Volcanoes of Japan (Third edition) , a compiled map, published in 2013

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The Geological Survey of Japan issued the map (1:2,000,000), Volcanoes of Japan (Third Edition), covering volcanoes in the Quaternary Period in Japan. The first and the second editions were issued in 1968 and 1981. The second edition covered Quaternary volcanoes in land areas and submarine volcanoes only with eruption records. Due to changes to the definition of geologic period definitions (the base of the Quaternary Period was changed from ca. 1.8 Ma to 2.6 Ma) by IUGS in 2009, the third edition has a significantly greater number of volcanoes compared to the second edition.

The distribution map was created based on the Seamless Digital Geological Map of Japan at the scale of 1:200,000. Geological boundaries on the seamless geological maps were integrated or removed, because the seamless geological maps which had been created until 2012 adopt the later part of the late Miocene and Pliocene (from approximately 7 Ma to 1.7 Ma) as a single period classification. Extracting individual volcanic rocks of the Gelasian Stage (from ca. 2.6 Ma to 1.8 Ma), which has been newly included in the Quaternary Period, has been manually carried out.

A large number of land volcanoes have been added due to the redefinition of geologic periods. Quaternary volcanoes according to the former definition are based on website, Quaternary Volcanoes in Japan, by the Geological Survey of Japan. A large volume of unpublished age measurement data was also referred to in looking into active periods. In addition to these, there are some volcanoes which were not in the second edition but have been included in the third edition, because they were found to be in the Quaternary Period. Information on such volcanoes is essentially based on the database by Nishiki et al. (2012). There, possible volcanic bodies to be Quaternary only judged by stratigraphy, and those having some age data with relatively large error span showing to be at the last stage of Pliocene (younger than ca. 3 Ma) are also included. In this publication, each of them were individually considered and omitted if the reason to judge it to be Quaternary were poor.

In addition to obvious submarine eruption points, sites with which any volcanic phenomena such as discolored water, floating pumice and submarine hydrothermal activity are found, are displayed as submarine volcanoes.