



Australian Government
Bureau of Meteorology

Monthly Weather Review Australia July 2015



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

Product code IDCKGC1AR1. Prepared on 25 August 2015

Cover photograph

Snow settled to low levels across large areas of southeastern Australia during a strong cold outbreak mid-July. The image shows snow at Kooringle, at about 340 m elevation. Kooringle is near Hovells Creek, about 35 km southeast of Cowra in New South Wales.

Photograph by Stafford Wells, 17 July 2015. Used with permission.

Overview

- above average maxima and minima nationally
- a significant cold outbreak for eastern Australia, with snow falling to low levels
- a notable warm spell for the north and west, including some daily records
- below average rainfall nationally, although regionally varied

July was a warmer-than-average month for most of northern Australia while for the southeastern States and adjacent parts of southern Queensland and South Australia it was cooler than average. A significant cold outbreak between the 11th and 17th contributed significantly to cool monthly anomalies over this region. Further detail is provided in the Significant Weather (see page 3) section or in the Climate Update "*A significant low-level snow event across eastern Australia*", located at <http://www.bom.gov.au/climate/updates/articles/a011-eastern-snow-event.shtml>. Above-average temperatures in Western Australia were the result of more persistent anomalies, although the last few days of the month were especially warm for Western Australia and the last two weeks of the month much warmer than average for the north of Australia.

Maximum temperatures for July were warmer than average across much of northern and western

Australia. Maxima were cooler than average for most of New South Wales, extending just into southern Queensland, central and western Victoria, northwestern Tasmania, and in South Australia in the far southeast and the Flinders and Eyre Peninsula districts. Nationally, July maxima were 0.43 °C above average.

Minimum temperatures for July were warmer than average for most of Western Australia and a large part of Queensland, extending south of the Peninsula to the Central West district. Minima were cooler than average for parts of the Northern Territory, a large part of the southeast—extending inland of the Great Dividing Range into eastern South Australia—and most of Tasmania. Nationally, minimum temperatures were 0.41 °C above average.

Nationally, rainfall was 27% below average. Rainfall during July was below average for the southwest of Western Australia and also for the majority of Tasmania, and parts of the east coast, South Australia and western Victoria. Rainfall was higher than average for parts of northern Australia, some areas of the east, and some parts of the west of Western Australia. A number of locations in southwest Western Australia observed their highest July daily rainfall (see page 16) for the 24 hours to 9 am on the 31st.

Areal averages in July 2015

	Rainfall anomaly	Mean maximum temperature anomaly	Mean minimum temperature anomaly	Mean temperature anomaly
Australia	–27 %	+0.43 °C	+0.41 °C	+0.42 °C
Western Australia	–11 %	+0.97 °C	+0.84 °C	+0.91 °C
Northern Territory	–83 %	+0.44 °C	–0.24 °C	+0.10 °C
South Australia	–38 %	–0.21 °C	–0.31 °C	–0.25 °C
Queensland	–63 %	+0.57 °C	+0.99 °C	+0.78 °C
New South Wales	–4 %	–0.47 °C	+0.12 °C	–0.17 °C
Victoria	–11 %	–0.39 °C	–0.50 °C	–0.44 °C
Tasmania	–22 %	–0.44 °C	–0.34 °C	–0.38 °C

Extremes in July 2015

	Hottest day	Coldest night	Wettest day	Warmest overall	Coollest overall	Wettest overall	Strongest wind gust
Australia	36.8 °C at Douglas River (NT), Kalumburu (WA), and Wyndham Aero (WA) all on the 26th	–11.0 °C at Thredbo Village (NSW) on the 20th	118.0 mm at Capel North (WA) on the 31st	27.5 °C at Coconut Island (Qld)	–2.8 °C at Thredbo AWS (NSW)	341.0 mm at Mount Read (Tas.)	156 km/h at Hogan Island (Tas.) on the 26th
Western Australia	36.8 °C at Kalumburu and Wyndham Aero on the 26th	–4.0 °C at Norseman Aero on the 22nd	118.0 mm at Capel North on the 31st	26.4 °C at Browse Island	10.2 °C at Newdegate Research Station	203.2 mm at Capel North	106 km/h at Cape Leeuwin on the 20th
Northern Territory	36.8 °C at Douglas River on the 26th	–5.0 °C at Alice Springs Airport and Arltunga on the 20th	18.2 mm at Alcan Minesite on the 2nd	26.2 °C at Cape Wessel	10.8 °C at Arltunga	38.4 mm at Gove Airport	69 km/h at Cape Wessel on the 2nd
South Australia	28.6 °C at Coober Pedy Airport on the 31st	–5.7 °C at Gluepot Reserve (Gluepot) on the 20th	40.2 mm at Piccadilly (Mount Lofty Botanic Garden) on the 11th	12.8 °C at Neptune Island	6.2 °C at Mount Lofty	177.4 mm at Piccadilly (Mount Lofty Botanic Garden)	106 km/h at Neptune Island on the 11th
Queensland	35.6 °C at Kowanyama Airport on the 26th	–4.1 °C at Warwick on the 18th	91.0 mm at Bellenden Ker Top Stn on the 22nd	27.5 °C at Coconut Island	7.8 °C at Applethorpe	247.0 mm at Topaz	89 km/h at Lihou Reef Lighthouse on the 22nd
New South Wales	25.0 °C at Murwillumbah (Bray Park) on the 7th	–11.0 °C at Thredbo Village on the 20th	110.6 mm at Jervis Bay (Point Perpendicular) on the 17th	15.3 °C at South West Rocks (Smoky Cape Lighthouse)	–2.8 °C at Thredbo AWS	202.6 mm at Perisher Valley AWS	117 km/h at Thredbo AWS on the 21st and 31st
Victoria	20.4 °C at Lakes Entrance (Eastern Beach Road) on the 10th	–6.9 °C at Falls Creek and Mount Hotham on the 17th	84.0 mm at Goongerah on the 13th	11.4 °C at Gabo Island Lighthouse	–2.0 °C at Mount Buller	256.4 mm at Mount Baw Baw	128 km/h at Wilsons Promontory Lighthouse on the 2nd
Tasmania	17.8 °C at Bicheno (Council Depot) on the 4th	–9.3 °C at Liawenee on the 8th	73.8 mm at South Forest (Plummers Road) on the 6th	10.3 °C at Hogan Island	–0.3 °C at Mount Wellington	341.0 mm at Mount Read	156 km/h at Hogan Island on the 26th
In this table <i>Hottest day</i> is the highest daily maximum temperature, <i>Coldest night</i> is the lowest daily minimum temperature, <i>Wettest day</i> is the highest daily rainfall total, <i>Warmest overall</i> is the highest mean monthly temperature, <i>Coollest overall</i> is the lowest mean monthly temperature and <i>Wettest overall</i> is the highest total monthly precipitation.							

Cold outbreak and low-level snow for the east

The southeastern States and parts of Queensland experienced a significant cold outbreak between the 11th and 17th. The cold outbreak was notable for its spatial extent, producing widespread snow along the Great Dividing Range from the Southern Tablelands in New South Wales to the Granite Belt in southern Queensland. In addition to the summary below, further detail is provided in the Climate Update "*A significant low-level snow event across eastern Australia*", located at <http://www.bom.gov.au/climate/updates/articles/a011-eastern-snow-event.shtml>.

At the start of this event snow was reported in the upper parts of the ranges east of Melbourne and elevated parts of southern and central New South Wales on the morning of the 12th—including snow depths greater than 5 cm in the Tablelands of New South Wales at Oberon, Guyra, Glen Innes and Orange, and 15 cm of snow at Mt Ginini—with more widespread falls in elevated parts of Victoria on the 14th and 15th, although snowfalls in Victoria were generally light and not especially unusual.

The system strengthened on the 16th, with widespread snowfall reported across the New South Wales Tablelands on the 17th, extending to 600 m in the Southern Highlands. Snow depths greater than 5 cm were reported at areas including Bowral, Bathurst, and Guyra, with 10 cm at Glen Innes. Light dustings of snow were also reported on the ground at Goulburn and Armidale, while 15 cm to 20 cm of snow was reported in the Blue Mountains, the heaviest snow since at least 2012. The snow and black ice led to the closure of several major roads, stranding motorists, while strong winds also caused power outages in some areas.

In Queensland snow was reported in various locations in the Granite Belt. Sleet was reported at Eukey late on the 16th, turning to snow and falling heavily at times early on the 17th. There were multiple reports of snow settling at elevations above 800 m in the Granite Belt, with accumulations around 5 cm in Stanthorpe and Eukey. There were reports of brief snow flurries as far north as Toowoomba on the morning of the 17th. Snowfall was observed down to 350 m on the coastal side of Cunningham's Gap, about 90 km southwest of Brisbane. Accumulations of snow occurred on higher peaks (Mt Mitchell and Mt Cordeaux) above 1100 m in the Cunningham's Gap area. Snow depths up to about 10 cm were observed around Stanthorpe and up to 20 cm in the deepest snow drifts beside some of the back roads on the highest parts around the Mt Norman area.

Accumulation rates of up to 3 cm in 45 minutes were reported and accumulations in southeast Queensland were the deepest since 1984. Freezing fog/cloud to ground level with rime ice and hoar frost was reported in the Bunya Mountains northwest of Brisbane.

In addition to this event snow fell to below 400 m in Tasmania on the 2nd, with greater quantities down to 500 m on the 27th. Some elevated roads (including the Lyell Highway and Highland Lakes Road) were closed or restricted to 4WDs.

Several other snow-bearing systems also crossed the alpine regions of the southeast during July. Natural snow depths at Spencer's Creek increased from just 4.5 cm on the 9th—the latest date on record to have less than 5 cm of snow—to 122.4 cm at the start of August—close to the long-term average. The Bureau does not collect snow measurements, but Snowy Hydro take regular measurements for Spencer's Creek as part of their operations.

Cold at the Australian Antarctic stations

Both Mawson and Davis observed their coolest July maximum and minimum temperatures for more than 20 years. The lowest minimum temperature of the month at an Australian base was -37.1°C at Davis on the 10th.

Heavy rain in Western Australia

A cold front and an associated cloudband brought moderate to heavy rainfall to the western parts of the South West Land Division on the 19th and 20th, while a low pressure system and an associated trough off the northwest coast of Western Australia produced moderate to heavy falls in the Gascoyne district between the evening of the 20th and the morning of the 21st.

During the last days of the month a low pressure system and cloudband with embedded thunderstorms produced widespread moderate to heavy rain over the southwest of Western Australia during the 30th and 31st. Many sites in the Central West, Central Wheat Belt and South West districts observed their wettest July day on record (see page 16). Minor to moderate flooding occurred in the Moore River catchment.

Strong winds in New South Wales

Strong winds associated with the passage of a cold front on the 10th damaged at least 12 buildings at Burrumbuttock in the Riverina region, as well as removing the roof from a home in Armidale.

Strong winds in South Australia

Scattered showers affected western and southern districts of South Australia from early on the 11th in a very cold and unstable southwesterly airstream in the wake of a cold front. One shower produced a wind gust of 91 km/h at Ceduna, with reports of trees being blown down and the roof of an amenities block blown off.

Later the same day, a low pressure system pushed northeastwards towards the Lower South East coast. Southwesterly winds on the northwest flank of this low increased to gale force, affecting eastern Kangaroo Island, the southern Mount Lofty Ranges and coastal parts of southeast South Australia from about mid-afternoon on the 11th through to the early hours of the 12th. Winds of 60 km/h to 70 km/h were recorded at Cape Willoughby, Lower Inman Valley, Hindmarsh Island and Cape Jaffa. The highest recorded wind gust was 98 km/h at Hindmarsh Island.

A band of showers linked to a fast moving front embedded in a vigorous westerly flow tracked across the southeast of South Australia during the evening of the 24th, generating localised squally winds which brought down trees and tree limbs in parts of the Mount Lofty Ranges. The highest recorded wind gust was 87 km/h at Mount Crawford.

Another stronger front tracked across southern parts of South Australia during the afternoon and evening of the 25th, bringing with it a band of squally showers and thunderstorms. West to northwesterly winds increased across the Mount Lofty Ranges just ahead of the front, with gusts to 96 km/h recorded at Mount Crawford. Near-severe wind gusts were reported in several districts with the passage of the front, but only isolated and minor tree damage resulted.

A warm spell for the north

A very warm spell affected northern Australia during the latter part of the month as a strengthening high pressure system moved over southern Australia. Several locations in central and western Queensland observed their highest July temperature on record on the 26th. The system extended a dry airmass into southern and western Queensland in the wake of a surface trough with dry inland air was pushed through central parts of the Northern Territory and the Kimberley district on the following day. Several locations around the Top End and the northwest of Western Australia experienced their warmest July day on record between the 26th and 30th.

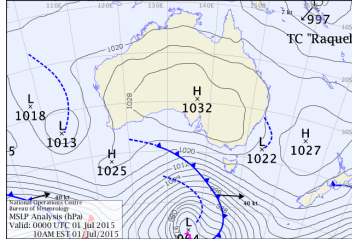
A second pulse of warm air spread from the northwest of Western Australia into more inland parts during the 28th and 29th with a few sites observing their warmest July night on the night of the 29th or 30th.

Tropical cyclone *Raquel*

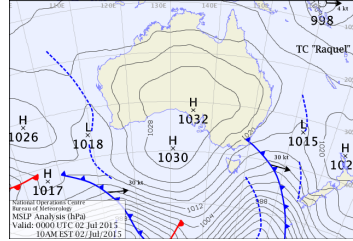
Tropical cyclone *Raquel* formed to the north of the Solomon Islands (approximately 2000 km away from the Queensland coast) early on the morning of the 1st July, the system remained at category 1 strength until being downgraded to a tropical low on the 2nd and decaying by the 5th. At no time did *Raquel* posed a threat to the Queensland coast. *Raquel* was the only known instance of a tropical cyclone during July in the Queensland region since the satellite era began. A cyclone has been recorded in the Queensland region during June—tropical cyclone *Ida* (30 May to 3 June 1972)—and two in the Indian Ocean during July—tropical cyclone *Lindsay* (9–13 July 1996) and an unnamed system (29–30 July 2007).

