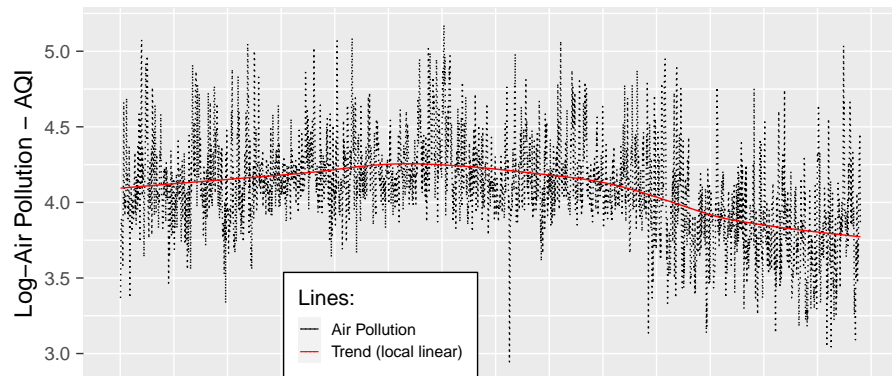
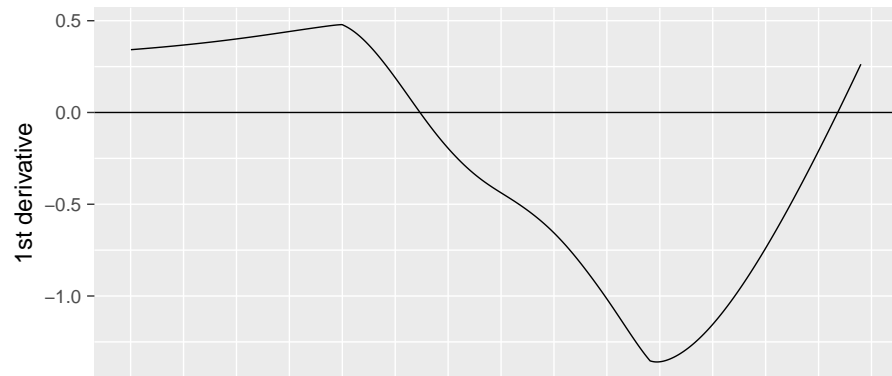


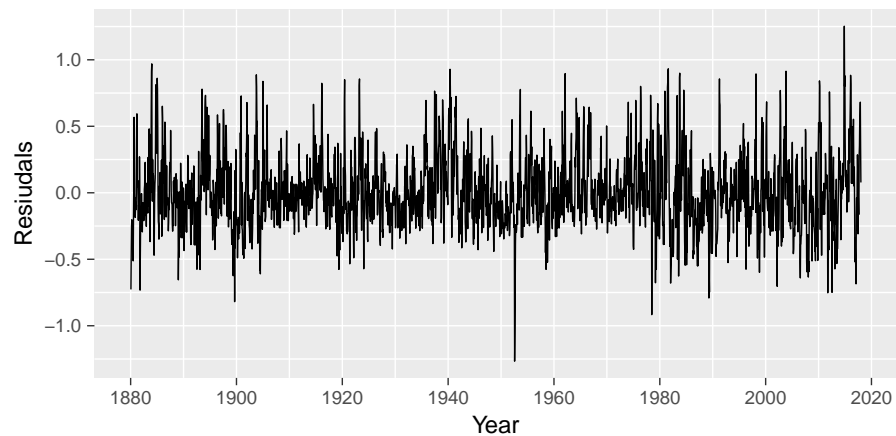
(a) Log of air pollution (AQI) & estimated trend



(c) Estimated first derivative



(b) Trend-adjusted Residuals



(d) Estimated second derivative

