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Chemical Oceanography Committee

Preliminary Chemical, Physical and Biological Observations  
in Amvrakikos Gulf (April, 1974)

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Observations about the distribution of physico-chemical and biological parameters at different depths in the Amvrakikos Gulf, in April, 1974, into which flow two rivers, Louros and Arachthos. Measurements of salinity, temperature, dissolved oxygen, nutrients and phytoplankton were carried out at eight stations. Salinity increased with depth, causing stratification and low oxygen values near the bottom. Especially at stations near the mouth of the rivers, large amounts of phytoplankton and chlorophylla were found. Diatom populations exceeded those of dinoflagellates at all stations. The high nutrient values and especially those of ammonia, silicate and phosphate tend to indicate eutrophication in the area.

#### DISCUSSION

Questions and Comments:

1. What is the stratification (vertical distribution of temperature) of coastal waters in connection with oxygen distribution? (A. BALLESTER, Spain)

- At the surface (0-5m) the salinity varies between 26 and 31‰ and the oxygen from 7-8 mg/l while at the depth of 10m the values were 32-35‰ and 4-6,5 mg/l respectively. The temperature from surface to 10m varies from 15 to 16°C.
2. Is it possible to know some results about  $\text{NO}_2^-$  distribution?  
(A. BALLESTER, Spain)
- At stations 5,6,7, and 8 which are most influenced by the rivers, high nitrite values are observed at the surface while at the other stations the highest values are observed at the depth of 10m. The nitrite distribution generally follows that of ammonia.