

State of the Services FY 2023 Q2 Report

January 2023 - March 2023

Engagement Events Highlights

White House Pathways to the Federal Space Virtual | March 2023

- NESDIS is supporting a Space Science, Technology, Engineering, and Mathematics (STEM) workforce initiative with the White House Office of Science and Technology Policy (OSTP) called "Your
 - Place in Space." OSTP has planned a series of forums to help educate students about what it's like to work at a space-centric agency, available opportunities, and tips for submitting strong applications for the federal workforce.
- A NCEI staff member represented NOAA as a panelist at the "Meet Early Career Professionals" panel during the first webinar of the series, which was held in March.

Regional Climate and Equity Heat Health Pilot

Multi-State | January - March 2023

- NCEI led cross-cutting engagements focused on heat health equity in four cities including Phoenix, Las Vegas, Charleston, and Miami. These projects followed on the NOAA Regional Col
 - laboration Network climate equity listening sessions, and served to help these cities identify short- and long-term adaptation measures to high heat extremes.
- NCEI's regional staff are subject-matter experts for climate scenarios, and continue to work with the National Integrated Heat Health Information System to develop engagements at local scales in the regions.

Product and Services Highlights



Sea Surface Temperature Product Informs Research on Collapsing Cod Stocks

NCEI's Extended Reconstructed Sea Surface Temperature (ERSST) product was used in a January 2023 Nature Scientific Reports article titled "Regime shift dynamics, tipping points and the success of fisheries management," which cited a 2019 paper published in the Proceedings of the Royal Society B: Biological Sciences. Both papers studied the relationship between collapsing cod stocks and climate change in terms of SST, and the 2023 paper found that certain levels of SST can change the stock-recruitment relationship shown. The study suggested that a continuing increase in ocean temperatures will probably limit future fishing opportunities for most cod stocks in the Atlantic Ocean.



Climate at a Glance Updated Application

The latest release of the Climate at a Glance web application was deployed in March. Along with user interface updates (e.g., enhanced navigation menu) and a few bug fixes, users now have access to a faster, more stable, and more reliable application experience.



Natural Hazards Image Database

The Pacific Tsunami Museum in Hilo, Hawai'i requested to use images from NCEI's Natural Hazards Image Database of the April 1, 1946 Aleutian Islands earthquake and tsunami. With the support of the County of Hawai'i, these images will be used on interpretive signs that are being installed in areas of historical tsunami significance across the Hawaiian Islands. The interpretive signs will provide visitors an opportunity to understand the area's tsunami history through historical images and survivor stories.



NOAA Global Surface Temperature v5.1.0

Coinciding with the release of the January 2023 Global Climate Report, the NOAA Global Surface Temperature (NOAAGlobalTemp) dataset version 5.1.0 replaced version 5.0.0. This new version includes complete global coverage and an extension of the data record back in time an additional 30 years to January 1850.

Stakeholder Highlights



NCEI staff gave a virtual introduction to Crowdsourced Bathymetry (CSB) presentation to students attending the annual International Hydrographic Management and Engineering Program (IHMEP), hosted by the Naval Mete-

orology and Oceanography Professional Development Center in Gulfport, MS. Introduction of the CSB concept to these international students early in their careers will hopefully lead to their participation in the subject in the future. CSB is bathymetry collected by non-surveying vessels on passage and provided to NCEI as open source data.



NCEI Scientists developed new and updated versions of the tiled Digital Elevation Models (DEMs) for Southwest Florida, including Marcos Island, Everglades National Park, and the Florida Keys. The DEMs integrate the most

modern available coastal topography and bathymetry data to support NOAA's National Weather Service and National Ocean Service storm surge modeling, as part of the Consumer Option for an Alternative System to Allocate Losses (COASTAL) Act.



NCEI and partners were asked to support the Ninth Meeting of the Pacific Tsunami Warning System Regional Working Group on Tsunami Warning and Mitigation for Pacific Island Countries and Territories. NCEI provided

summary tsunami data with accompanying static visualizations (global and regional) of the January 15, 2022 Hunga-Tonga Hunga-Ha'apai Tsunami. This work was coordinated with the International Tsunami Information Center, Tonga Meteorological Service and Tonga Geological Services.

On January 24, 2023 NCEI conducted a Roundtable Discussion with members of the Retail Sector, in partnership with the Retail Industry Leaders Association as a follow-up from the NOAA Climate Listening Sessions NCEI orga-

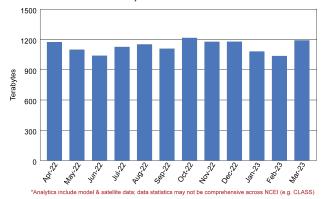
nized on behalf of the NOAA Administrator. Attendees from companies such as Walmart, Lowes, Walgreens, and Best Buy enthusiastically provided perspectives on discussion topics and welcomed further interaction with NCEI in the future.

Upcoming Engagements	
Climate Prediction Applications Science Workshop	May 9-11
Climate and Resilience Community of Practice	May 15-17
American Association of State Climatologists	Jun. 20-23
American Meteorological Society Summer Community Meeting	Aug. 28-30
OCEANS 2023 Gulf Coast	Sep. 25-28

Customer Reach

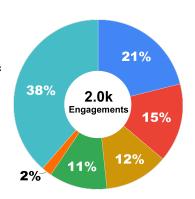
NCEI Makes Data Accessible

919M web hits and 3,304 TBs of data delivered online*



U.S. Sectors Served

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



Unique Customer Requests

Nuclear Policy Program

NCEI was contacted by a research scientist from the Carnegie Endowment for International Peace (CEIP) to discuss climate change and potentials for nuclear facilities in Missouri and North Dakota. NCEI provided CEIP with information regarding the basics of climate change modeling, extremes, and the issues that facilities, such as, missile silos and air bases, may face as a result of climate change.

Calculating Ocean Heat Content on Coral Reefs

A Coral Reef Ecosystem Oceanographer from NOAA's Pacific Island Fisheries Science Center (PIFSC) in Hawaii, asked to consult with NCEI to start calculating ocean heat content near coral reef monitoring sites. While PIFSC regularly uses ocean temperature metrics, ocean heat isn't one of them. PIFSC recognizes that heat storage is probably very important to shallow, coral reef environments, and has deployed water temperature loggers at depths of 5m, 15m and 25m in some sites.

Fans









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