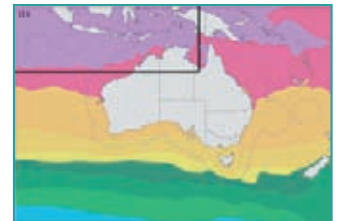


# Water Mass I20

## Indonesian Throughflow: Indian North-East Equatorial Water Mass

**Description:** *Indonesian Throughflow Water* derives from Pacific Ocean Central Water and is formed during transit through the Indonesian archipelago, where the high precipitation rates reduce salinity levels (water masses 1b\_20 and 1b\_23). The water enters the Indian Ocean between Timor and the North West Shelf and through the various passages between the islands east of Bali. It spreads across the central Indian Ocean as a latitudinal tongue of high-temperature, low-nutrient, low-salinity water.

This outflow occurs throughout the upper 1000 m of the water column (but at depth is classed as a different water mass – 1b\_23) and has a major influence on the climate of the entire ocean basin and the Western Australian region in particular. Substructure at Level 2 appears to be related to regional influences of freshwater runoff affecting salinity levels. Energy levels are elevated around the numerous islands and coastline irregularities, and there is a general increase to the west, presumably associated with the westward tongue of the outflow waters.



Water Mass I20	Mean	Min	Max	Std. Dev.
Temperature (°C)	27.69	21.61	30.34	1.16
Salinity	34.21	29.32	34.72	0.50
Oxygen (mm/l)	4.42	3.63	5.33	0.17
Nitrate (mg/l)	0.66	0.00	10.65	0.78
Silicate (mg/l)	3.76	0.00	56.33	2.25

<b>Depth (m):</b>	20
<b>Latitude (°S):</b>	-8.3
<b>Longitude (°E):</b>	116.4
<b>Volume (km<sup>3</sup>/106):</b>	0.62

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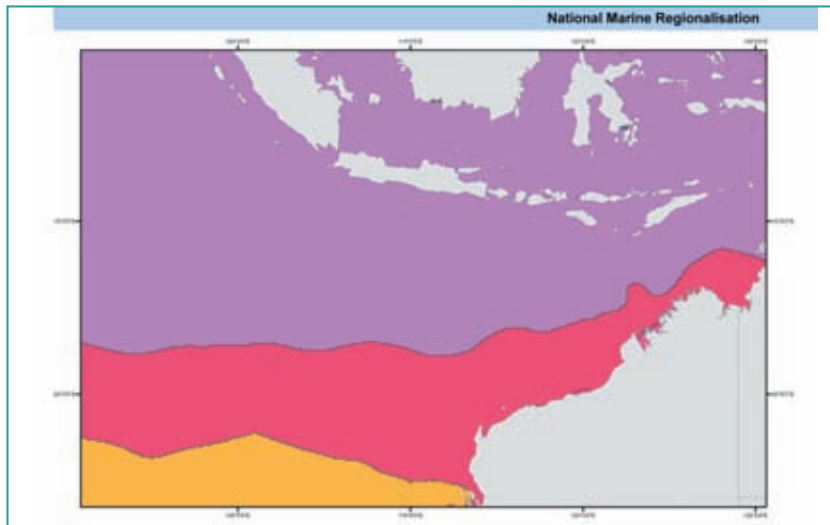
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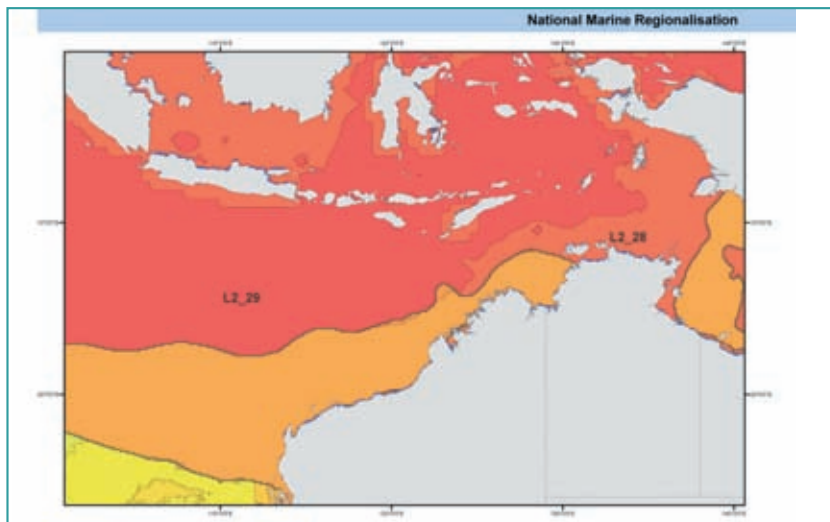


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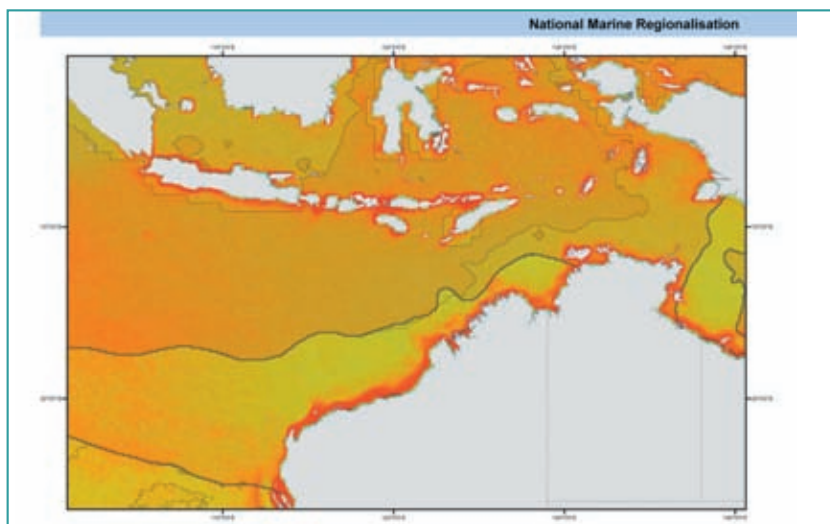




Level 1B



Level 2



Level 3

