Package 'forecastComp'

September 11, 2019

Title What the Package Does (one line, title case)

Version 0.0.0.9000

Description What the package does (one paragraph).

Depends R (>= 3.5.0)

Imports forecast

License GPL (>= 2)

Encoding UTF-8

LazyData true

RoxygenNote 6.0.1

R topics documented:

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`compare_forecasts` *Compare forecast accuracies*

Description

Test the efficacy of time series models by comparing forecasts with actual data

Usage

```
compare_forecasts(m, y = NULL, holdout = NULL)
```

Arguments

`m`	a list of models to compare
`y`	a monovariate time series; the data to train and test the models on
`holdout`	single integer; the last n points will be forecasted

Examples

```
data(tf.d12)
ts2 <- head(tf.d12, 110)

mod1 <- forecast::snaive(ts2)
mod2 <- ar(ts2)
mod3 <- forecast::ets(ts2)
mod.l <- list(mod1, mod2, mod3)

(l <- compare_forecasts(mod.l, ts2, 12))

par(mfrow=c(3, 1), mar=c(3, 3, 2, 1), mgp=c(2, 0.6, 0), oma=c(0, 0, 0, 0))
invisible(lapply(l, function(x) {
  plot(x$fcast.obj, shaded=FALSE, PI=FALSE, include=48, type="l",
    cex.main=0.9, xpd=NA)
  lines(x$test, col="#00FF4488")
  }
))

## Not run:
data(sunspot.month)

extr <- aggregate(sunspot.month, nfrequency=2, mean)[100:349]
extr <- ts(extr, f=21)

mod1 <- StructTS(extr)
mod2 <- ar(extr)
mod3 <- nnetar(extr)
mod4 <- arfima(extr)
mod5 <- Arima(extr, order=c(3, 0, 1))
mod6 <- Arima(extr, order=c(2, 0, 2), seasonal=c(2, 1, 0))

mod.l <- list(mod1, mod2, mod3, mod4, mod5, mod6)

l <- compare_forecasts(mod.l, extr, 21)

diffs <- sapply(l, function(y) y[["fcast"]] - y[["test"]])
matplot(diffs, type="l",
  col=c("red", "lightgreen", "blue", "orange", "pink", "cyan"), lty=1)

par(mfrow=c(3, 2), mar=c(3, 3, 2, 1), mgp=c(2, 0.6, 0), oma=c(0, 0, 0, 0))
invisible(lapply(l, function(x) {
  plot(x$fcast.obj, shaded=FALSE, PI=FALSE, include=66, type="l",
    cex.main=0.9, xpd=NA)
  lines(x$test, col="#00FF4488")
  }
))
summary(l)
head(forecasts(l))
l

## End(Not run)
```

`forecasts` *Return forecasts*

Description

Return forecasts and actual data from `compare_forecasts` object

Usage

```
forecasts(x)
```

Arguments

`x`	a `compare_forecasts` object

Value

A multivarite time series (`mts`) with the actual data, the holdout, on the first column, and the forecasts on the rest.

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