

this study are by far lower than those of the imported granitic rocks in Greece. Therefore, at least from radiological point of view and for the investigated rocks, the granites from the Atticocycladic Zone can be used as building materials rather than the majority of the imported granites.

Tectonostratigraphic models of the Alpine tectonostratigraphic terranes of the Hellenides

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The tectonostratigraphic terrane analysis of the Hellenides has resulted in the distinction of nine terranes, representing five continental crustal blocks with pre-Alpine basement overlain by Alpine carbonate platforms and four Tethyan oceanic terranes with ophiolites and pelagic sediments. The tectonostratigraphy of the above terranes is related to their paleogeodynamic and paleogeographic evolution, which can be distinguished in three major stages: (i) A first stage of continental rifting in the northern margin of Gondwana, which is characterised by volcanosedimentary successions of Late Palaeozoic – Triassic. (ii) A second stage of continental drifting and of oceanic opening of Tethyan basins in between the continental terranes. This stage is characterised by the development of shallow-water carbonate platforms on the continental terranes and by ophiolite suites interlayered with pelagic sediments within the tethyan basins. The duration of this stage is Triassic – Paleogene. (iii) A third stage of docking of the tectonostratigraphic terranes along the active European margin, which is characterised by flysch sedimentation along the trenches developed in front of the evolving arc and trench systems. The duration of this stage is from late Triassic to Neogene. The timing of the transition from one period to the other for each terrane is shown by the different tectonostratigraphic formations observed in each case with distinction of two models: one for the continental terranes and carbonate platforms and another for the oceanic basins. In both cases the duration of each geodynamic stage for each terrane is obtained from the chronology of the tectonostratigraphic facies change. Thus, the rifting stage comprises the ages of the successive volcanosedimentary formations, the drifting and oceanic opening stage comprises the ages of the carbonate platforms and of the ophiolites and associated pelagic sequences respectively and the docking stage comprises the ages of the flysch formations. The general trend is younger ages observed in the southern terranes and older ages towards the northern terranes. The two alternative tectonostratigraphic models are applied in the two groups of terranes with indication of the different timing of each formation, corresponding to the different geodynamic-paleogeographic stages. The period of drifting of each terrane can be used as a dimensional indicator of the Tethyan width that was covered by the terrane motion across the ocean (e.g. 190 Ma for the Tripolis platform but only 110 Ma for the Pelagonian platform).

Tectonostratigraphic observations in the western Thrace Basin in Greece and correlations with the eastern part in Turkey

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New observations on the Tertiary tectonostratigraphy of the western part of the Thrace Basin in Greece enabled the distinction of several tectonostratigraphic formations ranging between Middle Eocene and Late Oligocene. The first major conclusion was that two NE-SW trending dextral strike-slip fault zones – the Soufli FZ in the south and the Ardas FZ in the