201608_Flood_US

Geospatial Information and Remotely Sensed Imagery

Hazards Data Distribution System (HDDS)

http://hddsexplorer.usgs.gov/
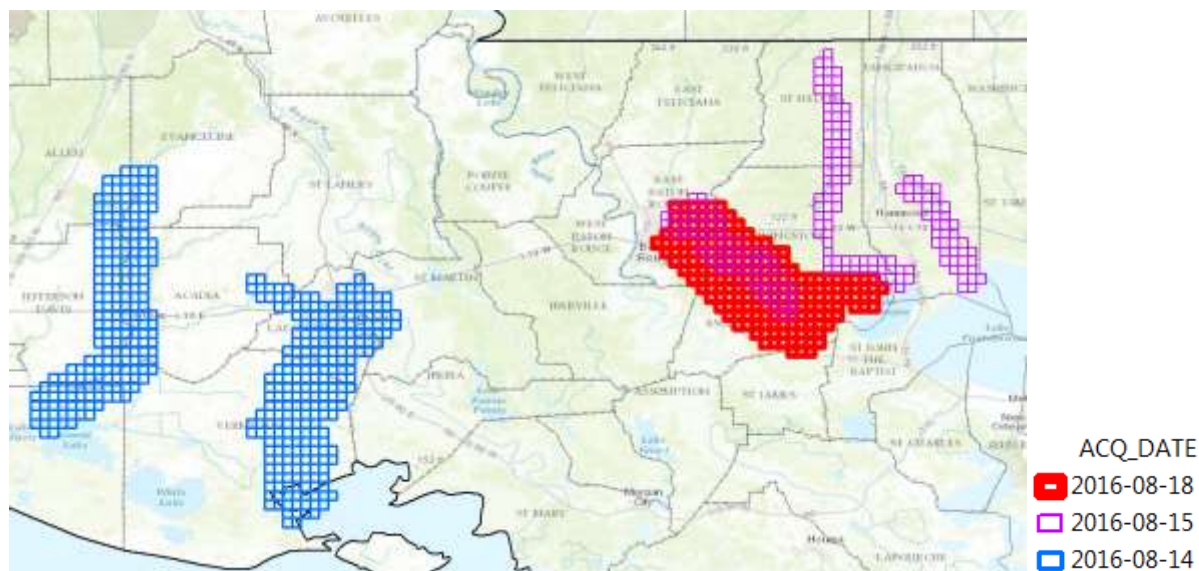
>Select Event: "**201608_Flood_US**" ➜ click on "+ "and then "Search"
>
>Download Shapefiles for image footprints
>
>http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/shapefiles/index
>
>Note: For the HDDS links, **copy the links and paste them into your browser.**
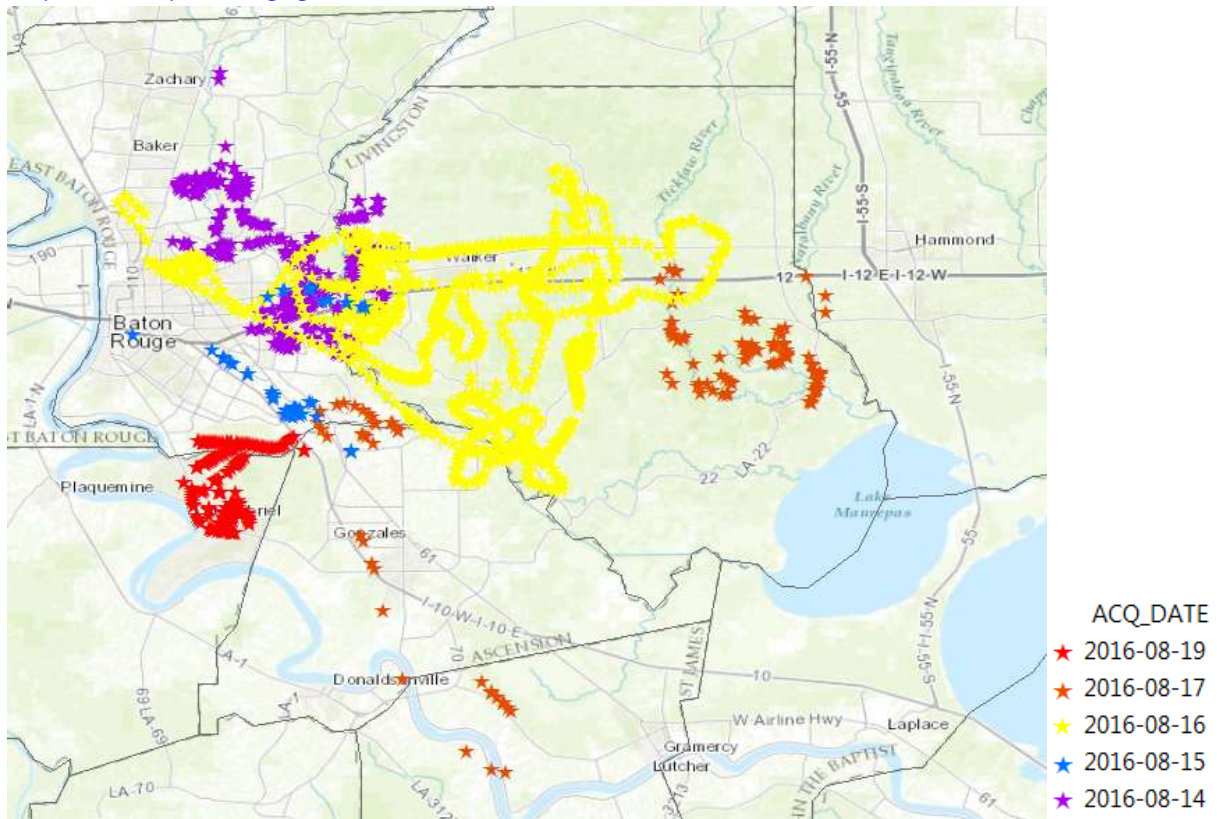>
>**More information about HDDS:** http://hdds.usgs.gov/hazards-data-distribution-system-hdds

NOAA Aerial NAD83

ACQ_DATE
- 2016-08-18
- 2016-08-15
- 2016-08-14

NOAA Aerial WGS84 (Frames)

