



U.S. Argo Data Assembly Center



The U.S. Argo Data Assembly Center (DAC) is hosted by the NOAA OAR Atlantic Oceanographic & Meteorological Laboratory (AOML)

AOML Argo Monthly Metrics Report: December 2024

Argo Mission: Argo is an international program that aims to understand the ocean's role in the Earth System to improve ocean and weather forecasts.

Argo Achievement: Argo is the dominant source of subsurface ocean data. This global array of robotic profiling floats measure from the ocean surface down to 2000 – 6000 meters (float type dependent). Argo data play a pivotal role in the Global Ocean Observing System and are used in nearly 600 NOAA products that contribute significantly to all three of NOAA's strategic goals.

Argo Key Impacts: Argo observations are used to detect long-term changes in sea level, ocean heat, ocean biogeochemistry, ice volume and long-term weather signals. Argo is critical for improved global ocean and weather forecasts, including extreme weather events such as hurricanes, and are used within short-range ocean forecast applications for search and rescue operations, fisheries, shipping, oil and gas, and the military.

Argo Collaborations: Six U.S. NOAA Agencies, eight U.S. Universities & 30 countries deploy Argo floats.

Argo Data Availability: Argo data and user-friendly tools are freely available from the USGODAE GDAC and the Coriolis Argo GDAC.

U.S. Argo DAC: December 2024

1,734,196 Total U.S DAC Profile Files in GDAC



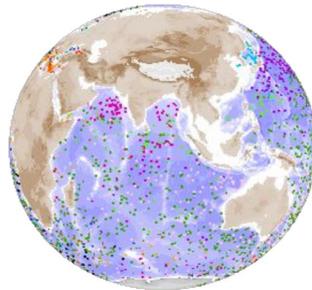
8,972 Total U.S. Floats



2304 Active Floats
(over the last 60 days)



2.8 hour median from float to GDAC & GTS user



Core Argo Profiles

Temperature, salinity & pressure (T/S/P).
Depths: 0 – 2000 m

1,616,304



BGC-Argo Profiles

Core (T/S/P) + Biogeochemical sensors: chlorophyll-a fluorescence, oxygen, nitrate, pH, and CDOM.
Depths: 0 – 2000 m

117,892



Deep Core Argo Profiles

T/S/P.
Depths: 0 – 4000/6000 m

31,866

Polar Argo Core Profiles

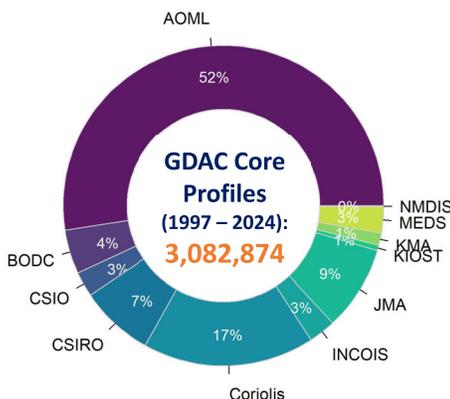
> 60° N & S
T/S/P.
Depths: Ice – 2000 m

45,851

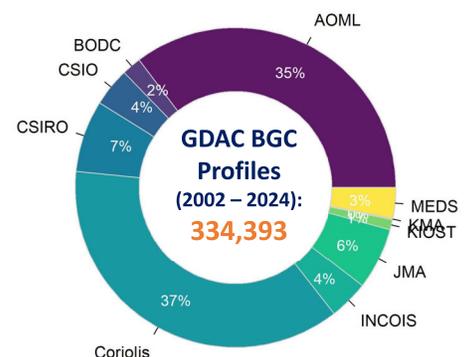
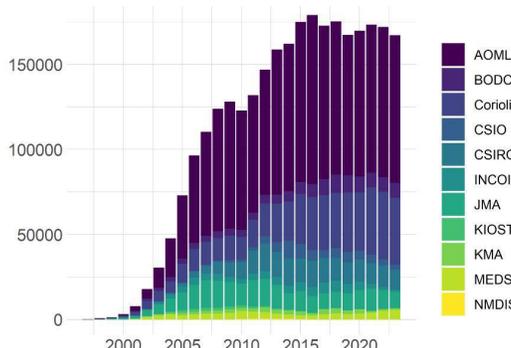
Global Argo Data Assembly (GDAC): 1997 - 2024

Argo, the 'crown jewel' of ocean observing systems, turns 25!!

Ref: NOAA News, Dec. 11, 2024



DAC -> GDAC Core Profiles (1997 – 2024)





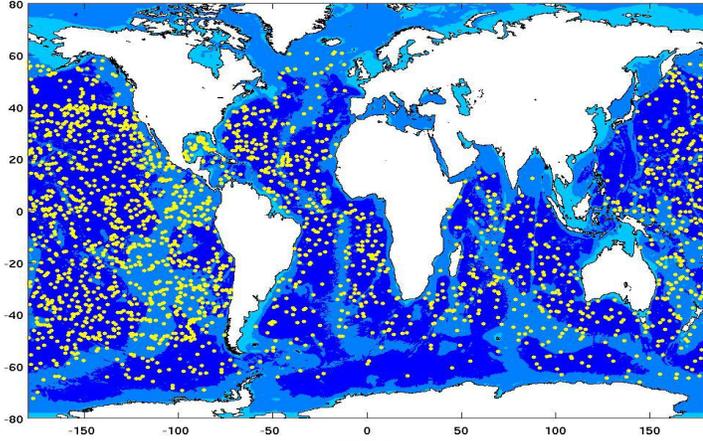
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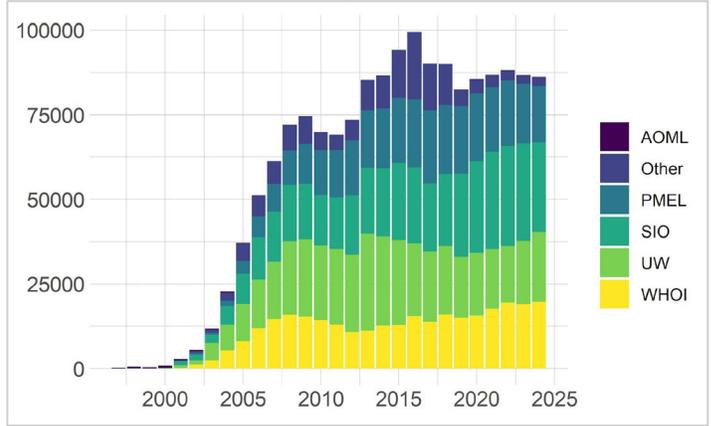
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U.S. DAC Active Floats: December 2024

