Package 'igoR'

August 13, 2022

```
Title Intergovernmental Organizations Database
Version 0.1.4
Description Tools to extract information from the Intergovernmental
     Organizations ('IGO') Database, version 3, provided by the Correlates
     of War Project <a href="https://correlatesofwar.org/">https://correlatesofwar.org/</a>. See also Pevehouse, J.
     C. et al. (2020). Version 3 includes information from 1815 to 2014.
License GPL (>= 3)
URL https://dieghernan.github.io/igoR/,
     https://github.com/dieghernan/igoR
BugReports https://github.com/dieghernan/igoR/issues
Depends R (>= 2.10)
Suggests countrycode (>= 1.1.0), dplyr (>= 1.0.2), ggplot2, knitr,
     rmarkdown, testthat (>= 3.0.0)
VignetteBuilder knitr
Config/testthat/edition 3
Config/testthat/parallel true
Copyright © 2000-2021 by the Correlates of War
Encoding UTF-8
LazyData true
RoxygenNote 7.2.1
X-schema.org-keywords R, IGO, Correlates of War, Intergovernmental
     Organisations
NeedsCompilation no
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Repository CRAN
Date/Publication 2022-08-13 12:20:05 UTC
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igo_dyadic

Extract the Joint Membership of a pair of Countries across IGOs.

Description

Dyadic version of the data. The unit of observation is a dyad of countries. It provides a summary of the joint memberships of two IGOs over time.

Usage

```
igo_dyadic(country1, country2, year = 1816:2014, ioname = NULL)
```

Arguments

country1	A single state, used as a base of comparison. It could be any valid name or code of a state as specified on states 2016.
country2	A state of vector of states to be compared with country1.
year	Year to be assessed, an integer or an array of year.
ioname	Optional. ioname or vector of ioname corresponding to the IGOs to be assessed. If NULL (the default), all IGOs would be extracted. See codes on igo_search().

Details

This function tries to replicate the information contained in the original file distributed by The Correlates of War Project (dyadic_format3.dta). That file is not included in this package due to its size.

The result is a data frame containing the common years of the states selected via country1, country2, year by rows.

An additional column dyadid, computed as (1000*ccode1)+ccode2 is provided in order to identify relationships.

For each IGO selected via ioname (or all if the default option has been used) a column (using lowercase ioname as identifier) is provided with the following code system:

Category Numerical Value

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No Joint Membership	0
Joint Full Membership	1
Missing data	-9
State Not System Member	-1

If one state in an IGO is a full member but the other is an associate member or observer, that IGO is not coded as a joint membership.

Differences with the original dataset

There are some differences on the results provided by this function and the original dataset on some IGOs regarding the "Missing Data" (-9) and "State Not System Member" (-1). However it is not clear how to fully replicate those values.

See Codebook Version 3 IGO Data

Value

A coded data frame representing the years and country dyad (rows) and the IGOs selected (columns). See Details

Source

Codebook Version 3 IGO Data for full reference.

References

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503.

See Also

```
state_year_format3, states2016, igo_search().
```

Examples

```
USA_CAN <- igo_dyadic("USA", "Spain")
nrow(USA_CAN)
ncol(USA_CAN)

# Using custom parameters
igo_dyadic(
  country1 = "France",
  country2 =
    c("Sweden", "Austria"),
  year = 1992:1995,
  ioname = "EU"
)</pre>
```

igo_members

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Extract Members of an IGO

Description

Extract all the countries belonging to an IGO on a specific date.

Usage

```
igo_members(ioname, year = NULL, status = "Full Membership")
```

Arguments

ioname Any valid ioname of an IGO as specified on igo_year_format3. It could be also

a vector of IGOs.

year Year to be assessed, an integer or an array of year. If NULL the latest year avail-

able of the IGO would be extracted.

status Character or vector with the membership status to be extracted. See Details on

state_year_format3.

Value

A dataframe.

See Also

