Himalaya and South Asia Volcanos by Rock Type

GVP_Volcano_List_Holocene.csv

- Andesite
- Basalt
- Dacite
- Trachybasalt
- Rhyolite
- No Data (checked)
- Trachydacite
- Trachyandesite
- Foidite
- Phonolite
- Other / No value

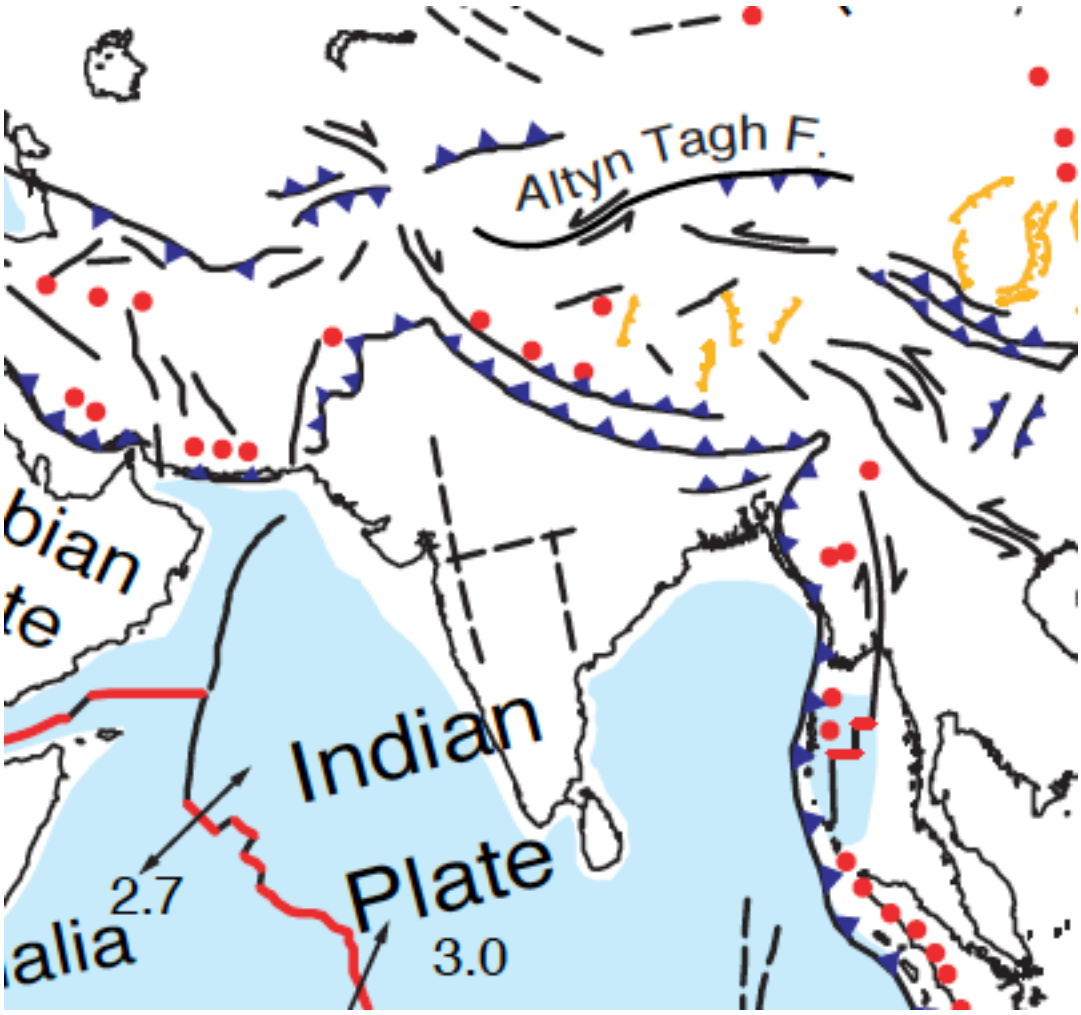
Volcanoes classified by dominant rock type.

