\[ Y_t = T_t + S_t + I_t \]

Seasonal

Trend

Irregular

Data point at time \( t \)

\[ Y_t - T_t - S_t = I_t \]

\[ Y_t - \hat{T}_t - \hat{S}_t = \hat{I}_t \]
\[ y_t = y_{t-12} \]
\[ = (T_t + S_t + I_t) \]
\[ - (T_{t-12} + S_{t-12} + I_{t-12}) \]
\[ = (T_t - T_{t-12}) + (S_t - S_{t-12}) + (I_t - I_{t-12}) \]
\[ \approx 0 \]