

# Package ‘geonames’

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**Type** Package

**Title** Interface to www.geonames.org web service

**Version** 0.8

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**Depends** R (>= 2.2.0), rjson

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

**License** GPL-3

**LazyLoad** yes

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**Repository** CRAN

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geonames-package     *R Interface to the www.geonames.org web query service*

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### Description

This package wraps calls to the web service on [www.geonames.org](http://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](http://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

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

### Author(s)

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Environment     *Topographic queries*

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### 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.

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General

*General Queries*

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**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.

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Hierarchy

*Admin area hierarchies*

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**Description**

These are functions for administrative hierarchies

**Usage**

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

**Arguments**

<code>geonameId</code>	A geoname identifier
<code>lat</code>	Decimal latitude. North is positive
<code>lng</code>	Decimal longitude. East is positive
<code>lang</code>	Language for returned text
<code>radius</code>	Search radius
<code>maxRows</code>	Maximum number of rows to return
<code>...</code>	See <a href="http://www.geonames.org/export/ws-overview.html">http://www.geonames.org/export/ws-overview.html</a> 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.

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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.

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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.

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Topography

*Topographic queries*

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**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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