Package 'prabclus'

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Title Functions for clustering of presence-absence and abundance data

Version 2.1-4

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Depends R (>= 2.0), MASS

Suggests mclust, spdep, tripack, maptools, foreign, SparseM, mvtnorm

Description Distance-based parametric bootstrap tests for clustering, mainly intended for presence-absence data and abundance data (clustering of species distribution ranges). Jaccard, Kulczynski, quantitative Kulczynski and geco distance measures, clustering of presence-absence and abundance data, and nearest neighbor based noise detection (R port of Byers and Raftery's (1998) "NNclean"). Main functions are prabtest, abundtest (for testing), prabclust (for clustering), prabinit (for preparing the data) and NNclean (for noise detection). The help-pages for prabtest, abundtest and prabclust contain simple standard executions. Note that the use of the package mclust (called by function prabclust) is protected by a special license, see http://www.stat.washington.edu/mclust/license.txt, particularly point 6.

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License GPL

URL http://www.homepages.ucl.ac.uk/~ucakche

Repository CRAN

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R topics documented:

`prabclus-package` *Test for clustering of presence-absence data ~~ package title ~~*

Description

Distance-based parametric bootstrap tests for clustering, mainly intended for presence-absence data (clustering of species distribution maps). Jaccard, Kulczynski and geco distance measures, clustering of presence-absence and abundance data, and nearest neighbor based noise detection (R port of Byers and Raftery's (1998) "NNclean"). Main functions are prabtest (for testing), prabclust (for clustering), prabinit (for preparing the data) and NNclean (for noise detection). The help-pages for prabtest and prabclust contain simple standard executions. ~~ A concise (1-5 lines) description of the package ~~

Details

Package:	prabclus
Version:	2.0-2
Date:	2006-10-06
Depends:	R (>= 2.0), MASS
Suggests:	mclust02
License:	GPL
URL:	http://www.homepages.ucl.ac.uk/~ucakche
Packaged:	Fri Oct 6 20:57:45 2006; chrish
Built:	R 2.6.0; ; 2007-11-05 12:53:48; unix

Index:

kulczynski	Kulczynski distance matrix
kykladspecreg	Snail presence-absence data from Aegean sea
lcomponent	Largest connectivity component
nb	Neighborhood list for Aegean islands
nbtest	Test of neighborhood list
nn	Mean distance to kth nearest neighbor
piecewiselin	Piecewise linear transformation for distance matrices
pop.sim	p-value simulation for presence-absence matrices clustering test
prabclust	Clustering of species ranges from presence-absence matrices (mixture method)
prabinit	Presence-absence/abundance matrix initialization
prabtest	Parametric bootstrap test for clustering in presence-absence matrices
qkulczynski	Quantitative Kulczynski distance matrix
randpop.nb	Simulation of presence-absence matrices (non-clustered)
summary.prabtest	Print and summary method for prabtest
waterdist	Overwater distances between islands in the Aegean sea

~~ An overview of how to use the package, including the most important ~~ ~~ functions ~~

Author(s)

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Maintainer: Christian Hennig <chrish@stats.ucl.ac.uk> ~~ The author and/or maintainer of the package ~~

References

~~ Literature or other references for background information ~~

See Also

~~ Optional links to other man pages, e.g. ~~ ~~ <pkg> ~~

Examples

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~~ simple examples of the most important functions ~~
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