

Microgravity: an example on its application as a site investigation tool

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A gravity survey has been conducted in a residential area where subsurface mass movements has been noted. These movements have been observed through structures like roads, drain and floor and wall of houses within the site which are displaced vertically and some horizontally. The mass movement appears to be concentrated in an area to the west and middle of the site. Subsidence measurements confirms presence of the vertical movement. One of the potential cause of subsidence in limestone area such this site is due to the presence of cavity. A gravity survey has been carried out to determine this. The gravity anomaly obtained from the gravity measurements and the subsequent modelling indicate that this subsiding area occurs over a subsurface limestone ridge. It suggest cavity may not be the cause of the subsidence instead the movement may be all above the limestone bedrock.