

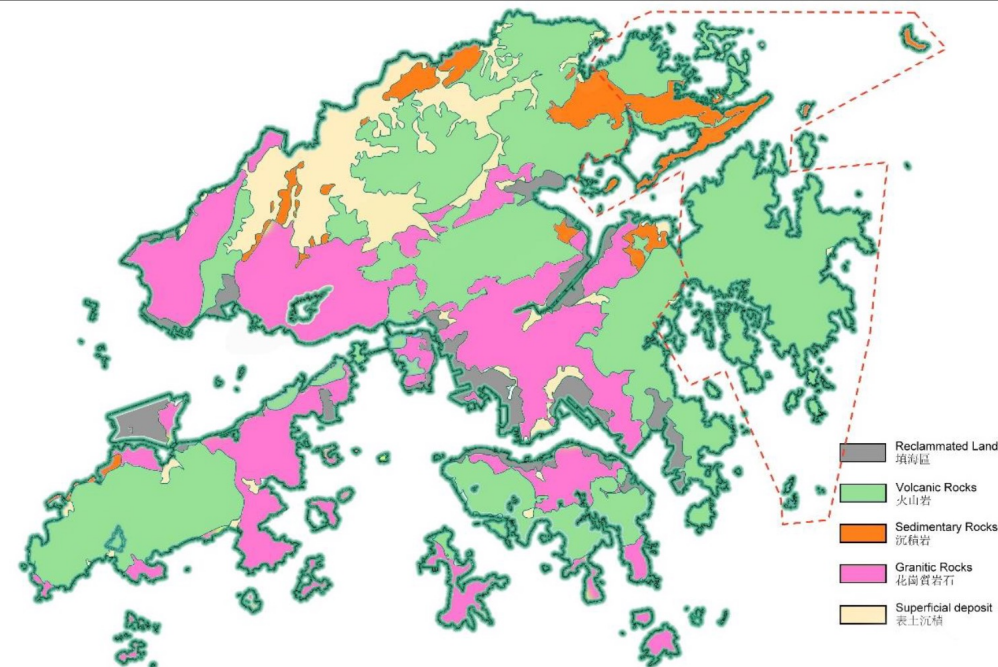
Celebrating

INTERNATIONAL GEODIVERSITY DAY

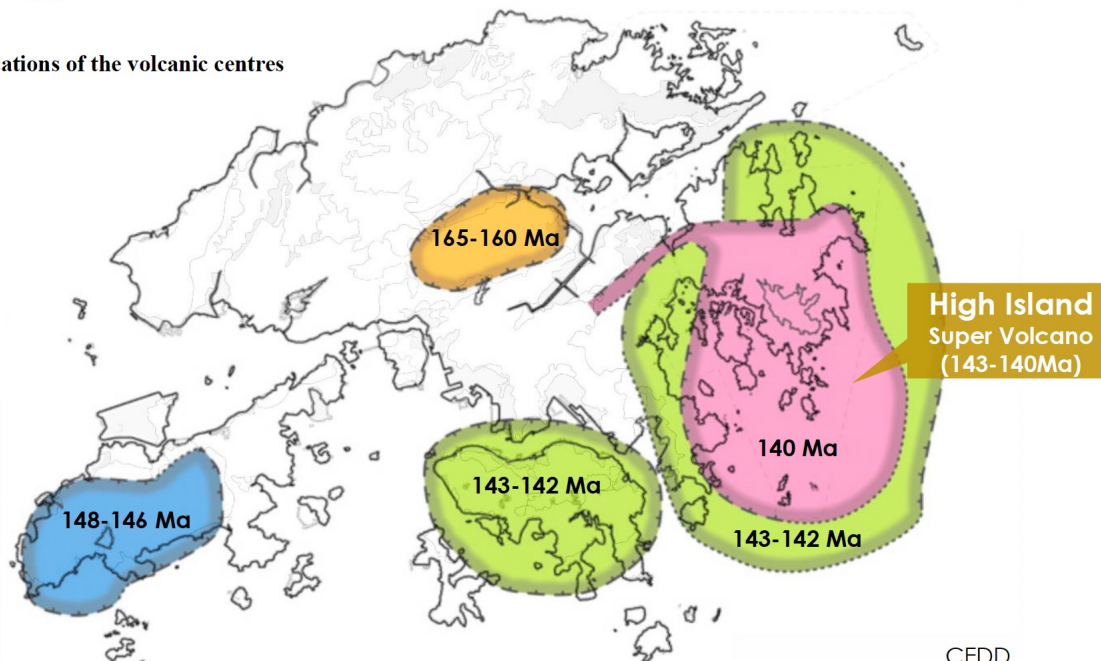
Diverse Volcanic Heritage of Hong Kong UNESCO Global Geopark

