GEOID BEHAVIOUR IN THE BAHIA BLANCA AREA

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ABSTRACT:

During November and December 1997 a campaign in the South – South West part of the Buenos Aires province was realized. A GPS Network was measured on points of the Argentine Altimetric and Trigonometric Networks.

With the processing of the campaign data the observed values of N (geodetic undulation) were obtained by means of the difference between h (ellipsoidical heights obtained by GPS and referred to the PROSGAR'94 system) and H (pre-existing heights referred to the average sea level(geoid)).

The global model EGM96 was used to obtain the geodetic undulations in this area: these undulations are called estimated values of N.

The difference between the observed values of N and the estimated values of N gives as result a numerical model where the differences are bigger in some areas, in the south part specifically, where we consider the possibility of making more dense the observations, since it coincides with a complex topography, with heights that reach 700 m above the sea level.