

*22<sup>nd</sup> annual*

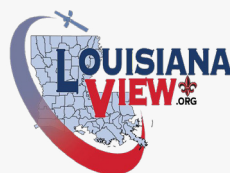
**Hurricane Season**

**Geospatial Data Mining  
Workshop**

*NASA/UL Lafayette Regional Application Center*

*University of Louisiana at Lafayette*

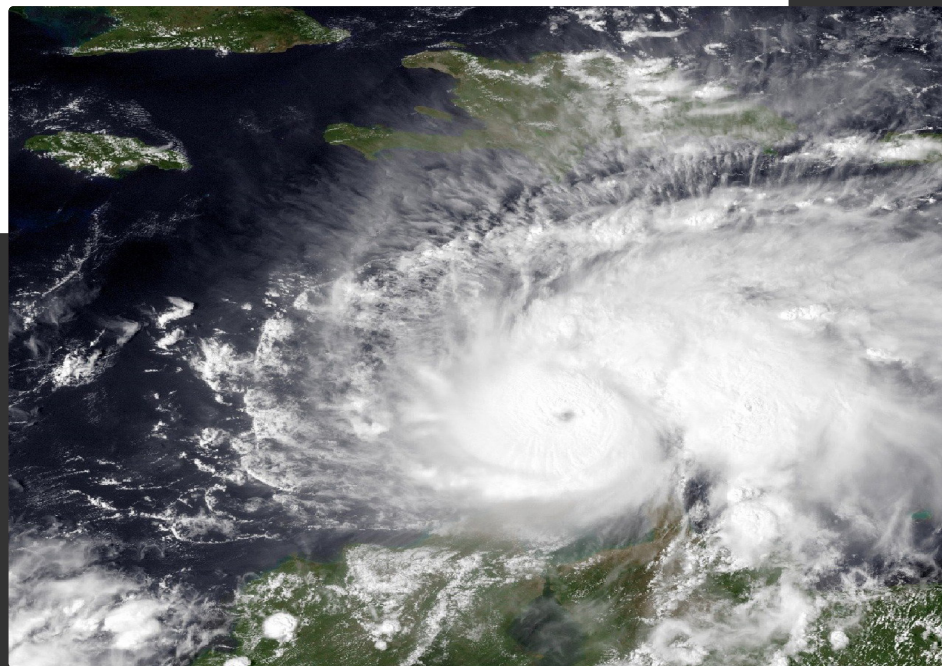
**2021**



# 22 years of disaster response

Thank you for participating in our 22nd annual Data Mining workshop. The workshop was held online due to the COVID19 pandemic. This year's workshop was a change from our in-person gathering; however, it helped us expand our community and allowed more people to be part of this geospatial data mining outreach. We hope this new experience prepared us for future virtual workshops and seminars while assisting each participant in preparation for the Hurricane Season of 2021.

The following virtual document has been prepared to provide you a summary and related links for all presentations we had in this workshop.



# workshop coordinators

Brent Yantis is the Director of the NASA/UL Lafayette Regional Application Center located in the Research Park of the University of Louisiana at Lafayette. He has a Bachelor's degree in Agriculture and a Master's Degree in Landscape Architecture: Landscape Ecology/GIS and Remote Sensing from Louisiana State University. He is currently a member and current Board Chair of the National AmericaView program; Director of LouisianaView; State GeoSpatial Contractor to the Louisiana Army National Guard; a member of LaURISA and a project manager for the International Charter.



Chris Cretini joined the USGS National Wetlands Research Center in 2000. As a member of the Spatial Analysis Branch, he developed web and database applications to share data and to highlight integrated USGS science and partner programs across the Gulf of Mexico. In 2007 he joined the USGS National Geospatial Program and is The National Map Liaison to Arkansas and Louisiana. He works to develop data acquisition and stewardship agreements to ensure the availability of common base data to a broad range of users and applications. Chris is a member of the USGS Geospatial Information Response Team, which ensures that timely geospatial data are available for use by emergency responders, land and resource managers, and for scientific analysis.



Rusti Liner has been teaching college courses since 2010. She recently developed and introduced the first offering of a GIS course at the college. An active member of the Louisiana Emergency Preparedness Association (LEPA), she has also been actively involved in disaster management and has led the response to the recent COVID crisis at the River Parishes Community College campuses. Ms. Liner was deployed to 15 nationally declared disasters across the United States and shares that one of her most memorable experiences was during the BP Oil Spill.





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## **June 3rd, day one of the workshop**

**On the first day of the workshop, we hosted Tim Osborn, NOAA Office of Coast Survey; David Schlotzhauer, and Jonathan Brazzell, National Weather Service; and Jeremy Kirkendall, NASA Earth Science, Disasters Program.**

You can have access to the first day of the workshop video using the link provided.

**Hurricane Season Geospatial Data Mining Workshop Day 1, June 3rd**



## ***Tim Osborn***

Central Gulf Coast Regional Navigation Manager  
NOAA Office of Coast Survey

Tim oversees surveying and mapping of Gulf Coast waters, navigation channels, ports, waterways, and coordinates the NOAA OCS response activities during hurricanes and severe incidents. He participates in the planning and implementation of new programs such as densification of NOAA's tides and water level programs and installations (including PORTS, and IOOS related activities) in the Gulf of Mexico. He works with local state and coastal communities on coastal projects including restoration projects, artificial reef programs, new navigation and port installations and the surveying and mapping of marine debris.

