

Which ARMA Model is Best?

Recall from Chapter 3 that the Akaike Information Criterion (AIC) can be used to compare models with different numbers of parameters. It measures goodness-of-fit, but places a penalty on models with more parameters to discourage overfitting. Lower AIC scores are better.

Fit the temperature data to an AR(1), AR(2), and ARMA(1,1) and see which model is the best fit, using the AIC criterion. The AR(2) and ARMA(1,1) models have one more parameter than the AR(1) has.

The annual change in temperature is in a DataFrame `chg_temp` .