Long Seasonality ($s = 365$): Fourier Terms vs SARIMA

Parameters Required

730 params!

6 params

SARIMA
$(p, d, q)(P, D, Q)_{365}$

Fourier
($K = 3$ harmonics)

Number of Seasonal Parameters

Fourier Approximation Quality

Seasonal Effect

Day of Year

K=1 (2 params) — K=3 (6 params) — K=6 (12 params) --- True pattern