



Australian Government
Bureau of Meteorology

Special Climate Statement 43 – extreme heat in January 2013

Updated 25 January 2013



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1 Introduction

An exceptionally extensive and long-lived heatwave affected large parts of Australia from late December 2012 until mid-January 2013. Whilst the heat was most extreme and persistent in the central and southern interior of the continent, most of Australia experienced extreme heat at some stage during the event.

The heatwave was notable for its spatial extent and duration. Records were set in every State and Territory, including long-standing records at Hobart and Sydney, and the nationally averaged daily temperature rose to levels never previously observed in national records extending back to 1910. The heat, in combination with dry conditions over much of eastern Australia in the second half of 2012, also contributed to extreme fire weather at various stages during the event.

Few previous heatwaves have had an extent and duration comparable to that of 2012-13, with events such as those of 1939, 1960 and 2009 confined to a much smaller area. The closest past analogue to the 2012-13 event occurred in late 1972 and early 1973, and was responsible for the national daily area-averaged temperature records which were broken in early 2013. Like the 2012-13 heatwave, the 1972-73 heatwave coincided with the late onset of the northern Australian monsoon, preventing moisture and cloud of tropical origin from moderating temperatures inland. However, the most extreme aspects of the 1972-73 event were confined to inland areas, whereas in late 2012 and early 2013, 40 °C was reached at least once in every capital city except Brisbane and Darwin.

2 Significant aspects of the heatwave

2.1 Background and evolution of the heatwave

The last four months of 2012 were abnormally hot across Australia, and particularly so for maximum (daytime) temperatures. For September to December (i.e. the last four months of 2012) the average Australian maximum temperature was the highest on record with maximum temperatures averaged across Australia as a whole 1.61 °C warmer than average, slightly ahead of the previous record set in 2002 when nationally averaged maximum temperatures were 1.60 °C warmer than average (nationally averaged temperature records go back to 1910).

During spring and early summer in 2012 extreme high temperatures for the time of year occurred on numerous occasions in inland Australia; for example, a State temperature record was set for Victoria in November (see *Special Climate Statement 41*), Alice Springs equalled its record highest temperatures for both September and October, and Birdsville recorded its earliest-ever 40-degree day in spring in September. Also, much of Australia was much drier than normal during the second half of 2012 with record lowest July to December rainfall across central South Australia, and below average rainfall across almost all of southeastern Australia.

The 2012-13 heatwave event commenced with a build up of extreme heat in the southwest of Western Australia from 25–30 December 2012 as a high in the Bight and a trough near the west coast directed hot easterly winds over the area. Particularly hot conditions were observed on the 30th, with Cape Naturaliste observing 37.7 °C, its hottest December day on record. Perth equalled a record when it experienced seven consecutive days above 37 °C from 25–31 December.

From 31 December the high pressure system began to shift eastward, bringing well above average temperatures across southern WA between 30 December and 2 January. A number of records were set, particularly on the Nullarbor (see Table 1), with Red Rocks Point, west of Eucla, reaching 48.6 °C on 2 January.

By 4 January the high pressure system had moved off eastern Australia, with northerly winds directing very hot air into southeast Australia, while southerly winds lowered temperatures in WA. The 4th was the most extreme day of the event in Tasmania and coastal areas of Victoria and South Australia. Numerous records were set in southern Tasmania, most notably at Hobart, whose maximum of 41.8 °C was the highest in 120 years of records there, the highest on record anywhere in southern Tasmania, and the second-highest for the State as a whole. Adelaide reached 45 °C for only the fourth time in its history.

Southern coastal areas of Australia cooled from the 5th onwards, but areas of intense heat lingered inland over eastern SA and the southern half of NSW until 8 January when the high pressure system in the Tasman Sea began to move eastward and

northwesterly winds ahead of a cold front spread the heat to coastal NSW with temperatures widely exceeding 40 °C from Sydney southwards, and fire danger reaching catastrophic levels in parts of the State's southern inland.

Conditions cooled temporarily in the eastern States after the 8th. Meanwhile, Western Australia saw a second wave of recording breaking heat on 8–10 January as a second high pressure system moved into the Great Australian Bight directing hot easterly winds into the State. Conditions were particularly extreme over the State's central and southern interior. The highest temperature recorded in WA during this event was 49.0 °C at Leonora, while Wiluna (48.0 °C, 8 January) equalled the record for the highest sea-level equivalent temperature ever observed in Australia¹.

Intense heat from the interior of Australia moved east again on the 11th of January with the most extreme heat of the whole event occurring on the weekend of 12–13 January. Temperatures exceeding 48 °C were recorded at numerous locations in northwestern New South Wales, northeastern South Australia and western Queensland. Moomba reached 49.6 °C on the 12th, the highest temperature of the event, the highest temperature recorded in South Australia since 1960, and the sixth hottest temperature ever officially recorded in Australia under standard conditions. On the 13th, Birdsville set a new Queensland January record with 49.0 °C, the State's highest temperature since December 1972, and Wanaaring's 48.6 °C was the hottest temperature recorded in New South Wales since 1939. Overnight minimum temperatures were also very high in places, with Bedourie (Queensland) only dropping to 34.1 °C on the 14th, the highest minimum temperature in Queensland since 2006.

