



NOAA Science Update to the Science Advisory Board

Craig McLean
Acting Chief Scientist
July 17, 2018



NOAA

Reduce the impacts of extreme weather and water events



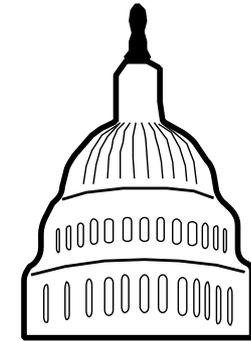
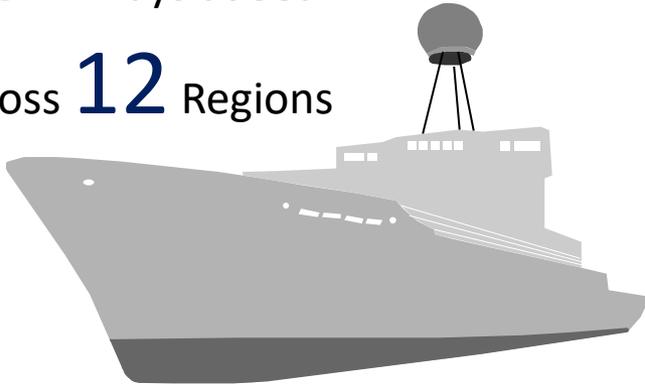
NOAA

Increase the sustainable economic contributions of our fishery and ocean resources

NOAA Science by the Numbers (August 2017 – July 2018)

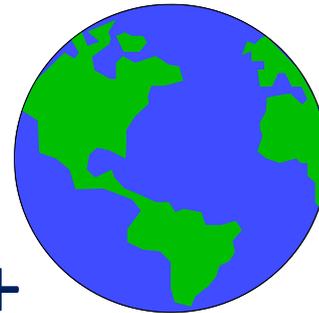
997 Days at Sea

across **12** Regions



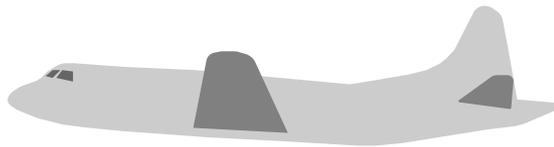
70 +

Congressional Reports

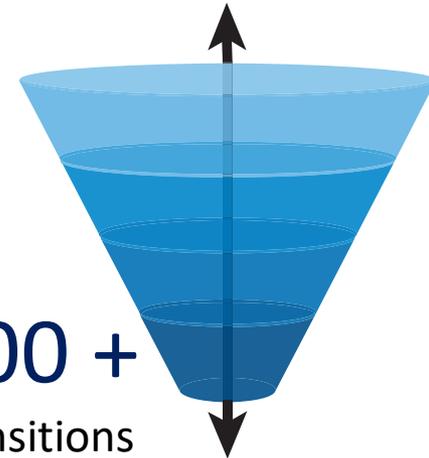


60+

International Meetings



4,470 Flight Hours



100 +

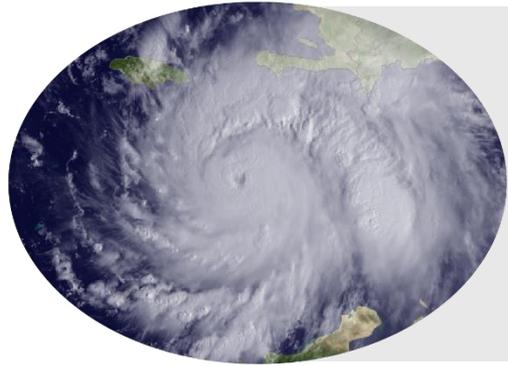
Transitions

NOAA Ship Tracks (August 2017 – July 2018)

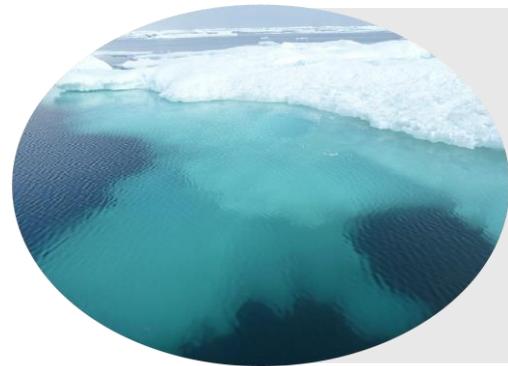


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NOAA Congressional Report Highlights (August 2017 – July 2018)



