

MIRAI MR17-05C Partial Pressure of CO2 (pCO2)

Last Modified: 2019-09-27

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

Cruise ID: [MR17-05C](#)

Partial Pressure of CO2 (pCO2): Processed (PI)

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/MR17-05C_all.pdf

For Using Data

Principal Investigator

Akihiko Murata (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 (MR10-07

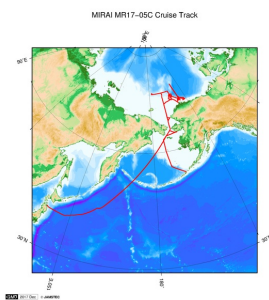
-)



Data Citation

Please mention that this cruise was conducted under the Arctic Challenge for Sustainability (ArCS) Project, which was funded by the Ministry of Education, Culture, Sports, Science and Technology of Japan (MEXT).

Related Information



[Enlarge Image](#)

MR17-05C

Ship Name: MIRAI

Period: 2017-08-24 - 2017-10-01

Chief Scientist: Shigeto Nishino (JAMSTEC)

Project Name: [Arctic Ocean Climate System Research]

Proposal ▶ Arctic Challenge for Sustainability (ArCS)

Title:

Update History

2019-09-27	An observation data was registered.
2019-07-31	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:

MIRAI MR17-05C Partial Pressure of CO₂ (pCO₂)

Last Modified: 2019-09-27

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

Cruise ID: [MR17-05C](#)

Partial Pressure of CO₂ (pCO₂): Processed (PI)

Data Policy: [JAMSTEC](#)

pCO₂ FORMAT_J (MR11-08-)

Air-xCO₂

The file is in fixed comma separated text file (csv) format.

The "missing value" is defined as -999.

Column NO.	Column Heading	Comments
1	Date (UTC)	Year, Month, Day
2	Time (UTC)	Hour, Minute, Second
3	Latitude (degree)	Positive in north
4	Longitude (degree)	Degree in eastward (0 - 360)
5	Sea surface temperature (°C)	
6	Sea surface salinity (PSU)	
7	Air pressure (hPa)	
8	Wind direction (degree)	
9	Wind speed (m/s)	
10	xCO ₂ in dry air (ppmv)	

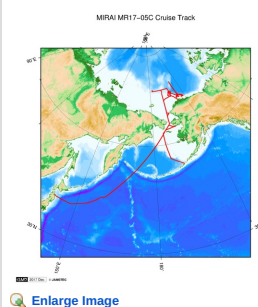
Sea-xCO₂

The file is in fixed comma separated text file (csv) format.

The "missing value" is defined as -999.

Column NO.	Column Heading	Comments
1	Date (UTC)	Year, Month, Day
2	Time (UTC)	Hour, Minute, Second
3	Latitude (degree)	Positive in north
4	Longitude (degree)	Degree in eastward (0 - 360)
5	Sea surface temperature (°C)	
6	Sea surface salinity (PSU)	
7	Equilibrator temperature (°C)	
8	Equilibrator pressure (hPa)	
9	Air pressure (hPa)	
10	xCO ₂ in equilibrator (ppmv)	
11	pCO ₂ in equilibrator (µatm)	
12	pCO ₂ at SST (µatm)	
13	xCO ₂ in dry air (ppmv)	

Related Information



MR17-05C

Ship Name: MIRAI
Period: 2017-08-24 - 2017-10-01
Chief Scientist: Shigeto Nishino (JAMSTEC)
Project Name: [Arctic Ocean Climate System Reaserch]
Proposal ▶ Arctic Challenge for Sustainability (ArCS)
Title:

Update History

2019-09-27 An observation data was registered.
2019-07-31 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:

MIRAI MR17-05C Partial Pressure of CO2 (pCO2)

Last Modified: 2019-09-27

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

Cruise ID: [MR17-05C](#)

Partial Pressure of CO2 (pCO2): Processed (PI)

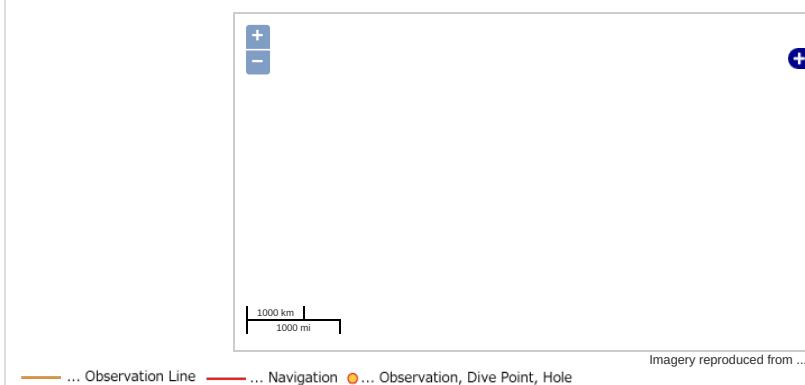
Data Policy: [JAMSTEC](#)

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



Data List

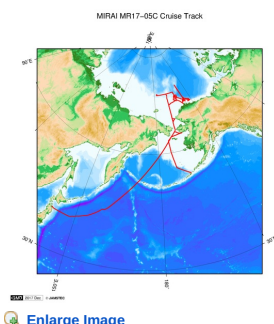
☐ File names

☐ MR17-05c_air.csv

☐ MR17-05c_sea.csv

☐ Readme_pCO2_MR17-05c.docx

Related Information



MR17-05C

Ship Name: MIRAI

Period: 2017-08-24 - 2017-10-01

Chief Scientist: Shigeto Nishino (JAMSTEC)

Project Name: [Arctic Ocean Climate System Research]

Proposal ▶ Arctic Challenge for Sustainability (ArCS)

Title:

Update History

2019-09-27	An observation data was registered.
2019-07-31	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: