A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green color. They are positioned diagonally, with the blue one in front of the green one.

Analysis of Earthquake Data

Haley Visconti



About the Data Set

This data set was obtained from the US Geological Survey and it represents the period from 2023-08-23 to 2023-09-24

In this analysis we will focus on depth, magnitude, location, time and type of earthquake



Distribution of Earthquake Magnitudes

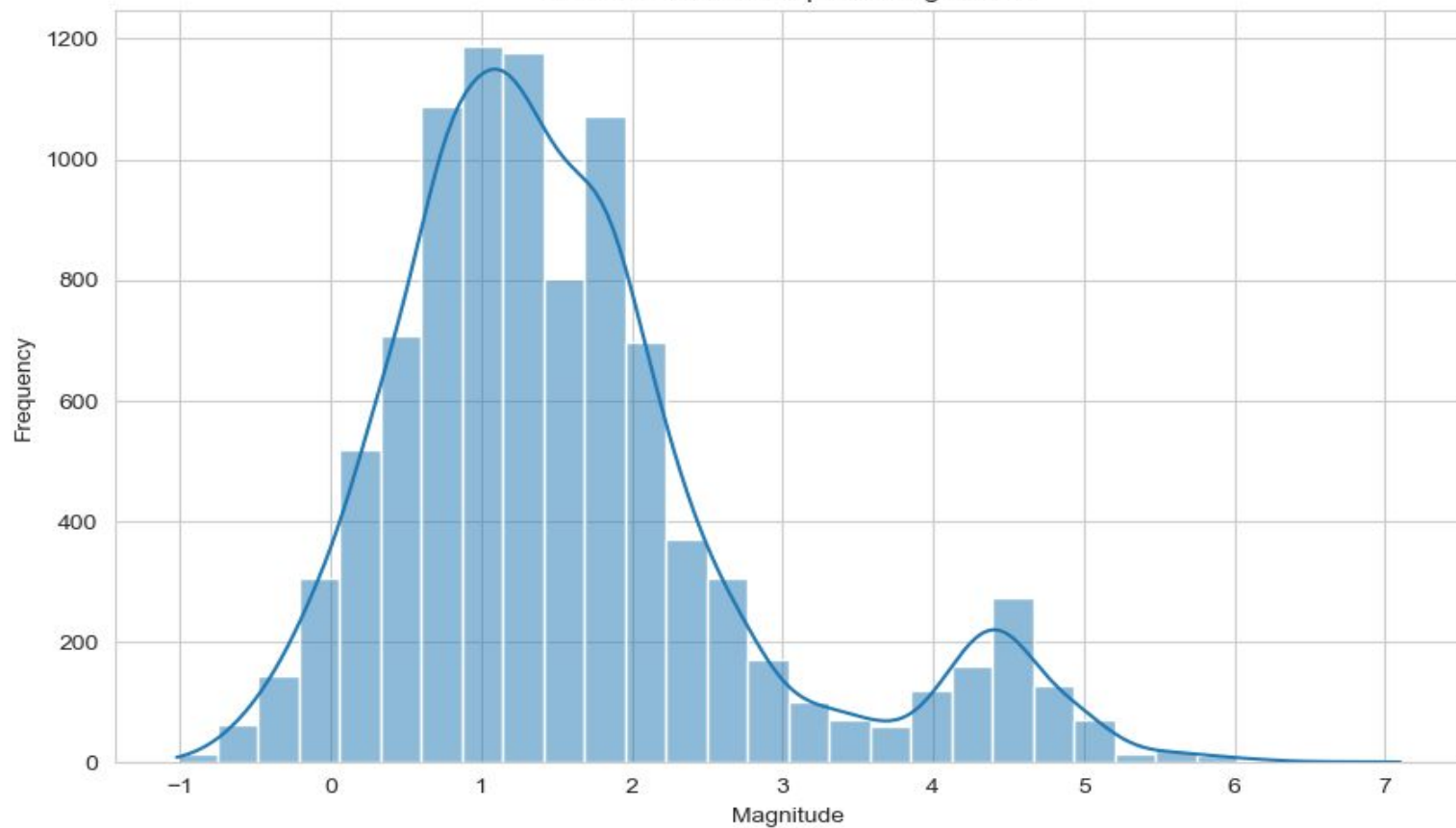
Magnitude is the strength of the earthquake, higher magnitudes are more destructive.

