

# **Appendix 2**

## **Temperature estimations at depth**

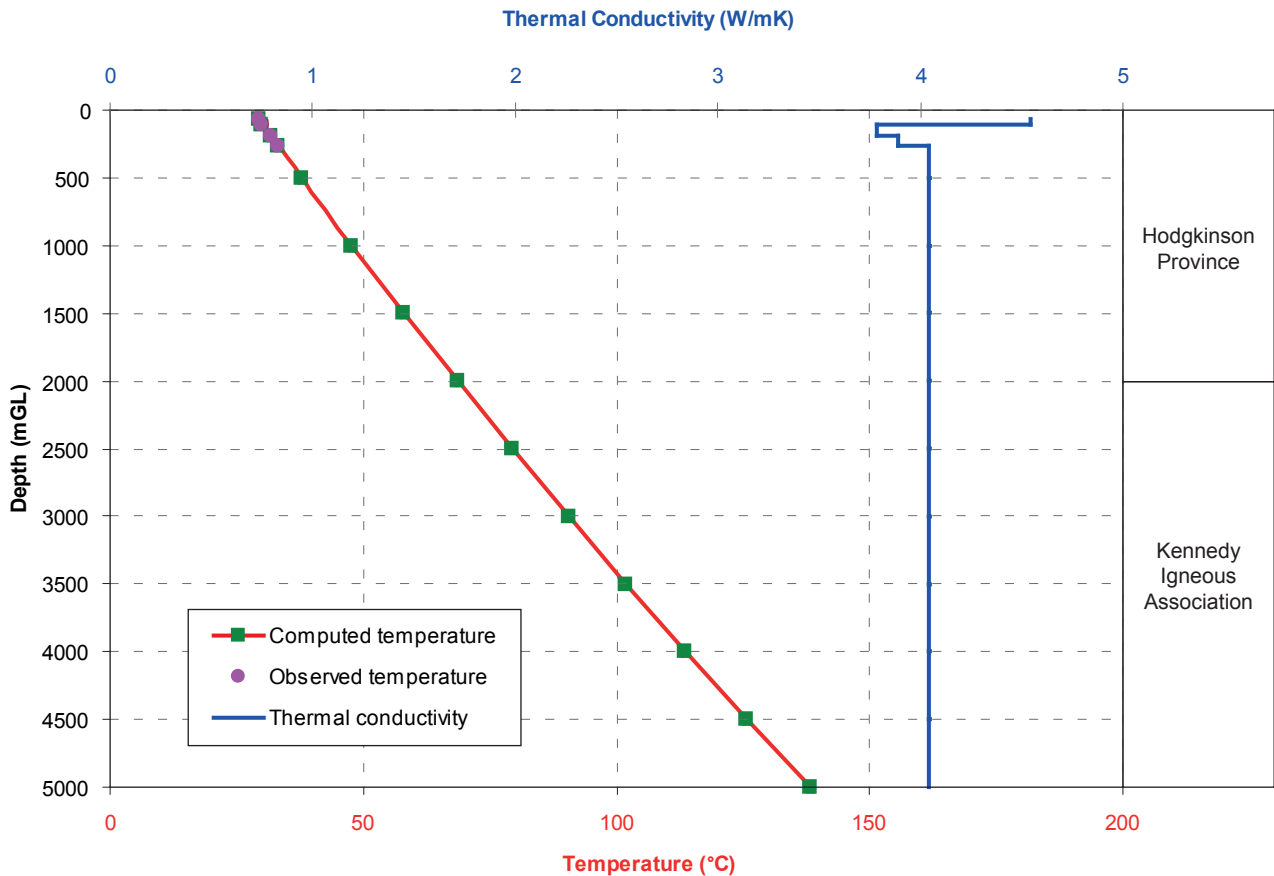
# GSQ Mossman 2–3R

## Temperature Estimation at Depth

Lat: -16.51797; Long: 145.03100 (GDA 94, Zone 55)

Total depth: 339.7 m

GSQ Mossman 2–3R		Depth to top of modelled interval (m): 62.00		
Heat Flow: $77.0 \pm 0.3$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Sandstone, siltstone	62.00	$4.54 \pm 0.15$	29.27	$29.27 \pm 0.00$
Sandstone, siltstone	103.13	$3.79 \pm 0.06$	29.95	$29.98 \pm 0.99$
Sandstone, mudstone	189.45	$3.89 \pm 0.07$	31.66	$31.76 \pm 0.47$
Greywacke	264.99	$4.04 \pm 0.05$	33.33	$33.28 \pm 0.38$
Greywacke	500.00	$4.04 \pm 0.05$		$37.88 \pm 0.32$
Greywacke	1000.00	$4.04 \pm 0.05$		$47.79 \pm 0.37$
Greywacke	1500.00	$4.04 \pm 0.05$		$57.99 \pm 0.38$
Greywacke	2000.00	$4.04 \pm 0.05$		$68.49 \pm 0.40$
Greywacke	2500.00	$4.04 \pm 0.05$		$79.30 \pm 0.42$
Greywacke	3000.00	$4.04 \pm 0.05$		$90.42 \pm 0.44$
Greywacke	3500.00	$4.04 \pm 0.05$		$101.86 \pm 0.47$
Greywacke	4000.00	$4.04 \pm 0.05$		$113.63 \pm 0.49$
Greywacke	4500.00	$4.04 \pm 0.05$		$125.73 \pm 0.51$
	5000.00			$138.18 \pm 0.53$

