Data Management Plan - Collaborative Research: Investigations on the Cycling of Mercury from the Ocean to Fog and Deposition to Land in Coastal California

Data from the Pacific Coast network of fog sampling stations (FogNet) will include fog water volume, meteorology (wind speed and direction, temperature, relative humidity, barometric pressure, photosynthetically available radiation (PAR)) and other parameters (leaf wetness and soil moisture monitors). These data will be collected at 15 minute intervals and stored on a data logger at each site, then will be uploaded weekly by ftp to a UCSC FogNet data server. These data will be made freely available through a website created at UCSC. Efforts will be made to announce to the wider community of people interested in fog and encourage them to use the fog water volume, wetness, and meteorological data.

Discrete fog water chemistry data (Hg speciation, pH and ions) will be generated at MLML and UCSC and these data will be stored on servers at these institutions. Air concentrations of speciated mercury compounds will be measured by UCSC and these data will be stored on a UCSC data server. Data on Hg concentrations in soil, plant tissue, and arthropods well be generated at UCSC and stored on a data server. These data will be available to students from UCSC, San Jose State University, and CSUMB working towards the completion of their independent study programs.

Mercury speciation and concentration data will be obtained from the MLML pumping system/coastal observatory. These data will include concentrations of MMHg, DMHg, total Hg concurrently with high resolution measurements of temperature, salinity, turbidity, fluorescence, pH and oxygen. MET data will be taken from the shore-side station. These data include temperature, humidity, pressure, wind speed and direction, photosynthetically available radiation (PAR) and rainfall.

Mercury speciation and concentration in addition to nutrients will be taken from the CTD/Rosette, pore waters, fog collectors and the ship's underway sampling system. Concurrent measurements will include temperature, salinity, depth, PAR, oxygen, fluorescence, turbidity, position, ADCP currents and a full suite of MET data. In addition, measurements of nutrients will be made on specific samples. The MLML team will be using http://dspace.mlml.calstate.edu as the data archive portal for this project.

The MLML coastal observatory, water quality and shoreside MET measurements will be collected and served over the Central and Northern California Ocean Observing System (CeNCOOS) data network which conforms to the IOOS standards for metadata and archiving. These data will be available at http://pubdata.mlml.calstate.edu/, and at http://www.cencoos.org/ . The underway data from the cruises aboard the R/V Point Sur will be made available through the NSF Rolling Deck to Repository Program (R2R) and will be submitted in the format specific to that program. The analyses of discrete samples for mercury analysis will be published in manuscripts, served locally and shared with the UCSC team for incorporation into their data compendium from this program. In addition, these data, with links to the supporting ancillary data will be submitted to NSF within two years in satisfaction of their data sharing policy.

General Data Use Policy: All data are freely available with a written fair-use policy that says users are requested to acknowledge the source and encouraged to contact the PIs regarding collaborative input.