

VOLCANIC ERUPTIONS



IST 719-M002
(Wednesday)

By Shama Kamat

Volcanic Eruptions

DATASET AND STORY

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Section: IST 719-M002- Wednesday

Title: Volcanic Eruptions

Dataset Description: Each line in the dataset is an occurrence of a volcano of specific elevation somewhere in the world (at a certain latitude and longitude). A **volcano** is a mountain that opens downward to a pool of molten rock below the surface of the earth. Data Source: <https://data.world/makeovermonday/2018w28-volcano-eruptions> . In the dataset there are 13 columns and 1437 rows.

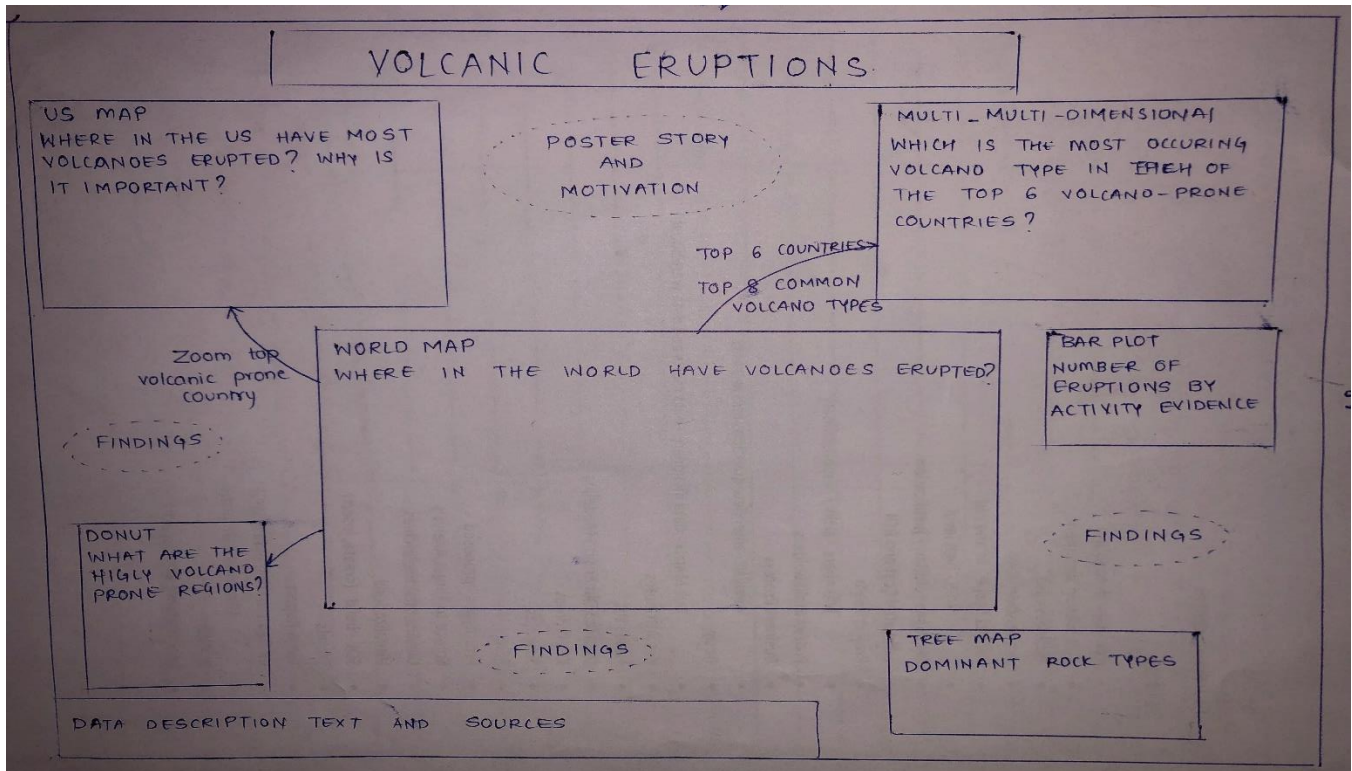
Compelling story: Did you know United States has had maximum number of volcanic eruptions in the world? **Volcanoes** are **natural disasters**. When pressure builds up, volcanic eruptions occur which can trigger tsunamis, flash floods, earthquakes, mudflows and rockfalls. For disaster preparedness and relief, it is very important to know the history of volcano eruptions at several places in the US and around the world.

