



State of the Services FY 2021 Q2 Report January - March 2021

Engagement Events Highlights

U.S. Drought Monitor Workshop

Virtual | Mar 16 and 18 2021

- Focused on increasing transparency, establishing guidelines for dataset inclusion, and preparing a one-stop shop for the data feeds to produce the U.S. Drought Monitor.
- NCEI was joined by the National Weather Service (NWS) Climate Prediction Center, the U.S. Department of Agriculture (USDA) Office of the Chief Economist, the National Drought Mitigation Center, and the Western Region Climate Center.



Coastal GeoTools Conference

Virtual | Feb 8-11

- NCEI presented at the virtual Coastal GeoTools Conference hosted by the Association of State Floodplain Managers February 8-11, 2021.
- NCEI gave an oral presentation titled, "Canada-United States Elevation Model Collaboration to Improve Tsunami Inundation Mapping" in the Getting More Done Together session.



Product and Services Highlights



NCEI Responds to 59 COVID-19 Inquiries

59 COVID-19 related NCEI user engagements have been documented in Salesforce since March 2020. These inquiries have come from 16 of 20 U.S. economic sectors. Users include universities, private sector companies such as Walmart, Bank of America, and real estate companies, as well as public sector organizations like the Department of Energy, National Geospatial Intelligence Agency, Federal Aviation Agency, Department of Homeland Security's National Biodefense Analysis and Countermeasures Center.



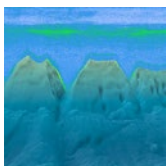
Passive acoustic data and annotations archived from the cloud to NCEI

A passive acoustic dataset collected at sites in the North Pacific to monitor humpback whales was recently archived at the NOAA NCEI passive acoustic archive. This dataset was foundational to an analysis of humpback whale song using machine learning conducted in collaboration with scientists from the NOAA Pacific Island Fisheries Science Center and Google's AI for Social Good.



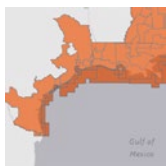
2021 Billion-Dollar Disasters

One event was identified during FY21Q2 of 2021 with losses exceeding \$1 billion across the U.S. The Northwest, Central Winter Storm and Cold Wave event that occurred in mid-February has preliminary losses in excess of \$10 billion. This event is now the most costly winter storm event on record for the U.S., surpassing the Superstorm of 1993.



Automating the Creation of Metadata Records for Water Column Sonar Data

The fisheries acoustics team improved their metadata publishing process to be more robust and automated. Over 300 published metadata records have been updated with the new template and 300 new records created. Now Digital Object Identifier minting and International Organization for Standardization record creation are done in a matter of seconds.



New Digital Elevation Models (DEMs) for the South Texas Coast

Tiled DEMs covering the South Texas Coast integrated coastal bathymetry and topography to support NOAA's NWS and NOS storm surge modeling, as part of the COASTAL Act.

Stakeholder Highlights



Ahead of an Arctic air outbreak in the central and southern U.S. in February, NCEI collaborated with the NWS, USDA, and Regional Climate Centers to develop a briefing and social media plan for sharing forecast and impacts information with regional partners and stakeholders.



The Spring 2021 DEVELOP team partnered with the Montana State Climate Office, the NWS Missouri Basin River Forecast Center, U.S. Army Corps of Engineers Northwestern Division, and NCEI to build upon an exploratory analysis and framework for a Composite Moisture Index.



NCEI gave a remote presentation to the U.S. National Tsunami Hazard Mitigation Program, which connects states with the federal agencies responsible for the U.S. Tsunami Warning System. The presentation provided an overview of the NCEI World Data Service Integrated Tsunami Database.



NCEI was invited by the U.S. Army Corps of Engineers and U.S. Coast Guard to present the latest climate summary and update information for the Missouri River Basin to over 100 employees of transportation, recreation, and non-governmental organizations.



The Midwestern Regional Climate Center partnered with Illinois-Indiana Sea Grant to host virtual workshops for decision-makers regarding extreme lake levels and identifying gaps and information needs for southern Lake Michigan communities.



The Western Regional Climate Center partnered with the University of Alaska – Fairbanks Scenarios Network for Alaska and Arctic Planning program, to develop a new Alaska airport wind visualization tool.

Upcoming Engagements

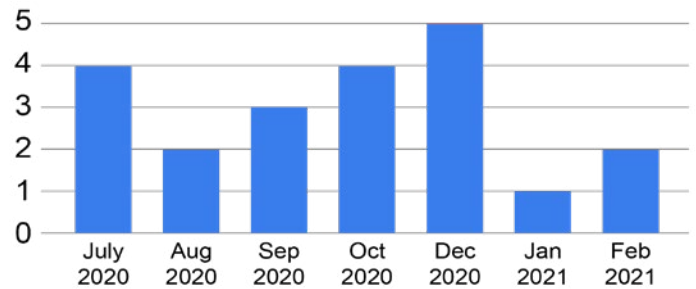
State Climate Summits: IN, TN, CO, AK, IA	Spring 2021
Carolina's Climate Resilience Conference	May 2021
AASC Annual Meeting - Climate Fridays	Jun. 2021
NOAA Environmental Data Workshop	Aug. 2021
Oceans in Action/ANTX	Aug. 2021
Global OCEANS 2021 San Diego - Porto	Sept. 2021

Customer Reach

COVID-19 Related Data Requests

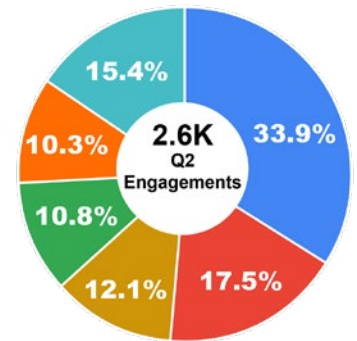
Top Products:

- Storm Events Database



U.S. Sectors Served

- 54 Professional, Scientific, and Technical Services
- 81 Other Services (except Public Administration)
- 61 Educational Services
- 92 Public Administration
- 99 Foreign
- Other



Unique Customer Requests

SAD Application Development Support:

A software developer contacted NCEI requesting assistance with the development of an app for people suffering from Seasonal Affective Disorder (SAD). SAD is a multi-symptom form of clinical depression that many people suffer from as a result of changing seasons, usually to autumn or winter. His preliminary research begins with evaluating sunlight intensity in regions within the United States. He was informed of the National Solar Radiation Database and referred to possible additional support from the National Renewable Energy Lab.

National Geographic Request

NCEI received a request from a National Geographic researcher who was working on an upcoming story on coral reefs. They asked NCEI for help explaining the role of ocean acidification using the paper, "Surface ocean pH and buffer capacity: past, present and future." NCEI provided the results of the temporal change of the global average surface ocean pH that he used to make the plots in the paper.

Fans



55k

61k

2.2k

