

8 March 2016

Highest ever annual rise in carbon dioxide levels recorded

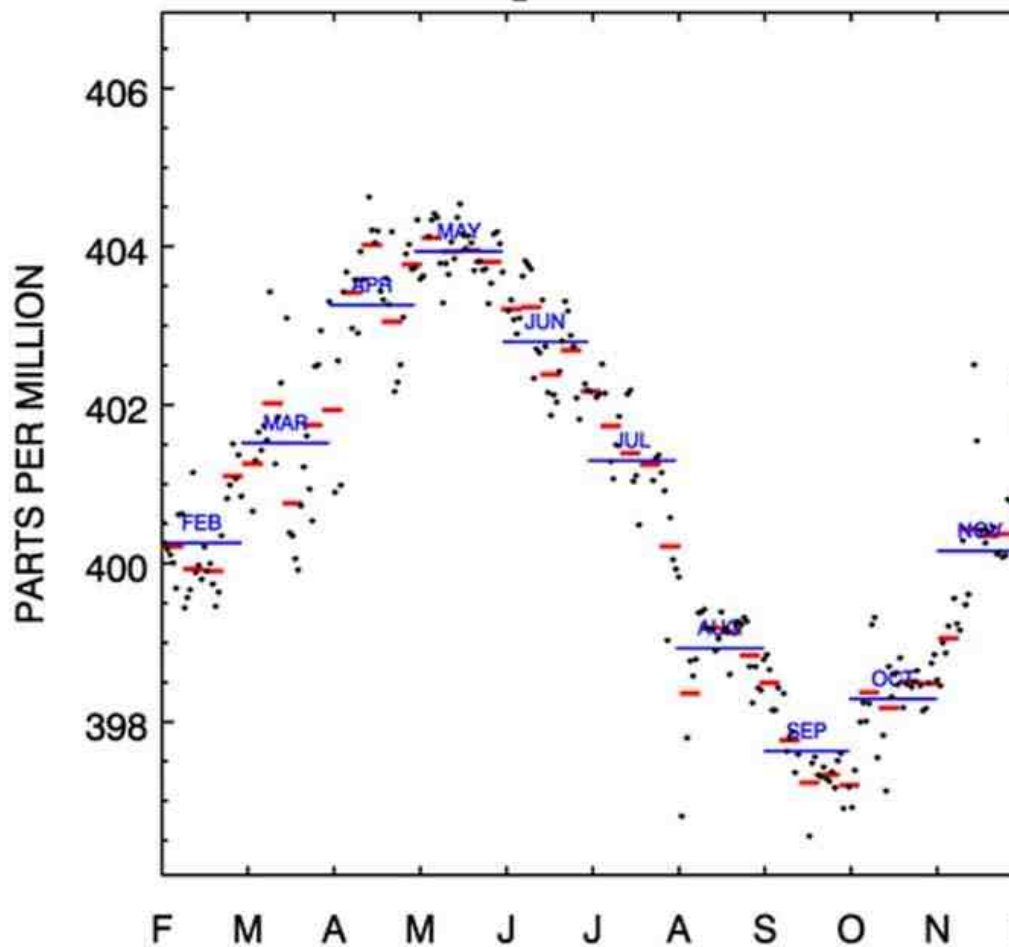


Mauna Loa Observatory in Hawaii
NOAA

It is not just [temperature records](#) that are falling. The average [carbon dioxide level](#) recorded at Mauna Loa, Hawaii, during February 2016 was 404.02 parts per million – 3.76 ppm higher than the average for February 2015, according to [preliminary figures](#).

That is the biggest ever increase over a 12-month period. The previous 12-month record at Mauna Loa was 3.70 ppm, from September 1997 to September 1998.

