



Subsurface Cavity Detection by Using Integrated Geophysical Methods

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Global warming experienced in recent years in Turkey has led to a severe drought around the Konya Plain in central Anatolia. As a result, excessive amount of ground water was drawn in the region for the sustainability of agricultural activities. So, five small-scale shallow depth sinkholes have occurred at different times, at an average interval between 400-450 m. in the study area; Konya-Atlantı. Generally, sinkholes formation occurs among natural processes has turned into disasters caused by humans due to excessive use of groundwater. Consequently, investigations were carried out within a partnership research programme on cavity detection and ground penetration radar, microgravity and multi-frequency electromagnetic methods were jointly utilized. Exact locations and dimensions of two possible hidden cavities were determined by using these multidisciplinary methods.

Keywords: Cavity; Ground-penetrating radar; Konya; Microgravimetry; Multi-frequency electromagnetic method.