Geophysical Research Abstracts,
Vol. 11, EGU2009-996, 2009
EGU General Assembly 2009

How to obtain the optimum digree/order in the expansion of geopotential model for geoid computation problem?

A. A Ardalan, M Raoofian, and sh jazaery

university of tehran, departmant of surveying and geomatics engineering, University of Tehran, Tehran, Islamic Republic Of Iran (mraoofian@ut.ac.ir)

One of the discrepancy issues among the contemporary geodesist is the manner of implementation of geopotential models for solving of boundary value problems. Some of them believe that it's better to use the low order in the expansion of geopotential models and instead, increase the domain of integration in the terrain correction. However, the other emphasize that we should take the order of expansion in the geopotential models as high as possible and consequently lessen the domain of integration over the remain local masses. In this paper we have comprehensively studied this matter and illustrated it's result on the various geopotential models.