

MULTIFOCAL THEMATIC PHOTOMAPS : Looking at objects with an eagle eye.

P.Patias, C. Boutoura
Dpt. of Cadastre, Photogrammetry and Cartography
The Aristotle University of Thessaloniki
Thessaloniki, GR-54006 Greece
Tel. (+30)-51-99.61.16 (Fax)
e-mail : patias@olymp.ccf.auth.gr

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ABSTRACT

Combining raster airphotographs with vector maps gives the opportunity to exploit the advantages of both representations into a new product : the photomap. The photomap conveys the full information included in the image plus the special thematic symbology included in the maps.

Special kinds of map projections, like the multifocal ones, are characterized by important properties, the most important being the exaggeration of information in areas of interest while the information content in non-important areas is generalized. Although such projections have been successfully used in Cartography, they are unknown in Photogrammetry.

The purpose of this paper is to stretch the importance of such projections, combining digital raster images with vector - based maps. The result is a new product, which combines the geometrical strickness of a map with the wealth of the information inherent in the photographs. Furthermore, the superimposition of thematic contents and map symbology enchances map understanding and provides certain advantages in a variety of applications, practical cases of which are also presented.