Holocene variation in atmospheric CO$_2$ and global temperature

- NOAA Climate at a Glance: https://www.ncdc.noaa.gov/cag/time-series/global/globe/

Global temperature reconstruction of Marcott et al. (2013)


The Keeling Curve: https://scripps.ucsd.edu/programs/keelingcurve/

Measurements of CO$_2$ from glacial ice

- Measurements of CO$_2$ from glacial ice

Thousands of years before present (“present” = AD 1950)

Concentration of CO$_2$ in Earth’s atmosphere (ppmv)

6000                             4000                              2000                    BC        1           AD

6000                             4000                              2000                    BC        1           AD

MWP

LIA

Human civilization

Thermometer measurements of temperature compiled by NOAA

Railsback's *Fundamentals of Quaternary Science*