ACQ_DATE
- 2016-08-15

Civil Air Patrol

ACQ_DATE
★ 2016-08-19
★ 2016-08-17
★ 2016-08-16
★ 2016-08-15
★ 2016-08-14

NASA ISS

ACQ_DATE
☐ 2016-08-17
☐ 2016-08-16

Landsat 8
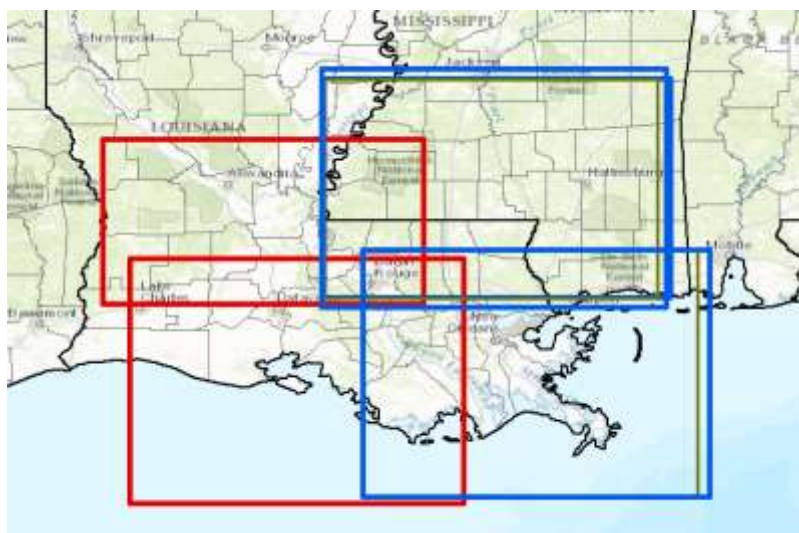

ACQ_DATE
- 2016-08-20
- 2016-08-18

Landsat 7

ACQ_DATE
- 2016-08-19
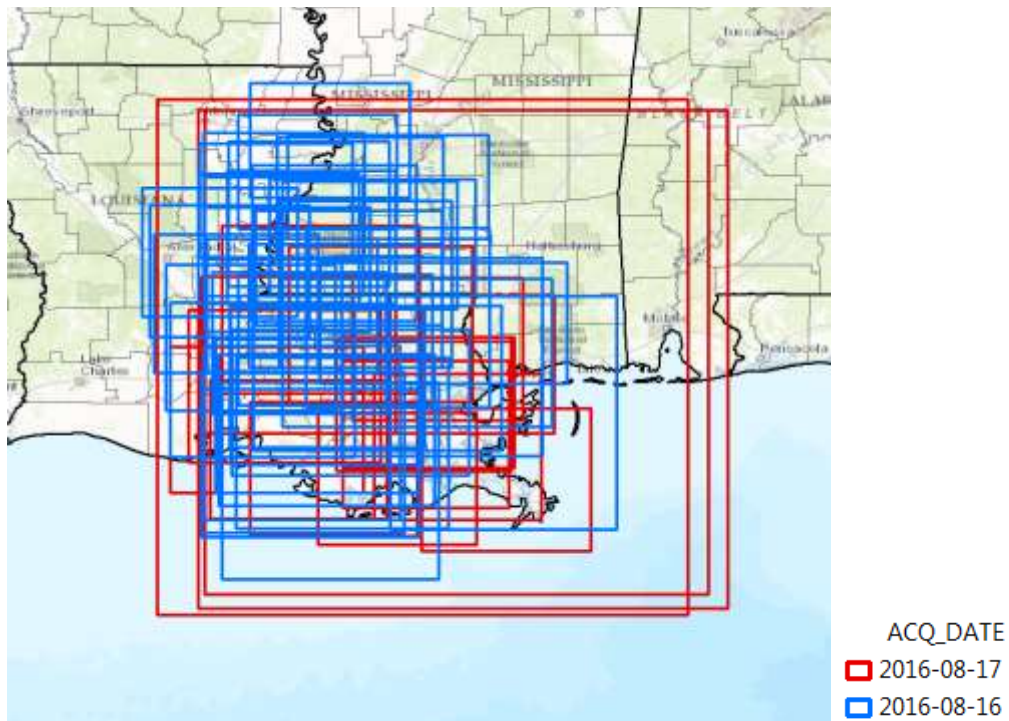
Sentinel 1 NEW
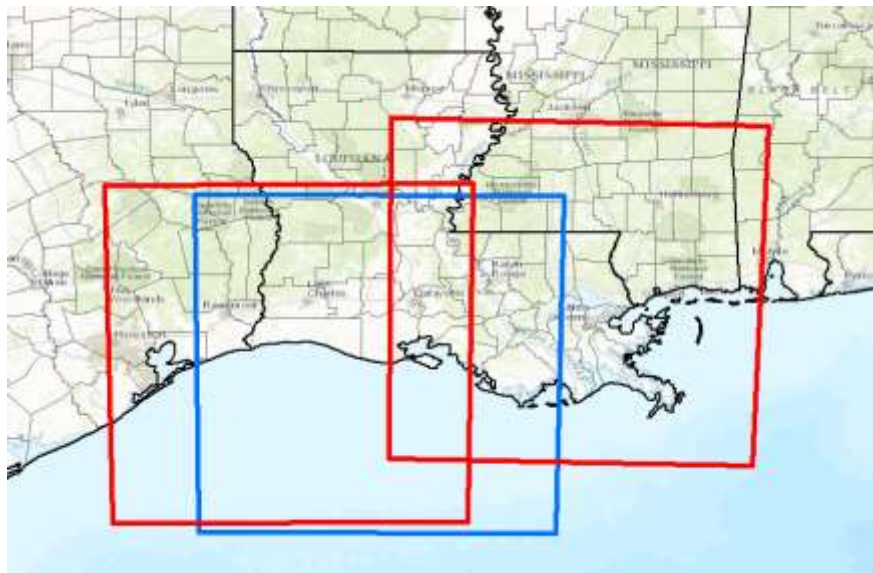
International Charter

As Project Manager for the International Charter activation to support The August 2016 SE Louisiana flood response, Teresa Howard is tasked to provide the most meaningful information products generated for the activation for hosting on the Charter public website. Each product must bear the appropriate logos and copyrights, and be accompanied by a short one paragraph description (again including the appropriate copyrights).

When you create an information product that uses data provided by the International Charter, whether it's a map, KML, document or web site, please share your information with Teresa by email at howard@csr.utexas.edu .
You can also contact Teresa if you have questions regarding the required copyrights or logos.

DMCii (From International Charter)

ACQ_DATE
- 2016-08-20
- 2016-08-17

International Charter Products

USGS Map Products WGS 84

Geotif products created from imagery acquired under International Charter
http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/data/MAP_PRODUCTS_USGS ← Product location
201608_Flood_US_MAP_PRODUCTS_USGS_WGS84.zip ← Locator Shapefile

ACQ_DATE
- 2016-08-21
- 2016-08-19
- 2016-08-18
- 2016-08-17
- 2016-08-16

VENDOR
- CSA
- ESA
- JAXA
- KARI

USGS Map Products NAD83

Geotif products from JAXA imagery acquired under International Charter

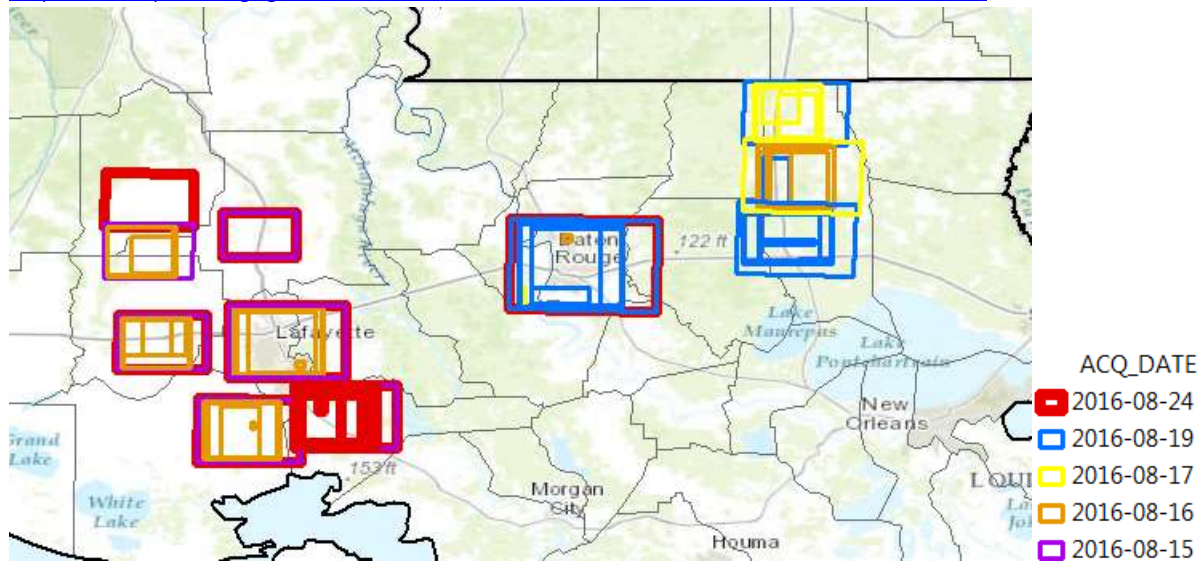201608_Flood_US_MAP_PRODUCTS_USGS_NAD83.zip ← Locator Shapefile

