Earthquakes

A data visualisation assignment using a data taken from USGS (U.S Geological Survey)

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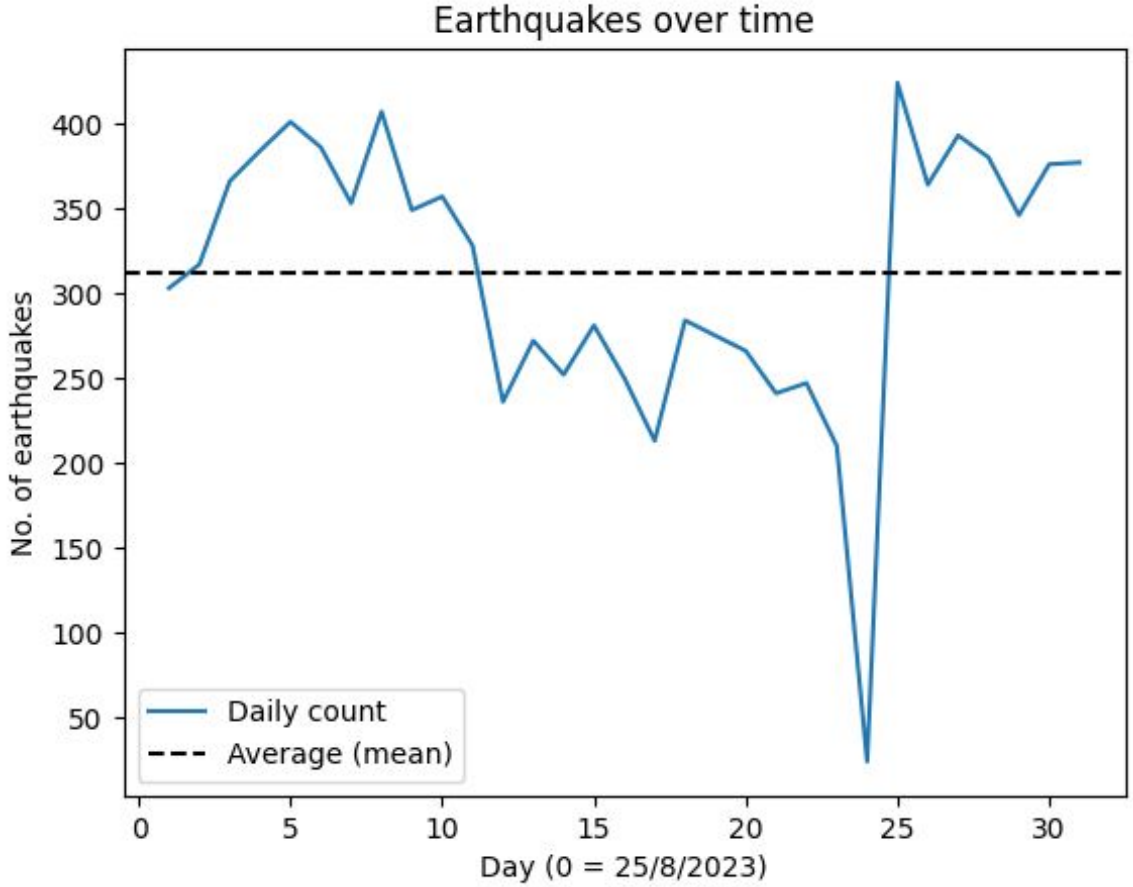
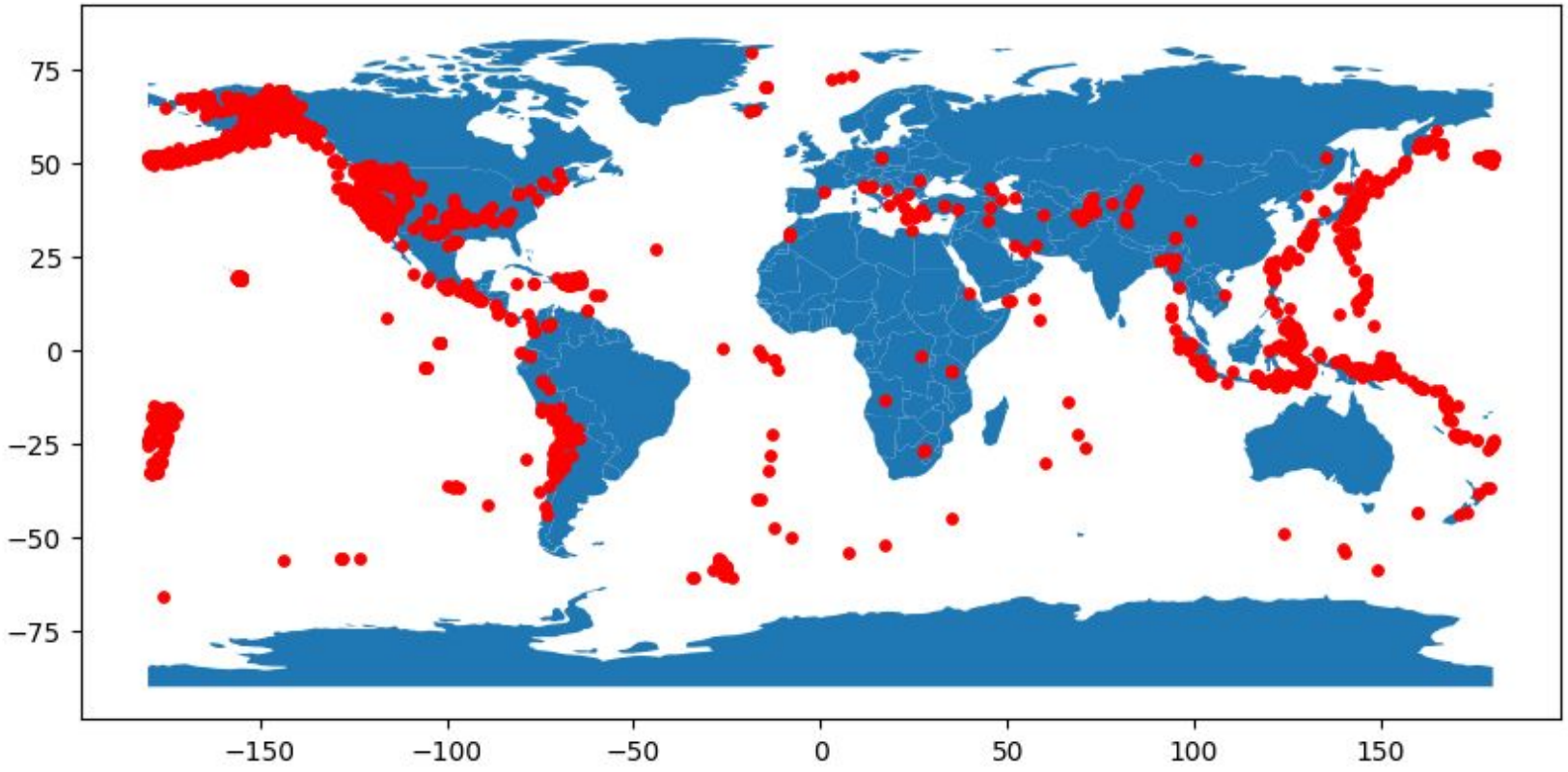
Temporal Trends