Synoptic analyses and summary

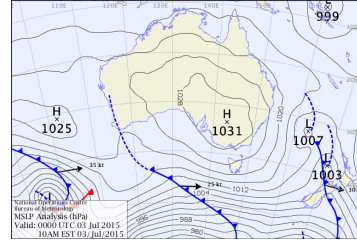
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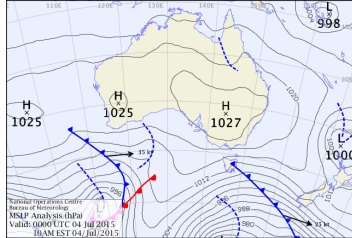
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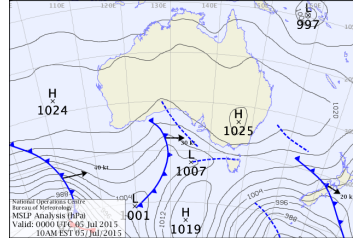
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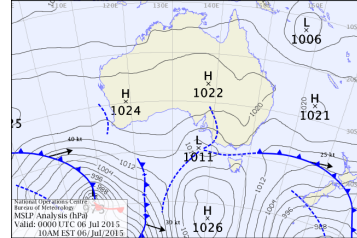
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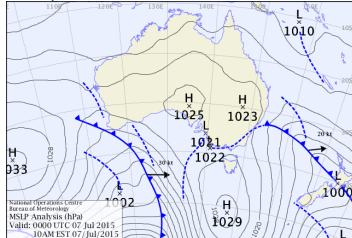
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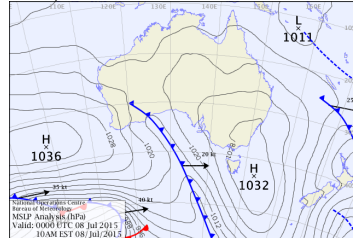
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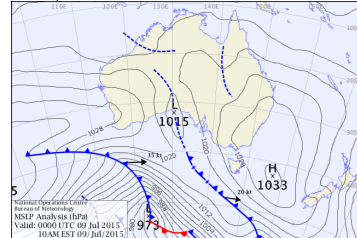
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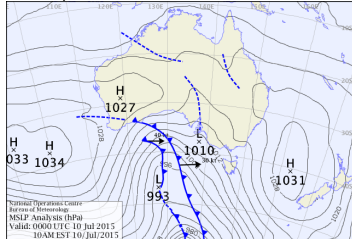
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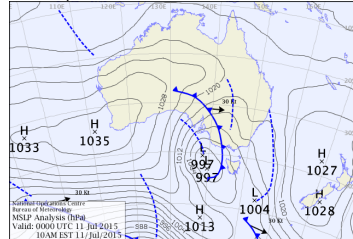
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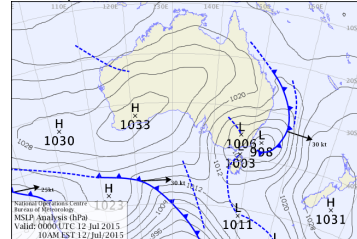
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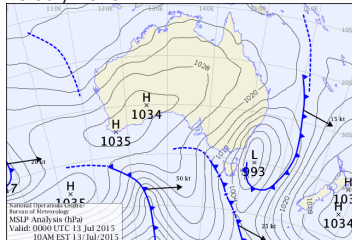
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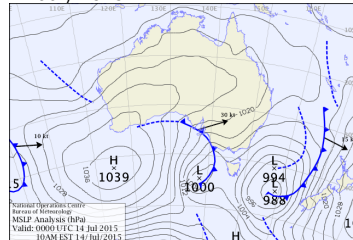
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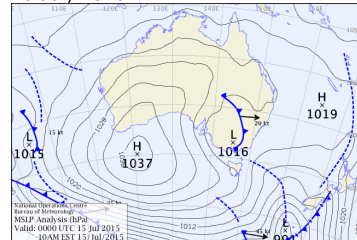
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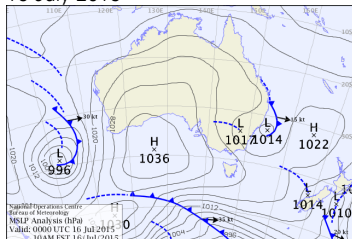
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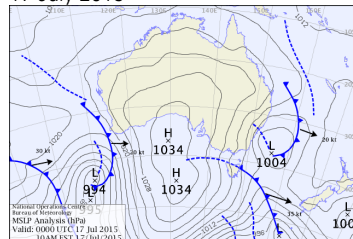
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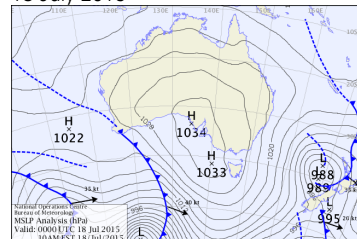
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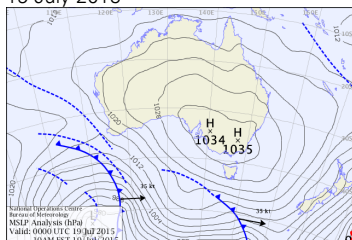
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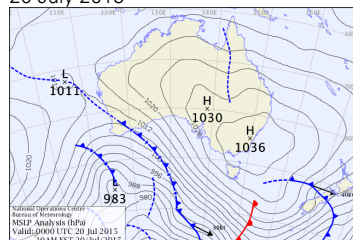
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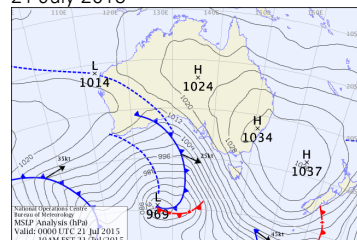
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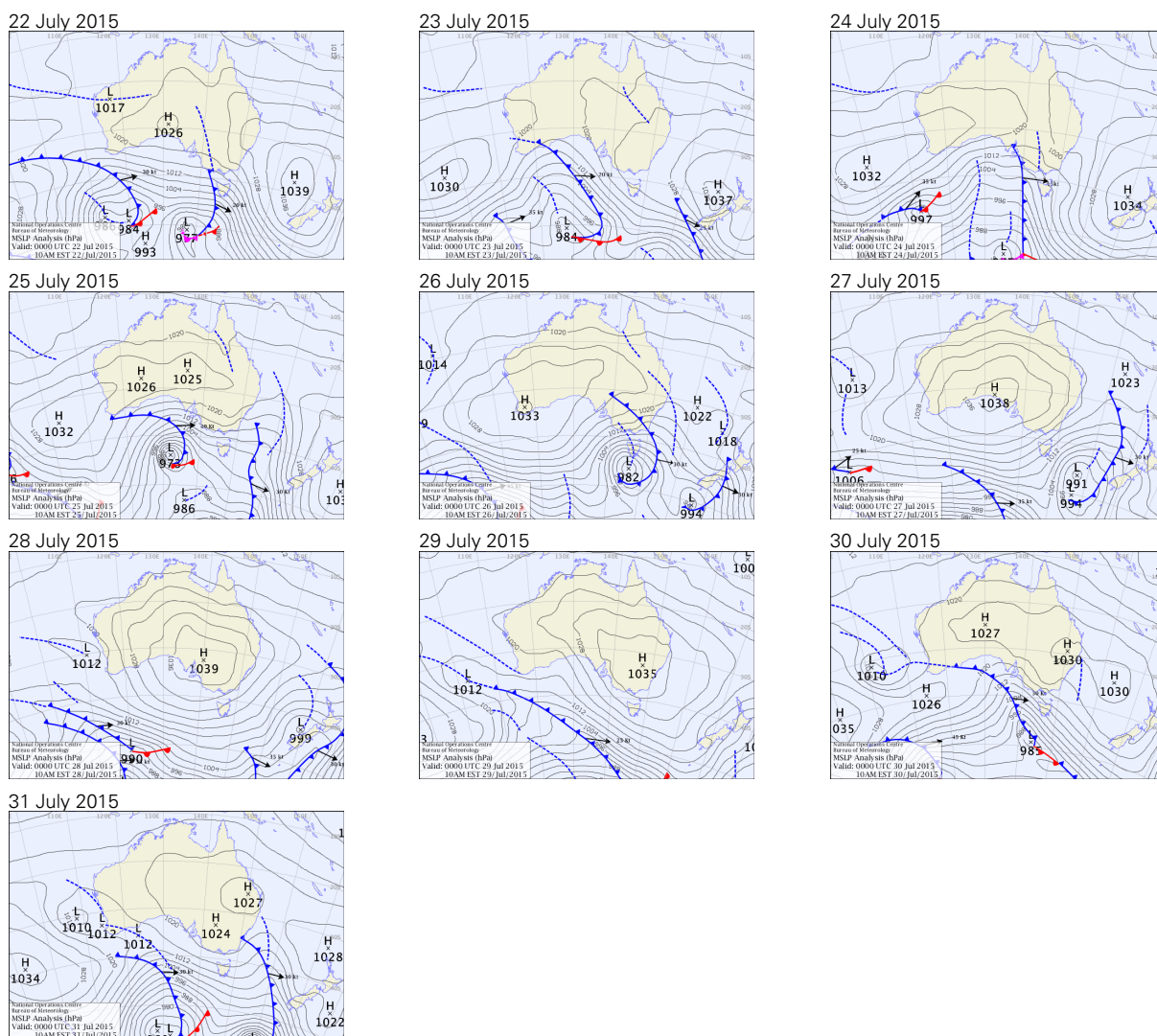


20 July 2015



21 July 2015





Synoptic summary

The month started with a near-stationary high pressure ridge in place over the southern half of the mainland which persisted until weakening during the 7th. In the tropical regions the start of the month was marked by the development of a very late-season tropical cyclone—*Raquel* (see page 3). A tropical low to north of the Solomon Islands deepened in the last days of June, reaching tropical cyclone status on 1 July and passing into the Queensland region of responsibility, becoming the first cyclone in the Queensland region during July since the satellite era began. *Raquel* remained in the vicinity of the Solomons and did not pose a threat to the Australian coast.

From the 11th, a complex low and strong cold front crossed southeastern Australia. The low remained over the Tasman Sea, directing a very cold, vigorous and unstable south- to southeasterly airstream across

Tasmania, Victoria and eastern South Australia. Another strong cold front crossed into Victoria on the 14th, adding to the pool of cold air remaining over the southeast associated with the previous front. The cold pool had moved into New South Wales and southern Queensland by the 16th.

On the 17th, a low associated with the latter front deepened off the southern New South Wales coast then tracked eastwards across the Tasman Sea.

A series of vigorous cold fronts embedded in westerly flow swept across southern coastlines between the 20th and 27th.

Meanwhile, a high pressure system tracking over the Bight was replaced by a ridge of high pressure which directed easterly flow across the tropics until the end of the month as it tracked across the southern half of the continent.

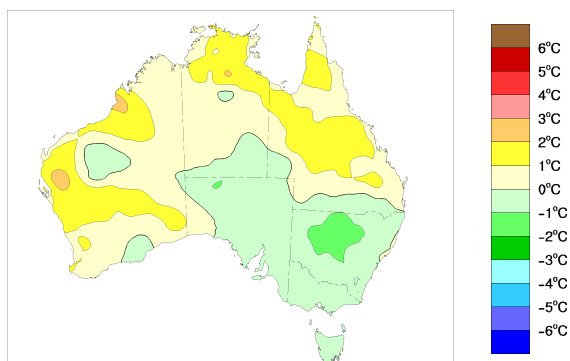
Temperatures

July was a warm month for much of western and northern Australia with mean temperatures in the highest 10% of historical observations along the coast of Western Australia between the western Kimberley and Central West district. Meanwhile, for large areas in the southeast of the continent both maxima and minima were cooler than average. For Australia as a whole, mean temperatures were 0.42 °C warmer than the long-term mean. Individually, maximum temperatures were 0.43 °C above average nationally, while minimum temperatures were 0.41 °C warmer than average.

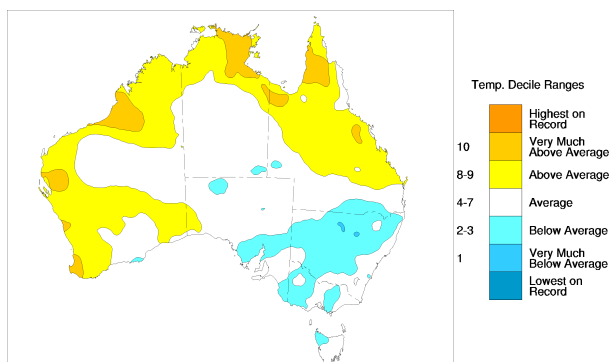
Maximum temperatures

Maximum temperatures were warmer than average across much of Western Australia except an area around Esperance and the northern interior, across the top of the Northern Territory, and through most of Queensland except the Channel Country and the south. Maxima were in the highest 10% of July records for areas of the western Kimberley, small areas on the west coast of Western Australia, and large areas around the Gulf of Carpentaria.

Anomalies of mean daily maximum temperature in July 2015



Decile rank of mean daily maximum temperature in July 2015



Maxima were cooler than average over much of the southeastern quadrant of Australia, extending from

the Eyre Peninsula in South Australia, through New South Wales into part of southern Queensland and also covering northwestern Tasmania. However, minima were near average around the Murraylands in South Australia, East Gippsland and southeastern New South Wales, and part of central Victoria. In terms of statewide averages, July was the coldest since 1998 for New South Wales and Victoria.

Western Australia experienced a warm start to July as a high pressure system migrated eastward across Australia during the first week of the month. Warm anomalies lessened but became more generalised as high pressure continued to dominate southern Australia.

A cold front crossed southwest Western Australia during the 7th—most locations in the west of Western Australia observed their coolest day of the month on the 8th or the 9th as the cold, unstable airmass behind the front spread across the west.

Days were warmer than average for much of the Northern Territory and eastern Australia between on 10th and 11th before a strong cold front associated with a complex low over the southeastern Bight moved rapidly eastwards on the 11th. Maxima were below average over nearly all of Australia on the 12th in very cold air behind the front. This significant cold outbreak (see page 3) saw widespread below-average temperatures for the following week, peaking on the 16th when maxima were more than six degrees cooler than average over central New South Wales to southern Queensland. However, days were warmer than average over the South West Land Division of Western Australia between the 17th and 19th under northerly airflow associated with a large high pressure system over the Bight.

Warmth built in the east from the 21st, becoming more pronounced in the north between the 22nd and 26th as a high pressure ridge established across the south. Record-high July daily maximum temperatures (see page 14) occurred at some sites in Queensland on the 26th although large areas of anomalies in excess of six or eight degrees were observed in the north on multiple days.

During this period temperatures were generally close to average across the rest of Australia, although days were cooler than average around the 25th along the path of a cloudband extending from the Pilbara coast into central Australia.

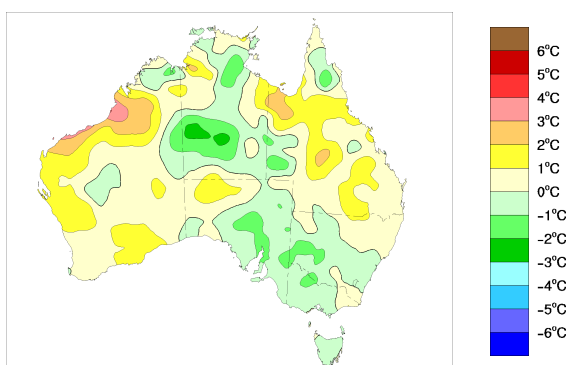
The subtropical jet stream brought cloud from the Indian Ocean over southwest Western Australia from the 28th. Days were warmer than average for much

of Australia and very warm for Western Australia, with anomalies of eight to twelve degrees over some inland areas.

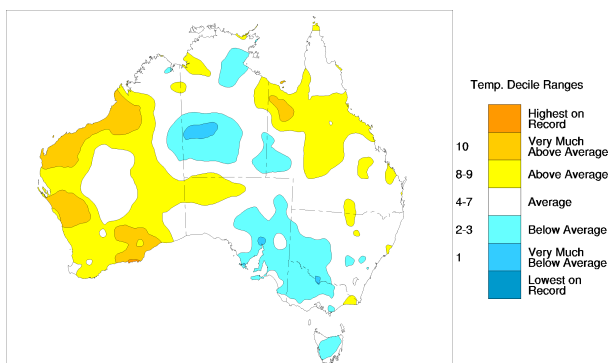
Minimum temperatures

Minimum temperatures were warmer than average for most of Western Australia, part of adjacent northwestern South Australia, and a large part of Queensland extending from the base of the Cape York Peninsula into central regions. Minima were in the highest 10% of July observations for large areas of Western Australia's western and southern coast.

Anomalies of mean daily minimum temperature in July 2015



Decile rank of mean daily minimum temperature in July 2015



Minimum temperatures were below average in southern parts of the Northern Territory, extending just into adjacent parts of Western Australia and Queensland, part of the Roper–McArthur district. Minima were also below average across a large part

of the southeastern continent spanning the eastern third of South Australia, northwestern to central Victoria, and southwestern New South Wales, as well as across much of Tasmania.

Southwest Western Australia experienced warmer than average overnight temperatures at the start of July, with parts of the north also warmer than average. A high pressure system over the southeast brought cooler-than-average minima to large parts of southeastern Australia to southern Queensland between the 3rd and 6th, with frosty mornings affecting large areas.

The northwest of Western Australia had a string of warm nights between the 9th and 13th while a surface trough was present in the area, with minima also above average in southern Queensland on the 10th and more generally across the east on the following day. Meanwhile, a southwesterly airstream kept nights cool in southwest Western Australia.

Several strong cold fronts embedded in this flow tracked across the southeast over the following days (see cold outbreak in Significant Weather (see page 3)). Nights up to eight degrees cooler than average were observed across parts of Queensland and the Northern Territory between the 13th and 16th. Daily minima remained generally below average across much of Australia until the 20th in the wake of a cold outbreak.

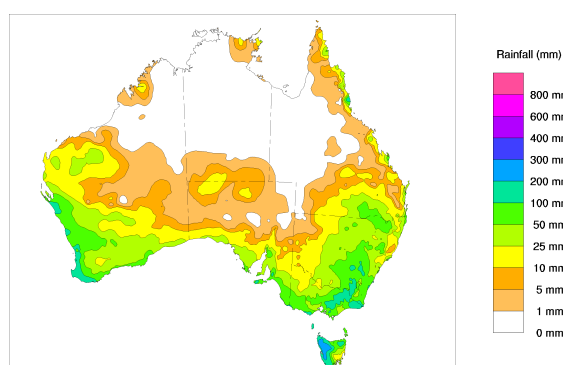
A trough extending from the Indian Ocean across Western Australia brought above-average overnight temperatures to the west of Western Australia on the 20th, with warm anomalies spreading across much of Australia between the 22nd and 26th. Multiple nights more than eight degrees warmer than average were recorded in areas between northwest Western Australia and southeastern Queensland.

Northern Australia continued to observe mild nights while the southern half of Australia saw average to cooler-than-average nights from 27th as a high pressure system tracked across the south. A few sites in the South West Land Division observing record-warm July nights (see page 14) on the night of the 29th or 30th on the back side of this high.

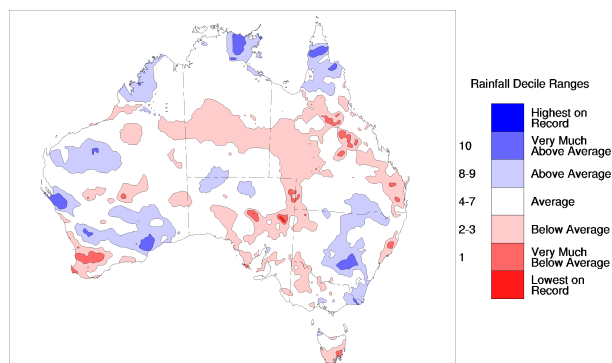
Rainfall

July rainfall was below average for most of the South West Land Division and part of the southeast coast in Western Australia, much of Tasmania, southeast Queensland and the central coast of New South Wales, large parts of agricultural and pastoral South Australia, as well as areas between the western half of Victoria and western Queensland. Rainfall was above average for the Cape York Peninsula, eastern Top End, western Kimberley, parts of the west of Western Australia, and in parts of the east between the Darling Downs in southern Queensland and East Gippsland in Victoria. Nationally, rainfall was 27% below average.

