

Centralized Data Repositories

NOAA’s National Archives for Marine Acoustic Data

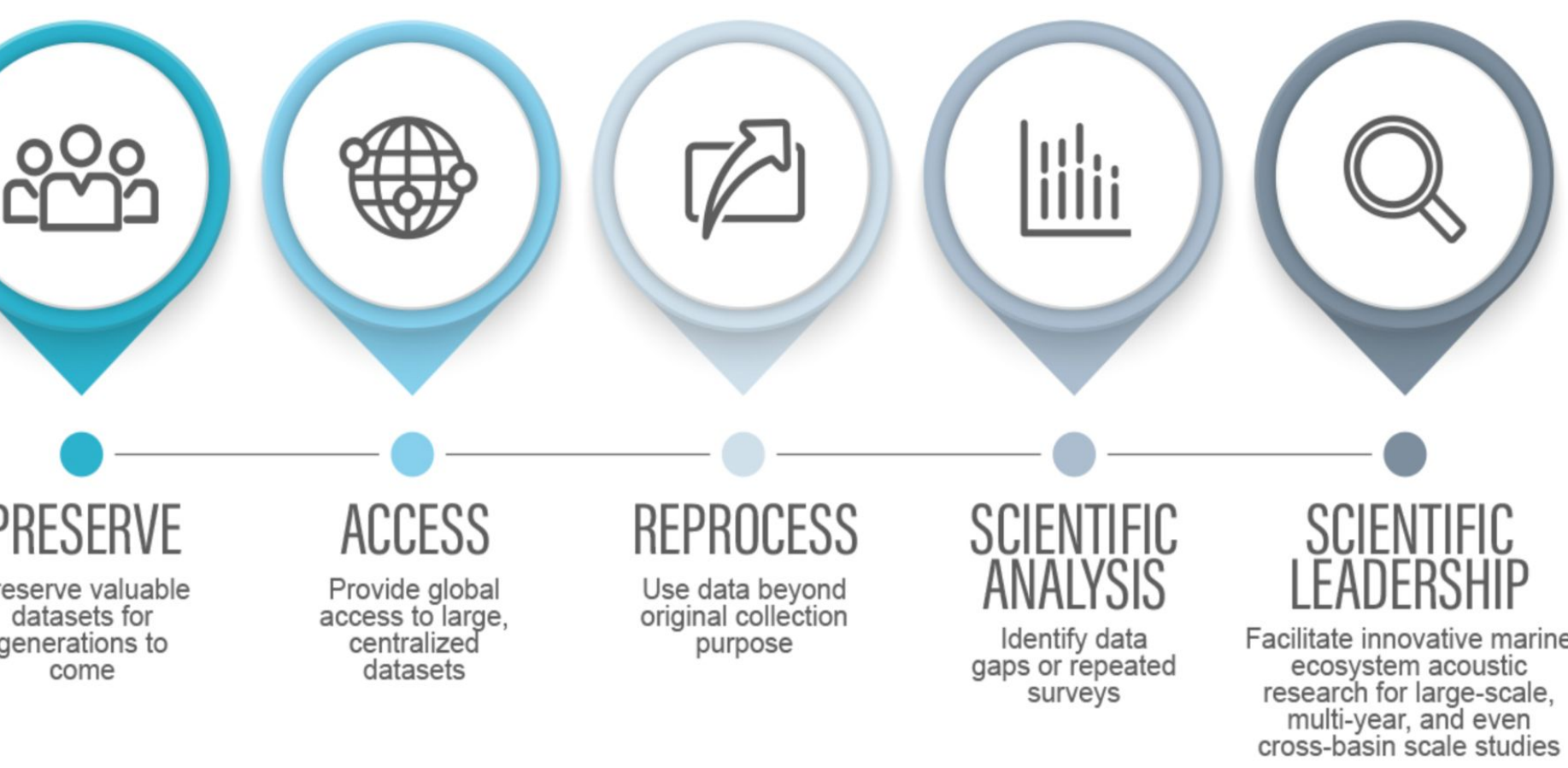
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OVERVIEW

CIRES scientists at the NOAA National Centers for Environmental Information maintain two marine acoustic archives for the long-term stewardship of globally collected water column sonar and passive acoustic data. These vast datasets are collected across NOAA, academia, and industry for a wide range of scientific objectives.

