

TBATS: What Does It Stand For?



Trigonometric

Fourier terms for seasonality
 $\sum [a_n \cos(\frac{2\pi n t}{m}) + b_n \sin(\frac{2\pi n t}{m})]$



Box-Cox

Variance stabilization
 $y^{(\omega)} = (y^\omega - 1)/\omega$



ARMA

Error autocorrelation
 $\phi(L)d_t = \theta(L)\varepsilon_t$



Trend

Level + slope (possibly damped)
 $\ell_t = \ell_{t-1} + \phi b_{t-1}$



Seasonal

Multiple seasonal periods
 m_1, m_2, \dots, m_T