

Mauna Loa Observatory, Hawaii
 Monthly Average Carbon Dioxide Concentration

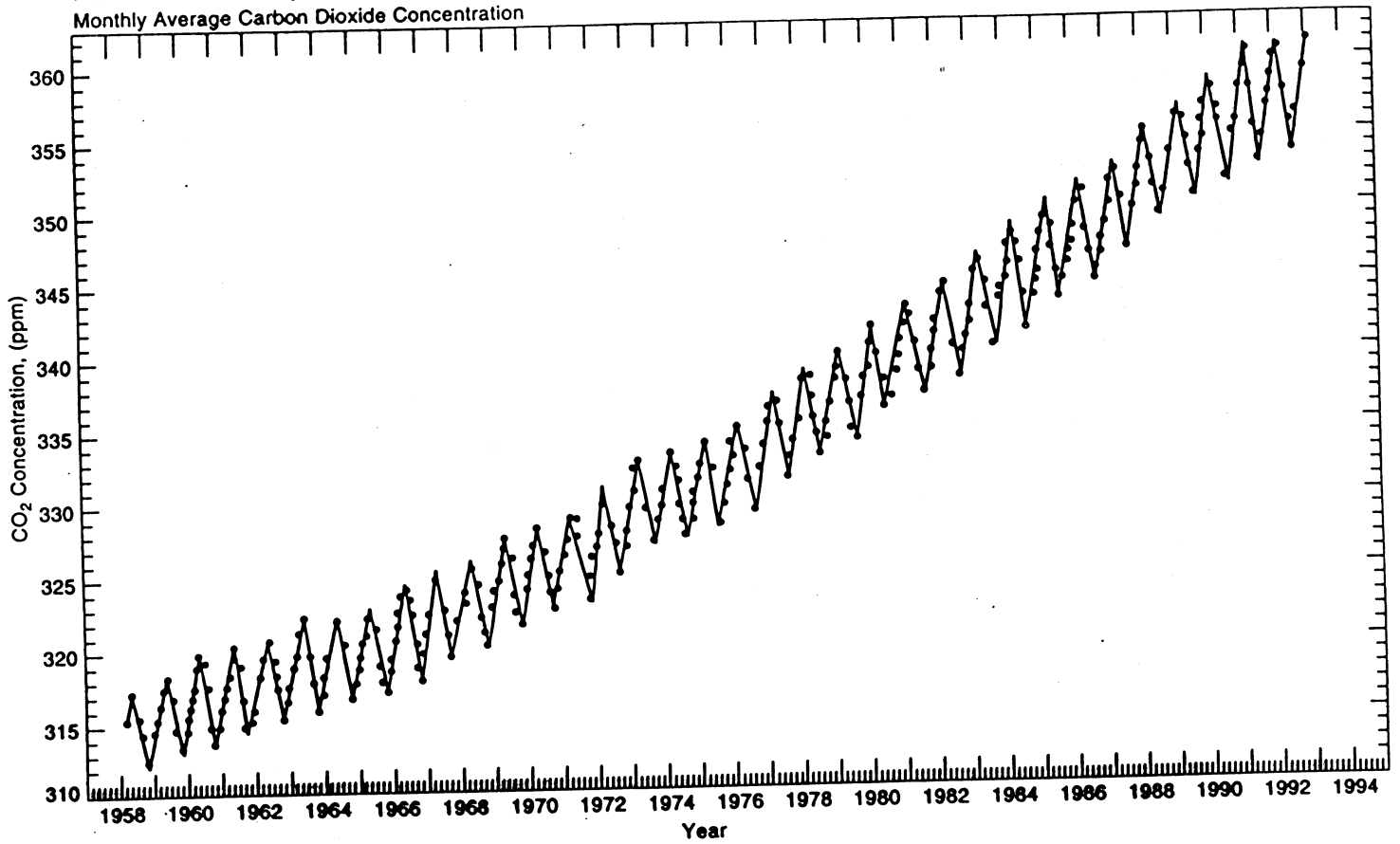


Figure 2.1. Mean monthly concentration of atmospheric CO₂ at Mauna Loa, Hawaii, 1958–late 1993 (C. D. Keeling, personal communication, 1994). The yearly oscillation is explained mainly by the annual cycle of photosynthesis and respiration of plants in the Northern Hemisphere. (Note: 1 ppm CO₂ = 2.12 Gt C, where 1 Gt C = 10⁹ tons C = 10¹⁵ g C.)

