Package 'geonames'

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Type Package

Title Interface to www.geonames.org web service

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Depends R (>= 2.2.0)

Imports rjson

Description Code for querying the web service at www.geonames.org

License GPL-3

LazyLoad yes

BugReports https://github.com/ropensci/geonames/issues

NeedsCompilation no

Repository CRAN

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R topics documented:

`geonames` *Query the geonames web API for geographic data*

Description

www.geonames.org is a service where you can query for global geographic data such as administrative areas, populated places, weather data etc.

Details

The functions in this package are mostly thin wrappers to the API calls documented at the geonames web services overview http://www.geonames.org/export/ws-overview.html.

A set of example calls are supplied in a file with the package. Once you have set your geonames username with `options(geonamesUsername="myusernamehere")` you can run this with `source(system.file("tests","testing.R",package="geonames"),echo=TRUE)`

`GNcities` *find cities*

Description

Search for cities

Usage

```
GNcities(north, east, south, west, lang = "en", maxRows = 10)
```

Arguments

north	north bound
east	east bound
south	south bound
west	west bount
lang	language code
maxRows	max number of records to return

Details

find cities

API doc for GNcities is at http://www.geonames.org/export/JSON-webservices.html#citiesJSON

Value

city records

Author(s)

Barry Rowlingson

GNcountryCode *country code for location*

Description

Get country code

Usage

```
GNcountryCode(lat, lng, lang = "", radius = "")
```

Arguments

lat	latitude
lng	longitude
lang	language code
radius	radius size

Details

country code for location

API doc for GNcountryCode is at http://www.geonames.org/export/web-services.html#countrycode

Value

country record

Author(s)

Barry Rowlingson

`GNcountryInfo` *country info*

Description

Get country info

Usage

```
GNcountryInfo(country = "", lang = "")
```

Arguments

`country`	country code
`lang`	language code

Details

country info

API doc for GNcountryInfo is at http://www.geonames.org/export/web-services.html#countryInfo

Value

country record info

Author(s)

Barry Rowlingson

GNcountrySubdivision *country code and subdivision*

Description

country code and admin subdivision

Usage

```
GNcountrySubdivision(lat, lng, lang = "en", radius = "", maxRows = 10)
```

Arguments

lat	latitude
lng	longitude
lang	language code
radius	search radius
maxRows	max number of returned records

Details

looks up country and admin subdivisions

API doc for GNcountrySubdivision is at http://www.geonames.org/export/web-services.html#countrysubdiv

Value

iso country code

Author(s)

Barry Rowlingson

GNearthquakes *recent earthquakes*

Description

recent earthquakes

Usage

```
GNearthquakes(north, east, south, west, date, minMagnitude, maxRows = 10)
```

Arguments

north	north bound
east	east bound
south	south bound
west	west bound
date	optional date
minMagnitude	optional minimal magnitude
maxRows	max records to return

Details

get recent earthquakes in a region

API doc for GNearthquakes is at http://www.geonames.org/export/JSON-webservices.html#earthquakesJSON

Value

earthquake records

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNearthquakes(north=44.1,south=-9.9,east=-22.4,west=55.2)

## End(Not run)
```

GNfindNearby *nearby search*

Description

find nearby entities

Usage

```
GNfindNearby(...)
```

Arguments

...	search parameters

Details

nearby search

API doc for GNfindNearby is at http://www.geonames.org/export/web-services.html#findNearby

Value

matched records

Author(s)

Barry Rowlingson

GNfindNearbyPlaceName *populated place search*

Description

find nearby populated place

Usage

```
GNfindNearbyPlaceName(lat, lng, radius = "", maxRows = "10",
  style = "MEDIUM")
```

Arguments

lat	latitude
lng	longitude
radius	search radius
maxRows	max records returned
style	verbosity of record

Details

search for populated places

API doc for GNfindNearbyPlaceName is at http://www.geonames.org/export/web-services.html#findNearbyPlaceName

Value

nearby populated place records

Author(s)

Barry Rowlingson

GNfindNearbyPostalCodes *find postal code*

Description

find postal code by lat long or code

Usage

