

Informe EDA

EURUSD y segundo activo (SPY/US500)

Carpeta: outputs/eda

00 Informe ejecutivo

Objetivo: describir patrones, riesgos y estructura temporal de EURUSD y SPY para servir de base al modelado predictivo (horizonte 1D). Criterio de modelos: comparación ARIMA vs SARIMA por BIC; verificación de residuales (Ljung-Box) y gráficos ACF/PACF de residuales. EURUSD: ARIMA(0,1,3) (BIC=-33124.18) · Alt: SARIMA(2,0,2)x(1,1,1)[5] (Δ BIC=+1451.21)

EURUSD — 00 Narrativa ejecutiva

EURUSD (diario) • Periodo: 2025-05-09 23:00:00 → 2025-10-31 22:00:00 • Precio medio: 1.1598 | Último: 1.15363 | Rango [1.10787, 1.18705] • Riesgo (log-returns): $\sigma=0.0009$ ($\sim 0.09\%$), $\text{VaR}_{95}=-0.13\%$, $\text{ES}_{95}=-0.21\%$, JB $p=0 \Rightarrow$ no normal. • MDD aprox.: -6.67%. • Modelo recomendado (menor BIC): ARIMA(0,1,3) | BIC=-33124.18, AIC=-33148.21, Ljung-Box $p=3.424488788078203e-07$. Alternativa: SARIMA(2,0,2) \times (1,1,1)[5] | BIC=-31672.97 ($\Delta\text{BIC}=+1451.21$). Diagnóstico esperado: residuales \approx ruido blanco (Ljung-Box $p \geq 0.05$) y ACF/PACF de residuales sin picos significativos.

EURUSD — HEAD (primeras filas)

Open	High	Low	Close	Volume
1.12566	1.12567	1.12467	1.12475	0.0
1.1192	1.12223	1.1192	1.12093	0.0
1.12092	1.12308	1.12061	1.12246	0.0
1.12245	1.12355	1.12226	1.12276	0.0
1.12276	1.12387	1.12245	1.12381	0.0

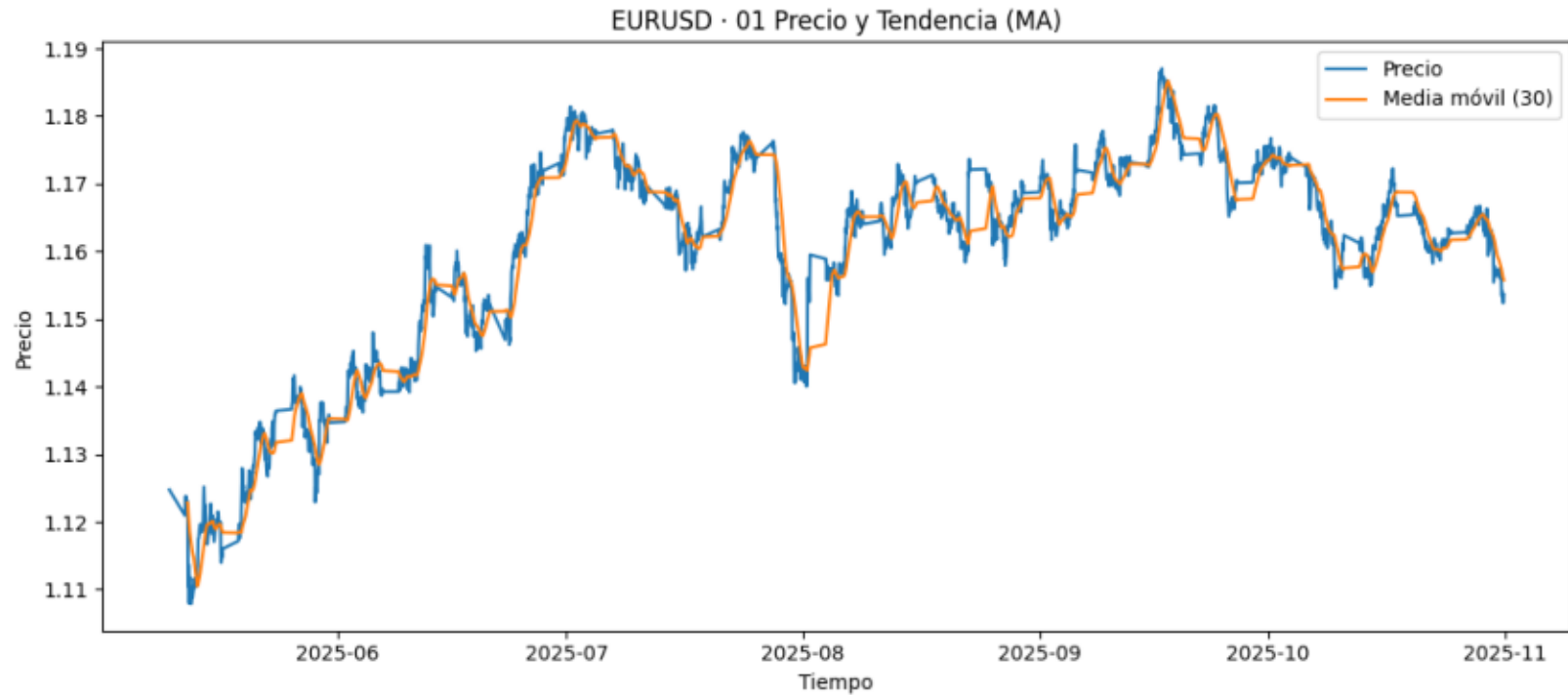
EURUSD — RESUMEN

activo	filas	inicio	fin	precio_ultimo	precio_promedio	precio_min	precio_max
EURUSD	3000	2025-05-09 23:00:00	2025-10-31 22:00:00	1.15363	1.159838	1.10787	1.18705

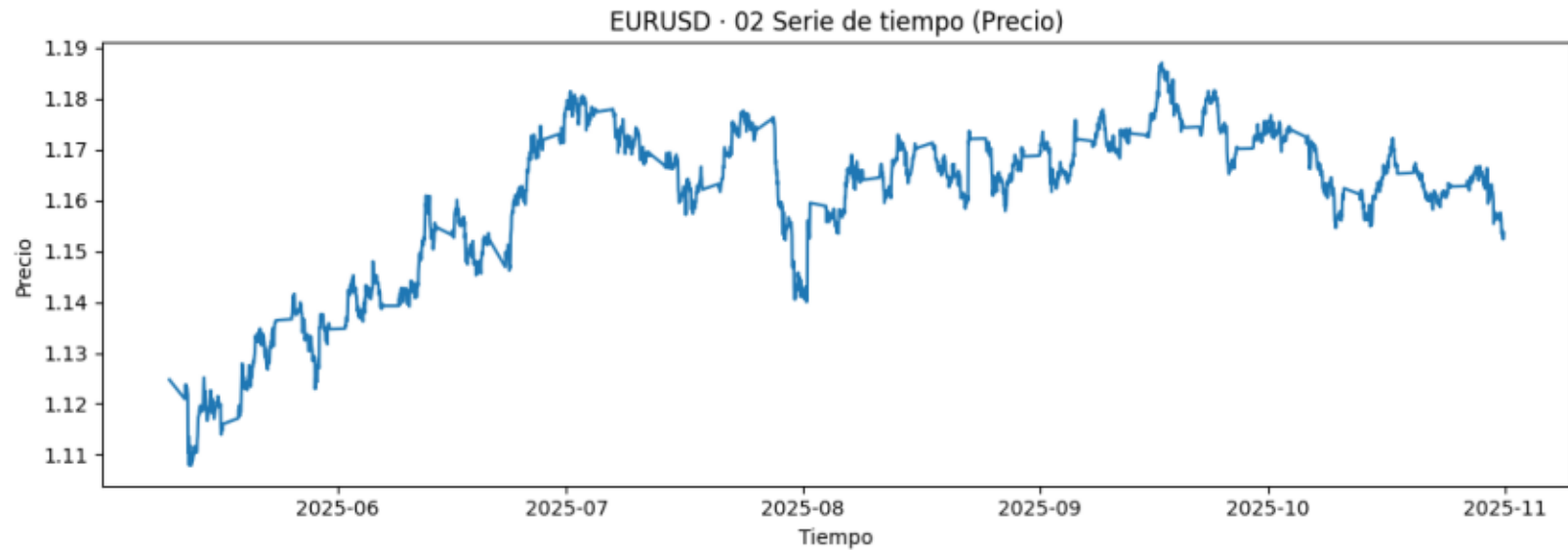
EURUSD — STATS (log-returns)