Total rainfall in July 2015



Decile rank of total rainfall in July 2015



At the start of the month, a surface trough stretching from the Gulf of Carpentaria to the New South Wales coast generated falls between 10 mm and 25 mm in parts of southern Queensland and northern New South Wales. A moist easterly flow in northern Australia resulted in light falls in the eastern Top End and the tip of the Cape York Peninsula.

A cold front tracked across southeastern Australia, bringing moderate falls to western Tasmania in the 48 hours to 9 am on the 3rd, and light falls over southern Victoria. In the west, a broad low pressure system and surface trough west of Perth brought light to moderate rainfall to parts of southwest and coastal southeast Western Australia.

Early on the 4th, a cold front brought light to moderate rainfall to western and northern parts of Tasmania. A cold front and associated surface troughs brought moderate falls to northern Tasmania during the following day and light falls over parts of South Australia and Victoria to moderate falls in East Gippsland to 9 am on the 7th.

A strong cold front tracked across southern Western Australia during the 7th and 8th, with falls in excess of 15 mm recorded around Albany and other parts of the southeast coast. A trough extending inland from northwestern Western Australia generated thunderstorms with isolated totals in excess of 15 mm near the Kimberley coast.

A cloudband formed ahead of a trough and strong cold front approaching the southeast during the 10th, producing widespread falls over several days across much of coastal South Australia, Victoria, New South Wales, parts of southern Queensland, and northern Tasmania, including totals in excess of 50 mm to 9 am on the 13th in the coastal southeast.

A vigorous cold front tracked across southeastern Australia and southern Queensland between the 14th and 16th, with light to moderate falls recorded across much of the southeast and light rainfall through northern New South Wales and southern Queensland. Heavier falls were recorded in East Gippsland and parts of the Snowy Mountains in the 24 hours to 9 am on the 17th as the associated complex low became slow-moving off the New South Wales coast.

A rainband developed over southwest Western Australia from the 19th as a surface trough extending from the Indian Ocean and a pair of cold fronts tracked across southern Western Australia, with falls between 10 mm and 50 mm recorded across the Gascoyne and the South West Land Division.

The second cold front tracked across the southern States, bringing light to moderate rainfall to coastal South Australia, central New South Wales, Victoria and Tasmania between the 21st and 23rd. Embedded thunderstorms brought heavier falls in northwestern Tasmania, central New South Wales, and southern Queensland.

Another cold front tracked across southwest Western Australia during the early hours of the 23rd, with light to moderate falls recorded in parts of the South West Land Division.

Moisture continued to stream into northwest Western Australia from the Indian Ocean with a thickening cloudband extending from the Pilbara to southeastern

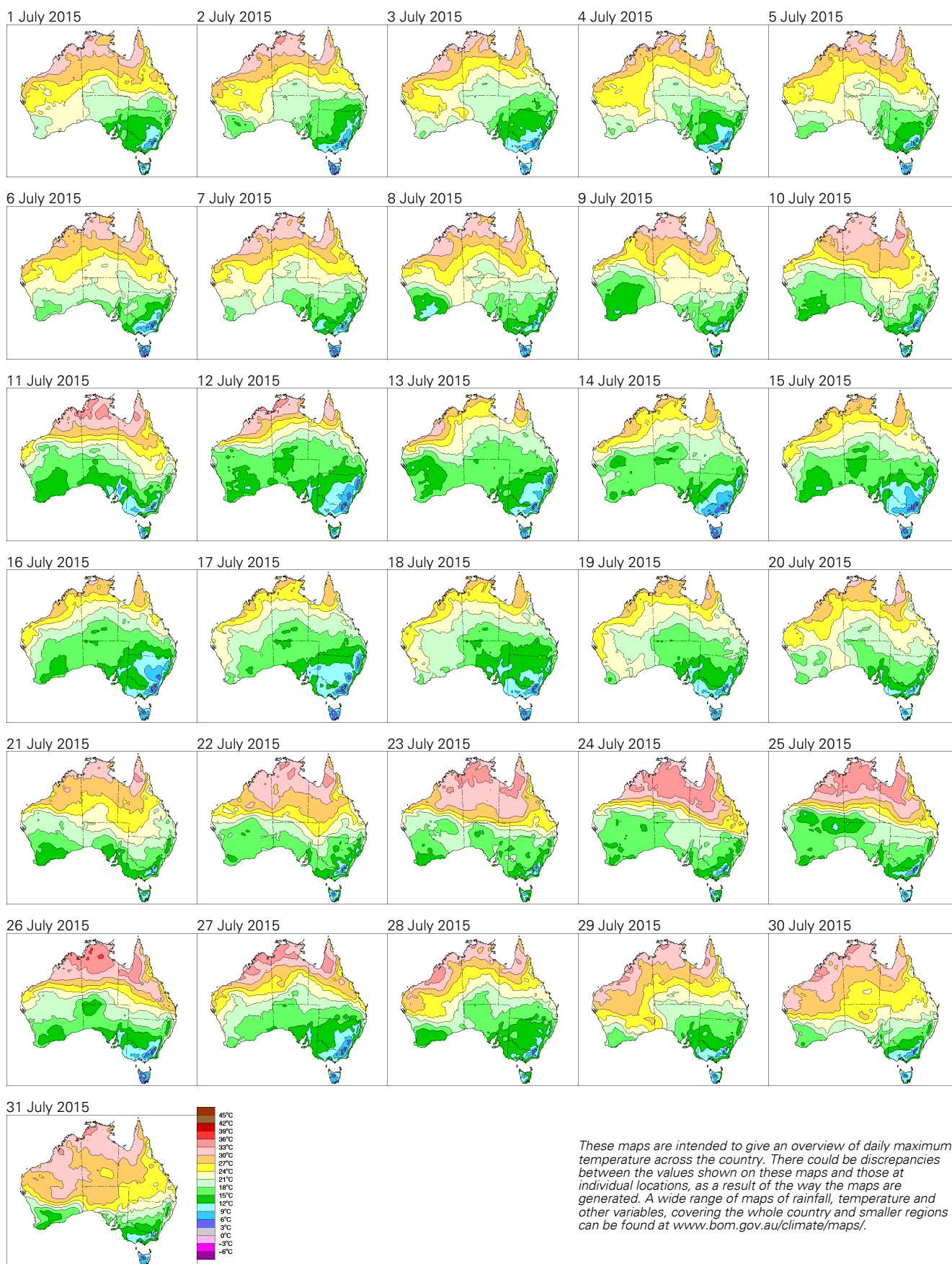
Queensland on the 24th. A cold front crossing the southeast was also generating cloud. Moderate totals were recorded in southeastern Queensland and northeastern New South Wales, the Alpine area, northern and western Tasmania, and along the junction of the Gascoyne and Pilbara districts in the 24 hours to 9 am on the 25th.

A deep low located to the southwest of Tasmania on the 25th swept a cold front through the southeast, bringing light falls to the south coast of the mainland and moderate falls to western Tasmania over the following days.

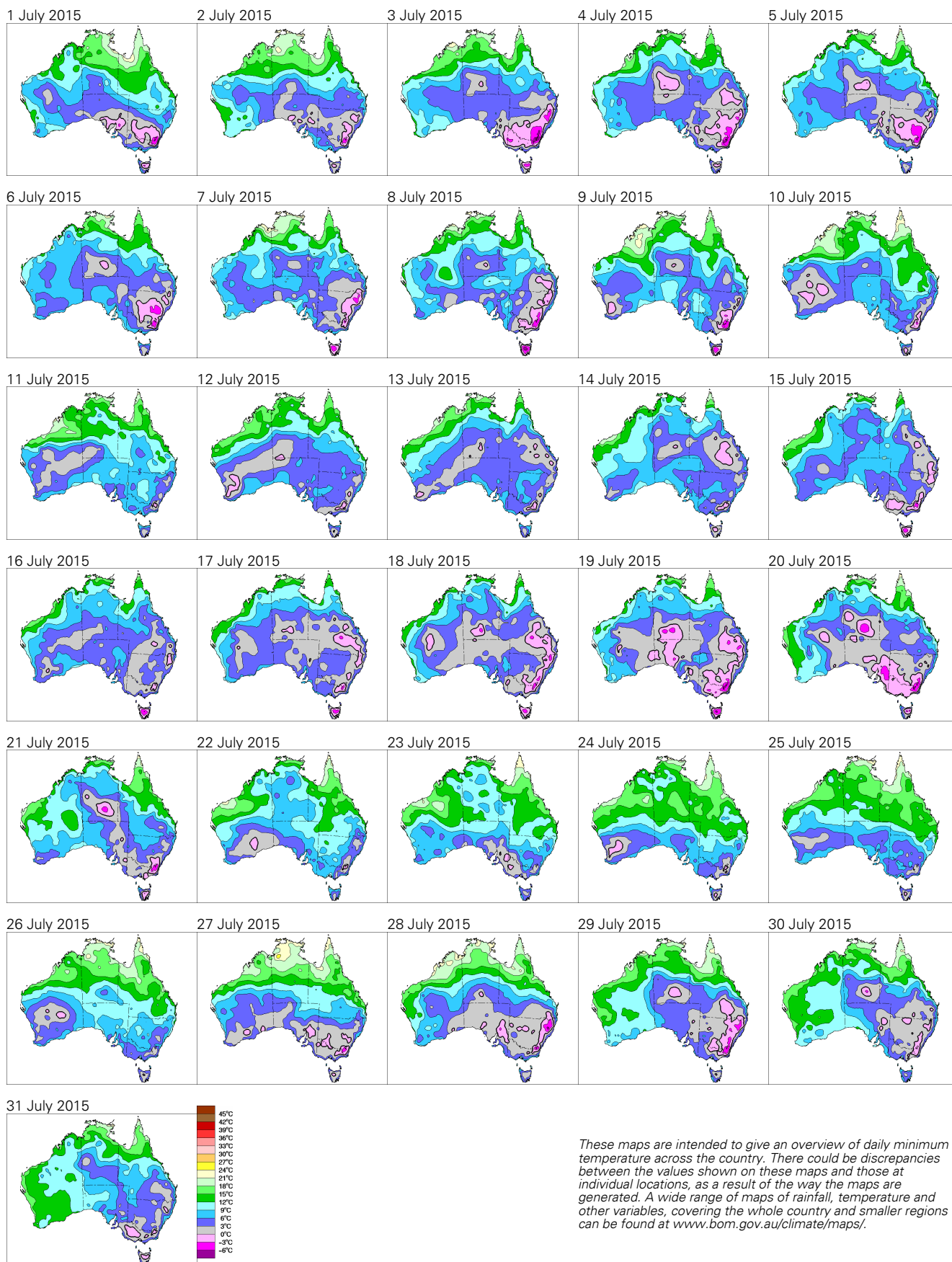
A persistent, moist onshore southeasterly airstream produced rainfall on parts of the northern coast of Queensland, with moderate falls recorded on the north tropical coast near the end of the month.

Towards the end of the month a cloudband associated with a low west of Perth generated areas of moderate falls over the South West Land Division and Gascoyne from the 28th, with areas of rain becoming heavier and more widespread as a cold front tracked across the southwest of Western Australia. This front was linked to a complex low well south of Tasmania. Moderate falls were recorded across the South West Land Division and western Tasmania between the 30th and 31st, with lighter falls in parts of southeastern South Australia, and western Victoria. Numerous locations in the Central West and Central Wheat Belt districts of Western Australia had their highest July daily rainfall (see page 16) in the 24 hours to 9 am on the 31st. Daily totals exceeded 50 mm, with Jarrahwood receiving 93.4 mm and Westbourne breaking a 108-year-old-record with 75 mm.

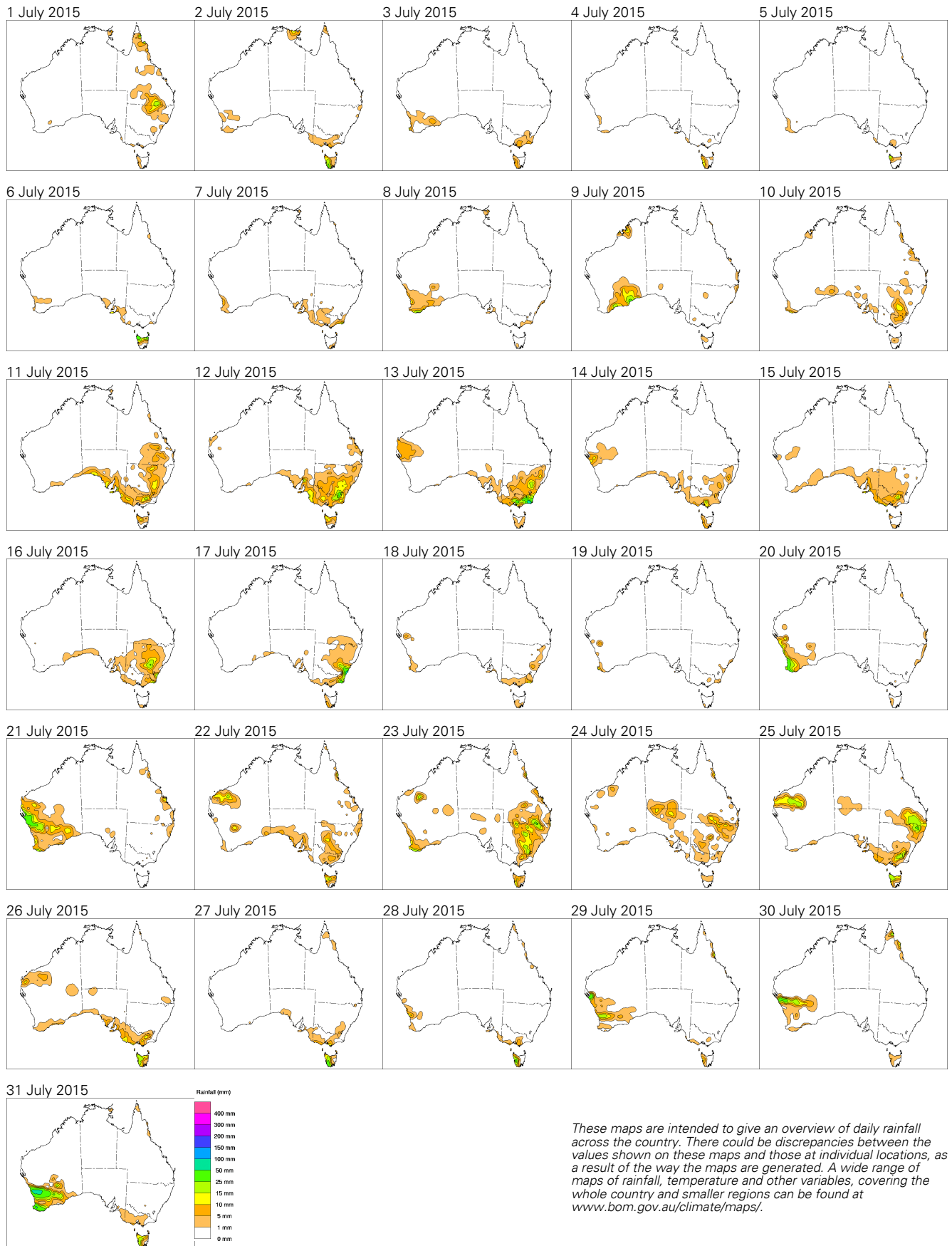
Daily maximum temperature maps



Daily minimum temperature maps



Daily rainfall maps



Records

Record highest July daily maximum temperature

	New record	Old record	Years of record
Western Australia			
003030 Bidyadanga	35.6 on 28th	35.5 on 29th in 2014	56
005008 Mardie	34.4 on 29th	34.3 on 30th in 1988	59
006011 Carnarvon Airport	30.9 on 30th	30.7 on 31st in 1977	69
006072 Emu Creek Station	32.6 on 29th =	32.6 on 17th in 1979	43
007045 Meekatharra Airport	29.2 on 31st	28.8 on 14th in 1979	66
012090 Yeelirrie	30.4 on 31st	28.6 on 30th in 2001	42
013012 Wiluna	29.7 on 31st	29.0 on 28th in 2008	59
200790 Christmas Island Aero	30.1 on 25th	28.8 on 1st in 1998	41
Northern Territory			
014198 Jabiru Airport	36.2 on 26th	36.1 on 1st in 2009	38
014704 McArthur River Mine Airport	35.9 on 26th	35.4 on 13th in 2012	38
Queensland			
029038 Kowanyama Airport	35.6 on 26th	35.0 on 15th in 1995	47
033013 Collinsville Post Office	32.0 on 26th	31.7 on 28th in 1961	57
035070 Taroom Post Office	30.0 on 26th =	30.0 on 1st in 2009	59
039104 Monto Township	30.0 on 26th	29.9 on 30th in 2010	43
040093 Gympie	29.4 on 26th	28.8 on 1st in 1981	50
040126 Maryborough	28.6 on 26th	28.5 on 1st in 1983	58

= indicates the new record equals the old one.

