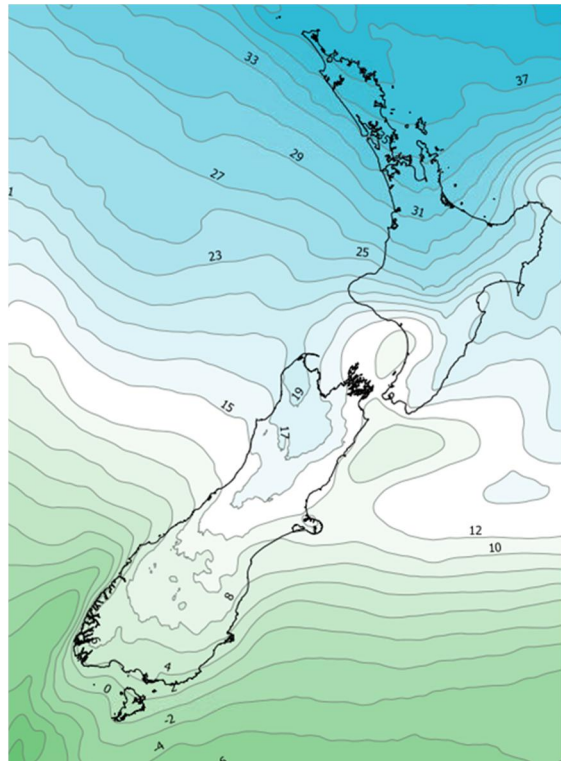
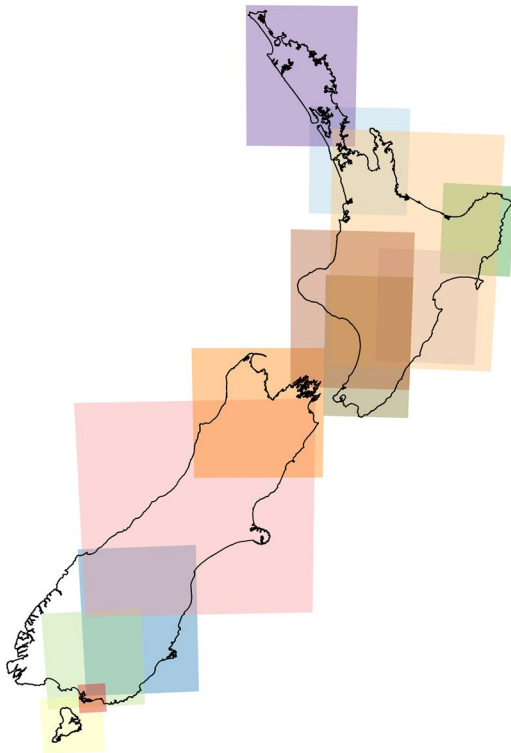


Improving New Zealand's Vertical Datum with Airborne Gravity

Dr. Matt Amos
Land Information New Zealand (LINZ)



Abstract: Land Information New Zealand has recently completed a four year project to improve the accuracy of the national vertical datum. This work has culminated in the publication of the New Zealand Vertical Datum 2016 (NZVD2016). A significant component of this project was the acquisition and processing of a national airborne gravity dataset across mainland New Zealand and the surrounding littoral zone. This has been combined with terrestrial, marine and satellite observations to provide a new geoid and vertical datum that has a demonstrable accuracy of better than three centimetres in developed areas. NZVD2016 provides better modelling of the relationships to the existing local vertical datums. Instead of the constant offsets that were used in the previous datum, NZVD2016 utilises transformation surfaces to achieve a better fit. The new datum has improved accuracy and enables the generation of accurate normal-orthometric heights anywhere across New Zealand.

12:00 noon, Thursday, 11 August 2016

**L1 Lecture Theatre
School of Surveying
310 Castle Street**