

Nutrient pollution round Yangtze Estuary in Spring and Autumn

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The nutrient data, measured round Yangtze estuary in 1998 and from NOAA, are analyzed using the Matlab computer programming, to study the nutrient pollution round Yangtze Estuary and its adjacent sea area, It can be shown from the results: around Yangtze estuary, the nutrient contamination was very seriously; the nutrients with nitrogen and phosphorus were mostly come from the river discharges, and phosphorus concentration was also influenced by outer sea currents which contain high phosphorus. The nutrient pollution distributions showed that the nutrient concentration at surface and bottom of shore was decreasing from coast to offshore. With fresh water current extending in autumn, the area of contamination was increasing offshore For the structure of nutrients the highest value of w(N)/w(P) ratio came to 405 and the DIN was abundance; but the nitrogen or phosphorus limitation, which limited the growth of phytoplankton, had the space-time changes. It was proved that the distribution of nutrients pollution connected with the position of Yangtze estuarine front and the direction of fresh water current out shore. The position and spreading direction of

contamination can be indicated by the position of the estuarine front and the direction of fresh water current.

Key words: Yangtze Estuary; water environment; nutrient pollution.

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