Temperature moderated slightly in eastern inland areas from the 14th, whilst remaining very high in the western interior. In the later stages of the heatwave, northwesterly winds brought a final phase of extreme heat to South Australia and Victoria on the 17th and New South Wales on the 18th. Conditions were particularly extreme on the coast and adjacent ranges of central and southern New South Wales. Sydney's long-standing record high temperature was broken when it reached 45.8 °C at Observatory Hill, and numerous other records were broken elsewhere in the greater Sydney region, the Hunter, South Coast and Illawarra.

The main part of the heatwave finally ended on the 19th, as southerly winds cooled the southern States and tropical moisture from a late developing monsoon moderated conditions further north, although temperatures have remained above normal in parts of the eastern outback. The 19th was the first day since 31 December 2012 that it did not reach 45 °C somewhere in Australia, with above-normal temperatures becoming confined to the southern half of Queensland.

¹ Using the standard lapse rate for dry air of 1 °C per 100 metres, the temperature at Wiluna (elevation 521 metres) equates to 53.2 °C at sea level. This equals the value at Yuendumu, NT (46.5 °C, elevation 667 metres) set on 15 January 1980.

2.2 National and State average temperatures and the spatial extent of the extreme heat

A particular feature of this heatwave event was the exceptional spatial extent of high temperatures. Table 3 gives the national and State/Territory area-average maximum temperature for each day of the heatwave event. Australia set a new record for the hottest day for Australia as a whole on 7 January, recording 40.33 °C, surpassing the previous record set on 21 December 1972 (40.17 °C). The area-averaged temperature for Australia as a whole exceeded 39 °C on seven consecutive days from 2–8 January; the longest such period previously recorded was four days in December 1972. There have only been 21 days in 102 years of records where the national area-averaged maximum temperature has exceeded 39 °C; eight in 2013 (2–8 January and 11 January), seven in 1972–73, and only six in all other events combined (Table 4).

On 7 January Australia recorded a new area-averaged mean temperature (average of the maximum and minimum temperatures) record of 32.23 °C, surpassing the previous record of 31.86 °C from 21 December 1972. This new record was then subsequently broken on 8 January (32.36 °C), making 7–8 January 2013 Australia's hottest 2-day period on record. The national area-averaged minimum temperature on 8 January was 24.52 °C, the second-highest on record after 24.69 °C on 23 January 1982.

Maximum temperatures over the period 1–18 January have been 6 °C or more above normal over a wide area of interior central and southern Australia (Figure 1), and 45 °C has been reached at least once during the event over 46.9 per cent of Australia (Figure 3). Overnight minimum temperatures have been less extreme but have still been well above normal (Figure 2).

2.3 Record-breaking daily temperatures

Tables 1 and 2 give a list of all significant daily maximum and minimum temperature records broken during the course of this heatwave event to date. A total of 44 stations with 30 years or more of data have set all-time record high maximum temperatures during this event, with a further 15 setting January records. For minimum temperatures, seven such stations set all-time records and a further 13 set January records. Some stations exceeded their previous records on multiple occasions; for example, Giles surpassed its previous record (44.8 °C) on three separate occasions during the event, peaking at 45.7 °C on 16 January.

Figure 4 shows the area over which record, and other notably high, maximum temperatures were set during the course of the event², whilst Figure 5 shows the occurrence of record temperatures on some individual days during the event. Over the full course of the event, records were set over 14.2 per cent of Australia's area, including 21.7 per cent of Western Australia and between 13 and 16 per cent of Tasmania, New South Wales and Queensland. Temperatures that, on average, occur once every ten years were exceeded across 52.3 per cent of Australia, including 79.1 per cent of New South Wales and 73.7 per cent of South Australia. The only large areas over which significant extremes did not occur were the northern tropics, the west coast of Western Australia from Perth northwards, and coastal Queensland.

Fourteen of the 112 stations in the Bureau's long-term high-quality temperature observation network (ACORN-SAT) set all-time record high maximum temperatures during the 2013 event (Table 1), with a fifteenth (Mount Gambier) equalling its record. No previous event has resulted in so many records at ACORN-SAT stations, the previous benchmark being set in the January 1939 heatwave, in which eleven ACORN-SAT stations set records and three equal records.

No States or Territories set all-time records during the event, partly a consequence of the most extreme conditions (relative to previous site records) in Western Australia and the Northern Territory occurring over elevated terrain. Moomba's 49.6 °C ranks as the eighth-highest temperature on record in Australia (Table 5), whilst Birdsville's 49.0 °C set a January record for Queensland. Whilst, unlike the 1939, 1960 and 2009 heatwaves, the 2012–13 event did not set any State or Territory single-day records, it affected a much larger area, and lasted for longer, than any of those events did.

2.4 The prolonged nature of the extreme heat

A major feature of the 2012-13 heatwave was its duration, particularly in inland areas, where some stations experienced well above normal temperatures on every, or almost every, day over a period of three weeks or more.

A number of stations set or equalled records for the longest continuous run of hot days (Table 6). Alice Springs had 17 consecutive days of 40 °C or above, easily breaking its previous record of 12³. Birdsville has had a run of 29 consecutive days of 40 °C or above (as of 24 January), and is approaching the record for any Queensland location, 31 days at Boulia in 1972–73.

² The spatial resolution of the analysis used in Figure 4 is not sufficient to show the records set along the NSW coastal strip on 18 January.

³ By way of comparison, in the 1972-73 event Alice Springs had a run of 17 consecutive days of 39.5°C or above, but it failed to reach 40°C on three of those days.

Another indicator of the extreme heat was the number of days on which particular thresholds were reached in various States. It reached at least 47 °C somewhere in New South Wales on six separate days during the event, and 48 °C somewhere in South Australia on five consecutive days. In both cases the number of such days already observed in 2013 surpassed the number observed in any other year in the 1957–2013⁴ period.

⁴ Pre-1957 data are not used in this comparison as the available network of digitised daily data prior to 1957 is much sparser, and thus it is likely that a number of days prior to 1957 which would meet these criteria had the present network been in place would have been missed.

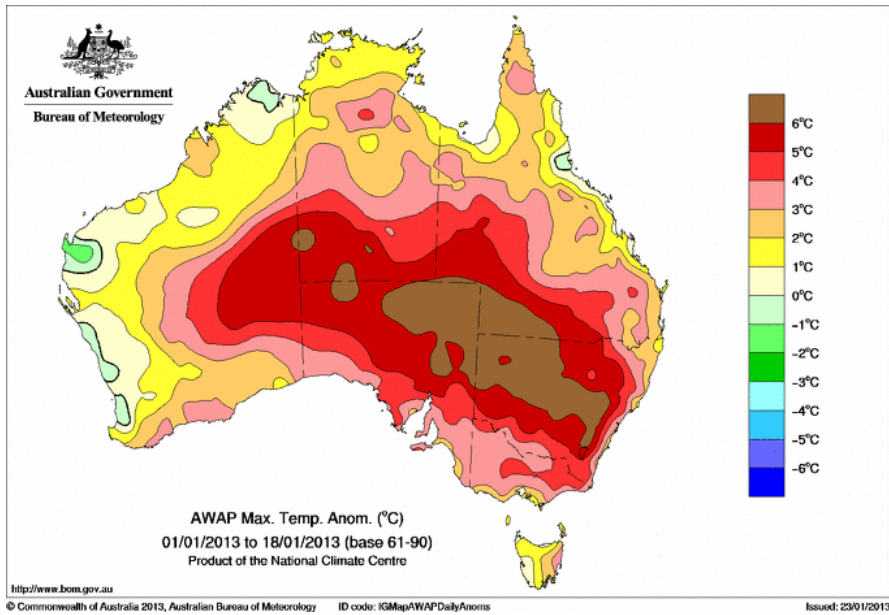


Figure 1. Maximum temperature anomaly (departure from 1961–1990 average) for Australia, 1–18 January 2013.

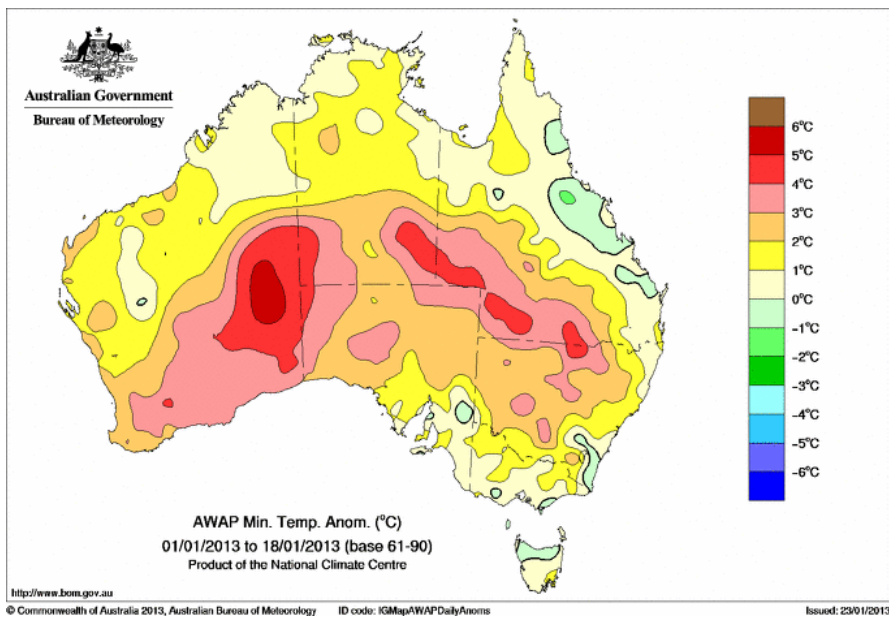


Figure 2. Minimum temperature anomaly (departure from 1961–1990 average) for Australia, 1–18 January 2013.

