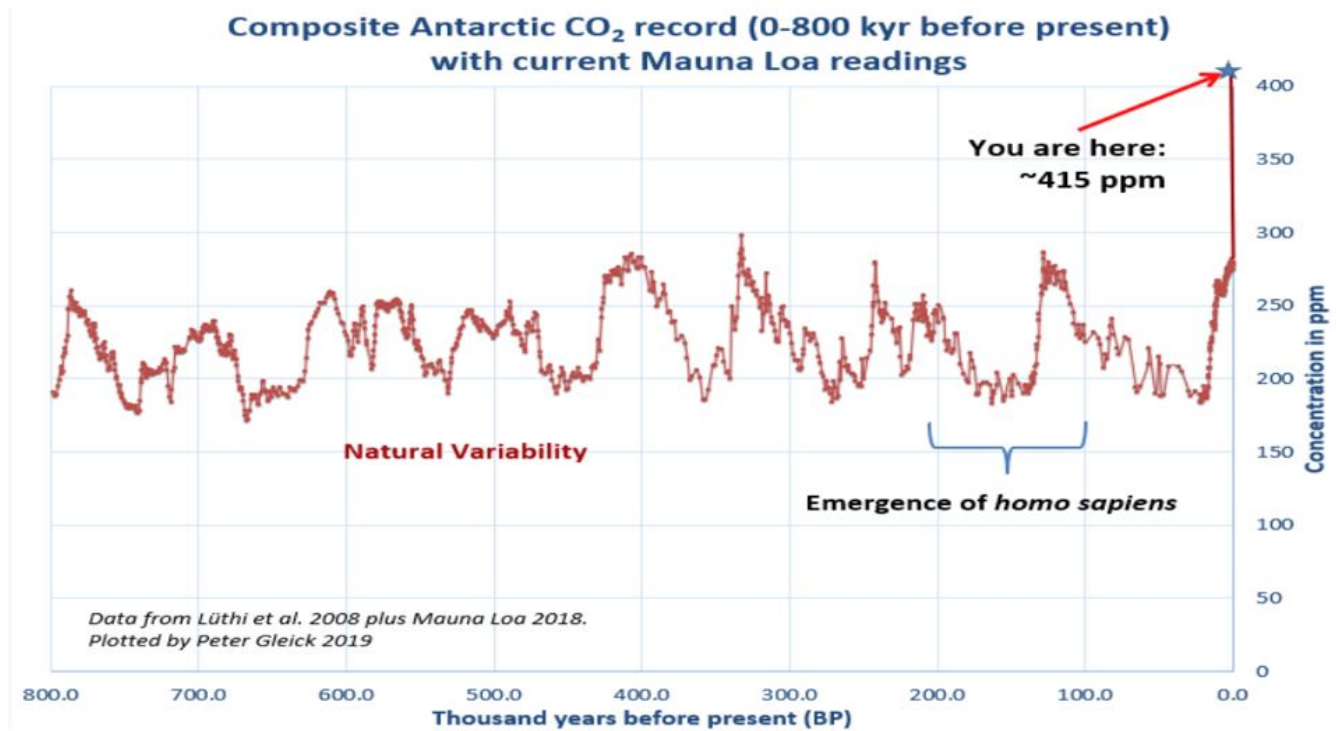




Congratulations, World! Atmospheric CO₂ Levels Have Not Been This High in the Past Three Million Years

The world set a new record in May 2019, at least on a human perspective. Atmospheric concentrations of CO₂ reached 415.26 ppm on May 14, as recorded at the Mauna Loa Observatory in Hawaii, a level not seen in the past three million years.



To put that into perspective, the last time atmospheric concentrations of CO₂ were this high, there were no humans on Earth. This was the Pliocene Epoch, where global temperatures were on average 2-3°C (3.6-5.8°F) higher than today; the oceans were up to 30 meters (90 feet) higher, the Himalayas were beginning to form, and forests covered parts of Antarctica.

Not only did we set a “record” CO₂ concentration this month, carbon dioxide emissions hit a record high in 2018, with the amount of increase of CO₂ in the atmosphere reaching the fourth highest on record. (Three of the four highest annual increases in atmospheric CO₂ concentrations have occurred in the past four years.) This is all occurring, of course, at the same time the IPCC is warning that net CO₂ emissions globally must be reduced to zero by 2050 in order to keep the global temperature rise below 1.5°C.

As hard as it would be to believe, if the world continues “business as usual,” atmospheric CO₂ concentrations would reach 440 ppm by 2040, and approximately 500 ppm by 2050.



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That would put us back into the Eocene, right after the dinosaurs disappeared.

We probably don't want to go there.