

*データのご利用にあたって

- ・データ責任者 川合 義美（海洋研究開発機構）、笹岡 晃征（海洋研究開発機構）
- ・データの利用制限 Scientific research or education purpose only.
- ・引用方法 "Kawai, Y. (2022), R/V SHINSEI MARU Cruise report KS-22-10. JAMSTEC. doi:10.17596/0003553"

品質

Processed (PI)

観測機器

機器名

Fluorometer



機器の概要：

Model 10-AU-005 manufactured by Turner Designs

サンプル種別

Seawater

概要

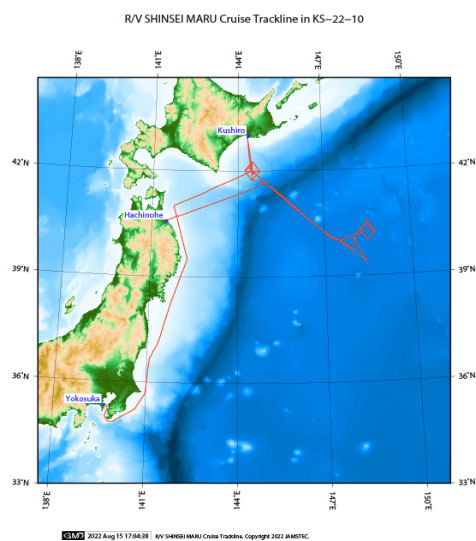
Seawater samples for chlorophyll a (chl-a) were collected into 250ml brown polyethylene bottles from a bucket at the surface, and from Niskin bottles at 9 depths between 10 and 200 dbar including a chl-a maximum layer, which was determined by a fluorometer (Seapoint Sensors, Inc.) installed in the CTD system. All seawater samples were gently filtrated by low vacuum pressure (<0.02 MPa) through Whatman GF/F filter (diameter 25 mm) in the dark room on board. The filters were stored in the freezer of the vessel, and sent to JAMSTEC Yokosuka HQ just after the cruise. Phytoplankton pigments retained on the filters were extracted in a polypropylene tube with 7 ml of N,N-dimethylformamide in the laboratory of JAMSTEC. The tubes were stored at -20°C under the dark condition to extract chl-a at least for 96 hours. Fluorescence of each sample were measured by Turner Designs fluorometer (10-AU-005), which was calibrated against a pure chl-a (Sigma chemical Co.). To estimate the chl-a concentrations, we applied to the fluorometric "Non-acidification method" (Welschmeyer, 1994).

Welschmeyer, N. A. (1994): Fluorometric analysis of chlorophyll a in the presence of chlorophyll b and pheopigments. *Limnol. Oceanogr.*, 39, 1985-1992

データフォーマット

Csv file

関連情報



KS-22-10

船舶名：

新青丸

期間：

2022/07/15 - 2022/08/02

主席/首席：

川合 義美（海洋研究開発機構）

課題名：

航空機との同時観測による北西太平洋の海洋起源エアロゾルとその雲微物理影響の解明