count	mean	std	skew	kurtosis	JB_stat	JB_pvalue	VaR_95	ES_95
2999.0	8e-06	0.000937	0.651268	22.34552	62387.340245	0.0	-0.001326	-0.002083

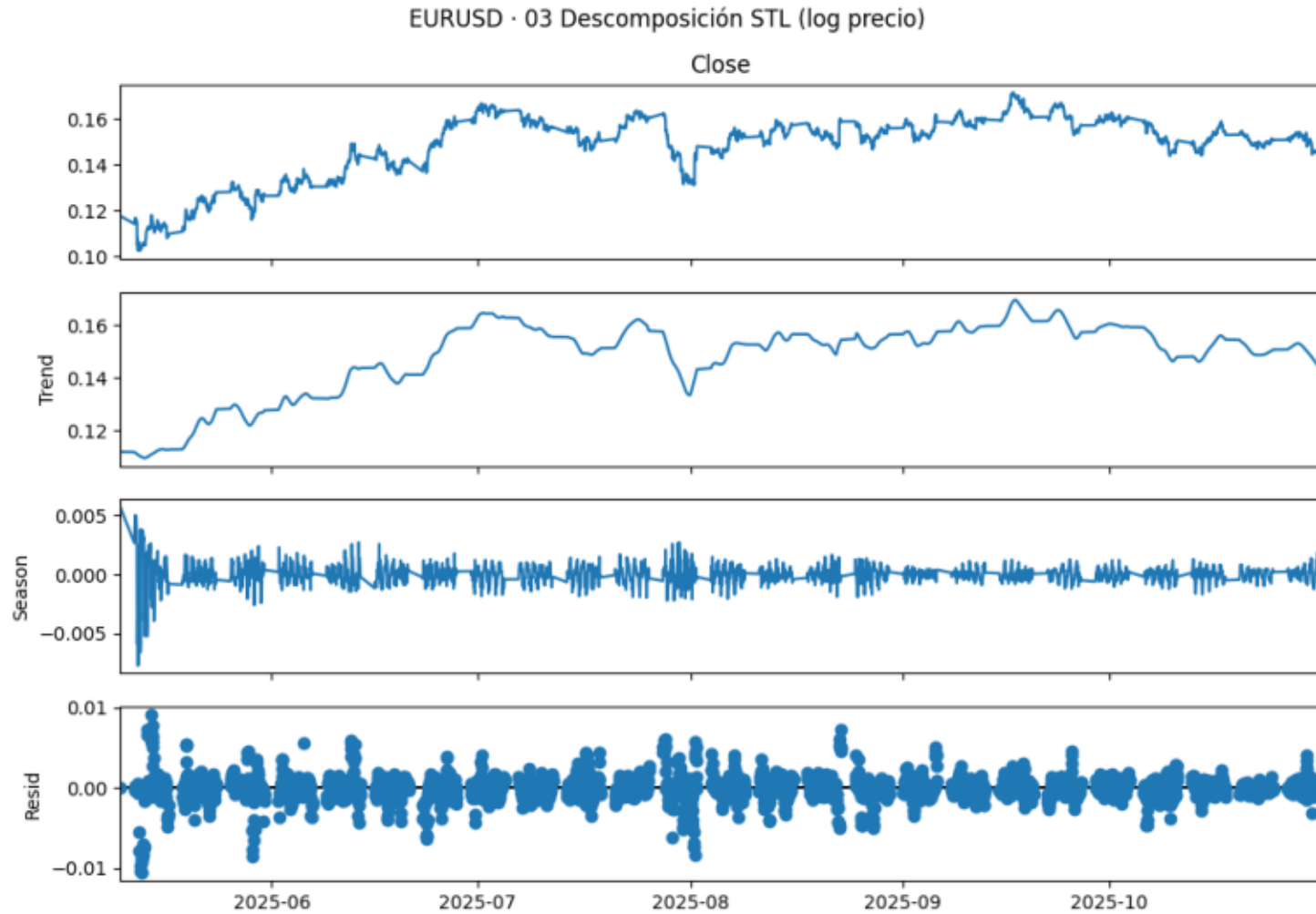
EURUSD — 01 Precio y Tendencia



