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Neotectonic Features and fault activity since Late Pleistocene of Hengchun Valley, southern Taiwan

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Hengchun Valley is located in the southernmost of Taiwan, which was record the evolution of accretionary wedge between South China Sea and Phillippine Sea Plate. In this study, we used DTM (Digital Terrain Model) and aerial photos to determine the neotectonic features of marine terraces and fault scarps around the Hengchun Valley, because its displays all major topographic features for interpreting broadly the displacement landforms of the Hengchun Valley. The subsurface geological profiles were established using borehole core data, and correlation the strata by lithology with C14 dating analysis. According to the subsurface geological profiles, we understanding the evolution of the under surface sedimentary environment and assume the fault activity since 50,000 years ago in Hengchun Valley.