



Australian Government
Bureau of Meteorology

Monthly Weather Review Australia July 2016



The *Monthly Weather Review - Australia* is produced by the Bureau of Meteorology to provide a concise but informative overview of the temperatures, rainfall and significant weather events in Australia for the month.

To keep the *Monthly Weather Review* as timely as possible, much of the information is based on electronic reports. Although every effort is made to ensure the accuracy of these reports, the results can be considered only preliminary until complete quality control procedures have been carried out. Any major discrepancies will be noted in later issues.

We are keen to ensure that the *Monthly Weather Review* is appropriate to its readers' needs. If you have any comments or suggestions, please contact us:

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Units of measurement

Except where noted, **temperature** is given in degrees Celsius (°C), **rainfall** in millimetres (mm), and **wind speed** in kilometres per hour (km/h).

Observation times and periods

Each station in Australia makes its main observation for the day at 9 am local time. At this time, the precipitation over the past 24 hours is determined, and maximum and minimum thermometers are also read and reset. In this publication, the following conventions are used for assigning dates to the observations made:

Maximum temperatures are for the 24 hours *from* 9 am on the date mentioned. They normally occur in the afternoon of that day.

Minimum temperatures are for the 24 hours *to* 9 am on the date mentioned. They normally occur in the early morning of that day.

Mean temperatures are the average of the daily maximum and daily minimum temperatures.

Daily rainfall is for the 24 hours *to* 9 am on the date mentioned. This means a significant fraction of the rain may have occurred on the previous calendar day.

Monthly rainfall is for the period from 9 am on the last day of the previous month to 9 am on the last day of this month.

Maximum daily wind gusts are in the 24 hours from midnight to midnight.

Climatological values

The climatological averages shown in the text and tables are generally long-term means based on observations from the years 1961–1990. They are not shown for sites with less than 25 years of record in that time, as they cannot then be calculated reliably. Climatological extremes are generally taken from all available years of record; the number of years can vary markedly from site to site.

Records

The tables of records are not exhaustive, as they only show sites with at least 30 years of record. This may exclude locations where a new site has been established; this means even some major cities and towns may not be listed.

Maps

The temperature and rainfall maps are intended to give an overview of the country. There could be discrepancies between the values shown on these maps and those at individual locations, as a result of the way the maps are generated. A wide range of maps of rainfall, temperature and other variables, covering the whole country and smaller regions can be found at www.bom.gov.au/climate/maps.

Accessing data

Tables of daily values for selected sites are included toward the back of the *Monthly Weather Review*. Data from many more sites and for other times are available from www.bom.gov.au/climate/data/.

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Cover photograph

A flush of green surrounds Camden Park Station near Longreach in Queensland.

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Overview

- Nationally, the fifth-warmest mean minimum temperatures on record for July
- Above average daytime temperatures along the east coast, Tasmania and northern Australia
- Well above average July rainfall in central Queensland, the northern tropics, the west, Victoria and Tasmania
- Very windy in southern parts of Australia

Australia's mean temperature was the ninth-warmest on record for July. Mean minimum temperatures, nationally averaged, were the fifth-warmest on record for Australia with most of the continent recording above average overnight temperatures, except in the southwest, parts of central South Australia, and in parts of the Kimberley and the Top End. Maxima were cooler than average across much of the Gascoyne, Goldfields, Eucla and South West Land Division of Western Australia, and in parts of central Queensland,

while above average mean maximum temperatures were recorded across the northern tropics, along the east coast of Australia and Tasmania.

Rainfall in July was the seventh-wettest on record for Australia as a whole, and the wettest July since 1998. Rainfall was above to very much above average over most of northern Australia, a large area of Western Australia, western and southeastern South Australia, most of Victoria, Tasmania and much of southern New South Wales. Areas in central Queensland, pockets of central and southern Western Australia and small parts of southeastern Australia had their wettest July on record. In contrast, the southwest and northwest of Western Australia, areas of central Australia, and parts of southeastern Queensland and northeastern New South Wales had below average rainfall in July.

Areal averages in July 2016

	Rainfall anomaly	Mean maximum temperature anomaly	Mean minimum temperature anomaly	Mean temperature anomaly
Australia	+61 %	+0.38 °C	+1.59 °C 5th-highest	+0.99 °C 9th-highest
Western Australia	+53%	+0.31 °C	+1.12 °C 10th-highest	+0.72 °C
Northern Territory	+22%	+0.76 °C	+1.37 °C	+1.07 °C
South Australia	−4%	+0.20 °C	+0.81 °C	+0.51 °C
Queensland	+188% 7th-highest	+0.21 °C	+2.58 °C 7th-highest	+1.40 °C
New South Wales	+5%	+0.56 °C	+2.25 °C 4th-highest	+1.41 °C equal 8th-highest
Victoria	+41 % 10th-highest	+0.49 °C	+1.71 °C 2nd-highest	+1.10 °C equal 7th-highest
Tasmania	+50% 7th-highest	+0.36 °C	+1.68 °C 3rd-highest	+1.02 °C 10th-highest

Extremes in July 2016

	Hottest day	Coldest night	Wettest day	Warmest overall	Coollest overall	Wettest overall	Strongest wind gust
Australia	38.3 °C at Kalumburu (WA) on the 24th	−8.9 °C at Liawenee (Tas.) on the 30th	310.8 mm at Pacific Heights (Qld) on the 17th	28.2 °C at Coconut Island (Qld)	−1.3 °C at Mount Hotham (Vic.)	591.8 mm at Lake Margaret Dam (Tas.)	165 km/h at Kunanyi (Mount Wellington Pinnacle) (Tas.) on the 14th
Western Australia	38.3 °C at Kalumburu on the 24th	−3.8 °C at Wandering on the 13th	113.2 mm at Jarrahwod on the 16th	27.3 °C at Browse Island	8.6 °C at Corrigin	324.6 mm at Jarrahwod	130 km/h at Cape Leeuwin on the 29th
Northern Territory	36.3 °C at Bradshaw on the 10th and Oenpelli Airport on the 24th	−4.5 °C at Kulgera on the 16th	52.2 mm at Geriatric Park on the 13th	27.3 °C at Cape Wessel	11.6 °C at Kulgera	59.4 mm at Black Point	69 km/h at Cape Wessel and Walungurru Airport on the 13th
South Australia	29.6 °C at Moomba Airport on the 22nd	−5.0 °C at Yunta Airstrip on the 16th	84.0 mm at Myponga on the 5th	13.4 °C at Moomba Airport	7.2 °C at Mount Lofty	269.8 mm at Aldgate	139 km/h at Cape Willoughby and Neptune Island on the 12th
Queensland	34.8 °C at Burketown Airport on the 23rd	−4.5 °C at Stanthorpe Leslie Parade on the 30th	310.8 mm at Pacific Heights on the 17th	28.2 °C at Coconut Island	10.1 °C at Applethorpe	485.0 mm at Byfield Childs Road	91 km/h at Rundle Island on the 16th
New South Wales	29.5 °C at Murwillumbah (Bray Park) on the 23rd	−8.7 °C at Thredbo AWS on the 13th and 14th	148.0 mm at Perisher Valley AWS on the 23rd	16.7 °C at Byron Bay (Cape Byron AWS) and South West Rocks (Smoky Cape Lighthouse)	−0.9 °C at Thredbo AWS	420.4 mm at Perisher Valley AWS	128 km/h at Cabramurra SMHEA AWS on the 22nd and 23rd
Victoria	23.5 °C at Mallacoota on the 18th	−8.0 °C at Mount Hotham on the 13th and 14th	120.2 mm at Reeves Knob on the 7th	12.5 °C at Gabo Island Lighthouse	−1.3 °C at Mount Hotham	358.2 mm at Haines Junction (Mount Sabine)	159 km/h at Wilsons Promontory Lighthouse on the 13th
Tasmania	18.1 °C at Bicheno (Council Depot) on the 3rd	−8.9 °C at Liawenee on the 30th	92.6 mm at Lake Margaret Power Station on the 15th	11.4 °C at Swan Island	0.7 °C at Kunanyi (Mount Wellington Pinnacle)	591.8 mm at Lake Margaret Dam	165 km/h at Kunanyi (Mount Wellington Pinnacle) on the 14th

In this table *Hottest day* is the highest daily maximum temperature, *Coldest night* is the lowest daily minimum temperature, *Wettest day* is the highest daily rainfall total, *Warmest overall* is the highest mean monthly temperature, *Coollest overall* is the lowest mean monthly temperature and *Wettest overall* is the highest total monthly precipitation.

Wind and rain in the South West Land Division

The passage of a cold front produced severe wind gusts, moderate to heavy rainfall and small hail along coastal areas of Western Australia's South West Land Division from the 8th to the 10th.

Flooding in Queensland

Significant rainfall throughout the month resulted in moderate flood levels recorded along the Mackenzie and Isaac River catchments during the second week of July. Moderate flood levels were recorded at Winton on the Western River which flowed downstream throughout the second half of July.

Flooding in South Australia

The succession of frontal systems from the 22nd to the 26th resulted in rainfall accumulations of 80 to 100 mm across parts of the Mount Lofty Ranges. Catchments were already wet following rainfall earlier in the month and as a result minor flooding affected the upper Onkaparinga River from the 24th to the 25th, and again from the 26th to 27th. Strong flows were also experienced in the Bremer River during the 24th and 25th, with road closures affecting several areas, particularly in and around Langhorne Creek.

Strong winds in southeast Australia at the start of the month

A low pressure system deepened off South Australia's Coorong coast during the evening of the 4th, then tracked northeastwards overnight. Strong winds developed on the western flank of the low, with wind gusts of 91 km/h at Parawa, 93 km/h at Outer Harbor, and 102 km/h at Cape Willoughby. The low pressure system intensified east of Victoria, with wind gusts above 100 km/h at Mount Buller, Falls Creek and Wattamolla and 96 km/h at Irapuna / Eddystone Point on the 6th.

Cold front causes destruction in the southeast

A low pressure system and associated cold front caused very strong winds as it crossed southeastern Australia, with wind gusts exceeding 90 km/h in large parts of Tasmania, South Australia, Victoria and New South Wales between the 9th and 13th. The strongest winds were recorded on the 12th, when wind gusts exceeded 120 km/h at several locations, including record-high July wind gusts at Mangalore, Wynyard and King Island airports. Wilsons Promontory also recorded a wind gust of 159 km/h on

13 July, with a gust of 161 km/h recorded at Hogan Island. Strong winds continued in Tasmania until the 15th as a small low pressure system intensified within the trough, with the strongest wind gust reaching 165 km/h at Kunanyi / Mount Wellington on the 14th.

The strong winds were associated with widespread damage, with downed trees and powerlines leading to road closures and property damage across four states and widespread power outages, including to over 120,000 premises in South Australia and 14,000 premises in Tasmania. Impacts were particularly significant in the Mount Lofty ranges in South Australia, where persistently strong winds interacted with topography, with more than 1000 calls for assistance to the SES in South Australia alone. At Tungkillio, a man died when a tree fell on him while he was clearing another fallen tree. At Strathalbyn, a caravan was overturned with a man inside. A fatality was also reported in Picton, New South Wales, when a tree crushed a ute. Damage was widespread in Tasmania, with damage to roofs, walls and windows from strong winds and flying debris as well as significant coastal erosion from large surf. A man suffered two broken legs in Hobart when a large section of brick wall in Bathurst Street collapsed during the strong winds on the 13th.

Cold outbreak brings snow to Tasmania, Victoria and New South Wales

As well as strong winds, the cold front brought very cold weather to southeastern Australia between the 11th and 13th. Snow fell to sea level in southern parts of Tasmania overnight on the 12th and into the morning of the 13th, and settled below 200 metres in some areas, although in most areas the cover was light. Many high elevation roads were either closed or restricted to 4WD vehicles. Widespread snow to low levels was also reported in Victoria, including the Otways, higher parts of the Dandenong ranges outside Melbourne, Mount Macedon, Wonthaggi, Ararat and Ballarat. Snow flurries were also reported at Mount Lofty on the afternoon of the 12th, with reports of small hail across the Adelaide region. There was heavy snow in alpine regions of Victoria and New South Wales, with snow depths at Spencers Creek increasing by 44 cm between the 6th and 14th. Settling snow was also reported in some lower-altitude locations such as Cooma and Canberra, with some cover on Black Mountain and Mount Ainslie. In most low lying areas, temperatures recovered quickly and any snow soon melted.

More strong wind and another cold outbreak in the southeast

A series of cold fronts crossed the southeast from the 22nd to the 25th, causing strong and gusty winds across Tasmania, South Australia, Victoria and much of New South Wales.

Exposed and elevated sites in Tasmania recorded wind gusts well in excess of 100 km/h, including 126 km/h at Maatsuyker Island on the 22nd and 146 km/h at Cape Grim on the 23rd. Mount Buller in Victoria reached 115 km/h on the 22nd and Wilsons Promontory reached 144 km/h on the 23rd, whilst in New South Wales the peak gust was 128 km/h at Cabramurra.

There were at least 100 calls for assistance to the SES in Victoria alone. Fallen trees and downed powerlines occurred in many areas. In South Australia, wind gusts of over 90 km/h were recorded at several locations including Adelaide Airport, with scattered damage to trees and property including substantial roof damage to a house in the Adelaide suburb of Semaphore.

In the wake of the cold front, snow again fell to low levels in Tasmania, settling below 200 m in some areas and leading to the closure of some highland roads. There were also significant falls in the

Australian Alps: snow depths increased by 73 cm at Spencers Creek during this week, with a 29 cm increase at Three Mile Dam.

Strong winds continued over Tasmania, South Australia and Victoria for several days, re-intensifying on the 25th as a front crossed. Several exposed sites in Tasmania reported wind gusts over 100 km/h, with Maatsuyker Island reaching 143 km/h on the 26th.

In Victoria, Wilsons Promontory recorded a gust to 130 km/h and St Kilda a gust to 94 km/h; there were 300 calls to the SES, mainly concerning fallen trees.

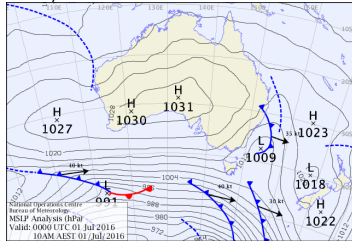
In South Australia, wind gusts to 93 km/h were recorded at Parndana and 91 km/h at Mount Gambier. A tornado also caused tree and house roof damage along a narrow 2.7 km long track through the Adelaide suburbs of Somerton Park and Glengowrie on the 25th.

Wind and storms in Western Australia

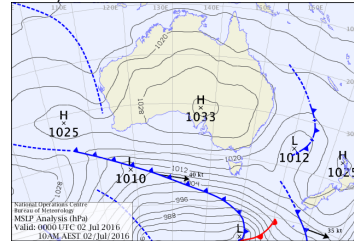
Strong cold fronts moved through the southwest of Western Australia from the 29th to the 31st, producing severe wind gusts up to 130 km/h at Cape Leeuwin. Isolated thunderstorms and hail with minor wind and water damage were reported in the South West and Lower West districts.

Synoptic analyses and summary

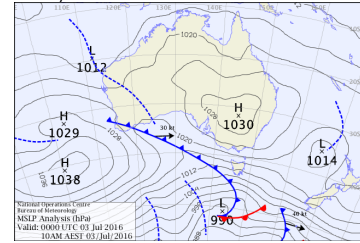
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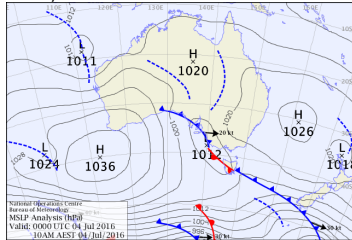
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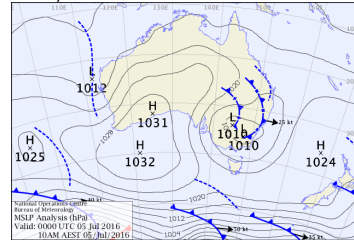
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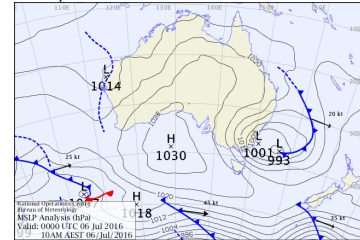
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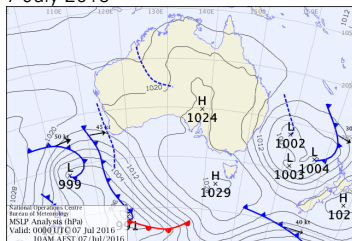
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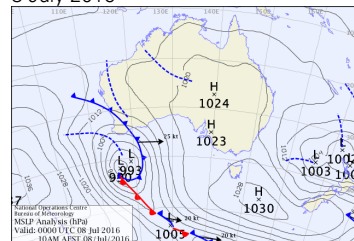
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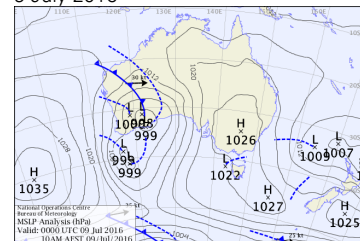
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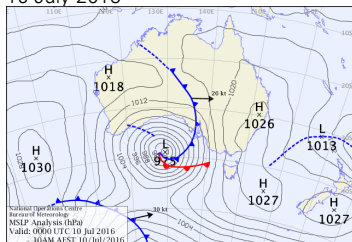
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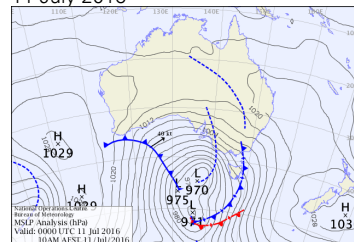
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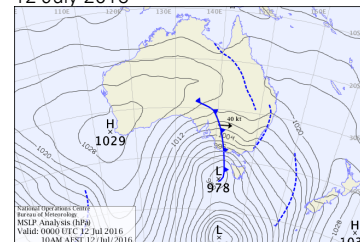
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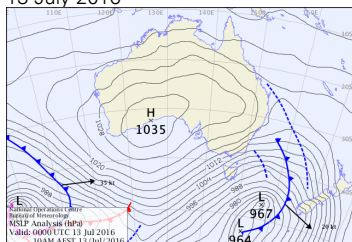
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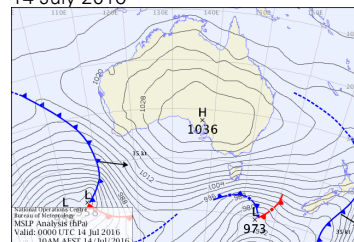
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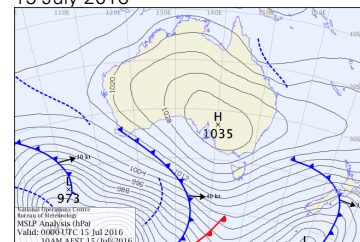
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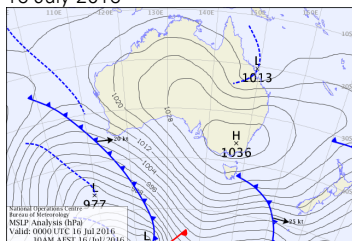
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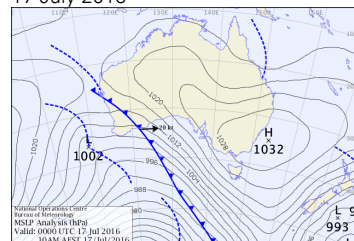
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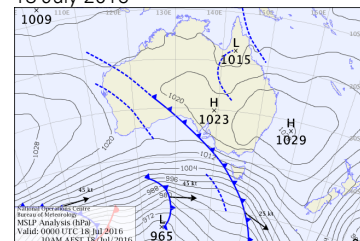
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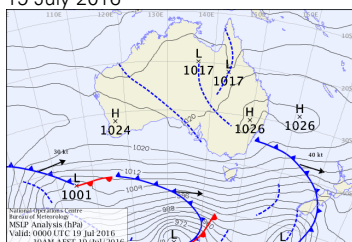
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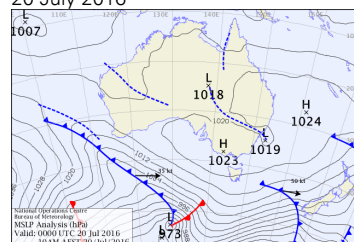
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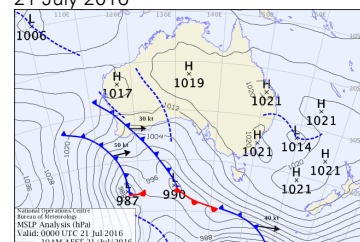
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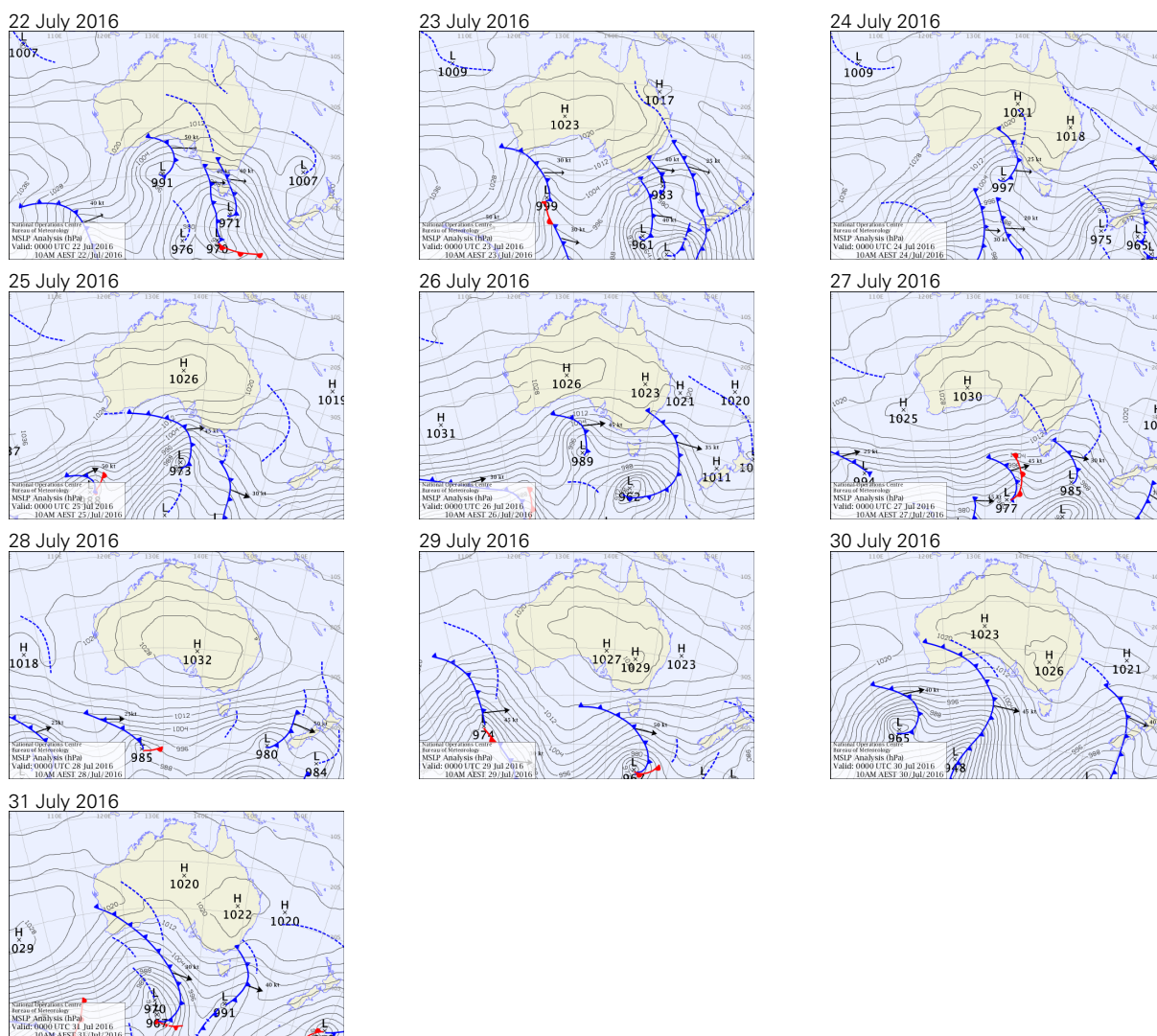


