Package ‘troopdata’

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Title Tools for Analyzing Cross-National Military Deployment and Basing Data

Version 1.0.0

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Description These functions generate data frames on troop deployments and military basing using U.S. Department of Defense data on overseas military deployments. This package provides functions for pulling country-year troop deployment and basing data. Subsequent versions will hopefully include cross-national data on deploying countries.

License GPL (>= 3)

Language en-US

Encoding UTF-8

LazyData true

RoxygenNote 7.3.1

URL https://github.com/meflynn/troopdata,
     https://meflynn.github.io/troopdata/

BugReports https://github.com/meflynn/troopdata/issues

Depends R (>= 3.5.0)

Imports magrittr, dplyr, rlang

Suggests testthat (>= 3.0.0), furrr, spelling, knitr, rmarkdown, viridis, ggplot2, countrycode, tidyr, stringr, readstata13, haven, maps, pdftools

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troopdata-package  Tools for Analyzing Cross-National Military Deployment and Basing Data

Description

Generate customized data frames containing U.S. military deployment data

Details

The troopdata package contains functions for generating customized data sets on U.S. military deployment data and U.S. overseas basing data. The data contain country identifiers that can be used to merge these data with other data to analyze trends in the United States’ overseas military posture.

Author(s)

Michael E. Flynn <meflynn@ksu.edu>

References

https://www.m-flynn.com/ https://github.com/meflynn/troopdata

See Also

Useful links:

- https://github.com/meflynn/troopdata
- https://meflynn.github.io/troopdata/
- Report bugs at https://github.com/meflynn/troopdata/issues
**Description**

`basedata` returns a data frame containing David Vine’s US basing data.

**Usage**

`basedata`

**Format**

A data frame with country-base observations including the following variables:

- **countryname**: A character vector of country names.
- **ccode**: A numeric vector of Correlates of War country codes.
- **iso3c**: A character vector of ISO three character country codes.
- **basename**: Name of the facility.
- **lat**: The facility’s latitude.
- **lon**: The facility’s longitude.
- **base**: Binary indicator identifying the facility as a major base or not.
- **lilypad**: A binary indicator identifying the facility as a lilypad or not. Vine codes lilypads as less than 200 personnel or “other site” designation in Pentagon reports.
- **fundedsite**: A binary variable indicating whether or not the facility is a host-state base funded by the US.

**Value**

Returns the full data frame containing country observations of US military bases from the Cold War period through 2018.

**Source**

[https://aura.american.edu/articles/online_resource/Lists_of_U_S_Military_Bases_Abroad_1776-2020/23856486](https://aura.american.edu/articles/online_resource/Lists_of_U_S_Military_Bases_Abroad_1776-2020/23856486)
**builddata**

*U.S. Military overseas construction spending data*

**Description**

`builddata` returns a data frame containing geocoded location-project-year overseas military construction spending data.

**Usage**

`builddata`

**Format**

A data frame with country-base observations including the following variables:

- `countryname` A character vector of country names.
- `ccode` A numeric vector of Correlates of War country codes.
- `year` Year of observed country-year spending.
- `iso3c` A character vector of ISO three character country codes.
- `location` Name of the facility where spending occurred, or host country where detailed facility information is unavailable.
- `spend_construction` Total obligational authority associated with the observed location-year in thousands of current US dollars.
- `lat` The facility’s latitude.
- `lon` The facility’s longitude.

**Value**

Returns the full data frame containing location-project-year observations of U.S. military construction spending data from 2008-2019.

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**get_basedata**

*Function to retrieve customized U.S. basing data*

**Description**

`get_basedata()` generates a customized data frame containing data obtained from David Vine’s U.S. basing data.

**Usage**

`get_basedata(host = NA, country_count = FALSE, groupvar = NULL)`
get_basedata

Arguments

- host: The Correlates of War (COW) numeric country code or ISO3C code for the host country or countries in the series
- country_count: Logical. Should the function return a country-level count of the total number of bases or the country-site data
- groupvar: A character string indicating how country count totals should be generated. Accepted values are 'countryname', 'ccode', or 'iso3c'. Can take on Required when using country_count argument.

Details

Our research team updated these data through 2018.

Value

get_basedata() returns a data frame containing information on U.S. military bases present within selected host countries. This can be customized to include country-base observations or country-count observations.

Author(s)

Michael E. Flynn

References


Examples

```r
# Not run:
library(tidyverse)
library(troopdata)

example <- get_basedata(host = NA)

head(example)

# End(Not run)
```
get_builddata  

function to retrieve customized U.S. construction spending data.

