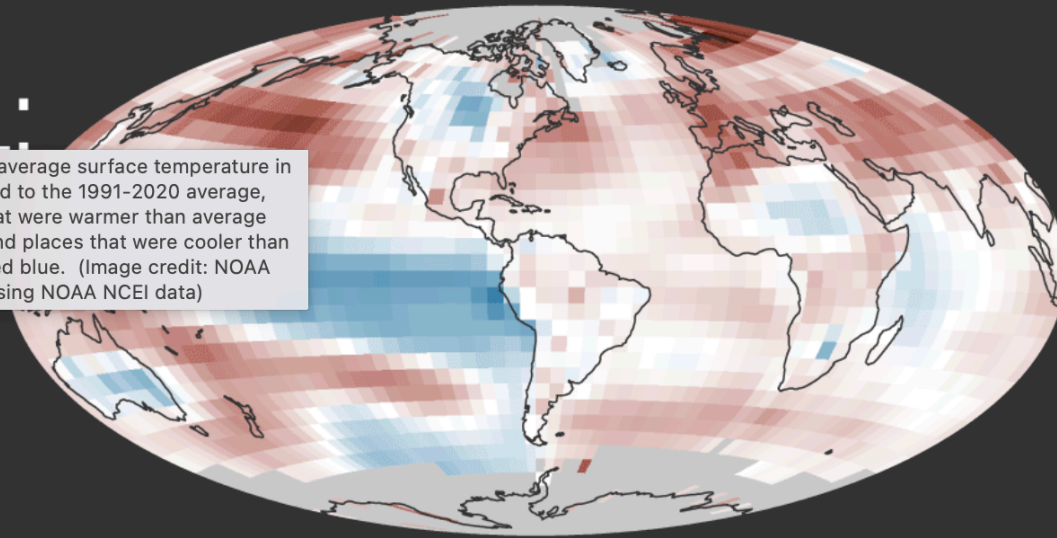


IT'S OFFICIAL: 2022 WAS THE 6th-WARMEST YEAR ON RECORD (1880-2022)

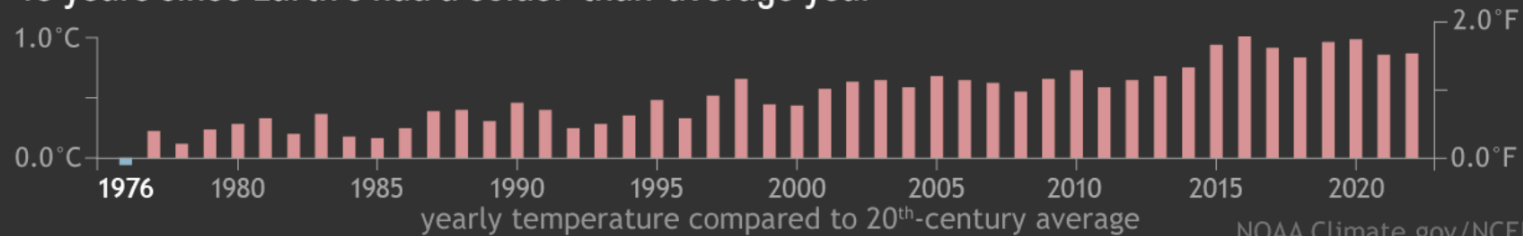
Map of global average surface temperature in 2022 compared to the 1991-2020 average, with places that were warmer than average colored red, and places that were cooler than average colored blue. (Image credit: NOAA Climate.gov, using NOAA NCEI data)



Difference from 1991-2020 average (°F)