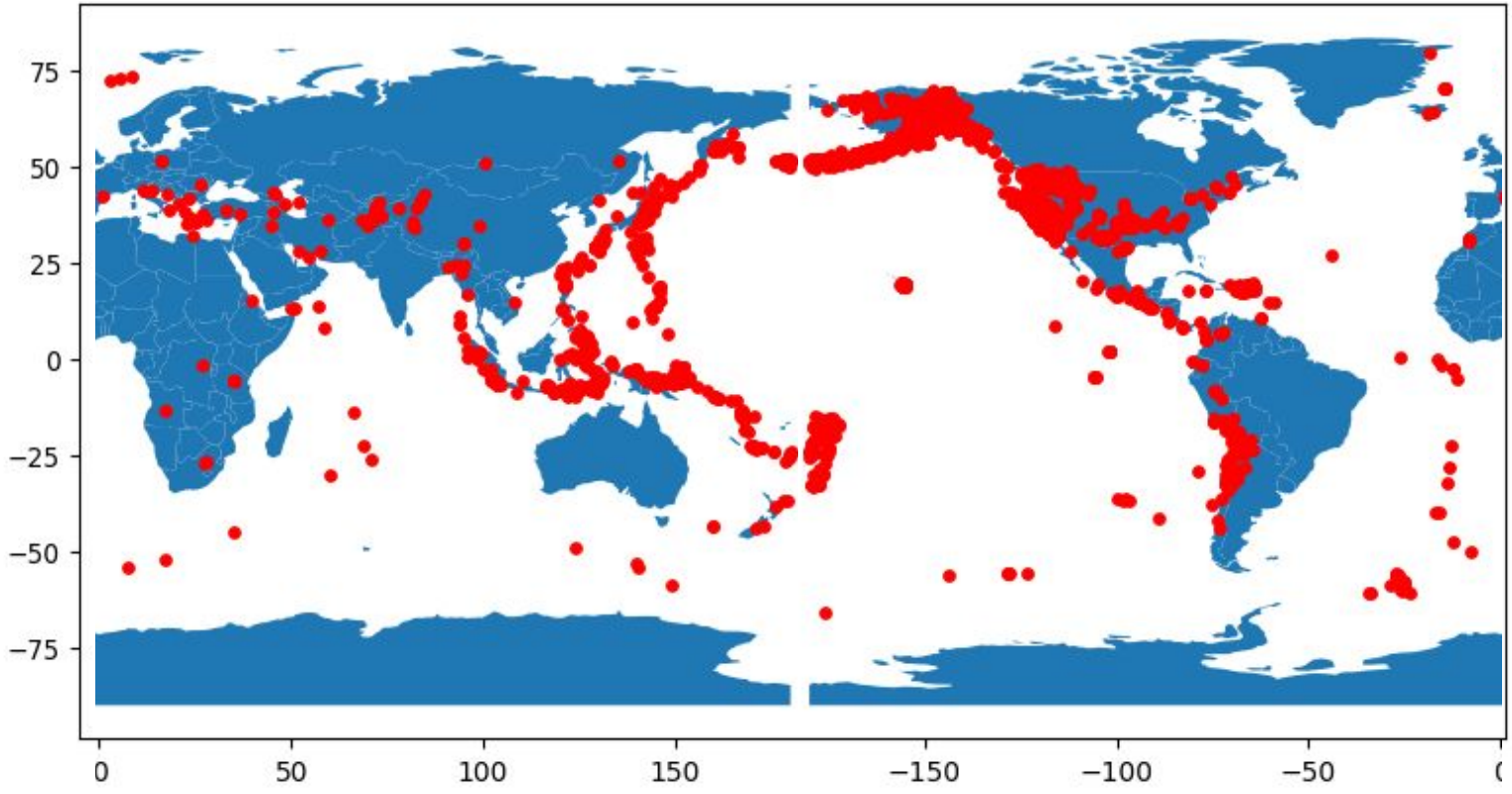


Average over 300 earthquakes per day !

