

CARBON SYSTEM DISTRIBUTION DURING THE AZORES 1 CRUISE

Poster

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The main goal of CANIGO Subproject 2 is the study of the carbon cycle in the subtropical North Atlantic, between the Azores and Canaries archipelagos. During the Azores-1 cruise the four variables defining the carbonic system, alkalinity, total inorganic carbon, pH and partial pressure of CO₂ were measured with the aim of: (i) Studying their general distribution and its relation with physical structures, as the subtropical front and its associated current (the Azores Current), (ii) Characterising physically and chemically the water masses present in the region, and (iii) Evaluating the anthropogenic input of CO₂. The subtropical region east of Azores during summer 1998 behaved as a net CO₂ source to the atmosphere with a mean value of 1.9 ± 1.4 mmol.m⁻².d⁻¹, which was main controlled by sea surface temperature and wind velocity. The water mass distribution was modelled using a relatively simple multi-triangular mixing model together with the thermohaline characteristics for the source waters of the Northeast Atlantic. From the end-member of the mixing model, an algorithm enable to determine the anthropogenic carbon input. The anthropogenic signal over total inorganic carbon showed a decrease with depth from surface layer (50 μmol.Kg⁻¹) with very low values below LSW levels (2000 m.). The average anthropogenic CO₂ inventory was of 860 ± 260 μmol.kg⁻¹.

CHARACTERIZATION OF SOME OCEANOGRAPHIC FEATURES BY SATELLITE OBSERVATIONS IN THE SAN VICENTE CAPE AREA (POSTER PRESENTATION)

Poster

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It is presented a study of the incidence of satellite observations to detect some oceanographic features in the San Vicente Cape area, subregion of the CANIGO geographic area. Satellite observations of Meteor (TOMS), NOAA (AVHRR) and ERS-2 and TOPEX/POSEIDON (ALT) are used. Atmospheric circulation maps and Tropospheric (Wet/Dry), Ionospheric effects are affecting the signal propagation are described. The Sea Surface Temperature maps are used for