Data Management- van Woesik 2016

All data measurements made by van Woesik's lab will be managed by the Biological and Chemical Oceanography Data Management Office (BCO-DMO) at Woods Hole (http://bco-dmo.org/data/). My current NSF sponsored project (NSF OCE-1219804) is located on the BCO-DMO website at: http://www.bco-dmo.org/project/562563

Data for the current proposal will be also made available to BCO-DMO by late 2018, in the mid-phase of 3rd year of the project (which will end at the end of spring 2019). As in previous awards, van Woesik will make available all the data-analysis code (both the R code and OpenBugs code) by mid-2019. There will be line by line explanations within the body of the code. R. van Woesik has a policy that all newly written code that comes for his lab should be shared so that the field moves forward, but also that there is an archived record which is repeatable, annotated, and sharable.

The amount of data this project will be considerable. Successful completion of objectives and comparisons relies on quality control and data management starting early and continuing throughout the program. Microsoft Access ® will be used to create a relational database where all data from all study sites will be entered and also kept at Florida Institute of Technology as a central repository. Using a comprehensive relational database provides a means of quality control to ensure all required data is collected and entered, and will ease comparisons without wasting time deciphering individuals Excel worksheets. This database will allows external researchers to query specific information based on these shared attributes, thus creating new spreadsheets ready for new analyses. The key to successful queries lies in the proper linkage of data-tables. The required tables for this project are listed below with the required attributes: Location ID, Year, Month, Date, Time, Site number, In situ Temperature, Latitude, Longitude, Average Depth, Exposure, Geographical Region, Map Datum, and Transect. All coral growth data and transect data, including rugosity will be available in the database. The echinoids and herbivorous fishes, using the same 6 x 20 m transects at each site (i.e., 1-m wide belt transects for echinoid densities, and 5-m wide belt transects for herbivorous fishes) will be also available in the database.