Jurassic was missing, probably eroded, contrary to many authors (i.e. I.G.R.S.-I.F.P., 1966; Bernoulli and Renz, 1970...) who supposed the sequence without hiatuses. Radiolarian fauna permit us to date the top of the «Calcaire à filament» Formation (Bathonian and/or middle Callovian) and the Upper «Posidonia» Formation: Bathonian and/or middle Callovian near the base, Upper Tithonian and/or Berriasian near the top. The base of the Vigla Limestone Formation is dated by Radiolaria and Calpionellids. These fauna establish an important diachronism, from lower Oxfordian to lower Berriasian. However, the Upper Jurassic age of the base of the Vigla Limestone is developed with a peculiar facies. The usual micritic Vigla Limestone contains Berriasian age fauna. These results document a continuity of sedimentation in the Ionian trough and permit us to withdraw the hypothesis of an Upper Jurassic generalized stratigraphic gap. Nevertheless, many localized gaps exist. The time span of one stratigraphic gap (Middle liassic to Upper Oxfordian), situated between the Pantokrator Limestone and the Upper «Posidonia» Beds has been well-documented in one of our sections and interpreted as a progressive transgression on tilted block.

The Jurassic stratigraphic successions can be interpreted as extensional passive margins: (i) the pre-rift series correspond to the Pantokrator Limestone Formation (Upper Triassic-Lower Liassic); (ii) the syn-rift series begin with the Sinais and Louros Limestone Formations (Pliensbachian); (iii) the post-rift series start with the «Calcaires à filament» Formation (Aalenian to Bathonian-middle Callovian). As suggested by De Waver et al., 1986; Ricou, 1987, the sedimentation of the base of Vigla Limestone is tied to paleo-oceanographic changes in the jurassic Tethys: the opening of the Atlantic ocean in the Caribbean domain generates a large oceanic seaway from E to W.

TECTONIC AND SEDIMENTARY EVOLUTION OF THE WESTERN PINDOS OCEAN: EVIDENCE FROM THE PINDOS ZONE, PELOPONNESE, GREECE

P.J. Degnan, A.H.F. Robertson

Department of Geology and Geophysics, University of Edinburgh, West Mains Road, Edinburgh EH9 3JW, U.K.

An integrated sedimentological, structural and geochemical study of imbricated Mesozoic facies of the Pindos Zone indicates that they represent the passive margin of a Mesozoic Tethyan ocean basin situated east of an Apulian microcontinent. Emplacement in the Early Tertiary produced a regularly ordered thrust stack that can be restored to show original facies patterns. Sediments of Late Triassic to Early Tertiary age record base-of-slope to abyssal plain settings, which became progressively more distal eastwards. Axial siliciclastic sediment supply from the north also played an important role during continental break-up in the Late Triassic. Intermediate and basic-extrusives occur locally, as tectonic-sedimentary melange and as coherent units, at the base of some thrust sheets. Analyses of «immobile» elements suggest compositions intermediate between mid ocean ridge basalts (MORB) and island arc tholeiites (IAT). This crust was preserved as remnants within a subduction-
accretion complex related to eastward subduction in the Early Tertiary. This subduction eventually led to collision and emplacement of ocean crust and sediments over the subsided continental margin of Apulia.

PERIPACIFIC VIEW(S) ON AN ALPINE BELT: THE HELLENIDES

J. Ferriere*, M. Bonneau**, B. Clement***, F. Thiebault*

*Université Sc. Tech. Lille. F.A., 59655 Villeneuve d'Ascq Cedex, France
**Département Géolectonique, Université Paris VI, 75230 Paris Cedex, France
***Université Bordeaux I, 33405 Talence Cedex, France

During the last years, knowledges coming from Alpine-type Belts have been successfully applied to Peripacific Belts, like the Japan Belts, modifying some classic interpretations.

Using our own experiment and modern knowledges about Peripacific belts we propose to reconsider a Tethysian Belt (the Hellenides), according to this type of model.

It is clear that the Hellenides are characterized by Tertiary collisional structures while many Peripacific Belts are, for the main part, linked to subduction processes, mini-collision (with insular arcs) or even "soft-collision" (with huge submarine fans).

So, in this publication, we discuss and emphasize all the possibilities of subduction during the post-Hercynian history of the Hellenides.

For instance, we will talk about:
1. the meaning of middle triassic volcanic processes known in a large part of the Hellenides: is it the result of extensional tectonic, subduction or other geodynamic process?
2. the age and position of subduction zone(s) during jurassic times involving the neo-tethyan oceanic crust, and the meaning of associated basins (marginal seas...);
3. the possibility of subduction(s), after the Upper-Jurassic obduction(s), especially during cretaceous times, in the basins located on each side of the pelagonian domain;
4. the meaning of Tertiary blueschists outcropping in the internal and external Hellenides, and the link between this tertiary geodynamic network and the more recent one, characterized by the subduction of the eastern mediterranean crust under the Aegean Plate.