



Australian Government
Bureau of Meteorology

Monthly Weather Review Australia January 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:

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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

Pyro-cumulonimbus ("PyroCb") cloud over a fire near Timbarra in East Gippsland, as seen from Bete Bolong North. Photograph by Chris Lucas, 8 pm, 25 January 2019. Copyright © 2019, Chris Lucas. Used with permission.

Overview

- Warmest January on record for Australia; warmest or second-warmest in each State and Territory
- The month saw a series of heatwaves unprecedented in their scale and duration
- Mean temperatures record-warm across large areas, and well above average everywhere except the Kimberley, west coast Western Australia, and northeastern Queensland
- January rainfall below average overall
- Rainfall for the month very much below average for southeastern Queensland and much of southeastern Australia; driest January on record for Tasmania
- Above average rainfall for parts of northern coastal Queensland, with flooding late in the month
- Two Special Climate Statements were issued: one discussing the extraordinary heat and another the flooding in northern Queensland

January 2019 was the warmest month on record for Australia in terms of mean, maximum and minimum temperatures, and all exceeding previous respective

records by a large margin. A prolonged series of heatwaves affected much of the country throughout the month, breaking records for both individual daily extremes and length of warm spells. Both the scale and longevity of this persistent heat was unprecedented in the climate record.

Rainfall for January was below average for Australia as a whole, and it was particularly dry through much of southeastern Australia. Much of central to southern Queensland observed little to no rainfall during January, with large parts of the southeastern quarter of the State also observing record low totals. Tasmania recorded about one-fifth of the average rainfall. Above average falls occurred along the coast of central and northern Queensland, with other small pockets in central northern Queensland, the Top End, and central eastern New South Wales.

The monsoonal systems brought flooding to Queensland's north tropical coast late in January and continued until the second week of February.

Areal averages in January 2019

	Rainfall anomaly	Mean maximum temperature anomaly	Mean minimum temperature anomaly	Mean temperature anomaly
Australia	-34%	+3.35 °C highest	+2.45 °C highest	+2.90 °C highest
Western Australia	-39%	+2.28 °C highest	+0.86 °C equal 5th-highest	+1.57 °C 2nd-highest
Northern Territory	-36%	+3.70 °C highest	+2.82 °C highest	+3.26 °C highest
South Australia	-78%	+4.66 °C highest	+3.07 °C 4th-highest	+3.86 °C 2nd-highest
Queensland	-18%	+2.39 °C 5th-highest	+2.53 °C highest	+2.46 °C highest
New South Wales	-56%	+6.15 °C highest	+5.56 °C highest	+5.86 °C highest
Victoria	-71%	+4.61 °C highest	+3.32 °C highest	+3.97 °C highest
Tasmania	-79% 2nd-lowest	+3.22 °C highest	+1.78 °C 3rd-highest	+2.50 °C highest

Extremes in January 2019

	Hottest day	Coldest night	Wettest day	Warmest overall	Coolest overall	Wettest overall	Strongest wind gust
Australia	49.5 °C at Port Augusta Aero (SA) on the 24th	-0.5 °C at Butlers Gorge (Tas.) on the 13th	471.6 mm at Whyanbeel Valley (Qld) on the 27th	36.8 °C at Birdsville Airport (Qld)	11.3 °C at Mount Read (Tas.)	1885.0 mm at Bellenden Ker Top Strn (Qld)	131 km/h at Rabbit Flat (NT) on the 3rd
Western Australia	49.1 °C at Marble Bar on the 13th and Red Rocks Point on the 23rd	3.9 °C at Wandering on the 25th	132.0 mm at Troughton Island on the 23rd	35.7 °C at Marble Bar	17.9 °C at North Walpole	456.0 mm at Kalumburu	113 km/h at Giles Meteorological Office on the 26th and Marble Bar on the 31st
Northern Territory	47.4 °C at Walungurru Airport on the 3rd	14.0 °C at Kulgera on the 28th	139.0 mm at Charles Point on the 27th	35.7 °C at Walungurru Airport	27.9 °C at Central Arnhem Plateau	612.0 mm at Croker Island Airport	131 km/h at Rabbit Flat on the 3rd
South Australia	49.5 °C at Port Augusta Aero on the 24th	3.5 °C at Coonawarra on the 10th	14.6 mm at Ernabella (Pukatja) on the 19th	36.2 °C at Moomba Airport	19.1 °C at Robe Airfield	18.2 mm at Ernabella (Pukatja)	100 km/h at Outer Harbour (Black Pole) on the 16th
Queensland	47.3 °C at Ballera Gas Field on the 17th	10.7 °C at Stanthorpe Leslie Parade on the 13th	562.0 mm at Mossman Central Mill on the 27th	36.8 °C at Birdsville Airport	23.6 °C at Applethorpe and Stanthorpe Leslie Parade	1077.0 mm at Whyanbeel Valley	98 km/h at Urandangi Aerodrome on the 25th
New South Wales	48.8 °C at Menindee Post Office on the 25th	1.2 °C at Perisher Valley AWS on the 10th	101.2 mm at Kiama (Brighton St) on the 6th	35.9 °C at Wanaaring (Borrone Downs AWS)	16.1 °C at Thredbo AWS	224.8 mm at Glen Alice	115 km/h at Thredbo AWS on the 31st
Victoria	47.6 °C at Kerang on the 25th	1.0 °C at Mount Hotham on the 6th	41.8 mm at Genoa (Fools Haven) on the 31st	28.9 °C at Mildura Airport	15.8 °C at Mount Baw Baw	76.8 mm at Genoa (Fools Haven)	113 km/h at Laverton RAAF on the 30th
Tasmania	40.1 °C at Hobart Airport on the 25th	-0.5 °C at Butlers Gorge on the 13th	20.6 mm at Hummocky Hills on the 31st	20.6 °C at Launceston (Ti Tree Bend)	11.3 °C at Mount Read	92.0 mm at Mount Read	130 km/h at Maatsuyker Island Lighthouse on the 27th

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

Thunderstorms and lightning in Tasmania

A middle level cloudband with embedded thunderstorms moved across Tasmania late on the 14th, with a second and more significant band crossing on the 15th. There was little, if any, rain with the thunderstorms, but the lightning started dozens of bushfires across the State, especially in the west and southwest.

Thunderstorms developed over Central Tasmania late on the 30th, moving to the lower East Coast early on the 31st. Some localised moderate falls were recorded, including 18 mm in 30 minutes at Hummocky Hills in the northern Midlands late on the 30th, and 15 mm in an hour at Maria Island early on the 31st.

Bushfires and smoke in Tasmania

Lightning strikes onto dry vegetation led to bushfires, including over 60 that started on the 15th, many in remote and difficult terrain, whilst the Gell River fire in southwest Tasmania also continued to burn. The fires threatened communities in several parts of Tasmania, with the Tasmanian Fire Service issuing Emergency Warnings on many occasions, and at one point more than 60 fires were burning. Repeated warm days, little or no rain and some periods of strong winds made the fires difficult to control. Intensive and sustained efforts by several hundred fire fighters, augmented by aircraft, ensured that building losses were limited, although large tracts of both wilderness and forests were lost.

The largest fires, reported by the Tasmania Fire Service, as still going at the end of January included the "Riveaux Road" fire from the southwest into the Huon Valley (over 56 000 ha burned by the end of January), the "Great Pine Tier" fire on the Central Plateau (51 000 ha), the "Moores Valley" fire in the southwest (30 000 ha), and the "Gell River" fire in the southwest (27 000 ha). Several other large fires were also still burning at the end of the month, including the "Western Hills" fire that had threatened Zeehan and Renison Bell, and the "Brittons Link" fire in the northwest. Smaller fires were reported through the southwest, and on Maria Island. The total area burnt by the end of January was estimated at over 178 000 ha, or about 2.6% of Tasmania.

Communities near to the fires were repeatedly affected by thick smoke, which was also blown across different parts of the State, to Victoria and even to New Zealand. For example, a high-level but dense smoke plume from the Gells River fire was over Hobart on the 4th, and fires to the southwest

gave Hobart particularly high surface smoke concentrations on the evenings of the 29th and 30th and again on the morning of the 31st.

Bushfires in Victoria

The extreme temperatures and sudden changes in wind direction and strength produced conditions conducive to bushfires across eastern Victoria.

On the 4th, strong, hot northerly winds ahead of a cool change saw around 200 fires across Victoria, including a large fire near Rosedale in Gippsland that burnt through more than 550 hectares. The SES responded to over 100 reports of fallen trees and 22 incidents involving damages to buildings, mainly around the Melbourne and surrounding areas.

A complex fire in the Thomson catchment, just north of Mount Baw Baw, had burnt through about 2500 hectares by 30 January and about 4770 hectares by 1 February.

A bushfire 10 km north of Timbarra, in East Gippsland, began around the 16th and was believed to be started by a lightning strike. The fire was under control by the 26th and had burnt through over 13 000 hectares by the end of January though was still burning into February.

Hepburn, south of Grantville near Moe, was also affected by bushfires this month.

Heatwave across Australia

An extraordinary and unprecedented extended period of heatwaves over much of Australia began in early December 2018 and continued into January 2019. A persistence of stable and sunny conditions over much of the country, and a delayed onset of the Australian monsoon over northern Australia, created ideal conditions for heat build-up. This dome of hot air over the continent brought extreme heat to various areas as weather systems, particularly troughs, introduced hot air into different regions, with little penetration of cooler air from the south to disrupt the hot, continental air mass.

Numerous sites set records for consecutive days at or above 40 °C including Cloncurry and Camooweal in Queensland's northwest; Cloncurry with 43 days in a row (ending 27 January 2019), and Camooweal with 40 days in a row (ending 24 January 2019). Birdsville (in the Channel Country) had a record run of 10 days at or above 45 °C (12 to 21 January), beating the previous record of 6 days set in both 2004 and 2013.

Many other sites reported their highest daily maximum or minimum temperature on record for

January, or for any month. The hottest overnight temperature was recorded at Wanaaring (Borrona Downs AWS), in New South Wales' northwest, with 36.6 °C in the 24 hours to 9 am on the 26th and was a new highest minimum temperature ever recorded in Australia.

In South Australia, all-time maximum temperature records were broken at two locations in the west of the State on the 23rd. On the 24th, 41 all-time maximum temperature records were broken or equalled and many by a significant margin in the State's southeast. Impacts on the wider community, including power infrastructure, agriculture and the public's wellbeing, stretched resources of utilities, health agencies and the emergency services.

There were reports of significant impacts on wildlife due to heat stress. On the 23rd, more than 90 wild horses were found dead in a dried up waterhole about 90 km east of Alice Springs, in a place called 'Deep Hole'. It is believed that the horses entered 'Deep Hole' to find water, and the prolonged extreme temperatures contributed to the deaths.

Heat stress killed almost a third of the native endangered flying fox population in eastern Victoria after extreme weather on the 25th. Victoria's Department of Environment, Land, Water and Planning estimated about 1400 of the animals perished near Bairnsdale and another 900 were found dead near Maffra.

As heatwave conditions continued across Victoria, the extreme temperatures soared on the 25th and about 200 000 homes across the State were left without power at the request of the Australian Energy Market Operator to cope with the demand on the grid.

Further information about the heatwaves that have affected the country can be found in the Special Climate Statement 68 [Widespread heatwaves during December 2018 and January 2019](#).

Flooding in northern Queensland

Heavy rainfall was associated with an intense and slow-moving monsoon low over northern Queensland that persisted from the last week of January into February.

Heavy rain began on 26 January and continued into early February. The rain began in areas of the North Tropical Coast and Tablelands, and the Herbert and Lower Burdekin districts. Over the following days, heavy falls had spread further south to the Central Coast and Whitsundays and inland across the northwestern regions of the State.

Major flooding occurred in coastal communities between Daintree and Mackay. Flash flooding and swift water rescues occurred around Black River and Bluewater Creek to the northwest of Townsville, with rainfall totals of more than 200 mm in three hours. Heavy rainfall continued around Townsville and the Herbert and Lower Burdekin into February and heavy falls were also experienced in the vicinity of the low pressure system (in the Northwest district).

Further information on the flooding can be found in the Special Climate Statement 69 [An extended period of heavy rainfall and flooding in tropical Queensland](#).

Tropical cyclones Penny and Riley

The tropical low, which would become tropical cyclone *Penny*, emerged over the northwest Coral Sea in late December and crossed Cape York Peninsula south of Lockhart River on the 30th. The low tracked back east and reached tropical cyclone strength over the northwest region in the Gulf of Carpentaria on the morning of 1 January 2019, and soon made landfall south of Weipa in the afternoon. *Penny* and its remnants, remained active over the Coral Sea and Queensland's tropical east coast until the 9th (see the [preliminary report](#) for more details). A 0.8 metre storm surge was recorded at Weipa, and there were reports of uprooted trees, flooded roads, vegetation damage and minor property damage. The SES received two calls for assistance. The remnants of *Penny* later brought heavy rainfall to the northern and central east coasts of Queensland.

Another tropical low was first identified on the 21st to the north of the Kimberley and was later named tropical cyclone *Riley* early on the 24th when located to the northwest of Broome. *Riley* remained offshore during its life span and had minimal impacts on the northwest coastal communities, but did bring isolated very heavy falls along the northwest Kimberley coast on the 23rd.

Severe wind gusts in southwest Western Australia

A cut-off low pressure system developed near the far southwest of Western Australia during the evening on the 22nd, producing unseasonal moderate to heavy falls to the far southwest. Severe wind gusts were recorded at Cape Naturaliste, Busselton and Cape Leeuwin. The highest gust was 104 km/h at Cape Naturaliste on the 23rd.

Thunderstorms across northern Australia

Numerous severe thunderstorms impacted the Northern Territory during January. Rabbit Flat, in the Tanami district, recorded a gust of 131 km/h on the

3rd. On the 6th, a severe thunderstorm tracked across the Darwin area and gusts of 90 to 100 km/h were recorded around Tindal and Darwin. Strong wind gusts were reported at Jabiru Airport as further severe thunderstorms tracked across the Top End with 109 km/h and 102 km/h recorded on the 10th and 11th, respectively.

Seasonal thunderstorms were active in the Kimberley and occasionally in the Pilbara in early January. Severe wind gusts were reported almost daily during the first seven days of the month. Severe thunderstorms were reported again in the Kimberley and Pilbara in late January, and the highest wind gust was 113 km/h at Marble Bar on the 31st.

On the 26th, a severe thunderstorm produced 87.8 mm of rain in 1 hour at Wandie Creek, near Katherine in Western Australia.

On the 31st, 109 mm of rain fell in 2 hours at Upper Adelaide River, in the Top End of the Northern Territory while a 94 km/h wind gust from a severe thunderstorm was recorded at Victoria River Downs.

Severe thunderstorms in New South Wales

On the 5th, a severe thunderstorm produced strong winds and brought down power lines in Punchbowl (in the southwestern suburbs of Sydney); and a man died after stepping on a fallen power line.

More severe thunderstorms cut power in central regions of New South Wales on the 10th. On the

11th, widespread showers and thunderstorms developed along a trough extending through inland New South Wales from the northwest to the southeast and another trough through central parts of the coast and ranges. Moderate falls were recorded across the ranges (away from the northeast), and hail was reported in Canberra.

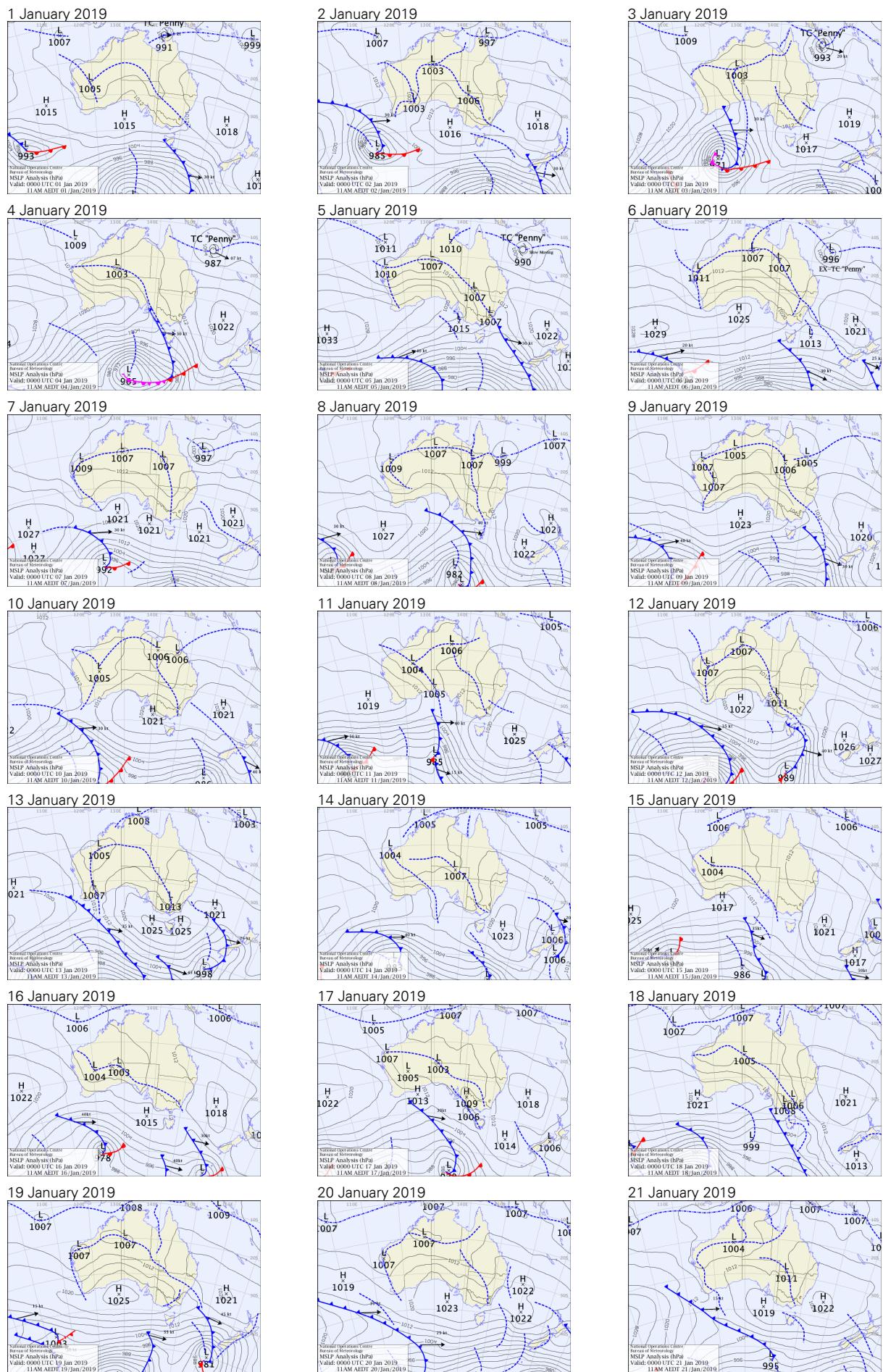
Thunderstorms and wind gusts in Victoria