ACQ_DATE
- 2016-08-20
- 2016-08-18

Radarsat

http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/data/MAP_PRODUCTS_CSA

ESA Copernicus

http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/data/MAP_PRODUCTS_ESA

Time series products with flood polygons.

Vector Maps - Crowley AOI

5 ESA Crowley Reference v1 Shapefiles (Aug03,2015) published

http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Crowley_Ref_v1_20150803&field=BATCH_NAME

6 ESA Crowley Delineation v1 Shapefiles (Aug15) published

http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Crowley_Deline_v1_20160815&field=BATCH_NAME

6 ESA Crowley Delineation Monit01 v1 Shapefiles (Aug16) published
http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Crowley_M1_v1_20160816&field=BATCH_NAME

6 ESA Crowley Delineation Monit02 v1 Shapefiles (Aug17) published
http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Crowley_M2_v1_20160817&field=BATCH_NAME

Vector Maps - Eunice AOI
5 ESA Eunice Reference v1 Shapefiles (Aug03,2015) published
http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Eunice_Ref_v1_20150803&field=BATCH_NAME

6 ESA Eunice Delineation v1 Shapefiles (Aug15) published
http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Eunice_Deline_v1_20160815&field=BATCH_NAME

6 ESA Eunice Delineation Monit01 v1 Shapefiles (Aug16) published
http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Eunice_Deline_M1_v1_20160816&field=BATCH_NAME

6 ESA Eunice Delineation Monit02 v1 Shapefiles (Aug17) published
http://hddsexplorer.usgs.gov/criteria?event=201608_Flood_US&ordered=201608_Flood_US_MAP_PRODUCTS_ESA_SHP_Eunice_Deline_M2_v1_20160817&field=BATCH_NAME

MAP PRODUCTS Dartmouth Flood Observatory

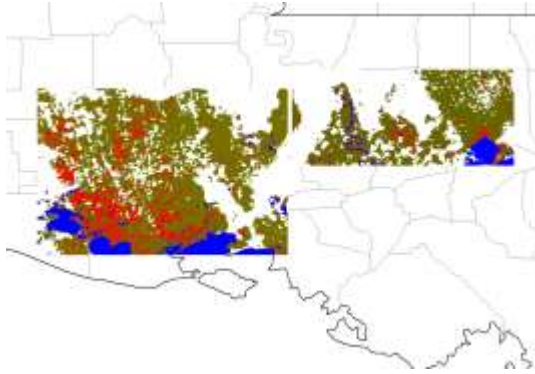http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/data/MAP_PRODUCTS_DFO

Map Products NASA

http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/data/MAP_PRODUCTS_NASA

NASA Processed LandWater RGB files

http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/SATELLITE/NON_INGESTED/WORLDVIEW_TRUE_COLOR_NASA

NGA

http://hddsexplorer.usgs.gov/data/list/disaster/201608_Flood_US/data/MAP_PRODUCTS_NGA

      MR00N30_497433W090_807370201608190000000OL00_G000000000.zip ← Shapefiles

      MR00N30_245106W091_442527201608190000000MR00_GU000000000.zip ← PDF Flood Assessment

HDDS Restricted

Self-Register for HDDS Restricted. http://hddsexplorer.usgs.gov/

If you have not registered on either EarthExplorer or HDDS, click the register button in the top right corner of the screen and go thru the registration process. Once registered, you will have access to EarthExplorer and HDDS download capabilities. The first time you attempt to download restricted imagery, you will need to fill out an access request form for that event. Click on "Access" (upper right of HDDS screen), then select "To request access to restricted data click here". Select event from menu. Once granted access, you can download restricted imagery. (note: in most cases the restricted area contains licensed imagery, not all requests can be granted.)

Questions on HDDS Contact: Brenda Jones bkjones@usgs.gov

WorldView

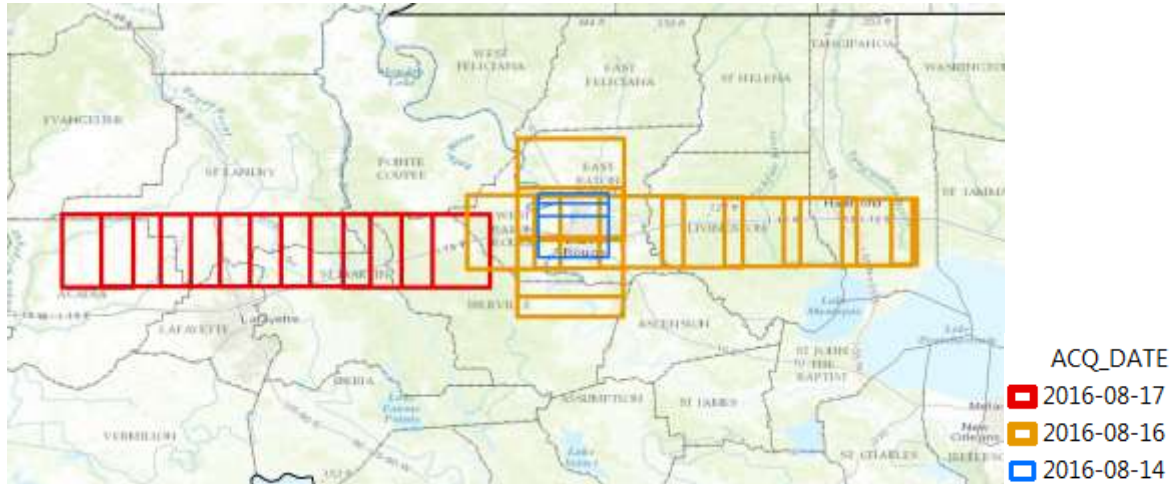http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/WORLDVIEW_NGA

