Evaluating the Hazards and Abundance of Submarine Volcanism with Dallas Abbott

Earth2Class
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Submarine Volcanoes

• Ocean cover about 70-75% +/- of Earth’s Surface
• Tectonic plate boundaries exist at the Mid-Ocean Ridges and Continental edge subduction zones
• There are also many hot spots in the oceans (e.g., Hawaii, Iceland)
• All of the above are regions where volcanism is common
• A volcano that rises from the sea floor and does not break the water surface is called a seamount.
• There are an estimated 40,000 – 55,000 seamounts on the ocean floor.
Furnas

The Volcanoes of the World database is a catalog of Holocene and Pleistocene volcanoes, and eruptions from the past 12,000 years.

Recent Bulletin Reports
- Erebus | Increased thermal activity during 2021 compared to 2020
- Lengai | Thermal anomalies, ash plumes, and sulfur dioxide plumes during May-December 2021

Frequently Asked Questions (more questions are available)
- Which countries have the most volcanoes? | United States, Indonesia, Japan, Russia, Chile.
- How many volcanoes are erupting? | 40-50 continuing eruptions at any given time.

New Activity / Highlights
- Krakatau | Indonesia
- Karymsky | Russia
- Ruapehu | New Zealand
- Pacaya | Guatemala
- Ridgecrest | United States
- Report for 20 Apr-26 Apr 2022
- Current Eruptions (17 Mar 2023): 46
- Eruptions In 2022 (New Releases): 9 / 54
- Eruptions In 2021 (New Releases): 51 / 73
- Eruptions Avg 2011-2020 In/Out: 34 / 79
Guyot/tablemount

Bear Seamount guyot - Guyot - Wikipedia
Atoll
Hydrothermal vents
Patrick O'Brian

THE WINE-DARK SEA

Narrated by Patrick Tull