

Monday, 24 June 2024

# An Assessment of Geothermal Direct Use in Taupo Township: Insights from Well Data Analysis and Numerical Modeling

Sadiq J. Zarrouk

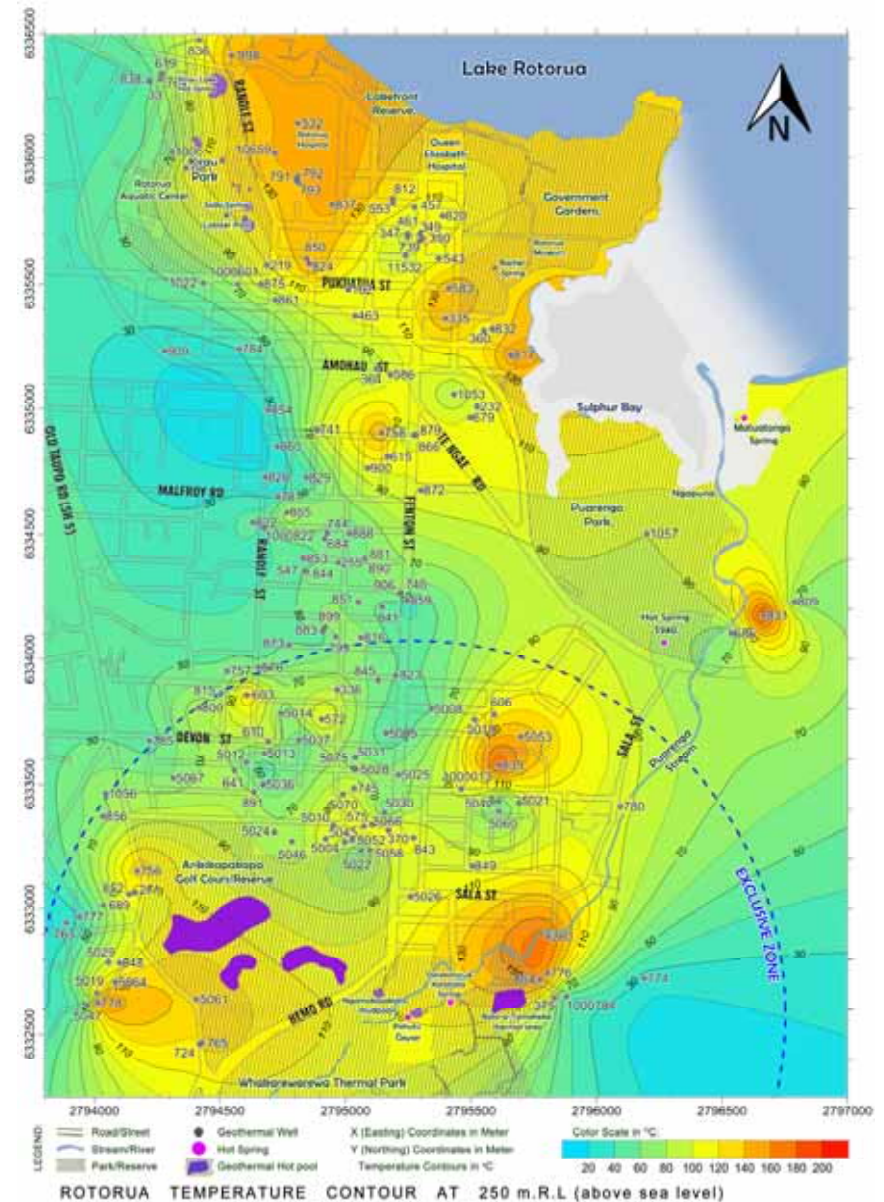
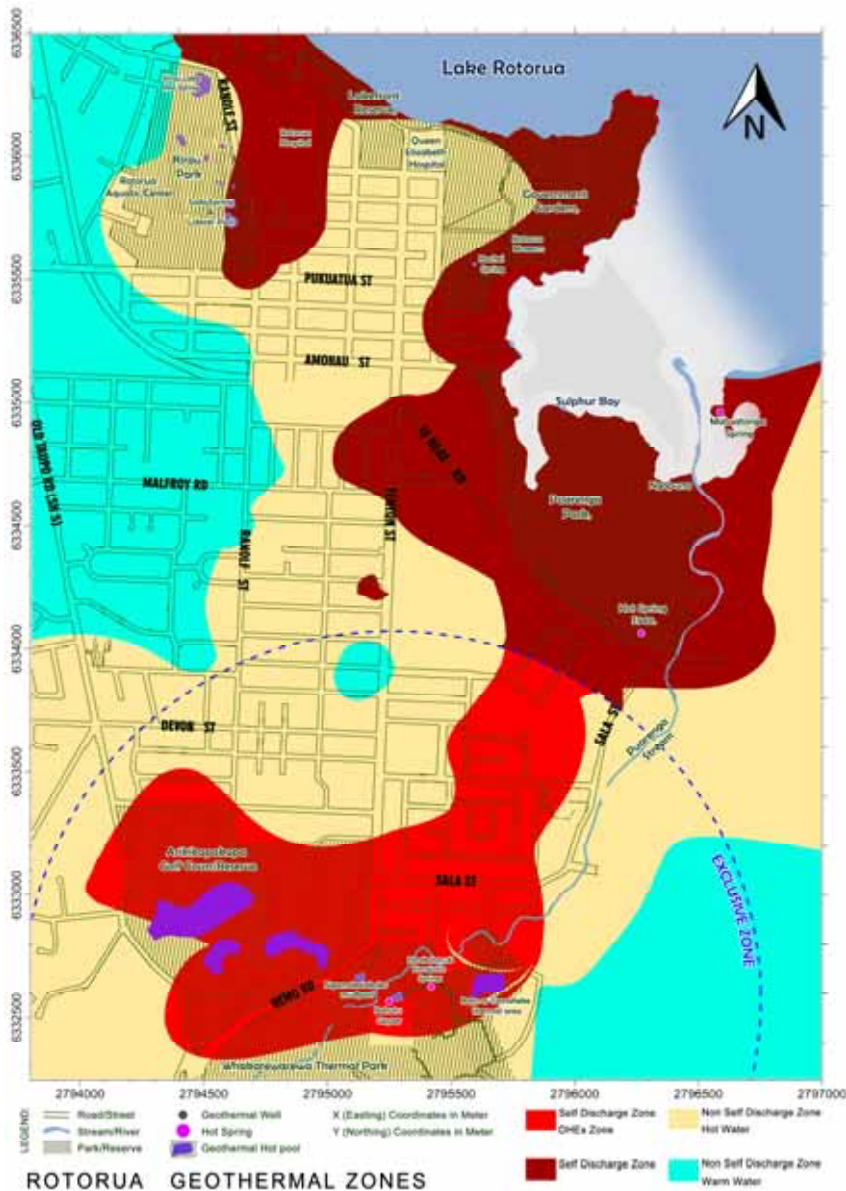


