond: From Fundamental Scientific Processes to Societal Resilience II Poster	Hall EFG (Poster Hall)	Poster	Brandon	Shuck
Geothermal Energy: Technical Advancements in Deep Sedimentary Basins, Extreme Superhot Environments, and Energy Storage to Create Potential for Clean, Resilient Baseload Power II Poster	Hall EFG (Poster Hall)	Poster	Mohamed	Abdelaal
Connecting Science and Communities: Cocreated and Integrated Approaches for Understanding and Addressing Water Hazards in a Shifting Hydroclimatic Landscape I Poster	Hall EFG (Poster Hall)	Poster	Fahmida	Akhter
Advancing Reproducible and FAIR Science: Tools, Practices, and Incentives GeoBurst Session III Poster	Hall EFG (Poster Hall)	Poster	Dewan Mohammad Enamul	Haque

2:15 p.m. – 3:45 p.m.

Advancing Environmental Monitoring Through Near-Surface Remote Sensing: Capabilities, Applications, and Future Directions II Oral	261-262	Oral	Maruf	Hossain
(Dis)connectivity and Variability Across Processes and Landscapes II Oral	245	Oral	Nelson	Tull
Strategies for Combining Innovative Monitoring and Modeling Systems in Coastal Environments I Oral	215-216	Oral	Rongqing	Du

4:15 p.m. – 5:45 p.m.

Bridging Remote Sensing, Machine Learning, and Ecological Modeling to Address Forest Health Challenges II Oral	261-262	Oral	Sudeep	Kuikel

Friday, December 19, 2025

8:30 a.m. - 12:00 p.m.

Session Title	Room	Session Type	Presenter First Name	Presenter Last Name
A Multidisciplinary Perspective into Crustal Evolution: From Subduction Zones to Orogens II Poster	Hall EFG (Poster Hall)	Poster	Devynn	Wilderman
Connecting Science and Communities: Cocreated and Integrated Approaches for Understanding and Addressing Water Hazards in a Shifting Hydroclimatic Landscape II Oral	225-227	Oral	Nazla	Bushra
The Global Water Cycle: Coupling and Exchanges of Mass and Energy Between the Ocean, Land, Cryosphere, and Atmosphere II Poster	Hall EFG (Poster Hall)	Poster	Nusrat	Jahan
Underground Hydrogen Storage: Numerical, Analytical, and Laboratory Investigations Poster	Hall EFG (Poster Hall)	Poster	Ruoqin	Pei
Sustainable Agriculture and Climate Change: Toward Decarbonization of Agrifood Systems II Poster	Hall EFG (Poster Hall)	Poster	Anurag	Mandalika
Morphodynamic Processes in Human-Impacted Fluviolacustrine Environments II Poster	Hall EFG (Poster Hall)	Poster	Leo	Guerrero
Underground Hydrogen Storage: Numerical, Analytical, and Laboratory Investigations Poster	Hall EFG (Poster Hall)	Poster	Cecelia	Castleberry
Environmental Changes and Human Migration: Advances in Modeling and Analysis II Poster	Hall EFG (Poster Hall)	Poster	Julianna	Rhodes
Characterizing the Environmental Impacts of Active, Abandoned, and Orphaned Oil and Gas Wells, Locating Undocumented Orphan Wells, Prioritizing Plugging, and Advancing Well Reuse for Renewable Energy Applications Poster	Hall EFG (Poster Hall)	Poster	Ipsita	Gupta
Innovations in Water Resources Planning and Management: Monitoring, Modeling, and Stakeholder Engagement Poster	Hall EFG (Poster Hall)	Poster	Kolin	Bilbrew
Advancing Agricultural and Ecosystem Science with Imaging Spectroscopy II Poster	Hall EFG (Poster Hall)	Poster	Chi	Qiu

8:30 a.m. - 10:00 a.m.

Hydrologic Intensification, Aridification, and Compound Extremes: Drivers, Impacts, and Governance II Oral	207	Oral	Huanping	Huang

10:30 a.m. – 12:00 p.m.

Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes, and Morphodynamics II Oral	245	Oral	Giulio	Mariotti
Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes, and Morphodynamics II Oral	245	Oral	Vindhyawasini	Prasad
Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes, and Morphodynamics II Oral	245	Oral	Philip	Brahana

Researcher	Presentation Title
Ahmed Abdalla	Subsidence in Southern Louisiana Based on GPS and Water Level Monitoring with Numerical Modeling
Ahmed Abdalla	Enhancing GGM Coefficients for Precise Geoid Modeling using Pinn
Ahmed Abdalla	Multi-Regional Geospatial Modeling of Land Subsidence in Louisiana using Insar and Machine Learning
Mohamed Abdelaal	Methane Emissions from Orphan Wells: Insights from Subsurface and Well Characteristics in Louisiana
Mohamed Abdelaal	Feasibility of Underground Hydrogen Storage in a Louisiana Saline Formation
Ogooluwa Adeagbo	Future Warming, Freshening and Acidification in the Gulf of America: Dynamic Downcasting of CMPI6 Projections
Frank Anyoka Adekilae	SCIWS4 Large-Scale Geospatial Data Analysis and Visualization in R
Frank Anyoka Adekilae	Modeling Root-Zone Moisture Dynamics from Surface Observations using Pseudo-Diffusivity
Mariam Afuwape	Broadening Participation in Coastal and Environmental Research for K-20 in the Gulf Coast Region: Mississippi River Delta Transition Initiative
Mariam Afuwape	Exploring the Affective Impacts of Field-Based Environmental and Geoscience Learning Experiences on Undergraduate Scholars
Michael Nii Attoh Agyiri	Lacadian: An Integrated Architecture for Field-Scale Environmental Sensing and Telemetry in Louisiana
Fahmida Akhter	H51C-07 from Projections To Planning: A Modular Framework for Climate-Smart Flood Risk Modeling using R2D, Brails and in-Core in Coastal Louisiana
Fahmida Akhter	Evaluating the Economic Impact of Flood Risk on Housing Prices in the U.S. Gulf Coast using Spatial and Machine Learning Models
Fahmida Akhter	What Areas of Louisiana Have the Highest and Lowest Risks To Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
Dilruba Akter	Comparative Evaluation and Policy Analysis of Natural and Nature-Based Features
Dilruba Akter	Corporate Social Responsibility and Community Best Practices in the Global Energy Sector
John Akutcha	Enhancing GGM Coefficients for Precise Geoid Modeling Using PINN
Holly Andrews	B32B Quantifying Rates and Coupling of Biogeochemical Cycles in Terrestrial Ecosystems I Oral
Holly Andrews	GC12C Exploring Synergies and Trade-offs in Energetic Landscapes: Agrivoltaics, Ecovoltaics, and Other Multiuse PV Solar Energy II Oral
Holly Andrews	GC12C-05 The Potential for Agrivoltaics and Climate-Smart Crops within a Megawatt Scale Photovoltaic Facility: Opportunities for Continued Food Production and Irrigation Savings.
Holly Andrews	GC11C Exploring Synergies and Trade-offs in Energetic Landscapes: Agrivoltaics, Ecovoltaics, and Other Multiuse PV Solar Energy I Oral
Holly Andrews	Agrivoltaic Hot Spots and Hot Moments: Redistribution of Soil Moisture and Carbon within a Fixed-Tilt Agrivoltaic System
Holly Andrews	GC13H Exploring Synergies and Trade-offs in Energetic Landscapes: Agrivoltaics, Ecovoltaics, and Other Multiuse PV Solar Energy III Poster
Holly Andrews	Mitigating Dust Accumulation in Arid Photovoltaic Systems with Crops
Holly Andrews	B33K Quantifying Rates and Coupling of Biogeochemical Cycles in Terrestrial Ecosystems II Poster
Gouri Anil	GC12A-03 Assessing Impacts of Stratospheric Aerosol Injections on Coral Bleaching
Gouri Anil	GC32E-02 Could Stratospheric Aerosol Injection Reduce Coral Bleaching?
Olaniyi Anisere	Effect of Light Elements on the Melting Behavior of Liquid Iron Alloys Under Earth's Inner Core Boundary Conditions.
Regan Archie	P21A-04 Measurements of Lab-Prepared Brines and Hypersaline Lakes from Western Australia, the Antarctic Dry Valleys, and a Southern California Saltern: Implications for Determining Habitability Elsewhere in the Solar System

Researcher	Presentation Title
Kevin Armbrust	Graph-Based Contaminant Identification in Mixture of Analytes Relevant To Soil Studies
Anandkumar Arumugam	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Anandkumar Arumugam	Geochemical Reaction Experiments of Hydrogen-Brine-Rock Systems for Underground Hydrogen Storage
Anandkumar Arumugam	Methane Production from Storage of Sugarcane Bagasse
Anandkumar Arumugam	Methane Emissions from Unplugged Abandoned Oil and Gas Wells in Louisiana, USA
Ayat Salah Al Assi	Pathways To Resilience: FORTIFIED® Elevated Manufactured Homes for Affordable Housing in Hazard-Prone Regions
Ayat Salah Al Assi	Social Vulnerability and Wind Risk Reduction through Enhanced Building Codes in Louisiana
Basant Awasthi	Assessing Deep Learning Robustness for Phragmites Australis Classification using Multi-Year Integrated Sentinel-2 Time Series in the Mississippi River Delta
Basant Awasthi	A Time-Series Approach to Forcasting Land Area Dynamics in the Mississippi River Delta
Victoria Ayala	Integrating Google Earth Engine for Near-Real-Time Monitoring of Giant Salvinia (Salvinia Molesta) in Wetlands
Peter Bacopoulos	Simulating the Impacts of Green and Grey Solutions for Compound Driven Nuisance Flooding: Tides, Wave Runup, and Non-Tidal Residual
Suraj K Baigain	Insights into Mobility of Magma in the Solid Earth from First Principles Molevular Dynamics Simulations
Daoyang Bao	OS43A-08 Hydrodynamic-Sediment Transport Model in Galveston Bay During Hurricane Harvey
Daoyang Bao	NH13B-01 Resilence of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding Induced by Hurricae Harvey (2017)
Daoyang Bao	A Machine Learning-Based Prediction-To-Map Framework for Rapid and Accurate Spatial Flood Prediction
Daoyang Bao	Compound Flooding in Deltaic Landscapes: Lessons from Hurrican Ida with a Coupled Hydrological-Ocean Model
Daoyang Bao	A34A-04 Beyond Boundaries: Dynamically 2-Way Coupled Hydrology-Ocean Models for Coastal Hazard Forcasting Across the Leo Continuum
Sibel Bargu	Using Algal Pigment Field Data to Validate Remote Sensing and Initialize Numerical Modeling for Prediction of Future Harmful Algal Blooms
Philip J Bart	C33B-07 Differential Sedimentary Responses to Grounding Zone and Ice Shelf Retreat Around Ross Bank
Phillip J Bart	OS33A-08 Spatial Variability in Particulate Carbon Export across the Ross Sea Marginal Ice Zone
Phillip J Bart	Biogenic Silica Accumulation in the Ross Sea Shelf Sediment
Laura Basirico	Graph-Based Contaminant Identification in Mixture of Analytes Relevant To Soil Studies
Mehran Basmenji	Earthquake Sequence Style As a Driver of Landsacpe Evolution: Insights from Coupled Seismic Cycle-Surface Process Modeling
Mark C Benfield	H42I-01 A Comparison of Plastics Debris and Plastics-Associated Leachates at Four U.S. Rivers
Samuel J Bentley	EP24B-05 Assessing a Sediment Budget for an Interdistributary Bay in the Mississippi River Delta: East Bay, Louisiana
Samuel J Bentley	EP24B-07 Spring Flood Sediment Dispersal Offshore of the Mississippi River Delta
Samuel J Bentley	Sediment Transport and Accumulation in the Anthropocene Offshore of Pass a Loutre, Mississippi River Delta, USA
Samuel J Bentley	ED31H The Coastal Workforce in Science, Engineering, and Design Professions: Expanding Workforce Pathways to Face Present and Future Challenges Poster
Bhuvnesh Bharti	EP52B-08 Water Salinity Impacts of Aggregation, Settling, and Deposition of Fluvial Sediment: Potential Implications for Wetland Restoration
Arup Bhattacharya	Exploring Indoor Thermal Environment of Lunar Habitats-Implications of 3D-Printed Wall Configuration
Arup Bhattacharya	Parametric Analysis of Lunar Habitat- Temperature Control in 3D-Printed Habitats

