

## Hot start to 2019 after Australia ends its third-warmest year

Peter Hannam. 31 December 2018 — 4:32pm

The searing end to 2018 for much of Australia will likely make it the third-hottest on record for maximum temperatures with little early relief in sight in the new year, preliminary data from the Bureau of Meteorology shows. For mean temperatures, 2018 will also come in among the top five, according to bureau meteorologist Skye Tobin. The year was also "very much drier" than average for Australia, particularly in the south-east.

In New South Wales, Hay, Ivanhoe and Wilcania recorded the highest temperatures, reaching 44 degrees Celsius while in the east, there was little relief with the mercury peaking at 40 degrees in Penrith.

All but one of the country's top 10 hottest years have occurred since 2005, a result "in line with long-term trends resulting from anthropogenic climate change", the bureau said in a summary on 2018's national weather.

Up until the middle of December, more than two-thirds of Australia was recording very much above average daytime temperatures for 2018. Pockets of the nation, such as east Gippsland in Victoria and inland northern NSW, were enduring their hottest year on record for maximums.

"It's very likely that NSW will be amongst the warmest three years on record for both mean temperatures and maximum temperatures," Ms Tobin said. Less heat and more rain: what many Australians will be hoping 2019 brings. Credit: Joe Armao

Despite late rains – often connected to storms and even flash-flooding in places – NSW was also likely to post among its 10 driest years on record, she said. Sydney just cleared the 1000-millimetres mark for rainfall – by 0.2 millimetres – but that was well shy of its long-run average of 1215.7 millimetres, based on bureau records going back to 1858. It was the driest year since 2014.

Victoria's 2018 was marked by both days and nights being above average for temperatures. The state was likely to have had a top-10 year for both warmth and dry conditions.

Melbourne itself had a "very dry year", while maximum temperatures will come in about a degree above the norm, Ms Tobin said.

Indeed, almost all of south-eastern mainland Australia, including the eastern half of South Australia, was on track to record below to very much below average rainfall for the year. The April-September period was the fourth-driest on record for southern Australia.

The national temperature readings will have been given a nudge higher in the final month, which included record-smashing heat in northern Queensland. For the past week, a blocking high-pressure system in the Tasman Sea has created ideal conditions for heat to intensify over inland Australia.

Records have fallen for daytime and night-time readings in places ranging from Marble Bar in the Pilbara to Alice Springs in the red centre, to Albury in the south-east. Poor air quality, particularly high ozone levels, has been a feature of the recent heat scorching western suburbs of Sydney. Credit: Wolter Peeters "The pattern doesn't change for the next week," said Gabrielle Woodhouse, duty forecaster from the bureau.

The heat will again build up by the end of the week, with parts of north-western Victoria and south-western NSW likely to reach 45 degrees by Saturday, the bureau forecasts.

Australia was hardly alone in recording a hot year.

"For the globe as a whole, 2018 is likely to be the fourth-warmest year on record, continuing the recent pattern of very warm years," the bureau said. Temperatures are now about 1.1 degrees above the pre-industrial norm. That's more than half way to the 2-degree upper limit of warming almost 200 nations agreed to work towards under the Paris climate agreement signed in 2015.