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Sixth Report of Joint Russian/German Project "Assessment of Short-time Climatic Variations in the Labrador Sea"

by

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A Workshop consisting of V. A. Borovkov (PINRO, Murmansk, Russia), M. Stein (ISH, Hamburg, Germany) and G. Nesvetova (PINRO, Murmansk, Interpreter) met at the Institut für Seefischerei, Hamburg during 23-27 April 2001. Terms of references as formulated during the fifth meeting of this project formed the basis for this Workshop.

Preliminary Results

Data acquisition

Based upon recent year's workshop in Hamburg, data on recruitment (R) and Spawning Stock Biomass (SSB) of Greenland and Iceland cod stocks were considered in relation to environmental variables, which might have an impact on the early stages of development of cod, e.g. air temperatures, zonal winds, and sea surface temperatures (SST). Computation of correlation between biological and the environmental factors in the Northwestern Atlantic was achieved through the INTERNET page:

http://www.cdc.noaa.gov/Correlation/

which provides software and data bases in the Climate Diagnostics Center of NOAA..

This part of work was done in PINRO during the interim phase between the workshops in 2000 and 2001. Specific areas of high significant correlation between biotic and abiotic parameters were defined to download the respective time series data on air temperatures, sea surface temperatures (SSTs) and zonal wind components through the internet from the Climate Prediction Centre of NOAA.

http://wesley.wwb.noaa.gov/ncep_data/index_sgi62.html.

Multiple linear regression models were composed which explain the interannual variation in cod recruitment off West Greenland: An initial model, and two models which consider different Cause-Effect Regimes. The models give highly significant results.

Scientific results of this workshop are given in Borovkov and Stein (2001).

Future activities

Results of this workshop will be presented during the June 2001 Scientific Council Meeting of NAFO.

Next Meeting

The next Workshop meeting within the scope of the project will be held in PINRO, Murmansk, tentatively during 27 August to 3 September 2001.

Acknowledgements

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References

Borovkov, V.A. and M. Stein 2001. Recruitment of West Greenland Cod – Modelling Different Cause-Effect Regimes. Announced for NAFO Scientific Council Meeting June 2001.