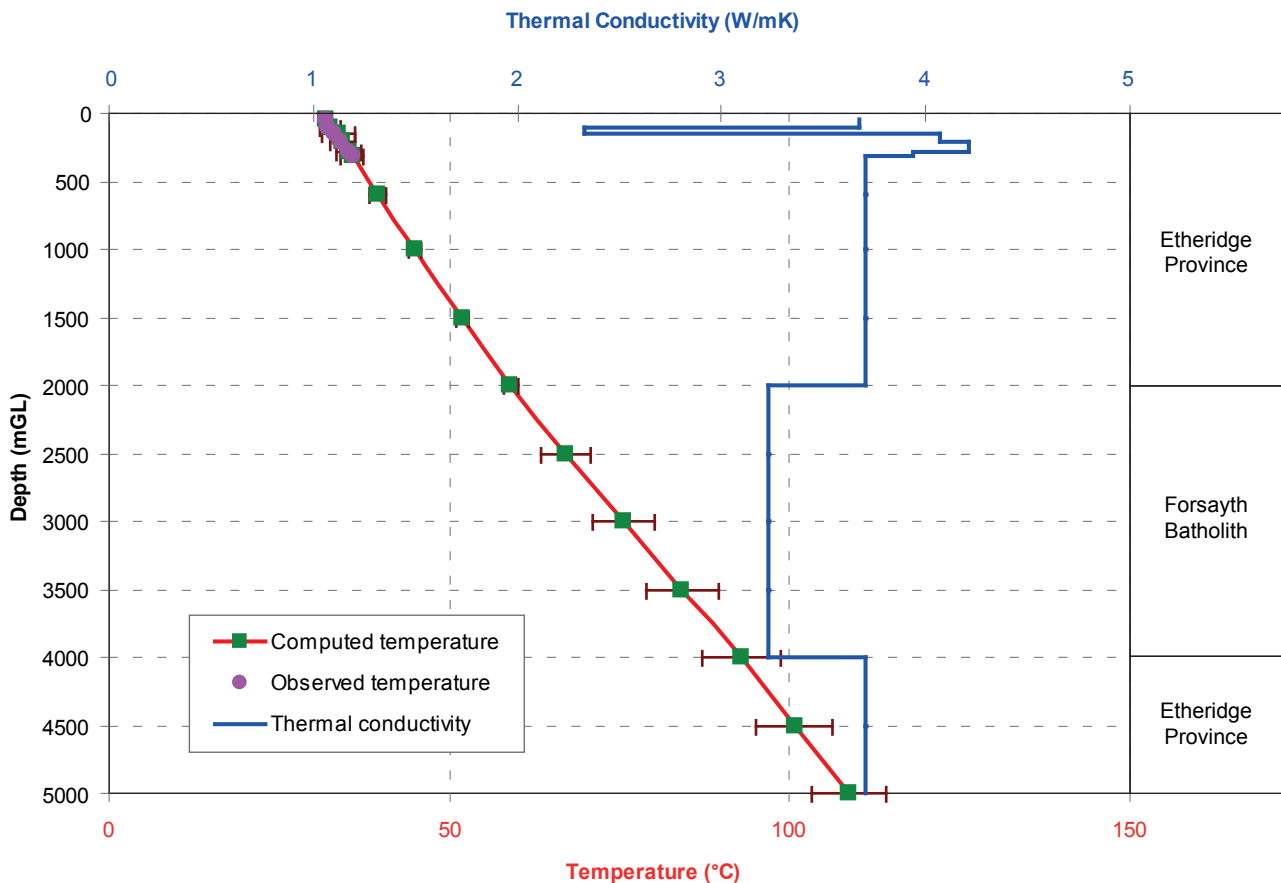


# GSQ Georgetown 8–9R

## Temperature Estimation at Depth

Lat: -18.40500; Long: 143.14150 (GDA 94, Zone 54)  
Total depth: 320.15 m

GSQ Georgetown 8–9R		Depth to top of modelled interval (m): 43.60		
Heat Flow: $48.5 \pm 2.4$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Sandstone, mudstone, siltstone	43.60	$3.67 \pm 0.17$	31.76	$31.76 \pm 0.00$
Sandstone, siltstone, mudstone	97.30	$2.33 \pm 0.26$	32.15	$32.48 \pm 1.50$
Sandstone, siltstone	154.37	$4.07 \pm 0.19$	32.99	$33.69 \pm 2.42$
Sandstone, siltstone, mudstone	209.85	$4.21 \pm 0.58$	33.93	$34.37 \pm 1.88$
Sandstone, siltstone	283.94	$3.94 \pm 0.12$	35.29	$35.24 \pm 1.89$
Metasediments	320.15	$3.70 \pm 0.13$	35.98	$35.71 \pm 1.70$
Metasediments	600.00	$3.70 \pm 0.13$		$39.50 \pm 1.17$
Metasediments	1000.00	$3.70 \pm 0.13$		$44.97 \pm 1.02$
Metasediments	1500.00	$3.70 \pm 0.13$		$51.91 \pm 1.00$
Granitoid	2000.00	$3.23 \pm 0.73$		$58.99 \pm 1.00$
Granitoid	2500.00	$3.23 \pm 0.73$		$67.21 \pm 3.63$
Granitoid	3000.00	$3.23 \pm 0.73$		$75.60 \pm 4.65$
Granitoid	3500.00	$3.23 \pm 0.73$		$84.16 \pm 5.33$
Metasediments	4000.00	$3.70 \pm 0.13$		$92.89 \pm 5.86$
Metasediments	4500.00	$3.70 \pm 0.13$		$100.76 \pm 5.65$
	5000.00			$108.77 \pm 5.48$