Display: All volcanoes from the last ~10,000 years (Holocene)

Source: Smithsonian Institution, National Museum of Natural History, Global Volcanism Program, Holocene Volcano List,

https://volcano.si.edu/list_volcano_holocene.cfm

GPS Motion
India and Himalaya Mountains, South Asia



GLOBAL TECTONIC ACTIVITY MAP OF THE EARTH
Tectonism and Volcanism of the Last One Million Years

DTAM - 1

NASA/Goddard Space Flight Center
Greenbelt, Maryland 20771

Robinson Projection
Mainly oceanic crust
Mainly continental crust

October 2002

LEGEND

Actively-spreading ridges and transform faults

Total spreading rate, cm/year

1.4

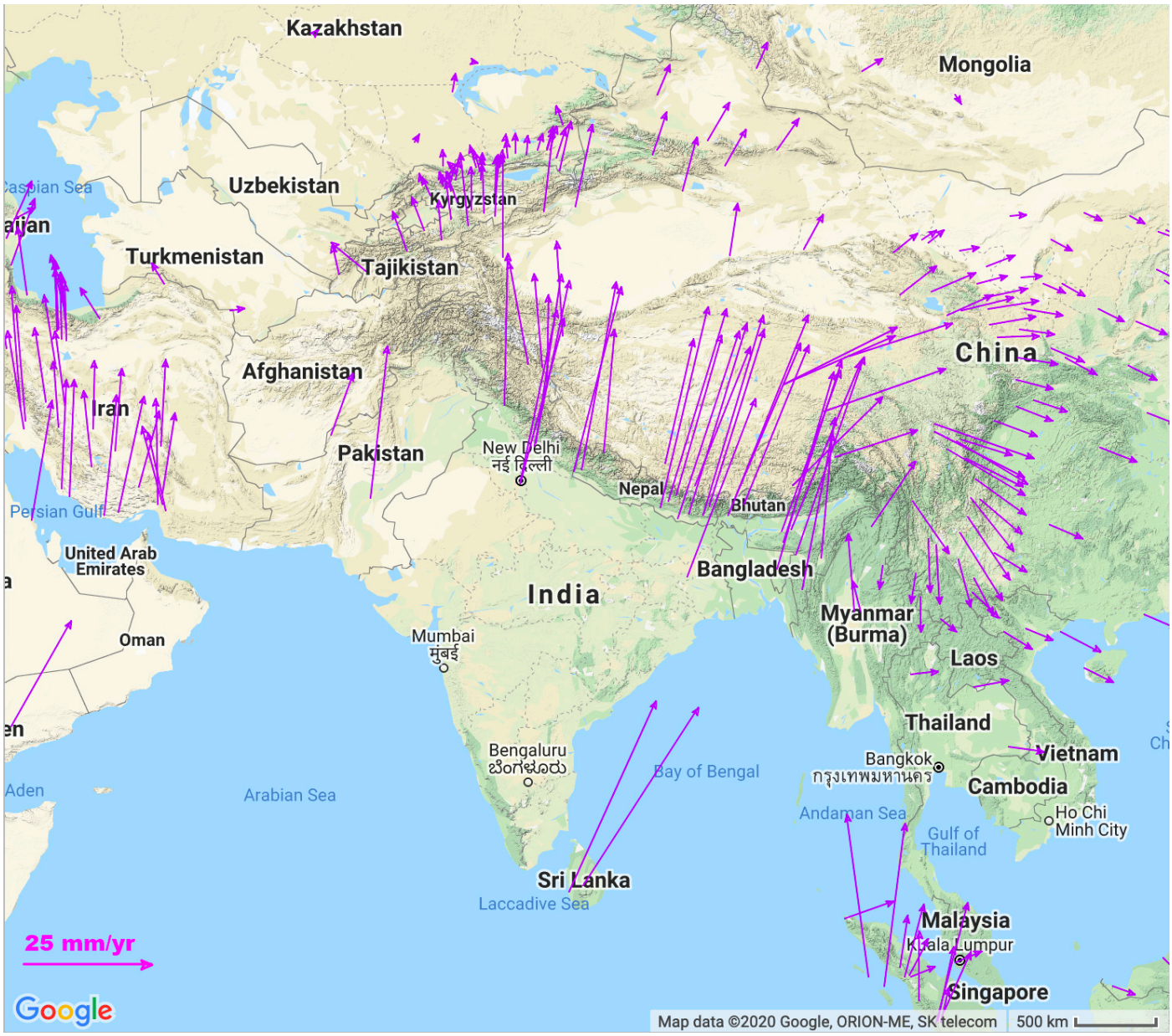
Major active fault or fault zone; dashed where nature, location, or activity uncertain