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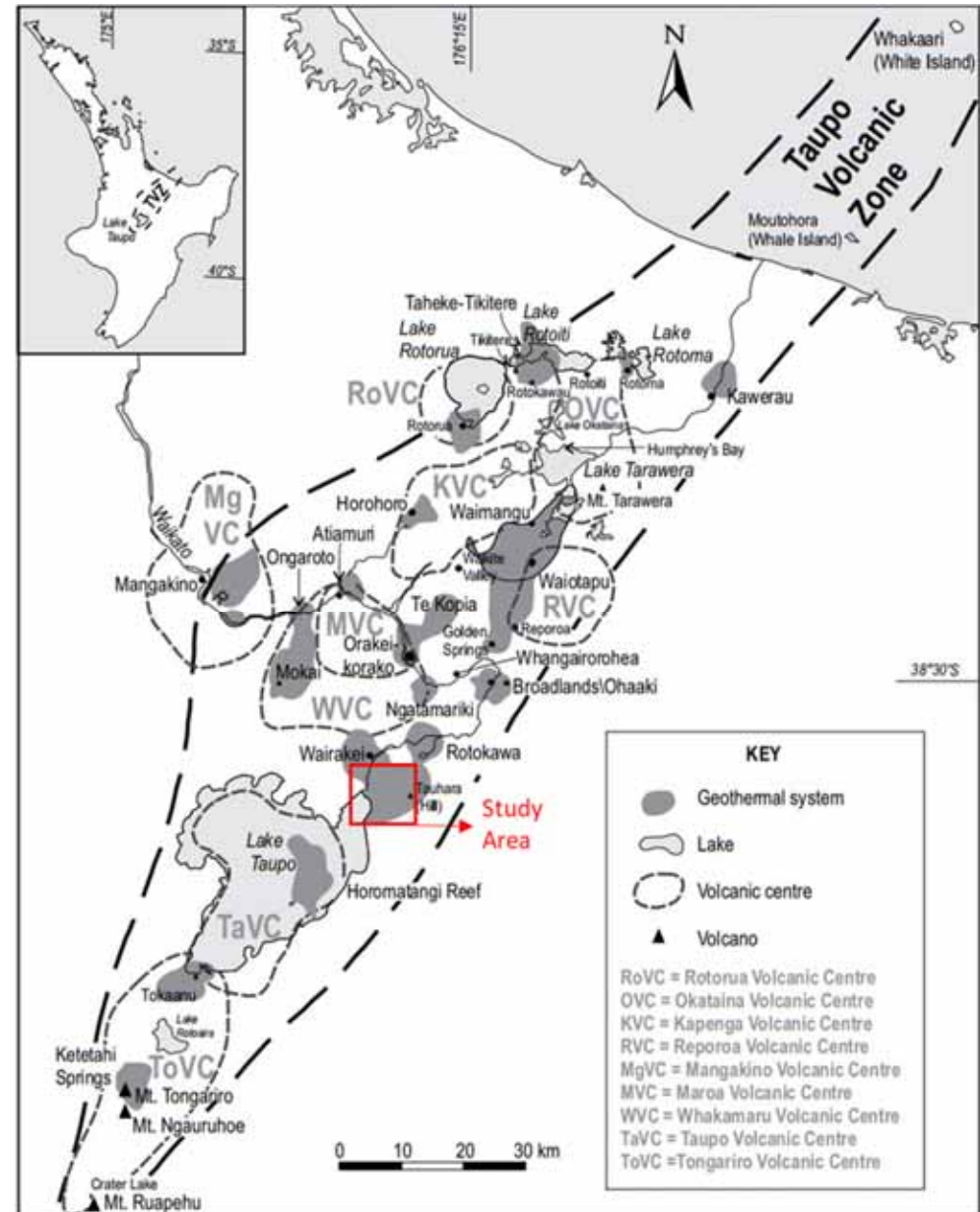
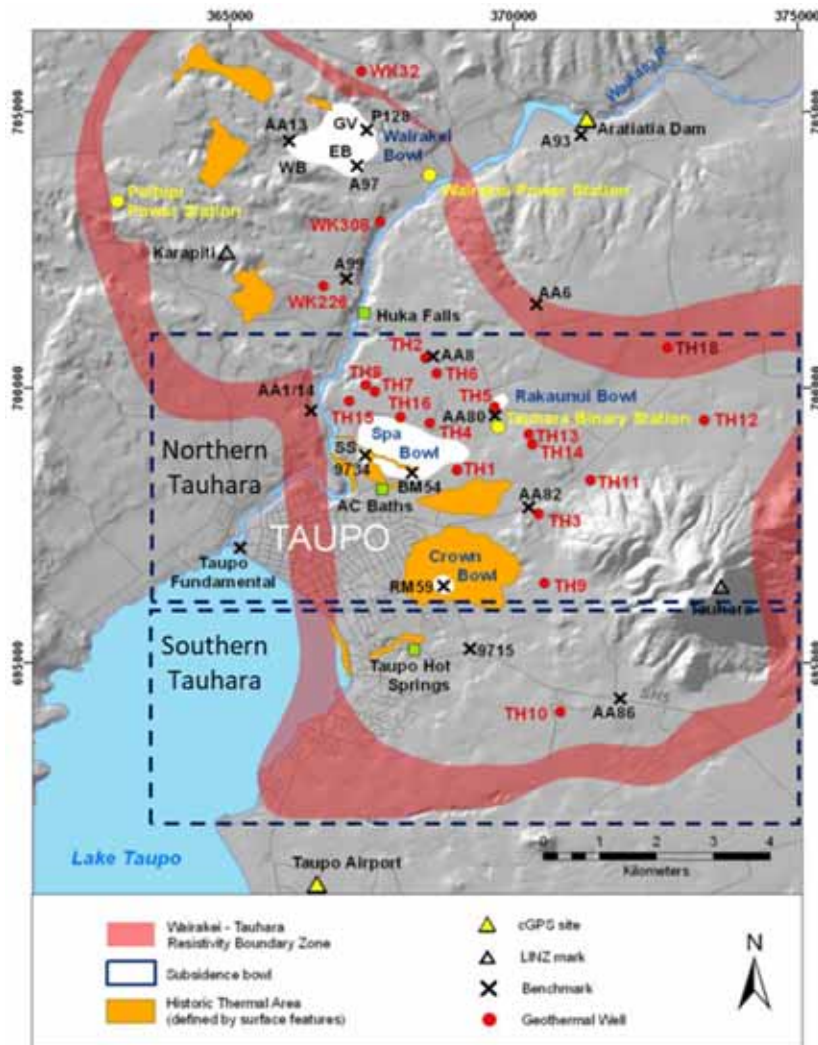
# Temperature contour maps





