Package 'dissPkg'

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Type Package

Title A tool to support my PhD research on empirical analysis of countries, characteristics, & networks

Version 0.1.0

Author Harold Walbert [aut, cre]

Maintainer Harold Walbert <haroldwalbert@gmail.com>

Description A tool that connects high quality data from across a variety of sources to allow creation of empirical populations that can be used to instantiate agent based and other simulation models. This package includes functions to explore important demographic, economic, social, and political characteristics about countries. It also contains functions to explore a countries position in different types of international networks.

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Encoding UTF-8

LazyData true

Depends tidyverse, igraph, ggplot2, visNetwork, gridExtra, plotly

RoxygenNote 7.1.1

R topics documented:

Alliances *Formal Alliances (v4.1)*

Description

More information available here: CoW Alliance Data

Usage

```
data(Alliances)
```

Format

A data table with 148,258 rows and 19 columns

References

Gibler, Douglas M. 2009. International military alliances, 1648-2008. CQ Press.

CountryCodes *COW Country Codes*

Description

The list of states with COW abbreviations and ID numbers

Usage

```
data(CountryCodes)
```

Format

A data table with 217 rows and 3 columns

Note

Duplicates were present in the original dataset from CoW (it containted 243 observations as opposed to the 217 unique ones included in this dataset)

References

Correlates of War

CountryCredibilityCalc

A function to analyze countries involved in disputes and how often they are credible after entering into a formal defense agreement

Description

A function to analyze countries involved in disputes and how often they are credible after entering into a formal defense agreement

Usage

```
CountryCredibilityCalc(Analyze4_5 = F, ReturnDetail = F)
```

Arguments

Analyze4_5	When TRUE, Disputes at both levels 4 (Use of Force) & level 5 (War) are analyzed. When FALSE, only level 5 (War) is analyzed
ReturnDetail	Defaults to FALSE. When TRUE, detail data available for each dispute available will be returned

Value

A data frame called CountryCredibility giving results of calculation

Examples

```
CountryCredibilityCalc()
```

CountryLookup

Report the Country Identification information from the CoW Country Code list

Description

Report the Country Identification information from the CoW Country Code list

Usage

```
CountryLookup(x, abb = TRUE)
```

Arguments

x	A number value that corresponds to a Country in the CoW country codes dataset
abb	TRUE by default. When TRUE and given a CCode it will return the country abbreviation. When FALSE and given a CCode it will return the full country name

Value

Depending on input: Country Name, Country Abbreviation, or CCode if input is CCode or abbreviation; CCode if input is Country Name

Examples

```
CountryLookup(2)
CountryLookup("China")
```

`CreateNetwork` *Analyze defense and trade networks A function to specify, create, & visualize a year of country level alliance data or trade data*

Description

Analyze defense and trade networks

A function to specify, create, & visualize a year of country level alliance data or trade data

Usage

```
CreateNetwork(
  YEAR = 2007,
  Alliance_Type = "defense",
  visualize = TRUE,
  returnDetail = TRUE
)
```

Arguments

`YEAR`	A number value that specifies the desired year. Defaut is 2007
`Alliance_Type`	Defaults to the value of "defense". Can take the alliance types of "neutrality", "nonaggression", "entente", "trade" or "allAlliances"
`visualize`	Defaults to TRUE. When FALSE the function will not create the network visualization

Value

A network graph (with summary statistics) and data frame with specified alliance data

Examples

```
CreateNetwork()
CreateNetwork(YEAR = 1960, Alliance_Type = "entente")
```

`DisputeInfo` *A function giving information about a given dispute at the level 4 or 5 conflict level, including originators, years, fatalities, level of dispute, alliances, and credibility results*

Description

A function giving information about a given dispute at the level 4 or 5 conflict level, including originators, years, fatalities, level of dispute, alliances, and credibility results

Usage

```
DisputeInfo(DisputeNumber)
```

Arguments

`DisputeNumber`	A the unique ID number corresponding to the variable called "dispnum3" used in the MID datasets

Value

Multiple data frames giving information about the selected dispute

Examples

```
DisputeInfo(258) #Will give you WWII
DisputeInfo(1206) #Will give you the "Football War"
```

`DisputeNarrative` *A function to generate the narrative of a dispute, giving information about a given dispute at the level 4 or 5 conflict level, including originators, years, fatalities, level of dispute, alliances, and credibility results*

Description

A function to generate the narrative of a dispute, giving information about a given dispute at the level 4 or 5 conflict level, including originators, years, fatalities, level of dispute, alliances, and credibility results

Usage

```
DisputeNarrative(DisputeNumber)
```

Arguments

`DisputeNumber`	A the unique ID number corresponding to the variable called "dispnum3" used in the MID datasets

Value

Multiple data frames giving information about the selected dispute

Examples

```
DisputeInfo(258) #Will give you WWII
DisputeInfo(1206) #Will give you the "Football War"
```

`DisputesOverTime` *Calculate time series network level measures of alliance and trade networks*

Description

Calculate time series network level measures of alliance and trade networks

Usage

```
DisputesOverTime(HostilityLevel = "")
```

Arguments

`HostilityLevel`	Can take values of Hostility Level (1,2,3,4,5) or the strings "high" & "low" - defaults to show all levels of disputes

Value

Data frame detailing disputes & visualization of results over time

Examples

```
DisputesOverTime()
DisputesOverTime(HostilityLevel = 3)
DisputesOverTime(HostilityLevel = "low")
```

`MIDA_4.01` *MIDA 4.01 - Militarized Interstate Dispute Data*

Description

Data on MIDs from 1816-2010, at the dispute level. Contains one record per militarized dispute.

