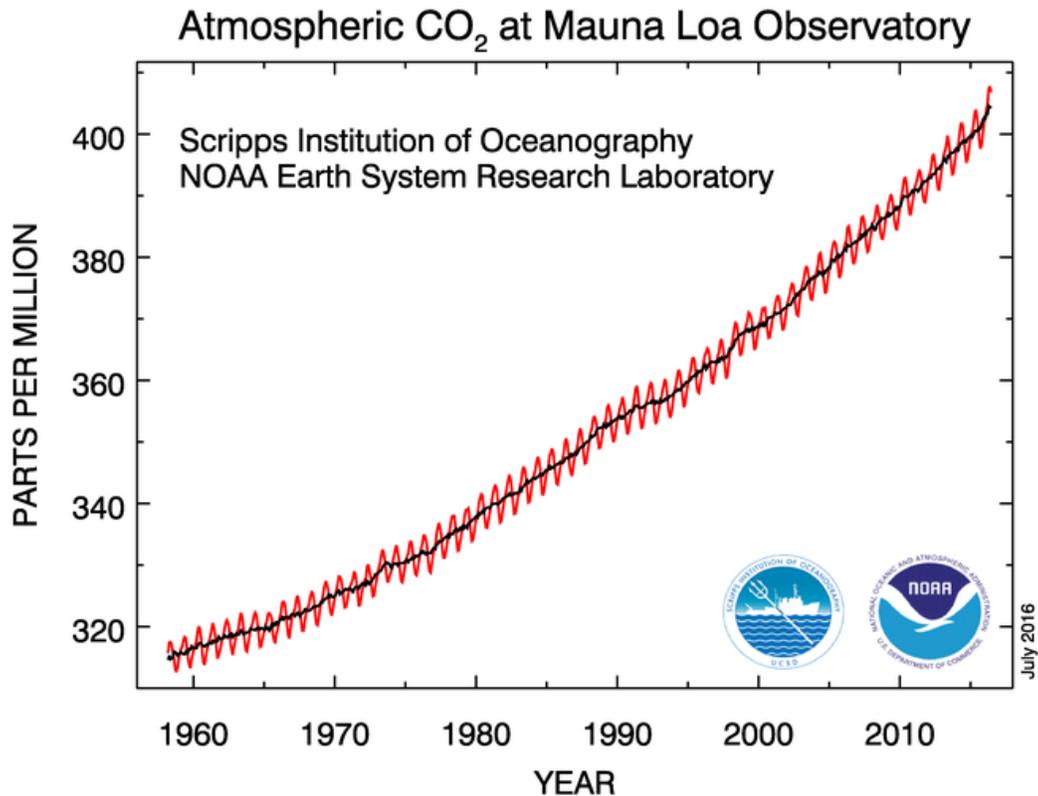


CO₂ in the Atmosphere

Learning goals:

- Analyze time series data of atmospheric CO₂ to determine current growth rate and how the growth rate has changed since measurements began.



The above figure shows the amount of CO₂ in the atmosphere at Mauna Loa, Hawaii, the longest continuous direct measurements of CO₂ in the world. The line with the up-and-down pattern shows monthly values, the smooth line is the seasonally corrected version of the same values. They are presented in parts per million (ppm). The data are the most recent available from the National Oceanic and Atmospheric Administration's Earth System Research Laboratory, and are continually updated at http://www.esrl.noaa.gov/gmd/ccgg/trends/#mlo_full.

In your group, answer the following questions and be prepared to discuss your answers with the class:

- How much did CO₂ increase between 1960 and 1969, using the seasonally corrected data?
- How much did CO₂ increase between 2006 and 2015, using the seasonally corrected data?
- What does this say about the growth rate of CO₂ in the atmosphere since the 1960s?