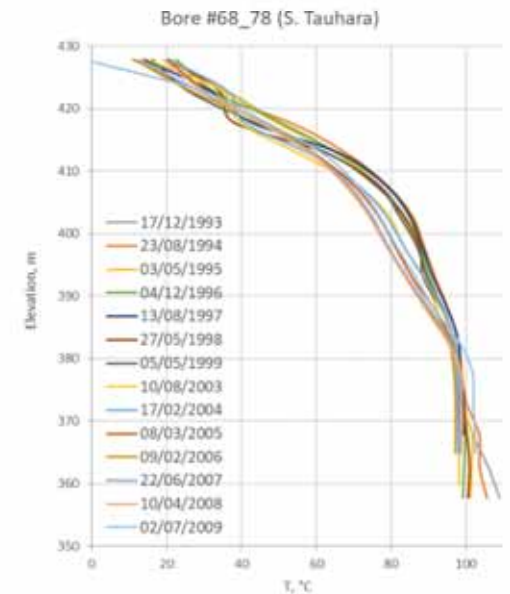
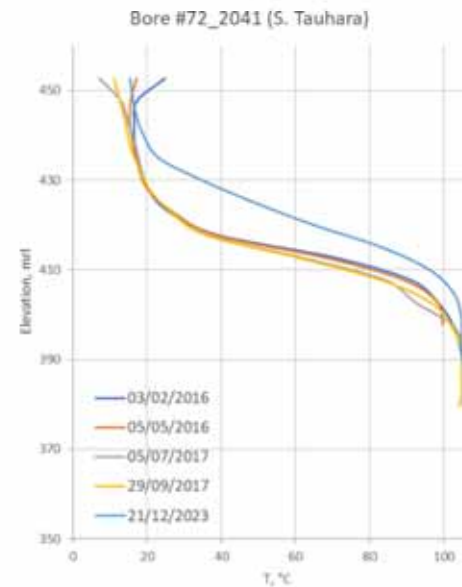
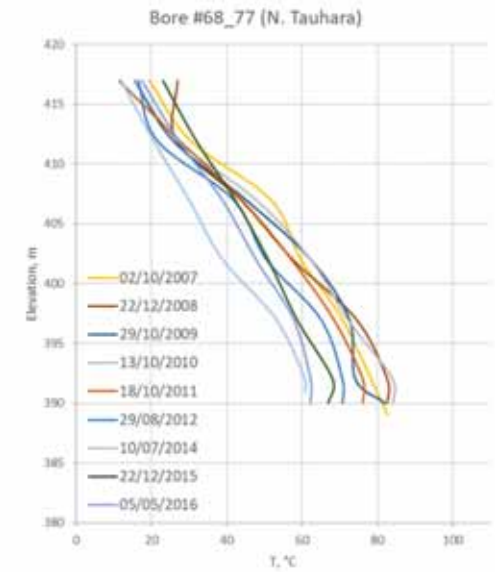
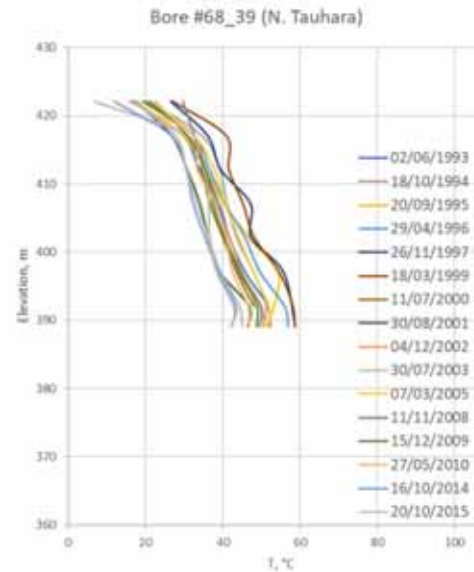
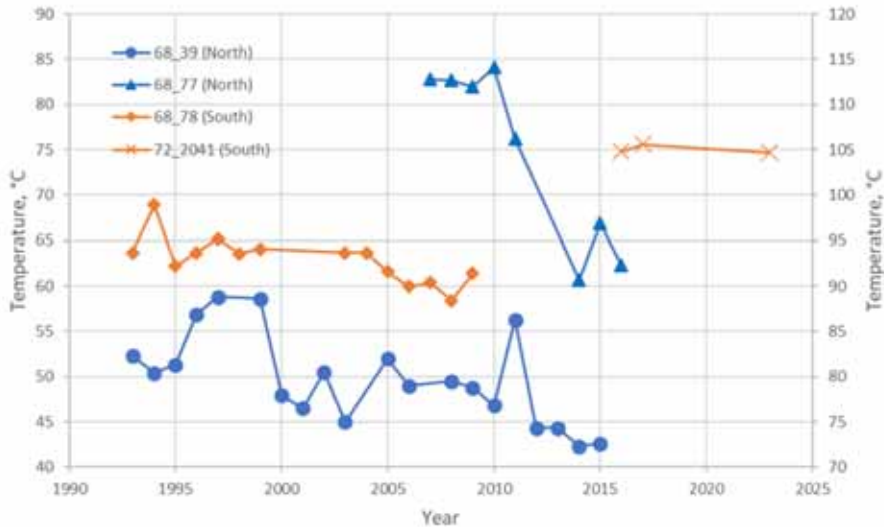


# Taupo Township:



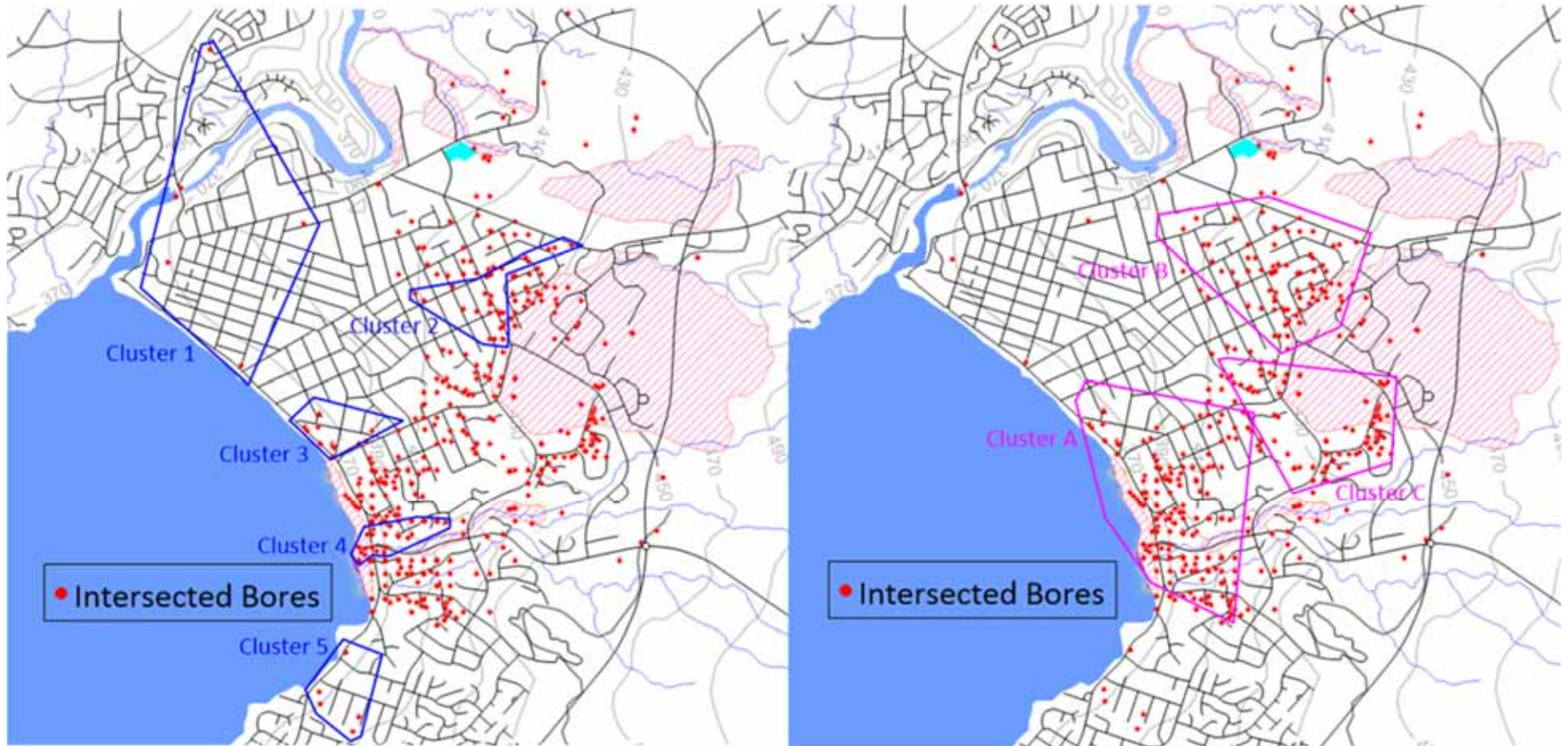
# Temperature Data (>280 wells)

