Disturbance Assignment

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## Disturbance Assignment

The code below outlines the ranodmization procedure for the disturbance treatment.

#set random seed  
set.seed(9925)  
  
#define parameters  
w <- c("top", "bottom")  
x <- c("E", "W")   
y <- c(1, 2, 3, 4)  
z <- c(0, 45, 65, 85)  
  
# example treatment using group A  
# all other groups simulated in identical fashion  
# then merged at the end of file and written to .csv  
plot.disturbance.a <- data.frame(group = "A", plot = sample(y), disturbance = sample(z))  
plot.disturbance.a <- plot.disturbance.a[order(plot.disturbance.a$plot),]  
  
# randomization of how which side E = east or W = west is chosen for  
# top = top-down or bottom - bottom-up treatment  
plot.treatment <- data.frame(plot.side = sample(w), treatment = sample(x))

## Group A

Assigned Disturbance Level Per Plot - Group A

group plot disturbance  
 A 1 85  
 A 2 45  
 A 3 65  
 A 4 0

Group A Treatment Assignments

plot plot.side treatment  
 A1 bottom E  
 A1 top W  
 A2 top E  
 A2 bottom W  
 A3 bottom E  
 A3 top W  
 A4 top W  
 A4 bottom E

## Group B

Assigned Disturbance Level Per Plot - Group B

group plot disturbance  
 B 1 0  
 B 2 45  
 B 3 85  
 B 4 65

Group B Treatment Assignments

plot plot.side treatment  
 B1 bottom E  
 B1 top W  
 B2 bottom W  
 B2 top E  
 B3 top W  
 B3 bottom E  
 B4 bottom W  
 B4 top E

## Group C

Assigned Disturbance Level Per Plot - Group C

group plot disturbance  
 C 1 0  
 C 2 65  
 C 3 85  
 C 4 45

Group C Treatment Assignments

plot plot.side treatment  
 C1 bottom W  
 C1 top E  
 C2 bottom E  
 C2 top W  
 C3 bottom E  
 C3 top W  
 C4 top E  
 C4 bottom W

## Group D

Assigned Disturbance Level Per Plot - Group D

group plot disturbance  
 D 1 0  
 D 2 85  
 D 3 45  
 D 4 65

Group A Treatment Assignments

plot plot.side treatment  
 D1 bottom E  
 D1 top W  
 D2 bottom W  
 D2 top E  
 D3 top W  
 D3 bottom E  
 D4 top W  
 D4 bottom E

## Writing Output

The code below outlines the ranodmization procedure for the disturbance treatment.

# first the plot assignments  
plot.disturbance <- rbind(plot.disturbance.a, plot.disturbance.b, plot.disturbance.c, plot.disturbance.d)  
write.csv(plot.disturbance, "./output/plot\_disturbance\_level\_assignments.csv")  
  
# then the treatment level assignments by group  
plot.treatment <- rbind(group.a, group.b, group.c, group.d)  
write.csv(plot.treatment, "./output/plot\_treatment\_level\_assignments.csv")