



36th Annual Louisiana Remote Sensing and GIS Workshop

Louisiana's Premier Workshop on Remote Sensing, GIS,
Mapping Science, Spatial Analysis, and GeoInformatics

April 9th, 10th, and 11th, 2024

Castine Center
63350 Pelican Drive
Mandeville, Louisiana

AGENDA

Tuesday, April 9, 2024

- 8:00 am – 2:00 pm **Registration**
- 8:00 am – 10:00 am **Vendor Set-up in Exhibition Area**
- 9:30 am – 10:00 am **Continental Breakfast**
- 10:00 am – 10:15 am **Welcome and Announcements/Housekeeping**
- 10:15 am – 10:30 am **Opening Remarks**
Kathrine Cargo, GISP, LARSGIS Workshop Chair
- 10:30 am – 11:15 am **Keynote Address**
Louisiana: The Canary in the Climate Coal Mine
Barry D. Keim, PhD, the Richard J. Russell Louisiana Studies Professor and Chair of the LSU Department of Geography and Anthropology. Dr. Keim's research focuses on climatic extremes, particularly on heavy rainfall, hurricanes, and storm surge. In matters concerning climatic data and its interpretation he is recognized as an expert. He conducts climatic research on the State of Louisiana and the broader region serving the community by providing climatic data to those in need while also providing interviews to the media. He serves as the LSU Director of a NOAA-funded research program called the Southern Climate Impacts Planning Program (SCIPP) which is a joint venture with personnel at the University of Oklahoma. He is director of the Disaster Science and Management at LSU, which is a core piece of the BA and BS programs within Geography. Also, from 2003 to 2023, Dr. Keim served as the Louisiana State Climatologist.
- 11:15 am – 12:30 pm **Boxed Lunch**
Sponsored By: NV5



12:30 pm – 1:30 pm **Session 1: Environmental Applications of Remote Sensing and GIS Part I**
Moderator: Andrew Milanes, PE, GISP, Es²

- 1) *The National Map (TNM) – Your Source for Topographic Information*
Michelle Fischer, US Geological Survey, Lafayette, LA
- 2) *LDH Tracking Program: GIS Applications in Environmental Health Surveillance*
Kate Friedman, MNS, LA Department of Health, Baton Rouge, LA
- 3) *A GIS Workflow to Support Real-Time Decisions in Environmental Remediation*
Blake Simon, Freese and Nichols, Inc., Lafayette, LA

1:30 pm – 1:45 pm **Break**
Sponsored By: Sanborn Geospatial

1:45 pm – 2:45 pm **Session 2: Geospatial Analytics**
Moderator: Molly McGraw, PhD, Southeastern Louisiana University

- 1) *Trail Proximity to the Emergency Evacuation Network*
Leslie Couvillion, Regional Planning Commission, New Orleans, LA
- 2) *Historical Heat Mapping in Experience Builder*
Thomas Rickett, Acadian Ambulance, Lafayette, LA
- 3) *Providing a Higher Resolution Social Vulnerability Index (SVI) for Local Analysis*
Lynn Dupont, GISP, Regional Planning Commission, New Orleans, LA

2:45 pm – 3:00 pm **Break**

3:00 pm – 4:00 pm **Session 3: Innovative Solutions Using GIS Technology in Government Part I**
Moderator: Thomas Rickett, Acadian Ambulance

- 1) *Improving the User Experience with ArcGIS Experience Builder Web Apps*
Justin Priola, GISP and Mickey Broussard, City-Parish Data, Analytics and Performance, Baton Rouge, LA
- 2) *Innovative Repetitive Loss Mapping with a Focus on 510 CRS Credit*
Randi Ezell, Jefferson Parish Floodplain Management, Jefferson, LA
- 3) *Strengthening the Louisiana Well Owner Network*
Darcie Olexia, LDH Office of Public Health, Section of Environmental Epidemiology & Toxicology, New Orleans, LA and Garth Sullivan, GISP, Es², Denham Springs, LA



- 4:00 pm – 5:00 pm **Session 4: Environmental Applications of Remote Sensing and GIS Part II**
Moderator: Justin Priola, GISP, City-Parish Data, Analytics and Performance
- 1) *Long Term Monitoring in an Arctic Delta*
Molly McGraw, Southeastern Louisiana University, Hammond, LA
 - 2) *A Non-Intrusive Method of Collecting Data for Observed Surface Classification of a Coastal Habitat*
Zach Meyers, Duplantis Design Group, Baton Rouge, LA
 - 3) *Seasonal Variations of Air-Land Carbon Flux at Spruill Farm North Carolina Based on Vertical Profile of Carbon Dioxide in Lower Troposphere Obtained with an Unmanned Aerial Vehicle (UAV)*
Jinchun Yuan, Elizabeth State University, Elizabeth City, NC
- 5:30 pm – 8:00 pm **Vendor Social Event**
Sponsored By: Es²
Location: The Barley Oak

Wednesday, April 10, 2024

- 8:00 am – 2:00 pm **Registration**
- 8:30 am – 9:00 am **Continental Breakfast**
Sponsored By: Duplantis Design Group
- 9:00 am – 9:15 am **Welcome and Announcements**
Kathrine Cargo, GISP, LARSGIS Workshop Chair
- 9:15 am – 10:45 am **Session 5: Enterprise GIS**
Moderator: Lynn Dupont, ASLA, GISP, Regional Planning Commission
- 1) *Enterprise GIS Implementation - A Program Versus a Project*
Jason Carr, LA DOTD, Baton Rouge, LA
 - 2) *Louisiana Spatial Data Infrastructure*
David Gisclair and Warren Kron, GISP, Louisiana GIS Council
 - 3) *LADOTD's Local Data Initiative: A Collaborative Approach*
Lucas Denson, LA DOTD, Baton Rouge, LA



10:45 am – 11:00 am

Break

Sponsored By: Duplantis Design Group

11:00 am – 11:45 am

Session 6: Location Matters

Moderator: Rusti Liner, River Parishes Community College

- 1) *Relocation of the NWS Weather Radar from Slidell to Hammond*
Kevin Gilmore, New Orleans/Baton Rouge Weather Forecast Office
National Weather Service, Slidell, LA

11:45 am – 1:00 pm

Boxed Lunch

Sponsored By: Acadian Architectural Woodwork and Wyndston Services

12:00 pm – 1:00 pm

Session 7: Vendor Presentations

Moderator: Warren Kron, GISP, Es²

- 1) *The Why and How of Statewide Imagery Programs*
Matt Hiland, Sanborn Geospatial, Colorado Springs, CO

Why and how other states began their statewide data programs.

- 2) *An Introduction to Reality Mapping for State and Local Government*
Traci Tracey and Zena Pelletier, Esri, San Antonio, TX

Reality mapping involves the creation of precise digital depictions of the real world by utilizing images, lidar technology, or a combination of both. Discover how Esri's reality mapping features empower you to produce lifelike 3D models, point clouds, detailed orthomosaics, and elevation models through the utilization of drone, aerial, and satellite imagery.

- 3) *Pro Point Technology*
Kevin Cormier and Eric Bock, NEI/Trimble, Lafayette, LA

Pro Point Technology sets a new standard for precision and efficiency in GNSS equipment. Whether it's mapping, construction layout, or asset management.



- 1:00 pm – 2:15 pm **Session 8: GIS in Academia**
Moderator: Rodney B. Yantis, NASA/UL Lafayette Regional Application Center
- 1) *Empowering Youth and Innovating Education with GIS Technology*
Vibriyogn Epuri and Fran Harvey, GISP, Global Geospatial Institute, Baton Rouge, LA
 - 2) *Providing an Inside Look into the World of Geospatial Technologies Through Recruitment of Prospective Geoscience Majors*
Courtney A. Poirier Chicola and Rodney B. Yantis, NASA/UL Lafayette Regional Application Center, Lafayette, LA
 - 3) *UNO GIS: First Year GIS Students Using Data Driven Pages to Create Animated Maps*
Louis Temento and Students, University of New Orleans, New Orleans, LA
 - 4) *STELLA and Beyond*
Bree Landry and Billy Poirier, NASA/UL Lafayette Regional Application Center, Lafayette, LA
- 2:15 pm – 3:15 pm **Break**
- 2:15 pm – 3:15 pm **Student Poster Competition**
Poster Author Interviews: Please visit the poster display area and cast your vote!
- 3:15 pm– 4:00 pm **Session 9: Innovative Solutions Using GIS Technology in Government Part II**
Moderator: Brad Mooney, Louisiana Department of Wildlife and Fisheries
- 1) *Identifying the Displaced Dead in the Aftermath of Hurricane Ida: GIS's Role in Bringing Closure to Impacted Communities*
Christine L. Halling and Ryan M. Seidemann, PhD, Louisiana Department of Justice, Baton Rouge, LA
 - 2) *Integration of High-Resolution DEMs and Real-Time Water Levels to Guide Larval Mosquito Management*
Kevin A. Caillouet and Hieu Duong, St. Tammany Parish Mosquito Control, Slidell, LA
- 4:00 pm – 5:00 pm **Awards Ceremony**
Moderator: Lynn Dupont, ASLA, GISP, Regional Planning Commission
- 5:30 pm – till **Workshop Social Event – Crawfish Boil**
Location: Kelly's Coastal Cabana