Temperature Slice at 390mrl  
North Tauhara vs South Tauhara

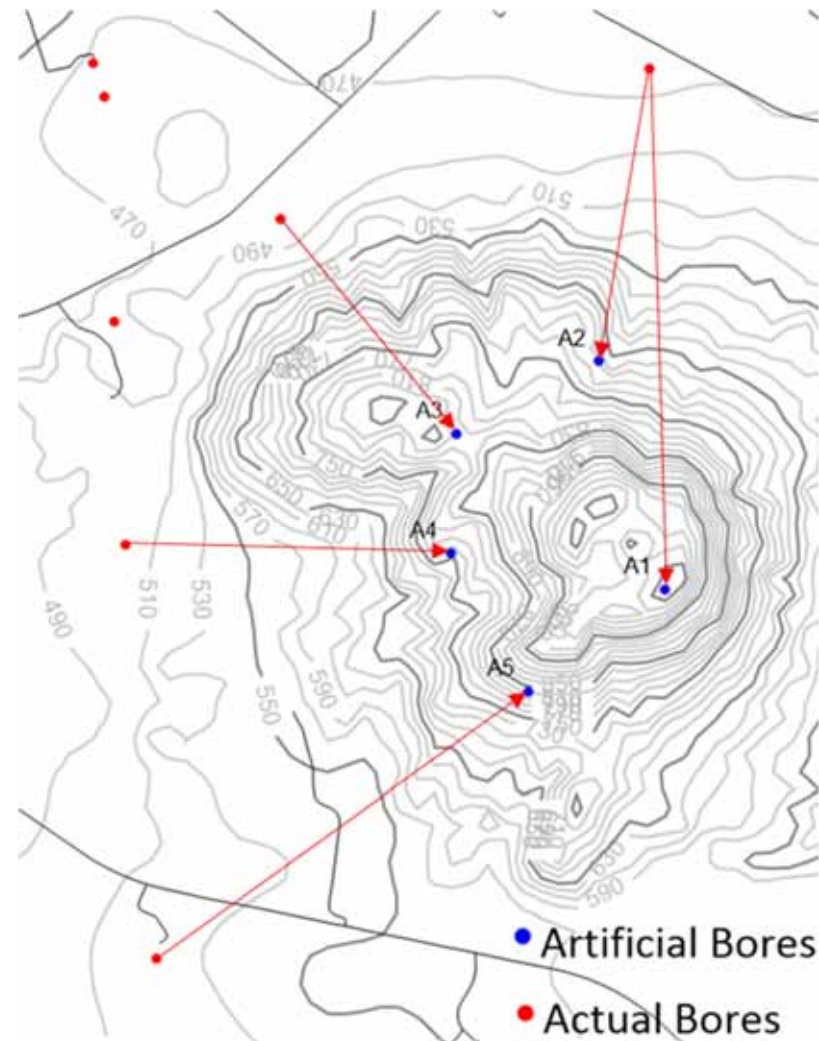




# Field work and data gathering

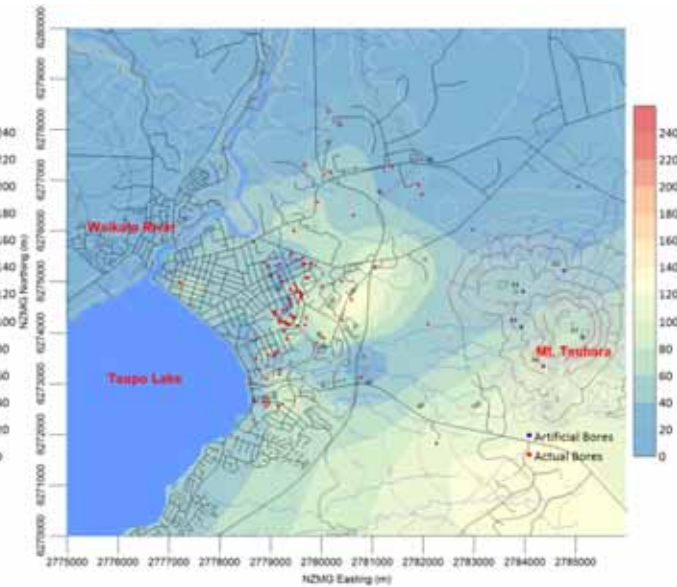
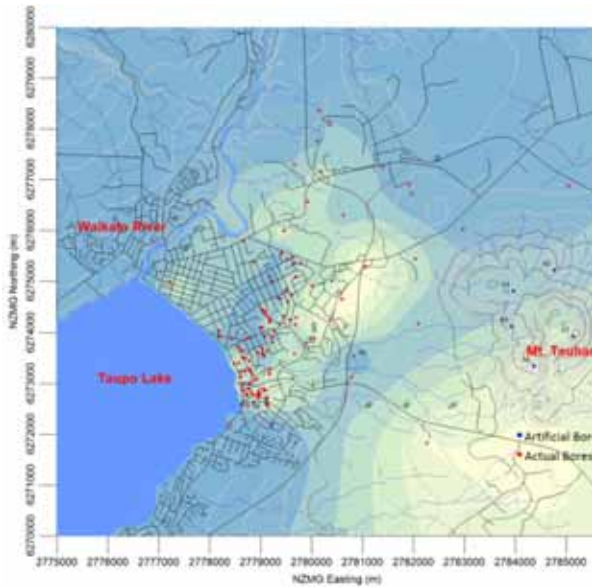
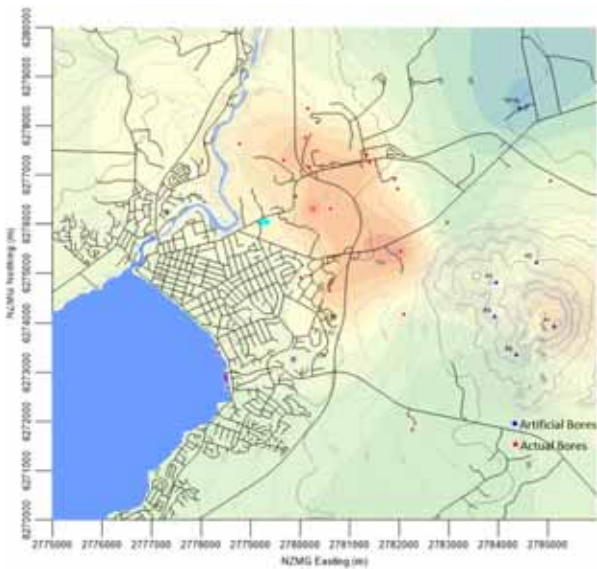
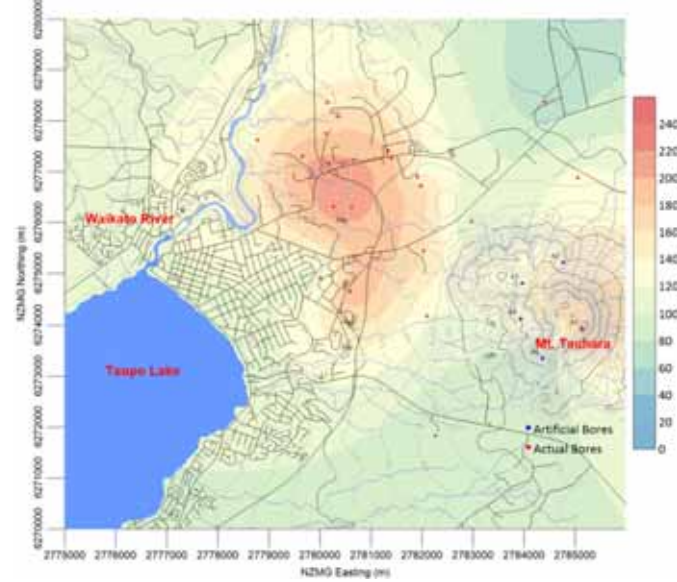
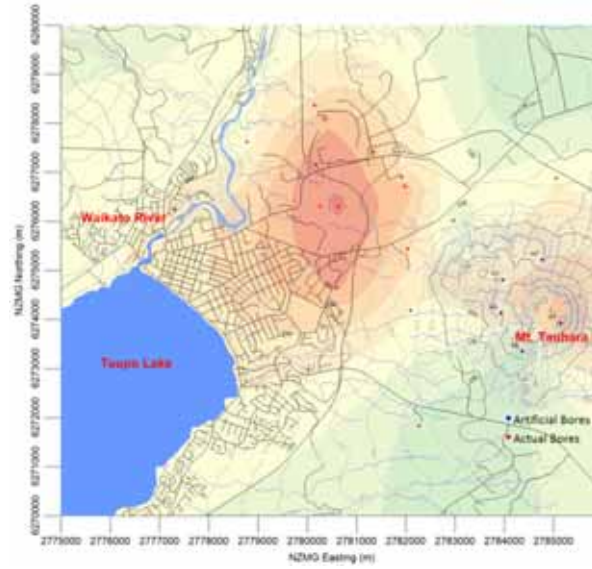
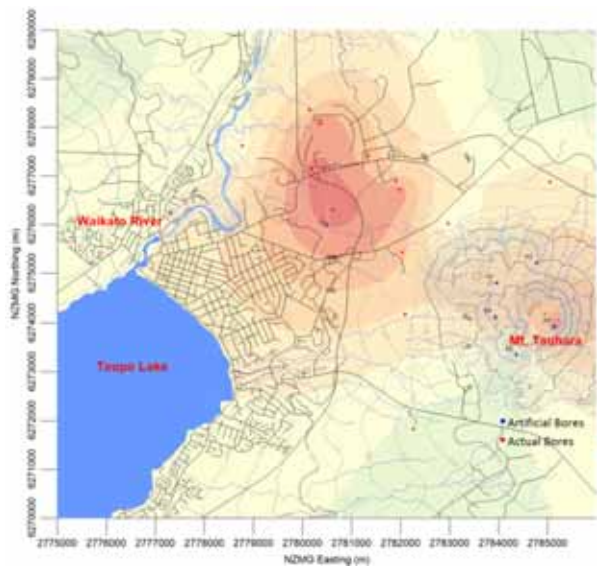


