

## From Nuna to Rodinia: Stenian-Tonian paleogeography

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Stenian – Tonian (~1200-850 Ma) times are generally associated with a significant part of supercontinental cycle: breakup of Nuna followed by assembly of Rodinia. The global paleogeography of this time interval is poorly understood because of a deficit of reliable geochronological, paleomagnetic and other datasets. Consequently there is a variety of opinions about paleogeographic locations of many Precambrian cratons and about their kinematics. Differences in lengths and shapes of late Mesoproterozoic Apparent Polar Wander Paths of several continents suggests that a large supercontinent did not exist between ~1300 and 1000 Ma. Almost every new well-dated paleomagnetic pole, or re-dated old paleopole, or discovered LIP event causes significant reconsideration of existing paleogeographic models. Many interesting results have been reported in last few years from Baltica, India, Siberia, North China, Australia, Congo-São Francisco and other building blocks of Nuna and Rodinia. Recent testings of some paleogeographic reconstructions and re-interpretation of orogenic histories (e.g. Grenville and Sveconorwegian) also require revisiting of Late Mesoproterozoic – Early Neoproterozoic paleogeography. This study summarises these new data and new ideas. Proposed updated positions of some continents are now better justified. Most changes are associated with North China and Congo-São Francisco cratons. Kinematics of the transitional period between the breakup of Nuna and the assembly of Rodinia is now better understood and better constrained, but some aspects are still controversial.