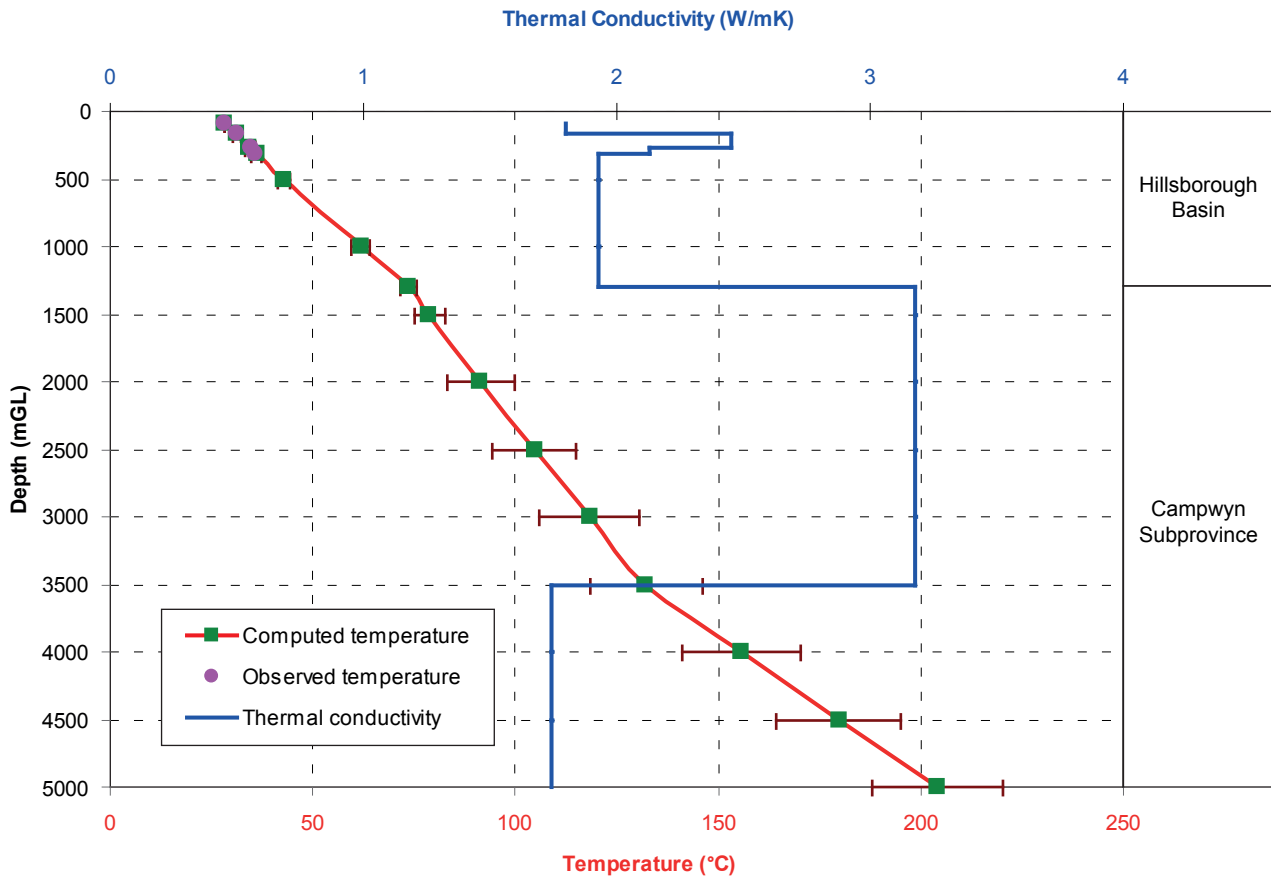


# GSQ Bowen 1

## Temperature Estimation at Depth

Lat: -20.28725; Long: 148.46589 (GDA 94, Zone 55)  
Total depth: 321 m

GSQ Bowen 1		Depth to top of modelled interval (m): 89.00		
Heat Flow: 71.0 ± 5.6 mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Mudstone, siltstone, sandstone, coal	89.00	1.80 ± 0.07	28.27	28.27 ± 0.00
Mudstone, sandstone, siltstone	164.19	2.45 ± 0.15	31.04	31.26 ± 1.22
Sandstone, mudstone, siltstone	274.19	2.13 ± 0.14	34.56	34.50 ± 1.27
Sandstone, mudstone, siltstone	320.71	1.93 ± 0.11	35.94	36.08 ± 1.17
Sandstone, mudstone, siltstone	500.00	1.93 ± 0.11		42.81 ± 1.35
Sandstone, mudstone, siltstone	1000.00	1.93 ± 0.11		61.82 ± 2.17
Sandstone, mudstone, siltstone	1300.00	3.18 ± 1.26		73.60 ± 2.20
Sandstone	1500.00	3.18 ± 1.26		78.66 ± 3.78
Sandstone	2000.00	3.18 ± 1.26		91.46 ± 8.14
Sandstone	2500.00	3.18 ± 1.26		104.64 ± 10.51
Sandstone	3000.00	3.18 ± 1.26		118.21 ± 12.31
Basalt	3500.00	1.74 ± 0.36		132.16 ± 13.84
Basalt	4000.00	1.74 ± 0.36		155.65 ± 14.56
Basalt	4500.00	1.74 ± 0.36		179.70 ± 15.32
	5000.00			204.28 ± 16.11

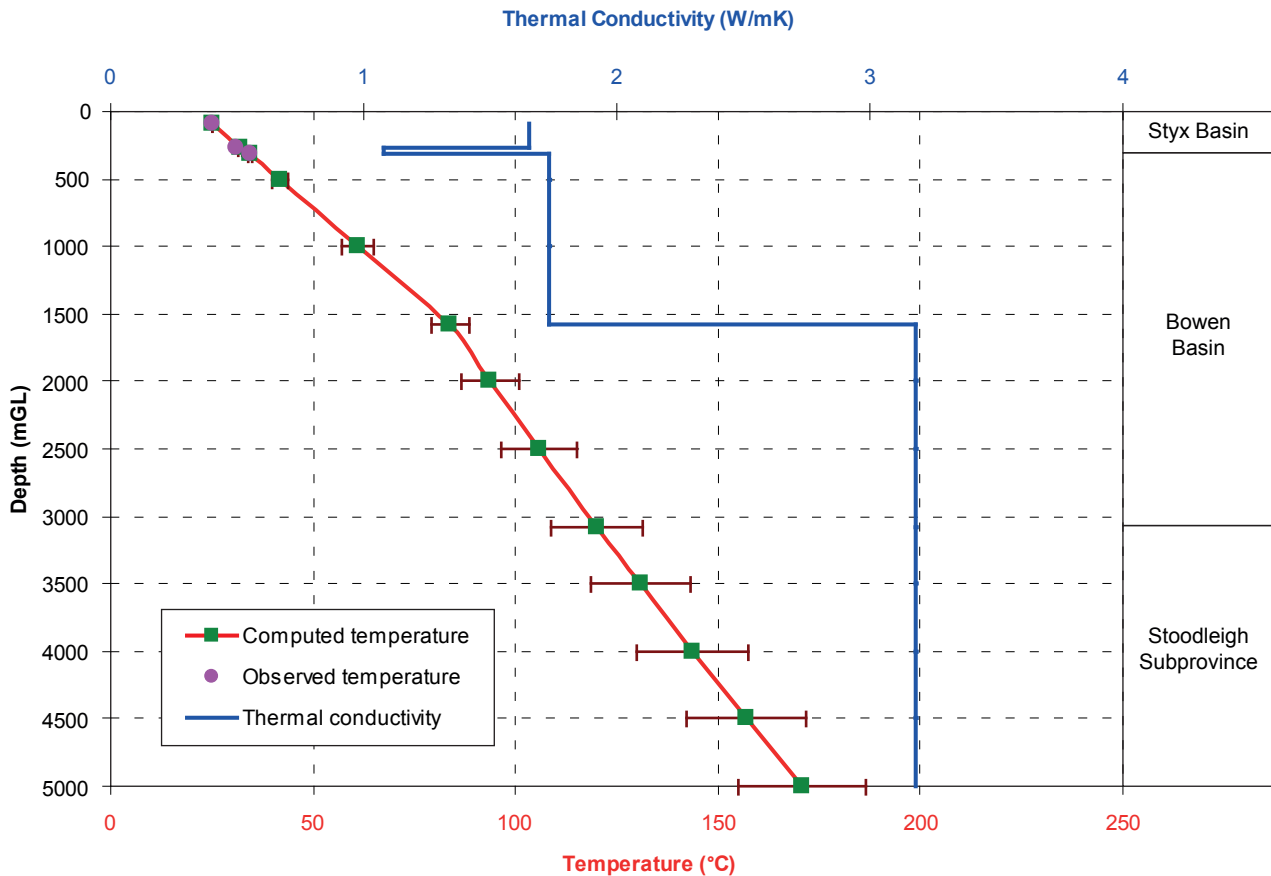


# GSQ St Lawrence 1

## Temperature Estimation at Depth

Lat: -22.64077; Long: 149.66777 (GDA 94, Zone 55)  
Total depth: 340 m

GSQ St Lawrence 1		Depth to top of modelled interval (m): 90.15		
Heat Flow: $64.5 \pm 6.0$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Sandstone, mudstone, coal	90.15	$1.65 \pm 0.03$	25.07	$25.07 \pm 0.00$
Sandstone, mudstone, coal	264.50	$1.08 \pm 0.03$	31.23	$31.89 \pm 0.58$
Mudstone	310.77	$1.73 \pm 0.19$	34.69	$34.65 \pm 0.53$
Mudstone	500.00	$1.73 \pm 0.19$		$41.82 \pm 2.00$
Mudstone	1000.00	$1.73 \pm 0.19$		$60.96 \pm 3.82$
Sandstone	1580.00	$3.18 \pm 1.26$		$83.80 \pm 4.81$
Sandstone	2000.00	$3.18 \pm 1.26$		$93.69 \pm 7.06$
Sandstone	2500.00	$3.18 \pm 1.26$		$105.73 \pm 9.22$
Sandstone	3080.00	$3.18 \pm 1.26$		$120.05 \pm 11.42$
Sandstone	3500.00	$3.18 \pm 1.26$		$130.74 \pm 12.35$
Sandstone	4000.00	$3.18 \pm 1.26$		$143.74 \pm 13.60$
Sandstone	4500.00	$3.18 \pm 1.26$		$157.07 \pm 14.77$
	5000.00			$170.74 \pm 15.87$