Alvin NG

Hong Kong UNESCO Global Geopark



Locations of the volcanic centres



CEDD



Columnar rock formation (~140Ma)

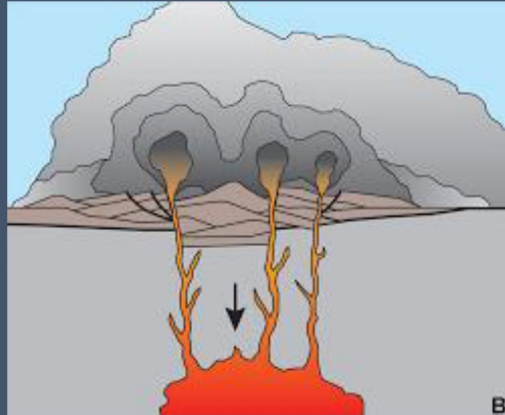
- 100km², 400m thick
- Originated from **a single mass** of volcanic materials
- Extremely high level of **homogeneity** 1

Formation of the hexagonal rock columns

Early Stage

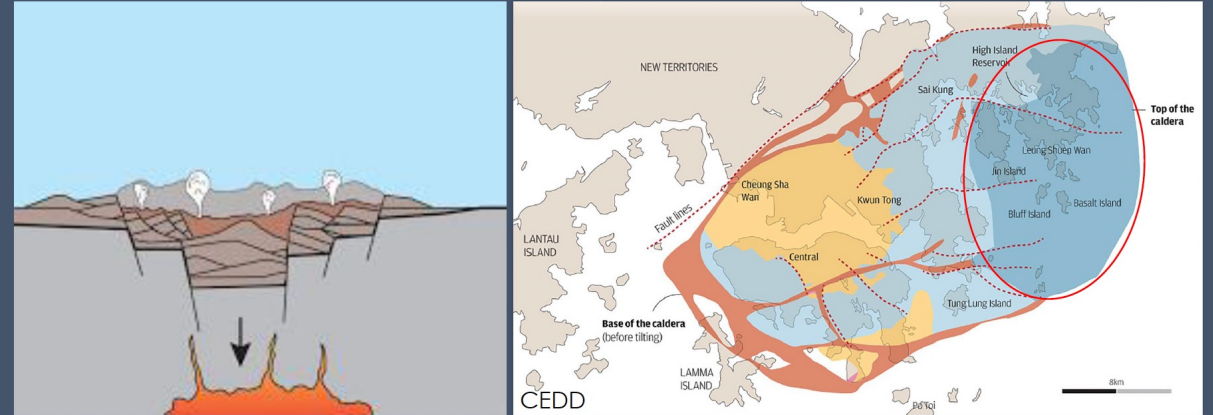


