

3 Columnar joint and potholes

When the pyroclastic flow cooled and formed into rocks, they contracted and many cracks appeared. These cracks run vertically and look like a row of pillars. This is why they are called columnar joints. The reason the steep cliff around the falls formed in a straight manner is that the pillar-like rocks collapsed piece by piece.

Many potholes (oketsu) are seen above the falls. The stones carried along the river eroded the bedrock and produced holes and ditches. The numerous potholes show the bedrock produced 90,000 years ago is easy to collapse and erode.



Potholes above the falls

Harajiri Bridge

Harajiri Bridge is a five-arch bridge built in 1923. After Ogata Station was opened on the Hohi Line in the Taisho era (1912-1926), people in the region thought it was time to replace the wooden bridge with a new one to keep up with the expanding system of transportation. This stone bridge is made with Aso ignimbrite produced in the region. It was easy to process; therefore, many stone bridges were built with this material.

Event that occurred 90,000 years ago

How the falls was created is not yet fully understood. The rock forming the falls is one large piece of Aso ignimbrite, which is the most common at the Oita Bungo-Ono Geopark. The Aso ignimbrite was produced by eruptions of Mt. Aso in Kumamoto. It was produced from pyroclastic flows 90,000 years ago.

Compared with the 4.6 billion year-history of the earth, 90,000 years is fairly recent. However, it was a very old and big event for us.

A Torii gate of the shrine built in a river

Pathway for a portable shrine at Sannomiya Shrine

When the water level rises, this passage way across the river is closed to traffic.

This water gate built on the Ogata-shimo Iro Channel is also arch-type masonry

2 The channels support the lives of the people

The channel above the falls is called Ogata-shimo Iro. It is thought to have been made by Ogata Saburo Koreyoshi, a member of a powerful family that ruled the area at the end of the Heian period (794-1192).

"Get water into channels before it falls." The wisdom of people made the channel that brings water as far as 5 kilometers from the falls and is still useful. Thanks to the channel, the Ogata area became renowned for producing rich harvests.

To Harajiri Bridge (Approx. 5 minutes walk)



Ogata Ninomiya Hachiman Shrine

Harajiri Iro Channel

Many sluice gates for channels are installed on both sides of the upper stream from Harajiri Falls to provide water to such channels as Ogata-Shimo Iro, Harajiri Iro, Nonaka Iro, and Ogata-kami Iro. The falls prompted people to get water from the upper stream, resulting in construction of many channels to water a larger area.

Takimi (Falls Viewing) Bridge

Photo spot The picture on the cover was taken at this spot.

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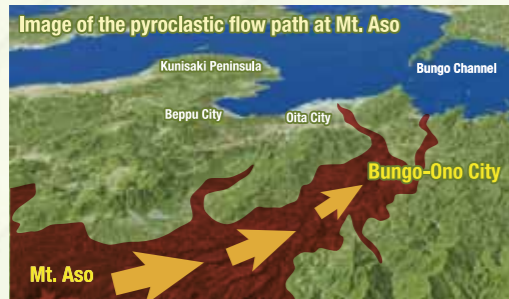


Rocks produced from massive eruptions of Mt. Aso

Traces of a large eruption

The large eruption of Mt. Aso that occurred 90,000 years ago is thought to have spewed volcanic fumes, including volcanic gas, lava, rocks, and ash, as high as 10,000 meters into the air. The volcanic fumes became pyroclastic flow. The amount was very large and covered the entire area around the Ono River. They melted again and formed into rocks. This rock is called Aso ignimbrite.

Image of the pyroclastic flow path at Mt. Aso



Parishioners of Sannomiya and Ninomiya shrines carry a portable shrine over the river (Kawagoshi), which takes about an hour.

Roadside Station Harajiri Falls

Three Ogata Shrines' Kawagoshi Festival

Kawagoshi Festival for the three Ogata Shrines is held in late November of each year. Portable shrines are carried across the falls. This festival is held jointly by Ogata Ichinomiya, Ninomiya and Sannomiya shins.

The portable shrine representing Sannomiya Shrine on the left bank is carried over the river to Ninomiya Shrine on the right bank. While parishioners carry the portable shrine over the river, they never fails to go into the Ogata-shimo

Iro Channel and parade around the sluice gate as a show of appreciation for the channel that distributes water to the area and as a prayer for prosperity. We can see that the channel was functional because it was made above the falls, and that parishioners of the three shrines gather to celebrate the benefit that the channel brings. On the following day, the people participate in a feast in which stirring musical performances and the cheers of the people can be heard above the falls.



1 Rocks formed by a large eruption of Mt. Aso

These rocks are pieces of Aso ignimbrite. These were also produced from the pyroclastic flow that cooled after the massive eruption 90,000 years ago, the same as the rocks that formed the falls. Looking at them closely reveals a black stripe pattern. The black stripes were produced by pumice in the pyroclastic flow that was exposed to great pressure. Similar patterns are seen on the rocks above the falls. If you look down from above, they look circular, and if you look from the side, they look like lenses or lines. The pyroclastic flow hardened differently in different areas. Around these falls, they hardened densely, which is evidenced by these compressed pumice stones.