20 July 2016



21 July 2016





Synoptic summary

July began with a surface trough lingering over northwestern parts of Australia and a cold front clearing to the southeast of the country.

A complex area of low pressure developed over South Australia on the 4th before the system tracked eastwards over southeastern States. The low pressure system pushed off the east coast by the 7th. During the first week of the month the rest of the country was clear under a ridge of high pressure.

From the 8th, a strong cold front and associated low pressure system moved over the southwest of Western Australia and tracked eastwards across southern Australia over the next few days. A high in the Bight produced relatively fine conditions preceding the frontal system. A ridge of high pressure

over much of Queensland and New South Wales generated clear conditions until the 12th, before a surface and upper-level trough developed through inland Queensland.

The deep low pressure system in the Bight moved over the Southern Ocean, and was located south of Tasmania late of the 12th. A series of low pressure systems and associated troughs moved over the eastern States before the systems weakened by the 14th. A large high pressure system dominated the southeast of the continent until the 17th. Another series of surface troughs and cold fronts continued to track across southern Australia for the remainder of the month.

Temperatures

July was the ninth-warmest on record for Australian temperatures, with the national average mean temperature 0.99 °C above the historical average. Temperatures were above average across most of eastern and northern Australia, with only southwest Western Australia recording cooler than average temperatures.

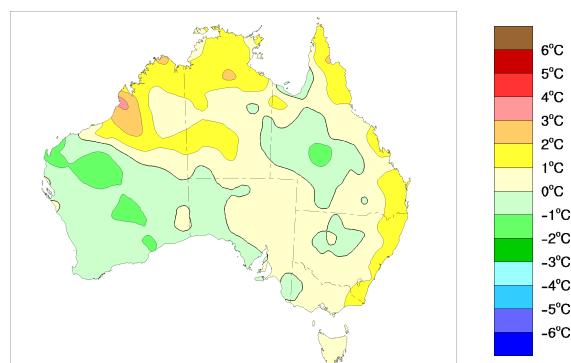
All States and Territories had above-average temperatures, with mean temperatures in the warmest 10% of years for most of Victoria, Tasmania, eastern and southern Queensland, and large areas of southern, eastern and northern New South Wales. For New South Wales (mean temperature anomaly of +1.41 °C), Victoria (+1.10 °C) and Tasmania (+1.02 °C) this was among the ten warmest Julys on record, although all were warmer in July 2013. Mean temperatures were also in the warmest 10% of years in the Pilbara region of Western Australia and in small areas of the northern and western Northern Territory.

The warm mean temperatures were primarily due to very warm minimum temperatures, associated with above average rainfall and cloudiness across the country, and with windiness in the south. The very warm minima were also associated with very high local sea surface temperatures, with July now the eighth consecutive month of record-high sea surface temperatures in the Australian region. In addition, a significant winter warm spell broke July temperature records in parts of eastern Australia between the 17th and 23rd.

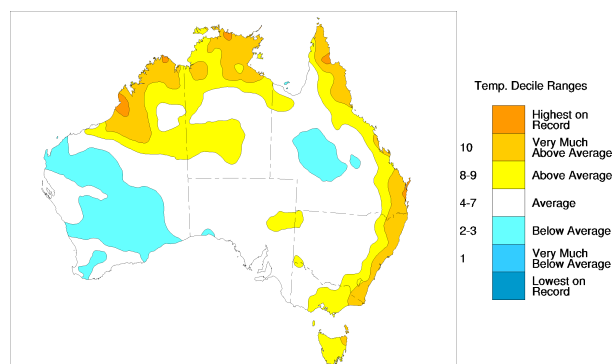
Maximum temperatures

Maximum temperatures during July were above average in Tasmania and along most of the eastern and northern coasts of the mainland. Daytime temperatures were in the warmest 10% of years in most of the northern and western Kimberley, the eastern and central Top End of the Northern Territory, eastern Cape York Peninsula, southeast Queensland, most of the eastern seaboard of New South Wales, and parts of eastern Gippsland and northeast Tasmania. Some areas recorded their warmest July average maximum temperatures on record, including Mackay and Derby (see page 15).

Anomalies of mean daily maximum temperature in July 2016



Decile rank of mean daily maximum temperature in July 2016



In contrast, most of mainland Australia away from the coast recorded close to average maximum temperatures during July, with below-average maximum temperatures in parts of central Queensland and much of the southern half of Western Australia. The national mean maximum temperature was 0.39 °C above average, with above-average daytime temperatures for all States and Territories but none recording temperatures in the warmest 20 years on record

At the start of the month, a high pressure system in central Australia brought generally cooler temperatures to southern and central Australia, with warm days in the west of Western Australia and the northern tropics. A cold front and subsequent high pressure system brought further cool days to southern Australia between the 4th and 7th, while warm days persisted in northern Australia.

A complex low pressure system crossed southern Australia from the 9th, with northerly winds brought warm weather ahead of the system and cool weather behind. Daytime temperatures were more than 8 °C above average in parts of the Northern Territory on the 10th, exceeding 35 °C in several locations. The low pressure system and associated cold front

intensified over subsequent days, with deep southerly winds bringing very cold temperatures to most of Australia. On the 13th, heavy snow fell in alpine regions of southeast Australia, with snow also reported at lower altitudes including Canberra (see page 3).

A high pressure system over central Australia contributed to very cold temperatures in northern Australia between the 13th and 16th, with large areas of Queensland and the Northern Territory recording maximum temperatures more than 12 °C below average. This broke July temperature records at several locations, including Gove, Mount Isa, and Longreach.

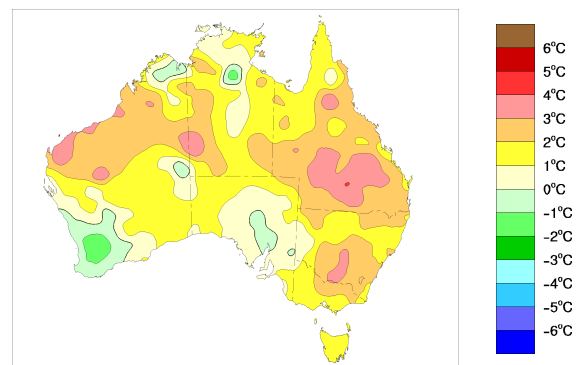
Temperatures warmed as the high pressure system moved eastward from the 17th. A slow-moving surface trough directed warm northerly winds into southeast Australia between the 17th and 19th, with warmth strengthening ahead of subsequent fronts between the 20th and 22nd. Several stations in Queensland and New South Wales recorded their warmest July day on record during this event, including Sydney Airport, Inverell, Gympie and Mackay.

As another high pressure system moved over Australia, average or cooler temperatures returned to southern Australia, but with persistently warm temperatures in northern Australia. As the high moved eastward, warm temperatures developed over Western Australia from the 28th. The month ended with warm days across the country, and temperatures more than 8 °C above average in parts of central Australia.

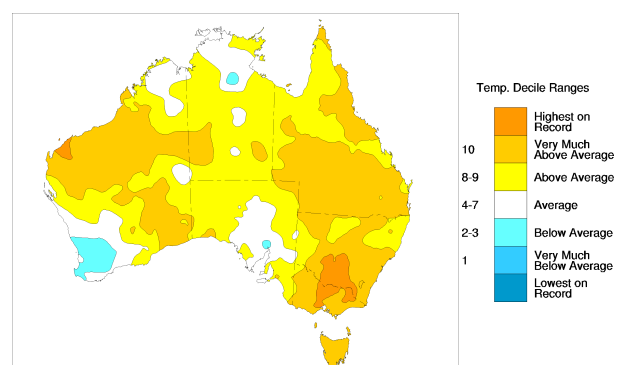
Minimum temperatures

July was the fifth-warmest on record for Australian mean minimum temperatures, 1.58 °C above average, and the warmest since 2010. Minimum temperatures were above average across most of the country, with the exception of cool nights in southwest Western Australia and in small areas near Port Augusta in South Australia and Daly Waters in the Northern Territory.

Anomalies of mean daily minimum temperature in July 2016



Decile rank of mean daily minimum temperature in July 2016



Minimum temperatures were in the warmest 10% of years over about 40% of the country, including most of the eastern States and large areas of Western Australia, with record-high minima recorded near Onslow in northwest Western Australia and in the New South Wales-Victorian border region. The statewide average minimum temperature during July was the second-warmest on record for Victoria (with an anomaly of +1.71 °C), third-warmest for Tasmania (+1.68 °C) and fourth-warmest for New South Wales (+2.25 °C), with Queensland and Western Australia also recording July mean minimum temperatures in the ten warmest years on record.

The first ten days of July featured persistently warm nights across much of northern Australia and in the west of Western Australia, extending into central Australia, with some locations such as Mardie as well as some offshore islands recording their warmest July night on record at the start of the month. Nights were also persistently warm in southeast Australia, but they were cooler than average in southwest Western Australia and parts of eastern central Australia. Cool nights also extended into inland Queensland from the 6th.

A surface trough in central Australia and high pressure to the west of the country contributed to very warm minimum temperatures in northern and eastern

Australia between the 11th and 13th, with cooler nights developing in southern Western Australia. This was followed by widespread cool conditions as the high pressure system moved over the mainland between the 14th and 16th, with the exception of Tasmania and parts of southwest Western Australia.

On the 17th, cool nights were present across a large area of mainland Australia extending between northwest Western Australia and Victoria, with well above average temperatures in southwestern Western Australia and southeast Queensland. Over subsequent days cool temperatures persisted in parts of northwest Australia but nights warmed across the rest of the country, associated with a series of complex low pressure systems, northerly winds, and cloudy conditions.

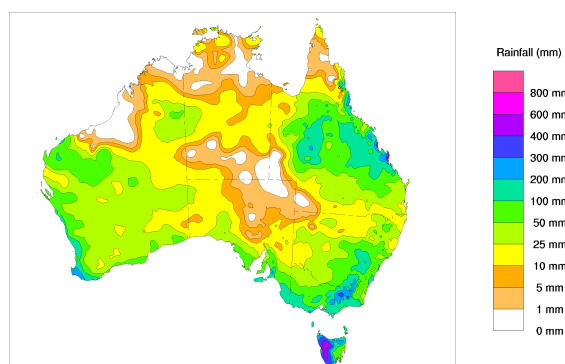
Nights were more than 10 °C above average across much of southern Queensland and northern New South Wales between the 19th and 23rd, with many stations including Cairns, Charleville and Cobar recording their warmest July night on record (see page 15). This air mass was also abnormally moist, with several stations including Canberra and Melbourne recording dewpoint temperatures more than 2 °C higher than their previous June record.

Temperatures were closer to average in southern Australia between the 24th and 28th, while warm nights persisted over much of northern Australia. The month ended with warmer nights in southern Australia and cooler nights in the north, with very warm nights in southern Western Australia including the warmest July night on record at Kalgoorlie-Boulder on the 30th.

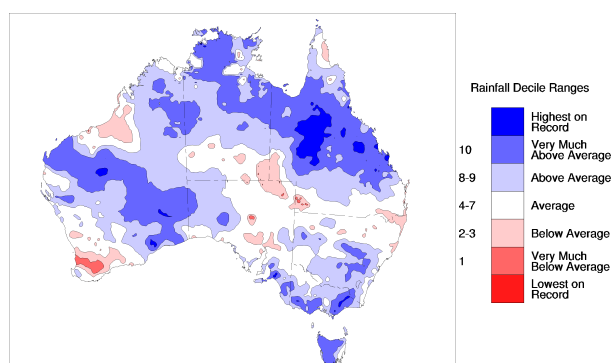
Rainfall

For Australia as a whole, July rainfall was 68 % above average. This is the wettest July since 1998, and the seventh-wettest on record. July rainfall was above average across northern Australia, large parts of Western Australia, and in parts of western and southeastern South Australia. Much of Victoria, Tasmania, and southern and central New South Wales also received above average July rainfall. Nearly 10 % of Queensland had its highest July rainfall on record, with much of Queensland away from the southern border receiving above average to well above average rainfall. Queensland had its seventh-wettest July, whilst Tasmania had its sixth-wettest and Victoria recorded its eighth-wettest July.

Total rainfall in July 2016



Decile rank of total rainfall in July 2016



July rainfall was below average in southwest Western Australia, in the Pilbara and western Kimberley, southern parts of the Northern Territory, southwest Queensland, and parts of the east coast straddling the border of New South Wales and Queensland. The far northeast of Cape York Peninsula, and an area along the southwest coast of South Australia also recorded below average July rainfall.

A series of cold fronts tracked across southern Australia at the start of the month, bringing moderate falls to southeastern Australia and along the southern coast up to the 4th. A frontal system and associated low moved across South Australia and southeastern

Australia and brought widespread, light rainfall to southern parts of South Australia and moderate falls to western, central and northeastern Victoria, and elevated parts of southeastern New South Wales.

Moderate to heavy rainfall affected parts of Adelaide on the evening of the 4th, with widespread totals of 30 to 50 mm recorded over four or five hours causing hundreds of water-related callouts for emergency services. Many stations in the Adelaide metropolitan area recorded their wettest July day on record on the 5th (see page 21), with 38 mm recorded at Adelaide (Kent Town) the wettest July day in 75 years. A deepening surface trough over inland Queensland brought heavier falls to central and southeastern Queensland and northeastern New South Wales.

In the west, a deepening low pressure system off the coast to the north of Carnarvon brought moderate falls to parts of the Pilbara and Gascoyne, and the Goldfields district in Western Australia between the 5th and 7th. Frontal systems tracked across southern Australia from the 8th to the 15th. The first of the series tracked across the southwest and affected the South West Land Division, with a cold air mass behind the front moving northwards and producing showers and thunderstorms in most of southern and southwest Western Australia. Light to moderate, widespread rainfall was recorded in South Australia, Victoria, southern New South Wales and Tasmania.

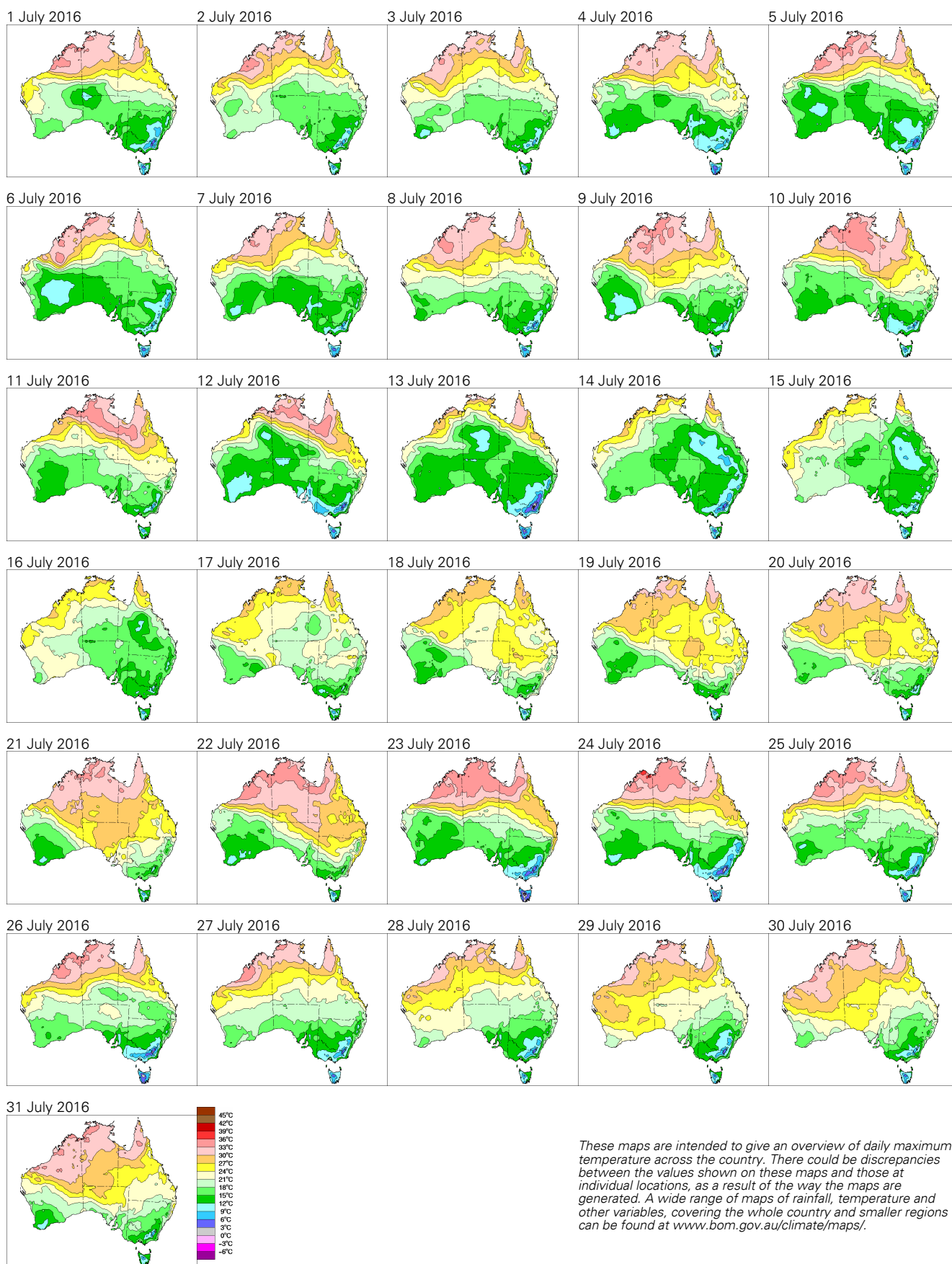
A broad low pressure trough across northern Australia produced moderate falls in the Kimberley, northern and central parts of the Northern Territory, and in western Queensland between the 12th and 14th. Daily totals exceeded 50 mm in large areas of central Queensland over the 15th and 16th, with falls exceeding 100 mm around Yeppoon and Byfield and record high July totals at stations including Richmond and Mackay. Further isolated, heavy rainfall was recorded in Yeppoon, with falls in excess of 250 mm on the 17th, resulting in a 48-hour rainfall total at Byfield of 485 mm and the wettest July day on record for Rockhampton.