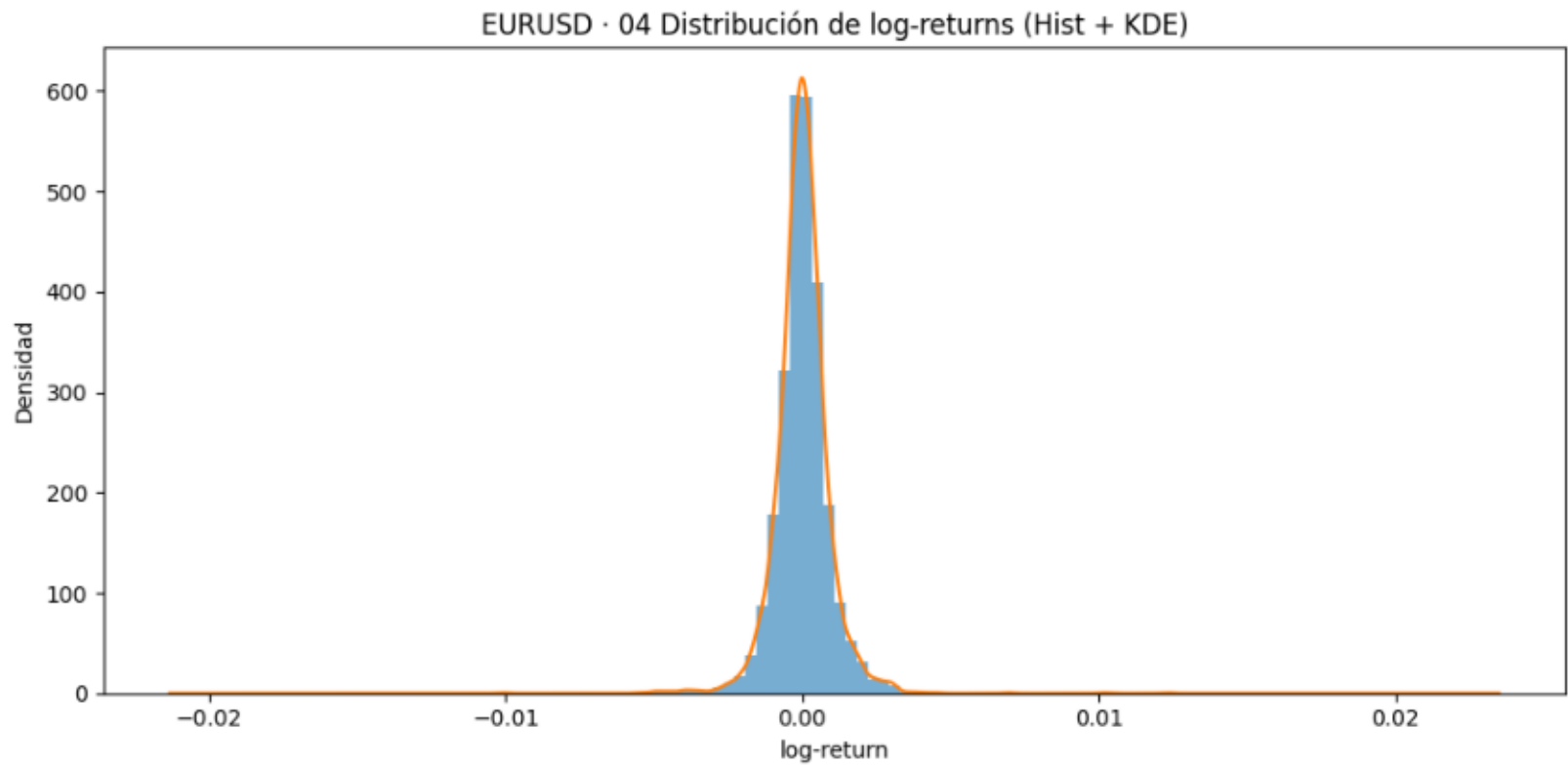
EURUSD — 02 Serie de Precio



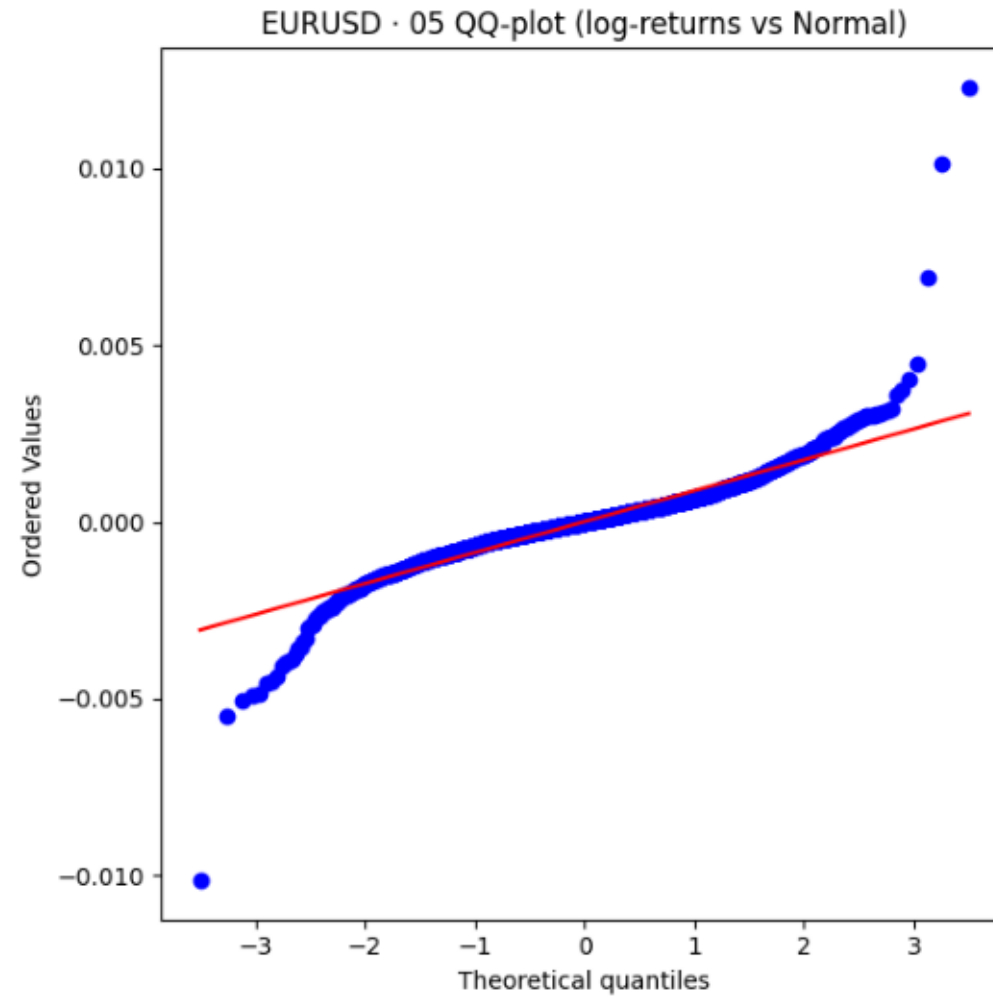
EURUSD — 03 Descomposición STL



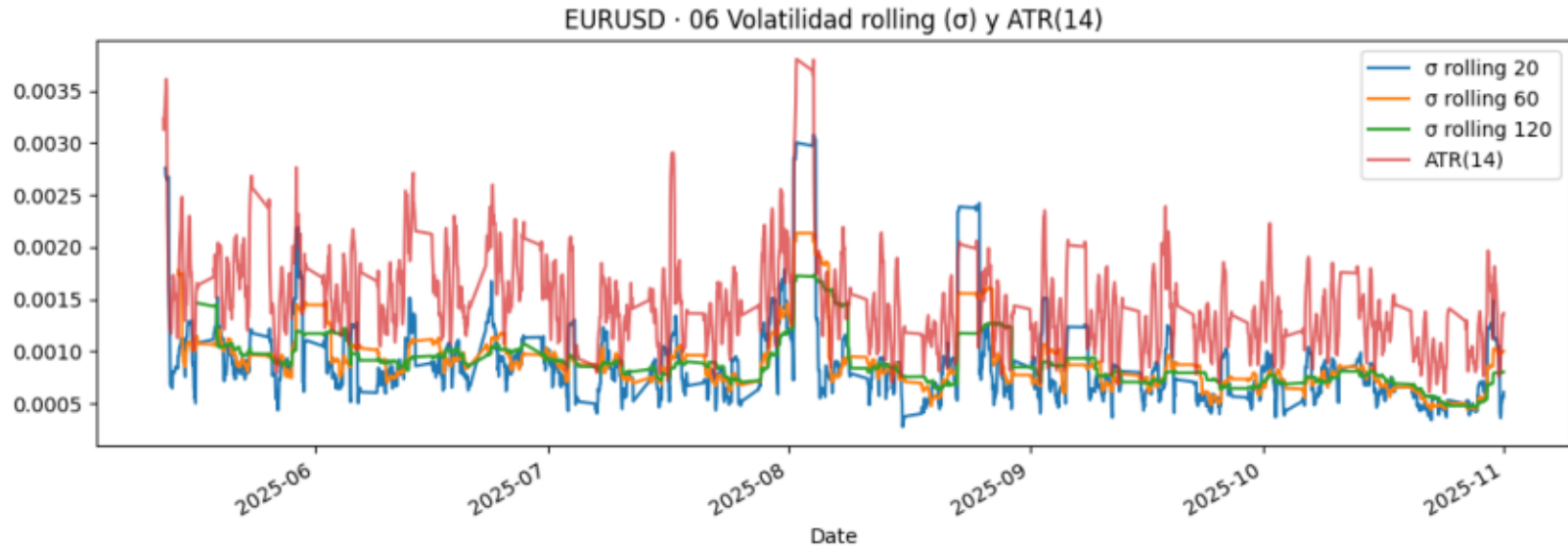
EURUSD — 04 Distribución log-returns (Hist+KDE)