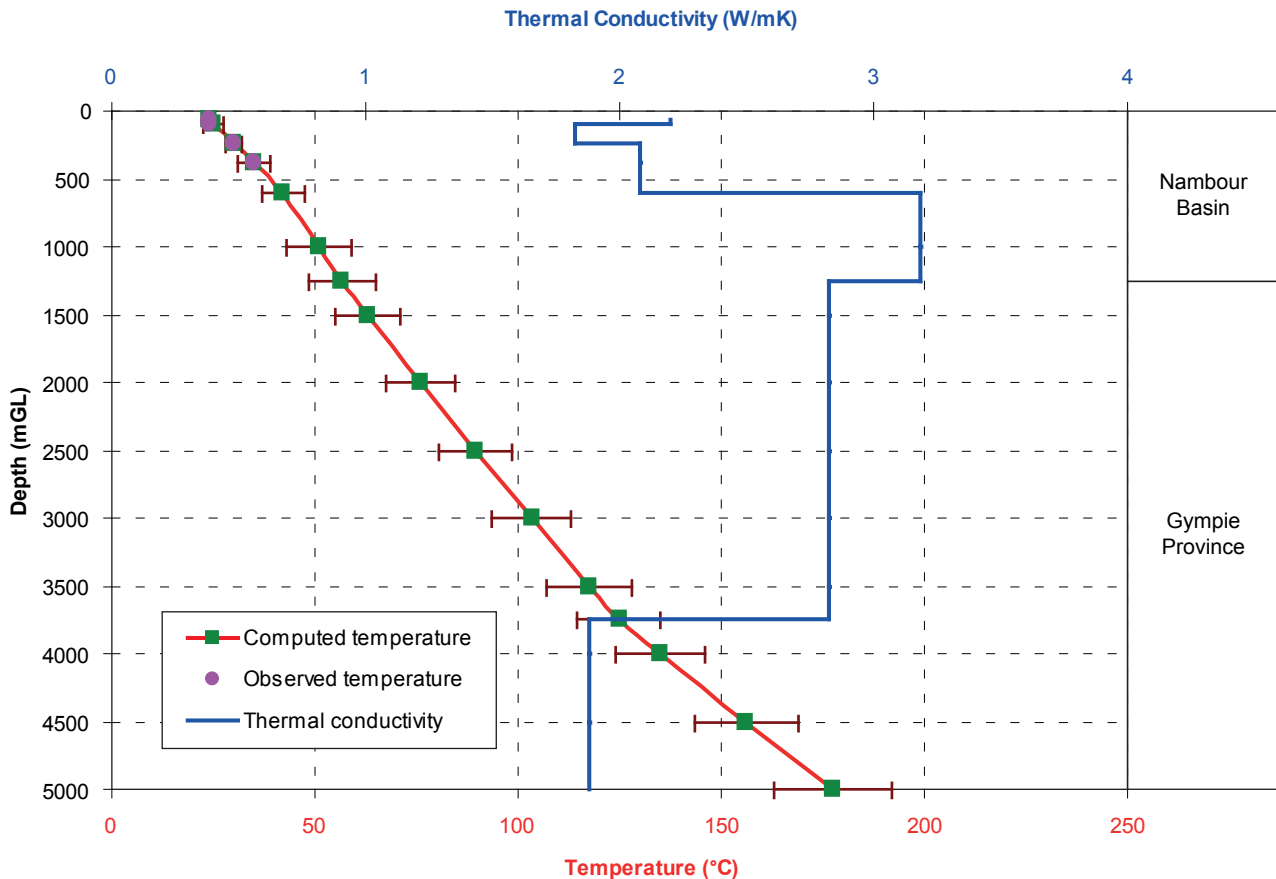


# GSQ Maryborough 16

## Temperature Estimation at Depth

Lat: -25.84517; Long: 152.44472 (GDA 94, Zone 56)  
Total depth: 387.4 m

GSQ Maryborough 16		Depth to top of modelled interval (m): 61.20		
Heat Flow: $67.0 \pm 5.3$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Sandstone/mudstone	61.20	$2.20 \pm 0.24$	23.96	$23.96 \pm 0.00$
Sandstone/mudstone/coal	95.14	$1.82 \pm 0.14$	23.99	$24.99 \pm 2.73$
Sandstone/mudstone	236.36	$2.08 \pm 0.10$	30.11	$30.18 \pm 2.01$
Sandstone/mudstone	380.50	$2.08 \pm 0.10$	34.86	$34.87 \pm 4.11$
Sandstone	600.00	$3.18 \pm 1.26$		$42.09 \pm 5.27$
Sandstone	1000.00	$3.18 \pm 1.26$		$50.92 \pm 7.88$
Siltstone	1250.00	$2.82 \pm 0.68$		$56.56 \pm 8.21$
Siltstone	1500.00	$2.82 \pm 0.68$		$62.99 \pm 8.04$
Siltstone	2000.00	$2.82 \pm 0.68$		$76.03 \pm 8.60$
Siltstone	2500.00	$2.82 \pm 0.68$		$89.45 \pm 9.18$
Siltstone	3000.00	$2.82 \pm 0.68$		$103.26 \pm 9.77$
Siltstone	3500.00	$2.82 \pm 0.68$		$117.47 \pm 10.36$
Slate	3750.00	$1.88 \pm 0.54$		$124.77 \pm 10.44$
Slate	4000.00	$1.88 \pm 0.54$		$135.11 \pm 10.87$
Slate	4500.00	$1.88 \pm 0.54$		$156.06 \pm 12.73$
	5000.00			$177.50 \pm 14.35$

