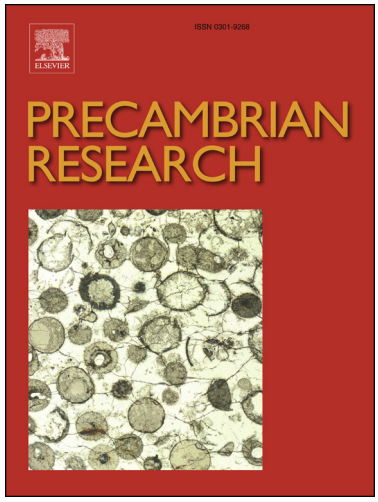

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Paleomagnetism of Mesoproterozoic margins of the Anabar Shield: A hypothesized billion-year partnership of Siberia and northern Laurentia

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ABSTRACT

Siberia and Laurentia have been suggested as near neighbors in Proterozoic supercontinents Nuna and Rodinia, but paleomagnetic evidence has been sparse and ambiguous. Here we present four new paleomagnetic poles from undeformed Paleo-Mesoproterozoic (lower Riphean) sedimentary rocks and mafic intrusions of the northwestern Anabar uplift in northern Siberia. Combining these results with other Proterozoic data from Siberia and Laurentia, we propose a tight juxtaposition of those two blocks (Euler parameters 77°, 098°, 137° for Anabar to North America) spanning the interval 1.7–0.7 Ga, constituting a