



DETECTION OF INCLINATION AND DECLINATION ANGLES FROM TOTAL MAGNETIC ANOMALY MAPS ON ARCHAEOLOGICAL SITES

HAZEL DENİZ TOKTAY *

Istanbul University - Cerrahpasa
Geophysical Engineering Department
Istanbul-Turkey

(E-mail: hazel.deniztoktay@iuc.edu.tr)

DAVUT AYDOĞAN

Istanbul University
Geophysical Engineering Department
Istanbul-Turkey

(E-mail: aydogan@istanbul.edu.tr)

and

FETHİ AHMET YÜKSEL

Istanbul University - Cerrahpasa
Geophysical Engineering Department
Istanbul-Turkey

(E-mail: fayuksel@iuc.edu.tr)

Abstract. We considered determining the inclination and declination angles from the total magnetic anomaly maps on archaeological sites. It is necessary to know the magnetic inclination and declination angles of the study area in order to accurately locate the buried structures on the total magnetic anomaly maps. To this end, we used the Dannemiller and Li method. We calculated inclination and declination angles for both synthetic model and archeological total magnetic field data.

*Corresponding author : hazel.deniztoktay@iuc.edu.tr
Communicated by Messoud Efendiev; Received May 24, 2021.

AMS Subject Classification (MSC 2020): 86A02, 86A05, 86A08, 86A11.

Keywords: Inclination angle, Declination angle, Dannemiller and Li Method, Total magnetic anomaly maps.