



Australian Government  
Bureau of Meteorology

# Monthly Weather Review Australia September 2019



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:

Bureau of Meteorology  
GPO Box 1289  
Melbourne VIC 3001  
Australia  
[media@bom.gov.au](mailto:media@bom.gov.au)  
[www.bom.gov.au](http://www.bom.gov.au)

## 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](http://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/](http://www.bom.gov.au/climate/data/).

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Publishing Unit, Bureau of Meteorology, GPO Box 1289, Melbourne VIC 3001

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## Cover photograph

Snow falling on the Stevenson screen (which houses the thermometers) at Lake St Clair.

Photograph by Maren Goerne (Visitor Reception Officer, Lake St Clair National Park), 9 am on 16 August 2010. Used with permission.

# Overview

- Warmer than average September for Australia, in terms of mean temperature
- For Australia as a whole, the mean maximum temperature for September was the fourth-warmest on record, and record warm across areas of the southwest
- Mean minimum temperature was warmer than average in much of Western Australia, and below average for large areas of the north and east
- September rainfall was very much below average for Australia, and the ninth-lowest on record for the Murray Darling Basin
- There were bushfires across parts of eastern Queensland and northeastern New South Wales at the start of the month

September was warmer than average for Australia as a whole, with the national mean temperature  $1.19^{\circ}\text{C}$  above average. The mean maximum temperature for

the month was the fourth-warmest September on records, and  $2.23^{\circ}\text{C}$  above average, while the mean minimum temperature was  $0.15^{\circ}\text{C}$  above average.

Nationally, rainfall was more than 58% below average. The Murray Darling Basin reported its ninth-driest September on record and was more than 66% below average, and Western Australia had its fifth-driest September on record.

Many bushfires started early in the month in eastern Queensland and northeastern New South Wales, leading to the loss of several properties and covering tens of thousands of hectares. Special Climate Statement 71 [Severe fire weather conditions in southeast Queensland and northeast New South Wales in September 2019](#) gives further information about the severe fire weather conditions at the start of the month.

## Areal averages in September 2019

	Rainfall anomaly	Mean maximum temperature anomaly	Mean minimum temperature anomaly	Mean temperature anomaly
Australia	-58%	+2.23 °C 4th-highest	+0.15 °C	+1.19 °C
Western Australia	-67% 5th-lowest	+2.82 °C highest	+0.45 °C	+1.64 °C 4th-highest
Northern Territory	-37%	+1.17 °C	-0.16 °C	+0.51 °C
South Australia	-50%	+2.87 °C equal 6th-highest	+0.15 °C	+1.51 °C
Queensland	-86%	+1.84 °C	-0.03 °C	+0.91 °C
New South Wales	-62%	+2.75 °C 7th-highest	+0.38 °C	+1.57 °C
Victoria	-33%	+0.62 °C	-0.62 °C	0.00 °C
Tasmania	-23%	+0.56 °C	+0.11 °C	+0.34 °C

## Extremes in September 2019

	Hottest day	Coldest night	Wettest day	Warmest overall	Coolest overall	Wettest overall	Strongest wind gust
Australia	41.7 °C at Fitzroy Crossing Aero (WA) on the 30th	-8.3 °C at Thredbo AWS (NSW) on the 17th	158.6 mm at Gray (Dalmayne Rd) (Tas.) on the 7th	29.3 °C at Bradshaw - Angallari Valley (Defence) (NT)	1.0 °C at Mount Hotham (Vic.) and Thredbo AWS (NSW)	342.8 mm at Mount Read (Tas.)	154 km/h at kunanyi (Mount Wellington Pinnacle) (Tas.) on the 12th
Western Australia	41.7 °C at Fitzroy Crossing Aero on the 30th	-5.5 °C at Salmon Gums Res.Stn. on the 6th and Eyre on the 8th	38.0 mm at Walpole Forestry on the 3rd	28.5 °C at Argyle Aerodrome	12.7 °C at Wandering	119.1 mm at Walpole	102 km/h at Cape Leeuwin on the 2nd
Northern Territory	40.2 °C at Bradshaw - Angallari Valley (Defence) on the 30th	-0.5 °C at Arltunga on the 11th	18.4 mm at Ormiston Gorge on the 24th	29.3 °C at Bradshaw - Angallari Valley (Defence)	16.9 °C at Arltunga	32.0 mm at Vaughan Springs	83 km/h at Alice Springs Airport on the 20th
South Australia	38.1 °C at Nullarbor on the 14th	-4.0 °C at Gluepot Reserve (Gluepot) on the 18th	56.4 mm at Ungarra on the 20th	19.9 °C at Oodnadatta Airport	10.2 °C at Mount Lofty	99.6 mm at Mount Schank (Jethia)	104 km/h at Cape Willoughby on the 19th
Queensland	39.5 °C at Century Mine on the 30th	-1.5 °C at Stanthorpe Leslie Parade on the 10th	28.0 mm at Finsbury Park on the 27th	27.9 °C at Coconut Island	13.5 °C at Stanthorpe Leslie Parade	30.0 mm at Tarana Crossing	83 km/h at Oakey Aero on the 6th and Redcliffe on the 30th
New South Wales	34.9 °C at Grafton Research Stn on the 6th	-8.3 °C at Thredbo AWS on the 17th	143.0 mm at Careys Peak (Barrington Tops) on the 18th	19.0 °C at Evans Head RAAF Bombing Range AWS	1.0 °C at Thredbo AWS	245.2 mm at Careys Peak (Barrington Tops)	139 km/h at Thredbo AWS on the 21st
Victoria	31.9 °C at Ouyen (Post Office) on the 15th	-7.8 °C at Mount Hotham on the 17th	53.2 mm at Mitchell River at Glenaladale on the 29th	14.6 °C at Mildura Airport	1.0 °C at Mount Hotham	242.6 mm at Mount Baw Baw	139 km/h at Mount Hotham on the 21st
Tasmania	27.2 °C at Hobart (Ellerslie Road) on the 20th	-6.8 °C at Liawenee on the 17th	158.6 mm at Gray (Dalmayne Rd) on the 7th	12.0 °C at Friendly Beaches and Hobart (Ellerslie Road)	2.7 °C at kunanyi (Mount Wellington Pinnacle)	342.8 mm at Mount Read	154 km/h at kunanyi (Mount Wellington Pinnacle) on the 12th

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, *Coolest overall* is the lowest mean monthly temperature and *Wettest overall* is the highest total monthly precipitation.

# Significant weather

## Bushfires in Queensland

By the 7th, more than 50 fires were burning across Queensland. Residents were evacuated from parts of Beechmont and Binna Burra in the Gold Coast Hinterland, and Stanthorpe and Applethorpe in the Granite Belt. Properties had been destroyed overnight of 6 September at Binna Burra. Homes were destroyed near Stanthorpe the same night. One home was lost at Sarabah on the 6th, and another near Mareeba in the Atherton Tablelands on the 5th. By the 11th, QFES confirmed there were 17 homes lost: at least one home at Peregian Beach with another severely damaged; 11 homes at the Scenic Rim including the Sarabah and Binna Burra fires; four homes at Applethorpe and Stanthorpe; one home at Biboohra (Mareeba); and five commercial structures at Binna Burra. Bushfires had scorched more than 33,000 hectares Statewide, including 10,600 hectares at Hawkford; 5,000 hectares at Sarabah; 2,000 hectares at Stanthorpe, and almost 1,000 hectares at Peregian Springs. On the morning of the 11th, there were 70 fires burning across Queensland. More details can be found in Special Climate Statement 71 [Severe fire weather conditions in southeast Queensland and northeast New South Wales in September 2019](#)

## Bushfires in New South Wales

By 9 September, more than 50 fires were active in NSW. On the morning of the 9th, five fires were burning out of control and 3 watch and act alerts are in place for blazes at Drake near Tenterfield, Ebor near Armidale and Shark Creek in the Clarence Valley. All three Local Government Areas (LGAs) were affected.

Three fires in the Tenterfield LGA including a fire burning in the vicinity of Flagstone Road and Koreelah Road and at Long Gully Road at Drake.

The Armidale fire at Bees Nest was burning north of Ebor and to the northwest of Dorrigo. As of 9th, the fire covered more than 61,300 hectares, and had a perimeter of more than 100 km. At Shark Creek in the Clarence Valley LGA, a fire was burning out of control, with more than 3,700 hectares burnt on the morning of the 9th. By 3 pm, more than 6,800 hectares had burnt, and a southerly change pushed the fire towards Yamba. After a day of reprieve from strong winds on the 11th, strong south to southwesterly winds strengthened during the 12th across northeastern New South Wales.

By the 12th, the Armidale fire at Bees Nest was still burning out of control north of Ebor and to the northwest of Dorrigo. 78,600 hectares by the morning

of the 12th. The fire at Shark Creek was under control bush fire was still burning in bushland in the Yuraygir National Park and Shark Creek area, south of Yamba. By the morning of the 12th, 10,100 hectares had burnt. The fire at Long Gully Road, Drake area in the Tenterfield LGA, was burning in bushland south of Drake, Tabulam and the Bruxner Highway. It had burnt 47, 500 hectares by the morning of the 12th.

Special Climate Statement 71 [Severe fire weather conditions in southeast Queensland and northeast New South Wales in September 2019](#)

## Snow in parts of Canberra

Snow fell overnight in most parts of Canberra overnight of the 16th for several hours around midnight but was mostly melted by morning due to rain followed by warmer temperatures. Some areas had settled snow, with 5 cm to 8 cm at Goulburn.

## Strong winds and high temperatures in South Australia

On the 19th, strong northerly winds ahead of a cold front accompanied warmer than average temperatures across the State, with some power outages from wind damage and an elevated fire weather risk.

## Frost damage of South Australia and Western Australia

Frost events during the first half of September led to severe frost damage to crops in southwest Western Australia, with greatest losses in the region around Esperance. Low minimum temperature records for September were set at some stations, including  $-5.5^{\circ}\text{C}$  at both Eyre and Salmon Gums Research Station. The effect of the frost was compounded by antecedent low rainfall, and high temperatures following frost early in the month, as well as crops being at a vulnerable stage of development. Early reports indicate crop damage from the frost events may be the worst for a decade or more.

Some individual cold nights during the month saw frost cause crop damage across southeastern South Australia and parts of western Victoria on the 17th and 18th.

## Thunderstorms in Victoria

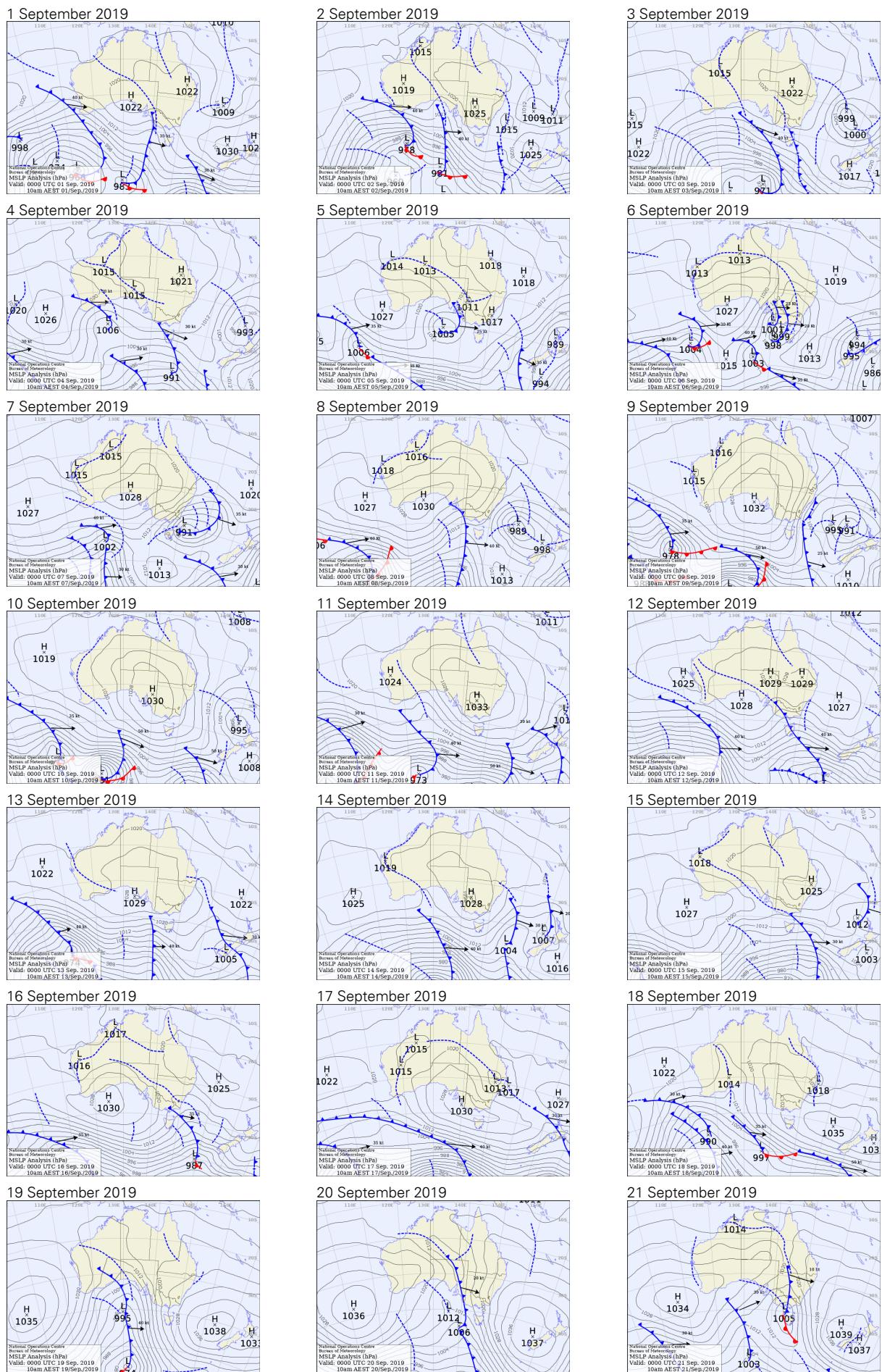
Thunderstorms developed over the northeast of Victoria behind a cold front and tracked near the town of Peechelba on the 6th. A thunderstorm spawned a tornado, leading to property damage and death of about a dozen cattle at the Peechelba feedlot. The

