



Figure 8.13. The relation between alkenone unsaturation ($UK'_{37} = \frac{37:2}{37:2+37:3}$) and annual sea surface temperature (SST) for samples from various locations in the World Ocean (from Müller *et al.*, 1998). In general, unsaturated alkenones are produced in greater relative abundance at lower water temperatures to maintain cell membrane fluidity.