

THE STRUCTURE OF NORTHERN SYROS (CYCLADES, GREECE) CONSIDERING THE MOVEMENTS ON HIGH-ANGLE FAULTS.

AVDIS V., SKAYAS S. IGME, ATHENS GREECE

Syros consists almost entirely of metamorphic rocks and its topographic relief is intensive with many valleys and peaks. This topography has previously been assumed to be the result of erosion. Detailed field work has shown that the topography has been largely tectonically controlled and is the result of small, dip-slip displacements on two sets of high-angle faults. Previous authors described various alternations of marbles and schists. In addition, in order to account for the juxtaposition of the various rock types on northern Syros (Cyclades, Greece) previous authors have invoked the existence of nappe structures. However if one considers the relatively small movements on numerous high-angle faults the structural and stratigraphical interpretation can considerably be simplified. Hydrogeocological borehole data have proven that the apparent alternation is the result of faulting and erosion.