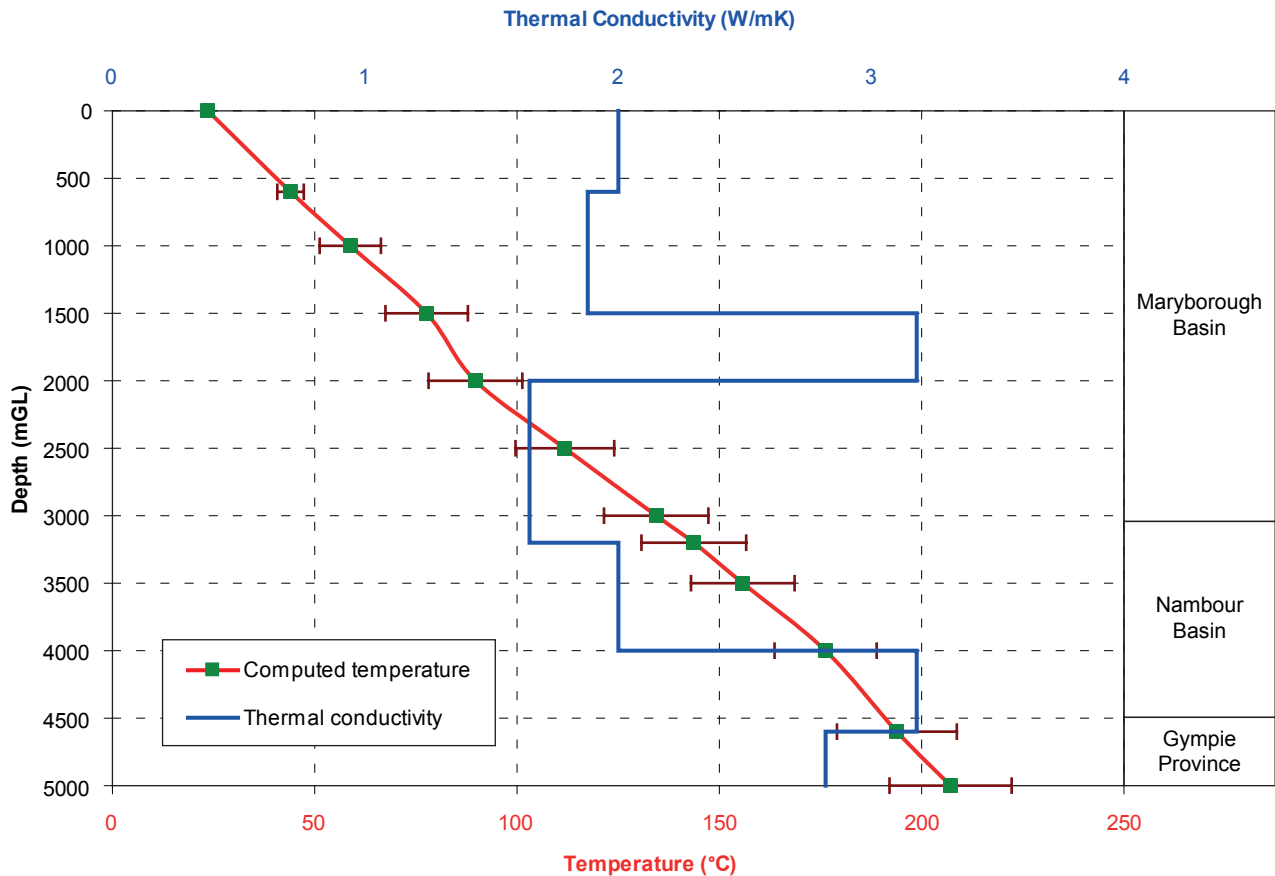


# GSQ Maryborough 16

## Temperature Estimation at Depth\*\* (inferred resource area)

GSQ Maryborough 16		Depth to top of modelled interval (m): 0.00		
Heat Flow: $67.0 \pm 4.9 \text{ mW/m}^2$		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Mudstone	0.00	$2.00 \pm 0.15$		$23.59 \pm 0.00$
Mudstone	600.00	$1.88 \pm 0.54$		$44.02 \pm 3.30$
Mudstone	1000.00	$1.88 \pm 0.54$		$58.76 \pm 7.59$
Sandstone	1500.00	$3.18 \pm 1.26$		$77.65 \pm 10.19$
Andesite	2000.00	$1.65 \pm 0.33$		$89.70 \pm 11.61$
Andesite	2500.00	$1.65 \pm 0.33$		$111.80 \pm 12.21$
Andesite	3000.00	$1.65 \pm 0.33$		$134.43 \pm 12.90$
Siltstone/Coal	3200.00	$2.00 \pm 0.15$		$143.68 \pm 12.92$
Siltstone/Coal	3500.00	$2.00 \pm 0.15$		$155.79 \pm 12.77$
Sandstone	4000.00	$3.18 \pm 1.26$		$176.25 \pm 12.63$
Siltstone	4600.00	$2.82 \pm 0.68$		$193.88 \pm 14.78$
	5000.00			$207.16 \pm 15.09$

\*\* GSQ Maryborough 16 heat flow value was used to extrapolate temperatures within the northern Maryborough Basin (inferred resource area)

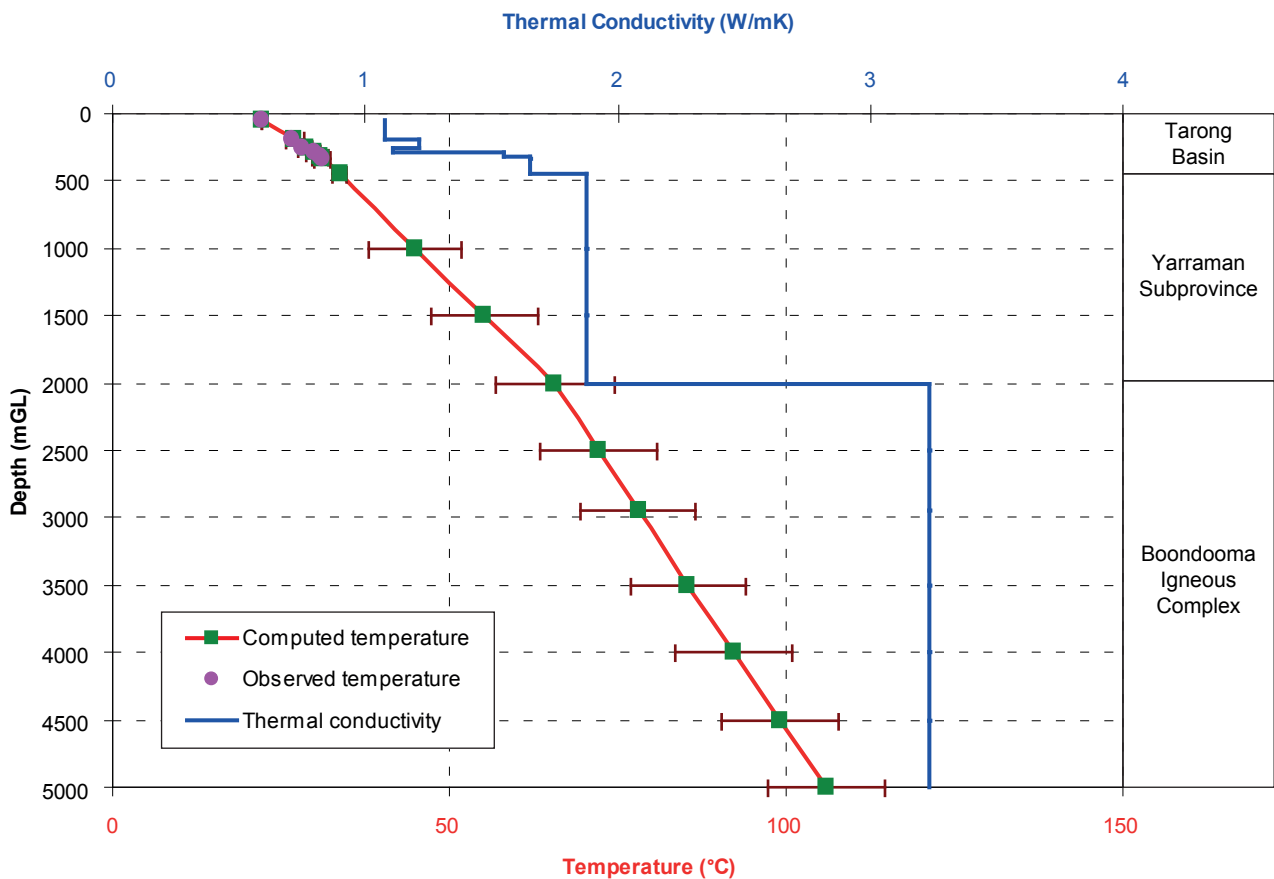


# GSQ Gympie 7

## Temperature Estimation at Depth

Lat: -26.69179; Long: 151.86641 (GDA 94, Zone 56)  
Total depth: 338.6 m

GSQ Gympie 7		Depth to top of modelled interval (m): 54.10		
Heat Flow: $37.5 \pm 3.1$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Sandstone, mudstone, coal, tuff	54.10	$1.08 \pm 0.05$	22.12	$22.12 \pm 0.00$
Mudstone, sandstone, siltstone, tuff, coal	196.57	$1.21 \pm 0.06$	26.57	$27.07 \pm 1.25$
Mudstone, sandstone, coal, tuff	247.12	$1.11 \pm 0.07$	28.26	$28.63 \pm 1.06$
Mudstone, sandstone, conglomerate, tuff	281.86	$1.55 \pm 0.38$	29.83	$29.81 \pm 0.98$
Sandstone, mudstone	324.14	$1.65 \pm 0.07$	30.83	$30.84 \pm 1.26$
Mudstone	337.75	$1.65 \pm 0.07$	31.14	$31.15 \pm 1.23$
Slate	450.00	$1.88 \pm 0.59$		$33.72 \pm 1.09$
Slate	1000.00	$1.88 \pm 0.59$		$44.87 \pm 6.94$
Slate	1500.00	$1.88 \pm 0.59$		$55.20 \pm 7.98$
Granite	2000.00	$3.23 \pm 0.73$		$65.71 \pm 8.76$
Granite	2500.00	$3.23 \pm 0.73$		$72.17 \pm 8.64$
Granite	2950.00	$3.23 \pm 0.73$		$78.08 \pm 8.57$
Granite	3500.00	$3.23 \pm 0.73$		$85.40 \pm 8.58$
Granite	4000.00	$3.23 \pm 0.73$		$92.17 \pm 8.60$
Granite	4500.00	$3.23 \pm 0.73$		$99.05 \pm 8.65$
	5000.00			$106.03 \pm 8.72$