ACQ_DATE
- 2016-08-23
- 2016-08-22

ACQ_DATE
- 2016-08-21
- 2016-08-20
- 2016-08-19

- 2016-08-18
- 2016-08-17
- 2016-08-16

GeoEye

http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/GEOEYE_NGA

ACQ_DATE
- 2016-08-17
- 2016-08-16
- 2016-08-14

SPOT

ACQ_DATE
- 2016-08-23
- 2016-08-22
- 2016-08-19
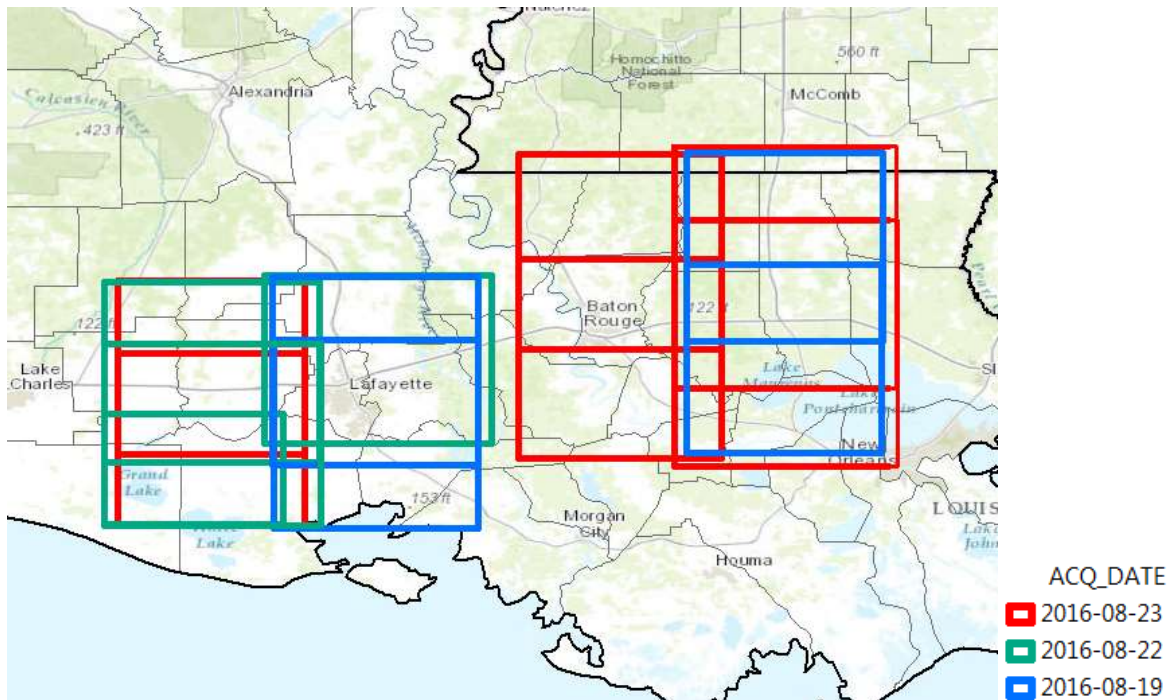
Restricted/Non Ingested

PLEIADED NEW

http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/SATELLITE/NON_INGESTED/PLEIADES

WV2 and WV3 PAN NEW

http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/SATELLITE/NON_INGESTED

TerraSAR-X NEW

http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/SATELLITE/NON_INGESTED/TERRASAR_X_DLR

JAXA_PALSAR2
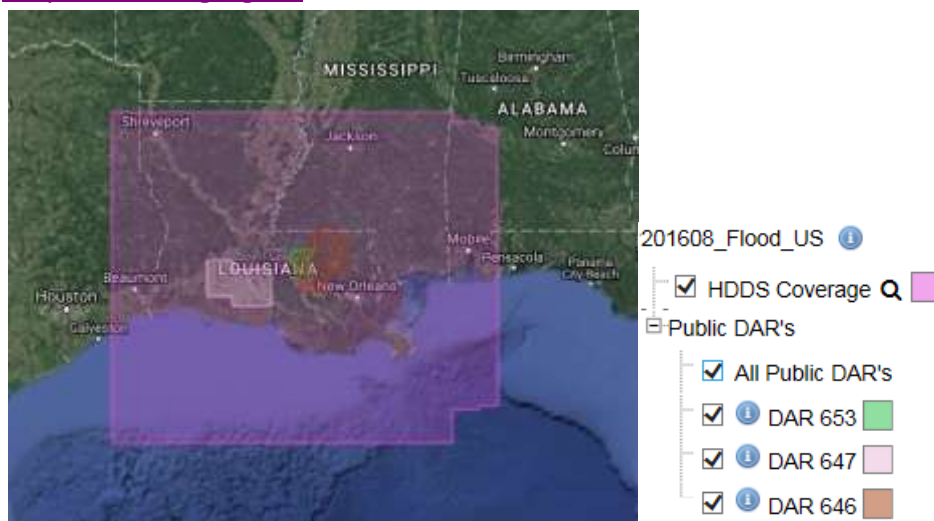http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/SATELLITE/NON_INGESTED/JAXA

KARI_KOMPSAT5
http://hddsexplorer.usgs.gov/data/list/disaster_restricted/201608_Flood_US/data/SATELLITE/NON_INGESTED/KARI

HDDS Emergency Operations – Collection Management Tool (area of interest for imagery collections)

http://cmt.usgs.gov/

End HDDS

NOAA / FEMA

Yesterday's flight of the South Louisiana AOIs, for Bayou Vermilion and Vermilion River - Major Flooding (Crest 8/14 North; 8/15 South) and Bayou Nezpique and Mermentau River - Major Flooding (Crest 8/16). NOAA RSD began flights on 8/14/2016, per the FEMA Mission Assignment and expects to complete the follow-on AOIs as weather permits. Weather has precluded us from collecting more imagery and we are willing to wait until weather improves however, the sky cover forecasts and local observations are not favorable.

Bulk downloads:
- **Aug 14**:
  https://ngsstoragepublicstr.blob.core.windows.net/download/20160814a_JpegTiles_GCS_NAD83.tar
- **Aug 15** Nadir:
  https://ngsstoragepublicstr.blob.core.windows.net/download/20160815aJpegTiles_GCS_NAD83.tar
- **Aug 15 Oblique**:
  https://ngsstoragepublicstr.blob.core.windows.net/download/20160815obOblique.tar
- **Aug 18**:
  https://ngsstoragepublicstr.blob.core.windows.net/download/20160818aJpegTiles_GCS_NAD83.tar

Web Map Tile Service: http://ngs-storm-viewer-web.azurewebsites.net/storms/tilesa/services/tileserver.php?/wmts
   WMTS Layer names: 20160814_RGB, 20160815_MOS, and 20160818_RGB

Web Viewer: http://geodesy.noaa.gov/storm_archive/storms/aug2016_lafloods/index.html
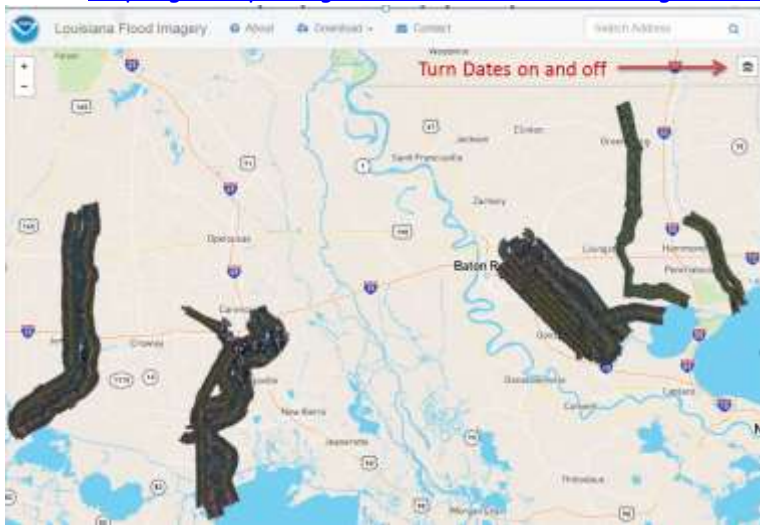
Additional areas flown on August 18. In some area (e.g. Baton Rouge) you can toggle between August 15 and August 18,

NOAA Swipe Before and after imagery

http://oceanservice.noaa.gov/news/aug16/louisiana-flooding.html
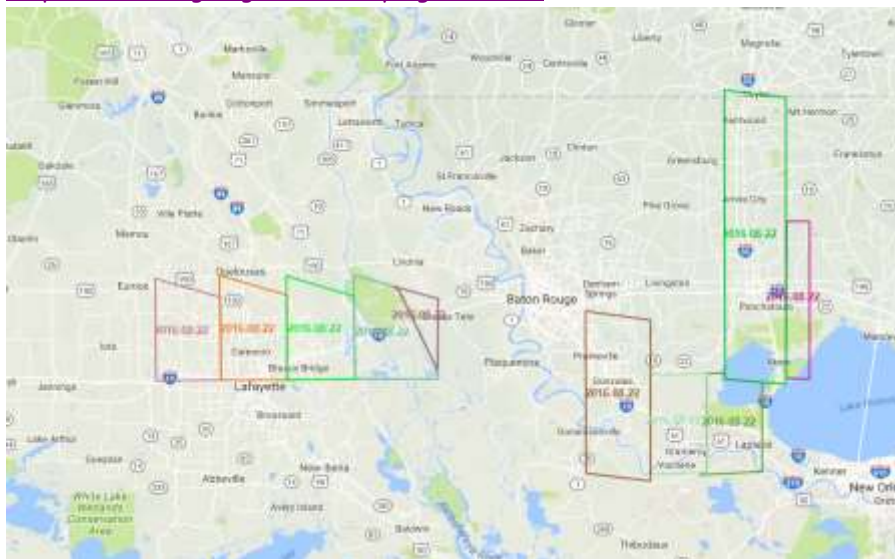
ESRI Louisiana Swipe Map Using NOAA Aerial ^{NEW}

http://disasterresponse.maps.arcgis.com/apps/StorytellingSwipe/index.html?appid=2e499ec7eb784237bd70fb16ae0f5dcf#

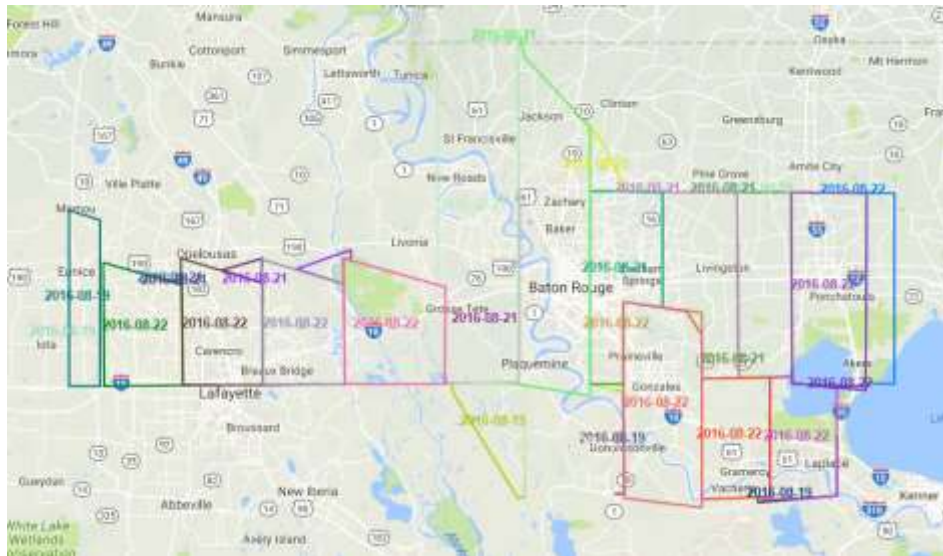# Digital Globe Imagery

Digital Globe imagery is available orthorectified in the NGA funded EnhancedView Web Service. Users with .gov or .mil emails can self-register.

https://evwhs.digitalglobe.com/myDigitalGlobe/

Imagery available from 22 August 2016

Imagery available for the last 7 days.

Eagle Vision

http://dev.evr2est.us/scenes/table and http://evr2est.us/

	Eagle Vision 6	Gueydan LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1135 America/Chicago
	Eagle Vision 6	Iota LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1135 America/Chicago
	Eagle Vision 6	Oak_Grove LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1134 America/Chicago
	Eagle Vision 6	Slaughter LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1134 America/Chicago
	Eagle Vision 6	Independence2 LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1134 America/Chicago
	Eagle Vision 6	Independence LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1134 America/Chicago
	Eagle Vision 6	Ponchatoula LA US		Disaster Relief	SPOT 6	6 m	23Aug16 - 1134 America/Chicago

FEMA CAP Imagery Viewer

The Select Event "LA – Flooding Aug 2016" works:
http://apps.femadata.com/ImageEventsPublic/map.html
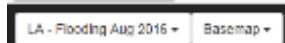
If you use the select function for LA – Flooding Aug 2106, the green markers are from 8/14/2016, 8/15/2016, 8/16/2016, 8/17/2016, and **8/19/2016.**

FEMA DR477 Journal

http://fema.maps.arcgis.com/apps/MapJournal/index.html?appid=efb5b1121e344e919784a2386c90ea01
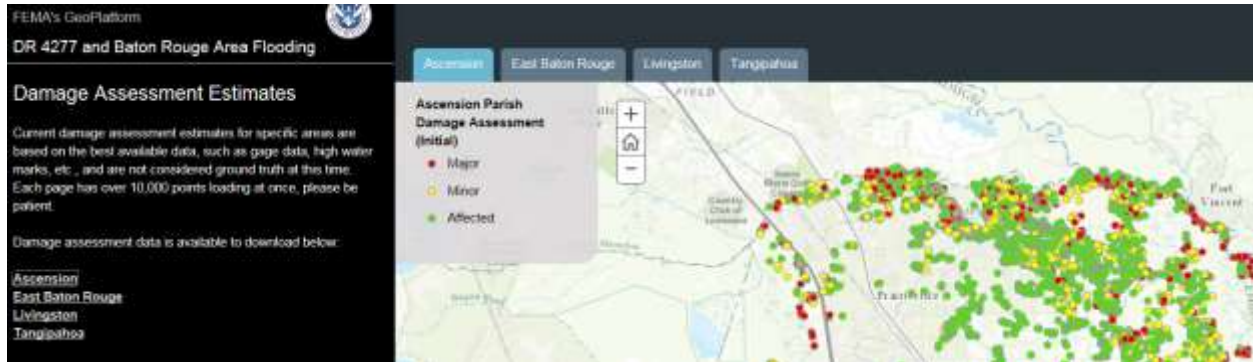
FEMA CAP imagery on GeoPlatform

