

Package: exoplanets (via r-universe)

July 12, 2024

Title Access NASA's Exoplanet Archive Data

Version 0.2.3

Description The goal of exoplanets is to provide access to NASA's Exoplanet Archive TAP Service. For more information regarding the API please read the documentation [<https://exoplanetarchive.ipac.caltech.edu/index.html>](https://exoplanetarchive.ipac.caltech.edu/index.html).

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URL <https://docs.ropensci.org/exoplanets/>,
<https://github.com/ropensci/exoplanets>

BugReports <https://github.com/ropensci/exoplanets/issues>

Depends R (>= 2.10)

Imports cli, httr, memoise, readr, tibble

Suggests covr, dplyr, ggplot2, httpptest, knitr, rmarkdown, scales, testthat (>= 3.0.0)

VignetteBuilder knitr

Config/testthat/edition 3

Encoding UTF-8

Language en-US

LazyData true

RoxygenNote 7.2.1

Repository <https://ropensci.r-universe.dev>

RemoteUrl <https://github.com/ropensci/exoplanets>

RemoteRef master

RemoteSha 27db652071d68ffe1f5575ef424071b6fb2b2b0f

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exoplanets	<i>Retrieve Data from NASAs Exoplanet Archive</i>
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Description

A simple interface for accessing exoplanet data. At the bare minimum, a table name is required. Tables names are documented in the ‘tableinfo‘ dataset.

Usage

```
exoplanets(table, columns = NULL, limit = NULL, format = "csv")
```

Arguments

table	A table name, see ‘tableinfo‘.
columns	A vector of valid column names, by default will return all default columns, see ‘tableinfo‘.
limit	Number of rows to return. If NULL, returns all data in the table.
format	Desired format, either csv, tsv, or json.

Details

At one time, this package used the Exoplanet Archive Application Programming Interface (API). Since then, a handful of tables have been transitioned to the Table Access Protocol (TAP) service. More tables will be transitioned to TAP and as such, this package only supports queries from TAP. For more information, you can read https://exoplanetarchive.ipac.caltech.edu/docs/exonews_archive.html#29April2021.

Value

A data.frame if format="csv" or format="tsv". A list if format="json".

Source

<https://exoplanetarchive.ipac.caltech.edu/>

See Also

tableinfo

Examples

```
if (interactive()) {  
  # request all default columns from the `ps` table  
  exoplanets("ps")  
  
  # request the planet name and discovery method from the `ps` table  
  exoplanets("ps", c("pl_name", "discoverymethod"))  
  
  # request the first 5 rows from the `keplernames` table  
  exoplanets("keplernames", limit = 5)  
  
  # request in json format (returns list)  
  exoplanets("ps", c("pl_name", "discoverymethod"), format = "json")  
}
```

forget_exoplanets	<i>Clear the exoplanets cache</i>
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Description

Forget past results and reset the exoplanets cache.

Usage

```
forget_exoplanets()
```

Examples

```
if (interactive()) {  
  system.time(exoplanets("k2names"))  
  system.time(exoplanets("k2names"))  
  forget_exoplanets()  
  system.time(exoplanets("k2names"))  
}
```

tableinfo	<i>Table Information</i>
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Description

This dataset provides table information for NASA's Exoplanet Archive TAP service. In particular, the table name, columns, and column descriptions are provided.

Usage

`tableinfo`

Format

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 546 rows and 13 columns.

Source

<https://exoplanetarchive.ipac.caltech.edu/docs/TAP/usingTAP.html>

Examples

`tableinfo`

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