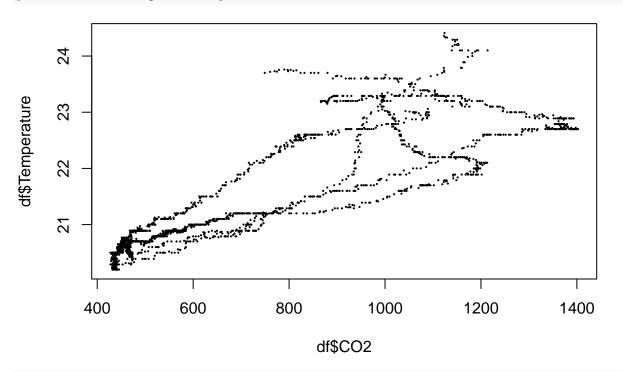
day_10_nov_15_2016_occupancy_anova_cnt

Redoing ANOVA from a few days ago

```
plot(df$CO2, df$Temperature, pch=16, cex=0.3)
```



```
(fit <- aov(CO2 ~ Temperature, data=df))</pre>
```

```
## Call:
## aov(formula = CO2 ~ Temperature, data = df)
##
## Terms:
## Temperature Residuals
## Sum of Squares 172818405 55386731
## Deg. of Freedom 1 2663
##
## Residual standard error: 144.2173
## Estimated effects may be unbalanced
```

```
summary(fit)
```

```
## Df Sum Sq Mean Sq F value Pr(>F)
## Temperature   1 172818405 172818405 8309 <2e-16 ***
## Residuals   2663 55386731 20799
## ---
## Signif. codes: 0 '*** 0.001 '** 0.01 '* 0.05 '.' 0.1 ' ' 1</pre>
```

The anova of CO2 vs Temperature shows a definite linear relationship, as confirmed by the ANOVA p-value.

```
df$rand <- rnorm(length(df$Temperature))</pre>
(fit <- aov(CO2 ~ rand, data=df))</pre>
## Call:
##
      aov(formula = CO2 ~ rand, data = df)
##
## Terms:
##
                        rand Residuals
## Sum of Squares
                       26404 228178731
## Deg. of Freedom
                           1
                                   2663
## Residual standard error: 292.7197
## Estimated effects may be unbalanced
summary(fit)
##
                 Df
                       Sum Sq Mean Sq F value Pr(>F)
                        26404 26404
                                        0.308 0.579
## rand
                  1
## Residuals
               2663 228178731
                                 85685
```

This shows that a generated variable (as expected) does not have any relationship with CO2.