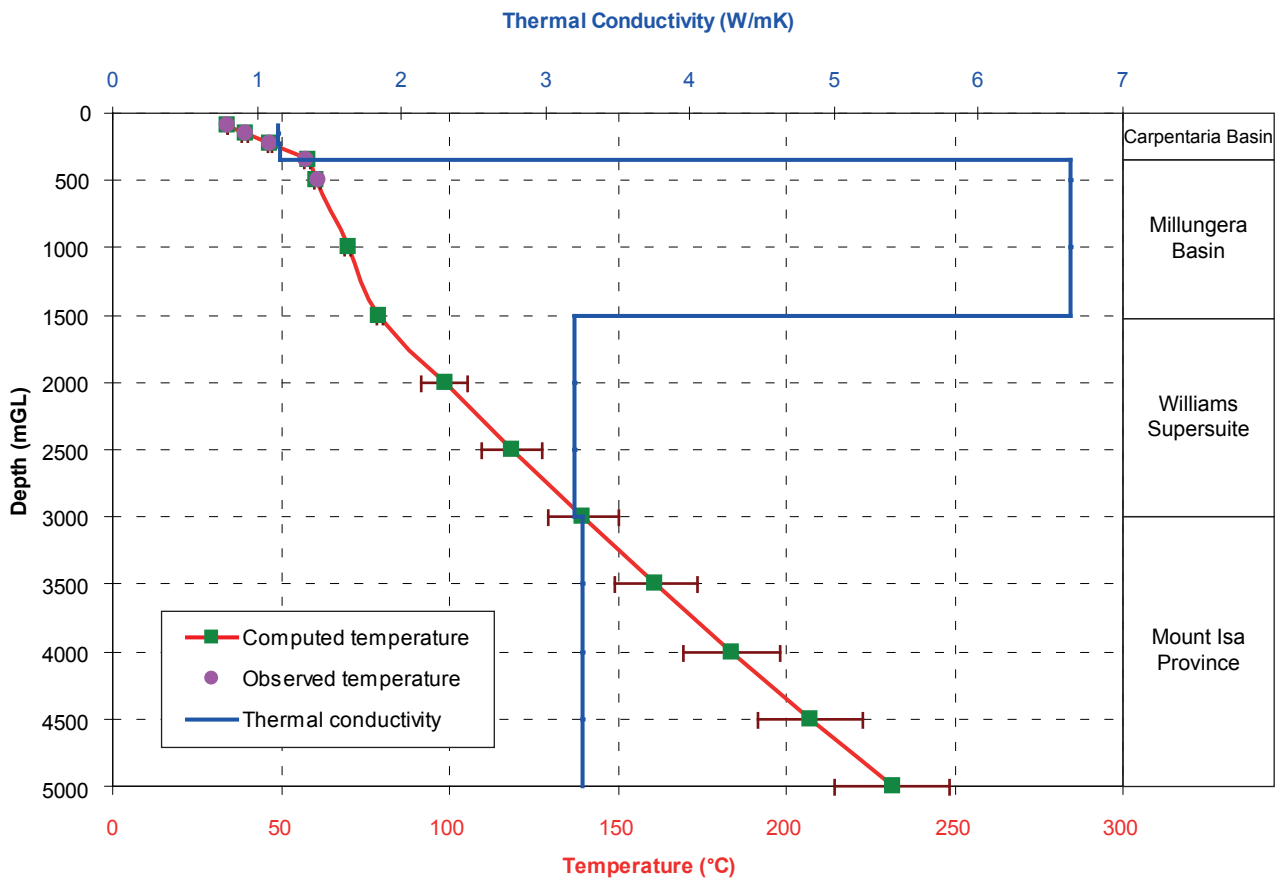


# GSQ Dobbyn 2

## Temperature Estimation at Depth (Area A)

Lat: -19.54532; Long: 140.88399 (GDA 94, Zone 54)  
Total depth: 500.04 m

GSQ Dobbyn 2		Depth to top of modelled interval (m): 90.52		
Heat Flow: 107.5 ± 8.0 mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Mudstone, sandstone	90.52	1.14 ± 0.02	34.00	34.00 ± 0.00
Mudstone, calc mudstone, sandstone	146.60	1.14 ± 0.02	39.59	39.30 ± 0.69
Mudstone, sandstone	226.50	1.16 ± 0.04	47.00	46.87 ± 0.59
Sandstone	344.40	6.64 ± 0.18	57.24	57.89 ± 1.00
Sandstone	500.04	6.64 ± 0.18	61.07	60.69 ± 0.96
Sandstone	1000.00	6.64 ± 0.18		69.83 ± 0.95
Granitoid	1500.00	3.20 ± 0.73		79.22 ± 0.96
Granitoid	2000.00	3.20 ± 0.73		98.52 ± 6.77
Granitoid	2500.00	3.20 ± 0.73		118.67 ± 8.95
Metasediments	3000.00	3.26 ± 0.87		139.71 ± 10.56
Metasediments	3500.00	3.26 ± 0.87		161.29 ± 12.48
Metasediments	4000.00	3.26 ± 0.87		183.78 ± 14.15
Metasediments	4500.00	3.26 ± 0.87		207.18 ± 15.69
	5000.00			231.50 ± 17.15

