



**Figures 12a-l.** Seasonal variations in concentrations and  $\delta^{13}\text{C}$  of atmospheric  $\text{CO}_2$  at 6 selected sites from the NOAA Global Flask Network. The sites include Barrow, Alaska (BRW), Mauna Loa, Hawaii (MLO), Cape Grim, Australia (CGO), northern Wisconsin (WLEF), Niwot Ridge, Colorado (NWR),