Geochemical Features of Gashi Zone Paleozoic Magmatism

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Received July 26, 2010; Accepted December 06, 2010

Abstract: Magmatic rocks of Gashi zone (Northern–eastern Albania) are represented by volcanic rocks (basalts to rhyolite) included in sedimentary–volcanic and volcanic–sedimentary sequences and by plutonic, granodioritic rocks. Plutonic massif of Trokuzi is composed mainly by granodiorites. Plagiogranites, granites and gabbros are rare. The aim of this paper is to get in evidence the main geochemical features of this Paleozoic magmatism, based on the 25 new, wet chemical (major elements) and X–ray spectrometry (trace elements) analyses of granodioritic rocks and a review of the previous analysis of the volcanic rocks. The Rb, Sr, Zr and Y, distributions show typical features of the within plates magmatism. An acid magma generation in the Silurian–Permian continental plate is in accord with these geochemical data. The geochemical maps of the distribution of the trace elements in the surface of the Trokuzi granodioritic massif indicate a small but significant variation of their contents. The Rb and Zr anomalies correlated with the anomalies of Rb/Sr and Zr/Y ratios seem to indicate an eastern extension of the massif.

Keywords: geochemistry, trace elements, within plate magmatism, paleozoic

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