# Contour map constrains



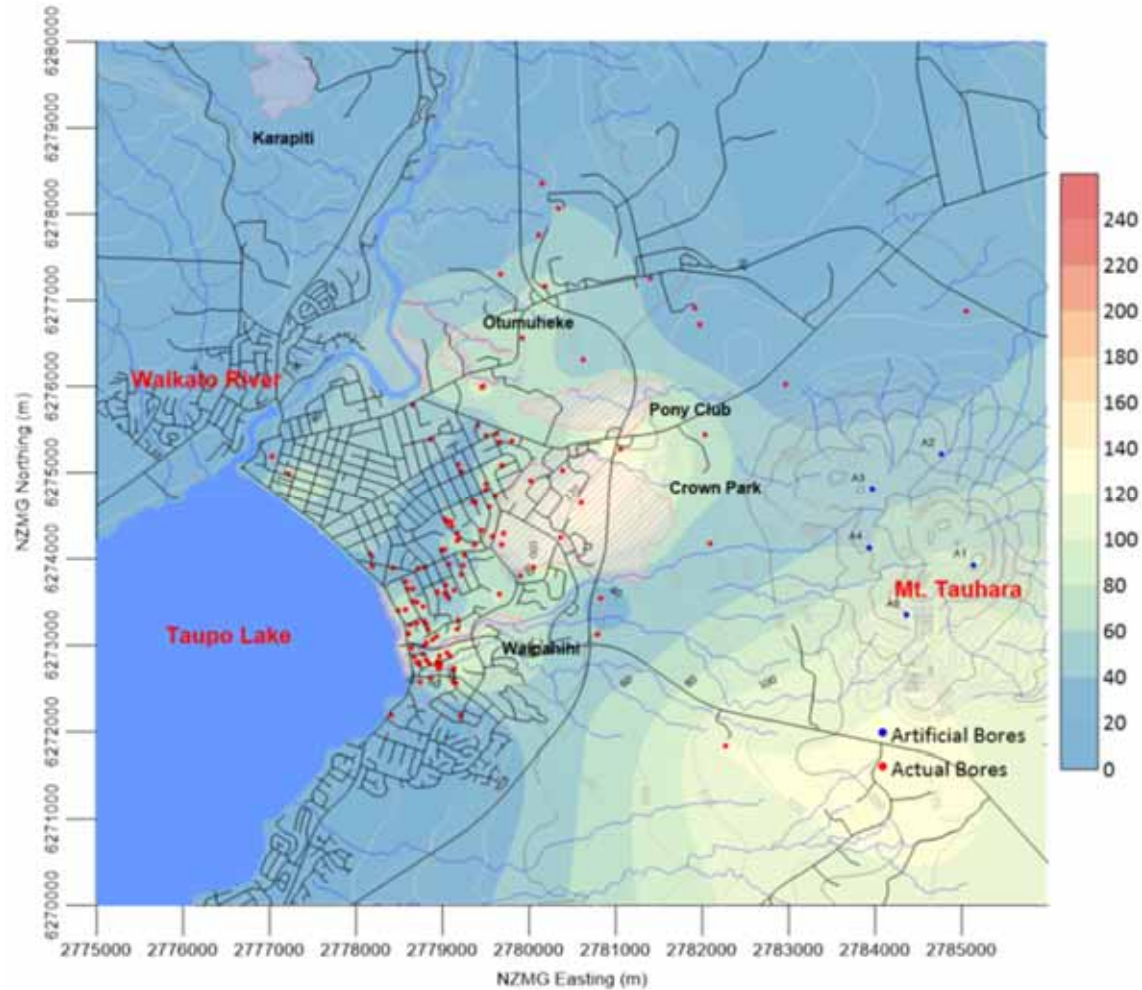


# Temperature Contour maps

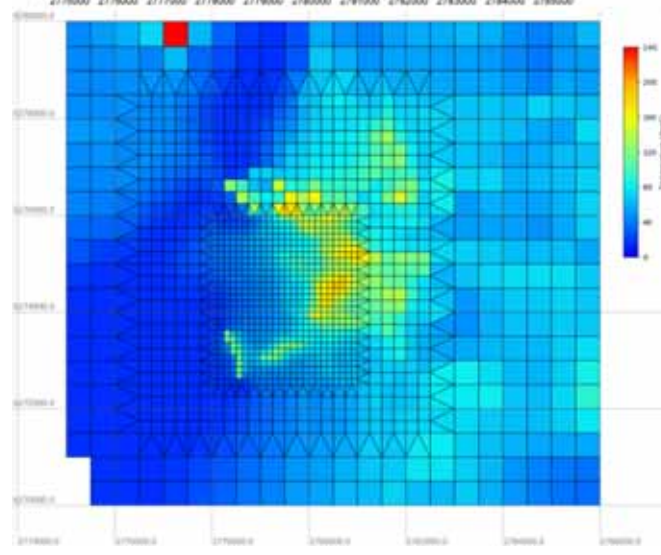
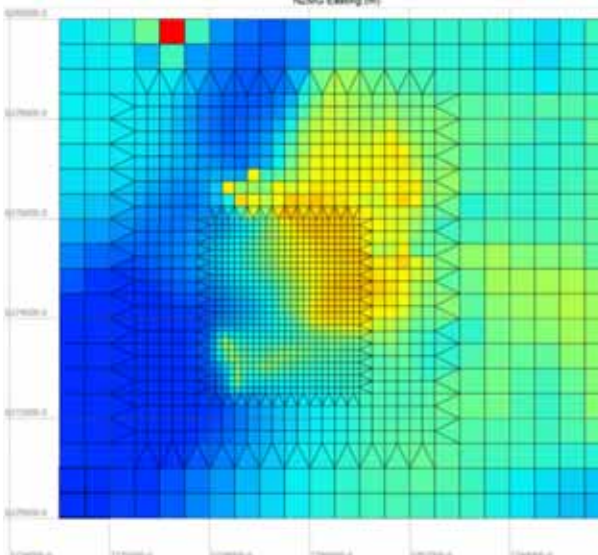
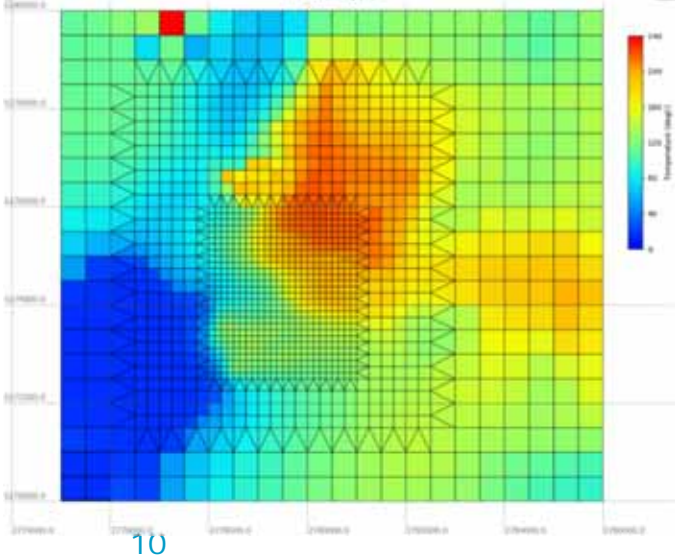
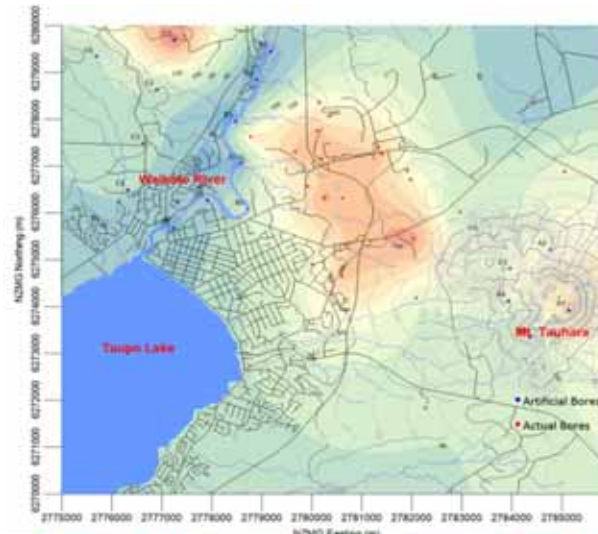
