

Comparative study of the Downward Continuation Methods to be applied to the airborne gravity data

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In the airborne gravimetry gravity is obtained at a certain height above geoid, so that it is necessary to apply the height reduction in order to combine the airborne data with the ground data. This is the downward continuation.

Since the downward continuation is a treatment which is likely to cause the short wavelength noises to build up it is necessary to select the method so that the noises may be suppressed properly.

Three methods have so far been proposed: FFT method, Collocation method and Wavelet method. In this paper we discuss the advantages and disadvantages among these methods.