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## ACCEPTED MANUSCRIPT

## Connection of the proto-Yangtze River to the East China Sea traced by sediment magnetic properties

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Abstract

The evolution of the Yangtze River, and specifically how and when it connected to the East China Sea, has been hotly debated with regard to possible linkages with the so-called 'Cenozoic Topographic Reversal' (tectonic tilting of continental east China in the Cenozoic) and particularly the relationship to the uplift history of the Tibetan Plateau. Resolving this key question would shed light on the development of large Asian rivers and related changes in landforms and monsoon climate during this interval. Here, we use the magnetic properties of both Plio-Quaternary sediments in the Yangtze delta and of surficial river sediments to identify a key mid-late Quaternary switch in sediment source-sink relationships. Our results reveal a fundamental shift in sediment Download English Version:

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