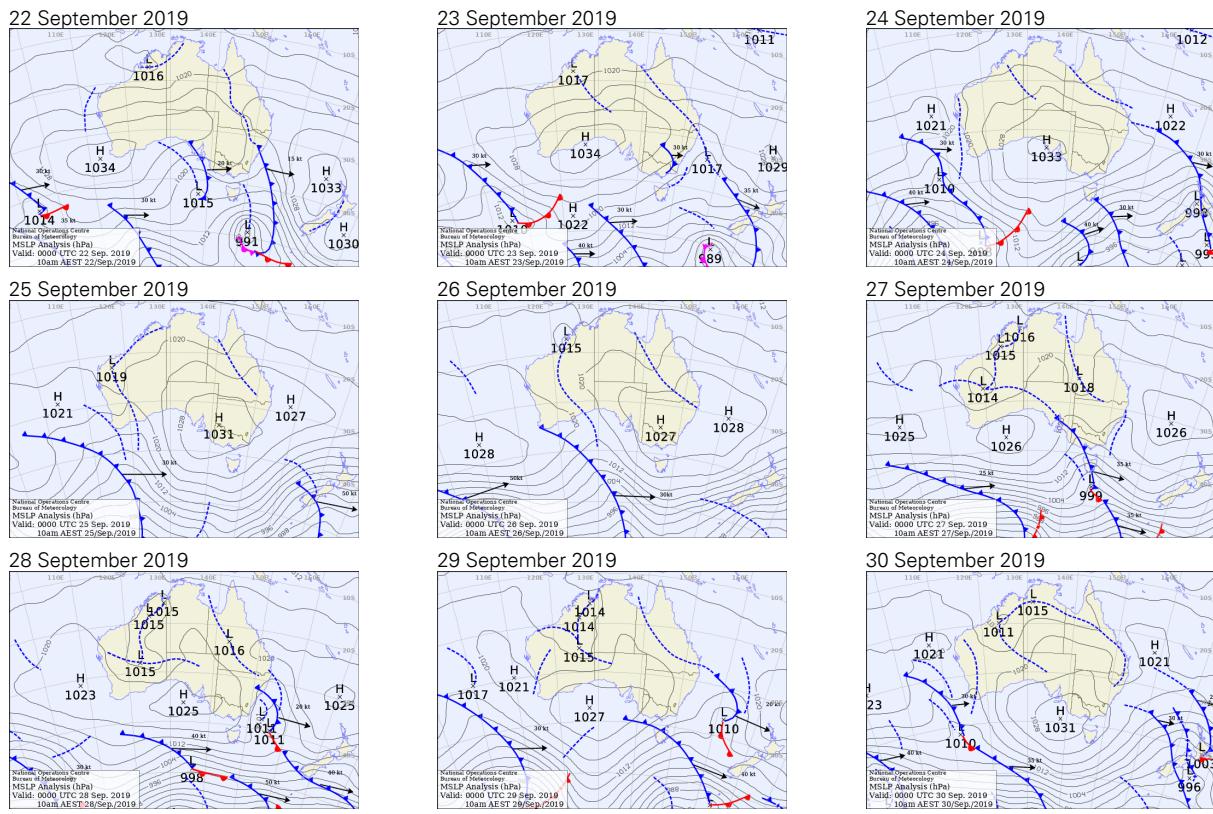
storm also damaged cars and sheds in the area, and the SES responded to 15 requests for assistance.

Severe winds were reported around Melbourne on the 20th, with an A380 forced to make an emergency landing at Avalon Airport due to strong wind shear. At

Tullamarine Airport there was only one operating runway in the morning, and flights have been delayed throughout the day. More snow fell in the Victorian Alps in the 23rd, following the passage of a cold front.

# Synoptic analyses and summary





## Synoptic summary

Cold fronts across southern Australia were a feature of September. At the start of the month, several cold fronts with pre-frontal troughs approached and tracked across southern Australia. Around the 5th, a cold front approached southwest Victoria, with an associated low pressure system over the Great Australian Bight. A complex area of low pressure developed over western Victoria, and an associated cold front stretched north into southern New South Wales. The complex area of low pressure intensified over Tasmania, with multiple cold fronts extending north into Victoria and New South Wales.

From the 10th, much of the continent was under the influence of a high pressure system until the middle of the month.

Broad areas of low pressure extended across northwestern Australia, through central parts of the Northern Territory to the east coast of New South Wales from mid-month, while a cold front tracked across the far southeast of Australia on the 15th. A transient low pressure system situated on a coastal trough extended through New South Wales and much of Queensland on the 17th and 18th, before the trough moved away from the coast.

Another cold front tracked across southern and southeast Australia on the 20th, followed quickly by another cold front.

Broad areas of low pressure remained across northern Australia for the remainder of the month.

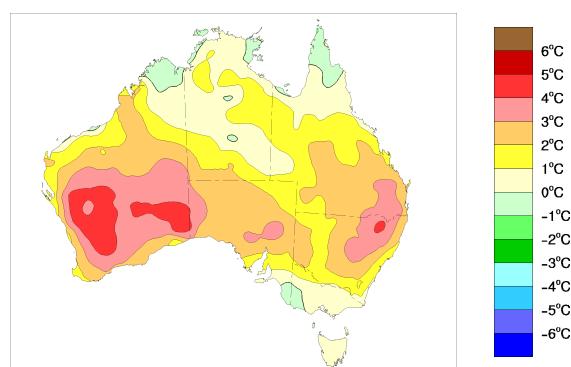
# Temperatures

September was warmer than average for Australia as a whole, with the national mean temperature 1.19 °C above average. The mean maximum temperature for the month was much warmer than average for September, and the fourth-warmest September on record at 2.22 °C above average, while the mean minimum temperature was 0.15 °C above average. The national monthly diurnal temperature range (the difference between the mean maximum and mean minimum temperatures) was the second-highest on record for September at +2.07 °C (the record is +2.12 in 1980). A high diurnal temperature range is often observed in dry periods as the absence of clouds is associated with lower night-time temperatures and low humidity, and soil moisture reduces latent heating (which results from phase changes of water).

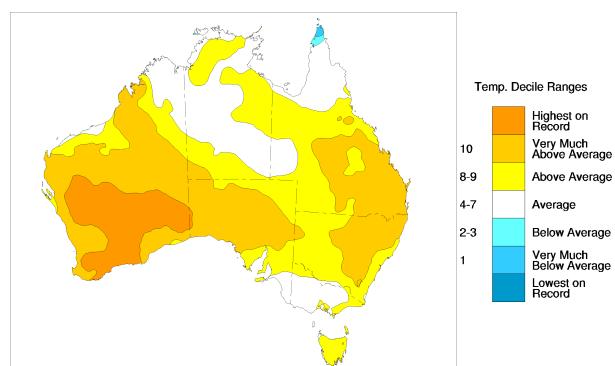
## Maximum temperatures

The September mean maximum temperature was the warmest on record for Western Australia, equal-sixth-warmest for South Australia, and the seventh-warmest on record for New South Wales and the Murray Darling Basin.

### Anomalies of mean daily maximum temperature in September 2019



### Decile rank of mean daily maximum temperature in September 2019



Maximum temperatures for September were above to very much above average for most of Western

Australia except the eastern Kimberley; parts of the Northern Territory; most of Queensland except the Cape York Peninsula and a pocket of the far southwest; New South Wales; South Australia; Tasmania; and parts of northwestern and far eastern Victoria. The mean maximum temperature for the month was the highest on record over most of the southern half of Western Australia, mostly inland of the coast but extending to the coast in the Southwest and South Coastal districts.

Maximum temperatures were well above average across southern Australia at the start of the month. A cold front swept across southern parts and intensified as it crossed southeast Australia. Warm gusty north to northwesterly winds were directed across parts of the South Australia, New South Wales and southern Queensland ahead of the passage of the front. Daytime temperatures were more than 8 degrees above average across South Australia, New South Wales, and southern Queensland, and more than 10 degrees above average in some areas of southeast Queensland, and western to northeast New South Wales. The peak of the heat occurred on the 6th, before a cooler southerly change the following day. This combined with very low humidity, gusty winds, and very dry fuels led to severe fire weather conditions. More detail on the fire activity can be found in the Significant Weather.

From the 10th, very warm days were experienced over southern Western Australia, as warm north to northwesterly winds were drawn over the South West Land Division ahead of a front. Well above average days were experienced over the southwest and southern South Australia until the 15th, while remaining parts of the southern half of Australia had above average daytime temperatures. Cooler than usual days were reported across northern and eastern Australia between the 10th and 15th, with the cooler days contracting to the far north by the middle of the month.

Another cold front crossing southern Australia brought warm and gusty northwesterly winds, and daytime temperatures more than 10 degrees warmer than average to southeast Western Australia and parts of southern South Australia on the 18th and 19th. As the front tracked eastwards, much of eastern Australia had above average days, while much of the western half of Australia had below average daytime temperatures due to the cooler south to southwesterly winds behind the front.

Much cooler than usual days were recorded across southern parts of the Northern Territory on the 22nd

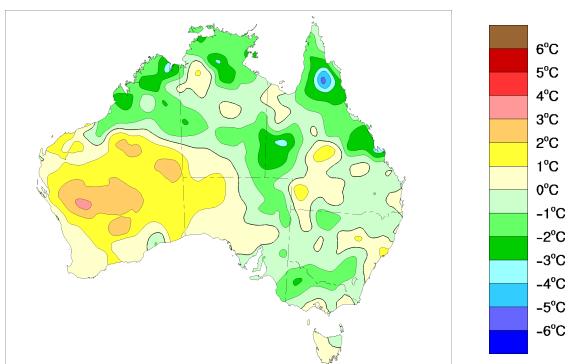
and 23rd, as a result of a cloudband, along with a large swathe from the northwest to southeast of the continent also reporting cooler than usual daytime temperatures up until the 25th.

For the rest of the month, most of the continent reported warmer than average days, especially in the southwest. Hot days near the end of September were also reported across the Kimberley, with the hottest day reported at Fitzroy Crossing Aero with 41.7 °C on the 30th.

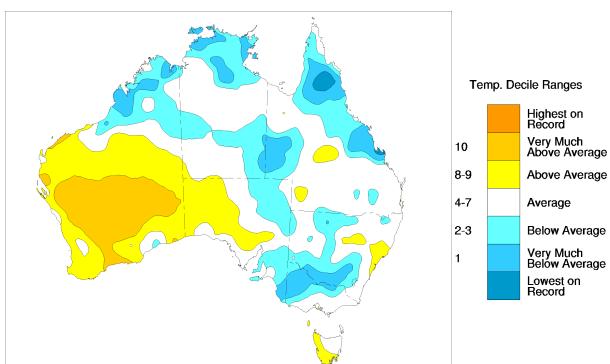
## Minimum temperatures

The mean minimum temperature was slightly warmer than average (+0.15 °C). Mean minimum temperature was below average in large areas, particularly the southeastern mainland and Central Australia.

### Anomalies of mean daily minimum temperature in September 2019



### Decile rank of mean daily minimum temperature in September 2019



The mean minimum temperature for the month was cooler than average for large parts of Australia, including eastern South Australia; much of western and northern Victoria; southern New South Wales away from the coast, and parts of the west and north; much of western Queensland, the Central Coast, Northern Tropical Coast, and Cape York Peninsula; the Top End and parts of the west and southeast of the

Northern Territory; and the Kimberley in Western Australia.

Warmer than average mean minimum temperatures were observed across the remainder of Western Australia, extending into parts of western South Australia; in western Tasmania; central coast New South Wales, extending into parts of the Central West Slopes and Plains; an area of the Flinders Ranges and northern Eyre Peninsula in South Australia; and a few small areas in central and southwestern Queensland.

At the start of the month, minimum temperatures were mostly cooler than average across most of Australia except in the southwest. Nights were more than 6 degrees below average across northern Australia, and it was particularly cold in northwestern areas of the continent until the 3rd. Cooler than usual nights were experienced in the northeast coast of Queensland, as well as in southwest Western Australia from the 4th, then the areas of cooler than usual nights extended to most southern and eastern parts of the country from the 6th. Very cool nights persisted in the northern tropical coast, then extended to much of Queensland, the Northern Territory and the Kimberley in Western Australia.

Frost events during the first half of September led to severe frost damage to crops in southwest Western Australia, with greatest losses in the region around Esperance.

Warm nights accompanied warm days over the South West Land Division from the 10th, as warm northwesterly winds ahead of a trough kept night-time temperatures more than 6 degrees above average across the southern coast of Western Australia. As the cold front moved east, warmer than usual overnight temperatures were reported ahead of the system across southern South Australia, western Victoria and Tasmania by the 15th.

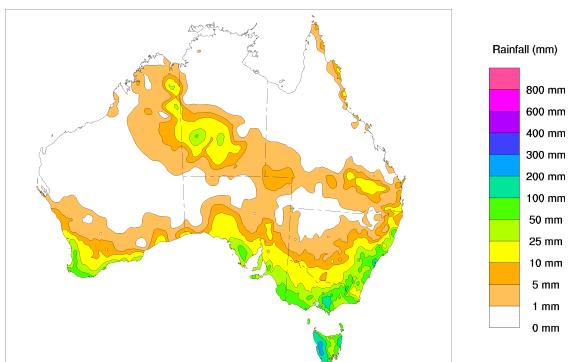
Some individual cold nights during the month saw frost cause crop damage across southeastern South Australia and parts of western Victoria on the 17th and 18th. The coldest night was at Thredbo AWS with -8.3 °C on the 17th.

Warmer than usual overnight temperatures were experienced in the southeast and then across much of eastern Australia on the 20th and 21st. At the end of the month, warmer than usual night-time temperatures were recorded across most of Australia away from the southeast, where nights were cooler than usual.

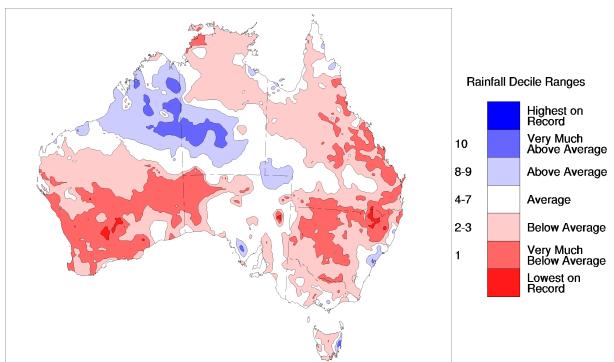
# Rainfall

Nationally, rainfall was more than 58% below average. September rainfall was the ninth-lowest on record for the Murray-Darling Basin as a whole, and the fifth-lowest on record for Western Australia.

## Total rainfall in September 2019



## Decile rank of total rainfall in September 2019



Rainfall was below to very much below average across most of Australia, including nearly all of New South Wales except parts of the coast; most of Queensland, except parts of the southwest, Gulf Coast, and northern Peninsula; most of Victoria, except parts of the southwest and South Gippsland; most of Tasmania, except parts of the east coast; the northern half of the Northern Territory; the southern half of Western Australia; and much of western and northern South Australia, and smaller areas of the east of that State.

Rainfall was above average for most of the Kimberley in Western Australia, extending into the northern part of the Interior District, and much of the Alice Springs District in the Northern Territory, extending east into far southwest Queensland. It is climatologically the driest part of the year for most of northern Australia away from the east coast, and the above average

rainfall totals were generally on the order of 5 to 25 mm. Isolated convective showers towards the later part of September brought totals in excess of 25 mm to some locations in the eastern Kimberley and western Alice Springs District.