Record highest July mean maximum temperature

	New record	Old record	Years of record
Western Australia			
009842 Jarrahdwood	17.5	17.4 in 1977	32

Record lowest July daily maximum temperature

	New record	Old record	Years of record
Western Australia			
008251 Kalbarri	14.1 on 13th	14.6 on 19th in 1991	41

Record lowest July mean maximum temperature

	New record	Old record	Years of record
Victoria			
083024 Mount Buller	-0.1 =	-0.1 in 2004	30

= indicates the new record equals the old one.

Lowest July mean maximum temperature for at least 30 years			
		Observed this month	Most recent lower
New South Wales			
056032	Tenterfield (Federation Park)	13.5	12.5 in 1984

Record highest July daily minimum temperature				
		New record	Old record	Years of record
Western Australia				
008025	Carnamah	15.8 on 30th =	15.8 on 29th in 2001	71
009037	Badgingarra Research Stn	15.3 on 30th	15.0 on 29th in 2001	48
009111	Karnet	14.2 on 31st	13.6 on 26th in 1992	50
009538	Dwellingup	14.0 on 31st =	14.0 on 10th in 2003	56
010515	Beverley	14.2 on 31st	13.7 on 30th in 2001	46
010626	Pingelly	13.7 on 31st	13.1 on 30th in 2001	44
= indicates the new record equals the old one.				

Record lowest July mean temperature				
		New record	Old record	Years of record
Victoria				
083024	Mount Buller	-2.0	-1.9 in 2007	30

Lowest July mean temperature for at least 30 years			
		Observed this month	Most recent lower
New South Wales			
073014	Grenfell (Manganese Rd)	6.6	6.0 in 1966 *
* note: there are gaps in the historical record at this site, so it is possible a lower value has gone unreported.			

Record highest July daily rainfall			
	New record	Old record	Years of record
Western Australia			
006045 Tamala	65.6 on 21st	65.3 on 1st in 1972	81
006097 Useless Loop	29.6 on 21st	27.3 on 26th in 2011	31
008002 Ballidu	70.0 on 31st	38.4 on 18th in 1956	102
008005 Barberton	57.6 on 31st	45.6 on 11th in 1995	101
008009 Bindi Bindi East	87.6 on 31st	42.6 on 11th in 1995	72
008016 Glenferrie	78.0 on 31st	42.6 on 16th in 1978	101
008017 Buntine	82.3 on 31st	46.0 on 16th in 1978	89
008022 Balgerbine	68.8 on 31st	40.0 on 16th in 1978	57
008025 Carnamah	50.2 on 31st	49.6 on 7th in 2004	105
008037 Coorow	54.4 on 31st	45.7 on 25th in 1949	101
008046 Dunolly	67.0 on 31st	44.0 on 11th in 1995	98
008052 Gleneva	58.2 on 21st	43.2 on 20th in 1965	86
008057 Green Grove	76.8 on 31st	66.3 on 18th in 1973	63
008066 Kokardine	70.0 on 31st	41.4 on 18th in 1956	107
008085 Miling	98.0 on 31st	42.2 on 11th in 1995	86
008087 Mindalla	75.6 on 31st	39.1 on 18th in 1956	98
008104 Ogilvie	65.2 on 21st	50.0 on 16th in 1974	105
008137 Wongan Hills	86.2 on 31st	45.8 on 30th in 2001	109
008179 East Kondut	54.5 on 30th	46.2 on 19th in 1956	66
008225 Eneabba	95.2 on 31st	64.6 on 16th in 1978	50
008230 Elena	60.0 on 31st	43.4 on 16th in 1978	73
008254 Kondut	57.4 on 31st	41.1 on 18th in 1956	84
008271 Nindethana Farm	54.0 on 21st	41.0 on 24th in 1988	38
008275 Anro	75.0 on 31st	38.0 on 2nd in 1991	34
008278 Warradarge	68.6 on 31st	67.6 on 29th in 1987	36
008283 Karawa	67.8 on 31st	40.2 on 11th in 1995	30
009616 Westbourne	74.0 on 31st	64.4 on 21st in 1990	109
009744 Paynedale	61.0 on 31st	58.9 on 26th in 1984	37
009842 Jarraewood	93.4 on 31st	75.2 on 4th in 1999	40
010000 Amery Acres	50.0 on 31st	46.5 on 21st in 1960	52
010007 Bencubbin	54.4 on 31st	30.0 on 11th in 1995	88
010011 Bonnie Rock	35.0 on 31st	31.5 on 13th in 1963	80
010016 Bruce Rock	37.0 on 31st	32.0 on 28th in 1915	101
010019 Burracoppin	65.0 on 31st	38.4 on 16th in 1932	107
010026 Goodlands	45.2 on 31st	36.0 on 16th in 1978	64
010030 Wattoning	43.0 on 31st	37.2 on 11th in 2011	96
010032 Cowcowing	60.0 on 31st	37.4 on 11th in 1995	108
010034 Fort Hill	40.8 on 31st	37.3 on 16th in 1932	103
010045 Ejanding	53.6 on 31st	52.8 on 31st in 1907	109
010055 Gabbin	82.5 on 31st	34.5 on 16th in 1932	78
010058 Goomalling	45.0 on 31st	38.2 on 11th in 1995	105
010061 Happy Valley	57.8 on 31st	43.6 on 20th in 2007	79
010070 Kalannie	68.2 on 31st	38.0 on 11th in 1995	81
010077 Koorda	56.0 on 31st	34.0 on 22nd in 1940	90
010097 Moningarín	74.0 on 31st	37.3 on 22nd in 1940	105
010104 Nanyanine	49.0 on 31st	45.0 on 15th in 1978	77
010112 Nungarin	36.2 on 31st	31.5 on 16th in 1932	105
010124 Nangeenan	47.0 on 31st	37.6 on 21st in 1960	109
010126 Trayning	39.6 on 31st	34.0 on 9th in 2010	104
010135 Wialki	53.8 on 31st	35.1 on 27th in 1940	82
= indicates the new record equals the old one.			

Record highest July daily rainfall

	New record	Old record	Years of record
010136 Wialki South	62.0 on 31st	36.0 on 12th in 1995	74
010140 Wyalkatchem	52.0 on 31st	39.9 on 21st in 1960	106
010141 Xantippe	69.0 on 31st	39.0 on 16th in 1978	77
010143 Ygnattering	41.0 on 31st	35.6 on 16th in 1932	88
010145 Yorkrakine	57.5 on 31st	44.0 on 15th in 1978	92
010151 Hines Hill	48.4 on 31st	37.3 on 16th in 1932	83
010155 Cadoux	66.0 on 31st	35.4 on 11th in 1995	84
010192 Jourerdine	55.5 on 31st	38.9 on 27th in 1940	67
010250 Redwing	54.8 on 31st	38.1 on 21st in 1960	86
010257 Spring Valley	40.0 on 31st	33.0 on 5th in 1963	57
010294 Coodernuppin	32.0 on 31st	27.2 on 13th in 1990	48
012007 Boodarockin	49.4 on 31st	37.8 on 20th in 1991	81
012011 Bullfinch	42.2 on 31st	38.0 on 20th in 1991	104
012056 Moree	35.4 on 31st =	35.4 on 20th in 1991	87
012083 Westonia	36.8 on 31st	33.0 on 24th in 1917	98
012295 Coppin Rock	40.0 on 30th	26.8 on 25th in 1988	54
New South Wales			
070263 Goulburn TAFE	40.4 on 17th =	40.4 on 6th in 1988	41
Victoria			
084112 Cann River	68.2 on 13th	68.0 on 18th in 1989	42

= indicates the new record equals the old one.

Highest July total rainfall for at least 30 years

	Observed this month	Most recent higher
Western Australia		
008016 Glenferrie	117.9	127.1 in 1958 *
010016 Bruce Rock	88.0	107.1 in 1964 *
010055 Gabbin	106.3	115.6 in 1958 *
010070 Kalannie	106.0	120.0 in 1958 *
New South Wales		
070080 Taralga Post Office	110.9	150.4 in 1984
Victoria		
084134 Goongerah	183.2	286.6 in 1984

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

Lowest July total rainfall for at least 30 years

	Observed this month	Most recent lower
Western Australia		
009626 Pleasant Valley	34.8	16.2 in 1977
Queensland		
031037 Low Isles Lighthouse	6.6	1.4 in 1974
032031 Lucinda Township	4.7	0.0 in 1974 *

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

Selected observations

Daily and mean maximum temperatures for July 2015

	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																																	
001019 Kalbarri Creek	32.4	33.0	32.8	33.0	31.7	31.4	31.8	32.0	32.9	32.1	33.2	34.0	34.5	30.5	28.6	29.7	30.0	29.3	28.8	29.0	30.4	32.3	33.2	34.2	33.8	34.3	36.8	35.8	33.7	33.0	33.8	33.6	
002012 Halls Creek Airport	27.5	+0.5	28.1	28.4	28.0	26.1	25.6	27.0	28.4	28.5	26.4	29.6	28.9	27.9	23.1	23.9	24.7	23.5	22.4	22.4	23.0	24.4	27.7	30.6	32.1	32.4	32.6	31.8	29.7	28.0	27.6	29.9	
002056 Kununurra Aero	31.0	32.5	31.6	30.7	29.7	29.6	29.9	32.5	31.6	31.4	33.1	34.1	32.6	27.0	26.8	27.7	27.2	26.1	26.2	26.9	28.3	30.5	32.5	34.0	34.7	34.7	36.5	34.9	30.8	31.4	32.7	32.2	
003003 Broome Airport	30.1	+1.3	32.4	32.0	31.6	30.2	28.6	30.3	31.8	32.3	25.8	24.9	30.0	32.5	31.8	29.3	27.7	29.1	27.5	27.0	28.7	29.8	26.9	27.3	27.1	31.3	32.1	31.7	32.7	35.6	33.1	34.3	28.7
003032 Derby Aero	31.6	32.4	32.8	33.3	31.9	29.8	31.2	32.6	32.0	25.1	30.1	33.1	33.6	32.0	30.0	29.4	29.4	28.8	28.7	29.2	29.7	29.0	30.5	32.3	33.8	34.3	33.4	34.7	35.0	34.1	34.3	33.5	
004032 Port Hedland Airport	28.4	+1.3	31.1	30.8	30.2	29.4	28.5	28.8	28.8	30.2	27.3	27.8	23.5	28.5	29.7	27.2	27.4	27.6	27.3	26.4	25.9	26.0	27.7	27.5	27.8	27.8	29.1	27.9	30.6	32.2	29.4	29.5	29.3
004083 Karratha Aero	27.0	27.1	28.8	28.2	28.1	26.9	26.2	27.4	28.3	28.1	27.5	25.2	26.4	28.8	26.5	26.0	25.8	24.8	25.4	23.5	23.2	27.0	24.0	28.7	25.0	24.8	27.7	27.5	28.7	30.6	28.9	32.3	
004106 Marble Bar	27.4	29.3	28.9	28.3	27.6	27.4	27.2	28.0	28.4	25.4	25.0	22.4	24.9	27.3	26.1	25.3	25.2	25.6	25.2	24.8	27.5	27.3	28.7	30.7	24.6	25.8	25.5	28.6	32.1	32.4	32.0	32.7	
005007 Leamonth Airport	24.4	25.4	27.9	27.8	27.9	26.0	27.9	25.9	26.4	24.9	24.7	24.2	17.6	21.0	21.5	23.2	22.9	20.8	24.0	23.4	23.7	24.7	25.1	22.7	20.9	17.9	24.0	23.7	25.7	29.2	27.5	28.1	
006011 Carnarvon Airport	23.9	+1.8	27.0	26.8	22.5	23.1	23.7	25.9	23.7	23.2	20.9	21.9	24.2	18.8	17.0	22.2	25.7	27.0	24.3	26.3	26.8	25.9	20.4	20.3	21.0	19.7	20.6	23.0	27.5	26.1	27.1	30.9	
006044 Denham	22.4	26.4	24.4	22.8	22.5	24.9	23.0	23.0	23.0	21.7	18.9	19.0	21.5	18.4	15.2	17.4	24.2	25.0	22.0	25.2	26.2	20.6	21.4	19.2	20.4	19.5	21.5	21.0	26.1	25.6	25.4	28.4	
007176 Newman Aero	21.8	24.6	24.9	24.1	24.6	24.4	24.3	24.0	23.5	19.2	19.2	19.7	17.7	18.1	17.5	18.8	20.5	21.0	20.8	21.1	23.4	19.3	24.8	19.5	16.6	12.8	19.0	21.2	25.7	28.0	28.0	28.4	
007185 Paraburdoo Aero	24.3	26.9	26.7	26.4	26.6	26.0	26.1	25.6	25.7	21.5	22.2	21.9	16.3	22.3	23.1	24.8	24.8	23.3	24.5	24.1	26.1	18.9	24.9	21.1	20.4	15.6	22.5	26.1	29.3	30.4	30.7	29.6	
007045 Meekatharra Airport	20.5	+1.6	24.1	24.3	24.9	23.4	22.2	23.2	20.5	16.0	17.3	17.8	17.2	13.2	12.5	17.7	17.9	19.5	20.0	21.1	22.4	18.7	16.9	17.8	16.1	15.8	19.8	21.6	26.4	27.8	28.3	29.2	
007600 Mount Magnet Aero	19.9	23.3	25.3	24.9	23.9	21.8	20.6	21.2	17.0	15.1	17.1	16.7	15.1	15.5	18.7	17.5	18.1	20.6	21.6	19.7	16.1	18.2	17.1	16.2	16.8	18.7	23.3	23.2	25.4	25.3	25.3		
008296 Morawa Airport	19.3	22.2	19.3	22.8	20.5	20.6	20.4	21.9	15.4	15.1	17.5	17.6	16.7	15.8	20.2	20.3	19.7	23.3	24.1	24.0	16.3	16.3	17.6	17.2	15.8	17.1	18.3	21.7	18.8	23.4	18.8	19.1	
008297 Dalwallinu	17.1	17.9	16.0	20.9	19.0	19.1	19.5	19.6	12.6	12.6	16.3	14.6	14.1	14.7	17.3	16.8	17.4	20.6	22.1	22.0	17.6	15.0	16.2	15.5	13.7	14.6	16.3	18.9	17.2	20.1	15.9	16.8	
008315 Geraldton Airport	20.9	23.4	22.5	23.1	22.7	23.2	22.8	22.9	17.1	16.2	18.7	18.8	18.2	16.8	19.6	22.2	22.5	24.3	25.2	27.0	20.4	18.2	18.6	18.9	17.6	18.3	18.4	22.4	21.8	23.5	20.4	21.2	
009021 Perth Airport	18.7	+1.0	19.5	20.6	21.7	20.9	20.2	20.1	18.9	15.3	15.7	17.4	16.9	16.8	17.1	18.3	17.5	19.2	20.9	21.2	18.5	19.9	16.4	18.1	16.8	18.0	18.2	17.8	20.6	15.9	20.1	21.8	
009131 Jurien Bay																																	
009225 Perth Metro	18.7	19.5	21.0	21.7	21.0	20.5	20.0	18.7	15.0	15.6	17.2	16.7	17.1	17.7	18.4	17.6	19.0	20.8	20.5	19.0	19.8	17.7	18.3	16.5	18.0	18.1	18.2	21.0	15.2	19.7	20.0	21.5	
009240 Bickley	15.5	16.6	17.7	18.8	17.5	16.7	16.8	14.7	11.9	12.3	15.0	13.6	14.1	13.9	15.0	14.4	15.7	17.6	17.8	16.1	16.5	13.4	14.3	13.9	14.9	15.4	15.3	17.5	13.5	16.1	16.5	17.9	
009518 Cape Leeuwin	17.6	+1.0	20.4	21.9	17.9	18.6	18.9	19.3	18.0	14.7	16.3	16.7	15.8	16.3	16.3	16.7	16.9	17.5	17.0	18.8	18.9	17.2	16.2	17.0	16.0	16.2	18.1	16.9	18.9	18.4	19.1	18.8	15.4
009617 Bridgetown	16.2	19.8	20.1	18.9	19.5	17.8	17.1	18.8	12.3	13.0	15.0	14.0	14.3	15.3	14.8	14.6	16.4	19.0	19.0	14.7	16.2	14.6	16.4	14.3	15.5	15.9	14.6	17.7	14.2	18.1	15.7	14.8	
009746 Witchcliffe	17.0	19.5	20.3	18.5	19.1	18.0	19.0	18.9	13.4	15.2	15.0	15.4	16.3	15.8	16.2	16.9	16.9	15.9	18.7	17.8	16.9	14.9	17.1	15.0	15.9	16.9	16.9	17.6	16.4	19.1	18.4	15.9	
009789 Esperance	16.7	22.1	17.4	21.4	18.6	17.1	19.4	19.9	13.4	14.6	15.4	14.1	16.4	15.8	15.1	14.9	16.4	16.8	20.6	22.4	18.9	14.4	16.3	13.6	14.2	14.3	14.3	17.2	13.8	17.1	16.5	16.5	
009865 Bunbury																																	
009877 Mandurah	18.0	19.1	19.8	20.8	18.7	19.0	18.0	19.0	14.6	15.1	16.5	17.1	16.9	18.8	19.4	18.1	18.7	18.1	19.5	17.4	18.4	15.7	16.8	15.7	17.0	17.3	18.4	19.3	15.8	18.8	19.1	20.8	
009999 Albany Airport	16.5	20.8	18.3	19.0	18.8	17.7	19.2	18.5	13.3	14.9	15.1	13.9	15.6	17.2	15.6	14.7	15.2	18.7	16.8	16.6	14.9	17.4	14.5	16.0	14.3	16.0	18.0	15.9	17.8	15.9	13.3		
100007 Bencubbin	16.4	+0.2	18.8	15.0	19.9	18.5	18.3	18.0	19.5	11.8	12.7	15.0	13.8	14.8	14.1	16.6	15.0	17.0	20.0	20.8	21.4	17.5	14.5	15.5	14.8	14.0	14.1	16.1	18.6	15.0	16.0	16.0	14.1
10092 Merredin	16.7	+0.7	19.8	15.1	19.0	18.2	20.3	17.9	20.0	12.8	13.7	15.0	14.4	15.3	15.0	16.4	14.0	15.5	19.1	21.5	22.0	18.8	14.8	16.4	16.0	16.0	15.1	16.5	16.5	17.7	13.3	16.5	17.0
102086 Cunderdin Airfield	18.0	21.9	16.9	20.9	19.1	20.1	19.6	20.8	13.7	13.3	14.7	15.2	15.3	16.4	17.3	16.0	17.9	21.6	23.3	23.0	20.9	15.6	18.8	16.8	15.9	17.8	17.2	20.1	12.5	19.4	18.3	16.6	
102633 Ravensthorpe	16.4	+0.3	22.0	16.0	21.5	19.0	18.5	17.5	19.5	9.5	13.0	14.5	13.6	15.0	15.5	15.0	12.5	14.5	17.5	20.8	21.5	19.0	14.5	15.7	15.0	16.0	15.5	13.0	18.5	14.5	16.5	17.0	14.5
102911 Lake Grace	15.7	20.6	16.4	19.6	18.8	14.6	15.7	17.5	11.3	11.6	14.0	12.8	13.9	14.2	14.4	13.3	14.8	18.2	19.3	20.0	18.4	13.5	15.5	13.9	14.8	14.3	14.1	18.2	13.5				

