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Microbaroms are a kind of infrasound wave of which frequency range is about 0.2 Hz and induced by oceanic wave. The microbaroms is often observed not only near the coast but also in inlad away from the coast. However, the waves are not well confirmed just above the source, i.e., on the ships. In order to observe the microbaroms on the ship, we installed the infrasound senseor which can detect the pressure wave with low frequency (~20 Hz) on the icebreaker SHIRASE during JARE-54 (54th Japan Antarctic Research Expedition) in 2012 and JARE-55 in 2013 from Fremantle, Australia to offshore of the Showa station. The infrasound wave with 0.06-0.2 Hz which is similar frequency range of the microbaroms were observed on the voyage. In contrast, such wave could not be detected at the anchor in Fremantle. Since the roll and pitch of the ship also similar freqency range, the pressure variation accompanying with height variation of the sensor were estimated to evaluate contribution of pressure variation due to the vertical ship motion. The results suggest that the wave with 0.06-0.07 Hz are not related to the ship motion while the waves with 0.1-0.2 Hz mainly arise from the ship motion. However, the range around 0.1-0.2 Hz were less likely related to the ship motion during stomy days. Further, the range around 0.1-0.2 Hz were also less likely related to the ship motion during very calm condions. The results suggest that the pressure wave with the same frequency range of the microbaroms are hard to detect over the sea except stomy and very calrm conditions.

キーワード：インフラサウンド、マイクロバロムス、南極、しらせ
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