



Australian Government
Bureau of Meteorology

Monthly Weather Review Australia January 2021



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

Looking east from Hobart toward an impressive pyrocumulus cloud capping smoke from a large bushfire that started near Forcett on a day of record-breaking heat.

Photograph by Phil Reid, 3:30 pm on 4 January 2013. Used with permission.

Overview

- Rainfall was slightly below average for Australia as a whole.
- Rainfall was below average for parts of Queensland's east coast between Fraser Island and Mackay, parts of north-western Queensland and the central third of the Northern Territory.
- Rainfall was above average for much of Victoria, the Hunter District, and much of the west and south of New South Wales, large parts of the southern half of South Australia away from the south-east and Eyre Peninsula, large parts of Queensland's Cape York Peninsula and the Northern Territory's Top End, and parts of the Kimberley and south-east of Western Australia.
- Mean maximum temperatures were warmer than average along most of the north and west coasts of Western Australia but cooler than average for the much of central, and south of Western Australia, extending to the south-west of the Northern Territory and western parts of South Australia, and in a band extending from Queensland's north tropical coast extending inland of the ranges in south-east Queensland into north-eastern New South Wales.
- Mean minimum temperatures were warmer than average along much of coastal north and west of Western Australia, the north and east of the Northern Territory, western and far northern Queensland, and southern Victoria. Cooler than average mean minimum temperatures were recorded in an area spanning the interior of Western Australia and south-west of the Northern Territory.

Areal averages in January 2021

	Rainfall anomaly	Mean maximum temperature anomaly	Mean minimum temperature anomaly	Mean temperature anomaly
Australia	-4%	+0.05 °C	+0.46 °C	+0.26 °C
Western Australia	+6%	+0.01 °C	+0.25 °C	+0.13 °C
Northern Territory	-20%	+0.05 °C	+0.66 °C	+0.36 °C
South Australia	-20%	-0.03 °C	+0.19 °C	+0.08 °C
Queensland	-3%	+0.02 °C	+0.83 °C	+0.43 °C
New South Wales	-1%	+0.27 °C	+0.23 °C	+0.25 °C
Victoria	+85% 9th-highest	+0.28 °C	+0.95 °C	+0.62 °C
Tasmania	0%	+0.30 °C	+0.06 °C	+0.18 °C

Extremes in January 2021

	Hottest day	Coldest night	Wettest day	Warmest overall	Coollest overall	Wettest overall	Strongest wind gust
Australia	47.1 °C at Roebourne Aero (WA) on the 14th	-4.0 °C at Liawenee (Tas.) on the 20th	303.2 mm at Ingham Composite (Qld) on the 6th	34.0 °C at Marble Bar (WA) and Roebourne Aero (WA)	8.7 °C at kunanyi (Mount Wellington Pinnacle) (Tas.)	1223.5 mm at Tully Sugar Mill (Qld)	157 km/h at Parkes Airport AWS (NSW) on the 2nd
Western Australia	47.1 °C at Roebourne Aero on the 14th	4.7 °C at Eyre on the 8th	260.0 mm at Myroodah on the 31st	34.0 °C at Marble Bar and Roebourne Aero	19.6 °C at Albany	497.6 mm at Mount Hart Station	98 km/h at Mardie on the 21st
Northern Territory	44.0 °C at Curtin Springs on the 11th	10.0 °C at Arltunga on the 18th	176.0 mm at Mount Sanford on the 22nd	32.5 °C at Walungurru Airport	27.7 °C at Central Arnhem Plateau	712.0 mm at Marrara	87 km/h at Cape Wessel on the 28th
South Australia	45.3 °C at Port Augusta Aero on the 24th	3.9 °C at Naracoorte Aerodrome on the 20th	107.8 mm at Yunta (Panaramitee) on the 26th	30.8 °C at Moomba Airport	17.5 °C at Robe	110.4 mm at Yunta (Panaramitee)	85 km/h at Port Augusta Aero on the 25th
Queensland	44.0 °C at Birdsville Airport on the 23rd and 24th	9.6 °C at Applethorpe on the 24th	303.2 mm at Ingham Composite on the 6th	33.1 °C at Birdsville Airport	20.4 °C at Applethorpe	1223.5 mm at Tully Sugar Mill	130 km/h at Sweers Island on the 3rd
New South Wales	43.6 °C at Hay Airport AWS on the 24th	-2.6 °C at Thredbo AWS on the 16th	151.0 mm at Moorall Creek (The Den) on the 1st	30.2 °C at Wanaaring (Borrora Downs AWS)	11.1 °C at Thredbo AWS	512.0 mm at Moorall Creek (The Den)	157 km/h at Parkes Airport AWS on the 2nd
Victoria	43.9 °C at Ouyen (Post Office) on the 24th and Walpeup Research on the 24th	-2.6 °C at Mount Hotham on the 16th	194.4 mm at Haines Junction (Mount Sabine) on the 4th	24.5 °C at Mildura Airport	11.8 °C at Mount Hotham	388.8 mm at Haines Junction (Mount Sabine)	113 km/h at Wilsons Promontory Lighthouse on the 16th
Tasmania	38.0 °C at Dover on the 11th	-4.0 °C at Liawenee on the 20th	91.2 mm at Mileara Park on the 4th	18.4 °C at Launceston (Ti Tree Bend)	8.7 °C at kunanyi (Mount Wellington Pinnacle)	196.6 mm at Mount Read	139 km/h at kunanyi (Mount Wellington Pinnacle) on the 18th

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

Heatwaves

A low- to severe-intensity heatwave occurred in the north of Western Australia between the 12th and the 15th, with 47.1 °C at Roebourne Aero on the 15th being Australia's highest temperature recorded during January.

A low- to severe-intensity heatwave affected most of South Australia, Victoria and New South Wales in the days leading up to the 26th.

Low-intensity heatwave conditions developed in western Queensland and to the Northern Territory, South Australia and New South Wales from the 29th.

Low- to severe-intensity heatwave conditions were observed from the 29th along the coast from the Gascoyne and Central West districts down to the south-west corner of Western Australia.

Queensland

Tropical cyclone Imogen and flooding

Tropical cyclone Imogen formed in the south-east Gulf of Carpentaria on the 3rd, making it the first tropical cyclone of the 2020-21 season in the Australian Region.

Imogen weakened to a tropical low after crossing the Queensland's Gulf Country near Karumba and moving eastwards across northern Queensland. The system moved over the north tropical coast by the 5th and became embedded in a coastal trough off the north tropical coast. The coastal trough and low lingered for several days, generating widespread moderate falls across northern Queensland.

Another trough located further inland, and the coastal trough, combined with an upper-level disturbance, and produced widespread moderate falls across most of eastern Queensland. Heavy falls were localised around the north tropical to central coasts, with major flooding on the Herbert and Lower Burdekin rivers, and moderate flooding in some Gulf and western catchments on the 10th and the 11th.

Tropical cyclone Kimi

A tropical low was located in the Coral Sea on the 16th. The low tracked southward and developed into tropical cyclone Kimi, east of Cape Flattery around 10 am on the 17th. Kimi continued its southward track and intensified to a category 2 cyclone briefly to the east of Innisfail in the afternoon on the 18th.

Kimi soon weakened to a tropical low on the 19th then moved north-west nearly parallel to the coast line without making landfall.

Severe thunderstorms

Widespread thunderstorms activity brought heavy falls to south-east Queensland on the 18th. Flash flooding occurred in and around suburbs of Alexandra Hills, Birkdale, Thornside, Capalaba, Upper Coomera, Willow Vale and Ormeau Hills. Redland (Alexandra Hills) reported 120 mm in one hour.

The SES had around 205 requests for assistance, mainly around flash flooding. QFES responded to 12 swift water rescue incidents, mainly for vehicles driving through flooded roads. A tornado was observed west of Mareeba on the 18th as th

Northern Territory

Severe thunderstorms

On the 4th, squall-line thunderstorms affected the central Arnhem and Katherine areas, generating heavy rainfall at Sleisbeck, north-east of Katherine.

On the 6th, heavy rainfall from a Mesoscale Convective Complex (MCC), associated with widespread thunderstorms, affected parts of the Daly District in the north-west Top End. Heavy rainfall affected Darwin and nearby sites on the 14th, with a 103.5 mm recorded at Marrara in one hour, less than 1% Annual Exceedance Probability.

On the 21st, heavy rainfall associated with an active monsoon trough generated 125 mm in 2 hours and 131 mm in 3 hours at Upper Wickham River in the Gregory District. An isolated thunderstorm moved over Tennant Creek Airport on the 22nd, producing 51.6 mm in an hour.

A slow-moving thunderstorm produced 66.8 mm of rain in one hour at Yeuralba Ridge, just east of Katherine, on the 24th.

Western Australia

Fires

Fires burnt north and south of Perth on the 2nd. Suburbs in the City of Kwinana were under threat from fire on the 5th, when fire started at the Kwinana town rubbish tip. By the 6th, a fire was burning in the shires of Gingin and Dandaragan and had burnt through 9,500 hectares of land since the 2nd, along a 102 km perimeter.

Following many very warm days, fires had burnt almost 7,000 hectares to the south and east of Perth by the afternoon of the 16th, with at least two properties destroyed early that morning.

Tropical cyclone Joshua

A tropical low was located to the east of Cocos Island on the 14th. The low moved south-west and intensified into tropical cyclone Joshua in the morning on the 17th, before moving out of the Australian region of responsibility on the same day. Although Joshua brought over 200 mm rainfall in 72 hours to 9 am on the 14th, it remained well off shore from the Australian mainland.

South Australia

Fires

On the 11th, a grassfire started in South Australia's Lower South East and traveled in an easterly direction towards the town of Lucindale. The fire burnt through 16,800 hectares of land, with some properties damaged or destroyed, and significant losses to livestock and fencing. Electricity was also cut to over 3000 homes. Naracoorte reported catastrophic FFDI on the afternoon of the 11th between 15:30 and 16:00, with a maximum reported FFDI of 107.

On the 24th fires were burning in the Adelaide Hills, at Cherry Gardens near Mount Barker. The fire was burning towards heavily populated areas of the Adelaide Hills. Another fire began at Clarendon, and burnt through 1,200 hectares.

Victoria

Snow at Mount Buller

A cold front tracked over south-east Australia on the 16th and produced a few centimetres of snow at Mount Buller in north-east Victoria.

Severe thunderstorms

A thunderstorm crossed Warrnambool around 2 pm on the 2nd; reached a one-in-50- year intensity 30 mm rainfall was recorded in 12 minutes, which is less than 1% of annual exceedance probability. The Victoria State Emergency Service received around 100 calls for help from Warrnambool area, mostly for flash flooding.

On the 3rd, Cumberland River Holiday Park near Lorne was flooded due to heavy rainfall in the area; the gauge at Mount Cowley Lorne recorded 119.0 mm in the 24 hours to 9 am on the 4th, while Mount Sabine in the Otway Ranges recorded 194.4 mm, the highest daily total in Victoria since June 2012 Heavy rainfall on the 29th resulted in flash flooding in parts of Victoria, including Melbourne.

New South Wales

Severe thunderstorms

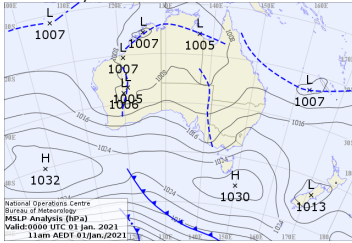
A severe thunderstorm on the 4th produced heavy rainfall, hail and strong winds in the Sydney area. A wind gust of 94 km/h was reported at Port Botany just after 3:30 pm. On the 14th, Sydney's upper North Shore was hit with hail up to 2 cm in diameter, and there were reports of fallen trees in Sydney's north and Central Coast. Hail with a diameter of 2 cm was reported at Urunga on the afternoon of the 15th.

Fog

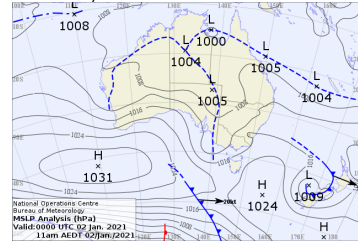
On the 24th, sea fog stretched about 50 km along the coast around Sydney from the eastern beaches down past Botany Bay, covering the skyline and the Harbour Bridge.

Synoptic analyses and summary

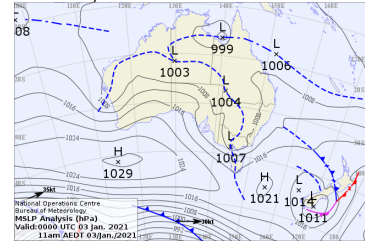
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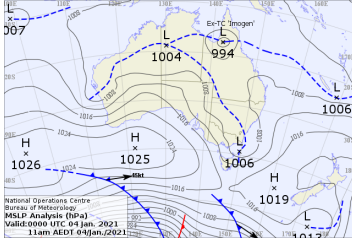
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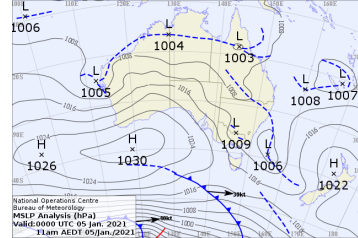
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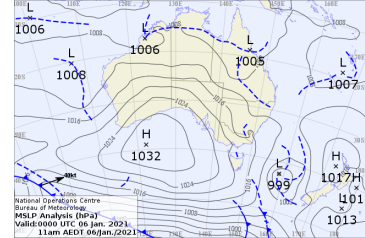
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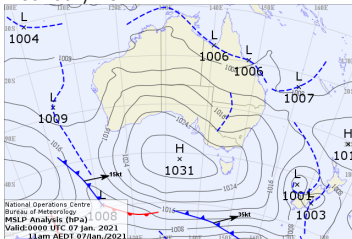
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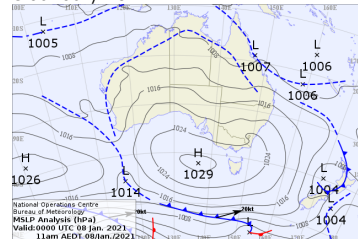
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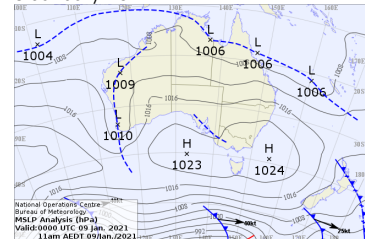
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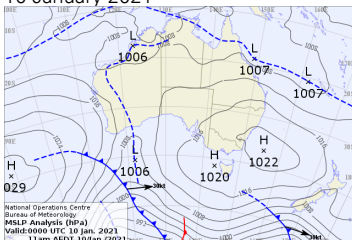
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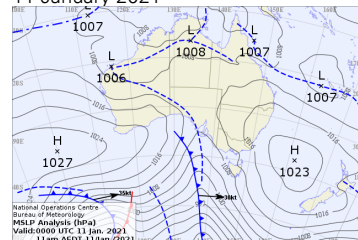
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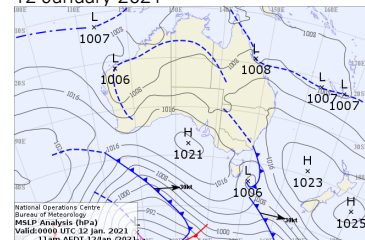
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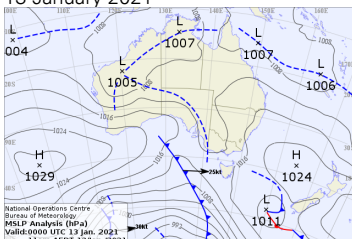
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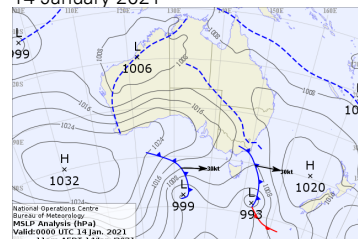
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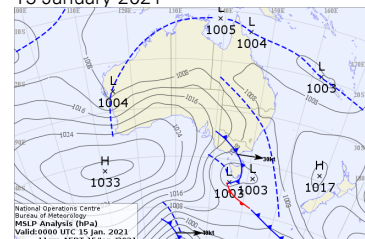
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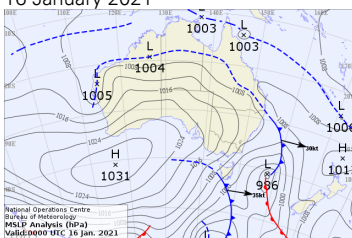
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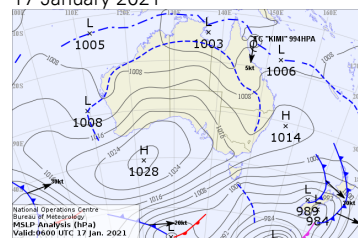
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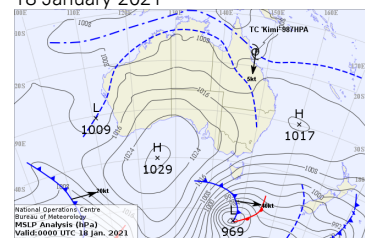
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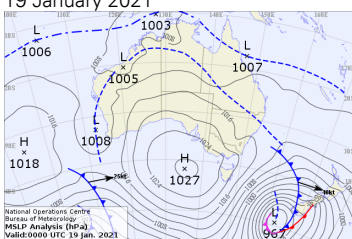
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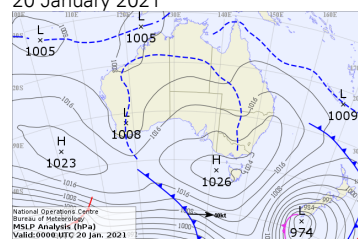
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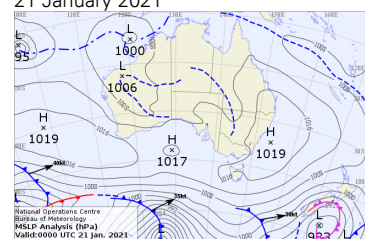
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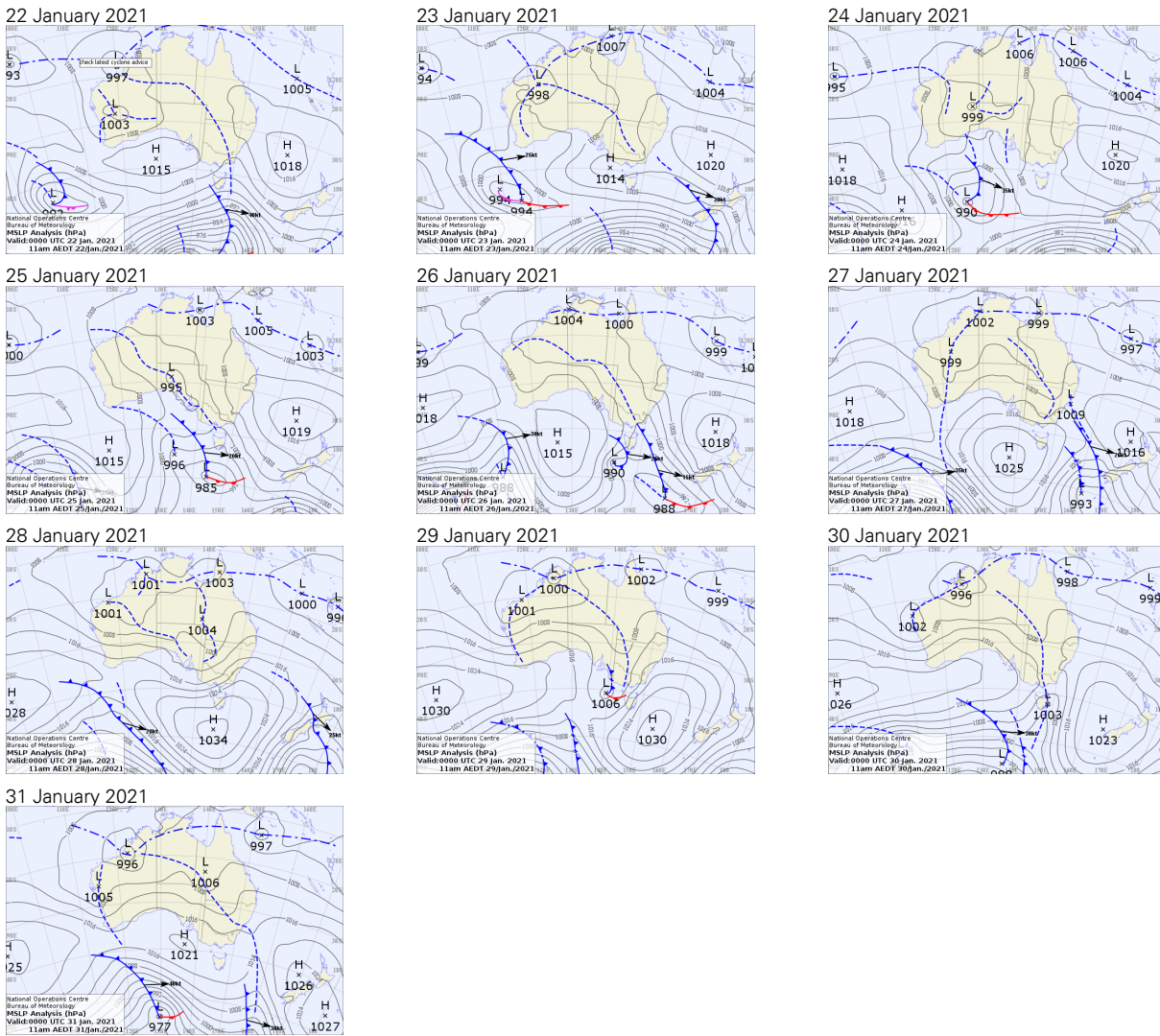


20 January 2021



21 January 2021





Synoptic summary

At the start of the month, most of northern and eastern Australia was dominated by surface troughs. A monsoon trough extended across the tropics, a tropical low developed in the Gulf of Carpentaria. The tropical low developed to Tropical cyclone Imogen in the south-western Gulf of Carpentaria in the morning on the 3rd. It was the first tropical cyclone in the Australian Region for the 2020–21 season.

Imogen soon made landfall in the Gulf Country near Karumba in the evening, and weakened to a tropical low (ex-tropical cyclone), and moved slowly eastwards across northern Queensland. The system moved over the north tropical coast by the 5th and became embedded in a coastal trough off the north tropical coast. The coastal trough and low lingered for several days.

A large high pressure system slowly moved from the south of Western Australia to the Great Australia Bight and south-east at the start of the month to the 11th. A trough tracked across southern Australia in its

wake while a series of cold fronts brushed far south-east Australia between the 11th and 15th.

In the north, the tropics remained active as surface troughs and low pressure systems extended across northern Australia. A tropical low off the north tropical coast of Queensland, developed into tropical cyclone Kimi on the 17th. Kimi tracked southwards, though briefly intensified to a category 2 cyclone, but soon weakened to a tropical low on the 19th, then turned and moved north-west nearly parallel to the coastline. The system remained off shore and did not make landfall.

Another high pressure system moved into the Great Australian Bight on the 18th, with troughs across the west, north and east for several days. A tropical low located to the north-west of the Northern Territory on the 18th moved south-west off the Kimberley coast in Western Australia.

The low crossed the far west Kimberley coast on the 22nd. The weakening low moved slowly south-east

through the east Pilbara and the interior of Western Australia by the 24th, before the remnants of the low moved over South Australia on the 25th and 26th. Associated surface troughs stretched from north-west to south-east Australia, and an active monsoon trough was situated across northern Australia.

A complex low and cold front tracked across south-east Australia on the 26th before moving off the east coast. Surface troughs dominated much of the continent to the end of the month.

Towards the end of the month, a monsoon trough extended across northern tropics, with a tropical low in the north Kimberley border of Western Australia, and a second low in the eastern Gulf of Carpentaria.

The tropical low in the west, tracked across the Kimberley and east Pilbara. The second low tracked across the northern Cape York Peninsula to the Coral Sea and developed into tropical cyclone Lucas on the 31st, just inside the eastern border of Australian Region of responsibility.

Temperatures

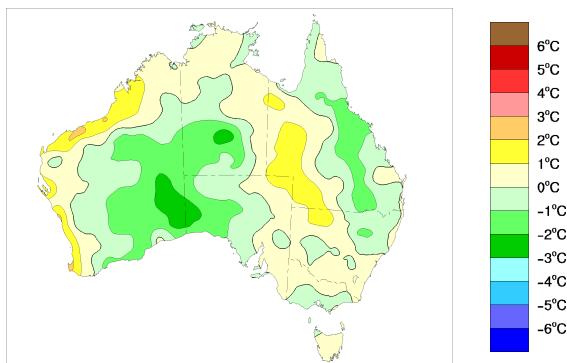
The national mean temperature for January was 0.26 °C warmer than average for Australia as a whole.

The mean maximum temperature was close to average for January at +0.05 °C. The mean minimum temperature was 0.46 °C above average for January.

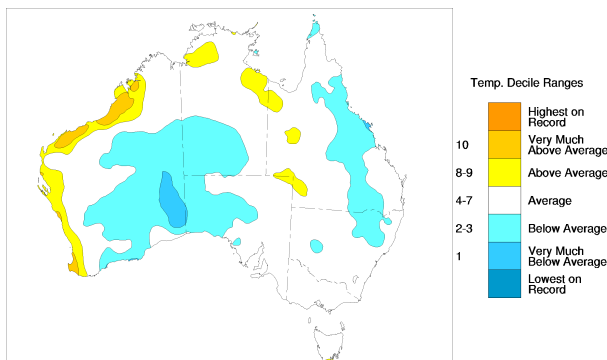
Maximum temperatures

The mean maximum temperature for January was below average across a large area of Western Australia covering most of the south-eastern quarter of that state, most of the western half of South Australia, and much of the southern half of the Northern Territory.

Anomalies of mean daily maximum temperature in January 2021



Decile rank of mean daily maximum temperature in January 2021



Maximum temperatures for the month were also below average in a band extending through eastern Queensland from Cooktown south, but only inland of the ranges between Capricornia and the south-east of the state and extending into north-east New South Wales inland of the coastal strip.

The mean maximum temperature for January was warmer than average for most of the northern and west coasts of Western Australia, pockets in the

western Top End and on the southern coast of the Gulf of Carpentaria, and in far western Queensland.

At the start of the month, maximum temperatures were cooler than average across southern parts of Australia, with cooler than usual anomalies across the Gulf of Carpentaria with the passage of tropical cyclone Imogen. Parts of central and northern Western Australia and southern parts of the Northern Territory experienced maximum temperatures more than 10 °C below average on the 4th and 5th, with the cooler than usual anomalies shifting to southern Queensland and north-east New South Wales from the 6th to the 10th.

Very warm days were reported across south-west Western Australia from the 8th, with the warmer than usual maximum temperatures extending to southern South Australia on the 9th and 10th, then moving to south-east South Australia, southern Victoria and Tasmania on the 11th. The warmer than usual days were due to a slow-moving high pressure system in the Great Australian Bight, followed by the passage of a surface trough.

In the north of Western Australia, the maximum temperatures were warmer than usual for several days, with a low-intensity heatwave affecting northern Western Australia from the 12th to the 15th. Cooler than usual days occurred over southern Australia from the 14th, with a high pressure system over the Bight directing cool air onto southern and south-east Australia. The cool anomalies extended into southern parts of the Northern Territory and Interior of Western Australia. The cooler than usual maximum temperatures subsided by the 18th.

