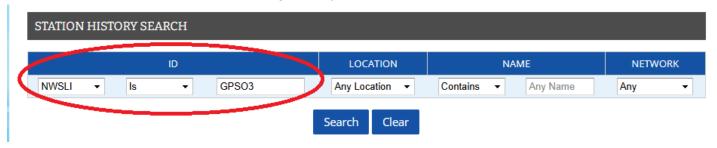
Using NCEI API and Web Site to Obtain Monthly COOP Precipitation Data

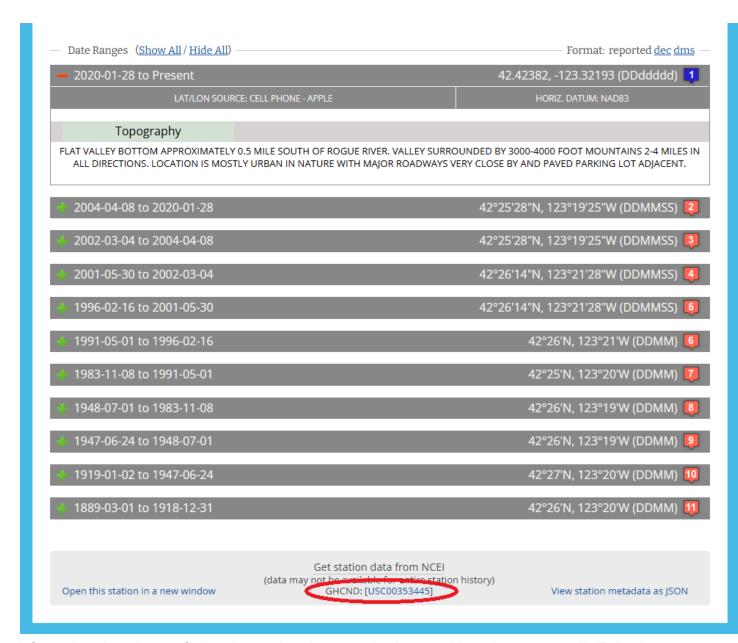
Overview:

From Water Years 2002 through 2025, CNRFC provided monthly and water year precipitation data from National Weather Service cooperative (COOP) observers in a tabular format <a href="https://nex.ps.//nex

General Information and Getting Set up to Use NCEI API:

- Information about getting started with using the NCEI climate data API can be found here: https://www.ncdc.noaa.gov/cdo-web/webservices/v2
- As mentioned on the page above, using the API requires first obtaining a token.
- Location IDs can be found be using one of the following resources:
 - https://www.ncei.noaa.gov/cdo-web/search
 - You can also look up an NWS ID (called NWSLI) and find the corresponding NCEI ID (GHCND) by going here: https://www.ncei.noaa.gov/access/homr Then, select "NWSLI" from the first dropdown and type the ID in the appropriate box (first screenshot below). Click search. Then scroll down to the bottom of the page, and you'll see the NCEI ID (second screenshot).





 Information about how to find and use other datatypes is given on this web page as well. Following sections will detail how to obtain monthly precipitation data, as well as monthly and yearly normals, specifically.

Obtaining Observed Monthly Precipitation via the NCEI API:

Note: The example below uses curl to obtain data values. See this page for information about how to download using ajax in Javascript.

curl -H "token:insert_your_token_here"

"https://www.ncei.noaa.gov/cdo-web/api/v2/data?datasetid=GSOM&stationid=GHCND:USC00042574&units=standard&startdate=2025-07-01&enddate=2025-07-01&datatypeid=PRCP"

Where USC00042574 is the station ID (Dunsmuir, CA in this case)

The units=standard field forces the output to be in inches.

Selecting different start/end dates will retrieve values for different months. Note: In returned JSON output, the "date" field corresponds to the first day of the month for which data is valid. In the example below, the date of "2025-07-01T00:00" refers to the precipitation value for the month of July.

Output looks like the following JSON:

```
"metadata":
"resultset":
{
"offset":1,
"count":1,
"limit":25
}
},
"results":[{
"date":"2025-07-01T00:00:00",
"datatype":"PRCP",
"station":"GHCND:USC00042574",
"attributes":"3,,,H",
"value":2.94
} ]
}
```

Obtaining Monthly-Averaged Precipitation Values

Example curl command:

```
curl -H "token:insert_your_token_here"

"https://www.ncei.noaa.gov/cdo-web/api/v2/data?datasetid=NORMAL_MLY&stationid=GHCND:USC00042
574&units=standard&startdate=2025-07-01&enddate=2025-07-01&datatypeid=MLY-PRCP-NORMAL"

Selecting different start/end dates will retrieve normals for different months.
```

Obtaining Yearly-Averaged Precipitation Values

Example curl command:

```
curl -H "token:insert_your_token_here"

"https://www.ncei.noaa.gov/cdo-web/api/v2/data?datasetid=NORMAL_ANN&stationid=GHCND:USC00042
574&units=standard&startdate=2025-07-01&enddate=2025-07-01&datatypeid=ANN-PRCP-NORMAL"

Selecting different start/end dates will retrieve normals for different months.
```

Obtaining Precipitation Values and Normals via NCEI Web Download:

All available climate data can be requested via a web download tool <u>here</u>. Requested data will be delivered by email.

Alternate Sources of Data

Although not official COOP data, real-time monthly and water year precipitation totals are available for each month and water year using our <u>front map interface</u>. Also, a tabular version of this data for monthly and water precipitation totals is available by selecting any gauge location on the map and selecting the "Link to text version of this data".

Please refer to the Climate Data Online: Web Services Documentation page for updates and assistance.