

SHELF OFF ALAGOAS AND SERGIPE (NORTHEASTERN BRAZIL)

1. INTRODUCTION

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RESUMO

Esta primeira parte introdutória dos estudos feitos na plataforma continental de Alagoas e Sergipe fornece dados sobre a topografia, a temperatura, a salinidade e as possibilidades para a pesca.

(1) A plataforma continental nesta área é estreita, com sua rutura para o talude a uns 50-60m de profundidade. O seu relêvo é bastante plano nas profundidades de 25 a 50 m, existindo em frente ao rio São Francisco um canyon.

(2) As temperaturas superficiais são relativamente constantes. Na foz do rio São Francisco nota-se a influência das águas fluviais relativamente quentes.

(3) As sanilidades são também comuns, porém com diferenças estacionais. Destaca-se a influência dos rios na zona costeira, baixando a salinidade naquela área.

(4) As possibilidades da pesca não são muito promissôras. Apenas na zona costeira do Estado de Sergipe e na área com depósitos de lama na foz do São Francisco existem possibilidades de pesca com redes de arrasto à base comercial.

PRELIMINARY REMARKS

On the initiative of the Development Organization for Northeastern Brazil (SUDENE), a survey of the continental platform off the coast of the States of Alagoas and Sergipe has been made in three trips in 1965 by the vessel Akaroa. The chief purpose of the survey was an exploration of the possibilities for fishery, but at the same time additional investigations could be made on hydrology and collection of bottom samples.

Plankton was collected at the surface with a normal plankton-net. Water samples for salinity analysis were taken with the Nansen-bottle, measuring at the same time the temperature. Constant echo-sounding provided bottom sections during the whole trajet of the three trips. The bottom samples were obtained by dredging.

The situation of the investigated shelf has been presented in figure 1. It extends between the latitudes of 8°55' and 11°20'S, and between the coast and the continental margin. The platform is very narrow in this area, and has a width of about 25 miles. The break occurs at a relatively moderate depth (50-60 m), such that the samples taken below depths are already representative for the continental slope.

The greater part of figure 1 presents the sampling localities; about every 5 miles a station was made. The first trip, from August 6-11, 1965, under the supervision of O. C. da Silva, included the sampling of the stations 106-156. The second trip, from September 2-10, under the supervision of P. A. Coelho and M. Kempf, covered the area with stations 1-106. Being necessary a more detailed investigation of the mouth of the São Francisco river, on the third trip, from December 2-3, under the supervision of M. Kempf, the stations 160-190 were sampled; these stations have been presented in the lower part of figure 1. In this area, the distance between the stations was 2½ miles.

The total of some 200 samples provided a great abundance of material, being studied actually in the Oceanographical Institute of the Federal University of Pernambuco.

TOPOGRAPHY AND CONTINENTAL GEOLOGY

Land

The shelf off Alagoas and Sergipe is bordered by an area

