

## **Australian Actuaries Climate Index shows extreme weather continues through Autumn 2019**

**12 September 2019**

- **Extreme heat and dryness continued through Autumn 2019**
- **Hot conditions and lightning strikes led to multiple significant bushfires**
- **Autumn 2019 ranked as the second highest Autumn for extreme temperatures, and the third highest across all seasons since the index started in 1981**

The [Australian Actuaries Climate Index](#) shows Autumn 2019 continued the pattern of extreme weather: last Autumn ranked as the second most extreme in the number of hot days ever recorded in the three months from March, and the third when ranked against all seasons. Only the Autumn of 2016 and the Summer of 2018/2019 showed more extreme high temperatures.

The trend is consistent with climate change projections from Australia's Bureau of Meteorology and CSIRO.

The Index, released today, is the fourth quarterly update of extreme weather conditions and sea levels across Australia and how these vary over time.

The Index shows changes in the frequency, or rate of occurrence, of extreme high and low temperatures, heavy precipitation, dry days, strong winds and changes in sea levels.

It is collated at the end of each season following the release of data from the Bureau of Meteorology. The data is collected nationally and grouped into 12 climatically consistent regions. Each season is compared to the same season in previous years and against a reference period of 1981-2010.

This shows long-term trends in extremes. Extremes in climate pose the greatest risk to people, communities, the environment and the economy.

"There is a growing urgency to understand the occurrence of extremes and the impacts of climate change on businesses and communities," said Actuaries Institute Chief Executive Elayne Grace.

"We have seen a strong rise in the momentum of interest from various parties, including from Australia's regulators, the Australian Prudential Regulation Authority and the Reserve Bank of Australia."

In Autumn 2019 there was a near doubling of the frequency of extreme high temperatures relative to the reference period (1981-2010) (see Figure 1).

Autumn continues the pattern seen in the Index over a number of seasons as Australia continues to break high temperature records. It is expected that we will continue to see temperature records broken over the years to come, said Tim Andrews, a consultant at Finity. Mr Andrews, an actuary, collates the Index for the Actuaries Institute.



Actuaries Institute President Nicolette Rubinsztein said the quarterly data allows regulators, companies, scientists and others to monitor trends in extremes, based on the data from weather bureau stations.

"It is crucial to build the Index over time, so we can assess change based on data and objectively contribute to this important public policy issue," Ms Rubinsztein said.

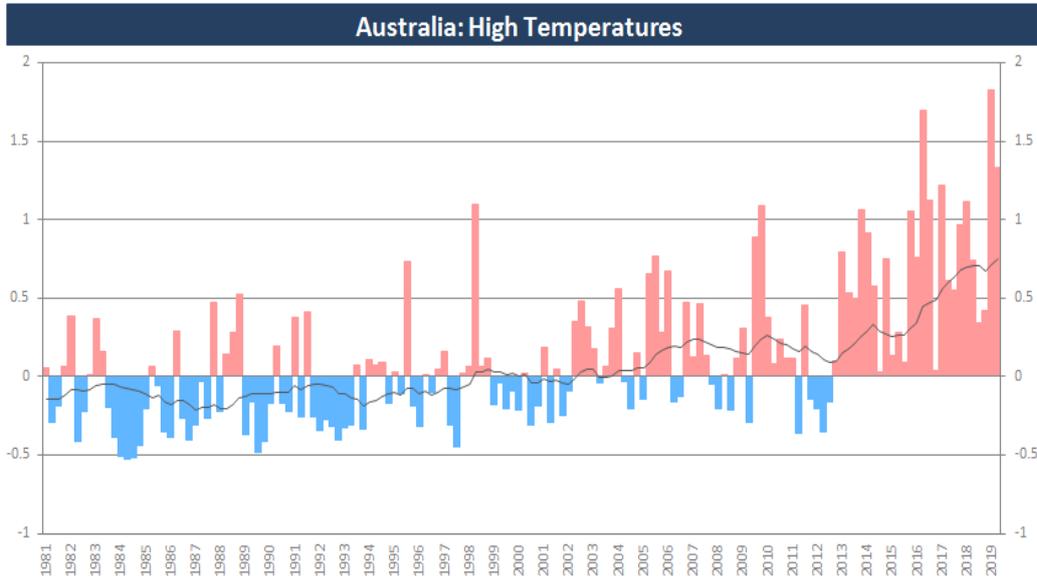
**For media inquiries please call**

Michelle Innis  
P&L Corporate Communications  
**m** +61 (0) 414 999 693  
**p** +61 (0) 2 9231 5411

**About the Actuaries Institute**

As the sole professional body for Members in Australia and overseas, the Actuaries Institute represents the interests of the profession to government, business and the community. Actuaries assess risks through long-term analyses, modelling and scenario planning across a wide range of business problems. This unrivalled expertise enables the profession to comment on a range of business-related issues including enterprise risk management and prudential regulation, retirement income policy, finance and investment, general insurance, life insurance and health financing.

Figure 1 – Australian Actuaries Climate Index High Temperature



The frequency of extreme high temperatures in Autumn 2019 was 96% above the long-term average (i.e. a near doubling).

Figure 2 – Australian Actuaries Climate Index Regional Results High Temperature

