The data are recorded with AANDERAA current meters model RCM4S 3 to 5 m above the bottom at five locations.

The analysis of time series of currents and temperature values indicates a very weak curent field depending on the physiography and the depth of the area with the dominance of tidal motion for the period of measurements. At some locations, observed subtidal currents show that the meteorological factors contribute to the total bottom current field.

An analysis of the initiation of motion of the bottom sediments by the tidal currents indicates that the recorded currents are likely to transport the surficial sediment and generate the sand ripples formations in the area between Tinos and Mykonos recorded with Side scan sonar and Sub bottom profiler.

LATE OR PRE-LATE TRIASSIC RELATIVE AGE FOR SOME METAMORPHIC ROCKS IN THE SO-CALLED LATE MESOZOIC IZMIR-ANKARA OPHIOLITE ZONE (TURKEY): THE FIRST PALEONTOLOGICAL APPROACH AND TECTONIC IMPLICATIONS

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The Izmir-Ankara Zone, in a redefined sense, is typified with the latest Cretaceous volcanic olistostrome unit which overlies unconformably the low-grade metamorphic rocks and ultramafic tectonites, and the steeply dipping faults separating them. Although there is a considerable discrepancy in the radiometric datings (718 to 65 m.y.) of the low-grade metamorphic (greenschist and blueschist) rocks, in recent tectonic syntheses the low-grade metamorphic rocks have been considered as being Late Mesozoic (mainly Late Cretaceous) in age.

In a huge block in the latest Cretaceous volcanic olistostrome unit, Late Triassic (conodont age) non-metamorphic strata rest unconformably on the metacarbonates. The latter with their known in place stratigraphic setting in nearby areas may suggest a Late or pre-Lata Triassic age for the middle metacarbonate parts of the metamorphic sequences in the Zone. Furthermore, abundant sand-sized detritus of serpentinite in the Late Triassic strata imply Late or pre-Late Triassic emplacement of the uttramafic rocks in tha metamorphic tarrane, elsewhere.

The conodonts include *Enantiognatus* sp., *Epigondolella pseudodiebeli* (KOZUR), *Cornudina* cf. *breviramulis* (TATGE), *Gondolella auriformis* KOVACS and G. cf. *noah* (HAYASHI).

The herein introduces Late or pre-Late Triassic relative ages, at least, for some

metamorphic and ultramafic basement rocks, necessitate the reconsideration of the Neotethyan origin for the Izmir-Ankara Zone, widely accepted in previous work.

TERTIARY EXTENSION OF CONTINENTAL CRUST AND UPLIFT OF PSILORITIS "METAMORPHIC CORE COMPLEX" IN THE CENTRAL PART OF THE HELLENIC ARC (CRETE, GREECE)

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A new interpretation of the structural evolution of Crete, in the central part of the Hellenic Arc, is herewith presented.

Kinematic analysis of deformation in the central Crete revealed that the structure of Psiloritis Mountains, is characterized by the presence of a "metamorphic complex" in the core.

The structural evolution and the uplift of Psiloritis "metamorphic core complex", is associated with two main successive deformational events; a compressional D1 and an extensional D2. These events overprinted the structures of an older Orgenetic process, which are similar to those created during Cretaceous-Oligocene, in the internal Hellenidas.

The first D1 event, took place during Oligocene - Miocene simultaneously with an underplating of crustal material and caused an intense folding and thrusting of continental material towards South, stacking of nappes and overthickening of the accretionary wedge in the central part of the Hellenic Arc.

During Miocene, a regional scale extension is created, in order to balance the large overthickening of the wedge. This D2 extension, is developed subhorizontally in a N-S direction and under bulk coaxial, ductile conditions in the lower nappes, or brittle conditions in the Upper one. This tectonic regime resulted in crustal thinning and continental escape along semi - ductile extensional shear zones.

A relative younger, E-W directed compression developed during Middle to Upper Miocene, in an evolutionary stage of D2 event, normal to the direction of the main extension of the previously formed nappe pile, without changing the finite strain ellispoid. This compression possibly accelerated the continental escape along fault zones, in a direction normal to the compression. Thus, during Miocene, a compressional field at the front of the escaped masses is created, displacing the compression southwards.

Gradually, after Miocene, uplift, cooling and exhumation of Psiloritis "metamorphic