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## Application of the airborne electromagnetic survey in landslide survey

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The airborne electromagnetic survey can survey underground three-dimensional resistivity structure from the air in a short time. The analysis method draws resistivity structure from the measurement data on a survey line, and presumes geological structure from resistivity structure. Many airborne electromagnetic survey methods have been developed recently. The frequency domain airborne electromagnetic survey method and the ground source type TIMEDOMAIN airborne electromagnetic survey method (GREATEM) are used according to the investigation purpose.

This announcement reports the enforcement example of a frequency domain airborne electromagnetic survey method.

Landslide survey was conducted by Minamishimabara of Nagasaki Prefecture. Northern Nagasaki is a national leading landslide zone. The area which surveyed is a landslide frequent occurrence zone which is equal to northern Nagasaki. Nagasaki Prefecture specifies the survey area as the landslide prevention zone. Survey was conducted for two years, in order to obtain the fundamental data of landslide preventive measures. The adjoining land of the survey area carried out measure construction in the previous year. The established construction place also investigated simultaneously. As a result, it turned out that an airborne electromagnetic survey is effective in the construction plan of landslide preventive measures. Moreover, it can carry out the effect judging of the area which carried out prevention construction of the measure against a landslide.

Keywords: airborne electromagnetic survey, landslide, airborne geophysics, resistivity