- 350+ terabytes archived
- Long term stewardship
- Free data access
- Standards-driven metadata
- Cloud access (AWS & GCP)



PASSIVE ACOUSTICS (200 TB)

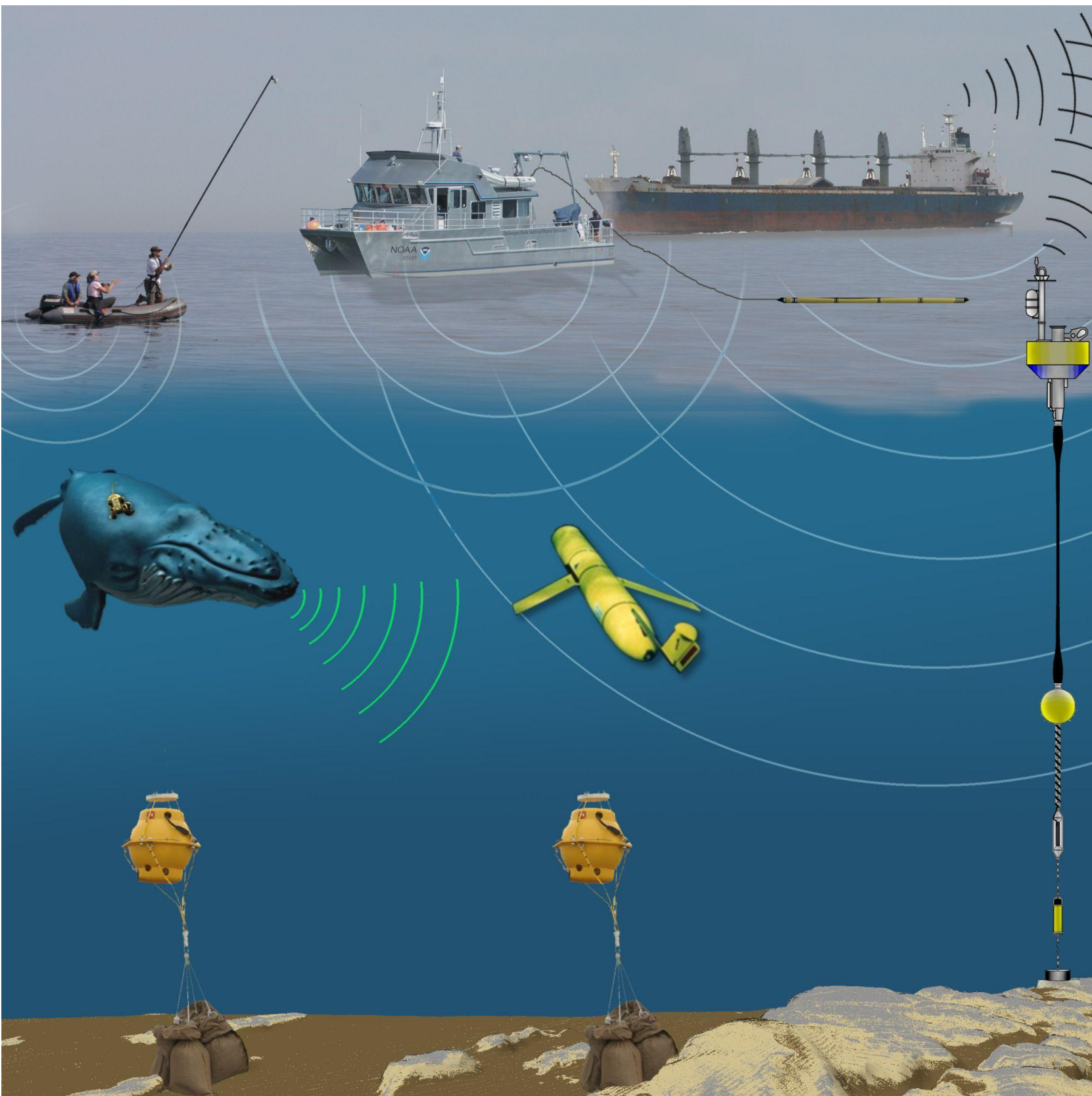
Passive acoustic monitoring is a powerful observational tool that NOAA uses to detect and characterize sounds produced by fish and marine mammals, ambient noise from physical oceanographic processes, and anthropogenic noise sources that contribute to the overall ocean noise environment.