A vigorous westerly flow in the wake of a strong cold front produced moderate falls in western Tasmania. In the north, a strong upper-level trough moved across Queensland, with an upper-level low developing over the northern interior of Queensland. Moderate rainfall was recorded in the Northern Goldfields and Upper Flinders before a surface trough formed off the central Queensland coast. These features produced heavy rainfall in the Central Highlands and Capricornia coast, with moderate falls recorded across large parts of southern and western Queensland.

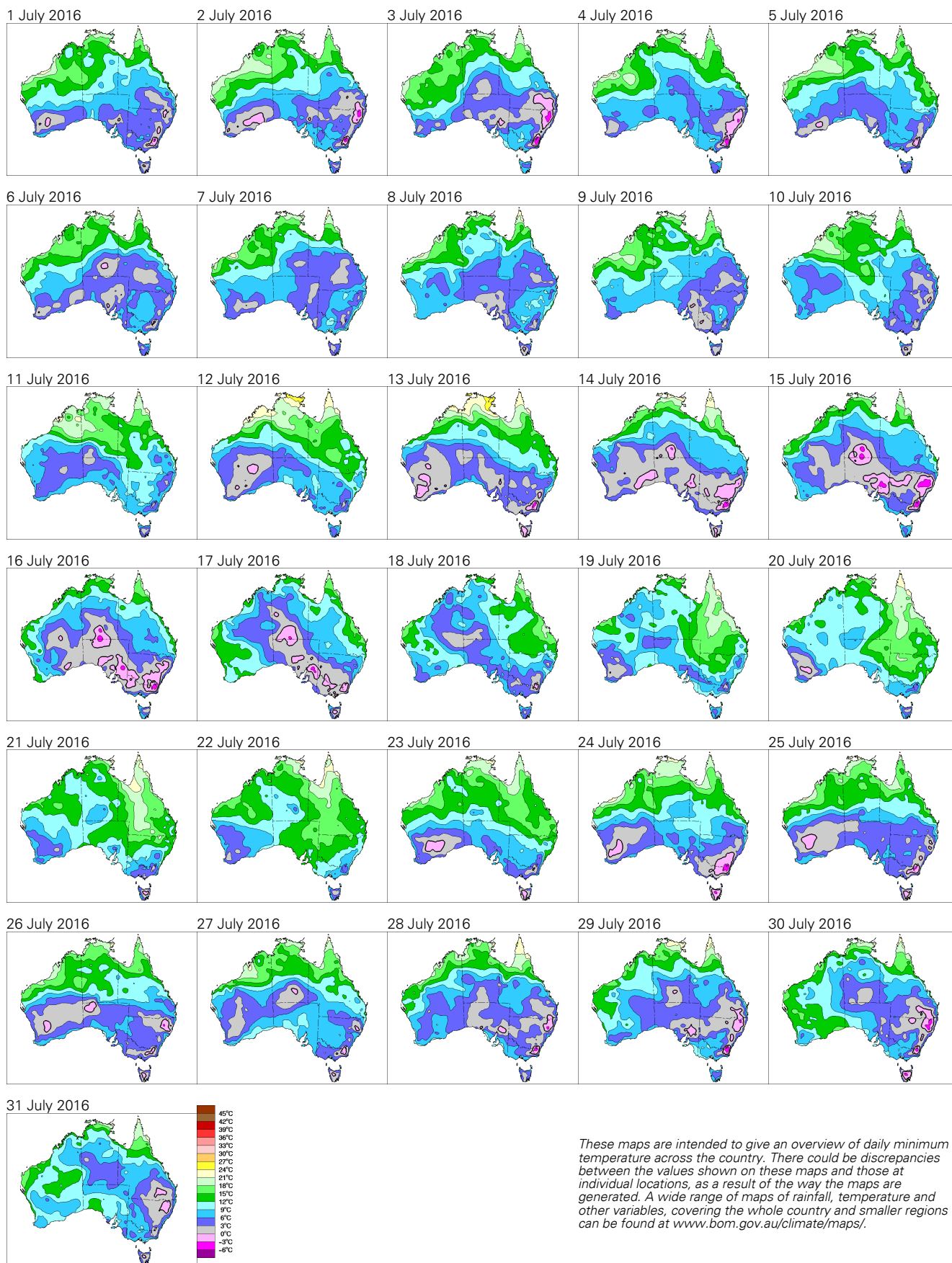
Another deep trough over western Queensland and New South Wales generated thunderstorms with heavy falls recorded in central western Queensland, and in central, western and northern New South Wales between the 19th and 22nd.

Frontal systems dominated the remainder of the month, with a series of cold fronts and associated low pressure systems tracking across southern parts, and generating moderate falls in the southwest, southern coast and southeastern Australia.

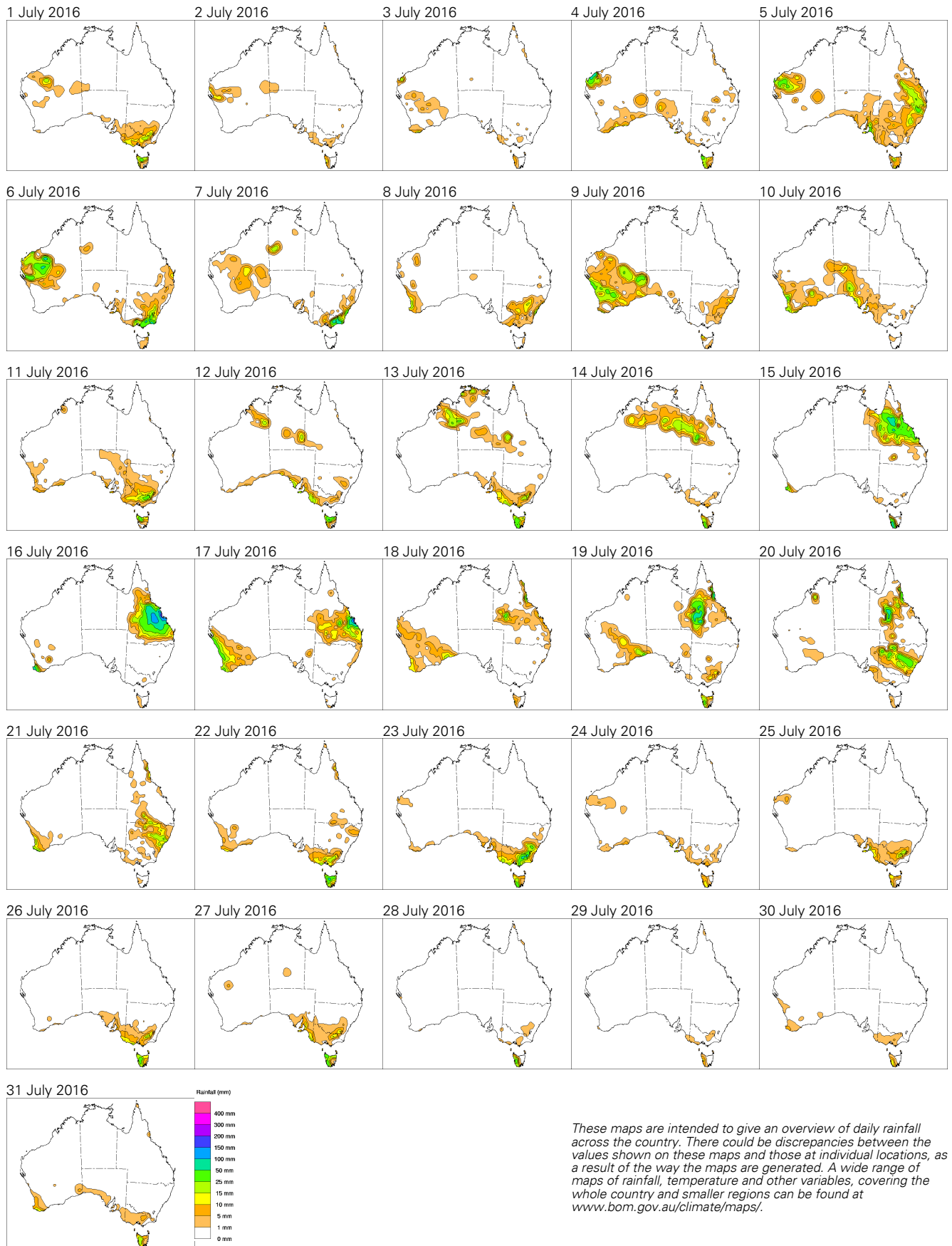
Daily maximum temperature maps



Daily minimum temperature maps



Daily rainfall maps



Records

Record highest July daily maximum temperature				
		New record	Old record	Years of record
Western Australia				
001007	Troughton Island	32.0 on 13th	31.8 on 2nd in 2009	37
003030	Bidyadanga	35.7 on 1st	35.6 on 28th in 2015	57
003032	Derby Aero	36.2 on 25th	35.9 on 1st in 1996	32
006022	Gascoyne Junction	32.1 on 31st	31.5 on 30th in 2015	41
200284	Cocos Island Airport	30.3 on 27th =	30.3 on 28th in 2003	65
200790	Christmas Island Aero	29.3 on 1st	28.8 on 1st in 1998	42
Queensland				
040068	Double Island Point Lighthouse	26.6 on 22nd	26.2 on 21st in 1998	56
040082	University of Queensland Gatton	29.0 on 22nd =	29.0 on 31st in 1974	51
040093	Gympie	30.2 on 23rd	29.4 on 26th in 2015	51
040126	Maryborough	30.1 on 23rd	28.6 on 26th in 2015	59
040211	Archerfield Airport	29.2 on 23rd	28.3 on 21st in 1998	42
041095	Stanthorpe Leslie Parade	23.2 on 19th	22.2 on 30th in 2010	54
041175	Applethorpe	22.3 on 20th	21.7 on 30th in 2010	48
New South Wales				
056013	Glen Innes Ag Research Stn	20.0 on 20th =	20.0 on 16th in 2003	43
056018	Inverell Research Centre	22.6 on 20th	22.1 on 18th in 1974	51
056032	Tenterfield (Federation Park)	23.3 on 19th	22.7 on 31st in 1992	51
056229	Guyra Hospital	18.7 on 19th	17.7 on 16th in 2003	33
058158	Murwillumbah (Bray Park)	29.5 on 23rd	28.3 on 31st in 1974	39
064008	Coonabarabran (Namoi Street)	24.2 on 22nd	23.6 on 22nd in 1978	59
066037	Sydney Airport AMO	27.0 on 22nd	26.7 on 24th in 1990	78
068192	Camden Airport AWS	26.0 on 22nd	25.4 on 22nd in 2009	40
069022	Narooma (Marine Rescue)	25.3 on 22nd	24.8 on 31st in 1975	32
070005	Bombala (Therry Street)	21.3 on 18th	18.8 on 21st in 2002	48
= indicates the new record equals the old one.				

Record highest July mean maximum temperature				
		New record	Old record	Years of record
Western Australia				
001007	Troughton Island	29.9	29.8 in 2005	36
003032	Derby Aero	32.0	31.9 in 1975	31
200790	Christmas Island Aero	27.6	27.5 in 1984	41
Queensland				
028008	Lockhart River Airport	28.5	28.3 in 2009	51
040043	Cape Moreton Lighthouse	20.7	20.6 in 1993	106
New South Wales				
058158	Murwillumbah (Bray Park)	22.3	22.0 in 2005	38
200288	Norfolk Island Aero	19.9	19.5 in 1998	77

Highest July mean maximum temperature for at least 30 years			
		Observed this month	Most recent higher
Queensland			
032025	Innisfail	25.3	25.5 in 1981
040126	Maryborough	23.8	24.1 in 1953 *
New South Wales			
058012	Yamba Pilot Station	20.6	21.1 in 1946
* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported.			

Record lowest July daily maximum temperature			
	New record	Old record	Years of record
Northern Territory			
014508	Gove Airport	23.4 on 15th	24.0 on 18th in 2006 37
014703	Centre Island	19.8 on 14th	20.5 on 1st in 2000 42
015085	Brunette Downs	14.1 on 14th	14.4 on 2nd in 1999 53
015135	Tennant Creek Airport	10.4 on 13th	10.7 on 7th in 2010 48
Queensland			
029038	Kowanyama Airport	18.8 on 15th	20.0 on 26th in 1984 48
029127	Mount Isa Aero	10.1 on 14th	10.6 on 24th in 1984 50
032078	Ingham Composite	18.0 on 15th =	18.0 on 13th in 1978 48
033002	Ayr DPI Research Stn	15.6 on 15th	16.1 on 25th in 1957 60
035069	Tambo Post Office	9.0 on 14th	9.7 on 7th in 2010 60
036007	Barcaldine Post Office	9.5 on 15th	12.6 on 25th in 1984 55
036026	Isisford Post Office	10.2 on 15th =	10.2 on 7th in 2010 57
036031	Longreach Aero	9.1 on 15th	11.2 on 7th in 2010 51
043020	Mitchell Post Office	9.0 on 14th =	9.0 on 28th in 1986 47
= indicates the new record equals the old one.			

Record lowest July daily minimum temperature			
	New record	Old record	Years of record
South Australia			
018115	Neptune Island	5.0 on 13th	5.2 on 30th in 1994 55

Record highest July daily minimum temperature			
	New record	Old record	Years of record
Western Australia			
001007 Troughton Island	26.6 on 2nd	26.0 on 2nd in 2009	37
004019 Mandora	22.1 on 1st	21.4 on 1st in 1996	54
005008 Mardie	22.3 on 3rd	22.1 on 15th in 1996	59
009573 Manjimup	13.9 on 16th	13.6 on 15th in 2013	57
012038 Kalgoorlie-Boulder Airport	15.8 on 30th =	15.8 on 30th in 2001	76
200284 Cocos Island Airport	27.1 on 1st	26.9 on 8th in 2009	65
200790 Christmas Island Aero	25.4 on 6th	24.9 on 15th in 1998	42
South Australia			
016065 Andamooka	15.6 on 22nd	14.4 on 30th in 1993	47
018069 Elliston	15.3 on 22nd	15.0 on 29th in 2011	55
019017 Hawker	13.5 on 22nd	13.4 on 30th in 1975	43
Queensland			
031011 Cairns Aero	22.8 on 20th	22.7 on 15th in 2012	74
032004 Cardwell Marine Pde	22.1 on 20th	22.0 on 21st in 1998	59
032040 Townsville Aero	22.2 on 19th	21.7 on 25th in 2010	76
033045 Mackay Aero	21.0 on 19th	20.9 on 14th in 2012	31
036007 Barcaldine Post Office	18.9 on 21st =	18.9 on 26th in 1993	55
036026 Isisford Post Office	19.7 on 21st	18.6 on 1st in 1981	58
036031 Longreach Aero	19.4 on 21st	18.5 on 26th in 1993	51
039314 Seventeen Seventy	20.0 on 23rd	19.8 on 9th in 1993	30
041175 Applethorpe	14.8 on 23rd	14.0 on 13th in 2012	48
043035 Surat	16.5 on 23rd	16.0 on 7th in 1993	52
044021 Charleville Aero	18.7 on 21st	17.2 on 7th in 1993	75
044026 Cunnamulla Post Office	18.2 on 21st	17.6 on 7th in 1993	58
= indicates the new record equals the old one.			

Record highest July daily minimum temperature				
		New record	Old record	Years of record
New South Wales				
047019	Menindee Post Office	14.0 on 22nd	13.9 on 21st in 1962	54
048015	Brewarrina Hospital	16.4 on 20th	15.1 on 13th in 2012	45
048027	Cobar MO	16.8 on 20th	14.7 on 23rd in 2003	55
048031	Collarenebri (Albert St)	18.0 on 21st	16.0 on 24th in 1990	49
049002	Balranald (RSL)	13.0 on 22nd =	13.0 on 30th in 1975	51
050031	Peak Hill Post Office	16.2 on 20th	14.0 on 24th in 1990	51
051039	Nyngan Airport	16.5 on 20th	14.0 on 19th in 2013	57
052020	Mungindi Post Office	18.4 on 21st	16.0 on 24th in 1990	50
054104	Pindari Dam	15.1 on 22nd	14.4 on 2nd in 1981	43
055136	Woolbrook (Danglemah Road)	13.6 on 21st	12.7 on 24th in 1990	45
056013	Glen Innes Ag Research Stn	11.5 on 22nd	11.4 on 9th in 1993	43
056018	Inverell Research Centre	15.1 on 23rd	13.3 on 13th in 2012	51
056032	Tenterfield (Federation Park)	14.1 on 21st =	14.1 on 24th in 1981	51
056229	Guyra Hospital	12.1 on 21st	9.5 on 13th in 2012	33
057095	Tabulam (Muirne)	15.6 on 23rd	15.1 on 31st in 2010	46
060085	Yarras (Mount Seaview)	14.8 on 21st	14.6 on 14th in 1975	47
061055	Newcastle Nobbys Signal Station AWS	16.7 on 20th	15.7 on 25th in 1990	59
061078	Williamstown RAAF	15.7 on 20th	15.2 on 25th in 1990	66
061250	Paterson (Tocal AWS)	15.4 on 20th	14.3 on 29th in 1992	44
063005	Bathurst Agricultural Station	12.5 on 20th	11.0 on 5th in 1988	51
063039	Katoomba (Murri St)	12.2 on 20th	11.1 on 29th in 1975	54
063063	Oberon (Springbank)	10.5 on 20th	10.0 on 8th in 1984	33
063254	Orange Agricultural Institute	12.0 on 20th	10.5 on 25th in 1993	41
064009	Dunedoo Post Office	13.5 on 20th	13.3 on 25th in 1993	48
066124	Parramatta North (Masons Drive)	15.5 on 20th	15.2 on 25th in 1990	50
070080	Taralga Post Office	11.3 on 20th	10.2 on 29th in 1975	56
070263	Goulburn TAFE	11.4 on 20th	10.4 on 6th in 1988	42
071032	Thredbo AWS	1.8 on 22nd =	1.8 on 19th in 2013	48
073014	Grenfell (Manganese Rd)	14.0 on 20th	13.2 on 31st in 1975	50
075039	Lake Cargelligo Airport	14.5 on 20th	13.7 on 23rd in 2003	45
Victoria				
076031	Mildura Airport	14.6 on 22nd	14.3 on 30th in 1975	70
089085	Ararat Prison	11.0 on 22nd	10.8 on 28th in 1975	48
= indicates the new record equals the old one.				

Record highest July mean minimum temperature				
		New record	Old record	Years of record
Western Australia				
005008	Mardie	16.1	15.1 in 2004	59
200284	Cocos Island Airport	25.1	25.0 in 2012	64
200790	Christmas Island Aero	23.6	23.4 in 1996	41
Queensland				
031037	Low Isles Lighthouse	22.3	22.2 in 2010	48
New South Wales				
050052	Condobolin Ag Research Stn	6.3	5.6 in 1993	53
069018	Moruya Heads Pilot Station	8.6	8.4 in 1950	140
070080	Taralga Post Office	3.2	2.5 in 1993	56
070263	Goulburn TAFE	4.2	3.5 in 1991	41
070278	Cooma Visitors Centre	−0.6 =	−0.6 in 1974	40
071032	Thredbo AWS	−3.3	−3.4 in 1999	47
072150	Wagga Wagga AMO	5.6	5.1 in 1993	75
074106	Tocumwal Airport	6.7	5.4 in 1990	45
Victoria				
080091	Kyabram	6.1 =	6.1 in 1990	50
081049	Tatura Inst Sustainable Ag	5.6	5.4 in 1975	51
082042	Strathbogie	4.2	3.7 in 1975	39
082076	Dartmouth Reservoir	4.6	4.4 in 1990	37
085280	Morwell (Latrobe Valley Airport)	6.1	5.5 in 1991	32
086038	Essendon Airport	7.4	7.2 in 2013	46
087031	Laverton RAAF	7.1	6.9 in 2014	72
088023	Lake Eildon	5.8 =	5.8 in 1975	46
088110	Castlemaine Prison	6.4	5.1 in 1975	46
089085	Ararat Prison	5.3	5.0 in 1988	47
Tasmania				
091237	Launceston (Ti Tree Bend)	4.9	4.5 in 1993	33
092027	Orford (Aubin Court)	5.5	5.4 in 2001	47
094008	Hobart Airport	5.7	5.6 in 2013	58
099005	Flinders Island Airport	8.4	8.3 in 2005	54

= indicates the new record equals the old one.