Audience (who would care about it): Several observatories which track the seismic data on a day to day basis. These insights might help them to narrow down their scope. Researchers, companies like IBM and teams like DR-a-a-S (Disaster Recovery as a Service) to predict the occurrence of natural disasters and thus trigger the blockchain.

Questions:

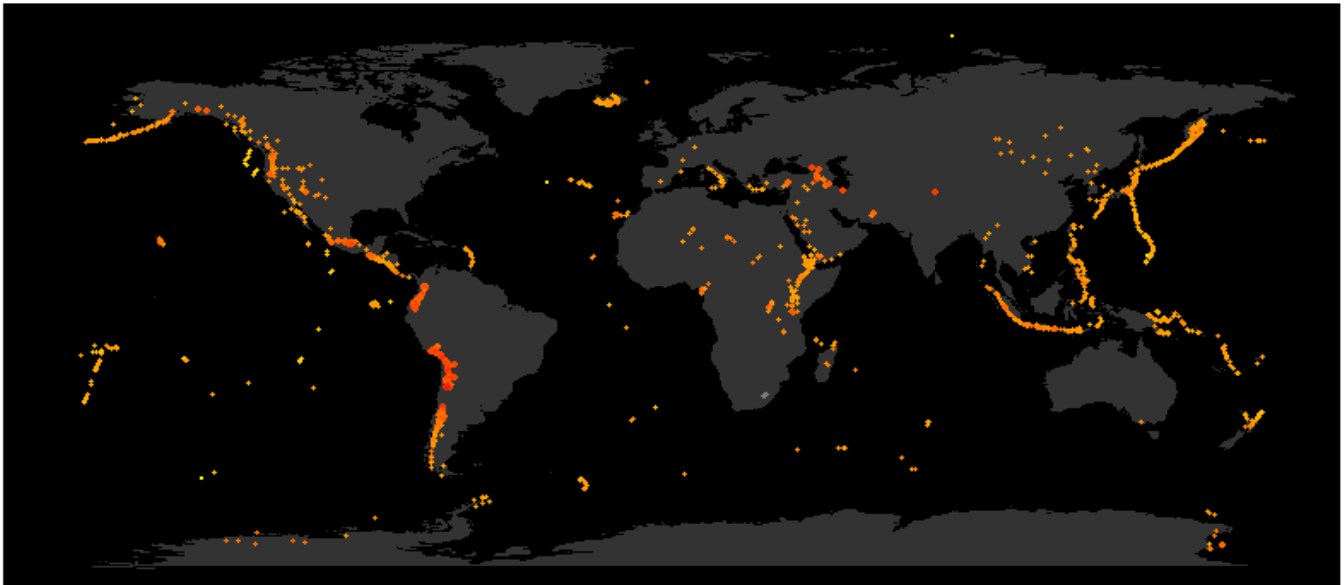
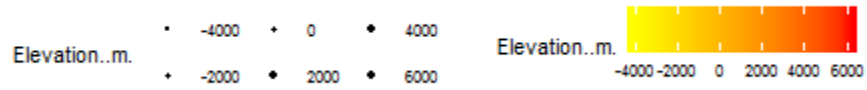
1. Where in the world have volcanoes erupted? (Page 3, Plot 1)
2. Which states in the US have a history of volcano eruptions? Why is this important? (Page 4, Plot 2)
3. What are the highly volcano prone regions in the world? (Better interpretable) (Page 4, Plot 3)
4. Which is the most occurring volcano type in each of the six countries having maximum volcano eruptions? (Page 5, Plot 4)
5. What is the distribution of eruptions by activity evidence? (Page 5, Plot 5)
6. What are the dominant rock types in the volcanoes? (Page 6, Plot 6)

