

## **DATA MANAGEMENT PLAN**

The project will collect and analyze the following data:

- Conductivity and temperature from glider surveys.
- Horizontal currents from shipboard ADCP and the HDSS Doppler Sonars on the R.V. Revelle.
- LADCP/ CTD profiles from the R.V.Revelle.
- Moored ADCPs.
- CTD-u,v profiles from the McLane profilers.
- CTD profiles from the SIO Fast-CTD.
- Fine and microscale temperature from CHIPODs and moored thermistor chains.

### **Quick-Response data management**

The T-TIDE PIs have experience with this mix of data types from previous collaborative efforts, such as the ONR IWISE Experiment, 2010-11, in the S. China Sea. To guide both modeling and the Process experiment planning, quick-look Scout data will be centralized on a server at APL, UW.

Scout Quick-look data responsibilities include:

J.Klymak	LADCP-CTD analysis.
S. Johnston	SIO glider analysis
L.Rainville	Co-operative CSIRO glider Tidal analysis
H. Simmons, J.Klymak	Ongoing model output predictions
R.Pinkel, J. Klymak	F-C TD site studies

The centralized data access will be maintained for the Process Experiment, with the McLane and thermistor chain data provided by the relevant PIs.

### **Long Term data Archiving**

Aside from the LADCP-shipboard CTD profiles, there are currently no established standards for archiving or data from many of the fine-scale sensors used in T-Tide. Archiving standards for glider data are evolving. This is a concern of the Climate Process Team on Ocean Mixing, of which many T-Tide PIs are members. We propose to work with the CPT to evolve formats for data and metadata suitable for archiving both sensor and (critically) model output from the experiment.

All field data collected under this program will be made available as per NSF guidelines within 2 years of collection via published manuscripts, publicly available final reports to NSF, and data archiving with NODC.

Data will be shared in matlab MAT file format and/or as netCDF files. Ultimate archival formats will be determined in consultation with NODC and with the CPT. Adequate archiving is anticipated to be an expensive, time-consuming task. All PIs have included funds for this effort in their budgets.

The primary T\_TIDE models are all public domain. Published peer-reviewed manuscripts will document the simulations and forcing sufficiently. Recognizing that archiving high-resolution simulations at tidally resolving intervals can result in gigabytes-to-terabytes of data, every effort will be made by modeling PIs to archive model output and provide data and/or code to interested parties upon request. Model products and output will be available at the end of the grant period.