

Mezo- and Neoproterozoic supercontinents: a sight from Russia.

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Two Proterozoic continental areas, Baltica and Siberia, occupying now a considerable part of Russian territory, played an important role in the history of a birth and decay of Proterozoic supercontinents. It is widely accepted that they formed marginal parts of Rodinia supercontinent, which was born as a result of Grenvillian orogeny (1300-1100 Ma) and desintegrated as a consequence of intense rifting at approximately 750-600 Ma. The data on Grenvillian orogeny in the territory of Russia are very scarce, though inter-continental connections of older foldbelts between Siberia, Baltica and Laurentia witness for their closeness. As for the idea of the Neoproterozoic rifting, it is supported by solid data. Rift volcanics and graben formations of this epoch are reported from the Urals and from numerous terranes within Kazakhstan, Altay and Sayan foldbelts. Neoproterozoic ophiolites are traced around Siberia as a Circum-Siberian ophiolite belt and found in the Polar Urals.

An unnamed supercontinent (we suggest to call it Panterra) was probably formed in the Late Vendian (600-550 Ma). By that time, Gondwana was reassembled as a result of a Panafrican orogeny, whereas Baltica and Siberia docked to Gondwana as a consequence of Vendian subduction followed by Cadomian collision and orogeny. Laurentia was separated from this supercontinent by Iapetus ocean. The desintegration of the supercontinent started in Cambrian. Intense rifting was followed by oceanic spreading and formation of Paleouralian and Paleotethys oceans in the Early Ordovician.