

State of the Services FY 2022 Q1 Report

October - December 2021

Engagement Events Highlights

NOAA and Climate Listening Sessions

Virtual | Oct 25 and Dec 2

 NCEI led and hosted two "NOAA and Climate Listening Sessions" that focused on the Retail and Reinsurance sectors.



• Participants and members of the Retail Industry Leaders Association and the Reinsurance Association of America provided insights into NOAA information use and ways NOAA can improve its products and services to better serve the sectors. Three additional listening sessions will take place in early 2022.

NCEI Town Hall at AGU Meeting

Virtual | Dec 9

 NCEI hosted a virtual town hall, "Connect with NOAA National Centers for



Environmental Information Space Weather Data and Science Stewards" at the American Geophysical Union Fall Meeting.

 Participants at the virtual town hall engaged directly with NCEI space and solar scientists. The session featured information about NOAA space weather data, new products and services with plenty of lively discussion.

Product and Services Highlights



Probability of a White Christmas

NCEI updated its information for the probability of a white Christmas across the U.S. The update was driven by information in the recently updated 1991-2020 Climate Normals. While this directly supports sectors such as transportation, it is also of interest to media, being picked up by CNN, Fox, and others.



Historic Earthquake Imagery Added to Database

Images from the November 18, 1929 Grand Banks, Canada earthquake and resulting tsunami were added to NCEI's Natural Hazards Image database courtesy of the Archives and Special Collections of the Memorial University of Newfoundland's Queen Elizabeth II Library. Because this was the first Canadian event added to the Natural Hazards Image Database, these images filled an existing data gap and enhanced database integrity.



Billion-Dollar Disasters

NCEI updated its Billion-Dollar Disaster product to include new information on hazards and disasters. The update now provides a view of a location's risk for, and vulnerability to, single or multiple combinations of weather and climate hazards for every U.S. county.



NCEI Released the High Definition Geomagnetic Model (HDGM) Updates

The NCEI-CIRES Geomagnetism Team released the HDGM2022 and HDGM-Real Time 2022, two new models of Earth's magnetic field. The HDGM is a global, high-resolution model providing values of the main and crustal magnetic fields at any point near the Earth's surface. The HDGM-RT additionally provides, in real-time, magnetic fields generated by electric currents in the magnetosphere and the ionosphere.



Regional Climate Services Program

NCEI announced the selection of Regional Climate Services Directors (RCSDs) for the Alaska, Southern, and Western Regions in October. They join the Central Region, Eastern Region, and Pacific Region in the provision of climate services to the regions.

Stakeholder Highlights



New ionospheric data has been made public through a joint Los Alamos National Laboratory and NCEI effort. The new data

comes from unique measurements of lightning events. Each measured flash provides a snapshot of the ionospheric conditions at that instant, and measurements accumulated over time provide a unique view of ionospheric weather. This is the first-ever global set of ionospheric electron density data to use a naturally occurring source.



NCEI participated in and led parts of the 2021 US Drought Monitor Forum. The USDM Forum is a biennial workshop that discusses scientific, user engagement, and administrat-

ive issues associated with drought monitoring in the U.S. The meeting allows engagement with users and the virtual nature of this year's program saw a larger number of users from across the U.S. than in previous years.



RCSDs across the country supported the NOAA regional climate and equity roundtables. These events were coordinated and hosted by the NOAA Regional Collaborat-

ion Teams and NCEI was asked to leverage existing relationships in the regions to bring many of the speakers and participants to the table.



NCEI participated in the 29th Session of the Intergovernmental Coordination Group for the Pacific Ocean Tsunami Warning and Mitigation System (ICG/PTWS). NCEI supports the Working Group on Understanding

Tsunami Risk. NCEI and the co-located World Data Service for Geophysics maintains a global historical tsunami database, which supports the ICG/PTWS.

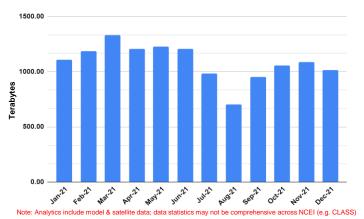
Upcoming Engagements	
AGU Fall Meeting	Dec. 2021
AMS Annual Meeting	Jan. 2022
AGU Ocean Sciences	Feb. 2022
NOAA Listening Session - Architecture & Engr.	Jan. 2022
NOAA Listening Session - New Blue Economy	Feb. 2022
NOAA Listening Session - Travel & Tourism	Mar. 2022



Customer Reach

NCEI Makes Data Accessible

922M web hits and 3,155 TBs of data delivered online in FY22-Q1



U.S. Sectors Served

- Professional, Scientific, and Technical Services
- Other Services (except Public Administration)
- Educational Services



36% 8% 1.9K **Q1** Engagements Public Administration 13% 13% 15% Other

15%

Unique Customer Requests

Going Going Gone:

A baseball enthusiast contacted NCEI for meteorological data from various ballparks for multiple periods to help him analyze how wind speeds affect exceptionally long home runs. NCEI provided daily and hourly observations from the Environmental Document and Access Display System. In his most notable study, he compared, what were at the time, the two longest home runs hit at Fenway Park in Boston: Ted Williams' 493' homer vs. Babe Ruth's 488' homer. Years later, on June 4, 1946, Williams would hit a 502' homer which took advantage of a 21 mile per hour wind.

Offshore Wind Farm Planning

A renewable energy company contacted NCEI requesting bathymetric data in a BOEM wind lease offshore New Jersey. 193GB of NOS hydrographic survey data, collected and processed by the Office of Coast Survey in 2006 and archived at NCEI, was available and delivered via electronic transfer. Hydrographic survey data are exceptionally useful for cable routing in the nearshore, and have significant impacts, reducing required survey times for some leases from over two years to a single season.

