



**Figure 7.18.** The four glacial–interglacial transitions over the past 400 ky in the Vostok ice core, showing the relations among the gases  $\text{CO}_2$ ,  $\text{CH}_4$  and  $\delta^{18}\text{O}-\text{O}_2$  in the bubbles of the ice core. Vertical dashed lines are drawn through the “jumps” in the  $\text{CH}_4$  concentrations. These data illustrate the temporal relations between the changes in atmospheric chemistry and ice volume change (see text). Redrawn from Petit *et al.* (1999).