Daily and mean maximum temperatures for July 2015

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	
047007 Broken Hill (Patton Street)	14.6		14.3	16.5	14.7	14.6	16.1	17.8	15.7	14.8	16.8	19.8	12.8	11.4	13.4	14.4	10.2	11.4	7.8	10.8	11.4	15.8	18.3	19.6	13.6	18.1	16.3	13.3	12.7	13.8	13.3	17.2	
048027 Cobar MO	14.4	-1.1	12.5	13.7	14.1	12.6	15.0	14.9	17.2	16.8	17.1	18.2	18.7	10.4	11.2	12.1	9.3	8.5	9.7	13.1	15.0	16.4	17.4	13.7	15.9	16.1	16.5	15.7	11.5	13.2	15.5	16.5	19.2
048245 Bourke Airport AWS	16.7		16.0	14.6	14.2	14.5	15.7	17.0	18.6	17.5	19.6	18.0	21.2	13.4	13.8	15.2	15.6	11.0	13.1	14.7	16.6	18.5	20.1	17.7	15.4	19.0	19.4	19.3	14.8	14.9	16.1	20.1	21.6
049000 Ivanhoe Aerodrome AWS	14.9		13.0	15.4	11.9	12.8	14.7	17.4	16.7	17.5	17.7	19.9	17.7	12.0	13.4	12.6	10.1	11.2	10.2	12.0	13.0	16.9	19.4	16.6	16.5	18.5	16.5	13.7	12.7	14.4	14.5	16.4	17.8
050052 Condobolin Ag Research Stn	13.8	-1.1	12.1	14.5	12.5	11.8	12.9	14.0	15.8	16.3	17.7	15.4	15.0	9.2	9.5	9.2	8.5	7.3	11.0	11.0	14.4	17.0	17.5	16.8	15.7	16.0	16.3	13.5	11.7	13.8	16.5	15.8	17.7
051039 Nyngan Airport	14.9	-1.7	13.5	15.0		14.5	15.0	17.8	16.8	17.6	13.5	14.8	11.1	11.6	11.1	13.0	9.0		13.0	15.5	17.0	17.4	12.8	16.0	16.0	17.6	17.4	12.7	13.5	16.0	17.0	20.0	
052088 Walgett Airport AWS	16.7		16.2	12.8	14.4	16.9	17.7	17.3	17.7	18.1	19.7	16.9	19.8	13.5	12.9	15.8	16.1	10.2	12.4	13.8	17.2	18.8	19.7	18.2	18.6	17.5	19.1	19.2	14.0	14.6	16.3	20.0	21.1
053115 Moree Aero	16.8		17.3	12.1	15.5	18.0	19.9	18.4	16.8	18.5	20.1	16.8	20.2	13.0	12.3	15.5	14.8	10.5	11.9	14.1	17.5	19.1	20.2	18.4	19.4	17.0	18.8	18.7	13.4	14.4	17.3	18.8	20.6
054038 Narrabri Airport AWS			18.4	12.7	14.2	17.9	18.5	16.9	16.6	17.2	20.6	18.3	19.6	12.9	12.1	14.9	14.7						19.9	18.0					14.0	13.8	17.7	18.8	19.7
055024 Gunnedah Resource Centre	15.6	-0.3	17.2		14.1	16.1	17.1	16.7	14.3	16.5	18.4	17.2	17.6	10.8	12.3	14.4	13.6	8.9	13.3	13.4	15.5	17.9	18.4	15.3	16.3	15.6	18.8	18.7	12.9	13.4	16.9	17.8	18.9
055325 Tamworth Airport AWS	15.4		16.4	11.6	14.3	15.9	16.4	15.6	14.5	17.2	18.0	18.4	18.3	10.0	10.4	13.2	13.3	8.8	12.1	13.7	16.1	18.0	18.9	15.6	19.4	16.1	16.7	17.4	12.8	14.0	17.0	17.4	18.5
056242 Inverell (Raglan St)	15.5		17.8	13.5	15.5	16.2	17.9	17.2	15.3	19.0	18.2	18.0	16.8	9.5	9.4	12.9	12.0	10.8	9.7	14.9	17.2	18.4	18.4	16.5	16.8	14.5	16.2	16.5	12.2	15.2	17.2	17.5	18.2
057095 Tabulam (Muirie)	15.8		18.8	16.3	14.2	17.4	18.6	18.9	18.7	14.1	14.9	16.7	17.1	11.5	11.1	13.4	13.3	14.7	10.2	13.8	15.2	14.1	14.7	14.1	16.4	18.0	17.9	19.2	17.3	14.6	15.9	18.2	20.0
058012 Yamba Pilot Station	19.4	+0.5	21.0	21.2	18.0	20.9	22.1	23.2	18.5	15.9	15.7	20.1	21.8	16.6	18.2	19.0	16.4	18.8	16.8	17.3	18.0	18.7	19.4	19.6	18.2	21.0	23.6	23.5	19.7	17.1	18.9	20.4	21.3
059040 Coffs Harbour MO	18.9	+0.3	20.2	20.3	18.1	18.7	19.2	19.7	18.9	17.3	17.5	20.6	21.2	17.2	19.2	19.0	16.1	19.1	16.8	17.8	18.7	18.9	16.2	19.3	18.6	19.0	22.6	21.4	18.2	17.4	18.9	20.0	21.3
060139 Port Macquarie Airport AWS	18.6		19.9	17.6	16.9	20.2	19.2	20.7	18.0	16.3	18.6	20.6	20.1	16.0	18.2	19.0	16.7	18.4	15.7	17.4	18.0	17.6	18.6	14.6	20.5	16.5	22.9	20.8	17.4	17.4	19.7	20.9	21.8
061078 Williamtown RAAF	17.2	+0.2	17.3	15.1	15.9	17.5	18.4	17.2	17.3	16.7	18.0	19.0	19.9	13.2	17.3	16.4	15.9	16.0	13.3	15.1	15.8	16.6	19.1	14.9	17.8	18.6	20.0	20.1	15.8	16.6	17.3	20.1	20.7
061363 Scone Airport AWS	17.4		17.9	13.2	13.2	16.5	17.6	16.4	15.9	14.5	19.5	18.8	10.7	13.8	14.8	14.4	11.2	13.0	13.0	13.0	15.9	13.9	15.6	13.6	16.3	19.3	18.5	13.1	14.6	15.9	18.2	19.2	
062101 Mudgee Airport AWS	13.2		13.9	11.7	12.1	12.0	13.9	12.0	14.7	14.0	15.3	14.7	15.5	8.1	9.2	10.0	10.6	7.3	10.5	13.5	13.2	14.6	16.6	15.1	15.8	14.9	15.1	15.9	9.7	14.0	15.0	15.0	16.2
063005 Bathurst Agricultural Station	11.3	+0.3		8.4	11.3	11.0	13.4	9.8	12.9	13.0	14.5	9.5	12.5	7.0	8.5	7.5	10.5	7.2	6.0	11.3	11.0	12.5	14.5	14.2	14.5	13.5	13.5	13.0	6.5	11.5	13.5	12.5	15.0
063254 Orange Agricultural Institute			8.4	7.0			12.0	7.1	10.6		11.1				6.0	4.0		5.2				9.5	10.3	12.4	11.1	12.6		10.8	5.0	8.2	11.0	9.8	
064008 Coonabarabran (Namoi Street)	13.8	-1.3	15.9	10.9	13.9	14.0	15.0	13.8	14.0	15.7	17.1	15.5	15.0	8.0	10.5	11.0	12.6	8.8	10.5	13.0	14.5	16.7	17.4	14.9	15.0	15.1	16.2	16.0	10.0	11.6	16.2	15.6	
065070 Dubbo Airport AWS	14.1		12.6	12.6	12.9	12.2	13.8	13.2	15.5	15.8	17.6	14.3	16.7	8.5	10.1	9.7	13.3	8.3	10.2	13.4	15.2	16.4	16.5	17.8	17.1	15.8	16.9	16.9	11.4	14.0	16.6	15.9	17.4
066062 Sydney (Observatory Hill)	17.4	+0.3	17.5	16.4	16.2	16.1	18.6	17.3	14.7	16.5	17.6	16.9	19.9	15.1	16.9	17.6	16.8	13.4	14.3	14.6	16.7	17.9	19.3	16.9	19.1	20.0	20.8	20.2	15.7	17.3	18.4	20.5	21.0
067105 Richmond RAAF	16.8		15.6	17.2	15.5	14.9	16.2	16.7	16.0	15.9	16.6	11.8	18.6	14.6	17.9	17.2	15.8	12.9	14.6	15.7	17.2	17.5	18.7	15.7	17.4	20.6	20.3	20.6	15.9	17.4	17.1	20.0	20.2
068072 Nowra RAN Air Station AWS	15.7		15.1	14.6	12.9	15.0	17.2	16.3	13.8	14.5	16.2	11.9	18.0	12.2	17.3	13.9	15.1	12.6	13.9	13.3	13.7	16.1	18.7	18.6	16.2	19.3	18.0	18.0	13.7	16.6	17.1	18.5	18.6
068151 Jervis Bay (Point Perpendicular)	15.0		15.1	15.3	12.1	13.7	16.9	15.2	13.7	13.0	15.3	13.5	17.7	12.1	17.0	14.1	13.6	12.0	13.5	12.6	12.6	14.9	17.9	17.2	15.3	18.0	17.3	18.1	13.6	14.9	15.2	18.3	16.8
068241 Albion Park (Wollongong Airport)	16.6		17.2	16.2	14.5	15.2	18.0	16.7	14.7	15.8	16.4	14.4	18.6	14.1	17.3	15.7	15.1	14.2	14.1	13.6	16.3	16.6	18.9	19.0	17.2	19.3	19.2	19.5	14.4	17.1	16.5	20.0	20.1
069018 Moruya Heads Pilot Station	16.0	-0.1	16.3	16.5	14.4	14.9	17.1	17.4	15.2	14.5	15.5	14.0	18.5	14.1	17.2	15.4	14.9	13.4	15.6	14.2	15.5	14.9	17.8	15.3	15.1	17.0	19.6	19.2	15.8	17.6	15.2	18.9	16.2
070351 Canberra Airport	11.5		10.0	10.8	10.5	9.3	7.3	11.2	11.5	12.6	13.8	9.9	12.5	9.2	13.6	10.0	7.9	10.8	10.8	11.0	12.8	14.1	14.1	9.6	10.8	11.6	13.4	11.5	11.5	13.0	12.9	12.3	15.1
071041 Thredbo Village	5.0		6.0	3.0	3.5	5.5	7.7	4.7	6.0	6.5	4.0	4.0	4.2	3.0	4.1	4.2	2.0	2.5	3.5	8.5		5.5	5.5	6.0	3.3	3.0	4.5	4.5	4.5	8.0	7.0	7.5	
072150 Wagga Wagga AMD	12.4	-0.1	9.5	12.2	10.8	10.5	11.2	11.9	14.2	14.6	14.2	14.6	13.4	9.7	11.0	8.6	8.0	11.8	11.4	12.8	13.6	14.8	16.6	11.6	16.9	13.7	13.4	11.7	10.3	11.5	12.5	13.0	14.0
072160 Albury Airport AWS	12.5		10.6	12.1	11.0	11.6	11.8	10.0	14.8	14.8	13.2	14.2	13.9	11.3	13.7	9.1	6.8	11.9	11.5	12.4	13.0	13.7	15.9	13.5	16.9	12.8	13.6	11.8	9.5	13.8	12.2	12.5	13.8
072161 Cabramurra SMHEA AWS	2.7		4.0	0.9	1.2	2.8	5.0	0.9	5.8	5.7	5.5	2.9	3.7	-0.3	1.4	-1.0	0.5	1.1	0.6	2.6	4.1	5.1	4.9	2.5	4.5	3.2	1.2	1.1	-0.9	1.9	4.2	1.9	6.1
074258 Deniliquin Airport AWS	13.3		13.7	14.6	11.5	12.9	12.8	11.3	15.0	15.0	16.3	17.1	13.4	10.0	11.4	9.1	9.1	13.7	11.7	12.4	13.7	14.7	16.1	16.0	15.5	15.7	13.9	12.0	12.3	13.7	13.0	12.0	13.4
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	14.8	-0.6	12.6	16.1	13.0	14.6	15.6	16.7	14.6	15.9	17.6	20.1	10.8	13.4	13.7	13.9	11.1	13.6	11.3	11.9	12.5	15.6	17.0	16.3	18.3	17.2	16.5	14.0	13.1	13.9	13.9	17.0	16.4
078015 Nhill Aerodrome	13.1		14.4	12.9	11.3	14.3	16.7	15.2	10.8	14.2	16.7	16.0	10.9	12.5	13.2	11.0	9.6	11.9	11.4	10.9	9.6	13.0	15.0	15.5	15.7	15.6	14.1	11.2	12.7	13.2	11.9	13.3	12.3
080023 Kerang	13.6	-0.4	14.2	14.2	12.2	13.6	14.6	13.0	11.5	16.0	14.9	17.2	13.1	11.1	12.2	9.9	10.0	13.8	12.2	12.6	13.5	14.7	17.3	16.4	13.4	16.2	16.0	11.7	12.3	13.1	12.0	13.2	14.6
081123 Bendigo Airport	11.6		12.8	12.1	11.5	12.5	13.2	8.2	13.2	11.5	10.3	13.2	10.2	9.9	11.4	7.1	8.5	12.3	12.1														

Daily and mean minimum temperatures for July 2015

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	14.8	12.2	14.8	22.3	14.5	10.3	9.9	20.4	20.6	21.1	21.1	13.2	14.8	15.2	14.7	11.2	9.7	15.8	15.8	11.6	8.9	11.3	10.9	12.1	10.7	12.3	15.8	17.6	19.2	21.7	14.8	13.2	
002012 Halls Creek Airport	13.4	+0.9	13.6	16.4	15.1	12.8	9.1	11.2	13.5	13.9	17.8	18.4	17.9	14.6	13.7	12.1	9.5	8.8	10.1	8.8	9.5	9.9	10.3	11.2	12.2	14.2	15.3	18.5	18.5	17.2	13.6	14.1	12.7
002056 Kununurra Aero	14.0	13.3	17.5	17.7	13.1	10.0	11.8	21.3	19.3	18.2	15.0	14.9	15.8	19.1	16.0	10.4	10.8	11.3	9.4	10.8	9.1	8.7	10.3	10.5	11.0	12.5	14.6	17.8	21.9	16.4	13.2	13.1	
003003 Broome Airport	15.0	+1.6	11.8	14.2	16.3	15.5	10.8	8.4	11.3	14.5	20.3	19.9	19.8	14.8	18.2	14.2	15.2	14.3	13.7	11.3	10.5	10.5	11.8	14.5	14.3	16.3	17.7	19.9	20.1	20.7	16.7	14.6	13.3
003032 Derby Aero	15.5	11.4	16.2	17.0	19.6	11.1	8.5	11.2	16.0	20.7	20.0	18.9	19.2	19.6	12.7	14.1	14.1	13.4	12.1	9.8	11.8	10.7	14.1	16.3	17.2	16.5	17.4	19.7	20.6	20.0	15.2	14.0	
004032 Port Hedland Airport	15.1	+3.0	12.0	13.7	14.2	13.0	12.9	11.0	10.8	11.1	13.6	14.2	16.8	13.3	17.8	20.1	17.6	15.5	15.6	13.9	11.2	11.2	14.8	19.8	19.9	20.2	17.4	17.6	16.6	14.9	16.0	16.3	14.2
004083 Karratha Aero	15.6	10.1	13.1	14.1	12.4	11.4	11.8	11.7	10.6	11.7	15.7	18.9	19.1	18.6	20.3	17.6	16.7	13.7	13.6	11.9	11.7	16.0	22.1	20.1	20.4	19.6	17.5	17.7	16.5	15.9	16.5	15.3	
004106 Marble Bar	13.4	12.4	10.5	11.9	11.9	10.0	10.4	8.4	9.3	10.8	13.5	16.8	15.1	14.7	16.6	16.4	13.6	10.9	11.8	9.6	7.0	13.9	20.3	21.1	18.3	15.1	14.0	15.7	14.7	14.6	13.9	10.8	
005007 Learmonth Airport	12.6	6.6	7.7	10.8	10.7	11.3	11.6	9.8	11.0	10.4	7.1	8.9	13.7	13.5	11.7	15.2	13.4	14.9	12.7	10.0	15.2	19.2	16.4	14.9	16.2	14.8	12.1	14.5	14.6	12.9	15.2	14.5	
006011 Carnarvon Airport	12.1	+1.2	9.3	10.5	9.8	12.1	12.0	11.2	8.7	12.5	8.3	7.1	5.2	10.9	12.4	13.0	12.6	10.8	13.6	12.8	9.7	17.4	16.5	13.8	15.3	14.5	13.3	7.5	9.7	14.7	16.7	16.0	15.9
006044 Denham	13.9	15.2	15.0	12.9	14.9	14.0	12.6	12.5	14.2	8.6	8.5	10.2	12.1	12.5	12.9	13.0	13.5	15.2	15.2	13.2	17.0	15.5	14.5	14.0	15.0	13.4	10.2	12.0	16.1	20.0	18.5	18.0	
007176 Newman Aero	7.1	4.2	5.9	6.6	5.3	5.3	4.9	4.7	4.9	7.8	1.8	2.3	11.2	11.2	10.9	6.9	5.5	2.8	2.1	0.7	2.3	12.1	15.5	12.7	13.7	9.2	7.8	5.8	6.3	9.9	10.8	10.2	
007185 Paraburdoo Aero	11.2	6.5	10.8	10.1	9.3	8.7	7.5	8.3	8.6	11.9	7.0	10.9	13.5	12.4	13.5	14.2	11.6	11.6	8.3	8.4	9.3	13.4	16.7	12.8	15.7	11.7	10.8	10.3	12.0	12.8	14.3	13.0	
007045 Meekatharra Airport	7.8	+0.3	6.8	9.1	9.0	9.9	8.2	8.0	7.1	7.6	4.0	2.3	5.8	5.2	8.3	8.6	7.4	5.3	5.8	4.4	6.6	8.5	12.0	8.7	6.0	10.1	8.5	2.6	6.5	9.4	12.2	14.1	13.1
007600 Mount Magnet Aero	8.0	8.2	11.5	8.7	8.8	8.1	7.1	5.6	8.5	4.2	2.1	3.2	3.7	8.9	9.6	6.4	6.3	7.4	6.5	5.0	12.5	10.5	9.7	7.9	7.1	5.1	2.4	6.8	12.4	14.9	14.8	13.9	
008296 Morawa Airport	7.9	13.0	13.1	8.3	11.1	6.9	6.0	7.3	10.3	2.6	-0.1	2.8	1.1	7.5	9.3	4.7	6.1	7.5	9.9	6.1	12.8	9.4	9.5	8.8	4.0	1.8	2.0	6.3	10.5	15.4	14.4	15.1	
008297 Dalwallinu	6.6	11.4	11.6	8.9	7.2	5.4	7.4	8.6	1.5	2.0	3.5	1.4	3.7	4.0	3.4	4.3	4.4	7.1	6.1	12.4	7.8	7.2	8.5	3.2	2.6	2.8	4.7	9.2	12.1	14.7	13.9		
008315 Geraldton Airport	10.2	11.8	13.8	12.4	10.4	9.5	9.2	9.1	12.4	2.3	2.6	7.0	5.2	8.1	11.6	8.0	11.3	12.1	12.0	10.4	15.8	12.9	11.4	11.5	6.7	4.4	5.2	5.8	12.1	17.1	17.2	17.6	
009021 Perth Airport	9.1	+1.0	10.8	13.7	12.5	10.2	10.2	9.0	12.0	7.7	0.1	5.5	3.8	3.4	6.4	8.8	9.9	9.3	11.8	12.5	12.2	13.4	8.1	6.2	9.8	1.0	8.8	3.8	7.8	11.9	10.5	15.6	15.8
009131 Jurien Bay		10.0	10.0																														
009225 Perth Metro	9.1	10.6	13.0	11.6	10.9	10.7	9.1	11.2	9.1	0.8	6.8	2.6	2.8	5.4	7.9	8.2	9.4	11.7	12.6	13.1	13.6	8.9	7.3	10.3	2.2	8.4	3.9	7.1	11.7	9.7	15.1	15.8	
009240 Bickley	8.1	11.0	10.9	11.4	11.8	10.6	8.8	10.9	5.8	2.4	5.8	1.3	3.7	4.8	6.0	7.2	4.8	7.7	10.6	12.2	11.8	5.9	6.5	7.9	5.2	7.4	6.2	5.4	8.2	9.1	13.4	13.6	
009518 Cape Leeuwin	12.2	+1.1	13.9	14.5	15.1	15.5	14.5	13.1	14.5	10.7	11.2	12.3	11.5	10.5	8.9	10.3	11.9	7.8	9.6	13.7	13.8	14.2	9.1	12.6	11.2	12.9	13.4	10.1	10.0	11.5	12.0	14.4	14.8
009617 Bridgetown	4.9	4.1	10.5	9.0	9.9	7.3	4.0	7.0	3.4	2.2	6.4	3.8	-1.4	-2.3	-0.5	2.4	4.0	7.9	9.7	6.0	8.0	2.6	4.7	4.3	10.0	3.7	3.1	-0.9	3.5	8.5	9.0	12.6	
009746 Witchcliffe	8.2	7.8	10.9	10.9	10.4	7.4	8.7	13.9	7.9	6.6	9.2	7.8	3.5	2.1	3.9	6.3	10.3	7.2	9.5	10.0	6.2	8.9	9.9	5.8	12.0	4.9	4.5	9.1	8.6	10.4	11.6		
009789 Esperance	9.0	11.9	10.3	12.2	10.3	10.5	7.6	7.4	10.9	8.4	7.2	10.9	9.0	8.1	10.1	8.8	7.0	6.5	6.8	10.0	11.5	7.4	5.2	9.3	7.9	8.6	8.3	5.7	7.6	8.9	11.3	13.2	
009965 Bunbury		11.3								6.1	1.0	5.4	4.2	1.4	2.8	4.3	6.2	10.9	8.2	10.8	12.5	4.7	8.2	5.3	2.8	6.8	3.8	4.8	10.2	11.8	10.2	12.7	
009977 Mandurah	11.0	14.5	15.2	13.1	13.2	14.2	13.1	14.3	9.8	4.4	8.2	7.7	6.2	7.1	8.9	9.3	9.1	11.4	14.8	14.9	13.9	9.1	9.9	10.6	6.2	9.3	8.3	8.9	11.4	12.6	14.8	16.4	
009998 Albany Airport	7.7	7.0	12.0	9.4	10.8	7.6	6.7	10.5	7.9	6.0	9.5	7.5	7.6	3.6	5.9	7.3	2.6	8.6	11.4	8.1	11.5	4.9	6.2	7.4	6.6	9.3	5.8	1.3	8.0	5.8	11.1	12.0	
010007 Bencubbin	6.7	+0.7	10.5	11.6	10.6	9.2	9.3	7.0	8.5	9.0	1.0	1.6	3.2	0.5	3.9	4.3	3.6	3.2	5.5	7.3	9.4	10.6	7.5	6.2	7.5	1.5	3.8	4.1	4.5	7.2	9.5	11.9	
010092 Merredin	6.6	+1.2	10.0	11.2	9.9	7.4	6.8	8.2	8.7	8.5	1.0	0.0	2.0	1.0	5.0	5.2	5.9	5.0	6.5	9.3	7.7	10.5	6.0	3.0	-1.0	2.2	5.7	6.0	10.4	9.5	11.5	13.0	
010286 Cunderdin Airfield	6.3	11.2	12.1	12.3	9.3	8.0	7.7	9.7	7.3	-0.3	2.0	-0.2	-1.0	1.0	2.8	3.1	2.8	4.8	7.6	9.7	11.7	7.5	4.4	8.6	-1.5	3.7	2.5	2.9	9.0	9.7	12.2	14.3	
010633 Ravensthorpe	8.0	+1.4	11.0	12.0	11.5	9.6	10.2	6.0	9.5	7.0	5.5	5.5	8.1	5.1	6.0	7.5	6.5	9.0	7.5	10.5	11.2	10.0	4.5	3.5	7.5	5.5	7.3	6.5	3.5	9.0	9.0	10.5	12.5
010911 Lake Grace	6.0	9.6	12.1	9.3	8.4	8.1	4.8	6.6	7.0	0.2	3.4	6.2	2.0	1.4	2.5	4.8	1.8	3.8	7.6	8.4	10.2	4.6	2.0	7.8	2.9	7.7	3.0	1.7	8.4	8.7	10.0	12.4	
010916 Katanning	6.3	8.1	11.0	8.3	10.0	9.5	5.3	9.8	5.8	1.6	5.8	8.0	1.4	0.4	4.3	2.8	1.3	5.4	9.3	10.2	10.3	3.0	4.5	6.4	4.0	7.0	3.6	1.7	6.8	9.6	7.6	11.2	
010917 Wandering	5.0	5.7	11.0	8.3	7.7	7.4	3.8	8.4	6.2	-3.0	1.2	3.1	-2.8	-2.5	-0.4	3.9	5.4	6.4	10.0	8.2	11.9	4.2	1.6	5.8	-1.2	3.6	-1.02	4.5	10.3	10.8	13.9		
011003 Eucla	6.6	5.0	4.3	6.6	8.0	7.1	6.1	4.6	3.5	6.8	6.0	9.1	7.6	7.8	7.9	9.7	9.8	6.8	2.9	2.1	4.9	11.4	3.3	2.3	7.0	5.2	9.8	4.2	3.7	10.5	10.8	11.3	
011052 Forrest	4.5	2.5	3.6	3.6	4.8	3.3	6.8	3.7	3.3	6.1	3.3	7.0	4.6	3.3	6.4	4.8	4.7	3.2	0.9	-0.3	1.0	11.0	0.6	4.1	4.8	3.8	6.4	0.1	0.5	10.1	11.0	9.8	
012038 Kalgoorlie-Boulder Airport	6.2	+1.4	7.4	11.8	9.2	6.4	6.9	5.0	3.8	8.5	6.5	0.2	5.2	6.9	2.1	3.0	6.4	7.5	3.4	4.8	5.2	10.1	9.0	0.1	5.7	1.7	2.4	4.9	4.6	8.5	10.1	11.3	13.3
012071 Salmon Gums Res.Stn.	5.8	+1.0	10.1	7.8	10.6	7.7	8.7	3.9	4.7	9.1	4.6	4.8	4.8	2.2	2.3	6.8	4.5	3.1	3.5	6.9	7.7	9.3	5.5	0.8	3.2	3.9	7.2	4.3	-0.6	2.9	9.3	8.1	12.5
013011 Warburton Airfield	6.8	8.4	5.1	5.1	3.9	4.1	5.1	8.9	11.3	8.6	7.3	1.1	1.6	3.2	8.7	6.9	2.4	4.8	4.0	1.7	1.2	13.9	7.3	13.4	9.8	9.7	7.4	6.1	8.1	10.0	11.3	11.0	
013012 Wiluna																																	
013017 Giles Meteorological Office	6.9	+0.4	7.4	7.9	6.0	4.7	7.2	4.6	8.2	5.9	13.9	4.8	3.																				