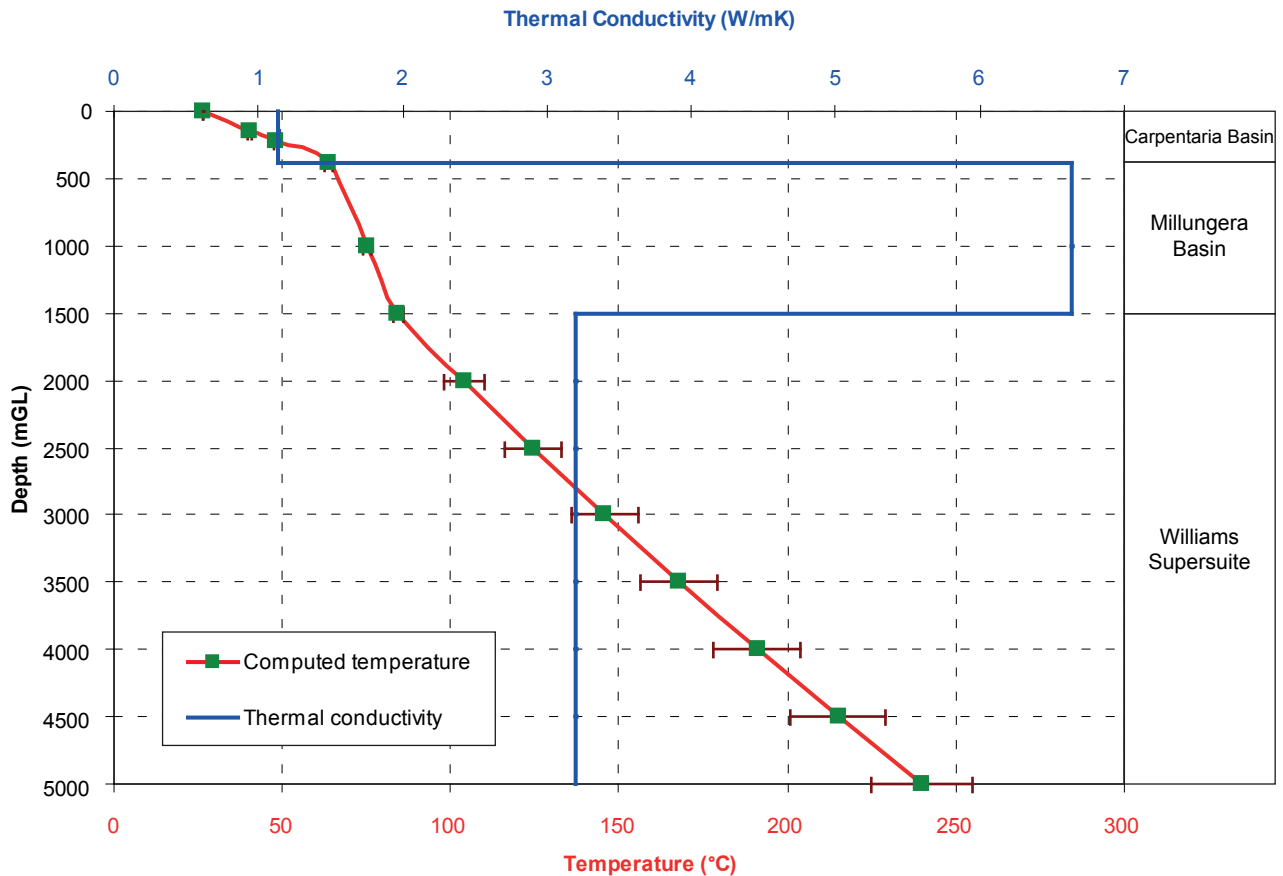


# GSQ Dobbyn 2

## Temperature Estimation at Depth\*\* (Area B)

GSQ Dobbyn 2		Depth to top of modelled interval (m): 0.00		
Heat Flow: 107.5 ± 6.8 mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Mudstone, sandstone	0.00	1.14 ± 0.02		26.61 ± 0.00
Mudstone, calc mudstone, sandstone	146.60	1.14 ± 0.02		40.44 ± 0.71
Mudstone, sandstone	226.50	1.13 ± 0.05		48.01 ± 0.62
Sandstone	390.00	6.64 ± 0.18		63.67 ± 1.28
Sandstone	1000.00	6.64 ± 0.18		74.90 ± 1.25
Granitoid	1500.00	3.20 ± 0.73		84.44 ± 1.24
Granitoid	2000.00	3.20 ± 0.73		103.98 ± 6.10
Granitoid	2500.00	3.20 ± 0.73		124.37 ± 8.27
Granitoid	3000.00	3.20 ± 0.73		145.65 ± 9.92
Granitoid	3500.00	3.20 ± 0.73		167.83 ± 11.36
Granitoid	4000.00	3.20 ± 0.73		190.93 ± 12.68
Granitoid	4500.00	3.20 ± 0.73		214.97 ± 13.94
	5000.00			239.96 ± 15.16

\*\* GSQ Dobbyn 2 heat flow value was used to extrapolate temperatures within the Millungera Basin - North (Area B)

