

Siberia and Rodinia

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Abstract

An analysis of the Riphean sedimentary successions along the margins of the Siberian craton, together with recent geochronological and palaeomagnetic data from Siberia, require a revision of the hypothesis that Siberia was part of Rodinia. Some previously proposed Laurentia-Siberia reconstructions may be dismissed, whereas other models are permissible with minor modifications and conservative assumptions about recent geochronological data from Siberia. A comparison of Laurentian and Siberian apparent polar wander paths between 1050 and 1000 Ma shows a striking similarity. However, if Siberia was part of Rodinia, it was probably not contiguous with the Laurentian craton. In this scenario northern and southern (Stanovoy block) margins of Siberia are possible candidates for conjunction with the rest of Rodinia. We propose a new reconstruction of Laurentia and Siberia at ca. 1050 – 1000 Ma.

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