Data Management Plan

- The ^{3}He/SF$_6$ tracer release experiment will generate data of temperature, salinity, ^{3}He, SF$_6$ from the CTD/rosette, SF$_6$ data from the underway seawater system, dissolved O$_2$ and N$_2$ from CTD/rosette and AUV, and measurements of currents and acoustic backscatter from the AUVs. Location and time information, as well as measurement errors will be stored with each measurement.

- Initially, data will be shared only among those directly involved in the project. Within three years from the start of the project, all data generated will be made freely available via journal electronic supplements and deposited for archival and public access at Biological and Chemical Oceanography Data Management Office (BCO-DMO) at WHOI website or National Oceanographic Data Center (NODC). The data will be uploaded in comma-separated value (.csv) format for easy reading from Excel, MATLAB or programming languages. We will also publish a data report for the helium isotope data with a digital object identifier (DOI).

- All AUV data collected will be archived along with documentation describing how the data was processes to various levels of post-processing from the raw data. This includes various steps from renavigation of the AUV data to inclusion of cross-calibration information from the shipboard data (e.g., Winkler titrations for O$_2$). All data will be archived in multiple locations with backup drives on and off the UW campus. At UW we use a campus data archiving facility called LOLO which has redundant backup including magnetic tape for permanent archiving (see http://depts.washington.edu/uwtscat/archivestorage).

- Numerical solutions will be stored in the proposer's data server that has 66 Terabytes space during the project period.

- The numerical solutions and the data for figures in those publications used for project publications will be archived on community data repositories.

- Source code for the air-sea gas flux parameterization will be available through a GitHub webpage.