The Danopolonian orogeny: rotation of Baltica between 1.55 and 1.40 Ga

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Major deformation, intracontinental magmatism and sedimentation, together named the Danopolonian orogeny (Bogdanova, 2001) affected the central part of Baltica/the East European Craton between ca. 1.55 and 1.40 Ga. These processes were accommodated within EW-trending belts superimposed on the Paleoproterozoic tectonic grain and along pre-existing NW zones of deformation. The Danopolonian events were semi-simultaneous with the Telemarkian (1.52-1.48 Ga) and Hallandian (1.47-1.38 Ga) events of accretionary orogeny along the western margin of Baltica. In the east, however, sedimentation and magmatism occurred during rifting of the crust and formation of aulacogens (Bogdanova et al. 2008). Such differences convincingly suggest that rotation of the craton during plate reorganization controlled its overall tectonic settings, which is also confirmed by paleomagnetic reconstructions for the concerned period (Pisarevsky et al. 2014).

References:

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