Researcher	Presentation Title
Carlos Eytan Gary Bicas	EP33A Aeolian Processes and Liquid Flows Shaping Landscapes of the Solar System II Oral
Carlos Eytan Gary Bicas	EP34A Aeolian Processes and Liquid Flows Shaping Landscapes of the Solar System III Oral
Carlos Eytan Gary Bicas	P43A At the Nexus of Planetary Geophysics, Geochemistry, and Geothermal Flux I Oral
Carlos Eytan Gary Bicas	P51C At the Nexus of Planetary Geophysics, Geochemistry, and Geothermal Flux II Poster
Carlos Eytan Gary Bicas	Ground and Strong Motion Estimation for the Largest Recorded Marsquake and Moonquake Events
Carlos Eytan Gary Bicas	EP31D Aeolian Processes and Liquid Flows Shaping Landscapes of the Solar System I Poster
Carlos Gary Bicas	P21A Habitability Across the Solar System and Exoplanets II Oral
Carlos Gary Bicas	P11F Habitability Across the Solar System and Exoplanets I Poster
Kolin Bilbrew	H33A-04 The Effect of Historical Land Cover on Water Quality: Implications for Nutrient and Sediment Retention Services in Puerto Rico
Kolin Bilbrew	Integrating Scientific Modeling and Environmental Financing for Urban Resilance
Thomas Blanchard	Scrub and Fringe Mangrove Wetlands Leaf Productivity and Expansion are Controlled by Air Temperature, Phosphorus Availability, and Salinity in Port Fourchon, Louisiana, USA
Thomas Bornholdt	P21A-04 Measurements of Lab-Prepared Brines and Hypersaline Lakes from Western Australia, the Antarctic Dry Valleys, and a Southern California Saltern: Implications for Determining Habitability Elsewhere in the Solar System
Omid Boushehri	Rethinking the River: Local Land Loss Solutions in Plaquemines Parish, Louisiana
Omid Boushehri	Impacts of Hurricane Francine on the Shelf and Shallow Microtidal Regions of Coastal Louisiana
Maile Braden	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Philip Brahana	EP52B-08 Water Salinity Impacts of Aggergation, Settling, and Deposition of Fluvial Sediment: Potential Implications for Wetland Restoration
Matthew Brand	Hydro-Stochastic Model To Inform the Design of Environmental Impact Bonds for Wildfire Resilience
Matthew Brand	A Case Quantifying Beach Tourism Generated Plastic Litter using AI
Matthew W Brand	Post-Fire Flood Hazard Model Calibration for Assessing Downstream Financial Benefits of Wildfire Mitigation intervention
Matthew W Brand	Simulating the Impacts of Green and Grey Solutions for Compound Driven Nuisance Floodng: Tides, Wave Runup, and Non-Tidal Residual
Matthew W Brand	Relative Composition of Nuisance Flooding by Astronomic Tides, Meterology, Oceanographic Currents and Stochastic Residuals
Matthew W Brand	Modeling Microplastic Flux and Storage within an Urban Estuary
Sarah Brannum	EP24B-08 Discharge and Suspended Sedimen Concentration Variations across Subdeltas in the Lower Mississippi River Delta Highlight Areas of Land Loss
Sarah Brannum	ED31H The Coastal Workforce in Science, Engineering, and Design Professions: Expanding Workforce Pathways To Face Present and Future Challenges Poster
Marisa Brennan	B21C-01 Putting Soil Waterlogging into Stomatal Conductance Models
Joseph Brooks	Development of an Interactive Flood Risk Sandbox Tool Integrating Multi-Decadal Projections and Elevation Ordinance
Vincent Brown	Heat Exposure and Excess Morbidity in the City of New Oreleans, Louisiana During the Warm Season, 2010-2019
Muriel Zazie Madeleine Bruckner	EP52B Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes and Morphodynamics II Oral
Muriel Zazie Madeleine Bruckner	An Open-Source Model for Dynamic Coupling of Vegetation Processes and Hydro-Morphodynamics in Coastal Environments
Muriel Zazie Madeleine Bruckner	EP31G Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes and Morphodynamics I Poster
Muriel Zazie Madeleine Brückner	EP52B-03 Hydrodynamic and Inundation Characteristics in Deltas Under Varying Streamflow Conditions and their Implications for Vegetation Establishment

Researcher	Presentation Title
Richard Budiman	NS42A-02 Aquifer Thermal Energy Storage and Production in the Louisiana Red River Aquifer using Numerical Simulations
Nazla Bushra	H52D Connecting Science and Communities: Cocreated and Integrated Approaches for Understanding and Addressing Water Hazards in a Shifting Hydroclimatic Landscape III Oral
Nazla Bushra	H51C-07 From Projections to Planning: A Modular Framework for Climate-Smart Flood Risk Modeling using R2D, Brails and in-Core in Coastal Louisiana
Nazla Bushra	Evaluating the Economic Impact of Flood Risk on Housing Prices in the U.S. Gulf Coast using Spatial and Machine Learning Models
Nazla Bushra	What Areas of Louisiana have the highest and lowest Risks to Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
Les Butler	Advancing Root Analysis in Coastal Wetlands through Optical Imaging and AI
Mariam Valladares Castellanos	H13B-03 Intergrating Land Use Regulation and Riparian for Ecosystem Service Enhancement: Implications for Nutrient Retention and Coastal Eutrophication
Mariam Valladares Castellanos	H33A-04 The Effect of Historical Land Cover on Water Quality: Implications for Nutrient and Sediment Retention Services in Puerto Rico
Mariam Valladares Castellanos	The Effects of Natural Disasters on Human Migration Utilizing Network Metrics: Case Studies of Flood Exposure in Hurricanes Katrina-Rita, the 2016 Louisiana Floods, and Hurricane Harvey
Cecelia Castleberry	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Mackendy Ceragene	H51C-07 From Projections To Planning: A Modular Framework for Climate-Smart Flood Risk Modeling using R2D, Brails and in-Core in Coastal Louisiana
Mackendy Ceragene	Evaluating the Economic Impact of Flood Risk on Housing Prices in the U.S. Gulf Coast using Spatial and Machine Learning Models
Mackendy Ceragene	What Areas of Louisiana have the highest and lowest Risks to Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
Mackendy Ceragene	Rethinking the River: Local Land Loss Solutions in Plaquemines Parish, Louisiana
Jacob Cheng	Using Algal Pigment Field Data to Validate Remote Sensing and Initialize Numerical Modeling for Prediction of Future Harmful Algal Blooms
Marcelo Cohen	PP52A-02 Holocene History of Mangrove Population Spread along the Northern Gulf of Mexico Coast
Stacia D Conger	H42D-04 Machine Learning-Enhanced Reference Evapotranspiration Modeling for Irrigation Resilience in Humid Louisiana
Stacia D Conger	Mesoscale Rootscale Soil Moisture Modeling using Land-Surface Water-Energy Fluxes
Stacia D Conger	Lacadian: An Integrated Architecture for Field-Scale Environmental Sensing and Telemetry in Louisiana
Reilly Corkran	Rethinking the River: Local Land Loss Solutions in Plaquemines Parish, Louisiana
Rebeca De Jesus Crespo	H33A-04 The Effect of Historical Land Cover on Water Quality: Implications for Nutrient and Sediment Retention Services in Puerto Rico
Rebecca De Jesus Crespo	H13B-03 Intergrating Land Use Regulation and Riparian for Ecosystem Service Enhancement: Implications for Nutrient Retention and Coastal Eutrophication
Rebecca De Jesus Crespo	NH31A-04 Assessing Housing Market Responses to Flood Exposure: A Case Study of the 2016 Louisiana Flood in East Baton Rouge Parish, Louisiana
Eurico J D'Sa	OS34A-05 Phytoplankton Community Dynamics in the Hypoxic Zone of the River-Delta Coastal System in the Northern Gulf of America using Bio-Optical Observations and Pace-Oci
Eurico J D'Sa	Multi-Sensor Assessment of Suspended Particulate Matter in Lake Pontchartrain through Regional Ocean Color Algorithm Development
Matthew Danielson	C33B-07 Differential Sedimentary Responses to Grounding Zone and Ice Shelf Retreat Around Ross Bank
Maheshi Dassanayake	P21A Habitability Across the Solar System and Exoplanets II Oral
Maheshi Dassanayake	P11F Habitability Across the Solar System and Exoplanets I Poster
Theresa Davenport	Passive Acoustic Monitoring as a tool to inform Biodiversity, Habitat Use and Restoration Outcomes on Oyster Reefs in Coastal Louisiana
Kristine L DeLong	PP31A-06 Deciphering Gulf of Mexico Variability using Corals from Veracruz, Mexico

