



# Earthquakes that are not earthquakes

By Jake Hurley

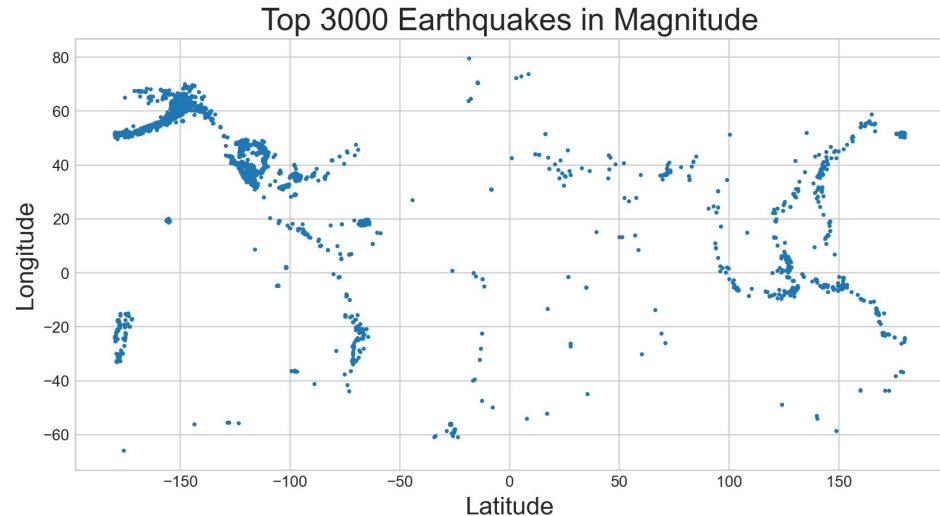


# Itinerary

- What are earthquakes?
- Earthquake data
- Findings

# What makes an earthquake?

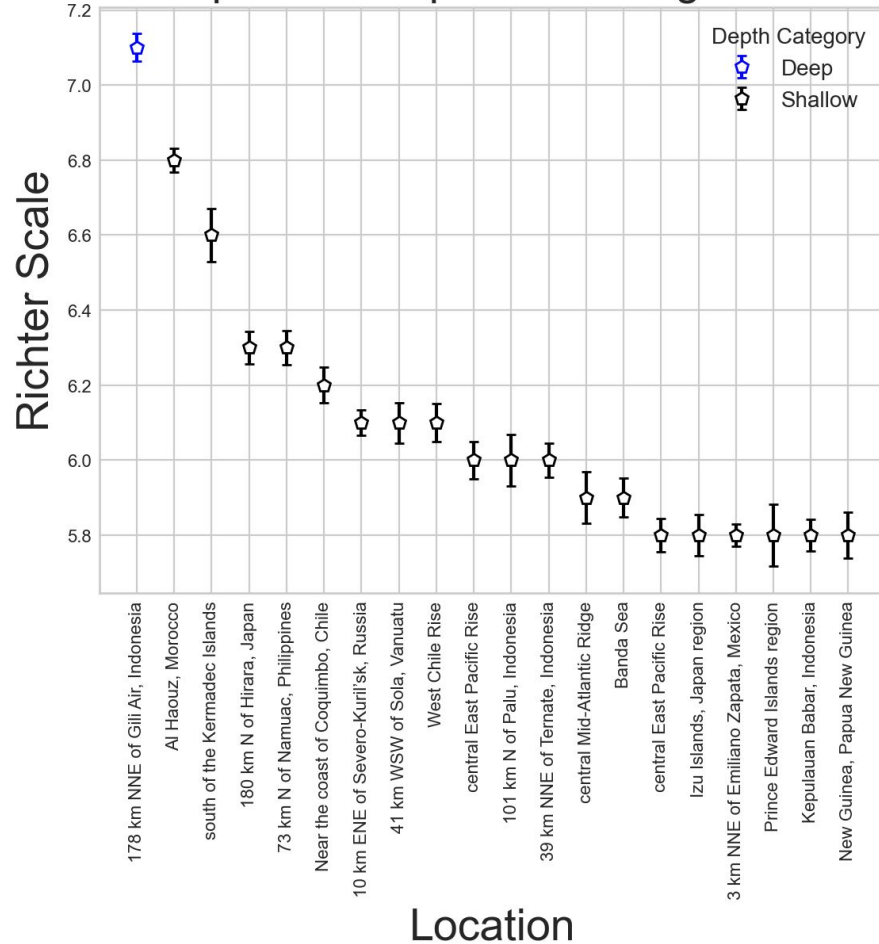
- Sudden releases of energy in the Earth's crust, leading to seismic waves
  - Primarily caused by tectonic plate movement
  - Others included volcanic activity and human induced activities
- Magnitude of earthquake is measured on the Richter scale



# Understanding the data set

- All recorded earthquakes from the last 30 days
- Key data
  - Magnitude
  - Magnitude error
  - Depth
  - Earthquake Type

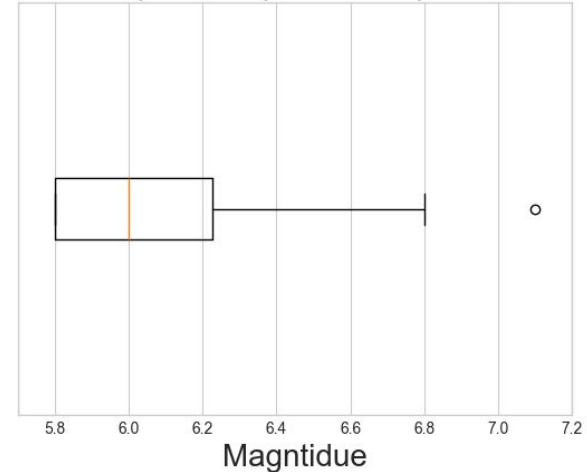
## Top 20 Earthquakes in Magnitude



# Biggest earthquakes

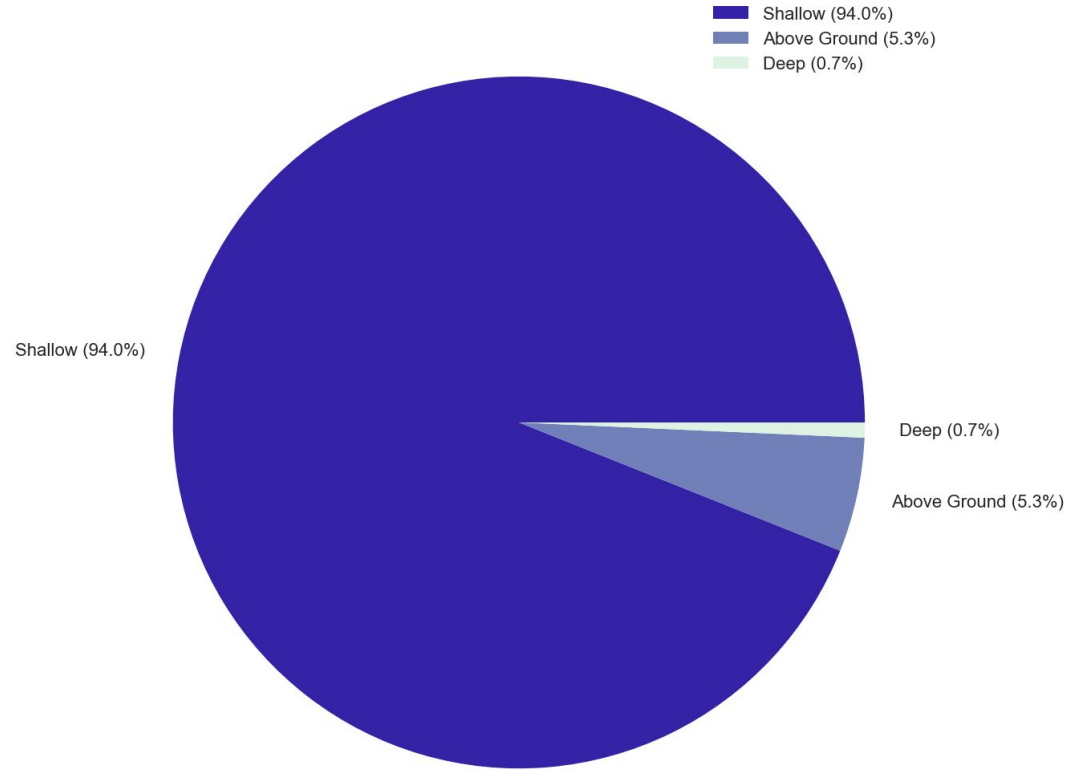
- Above ground < 0m
- Shallow < 300m
- Deep > 300m

