

March was Australia's hottest on record, with temperatures 2C above average

Hot weather came after sweltering summer and unusually dry season in Western Australia and the Northern Territory

By Michael McGowan / Tue 2 Apr 2019 / theguardian.com



Temperatures across Australia were 2.13C above the average throughout March, according to Bureau of Meteorology data. Photograph: Steven Saphore/AAP

An abnormally hot summer in Australia ended with the warmest March on record, new data from the Bureau of Meteorology shows.

The latest monthly climate breakdown shows that despite two severe tropical cyclones in the northern states, temperatures across Australia were 2.13C above the average throughout last month in part due to an unusually dry summer in Western Australia and the Northern Territory.

“One of the standout features of March was there was above-average temperatures just about everywhere; more than 99% of the country,” Blair Trewin, a senior climatologist at the bureau told Guardian Australia.

“Really a few things came together: the overall, long-term background trend [of rising temperatures] means you’re starting from a higher base, which increases the probability of records.

“Another major factor has been that the summer monsoon season in the tropics has been quite weak. Normally in the tropics in the summer you see fairly regular incursions of rainfall and moisture into the continent. That has been happening in Queensland but not really in Western Australia or the Northern Territory.”

The record temperatures in March follow records in January, while February was in the top five on record. Last year was Australia’s third-warmest year on record. It beat out the previous third-place holder, 2017.

The 2018 state of the climate report from the bureau and CSIRO found Australia was experiencing more extreme heat, longer fire seasons, rising oceans and more marine heatwaves consistent with a changing climate.

So, is this the new normal?

“It’s not as if we’re going to see records every month, even in the warmer overall climate we have now,” Trewin said.

“This is still a very abnormal summer, when you break the record for the warmest first quarter by 0.9 of a degree, that’s not a small number. It’s been an unusually hot few months, the background warming trend we see in Australia is in the order of 0.1 to 0.2 of a degree per decade.

“Even in the climate of 2019 this is unusual, but is not as unusual as it would have been in say 1980 or 1950.”

According to the bureau’s report, two severe tropical cyclones – Trevor and Veronica - contributed to very much above-average rainfall in parts of north Queensland, the east of the Northern Territory, north-east South Australia and parts of the Pilbara coast.

A wet end to the month brought totals to above average for eastern New South Wales, far-eastern Victoria and south-east Queensland.

However the report noted that “unfortunately, the rain needed to reduce significant rainfall deficiencies in drought-affected areas is substantial and will require above-average rainfall over a prolonged period to completely remove deficits at longer timescales”.

Trewin said that without those downpours, the overall average would have been higher.

“It had a bit of a cooling effect particularly in Queensland, though they still came in with their fifth warmest March on record,” he said.

The outlook is not particularly promising either. Trewin said most areas had a “neutral” outlook for rainfall, with the expectation of above-average temperatures to continue.