Normal fault or rift; hachures on downthrown side

Reverse fault (overthrust, subduction zones); generalized; barbs on upthrown side

Volcanic centers active within the last one million years; generalized. Minor basaltic centers and seamounts omitted.

GPS Motion
India and Himalaya Mountains, South Asia



Display: Motion relative to Eurasian, GEM GSRM

Digital map accessed: Data Source: UNAVCO: GPS Velocity Viewer https://www.unavco.org/software/visualization/GPS-Velocity-Viewer/GPS-Velocity-Viewer.html

Himalaya and South Asia earthquakes by depth

Depth (in km)

- 0 - 33
- 33 - 70
- 70 - 150
- 150 - 300
- 300 - 500
- 500 - 800

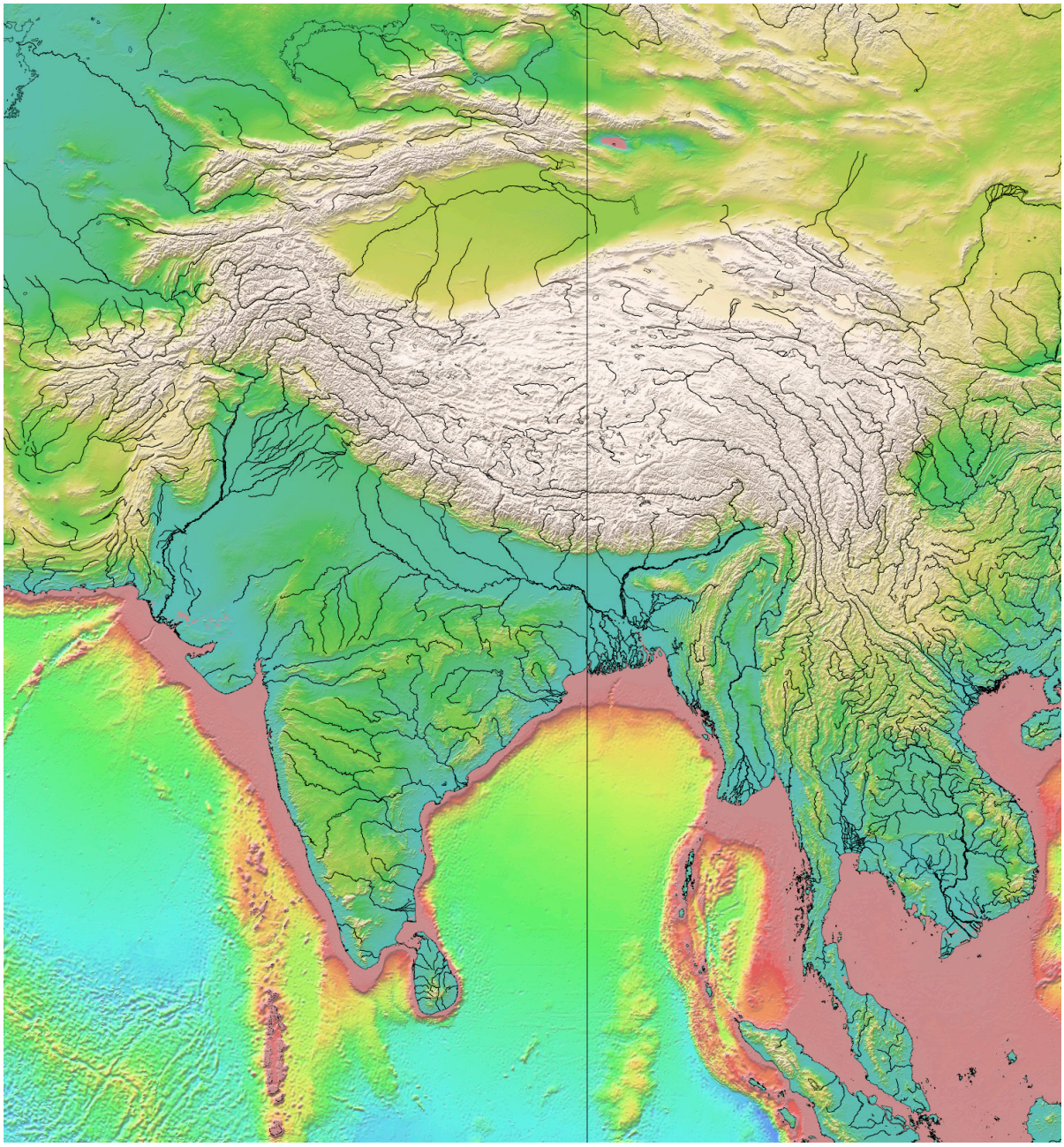
Earthquakes classified by depth.

