



The Ryukyu trench is a deep-sea trench located at the north-western subduction zone of the Philippine Sea plate. It is associated with the Ryukyu Arc and Okinawa Trough. The trench borders the Ryukyu Islands and extends for 2,250 km from northeast of Taiwan to south of Japan. It also goes as deep as about 7,507 m with a mainly red-clay covered seafloor that stretches a little more than 135,000 km square km.

Between the Philippine Sea plate and the Eurasian plate is a continental-ocean convergent plate boundary; thus, the Philippine Sea plate subducts under the Eurasian plate through the trenches around it, such as the Ryukyu trench.



Parallel to the trench is a volcanic and non-volcanic arc. The Ryukyu Islands has 10 volcanoes---some being one of the most active in the world. Volcanoes exist there due to the subduction of the Philippine Sea plate under the Eurasian plate, where the mantle melts underneath and pressure causes water to come out of the plate and into the mantle, consequently creating magma that rises up.



! The volcanoes by the Ryukyu Trench are part of the The Ring of Fire, the area well-known in the world for volcanism. Therefore, places around it are susceptible to damage by volcanic eruption, earthquakes, and tsunamis.



REFERENCES

<https://wiki.carleton.edu/display/tec2011/Philippine+Sea+Plate>

<http://oceana.org/es/explore/marine-places/ryukyu-trench>

http://www.moeacgs.gov.tw/english/twgeol/twgeol_ptsetting_02.jsp

<http://my.opera.com/nielsol/blog/2007/07/19/tectonic-sliver-plates>

http://en.wikipedia.org/wiki/Ryukyu_Trench

<http://www.britannica.com/EBchecked/topic/514639/Ryukyu-Trench>