

Simulation Example

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Versión 02 noviembre, 2022

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```
beta0 <- -0.6; beta1 <- 1.7; beta2 <- -2.2; beta3 <- 1.3; r1 <- 2; r3 <- 3
Y <- beta0 + beta1*lag(X1,-r1) + beta2*X2 + beta3*lag(X3,-r3) + residuals
xregs <- cbind(X1, X2, X3, X4, X5, X6)
ajuste <- drm.select(Y, xregs, ic='aicc', st_method='adf.test', show_info=F)
```

```
print(ajuste$history, row.names=F)
```

```
var lag          ic
X2  0 -1156.68486061937
X1 -2 -2171.66958134745
X3 -3 -3108.15443209894
```

```
print(ajuste, row.names=F)
```

Series: serie

Regression with ARIMA(0,0,4) errors

Coefficients:

	ma1	ma2	ma3	ma4	intercept	X2	X1	X3
	0.2498	0.3360	0	0.1589	-0.5947	-2.1868	1.6949	1.3083
s.e.	0.0304	0.0302	0	0.0300	0.0033	0.0105	0.0089	0.0320

sigma^2 = 0.002377: log likelihood = 1562.15

AIC=-3108.3 AICc=-3108.15 BIC=-3069.26

```
preds <- forecast_model(Y, xregs, ajuste, h=10,
                        mode='bootstrap', levels=c(50, 75, 90))
```