Kinetic Surge

Kinetic tropical cyclone surge data shows maximum surge heights for tropical cyclone events globally. These are presented as a forecast pre-event, as well as actual heights post-landfall.

Coverage area & data available

- Global surge data for tropical cyclone events
- Two resolutions: As a storm progresses, so does the resolution
- Notable historical events through 2006 and further available upon request

Update frequency

Hazard layers are updated anytime a new forecast is issued and are generally available within 20 minutes of the forecast. After the initial forecast, data is updated every 3 hours.

Enhanced columns

We enhance your data with a max surge height column that you can view and filter by:

- Combined Surge (Kinetic) [Date/Time]

What the data means

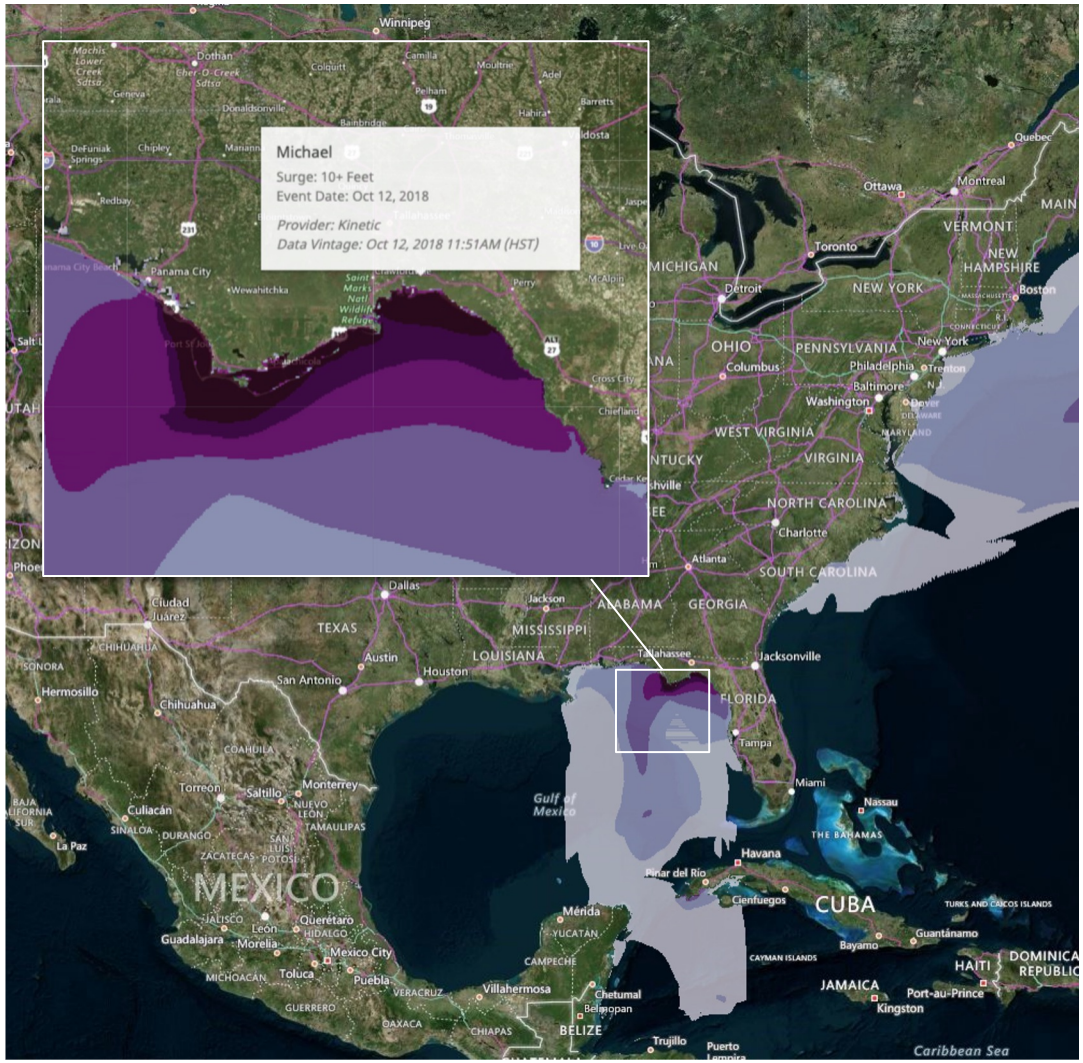
Hazard datasets are produced using tropical cyclone forecast data generated from meteorological prediction centers or numerical weather prediction models. Modeled hazard data includes max coastal storm surge depth.

Exported Columns

The models you enhanced your data with will be available in exported CSV files as:

- Kinetic Hurricane Combined Surge Depth [Date]

When you download your enhanced data, look for the columns that start with the "Provider Name", then the "Peril Name", and ending with the date. For example, "Kinetic Hurricane Combined Surge Depth 092021".



Learn more about Kinetic Analysis Corporation at
https://www.kinanco.com/

About Kinetic Analysis Corporation

Kinetic Analysis Corporation (Kinanco) provides a comprehensive range of real-time and post-event data products for tropical cyclone hazards and damage ratios for a wide range of asset classes exposed to the hazards. All products have global coverage and real-time data are generally available shortly after a forecast or model run update. Postevent data, reflecting the full extent of hazards over a storm's lifetime, are available within 48 hours of a storm's dissipation.

Kinanco produces two types of stationary products for tropical cyclone-related hazards. The first type is hazard and damage ratio layers for historical storms. This data is updated annually. The second type is standard return period layers for hazard intensity and damage ratio. As for real-time and post-event data, all stationary products are available for hazard prone areas globally.

We use the sparse forecast information (e.g., location, maximum wind, and radii of hurricane and tropical storm force winds) as input to scientifically-based wind and wave models and produce detailed data for winds, waves, storm surge and rainfall produced by tropical cyclones.

Additional Kinetic Analysis Corporation Products

Event Response

- Tropical cyclone
- Wildfire
- Historical footprints
- Damage ratios

Environmental Data

- Provide information on wildfires and the state of atmospheric and oceanic environmental parameters related to tropical cyclones such as sea surface temperature.

Parametric Insurance Products

- Kinetic Analysis produces risk assessments and real-time impact information to support a wide range of parametric insurance types using triggers based on modeled hazard (tropical cyclone wind and/or storm surge), damage (tropical cyclone wind and wave) and/or modeled loss.