Package ‘cder’

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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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```latex
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\textbf{cdec-search} & \textit{CDEC Search Pages Open the CDEC station/group search page or map interface.}
\end{tabular}
```

**Description**

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

**Usage**

```r
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.
cdec_meta  

CDEC Station Metadata

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.

cdec_query  

Query CDEC

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.
cdec_query_group

Query CDEC 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](https://github.com/mkoohafkan/cder)
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