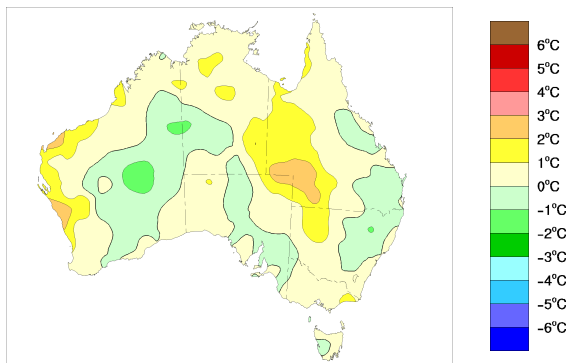
Heat returned to southern Australia from the 21st, with cool anomalies across the southern half of Western Australia on the 22nd, most of South Australia on the 23rd, and Victoria, most of New South Wales and Tasmania on the 24th and 25th. A low- to severe-intensity heatwave affected most of South Australia, Victoria and New South Wales over these days.

Maximum temperatures were more than 10 °C below average through the Interior of Western Australia due to the presence of a tropical low and associated rainfall over the north-west of that state at the end of month. The above average maximum temperatures led to severe- to low-intensity heatwave conditions along the west coast from the Gascoyne and Central West districts down to the south-west corner of Western Australia from the 29th to the 31st.

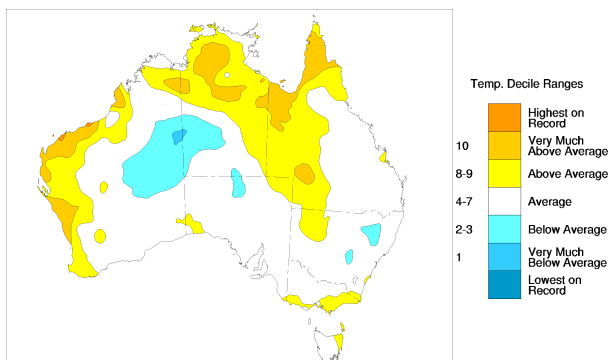
Minimum temperatures

The mean minimum temperature for the month was above or very much above average for large areas covering northern and western Queensland, in the north and east of the Northern Territory, parts of the Kimberley and along the north-west and west coast of Western Australia.

Anomalies of mean daily minimum temperature in January 2021



Decile rank of mean daily minimum temperature in January 2021



Minimum temperatures for the month were also above average for southern Victoria and the north-east of Tasmania. Mean minimum temperatures were below average for an area of the south-west of the Northern Territory and the adjacent interior of Western Australia, and for some pockets of New South Wales on the inland slopes and plains.

At the start of the month, minimum temperatures were generally close to average across the nation. On the 3rd cooler than usual minima were reported over southern Western Australia, and extended over much of western and southern Australia by the 7th. A large high pressure system centred over the Great Australian Bight kept overnights calm and skies clear. Warmer than usual minimum temperatures were recorded along the west coast of Western Australia from the 7th and extending over west and south of the state on the 10th, due to cloudy conditions associated with a trough.

The warmer than usual minima moved over southern South Australia, Victoria and Tasmania on the 11th and 12th. Cooler than usual minimum temperatures were experienced over southern Australia from the 15th, with a high pressure system moving across the Bight leading to clear skies and cooler air pushing into southern and south-east Australia.

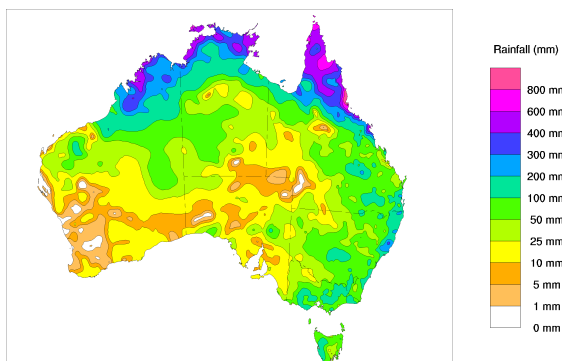
The cool anomalies extended north into interior parts of Western Australia, southern parts of the Northern Territory, South Australia, southern inland Queensland and central New South Wales on the 16th, and shifted into south-east Australia around the 21st. Warmer than usual minimum temperature were experienced in southern Western Australia and South Australia from the 22nd, with particularly warm nights over South Australia on the 24th and 25th, and expanding to Victoria, western New South Wales and south-west Queensland on the 25th and the 26th.

A low- to severe-intensity heatwave affected most of South Australia, Victoria and New South Wales over these days. Warmer than usual minima persisted in the west and south of Queensland, south-eastern parts of the Northern Territory and north-east of New South Wales, and led to low-intensity heatwave conditions developing in those areas towards the end of month. Low- to severe-intensity heatwave conditions were also observed in the Gascoyne and Central West districts in Western Australia.

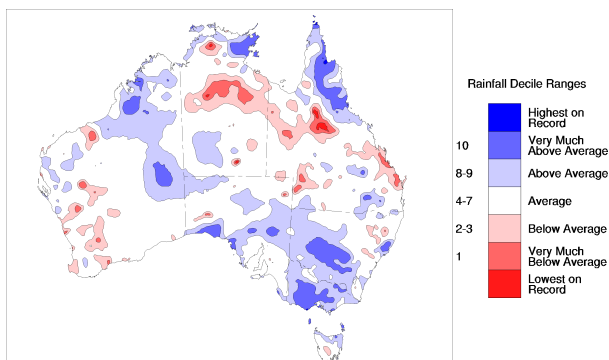
Rainfall

January rainfall was 4% below average for Australia as a whole, but it was Victoria's ninth-wettest January on record, at 85% above average.

Total rainfall in January 2021



Decile rank of total rainfall in January 2021



Rainfall for the month was below average for parts of Queensland's east coast between Fraser Island and Mackay, and a broad area from inland north-western Queensland through the Gulf Country, and westward into central parts of the Northern Territory.

Rainfall was also below average for pockets scattered across south-west Western Australia, the central Top End, eastern New South Wales, and the south of Tasmania. Rainfall for the month was above average for much of Victoria, New South Wales mostly inland of the ranges, and large parts of the southern half of South Australia away from the south-east and Eyre Peninsula.

Rainfall was also above average along coastal northern and north-eastern Tasmania, large parts of Queensland's Cape York Peninsula, parts of the Northern Territory's Top End, and parts of the western Kimberley and south-east of Western Australia.

Tropical cyclone Imogen made landfall near Karumba in Queensland's Gulf Country on the 3rd, then the remnants of ex-tropical cyclone Imogen tracked eastward across the northern Queensland to the north tropical coast for the following two days.

At the same time, a surface trough extended from inland Queensland to New South Wales and Victoria, resulting in widespread moderate rainfall with localised heavier falls across northern, central and inland southern parts of Queensland, eastern New South Wales and Victoria. Ingham Composite in Queensland recorded 303.2 mm on the 6th, the nation's highest daily rainfall of the month. A few stations in Queensland and New South Wales observed their highest January daily rainfall either on the 4th or 5th.

Another trough located further south and through inland Queensland, along with the coastal trough, combined with an upper-level disturbance and produced areas of thunderstorms and widespread moderate falls, first in the south and west, then across most of eastern Queensland between the 8th and 10th. Major flooding occurred on the Herbert and Lower Burdekin rivers, and moderate flooding in some Gulf and western catchments on the 10th and 11th.

Convective activity brought moderate falls across the northern tropics from the 13th to the 16th.

A series of cold fronts tracked across far south-east Australia from the 13th to 18th and brought light to moderate falls to southern Victoria and western Tasmania.

On the 17th, a tropical low embedded on a monsoon trough intensified into tropical cyclone Kimi, off the north-east tropical coast of Queensland. Moderate to locally heavy falls were recorded across the north tropical coast. A surface trough extended from north-west Western Australia across the Top End in the Northern Territory, and from the Gulf Country to south-east inland Queensland.

The surface trough combined with an upper level disturbance, and produced showers and thunderstorms, with widespread moderate falls recorded across south-east and north-east Queensland, and north-east New South Wales on the 19th. Widespread thunderstorm activity brought heavy falls to south-east Queensland on afternoon of the 18th. Flash flooding occurred in some suburbs of Brisbane. A tropical low located to the north-west of the Northern Territory on the 18th and moved south-west off the Kimberley coast in Western Australia.

The low crossed the far west Kimberley coast on the 22nd, along a monsoon trough stretching across north-west and northern Australia. Moderate to heavy falls were recorded in the southern parts of the Kimberley and east Pilbara and northern parts of the

Northern Territory and the Cape York Peninsula in Queensland. Showers and thunderstorms also developed across southern inland Queensland. The remnants of the tropical low moved south-east across the east Pilbara and interior of Western Australia until the 23rd, with an extensive cloud band from north-west Western Australia to South Australia. Thunderstorms developed along the trough over the Interior of Western Australia, with moderate falls also recorded in southern parts of the Northern Territory.

A complex trough system moved through South Australia and southern Northern Territory, and then Victoria and Tasmania from the 24th to 26th. Moderate falls were recorded in eastern South Australia, western and southern New South Wales, Victoria and Tasmania. A number of stations in the eastern parts of South Australia observing their highest January daily rainfall on record on the 26th.

Another complex trough system moved across South Australia and the south-east from the 29th, with widespread moderate falls in northern Tasmania, Victoria and southern New South Wales. A number of sites in both Victoria and New South Wales observed

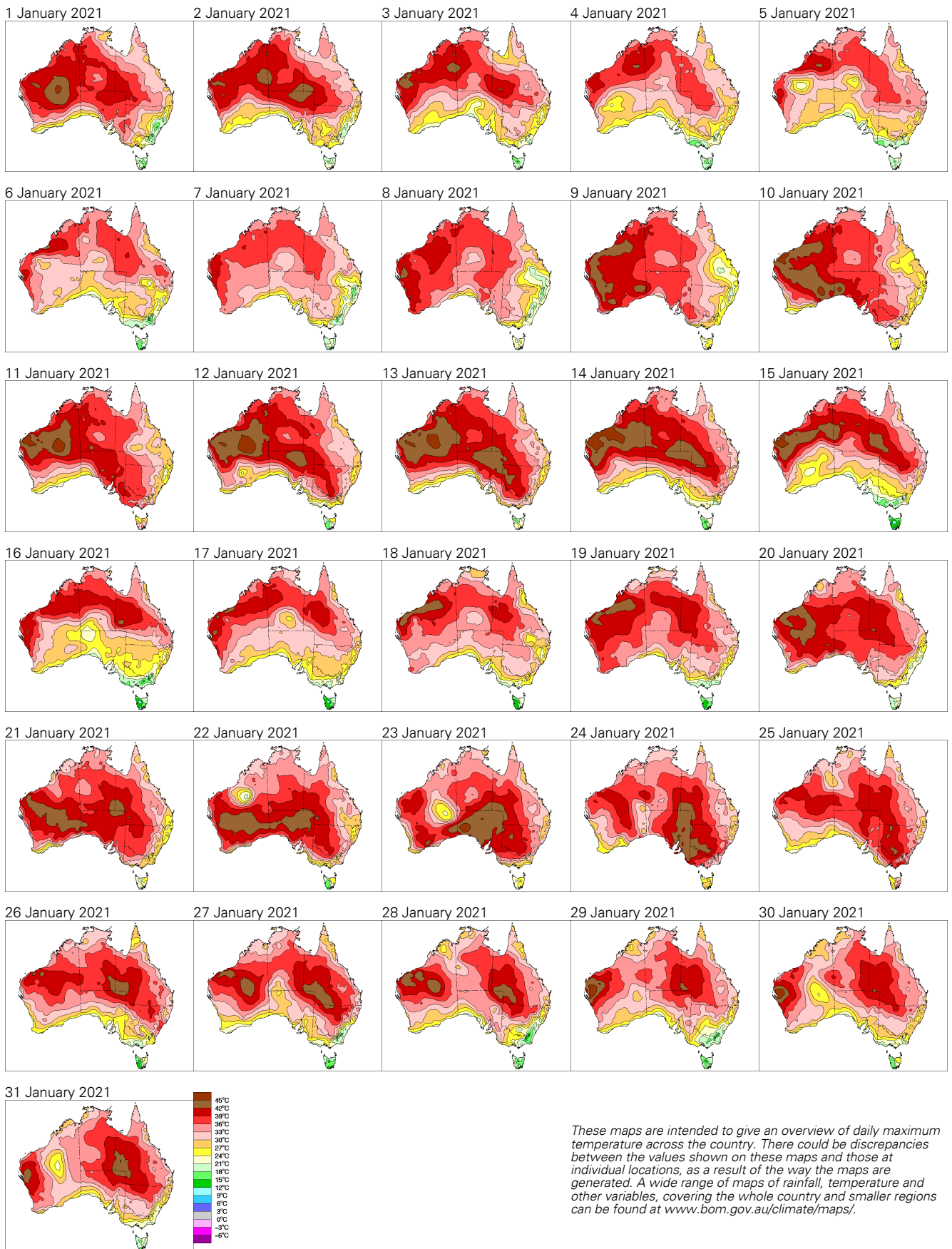
record-high January daily rainfall for the 24 hours to 9 am on the 30th. Flash flooding was reported in some locations on the 29th, including Melbourne. This event brought daily totals approaching or exceeding the average monthly rainfall for January as a whole across large areas, and numerous stations in Victoria and New South Wales received their highest January daily rainfall on record.

Towards the end of the month, a monsoon trough extended across northern tropics, with a tropical low in the north Kimberley border of Western Australia, and a second low in the eastern Gulf of Carpentaria.. The tropical low in the west, tracked across the Kimberley and east Pilbara.

The second low tracked across the northern Cape York Peninsula to the Coral Sea and developed into tropical cyclone Lucas , just inside the eastern border of Australian Region of responsibility on the 31st. Widespread moderate to locally heavier falls were recorded in the Cape York Peninsula, the Top End and the Kimberley. Myroodah in the west Kimberley recorded Western Australia's highest daily rainfall of 260 mm of the month on the 31st.

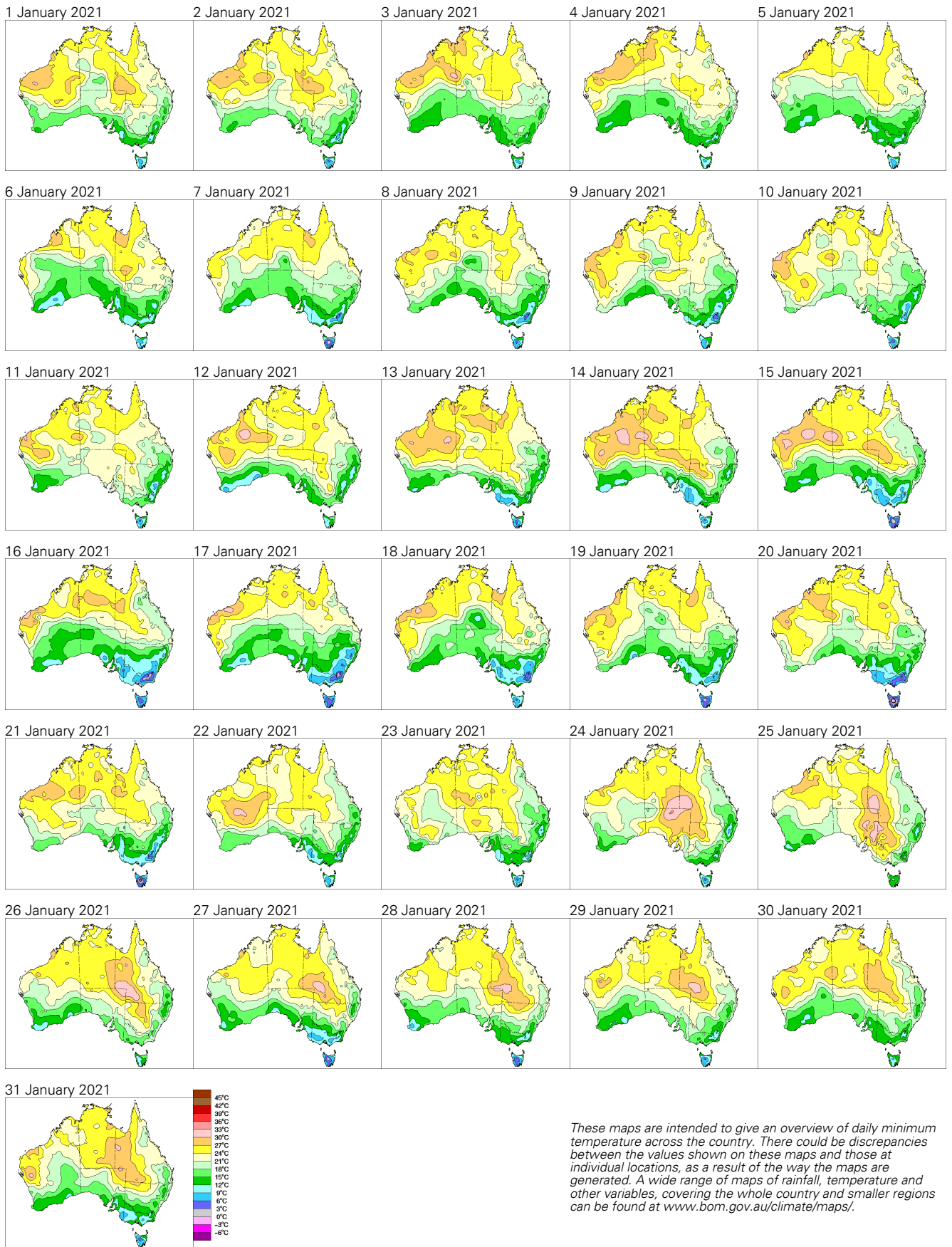
Daily maps

Daily maximum temperature maps



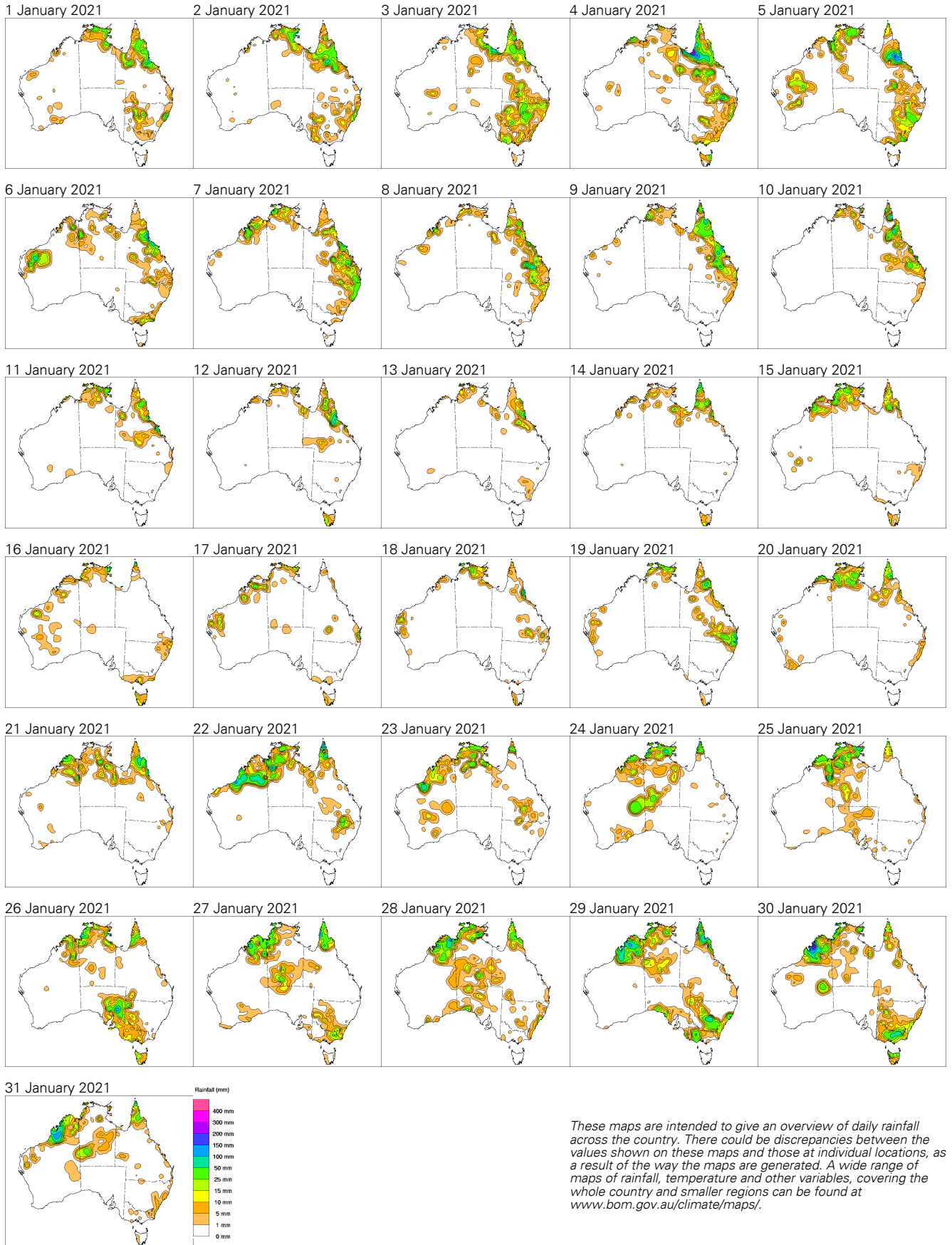
These maps are intended to give an overview of daily maximum temperature across the country. There could be discrepancies between the values shown on these maps and those at individual locations, as a result of the way the maps are generated. A wide range of maps of rainfall, temperature and other variables,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

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



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

Records

Record highest January daily maximum temperature

	New record	Old record	Years of record
South Australia			
026095 Cape Jaffa (The Limestone)	41.8 on 24th =	41.8 on 24th in 2019	30
<i>= indicates the new record equals the old one.</i>			

Record highest January mean maximum temperature

	New record	Old record	Years of record
Western Australia			
009518 Cape Leeuwin	25.3	25.1 in 2012	125
009519 Cape Naturaliste	29.6	29.5 in 2012	118
009871 Windy Harbour	25.4 =	25.4 in 2012	31
<i>= indicates the new record equals the old one.</i>			

Highest January mean maximum temperature for at least 30 years

	Observed this month	Most recent higher
Western Australia		
003003 Broome Airport	35.0	35.3 in 1988
003030 Bidyadanga	36.1	37.0 in 1989 *
<i>* note: there are gaps in the historical record at this site, so it is possible a higher value has gone unreported.</i>		

Record lowest January daily maximum temperature

	New record	Old record	Years of record
Queensland			
041359 Oakey Aero	21.0 on 8th	21.2 on 13th in 1983	48
041522 Dalby Airport	21.3 on 8th	22.2 on 16th in 2016	30
043015 Injune Post Office	20.6 on 8th	21.7 on 11th in 2008	54
New South Wales			
075041 Griffith Airport AWS	19.7 on 28th	20.0 on 16th in 2005	45

Record highest January daily minimum temperature			
	New record	Old record	Years of record
Western Australia			
001007 Troughton Island	30.0 on 12th	29.9 on 1st in 2003	42
003080 Curtin Aero	29.2 on 14th	28.7 on 17th in 1994	30
Northern Territory			
014015 Darwin Airport	29.3 on 4th =	29.3 on 28th in 2002	80
New South Wales			
069018 Moruya Heads Pilot Station	22.5 on 25th	22.4 on 31st in 2017	111
Tasmania			
092003 Bicheno (Council Depot)	19.5 on 12th =	19.5 on 29th in 2018	46

= indicates the new record equals the old one.

Record highest January mean minimum temperature			
	New record	Old record	Years of record
Western Australia			
003003 Broome Airport	27.8	27.7 in 1988	82

Record highest January mean temperature			
	New record	Old record	Years of record
Western Australia			
003003 Broome Airport	31.5 =	31.5 in 1988	82
004032 Port Hedland Airport	33.2	33.1 in 2005	73
005017 Onslow Airport	32.9 =	32.9 in 2003	55

= indicates the new record equals the old one.

Record highest January daily rainfall			
	New record	Old record	Years of record
Western Australia			
003052 Mount Hart Station	211.0 on 30th	165.2 on 17th in 1995	50
Northern Territory			
014865 Mount Sanford	176.0 on 22nd	126.0 on 15th in 1995	35
South Australia			
017032 Blinman (Moolooloo)	65.2 on 26th	59.9 on 10th in 1972	75
019107 Wilpena (Oraparinna)	105.4 on 26th	45.4 on 20th in 2017	32
020020 Yunta (Panaramitee)	107.8 on 26th	66.2 on 21st in 2007	115
Queensland			
028031 Violet Vale Station	237.0 on 28th	107.0 on 19th in 1982	34
030048 Spring Creek Station	166.5 on 5th	150.4 on 1st in 2001	109
032082 Craigs Pocket Station	138.4 on 5th	118.2 on 1st in 2001	48
035077 Warrinilla	141.5 on 8th	135.4 on 13th in 1910	119
043095 Namarah	136.6 on 4th	105.0 on 8th in 1974	49

Record highest January daily rainfall				
		New record	Old record	Years of record
New South Wales				
060121	Elands (Black Sands Creek)	85.0 on 1st	82.0 on 29th in 2013	34
061143	Bulga (Down Town)	90.0 on 5th	88.8 on 29th in 2013	54
071032	Thredbo AWS	82.8 on 30th	79.0 on 5th in 1974	37
071041	Thredbo Village	92.0 on 30th	89.5 on 11th in 1974	51
Victoria				
082057	Wooragee	90.4 on 30th	88.2 on 16th in 1984	120
083038	Tawonga	72.0 on 30th	71.4 on 29th in 1954	68
086305	Greenvale Reservoir	62.4 on 30th	49.6 on 15th in 1977	47
086364	Tarrawarra Monastery	36.2 on 30th	36.0 on 1st in 1988	34
088021	Eberys	80.4 on 30th	73.0 on 14th in 2011	82
088023	Lake Eildon	62.0 on 30th	61.0 on 31st in 1973	130
088031	Highlands (Glentannar)	85.4 on 30th	82.0 on 2nd in 2010	106
088121	High Camp (Lannermoor)	65.8 on 30th	57.9 on 2nd in 1970	52

Record highest January total rainfall				
		New record	Old record	Years of record
South Australia				
019107	Wilpena (Oraparinna)	110.0	91.0 in 2007	32
Queensland				
028031	Violet Vale Station	708.8	487.5 in 1998	30
033255	Hamilton Island	759.3	651.1 in 1991	31
043095	Namarah	264.4	243.6 in 1974	56
Victoria				
079016	Warranooke (Glenorchy)	153.2	116.4 in 1959	143
081063	Avoca	137.8	99.3 in 1928	60
086223	Dromana Sussex Farm	138.4	122.2 in 1993	61
086282	Melbourne Airport	107.6	101.6 in 1991	51
086305	Greenvale Reservoir	114.4	97.4 in 2011	47
086358	Gladysdale (Little Feet Farm)	146.8	141.6 in 2000	31
086364	Tarrawarra Monastery	122.6	116.6 in 2020	32
086377	Upper Plenty	115.6	115.4 in 2011	36
090015	Cape Otway Lighthouse	135.2	133.1 in 1946	158
090093	Hordern Vale	152.6	145.6 in 1991	73