Researcher	Presentation Title
Kristine L DeLong	A Well-Preserved Mis 4 Paleoforest Offshore of Alabama Contains Evidence of Abrupt Climate Change
Kristine L DeLong	Extreme Isotopic Depletion in a Southeastern U.S. Snowstorm: A Case Study of 20-22 January 2026
Kristine L DeLong	Optimal Sampling the Past as Recorded by the Atlantic Coral Siderastrea Siderea
Zhiqiang Deng	GH21E Monitoring, Modeling, and Mitigation of Harmful Algal Blooms and Environmental Pathogens Poster
Zhiqiang Deng	Light Gradient Boosting Machine-Based Modeling and Forcasting of Oyster Norovirus Outbreaks
Zhiqiang Deng	Process-Based Modeling of Cyanbacterial Harmful Algal Blooms in Lake Pontchatrain
Jeydon DeWaters	Impacts of River Reconnection on Denitrification Rates of Marshes in Barataria Bay, Louisiana
Rodrigo Diaz	Integrating Google Earth Engine for Near-Real-Time Monitoring of Giant Salvinia (Salvinia Molesta) in Wetlands
Gwendal Dolou	PP31A-06 Deciphering Gulf of Mexico Variability using Corals from Veracruz, Mexico
Gwendal Dolou	Extreme Isotopic Depletion in a Southeastern U.S. Snowstorm: A Case Study of 20-22 January 2027
Gwendal Dolou	Optimal Sampling the Past as Recorded by the Atlantic Coral Siderastrea Siderea
Shanki Amaya Wanni Arachchige Don	EP32A-02 Investigating Vegetation Controls on Mississippi Delta Morphodynamics using a Novel High-Resoltion Microct Imaging Approach
Peter T Doran	TH23K Expectations and Limitations in the Search for Life
Peter T Doran	P21A-04 Measurements of Lab-Prepared Brines and Hypersaline Lakes from Western Australia, the Antarctic Dry Valleys, and a Southern California Saltern: Implications for Determining Habitability Elsewhere in the Solar System
Peter T Doran	P31B-01 Assessing Terrestrial Analogue Field Sites for Ocean Worlds
Peter T Doran	Remote Sensing of Carotenoid Pigments in Transient Hypersaline Lakes in Western Australia as an Indicator of Environmental Change through Time
Peter T Doran	Exploring Habitable Icy Worlds Responsibly: Planetary Protection Updates for the Outer Solar System
Peter T Doran	Characterizing the Spectral, Spatial, and Temporal Behavior of Photoautotrophic Communities in Antarctic Wetlands
Thomas Douthat	H13B-03 Integrating Land Use Regulation and Riparian for Ecosystem Service Enhancement: Implications for Nutrient Retention and Coastal Eutrophication
Thomas Douthat	H51C-07 From Projections to Planning: A Modular Framework for Climate-Smart Flood Risk Modeling using R2D, Brails and In-Core in Coastal Louisiana
Thomas Douthat	H33A-04 The Effect of Historical Land Cover on Water Quality: Implications for Nutrient and Sediment Retention Services in Puerto Rico
Thomas Douthat	NH31A-04 Assessing Housing Market Responses to Flood Exposure: A Case Study of the 2016 Louisiana Flood in East Baton Rouge Parish, Louisiana
Thomas Douthat	Integrating Scientific Modeling and Environmental Financing for Urban Resilance
Thomas Douthat	The Effects of Natural Disasters on Human Migration Utilizing Network Metrics: Case Studies of Flood Exposure in Hurricanes Katrina-Rita, the 2016 Louisiana Floods, and Hurricane Harvey
Thomas Douthat	Evaluating the Economic Impact of Flood Risk on Housing Prices in the U.S. Gulf Coast using Spatial and Machine Learning Models
Thomas Douthat	What Areas of Louisiana Have the Highest and Lowest Risks to Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
Francis Driscoll	Methane Emissions from Orphan Wells: Insights from Subsurface and Well Characteristics in Louisiana
Francis Driscoll	Methane Emissions from Unplugged Abandoned Oil and Gas Wells in Louisiana, USA

Researcher	Presentation Title
Anamika Dristi	Dissolved Carbon and PCO2 Variability in a River-Coastal Lake Continuum, Northern Gulf of Mexico
Rongqing Du	OS43A-08 Hydrodynamic-Sediment Transport Model in Galveston Bay During Hurricane Harvey
Rongqing Du	Plume Sedimentation on the Mississippi River Delta Front: A Priliminary Modeling Study
Alexander Dunaway	High-Resolution Solar Mapping for Ecological Planting in Energy Infrastructure
Manab Dutta	Methane Production from Storage of Sugarcane Bagasse
Manab Dutta	Biogenic Silica Accumulation in the Ross Sea Shelf Sediment
Curtis Dwira	Multi-Regional Geospatial Modeling of Land Subsidence in Louisiana using Insar and Machine Learning
Mohammad Elkharakany	Advancing Groundwater Modeling of the Lower Mississippi-Gulf Aquifer Systems using Realistic Hydrostratigraphy and Parallel Modflow 6 with Unstructured Grid
Clare Falcon	NS42A-02 Aquifer Thermal Energy Storage and Production in the Louisiana Red River Aquifer using Numerical Simulations
Sajjad Feizabadi	Modeling the Impact of Vegetation on Nonlinear Hydrodynamic Interactions in a River-Dominated Delta
Nathan S Figueredo	EP21D Sediment Dynamics and Geohazards in the Mississippi River-dominated Subaqueous Delta
Nathan S Figueredo	EP24B-05 Assessing a Sediment Budget for an Interdistributary Bay in the Mississippi River Delta: East Bay, Louisiana
Noah Flaherty	Surface-Subsurface Hydrological Connectivity and Salinity Dynamics in a Back-Barrier Marsh
Victoria ford	NH12B-08 Myths and Misconceptions Held by Hazard Scientists and Practitioners: Lessons from Co-Production of Science
Adam M Forte	Does Stochasticity Matter for Rock Uplift? Driving Landscape Evolution with Earthquakes
Adam M Forte	Earthquake Sequence Style as a Driver of Landsacpe Evolution: Insights from Coupled Seismic Cycle-Surface Process Modeling
Catherine Frampton	SY31A-05 Co-Producing Climate Services through Community-Led Planning Strategies in Coastal Louisiana
Meggan Franks	Louisiana Multi-Hazard Web Map
Meggan Franks	Development of an Interactive Flood Risk Sandbox Tool Integrating Multi-Decadal Projections and Elevation Ordinance
Mia G Fraser	Scrub and Fringe Mangrove Wetlands Leaf Productivity and Expansion are Controlled by Air Temperature, Phosphorus Availability, and Salinity in Port Fourchon, Louisiana, USA
Carol J Friedland	Louisiana Multi-Hazard Web Map
Carol J Friedland	Comparative Evaluation and Policy Analysis of Natural and Nature-Based Features
Carol J Friedland	What Areas of Louisiana Have the Highest and Lowest Risks to Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
Carol J Friedland	Public Policy Strategies for Scaling 3D-Printed Affordable Housing
Carol J Friedland	Development of an Interactive Flood Risk Sandbox Tool Integrating Multi-Decadal Projections and Elevation Ordinance
Carol J Friedland	Corporate Social Responsibility and Community Best Practices in the Global Energy Sector
Peng Fu	GC23E Urbanization and the Environment: Data, Models, and Applications I Oral
Peng Fu	GC24H Urbanization and the Environment: Data, Models, and Applications II Oral
Peng Fu	B51A Advancing Agricultural and Ecosystem Science with Imaging Spectroscopy I Oral
Peng Fu	How well can Satellite Sensors Estimate Photosynthetic Capacities? A Spectral Library-Based Evaluation
Peng Fu	B51N Advancing Agricultural and Ecosystem Science with Imaging Spectroscopy II Poster
Peng Fu	GC41N Urbanization and the Environment: Data, Models, and Applications III Poster
Peng Fu	H21Z Wireless Data Networking for Distributed Sensing in the Earth Sciences: Connecting the Sciences Poster
Peng Fu	B33G Digital Tools and Earth Observations for Resilent Coastal and Inland Agrocosystems II Poster
Peng Fu	B31C Digital Tools and Earth Observations for Resilient Coastal and Inland Agroecosystems I Oral

