

Hunter Leise, Tom Baltzer, Anne Wilson, Doug Lindholm, Martin A. Snow, Don Woodraska, Stéphane Béland, Odele Coddington, Chris Pankratz, and the LASP Web Team

IN53C-0621

Overview

LISIRD is a website where researchers can discover, analyze, and download solar data from a variety of missions, instruments, and laboratories. LISIRD provides many dataset types, including:

- **Solar Spectral Irradiance:** irradiance measured at individual wavelengths.
- **Total Solar Irradiance:** a measurement of the integrated energy across the entire electromagnetic spectrum.
- **Composite:** integrated solar irradiance measurements from different instruments, reference spectra, etc.
- **Sunspot Number:** number of sunspots observed on the surface of the sun.

Feel free to contact us at lisird@lasp.colorado.edu if you have solar datasets you'd like to offer through LISIRD.

Improvements

The LASP web team has made significant improvements to LISIRD over the past year, including:

- Nearly doubling the number of available datasets (both internal and external to LASP).
- User interface updates to enhance dataset search, analysis, and download capabilities.
- Increased user insights through usage statistics and usability testing.

Built On

LaTiS: LaTiS is both a library and a service for manipulating and serving data modeled using the functional data model (FDM). The FDM is a specialization of the relational data model in which relations are strengthened to functions, providing richer semantics useful for representing scientific data.



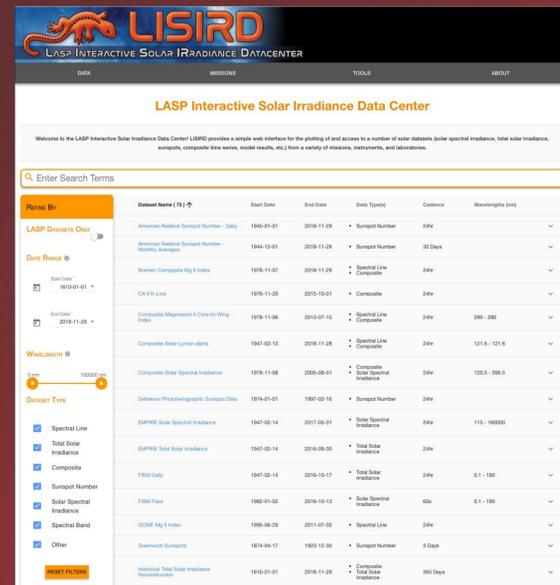
LEMR: The LASP Extended Metadata Repository is a semantic database of metadata information about the datasets served.

These technologies together make it quick and easy to add and maintain datasets.

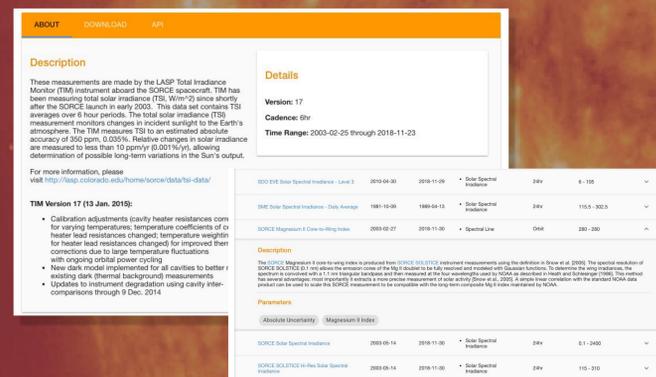
FREE SOLAR DATA!

75 Datasets (and Growing)

Discover



Search and filter controls to help quickly find applicable datasets



Detailed metadata

Analyze

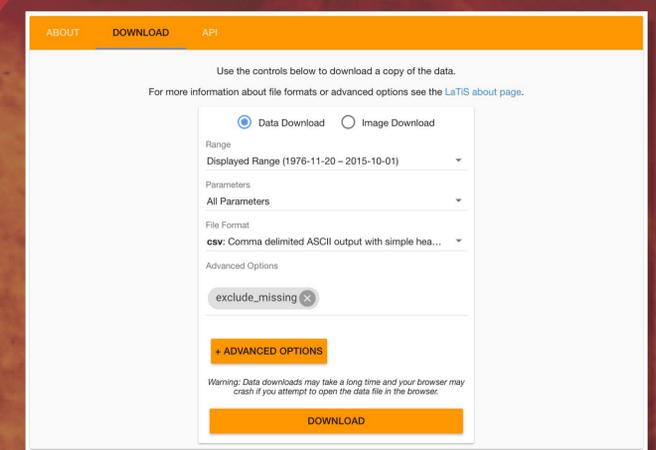


Time series and spectrum views for SSI datasets



Simple plot interaction tools

Download



Download customization options
Great for keeping file sizes small by getting only the data you need

csv: Comma delimited ASCII output with simple header.

txt: Comma delimited ASCII output with no header.

json: JSON output with labels.

asc: ASCII representation reflecting how the dataset is modeled.

bin: Binary stream of IEEE bytes.

jsona: JSON output as arrays.

jsond: JSON output with metadata and arr

tab: Tab delimited ASCII output with no he

png: Raster image.

svg: Scalable vector image, suitable for web pages.

pdf: Scalable vector image, suitable for printing.

Numerous download formats, with more to come

lasp.colorado.edu/lisird