Highest July mean minimum temperature for at least 30 years			
		Observed this month	Most recent higher
Western Australia			
005026	Wittenoom	13.4	15.1 in 1973
New South Wales			
063005	Bathurst Agricultural Station	3.3	5.1 in 1930 *
066124	Parramatta North (Masons Drive)	8.3	8.5 in 1973
072023	Hume Reservoir	6.7	6.9 in 1975 *
072043	Tumbarumba Post Office	2.2	2.4 in 1975 *
074034	Corowa Airport	5.7	6.0 in 1975 *
Victoria			
078077	Warracknabeal Museum	5.4	6.1 in 1975 *
080015	Echuca Aerodrome	6.1 =	6.1 in 1975
088109	Mangalore Airport	5.9	6.3 in 1975
089002	Ballarat Aerodrome	4.3	4.8 in 1975 *
Tasmania			
095003	Bushy Park (Bushy Park Estates)	3.4	4.1 in 1946 *
096003	Butlers Gorge	1.4	1.8 in 1959 *
* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported. = indicates the new record equals the old one.			

Record highest July mean temperature				
		New record	Old record	Years of record
Western Australia				
001007	Troughton Island	26.9 =	26.9 in 2010	36
013030	Telfer Aero	19.6	19.5 in 2000	42
200790	Christmas Island Aero	25.6	25.2 in 1996	41
Queensland				
040068	Double Island Point Lighthouse	18.6	18.4 in 2005	74
New South Wales				
059030	South West Rocks (Smoky Cape Lighthouse)	16.7	16.5 in 1946	77
061250	Paterson (Tocal AWS)	13.2	13.0 in 1993	42
066124	Parramatta North (Masons Drive)	13.3 =	13.3 in 1988	49
066137	Bankstown Airport AWS	12.9	12.8 in 1988	47
068192	Camden Airport AWS	11.6	11.5 in 1988	39
069018	Moruya Heads Pilot Station	13.0	12.6 in 2014	140
200288	Norfolk Island Aero	17.4 =	17.4 in 1998	77
Victoria				
085072	East Sale Airport	9.9 =	9.9 in 2014	70
085280	Morwell (Latrobe Valley Airport)	10.0 =	10.0 in 2005	32
089085	Ararat Prison	9.0	8.9 in 1999	47
Tasmania				
091237	Launceston (Ti Tree Bend)	9.1	9.0 in 1993	33
095003	Bushy Park (Bushy Park Estates)	8.2	8.1 in 2005	79
099005	Flinders Island Airport	11.2	11.1 in 2005	54
= indicates the new record equals the old one.				

Highest July mean temperature for at least 30 years			
		Observed this month	Most recent higher
Western Australia			
003003	Broome Airport	23.8	24.2 in 1973
004032	Port Hedland Airport	22.3	22.9 in 1973
New South Wales			
061078	Williamtown RAAF	13.3	13.6 in 1973
074106	Tocumwal Airport	10.3	10.9 in 1975
Victoria			
080015	Echuca Aerodrome	10.0	11.3 in 1975
080091	Kyabram	9.8	10.1 in 1975 *
081049	Tatura Inst Sustainable Ag	9.4	10.1 in 1975
082042	Strathbogie	7.3	7.6 in 1975 *
088110	Castlemaine Prison	9.1	9.5 in 1975 *
* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported.			

Lowest July mean temperature for at least 30 years			
		Observed this month	Most recent lower
Western Australia			
010536	Corrigin	8.6	8.4 in 1952

Record highest July daily rainfall				
		New record	Old record	Years of record
Western Australia				
005008	Mardie	89.8 on 4th	41.2 on 11th in 2005	118
005082	Eramurra Pool	76.0 on 4th	22.6 on 16th in 1996	30
006097	Useless Loop	42.0 on 17th	29.6 on 21st in 2015	32
007007	Boolardy	90.4 on 6th	56.1 on 16th in 1974	108
007080	Three Rivers	44.4 on 6th	40.4 on 3rd in 1997	89
007181	Weelarrana	46.0 on 6th	26.2 on 20th in 1984	30
008004	Balline	72.8 on 17th	53.1 on 18th in 1973	85
008075	Lynton	53.8 on 17th	50.3 on 7th in 1919	90
008096	Mumby	44.6 on 9th	43.7 on 20th in 1965	108
008286	Wundi	48.0 on 9th	40.0 on 1st in 1978	39
009771	Yoongarillup	107.0 on 16th	96.6 on 18th in 1995	60
009842	Jarraewood	113.2 on 16th	93.4 on 31st in 2015	41
009908	One Tree Bridge (Hazelmere)	77.4 on 16th	70.0 on 13th in 1997	46
011050	Kybo	23.0 on 19th	21.0 on 10th in 2009	35
Northern Territory				
014857	Suplejack	31.0 on 13th	23.0 on 24th in 1986	33

Record highest July daily rainfall			
	New record	Old record	Years of record
South Australia			
023001 Adelaide (Brighton)	43.2 on 5th	36.3 on 14th in 1941	73
023009 Mallala	38.8 on 5th	31.8 on 6th in 1891	133
023012 Owen	40.0 on 5th	37.4 on 8th in 1993	91
023028 Two Wells	39.6 on 5th	34.0 on 9th in 1951	130
023042 Burnside	55.6 on 5th	33.5 on 21st in 1920	38
023081 Bolivar Treatment Works	37.0 on 5th	23.6 on 30th in 1975	44
023087 Reeves Plains (Parana Park)	37.0 on 5th	30.0 on 28th in 1998	43
023090 Adelaide (Kent Town)	37.6 on 5th	32.8 on 8th in 1993	40
023095 Hamley Bridge	40.0 on 5th	33.0 on 10th in 1905	133
023096 Adelaide (Hope Valley Reservoir)	41.2 on 5th	36.2 on 28th in 1998	38
023311 Marrabel	49.0 on 5th	35.3 on 28th in 1907	133
023370 Stockport (Clifton)	47.8 on 5th	33.8 on 8th in 1993	58
023714 Finnis	48.6 on 5th	36.3 on 12th in 1964	103
023721 Happy Valley Reservoir	62.6 on 5th	56.4 on 8th in 1993	125
023732 Adelaide (Morphett Vale)	56.0 on 5th	40.0 on 31st in 1975	112
023750 Uraidla	61.8 on 5th	61.7 on 14th in 1955	126
023822 Hartley (Pine Hill)	36.0 on 5th	24.2 on 27th in 2012	46
023839 Blackwood (Wittunga)	50.8 on 5th	48.9 on 4th in 1986	38

Record highest July daily rainfall				
		New record	Old record	Years of record
Queensland				
029012	Croydon Township	48.0 on 15th	35.0 on 15th in 2006	127
030045	Richmond Post Office	53.2 on 15th	51.6 on 2nd in 1900	126
030057	Zara Station	85.0 on 15th	64.8 on 8th in 1935	96
030075	Solway Downs Station	55.6 on 19th	38.4 on 26th in 1984	48
030081	Burleigh Station	57.0 on 14th	39.0 on 9th in 1978	42
030088	Werrington Station	75.0 on 15th	65.0 on 10th in 2012	56
030090	Bagstowe Station	66.0 on 15th	50.0 on 7th in 1985	50
030091	Ironhurst Station	42.0 on 15th	36.0 on 23rd in 2008	46
030144	Plainby Station	65.4 on 20th	64.0 on 3rd in 1988	38
030149	Hillview Station	93.0 on 15th	38.6 on 14th in 1984	34
030158	Green Hills	59.2 on 15th	49.5 on 23rd in 2008	31
031108	Walkamin Research Station	22.0 on 20th	21.2 on 5th in 1999	52
032043	Upper Stone Exelby	47.0 on 20th	44.5 on 7th in 1942	77
032119	Mena Creek Post Office	133.2 on 19th	122.2 on 20th in 1981	35
033008	Byfield Childs Road	289.0 on 17th	156.2 on 5th in 1973	85
033038	Koumala Hatfields Road	193.0 on 16th	171.2 on 1st in 1921	81
033059	Plane Creek Sugar Mill	151.0 on 16th	145.1 on 5th in 1988	103
033077	Pacific Heights	310.8 on 17th	153.7 on 11th in 1933	124
033095	Orkabie West Hill	279.0 on 16th	93.7 on 3rd in 1964	55
033170	Mystery Park	131.2 on 16th	69.2 on 27th in 1984	43
033186	Carmila Beach Road	255.6 on 16th	170.6 on 5th in 1988	53
033188	Belgamba	250.0 on 16th	185.6 on 5th in 1988	44
034047	Barmount	61.5 on 17th	54.4 on 27th in 1984	44
035016	Capella Post Office	115.6 on 16th	80.3 on 10th in 1933	118
035019	Clermont Post Office	118.0 on 16th	96.5 on 10th in 1933	132
035026	Duaringa Post Office	84.4 on 17th	83.3 on 10th in 1933	124
035109	Booroondarra	95.0 on 16th	76.0 on 10th in 1978	73
035119	Carinya	104.0 on 17th	70.2 on 10th in 1978	54
035131	Talagai	117.0 on 16th	63.4 on 24th in 2008	48
035132	New Caledonia	68.8 on 16th	64.6 on 10th in 1978	49
035199	Mount Wilkin	117.2 on 16th	79.2 on 28th in 1950	86
035207	Mountain View	71.4 on 16th	59.0 on 10th in 1978	43
035221	Lucknow	138.0 on 16th	57.0 on 24th in 2008	43
035224	Karmoo	112.6 on 16th	76.0 on 25th in 1980	69
035241	Fairbairn Dam	116.0 on 16th	56.0 on 10th in 1978	41
035272	Aqua Park	46.2 on 16th	39.0 on 24th in 2008	33
035274	Juanita	95.0 on 16th	70.0 on 11th in 1978	54
036074	Jochmus	78.0 on 16th	63.0 on 11th in 1993	47
037081	Corfield-Manuka St	51.0 on 20th	34.6 on 21st in 2005	39
037104	Weona	129.8 on 19th	80.4 on 10th in 1978	53
039083	Rockhampton Aero	136.8 on 17th	58.6 on 4th in 1988	78
039242	Broadmeadows	143.8 on 17th	90.0 on 11th in 1993	61
044190	Lochinvar	37.0 on 16th	35.6 on 30th in 1980	37

Record highest July daily rainfall				
		New record	Old record	Years of record
New South Wales				
046115	Tilpa (Trevallyn)	43.0 on 20th	37.0 on 14th in 2010	43
047022	Ivanhoe (Mt Manara)	37.2 on 20th	27.7 on 22nd in 1962	107
050018	Dandaloo (Kelvin)	73.0 on 20th	58.9 on 29th in 1916	126
050034	Nevertire (Beverley)	78.6 on 20th	67.3 on 24th in 1962	126
050035	Tottenham (Umang St)	90.0 on 20th	44.0 on 6th in 1988	84
050139	Tomingley (Gundongs)	71.0 on 20th	63.2 on 25th in 1990	50
050140	Nymagee (Truganini)	83.0 on 20th	49.0 on 6th in 1988	36
051008	Wyanga (Barcoo)	60.4 on 20th	54.6 on 31st in 1960	117
062084	Budgee Budgee (Botobolar Vineyard)	52.8 on 20th	50.0 on 20th in 1998	46
063094	Bigga (Birrellan)	69.0 on 23rd	57.8 on 28th in 1984	127
075072	Weethalle (Mountain View)	42.0 on 20th	32.8 on 23rd in 1961	55
Victoria				
083064	Benambra (The Brothers)	52.4 on 7th	51.4 on 10th in 2005	48
084096	Buchan South	84.6 on 7th	63.2 on 21st in 2011	49
085029	Foster (Post Office)	81.0 on 6th	54.4 on 2nd in 1906	132
085166	Stratford	41.0 on 6th	40.8 on 2nd in 1974	48
085168	Briagolong	64.6 on 7th	56.2 on 29th in 1984	49
085254	Valencia Creek (Little Plain)	67.0 on 7th	51.6 on 29th in 1984	42
085280	Morwell (Latrobe Valley Airport)	36.4 on 6th	34.0 on 11th in 1989	33
085283	Willow Grove (Blue Rock Reservoir)	32.0 on 23rd	31.2 on 24th in 2003	31
087007	Morrisons (Ballark)	37.0 on 6th	36.6 on 11th in 1957	124
087121	Rockbank (Melton)	34.0 on 6th	33.8 on 30th in 1987	48
087161	Merrimu Reservoir	34.6 on 6th	30.6 on 30th in 1987	43
090095	Coleraine (Melville Forest)	36.2 on 23rd	36.1 on 12th in 1964	62
Tasmania				
097020	Lake Margaret Power Station	92.6 on 15th	72.0 on 25th in 2003	63

Record highest July total rainfall				
		New record	Old record	Years of record
Western Australia				
005017	Onslow Airport	115.4	105.8 in 2005	53
005040	Balmoral	97.6	82.5 in 1972	73
005070	Robe	88.0	60.0 in 2005	42
005071	Pindral Outcamp	64.0	36.0 in 1995	42
005082	Eramurra Pool	76.0	67.0 in 2005	30
007181	Weelarrana	89.6	39.1 in 1998	30
011032	Rawlinna Depot	55.8 =	55.8 in 1980	47
011050	Kybo	43.9	41.1 in 1996	35
South Australia				
023042	Burnside	139.6	129.8 in 2013	38
023319	Tarlee	129.8	115.4 in 1909	134
023370	Stockport (Clifton)	134.8	114.6 in 1995	56
023728	Macclesfield	217.4	208.0 in 1986	131
023747	Strathalbyn	169.2	133.2 in 1986	155
023812	Rockleigh (Black Heath)	158.6	156.0 in 1995	47
023822	Hartley (Pine Hill)	128.4	81.0 in 1974	46
024508	Callington	113.6	103.0 in 1886	134
Queensland				
029130	MIM Rifle Creek	84.4	72.2 in 1986	35
030045	Richmond Post Office	116.7	95.3 in 1936	126
030057	Zara Station	130.6	118.8 in 1984	98
030149	Hillview Station	117.0	90.3 in 1984	34
032004	Cardwell Marine Pde	190.6	170.4 in 1893	143
032043	Upper Stone Exelby	127.4	120.8 in 2008	77
032078	Ingham Composite	138.0	130.5 in 2008	48
032098	Rollingstone	96.4	90.6 in 2008	44
033008	Byfield Childs Road	485.0	267.9 in 1973	85
033077	Pacific Heights	453.6	327.7 in 1933	126
033095	Orkatie West Hill	401.0	154.0 in 2012	54
033170	Mystery Park	204.8	149.2 in 2012	43
033172	Crediton	263.8	262.8 in 1988	61
033186	Carmila Beach Road	319.2	228.0 in 1988	53
033188	Belgamba	309.4	239.9 in 1988	44
035119	Carinya	160.5	124.7 in 1973	59
035199	Mount Wilkin	155.8	110.2 in 1933	86
035221	Lucknow	160.0	157.6 in 1984	41
037049	Warnambool Downs	159.0	113.8 in 1920	128
037081	Corfield-Manuka St	120.8	88.7 in 1978	40
037104	Weona	218.0	103.8 in 1978	53
037105	Belmont	101.8	99.4 in 1978	113
039083	Rockhampton Aero	254.4	184.0 in 1950	78
039242	Broadmeadows	249.8	166.4 in 1973	61
New South Wales				
050035	Tottenham (Uyang St)	111.9	100.1 in 1998	84
050139	Tomingley (Gundongs)	153.2	128.2 in 1984	48
063271	Tuena (Wyoming)	158.4	144.4 in 1984	66
075072	Weethalle (Mountain View)	88.2	82.1 in 1956	54

= indicates the new record equals the old one.

Record highest July total rainfall				
		New record	Old record	Years of record
Victoria				
083003	Benambra (Evandale)	130.0	128.2 in 1981	75
083064	Benambra (The Brothers)	150.0	135.4 in 1986	46
084012	Dargo	172.6	134.8 in 1991	77
084125	Crooked River	174.0	129.0 in 1987	43
085254	Valencia Creek (Little Plain)	143.2	140.6 in 1984	43
085280	Morwell (Latrobe Valley Airport)	119.2	104.0 in 1993	33
085283	Willow Grove (Blue Rock Reservoir)	117.2	110.2 in 1986	31
087006	Ballan	152.8	144.1 in 1923	140
087040	Melton Reservoir	83.8	80.0 in 1957	69
087075	Bullengarook East	176.6	174.3 in 1957	63
087161	Merrimu Reservoir	86.6	70.8 in 1987	42
090024	Coleraine Hospital	146.2	144.5 in 1964	118
090173	Hamilton Airport	136.4	117.4 in 1996	34
Tasmania				
091034	South Forest (Plummers Road)	284.4	250.2 in 1946	83
091153	Barrington Post Office	312.6	301.4 in 1975	50
091241	Mawbanna (Harby Hills)	334.9	292.4 in 1996	35
091321	Loongana (Serendipity)	412.8	350.5 in 2000	30
= indicates the new record equals the old one.				

Highest July total rainfall for at least 30 years		Observed this month	Most recent higher
Western Australia			
001018	Mount Elizabeth	15.4	34.0 in 1986
002029	Sturt Creek	39.0	76.8 in 1978 *
005008	Mardie	143.8	150.6 in 1904
006072	Emu Creek Station	99.8	126.3 in 1974
007007	Boolardy	122.4	126.2 in 1974 *
007059	Mount Vernon	70.6	101.6 in 1965 *
007080	Three Rivers	74.6	83.5 in 1974 *
011008	Mundrabilla Station	64.5	76.8 in 1916 *
Northern Territory			
014840	Wave Hill	52.0	93.8 in 1978
014902	Katherine Council	4.0	16.0 in 1978 *
014903	Katherine Aviation Museum	3.6	37.9 in 1968 *
015005	Avon Downs	19.4	125.6 in 1986
015085	Brunette Downs	12.6	164.6 in 1986
South Australia			
020004	Curnomona (Curnamona)	41.6	63.6 in 1956
021001	Auburn	148.8	165.0 in 1963 *
022809	Penneshaw	142.7	151.9 in 1974
023009	Mallala	92.0	106.9 in 1951
023012	Owen	107.2	118.7 in 1951 *
023087	Reeves Plains (Parana Park)	87.6	90.2 in 1978 *
023718	Goolwa Council Depot	109.0	152.6 in 1974 *
023723	Inman Valley	240.4	244.0 in 1974 *
023732	Adelaide (Morphett Vale)	156.4	161.2 in 1890 *
023744	Second Valley (Poolamacca)	204.6	207.0 in 1910 *
023829	Woodside	218.0	301.5 in 1964 *
024515	Langhorne Creek	96.2	101.8 in 1922 *
024576	Milang (Navarino)	105.0	117.2 in 1986
025525	Bordertown (Inglewood)	96.4	123.4 in 1981
* <i>note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported.</i> = <i>indicates the new record equals the old one.</i>			

Highest July total rainfall for at least 30 years		Observed this month	Most recent higher
Queensland			
029008	Cloncurry McIlwraith St	49.0	77.4 in 1978 *
029011	Crowfells Station	90.2	106.7 in 1944 *
029030	Lands End Station	77.8	83.8 in 1944
029127	Mount Isa Aero	26.4	67.4 in 1986
029132	Manfred Downs Station	70.6	87.6 in 1944 *
030127	Woodbine Station	61.0	93.0 in 1984 *
031049	Mulgrave Mill	93.0	98.3 in 1944 *
032001	Bambaroo	91.8	120.1 in 1938
032045	Victoria Sugar Mill	131.2	143.0 in 1950
032141	Lucinda Point	54.8	166.8 in 1981 *
032191	Hawkins Creek	224.4	230.8 in 1981
033038	Koumala Hatfields Road	262.0	273.2 in 1950 *
033076	Yaamba	252.8	363.6 in 1933
035000	Alpha Post Office	83.4	185.5 in 1984
035001	Anakie Richardson St	147.2	193.0 in 1984
035007	Bauhinia Downs Store	107.4	195.0 in 1984 *
035016	Capella Post Office	142.4	154.6 in 1950
035018	Carnarvon Station	72.4	95.0 in 1980 *
035019	Clermont Post Office	154.7	192.5 in 1950
035021	Comet Post Office	134.0	148.4 in 1984
035026	Duaringa Post Office	174.2	182.8 in 1933 *
035063	Somerby	105.5	180.0 in 1984
035064	Spring Creek Station	65.0	162.3 in 1984
035077	Warrinilla	88.8	165.0 in 1984 *
035079	Wharton Creek Station	71.0	199.2 in 1984 *
035090	Rewan Station	115.2	125.8 in 1973 *
035109	Booroondarra	130.8	151.4 in 1950
035117	La Palma	86.4	168.0 in 1984
035194	Wyseby	98.3	201.4 in 1984 *
035205	Woorarra	97.2	154.5 in 1984 *
035207	Mountain View	91.6	166.4 in 1984
035224	Karmoo	171.0	219.6 in 1984 *
035274	Juanita	116.4	162.6 in 1984 *
036010	Bulliwallah	131.0	239.0 in 1981 *
036012	Cameron Downs	96.2	122.0 in 1950 *
036023	Holmleigh	85.6	106.4 in 1950
036026	Isisford Post Office	68.2	88.4 in 1984
036037	Muttaborra	72.0	142.3 in 1984
036050	Ulcanbah	76.2	155.6 in 1984 *
037000	Alni	75.6	77.0 in 1981
037046	Elderslie	91.2	114.4 in 1978
037098	Noonbah	118.1	122.5 in 1920
039002	Bajool Post Office	146.0	162.8 in 1973 *
039043	Glenlands	163.4	451.0 in 1933 *
039044	Riverslea TM	190.0	248.7 in 1933 *
039048	Goovigen	109.4	117.0 in 1984
039049	Gracemere - Lucas St	152.4	156.7 in 1950 *
039068	Mount Larcom Post Office	204.1	334.5 in 1933 *
039156	Dululu Post Office	108.0	121.5 in 1964 *

* *note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported.*
= indicates the new record equals the old one.