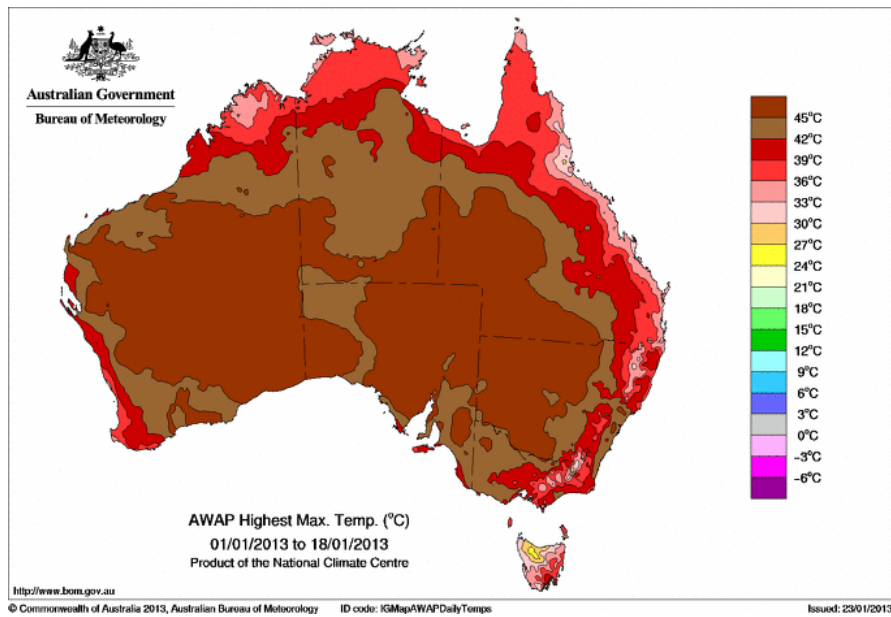


Figure 3. Highest reported temperature in period 25 December 2012 – 18 January 2013.

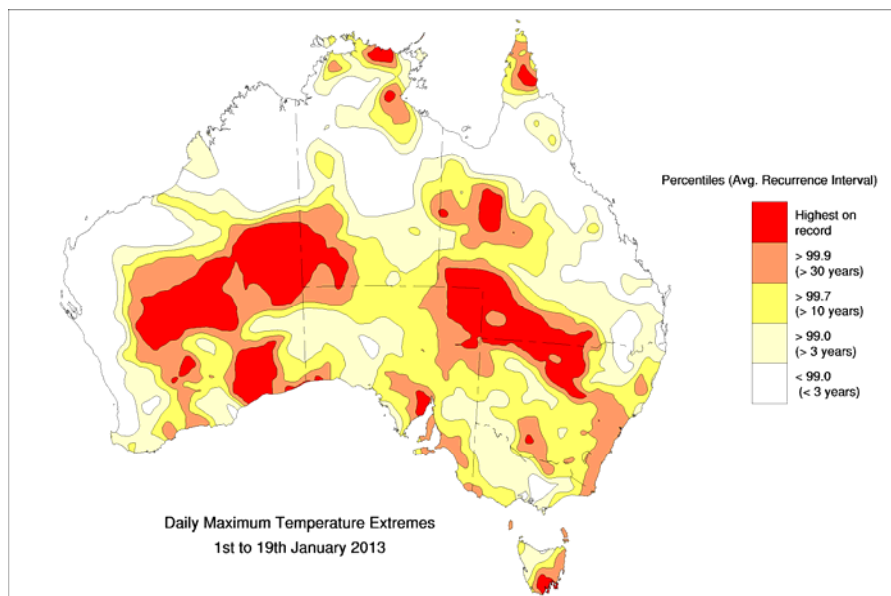


Figure 4. Highest reported temperature in period 1–19 January, compared to January records and 1-in-30 year, 1-in-10 year and 1-in-3 year values.

