

Height Distribution of the tsunami of the Ansei North Sanriku-Oki earthquake of August 23, 1856

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A large earthquake occurred in the sea area between Aomori coast, most northern district of Honshu, and Hidaka coast, Hokkaido, on 23rd August, 1856 (3rd year of Ansei era) . This earthquake is a one of the series of the plate boundary earthquakes at the joint point of the Japan and the Kuril trenches, where the 1968 Tokachi-Oki earthquake occurred. The 1677 Enpo North Sanriku-Oki earthquake is considered also as the same typed one. The tsunami of the 1856 North Sanriku-Oki earthquake hit the coasts of Sanriku districts, the north east part of Honshu, and the pacific coast of Hokkaido. As the total number of victims of the tsunami was only 38 people in all, and it was considered not to be a large natural hazard. So it did not become a lecture for tsunami hazard in the time of the 1896 Great Meiji Sanriku tsunami. The diary kept by a priest of Kokutaiji Temple at Akkeshi in east Hokkaido records that human disturbance broke out there, and tsunami height was estimated at 2.0 m. At Saru-Kaisho office in Monbetsu town, Hidaka district, a strong tide came in front of the building of the office, where sea water rose up to the height of 11.2 meters. At Etomo village in Muroran city, sea water invaded into the residential area (height: 5.6m). On the pacific side of Hakodate peninsula, sea water flooded up to the fort of Tsugaru Clan "Tsugaru-han Jin'ya" where the ground height is 8.6 m. At Same fishery port in the central area of Hachinohe city, residential area was flooded up to 7.3 meters height. At Kanehama village in Miyako city, which is located at the innermost point of the V-shaped bay, inundation height was 5.7 meters. As for the coasts of south part of Iwate Prefecture Tsuji et al.(1995) conducted survey. Together with this result, we have the distribution map of the tsunami height as the figure. The authors of the present study wish to express their thanks to JNES for its financial support in promoting our research.

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