

Package ‘zipcode’

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Version 1.0

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Title U.S. ZIP Code database for geocoding

Description This package contains a database of city, state, latitude, and longitude information for U.S. ZIP codes from the CivicSpace Database (August 2004) augmented by Daniel Coven’s federalgovernmentzipcodes.us web site (updated January 22, 2012). Previous versions of this package (before 1.0) were based solely on the CivicSpace data, so an original version of the CivicSpace database is also included.

Depends R (>= 2.10)

Repository CRAN

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zipcode-package	<i>U.S. ZIP code database for geocoding</i>
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Description

This package contains a database of city, state, latitude, and longitude information for U.S. ZIP codes from the CivicSpace Database (August 2004) and augmented by Daniel Coven's federalgovernmentzipcodes.us web site (updated January 22, 2012). Previous versions of this package (before 1.0) were based solely on the CivicSpace data, so an original version of the CivicSpace database is also included.

Details

Package:	zipcode
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Title:	U.S. ZIP code database for geocoding

Author(s)

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clean.zipcodes	<i>clean up and standardize ZIP codes</i>
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Description

Attempts to detect and clean up suspected ZIP codes. Will strip "ZIP+4" suffixes to match format of zipcode data.frame. Restores leading zeros, converts invalid entries to NAs, and returns character vector. Note that this function does not attempt to find a matching ZIP code in the database, but rather examines formatting alone.

Usage

```
clean.zipcodes(zips)
```

Arguments

zips	character vector of suspect entries, will be cast if non-character
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Value

character vector containing cleaned ZIP codes with NAs for non-conforming entries

Author(s)

Jeffrey Breen <jeffrey@atmosgrp.com>

Examples

```
# given a mix of possible zip codes, including ZIP+4 and foreign postal codes,
# attempt to identify valid zip codes and return character vector:

zips = c(2061, "02142", 2043, "20210", "2061-2203", "SW1P 3JX", "210", '02199-1880')

clean.zipcodes(zips)
# [1] "02061" "02142" "02043" "20210" "02061" NA      "00210" "02199"
```

zipcode	<i>data.frame of city, state, latitude, and longitude for U.S. ZIP codes</i>
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Description

This data.frame contains city, state, latitude, and longitude for U.S. ZIP codes from the CivicSpace Database (August 2004) augmented by Daniel Coven's federalgovernmentzipcodes.us web site (updated on January 22, 2012).

Usage

```
data(zipcode)
```

Format

A data frame with 44,336 observations on the following 5 variables.

zip a character vector

city a character vector

state a character vector

latitude a numeric vector

longitude a numeric vector

Details

Please note that CivicSpace's outdated timezone-related fields have been removed with the 1.0 release of this package. The original CivicSpace database is available in its original form in this package's zipcode.civicspace data.frame.

Source

Daniel Coven's federalgovernmentzipcodes.us web site and the CivicSpace US ZIP Code Database written by Schuyler Erle <schuyler@geocoder.us>, 5 August 2004. Original CSV files available from <http://federalgovernmentzipcodes.us/free-zipcode-database-Primary.csv>, <http://www.boutell.com/zipcodes/>, and <http://mappinghacks.com/data/>.

References

Data packaged for R by Jeffrey Breen <jeffrey@atmosgrp.com>

Examples

```
data(zipcode)

subset(zipcode, city=='Cambridge'&state=='MA')
#   zip    city state latitude longitude
# 701 02138 Cambridge MA 42.37915 -71.12803
# 702 02139 Cambridge MA 42.36435 -71.10431
# 703 02140 Cambridge MA 42.39333 -71.12837
# 704 02141 Cambridge MA 42.37052 -71.08443
# 705 02142 Cambridge MA 42.36230 -71.08412
# 776 02238 Cambridge MA 42.44640 -71.45941
# 777 02239 Cambridge MA 42.44640 -71.45941
```

zipcode.civicspace *original CivicSpace Database of U.S. ZIP codes*

Description

This data.frame contains the CivicSpace US ZIP Code Database, August 2004.

Usage

```
data(zipcode.civicspace)
```

Format

A data frame with 43191 observations on the following 7 variables.

zip a character vector
city a character vector
state a character vector
latitude a numeric vector
longitude a numeric vector
timezone a numeric vector
dst a logical vector

Details

Please note that the data are as published in 2004. No recent changes have been incorporated, including 2006's reorganization of Indiana's time zones. (Thanks to CSIRO's William Venables for the reminder!)

Previous versions of the zipcode package were based solely on this CivicSpace data. As of version 1.0, we are using the database from federalgovernmentzipcodes.us to augment the primary zipcode data.frame which omits the (outdated) timezone and dst fields. This zipcode.civicspace data.frame is being included for backwards compatibility and historical reference.

from the original README:

CivicSpace US ZIP Code Database

written by Schuyler Erle <schuyler@geocoder.us>

5 August 2004

The ZIP code database contained in 'zipcode.csv' contains 43204 ZIP codes for the continental United States, Alaska, Hawaii, Puerto Rico, and American Samoa. The database is in comma separated value format, with columns for ZIP code, city, state, latitude, longitude, timezone (offset from GMT), and daylight savings time flag (1 if DST is observed in this ZIP code and 0 if not).

This database was composed using ZIP code gazetteers from the US Census Bureau from 1999 and 2000, augmented with additional ZIP code information from the Census Bureau's TIGER/Line 2003 data set. Timezone information was added using cartographic data sets from nationalatlas.gov. The database is guaranteed to exclusively contain information gathered from sources in the public domain, and thus be legal to redistribute.

The database is believed to contain over 98% of the ZIP Codes in current use in the United States. The remaining ZIP Codes absent from this database are entirely PO Box or Firm ZIP codes added in the last five years, which are no longer published by the Census Bureau, but in any event serve a very small minority of the population (probably on the order of .1% or less). Although every attempt has been made to filter them out, this data set may contain up to .5% false positives, that is, ZIP codes that do not exist or are no longer in use but are included due to erroneous data sources. The latitude and longitude given for each ZIP code is typically (though not always) the geographic centroid of the ZIP code; in any event, the location given can generally be expected to lie somewhere within the ZIP code's "boundaries".

The database and this README are copyright 2004 CivicSpace Labs, Inc., and are published under a Creative Commons Attribution-ShareAlike license, which requires that all updates must be released under the same license. See <http://creativecommons.org/licenses/by-sa/2.0/> for more details. Please contact schuyler@geocoder.us if you are interested in

receiving updates to this database as they become available.

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Source

CivicSpace US ZIP Code Database written by Schuyler Erle <schuyler@geocoder.us>, 5 August 2004. Original CSV file available from <http://www.boutell.com/zipcodes/> and <http://mappinghacks.com/data/>.

References

Data packaged for R by Jeffrey Breen <jeffrey@atmosgrp.com>

Examples

```
data(zipcode.civicspace)

subset(zipcode.civicspace, city=='Cambridge'&state=='MA')
#      zip      city state latitude longitude timezone  dst
# 698 02138 Cambridge  MA 42.37915 -71.12803      -5 TRUE
# 699 02139 Cambridge  MA 42.36435 -71.10431      -5 TRUE
# 700 02140 Cambridge  MA 42.39333 -71.12837      -5 TRUE
# 701 02141 Cambridge  MA 42.37052 -71.08443      -5 TRUE
# 702 02142 Cambridge  MA 42.36230 -71.08412      -5 TRUE
# 772 02238 Cambridge  MA 42.44640 -71.45941      -5 TRUE
# 773 02239 Cambridge  MA 42.44640 -71.45941      -5 TRUE
```

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