The Journal of Open Source Software

chirps: API Client for the CHIRPS Precipitation Data in R

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DOI:

Software

- Review
- Repository
- Archive

Submitted:
Published:

Summary

The **chirps** package provides functionalities for reproducible analysis using the CHIRPS data(Funk et al. 2015). CHIRPS is daily precipitation data set developed by the Climate Hazards Group(Funk et al. 2015) for high resolution precipitation gridded data. Spanning 50°S-50°N (and all longitudes) and ranging from 1981 to near-present, CHIRPS incorporates 0.05 arc-degree resolution satellite imagery, and in-situ station data to create gridded precipitation time series for trend analysis and seasonal drought monitoring(Funk et al. 2015). Other functionalities of **chirps** are the computation of precipitation indices and the evaporative stress index (ESI) which describes temporal anomalies in evapotranspiration produced weekly at 0.25 arc-degree resolution for the entire globe.

References

Funk, Chris, Pete Peterson, Martin Landsfeld, Diego Pedreros, James Verdin, Shraddhanand Shukla, Gregory Husak, et al. 2015. "The climate hazards infrared precipitation with stations—a new environmental record for monitoring extremes." *Scientific Data* 2 (December): 150066. https://doi.org/10.1038/sdata.2015.66.