Presentation title:

***NOAA Hurricane Season Update***

The slides are available at the link below:

<https://drive.google.com/file/d/1-upRtaADTQqoj-qBdgIqBR79CXkfztsd/view?usp=sharing>



## *David Schlotzhauer*

Hydrologist

Lower Mississippi River Forecast Center

David Schlotzhauer has been a Hydrologist at the National Weather Service's Lower Mississippi River Forecast Center (LMRFC) since 2010. His primary responsibility is forecasting river stages at any of the 240+ forecast locations within the area. Secondary duties that support the forecasting role include geospatial analysis and programming. Prior to the NWS, he was an Emergency Planner for the Louisiana Governor's Office of Homeland Security and Emergency Management. Mr. Schlotzhauer has bachelor's degrees in Life Sciences and Geological Engineering from the Missouri University of Science and Technology and a master's degree in Operational Meteorology from Mississippi State University.

Presentation title:

***NWS Geospatial Data...Old and New***

The slides are available at the link below:

<https://drive.google.com/file/d/1jxfXZ0DizIqw6nT3swwzS1zbKe76K-DV-/view?usp=sharing>



## *Jonathan Brazzell*

Service Hydrologist

National Weather Service

Jonathan Brazzell is the Service Hydrologist at the NOAA/ National Weather Service Forecast Office in Lake Charles Louisiana. In this capacity, he manages the office's hydrologic forecasting program, which issues water level and flood forecasts across 22 counties and parishes in southeast Texas, southwest and central Louisiana. Jonathan has been with the National Weather Service for 22 years and has been stationed in Grand Forks, North Dakota as a Weather Forecaster, then in San Angelo Texas as a Senior Forecaster before moving into his current position at Lake Charles in 2007.

Presentation title:

***NWS Geospatial Data...Old and New***

The slides are available at the link below:

[https://docs.google.com/presentation/  
d/17CIOkoAyKm5GQ9GeifTBai3qiLjG4Rdh/edit?  
usp=sharing&ouid=100916149451313942961&rtpof=true&sd=true](https://docs.google.com/presentation/d/17CIOkoAyKm5GQ9GeifTBai3qiLjG4Rdh/edit?usp=sharing&ouid=100916149451313942961&rtpof=true&sd=true)





## *Jeremy Kirkendall*

Senior GIS Administrator,  
NASA Disasters Program

Jeremy Kirkendall is the Senior GIS Administrator of the NASA Disasters Program's Mapping Portal at NASA Headquarters. He is responsible for the curation of the NASA Disasters Mapping Portal which hosts disaster-relevant research, data, and satellite imagery from across NASA as well as web applications and story maps. Jeremy has over a decade of GIS experience and a Master's in GIS Management.

Presentation title:

***NASA Disasters Mapping Portal Overview***

The slides are available at the link below:

<https://drive.google.com/file/d/12WuLDntKx3kNmJA1jvHSibIZVeYyneY1/view?usp=sharing>

## **June 8<sup>th</sup>, day two of the workshop**

**On the second day of the workshop, we hosted Chris Vaughan and Kimberly Stephens, FEMA; Richard Butgereit, Geospatial Insurance Consortium; Jason Sheeley and Alexandra Ubben, USACE; and Rusti Liner, River Parishes Community College.**

You can have access to the second day of the workshop video using the link provided.

**Hurricane Season Geospatial Data Mining Workshop Day 2, June 8th**



## *Christopher Vaughan*

Geospatial Information Officer  
**FEMA**

Chris Vaughan serves as the Federal Emergency Management Agency's first-ever geospatial information officer, a role he has held for over eight years. Vaughan envisioned and established the Response Geospatial Office, which provides strategy and guidance for FEMA's 10 regional offices and their proposed Regional Geospatial Resource Centers. Vaughan earned a Master's Degree in Counseling Psychology and a Bachelor's Degree in Sociology from Lee University. Before he joined NGA in November 2006, Vaughan was a principal defense analyst at General Dynamics. He worked with key stakeholders in resolving complex problems that could be addressed through GIS tools.

Presentation Title:

***FEMA's & Response Geospatial and Analytic Resources***

The Slides are available at the link below:

<https://drive.google.com/file/d/11rmSFRuSjtTQV-woalAvml6kaiRVjrlK/view?usp=sharing>



## *Kimberly Stephens*

Communications and Coordination Lead  
**FEMA**

Kimberly Stephens has been with FEMA for almost five years, initially providing communications support to the Office of the Administrator. She joined the Regional Geospatial Office in 2019, and helps deliver policy, guidance and training to the FEMA geospatial enterprise. She is a member of the National Response Coordination Center staff where she serves as one of the Crowdsourcing Unit Leaders, and manages the RGO's online Geospatial Resources Center. Ms. Stephens has a Bachelor of Arts in Political Science and a Master's Degree in Public Administration, both from Texas A&M.

