

Assignment\\$_code

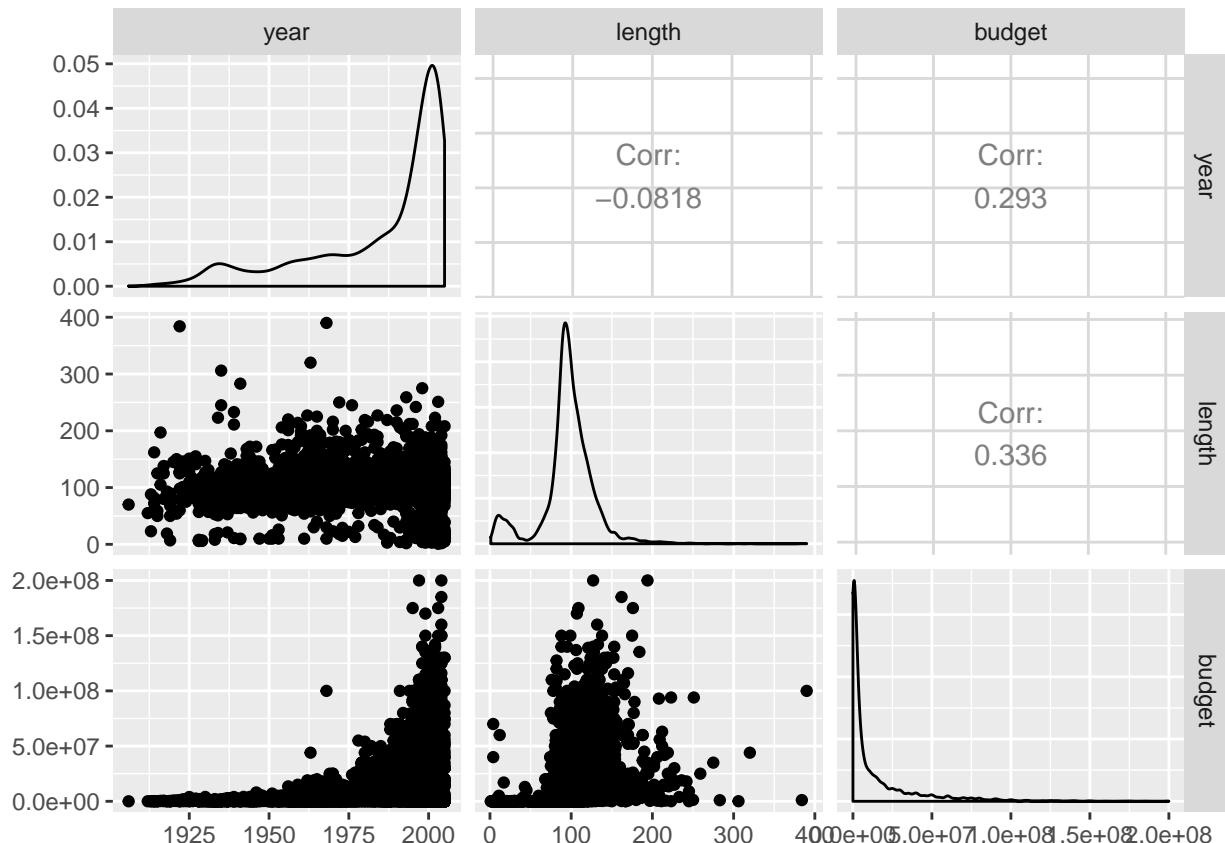
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2/19/2018

Loading the date:

```
##          title year length   budget
## 1      'G' Men 1935     85 450000
## 2 'Manos' the Hands of Fate 1966     74   19000
## 3      'Til There Was You 1997    113 23000000
## 4      .com for Murder 2002     96 5000000
## 5 10 Things I Hate About You 1999     97 16000000
## 6      100 Mile Rule 2002     98 1100000
```