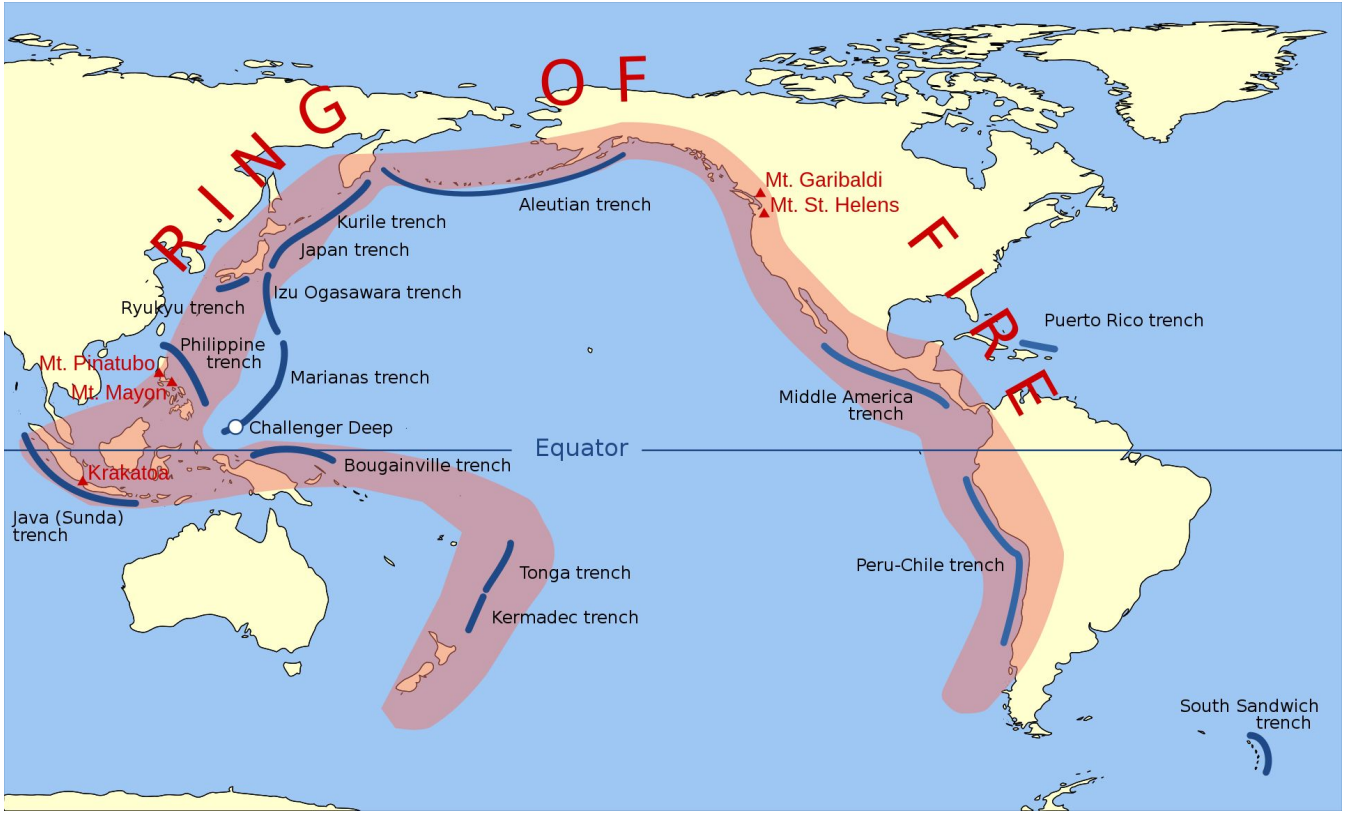
Geographical Distribution



Geographical Distribution



Geographical Distribution - Ring of Fire

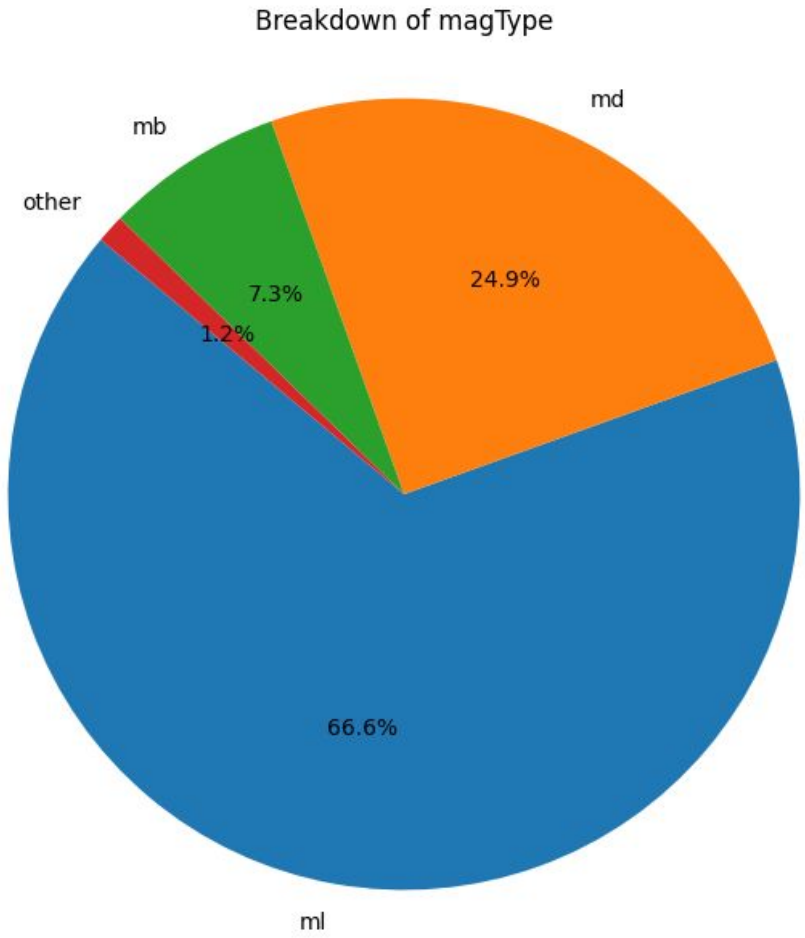


Source: Gringer, Wikipedia

What’s the impact?