At the start of the month, a series of cold fronts brought moderate falls to southwest Western Australia. One of the cold fronts and an associated low pressure system moved across the Great Australian Bight, with a complex area of low pressure developing over western Victoria, and an associated cold front stretching north into southern New South Wales. The complex area of low pressure intensified over Tasmania on the 7th, with multiple cold fronts extending north into Victoria and New South Wales, and generated moderate to heavy falls over the southeast, and locally heavier falls in northeast Tasmania. A few sites in Tasmania observed a record wet day for September on the 7th, and Gray (Dalmaine Rd) reported the wettest day with 158.6 mm on the 7th. Further light to moderate falls were recorded in southeast Australia following the passage of another cold front.

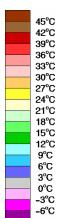
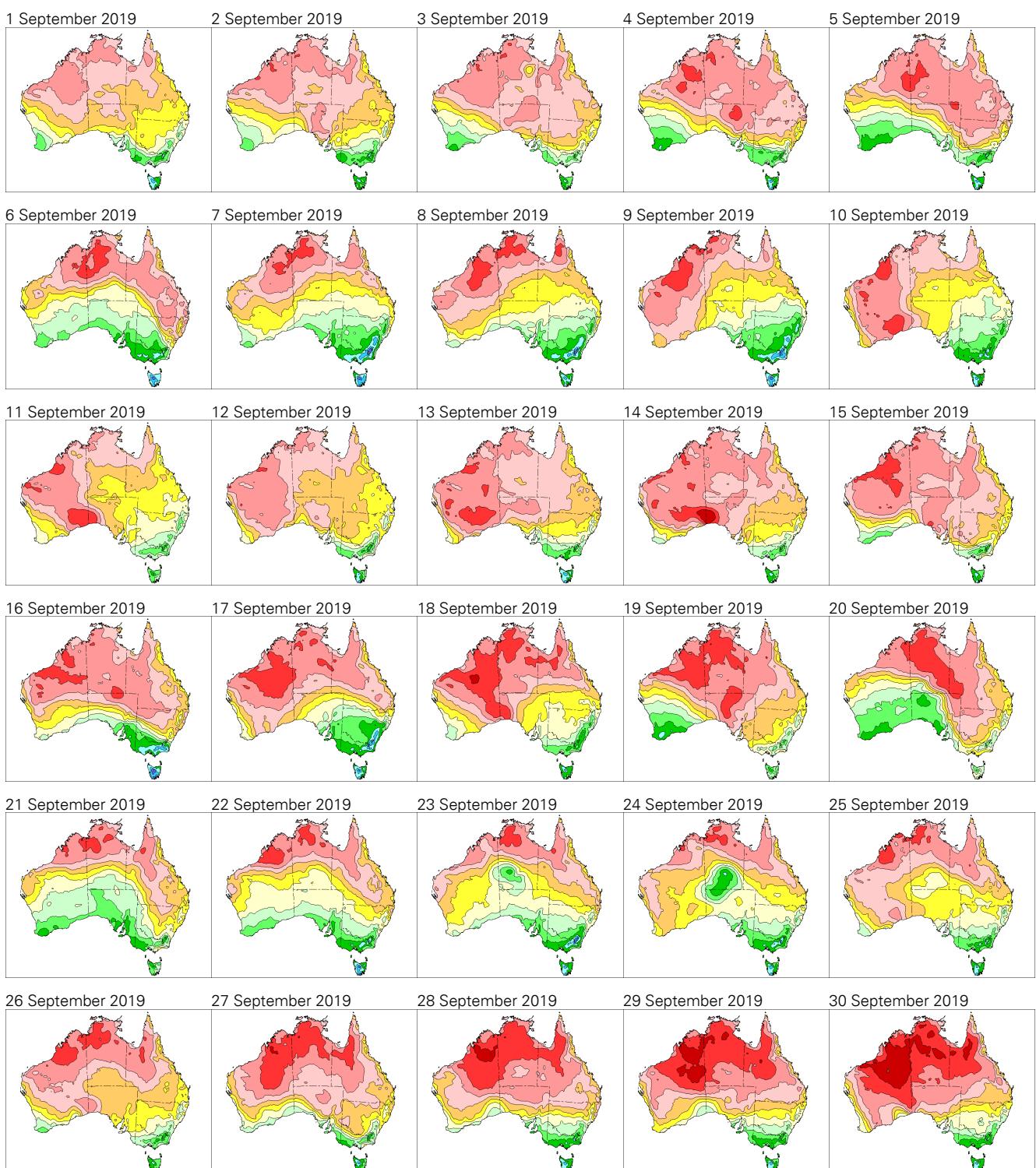
Very little rainfall was recorded in Australia from the 10th to the 15th, except in western Tasmania, with a large high pressure system dominating much of the continent.

A transient low pressure system located on a coastal trough extending through New South Wales and much of Queensland, produced showers and thunderstorms, with moderate to locally heavy daily falls reported along coastal New South Wales and far southeastern Queensland from the 16th to 19th. Another cold front tracked across southern and southeast Australia, and brought moderate falls to southern South Australia, Victoria and Tasmania. Locally heavy daily rainfall totals were recorded in parts of southern South Australia.

A mid-level trough and an associated cloudband extended from the Kimberley in Western Australia and through southern parts of the Northern Territory, with thunderstorms producing isolated moderate falls between the 23rd to 25th. Light showers developed over parts of southern inland and southeast Queensland near the end of the month, and a weak cold front brought light falls to far southern Victoria and western Tasmania.

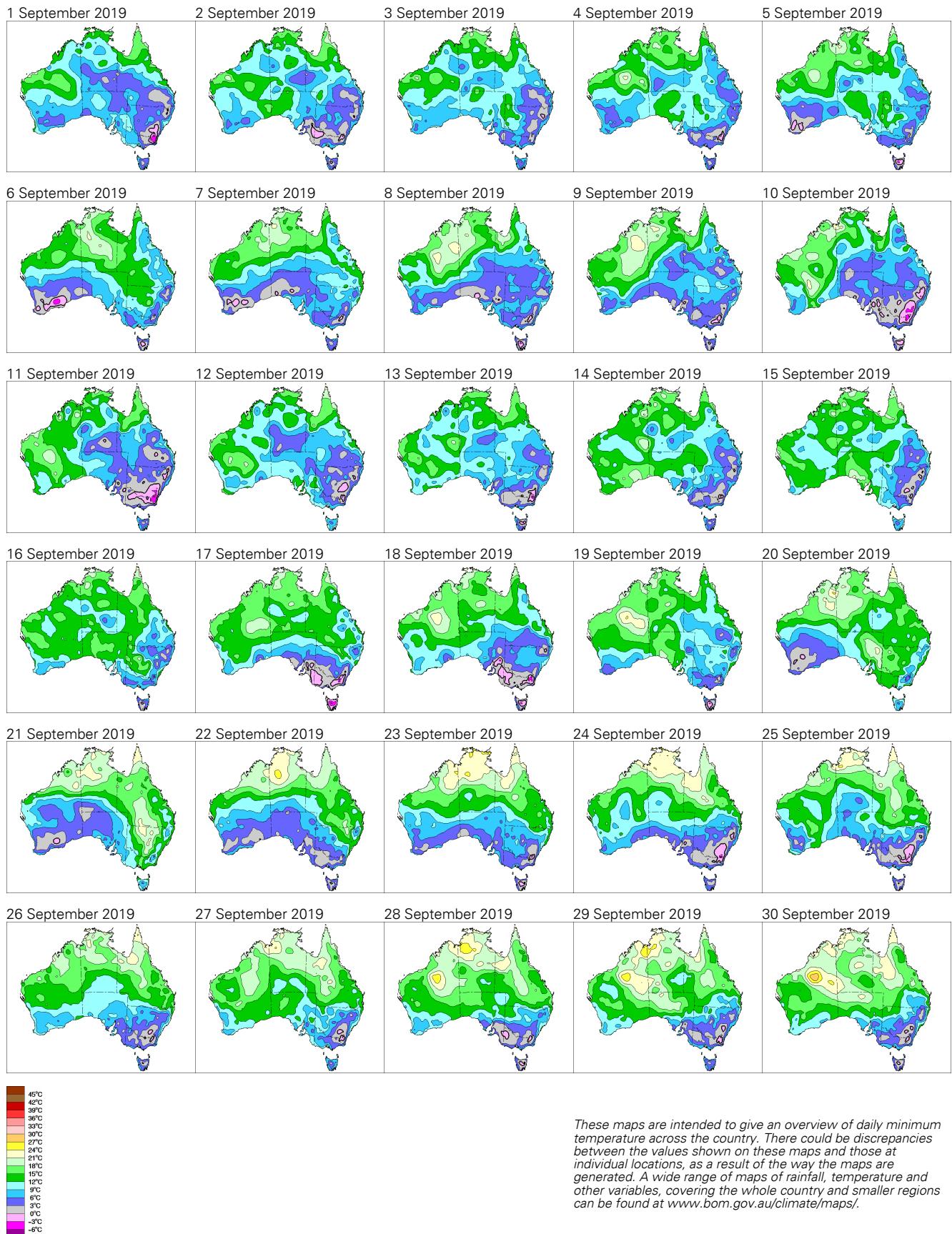
# Daily maps

## Daily maximum temperature maps



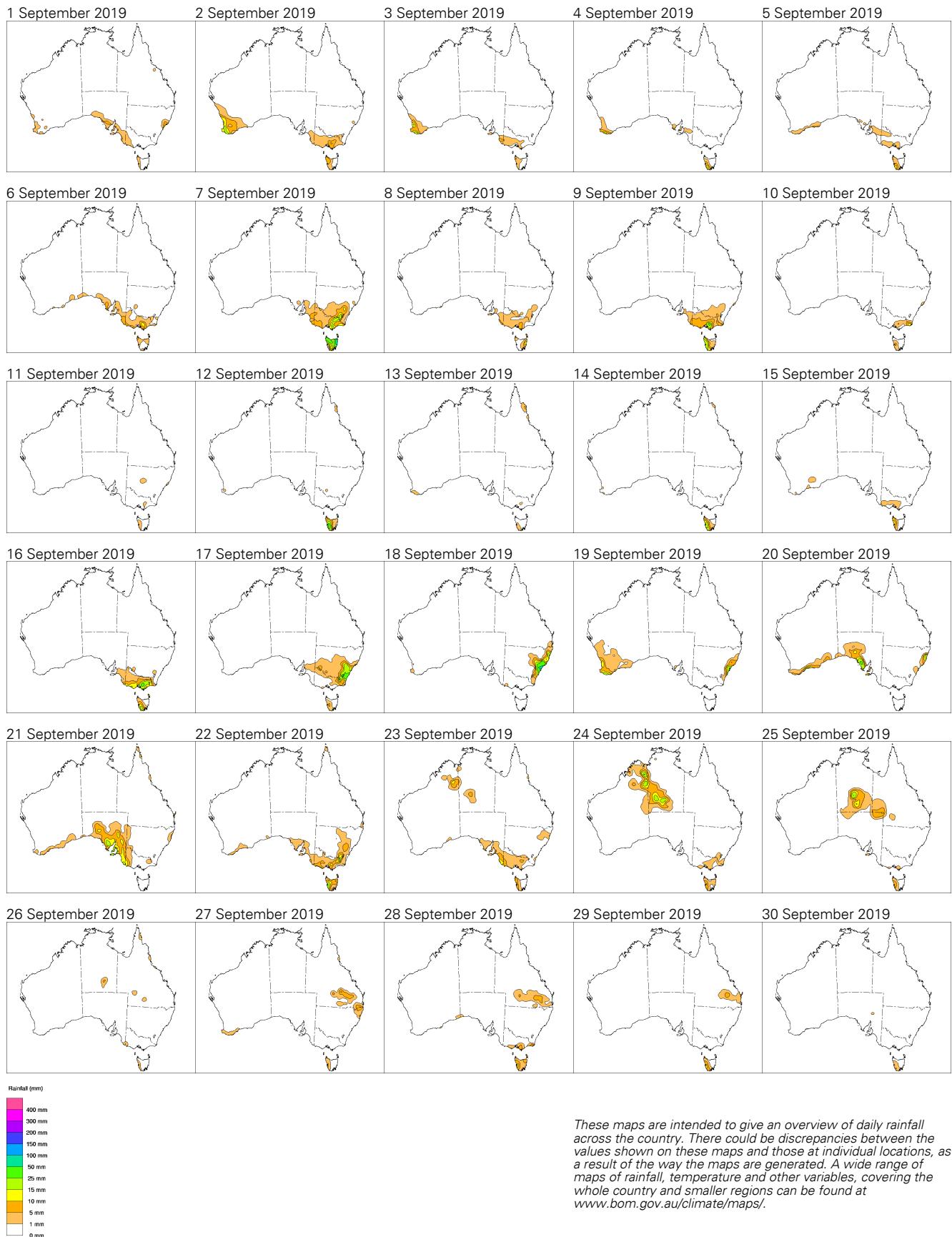
These maps are intended to give an overview of daily maximum temperature across the country. There could be discrepancies between the values shown on these maps and those at individual locations, as a result of the way the maps are generated. A wide range of maps of rainfall, temperature and other variables,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

## Daily minimum temperature maps



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## Daily rainfall maps



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# Records

## Record highest September daily maximum temperature

		New record	Old record	Years of record
<b>Western Australia</b>				
009114	Lancelin	33.4 on 9th	32.5 on 9th in 2015	52
009573	Manjimup	28.6 on 9th	28.5 on 20th in 2014	60
009592	Pemberton	28.4 on 9th	= 28.4 on 20th in 2014	61
010622	Ongerup	31.6 on 30th	31.5 on 29th in 2006	53
010633	Ravensthorpe	33.0 on 30th	= 33.0 on 21st in 1987	58
<b>Queensland</b>				
039123	Gladstone Radar	33.9 on 5th	33.8 on 29th in 2017	62
039128	Bundaberg Aero	34.2 on 5th	34.1 on 30th in 2017	42
039314	Seventeen Seventy	30.7 on 5th	30.0 on 20th in 1989	32
<b>Tasmania</b>				
092019	Lake Leake (Elizabeth River)	22.1 on 20th	21.2 on 14th in 2015	30
= indicates the new record equals the old one.				

## Record highest September mean maximum temperature

		New record	Old record	Years of record
<b>Western Australia</b>				
006099	Murchison	29.8	28.8 in 2015	30
007045	Meekatharra Airport	29.6	29.4 in 2014	70
007139	Paynes Find	27.6	26.5 in 2014	41
008095	Mullewa	27.1	26.4 in 1936	76
008137	Wongan Hills	24.6	23.3 in 2014	53
009021	Perth Airport	23.1	22.8 in 2015	76
009053	Pearce RAAF	23.0	22.7 in 2015	59
009111	Karnet	20.0 =	20.0 in 2015	53
009172	Jandakot Aero	22.4	22.2 in 2015	30
009519	Cape Naturaliste	19.4	19.1 in 2010	116
009538	Dwellingup	20.3	19.8 in 2015	82
009573	Manjimup	19.2	18.9 in 1987	80
009789	Esperance	22.0	21.5 in 2014	51
009842	Jarrahwood	20.4	19.9 in 2015	38
010007	Bencubbin	24.7	24.6 in 1987	69
010092	Merredin	24.8	23.7 in 2014	54
010515	Beverley	23.6	22.9 in 2015	50
010568	Hyden	24.7	23.2 in 2014	47
010612	Narembeen	24.6	23.3 in 2014	49
010614	Narrogin	21.1 =	21.1 in 1957	102
010626	Pingelly	22.1	20.7 in 2015	48
010633	Ravensthorpe	22.8	22.1 in 1981	58
010647	Wagin	21.1	20.1 in 2015	45
012038	Kalgoorlie-Boulder Airport	26.1	25.5 in 1981	79
012071	Salmon Gums Res.Stn.	23.6	23.4 in 1961	81
= indicates the new record equals the old one.				