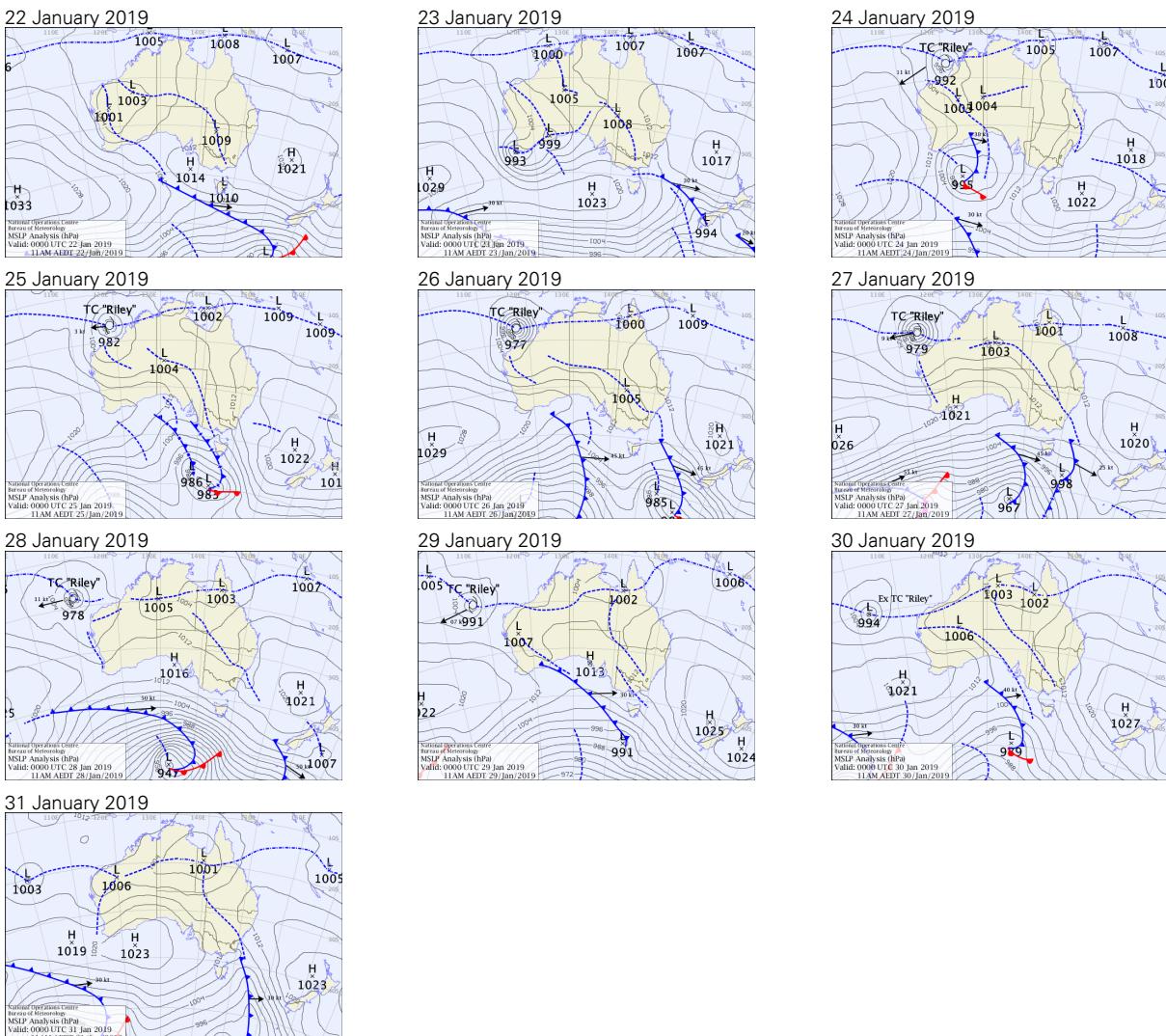
Thunderstorms associated with a fast-moving cold front and low pressure trough produced heavy rain and damaging winds across eastern and central Victoria on the 30th. Wind gusts exceeding 70 km/h were recorded at many sites across the State, with the strongest January 113 km/h at Laverton RAAF. Glencairn in the Gippsland high country recorded 38 mm of rain in one hour and Mount Wombat (near Euroa) recorded 26 mm in half an hour. The SES reported more than 800 calls for assistance, mostly due to wind damage. Also on the 30th, dust raised by strong winds reduced visibility in Melton, in the northwest of Great Melbourne.

Severe thunderstorms in South Australia

Gusty thunderstorms developed across a broad area of northern South Australia in a very hot and fairly dry airmass during the afternoon on 23 January. One of these thunderstorms produced a wind gust to 96 km/h at Oodnadatta.

Synoptic analyses and summary





Synoptic summary

A "blocking" high pressure system over the Tasman Sea moderated the incursion of cold fronts into southern Australia for much of the month, whilst also directing warm air from the north and northwest into the southeast. Broad surface troughs over the northern half of the continent were another feature, as was the monsoon trough, although the monsoon did not reach Darwin until the 23rd.

At the start of the month, a tropical low that had tracked westwards across the Cape York Peninsula intensified and was named tropical cyclone *Penny* early on the morning of the 1st. After a U turn towards the Peninsula's west coast, the system made landfall on the afternoon of the 1st near Weipa, weakened to a tropical low, and tracked eastwards across the Cape York Peninsula emerging in the northwest Coral Sea on the 2nd. The monsoon trough extended from the northern Coral Sea to the Gulf of Carpentaria, with *Penny* re-intensifying early on the 3rd. Over the next few days, *Penny* tracked further across the Coral Sea and peaked as a category 2

strength system on the 5th. By the 6th, *Penny* slowly weakened and was downgraded to a tropical low as it became removed from the monsoonal flow to the north of the system.

Broad surface troughs, with numerous embedded low pressure systems, sat over most of Australia at the start of the month. A cold front tracked across southern Australia, brushing the southern Western Australian coast and moving across the southeast on the 5th. A surface trough extended across northern Western Australia, through the Top End to northwestern Queensland, and down to the central coast of New South Wales, linking to the cold front over the Tasman Sea.

The remnants of *Penny* tracked back towards the Queensland east coast over the next few days and the system made landfall near Bowen on the 9th, with heavy rainfall in areas of central and northern Queensland on the days following landfall. On the 10th, a surface trough extended from northwest Queensland to eastern Victoria, with another trough

just off the central coast of New South Wales. Several surface troughs dominated much of Australia as a high pressure system tracked across Tasmania and established in the central Tasman Sea from the 13th to the 18th.

On the 18th, a cold front tracked across southern Victoria and Tasmania and a developing low pressure system, southeast of Tasmania, directed strong southwesterly winds over the State. Further north, a high pressure ridge along the east coast directed moist onshore flow over Queensland's north tropical coast. A series of troughs across inland northern Australia and into Queensland, focused further showers over the Top End in the Northern Territory and over Queensland's northern and eastern Peninsula region until the 20th.

A high pressure system over western Bass Strait extended a ridge to another high pressure system located over the Tasman Sea from around the 21st. The high in the Tasman Sea remained dominant for several days.

From the 21st, a broad trough lingered through northern and central Western Australia ahead of another low pressure system developed over southwestern parts of Western Australia. The trough moved eastwards across the Western Australian and South Australian borders. An associated cloudband extended from western South Australia through to

western New South Wales and to southwestern Queensland. Warm, humid air from onshore flow, in addition to the trough, led to showers in central and eastern districts of New South Wales between the 20th and 24th. In the north, a broad area of low pressure, combined with moist air generated further showers and thunderstorms across the Top End and northern Western Australia.

By the 23rd, the monsoon trough stretched across tropical northern Australia and remained until early February. A low pressure system embedded in the trough over Western Australia's far north became tropical cyclone *Riley* on the morning of the 24th. Tropical cyclone *Riley* lingered off the Pilbara coast and slowly tracked west and dissipating by the 30th.

Meanwhile, a tropical low, the system responsible for the unprecedented flooding in northern Queensland, was first identified over the northwestern Cape York Peninsula on the 23rd. The low lingered off the west coast before tracking southeast and crossing Cape Keerweer on the 26th. The following two weeks, till 7 February, the slow-moving low tracked south to the southern Gulf Country then east through the Northern Goldfields district.

In the south, a strong cold front passed over Tasmania and Victoria on the 25th followed by a westerly flow and a high pressure system behind the front remained in the Bight at the end of the month.

Temperatures

Australia experienced exceptionally warm temperatures during January. Mean, maximum and minimum temperatures were all warmer than average across nearly all of Australia with near-average or cooler than average temperatures only observed in northeastern Queensland, across west coast and parts of south coast Western Australia, and other smaller areas in the Kimberley and Top End.

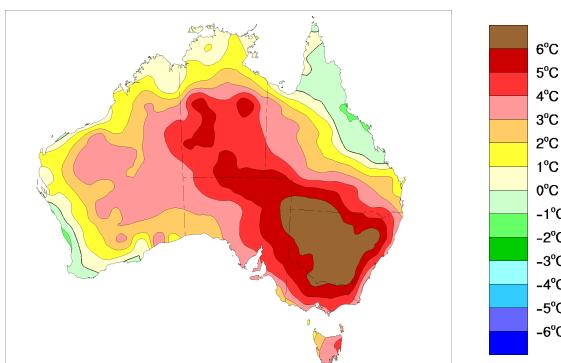
Mean temperatures for January were the warmest on record for all States and the Northern Territory, except South Australia and Western Australia where they were second-warmest.

The national mean temperature was 2.90 °C above average. Maximum temperatures were 3.35 °C above average and minimum temperatures were 2.45 °C above average.

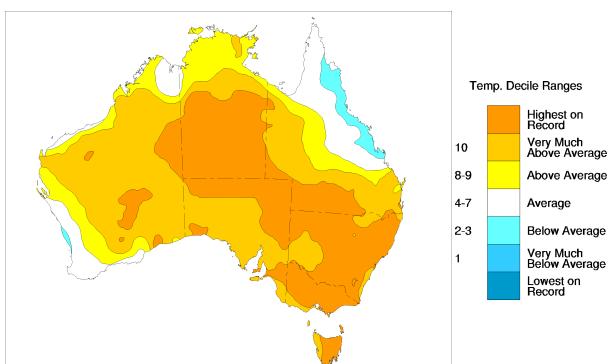
Maximum temperatures

January mean maximum temperatures were highest on record for the southern two-thirds of the Northern Territory, extending to adjacent eastern parts of Western Australia, northern and eastern South Australia, western and southern Queensland, most of New South Wales, Victoria and Tasmania, and also for patches of inland southern Western Australia.

Anomalies of mean daily maximum temperature in January 2019



Decile rank of mean daily maximum temperature in January 2019



In area-averaged terms, maxima were the highest on record for January for every State and Territory, except for Queensland that experienced its fifth-highest on record.

Severe to locally extreme heatwave conditions moved through large inland areas of the country during the first week of the month. The heat began as a low pressure system over southern Western Australia and the associated low pressure trough extended from the Pilbara in Western Australia through southern parts of the Northern Territory and down into southeastern Australia. Much of South Australia's southern regions observed daytime temperatures more than 12 degrees warmer than average with Adelaide reaching 42.3 °C on the 3rd. The extreme heat was then directed over southern New South Wales, Victoria and Tasmania by the 4th, as Canberra reached 38.1 °C, Melbourne 42.6 °C, and Hobart 34.0 °C. A cool change came as a cold front tracked over southeastern Australia the same day, and temperatures shifted from more than 12 degrees warmer than average to up to 8 degrees cooler average.

Milder temperatures were experienced in southern regions of the country during the second week of January, but it remained very hot in the country's northwest. Temperatures began to build again by the 10th as a high pressure system in the Tasman Sea directed warm north to northwesterly airflow into southeastern Australia. Heatwave conditions were generally maintained until around the 18th. The most intense heat nationally was experienced between the 12th and the 16th, with the nationally-averaged maximum temperature exceeding 40 °C on each of these days. There was a brief relief of hot conditions in parts of southern Australia between the 18th and 19th as a trough brought a cool change, before another high pressure system established in the Tasman Sea by the 20th.

Southwest Western Australia saw cooler conditions between the 22nd and 24th where much of the South West Land Division experienced daytime temperatures 8 to 12 degrees below average. These milder conditions came about as a low pressure system near the southwest corner of Western Australia brought unseasonably cool, wet and windy conditions.

Extremely high temperatures impacted southern and southeastern Australia and large areas saw daytime temperatures once again up to 12 degrees warmer than average from around the 22nd till the 26th. Port Augusta Airport in South Australia reported the

highest daytime temperature for the month for Australia, 49.5 °C on the 24th, which was the equal ninth-hottest temperature ever recorded for Australia for any month.

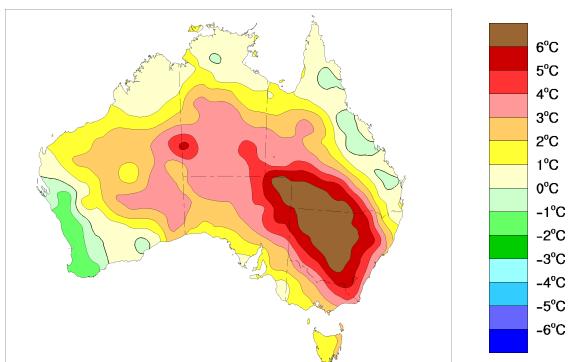
A few days later, cooler conditions entered South Australia, Victoria and southern New South Wales between the 27th and 28th as a high pressure system in the Bight directed cool air across inland regions.

A low pressure trough extended from inland New South Wales towards northeastern Victoria and brought warm temperatures (though not as extreme as the previous heat events) for southern South Australia, southern New South Wales and much of Victoria and Tasmania in the last few days of January. A monsoon trough developed late in January and established across the tropics by the 26th and northern Queensland experienced cooler than average daytime temperatures around this time.

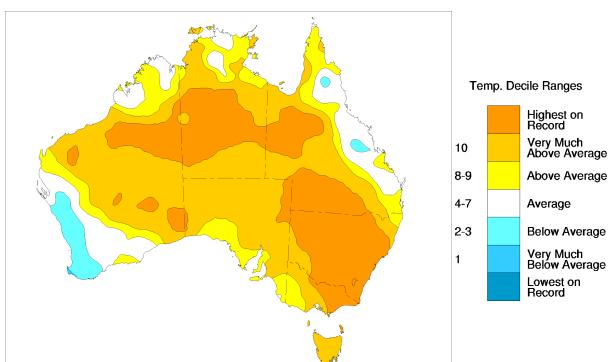
Minimum temperatures

Mean minimum temperatures were highest on record for the month for a large area of inland northern Australia, and a large area spanning southern Queensland to the eastern half of Victoria.

Anomalies of mean daily minimum temperature in January 2019



Decile rank of mean daily minimum temperature in January 2019



January mean minimum temperatures were highest on record for Queensland, New South Wales, Victoria, and the Northern Territory. They were third-highest for Tasmania, fourth-highest for South Australia and equal fifth-highest for Western Australia.

At the start of the month, nights were warm across most of Australia, except along the east coast of Queensland, west coast of Western Australia and across the Kimberley, across the Top End of the Northern Territory and southern coast of South Australia. Minimum temperatures were more than 8 degrees warmer than average in some parts of northwestern New South Wales and adjacent northeastern South Australia, and in inland Western Australia.

Warm conditions were building across southeastern Australia from around the 11th as a series of troughs located over inland central Australia and northern inland New South Wales and through central parts of the New South Wales coast.

By the 18th, northern and eastern South Australia, southwestern Queensland, much of New South Wales, Victoria, and Tasmania experienced very warm nights, between 6 to 10 degrees warmer than average. Some areas across western New South Wales were up to 12 degrees warmer than average. The overnight temperature at Noona (between Cobar and Wilcannia) in the Upper Western district of New South Wales was 35.9 °C, the highest minimum temperature ever recorded in Australia (this record was broken again a few days later).

Clear skies and light winds under a high pressure system generated cooler conditions and the coolest overnight temperature for January was -0.5 °C at Butlers Gorge in Tasmania's Central Plateau District on the 13th.

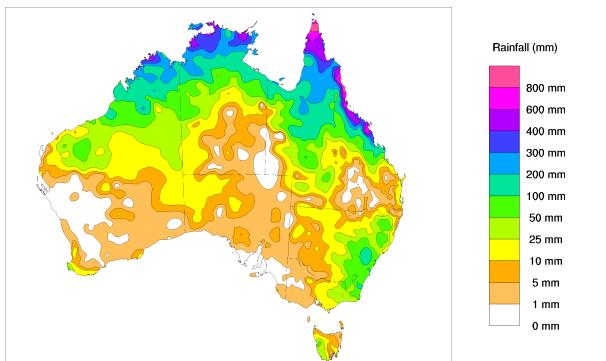
Along the west and southwest coast of Western Australia, overnight temperatures throughout January at some locations were the coolest on record. This was a result of cooler than average sea surface temperatures along these coasts, and rare occurrences of late seabreezes.

Nights between the 24th and 26th were exceptionally warm across most of Victoria and New South Wales and northeastern South Australia. Moomba Airport in South Australia recorded 36.1 °C, and Wanaaring (Borrone Downs AWS), in New South Wales northwest, recorded 36.6 °C in the 24 hours to 9 am on the 26th. These temperatures surpassed Noona's newly minted national overnight temperature record (35.9 °C on the 18th) to become the highest minimum temperature ever recorded in Australia.

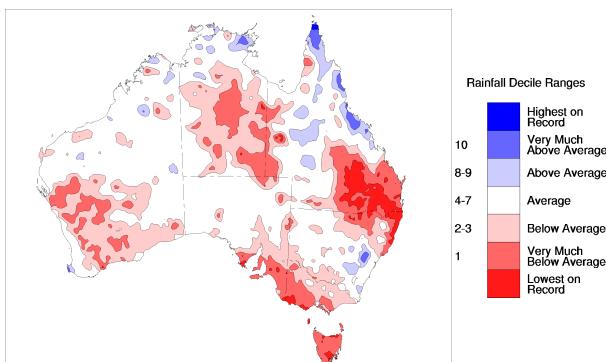
Rainfall

Rainfall was below or very much below average across the southeastern quarter of Queensland, northeastern New South Wales, Victoria and adjacent southern New South Wales, southern South Australia, Tasmania, most of the southern half of Western Australia, most of the Northern Territory (away from the Top End) and adjacent western Queensland.

Total rainfall in January 2019



Decile rank of total rainfall in January 2019



Above average rainfall was observed along the coast of central and northern Queensland, and small pockets in central northern Queensland and the Top End, and central eastern New South Wales. Late in the month, the monsoon trough brought flooding to Queensland's north tropical coast.

Tropical cyclone *Penny* developed early on the 1st in the Gulf of Carpentaria and made landfall by the afternoon on the western side of Cape York Peninsula producing moderate to heavy falls in the area. Tropical cyclone *Penny* moved quickly eastwards across the far north Peninsula as a tropical low and regained tropical cyclone strength in the northwest Coral Sea by the 3rd.

At the same time, a broad surface trough extended from southwest Queensland through to southeast New South Wales and generated thunderstorms through southwest Queensland, northwest and central parts of New South Wales.

Towards the end of the first week of January, broad areas of low pressure lingered over northern Australia, and combined with very moist and unstable air to produce isolated showers and embedded thunderstorms.

From the 6th, widespread light falls from thunderstorms and showers were recorded along a trough that extended from inland Queensland to southeastern Australia. While, the slow-moving ex-tropical cyclone *Penny* continued to bring moderate falls to Queensland's central coast. Remnants of *Penny*, in the form of low and middle level cloud, stretched over eastern Queensland and northeastern New South Wales and brought moderate to locally heavy falls from the 8th to 9th. Meanwhile, a cold front that tracked across Tasmania on the 9th and generated light falls to western Tasmania.

Between the 10th and 12th, further thunderstorm activity was generated along a series of troughs spanned over central Queensland, through inland New South Wales and eastern Victoria, and across northern Australia.

Persistent troughs across northern Australia generated isolated thunderstorms and moderate falls over the tropical north of the country for much of the month. By the 15th, an extensive cloudband, associated with a surface trough and cold front, extended from central Western Australia, through South Australia to Victoria, New South Wales and Tasmania and produced thunderstorms and localised light falls.

Around the 21st, clouds to the north of Australia combined with the broad area of low pressure over northern Australia and resulted in enhanced convective activity over the Top End of the Northern Territory and northern regions in Western Australia. Meanwhile, in southeastern Australia, a surface trough combined with an upper level disturbance and produced thunderstorms and moderate falls in central and northeast New South Wales.

By the 23rd, the monsoon trough had developed across the northern tropics and enhanced convective activity. The monsoon onset at Darwin on the 23rd occurred nearly a month later than usual, and was only two days earlier than the previous latest onset date on record (25 January in 1973) at Darwin.

