

The theme of the Hagi Geopark Plan -The geological history of the Hagi district,SW Japan

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We will introduce the interesting geosites of the Hagi Geopark Plan that can learn the events of the Earth's history 300 million years.

The Hagi Geopark Plan covers the Hagi City, northern part of Yamaguchi Prefecture. More than 95% of this district consists of the rocks and strata related to the magmatism in various age.

Earth's history of the district can be divided into eight periods.

1) About 300 million years ago; Limestone (coral reef) which is oldest strata in this district was formed on the sea mount (volcanic island) located near the equator.

2) About 100 million years ago; The basement of the Hagi district, which was an eastern margin of the Asian Continent, was formed by the violent and voluminous caldera-forming eruption of silicic magma.

3) About 43 to 30 million years ago; Violent and voluminous eruption of silicic magma was occurred in the limited area and then formed the caldera.

4) About 22 to 15 million years ago; The eastern margin of the Asian Continent was fractured. A part of the continent moved to the south and formed the foundation of the Japanese Islands.

5) About 16.5 million years to 15 million years ago; The strata consisting of conglomerate, sandstone and shale deposited in the Sea of Japan. The gabbroic (basaltic) magma intruded in these strata and changed the strata into the hornfels.

6) About 12 million years ago; Basaltic magmas formed by partial melting of the upwelling mantle diapir erupted from the fissure and form the large lava plateau.

7) About 2 million years ago to 10,000 years ago; The Abu Volcanoes consist of over 50 volcanic edifice distributed through Hagi, Abu, and Yamaguchi in the northern part of Yamaguchi Prefecture. They show the characteristic volcanic topography, small basaltic and andesitic to dacitic lava plateaus.

8) About 4500 years ago to present; Hagi delta has been formed by the debris flow deposits of the Abu-gawa River.