The Nasu Mountain Range

The Nasu mountain range is located at the southern end of the Nasu volcanic belt. It was formed by volcanic activity that began 500,000 years ago with the eruption of Mt. Kashiasahi (1,835 m). Some 200,000 years later, Mt. Sanbonyari (1,917 m) erupted, and the peaks of Mt. Futamata (1,554 m), Mt. Asahi (1,896 m), and Mt. Minamigatsu (1,776 m) were formed roughly 100,000 years after that. A U-shaped caldera—a large cauldron-like hollow that forms shortly after the emptying of a magma chamber in a volcanic eruption—developed between Mt. Asahi and Mt. Minamigatsu between 40,000 and 30,000 years ago. Eruptions around 16,000 years ago created Mt. Chausu (1,915 m) in this caldera.

Today, Mt. Chausu is the only active volcano in the range. Its current shape is startlingly recent: the lava dome at its peak was created by a series of eruptions between 1408 and 1410. Lava domes are created when lava is especially viscous (thick) and does not flow very far before cooling. The andesite that flowed from the mouth of Mt. Chausu quickly hardened into the barren summit seen today.

There are fumaroles (volcanic vents) on the western face of Mt. Chausu near the peak and at the southern foot near the Sesshō-seki ("Killing Stone"). They emit sulfurous gases at extremely high temperatures of around 90°C. The area of fissures near the peak is known as Mugen Jigoku, or "Infinite Hell." As the name suggests, nothing grows in this rocky terrain, where the smell of sulfur hangs heavily in the air, clouds of vapor obscure the cliffside, and the rocks are tinted yellow by crystallized sulfur.

More than 150 hot springs have been found in the Nasu area, evidence of ongoing volcanic activity. Most of these are heated by the magma that lies beneath Mt. Chausu.

Although the mountain is still an active volcano, its activity level is closely monitored, and visitors can safely hike to its peak. For easy access, the Nasu Ropeway takes passengers to an altitude of 1,680 meters. A trail leads west from the ropeway station, and it takes about 50 minutes to reach the summit.