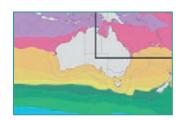
Water Mass P17

Coral Sea: Pacific North-West Tropical Warm Pool

Description: Water Mass P17 is a near-surface layer representing the core of the Coral Sea region in the tropical band of the north-west Pacific to the south of Papua New Guinea. The water here is warmer and more saline than water south of the Tasman Front. The higher salinity is due to convective evaporation when water is transported into the region by way of the Equatorial Current, which splits at the Australian coast. The northward arm feeds into the Solomon Sea and the southern arm becomes the East Australian Current, the western boundary current of the South Pacific Subtropical gyre. Increased energetics in this layer (Level 3 map) occur to the east of the island chain that extends from New Caledonia to Papua New Guinea. An energetic shelf-edge strip occurs offshore of the Great Barrier Reef, presumably associated with the splitting of the Equatorial Current system.



| Water Mass 17 | Mean | Min | Max | Std. Dev. |
|------------------|-------|-------|-------|-----------|
| Temperature (°C) | 25.62 | 10.67 | 29.41 | 3.43 |
| Salinity | 35.12 | 34.66 | 36.04 | 0.25 |
| Oxygen (mm/l) | 4.62 | 4.07 | 5.35 | 0.13 |
| Nitrate (mg/l) | 0.92 | 0.00 | 17.38 | 2.08 |
| Silicate (mg/l) | 2.56 | 0.25 | 16.21 | 1.69 |

| Depth (m): | 50 |
|--------------------------------|-------|
| Latitude (°S): | -16.5 |
| Longitude (°E): | 157.8 |
| Volume (km ³ /106): | 1.00 |

...continued page 2

For further information, please contact:

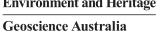
CSIRO – Marine Research GPO Box 1538, Hobart TAS 7001, Australia **Tel:** +61 3 6232 5222 **Fax:** +61 3 6232 5000

Web: www.csiro.au

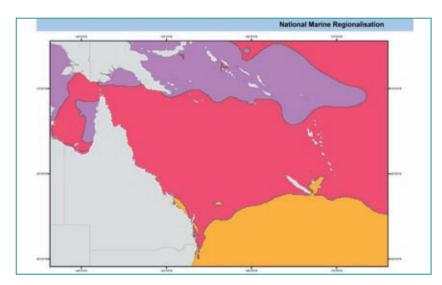


Australian Government

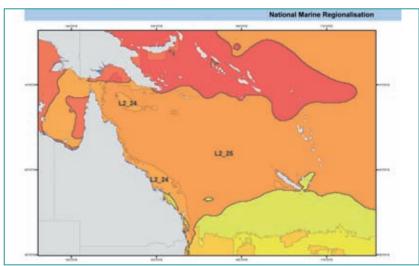
Department of the Environment and Heritage



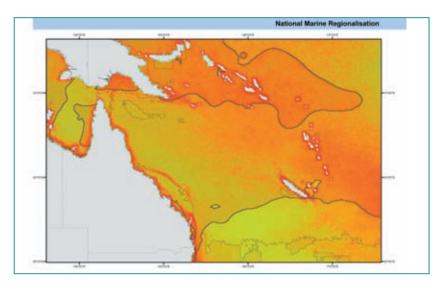




Level 1B



Level 2



Level 3