NEW CRUSTAL SECTION ACROSS LIGURIAN SEA – CORSICAN BLOCK - NORTHERN APENNINE - ADRIATIC SEA, BASED ON CROP SEISMIC DATA

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The Italian NVR Lithospheric seismic exploration Project (CROP) is constituted by over 9000 km of deep seismic sections which cover regionally the Italian peninsula and the Central Mediterranean. This geophysical network furnishes new very important information on the many involved questioned aspects of the complex and atractive investigated area.In this paper the Authors present the reconstruction of a new crustal section of over 600 km which crosses the Ligurian margin of Europe, the Ligurian Sea, the Corsica-Sardinia block, the Tuscan Arcipelago, the Northern Apennine thrust-belt and the Adriatic Sea, terminating on frontal compressive deformation of the Dinarides.Crustal tectono-stratigraphic conditions of the different crossed geological provinces are outlined with satisfactory reliability and substantially clear seismic support.Ligurian Sea and its European and Corsican passive margins, extended during the Balearic geodynamics phase (Upper Oligocene-Lower Miocene), are well defined. Corsican blocks (a fragment of Europe) constitutes the first innermost block of Adria verging deformation. Corsica basin represents an old foredeep formed between Europe and Adria, after the subduction of the Tethyan slab beneath Adria during the Eo-Alpine geodynamic phase. Apennine belt is essentially formed by an ensamble of thrusting blocks which have two litospheric roots connected to two different geodynamic phases: the Balearic one, as above mentioned, and the Tyrrhenian one (Middle Miocene to Present time). This last phase produced the highes mounts and the most impressive lithospheric thrusting.