

AN INTEGRAL DETECTION TESTING OF ANCIENT LANDSLIDE BY ACOUSTIC AND ELECTRICAL FEATURES
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For the constructional engineering above the landslide, it's the key roles to investigate the (spatial) patterns of landslide surface and the velocity and resistivity features of rock (or soil) near the surface. 2D seismic survey was carried out, in which the 200m×200m mesh was set up, to acquire seismic data with high-folds (24 times) and fine CDP bin (1m). And then, combined with borehole data, it has been to calibrate and interpret the landslide surface using seismic scattering wave imaging method. Restrained by logging data, the fine layer-velocity, from ground level to 30m depth, was inversed by seismic tomography technique, which based on the first arrival of refraction. High-precision resistivity images of landslide bodies are obtained by 2D inversion of high-density-resistivity data. The testing integrates seismic velocity, resistivity and others (or other parameters), it is shown that the landslide have an ancient landslide property. This method remedies the deficiency of borehole effectively, whose result is assumed the line (or surface) data by the points'. The method is a beneficial attempt and discussion to geophysical integral detection technology with landslide.