Fine sediment discharge after Sep. 14, 2015 Eruption in Aso volcano

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Nakadake 1st Crater of Aso Volcano in southern Japan erupted on the 14\(^{th}\) of September in 2015 where a phreatomagmatic eruptions was occurred and pyroclastic flow was observed, which distributed fine ash deposit around the crater. It is known that fine volcanic ash inducing the infiltration rate lowering, and causes disaster of lahar. Every volcanic eruption, however, may not result in lahar. Therefore, certain criteria is required to evaluate the possibility of a lahar. Survey of sediment deposition was performed three times after the eruption, and particle size was analyzed on the collected samples. In the watersheds around the Nakadake crater, gray mud deposit was detected coating the layer of black volcanic sand. These gray mud deposit consisted of fine particles was not observed at the previous three eruptions between 2014 and 2015. In this presentation, summaries of these observation results will be introduced.

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