

The new Taranaki Atlas will be based on digital seismic and well data using state of the art software. Green seismic lines present GNS Science's current digital data sourced from MED's open file data system. Open file data acquired in Taranaki Basin are shown in grey and highlight areas like the southern Taranaki Basin with sparse lodged digital data coverage. The Kupe region shown in yellow is currently interpreted using 2D and 3D seismic data to provide detailed seismic facies maps for input to petroleum system models.

Fence diagram (top) shows the constrained optimization (CONOP) correlation of biostratigraphic events and seismic markers between Arawa-1, Okoki-1, Taimana-1 and Witiara-1. CONOP uses high resolution biostratigraphy and seismic picks to correlate between wells and to generate a highly refined age model. Also shown is the distribution of event levels in the composite sequence and a plot of adjusted event-clusters that may mark regional unconformities. Seismic ties are coloured and match interpretation of seismic line shown below (seismic section and interpretation supplied by Pogo Producing Company). So far 10 offshore Taranaki wells have been correlated using CONOP (black crosses on map at right). The Seismic Facies Mapping Project will use CONOP as a regional tool to QC and correlate

