

Geology of Yashima

Yashima (“roof island”) is a mesa, or a flat-topped mountain surrounded by steep cliffs on all sides. Its unusual shape is the result of a volcanic event that took place here approximately 14 million years ago. Before that, what is now Yashima was a valley overshadowed by high mountains, some of them volcanoes. One of the volcanoes erupted and lava flowed into the valley, covering it. This lava solidified into a distinctive type of extremely hard black rock called sanukite (named after Sanuki province, the old name for Kagawa Prefecture). Over a period of more than 10 million years, the granite mountains around the sanukite-filled valley eroded away entirely. The lowest point of the landscape eventually became the highest: the sanukite protected the granite base of the former valley from the elements, turning Yashima into the lone mesa we see today. Layers of smooth sanukite and joints (horizontal breaks) in the rock, formed by the flow of lava, can be observed along the walking path that circles the North Ridge, and at a few places near the trail that leads from the foot of the mountain to Yashimaji Temple.

Some 7,000 years ago Yashima was surrounded by water, making it an island when the Seto Inland Sea as we know it today was formed by a dramatic rise in ocean level after the most recent ice age. Yashima remained separated from Shikoku until the 1600s, when landfill work conducted to expand salt production in the area filled in the shallow sea.