Brief Overview

In this lesson, you will acquire water security data (WSIM-GLDAS) from the NASA SEDAC website. You will work with 1-month and 12-month precipitation anomaly datasets to extract and visualize precipitation deficit data through different plotting methods, and identify states that experienced drought. You will also work with population data to perform zonal statistics.

Objectives:

After completing this lesson, you should be able to:

* Subset data for a region of interest and time period.
* Perform data analysis such as making histograms and a time series.
* Plot geospatial data to determine precipitation deficit patterns.

In this lesson, you learned how to:

* Download geoboundaries data using the httr::GET() method.
* Identify hotspots of precipitation data and select these hotspots for further analysis by subsetting.
* Extract data from a pixel by using the extract function from the Stars library.
* Perform zonal statistics of population data using the extractexactr library.