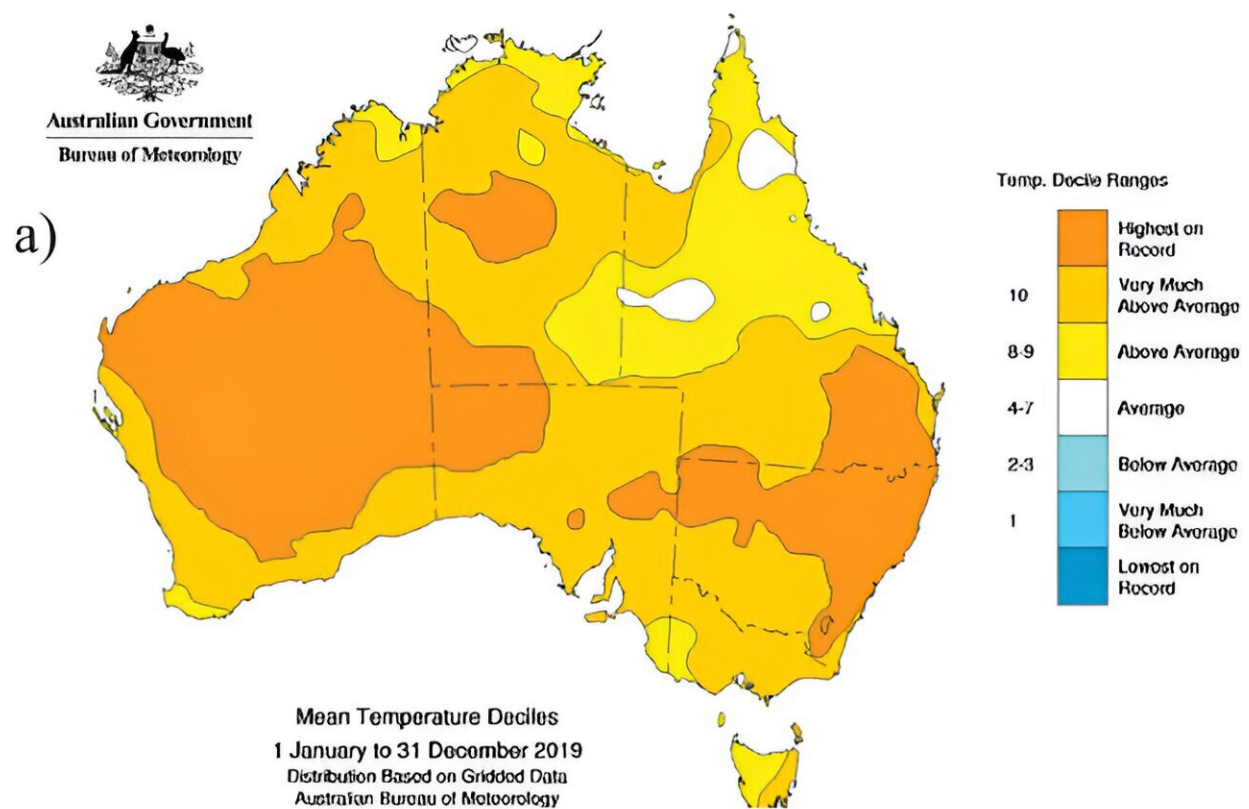


# Researcher: Black Summer response shows Australia is good in an emergency but bad in a crisis

December 6 2023, by Peter Christoff



Air temperature [31]: a) Annual mean temperatures compared to historical temperature observations, b) Mean temperature anomalies averaged over Australia. Deciles show whether temperature is above average, average or below average for the time period and area chosen. The black line shows the 11-year moving average. Pictures and data were published in the Bureau of Meteorology's annual statement [31] under Creative Commons licensing

arrangements. Credit: *Journal of Safety Science and Resilience* (2020). DOI: 10.1016/j.jnlssr.2020.06.009

It was a summer in Hell.

More than [15,000 fires blazed across half a continent](#), the skies pitch-black by day and lurid red by night.

Small country towns were enveloped in storms of burning embers. People huddled in their homes or in community halls or cowered on beaches watching the walls of flame and listening to the roaring winds.

In forced evacuations, they escaped by sea or in cavalcades kilometers long that queued for petrol and crawled along highways fringed by flames. Acts of heroism in the face of terrifying challenges proved the difference between having a home or losing everything, and sometimes between life or death.

Normally insulated by distance, Australia's eastern cities became vulnerable. Canberra and Greater Sydney were directly threatened by [fire](#). Dense smoke shrouded Brisbane, Sydney, Melbourne and Canberra, reducing visibility to tens of meters and randomly setting off indoor smoke alarms.