Boxplot of Top 20 Earthquakes

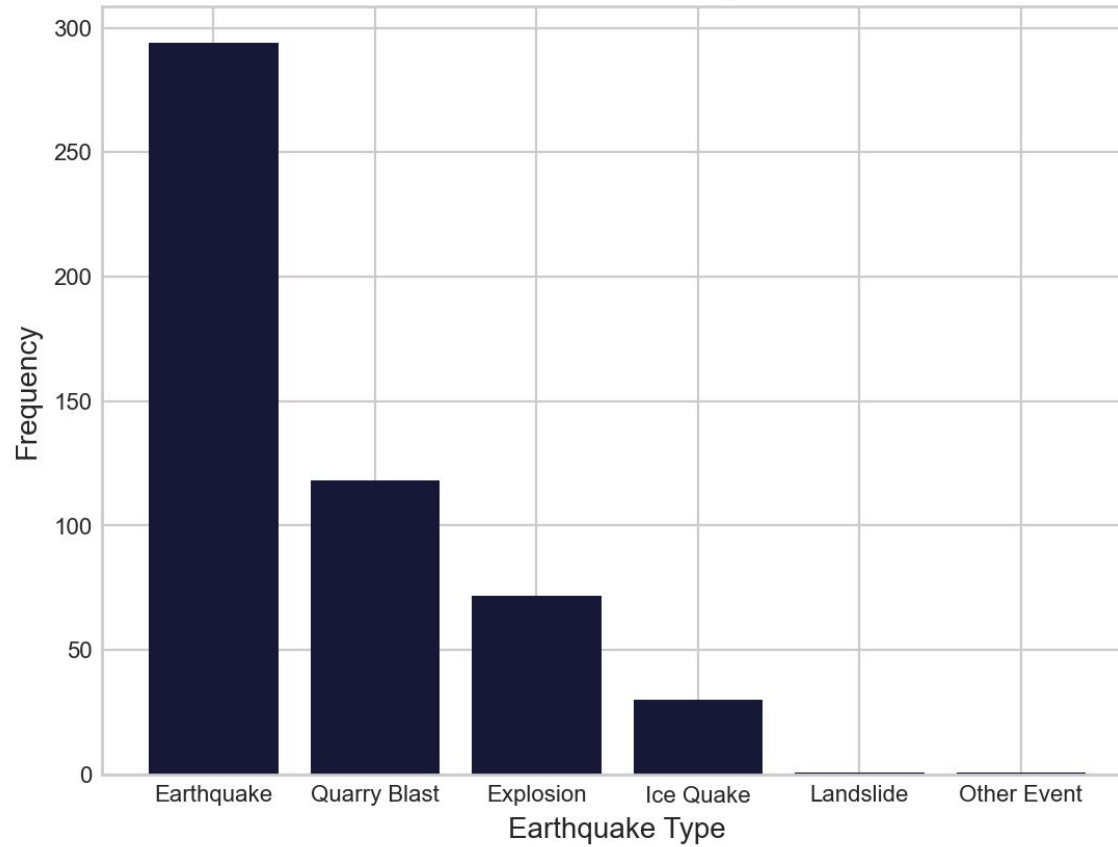


How deep  
are they  
happening?

Earthquake Depth



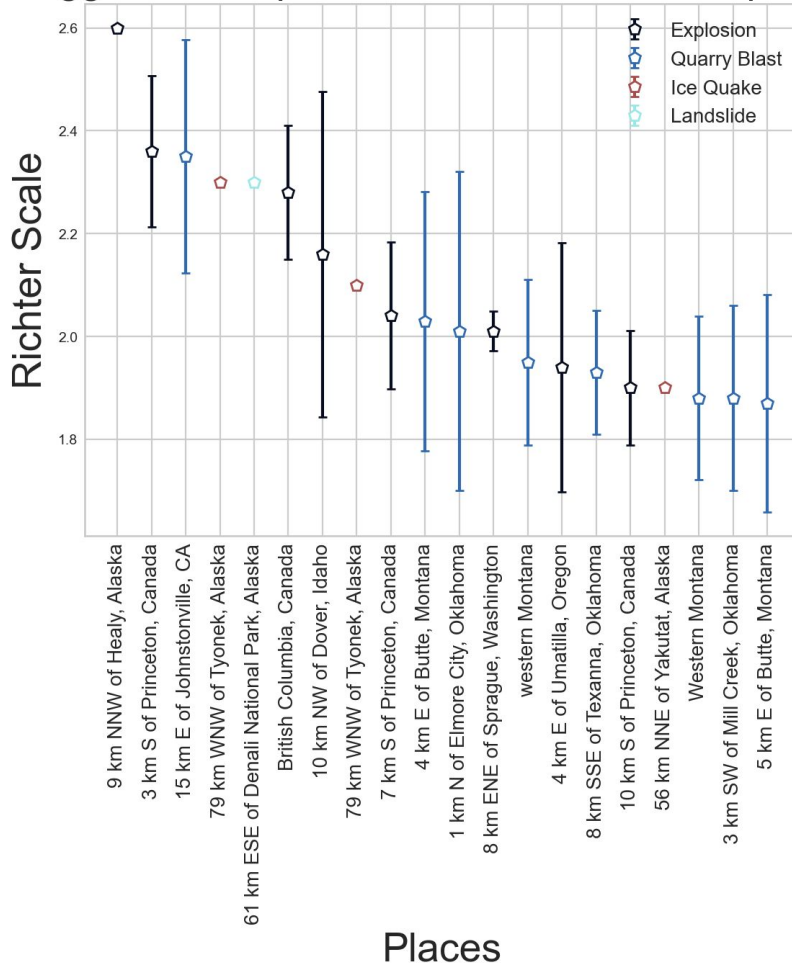
Above Ground Earthquakes



Above  
ground

# Earthquakes that are not earthquakes

Biggest Earthquakes That Are Not Earthquakes





# Takeaways

- Over 2% of recorded earthquakes come from human activity
- All took place in North America
- Magnitude considered small or very small