Magnitude Trends

- 67% measured with ML scale.
- 25% MD scale



Magnitude Trends

To compare damages - we'll only look at ML values.

Keeps it fair

Magnitude Trends

Richter Magnitude	Earthquake effects
0-2	Not felt by people
2-3	Felt little by people
3-4	Ceiling lights swing
4-5	Walls crack
5-6	Furniture moves
6-7	Some buildings collapse
7-8	Many buildings destroyed
8-Up	Total destruction of buildings, bridges and roads

Source: elizabethturp.co.uk

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(<2) Unnoticeable

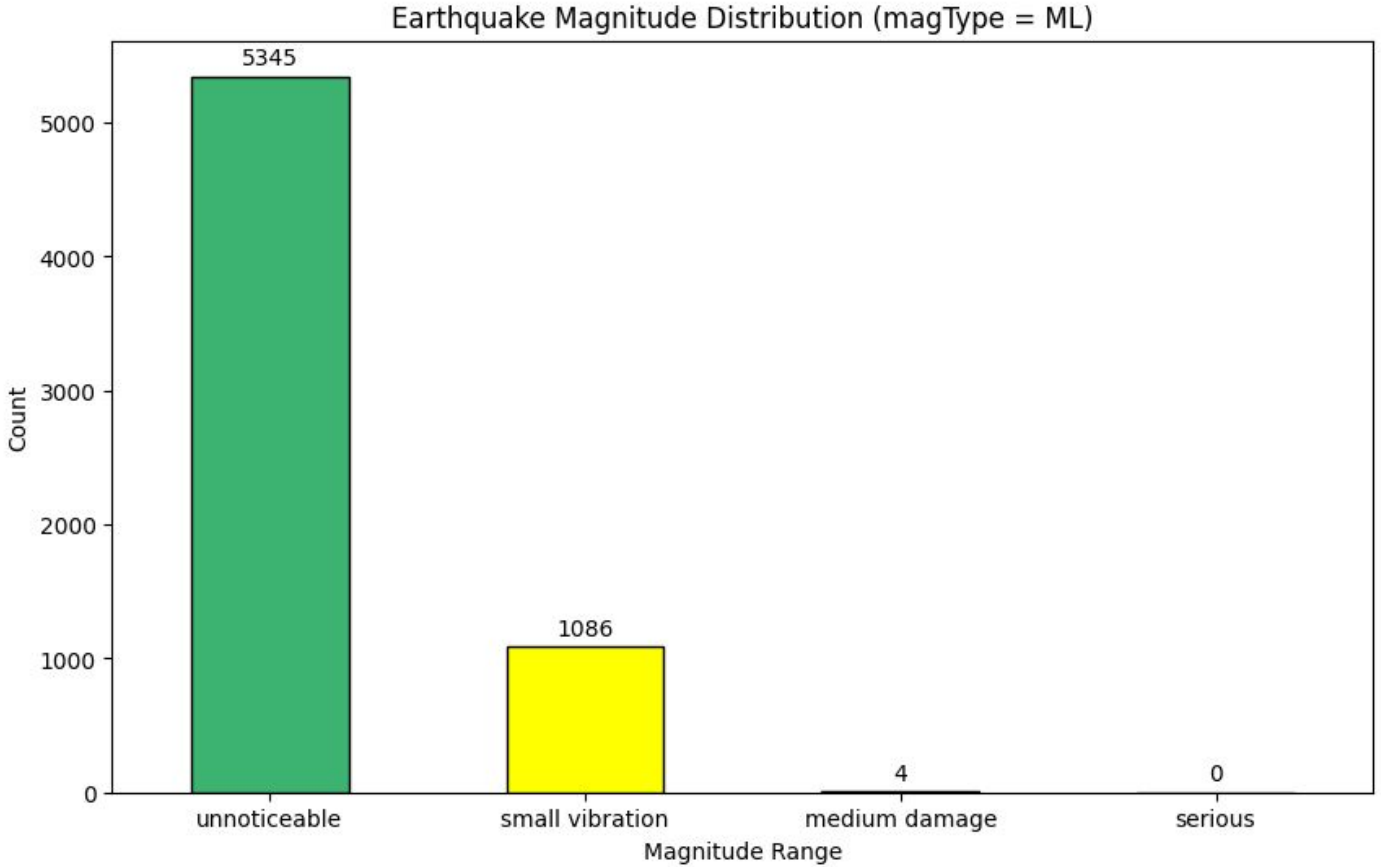
(2-4) Small vibration

(4-6) Medium damage

(6+) Serious

Source: elizabethturp.co.uk

Magnitude Trends



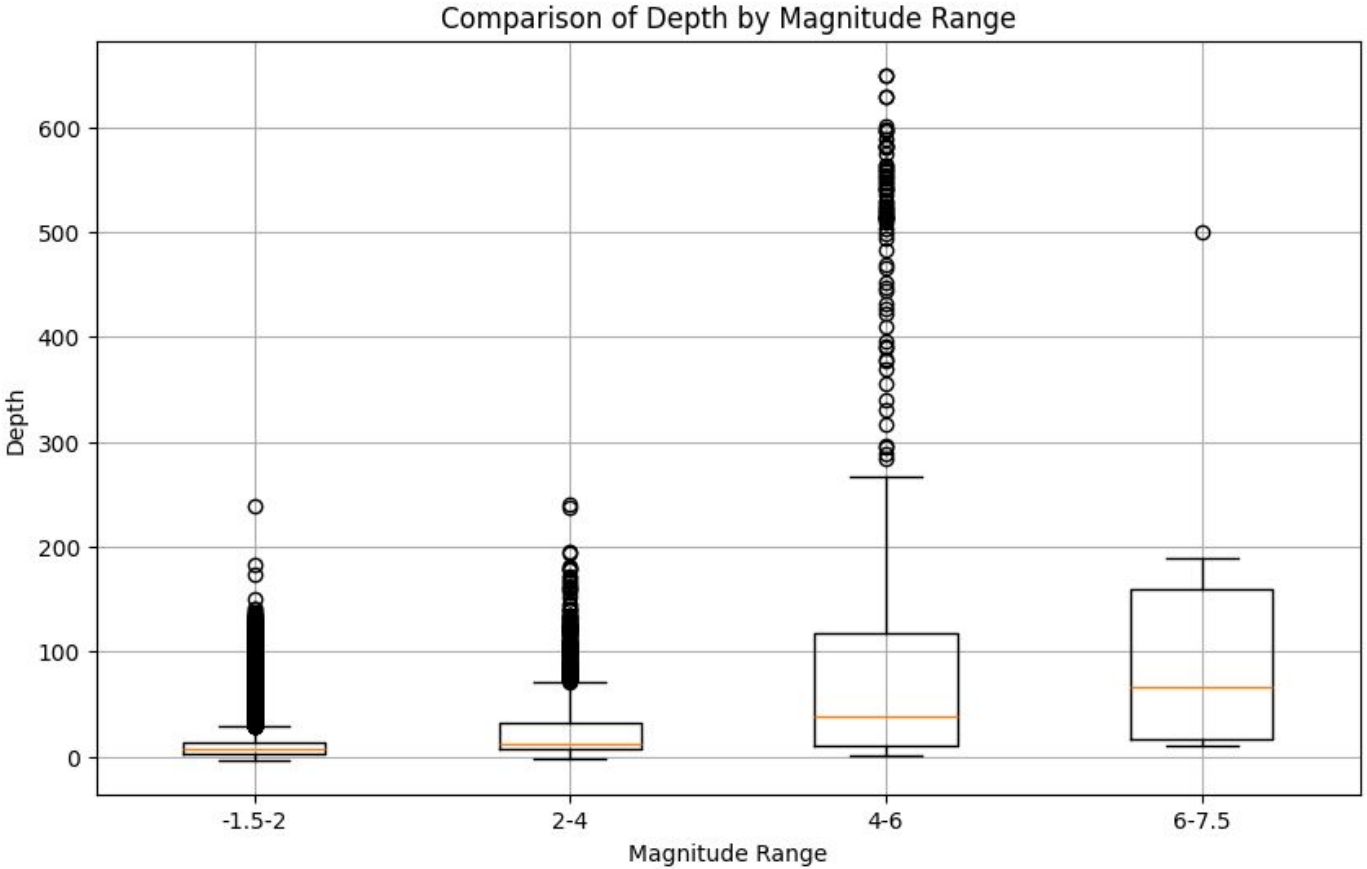
The majority of earthquakes are unnoticeable to humans.

From the ML-measured earthquakes:

- 0 caused serious damage
- 4 in medium damage range

Correlations

Depth vs Magnitude Analysis



Thanks for watching !