ΠΕΡΙΛΗΨΕΙΣ

ABSTRACTS

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ΤΕΚΤΟΝΙΚΗ ΓΕΩΛΟΓΙΑ - STRUCTURAL GEOLOGY

ΝΕΟΤΕΚΤΟΝΙΚΗ - NEOTECTONICS

NEW OBSERVATIONS ON PERMIAN STRATIGRAPHY IN GREECE AND GEODYNAMIC INTERPRETATION

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New detailed stratigraphic and micropaleontological work on the famous exposures of Permian rocks in Hydra rich in foraminifera, allows to define the stratigraphy of other outcrops in Aegina, Salamis, Attica and Chios. A synthetic section is presented which is characterized by the development of 3 successive carbonate platforms during the Permian and by 4 main tectonostratigraphic events. The first event is the onset of the first carbonate platform (Lehusis) over the fine terrigenous offshore sediments during late Asselian time. The second event is paleotectonic with the uplift (or tilting) of part of this platform, erosion and carbonate breccia deposition (late Artinskian?). The third event is recorded by the basal Episkopi unconformity and the conglomerate deposition due to tilting and uplift of part of the second carbonate platform (Marmari) that occurs between the late Murgabian and the late Midian. The last event is the sudden terrigenous influx on the deformed open marine third carbonate platform (Episkopi) during the early Dorashamian. A paroxism of the deformations with Permian olistoliths emplacement occurs during the early Triassic time.

New discovered outcrop near Mesagros in Aegina island and the Kaki Vigla section of Salamis are time equivalent of the upper Episkopi formation in Hydra (Late Dzhulfian) with the same foraminifera *Paleofusulina – Colaniella* assemblage. The environment is shallow water, near reef in Aegina and deep water in Salamis.

The Paleozoic allochtonous series of Chios can be regarded as pertaining to an active margin setting, the northern margin of the Paleotethys. The imbrication of paleotethyan exotics in a matrix of greywacke would point to a location in the outer slope of an accretionary complex. The exotic material derived from the paleotethyan oceanic floor consists mainly of deep water facies ranging in age from Ordovician to early Permian, with some volcanics and platform carbonates possibly derived from seamounts. Radiolarites blocks of late paleozoic age are abundant up to the top of these series. These terranes are covered unconformably by shallow water carbonates very close in facies and micropaleontologically to the late Murgebian Marmaris formation in Hydra. They can be regarded as a sealing the deformation affecting the prism. Although thay do not mark the real end of the deformation (the Murgabian beds being covered unconformably by Liassic limestone) these deformations could have started during a late Variscan phase of continent/continent collision marking the closing of Paleotethys.

In this sense, one can suggest that a paleotethyan «suture» should exist in Greece. Volcano-sedimentary sequence of late Permian to Early Triassic age containing large olistolith or olistostrom could certainly be used as witness of such a collision process between an active margin to the N producing the volcano-sedimentary matrix and a passive margin to the S producing the carbonate platform olistolith.

As shown by the numerous examined outcrops the collision process could start during a late Variscan phase to end up in an early Cimmerian phase of deformation, showing how obsolete the folding phase concept can be in a such context of diachronous collision.

The Chios outcrops are certainly unique in that context as they allow to trace the accretion history and to prove that the accreted exotics were very likely derived from the Paleotethys. The Carboniferous and Permian olistoliths found elsewhere (Salamis, Attica) certainly belong to the paleotethyan passive margin and were part of large carbonate platform which got caught in the collision processes.

In conclusion the late Paleozoic occurences of Greece certainly represent a milestone in the convergence of the Euresian and Gondwanian landmasses. Their study should receive more attention as the Late Paleozoic framework is certainly responsible for the paleogeographic settings of the Mesozoic history of Greece.

CONTEXTE ALPIN DES RHODOPES. ANALYSE DES NAPPES SYNMÉTAMORPHIQUES EN BULGARIE ET EN GRÈCE

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Les roches métamorphiques et magmatiques du massif des Rhodopes ont longtemps été considérées comme un microbloc continental coincé dans l'orogène alpin, entre Balkans au Nord, et Hellénides au Sud. Les plus vieux sédiments discordants sur ce socle sont paléocènes. Les datations absolues des granites tardi à post tectoniques donnent des âges crétacés. Enfin, des séries épizonales supra-rhodopiennes sont datées paléontologiquement du Jurassique.

Nous en concluons donc que les déformations cisaillantes à vergence sud, synmétamorphiques sont probablement mésozoïques plutôt que varisques ou plus anciennes comme cela était admis précédemment.

L'étude des successions lithologiques et des champs de déformation ductile conduit à distinguer quatre ensembles superposés tectoniquement et limités par une zone de chevauchement ductile, sont du plus profond au plus élevé: