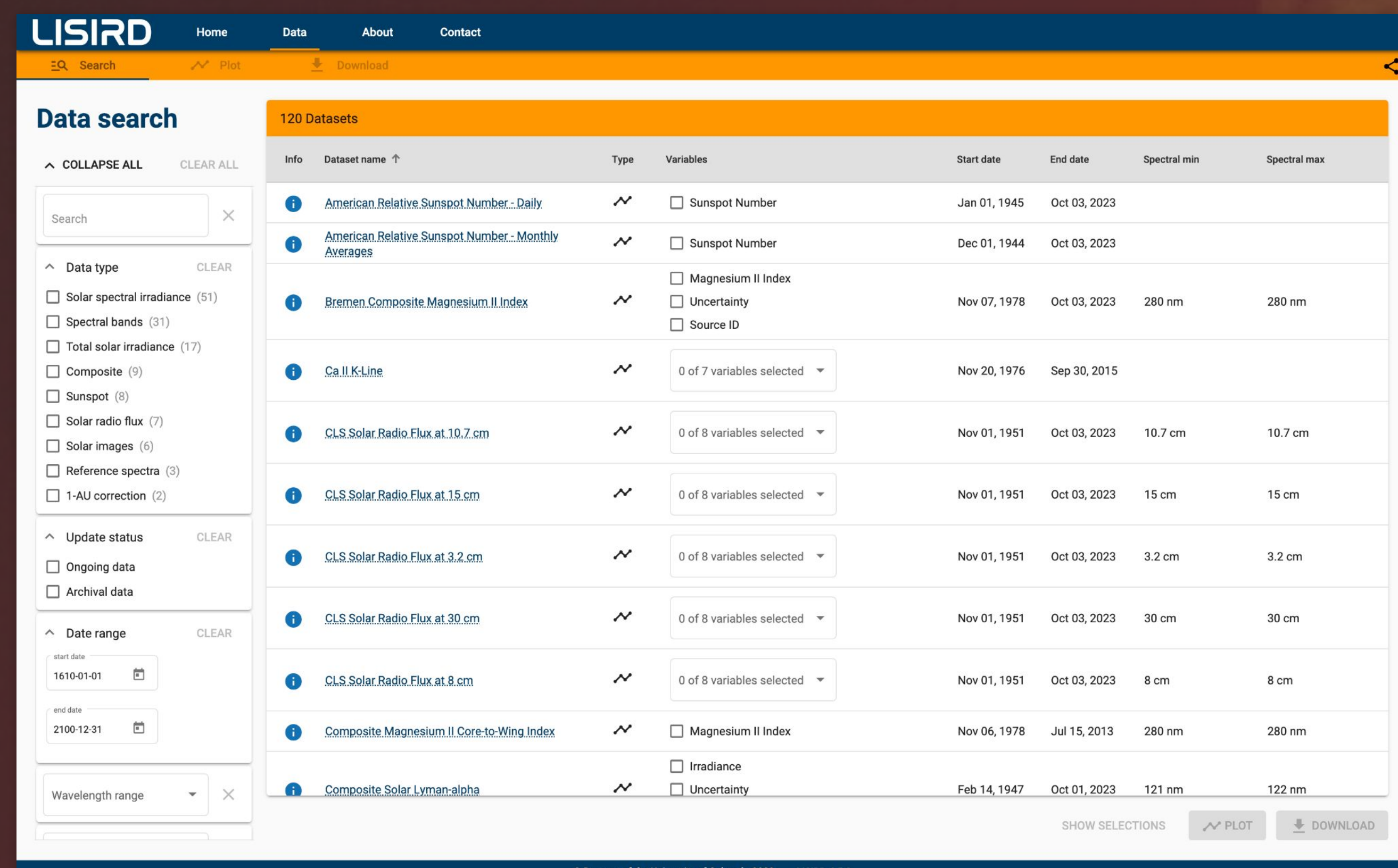


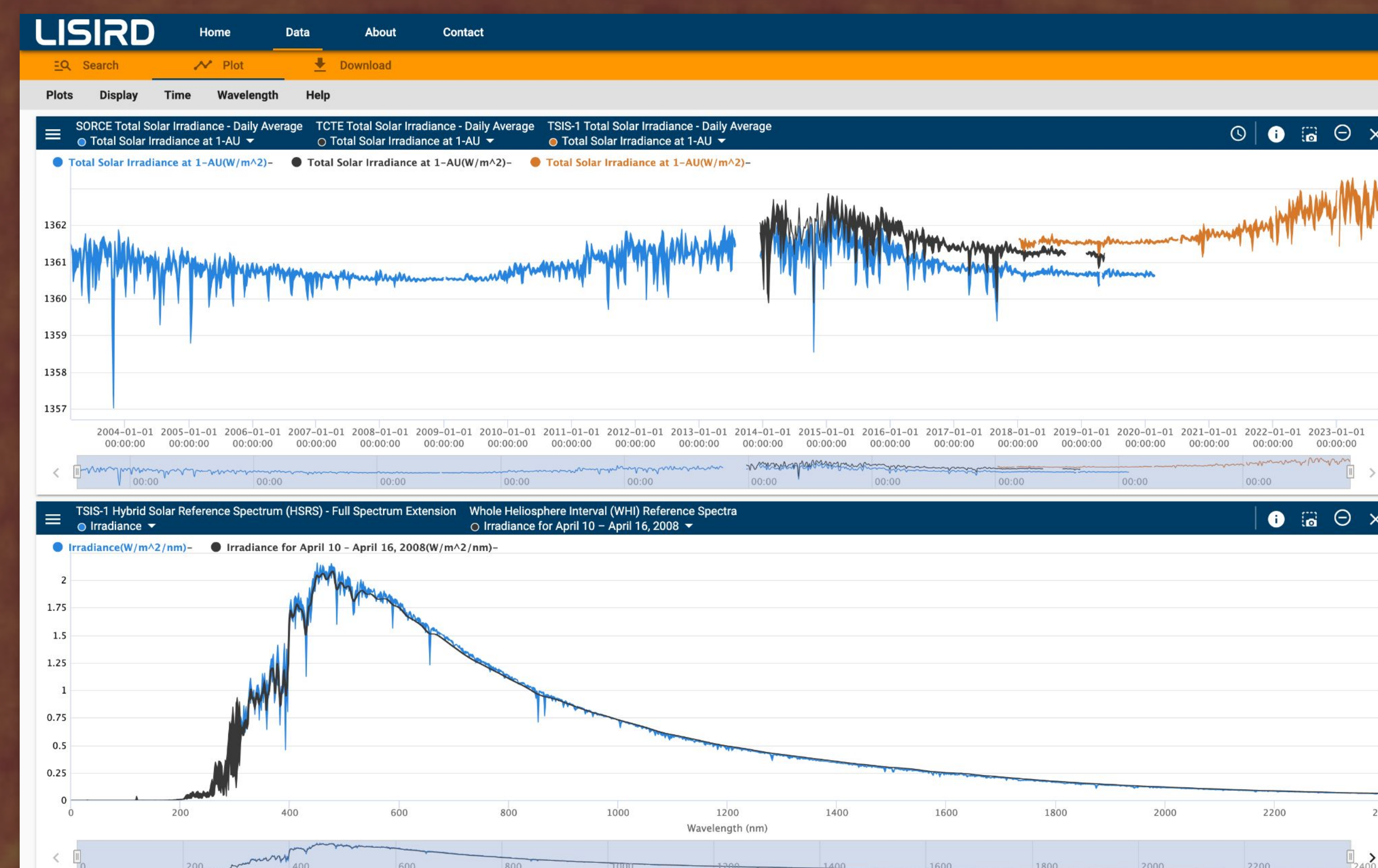
Over 120 solar datasets from LASP, NASA, NOAA, NSO, and more!

