

Abstract: Building a responsible, comprehensive, and practical relational database for oceanographic and ecological data, Y3

The PI's lab collects a diverse suite of biological samples from sea-going biological oceanography research cruises from around the world oceans. Specifically, Choy's lab focuses on deep-sea ecosystems, which are Earth's largest living spaces. Collected samples are processed and analyzed by the research team using multiple but inter-related data pipelines ranging from biochemical to physical to ecological. The overarching goal for this project is to create a relational data model along with data deposition and retrieval methods for the lab members to continually add, update and analyze this growing corpus of data using programmatic open-source tools in R and Python.