Thursday, April 11, 2024

Vendor Technology Workshops

- 8:00 am – 10:00 am **Vendor Take-down in Exhibition Area**
- 8:30 am – 9:00 am **Coffee**
- 9:00 am – 10:00 am **Experience Builder Tips and Tricks**
Traci Tracey and Zena Pelletier, Esri, San Antonio, TX
- 10:15 am – 10:45 am **Drone Use Cases and Drone Types in Relation to GIS**
William Bell, SITECH, Baton Rouge, LA and Reed David, GeoJobe, Gulfport, MS
- 10:45 am – 11:15 am **DA2 Catalyst and R580 Demonstration with Field App**
Kevin Cormier, NEI/Trimble, Lafayette, LA



Poster Presentations

Student Poster Competition

- 1) *Assessing Correlation between Aerosolized PM 2.5 and Algal Blooms Using Satellite Images in a Eutrophic Sound*
Aron Stamper, Elizabeth City State University, Elizabeth City NC
- 2) *Localized Flooding Resulting from Coastal Wetland Degradation and Urbanization*
Lauren Lee, Elizabeth City State University, Elizabeth City NC
- 3) *The Effects of Climate Change on Ecuador and the Galápagos Islands*
Lesta Hess, Elizabeth City State University, Elizabeth City NC
- 4) *Multi-Criteria Evaluation and Weighted Overlay Analysis of Microplastic Pollution in Nacogdoches, Texas*
Kirsten Garza, Stephen F. Austin State University, Nacogdoches, TX
- 5) *Pine Island Erosion Due to Invasive Nutria Species Using Aerial View Geographic Systems*
Elizabeth Hodges, Elizabeth City State University
- 6) *Seasonal Variations of Air-land Carbon Flux at Spruill Farm North Carolina Based on Vertical Profile of Carbon Dioxide in Lower Troposphere Obtained with an Unmanned Aerial Vehicle*
Jinchun Yuan, Elizabeth City State University, Elizabeth City NC
- 7) *Monitoring Change Detection in an Urban Area with Unmanned Aerial Vehicles*
Victoria Williams, Stephen F. Austin State University, Nacogdoches, TX
- 8) *Sediment Dynamics of Louisiana's Barataria Basin Using Sentinel-2 Data and Deep Learning Approach*
Emeghiebo Chisom Okwuchi, University of Louisiana at Lafayette, Lafayette, LA



Professional Posters

- 1) *Transboundary Ecology and Conservation in the Lower Rio Grande Valley*
B. Chivoiu, S.B. Hartley, E.L. Koen, M.M. Lamont, Claudia Mengelt, B.A. Middleton, M.J. Osland, J.H. Waddle, T.J. Zenzal Jr., and more, U.S. Geological Survey, Wetland and Aquatic Research Center, Lafayette, LA

- 2) *Long-term Remote Sensing Assessment of Waterfowl and Shorebird Habitat on Inland Agricultural Landscapes Along the Louisiana Chenier Plain*
Tyler Morvant, Cherokee Nation System Solutions, Contracted to the U.S. Geological Survey; U.S. Geological Survey, Wetland and Aquatic Research, Lafayette, LA

- 3) *Mapping Barrier Island Habitats for the Louisiana Outer Coast Project*
Kimberly A. Thompson, Nicholas M. Enwright, and Jason L. Dugas, Cherokee Nation System Solutions, Contracted to the U.S. Geological Survey; U.S. Geological Survey, Wetland and Aquatic Research, Lafayette, LA



Guest Professional Poster

- 1) *Mississippi River Alluvial Valley Development of Alluvial Surface (Harold N. Fisk, 1944)*
Overlying Louisiana 2020 LANDSAT-8 Satellite Imagery Mosaic (DeWitt H. Braud, 2021)
R. Hampton Peele, Coastal Ecosystem Design Studio, Louisiana State University, Baton Rouge, LA