Hurricane Forecast Improvement Program Report
(Weather Research and Forecasting Innovation Act)



Alaska and Arctic Buoy Needs
(Appropriations Bill for National Data Buoy Center)



Status of Fisheries in the US: Rebuilding Overfished Fisheries
(Magnuson-Stevens Fishery Conservation and Management Act)

NOAA Transition Highlights (August 2017 – July 2018)



The Kilauea volcano was added to the operational set of U.S. volcano trajectories in HYSPLIT

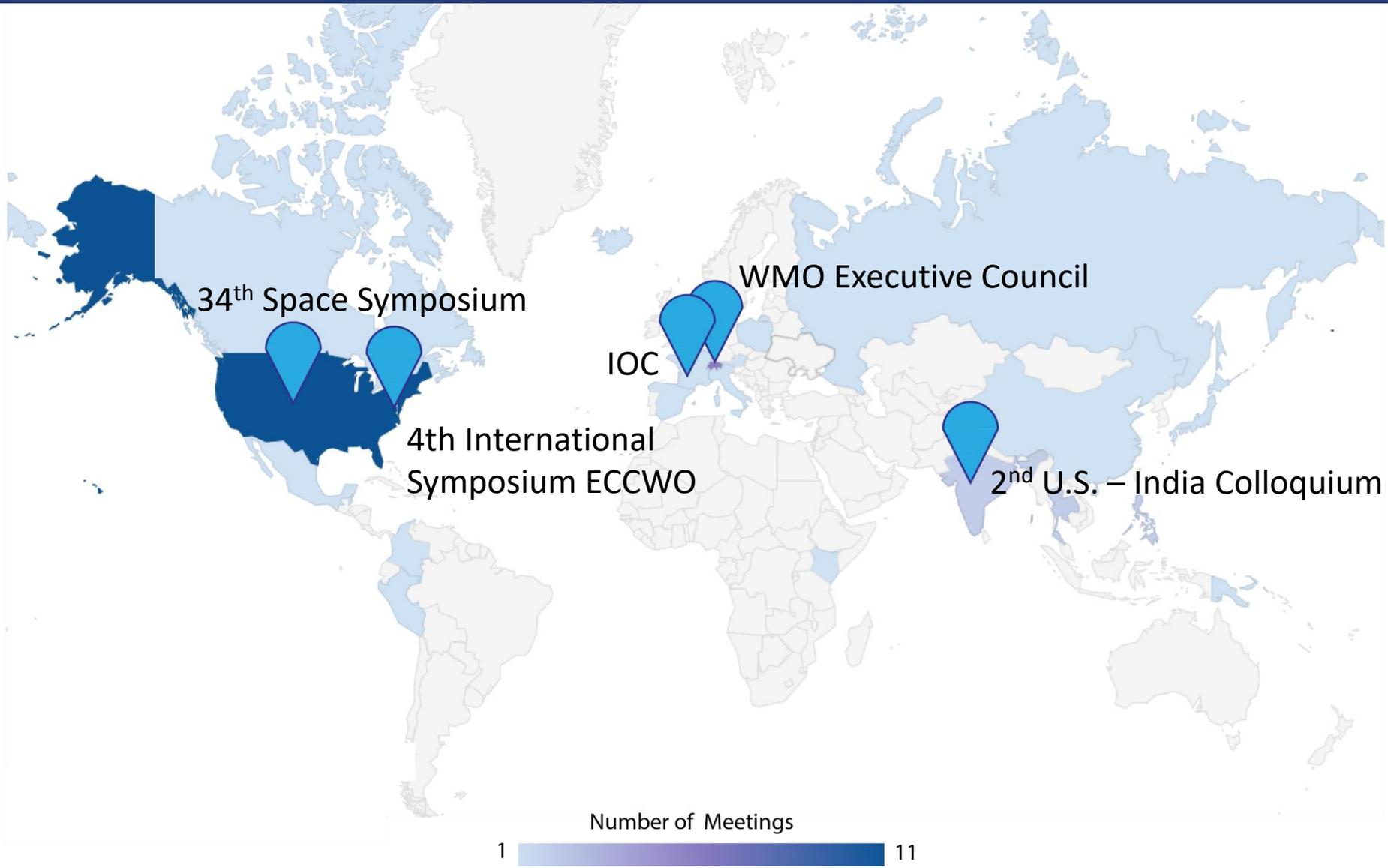


Shoreline Cleanup and Assessment Technique (SCAT) Data Standard



CONUS Graphical Forecasts for Aviation (GFA)

