

[sign in](#)

[home](#) › [environment](#)

[development](#)

[cities](#)

[US](#)

[world](#)

[opinion](#)

[sports](#)

[all](#)

Climate change

Lightning strikes will increase due to climate change

For every 1C of global warming lightning strikes will increase by about 12%, new research shows, but scientists don't yet know where increases will occur

[Video: Watch a year's worth of lightning strikes in the US](#)



A lightning storm in Denver, Colorado. New research has found global warming could result in 50% more lightning strikes by the end of the century. Photograph: Roger Hill/Barcroft USA

[Suzanne Goldenberg](#)

Thursday 13 November 2014 14.00 EST

Shares

123

Comments

34

Lightning will strike far more frequently in a world under climate change - but

researchers can still not predict exactly where or when those strikes will occur.

New research from the University of California, Berkeley, [published on Thursday in the journal Science](#), found warming conditions would result in 50% more lightning strikes by the end of the century.

“For every two lightning strikes you had at the beginning of the century, we will have three at the end of the century,” said David Romps, a researcher at the University of California, Berkeley.

Researchers have known for some time that climate change was producing more lightning strikes, and fatalities in developing countries have been rising in recent years. But the latest findings put a number on that rate of increase, using data from federal government scientific agencies.

The scientists found lightning strikes would increase by about 12% for every 1C of warming, resulting in about 50% more strikes by 2100.

At this point, however, the scientists are unable to predict where or when those strikes will occur. In the continental US, lightning strikes are especially common in the mid-west and the Tampa Bay area of Florida, so-called lightning alley.

“What we don’t know is where those increases will occur in the future,” Romps said. “It could be regions that get a lot of lightning strikes today will get even more in the future, or it could be that parts of the country that get very little lightning could get much in the future. We just don’t know at this point.”

The findings provide further evidence that climate change is having far greater effects on weather patterns than initially anticipated.

A few dozen people are killed in the US each year because of lightning strikes, with 25 so far this year, [according to the National Weather Service](#).

Lightning strikes are also a leading cause of wildfires - and have been responsible in the past for some of the most devastating blazes in the south-west. The deadliest wildfire in 20 years, [which killed 19 hotshot firefighters](#) near Yarnell, Arizona, was caused by a lightning strike last year.

The researchers used data from federal government agencies to establish the connection between warming temperatures, more energetic storms, and increased lightning strikes, and combined the findings with 11 climate models.

[Climate change \(Environment\)](#)

[Climate change \(Science\)](#)

[US weather](#)

[Meteorology](#)