In the west, a low pressure system produced thunderstorms with moderate falls in far southwest Western Australia, while an active inland trough triggered an extensive cloudband over central to

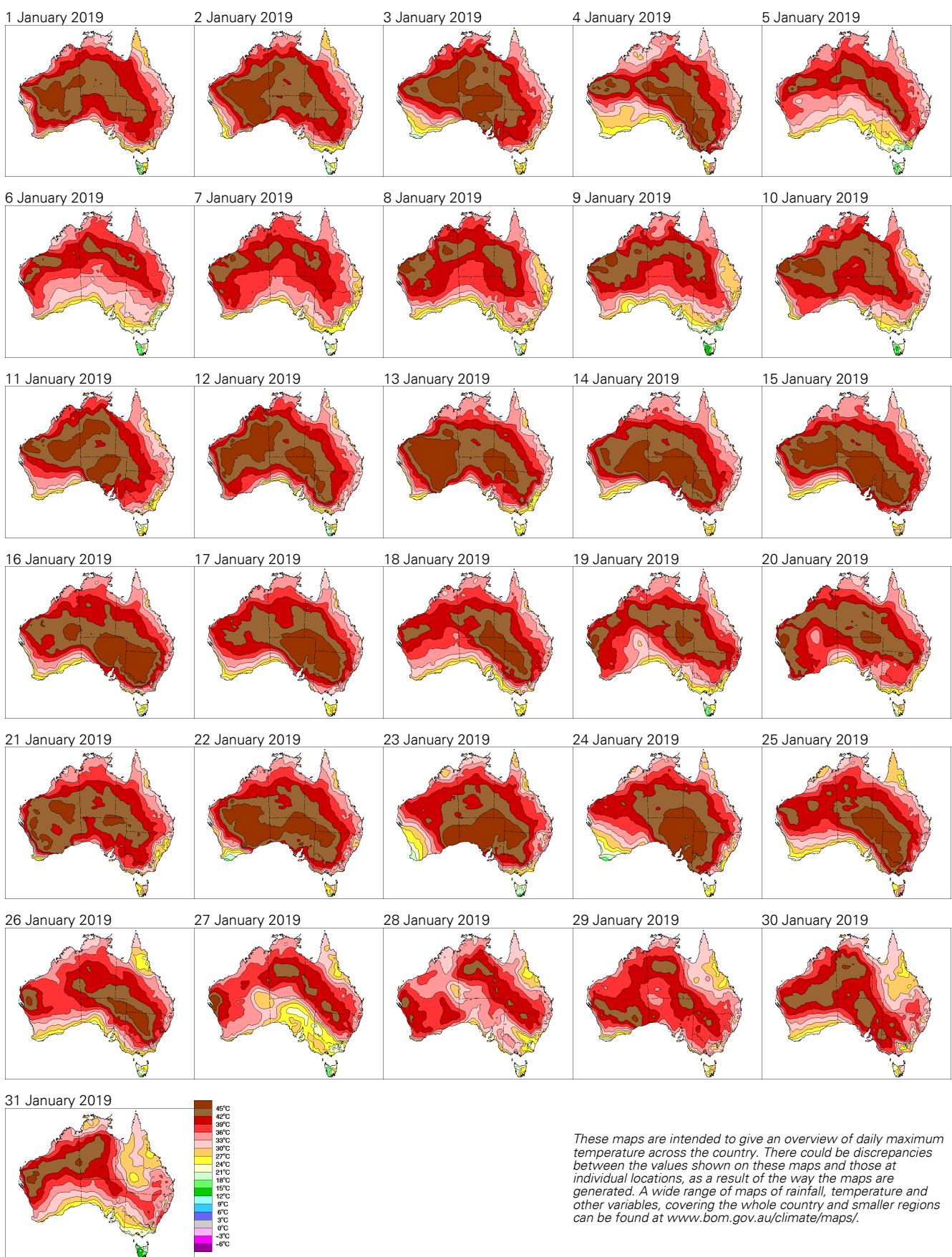
eastern parts of the State that brought isolated moderate falls.

In the final week of the month, there were two tropical low pressure systems embedded in the monsoon trough, one off the west coast of the Cape York Peninsula, and the other north of the Kimberley. The latter system intensified and developed into tropical cyclone *Riley* on the 24th northwest of

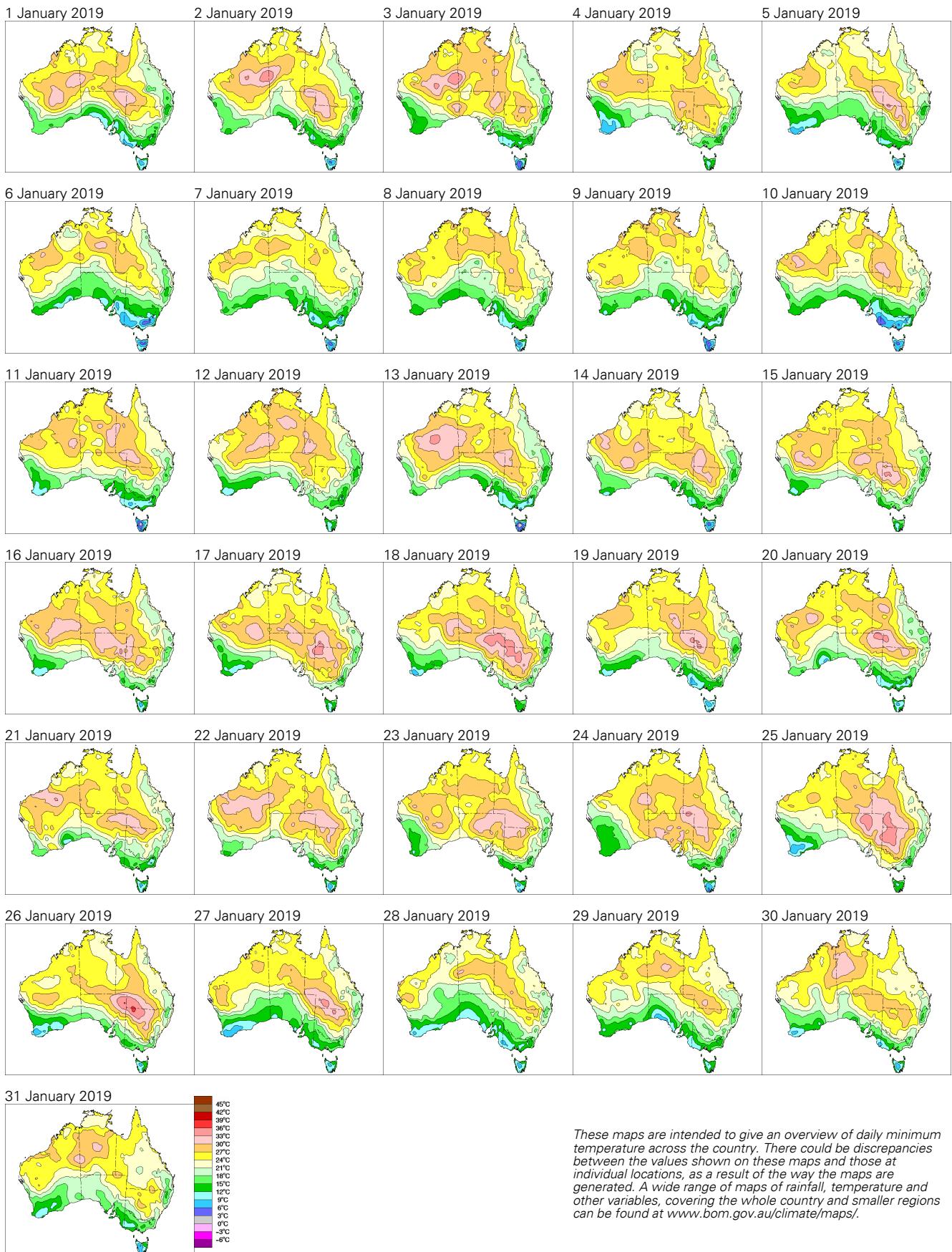
Broome in the west Kimberley region. While the other low pressure system lingered over northern Queensland and brought exceptionally heavy rain over northwestern to north coast Queensland from around the 26th and continued into early February. The highest daily rainfall totals were reported between the 27th and 29th along the North Tropical Coast with totals greater than 400 mm.

Daily maps

Daily maximum temperature maps

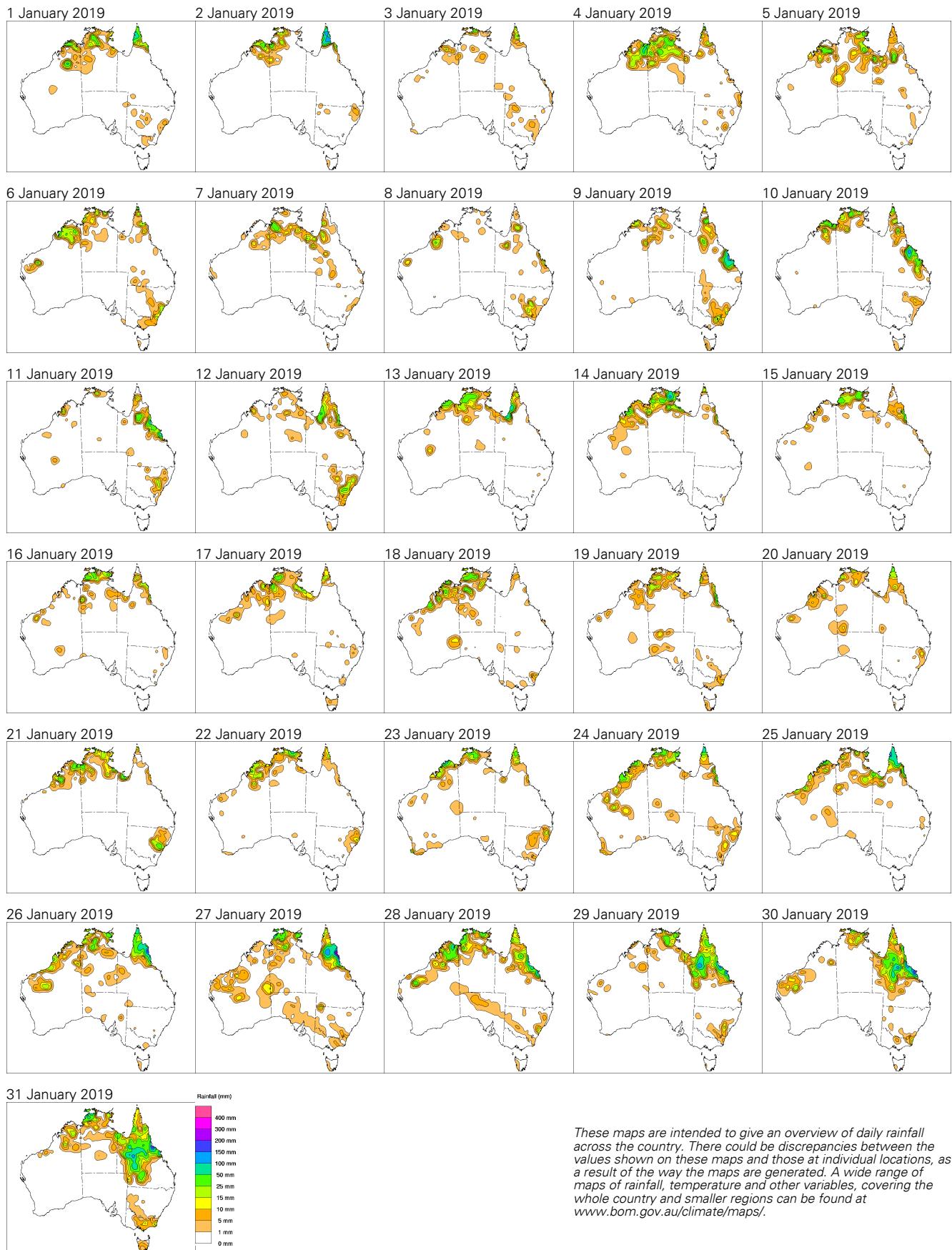


Daily minimum temperature maps



These maps are intended to give an overview of daily minimum 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/.

Daily rainfall maps



Records

Record highest January daily maximum temperature				
		New record	Old record	Years of record
Western Australia				
011003	Eucla	48.6 on 23rd	48.2 on 3rd in 2013	100
011019	Eyre	48.5 on 2nd	47.7 on 2nd in 2013	31
200790	Christmas Island Aero	31.6 on 19th	30.7 on 26th in 2016	46
Northern Territory				
015511	Curtin Springs	46.5 on 4th	46.4 on 11th in 2013	55
015590	Alice Springs Airport	45.6 on 3rd	45.2 on 3rd in 1960	78
015603	Kulgera	47.0 on 3rd	44.9 on 8th in 2013	38
015635	Yulara Airport	46.8 on 3rd	46.4 on 11th in 2013	32
South Australia				
016065	Andamooka	48.1 on 24th	47.8 on 25th in 2011	49
017110	Leigh Creek Airport	46.9 on 24th	46.3 on 6th in 2013	36
018012	Ceduna AMO	48.6 on 24th	47.9 on 2nd in 1990	77
018014	Cleve	46.0 on 24th	45.2 on 31st in 1968	63
018040	Kimba	47.0 on 24th	46.0 on 4th in 2013	52
018069	Elliston	44.3 on 23rd	43.2 on 14th in 2014	58
018120	Whyalla Aero	48.5 on 24th	47.2 on 4th in 2013	35
019017	Hawker	46.0 on 24th =	46.0 on 19th in 2003	47
019062	Yongala	43.5 on 24th =	43.5 on 28th in 2009	62
022008	Maitland	46.3 on 24th	45.0 on 28th in 2009	37
023000	Adelaide (West Terrace / ngayirdapira)	46.6 on 24th	46.1 on 12th in 1939	95
023013	Parafield Airport	47.7 on 24th	46.4 on 25th in 2003	63
023034	Adelaide Airport	45.8 on 24th	44.1 on 4th in 2013	64
023083	Edinburgh RAAF	47.5 on 24th	46.2 on 23rd in 1982	47
023090	Adelaide (Kent Town)	47.7 on 24th	45.7 on 28th in 2009	42
023343	Rosedale (Turretfield Research Centre)	47.2 on 24th	46.4 on 31st in 1968	58
023733	Mount Barker	44.5 on 24th =	44.5 on 28th in 2009	62
024511	Eudunda	45.0 on 24th	43.5 on 28th in 2009	55
024518	Meningie	46.1 on 24th	45.1 on 28th in 2009	53
New South Wales				
047048	Broken Hill Airport AWS	46.3 on 16th	45.3 on 14th in 2001	31
055136	Woolbrook (Woolbrook Road)	38.7 on 16th	37.5 on 3rd in 2014	47
056013	Glen Innes Ag Research Stn	36.5 on 19th	36.0 on 3rd in 2014	45
061051	Murrurundi (Haydon Street)	41.6 on 16th	41.2 on 3rd in 2014	54
062013	Gulgong Post Office	42.7 on 16th	42.3 on 3rd in 2014	45
063005	Bathurst Agricultural Station	40.2 on 17th =	40.2 on 12th in 2013	53
063254	Orange Agricultural Institute	37.3 on 16th	37.2 on 12th in 2013	44
070080	Taralga Post Office	39.0 on 17th =	39.0 on 7th in 2018	58
070263	Goulburn TAFE	40.7 on 26th	40.1 on 30th in 2003	42
070278	Cooma Visitors Centre	39.5 on 16th	39.0 on 31st in 2009	45
072023	Hume Reservoir	44.0 on 25th	43.4 on 24th in 1982	53
072043	Tumbarumba Post Office	40.8 on 16th	40.5 on 16th in 2014	51
072150	Wagga Wagga AMO	45.2 on 17th	44.8 on 23rd in 2001	78
073007	Burrinjuck Dam	43.1 on 17th	42.5 on 16th in 2014	54
074106	Tocumwal Airport	46.5 on 25th	45.8 on 3rd in 1990	49
075032	Hillston Airport	47.0 on 16th	46.0 on 1st in 2006	61
075039	Lake Cargelligo Airport	47.7 on 17th	47.0 on 3rd in 1973	48
075041	Griffith Airport AWS	46.4 on 16th	46.0 on 23rd in 2001	43

= indicates the new record equals the old one.

Record highest January daily maximum temperature

		New record	Old record	Years of record
Victoria				
076047	Ouyen (Post Office)	46.7 on 4th	46.6 on 31st in 1968	63
076064	Walpeup Research	46.6 on 4th =	46.6 on 31st in 1968	53
080015	Echuca Aerodrome	46.9 on 25th	45.6 on 13th in 2016	63
080023	Kerang	47.6 on 25th	46.1 on 10th in 1939	106
080091	Kyabram	47.1 on 25th	44.8 on 13th in 2016	54
081049	Tatura Inst Sustainable Ag	44.8 on 25th	43.5 on 31st in 2009	55
082042	Strathbogie	41.9 on 16th	41.5 on 24th in 1982	42
085072	East Sale	44.6 on 25th =	44.6 on 24th in 1982	74
085279	Bairnsdale Airport	45.8 on 25th	44.6 on 17th in 2014	38
085280	Morwell (Latrobe Valley Airport)	45.4 on 25th	45.1 on 30th in 2009	36
086282	Melbourne Airport	46.0 on 25th	44.6 on 25th in 2003	49
088023	Lake Eildon	43.3 on 25th	43.0 on 31st in 2009	49
088043	Maryborough	44.8 on 25th	43.8 on 14th in 2014	55
088109	Mangalore Airport	46.3 on 25th	44.6 on 31st in 2009	61
088110	Castlemaine Prison	45.0 on 25th	43.7 on 31st in 1968	48
090171	Portland (Cashmore Airport)	42.5 on 24th	42.1 on 4th in 2013	37

= indicates the new record equals the old one.

Record highest January mean maximum temperature

		New record	Old record	Years of record
Western Australia				
011019	Eyre	31.0	30.7 in 2010	60
013017	Giles Meteorological Office	40.5	40.3 in 1979	63
Northern Territory				
015131	Elliott	41.2	40.8 in 1985	38
015135	Tennant Creek Airport	41.6	40.4 in 2008	50
015511	Curtin Springs	42.3	41.3 in 2006	55
015590	Alice Springs Airport	41.5	40.0 in 2006	78
015602	Jervois	42.6	42.1 in 1990	50
015603	Kulgera	42.0	40.5 in 2006	38
015635	Yulara Airport	42.4	41.3 in 2013	32
South Australia				
017110	Leigh Creek Airport	40.7	39.9 in 2006	36
018069	Elliston	29.6	29.5 in 2001	58
018106	Nullarbor	30.9	30.4 in 2007	32
022018	Warooka	30.1	30.0 in 2001	59
022803	Cape Willoughby	24.1	23.8 in 2018	52
023090	Adelaide (Kent Town)	33.8	33.7 in 2001	42
023733	Mount Barker	32.1	31.9 in 2001	118
024024	Loxton Research Centre	36.5	35.7 in 2001	35
024511	Eudunda	34.2	34.1 in 2001	55
024518	Meningie	29.8	29.1 in 2001	53
026091	Coonawarra	30.6 =	30.6 in 2001	34
Queensland				
029127	Mount Isa Aero	40.3	40.2 in 1971	53
039314	Seventeen Seventy	31.1	30.7 in 2015	32
040043	Cape Moreton Lighthouse	29.5 =	29.5 in 2017	110
040082	University of Queensland Gatton	35.2 =	35.2 in 1942	97
040717	Coolangatta	30.1 =	30.1 in 2010	32
041175	Applethorpe	31.7	29.3 in 2017	50
041359	Oakey Aero	33.9	33.7 in 2017	46
044010	Bollon Mary St	40.0	39.4 in 2017	108
044021	Charleville Aero	39.2 =	39.2 in 2018	77
044026	Cunnamulla Post Office	41.4	40.2 in 2018	112

= indicates the new record equals the old one.

Record highest January mean maximum temperature

		New record	Old record	Years of record
New South Wales				
047016	Lake Victoria Storage	37.7	37.5 in 1968	84
047048	Broken Hill Airport AWS	38.3	37.8 in 2001	31
048015	Brewarrina Hospital	41.8	40.7 in 1932	96
048027	Cobar MO	41.3	38.5 in 2001	57
050031	Peak Hill Post Office	38.7	37.1 in 2013	52
050052	Condobolin Ag Research Stn	39.8	37.8 in 1981	55
051039	Nyngan Airport	40.5	39.2 in 2013	97
051049	Trangie Research Station AWS	39.7	38.7 in 1939	76
052020	Mungindi Post Office	40.3 =	40.3 in 2017	96
055024	Gunnedah Resource Centre	38.1	37.3 in 1952	69
055049	Quirindi Post Office	38.5	37.3 in 1952	99
055136	Woolbrook (Woolbrook Road)	33.8	31.6 in 1981	47
056013	Glen Innes Ag Research Stn	30.6	28.8 in 2018	45
056018	Inverell Research Centre	34.6	34.0 in 1952	61
056229	Guya Hospital	28.7	26.4 in 2018	33
057095	Tabulam (Muirne)	32.4	30.6 in 2003	49
060085	Yarras (Mount Seaview)	34.7	32.8 in 1969	51
061078	Williamtown RAAF	33.3	31.5 in 2017	69
061250	Paterson (Tocal AWS)	35.3	33.0 in 2018	45
062013	Gulgong Post Office	36.5	34.9 in 1981	45
063005	Bathurst Agricultural Station	34.0	32.8 in 1929	96
063063	Oberon (Albion St)	29.6	28.7 in 1952	46
064009	Dunedoo Post Office	37.9	36.0 in 1952	62
066037	Sydney Airport AMO	30.6	30.1 in 2017	80
066062	Sydney (Observatory Hill)	29.6 =	29.6 in 2017	161
066124	Parramatta North (Masons Drive)	32.0	31.7 in 2017	51
066137	Bankstown Airport AWS	32.3	31.8 in 2017	51
068192	Camden Airport AWS	33.3	33.1 in 2017	43
070080	Taralga Post Office	32.3	30.4 in 2017	59
070263	Goulburn TAFE	32.5	31.7 in 2017	42
070278	Cooma Visitors Centre	32.2	30.4 in 2009	45
071032	Thredbo AWS	21.1	19.3 in 2013	39
071041	Thredbo Village	26.8	24.7 in 2006	49
072023	Hume Reservoir	36.6	36.4 in 1939	88
072043	Tumbarumba Post Office	34.7	32.3 in 1979	51
072150	Wagga Wagga AMO	37.9	35.8 in 1979	78
073007	Burrinjuck Dam	36.3	35.8 in 1939	99
074106	Tocumwal Airport	37.1	36.6 in 1981	49
075039	Lake Cargelligo Airport	40.3	39.9 in 1939	98
075041	Griffith Airport AWS	39.1	37.3 in 2006	43
200839	Lord Howe Island Aero	27.9	27.3 in 2010	31

= indicates the new record equals the old one.

Record highest January mean maximum temperature

		New record	Old record	Years of record
Victoria				
076031	Mildura Airport	37.8	37.1 in 2001	73
076047	Ouyen (Post Office)	37.7	36.4 in 1939	82
076064	Walpeup Research	37.6	36.3 in 2018	71
078077	Warracknabeal Museum	35.2	34.6 in 2001	46
080015	Echuca Aerodrome	36.8	35.6 in 1908	138
080023	Kerang	37.5	36.6 in 1939	112
080091	Kyabram	36.3	33.9 in 2018	54
081049	Tatura Inst Sustainable Ag	34.5	32.9 in 1981	55
082039	Rutherglen Research	37.2	35.8 in 1939	106
082042	Strathbogie	32.7	31.2 in 1981	42
082076	Dartmouth Reservoir	34.4	32.8 in 2006	41
082138	Wangaratta Aero	36.3	34.9 in 2006	32
083024	Mount Buller	22.3	20.6 in 2013	32
084070	Point Hicks (Lighthouse)	27.0	26.8 in 1988	49
085072	East Sale	29.5	28.5 in 1988	74
085279	Bairnsdale Airport	28.6 =	28.6 in 1988	38
085280	Morwell (Latrobe Valley Airport)	31.7	30.1 in 2009	36
086038	Essendon Airport	30.2	29.7 in 1951	50
086104	Scoresby Research Institute	31.2	29.3 in 2018	61
086282	Melbourne Airport	30.4	29.7 in 2001	49
088023	Lake Eildon	34.1	32.3 in 2009	49
088109	Mangalore Airport	35.1	33.4 in 1988	61
088110	Castlemaine Prison	32.9	32.2 in 2018	48
089002	Ballarat Aerodrome	30.8	30.1 in 1908	111
089085	Ararat Prison	31.8	30.4 in 2001	50
090171	Portland (Cashmore Airport)	24.3 =	24.3 in 2018	37
090173	Hamilton Airport	30.7	30.2 in 2001	36
Tasmania				
091107	Wynyard Airport	24.3 =	24.3 in 2016	32
091219	Scottsdale (West Minstone Road)	26.0	25.6 in 1988	47
091237	Launceston (Ti Tree Bend)	27.3	26.9 in 1981	36
092012	Fingal (Legge Street)	27.4	26.6 in 2018	33
092019	Lake Leake (Elizabeth River)	23.6	22.0 in 2018	30
092027	Orford (Aubin Court)	25.2	24.5 in 1969	51
092045	Iarapuna (Eddystone Point)	25.3	24.3 in 2010	109
094008	Hobart Airport	26.3	25.2 in 2003	61
094020	Dover	24.0	23.7 in 2018	30
094029	Hobart (Ellerslie Road)	25.9	25.0 in 2003	137
094087	kunanyi (Mount Wellington Pinnacle)	17.2	15.9 in 2003	39
095003	Bushy Park (Bushy Park Estates)	28.3	27.8 in 1954	85

= indicates the new record equals the old one.

Highest January mean maximum temperature for at least 30 years			
		Observed this month	Most recent higher
South Australia			
023000	Adelaide (West Terrace / ngayirdapira)	33.0	33.6 in 1939 *
Queensland			
037010	Camooweal Township	41.3	41.9 in 1971 *
041095	Stanthorpe Leslie Parade	31.2	32.0 in 1952 *
041100	Texas Post Office	37.1	37.2 in 1985 *
043015	Injune Post Office	36.6	36.7 in 1980
New South Wales			
047019	Menindee Post Office	39.9	40.4 in 1939 *
049002	Balranald (RSL)	38.0	38.1 in 1939 *
056032	Tenterfield (Federation Park)	30.3	32.9 in 1952 *
058012	Yamba Pilot Station	28.9	30.7 in 1896
064008	Coonabarabran (Showgrounds)	37.0	38.8 in 1896 *
065034	Wellington (D&J Rural)	38.1	40.5 in 1932 *
074034	Corowa Airport	36.9	37.2 in 1939 *
075032	Hillston Airport	39.7	41.6 in 1960 *
Victoria			
079028	Longerenong	35.3	36.8 in 1908 *
084016	Gabo Island Lighthouse	23.7	24.1 in 1896
085096	Wilsons Promontory Lighthouse	23.9	24.4 in 1887
086077	Moorabbin Airport	29.0	29.5 in 1981
087031	Laverton RAAF	28.5	29.4 in 1981
088043	Maryborough	33.9	35.6 in 1908 *
Tasmania			
096003	Butlers Gorge	22.5 =	22.5 in 1961 *
* 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.			

Lowest January mean maximum temperature for at least 30 years			
		Observed this month	Most recent lower
Western Australia			
009114	Lancelin	26.5	26.2 in 1987 *
Queensland			
031037	Low Isles Lighthouse	30.5	29.9 in 1981
032004	Cardwell Marine Pde	29.5	28.7 in 1981
* note: there are gaps in the historical record at this site, so it is possible a lower value has gone unreported.			

Record lowest January daily minimum temperature			
	New record	Old record	Years of record
Western Australia			
010524	Brookton	6.5 on 4th	7.0 on 25th in 2001
Northern Territory			
014198	Jabiru Airport	20.3 on 11th	20.5 on 2nd in 1973
			52
			43

Record lowest January mean minimum temperature

		New record	Old record	Years of record
Western Australia				
009114 Lancelin		16.1 =	16.1 in 2015	53

= indicates the new record equals the old one.

Lowest January mean minimum temperature for at least 30 years

		Observed this month	Most recent lower month
Western Australia			
008137 Wongan Hills		16.3 =	16.3 in 1987 *

* 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.

Record highest January daily minimum temperature

		New record	Old record	Years of record
Western Australia				
007045 Meekatharra Airport		33.0 on 15th	32.9 on 3rd in 2004	69
009789 Esperance		25.3 on 21st	23.8 on 30th in 2007	50
010568 Hyden		26.5 on 13th	26.3 on 5th in 1977	45
Northern Territory				
014840 Wave Hill		31.1 on 30th	30.0 on 8th in 2013	46
015603 Kulgera		32.0 on 4th	31.8 on 17th in 1998	38
South Australia				
017043 Oodnadatta Airport		34.3 on 25th	34.2 on 28th in 2011	70
018106 Nullarbor		29.4 on 24th	28.5 on 30th in 2011	32
New South Wales				
047019 Menindee Post Office		33.4 on 25th	30.4 on 15th in 2001	59
047048 Broken Hill Airport AWS		33.6 on 25th	33.2 on 1st in 2006	31
048027 Cobar MO		32.6 on 18th	32.1 on 1st in 2006	57
050052 Condobolin Ag Research Stn		32.0 on 18th	30.7 on 7th in 2018	54
051039 Nyngan Airport		32.0 on 18th	30.7 on 1st in 2006	61
055049 Quirindi Post Office		27.8 on 27th	27.0 on 14th in 2017	52
055136 Woolbrook (Woolbrook Road)		23.9 on 27th	23.0 on 24th in 1993	47
064008 Coonabarabran (Showgrounds)		25.6 on 27th	25.0 on 18th in 2017	62
064009 Dunedoo Post Office		29.8 on 18th	27.0 on 18th in 2017	51
069022 Narooma (Marine Rescue)		22.0 on 16th =	22.0 on 28th in 2018	33
071032 Thredbo AWS		18.3 on 26th	17.1 on 5th in 2013	39
072023 Hume Reservoir		28.9 on 26th	26.3 on 10th in 1979	53
072043 Tumbarumba Post Office		25.9 on 5th	25.2 on 23rd in 2010	52
072150 Wagga Wagga AMO		29.8 on 17th	29.5 on 25th in 1973	78
075039 Lake Cargelligo Airport		33.9 on 18th	32.8 on 8th in 1969	48
075041 Griffith Airport AWS		30.5 on 25th	30.0 on 8th in 2013	44
Victoria				
082039 Rutherglen Research		29.3 on 25th	29.0 on 12th in 1982	102
082076 Dartmouth Reservoir		25.1 on 26th	24.4 on 25th in 1982	41

= indicates the new record equals the old one.

Record highest January mean minimum temperature

		New record	Old record	Years of record
Western Australia				
013030	Telfer Aero	28.4	28.2 in 1991	45
Northern Territory				
014142	Pirlangimpi Airport	25.8	25.6 in 2016	38
015131	Elliott	26.2	25.4 in 1990	38
015135	Tennant Creek Airport	28.3	27.1 in 1988	50
015602	Jervois	26.4	25.7 in 2013	50
Queensland				
030045	Richmond Post Office	25.6	25.5 in 1994	126
038003	Boulia Airport	28.6	27.8 in 2006	125
044010	Bollon Mary St	27.1	25.7 in 2017	107
044021	Charleville Aero	26.4	25.8 in 2006	77
044026	Cunnamulla Post Office	28.3	26.8 in 2017	112

= indicates the new record equals the old one.

Record highest January mean minimum temperature

		New record	Old record	Years of record
New South Wales				
048015	Brewarrina Hospital	26.8	25.1 in 1981	95
048027	Cobar MO	26.9	24.4 in 2006	57
050031	Peak Hill Post Office	24.3	22.9 in 2006	52
050052	Condobolin Ag Research Stn	25.4	22.9 in 1981	56
051039	Nyngan Airport	26.2	23.8 in 2006	97
051049	Trangie Research Station AWS	24.6	23.0 in 1939	76
052020	Mungindi Post Office	25.5	24.7 in 2017	94
055024	Gunnedah Resource Centre	24.0	22.0 in 1981	69
055049	Quirindi Post Office	22.4	20.0 in 2006	98
055136	Woolbrook (Woolbrook Road)	17.2	15.9 in 2017	47
056018	Inverell Research Centre	18.9	18.8 in 2017	61
060085	Yarras (Mount Seaview)	19.9	19.8 in 2017	51
061078	Williamtown RAAF	21.0	20.2 in 2017	69
061250	Paterson (Tocal AWS)	20.5	19.6 in 2017	46
062013	Gulgong Post Office	21.2	19.6 in 2017	45
063005	Bathurst Agricultural Station	18.4	16.8 in 1939	99
063063	Oberon (Albion St)	15.5	13.9 in 2017	46
064008	Coonabarabran (Showgrounds)	20.8	19.4 in 1981	139
064009	Dunedoo Post Office	22.6	20.4 in 2017	61
065034	Wellington (D&J Rural)	22.3	20.3 in 2017	100
066037	Sydney Airport AMO	21.4	21.2 in 2017	80
066062	Sydney (Observatory Hill)	21.7	21.6 in 2017	161
066124	Parramatta North (Masons Drive)	20.4	20.0 in 2017	52
066137	Bankstown Airport AWS	21.5	20.3 in 2017	51
068192	Camden Airport AWS	20.2	19.1 in 2017	43
069022	Narooma (Marine Rescue)	19.3	18.2 in 2017	33
070005	Bombala (Therry Street)	14.9	14.2 in 2003	95
070080	Taralga Post Office	16.4	14.5 in 2017	59
070263	Goulburn TAFE	18.0	16.2 in 2017	42
070278	Cooma Visitors Centre	14.5	13.7 in 2011	46
071032	Thredbo AWS	11.1	10.4 in 2006	39
071041	Thredbo Village	11.2	10.6 in 2006	48
072023	Hume Reservoir	22.4	20.8 in 1999	88
072043	Tumbarumba Post Office	16.9	15.6 in 2006	52
072150	Wagga Wagga AMO	22.3	19.7 in 2006	78
073007	Burrinjuck Dam	19.5	19.1 in 2006	99
073014	Grenfell (Manganese Rd)	21.3	21.1 in 1939	102
074034	Corowa Airport	19.8	19.7 in 1939	95
074106	Tocumwal Airport	20.0	19.1 in 1999	49
075039	Lake Cargelligo Airport	25.4	23.9 in 1939	96
075041	Griffith Airport AWS	22.4	20.9 in 2006	44
200839	Lord Howe Island Aero	22.2 =	22.2 in 2017	31

= indicates the new record equals the old one.

Record highest January mean minimum temperature

		New record	Old record	Years of record
Victoria				
081049	Tatura Inst Sustainable Ag	17.2	17.0 in 1981	55
082039	Rutherglen Research	18.5	18.0 in 1939	106
082076	Dartmouth Reservoir	18.1	16.5 in 1999	41
082138	Wangaratta Aero	17.3	16.5 in 1999	32
083024	Mount Buller	13.2	12.9 in 1993	32
084016	Gabo Island Lighthouse	18.5	18.2 in 2018	139
085072	East Sale	15.4	15.2 in 2018	74
085096	Wilsons Promontory Lighthouse	16.8	16.5 in 2018	140
085279	Bairnsdale Airport	15.4	15.1 in 1999	38
085280	Morwell (Latrobe Valley Airport)	15.1	14.8 in 2018	36
086038	Essendon Airport	16.5	16.4 in 2018	50
Tasmania				
094029	Hobart (Ellerslie Road)	14.7	14.4 in 2016	137
099005	Flinders Island Airport	15.3	15.2 in 2007	57

= indicates the new record equals the old one.

Highest January mean minimum temperature for at least 30 years

		Observed this month	Most recent higher
Queensland			
037010	Camooweal Township	26.9	27.4 in 1926 *
New South Wales			
047019	Menindee Post Office	24.0	24.6 in 1939 *
049002	Balranald (RSL)	20.3	20.4 in 1929 *
061055	Newcastle Nobbys Signal Station AWS	21.1 =	21.1 in 1896 *
069018	Moruya Heads Pilot Station	19.5	21.7 in 1878 *
075032	Hillston Airport	23.9	27.2 in 1960 *
Victoria			
080023	Kerang	18.7	18.8 in 1908 *
086077	Moorabbin Airport	16.5	16.6 in 1981
088109	Mangalore Airport	16.6	16.7 in 1981

* 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 January mean temperature

		New record	Old record	Years of record
Western Australia				
011019	Eyre	23.4	23.2 in 2011	60
Northern Territory				
015131	Elliott	33.6	32.7 in 1988	38
015135	Tennant Creek Airport	35.0	33.7 in 1971	50
015590	Alice Springs Airport	33.3	33.2 in 2006	78
015602	Jervois	34.5	33.4 in 2013	50
015635	Yulara Airport	33.9	33.6 in 2006	32
South Australia				
022803	Cape Willoughby	20.7 =	20.7 in 2018	52
Queensland				
029127	Mount Isa Aero	32.8	32.6 in 1990	53
037010	Camooweal Township	34.1 =	34.1 in 1971	111
039314	Seventeen Seventy	27.4 =	27.4 in 2015	32
041100	Texas Post Office	29.4	29.0 in 2017	48
041175	Applethorpe	23.6	23.2 in 2017	50
044021	Charleville Aero	32.8	32.2 in 2018	77
044026	Cunnamulla Post Office	34.9	33.4 in 2017	112

= indicates the new record equals the old one.

Record highest January mean temperature

		New record	Old record	Years of record
New South Wales				
047048	Broken Hill Airport AWS	30.6 =	30.6 in 2001	31
048015	Brewarrina Hospital	34.3	32.8 in 1939	95
048027	Cobar MO	34.1	31.1 in 2006	57
049002	Balranald (RSL)	29.1	29.0 in 1908	103
050052	Condobolin Ag Research Stn	32.6	30.4 in 1981	55
051039	Nyngan Airport	33.4	30.9 in 2006	97
051049	Trangie Research Station AWS	32.2	30.9 in 1939	76
052020	Mungindi Post Office	32.8	32.5 in 2017	94
055024	Gunnedah Resource Centre	31.0	29.0 in 1952	69
055049	Quirindi Post Office	30.4	28.0 in 2017	98
055136	Woolbrook (Woolbrook Road)	25.5	22.9 in 2017	47
056013	Glen Innes Ag Research Stn	22.7	21.8 in 2017	45
056018	Inverell Research Centre	26.7	26.4 in 1952	61
056229	Guyra Hospital	21.5	20.6 in 2017	33
057095	Tabulam (Muirne)	25.3	24.2 in 2002	49
060085	Yarras (Mount Seaview)	27.3	25.7 in 2017	51
061078	Williamtown RAAF	27.2	25.9 in 2017	69
061250	Paterson (Tocal AWS)	27.9	26.3 in 2017	45
062013	Gulgong Post Office	28.8	27.1 in 1981	45
063005	Bathurst Agricultural Station	26.1	24.3 in 2017	96
063063	Oberon (Albion St)	22.5	21.3 in 2017	46
064008	Coonabarabran (Showgrounds)	28.8	27.9 in 1882	139
064009	Dunedoo Post Office	30.3	28.2 in 2017	61
065034	Wellington (D&J Rural)	30.2	29.8 in 1932	100
066037	Sydney Airport AMO	26.0	25.7 in 2017	80
066062	Sydney (Observatory Hill)	25.7	25.6 in 2017	161
066124	Parramatta North (Masons Drive)	26.2	25.9 in 2017	51
066137	Bankstown Airport AWS	26.9	26.1 in 2017	51
068192	Camden Airport AWS	26.7	26.1 in 2017	43
069022	Narooma (Marine Rescue)	22.1	21.8 in 2017	33
070005	Bombala (Therry Street)	22.5 =	22.5 in 2003	95
070263	Goulburn TAFE	25.2	24.0 in 2017	41
071032	Thredbo AWS	16.1	14.8 in 2006	39
071041	Thredbo Village	19.0	17.7 in 2006	48
072023	Hume Reservoir	29.6	28.6 in 1939	88
072043	Tumbarumba Post Office	25.6	23.7 in 2006	51
072150	Wagga Wagga AMO	30.1	27.6 in 2006	78
074106	Tocumwal Airport	28.7	27.6 in 1981	49
075039	Lake Cargelligo Airport	32.8	31.9 in 1939	96
075041	Griffith Airport AWS	30.8	29.1 in 2006	43
200839	Lord Howe Island Aero	25.1	24.5 in 2017	31

= indicates the new record equals the old one.