Highest January total rainfall for at least 30 years

		Observed this month	Most recent higher
Western Australia			
200284	Cocos Island Airport	550.2	560.7 in 1965
Queensland			
032009	Bingil Bay	1112.6	2491.4 in 1981 *
033001	Burdekin Shire Council	638.4	954.4 in 1974 *
New South Wales			
060015	Gloucester Post Office	234.0	257.8 in 1974 *
060021	Krambach (Firefly Rd)	248.3	320.9 in 1974 *
060075	Gloucester (Upper Bowman)	236.6	290.9 in 1984 *
073029	Murrumburrah (Historical Society)	152.6	215.5 in 1984 *
074202	Ganmain (Rosedale)	110.4	144.8 in 1984 *
075032	Hillston Airport	101.4	212.6 in 1984 *
075163	Hillston (Aldinga)	168.6	237.8 in 1984
Victoria			
078029	Minyip (Post Office)	90.0	97.2 in 1974 *
085063	Mount Best (Upper Toora)	141.0	147.4 in 1980
086074	Mitcham	127.6	212.3 in 1963
086076	Montrose	111.0	131.8 in 1977 *
086131	Yan Yean	88.8	103.8 in 1988
087075	Bullengarook East	144.4	167.8 in 1970 *
089034	Willaura (Main Street)	149.2	198.7 in 1963 *
089068	Rokewood	110.2	114.9 in 1970 *
090060	Nullawarre	101.8	180.4 in 1991

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

Selected observations

Daily and mean maximum temperatures for January 2021

Western Australia	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
001019 Kalumburu	34.1	36.8	37.2	37.0	35.1	33.0	35.0	35.1	36.3	36.9	35.8	35.5	37.2	36.8	37.4	35.3	36.2	35.9	33.1	32.4	32.4	31.8	32.1	31.9	32.1	32.5	34.8	33.5	30.7	29.0	29.2	29.8	
002056 Kununurra Aero	36.1	40.1	41.0	40.2	39.3	34.4	37.3	36.8	38.4	39.2	39.1	38.8	40.8	40.2	38.6	38.2	37.4	39.5	36.0	34.2	35.0	34.9	30.3	34.4	33.4	30.2	32.9	29.6	31.5	31.7	31.8	33.0	
003003 Broome Airport	35.0	+1.8	35.6	34.5	34.5	34.4	38.0	38.7	37.0	37.2	39.3	40.3	34.8	34.6	34.8	34.5	34.2	37.3	36.4	41.5	40.5	36.3	28.2	31.1	32.4	32.9	33.1	32.9	33.0	33.0	32.6	31.7	29.9
003032 Derby Aero	36.2	37.9	37.1	38.3	35.8	39.4	36.7	37.0	38.3	40.3	36.1	38.5	38.7	39.1	37.4	37.8	38.8	36.2	40.7	39.8	35.7	34.2	31.7	32.7	35.1	34.5	35.5	32.2	32.6	32.7	27.7	31.4	
004032 Port Hedland Airport	39.2	+2.9	38.5	38.2	36.8	35.9	37.8	40.1	36.1	38.3	42.6	42.5	37.0	40.1	38.8	44.9	38.3	41.7	42.4	42.6	40.4	42.5	36.9	37.3	36.4	40.4	39.7	39.7	41.4	37.5	35.0	37.8	37.6
004083 Karratha Aero	38.2	36.7	37.9	39.5	38.1	34.8	37.6	36.5	37.0	41.4	43.6	40.0	38.8	40.2	42.1	40.4	36.3	39.3	41.5	41.9	40.8	37.8	36.3	35.1	34.8	35.7	37.9	39.3	40.4	35.0	34.6	34.0	
004106 Marble Bar	41.2	41.3	41.6	42.5	39.2	36.7	37.3	39.2	40.2	43.3	43.4	43.8	44.2	45.5	46.0	45.2	40.4	41.1	42.8	42.9	43.0	40.1	30.4	40.4	42.0	41.6	43.0	44.1	44.1	40.6	38.4	32.1	
005007 Leamonth Airport	39.5	39.1	41.8	41.7	38.5	34.1	33.5	37.2	38.6	41.5	45.0	45.5	41.8	42.5	44.9	45.9	35.1	37.7	40.1	40.6	41.0	41.8	38.6	36.0	34.5	35.8	36.5	38.4	40.8	44.1	37.3	35.7	
006011 Carnarvon Airport	33.1	+1.6	30.3	30.3	30.2	29.2	35.1	37.7	34.5	35.2	35.5	33.9	31.8	30.5	30.6	32.8	32.5	34.5	38.0	33.7	32.7	31.2	31.8	30.3	29.8	29.6	29.0	29.1	31.6	31.5	40.1	44.2	37.9
006044 Denham	32.5	31.0	31.1	32.5	31.0	36.5	34.0	35.5	36.5	35.0	29.5	32.0	28.5	30.9	32.9	34.5	33.5	35.0	33.0	32.2	30.0	31.0	30.0	29.5	27.9	28.0	27.1	30.8	41.8	40.5	35.9		
007176 Newman Aero	38.0	42.3	39.2	38.7	37.7	23.3	29.6	35.3	37.6	39.8	40.9	42.1	42.9	43.5	39.8	32.1	36.6	37.4	39.6	40.8	41.6	35.3	39.9	38.9	37.8	40.1	39.9	41.8	38.6	36.0	30.2		
007185 Paraburdoo Aero	40.5	41.7	42.0	42.2	40.6	31.8	33.5	37.6	38.1	41.3	42.6	44.4	44.9	44.8	45.9	44.1	39.2	39.2	36.7	41.9	42.6	42.6	39.7	40.4	37.6	38.3	38.7	39.9	42.6	43.8	38.9	38.5	
007045 Meekatharra Airport	38.1	0.0	40.6	40.1	37.9	32.3	33.2	33.5	36.2	39.9	40.9	42.9	39.8	41.4	43.2	40.2	38.6	35.2	36.7	34.2	40.2	42.3	41.9	42.7	38.1	32.8	34.0	35.0	35.3	38.0	37.8	39.8	37.6
007600 Mount Magnet Aero	37.4	39.0	40.9	37.1	31.4	33.2	34.0	35.7	39.8	42.2	41.7	39.2	42.1	42.2	39.9	35.9	32.6	36.2	34.5	39.1	39.6	40.2	43.2	38.8	31.9	32.1	34.7	33.0	36.1	35.9	38.0	39.5	
008296 Morawa Airport	36.8	37.5	39.3	37.3	30.5	35.1	36.2	37.5	41.6	42.5	35.8	36.9	38.0	38.3	40.2	38.9	37.0	37.0	34.0	39.7	35.8	39.8	41.8	33.9	30.5	31.1	31.6	32.2	34.5	36.5	39.1	41.3	
008297 Dalwallinu	34.2	35.7	33.4	32.0	24.9	33.0	34.3	36.2	39.8	42.0	33.7	33.7	35.0	34.8	36.6	33.6	32.8	35.2	33.2	37.8	34.2	37.2	39.0	34.5	29.6	30.1	30.7	30.4	32.4	33.0	34.9	37.9	
008315 Geraldton Airport	35.5	29.7	34.1	40.0	36.7	38.0	38.5	40.0	42.4	34.1	27.7	32.2	29.2	31.3	38.4	42.9	41.9	40.6	34.9	32.2	29.6	31.2	33.2	28.1	31.9	38.5	40.1	41.6	31.9	38.5	40.1	41.9	
009021 Perth Airport	33.6	+1.9	35.6	32.4	31.9	32.4	33.9	36.4	38.6	41.5	38.1	27.0	32.2	32.4	33.9	33.6	32.8	34.1	36.1	35.2	37.8	31.2	36.4	36.8	28.2	28.1	27.9	26.4	27.0	33.3	34.5	35.6	38.4
009131 Jurien Bay	33.0	27.9	37.4	36.2	34.0	36.4	38.5	38.0	41.5	41.0	27.0	32.0	26.7	32.6	38.3	37.5	39.5	37.4	28.8	30.0	32.7	26.7	26.9	26.8	26.6	27.0	26.9	38.9	38.9	36.7	38.4		
009225 Perth Metro	32.9	33.9	32.9	32.3	32.5	34.3	35.9	38.5	42.2	35.9	27.0	30.9	29.4	33.1	33.6	33.1	34.2	36.7	34.5	36.6	30.1	34.8	36.5	27.3	27.1	27.4	26.3	25.9	30.9	34.5	35.2	37.3	
009240 Bickley	31.0	31.9	29.0	29.0	29.5	30.6	32.8	35.5	38.9	37.0	26.4	30.0	31.4	30.6	30.5	29.8	30.7	32.8	31.9	35.5	29.9	34.5	35.3	27.8	25.1	25.2	25.1	25.2	30.7	31.5	32.2	35.5	
009518 Cape Leeuwin	25.3	+1.9	22.3	22.0	23.0	22.7	23.9	27.4	35.7	38.1	28.1	23.7	22.8	23.7	21.1	21.2	22.9	23.2	26.7	35.1	21.6	24.1	24.0	25.2	24.5	24.6	22.1	22.9	23.4	23.8	24.9	25.2	
009617 Bridgetown	30.2	27.7	27.5	27.5	28.1	31.1	32.4	36.1	39.1	38.3	24.4	28.2	29.1	26.8	27.8	27.5	29.1	31.6	35.9	36.8	30.6	32.0	36.7	30.6	25.2	26.0	25.9	23.6	28.3	28.9	31.7		
009746 Witchcliffe	29.0	26.4	29.2	28.1	29.6	31.0	33.2	37.1	38.9	34.6	24.9	24.9	24.5	23.8	25.5	28.5	31.1	33.2	37.4	35.1	27.5	27.8	31.6	26.2	25.0	25.2	24.4	23.5	25.1	26.9	29.4	28.3	
009789 Esperance	24.9	22.1	21.2	21.1	22.6	22.3	24.6	28.3	33.3	35.4	23.6	21.2	20.5	20.9	22.3	21.9	23.0	28.5	35.7	30.9	24.1	24.3	28.8	23.3	22.5	22.6	22.2	22.6	22.7	24.2	24.9	28.4	
009965 Bunbury	31.5	31.7	30.9	30.7	31.6	33.5	35.3	34.4	34.4	28.2	30.8	31.0	30.2	30.5	31.2	32.3	35.0	36.2	32.5	35.0	35.1	30.9	27.5	26.2	25.9	26.2	25.9	26.1	31.4	32.8	33.9	35.9	
009977 Mandurah	31.9	34.2	32.8	31.1	33.0	34.5	35.3	35.7	38.6	34.9	26.3	31.1	28.4	32.9	33.6	33.5	33.9	36.3	34.3	31.8	29.5	32.2	30.6	26.4	26.2	26.1	25.8	25.1	30.1	34.3	35.1	34.7	
009999 Albany Airport	25.1	21.2	21.4	22.3	21.5	23.9	26.1	31.0	37.3	31.4	22.1	21.2	24.0	20.6	20.7	22.3	23.1	25.8	30.8	37.1	28.0	22.1	27.2	26.9	26.6	21.0	24.6	21.2	23.2	22.9	24.5	24.6	
010007 Bencubbin	36.5	30.4	33.5	34.4	34.0	35.0	30.3	31.1	33.0	32.1	37.5	37.0	36.9	39.5	31.9	30.2	32.0	30.1	31.5	33.5	35.4	32.8	30.2	31.5	31.8	33.0	36.0						
010092 Merredin	33.8	+0.4	35.6	29.0	29.0	28.6	30.8	32.3	34.5	39.2	39.9	36.0	33.0	34.8	33.0	33.0	30.0	30.4	32.5	32.0	36.6	39.0	37.4	39.5	39.5	32.5	32.8	30.2	31.5	31.8	33.0	36.0	
010286 Cunderdin Airfield	34.5	35.2	30.6	30.6	31.2	32.8	34.5	37.1	41.1	42.5	35.8	32.5	35.4	33.5	32.9	31.5	32.3	34.2	32.2	39.7	38.1	37.0	39.3	38.5	31.9	30.3	32.6	29.3	32.4	32.9	34.6	37.0	
010633 Ravensthorpe	27.8	-1.4	26.7	23.4	23.0	24.5	25.0	29.8	34.0	37.8	41.0	29.2	23.5	28.0	23.0	23.5	25.2	26.5	33.5	35.5	27.0	23.6	32.0	27.5	24.4	28.0	21.5	24.6	26.0	28.8	32.5		
010911 Lake Grace	31.2	29.2	27.0	27.4	29.7	32.0	35.1	38.0	40.1	31.1	28.4	32.7	26.7	27.5	26.8	29.1	31.0	34.3	37.5	31.3	32.0	38.8	38.3	30.3	28.5	30.4	24.3	28.6	29.8	31.6	33.8		
010916 Katanning	30.0	25.9	26.1	26.0	25.9	29.0	31.5	35.2	38.0	40.9	27.6	27.1	31.7	31.5	24.3	24.8	27.5	30.7	34.3	37.5	31.4	31.0	35.4	36.6	28.7	25.3	28.0	24.3	28.4	28.6	30.6	33.0	
010917 Wandering	32.4	32.4	28.8	28.9	29.6	31.5	33.9	36.1	40.0	41.3	30.6	30.4	34.3	30.4	30.6	29.9	30.2	32.5	34.5	37.6	33.8	34.8	37.6	34.2	27.8	28.4	29.4	25.4	30.7	31.7	32.6	35.2	
011003 Eucla	25.3	-1.3	22.9	21.3	22.7	22.9	22.6</																										

