# Package 'RcmdrPlugin.seeg'

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Type Package

Title Remdr Plugin for seeg	
Version 1.0	
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<b>Description</b> Supports the text book Acevedo, M.F (2013) ``Data Analysis and Statistics for Geography, Environmental Science, and Engineering" CRC Press	
License GPL-2	
Depends Rcmdr, seeg, spatstat, sgeostat	
Log-Exceptions	
RcmdrModels	
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NeedsCompilation no	
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RcmdrPlugin.seeg-package

Statistics for Environmental Science, Engineering, and Geography

## **Description**

Used in Acevedo, M.F. 2013. "Data Analysis and Statistics for Geography, Environmental Science, and Engineering", CRC press.

## **Details**

Package: RcmdrPlugin.seeg

Type: Package
Version: 1.0
Date: 2013-01-06
License: GPL-2

Package to use the seeg package from the Rcmdr (Fox 2005, 2007)

To start the RcmdrPlugin.seeg:

- 1.- run the R Commander by loading it as package Rcmdr or by using Commander() if the Rcmdr package is already loaded
- 2.- select RcmdrPlugin.seeg from menu Tools -> Load Rcmdr Plug-in(s) ...

Note: once the RcmdrPlugin.seeg has been loaded, the options()\$Rcmdr should show "RcmdrPlugin.seeg" in the \$plugins component.

3.- during the same R session, after the RCommander is closed, it can be re-run simply with Commander() and the RcmdrPlugin.seeg will re-run directly because of the options()\$Rcmdr have been set.

Optionally, if you want RcmdrPlugin.seeg to load automatically upon starting Rcmdr set options using options(Rcmdr=list(plugins="RcmdrPlugin.seeg"))

#### Author(s)

M.F. Acevedo < Acevedo @unt.edu>

## References

Acevedo, M.F. 2013. "Data Analysis and Statistics for Geography, Environmental Science, and Engineering", CRC press.

Fox, J. 2005 "The R Commander: A basic-statistics graphical user interface to R" Journal of Statistical Software, 14(9):1-42, Aug. 2005. ISSN 1548-7660. URL http://www.jstatsoft.org/v14/i09

Fox, J. 2007 "Extending the R Commander by 'Plug-In' Packages." R News, 7(3), 46-52. URL http://CRAN.R-project.org/doc/Rnews/

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## See Also

 $\verb| ecdfPlot|, tsPlot|, scangeoEASppp|, convertToppp|, quadChisqppp|, nnGKenvppp|, varCal|, SemiVarCov|, OKrigingCmd|, PlotKriged|\\$ 

## **Examples**

```
panel2(size=5)
x <- rnorm(100)
ts.plot(x)
acf(x)</pre>
```

RcmdrPluginseeg

Remdr Plugin seeg functions

## Description

Functions for the seeg plugin of package Rcmdr. For details of the Rcmdr see Fox(2005, 2007).

## Usage

```
ecdfPlot()
tsPlot()
acfPlot()
edaPlot()
scangeoEASppp()
scangeoEASras()
convertToppp()
quadChisqppp()
quadPoisppp()
nnGKppp()
nnGKenvppp()
varCal()
SemiVarCov()
MakeSemiVarCov()
OKrigingCmd()
PlotKriged()
```

## Arguments

These functions do not require arguments. Functions are invoked by the menu items of RcmdrPlugin.seeg. The user does not really need to employ these functions. Their role are as follows:

ecdfPlot: dialog to pick a variable from a dataset and call ecdf function of seeg tsPlot: dialog to pick a variable from a dataset and call ts.plot function acfPlot: dialog to pick a variable from a dataset and call acf function edaPlot: dialog to pick a variable from a dataset and call eda6 function of seeg

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scangeoEASppp: dialog to set a name for dataset to be read from a geoEAS file using scan.geoeas.ppp of seeg

scangeoEASras: dialog to set a name for dataset to be read from a geoEAS file using scan.map.ras of seeg

convertToppp: dialog to select a dataset and convert to ppp using makeppp of seeg

quadChisqppp: dialog to select a dataset and perform quadrat analysis by Chisquare using quad.chisq.ppp of seeg

quadPoisppp: dialog to select a dataset and perform quadrat analysis by Poisson using quad.poisson.ppp of seeg

nnGKppp: invokes function nnGK.ppp of seeg to perform Nearest Neighbor analysis using nnGK.ppp of seeg

nnGKenvppp: dialog to select number of Monte Carlo realizations and calculate envelopes for G and K using nnGKenv.ppp of seeg

varCal: dialog to set arguments for semivariogram calculations using vario of seeg

SemiVarCov: dialog to set model of Semi-Variance and Covariance using model.semivar.cov of seeg

MakeSemiVarCov: dialog to make a model of Semi-Variance and Covariance using make.variogram of seeg

OKrigingCmd: dialog to set arguments for Ordinary Kriging using Okriging of seeg

PlotKriged: dialog to set arguments to plot a dataset together with its kriged map using plotkriged of seeg i

#### **Details**

To start the RcmdrPlugin.seeg:

- 1.- run the R Commander by loading it as package Rcmdr or by using Commander() if the Rcmdr package is already loaded
- 2.- select RcmdrPlugin.seeg from menu Tools -> Load Rcmdr Plug-in(s) ...

Note: once the RcmdrPlugin.seeg has been loaded, the options()\$Rcmdr should show "RcmdrPlugin.seeg" in the \$plugins component.

3.- during the same R session, after the RCommander is closed, it can be re-run simply with Commander() and the RcmdrPlugin.seeg will re-run directly because of the options()\$Rcmdr have been set.

Optionally, if you want RcmdrPlugin.seeg to load automatically upon starting Rcmdr set options using options(Rcmdr=list(plugins="RcmdrPlugin.seeg"))

#### Value

These functions generate a dialog box for the user to enter arguments for a call one of seeg functions to execute the work.

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## Note

Input files are in 'datafiles.zip' in directory 'datafiles' and organized by chapters of Acevedo (2013). The examples below require input files.

## Author(s)

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#### References

Acevedo M.F. 2013. "Data Analysis and Statistics for Geography, Environmental Science, and Engineering", CRC Press.

Fox, J. 2005 "The R Commander: A basic-statistics graphical user interface to R" Journal of Statistical Software, 14(9):1-42, Aug. 2005. ISSN 1548-7660. URL http://www.jstatsoft.org/v14/i09

Fox, J. 2007 "Extending the R Commander by 'Plug-In' Packages." R News, 7(3), 46-52. URL http://CRAN.R-project.org/doc/Rnews/

## See Also

```
convert to ppp object ppp, plot plot, plot plot, sgeostat point, pair,
```

## **Examples**

```
## Not run:
    command <- paste("plot(ecdf(", ActiveDataSet(), "$", x, '))', sep="")
    doItAndPrint(command)
## End(Not run)</pre>
```

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