

**Concerning new land formation/expansion due to eruption in the sea  
around Nishinoshima Island  
(8<sup>th</sup> report)**

On November 20<sup>th</sup>, 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 and the island area has been expanding.

Topographic interpretation maps were created by interpreting aerial photographs taken on July 28<sup>th</sup>, 2015 by Unmanned Aerial Vehicle (UAV). Facts established by means of topographic interpretation are as follows.

**1. Expansion of the island area due to emission of lava flows**

Lava was emitted from the northeast side of the main pyroclastic cone (C1) and flowed down to the west, northeast and southeast. As the amount of lava which flowed to the southeast was the largest, the island was expanded to the southeast.

**2. Formation of small pyroclastic cone**

The crater on northeast side of the main pyroclastic cone (C1) was inactive as of July 28<sup>th</sup>. A small pyroclastic cone (C2) was formed after lava flow was emitted.

**3. Slowdown in growth of the main pyroclastic cone**

The size of the main pyroclastic cone (C1) has not changed very much since March 1<sup>st</sup>, 2015, while new craters have been formed at the summit. Wide area was discolored to yellow or white by sulfur and other products on the land surface.

**4. Formation of smooth coastline due to erosion of front edges of lava flows and formation of sandbars**

The lava flowing into the sea has been eroded by waves. Lava pieces, etc. have been deposited in indentations and have formed sandbars (S). As a result, smooth coastlines have been formed except at the points where new lava was flowing down into the sea.