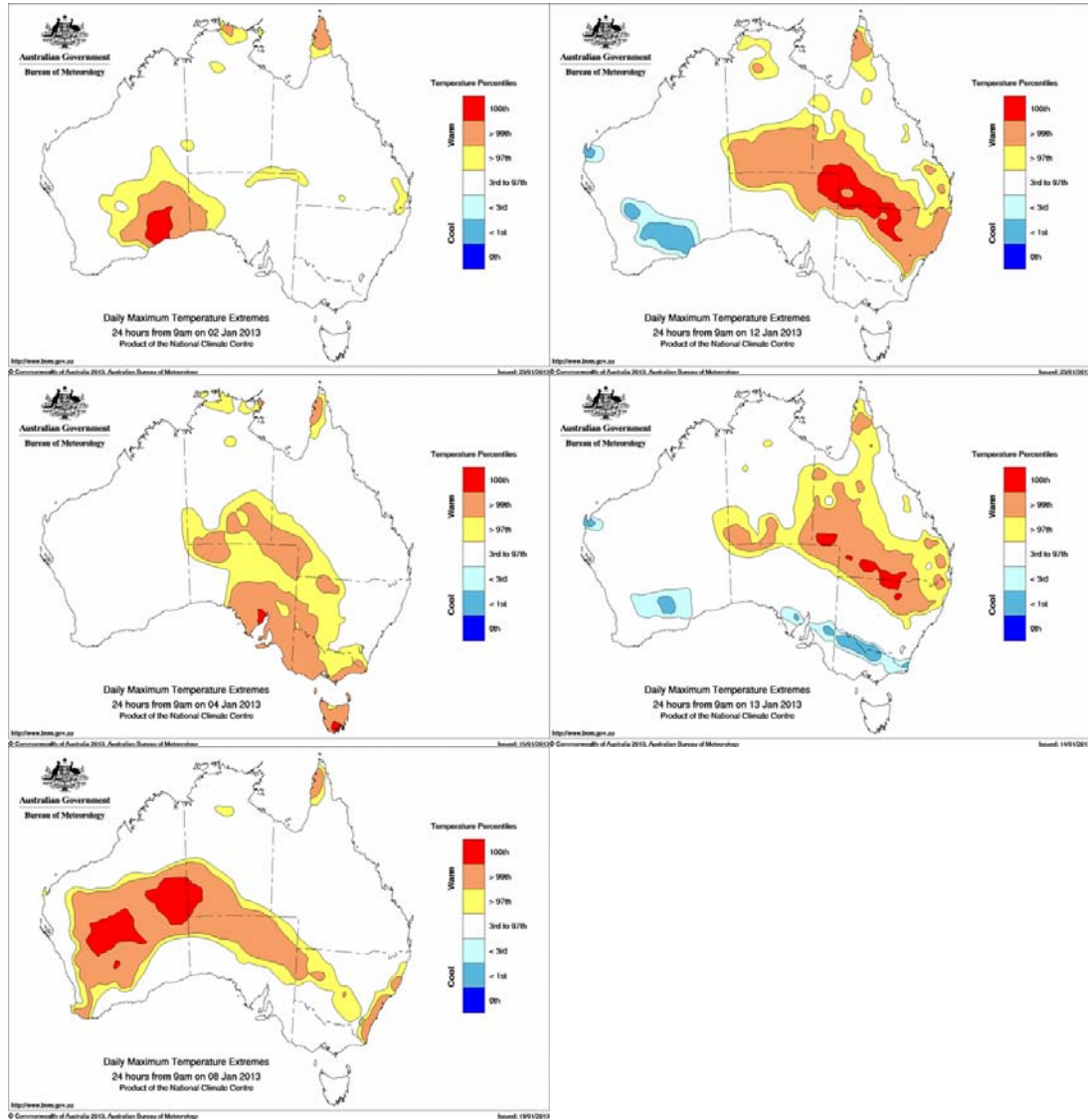


Figure 5. Areas of record-breaking temperatures (dark red) on selected days during heatwave: from top to bottom, 2, 4, 8, 12 and 13 January.

Table 1. New daily maximum temperature records set during the event (stations with 30 or more years of historical records). Highlighted records indicate the monthly record is also an annual record. Where two station numbers are shown data from two sites are combined. If the previous all-time record was set in a month other than January both the previous January and all-time records are shown. Stations with an asterisk (*) against the station number are part of the Australian Climate Observations Network – Surface Air Temperature (ACORN-SAT) network.