```
igo_year_format3, igo_search(), state_year_format3.
```

Examples

```
# Composition on two different dates
igo_members("EU", year = 1993)
igo_members("EU")
igo_members("NAFTA", year = c(1995:1998))

# Extract different status
igo_members("ACCT", status = c("Associate Membership", "Observer"))

# States no members of the UN
igo_members("UN", status = "No Membership")

# Vectorized

igo_members(c("NAFTA", "EU"), year = 1993)

# Use countrycodes package to get additional codes
if (requireNamespace("countrycode", quietly = TRUE)) {
    library(countrycode)
```

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```
EU <- igo_members("EU")
EU$iso3c <- countrycode(EU$ccode,
    origin = "cown",
    destination = "iso3c"
)
EU$continent <- countrycode(EU$ccode,
    origin = "cown",
    destination = "continent"
)
head(EU)
}</pre>
```

igo_search

Search and Find an IGO

Description

Search any IGO by name or string pattern.

Usage

```
igo_search(pattern = NULL, exact = FALSE)
```

Arguments

pattern regex pattern. If NULL the function returns a dataset with all the IGOs on igo_year_format3.

Integer values are accepted.

exact Logical. When TRUE only exact matches are returned.

Details

The information of each IGO is retrieved based on the last year available on igo_year_format3.

An additional column label is provided. This column is a clean version of longorgname

Value

A dataframe.

See Also

```
igo_year_format3
```

igo_search_states

Examples

```
# All values
all <- igo_search()

nrow(all)
colnames(all)

# Search by pattern
igo_search("EU")[, 1:3]

igo_search("EU", exact = TRUE)[, 1:3]

# With integers
igo_search(10)[, 1:3]

igo_search(10, exact = TRUE)[, 1:3]

# Several patterns (regex style)
igo_search("NAFTA|UN|EU")[, 1:3]

# Several patterns Exact (regex style)
igo_search("^NAFTA$|^UN$|^EU$")[, 1:3]</pre>
```

igo_search_states

Finds codes and names of a state

Description

Extract all the memberships of a state on a specific date.

Usage

```
igo_search_states(state)
```

Arguments

state

Any valid name or code of a state as specified on states2016(). It could be also an array of states.

Value

A dataframe.

See Also

```
states2016().
```

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Examples

```
igo_search_states("Spain")
igo_search_states(c(20, 150))
igo_search_states("congo")
igo_search_states(c("Germany", "papal states"))
igo_search_states(c("FRN", "United Kingdom", 240, "italy"))
```

Description

Extract all the memberships of a state on a specific date.

Usage

```
igo_state_membership(state, year = NULL, status = "Full Membership")
```

Arguments

Any valid name or code of a state as specified on states 2016. It could be also a vector of states

vector of states

year Year to be assessed, an integer or an array of year. If NULL the latest year avail-

able of the state would be extracted.

status Character or vector with the membership status to be extracted. See Details on

igo_year_format3.

Value

A dataframe.

See Also

```
igo_year_format3, igo_search_states(), states2016.
```

Examples

```
# Memberships on two different dates
igo_state_membership("Spain", year = 1850)
igo_state_membership("Spain", year = 1870)
igo_state_membership("Spain", year = 1880:1882)
# Last year
igo_state_membership("ZAN")[, 1:7]
```

