Simulation study of GlpG unfolding by force

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Constant Force at 0.5 force units.(34.7385 pN)

```
data <- read_csv("~/Research/data/apr04/force0.5.csv", col_types = "idcc")</pre>
```

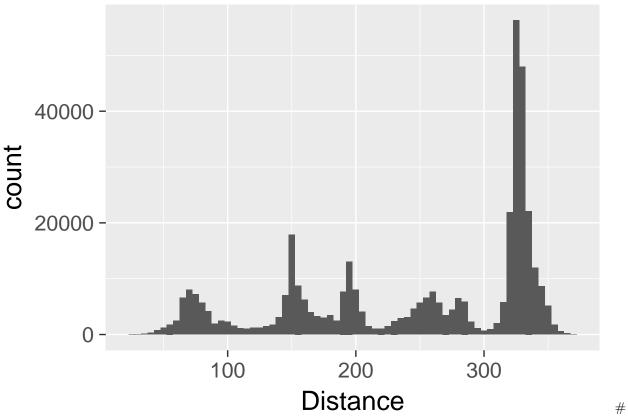
First I want to see two basic graph.

Distance vs Steps.

```
data %>%
 filter(name == "wt") %>%
 ggplot() +
 aes(Steps, Distance, color = run) +
 geom_line()
                                                                 ZŎ
                                                          -10 - 29
                                                         -11 - 3
                                                          -12 - 30
   300 -
                                                          -13 - 31
                                                          <del>-</del> 14 — 32
                                                          -15 - 33
Distance
                                                          -16 - 34
   200 -
                                                          -17 - 35
                                                          -18 - 36
                                                          -19 - 37
                                                          -2 -38
   100 -
                                                          -20 - 39
                                                         -21 - 4
                                                          -22 - 5
                                                         -23 - 6
                                                          -24 - 7
      0.0e+00 2.5e+06 5.0e+06 7.5e+06 1.0e+07
                                                           25 - 8
                           Steps
                                                         -26 - 9
```

Histogram of Distance.

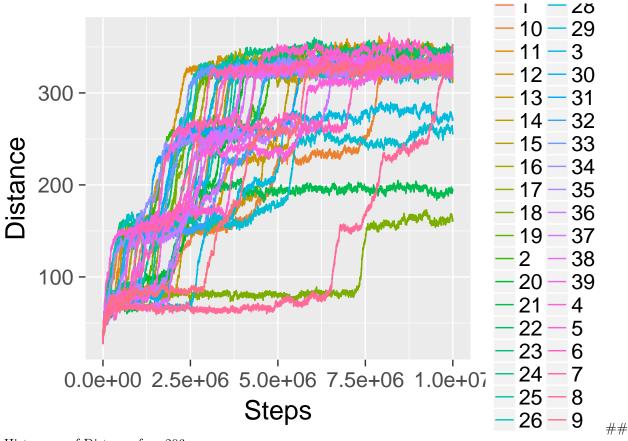
```
data %>%
  filter(name == "wt") %>%
  ggplot() +
  aes(Distance) +
  geom_histogram(binwidth = 5)
```



Then let's see a 206g.

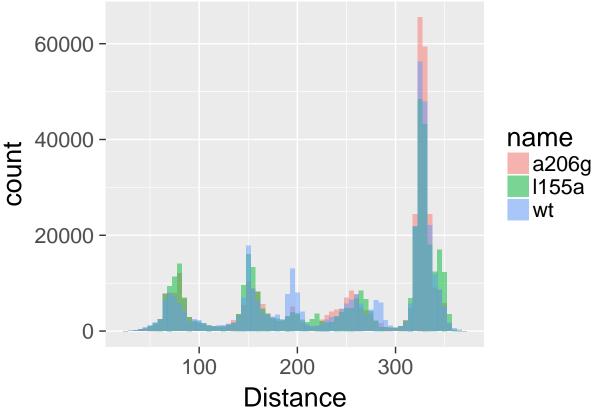
Distance vs Steps.

```
data %>%
  filter(name == "a206g") %>%
  mutate(run = as.character(run)) %>%
  ggplot() +
  aes(Steps, Distance, color = run) +
  geom_line()
```



Histogram of Distance for a206g.

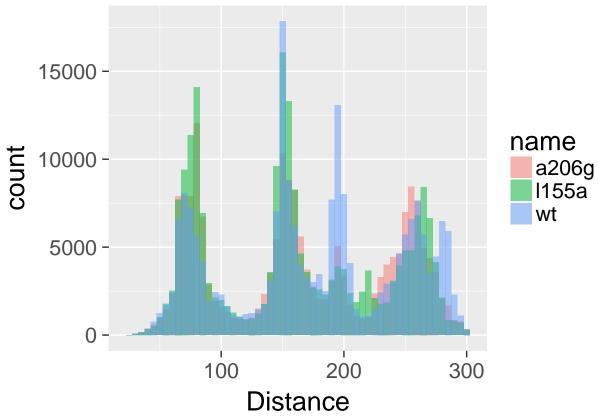
```
data %>%
   ggplot() +
   aes(Distance, fill = name) +
   geom_histogram(binwidth = 5, position = "identity", alpha = 0.5)
```



see only distance less than 300.

```
data %>%
  filter(Distance < 300) %>%
  ggplot() +
  aes(Distance, fill = name) +
  geom_histogram(binwidth = 5, position = "identity", alpha = 0.5)
```

Let's



Change