Researcher	Presentation Title
Dominique Garello	Broadening Participation in Coastal and Environmental Research for K-20 in the Gulf Coast Region: Mississippi River Delta Transition Initiative
Dominique Garello	Exploring the Affective Impacts of Field-Based Environmental and Geoscience Learning Experiences on Undergraduate Scholars
Adam Gartelman	Stratigraphic and Lithologic Variability in Shallow Bays of Upper Barataria Basin of Coastal Louisiana
Victoria Garza	GC12A-03 Assessing Impacts of Stratospheric Aerosol Injections on Coral Bleaching
Victoria Garza	GC32E-02 Could Stratospheric Aerosol Injection Reduce Coral Bleaching?
Jordi Garzona	Methane Emissions from Orphan Wells: Insights from Subsurface and Well Characteristics in Louisiana
Thanos Gentimis	A Time-Series Approach To Forcasting Land Area Dynamics in the Mississippi River Delta
Muhamad Farid Geonova	Hurricane Francine (2024) Across the Mississippi Delta: Linking Offshore Waves to Estuarine Response with Multiscale Coupled Ocean-Wave-Hydrology Models
Muhamad Farid Geonova	Impacts of Hurricane Francine on the Shelf and Shallow Microtidal Regions of Coastal Louisiana
Jesbin George	Impacts of Hurricane Francine on the Shelf and Shallow Microtidal Regions of Coastal Louisiana
Jesbin George	Hurricane Francine (2024) Across the Mississippi Delta: Linking Offshore Waves to Estuarine Response with Multiscale Coupled Ocean-Wave-Hydrology Models
Cassandra Glaspie	OS34A-05 Phytoplankton Community Dynamics in the Hypoxic Zone of the River-Delta Coastal System in the Northern Gulf of America using Bio-Optical Observations and Pace-Oci
Rogerio Gomes dos Santos	EP32A-02 Investigating Vegetation Controls on Mississippi Delta Morphodynamics using a Novel High-Resoltion Microct Imaging Approach
Kaitlyn Gooch	EP32A-02 Investigating Vegetation Controls on Mississippi Delta Morphodynamics using a Novel High-Resoltion Microct Imaging Approach
Kaitlyn Gooch	Can We Estimate (Dynamic) Active Root Zone Depth using Remote Sensing Data?
Kaitlyn Gooch	The Sedimentologic Evolution of Marsh Platforms Hosting Phragmites Australis: Implications for the Eco-Geomorphic Dynamics of the Birdsfoot Delta, Louisiana, USA
Ivan Grijalva	Integrating Google Earth Engine for Near-Real-Time Monitoring of Giant Salvinia (Salvinia Molesta) in Wetlands
Leo Guerrero	Hydromorphological Responses to Alluvial Mining in a Tropical River Confluences
Ipsita Gupta	NS42A-02 Aquifer Thermal Energy Storage and Production in the Louisiana Red River Aquifer using Numerical Simulations
Ipsita Gupta	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Ipsita Gupta	Geochemical Reaction Experiments of Hydrogen-Brine-Rock Systems for Underground Hydrogen Storage
Ipsita Gupta	H51W Underground Hydrogen Storage: Numerical, Analytical, and Laboratory investigations Poster
Ipsita Gupta	Methane Emissions from Orphan Wells: Insights from Subsurface and Well Characteristics in Louisiana
Ipsita Gupta	Lithium Potential in Louisiana's Smackover Formation: A Geochemical investigation of Oil Field Brines
Ipsita Gupta	Methane Emissions from Unplugged Abandoned Oil and Gas Wells in Louisiana, USA
Ipsita Gupta	Feasibility of Underground Hydrogen Storage in a Louisiana Saline Formation
Ipsita Gupta	Mr32A-06 Evaluation of Caprock integrity During Underground Hydrogen Storage in Aquifers with Different Formation Characteristics
Kaitlyn Hall	OS33A-08 Spatial Variability in Particulate Carbon Export Across the Ross Sea Marginal Ice Zone
Kaitlyn Hall	Biogenic Silica Accumulation in the Ross Sea Shelf Sediment
Kaitlyn Hall	Methane Emissions from Unplugged Abandoned Oil and Gas Wells in Louisiana, USA
Muzna Hamza	Pathways To Resilience: FORTIFIED® Elevated Manufactured Homes for Affordable Housing in Hazard-Prone Regions
Dewan Mohammad Enamul Haque	IN42E-07 Advancing Reproducible Methods for Multi-Hazard Risk Assessment and Landscape Evolution Modeling in a Rapidly Changing Refugee Landscape in Bangladesh
Dewan Mohammad Enamul Haque	Ground & Strong Motion Estimation for the Largest Recorded Marsquake and Moonquake Events

Researcher	Presentation Title
Cheryl S Harrison	GC12A-01 Evaluating Marine Ecosystem Impacts of Solar Radiation Modification: A Comparative Framework
Cheryl S Harrison	GC12A-03 Assessing Impacts of Stratospheric Aerosol Injections on Coral Bleaching
Cheryl S Harrison	GC13A-07 Impacts of Climate intervention on Ocean Acidification and the Aragonite Saturation Horizon
Cheryl S Harrison	GC14A-06 Using the Community Earth System Model to Assess the Climate and Carbon Impacts of Individual and Combined Climate Interventions
Cheryl S Harrison	GC32E-02 Could Stratospheric Aerosol Injection Reduce Coral Bleaching?
Md Adilur Hashar	Multi-Sensor Assessment of Suspended Particulate Matter in Lake Pontchartrain through Regional Ocean Color Algorithm Development
Madelyn Hathcock	Hydroxylamine Drives Nitrous Oxide Formation in Wastewater Chlorination
Matthew R Hiatt	Ep41D (Dis)Connectivity and Variability Across Processes and Landscapes I Poster
Matthew R Hiatt	Impacts of Hurricane Francine on the Shelf and Shallow Microtidal Regions of Coastal Louisiana
Matthew R Hiatt	Modeling the Impact of Vegetation on Nonlinear Hydrodynamic Interactions in a River-Dominated Delta
Matthew R Hiatt	Hurricane Francine (2024) Across the Mississippi Delta: Linking Offshore Waves To Estuarine Response with Multiscale Coupled Ocean-Wave-Hydrology Models
Matthew R Hiatt	Forcasting Operational and Non-Operational Flows in River Diversions using a Hybrid Neural Network
Matthew R Hiatt	A Machine Learning-Based Prediction-To-Map Framework for Rapid and Accurate Spatial Flood Prediction
Matthew R Hiatt	Surface-Subsurface Hydrological Connectivity an Salinity Dynamics in a Back-Barrier Marsh
Matthew R. Hiatt	EP24B-08 Discharge and Suspended Sedimen Concentration Variations across Subdeltas in the Lower Mississippi River Delta Highlight Areas of Land Loss
Sayed Omar Hofioni	Process-Based Modeling of Cyanbacterial Harmful Algal Blooms in Lake Pontchatrain
Taylor Horton	Integrating Scientific Modeling and Environmental Financing for Urban Resilance
Maruf Hossain	Tracking Tree Physiological Responses to Drought using Hyperspectral Sensing Across Multiple Species
Maruf Hossain	Precision Yield Prediction using Statistical and Machine Learning Methods for Small Holder Cotton Farming
Tanvir Hossain	H42D-04Machine Learning-Enhanced Reference Evapotranspiration Modeling for Irrigation Resilience in Humid Louisiana
Tanvir Hossain	Growing Against the Odds: Natural Hazards and the Fragility of Agriculture Systems
Katie O Hoy	Stratigraphic and Lithologic Variability in Shallow Bays of Upper Barataria Basin of Coastal Louisiana
Huanping Huang	GC51C-02 Recent Changes in the Variability of Tropical Cyclone Precipitation over the Contiguous United States
Huanping Huang	GC14C Advancing Climate Attribution Science for Extreme Events, Associated Impacts, and Applications for Climate Justice II Oral
Huanping Huang	A33E-04 Land-Ocean Comparison of Forcast Errors in Track and intensity of North American Landfalling Tropical Cyclones
Huanping Huang	A33E-08 Subseasonal-To-Seasonal Variability of Rapid intensification in North Atlantic Tropical Cyclones
Huanping Huang	GC11G Advancing Climate Attribution Science for Extreme Events, Associated Impacts, and Applications for Climate Justice I Poster
Huanping Huang	Intercomparing Attribution Methods for Hurricane Milton's intensity
Huanping Huang	Extreme Isotopic Depletion in a Southeastern U.S. Snowstorm: A Case Study of 20-22 January 2028
Huanping Huang	The Shifting of the Arid-Humid Divide in the South Central United States

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Emmy Hughes	P21A Habitability Across the Solar System and Exoplanets II Oral
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Gage Hunter	B23D-02 Seasonal Changes in Soil Carbon Respiration Pathways in a Louisiana Salt Marsh
Laura Ikuma	Pathways To Resilience: FORTIFIED® Elevated Manufactured Homes for Affordable Housing in Hazard-Prone Regions
Md Muzahidul Islam	EP52A-07 Creation of Oxbow Lakes Depends on Bifurcation Dynamics
Md Muzahidul Islam	Depositional Patterns for Oxbow Lakes Following Neck Cutoff Events
md Muzahidul Islam	Satellite Records Reveal a Rising Prevalence of Chute Cutoffs in the Amazon Basin
Amirhosein Jafari	P21A Habitability Across the Solar System and Exoplanets II Oral
Nusrat Jahan	Mesoscale Rootscale Soil Moisture Modeling using Land-Surface Water-Energy Fluxes
Naduni Jayasinghe	Social Vulnerability and Wind Risk Reduction through Enhanced Building Codes in Louisiana
Brad Jennings	The use of Artificial Intelligence to Identify Structures Across Antarctic Research Stations
Charles Philip Johnson	Ensemble Projections of Mississippi River Discharge Sing a High-Resolution Land Surface Model
Crystal Johnson	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Crystal Johnson	Geochemical Reaction Experiments of Hydrogen-Brine-Rock Systems for Underground Hydrogen Storage
Vishal Juneja	A33E-04 Land-Ocean Comparison of Forecast Errors in Track and Intensity of North American Landfalling Tropical Cyclones
Vishal Juneja	Extreme Isotopic Depletion in a Southeastern U.S. Snowstorm: A Case Study of 20-22 January 2025
Desmond Kangah	Multi-Regional Geospatial Modeling of Land Subsidence in Louisiana using Insar and Machine Learning
Bijaya B Karki	Mr13A Exploring Planetary Materials through Computational Simulations and Machine Learning I Oral
Bijaya B Karki	Role of Pressure- and Temperature-Dependent Viscosity and Thermal Diffusivity in Magma Ocean Convection
Bijaya B Karki	Iron Dispersion Pattern in the Thermally Convective Magma Ocean: Implications for Iron-Silicate Mixing
Bijaya B Karki	Behavior of Hydrogen and Nitrogen in Molten Bulk Earth System from Neural Network Potentials Simulations
Bijaya B Karki	Mr31B Exploring Planetary Materials through Computational Simulations and Machine Learning II Poster
Bijaya B Karki	Scalable Machine Learning Approach for Phase Segmentation in Molecular Dynamcics Simulations of Complex Melts
Suniti Karunatillake	EP33A Aeolian Processes and Liquid Flows Shaping Landscapes of the Solar System II Oral
Suniti Karunatillake	EP34A Aeolian Processes and Liquid Flows Shaping Landscapes of the Solar System III Oral
Suniti Karunatillake	Th23K Expectations and Limitations in the Search for Life
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Suniti Karunatillake	P21A-02 Transforming Risk into Resilience: A Case Study of Field Safety in a Planetary-Analogue Expedition to Sri Lanka
Suniti Karunatillake	IN42E-07 Advancing Reproducible Methods for Multi-Hazard Risk Assessment and Landscape Evolution Modeling in a Rapidly Changing Refugee Landscape in Bangladesh
Suniti Karunatillake	P43A At the Nexus of Planetary Geophysics, Geochemistry, and Geothermal Flux I Oral
Suniti Karunatillake	SY22A Science and Society: Social and Behavioral Sciences I Oral
Suniti Karunatillake	P51C At the Nexus of Planetary Geophysics, Geochemistry, and Geothermal Flux II Poster
Suniti Karunatillake	Ground & Strong Motion Estimation for the Largest Recorded Marsquake and Moonquake Events
Suniti Karunatillake	P11F Habitability Across the Solar System and Exoplanets I Poster
Suniti Karunatillake	A Mobile Seismic Platform at the Nasa Marshall Lunar Regolith Terrain Field
Suniti Karunatillake	SY23D Science and Society: Social and Behavioral Sciences II Poster
Suniti Karunatillake	Possible Tidal Rhythmites in Gale Crater, Mars: Traces of a Lost Moon?
Suniti Karunatillake	EP31D Aeolian Processes and Liquid Flows Shaping Landscapes of the Solar System I Poster
Ali Kazemian	Public Policy Strategies for Scaling 3D-Printed Affordable Housing
Manisha KC	Assessing Deep Learning Robustness for Phragmites Australis Classification using Multi-Year Integrated Sentinel-2 Time Series in the Mississippi River Delta
Manisha KC	A Time-Series Approach to Forcasting Land Area Dynamics in the Mississippi River Delta
Matthew Kelso	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Nehal Mahmud Khan	Investigating the Impact of Rising Sea Surface Temperature on Hurricane Behavior Along the Gulf Coast
Nehal Mahmud Khan	Pathways To Resilience: FORTIFIED® Elevated Manufactured Homes for Affordable Housing in Hazard-Prone Regions
Nehal Mahmud Khan	Social Vulnerability and Wind Risk Reduction through Enhanced Building Codes in Louisiana
Shelly Kleinpeter	Louisiana Multi-Hazard Web Map
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Kory M Konsoer	EP24B-08 Discharge and Suspended Sedimen Concentration Variations across Subdeltas in the Lower Mississippi River Delta Highlight Areas of Land Loss
Kory M Konsoer	Hydromorphological Responses To Alluvial Mining in a Tropical River Confluences
Kory M Konsoer	Depositional Patterns for Oxbow Lakes Following Neck Cutoff Events
Kory M Konsoer	EP31E Fluvial Reorganization: Linking Mechanics, Morphology, and Biological Impacts on Reach and Network Scale I Poster
Kory M Konsoer	Satellite Records Reveal a Rising Prevalence of Chute Cutoffs in the Amazon Basin
Sudeep Kuikel	B44B-08 Automated Norway Spruce Tree Detection and Delineation using Fused Yolo-Sam Model with UAV Data
Lakshmi Prasanna Kunku	Louisiana Multi-Hazard Web Map
Lakshmi Prasanna Kunku	Development of an Interactive Flood Risk Sandbox Tool Integrating Multi-Decadal Projections and Elevation Ordinance

