

Discussion on the ground ruptures appeared in alluvial plain in Aso caldera and earthquake fault based on field investigation and low-altitude aerial photogrammetry.

\*Kei Tanaka<sup>1</sup>, Takashi Nakata<sup>2</sup>, Nobuhisa Matsuta<sup>3</sup>, Kyoko Kagohara<sup>4</sup>, Daishi Takenami<sup>5</sup>, Takashi Kumamoto<sup>3</sup>, Hikaru Moriki<sup>5</sup>

1.Japan Map Center, 2.Prof. Emeritus, Hiroshima Univ. , 3.Okayama Univ., 4.Yamaguchi Univ., 5.Graduate Student, Okayama Univ.

We examined ground ruptures appeared in alluvial plain in Aso caldera based on field investigation and low-altitude aerial photogrammetry, in order to discuss their origin. Ground ruptures are extended from north of Aso-Nishi primary school in the south to Uchinomaki hot spring in the north. They are aligned in ENE-WSW direction forming elongated depressions bounded by parallel running steep scarps with maximum height of 2m. They are, in places, are associated right-lateral fault slips of several decimeters. Therefore we suggest that some of the ground ruptures are probably triggered by surface faulting and resulted in extensive ground ruptures.

Keywords: Kumamoto Earthquake, surface fault, ground rupture, Aso caldera