```
GNfindNearbyPostalCodes(...)
```

Arguments

...	search parameters, see geonames web docs for details

Details

find postal code

API doc for GNfindNearbyPostalCodes is at http://www.geonames.org/export/web-services.html#findNearbyPostalCodes

Value

postal code records

Author(s)

Barry Rowlingson

GNfindNearbyStreets *nearby street finding*

Description

find nearby streets (US only)

Usage

```
GNfindNearbyStreets(lat, lng)
```

Arguments

lat	latitude
lng	longitude

Details

for a lat-long, find nearby US streets

API doc for GNfindNearbyStreets is at http://www.geonames.org/maps/us-reverse-geocoder.html#findNearbyStreets

Value

street records

Author(s)

Barry Rowlingson

GNfindNearByWeather *weather at location*

Description

get weather at location

Usage

```
GNfindNearByWeather(lat, lng)
```

Arguments

lat	latitude
lng	longitude

Details

get weather

API doc for GNfindNearByWeather is at http://www.geonames.org/export/JSON-webservices.html#findNearByWeatherJSON

Value

weather record

Note

check capitalisation of 'NearBy'

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNfindNearByWeather(57,-2)

## End(Not run)
```

`GNfindNearbyWikipedia` *nearby wikipedia entries*

Description

find nearby wikipedia entries

Usage

```
GNfindNearbyWikipedia(...)
```

Arguments

`...`	see geonames.org documentation

Details

search wikipedia entries by lat/lng or location name parameters

API doc for GNfindNearbyWikipedia is at http://www.geonames.org/export/wikipedia-webservice.html#findNearbyWikipedia

Value

wikipedia entries

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNfindNearbyWikipedia(postalcode=8775,country="CH",radius=10)

## End(Not run)
```

GNfindNearestAddress *nearest address*

Description

find nearest street and address

Usage

```
GNfindNearestAddress(lat, lng)
```

Arguments

lat	latitude
lng	longitude

Details

search US for nearest street and address

API doc for GNfindNearestAddress is at http://www.geonames.org/maps/us-reverse-geocoder.html#findNearestAddress

Value

address record

Author(s)

Barry Rowlingson

GNfindNearestIntersection *nearest intersection*

Description

search US for nearest intersection

Usage

```
GNfindNearestIntersection(lat, lng)
```

Arguments

lat	latitude
lng	longitude

Details

finds nearest intersection

API doc for GNfindNearestIntersection is at http://www.geonames.org/maps/us-reverse-geocoder.html#findNearestIntersection

Value

intersection record

Author(s)

Barry Rowlingson

GNgtopo30 *topo30 height*

Description

height from topo30

Usage

```
GNgtopo30(lat, lng)
```

Arguments

lat	latitude
lng	longitude

Details

get height from topo30 data

API doc for GNgtopo30 is at http://www.geonames.org/export/web-services.html#gtopo30

Value

height record

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNgtopo30(lat=54,lng=-1)

## End(Not run)
```

GNneighbourhood *neighbourhood*

Description

find neighbourhood

Usage

```
GNneighbourhood(lat, lng)
```

Arguments

lat	latitude
lng	longitude

Details

find neighbourhood

API doc for GNneighbourhood is at http://www.geonames.org/export/web-services.html#neighbourhood

Value

neighbourhood records

Author(s)

Barry Rowlingson

GNpostalCodeCountryInfo *postal code info*

Description

countries with postal code info

Usage

```
GNpostalCodeCountryInfo()
```

Details

list countries with postal code info

API doc for GNpostalCodeCountryInfo is at http://www.geonames.org/export/web-services.html#postalCodeCountryInfo

Value

list of countries with postal codes on geonames

Author(s)

Barry Rowlingson

`GNpostalCodeLookup` *postal code lookup*

Description

postal code lookup

Usage

```
GNpostalCodeLookup(...)
```

Arguments

...	parameters

Details

postal code lookup

API doc for GNpostalCodeLookup is at http://www.geonames.org/export/web-services.html#postalCodeLookupJSON

