## KITE AS A RESEARCH VEHICLE FOR OBSERVATION OF SURFACE PATCHES OF ANTARCTIC KRILL

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Aerial photographic survey of surface patches of the Antarctic krill (*Euphausia superba* Dana) was attempted using a radio controlled photographic instrument lifted by "Rokkakudako" (hexagonal kite) and the Jalbert parafoil over the Antarctic Ocean. The Jalbert parafoil fitted best to use on ship. The present paper describes methods employed, reason of unsuccessful results, and feasibilities of using the kite photographic system for research at sea. (p. 167–171).

## SOLAR RADIATION IN THE ANTARCTIC OCEAN MEASURED ON SHIPBOARD DURING JANUARY-FEBRUARY 1984

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Photosynthetically active radiation (PAR) was measured on shipboard during the BIOMASS/SIBEX cruise of UMITAKA MARU in the Antarctic Ocean south of Australia in January and February 1984. It ranged from 17.0 cal/cm<sup>2</sup>·day under a heavily overcast sky to 309.9 cal/cm<sup>2</sup>·day under a clear sky. Some of the records of diurnal changes of PAR are shown. (p. 173–177).