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

Date/Publication  2020-01-24 18:20:05 UTC
R topics documented:

\begin{itemize}
  \item cdec-search \hfill 2
  \item cdec_meta \hfill 3
  \item cdec_query \hfill 3
  \item cdec_query_group \hfill 4
  \item cder \hfill 5
\end{itemize}

\section*{Description}

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

\section*{Usage}

\begin{itemize}
  \item cdec_search_groups(...) \\
  \item cdec_search_stations(...) \\
  \item cdec_map(...) \\
\end{itemize}

\section*{Arguments}

\begin{itemize}
  \item ... Additional arguments to pass to browseURL.
\end{itemize}

\section*{Functions}

- cdec_search_groups: CDEC Group search page.
- cdec_search_stations: CDEC Station search page.
- cdec_map: CDEC Map locator page.
cdec_meta

**CDEC Station Metadata**

**Description**

Open the Metadata page for a station.

**Usage**

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

**Arguments**

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

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cdec_query

**Query CDEC**

**Description**

Query data from the CDEC web services.

**Usage**

```r
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.
cdec_query_group

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())
}
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`
Index

cdec-search, 2
node_map (cdec-search), 2
cdec_meta, 3
cdec_query, 3
cdec_query_group, 4
cdec_search_groups (cdec-search), 2
cdec_search_stations (cdec-search), 2
cder, 5
cder-package (cder), 5

options(), 5