Record highest January mean temperature

		New record	Old record	Years of record
Victoria				
076031	Mildura Airport	28.9	28.7 in 2001	73
076064	Walpeup Research	27.8	27.3 in 1981	70
080023	Kerang	28.1	27.2 in 1939	111
080091	Kyabram	26.8	25.5 in 2001	54
081049	Tatura Inst Sustainable Ag	25.9	25.0 in 1981	55
082039	Rutherglen Research	27.8	26.9 in 1939	106
082042	Strathbogie	23.4	22.7 in 1981	42
082138	Wangaratta Aero	26.8	25.6 in 2006	32
083024	Mount Buller	17.7	16.4 in 2006	32
084016	Gabo Island Lighthouse	21.2	21.1 in 1890	139
084070	Point Hicks (Lighthouse)	22.3	21.9 in 2006	49
085072	East Sale	22.5	21.6 in 1960	74
085096	Wilsons Promontory Lighthouse	20.3	20.1 in 1908	140
085279	Bairnsdale Airport	22.0	21.5 in 1988	38
085280	Morwell (Latrobe Valley Airport)	23.4	21.9 in 2001	36
086038	Essendon Airport	23.4	22.4 in 2018	50
086104	Scoresby Research Institute	23.4	22.7 in 1981	61
086282	Melbourne Airport	23.0	22.9 in 2001	49
088023	Lake Eildon	24.0	23.8 in 1999	49
088109	Mangalore Airport	25.8	24.9 in 1981	61
Tasmania				
091219	Scottsdale (West Minstone Road)	19.0 =	19.0 in 1988	47
091237	Launceston (Ti Tree Bend)	20.6	20.4 in 1981	36
092012	Fingal (Legge Street)	19.3	19.1 in 2018	33
092019	Lake Leake (Elizabeth River)	16.6	15.8 in 2018	30
092027	Orford (Aubin Court)	19.4	18.7 in 2003	51
092045	Iarapuna (Eddystone Point)	20.3	19.8 in 2016	109
094008	Hobart Airport	20.1	19.3 in 2018	61
094020	Dover	17.8	17.4 in 2018	30
094029	Hobart (Ellerslie Road)	20.3	19.4 in 2018	137
094087	kunanyi (Mount Wellington Pinnacle)	11.6	11.0 in 2018	39
099005	Flinders Island Airport	19.9	19.8 in 2008	57

= indicates the new record equals the old one.

Highest January mean temperature for at least 30 years

		Observed this month	Most recent higher
Northern Territory			
014825	Victoria River Downs	32.5	32.7 in 1985
South Australia			
023000	Adelaide (West Terrace / ngayirdapira)	25.7	26.9 in 1939 *
Queensland			
041095	Stanhope Leslie Parade	23.6	24.2 in 1952 *
New South Wales			
047019	Menindee Post Office	32.0	32.5 in 1939 *
058012	Yamba Pilot Station	25.2	25.3 in 1898
074034	Corowa Airport	28.0	28.5 in 1939 *
075032	Hillston Airport	31.8	34.4 in 1960 *
Victoria			
079028	Longerenong	24.8	27.6 in 1908 *
080015	Echuca Aerodrome	27.2	28.1 in 1908
086077	Moorabbin Airport	22.8	23.1 in 1981
087031	Laverton RAAF	22.4	23.1 in 1981
088043	Maryborough	24.2	26.6 in 1908 *
089002	Ballarat Aerodrome	21.9	22.6 in 1908 *
Tasmania			
095003	Bushy Park (Bushy Park Estates)	19.7	20.1 in 1951 *
096003	Butlers Gorge	14.9	15.4 in 1961 *

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

Lowest January mean temperature for at least 30 years

		Observed this month	Most recent lower
Western Australia			
009114	Lancelin	21.3	21.2 in 1987 *
Queensland			
031037	Low Isles Lighthouse	27.9	27.3 in 1981

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

Record highest January daily rainfall

	New record	Old record	Years of record
Western Australia			
009518	Cape Leeuwin	57.2 on 23rd	54.9 on 31st in 1971
Queensland			
031040	Meringa Sugar Exp Stn	494.0 on 29th	375.0 on 9th in 1998
031062	Whyanbeel Valley	471.6 on 27th	412.0 on 28th in 1969
031127	Daintree Village	405.0 on 27th	372.0 on 2nd in 1979
034007	Mount McConnell	188.0 on 10th	174.0 on 29th in 1910
New South Wales			
061215	Rylstone (Kalgoola)	81.6 on 24th	70.6 on 5th in 1968
			57

Record highest January total rainfall

		New record	Old record	Years of record
New South Wales				
063142	Tarana (Wonga)	184.0	174.8 in 1963	31

Highest January total rainfall for at least 30 years

		Observed this month	Most recent higher month
Queensland			
027015	Moreton Telegraph Station	644.0	849.2 in 1979 *
031036	Kuranda Railway Station	976.5	1341.5 in 1981
031040	Meringa Sugar Exp Stn	939.1	1386.8 in 1981 *
031112	Shiptons Flat	822.2	1267.6 in 1979 *
031166	Cairns Severin St	1000.4	1557.6 in 1981 *
032141	Lucinda Point	595.4	880.8 in 1981 *
033041	Lethebrook	803.0	1132.4 in 1974 *
033051	Mingela Post Office	429.2	603.8 in 1974 *
033082	Strathmore	332.1	603.4 in 1974 *
034007	Mount McConnell	282.8	317.2 in 1981
New South Wales			
061215	Rylstone (Kelgoola)	182.2	209.0 in 1978 *
061334	Glen Alice	224.8	255.6 in 1978 *
062026	Rylstone (Ilford Rd)	180.4	197.4 in 1978 *
063005	Bathurst Agricultural Station	154.5	180.2 in 1984
063076	Sofala Old Post Office	157.4	182.2 in 1984

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

Record lowest January total rainfall

		New record	Old record	Years of record
Northern Territory				
015135	Tennant Creek Airport	1.2	2.2 in 1985	50
South Australia				
018165	Lock (Terrah Winds)	0.0	0.4 in 1992	48
022836	Pelican Lagoon	1.4 =	1.4 in 1986	35
023076	Port Parham	0.0	1.0 in 1992	47
023083	Edinburgh RAAF	0.0	0.2 in 2009	47
023090	Adelaide (Kent Town)	0.0	0.4 in 1992	42
023096	Adelaide (Hope Valley Reservoir)	0.0	0.4 in 2009	40
023709	Cherry Gardens	0.0	0.3 in 1957	119
023720	Hahndorf	0.1	0.3 in 1957	134
023783	Myponga Reservoir	0.6	1.0 in 2009	55
023799	Prospect Hill	1.2 =	1.2 in 2009	51
023801	Lenswood	0.2	1.2 in 2009	51
023812	Rockleigh (Black Heath)	0.0	0.4 in 2009	50
023817	Aldgate	1.5	2.6 in 2009	49
023822	Hartley (Pine Hill)	0.0	0.6 in 1985	49
023823	Hindmarsh Valley (Fernbrook)	0.4	1.0 in 1957	84
024554	Tailem Bend (Naturi)	0.0	0.6 in 1992	50
025036	Kulkami	0.0	1.0 in 2009	50
026009	Kalangadoo	1.4	1.6 in 1957	104
026067	Mount Schank (Jethia)	1.6	3.0 in 2001	50
026091	Coonawarra	0.2	1.2 in 2013	34
026111	Pelican Point	0.4	6.6 in 2001	35

= indicates the new record equals the old one.

Record lowest January total rainfall

		New record	Old record	Years of record
Queensland				
029000	Almora Station	32.2	39.6 in 2018	31
035064	Spring Creek Station	2.6	8.4 in 2003	68
035065	Springsure Comet St	2.4	3.6 in 1979	149
035066	Springwood Station	0.0	5.6 in 2003	66
035088	Birraban	0.0	11.6 in 2003	65
035280	Allambee	2.0	10.8 in 1994	31
035289	Mt Playfair	0.2	7.0 in 2018	39
039059	Lady Elliot Island	0.2	7.4 in 1992	80
039151	Gonyelinka	10.0	11.0 in 1979	73
039314	Seventeen Seventy	10.6	11.8 in 2003	32
040051	Conondale Township	10.4	17.4 in 2003	70
040082	University of Queensland Gatton	1.2	2.0 in 2003	119
040083	Gatton Allan Street	1.6	1.8 in 2003	121
040094	Harrisville Mary Street	3.6	5.8 in 2003	122
040096	Helidon Post Office	1.3	1.4 in 2003	139
040104	Englesberg Village	5.6	8.9 in 2003	126
040106	Kenilworth Township	22.0	24.4 in 2003	116
040139	Mt Alford	3.1	5.0 in 2003	78
040167	Palen Creek Correctional	0.7	6.6 in 2003	74
040169	Peachester	10.2	14.0 in 2003	101
040183	Rosevale	8.8	15.3 in 1932	106
040189	Somerset Dam	6.2	7.0 in 2003	82
040196	Tallebudgera Guineas Creek Road	6.2	12.4 in 2003	118
040205	Toogoolawah Post Office	2.4	4.0 in 2003	111
040237	Toombul Bowls Club	5.8	12.1 in 1919	125
040247	Lindfield	2.4	8.7 in 1937	97
040259	Yarraman Upper	2.2	4.6 in 2003	68
040317	Range View	5.0	7.0 in 2003	58
040388	Upper Tenthill	0.0	17.3 in 1966	58
040394	Mount Barney	2.0	3.4 in 2003	49
040396	Maleny Denning Rd	20.6	32.3 in 1932	90
040417	Miami Bardon Ave	4.4	10.6 in 2003	49
040490	Carneys Creek The Ranch	3.0	6.4 in 2003	45
040493	Homeleigh	4.2	10.0 in 2002	101
040517	McKenzie Creek	12.8	14.8 in 2003	67
040542	Maclean Bridge	4.8	7.8 in 2003	37
040550	Numinbah	7.0	24.2 in 2003	91
040607	Springbrook Road	18.5	28.0 in 2003	38
040672	Withcott	1.6	12.8 in 2018	45
040717	Coolangatta	4.4	11.4 in 2003	36
040759	Corbould Pk Racecourse	10.0	12.0 in 2003	31
041016	Cecil Plains Homestead	6.4	7.6 in 2005	63
041018	Clifton Post Office	5.2	10.4 in 1908	117
041025	Dunmore State Forest	0.0	5.2 in 2018	78
041056	Killarney Post Office	0.6	4.8 in 1903	131
041082	Pittsworth	0.0	2.4 in 1994	133
041083	Pratten	4.0	4.8 in 1982	118
041085	Queen Mary Falls	1.2	7.8 in 2003	61
041098	Tannymorel	0.0	9.8 in 2003	99
041120	Yangan Post Office	0.8	5.2 in 1994	108

= indicates the new record equals the old one.

Record lowest January total rainfall

		New record	Old record	Years of record
041134	Top Plains	0.8	8.2 in 2003	67
041166	Springside	1.6	6.0 in 2007	58
041170	Aubigny Purrawunda	3.2	23.2 in 2007	30
041198	Tingha	0.4	1.2 in 1979	56
041208	Spring Creek	0.0	4.8 in 2003	59
041209	Sorrento	0.0	2.0 in 1985	57
041212	Rosalie Plains	0.0	3.6 in 2018	62
041240	Hereward	1.2	4.5 in 1997	60
041250	Pampas	2.8	15.5 in 2003	61
041275	Glenroy Massie	1.8	14.8 in 1997	61
041276	Glenrive	8.4	9.0 in 2007	60
041285	Fairleigh	4.8	17.8 in 1997	61
041306	Tosari	0.0	10.0 in 2007	60
041314	Brookstead Post Office	5.4	10.6 in 2018	61
041323	Mandala	2.2	9.4 in 1966	46
041344	Karara	1.8	3.6 in 2018	50
041359	Oakey Aero	1.4	2.2 in 1997	49
041369	Moyola	1.8	5.2 in 2003	46
041371	Melva	9.6	18.0 in 1997	99
041404	Ellangowan	0.0	4.0 in 1994	66
041454	Girraween Nat Park	5.0	5.8 in 1995	45
041456	Cunninghams Gap National Park	5.2	15.8 in 2003	41
041464	Oakington	0.6	7.4 in 2003	42
041469	Macalister	0.6	1.2 in 1994	48
041509	Traighli	0.0	11.2 in 2003	31
041510	Tamba	4.0	6.0 in 2003	30
042002	Belah Park	0.8	6.8 in 2018	103
042009	Drillham	0.0	4.2 in 2003	91
042016	Hannaford Post Office	0.8	5.6 in 1928	86
042023	Miles Post Office	3.4	9.7 in 1915	135
042034	Ourigilla	1.0	5.6 in 1932	89
043035	Surat	0.0	0.6 in 2018	139
043093	Waverley Downs	0.0	0.4 in 2003	65
044111	Wansey Downs	2.6	3.2 in 2000	52

= indicates the new record equals the old one.

Record lowest January total rainfall

		New record	Old record	Years of record
New South Wales				
048018	Collarenebri (Bundabarina)	0.0	1.5 in 1928	106
054081	Bingara (Glenroy)	12.0	12.4 in 2003	37
055331	Manilla (Towri)	3.4	10.2 in 2014	37
056022	Legume (New Koreelah)	0.2	8.4 in 2003	115
056023	Old Koreelah (McPherson)	0.0	7.5 in 1966	105
056050	Tenterfield (Aberfeldie)	16.6	17.8 in 1963	69
056202	Black Swamp (Maxwell)	5.8	11.6 in 2002	40
057003	Bonalbo Post Office	0.0	18.6 in 2002	69
057005	Drake (Village Resource Centre)	1.2	11.0 in 2002	126
057018	Tabulam Post Office	0.0	7.8 in 2002	131
057020	Urbenville	0.0	13.2 in 1966	80
057024	Woodenbong (Unumgar St)	3.0	6.8 in 2003	86
057095	Tabulam (Muirne)	0.6	18.8 in 2002	49
058004	Mummulgum (Bingeebiebera)	5.0	7.0 in 2003	78
058011	Chillingham	2.0	7.9 in 1966	66
058012	Yamba Pilot Station	2.0	13.1 in 1966	141
058015	Coraki (Richmond Terrace)	14.0	15.5 in 1932	123
058020	Murwillumbah (Dungay (Taleswood))	5.2	16.0 in 1969	64
058027	Harwood Island (Harwood Sugar Mill)	1.6	8.4 in 1966	105
058036	Chillingham (Limpinwood)	3.0	8.9 in 1966	81
058040	Mullumbimby (Fairview Farm)	4.4	24.4 in 1932	118
058045	Nymboida (Sutton St)	18.8	21.6 in 1966	93
058056	Tweed Heads Golf Club	10.0	16.4 in 1966	133
058070	Rosebank (Repentance Creek)	0.8	46.9 in 1966	59
058077	Grafton Research Stn	7.0	9.6 in 2014	63
058080	Wooli Beach	4.2	19.0 in 2003	51
058113	Green Pigeon (Morning View)	0.6	13.2 in 2003	51
058127	Clunes (Flatley Drive)	0.2	22.0 in 2003	56
058129	Kunghur (The Junction)	0.0	20.8 in 2003	46
058138	Kangaroo Creek (Hayfield)	4.8	16.2 in 2014	77
058148	Lillian Rock (Williams Road)	0.0	20.8 in 2003	52
058158	Murwillumbah (Bray Park)	2.4	11.6 in 2003	47
058165	Rosebank (Upper Coopers Creek)	2.2	28.4 in 2003	43
058171	Meerschaum Vale (Jenbetdaph)	16.8	17.6 in 2003	41
059002	Bowraville Recreation Club	7.0	17.7 in 1942	127
059030	South West Rocks (Smoky Cape Lighthouse)	8.2	15.0 in 1942	81
059032	Taylors Arm	10.0	15.0 in 1981	58
059100	Orama (Darkwood Road)	38.0	40.8 in 1994	47
059107	Girralong	16.8	20.0 in 1981	42
059110	Bowraville (Cow County)	9.4	22.6 in 1994	46
059113	Leigh (Rolling Acres)	31.4	52.4 in 1985	45
059120	Thumb Creek (Figtree)	10.4	13.4 in 1966	51
059139	Nana Glen (Cowling Close)	11.8	24.0 in 1966	62
060130	Forbes River (Birdwood)	29.2	34.4 in 2002	32
060144	Smiths Lake (Patsys Flat Road)	11.2	20.5 in 1981	39
200839	Lord Howe Island Aero	1.0	12.8 in 2014	31

= indicates the new record equals the old one.

Record lowest January total rainfall

		New record	Old record	Years of record
Victoria				
078072	Donald	0.0	0.4 in 2009	53
079083	Benayeo	0.0	0.2 in 2013	46
086119	Ventnor (Oaklands)	2.6 =	2.6 in 1932	100
087114	Drysdale (Brimdale)	2.0	2.4 in 2009	50
089075	Glenthompson	2.0	2.2 in 2009	53
090013	Cape Bridgewater	0.8	3.8 in 2001	113
090036	Drik Drik	2.2	3.0 in 1912	108
090042	Gellibrand River West	3.0	4.6 in 1939	103
090055	Macarthur (Post Office)	1.0	3.4 in 1957	83
090067	Port Campbell Post Office	2.8	3.5 in 1906	134
090093	Hordern Vale	4.8	11.9 in 1961	71
090105	Strathdownie	4.6	4.7 in 1965	56
090165	Simpson South	2.0	4.8 in 1990	51
090171	Portland (Cashmore Airport)	1.4	3.8 in 2001	37

= indicates the new record equals the old one.