### Highest September mean maximum temperature for at least 30 years

		Observed this month	Most recent higher
Western Australia			
009534	Donnybrook	20.9	= 20.9 in 1954 *
010111	Northam	23.4	24.7 in 1914 *
010524	Brookton	21.8	22.0 in 1987 *
<small>* 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.</small>			

### Record lowest September daily maximum temperature

		New record	Old record	Years of record
Tasmania				
092012	Fingal (Legge Street)	8.5 on 7th	8.6 on 18th in 1992	34

### Record lowest September daily minimum temperature

		New record	Old record	Years of record
Western Australia				
001007	Troughton Island	20.5 on 12th	20.6 on 20th in 1967	41
011019	Eyre	-5.5 on 8th	-5.1 on 14th in 2017	32
012071	Salmon Gums Res.Stn.	-5.5 on 6th	-4.4 on 19th in 1953	81
South Australia				
018012	Ceduna AMO	-1.8 on 8th	-1.2 on 1st in 2007	79
023013	Parafield Airport	-0.2 on 17th	0.0 on 1st in 1987	63
Queensland				
028004	Palmerville	5.0 on 10th	6.3 on 12th in 1913	111
031011	Cairns Aero	9.3 on 5th	11.1 on 3rd in 1948	77
033247	Proserpine Airport	3.2 on 4th	3.8 on 12th in 2011	30
Victoria				
090171	Portland (Cashmore Airport)	-0.6 on 17th	0.0 on 5th in 2007	38

### Record lowest September mean minimum temperature

		New record	Old record	Years of record
Queensland				
028004	Palmerville	11.3	13.5 in 1902	114
032141	Lucinda Point	19.5	19.7 in 2006	31
033247	Proserpine Airport	10.5	11.8 in 1991	30

### Lowest September mean minimum temperature for at least 30 years

			Observed this month	Most recent lower month
<b>Queensland</b>				
031108	Walkamin Research Station		12.3	12.2 in 1969
032040	Townsville Aero		14.8	13.8 in 1941

### Record highest September daily minimum temperature

		New record	Old record	Years of record
<b>Western Australia</b>				
009500	Albany	16.5 on 14th	16.1 on 27th in 1961	76
009842	Jarrahwod	16.0 on 14th	15.0 on 10th in 2015	38
010092	Merredin	17.9 on 30th	= 17.9 on 13th in 1981	54
011019	Eyre	24.2 on 11th	18.0 on 7th in 2016	32
<b>New South Wales</b>				
055136	Woolbrook (Woolbrook Road)	14.5 on 20th	= 14.5 on 29th in 2005	48
075039	Lake Cargelligo Airport	21.4 on 21st	18.0 on 29th in 2004	50
<b>Victoria</b>				
082039	Rutherglen Research	18.7 on 21st	17.8 on 28th in 1928	102
086038	Essendon Airport	18.3 on 21st	18.2 on 30th in 1944	50
086104	Scoresby Research Institute	20.3 on 21st	20.2 on 30th in 1980	54
<i>= indicates the new record equals the old one.</i>				

### Record highest September mean minimum temperature

		New record	Old record	Years of record
<b>Western Australia</b>				
010633	Ravensthorpe	8.9	8.6 in 2000	58

### Record highest September mean temperature

		New record	Old record	Years of record
<b>Western Australia</b>				
006099	Murchison	20.9	20.8 in 2014	30
007045	Meekatharra Airport	21.7 =	21.7 in 2014	70
008137	Wongan Hills	16.5 =	16.5 in 2014	53
009519	Cape Naturaliste	15.2 =	15.2 in 2006	116
009573	Manjimup	13.6 =	13.6 in 2014	80
009789	Esperance	16.4	16.2 in 2014	51
010007	Bencubbin	16.9	16.7 in 2014	69
010092	Merredin	16.7 =	16.7 in 2014	54
010568	Hyden	15.8	15.1 in 2014	47
010612	Narembeen	16.1	16.0 in 2014	49
010614	Narrogan	13.9 =	13.9 in 2014	101
010633	Ravensthorpe	15.6	15.1 in 2014	58
012038	Kalgoorlie-Boulder Airport	18.2	17.7 in 1981	79
<i>= indicates the new record equals the old one.</i>				

### Highest September mean temperature for at least 30 years

		Observed this month	Most recent higher
Western Australia			
012071	Salmon Gums Res.Stn.	15.1	15.2 in 1983 *

\* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported.

### Record lowest September mean temperature

		New record	Old record	Years of record
Queensland				
028004	Palmerville	22.4	23.0 in 1902	113

### Lowest September mean temperature for at least 30 years

		Observed this month	Most recent lower
Northern Territory			
014401	Warruwi Airport	26.2	25.5 in 1977

### Record highest September daily rainfall

		New record	Old record	Years of record
South Australia				
018088	Ungarra	56.4 on 20th	56.0 on 27th in 1979	106
018099	Yeelanna	36.0 on 20th	31.8 on 6th in 1912	105
New South Wales				
061217	St Albans (Espie St)	76.0 on 18th	56.0 on 7th in 2006	51
061394	Kulnura (Mangrove Creek Dam)	85.4 on 18th	75.4 on 10th in 2006	38
063290	Bilpin Post Office	65.0 on 18th	58.8 on 27th in 1999	32
066079	Avalon Beach (Avalon (Palmgrove Rd))	96.4 on 18th	68.0 on 6th in 2008	42
067100	Castle Hill (Kathleen Ave)	92.0 on 18th =	92.0 on 7th in 2006	35
Tasmania				
092012	Fingal (Legge Street)	75.2 on 7th	67.8 on 30th in 2016	121
092020	Lewis Hill (St Pauls River)	84.2 on 7th	79.8 on 4th in 1975	90
092054	Douglas River	96.0 on 7th	88.8 on 30th in 1996	30
092067	Rushy Lagoon (Cape Portland Road)	58.6 on 7th	50.8 on 17th in 1966	54

= indicates the new record equals the old one.

### Record lowest September total rainfall

		New record	Old record	Years of record
Western Australia				
006097	Useless Loop	0.0	0.4 in 1994	37
008022	Balgerbine	3.0	6.4 in 2015	61
008077	Highfields	3.4	4.9 in 1959	63
008130	Watheroo	0.6	1.3 in 1914	118
008254	Kondut	3.4	5.3 in 2015	88
008273	Arena	3.8	6.0 in 2018	40
008283	Karawa	5.8 =	5.8 in 1989	32
009127	Mosman Park	17.6	20.5 in 1977	39
009199	Leeman	6.2	6.7 in 2010	33
009518	Cape Leeuwin	19.0	23.1 in 1914	123
009804	Adina	19.0	23.2 in 1981	51
009815	The Duke	25.2	26.8 in 1993	41
009930	Tamaru	27.8	31.7 in 1982	53
010055	Gabbin	2.6	2.8 in 2018	80
010135	Wialki	0.0	2.5 in 1944	87
010155	Cadoux	0.0	2.1 in 1939	88
010163	Jaroma	0.0	3.0 in 2018	97
010264	Kenandra	0.5	2.7 in 1980	45
010571	Jalna	10.8	11.0 in 2018	71
010831	Glenrose	11.1	11.4 in 1967	69
012083	Westonia	2.4 =	2.4 in 2015	105
012297	Beaumont West	6.8	12.8 in 2006	37
200284	Cocos Island Airport	1.8	2.8 in 1986	116
South Australia				
018049	Butler Tanks (North Parnda)	3.2	5.2 in 1994	112
021076	Manoora (Cooinda)	5.8	10.2 in 2008	62
New South Wales				
050040	Ungarie Post Office	0.0	0.3 in 1957	114
054023	Barraba (Neranghi)	0.0	0.5 in 1927	109
054027	Delungra (Pearsby Hall)	1.1	1.5 in 2007	98
054049	Graman (Ulupna)	1.0	1.4 in 2003	85
054057	Cherry Tree Hill (Kulki)	0.0	1.4 in 2007	60
054078	Inverell (Wandera)	2.0	2.5 in 1980	60
054102	Barraba (Rosevale)	0.6	2.0 in 1980	55
054104	Pindari Dam	0.0	0.4 in 1980	49
054125	Caroda (Roseberry Park)	0.8	1.6 in 2003	53
054128	Copeton Dam	0.0	1.8 in 1989	51
055157	Winton (Dalblair)	0.0	1.8 in 2007	61
055164	Weabonga (Stoneleigh)	2.4 =	2.4 in 1980	92
055245	Nundle (Keeva)	4.2	5.4 in 2007	31
055319	Upper Manilla (Glenborah)	1.0	2.6 in 2007	33
056057	Tenterden (Balook)	2.2	4.0 in 1980	62
056202	Black Swamp (Maxwell)	0.8	2.0 in 1980	40
056229	Guyra Hospital	6.4	10.1 in 2007	39
063032	Golspie (Ayrston)	0.0	6.0 in 1946	116
072078	Garryowen (Yallock)	9.6	13.8 in 1972	64
073029	Murrumburrah (Historical Society)	0.0	4.2 in 2007	126

= indicates the new record equals the old one.

### Record lowest September total rainfall

		New record	Old record	Years of record
<b>Victoria</b>				
082010	Chiltern (Post Office)	1.6	7.6 in 1946	134
090005	Beeac (Post Office)	7.2	18.2 in 1985	115
090167	Winchelsea (Post Office)	0.0	6.1 in 1918	115
<b>Tasmania</b>				
094070	Alonnah Area School	27.3	28.8 in 2018	62

= indicates the new record equals the old one.

Lowest September total rainfall for at least 30 years

		Observed this month	Most recent lower month
Western Australia			
008005	Barberton	8.6 =	8.6 in 1939
008008	Berkshire Valley	5.0	3.2 in 1916
008014	Dalwallinu North	2.4	2.2 in 1989
008037	Coorow	3.7	3.3 in 1939 *
008050	Geraldton Town	2.1	1.0 in 1916 *
008052	Gleneva	5.8	1.2 in 1977 *
008057	Green Grove	3.4	3.1 in 1969 *
008064	Indarrie	12.0	7.6 in 1977
008072	Latham	4.0	1.8 in 1956 *
008079	Manarra	4.0 =	4.0 in 1981 *
008087	Mindalla	2.0	0.0 in 1957 *
008100	Northampton	7.7	5.4 in 1986
008113	Riverside	1.6 =	1.6 in 1979 *
008137	Wongan Hills	5.4	4.8 in 1946
008139	Wubin	1.3	0.0 in 1956 *
008143	Yandanooka	3.4	2.8 in 1977
008151	Walebing	8.8	7.1 in 1977 *
008200	Eradu	4.2	0.6 in 1977 *
009007	Chidlow	15.1	12.8 in 1951
009024	Marbling	34.0	28.2 in 1977
009030	Mundaring	45.8	42.2 in 1977 *
009106	Gosnells City	11.6	4.1 in 1969 *
009151	Subiaco Treatment Plant	20.8	13.1 in 1977 *
009182	Maida Vale	39.8	28.2 in 1977 *
009211	Pindarita	15.3	9.5 in 1974 *
009605	Tenterden	23.6	16.5 in 1916 *
009827	Second Beach	24.4	17.6 in 1981 *
009848	Windrush	28.4	28.2 in 1969
010007	Bencubbin	2.6	2.5 in 1939 *
010011	Bonnie Rock	1.8	1.5 in 1956 *
010026	Goodlands	1.8	0.6 in 1979
010039	Doodarding Well	3.0	1.3 in 1939 *
010044	Bungulla	4.2	3.2 in 1980
010070	Kalannie	3.3	2.3 in 1956 *
010082	Kununoppin	1.6	1.5 in 1939 *
010095	Millston	4.6	3.0 in 1980
010102	Mukinbudin	2.2	1.4 in 1980 *
010124	Nangeenan	1.8	0.0 in 1914
010126	Trayning	2.3	2.2 in 1977
010149	Codg Codgen	4.4	3.6 in 1977
010151	Hines Hill	2.6 =	2.6 in 1980 *
010524	Brookton	10.1	8.6 in 1939 *
010612	Narembeen	3.6	2.5 in 1939
010647	Wagin	12.1	9.5 in 1972 *
010671	Avoca	5.6	4.3 in 1967
010715	Barracup	13.5	11.7 in 1976 *
012007	Boodarockin	1.4	0.0 in 1956 *
012011	Bullfinch	1.0	0.0 in 1914
012038	Kalgoorlie-Boulder Airport	0.4 =	0.4 in 1988 *

\* note: there are gaps in the historical record at this site, so it is possible a lower value has gone unreported.  
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**Lowest September total rainfall for at least 30 years**

		Observed this month	Most recent lower month
012312	Katta Barega	12.8	9.0 in 1981
<b>South Australia</b>			
021075	Clare (Calcannia)	10.6	1.0 in 1963
<b>Queensland</b>			
040224	Alderley	3.1	0.8 in 1987 *
041095	Stanhope Leslie Parade	1.6	0.0 in 1980 *
041100	Texas Post Office	0.2	0.0 in 1928 *
041175	Applethorpe	0.8	0.6 in 1980 *
041404	Ellangowan	0.7	0.0 in 1980
<b>New South Wales</b>			
050014	Condobolin Retirement Village	4.6	1.0 in 1957 *
053033	Pallamallawa Post Office	0.2	0.0 in 1989
054003	Barraba (Clifton Lane)	0.6	0.0 in 1901
054029	Warialda Post Office	0.6 =	0.6 in 1989
054045	Ashford (Springvale)	0.5	0.0 in 1980 *
054046	Ashford (Burrabogie)	1.0	0.6 in 1989
055181	Dungowan (Ravencroft)	3.8	1.0 in 1980 *
055183	Duri (Ashgrove) No 142	4.4	0.6 in 1980 *
056006	Bundarra Post Office	1.6	0.8 in 1925 *
056016	Guya Post Office	7.0	6.2 in 1980 *
056029	Emmaville (Strathbogie)	1.4	1.0 in 1980 *
056065	Uralla (Mihi)	6.6	2.6 in 1980
056080	Glen Morrison (Millbank)	5.6	4.0 in 1980 *
064025	Coolah (Binnia St)	0.4	0.0 in 1980 *
070009	Bukalong Station	9.7	7.2 in 1979
074188	Culcairn Bowling Club	11.4	3.3 in 1946 *
<b>Victoria</b>			
081035	Murchison	5.8	5.3 in 1951 *

