Making of Eurasia: A new Paleogeographic Atlas.

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The Atlas is a first attempt to reconstruct in detail the assembling of the composite continent of Eurasia in the period from 380 to 10 Ma. It consists of 26 paleogeographic maps at scale 1:30000000 covering a hemisphere centered on Eurasia. An extensive digital (ARCINFO) database had been compiled containing information on environment, lithologies, paleoclimate indicators, active structures, paleomagnetic vectors etc. Palinspastic base for the maps was constructed relatively to the absolute (hotspot) reference frame. The reconstructions were then adjusted to geological, paleoclimatic and new paleomagnetic data. Besides geology and environment, the maps snow modelled paleocurrents and paleoclimatic zones. An especial emphasis is laid on the evolution of sedimentary basins in Siberia and East Europe, distribution of magmatic complexes at the plate boundaries and in the intraplate setting, development of fold belts.

The major tectonic processes demonstrated in Atlas are: the history of the Paleoasian Ocean and formation of the Urals-Tyanshan fold belt; the evolution of the Tethyan active margin and the Paleozoic-Mesozoic accretion of the Gondwana-born terranes; the closure of the Mongol-Okhotsk and Anui embayments of Pantalassa and formation of the respective fold belts; the evolution of the Pacific margin of Eurasia dominated by the lateral northward transport of terranes.