

Package ‘Grid2Polygons’

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Title Convert Spatial Grids to Polygons

Version 0.2.1

Description The functionality of this package has been deprecated; please use the Grid2Polygons function in the inlmisc package instead. Converts a spatial object from class sp::SpatialGridDataFrame to sp::SpatialPolygonsDataFrame.

Depends R (>= 2.15.0)

Imports inlmisc (>= 0.3.0), methods, raster, rgeos, sp

Suggests rgdal, roxygen2

License GPL (>= 2)

Encoding UTF-8

LazyData true

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NeedsCompilation no

Author Jason C. Fisher [aut, cre]

Maintainer Jason C. Fisher <jfisher@usgs.gov>

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Description

This function has been deprecated; please use `inlmisc::Grid2Polygons` instead. Used to convert **sp** spatial objects from class `'SpatialGridDataFrame'` to `'SpatialPolygonsDataFrame'`. Spatial polygons can then be transformed to a different projection or datum with `spTransform` in package **rgdal**. Image files created with spatial polygons are reduced in size and result in a much "cleaner" version of your image.

Usage

```
Grid2Polygons(grd, zcol = 1, level = FALSE, at, cuts = 20,
  pretty = FALSE, xlim = NULL, ylim = NULL, ply = NULL, ...)
```

Arguments

<code>grd</code>	SpatialGridDataFrame. Spatial grid data frame
<code>zcol</code>	character or integer. Attribute name or column number in attribute table.
<code>level</code>	logical. If true, a set of levels is used to partition the range of z, its default is false.
<code>at</code>	numeric. A vector giving breakpoints along the range of z.
<code>cuts</code>	integer. Number of levels the range of z would be divided into.
<code>pretty</code>	logical. Whether to use pretty cut locations.
<code>xlim</code>	numeric. Vector of length 2 giving left and right limits of the spatial grid, data outside these limits is excluded.
<code>ylim</code>	numeric. Vector of length 2 giving lower and upper limits of the spatial grid, data outside these limits is excluded.
<code>ply</code>	SpatialPolygons, or SpatialGridDataFrame. Cropping polygon
<code>...</code>	Not used

Details

Converts **sp** spatial objects from class `SpatialGridDataFrame` to `SpatialPolygonsDataFrame`. Spatial polygons can then be transformed to a different projection or datum with `spTransform` in package **rgdal**. Image files created with spatial polygons are reduced in size and result in a much "cleaner" version of your image.

Value

Returns an object of `SpatialPolygonsDataFrame`. The objects data slot is a data frame, number of rows equal to the number of `Polygons` objects and a single column containing values of z. If `level` is true, z values are set equal to the midpoint between breakpoints. The status of the polygon as a hole or an island is taken from the ring direction, with clockwise meaning island, and counter-clockwise meaning hole.

Note

The traditional R graphics model does not draw polygon holes correctly, holes overpaint their containing Polygon object using a user defined background color (white by default). Polygon holes are now rendered correctly using the plot method for spatial polygons ([SpatialPolygons-class](#)), see [polypath](#) for more details. The Trellis graphics model appears to rely on the traditional method so use caution when plotting with [spplot](#).

Author(s)

J.C. Fisher, U.S. Geological Survey, Idaho Water Science Center

References

A general explanation of the algorithm provided [here](#); inspiration provided [here](#).

See Also

[Grid2Polygons](#)

Examples

```
## Not run:
data(meuse.grid, package = "sp")
sp::coordinates(meuse.grid) <- ~ x + y
sp::gridded(meuse.grid) <- TRUE
meuse.grid <- as(meuse.grid, "SpatialGridDataFrame")
meuse.plys <- Grid2Polygons(meuse.grid, "dist", level = FALSE)
op <- par(mfrow = c(1, 2), oma = rep(0, 4), mar = rep(0, 4))
sp::plot(meuse.plys, col = heat.colors(length(meuse.plys)))
title("level = FALSE", line = -7)
meuse.plys.lev <- Grid2Polygons(meuse.grid, "dist", level = TRUE)
sp::plot(meuse.plys.lev, col = heat.colors(length(meuse.plys.lev)))
title("level = TRUE", line = -7)
par(op)

## End(Not run)
```

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*Topic **manip**

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