

Package: PEcAn.all (via r-universe)

March 14, 2025

Type Package

Title PEcAn Functions Used for Ecological Forecasts and Reanalysis

Version 1.8.0.9000

Description The Predictive Ecosystem Carbon Analyzer (PEcAn) is a scientific workflow management tool that is designed to simplify the management of model parameterization, execution, and analysis. The goal of PEcAn is to streamline the interaction between data and models, and to improve the efficacy of scientific investigation.

Depends PEcAn.DB, PEcAn.settings, PEcAn.MA, PEcAn.logger, PEcAn.utils, PEcAn.uncertainty, PEcAn.data.atmosphere, PEcAn.data.land, PEcAn.data.remote, PEcAn.assim.batch, PEcAn.emulator, PEcAn.priors, PEcAn.benchmark, PEcAn.remote, PEcAn.workflow

Imports utils

Suggests mockery, PEcAn.ED2, PEcAn.SIPNET, PEcAn.BIOCRO, PEcAn.DALEC, PEcAn.LINKAGES, PEcAn.allometry, PEcAn.photosynthesis, sessioninfo, testthat

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LazyData true

Encoding UTF-8

Roxygen list(markdown = TRUE)

RoxygenNote 7.3.2

Config/pak/sysreqs cmake libgdal-dev gdal-bin libgeos-dev libglpk-dev
make libmagick++-dev gsfonts jags libicu-dev libpng-dev
libxml2-dev libnetcdf-dev libssl-dev libproj-dev python3
libsqlite3-dev libudunits2-dev libx11-dev xz-utils zlib1g-dev

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

RemoteUrl <https://github.com/PecanProject/pecan>

RemoteRef HEAD

RemoteSha 97e61070b67901b2fa9aa727c73fdaf98a69a70c

RemoteSubdir base/all

Contents

pecan_releases	2
pecan_version	2
pecan_version_history	3

Index	5
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pecan_releases	<i>Dates, tags, and versions of all PEcAn releases</i>
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Description

Dates, tags, and versions of all PEcAn releases

Usage

```
pecan_releases
```

Format

Data frame with 3 columns

tag name used to mark the release

date date released

version numeric version assigned to this release

Source

Extracted from Git tags in the [PEcAn development repository](#)

pecan_version	<i>Report installed PEcAn version</i>
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Description

Reports the currently installed or loaded version(s) of each PEcAn package, as well as the versions expected by the specified release(s) of the PEcAn system.

Usage

```
pecan_version(version = max(PEcAn.all::pecan_releases$version), exact = FALSE)
```

Arguments

version PEcAn release number to use for expected package versions

exact Show only tags that exactly match version, or all tags that have it as a substring?

Details

When `exact = FALSE` (the default), `pecan_version` will show all releases whose names contain `version` as a substring. This is mostly so that e.g. "1.4.2" finds the release tag "v1.4.2", but since all matches are returned it can also be handy for seeing all patches sharing a minor version number (see examples).

If more than one version of a package is installed, the output from `pecan_version()` will contain multiple rows for that package. This can occur if you have installed different versions to different locations in `.libPaths()`, or if you've loaded a new version into your current session by loading it from its source directory without installing it to the R library. If you see multiple rows unexpectedly, try `find.package(<pkgname>, verbose = TRUE)` to see where each version was found.

Value

data frame with columns for package name, expected version(s), installed version, and Git hash (if known). If the `sessioninfo` package is installed, an additional column reports where each package was installed from: local, github, CRAN, etc.

Examples

```
pecan_version()
pecan_version(c("1.4.0", "1.5.0", "1.6.0"))

# multiple matches are possible when exact = FALSE
pecan_version("v1.3", exact = TRUE)
pecan_version("v1.3", exact = FALSE)
```

`pecan_version_history` *Versions of all PEcAn packages in each release of PEcAn*

Description

Versions of all PEcAn packages in each release of PEcAn

Usage

```
pecan_version_history
```

Format

Data frame with at least 33 columns (plus one more every release!)

package Package name, as character

v1.0, ..., v1.7.2, ... Release numbers, each with the Git tag as the column name and numeric package versions as the row contents. NA means package did not exist in this version of PEcAn.

Source

Extracted from Git history of the [PEcAn development repository](#)

See Also

`pecan_version`, which queries this table and also reports the versions currently installed

Index

* datasets

pecan_releases, [2](#)

pecan_version_history, [3](#)

pecan_releases, [2](#)

pecan_version, [2](#)

pecan_version_history, [3](#)