

Package ‘sisus’

February 15, 2012

Type Package

Title SISUS: Stable Isotope Sourcing using Sampling

Version 0.09-011

Date 2008-05-22

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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, hrcde, moments, mvtnorm, polyapost, rcdd, RColorBrewer, stats, sm

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sisus-package	<i>sisus reads in a specific Excel-like workbook and performs an IsoSource-type analysis</i>
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Description

Provides sample of feasible solutions to π 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 internal 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)
```

<code>write.Ab</code>	<i>write.Ab</i>
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Description

`write.Ab()` is an internal function for `sisus()`

Author(s)

Erik Barry Erhardt

<code>write.input</code>	<i>write.input</i>
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Description

`write.input()` is an internal function for `sisus()`

Author(s)

Erik Barry Erhardt

<code>write.model.settings</code>	<i>write.model.settings</i>
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Description

`write.model.settings()` is an internal function for `sisus()`

Author(s)

Erik Barry Erhardt

<code>write.out</code>	<i>write.out</i>
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Description

`write.out()` is an internal function for `sisus()`

Author(s)

Erik Barry Erhardt

write.progress

write.progress

Description

write.progress() is an internal function for *sisus()*

Author(s)

Erik Barry Erhardt

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