

Simulation study of GlpG unfolding by force

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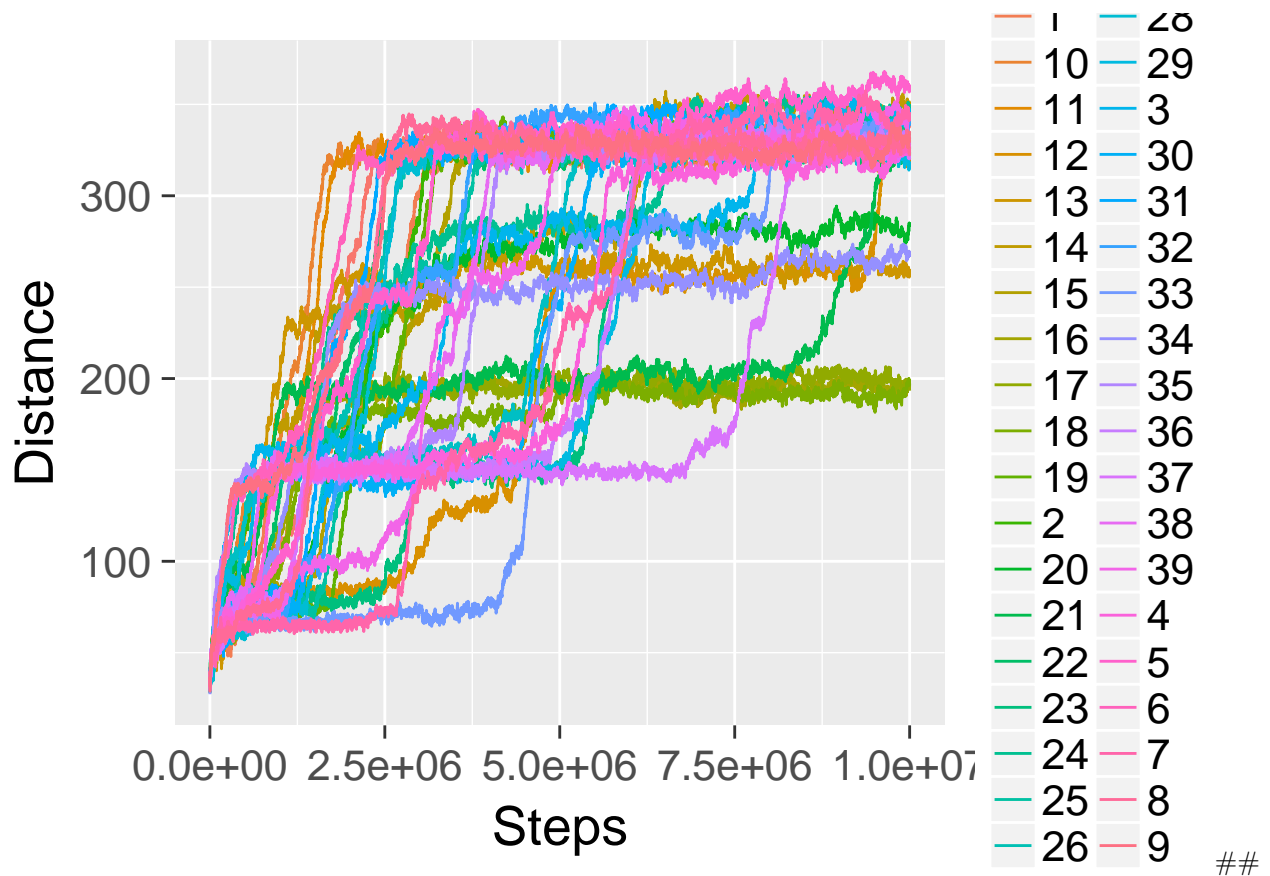
Constant Force at 0.5 force units.(34.7385 pN)

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

First I want to see two basic graph.

