

KAIYO K94-06 Leg2 Partial Pressure of CO2 (pCO2)

Last Modified: 2013-01-25

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

Cruise ID: [K94-06 Leg2](#)

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/K94-06_leg2_all.pdf

For Using Data

Principal Investigator

Masao Ishii (Meteorological Research Institute)

Use Constraints

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

Data Citation

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

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 : MRI_87 scale(*)

(*) The relationship between MRI_87 scale and WMO 1985 mole fraction scale is given by:

$$x_{CO2-WMO}=5.451+0.9741 \times (x_{CO2-MRI_87})+2.7699 \times (x_{CO2-MRI_87})^2$$

Related Information



[K94-06 Leg2](#)

Ship Name: KAIYO

Period: 1994-12-19 - 1995-01-11

Chief Scientist: Yoshifumi Kuroda (JAMSTEC)

Update History

Update Date	Update Content
2013-01-25	An observation data was registerd.

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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



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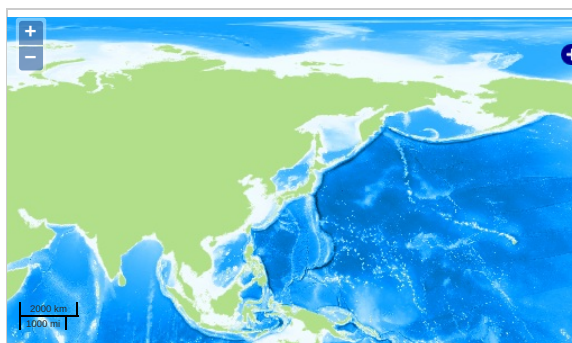
Data Policy: [JAMSTEC](#)

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Observation Map



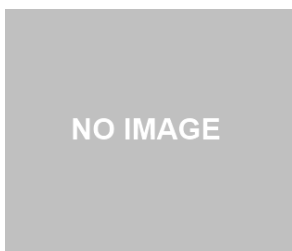
... Observation Line ... Navigation ... Observation, Dive Point, Hole

Data List

File names

☐ K94-06_leg2_pco2.zip

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