



State of the Services FY 2023 Q3 Report April 2023 - June 2023

Engagement Events Highlights

Space Weather Workshop

Boulder, CO | April 18-21

- NCEI participated in the annual Space Weather Workshop in Boulder, CO. The workshop brought academic, industry, and government partners together to discuss the impacts of space weather on communications, navigation, spacecraft operations, human space exploration, aviation, space traffic coordination, electric power, and solutions to these issues.
- NCEI presented on solar flare detection and forecasting, Geostationary Operational Environmental Satellites, space weather measurements of particles, solar X-rays, and magnetic fields.



Retail and the 20th Annual Climate Prediction Applications Science Workshop

Asheville, NC | May 9-11

- The Home Depot and the Retail Industry Leaders Association participated in a special retail sector panel discussion, organized by NCEI and the North Carolina Institute for Climate Studies (NCICS), at the 20th Annual Climate Prediction Applications Science Workshop.
- NCEI co-hosted the workshop with the National Weather Service and NCICS. Over 100 participants attended the workshop this year, either virtually or in person, which was themed: *Understanding Socio-economic Value of Climate Data, Prediction, and Information Services*.



Product and Services Highlights



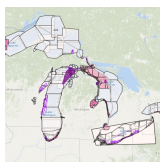
Artificial Intelligence at NOAA: Innovation in Practice - StoryMap Release

NCEI released a StoryMap titled, *AI at NOAA: Highlighting Innovation in Practice*. Artificial intelligence (AI) can help scientists better understand the environment and its management. NOAA has a long history of using AI in weather forecasting, climate modeling, and environmental monitoring and has established the NOAA Center for AI (NCAI) to support new and ongoing projects that span from the bottom of the ocean to the outer atmosphere. NCEI worked closely with NCAI and other NOAA project leads to create this informative StoryMap.



Uncrewed Systems Partnership Project

The NCEI Uncrewed Systems Data Services Team completed the Run for Record in the Naval Integrated Live Virtual Constructive Environment exercise in May. This exercise is an assessment of the metadata standard being developed by NCEI and the Naval Meteorology and Oceanography Command under the Commercial Engagement through Ocean Technology Act of 2018. The test was conducted by the Naval Research Laboratory, with participants from NOAA's National Ocean Service and the NOAA Navigation Response Team.



NCEI Partners with Northwestern Michigan College for Lakebed 2030

Northwestern Michigan College has contributed the first multibeam bathymetry survey from the Great Lakes to NCEI's archive. This milestone achievement highlights the lack of bathymetric data in the Great Lakes, where it is estimated that 92% of the lakebed remains unmapped. By working directly with students and instructors, NCEI utilized the Great Lakes Spatial Priorities Study to identify an area of interest with high mapping priority. The survey, *NMC2023*, is now archived and publicly accessible online through the Bathymetric Data Viewer.



New Growing Degree Days Tool: CliGrow

The High Plains Regional Climate Center developed a new Growing Degree Day (GDD) tool, *CliGrow*, to meet the needs of users in the region. This new tool uses gridded data from the NCEI and the Applied Climate Information System to estimate crop maturity using GDDs for ten major crops across the contiguous United States. Additional crops will be added to the tool in the future. Farmers are able to use the tool to evaluate planting and harvesting dates, along with freeze data to better plan their operations and maximize productivity.

Stakeholder Highlights



Starting in the Mid-Atlantic, and extending into New England, NCEI has been convening inter-agency federal partners to review and analyze what the national environmental justice tools show and don't show. Mapping the underserved regions using all of the available tools and confirming the results with the states is leading to a whole-of-government coordinated approach to better serve the communities in these regions. This analysis and engagement will inform NCEI's FY-24 execution of Bipartisan Infrastructure Law and Inflation Reduction Act funding focused on the underserved.



NCEI participated in the National Security Innovation Network's Critical Resource Summit hosted by the University of Montana, Montana Technical University, and Montana State University. The event brought together more than 130 academic, industry, and government partners and was focused on sustainable access to vital resources and the technical innovation necessary to ensure continued economic competitiveness and security for the United States. Key areas considered were water, food, energy, minerals, and human systems. Attendees were briefed on NCEI resources available to support informed decision-making.



NCEI participated in the annual meeting of the American Association of State Climatologists (AASC), providing an update on its mission and vision, as well as engaging with AASC members to provide details of upcoming products and services. AASC is an integral component of the National Partnership for Climate Services.



Climate and Resilience
COMMUNITY OF PRACTICE

NCEI spoke to the Gulf of Mexico Climate and Resilience Community of Practice, comprised of more than 330 members from more than 130 organizations, about *Climate Trends: Understanding the Data Behind the Headlines*. The presentation exposed participants to many NCEI climate products and services. In closing remarks, several participants cited NCEI for providing important meeting takeaways and a significant amount of new information.

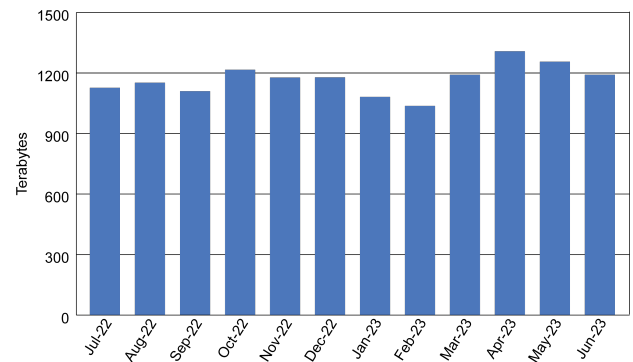
Upcoming Engagements

American Meteorological Society, Summer Community Meeting	Aug. 29-30
Southern Central Drought Emergency Response System, Annual Meeting	Sep. 12-13
OCEANS 2023, Gulf Coast	Sep. 25-28

Customer Reach

NCEI Makes Data Accessible

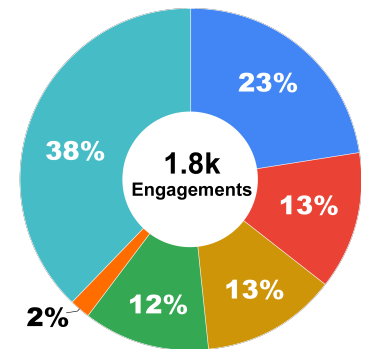
- 1 billion web hits and 3,750 TBs of data delivered online*



*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
- All Others (Combined)
- Public Administration
- Finance and Insurance



Unique Customer Requests

Volcano Archive Footage for New Netflix Series

Netflix contacted NCEI to request underwater volcano archive footage from NCEI's Ocean Exploration Video database for their new *Oceans* series. Led by the team that produced *Blue Planet II*, *Oceans* is an ambitious blue-chip natural history series that will tell the stories of Earth's oceans through the experiences of the remarkable creatures that call them home. The five episode series will reveal the surprising wonders of our planet's greatest habitats and the latest discoveries that are giving us a new understanding of our oceans in today's world.

Storm Events Data for Illness Study

A researcher with the U.S. Centers for Disease Control & Prevention contacted NCEI to request bulk access to a national database of severe weather in an attempt to correlate extreme weather occurrences with enteric and foodborne illnesses. NCEI provided access to the Storm Events Database in cooperation with this effort to improve food safety and security.

Fans



112k



64.2k



10k

