

Several of the statistical techniques previously applied by hand are here quickly and easily executable with the aid of the present program.

One of the advantages of Rock 1, apart from the rapidity of elaboration and presentation of data, are the rigorous results, otherwise difficult using graphic methodologies, when the number of data increases. The program has the possibility to define the space density distribution, to draw isodensities and finally to estimate the main plane systems.

Rock 1 gives also the possibility to show on the screen, and to reproduce on the line printer the data and all the results either in 2D or in 3D.

The complete flow-chart of the program is given, the applied methodologies are fully described and an application example is discussed.

PASSIVE MARGIN SEDIMENTATION AND COLLAPSE IN THE NEOTETHYS OF S. GREECE

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Sedimentation in the S. Greek area is governed by the history of the numerous micro-continent blocks which rifted from the northern edge of Gondwana and their subsequent accretion to the active margin of Eurasia. While our research has dealt with rift-related tectonics and sedimentation and ophiolite genesis and obduction, we here present our interpretation of continental margin units deposited in the final stages of basin evolution.

The Argolis Peninsula of S. Greece comprises a series of deformed platform units and ophiolites (Pelagonian Zone), transgressed by U. Jurassic-L. Cretaceous carbonates and overthrust by a tectonically thickened 8 km stack of E. Tertiary flysch, interpreted as an accretionary complex (Ermioni Complex). Associated with the flysch is a series of calciturbidite and calcilutite thrust sheets, which we interpret as the preserved continental margin to the Pelagonian Zone platform. Those strata exposed in the south of the area show SW-facing, mega-slump folds as well as bioclastic debris in turbidites, redeposited from the adjacent platform. The calcilutite layers contain a pelagic fauna of mid-late Cretaceous age. In contrast those limestones exposed in the north show a gradation up into terrigenous flysch, although at lower levels they also show the characteristics of slumped, slope carbonates. Additionally, bituminous micritic limestones suggest deposition on the upper continental slope, within the oxygen minimum zone. We interpret these two areas to be the remains of a carbonate margin which underwent flexurally induced collapse as the opposing active margin and accretionary complex began to impinge on it in Upper Cretaceous times. This collapse caused olistoliths to be shed from the platform into the trench where they were incorporated into the accretionary wedge. Finally, parts of the slope succession were over-ridden by the wedge and incorporated as the lowermost thrust sheets and emplaced on to the continent as final Eocene suturing of the Neotethys occurred. Most recently the

region has been dissected by Neotectonic normal faulting, juxtaposing different levels of the tectonic stratigraphy, with no appreciable strike-slip motion, as previously supposed.

THE PRESENCE OF THE "TYROS BEDS" FORMATION AT KYTHIRA ISLAND

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The Myrtidia formation outcrops near the Myrtidia Monastery, at Limnaria area, at the southwestern part of Kythira island. It appears as a tectonic "window" under the Tripoli's limestones probably of Paleocene age, which upthrust it while in a part it is covered from Neogene deposits.

It is composed of (meta)-sandstones, (meta)-pelites and mixed volcanoclastic sediments which contain small blocks of andesitic lavas.

The sandstones are mainly quartzitic, while in the metapelites and in the mixed volcanoclastic sediments we distinguish, as ordinary minerals, serikite, quartz, chlorite and haematite in smaller amounts.

The lavas are composed of albite, haematite, chlorite and serikite.

The discovery of Konodonts in the marly limestone intercalation, led to the dating of Myrtidia formation at Karnian age.

The lithological characters of the sediments of this formation, its weak metamorphism and its age, allow us to correspond this formation with Tyros beds which are well known in Southern Peloponnesus and to consider it as the base of Tripoli unit at Kythira island.

JURASSIC EVOLUTION OF SOUTH-TETHYAN MARGIN: A DISTENSION BASIN, THE IONIAN TROUGH (EPIRUS, GREECE), ANALYSED FROM ITS RADIOLARIAN FAUNA

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The Triassic-Lower Jurassic neritic platform is submitted to an extension regime during Liassic time (Ammonitico Rosso and associated rocks). A deep trough was established and siliceous deposits occurred. The continuity of this sedimentation was not established, no fauna were described from these beds. According to B.P.'s geologists (1971) the Upper