Prática

```
#treino: criar os modelos
treino = window(data, start=c(anoinic,mesinic), end=c(anofim-2, mesfim))
#teste: testar os modelos
teste = window(data, start=c(anofim-2,mesinic), end=c(anofim, mesfim))

#hold winter multiplicativo
Mhw2 = hw(treino,seasonal = "multiplicative", h=valr)

#arima
Marima = auto.arima(treino)
Marima = forecast(Marima, h=valr)
```

Prática

- `output$Mnaive <- renderTable({accuracy(teste,Mnaive$mean)})`

Holt Winter Multiplicativo

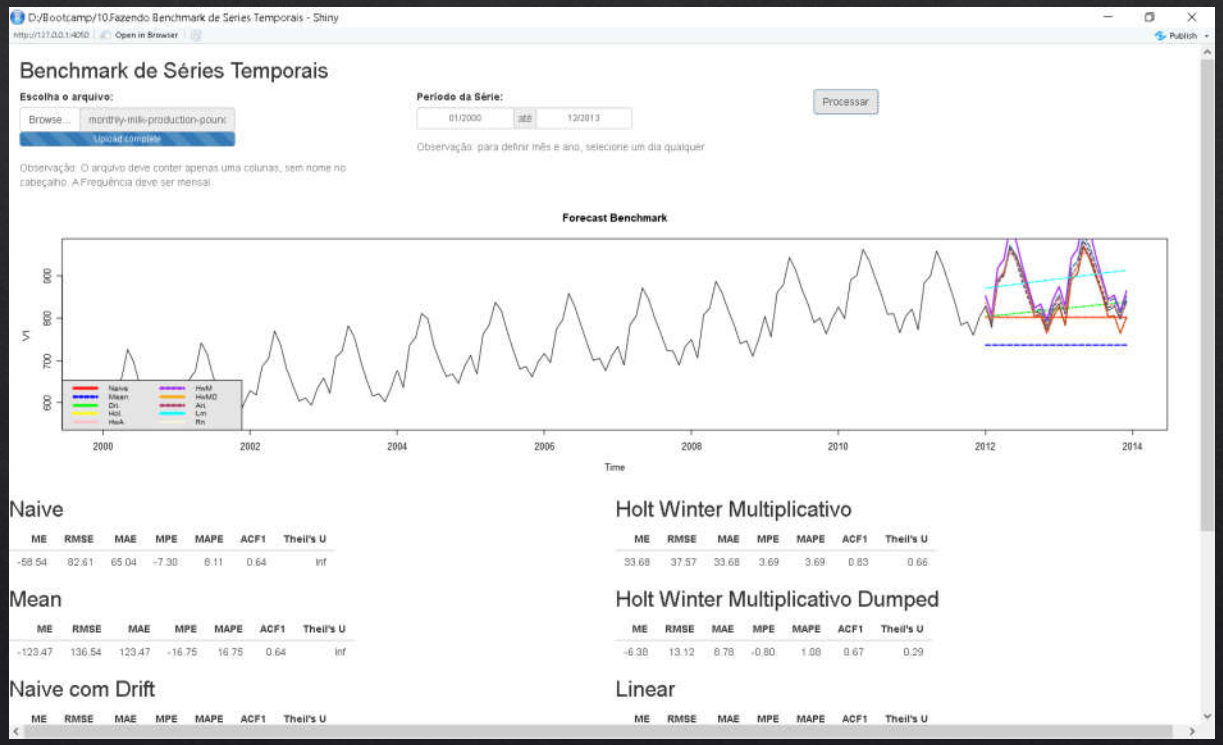
ME	RMSE	MAE	MPE	MAPE	ACF1	Theil's U
33.68	37.57	33.68	3.69	3.69	0.83	0.66

- `plot(data, main = "Forecast Benchmark")`
- `lines(Mnaive$mean, type="l", pch=22, lty=6,  col="red", lwd=2)`

Prática

- `plot(data, main = "Forecast Benchmark")`
- `lines(Mnaive$mean, type="l", pch=22, lty=6,  col="red", lwd=2)`

