

Package: mrorganic (via r-universe)

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Type Package

Title Provide soil organic carbon and biomass data

Version 0.5.7

Date 2026-06-23

Description mrorganic supports downloading and preparing soil organic carbon and biomass data for further scientific work.

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URL <https://github.com/tscheypidi/mrorganic>

Depends madrat(>= 3.3.4), magclass(>= 3.17), R(>= 2.10.0)

Imports geodata, terra, utils, withr

Suggests covr, knitr, rmarkdown

VignetteBuilder knitr

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Repository <https://pik-piam.r-universe.dev>

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mrorganic-package	<i>mrorganic: Provide soil organic carbon and biomass data</i>
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Description

mrorganic supports downloading and preparing soil organic carbon and biomass data for further scientific work.

Author(s)

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- Hugo Valin [contributor]

See Also

Useful links:

- <https://github.com/tscheypidi/mrorganic>

calcBiomassByLandType *Calculate Biomass by land type*

Description

Estimate soil organic carbon content split by land type.

Usage

```
calcBiomassByLandType(subtype)
```

Arguments

subtype "aboveground" or "belowground"

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[calcOutput](#)

Examples

```
## Not run:  
a <- calcOutput("BiomassbyLandType", subtype = "aboveground")  
  
## End(Not run)
```

calcEcoregions2017Raster
calcEcoregions2017Raster

Description

Produces a raster with ecoregion information.

Usage

```
calcEcoregions2017Raster(nrows = 720, ncols = 1440)
```

Arguments

nrows	Number of rows in the raster produced.
ncols	Number of columns in the raster produced.

Value

A raster with ecoregion information as a data.frame

Author(s)

Pascal Sauer

calcLandTypeAreas	<i>Calculate land type areas</i>
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Description

Convert ESACCI landcover information into area information for selected land types cropland, grassland and other.

Usage

```
calcLandTypeAreas(categories = "CropGrassOther")
```

Arguments

categories	Categories land should be segregated into. Only available options are currently "CropGrassOther" and "CropGrassForestOthernatvegResidual".
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Value

data

Author(s)

Jan Philipp Dietrich

See Also

[calcOutput](#)

Examples

```
## Not run:
a <- calcOutput("LandTypeAreas")

## End(Not run)
```

calcLandTypeAreasAggregated
Aggregate land type areas

Description

Aggregate land type area information to a desired resolution

Usage

```
calcLandTypeAreasAggregated(res, zeroValue = 0)
```

Arguments

res	target resolution
zeroValue	value for cells with no area. Useful to change to a very small number if the area information should be used as weight.

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[calcOutput](#)

Examples

```
## Not run:  
a <- calcOutput("LandTypeAreas")  
  
## End(Not run)
```

calcSOCbyLandType	<i>Calculate SOC by land type</i>
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Description

Estimate soil organic carbon content split by land type

Usage

```
calcSOCbyLandType()
```

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[calcOutput](#)

Examples

```
## Not run:  
a <- calcOutput("SOCbyLandType")  
  
## End(Not run)
```

calcWorldCountries	<i>Calculate world countries</i>
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Description

Partition the world into countries with their respective ISO codes

Usage

```
calcWorldCountries()
```

Value

data

Author(s)

Patrick v. Jeetze, Jan Philipp Dietrich

See Also

[calcOutput](#)

Examples

```
## Not run:  
a <- calcOutput("WorldCountries", aggregate = FALSE)  
  
## End(Not run)
```

fullORGANIC

fullORGANIC

Description

Bundle function for mrorganic which bundles all relevant outputs and write them to a tgz file.

Usage

```
fullORGANIC(rev)
```

Arguments

rev data revision

Details

Use `regionmapping = "regionmappingGTAP11.csv"`) to produce outputs for GTAP11 world regions.

Author(s)

Jan Philipp Dietrich

See Also

[retrieveData](#), [calcOutput](#), [readSource](#), [setConfig](#)

Examples

```
## Not run:  
retrieveData("Organic", rev = 2.1, regionmapping = "regionmappingGTAP11.csv")  
  
## End(Not run)
```

plotMap	<i>plotMap</i>
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Description

Create a plot showing a map.

Usage

```
plotMap(x, name, createPng = FALSE, range = NULL, ...)
```

Arguments

x	The data to plot as magclass object
name	The name/title of the plot/png
createPng	If TRUE save plot as png
range	range of values for the color bar. If NULL range will be detected automatically
...	Further arguments passed to terra::plot

readESACCI	<i>Read ESACCI</i>
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Description

Read ESACCI data

Usage

```
readESACCI(subtype = "landcover2010")
```

Arguments

subtype	Subtype to be read in
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Value

data

Author(s)

Jan Philipp Dietrich

See Also

[readSource](#)

Examples

```
## Not run:  
a <- readSource("ESACCI")  
  
## End(Not run)
```

`readGSOCseq`*Read GSOCseq*

Description

Read GSOCseq data

Usage

```
readGSOCseq(subtype = "ini")
```

Arguments

subtype data set to use (currently available "ini" and "finalSSM1")

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[readSource](#)

Examples

```
## Not run:  
a <- readSource("GSOCseq")  
  
## End(Not run)
```

`readSpawn`*Read Spawn*

Description

Read Spawn data

Usage

```
readSpawn(subtype)
```

Arguments

subtype	Subtype to be read in. Available types are "abovegroundBiomass", "abovegroundBiomassUncertainty", "belowgroundBiomass" and "belowgroundBiomassUncertainty".
---------	---

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[readSource](#)

Examples

```
## Not run:  
a <- readSource("Spawn", "abovegroundBiomass")  
  
## End(Not run)
```

`readWorldBankMaps`*readWorldBankMaps*

Description

Read World Bank Maps

Usage

```
readWorldBankMaps(subtype = "CountryPolygons")
```

Arguments

subtype data set to use (currently available "CountryPolygons", "CountryBoundaries", "DisputedAreas" and "DisputedAreasBoundaries")

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[readSource](#)

Examples

```
## Not run:
a <- readSource("WorldBankMaps")

## End(Not run)
```

toolAddEcoregions	<i>toolAddEcoregions</i>
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Description

Enriches a magclass object with ecoregion and region information.

Usage

```
toolAddEcoregions(x, ecoregions, regionmapping)
```

Arguments

x A magclass object
 ecoregions Ecoregions dataframe, as returned by calcEcoregions2017Raster
 regionmapping A regionmapping

Value

x with additional ecoregion and region information. Spatial subdimensions: c("x", "y", "country", "region", "biome", "country_biome", "region_biome")

Author(s)

Pascal Sauer

toolAggregateByLandType
toolAggregateByLandType

Description

Aggregate raster object by land type and return as 0.25degx0.25deg magclass object

Usage

```
toolAggregateByLandType(x, weight)
```

Arguments

x	data to be aggregated
weight	weight to be used for aggregation (land type)

Value

data

Author(s)

Jan Philipp Dietrich

See Also

[calcOutput](#)

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