

**Request for change of milestone for ACCESS Project
Software to Access HDF5 Datasets via OPeNDAP's Data Access
Protocol**

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I. Overview

This is a two-year ACCESS project. To keep the scope of work in the original proposal, we also obtained some compensated fundings from NASA ESDIS project. The first year's work is to enhance HDF5-OPeNDAP handler so that it can serve as an operational handler for NASA Earth Science community. We have successfully finished this work. The second year's work is to implement tools for OPeNDAP users to easily access HDF5 data. We are proposing changes of milestone for the second year.

II. Proposed change of milestone

During the development of the HDF5-OPeNDAP handler in the first year, we found that most existing OPeNDAP visualization client tools heavily rely on OPeNDAP NetCDF client library instead of strictly following DAP protocol. On the contrary, HDF5-OPeNDAP handler strictly follow DAP protocol and this causes problems for existing OPeNDAP visualization client tools to access HDF5 data via OPeNDAP. Since Many NASA OPeNDAP users are using some OPeNDAP visualization client tools such as IDV[1] and GrADS[2] and it is not feasible in the near future for those tools to follow DAP protocol to access NASA HDF-EOS5 data; therefore, we propose to change our second year's milestone to better help NASA OPeNDAP users have access of HDF5 data. The fundamental change is to implement a prototyped HDF5-friendly OPeNDAP client library rather than to implement a DAP4 to HDF5 "file dump".

The following is the summary of original milestone on the second year:

1. Implementation of DAP4 to HDF5 "file dump"
2. Design study for DAP-aware HDF library

The summary of the proposed change of the milestone on the second year is:

1. Design study of HDF5-friendly OPeNDAP client library
2. Implement a prototype of HDF5-friendly OPeNDAP client library, if feasible
3. Make an existing OPeNDAP client tool(GrADS) work with the prototyped HDF5-friendly OPeNDAP client library, if feasible
4. Implement DAP to HDF5 "file dump" tool if design study shows that HDF5-friendly OPeNDAP client library is not feasible

The attached document shows the detailed milestone change. The date doesn't reflect the application of no-cost extension for this project.

References:

1. IDV: Unidata Integrated Data Viewer <http://www.unidata.ucar.edu/software/idv/>
2. GrADS: Grid Analysis and Display System <http://www.iges.org/grads/>