Presentation Title:

***FEMA's & Response Geospatial and Analytic Resources***

The Slides are available at the link below:

<https://drive.google.com/file/d/11rmSFRuSjtTQV-woalAvml6kaiRVjrlK/view?usp=sharing>





## ***Richard Butgereit***

Director of Catastrophe Response  
Geospatial Insurance Consortium  
Geospatial Insurance Consortium (GIC)

Richard Butgereit is Director of Catastrophe Response at the Geospatial Insurance Consortium (GIC), a not-for-profit consortium between the insurance industry, National Insurance Crime Bureau, and Vexcel Imaging. After disasters, Richard leads collection of high-resolution aerial imagery to assist GIC members in claims processing and to fight against fraud. Recognizing the value of these images and benefits of cooperating with public safety stakeholders including federal, state, and local government and non-government organizations, GIC provides access to the images at no-cost and with no obligation to these stakeholders. Richard began this position in November 2018, coming from the Florida Division of Emergency Management, where he served as the Chief Information Officer for the Division and Technical Services Branch Chief for the Florida State Emergency Response Team. Richard is a graduate of New College, the Honors College of the State of Florida University system, and is a Geographic Information Systems Professional.

Presentation Title:

***Engage High-Res Disaster Imagery for Smarter Government***

The slides are available at the link below:

<https://drive.google.com/file/d/1iIdr402mrDotoJJmyRiphHiT1FB3kU5W/view?usp=sharing>



## *Jason Sheeley*

Assistant Director of U.S. Army Corps of Engineers  
Modeling, Mapping, & Consequences National Center  
*United States Army Corps of Engineers (USACE)*

Jason Sheeley is Assistant Director of the U.S. Army Corps of Engineers Modeling, Mapping and Consequences national center expertise. One function of the center is assisting USACE districts to deploy robust inundation modeling and mapping capabilities and to provide a consistent national data dissemination mechanism for USACE stakeholders to access inundation maps. Mr. Sheeley has supported numerous national and regional scale flood emergencies since 2011.

Presentation Title:

***USACE Hurricane and Flood Data Resources***



## *Alexandra Ubben*

Project Manager of Dam & Levee Safety Data  
Management Team  
United States Army Corps of Engineers (USACE)

Alex Ubben joined the U.S. Army Corps of Engineers (USACE) Kansas City District in 2010. Since that time, she has been working in various roles with the Modeling, Mapping and Consequences Production Center (MMC) to support flood inundation mapping and data management initiatives. Alex has provided inundation mapping for many flood events, including numerous hurricane events in 2020. She currently serves as the project manager for the Dam and Levee Safety Data Management Team. The Data Management team is responsible for maintaining and enhancing dam and levee safety tools including the National Inventory of Dams and the National Levee Database.

Presentation Title:

***USACE Hurricane and Flood Data Resources***



## ***Rusti Liner***

Geography Instructor

Faculty Senate Campus Representative

Chair, Safety & Emergency Preparedness Committee

*River Parishes Community College*

Rusti Liner has been teaching college courses since 2010. She recently developed and introduced the first offering of a GIS course at the college. An active member of the Louisiana Emergency Preparedness Association (LEPA), she has also been actively involved in disaster management and has led the response to the recent COVID crisis at the River Parishes Community College campuses. Ms. Liner was deployed to 15 nationally declared disasters across the United States and shares that one of her most memorable experiences was during the BP Oil Spill.

Presentation title:

***A Brief Overview of the Louisiana Emergency Preparedness Association (LEPA)***

The slides are available at the link below:

<https://drive.google.com/file/d/1R62MH-cFaS5kUoBWIW14cZHKshzJi4kT/view?usp=sharing>



## June 9<sup>th</sup>, day three of the workshop

On the third day of the workshop, we hosted Mike Budde and Dean Mierau, USGS EROS Data Center; Roberto Biasutti, European Space Agency.

You can have access to the third day of the workshop video using the link provided.

Hurricane Season Geospatial Data Mining Workshop Day 3, June 9th



## *Michael Budde*

Geographer

United States Geological Survey

Earth Resources Observation & Science Center

Mike Budde is a geographer in the Science and Applications Branch at the USGS Earth Resources Observation and Science Center in Sioux Falls, SD. His primary responsibility is acting as the technical lead on the Famine Early Warning Systems Network (FEWS NET) project. FEWS NET is a USAID-funded project that specializes in remote and field-based monitoring of crop and pastoral conditions. In addition to FEWS NET responsibilities, Budde acts as the USGS Liaison to the International Charter Space and Major Disasters. As an Executive Secretariat member and US Authorized User he can activate the Charter on behalf of emergency managers in the US and other countries as necessary.

