

MIRAI MR07-03 Partial Pressure of CO₂ (pCO₂)

Last Modified: 2018-05-31

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

Cruise ID: [MR07-03](#)

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

Data Policy: [JAMSTEC](#)

Observation Items: CO₂, Atmospheric pressure, 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/MR07-03_all.pdf

For Using Data

Principal Investigator

Iwao Ueki (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.

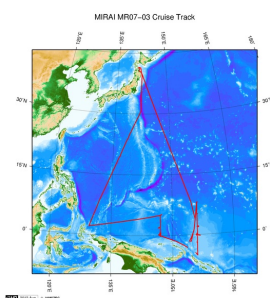
Method : Non-dispersive infrared gas analyzer (NDIR) ; BINOSTM / Equilibrator : showerhead-type

Precision : -

Reference Gas: -

[About data processing method](#)

Related Information



[Enlarge Image](#)

MR07-03

Ship Name: MIRAI

Period: 2007-05-31 - 2007-07-14

Chief Scientist: Iwao Ueki (JAMSTEC)

Project Name: [Tropical Ocean Climate Study (TOCS)]

Update History

Update Date	Update Content
2018-05-31	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 \(SHELL\)](#)
[POWER GRAB SAMPLER \(CLOW\)](#)
[BMS](#)

Go to a Cruise Information

Cruise ID:

Go to a Dive Information

Dive ID:



MIRAI MR07-03 Partial Pressure of CO₂ (pCO₂)

Last Modified: 2018-05-31

ReadMe Observation Data **Data Format**

Cruise ID: **MR07-03**

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

Data Policy: **JAMSTEC**

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.

"-999" is missing data value.

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	xCO ₂ _Air	CO ₂ mixing ratio (ppm) in the atmosphere.
12	F	Quality flag for xCO ₂ _Air
13	xCO ₂ _Sea	CO ₂ mixing ratio (ppm) in the sea surface water.
14	F	Quality flag for xCO ₂ _Sea
15	Atm_Prs	Barometric pressure (hPa)
17	Eq_Prs	Air pressure in equilibrator (hPa)
18	Eq_Tmp	Water temperature in equilibrator (degC)
19	SST	Sea surface temperature
20	F	Quality flag for SST
21	SSS	Sea surface salinity (PSU)
22	F	Quality flag for SSS
23	pH ₂ O	In-situ vapor pressure of water (hPa)

Data quality flag

2 - Good

3 - Questionable

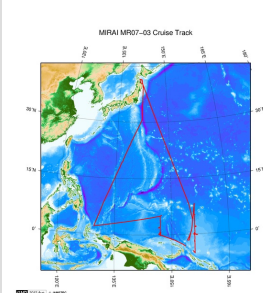
4 - Bad

5 - Not reported

9 - No data

*: Please refer [Sea-surface pCO₂ data analysis](#) for xCO₂_Sea data calculation.

Related Information



[Enlarge Image](#)

MR07-03

Ship Name: MIRAI

Period: 2007-05-31 - 2007-07-14

Chief Scientist: Iwao Ueki (JAMSTEC)

Project Name: [Tropical Ocean Climate Study (TOCS)]

Update History

2018-05-31 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)
POWER GRAB
SAMPLER (CLOW)
BMS

Go to a Cruise Information

Cruise ID: Go

Go to a Dive Information

Dive ID: Go

MIRAI MR07-03 Partial Pressure of CO₂ (pCO₂)

Last Modified: 2018-05-31

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

Cruise ID: [MR07-03](#)

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

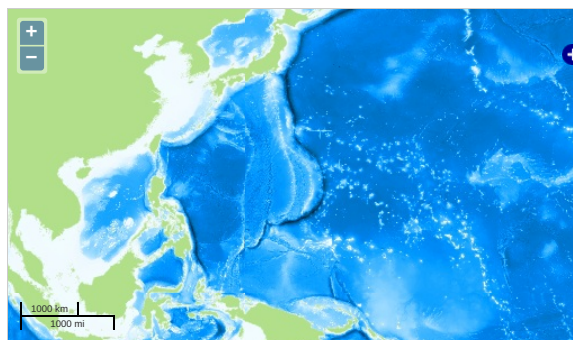
Data Policy: [JAMSTEC](#)

Observation Items: CO₂, Atmospheric pressure, Sea surface temperature, Sea surface salinity

Science Keywords:

OCEANS > OCEAN CHEMISTRY > CARBON DIOXIDE

Observation Map



Imagery reproduced from ...

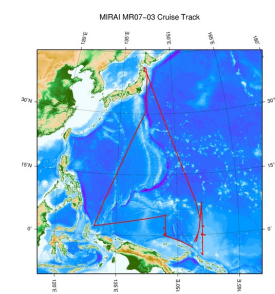
... Observation Line ... Navigation ... Observation, Dive Point, Hole

Data List

File names

☐ MR07-03_xCO2.csv

Related Information



[Enlarge Image](#)

MR07-03

Ship Name: MIRAI

Period: 2007-05-31 - 2007-07-14

Chief Scientist: Iwao Ueki (JAMSTEC)

Project Name: [Tropical Ocean Climate Study (TOCS)]

Update History

2018-05-31 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: