MIRAI MR08-02 air-sea surface eddy flux

Last Modified: 2014-03-06

ReadMe | Observation Data

Cruise ID: MR08-02
air-sea surface eddy flux : Processed (PI)
Data Policy: JAMSTEC
Observation Items:
Science Keywords:

Data Information

Air-sea surface eddy fluxes were calculated with eddy-covariance method including ship motion correction. Using the continuous time series data, eddy fluxes were calculated every 10 minutes and quality controlled. Then 1 hour averaged fluxes are summarized here. As the sir-sea energy exchange components, sensible and latent heat fluxes(W/m2) are presented.

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR08-02_all.pdf

For Using Data

Principal Investigator

Osamu Tsukamoto (Okayama University)

Use Constraints

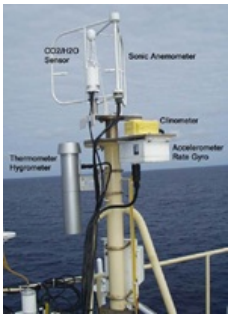
Air-sea eddy flux measurement with eddy-covaraince method and data quality control is not completely established. So please be careful that the present results are tentative.

Data Citation

None

Instrument

Instrument:
surface eddy flux measurement
system
Instrument Information:
Refer to following.



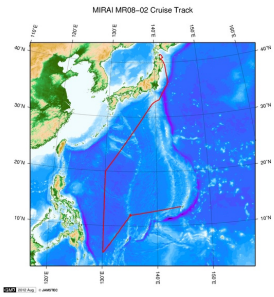
Data Format

csv file
yyyy/mm/dd hh:mm(UTC), QH(sensible heat flux; W/m2), QE(latent heat flux; W/m2)
the time stamp represents the starting time of an hour.
'999.9' means missing data due to quality control.

Instrument Information

The surface eddy flux measurement system consists of turbulence instruments and ship motion sensors (Kanto Aircraft Instrument Co., Ltd.). The turbulence sensors include a three-dimensional sonic anemometer-thermometer (Kaijo, DA-600) and an infrared hygrometer (LICOR, LI-7500). The sonic anemometer measures three-dimensional wind components relative to the ship. The ship motion sensors include a two-axis inclinometer (Applied Geomechanics, MD-900-T), a three-axis accelerometer (Applied Signal Inc., QA-700-020), and a three-axis rate gyro (Systron Donner, QRS-0050-100). LI7500 is a CO2/H2O turbulence sensor that measures turbulent signals of carbon dioxide and water vapor simultaneously. These signals are sampled at 10 Hz by a PC-based data logging system (Labview, National Instruments Co., Ltd.).

Related Information



Enlarge Image

MR08-02
Ship Name: MIRAI
Period: 2008-05-26 - 2008-06-30
Chief Scientist: Kunio Yoneyama (JAMSTEC)
Project Name: [MJO Research]
Proposal Title: Observational Study on the Air-Sea Interaction in the Tropical Western Pacific Ocean

Update History

2014-03-06	An observation data was registerd.
2012-10-27	An observation data was registerd.

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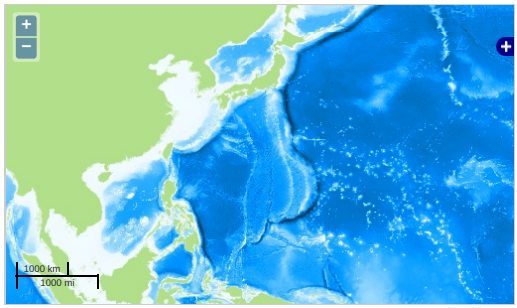
Observation Map



Imagery reproduced from ...

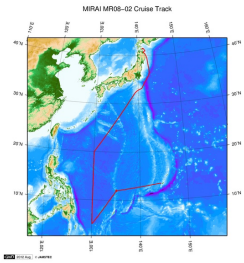
... Observation Line ... Navigation ... Observation, Dive Point, Hole

Data List

Add to Basket

File names
MR08-02_flux.csv

Related Information



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