Presentation title:

***The International Charter Space and Major Disasters - satellite data for disaster response worldwide.***

The slides are available at the link below:

[https://drive.google.com/file/d/1zh5acW2yOGWTdA2Bn\\_y78Gp0H7wjSvc6/view?usp=sharing](https://drive.google.com/file/d/1zh5acW2yOGWTdA2Bn_y78Gp0H7wjSvc6/view?usp=sharing)



## *Dean Mierau*

Emergency Operations Coordinator

United States Geological Survey

Earth Resources Observation & Science Center

Dean Mierau, a native of Rushford, Minnesota, graduated from Winona State University in 1996 with a degree in Hydrogeology and later attended graduate school at Saint Mary's University and graduated with a Master of Science Degree in Resource Analysis. He also attended Reserve Officer Training Corps (ROTC) and was commissioned as Information Warfare Officer. He spent 5 years teaching GIS/Remote Sensing at Saint Mary's University. After 911, he went on active duty until 2013, when he took a job with the Air Force as their Geospatial Information Officer at Minot ND Air Force Base. Spent 3 years in balmy Minot before joining EROS and is currently the Emergency Operations Liaison.

Presentation title:

***USGS Earth Resources Observation Science Center  
(EROS) Emergency Operations***

The slides are available at the link below:

[https://drive.google.com/file/d/1MglSCHKTRnnzz7meHcQLtDpW63\\_9pidH/view?usp=sharing](https://drive.google.com/file/d/1MglSCHKTRnnzz7meHcQLtDpW63_9pidH/view?usp=sharing)



## ***Roberto Biasutti***

Ground Segment Manager,  
Executive Secretariat Representative  
**ESA/ International Charter**

Roberto is currently serving as the Ground Segment Operational Manager for the ESA Third Party Missions. He obtained an Aeronautical Engineering degree in 1992 at the University of Rome and began work at Eurimage, Located at ESA – Italy, he joined the Landsat project in 1996 as the Landsat project operational manager for Eurimage covering the European market, first with EOSAT and then with USGS. Following the 1993 floods in Germany, the “Earth Watching” program was formed and in 1999 lead to the birth of the International Charter following the United States Nations Conference UNISPACE III. In 2006 he became an Executive Secretariat member of the Charter, responsible for the integration of new Agencies (with CSA), for the On-Duty Operators (ODO) and Emergency on-Call Officers (ECO) services and for the development of the IT infrastructure for the Charter Operations (the Charter Operational System 2<sup>nd</sup> generation – COS-2). In 2014 Roberto becomes the Ground Segment Operational Manager for the ESA Third Party Missions like Landsat, which currently number around 20 missions and for the Proba-V mission. He speaks with us today via Italy.

Presentation title:

***International Charter: A Working Perspective PM  
Interface- COS2-Value Added Products***

The slides are available at the link below:

[https://drive.google.com/file/d/1Mgr7G5g6E4RZNxYqKCxI\\_MtIOoTlx1nU/view?usp=sharing](https://drive.google.com/file/d/1Mgr7G5g6E4RZNxYqKCxI_MtIOoTlx1nU/view?usp=sharing)



## **June 10<sup>th</sup>, day four of the workshop**

**On the last day of the workshop, we hosted Austin Dixon, LA Governor's Office of Homeland Security and Emergency Preparedness; Brett Weidman and Casey Johnston, LA Department of Transportation and Development; Bob Capezza, USDA-Natural Resources Conservation Service; Chris Cretini, USGS National Geospatial Program; Rich Frazier, USGS, Federal Geographic Data Committee; Joel Schlagel, Federal Geoplatform; and David Borges, NASA Applied Sciences Disasters Program at NASA Langley Research Center.**

**You can have access to the fourth day of the workshop video using the link provided.**

**Hurricane Season Geospatial Data Mining Workshop Day 4, June 10th**



## *Austin Dixon*

WebEOC Administrator

LA Governor's Office of Homeland Security and Emergency Preparedness  
Division of Administration

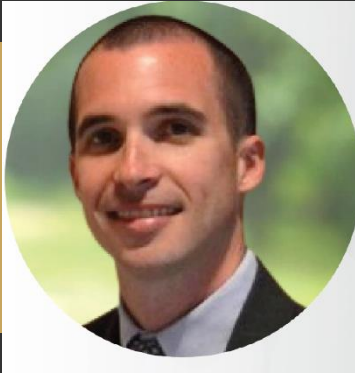
For the last five years, Austin has served the public as a WebEOC Administrator and member of the Crisis Action Team at the Louisiana Governor's Office of Homeland Security & Emergency Preparedness (GOHSEP). He has taken on increasing GIS responsibilities in the last six months, including the development of dashboards, maps, and infographics in response to the Coronavirus public health emergency as well as planning improvements to present and future GIS services offered by GOHSEP.

Presentation title:

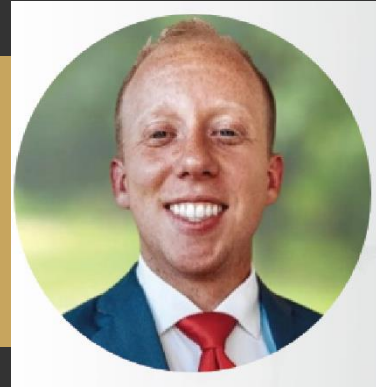
***Virtual Louisiana, <http://Damage.LA.Gov>, and WebEOC***

The slides are available at the link below:

<https://drive.google.com/file/d/1bfm6HvE1eAwlrTh2ZjOKKl-upPpFgGIS/view?usp=sharing>



***Brett Wiedman***  
***GIS Specialist***



***Casey Johnston***  
***Geospatial Analyst II***

## **LA Department of Transportation and Development**

Brett Weidman is a GIS Specialist with LA DOTD. He oversees the generation of products derived from aerial photography and lidar for use in the Statewide Topographic Mapping Program. Brett also provides GIS support to the mapping section at DOTD. He has previously worked as a GIS professional in environmental consulting, bathymetric and topographic surveying, and nautical charting for the past 16 years. He has worked in the collection, processing, and production side of the aforementioned fields. Brett earned a BS in Geography from the University of Southern Mississippi.

