

Package: PEcAn.ModelName (via r-universe)

September 18, 2024

Type Package

Title PEcAn Package for Integration of the ModelName Model

Version 1.8.0.9000

Description This module provides functions to link the (ModelName) to PEcAn.

Imports PEcAn.DB, PEcAn.logger, PEcAn.utils (>= 1.4.8)

Suggests testthat (>= 1.0.2)

SystemRequirements ModelName

OS_type unix

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LazyLoad yes

LazyData FALSE

Encoding UTF-8

RoxygenNote 7.3.2

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

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

RemoteRef HEAD

RemoteSha f22a7c4bbc532e4551f7bc9624cef649da317ac1

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met2model.MODEL *Write MODEL met files*

Description

Converts a met CF file to a model specific met file. The input files are called <in.path>/<in.prefix>.YYYY.cf

Usage

```
met2model.MODEL(in.path, in.prefix, outfolder, overwrite = FALSE)
```

Arguments

in.path	path on disk where CF file lives
in.prefix	prefix for each file
outfolder	location where model specific output is written.
overwrite	logical: replace output files if they already exist?

Value

OK if everything was succesful.

Author(s)

Rob Kooper

model2netcdf.MODEL *Code to convert MODELS's output into netCDF format*

Description

Convert MODEL output into the NACP Intercomparison format (ALMA using netCDF)

Usage

```
model2netcdf.MODEL(outdir, sitelat, sitelon, start_date, end_date)
```

Arguments

outdir	Location of model output
sitelat	Latitude of the site
sitelon	Longitude of the site
start_date	Start time of the simulation
end_date	End time of the simulation

Author(s)

Rob Kooper

`read_restart.ModelName`

Read restart template for SDA

Description

Read restart files from model.

Usage

`read_restart.ModelName(outdir, runid, stop.time, settings, var.names, params)`

Arguments

<code>outdir</code>	Output directory
<code>runid</code>	Run ID
<code>stop.time</code>	Year that is being read
<code>settings</code>	PEcAn settings object
<code>var.names</code>	Variable names to be extracted
<code>params</code>	Any parameters required for state calculations

Value

Forecast numeric matrix

Author(s)

Alexey Shiklomanov

write.config.MODEL *Write MODEL configuration files*

Description

Writes a MODEL config file.

Usage

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

Arguments

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

Details

Requires a pft xml object, a list of trait values for a single model run, and the name of the file to create

Value

configuration file for MODEL for given run

Author(s)

Rob Kooper

write_restart.ModelName
Write restart template for SDA

Description

Write restart files for model

Usage

```
write_restart.ModelName(  
  outdir,  
  runid,  
  start.time,  
  stop.time,  
  settings,  
  new.state,  
  RENAME,  
  new.params,  
  inputs  
)
```

Arguments

<code>outdir</code>	outout directory
<code>runid</code>	run id
<code>start.time</code>	Time of current assimilation step
<code>stop.time</code>	Time of next assimilation step
<code>settings</code>	pecan settings list
<code>new.state</code>	Analysis state matrix returned by <code>sda.enkf</code>
<code>RENAME</code>	flag to either rename output file or not
<code>new.params</code>	optional, additional params to pass <code>write.configs</code> that are deterministically related to the parameters updated by the analysis
<code>inputs</code>	new input paths updated by the SDA workflow, will be passed to <code>write.configs</code>

Author(s)

Alexey Shiklomanov

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