

## News & Comments

# Eastern Australia is at Risk for More La Nina Events

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During La Nina, the surface temperatures of the Pacific Ocean are cooled to unusually low levels over the central and eastern Pacific oceans. This occurs every two to seven years.

New research finds that floods are likely to become more prevalent in Australia's eastern states due to increasing La Nina events in the coming decades. The presence of such a weather pattern could be due to the deceleration of the "conveyor belt" of currents in the Atlantic Ocean.

One of the strongest influencers on weather globally is the Atlantic meridional overturning circulation, which entails the constant flow of warm water.

According to the authors of the study, the Atlantic overturning had remained relatively stable for thousands of years but was slackening in recent decades. Additionally, the melting of greenhouse gases has accelerated the thawing of polar ice caps in Greenland and Antarctica, releasing huge quantities of fresh water into the oceans, which could undoubtedly change the physical characteristics of seawater, like its buoyancy thereby overturning marine ecosystems.

Several regions of Australia have witnessed the effects of persistent La Nina events like Unprecedented flooding in the previous year.

The research team of UNSW Scientia Professor Matthew England, Associate Professor Andrea S. Taschetto, and Bryam Orihuela-Pinto explained their findings in the Conversation online saying that "Global warming is slowed by the oceans, which absorb vast quantities of carbon dioxide and heat. Global warming is giving the whole system a massive kick that could ultimately lead to the collapse of the ocean's conveyor belt."

For such an environmental catastrophe to be avoided or at least ameliorated, a new low-carbon economy has to be developed quickly

### KEYWORDS

Climate change, Floods, Global warming, La Nina, Flooding