Daily and mean maximum temperatures for January 2021

	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																																		
048027 Cobar MO	34.4	+0.9	29.3	34.2	32.2	32.3	30.7	30.1	31.4	29.8	30.1	33.0	35.0	37.9	39.1	38.9	31.2	27.7	29.9	32.7	34.3	36.2	38.9	37.6	40.2	40.2	39.4	37.2	37.4	35.8	29.8	35.2	37.5	
048245 Bourke Airport AWS	36.3		32.5	36.4	32.0	35.9	34.8	32.0	32.3	30.6	31.5	33.2	35.1	37.4	39.2	42.2	36.9	29.9	31.9	35.0	37.0	38.5	39.0	37.7	39.9	40.1	40.0	37.5	41.7	40.6	35.0	39.6	40.1	
049000 Ivanhoe Aerodrome AWS	32.9		32.7	27.3	31.1	28.0	27.7	28.2	32.3	31.2	31.8	34.9	36.9	38.4	41.1	33.4	27.6	26.6	28.0	31.5	31.8	34.3	37.9	39.1	41.7	41.2	40.8	28.0	32.8	31.7	27.8	31.0	31.8	
050052 Condobolin Ag Research Stn																																		
052088 Walgett Airport AWS	34.8		33.0	34.4	32.9	33.1	32.5	28.3	30.5	30.3	31.6	32.7	34.0	36.9	37.8	40.2	38.7	29.5	32.5	33.0	36.1	38.0	36.9	32.3	36.0	35.1	36.4	40.0	40.9	36.8	34.7	36.0	37.3	
053115 Moree Aero	33.3		34.1	33.4	33.1	30.1	33.9	27.3	24.0	28.3	29.8	30.8	31.6	33.7	34.2	37.0	37.2	29.7	34.3	26.6	34.7	35.9	34.1	28.9	34.8	34.7	35.9	37.4	39.6	37.5	35.7	35.6	37.3	
054038 Narrabri Airport AWS	32.8		29.7	29.4	31.9	30.7	32.7	26.2	27.2	28.3	29.6	30.6	31.2	32.8	34.0	36.8	35.4	28.3	32.1	30.0	33.8	34.3	33.4	32.7	36.2	36.0	36.2	37.9	37.8	36.4	33.6	35.8	36.7	
055325 Tamworth Airport AWS	30.8		28.7	29.0	26.8	28.3	30.0	25.9	25.2	26.8	27.8	29.4	29.8	31.8	33.0	33.5	33.6	27.2	30.1	26.8	31.4	29.8	29.9	30.8	34.5	35.8	34.5	34.9	36.0	32.2	33.0	33.3	34.2	
056242 Inverell (Raglan St)	29.5		29.9	27.8	26.3	26.9	31.7	28.2	21.6	24.1	25.7	26.9	27.6	30.7	31.2	32.2	31.9	26.8	29.4	25.2	30.6	30.7	29.9	26.9	33.2	31.9	31.9	31.9	35.3	31.6	31.1	31.4	32.8	
057095 Tabulam (Muirne)	26.1		24.8	26.6	25.9	25.1	31.0	29.1	17.6	16.8	21.0	24.5	24.4	26.0	26.3	28.6	30.2	28.4	28.7	24.8	28.3	21.1	22.1	26.4	27.4	26.3	27.3	29.8	31.2	26.6	27.4	27.5	28.2	
058012 Yamba Pilot Station	27.7	+1.5	26.4	26.1	28.5	28.1	30.1	29.1	23.0	22.2	25.1	25.2	26.8	27.1	27.4	28.7	30.4	26.8	27.8	28.7	28.5	24.6	25.8	28.6	28.9	29.5	30.4	30.1	29.9	28.8	29.5	29.0	28.1	
060139 Port Macquarie Airport AWS (Comparison)	27.3		26.0	24.4	26.6	28.0	27.8	27.5	23.5	24.6	25.1	26.2	26.4	27.4	27.4	28.8	29.3	26.9	27.6	26.8	28.7	23.7	25.2	28.4	28.9	29.0	29.3	31.1	28.9	28.8	26.9	27.6	28.6	
061078 Williamtown RAAF	28.0	+0.2	19.9	23.3	26.2	28.8	31.0	25.3	24.7	25.1	25.2	25.9	27.5	30.9	29.4	35.3	28.0	25.6	26.1	28.9	26.4	24.8	26.7	34.1	34.0	36.2	35.4	38.4	24.1	21.3	24.1	28.7	27.4	
061363 Scone Airport AWS	29.9		20.2	24.4	28.3	30.0	30.7	24.6	23.6	23.3	25.5	28.1	28.9	31.3	30.3	34.8	34.6	28.1	30.5	31.5	30.4	26.5	29.9	33.9	36.8	37.4	36.5	37.3	32.7	25.2	29.1	32.7	31.0	
062101 Mudgee Airport AWS	29.2		19.2	24.9	26.8	26.2	28.9	26.1	23.7	22.4	24.6	28.6	29.0	31.9	31.8	34.6	31.6	25.5	28.9	31.1	31.8	25.7	30.5	33.8	35.4	36.5	35.4	36.4	31.5	24.4	26.3	29.8	30.4	
063005 Bathurst Agricultural Station	27.8	+0.1	18.2	22.8	27.1	24.4	26.6	26.3	22.3	20.0	24.2	28.0	29.2	31.7	32.0	33.7	29.5	22.5	26.0	29.0	30.9	25.0	30.0	32.5	33.6	35.0	34.8	32.6	29.6	24.2	23.2	28.8	28.5	
063254 Orange Agricultural Institute																																		
064008 Coonabarabran (Showgrounds)	29.4	-1.9	25.5	27.4	27.9	27.7	29.4	25.3	19.7	23.7	25.3	28.0	29.0	29.9	32.0	33.5	31.7	25.6	28.1	31.0	31.4	29.5	29.5	31.6	33.3	33.1	33.5	34.6	34.4	29.2	29.4	29.6	32.4	
065070 Dubbo Airport AWS	32.4		24.7	29.3	29.4	29.5	30.2	29.9	27.4	26.9	27.4	30.2	31.0	33.6	34.5	37.5	33.5	26.4	29.7	32.7	33.3	31.6	34.1	35.4	37.3	38.0	37.5	38.3	39.3	33.0	30.3	34.5	37.4	
066214 Sydney (Observatory Hill)	27.4		22.0	22.4	26.5	27.7	28.0	25.4	23.5	22.7	26.7	27.8	28.6	29.3	29.8	31.6	28.1	27.0	27.1	30.1	25.2	23.1	28.2	32.9	31.9	34.2	32.3	37.1	23.5	22.5	22.8	28.8	23.4	
067105 Richmond RAAF	29.2		20.0	22.0	27.3	27.6	31.0	26.4	24.1	23.1	26.5	29.5	30.4	33.8	31.3	38.7	33.5	29.5	28.4	32.2	24.8	22.0	29.6	35.9	37.1	39.2	37.9	39.8	22.9	22.8	22.3	30.0	25.2	
068072 Nowra RAN Air Station AWS	27.1		22.4	19.3	26.6	28.2	28.4	23.1	21.4	22.4	25.7	28.2	28.8	31.8	30.3	33.6	27.6	27.7	24.4	28.5	22.3	22.7	26.7	36.6	31.5	38.7	34.0	36.9	19.9	21.2	20.7	29.6	20.8	
068151 Jersey Bay (Point Perpendicular)	24.6		20.8	20.0	23.7	26.2	23.8	21.3	21.3	21.9	23.5	26.8	26.3	27.5	27.6	28.4	24.9	22.2	22.0	24.6	20.8	22.3	25.4	28.5	26.7	30.4	27.6	34.5	21.1	21.3	21.5	27.3	21.7	
068241 Albion Park (Shellharbour Airport)	25.9		22.4	19.6	24.1	27.4	26.2	24.4	21.7	23.4	24.6	26.4	27.4	27.4	28.3	30.0	25.3	25.1	24.3	27.1	21.8	22.8	25.4	28.8	28.3	32.3	28.1	38.8	23.1	21.7	29.8	22.2		
069018 Moruya Heads Pilot Station	24.0	+0.6	22.3	21.0	21.7	23.5	23.6	21.0	22.2	22.4	22.9	24.5	24.2	26.0	24.0	24.5	23.3	25.2	22.2	24.2	23.1	22.2	24.7	27.5	26.7	28.5	31.1	34.3	22.2	19.8	20.4	25.0	21.0	
070351 Canberra Airport	28.1		19.7	22.3	26.7	24.8	28.0	24.7	24.3	22.2	27.7	31.8	32.5	33.7	34.5	32.9	27.9	23.5	27.7	30.8	30.1	24.9	30.5	34.1	35.9	37.5	38.0	32.7	20.1	17.9	18.8	29.3	25.2	
071041 Thredbo Village	20.7		14.5	19.0	19.5	18.4	18.5	13.1	15.0	19.0	20.0	25.5	26.0	26.5	27.0	23.5	21.0	14.0	19.0	22.0	20.5	22.5	23.0	24.0	27.2	29.1	30.0	19.5	14.5	11.5	15.0	19.0	24.0	
072150 Wagga Wagga AMD	31.2	+0.1	28.4	29.9	30.5	25.1	29.6	27.8	28.7	28.1	30.6	34.3	34.7	38.4	39.0	32.6	27.2	24.4	28.1	31.6	32.6	30.4	33.8	37.5	38.7	40.8	40.4	26.6	32.1	22.8	21.5	30.7	31.6	
072160 Albury Airport AWS	31.5		27.7	30.2	28.4	28.0	30.0	28.3	28.6	29.9	32.4	34.7	35.8	38.9	38.9	30.1	25.0	23.7	27.8	30.8	32.2	30.5	34.6	37.2	37.6	39.8	40.2	30.2	33.2	27.5	21.3	30.8	32.7	
072161 Cabramurra SMHEA AWS	20.1		15.9	18.5	17.7	16.4	17.7	14.5	15.4	17.4	21.6	23.5	24.8	25.3	25.9	21.9	16.2	12.7	18.2	20.8	21.2	21.0	22.6	25.2	27.0	28.6	28.4	20.2	18.7	11.7	13.8	18.2	21.5	
074258 Deniliquin Airport AWS	32.0		29.9	23.0	33.0	30.1	31.2	29.0	31.2	33.1	37.1	38.4	37.0	39.1	29.1	25.0	26.3	27.8	30.5	29.0	32.4	36.6	38.1	38.7	41.5	41.8	30.7	31.3	25.0	21.8	30.0	30.9		
Victoria																																		
076031 Mildura Airport	32.6	+0.8	35.7	29.4	30.2	29.0	27.2	28.4	32.5	34.6	35.8	37.6	37.8	35.1	39.6	29.8	24.8	26.6	28.3	30.2	30.8	32.2	37.1	37.6	40.4	43.3	40.5	27.2	29.2	31.5	30.3	28.7	30.1	
078015 Nhill Aerodrome	30.4		34.5	29.1	28.3	23.1	23.4	25.8	30.6	33.8	36.3	37.6	38.8	30.6	34.7	25.0	22.0	22.9	26.7	27.8	28.4	32.0	35.6	33.1	36.9	42.5	33.6	26.5	28.8	30.0	29.2	27.8	28.2	
080023 Kerang	31.5	+0.3	30.8	25.7	31.2	27.4	27.2	28.0	30.7	32.4	34.1	37.2	38.9	35.4	37.2	28.2	24.3	25.4	28.0	30.2	29.2	32.1	36.3	36.9	38.3	41.4	41.4	28.8	31.0	26.8	23.8	28.7	30.5	
081123 Bendigo Airport	29.3		25.7	27.3	30.4	23.9	25.3	24.4	28.9	31.6	33.4	36.5	37.3	31.4	35.4	26.3	22.6	21.9	26.0	27.5	24.6	30.3	34.5	35.9	38.9	40.0	25.1	27.2	33.2	27.5	21.3	30.8	32.7	
082033 Rutherglen Research	32.2	+0.9	30.3	30.5	30.2	29.2																												