NOAA Participates in International Science Meetings



Reduce the impacts of extreme weather and water events



NOAA



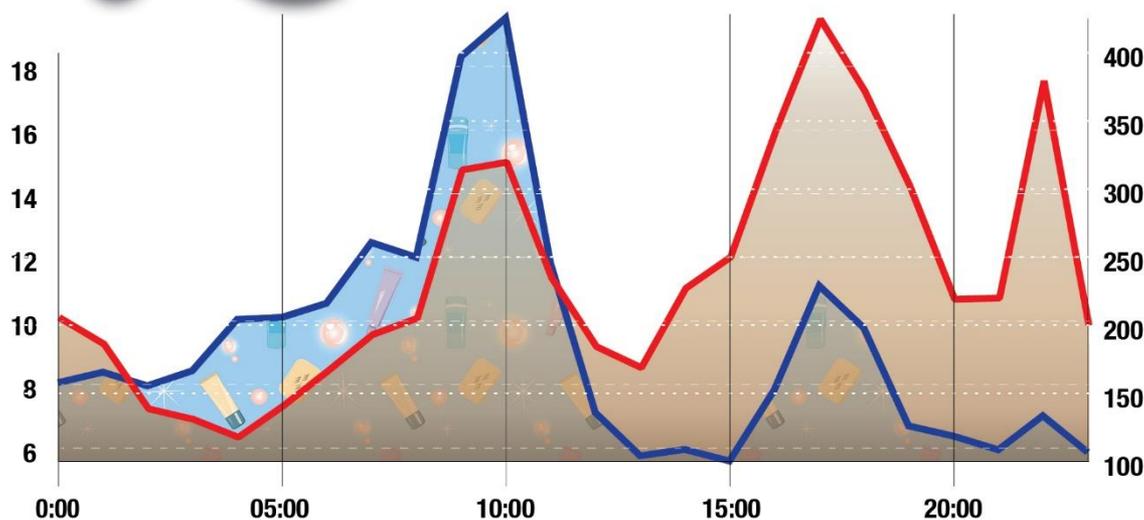
Emissions from personal care products comparable to tailpipe emissions



D5 siloxane evaporates from personal care products, such as hair gels and deodorants. Its levels are highest in the morning when people shower and apply fresh products.

D5 siloxane emissions (ppt)

Benzene emissions (ppt)



Benzene is emitted from the tailpipes of motor vehicles. It is largely enhanced during morning and afternoon rush hours.

