MIRAI MR11-05 Leg2 fluorescent particle data

Last Modified: 2014-02-28

ReadMe | Observation Data

Cruise ID: MR11-05 Leg2
fluorescent particle data: Processed (PI)
Data Policy: JAMSTEC
Observation Items:
Science Keywords:

Data Information

WIBS4 (Waveband Integrated Bioaerosol Sensor) is a single-particle fluorescence sensor measuring the size and fluorescence information. Hourly data of detected and fluorescent particles are provided. Fluorescent particles in this analysis mean particles emit the fluorescence in the three bands (310-400nm and 420 - 650nm excited by 280nm and 420nm-650nm excited by 370nm) in the same time. To avoid ship plume, relative wind-detraction data are employed.

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR11-05_leg1-2_all.pdf

For Using Data

Principal Investigator

Fumikazu TAKETANI (Research Institute for Global Change (RIGC)
, Environmental Biogeochemical Cycle Research Program (EBCRP)
, Atmospheric Composition Research Team)

Use Constraints

Since data analysis of fluorescence information in the particles is still undeveloped, further improvement in data quality is anticipated. It is recommended to contact the above investigator before use for publication.

Data Citation

Since data analysis of fluorescence information in the particles is still undeveloped, further improvement in data quality is anticipated. It is recommended to contact the above investigator before use for publication.

Instrument

Instrument:
WIBS4(Waveband Integrated Bioaerosol Sensor)
Instrument Information:
The single-particle fluorescence sensor utilizes a continuous-wave 635 nm diode laser for the detection of particles and the determination of particle size. The scattering light signal derived from a single particle upon crossing the 635 nm-CW laser triggers two pulsed xenon UV lights (280 nm and 370 nm) for the excitation of compounds contained in the pertinent single particle. The fluorescence signals emitted from the particle are then detected by two PMTs, separately for the 310–400 nm and 420–650 nm wavelength windows.

Data Format

Text format. See the header of the data files for more details.

Related Information

Enlarge Image

MR11-05 Leg2
Ship Name: MIRAI
Period: 2011-07-17 - 2011-08-04
Chief Scientist: Makio Honda (JAMSTEC)
Project Name: [Station S1,Station KEO]
Proposal Title: Change in material cycles and ecosystem by the climate change and its feedback

Update History

2014-02-28	An observation data was registerd.

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Observation Map

Imagery reproduced from ...

... Observation Line ... Navigation ... Observation, Dive Point, Hole

Data List

Add to Basket

	File names
☐	FL_particles_mr1105_dscd.txt

Related Information

Enlarge Image

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