Value

list of places for a given input postal code

Author(s)

Barry Rowlingson

GNpostalCodeSearch *postal code search*

Description

search for postal code

Usage

```
GNpostalCodeSearch(...)
```

Arguments

...	search parameters

Details

full text search for postal codes

API doc for GNpostalCodeSearch is at http://www.geonames.org/export/web-services.html#postalCodeSearch

Value

postal code record

Author(s)

Barry Rowlingson

GNsearch *search geonames*

Description

search geonames

Usage

```
GNsearch(...)
```

Arguments

...	search parameters

Details

general search call

API doc for GNsearch is at http://www.geonames.org/export/geonames-search.html

Value

matched records

Author(s)

Barry Rowlingson

`GNsrtm3` *srtm3 height*

Description

height from srtm3 data

Usage

```
GNsrtm3(lat, lng)
```

Arguments

`lat`	latitude
`lng`	longitude

Details

get srtm3 height

API doc for GNsrtm3 is at http://www.geonames.org/export/web-services.html#srtm3

Value

height record

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNsrtm3(lat=54,lng=-1)

## End(Not run)
```

GNtimezone *timezone for location*

Description

get timezone

Usage

```
GNtimezone(lat, lng, radius = 0)
```

Arguments

lat	latitude
lng	longitude
radius	sesarch radius

Details

timezone for location

API doc for GNtimezone is at http://www.geonames.org/export/web-services.html#timezone

Value

time zone record

Author(s)

Barry Rowlingson

GNweather *weather stations in box*

Description

weather stations in region

Usage

```
GNweather(north, east, south, west, maxRows = 10)
```

Arguments

north	north bound
east	east bound
south	south bound
west	west bound
maxRows	max records to return

Details

get weather stations in region with latest readings

Value

weather records

Author(s)

Barry Rowlingson

GNweatherIcao *ICAO weather station data*

Description

weather record from ICAO station

Usage

```
GNweatherIcao(ICAO)
```

Arguments

ICAO	ICAO code

Details

get most recent ICAO station data

API doc for GNweatherIcao is at http://www.geonames.org/export/JSON-webservices.html#weatherIcaoJSON

Value

weather record

Author(s)

Barry Rowlingson

GNwikipediaBoundingBox *wikipedia articles in a box*

Description

wikipedia articles in bounding box

Usage

```
GNwikipediaBoundingBox(...)
```

Arguments

...	parameters (north, south, east, west etc.)

Details

find articles in a box

API doc for GNwikipediaBoundingBox is at http://www.geonames.org/export/wikipedia-webservice.html#wikipediaBoundingBox

Value

wikipedia records

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNwikipediaBoundingBox(north=44.1,south=-9.9,east=-22.4,west=55.2)

## End(Not run)
```

GNwikipediaSearch *search wikipedia*

Description

wikipedia fulltext search

Usage

```
GNwikipediaSearch(q, maxRows = 10)
```

Arguments

q	search string
maxRows	maximum returned records

Details

find geolocated articles in wikipedia

API doc for GNwikipediaSearch is at http://www.geonames.org/export/wikipedia-webservice.html#wikipediaSearch

Value

wikipedia entries

Author(s)

Barry Rowlingson

Examples

```
## Not run:
GNwikipediaSearch("london")

## End(Not run)
```

`hierarchy` *Admin area hierarchy*

Description

See http://www.geonames.org/export/ws-overview.html for a full description of valid arguments and return values

Usage

```
GNchildren(geonameId, ...)

GNhierarchy(geonameId, ...)

GNsiblings(geonameId, ...)

GNneighbours(geonameId, ...)
```

Arguments

`geonameId`	a geonames ID value
`...`	other parameters to pass to geonames

Details

API doc for GNchildren is at http://www.geonames.org/export/place-hierarchy.html#children

API doc for GNhierarchy is at http://www.geonames.org/export/place-hierarchy.html#hierarchy

API doc for GNsiblings is at http://www.geonames.org/export/place-hierarchy.html#siblings

API doc for GNneighbours is at http://www.geonames.org/export/place-hierarchy.html#neighbours

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