Kathy Bogan/CIRES

410 ppm Reached at Mauna Loa



NOAA Provides Vital Public Safety Information during Kilauea Eruption



Improved Forecasts for Flooding: FLASH and AQPI



FEMA

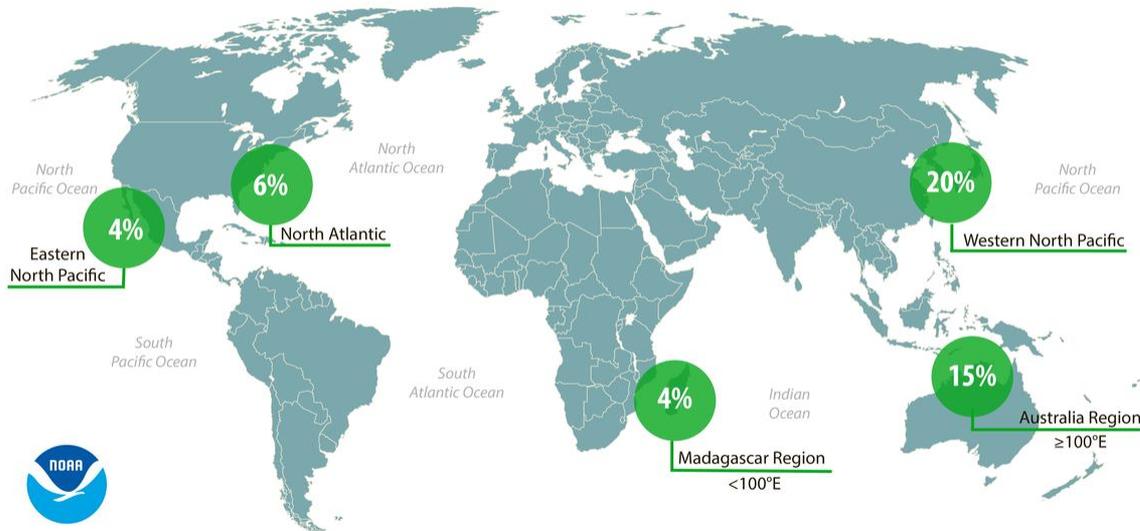
Satellite Products Transition to Operations



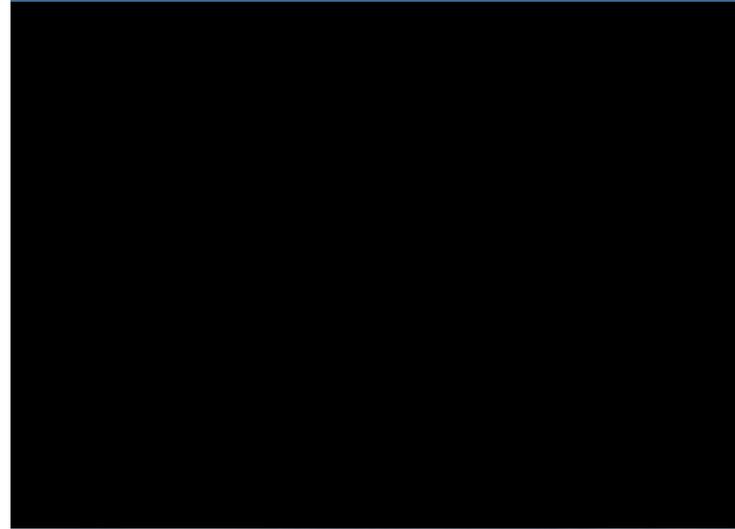
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A Global Slowdown of Tropical Cyclone Translation Speed

Regional Slowdowns of Tropical Cyclone Movement Between 1949 and 2016 over Land and Water



Adapted from "A Global Slowdown of Tropical Cyclone Translation Speed" by J.P. Kossin, published in *Nature* 2018



www.ncei.noaa.gov

NOAA National Centers for Environmental Information

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No Tornado Deaths in May and June



