Using GIS Technology for the Documentation of Historical Monuments

Zaide DURAN, Caner GÜNEY, Assoc. Prof. Dursun Z. SEKER and Prof. Gonul TOZ, Turkey

Key words: Historical monuments, Rectification, Photogrammetry, GIS, Geodetic network.

ABSTRACT

Documentation and conservation of historical monuments are becoming inevitable. Digital photogrammetric techniques, now appears as the most efficient and inexpensive way for these purposes. Some alternative solution for these kinds of studies also carried out to save time, money and manpower. In this study as an alternative for documenting of historical monuments GIS technology is used and encountered problems have been discussed.

In this study GIS technology has been chosen for the documentation of the historical sites. Photographs have been taken and then converted into orthogonal images with the help of ARC/INFO GIS software. Two different case studied have been selected. In these studies façades of the historical buildings wanted be drawn and documented. These tasks were done using digital photogrammetric technique but GIS technology has been selected as an alternative solution for documenting. Photographs converted into orthogonal images with the help of ARC/INFO. These orthogonal images are used in the CAD software and details are drawn. The same photographs have been evaluated and two different outputs were compared.

CONTACT

Assoc. Prof. Dr. Dursun Z. Seker Istanbul Technical University Department of Geodesy and Photogrammetry 80626 Maslak Istanbul TURKEY

Tel. + 90 212 285 3755 Fax + 90 212 285 6587 E-mail: dseker@itu.edu.tr

Web site: http://atlas.cc.itu.edu.tr/~seker

Res. Assist. Zaide Duran Res. Assist. Caner Guney Prof. Dr. Gonul Toz Istanbul Technical University Department of Geodesy and Photogrammetry 80626 Maslak Istanbul TURKEY

TS3.11 GIS – A Tool for Documentation Zaide Duran, Caner Guney, Dursun Z. Seker and Gonul Toz Using GIS Technology for the Documentation of Historical Monuments