

THE ENVIRONMENT IN ROMANIA

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Romania is located in an area of strong seismological activity; it lies in an area where there are a number of mini-tectonic plates or "platelets". In particular, the Carpathian horseshoe embraces regions of considerable scientific interest. With the advent of digital mapping technology into Romania, the country has new possibilities for investigating seismological matters as well as other aspects of importance to the environment - especially for forest management, hydrological modelling and for pollution monitoring and control.

The use of Digital Terrain Models (DTMs) provides considerable geo-morphological insight - especially for regions which are relatively unknown to the international community. They are also required for both hydrological modelling and for forest management. However, Romania's political environment provides unique problems for the scientific investigator in that maps of this region are still considered to be secret.

For this reason it is necessary to produce DTMs from a variety of paper maps at various scales. This situation is far from ideal and the presentation will discuss the technology required to extract contour information from paper maps which have been printed within the limitations of the materials and processes available.

There is a subsidiary problem of combining height information from different maps, at different scales, on different ellipsoids and with differing projections. It is very apparent that the political situation which applies in Romania has a major impact on the digital technology required and the cost of carrying out procedures which might be considered normal elsewhere.

In addition, there is a little indigenous knowledge of the capabilities and possibilities offered by modern GIS systems. For this reason, it is necessary to "educate" customers for digital products in the use of those products.