

Trans-Baltic Palaeoproterozoic correlations as a key to the Svecofennian orogeny

S. Bogdanova¹, R. Gorbatshev², G. Skridlaite^{3*}, A. Soesoo⁴, L. Taran⁵ and D. Kurlovich⁶

^{1,2}*Department of Geology, Lund University, Sölvegatan 12, SE-223 62 Lund, Sweden*

^{3*}*Nature Research Centre Akademijos 2, LT-08412 Vilnius, Lithuania (correspondence: skridlaite@geo.lt)*

⁴*Tallinn University of Technology, Ehitajate tee 5 19086 Tallinn, Estonia*

⁵*Republican Unitary Enterprise "Research and Production for Geology", Kuprievich 7, 220141 Minsk, Belarus*

⁶*Department of Soil Science and Land Informational Systems, Belarusian State University, 4, Nezavisimosti avenue, 220030, Minsk, Belarus*

The Palaeoproterozoic Svecofennides in the Baltic Shield correlates well with their unexposed counterparts across the Southern Baltic Sea. Apart from the effects of some microcontinents and oroclines, they feature 100 to 300 km wide tectonic domains and belts younging SSW. Major disturbance was caused by the collision of Fennoscandia with Volgo-Sarmatia at 1.82-1.80 Ga followed by the formation of the Andean-type Transscandinavian Igneous belt (1.81-1.76 Ga). We also find that the Svecofennian orogen was not a part of the westward Laurentia-Baltica margin of supercontinent Columbia/Nuna but older than that 1.7-1.2 Ga accretionary margin.