Package 'geysertimes'

October 13, 2022

Title Geyser Data from GeyserTimes.org

Version 0.1.9

Depends R (>= 4.0)

Imports jsonlite, lubridate, readr, tools, utils

Suggests curl, dplyr, knitr, rmarkdown

Description Download geyser eruption and observation data from the GeyserTimes
site (<https://geysertimes.org>) and optionally store it locally. The vignette
shows a simple analysis of downloading, accessing, and summarizing the data.

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URL <https://github.com/geysertimes/geysertimes-r-package>

BugReports <https://github.com/geysertimes/geysertimes-r-package/issues>

VignetteBuilder knitr, rmarkdown

NeedsCompilation no

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Repository CRAN

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R topics documented:

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gt_cleanup_data   *Cleanup Old GeyserTimes Data Files*

Description

Removes a particular version of the GeyserTimes data files that have been download and stored on disk by `gt_get_data`. Alternatively, the function will remove all old versions of the GeyserTimes data files, keeping only the most recent files.

Usage

```
gt_cleanup_data(version = NULL, old = FALSE, path = gt_path())
```

Arguments

version   a character value, the specific version of the GeyserTimes data files to be re-
              moved. The version number is the date that the files were downloaded, with the
              format yyyy-m-d e.g. "2021-05-15".

old   a logical value, if TRUE, all but the most recent version of the data files found
              under path will be removed.

path   a character value, the location on disk where the GeyserTimes data files.

Details

Users who regularly download the latest GeysersTimes data may want to call `gt_cleanup_data(old=TRUE)` to clean out old copies of the data.

Value

a character vector, the versions of the data files that were removed. If no files are removed, `NULL` is returned.

Author(s)

Stephen Kaluzny <spkaluzny@gmail.com>

See Also

[gt_path](), [gt_get_data]()

Examples

```
# see the example in the gt_get_data help file.
```

---

gt_get_data *Download GeyserTimes Data*

Description

Downloads the data from geysertimes.org. Reads the data and creates a tibble object in 'dest_folder'.

Usage

```
gt_get_data(dest_folder = file.path(tempdir(), "geysertimes"),
    overwrite = FALSE, quiet = FALSE, version = lubridate::today())
```

Arguments

dest_folder   the location where the binary tibble object should be written. The default is under the current R session's temp directory which will disappear when the session ends.

overwrite   a logical value, ifFALSE, the data will not be downloaded again if copy of the data, with version, already exists in dest_folder.

quiet   a logical value, if TRUE, no messages are displayed.

version   a character string giving the version of the data to download. This should a date in the form yyyy-mm-dd. Typically, only the version with today's date is available.

Details

The data is downloaded from the GeyserTimes archive web site https://geysertimes.org/archive/ to the tempdir() directory. The data is then read with readr::read_tsv with appropriate column types. The resulting tibble object is then saved as an binary (.rds) in dest_folder.

Value

a character string giving the full path to the directory where the GeyserTimes data was stored.

Note

Users are encouraged to set dest_folder to gt_path() to save a persistent copy of the data.

Author(s)

Stephen Kaluzny <spkaluzny@gmail.com>.

See Also

gt_load_eruptions, gt_load_geysers.

Examples

```
dpath0 <- gt_get_data()  # data saved under tempdir()
dpath1 <- gt_get_data(dest=gt_path())  # data saved under gt_path()
gt_cleanup_data(gt_version())
```

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gt_load_eruptions   *Load the Geyser Times Data*

Description

Loads the Geyser Times data that was previously downloaded by a call to `gt_get_data`.

Usage

```
gt_load_eruptions(path = gt_path(), quiet = FALSE, version = NULL)
gt_load_geysers(path = gt_path(), quiet = FALSE, version = NULL)
```

Arguments

path   a character string, the local location where the Geyser Times data has been writ-
                ten. The default is the local permanent location given by `gt_path()`. If no
                appropriate data is found at that location, the function will look in the temporary
                location given by `gt_path(temp=TRUE)`.

quiet   a logical value, if TRUE, no messages are displayed.

version   a character string giving the version of the Geyser Times data to load. Calling
                `gt_version(path, all=TRUE)` will list all versions available under `path`.

Details

Typically, a user would download the data once, with a call to 'gt_get_data(destdir=gt_path())'.
Subsequent R sessions can the load this downloaded data with a call to 'gt_load_eruptions()'.

Value

a tibble containing the Geyser Times data with names: (need to decide on appropriate names)

Author(s)

Stephen Kaluzny <spkaluzny@gmail.com>

See Also

gt_get_data

Examples

```
## Not run:
tmppath <- gt_get_data()
erupt <- gt_load_eruptions()

## End(Not run)
```

---

gt_path   *Path to GeyserTimes Local Data*

Description

Returns the path where local GeyserTimes data is stored.

Usage

```
gt_path(temp = FALSE)
```

Arguments

temp   a logical value, if TRUE, the temporary path is returned. This location will disap-
                pear when the R session ends.

Value

a character string giving the full path where local GeyserTimes data is stored.

Note

Prior to version 0.1.8, the geysertimes package used a location specified by rappdirs::user_data_dir
for storing local GeyserTimes data. Starting with version 0.1.8, the package now uses the location
tools::R_user_dir("geysertimes", "data").

Author(s)

Stephen Kaluzny <spkaluzny@gmail.com>

See Also

[gt_get_data](#)

Examples

```
# The default location for the GeyserTimes data:
gt_path()
```

gt_version   *Version of GeyserTimes Data*

Description

Returns the version of the current GeyserTimes data. This is a character string date in year-mm-dy
format.

Usage

```
gt_version(path = gt_path(), quiet = FALSE, all = FALSE)
```

Arguments

path	the path to the GeyserTimes data. The default is the suggested location used by 'gt_get_data'.
quiet	a logical value, if TRUE, no messages are printed.
all	list all versions of the GeyserTimes data found, not just the newest.

Value

a character string listing the version(s) of GeyserTimes data stored under 'path'.

Author(s)

Stephen Kaluzny <spkaluzny@gmail.com>

Examples

```
gt_version()
```

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