Prática



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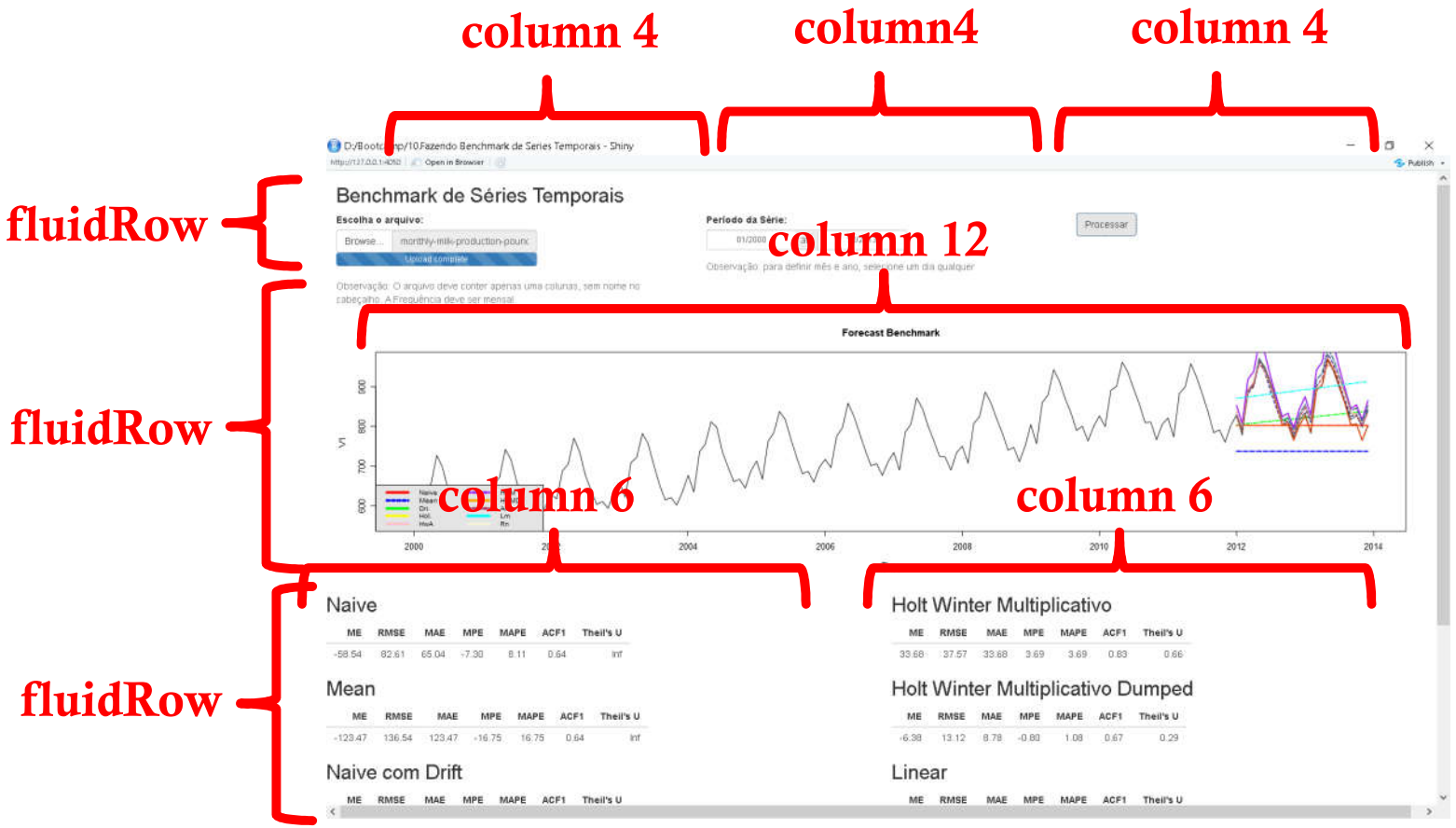
column 4
column4
column 4
fluidRow
Benchmark de Séries Temporais
Escolha o arquivo:
Browse...
monthly-milk-production-pounds
Upload complete
Observação: O arquivo deve conter apenas uma colunas, sem nome no cabeçalho. A Frequência deve ser mensal
Periodo da Série:
01/2000
Processar
Observação: para definir mês e ano, selecione um dia qualquer
column 12
fluidRow
Forecast Benchmark
column 6
column 6
fluidRow
Naive
ME RMSE MAE MPE MAPE ACF1 Theil's U
-58.54 82.61 65.04 -7.30 8.11 0.64 Inf
Mean
ME RMSE MAE MPE MAPE ACF1 Theil's U
-123.47 136.54 123.47 -16.75 16.75 0.64 Inf
Naive com Drift
ME RMSE MAE MPE MAPE ACF1 Theil's U
Holt Winter Multiplicativo
ME RMSE MAE MPE MAPE ACF1 Theil's U
33.68 37.57 33.68 3.69 3.69 0.83 0.66
Holt Winter Multiplicativo Dumped
ME RMSE MAE MPE MAPE ACF1 Theil's U
-6.38 13.12 8.78 -0.80 1.08 0.67 0.29
Linear
ME RMSE MAE MPE MAPE ACF1 Theil's U