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**U–Pb zircon ages, field geology and geochemistry of the Kermanshah ophiolite (Iran): From continental rifting at 79 Ma to oceanic core complex at ca 36 Ma in the southern Neo-Tethys**

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The geodynamic evolution of the Zagros Mountains of Iran remains obscure. In particular, the time of formation of the Zagros ophiolites and the closure of the Neo-Tethys Ocean are highly controversial. Here we present new precise zircon U–Pb ages that show that the younger part (Sahneh–Kambaran) of the Kermanshah ophiolite formed at  $35.7 \pm 0.5$  Ma and the older part (Harsin) at  $79.3 \pm 0.9$  Ma. Field relations and geochemical evidence show that the younger Sahneh–Kambaran part is probably a fossil oceanic core complex, and the older Harsin part is probably a continental-oceanic transition complex. Both the Sahneh–Kambaran and Harsin parts were later emplaced into an accretionary complex. We conclude and infer that the final closure time of the southern Neo-Tethys Ocean was after the Late Eocene. Our data and tectonic model have crucial implications for the geodynamic evolution of the Zagros region.

Keywords: Oceanic core complex, Kermanshah ophiolite, Neo-Tethys, U-Pb age, Iran

*Reference:*

[1] AO Songjian et al. (2015) Gondwana Research, <http://dx.doi.org/10.1016/j.gr.2015.01.014>