Station number	Location	State	Temperature (°C)	Date	Previous Record	Date	Years of record
7045*	Meekatharra	WA	47.1	8/1	45.7	5/1/2008	63
7139	Paynes Find	WA	47.2	8/1	46.5 46.6	20/1/1991 3/2/2007	34
9519	Cape Naturaliste	WA	37.7	30/12	37.6	26/12/2007	104
11003*	Eucla	WA	48.2	3/1	47.9	3/1/1979	97
12046	Leonora	WA	49.0	9/1	47.8	17/1/1958	57
12090	Yeelirrie	WA	47.9	8/1	45.8 46.0	7/1/1983 11/2/1991	40
13012	Wiluna	WA	48.0	8/1	46.9	1/1/1990	56
13017*	Giles	WA	45.7	16/1	44.8	28/1/2011	57
15511	Curtin Springs	NT	46.4	11/1	45.5 46.0	28/1/2011 17/2/1992	49
17110	Leigh Creek	SA	46.3	6/1	46.1	25/1/2011	31
18040	Kimba	SA	46.0	4/1	45.6	31/1/1968	46
23034	Adelaide Airport	SA	44.1	4/1	44.0	28/1/2009	58
38024	Windorah	QLD	47.6	12/1	47.0 47.1	4/1/1973 22/12/1990	47
38026/ 38002*	Birdsville	QLD	49.0	13/1	48.5	5, 6/1/2004	58
44026	Cunnamulla	QLD	47.0	13/1	46.9	4/1/1973	56
45025/ 45017*	Thargomindah	QLD	48.8	13/1	47.5	3/1/1994	57
46037*	Tibooburra	NSW	47.9	12/1	47.6	3/1/1973	103
48015	Brewarrina	NSW	48.1	13/1	47.4	3/1/1973	49
50031	Peak Hill	NSW	44.5	12/1	44.3	3/1/1973	46
51039	Nyngan	NSW	47.0	12/1	46.8	15/1/1939	93
51049	Trangie	NSW	46.1	12/1	45.0 45.8	15/1/2001 21/2/2004	45
52020	Mungindi	NSW	46.8	12/1	46.5	4/1/1990	48
52088/ 52026*	Walgett	NSW	48.5	13/1	48.0	4/1/1973	104
55049	Quirindi	NSW	42.9	12/1	41.4	27/1/2011	48
61051	Murrurundi	NSW	40.9	12/1	40.2 40.7	27/1/1981 2/2/2006	49
61055	Newcastle	NSW	42.5	18/1	41.4	1/1/2006	56

Station number	Location	State	Temperature (°C)	Date	Previous Record	Date	Years of record
	(Nobbys Head)				42.0	23/12/1990	
61078*	Williamtown	NSW	44.8	18/1	44.4	1/1/2006	63
61087	Gosford (Narara)	NSW	44.8	18/1	43.8	1/1/2006	30
61250	Paterson	NSW	44.4	18/1	43.7	15/1/2001	43
61288	Lostock Dam	NSW	43.5	13/1	42.4 42.5	23/1/2001 21/2/2004	44
61363/ 61089*	Scone	NSW	44.2	12/1	42.5 43.4	26/1/2011 19/11/1968	49
62013	Gulgong	NSW	42.0	12, 18/1	41.5	15/1/2001	43
63039	Katoomba	NSW	36.4	12/1	36.2	14/1/2005	51
63063	Oberon	NSW	36.0	18/1	35.9	3/1/1973	33
63254	Orange Ag Inst	NSW	37.2	12/1	36.7	15/1/2001	38
64009	Dunedoo	NSW	43.7	12/1	43.4	3/1/1973	49
65034	Wellington	NSW	43.7	12/1	42.5	3/1/1990	46
66037	Sydney Airport	NSW	46.4	18/1	45.2	1/1/2006	74
66062*	Sydney	NSW	45.8	18/1	45.3	14/1/1939	155
66124	Parramatta North	NSW	45.5	18/1	44.8	1/1/2006	45
66137	Bankstown	NSW	46.1	18/1	44.8	18/1/2003	45
67019	Prospect Res	NSW	45.1	18/1	44.7	15/1/2001	49
67105*	Richmond	NSW	46.4	18/1	44.9	15/1/2001	67
68072/ 68076*	Nowra	NSW	45.4	18/1	45.1	30/1/2003	58
68192	Camden	NSW	46.4	18/1	45.0	30/1/2003	38
70351/ 70014*	Canberra	ACT	42.0	18/1	41.4	31/1/1968	74
72043	Tumbarumba	NSW	40.0	5, 6/1	39.8	30/1/2009	46
75031	Hay	NSW	47.7	5/1	46.0 47.2	23/1/2001 1/2/1968	56
90171	Portland Airport	VIC	42.1	4/1	41.6	26/1/2006	31
91223	Marrawah	TAS	33.2	4/1	33.0	29/1/2009	42
92027	Orford	TAS	38.8	4/1	38.7	21/1/1997	45
92045*	Larapuna (Eddystone Point)	TAS	36.5	4/1	36.1	16/1/1960	104
94008	Hobart Airport	TAS	40.3	4/1	40.1	3/1/1991	55
94029*	Hobart	TAS	41.8	4/1	40.8	4/1/1976	120
94087	Mount Wellington	TAS	29.5	4/1	29.2	22/1/2006	34
94220/ 94069*	Grove	TAS	40.9	4/1	40.4	19/1/1959	59
95003	Bushy Park	TAS	40.3	4/1	39.5	20/1/1973	53
97053	Strathgordon	TAS	34.8	4/1	34.5	4/1/1976	32

Table 2. New daily minimum temperature records set during the event (stations with 30 or more years of historical records). Details as for Table 1.

