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CARBON DIOXIDE AT ALL-TIME HIGH IN HUMAN HISTORY

CO2 levels in the atmosphere have surged past an important threshold and may not climb down for "generations" despite environmental actions

The 400 parts per million benchmark was broken globally first time in recorded history last year. The World Meteorological Organization (WMO) says 2016 will probably be the first full year to exceed the mark

The spike can be partly attributed to a strong El Niño event

THE EL NINO LINK

- El Niño triggered drought conditions in tropical regions. This meant that vegetation was able to absorb less CO2
- Drier conditions sparked fires and these led to extra emissions

HOW SERIOUS?

- Monitored at the atmospheric monitoring station in Mauna Loa, Hawaii: **The CO2 count was 400 parts per million or 400 molecules of CO2 for every 1m molecules in atmosphere**
- The last time CO2 was regularly this high was **3m to 5m years ago**
- Before 1800, atmospheric levels were **around 280ppm,** experts say

DOES THE EL NINO EFFECT PERSIST?

No, El Niño factor has disappeared for now

- Modern human beings, who evolved in Africa only about 200,000 years ago, have never lived under such high atmospheric carbon dioxide levels
- Although 2016 is the first full year when the entire world has crossed the 400ppm threshold for CO2, isolated places have breached the mark in the past few years. It was recorded over the Arctic in 2012, and at Mauna Loa in 2013

WHAT DOES THAT MEAN?

- While 2015 ushered in an era of optimism and climate action with the Paris climate change agreement, it also marks a new era of climate change reality with record high greenhouse gas concentrations
- Other greenhouse gases, including methane and nitrous oxide, have been growing alarmingly
- Last year, methane levels were 2.5 times greater than in the pre-industrial era that started around 1800
- Nitrous oxide was 1.2 times above the historic measure
- The study points to the impact of these increased concentrations of warming gases on the world's climate

Source: BBC

"Without tackling CO2 emissions, we cannot tackle climate change and keep temperature increases to less than 2 degrees C above the pre-industrial era"

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