The New LASP Interactive Solar Irradiance Datacenter (LISIRD)

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The University of Colorado at Boulder’s Laboratory for Atmospheric and Space Physics (LASP) has a long history of providing state of the art Solar instrumentation and datasets to the community. In 2005, LASP created a web interface called LISIRD which provided plotting of and access to a number of Solar Irradiance measured and modeled datasets, and it has been used extensively by members of the community both within and outside of LASP. In September of 2017, LASP released a new version of LISIRD (Version 3) for use by anyone interested in viewing and downloading the datasets it serves as well as for use by anyone with Solar datasets they would like to be served through LISIRD.

LISIRD Version 3 is distinct to its predecessors in that it leverages a functional data model as implemented by LaTiS (https://github.com/latis-data/latis) as well as an ontology (The LASP Extended Metadata Repository – LEMR) for maintaining the dataset metadata as well as for controlling how LISIRD displays a given dataset.

This talk will describe the LISIRD Version 3 with emphasis on features enabled by it to include:

• Ease of adding datasets from a wider array of resources
• Ease of updating metadata describing any dataset
• Programmatic API for accessing datasets served by LISIRD (LaTiS)
• Better dataset browse and search capabilities
• Cleaner interface with better use of screen real estate
• New and more functional plotting interfaces
• More datasets

We are also hopeful to show progress in our implementation of the HAPI (Abstract Identification number: EGU2018-10065) for this presentation.