Poster Sketch

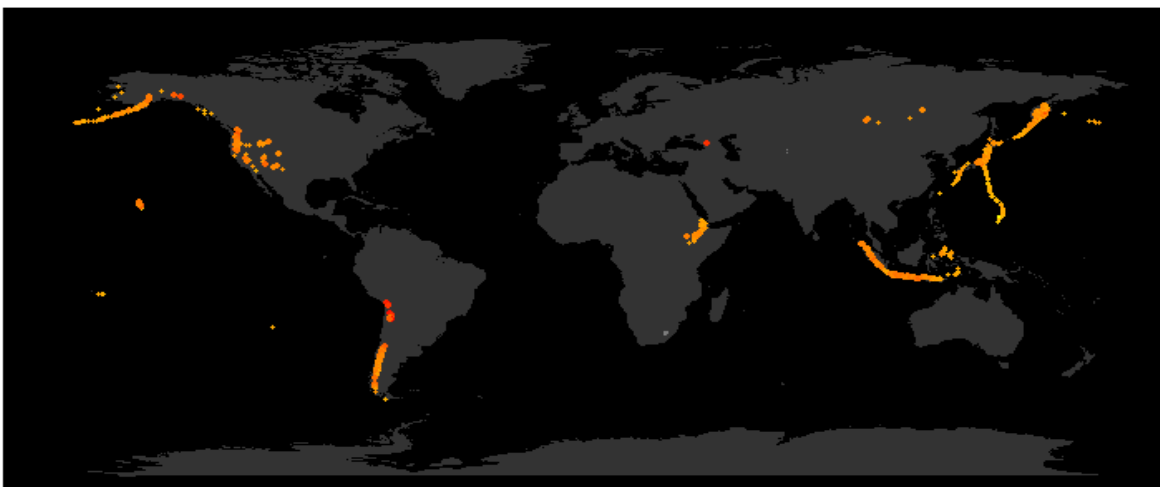


Plots

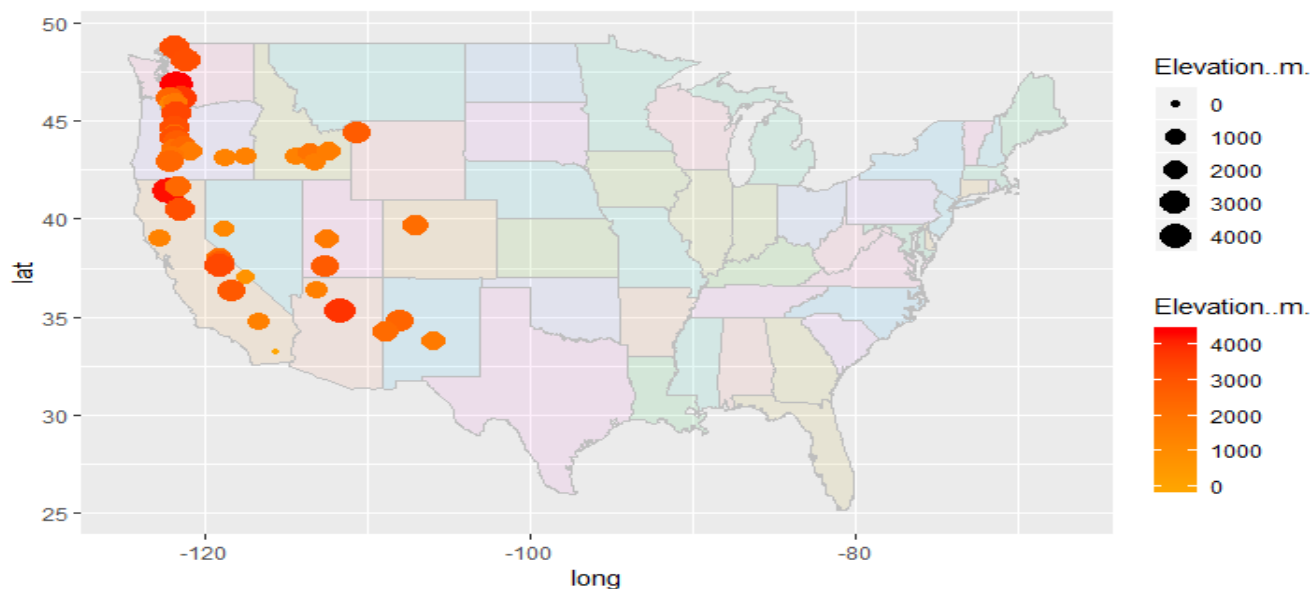
Plot 1- Where in the world have volcanoes erupted?