Discover



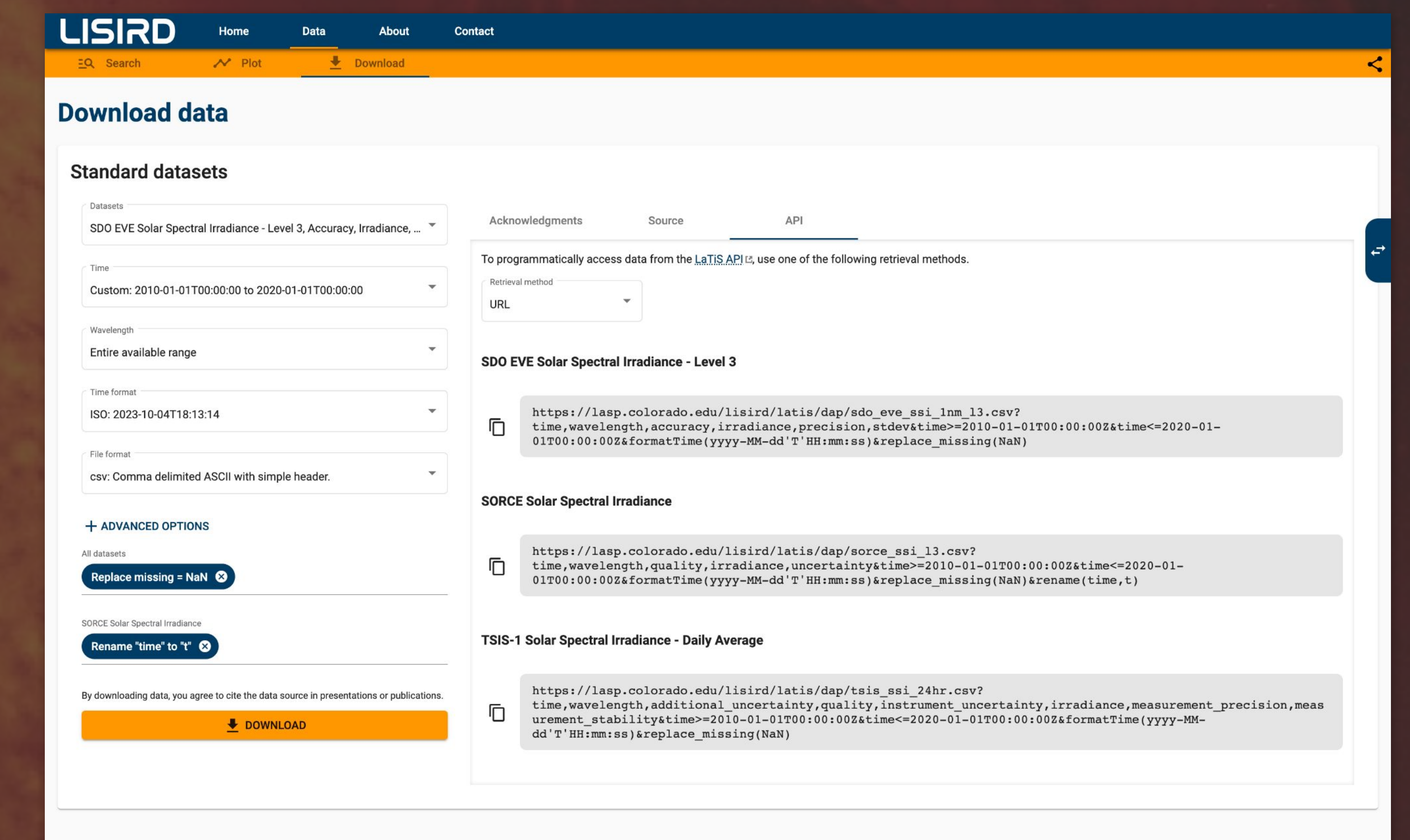
Filterable catalog of over 120 datasets

Visualize

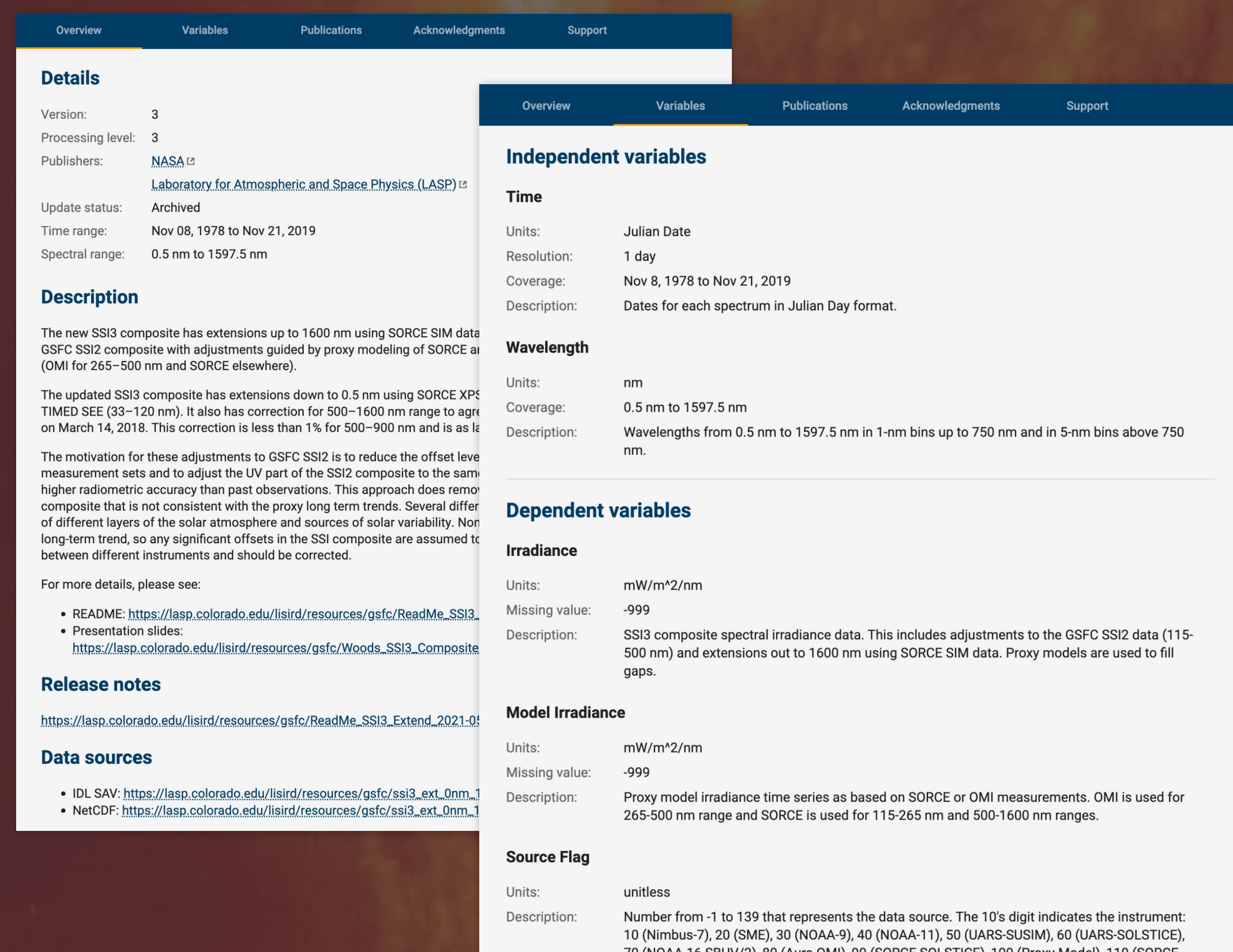


Intuitive and powerful plotting capabilities

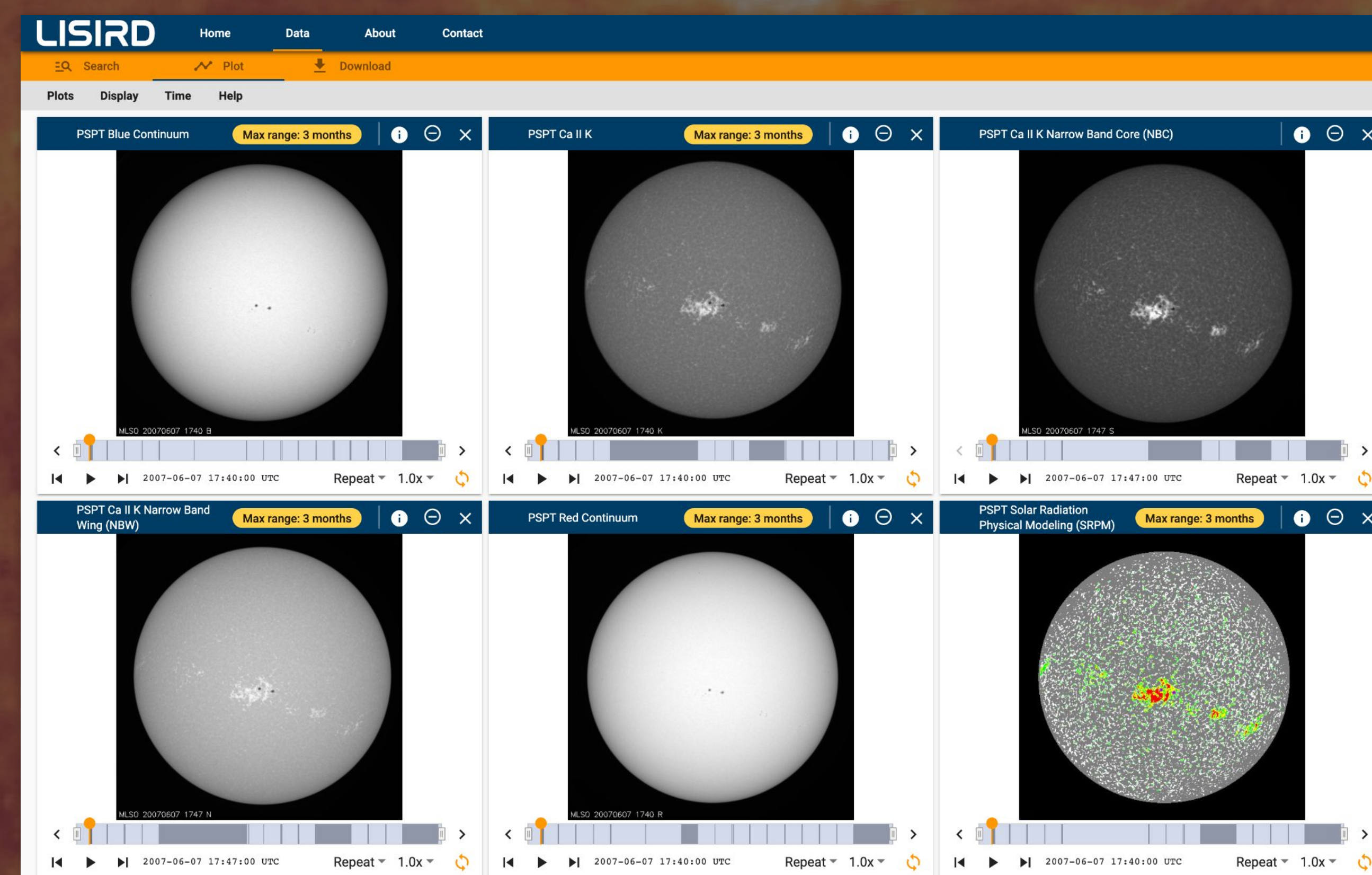
Download



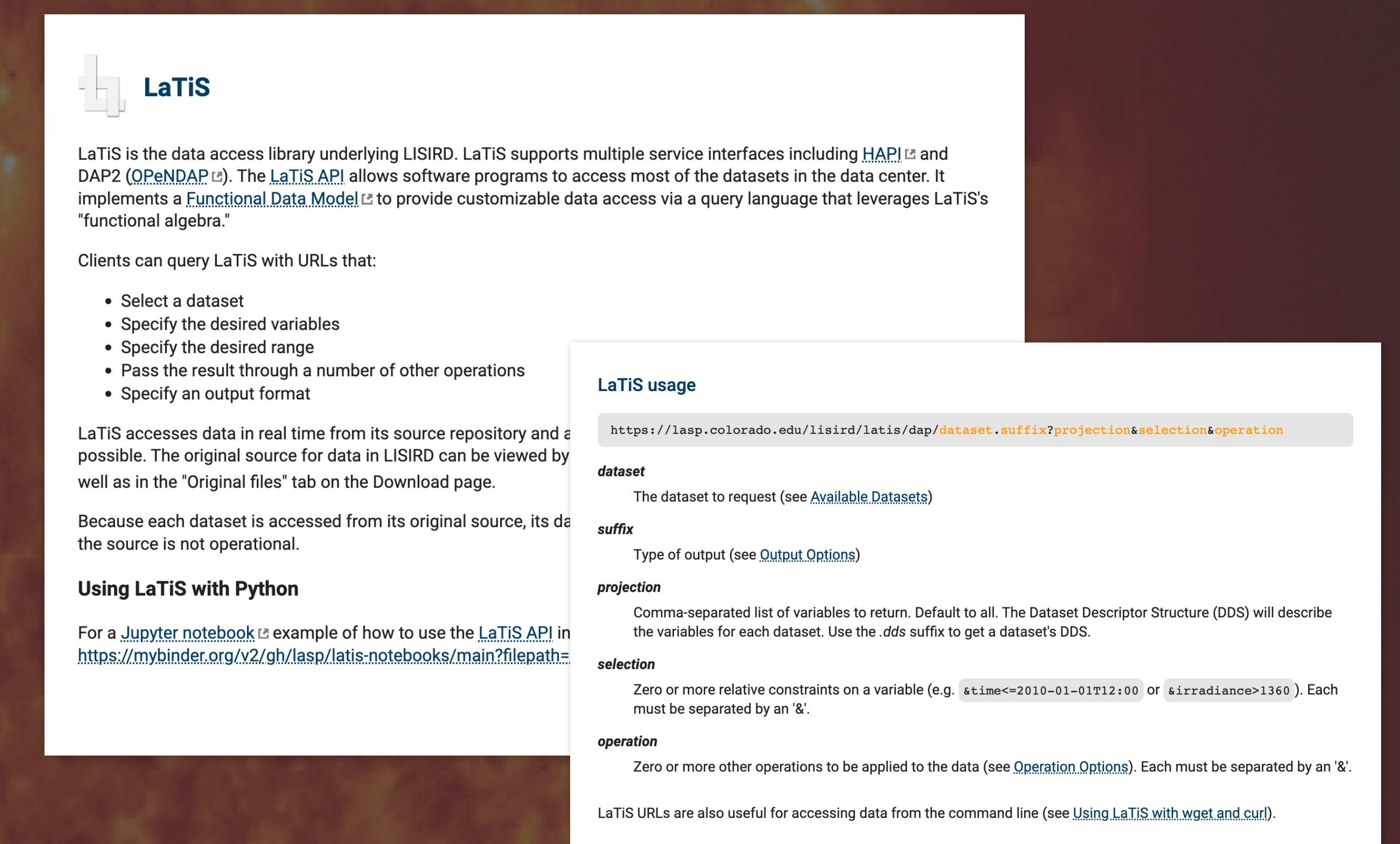
Customizable data downloads



Detailed metadata



Interactive image dataset viewer



Programmatic data access via the LaTIS and HAPI APIs

Overview

The LASP Interactive Solar IRradiance Datacenter (LISIRD) is a website that provides convenient, standardized access to solar data from a variety of missions, instruments, models, and laboratories.

The primary objectives of LISIRD include:

- **Discoverability:** Make solar data more openly available.
- **Standardization:** Offer a common interface for otherwise disparate data.
- **Modernization:** Rethink how data can be accessed beyond just static files on a server.
- **Analyzability:** Offer data that is analysis-ready by removing preprocessing overhead.

Key features

- **Detailed metadata:** LISIRD provides researchers with comprehensive metadata, offering a wealth of contextual information that enriches the transparency, understanding, and utilization of each dataset.
- **Interactive plotting capabilities:** LISIRD offers an array of intuitive and robust plotting tools, enabling researchers to visualize and explore solar datasets effortlessly.
- **Collaborative analysis:** LISIRD facilitates the convenient saving and sharing of plot configurations, streamlining collaborative research efforts.
- **Customizable data downloads:** LISIRD empowers users to download data in various file formats, refine data acquisition by specifying temporal and spectral ranges of interest, and even apply minor operations like variable renaming and time format customization. This flexibility ensures that researchers receive data optimized for their specific workflow requirements.

Next steps

- Continue refining metadata to aid long-term data discovery and reuse.
- Improve accessibility by integrating with tools like Python, Jupyter Notebooks, and SunPy.
- Run LISIRD in the cloud to allow for more dynamic scaling of resources when necessary. This will also allow LISIRD to support larger / higher-cadence datasets.
- Continue adding datasets to better serve the needs of the community.

Contact us

lisird@lasp.colorado.edu

Feel free to contact us with any questions, feedback, or suggestions for datasets you'd like offered through LISIRD.