One year of CO₂ daily and weekly mean



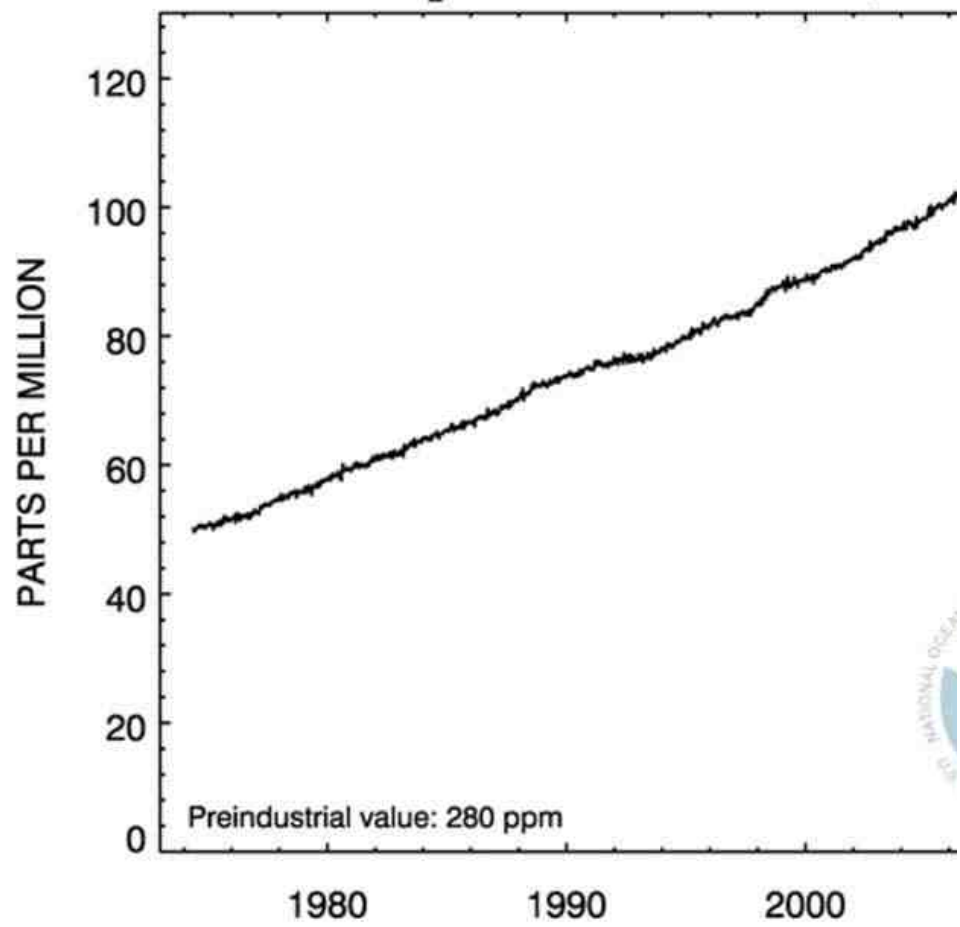
NOAA

A new record has also been set for the biggest rise over a calendar year. Global average CO₂ levels (which differ slightly from the figures for Mauna Loa only) [rose by 3.09 ppm in 2015](#). The previous record was a rise of 2.82 ppm, in 1998.

[The record figures](#) are due to the continued growth in emissions from human activity along with the ongoing El Niño phenomenon, which causes CO₂ levels to shoot up because it causes an increase in wildfires in places such as Indonesia.

They are, of course, bad news because the higher the levels of CO₂ are in the atmosphere, the more the planet will warm in the future.

Increase of CO₂ at Mauna Loa since pre-



Atmospheric increase of CO₂ over 280 ppm in weekly averages of CO₂ at

NOAA

Some [studies suggest](#) that [greenhouse gas emissions have fallen recently](#), but these studies typically only include emissions from energy generation and industry, and are based on countries' own estimates. They do not include changes in land use, such as deforestation and the loss of peat.

While the El Niño boost will be temporary, says [Ralph Keeling](#) of the Scripps Institution of Oceanography, the long-term trend is that more and more CO₂ is entering the atmosphere every year. What's more, the rate of growth continues to increase.