

reveals an increase in activity that starts about 2 months before the main shocks, culminating in a final rapid acceleration of activity during the last day.

## **INVERSION TECTONICS OF IONIAN BASIN IN EPIRUS (NW-GREECE)**

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Ionian basin opening and its internal differentiation is attested by lateral facies and thickness variation of the Middle Liassic to Malm formations. The beginning of the synrift sequence is represented by the Siniais Limestones and their lateral equivalent of Louros limestones in which identification and description of Brachiopodes and Ammonites indicate a Carixian to Domenian age. The geometrical characteristics of the distentional basin are deduced from direction of stratigraphic pinching out of the Middle Liassic to Malm Formations and of synsedimentary tectonic features (slumps, synsedimentary faults) observed in their base in the hemi-grabens. The postrift period is marked by an Early Berriasian break-up unconformity representing the base of Vigla limestones, which their sedimentation was synchronous in the whole Ionian basin. The postrift sequence largely obscures the synrift structures and in some cases overlies directly the prerift sequence.

During Alpine orogeny, collision related compressive stresses on the margin induced the reactivation of pre-existing fractures and were responsible for the inversion tectonics that affected the Mesozoic basin. The geometric characteristics of the inverted basin depend on the lithology (evaporites), the geometry of the extensional structures, and the orientation of extensional faults.

The Ionian zone constitutes a good example of inversion tectonics of a basin.

## **NEAR BOTTOM CURRENTS AND THE GENERATION OF BEDFORMS IN THE EASTERN AND CENTRAL AEGEAN SEA. FIRST APPROACH.**

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In this work bottom current meters data will be presented collected over a period of about 15 days (23/5/1988 - 9/6/1988) in the area of Eastern and Central Aegean sea.

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 current 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-Late Triassic age for the middle metacarbonate parts of the metamorphic sequences in the Zone. Furthermore, abundant sand-sized detritus of serpentinita in the Late Triassic strata imply Late or pre-Late Triassic emplacement of the ultramafic rocks in the metamorphic terrane, elsewhere.

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

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