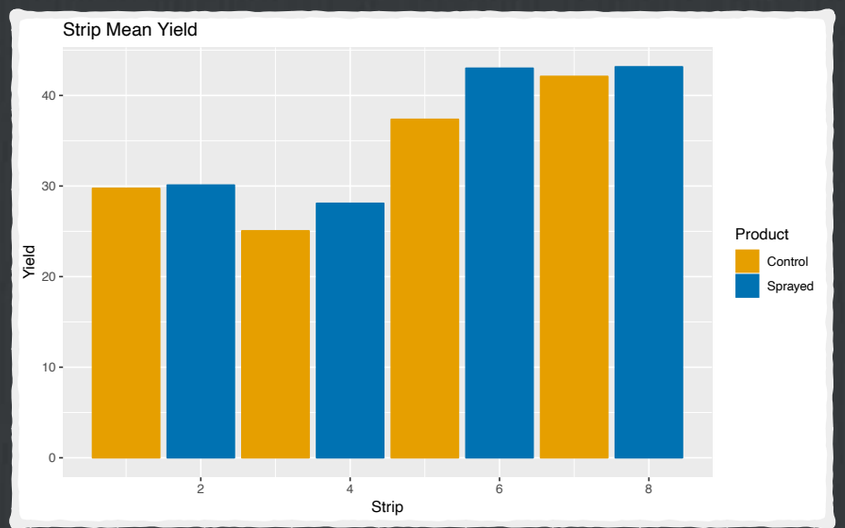
We fail to reject the null hypothesis



- Even though :
  - For each pair of strips, the treated strip had greater yield
  - Average yield in the treated strips was greater (36.1 vs 33.6 bu/acre - ~ 7.5% increase)

- > wilcox.test(Yield ~ Product, paired=TRUE,…)

  Wilcoxon signed rank test

  data: Yield by Product

  V = 0, p-value = 0.125

- > t.test(Yield ~ Product, paired=TRUE, …)

  Paired t-test

  data: Yield by Product

  t = -2.1319, df = 3, **p-value = 0.1228**

  sample estimates:

  mean in group Control mean in group Sprayed

  33.56637 **36.09020**

- > friedman.test(Yield ~ Block | Product, …)

  Friedman rank sum test

  data: Yield and Block and Product

  Friedman chi-squared = 6, df = 3, **p-value = 0.1116**

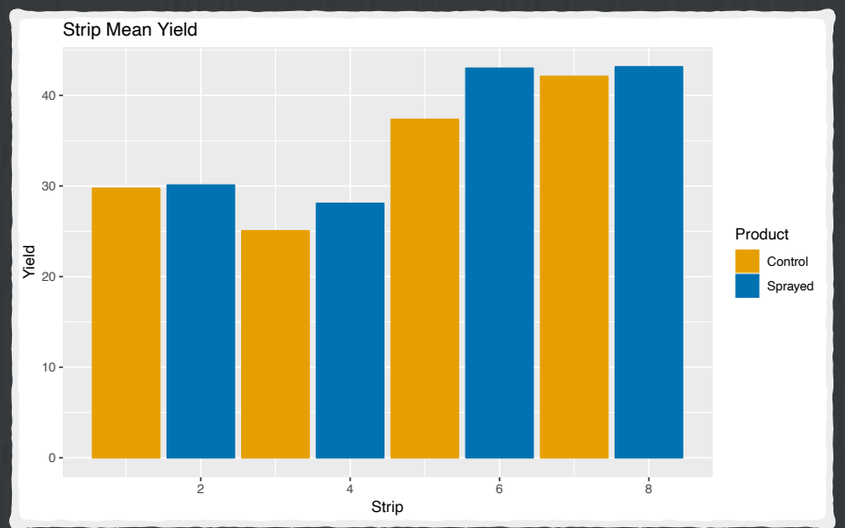
- > anova(Yield ~ Block + Product, …)

  Analysis of Variance Table

  Response: Yield

	Df	Sum Sq	Mean Sq	**F value**	Pr(>F)
Block	3	363.52	121.173	43.230	0.005732 **
Product	1	12.74	12.739	4.545	**0.122791**
Residuals	3	8.41	2.803		

We fail to reject the null hypothesis



- This result is disappointing, but may be the best outcome for a designed based analysis of these data.

- `> wilcox.test(Yield ~ Product, paired=TRUE,…)`

```
        Wilcoxon signed rank test
data:  Yield by Product
V = 0, p-value = 0.125
```

- `> t.test(Yield ~ Product, paired=TRUE, …)`

```
        Paired t-test
data:  Yield by Product
t = -2.1319, df = 3, p-value = 0.1228
sample estimates:
mean in group Control mean in group Sprayed
             33.56637              36.09020
```

- `> friedman.test(Yield ~  Block | Product, …)`

```
        Friedman rank sum test
data:  Yield and Block and Product
Friedman chi-squared = 6, df = 3, p-value = 0.1116
```

- `> anova(Yield ~ Block + Product, …)`

```
          Analysis of Variance Table
Response: Yield
          Df  Sum Sq Mean Sq F value    Pr(>F)
Block      3 363.52 121.173  43.230 0.005732 **
Product    1  12.74  12.739   4.545 0.122791
Residuals  3   8.41   2.803
```