Record lowest January total rainfall

		New record	Old record	Years of record
Tasmania				
091040	Hampshire (Neena Road)	5.2	5.3 in 1939	91
091109	Yolla (Sea View)	7.0	7.1 in 1939	114
091118	Evandale (Cambock Lane)	4.0	5.6 in 1958	48
091121	Waterhouse(Barooga)	2.2	6.2 in 2010	59
091171	East Sassafras (Elphin Grove)	7.2	7.8 in 2010	49
091173	Tomahawk (Carisbrooke)	1.4	4.4 in 2010	54
091237	Launceston (Ti Tree Bend)	6.0	7.4 in 2010	38
091255	Deviot Jetty	4.6	9.4 in 2010	30
091321	Loongana (Serendipity)	12.2 =	12.2 in 2008	33
092040	Swansea (Belmont)	2.7	6.0 in 2009	35
092051	Pyengana (Forest Lodge Road)	4.2	11.7 in 1968	55
093035	Ross (Rose Villa)	3.8 =	3.8 in 2008	49
094025	Glenorchy (Glenorchy Reservoir)	0.8	3.8 in 2008	66
094029	Hobart (Ellerslie Road)	0.4	2.8 in 2008	138
094061	Sandford (Maydena)	2.2	3.2 in 2008	130
094066	Mount Wellington (The Springs)	8.8	18.4 in 2008	116
094068	Woodbridge	6.0	6.4 in 1958	68
094070	Alonnah Area School	2.2	4.6 in 1999	56
094083	Hobart (Strickland Reserve)	4.6	5.2 in 2008	54
094087	kunanyi (Mount Wellington Pinnacle)	9.6	18.6 in 2003	36
094111	Taroona (Taroona Crescent)	1.2	3.6 in 2008	54
094125	Margate (Sunnyside)	3.2	4.6 in 2008	51
094139	Fern Tree (Grays Road)	6.8	14.2 in 2008	50
094151	Longley (Telopea)	6.0	18.0 in 2001	41
094161	Clifton Beach (Clifton Beach Road)	1.0	4.6 in 2008	32
094172	Tea Tree (The Point)	5.0	6.0 in 2008	33
094175	Lucaston (Bakers Creek Road)	5.4	6.0 in 2008	41
095003	Bushy Park (Bushy Park Estates)	0.6	3.6 in 2008	146
095012	Ouse (Millbrook)	0.8	3.6 in 2010	108
095016	Osterley	2.8	6.2 in 2008	106
096071	Lake St Clair National Park	20.8	25.8 in 2008	30
097000	Cape Sorell	11.2	16.0 in 1939	95
097045	Arve Valley (Arve Road)	13.0	15.2 in 2008	63
097054	Zeehan (West Coast Pioneers Museum)	36.6	47.0 in 1999	47
098000	City of Melbourne Bay	3.6	5.4 in 2008	85
098003	Harwell	3.2	10.8 in 2008	79
098004	Naracoopa	2.4	3.3 in 1920	108
098017	King Island Airport	3.0	8.6 in 2018	45
098023	Yarra Creek	5.8 =	5.8 in 2008	45
099005	Flinders Island Airport	5.2	5.4 in 1990	74

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Lowest January total rainfall for at least 30 years

		Observed this month	Most recent lower month
Western Australia			
001025	Doongan	78.7	35.7 in 1989
Northern Territory			
015661	Mount Skinner	2.2	0.0 in 1985
South Australia			
018174	Rudall (Swaffpro)	1.5	0.4 in 1989
021044	Port Wakefield	1.2	1.0 in 1980
022003	Curramulka	0.6	0.0 in 1980 *
022014	Port Vincent	0.8	0.0 in 1957 *
022809	Penneshaw	0.4	0.3 in 1986
023005	Adelaide (Glen Osmond)	0.2	0.0 in 1926 *
023365	Tarlee (Hazelton)	0.2	0.0 in 1986 *
023704	Belair (State Flora Nursery)	0.2	0.0 in 1965 *
023728	Macclesfield	1.0 =	1.0 in 1957
023730	Meadows	1.4	0.5 in 1959 *
023731	Cudlee Creek (Millbrook Reservoir)	0.3	0.0 in 1957 *
023747	Strathalbyn	0.6	0.5 in 1898
023761	Parawa (Sharon)	2.4	0.0 in 1951
023803	Ashton Co-op	0.2	0.0 in 1959 *
025504	Coonalpyn	0.4	0.0 in 1957 *
Queensland			
035029	Giligulgul	5.4	0.0 in 1948 *
035069	Tambo Post Office	6.6	6.3 in 1937
035090	Rewan Station	1.6	0.0 in 1960 *
035093	Mt Moffatt National Park	0.6	0.0 in 1980 *
035113	Eurombah	3.6	0.0 in 1977 *
035207	Mountain View	4.8	4.6 in 1988
035220	Cometside	4.6	3.7 in 1979 *
035274	Juanita	4.0	0.0 in 1979 *
036143	Blackall Township	10.2	8.0 in 1979
039104	Monto Township	5.1	4.6 in 1969 *
040078	Eumundi - Crescent Rd	7.0	2.8 in 1932 *
040089	Goomboorian	6.5	2.8 in 1919 *
040093	Gympie	7.2	6.7 in 1932 *
040182	Green Mountains	10.0	0.0 in 1960 *
040290	Maroon	9.2	8.6 in 1966
040400	Moorang	5.0	3.3 in 1966 *
040609	Elanora Water Treatment Plant	4.8	0.0 in 1960 *
041022	Dalveen	1.2	0.0 in 1921 *
041128	Wondallai	1.0	0.0 in 1952 *
041388	Murralah	4.0	2.0 in 1952
041445	Leslie Dam	9.2	8.9 in 1952 *
041504	Glen Royal	2.5	0.0 in 1932 *
043015	Injune Post Office	0.2	0.0 in 1929
043038	Wallumbilla Post Office	0.6	0.0 in 1908 *
043052	Warkon	0.6	0.0 in 1940 *
044010	Bollon Mary St	0.6	0.0 in 1989

* 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 January total rainfall for at least 30 years

		Observed this month	Most recent lower month
New South Wales			
048031	Collarenebri (Albert St)	0.4	0.3 in 1932 *
053003	Bellata Post Office	15.0	7.0 in 1981 *
056055	Mole River (Trenayr)	12.8	8.9 in 1932
057091	Uralla (Blue Nobby)	24.0	9.4 in 1981 *
057093	Cangai (Smelter Creek)	14.6	0.0 in 1960 *
058005	Brays Creek (Misty Mountain)	1.0	0.0 in 1975 *
058006	Brushgrove (Clarence St)	6.0	1.8 in 1909 *
058019	Doon Doon (McCabes Road)	3.0	0.0 in 1960 *
058147	The Channon	1.2	0.0 in 1960 *
059006	Lower Bucca	1.8	0.0 in 1960 *
059047	Crescent Head	6.2	0.0 in 1960 *
060013	Forster - Tuncurry Marine Rescue	13.2	8.4 in 1942
060022	Laurieton (Elouera St)	14.0	9.6 in 1908 *
060031	Telegraph Point (Farrawells Road)	7.4	0.0 in 1915
060055	Long Flat Post Office	15.4	0.0 in 1960 *
060090	Birdwood	9.4	0.0 in 1969
200288	Norfolk Island Aero	4.6	3.7 in 1946
Victoria			
086105	Shoreham	4.4	2.5 in 1939 *
089009	Cavendish (Post Office)	1.4	0.6 in 1932
090001	Apollo Bay	3.8	0.3 in 1911 *
090015	Cape Otway Lighthouse	1.8	0.0 in 1878 *
090021	Cobden (Post Office)	3.4	2.8 in 1906
090045	Hawkesdale (Post Office)	2.6	2.0 in 1932 *
090060	Nullawarre	2.4	0.0 in 1911
090076	Tanybryn	7.4	5.1 in 1961 *
090087	Wyelangta	10.2	4.6 in 1939 *
090153	Camperdown Donalds Hill	1.5	0.5 in 1961 *

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Lowest January total rainfall for at least 30 years

		Observed this month	Most recent lower month
Tasmania			
091001	Beaconsfield (Mine & Heritage Centre)	4.8	1.8 in 1961
091019	Connorville (Lake River)	4.0	0.5 in 1966
091029	Dunorlan (Sharmans Road)	7.4	4.6 in 1966
091033	Frankford (Rossdale)	7.6	1.3 in 1961
091041	Hillwood (Hillwoodville)	5.4	1.1 in 1939 *
091077	Deddington (Marathon)	3.8	1.6 in 1961 *
091086	Ringarooma (Main Street)	3.8	0.0 in 1960
091095	Windermere (Acacia House)	4.4	3.3 in 1975 *
091150	Western Creek (Somer Hill)	11.5	7.1 in 1966 *
092001	Apslawn	1.4	0.0 in 1979
092002	Avoca (Railway House)	6.4	2.5 in 1961 *
092011	Gladstone (Old Post Office)	2.0	1.0 in 1939 *
092012	Fingal (Legge Street)	1.6 =	1.6 in 1966
092019	Lake Leake (Elizabeth River)	8.9	8.1 in 1961
092020	Lewis Hill (St Pauls River)	2.0	0.0 in 1939 *
092024	Mathinna (Fingal Road)	4.2	0.0 in 1969 *
092045	Irapuna (Eddystone Point)	3.0	0.5 in 1939 *
092048	South Mount Cameron (Gladstone Road)	7.8	6.6 in 1966 *
094012	Richmond (Lowlands)	4.2	0.0 in 1960 *
094030	Hobart Botanical Gardens	1.1	0.5 in 1841 *
094082	Mount Rumney (Mount Rumney Road)	3.0	0.0 in 1958 *
096002	Bronte Heights	6.4	5.2 in 1939 *
096046	Miena Dam	5.0	0.0 in 1960 *

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Selected observations

Daily and mean maximum temperatures for January 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	31	
001019 Kalumburu	36.4	36.9	37.6	38.7	37.4	39.5	37.1	40.3	40.0	37.5	37.3	39.9	36.8	35.3	34.5	35.0	37.5	38.4	37.2	39.3	36.6	34.4	31.5	29.0	29.2	32.6	36.2	34.8	37.7	37.4	34.5		
002056 Kununurra Aero	36.4	39.1	37.9	38.9	30.5	36.6	36.5	39.1	39.5	37.7	36.8	39.8	39.9	35.1	34.5	36.1	38.1	36.0	35.3	35.9	38.2	36.1	35.0	32.4	34.7	34.2	35.2	35.3	35.1	37.9	39.9	31.9	
003003 Broome Airport	34.0	+0.8	33.5	33.8	34.0	34.4	33.4	32.5	33.2	33.6	33.5	33.4	33.7	33.7	36.6	34.4	35.1	34.2	35.2	34.8	38.7	33.2	34.4	35.8	33.5	32.1	33.8	32.4	33.9	32.6	32.5	33.1	
003032 Derby Aero	36.1	36.9	39.3	37.7	33.1	36.7	30.7	36.3	37.3	35.5	35.6	37.1	39.8	36.8	38.3	36.7	36.8	36.8	37.2	38.6	38.5	35.8	37.1	35.3	33.7	30.6	33.3	34.8	34.1	36.7	36.1	36.8	
004032 Port Hedland Airport	37.4	+1.1	33.5	33.2	33.7	38.1	37.1	41.6	39.1	40.8	43.5	35.2	35.4	35.7	43.0	37.5	40.5	39.5	40.1	39.4	39.8	39.7	40.5	37.3	34.7	36.8	37.7	33.4	33.7	33.9	33.9	34.5	36.1
004083 Karatha Aero	36.3	31.6	32.8	33.7	36.4	35.7	35.2	36.3	40.3	37.6	39.8	40.4	33.8	39.7	35.1	36.2	38.9	37.2	37.2	38.0	39.2	39.0	35.8	35.4	38.7	38.6	34.5	33.1	33.1	33.6	33.7	35.3	
004106 Marble Bar	43.7	43.1	44.6	42.9	44.9	43.7	45.4	46.1	45.7	46.1	46.5	45.3	49.1	44.9	45.9	45.2	42.5	41.4	43.3	45.3	45.0	45.8	41.3	41.8	38.4	40.4	38.9	39.2	41.5	42.6			
005007 Learmonth Airport	39.5	42.4	38.7	39.7	43.0	34.1	38.7	43.2	46.1	46.7	44.1	42.3	40.2	39.1	38.8	40.2	41.1	38.7	41.7	42.1	37.5	36.8	36.2	37.9	42.2	39.7	35.7	32.6	34.7	35.9	39.7		
006011 Carnarvon Airport	31.9	+0.4	28.2	27.4	31.8	31.7	34.2	35.2	30.0	30.8	29.4	29.0	28.1	27.9	28.6	31.4	35.8	40.4	40.0	29.9	27.4	27.8	28.0	29.3	38.0	45.3	38.5	30.9	32.5	31.9			
006044 Denham	30.2	27.3	28.0	26.3	25.1	29.0	32.0	30.0	29.0	30.0	27.9	28.0	26.0	25.8	25.0	25.0	26.0	34.0	32.1	42.1	30.0	26.2	24.5	24.9	26.7	37.0	40.4	37.1	33.8	31.2	30.9		
007176 Newman Aero	42.3	43.8	46.1	42.2	44.8	41.3	40.2	42.2	42.6	44.0	45.1	44.0	45.2	45.9	43.3	44.6	44.0	41.5	43.2	41.3	41.8	43.7	45.5	38.8	40.4	40.0	38.0	37.6	34.8	39.1	41.9	43.0	
007185 Paraburdoo Aero	43.1	46.0	45.6	45.2	44.1	46.4	42.8	43.5	44.6	45.7	43.6	42.6	46.0	46.0	44.4	44.7	44.0	37.9	43.8	44.0	43.6	44.8	45.9	41.2	41.0	42.8	41.2	37.8	36.2	37.4	30.5	40.4	44.5
007045 Meekatharra Airport	41.0	+2.9	44.9	42.9	38.9	36.8	31.9	39.3	40.6	40.9	42.3	40.6	40.2	46.0	45.3	45.5	45.0	45.0	42.0	41.2	40.0	42.7	41.7	43.6	34.1	35.0	42.0	39.9	39.2	38.8	41.2	43.0	42.5
007600 Mount Magnet Aero	39.6	44.2	37.2	35.2	35.8	38.6	35.1	41.3	41.8	39.8	39.6	38.2	46.1	42.3	42.6	41.0	40.3	38.9	38.4	40.2	41.7	43.9	41.6	29.2	31.9	39.3	41.3	39.1	39.4	42.4	41.1	41.1	
008296 Morawa Airport	37.7	38.6	32.4	29.3	31.8	37.6	39.2	41.1	39.7	38.3	36.1	36.0	44.2	37.3	37.9	39.9	38.4	35.9	35.3	38.3	42.0	44.0	44.9	33.8	26.4	28.0	35.7	38.4	40.9	42.4	38.2	38.2	
008297 Dalwallinu	35.6	39.6	31.5	27.7	28.2	35.9	38.1	39.7	30.0	35.9	34.3	33.8	43.6	36.0	35.6	36.2	34.1	33.4	35.3	40.0	42.4	38.8	34.5	25.5	25.2	31.9	34.7	37.7	41.1	38.2	34.1	39.1	
008315 Geraldton Airport	31.0	26.1	26.2	27.1	26.3	31.4	34.3	31.9	29.5	30.4	30.2	27.6	27.9	27.5	28.1	26.6	25.9	26.8	37.2	32.7	45.2	41.5	28.7	26.7	34.9	42.8	42.5	30.2	33.7	40.3			
009021 Perth Airport	31.3	-0.4	34.1	24.6	24.5	25.5	32.7	36.7	32.5	33.9	31.5	26.1	28.2	35.4	28.7	30.2	30.5	29.2	26.7	34.0	31.6	30.6	21.5	20.4	26.7	32.9	36.8	40.2	31.7	33.2	37.3		
009131 Jurien Bay	28.9	25.7	25.7	24.8	26.0	33.8	28.7	26.6	32.1	28.4	25.8	25.6	26.6	25.1	25.5			34.2	38.6			36.3	26.0	24.0	22.8	24.2	32.0	36.5	25.9	30.2	36.9		
009225 Perth Metro	30.5	32.5	23.8	24.2	32.5	36.4	32.2	33.1	25.7	25.5	37.7	27.7	28.9	28.1	26.0	32.8	30.4	42.1	30.5	22.2	20.6	25.7	32.0	35.5	39.6	30.6	39.3	36.2					
009240 Bickley	29.7	33.4	22.4	21.2	23.8	30.9	34.4	33.3	30.9	31.1	25.4	28.5	34.8	29.3	29.9	25.5	27.4	31.9	38.2	40.4	32.2	27.7	18.6	17.3	25.6	29.6	33.8	30.0	30.1	34.2	30.1		
009518 Cape Leeuwin	22.4	-1.0	24.6	21.9	19.8	21.0	22.8	22.8	22.3	22.2	23.2	21.9	22.1	23.7	23.8	22.4	22.6	22.4	23.2	23.3	24.7	24.5	24.0	19.8	19.7	20.2	21.3	21.6	22.8	21.9	21.5	21.2	23.9
009617 Bridgetown	29.7	35.7	27.5	21.6	23.5	30.4	34.3	30.6	29.9	32.5	29.9	30.2	36.4	29.3	30.0	30.7	27.8	20.7	25.8	32.3	37.7	40.4	32.1	22.2	20.3	19.9	24.6	28.0	34.7	35.4	36.5	32.6	32.6
009746 Witchcliffe	25.1	32.3	22.7	19.8	22.3	26.2	27.6	24.8	25.6	27.0	23.1	24.0	27.3	26.1	24.0	24.1	23.6	24.1	28.5		33.0	25.7	21.2	19.1	19.9	22.1	22.8	29.3	29.3	21.9	23.2	31.0	
009789 Esperance	26.4	25.1	26.6	21.3	22.8	22.2	24.3	25.8	22.0	25.9	33.5	24.0	33.9	40.6	21.0	21.4	22.5	24.1	23.9	30.6	37.6	41.8	27.6	32.4	22.4	21.2	24.5	28.8	32.8	21.7	24.5		
009965 Bunbury	28.6	31.7	22.2	22.7	22.7	26.1	35.1	34.3	31.3	29.7	24.6	22.4	29.1	31.4	28.1	28.4	34.8	34.0	29.5	20.9	22.8	25.8	30.9	30.6	34.0	28.3	30.9	33.3	33.3	33.3			
009977 Mandurah	27.8	28.7	23.2	22.4	26.6	28.4	30.3	30.4	30.7	24.2	24.3	30.0	26.2	26.9	26.3	24.5	23.8	28.1	35.5	30.6	26.3	31.1	20.0	20.6	23.7	27.6	32.9	31.1	35.0	27.2	35.2		
009999 Albany Airport	24.3	25.4	28.0	22.0	24.3	24.1	22.5	22.3			24.3	31.7	24.5	21.7	20.6	24.3	24.0	24.2	28.9	31.9	24.4	20.4	26.4	18.7	21.8	21.5	27.0	30.8	19.4	21.5	26.7		
010007 Benecubin	35.0	+0.7	40.5	33.2	28.3	27.0	33.8	37.0	35.3	30.5	35.2	33.0	42.5	37.3	35.5	32.0	37.5	35.2	34.0	39.5	41.5	40.5	34.5	35.5	39.5	36.4	32.5	36.3	35.0	35.9	36.1	33.0	35.0
010092 Merredin	35.2	+1.8	40.7	33.9	29.4	28.2	34.2	35.6	38.1	35.8	35.4	36.0	34.2	40.2	37.8	35.1	36.6	34.9	33.8	35.8	35.5	42.0	44.2	35.0	32.7	31.5	31.6	32.2	32.6	37.1	31.1	31.6	32.6
012086 Cunderdin Airfield	35.4	40.2	32.9	28.8	28.1	34.2	38.7	39.3	34.1	36.0	36.7	33.8	42.6	37.9	34.2	35.3	34.5	34.9	33.4	40.4	44.2	44.3	33.7	25.7	27.3	30.5	32.0	35.8	41.6	37.0	32.1	36.2	
010633 Ravensthorpe	29.8	+0.6	29.3	36.2	24.8	27.7	31.0	31.0	24.0	30.5	37.4	27.9	39.0	30.5	29.0	25.0	28.9	29.1	27.0	22.0	24.0	23.4	30.0	22.0	24.3	30.0	22.5	29.5					
010911 Lake Grace	32.0	36.7	35.1	27.0	32.6	33.7	34.7	33.3	30.5	35.1	36.5	35.5	34.6	35.4	32.0	32.3	32.4	33.3	33.5	33.5	32.7	31.8	31.7	31.3	33.8	33.0	34.6	31.7	29.2	29.8			
010916 Katanning	30.2	35.4	33.0	25.0	35.0	32.4	36.7	37.3	30.7	35.5	30.5	37.5	30.7	37.3	30.9	32.4	32.5	32.5	33.1	32.9	32.5	33.5	32.9	32.0	32.5	31.1	30.1	30.1	30.1	30.1	30.1	30.1	
010917 Wandering	31.9	37.8	24.9	24.8	31.6	32.3	35.3	33.0	31.8	32.4	39.7	30.7	30.8	30.7	29.0	27.0	27.8	29.8	31.9	3													