Daily and mean minimum temperatures for January 2021

Western Australia	Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
001019 Kalbaruru	24.4	22.8	24.3	25.4	23.4	21.2	24.0	23.6	25.7	26.2	26.1	25.4	24.7	24.3	24.3	22.5	26.0	23.5	24.4	26.0	24.4	24.8	24.9	25.5	24.2	22.6	23.9	23.3	24.3	24.8	24.1	24.3	
002056 Kununurra Aero	25.1	25.4	25.1	26.2	24.7	24.4	26.4	24.0	24.1	26.1	26.0	27.0	24.6	27.2	25.4	24.9	25.4	24.9	25.3	24.1	25.4	25.1	24.3	24.3	24.5	24.4	24.2	23.6	24.8	25.2	25.7	25.1	
003003 Broome Airport	27.8	+1.5	30.1	29.6	29.6	29.7	27.8	30.0	24.6	24.7	28.2	27.5	26.8	29.9	30.0	29.0	28.9	25.2	27.3	28.3	29.7	26.9	25.8	25.6	26.4	27.0	29.1	28.9	28.6	29.0	23.3	25.5	
003032 Derby Aero	26.0	24.7	27.0	27.4	28.0	27.3	28.1	23.6	25.2	27.1	24.4	27.0	26.7	23.2	29.9	28.1	22.8	24.6	27.2	27.0	29.4	26.1	25.9	25.3	25.7	26.8	26.5	26.8	22.9	23.3	24.0	22.7	
004032 Port Hedland Airport	27.2	+1.6	27.9	28.4	28.8	29.8	26.9	24.6	26.7	28.2	27.6	26.7	25.9	27.3	27.4	27.2	28.7	29.7	30.0	28.6	29.7	27.5	27.6	26.2	27.2	25.0	24.4	23.0	26.0	25.3	27.1	27.7	
004083 Karratha Aero	28.3	29.2	29.1	29.7	30.8	27.9	22.7	27.6	27.9	29.0	30.1	30.0	29.9	29.9	30.5	31.1	30.4	28.5	30.7	30.1	31.1	29.6	24.2	26.2	26.3	24.6	25.1	25.0	26.1	28.3	26.8	28.6	
004106 Marble Bar	26.7	28.9	29.7	28.0	29.2	23.3	22.1	23.4	27.1	27.4	25.1	24.1	25.7	26.4	28.0	29.7	28.5	30.9	31.1	28.9	26.9	27.7	25.1	24.4	24.0	28.8	25.3	25.4	24.3	26.3	28.2	24.6	
005007 Learmonth Airport	24.6	26.6	25.8	25.1	23.4	20.4	25.2	25.2	24.8	27.4	29.2	25.7	25.3	23.6	24.9	25.7	27.8	28.2	26.2	27.2	24.7	24.0	23.0	22.7	23.3	21.4	21.0	19.8	20.5	23.3	25.5	26.4	
006011 Carnarvon Airport	24.0	+1.6	23.3	24.0	24.2	23.7	19.0	24.2	25.7	26.2	26.8	26.6	23.8	23.8	21.4	24.4	24.8	24.8	24.7	27.1	26.5	24.7	23.4	24.2	23.8	23.2	22.1	21.6	19.7	21.4	22.6	24.4	26.5
006044 Denham	23.1	21.5	22.1	22.7	22.2	21.1	23.9	25.0	26.0	26.0	25.0	21.9	22.5	22.0	24.0	23.5	23.0	23.5	25.5	25.0	23.5	23.0	24.0	23.0	22.0	22.5	21.5	19.5	20.0	22.2	23.2	25.0	
007176 Newman Aero	24.6	28.9	27.5	28.3	25.7	19.2	17.3	18.9	25.3	25.4	22.0	22.8	25.0	27.6	27.1	28.7	22.0	23.1	25.3	29.3	23.2	26.9	28.1	22.6	24.6	23.8	22.9	21.9	23.0	23.2	27.3	23.1	
007185 Paraburdoo Aero	26.4	30.2	29.1	29.7	28.4	22.6	17.9	25.0	24.4	26.7	29.0	26.1	27.6	30.0	30.7	32.0	29.2	24.6	23.6	25.8	30.0	26.6	27.0	25.9	25.8	22.6	20.1	19.9	25.4	29.8	26.8	24.9	
007045 Meekatharra Airport	24.8	+0.5	24.5	23.6	23.6	23.7	19.2	21.2	22.3	27.2	28.0	27.6	29.6	29.6	28.6	30.4	25.3	20.6	23.5	25.7	27.8	27.6	26.7	28.3	25.3	21.6	20.0	20.3	20.5	21.5	25.0	25.2	
007600 Mount Magnet Aero	23.8	23.3	24.9	23.0	23.6	20.8	21.6	21.7	25.5	29.5	29.1	25.0	28.4	26.1	29.1	24.7	18.5	20.0	26.2	26.8	25.8	24.3	25.0	25.9	20.1	18.3	18.8	17.3	20.7	23.3	24.2	25.0	
008296 Morawa Airport	21.0	16.8	20.9	24.1	24.9	17.8	22.4	23.3	22.0	25.3	24.3	18.6	22.0	18.9	21.6	25.7	20.6	25.4	26.4	24.3	20.7	19.2	22.5	19.7	16.3	16.2	15.5	13.7	16.6	22.0	24.0	20.9	
008297 Dalwallinu	18.0	17.7	18.0	20.3	19.3	14.9	18.7	16.0	19.6	23.5	20.0	16.2	18.7	16.0	16.6	18.0	16.4	20.0	19.2	19.2	20.4	19.9	18.9	21.2	17.4	14.7	14.8	14.1	13.9	18.3	17.3	19.1	
008315 Geraldton Airport	21.7	21.4	19.6	20.9	26.6	22.3	24.8	21.1	19.9	19.9	22.8	17.2	22.0	17.7	19.7	22.4	26.7	26.0	24.9	23.4	23.3	22.4	19.9	21.9	20.8	14.6	19.6	22.9	21.5	14.6	19.6	22.9	21.5
009021 Perth Airport	18.6	+1.5	20.0	19.3	17.3	16.7	17.5	19.0	22.0	20.1	23.8	21.6	15.7	17.3	16.8	16.7	17.4	18.7	23.4	24.2	22.7	22.8	20.0	16.7	14.1	17.8	15.2	11.7	15.3	18.5	18.6	20.1	
009131 Jurien Bay	19.7	16.8	20.6	23.6	22.5	16.5	22.7	22.2	19.3	22.0	15.9	17.0	17.0	19.3	19.9	24.8	27.1	19.8	20.7	19.5	17.7	19.5	20.3	16.0	20.2	13.1	19.6	17.9	18.9	19.6	17.9	18.9	
009225 Perth Metro	18.7	20.3	19.4	17.7	16.7	17.7	18.7	20.1	18.7	23.7	21.4	16.4	17.6	16.8	16.7	16.9	17.9	19.1	22.4	22.6	22.3	22.7	20.0	18.1	15.9	18.3	14.6	14.3	15.3	18.5	19.1	20.1	
009240 Bickley	15.8	16.2	15.7	13.7	12.9	13.9	14.6	18.3	20.4	24.7	18.1	12.9	14.0	13.3	12.7	13.2	13.6	14.6	19.2	21.2	20.1	18.9	16.0	19.5	14.5	14.8	13.5	12.6	11.4	14.8	14.9	16.1	
009518 Cape Leeuwin	18.1	+1.1	18.0	18.5	17.0	16.5	16.0	16.3	19.6	19.7	21.9	19.0	17.6	17.3	16.3	17.0	16.2	16.8	17.9	21.1	20.6	19.3	18.0	19.0	20.0	18.5	16.0	17.1	17.7	18.7	18.4	18.1	
009617 Bridgetown	13.8	15.2	17.0	14.7	13.3	14.1	13.3	15.3	14.4	18.1	18.6	10.8	8.0	13.2	12.1	14.3	13.9	13.3	14.5	15.2	17.9	17.5	15.8	12.5	8.7	9.3	9.2	6.3	16.4	15.1	14.5		
009746 Witchcliffe	14.6	15.6	15.7	15.1	12.7	13.1	14.4	17.2	14.4	19.2	18.8	10.8	11.3	13.8	12.3	13.6	11.7	12.7	16.3	16.0	18.7	18.8	14.3	17.4	18.5	12.6	10.7	9.0	14.6	14.8	14.6		
009789 Esperance	15.3	17.0	17.1	15.3	14.6	13.3	14.5	10.7	15.2	17.3	20.0	16.7	10.0	16.9	12.4	13.9	13.1	12.4	13.6	16.0	21.7	18.3	18.4	18.9	18.2	15.6	12.6	16.5	16.4	11.6	12.2	13.9	
009965 Bunbury	15.9	16.3	18.4	16.9	15.4	15.7	16.2	19.5	18.6	21.1	18.8	12.3	14.3	10.7	14.5	15.4	15.9	16.8	19.6	18.6	18.3	17.8	17.0	13.5	13.4	9.9	13.3	10.9	12.3	16.1	17.3	16.6	
009977 Mandurah	19.5	19.7	19.8	18.0	17.3	17.8	18.9	23.7	24.9	26.7	21.1	16.9	18.0	16.9	16.2	16.6	17.4	19.0	23.2	24.0	22.0	21.5	19.8	21.9	18.3	18.2	17.6	16.7	16.5	18.6	18.8	20.0	
009999 Albany Airport	14.7	16.6	15.3	14.7	15.3	15.8	14.9	14.4	15.3	18.1	18.4	14.1	7.0	13.5	11.9	15.4	14.8	16.3	15.9	15.7	18.6	17.3	16.5	13.4	13.8	11.3	10.6	13.2	12.6	14.8	13.8		
010007 Bencubbin	18.1	16.5	17.5	19.5	19.6	20.6	15.0	18.5	15.7	16.5	16.7	15.7	18.9	22.3	21.0	25.1	21.0	17.4	17.0	16.2	17.6	15.0	14.1	17.5	17.5								
010092 Merredin	18.5	+0.9	20.0	17.1	15.4	15.2	16.2	17.2	21.6	22.6	26.5	23.9	14.9	17.4	16.1	14.8	15.5	17.0	17.2	20.4	20.4	23.4	20.6	24.0	17.3	17.1	15.9	14.5	16.0	17.4	20.4		
010286 Cunderdin Airfield	17.1	17.8	17.4	16.0	15.4	16.1	16.4	17.8	19.5	22.7	21.7	14.8	15.2	15.6	14.7	15.0	15.8	16.6	18.4	21.4	20.4	20.8	17.1	18.6	16.2	15.5	14.2	13.4	16.0	16.5	16.7		
010633 Ravensthorpe	14.2	+0.4	15.0	14.8	14.3	12.5	11.0	10.0	13.2	17.0	21.4	22.5	15.0	10.0	14.0	12.5	8.5	10.0	10.5	13.0	18.0	21.5	16.0	16.3	15.3	14.5	15.0	12.3	14.0	14.5	12.4	12.0	14.5
010811 Lake Grace	15.4	15.5	15.5	12.9	12.0	12.9	12.0	16.2	19.1	25.1	21.9	14.5	12.6	14.3	12.7	12.8	11.9	13.1	16.1	20.7	21.1	16.7	15.9	15.7	17.8	16.6	12.5	16.4	13.5	13.2	13.6	13.2	
010816 Katanning	13.9	15.6	14.0	14.0	11.7	13.6	11.3	11.9	15.1	22.2	18.1	13.3	9.8	12.6	11.5	13.3	12.7	11.4	12.4	17.2	18.2	16.0	15.5	13.4	15.8	13.7	11.9	13.1	11.2	12.9	14.2	13.2	
010817 Wandering	14.5	15.9	15.2	14.2	12.8	14.0	13.2	18.2	15.5	19.9	18.5	10.3	11.5	13.6	12.7	13.0	13.0	14.0	15.7	20.2	19.7	17.3	15.1	15.1	13.6	11.6	11.1	9.1	14.4	15.5	11.5		
011003 Eucla	16.9	17.2	16.8	16.5	16.1	15.9	16.2	16.3	16.2	13.0	16.3	16.7	16.3	16.8	17.3	16.2																	

