

# Package ‘cder’

October 12, 2022

**Title** Interface to the California Data Exchange Center

**Version** 0.2-2

**Description** Connect to the California Data Exchange Center (CDEC) Web Service <<http://cdec.water.ca.gov/>>. 'CDEC' provides a centralized database to store, process, and exchange real-time hydrologic information gathered by various cooperators throughout California. The 'CDEC' Web Service <<http://cdec.water.ca.gov/dynamicapp/wsSensorData>> provides a data download service for accessing historical records.

**License** GPL (>= 3)

**URL** <https://github.com/mkoohafkan/cder>

**BugReports** <https://github.com/mkoohafkan/cder/issues>

**Depends** R (>= 3.4)

**Imports** utils, curl (>= 4.3), glue (>= 1.3), stringr (>= 1.4), tibble (>= 2.1), dplyr (>= 0.8), readr (>= 1.3), rlang (>= 0.4), lubridate (>= 1.7)

**Encoding** UTF-8

**LazyData** true

**Suggests** knitr (>= 1.26), rmarkdown (>= 2.0), testthat (>= 2.3)

**VignetteBuilder** knitr

**RoxygenNote** 7.0.2

**NeedsCompilation** no

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**Repository** CRAN

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cdec-search	<i>CDEC Search Pages Open the CDEC station/group search page or map interface.</i>
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### Description

CDEC Search Pages Open the CDEC station/group search page or map interface.

### Usage

```
cdec_search_groups(...)
```

```
cdec_search_stations(...)
```

```
cdec_map(...)
```

### Arguments

... Additional arguments to pass to browseURL.

### Functions

- cdec\_search\_groups: CDEC Group search page.
- cdec\_search\_stations: CDEC Station search page.
- cdec\_map: CDEC Map locator page.

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cdec_meta	<i>CDEC Station Metadata</i>
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**Description**

Open the Metadata page for a station.

**Usage**

```
cdec_meta(station, ...)
```

**Arguments**

station	The three-letter station code.
...	Additional arguments to pass to browseURL.

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cdec_query	<i>Query CDEC</i>
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**Description**

Query data from the CDEC web services.

**Usage**

```
cdec_query(stations, sensors, durations, start.date, end.date, ...)
```

**Arguments**

stations	A vector of station codes.
sensors	A vector of sensor numbers.
durations	A vector of durations.
start.date	The start date of the query.
end.date	The end date of the query.
...	Not used.

**Details**

Note that CDEC timestamps are in Pacific Time and Daylight Savings adjustments are reflected. In R, this is equivalent to the timezone "US/Pacific".

**Value**

A dataframe.

## Examples

```
if(interactive()){  
  cdec_query("NSL", 100, "E", Sys.Date() - 5, Sys.Date())  
}
```

---

cdec\_query\_group

*Query CDEC Group*

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## Description

Query group data from the CDEC web services.

## Usage

```
cdec_query_group(groups, start.date, end.date, ...)
```

## Arguments

groups	A vector of group codes.
start.date	The start date of the query.
end.date	The end date of the query.
...	Not used.

## Details

Note that CDEC timestamps are in Pacific Time and Daylight Savings adjustments are reflected. In R, this is equivalent to the timezone "US/Pacific".

## Value

A dataframe.

## Examples

```
if(interactive()){  
  cdec_query_group("SR1", Sys.Date() - 5, Sys.Date())  
}
```

---

cder

*Interface to the California Data Exchange Center*

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### **Description**

Access the CDEC Web Service from R.

### **Package options**

cder uses the following `options()` to configure behavior:

- `cder.timeout`: The maximum time to wait for a response from the CDEC Web API.

### **Author(s)**

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### **See Also**

Useful links:

- <https://github.com/mkoohafkan/cder>
- Report bugs at <https://github.com/mkoohafkan/cder/issues>

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