

# Package: PEcAn.FATES (via r-universe)

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**Type** Package

**Title** PEcAn Package for Integration of FATES Model

**Version** 1.7.3.9000

**Author** Mike Dietze

**Maintainer** Mike Dietze <dietze@bu.edu>

**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. This package provides functions to link the FATES model to PEcAn.

**Imports** stringr, PEcAn.logger, PEcAn.remote, PEcAn.utils, lubridate (>= 1.6.0), ncd4 (>= 1.15), tibble

**Suggests** testthat (>= 1.0.2)

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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.FATES      *met2model for FATES*

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### Description

met2model wrapper for FATES

### Usage

```
met2model.FATES(  
  in.path,  
  in.prefix,  
  outfolder,  
  start_date,  
  end_date,  
  lst = 0,  
  lat,  
  lon,  
  overwrite = FALSE,  
  verbose = FALSE,  
  ...  
)
```

### Arguments

in.path	location on disk where inputs are stored
in.prefix	prefix of input and output files
outfolder	location on disk where outputs will be stored
start_date	the start date of the data to be downloaded
end_date	the end date of the data to be downloaded
lst	timezone offset to GMT in hours
overwrite	should existing files be overwritten
verbose	should the function be very verbose for(year in start_year:end_year)

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model2netcdf.FATES      *Code to convert FATES netcdf output into into CF standard*

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## Description

Code to convert FATES netcdf output into into CF standard

## Usage

```
model2netcdf.FATES(  
  outdir,  
  sitelat,  
  sitelon,  
  start_date,  
  end_date,  
  vars_names,  
  pfts  
)
```

## Arguments

outdir	Location of FATES model output (e.g. a path to a single ensemble output)
sitelat	Latitude of the site
sitelon	Longitude of the site
start_date	Start time of the simulation, not string
end_date	End time of the simulation, not string
vars_names	Names of Selected variables in PEcAn format, (e.g. c("", ""))
pfts	a named vector of PFT numbers where the names are PFT names

## Author(s)

Michael Dietze, Shawn Serbin

## Examples

```
## Not run:  
example.output <- system.file("case.clm2.h0.2004-01-01-00000.nc", package="PEcAn.FATES")  
model2netcdf.FATES(outdir="~/", sitelat, sitelon, start_date, end_date, vars_names, pfts)  
  
## End(Not run)
```

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recurse.create	<i>recurse.create</i>
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**Description**

recursively follow the file structure in 'ins' and create all the same folders in 'path' as well as symbolic links to all the file. This is done, rather than creating a symbolic link to the whole structure, so individual files can later be unlinked and replaced with different files/links.

**Usage**

```
recurse.create(path, ins)
```

**Arguments**

path	new location to create folders and links
ins	reference location of inputs

**Author(s)**

Mike Dietze

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write.config.FATES	<i>Write FATES configuration files</i>
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**Description**

Writes config files for use with FATES.

**Usage**

```
write.config.FATES(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

**Value**

none

**Author(s)**

Mike Dietze, Shawn Serbin

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