

Feature of the submarine landslide. As an example, Oshima-Oshima and off Kaimon volcano.

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Tsunami is generated by earthquake nearly 90 percent. However, causes of the remaining 10 percent are falling meteor, volcano activity, submarine landslide. We focus the feature of submarine landslide, Oshima-Oshima and off Kaimon volcano particularly. Oshima-Oshima island is an active volcano located in the eastern margin of the Japan Sea off Hokkaido. In a huge eruption on August 1741, Nishiyama of western part of Oshima-Oshima collapsed toward the northern submarine slope, and the horseshoe shape caldera was formed. Japan Sea tsunami in 1741 was generated by this collapse and damaged along western coast of Hokkaido. And also, the huge submarine landslide exists off Kaimon volcano. Kaimon volcano started activity from 4ka. It is possible trigger of the submarine landslide. We compiled and analyzed these geographical features of the debris avalanche. As a result, Oshima-Oshima has diameter of approximately 16km. Oshima-Oshima has also an estimated total edifice volume (sub-aerial and submarine) of 127km^3 and rises about 2200m from its base in 1500m depth of water. The debris avalanche deposits are thickness more than 100m in front of Oshima-Oshima. We divided the debris avalanche deposits into three areas (Type A-C) by the topography. Kaimon submarine landslide collapsed at the continental margin. The size of Kaimon submarine landslide is similar to Oshima-Oshima debris avalanche. However, Kaimon submarine landslide has different feature with Oshima-Oshima debris avalanche. Kaimon submarine landslide identified clearly distribution, toe ridge and lateral ridge. And also, its deposits are thinner than Oshima-Oshima debris avalanche. We compare the feature of these submarine landslides with other submarine landslide in the world.