

Package: PEcAn.PRELES (via r-universe)

March 14, 2025

Type Package

Title PEcAn Package for Integration of the PRELES Model

Version 1.7.3.9000

Description This module provides functions to run the PREDict Light use efficiency Evapotranspiration and Soil moisture (PRELES) model on the PEcAn project. The Predictive Ecosystem Carbon Analyzer (PEcAn) is a scientific workflow management tool 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.

Imports PEcAn.logger, lubridate (>= 1.6.0), ncd4 (>= 1.15), PEcAn.data.atmosphere, PEcAn.utils

Suggests testthat (>= 1.0.2), Rpreles

Remotes github::MikkoPeltoniemi/Rpreles

OS_type unix

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Encoding UTF-8

RoxygenNote 7.3.2

Config/pak/sysreqs cmake libgdal-dev gdal-bin libgeos-dev make libmagick++-dev gsfonts libicu-dev libxml2-dev libnetcdf-dev libssl-dev libproj-dev libsqlite3-dev libudunits2-dev libx11-dev

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

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

RemoteRef HEAD

RemoteSha 97e61070b67901b2fa9aa727c73fdaf98a69a70c

RemoteSubdir models/preles

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runPRELES.jobsh	<i>Process ncdf file, run PRELES model, and convert output .nc file in CF standard</i>
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Description

Process ncdf file, run PRELES model, and convert output .nc file in CF standard

Usage

```
runPRELES.jobsh(
  met.file,
  outdir,
  parameters,
  sitelat,
  sitelon,
  start.date,
  end.date
)
```

Arguments

met.file	base name for yearly nc files containing met data. Example: 'met.file="somefile"' matches somefile.2004.nc, somefile.2005.nc, etc.
outdir	Location of PRELES model output
parameters	An R data file containing parameter values. Must be an Rda file written via 'save()', and must define an object named 'trait.values'
sitelat, sitelon	Latitude and longitude of site in decimal degrees
start.date, end.date	Start and end time of the simulation

Author(s)

Tony Gardella, Michael Dietze

`write.config.PRELES` *Write PRELES configuration files*

Description

Writes a PRELES config file.

Usage

`write.config.PRELES(defaults, trait.values, settings, run.id)`

Arguments

<code>defaults</code>	list of defaults to process
<code>trait.values</code>	vector of samples for a given trait
<code>settings</code>	list of settings from pecan settings file
<code>run.id</code>	id of run

Value

configuration file for PRELES for given run

Author(s)

Tony Gardella, Micheal Dietze

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