

Presentation of MAR-ECO Students

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Working title of project: An optimization of parameters for estimating the area backscattering coefficient for species on the mid-Atlantic ridge

Summary of Project: In this project data from the cruise conducted with RV G.O. Sars in the MARECO project was analyzed. The aim was to investigate the relationship between real acoustic backscatter and catch converted into acoustic energy. The original relationship between the acoustics and the catch data was far from the desirable one-to-one correspondence, hence known algorithms for optimization and curve fitting were used together with established formulas and equations to estimate area backscattering coefficients, s_a , for the catch. The task of this work was to find better values for the parameters target strength TS and catchability q used in calculating the s_a .

The method did provide some improvements, but the results were not satisfying. It is suggested that the degree of variability needs to be limited for further analysis. A report is completed, but further analysis will be carried out during the spring and summer of 2006.