Description

get_builddata() generates a customized data frame containing location-project-year observations of U.S. military construction and housing spending in thousands of current dollars.

Usage

get_builddata(host = NA, startyear, endyear)

Arguments

- host: The Correlates of War (COW) numeric country code or ISO3C code for the host country or countries in the series
- startyear: The first year for the series
- endyear: The last year for the series

Value

get_builddata() returns a data frame containing location-project-year observations of U.S. military construction and housing spending in thousands of current dollars.

Author(s)

Michael E. Flynn

References


Examples

```r
## Not run:
library(tidyverse)
library(troopdata)

example <- get_builddata(host = NA, startyear = 2008, endyear = 2019)

head(example)

## End(Not run)
```
**get_troopdata**

Function to retrieve customized U.S. troop deployment data

**Description**

get_troopdata() generates a customized data frame containing country-year observations of U.S. military deployments overseas.

**Usage**

```r
get_troopdata(
  host = NULL,
  branch = FALSE,
  startyear = 1950,
  endyear = 2024,
  quarters = FALSE,
  guard_reserve = FALSE,
  civilians = FALSE,
  reports = FALSE
)
```

**Arguments**

- **host**
  The Correlates of War (COW) numeric country code, ISO3C code, or country name, for the host country or countries in the series. If region == TRUE the user can specify a COW region name and the function will try to match it to the region column in the data. The default is NA.

- **branch**
  Logical. Should the function return a single vector containing total troop values or multiple vectors containing total values and values for individual branches? Default is FALSE.

- **startyear**
  The first year for the series. The default is set to 1950.

- **endyear**
  The last year for the series. The default is the maximum year in the currently published data.

- **quarters**
  Logical. Should the function return quarterly data? Default is FALSE.

- **guard_reserve**
  Logical. Should the function return values for the National Guard and Reserve? Default is TRUE.

- **civilians**
  Logical. Should the function return values for civilian DoD personnel? Default is FALSE.

- **reports**
  Logical. Should the function return reports for the specified countries and years? Default is FALSE.

**Value**

get_troopdata() returns a data frame containing country-year observations for U.S. troop deployments.
Author(s)

Michael E. Flynn

References


Examples

```r
## Not run:
library(tidyverse)
library(troopdata)

example <- get_troopdata(host = "United States",
branch = TRUE,
startyear = 1980,
endyear = 2015)

head(example)

## End(Not run)
```

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**troopdata_rebuild_long**

*U.S. overseas troop deployment data*

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**Description**

`troopdata` returns a data frame containing information on US military deployments.

**Usage**

`troopdata_rebuild_long`

**Format**

A data frame with country year observations including the following variables:

- `ccode` A numeric vector of Correlates of War country codes.
- `iso3c` A character vector of ISO three character country codes.
- `countryname` A character vector of country names.
- `region` Correlates of War geographic region name.
year  The year of the observation.
month  The month of the observation.
quarter  The quarter of the observation.
source  The DMDC report source of the observation.
troops_ad  The total number of active duty US military personnel deployed to the host country.
army_ad  Total number of active duty Army personnel deployed to the host country.
navy_ad  Total number of active duty Navy personnel deployed to the host country.
air_force_ad  Total number of active duty Air Force personnel deployed to the host country.
space_force_ad  Total number of active duty Space Force personnel deployed to the host country.
marine_corps_ad  Total number of Marine Corps personnel deployed to the host country.
cost_guard_ad  Total number of Coast Guard personnel deployed to the host country.
total_selected_reserve  Total number of reserve US military personnel deployed to the host country.
army_reserve  Total number of reserve Army personnel deployed to the host country.
navy_reserve  Total number of reserve Navy personnel deployed to the host country.
air_force_reserve  Total number of reserve Air Force personnel deployed to the host country.
marine_corps_reserve  Total number of reserve Marine Corps personnel deployed to the host country.
cost_guard_reserve  Total number of reserve Coast Guard personnel deployed to the host country.
army_national_guard  Total number of Army National Guard personnel deployed to the host country.
air_national_guard  Total number of Air National Guard personnel deployed to the host country.
army_civilian  Total number of Army civilian personnel deployed to the host country.
navy_civilian  Total number of Navy civilian personnel deployed to the host country.
air_force_civilian  Total number of Air Force civilian personnel deployed to the host country.
marine_corps_civilian  Total number of Marine Corps civilian personnel deployed to the host country.
dod_civilian  Total number of Department of Defense civilian personnel deployed to the host country.
total_civilian  Total number of civilian personnel deployed to the host country.