Casey Johnston is a Geospatial Analyst II with Dewberry and is currently working as an embedded contractor for LA DOTD. He assists DOTD GIS in accomplishing their remote sensing goals by creating and standardizing their online image services as well as providing auxiliary support to the lidar group. Since 2014, he has previously worked in local government, lidar and aerial acquisition for federal projects, and agricultural aerial acquisition. He has worked as a sensor operator, analyst, and software developer in the aforementioned positions. Casey earned a BS in GIS from Louisiana Tech University and a MS in Forestry from Mississippi State University.

Presentation title:

### ***LA DOTD Open Data Portal, Imagery Services, and Lidar Update***

The slides are available at the link below:

<https://drive.google.com/file/d/1NArrYUgkwSmzIaHt-G9hpgTzGPu-QQFF/view?usp=sharing>

The Video Link is available here:

<https://drive.google.com/file/d/1NArrYUgkwSmzIaHt-G9hpgTzGPu-QQFF/view?usp=sharing>



## ***Bob Capezza***

GIS Specialist

USDA-Natural Resources Conservation Service

Bob Capezza has over 25 years' experience in GIS, working in state & federal governments, as well as for oil/gas & telecom industries. He joined NRCS in 2003 under the Soils Department in Alexandria, Louisiana in Rapides Parish. He is responsible for providing GIS support, services, and products to NRCS staff throughout Louisiana and serves as state GIS liaison for NRCS' mission activities to "help people help the land". GIS technology is vastly changing, and Bob enjoys the challenge to learn and help others utilize it to its full potential.

Presentation title:

***Implementing Configurable Apps for ArcGIS***

The slides are available at the link below:

[https://drive.google.com/file/d/1pyuMC681stc25\\_fB66YPiejMyosmFSQk/view?usp=sharing](https://drive.google.com/file/d/1pyuMC681stc25_fB66YPiejMyosmFSQk/view?usp=sharing)





## *Chris Cretini*

National Map Liaison - AR, FL, LA, PR, USVI  
U.S. Geological Survey

Chris Cretini joined the USGS National Wetlands Research Center in 2000. As a member of the Spatial Analysis Branch, he developed web and database applications to share data and to highlight integrated USGS science and partner programs across the Gulf of Mexico. In 2007 he joined the USGS National Geospatial Program and is The National Map Liaison to Arkansas and Louisiana. He works to develop data acquisition and stewardship agreements to ensure the availability of common base data to a broad range of users and applications. Chris is a member of the USGS Geospatial Information Response Team, which ensures that timely geospatial data are available for use by emergency responders, land and resource managers, and for scientific analysis.

Presentation title:

***Louisiana Lidar Update and The National Map Resources***

The slides are available at the link below:

[https://drive.google.com/file/](https://drive.google.com/file/d/1CVnHye595E5K9zAHeH1htowuD29tyU85/view?usp=sharing)

[d/1CVnHye595E5K9zAHeH1htowuD29tyU85/view?usp=sharing](https://drive.google.com/file/d/1CVnHye595E5K9zAHeH1htowuD29tyU85/view?usp=sharing)



## *Rich Frazier*

Principal Planner/GIS Manager / Licensed Landscape Architect  
USGS, Federal Geographic Data Committee

Rich serves as the Technical Advisor for the Federal Geographic Data Committee (FGDC Secretariat). The FGDC leads and supports the National Spatial Data Infrastructure Strategy and spatial data policy development in the United States. The FGDC also coordinates with international organizations having an interest in spatial data infrastructures. He is responsible for providing broad technical leadership, interagency coordination, and development activities with Federal, State, local, international and other organizations to support and implement geospatial capabilities and initiatives.

Presentation title:

### *Geoplatform Geospatial Data Resources*

The slides are available at the link below:

[https://drive.google.com/file/d/1XbGOW\\_I-KAleGLfcm3bWzjNJid7aqnm/view?usp=sharing](https://drive.google.com/file/d/1XbGOW_I-KAleGLfcm3bWzjNJid7aqnm/view?usp=sharing)



## ***David Borges***

Physical Scientist  
NASA

David Borges is a Physical Scientist with the NASA Applied Sciences Disasters Program at NASA Langley Research Center. He provides international project management and geospatial analytics solutions to disaster related issues on a global scale through application development and geospatial enablement of Earth observation information. David currently serves as a Group on Earth Observation (GEO) Disaster Risk Reduction Working Group (DRR WG) Co-Chair and the Committee on Earth Observation Satellites (CEOS) Working Group Disasters (WG-Disasters) Secretariat. He is also an active member of the UNDRR Global Risk Assessment Framework (GRAF) WG and UN-GGIM WG-Disasters. Before joining NASA, David spent ten years in the private sector supporting a variety of clients, including the U.S. Federal Emergency Management Agency (FEMA) and Department of Homeland Security (DHS). He is a GISCI Certified GIS Professional (GISP), PMI Certified Project Management Professional (PMP) and received his Bachelor's degree in Geographic Information Science from Old Dominion University.

