

Preliminary report of deformation and debris flow effect at North West site Aso caldera cliff after Kumamoto earthquake.

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At northwest area of Aso Caldera cliff area, several landslides occur along the northeast trend right-lateral faults. Our department (Kyushu university, Earth and Planetary Science) have been done of field trips every year at November. Many outcrops of trip locations were damaged by the Kumamoto Earthquake at 15th and 16th April 2016. We researched 1) Kabutoiwa lookout, 2) Raputa road, 3) Muramoto rock quarry. There are several landslide along north-west site of the caldera cliff. We try to check how difference before and after earthquake topography and preserving geological evidence.

Especially the Muramoto rock quarry, which is main field trip stop in our class with big cliff and diggings hole, was highly occur land slide. Debris flow occurred during the land sliding started top of the hill (850m). Then this flow down bottom of digging hole then it clime up again opposite side of the lower cliff (30m from bottom of cliff). There are several big concrete water pipes and rock breccia within mud flow deposit. If these is not diggings holes in this quarry, debris flow went to village bellow this quarry. So it is suggest that high energy debris flow easy can pass higher mound.

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