1. **Types of Data**
   Two types of model output will be generated: global, 2°x2°x24 depth layers from a 1780-2016 simulation of marine DOC concentrations, ^{13}C, and ^{14}C content from output of the DOC cycling Ocean Circulation Inverse Model (DOC-OCIM); global ocean, 1°x1°x60 depth layers, biogeochemical and ecosystem tracer output including ^{13}C and ^{14}C from the years 1850-2300 simulation of the Biogeochemical Elemental Cycling – Community Earth System Model (CESM-BEC).

2. **Data and Metadata Standards**
   Model output and input files for the DOC-OCIM will be stored in the native data format of MATLAB® software, .mat, which is a matrix data format that stores matrices, values, or strings in a binary format. Metadata for these files will consist of user-generated 'readme' files describing the contents of each stored matrix. We will also create netCDF files of the DOC-OCIM output for improved compatibility with other programming languages. Model output and input files for the CESM will follow the CESM DMP (http://www.ccsm.ucar.edu/experiments/data.mgmt.plan.050803.html), with the files stored using the community standard netCDF format and metadata described in the file header section. Metadata files for all model data output files will be created for preparation of submission to file repositories.

3. **Period of Data Retention**
   DOC-OCIM model can be accessed by request via email (tdevries@geog.ucsb.edu) or via PI Devries' website (https://tdevries.eri.ucsb.edu). Data will be available immediately after publication. CESM model output will be available following the release of relevant publications upon request via email (robert.letscher@unh.edu) or the PI's website (http://mypages.unh.edu/rletscher/). CESM model output will follow the general rules of the CESM data management and data distribution plan whereby output is initially made available to the CESM working groups after 6 months with full release to the public after publication of results or 1 year.

4. **Policy for Reuse**
   No policies are imposed for reuse or production of derivatives from the model output other than citation of original publications.

5. **Data Storage and Preservation of Access**
   DOC-OCIM code, input, and output files will archived at the Earth Research Institute at University of California, Santa Barbara. CESM model output will be archived at both the PI's institution, University of New Hampshire, and with the Earth System Grid (http://www.earthsystemgrid.org/), consistent with other CESM output. Data storage for CESM model code, input, and output files will use a Lustre® distributed file system managed by the Research Computing Center at UNH. Metadata files for all model output files will be submitted to the Biological & Chemical Oceanography Data Management Office (BCO-DMO) with instructions and links to access the model output files at the outside repositories.