

Iana Lava Tube

Iana is the Goto Islands' largest and longest lava tube, estimated at 1,400 meters. It is located in the lava plateau that makes up most of the Tomie Peninsula, on the southern tip of Fukue Island. The plateau was formed between 180,000 and 51,000 years ago by eruptions of low-viscosity basaltic lava. This type of fast-moving flow often produces lava tubes, many of which can be found in the area.

Lava tubes are tunnels that form as lava flows from an eruption site. As the lava flows, its surface is exposed to the air and begins to cool and harden. Eventually a solid crust forms, but beneath it, still-molten lava continues to carve a channel through the earth. Because some of the lava is constantly left behind as a cooled shell, the flow eventually depletes itself—much like a fully extended telescope. When the last of it has hardened, what remains is a cave-like tunnel.

The entrance to Iana Lava Tube is 3.5 meters high and 6.5 meters wide, but some sections reach 6 meters in height and 13 meters in width. The tunnel's exact length is unknown because it is filled with water around 400 meters from the entrance. The water is slightly brackish, and the level appears to be influenced by the tides, suggesting that the tunnel connects to the sea at some point deep underground. This subterranean reservoir provides a niche ecosystem for rare cave creatures such as *Luciogobius albus*, an endemic goby species. Meanwhile, the unflooded section of Iana is home to colonies of eastern bent-wing bats, little Japanese horseshoe bats, and Japanese large-footed bats.

For safety reasons, the tunnel may sometimes be closed, but from its entrance visitors can see the tube's undulating walls that were formed by waves of cooling lava. They are speckled here and there with iridescent black crystals of iron-rich magnetite.

Iana Lava Tube was designated a cultural property of Nagasaki Prefecture in 1957.