



Structural Deformation of the Rocks between Prishtina and Gjilan Region, Kosovë

Islam Fejza^{1,*}, Bardhyl Muceku², Ahmet Tmava.¹, Sabri Avdullahi¹, Festim Kutllovci¹

¹*Faculty of Geosciences and Technology, University of Pristine, Kosovë;* ²*Faculty of Geology and Mining, Polytechnic University of Tirana, Albania*

Received July 04, 2012; Accepted October 31, 2012

Abstract In this paper in accordance with geological-structural exploration, we can distinguish the next structural stages: The Upper Triassic metamorphic basement, metamorphic sole, ophiolites and sedimentary supra-ophiolitic mélangé, The Valanginian transgression, The Barremian - Aptian Transgression, The Tertiary Transgression. In this region are developed as folding structures and extension structures. Foldings are well identified as sedimentary mélangé also in the Cretaceous turbid formations. The folding are isoclinal with the axial plan parallel to the accompanying schistosity. The deformation phase D₂ (middle Jurassic – J₂) has structured the Upper Triassic metamorphism, amphibolites and metamorphic sole as well as the lherzolites and milonitic harzburgites of the basal peridotites. More homogeneous structures with the south western reversal are observed in the Cretaceous turbidity and we assume that during this deformation phase we have a transport towards the southwest. This is in accordance with the D₃ deformation phase (110-90 million years – K₁) that has registered a transport to the upper part towards SW, under conditions of green facies of ALMOPIAS. Another deformation phase that has affected the Cretaceous turbidity is the deformation phase D₄ (Campanian) that according to Most 2003 has registered a transport of the upper part towards NE, under conditions of green facies in the western Pelagonian zone. While in the area of East Pelagonian zone, the deformation occurs only under conditions semi - ductile to brittle.

Keywords: *Ophiolites, schistosity, structural deformation, sedimentary mélangé, structural analyses*

* Corresponding: E-Mail: islamfejza@gmail.com Tel: 0037744260649;