ACTIVE ACOUSTICS (170 TB)

Active acoustic (or sonar) data are used for a variety of mapping requirements. Water column sonar data focus on the area from near the surface of the ocean to the seafloor. Primary uses of these specific sonar data include 3-D mapping of fish schools and other mid-water marine organisms; assessing biological abundance; species identification; and habitat characterization.

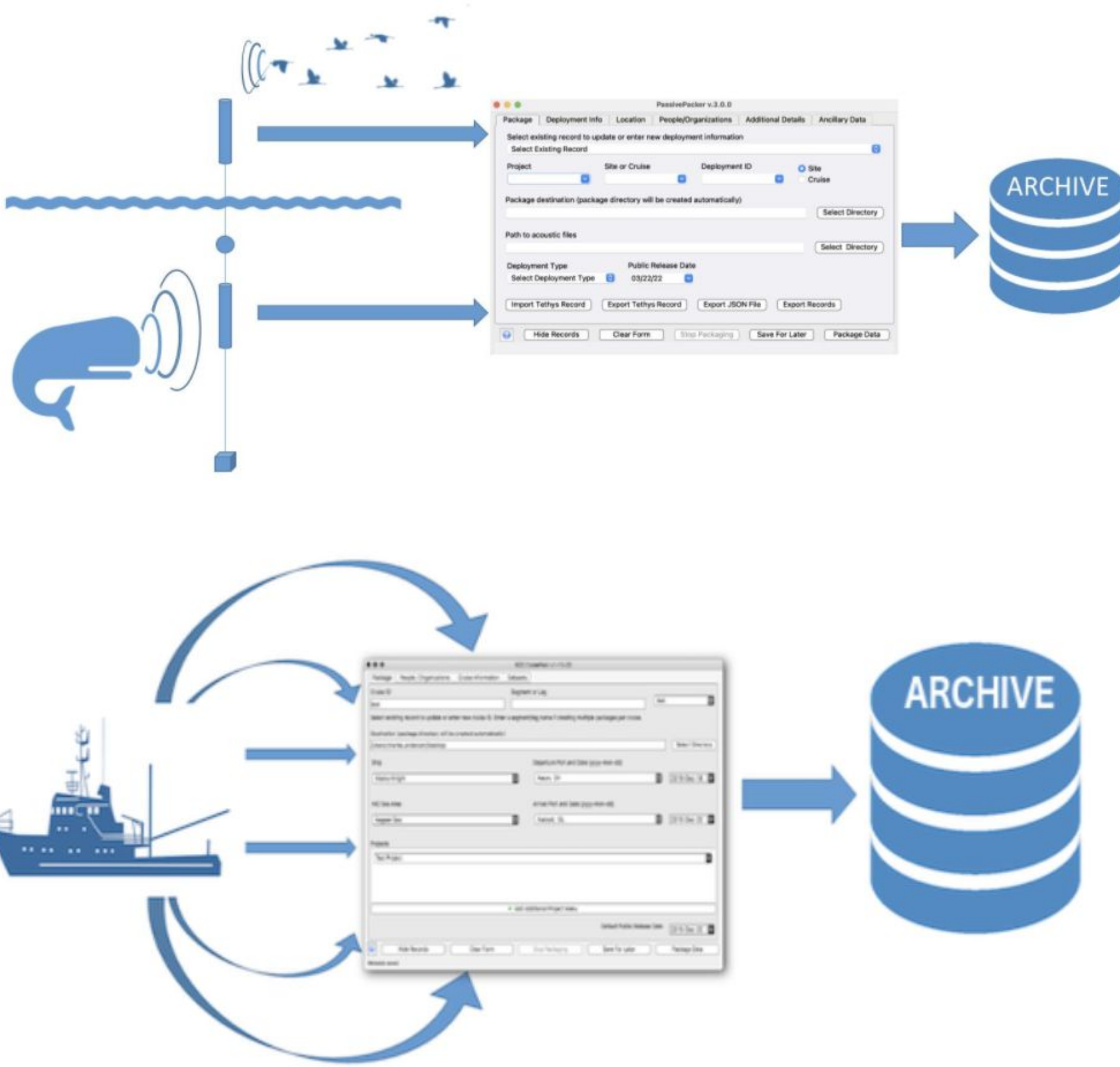
Free access to data archives enable researchers to address new scientific questions that will advance the field of marine ecosystem acoustics

