Package 'wikilake'

June 7, 2018

Title Scrape Lake Metadata Tables from Wikipedia

Version 0.4

Description Scrape lake metadata tables from Wikipedia <http://www.wikipedia.org>.

Imports rvest, stringi, WikipediR, xml2, sp, graphics, stringr,
    selectr, units

URL https://github.com/jsta/wikilake

BugReports https://github.com/jsta/wikilake/issues

Depends R (>= 3.3.0), maps

License GPL (>= 2)

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

Suggests knitr, rmarkdown, testthat

VignetteBuilder knitr

NeedsCompilation no

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Repository CRAN

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R topics documented:

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wikilake-package   *Scrape Wikipedia lakes metadata*

Description

Scrape Wikipedia lakes metadata

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dms2dd   *dms2dd*

Description

Convert numeric coordinate vectors in degrees, minutes, and seconds to decimal degrees

Usage

```
dms2dd(x)
```

Arguments

x   numeric vector of length 3 corresponding to degrees, minutes, and seconds

Examples

```
dt <- rbind(c(25,12,53.66),c(-80,32,00.61))
apply(dt, 1, function(x) dms2dd(x))
```

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get_lake_wiki   *get_lake_wiki*

Description

get_lake_wiki

Usage

```
get_lake_wiki(lake_name, cond = NA)
```

Arguments

lake_name	character
cond	character stopping condition

Examples

```
## Not run:
get_lake_wiki("Lake Nipigon")

## End(Not run)
```

---

lake_wiki	*lake_wiki*

Description

lake_wiki

Usage

```
lake_wiki(lake_name, map = FALSE, ...)
```

Arguments

lake_name	character
map	logical produce map of lake location?
...	arguments passed to maps::map

Examples

```
## Not run:
lake_wiki("Lake Peipsi")
lake_wiki("Flagstaff Lake (Maine)")
lake_wiki("Lake George (Michigan-Ontario)")
lake_wiki("Lake Michigan", map = TRUE, "usa")
lake_wiki("Lac La Belle, Michigan")
lake_wiki("Lake Antoine")
lake_wiki("Lake Baikal")
lake_wiki("Dockery Lake (Michigan)")
lake_wiki("Coldwater Lake")
lake_wiki("Bankson Lake")
lake_wiki("Fisher Lake (Michigan)")
lake_wiki("Beals Lake")
lake_wiki("Devils Lake (Michigan)")
lake_wiki("Lake Michigan")
lake_wiki("Fletcher Pond")
lake_wiki("Lake Bella Vista (Michigan)")
lake_wiki("Lake Mendota")
```

```
lake_wiki("Lake Mendota", map = TRUE, "usa")
lake_wiki("Lake Nipigon", map = TRUE, regions = "Canada")
lake_wiki("Trout Lake (Wisconsin)")
lake_wiki("Rutland Water")

# throws warning on redirects
lake_wiki("Beals Lake")

# ignore notability box
lake_wiki("Rainbow Lake (Waterford Township, Michigan)")

## End(Not run)
```

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map_lake_wiki   *map_lake_wiki*

Description

map_lake_wiki

Usage

```
map_lake_wiki(res, ...)
```

Arguments

res   data.frame output of get_lake_wiki

...   arguments passed to maps::map

Examples

```
## Not run:
map_lake_wiki(get_lake_wiki("Corey Lake"), "usa")

map_lake_wiki(get_lake_wiki("Lake Nipigon"), regions = "Canada")

## End(Not run)
```

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milakes   *Michigan Lakes*

Description

Metadata of Michigan lakes scraped from Wikipedia.

Format

A data frame with 48 columns and 177 rows:

- Name: lake name
- Location: location description
- Primary inflows: rivers and streams
- Basin countries: countries
- Surface area: hectares
- Max. depth: meters
- Surface elevation: meters
- Lat: decimal degrees
- Lon: decimal degrees
- Primary outflows: rivers and streams
- Average depth: meters
- Max. length: meters
- Max. width: meters

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tidy_lake_df   *tidy_lake_df*

Description

tidy_lake_df

Usage

```
tidy_lake_df(lake)
```

Arguments

lake   data.frame output of get_lake_wiki

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