

南大洋インド洋区季節海氷域における溶存炭酸物質の空間分布と時間変化

Temporal and spatial variation of dissolved inorganic carbonates in the summer of Antarctic seasonal sea ice zone

*橋田 元¹、高村 友海¹、野村 大樹²、吉川 久幸³

*Gen Hashida¹, Tomomi Takamura¹, Daiki Nomura², Hisayuki Yoshikawa³

1.大学共同利用機関法人 情報システム研究機構 国立極地研究所、2.北海道大学大学水産学部、3.北海道大学大学院環境科学院

1.Inter-university Research Institute Corporation Research Organization of Information and Systems / National Institute of Polar Research, 2.Hokkaido University, Faculty of Fisheries Science, 3.Hokkaido University, Graduate School of Environmental Science

To clarify the variations of carbonate system in the Southern Ocean, multi-ship observations and line observation which closes ice edge were performed since JARE-51st (2009/10 austral summer) on-board Icebreaker "SHIRASE" and T/V Umitaka-Maru of TUMSAT (Tokyo University of Marine Science and Technology). Although seasonal changes of $p\text{CO}_2$ are attributed to thermodynamics and biological activity, Analysis of DIC vertical profiles reveal that biological uptake and entrainment of sub-surface water played major role and air-sea CO_2 exchange can contribute a little.

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