As part of the U.S. Integrated Ocean Observing System (IOOS®), the Pacific Islands Ocean Observing System (PacIOOS) is a partnership of data providers and users working together to enhance ocean observations and develop, disseminate, evaluate, and apply ocean data and information products designed to address the needs of stakeholders who call the Pacific Islands home.

Based within SOEST at the University of Hawaii at Manoa, PacIOOS manages a broad network of observing assets [gliders, high frequency (HF) radars, buoys, drifters, Autonomous Underwater Vehicles (AUVs)] that routinely measure ocean variability over a variety of temporal and spatial scales in the US Pacific Islands region. In addition to generating observing data, PacIOOS maintains a robust operational modeling enterprise (ROMS, WRF, WWIII, SWAN) and operates a comprehensive data management system that integrates and distributes over 50TB of real-time and archived ocean data from the region to over 100,000 unique users annually around the world.

The data generated and provided by the system is transferred to information consumers, as both data and refined information products, through a robust outreach and engagement effort that endeavors to include stakeholders in each phase of data collection. Users participate regularly in determining the priorities for system growth, advising on new locations for instrumentation, assisting in the deployment and maintenance of observing assets, and by providing critical feedback on the efficacy of value-added products and services.

By managing the lifecycle of data from its instant of generation to the point of knowledge transfer to a user, PacIOOS is able to provide timely, reliable, and accurate ocean data and information that aid decision makers, emergency managers, industry, environmental NGOs, and public citizens on a daily basis. PacIOOS provides valuable information on marine operations, coastal hazards, coastal water quality, and ecosystem characteristics in a routine fashion that directly impacts saving lives through search-and-rescue, conserves resources through increased shipping efficiency, and protects the environment by informing the mitigation, management, and response to oil spills and pollution events.