

## **Mt. Sanbe: Formation**

Mt. Sanbe is the Chūgoku region's youngest volcano. It began forming around 100,000 years ago and has undergone at least seven phases of volcanic activity since then. Phase I was the creation of an immense lava dome (a mound of hardened lava) known as "Old Sanbe." During Phase II, beginning around 50,000 years ago, further eruptions caused Old Sanbe to collapse and form a caldera. Phases III and IV, from 45,000 to around 10,000 years ago, were marked by repeated, highly explosive eruptions that deposited large amounts of tephra (particles such as pumice and ash) over the surrounding countryside. The peak of Mt. Hikageyama, a lava dome formed during Phase IV, is the oldest part of Sanbe visible today.

The first four phases were by far the most violent, depositing layer after layer of tephra and hardened lava. Phases V and VI, lasting from 10,000 to around 4,000 years ago, involved comparatively smaller-scale eruptions. Phase VII, however, was significant for several reasons. Beginning roughly 4,000 years ago, the eruptions during that period created the topography we see today. The four peaks of Osanbe, Mesanbe, Kosanbe, and Magosanbe are all lava domes that arose inside the older Phase IV caldera. The final peak, Taiheizan, is a pyroclastic cone made of ash and other volcanic products that was formed during Phase VII. A Phase VII eruption was also responsible for the more than 10 meters of ash and volcanic debris that created the Azukihara Buried Forest.

While the first seven phases can be clearly traced in the geological record, evidence also suggests the possibility of an eighth phase: ash has accumulated atop the Phase VII lava domes, indicating recent activity.