

and folds with N or S to NW or SE sense of movement. During Miocene-Pliocene the third T3 event is taken place. It is responsible for the high angle normal fault dismembered the Eocene-Oligocene molassic basin into Neogene grabens. A local T4 event has been recorded affecting also the Neogene sediments of the basin with minor reverse strike slip faults as well as normal faults. The following T5 event is related to big normal active faults. They are coincided to the active tectonic of the study area defined by the earthquake focal mechanisms.

Sedimentary setting of Adriatic flysch formation (Middle Eocene-middle Miocene), Southeastern Montenegro as revealed by turbidite sequences

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A 750 m long outcrop of Middle Eocene-Miocene flysch is exposed in an asymmetrical syncline in Crnjak Cove, south of Bar, Montenegro. Texture, physical sedimentary structures, petrography, and trace fossil studied in these sediments allowed the recognition of turbidite facies that display various members of the Bouma sequence (Ta,b,c,d,e). These are interpreted in order to reconstruct the depositional setting of these gravitational deposits. Predominantly clastic lithologies in this 300 m thick sequence are arranged in seven distinct turbidite facies, which represent three superimposed submarine fans. The oldest fan consists of: 1) basal marl (T₁: 0-30 m), which indicate basin to marginal-fan deposits; 2) thin to medium bedded graywackes intercalated with thin mudstones (T₂: 30-140 m), which represent mid fan; and 3) thinly bedded graywackes intercalated with mudstones (T₃: 140-160 m), which indicate outer fan deposits. The second fan is comprised of: 1) thin to medium bedded, coarsening upward graywackes (T₄: 160-190 m) that represent mid fan environment; 2) conglomerates (T₅: 190-200 m) which, in addition to carbonate clasts, also contain large rip-up clasts of siltstones, indicating locally derived channel deposits; and 3) thinly bedded graywackes intercalated with mudstones (T₆: 200-230 m), which represent outer fan deposits. The youngest submarine fan is made of thin bedded graywackes intercalated with mudstones (T₇: 230-300 m) that represent mid fan environment. The graywackes from mid fan facies consist of Bouma's Tb,c,d sets, and at their bases contain flute casts, prod casts, and scour marks. Thin greywackes from outer fan facies contain abundant and diverse *Nereites* ichnofacies.

Mineralogical evolution of contaminated granitic pegmatites hosted in marbles. The role of CO₂ rich fluids on phase relationships of crystallizing granitic melts. An example from the Intermediate Unit of the Central Rhodope Metamorphic Province, Greece

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The Intermediate Unit of the Rhodope Metamorphic Province in Greece intervenes between the Lower (Pangaion) Unit with continental passive margin affinities, composed of orthogneisses of Permo-Carboniferous magmatic age overlain by amphibolite facies marbles and minor schists, and the Upper Unit dominated with 150 Ma metagranites. The Intermediate Unit is an assemblage of strongly deformed and variably migmatized lithologies of oceanic and trench affinities. An important component of the Intermediate Unit is a migmatized (diatexitic) biotite-plagioclase gneiss, intercalated with marbles, calc-silicate rocks and minor garnet-amphibolites. The leucosome components of the migmatites, representing in situ melts, with granitic and quartz monzonitic compositions and of pegmatitic or aplitic textures, are hosted in the surrounding parental gneisses or in the neighbouring marbles. In the cases they