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| gdm\_ext.transform(gdm\_ext) | R Documentation |

Transform Grids with a Generalized Dissimilarity Model

Description

gdm\_ext.transform is used to transform a list of ESRI Binary Float Grids using the quantiles and coefficients from generalized dissimilarity model created via gdm.fit.

Usage

gdm\_ext.transform(model, inlist, outdir, dllpath, extrap\_type=“Default10”)

Arguments

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| model | a gdm model object created with gdm.fit |
| inlist | a string containing the path to a .csv file containing the paths to the ESRI Binary Export Grids that will be transformed. Use one path per line and no header in the file list. Grids should be in the same order as the predictors in the gdm model. |
| outdir | a string containing the path to the output directory to write the transformed grids. |
| dllpath | a string containing the path to the GDM4Rext.dll support library. |
| extrap\_type | a string containing one of the four following extrapolation methods: “Default10”, “WholeGrad”, “Conservative”, “None”. |

Details

gdm\_ext.transform utilises the quantiles and coefficients in a gdm model to transform a set of ESRI Binary Export grids. The grids may extend beyond the quantiles defined by the model and these extrapolations may be dealt with using one of the extrap\_type methods defined above.

“Default10” is the default method and it uses a linear extrapolation of the 0%-10% and 90%-100% slopes to set the extrapolated values.

“WholeGrad” uses a linear extrapolation of the 0%-100% slope to set the extrapolated values.

“Conservative” makes a choice of the minimum slope at either end of the continuum between the Default10 and WholeGrad methods.

“None” uses the minium and maximum transformed values for any gridcells that are to be extrapolated.

A grid with an “\_ERR” file extenstion is also created detailing any of the grids cells that were extrapolated and also a grid called ABS\_ERR\_SUM is created with the sums of the extrapolated gridcells. Both these outputs may be useful for diagnostic purposes.

Value

gdm\_ext.transform returns null.

Author(s)

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References

Ferrier, S., Manion, G., Elith, J. and Richardson, K. (2007) Using generalized dissimilarity modelling to analyse and predict patterns of beta diversity in regional biodiversity assessment. *Diversity and Distributions* 13: 252-264

See Also

gdm.fit, gdm.summary, gdm.plot, gdm.transform, gdm.predict

Examples

##

inpaths <- “d:\\gridpaths\\myInputGrids.csv”

outdir <- “d:\\outputs”

dllpath <- “d:\\mydlls\\GDM4Rext.dll”

Gdm\_ext\_transform(model, inpaths, outdir, dllpath)

##