Display: All earthquakes magnitudes >2.5; January 27, 2020 to July 27, 2020

Source: United States Geological Survey, Earthquake Catalog,

https://earthquake.usgs.gov/earthquakes

Topography
India and Himalaya Mountains, South Asia



Display: Surface topography including continents and seafloor
Horizontal resolution: 1-12 km
Digital map accessed: https://topex.ucsd.edu/marine_topo/mar_topo.html

Original Data Source: Smith, W. H. F., and D. T. Sandwell, Global seafloor topography from satellite altimetry and ship depth soundings, Science, v. 277, p. 1957-1962, 26 Sept., 1997.

Himalaya and South Asia Volcanoes by Volcano Type

GVP_Volcano_List_Holocene.csv

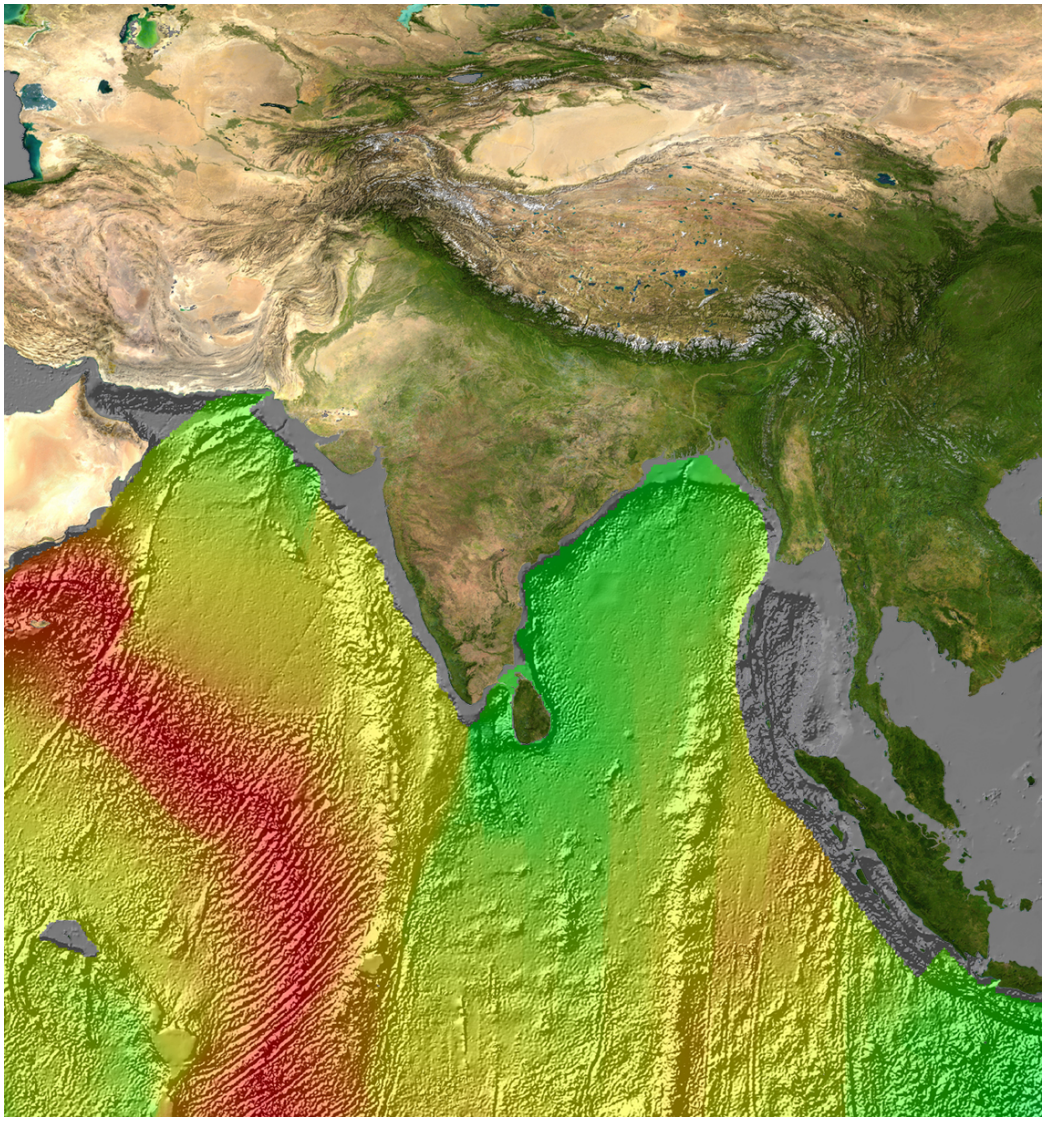
- Stratovolcano
- Shield
- Submarine
- Pyroclastic cone
- Caldera
- Volcanic field
- Complex
- Lava dome
- Fissure vent
- Maar
- Compound
- Tuff cone