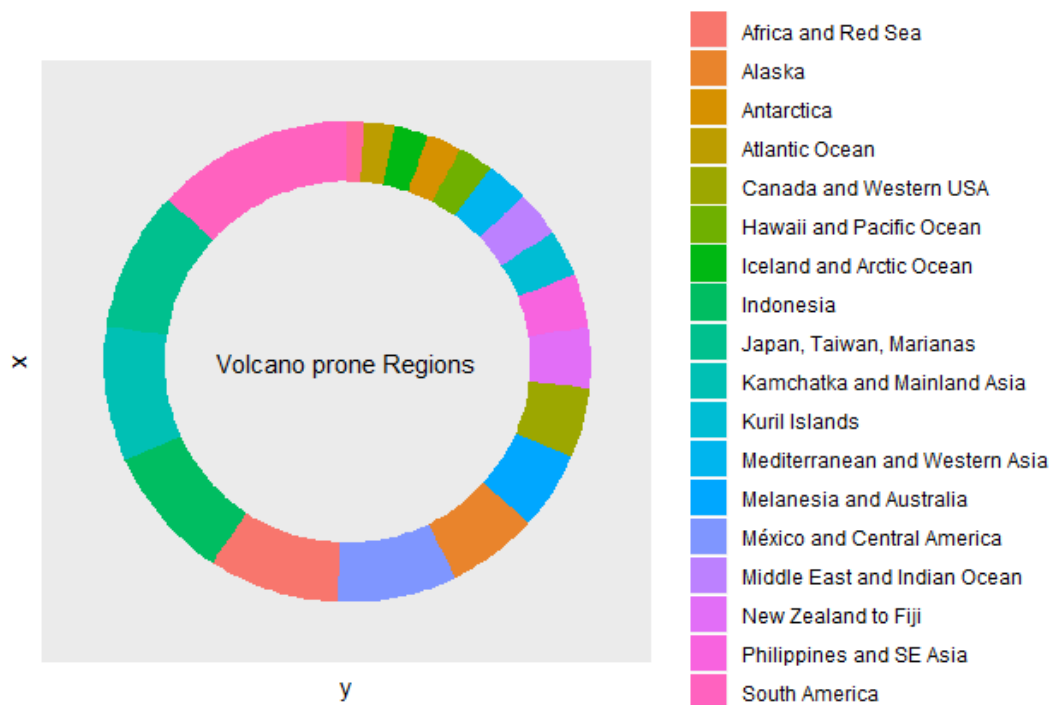
Random plot: Top 6 countries having most volcano eruption