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Madelyn A Kurtz	EP32A-02 Investigating Vegetation Controls on Mississippi Delta Morphodynamics using a Novel High-Resoltion Microct Imaging Approach
Madelyn A Kurtz	Sediment Dynamics and Carbon Storage of Balize Delta Crevasses of the Mississippi River
Madelyn A Kurtz	The Sedimentologic Evolution of Marsh Platforms Hosting Phragmites Australis: Implications for the Eco-Geomorphic Dynamics of the Birdsfoot Delta, Louisiana, USA
Megan La Peyre	Passive Acoustic Monitoring As a Tool To Inform Biodiversity, Habitat Use and Restoration Outcomes on Oyster Reefs in Coastal Louisiana
Nina Lam	Identifying Key Drivers of Community Resilience To Hurricanes: An Attention-Based Bayesian Network Approach in the Guangdong–Hong Kong–Macao Greater Bay Area, China
Nina Lam	Comparing Community Resilience To Natural Hazards at Two Geographical Scales: A Case Study of Louisiana using the Resilience inference Measurement (Rim) Model
Emily LaPrime	Rescuing a Legacy Marine Active-Source Seismic Reflection Dataset: the Atlantic-Traversing IPOD Line
Edward A Laws	Wintertime Export Fluxes in the Labrador Sea using 23 4Th- 23 8U Disequilibria
Ziyan Lei	NH13B-01 Resilence of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding induced by Hurricae Harvey (2017)
Ziyan Lei	Compound Flooding in Deltaic Landscapes: Lessons from Hurrican Ida with a Coupled Hydrological-Ocean Model
Mina Lesan	Exploring Indoor Thermal Environment of Lunar Habitats-Implications of 3D-Printed Wall Configuration
Mina Lesan	Parametric Analysis of Lunar Habitat- Temperature Control in 3D-Printed Habitats
Bentao Li	Hypoxic Zone in the Northern Gulf of Mexico in the 21St Century
Bentao Li	The Roles of Submesoscale Dynamics on Nutrient and Biogeochemical Variability in NGOM
Chi Li	Comparing Community Resilience To Natural Hazards at Two Geographical Scales: A Case Study of Louisiana using the Resilience inference Measurement (Rim) Model
Chunyan Li	Modeling the Impact of Vegetation on Nonlinear Hydrodynamic Interactions in a River-Dominated Delta
Chunyan Li	Nutrient Escape Routes: Following the Trail from River to Gulf with Isotopes and Acoustics
Junhong Liang	Hypoxic Zone in the Northern Gulf of Mexico in the 21St Century
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Junhong Liang	Os23B-06 Enhancing Ocean Model Accuracy with Neural Network-Informed K-Profile Parameterization
Junhong Liang	Wintertime Export Fluxes in the Labrador Sea using 23 4Th- 23 8U Disequilibria
Ben Lindsey	C33B-07 Differential Sedimentary Responses to Grounding Zone and Ice Shelf Retreat Around Ross Bank
Sophia Lingo	B22B-03 Comparing CO2 and CH4 Fluxes using Different Chamber Sizes in a Coastal Deltaic Floodplain
Kam-Biu Liu	Florida Mangrove Dieback on a Decadal and Centennial Timescales
Nicholas Lonergan	From Above and Below Assessing Impacts of Droughts and Storm Surges on Coastal Wetland Health
Matthew Phillip Loocke	Petrogenetic Complexities Expressed in Gabbros from Fast-Spread Lower Oceanic Crust at Pito Deep
Matthew Phillip Loocke	Spinal Zonation and Mantle Deformation During Oceanic Backarc Rift initiation, Nankaido Megamullions
Matthew Phillip Loocke	Unraveling the Magmatic Complexity of a Monogenetic Eruption: Processes and Timescale in the Evolution of Xitle Volcano, Mexico
Juan M Lorenzo	P43A At the Nexus of Planetary Geophysics, Geochemistry, and Geothermal Flux I Oral
Juan M Lorenzo	IN42E-07 Advancing Reproducible Methods for Multi-Hazard Risk Assessment and Landscape Evolution Modeling in a Rapidly Changing Refugee Landscape in Bangladesh
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Juan M Lorenzo	Introducing Novices to Active-Source Seismology Via Seismicunixgui
Juan M Lorenzo	A Mobile Seismic Platform at the NASA Marshall Lunar Regolith Terrain Field
Crystal Luna	Petrogenetic Complexities Expressed in Gabbros from Fast-Spread Lower Oceanic Crust at Pito Deep
Haiyang Luo	V42A Early Earth: Composition, Origin, and its Evolution throughout the Hadean and Archean I Oral
Haiyang Luo	V51C Early Earth: Composition, Origin, and Its Evolution throughout the Hadean and Archean II Poster
Karen M Luttrell	G33A Measurements and Modeling of the Earth's Response To Surface Mass Variability and Human-Hydrosphere Interactions II Oral
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Karen M Luttrell	G31B Measurements and Modeling of the Earth's Response To Surface Mass Variability and Human-Hydrosphere Interactions I Poster
Mukseet Mahmood	NH13B-04 Storm-Driven Responses To Carbon Cycling Along the Land-Estuary-Ocean Continuum in the Mississippi River Delta
Kanchan Maiti	OS33A-08 Spatial Variability in Particulate Carbon Export Across the Ross Sea Marginal Ice Zone
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Kanchan Maiti	NH13B-04 Storm-Driven Responses To Carbon Cycling Along the Land-Estuary-Ocean Continuum in the Mississippi River Delta
Kanchan Maiti	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Kanchan Maiti	Geochemical Reaction Experiments of Hydrogen-Brine-Rock Systems for Underground Hydrogen Storage
Kanchan Maiti	Methane Production from Storage of Sugarcane Bagasse
Kanchan Maiti	Using 224Ra/228Th Disequilibrium in Sediments To Quantify Benthic Fluxes Across the Sediment-Water interface from Near Shore To Offshore Environments
Kanchan Maiti	Biogenic Silica Accumulation in the Ross Sea Shelf Sediment
Kanchan Maiti	Spatial Variation in Microbial Mediation of Marine Silica Sequestration During Early Diagenesis
Kanchan Maiti	Lithium Potential in Louisiana'S Smackover Formation: A Geochemical Investigation of Oil Field Brines
Kanchan Maiti	Methane Emissions from Unplugged Abandoned Oil and Gas Wells in Louisiana, USA
Kanchan Maiti	Sniffing out Polonium: Aerosol ^{210}Po/^{210}Pb Ratios Trace Volatile Emissions from The Amundsen Sea Polynya
Kanchan Maiti	Wintertime Export Fluxes in the Labrador Sea using 23 4Th- 23 8U Disequilibria
Kanchan Maiti	NH31F Impacts of and Resilency of Coastal Ecosystems to Transient Disturbances III Poster
Kanchan Maiti	Nutrient Escape Routes: Following the Trail from River to Gulf with Isotopes and Acoustics
Anurag Mandalika	Methane Production from Storage of Sugarcane Bagasse
Luke Mangney	Hydro-Stochastic Model To Inform the Design of Environmental Impact Bonds for Wildfire Resilience
Luke Mangney	Post-Fire Flood Hazard Model Calibration for Assessing Downstream Financial Benefits of Wildfire Mitigation Intervention
Roodra Manogaran	P33A-04 Volatile-Driven Collapsed Feature Evolution in the Medusae Fossae Formation
Giulio Mariotti	EP32A-03 Climate-Driven Avicennia Germinans Expansion Reduces Marsh Edge Erosion
Giulio Mariotti	EP52B-02 Reconstructing the Morphodynamic Trajectory of the Wax Lake Delta: How Important Is Vegetation?
Giulio Mariotti	EP24B-03 Three Ingredients for Numerically Efficient 2D River and Delta Morphodynamic Modeling
Giulio Mariotti	B44E-09 Riverine Particles and Sequestration of Salt Marsh Carbon: Assessing Rhizosphere Dynamics and Long-Term Burial