Final Stage



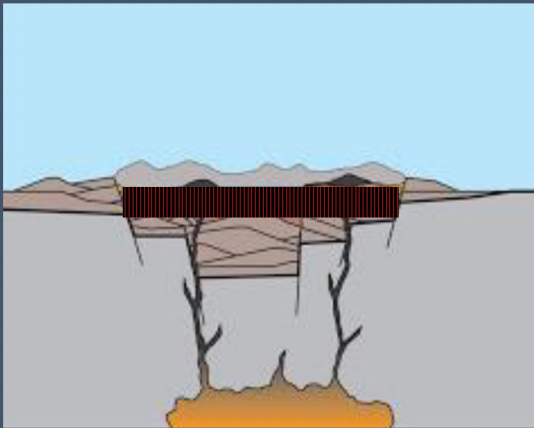
Formation of the hexagonal rock columns

Volcano collapsed into a caldera, ~20 km wide



Formation of the hexagonal rock columns

Columnar joints developed in a huge single mass volcanic materials inside a giant caldera



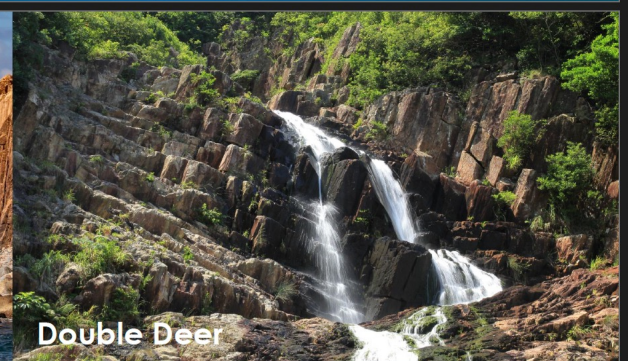
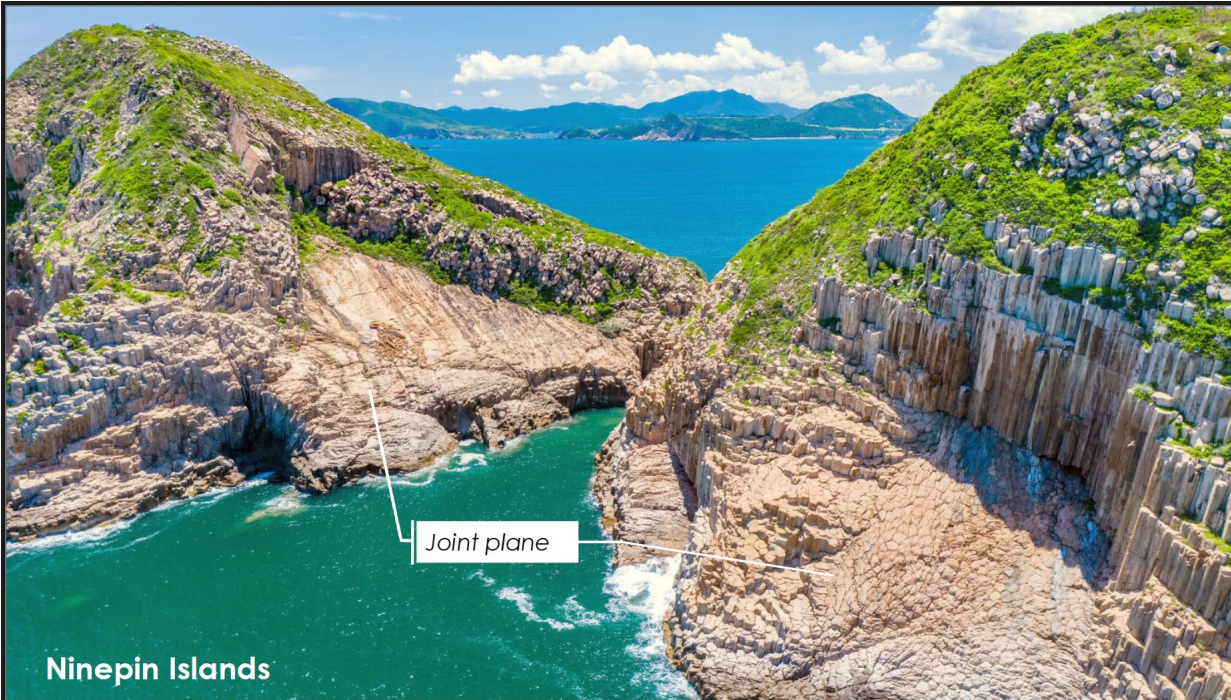
Rare Rhyolitic columns

