R004-03
C 会場 ：11/6　AM1 （9:00-10:30）
09:30〜09:45

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Paleomagnetic directional change observed for nonwelded pyroclastic flow deposits of the 46 ka Shikotsu caldera-forming eruption

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We report paleomagnetic results obtained from multiple units of pyroclastic deposits at the type locality section of the 46 ka Shikotsu caldera-forming eruption. Geological observation of the previous study indicated that these deposits were classified into six units in the section and two possible temporal intervals. In order to obtain temporal information from these units, we conducted paleomagnetic measurements on successive five units of nonwelded pyroclastic density current (PDC) deposit and a unit of surge deposit in the section. These nonwelded pyroclastic deposits were carefully sampled into aluminum and plastic cubes where the cubes were precisely oriented using an improved procedure. Thermal/alternating field demagnetizations on the samples in the aluminum/plastic cubes give well-clustered characteristic remanent magnetization directions for individual sites except for a site. Paleomagnetic directions with confidence limits of a few deg. determined from seven sites on the five units show a continuous directional change of more than 15 deg., which is regarded as paleomagnetic secular variation of the order of 100 years. These paleomagnetic data provide a high temporal resolution history of the 46 ka Shikotsu caldera-forming eruption.