DATA COLLECTION



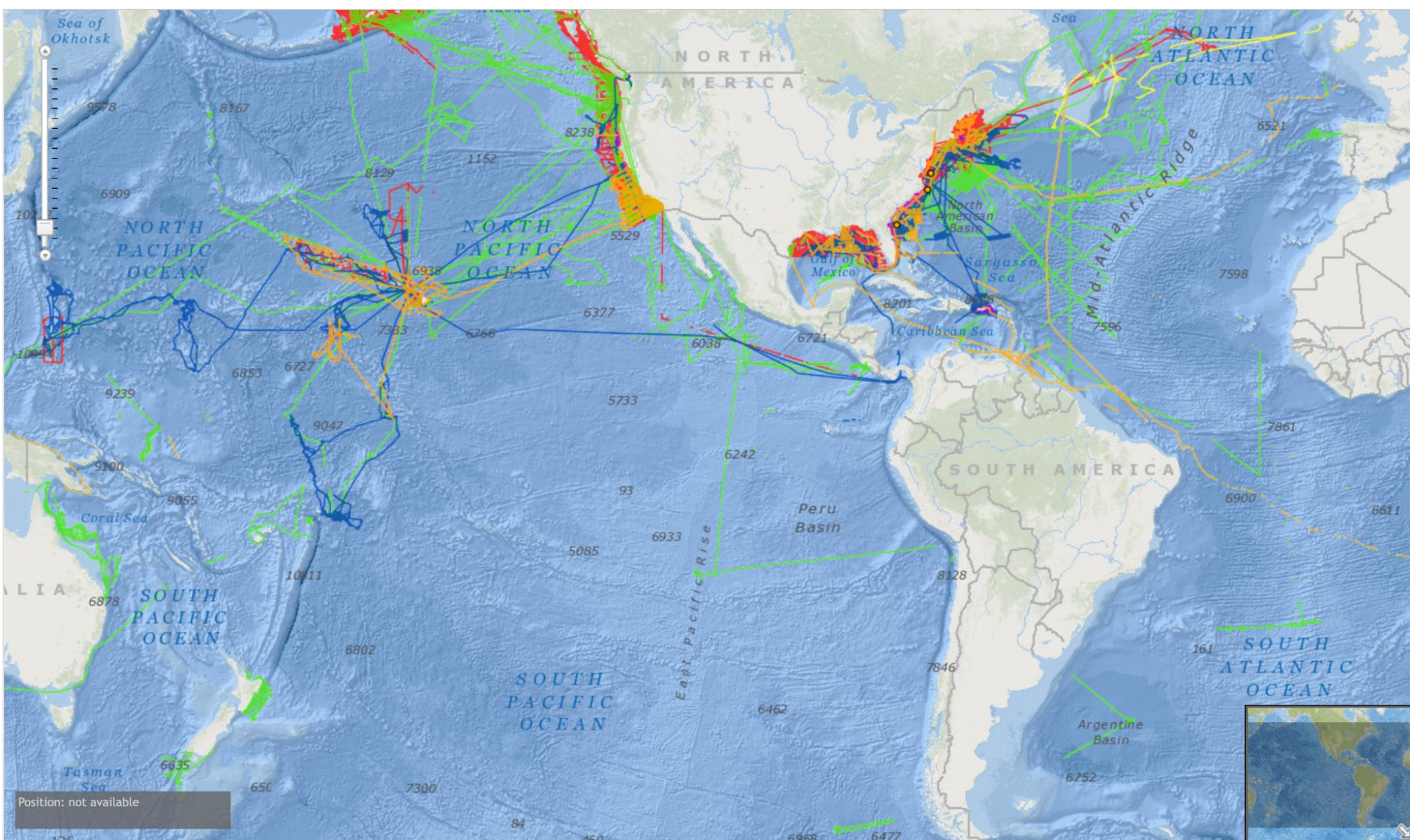
Sound monitoring methods. Credit: NOAA NEFSC Passive Acoustic Research Group

DATA SUBMISSION



Data packaging tools facilitate data submissions to the archives

DATA DISCOVERY



Web-based map viewers allow users to easily discover, query, and access archived data.

Additional information:



Passive Acoustic Data Archive



Water Column Sonar Data Archive

