

STEP 1: STATIONARITY

ADF p-value: 0.0007
STATIONARY

STEP 2: SEASONAL

Strength: 23.5%
STRONG

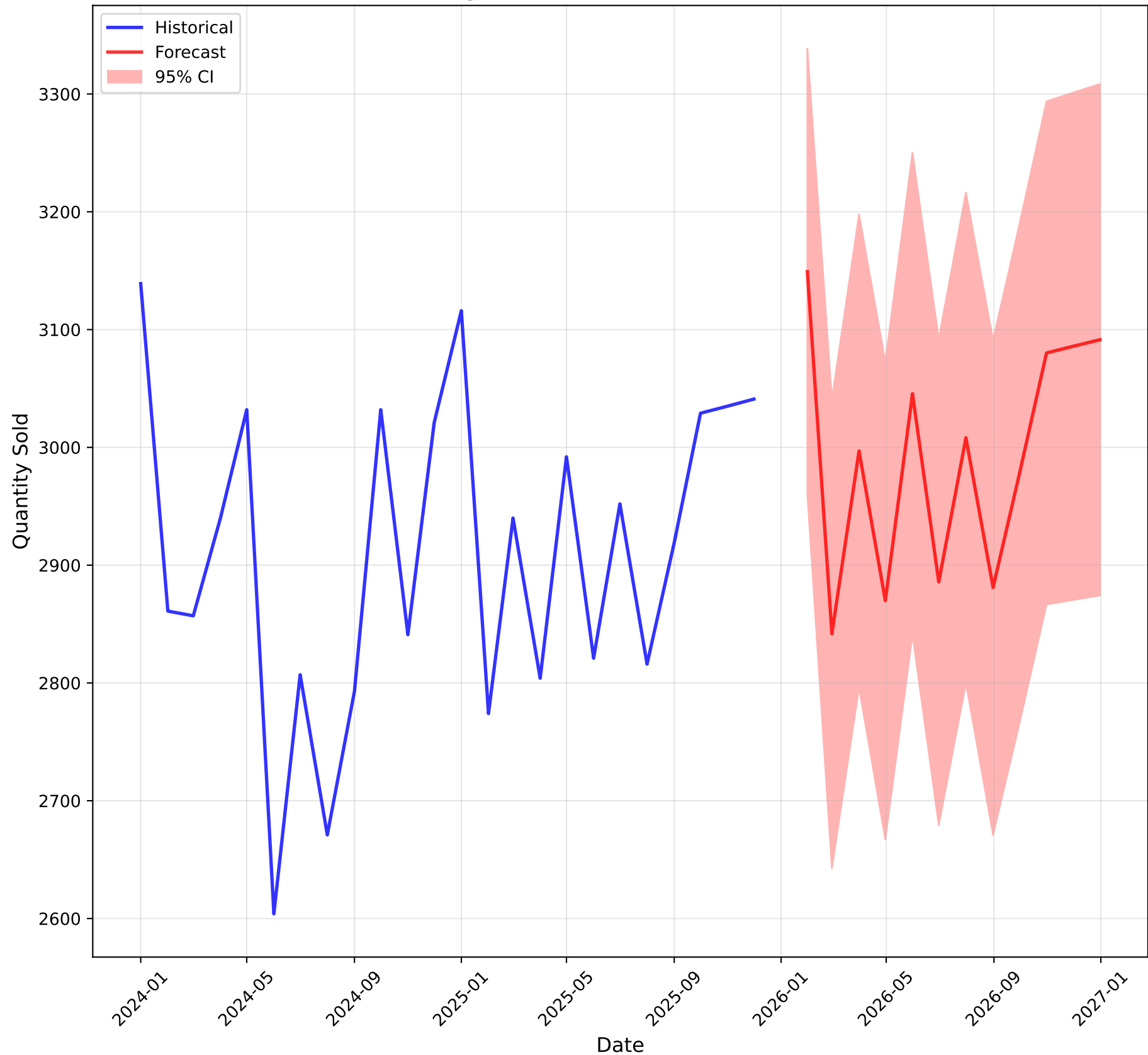
STEP 3: MODEL

ARIMA(0, 1, 2)
AIC: 1603.6

STEP 4: EVALUATION

MAPE: 5.7%
GOOD

STEP 5: FORECAST GENERATION
Complete ARIMA Process Result



COMPLETE ARIMA PROCESS SUMMARY

Process Overview:

1. STATIONARITY TESTING
 - ADF Test: p-value = 0.0007
 - Result: STATIONARY
 - Implication: Ready for ARIMA
2. SEASONAL DECOMPOSITION
 - Seasonal Strength: 23.5% if 'seasonal_strength' in locals() else 'N/A'
 - Pattern: STRONG
 - Implication: Use SARIMA
3. MODEL SELECTION
 - Best Model: ARIMA(0, 1, 2) x SARIMA(1, 0, 0, 12)
 - AIC: 1603.6
 - Parameters: 16 total
4. MODEL EVALUATION
 - MAPE: 5.7%
 - Performance: GOOD
 - Quality: High
5. FORECAST GENERATION
 - Horizon: 12 months
 - Mean Forecast: 2993 units/month
 - Range: 2842 to 3149 units
 - Confidence: 95% intervals provided

CONCLUSION:

The ARIMA model successfully captures the time series patterns and provides reliable forecasts for inventory planning and business decision-making.