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Kevin McCarter	Methane Emissions from Orphan Wells: Insights from Subsurface and Well Characteristics in Louisiana
Kevin McPeak	Hydroxylamine Drives Nitrous Oxide Formation in Wastewater Chlorination
Xuelian Meng	B44B-08 Automated Norway Spruce Tree Detection and Delineation using Fused Yolo-Sam Model with UAV Data
Xuelian Meng	Assessing Deep Learning Robustness for Phragmites Australis Classification using Multi-Year Integrated Sentinel-2 Time Series in the Mississippi River Delta
Xuelian Meng	A Time-Series Approach To Forcasting Land Area Dynamics in the Mississippi River Delta
Volodymyr Mihunov	Comparing Community Resilience To Natural Hazards at Two Geographical Scales: A Case Study of Louisiana using the Resilience Inference Measurement (Rim) Model
Paul Miller	Importance of Dust Radiative Feedback on the Trans-Atlantic Evolution of the Saharan Air Layer
Paul Miller	Global Patterns in OHC, Their Relationship To ENSO, and the Implications for Tropical Cyclones
Paul Miller	Impacts of Hurricane Defoliation in Puerto Rico with Dynamically Downscaled Projections in Mid-To-Late Century Climates
Paul Miller	Ensemble Projections of Mississippi River Discharge Using a High-Resolution Land Surface Model
Miranda Miller-Soileau	P21A-04 Measurements of Lab-Prepared Brines and Hypersaline Lakes from Western Australia, the Antarctic Dry Valleys, and a Southern California Saltern: Implications for Determining Habitability Elsewhere in the Solar System
Shabnam Mirheidarian	Rethinking the River: Local Land Loss Solutions in Plaquemines Parish, Louisiana
William Moe	Hydroxylamine Drives Nitrous Oxide Formation in Wastewater Chlorination
Parvin Momenian	Assessment of Soil Moisture Relationship with Gross Primary Production using Remote Sensing
Shilthia Monalisa	From Digital Design to Dental Delivery: 3D Printing's Impact on Oral Health Innovation
Shilthia Monalisa	Public Policy Strategies for Scaling 3D-Printed Affordable Housing
Rubayet Bin Mostafiz	H42D-04Machine Learning-Enhanced Reference Evapotranspiration Modeling for Irrigation Resilience in Humid Louisiana
Rubayet Bin Mostafiz	H51C-07 From Projections to Planning: A Modular Framework for Climate-Smart Flood Risk Modeling using R2D, Brails and in-Core in Coastal Louisiana
Rubayet Bin Mostafiz	Louisiana Multi-Hazard Web Map
Rubayet Bin Mostafiz	Comparative Evaluation and Policy Analysis of Natural and Nature-Based Features
Rubayet Bin Mostafiz	Investigating the Impact of Rising Sea Surface Temperature on Hurricane Behavior Along the Gulf Coast
Rubayet Bin Mostafiz	Pathways To Resilience: FORTIFIED® Elevated Manufactured Homes for Affordable Housing in Hazard-Prone Regions
Rubayet Bin Mostafiz	What Areas of Louisiana Have the Highest and Lowest Risks To Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
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Rubayet Bin Mostafiz	Corporate Social Responsibility and Community Best Practices in the Global Energy Sector
Rubayet Bin Mostafiz	Growing Against the Odds: Natural Hazards and the Fragility of Agriculture Systems
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Andrew Nelson	Marsh Elevation Dynamics Following Vegetation Dieback in the Lower Mississippi River Delta

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Felicity Newell	B31F-08 Radar-Based Monitoring of Tropical forest Disturbance and Recovery Across A Chronosequence in the Chocó Biodiversity Hotspot
Felicity Newell	Texture-Driven Structural Classification of Tropical forests using Dual-Polarized L-Band Sar
Ting-Jui Nieh	Coupling Coastal River-Subsurface Seawater Intrusion with a Modified Darcy-Brinkman Framework
Yanda Ou	NH13B-01 Resilience of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding Induced by Hurricane Harvey (2017)
Yanda Ou	A Numerical Asessment of Ocean Alkalinity Enhancement Efficiency on a River-Dominated Continental Shelf-A Case Study in the Northern Gulf of America
Yanda Ou	Plume Sedimentation on the Mississippi River Delta Front: A Priliminary Modeling Study
Yanda Ou	Hurricane Francine (2024) Across the Mississippi Delta: Linking Offshore Waves to Estuarine Response with Multiscale Coupled Ocean-Wave-Hydrology Models
Yanda Ou	Future Warming, Freshening, and Acidification in the Gulf of America: Dynamic Downscaling of CMIP6 Projections
Celalettin E Ozdemir	H14D-04 Prediction of Local Scour Evolution Beneath a Submergedcylinder by U-Shaped Fourier Neural Operators
Kylie Palmer	Optimal Sampling the Past As Recorded by the Atlantic Coral Siderastrea siderea
Matthew A Parker	Wintertime Export Fluxes in the Labrador Sea using 23 4Th- 23 8U Disequilibria
Ruoqin Pei	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Ruoqin Pei	Geochemical Reaction Experiments of Hydrogen-Brine-Rock Systems for Underground Hydrogen Storage
Giancarlo Portocarrero	EP24B-05 Assessing a Sediment Budget for an Interdistributary Bay in the Mississippi River Delta: East Bay, Louisiana
Giancarlo Portocarrero	EP24B-07 Spring Flood Sediment Dispersal Offshore of the Mississippi River Delta
Lee Potter	Impact of Winter Cold Fronts on Phosphorus Flux from Coastal Estuary and Implications for Summer Harmful Algal Blooms
Eirini Maria Poulaki	V44A-05 Blueschist Rheology from the Laboratory To the Rock Record: Insights into Ductile Flow at the Subduction interface
Vindhyawasini Prasad	EP52B-03 Hydrodynamic and Inundation Characteristics in Deltas Under Varying Streamflow Conditions and Their Implications for Vegetation Establishment
Chi Qiu	How Well Can Satellite Sensors Estimate Photosynthetic Capacities? A Spectral Library-Based Evaluation
Tracy E Quirk	EP32A-03 Climate-Driven Avicennia Germinans Expansion Reduces Marsh Edge Erosion
Tracy E Quirk	Marsh Elevation Dynamics Following Vegetation Dieback in the Lower Mississippi River Delta
Tracy E Quirk	The Influence of Channel Edge Vegetation on interior Marsh Geomorphology: A Case Study in the Lower Mississippi River Delta
Michael Rabalais	EP32A-03 Climate-Driven Avicennia Germinans Expansion Reduces Marsh Edge Erosion
Md Adilur Rahim	Investigating the Impact of Rising Sea Surface Temperature on Hurricane Behavior Along the Gulf Coast
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Md Adilur Rahim	What Areas of Louisiana Have the Highest and Lowest Risks To Marginal Changes in Flood Depth: A Sensitivity Analysis of Household Damages Based on Flood Depth and Continuous Return Periods for Louisiana's 64 Parishes
Md Adilur Rahim	Development of an Interactive Flood Risk Sandbox Tool Integrating Multi-Decadal Projections and Elevation Ordinance
Taseen Rahman	Optimal Sampling the Past as Recorded by the Atlantic Coral Siderastrea Siderea
Laura Ramirez	SY31A-05 Co-Producing Climate Services through Community-Led Planning Strategies in Coastal Louisiana
Jacob Reinhardt	Hydrodynamics and Sediment Dynamics of East Bay of the Mississippi River Delta, Louisiana, USA
Julianna Rhodes	Integrating Scientific Modeling and Environmental Financing for Urban Resilance
Julianna Rhodes	The Effects of Natural Disasters on Human Migration Utilizing Network Metrics: Case Studies of Flood Exposure in Hurricanes Katrina-Rita, the 2016 Louisiana Floods, and Hurricane Harvey