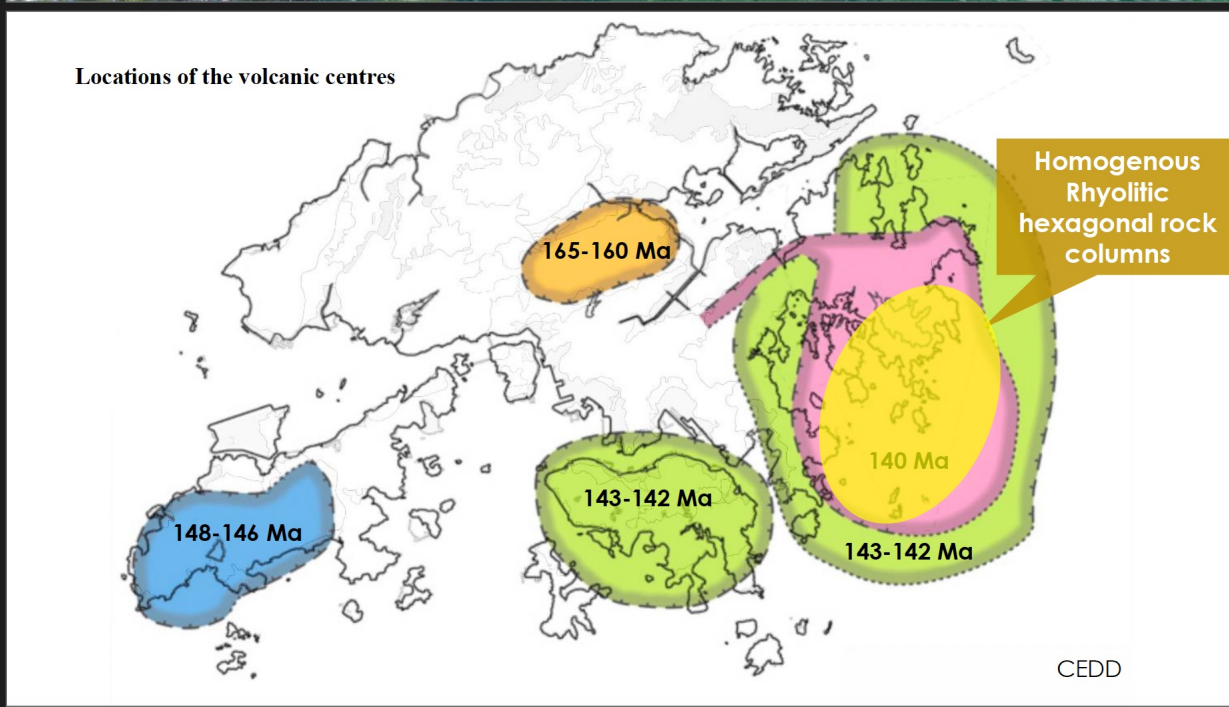
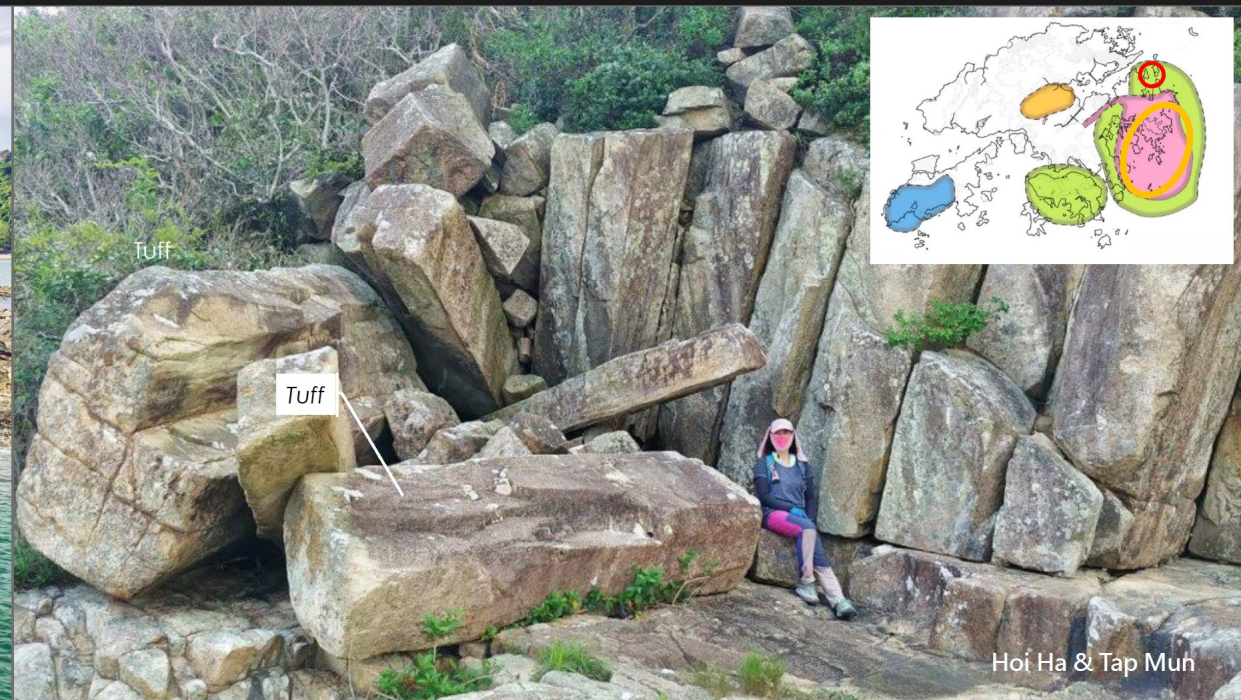
