

## MIRAI MR06-05 Leg2 Radiosonde

Last Modified: 2014-07-11

ReadMe Observation Data Data Format

Cruise ID: **MR06-05 Leg2**

Radiosonde: Processed (DMO)-Corrected

Data Policy: **JAMSTEC**

Observation Items: Atmospheric pressure, Air temperature, Dew point temperature, Relative humidity, Wind speed (zonal, meridional), Height

Science Keywords:

ATMOSPHERE > ATMOSPHERIC WATER VAPOR > DEW POINT TEMPERATURE  
ATMOSPHERE > ATMOSPHERIC WATER VAPOR > HUMIDITY  
ATMOSPHERE > ATMOSPHERIC TEMPERATURE > TEMPERATURE PROFILES  
ATMOSPHERE > ATMOSPHERIC WINDS > UPPER LEVEL WINDS  
ATMOSPHERE > ATMOSPHERIC WINDS > WIND PROFILES

Cruise Report

[http://www.godac.jamstec.go.jp/catalog/data/doc\\_catalog/media/MR06-05\\_leg2\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR06-05_leg2_all.pdf)

### 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.

### Instrument

Instrument:

Radiosonde (MR11-03 - MR15-E01 Leg3)



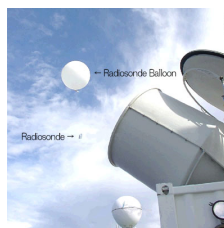
Instrument:

Radiosonde (MR04-03 Leg1 - MR11-02)



Instrument:

Radiosonde ( - MR04-02)



### Overview

#### Correction method

- Data observed by RS80 sensors

- Correction of ship body warming

Temperature and dew point temperature data near the surface (4.5 hPa from ship deck) were corrected by linear extrapolation using upper layer data, since these data were affected by ship body warming (cooling) at daytime (nighttime). Details for data processing and correction can be found in [Yoneyama et al. \(2002\)](#).

- Data observed by RS92 sensors

- Correction of ship body warming

Same as above

- Correction of Dry Bias

Humidity data observed by RS92 sensors contain dry bias mainly due to solar radiation error in daytime. We have corrected the humidity data observed by RS92 sensors using [Yoneyama et al.\(2008\)](#). method. RS92 sensors have been used since MR04-03 cruise.

#### Note

Information about each radiosonde data are listed in the following table. It contains corrected sounding data, launch time, position, sensor information and calibration results for atmospheric pressure, air temperature and relative humidity. Calibration is conducted for every sensor prior to launch. Therefore, even raw data take in this calibration result. If the calibration result shows the positive value, it means that the calibrator showed the higher value than that of the sonde sensor. Filename of corrected data shows a sounding time (YYMMDDHH.\*\*\*, where YY=year, MM=month, DD=day, and HH=hour) in UTC.

Data file	Launch time (UTC)		Launch station		Sensor information		Calibration result				Note
	Date	Time	Latitude	Longitude	Serial No.	Age	Atmospheric pressure[hPa]	Air temperature[deg-C]	Relative humidity1[%]	Relative humidity2[%]	
06112900.dat	2006/11/28	23:30	2.77N	77.20E	B1644688	229	1.07	-0.38	-0.44	-0.44	
06112906.dat	2006/11/29	05:30	2.36N	78.34E	B3431617	104	0.68	-0.24	-0.30	-0.32	
06112912.dat	2006/11/29	11:30	2.11N	78.98E	B3354754	110	0.39	-0.24	-0.42	-0.38	
06112918.dat	2006/11/29	17:30	1.81N	79.62E	B3440751	104	0.19	-0.20	-0.62	-0.60	
06113000.dat	2006/11/29	23:30	1.57N	80.20E	B3441360	104	0.65	-0.42	-0.15	-0.18	
06113006.dat	2006/11/30	05:30	1.48N	80.39E	B3440410	104	0.43	-0.22	-0.48	-0.50	
06113012.dat	2006/11/30	11:30	1.26N	80.54E	B3415930	108	0.30	-0.24	-0.44	-0.34	
06113018.dat	2006/11/30	17:30	0.06N	80.44E	B3415839	108	0.42	-0.33	-0.34	-0.42	Rain
06120100.dat	2006/11/30	23:30	1.14S	80.37E	B3415953	108	0.56	-0.24	-0.41	-0.42	
06120106.dat	2006/12/01	05:30	1.49S	80.35E	B3420675	107	0.55	-0.21	-0.25	-0.26	
06120112.dat	2006/12/01	11:30	1.40S	81.20E	B3430922	106	0.59	-0.34	-0.24	-0.28	
06120118.dat	2006/12/01	17:30	1.16S	82.77E	B3432379	107	0.67	-0.29	-0.33	-0.36	Rain