For many days over five months, more than 12 million people—almost half Australia's population—breathed air that failed to meet national health quality standards and often registered as the [world's most polluted](#) by a significant margin.

The atmospheric impact was larger than anything previously recorded for wildfires globally.

The Fires created a vortex a thousand kilometers wide. The smoke plume rose some [35 kilometers into the stratosphere](#) and circumnavigated the Earth.

The [2019-2020 Black Summer fires](#) were the [largest experienced in Australia in modern times](#) and, at 24.3 million hectares, produced among the largest areas burnt anywhere on Earth in one event.

It is also estimated that [the fires released](#) between 715 and 830 million tons of greenhouse gases, [more than one and a half times](#) Australia's human-generated national emissions in 2019.

The Black Summer was not only a [national emergency](#), it also reflected and emerged from broader systemic crises that had made fires of such scale and impact possible.

These terms—crisis and emergency—are often used interchangeably, sometimes to refer to immediate threats, sometimes to ones that can last for a long time.

We speak of enduring states of emergency and of fleeting crises. How crises and emergencies relate to each other—indeed whether the terms refer to the same thing—is often left ill defined.

Here I am using 'crisis' to refer to a period of heightened risk that threatens, or causes, profound systemic change and harm. By contrast, an 'emergency' here refers to a brief 'peak event' that arises during a crisis and defines an immediate threat of serious harm.

Emergencies require a swift intervention—one that might possibly resolve not only the emergency itself but also the underlying crisis that produced it.

Very few emergencies occur without a preceding crisis (whether acknowledged or not), and crises invariably are the product of drivers that reflect a larger context of neglect.

The COVID-19 pandemic is a case in point.

Since the Great Influenza (also known as the Spanish influenza) epidemic of 1918-20, medical researchers and epidemiologists have warned about the dangers of pandemics being accentuated by rapid and potentially lethal global chains of human transmission.

Their concerns increased with the AIDS, SARS and MERS epidemics. SARS in 2003 and MERS in 2012 also heightened awareness of viral pathways leading from wildlife to humans, and of the novelty of coronaviruses.

Nevertheless adequate precautionary action—such as the preparation of robust pandemic management strategies—was largely neglected.

This neglect created the crisis context of 'global pandemic vulnerability' that amplified the emergency of the COVID-19 pandemic, with aftershocks that will last for many years.

Similarly, Australia's recent environmental emergencies—its mounting toll of coral bleaching events, mass fish deaths, species extinctions and wildfires—have resulted from much longer crises.

The path to these emergencies has been laid through two centuries of land use inappropriate to Australia's ecological systems, with wholesale clearing of native vegetation and infrequent burning based on imported agricultural practices and a European world view imposed on a misinterpreted landscape.

The Fires were tragic testimony to limited preparation across different layers and domains of government and society.

At the heart of this statement, however, lies a question: given the unprecedented scale and intensity of those fires, to what extent could or should preparation have been better?

This question was a central focus of the various national and state inquiries into the Fires.

Their findings were unequivocal: while acknowledging the unique (to date) weather characteristics that underlay the Black Summer, preparation could have been better—but the emergency response was exemplary, given existing capacities.

In all, the inquiries highlighted the extent to which Australia continues to depend on a flawed and reactive, rather than proactive and pre-emptive, approach to climate adaptation and (fire) risk management.

The Fires have not been the game changer for climate politics and administrative responses that one might have hoped for and expected.

The tricky politics of climate adaptation, emergency management and risk minimisation are only beginning to come into focus. Meanwhile, fresh data and projections show that the extraordinary climatic conditions that produced the Fires in 2019–20 will be approaching the ['new normal'](#) by 2050.

In November 2021, I drove from Canberra, down through the Alps and via Cann River through to Melbourne. Thanks to La Niña, it had been a very wet spring and good for regrowth.

From the distance, East Gippsland's hills appeared verdant again. The

forest still bristled with dead trunks reaching up from a carpet of green, but the greater mass of trees were furred with new foliage sprouting from their scorched bark.

Where I stopped, the undergrowth was thin and the ground bare. It was midday, and the day was hot and still. Even so, the forest was unnaturally silent.

It is impossible to tell, by casually looking and listening, what sort of recovery might be underway and how much of the damage is permanent.

We will face more and fiercer fire seasons, and potentially more megafires, in the future, given climate change.

The until-now infrequent parched and superheated conditions and the rare pyroclastic storms that contributed to the Black Summer will be the 'new normal' only decades from now.

We need new approaches to prepare for these changing conditions before they eventuate.

Lives, human and other, depend on it.

Provided by University of Melbourne

Citation: Researcher: Black Summer response shows Australia is good in an emergency but bad in a crisis (2023, December 6) retrieved 27 April 2024 from

<https://phys.org/news/2023-12-black-summer-response-australia-good.html>

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