

Data Management Plan

Our primary vehicle for disseminating the information we collect will be publication in the peer reviewed literature.

For all chemical and biological measurements we will comply with the Division of Ocean Sciences Sample and Data Policy (www.nsf.gov/pubs/2011/nsf11060/nsf11060.pdf).

Types of data produced: The data generated in this project will include both sequence data of novel N₂ fixers and N assimilators, as well as data on rates of rates of N uptake, N₂ fixation, nitrification, and opportunistic sampling for nitrous oxide concentrations). All of the genomic data obtained will be submitted to the NCBI Genbank Short Read Archive and thereby made directly available to the scientific community. All associated environmental and metadata will be submitted in accordance with recommendations on data deposition put forth by the Genome standards Consortium such as the Minimum Information for Metagenomes Standards (MIMS). Within two years of collection we will also submit our primary data (along with relevant ancillary data relating to incubations (date, depth, temperature, salinity, nutrients etc.) to the Biological and Chemical Oceanography Data Management Office (BCO-DMO) Oceanographic database repository (<http://bcodmo.org/>).

Primary data generated by this project will also be incorporated directly into the Microbial Observatory/ Dimensions in Biodiversity project and databases and will contribute to and enhance substantially the ongoing network analyses by providing estimates of key biochemical processes.

Table 1. Data matrix for N-SPOT project. All rate and nitrous oxide data will be submitted with ancillary data on date, location, depth, temp, salinity, oxygen, chl a (upper depths), nutrients.

Data type	Units	Depths	Frequency	
			monthly	quarterly
Nitrate uptake rates	$\mu\text{mol N L}^{-1} \text{d}^{-1}$	4	X	
Ammonium uptake rates	$\mu\text{mol N L}^{-1} \text{d}^{-1}$	4	X	
Nitrogen fixation rates	$\mu\text{mol N L}^{-1} \text{d}^{-1}$	4	X	
Nitrification rates	$\mu\text{mol N L}^{-1} \text{d}^{-1}$	4	X	
NH ₄ , NO ₃ , Urea SIP		4	X	
CHIP-SIP		2		X
Nitrous oxide	nmol L	12	X	