Package ‘StMoSim’

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Type Package
Title Plots a QQ-Norm Plot with several Gaussian simulations.
Version 3.0
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Description Plots a QQ-Norm Plot with several Gaussian simulations.
License GPL-2 | GPL-3
LazyLoad yes
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StMoSim-package  Plots a QQ-Norm plot with several Gaussian simulations.
Description

With this package you can simulate several lines into the QQ-Norm Plot under the assumption of Gaussian distribution. If the realised observations lie inside of the simulations tracks there is the possibility that the observations stem from a Gaussian distribution. This can be very useful in residual analysis where you have to evaluate whether the model residuals fit the assumption of gaussian distributed terms or not.

———–<CHANGELOG>———–

——–< v3.0 - 2014-10-16 >——–
Computation intense code moved to C++.
Moved to parallel computation, thanks to Rcpp/RcppParallel!
Minor bug fixes.
——–< v2.2 - 2012-02-24 >——–
Minor bug fixes, due to CHECK changes on CRAN.
——–< v2.1 - 2012-02-24 >——–
Minor bug fixes.
——–< v2.0 - 2011-03-31 >——–
Moved to S4 Classes.
——–< v1.1 - 2010-05-03 >——–
First Version on CRAN.
———–</CHANGELOG>———–

Details

Package: StMoSim
Type: Package
Version: 3.0
Date: 2014-10-16
License: GPL-2 | GPL-3
LazyLoad: yes

function: qqnormSim

Author(s)

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qqnormSim

Plots a QQ-Norm plot with several Gaussian simulations.

Description

Plots a QQ-Norm plot of the variable x with nSim Gaussian simulations.

Usage

## sT method for signature 'lm'
qqnormSim(x, nSim = 500)
## sT method for signature 'numeric'
qqnormSim(x, nSim = 500)

Arguments

x is a lm-object or a numeric vector. If it is an lm-object its residuals are plotted.
nSim is an optional argument. If you like to have more or less than 500 simulations you can specify this parameter.

Examples

## Not run:
# The observations should behave like a simulation, because the observations are sampled from a Gaussian distribution.
qqnormSim(rnorm(100))
# On the first glance its obvious that this sample doesn't originate from a Gaussian distribution due to the heavy tails.
qqnormSim(rt(100, df = 4))

# Reduce the simulation tracks from 500 to 50. (500 is default).
# Not recommended unless you have not enough computation power.
qqnormSim(rnorm(100), nSim = 50)
## End(Not run)
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