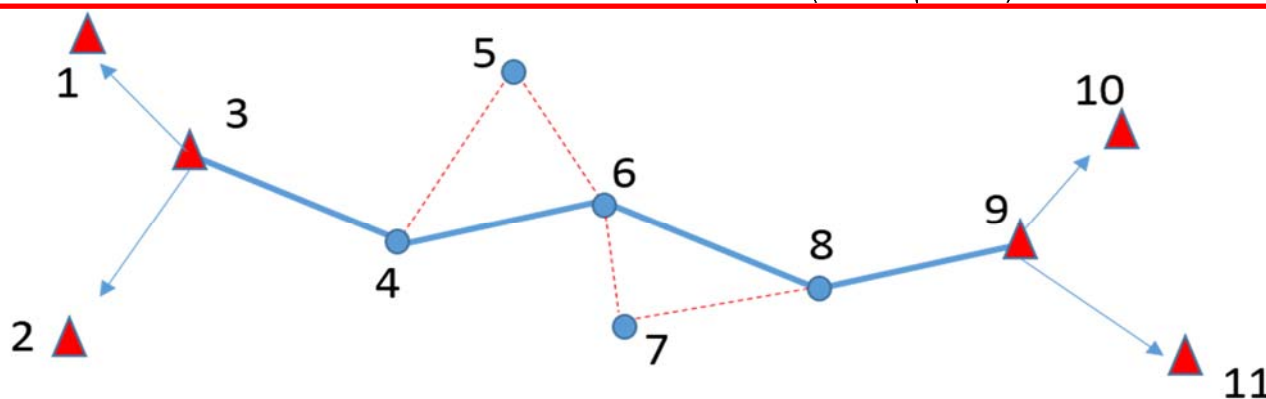


# An observation coordinate file to accompany Cadastral Survey Datasets?

*Dr David Goodwin, School of Surveying, University of Otago*

**Abstract:** Two important foundations of New Zealand’s cadastral system are first, its monument based cadastre by which original marks if undisturbed carry the greatest weight in evidence; and second, the mathematical comparison of data to confirm whether monuments are in their original position or have been disturbed. In order to carry out such a mathematical comparison, where survey field notes are held by Landonline in the form of vector tables and survey plans, manual data entry may be necessary, with the associated risk of copying errors. Vector data may at times also need to be converted into quasi coordinates to permit joins or coordinate transformation, which are often less cumbersome than missing line and ray-trace calculations, and permit the full COGO capabilities of today’s data recorders and surveying software. One enhancement of the system might be to require surveyors to submit a CSV file of “observation coordinates” to Landonline with every survey. This is envisaged as a digital file of the relative position of all marks in the survey on a unified survey system. Such a data set could avoid copying errors, permit joins to be taken between any marks without repeating missing line/ray-trace calculations done by previous surveyors, and could be conveniently uploaded into survey software and data recorders. This presentation describes what such a data set might look like, and discusses possible queries and sticking points in its introduction.

FIELD BOOK	NZGD2000 North Taieri Circuit	NAME OF MARK	DESCRIPTION	F/P/A/C	MCS
	False Origin 800000.00mN	400000.00mE			
	N metres	E metres	[F: Found, P: Placed A: Adopted, C : Calc]		
	811678.37	427475.6	Trig 16421(A238)	-	-
	812728.90	427544.09	Trig Z (A237)	-	-
	810168.74	425322.33	Trig Mopanui (A22G)	-	-
	811885.64	427082.18	IT XXII DP 6000	F	MCS
	812643.17	427081.09	IT IV DP 8111	F	MCS
	812661.50	427059.82	IT V DP 8111	F	MCS
	812643.17	427081.09	IT IV DP 8111	F	MCS
	812724.74	427216.80	IT XIII DP 8111	F	MCS
	812556.84	427185.80	IT 1	P	MCS



12:00 noon, Thursday, 10 May 2018

L1 Lecture Theatre  
School of Surveying  
310 Castle Street

School of  
**Surveying**  
Te Kura Kairūri

UNIVERSITY  
of  
OTAGO



Te Whare Wānanga o Otago  
NEW ZEALAND

# New tenure arrangements are changing Māori interests in land and water

*Dr Mick Strack, School of Surveying, University of Otago*

**Abstract:** Recent Treaty settlements have created new interests in land and waterways. The creation of Te Urewera and the Whanganui River as legal entities owning themselves is a radical departure from the common law and statutory titles that we are accustomed to, but they seem to be more of a device to avoid recognising 'ownership' of water, rivers and lakes, rather than acknowledging Māori Customary interests. Māori remain subject to colonising ideologies.