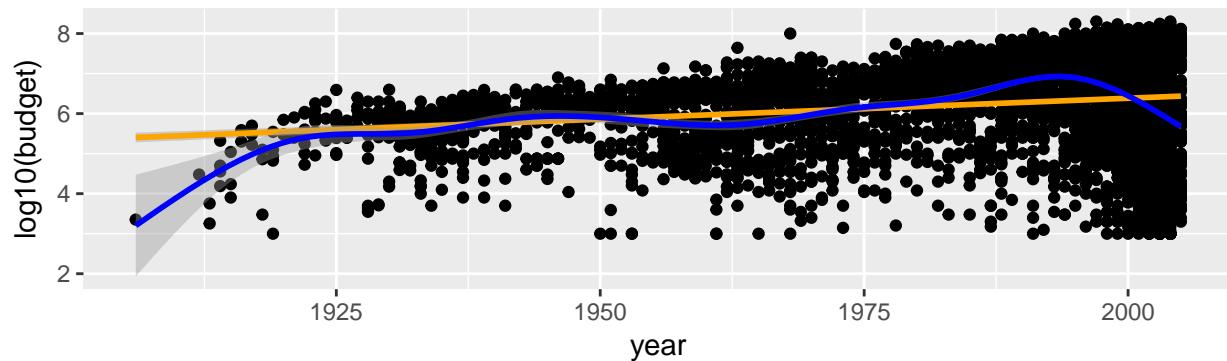
Checking the pairwise relationship



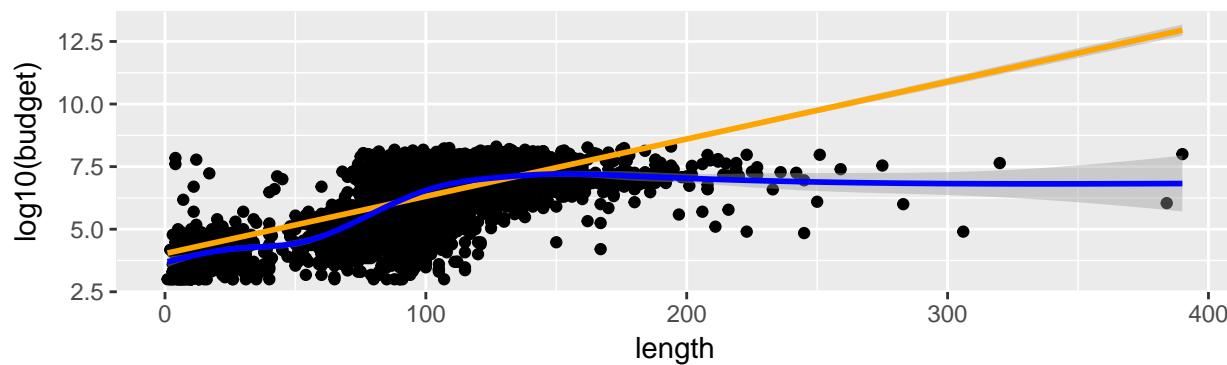
We can observe that budget is right skewed, so we take log value . Even length is right skewed, but we ignore and do not take log.

