

Ocean Chemistry and Temperature

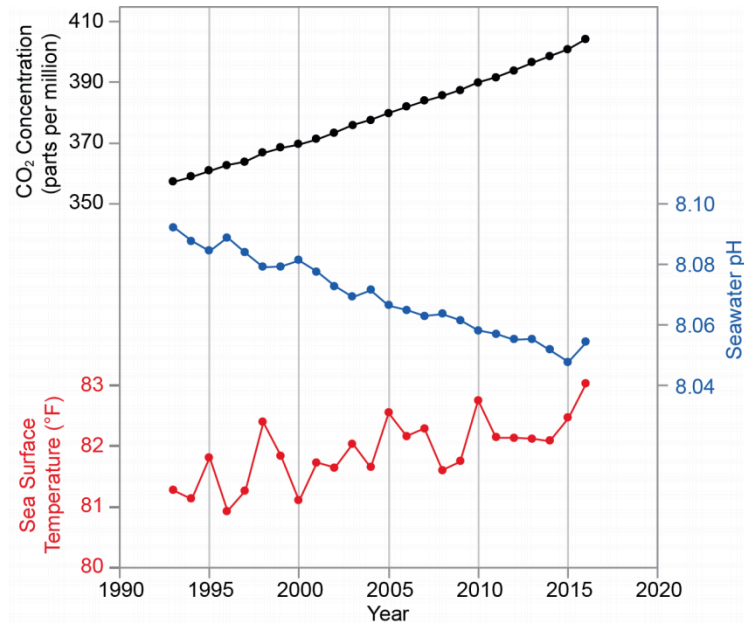


Figure 20.5: This figure represents an annual time series from 1993 to 2016 of atmospheric carbon dioxide (CO₂; black line), sea surface temperature (red line), and seawater pH (blue line) for the Caribbean region. The Caribbean ocean is subject to changes in surface pH and temperature due to the increase in atmospheric CO₂ concentrations. The oceans have the capacity to not only absorb heat from the air (leading to ocean warming) but also to absorb some of the CO₂ in the atmosphere, causing more acidic (lower pH) oceans. Continued ocean acidification and warming have potentially detrimental consequences for marine life and dependent coastal communities in the Caribbean islands. Source: University of Puerto Rico.