MIRAI MR11-08 Leg2 Cloud Ceiling

Last Modified: 2014-08-09

ReadMe | Observation Data | Data Format

Cruise ID: MR11-08 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/MR11-08_leg1-3_all.pdf

> ℹ️ **For Using Data**
>
> **Principal Investigator**
>   Data Management Office
>
> **Use Constraints**
>   See **Terms and Conditions** about constrain of use.
>
> **Data Citation**
>   See **Terms and Conditions** about data citation.

Period (UTC)

2011-12-20 21:00 – 2011-12-22 00:00
2011-12-23 19:30 – 2012-01-01 04:30
2012-01-03 14:00 – 2012-01-10 14:00

Instrument

Instrument:

Ceilometer (- MR12-05Leg3)

Overview

Ceilometer 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:	+-2% or +-1/2 * 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 : Ceilometer data files include the invalid data in this cruise as follows.

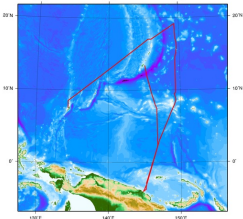|	
Date/Time :	Date,Time data is invalid
Format :	Format error data
DataLack :	Lack of data

<

Start		Stop		
File name	Date,Time	File name	Date,Time	Remarks
A2010900.DAT	20120109,141115 -	A2010920.DAT	20120109,200216	DataLack

Related Information

MIRAI MR11-08 Leg2 Cruise Track

MR11-08 Leg2
Ship Name: MIRAI
Period: 2011-12-20 - 2012-01-12
Chief Scientist: Akihiko Murata (JAMSTEC)
Project Name: [POST-WOCE Hydrography]

🔍 **Enlarge Image**

Update History

2014-08-09	An observation data was registerd.
2014-04-29	An observation data was registerd.

MIRAI MR11-08 Leg2 Cloud Ceiling

Last Modified: 2014-08-09

ReadMe | Observation Data | **Data Format**

Cruise ID: **MR11-08 Leg2**
Cloud Ceiling: Raw
Data Policy: **JAMSTEC**

Ceiling Raw

The record length of the data file is 56 bytes.

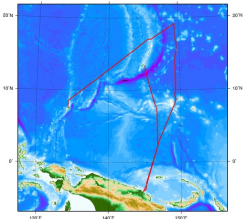| No.	Column	Content	Format	Remarks
1	1 - 8	Date	i4,i2,i2	YYYYMMDD (UTC)
2	10 - 15	Time	i2,i2,i2	hhmmss (UTC)
3	17 - 19	Operating software	a3	'CT0' : CT-VIEW 'CL0' : CL-VIEW
4	20 - 21	Software version	i2	Version of operating software
5	22	Data status	i1	1: Cloud base height/vertical visibility data 2: 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 (o:on, -:off)																Message(A:alarm, W:warning)
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
1	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Laser temperature shut-off(A)
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Laser failure(A)
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Receiver failure(A)
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Voltage failure(A)
2	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Spare(A)
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Spare(A)
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Spare(A)
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Spare(A)
3	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Windows contaminated(W)
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Battery low(W)
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Laser power low(W)
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Laser temperature high or low(W)
4	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Internal temperature high or low(W)
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Voltage high or low(W)
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Relative Humidity is > 85%(W)
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Receiver cross-talk compensation poor(W)
5	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Blower suspect(W)
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Spare(W)
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Spare(W)
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Spare(W)
6	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Blower is ON
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Blower heater is ON
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Internal heater is ON
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Units are METERS if ON , else FEET
7	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Polling mode is ON
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	Working from battery
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Single sequence mode is ON
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Manual settings are effective
8	-	-	-	-	-	-	-	-	o	o	o	o	o	o	o	o	Tilt angle is > 45 degrees
	-	-	-	-	o	o	o	o	-	-	-	-	o	o	o	o	High background radiance
	-	-	o	o	-	-	o	o	-	-	o	o	-	-	o	o	Manual blower control
	-	o	-	o	-	o	-	o	-	o	-	o	-	o	-	o	Spare

Related Information

MIRAI MR11-08 Leg2 Cruise Track

Enlarge Image

MR11-08 Leg2
Ship Name: MIRAI
Period: 2011-12-20 - 2012-01-12
Chief Scientist: Akihiko Murata (JAMSTEC)
Project Name: [POST-WOCE Hydrography]

Update History

2014-08-09	An observation data was registerd.
2014-04-29	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

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JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

MIRAI MR11-08 Leg2 Cloud Ceiling

Last Modified: 2014-08-09

ReadMe | **Observation Data** | Data Format
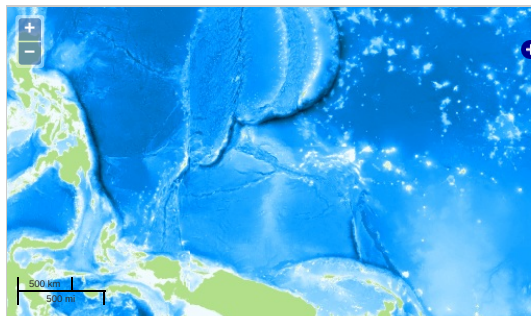
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Data Policy: **JAMSTEC**
Observation Items: Cloud base height
Science Keywords:

ATMOSPHERE > CLOUDS > CLOUD BASE

Observation Map

500 km
500 mi

Imagery reproduced from ...

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

Figures

MR11-08 Leg2: Cloud Ceiling
Cloud base height

Highest
Second Lowest
Lowest
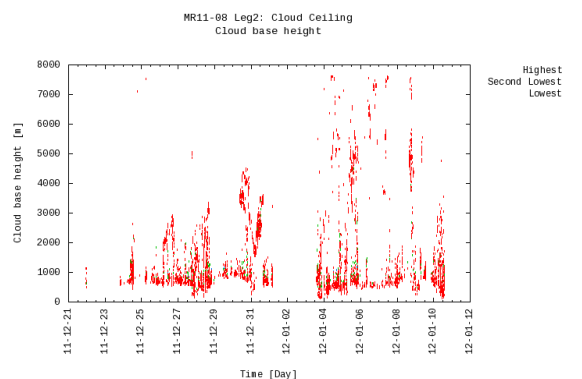
Data List

Add to Basket

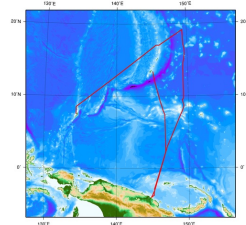| ☐	File names
☐	A1122100.DAT
☐	A1122300.DAT
☐	A1122400.DAT
☐	A1122500.DAT
☐	A1122600.DAT
☐	A1122700.DAT
☐	A1122800.DAT
☐	A1122900.DAT
☐	A1123000.DAT
☐	A1123100.DAT
☐	A2010100.DAT
☐	A2010300.DAT
☐	A2010400.DAT
☐	A2010500.DAT
☐	A2010600.DAT
☐	A2010700.DAT
☐	A2010800.DAT
☐	A2010900.DAT
☐	A2010920.DAT
☐	A2011000.DAT

Related Information

MIRAI MR11-08 Leg2 Cruise Track

Enlarge Image

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