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

## Selected observations

## Daily and mean maximum temperatures for September 2019

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		
001019 Kalumburu	35.0	36.6	33.4	33.1	32.9	33.5	35.3	34.8	34.2	37.7	34.4	34.5	35.0	35.2	35.2	33.1	32.9	34.5	34.1	33.5	35.2	37.6	34.6	35.0	37.5	38.4	36.1	36.1	34.6	35.3	36.7		
002056 Kununurra Aero	36.3	35.2	36.3	35.1	35.1	35.8	36.2	36.8	37.0	36.7	33.0	33.5	33.5	34.9	35.2	35.8	35.1	35.8	37.0	37.1	37.7	37.1	36.3	36.1	35.7	36.4	38.1	37.9	38.5	40.6	39.9		
003003 Broome Airport	32.3	+0.4	31.8	30.1	28.7	28.2	28.4	28.8	29.4	30.5	32.2	37.3	35.8	35.1	36.2	30.2	33.4	30.4	32.0	32.6	30.1	33.0	34.0	36.3	33.8	34.1	36.0	36.3	31.6	31.7	31.5	30.8	
003032 Derby Aero	36.3	<b>32.7</b>	35.1	35.5	35.2	33.9	34.5	34.3	37.6	37.2	37.3	35.8	34.7	34.8	35.3	36.1	36.1	36.5	35.0	37.3	36.3	37.2	37.2	35.9	35.7	37.4	35.8	38.7	39.4	<b>40.2</b>	39.0		
004032 Port Hedland Airport	33.3	+1.1	34.1	34.3	33.8	32.8	28.3	28.7	28.0	30.0	33.6	33.7	33.3	33.3	32.2	35.9	34.6	37.2	34.7	37.5	35.7	31.4	31.1	31.9	33.4	34.7	32.5	32.7	38.2	40.0			
004083 Karatha Aero	32.0	33.8	34.0	30.9	30.3	29.9	27.2	28.0	29.9	31.6	33.3	32.6	33.2	33.9	35.3	35.0	34.3	34.6	35.0	35.5	29.5	28.6	29.9	31.1	28.7	33.0	32.5	30.2	31.5	33.4	33.2		
004106 Marble Bar	35.3	34.8	35.2	35.2	33.1	32.0	33.3	36.2	37.9	37.2	35.9	35.1	35.5	36.5	36.7	37.8	38.0	39.3	37.5	29.3	29.1	30.8	32.7	30.7	34.1	36.8	36.0	37.1	39.0	39.9			
005007 Learmonth Airport	31.4	30.7	32.4	31.1	30.1	29.3	30.0	30.3	27.9	28.3	34.6	36.9	33.6	32.3	32.0	35.7	33.6	33.5	30.3	28.9	27.0	28.3	31.5	31.3	30.6	32.5	29.4	31.1	32.4	31.4			
006011 Carnarvon Airport	26.3	+1.9	23.8	23.7	23.1	23.8	27.3	23.3	28.3	34.2	27.2	24.4	30.1	25.1	28.4	27.2	29.3	27.1	25.0	24.7	23.6	24.6	28.4	30.5	32.0	27.6	25.9	25.0	25.2	24.3	24.8	24.2	
006044 Denham	24.9	24.5	25.5	23.0	21.0	21.0	23.5	22.5	31.0	27.5	25.5	25.5	25.0	27.0	26.5	24.5	26.0	24.5	25.0	20.5	21.0	25.0	28.0	30.5	25.5	25.5	24.5	23.5	25.5	25.5	25.5		
007176 Newman Aero	32.0	32.1	31.5	33.4	33.1	32.4	28.8	28.1	31.1	33.4	34.7	35.5	33.6	33.7	33.4	33.2	34.5	34.7	36.1	35.3	30.4	23.2	24.1	24.1	25.0	28.2	28.5	31.0	33.3	35.0	33.5	<b>37.5</b>	
007185 Paraburdoo Aero	33.0	30.5	31.6	32.1	31.5	30.0	32.0	32.5	34.4	36.3	37.1	36.4	35.9	35.6	35.3	35.7	36.5	35.9	36.4	28.3	25.9	27.6	26.6	30.6	30.8	32.9	34.5	33.8	28.7	35.7	36.8		
007045 Meekatharra Airport	29.6	+4.2	27.6	25.9	26.0	23.2	22.8	25.0	28.2	31.6	34.6	35.5	33.2	34.1	35.2	34.9	34.3	34.4	33.5	31.6	21.8	20.3	21.6	23.8	26.8	28.7	32.3	32.1	31.3	33.1	35.3		
007600 Mount Magnet Aero	28.6	25.6	23.9	21.7	20.1	20.7	23.3	28.1	30.6	35.1	35.9	31.0	33.6	35.3	35.6	33.9	30.8	32.4	29.0	18.8	19.0	21.2	23.5	26.5	30.1	30.9	30.7	30.8	31.6	32.7	34.8		
008296 Morawa Airport	27.0	22.6	20.5	21.2	19.5	20.0	23.4	26.3	30.8	34.5	31.9	26.8	30.7	<b>34.6</b>	33.5	29.1	30.9	27.9	24.9	18.4	18.7	21.8	25.0	28.1	31.9	28.0	27.2	29.0	33.0	29.9			
008297 Dalwallinu	25.4	22.3	19.9	19.8	17.4	18.4	20.4	23.2	28.9	32.8	32.8	25.2	30.8	<b>33.1</b>	31.8	24.7	29.1	27.4	22.2	15.7	17.1	20.0	22.4	26.4	31.0	26.6	24.5	27.6	27.7	32.0	30.5		
008315 Geraldton Airport	24.1	22.2	20.4	20.2	<b>19.6</b>	20.2	23.9	22.1	26.6	<b>34.9</b>	24.1	24.8	23.6	27.7	25.1	23.5	25.4	23.1	23.1	19.9	20.6	23.8	26.3	30.0	29.1	24.3	25.7	23.1	22.9	24.4	23.2		
009021 Perth Airport	23.1	+3.1	19.1	20.2	18.3	16.8	17.7	20.4	22.0	25.8	32.6	29.2	23.4	25.8	27.2	24.5	24.3	26.4	22.7	21.3	16.0	18.5	19.4	20.7	26.0	29.1	23.3	22.3	23.1	23.7	30.8	24.0	
009131 Jurien Bay	22.8	20.5	20.4	20.1	19.8	<b>19.0</b>	22.1	21.3	23.8	30.0	22.2	22.9	23.2	23.8	23.6	21.6	26.1	23.3	21.6	21.6	22.2	23.8	29.0	23.9	22.5	22.9	21.2	21.7	23.6	22.9			
009225 Perth Metro	22.9	19.1	20.2	18.2	17.4	16.9	20.2	20.8	25.1	<b>33.1</b>	28.0	23.5	25.3	26.7	24.3	21.7	26.6	22.6	21.8	15.6	18.0	18.8	20.6	26.5	28.4	23.2	22.8	21.1	23.4	31.0	24.0		
009240 Bickley	20.2	14.8	15.9	14.2	13.3	13.8	17.3	17.9	23.5	29.4	27.5	21.6	22.2	21.4	23.3	20.3	17.8	14.2	14.9	16.2	17.6	22.6	25.8	20.0	18.7	21.5	22.3	27.9	21.5				
009518 Cape Leeuwin	18.3	+1.1	16.9	16.1	15.1	<b>15.1</b>	14.5	14.9	17.5	17.3	18.7	19.6	19.4	20.3	19.7	21.0	19.4	19.3	18.1	14.7	16.3	16.7	17.1	21.0	<b>22.4</b>	18.3	17.7	18.6	20.8	19.4			
009617 Bridgetown	19.6	16.7	15.9	15.2	13.6	17.1	18.8	19.4	<b>28.1</b>	26.3	20.4	21.8	22.5	21.1	18.8	21.1	22.6	17.4	12.9	14.1	14.6	17.6	20.9	23.5	20.3	18.9	21.1	21.2	24.9	21.7			
009746 Witchcliffe	18.8	16.7	16.0	15.1	<b>13.2</b>	15.4	17.0	18.0	19.1	23.5	22.1	20.9	19.8	21.7	19.3	18.2	20.9	17.8	18.3	13.6	15.8	15.9	16.9	21.1	23.7	18.4	17.9	19.2	20.3	25.5	20.8		
009789 Esperance	22.0	24.4	22.3	18.0	16.3	13.8	16.4	20.5	21.4	31.9	<b>33.4</b>	23.4	31.1	26.3	24.3	17.4	20.9	30.6	24.9	12.8	14.5	15.0	16.0	20.2	25.0	29.0	26.3	24.9	27.8	28.2	30.5	31.6	
009965 Bunbury	17.8	18.8																															
009977 Mandurah	20.3	18.4	18.4	17.3	16.2	17.1	17.3	19.6	22.5	<b>26.8</b>	21.7	21.9	22.1	22.3	22.2	20.2	23.2	21.0	19.6	14.7	17.0	18.0	20.3	23.5	22.4	19.6	20.9	19.5	21.1	24.7			
009999 Albany Airport	19.9	18.8	17.9	16.8	13.6	13.2	17.8	17.9	20.5	<b>28.5</b>	26.4	23.7	24.1	24.5	26.5	19.5	21.7	20.4	22.5	22.8	13.1	14.8	15.3	15.2	20.7	27.9	18.8	19.2	19.5	21.5	25.7		
010007 Merredin	24.7	+3.7	21.9	19.0	18.6	16.1	15.6	19.5	22.8	27.2	32.1	32.5	35.0	32.0	30.8	<b>32.9</b>	31.1	25.0	26.9	28.6	23.3	15.1	15.8	18.2	20.2	25.0	29.0	26.3	24.9	27.8	28.2	30.5	31.6
010092 Cunderdin	24.8	+4.5	21.4	19.1	17.0	16.7	<b>15.9</b>	18.9	23.1	27.2	32.0	<b>33.0</b>	25.4	30.3	32.4	29.5	25.0	26.6	29.4	23.5	<b>15.9</b>	17.1	18.8	20.5	24.1	29.0	27.0	25.5	28.4	30.3	32.9		
010286 Cunderdin Airfield	24.5	18.8	19.5	18.6	16.7	15.4	15.8	18.4	20.9	24.8	30.4	33.3	37.7	33.7	30.2	37.4	27.4	28.3	26.8	24.3	17.6	19.2	19.0	20.2	24.3	26.4	30.5	30.9	30.6	30.9			
010633 Ravnesthorpe	22.8	+3.4	21.5	19.5	17.5	15.0	14.0	19.0	22.5	25.5	31.5	33.0	36.5	30.0	31.3	26.0	16.0	13.3	30.5	23.5	12.0	13.5	14.5	15.5	23.0	25.0	27.0	20.7	24.0	24.3	<b>33.0</b>		
010911 Lake Grace	22.7	19.3	19.2	16.4	14.8	14.5	17.8	19.8	24.4	30.7	<b>32.3</b>	24.4	28.0	29.0	29.2	29.5	29.2	28.9	29.6	31.3	20.3	30.7	30.7	30.3	30.8	30.7	30.5	30.8	31.2	31.1	31.2		
010916 Katanning	19.9	17.1	14.9	11.9	12.3	15.3	18.2	19.3	19.0	29.5	30.9	32.1	32.2	27.4	28.6	20.9	21.8	20.2	21.4	12.1	14.2	14.1	16.8	21.2	26.9	20.9	21.2	22.2	22.7	24.4			
010922 North Shields (Port Lincoln AWS)	18.9	18.6	19.3	19.8	17.8	17.0	14.5	17.1	15.5	19.3	27.6	21.1	21.7	23.9	25.8	15.2	15.1	22.4	32.4	<b>13.1</b>	15.2	16.8	15.1	16.5	26.7	26.1	25.7	16.1	17.1				
021133 Showtown (Rayville Park)	21.9	20.3	27.7	23.8	24.8	20.3	16.1	17.2	18.0	17.5	21.0	25.9	24.9	23.4	29.6	31.2	<b>14.7</b>	21.7	24.1	21.9	27.4	31.1	20.6	15.4	16.8	22.5	25.6	29.5	22.5	21.5	21.9	24.4	
022823 Cape Borda	15.8	15.5	16.8	15.7	16.3	14.7	12.7	14.2	14.9	14.1	14.8	18.5	19.1	15.6	19.9	<b>20.6</b>	15.0	13.7	16.7	20.6	12.0	12.8	14.0	14.2	14.8	15.5	18.9	15.6	14.1	17.0			
023090 Adelaide (Kent Town)	19.6	18.0	23.8	19.1	17.9	18.6	<b>13.6</b>	15.1	16.2	15.7	18.0	24.7	21.4	21.8	27.1	28.5	15.4	16.4	19.4	29.4	20.5	12.7	20.5	21.5	18.5	21.6	20.4	19.2	18.5	21.3	21.0		
023373 Nirooptya Pirsa	18.0	16.5	22.1	17.4	19.0	16.4	12.1	14.7	14.9	17.3	22.8	20.6	18.4	26.2	27.6	12.2	13.4	19.5	26.7	19.2	13.5	13.6	14.3	15.2	18.3	22.3	19.4	18.1	19.0	21.3			
026021 Mount Gambier Aero	15.4	-0.4	14.3	13.0	18.1	16.2	19.3	12.4	12.0	13.5	13.4	13.4	19.0	15.8	16.9	19.1	15.8	12.8	13.2	14.2	15.1	<b>20.4</b>	15.1	14.									

**040203** Thargomindah Airport 26.1 20.3 23.4 31.7 33.1 34.3 24.4 20.9 22.4 21.3 22.2 23.2 27.4 31.3 29.3 30.8 34.4 22.6 24.4 29.0 **34.5** 29.8 26.0 24.8 22.9 26.7 32.5 32.5 31.3 31.1  
**M** is the average of the daily maximum temperature for September 2019; it is only shown if there are sufficient days available. **Anom** is the difference between the mean daily maximum temperature for September 2019 and the long-term average maximum temperature for September. Anomalies are only shown if there are sufficient years of climate record available. The **lowest** and **highest** maximum temperature for each site for September 2019 is highlighted. Not all observations are shown here. Data from many more sites and for other times are available at [www.bom.gov.au/climate/data/](http://www.bom.gov.au/climate/data/).