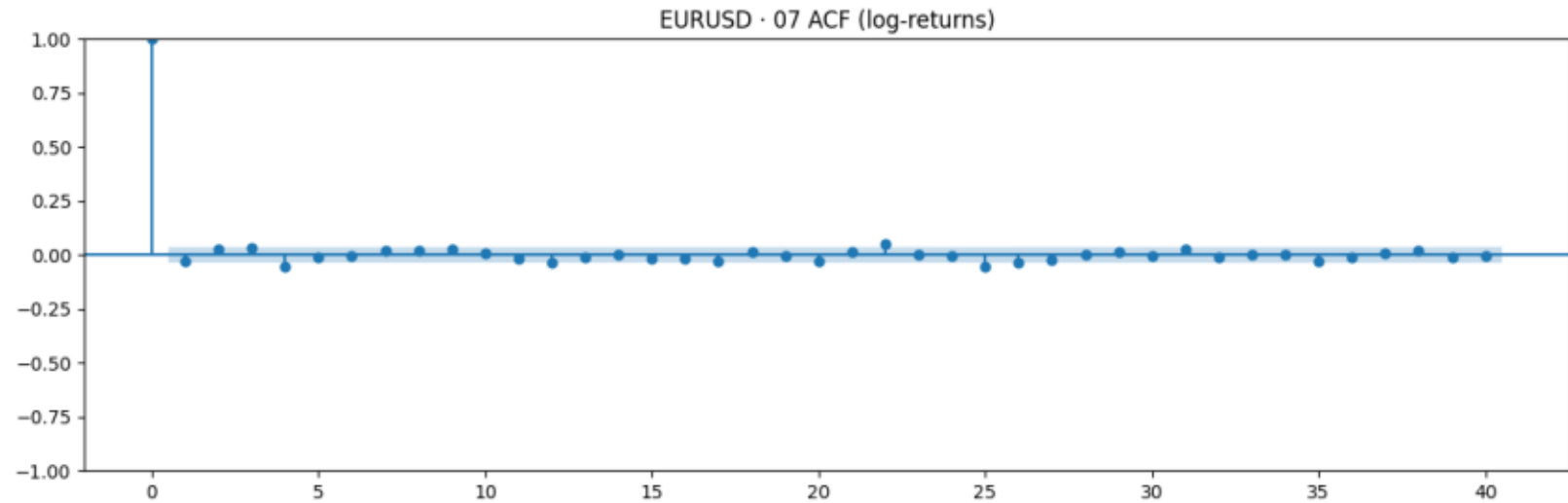
EURUSD — 05 QQ-plot log-returns



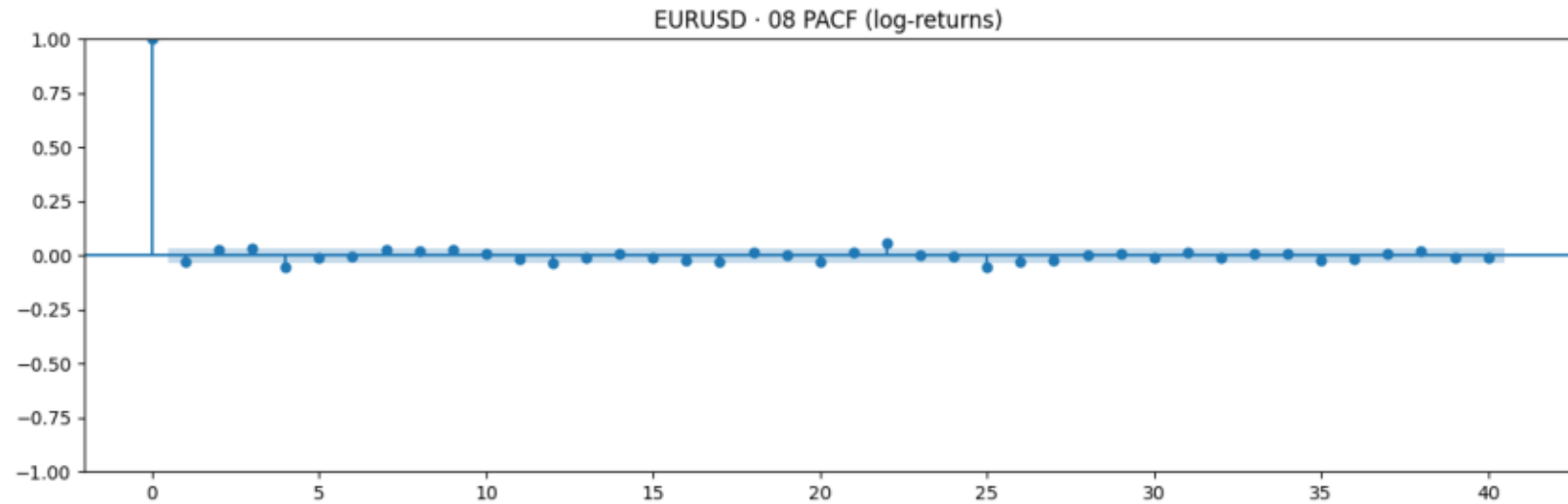
EURUSD — 06 Volatilidad rolling y ATR



