Stratigraphy and Lithologic Features of the Borehole Core from the Onioshidashi Observation Well, Asama Volcano

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Stratigraphy and Lithologic characteristics of the borehole core from the Onioshidashi observation well located at the northern foot of the Asama volcano were described. The total depth of the boring reached 201m from the surface. Based on lithologic features, the core consists of three stratigraphic groups. The upper part(0m-72.4m in depth) mainly consist of andesitic pyroclastic flow deposits. The middle part(72.4m-98.3m in depth) mainly consist of andesite lahar deposits including dacitic lava fragments and pumice. The lower part(98.3m-201m in depth) consist of mafic andesite lahar and pyroclastic flow deposits, and additional thin air fall pumice layers. Ohkuwa debris avalanche deposit that formed in the late stage of Kurofu volcano and pumice flow deposits associated with plinian eruptions of Hotokeiwa volcano are absent. K-Ah tephra (ca.7.3ka) was found in a soil layer depth in 51.3m. Pyroclastic flows near this horizon are significant to clarify the eruption style of initial stage of Maekake volcano.

Keywords: Borehole core, Asama volcano, Eruptive History, Lahar, Pyroclastic flow, K-Ah tephra