

-Gravity Studies in Archeo-Propecting of the Valley of the Queen and Kings, Luxor, Egypt

Due to our success in studying the applicability of the micro-gravity investigations in archaeo-prospecting and cave detection, we started to study the resulted unknown features in the Valley of the Queen and Kings from our previous micro-gravity investigations. Some profiles selected to cross the main area of the resulted anomaly.

Due to our success in studying the applicability of the micro-gravity investigations in archaeo-prospecting and cave detection, we started to study the resulted unknown features in the Valley of the Queen and Kings from our previous micro-gravity investigations. Some profiles selected to cross the main area of the resulted anomaly.

Our investigations concentrated in the testing site by micro-gravity measurements for the selected parallel profiles using models G and D if LaCoste & Romberg gravity meters with 1-meter interval between measuring stations. The resulted data were corrected and adjusted. The gravity effected of the entrances and main bodies of the surrounding tombs were calculated using 2.5 and 3D-gravity modeling. The final gravity study and interoperation for this local testing site show a presence of a considerable anomaly, which was interpreted as subsurface hidden room or big hole. This conclusion was conceded with the information deduced from the archaeological information.

Our investigations concentrated in the testing site by micro-gravity measurements for the selected parallel profiles using models G and D if LaCoste & Romberg gravity meters with 1-meter interval between measuring stations. The resulted data were corrected and adjusted. The gravity effected of the entrances and main bodies of the surrounding tombs were calculated using 2.5 and 3D-gravity modeling. The final gravity study and interoperation for this local testing site show a presence of a considerable anomaly, which was interpreted as subsurface hidden room or big hole. This conclusion was conceded with the information deduced from the archaeological information.

Primary author: RADWAN, Anwar Hassan Ahmed (National Research Institute of Astronomy and Geophysics (NRIAG))

Presenter: RADWAN, Anwar Hassan Ahmed (National Research Institute of Astronomy and Geophysics (NRIAG))

Track Classification: Theme 3: Advances in Sensors, Networks and Processing