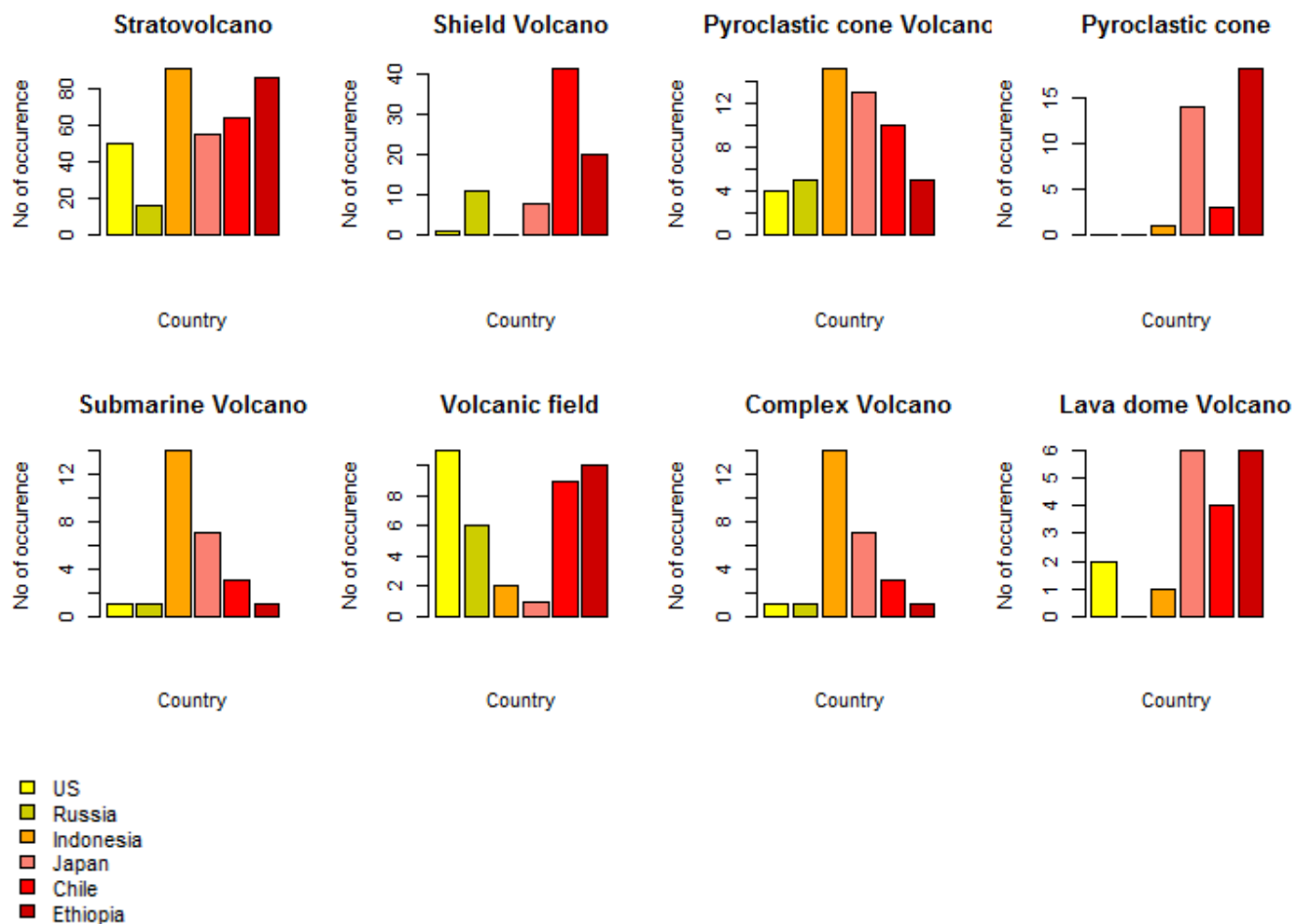
Plot 2 - Which states in the US have a history of volcano eruptions?



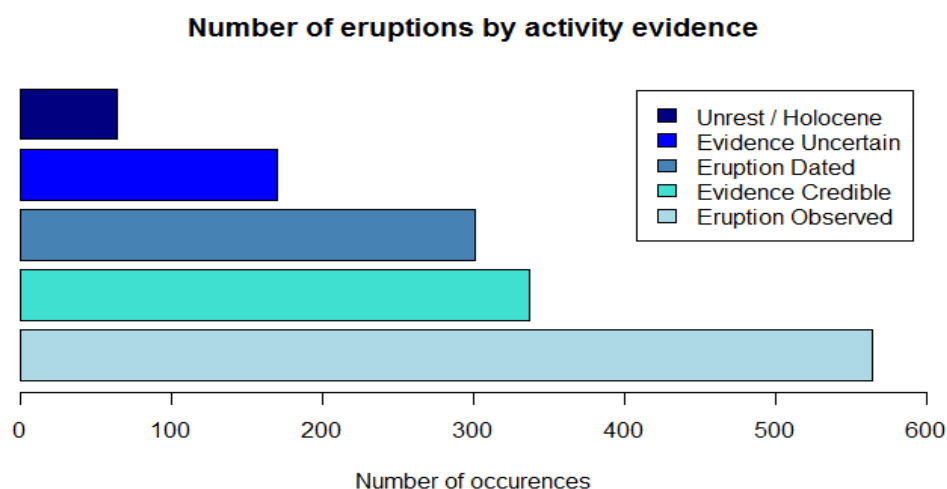
Plot 3- What are the highly volcano prone regions in the world?



Plot 4- Which is the most occurring volcano type in each of the six countries having maximum volcano eruptions?



Plot 5 - What is the distribution of eruptions by activity evidence?



Plot 6 - What are the dominant rock types in the volcanoes?

