

Paleoseismological study on subsidiary surface fault ruptures produced by the 2014 Mw 6.2 Northern Nagano earthquake, central Japan: Preliminary report

*Keiichi Ueta¹, Kotarou Aiyama¹, Toshinori Sasaki¹, Masaru SATO², Kiyoshi Ichikawa², Takenobu Tanaka²

1.Central Research Institute of Electric Power Industry, 2.Hanshin Consultants

The 2014 Mw 6.2 Northern Nagano earthquake (central Japan) produced a 10 km long surface rupture zone that consists of main rupture and subsidiary ruptures. We carried out trench excavation surveys on the subsidiary ruptures to reveal paleoseismic activities. Reverse faults cutting bedrock and terrace deposits were exposed on the trench walls. Judging from upward fault termination and other deformation structures, we identified three paleoearthquake events. The timing of these events is still under way.