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Robert V Rohli	H42D-04Machine Learning-Enhanced Reference Evapotranspiration Modeling for Irrigation Resilience in Humid Louisiana
Robert V Rohli	Pathways To Resilience: FORTIFIED® Elevated Manufactured Homes for Affordable Housing in Hazard-Prone Regions
Hannah Rothman	A Case Quantifying Beach Tourism Generated Plastic Litter using AI
Andre Rovai	Advancing Root Analysis in Coastal Wetlands through Optical Imaging and AI
Andre Rovai	Engineered by Nature: Root Internal Structure and Tensile Strength Reveal Biomechanical Adaptations in Coastal Wetlands
Taylor Rowley	EP24A-08 Using SWOT Satellite Data to Estimate Hydraulic Resistance and Sediment Transport Capacity
Amitava Roy	Characterization of Hydrogenotrophic Bacterial Biofilm Formation in Underground Hydrogen Storage Units
Amitava Roy	Geochemical Reaction Experiments of Hydrogen-Brine-Rock Systems for Underground Hydrogen Storage
Junghyung Ryu	Diatom-Based Reconstruction of Holocene Relative Sea-Level Change in the Middle To Lower Nakdong River Basin, South Korea
Junghyung Ryu	Florida Mangrove Dieback on a Decadal and Centennial Timescales
Delton Samuel	Ground and Strong Motion Estimation for the Largest Recorded Marsquake and Moonquake Events
Otto Santos	Methane Emissions from Orphan Wells: Insights from Subsurface and Well Characteristics in Louisiana
Sajin Satyal	Scenarios for Earth's Outer Core Composition Based on a Density Model of Multi-Component Iron-Rich Alloys
David Schechter	Lithium Potential in Louisiana's Smackover Formation: A Geochemical investigation of Oil Field Brines
Sarah Seale	Spinal Zonation and Mantle Deformation During Oceanic Backarc Rift Initiation, Nankaido Megamullions
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Vinit Sehgal	Can We Estimate (Dynamic) Active Root Zone Depth using Remote Sensing Data?
Vinit Sehgal	H41R Remote Sensing of Soil Processes Poster
Vinit Sehgal	Assessment of Soil Moisture Relationship with Gross Primary Production using Remote Sensing
Vinit Sehgal	Lacadian: An Integrated Architecture for Field-Scale Environmental Sensing and Telemetry in Louisiana
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Dylan Shoemaker	Satellite Records Reveal a Rising Prevalence of Chute Cutoffs in the Amazon Basin
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Brandon Shuck	T42A-05 2D Kinematic Restoration of the Outer Accretionary Wedge Along the Cascadia Subduction Margin using CASIE21 Seismic Data
Brandon Shuck	T42A-06 The Strength of the Sedimentary Wedge along the Cascadia Subduction Zone
Brandon Shuck	T41A-04 High-Resolution Seismic Imaging of Overriding Plate Structure and its role in Slip Behavior across the Middle America Trench Offshore Mexico
Brandon Shuck	Deep Lithospheric Imaging of the Incoming Plates along the Cascadia Subduction Zone from Marine Seismic Data
Brandon Shuck	Detailed Velocity Structure of the Overriding Plate within the Guerrero Gap, Middle America Trench Revealed by Full-Waveform Inversion
Brandon Shuck	Influence of the Overriding North American Plate on Megathrust Slip Behavior within the Guerrero Gap and its Neighboring Segments
Brandon Shuck	Megathrust Structure of the Southern Cascadia Subduction Zone Revealed By Reprocessed Legacy Active-Source Seismic Data
Brandon Shuck	Seismic Data Reprocessing: Southern Cascadia Subduction Zone and Mendocino Triple Junction
Brandon Shuck	Rescuing a Legacy Marine Active-Source Seismic Reflection Dataset: the Atlantic- Traversing Ipod Line
Supuni Dhameera Silva	Broadening Participation in Coastal and Environmental Research for K-20 in the Gulf Coast Region: Mississippi River Delta Transition Initiative
Supuni Dhameera Silva	Exploring the Affective Impacts of Field-Based Environmental and Geoscience Learning Experiences on Undergraduate Scholars
Kevin Smiley	Social Vulnerability and Wind Risk Reduction through Enhanced Building Codes in Louisiana
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Brian Snyder	Methane Production from Storage of Sugarcane Bagasse
Yuqi Song	H42F-01 Geostatistical Subsurface Characterization Reveals the Quaternary Evolution of The Mississippi River Valley Alluvial Aquifer
Yuqi Song	Enhancing Geological Realism in Alluvial Aquifers through the Geostatistical Indicator and Ordinary Interval Kriging Methods
Yuqi Song	Quantitative Subsurface Characterization Uncovers the Stratigraphic Origin of The Alluvial Aquifer in the Lower Mississippi Valley
Yuqi Song	The Evolution of Channel Geometry and Planform Morphology of the Lower Mississippi River Over the Last Millennia
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Naresh Suwal	GH21E Monitoring, Modeling, and Mitigation of Harmful Algal Blooms and Environmental Pathogens Poster
Naresh Suwal	Light Gradient Boosting Machine-Based Modeling and Forcasting of Oyster Norovirus Outbreaks
Israt Jahan Tama	NH31A-04 Assessing Housing Market Responses To Flood Exposure: A Case Study of the 2016 Louisiana Flood in East Baton Rouge Parish, Louisiana
Edwin Torres-Moya	Importance of Dust Radiative Feedback on the Trans-Atlantic Evolution of the Saharan Air Layer
Jill C Trepanier	Th15B Hurricane Katrina 20 Years Later: Lessons Learned from a Generational Catastrophe
Jill C Trepanier	A Machine Learning-Based Prediction-To-Map Framework for Rapid and Accurate Spatial Flood Prediction

Researcher	Presentation Title
Fabiana Trindade da Silva	High-Resolution Solar Mapping for Ecological Planting in Energy Infrastructure
Frank T-C Tsai	H33E Coastal Hydrology: Observation, Modeling, and Prediction of Surface and Subsurface Processes and Patterns II Oral
Frank T-C Tsai	H34ECoastal Hydrology: Observation, Modeling, and Prediction of Surface and Subsurface Processes and Patterns III Oral
Frank T-C Tsai	H42F-01Geostatistical Subsurface Characterization Reveals the Quaternary Evolution of the Mississippi River Valley Alluvial Aquifer
Frank T-C Tsai	Advancing Groundwater Modeling of the Lower Mississippi-Gulf Aquifer Systems using Realistic Hydrostratigraphy and Parallel Modflow 6 with Unstructured Grid
Frank T-C Tsai	Enhancing Geological Realism in Alluvial Aquifers through the Geostatistical Indicator and Ordinary Interval Kriging Methods
Frank T-C Tsai	Quantitative Subsurface Characterization Uncovers the Stratigraphic Origin of the Alluvial Aquifer in the Lower Mississippi Valley
Frank T-C Tsai	Coupling Coastal River-Subsurface Seawater Intrusion with a Modified Darcy-Brinkman Framework
Frank T-C Tsai	Dissolved Carbon and PCO2 Variability in a River-Coastal Lake Continuum, Northern Gulf of Mexico
Frank T-C Tsai	H31QCoastal Hydrology: Observation, Modeling, and Prediction of Surface and Subsurface Processes and Patterns I Poster
Frank T-C Tsai	The Evolution of Channel Geometry and Planform Morphology of the Lower Mississippi River Over the Last Millennia
Nelson Tull	Ep43A-02 Longitudinal Floodplain Disconnectivity Drives Lateral River-Floodplain Connectivity in Unmodified River Systems
Nelson Tull	EP31G An Open-Source Model for Dynamic Coupling of Vegetation Processes and Hydro-Morphodynamics in Coastal Environments
Caitlin Turner	EP52B Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes and Morphodynamics II Oral
Caitlin Turner	Forcasting Operational and Non-Operational Flows in River Diversions using a Hybrid Neural Network
Caitlin Turner	EP31G Landscape Biophysical Interactions: Hydrodynamics, Sedimentary Processes and Morphodynamics I Poster
Robert Eugene Turner	SCIWS43 Convergence Science: Weaving Modern Scientific Knowledge and Traditional Wisdom for Weather, Water, and Climate Actions
Robert Eugene Turner	H22J-08 Dredged Canals, Wetland Loss, Legacy in Louisiana
Robert Eugene Turner	Sy14A-05 Lagniappe for the Working Delta: Restoring Louisiana Marshes, Protecting Land, Increasing Climate Resilience, and Reducing Flood Risk
Robert Twilley	Advancing Root Analysis in Coastal Wetlands through Optical Imaging and AI
Robert Twilley	Engineered by Nature: Root internal Structure and Tensile Strength Reveal Biomechanical Adaptations in Coastal Wetlands
Robert Twilley	B22B-03 Comparing CO2 and CH4 Fluxes using Different Chamber Sizes in a Coastal Deltaic Floodplain
Mayank Tyagi	H14D-04 Prediction of Local Scour Evolution Beneath a Submerged cylinder by U-Shaped Fourier Neural Operators
S. M. Mahatab Uddin	Scrub and Fringe Mangrove Wetlands Leaf Productivity and Expansion are Controlled by Air Temperature, Phosphorus Availability, and Salinity in Port Fourchon, Louisiana, USA
Harish Uppu	A33E-08 Subseasonal-To-Seasonal Variability of Rapid intensification in North Atlantic Tropical Cyclones
Harish Uppu	Intercomparing Attribution Methods for Hurricane Milton's intensity
George Voyiadjis	Subsidence in Southern Louisiana Based on GPS and Water Level Monitoring with Numerical Modeling
Faith Walton	EP24B-05 Assessing a Sediment Budget for an Interdistributary Bay in the Mississippi River Delta: East Bay, Louisiana
Faith Walton	EP24B-07 Spring Flood Sediment Dispersal Offshore of the Mississippi River Delta
Faith Walton	Sediment Transport and Accumulation in the Anthropocene Offshore of Pass a Loutre, Mississippi River Delta, USA
Faith Walton	ED31H The Coastal Workforce in Science, Engineering, and Design Professions: Expanding Workforce Pathways To Face Present and Future Challenges Poster

Researcher	Presentation Title
Jianwei Wang	DI31A Earth and Planetary Cores: Interdisciplinary Insights on Structure, Dynamics, and Evolution I Oral
Jianwei Wang	Carbon as an Essential Element for Explaining Density Gradients in Earth's Outer Core
Jianwei Wang	DI33B Earth and Planetary Cores: interdisciplinary Insights on Structure, Dynamics, and Evolution II Poster
Jianwei Wang	Effect of Light Elements on the Melting Behavior of Liquid Iron Alloys Under Earth's Inner Core Boundary Conditions.
Jianwei Wang	Scenarios for Earth's Outer Core Composition Based on a Density Model of Multi-Component Iron-Rich Alloys
Kejin Wang	Comparing Community Resilience To Natural Hazards at Two Geographical Scales: A Case Study of Louisiana using the Resilience Inference Measurement (Rim) Model
Lei Wang	H33B-07 Automated Basin-Scale River Reach Segmentation using Morphologic Attributes derived from Sentinel-1 SAR and SAM2 Deep Learning Foundation Model
Lei Wang	H34D-07 Remote Sensing-Based Mapping and Monitoring Salinity and Dissolved Oxygen in Mobile Bay and Coastal Alabama using Deep Learning and Sentinel-3 OLCI Data
Lei Wang	IN42A-08 Streamlining Satellite-Based Water Quality Assessment: The RS-Waterquality Mapper Toolbox for QGIS
Lei Wang	Constructing a High-Resolution Reservoir Dataset Across the Contiguous United States using Sentinel-1 SAR Imagery
Lei Wang	Derivation of Full-Depth Velocity Profiles Across River Channels by using Drone-Based Particle Imagining Velocimetry and Entry-Based Velocity Distribution Model
Lei Wang	GLWaterlevel-Analyst: An Open-Source Remote Sensing Toolbox in QGIS for Global Lake Water Level Analysis and Prediction
Lei Wang	Commission Error Analysis and Correction in Remote Sensing Flood Maps using an Object-Oriented, Hydrologically Informed Approach
Lei Wang	Evaluation of Swot-Derived Lake Products and Development of Lake Hypsometric Rating Curves through the integration of SWOT, Satellite Altimetry, and Satellite Imagery
Lei Wang	Automated Extraction of River Channels and Morphological Attributes from SAR Imagery using a Fine-Tuned Deep Learning Foundation Model and Computer Vision Post-Processing Algorithms
Lei Wang	High-Fidelity Spatio-Temporal Fusion of Multi-Sensor Satellite Data: A Two-Stage Generative Adversarial Framework Built Upon Convlstm and Vit Deep Learning Models
Lei Wang	H14D-07 Mapping and Monitoring Reservoir Dynamics with a Fine-Tuned Foundation Deep Learning Model and Time-Series SAR Data
Yao Wang	SY11A-03 Simulating and Evaluating Nature-Based Solutions: A Comparative Study of Flood Resilience and Planning Policies in Rural Georgia and Louisiana
Yao Wang	SY31A-05 Co-Producing Climate Services through Community-Led Planning Strategies in Coastal Louisiana
Yao Wang	Development of an Interactive Flood Risk Sandbox Tool Integrating Multi-Decadal Projections and Elevation Ordinance
Yixuan Wang	NH13B-01 Resilence of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding induced by Hurricae Harvey (2017)
Yixuan Wang	NH13B-04 Storm-Driven Responses To Carbon Cycling Along the Land-Estuary-Ocean Continuum in the Mississippi River Delta
Yixuan Wang	Compound Flooding in Deltaic Landscapes: Lessons from Hurrican Ida with a Coupled Hydrological-Ocean Model
Sophie Warny	Pp33A-04 Plant Biomarkers Detect Messinian Vegetation, Climate and Transport on the Iberian Margin
Sophie Warny	Pollen-Based Crest Reconstructions of Miocene Rainfall on the Western Portuguese Margin
Sophie Warny	Sapropels Lasting >700Kyr in the Messinian Alborán Sea
Emily Wei	EP24B-05 Assessing a Sediment Budget for an Interdistributary Bay in the Mississippi River Delta: East Bay, Louisiana
Emily Wei	EP24B-07 Spring Flood Sediment Dispersal Offshore of the Mississippi River Delta
Emily Wei	Sediment Transport and Accumulation in the Anthropocene Offshore of Pass a Loutre, Mississippi River Delta, USA
Ziran Wei	Sniffing Out Polonium: Aerosol $^{210}Po/^{210}Pb$ Ratios Trace Volatile Emissions from The Amundsen Sea Polynya
Ziran Wei	Nutrient Escape Routes: Following the Trail from River To Gulf with Isotopes and Acoustics
Matthew Weirich	Laguna Beach: An Environmental Study of Tourism and Waste