- Pyroclastic shield
- Crater rows
- Lava cone
- Subglacial
- Stratovolcano?
- Cone
- Explosion crater
- Tuff ring

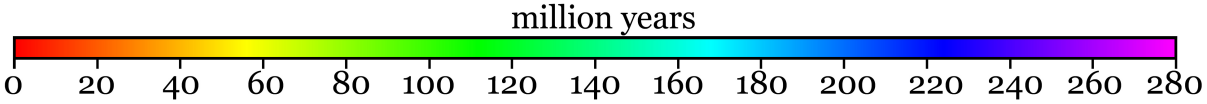
Volcanoes classified by volcano type.

Display: All volcanoes from the last ~10,000 years (Holocene)

Source: Smithsonian Institution, National Museum of Natural History, Global Volcanism Program, Holocene Volcano List, https://volcano.si.edu/list_volcano_holocene.cfm

Age of Ocean Lithosphere
India and Himalaya Mountains, South Asia





Display:
Cut image from Age of Oceanic Lithosphere (2008)
https://www.ngdc.noaa.gov/mgg/image/crustalimages.html
Created by: Mr. Elliot Lim, CIRES & NOAA/NCEI

Original Data Source:
Müller, R.D., M. Sdrolias, C. Gaina, and W.R. Roest 2008. Age, spreading rates and spreading symmetry of the world's ocean crust, Geochem. Geophys. Geosyst., 9, Q04006, doi:10.1029/2007GC001743