Value

Returns the full data frame containing observations of US military deployments to overseas locations (countries and territories) from 1950 through 2024.

Source

doi:10.1177/07388942211030885
**troopdata_rebuild_reports**

*DMDC Deployment Reports*

**Description**

`troopdata_rebuild_reports` returns a data frame containing DMDC reports on US military deployments.

**Usage**

`troopdata_rebuild_reports`

**Format**

A data frame with country year quarter observations including the following variables:

- **ccode**: A numeric vector of Correlates of War country codes.
- **iso3c**: A character vector of ISO three character country codes.
- **countryname**: A character vector of country names.
- **region**: Correlates of War geographic region name.
- **year**: The year of the observation.
- **month**: The month of the observation.
- **quarter**: The quarter of the observation.
- **source**: The DMDC report source of the observation.
- **Location**: The geographic location listed in the DMDC reports.
- **Total**: "Total number of US military personnel deployed to the host country."
- **Total Ashore**: "Total number of US military personnel deployed to the host country, excluding those at sea."
- **Total Afloat**: "Total number of US military personnel deployed to the host country, at sea."
- **Army Total**: Total number of Army personnel deployed to the host country.
- **Navy Ashore**: Total number of Navy personnel deployed to the host country, excluding those at sea.
- **Navy Temporary Ashore**: Total number of Navy personnel deployed to the host country, temporarily.
- **Navy Other**: Total number of Navy personnel deployed to the host country, in other capacities.
- **Marine Corps Ashore**: Total number of Marine Corps personnel deployed to the host country, excluding those at sea.
- **Marine Corps Afloat**: Total number of Marine Corps personnel deployed to the host country, at sea.
- **Air Force Total**: Total number of Air Force personnel deployed to the host country.
- **Navy Afloat**: Total number of Navy personnel deployed to the host country, at sea.
Navy Total  Total number of Navy personnel deployed to the host country.
Marine Corps Total  Total number of Marine Corps personnel deployed to the host country.
troops_ad  The total number of active duty US military personnel deployed to the host country.
army_ad  Total number of active duty Army personnel deployed to the host country.
navy_ad  Total number of active duty Navy personnel deployed to the host country.
machine_corps_ad  Total number of active duty Marine Corps personnel deployed to the host country.
space_force_ad  Total number of active duty Space Force personnel deployed to the host country.
air_force_ad  Total number of active duty Air Force personnel deployed to the host country.
coast_guard_ad  Total number of Coast Guard personnel deployed to the host country.
Macro Location  The geographic location listed in the DMDC reports.
Army Active Duty  Total number of active duty Army personnel deployed to the host country.
Navy Active Duty  Total number of active duty Navy personnel deployed to the host country.
Marine Corps Active Duty  Total number of active duty Marine Corps personnel deployed to the host country.
Air Force Active Duty  Total number of active duty Air Force personnel deployed to the host country.
Coast Guard Active Duty  Total number of active duty Coast Guard personnel deployed to the host country.
Space Force Active Duty  Total number of active duty Space Force personnel deployed to the host country.
Total Active Duty  Total number of active duty US military personnel deployed to the host country.
Army National Guard  Total number of Army National Guard personnel deployed to the host country.
Army Reserve  Total number of reserve Army personnel deployed to the host country.
Navy Reserve  Total number of reserve Navy personnel deployed to the host country.
Marine Corps Reserve  Total number of reserve Marine Corps personnel deployed to the host country.
Air National Guard  Total number of Air National Guard personnel deployed to the host country.
Air Force Reserve  Total number of reserve Air Force personnel deployed to the host country.
Coast Guard Reserve  Total number of reserve Coast Guard personnel deployed to the host country.
Total Selected Reserve  Total number of reserve US military personnel deployed to the host country.
Army Civilian  Total number of Army civilian personnel deployed to the host country.
Navy Civilian  Total number of Navy civilian personnel deployed to the host country.
Marine Corps Civilian  Total number of Marine Corps civilian personnel deployed to the host country.
Air Force Civilian  Total number of Air Force civilian personnel deployed to the host country.
DOD Civilian  Total number of Department of Defense civilian personnel deployed to the host country.
Total Civilian  Total number of civilian personnel deployed to the host country.
Grand Total  Total number of US military and civilian personnel deployed to the host country.

Value
Returns a data frame containing DMDC reports of US military deployments to overseas locations from 1950 through 2024.

Source
doi:10.1177/07388942211030885
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