

Package ‘spCEH’

March 31, 2020

Title Spatial utility functions and data

Version 0.0.0.9000

Description Generically useful utility functions and data used at CEH Edinburgh for spatial work.

Depends R (>= 3.2.0),
raster

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LazyData true

Suggests testthat,
knitr,
covr

VignetteBuilder knitr

Imports git2r,
gh

RoxygenNote 7.1.0

BugReports <https://github.com/NERC-CEH/spCEH/issues>

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spCEH-package	<i>Generate maps of GHG fluxes for the UK.</i>
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Description

spCEH provides spatial utility functions and data.

Author(s)

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See Also

Useful links:

- Report bugs at <https://github.com/NERC-CEH/spCEH/issues>

getRasterTemplate	<i>Function to initialise an empty raster for the UK or a sub-region</i>
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Description

Function to initialise an empty raster for the UK or a sub-region

Usage

```
getRasterTemplate(domain = "UK", res = 100)
```

Arguments

domain	Domain of the output raster: "UK", "Scotland".
res	Resolution of the output raster in metres.

Value

An empty raster object covering the UK.

Examples

```
r <- getRasterTemplate(domain = "Scotland", res = 10000)
r <- getRasterTemplate(domain = "UK", res = 5000)
r <- getRasterTemplate(domain = "NT_10km", res = 100)
```

maskByCountry	<i>Function to mask out cells outwith polygons defining a country within the UK</i>
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Description

Function to mask out cells outwith polygons defining a country within the UK

Usage

```
maskByCountry(r, countryName)
```

Arguments

r	A RasterLayer.
countryName	The name of a country within the UK ("Scotland", "Northern Ireland", "England" or "Wales").

Value

A RasterLayer masked to the named country.

Examples

```
r <- getRasterTemplate(domain = "UK", res = 10000)
r_masked <- maskByCountry(r, c("England", "Wales"))
plot(r_ppt)
plot(r_masked)
```

projlonlat	<i>CRS object for null projection (longitude-latitude).</i>
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Description

A Coordinate Reference System object

Usage

```
projlonlat
```

Format

A text string

Source

<https://spatialreference.org/>

projOSGB	<i>CRS object for the OSGB projection).</i>
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Description

A Coordinate Reference System object for the Transverse Mercator projection used by the Ordnance Survey in Great Britain (OSGB)

Usage

```
projOSGB
```

Format

A text string

Source

<https://spatialreference.org/>

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