SARIMA$(p, d, q) \times (P, D, Q)_s$ Notation

$$\phi(L)\Phi(L^s)(1 - L)^d(1 - L^s)^D Y_t = \theta(L)\Theta(L^s)\varepsilon_t$$

Regular (Non-Seasonal)

p = AR order   (Number of AR lags)

d = Differencing   (Regular differences)

q = MA order   (Number of MA lags)

Seasonal

P = Seasonal AR   (SAR lags at $s, 2s, \ldots$)

D = Seasonal Diff $((1 - L^s)^D)$

Q = Seasonal MA   (SMA lags at $s, 2s, \ldots$)

s = Period   (Seasonal period)

Example: SARIMA$(1, 1, 1) \times (0, 1, 1)_{12}$

Monthly data with: AR(1), MA(1), one regular diff,

one seasonal diff at lag 12, seasonal MA(1)