Negative magnitudes represent small quakes

The majority of the earthquakes in this data set were between 0 and 2 with a small cluster between 4 and 5.

The highest magnitude recorded in this time period was 7.1

Distribution of Earthquake Magnitudes

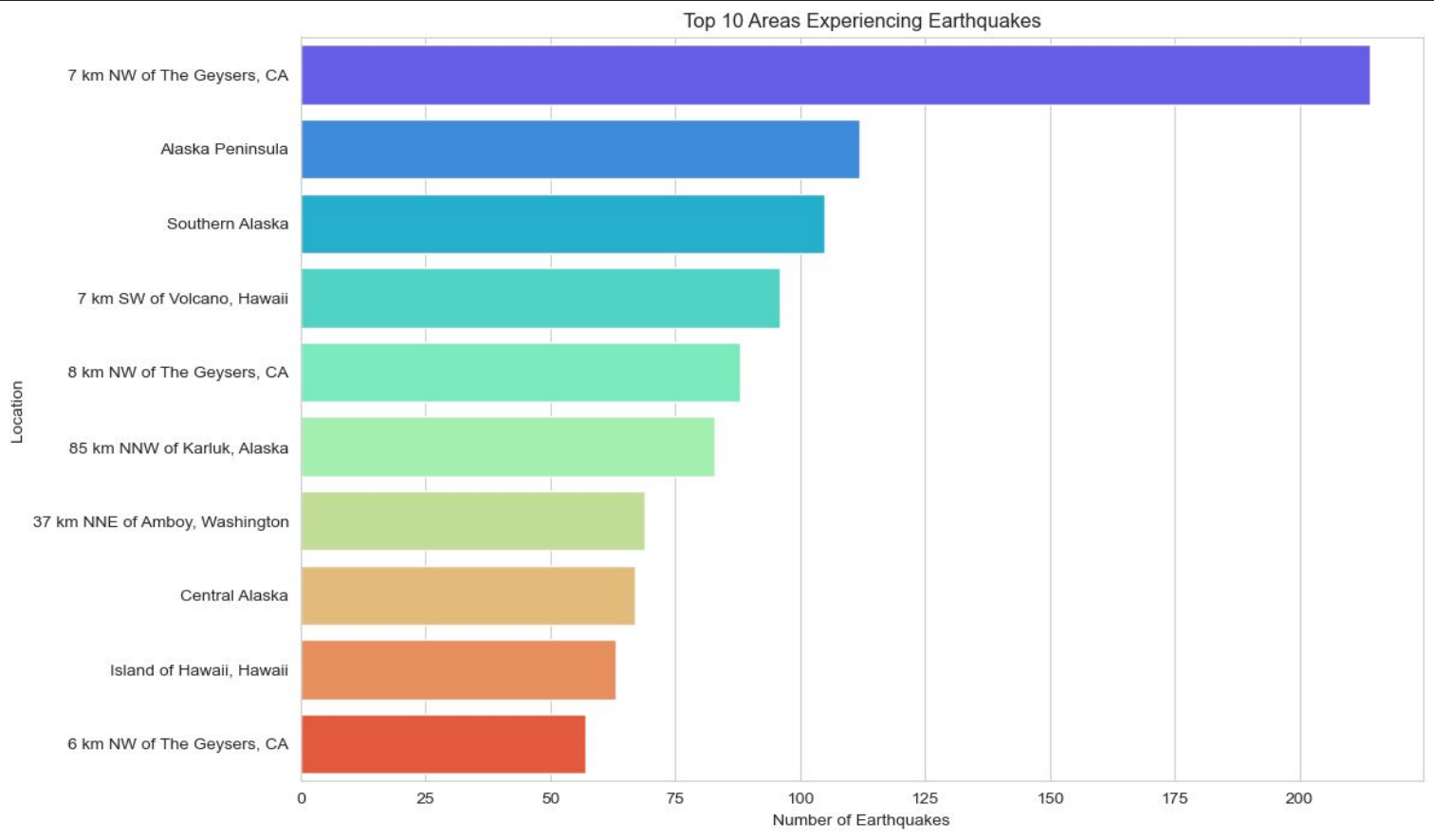




Top 10 Locations Experiencing Earthquakes

Some locations in Hawaii and along the west coast: Alaska, California and Washington

7km northwest of The Geysers, California experienced over 200 events, while the next highest experienced less than 125.



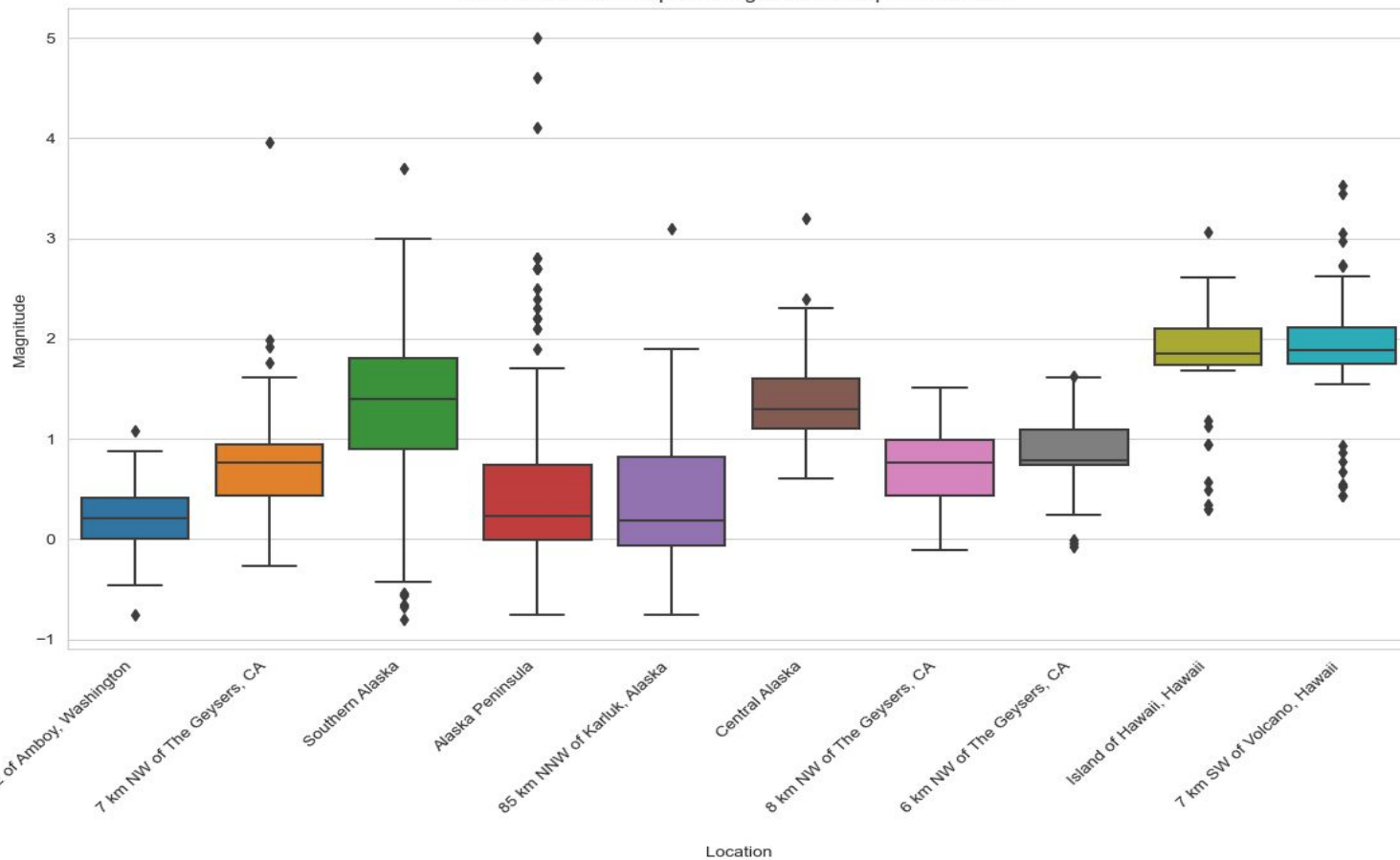


Magnitude in Top 10 Locations

The distribution of magnitude in the top 10 locations experiencing earthquakes is also around 0-2 with

The locations in Hawaii tended to experience earthquakes at the higher end of this range.