## Daily and mean maximum temperatures for September 2019

	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			
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			
048027 Cobar MO	24.8	+3.5	25.0	24.9	30.3	30.5	31.8	19.2	16.4	17.7	16.1	19.4	23.9	26.1	26.2	26.5	29.7	31.4	24.1	27.1	30.8	26.3	22.7	20.3	21.3	21.9	24.6	27.6	26.3	25.0				
048245 Bourke Airport AWS	26.8	25.5	27.0	31.6	33.1	34.0	25.4	19.1	19.7	19.1	21.4	24.3	27.7	27.9	28.8	29.6	33.3	20.0	25.3	28.2	33.6	29.7	25.4	23.3	23.7	24.4	27.5	29.9	30.6	27.9	26.8			
049000 Ivanhoe Aerodrome AWS	23.6	25.4	24.4	29.9	26.1	32.9	18.5	18.2	16.8	16.7	18.5	22.6	27.9	24.7	25.1	30.8	25.2	17.3	22.7	28.5	31.1	22.6	20.7	20.1	21.0	21.4	23.7	28.4	21.3	24.1	21.7			
050052 Condobolin Ag Research Stn	22.9	+2.8	23.2	21.0	29.5	28.7	29.8	20.0	16.3	15.2	15.4	17.8	21.1	25.9	24.9	24.9	28.9	30.0	13.5	22.6	26.2	29.0	27.2	21.4	19.0	20.4	21.6	22.5	26.0	22.1	23.1	21.0		
051039 Nyngan Airport	24.0	24.0	31.0	31.0	32.0			28.0	19.0	16.5	19.0	23.0	26.5	26.6		28.5	31.5	15.7	23.5	26.5		29.5	22.0	22.0	23.0	25.0			27.0	23.2				
052088 Walgett Airport AWS	27.0	25.3	26.8	30.4	32.7	33.4	34.5	20.4	20.3	17.7	20.7	24.2	26.8	28.4	28.7	29.4	32.4	20.8	24.7	28.3	31.0	30.7	25.9	24.2	23.2	24.7	27.5	30.1	31.0	27.8	26.6			
053115 Moree Aero	27.3	25.5	27.1	28.7	32.0	33.2	34.0					28.0	24.3	26.1	29.1	29.4	31.1	26.8	24.7	27.7	29.7	29.6	29.4	25.1	24.2	25.1	27.2	30.3	31.1	29.1	27.8			
054038 Narrabri Airport AWS	26.7	25.4	26.6	28.5	31.5	33.5	34.6	19.7	19.7	17.2	19.9	23.3	25.9	27.2	29.5	29.2	31.6	23.5	24.5	27.4	30.2	29.1	27.2	24.8	23.8	25.3	27.4	29.4	30.2	27.9	27.7			
055325 Tamworth Airport AWS	25.2	23.7	25.2	26.6	29.6	30.6	32.4	19.3	19.1	15.4	18.8	22.2	24.3	26.3	27.5	27.1	29.0	24.2	22.5	26.7	28.3	27.7	23.2	21.1	22.7	25.1	26.5	27.1	28.7	26.9	26.0			
056242 Inverell (Raglan St)	24.7	23.1	24.9	26.4	28.7	29.4	33.0	18.7	18.8	15.6	19.1	22.4	22.2	25.7	26.7	26.2	27.3	24.0	24.1	26.1	26.0	25.8	26.1	24.6	23.9	22.2	24.1	25.7	27.4	21.6	25.5			
057095 Tabulam (Muirine)	24.2	22.2	24.6	25.2	28.7	29.8	30.2	21.9	20.0	16.7	18.4	19.2	24.0	24.6	25.4	25.6	28.1	23.6	20.4	22.4	23.0	25.1	27.3	27.3	22.2	21.4	22.4	25.9	28.1	27.9	23.8			
058012 Yamba Pilot Station	23.8	+2.3	20.4	25.1	21.6			26.1	30.0	27.3	26.1	21.2	19.3	20.0	23.2	26.2	23.7	22.7	25.7	22.7	20.7	22.1	22.2	23.3	25.7	26.9	22.1	24.0	22.7	24.8	29.3	22.2	22.7	
060139 Port Macquarie Airport AWS	23.5	21.6	28.1	23.7	22.5	24.0	30.7	24.9	23.3	20.6	18.8	20.8	23.1	22.7	24.6	22.9	29.0	22.0	22.6	21.9	25.5	23.5	25.0	25.0	22.7	25.0	30.3	21.3	20.2					
061078 Williamtown RAAF	22.4	+1.3	20.0	22.0	23.8	26.3	21.3	31.2	19.7	20.4	19.4	17.2	18.9	27.4	20.6	20.7	26.4	31.4	17.5	20.3	21.9	23.4	25.7			23.3	20.4	20.5	21.0	27.6	20.3	21.1	20.1	
061363 Scone Airport AWS	24.5	21.9	24.9	28.5	30.1	27.9	32.6	18.8	19.5	17.6	18.4	22.2	27.2	24.6	25.8	28.8	30.0	12.4	17.0	23.9	25.9	27.6	24.6	23.3	23.3	22.9	25.5	28.5	28.6	27.0	24.4			
062101 Mudgee Airport AWS	22.2	22.1	22.5	25.5	27.6	28.0	30.1	13.1	15.3	12.9	18.3	21.0	23.4	25.0	25.0	27.5	28.2	14.9	18.9	23.0	25.7	24.8	21.8	19.0	19.8	20.9	22.0	23.1	22.7	22.9	22.4			
063005 Bathurst Agricultural Station	19.2	+3.4	18.3	17.4	23.2	22.6	24.5	25.7	1.0	11.0	10.0	15.5	18.7	20.2	22.5	20.0	24.5	26.0	14.6	22.7	23.5	22.5	19.3	15.0	16.3		19.5	19.5	18.0	18.8	19.4			
063254 Orange Agricultural Institute	14.6	20.0	19.0	21.0					20.5	6.6	11.6	15.5	16.6					20.8	21.9	10.4	14.8	18.3					20.1	11.2	13.2	15.7	16.3		16.8	17.0
064008 Coonabarabran (Showgrounds)	23.0	+2.7	22.8	21.5	26.2	27.3	29.3	28.7	15.7	15.6	13.5	17.4				23.8	25.8	24.9	25.0	32.8	14.0	19.5	24.0	27.0	25.3	23.8	19.5	20.6	23.0	24.0	24.2	25.3	24.0	23.8
065070 Dubbo Airport AWS	24.0	23.8	22.5	28.5	29.6	30.3	32.9	2.2	16.2	17.4	15.3	19.5	22.5	25.6	26.6	27.8	30.3	14.5	22.7	25.7	29.6	26.2	24.0	21.4	21.3	22.6	23.9	25.7	23.1	24.5	23.8			
066062 Sydney (Observatory Hill)	21.7	+1.3	23.4	20.6	23.2	27.7	20.8	28.8	19.2	19.9	17.4	19.2	26.8	19.6	20.5	27.7	27.0	14.6	17.9	20.6	20.6	23.0	22.5	22.4	20.7	21.9	20.8	25.3	21.7	21.1	18.6			
067105 Richmond RAAF	23.8	23.5	23.4	25.9	29.5	26.0	32.2	19.0	2.2	18.5	19.2	22.3	27.1	24.4	24.1	29.1	31.0	12.6	16.0	22.2	24.3	28.2	26.4	23.1	22.6	22.0	23.8	27.0	23.5	24.2	21.5			
068072 Nowra RAN Air Station AWS	21.0	23.9	18.7	23.5	26.7	19.7	27.2	16.1	19.0	18.1	16.7	20.4	23.6	20.8	19.5	28.6	25.6	12.2	16.6	20.4	22.0	24.4	23.1	20.3	21.1	19.0	20.6	19.3	20.8	17.5				
068151 Jervis Bay (Point Perpendicular)	18.7	22.3	16.5	19.8	21.8	18.8	20.9	15.3	17.4	14.4	14.3	18.1	22.7	17.4	18.1	26.5	21.2	15.3	16.2	19.7	20.6	23.8	18.2	18.5	16.9	17.2	19.3	23.7	16.4	17.5	15.8			
068241 Albion Park (Wollongong Airport)	21.0	22.0	20.2	23.1	27.5	20.4	27.7	17.0	18.2	18.7	17.5	19.4	24.7	19.5	20.3	25.5	23.9	14.7	16.6	20.2	20.5	23.0	24.2	21.5	18.7	19.1	20.9	25.8	20.1	19.5	18.1			
069018 Moruya Heads Pilot Station	18.4	0.0	18.2	18.1	19.0	19.0	16.8	19.2	19.8	20.1	16.9	16.6	18.0	24.5	17.0	17.7	24.2	17.4	13.6	16.4	19.5	21.2	19.0	19.2	16.4	17.0	17.7	18.1	19.0	17.3	17.4			
070351 Canberra Airport	18.8	19.8	19.0	21.7	22.2	21.2	20.1	11.8	13.4	14.1	16.3	19.4	22.2	19.3	21.8	24.0	24.7	11.3	15.9	20.3	23.3	18.7	17.2	13.6	16.9	17.8	18.2	20.8	18.1	20.2	19.7			
071041 Thredbo Village	10.5	11.0	11.5	12.8	11.5	10.7	11.0	2.0	4.8	4.5	9.0	14.1	11.0	13.0	13.0	13.0	8.0	4.5	12.5	15.5	13.8	8.0	6.5	9.0	10.5	12.0	11.2	11.3	12.0	13.0				
072150 Wagga Wagga AMO	19.6	+2.4	20.6	18.0	24.4	18.8	21.1	15.6	13.9	13.8	14.1	15.1	18.4	21.1	21.5	22.3	21.4	19.7	20.8	17.0	20.6	18.0	19.0	20.6	19.0	19.4	19.7	21.0						
072160 Albury Airport AWS	18.0	19.4	17.7	21.0	17.0	15.4	14.4	13.5	13.1	14.8	13.5	12.3	18.7	19.1	17.6	18.5	23.2	10.7	10.8	9.2	3.5	12.1	14.1	15.8	9.7	7.3	14	6.0	9.4	9.8	10.8	9.0	10.1	11.4
074258 Deniliquin Airport AWS	20.2	24.9	19.7	23.6	15.6	20.5	15.5	16.0	15.5	16.7	19.9	24.7	21.2	22.5	28.5	14.0	17.2	20.6	26.0	28.9	19.5	18.0	16.5	18.3	17.6	21.3	28.4	19.2	19.1	20.5				
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			
070301 Mildura Airport	22.3	+2.1	25.1	24.1	25.8	25.1	27.9	16.2	17.2	17.3	17.7	18.0	22.7	27.2	23.1	24.9	31.8	15.6	16.0	21.3	28.1	31.3	19.1	18.0	19.4	19.4	20.8	24.9	29.6	20.1	20.8	21.6		
070815 Nhill Aerodrome	17.3	15.7	15.1	18.5	15.6	20.5	12.2	12.9	14.0	14.4	14.2	20.7	19.7	17.1	21.1	22.6	14.0	14.5	19.6	25.4	22.8	15.0	15.2	15.6	15.0	16.8	22.2	18.2	17.1	15.0	18.2			
080023 Kerang	20.1	+1.5	23.4	20.2	23.3	16.0	21.9	15.3	14.5	15.5	15.8	15.6	20.5	23.2	20.8	22.7	28.6	13.5	16.0	21.0	26.7	29.9	19.3	18.4	16.9	17.1	17.8	21.5	28.2	19.0	18.7	20.3		

