

Er-Kun Xue, Wei Wang, Mei-Fu Zhou, Manoj. K. Pandit, Si-Fang Huang, and Gui-Mei Lu, 2020, Late Neoproterozoic–early Paleozoic basin evolution in the Cathaysia Block, South China: Implications of spatio-temporal provenance changes on the paleogeographic reconstructions in supercontinent cycles: *GSA Bulletin*, <https://doi.org/10.1130/B35588.1>.

Supplemental Material

Table S1: Information of samples of detrital zircon U-Pb age from previous studies.

Table S2: Metadata of LA-MC-ICPMS U-Pb and Lu-Hf data used in this study.

Table S3: U-Pb isotopic compositions and ages of detrital zircons from the four sub-basins.

Table S4: LA(MC)-ICPMS Lu-Hf isotopic compositions for detrital zircons from the four sub-basins.

Table S5: Whole-rock major and trace elements of sedimentary rocks from the three sub-basins.

Table S6: Paleocurrent data from the four sub-basins.

Table S7: K-S test result of the age clusters.

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