Climatic Extremes

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Australia's average daily mean temperatures

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Australia is a land of extremes with temperatures ranging from highs of 40°C in the central desert regions to below freezing in the higher regions of the country's southeast.

Sometimes these extremes can be experienced on a single day.



From its northern most point at 10° 41′ 21″S on Cape York to the southern tip of Tasmania at 43° 38′ 40″S, Australia experiences almost every climatic condition encountered elsewhere in the world, along with some that are unique. One of the most significant features of Australia's climate is its long, hot and often dry summers.

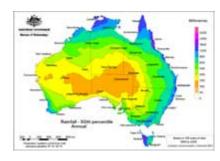
Several places can claim to be the hottest in Australia, depending on how the temperature is measured. The variants include the place with the highest recorded temperature, the most frequent occurrences of high temperatures or the hottest yearly average.

| RECORD TEMPERATURES | PLACE | TEMPERATURE (° C) | DATE |
|---|------------------------------------|----------------------------------|------------------------------------|
| Highest recorded temperature | Oodnadatta, South Australia | 50.7°C | 1960 |
| Lowest recorded temperature | Charlotte Pass, New South Wales | -23°C | 1994 |
| Highest average monthly maximum temperature | Marble Bar, Western Australia | 41.5°C | December |
| Longest hot spell | Marble Bar, Western Australia | 160 days over 37.8°C or 100°F | 31 October 1923 to 7 April 1924 |
| Greatest diurnal temperature range | Eyre, Western Australia | 6.8°C to 44.2°C | 5 March 2008 |
| Greatest overall temperature range | Richmond, New South Wales | -8.3°C to 47.8°C | - |

Australia's 50th percentile annual rainfall.

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Rainfall in Australia is highly variable with low average annual rainfall over most of the continent and intense seasonal falls in the tropics.



The rainfall pattern is concentric around the extensive arid core of the continent, which in the west and along parts of the Great Australian Bight extends to the coast. Around this arid centre there is a broken margin of more humid conditions which increases the level of precipitation as it nears the coast, particularly in the east of the continent.

The wettest regions are around Cairns in far north Queensland and the west coast of Tasmania around Strahan, about 1600 kilometres to the south. The effects of this widely varied rainfall pattern and Australia's drainage system can lead to parts of the continent being in drought, but inundated by waters from rainfall thousands of kilometres away. This phenomena is most prevalent after heavy cyclonic rains in the north, which causes flooding in drought stricken areas in the south. An example of this is the normally dry salt expanse of Lake Eyre in South Australia which receives very little rainfall, but experiences extensive flooding after rain in north Queensland, typically after tropical cyclonic rain.

| STATISTIC | PLACE | RAINFALL |
|--|---|------------------------|
| Average annual rainfall | Australia | 165mm |
| Highest annual rainfall | Bellenden Ker, North Queensland (2000) | 12 461mm |
| Highest median annual rainfall | Bellenden Ker, North Queensland | 7950mm |
| Highest daily rainfall in 24 hours to 9:00am | Crohamhurst, Southeast Queensland (1893) | 907mm |
| Most frequent rainfall | Lake Margaret, Western Tasmania | 237 days/yr average |
| Driest area | Lake Eyre, South Australia | 125mm/yr |

Related Information



Maps

Australian Land Tenure Map 1993