

Package ‘noaoceans’

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Type Package

Title Collect Ocean Data from NOAA

Version 0.1.0

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Description Provides a small set of tools for collecting data from National Oceanic and Atmospheric Administration (NOAA) data sources. The functions provided in the package are wrappers around NOAA's existing APIs which is found at <<https://tidesandcurrents.noaa.gov/api/>>.

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Encoding UTF-8

LazyData true

Suggests testthat, covr, knitr, rmarkdown, dplyr, httpptest, ggplot2, maps, mapdata

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VignetteBuilder knitr

NeedsCompilation no

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list_coops_stations *Find All NOAA Stations*

Description

This function produces a data frame with all NOAA stations. The list of stations is retrieved from NOAA's website when the function is called.

Usage

```
list_coops_stations()
```

Details

In the returned data frame there is one row for each station. The name, location and date that the station was established are included as columns. In addition, there are columns that provide the status of various sensors at the station is included. The column names indicate the type of sensor

In the status columns a value of *1* indicates that sensor is working A *0* indicates that the sensor is not working. If a particular station does not have the capability indicated by the column name, the value provided is NA

Value

A data frame.

Examples

```
# Do Not Run  
station_df <- list_coops_stations()
```

noaaoceans *noaaoceans: A package for collecting oceans and weather data from NOAA.*

Description

The noaaoceans package provides several functions to access NOAA APIs. It includes functions to access the CO-OPS API and metadata for each of the tide sensor stations.

query_coops_data	<i>Retrieve Tides Data From NOAA CO-OPS API</i>
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Description

Retrieve Tides Data From NOAA CO-OPS API

Usage

```
query_coops_data(station_id, start_date, end_date, data_product,
                 units = "english", time_zone = "lst_ldt", datum = NULL,
                 interval = NULL)
```

Arguments

station_id	is a character string that provides the a 7 character station id.
start_date	is a character string that specifies the start date for the retrieval period. Dates can be specified in the following formats: <i>yyyyMMdd</i> , <i>yyyyMMdd HH:mm</i> , <i>MM/dd/yyyy</i> , or <i>MM/dd/yyyy HH:mm</i> .
end_date	is a character string that specifies the end date for the retrieval period. Dates can be specified in the following formats: <i>yyyyMMdd</i> , <i>yyyyMMdd HH:mm</i> , <i>MM/dd/yyyy</i> , or <i>MM/dd/yyyy HH:mm</i> .
data_product	specifies the data product to be returned. See CO-OPS API Documentation for the available data products.
units	a character string specifying if the data should be returned using metric or English units. Defaults to 'english'.
time_zone	a character string specifying what time zone information the data should be returned with. Options include Greenwich Mean Time 'gmt', Local Standard Time 'lst', and Local Standard/Local Daylight Time 'lst_ldt'. Local times refer to the local time of the specified station. The default is 'lst_ldt'
datum	a character string indicating the datum that should be returned. See CO-OPS API Documentation for the available datums.
interval	a character string that specifies the interval for which Meteorological data is returned. The API defaults to every six minutes and does not need to be specified. Other option include hourly 'h' and 'hilo'. The retrieval time period specified by start_date and end_date to create restrictions on the intervals that can be returned. See CO-OPS API Documentation for details

Value

a data frame.

Examples

```
# Do Not Run
a <- query_coops_data('9414290',
                      '20170101',
                      '20170201',
                      'predictions',
                      interval = 'hilo',
                      datum = 'MLLW')
```

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