

# Package ‘troopdata’

June 14, 2024

**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), furr, spelling, knitr, rmarkdown,  
viridis, ggplot2, countrycode, tidyr, stringr, readstata13,  
haven, maps, pdftools

**Config/testthat/edition** 3

**NeedsCompilation** no

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**Repository** CRAN

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troopdata-package	<i>Tools for Analyzing Cross-National Military Deployment and Basing Data</i>
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## 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>

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basedata	<i>Vine's U.S. basing data</i>
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**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.

funded site 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)

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builddata	<i>U.S. Military overseas construction spending data</i>
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### 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	<i>Function to retrieve customized U.S. basing data</i>
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### 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)
```

**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**

David Vine. 2015. Base Nation. Metropolitan Books. New York, NY.

**Examples**

```
## Not run:  
library(tidyverse)  
library(troopdata)  
  
example <- get_basedata(host = NA)  
  
head(example)  
  
## End(Not run)
```

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get\_builddata                      *Function to retrieve customized U.S. construction spending data.*

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**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**

Michael A. Allen, Michael E. Flynn, and Carla Martinez Machain. 2020. "Outside the wire: US military deployments and public opinion in host states." *American Political Science Review*. 114(2): 326-341.

**Examples**

```
## Not run:  
library(tidyverse)  
library(troopdata)  
  
example <- get_builddata(host = NA, startyear = 2008, endyear = 2019)  
  
head(example)  
  
## End(Not run)
```

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get_troopdata	<i>Function to retrieve customized U.S. troop deployment data</i>
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### Description

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

### Usage

```
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 FALSE.
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**

Tim Kane. Global U.S. troop deployment, 1950-2003. Technical Report. Heritage Foundation, Washington, D.C.

Michael A. Allen, Michael E. Flynn, and Carla Martinez Machain. 2022. "Global U.S. military deployment data: 1950-2020." *Conflict Management and Peace Science*. 39(3): 351-370.

**Examples**

```
## 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*

---

**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.  
coast\_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.  
coast\_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**

<https://www.heritage.org/defense/report/global-us-troop-deployment-1950-2005>  
[doi:10.1177/07388942211030885](https://doi.org/10.1177/07388942211030885)

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troopdata\_rebuild\_reports

*DMDC Deployment Reports*


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### 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.

marine\_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**

<https://www.heritage.org/defense/report/global-us-troop-deployment-1950-2005>  
doi:10.1177/07388942211030885

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