Geophysical Research Abstracts Vol. 19, EGU2017-5142, 2017 EGU General Assembly 2017 © Author(s) 2017. CC Attribution 3.0 License.



New insights of the activity in the Chishan fault south segment, southern Taiwan

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The active Taiwan orogen is located in the plate boundary between the Eurasian Plate and Philippine Sea Plate. Chishan Fault which is the reverse active fault extends about 30 km along the southern Taiwan. The Chishan Fault north segment is located in the southern Foothills of Taiwan, and the Chishan Fault south segment is the blind fault under the Holocene deposits in the Kaohsiung Plain.

In this study, we used the borehole core data to establish the subsurface geological profiles, and correlated the strata by lithology with C14 dating analysis. According to the subsurface geological profiles, we understood the character of the fault zone under the surface in the Chishan Fault south segment, and assumed the active events of the Chishan Fault south segment past 18,000 years.