Highest July total rainfall for at least 30 years		Observed this month	Most recent higher
039201	Belvedere	127.0	143.5 in 1984
039241	Southend Curtis Island	142.0 =	142.0 in 1978
043061	Gunnewin	70.2	171.0 in 1984 *
New South Wales			
050034	Nevertire (Beverley)	114.2	140.4 in 1912 *
063029	Mandurama (Gallymont (Homeleigh))	158.4	214.4 in 1984
063032	Golspie (Ayrston)	129.8	199.2 in 1922 *
063049	Lowther Park	140.4	157.0 in 1984
063094	Bigga (Birrellan)	192.4	242.0 in 1984 *
063119	Crooked Corner (Wingadeena)	140.4	199.6 in 1984 *
063226	Lithgow (Cooerwull)	102.0	167.7 in 1952 *
065000	Arthurville (Cramond)	119.8	132.4 in 1984
065030	Dubbo (Mentone)	138.6	144.0 in 1984 *
068229	Bendalong STP	185.6	199.6 in 1984
070069	Crookwell (Gundowringa)	121.6	125.0 in 1984 *
070080	Taralga Post Office	112.6	150.4 in 1984
<i>* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported. = indicates the new record equals the old one.</i>			

Highest July total rainfall for at least 30 years		Observed this month	Most recent higher
Victoria			
082018	Uplands (Gibbo River Park)	247.8	272.0 in 1986
083033	Woods Point	338.0	437.6 in 1964 *
084015	Ensay	148.4	201.7 in 1925 *
084035	Swifts Creek	99.5	101.6 in 1957 *
084044	Black Mountain	122.6	180.8 in 1957
084096	Buchan South	169.4	216.8 in 1984
085029	Foster (Post Office)	189.2	234.0 in 1978
085033	Giffard	106.4	169.2 in 1984 *
085072	East Sale Airport	102.4	167.4 in 1974
085160	Darriman (Tarralangi)	143.0	176.2 in 1984 *
085166	Stratford	111.5	142.4 in 1974 *
085167	Meerlieu (Springvale West)	105.7	140.4 in 1984
085168	Briagolong	150.4	153.8 in 1984 *
085195	Willow Grove	128.0	139.8 in 1984
085236	Callignee North	184.2	223.5 in 1977 *
087007	Morrison's (Ballark)	108.0	143.3 in 1964 *
087009	Bannockburn	87.6	91.2 in 1978 *
087036	Macedon Forestry	169.8	186.9 in 1936 *
087043	Meredith (Darra)	92.4	93.6 in 1983
087046	Scotsburn (Mount Boninyong)	130.0	139.0 in 1964 *
087048	Little River (Mount Rothwell)	70.9	90.4 in 1974 *
087095	Pykes Creek Reservoir	98.6	126.3 in 1957
087119	Wensleydale (Anglesea (Vehicle Proving G	152.2	176.6 in 1978 *
087124	Buckley (Balliwindi)	109.2	116.6 in 1978
087147	Bannockburn (Hillside)	93.2	99.6 in 1978
088020	Daylesford	178.6	179.2 in 1969
088059	Trentham (Post Office)	251.1	274.6 in 1964 *
088061	Woodend	186.6	189.8 in 1923 *
089009	Cavendish (Post Office)	135.4	150.2 in 1964
089010	Cressy	100.2	105.0 in 1978 *
089011	Dunkeld	130.2	169.6 in 1964 *
089019	Mirranatwa (Bowacka)	128.4	139.0 in 1984
089022	Moutajup	139.4	182.5 in 1964 *
089043	Gatum	139.3	160.7 in 1964
089068	Rokewood	88.6	100.1 in 1978 *
090008	Birregurra (Post Office)	128.2	145.9 in 1978 *
090010	Branxholme (Bassett)	117.6	147.2 in 1981 *
090020	Casterton (Warrock)	144.4	160.2 in 1981
090021	Cobden (Post Office)	131.0	133.2 in 1984
090033	Dergholm (Hillgrove)	141.8	151.4 in 1981
090062	Penshurst (The Gums)	130.0	150.9 in 1964
090063	Penshurst (Post Office)	129.4	136.2 in 1978
090076	Tanybryn	307.0	377.4 in 1964 *
090095	Coleraine (Melville Forest)	138.1	160.7 in 1964 *
<i>* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported. = indicates the new record equals the old one.</i>			

Highest July total rainfall for at least 30 years		Observed this month	Most recent higher
Tasmania			
091009	Burnie (Round Hill)	208.6	273.2 in 1975
091022	Cressy Research Station (Main Office)	145.8	169.2 in 1975 *
091029	Dunorlan (Sharmans Road)	234.8	322.0 in 1975
091033	Frankford (Rossville)	225.2	321.0 in 1975
091040	Hampshire (Neena Road)	368.4	393.8 in 1975 *
091041	Hillwood (Hillwoodville)	187.4	266.0 in 1975
091048	Latrobe (Coal Hill Road)	214.4	276.8 in 1975 *
091053	Lilydale Post Office	209.7	252.2 in 1975 *
091055	Lorinna	307.8	358.0 in 1946 *
091060	Mawbanna (Mawbanna Road)	265.8	270.0 in 1975 *
091086	Ringarooma (Main Street)	273.2	322.0 in 1975 *
091088	St Patricks River (Targa Farm)	303.0	356.5 in 1975 *
091090	Selbourne (Kirnbrae)	188.8	256.0 in 1975 *
091109	Yolla (Sea View)	380.3	382.4 in 1975
091149	Kimberley (Siding)	235.7	297.2 in 1975 *
091150	Western Creek (Somer Hill)	221.3	227.0 in 1981 *
091156	Weetah (Weetah Road)	274.2	287.2 in 1975 *
091161	Parkham (Avenue Road)	209.6	250.3 in 1975 *
091219	Scottsdale (West Minstone Road)	206.6	276.4 in 1975 *
091225	Burns Creek (Janefield)	178.0	280.4 in 1975 *
094116	Geeveston (Riawunna)	245.0	383.0 in 1974 *
095016	Osterley	139.2	180.6 in 1974 *
096046	Miena Dam	173.0	194.6 in 1975
097006	Lake Margaret Dam	591.8	643.4 in 1970 *
097020	Lake Margaret Power Station	554.4	595.1 in 1970 *
097021	Renison Bell	434.6	521.2 in 1970 *
097047	Savage River Mine	356.4	376.4 in 1972 *
097054	Zeehan (West Coast Pioneers Museum)	429.0	544.1 in 1970 *
097065	Tahune Reserve	265.0	288.4 in 1974 *
<i>* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported. = indicates the new record equals the old one.</i>			

Selected observations

Daily and mean maximum temperatures for July 2016

Western Australia	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
001019 Kalumburu	33.8	35.0	33.8	33.1	34.4	35.6	34.4	33.9	34.0	34.6	34.7	35.1	34.8	33.0	29.4	29.3	28.1	29.6	31.3	32.4	33.2	34.2	36.4	36.9	38.3	36.3	35.7	33.9	32.6	33.3	34.2	34.9	
002012 Halls Creek Airport	27.7	+0.7	31.4	29.0	28.8	31.6	30.7	29.9	30.4	31.6	32.9	30.4	22.8	14.7	17.8	20.0	20.1	21.4	23.4	25.8	27.0	28.8	30.5	31.5	33.0	32.1	32.2	31.4	27.7	26.3	27.3	28.6	29.9
002056 Kununurra Aero	31.8	33.5	31.9	31.2	32.7	34.4	33.2	31.5	32.6	34.8	34.7	34.4	31.6	27.6	25.2	24.6	26.0	26.3	29.3	30.6	32.8	33.7	34.9	36.0	36.2	35.2	34.3	31.7	29.8	31.6	32.3	32.6	
003003 Broome Airport	30.9	+2.1	34.3	32.5	30.6	29.9	34.8	32.3	31.2	31.8	29.9	29.3	29.0	27.3	26.6	28.2	28.1	27.4	27.8	29.0	27.3	28.9	30.2	33.1	33.9	32.4	33.7	33.4	35.1	31.7	32.3	32.7	33.2
003032 Derby Aero	32.0	33.5	33.7	32.4	31.7	34.3	33.0	32.9	34.2	31.9	31.5	30.5	24.3	29.6	28.2	27.8	27.2	28.6	28.6	29.2	30.5	31.8	35.3	34.8	35.2	36.2	35.8	35.1	33.3	33.2	33.5	33.2	
004032 Port Hedland Airport	28.6	+1.5	26.8			30.4	28.0	29.4	28.6	27.9	24.5	25.6	25.3	24.6	28.3	26.9	25.1	26.1	28.1	28.6	28.3	28.5	32.1	32.5	27.0	30.7	30.2	32.1	30.7	30.4	30.7	32.5	
004083 Karratha Aero	25.5	24.4	26.5	27.6	25.5	24.4	21.8	25.3	24.4	24.5	22.3	24.4	23.4	23.0	24.0	23.9	22.5	24.9	26.4	25.5	26.4	26.4	25.9	26.3	23.8	27.0	28.9	28.1	27.0	27.8	28.4	31.2	
004106 Marble Bar	28.0	24.4	29.1	31.8	27.6	27.0	30.3	30.3	29.7	27.0	23.1	24.2	23.1	22.3	25.9	24.0	25.9	27.3	28.1	29.5	28.7	29.9	30.2	30.3	25.8	28.1	28.1	30.5	30.3	30.1	32.2	33.6	
005007 Leamonth Airport	22.8	24.8	23.9	20.0	21.0	21.1	22.8		25.0	22.8	21.0	22.0	21.5	21.4	21.6	23.2	22.4	24.6	22.6	22.4	23.1	20.5	18.7	18.4	19.0	25.4	25.7	24.0	24.9	27.0	27.5	24.7	
006011 Carnarvon Airport	22.5	+0.4	26.8	23.4	23.4	25.3	21.0	17.4	18.4	21.7	18.9	19.5	21.3	20.1	22.2	23.9	26.3	25.7	18.2	19.7		19.2	18.6	21.4	21.3	23.2	22.0	26.3	27.0	24.2	29.3	24.5	23.3
006044 Denham	21.1	25.0	23.2	21.9	22.5	16.0	17.5	19.5	22.0	18.0	20.0	20.0		20.0	23.5	25.0	24.0	18.8	18.0	18.0	18.7	18.8	19.9	20.0	21.0	22.9	23.0	24.4	21.0	25.5	23.4	20.9	
007176 Newman Aero	21.0	18.9	20.4	24.7	16.9	11.9	15.3	19.5	24.7	17.7	16.3	17.8	16.6	16.1	20.6	20.6	22.5	25.1	24.4	23.3	26.7	24.0	17.8	16.5	15.9	21.1	21.4	23.8	26.0	27.0	29.8	28.6	
007185 Paraburdoo Aero	22.3	25.3	25.1	24.1	19.3	17.8	20.5	22.8	24.1	17.8	16.9	19.6	18.5	19.2	23.5	23.6	25.3	27.5	19.7	17.1	24.8	20.0	17.3	17.3	17.8	22.8	23.5	26.5	29.1	29.4	29.9	25.8	
007045 Meekatharra Airport	18.3	-0.6	21.2	16.5	20.8	17.7	12.4	13.4	18.6	20.0	13.2	15.0	15.2	13.9	14.4	17.9	19.7	21.6	18.7	16.0	16.8	19.0	16.3	16.8	16.0	17.7	19.1	20.1	21.5	23.0	28.1	26.0	20.4
007600 Mount Magnet Aero	17.4	21.4	16.4	19.3	15.0	13.3	12.3	16.8	19.1	12.9	15.4	14.6	14.0	14.9	17.5	21.5	22.3	16.1	15.8	16.4	15.7	15.2	14.9	14.7	16.0	17.5	18.2	20.2	24.0	28.4	22.0	18.1	
008296 Morawa Airport	17.7	21.3	18.8	19.1	16.0	17.0	18.3	18.2	14.4	13.4	17.1	16.5	15.1	14.6	18.1	22.2	20.2	18.0	16.7	16.0	16.3	15.2	15.4	15.4	15.8	16.1	17.1	19.3	23.4	25.4	20.3	18.7	
008297 Dalwallinu	15.6	17.7	18.0	17.1	12.9	14.5	15.9	15.9	13.5	12.1	13.9	14.6	12.9	12.9	15.3	19.4	18.5	17.6	14.1	14.0	15.2	13.6	13.1	14.4	12.6	13.3	15.8	17.0	20.8	23.3	18.3	15.5	
008315 Geraldton Airport	18.9	21.1	21.5	19.3	17.4	18.3	19.2	20.0	16.1	15.3	18.2	17.9	17.0	16.0	20.2	22.7	22.7	20.3	16.6	16.7	18.6	16.8	17.9	17.4	16.0	17.4	18.0	19.5	22.7	25.3	20.2	19.1	
009021 Perth Airport	17.7	0.0	19.5	21.1	16.9	14.5	16.7	17.6	15.5	17.0	13.5	17.0	16.8	14.3	16.2	18.3	22.1	20.7	19.0	18.2	17.6	18.4	14.9	15.6	16.7	15.3	16.8	18.9	18.8	21.6	19.2	15.8	
009131 Jurien Bay	19.3	21.9	23.2	20.5	17.2	21.1	18.4	18.1	19.0	16.5	17.4	19.1	17.4	18.0	19.1	21.4	20.4	19.8		18.6	19.0	17.1	18.7	18.4	17.5	18.1	21.1	20.8	20.1	20.6	20.7	19.0	
009225 Perth Metro	17.7	19.3	20.7	16.6	14.7	16.7	17.6	15.9	17.4	14.5	16.4	16.6	14.2	16.0	18.2	22.0	21.1	19.4	16.8	18.0	19.0	15.3	15.7	17.1	15.1	17.1	18.4	19.0	21.1	22.5	19.4	15.6	
009240 Bickley	14.5	16.1	17.6	14.1	11.5	14.5	14.6	12.9	13.5	10.9	13.6	13.4	11.3	12.8	15.1	19.3	17.2	14.3	13.8	14.8	15.2	12.0	12.8	12.7	12.9	14.3	16.1	16.5	19.1	18.4	16.0	12.1	
009518 Cape Leeuwin	16.3	-0.3	17.9	18.3	14.5	14.0	15.0	15.7	17.8	15.0	14.2	16.1	15.6	14.1	16.1	19.5	18.4	18.5	16.1	16.4	16.0	16.6	14.3	14.3	14.7	15.0	16.7	17.4	17.9	16.9	20.1	17.1	14.6
009617 Bridgetown	14.9	16.2	18.4	13.0	12.5	14.0	14.2	15.0	13.7	12.6	15.2	14.0	12.5	13.9	15.8	17.7	16.9	16.1	15.1	14.6	13.7	13.1	11.9	12.9	13.9	16.4	17.1	16.0	19.5	19.3	16.6	11.6	
009746 Witchcliffe	15.7	17.2	17.6	13.9	13.3	15.7	16.5	16.2	14.3	12.5	14.9	15.4	13.6	15.3	18.3	18.0	16.9	15.2	15.7	16.7	13.7	13.9	13.6	14.2	16.5	16.5	16.5	17.2	19.4	17.5	13.0		
009789 Esperance	16.8	18.4	20.3	17.0	14.4	14.4	16.5	15.8	17.0	12.8	14.8	14.8	13.5	14.2	16.1	21.4	18.3	15.3	16.6	17.5	15.3	13.4	15.6	14.3	15.8	16.3	17.6	21.1	23.5	19.8	15.5		
009965 Bunbury	16.3	17.6	19.0	15.3	14.0	14.6	16.1	17.1	15.8	13.9	16.2	16.5	14.8	14.7	16.6	17.7	18.0	17.5	15.5	15.1	16.0	14.9	14.2	15.2	14.9	16.2	17.6	17.2	20.1	20.2	18.0	14.3	
009977 Mandurah	16.7	19.1	18.8	16.3	15.1	17.1	17.7	17.5	16.5	13.7	16.4	16.1	15.2	14.4	16.3	18.0	18.1	17.8	16.1	17.1	16.7	15.0	14.7	15.9	14.7	16.1	17.6	17.4	19.5	20.0	17.9	15.4	
009999 Albany Airport	15.7	18.5	18.5	12.4	12.5	14.1	16.2	16.4	15.6	13.8	14.7	13.8	12.0	14.2	15.5	20.3	21.1	17.0	15.1	16.0	16.6	12.9	12.6	12.8	14.3	14.9	16.6	17.7	19.2	20.3	18.4	11.9	
010007 Bencubbin	15.3	-0.9	18.0	19.6	16.0	12.3	15.0	14.0	15.1	13.0	11.6	14.0	13.9	11.0	14.2	15.3	19.0	20.9	17.1	14.2	13.5	15.2	12.0	12.5	15.7	12.3	10.1	15.0	17.3	21.0	24.0	18.2	14.8
010092 Merredin	15.7	-0.3	18.3	20.0	17.0	12.3	13.8	14.1	13.3	13.7	12.1	14.0	14.5	11.8	13.5	15.0	19.5	21.0	17.0	15.5	15.0	15.5	13.3	14.0	14.0	14.4	15.5	16.2	17.0	21.5	22.5	18.5	14.6
010286 Cunderdin Airfield	15.8	17.0	19.4	15.6	12.4	15.0	15.6	13.4	16.1	13.2	15.2	15.2	10.9	14.2	15.1	19.7	21.0	17.5	14.5	15.4	15.7	13.6	13.1	15.4	13.8	14.1	16.7	17.4	18.9	22.1	18.0	14.0	
010633 Ravensthorpe	15.8	-0.3	17.1	20.3	14.0	13.0	14.0	14.0	13.0	15.8	10.2	15.0	14.0	13.0	15.0	16.0	20.3	22.1	18.0	15.0	16.0	16.0	14.0	12.0	13.5	13.0	16.0	18.0	19.0	20.0	21.2	18.0	14.0
010911 Lake Grace	14.4	15.5	18.2	11.4	11.9	12.7	14.2	11.2	14.5	11.7	13.7	13.7	10.6	13.4	13.9	19.3	20.4	16.5	14.1	14.1	14.8	12.2	11.9	13.0	10.8	14.9	15.5	16.0	17.2	21.2	17.5	11.8	
010916 Katanning	13.6	15.5	16.6	11.1	10.8	12.6	13.3	11.1	13.9	12.2	13.3	13.1	9.9	12.2	13.0	18.5	18.1	14.9	13.6	12.7	14.2	11.1	11.6	11.4	10.1	14.6	15.2	15.2	16.7	18.1	16.2	10.2	
010917 Wandering	14.8	16.0	19.8	12.9	11.6	13.2	13.5	12.3	14.2	13.0	14.5	14.9	11.3	13.1	16.1	20.0	18.5	16.1	13.8	15.0	16.4	13.2	11.7	13.1	11.9	12.7	16.3	15.7	18.6	19.6	17.1	12.5	
011003 Eucla	17.6	16.2	18.8	16.8	15.0	15.0	13.6	15.2	14.1	20.5	13.8	17.0	13.6	15.5	17.0	19.3	20.7	24.4	15.4	15.5	16.7	22.3	16.2	15.6	14.6	17.2	18.0	16.7	20.9	26.1	22.4	22.5	
011052 Forrest	17.8	18.2	18.6	16.6	15.4	15.9	13.3	13.1	16.2	20.8	14.6	16.3	14.6	15.8	16.4	18.5	20.5	23.3	16.6	15.8	20.8	22.4	15.5	14.3	15.2	16.9	17.8	24.0	26.2	22.6	19.1		
012038 Kalgoorlie-Boulder Airport	16.0	-0.6	18.0	19.5	19.2	13.0	12.9	10.5	12.2	17.6	11.2	14.2	14.1	14.1	13.2	17.1	19.1	21.7	14.6	15.4	13.2	15.0	14.8	13.3	13.6	13.9	15.7	17.3	18.3	21.7	25.2	22.6	17.2
012071 Salmon Gums Res.Stn.	15.8	-0.2	16.7	19.2	17.2	12.7	13.4	13.7	14.8																								

