

Origin of the summit caldera at Izu-Oshima Volcano, and possible disaster of future eruption

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The summit caldera at Izu-Oshima Volcano which was thought due to simple subsidence was investigated with scientific drilling inside the caldera. As the result, it is likely that the caldera resulted from large-scale landslide toward the NE. The volcano island locates at the NE edge of the subducting Philippine-Sea plate, where the island is being bent in the direction of NE-SW. As the result, magma intruded through the resultant cracks and collapses of volcanic body occurred toward the NE. Anticipated disaster from future eruptions is Tsunami triggered by the collapses rather than eruption itself inside the island.