## Daily and mean minimum temperatures for September 2019

	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		
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		
001019 Kalumburu	17.4	10.4	11.8	13.1	15.5	16.7	16.7	17.1	18.6	18.3	17.4	14.6	11.5	14.6	17.5	16.3	17.6	17.9	18.2	17.4	17.9	18.6	19.4	22.2	22.3	18.5	18.3	20.2	20.8	22.1	20.7		
002056 Kununurra Aero	17.5	10.2	10.5	12.1	14.6	17.1	16.7	18.0	18.4	18.8	22.9	14.4	14.7	12.5	17.9	13.6	14.9	16.4	17.2	16.8	17.2	18.6	20.0	21.5	22.0	23.1	17.5	21.4	21.7	24.6	20.4		
003003 Broome Airport	16.6	-1.8	13.9	14.9	13.2	13.4	14.7	15.1	21.2	17.8	16.3	16.4	11.9	13.1	10.2	12.5	13.7	15.4	16.0	16.3	18.3	19.3	17.8	18.4	23.0	23.5	18.7	17.0	20.6	19.7			
003032 Derby Aero	17.4	11.5	13.6	16.1	15.4	17.5	16.1	16.2	17.8	19.7	16.9	14.4	14.6	11.8	14.3	14.2	16.4	19.9	19.1	19.2	19.3	18.2	18.0	20.7	18.8	18.5	19.2	20.1	19.7	20.7	22.6		
004032 Port Hedland Airport	14.8	-0.5	16.0	12.3	11.5	13.5	15.9	16.1	14.7	15.2	14.1	15.1	17.0	17.0	12.8	13.1	9.7	12.2	12.9	14.2	16.7	17.1	14.9	16.7	15.7	14.5	16.9	14.9	14.8	17.3	15.9	14.3	17.9
004083 Karratha Aero	17.2	18.1	19.7	16.7	17.0	18.5	16.9	16.5	16.0	17.4	18.9	18.8	16.2	14.1	14.8	16.8	16.4	18.0	18.6	19.5	18.6	14.7	13.7	14.3	15.7	16.7	18.2	19.8	18.9	17.3	17.8		
004106 Marble Bar	15.8	15.9	13.7	16.7	13.8	13.9	15.3	15.2	17.7	19.6	14.6	12.8	10.8	13.8	15.3	13.3	14.3	18.5	17.4	19.6	15.5	17.1	17.5	16.8	14.1	16.3	17.5	16.3	16.5	18.8			
005007 Learmonth Airport	13.6	13.8	13.9	13.7	13.3	12.8	14.0	16.3	10.8	11.6	14.1	15.9	16.4	15.9	12.6	12.8	13.3	15.5	14.5	16.3	13.3	11.2	11.0	10.7	10.5	12.0	13.6	15.0	15.5	15.5	13.7		
006011 Carnarvon Airport	15.0	+1.2	15.3	14.8	14.0	13.5	12.5	13.2	16.0	12.4	15.7	13.5	14.8	17.1	17.6	18.8	17.9	17.6	13.1	18.6	12.1	10.4	15.0	9.8	14.2	10.5	16.0	18.5	18.0	16.7	16.6		
006044 Denham																																	
007176 Newman Aero	13.2	15.3	14.4	13.2	14.9	13.4	14.5	10.6	11.2	13.6	18.6	14.6	11.8	8.6	7.4	9.8	10.5	13.7	14.3	14.2	12.0	6.8	11.4	14.6	14.0	12.2	14.4	19.1	14.7	12.1	13.6		
007185 Paraburdoo Aero	14.3	14.1	12.8	13.2	14.5	17.6	14.8	13.3	14.5	16.3	18.0	14.6	13.2	10.5	12.6	13.0	13.9	14.2	17.2	13.9	14.7	15.0	15.7	17.2	14.0	14.3	13.1	12.4	11.0	13.8			
007045 Meekatharra Airport	13.8	+2.4	11.7	9.8	11.8	10.8	9.5	10.2	14.9	14.9	18.2	16.5	18.5	20.7	18.5	15.1	12.7	18.0	13.6	13.3	13.8	7.4	7.3	9.5	10.4	14.1	14.4	14.5	15.7	17.8			
007600 Mount Magnet Aero	12.9	10.6	11.3	11.0	8.6	7.2	9.1	9.1	10.7	13.8	16.2	15.0	17.5	18.3	16.8	16.3	17.5	14.6	13.4	10.9	4.6	9.4	8.8	10.2	15.2	12.0	13.2	15.2	16.1	15.9	17.6		
008296 Morawa Airport	8.8	7.5	9.4	7.6	5.5	4.0	2.4	5.8	6.8	7.6	8.4	13.6	11.0	10.1	11.9	13.4	11.6	12.2	10.2	11.8	3.3	4.9	6.9	5.3	11.0	4.8	10.1	10.7	11.5	11.2	14.2		
008297 Dalwallinu	7.8	5.2	6.9	8.1	6.0	1.5	-0.1	3.9	5.2	10.0	9.8	11.1	12.0	12.1	11.4	9.8	11.4	9.5	1.3	3.2	3.0	4.7	10.1	7.6	7.2	7.9	10.0	12.0	13.2	13.2	13.2	13.2	
008315 Geraldton Airport	8.7	10.2	10.2	9.8	8.0	3.6	6.5	2.9	5.9	9.0	9.4	13.7	10.3	6.8	9.0	12.0	8.7	10.0	9.7	14.7	6.6	7.2	6.8	7.5	7.7	8.7	7.2	7.8	10.3	9.9	10.7		
009021 Perth Airport	9.0	-0.1	10.9	8.9	10.6	10.3	2.6	3.0	1.7	6.2	8.9	10.0	12.9	11.8	11.3	12.0	10.6	12.9	11.9	11.5	9.5	2.0	5.5	6.2	7.4	14.0	7.1	10.2	7.6	9.8	10.6	12.8	
009131 Jurien Bay	10.0	12.2	14.9	13.8	13.5	6.9	4.4	2.9	7.1	10.3	7.8	14.5	10.0	10.9	13.6	12.9	10.5	8.3	16.8	5.1	5.0	7.2	9.6	7.0	10.3	8.1	10.7	10.8	15.4				
009225 Perth Metro	9.6	11.7	9.4	12.2	11.5	3.2	4.1	2.5	6.8	8.3	10.5	13.3	11.5	12.2	14.9	11.3	13.3	12.0	10.6	9.9	3.0	5.6	5.3	8.4	10.0	9.8	11.3	9.6	10.4	11.9	14.9		
009240 Bickley	9.2	10.0	8.5	8.5	8.3	2.4	2.7	5.2	7.6	11.3	12.7	13.4	12.5	13.0	10.5	9.9	13.3	11.4	6.4	4.0	4.9	5.3	6.1	11.2	11.5	9.8	9.7	9.0	11.1	13.6			
009518 Cape Leeuwin	12.8	+1.2	13.4	13.9	11.8	10.6	9.7	8.3	11.5	10.4	11.5	12.7	17.0	18.0	14.7	16.9	13.8	11.7	14.8	15.1	9.0	9.9	10.6	11.2	10.0	14.0	15.7	13.7	10.9	13.0	14.8	15.7	
009617 Bridgetown	6.0	10.0	5.8	4.7	6.5	-1.1	-1.7	0.3	2.8	1.7	7.0	10.5	13.7	10.6	15.1	7.4	8.7	6.0	5.2	3.8	2.3	-0.2	1.1	3.3	7.2	8.3	10.0	5.4	7.9	8.6			
009746 Witchcliffe	8.6	11.5	11.9	9.5	8.7	5.1	1.7	7.1	4.4	4.5	6.3	14.8	12.7	11.2	14.4	15.8	13.9	6.4	5.2	7.1	2.7	5.3	6.8	12.7	10.0	6.9	6.2	9.4	11.9				
009789 Esperance	10.6	8.0	8.3	10.2	8.7	7.6	3.6	3.9	8.4	10.7	15.9	15.1	12.7	14.7	15.8	14.6	11.2	13.7	8.4	7.9	6.8	9.6	9.8	14.1	11.5	12.0	10.8	11.6	10.7				
009965 Bunbury		14.9	13.3	11.6																													
009977 Mandurah	12.3	15.0	15.3	12.5	12.2	5.4	7.1	8.0	9.9	11.2	13.1	17.4	15.1	14.6	16.1	13.7	13.5	14.3	15.5	9.7	5.9	9.1	8.5	9.8	13.6	14.2	12.7	11.6	12.9	14.1	16.4		
009997 Albany Airport	8.2	8.6	9.0	8.4	6.7	1.8	1.6	4.8	6.0	7.8	6.8	11.5	12.7	10.5	15.9	11.3	7.9	7.1	11.6	5.6	5.1	6.8	7.0	3.8	6.9	9.0	9.9	10.6	9.4	11.9			
010007 Bencubbin	9.0	+1.8	8.5	8.2	9.0	6.4	3.3	3.0	5.0	8.8	9.0	11.2	11.4	10.7	11.9	16.5	13.5	12.3	14.3	10.6	9.0	1.0	4.9	5.0	6.5	11.5	7.4	8.6	10.5	12.5	9.8		
010092 Merredin	8.6	+2.0	5.2	7.3	10.0	5.5	3.1	4.4	1.2	7.2	8.2	9.1	10.9	8.5	10.5	14.1	13.9	12.4	16.1	8.1	8.1	0.5	2.1	5.6	8.9	12.1	4.6	7.1	11.2	10.4	13.2	17.9	
010286 Cunderdin Airfield	5.0	4.8	5.9	9.0	5.2	0.0	-0.6	-1.3	0.5	2.3	4.5	8.5	8.4	6.5	8.0	13.3	10.2	11.1	12.5	6.5	-1.1	-0.6	0.3	2.3	8.4	-0.2	4.7	8.7	5.2	11.5	7.2		
010633 Ravensthorpe	8.9	+1.6	9.9	12.5	7.0	6.0	1.5	0.5	2.6	10.2	8.5	10.0	11.5	10.0	16.0	11.0	10.5	11.0	10.5	9.0	1.0	6.0	6.0	8.5	14.4	15.5	10.5	8.0					
010911 Lake Grace	7.4	5.3	6.0	8.0	5.1	-1.6	-0.3	0.0	8.8	3.8	16.6	12.0	20.6	21.2	14.1	12.7	8.2	10.8	10.9	7.0	3.6	0.8	3.4	5.7	9.9	4.0	9.2	11.0	9.3	10.4	13.9		
010916 Katanning	7.1	7.8	7.2	6.5	6.2	1.2	0.8	4.0	8.6	6.0	11.8	9.4	10.0	13.5	10.7	13.5	8.5	7.8	8.0	4.9	2.7	2.4	3.3	2.5	7.7	6.7	7.5	9.3	8.9	11.2			
010917 Wandering	4.6	5.3	4.5	3.8	6.7	-1.6	-1.4	-1.2	2.9	2.2	4.1	11.7	6.7	7.7	10.8	12.9	8.2	6.5	6.6	-0.3	0.3	-0.8	1.4	3.4	1.4	5.0	6.1	7.5	4.6	6.9			
011003 Eucla	9.8	+0.7	6.3	14.5	9.8	10.3	7.7	4.1	2.1	3.5	6.6	18.3	12.2	12.0	19.5	13.3	13.0	13.3	13.0	13.7	13.6	10.3	2.4	2.0	4.8	6.9	11.6	14.2	9.7	14.7	15.4	16.4	
011052 Forrest	7.9	5.7	5.4	7.9	7.5	5.2	8.2	10.6	7.5	10.8	9.7	5.4	4.1	3.0	9.4	10.4	10.1	11.2	14.3	15.9	10.8	15.8	2.7	5.7	6.3	6.2	11.7	12.7	12.9	12.0	12.0	12.2	
012038 Kalgoorlie-Boulder Airport	10.3	+2.4																															

## Daily and mean minimum temperatures for September 2019

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					
048027 Cobar MO		5.7	7.4	10.9	12.9	14.6	15.2	8.4	5.0	7.0	2.2	5.3	7.2	9.0					7.4	12.4	14.9	20.5					6.9	9.2	11.0							
048245 Bourke Airport AWS	8.5	4.5	5.0	5.3	8.0	8.7	13.4	8.0	4.7	7.1	3.3	6.1	3.2	8.4	5.5	4.8	8.1	12.1	7.6	12.5	13.5	21.3	12.6	6.7	5.0	9.7	9.2	10.2	8.4	11.0	10.4					
049000 Inverloch Aerodrome AWS	8.2	6.1	5.0	10.6	10.4	12.2	12.1	7.2	6.5	6.4	1.8	3.1	7.6	8.2	8.9	16.2	3.5	7.1	9.6	16.5	15.2	7.2	9.9	5.2	6.3	7.2	9.4	6.5	6.6	6.1						
050052 Condobolin Ag Research Stn	6.6	+1.1	4.9	6.0	5.0	7.5	6.3	17.0	7.5	8.1	5.4	2.0	1.0	21	7.2	6.2	29	13.9	6.4	6.9	8.4	15.5	9.6	5.5	2.9	4.2	5.1	4.5	7.0	6.4	5.0					
051039 Nyngan Airport								6.5	5.0	10.0	11.3	14.5		7.8	7.8	5.0	5.7	4.0	8.8	7.8	5.0	8.5	8.5	12.0	13.8		8.0	6.3	8.8	9.0	7.5					
052088 Walgett Airport AWS	7.1	3.4	4.8	2.1	9.4	5.4	12.8	7.6	5.3	7.5	4.3	0.8	2.7	9.7	5.8	3.1	3.4	13.4	6.4	6.0	15.2	20.7	13.7	8.1	3.9	8.3	4.2	4.9	7.3	5.7	7.6					
053115 Moree Aero	8.4	5.0	6.1	3.9	6.8	9.4	9.7	8.7	4.0	8.3	3.1	6.0	5.9	4.7	5.5	7.1	8.3	9.1	4.5	12.5	15.5	17.4	18.0	13.9	5.1	2.5	11.9	9.8	10.4	8.0	7.4					
054038 Narrabri Airport AWS	7.5	9.6	4.8	3.7	7.6	8.2	6.6	7.1	1.7	5.6	-0.2	7.9	3.3	4.7	3.4	5.0	4.9	12.2	4.9	12.8	9.9	18.6	19.8	10.7	8.4	6.8	4.9	6.3	7.9	7.5	10.1					
055325 Tamworth Airport AWS	5.3	4.0	2.2	0.8	4.8	6.5	6.0	9.6	7.4	6.4	-0.3	1.4	3.0	2.9	0.7	2.2	2.4	13.0	8.1	7.0	11.8	11.3	11.4	9.5	2.4	2.2	5.8	3.8	4.3	3.4	4.3					
056242 Inverell (Raglan St)																										3.6	7.9	5.8	10.2	-1.1	1.2	5.1	2.5	3.7	5.5	0.5
057095 Tabulam (Muirine)	10.7	8.4	8.7	9.5	12.8	15.3	12.2	11.3	8.4	8.2	5.6	6.5	9.1	10.2	8.2	10.7	11.7	14.3	8.2	7.0	11.9	12.2	12.4	15.3	11.7	11.6	11.3	13.0	12.8	10.8	11.9					
058012 Yamba Pilot Station	13.6	+0.9	10.2	11.4	10.9	11.3	11.6	13.4	15.2	12.5	11.5	10.3	10.0	11.1	11.1	12.7	13.6	12.1	15.3	12.4	13.8	16.2	17.2	17.7	16.8	14.1	15.4	18.5	15.5	15.9	13.7	18.0				
060139 Port Macquarie Airport AWS	8.4	6.1	5.0	5.9	2.3	6.8	4.9	14.6	5.3	2.1	11.9	6.6	2.9	5.4	2.2	6.7	5.3	11.3	10.5	10.6	16.6	16.7	16.1	7.3	4.6	10.9	9.0	10.0	4.8	8.5						
061078 Wiltonia RAAF	10.1	+1.1	11.4	8.8	8.6	7.1	10.5	10.3	11.4	11.2	10.2	9.5	8.7	5.3	7.7	9.3	7.2	8.8	12.6	11.3	13.1	12.1	17.3	14.8	11.5	5.3	6.8	8.5	10.8	8.8	9.6	13.1				
061363 Scone Airport AWS	7.1	10.8	5.1	4.8	5.9	6.5	9.8	9.5	11.1	8.0	2.0	1.3	1.2	8.2	5.0	3.1	4.8	11.4	9.3	12.2	11.9	11.3	16.5	5.9	2.7	2.9	5.0	5.9	7.3	4.2	8.1					
062101 Mudgee Airport AWS	3.5	0.5	0.9	0.1	3.0	2.7	2.6	6.8	7.4	5.0	-2.4	-1.1	-2.3	1.2	2.5	-0.1	0.1	7.0	6.8	7.4	10.5	12.6	13.8	3.3	-0.3	1.3	4.5	2.3	3.2	2.7	2.6					
063005 Bathurst Agricultural Station	2.3	-0.7	-1.0	0.0	0.5	1.5	2.1	5.0	4.5	3.0	-2.5	-2.8	-0.5	0.0	-0.1	1.0	4.0	4.4	9.0	9.2	12.2	9.5		-1.0	-1.0	1.0	7.5	0.0	0.0							
063254 Orange Agricultural Institute	0.8	2.4	7.2	7.5	9.8				11	1.6	0.4	0.2	5.5		3.6	3.7	3.7	6.9	7.8					3.5		0.5	2.4	1.9	1.0							
064008 Coonabarabran (Showgrounds)	4.2	-0.1	0.7	1.0	0.1	4.6	3.2	3.1	8.6	8.2	5.4	-0.2	-2.0		4.2	3.3	0.7	9.8	8.3	6.0	6.5	12.2	14.1	5.0	-0.8	2.2	1.0	0.5	2.6	0.7	3.5					
065070 Dubbo Airport AWS	6.0	5.7	4.1	3.3	7.0	6.3	8.2	8.9	2.2	4.7	-1.2	4.4	0.4	3.5	3.8	2.8	3.1	11.5	7.9	10.4	13.2	15.3	12.4	4.7	2.6	4.4	6.6	3.0	8.5	3.9	5.4					
066062 Sydney (Observatory Hill)	12.2	+0.7	9.9	11.8	10.6	10.4	14.9	14.4	11.0	11.7	11.0	8.3	8.1	9.1	13.7	11.7	9.5	15.7	8.8	10.6	14.5	16.3	17.5	18.4	12.4	9.5	9.7	12.6	13.9	15.3	11.3	14.5				
067105 Richmond RAAF	7.8	4.4	4.0	5.1	3.6	8.6	9.9	10.2	9.6	9.2	6.6	2.9	16	7.6	6.3	3.2	2.6	7.0	8.1	8.8	12.5	11.8	13.1	15.9	7.9	3.8	4.7	10.8	9.2	12.4	7.8	12.9				
068072 Nowra RAN Air Station AWS	8.5	6.8	9.1	8.9	7.3	8.7	7.8	9.8	9.4	8.3	3.7	6.0	6.0	7.6	6.2	6.2	14.3	6.1	8.2	9.3	13.6	14.1	5.7	6.3	7.4	10.4	9.6	10.2	8.3	7.4						
068151 Jervis Bay (Point Perpendicular)	12.1	9.8	14.0	10.8	10.2	14.0	14.5	11.2	10.6	10.2	10.8	8.5	11.6	14.4	11.8	9.6	18.1	7.3	11.1	12.9	15.2	16.9	15.6	9.7	8.7	11.8	13.0	12.5	13.2	12.3	11.0					
068241 Albion Park (Wollongong Airport)	8.3	5.1	6.8	6.3	4.5	8.6	9.9	10.1	10.0	10.0	9.7	3.6	15	8.3	8.0	2.5	13.1	8.0	10.3	11.3	12.2	17.5	13.6	5.5	5.7	9.4	8.3	10.0	5.4	8.8						
069018 Moruya Heads Pilot Station	9.0	+0.6	5.4	9.5	8.7	7.5	7.5	11.8	9.2	10.2	9.7	5.5	5.9	6.8	6.8	7.1	6.5	15.9	6.2	7.8	12.0	12.6	14.7	14.2	8.7	6.2	8.0	10.0	8.9	8.8	9.1	10.2				
070351 Canberra Airport	2.1	-2.3	0.5	-2.9	-0.3	1.5	5.7	5.0	4.4	3.0	-3.7	-0.5	-3.1	-0.9	-2.8	-0.5	-0.4	5.4	0.8	1.5	10.0	5.6	10.1	6.9	0.1	-2.9	0.4	4.4	0.7	3.7	2.2	3.6				
071041 Thredbo Village	-0.8	-6.2	-0.5	1.5	-2.3	4.0	0.0	-1.0			-6.0	-4.5	-2.0	-4.5	2.0	35	6.2	-4.0	-3.0	-1.5	-2.0	5.0	10	1.2	0.0	-3.5	-2.5	-2.1	-2.4	-3.4						
072150 Wagga Wagga AMO	3.7	-1.2	3.0	4.3	4.8	-0.2	4.0	7.4	6.8	5.6	4.1	-1.8	-1.7	-0.2	0.6	2.0	0.3	9.6	6.5	1.8	6.0	13.8	17.7	6.0	6.2	-1.6	0.3	-0.2	0.0	3.3	2.1	0.6				
072160 Albury Airport AWS	4.5	1.8	2.2	5.0	2.7	9.3	8.2	7.5	4.6	5.6	4.9	-0.5	0.8	2.3	1.8	2.0	4.3	10.6	6.6	2.6	5.1	8.3	14.0	6.0	5.1	1.7	1.9	2.4	2.9	3.2	3.8	2.9				
072161 Cabramurra SMHEA AWS	1.5	2.0	0.9	2.7	4.8	4.3	5.9	-1.7	-2.9	-3.2	-5.3	0.5	2.3	2.2	1.2	2.1	5.1	6.1	-3.6	-1.7	3.4	5.7	9.3	1.5	-0.4	-3.3	-0.4	1.4	1.4	-0.6	1.5	2.5				
074258 Deniliquin Airport AWS	4.3	2.7	0.1	7.6	2.9	8.5	7.4	4.8	5.9	3.7	0.2	-0.7	6.2	0.0	1.6	5.0	11.6	-0.1	1.9	7.1	12.7	12.7	2.2	6.8	1.0	0.6	4.5	7.0	1.0	1.8	3.3					
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					
067031 Mildura Airport	6.9	-0.5	11.4	16	10.4	8.3	12.2	10.5	6.8	6.8	3.0	1.5	0.9	10.5	10.5	10.9	10.1	10.4	11.3	8.6	8.4	9.4	10.3	13.2	13.2	8.4	8.9	8.9	10.4	9.7	10.5	7.4	9.2	9.7		
078015 Nhill Aerodrome	4.2	9.2	-0.5	3.4	2.1	5.7	6.1	5.1	5.4	3.2	-0.1	0.5	9.4	0.9	4.9	9.5	7.3	-1.6	1.1	7.0	13.1	9.2	3.7	3.9	0.3	2.3	2.9	7.5	0.8	2.7	1.3					
080023 Kerang	5.7	-1.3	8.2	1.9	5.4	5.2	9.4	8.6	5.5	4.7	3.5	3.6	0.6	7.6	3.8	3.6	8.9	10.0	2.5	1.7	7.8	15.0	12.3	3.0	5.9	3.6	2.9	3.3	8.9	2.7	4.7					
081213 Bendoig Airport	3.8	7.2	2.4	6.9	2.8	4.3	7.2	4.9	5.6	4.9	0.8	-0.6	-2.5	0.6	1.3	7.8	7.4	1.6	-0.1	3.4	13.4	12.3	0.7	4.5	0.0	1.8	1.1	3.2	1.1	2.6	0.6					
082039 Rutherford Research	2.2	-2.0	-1.7	-0.2	4.1	0.2	8.5	6.7	5.8	1.9	3.3	-2.5	-2.2	-0.6	-0.8	12	10.7	1.1	-0.9	1.0	13.8	18.7	-0.1	-2.1	-0.2	-1.9	-1.7	-0.2	-0.1	-1.3						
083085 Mount Howtham	-2.0	-2.1	-3.3	-0.3	1.0	-1.1	4.6	-4.8	-6.6	-6.3	-5.2	-0.5	0.1	-1.0	1.4	-1.5	-7.8	-5.2	0.4	3.8	6.2	-3.1	-3.3	-4.6	-3.9	-1.9	0.2	-0.5	-2.5	-2.9	-3.0					
084016 Gabo Island Lighthouse	9.5	-0.4	8.4	10.7	8.4	9.1	10.8	12.9	8.8	9.3	8.8	8.4	8.2	8.5	11.3	9.5	7.5	10.6	7.5	6.1	10.8	11.9	6.9	3.0	4.8	6.6	2.9	2.7	5.6	6.8	7.0					
085072 East Sale	5.6	-0.2	1.2	7.2	6.4	4.9	5.9	9.5	8.6	6.6	5.5	1.3	5.5	5.6	8.1	7.0	9.2	12	1.0	17	8.3	11.9	6.9	3.0	4.8	6.6	2.9	2.7	5.7	6.0	6.8					
085096 Wilsons Promontory Lighthouse	9.9	+0.7	10.5	10.8	11.0	10.6	9.1	10.8	8.7	8.8	8.3	9.4	10.5	10.9	10.1	10.4	11.3	8.6	8.4	9.4	10.3	13.2	13.2	8.4	8.9	8.9	10.4	9.7	10.5	7.4	9.2	9.7				
087031 Laverton RAAF	7.2	+0.5	11.5	5.4	6.9	5.7	7.0	9.9	7.9	3.8	5.9	5.3	7.7	11.2	7.2	4.9	12.4	8.8	7.0	2.2	5.3	16.5	13.6	4.0	7.8	4.2	4.1	10.4	4.1	7.1	6.6					
087184 Breakwater (Geelong Racecourse)	7.5	9.1	8.4	6.7	5.7	6.1	9.8	7.4	6.6	6.0	5.4	4.7	10.5	7.6	7.1</																					

