



Evolution of CO₂ over the past 55 million years, and projected to 2300. Scientific ocean drilling demonstrates the range, rates, and conditions of past climate changes, including the only opportunity to investigate the Earth system response to atmospheric CO₂ exceeding 400 ppm. Drilling provides the critical parameterization and validation of developing paleoclimate models, including paleo ice sheet and sea level reconstructions. *Data from Foster et al. (2017), <https://doi.org/10.1038/ncomms14845>, Masson-Delmotte et al. (2013), and DeConto et al. (2008), <https://doi.org/10.1038/nature07337>*