Distribution of Earthquake Magnitudes in Top 10 Locations

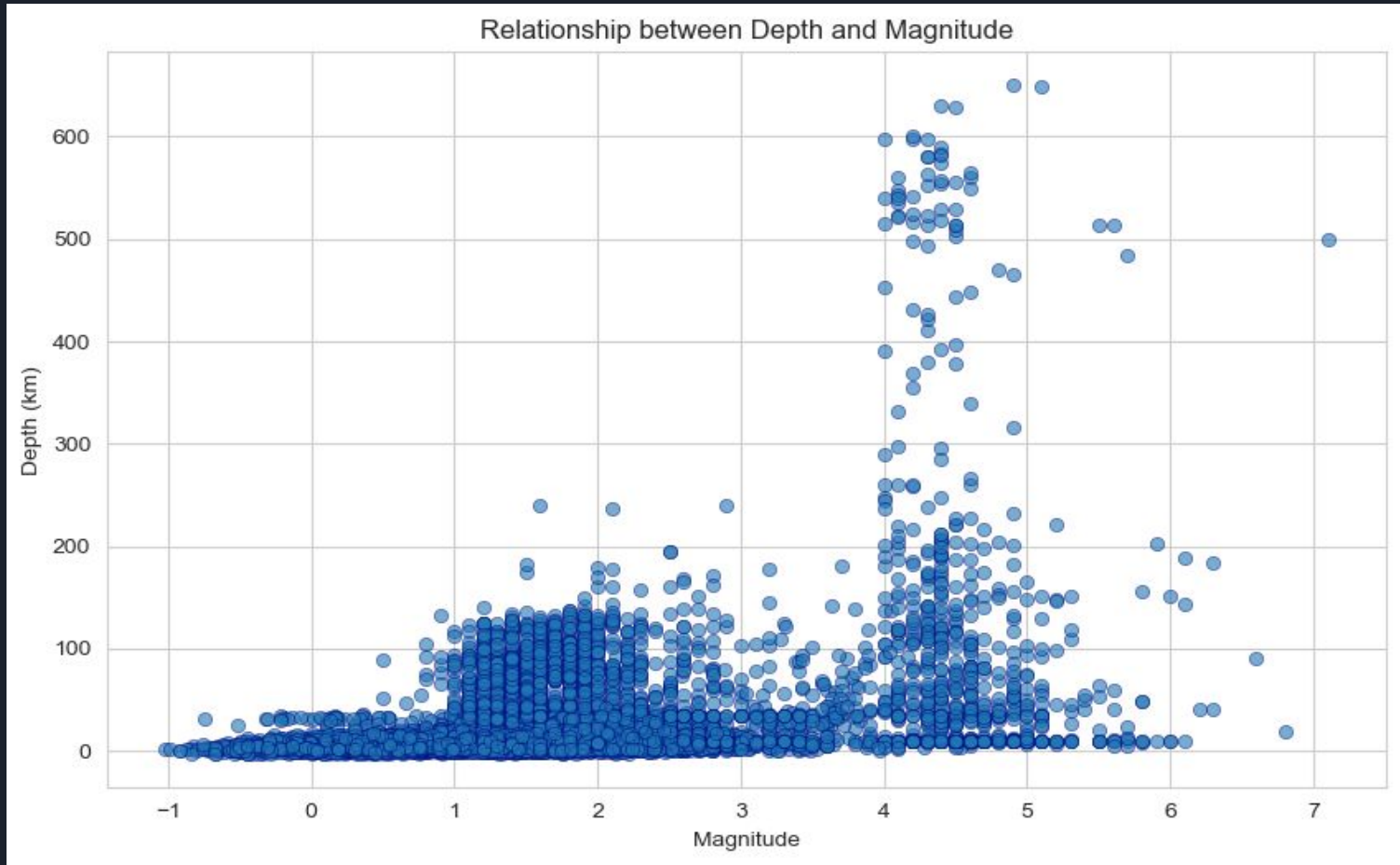




Relationship Between Depth and Magnitude

Lower depths (below 200 km) tended to experience lower magnitudes

Higher magnitudes had a larger range of depths, from 0 km to over 600 km





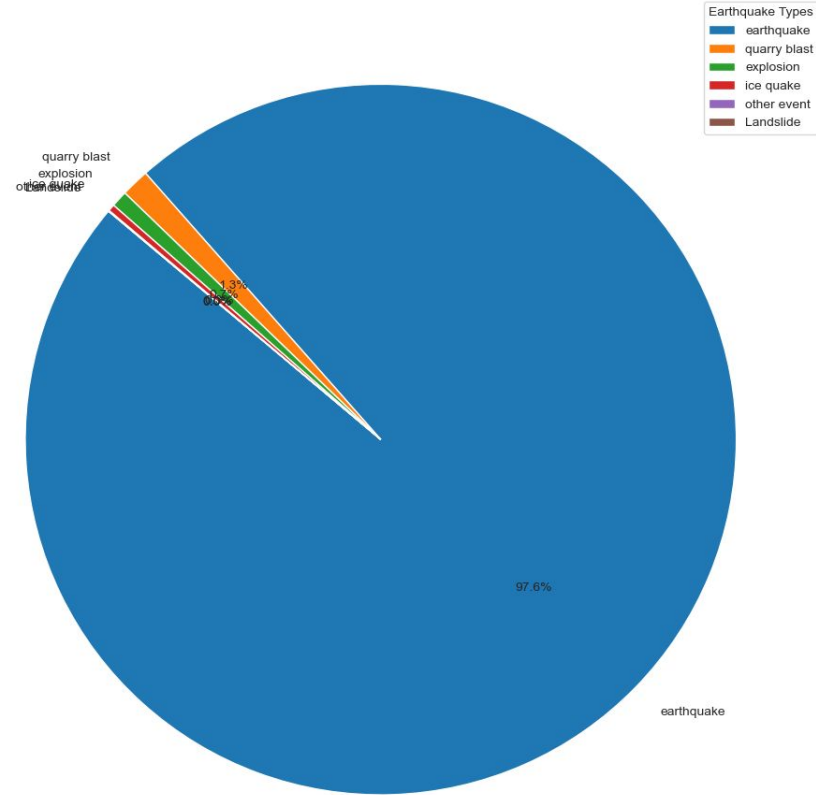
Different Types of Activity

The majority of seismic activity was classified as earthquakes (>97%)

Other types of activity recorded includes: quarry blasts, explosions, ice quakes and landslides.



Proportion of Different Earthquake Types





Earthquakes Per Day

The number of earthquakes recorded per day ranged between 200 and 400

The average number went down as the month went on.

Number of Earthquakes per Day Over Time

