Package 'sisus'

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Type Package

Title SISUS: Stable Isotope Sourcing using Sampling

Version 0.09-011

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Description SISUS for source partitioning using stable isotopes.

Depends R (>= 2.7.0), annotate, ash, Biobase, coda, ellipse, gclus,gdata, geneplotter, gplots, gtools, hdrcde, moments, mvtnorm,polyapost, rcdd, RColorBrewer, stats, sm

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`sisus-package` *sisus reads in a specific Excel-like workbook and performs an IsoSource-type analysis*

Description

Provides sample of feasible solutions to pi in linear systems, b = A*pi.
Designed in the language of stable isotope mixing models for ecological and biological applications.

Details

Package:	sisus
Type:	Package
Version:	0.09-011
Date:	2008-05-22
License:	GNU General Public License (GPL)

sisus(filename) is the only user function

Author(s)

Erik Barry Erhardt

Maintainer: Erik Barry Erhardt <erik@statacumen.com>

Examples

```
## # set working directory for many output files with setwd()
```

```
## # see http://statacumen.com/sisus for workbook
## filename = "http://statacumen.com/old/sisus/examples/SISUS_v0_09_template.xls";
## sisus(filename)
```

`additional.linear.constraints` *additional.linear.constraints*

Description

additional.linear.constraints() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`assign.variables` *assign.variables*

Description

assign.variables() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`diag.panel.hist` *diag.panel.hist*

Description

diag.panel.hist() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`dirichlet.moments` *dirichlet.moments*

Description

dirichlet.moments() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`filename.clean` *filename.clean*

Description

filename.clean() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`get.data` *get.data*

Description

get.data is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`indy.mixture.isotope.mvn.sample` *indy.mixture.isotope.mvn.sample*

Description

indy.mixture.isotope.mvn.sample() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`isotope.mvn.sampling` *isotope.mvn.sampling*

Description

isotope.mvn.sampling() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`mcmc.diagnostics` *mcmc.diagnostics*

Description

mcmc.diagnostics() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`model.mass.balance.equation` *model.mass.balance.equation*

Description

model.mass.balance.equation() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`model.mass.balance.equation.inverse` *model.mass.balance.equation.inverse*

Description

model.mass.balance.equation.inverse() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`numerical.summaries` *numerical.summaries*

Description

numerical.summaries() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`polytope.constraints` *polytope.constraints*

Description

polytope.constraints() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`polytope.multiple.samples` *polytope.multiple.samples*

Description

polytope.multiple.samples() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`prior.on.p` *prior.on.p*

Description

prior.on.p() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

progress.time *progress.time*

Description

progress.time() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

resample.dirichlet.p *resample.dirichlet.p*

Description

resample.dirichlet.p() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

s.plot.convex.hull *s.plot.convex.hull*

Description

s.plot.convex.hull() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

s.plot.convex.hull.titles
s.plot.convex.hull.titles

Description

s.plot.convex.hull.titles() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`s.plot.marginal.histogram`
s.plot.marginal.histogram

Description

s.plot.marginal.histogram() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`s.plot.scatterplot.sample`
s.plot.scatterplot.sample

Description

s.plot.scatterplot.sample() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`s.plot.settings.begin.end`
s.plot.settings.begin.end

Description

s.plot.settings.begin.end() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`sample.from.polytope` *sample.from.polytope*

Description

sample.from.polytope() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`sisus` *sisus*

Description

runs the stable isotope analysis for the specified Excel-like workbook input dataset

Usage

```
sisus(filename)
```

Arguments

`filename`	template workbook available at http://statacumen.com/sisus/

Value

no value returned, many output files produced depending on options specified in workbook

Author(s)

Erik Barry Erhardt

References

http://statacumen.com/sisus/

Examples

```
## # set working directory for many output files with setwd()
## # see http://statacumen.com/sisus for workbook
## filename = "http://statacumen.com/old/sisus/examples/SISUS_v0_09_template.xls";
## sisus(filename)
```

`write.Ab` *write.Ab*

Description

write.Ab() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`write.input` *write.input*

Description

write.input() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`write.model.settings` *write.model.settings*

Description

write.model.settings() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

`write.out` *write.out*

Description

write.out() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

write.progress *write.progress*

Description

write.progress() is an interal function for sisus()

Author(s)

Erik Barry Erhardt

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