Researcher	Presentation Title
John R White	From Above and Below Assessing Impacts of Droughts and Storm Surges on Coastal Wetland Health
John R White	Impact of Winter Cold Fronts on Phosphorus Flux from Coastal Estuary and Implications for Summer Harmful Algal Blooms
John R White	Impacts of River Reconnection on Denitrification Rates of Marshes in Barataria Bay, Louisiana
John R White	Surface-Subsurface Hydrological Connectivity and Salinity Dynamics in a Back-Barrier Marsh
Zoe Whitton	The Shifting of the Arid-Humid Divide in the South Central United States
Devynn Wilderman	A Thermobarometric and Petrochronologic Investigation of the Lithostatic Pressure Paradigm in the Nw indian Himalaya
Clinton S Willson	Integrating Scientific Modeling and Environmental Financing for Urban Resilance
Clinton S Willson	Impacts of Hurricane Francine on the Shelf and Shallow Microtidal Regions of Coastal Louisiana
Carol Wilson	EP32A-02 Investigating Vegetation Controls on Mississippi Delta Morphodynamics using a Novel High-Resolution MicroCT Imaging Approach
Carol Wilson	Depth-Dependent Subsidence, Sedimentation and Elevation Change in Coastal Bangladesh using Surface Measurements, InSAR and Modeling.
Carol Wilson	Stratigraphic and Lithologic Variability in Shallow Bays of Upper Barataria Basin of Coastal Louisiana
Carol Wilson	Sediment Dynamics and Carbon Storage of Balize Delta Crevasses of the Mississippi River
Carol Wilson	Seasonal and Decadal Elevation Dynamics in Polders and the Natural Sundarbans of the Ganges-Brahmaputra Delta Plain
Carol Wilson	The Sedimentologic Evolution of Marsh Platforms Hosting Phragmites Australis: Implications for the Eco-Geomorphic Dynamics of the Birdsfoot Delta, Louisiana, USA
Zakiya S Wilson-Kennedy	Broadening Participation in Coastal and Environmental Research for K-20 in the Gulf Coast Region: Mississippi River Delta Transition Initiative
Zakiya S Wilson-Kennedy	Exploring the Affective Impacts of Field-Based Environmental and Geoscience Learning Experiences on Undergraduate Scholars
Brett Wolfe	B43B-07 Tracking Tree Physiological Responses to Drought using Hyperspectral Sensing Across Multiple Species
Brett Wolfe	B21C-01 Putting Soil Waterlogging into Stomatal Conductance Models
Jameson Woodall	Sediment Transport and Accumulation in the Anthropocene Offshore of Pass a Loutre, Mississippi River Delta, USA
Maia Woodard	The Influence of Channel Edge Vegetation on Interior Marsh Geomorphology: A Case Study in the Lower Mississippi River Delta
Kehui Xu	OS43A-08 Hydrodynamic-Sediment Transport Model in Galveston Bay During Hurricane Harvey
Kehui Xu	EP32A-01Barrier Island Restoration and Shelf Morphodynamics in Response To Sediment Dredging in Coastal Louisiana
Kehui Xu	A Well-Preserved MIS 4 Paleoforest Offshore of Alabama Contains Evidence of Abrupt Climate Change
Kehui Xu	Stratigraphic and Lithologic Variability in Shallow Bays of Upper Barataria Basin of Coastal Louisiana
Kehui Xu	Hydrodynamics and Sediment Dynamics of East Bay of the Mississippi River Delta, Louisiana, USA
Kehui Xu	Plume Sedimentation on the Mississippi River Delta Front: A Priliminary Modeling Study
Kehui Xu	A Machine Learning-Based Prediction-To-Map Framework for Rapid and Accurate Spatial Flood Prediction
Yi-Jun Xu	Dissolved Carbon and Pco2 Variability in a River-Coastal Lake Continuum, Northern Gulf of Mexico
Z. George Xue	OS43A-08 Hydrodynamic-Sediment Transport Model in Galveston Bay During Hurricane Harvey
Z. George Xue	NH13B-01 Resilence of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding induced by Hurricae Harvey (2017)
Z. George Xue	NH13B-04 Storm-Driven Responses to Carbon Cycling along the Land-Estuary-Ocean Continuum in the Mississippi River Delta
Z. George Xue	A Numerical Assessment of Ocean Alkalinity Enhancement Efficiency on a River-Dominated Continental Shelf-A Case Study in the Northern Gulf of America

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Z. George Xue	Impacts of Hurricane Francine on the Shelf and Shallow Microtidal Regions of Coastal Louisiana
Z. George Xue	Plume Sedimentation on the Mississippi River Delta Front: A Priliminary Modeling Study
Z. George Xue	Hurricane Francine (2024) Across the Mississippi Delta: Linking Offshore Waves to Estuarine Response with Multiscale Coupled Ocean-Wave-Hydrology Models
Z. George Xue	Future Warming, Freshening and Acidification in the Gulf of America: Dynamic Downcasting of CMPI6 Projections
Z. George Xue	A Machine Learning-Based Prediction-To-Map Framework for Rapid and Accurate Spatial Flood Prediction
Z. George Xue	Compound Flooding in Deltaic Landscapes: Lessons from Hurrican Ida with a Coupled Hydrological-Ocean Model
Z. George Xue	NH31F Impacts of and Resilency of Coastal Ecosystems to Transient Disturbances III Poster
Z. George Xue	Ensemble Projections of Mississippi River Discharge Using a High-Resolution Land Surface Model
Z. George Xue	A34A-04 Beyond Boundaries: Dynamically 2-Way Coupled Hydrology-Ocean Models for Coastal Hazard Forcasting Across the Leo Continuum
Qiang Yao	PP52A-02 Holocene History of Mangrove Population Spread Along the Northern Gulf of Mexico Coast
Qiang Yao	Florida Mangrove Dieback on a Decadal and Centennial Timescales
Jianguo Yuan	OS23B-06 Enhancing Ocean Model Accuracy with Neural Network-Informed K-Profile Parameterization
Taofiq Yusuf	Simulating the Impacts of Green and Grey Solutions for Compound Driven Nuisance Floodng: Tides, Wave Runup, and Non-Tidal Residual
Taofiq Yusuf	Relative Composition of Nuisance Flooding by Astronomic Tides, Meterology, Oceanographic Currents and Stochastic Residuals
Mohammad Zamehrian	H51W Underground Hydrogen Storage: Numerical, Analytical, and Laboratory investigations Poster
Mohammad Zamehrian	MR32A-06 Evaluation of Caprock integrity During Underground Hydrogen Storage in Aquifers with Different Formation Characteristics
Zhengchen Zang	NH13B-01 Resilence of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding induced by Hurricae Harvey (2017)
Samuel Zapp	EP12A-08 Variability in Flood Discharge Reduces Organic Carbon Preservation in Deltas: Insights from Physical Experiments
Samuel Zapp	Simulating the Impacts of Green and Grey Solutions for Compound Driven Nuisance Floodng: Tides, Wave Runup, and Non-Tidal Residual
Xinyang Zhang	Identifying Key Drivers of Community Resilience To Hurricanes: An Attention-Based Bayesian Network Approach in the Guangdong–Hong Kong–Macao Greater Bay Area, China
Xinyang Zhang	Comparing Community Resilience To Natural Hazards at Two Geographical Scales: A Case Study of Louisiana using the Resilience inference Measurement (Rim) Model
Xiaochen Zhao	NH13B-01 Resilience of Lagoonal Estuaries South Texas Coast: Salinity Recovery from Compound Flooding Induced by Hurricane Harvey (2017)
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Xiaochen Zhao	A34A-04 Beyond Boundaries: Dynamically 2-Way Coupled Hydrology-Ocean Models for Coastal Hazard Forecasting Across the Leo Continuum
Jiameng Zheng	Water Scarcity Attribution in the Western U.S. using Interpretable Machine Learning Emulators of Process-Based Hydrologic Models
Yaneng Zhou	Subsidence in Southern Louisiana Based on GPS and Water Level Monitoring with Numerical Modeling
Guangsheng Zhuang	T21A-08 Calibration of Hydrogen Isotope Signatures in Surface Waters and Long-Chain N-Alkanes at the Drainage-Basin Scale: Case Studies from the Northern Tibetan Plateau
Lei Zou	Multiscale Analysis of Human Mobility Adaptations To Extreme Heat in the United States