



Department of
Geodesy and Geomatics Engineering

Graduate Seminar

Thursday, March 17, 2016

3:00 pm

Head Hall, Room E-11

ARE GLOBAL GRAVITY MODELS IMPROVING?

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A numerical analysis was done, globally and locally, to show the performance of global gravity models in the sense of Gravity Anomalies (GA) and Height Anomalies (HA). EGM2008, GGM05S, TIM_R5, GOCO03S and EGM96 as internationally well-known and accepted models were considered for the test. Different degree/order of global models were tried and a divergence trend was seen after degree 140 between models in outputting the GA and HA for the area of Auvergne, France. Functioning of models were also tested for prediction of terrestrial observed GA and HA in the area of Iran, results showed huge range of differences, $500mGal$ in GA and $3m$ in HA, between synthetic values and observed ones, that basically means global gravity models are not in a position of representing the real Earth's gravity field for practical applications.