

Package ‘geonames’

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Type Package

Title Interface to www.geonames.org web service

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

License GPL-3

LazyLoad yes

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geonames-package

R Interface to the www.geonames.org web query service

Description

This package wraps calls to the web service on www.geonames.org, to provide a number of functions for geographic information queries. It can query administrative regions, time zones, weather info, cities, wikipedia and so on. For more documentation go to <http://www.geonames.org/> and check the web service info list.

Note that by default the package uses www.geonames.org as the host name. In the past the service has occasionally changed its host name, so in order to change the host name used by the package you can set it using `options(geonamesHost="www2.geonames.org")` in R.

Details

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Type:	Package
Version:	0.5
Date:	2008-10-10
License:	GPL v3
LazyLoad:	yes

Author(s)

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Environment

Topographic queries

Description

Get topographic (height) information.

Usage

```
GNfindNearByWeather(lat, lng)
GNweather(north, east, south, west, maxRows)
GNweatherIcao(ICAO)
GNearthquakes(north, east, south, west, date, minMagnitude, maxRows)
```

Arguments

lat	Decimal latitude. North is positive
lng	Decimal longitude. East is positive
north, east, south, west	Bounding box region in decimal degrees
maxRows	Limit number of returned rows
ICAO	ICAO weather station code
date	earthquake query date
minMagnitude	Minimum earthquake magnitude

Details

These functions query geonames for information about weather and earthquakes.

Note capitalisation of 'NearBy'...

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

Value

List or data frame objects with the query results.

General

General Queries

Description

Get topographic (height) information.

Usage

```
GNcountryCode(lat, lng, lang, radius)
GNcountryInfo(country, lang)
GNcities(north, east, south, west, lang, maxRows)
GNtimezone(lat, lng)
```

Arguments

lat	Decimal latitude. North is positive
lng	Decimal longitude. East is positive
radius	Search radius in km
lang	Language for internationalised returned text
country	Two-character country code
north, east, south, west	Decimal degree bounding box
maxRows	Limit on returned rows

Details

These functions query geonames for information about various things.

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

Value

List or data frame objects with the query results.

Hierarchy

Admin area hierarchies

Description

These are functions for administrative hierarchies

Usage

```
GNchildren(geonameId,...)
GNhierarchy(geonameId,...)
GNsiblings(geonameId,...)
GNneighbours(geonameId,...)
GNcountrySubdivision(lat,lng,lang,radius,maxRows)
```

Arguments

geonameId	A geoname identifier
lat	Decimal latitude. North is positive
lng	Decimal longitude. East is positive
lang	Language for returned text
radius	Search radius
maxRows	Maximum number of rows to return
...	See http://www.geonames.org/export/ws-overview.html for details of arguments to this function

Details

These functions query geonames for information about administrative region hierarchies.

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

Value

List or data frame objects with the query results.

PostalCodes	<i>Postal code queries</i>
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Description

Query geonames for postal codes.

Usage

```
GNfindNearbyPostalCodes(...)
GNpostalCodeLookup(...)
GNpostalCodeSearch(...)
GNpostalCodeCountryInfo()
```

Arguments

... Various query arguments. See <http://www.geonames.org/> for details

Details

These functions query geonames for information about postal codes. Note that geonames only supports postal code lookups in a limited number of countries. The supported country info is returned by GNpostalCodeCountryInfo.

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

Value

List or data frame objects with the query results.

Searching	<i>Searching</i>
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Description

Various geographic searches

Usage

```
GNsearch(...)
GNneighbourhood(lat,lng)
GNfindNearby(...)
GNfindNearbyPlaceName(lat,lng,radius,maxRows,style)
GNfindNearbyStreets(lat,lng)
GNfindNearestAddress(lat,lng)
GNfindNearestIntersection(lat,lng)
```

Arguments

...	Various search arguments
lat	Decimal latitude. North is positive
lng	Decimal longitude. East is positive
radius	Search radius in km
maxRows	Limit on returned rows
style	Verbosity of returned data

Details

These functions query geonames for general spatial searches.

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

Value

List or data frame objects with the query results.

Topography

Topographic queries

Description

Get topographic (height) information.

Usage

```
GNgtopo30(lat, lng)
GNSrtm3(lat, lng)
```

Arguments

lat	Decimal latitude. North is positive
lng	Decimal longitude. East is positive

Details

These functions query geonames for information about elevations. There are interfaces to SRTM3 and Gtopo30 data.

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

Value

List or data frame objects with the query results.

Description

Query Wikipedia with a location or area.

Usage

```
GNfindNearbyWikipedia(...)  
GNwikipediaBoundingBox(...)  
GNwikipediaSearch(q,maxRows)
```

Arguments

...	Search parameters - see DETAILS
q	Query string
maxRows	Maximum number of rows to return

Details

These functions query geonames for information about places from Wikipedia.

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

Value

List or data frame objects with the query results.

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