

Package ‘rarms’

July 23, 2025

Type Package

Title Access Data from the USDA ARMS Data API

Version 1.0.0

Description Interface to easily access data via the United States Department of Agriculture (USDA)'s Agricultural Resource Management Survey (ARMS) Data API <<https://www.ers.usda.gov/developer/data-apis/arms-data-api/>>. The downloaded data can be saved for later off-line use. Also provide relevant information and metadata for each of the input variables needed for sending the data inquiry.

Encoding UTF-8

License GPL (>= 2)

LazyData true

RoxygenNote 7.0.2

Depends R (>= 3.6.0)

Imports jsonlite (>= 1.6)

NeedsCompilation no

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armsRequest	<i>Request USDA ARMS data</i>
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Description

The primary function in the rarms package to send request to the USDA ARMS Data API.

Usage

```
armsRequest(
  state = NULL,
  year,
  category = NULL,
  report = NULL,
  variable = NULL,
  farmtype = NULL
)
```

Arguments

state	optional character vector. It can be full state names, or state id, or state code. Use NULL if for all states.
year	numerical/character vector. Which year(s) to request? This is required.
category	optional character vector. Category names or IDs.
report	optional vector. Report names or IDs.
variable	optional vector. Variable names or IDs.
farmtype	optional vector. Farm type or ID.

Details

An API key is needed for sending the data requests. To apply for a key, go to this website: <https://www.ers.usda.gov/developer/>. Then click Register.

To make valid request, users should provide valid values for the input variables (e.g., report). Users can refer to this USDA website for information on the input variables (<https://www.ers.usda.gov/developer/data-apis/arms-data-api/>). Users can also use paramSearch in the package to get possible valid values for each input variable (see examples in paramSearch).

For most input variables, users can use id or codes instead of original names to simplify the requests. For example, the id and code for Arkansas is 05 and ar, respectively. Users can let state = '05' or state = 'ar' to request data for Arkansas instead of letting state = 'Arkansas'. Similarly, the id for the report named Farm Business Balance Sheet is 1, users can simply let report = 1 to request data from this report.

Value

The function returns a list with three elements: (1) request status, (2) request information, (3) the requested data.

Examples

```
## Not run:
key <- 'Your key' # Specify your API key here.
test <- armsRequest(year = c(2005:2018), state = c('05', '06'), category = c('age', 'ftyppl'),
  report = c(1, 2), variable = c('kount', 'accrop'), farmtype = 'all farms')
data <- test$data # Get the data returned from the ARMS data API.

## End(Not run)
```

paramSearch	<i>Return values of the selected input variables</i>
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Description

Return values of the selected input variables

Usage

```
paramSearch(param)
```

Arguments

param	Name of input variable
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Value

A data set that contains possible values of the selected input variable.

Examples

```
## Not run:
key <- 'Your key' # Specify your API key here.
paramSearch(param = 'state')
paramSearch(param = 'year')
paramSearch(param = 'category')

## End(Not run)
```

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