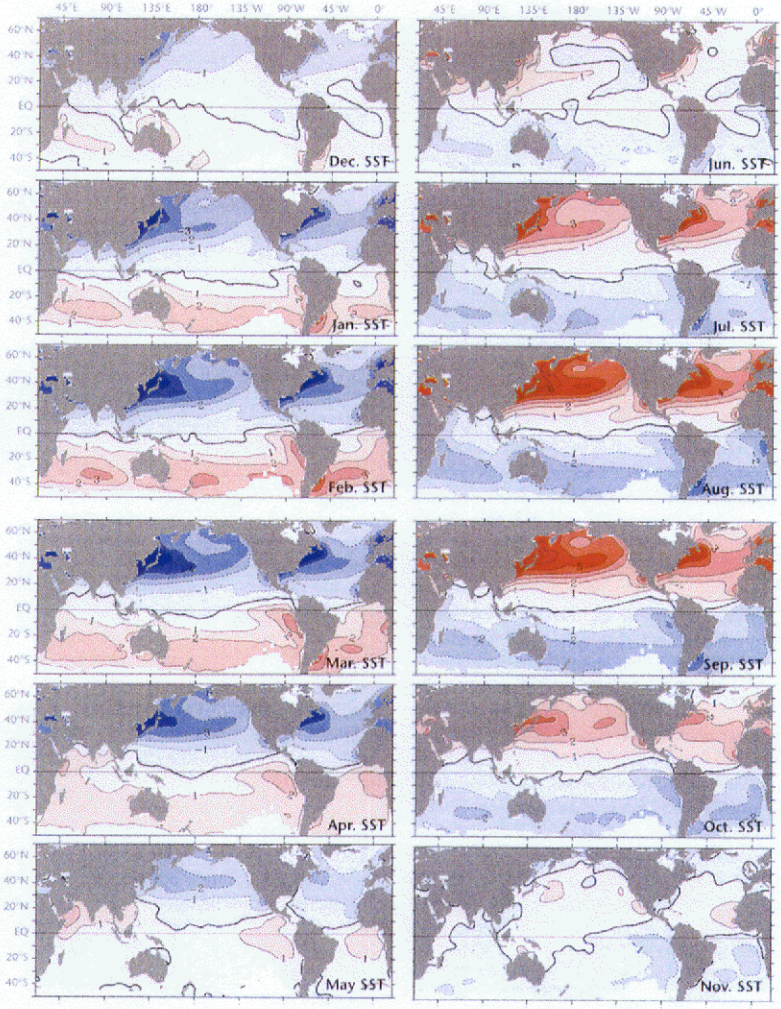

Figure A.6
Monthly departure of sea surface temperature (SST) from the local annual mean. Contours are shown grouped by season every 1°C and anomalies greater than or less than 1°C are shaded red and blue respectively.
(Harrison and Larkin, 1998)

wind-driven advection of cooler water from the south. The cooler waters of the northern Indian Ocean tend to strengthen the air temperature gradient between the northern Indian Ocean and the warm Asian continent and contribute to the persistence of the Indian summer monsoon.

The southern subtropics of the Indian Ocean go through an annual cycle but the equatorial waters remain warm during the Southern Hemisphere summer. The westerly winds generated by the Australian monsoon are neither as strong nor as persistent as those of the Asian monsoon.

The easterly Trade Winds blowing across the equatorial Pacific Ocean (see Figure A.3) establish a wind-driven current to transport water westwards. As the surface water moves westward it warms by the absorption of solar radiation. Through Ekman turning the surface current at the equator is divergent and upwelling of cold water is induced, particularly in the eastern equatorial Pacific Ocean where the thermocline is at a relatively shallow depth. The warming of the surface water as it moves west and the upwelling of cold water in the east combine to establish a cross-Pacific sea surface temperature gradient in equatorial latitudes. Higher surface atmospheric pressure over the cooler waters in the east and lower