

Exercise 3.7 (cmort)

1. Plot the cmort, part, tempr. Also make pairwise scatterplots.
2. Construct the new variables `trend=time(cmort)`, `temp=tempr-mean(tempr)`, `temp2 = temp^2`.
3. Run the regression `cmort = trend + temp + temp2 + part + e`.
4. Plot ACF/PACF for the residuals.
5. Is there any autocorrelation? If so, try to find a good ARMA model for the residuals (note: maybe try using the `sarima()` function).
6. Look at some diagnostics for your preferred model.