Daily and mean minimum temperatures for July 2015

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	
047007 Broken Hill (Patton Street)	5.2	3.5	4.1	2.9	6.2	3.9	7.5	6.4	9.1	9.7	5.8	8.3	3.5	4.8	4.2	3.2	1.4	2.3	5.9	3.7	-0.9	10.9	7.5	7.6	6.9	9.1	2.7	3.8	3.7	3.4	5.9		
048027 Cobar MO	4.6	-0.3	3.9	2.2	1.6	1.5	1.8	1.9	5.3	4.8	4.2	8.4	10.5	4.5	4.5	6.4	4.6	3.3	3.9	3.5	2.2	3.4	6.7	9.0	6.7	8.2	5.5	8.6	2.2	0.4	1.9	2.9	7.3
048245 Bourke Airport AWS	4.6	7.4	3.8	4.2	-0.3	1.0	0.7	1.3	4.0	5.1	9.8	7.9	5.2	7.8	5.0	4.3	1.6	4.9	3.8	2.8	2.5	8.3	11.3	8.8	8.8	6.1	5.9	5.5	1.8	1.6	-0.7	3.4	
049000 Ivanhoe Aerodrome AWS	5.1	2.1	3.3	0.5	2.0	0.5	3.6	4.9	4.0	5.7	7.9	11.1	6.2	7.3	7.2	6.1	3.1	4.0	4.3	-0.2	3.0	5.0	10.2	8.8	8.8	6.3	9.5	3.2	5.8	4.0	2.3	6.9	
050052 Condobolin Ag Research Stn	2.6	+0.3	-0.4	1.5	-1.6	-1.8	-3.6	-3.6	1.0	-1.0	0.8	5.2	7.9	5.1	3.4	6.5	5.5	3.7	3.5	2.0	-1.5	0.7	5.5	8.4	5.8	6.0	6.0	8.0	1.0	0.7	-0.5	-0.3	5.7
051039 Nyngan Airport	3.8	+0.1	4.0	2.5	1.8		-2.4	0.3	1.5	2.5	7.7	7.7	4.6	6.3	6.0	4.2	1.5	4.4		1.8	1.5	4.3	7.5	9.4	7.2	5.0	6.8	3.0	1.0	1.9	0.1	4.0	
052088 Walgett Airport AWS	4.3	8.6	1.9	2.0	-0.4	2.5	0.5	0.1	1.4	4.0	8.1	6.2	5.8	6.9	4.3	1.7	2.4	3.4	4.5	1.6	3.3	7.1	8.8	9.9	11.7	10.4	9.1	5.5	0.6	-1.3	-0.3	2.8	
053115 Moree Aero	4.9	9.9	1.5	0.4	2.3	4.7	3.0	1.1	2.0	5.7	9.5	8.7	4.8	5.1	4.9	3.7	5.2	2.4	-0.4	3.2	2.7	4.0	6.9	11.8	11.5	13.2	11.6	5.7	-0.1	0.2	3.2	4.1	
054038 Narrabri Airport AWS		7.9	0.1	-0.8	1.1	3.4	0.7	-0.2	2.6	6.5	6.7	4.3	3.8	5.8	3.7	2.7							7.0	10.8					-1.3	-0.3	0.6	4.0	
055024 Gunnedah Resource Centre	4.7	+0.2	8.1	1.8	1.1	1.4	4.9	4.7	1.4	2.4	5.4	6.7	7.0	5.4	4.9	4.3	5.0	5.4	2.8	1.5	2.2	2.8	5.3	8.1	9.2	11.0	12.0	7.4	4.5	-0.2	0.8	4.4	5.4
055325 Tamworth Airport AWS	2.4	7.8	-0.7	-2.8	-1.9	2.1	-0.3	-2.3	-0.1	4.1	3.8	3.9	4.8	3.7	4.9	2.0	4.7	2.6	-1.8	-1.2	1.6	3.4	3.3	8.6	9.0	10.6	5.8	1.8	-3.5	-1.3	0.3	0.2	
056242 Inverell (Raglan St)	0.4	5.0	0.0	-4.4	-3.0	-1.4	-2.5	-4.0	-2.5	-0.8	6.0	4.2	2.7	3.0	1.4	-1.0	2.0	1.5	1.3	-2.5	-1.5	-1.2	-0.4	0.5	6.9	6.6	6.3		-3.7	-3.0	-1.2	-1.5	
057095 Tabulam (Muirie)	6.8	11.1	6.6	4.1	6.7	6.8	8.0	5.2	5.3	8.0	7.4	8.2	5.2	4.4	4.2	4.0	3.7	2.4	1.4	4.4	7.1	7.7	8.8	10.6	11.8	10.8	11.0	8.3	5.2	4.7	8.7	8.0	
058012 Yamba Pilot Station	10.0	+0.7	12.6	10.6	8.0	8.1	9.0	9.4	9.7	9.0	11.3	10.8	11.9	11.5	8.4	8.7	6.9	7.4	7.6	6.2	8.9	11.0	10.3	10.6	13.1	14.0	14.5	14.5	10.9	6.9	6.1	9.8	12.1
059040 Coffs Harbour MO	7.8	+0.4	10.3	7.2	9.0	7.8	7.2	6.0	3.3	10.7	9.7	10.1	9.7	9.0	3.6	2.4	1.7	3.4	4.2	8.6	11.1	10.8	9.4	6.4	13.0	12.2	12.8	11.3	6.9	2.7	3.6	9.7	8.9
060139 Port Macquarie Airport AWS	6.5		11.6	8.0	9.2	10.1	5.1	4.4	0.7	9.2	6.3	5.1	7.1	8.4	5.6	8.8	0.4	4.3	1.2	8.4	7.3	6.3	5.4	6.5	8.4	8.2	10.7	10.6	4.5	3.8	6.0	6.9	3.5
061078 Williamtown RAAF	6.3	+0.2	8.8	6.2	4.7	3.5	3.2	6.2	6.2	6.0	4.2	6.6	7.5	8.4	8.8	7.2	2.4	5.6	6.3	6.5	8.1	3.5	6.2	7.3	9.3	8.9	6.7	7.6	5.0	4.3	10.1		
061363 Scone Airport AWS	3.0		5.6	0.9	-0.9	-1.9	0.4	-0.7	4.0	1.2	-0.3	-0.1	1.8	5.7	5.8	7.7	5.8	3.9	1.2	2.0	4.3	2.8	3.2	7.0	10.7	4.3	5.2	-2.0	-2.1	0.3	7.4		
062101 Mudgee Airport AWS	1.2		4.7	-1.7	-3.7	-3.2	-4.0	-4.9	-2.6	-1.3	2.7	1.1	5.3	2.3	4.1	5.3	2.1	4.4	2.1	-1.9	-1.9	2.6	0.8	3.7	8.1	7.4	4.5	2.2	2.3	-1.1	-2.4	-1.0	0.8
063005 Bathurst Agricultural Station	-0.1	+0.1	3.0	-0.5	-4.8	-4.7	-5.0	-6.0	-2.0	-3.5	-4.0	-0.5	3.5		1.5	3.8	1.5	3.0	0.0	-1.7	-2.0	-2.0	-1.0	2.5	7.0	5.0	2.0	2.5	1.3	0.5	-3.5	-1.5	1.5
063254 Orange Agricultural Institute			1.0	0.5	-2.6			-2.4	1.3	0.2		0.6				2.0	0.0	0.2	-0.5				-1.0	2.3	4.0	5.7	4.5		0.0	2.0	-1.1	1.7	3.1
064008 Coonabarabran (Namoi Street)	1.0	+0.3	5.4	1.6	-1.5	-4.0	-2.0	-4.5	-2.4	-3.8	-2.2	-1.5	5.7	3.5	3.7	4.7	3.3	3.0	-0.8	2.5	-3.7	-2.6	-0.7	2.6	8.9	7.4	7.3	3.0	3.5	1.3	-4.4	-2.8	-0.6
065070 Dubbo Airport AWS	2.5		4.1	-1.8	-2.7	-3.3	-1.6	-3.9	-2.8	1.6	6.5	6.8	5.1	4.5	5.3	6.0	3.1	3.8	2.3	-0.1	0.0	3.4	3.7	7.8	9.6	6.5	6.1	4.5	-0.3	1.7	-1.3	-0.5	2.2
066062 Sydney (Observatory Hill)	8.0	-0.4	10.7	7.0	6.2	5.8	6.0	6.0	7.8	7.9	6.6	7.3	6.6	7.1	8.1	8.6	6.2	8.3	6.2	6.6	7.8	7.8	8.2	9.9	11.2	11.6	10.8	11.0	7.3	6.4	8.1	8.2	10.7
067105 Richmond RAAF	3.4		7.1	1.6	0.8	0.0	-1.2	-2.5	0.2	1.5	1.8	2.8	4.0	5.9	5.3	0.0	5.7	6.0	1.4	4.5	4.9	4.6	4.9	8.3	9.6	9.3	10.7	5.2	3.2	-0.4	0.0	2.3	6.0
068072 Nowra RAN Air Station AWS	5.9		4.1	6.1	2.4	2.0	5.4	4.6	6.9	4.3	4.1	2.1	6.1	7.1	5.9	9.5	5.8	4.5	7.6	5.9	6.9	4.5	4.2	5.4	10.1	6.9	6.6	11.0	5.7	5.8	5.9	5.4	8.8
068151 Jervis Bay (Point Perpendicular)	8.8		7.8	8.0	8.8	6.4	7.3	8.2	9.7	9.2	7.3	8.6	8.4	8.3	6.5	10.9	7.1	8.9	7.9	9.3	9.1	6.6	8.8	12.4	11.6	9.7	11.5	11.3	7.8	7.6	7.0	8.3	12.0
068241 Albion Park (Wollongong Airport)	5.4		6.7	6.8	5.6	0.2	1.2	2.5	8.7	6.0	2.1	2.8	1.5	6.2	7.4	10.7	5.3	1.5	8.3	9.5	8.4	1.7	2.8	5.6	9.1	8.0	8.4	2.4	7.8	8.0	3.3	2.6	7.0
069018 Moruya Heads Pilot Station	6.2	+0.4	6.2	6.1	2.1	3.7	3.6	6.6	7.9	3.8	4.3	5.7	8.2	8.0	8.0	7.6	5.7	8.0	8.3	6.8	4.9	4.3	4.4	6.9	8.4	6.1	8.8	10.2	3.0	4.8	5.1	6.5	8.4
070351 Canberra Airport	-0.7		-4.1	-0.8	-7.0	-5.5	-4.7	-2.4	-4.7	-3.0	-1.3	-0.5	3.6	3.1	3.6	4.1	1.1	-0.5	4.2	-2.9	-5.1	-4.7	-4.5	0.2	4.3	0.5	4.4	6.5	1.4	-4.1	-3.3	-2.5	2.4
071041 Thredbo Village	-3.6		-4.0	-4.5	-5.0	-7.3	-3.0	-5.7	-3.0	-6.0	-7.5		1.0	-4.0	-2.2	-0.5	-2.1	0.0	-7.0		-8.0	-11.0	-6.0	1.0	-0.1	-1.5	-1.0	-7.0	-7.0	-1.5	-5.0	-3.0	1.0
072150 Wagga Wagga AMO	2.9	+0.6	-0.6	2.7	-3.6	-0.7	-2.1	2.6	3.2	0.4	1.7	6.3	7.6	5.1	5.9	4.0	4.8	4.2	2.0	0.5	0.0	1.0	2.4	8.0	7.7	4.4	7.0	7.0	0.2	0.3	0.5	2.2	3.9
072160 Albury Airport AWS	2.8		2.9	4.6	-2.1	1.1	0.7	3.6	4.8	0.1	-0.5	3.3	8.0	5.1	5.9	5.0	4.4	2.9	-1.4	-1.6	-1.5	-1.6	-0.3	4.5	7.5	2.2	6.5	8.2	0.7	1.4	1.0	3.3	7.2
072161 Cabramurra SMHEA AWS	-1.9		-3.8	-2.5	-5.7	-4.8	-3.4	-2.6	-2.5	-1.5	-1.1	0.6	0.4	-3.3	-3.3	-1.9	-4.0	-1.0	-3.5	-3.1	-2.1	-0.9	0.9	1.7	1.0	0.6	0.1	-0.4	-4.4	-4.2	-1.2	-1.7	-0.7
074258 Deniliquin Airport AWS	2.4		-1.6	3.0	-2.6	1.6	-0.1	-1.3	1.0	0.9	4.9	4.1	7.3	4.7	5.9	1.8	0.4	2.5	3.1	-0.3	-1.1	-0.9	2.6	5.6	5.9	6.8	6.9	8.6	0.4	0.7	-2.0	2.9	1.3
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	3.2	-1.2	-0.7	4.1	-0.7	0.5	0.9	4.4	2.3	5.2	8.7	4.7	5.7	6.4	3.0	5.8	1.3	0.6	3.5	3.2	0.1	-1.2	2.4	7.7	0.4	7.0	6.5	8.1	0.0	0.2	4.1	2.7	2.8
078015 Nhilil Aerodrome	3.4		3.9	7.3	-2.3	-0.2	4.8	5.1	4.1	6.0	7.2	8.1	7.2	4.6	4.5	6.3	0.1	1.0	3.7	1.0	1.4	-1.1	2.7	6.1	-0.6	3.9	5.7	5.0	0.8	1.9	3.9	4.3	-1.3
080023 Kerang	2.5	-1.6	-0.2	2.2	-2.0	2.0	1.4	2.9	2.0	0.5	2.7	5.5	7.2	5.2	6.0	4.1	1.0		3.4	2.5	-0.4	-1.0	2.9	7.5	1.4	1.5	6.4	6.5	1.0	0.1	0.0	0.1	1.5
081123 Bendigo Airport	1.7		4.7	7.2	-3.8	1.1	0.0	-0.2	1.7	-0.4	4.7	3.7	6.1	3.2	5.0	5.1	-2.2	1.2	2.6	0.9	-2.2	-2.1	1.6	7.0	0.3	2.8	6.2	6.5	-0.8	-0.8	-1.9	-1.6	-2.1
082039 Rutherglen Research	1.7	-0.1	1.4	1.3	-4.6	0.2	-0.4	4.4	1.5	-2.3	-2.3	3.3	9.0	4.8	5.7	2.4	4.5	1.0	1.5	-2.9	-4.0	-4.0	0.7	8.5	9.3	0.7	4.1	7.9	-1.6	-1.2	-2.4	2.5	3.8
083085 Mount Hotham												-2.9	-1.9	-5.8	-6.1	-5.7	-5.9	-4.3	-6.9	-6.0	-6.3	-6.0	-3.8	-2.4	-1.5	-1.6	-3.6	-3.5	-6.4	-5.7	-3.8	-4.3	-4.6
084016 Gabo Island Lighthouse	8.6	+0.1	9.2	8.9	7.9	6.3	8.4	8.8	10.1	8.0	7.1	9.3	9.0	8.5	7.5	8.6	6.8	9.4	8.5	8.9	7.2	6.5	9.1	10.1	11.4	8.8	8.3	9.0	8.4	10.0	8.5	7.7	10.1
084145 Orbst	5.3		8.3	6.9	5.5	2.7	7.5	6.7	8.0	3.4	3.6	2.2																					

Daily and total rainfall for July 2015

Western Australia	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
001019 Kalumburu	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
002012 Halls Creek Airport	-	4.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
002056 Kununurra Aero	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
003003 Broome Airport	-	2.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
003032 Derby Aero	3.2	4.7	-	-	-	-	-	-	-	-	2.8	0.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
004032 Port Hedland Airport	1.8	8.0	-	-	-	-	-	-	-	-	-	»	»	1.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
004083 Karratha Aero	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.0	4.6	-	-	-	-	-	-	-		
004106 Marble Bar	1.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1.4	0.2	-	-	-	-	-		
005007 Learmonth Airport	20.8	23	-	-	-	-	-	-	-	-	-	-	-	3.4	5.0	-	-	-	-	0.2	-	-	5.4	-	-	-	6.2	0.6	-	-	-	-		
006011 Carnarvon Airport	24.6	41	-	-	-	0.2	-	0.2	-	-	-	-	-	-	8.6	0.8	0.2	-	-	-	-	-	14.0	-	-	0.2	-	-	-	-	-	0.2	0.2	
006044 Denham	42.4	38	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	-	-	-	-	-	1.6	36.6	-	-	-	-	-	-	-	4.0	-	-	
007176 Newman Aero	28.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.4	-	-	-	-	-	-	-	-	8.8	0.2	-	13.0	5.6	-	-	-	-	
007185 Paraburdoo Aero	24.4	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	-	-	-	-	0.2	4.4	0.2	-	18.6	0.2	-	-	-	-	-	
007045 Meekatharra Airport	7.0	25	-	-	-	-	-	-	-	-	-	-	-	-	1.2	2.4	1.4	0.2	-	-	-	-	1.8	-	-	-	-	-	-	-	-	-	-	
007600 Mount Magnet Aero	35.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	-	-	-	-	-	-	-	8.2	0.2	-	-	-	-	-	3.6	23.0	-	
008296 Morawa Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
008297 Dalwallinu	85.2	-	0.8	0.4	0.6	0.2	0.2	0.2	0.2	3.8	-	-	0.2	-	-	-	-	-	-	-	-	-	2.2	8.0	-	0.2	0.2	-	0.2	-	0.2	5.2	3.2	59.4
008315 Geraldton Airport	54.4	-	-	-	-	-	-	-	-	-	8.4	-	-	-	-	-	-	-	-	-	-	-	14.4	10.4	0.2	3.8	1.8	-	-	-	2.0	4.2	0.4	8.8
009021 Perth Airport	89.4	158	-	1.8	2.4	-	2.4	0.6	4.2	4.2	-	-	0.2	-	-	-	-	-	-	0.2	-	-	30.0	9.8	-	9.2	-	0.2	-	0.4	4.8	4.0	15.0	
009131 Jurien Bay	105.7	2.0	1.8	4.6	-	1.8	1.2	1.6	-	6.6	-	-	0.4	-	-	-	-	-	-	-	-	-	18.3	0.8	-	6.4	-	-	-	5.0	13.0	2.8	39.4	
009225 Perth Metro	102.4	-	1.6	3.8	-	1.8	2.6	5.6	9.2	-	1.2	0.2	-	-	-	-	-	-	-	0.8	0.8	33.2	8.6	0.2	8.4	-	-	-	-	0.4	5.2	0.4	18.4	
009240 Bickley	138.6	-	2.6	0.6	2.8	3.0	2.2	6.8	10.8	-	-	0.8	-	-	-	0.2	-	-	-	0.2	0.2	56.8	10.4	-	7.6	-	0.6	-	0.2	0.2	8.4	1.4	22.8	
009518 Cape Leeuwin	93.0	191	-	5.8	0.2	1.6	-	0.6	6.8	-	5.0	-	-	-	-	-	-	-	-	-	-	4.4	22.2	11.0	9.4	1.2	9.6	-	0.2	1.2	-	1.6	0.2	11.8
009617 Bridgetown	128.6	0.4	1.6	0.4	-	1.0	-	0.4	4.2	0.2	1.6	-	0.2	-	0.2	-	-	-	-	0.4	1.2	15.2	5.8	0.4	5.6	-	0.2	0.6	-	1.6	0.8	0.2	86.4	
009746 Witchcliffe	146.0	-	1.2	10.8	0.4	4.4	0.8	2.8	9.4	-	9.4	0.2	0.2	-	-	0.2	-	-	-	11.6	32.8	25.0	6.8	4.2	15.8	-	-	0.6	0.2	1.4	0.4	0.2	7.2	
009789 Esperance	60.0	-	-	1.6	-	0.6	-	-	3.6	8.2	1.6	1.4	1.0	0.2	0.2	0.8	-	0.2	-	-	-	1.0	8.4	3.2	8.2	7.2	4.6	5.4	0.2	-	-	2.0	0.4	
009965 Bunbury	122.0	0.2	0.2	22.4	0.4	-	-	-	-	-	1.8	-	-	-	-	-	-	-	5.2	4.4	28.8	2.6	0.4	10.2	-	-	-	-	-	2.4	-	1.8	41.2	
009977 Mandurah	93.6	-	-	14.0	3.6	3.4	0.2	9.6	10.8	-	6.2	0.2	-	-	-	-	-	-	4.6	0.2	5.6	13.6	2.2	9.0	-	-	-	0.2	1.2	-	1.6	7.4		
009999 Albany Airport	94.2	-	1.4	0.4	1.0	0.6	-	1.6	17.2	0.4	3.0	1.0	0.2	-	-	2.8	-	-	4.6	0.2	5.0	7.8	0.2	15.2	0.2	4.6	5.2	-	-	-	2.8	23.2		
010007 Bencubbin	77.1	47	-	-	1.2	0.3	-	0.2	0.2	3.4	-	-	0.2	-	-	-	-	-	-	-	1.0	6.0	0.2	0.2	-	-	-	-	-	-	8.6	1.2	54.4	
010092 Merredin	62.6	44	-	1.6	3.2	0.4	-	0.6	-	3.2	-	-	-	-	-	-	-	-	-	-	-	1.8	2.6	-	-	-	-	-	-	-	14.8	1.0	33.4	
010286 Cunderdin Airfield	71.0	-	0.4	2.6	0.4	0.2	0.8	-	2.2	0.2	-	-	-	-	-	-	-	-	-	-	-	2.6	1.8	-	0.8	0.2	-	-	-	1.4	26.4	0.2	30.8	
010633 Ravensthorpe	48.8	45	-	0.8	0.2	-	-	-	3.2	24.2	0.4	2.0	-	-	0.6	0.4	-	-	-	-	-	0.6	2.2	-	3.2	-	-	5.6	-	-	-	5.4		
010911 Lake Grace	17.6	-	0.2	0.8	-	0.2	0.4	0.6	1.4	0.8	0.2	-	-	-	-	0.4	-	-	-	-	-	4.8	1.0	-	2.2	0.2	-	1.0	0.2	-	0.2	3.0		
010916 Katanning	36.8	-	0.4	0.2	-	-	-	-	0.8	0.8	-	-	-	-	-	0.2	-	-	-	0.4	0.2	15.6	2.4	-	5.0	0.2	-	1.6	-	0.2	1.0	0.2	7.6	
010917 Wandering	67.8	-	1.2	0.4	0.2	0.2	0.4	1.4	10.6	0.2	0.2	-	-	-	0.2	-	-	-	-	-	0.2	35.6	6.0	0.2	3.4	0.2	-	0.2	-	0.8	0.4	5.8		
011003 Eucla	23.2	30	-	-	-	0.2	-	-	-	-	1.2	5.0	0.4	0.4	2.0	2.4	3.4	1.6	-	-	-	0.2	35.6	6.0	0.2	3.4	0.2	-	»	2.2	0.2	-	1.0	
011052 Forrest	17.4	-	-	-	-	-	-	-	-	-	10.8	-	-	-	-	0.4	1.0	0.8	0.6	-	-	-	-	3.4	-	-	-	-	-	-	0.4	-	-	
012038 Kalgoorlie-Boulder Airport	15.0	26	-	-	-	-	-	-	2.4	1.2	»	»	»	-	-	-	-	-	-	-	-	10.2	-	-	-	-	-	-	-	-	1.0	0.2	-	
012071 Salmon Gums Res.Stn.	34.4	37	-	-	6.6	0.2	0.4	-	0.2	8.0	8.8	0.2	1.2	-	-	-	1.2	0.2	0.2	-	-	1.0	1.8	-	0.2	-	-	0.6	-	-	0.8	0.2	2.6	
013011 Warburton Airfield	6.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.4	-	0.4	3.6	-	-	-	-	
013012 Wiluna	4.0	21	-	-	-	-	-	-	-	-	-	-	-	-	1.8	0.4	-	-	-	»	»	»	1.6	-	0.2	-	-	-	-	-	-	-	-	
013017 Giles Meteorological Office	0.8	7.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.4	-	-	-	-	
Northern Territory	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
014015 Darwin Airport	-	1.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
014198 Jabiru Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
014932 Tindal RAAF	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
014508 Gove Airport	38.4	7.2	18.0	-	-	-	-	1.2	-	7.0	1.2	0.2	2.2	-	-	-	-	-	-	-	-	-	1.0	0.2	-	-	0.2	-	-	-	-	-	-	-
014723 Borroloola Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
014825 Victoria River Downs	-	6.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
015135 Tennant Creek Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
015590 Alice Springs Airport	-	16	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
015635 Yulara Airport	9.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	8.0	1.2	-	-	-	-	-	
015666 Rabbit Flat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
South Australia	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
016001 Woomera Aerodrome	3.0	17	-	-	-	-	-	-	-	-	-	-	-	-	-	0.8	-	-	-	0.2	-	-	-	0.2	0.2	1.4	0.2	-	-	-	-	-	-	

