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ZIRCON U-Pb AND Hf ISOTOPIC STUDY OF THE KAWABULAKE OPHIOLITE EASTERN TIANSHAN: IMPLICATION FOR THE TECTONIC EVOLUTION OF CAO B

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The Eastern Tianshan belt, located in the southern CAO B, played an important role in the crustal evolution, particularly because it links the Southern Tianshan suture to the west with the Inner Mongolia Solonker suture to the east. However, some critical issues, such as the exact position and formation age of the final suture zone of the Paleo-Asian ocean are still obscure or in controversy. Thus, here we have per-

formed detailed studies of the Kawabulake ophiolite zone, a key part of the southern suture of the CAO B. New LA- ICPMS zircon U-Pb ages, Hf isotopic values, and whole-rock geochemical data have been presented to: (1) constrain the age of the Kawabulake ophiolite, (2) understand the petrogenesis of the granodiorites and their tectonic setting, and (3) reveal their implications for geodynamics of the Eastern Tianshan belt.