Improved High-Resolution Models Support Forecast of a Rare Winter Storm



www.pennlive.com

Updates for the National Blend of Models



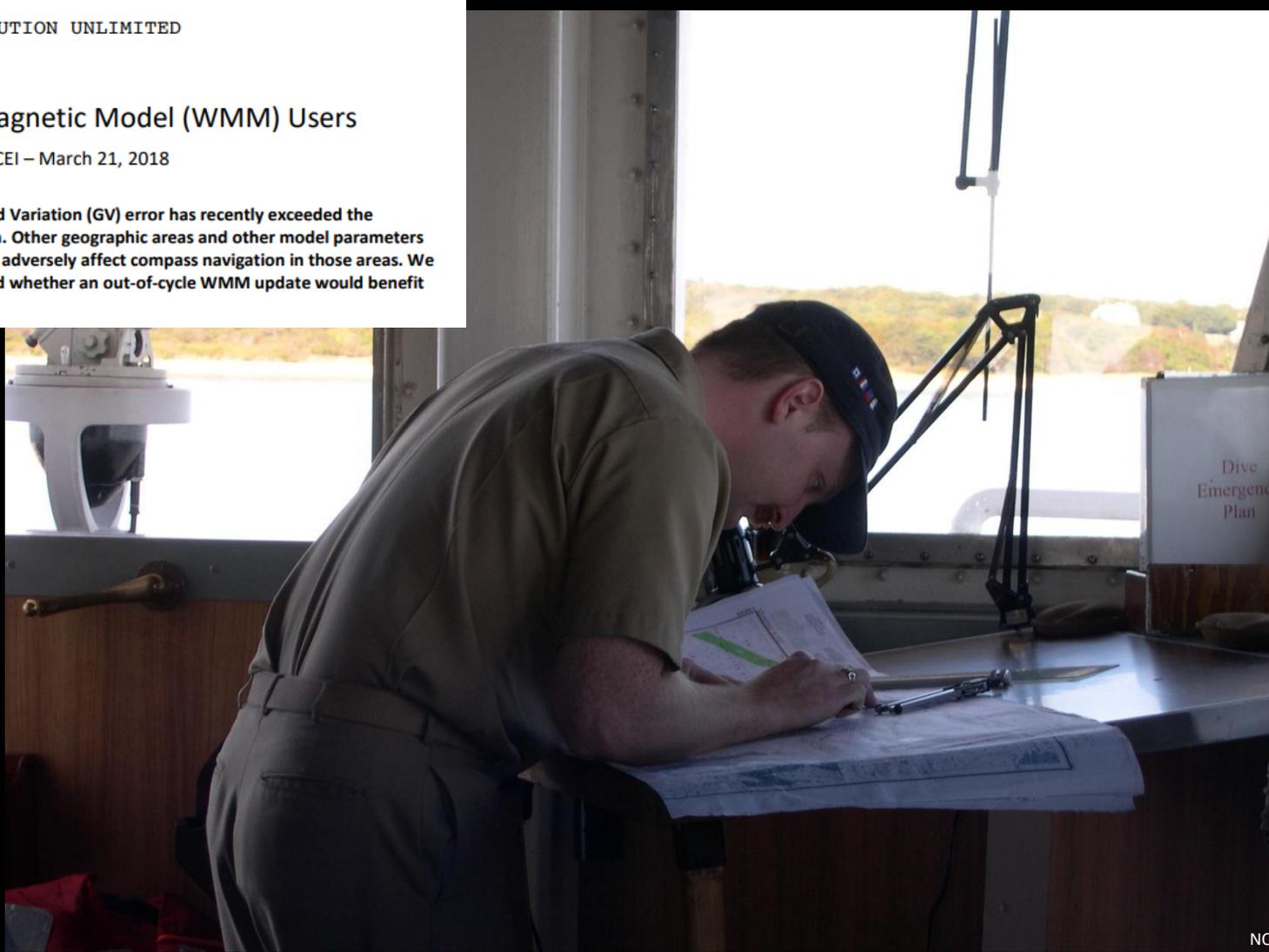
Unexpected Error in Navigation Tool Caught and Corrected

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Message to World Magnetic Model (WMM) Users

NOAA/NCEI – March 21, 2018

This is to inform users that the WMM Gridded Variation (GV) error has recently exceeded the performance specification in the Arctic region. Other geographic areas and other model parameters are not affected. The increased GV error may adversely affect compass navigation in those areas. We invite your feedback on potential impacts and whether an out-of-cycle WMM update would benefit your operations.



