

Package ‘geysertimes’

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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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`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

<code>version</code>	a character value, the specific version of the GeyserTimes data files to be removed. The version number is the date that the files were downloaded, with the format <code>yyyy-m-d</code> e.g. "2021-05-15".
<code>old</code>	a logical value, if TRUE, all but the most recent version of the data files found under <code>path</code> will be removed.
<code>path</code>	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

<code>dest_folder</code>	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.
<code>overwrite</code>	a logical value, if FALSE, the data will not be downloaded again if copy of the data, with <code>version</code> , already exists in <code>dest_folder</code> .
<code>quiet</code>	a logical value, if TRUE, no messages are displayed.
<code>version</code>	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())
```

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 written. The default is the local permanent location given by <code>gt_path()</code> . If no appropriate data is found at that location, the function will look in the temporary location given by <code>gt_path(temp=TRUE)</code> .
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 <code>gt_version(path, all=TRUE)</code> 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 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	<i>Path to GeyserTimes Local Data</i>
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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 disappear 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	<i>Version of GeyserTimes Data</i>
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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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