

## Heliophysics science Data Management Policy

xx/xx/2021 Version 2.0 is planned to have the following changes:

V2.0 will be a substantial revision that focuses on general integration of all aspects of the “Virtual Heliophysics System Observatory,” treating what was the “Heliophysics Data and Model Consortium” (HDMC) and the Final Archives as one Heliophysics Data Environment Project. The ideas behind “Virtual Observatories” have become basic parts of the general paradigm, rather than being discussed at length in a specific section (formerly 2.3)

Archiving of products in standard formats, with standard registration and use metadata and adequate documentation, are now required, and all data (including real-time) are now required to be placed in the HP archives and registered upon production. These tasks will be funded, and done in coordination with the HPDE.

In recognition of what has become standard practice, missions will now be required to work with the Final Archives early in the mission, prior to adoption of the PDMP, in the preparation of their data products. Complete (including descriptions of variables) SPASE product Registry entries will also be required; such efforts will be funded, and assistance will be available from the HPDE. Missions will be encouraged to use the services described in a new Appendix to streamline the development of tools for data discovery, access, and use.

In V2.0 here will be no mention of HDMC or of Resident Archives, and Data Upgrades are largely relegated to the SR&T program and ad hoc Archive projects.

The Mission Archive Plans will be removed from the Senior Review, to be replaced by a direct revision of the PDMP and the inclusion of Calibration and Measurement Algorithms Documents (CMADs). Mission data reduction and analysis code shall be open source, and the meaning of this will be discussed.

Another new element is the inclusion of archivable, registrable datasets that originate as data products and simulation output generated from SR&T projects. Moreover, the definition of “mission” from the data standpoint has been expanded to include cubesats and any other generator of science relevant data; the data from these will be expected to be registered and archived.

A number of Appendices (B: VxOs, C: SPASE, and G: HDMC) were removed as being only of historical interest, or superseded by other documents (such as the published paper on SPASE.)

Figure 1 (now 2; lifecycle), the executive summary, and various paragraphs throughout will be revised to reflect the above changes. Another figure will be added to show the basic (now quite simple) HPDE architecture. The sections will be reorganized so that specific, actionable instructions form a coherent policy section, with other areas included as needed to flesh out the full HPDE description.