*Mean* is the average of the daily minimum temperature for September 2019; it is only shown if there are sufficient days available. *Anom* is the difference between the mean daily minimum temperature for September 2019 and the long-term average minimum temperature for September. Anomalies are only shown if there are sufficient years of climate record available. The **lowest** and **highest** minimum temperature for each site for September 2019 is highlighted. Not all observations are shown here. Data from many more sites and for other times are available at [www.bom.gov.au/climate/data/](http://www.bom.gov.au/climate/data/).

## Daily and total rainfall for September 2019

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									
001013 Wyndham	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
001019 Kalumburu	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
002056 Kununurra Aero	0.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.6	.	.										
003003 Broome Airport	2.0	1.7	0.6	0.4	0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	0.4	.	.	.	.	.	.	.	.											
003032 Derby Aero	.	1.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
004032 Port Hedland Airport	1.0	0.9	.	0.2	0.2	0.2	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.											
004083 Karratha Aero	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
004106 Marble Bar	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
005007 Learmonth Airport	0.4	2.6	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.											
006011 Carnarvon Airport	0.4	5.8	0.2	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.											
006044 Denham	1.0	7.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.0	.	.	.	.	.	.	.	.	.	.											
007176 Newman Aero	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
007185 Paraburdoo Aero	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
007045 Meekatharra Airport	.	6.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.										
007600 Mount Magnet Aero	0.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.8	.	.	.	.	.	.	.	.	.	.											
008296 Morawa Airport	4.6	.	1.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	3.2	0.2	.	.	.	.	.	.	.	.	.										
008297 Dalwallinu	5.0	0.2	4.0	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.6	.	.	.	.	.	.	.	.	.	.											
008315 Geraldton Airport	.	»	»	4.0	.	.	.	»	»	»	»	»	»	»	»	»	»	»	»	0.4	.	0.4	0.2	.	.	.	0.2	.	.	.											
009021 Perth Airport	31.8	71	0.2	17.6	2.8	1.4	.	.	.	.	.	.	.	.	.	.	.	.	.	9.8	.	.	.	.	.	.	.	.	.	.											
009131 Jurien Bay	12.0	1.6	4.8	1.8	0.2	.	.	0.2	.	0.2	.	.	0.2	.	.	.	.	.	»	3.0	.	.	.	.	.	.	.	.	.	.											
009225 Perth Metro	31.4	0.2	13.8	3.6	1.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	11.4	1.0	.	.	.	.	.	.	.	.	.	.										
009240 Bickley	67.0	0.8	28.2	12.6	3.6	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	21.4	.	.	.	.	.	.	.	.	.	.	.										
009518 Cape Leeuwin	19.0	104	2.2	5.6	6.0	4.8	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.										
009617 Bridgetown	49.2	.	15.2	8.6	3.6	1.0	0.2	.	0.2	0.2	0.2	1.8	2.0	2.0	0.2	1.0	.	.	0.4	9.4	1.4	3.6	0.2	.	.	.	.	.	.	.	.	.									
009746 Witchcliffe	54.0	5.8	12.8	5.8	5.4	0.2	.	1.8	0.2	0.2	0.2	0.4	1.2	1.4	.	.	.	»	»	2.6	.	»	14.0	»	1.6	.	.	0.2	.	.	.	.	.								
009789 Esperance	.	»	»	»	»	»	»	»	11.6	.	.	.	.	.	.	.	.	.	2.0	0.2	.	0.2	5.2	.	.	.	.	.	.	.	.	.	.								
009965 Bunbury	30.0	.	18.6	3.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.6	.	0.6	6.8	0.4	.	.	.	1.8	2.0	.	.	.	.	.	.	.						
009977 Mandurah	22.8	0.2	2.8	4.0	3.6	.	.	.	.	.	.	.	.	.	.	.	.	.	0.6	.	0.6	6.8	0.4	.	.	.	1.8	2.0	.	3.6	0.2	0.2	.	.	.						
009999 Albany Airport	52.2	.	3.8	3.4	10.6	4.0	.	0.2	1.0	0.2	.	.	.	.	0.2	0.4	0.6	0.8	.	16.4	3.2	3.0	0.4	.	.	.	.	.	.	.	.	.	.	.							
010007 Bencubbin	2.6	20	0.2	0.6	0.1	.	.	.	.	.	.	.	.	.	.	.	.	.	1.6	0.1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.					
010092 Merredin	3.6	24	0.2	0.8	0.2	0.6	.	.	.	.	.	.	.	.	.	.	.	.	1.8	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.					
010286 Cunderdin Airfield	12.0	0.2	6.8	.	0.2	0.2	.	.	.	.	.	.	.	.	0.2	.	.	.	4.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.					
010633 Ravensthorpe	12.1	40	.	3.2	.	.	.	.	.	.	.	.	.	.	.	0.8	0.9	.	0.5	1.5	2.4	2.8	.	.	.	.	.	.	.	.	.	.	0.2	0.2							
010911 Lake Grace	3.0	0.2	0.8	0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	6.2	1.4	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.					
010916 Katanning	19.8	.	6.8	4.0	0.8	0.2	.	.	.	.	.	.	.	.	.	.	.	.	0.2	6.2	1.4	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.						
010917 Wandering	29.4	.	5.4	11.4	2.2	0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	0.4	8.4	.	0.2	.	.	.	.	.	.	.	.	.	2.8	0.2	.							
011003 Eucla	11.6	26	0.4	.	0.2	0.4	0.4	3.2	.	0.2	0.2	0.2	0.2	.	.	.	.	.	.	3.8	2.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.						
011052 Forrest	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			
012038 Kalgoorlie-Boulder Airport	0.4	13	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			
012071 Salmon Gums Res.Stn.	5.4	28	.	0.2	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	1.0	2.0	1.4	0.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.				
013011 Warburton Airfield	0.3	12	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	0.2	0.2	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			
013012 Wiluna	5.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
013017 Giles Meteorological Office	3.0	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	2.8	.	0.2	.	.	.	.	.	.	.	.
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									
014015 Darwin Airport	.	19	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
014198 Jabiru Airport	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
014932 Tindal RAAF	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
014508 Gove Airport	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
014723 Borroloola Airport	0.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
014825 Victoria River Downs	0.2	7.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
015135 Tenant Creek Airport	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.
015590 Alice Springs Airport	16.4	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1.6	14.8	.	.	.	.	.	.	.	.	.
015635 Yulara Airport	0.6	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	0.6	.	.	.	.	.	.	.	.	.	.
015666 Rabbit Flat	7.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	7.2	.	.	.	.	.	.	.	.	.	.
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									
016001 Woomera Aerodrome	4.2	16	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	4.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
016098 Tarcoola Aero	12.4	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	5.6	6.6	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	
017043 Oodnadatta Airport	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
018012 Ceduna AMO	12.8	28	1.0	0.2	.	0.6	1.0	.	.	0.6	.	.	.	.	.	0.2	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.			
018044 Kyancutty	64.6	33	7.4	.	0.5	1.8	5.3	0.3	.	.	.	.	.	.	.	.	.	.	.	.	33.0	14.7	0.6	1.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.			
018192 North Shields (Port Lincoln AWS)	31.0	1.2	0.2	0.2	0.2	0.2	3.8	1.0	.	0.6	.	.	.	.	.	.	.	.	.	14.6	3.0	0.8	5.4	.	0.2	.	.	.	.	.	.	.	.	.	.	.					
021133 Snowtown (Rayville Park)	2.6	0.2	0.2	.	.	.	0.4	1.0	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.		
022823 Cape Borda	10.0	.	0.2	3.6	»	»	2.4	0.6	3.0	.	.	»	»	0.4	.	.	0.4	.	»	2.0	18.6	12.6	0.4	5.4	0.4	»	»	.	.	.	.	.	.	.	.	.	.	.			
023090 Adelaide (Kent Town)	48.2	6.0	0.2	.	2.6	2.8	4.6	2.8	3.2	.	0.2	.	.	0.2	0.2	.	1.0	.	.	17.4	3.8	3.4</																			

04525 Thargomindah Airport Total is the total precipitation for September 2019; 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 September. 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 stations and for other times can be viewed at [www.bom.gov.au/climate/data/](http://www.bom.gov.au/climate/data/).

## Daily and total rainfall for September 2019

Total is the total precipitation for September 2019; 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 September. 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, "v" 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](http://www.bom.gov.au/climate/data).