Analyses_and_Plots

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library("ggplot2") library("phyloseq") library("dplyr") library("vegan") library("DESeq2") library("knitr")

seqtab <- readRDS("C:/Users/hammera/Desktop/raber_550/data/reads_290190_seqtab_final.rds") seqtab.taxa <- readRDS("C:/Users/hammera/Desktop/raber_550/data/reads_290190_taxa_final.rds") seqtab <- (seqtab) meta_data <- as.data.frame(read_excel("C:/Users/hammera/Desktop/raber_550/data/550_metadata_re rownames(seqtab) <- meta_data$Raber$SID samples = sample_data(meta_data) ASV = otu_table(seqtab, taxa_are_rows = FALSE) TAX = tax_table(seqtab.taxa) sample_names(samples) <- -sample_names(ASV) physeq = phyloseq(ASV, TAX, samples) taxa_names(physeq) <- -paste0("ASV", seq(ntaxa(physeq))) physeq = subset_samples(physeq, sample_names(physeq)! = "93") physeq = subset_samples(physeq, sample_names(physeq)! = "59") sample_data(physeq1) Radiated <- get_variable(physeq1, "Treatment") %in% c("25","50","200")

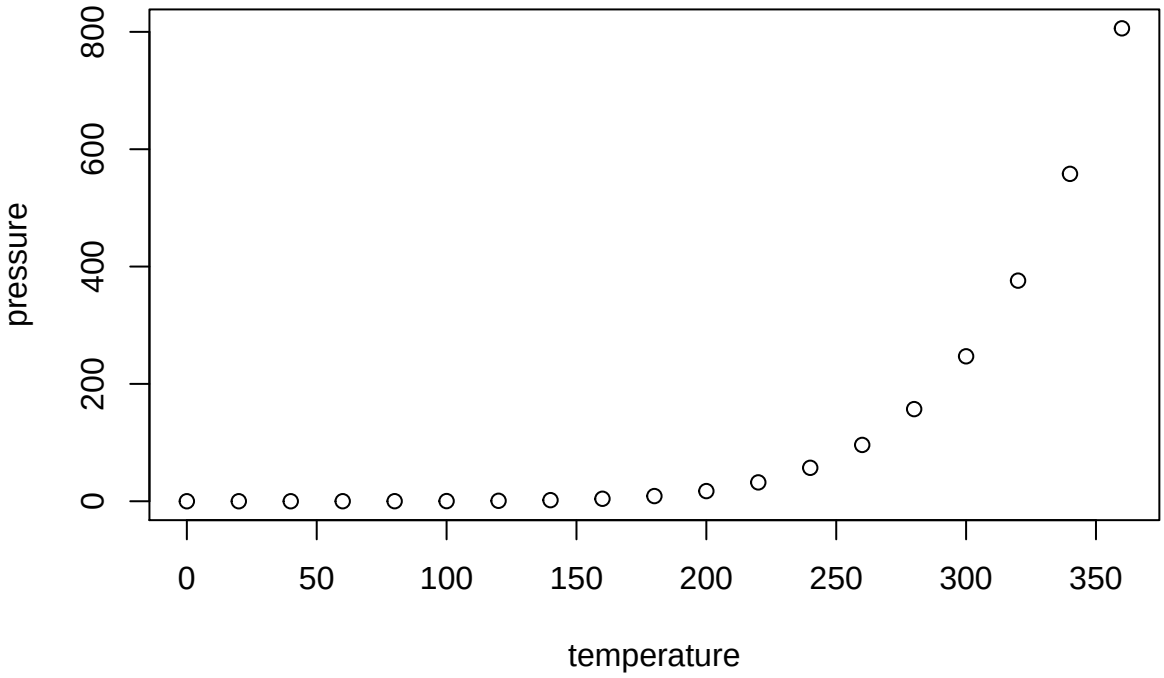
While the p-value for ANOVA of alphadiv~Treatment isn't significant (Pr(F)~0.11), I think it might be useful to briefly discuss this in light of Keaton's previous analysis which showed an increase in alphadiv associated with increased radiation exposure.

```
summary(cars)
```

```
##      speed           dist       
##  Min.   : 4.0   Min.   :  2.00  
##  1st Qu.:12.0   1st Qu.: 26.00  
##  Median :15.0   Median : 36.00  
##  Mean   :15.4   Mean   : 42.98  
##  3rd Qu.:19.0   3rd Qu.: 56.00  
##  Max.   :25.0   Max.   :120.00
```

Including Plots

You can also embed plots, for example:



Note that the `echo = FALSE` parameter was added to the code chunk to prevent printing of the R code that generated the plot.