Preliminary data for Cadomain metagranites in Strandzha zone, NW Pontides, Turkey

Предварителни данни за Кадомски метагранити в Странджанската зона, СЗ Понтиди, Турция

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Turkey is made up of different tectonic units which were amalgamated together in the Cenozoic time. The Pontides Unit is one of the main tectonic units of Turkey which has been devided in western, central and eastern Pontides. The western part of the Pontides is subdivided into three tectonic sub-units such as the İstanbul, Sakarya and Strandzha zones. The Strandzha zone is composed of metamorphic basement (Strandzha Massif) that is intruded by large granitic intrusions and overlaying by Paleozoic–Mesozoic metasedimentary cover rocks. The metamorphic basement provides important information about the border area between the Pontides and European orogenic belts. The metamorphic rocks of the Strandzha zone are outcropped from Strandzha Mountain in Bulgaria to NW Turkey and reach the area near Istanbul (Çatalca city).

We present new geochronological and geochemical data obtained from three samples of Strandzha massif in an attempt to gain further insight into the tectonic evolution of this region. This would provide an opportunity for a comparison of these granitoids with another granitoids of the same age in different areas of Turkey and Rhodopes–Pontides belt. The SHRIMP-II U-Pb zircon ages of the Çatalca metagranite range from 534.5 ± 4.7 Ma to 546.0 ± 3.9 Ma (Late Ediacaran to Early Cambrian) and LA-ICP-MS U-Pb zircon data yields 535.5 ± 3.6 Ma age for the İhsaniye metagranite. New geochronological data from metagranitic rocks of the Southern Strandzha Massif confirm the presence of significant Cadomian igneous events. The Ediacaran–Early Cambrian magmatism is characterized by acidic to intermediate compositions.