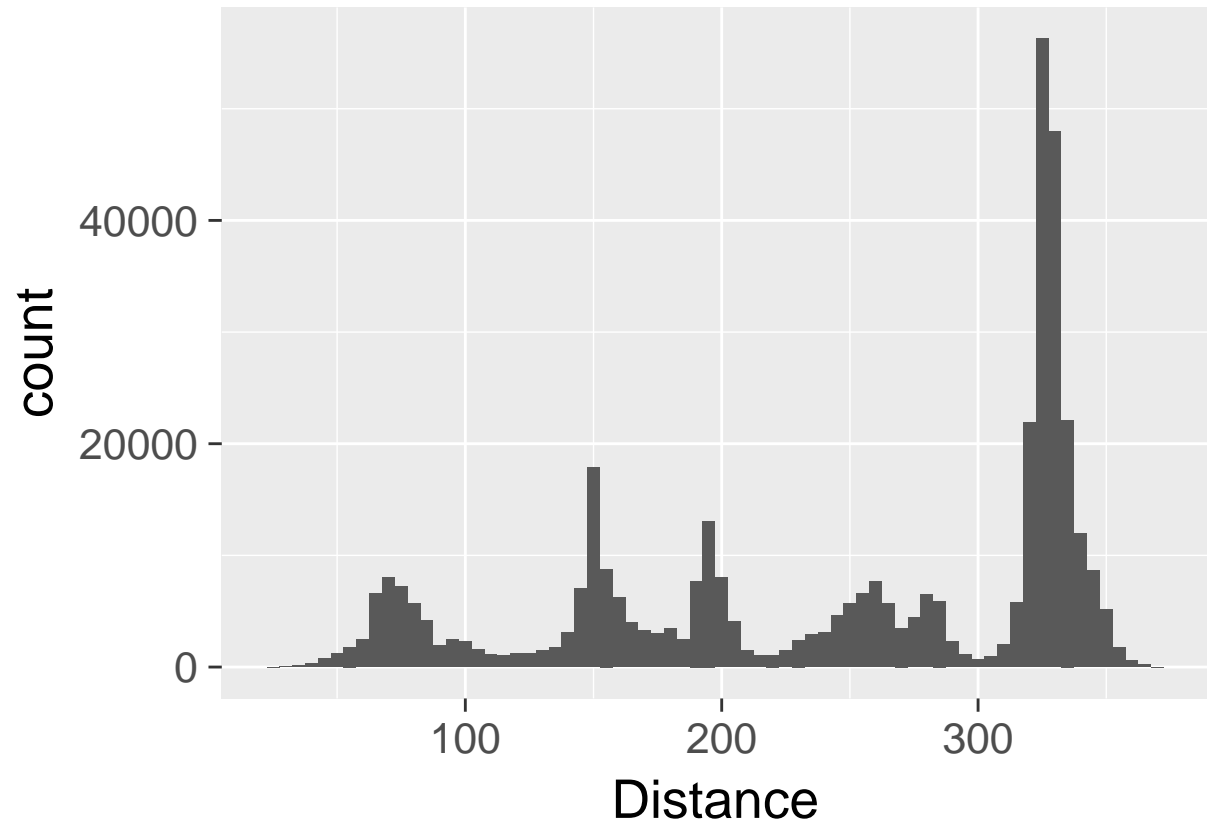
Distance vs Steps.

```
data %>%  
  filter(name == "wt") %>%  
  ggplot() +  
  aes(Steps, Distance, color = run) +  
  geom_line()
```



Histogram of Distance.

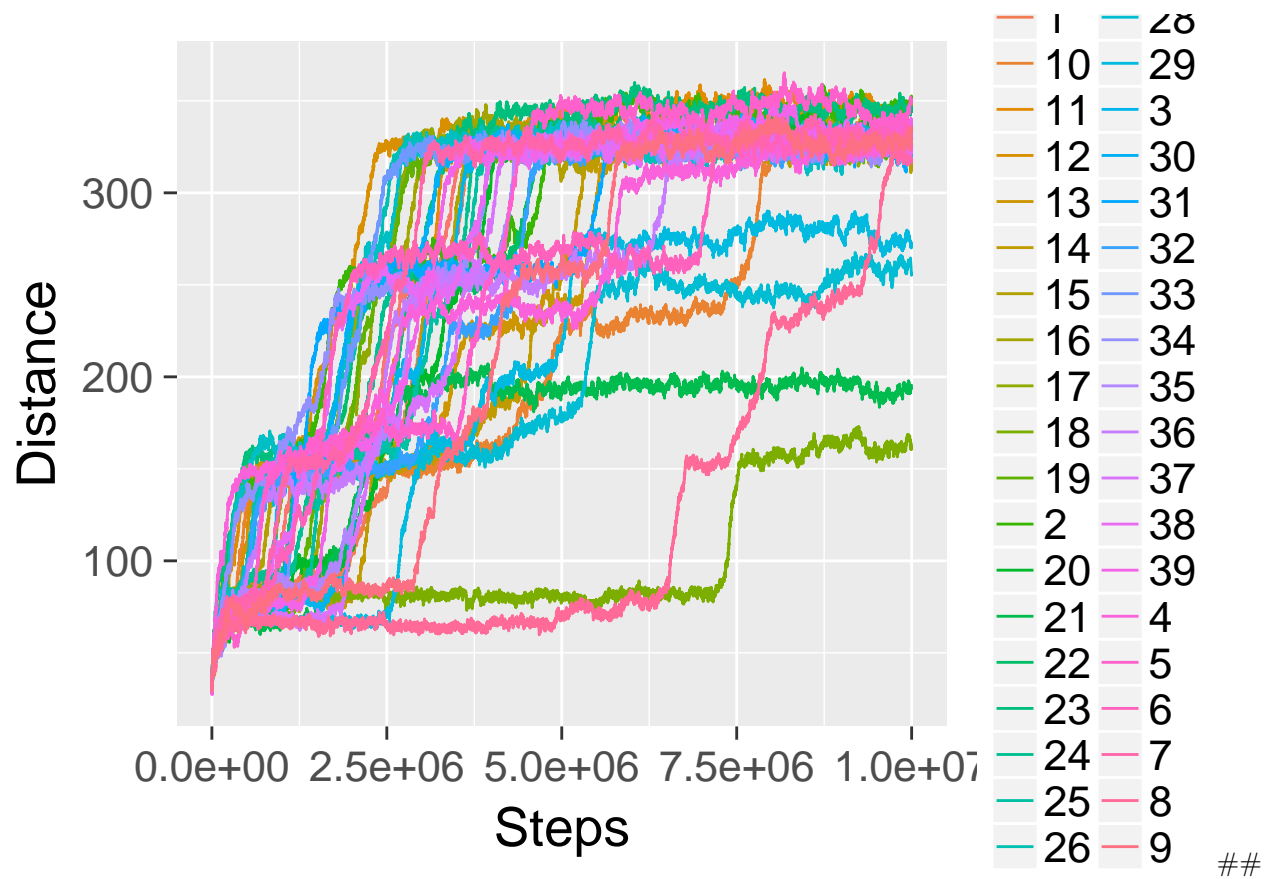
```
data %>%
  filter(name == "wt") %>%
  ggplot() +
  aes(Distance) +
  geom_histogram(binwidth = 5)
```



Then let's see a206g.

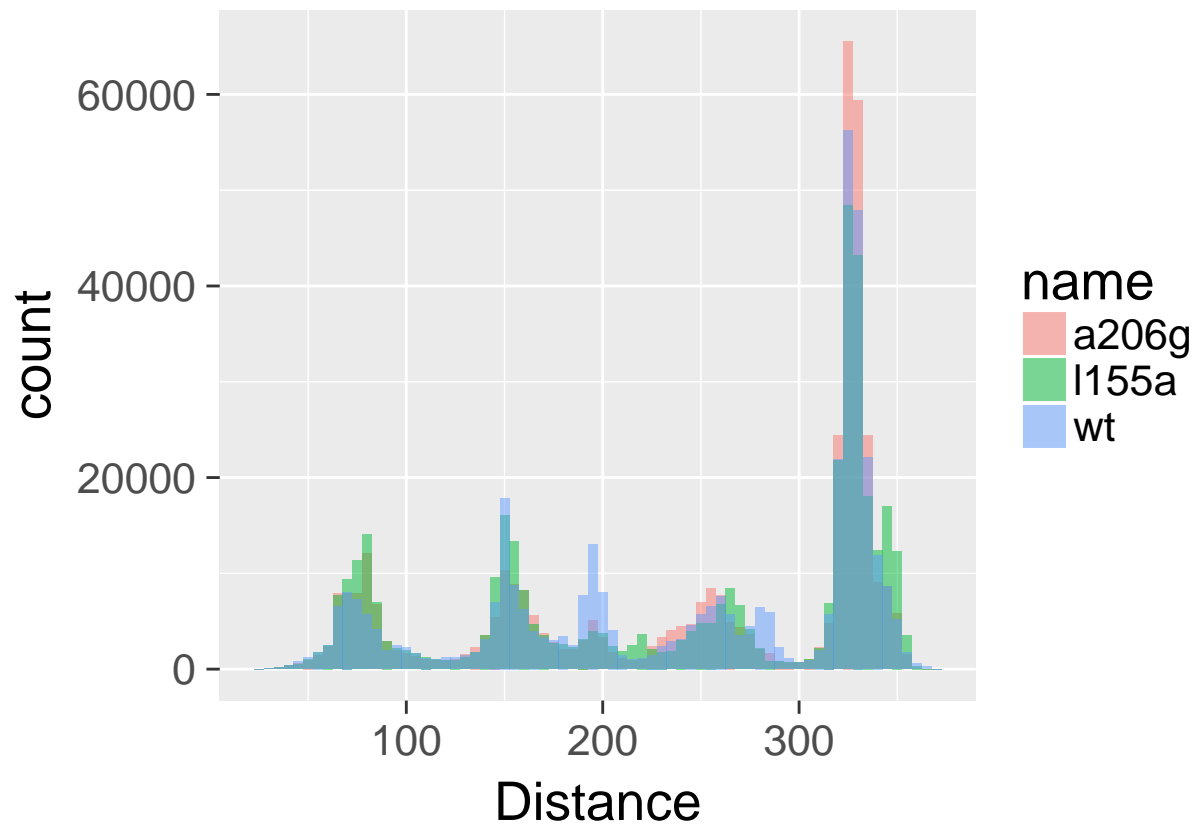
Distance vs Steps.

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



Histogram of Distance for a206g.

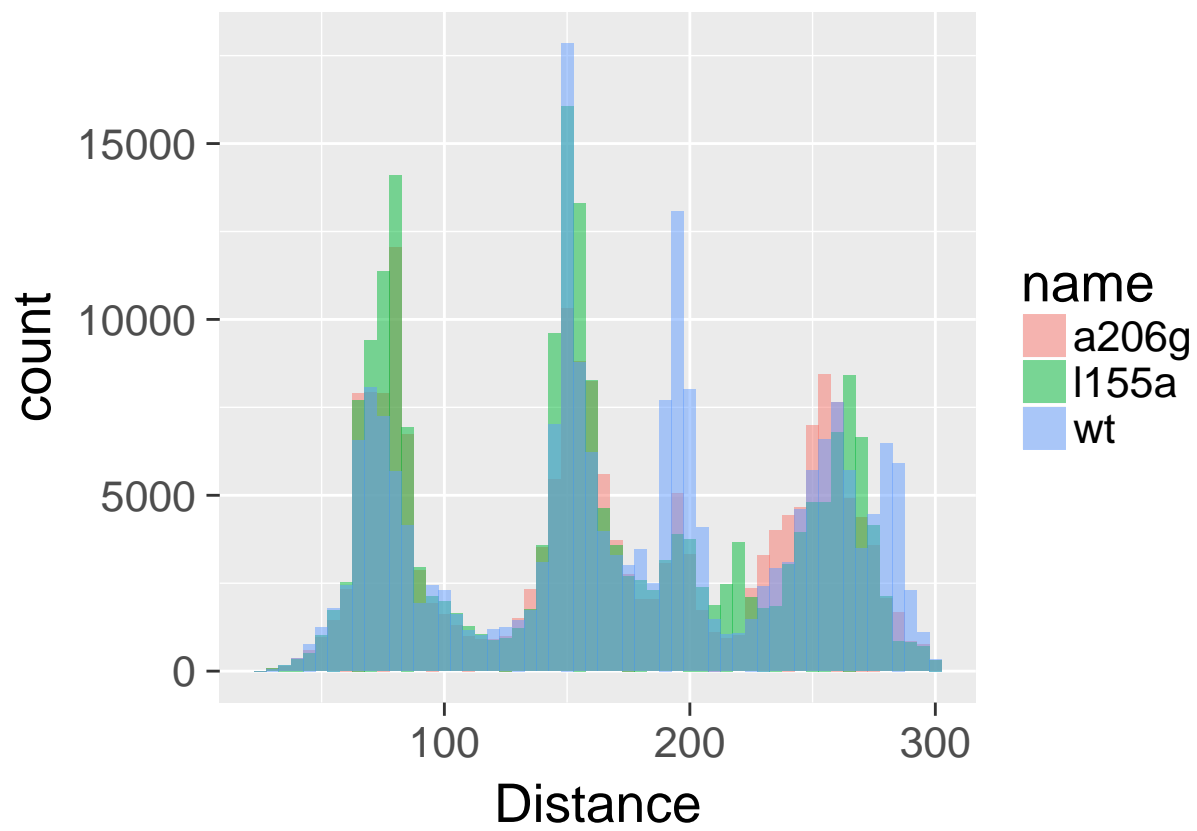
```
data %>%
  ggplot() +
  aes(Distance, fill = name) +
  geom_histogram(binwidth = 5, position = "identity", alpha = 0.5)
```



Let's

see only distance less than 300.

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



Change