46 years since Earth's had a colder-than-average year

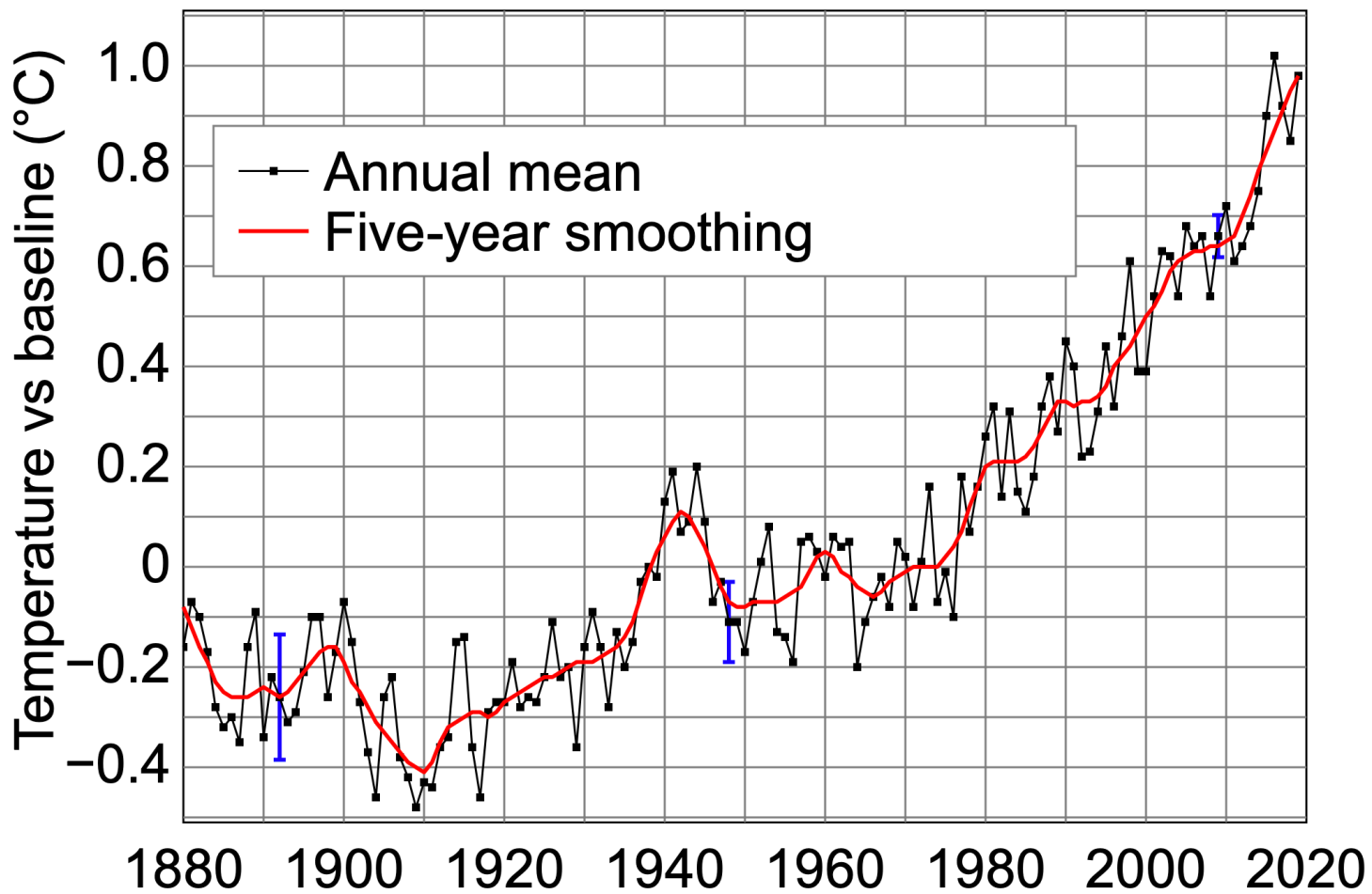


NOAA Climate.gov/NCEI

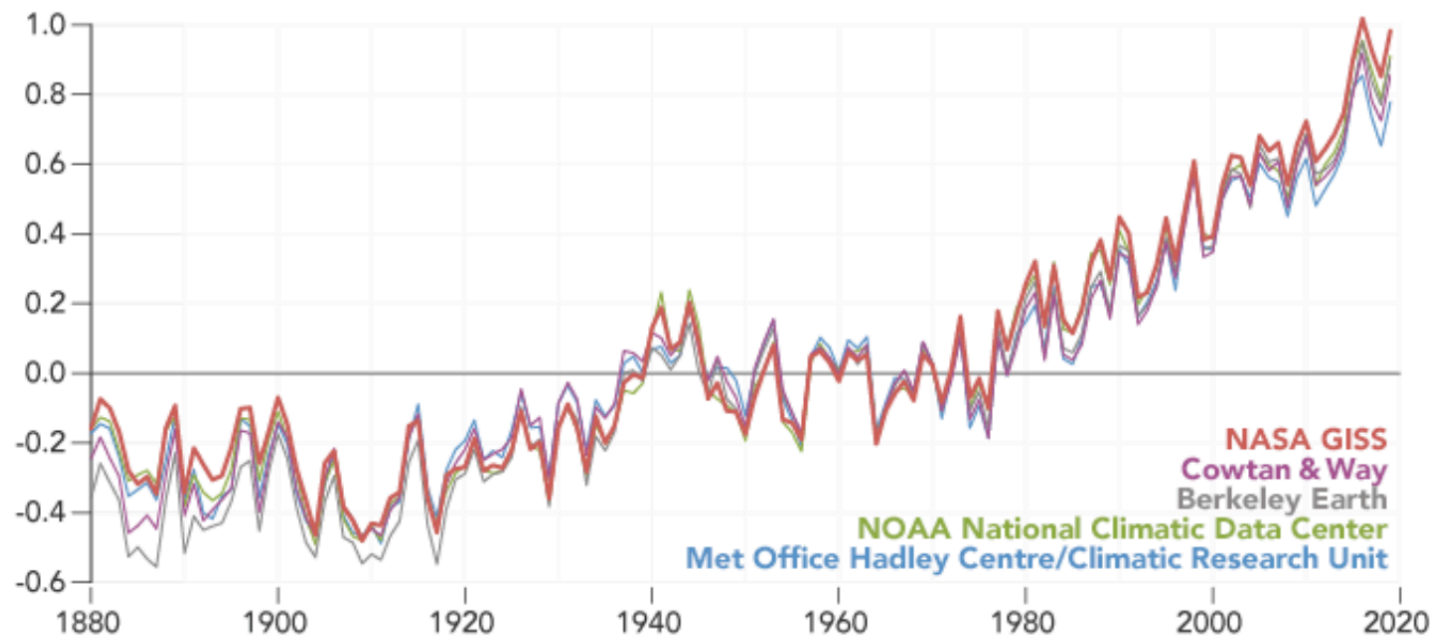
Map of global average surface temperature in 2022 compared to the 1991-2020 average, with places that were warmer than average colored red, and places that were cooler than average colored blue. The bars on the graph shows global temperatures

