Package 'tweet2Earth'

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Type Package

Title plot or stream tweets' location and created time to Google Earth

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Description Comes with two functions, one to plot tweets, typically obtained
from the twitteR package, onto Google Earth. The other to stream tweets, using
the streamR package, onto Google Earth.

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Imports streamR,
sp,
spacetime,
plotKML

Suggests ROAuth,
RCurl

RoxygenNote 5.0.1

URL https://github.com/JohnCoene/tweets2earth

BugReports https://github.com/JohnCoene/tweets2earth/issues

R topics documented:

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plot2earth	*plot2earth*

Description

Plots tweets location and created time on Google Earth.

Usage

```
plot2earth(df, longitude, latitude, date.time, labels, size, colour,
  colour.scale = plotKML::SAGA_pal[[1]],
  shape = "http://maps.google.com/mapfiles/kml/pal2/icon18.png",
  open = TRUE, kmz = FALSE, file.name = "tweets2earth.kml",
  folder.name = getwd(), ...)
```

Arguments

df	Required. data.frame of tweets to plot.
longitude	Required. Column holding longitude.
latitude	Required. Column holding latitude.
date.time	Required. Column including creation time of tweets; POSIXct format
labels	Required. Column holding labels.
size	Required. Column holding desired size of points.
colour,	optional. Column name that determines colours of points.
colour.scale,	optional, defaults to plotKML::SAGA_pal[[1]]. can be pallettes from R_pal (data(R_pal)), SAGA_pal (see default), from RColorBrewer (see example) or a vector of colors (hex) i.e.(c("#EE6A50", "#E8F9FE", "#6495ED"))
shape,	optional. Shape to use for points. Defaults to http.../icon18.png
open,	optional. Whether to open file in Google Earth. Defaults to TRUE.
kmz	Whether to also save the file as .kmz, defaults to FALSE
file.name	Name of kml or kmz file, defaults to tweets2earth.kml
folder.name	Name of folder where to save the kml or kmz file, defaults to getwd
...	Arguments to pass to kml function. See [kml](#)

Details

Takes data.frame of tweets and plots coordinates on Google Earth, also includes time variable (date.time). Choose size, colour and labels of your liking.

Value

Writes kml file and, optionally, opens it in Google Earth (open = TRUE).

Author(s)

John Coene, <jcoenep@gmail.com>

See Also

\code[stream2earth](stream2earth)

Examples

```
## Not run:
library(twitteR)

# setup oauth
setup_twitter_oauth(consumer_key, consumer_secret, access_token=your_token,
                    access_secret=your_secret)

# search twitter
tweets <- searchTwitter("rstats", n = 2000, lang= "en",
                        geocode="34.052235,-118.243683,100mi")

# unlist
tw.df <- do.call("rbind", lapply(tweets, as.data.frame))

plot2earth(tw.df, "longitude", "latitude", "created",
           "screenName", "retweetCount", "favorited",
           colour.scale = colour.scale = RColorBrewer::brewer.pal(8, "BuPu"),
           file.name = "rstats.kml")

## End(Not run)
```

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stream2earth   *stream2earth*

Description

Streams tweets' location and time to Google Earth.

Usage

```
stream2earth(search_term, oauth, labels, size, duration = 3600, window = 5,
  shape = "http://maps.google.com/mapfiles/kml/pal2/icon18.png", ...)
```

Arguments

search_term,	required. Search to use in API call.
oauth,	required. Your oauth token as used in streamR package. See examples.
labels,	requried. Labels to use on Google Earth. must be inherited from `filterStream` (see details)
size,	required. Size of shape. must be inherited from `filterStream` (see details).
duration,	requried. Number of seconds to stream, defaults to 3600.
window,	required. Duration of each streaming window in seconds. Defaults to 5.
shape,	required. Shape to use on Google Earth. Defaults to `.../icon18.png`.
...	Optional arguments to pass to streamR filterStream function.

Details

labels, size parameters must be inherited from filterStream.

Available labels and size parameters are;

- text
- favorited
- id_str
- source
- created_at
- in_reply_to_user_id_str
- listed_count
- location
- description
- user_created_at
- followers_count
- protected
- names
- user_lang
- friends_count
- time
- retweet_count
- truncated
- in_reply_to_screen_name
- retweeted
- in_reply_to_status_id_str
- lang
- verified
- user_id_str
- geo_enabled
- statuses_count
- favourites_count
- user_url
- time_zone
- utc_offset
- screen_name

Value

Opens Google Earth and plots tweet location and created time in near-real time.

Author(s)

Jabber Cruncher, <john.coene@jabber-cruncher.com>

See Also

plot2earth

Examples

```
## Not run:
# OAuth setup - from App (http://apps.twitter.com/)
requestURL <- "https://api.twitter.com/oauth/request_token"
accessURL <- "https://api.twitter.com/oauth/access_token"
authURL <- "https://api.twitter.com/oauth/authorize"
my_oauth <- OAuthFactory$new(consumerKey = "your_consumer_key",
                             consumerSecret = "your_consumer_secret",
                             requestURL = requestURL, accessURL = accessURL,
                             authURL = authURL)

# download cacert.pem
download.file(url="http://curl.haxx.se/ca/cacert.pem", destfile="cacert.pem")

# Register OAuth
my_oauth$handshake(cainfo = system.file("CurlSSL", "cacert.pem",
                                        package = "RCurl"))

#Run stream for 2 days with windows of 7 seconds looking for keyword #rstats
stream2Earth("rstats", my_oauth, "screen_name", "retweet_count",
             duration = 2, window = 7)

## End(Not run)
```

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