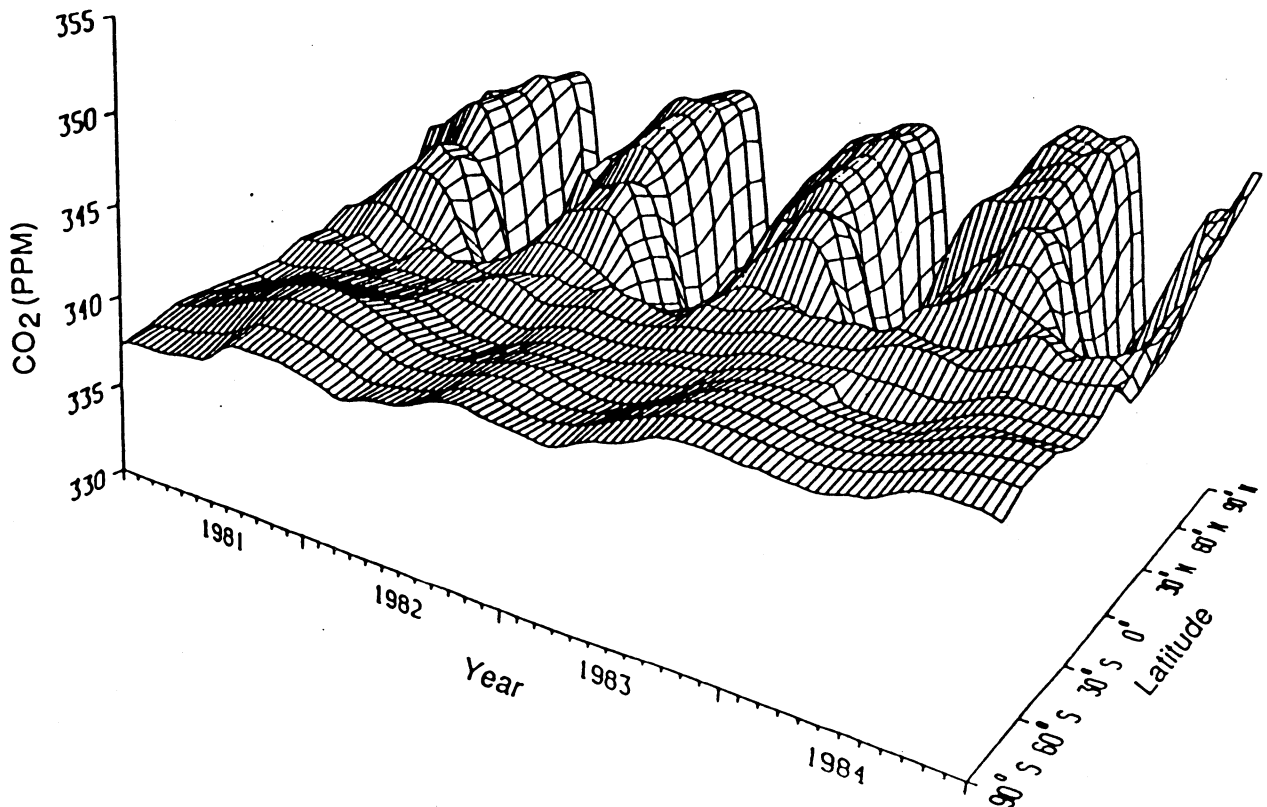


Figure 3.6 Seasonal fluctuation in the concentration of atmospheric CO₂ (1981–1984), shown as a function of 10° latitudinal belts (Conway et al. 1988). Note smaller amplitude of the fluctuations in the southern hemisphere, reaching peak concentrations during northern hemisphere minima.