



Plate 5.4.3

(a) Mode water distributions in the world's oceans, after Talley (1999a). Red coloured areas show the subtropical mode waters (STMWs) associated with the subtropical western boundary currents in each ocean (the first type). Purple coloured areas show the eastern type of subtropical mode waters (the second type), including Madeira Mode Water, North Pacific Eastern STMW and South Pacific Eastern STMW. Brown coloured areas show the third type of subtropical and subpolar mode waters, including North Atlantic Subpolar Mode Water, Subantarctic Mode Water and North Pacific Central Mode Water. Approximate potential densities (σ_0) are indicated. Black arrows denote the subtropical gyre circulation. See the text for explanation for each type of mode water.

(b) Low-salinity intermediate water distributions in the world's oceans, after Talley (1999a). Shown are the North Pacific Intermediate Water (light green), Antarctic Intermediate Water (green), overlap of NPIW and AAIW (medium green), and Labrador Sea Water (blue). The location of formation for each intermediate water is shown with an X. Regions of strong mixing near the ventilation sources that strongly affect the characteristics of the new intermediate waters are shown with cross-hatching.