Daily and mean maximum temperatures for January 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	31		
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		
04827 Cobar MO	41.3	+7.8	41.3	43.2	38.3	42.2	42.5	33.5	37.5	34.5	36.8	39.7	39.3	41.2	43.5	42.3	44.2	46.5	46.8	45.6	40.6	41.6	44.4	43.6	43.3	44.1	46.2	38.9	38.5	41.9	38.2	38.5		
048245 Bourke Airport AWS	42.6	43.0	43.6	42.6	43.3	43.8	36.9	37.3	39.2	40.6	41.4	40.5	41.3	43.5	42.0	43.0	46.4	47.4	45.3	43.5	44.9	44.2	45.6	46.2	43.5	45.1	46.3	43.7	42.6	42.0	35.9	34.6		
049000 Ivanhoe Aerodrome AWS	39.8	40.8	40.6	41.8	44.5	29.9	31.7	37.8	34.9	33.8	35.3	39.7	44.4	41.9	46.1	46.8	47.9	47.4	43.8	37.1	33.4	41.9	44.6	44.3	45.2	47.0	43.8	28.1	36.5	41.4	32.8			
050052 Condobolin Ag Research Stn	39.8	39.1	41.7	39.5	41.7	41.3	32.7	34.5	32.0	35.5	36.6	37.9	40.2	42.0	42.0	44.8	45.9	45.9	44.8	37.9	38.1	38.0	42.0	40.7	40.3	43.3	45.4	38.3	34.6	41.7	36.9	38.9		
051039 Nyngan Airport	40.5	+6.6	40.5	41.6	39.0	41.0	41.0	33.8	36.6	36.2	38.0	38.2	38.5	39.5	42.7	40.5	43.5	45.5	45.5	44.0	42.1	42.0	39.2	42.5	41.0	41.0	43.2	45.1	41.0	40.0	40.5	35.0	38.0	
052088 Walgett Airport AWS	40.6	40.0	41.3	40.4	40.2	40.0	38.8	38.2	36.9	37.6	39.3	39.6	40.4	42.2	39.5	43.2	46.4	44.4	42.4	42.9	42.7	39.9	41.4	40.3	41.6	42.4	43.5	40.8	41.2	38.9	35.8	36.1		
053115 Moree Aero	37.9	37.0	37.3	38.0	37.3	38.5	37.0	33.0	37.3	37.1	38.4	38.5	38.0	40.5	38.0	40.5	42.9	40.3	38.7	41.2	39.8	36.3	39.1	30.6	40.3	39.0	40.1	39.1	38.8	37.2	35.5	34.3		
054038 Narrabri Airport AWS	39.0	37.8	38.6	38.3	38.4	37.7	38.3	38.7	36.3	36.7	38.3	38.9	39.0	42.7	38.8	41.2	42.5	42.1	39.9	42.5	41.7	36.0	38.8	34.1	39.5	40.6	40.5	39.6	39.6	37.9	33.9			
055024 Gunnedah Resource Centre	38.1	+6.5	37.6	37.9	37.9	38.4	37.1	36.6	36.0	36.0	36.7	37.1	37.1	40.5	39.2	40.8	43.0	41.2	40.1	41.3	39.0	33.3	35.5	35.0	37.2	39.5	40.6	39.6	40.0	37.5	36.0	34.0		
055325 Tamworth Airport AWS	37.9	36.7	37.1	37.3	37.8	38.1	38.1	36.3	36.0	35.6	37.9	36.7	37.8	40.2	42.0	42.0	44.8	45.9	45.9	44.8	37.9	38.1	38.0	42.0	40.7	40.3	43.3	45.4	38.3	34.6	41.7	36.9	38.9	
056242 Inverell (Raglan St)	35.0	33.8	33.2	33.8	34.3	33.6	36.2	32.6	30.4	29.8	35.2	33.7	35.8	36.8	36.4	38.3	38.7	36.2	38.9	36.8	36.6	32.6	34.3	32.1	35.3	37.8	37.2	36.1	36.2	35.3	33.9	34.0		
057095 Tabulam (Muirme)	32.4	31.6	31.4	32.1	31.2	33.4	31.5	25.5	25.2	25.5	31.5	30.7	31.8	31.4	31.5	34.1	36.0	33.8	34.5	38.2	32.8	33.3	33.0	32.6	31.9	34.5	35.6	35.7	34.8	32.3	33.1			
058012 Yamba Pilot Station	28.9	+2.7	28.1	27.5	27.7	28.1	29.1	28.3	26.5	26.1	27.8	28.8	29.1	28.2	28.3	28.7	29.7	29.3	29.4	29.5	28.2	29.4	29.8	31.1	28.6	30.3	30.9	29.5	28.2	28.4	30.5	30.5		
060139 Port Macquarie Airport AWS	31.2	30.0	30.4	29.4	30.9	33.7	28.7	30.3	29.7	32.0	30.4	30.2	30.5	30.2	29.3	30.9	31.6	31.5	32.5	34.6	30.7	29.3	30.1	32.5	30.9	31.3	33.7	32.8	31.4	31.1	32.2	33.6		
061078 Williamtown RAAF	33.3	+5.5	34.6	35.8	31.5	35.1	40.9	22.1	26.2	33.3	35.4	25.8	31.6	34.4	27.6	31.2	36.8	35.9	37.6	38.5	30.5	27.7	27.0	33.9	36.8	29.6	34.5	41.8	38.1	31.0	35.7	36.9		
061363 Scone Airport AWS	37.5	37.9	39.2	37.5	39.4	39.4	26.2	29.3	37.3	37.6	33.5	37.0	34.1	36.4	41.8	43.4	42.8	42.7	42.8	32.3	29.6	37.2	39.1	35.0	40.1	42.7	42.0	37.3	39.9	38.4	36.2			
062101 Mudgee Airport AWS	35.5	36.5	37.6	34.0	38.3	37.5	30.1	30.4	34.5	34.4	33.1	31.8	35.7	34.3	35.6	39.5	40.7	40.0	40.6	37.5	29.1	36.1	34.6	31.9	36.7	39.1	39.3	36.8	34.7	31.7	34.0			
063005 Bathurst Agricultural Station	34.0	+6.3	35.0	35.8	37.0	26.6	26.7	31.0	31.7	33.5	31.8	33.0	32.2	35.3	38.5	39.8	40.2	39.3	34.9	34.2	26.7	35.0	35.3	32.0	36.0	38.0	35.5	31.8	34.0	30.4				
063254 Orange Agricultural Institute	33.8	32.4	24.9	27.6	28.7	29.6	34.0	33.1	36.2	37.3	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1	37.1		
064008 Coonabarabran (Showgrounds)	37.0	+5.7	36.2	38.3	36.9	37.1	35.8	35.1	34.9	34.1	35.0	35.5	35.6	37.3	38.7	38.3	39.2	42.0	41.0	39.0	30.9	31.0	36.4	33.5	35.5	38.6	39.1	37.4	37.6	36.3				
065070 Dubbo Airport AWS	39.0	39.3	40.4	38.1	39.9	37.3	35.5	36.5	37.4	38.3	36.7	39.3	41.1	40.0	43.0	44.6	44.3	42.5	40.8	40.6	34.1	38.7	37.0	36.4	40.1	41.6	40.6	39.8	38.0	33.3	37.0			
066062 Sydney (Observatory Hill)	29.6	+3.6	31.6	29.8	28.8	32.2	37.8	22.0	25.6	28.4	30.4	22.3	27.9	28.8	27.8	28.4	29.0	30.3	29.0	32.4	26.4	26.6	26.6	29.3	29.8	28.0	30.2	35.1	34.4	30.6	29.6	28.4	39.6	
067105 Richmond RAAF	33.8	35.7	36.6	32.5	37.6	40.3	21.1	22.7	32.1	33.5	24.5	28.7	36.0	29.1	33.8	39.7	39.0	41.4	41.1	29.3	27.0	29.2	35.1	34.6	34.1	36.7	34.1	38.6						
068072 Nowra RAN Air Station AWS	29.4	31.3	29.8	28.4	32.7	28.2	21.8	22.3	29.2	25.0	20.4	26.9	32.6	24.7	29.9	31.5	33.9	31.9	37.7	22.3	26.3	30.0	32.8	30.6	28.1	30.6	28.1	29.4	27.5	39.5				
068151 Jervis Bay (Point Perpendicular)	25.9	25.7	25.7	26.6	26.7	23.3	21.6	23.0	25.7	23.0	20.0	25.3	28.9	22.2	26.8	26.1	29.2	27.4	30.7	22.0	24.3	26.7	28.3	23.5	25.4	28.6	26.9	28.4	23.9	27.2	26.4	35.1		
068241 Albion Park (Wollongong Airport)	28.9	31.1	28.6	28.4	33.1	34.3	21.7	23.1	27.5	27.8	22.3	26.1	29.3	26.5	27.7	27.1	28.1	30.4	28.8	29.9	27.5	26.0	27.9	29.2	32.3	27.7	29.8	31.9	32.4	29.2	28.1	27.9	39.8	
069018 Moruya Heads Pilot Station	24.8	+1.4	24.9	25.2	24.7	25.5	24.3	22.5	21.9	24.2	20.8	20.8	24.7	26.0	27.0	25.0	24.7	25.5	24.6	26.8	21.8	22.5	24.0	24.3	26.0	25.0	23.6	25.4	25.4	24.4	23.1	24.9	25.5	35.8
070351 Canberra Airport	34.5	35.3	35.9	35.3	38.1	36.7	25.0	24.1	30.7	30.7	27.5	29.4	32.4	31.1	36.4	41.1	40.6	36.0	35.1	34.3	32.0	35.4	38.4	35.4	32.0	39.4	41.5	28.1	35.7	37.1	35.2			
071041 Thredbo Village	26.8	26.0	28.5	27.5	30.0	25.0	21.5	24.5	21.0	21.5	23.5	23.5	26.0	27.6	29.0	31.5	33.0	30.5	29.5	27.0	28.0	27.5	29.0	29.0	31.5	31.5	19.5	22.0	26.5	25.5	24.5			
072150 Wagga Wagga AMO	37.9	+6.8	38.5	40.8	39.5	42.1	31.3	31.6	33.9	32.8	32.0	33.1	35.7	37.9	38.1	40.7	42.9	43.0	44.3	45.2	43.6	37.6	38.4	39.2	40.7	41.1	39.2	43.7	42.5	29.6	23.9	36.6	40.5	35.3
072160 Albury Airport AWS	37.4	38.8	39.8	40.0	43.7	30.5	31.4	35.5	34.6	31.7	31.3	34.6	38.4	42.8	41.9	44.4	45.3	42.0	37.5	31.0	39.8	40.4	40.6	37.1	40.6	44.7	39.4	31.1	33.9	31.7	34.1			
072161 Cabramurra SMHEA AWS	25.6	25.6	27.5	28.2	29.1	23.2	21.5	21.7	21.4	20.8	21.9	21.2	25.4	27.3	27.6	30.6	32.3	30.4	28.3	26.6	26.1	26.5	26.9	27.9	28.3	30.6	29.3	17.4	17.5	24.6	24.8	23.7		
074258 Deniliquin Airport AWS	37.8	39.8	37.9	39.5	45.6	26.5	30.6	34.7	36.2	30.1	29.8	31.2	37.2	43.4	43.7	45.9	46.8	41.6	40.6	33.7	31.0	40.0	42.5	41.5	42.7	47.2	38.5	25.4	32.0	37.4	35.6	30.4		
Tasmania	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</									

Daily and mean minimum temperatures for January 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	31		
Western Australia	Mean Anom	24.8	23.3	23.1	27.7	23.2	23.3	28.0	25.1	27.5	22.7	22.3	26.0	25.2	22.5	22.8	25.8	25.5	24.7	23.1	25.0	26.3	23.7	23.7	24.6	24.2	24.5	24.5	25.6	24.8	25.8	27.6	26.6	
001019 Kalumburu	25.4	26.2	25.0	28.5	22.3	22.4	25.0	25.9	27.3	27.4	23.7	26.0	26.8	23.8	24.8	24.5	26.0	23.0	26.3	24.1	26.6	23.2	24.7	26.6	26.1	26.1	25.1	25.4	23.5	26.6	28.4	25.7		
002056 Kununurra Aero	26.8	+0.5	28.7	28.7	28.9	29.2	25.4	29.3	24.9	28.5	28.5	27.7	28.6	28.9	29.2	23.6	26.1	26.1	26.7	23.4	28.1	25.6	23.1	26.3	24.5	25.1	25.2	24.9	24.8	25.3	28.3	28.4	28.3	
003032 Derby Aero	25.9	27.7	27.8	28.4	28.6	22.9	21.8	22.0	23.3	27.1	27.5	27.5	28.3	28.2	24.8	24.3	26.3	23.1	24.5	29.1	24.0	24.4	27.2	23.8	25.8	25.5	25.5	27.7	26.3	26.2	26.1	26.4		
004032 Port Hedland Airport	26.8	+1.2	24.9	25.6	27.0	26.7	27.2	27.1	26.2	26.4	24.9	25.2	28.0	27.2	26.6	27.1	26.5	28.3	29.2	26.5	26.5	28.3	29.4	29.3	27.8	27.9	23.8	25.8	25.1	25.1	25.9	27.2	28.1	
004083 Karratha Aero	27.8	26.1	26.0	26.5	26.5	27.2	27.7	27.5	28.9	27.7	27.6	26.7	25.1	29.0	29.4	27.2	28.9	29.1	29.4	29.0	30.1	30.1	29.9	28.6	28.6	28.1	26.0	26.8	26.4	27.3	28.0			
004106 Marble Bar	27.7	25.8	27.3	28.7	27.9	26.1	27.1	26.4	27.4	28.5	26.5	27.2	30.0	28.3	30.9	29.0	23.5	26.2	29.2	28.9	31.4	29.4	27.5	27.9	26.5	27.3	26.6	26.9	25.4	25.8	27.6			
005007 Learmonth Airport	23.1	22.5	21.2	20.3	21.0	23.4	23.8	25.7	26.1	27.6	23.0	22.5	21.5	19.9	20.0	20.7	20.7	21.8	24.3	23.6	23.3	26.9	23.2	21.3	18.2	19.9	25.2	24.9	27.3	25.3	25.6	25.2		
006011 Carnarvon Airport	22.2	-0.2	21.8	20.9	20.3	19.4	21.5	24.0	23.4	23.6	23.3	22.4	21.4	21.9	21.1	20.9	21.3	20.4	20.1	21.2	22.0	25.2	24.0	22.9	20.5	18.3	19.6	22.1	25.6	26.2	25.8	22.4	23.5	
006044 Denham	21.1	21.4	20.8	21.4	18.4	20.6	22.1	24.5	22.6	22.1	21.0	21.5	21.2	20.9	20.0	19.0	19.7	24.5	19.5	20.1	21.5	20.8	18.8	18.2	19.1	23.6	25.0	22.0	20.0	20.0				
007176 Newman Aero	27.9	29.5	31.0	30.5	28.8	28.0	28.4	27.5	24.9	31.1	27.4	25.9	31.4	29.5	29.6	29.0	27.8	26.3	29.1	29.4	29.1	31.9	29.2	23.9	23.7	23.3	26.6	25.2	25.2	25.2				
007185 Paraburdoo Aero	27.8	28.8	29.3	29.4	32.1	29.1	23.2	28.8	26.4	30.5	27.5	28.4	22.0	26.9	28.4	26.7	30.1	30.7	25.2	26.6	29.7	29.7	31.8	30.2	25.8	31.0	25.8	28.6	24.6	22.1	25.8			
007045 Meekatharra Airport	26.1	+1.8	25.6	26.5	23.5	23.2	25.0	26.5	25.0	30.2	27.8	24.5	24.4	29.1	27.6	27.9	33.0	28.1	24.8	24.3	26.7	27.9	28.8	30.0	21.6	17.4	17.4	11.1	12.9	14.0	14.1	16.4	16.0	15.2
007600 Mount Magnet Aero	23.5	24.3	20.7	18.5	16.4	21.4	26.5	24.1	24.8	27.0	25.0	19.6	23.9	25.2	22.8	27.0	22.6	20.8	21.8	27.9	28.8	28.5	27.5	17.4	15.3	18.5	24.3	27.0	26.6	23.8	22.6	26.6		
008296 Morawa Airport	17.8	17.8	16.6	14.7	12.6	13.8	24.8	19.2	21.0	22.4	18.6	14.9	17.3	17.5	16.8	17.0	16.1	14.5	15.6	22.3	21.7	22.8	20.0	15.2	14.4	12.8	16.2	21.4	19.6	15.7	19.6			
008297 Dalwallinu	16.1	17.3	16.4	14.2	11.4	12.0	22.3	16.3	16.8	18.4	17.8	12.9	16.5	17.6	16.6	14.7	13.7	14.6	17.6	20.9	11.5	19.8	11.5	14.0	11.5	14.5	15.9	17.9	18.3	16.5	16.3			
008315 Geraldton Airport	16.8	16.8	15.6	14.2	13.8	12.4	20.5	14.8	20.0	19.6	15.8	17.9	13.5	18.1	19.7	19.6	19.3	18.2	16.0	15.5	17.3	20.6	20.3	18.1	17.1	12.1	14.0	15.4	19.0	13.6	16.5	13.8		
009021 Perth Airport	15.8	-1.3	16.3	20.0	16.9	7.0	14.8	18.6	17.2	18.4	18.5	13.2	11.7	12.0	18.9	17.5	16.2	14.5	14.8	16.0	16.1	20.7	17.6	18.8	15.5	14.6	12.4	15.6	17.4	11.6	11.0	17.4		
009131 Jurien Bay	16.4	17.8	18.6	18.8	14.0	12.4	20.5	15.6	16.2	20.5	14.6	17.7	14.4	20.0	19.1	19.1	19.5	15.9	14.3	15.5	17.7	17.5	17.9	17.4	11.1	12.9	14.0	14.1	16.4	16.0	15.2			
009225 Perth Metro	16.6	17.2	19.7	17.4	10.0	12.9	20.3	19.7	18.3	18.5	17.0	14.5	14.0	20.1	17.7	17.1	16.5	16.0	14.2	18.0	20.0	19.9	19.7	16.0	15.0	11.8	15.2	16.1	13.2	14.0	17.3	17.3		
009240 Bickley	14.7	16.9	16.2	13.5	8.4	12.9	17.1	12.4	19.9	18.4	17.0	12.9	14.8	16.4	15.5	13.2	13.4	12.5	12.9	15.9	21.5	16.5	12.5	12.0	8.6	12.0	13.5	17.3	16.6	13.8	13.2			
009518 Cape Leeuwin	16.4	-0.6	17.7	18.8	16.5	14.6	15.5	17.2	18.4	16.7	16.3	17.8	15.4	14.9	17.2	16.8	16.2	15.7	16.7	14.8	18.5	19.7	17.8	17.6	14.3	13.8	14.7	15.4	15.5	16.7	16.5	16.0		
009617 Bridgetown	11.2	17.8	16.0	13.4	6.3	5.6	13.2	14.4	12.9	11.3	11.6	11.1	9.1	15.6	15.0	11.3	9.3	11.5	6.6	8.8	13.8	16.2	15.1	11.0	12.7	7.6	4.5	6.2	6.9	13.8	6.1	12.1		
009746 Witchcliffe	12.3	16.7	17.1	15.3	9.8	9.2	12.8	14.8	13.1	12.6	11.9	9.9	7.7	12.0	11.9	10.8	9.2	14.7	7.9	10.9	17.1	16.0	15.6	13.0	12.8	9.5	10.5	11.4	10.0	11.0	11.5			
009789 Esperance	16.3	17.4	19.0	17.6	15.9	14.0	13.2	13.9	18.5	16.6	15.1	11.8	22.3	17.3	17.0	17.6	12.8	17.0	13.0	17.4	25.3	19.0	19.6	17.0	15.3	12.5	11.0	12.6	16.0	16.6	16.5			
009965 Bunbury	13.5	17.2	15.9	15.7	7.2	11.1	15.7	16.7	13.8	16.2	13.2	12.1	13.2	15.6	16.8	12.8	12.9	12.4	10.5	13.3	18.7	16.2	14.8	15.1	14.0	7.7	9.3	12.8	13.0	11.2	10.4	14.4		
009977 Mandurah	17.6	20.3	19.6	17.7	13.8	15.4	19.4	17.6	18.4	19.6	16.3	17.4	19.0	17.8	18.6	16.7	16.3	16.5	16.2	20.1	24.0	17.7	20.6	16.0	15.1	13.2	14.0	16.8	18.3	16.7	15.7	17.6		
009999 Albany Airport	12.7	15.8	15.9	14.6	9.9	8.3	15.6	17.8	15.5	14.4	12.9	11.0	11.1	16.3	10.2	14.0	7.8	11.2	8.9	10.1	16.2	18.2	14.5	16.4	14.3	10.5	9.8	6.0	9.5	15.2	12.3	8.6		
010007 Bencubbin	17.9	-0.2	21.1	16.0	15.5	13.7	15.0	21.5	21.3	16.7	17.9	19.4	15.3	19.5	22.4	16.5	18.0	16.5	21.2	21.7	20.7	21.0	25.4	14.0	14.0	14.5	19.0	19.1	16.0	17.6				
010092 Merredin	18.0	+0.4	21.5	17.2	14.9	15.6	14.1	21.4	23.6	17.4	23.7	22.2	17.2	22.2	16.2	20.0	25.0	16.0	20.6	27.4	19.0	15.0	20.5	14.0	13.1	10.0	14.5	19.4	18.1	17.0	15.6			
010286 Cunderdin Airfield	15.6	18.4	14.7	14.0	11.3	14.1	19.6	17.2	17.2	17.5	12.2	13.9	20.3	16.3	14.9	14.5	16.3	17.7	18.7	18.3	14.1	13.3	12.5	13.7	13.9	11.7	10.0	15.9	14.8					
010633 Darwin Airport	25.3	+0.5	26.5	23.8	28.9	28.2	21.6	23.9	23.8	28.5	24.9	26.4	26.8	28.9	22.3	25.4	24.3	22.3	23.0	24.1	25.4	25.6	23.5	25.7	24.5	23.5	26.5	25.6	25.6	25.2	21.8	21.2	21.8	
014198 Jabiru Airport	24.5	23.5	23.8	23.9	24.7	25.9	24.1	24.1	26.4	27.0	21.8	20.3	24.9	24.4	24.9	25.3	24.2	24.0	24.5	25.9	26.4	25.6	24.5	25.6	25.1	24.1	22.8	22.5	24.1	24.4	24.0	22.8	22.5	24.1
014932 Tindal RAAF	24.1	23.7	22.7	26.1	22.5	23.0	20.9	24.3	26.2	21.3	22.9	25.7	27.0	23.5	23.8	23.5	24.7	24.1	24.9	24.2	25.2	24.8	24.9	24.5	24.4	24.0	22.5	22.7	24.0	24.4	24.2	24.4	24.4	
014508 Gove Airport	25.7	24.5	25.6	26.4	26.4	25.1	24.9	25.8	26.5	27.9	27.9	28.3	27.4	24.6	25.3	25.8	25.3	25.1</td																