Daily and mean maximum temperatures for July 2016

New South Wales	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
048027 Cobar MO	15.7	+0.2	13.4	13.5	15.1	14.6	10.2	10.9	13.6	13.8	13.3	16.8	15.7	14.2	11.5	12.7	13.3	16.2	20.2	23.2	20.8	18.5	22.1	23.9	13.8	14.8	15.0	15.7	15.1	14.3	14.5	15.8	18.9
048245 Bourke Airport AWS	17.7		15.2	15.0	16.2	15.9	13.6	15.4	17.6	11.7	17.1	19.5	21.1	17.8	13.2	14.2	14.2	15.4	21.9	25.3	25.6	22.6	19.9	26.4	16.0	17.6	16.2	18.4	18.0	16.1	16.1	16.7	19.9
049000 Ivanhoe Aerodrome AWS	16.1		13.9	15.9	15.9	12.9	10.1	15.9	13.6	14.8	14.2	15.7	17.5	15.1	13.0	14.0	13.7	14.5	20.1	23.2	24.5	17.6	20.2	24.0	14.4	14.6	15.0	15.3	15.6	14.4	15.8	16.2	17.4
050052 Condobolin Ag Research Stn	14.9	0.0	10.6	13.8		11.7	11.5	12.9	14.5	14.6	13.1	16.5	16.2	14.5	10.2	12.6	13.2	15.1	19.1	20.6	22.8	17.4	21.3	23.5	12.7	13.0	11.6	14.6	14.4	13.0	11.2	13.8	17.1
051039 Nyngan Airport	15.7	-0.9	14.4	14.0	15.0	13.2	12.4	11.5	15.0	14.2	13.0	16.5	15.4	15.3	12.5	13.0	14.0	17.0	20.0	22.0	18.7	18.5	22.0	24.0	14.5	14.0	14.8	16.5	16.0	14.5	12.5	14.5	18.2
052088 Walgett Airport AWS	17.9		15.4	15.1	15.8	19.6	13.4	15.5	13.6	19.2	14.8	19.1	22.3	18.8	13.3	13.5	14.5	18.5	22.6	24.1	26.1	22.4	21.4	26.5	17.6	15.4	16.8	17.7	18.7	15.5	13.9	15.5	18.4
053115 Moree Aero	18.1		15.9	14.8	17.4	21.2	15.1	13.4	14.1	17.8	18.2	19.7	21.1	17.6	13.4	11.8	15.2	17.8	23.4	23.9	24.4	25.2	22.8	25.0	18.0	12.7	16.4	16.5	19.2	17.1	16.3	16.2	19.0
054038 Narrabri Airport AWS	17.5		15.2	14.6	16.4	20.5	15.0	12.5	16.5	17.9	16.7	19.6	20.5	17.4	13.9	11.4	12.9	16.5	21.7	24.2	23.9	24.5	18.9	23.7	17.6	13.0	16.1	16.2	17.8	17.3	15.7	16.1	17.7
055024 Gunnedah Resource Centre	16.4	+0.5	15.1	13.9	14.2	14.9	13.6	12.3	15.7	15.8	15.9	17.9	20.6	15.9	12.2	10.3	13.0	18.2	22.8	21.4	22.4	21.2	19.4	20.8	17.7	10.9	16.0	15.9	17.3	16.0	15.3	15.7	17.5
055325 Tamworth Airport AWS	16.7		14.8	13.1	14.8	18.3		10.2	14.0	17.9	16.6	18.4	21.5	15.4	12.1	13.0	14.5	18.6	22.3	21.1	22.6	21.2	19.9	22.7	17.7	9.9	14.9	14.9	16.5	14.6	15.8	16.2	17.0
056242 Inverell (Raglan St)	17.1		15.8	16.0	18.2	18.2	15.5	10.0	15.0	16.0	17.0	18.0	19.0	16.8	12.0	12.6	16.6	17.0	22.0	22.8	22.2	25.0	19.5	20.1	17.1	9.2	14.4	16.0	14.8	17.5	18.5	19.2	19.3
057095 Tabulam (Muirie)	18.0		17.1	15.7	16.4	18.4	16.7	11.7	17.9	19.1	17.3	18.1	19.2	21.0	15.9	10.9	13.0	12.6	14.8	18.3	23.4	23.7	23.7	23.9	21.9	17.2	17.0	19.8	17.0	17.8	19.8	18.0	21.0
058012 Yamba Pilot Station	20.6	+1.7	21.4	18.2	19.9	20.6	18.3	18.2	22.1	21.2	19.5	19.4	21.9	20.5	16.7	14.4	18.3	19.0	21.5	21.1	24.4	23.7	19.6	25.9	27.3	18.3	20.8	21.9	20.2	18.9	21.2	19.5	23.9
060139 Port Macquarie Airport AWS	19.8		19.4	18.3	18.5	20.9	20.8	18.1	20.8	17.1	19.2	18.0	17.0	21.9	18.4	15.2	16.9	17.8	19.8	22.9	25.7	19.1	20.8	26.5	24.2	15.0	20.3	18.3	20.9	18.7	19.2	20.4	22.8
061078 Williamtown RAAF	18.7	+1.7	17.1	17.2	16.8	17.4	20.5	15.1	17.4	14.8	18.3	18.9	21.6	20.0	15.9	15.3	16.5	17.9	17.6	24.3	25.8	18.9	19.0	26.5	18.9	13.5	17.3	19.4	19.5	18.4	18.0	19.2	22.2
061363 Scone Airport AWS	17.1		14.8	15.4	17.2	18.5	15.5	13.0	16.3	14.5	16.1	18.9	20.4	18.0	12.8	14.0	13.7	16.7	18.0	23.8	25.1	17.0	17.3	23.7	16.3	12.5	15.9	16.9	16.9	17.3	16.9	16.4	19.6
062101 Mudgee Airport AWS	14.6		9.4	13.8	13.5	14.4	11.5	11.1	16.7	14.0	13.6	16.0	17.0	14.1	9.9	12.4	14.7	16.8	18.0	20.2	17.5	16.9	18.9	20.7	12.3	9.9	11.5	14.0	13.5	14.3	12.9	16.5	15.5
063005 Bathurst Agricultural Station	12.1	+1.1	8.5	9.5	10.7	9.0	11.0	10.2	14.9	10.8	14.2	14.5	11.7	11.9	6.5		12.0	15.5	17.1	15.6	16.8	14.2	17.6		10.6	8.5	9.3	11.6	10.2	9.8	9.5	15.2	14.5
063254 Orange Agricultural Institute					8.5	8.4	7.1					11.6	9.3	8.7	4.4	6.5			15.5	13.3	14.3	13.4	15.5			15.2	5.7	8.3	6.8	7.9		12.5	
064008 Coonabarabran (Naroi Street)																	13.0	16.0	20.0	22.5	22.5	17.0		24.2	14.5	11.7	14.0	15.0		15.5	12.0	17.5	18.0
065070 Dubbo Airport AWS	15.2		10.4	14.1	14.3	14.8	12.1	10.7	17.9	15.7	14.7	17.7	15.2	14.2	11.1	12.5	13.7	17.5	19.4	21.2	18.2	17.0	21.0	21.4	13.6	12.3	12.7	14.6	14.9	14.1	12.1	15.6	15.9
066062 Sydney (Observatory Hill)	18.5	+1.4	16.7	18.2	18.1	15.6	18.8	17.7	17.2	15.6	18.0	17.9	18.6	20.2	14.0	17.0	17.7	18.9	18.8	24.2	24.9	16.9	19.3	25.7	17.4	14.3	17.9	17.9	18.6	19.4	18.5	19.8	20.9
067105 Richmond RAAF	18.5		17.2	17.6	16.8	14.2	17.9	17.7	18.8	16.7	18.0	18.0	19.4	20.1	14.6	16.9	17.0	17.4	19.5	24.9	25.2	16.4	19.3	25.7	17.2	14.2	17.4	19.7	19.0	19.5	18.3	18.9	20.4
068072 Nowra RAN Air Station AWS	16.9		16.1	17.2	17.0	15.2	15.9	14.3	14.0	14.5	15.2	16.6	18.7	16.9	12.0	15.3	17.3	17.6	19.5	22.8	22.0	15.7	18.9	24.5	14.9	13.5	14.9	15.4	16.2	17.2	16.3	17.6	19.9
068151 Jervis Bay (Point Perpendicular)	16.7		14.6	17.2	16.4	14.5	15.1	17.3	16.6	15.7	15.0	15.5	19.2	16.8	12.1	15.9	16.1	19.1	21.4	21.8	16.6	17.7	24.1	14.4	14.0	14.6	15.0	15.9	17.0	16.8	15.8	19.3	
068241 Albion Park (Wollongong Airport)	18.3		16.2	18.4	18.8	16.5	16.8	17.0	15.9	16.4	17.6	17.4	21.0	19.3	12.7	16.1	18.6	18.7	20.4	24.6	24.1	16.7	18.7	26.0	16.0	14.6	16.3	17.5	17.4	18.8	19.0	18.5	20.7
069018 Moruya Heads Pilot Station	17.4	+1.3	17.0	19.0	17.1	15.5	12.9	15.8	16.4	13.0	16.9	17.2	20.2	17.5	14.0	18.0	16.8	16.0	17.9	23.2	20.2	14.2	18.9	24.9	18.5	15.1	17.3	10.9	18.4	17.0	17.2	16.4	19.5
070351 Canberra Airport	12.7		11.6	13.3	12.9	8.4	8.0	11.3	14.6	13.2	13.1	13.8	13.4	11.2	7.1	11.2	13.1	16.1	16.2	17.6	18.8	14.4	14.9	16.9	10.4	8.4	10.9	10.2	11.8	12.6	12.8	11.9	14.9
071041 Thredbo Village	6.0		3.5	5.5	8.5	9.0	9.0	6.8	5.5	6.0	7.5	6.0	3.0	4.5	4.5	4.5	6.0	6.3	9.5	12.0			9.0	10.0		1.0	2.5	2.0		6.5	2.5	7.5	7.5
072150 Wagga Wagga AMO	13.4	+0.9	11.1	12.3	12.0	12.4	10.2	14.9	17.4	12.0	14.2	16.0	14.1	8.9	10.7	12.7	15.8	17.1	16.0	16.3	17.0	16.2	19.9	10.9	10.4	10.8	11.9	11.7	10.5	10.5	11.4	15.7	
072160 Albury Airport AWS	13.3		11.4	12.5	12.7	11.7	10.6	15.4	16.5	11.8	15.8	14.0	16.2	12.9	9.5	10.8	12.8	14.0	16.5	13.4	15.2	17.3	16.8	18.2	10.8	10.1	11.5	11.3	12.6	10.8	12.2	12.1	14.3
072161 Cabramurra SMHEA AWS	3.9		0.9	1.9	3.4	6.8	1.6	4.8	4.5	4.5	5.3	4.5	5.0	1.0	-2.6	-1.3	7.6	11.0	8.9	8.3	10.0	9.3	8.8	9.8	-1.0	-1.0	-0.0	-0.2	0.4	-0.1	0.5	3.2	3.6
074258 Deniliquin Airport AWS	13.7		12.7	14.3	13.9	10.8	12.3	15.3	14.4	15.0	10.1	12.2	15.3	12.7	10.7	12.2	11.7	13.4	16.3	15.7	16.0	16.9	17.4	17.3	11.2	12.8	13.5	11.8	12.8	12.4	12.2	13.9	17.8
Victoria	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
076031 Mildura Airport	16.0	+0.6	13.3	15.5	16.1	11.9	14.0	16.9	13.2	16.5	16.3	12.2	17.3	13.6	13.7	14.2	15.1	14.9	19.0	20.5	21.4	20.4	21.1	18.7	14.1	14.6	16.9	14.5	14.1	13.2	15.6	18.5	18.4
078015 Nhil Aerodrome	13.6		12.4	16.0	14.5	10.4	12.5	15.0	15.7	13.4	13.4	10.3	14.9	8.6	11.1	12.5	13.5	13.5	15.4	19.0	13.0	15.8	17.2	15.4	11.0	11.8	12.9	10.2	12.6	13.5	12.7	15.1	16.9
080023 Kerang	14.5	+0.5	13.3	14.2	14.2	11.9	11.9	16.2	15.0	12.0	15.0	12.2	16.2	13.3	11.8	13.7	13.2	14.2	16.1	17.0	18.8	15.8	19.2	16.7	12.4	14.0	14.1	12.3	12.9	13.5	14.0	15.8	18.8
081123 Bendigo Airport	12.8		12.3	14.9	12.4	11.6	12.0	14.4	12.2	13.3	15.2	11.2	13.7	10.6	9.8	11.8	11.4	14.0	13.6	13.2	17.3	15.5	15.5	14.5	10.8	10.9	11.8	10.3	11.3	11.9	11.2	12.8	15.6
082039 Rutherglen Research			11.3	12.8				15.4	16.9	12.2						16.0	12.2	9.3	10.4	12.5	13.8	16.5	14.4	17.0	17.5								
083085 Mount Hotham	0.2		-1.1	-0.3	-0.3	-1.8	-0.5	1.5	0.8	1.0	1.1	0.7	0.8	-1.7	-4.6	-2.6	-2.0	2.5	4.8	4.4	4.8	4.2	6.5	6.8	-3.9	-4.1	-2.3	-3.1	-1.4	-1.8	-0.6</		

Daily and mean minimum temperatures for July 2016

Western Australia	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
001019 Kalumburu	14.9	13.5	14.2	15.0	13.5	14.4	13.8	15.1	14.2	13.0	17.5	18.9	20.4	22.9	19.3	17.8	14.8	7.8	8.1	10.5	10.5	12.0	13.7	14.2	16.2	18.6	18.0	15.6	15.5	16.3	14.1	11.2		
002012 Halls Creek Airport	14.1	+1.6	17.1	18.9	16.9	13.5	18.9	17.7	15.9	16.0	16.5	18.6	20.3	13.4	11.9	9.3	9.1	10.8	6.9	8.4	10.3	12.3	13.9	13.8	14.6	16.9	15.0	15.9	17.1	12.5	12.8	11.6	11.6	
002056 Kununurra Aero	14.8	14.1	16.5	16.8	13.5	14.6	16.3	17.9	14.3	13.9	13.3	16.5	23.3	21.3	15.1	14.6	15.6	8.5	7.8	10.6	12.0	12.5	13.6	14.1	16.4	16.3	16.1	17.9	20.9	14.9	10.2	10.8		
003003 Broome Airport	16.6	+3.2	19.1	20.8	16.2	18.1	19.8	19.2	16.9	18.5	17.9	23.2	21.1	20.7	17.6	16.9	15.3	13.6	11.1	9.4	9.5	12.3	13.5	15.8	17.0	16.4	17.7	21.4	21.0	19.3	14.7	11.9	11.0	
003032 Derby Aero	16.9	17.7	18.3	17.6	18.2	21.1	17.6	18.1	19.8	19.9	21.4	21.9	21.6	17.6	17.1	15.9	13.5	15.4	9.5	9.3	12.9	14.4	15.3	15.3	16.5	17.1	17.6	20.9	18.5	17.3	14.7	10.6	10.6	
004032 Port Hedland Airport	16.1	+4.0	20.8				16.0	21.0	21.4	19.1	11.2	10.8	12.5	13.6	15.6	16.1	11.6	10.7	13.7	14.8	14.6	15.5	16.6	17.5	21.7	20.4	19.2	17.4	20.6	16.8	12.1	12.8	12.8	
004083 Karratha Aero	16.5	20.1	20.5	19.8	22.0	19.8	15.8	16.4	21.0	18.0	10.8	10.3	13.4	13.3	13.6	14.2	12.6	12.0	15.1	18.7	17.1	17.9	16.7	20.0	20.8	17.7	17.3	16.8	16.2	14.7	14.1	15.2	15.2	
004106 Marble Bar	15.1	18.7	19.7	17.3	21.3	17.8	15.2	20.6	19.5	20.4	12.6	11.2	13.0	12.2	11.9	12.1	10.2	7.8	8.9	12.1	10.9	14.2	16.8	19.2	18.6	18.3	18.1	15.7	13.8	16.6	11.7	13.2	13.2	
005007 Learmonth Airport	14.0	15.7	20.1	18.4	17.9	18.8	18.9	17.3		14.5	8.2	9.3	7.9	7.0		12.7	17.0	16.7	16.3	10.2	8.3	9.5	14.8	13.7	14.5	14.3	16.9	12.6	11.0	14.0	15.1	15.2	15.2	
006011 Carnarvon Airport	11.5	+0.6	12.6	17.8	18.3	15.4	17.0	14.7	11.5	9.6	13.6	8.3	9.3	7.1	6.4	4.3	8.4	13.5			7.4	9.1	7.6	14.0	9.6	13.8	9.8	6.6	11.6	13.0	14.2	16.2	16.2	
006044 Denham	13.4	15.0	15.0	15.0	10.0	13.0	13.0	11.0	12.5	10.0		12.5	11.0		12.9	14.2	17.0	15.0	14.5	10.5	11.0		12.5	13.0	12.5	12.5	12.0	14.0	15.5	16.5	16.5	17.0	17.0	
007176 Newman Aero	9.3	11.9	14.0	14.9	15.0	11.0	10.7	11.8	9.9	15.3	5.0	6.1	4.9	1.8	3.8	2.6	4.7	4.5	7.5	13.6	10.3	13.0	13.4	12.6	10.3	11.9	8.1	4.3	6.5	9.1	8.5	10.5	10.5	
007185 Paraburdoo Aero	12.0	14.8	16.8	18.1	16.2	13.7	12.8	13.6	13.0	11.6	5.3	7.9	7.6	6.2	9.2	12.3	10.4	9.6	12.6	12.6	12.4	9.6	14.0	14.7	13.5	13.4	15.1	7.5	13.6	11.4	11.5	12.0	12.0	
007045 Meekatharra Airport	8.3	+0.8	10.1	12.8	12.0	7.1	8.9	9.3	6.2	9.9	8.7	5.8	6.2	3.8	1.6	6.1	5.8	9.1	13.5	11.6	6.1	8.6	9.3	6.4	8.9	4.0	5.7	4.4	6.2	11.2	13.9	12.6	11.7	11.7
007600 Mount Magnet Aero	7.6	8.7	11.1	13.2	7.3	9.4	8.7	5.9	8.7	8.6	8.2	7.6	3.5	2.1	5.7	4.7	12.2	13.0	10.9	4.8	4.9	6.7	5.0	6.2	3.1	2.5	2.9	4.4	6.9	14.4	15.5	8.8	8.8	
008296 Morawa Airport	6.2	5.2	7.8	9.2	7.0	8.3	8.1	7.0	7.9	7.4	8.1	8.0	3.1	0.8	1.1	4.7	7.7	14.0	7.1	3.1	1.9	5.3	5.3	2.8	4.4	3.5	2.0	4.1	6.3	10.5	12.7	8.0	8.0	
008297 Dalwallinu	5.5	3.4	5.2	8.3	6.1	7.8	3.9	5.4	8.0	5.7	6.9	7.0	3.4	-0.4	2.0	6.9	5.5	12.3	6.0	3.2	2.6	6.1	5.4	3.0	2.5	0.6	2.2	3.7	7.3	10.6	11.9	8.3	8.3	
008315 Geraldton Airport	8.4	7.9	11.8	6.9	7.3	10.2	9.5	7.6	10.7	8.9	9.6	9.0	6.0	1.9	4.5	9.2	10.8	14.5	11.0	3.7	4.5	8.4	9.7	8.7	5.6	4.8	4.0	6.2	8.7	11.4	13.1	14.4	14.4	
009021 Perth Airport	7.4	-0.7	5.4	8.2	4.9	4.3	8.0	8.0	9.3	11.3	7.5	8.4	5.5	3.4	1.3	6.1	11.6	15.2	13.4	7.4	3.1	4.9	8.7	6.2	5.9	0.9	5.3	4.2	5.4	9.3	12.3	11.1	12.3	12.3
009131 Jurien Bay	8.9	4.2	9.0	8.9	6.1	8.5	8.7	5.4	11.7	8.1	8.4		7.2	4.7	4.8	12.5	14.7	15.7	10.5		3.9	10.2	13.0	8.5	6.7	3.8	5.6	6.0	8.3	14.0	14.8	13.8	13.8	
009225 Perth Metro	7.5	2.9	6.4	6.3	4.8	8.2	7.2	10.1	10.9	8.2	6.8	4.1	0.6	4.0	10.8	15.3	14.3	8.5	3.6	4.5	8.8	6.9	8.0	1.2	6.7	4.7	5.1	8.7	10.6	12.2	12.3	12.3	12.3	
009240 Bickley	6.3	4.1	5.7	7.9	3.1	4.3	4.2	6.3	8.2	5.6	5.5	6.9	3.0	1.5	4.6	9.1	13.7	10.9	6.7	4.7	4.8	6.3	5.2	5.5	3.0	4.9	6.7	6.3	7.3	10.2	10.5	9.5	9.5	
009518 Cape Leeuwin	11.3	+0.2	14.0	12.9	12.2	9.8	9.8	8.5	9.1	12.1	9.2	9.2	11.4	9.8	7.9	7.6	15.7	16.1	13.8	10.6	12.1	12.2	9.5	9.8	10.8	10.9	11.6	13.7	13.0	13.4	12.1	13.2	8.5	8.5
009617 Bridgetown	4.1	1.7	-0.1	2.0	0.9	-0.5	-1.3	1.4	7.0	5.8	7.0	5.3	1.0	-2.4	-0.2	10.6	14.2	10.4	3.9	2.7	3.5	5.8	2.0	2.0	1.4	6.1	5.6	4.7	5.7	6.7	6.2	8.1	8.1	
009746 Witchcliffe	7.8	8.5	7.5	6.7	2.3	3.7	2.2	3.6	10.4	6.6	8.4	9.6	5.5	5.8	3.6	14.5	15.4	12.7	6.0	7.2	10.0	7.6	6.8	4.7	5.5	7.3	10.2	10.3	10.7	6.5	13.5	9.1	9.1	
009789 Esperance	8.2	7.0	3.7	5.7	10.5	4.0	7.9	5.9	8.8	9.2	7.6	8.7	9.4	7.7	5.3	8.8	9.2	13.5	9.7	6.2	7.2	7.4	7.9	5.4	8.8	8.4	8.5	10.8	9.1	7.7	12.6	11.7	11.7	
009965 Bunbury	6.2	4.2	1.9	3.8	2.0	4.0	3.1	7.9	11.5	5.8	9.2	4.3	6.4	-1.1	4.3	11.3	14.1	12.2	4.0	2.5	8.1	7.7	2.6	7.2	2.3	5.6	4.0	4.5	9.1	7.0	14.6	9.6	9.6	
009977 Mandurah	9.5	8.0	7.9	9.4	7.0	8.4	7.3	10.5	12.0	9.3	8.8	8.0	7.0	4.5	9.3	11.8	14.9	14.4	9.6	7.2	10.1	9.3	8.5	8.9	8.5	8.9	8.6	8.9	8.6	11.4	12.1	15.4	13.5	13.5
009999 Albany Airport	6.8	7.5	5.1	5.2	5.4	2.4	3.0	3.5	9.1	4.8	8.3	8.4	7.5	1.0	1.8	10.3	12.4	11.9	5.8	6.7	6.1	7.7	6.8	4.7	6.6	8.5	8.1	10.0	7.8	6.6	9.2	7.3	7.3	
010007 Bencubbin	5.4	-0.6	1.8	4.3	7.1	6.0	6.3	5.1	4.6	7.2	5.2	5.2	5.6	2.8	0.4	2.1	6.1	8.5	11.2	8.3	4.7	2.1	4.3	5.5	4.5	2.5	1.2	1.6	2.7	5.3	11.4	13.8	8.8	8.8
010092 Merredin	4.3	-1.1	0.6	5.0	6.6	3.9	6.2	5.7	4.2	7.4	6.4	6.0	3.6	0.7	1.0	5.0	7.5	8.0	11.5	8.0	2.0	0.5	4.0	3.2	-1.0	-0.5	0.0	5.5	2.3	6.0	7.5	5.0	5.0	
010286 Cunderdin Airfield	4.1	0.0	2.4	3.9	1.1	5.3	5.3	3.1	8.1	7.0	6.9	3.4	2.5	-0.3	2.1	7.3	8.6	12.2	5.1	0.6	-0.1	5.8	4.6	4.2	-0.5	-0.6	-0.3	0.7	5.0	8.9	6.8	8.5	8.5	
010633 Ravensthorpe	6.1	-0.5	6.0	1.5	7.0	5.0	3.0	4.0	6.0	6.5	8.0	6.1	7.0	3.5	2.0	6.0	8.0	10.8	12.6	7.0	3.0	2.0	7.0	4.0	3.2	4.4	7.0	7.0	8.0	8.5	5.0	8.5	10.2	10.2
010911 Lake Grace	4.2	1.5	-0.1	2.3	1.6	3.4	2.8	3.2	6.5	5.9	6.2	5.3	0.6	0.2	4.0	6.9	7.1	11.9	4.1	0.8	0.7	5.5	4.4	6.7	-0.2	4.8	4.1	3.9	4.2	4.6	7.6	9.0	9.0	
010916 Katanning	4.9	5.5	2.0	6.0	2.2	2.0	0.8	4.8	6.8	5.3	5.9	5.4	3.3	0.2	2.7	7.2	10.8	11.0	4.7	2.7	3.6	6.4	3.3	5.0	2.2	6.3	6.6	6.3	6.1	5.2	7.0	6.0	6.0	
010917 Wandering	2.9	-0.5	-1.0	0.8	0.4	2.2	-0.6	3.0	8.7	4.3	4.4	2.9	-0.6	-3.8	0.1	8.3	11.0	11.0	4.9	-1.0	0.4	7.3	1.0	0.6	-1.8	2.4	2.6	0.4	3.7	4.1	5.3	9.5	9.5	
011003 Eucla	7.8	4.7	5.3	4.4	10.0	8.5	4.4	8.3	6.9	7.7	7.4	2.9	6.3	8.3	2.1	5.4	4.5	8.4	11.0	11.0	12.3	13.4	10.6	5.4	6.7	5.0	6.0	10.4	4.7	8.2	15.4	11.9	11.9	
011052 Forrest	5.6	3.7	1.2	2.9	4.1	3.1	1.4	7.9	5.1	6.0	6.6	5.8	5.3	5.1	-0.7	0.4	2.0	4.7	9.9	11.1	11.1	10.7	10.6	2.6	4.8	3.4	2.7	6.5	4.6	4.1	13.5	13.9	13.9	
012038 Kalgoorlie-Boulder Airport	5.7	+0.9	-0.1	1.5	10.5	8.0	5.3	7.1	7.4	6.6	7.4	6.5	4.2	2.2	1.9	4.8	6.8	10.5	8.9	6.3	8.7	5.9	6.7	-1.2	2.0	0.6	1.4	2.6	8.1	11.3	15.8	5.9	5.9	
012071 Salmon Gums Res.Stn.	4.5	-0.3	3.3	-3.1	1.0	5.2	-2.0	3.0	-2.5	6.7	7.8	6.5	5.8	3.7	-1.0	3.7	6.4	8.2	12.2	7.9	2.9	1.6	3.7	5.7	0.9	4.2	2.4	4.7	9.3	5.7	3.3	12.2	9.0	9.0
013011 Warburton Airfield	7.1	10.9	7.0	13.1	10.1	7.6	10.0	10.0	12.0	5.3	4.2	2.0	4.0	3.3	4.0	3.9	5.0	1.7	5.2	10.7	12.6	11.3	8.5	4.3	3.2	3.0	6.3							

