



## STUDY FINDS WEATHER CHANGES FUEL VIOLENT BEHAVIOUR

By Katie Hamann, ABC  
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Researchers in the United States say they have established a link between changes in the weather and spikes in violence around the world.

A paper published in the journal *Science* reviewed 60 studies from around the world, all finding a close relationship between climate events such as monsoons and heatwaves and the incidence of violence.

Solomon Hsiang is the lead author of the study and an assistant professor of public policy at the University of California.

He says two papers - produced by an Australian researcher - found that extreme temperature events can lead to leadership changes and changes in governing institutions.

"[Another] study was looking at domestic violence behaviour in Brisbane, and it was demonstrating that based on hotter days, there was a higher rate of domestic violence calls into the local police department," Professor Hsiang said.

Researchers found there was a measurable increase in domestic violence in India during recent droughts and a spike in assaults, rapes and murders during heatwaves in the US.

Professor Hsiang says outbreaks of larger conflicts also seen to coincide with significant shifts in weather patterns.

"We examined shifts in the El Nino southern oscillation, which is an important determinate of the Australian climate," he said.

"What we found in that study was that when you shift from the cooler and wetter La Nina state to the hotter and drier El Nino state, the average rate of civil conflicts throughout the tropics doubled."

The authors of the report say they are not sure exactly how changes in weather make people more aggressive and say other factors such as economic disadvantage also play a role.

"When we examine different types of conflict, it seems very likely that different mechanisms are at play," Professor Hsiang said.

"For example when we look at domestic violence in Brisbane, [it is] likely that some of that could be related to a sort of physiological mechanism, something that changes on how we perceive other individuals when we're exposed to high temperatures.

"The reason we say that is because there's actually many studies in actual laboratories, where we put some people into a hot room and some people into a cool room and we observe that their behaviour changes."

With the world on track for a two degrees rise in temperatures because of climate change, Professor Hsiang expects an increase in domestic and personal crimes and larger group conflicts.

"Our estimates suggest that if we continue along this sort of business as usual trajectories, we should expect throughout most of the inhabited world, rates of interpersonal violence increase on the scale of 8-16 per cent, and for inter group conflict increase on the scale of 30-50 per cent."