

## **Data Management Plan**

***Please briefly describe (what, where, when) the data that will be produced by this project.***

We will produce model results from simulations of the last glaciation and future warming using 3D global ocean models. Results using MESMO will be produced using the MSI facilities at University of Minnesota. Results using POP2/BEC will be generated at the NCAR supercomputing facility. Both model outputs will be monthly mean, annual mean, or decadal mean. The format is standard NetCDF.

***Approximately how much data will be produced each year?***

MESMO results will be less than 10 GB. POP2/BEC results will be less than 1 TB.

***What meta-data will be part of the data sets produced?***

NetCDF is a self-describing data format standard for climate model output. In addition, for each simulation case we will produce READMEs that describe the model setup, and also keep the file containing the input variables (aka 'namelist')

***How will data be made available to other researchers? To the general public?***

We have already communicated with the Biological and Chemical Oceanography Data Management Office (BCO-DMO). We will archive our data with the BCO-DMO data repository.

***If digital data will be made available what file format(s) will be used (ex: HDF5, NetCDF)***

NetCDF for spatial model output and climatological summaries.

***How long do you expect to keep the data private before making it available? If applicable, provide description of policies for the protection of proprietary data, privacy and confidentiality, and intellectual property. Please explain if different data products will become available on different schedules (ex: raw data vs. processed data, observations vs. models, etc. )***

Within two years of completion of this project, we will deposit the data with the BCO-DMO repository. There are no issues of proprietary data, privacy, or confidentiality that we are aware of with the data generated from this project.

***Describe policies (if any) for re-use, re-distribution and production of derivatives***

N/A

***How long do you expect the data be available after the funding for the project has ended? Will it be archived somewhere for long term archiving and curation?***

We will keep the results available for as long as the BCO-DMO repository allows. But we expect that after ~5 years, they will not be useful, as newer generation of models come online. Typically model results are not accessed after they have been described in a paper.