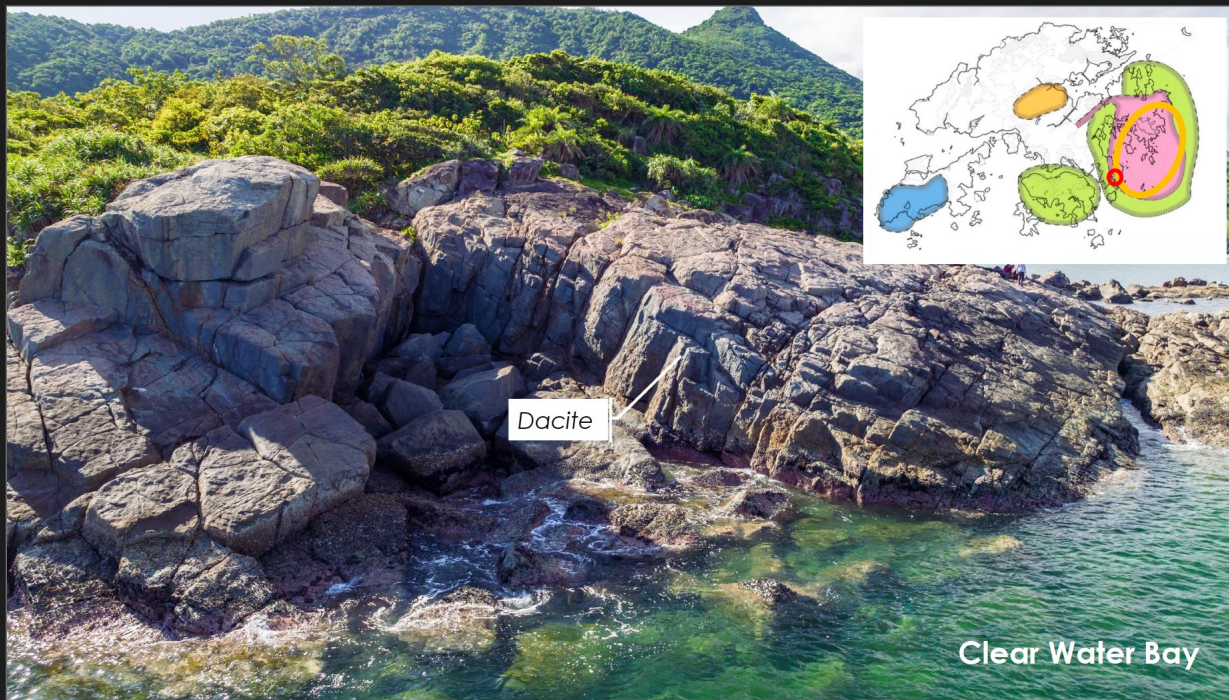
SiO₂ >=76%
~100km², ~400m thick
Diameter: ~1.2m, >3m