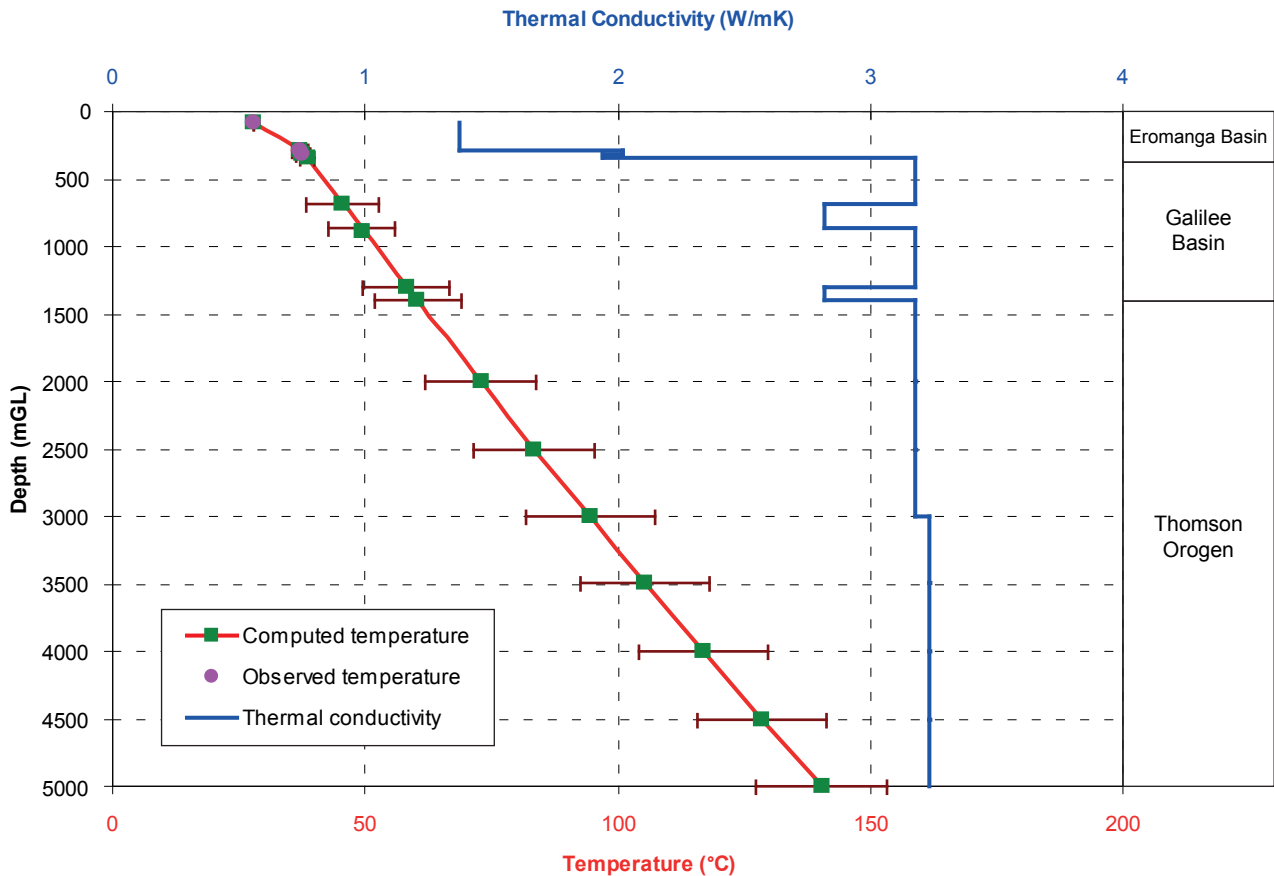


# GSQ Longreach 2

## Temperature Estimation at Depth

Lat: -23.35250; Long: 145.23220 (GDA 94, Zone 55)  
Total depth: 330.0 m

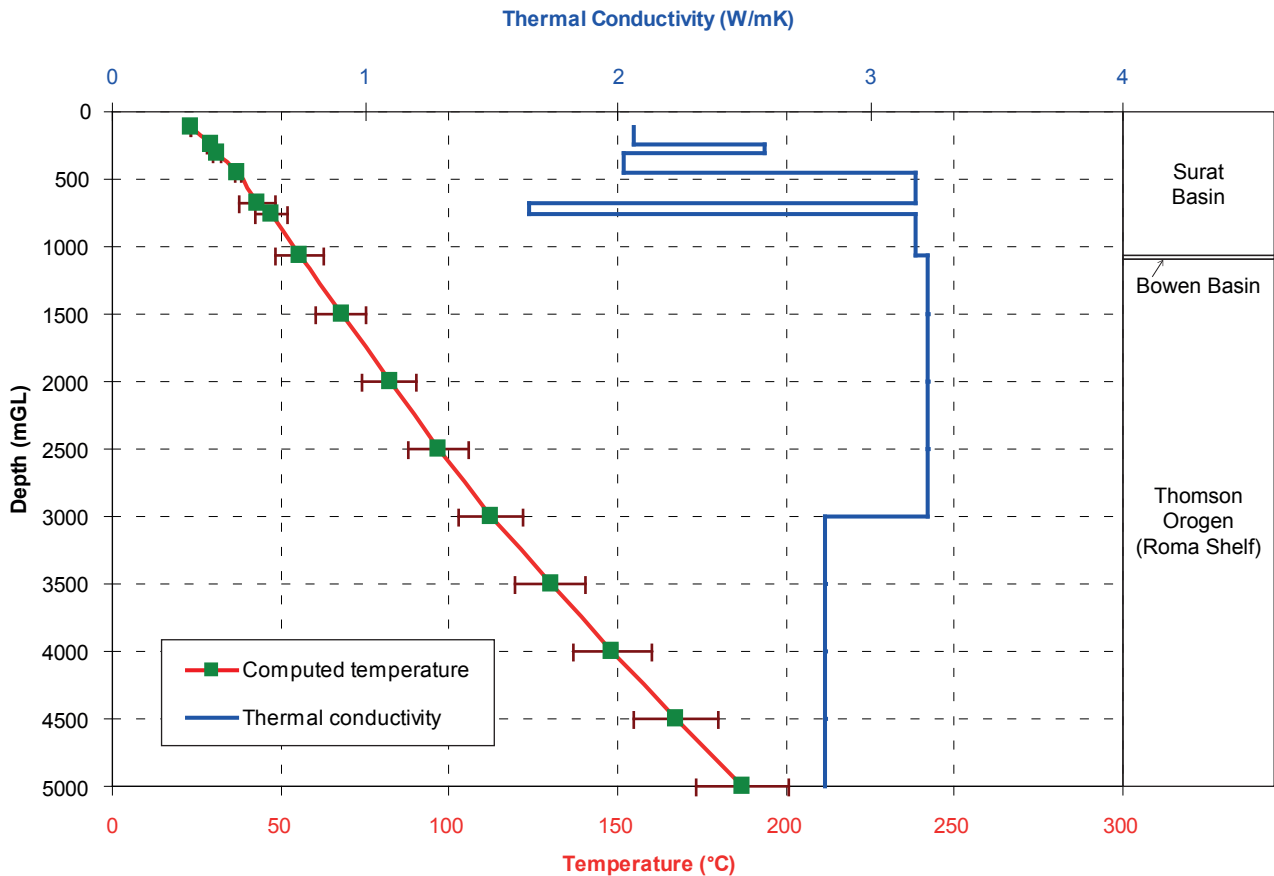
GSQ Longreach 2		Depth to top of modelled interval (m): 83.80		
Heat Flow: $60.0 \pm 5.6$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Mudstone, sandstone	83.80	$1.37 \pm 0.06$	27.94	$27.95 \pm 0.00$
Sandstone, mudstone	292.28	$2.02 \pm 0.11$	37.05	$37.10 \pm 1.62$
Mudstone, sandstone	312.66	$1.94 \pm 0.15$		$37.72 \pm 1.55$
Sandstone	340.00	$3.18 \pm 1.26$		$38.58 \pm 1.48$
Siltstone	690.00	$2.82 \pm 0.68$		$45.44 \pm 7.13$
Sandstone	865.00	$3.18 \pm 1.26$		$49.36 \pm 6.69$
Siltstone	1300.00	$2.82 \pm 0.68$		$58.12 \pm 8.72$
Metasediments	1400.00	$3.18 \pm 1.26$		$60.43 \pm 8.48$
Metasediments	2000.00	$3.18 \pm 1.26$		$72.86 \pm 10.89$
Metasediments	2500.00	$3.18 \pm 1.26$		$83.54 \pm 11.92$
Granitoid	3000.00	$3.23 \pm 0.73$		$94.48 \pm 12.84$
Granitoid	3500.00	$3.23 \pm 0.73$		$105.53 \pm 12.76$
Granitoid	4000.00	$3.23 \pm 0.73$		$116.86 \pm 12.78$
Granitoid	4500.00	$3.23 \pm 0.73$		$128.46 \pm 12.87$
	5000.00			$140.34 \pm 13.01$



# GSQ Roma 9–10R

## Temperature Estimation at Depth (Roma Shelf)

GSQ Roma 9–10R		Depth to top of modelled interval (m): 106.50		
Heat Flow: $82.5 \pm 6.0$ mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Sandstone, mudstone	106.50	$2.06 \pm 0.08$		$23.60 \pm 0.00$
Sandstone	245.57	$2.58 \pm 0.17$		$29.15 \pm 1.13$
Mudstone, sandstone, siltstone	308.50	$2.02 \pm 0.11$		$31.19 \pm 1.04$
Mudstone, sandstone	457.00	$3.18 \pm 1.26$		$37.33 \pm 1.14$
Sandstone, mudstone, coal	670.00	$1.65 \pm 0.03$		$43.04 \pm 5.10$
Sandstone	750.00	$3.18 \pm 1.26$		$47.15 \pm 4.61$
Granite	1058.00	$3.23 \pm 0.73$		$55.63 \pm 7.08$
Granite	1500.00	$3.23 \pm 0.73$		$67.89 \pm 7.55$
Granite	2000.00	$3.23 \pm 0.73$		$82.18 \pm 8.27$
Granite	2500.00	$3.23 \pm 0.73$		$96.97 \pm 8.95$
Metasiltstone	3000.00	$2.82 \pm 0.68$		$112.25 \pm 9.63$
Metasiltstone	3500.00	$2.82 \pm 0.68$		$130.05 \pm 10.67$
Metasiltstone	4000.00	$2.82 \pm 0.68$		$148.46 \pm 11.65$
Metasiltstone	4500.00	$2.82 \pm 0.68$		$167.46 \pm 12.59$
	5000.00			$187.09 \pm 13.51$



# GSQ Julia Creek 1

## Temperature Estimation at Depth

Lat: -20.90445; Long: 141.47260 (GDA 94, Zone 54)  
 Total depth: 500.02 m

GSQ Julia Creek 1		Depth to top of modelled interval (m): 120.10		
Heat Flow: 113.0 ± 8.7 mW/m <sup>2</sup>		Depth to base of modelled interval (m): 5000.00		
Rock type	Top (m)	Conductivity @ 25°C (W/mK)	Obs. T (°C)	Comp. T (°C)
Mudstone, sandstone	120.10	1.37 ± 0.06	35.26	35.26 ± 0.00
Mudstone, sandstone	235.85	1.53 ± 0.05	45.55	44.90 ± 1.97
Quartzite, sandstone	310.49	5.43 ± 0.16	50.93	50.55 ± 1.52
Quartzite, sandstone	480.44	5.43 ± 0.16	54.29	54.40 ± 1.35
Quartzite, sandstone	1000.00	5.43 ± 0.16		66.29 ± 1.26
Granitoid	1500.00	3.20 ± 0.73		78.15 ± 1.25
Granitoid	2000.00	3.20 ± 0.73		98.39 ± 7.27
Metasediments	2500.00	3.26 ± 0.87		119.57 ± 9.53
Metasediments	3000.00	3.26 ± 0.87		141.36 ± 11.84
Metasediments	3500.00	3.26 ± 0.87		164.13 ± 13.71
Metasediments	4000.00	3.26 ± 0.87		187.89 ± 15.38
Metasediments	4500.00	3.26 ± 0.87		212.66 ± 16.94
	5000.00			238.46 ± 18.45