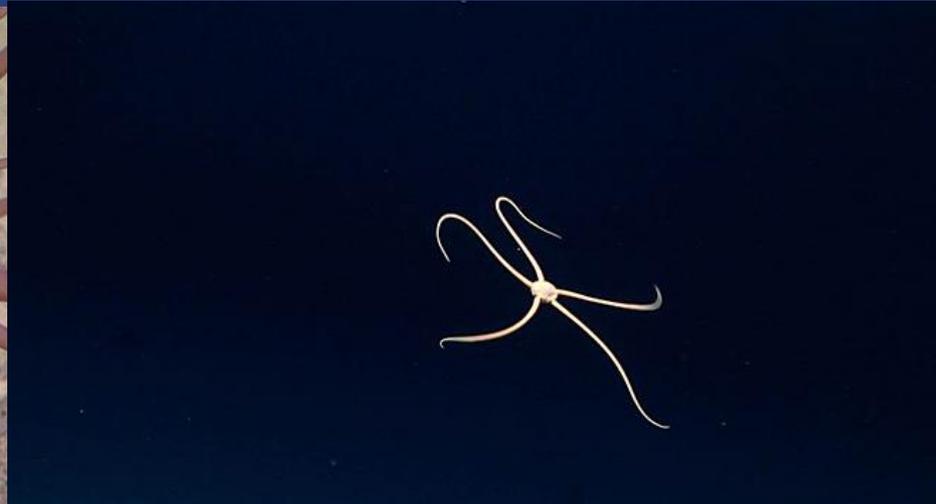
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Increase the sustainable economic contributions of our fishery and ocean resources