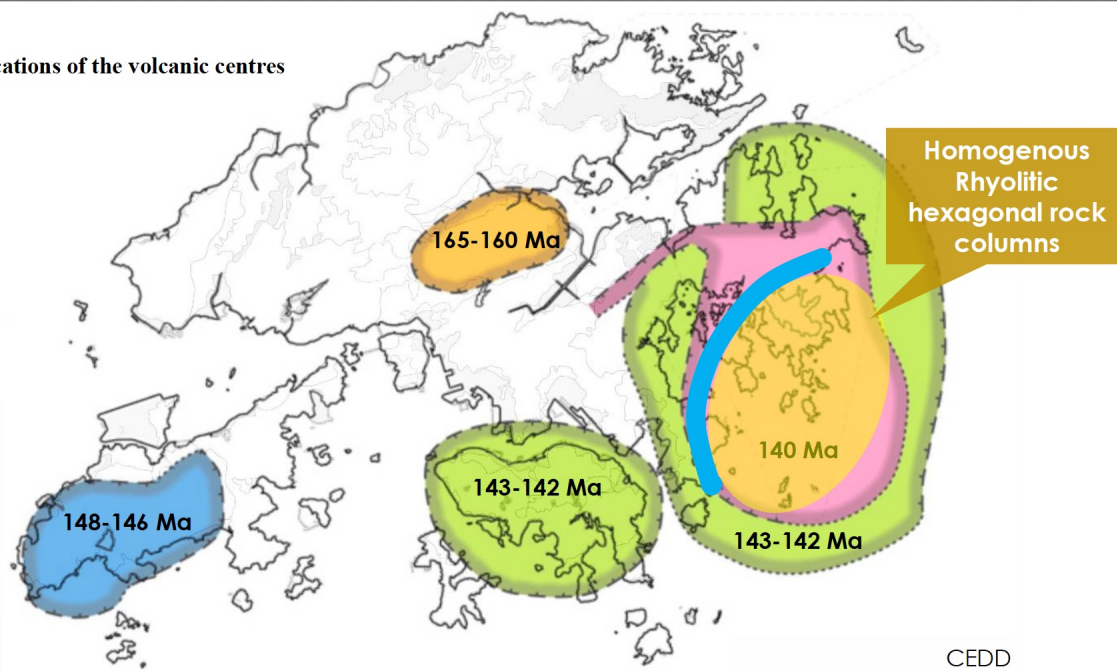
First 100 IUGS Geological Heritage Sites (2022)







Locations of the volcanic centres



Tuff (crystal fragments)

volcanic breccia (rock fragments)



Eutaxite (Flattened pumice)



Rhyolite (viscous lava)





Rhyolite (viscous lava)



Auto-brecciated lava (contains many solidified lava crust)



Spherulitic rhyolite (bubble lava)



