

Assignment

The purpose of this assignment is two fold: 1) make the students familiar with how to access solar irradiance and solar indices dataset; 2) understand how the correlation between solar irradiance and other indices changes with the indices and with time.

The [LISIRD/LASP database](https://lasp.colorado.edu/lisird/) is the most complete currently available (<https://lasp.colorado.edu/lisird/>). Get familiar with it. Visualize and compare how different irradiance dataset, including spectral irradiance at different spectral ranges, change with time.

- Download one of the available sunspot number dataset (no CSUN!).
- Download one of the available TSI time series.
- After interpolating on a common temporal grid study and compare: a) the correlation over the entire dataset; 2) the correlation for different cycles; 3) the correlation for the ascending phases and the descending phases.
- Download the sunspot area from and repeat the computations above.
- Note the differences and if possible compare with results published in the literature.