NOAA temperature link

Global Average Temperature

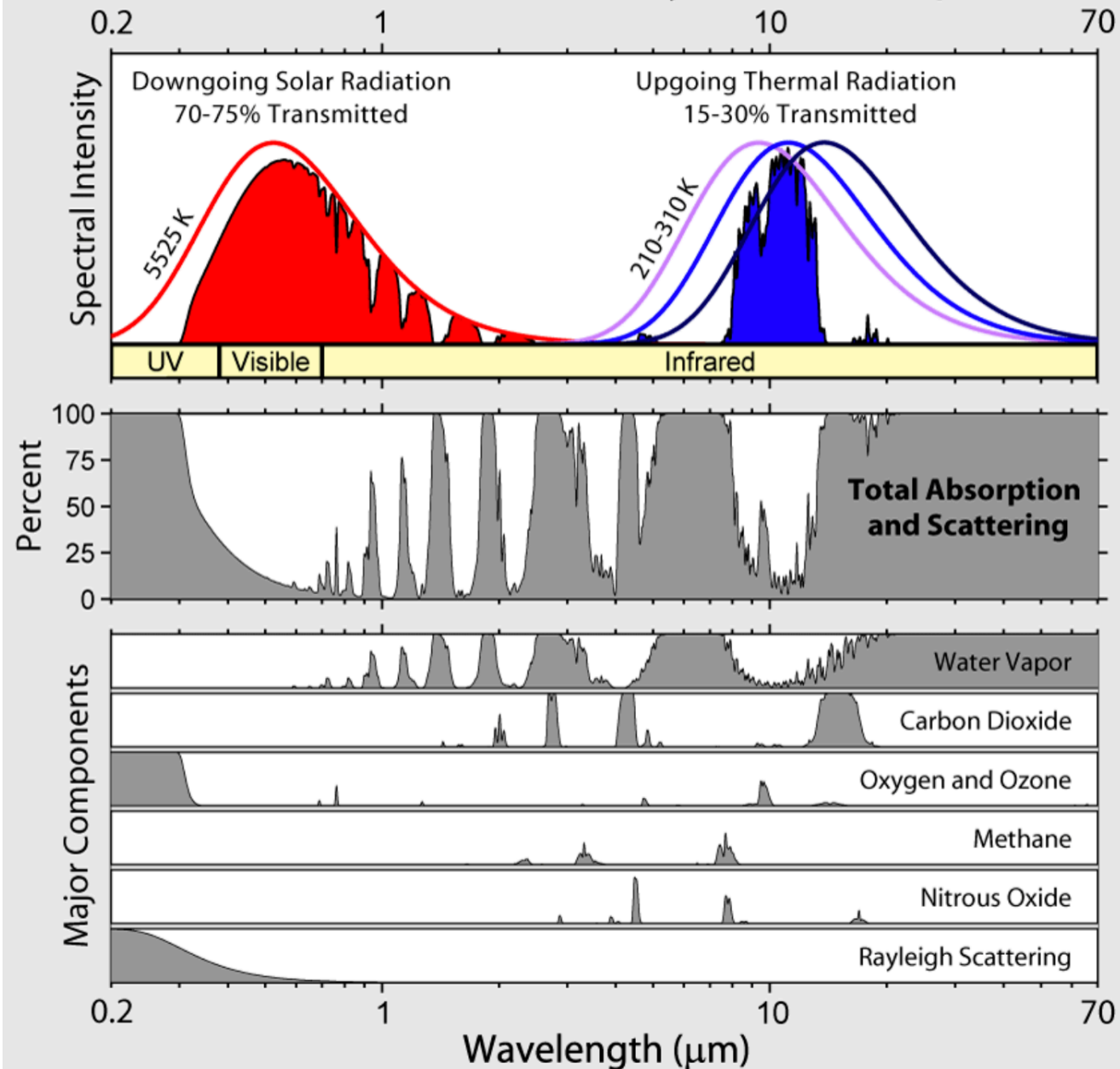


A World of Agreement: Temperatures are Rising Global Temperature Anomaly (relative to 1951-1980, °C)



Earth Observatory (NASA)

