

# ニューラルネット解析を利用した東北海域の海況パターンの予測

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## Abstract

Importance of forecasting of fisheries condition utilizing oceanographic features has been now well established and this is going to play a very important role in sustainable management of fisheries resources in future. In this study, it was attempted to forecast the oceanographic feature pattern from the oceanographic information using neural network.

As the factors of input unit layer, hydrographic principal factors (warm-core ring off Sanriku, warm-core ring off Kushiro, nearshore intrusion of Kuroshio, offshore intrusion of Kuroshio, first branch of Oyashio, second branch of Oyashio) were utilized in this study off Tohoku. Hidden layer was fixed for only one layer, and it had four hidden nerve cells. The above factors from 1981 to 1993 were made use of in the system of neural network for forecasting oceanographic features in 1994 and 1995. And then, this system was valued by comparison of estimated pattern of oceanographic features with real one.

It was made certain that the estimated pattern of oceanographic features agreeable with the real one within 60 nautical miles, and this neural network system would be useful for application of forecast of oceanographic feature pattern.