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# Biden-Harris

# Administration invests \$2.7 million to improve ocean observations with new robotic floats through investing in America agenda

## Funding will support expansion of the Argo ocean observing system

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NOAA Affiliates Dr. Elizabeth Steffen (left) and Marine Tech Elizabeth Ricci (right) deploy a Deep Surrounding Oceanographic Lagrangian Observer (SOLO) Argo float from the R/V Ka'imikai-O-Kanaloa in 2018. The Deep SOLO float was developed by the Scripps Institute of Oceanography Instrument Development Group (SIO IDG), and this was the first Deep SOLO float to be deployed by NOAA Affiliates. (Image credit: NOAA)

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Today, NOAA and the Department of Commerce announced that \$2.7 million from the Bipartisan Infrastructure Law (BIL) will be used to replenish and expand an important array of robotic floats in the Argo program that measure ocean and climate data as part of President Biden's Investing in America agenda.

The Argo array is made up of a fleet of robotic instruments that measure temperature and salinity in the global ocean, drifting freely with the currents. Every 10 days, an Argo float dives 1.2 miles below the surface to collect data, which it then transmits via satellite after it returns to the surface for use in weather forecasts and climate research.

For 25 years, the Argo Program has provided more ocean data than any other observing instrument, helping NOAA revolutionize our understanding of the ocean and its role in Earth's climate," said U.S. Secretary of Commerce Gina Raimondo. "This investment, made possible thanks to President Biden's Bipartisan Infrastructure Law, will enable the U.S. to maintain our position as the world leader in ocean research. The new robotic floats will expand out assessments of ocean conditions, measurements of sea level rise as we continue to tackle the impacts of climate change."

This funding will support the development of "OneArgo," a new and improved design for the instrument array, including floats that can measure biogeochemical conditions in two key regions that are ecologically and economically important to the U.S. — the Gulf of Mexico and the California Current Ecosystem. The fund

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efforts to increase our knowledge of the Arctic and the Tropical Pacific Ocean, where data collection has been sparse.



OneArgo exemplifies the type of services that NOAA provides to help improve climate science and resilience,” said NOAA Administrator Rick Spinrad, Ph.D. “The pursuit of autonomous technology to fill critical observing gaps and provide essential data and tools for society will only become more important as we move into the future.”



The Argo program includes 26 countries. The data from the Argo array plays a major role in ocean and climate assessments, such as assessments by the Intergovernmental Panel on Climate Change. When OneArgo is fully implemented, it will benefit fisheries modeling and management, sea level rise predictions, advanced seasonal weather forecasting and the emerging industry associated with marine carbon dioxide removal.



Argo currently includes 4,000 floats and ultimately aims to add 700 more to the array.



The original Argo array was deployed in 1999 and consisted of floats measuring temperature and salinity. In recent years, scientists and engineers developed new capabilities and new types of floats: [Deep Argo](#) floats that extend the robots’ range up to 3.7 miles below the surface, and [biogeochemical Argo](#) floats that measure oxygen, carbon pH and other conditions that are critical for addressing environmental issues like low oxygen levels and ocean acidification.



Most floats last for 4-5 years on battery power. The new funding will add 40 more Argo floats, 7 more Deep Argo floats and 6 biogeochemical floats to the mix. Funding will also support the development of key data management infrastructure for the array. NOAA and the National Science Foundation support U.S. Argo investments and activities.



Visit NOAA’s [Bipartisan Infrastructure Law website](#) to learn about current and future funding opportunities.

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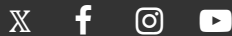


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