

## **DATA MANAGEMENT PLAN**

Climate change in the Arctic is an area of great concern. Researchers, modelers, and policy-makers alike are in urgent need of “good quality information” from which they can predict likely future changes and develop strategies to minimize impacts (e.g. identify populations and ecosystems that are most at risk and suggest strategies for mitigation and adaptation). To ensure that the data and understanding generated from this work provide the maximum benefit and value to all relevant end-users it is essential that all relevant data are accurately reported in scientific publications. Thus we will promptly publish results from this project in scientific journals, meetings and on the climate change dedicated web forums. Specifically all data and metadata will promptly (within 12 months or less) be made available to the climate community through the existing data management portals that will accept the data (World Climate Data and Monitoring Programme (WCDMP CDMS); National Climate Data Centre) following NCCWSC/CSC data management guidelines and will also be posted on the PIs’ web page.

**Data Types** - The data created by this project will be in the form of tables with chemical analyses and model outputs. The data will be captured in Excel Spreadsheets and comma delimited raw text files as well as maps.

**Data and Metadata Standards** - We will use the Excel and HTML formats to publish the results online. There are open source equivalents and data can be easily exported to these for sharing. The metadata is mainly in the form of column heading and explanatory text. These will be created by scripts and hand annotations. The metadata will be converted to HTML tags in the HTML Metadata 4 Standard. We are using this as the lowest common denominator for ease of publication and sharing.

**Policies for access and sharing and provisions for appropriate protection/privacy** - We will post the data on our website <https://pmc.ucsc.edu/~apaytan/index.html>. We do not need additional resources to run this website. The data will be updated at least 2 times a year after each field excursion. The data will be publically posted and advertised in publications and provided as on line material if journals have such a resource. There will be no charge for accessing this data. We retain the right to use the data before opening it up to wider use, but once we publish a paper we will release its corresponding data. There are no ethical and privacy issues per this performance. The data is not 'personal data' in terms of the Data Protection Act 1998 (the DPA) or equivalent HIPAA requirement) and IRB Protocols do not apply in this case as there are no human subjects in the study. The data is not copyrighted and no licenses pertain to it.

**Policies and provisions for re-use, re-distribution** - There will be no permission restriction placed on the data. The intended or foreseeable uses / users of the data would be those seeking to improve models or those who may want to apply similar tools at other sites and there are no reasons not to share or re-use data.

**Plans for archiving and Preservation of access** - We have plans for archiving data, samples, and other research products, and plans for preservation of access to them. The long-term strategy for maintaining, and archiving the data is via regular backup of website by UCSC personnel. Eventually this data will make it to UCSC for long term storage.