

The sinking dynamics of microeukaryotes and viruses

微小真核生物とウイルスの沈降動態

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研究成果概要

The purpose of using the supercomputer during this period is to perform 18S metabarcoding data and RNA-seq data from the eukaryotic and viral samples collected from the Oyashio water.

In this study, we showed that the sinking particles (marine snow) had distinct communities and lower diversity than the suspended particles. And the community composition of sinking particles varied with depth, suggesting that microeukaryotes were selectively disaggregated or decomposed during the sinking process. This research was published in the ISME Communication. In addition, based on the RNA-seq data, we found that the expression of RNA virus RdRp genes showed a positive correlation with POC and PON flux, suggesting that RNA virus infection may stimulate particle aggregation. The findings of this study were in prepared.

発表論文(謝辞あり)

Yang, Qingwei, et al. "Taxon-specific contributions of microeukaryotes to biological carbon pump in the Oyashio region." ISME communications 4.1 (2024): ycae136.