Climate Hazards Group InfraRed Precipitation with Station Data Global Ensemble Forecast System

NCEP’s Global Ensemble Forecast System (GEFS) is a weather forecast system that provides daily forecasts out to 16 days at 1 X 1 degree resolution at 6-hour intervals. This forecast product can be very useful to early warning famine and hydrological monitoring efforts, so the Climate Hazards Group (CHG) creates forecast precipitation fields at the dekadal (10 day) time scale and makes those available to researchers and decision makers.

* Model ID: CHIRPS-GEFS
* 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]