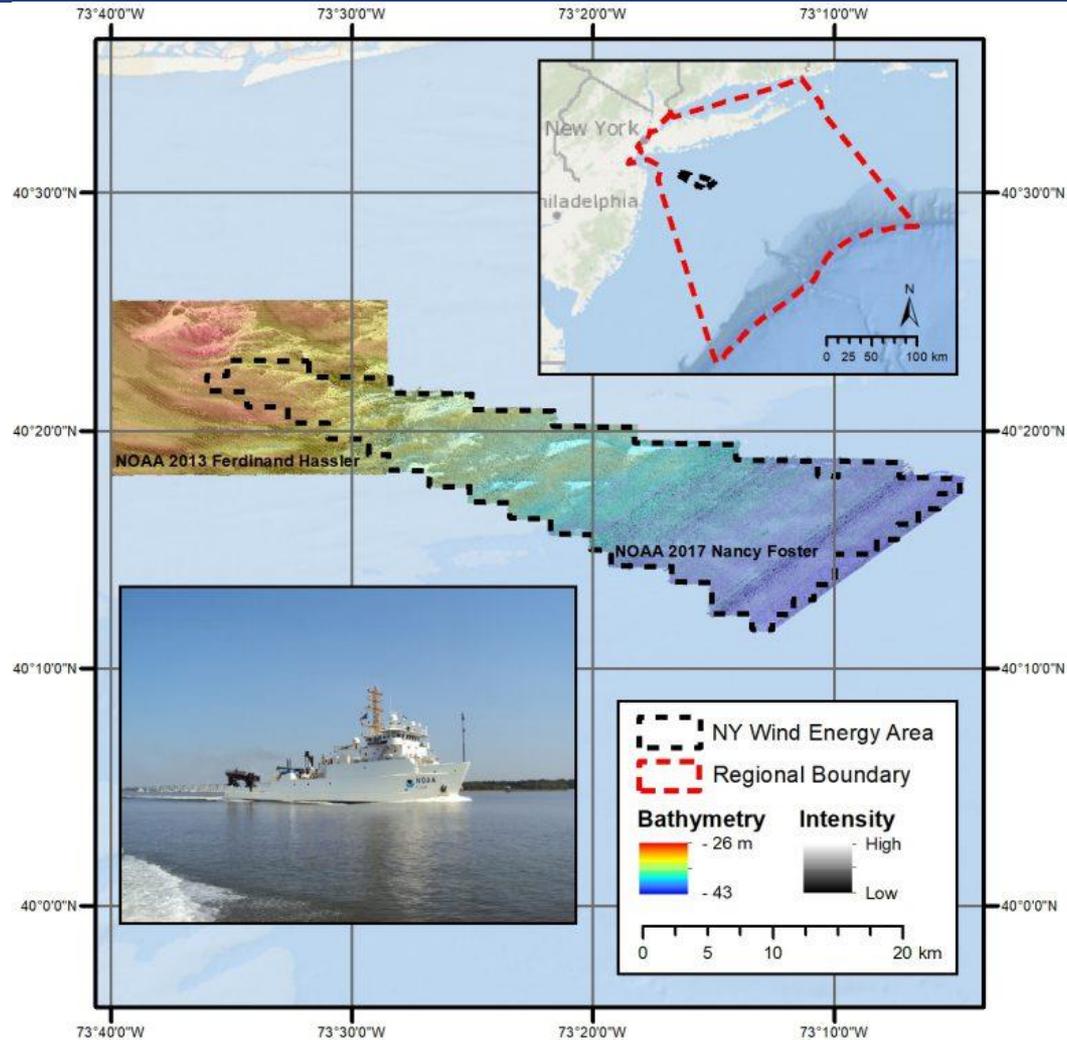


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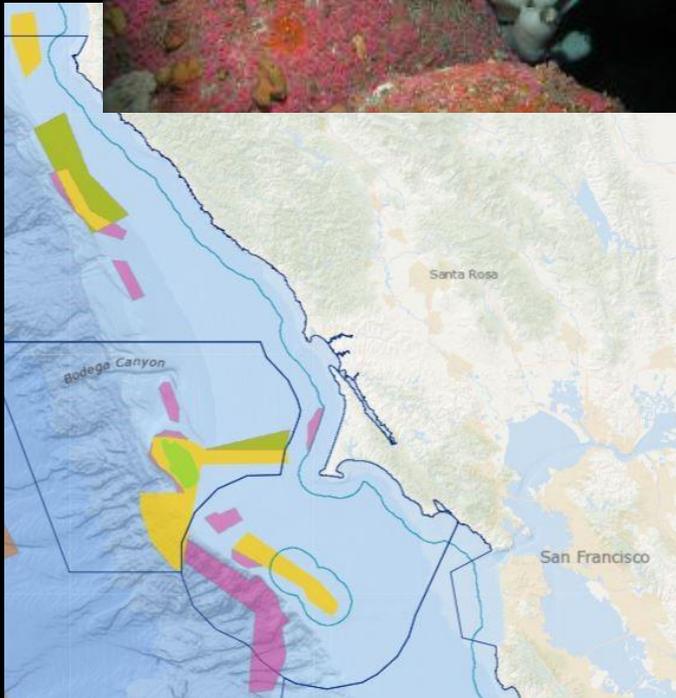
Ocean Exploration Discovers New Species



NCCOS Completes Mapping, Plans Ground Truthing of New York Wind Energy Area



Deep-Sea Benthic Surveys Inform Fishery Management Council Decisions in Pacific and Gulf of Mexico



