Unzen Volcano : the 1900-1992 eruption

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2. Photographic Records of the 1990-1992 Eruptions at Unzen Volcano

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◁ West-northwestern view of Mt. Fugen (Fugendake), which started eruption after 198 years of dormancy on 17 November 1990. Plumes are from Jigokuato Crater (left) and Kujukushi-ma Crater (right).

△ Northern floor of Jigokuato Crater, filled with debris derived from craterlets by phreatic eruptions. 21 Nov. '90

△ Southern floor of Jigokuato Crater. Craterlets were filled with water, and trees were covered with volcanic mud. 21 Nov. '90

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◁ Western view of Byobuiwa crater beginning the new eruption on 12 February 1991

△ Phreatomagmatic eruption at Jigokuato Crater. Taken from the summit of Mt. Fugen. 9 Apr. '91

△ Northeastern view of craters covered with thick tephra. Jigokuato Crater(front), Byobuiwa Crater (behind), and old Fugen-ike Crater(right). 11 May

△ Southern view of a new lava dome, about 60 m across and 40 m high(Dome 1), at Jigokuato Crater. It appeared on 20 May 1991, and was broken into four pieces on 21 May.

△ Southern view of a lava dome in Jigokuato Crater. The dome consists of lava blocks, broken by successive magma supply from beneath the crater. The blocks started falling down over the eastern rim of the crater(right behind) on 24 May, generating pyroclastic flows.

△ Nothern view of a lava dome growing over the eastern rim of Jigokuato Crater. Two days before the 3 June tragic disaster.

△ Nothern view of a lava dome whose eastern half collapsed at 16:08 JST on 3 June 1991.

▷ Houses burned by glowing cloud of the 3 June pyroclastic flow. Casualties, mainly press people taking photos of pyroclastic flows, were found around this point-(Kamikoba, Shimabara City, Nagasaki Prefecture).

◁ Cars burned by pyroclastic flow at Kamikoba about 4 km far from the crater. Cars were thrown about 30m by ash-cloud surge.

◁ Southeastern view of a new dome formed within the depression that formed after a large collapse on 3 June 1991. The new dome and the pre-3 June dome collapsed again in the evening of this day.

▷ Aerial view around the front of pyroclastic flow which took place on 8 June 1991. Both sides of the flow were burned by glowing cloud. Taken from the air over Shiratani, Shimabara City, about 5.5. km from the crater.

△ Southern view of the 8 June pyroclastic flows and the center of Shimabara City(right).

△ Southern view of Dome 2 growing eastward within the horseshoe-shaped depression formed on 8 June 1991.

▷ Northern view of Dome 3 growing on Dome 2. Dome 3 appeared after the total length of Domes 1 and 2 had become about 600 m.

△ Depression that appeared after the large-scale collapse of Dome 3 on 15 September 1991.

△ Northeastern view of Dome 3 growing notheastward, which collapsed in the evening on 15 September, resulting in the largest pyroclastic flow.

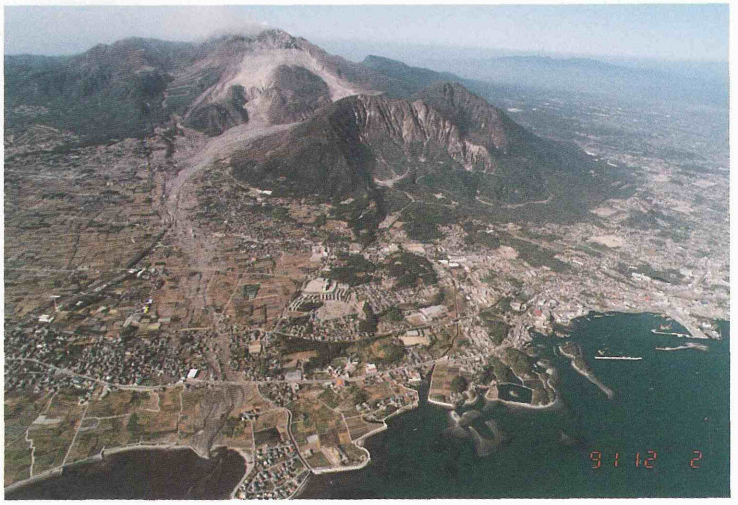
△ Frontal view of the 15 September 1991 pyroclastic flow at Shiratani, Shimabara City. Main flow moved along the Mizunashi River, however, glowing cloud rushed straight from the mouth of the Oshigadani Valley(upper right), climbing up the southern cliff of the Mizunashi River (Onokoba, Fukae Town, Nagasaki Prefecture).

△ Notheastern view of Dome 4 growing within the depression of the Dome 3 collapse.

◁ Night view of lava domes and pyroclastic flows. Taken from the northeast of the crater.

△ Aerial eastern view of lava domes. Middle-left, Dome 2; center, Dome 4; top-center dome with several thick lobes, Dome 5; Smokes behind Dome 5 are coming from Dome 3.

△ Helicopter-view of pyroclastic flow descending along a branch of the Akamatsudani Valley. The flow was generated after the partial collapse of Dome 5.



◁ Eastern view of Unzen Volcano on 2 November 1991, showing pyroclastic flow and debris-flow deposits along the Mizunashi River. A mountain with a horseshoe-shaped collapse is Mt. Mayuyama standing behind Shimabara City.

▷ Southeastern view of Dome 6(center) growing south of Dome 4 (right).

△ Helicopter-view of the southeast of lava domes, showing pyroclastic flow deposits along the Akamatsudani Valley.

△ Helicopter-view of lava domes and pyroclastic deposits on 3 April 1992, showing pyroclastic-flow deposits spreading over an area along the Akamatsudani Valley.

△ Dome 7 growing southeastward. Photo from the Nita-toge pass

△ Western view of the summit crater area, whose scenery largely changed during the 1991-1992 eruptions. Dome 3 in front and Dome 5 behind it. Similar angle to that taken of 17 November 1990.