	Launch time (UTC)	Latitude	Longitude	Station	Sensor information	Age	Calibration	Result		
06120200.dat	2006/12/01 23:30	0.66S	85.86E	B3441055	B3441055	106	0.51	-0.23		
06120209.dat	2006/12/02 05:30	0.66S	85.86E	B3531020	B3531020	100	0.47	-0.18	Air	
06120212.dat	2006/12/02 06:11	0.61S	87.25E	B3531056	B3531056	100	0.88	-0.24	Relative humidity1[%]	Note
06120218.dat	2006/12/02 17:30	0.16S	88.59E	B3531076	B3531076	101	0.89	-0.33	Relative humidity2[%]	Rain
06120300.dat	2006/12/02 23:30	0.03N	89.73E	B3531052	B3531052	101	0.74	-0.35		
06120306.dat	2006/12/03 05:30	0.01N	90.09E	B3531051	B3531051	101	1.13	-0.41		
06120312.dat	2006/12/03 11:30	0.05N	89.93E	B3531050	B3531050	102	0.82	-0.38		
06120318.dat	2006/12/03 17:30	0.90S	90.08E	B3520892	B3520892	103	0.71	-0.35		
06120400.dat	2006/12/03 23:30	1.73S	90.05E	B3511994	B3511994	104	0.97	-0.37		Rain
06120406.dat	2006/12/04 05:30	1.72S	90.14E	B1745471	B1745471	227	0.56	-0.23		Rain
06120412.dat	2006/12/04 11:30	1.65S	90.01E	B2614244	B2614244	168	0.71	-0.27		
06120418.dat	2006/12/04 17:30	1.64S	90.09E	B2625494	B2625494	167	0.53	-0.32		Rain
06120500.dat	2006/12/04 23:30	1.60S	90.12E	B2924822	B2924822	146	0.50	-0.29		Rain
06120503.dat	2006/12/05 02:30	1.56S	90.12E	B2944106	B2944106	144	0.49	-0.34		Rain
06120506.dat	2006/12/05 05:30	1.59S	90.09E	B3015051	B3015051	140	0.67	-0.35		
06120509.dat	2006/12/05 08:30	1.64S	90.01E	B3034032	B3034032	138	0.58	-0.38		
06120512.dat	2006/12/05 11:30	1.64S	90.03E	B3441069	B3441069	110	0.62	-0.22		
06120515.dat	2006/12/05 14:30	1.66S	90.03E	B1374302	B1374302	254	0.61	-0.43		
06120518.dat	2006/12/05 17:30	1.69S	90.01E	B1374304	B1374304	254	0.65	-0.51		
06120521.dat	2006/12/05 20:30	1.69S	90.01E	B1374303	B1374303	254	0.67	-0.49		
06120600.dat	2006/12/05 23:30	1.67S	90.01E	B1374307	B1374307	254	0.64	-0.53		
06120603.dat	2006/12/06 02:30	1.65S	89.99E	B1375025	B1375025	254	0.48	-0.61		
06120606.dat	2006/12/06 05:30	1.65S	90.00E	B1375073	B1375073	254	0.80	-0.52		Rain
06120612.dat	2006/12/06 11:30	2.37S	91.06E	B1634828	B1634828	238	0.64	-0.35		
06120618.dat	2006/12/06 17:30	3.25S	92.37E	B1644708	B1644708	237	0.37	-0.26		
06120700.dat	2006/12/06 23:30	4.15S	93.66E	B1644721	B1644721	237	0.45	-0.28		Rain
06120706.dat	2006/12/07 05:30	5.02S	94.95E	B1644717	B1644717	237	0.46	-0.28		
06120712.dat	2006/12/07 11:30	4.97S	94.99E	B1644705	B1644705	238	0.37	-0.24		
06120718.dat	2006/12/07 17:30	4.97S	95.02E	B1644752	B1644752	238	0.56	-0.77		
06120800.dat	2006/12/07 23:30	4.95S	95.01E	B1644716	B1644716	238	0.70	-0.26		
06120806.dat	2006/12/08 05:30	4.94S	95.01E	B1644707	B1644707	238	0.57	-0.28		
06120812.dat	2006/12/08 11:30	4.77S	95.02E	B1644718	B1644718	238	0.48	-0.27		
06120818.dat	2006/12/08 17:30	3.53S	94.97E	B1644714	B1644714	239	0.55	-0.29		
06120900.dat	2006/12/08 23:30	2.28S	94.90E	B1644722	B1644722	239	0.50	-0.25		
06120906.dat	2006/12/09 05:30	1.25S	94.49E	B1644709	B1644709	239	0.65	-0.24		
06120912.dat	2006/12/09 11:30	0.55S	93.64E	B1644712	B1644712	240	0.47	-0.21		
06120918.dat	2006/12/09 17:30	0.24N	92.92E	B1644706	B1644706	240	0.49	-0.25		
06121000.dat	2006/12/09 23:30	1.19N	92.26E	B1644711	B1644711	240	0.59	-0.22		
06121006.dat	2006/12/10 05:30	2.33N	91.92E	B3610024	B3610024	103	1.21	-0.36		

#### Reference

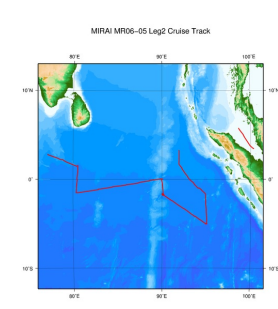
- K. Yoneyama, M.Hanyu, S.Sueyoshi, F.Yoshiura, and M.Katsumata, 2002:Radiosonde observation from the ship in the tropical region.[PDF:400kbyte]  
JAMSTECR, Vol.45, 31-39.
- K. Yoneyama, M.fujita, N.Sato, M.Fujiwara, Y.Inai, and F.Hasebe, 2008:Correction for Radiation Dry Bias Found in RS92 Radiosonde Data during the MISMO Field Experiment.[PDF:400kbyte] SOLA, Vol.4, 13-16.