Daily and mean minimum temperatures for January 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	31									
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	26.9	+6.8	23.7	29.0	26.3	26.3	29.3	19.8	22.4	22.5	21.3	22.7	24.8	22.5	27.6	30.7	30.1	30.8	30.9	32.6	28.3	27.5	27.1	29.2	29.5	28.8	30.5	31.2	28.4	22.8	24.5	27.2	24.4								
048245 Bourke Airport AWS	27.8	25.7	26.8	31.4	25.8	31.2	22.9	24.4	27.3	25.1	26.2	28.5	22.0	25.0	27.2	25.6	26.4	29.0	29.9	28.1	29.7	29.7	30.3	32.1	27.3	30.3	33.5	33.7	25.7	26.6	28.3	25.7									
049000 Ivanhoe Aerodrome AWS	24.1	22.7	25.8	24.9	27.3	22.1	15.5	18.1	22.5	18.8	17.2	21.1	24.1	23.1	25.5	30.9	31.2	28.4	30.2	24.2	20.9	19.8	27.6	27.4	28.7	33.6	27.4	22.5	16.4	17.5	26.2	26.7									
050052 Condobolin Ag Research Stn	25.4	+7.6	21.0	25.4	27.0	27.3	31.8	17.2	20.9	23.0	19.5	18.5	23.0	22.5	26.5	27.3	28.5	27.3	31.2	32.0	28.5	29.9	28.6	26.5	25.3	25.0	27.3	31.0	26.3	22.4	23.3	27.6	26.7								
051039 Nyngan Airport	26.2	+6.7	22.0	28.8	26.0	30.0	18.8	20.5	24.2	23.5	23.0	24.5	20.8	25.6	26.8	28.3	27.0	29.9	32.0	28.8	26.5	24.4	26.9	24.8	26.3	29.0	31.2	30.0	26.2	26.0	29.4	24.3									
052088 Walgett Airport AWS	25.9	25.1	24.8	25.8	23.5	26.9	22.6	24.8	25.0	24.5	23.3	27.8	24.9	23.2	27.0	22.5	24.6	27.4	30.3	21.3	30.0	25.5	26.3	27.4	25.2	29.0	30.3	31.8	24.8	26.6	27.8	24.4									
053115 Moree Aero	24.3	23.0	22.8	23.2	24.9	22.7	23.2	21.6	23.1	23.6	21.9	24.4	23.2	24.0	22.7	24.7	26.4	25.4	24.9	24.7	27.0	24.4	24.8	24.3	21.7	25.6	26.5	26.8	27.7	24.4	24.4	25.1									
054038 Narrabri Airport AWS	24.7	25.4	21.2	25.7	25.8	24.5	24.8	21.4	22.4	22.6	22.8	21.4	21.6	23.6	25.6	27.7	24.3	26.4	27.5	22.8	22.5	22.0	22.7	25.9	28.1	28.8	29.2	26.2	26.0	26.3											
055024 Gunnedah Resource Centre	24.0	+5.2	25.0	22.4	23.6	23.3	24.8	21.1	20.8	21.3	21.6	23.0	21.9	24.4	22.4	25.1	26.7	26.0	26.9	26.1	23.8	22.7	21.9	22.6	23.4	26.2	28.0	25.1	26.2	25.9											
055325 Tamworth Airport AWS	21.9	24.3	17.8	19.0	20.5	23.9	20.7	22.0	19.4	19.4	20.6	22.4	20.1	19.5	19.0	20.0	22.9	21.3	26.3	23.1	26.0	21.7	20.7	21.0	20.1	24.3	26.8	23.3	21.6	24.9	24.5										
056242 Inverell (Raglan St)																																									
057095 Tabulam (Muirne)	18.3	16.9	16.4	16.1	19.0	17.8	18.5	19.0	18.6	18.5	19.8	18.2	17.1	16.5	16.2	16.7	17.8	18.4	18.0	16.0	16.5	20.6	19.4	19.4	20.0	20.8	19.8	18.8	19.5	18.5	18.2	19.2									
058012 Yamba Pilot Station	21.4	+12.0	20.5	19.6	19.8	21.5	21.2	21.1	21.6	22.0	21.9	22.2	21.6	21.7	20.1	20.6	21.4	21.5	21.1	20.3	22.8	23.1	22.4	23.2	23.5	22.3	21.3	20.0	21.4	21.7	21.8										
060139 Port Macquarie Airport AWS	20.3	20.4	20.3	16.6	20.4	21.1	18.8	20.9	19.3	19.1	18.2	18.3	20.6	14.9	16.0	17.8	20.8	22.1	22.4	21.2	24.0	24.0	21.9	19.4	22.7	20.2	22.0	21.0	20.5	21.1	22.3	21.4									
061078 Williamtown RAAF	21.0	+3.1	20.9	18.6	17.5	18.6	23.0	19.7	19.1	21.0	20.6	21.8	21.2	21.0	17.7	21.1	21.8	21.8	19.8	19.0	23.0	20.8	21.2	21.2	21.1	22.2	23.2	22.1	22.8	23.7	22.2										
061363 Scone Airport AWS	21.7	20.9	19.6	19.9	18.1	25.9	20.2	18.3	20.2	19.6	20.7	21.4	19.7	19.8	20.0	19.9	22.0	22.6	24.4	27.7	21.5	21.4	20.0	22.1	21.5	22.5	22.6	25.9	23.4	21.8	25.3	24.8									
062101 Mudgee Airport AWS	20.2	18.8	18.7	21.7	17.6	19.7	20.3	18.8	19.3	17.6	19.7	19.1	17.8	20.7	21.2	20.7	20.9	20.8	22.6	21.1	19.8	18.6	20.3	20.2	19.0	19.5	23.7	22.7	20.5	22.8	21.5										
063005 Bathurst Agricultural Station	18.4	+5.3	16.5	18.3	18.8																																				
063254 Orange Agricultural Institute																																									
064008 Coonabarabran (Showgrounds)	20.8	+5.1	20.5	18.5	23.9	18.8	21.2	20.8	19.1	18.7	19.4	19.5	18.9	17.7	20.0	17.7	22.1	19.0	25.5	21.9	23.0	19.2	19.8	20.0	19.0	20.0	22.9	25.6	22.7	22.8	24.7	23.0									
065070 Dubbo Airport AWS	23.0	22.3	21.0	20.6	21.6	25.8	18.4	20.2	22.2	20.5	21.1	20.5	19.5	24.6	22.6	23.1	21.7	25.8	27.9	26.3	23.0	20.6	22.4	21.0	22.0	22.6	24.5	26.3	24.5	23.7	25.7	22.7									
066062 Sydney (Observatory Hill)	21.7	+2.6	21.7	21.4	21.0	20.9	22.6	17.9	18.3	20.7	20.8	20.3	20.7	21.8	21.6	22.5	22.2	22.8	22.8	23.5	20.8	21.9	21.2	21.1	22.2	23.2	22.7	22.9	22.7	22.8	23.4										
067105 Richmond RAAF	21.1	21.0	20.6	22.1	18.8	21.8	17.8	17.6	19.4	19.5	20.9	19.8	18.5	21.9	20.4	21.3	21.9	23.6	22.9	20.1	21.0	21.8	22.3	22.6	22.0	22.9	22.1	21.9	22.8	23.4											
068072 Nowra RAN Station AWS	19.7	22.7	20.6	20.1	21.2	20.0	14.8	14.9	19.7	18.4	16.8	17.3	17.5	20.4	19.9	19.1	20.2	22.1	21.4	22.7	21.4	18.0	19.8	18.9	22.8	18.9	18.4	22.4	21.1	21.2	20.4	21.1									
068151 Jervis Bay (Point Perpendicular)	20.1	20.3	20.1	20.5	20.7	20.7	15.4	17.1	20.0	19.4	17.0	17.4	19.5	20.6	19.4	21.4	20.7	21.5	21.7	21.1	18.6	19.9	21.0	21.6	20.7	20.1	22.2	21.2	20.2	20.3	21.4	21.2									
068241 Albion Park (Wollongong Airport)	19.9	21.9	17.8	21.2	15.7	18.6	17.5	18.1	20.0	18.1	19.1	19.4	18.5	20.0	18.8	19.3	20.5	21.4	22.2	19.4	21.3	18.8	20.5	20.4	19.9	21.2	21.1	22.5	22.3	21.7	20.0										
069018 Moruya Heads Pilot Station	19.5	+3.5	19.1	21.1	19.5	20.5	21.5	13.8	15.2	19.4	18.2	15.8	17.0	18.3	17.3	19.2	20.7	21.8	20.7	20.8	19.0	20.2	21.7	20.3	19.3	21.8	21.0	19.6	20.0	21.0	21.4										
070351 Canberra Airport	17.7	13.7	18.0	18.4	17.2	21.1	17.2	13.1	14.8	16.8	13.7	16.4	17.6	13.7	16.0	16.0	18.7	20.1	17.1	20.5	21.4	17.1	16.9	16.7	19.4	14.9	15.9	20.5	21.2	19.1	19.0	22.2									
071041 Thredbo Village	11.2	12.0	11.0	12.5	10.5	16.0	7.0	6.5	10.5	8.4	4.5	8.5	11.5	9.0	12.0	11.5	11.0	13.0	13.5	13.0	6.0	9.0	11.5	12.0	12.5	12.5	17.5	14.0	10.5	11.0	14.0	15.5									
072150 Wagga Wagga AMO	22.3	+6.6	17.8	22.4	22.1	25.7	24.4	12.4	18.1	18.4	16.3	13.3	21.0	19.2	24.4	22.8	25.9	24.0	29.8	28.5	24.6	23.1	25.7	23.4	22.0	25.7	28.9	23.7	20.1	19.2	23.2	25.8									
072160 Albury Airport AWS	20.7	17.6	22.1	19.6	19.5	22.5	12.4	14.7	22.2	17.2	13.1	13.6	16.8	18.8	22.2	22.2	24.0	22.3	26.0	23.3	16.7	21.6	22.2	21.1	19.9	24.1	28.0	20.1	19.1	20.3	23.2	19.3									
072161 Cabramurra SMHEA AWS	15.5	14.7	14.7	18.5	18.1	19.8	6.7	9.5	13.8	11.5	9.3	12.2	13.2	13.4	13.2	20.3	20.8	20.1	18.3	14.6	14.1	13.7	18.3	19.6	15.4	19.7	21.7	14.7	13.1	13.2	15.1	16.5									
074258 Deniliquin Airport AWS	19.3	20.3	17.9	15.3	22.0	17.3	11.7	12.0	19.0	15.3	13.2	14.9	19.0	19.0	17.9	17.3	20.7	17.6	15.9	17.3	20.7	23.6	21.4	28.9	22.8	17.8	17.1	20.7	21.3	19.1											
Tasmania	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									
091126 Devonport Airport	13.5	12.7	11.2	13.2	16.2	11.1	8.6	10.6	14.3	8.7	12.3	9.3	17.0	14.8	12.6	18.1	16.8	16.2	17.5	13.0	13.1	14.9	13.4</td																		

Daily and total rainfall for January 2019

	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					
Western Australia																																						
001013 Wyndham	211.4	5.2	22.4	.	18.0	2.0	0.2	.	.	43.2	.	»	2.0	.	0.6	0.2	12.0	.	0.4	.	24.0	13.0	10.0	7.0	3.0	1.2	.	47.0	.	.								
001019 Kalumburu	456.0	1.2	7.8	.	3.2	0.2	.	.	28.0	60.2	.	23.2	9.6	4.8	.	3.4	66.8	2.4	.	0.8	45.0	51.8	65.4	56.0	20.2	4.4	1.4	0.2	.	.								
002056 Kununurra Aero	149.2	.	.	.	65.6	2.0	.	.	22.4	.	16.2	.	.	0.4	0.2	.	.	13.2	8.8	.	1.2	.	1.4	2.0	15.8								
003003 Broome Airport	143.6	204	.	.	.	2.6	1.2	30.8	.	4.8	1.0	6.0	.	2.4	0.4	.	0.8	47.2	17.4	27.4	.	1.4	0.2	.	.								
003032 Derby Aero	153.0	207	.	.	.	11.6	35.4	0.2	6.4	.	.	.	6.0	2.0	2.6	12.8	0.4	.	17.2	5.6	0.2	21.2	17.8	6.2	7.2	0.2								
004032 Port Hedland Airport	38.6	64	4.0	0.2	24.6	3.2	6.4	0.2	.	.	2.8	.	.							
004083 Karratha Aero	2.8							
004106 Marble Bar	36.4	2.0	2.8	0.4	.	.	1.4	.	.	1.2	.	.	.	28.6	.	.									
005007 Leamonth Airport	.	46							
006011 Carnarvon Airport	3.1	19	2.4	0.1	0.6	.								
006044 Denham	.	8.1							
007176 Newman Aero	23.8	1.4	.	2.2	1.0	2.0	1.2	14.8	.	.	0.4	0.8	.	.									
007185 Paraburdoo Aero	64.0	25.8	2.2	0.2	2.4	.	28.0	.	5.4	.	.										
007045 Meekatharra Airport	0.8	26	0.8								
007600 Mount Magnet Aero							
008296 Morawa Airport							
008297 Dalwallinu							
008315 Geraldton Airport							
009021 Perth Airport	5.8	9.2	.	.	0.6	0.6	4.6							
009131 Jurien Bay	1.0	.	.	0.4	0.2	0.4							
009225 Perth Metro	7.2	.	.	1.8	0.4	4.8	0.2							
009240 Bickley	13.8	.	.	1.2	2.8	9.6	0.2							
009518 Cape Leeuwin	64.8	21	0.2	.	1.0	.	0.8	0.2	.	0.2	.	57.2	5.0	0.2							
009617 Bridgetown	6.8	.	0.8	2.4	3.4	0.2							
009746 Witchcliffe	54.6	.	1.2	0.4	1.8	43.8	7.2	0.2							
009789 Esperance	0.8	0.4	.	0.4						
009965 Bunbury	10.6	.	0.2	0.2	7.2	3.0						
009977 Mandurah	4.2	.	0.2	0.2	0.6	3.2						
009999 Albany Airport	15.6	.	0.2	0.2	0.2	0.2	2.0	5.8	4.8	.	0.2	.	1.4	0.6							
010007 Bencubbin	1.0	18	1.0						
010092 Merredin	0.6	17	.	.	.	0.6						
010286 Cunderdin Airfield	4.6					
010633 Ravensthorpe	4.6	27	4.6					
010911 Lake Grace						
010916 Katanning	1.0	0.8	0.2						
010917 Wandering	2.4	1.0	1.4						
011003 Eucla	1.8	10	0.4	.	.	.	1.2	0.2	3.2	0.2	2.4	.	25	26	27	28	29	30	31	.	.	.						
011052 Forrest	2.0	1.0	11.4						
012038 Kalgoorlie-Boulder Airport	8.0	26	0.8	0.2	.	.	4.2	2.8						
012071 Salmon Gums Res.Str.	1.4	19	0.8	0.6						
013011 Warburton Airfield	7.2	6.2					
013012 Wiluna	16.2	32	0.2	.	.	8.0	2.6	1.8	.	.	13.0	1.6	.	.	16.0							
013017 Giles Meteorological Office	27.2	31	1.4	2.2						
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	31					
014015 Darwin Airport	362.0	437	0.2	23.6	3.2	0.2	1.4	7.8	.	.	0.4	.	7.0	.	0.4	31.4	5.0	41.8	.	4.0	15.6	0.6	27.2	52.0	0.4	21.2	54.6	14.6	.	49.4	.	.	.					
014198 Jabiru Airport	364.6	17.8	18.2	12.6	0.6	.	21.2	6.0	.	38.0	40.8	11.4	14.6	0.6	0.6	7.0	7.2	8.0	0.4	2.2	6.8	7.2	34.2	48.6	.	30.2	5.6	12.0	11.4	1.4			
014932 Tindal RAAF	180.8	3.0	46.0	3.8	.	12.2	1.2	.	18.6	3.8	.	7.4	14.4	10.4	1.2	0.8	4.2	0.8	.	21.4	.	15.2	.	9.2	5.8	0.6	0.8					
014508 Gove Airport	222.8	26.2	1.0	1.0	.	0.6	8.6	7.2	4.0	0.8	1.2	.	14.4	2.0	9.4	5.8	7.0	33.4	43.8	21.2	25.4	.	8.6	.	1.2					
014723 Borroloola Airport	148.6	2.4	.	7.0	26.8	.	15.4	.	.	3.0	5.4	17.2	.	33.8	.	.	12.6	10.6	.	2.0	1.0	.	11.4					
014825 Victoria River Downs	101.8	144	0.8	5.2	14.2	.	18.4	.	0.6	.	6.0	3.0	.	17.0	.	.	»	14.0	.	»	»	10.2	11.2	.	1.2				
015135 Tennant Creek Airport	1.2	.	.	.	0.8	3.2	0.6	.	7.8	.	.	0.2	4.0					
015590 Alice Springs Airport	15.6	42	1.3	0.4	.	.	.	6.2	1.4	1.6	1.2	.	.	3.2				
015635 Yulara Airport	10.4	0.2	.	8.8	.	.	1.4	2.6	26.2	21.0	36.4	48.2					
014084 Charters Towers Airport	143.2	.	.	.	0.4	24.2	6.6	2.6	0.2	12.0	40.4	8.6	0.4	.	0.8	.	.	27.6	0.4	1.6	15.2	17.4	120.2	36.0	21.8	9.2	15.0	31.0	5.6
016001 Woomera Aerodrome	1.4	17	46.0	0.4	22.0	73.6	11.0	19.6	6.4	12.6				
016098 Tarcoola Aero	2.8	90.4	0.2	6.8	.	.	.	1.6	0.4	20.8	4.4	12.2	
029077 Burketown Airport	134.8	1.4	4.8	0.2	.	.	1.8	.	.	13.2	2.2	.	0.2	47.6	.	0.6	.	39.4	.	0.2														

Daily and total rainfall for January 2019

For more information about rainfall data and climate change see [www.bom.gov.au/climate/change](#). The following table provides a summary of the daily rainfall for the period 1 January 2010 to 31 December 2010. The table includes the total rainfall for each day, the number of days with zero rainfall, and the percentage of days with zero rainfall. The table also includes the total rainfall for the year, the number of days with zero rainfall, and the percentage of days with zero rainfall.