Package ‘weatherr’

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Type Package
Title Tools for Handling and Scraping Instant Weather Forecast Feeds
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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
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weatherr-package Tools for handling and scraping instant weather feeds

Description

Handling and scraping instant weather forecasts and geographical information

Details
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
```r
ggele(lat=0,lon=0, output=c('elevation','elevation/resolution','all'),key=NULL)
```

Arguments
- `lat`: numeric objects. latitude and longitude of a location in decimal degrees
- `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)
- `key`: Google API key

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

Usage

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

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
key            Google API key

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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