

TEMPORAL AND SPACIAL VARIABILITY OF ZOOPLANKTON COMMUNITY IN THE INDIAN SECTOR OF THE SOUTHERN OCEAN

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During every austral summer season, the Japanese Antarctic Research Expedition (JARE) has been conducting routine zooplankton observations with a NORPAC standard net since 1972 (JARE 14). The NORPAC standard net method seems to be suitable for analyzing macroscale distributions. However, net sampling is not ideal for mapping and monitoring of changes in distribution or abundance in relation to the various oceanographic boundaries in the Southern Ocean because the method is discontinuous. As a part of monitoring program in Antarctica, the JARE has initiated a long-term Continuous Plankton Recorder (CPR) survey since 1999 (JARE 41), in order to help to interpret the data collected by NORPAC net. The combination of CPR and NORPAC net data is an ideal methodology to detect fine structure of frontal positions, and to monitor zooplankton communities as part of a long-term monitoring program. We will be presented the results obtained JARE NORPAC data continued for over 30 years and CPR survey, and also provided information on the temporal and spacial variability of composition, distribution and abundance of zooplankton communities in the Indian sector of Southern Ocean.