

## MIRAI MR00-K07 Leg2 Cloud Ceiling

Last Modified: 2016-10-11

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

Cruise ID: [MR00-K07 Leg2](#)

Cloud Ceiling: Raw

Data Policy: [JAMSTEC](#)

Observation Items: Cloud base height

Science Keywords:

ATMOSPHERE > CLOUDS > CLOUD  
BASE

Cruise Report

[http://www.godac.jamstec.go.jp/catalog/data/doc\\_catalog/media/MR00-K07\\_leg1-2\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR00-K07_leg1-2_all.pdf)

### For Using Data

#### Principal Investigator

Data Management Office

JAMSTEC / BPPT joint cruise in the Indonesian waters.

#### Use Constraints

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

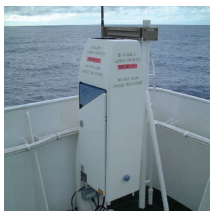
#### Data Citation

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

### Instrument

Instrument:

Ceiliometer (- MR12-05Leg3)



### Overview

Ceiliometer is the system that measures cloud base height by laser pulse emitted vertically.

Up to three levels of cloud base can be detected by measuring the change of strength of backscatter signal.

And the cloud base height is calculated from the elapsed time from laser pulse emission to backscatter detection.

In case the cloud base is obscured, it measures the vertical visibility.

### System

Manufacturer: Vaisala Inc.  
Type: CT25K Ver2.01  
Serial number: T18102  
Measurement range: up to 7500m  
Resolution: 15m  
Sampling rate: 15-120 seconds available (60sec as default)  
Accuracy:  $\pm 2\%$  or  $\pm 1/2 \times \text{Resolution}$   
Location: Compass deck bow side (18 meters high from sea surface)  
Recording software: CT-VIEW Ver1.05 (before MR01-K04)  
CT-VIEW Ver2.10 (MR01-K05 or later)

### Note

(1) File naming rule for CYMMDDHH.DAT(Ver1.05) and AYMMDDHH.DAT(Ver2.10).

C or A : Fixed as 'C' or 'A'

Y : Year in 1 digit

MM : Recording start month (UTC)

DD : Recording start day (UTC)

HH : Recording start time (UTC)

(2) Adjustment for the height : No sea surface level adjustment is applied to the raw data.

(3) Invalid data information : Ceiliometer data files include the invalid data in this cruise as follows.

Date/Time : Date,Time data is invalid

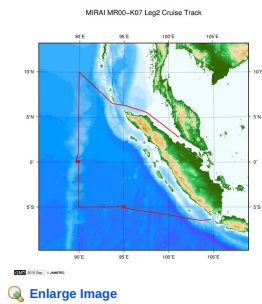
Format : Format error data

DataLack : Lack of data

Start Stop

File name	Date,Time	File name	Date,Time	Remarks
C0111000.DAT20001110,053413				Format
C0111000.DAT20001110,054113		C0111000.DAT20001110,054313		DataLack
C0111006.DAT20001110,102414		C0111006.DAT20001110,102715		DataLack
C0111012.DAT20001110,142015		C0111012.DAT20001110,142215		DataLack
C0111106.DAT20001111,111615				Format
C0111206.DAT20001112,092714		C0111206.DAT20001112,092914		DataLack
C0111212.DAT20001112,142315		C0111212.DAT20001112,142515		DataLack
C0111212.DAT20001112,174416		C0111212.DAT20001112,174616		DataLack
C0111418.DAT20001114,201616				Format
C0111500.DAT20001115,032518		C0111500.DAT20001115,032718		DataLack
C0111506.DAT20001115,060216		C0111506.DAT20001115,060617		DataLack

### Related Information



**MR00-K07 Leg2**  
Ship Name: MIRAI  
Period: 2000-11-09 - 2000-11-20  
Chief Scientist: Keisuke Mizuno (JAMSTEC)  
Project Name: [Tropical Ocean Climate Study (TOCS)]

Update History

2016-10-11	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:

Copyright 2011 Japan Agency for Marine-Earth Science and Technology



## MIRAI MR00-K07 Leg2 Cloud Ceiling

Last Modified: 2016-10-11

ReadMe Observation Data **Data Format**

Cruise ID: [MR00-K07 Leg2](#)

Cloud Ceiling: Raw

Data Policy: [JAMSTEC](#)

### Ceiling Raw

The record length of the data file is 56 bytes.

