

OSL dating of the old stage volcanic fan around Rishiri volcano in northern Hokkaido, Japan

Reisuke Kondo[1]; Sumiko Tsukamoto[2]

[1] Dept. of Geography, Meiji Univ; [2] IGES, University of Wales, Aberystwyth

The Mt. Rishiri (1721 m a.s.l) is located on Rishiri Island 20 km off the coast of northern Hokkaido. The Rishiri Island consists mainly of a Quaternary stratovolcano and several pyroclastic cones. The Rishiri volcano had been active from 200 ka (at the latest) to 8 ka (Ishizuka, 1999). The body of Rishiri volcano is deeply dissected by several radial-flowing creeks which deposited volcanic fans all around the base of the volcano. The depositional surface of volcanic fans can be divided into the young and old stages. The volcanic fan surface of the old stage covers large area around the Rishiri volcano, but its age is unknown. The aim of this study is applying the optically stimulated luminescence (OSL) dating method to the old stage volcanic fan sediments in Rishiri volcano. Samples for OSL dating were collected from 3 sites, and fine grained quartz was extracted from the samples and were used for the OSL measurements. OSL ages of the samples and their implication to the formation process of the old stage volcanic fan will be presented.