Daily and mean minimum temperatures for July 2016

New South Wales	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
048027 Cobar MO	6.3	+1.4	5.5	4.0	4.0	3.0	6.3	7.2	7.6	8.8	4.2	4.9	9.5	5.6	2.5	0.9	1.8	1.8	6.1	10.8	14.1	16.8	11.7	14.3	8.9	4.9	3.3	3.9	8.1	3.1	2.6	3.3	5.2
048245 Bourke Airport AWS	5.9		5.3	0.7	0.3	4.7	7.9	8.2	8.8	8.0	0.9	3.1	8.9	9.3	2.7	3.3	-1.1	3.8	6.1	10.7	15.6	17.7	14.4	13.3	11.2	7.1	2.3	0.8	3.9	1.9	2.5	0.2	1.7
049000 Ivanhoe Aerodrome AWS	6.5		5.8	7.5	4.9	3.0	7.0	7.0	6.1	7.9	6.5	6.8	9.2	7.2	4.2	1.7	1.6	4.7	2.1	7.1	13.1	15.0	10.0	13.2	9.0	5.5	5.2	4.7	7.6	3.8	4.3	3.0	7.8
050052 Condobolin Ag Research Stn	6.3	+4.0	5.2	4.5	7.5		5.4	7.6	6.8	8.8	9.1	4.9	10.6	8.6	3.5	-1.3	2.2	0.0	0.8	4.4	12.2	14.5	9.7	11.4	7.9	2.5	6.5	5.2	8.6	3.1	7.4	7.1	3.1
051039 Nyngan Airport	6.0	+2.3	6.0	6.5	4.5	0.5	5.0	7.0	7.0	9.0	4.8	4.5	8.0	4.0	3.3	1.0	2.1	2.5	5.4	6.5	14.2	16.5	10.0	13.0	10.0	4.8	5.8	4.1	8.0	4.5	2.9	2.2	1.8
052088 Walgett Airport AWS	5.7		4.8	1.9	0.0	0.8	8.1	4.8	9.1	7.7	5.5	1.2	9.0	11.9	5.3	1.8	0.0	2.9	6.3	9.9	14.7	17.1	15.7	12.7	11.1	3.6	5.3	-0.3	5.0	2.3	-0.9	-0.4	0.0
053115 Moree Aero	6.5		1.8	1.3	-1.2	3.0	9.7	4.7	8.9	8.8	4.9	5.2	8.8	14.2	8.3	5.4	-0.9	6.5	8.1	9.6	11.3	15.2	17.6	15.3	15.2	5.2	5.0	1.0	3.5	2.3	0.8	0.2	0.9
054038 Narrabri Airport AWS	6.1		6.1	3.4	1.0	1.4	5.9	6.0	7.2	9.6	3.8	3.0	7.1	14.3	6.0	3.6	0.3	4.6	7.6	9.1	10.4	14.6	15.3	14.5	13.9	4.9	5.5	1.2	4.7	1.2	1.8	-0.3	0.8
055024 Gunnedah Resource Centre	6.1	+1.6	5.8	1.1	1.6	0.4	5.8	5.7	6.0	10.1	3.9	6.1	8.4	11.0	6.7	1.9	-1.2	1.4	7.4	9.9	11.7	13.9	13.7	14.1	13.2	4.9	7.1	2.5	6.8	2.9	2.3	0.9	3.1
055325 Tamworth Airport AWS	3.7		2.7	-2.8	-2.0	-1.1	4.6	5.4	6.5	8.9	4.0	2.8	3.3	10.5	5.5	0.5	-3.6	1.6	6.3	4.3	7.6	12.3	14.2	13.2	12.4	3.3	4.0	-1.8	-0.4	-2.2	-2.5	-2.2	-1.5
056242 Inverell (Raglan St)	2.2		-3.0	-3.1	-4.1	-2.8	3.8	4.5	5.4	7.8	2.5	0.3	2.8	4.9	6.2	2.8	-1.2	1.0	5.0	3.4	4.6	10.0	13.0	14.3	0.1	-0.5	-3.5	-0.9	1.0	-2.0	-3.3	-2.6	
057095 Tabulam (Muirie)	8.9		7.8	5.2	6.8	6.5	9.1	5.6	7.4	8.2	8.3	8.2	9.5	12.8	9.1	6.6	7.3	7.8	9.3	12.4	12.2	13.8	13.8	13.8	15.6	7.8	7.3	6.8	9.3	6.3	6.4	6.6	6.8
058012 Yamba Pilot Station	11.5	+2.2	10.2	8.2	7.8	8.5	11.3	10.0	9.8	13.1	9.9	10.0	12.7	14.3	14.7	10.3	8.1	9.7	12.9	14.2	13.4	15.9	17.7	16.0	17.3	12.3	10.0	9.1	12.4	10.6	7.4	8.5	9.6
060139 Port Macquarie Airport AWS	6.3		2.2	4.0	3.1	3.6	7.6	1.6	9.2	12.7	7.8	9.5	7.6	8.3	9.1	1.6	2.2	3.4	11.5	9.0	10.1	12.2	14.0	10.1	13.6	6.6	1.7	-1.1	2.9	0.6	3.1	2.2	5.0
061078 Williamtown RAAF	8.0	+1.9	4.9	6.5	3.8	1.7	6.4	9.1	11.8	12.1	9.6	6.9	9.4	8.0	10.7	3.7	4.9	4.5	10.1	9.3	10.6	15.7	14.4	10.4	15.0	2.5	2.7	10.7	6.2	6.9	6.3	6.8	5.5
061363 Scone Airport AWS	4.8		4.9	-0.8	-1.7	-2.7	2.3	7.4	9.1	10.9	5.3	1.9	2.9	15.2	7.7	-1.2	-3.0	-2.0	3.2	9.3	8.7	14.3	11.7	7.7	13.6	3.5	7.4	4.2	7.8	1.8	-0.1	-0.7	0.4
062101 Mudgee Airport AWS	3.6		-0.1	4.5	1.9	-1.3	-0.1	4.9	5.6	9.3	2.0	1.4	5.2	8.3	4.5	-3.0	-3.1	-0.1	7.8	5.8	7.6	11.6	5.8	9.8	9.9	-0.8	2.5	3.7	7.2	3.4	-2.2	-0.6	0.2
063005 Bathurst Agricultural Station	3.3	+3.5	-2.2	4.6	5.8	-1.6	1.0	4.3	1.0	8.0	5.2	3.2	8.0	4.2	2.2	0.0	0.8	3.0	2.2	5.0	12.5	3.5	5.8		-1.5	0.6	5.3	5.5	3.3	3.2	3.8	0.0	
063254 Orange Agricultural Institute			2.8			-2.0	3.1	2.1	3.9	6.0			3.2	4.2	-0.2	-0.2	1.9			1.1	8.5	12.0	6.0	8.4		-0.2	2.9	4.4	2.0	0.8			
064008 Coonabarabran (Narroi Street)																	-2.5	2.2	4.9	8.0	9.5	12.5		11.5	1.5	1.8	-2.0	1.0		0.0	1.0	0.5	
065070 Dubbo Airport AWS	4.9		2.3	3.4	1.0	-1.9	3.3	6.4	7.8	10.0	3.8	4.0	7.3	5.5	2.8	-3.6	-3.2	2.5	7.1	7.8	10.5	14.0	8.4	11.1	8.0	1.8	2.9	3.2	6.9	3.0	6.6	6.0	2.4
066062 Sydney (Observatory Hill)	10.0	+1.6	7.7	8.2	6.5	6.4	7.5	9.5	12.9	12.4	8.7	10.5	11.8	14.8	9.6	6.7	6.4	6.9	9.2	11.0	11.4	16.5	13.9	13.1	14.5	7.8	8.4	10.2	10.8	8.8	7.3	8.7	10.4
067105 Richmond RAAF	5.7		3.4	-0.3	-0.6	-1.0	2.3	7.5	11.8	11.9	6.1	9.9	10.6	12.0	8.4	-1.5	-1.9	1.5	6.1	6.3	8.7	13.9	14.1	8.5	13.9	2.3	5.6	6.9	4.4	1.4	-0.9	0.4	6.0
068072 Nowra RAN Air Station AWS	8.3		7.2	6.8	6.9	6.1	5.8	7.3	11.5	11.0	8.7	8.3	11.5	8.9	6.5	5.5	6.5	5.1	7.2	8.8	14.5	13.9	12.5	11.8	11.0	4.7	2.3	10.8	9.6	7.6	6.5	6.9	6.1
068151 Jervis Bay (Point Perpendicular)	10.2		8.8	8.6	8.9	8.1	8.9	10.8	11.4	12.0	11.8	11.1	13.0	11.8	7.9	7.2	7.9	7.8	10.5	11.9	15.5	14.9	12.4	13.9	12.0	6.3	7.8	11.5	8.1	9.1	8.0	8.2	10.7
068241 Albion Park (Wollongong Airport)	8.3		4.8	9.4	8.6	0.7	4.3	9.6	12.8	11.7	7.3	6.7	11.6	6.5	8.3	7.4	8.9	2.7	9.4	4.3	12.6	15.0	13.9	10.5	12.1	7.5	3.4	9.8	5.6	9.7	8.5	6.8	6.8
069018 Moruya Heads Pilot Station	8.6	+2.8	8.2	5.8	5.7	5.7	7.5	7.9	12.0	11.0	10.1	8.8	9.8	13.8	7.6	4.8	5.8	5.0	6.3	8.9	12.9	13.6	12.0	12.8	12.5	3.7	5.3	11.7	10.0	5.5	4.5	7.4	8.7
070351 Canberra Airport	2.2		-0.4	-3.8	-5.2	-2.4	0.3	4.4	6.2	2.8	3.6	1.9	7.8	6.7	0.6	0.6	-3.1	-3.0	1.1	-1.8	6.7	11.1	8.5	9.6	4.7	-2.2	3.2	4.5	4.6	1.4	-3.4	-1.0	3.3
071041 Thredbo Village	-1.8		-2.5	-1.5	-4.0	-4.0	-1.5	0.5	2.0	1.5	1.0	1.0	3.2	2.0	-4.5	-5.0	-5.0	-5.5	-2.3				-1.0	-1.0		-2.5	-2.0	-3.5		-3.0	-3.0	0.0	
072150 Wagga Wagga AMO	5.6	+3.3	5.9	7.0	5.2	5.2	7.6	8.0	3.3	9.0	9.2	6.0	10.3	4.7	3.9	-1.0	2.9	0.7	1.6	4.3	8.9	12.0	7.4	10.4	7.1	-1.1	3.8	5.0	7.1	3.2	6.6	5.5	4.1
072160 Albury Airport AWS	5.8		5.2	7.2	7.9	8.2	6.7	7.2	4.0	6.5	7.0	6.2	9.1	8.6	3.6	-0.3	4.4	-0.4	0.4	2.1	7.3	8.5	6.2	9.9	7.1	-0.2	4.7	6.9	5.9	7.7	8.3	8.0	
072161 Cabramurra SMHEA AWS	-0.5		-2.8	-2.6	-1.2	-2.8	1.0	-1.2	-0.2	1.0	1.9	1.8	2.0	0.5	-5.4	-5.5	-3.0	-2.6	2.9	3.1	5.4	5.3	3.4	5.0	-1.6	-4.2	-3.4	-3.3	-2.9	-2.2	-2.1	-1.1	-0.5
074258 Deniliquin Airport AWS	6.4		6.6	7.6	9.8	8.7	6.3	7.8	9.9	10.3	3.1	4.1	9.5	7.2	3.4	2.1	2.6	1.8	0.9	4.6	6.8	8.8	6.8	10.4	6.9	1.2	6.1	4.1	6.3	6.4	8.8	8.3	9.7
Victoria	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
076031 Mildura Airport	5.9	+1.5	3.6	5.9	6.8	5.3	7.2	6.0	5.0	6.8	2.5	6.6	8.7	8.9	3.4	1.5	4.6	-1.0	0.1	4.0	7.7	10.7	12.0	14.6	7.8	3.3	6.1	4.8	7.6	4.2	5.4	3.5	8.3
078015 Nhili Aerodrome	5.6		3.2	5.4	7.9	7.8	7.4	6.4	5.6	3.6	0.6	2.1	7.8	7.9	2.9	2.5	4.9	-0.1	2.3	3.7	9.1	8.7	9.6	10.9	5.4	2.7	4.9	3.7	5.9	7.6	9.1	7.3	7.5
080023 Kerang	6.0	+1.9	5.8	7.0	8.8	8.0	6.9	7.8	9.7	6.8	1.6	3.6	8.8	8.0	3.4	1.4	3.7	1.6	-0.3	2.0	5.8	7.8	8.4	11.7	6.6	2.0	5.5	4.0	6.2	6.6	9.5	9.1	7.5
081123 Bendigo Airport	5.4		6.0	9.2	9.3	8.6	6.8	8.4	9.4	3.8	0.6	5.6	8.2	7.7	2.5	-0.2	3.9	-0.1	0.0	3.8	8.3	8.2	4.5	10.0	6.7	-0.7	2.4	2.4	4.4	2.2	8.0	8.7	9.1
082039 Rutherglen Research			4.8	7.0				5.1	6.0				8.0		-1.4	3.5	-1.8	-1.9	1.6	10.3	8.1	4.9		-2.3				6.0	5.6	7.2	8.8	8.4	
083085 Mount Hotham	-2.8		-4.4	-2.4	-1.9	-3.2	-3.7	-2.2	-0.9	-0.6	-1.1	-1.3	-1.2	-2.0	-8.0	-8.0	-5.1	-4.4	-3.3	-0.3	1.0	1.9	1.4	1.6	-3.9	-6.3	-5.8	-5.9	-5.7	-3.4	-2.8	-2.1	-1.6
084016 Gabo Island Lighthouse	9.4	+0.9	8.3	10.0	9.5	7.9	9.5	9.7	13.0	10.5	10.9	9.0	11.0	10.8	8.2	9.6	10.8	8.6	6.2	7.3	12.4	11.2	11.0	11.3	8.1	6.5	7.1	8.0	6.6	8.7	9.2	10.6	10.7
084145 Orbst	6.3		4.4	8.0	5.4	4.6	5.4	7.3	10.1	6.0	7.4	4.6	6.6	6.4	6.2	6.9	7.6	4.4	1.9	4.8	11.3	9.9	5.7	8.3	7.7	3.2	4.0	5.0	1.9	7.0	7.8	8.1	8.9
085072 East Sale Airport	5.3	+2.3	3.6	5.9	2.1	1.7	5.2	7.0	10.8	6.6	7.8	4.4	6.4	7.8	5.0	5.2	7.6	1.9	-2.1	0.7	7.6	9.5	3.8	6.1	6.1	-0.2	1.2	6.3	3.2	8.4	9.0	5.4	