FEMA Rest Services
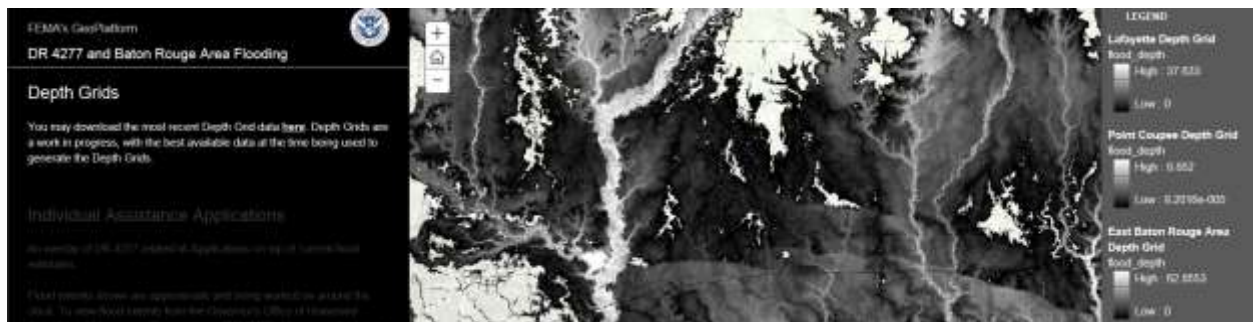https://gis.fema.gov/REST/services/FEMA

FEMA initial flood extents

https://data.femadata.com/DR4277_Severe_Storms_Flooding_LA/

http://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=c72ffb6af7884c199357bec4a950ee5e
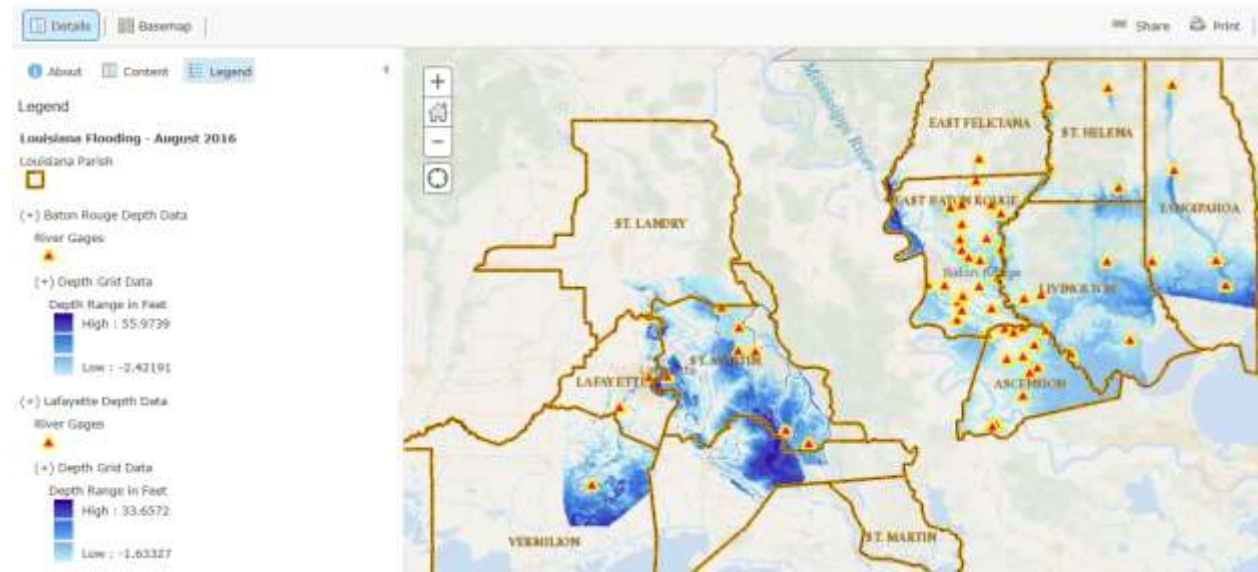
FEMA conservative gage/depth analysis

This will be the authoritative source as high water marks are collected and processed.
http://fema.maps.arcgis.com/home/item.html?id=c72ffb6af7884c199357bec4a950ee5e#overview
http://fema.maps.arcgis.com/home/item.html?id=c72ffb6af7884c199357bec4a950ee5e#overview

FEMA flood data created by Dewberry

https://data.femadata.com/DR4277_Severe_Storms_Flooding_LA/

City of Baton Rogue

Estimated flood inundation area web map. http://gis.brla.gov/flood
They intend on collecting public feedback, address all feedback and publish a new estimated inundation layer at the close of business each day.

Also, we are now keeping track of debris collection operations in the app:
http://gis.brla.gov/debris
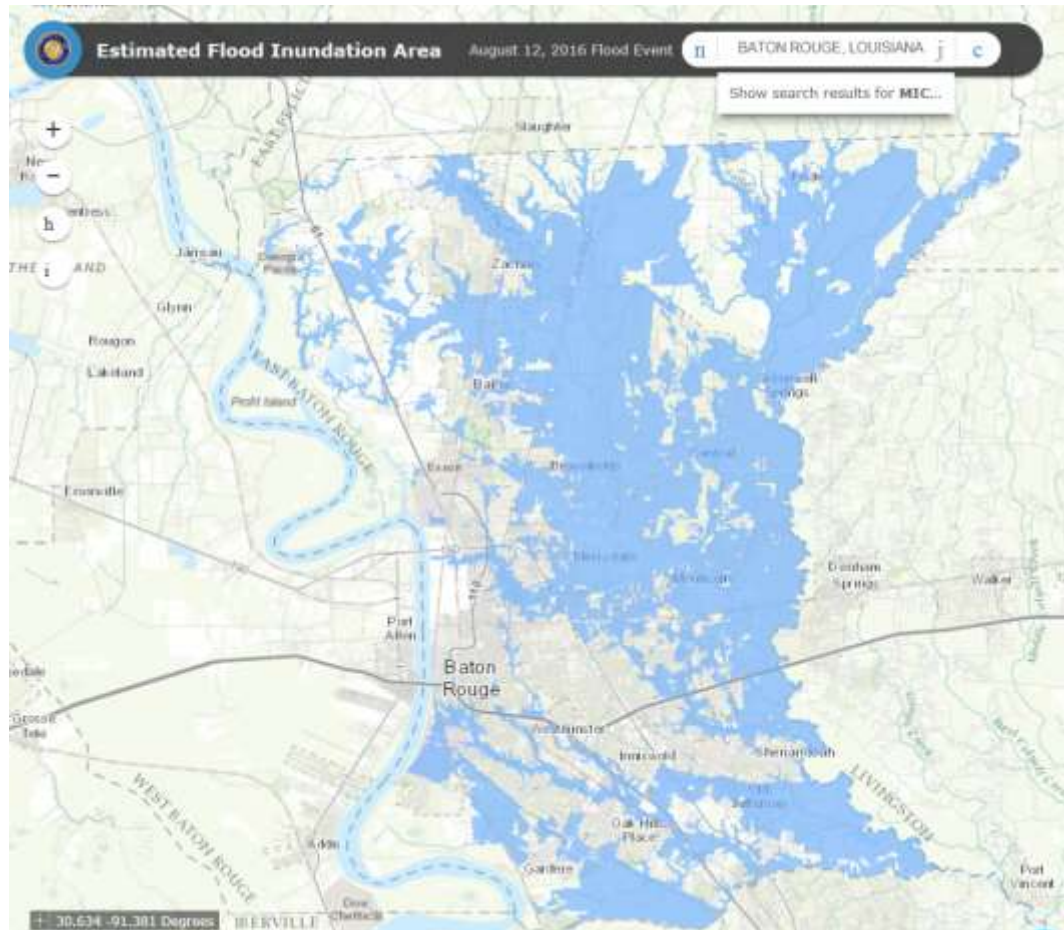
Baton Rouge Debris collection operations in the app: http://gis.brla.gov/debris

LSU via GOSHEP:

http://services1.arcgis.com/fXHQyq63u0UsTeSM/ArcGIS/rest/services

Services:

- AllFlights_story (FeatureServer)
- Ascension_Flood_Estimate_20160815A (FeatureServer)
- Assumption_Flood_Estimate_20160816A (FeatureServer)
- CAP_Flight_1_20160814 (FeatureServer)
- CAP_Flight_10_20160816 (FeatureServer)
- CAP_Flight_2_20160814 (FeatureServer)
- CAP_Flight_3_20160814 (FeatureServer)
- CAP_Flight_4_20160815 (FeatureServer)
- CAP_Flight_5_20160815 (FeatureServer)
- CAP_Flight_6_20160815 (FeatureServer)
- CAP_Flight_8_20160815 (FeatureServer)
- CAP_Flight_9_20160816 (FeatureServer)
- Daycare_Status (FeatureServer)
- East_Feliciana_Flood_Estimate_20160816A (FeatureServer)
- EBR_Flood_Estimate_20160815A (FeatureServer)
- eC8Gx (FeatureServer)
- FirstNet_Comments (FeatureServer)

- [Flight_11_20160814](#) (FeatureServer)
- [Flight_12_20160815](#) (FeatureServer)
- [Flight_13_20160816](#) (FeatureServer)
- [Flight_14_20160817](#) (FeatureServer)
- [Flight_15_20160817](#) (FeatureServer)
- [Flight_16_20160817](#) (FeatureServer)
- [Flight_17_20160817](#) (FeatureServer)
- [Flight_18_20160816](#) (FeatureServer)
- [Flight19_20160816](#) (FeatureServer)
- [Flight20_20160819](#) (FeatureServer)
- [Flight21_20160820](#) (FeatureServer) ⬅ 20 August not on HDDS
- [Flight22_20160820](#) (FeatureServer)
- [Flood_Depth_Single_Polys](#) (FeatureServer)
- [FwF4o](#) (FeatureServer)
- [Iberia_Flood_Estimate_20160816A](#) (FeatureServer)
- [Iberville_Flood_Estimate_20160816A](#) (FeatureServer)
- [Lafayette_Flood_Estimate_20160816A](#) (FeatureServer)
- [Lake_Arthur_Flood_Estimate_20160815A](#) (FeatureServer)
- [Livingston_Flood_Estimate_20160815A](#) (FeatureServer)
- [Parishes_LDOTD_2007](#) (FeatureServer)
- [PhotoSurveys](#) (FeatureServer)
- [Pointe_Coupee_Flood_Estimate_20160816A](#) (FeatureServer)
- [St_Helena_Flood_Estimate_20160815A](#) (FeatureServer)
- [St_Landry_Flood_Estimate_20160816A](#) (FeatureServer)
- [St_Martin_Flood_Estimate_20160816A](#) (FeatureServer)
- [Store_Status_Crowdsource_Polling](#) (FeatureServer)
- [Stores](#) (FeatureServer)
- [Tangipahoa_Flood_Estimate_20160815A](#) (FeatureServer)
- [Vermilion_Flood_Estimate_20160816A](#) (FeatureServer)
- [West_Feliciana_Flood_Estimate_20160816A](#) (FeatureServer)

LA Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) CAP ArcGIS Viewer https://www.arcgis.com/home/webmap/viewer.html?webmap=d550df47bc4949eea7d6898d1dfc1a16&extent=-92.2374,29.4127,-89.5458,31.339
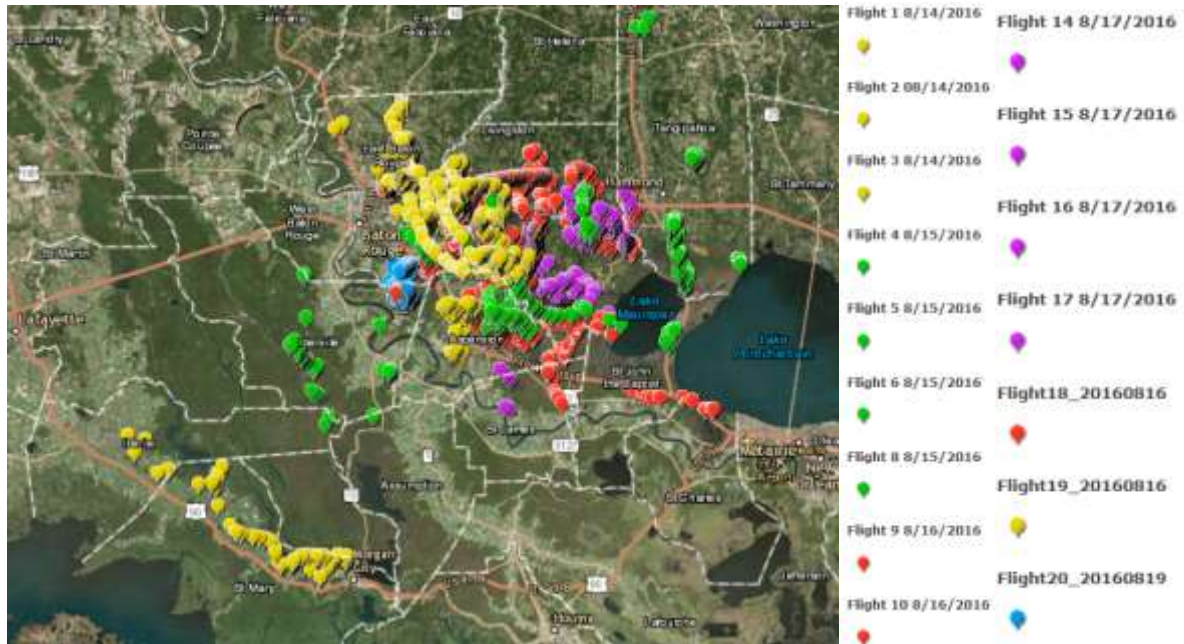
Dartmouth Flood Observatory ⚠️

USA Flooding, August 1-August 16, 2016 from NASA MODIS (August 1-18), NASA/NOAA VIIRS (August 15-17), Radarsat 2 (August 15); EO-1 (August 16), and Copernicus (COSMO-SkyMed, August 15, 2016). August 18, 2016).
http://floodobservatory.colorado.edu/Events/2016USA4388/2016USA4388.html

The .shp or MapInfo flood polygons, also Geotifs and kmz versions.
http://floodobservatory.colorado.edu/Events/2016USA4388/GISFiles/

- MapInfo/
- Shp/

- Copernicus/
- Sanmei_Li_GMU/

NASA

NASA JPL ARIA products created from ALOS-2 and Radarat-2
http://aria-share.jpl.nasa.gov/events/20160816-Louisiana_Floods/FPM/

KMZ file that contains flood extent maps derived from ALOS-2 data.

http://aria-share.jpl.nasa.gov//events/20160816-Louisiana_Floods/FPM/FPM_ALOS-2_2016-08-18_v0.5.kmz

EO-1 image 17August 2016
https://matsu.opensciencedatacloud.org/eo1/upload/ceosdrm/
Download the kmz file named Baton Rouge EO1….

