

## **Nicola LITCHFIELD**

*GNS Science*

Nicola is a Senior Scientist at GNS Science, New Zealand, and is Head of the Active Landscapes Department. Her expertise is in Tectonic Geomorphology and Earthquake Geology and she has been studying active faults, fluvial terraces and marine terraces in New Zealand to better understand tectonic processes and their impact on the landscape and seismic hazard. Since completing her PhD in 2001 at the University of Otago she has been focusing primarily on the Hikurangi Subduction Margin, where she used fluvial terraces to quantify and identify mechanisms on longer-term aseismic uplift processes and marine terraces to quantify Holocene coseismic uplift at the coast. She is involved in several multi-disciplinary projects aimed at understanding earthquake processes on the Hikurangi Subduction Margin over a range of timescales. She was also involved in past projects such as the Margins Source-To-Sink initiative, leading a programme focused on the onshore part of the Waipaoa Sedimentary System. Nicola coordinated the surface rupture and coastal uplift response to the 2016 M7.8 Kaikōura Earthquake. She has also been involved in international projects such as the Global Earthquake Model, where she developed a global active fault database.