No.	Column	Content	Format	Remarks
1	1 - 8	Date	i4,i2,i2	YYYYMMDD (UTC)
2	10 - 15	Time	i2,i2,i2	hhmmss (UTC)
3	17 - 19	Operating software	a3	'CT0' : CT-VIEW 'CL0' : CL-VIEW
4	20 - 21	Software version	i2	Version of operating software
5	22	Data status	i1	1: Cloud base height/vertical visibility data 2: Cloud base height/vertical visibility, backscatter signal 6: Cloud base height/vertical visibility, cloud amount/height of cloud layer 7: Cloud base height/vertical visibility, backscatter signal, cloud amount/height of cloud layer
6	23	Spare character	a1	
7	25	Detection status	i1	0: Clear 1: One cloud base detected 2: Two cloud bases detected 3: Three cloud bases detected 4: Full obscuration determined but no cloud base detected 5: Some obscuration detected but determined to transparent
8	26	Warning and alarm information	a1	0: Self-check OK W: At least one warning active, no alarms A: At least one alarm active See No.12:observation information
9	28 - 32	Lowest cloud base height or vertical visibility	i5	In the case of detection status is 1,2 or 3: Lowest cloud base height In the case of detection status is 4: Calculation of vertical visibility In the case of detection status is 0 or 5: ///// Unit: See No.12:observation information
10	34 - 38	Second lowest cloud base height or highest signal detected	i5	In the case of detection status is 2 or 3: Second lowest cloud base height In the case of detection status is 4: Maximum height that a signal was detected In the case of detection status is 0,1 or 5: ///// Unit: See No.12:observation information
11	40 - 44	Highest cloud base height	i5	In the case of detection status is 3: Highest cloud base height In the case of detection status is 0,1,2,4,5: ///// Unit: See No.12:observation information
12	46 - 53	Observation information	a8	*1
13	55 - 56	Terminator	a2	CR+LF

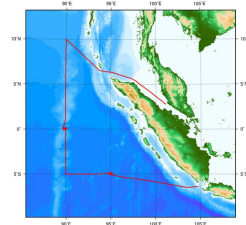
\*1: Observation information

The information is presented using 8 bytes characters. Each character, indicated in hexadecimal character, shows the following meanings;

Byte	Hexadecimal character (0:on, -:off)																Message(A:alarm, W:warning)
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
1	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Laser temperature shut-off(A)
	-	-	-	0	0	0	0	-	-	-	0	0	0	0	0	0	Laser failure(A)
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Receiver failure(A)
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Voltage failure(A)
2	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Spare(A)
	-	-	-	0	0	0	0	-	-	0	0	0	0	0	0	0	Spare(A)
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Spare(A)
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Spare(A)
3	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Windows contaminated(W)
	-	-	-	0	0	0	0	-	-	-	0	0	0	0	0	0	Battery low(W)
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Laser power low(W)
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Laser temperature high or low(W)
4	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Internal temperature high or low(W)
	-	-	-	0	0	0	0	-	-	-	0	0	0	0	0	0	Voltage high or low(W)
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Relative Humidity is > 85%(W)
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Receiver cross-talk compensation poor(W)
5	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Blower suspect(W)
	-	-	-	0	0	0	0	-	-	0	0	0	0	0	0	0	Spare(W)
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Spare(W)
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Spare(W)
6	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Blower is ON
	-	-	-	0	0	0	0	-	-	-	0	0	0	0	0	0	Blower heater is ON
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Internal heater is ON
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Units are METERS if ON , else FEET
7	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Polling mode is ON
	-	-	-	0	0	0	0	-	-	0	0	0	0	0	0	0	Working from battery
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Single sequence mode is ON
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Manual settings are effective
8	-	-	-	-	-	-	-	0	0	0	0	0	0	0	0	0	Tilt angle is > 45 degrees
	-	-	-	0	0	0	0	-	-	-	0	0	0	0	0	0	High background radiance
	-	0	0	-	0	0	0	-	0	0	-	0	0	-	0	0	Manual blower control
	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	0	Spare

### Related Information

MIRAI MR00-K07 Leg2 Cruise Track



Enlarge Image

**MR00-K07 Leg2**

Ship Name: MIRAI  
Period: 2000-11-09 - 2000-11-20  
Chief Scientist: Keisuke Mizuno (JAMSTEC)  
Project Name: [Tropical Ocean Climate Study (TOCS)]

Update History	
2016-10-11	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

KAIIMEI

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:

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 MR00-K07 Leg2 Cloud Ceiling

Last Modified: 2016-10-11

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

Cruise ID: [MR00-K07 Leg2](#)

