Climate Hazards Group InfraRed Precipitation with Station Data

Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS) is a 35+ year quasi-global rainfall data set. Spanning 50°S-50°N (and all longitudes) and ranging from 1981 to near-present, CHIRPS incorporates our in-house climatology, CHPclim, 0.05° resolution satellite imagery, and in-situ station data to create gridded rainfall time series for trend analysis and seasonal drought monitoring.

* Model ID: CHIRPS
* Model Maintainer: Marty Landsfeld, mlandsfeld@gmail.com
* Model Category: Climate

# Outputs

**Rainfall:**

* Description: rainfall in mm per 5km
* Units: mm per 5km

**Rainfall relative to average:**

* Description: Rainfall relative to the historic average in mm per 5km
* Units: mm per 5km

**SPI:**

* Description: Standardized Precipitation Index reflects the number of standard deviations by which the observed anomaly deviates from the long-term mean
* Units: unitless index

# Parameters

**\_type:**

* Description: This should be one of ['mm\_data','mm\_anomaly','none\_z-score']. mm\_data is the CHIRPS estimates of precipitation. The mm\_anomaly provides the data value minus the mean of the entire time series up to the previous year. none\_z-score provides the Standardized Precipitation Indexes (SPI) of the estimates.
* Type: ChoiceParameter
* Choices: mm\_data, mm\_anomaly, none\_z-score
* Default: mm\_data

**dekad:**

* Description: A zero padded value for the dekad of the year, 01-36 (a 10 day period).
* Type: TimeParameter
* Default: None

**year:**

* Description: The year in YYYY format for the data of interest.
* Type: TimeParameter
* Default: 2019

**bbox:**

* Description: The geospatial bounding box of interest. It should represent 4-elements in the WGS84 coordinate system: [xmin, ymin, xmax, ymax]. x is longitude, y is latitude. In other words, the coordinates of a SW point and a NE point define your region of interest.
* Type: GeoParameter
* Default: [33.512234, 2.719907, 49.98171, 16.501768]