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Spatial variations of the crustal stress field in the Philippine region from inversion of earthquake focal mechanisms and their tectonic implications

Wen-Nan Wu^{1,3}, Chung-Liang Lo², Jing-Yi Lin^{2,3,*}

¹Institute of Earth Sciences, Academia Sinica, No. 128, Sec. 2, Academia Road, Nangang Dist., Taipei 11529, Taiwan.

²Department of Earth Sciences, National Central University, 300 Jhongda Road, Jhongli Dist., Taoyuan City 32001, Taiwan.

³Center for Environmental Studies, National Central University, 300 Jhongda Road, Jhongli Dist., Taoyuan City 32001, Taiwan.

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Corresponding author: Jing-Yi Lin, Department of Earth Sciences, National Central University, 300 Jhongda Road, Jhongli Dist., Taoyuan City 32001, Taiwan. (jylin.gep@gmail.com; jylin@ncu.edu.tw)

Highlights:

- The spatial variation of the crustal stress for the entire Philippines was revealed.
- The regional E-W σ_1 axis coincides with the trench-normal direction.
- The collision of Palawan-PMZ influences the stress state in the western Philippines.
- The Philippine Fault Zone and the oceanic bathymetric highs may alter the stress state.

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