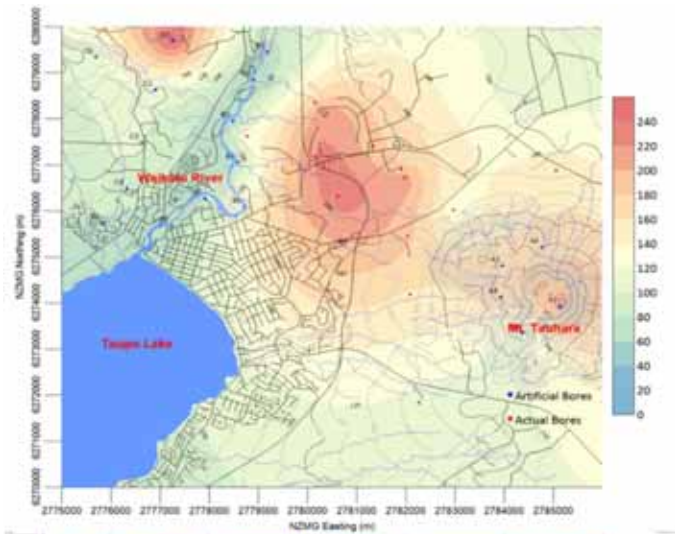




# Contour map

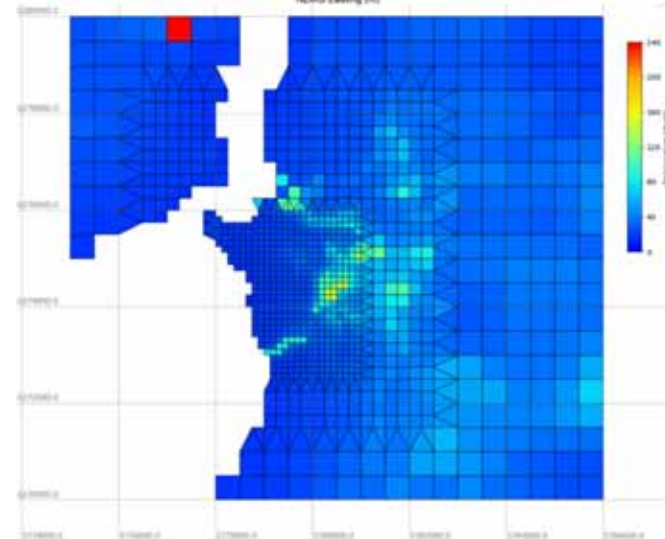
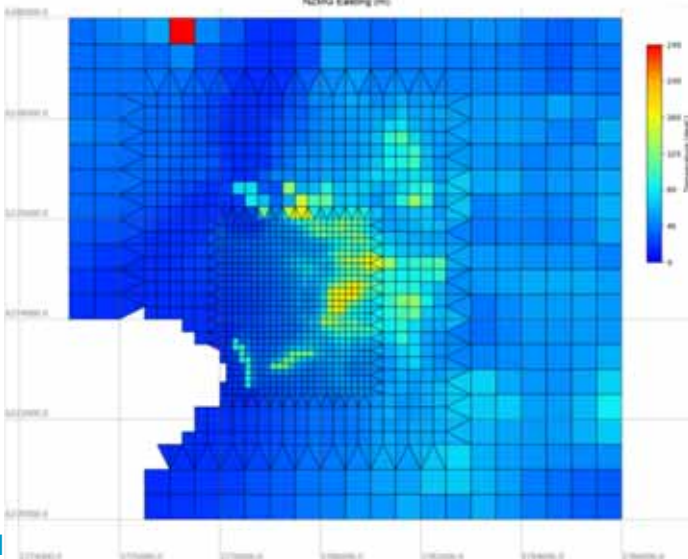
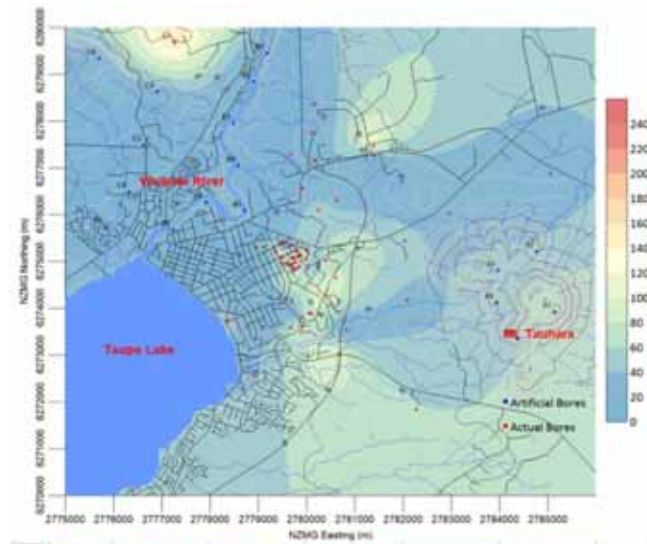
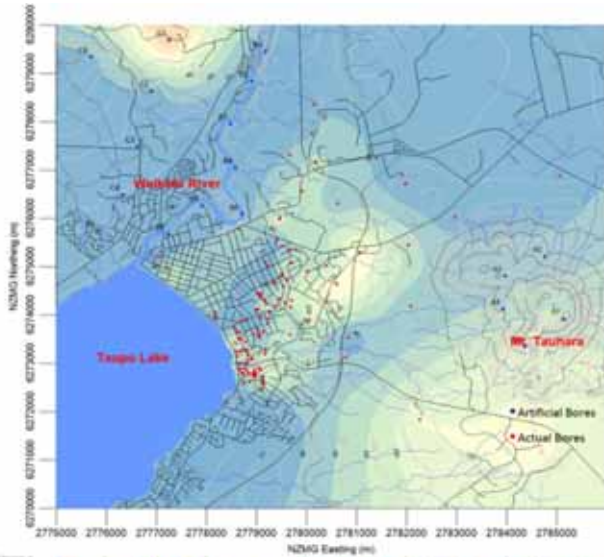


