Data Management Plan

Project Title: Cold Fog Amongst Complex Terrain (CFACT)
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The data management plan includes 1) Field data management plan in collaboration with EOL/NCAR and 2) Dissemination and sharing research results in Years 1 to 3.

1. Field Data Management Plan

   We plan to request advice and support from NCAR/EOL for the following aspects before, during and after the field campaign:
   - Develop a viable data management strategy for the full project including the analysis phase of the field campaign
   - Developing a project data policy
   - The Field Catalog customized for our project and supported through the field campaign and then made available in the long-term.
   - Provision of long-term archive for our project data in the EOL archive system

2. Dissemination and Sharing Research Results

Research data to be produced:
   - All observational data obtained from instruments during the field program.
   - Other standard operational data, including surface Mesonet, conventional, radar and satellite observations.
   - Regional forecast model (WRF) outputs and WRF/DART data assimilation results for multiple experiments over northern Utah during the field program period and multiple cases, including land and atmospheric state variables and other diagnostic outputs as well as related graphics.

Software produced:
   - Significant software: None; all significant code and scripts to be used will be generated before the project under other support and applied to WRF regional model.

Documents produced:
   - Documents related to this project include the proposal, annual report, technical notes, journal publications, and final report.

Storage and Dissemination:
   - All observation data from the field campaign will be regularly (frequency will be based on EOL requirements) downloaded, backed-up, and provided to NCAR, with completion after the field campaign and the initial quality control based on EOL requirements. We have requested EOL's data management and long-term data archive to ensure that the dataset will be easily available to the research community.

     All observational data will be made openly available two years after the completion of

the field experiment. This will enable sufficient time to quality control the dataset and for the participants to publish initial findings. The request of the restriction will be submitted to EOL 60 days before the field campaign for coordination and approval.

- Other standard operational data and the outputs from the WRF model simulations and DART/WRF data assimilation results produced under this work will be generated and permanently archived at University of Utah's CHPC for future applications and research. The PI's group currently has hard disk space available at the University of Utah's CHPC.
- All observations will be processed in NetCDF or ASCII format. WRF model outputs and DART/WRF data assimilation results will be generated in standard NetCDF format, and such data will be stored and provided in NetCDF format.
- All input observations, WRF model outputs and DART/WRF data assimilation results generated for this project will be made available upon request via FTP transfer from University of Utah's CHPC. Graphics will be made available through a link to the PI's research web page http://www.inscc.utah.edu/~pu/
- All documents will be made publically available through PI's research web page http://www.inscc.utah.edu/~pu/

Publications:
- Four journal articles will be prepared each year to disseminate results from this project to the scientific community. The PI, co-PI and collaborators and students will also make presentations in the related professional conferences to disseminate the results of this research.