Presentation title:

### ***Geoplatform Geospatial Data Resources***

The slides are available at the link below:

[https://drive.google.com/file/d/1XbGOW\\_I-KAJeGLfcrm3bWzjNJid7aqnm/view?usp=sharing](https://drive.google.com/file/d/1XbGOW_I-KAJeGLfcrm3bWzjNJid7aqnm/view?usp=sharing)



***Joel Schlager***  
Technician Lead  
Federal Geoplatform

Joel Schlager serves as Technical Lead for Federal Geoplatform. As a member of the Geoplatform team his focus is on data discovery and interoperability. Joel has been supporting federal geospatial data collection and analysis for nearly 30 years - first assisting with inundation analysis for the great flood of 1993 and moving on through a series of projects from regulatory data management, defense installation spatial data infrastructure, and army corps of engineers enterprise geospatial data and systems.

Presentation title:

***Geoplatform Geospatial Data Resources***

## Workshop Resource Links

*For your referral:*

### NASA

#### ***NASA Earth Science Disasters Program***

<https://maps.disasters.nasa.gov>

***Portal Questions:*** HQ-Disasters-GIS@mail.nasa.gov

***Request Disaster Support:*** HQ-Disasters-EM@mail.nasa.gov

#### ***NASA Products for Tropical Storms Amanda/Cristobal***

<https://maps.disasters.nasa.gov/arcgis/apps/MinimalGallery/index.html?appid=078b459f72c14f90b563ba6ae70be7f3>

#### ***Disasters Data Pathfinder***

<https://earthdata.nasa.gov/learn/pathfinders/disasters>

#### ***Improving Hurricane Forecasts with Near Real-Time Imagery and Data***

<https://earthdata.nasa.gov/learn/articles/hurricane-forecasts-nrt-data>

### USACE

***Unmanned Aircraft System (UAS) Program Startup Guide:*** HQAviation@usace.army.mil

### Louisiana Emergency Preparedness Association

<https://lepa.org/>

### NOAA

#### ***NOAA Hurricane StormTide***

[http://www.nhc.noaa.gov/surge/Hurricane Ike Slosh Model Runs](http://www.nhc.noaa.gov/surge/Hurricane_Ike_Slosh_Model_Runs)

[http://www.nhc.noaa.gov/surge/HistoricalRuns/?large&parm=2008\\_ike#contents](http://www.nhc.noaa.gov/surge/HistoricalRuns/?large&parm=2008_ike#contents)



**NOAA Sentinel Site Program**

<https://oceanservice.noaa.gov/sentinelsites/locations.html>

**Tides and Currents:** <https://tidesandcurrents.noaa.gov/>

**Sea Level Trends**

<https://tidesandcurrents.noaa.gov/sltrends/sltrends.html>

**Mean Sea Level Trend, Grand Isle, LA**

[http://www.tidesandcurrents.noaa.gov/sltrends/sltrends\\_station.shtml?st-nid=8761724](http://www.tidesandcurrents.noaa.gov/sltrends/sltrends_station.shtml?st-nid=8761724)

**Emergency Response Imagery:** <https://storms.ngs.noaa.gov/>

**Post Hurricane Isaac Assessment**

<http://www.slfpae.com/presentations/2012%2011%2015%20-%20USACE%20Post-Hurricane%20Isaac%20Assessment.pdf>

**VDatum:** <https://vdatum.noaa.gov/vdatumweb/>

## National Weather Service

<http://www.weather.gov/gis>

**NWS GIS Portal:** <http://www.weather.gov/gis/>

**Advanced Hydrologic Prediction Service (AHPS)**

<http://water.weather.gov>

**AHPS: Downloads:** <http://water.weather.gov/ahps/download.php>

**Rainfall Ensemble Hydrologic river forecast**

<https://www.weather.gov/source/abrhc/RawModel/>

**Observed Daily Precipitation Estimates**

<http://water.weather.gov/precip/>

**Weather Prediction Center (WPC):** <http://www.wpc.ncep.noaa.gov/>

**WPC: Excessive Rainfall Forecasts**

[http://www.wpc.ncep.noaa.gov/qpf/excess\\_rain.shtml](http://www.wpc.ncep.noaa.gov/qpf/excess_rain.shtml)

**WPC: Probabilistic Precipitation Forecasts**

[http://www.wpc.ncep.noaa.gov/pqpf/conus\\_hpc\\_pqpf.php](http://www.wpc.ncep.noaa.gov/pqpf/conus_hpc_pqpf.php)

