



## Gravity networks for the Geodetic Reference Framework of Albania

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This paper presents a general overview of gravimetric measurements carried out for the first order gravimetric network of Albania. Data compensation, correction methodologies, interpretation and related results have been presented as well. Relative gravimetric measurements were carried out in 42 points, with two CG-5 instruments. Real Vertical Gradients have been measured at all the points of first order network which together with other corrections, are used in the final data compensation in order to bring the final values at reference point as absolute ones. Apart from the first order network, other 38 second order and 138 third order gravimetric points have been measured in a grid 2x2 km, in the flat and most dense area (Tirana-Durresi) of Albania, with the scope the determination of Geoid Gravimetric Height on that region. The gravimetric measurements were realized with two Scintrex CG-5 gravimeters for three orders. For the first order points were used two gravimeters simultaneously, whereas for the points of second and third order only one. In this paper we present the results for only the first order measurements. The measurements were carried out during the period from August to October 2018, in collaboration with Aristotle University of Thessaloniki, Department of Geophysics. The project was supported by the Agency of Geospatial Information of Albania.