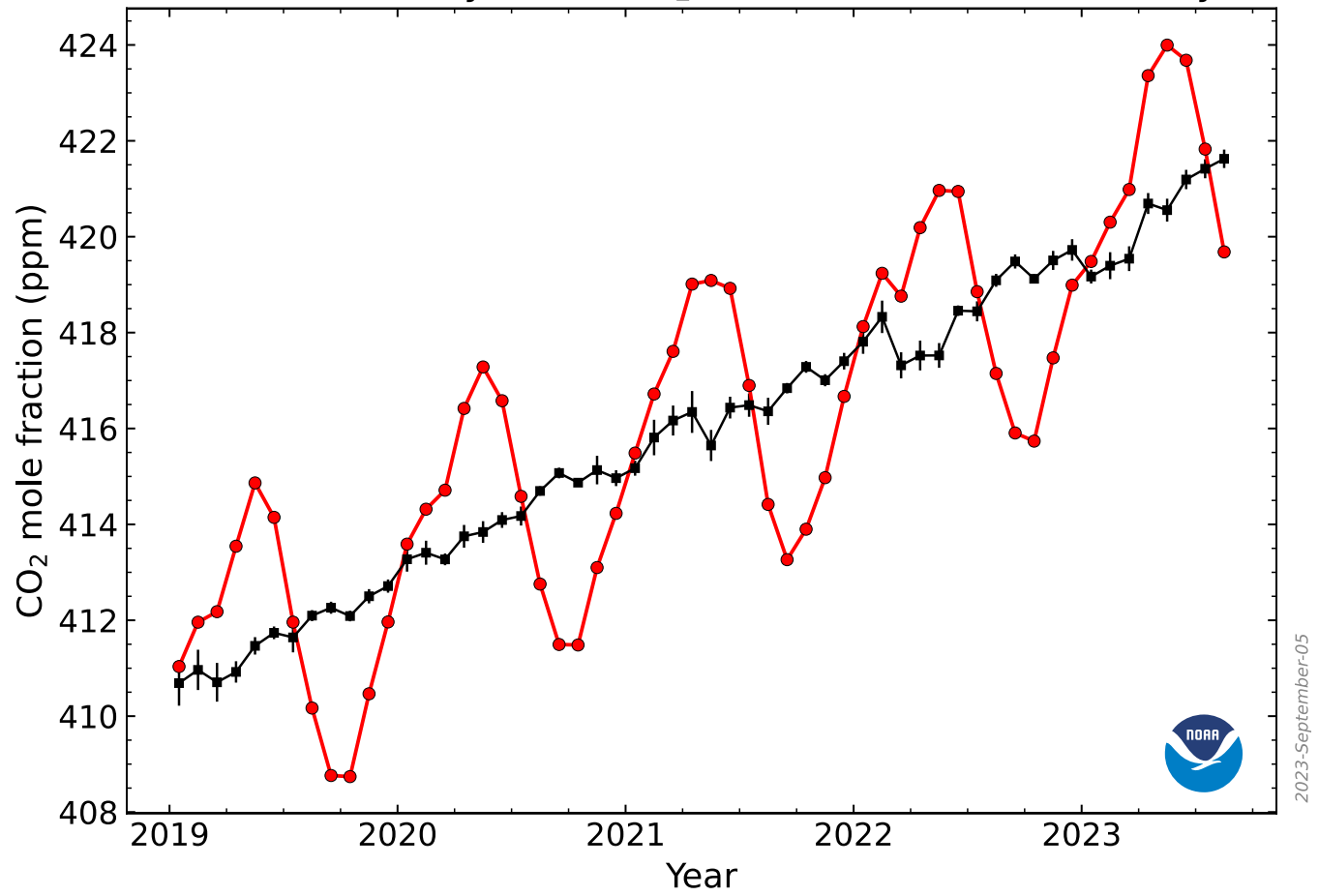
Radiation Transmitted by the Atmosphere



Source info

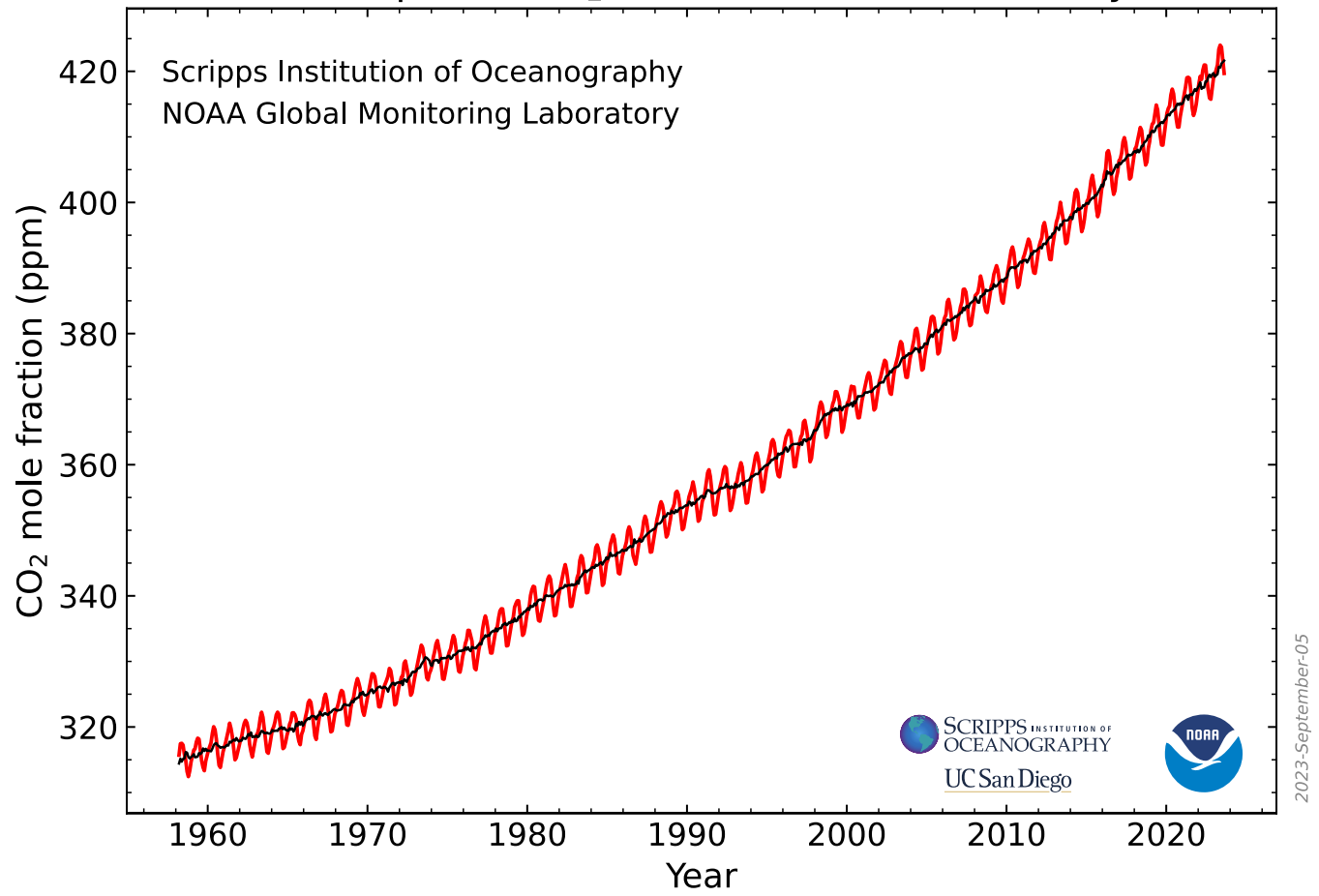