Cloud Ceiling: Raw

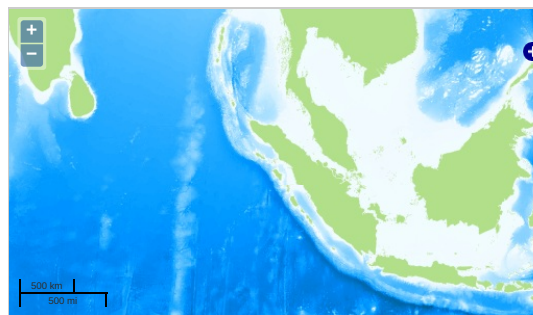
Data Policy: [JAMSTEC](#)

Observation Items: Cloud base height

Science Keywords:

ATMOSPHERE > CLOUDS > CLOUD  
BASE

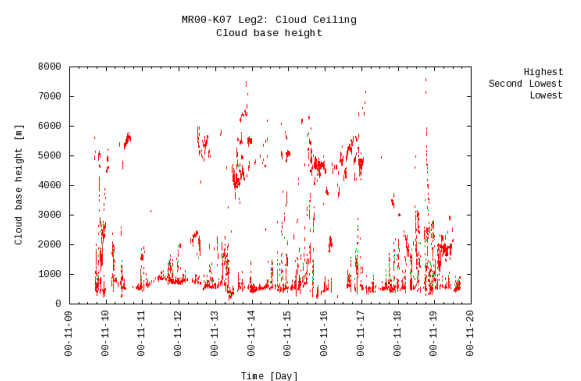
### Observation Map



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

Imagery reproduced from ...

### Figures



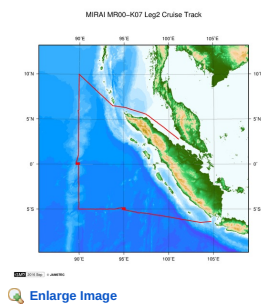
### Data List

[Add to Basket](#)

<input type="checkbox"/> File names
<input type="checkbox"/> C0110912.DAT
<input type="checkbox"/> C0110918.DAT
<input type="checkbox"/> C0111000.DAT
<input type="checkbox"/> C0111006.DAT
<input type="checkbox"/> C0111012.DAT
<input type="checkbox"/> C0111018.DAT
<input type="checkbox"/> C0111100.DAT
<input type="checkbox"/> C0111106.DAT
<input type="checkbox"/> C0111112.DAT
<input type="checkbox"/> C0111118.DAT
<input type="checkbox"/> C0111200.DAT
<input type="checkbox"/> C0111206.DAT
<input type="checkbox"/> C0111212.DAT
<input type="checkbox"/> C0111218.DAT
<input type="checkbox"/> C0111300.DAT
<input type="checkbox"/> C0111306.DAT
<input type="checkbox"/> C0111312.DAT
<input type="checkbox"/> C0111318.DAT
<input type="checkbox"/> C0111400.DAT
<input type="checkbox"/> C0111406.DAT
<input type="checkbox"/> C0111412.DAT
<input type="checkbox"/> C0111418.DAT
<input type="checkbox"/> C0111500.DAT
<input type="checkbox"/> C0111506.DAT
<input type="checkbox"/> C0111512.DAT
<input type="checkbox"/> C0111518.DAT
<input type="checkbox"/> C0111600.DAT
<input type="checkbox"/> C0111606.DAT

<input type="checkbox"/>	File names
<input type="checkbox"/>	C0111612.DAT
<input type="checkbox"/>	C0111618.DAT
<input type="checkbox"/>	C0111700.DAT
<input type="checkbox"/>	C0111706.DAT
<input type="checkbox"/>	C0111712.DAT
<input type="checkbox"/>	C0111718.DAT
<input type="checkbox"/>	C0111800.DAT
<input type="checkbox"/>	C0111806.DAT
<input type="checkbox"/>	C0111812.DAT
<input type="checkbox"/>	C0111818.DAT
<input type="checkbox"/>	C0111900.DAT
<input type="checkbox"/>	C0111906.DAT
<input type="checkbox"/>	C0111912.DAT

#### Related Information



#### MR00-K07 Leg2

Ship Name: MIRAI  
 Period: 2000-11-09 - 2000-11-20  
 Chief Scientist: Keisuke Mizuno (JAMSTEC)  
 Project Name: [Tropical Ocean Climate Study (TOCS)]

#### Update History

2016-10-11 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: