The LASP HAPI Server

Chris Lindholm, Thomas Baltzer, and Doug Lindholm
University of Colorado Boulder, Laboratory for Atmospheric and Space Physics, United States

We present a standalone data server implementing the Heliophysics Application Programmer’s Interface (HAPI) 2.0 specification (https://github.com/hapi-server/data-specification) developed by the Laboratory for Atmospheric and Space Physics (LASP) at the University of Colorado Boulder. Our server is built on the LaTiS library, enabling reuse of LaTiS’s existing adapters to a variety of data sources. It may also be used to expose datasets already served by LaTiS through a HAPI interface. Our implementation is open source and developed on GitHub: https://github.com/lasp/hapi-server

We have deployed an instance of the LASP HAPI server to provide access to a subset of datasets available on the LASP Interactive Solar Irradiance Datacenter (LISIRD), which is available here: http://lasp.colorado.edu/lisird/hapi

HAPI is an interoperable, REST-style interface to timeseries data. It provides mechanisms for viewing a catalog of datasets, accessing dataset metadata, and streaming datasets subset both in time and parameters.

LaTiS is both a library and a service for manipulating and serving data modeled using the functional data model. The functional data model is a specialization of the relational data model in which relations are strengthened to functions, providing richer semantics useful for representing scientific data. LaTiS is open source and developed on GitHub: https://github.com/latis-data