Daily and total rainfall for July 2016

Western Australia	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
001019 Kalumburu																																		
002012 Halls Creek Airport	26.2	4.7												5.6	18.0	2.6																		
002056 Kununurra Aero																																		
003003 Broome Airport		2.5																																
003032 Derby Aero		4.7																																
004032 Port Hedland Airport		8.0																																
004083 Karratha Aero	58.6				0.2	0.4	47.2				10.8																							
004106 Marble Bar	0.6									0.4	0.2																							
005007 Learmonth Airport	88.2	23			7.2	25.6	26.4	11.2	0.4	»	0.4									1.8						6.2	3.4	5.2	0.2				0.2	
006011 Carnarvon Airport	41.2	41		14.4	0.6		2.6	13.6		0.2	2.2								6.8						0.4	0.2								
006044 Denham	75.8	38					9.4	17.8			5.4	2.0	0.2						38.0	3.0														
007176 Newman Aero	28.8		11.2		0.2	2.2	2.4	5.4	2.2		2.8	0.2													0.4	1.8								
007185 Paraburdoo Aero	42.6		1.4			5.8	11.0	18.0	1.4		1.6	0.2									0.2				0.6	2.0	0.2	0.2						
007045 Meekatharra Airport	35.0	25		0.2	2.0				18.0	2.0		6.0		0.2						6.6														
007600 Mount Magnet Aero	29.8		0.4		2.6			13.8	0.4	0.2	3.8	2.0	0.8	0.2					2.4	2.8					0.4									
008296 Morawa Airport	57.0				2.6					0.2	24.8	5.4	0.6	0.2		0.2			17.2	2.6			0.2	0.6	1.2				0.2			0.6	0.4	
008297 Dalwallinu	42.2		0.2						0.2	0.8	10.8	8.0	3.8		0.2			0.2	15.0	1.0	0.2	0.2	1.0	0.4					0.2					
008315 Geraldton Airport	126.4									21.4	26.4	12.2	1.8		0.2				49.2	5.6	1.0	0.2			3.8				0.2	0.2			4.2	
009021 Perth Airport	119.6	158								11.0	18.0	25.4	0.4	0.2					34.6	9.2			12.4	3.0	0.2	0.2							5.0	
009131 Jurien Bay	121.7										2.8	39.8	9.6	3.8					45.0	5.2	»	0.4	5.4	2.0		0.3					0.4		7.0	
009225 Perth Metro	139.6				0.4					13.2	27.4	29.8	2.6	0.2					32.8	6.8			15.4	4.0		0.6							6.4	
009240 Bickley	193.2				0.2	0.2				16.6	18.4	36.6	1.2		0.2				55.6	15.0	0.2		20.6	12.4	0.2	1.2		0.2	0.2				0.2	14.0
009518 Cape Leeuwin	139.0	191	1.0			6.4	1.8	0.2			6.2	16.2	11.8	1.2				13.6	10.6	9.8	4.6	1.8	6.8	24.6	6.4	2.0		2.2				1.2	3.2	7.4
009617 Bridgetown	139.8		0.2		1.6	0.4				14.6	1.4	22.4	3.0		0.2			18.2	19.2	22.4	7.4			9.2	6.2	1.4	1.0	0.4	0.2	0.2		0.6	3.0	6.6
009746 Witchcliffe	242.0	0.6	0.2	9.8	1.6	0.2		0.2		4.8	13.0	17.0	7.4					11.0	42.6	36.4	22.4	0.8	3.2	36.8	6.8	3.4	0.4	1.2	0.4	0.4		1.8	8.2	11.4
009789 Esperance	54.0		0.2		4.6	0.4				6.0	6.8	10.8	3.2					3.2	1.2	2.6				5.6	0.8	6.0	0.8	1.0	0.8					
009965 Bunbury	110.6			0.6	0.2					6.6	3.4	7.6					15.2	17.6	7.8	9.6	0.2	3.0	19.2	3.2	1.2	1.2						6.0	8.0	
009977 Mandurah	69.0			1.2	0.2					7.4	8.8	25.6	0.6					0.6	8.2	2.2			8.2	1.6	2.6	1.0							0.8	
009998 Albany Airport	117.8		0.2	14.8	4.2	0.2	0.2		0.2	3.2	22.2	9.8	0.4	0.4		4.6	3.2	9.0	3.8			9.8	11.4	2.6	3.4	1.6	2.2	0.2		0.2	1.0	9.0		
010007 Bencubbin	29.3	47			0.2					15.6	2.2	0.4		0.1				8.6	1.0	0.3	0.2	0.4						0.1	0.2					
010092 Merredin	39.4	44			0.2					17.4	3.4							12.0	1.8	0.2		0.6	2.6		0.2					0.6		0.4		
010286 Cunderdin Airfield	49.2		0.2		0.2					5.6	18.6	0.8		0.2				19.0	0.2	0.2		2.0	0.4					0.2				0.2	1.4	
010633 Ravensthorpe	45.8	45			13.2	1.0				8.2	11.6	0.4	1.0	1.0				6.2		1.8			1.0	0.4										
010911 Lake Grace	23.2				1.8	0.2				2.8	5.4	0.4	0.2	0.2				9.0	0.4				1.6		0.8							0.2	0.2	
010916 Katanning	39.0		0.2	2.4	2.0	0.2	0.2		3.2		0.6	1.0	0.4					7.8	5.6	0.2		7.2	1.2		1.0		0.2				1.8	3.8		
010917 Wandering	75.0			0.2	1.0		0.2		13.2	2.4	2.0	0.6		0.2				22.2	7.2	0.2		11.4	6.4	0.2	0.8			0.2				0.6	6.0	
011003 Eucla	26.2	30	1.0	0.8			3.4	0.6	0.6	0.2	2.8	0.4		1.6	0.4						13.4	0.4	0.2					0.2					0.2	
011052 Forrest	22.6				0.2	0.6		1.4		5.0	0.2									5.6	0.2												0.2	9.2
012038 Kalgoorlie-Boulder Airport	22.2	26			0.8			0.2	1.6		4.2	2.4				0.2			1.8	6.0		3.8		0.8	0.2				0.2					
012071 Salmon Gums Res.Stn.	32.6	37		0.2		3.0	1.0			12.6	5.2	0.2	1.0					4.0	2.0	0.6	0.2	0.2	0.2	0.8	0.8	0.2			0.2			0.2		
013011 Warburton Airfield	13.6		1.2	0.8		0.2			9.2	0.2	0.6	0.6		0.2										0.6										
013012 Wiluna	39.7	21		3.0	»	6.0		7.8	4.2	0.4	5.0		0.5				»	»	»	4.2	8.2					»	0.4							
013017 Giles Meteorological Office	15.6	7.6	2.6	4.4	0.2				0.6			7.8																						
Northern Territory	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
014015 Darwin Airport		1.0																																
014198 Jabiru Airport	22.0														21.8	0.2																		
014932 Tindal RAAF	0.6														0.6																			
014508 Gove Airport	15.4	2.4					1.0	0.2						0.2	3.4	4.4	3.4	0.4																
014723 Borroloola Airport	1.8													0.2		0.4	1.2																	
014825 Victoria River Downs	0.6	6.1													0.6																			
015135 Tennant Creek Airport	19.8															19.8																		
015590 Alice Springs Airport		16																																
015635 Yulara Airport	21.4		2.4	4.8			0.2		0.2			13.6	0.2																					
015666 Rabbit Flat	3.0															2.8	0.2																	
South Australia	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
016001 Woomera Aerodrome	7.0	17		0.2		2.4	1.6			0.2		2.6																						
016098 Tarcoola Aero	10.4				2.0	0.6	0.2	0.2			7.2																							
017043 Oodnadatta Airport	3.8	8.6				0.2	0.8				0.2	2.6																						
018012 Ceduna AMO	39.0	40	0.2			1.6	6.4	1.0			10.8		1.4	6.4	0.4										2.0	0.8	0.8	2.2	1.0				4.0	
018044 Kyancutta	39.5	41	1.6				4.0	0.1	0.2	0.4		8.8		8.2	3.8										2.2	2.2	1.6	4.0	0.8				1.6	
018192 North Shields (Port Lincoln AWS)	82.2	0.2	0.6			2.0	3.0	0.4	2.2	0.4		1																						

Daily and total rainfall for July 2016

New South Wales	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
048027 Cobar MO	34.2	30	-	-	-	0.2	1.2	3.0	-	-	-	0.2	1.4	0.6	-	-	-	0.2	-	-	-	20.4	6.6	0.2	-	-	-	-	-	-	-	0.2	-	
048245 Bourke Airport AWS	22.8	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.8	18.6	-	0.2	-	-	-	-	-	-	-	-	
049000 Ivanhoe Aerodrome AWS	26.0	-	0.2	-	-	-	5.4	3.0	-	0.2	1.2	0.2	1.2	-	-	-	0.2	-	-	0.2	-	13.0	0.6	0.2	-	0.2	-	-	-	-	-	0.2	-	
050052 Condobolin Ag Research Stn	36.9	34	0.8	0.2	-	»	4.2	2.2	-	7.8	2.2	0.2	1.4	-	-	-	-	-	-	-	-	11.2	2.6	0.2	2.0	0.2	1.4	-	0.3	-	-	-	-	
051039 Nyngan Airport	34.0	32	-	-	-	-	4.4	2.6	-	0.4	-	-	-	0.6	-	-	-	-	-	-	-	17.6	8.2	-	-	-	-	-	0.2	-	-	-	-	
052088 Walgett Airport AWS	11.4	-	-	0.2	-	-	8.0	0.2	-	0.2	-	0.2	-	-	-	-	-	-	-	-	-	2.2	-	0.2	-	-	-	-	-	-	-	0.2	-	
053115 Moree Aero	13.6	-	-	-	-	-	3.6	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	9.6	0.2	-	-	-	-	-	-	-	-	-	-	
054038 Narrabri Airport AWS	59.8	-	-	-	-	0.2	30.6	1.0	-	0.2	-	-	-	-	-	-	-	-	-	-	-	23.2	4.2	-	-	-	-	-	-	-	-	0.2	0.2	
055024 Gunnedah Resource Centre	20.0	44	-	-	-	-	7.6	1.6	0.6	-	0.8	-	-	-	0.4	-	-	-	-	-	-	0.2	8.4	-	0.4	-	-	-	-	-	-	-	-	-
055325 Tamworth Airport AWS	28.6	-	-	0.2	-	-	0.2	11.4	1.0	1.2	-	0.2	0.2	-	3.2	-	-	-	-	-	-	0.6	9.6	-	0.6	-	-	-	-	-	-	0.2	-	
056242 Inverell (Raglan St)	56.0	-	-	-	-	-	29.0	3.2	-	0.2	-	-	-	-	-	-	-	-	-	-	-	11.2	11.4	1.0	-	-	-	-	-	-	-	-	-	-
057095 Tabulam (Muirie)	32.6	-	-	-	-	-	5.0	1.6	-	-	-	-	-	-	-	-	-	9.2	14.2	0.6	-	1.6	0.4	-	-	-	-	-	-	-	-	-	-	
058012 Yamba Pilot Station	17.6	85	-	-	-	-	4.2	3.0	-	-	1.4	-	-	-	-	-	-	4.8	1.0	0.2	0.2	2.6	0.2	-	-	-	-	-	-	-	-	-	-	
060139 Port Macquarie Airport AWS	16.6	-	-	-	-	-	2.8	0.2	-	-	5.2	-	0.2	-	-	-	-	3.6	0.2	-	0.6	3.6	0.2	-	-	-	-	-	-	-	-	-	-	
061078 Williamtown RAAF	52.6	62	-	-	-	-	2.0	-	2.0	9.4	7.4	0.2	-	-	-	-	-	1.2	0.8	-	-	18.6	11.0	-	-	-	-	-	-	-	-	-	-	-
061363 Scone Airport AWS	70.0	-	-	-	-	-	7.6	1.2	-	2.0	19.2	0.2	-	-	-	-	-	-	-	-	-	4.4	33.0	0.2	2.2	-	-	-	-	-	-	-	-	-
062101 Mudgee Airport AWS	104.4	-	0.4	-	-	-	0.2	22.2	4.0	1.2	2.8	9.0	0.2	0.2	3.6	-	-	-	-	-	-	51.2	5.6	-	1.4	-	0.4	-	1.8	-	-	-	0.2	-
063005 Bathurst Agricultural Station	101.6	45	2.2	0.2	-	-	11.8	4.2	0.4	2.8	7.2	»	3.0	10.8	0.6	-	-	-	-	-	-	0.6	40.0	10.6	1.0	»	0.2	1.8	-	4.0	0.2	-	-	-
063254 Orange Agricultural Institute	157.8	89	6.4	»	»	»	1.4	12.4	23.4	6.6	8.0	»	»	11.2	9.4	0.4	0.2	-	»	»	0.4	2.8	37.4	12.8	0.4	»	»	13.0	1.4	9.6	0.6	-	-	-
064008 Coonabarabran (Naroi Street)	22.6	53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	19.6	»	1.6	-	-	-	-	-	-	-	-	-
065070 Dubbo Airport AWS	105.2	-	0.6	0.2	-	-	0.2	10.8	3.0	1.4	17.8	1.8	-	0.6	3.0	-	-	0.2	-	-	-	52.0	9.0	-	0.6	-	0.6	-	3.4	-	-	-	-	-
066062 Sydney (Observatory Hill)	104.6	56	-	-	-	-	4.8	0.2	29.4	22.4	2.2	1.0	-	0.2	-	-	-	0.8	-	0.2	17.0	20.4	-	6.0	-	-	-	-	-	-	-	-	-	-
067105 Richmond RAAF	57.2	-	-	-	-	-	4.8	0.4	-	3.6	4.4	0.2	-	0.6	-	-	-	0.6	-	-	-	24.4	16.8	0.2	1.2	-	-	-	-	-	-	-	-	-
068072 Nowra RAN Air Station AWS	128.6	-	0.2	-	-	-	5.0	4.2	51.2	41.2	0.4	2.4	0.2	-	0.2	-	-	-	-	-	-	6.8	5.8	-	10.8	-	-	-	0.2	-	-	-	-	-
068151 Jervis Bay (Point Perpendicular)	65.2	-	-	-	-	-	1.6	1.6	7.0	3.2	1.0	4.0	-	-	-	-	-	-	-	-	-	4.0	36.6	-	6.2	-	-	-	-	-	-	-	-	-
068241 Albion Park (Wollongong Airport)	64.6	-	-	-	-	-	4.8	0.8	24.6	6.6	-	-	-	-	-	-	-	-	-	-	-	11.0	7.6	0.2	9.0	-	-	-	-	-	-	-	-	-
069018 Moruya Heads Pilot Station	63.0	43	-	-	-	-	0.2	9.2	30.6	6.2	14.0	-	-	-	-	-	-	-	-	-	-	1.2	0.8	-	-	-	-	-	-	-	-	-	0.8	-
070351 Canberra Airport	71.0	-	1.0	0.2	-	-	4.8	18.0	0.4	-	1.0	-	9.8	0.8	4.8	-	-	0.2	-	0.2	2.6	8.6	0.2	0.6	3.6	0.2	8.4	0.2	5.2	-	0.2	-	-	
071041 Thredbo Village	349.5	-	3.2	10.5	-	-	1.2	21.2	48.0	22.0	6.0	0.2	39.0	16.7	42.0	1.6	-	-	1.0	0.3	10.4	»	1.5	14.2	59.4	6.8	7.5	26.6	8.2	»	0.8	-	1.2	-
072150 Wagga Wagga AMO	91.4	55	8.6	0.2	0.2	-	3.2	10.8	-	11.4	6.8	-	9.0	-	1.0	0.2	-	-	-	-	-	8.0	1.8	-	9.0	5.4	0.2	6.8	1.6	5.4	1.0	0.8	-	-
072160 Albury Airport AWS	116.8	-	11.4	0.4	0.2	0.2	1.0	7.6	-	0.2	2.0	-	16.6	0.4	9.6	0.2	-	0.2	-	-	5.0	-	0.4	6.8	24.2	0.6	12.0	4.0	10.6	-	0.8	0.2	2.2	-
072161 Cabramurra SMHEA AWS	134.2	-	7.2	1.2	-	-	1.0	11.2	0.8	-	1.4	-	21.6	2.2	6.4	-	-	0.2	-	-	17.0	-	-	9.2	37.0	1.2	-	8.4	0.2	7.0	-	0.6	0.4	-
074258 Deniliquin Airport AWS	43.0	-	5.8	-	-	-	0.4	0.6	0.4	9.4	0.2	-	8.8	0.2	-	0.2	0.2	-	0.2	0.2	-	2.2	2.8	5.4	-	1.6	0.8	2.2	0.2	0.4	-	0.8	-	-
Victoria	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
076031 Mildura Airport	19.2	26	3.2	-	-	-	2.2	0.2	-	-	0.2	1.8	4.8	-	0.8	-	-	-	-	-	-	0.4	-	-	-	0.8	2.0	0.6	2.2	-	-	-	-	-
077008 Birchip (Woodlands)	48.8	35	4.6	-	-	-	13.8	-	-	-	-	5.8	2.8	2.8	-	-	-	-	-	-	-	7.6	-	-	-	2.4	4.4	3.8	-	-	-	-	0.8	-
078015 Nhill Aerodrome	61.8	-	4.6	1.8	1.0	-	4.2	0.4	0.2	1.6	-	1.0	5.4	0.2	6.2	0.2	0.4	-	0.2	-	0.2	2.0	1.4	4.6	7.2	0.2	5.6	5.2	3.4	-	-	-	4.6	-
080023 Kerang	32.6	39	6.6	0.2	0.8	-	1.4	-	-	-	0.2	-	9.0	-	0.8	-	-	0.4	-	0.2	0.2	-	1.4	2.4	-	5.6	1.2	1.4	-	0.4	-	0.4	-	
081123 Bendigo Airport	91.8	-	9.4	-	0.8	0.2	1.6	0.4	15.2	3.6	-	0.2	11.8	-	4.6	0.2	-	0.2	0.2	-	2.0	0.2	-	14.6	8.8	0.2	5.2	4.6	2.4	-	0.4	3.8	1.2	-
082039 Rutherglen Research	41.4	69	10.6	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	0.2	-	3.8	0.2	0.8	-	-	0.2	11.4	2.4	7.0	-	1.4	0.6	2.6	-	
083085 Mount Hotham	152.4	-	-	-	0.2	-	-	-	-	0.8	1.2	0.4	1.8	0.2	-	-	-	12.4	-	17.6	-	0.4	54.0	60.0	-	-	-	-	-	-	-	-	3.4	-
084016 Gabo Island Lighthouse	74.4	92	4.6	1.2	-	-	-	45.0	9.8	-	-	-	3.8	-	-	-	-	-	-	-	-	-	9.6	0.4	-	-	-	-	-	-	-	-	-	-
084145 Orbst	103.2	-	0.8	0.2	0.2	-	-	48.4	41.6	0.2	0.2	-	0.4	-	-	-	-	-	-	0.2	-	0.2	0.6	9.4	0.8	-	-	-	-	-	-	-	-	-
085072 East Sale Airport	102.4	43	3.2	-	-	-	-	27.8	25.6	-	-	-	1.6	-	1.8	2.0	-	-	-	-	-	1.2	0.2	3.6	27.4	5.2	-	2.4	-	-	-	-	0.4	-
085096 Wilsons Promontory Lighthouse	225.8	134	6.6	17.6	5.2	2.6	1.8	1.8	0.4	0.2	-	-	7.6	-	36.0	4.6	7.2	0.6	-	-	0.4	-	-	13.8	35.6	5.6	0.6	30.0	10.0	19.4	7.2	7.0	4.2	-
087031 Laverton RAAF	66.2	43	6.6	-	-	-	3.6	19.2	6.4	1.8	-	0.2	2.0	-	2.0	-	-	-	-	-	-	1.8	1.6	3.0	7.0	1.0	0.2	5.0	-	-	-	3.8	1.0	-
087184 Breakwater (Geelong Racecourse)	82.8	-	6.0	0.4	-	-	4.4	19.0	1.6	6.8	0.2	-	4.6	-	10.6	1.6	-	-	-	0.2	0.4	1.2	8.8	9.2	0.8	-	6.6	-	-	-	-	0.2	0.2	-
089002 Ballarat Aerodrome	93.4	67	15.4	1.2	0.4	-	1.4	10.8	3.4	6.0	0.2	-	8.2	3.6	4.0	1.0	0.6	-	0.4	-	-	2.4	1.0	4.4	10.8	1.4	1.0	6.6	2.2	0.2	-	4.2	2.6	-
090015 Cape Otway Lighthouse	145.0	122	5.0	4.8	1.2	0.6	6.0	2.6	1.0	5.6	-	-	1.4	4.0	19.6	5.6	0.6	0.2	-	0.4	0.2	2.0	17.8	26.8	3.0	4.8	14.8	1.6	4.0	10.2	0.2	1.0	-	-
Tasmania	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
091009 Burnie (Round Hill)	208.6	136	7.8	0.4	0.4	15.4	11.4	-	-	-	11.8	5.0	17.4	15.8	15.4	12.4	-	-	1.6	11.2	-	-	18.4	4.8	4.8	10.4	10.2	28.2	0.2	0.2	0.2	5.2	-	-
091126 Devonport Airport	148.2	105																																

Total is the total precipitation for July 2016; a missing total indicates there is concern about the quality of some of the daily values. Avg is the long-term average total precipitation for July. Long-term average is only shown if there are sufficient years of climate record available. Reports of zero precipitation are shown as "-". When a reading was accumulated over more than one day, "»" is shown on the days that are part of the accumulation. Not all observations are shown here. Data from many more sites and for other times are available at www.bom.gov.au/climate/data/.