Usage

```
data(MIDA_4.01)
```

Format

A data table with 2,586 rows and 24 columns

Details

More information available here: CoW Militarized Interstate Disputes

References

Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 Data Set: Procedures, Coding Rules, and Description." Conflict Management and Peace Science. Forthcoming.

Ghosn, Faten, and Scott Bennett. 2003. Codebook for the Dyadic Militarized Interstate Incident Data, Version 3.10. Online: http://correlatesofwar.org.

`MIDB_4.01` *MIDB 4.01 - Militarized Interstate Dispute Data*

Description

Data on MIDs from 1816-2010, at the participant level. Contains one record per militarized dispute participant.

Usage

```
data(MIDB_4.01)
```

Format

A data table with 6,132 rows and 20 columns

Details

More information available here: CoW Militarized Interstate Disputes

References

Palmer, Glenn, Vito D'Orazio, Michael Kenwick, and Matthew Lane. 2015. "The MID4 Data Set: Procedures, Coding Rules, and Description." Conflict Management and Peace Science. Forthcoming.

Ghosn, Faten, and Scott Bennett. 2003. Codebook for the Dyadic Militarized Interstate Incident Data, Version 3.10. Online: http://correlatesofwar.org.

NetworksOverTime *Calculate time series network level measures of alliance and trade networks*

Description

Calculate time series network level measures of alliance and trade networks

Usage

```
NetworksOverTime(Alliance_Type = "defense")
```

Arguments

Alliance_Type	Defaults to the value of "defense". Can take the alliance types of "neutrality", "nonaggression", "entente", or "allAlliances"

Value

Data frame of network level measures over the time period 1870 - 2012

Examples

```
NetworksOverTime()
NetworksOverTime(Alliance_Type = "defense")
```

NMC *National Material Capabilities (v5.0)*

Description

The National Material Capabilities data set contains annual values for total population, urban population, iron and steel production, energy consumption, military personnel, and military expenditure of all state members, currently from 1816-2012. The widely-used Composite Index of National Capability (CINC) index is based on these six variables and included in the data set.

Usage

```
data(NMC)
```

Format

A data table with 15,171 rows and 11 columns

Details

- stateabb: 3 letter country Abbreviation
- ccode: COW Country Code
- year: Year of observation
- milex: Military Expenditures (For 1816-1913: thousands of current year British Pounds. For 1914+: thousands of current year US Dollars.)
- milper: Military Personnel (thousands)
- irst: Iron and steel production (thousands of tons)
- pec: Primary energy consumption (thousands of coal-ton equivalents)
- tpop Total Population (thousands)
- upop: Urban population (In thousands. For 1816-2001: population in cities w/>=100k; For 2002-2012: population in cities w/>=300k)
- cinc: Composite Index of National Capability (CINC) score
- version: Version number of the data set

References

Singer, J. David, Stuart Bremer, and John Stuckey. (1972). "Capability Distribution, Uncertainty, and Major Power War, 1820-1965." in Bruce Russett (ed) Peace, War, and Numbers, Beverly Hills: Sage, 19-48.

`Religion` *World Religion Data (v1.1) - WRP National Data*

Description

This data set aims to provide detailed information about religious adherence worldwide since 1945.

Usage

```
data(Religion)
```

Format

A data table with 1,995 rows and 84 columns

Details

Detailed Code Book available here: World Religion Codebook

References

Zeev Maoz and Errol A. Henderson. 2013. “The World Religion Dataset, 1945-2010: Logic, Estimates, and Trends.” International Interactions, 39: 265-291.

Trade — *Trade (v4.0) - International Trade (1870-2014) (v4.0)*

Description

This data set tracks total national trade and bilateral trade flows between states from 1870-2014.The trade dataset is the result of the effort to code trade flows between states (as defined by the Correlates of War project) for the period 1870-2014. The data include information on both bilateral trade flows and total national imports and exports. The dyadic trade dataset describes import and export data in current U.S. dollars for pairs of sovereign states. The National (Monadic) Trade dataset contains information on individual states import and export levels in current U.S. dollars.

Usage

```
data(Trade)
```

Format

A data table with 886,828 rows and 19 columns

Details

Detailed Code Book available here: Bilateral Trade CoW Information

References

Barbieri, Katherine and Omar M. G. Omar Keshk. 2016. Correlates of War Project Trade Data Set Codebook, Version 4.0. Online: http://correlatesofwar.org.

Barbieri, Katherine, Omar M. G. Keshk, and Brian Pollins. 2009. "TRADING DATA: Evaluating our Assumptions and Coding Rules." Conflict Management and Peace Science. 26(5): 471-491.

viewNMC — *Visualization of National Material Capabilities of a given country*

Description

Visualization of National Material Capabilities of a given country

Usage

```
viewNMC(countryABB = "USA")
```

Arguments

countryABB	Country Code abbreviation

Value

Data frame of selected countries NMC data and time series graph of countries NMC over time

Examples

```
viewNMC("RUS")
viewNMC("USA")
viewNMC("FIN")
```

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