temperature link

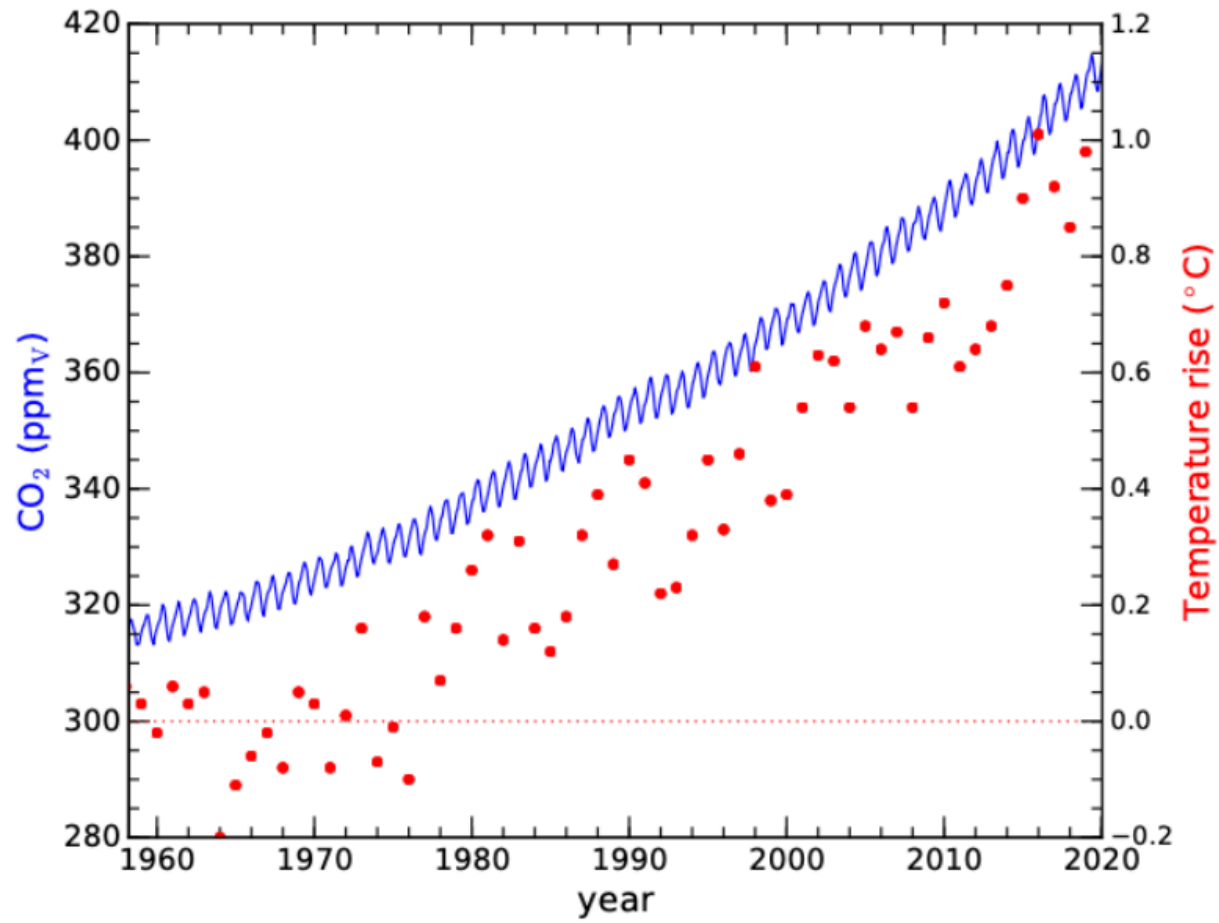
Recent Monthly Mean CO₂ at Mauna Loa Observatory



