Package ‘weatherr’

September 8, 2015

Type Package

Title Tools for Handling and Scrapping Instant Weather Forecast Feeds

Version 0.1.2

Date 2015-09-08

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Description Handle instant weather forecasts and geographical information. It combines multiple sources of information to obtain instant weather forecasts.

Depends ggmap, lubridate, RJSONIO, XML

License GPL (>= 2)

NeedsCompilation no

Repository CRAN

Date/Publication 2015-09-08 13:13:48

R topics documented:

- weatherr-package
- ggele
- locationforecast

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Description

Handling and scrapping instant weather forecasts and geographical information

Details
Package: weatherr
Type: Package
Version: 0.1.2
Date: 2015-09-08
License: GPL (>=2)

Author(s)
Stan Yip

ggele Elevation of a set of specific locations

Description
Obtaining elevation at a set of given locations. Note that using this function you are agreeing to the Google Maps API Terms of Service at https://developers.google.com/maps/terms.

Usage
ggele(lat=0, lon=0, output=c("elevation", "elevation/resolution", "all"))

Arguments
  lat, lon    numeric objects. latitude and longitude of a location in decimal degrees
  output      elevation; elevation and its corresponding resolution or the original JSON output (in a list format)

Value
If output="elevation", a numeric vector is returned with the elevation in metres.
If output="elevation/resolution", a data frame is return with the elevation and its corresponding resolution in metres.
If output="all", a list is returned with full JSON query output.

Author(s)
Stan Yip

Examples
  # Get the elevation of a location in Hong Kong
  ## Not run:
  ggele(lat=22.39643, lon=114.1095)

  ## End(Not run)
**Description**

Obtaining weather forecasts from api.met.no Locationforecast service. Note that using this function you are agreeing to the Norwegian Meteorologisk Institutt conditions of service at http://api.met.no/conditions_service.html. Also, using the location query option you are agreeing to the Google Maps API Terms of Service at https://developers.google.com/maps/terms.

**Usage**

```
locationforecast(lat, lon, elevation=NULL, location=NULL, exact=TRUE, tz=Sys.timezone())
```

**Arguments**

- **lat, lon** numeric objects. latitude and longitude of a location in decimal degrees
- **elevation** optional numeric object. metres above sea level
- **location** optional character object. query latitude, longitude and elevation of the location using Google map service
- **exact** logical, indicating an exact time or an interval period forecasts
- **tz** time zone format. system time zone by default

**Details**

If exact=FALSE, precipitation and temperature range can be obtained since these are computed as interval quantities.

**Value**

If exact=TRUE, A data frame is returned with the following quantities:

- **time** time of the forecasts
- **temperature** temperature (Celsius)
- **windDirection** wind direction (degree)
- **windSpeed_mps** wind speed (mps)
- **windSpeed_beaufort** wind speed (Beaufort scale)
- **windSpeed_name** wind speed category
- **windGust** gust (mps)
- **humidity** humidity (percentage)
- **pressure** atmospheric pressure (hPa)
- **cloudiness** clouds cover (percentage)
lowClouds        low clouds cover (percentage)
mediumClouds    medium clouds cover (percentage)
highClouds      high clouds cover (percentage)
dewpointTemperature
dewpoint temperature (Celsius)

If exact=FALSE, A data frame is returned with the following quantities:
timefrom         the start time of interval for the forecasts
 timeto          the end time of interval for the forecasts
 precipitation   precipitation amount (mm)
 minTemperature   minimum temperature in the interval (Celsius)
 maxTemperature   maximum temperature in the interval (Celsius)
 weather_id      weather category

Author(s)
Stan Yip

Examples

## Not run:
# Get exact time location forecast of Hong Kong
locationforecast(lat=22.39643,lon=114.1095)
# Get time interval location forecast of Malta
locationforecast(lat=35.9375,lon=14.37542,exact=FALSE)
# Get exact time location forecast of Cape Town, South Africa with timezone 'Africa/Johannesburg'
locationforecast(location='Cape Town, South Africa', tz='Africa/Johannesburg')

## End(Not run)
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