**WPC: Significant River Flood Outlook**

<http://www.wpc.ncep.noaa.gov/nationalfloodoutlook/index.html>

**WPC: Significant Weather Graphics**

[http://www.wpc.ncep.noaa.gov/national\\_forecast/natfcst.php](http://www.wpc.ncep.noaa.gov/national_forecast/natfcst.php)

**HDSC: Rainfall Frequency**

[http://hdsc.nws.noaa.gov/hdsc/pfds/pfds\\_gis.html](http://hdsc.nws.noaa.gov/hdsc/pfds/pfds_gis.html)

**NDFD: Mosaic of NWS Forecasts**

<http://graphical.weather.gov/> <http://digital.weather.gov/>

**National Hurricane Center**

<http://www.nhc.noaa.gov> <http://www.nhc.noaa.gov/gis/>

**NHC: Probabilistic Storm Surge**

<http://slosh.nws.noaa.gov/psurge2.0/>

<http://www.nhc.noaa.gov/surge/psurge.php>

**NHC Storm Surge Inundation Graphics**

<http://www.nhc.noaa.gov/surge/inundation/>

**Hurricane Products:** <https://www.weather.gov/gis/WebServices>

**Extra-Tropical Storm Surge Guidance:** <http://slosh.nws.noaa.gov/etss/>

**Probabilistic Extra-Tropical Storm Surge Guidance**

[https://slosh.nws.noaa.gov/petss/index.php?glat=All&display=0&type=e10&base=-Ocean\\_Base map&datm=datum&sorc=mean](https://slosh.nws.noaa.gov/petss/index.php?glat=All&display=0&type=e10&base=-Ocean_Base%20map&datm=datum&sorc=mean)

**HURREVAC:** <http://www.hurrevac.com/>

**NWS Enhanced Data Display:** <http://preview.weather.gov/edd/>

**Flash Flood Analysis:** <http://flash.ou.edu/new> or [flash.ou.edu](http://flash.ou.edu)

**National Water Model:** <http://water.noaa.gov>

**River forecast center data**

<https://noaa.maps.arcgis.com/apps/MapSeries/index.html?appid=ed-433140c2a24b67aa9f19d2e3ea1977>

[https://www.weather.gov/wgrfc/quick\\_briefing](https://www.weather.gov/wgrfc/quick_briefing)

**InFRM information:** <https://webapps.usgs.gov/infrm/>

**Flood Maps:** <https://webapps.usgs.gov/infrm/fdst/>

**Conversion and Transformation Tool (NCAT)**

[https://www.ngs.noaa.gov/web\\_services/ncat/index.shtml](https://www.ngs.noaa.gov/web_services/ncat/index.shtml)

## **USDA Natural Resources Conservation Service**

**Soil Survey Background**

[https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/home/?cid=nrc-s142p2\\_053369](https://www.nrcs.usda.gov/wps/portal/nrcs/detailfull/national/home/?cid=nrc-s142p2_053369)

**Louisiana Historical Soil Surveys**

<https://www.nrcs.usda.gov/wps/portal/nrcs/surveylist/soils/survey/state/?stateId=LA>

**Web Soil Survey Homepage**

<https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

**Gridded Soil Survey Geographic (gSSURGO) Database**

[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrc-s142p2\\_053628](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/home/?cid=nrc-s142p2_053628)

**Gridded Soil Survey Geographic (gSSURGO) Database Fact Sheet**

[https://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs142p2\\_052164.pdf](https://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs142p2_052164.pdf)

**Gridded Soil Survey Geographic (gSSURGO) Database Metadata**

[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrc-s142p2\\_053631](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/survey/geo/?cid=nrc-s142p2_053631)

**Geospatial Data Gateway:** <https://datagateway.nrcs.usda.gov/>

**Geospatial Data Gateway Direct Data Portal Link**

[https://gdg.sc.egov.usda.gov/GDGHome\\_DirectDownload.aspx](https://gdg.sc.egov.usda.gov/GDGHome_DirectDownload.aspx)

**gSSURGO Louisiana Download**

<https://nrccs.app.box.com/v/soils/file/562296233679>

**Soil Data Development Toolbox zip link**

[https://www.nrcs.usda.gov/wps/PA\\_NRCSCConsumption/download?cid=nrcse-prd1496615&ext=zip](https://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=nrcse-prd1496615&ext=zip)

**gSSURGO Development Toolbox User Guide**

[https://www.nrcs.usda.gov/wps/PA\\_NRCSCConsumption/download?cid=nrcse-prd362255&ext=pdf](https://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=nrcse-prd362255&ext=pdf)

**gSSURGO Mapping Quick Guide**

[https://www.nrcs.usda.gov/wps/PA\\_NRCSCConsumption/download?cid=nrcse-prd427806&ext=pdf](https://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=nrcse-prd427806&ext=pdf)