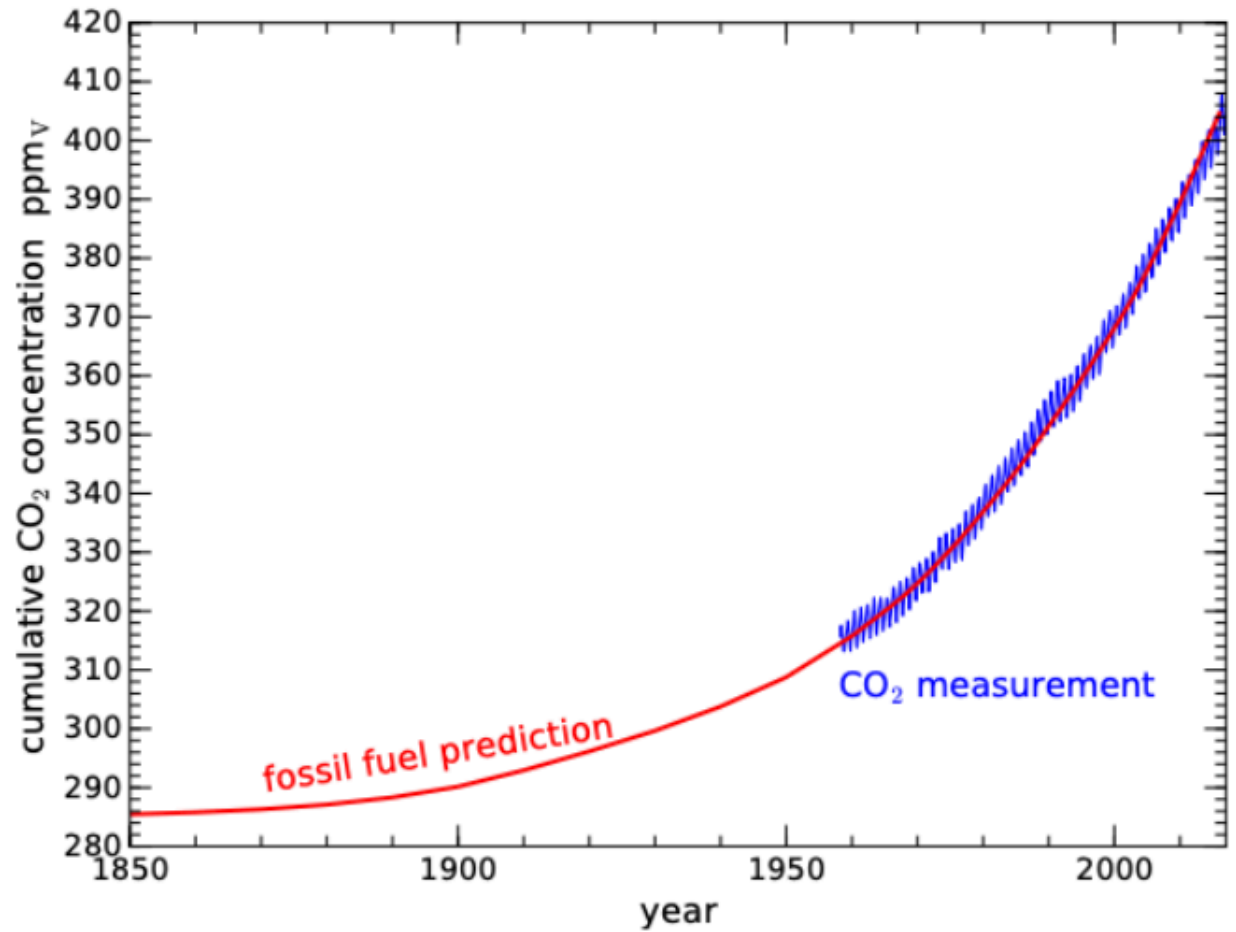


Atmospheric CO₂ at Mauna Loa Observatory





T. Murphy, *Energy and Human Ambitions on a Finite Planet* pg 144.



T. Murphy, *Energy and Human Ambitions on a Finite Planet* pg 147.