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```
# Use codes to get countries
igo_state_membership("2", year = 1865)
# Extract different status
igo_state_membership("kosovo",
 status = c(
    "Associate Membership",
    "Observer",
    "Full Membership"
)
# Vectorized
igo_state_membership(c("usa", "spain"),
 year = 1870:1871
# Use countrycodes package to get additional codes
if (requireNamespace("countrycode", quietly = TRUE)) {
 library(countrycode)
 IT <- igo_state_membership("Italy", year = 1880)</pre>
 IT$iso3c <- countrycode(IT$ccode,</pre>
   origin = "cown",
    destination = "iso3c"
 head(IT)
}
```

igo_year_format3

Intergovernmental Organizations (IGO) by year

Description

Data on IGOs from 1815-2014, at the IGO-year level. Contains one record per IGO-year (with years listed at 5 year intervals through 1965, and annually thereafter).

Format

data frame with 19335 rows. Relevant fields:

- ioname: Short abbreviation of the IGO name.
- orgname: Full IGO name.
- year: Calendar Year.
- afghanistan...zimbabwe: status of that state in the IGO. See Details.
- sdate: start date (year) that the IGO started.
- deaddate: dead date (year) that the IGO dead.

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- longorgname: a longer version of the IGOs name (including previous names)
- ionum: IGO id number in v2.1 and v3.0 of the data.
- version: COW version number.

See Codebook Version 3 IGO Data for full reference.

Details

Possible value of the status of that state in the IGO are:

Category	Numerical value
No Membership	0
Full Membership	1
Associate Membership	2
Observer	3
Missing data	-9
State Not System Member	-1

Note

Raw data used internally by igoR.

Source

Intergovernmental Organizations (v3), The Correlates of War Project (IGO Data Stata Files).

References

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503.

See Also

Other datasets: state_year_format3, states2016

states2016	State System Membership (v2016)	

Description

The list of states with COW abbreviations and ID numbers, plus the field state from state_year_format3.

10 states 2016

Format

data frame with 243 rows:

• ccode: COW country number.

• **stateabb**: COW state abbreviation (3 characters).

• statenme: COW state name.

• styear...endday: Fields to identify the begining and the end of each tenure.

• version: Data file version number.

• **state**: Abbreviated state name as appear in state_year_format3.

Details

This data set contains the list of states in the international system as updated and distributed by the Correlates of War Project.

This data set contains the list of states in the international system as updated and distributed by the Correlates of War Project. These data sets identify states, their standard Correlates of War "country code" or state number (used throughout the Correlates of War project data sets), state abbreviations, and dates of membership as states and major powers in the international system.

The Correlates of War project includes a state in the international system from 1816-2016 for the following criteria:

- **Prior to 1920** the entity must have had a population greater than 500,000 and have had diplomatic missions at or above the rank of charge d'affaires with Britain and France.
- After 1920 the entity must be a member of the League of Nations or the United Nations, or have a population greater than 500,000 and receive diplomatic missions from two major powers.

Note

state variable added to original data to help comparison across datasets on this package.

Source

State System Membership (v2016), The Correlates of War Project.

References

Correlates of War Project. 2017 "State System Membership List, v2016." Online, https://correlatesofwar.org/.

See Also

Other datasets: igo_year_format3, state_year_format3

state_year_format3

state_year_format3	Country membership to IGO by year
· ·	

Description

Data on IGOs from 1815-2014, at the country-year level. Contains one record per country-year (with years listed at 5 year intervals through 1965, and annually thereafter).

Format

data frame with 15557 rows. Relevant fields:

- ccode: COW country number, see states 2016.
- year: Calendar Year.
- **state**: Abbreviated state name, identical to variable names in igo_year_format3.
- aaaid...wassen: IGO variables containing information on state membership status. See Details

See Codebook Version 3 IGO Data

Details

Possible value of the status of that state in the IGO are:

Category	Numerical value
No Membership	0
Full Membership	1
Associate Membership	2
Observer	3
Missing data	-9
IGO Not In Existence	-1

Note

Raw data used internally by igoR.

Source

Intergovernmental Organizations (v3), The Correlates of War Project (IGO Data Stata Files)

References

Pevehouse, Jon CW, Timothy Nordstrom, Roseanne W McManus, and Anne Spencer Jamison. "Tracking Organizations in the World: The Correlates of War IGO Version 3.0 Datasets." *Journal of Peace Research* 57, no. 3 (May 2020): 492-503.

state_year_format3

See Also

 $\verb|country| code::country| code()| to convert between different country code schemes.$

Other datasets: igo_year_format3, states2016

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