

# A HYBRID METHOD TO DETERMINE THE HONG KONG GEOID

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## ABSTRACT

Integration of all the information/data available must be performed to obtain a precise geoid. A hybrid approach of so-called sequential processing is proposed in this study, which involves two steps. The first step is to construct a gravimetric geoid using the well-developed remove-restore technique. It is then refined with GPS/leveling derived geoid heights and other information. Three methods to refine a gravimetric geoid are discussed: the least squares collocation, a multi-quadratic interpolation function, and the weighted average. The experiment with the Hong Kong geoid indicates the approach is simple and works well.

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