# Reservoir Modelling

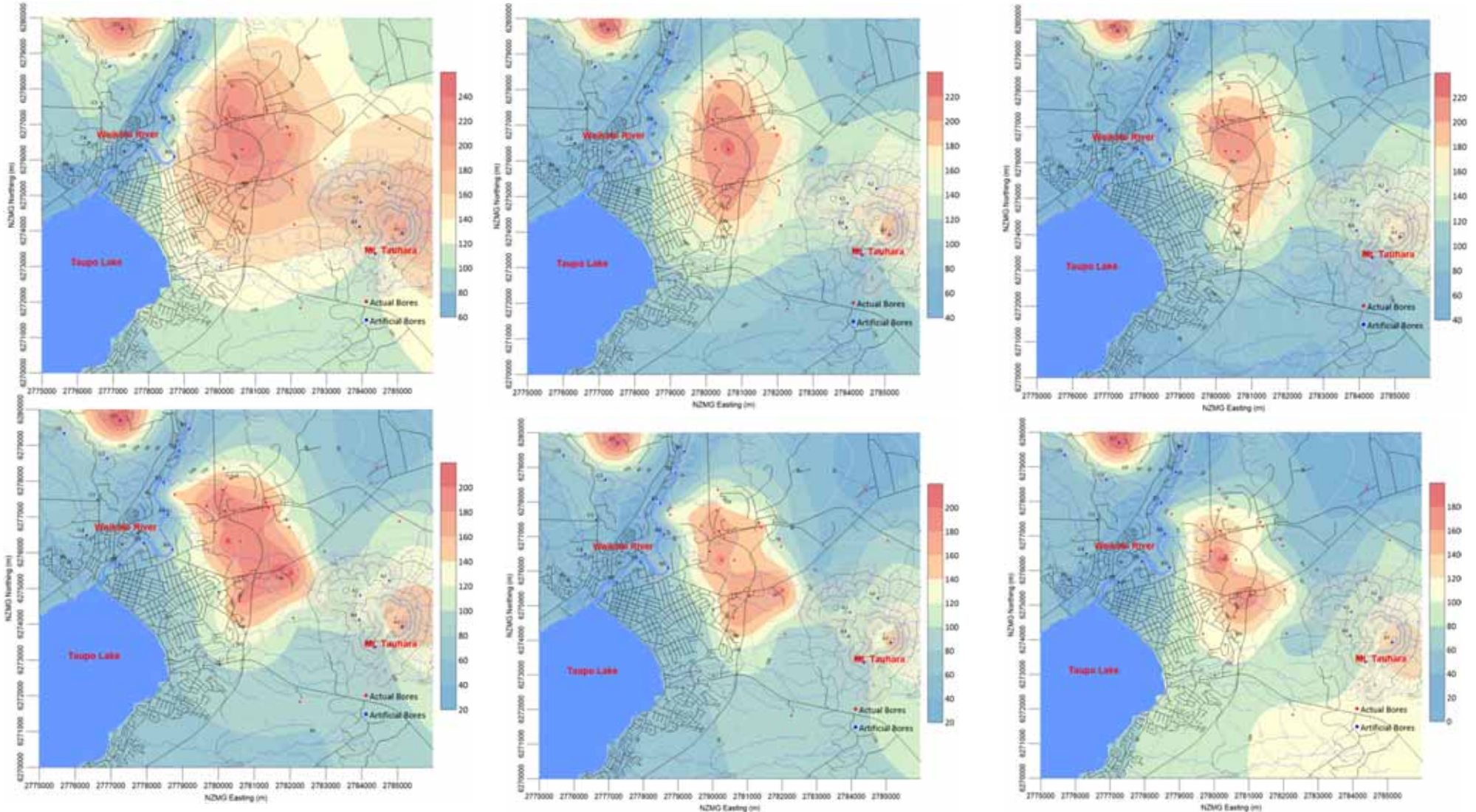




# Reservoir Modelling

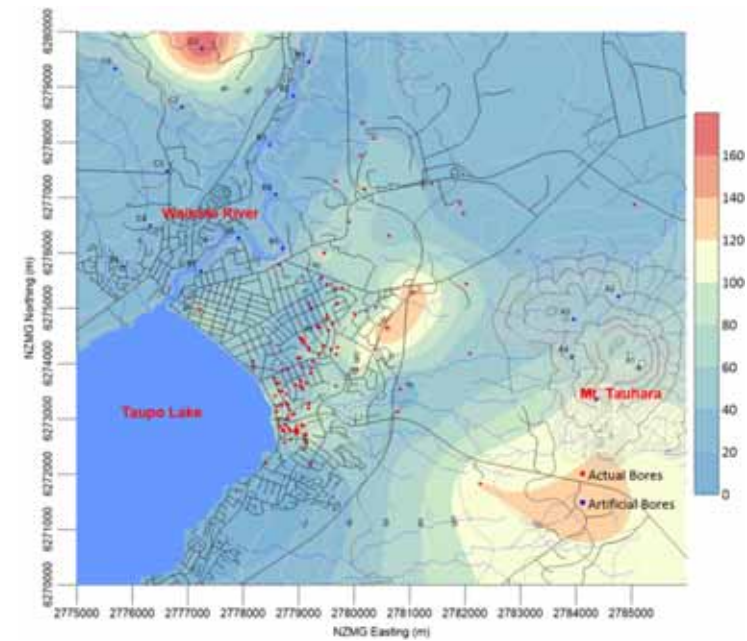
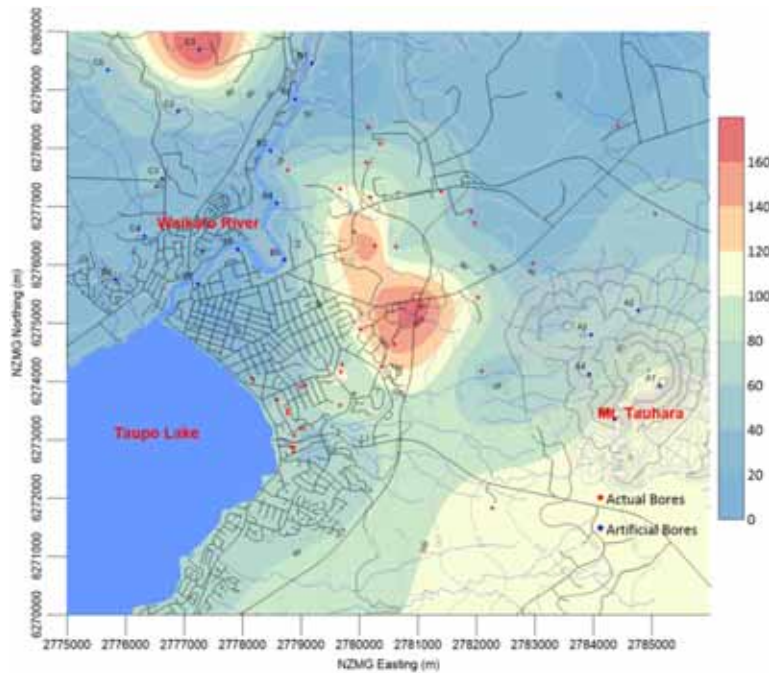