Fitting the model and checking which one is better

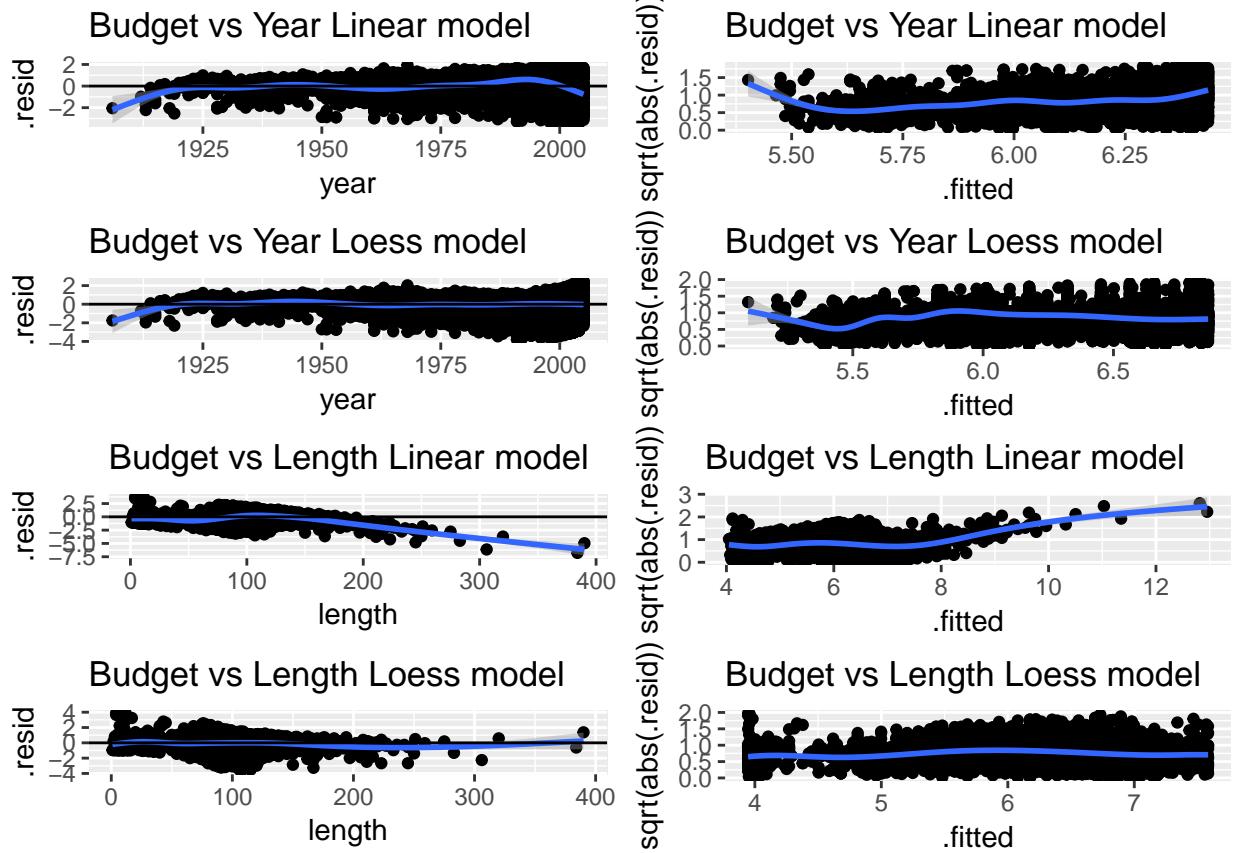
Budget over Time



Budget vs Length

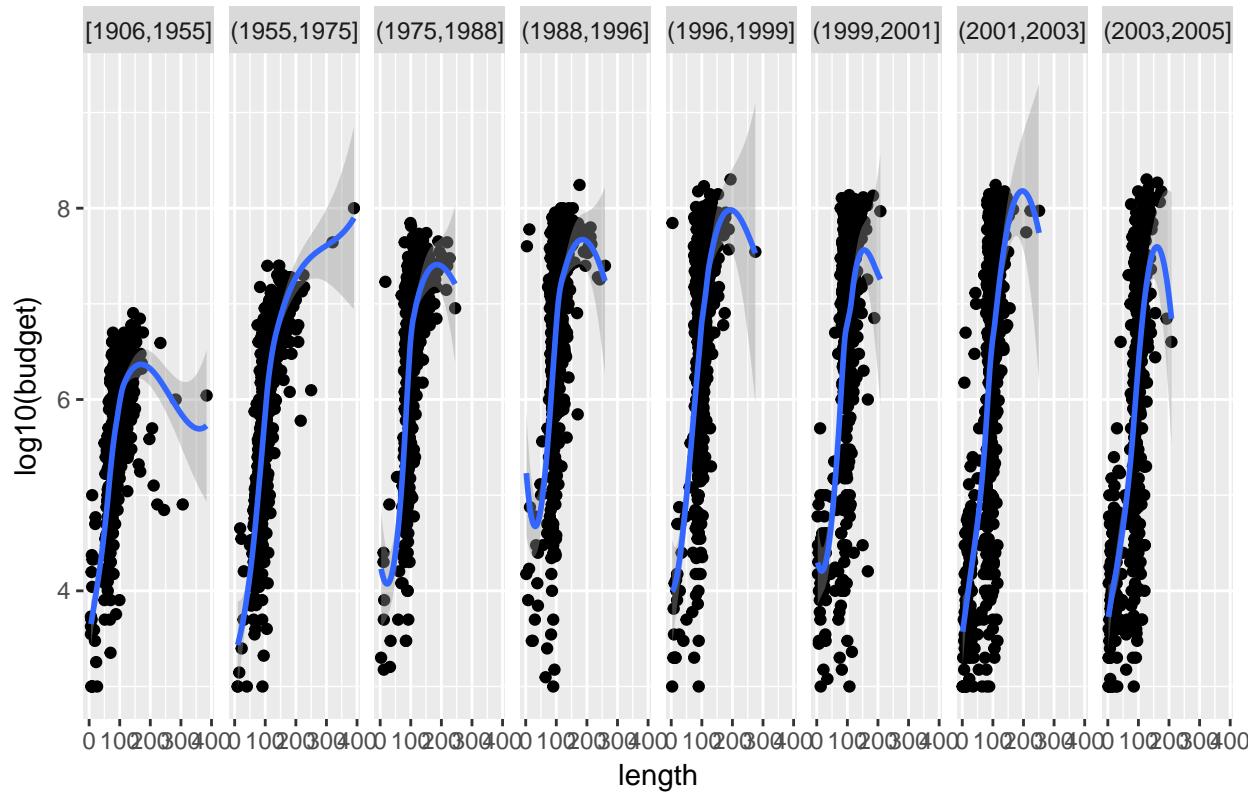


Checking the residuals plot

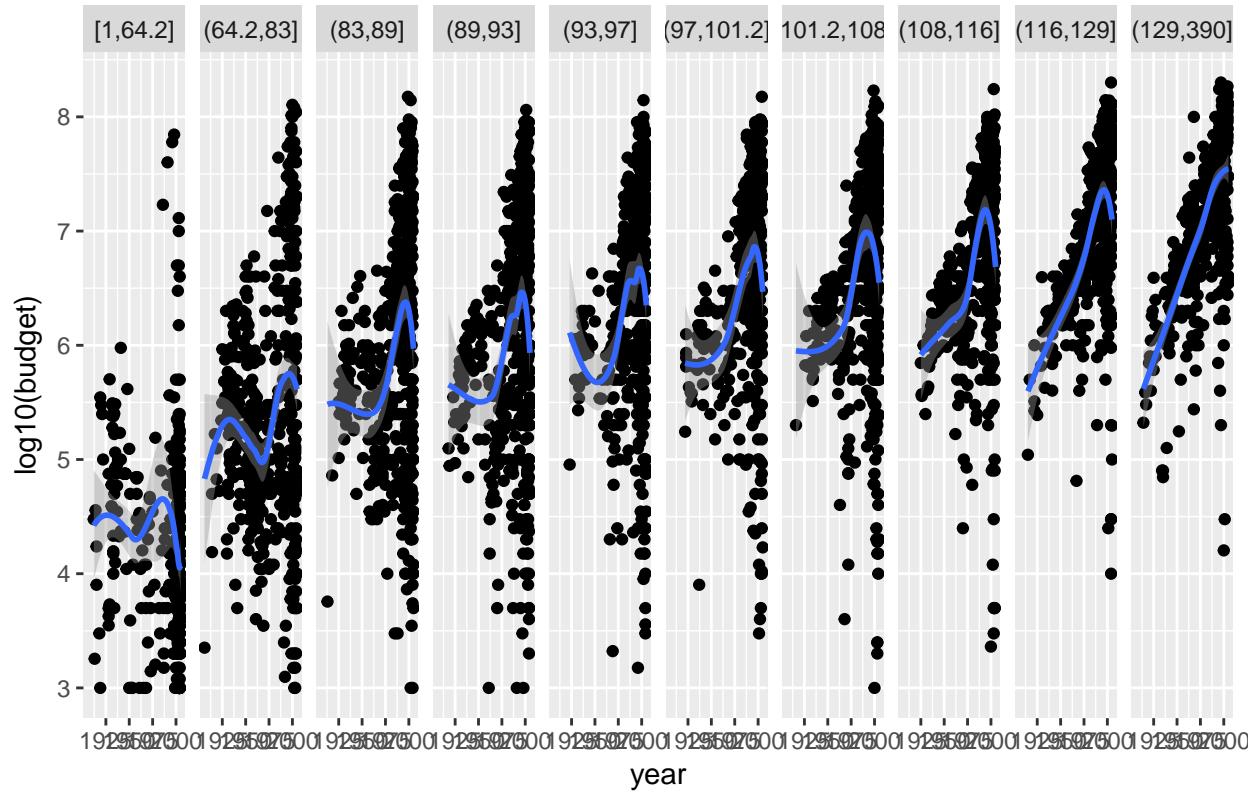


Graph to check if interaction is needed

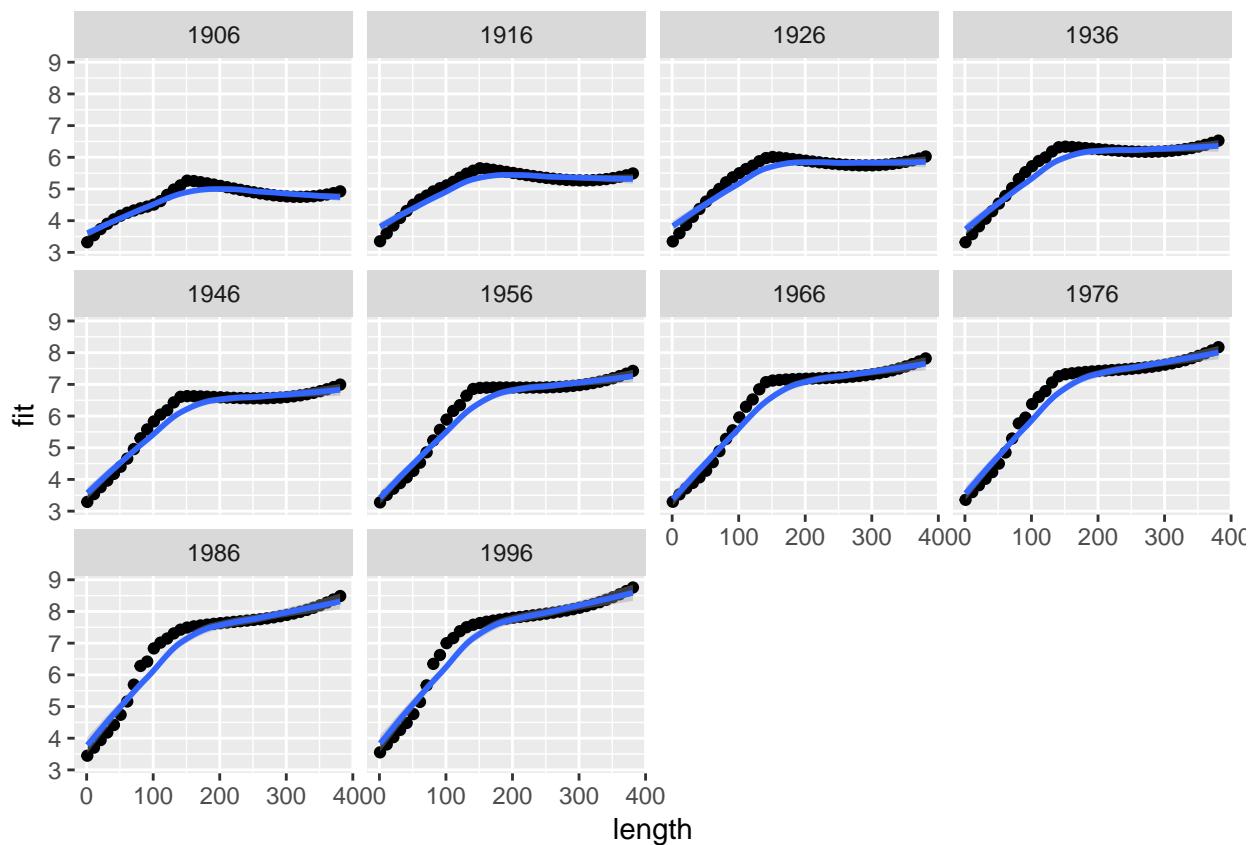
Budget VS Length over Time



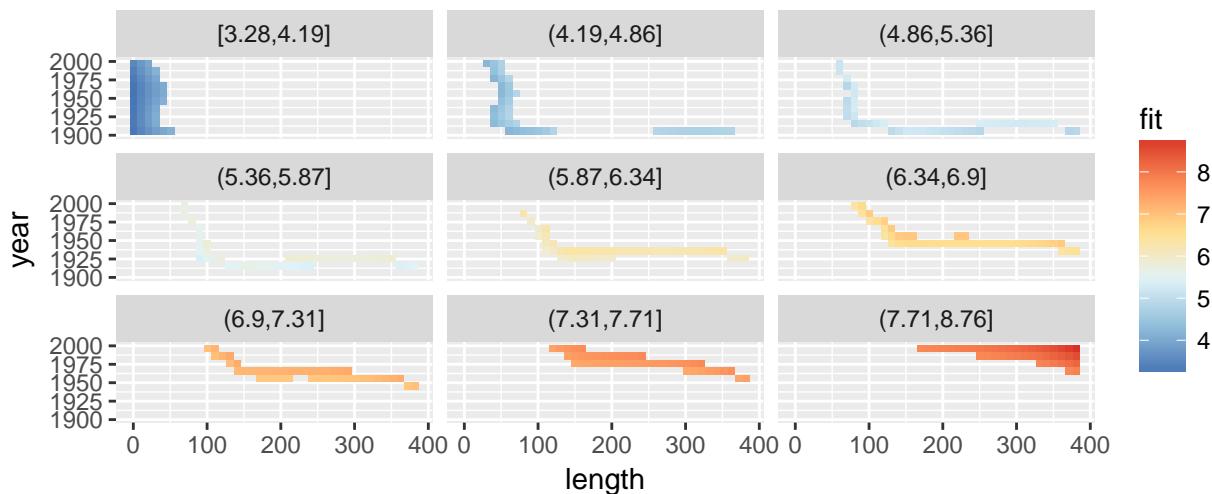
Budget VS Time over Different length



Graph for fitted model



geom_raster plot



Graph with contours