Daily and total rainfall for July 2015

New South Wales	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
046037 Tiboburra Post Office	1.2	19	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.2	0.2	0.8	-	-	-	-	-	-	-	
047007 Broken Hill (Patton Street)	16.8	-	-	-	0.2	-	-	-	-	-	-	-	-	6.0	0.2	0.8	4.4	2.0	0.6	0.2	0.2	-	-	-	-	0.4	1.6	-	-	-	0.2	-	-	
048027 Cobar MO	32.6	30	-	-	-	-	-	-	-	-	-	1.6	-	6.2	4.8	0.4	0.2	8.6	2.8	-	-	-	-	-	0.2	7.4	0.2	0.2	-	-	-	-	-	
048245 Bourke Airport AWS	18.8	-	3.6	-	-	-	-	-	-	-	-	1.0	2.8	0.8	-	0.2	-	-	1.2	0.6	-	-	-	-	3.4	4.6	0.2	0.2	0.2	-	-	-	-	
049000 Ivanhoe Aerodrome AWS	22.6	-	0.4	-	-	-	0.2	-	0.4	0.2	-	0.2	-	2.2	2.2	0.4	4.6	1.2	1.2	-	-	-	-	-	8.6	0.4	0.2	0.2	-	-	-	-	-	
050052 Condobolin Ag Research Stn	41.2	34	0.8	-	-	-	-	-	-	-	-	5.4	0.4	4.4	4.2	0.4	0.6	12.0	4.6	-	-	-	-	-	-	7.6	0.2	0.4	-	0.1	-	-	0.1	
051039 Nyngan Airport	35.0	32	-	-	-	-	-	-	-	-	-	-	-	3.2	0.8	1.0	0.2	0.4	5.6	1.2	-	-	-	-	22.6	-	-	-	-	-	-	-	-	
052088 Walgett Airport AWS	44.4	-	9.4	0.2	-	-	0.2	-	-	-	-	-	11.0	0.2	0.8	-	-	5.8	2.2	-	-	-	-	0.4	-	9.2	4.2	0.8	-	-	-	-	-	
053115 Moree Aero	35.0	-	3.8	0.2	»	»	0.2	-	-	-	-	»	»	8.0	-	-	-	1.8	»	»	0.4	-	-	-	-	2.6	»	»	»	17.8	0.2	-	-	-
054038 Narrabri Airport AWS	21.0	-	5.6	0.2	0.2	-	-	-	-	-	-	2.2	3.2	3.8	1.0	0.2	-	-	-	-	-	-	-	-	4.6	-	-	-	-	-	-	-	-	
055024 Gunnedah Resource Centre	30.4	44	0.4	-	-	-	-	-	-	-	-	-	-	2.8	3.8	4.0	1.4	-	2.8	0.8	-	-	-	0.6	0.4	2.6	6.2	4.6	-	-	-	-	-	
055325 Tamworth Airport AWS	33.8	-	3.0	0.2	-	-	-	-	0.2	-	-	-	1.4	1.4	5.6	1.0	-	3.4	1.0	0.2	-	-	-	-	0.6	6.0	9.6	0.2	-	-	-	-	-	
056242 Inverell (Raglan St)	54.0	-	0.4	0.2	-	-	-	-	-	-	-	-	1.4	5.0	3.6	0.4	-	-	0.6	1.2	-	-	-	-	13.0	8.6	19.6	-	-	-	-	-	-	
057095 Tabulam (Muirne)	18.8	-	-	-	-	-	-	-	-	-	2.0	0.2	-	3.4	-	-	-	-	-	-	-	-	-	0.2	1.4	2.8	1.4	0.4	7.0	-	-	-	-	
058012 Yamba Pilot Station	82.6	85	0.2	-	-	-	-	-	0.2	1.4	27.2	2.8	0.2	0.2	-	-	-	-	-	-	-	0.2	21.4	4.2	2.6	3.6	6.6	8.6	-	-	-	-	3.0	0.2
059040 Coffs Harbour MO	32.2	63	0.2	-	-	-	0.2	-	0.2	-	-	-	0.2	-	0.6	-	-	-	-	-	-	-	-	-	9.4	12.8	1.4	0.2	2.8	2.6	-	0.2	1.4	-
060139 Port Macquarie Airport AWS	12.2	-	0.2	-	-	-	-	-	-	0.2	0.2	0.6	-	-	-	-	-	-	-	-	-	-	-	5.2	0.6	0.6	-	0.4	4.2	-	-	-	-	-
061078 Williamtown RAAF	44.0	62	2.4	-	-	-	-	-	-	6.0	3.0	-	-	-	2.2	2.2	-	-	»	»	5.0	17.6	0.2	-	1.2	»	»	»	»	4.2	-	-	-	-
061363 Scone Airport AWS	37.2	-	2.2	0.2	-	-	0.2	-	-	-	-	-	0.4	9.2	3.2	1.8	-	1.2	1.8	2.4	-	-	0.2	0.2	0.2	3.2	9.0	1.6	0.2	-	-	-	-	-
062101 Mudgee Airport AWS	52.6	-	0.2	0.2	-	-	0.2	-	-	-	-	-	11.8	10.2	10.0	2.2	0.6	10.0	1.8	-	0.2	-	-	-	4.6	-	0.6	-	-	-	-	-	-	
063005 Bathurst Agricultural Station	48.1	45	0.4	-	-	-	-	-	-	-	-	-	13.4	1.6	3.6	3.0	0.6	6.8	8.2	0.4	-	0.2	-	-	0.7	6.2	-	3.0	-	-	-	-	-	
063254 Orange Agricultural Institute	111.2	89	0.8	0.2	0.2	»	»	0.2	0.2	-	»	0.4	-	»	61.0	7.6	1.4	8.2	7.4	»	»	0.6	0.2	-	17.4	0.2	-	»	4.8	-	0.2	-	0.2	
064008 Coonabarabran (Namoi Street)	45.6	53	0.6	-	-	-	-	-	-	-	-	-	6.0	1.4	8.6	0.2	0.2	9.4	2.0	-	-	-	-	-	3.6	8.4	2.6	2.4	-	-	-	-	-	
065070 Dubbo Airport AWS	60.2	-	0.6	-	0.2	-	-	-	0.2	-	-	-	5.2	9.2	9.6	2.2	-	14.6	7.0	-	0.2	0.2	-	-	10.6	-	0.4	-	-	-	-	-	-	
066062 Sydney (Observatory Hill)	47.0	56	1.0	-	-	-	-	-	5.6	-	-	-	0.8	2.2	4.8	0.6	0.2	0.2	17.2	9.0	0.6	-	3.0	-	1.8	-	-	-	-	-	-	-	-	
067105 Richmond RAAF	24.2	-	2.6	0.2	0.2	-	-	0.2	-	-	-	-	1.2	5.6	1.0	-	0.2	3.0	8.0	-	0.2	-	-	-	1.8	-	-	-	-	-	-	-	-	
068072 Nowra RAN Air Station AWS	76.4	-	0.2	-	-	-	-	-	-	-	0.2	-	3.4	0.4	7.8	-	-	61.6	-	0.4	0.2	0.2	0.2	1.6	0.2	-	-	-	-	-	-	-	-	
068151 Jervis Bay (Point Perpendicular)	175.2	-	0.8	0.2	0.4	-	-	-	1.4	31.0	1.0	-	1.8	6.8	0.4	-	0.2	0.4	110.6	3.4	14.6	0.4	-	-	1.4	0.4	-	-	-	-	-	-	-	
068241 Albion Park (Wollongong Airport)	30.6	-	0.2	-	-	-	-	-	-	-	-	-	6.4	3.4	-	-	-	17.4	-	0.4	-	-	-	2.8	-	-	-	-	-	-	-	-	-	
069018 Moruya Heads Pilot Station	93.2	43	-	-	2.4	-	-	-	2.4	0.2	-	-	0.6	4.2	9.0	-	-	21.4	50.6	-	-	0.2	0.2	-	1.6	0.4	-	-	-	-	-	-	-	
070351 Canberra Airport	37.2	-	-	-	-	0.2	-	0.2	-	-	-	-	2.6	7.2	10.2	1.4	-	3.2	0.4	0.2	-	0.2	-	0.2	0.6	2.2	2.4	-	-	-	-	-	-	
071041 Thredbo Village	174.9	-	0.8	1.5	0.6	-	-	0.1	0.1	-	-	11.8	14.4	17.0	27.3	2.8	-	6.6	4.0	1.5	-	-	-	-	11.4	14.2	0.3	34.6	13.9	-	8.0	-	4.0	
072150 Wagga Wagga AMO	69.2	55	-	-	-	0.6	-	-	-	-	-	6.2	-	14.0	3.8	2.2	6.4	6.8	-	0.2	-	-	-	-	9.0	10.2	-	7.0	0.8	1.2	-	0.2	0.6	
072160 Albury Airport AWS	43.6	-	0.8	0.8	-	-	-	-	-	-	-	1.8	2.4	5.4	2.8	-	10.0	4.4	0.2	-	-	-	-	3.0	2.8	0.2	5.8	3.0	-	-	-	-	0.2	
072161 Cabramurra SMHEA AWS	139.2	-	-	2.0	5.2	-	-	-	-	3.2	-	4.4	3.2	32.4	3.2	24.6	0.8	1.0	0.2	-	-	-	-	-	2.2	10.8	-	26.4	9.2	10.2	-	0.2	-	
073054 Wyalong Post Office	80.8	42	0.4	-	-	-	-	-	0.2	-	-	10.0	4.4	7.4	7.8	1.4	1.8	22.6	8.6	0.2	-	-	-	-	12.6	3.0	-	-	0.4	-	-	-	-	
074258 Deniliquin Airport AWS	27.8	-	-	-	-	-	-	1.0	0.2	-	-	1.2	1.6	6.6	6.6	0.2	4.2	0.8	0.2	-	-	-	-	0.2	1.2	0.2	2.6	0.4	0.6	-	-	-	-	
Victoria	Total	Avg	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
076031 Mildura Airport	11.6	26	-	-	-	-	-	-	-	-	-	-	0.4	5.6	-	0.2	3.4	1.4	-	-	-	-	-	-	-	-	-	0.2	-	0.4	-	-	-	
077008 Birchip (Woodlands)	22.4	35	-	-	-	-	-	-	7.2	-	-	4.8	1.8	-	-	-	-	-	-	-	-	-	-	-	-	3.0	2.8	1.4	-	-	-	-	1.4	
078015 Nhili Aerodrome	21.2	-	1.4	-	-	-	-	0.4	0.2	-	0.6	0.2	1.8	3.8	0.6	0.2	1.6	0.2	0.2	0.4	-	-	-	-	-	2.8	4.4	0.8	0.2	0.2	-	-	1.2	
079082 Horsham	25.8	50	-	0.4	-	-	-	-	1.0	-	-	-	0.4	9.0	-	0.2	3.0	2.0	-	-	-	-	»	»	»	»	»	»	»	»	»	»	»	9.8
080023 Kerang	26.6	39	-	-	-	-	-	2.4	0.2	-	-	-	1.2	10.0	5.0	0.2	5.2	0.2	-	-	-	-	-	0.6	-	-	-	1.4	-	-	-	-	0.2	
081123 Bendigo Airport	52.8	-	0.2	0.4	-	-	-	-	1.6	0.2	-	-	7.6	10.6	4.0	1.6	11.0	-	0.2	-	-	-	-	-	4.6	0.2	4.0	3.2	2.4	-	0.2	-	0.8	
082038 Rutherglen Research	53.0	69	-	1.2	0.2	-	-	-	0.2	-	0.2	0.6	5.0	15.4	2.4	-	12.2	0.6	-	-	0.2	-	-	-	3.6	4.6	0.2	4.2	1.8	-	0.2	0.2	-	
083085 Mount Hotham	51.4	-	0.2	-	3.4	0.2	1.6	-	-	-	-	-	»	2.8	8.0	-	-	-	-	-	-	-	-	33.6	10.8	1.6	-	-	-	-	-	-	-	
084016 Gabo Island Lighthouse	100.0	92	-	0.6	2.8	-	-	-	14.0	1.0	-	»	7.8	27.0	1.2	-	16.0	16.0	6.8	»	2.2	-	-	-	2.2	-	-	-	-	-	-	-	-	
084145 Orbost	106.8	-	1.2	3.0	-	-	-	16.4	2.6	0.2	-	-	5.0	50.4	3.2	2.2	9.6	2.4	7.4	1.4	0.2	0.2	-	-	-	0.4	-	0.8	-	-	-	0.2	-	
085072 East Sale Airport	26.2	43	-	-	5.8	-	-	0.4	3.8	2.2	0.2	0.4	-	1.2	2.8	1.2	1.0	0.2	-	1.8	-	-	0.2	-	0.2	-	3.4	0.8	0.2	0.4	-	-	-	
085096 Wilsons Promontory Lighthouse	127.0	134	1.2	25.6	0.2	0.2	0.6	-	12.0	-	-	-	1.4	40.6	5.6	3.6	0.8	-	-	-	-	-	-	0.4	-	10.4	7.8	9.8	1.0	-	-	-	5.8	
087031 Laverton RAAF	44.2	43	-	0.4	0.2	0.6	1.8	4.0	1.0	-	-	-	1.4	3.8	14.4	1.2	3.4	-	1.2	2.4	-	-	0.2	1.0	-	0.2	2.8	1.6	1.4	-	-	-	1.2	
087184 Breakwater (Geelong Racecourse)	30.4	-	1.8	0.2	-	0.6	-	2.4	0.2	-	-	-	4.0	-	1.4	5.2	0.8	3.4	3.6	-	0.2	-												