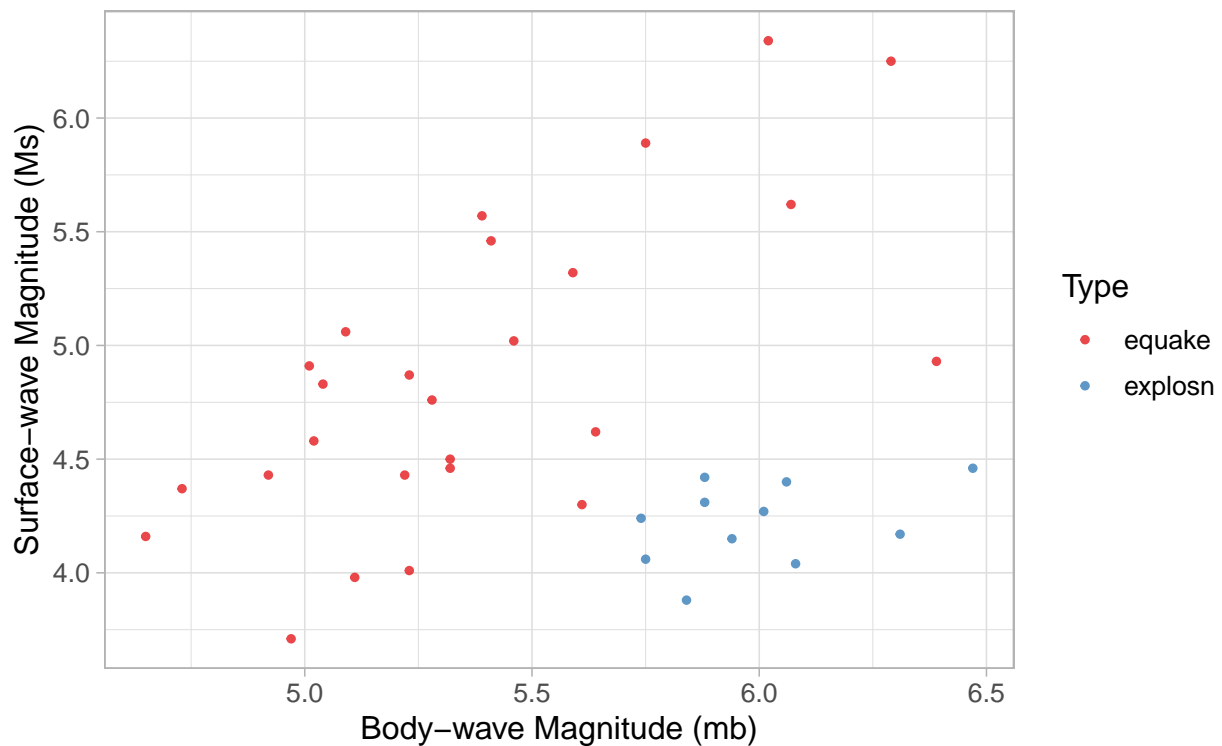# Report_10883408

10883408

2024-04-08
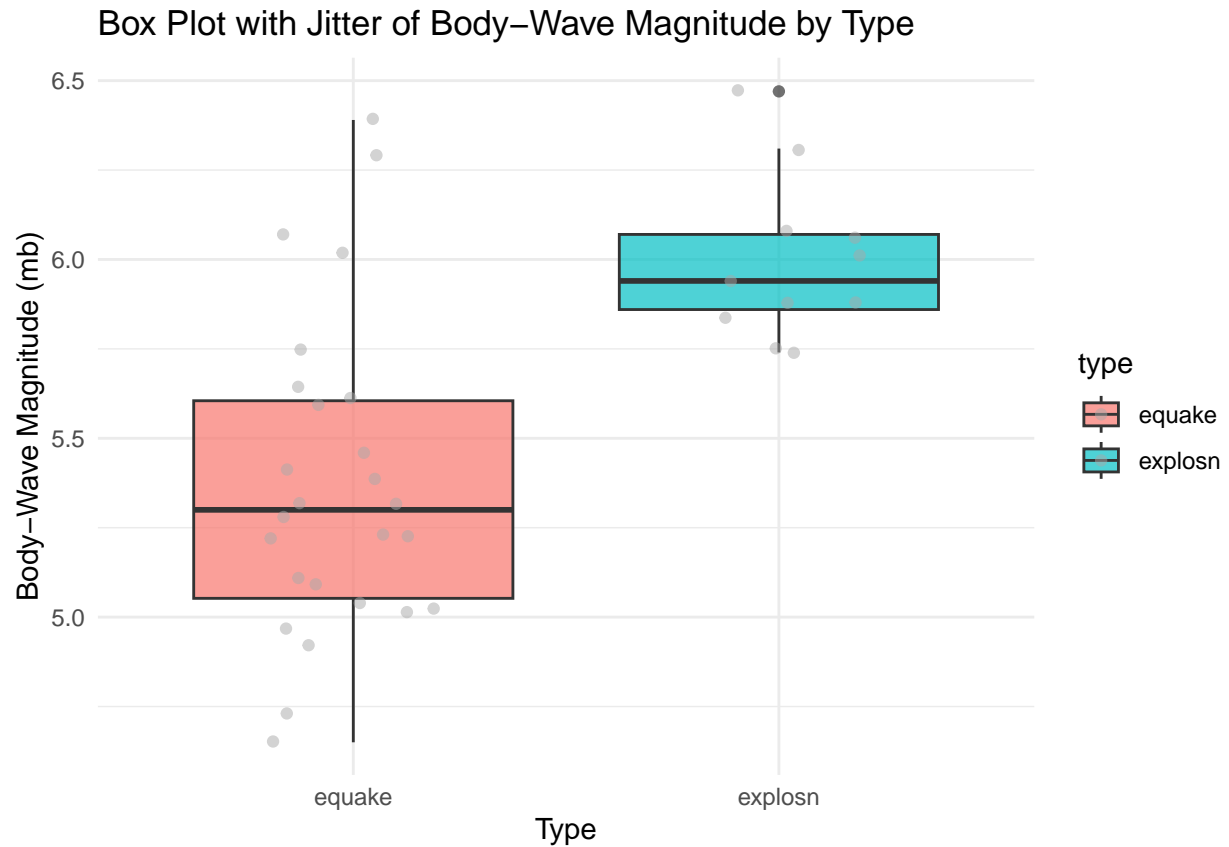
ML part A

Body–wave Magnitude vs. Surface–wave Magnitude
Comparing earthquake types
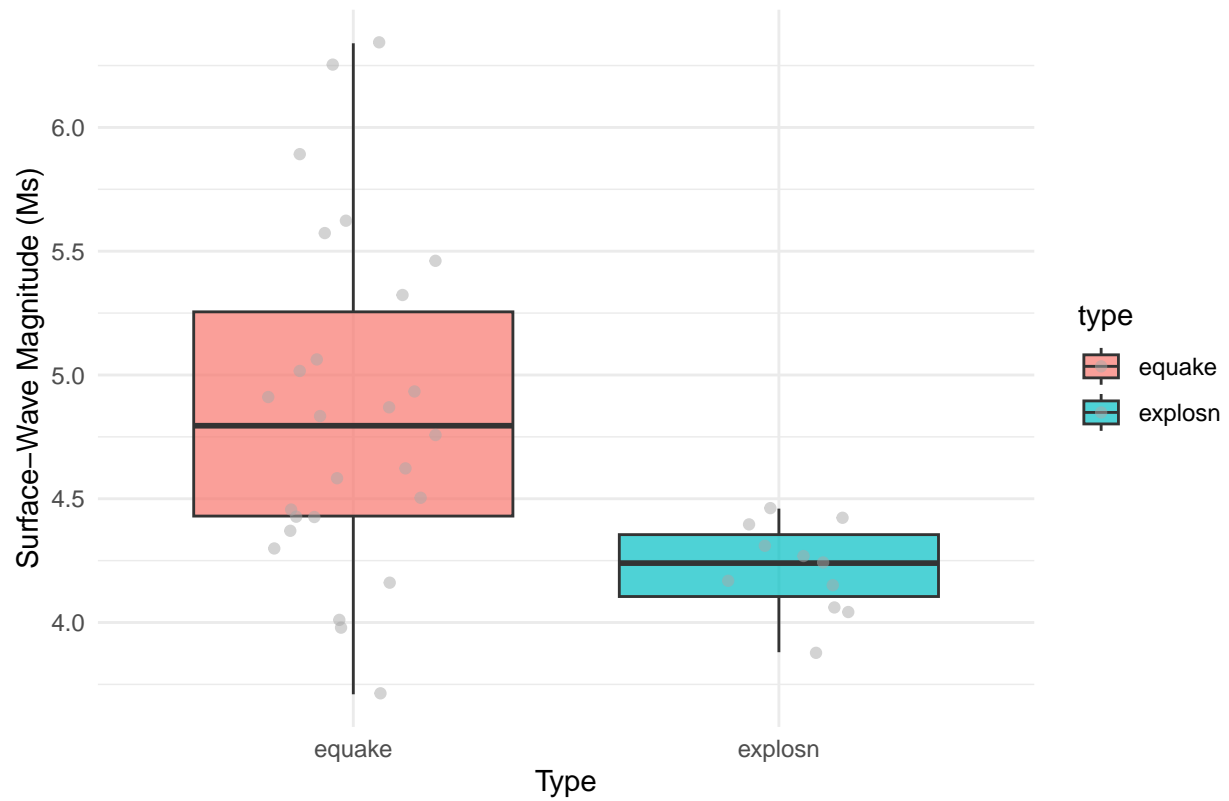


```r
library(ggplot2)

ggplot(data, aes(x = type, y = body, fill = type)) +
  geom_boxplot(alpha = 0.7) +
  geom_jitter(width = 0.2, alpha = 0.5, color = "darkgray") +
  labs(title = "Box Plot with Jitter of Body-Wave Magnitude by Type",
       x = "Type",
       y = "Body-Wave Magnitude (mb)") +
  theme_minimal()
```

Box Plot with Jitter of Body–Wave Magnitude by Type


```r
library(ggplot2)

ggplot(data, aes(x = type, y = surface, fill = type)) +
  geom_boxplot(alpha = 0.7) +
  geom_jitter(width = 0.2, alpha = 0.5, color = "darkgray") +
  labs(title = "Box Plot with Jitter of Surface-Wave Magnitude by Type",
       x = "Type",
       y = "Surface-Wave Magnitude (Ms)") +
  theme_minimal()
```

Box Plot with Jitter of Surface−Wave Magnitude by Type

ML part B

Random Forest Decision Boundary with Data Points