# Volcanoes in Japan

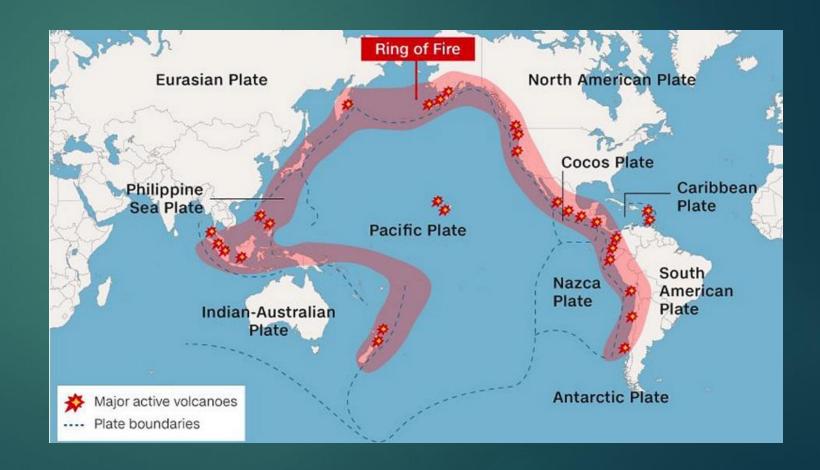
### The Main Problem

- Volcanoes
- Safety



#### The Location

- Japan
- Ring of Fire
- ► Confirmed Eruption sites



## Analysis

- Population Density
- Volcano Proximity
- VEI
- Deaths

VEI	Ejecta volume (bulk)	Classification	Description	Plume	Frequency	Tropospheric injection	Stratospheric injection <sup>[2]</sup>
		Examples					
0	$< 10^4  \text{m}^3$	Hawailan	Effusive	< 100 m	continuous	negligible	none
		Kīlauea, Piton de la Fournaise, Erebus					
1	> 10 <sup>4</sup> m <sup>3</sup>	Hawaiian / Strombolian	Gentle	100 m – 1 km	daily	minor	none
		Nyiragongo (2002), Raoul Island (2006), Stromboli (continuous since Roman times to present)					
2	> 10 <sup>6</sup> m <sup>3</sup>	Strombolian / Vulcanian	Explosive	1–5 km	fortnightly	moderate	none
		Unzen (1792), Cumbre Vieja (1949), Galeras (1993), Sinabung (2010)					
3	> 10 <sup>7</sup> m <sup>3</sup>	Vulcanian / Peléan/Sub-Plinian	Catastrophic	3–15 km	3 months	substantial	possible
		Lassen Peak (1915), Nevado del Ruiz (1985), Soufrière Hills (1995), Nabro (2011)					
4	> 0.1 km <sup>3</sup>	Peléan / Plinian/Sub-Plinian	Cataclysmic	> 10 km (Plinian or sub-Plinian)	18 months	substantial	definite
		Laki (1783), Mayon (1814), Pelée (1902), Galunggung (1982), Eyjafjallajökull (2010), Calbuco (2015)					
5	> 1 km <sup>3</sup>	Peléan/Plinian	Paroxysmic	> 10 km (Plinian)	12 years	substantial	significant
		Vesuvius (79), Fuji (1707), Mount Tarawera (1886), Mount Agung (1963), St. Helens (1980), Mount Hudson (1991), Puyehue (2011)					
6	> 10 km <sup>3</sup>	Plinian / Ultra-Plinian	Colossal	> 20 km	50 - 100 yrs	substantial	substantial
		Laach Lake Volcano (c. 12,900 BC), Veniaminof (c. 1750 BC), Lake Ilopango (535), Huaynaputina (1600), Krakatoa (1883), Santa Maria (1902), Novarupta (1912), Pinatubo (1991)					
7	> 100 km <sup>3</sup>	Ultra-Plinian	Super-colossal	> 20 km	500 - 1,000 yrs	substantial	substantial
		Mazama (c. 5600 BC), Thera (c. 1620 BC), Taupo (180), Baekdu (946), Samalas (Mount Rinjani) (1257), Tambora (1815)					
8	> 1000 km <sup>3</sup>	Ultra-Plinian	Mega-colossal	> 20 km	> 50,000 yrs <sup>[3][4]</sup>	vast	vast
		La Garita Caldera (26.3 Ma), Yellowstone (630,000 BC), Toba (74,000 BC), Taupo (25,360 BC)					

#### Results

- ▶ Medium VEI
- Small Population Area risks
- Asama



https://suny-

<u>buffalo.maps.arcgis.com/home/webmap/viewer.html?webmap=4212cb15abde4878a8139c3</u> <u>ad6e7654e</u>

## Career Plans (So Far)

- Who I am
  - I like school, learning, challenges, and watching movies
  - I am good at School, taking on challenges and sitting through movies.
  - My interests were Conventional, Enterprising, and Investigative.
- Where I'm headed
  - I researched Judicial Law Clerk. They assist a judge in court or by conducting research or preparing legal documents.
- How I can get there
  - This summer I will: Focus on my school work as well as research more into the career
  - This year I will: Work during school, join clubs, and take internships.
- My family, my friends, and my school can help me on my career path.

## My Career Interests

- ► My Current Interests
  - ▶ Pharmacology
  - Lawyer
  - Anesthesiologist
  - ► Clinical Research Coordinator

#### References

- ► <a href="https://volcano.si.edu/volcano.cfm?vn=283260">https://volcano.si.edu/volcano.cfm?vn=283260</a>
- https://www.volcanodiscovery.com/searchresults.html?cx=partner-pub-3740653521982427%3A9wc33x-8e80&cof=FORID%3A10&ie=UTF-8&q=,tate-yama
- ► ArcGIS tools.