dgiron3

Data: From the {datasets} package, I used the dataset “quakes”.

Analysis: From the dataset, I determined that 42.9% of the quakes were within a geographic location [longitude → (178,183); latitude → (-27,-17)] and that the subset dataset of the quakes that had a depth of at least 500 km (1/3 of the quakes dataset), I determined that almost 95% of the quakes were within the same geographic location.

```
> mean(quakes$lat > -27 & quakes$lat < -17 & quakes$long > 178 & quakes$long < 183)
[1] 0.429
> deep_ind = (quakes$depth >= 500)
> deep = quakes[deep_ind,]
> mean(deep$lat > -27 & deep$lat < -17 & deep$long > 178 & deep$long < 183)
[1] 0.9481707
```

Visualization: