

MIRAI MR08-06 Leg1 Partial Pressure of CO2 (pCO2)

Last Modified: 2017-07-27

[ReadMe](#) [Observation Data](#) [Data Format](#)

Cruise ID: [MR08-06 Leg1](#)

Partial Pressure of CO2 (pCO2): Processed (DMO)-QCed

Data Policy: [JAMSTEC](#)

Observation Items: CO2, Air temperature, Atmospheric pressure, Wind direction, Wind speed, Sea surface temperature, Sea surface salinity

Science Keywords:

OCEANS > OCEAN CHEMISTRY > CARBON DIOXIDE

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR08-06_leg1_all.pdf

[For Using Data](#)

Principal Investigator

Natsue Abe (JAMSTEC)

Use Constraints

See [Terms and Conditions](#) about constrain of use.

Data Citation

See [Terms and Conditions](#) about data citation.

Instrument

Instrument:

pCO2 measurement system (- MR10-06)



Information on pCO2 measurement

Instrument : pCO₂ measuring system ; Nippon ANS Ltd.

Method : Non-dispersive infrared gas analyzer (NDIR) / Equilibrator : showerhead-type

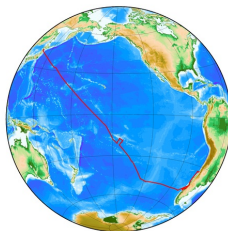
Precision : -

Reference Material/Calibration : The CO₂ standard gas was calibrated at Prof. Keeling's laboratory in the Scripps Institution of Oceanography

[About data processing method](#)

Related Information

MIRAI MR08-06 Leg1 Cruise Track



© 2014 JAMSTEC

[Enlarge Image](#)

MR08-06 Leg1

Ship Name: MIRAI

Period: 2009-01-14 - 2009-03-13

Chief Scientist: Natsue Abe (JAMSTEC)

Project Name: [South Pacific Ocean Research Activity 2009]

Update History

2017-07-27	An observation data was registerd.
2014-08-06	An observation data was registerd.
2012-10-26	An observation data was registerd.

JAMSTEC

[Site Policy](#)
[Privacy Policy](#)
[Application for Data and Samples](#)
[Data Policy](#)

What's New
[Update History](#)
[Feeds](#)

Lists

[Publication List](#)
[Amount of Public Info.](#)

Data
[Map Search](#)
[Data Tree](#)
[Detailed Search](#)

Information of the Ships

NATSUSHIMA
KAIYO
YOKOSUKA
MIRAI
KAIREI
CHIKYU
KAIMEI
SHINSEI MARU
HAKUHO MARU

Information of the Submersibles

KAIKO
SHINKAI 2000
SHINKAI 6500
DEEP TOW
HYPER-DOLPHIN
URASHIMA
YOKOSUKA DEEP TOW
6K Camera DEEP TOW
6K Sonar DEEP TOW
KM-ROV
POWER GRAB SAMPLER (SHELL)

Go to a Cruise Information

Cruise ID:

Go to a Dive Information

Dive ID:

POWER GRAB SAMPLER
(CLOW)
BMS

Copyright 2011 Japan Agency for Marine-Earth Science and
Technology



JAMSTEC 国立研究開発法人
海洋研究開発機構
JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

MIRAI MR08-06 Leg1 Partial Pressure of CO2 (pCO2)

Last Modified: 2017-07-27

[ReadMe](#) [Observation Data](#) [Data Format](#)

Cruise ID: [MR08-06 Leg1](#)

Partial Pressure of CO2 (pCO2): Processed (DMO)-QCed

Data Policy: [JAMSTEC](#)

pCO2 FORMAT_M

Data Format

The file is in variable length, comma separated text file (csv) format.

The line starts with "#" is a comment line which contains version information and so on.

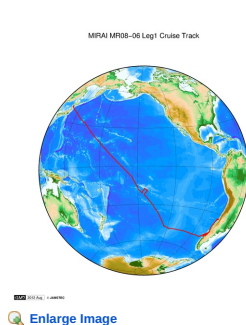
Column NO.	Column Heading	Comments
1	Ship	Ship name
2	Cruise	Cruise ID
3	Serial No.	Serial No.
4	Date	year (YYYY) in UTC
5		month (MM) in UTC
6		day (DD) in UTC
7	Time	hour (hh) in UTC
8		minute (mm) in UTC
9	Latitude	Latitude (degree) ; Positive in north
10	Longitude	Longitude (degree) ; degree in eastward (0 - 360)
11	xCO2_Air	CO ₂ mixing ratio (ppm) in the air
12	F	Quality flag for xCO2_Air
13	xCO2_Sea	CO ₂ mixing ratio (ppm) in the sea surface water (*)
14	F	Quality flag for xCO2_Sea
15	Wind_Dir	Wind direction (degree) ; Positive in clockwise from the north
16	Wind_Spd	Wind speed (m/s)
17	Atm_Prs	Barometric pressure (hPa)
18	Atm_Tmp.	Air temperature (degree-C)
19	SST	Sea surface temperature (degree-C)
20	F	Quality flag for SST
21	SSS	Sea surface salinity (PSU)
22	F	Quality flag for SSS
23	pH2O	Vapor pressure of in-situ sea water (hPa)

Definition of Quality Control Flags

- 2 - Good
- 3 - Questionable
- 4 - Bad
- 5 - Not reported
- 9 - No data

*: Please refer to "Information on pCO2 data" shown in ReadMe tab for xCO2_Sea data calculation.

Related Information



MR08-06 Leg1

Ship Name: MIRAI
Period: 2009-01-14 - 2009-03-13
Chief Scientist: Natsue Abe (JAMSTEC)
Project Name: [South Pacific Ocean Research Activity 2009]

Update History

2017-07-27	An observation data was registered.
2014-08-06	An observation data was registered.
2012-10-26	An observation data was registered.

JAMSTEC

[Site Policy](#)
[Privacy Policy](#)
[Application for Data and Samples](#)
[Data Policy](#)
[What's New](#)
[Update History](#)
[Feeds](#)

Lists

[Publication List](#)
[Amount of Public Info.](#)

Data

[Map Search](#)
[Data Tree](#)
[Detailed Search](#)

Information of the Ships

[NATSUSHIMA](#)
[KAISO](#)
[YOKOSUKA](#)
[MIRAI](#)
[KAIREI](#)
[CHIKYU](#)
[KAIMEI](#)
[SHINSEI MARU](#)
[HAKUHO MARU](#)

Information of the Submersibles

[KAISO](#)
[SHINKAI 2000](#)
[SHINKAI 6500](#)
[DEEP TOW](#)
[HYPER-DOLPHIN](#)
[URASHIMA](#)
[YOKOSUKA DEEP TOW](#)
[6K Camera DEEP TOW](#)
[6K Sonar DEEP TOW](#)
[KM-ROV](#)
[POWER GRAB](#)
[SAMPLER \(SHELL\)](#)
[POWER GRAB](#)
[SAMPLER \(CLOW\)](#)
[BMS](#)

Go to a Cruise Information

Cruise ID:

Go to a Dive Information

Dive ID:



MIRAI MR08-06 Leg1 Partial Pressure of CO2 (pCO2)

Last Modified: 2017-07-27

[ReadMe](#) [Observation Data](#) [Data Format](#)

Cruise ID: [MR08-06 Leg1](#)

Partial Pressure of CO2 (pCO2): Processed (DMO)-QCed

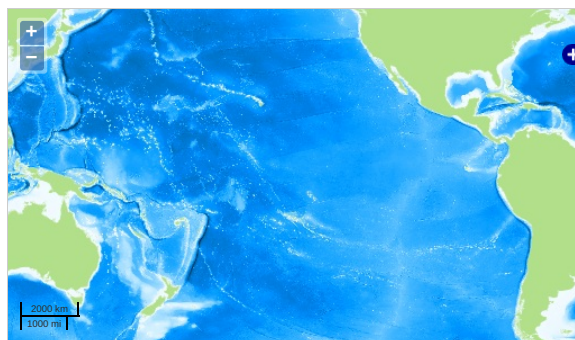
Data Policy: [JAMSTEC](#)

Observation Items: CO2, Air temperature, Atmospheric pressure, Wind direction, Wind speed, Sea surface temperature, Sea surface salinity

Science Keywords:

OCEANS > OCEAN CHEMISTRY > CARBON DIOXIDE

Observation Map



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

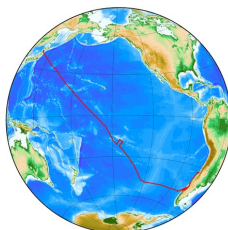
Data List

File names

☐ MR08-06_leg1_xCO2.csv

Related Information

MIRAI MR08-06 Leg1 Cruise Track



[Enlarge Image](#)

MR08-06 Leg1

Ship Name: MIRAI
Period: 2009-01-14 - 2009-03-13
Chief Scientist: Natsue Abe (JAMSTEC)
Project Name: [South Pacific Ocean Research Activity 2009]

Update History

2017-07-27	An observation data was registered.
2014-08-06	An observation data was registered.
2012-10-26	An observation data was registered.

JAMSTEC
[Site Policy](#)
[Privacy Policy](#)
[Application for Data and Samples](#)
[Data Policy](#)

[What's New](#)
[Update History](#)
[Feeds](#)

[Lists](#)
[Publication List](#)
[Amount of Public Info.](#)

[Data](#)
[Map Search](#)
[Data Tree](#)
[Detailed Search](#)

[Information of the Ships](#)
NATSUSHIMA
KAIYO
YOKOSUKA
MIRAI
KAIREI
CHIKYU
KAIMEI
SHINSEI MARU
HAKUHO MARU

[Information of the Submersibles](#)
KAIKO
SHINKAI 2000
SHINKAI 6500
DEEP TOW
HYPER-DOLPHIN
URASHIMA
YOKOSUKA DEEP TOW
6K Camera DEEP TOW
6K Sonar DEEP TOW
KM-ROV
POWER GRAB SAMPLER (SHELL)
POWER GRAB SAMPLER (CLOW)
BMS

[Go to a Cruise Information](#)

Cruise ID:

[Go to a Dive Information](#)

Dive ID: