



State of the Services FY 2023 Q1 Report October 2022 - December 2022

Engagement Events Highlights

Heat Health Pilot Activities

Nationwide | December 2022

- NCEI is partnering with the National Integrated Heat Health Information System (NIHHIS), NOAA National Weather Service, NOAA Ocean Service, and NOAA Regional Collaboration Teams on heat health activities throughout the country. In the West, Federal partners and the Phoenix Office of Heat Response and Mitigation briefed Senate staffers on recent Heat Health Pilot activities in December. In the East, they are working with Scranton and Wilkes-Barre, PA and Miami, FL. The pilot will produce updated information through temperature extreme tabletop exercises and detailed temperature modeling that will serve cities nationwide.



Naval Meteorology and Oceanography Command

Stennis Space Center, MS | November 1

- NCEI's Uncrewed Systems (UxS) Data Services Team met with the Chief Data Officer and Metadata specialist of the Naval Meteorology and Oceanography Command. They discussed the Draft to Directive process for the joint NOAA/Navy UxS Metadata Standards being developed through the Commercial Engagement Through Technology Act of 2018.
- The modeled standards will be tested against different formats of data derived from the Naval Research Lab and NOAA's Mesophotic Deep Benthic Communities Project.

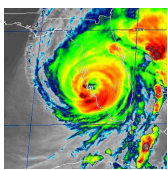


Product and Services Highlights



Climate Services Writing Team

An NCEI staff member has been nominated to be on the NOAA writing team for the interagency Fast Track Action Committee on Climate Services (FTAC). The Biden/Harris Administration's E.O. 14008 (Section 211d) on *Tackling the Climate Crisis at Home and Abroad* emphasizes the need to expand and improve climate information for all members of the public. The Office of Science and Technology Policy, in collaboration with other White House offices and Federal agencies, is working to facilitate the development and implementation of a national framework for climate services through an FTAC.



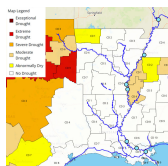
Digital Elevation Model Supported Hurricane Ian Impact Modeling

The NCEI Digital Elevation Model (DEM) Team developed tiled DEMs along the entire Florida Gulf Coast area impacted by Hurricane Ian, including the landfall location at Cayo Costa and the surrounding communities of Fort Myers, Cape Coral, and Naples, Florida. The DEMs were generated between 2017–2020 as part of the COASTAL Act fund supporting surge and inundation modeling efforts and were also used in forecast and modeling efforts for Hurricane Ian's impact.



New NOAA Ocean Exploration Data Atlas Map Viewer

NCEI launched the new NOAA Ocean Exploration Data Atlas map viewer. The Data Atlas provides NOAA partners, and the public with a map-based data access and visualization tool for discovering NOAA Ocean Exploration data. This viewer leverages cloud-based Geographic Information System services hosted on the NOAA GeoPlatform, including ship tracks, remotely operated vehicle dive tracks, sampling locations on the seafloor, visualizations of bathymetry mapped using multibeam echosounders, and near real-time tracking of the NOAA Ship *Okeanos Explorer*.



Waterways and Drought Tool

The Southern Regional Climate Center (RCC) has developed a new product for tracking the low water conditions along the Mississippi River and its impact on the Inland Water Transportation industry. The Waterways and Drought tool provides drought conditions, river level conditions and forecasts, and vessel traffic information for the past 30 days. The tool also provides comparative statistics with the previous year and prior intensive drought years.

Stakeholder Highlights



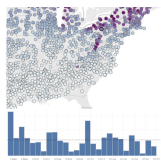
The Southern RCC tracked barge rates from the U.S. Department of Agriculture at key locations and leveraged their new Waterways and Drought Tool to analyze the impact of drought and low river levels along the Mississippi river on barge rates. A new database was created that now tracks river levels, transit counts, and barge rates.



The Northeast RCC developed a new gridded data set consisting of daily forecast maximum and minimum temperatures based on the National Digital Forecast Database. Using this new dataset, the Northeast RCC was able to upgrade its roadway freezing/thawing model for the Northeast, MI, WI, and ND, as well as create a weekly forecast Heating Degree Day map and table created primarily for the NY State Energy Research and Development Authority.



NCEI released an updated Paleoclimatology Perspective on Global Warming series of downloadable articles. These articles now reflect the latest scientific consensus presented in the Intergovernmental Panel on Climate Change Sixth Assessment Report. One new finding, derived from datasets archived by NCEI, is that recent global surface temperatures are likely unprecedented in at least the last 125,000 years.



The Midwestern RCC has launched an online interactive Snowfall Climatology Toolbox that provides easy-to-use, visually appealing historical data on annual and monthly snowfall, number of snow days, first and last snow dates, and record one-day snowfall for the entire United States.



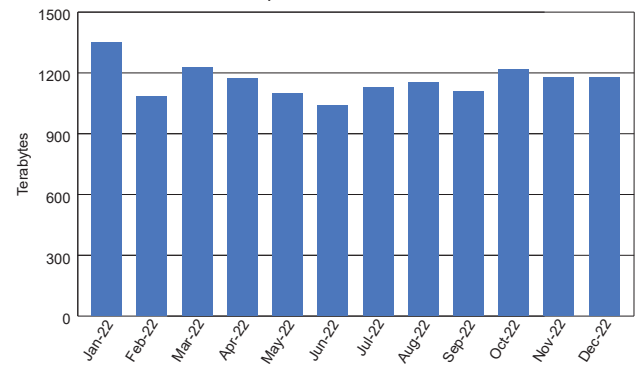
NCEI provided climate information regarding extremes, climate change monitoring, and current outlooks as it pertains to the Northern Plains at the *Oceti Sakowin Oyate: Coming Together to Face the Climate Crises* meeting of the Sioux Nation People (Seven Council Fires). All of the tribes present expressed an interest in setting their own drought designations and thus, not depending on the states.

Upcoming Engagements	
American Meteorological Society Annual Meeting 2023	Jan. 8-12, 2023
Bays and Bayous Symposium	Jan. 24-25, 2023
Climate Prediction Applications Science Workshop	May 9-11, 2023
American Association of State Climatologists	Jun. 20-23, 2023

Customer Reach

NCEI Makes Data Accessible

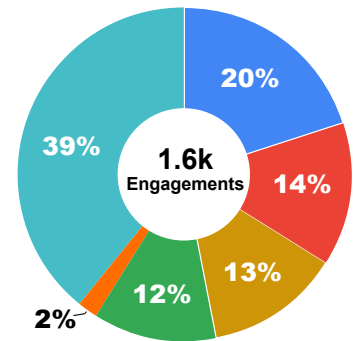
- 895M web hits and 3,567 TBs of data delivered online*



*Analytics include model & satellite data; data statistics may not be comprehensive across NCEI (e.g. CLASS)

U.S. Sectors Served

- Top Sectors
- Professional, Scientific, and Technical Services
- Other Services (except Public Administration)
- Educational Services
- Public Administration
- Finance and Insurance
- Others (Combined)



Unique Customer Requests

Corn Crop Research

A researcher contacted NCEI requesting Growing Degree Days (GDD) to time the pollination of sweet corn seed crops. The different inbred parents will consistently produce their silk or pollen after a certain number of GDDs. If the plant parents at a less-than-ideal time, the pollination will not sync up and there will be reduced productivity and a very poor seed set, resulting in less seed to sell and more expensive sweet corn at the store.

Sea Surface Temperature

A customer requested assistance downloading over 30 years of data to compare sea turtle nesting sites that have been monitored across the Florida coastline. NCEI Surface Marine In-situ staff were able to help them find a solution using the Optimum Interpolation Sea Surface Temperature Dataset, resulting in a very appreciative customer.

Fans



101.7k



62.8k



8k

