

DATA MANAGEMENT PLAN

The raw data for this project is already publicly available at the School of Ocean and Earth Science and Technology (SOEST) Ocean Seaglider website (<https://hahana.soest.hawaii.edu/seagliders/>). The processed data from this project, as well as associated metadata information, will be posted in the SOEST Ocean Seaglider website and submitted to the publicly available Biological and Chemical Oceanography Data Management Office (BCO-DMO) on year 2 of this project, in compliance with the NSF OCE Data and Sample Policy. The specific datasets generated by this project include:

- Corrected oxygen concentration to account for optode hysteresis and after calibration with shipboard Winkler measurements to improve the accuracy.
- Particle backscattering coefficient calculated from scattering at 124° after subtraction of pure water scattering and after geometrical scaling to include all backward directions
- Biological oxygen in the mixed layer: dissolved oxygen concentration corrected for physical processes.
- Air-water flux correction
- Mixed layer in situ rates of gross primary production and community respiration estimated from diel changes in biological oxygen
- Inventories of oxygen in the mixed layer and the lower euphotic zone
- Estimates of net community production

In addition, MATLAB routines used to process data and estimate rates will be posted in GitHub.

The PIs, Sara Ferrón and Benedetto Barone, will be responsible for all aspects of the datasets generated during this research proposal.