Residuals vs Fitted

Residuals
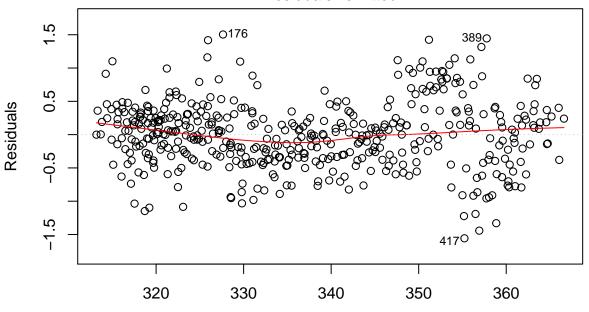
Fitted values
lm(value ~ 0 + time.index + I(time.index^2) + I(time.index^3) + season)