

THE PRESENCE OF WESTERN THESSALY UNIT AT KTIMENI-DAFNOSPILIA AREA (S. THESSALY-GREECE)

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The geological study of Dafnospilia-Ktimeni area (South Thessaly) revealed that the Alpine formations which are part of its geological formation, compose a continuous stratigraphic sequence including (i) radiolarites, pelites and cherts inbedded with thick oolitic-microbreccial limestones aged Dogger-Malm and also angular ophiolite blocks on the top. (ii) Intercalations of sandstones, pelites, marls and marly colored limestones aged Lower Cretaceous. (iii) Microbreccial thin-medium bedded limestones aged Upper Cretaceous. (iv) Red pelites aged Paleocene and (v) Tertiary flysch and ophiolites composed of basic and ultrabasic rocks syngenetically correlated with the radiolarites-pelites.

The former formations were subjected the Alpine orogeny with result the destruction of their primary relations due to the superimposed folding and the multiple thrusts directed NW-SE. In the area were detected three tectonic units limited by great tectonic contacts and characterised by the presense of some particular formations.

From the presense of these particular formations and their respective with formations outcropping on the Koziakas mount, it is assumed that they are appearances belonging to the Western Thessaly Unit. The appearance of this particular unit in the Dafnospilia-Ktimeni area is possible to contribute in the solving of some Tethys problems.

OBSERVATIONS SUR LA STRUCTURE DES NIVEAUX INFERIEURS DE L'UNITE DE TRIPOLITZA AU SE DU PELOPONNESE

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L'unité de Tripolitza est constituéé d'un ensemble d'écailles successives, resultant d'une tectonic tangentielle intense qu'elle l'a affectée.

A cet empilement d'écailles peut être en partie du le grand épaisseur qu'on observe à certain régions aussi bien dans les couches de Tyros que dans la série carbonatée et le flysch.

L'écaillage est bien observable aux niveaux inferieurs et supérieurs de le série, grâce à la differenciation lithologique entre les carbonates et le flysch d'une part et les couches de Tyros d'autre part. Dans les niveaux inférieurs la base de écailles peut comprendre aussi bien des couches de Tyros que des carbonates.

Le nombre des écaïlles ainsi que leur étendue superficielle ne peut être précisé à cause de nombreuses failles que coupent l'édifice. Dans la région de Agios Nikolaos de Laconie, nous avons décelé au moins trois écaïlles dans les niveaux inférieurs de Tripolitza.

Nous pensons que cet écaillage de la série de Tripolitza est dû d'une part au sous-charriage de la zone ionienne et le chevauchement du Pinde d'autre part.

OBSERVATIONS ON THE MINOR STRUCTURES OF THE METAMORPHIC ROCKS OF VARNAVAS-RAMNOUNDA AREA, NE ATTICA

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The study of mesoscopic and microscopic scale structures of the metamorphic rocks of the Varnavas-Ramnounda area (NE Attica), showed that their fabric is the result of three deformation phases.

The first two phases are the result of ductile deformation with development of penetrative structures (fold axes, schistosity, cleavage and lineations). The third deformation phase, and also the last stages of the second phase, are the results of brittle deformation with development of non-penetrative structures (faults and joints).

The first deformation phase D_1 , is synmetamorphic at the green-schist facies (M_1 , metamorphic event with presence of chloritoid). It comprises, similar isoclinal folds (B_1 , NE-SW) with a Height/Width ratio 1.86, axial plane schistosity (S_1) and lineation L_1 parallel to the B_1 fold axes. In some cases, coaxially refolding events have been observed, result of progressive deformation. In the microscope, the D_1 deformation phase is recognized by the presence of S_1 schistosity which is built by the minerals of the M_1 metamorphic event.

The second deformation phase D_2 comprises, open parallel folds (B_2 NW-SE) with a Height/Width ratio between 0.3 and 1, axial plane cleavage (S_2), expressed as fracture cleavage or strain-slip or crenulation cleavage, and lineation L_2 parallel to B_2 fold axes. A lineation, in the form of conjugate kink-bands along the NW-SE and NNW-SSE direction, has been created during the last stages of phase D_2 . In the microscope, the D_2 deformation phase is recognized by the deformation of S_1 schistosity and the associated minerals.

The third deformation phase D_3 , mainly comprises faults and joints.

The above deformation phases are similar to those described by Mariolakos and Papanikolaou (1973) in the metamorphic rocks of Pentelikon mountain.

In terms of tectonic levels, deformation phase D_1 belongs to the lower tectonic level, deformation phase D_2 to the intermediate and deformation phase D_3 to the upper tectonic level.

The structures of deformation phase D_1 may be interpreted as a-structures from the kinematic view point, whereas those of deformation phase D_2 as b-structures, as Papanikolaou (1981, 1987) has proposed for the structures of the metamorphic rocks of the median