

Hellenides. Additionally, the East Mediterranean Chain is much more wide in the Ionian side as well as in the Levantine, in contrast to the central area, where it is shortened. This is due to the beginning of collision with the African margin in the central area in contrast to the two sides, where the convergence is still free. The beginning of collision is probably the cause for the development of a sinistral strike-slip shear zone in the eastern side of the Hellenic trench along the Pliny basin.

A COMPUTER ASSISTED METHOD FOR THE DETERMINATION OF THE GEOLOGICAL CHARACTER OF LINEAMENTS DETECTED IN LANDSAT SATELLITE IMAGES

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The directions of most lineaments detected on the Landsat MSS satellite images in Western Greece, appear to be controlled by those predominant in the Alpine and Post-alpine tectonic structure. A number of 262 lineaments from this region, was classified, using informations from geological maps, into four different categories (tectonic lineaments, lithological boundaries, morphological lines and undetermined lineaments), on the basis of their geological character. At the end of this first processing stage the geological character of a large number of lineaments (137) was undetermined.

Thus, a second stage based on computer processing, was introduced. After the digitization of the lineament map the essential software was developed for the statistical analysis of the lineaments, based on their length distribution in different directions.

The final result of the proposed method was the definition geological character of 99 of the 137 previously undetermined lineaments.