

## Question 1.4: Constant Error Variance

DATASCI 203 Homework: Classical Linear Model Practice

Wesley Chang

### Evaluate the Homoskedastic errors assumption:

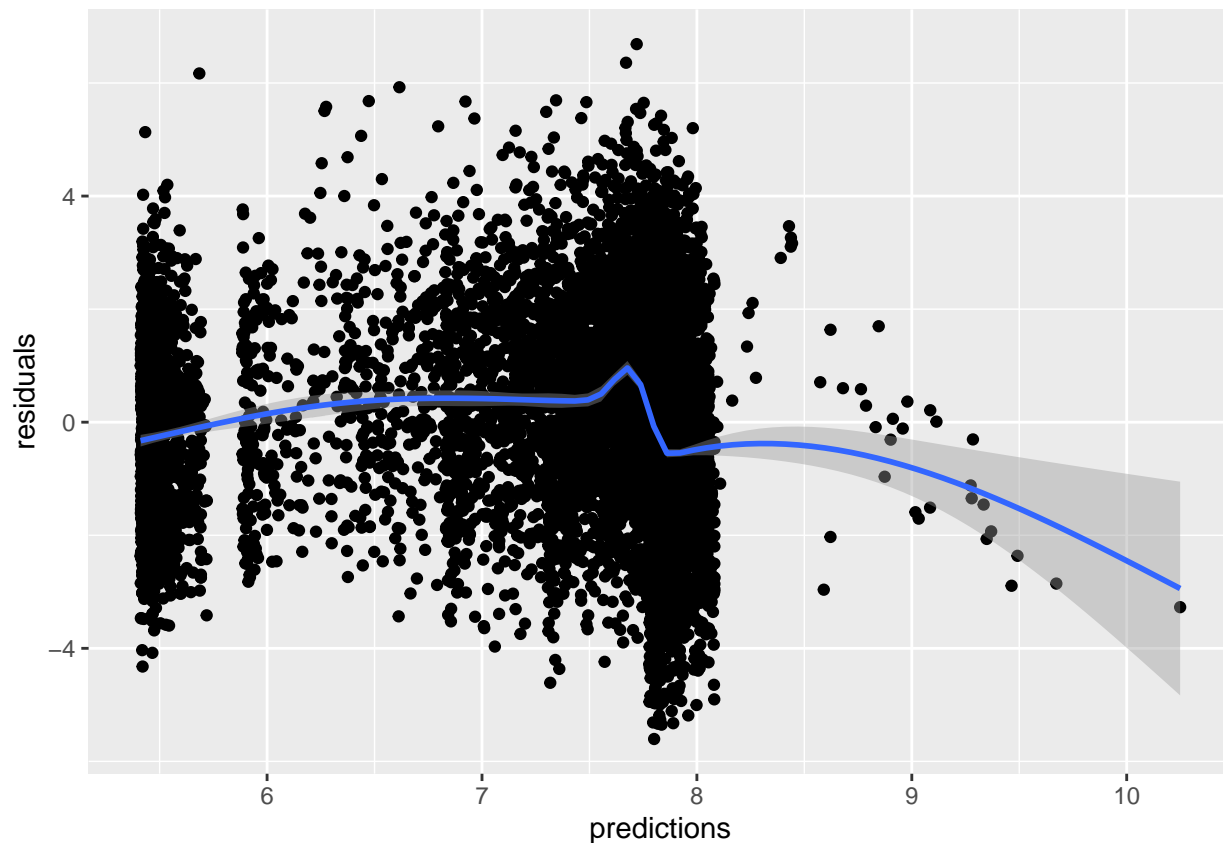
```
model <- lm(log(views) ~ rate + length, data = videos)

resid <- videos %>%
  mutate(residuals = resid(model),
         predictions = predict(model))

plot <- resid %>%
  ggplot(aes(x=predictions, y=residuals)) +
  geom_point() + stat_smooth(se = TRUE)

plot

## 'geom_smooth()' using method = 'gam' and formula 'y ~ s(x, bs = "cs")'
```



Using the ocular test, we can see that there is some homoskedasticity due to the grouping of residual values on certain prediction values.