

Subsurface intrusion process near the craters of Mt. Usu 2000 eruption, inferred from characteristics of fault-slip data

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Surface faulting system above growth of cryptodome, the 2000 eruption of Usu volcano, was performed to estimate a dynamic process of underlying magmatic intrusions. Over 40 numbers of fault-slip data clarified that; stress regime and stress ratio of the intrusion under Nishiyama region resulted a dike-fashioned derivative intrusion having perpendicular strike to it, toward the Konpirayama region. Based on a theoretical dynamic model of dike, observed variation of the faulting character is considered as a result of different depth of dike tip under surfaces.