Package 'igoR'

October 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 <https://correlatesofwar.org/>. 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,
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R topics documented:

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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 states2016.
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**

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"
)
```

---

igo_members   *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 available 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)
```

```
EU <- igo_members("EU")
EU$iso3c <- countrycode(EU$ccode,
  origin = "cown",
  destination = "iso3c"
)
EU$continent <- countrycode(EU$ccode,
  origin = "cown",
  destination = "continent"
)

head(EU)
}
```

---

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]()

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]
```

---

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().

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"))
```

---

igo_state_membership   *Extract Memberships of a State*

Description

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

Usage

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

Arguments

state	Any valid name or code of a state as specified on states2016. It could be also a vector of states
year	Year to be assessed, an integer or an array of year. If NULL the latest year available 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]
```

```
# 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)
  IT$iso3c <- countrycode(IT$ccode,
    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.

- **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`

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states2016 *State System Membership (v2016)*

Description

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

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

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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 states2016.
- **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.

See Also

`countrycode::countrycode()` to convert between different country code schemes.

Other datasets: `igo_year_format3`, `states2016`

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