# Updated Contours

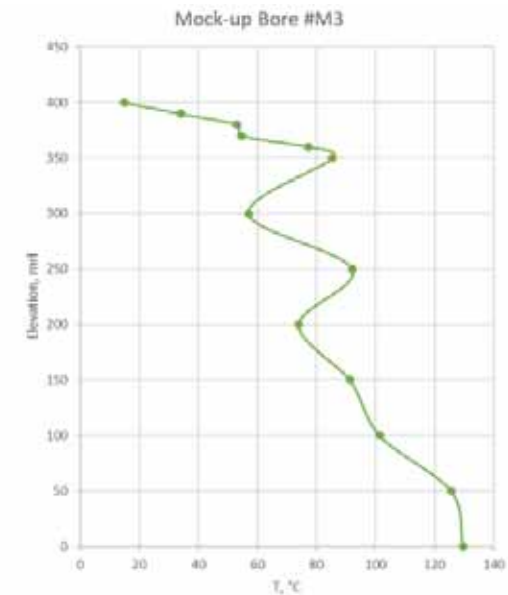
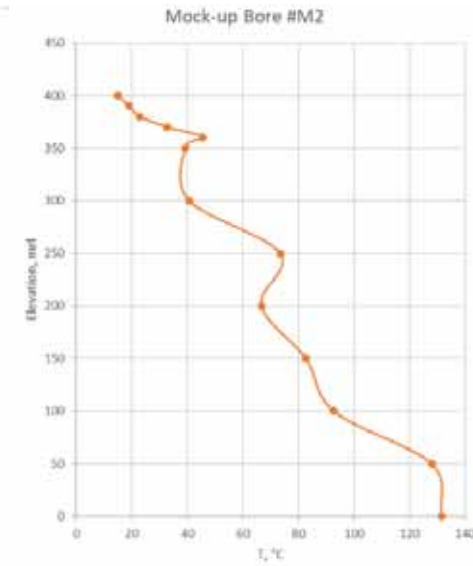
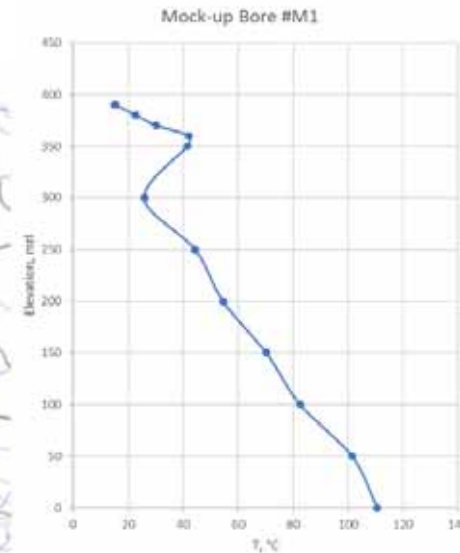
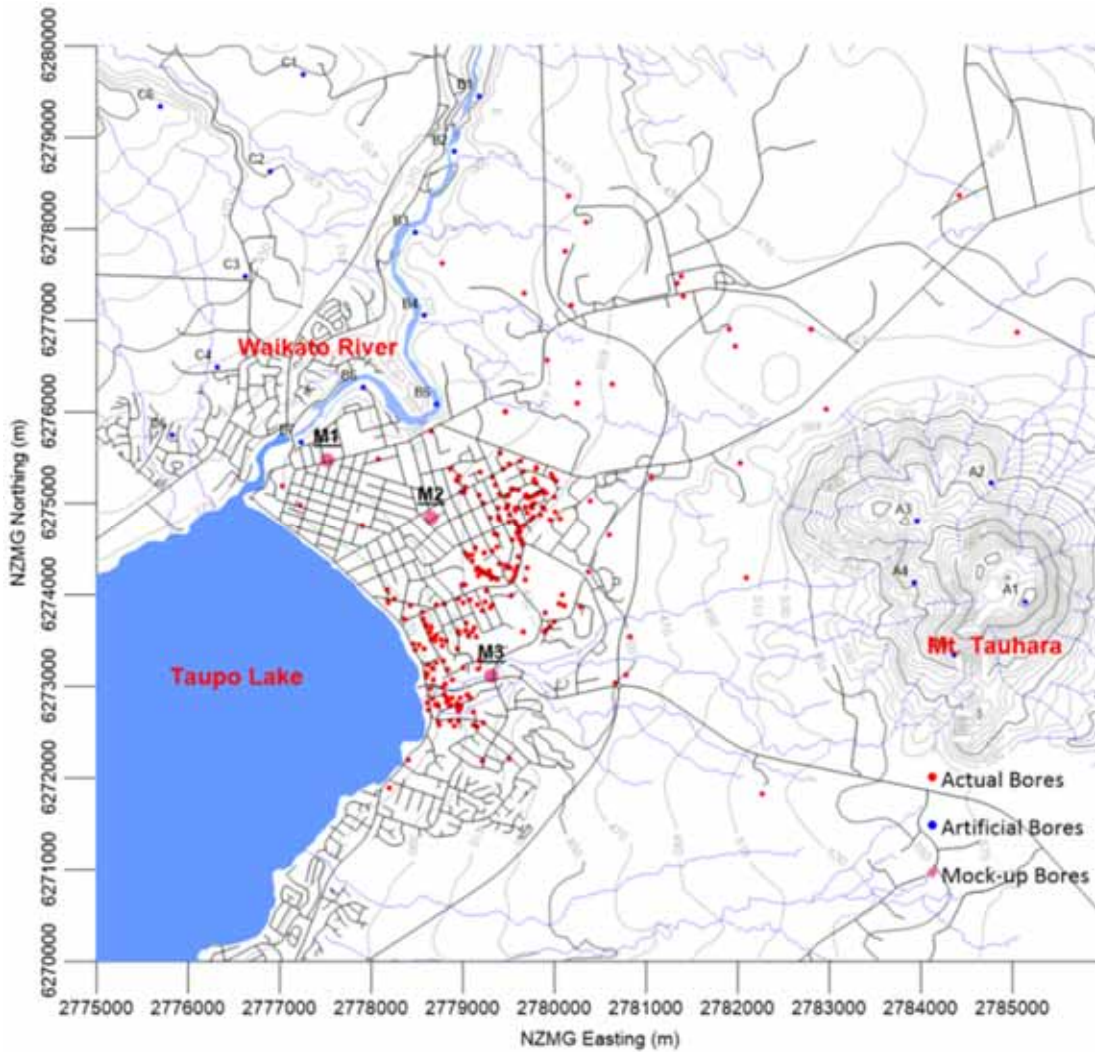




# Updated Contours



# Predicting future wells temperature





# Acknowledgments

Raymond Hendriawan

Eylem Kaya

Katherine Luketina (Waikato Regional Council)

Chris Bromley



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Thank You



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