EcoCast Supports Economically Viable Fisheries



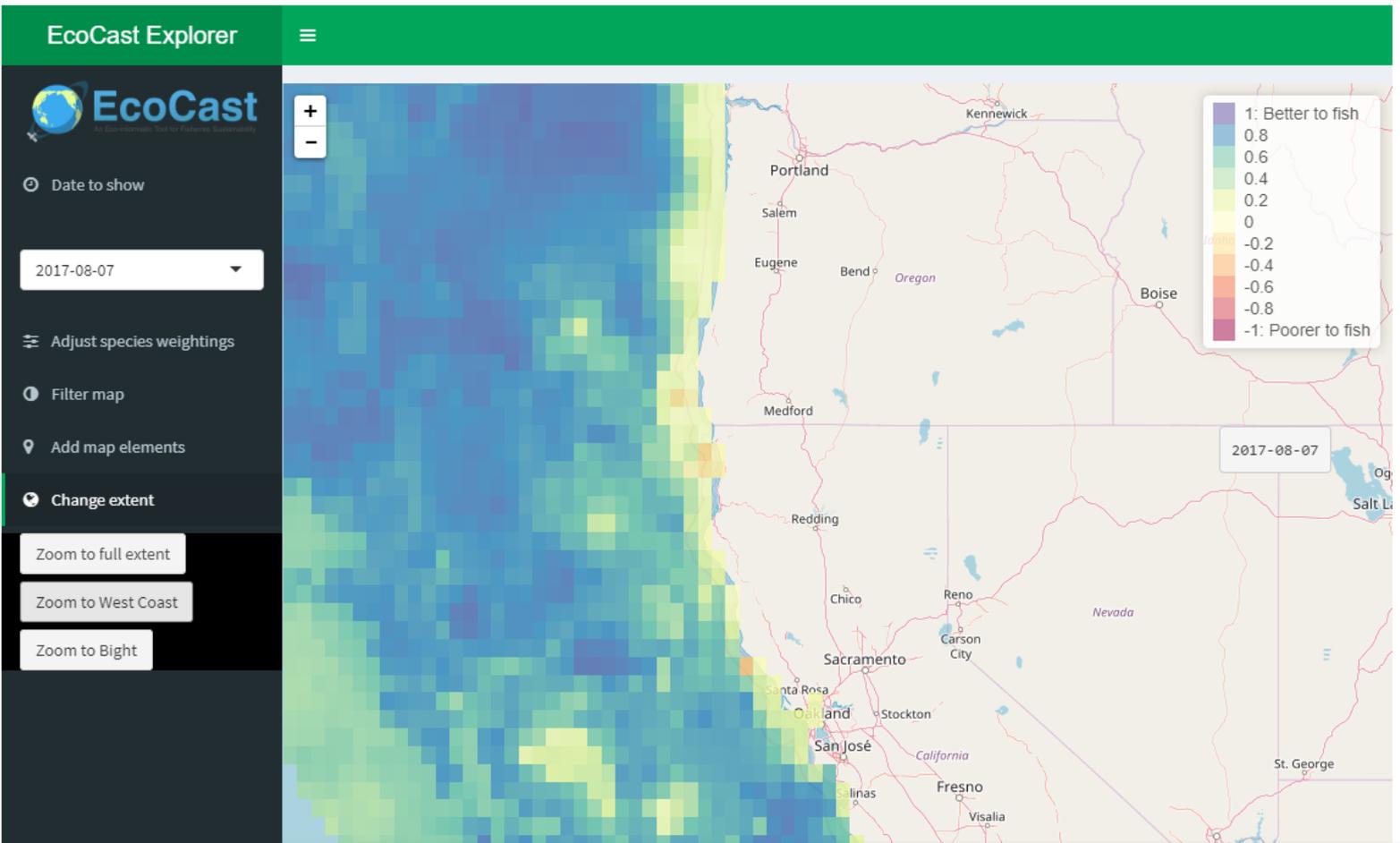
EcoCast Map

EcoCast Explorer

About EcoCast

EcoCast Explorer

Information and Instructions



Machine Vision to Collect Timely Fisheries Data

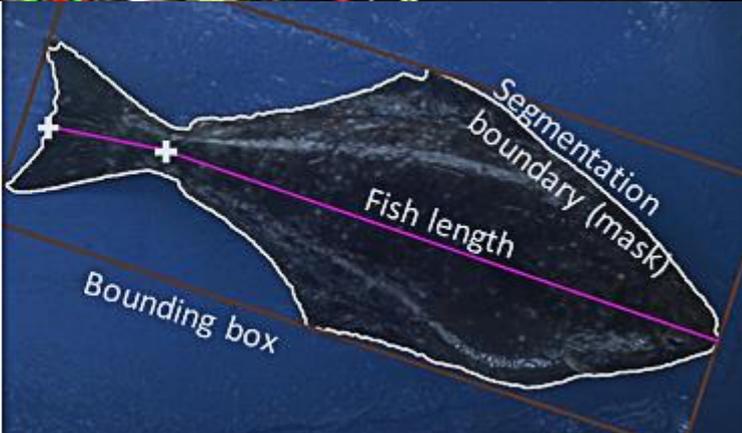
9674



[Video Link](#)



2017 Bering Sea deck-sorting chute



HAB Forecast Gives Washington Confidence to Proceed with Razor Clam Festival



Credit: Dan Ayres, WDFW



NOAA

Fishing Families Project Addresses Socioeconomic Challenges in Alaska



Environmental and Geographic Relationships among Salmon Forage Assemblages



Mike Peterson/Idaho Department of Fish and Game.

World's Largest Aquaponics Operation Opens in American Heartland



UW-Stevens Point Northern Aquaculture Demonstration Facility



Superior Fresh, LLC

Questions?

