



## INTERPRETATION OF MAGNETIC ANOMALIES BY USING ASTA EDGE DETECTION METHOD: SAKARYA (SAPANCA) EXAMPLE

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**Abstract.** Derivative based methods such as Tilt Angle, Analytic Signal, Total Horizontal Derivative methods are among the most preferred methods for determining the horizontal locations of potential buried structures in geophysical research areas. These algorithms are continuously developed, and new filters are produced, which provide better results. This study aims to determine the horizontal boundaries of the fault structures on magnetic anomaly maps. To this end, the ASTA (Analytic Signal of the Tilt Angle) method, which combines the Analytic Signal and Tilt Angle methods, has been used. Edges of the potential structures have been determined for both synthetic and Sapanca Lake Basin field data.

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