

## PALEOMAGNETISM OF LATE TERTIARY AND PLIO-PLEISTOCENE FORMATIONS OF NORTHERN GREECE

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Previous paleomagnetic measurements in the Ionian zone have shown strong clockwise rotations. The last one of about  $25^\circ$  begun 5 My ago. Measurements in Chalkidiki, on Oligocene volcanics, have also shown a recent clockwise rotation of about the same magnitude. In order to constraint the age and the amplitude of this rotation, paleomagnetic sampling was done in Chalkidiki (Pliocene sediments), in Tertiary volcanics north of Thessaloniki and in the Ptolemais basin.

The marls from the Ptolemais basin do not show any significant rotation although some less precise results may indicate a clockwise one. Older rocks, north of Thessaloniki and in Chalkidiki show a clear clockwise rotation. Thus all these paleomagnetic results show that:

- The internal parts of the Hellenides show the same rotational behaviour the external parts.
- Thus the rotation of the Ionian zone is not just due to cover thrusting.
- We must find for the Hellenides a model of continuous deformation and not a rigid plate one.