2024 AOML U.S. Argo DAC active float locations

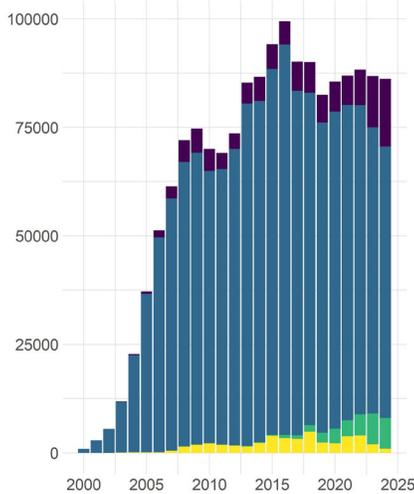


Annual U.S. Consortium Float Deployer profiles processed by the AOML U.S. Argo DAC

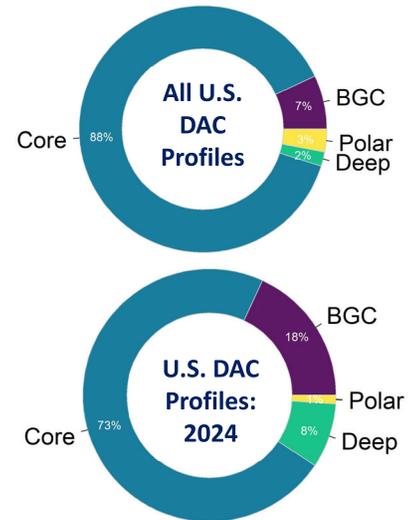
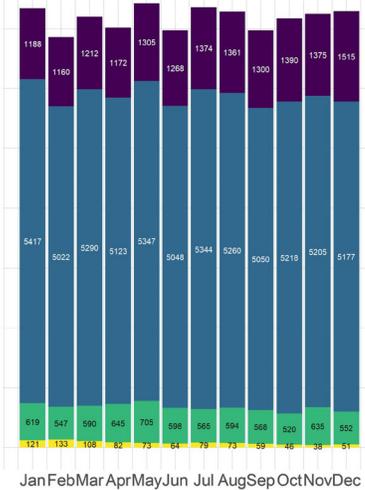


U.S. DAC Profiles: December 2024

U.S. DAC Profiles: 2000 - 2024

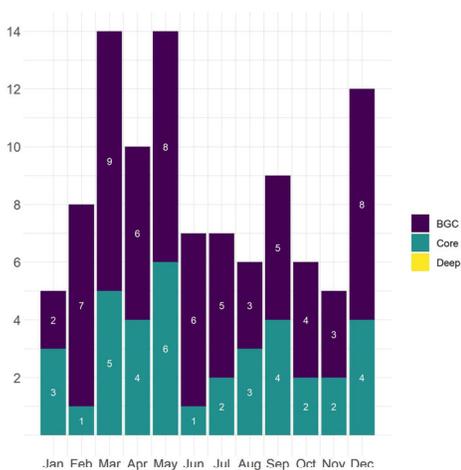


U.S. DAC Profiles: Jan - Dec 2024

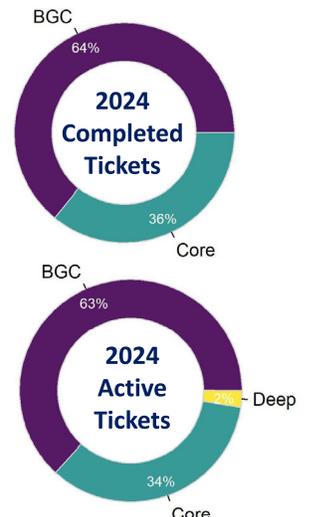
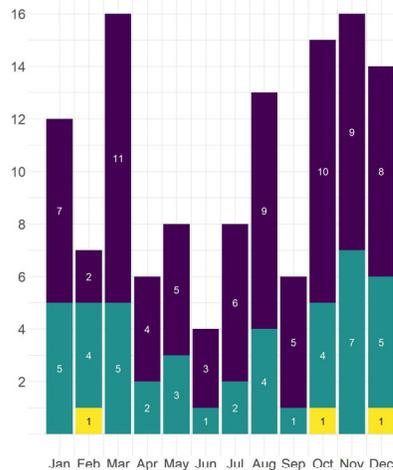


U.S. DAC Internal Ticket Status: December 2024

2024 Completed Tickets



2024 Active Tickets



Tickets represent standard operating procedure code changes only, not routine data management (e.g. float transmission errors and reprocessing needs.)