Station number	Location	State	Temperature (°C)	Date	Previous Record	Date	Years of record
5007*	Learmonth	WA	28.7	25/12	27.6	30/12/1994	38
9021*	Perth Airport	WA	27.5	29/12	26.9	24/12/1960	69
9021*	Perth Airport	WA	27.8	15/1	27.3	21/1/1989	69
9111	Karnet	WA	23.5	29/12	22.6	29/12/2009	47
9518*	Cape Leeuwin	WA	24.2	8/1	23.5	26/1/2012	107
9617/ 9510*	Bridgetown	WA	24.5	8/1	23.9 24.0	25/1/1961 4/2/1933, 28/12/2000	104
9741*	Albany Airport	WA	20.9	16/1	20.0	26/1/1974	48
9842	Jarrahwood	WA	26.0	8/1	24.3 24.4	12/1/1978 6/3/1990	33
10092*	Merredin	WA	29.7	8/1	29.3 29.4	26/1/2011 27/2/1997	48
15511	Curtin Springs	NT	31.5	13/1	31.4	4/1/2006	49
45015	Quilpie	QLD	32.5	13/1	32.1	30/1/2003	57
50031	Peak Hill	NSW	30.9	18/1	29.4 30.3	1/1/2006 12/2/2004	46
51039	Nyngan	NSW	33.0	18/1	30.7 32.0	1/1/2006 2/2/2006	55
51049	Trangie	NSW	31.3	18/1	28.4 29.3	28/1/1981 12/2/2004	45
71032	Thredbo (Top Stn)	NSW	17.1	5/1	17.0	26/1/2003	33
71041	Thredbo Village	NSW	21.0	8/1	19.2 20.2	8/1/1979 8/2/2009	42
84070	Point Hicks	VIC	25.0	5/1	23.8	3/1/2012	47
94008	Hobart Airport	TAS	21.8	4/1	21.2	3/1/2012	55
94010*	Cape Bruny Lighthouse	TAS	20.4	4/1	20.0	16/1/1960	57
94029*	Hobart	TAS	23.4	4/1	22.9	10/1/1887	120

Table 3. Daily area-average maximum temperatures during the event. Values in bold exceed the long-term 99th percentile.

	Australia	WA	NT	SA	QLD	NSW	VIC	TAS
Record (pre-2013)	40.17 21 Dec 1972	42.95 31 Dec 1972	42.91 27 Dec 1990	45.25 2 Jan 1960	41.64 15 Nov 1915	44.06 14 Jan 1939	44.48 7 Feb 2009	33.31 30 Jan 2009
1961-90 January average	34.64	35.62	36.35	34.72	34.80	31.68	27.28	19.76
25 December	36.42	39.34	38.99	32.60	37.29	31.01	24.03	18.50
26 December	36.32	39.12	38.53	34.73	36.54	29.72	26.68	19.68
27 December	36.08	36.63	38.98	35.30	36.34	33.00	30.12	21.04
28 December	35.89	37.58	39.12	34.14	35.96	32.09	24.67	17.95
29 December	36.76	38.32	39.11	35.51	37.38	32.86	25.98	18.11
30 December	37.10	38.54	39.28	37.26	37.30	32.86	27.06	18.33
31 December	37.63	39.59	39.37	39.02	35.56	35.24	29.59	19.20
1 January	38.56	41.19	39.18	40.33	35.95	37.01	29.66	17.65
2 January	39.21	41.09	39.76	41.33	38.76	35.63	28.09	19.02
3 January	39.55	39.33	40.61	43.55	39.27	36.11	36.77	26.65
4 January	39.32	37.35	40.87	43.78	38.38	39.38	41.17	33.02
5 January	39.26	39.16	40.39	40.48	38.06	41.06	35.42	24.46
6 January	39.71	40.36	40.87	41.81	37.92	40.13	33.27	24.51
7 January	40.33	42.35	40.74	43.42	36.84	38.87	37.78	27.07
8 January	40.11	42.74	40.52	41.41	37.20	39.63	32.45	21.79
9 January	38.36	41.93	41.32	33.95	39.94	30.92	22.69	15.26
10 January	38.65	38.89	41.18	38.54	40.67	33.85	29.58	18.43
11 January	39.20	36.56	41.39	40.90	40.50	40.63	37.66	22.47
12 January	37.95	34.86	41.34	38.57	40.84	40.12	25.08	19.68
13 January	36.92	34.98	40.62	35.23	41.19	36.28	19.64	17.02
14 January	37.33	38.92	40.63	34.51	40.13	29.72	24.35	18.96
15 January	37.89	40.63	39.63	38.09	36.51	32.88	30.24	20.91
16 January	38.44	40.51	41.35	40.17	34.50	36.71	32.61	20.63
17 January	37.47	35.00	37.56	43.46	36.46	40.00	39.90	25.00
18 January	34.78	32.30	33.80	34.61	36.87	41.89	31.45	18.79

Table 4. Days with an Australian area-averaged maximum temperature of 39 °C or above (values in 2013 shown in bold).

