CHLOROPHYLL DYNAMICS OF THE NORTHERN ADRIATIC STUDIED FROM SATELLITE DATA

Mira MOROVIC

Institute of Oceanography and Fisheries, 58000 Split, P.O.Box 500, Croatia

Satellite chlorophyll dynamics from the Northern Adriatic was studied from



around 30 satellite images. Studied region is presented in the figure 1. Satellite chlorophyll data from this paper were CZCS data, processed by JRC-ESA software for the chlorophyll within the frame of the OCEAN project. Temporal and spatial distribution and changes of satellite chlorophyll data were analyzed together with the Po river discharge and other parameters in order to find relationships of the physical environment to the sea water chlorophyll and determine the most powerful driving forces of chlorophyll dynamics.

Analysis was performed for chlorophyll means from areas from different spatial scales

Fig. I. Studied region

from the Northern Adriatic EOF analysis (PREISENDORFER, 1988) was also done to study different aspects of variability in terms of eigen motions and amplitudes. In most of the cases only first two modes were significant (MOROVIC *et al.*). First mode (the greatest variability of the process) was found to be correlated with the global radiation (fig.2).

Second mode was probably correlated with the Po river discharge. Some differences were found between different regions of the Northern Adriatic. Varying the size of averaged area (scaling), it was possible to find the range of influence of different parameters and differences in variability on different scales.



REFERENCES.

PREJENDORFER R., W., 1988. Principal component analysis in meteorology and oceanography. Elsevier. Amsterdam. 425p. MOROVIC M., B. GRBEC and V. DADIC. Significant variabilities of the physical processes in oceanography (in preparation).

0