

## DATA MANAGEMENT PLAN

*Project Title: RAPID: Testing the ability of the 2015 – 2016 El Niño Southern Oscillation (ENSO) to drive a community -level regime shift in the Galapagos marine ecosystem*

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Meta data collected during this NSF RAPID project will be posted so that it is available to the public in a timely fashion in compliance with the Division of Ocean Science Sample and Data policy (NSF 2011). As with data from our most recent NSF award, this will be accomplished by creating a website with the assistance of WHOI's Biological and Chemical Oceanography Data Management Office (BCO-DMO) <http://bco-dmo.org/>.

1. Expected Data. The principal types of expected data from this project include the following components:

- a. Ocean temperature data documenting the ENSO period from 24 locations (12 sites, 2 depths per site; 6 and 15 m) in the central Galapagos Islands during February 2016 – February 2017.
- b. Data on the abundance (percent cover) of sponges, corals and crustose coralline algae CCA in photo transects and in experiments at the beginning and end of the project.
- c. Raw data on the mortality of sponges in photo quadrats and experiments, data on the frequency of bleached corals in the coral transects over the sampling periods.
- d. Data on rates of consumption of sponges and CCA by sea urchins and sea stars

2. Data Format. Data will be distributed in the common format \*.csv files. All files will be accompanied with metadata indicating the location, time and depth of data collection.

3. Access to Data and Data Sharing Practices and Policies. Data collected under the project will be made widely available to the public according to the BCO-DMO guidelines. Since the temperature data do not require considerable analysis, they will be posted before the conclusion of the project. Due to the high replication of the ecological sampling (12 sites x several time periods) extensive analysis is required to work up data on the abundance of sponges, corals and CCA during variable ENSO conditions. These data will be posted on the project website according to BCO-DMO's specifications.

4. & 5 Policies for Re-Use, Re-Distribution and Archiving. Data will be archived and stored as Excel .csv files to ensure long-term readability via WHOI's Biological and Chemical Oceanography Data Management Office. In addition, some of the data will be published as appendices accompanying scientific journal publications. These additional data sets will be maintained according to the archiving standards of journals (i.e. <http://esapubs.org/archive/default.htm>)