



Weather Company Data - US 1km Precipitation History

Hi-Resolution Precipitation

This product provides access to accumulated precipitation values for the US at 1km resolution. Precipitation data is derived from the NOAA MRMS system. The data is available for the period beginning June 1, 2015 to the present time.

Certain parameters are required to initiate a weather request. As is standard in URIs, all parameters are separated using the ampersand (&) character. The list of parameters and their possible values are enumerated below:

- userKey **(required)** — this unique client identifier is assigned by TWC
- lat/long **(required)** – latitude/longitude for which data is being requested for
- startDate **(required)** — “mm/dd/yyyy” Indicates the starting date for weather request (Start date is first hour of requested date)
- interval **(required)** — The desired temporal resolution of the data being retrieved. Accepted values are:
 - Hourly
 - Daily
 - monthly
- endDate **(required)** — “mm/dd/yyyy” indicates the ending date for weather request. (End date is first hour of date requested, Data will be returned between the first hour of start date and first hour of end date. Make end date an extra day if you would like data for that day.)
- units **(required)** — The desired units in which to express the data being retrieved. Accepted values are:
 - Imperial
 - Metric
- time — Specify the time unit the requested data is returned in. Accepted values are:
 - lwt (local wall time)
 - gmt (Greenwich mean time) – Default
- peril **(required)** — The parameter type desired. Accepted values are:
 - Precipitation
 - Rain
 - Snow
 - freezingrain
- resolution **(required)** – The desired spatial resolution
 - 1km (Data only available over the Continental United States)
 - 4km (Data only available over the Continental United States)
 - 8km (Data available globally between 600N and 600S)
- format **(required)** — The desired format in which to return the data being retrieved. Accepted values are:

- json
 - xml
 - Csv
- delivery – Specify how the data is returned. Accepted values are:
 - stream – Data is delivered directly to the browser or the application that makes the API call
 - file – Data is delivered in a file that is downloaded to your system – Default Value
- version – The specific version of the API to be utilized. Currently accepted values are:
 - 1 – Default Value

HTTP Headers and Data Lifetime - Caching and Expiration

For details on appropriate header values as well as caching and expiration definitions, please see [The Weather Company Data | API Common Usage Guide](#).

Date Range Restriction

There is a max of 30 days of historical data allowed per request with one exception. **You can request up to 1 year of data when setting the “peril” parameter to “precipitation”.** For the other 3 “peril” values, if you request more than 30 days of data, your end date will be shortened and you would receive data from your start date to 30 days out.

NOTE: A system maintenance window is reserved between 7AM-9AM Eastern Time each Tuesday where API responses may be limited or curtailed.

Example

Retrieve 1km hourly rainfall data in a CSV file:

`https://cleanedobservations.weather.com/precip/1km/[42.134,-78.132]?startDate=02/11/2017&endDate=02/12/2017&version=1&peril=rain&interval=hourly&units=imperial&time=gmt&format=csv&userKey=[userKey]`