

advancing propagation of the Hellenides. The dominant mesoscale structures are those of faulted anticlinal folds, which have roughly northwest-southeast-trending fold axes and overturn to the southwest. These structures are due to the overthrust caused by Mesozoic-Tertiary pelagic sequence of Pindos thrust belt and by conglomerate debris-flow mega-slivers. These slivers are originating from the deeply up-faulted, gravity sliding and collapse of the upper levels of the Gavrovo-Tripolis and Pindos thrust belts.

Gavrovo-Tripolis and Apulian platforms formed during Early Mesozoic Tethyan opening and they developed as a part of the Early Cretaceous foreland-thrust belt system, which resulted from the collision of Apulia and Eurasia. During the Tertiary, the Apulian continental margin was affected by compressional tectonics due to the continuing collision. Subduction of Apulia beneath the Hellenic margin of the upper European Plate took place in the Miocene, which is responsible for the tectonic deformation due to the increasing west-to-east lithospheric shortening and gives rise to the intracontinental subduction formation of Plattenkalk and Phyllite-Quartzite Series.

Consequently, the examined sedimentary features, in Filiatra-Pylos area, are well correlated with the lithostratigraphic successions of Paxos, Ithaki, Cephalonia, Lefkas and Zakynthos, but are also connected with those of Megisti Island in Dodecanese, which geotectonically belongs to the Pre-Apulian isopic zone of the External Hellenides.

Preliminary petrographic data on the Early Cretaceous Boeothian flysch (External Hellenides, central Greece); provenance and palaeogeographic implications

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This paper defines the petrographic features of the Boeothian Flysch, an Early Cretaceous turbiditic deposit, which marks the boundary between the External/Internal Hellenides in central-southern Greece (south of the Kopais plain). The results from this study represent a preliminary contribution in reconstructing the Early Cretaceous palaeogeography of a limited segment of the Alpine Tethys (i.e. the Pindos Ocean), mainly supported by provenance changes of the detrital modes of arenites and related tectonic events. The Boeothian Flysch, whose stratigraphic succession is made up of basal conglomerates grading upwards to sandstones and pelites, interlayered with calpionellid micrite limestones, is here supposed to belong to the Early Cretaceous flysch family, cropping out along all the western and central Europe Alpine Chains for more than 7,000 km, from the Gibraltar Arc to the Balkans. This flysch commonly marks the contact between the internal and external areas and usually shows a provenance linked to internal areas, mainly made up of crystalline sources and, locally, by ophiolitic complexes. Representative samples of sandstones were analyzed for petrographic compositions in order to detect the source areas. The data obtained suggest that the provenance of the Boeothian Flysch is closely related to sediment sources belonging to internal domains and formed by a Jurassic carbonate platform and metamorphic basements, connected to the Pelagonian Terranes (Auct.), and by ophiolitic complexes. Thus, it is also possible to hypothesize that Early Cretaceous uplift and rejuvenation processes affected these internal domains with the production of a detrital supply, filling the innermost sector of the Pindos Ocean, whose external margin was bounded by the Parnassos microcontinent. This uplift process may probably represent the beginning of the Late Cretaceous tectogenesis, widely recorded in almost all the central-western Alpine Tethys.