**Soil Web Homepage:** <https://casoilresource.lawr.ucdavis.edu/gmap/>

**USDA -NRCS Soils HomePage**

<https://www.nrcs.usda.gov/wps/portal/nrcs/site/soils/home/>

## FEMA

**Incident Journals**

<https://disasters.geoplatform.gov/>  
<https://fema.maps.arcgis.com/>

**Prioritization Operations Support Tool:** [FEMA-MacMaps@fema.dhs.gov](mailto:FEMA-MacMaps@fema.dhs.gov)

**Community Lifelines:** <https://www.fema.gov/lifelines>

**Homeland Security Information Network**

<https://www.dhs.gov/homeland-security-information-network-hsin>

## USGS

**The International Charter Video Overview**

<https://www.youtube.com/watch?v=ZvExM-Z3E2w>

**Hazards Data Distribution System (HDDS):** <https://hddsexplorer.usgs.gov>

**Collection Management Tool (CMT):** <http://cmt.usgs.gov/>



***The National Map***

<https://nationalmap.gov>

***National Map Liaison Contacts***

<https://www.usgs.gov/core-science-systems/ngp/user-engagement-office/connect>

***TNM Download Application***

<https://viewer.nationalmap.gov/basic/>

***TNM Advanced Viewer***

<https://viewer.nationalmap.gov/advanced-viewer/>

***TNM Service Endpoints:*** <https://viewer.nationalmap.gov/services/>

***3D Elevation Program:*** <https://nationalmap.gov/3DEP/>

***3DEP Lidar Explorer***

<https://prd-tnm.s3.amazonaws.com/LidarExplorer/index.html#/>

***US Topo:*** <https://nationalmap.gov/ustopo/>

***TNM Training Videos:*** <https://www.usgs.gov/NGPvideos>

***National Map Help:*** [tnm\\_help@usgs.gov](mailto:tnm_help@usgs.gov)

## **Louisiana Department of Transportation and Development / American Association of State Highway and Transportation Officials(AASHTO)**

***Census Transportation Planning Products Program (CTPP)***

<https://ctpp.transportation.org/>

***LA Department of Transportation and Development Open Data Portal***

<https://data-ladotd.opendata.arcgis.com/>

***LA DOTD Imagery Service.lyr***

<ftp://gisweb.dotd.la.gov/planning/LouisianaImagery/>



## **LA Governor's Office of Homeland Security and Emergency Preparedness**

<https://gohsep.la.gov/>

**Virtual Louisiana 2:** <http://gohsep.la.gov/resources/VL2>

**WebEOC:** <https://gohsep.la.gov/RESPOND/REQUEST-RESOURCES/WEB-EOC>

**ArcGIS Online Portal:** <https://gohsep.maps.arcgis.com>

## **Louisiana Department of Health**

**COVID-19:** <http://ldh.la.gov/Coronavirus/>

**Combined COVID Reporting**

[https://www.arcgis.com/home/user.html?user=aberens\\_ladhh](https://www.arcgis.com/home/user.html?user=aberens_ladhh)

## **New Orleans Regional Planning Commission**

**TIGER/Line Shapefiles**

<https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html>

**Explore Census Data:** <https://data.census.gov/cedsci/>

**Using American Community Survey Estimates and Margins of Error**

[https://www.census.gov/content/dam/Census/programs-surveys/acs/guidance/training-presentations/20170419\\_MOE.pdf](https://www.census.gov/content/dam/Census/programs-surveys/acs/guidance/training-presentations/20170419_MOE.pdf)

**Determining Tables**

[https://www2.census.gov/programs-surveys/acs/summary\\_file/2018/documentation/tech\\_docs/](https://www2.census.gov/programs-surveys/acs/summary_file/2018/documentation/tech_docs/)

**Understanding Attributes**

<https://www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html>

**Summary File Documentation**

<https://www.census.gov/programs-surveys/acs/technical-documentation/summary-file-documentation.html>

**Regional Planning Commission Public Layers**

<https://norpc.maps.arcgis.com/apps/webappviewer/index.html?id=ce893f2bbebb-411fa9825a4cc0703079>

**Orleans Parish Communication District****NG9-1-1 GIS Data Model**

<https://www.nena.org/page/NG911GISDataModel>

**Louisiana Spatial Data Infrastructure**

[www.lgisc.org/documents/lodi/](http://www.lgisc.org/documents/lodi/)

**Louisiana GIS Council**

<http://www.lgisc.org/>

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***<https://www.surveymonkey.com/r/ZLLQW6B>***

# Thank you for attending the 22<sup>nd</sup> annual Hurricane Season Geospatial Data Mining Workshop

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## *A Note from the Coordination Team:*

*On behalf of the team hosting this year's 22nd Annual workshop, I want to thank all of our speakers and those participating in the workshop. Without each of you this workshop and the successful response effort that is put forth each year during disaster events would not be possible.*

*GeoSpatial First Responders are the silent heroes battling on the front lines for data acquisition, development, product deployment and analysis for each disaster event. Because of all your combined talent our response to these disasters gets quicker, more effective, more productive and more connected as we move forward. Keep up the great work, keep moving forward and we will be ready for the next disaster event.*

*Afterall, its not whether we will get another event, it is just where will it occur!*

*An informed network of geospatial first responders spanning the region - across the states, the Gulf, the Caribbean and all surrounding areas will always be our best defense. Thank you again and we look forward to "seeing" each of you next year; whether face-to-face or in the virtual world. Until then, like you, we will await the next "Events" arrival.*

*All the best,  
R. Brent Yantis*

