

Data Management

This project will produce novel organic geochemical data, including compound-specific AA isotopic measurements, bulk and purified compound-class $\Delta^{14}\text{C}$ data (isolated DOM fractions / purified hydrolyzable AA), as well as contextual compositional and enantiomeric AA measures for the high vs. low MW DON fractions isolated from large volume seawater samples. All radiocarbon data will be assigned a unique LLNL identifier, values archived at LLNL-CAMS, and reported following standard conventions. Most compound-specific AA isotopic data will be completely novel, so no standards yet exist for its dissemination. Overall, our data will thus be primarily shared with the scientific community through presentations and publications, but also with students via graduate-level classes and seminars at UCSC and as guest seminars elsewhere.

All primary AA data and samples used for the project will be archived in McCarthy research collections at UCSC. While most isolated DOM samples will be consumed by proposed analyses, any remaining would also be made freely available to researchers wishing to engage in complimentary or collaborative analyses.