Daily and mean minimum temperatures for January 2021

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		20.5	+0.4	18.0	18.3	19.5	21.0	17.8	18.8	19.4	18.0	16.8	17.8	18.8	21.9	24.6	27.5	19.1	15.3	14.8	17.6	17.5	18.6	20.9	20.2	23.1	24.2	25.2	28.9	22.2	23.7	20.5	21.2	23.6		
048245 Bourke Airport AWS		21.7		24.0	20.8	20.7	22.2	19.1	20.9	19.7	19.8	19.7	20.1	21.3	20.6	21.5	22.0	25.4	18.3	15.9	22.2	17.2	16.5	22.0	21.8	22.2	22.3	20.0	29.5	24.0	29.0	25.9	22.9	24.6		
049000 Ivanhoe Aerodrome AWS		18.8		19.8	20.6	16.5	18.0	15.4	16.7	16.4	19.6	18.2	18.7	22.0	23.1	21.3	20.1	17.0	12.3	15.0	14.9	16.8	13.3	17.5	20.3	19.1	26.2	28.3	22.7	17.0	19.2	19.0	20.0	17.4		
050052 Condobolin Ag Research Stn															17.0	21.4	13.4	10.5	11.0	10.0	14.0	13.7	17.5	20.5	23.3	22.0	24.0	27.4	22.4	20.4	16.1	17.5	18.6			
052088 Walgett Airport AWS		19.6		21.5	19.7	18.7	21.3	16.7	20.4	16.5	14.9	18.6	19.6	19.3	19.5	17.7	20.2	21.7	15.7	11.4	20.2	13.8	16.0	21.5	17.8	19.4	22.3	19.6	22.5	26.0	24.4	21.3	24.9	24.0		
053115 Moree Aero		19.0		20.2	19.6	19.6	22.4	19.1	22.7	18.3	17.5	15.3	15.8	16.7	17.5	19.0	20.0	19.9	17.8	11.5	17.8	16.1	18.4	18.5	18.6	17.7	19.7	19.7	22.1	23.6	22.9	19.1	20.2	20.5		
054038 Narrabri Airport AWS		18.1		20.7	17.9	19.6	21.9	17.2	19.8	18.1	16.6	14.7	15.3	15.2	15.8	17.0	16.5	17.8	13.1	10.0	18.3	14.1	17.7	17.5	17.1	15.8	21.7	19.2	22.6	26.7	21.5	18.4	23.5	20.1		
055325 Tamworth Airport AWS		15.3		17.8	18.9	17.6	17.9	15.3	17.6	17.3	14.4	11.5	12.3	13.4	13.1	14.5	13.1	15.7	11.7	7.7	14.7	11.4	15.7	13.8	15.4	14.5	13.7	14.5	15.7	19.8	19.3	17.5	21.5	18.4		
056242 Inverell (Raglan St)		14.1		14.0	15.4	16.2	18.1	16.5	17.7	16.7	14.0	10.9	10.1	10.6	11.5	13.9	12.2	16.3	12.2	8.1	15.6	14.0	13.5	15.2	16.9	10.7	10.4	12.2	15.1	15.9	18.3	14.1	16.7	14.9		
057095 Tabulam (Muirne)		17.1		17.4	17.6	15.5	18.3	19.2	20.7	15.9	14.8	14.8	14.8	16.1	16.5	17.1	18.4	18.9	18.2	16.2	17.8	15.7	16.4	15.2	15.4	16.4	14.8	16.9	17.0	18.9	19.8	19.1	17.0	18.6		
058012 Yamba Pilot Station		20.6	+0.3	21.6	20.5	20.9	22.8	22.3	22.8	20.4	18.9	18.0	18.1	18.7	19.8	20.0	20.0	20.7	20.3	18.8	22.2	19.5	20.1	18.5	19.3	19.8	20.0	21.4	20.0	21.5	24.0	24.2	22.1	22.1		
060139 Port Macquarie Airport AWS (Comparison)		18.8		20.7	19.6	19.9	21.2	18.8	20.1	19.2	17.6	17.0	16.0	16.6	16.1	15.5	18.3	21.0	19.5	14.4	16.9	18.6	18.4	17.2	18.0	17.7	18.4	19.3	20.8	20.7	21.7	20.7	21.5	21.6		
061078 Williamtown RAAF		17.7	-0.2	18.6	18.1	19.0	18.4	17.3	21.2	18.2	18.1	16.4	15.2	14.7	16.4	16.5	18.3	21.3	14.4	12.7	16.0	17.5	18.1	11.4	15.5	19.3	16.9	16.8	20.3	22.9	19.8	19.4	20.8	19.1		
061363 Scone Airport AWS		15.7		17.5	15.5	17.7	16.0	14.5	17.4	17.0	15.1	14.9	14.2	13.9	13.5	12.8	13.4	18.2	12.9	8.9	13.3	14.8	16.6	9.9	13.3	16.8	16.4	14.2	20.4	23.5	18.4	18.3	20.7	17.9		
062101 Mudgee Airport AWS		14.7		16.9	15.1	16.9	15.2	14.8	13.4	15.6	13.9	13.8	11.8	13.4	10.3	13.8	15.5	12.8	11.3	6.2	12.9	8.5	16.7	14.0	14.9	14.4	17.2	16.4	15.9	20.9	19.2	18.2	19.6	16.8		
063005 Bathurst Agricultural Station		12.3	-0.8	14.0	11.7	15.5	15.5	14.1	11.0	12.5	9.8	9.5	8.5	9.0	9.8	16.5	16.0	10.0	7.5	5.0	6.2	8.0	11.6	7.5	12.5	14.5	14.5	14.5	19.2	15.4	15.0	15.6	15.0	17.3	13.7	
063254 Orange Agricultural Institute				11.5			10.6							8.5	16.0	18.0	12.0				7.0	14.1	11.0	9.7	14.9			17.8	17.8	14.5	13.1	15.0				
064008 Coonabarabran (Showgrounds)		14.8	-0.9	17.0	15.4	17.5	18.1	15.5	16.0	15.4	12.3	11.8	12.0	12.5	11.9	11.5	13.5	15.0	12.1	8.6	15.5	10.1	14.3	13.0	14.5	15.8	16.5	16.5	15.5	18.8	18.9	16.3	19.6	17.3		
065070 Dubbo Airport AWS		16.5		19.0	16.1	17.3	19.1	13.6	14.6	16.5	12.5	12.5	14.4	15.4	14.3	19.0	17.3	15.1	11.4	10.0	10.9	11.3	16.9	15.3	19.2	17.8	18.6	21.3	21.5	20.5	20.0	20.2	21.1	18.8		
066214 Sydney (Observatory Hill)		19.1		17.8	16.1	18.0	20.4	19.3	19.8	18.4	17.6	16.7	17.0	18.2	18.8	20.9	20.8	20.6	17.3	6.3	16.3	18.4	21.1	17.0	15.2	18.3	22.1	22.2	21.9	21.7	21.3	18.6	18.6	19.7	21.8	
067105 Richmond RAAF		17.0		16.2	15.9	16.5	19.0	18.1	20.1	16.8	15.4	14.9	13.1	14.3	14.9	18.9	18.8	20.5	14.2	10.5	15.9	16.3	15.5	10.8	14.7	18.4	19.6	22.0	18.4	22.7	18.3	17.6	19.5	19.9		
068072 Nowra RAN Air Station AWS		16.4		16.8	15.3	15.5	16.1	18.2	16.9	14.0	15.1	14.3	14.6	15.1	15.5	18.3	19.0	17.7	13.2	12.7	13.6	18.5	14.3	12.2	14.3	20.9	20.2	19.6	17.9	17.7	16.2	17.1	18.2	18.4		
068151 Jervis Bay (Point Perpendicular)		18.3		19.0	16.8	16.8	18.7	18.5	18.2	15.8	16.0	17.5	16.7	17.7	19.7	18.9	21.0	18.0	15.3	16.3	16.5	19.2	17.8	15.1	19.4	22.2	20.8	21.2	21.4	18.7	18.2	18.4	18.4	19.4		
068241 Albion Park (Shellharbour Airport)		16.7		15.5	16.0	16.3	17.0	16.8	18.1	15.2	16.0	14.6	13.4	14.5	16.3	18.9	20.4	17.3	15.3	11.5	14.9	15.5	15.5	11.1	14.8	18.5	19.4	20.6	17.7	20.6	18.0	18.1	19.0	20.5		
069018 Moruya Heads Pilot Station		16.9	+0.9	18.6	14.8	17.2	18.5	18.0	15.8	15.5	15.9	16.8	15.0	16.0	18.3	18.1	19.5	16.1	11.1	12.9	13.5	17.1	14.2	16.1	14.6	17.5	21.1	22.5	21.8	17.4	16.8	16.5	18.4	17.6		
070351 Canberra Airport		12.3		14.4	13.0	15.7	14.6	14.1	13.0	8.3	8.2	7.1	10.7	10.2	12.0	14.4	14.1	10.9	9.0	4.8	7.6	10.5	11.4	8.4	11.2	11.5	13.7	15.6	18.1	16.7	15.9	13.2	15.0	17.5		
071041 Thredbo Village		7.9		9.5	7.5	11.0	8.0	10.1	9.7	6.5		3.5	7.0	9.5	12.0		14.5	7.3	2.5	2.0	3.5	2.5	2.0	3.8	7.0	4.7	9.0	9.0	17.0	10.5	9.8	9.0	9.3	10.8		
072150 Wagga Wagga AMD		16.3	+0.6	19.4	16.1	18.8	17.5	15.9	15.0	13.9	13.2	11.4	17.0	20.6	19.4	21.4	18.8	10.8	10.1	8.3	11.3	12.8	14.9	15.8	19.7	12.3	17.9	22.7	24.2	18.6	20.3	15.3	18.0	14.9		
072160 Albury Airport AWS		16.1		19.8	15.9	18.2	17.6	15.9	18.3	16.1	13.6	14.0	16.1	18.0	18.2	18.5	20.2	12.1	9.4	11.3	11.2	11.9	12.5	13.6	16.4	14.9	16.4	18.5	21.9	17.5	20.3	18.0	18.7	13.7		
072161 Cabramurra SMHEA AWS		10.7		8.6	7.2	11.0	11.9	10.3	8.8	5.5	5.1	8.2	12.8	14.6	15.6	15.2	15.3	8.8	1.0	3.1	7.6	10.7	5.0	10.8	13.3	16.7	18.1	18.8	17.2	11.2	9.2	8.6	10.5	11.4		
074258 Deniliquin Airport AWS		15.5		19.5	17.4	14.4	16.1	13.5	15.1	14.5	16.3	15.3	16.4	18.4	21.4	13.4	13.9	12.9	8.9	12.1	10.4	12.3	10.0	15.4	16.3	14.6	17.9	25.8	21.0	12.0	15.6	17.5	19.1	12.3		
Victoria		Mean Anom	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
076031 Mildura Airport		16.4	-0.1	19.7	20.2	15.4	16.6	13.3	13.7	14.0	17.3	17.8	17.4	22.5	18.1	15.7	13.0	10.9	9.3	12.8	13.5	13.8	13.3	13.3	16.8	17.7	22.1	27.0	20.5	15.3	16.6	21.7	15.3	15.0		
078015 Nhill Aerodrome		13.9		14.6	18.4	14.4	14.0	13.2	12.4	9.4	14.9	15.8	18.6	21.2	14.6	11.6	9.3	9.7	9.2	10.5	10.0	13.3	6.6	15.5	11.6	13.6	20.3	26.1	17.3	9.1	13.5	19.0	13.8	9.8		
080023 Kerang		15.8	+0.6	17.8	19.2	17.3	15.8	16.4	14.8	1																										

Daily and total rainfall for January 2021

Western Australia	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
001019 Kalbarri	248.2	31.2	-	0.4	33.8	14.0	4.6	0.8	-	-	-	-	-	0.6	1.2	0.4	0.2	3.0	-	17.8	8.2	3.4	32.6	26.4	3.2	26.6	6.8	7.8	8.2	17.0	-	-	-		
002056 Kununurra Aero	208.0	-	-	-	8.0	-	-	-	22.0	4.0	-	-	-	-	0.4	0.4	-	4.2	-	-	-	0.8	2.6	16.0	6.0	57.6	23.4	26.2	15.0	13.0	0.2	8.2	-	-	
003003 Broome Airport	59.8	20.4	-	-	-	-	-	-	-	7.8	-	-	-	-	-	-	-	1.2	-	-	-	2.6	21.6	5.6	3.8	-	-	-	-	3.8	13.4	-	-	-	
003032 Derby Aero	343.0	207	29.2	0.2	-	-	-	-	2.6	22.4	-	-	-	4.0	-	-	8.0	1.0	-	-	-	4.0	5.6	27.8	19.6	-	-	-	39.2	73.4	65.8	40.2	-	-	
004032 Port Hedland Airport	1.6	64	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	-	-	0.6	
004083 Karratha Aero	21.0	-	-	-	-	-	1.2	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	19.4	-	-	-	-	-	-	-	-	-	-	-	
004106 Marble Bar	7.8	-	-	-	-	3.0	1.0	0.2	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.0	
005007 Leamonth Airport	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
006011 Carnarvon Airport	0.2	19	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
006044 Denham	8.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
007176 Newman Aero	41.2	-	-	-	-	12.0	16.8	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9.8	-	
007185 Paraburdoo Aero	92.4	-	-	-	-	8.2	73.6	0.2	0.4	0.4	-	-	-	-	-	-	-	-	-	1.0	0.8	-	0.4	0.4	-	-	-	-	-	-	-	-	6.2	0.8	
007045 Meekatharra Airport	2.8	26	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
007600 Mount Magnet Aero	4.6	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
008296 Morawa Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
008297 Dalwallinu	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.4	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	
008315 Geraldton Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
009021 Perth Airport	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
009131 Jurien Bay	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
009225 Perth Metro	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
009240 Bickley	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2	-	-	-	-	-	-	-	-	-	-	-	-	-
009518 Cape Leeuwin	3.8	21	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	0.2	2.0	0.2	-	-	-	-	-	-	
009617 Bridgetown	2.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.6	-	-	-	-	-	1.0	-	-	-	-	-	-	-	
009746 Witchcliffe	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	3.8	-	-	-	-	-		
009789 Esperance	8.0	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	0.6	0.2	-	0.4	0.2	-	3.6	0.8	-	-	-	-		
009965 Bunbury	0.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
009977 Mandurah	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.2	-	-	-	-	1.0	-	-	-	-	-		
009999 Albany Airport	27.8	-	0.4	-	-	-	-	-	-	-	0.6	0.2	-	-	-	-	-	-	-	-	-	7.4	0.2	-	-	2.6	0.2	4.4	1.0	9.2	1.6	-	-		
010007 Bencubbin	3.4	18	-	-	-	-	-	-	-	-	1.4	-	-	-	-	0.6	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	-		
010092 Merredin	17	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
010286 Cunderdin Airfield	0.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	0.2	0.2	-	-	-	-	-	-	-	-	-	-	-	-		
010633 Ravensthorpe	1.2	27	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	0.8	-	-	-	-	-		
010911 Lake Grace	0.6	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	-	
010916 Katanning	4.8	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	-	-	-	-	-	4.4	0.2	-	-	-	-	-	-	-	-	-	-	-	
010917 Wandering	2.6	-	1.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	-	-	-	-	-	-	-	-	-	-	-	-	
011003 Eucla	13.4	10	-	-	-	0.2	0.4	-	-	-	0.2	0.2	-	-	-	-	-	-	-	-	-	0.2	-	-	5.8	0.2	-	6.0	0.2	-	-	-	-	-	
011052 Forrest	23.4	-	-	3.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	0.6	-	18.6	-	-	-	-	-		
012038 Kalgoorlie-Boulder Airport	10.8	26	1.4	0.2	-	-	-	-	-	-	-	-	0.8	2.4	-	-	0.4	0.2	-	-	-	0.6	-	-	4.0	-	0.6	0.2	-	-	-	-	-		
012071 Salmon Gums Res.Stn.	26.0	19	11.2	-	-	-	-	-	-	-	-	-	-	-	-	-	20.6	72.2	90.6	15.6	13.2	0.2	5.6	26.2	15.0	1.2	32.6	0.4	-	-	7.2	-	6.4	1.2	
013011 Warburton Airfield	86.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	0.4	-	-	-	-	-	-	8.4	44.4	-	-	-	-	-	1.0	27.6	3.6	
013017 Giles Meteorological Office	33.6	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.0	0.2	-	-	-	-	-	0.6	19.8	1.4	-	1.8	8.4	0.2	-	0.2	-		
Northern Territory	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
014015 Darwin Airport	616.8	437	0.4	-	-	1.2	0.4	21.4	11.2	4.2	0.2	20.8	6.0	26.0	0.2	49.4	5.8	-	37.6	12.8	5.8	0.4	-	9.8	35.8	49.8	58.6	61.8	37.8	72.4	75.4	11.6	-	-	
014198 Jabiru Airport	480.6	16.0	50.6	13.4	4.0	41.4	0.2	18.8	-	21.6	0.4	1.0	19.8	-	7.0	50.2	14.6	0.2	44.0	0.4	0.2	0.4	53.4	41.6	16.2	25.6	1.6	8.2	5.0	10.6	14.0	0.2	-	-	
014932 Tindal RAAF	130.2	8.6	2.0	-	-	-	-	14.4	3.6	0.6	-	-	-	-	-	7.2	-	-	-	-	0.2	9.0	-	35.2	0.2	1.6	10.8	-	4.2	29.0	9.8	0.6	-	-	
014908 Gove Airport	479.6	8.6	82.6	12.0	2.0	0.2	-	34.2	-	25.4	1.6	1.2	-	-	20.6	72.2	90.6	15.6	13.2	0.2	5.6	26.2	15.0	1.2	32.6	0.4	-	-	2.0	1.2	15.2	-	-		
014723 Borroloola Airport	147.0	8.0	1.6	33.2	0.4	-	-	-	-	1.2	-	-	2.4	-	-	-	-	-	-	-	-	0.2	0.2	44.2	5.6	-	47.6	0.2	-	-	-	-	2.0	-	
014825 Victoria River Downs	145.2	144	-	-	-	18.2	-	-	-	-	-	-	-	-	-	6.8	0.2	0.2	-	-	3.4	0.2	60.8	0.2	35.4	0.4	1.4								