NGA

Rest Services
http://ngamaps.geointapps.org/arcgis/rest/services/Louisiana_Flooding/Latest_Assessments_Louisiana/MapServer
WMS
http://ngamaps.geointapps.org/arcgis/rest/services/Louisiana_Flooding/Latest_Assessments_Louisiana/MapServer/WMSServer?request=GetCapabilities&service=WMS

International Charter Space and Major Disasters

The International Charter Space and Major Disasters was activated by US Geological Survey on behalf of the State of Louisiana for flooding in southern Louisiana . Products will be posted on the Charter website:
http://www.disasterscharter.org

Copernicus Emergency Management Service

http://emergency.copernicus.eu/mapping/list-of-components/EMSR176
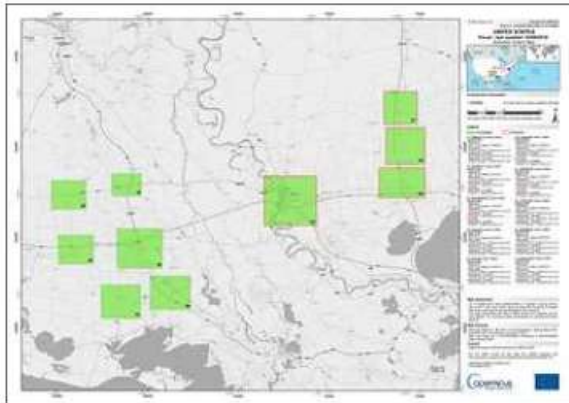
EMSR176 – Activation Extent Map

Sample of the 47 products available on the site.

American Red Cross Maps

Red Cross Disaster Relief operation Catalog:

http://maps.redcross.org/website/DROmaps/ARC_DROMap_Links.html

National Weather Service River Forecast Center
Observations and Forecasts – Web Service
http://water.weather.gov/ahps/
NWS New Orleans/Baton Rouge
http://www.srh.noaa.gov/lix/

USGS

High Water Marks: There should be data for the event towards the end of the week.

http://water.usgs.gov/floods/FEV/

  The event ID for this one is:

  event_id>129</event_id>

  <event_name>Louisiana August 2016</event_name>

Water related Maps and GIS Data

http://water.usgs.gov/maps.html

http://waterdata.usgs.gov/nwis/rt

Humanity Road

http://humanityroad.org/auglaflood/

Social Media from Tom Malmay

- **Geofeedia**
  https://maps.geofeedia.com/embed.php?guid=YWIxOGY3ZWZhNGFhZDM2ZmYzZDg3MjlhMmVhNTAwOWVkNDE0NGQ1MA==
- **Storify** https://storify.com/Tom_Malmay/south-louisiana-flooding
- **ArcGIS** http://malma.maps.arcgis.com/apps/LiveMaps/index.html?appid=f1d7a03c87e64ab6a10ad3f5c82ccdca

Louisiana Business Emergency Operations Center (LA BEOC)

http://www.labeoc.org/labeoc/welcome.aspx

  Report Businesses Open or Closed Map Viewer (Crowd Sourced)

Louisiana DOTD

http://wwwsp.dotd.la.gov/Pages/default.aspx (Below: the map viewer can be seen by clicking on "Traffic Cameras")
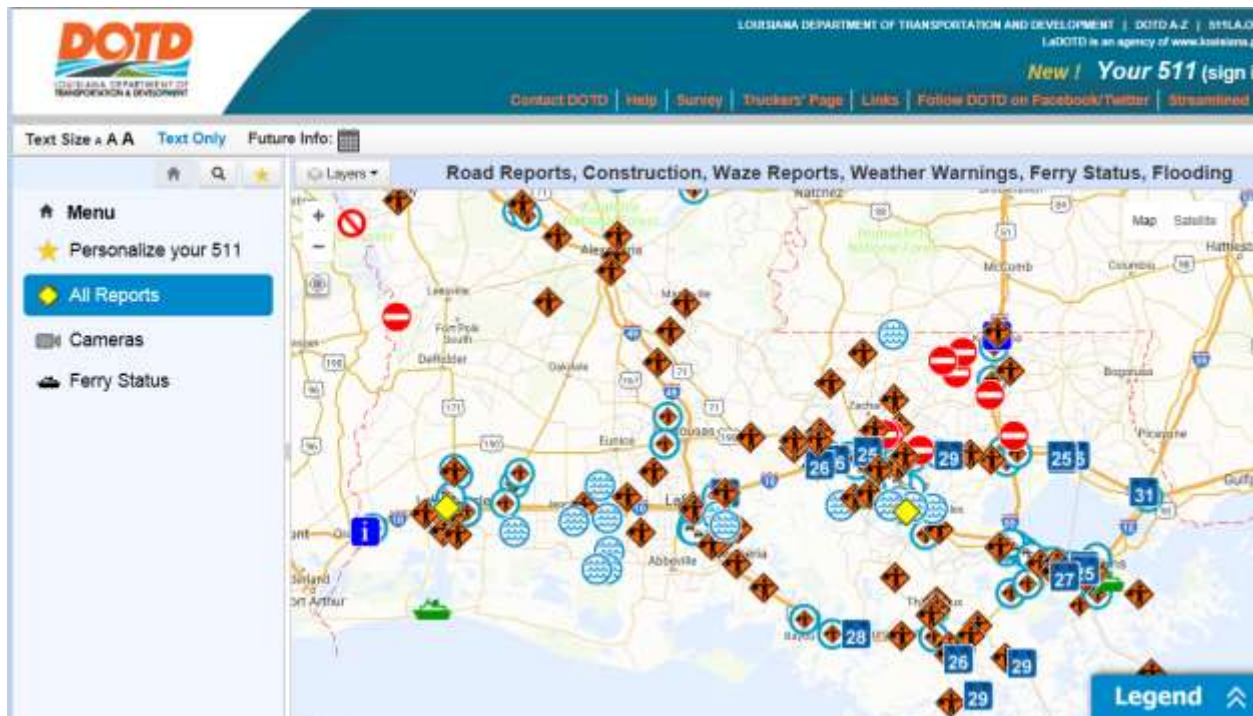
Entegy New Orleans Inc: Power Outage map viewer

http://www.etrviewoutage.com/external/nola.aspx?_ga=1.184680425.1359188064.1471298228

NASA Rainfall Measurements

https://pmm.nasa.gov/data-access/downloads/gpm

Pre-Event NAIP Imagery:

2015 NAIP Coverage: Louisiana

To preview NAIP ortho imagery mosaics go to USDA Geospatial Data Gateway

- Click on green Get Data button
- At Step 1-WHERE, select state and then select county or counties
- Click the gray Submit Selected Counties button
- At Step 2-WHAT, click the green plus (+) icon for the Ortho Imagery year of interest then click the gray eye icon

Add as an ArcGIS Server service:

- For each state, the most recent year of NAIP Imagery DOQQs is available on an ArcGIS server.
- The state based services can be added into ArcGIS Desktop by adding http://gis.apfo.usda.gov/arcgis/services to the Add ArcGIS Server connection.
- Please note: This link will not work unless you are using ESRI's ArcGIS application.