

**Topographic changes due to eruption in Nishinoshima Island from 2013
(9th report)**

On November 20th, 2013, new island formation was confirmed on the sea approximately 500 m southeast from Nishinoshima Island. Due to the continual eruption, the new island was connected to Nishinoshima Island.

Topographic interpretation map (attachment 4-1) was created by interpreting aerial photographs taken on December 9th, 2015 and by referring to topographic change map (attachment 4-2)

Facts established by means of topographic interpretation are as follows.

1. Lava flow emitted from July 2015 onward

Lava was emitted from crater Cr3 on the northeast side and the crater Cr4 on the south side of pyroclastic cone C1. It has been flowing down in all directions except west and reached the eastern sea and some part of southern sea of the island

2. Change of pyroclastic cones, expansion of a crater and formation of new crater

Pyroclastic cone C1 and crater Cr1 have been expanding. Pyroclastic materials from Cr2, the neighboring crater to the north, have formed new pyroclastic cone C3. A pyroclastic cone which had existed on the northeast foot of C1 disappeared due to lava flow emitted from crater Cr3. New crater Cr4 has formed on the south side and lava flow has been flowed out of the crater.