Date	Value (°C)	Date	Value (°C)	Date	Value (°C)
7/1/2013	40.33	17/12/2002	39.70	1/1/1990	39.39
21/12/1972	40.17	2/1/1973	39.65	4/1/2013	39.32
8/1/2013	40.11	3/1/2013	39.55	5/1/2013	39.26
20/12/1972	40.01	16/12/2002	39.54	2/1/1990	39.22
22/12/1972	39.82	30/12/1972	39.48	2/1/2013	39.21
1/1/1973	39.79	31/12/1972	39.43	11/1/2013	39.20
6/1/2013	39.71	27/1/1936	39.40	18/12/2002	39.20

Table 5. Observed temperatures of 49 °C or above in Australia since 1910. Values observed in the 2012–13 event are shown in bold.

Temperature (°C)	Location	State	Date	Comments
50.7	Oodnadatta	SA	2/1/1960	Australian record
50.5	Mardie	WA	19/2/1998	WA record, Australian February record
50.3	Oodnadatta	SA	3/1/1960	
49.8	Mundrabilla	WA	3/1/1979	WA January record (equal)
49.8	Forrest	WA	13/1/1979	WA January record (equal)
49.8	Emu Creek	WA	21/2/1998	
49.7	Menindee	NSW	10/1/1939	NSW record
49.6	Moomba	SA	12/1/2013	
49.5	Birdsville	QLD	24/12/1972	Queensland record, Australian December record
49.4	Marree	SA	2/1/1960	
49.4	Whyalla	SA	2/1/1960	
49.4	Madura	WA	7/1/1971	
49.4	Emu Creek	WA	16/2/1998	
49.4	Roebourne	WA	21/12/2011	WA December record
49.3	Kyancutta	SA	9/1/1939	
49.2	Marble Bar	WA	3/1/1922	
49.2	Oodnadatta	SA	1/1/1960	
49.2	Mardie	WA	9/2/1977	
49.2	Onslow	WA	11/1/2008	
49.2	Onslow	WA	1/1/2010	
49.2	Onslow Airport	WA	22/12/2011	
49.1	Moomba	SA	23/12/1972	SA December record
49.1	Roebourne	WA	18/2/1998	
49.1	Emu Creek	WA	2/1/2010	
49.0	Marree	SA	22/12/1972	
49.0	Birdsville	QLD	6/12/1981	
49.0	Birdsville	QLD	13/1/2013	Queensland January record
49.0	Marla	SA	12/1/1988	
49.0	Port Hedland	WA	11/1/2008	
49.0	Roebourne	WA	11/1/2008	
49.0	Emu Creek	WA	10/1/2009	
49.0	Mardie	WA	1/1/2010	
49.0	Roebourne Airport	WA	21/12/2011	
49.0	Leonora	WA	9/1/2013	

Table 6. Selected records set or equalled for long runs of consecutive days with maximum temperatures at or above specified thresholds. An asterisk (*) indicates that the run is ongoing as of 24 January.

Station number	Location	State	Threshold (°C)	Number of days	Dates	Previous record
10917/10648	Wandering	WA	35	8	25/12/2012-1/1/2013	8 (17-24/1/1961, 30/12/1964-6/1/1965)
12038	Kalgoorlie-Boulder	WA	45	2	8-9/1/2013	1 (numerous occasions)
13017	Giles	WA	40	17	1-17/1/2013	17 (5-21/2/2007, 14-30/1/2011)
15590	Alice Springs	NT	40	17	1-17/1/2013	12 (4-15/1/1971, 1-12/1/2006)
17043	Oodnadatta	SA	45	7	2-8/1/2013	5 (3 previous occasions)
			35	45*	11/12/2012-24/1/2013	38 (3/1-9/2/2009)
38026/38002	Birdsville	QLD	40	29*	27/12/2012-24/1/2013	24 (2-25/1/2006)
38026/38002	Birdsville	QLD	45	6	2-7/1/2013	6 (1-6/1/2004)
48245/48239/48013	Bourke	NSW	35	43*	13/12/2012-24/1/2013	41 (16/12/1938-25/1/1939)

Notes and contacts

Values in this statement are current as of 24 January 2013, and subject to the Bureau's normal quality control processes.

The data set from which area averages and other spatial analyses are drawn commences in 1911. Station data prior to national introduction of standardised instrument shelters in 1910 are used only if they are known to have been measured using standard equipment comparable with current standards.

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