SOME CHEMICAL OCEANOGRAPHIC PARAMETERS ALONG THE TURKISH COAST

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Dissolved oxygen, pH, suspended sediment, reactive silicate, orthophosphate, chlorophyll- and humic material together with temperature and salinity were measured along the Turkish coasts from Bosphorus at the Black Sea side to the Northeastern Mediterranean during R/V BILIM September 1983 cruise. A thermal stratification in the Sea of Marmara was present approximately at 25 m depth while in the NE Mediterranean it was more deeper, ranging between 20-50 m. The measured dissolved oxygen values, generally, exhibited positive deviation from the theoretical oxygen saturation in the Aegean Sea and NE Mediterranean. In contrast, there was a strong depletion of dissolved oxygen below the 30 m depth of The Sea of Marmara. Average pH of Mediterranean was 8.2 while a decreasing trend from surface to bottom was observed in the Sea of Marmara. Reactive silicate and orthophosphate showed a slight increase with depth for the NE Mediterranean the averages being 2.01,ug/l and 0.27,ug/l respectively. These two parameters were found relatively high for the Sea of Marmara averages being 2.19/ug Si-at/l and 0.55/ug PO4-P/l for upper layer and 18.85/ug Si-at/l and 1.20/ug PO4-P/l for deep layer. Chlorophyll-a values observed at this month were less than 1/ug/l average being 0.3/ug/l for the NE Mediterranean and fluctuates being between 1-2/ug/l for the sea of Marmara. A close correlation between chlorophyll-a suspended sediment and dissolved humic material was found.