

Late Paleozoic And Early Mesozoic Evolution Of SE China: A Record In The Palawan Continental Terrane, Philippines

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The Palawan Continental Terrane (PCT) is a fragment of the margin of SE China, drifted south as a result of the Cenozoic opening of the South China Sea. The SE margin of South China has been considered to have been passive margin in pre-Jurassic time [1] due to a lack of subduction related magmatism at that time. However, the evidence for subduction along south-eastern China might be found within the PCT in various islands, e.g., in Mindoro and Panay Islands in Central Philippines.

Detrital zircons separated from sandstone from northwest Panay, which is part of the PCT [2], were analyzed for their U-Pb age. In this sample about 80% of the grains fall into the age range of 235-282 Ma, which is exactly the same age range observed for detrital zircons in modern sediments draining the NE part of the Mindoro Metamorphics in Mindoro [3]. This would suggest that both, the Mindoro Metamorphics and the oceanic plate, upon which the Sabonogon Formation was deposited, were situated close to the Asian margin in SE China. Likewise, a period of igneous activity extending from mid-Permian time to the Early Triassic, that is probably related to an active arc was documented on Mindoro Island [3] and might be linked to similar activity documented on Hainan Island.

[1] Metcalfe *et al* (1996) *Australian Journal of Earth Sciences* **43**, 605-623. [2] Walia *et al* (2013) *Tectonophysics* **582**, 205-220. [3] Knittel *et al* (2010) *Tectonophysics* **493**, 113-117.