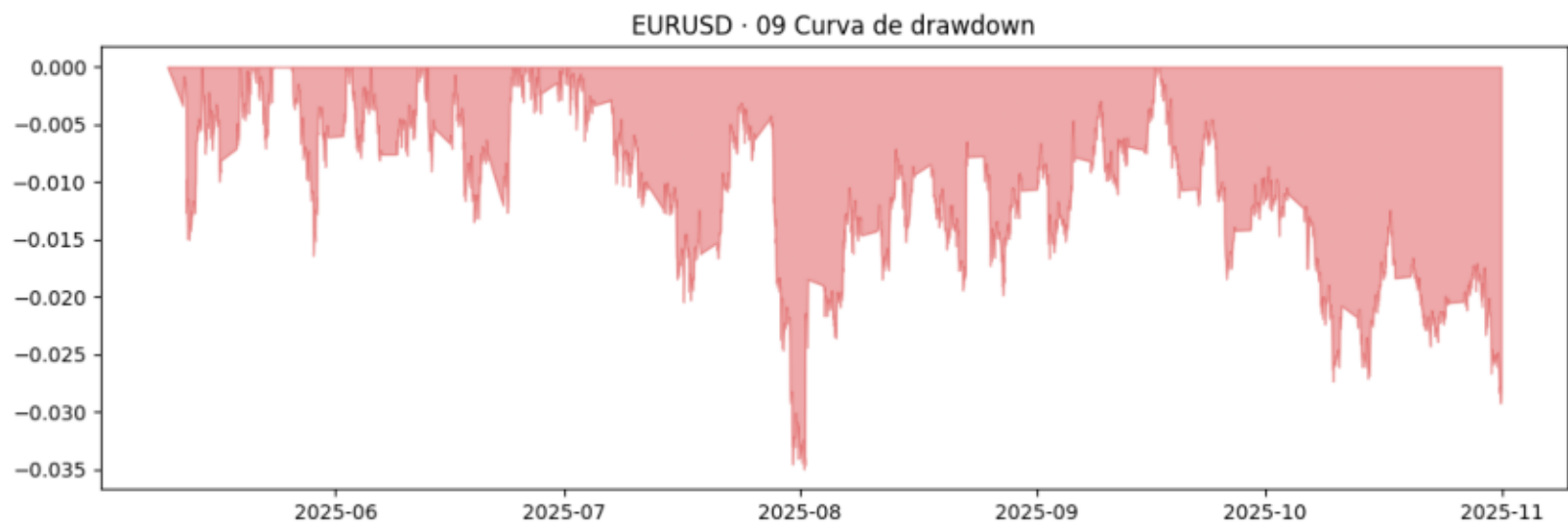
EURUSD — 07 ACF log-returns



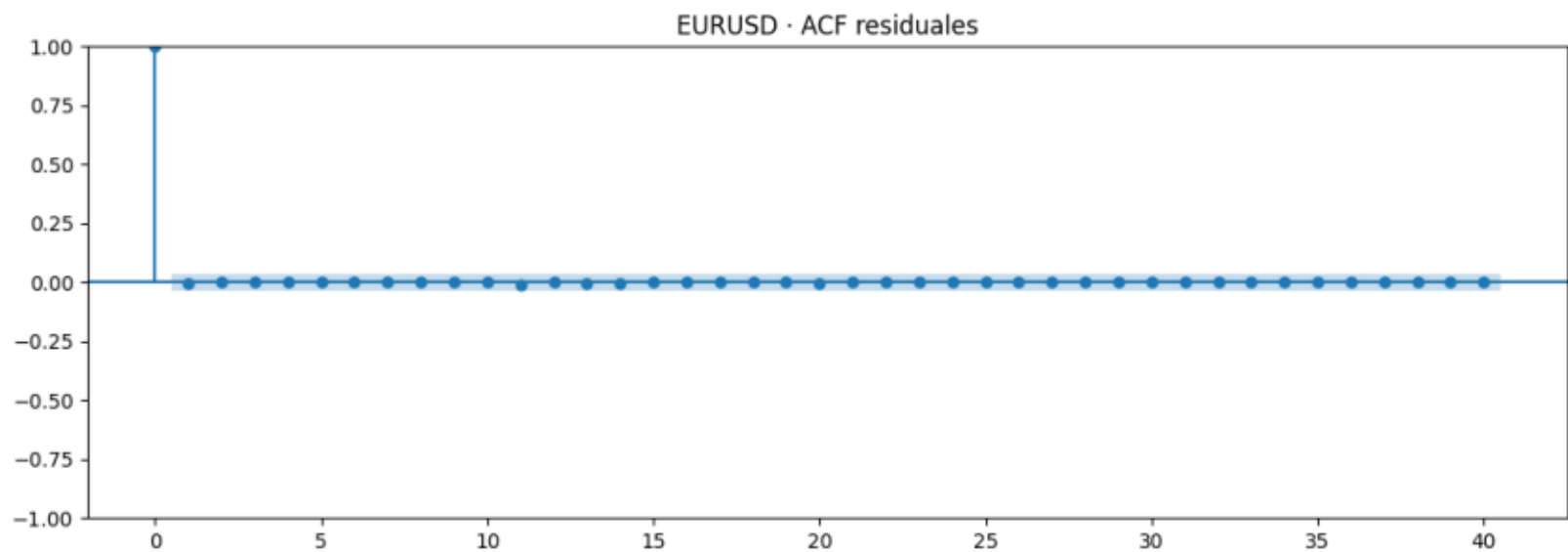
EURUSD — 08 PACF log-returns



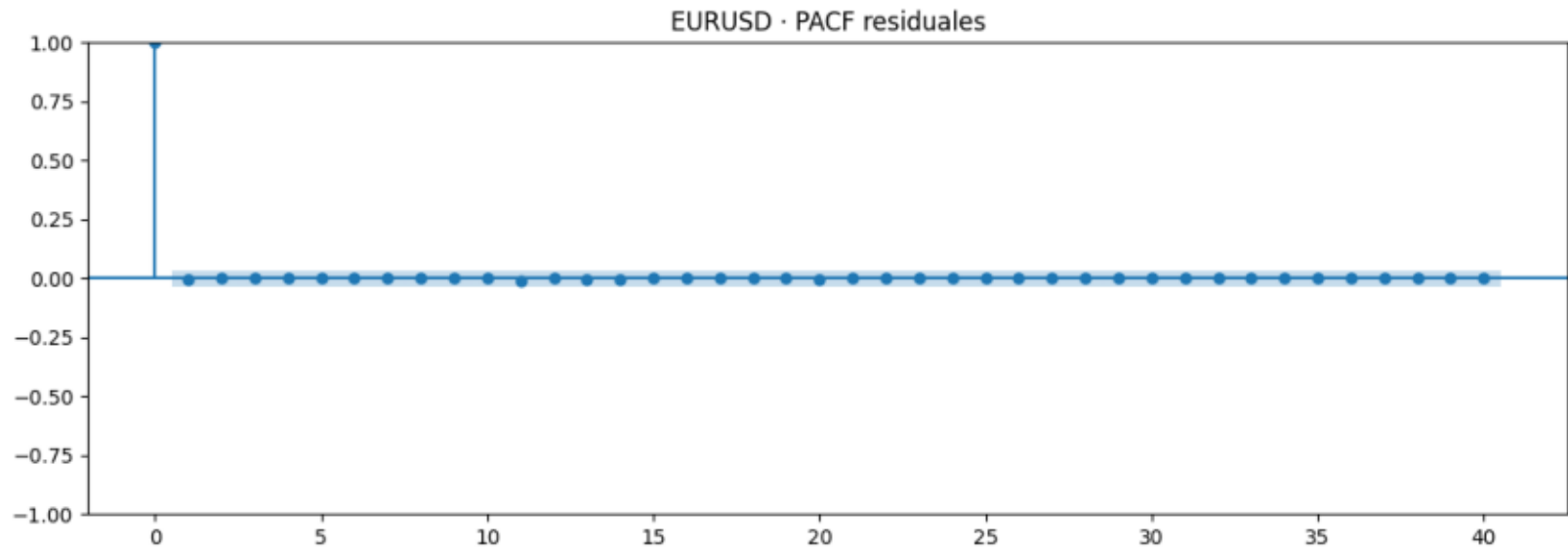
EURUSD — 09 Curva de drawdown



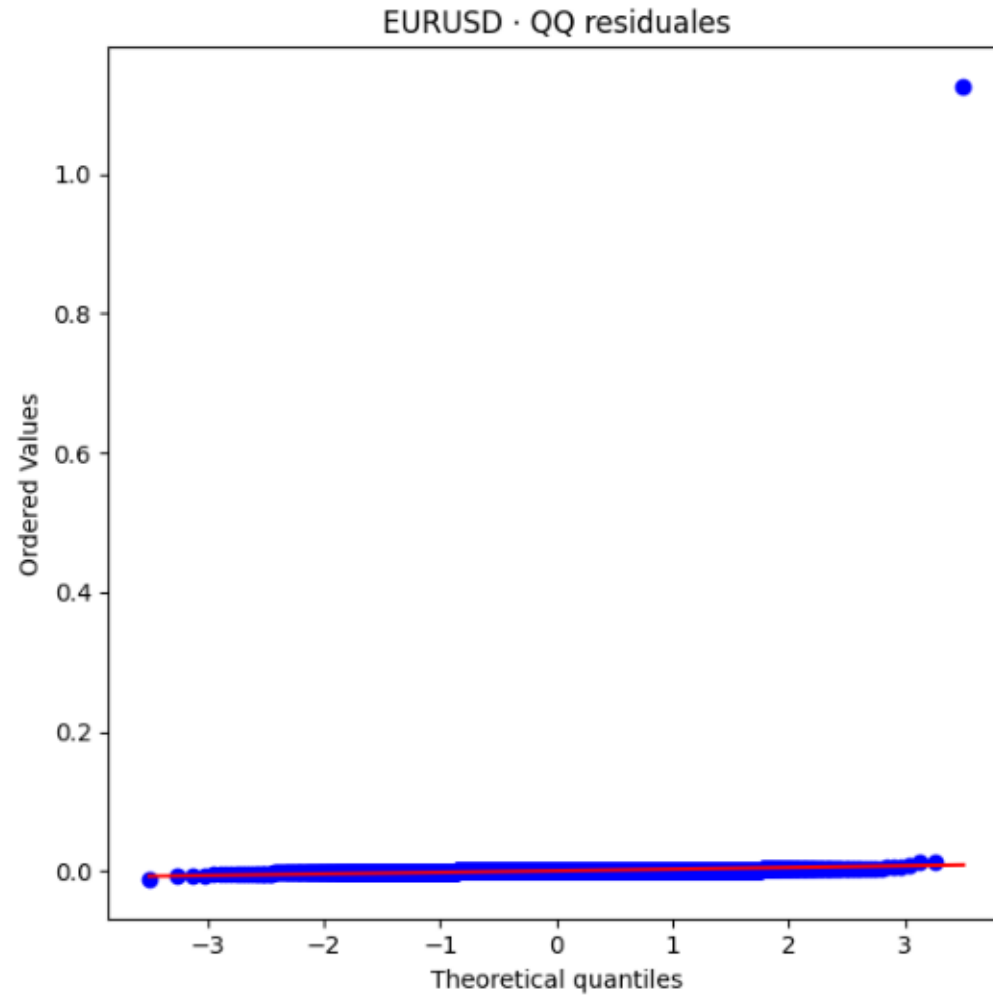
EURUSD — ACF Residuales



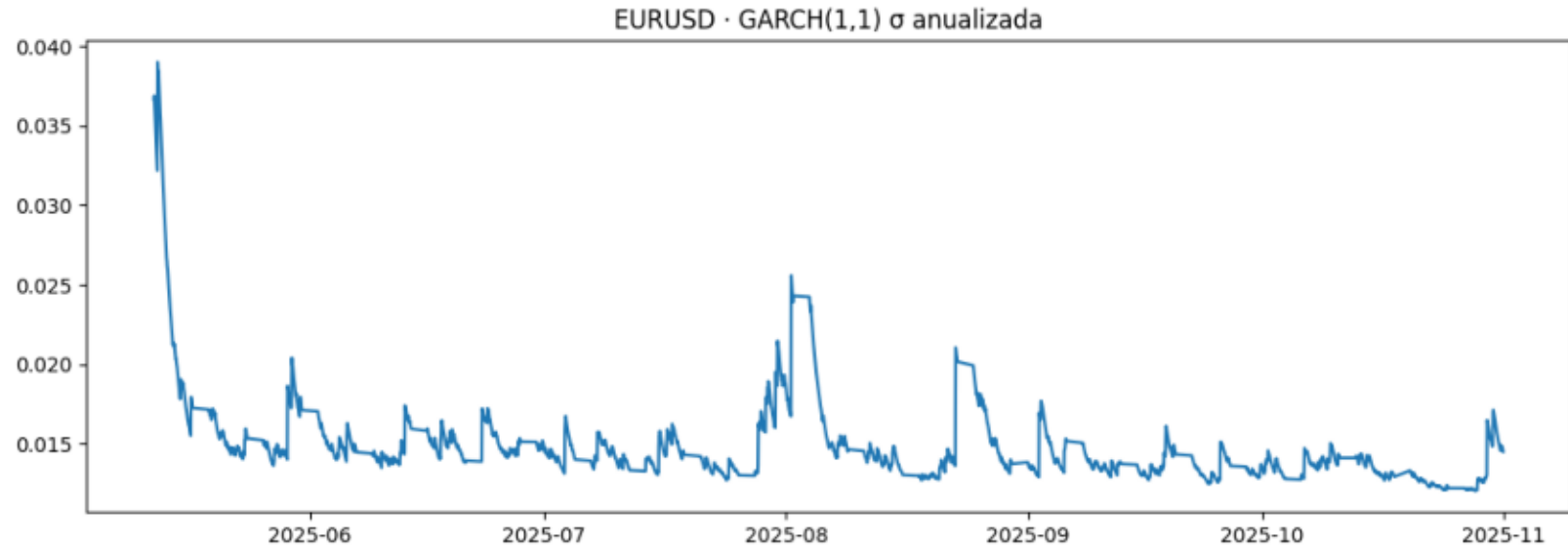
EURUSD — PACF Residuales



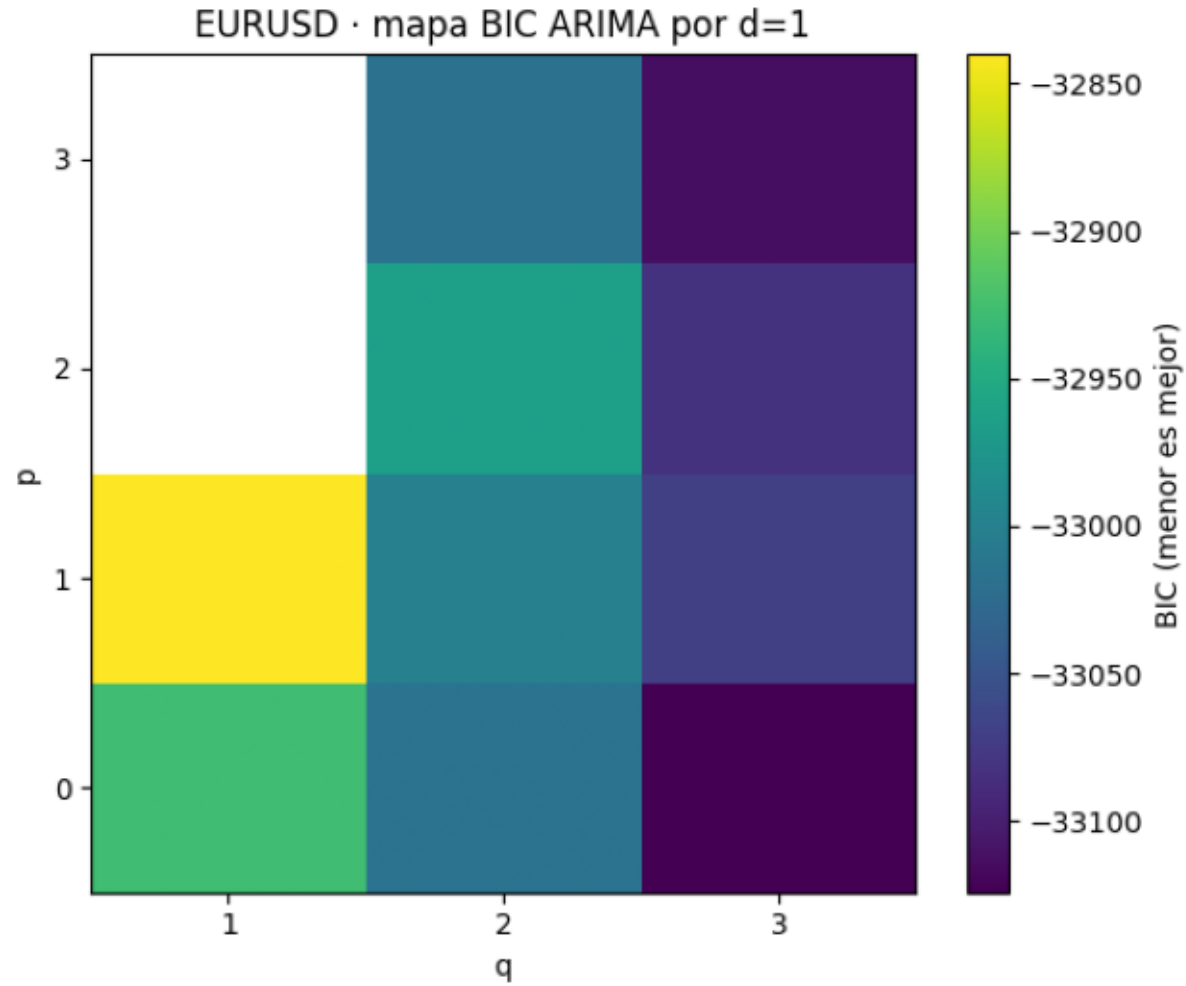
EURUSD — QQ Residuales



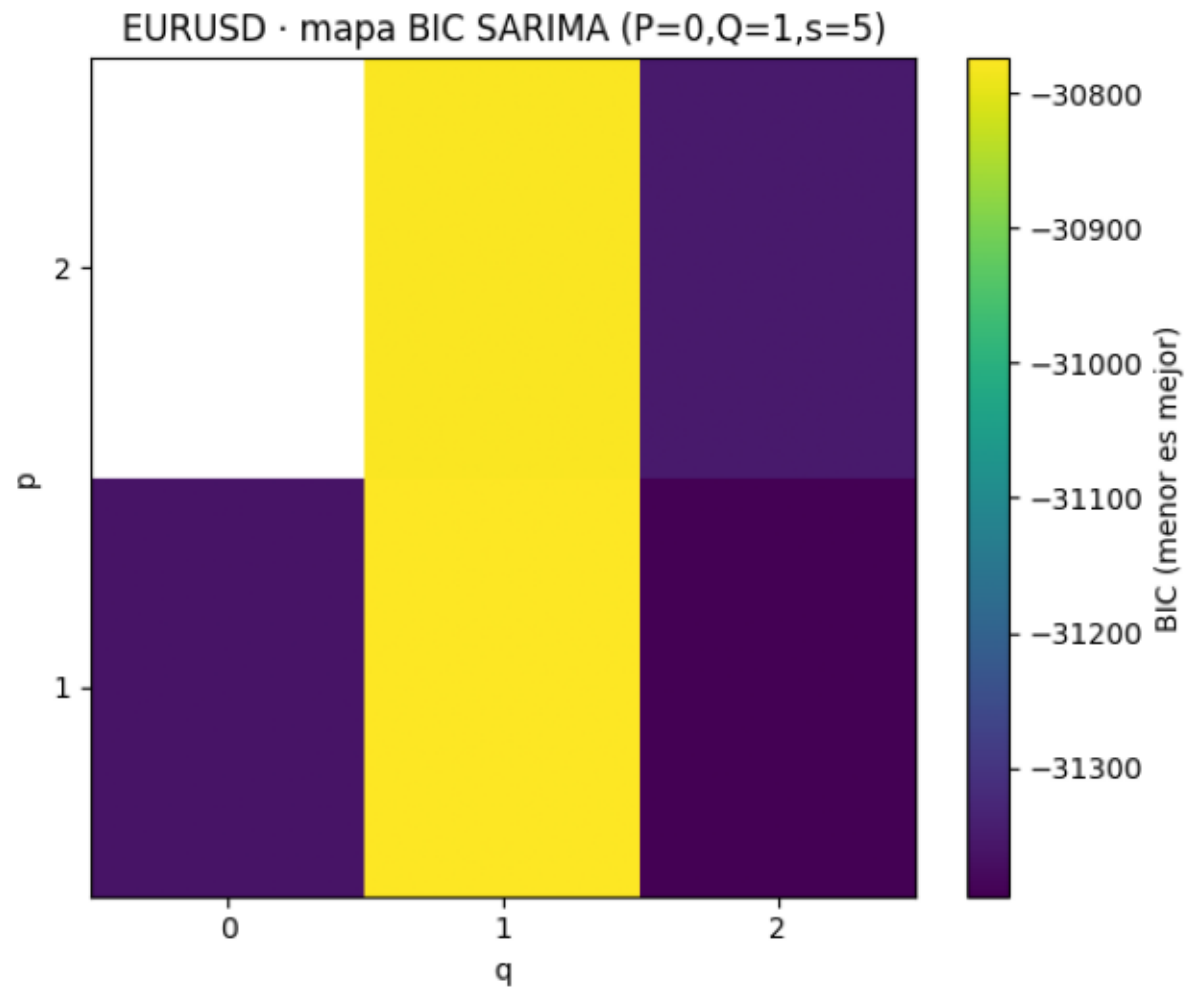
EURUSD — 10 Volatilidad GARCH (σ anualizada)



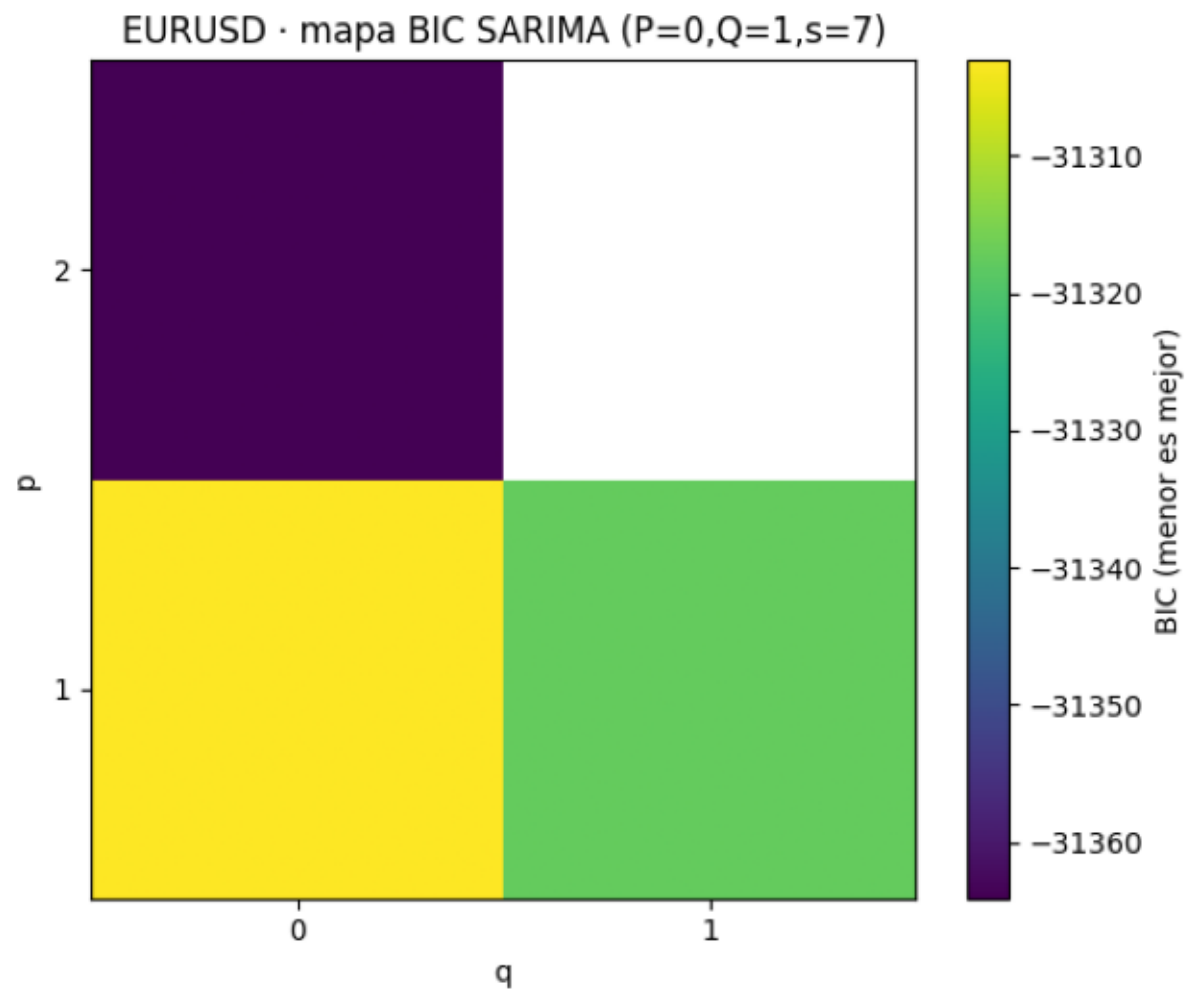
EURUSD — IMG_BIC_ARIMA_1



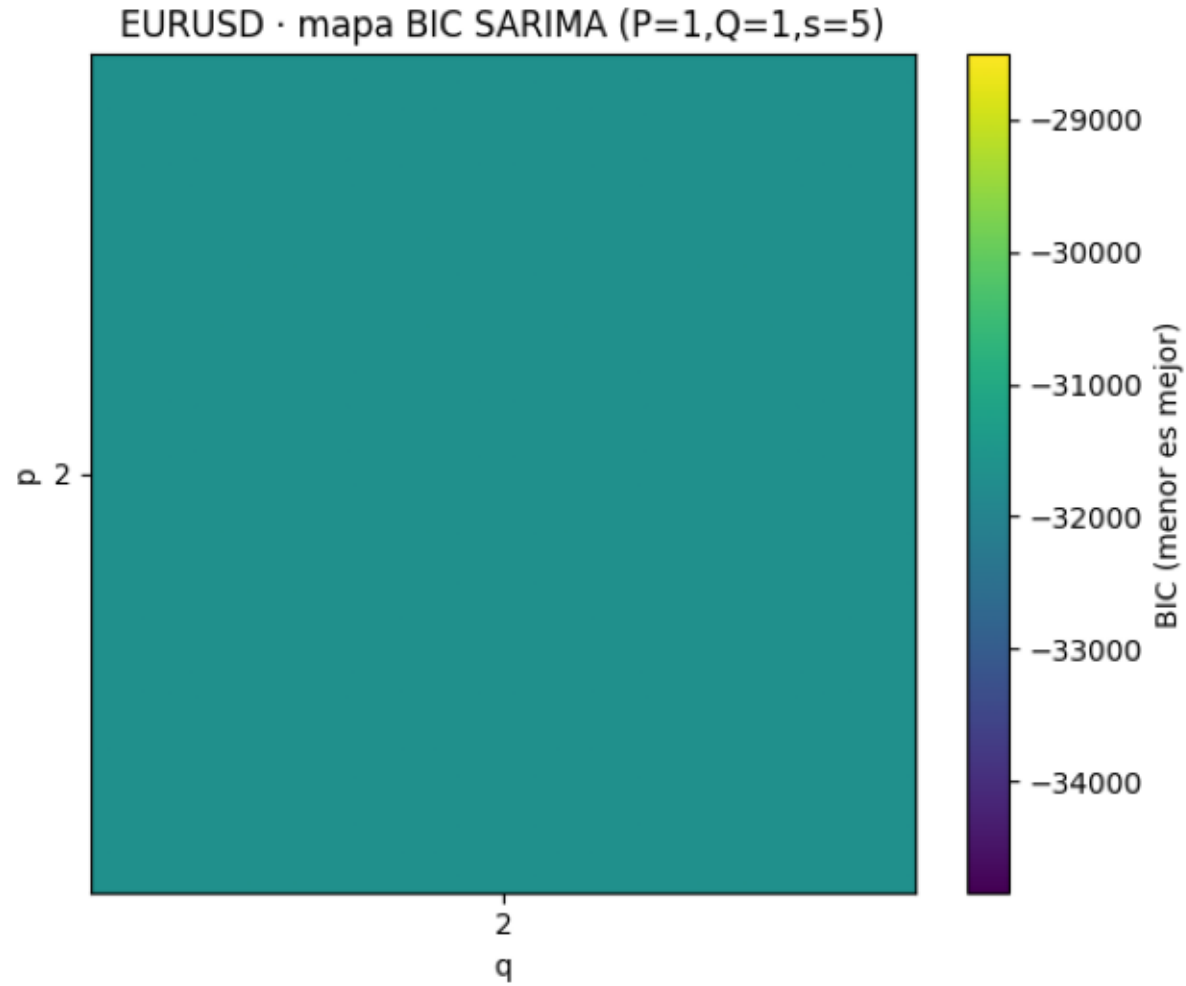
EURUSD — IMG_BIC_SARIMA_1



EURUSD — IMG_BIC_SARIMA_2



EURUSD — IMG_BIC_SARIMA_3



EURUSD — IMG_BIC_SARIMA_4

