timeSeries

Rmetrics Reference Card

The functions listed in this reference card are available from the CRAN server, its development version from the r-forge Server.

Time Series Functions:

timeSeries-.R*

timeSeries	Generates a signal or timeSeries from scratch
dummy	
dummySeries	Creates a dummy monthly timeSeries object
dummyDailySeries	Creates a dummy daily timeSeries object
getDataPart	Extracts data slot from a timeSeries object
setDataPart	Assigns data slot of a timeSeries object
isOHLC	
.isOHLC	Tests if a series has Open-High-Low-Close columns
.isOHLCV	Tests if a series has Open-High-Low-Close-Volume
isRegular	Tests if a time series is a regular series
isDaily	Tests if a timeSeries is a daily series
isMonthly	Tests if a timeSeries is a monthly series
isQuarterly	Tests if a timeSeries is a quarterly series
frequency	Returns the frequency of a regular time series
isUnivariate	Tests if a timeSeries object is univariate
isMultivariate	Tests if a timeSeries object is multivariate
readSeries	Reads a CSV file and creates a timeSeries
signalCounts	
.signalCounts	Creates charvec for integer indexed time stamps
slotFinCenter	
finCenter	Extracts financial center slot from a timeSeries
finCenter<-	Assigns financial center slot from a timeSeries
getFinCenter	Extracts financial center slot from a timeSeries
setFinCenter<-	Assigns new financial center slot from a timeSeries
slotSeries	
series	Extracts data slot from a timeSeries object
series<-	Assigns new data slot to a timeSeries object
getSeries	Extracts data slot from a timeSeries object
setSeries<-	Assigns new data slot to a timeSeries object
slotTime	
time	Extracts time stamps from a timeSeries object
time<-	Assigns time samps to a timeSeries object
getTime	Extracts time stamps from a timeSeries object
setTime<-	Assigns time samps to a timeSeries object
slotUnits	
getUnits	Extracts units slot from a timeSeries
setUnits<-	Assigns new units slot to a timeSeries

Base Time Series Functions:

base-.R*

apply	Applies a function to blocks of a timeSeries
attach	Attaches a timeSeries to the search path
cbind	Binds columns of two timeSeries objects
rbind	Binds rows of two timeSeries objects
comment	Returns documentation slot of a time series
diff	Differences a timeSeries object
dim	Returns dimension of a timeSeries object
dim<-	Assigns dimension of a timeSeries object
dimnames	Returns dimension names of a time series
dimnames	Assigns dimension names of a timeSeries object
colnames	Returns column names to a timeSeries object
rownames	Returns row names to a timeSeries object
colnames<-	Assigns column names to a timeSeries object
rownames<-	Assigns row names to a timeSeries object
names	Returns column names of a timeSeries object
names<-	Assigns column names of a timeSeries object
merge	Merges two timeSeries objects
rank	Returns sample ranks of a timeSeries object
rev	Reverts a time series in the time stamps
sample	Resamples a time series in its time stamps
scale	Centers and/or scales a timeSeries object
sort	Sorts a time series in its time stamps
start	Extracts start date of a timeSeries object
end	Extracts end date of a timeSeries object

Subsetting:

base-.R:*

subset	
.subset_	Subsets timeSeries objects
.findIndex	Index search
[	Subsets a timeSeries object
[<-	Assigns value to subsets of a time series
$	Subsets a time series by column names
$<-	Replaces subset by column names
t	Returns the transpose of a timeSeries object

Methods:

methods-.R*

as.timeSeries	Defines method for a timeSeries object
as.*.default	Returns the input
as.*.ts	Transforms a 'data.frame' into a timeSeries
as.*.data.frame	Transforms a 'data.frame' into a timeSeries
a.s*.character	Loads and transformas from a demo file
as.*.zoo	Transforms a 'zoo' object into a timeSeries
as.vector.*	Converts a univariate timeSeries to a vector
as.matrix.*	Converts a timeSeries to a 'matrix'
as.numeric.*	Converts a timeSeries to a 'numeric'
as.data.frame.*	Converts a timeSeries to a 'data.frame'
as.ts.*	Converts a timeSeries to a 'ts'
as.ts.logical	Converts a timeSeries to 'logical'
as.list.*	Converts a timeSeries to 'list'
	Note: Replace '*' by 'timeSeries'
comment	Gets documentation slot of a timeSeries object
comment<-	Set documentation slot of a timeSeries object
is	
is.timeSeries	Tests for a timeSeries object
mathops	
Ops,timeSeries	Returns group 'Ops' for a timeSeries object
cummax	Returns cumulated maxima from a timeSeries
cumin	Returns cumulated minima from a timeSeries
cumprod	Returns cumulated products from a timeSeries
cumsum	Returns cumulated sums from a timeSeries
quantile	Returns sample qunatile of a timeSeries
plot	Plots a timeSeries object
lines	Adds lines to a timeSeries plot
points	Adds points to a timeSeries plot
show	Prints a timeSeries object
print	Prints a timeSeries object

Statistics Time Series Functions:

statistics-.R*

colCumsums	Computes cumulated sums of a timeSeries by column
colCummaxs	Computes cumulated maximum values by column
colCummins	Computes cumulated maximum values by column
colCumprods	Computes cumulated product values by column
colCumreturns	Computes cumulated product values by column
colSums	Computes sums of all values in each column
colMeans	Computes means of all values in each column
colSds	Computes standardard deviation of each column
colVars	Computes sample variance by column
colSkewness	Computes sample skewness by column
colKurtosis	Computes sample kurtosis by column
colMaxs	Computes maximum values in each column
colMins	Computes minimum values in each column
colProds	Computes product of all values in each column
colStats	Computes sample statistics by column
orderColnames	Returns ordered column names of a timeSeries
sortColnames	Returns sorted column names of a timeSeries
sampleColnames	Returns sampled column names of a timeSeries
pcaColnames	Returns PCA correlation ordered column names
hclustColnames	Returns hierarchical clustered column names
statsColnames	Returns statistically rearranged column names
orderStatistics	Computes order statistics of a timeSeries
rollMean	Computes rolling mean of a timeSeries
rollMin	Computes rolling minimum of a timeSeries
rollMax	Computes rolling maximum of a timeSeries
rollMedian	Computes rolling median of a timeSeries
rollStats	Computes rolling statistics of a timeSeries
rowCumsums	Computes cumulated sums of a time series by row
smoothLowess	Smoothes a series with lowess function
smoothSupsmu	Smoothes a series with supsmu function
smoothSpline	Smoothes a series with smooth.spline function

Financial Time Series Functions:

fin-.R:*

align	Aligns a time series to time stamps
Cumulated	Computes cumulated series from financial returns
daily	
alignDailySeries	Aligns a time series to new positions
rollDailySeries	Rolls daily a timeSeries on a given period
drawdowns	Generates a time series of drawdown levels
drawdownsStats	Computes drawdown statistics from a timeSeries
durations	Computes durations from a timeSeries
monthly	
countMonthlyRecords	Returns a series with monthly counts of records
rollMonthlyWindows	Returns start/end dates for rolling time windows
rollMonthlySeries	Rolls Monthly a timeSeries on a given period
periodical	
.endOfPeriodSeries	Returns series back to a given period
.endOfPeriodStats	Returns statistics back to a given period
.endOfPeriodBenchmarks	Returns benchmarks back to a given period
returns	Computes returns from a index/price/value series
runlengths	Returns a timeSeries of runlengths
splits	
outlier	Detects timeSeries splits by outlier detection
spreads	Computes spreads between bivariate timeSeries
midquotes	Computes mid quotes of bivariate timeSeries
turnpoints	
turns	Returns peaks and pits from a timeSeries
turnsStats	Computes turnpoints statistics for a timeSeries

Misc. Time Series Functions:

stats-.R:*

aggregate	Aggregates a time series by calendarical blocks
filter	Applies linear filtering to a timeSeries
lag	Computes a lagged version of a timeSeries
na.contignous	Finds longest consecutive of non-missing values
na.omit	Handles missing values in a timeSeries
window	Subtracts a piece or a window from a timeSeries

Utility Functions:

utils-.R:*

Description	Sets default description string
getArgs	Extracts arguments from a timeSeries function
head	Returns the head of a timeSeries object
tail	Returns the tail of a timeSeries object
str	Displays the structure of a timeSeries object

Rmetrics Association
www.rmetrics.org
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