#### Others

- Main processor: DigiCORAll. MW21(from 2004 Jul. to 2011 Mar.) [VAISALA, Finland]
- Radiosonde Sensor: RS92-SGP, RS80-15GH, RS80-15G [VAISALA, Finland]
  - \* The observations which using the RS80 sensors were mentioned in the "Note" of data page (other observations were performed using the RS92 sensors).
- Launcher Location: 22m (from base line)

#### Note

#### Related Information



[Enlarge Image](#)

#### MR06-05 Leg2

Ship Name: MIRAI  
Period: 2006-11-28 - 2006-12-13  
Chief Scientist: Yoshifumi Kuroda (JAMSTEC)  
Project Name: [Mirai Indian ocean cruise for the Study of the MJO convection Onset,MJO Research,Tropical Ocean Climate Study (TOCS)]

#### Update History

- |            |                                     |
|------------|-------------------------------------|
| 2014-07-11 | An observation data was registered. |
| 2014-06-13 | An observation data was registered. |
| 2012-11-25 | An observation data was registered. |

[Site Policy](#)  
[Privacy Policy](#)  
[Application for Data and Samples](#)  
[Data Policy](#)  
  
**What's New**  
[Update History](#)  
[Feeds](#)

[Publication List](#)  
[Amount of Public Info.](#)  
  
**Data**  
[Map Search](#)  
[Data Tree](#)  
[Detailed Search](#)

[NATSUSHIMA](#)  
[KAIYO](#)  
[YOKOSUKA](#)  
[MIRAI](#)  
[KAIREI](#)  
[CHIKYU](#)  
[KAIMEI](#)  
[SHINSEI MARU](#)  
[HAKUHO MARU](#)

**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](#)

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 MR06-05 Leg2 Radiosonde

Last Modified: 2014-07-11

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

Cruise ID: [MR06-05 Leg2](#)

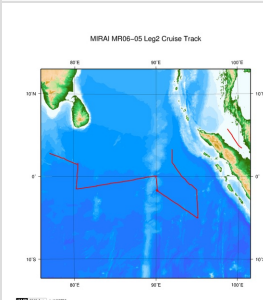
Radiosonde: Processed (DMO)-Corrected

Data Policy: [JAMSTEC](#)

### Radiosonde Corrected

No.	Column	Description	Format	Unit	Remarks
1	3 - 8	Atmospheric pressure	f6.1	hPa	
2	10 - 15	Air temperature	f6.1	deg-C	'9999.0' is missing value.
3	17 - 22	Dew point temperature	f6.1	deg-C	'9999.0' is missing value.
4	24 - 27	Relative humidity	i4	%	'9999' is missing value.
5	29 - 34	Wind speed (zonal)	f6.1	m/sec	'9999.0' is missing value.
6	36 - 41	Wind speed (meridional)	f6.1	m/sec	'9999.0' is missing value.
7	44 - 48	Height (from sea level)	i5	m	'99999' is missing value.
8	49 - 50	Terminator	a2		CR+LF

### Related Information



[Enlarge Image](#)

#### MR06-05 Leg2

Ship Name: MIRAI

Period: 2006-11-28 - 2006-12-13

Chief Scientist: Yoshitumi Kuroda (JAMSTEC)

Project Name: [Mirai Indian ocean cruise for the Study of the MJO convection Onset, MJO Research, Tropical Ocean Climate Study (TOCS)]

### Update History

2014-07-11	An observation data was registerd.
2014-06-13	An observation data was registerd.
2012-11-25	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 MR06-05 Leg2 Radiosonde

Last Modified: 2014-07-11

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

Cruise ID: [MR06-05 Leg2](#)

Radiosonde: Processed (DMO)-Corrected

Data Policy: [JAMSTEC](#)

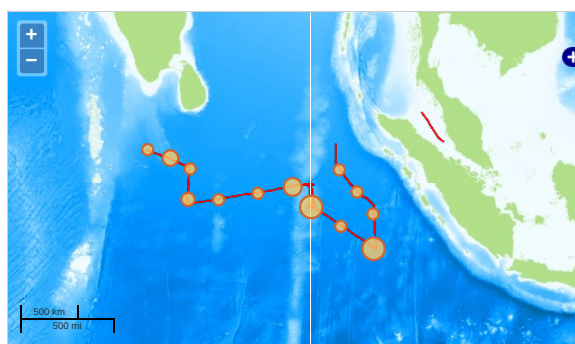
Observation Items: Atmospheric pressure, Air temperature, Dew point temperature, Relative humidity, Wind speed (zonal, meridional), Height

Science Keywords:

ATMOSPHERE > ATMOSPHERIC WATER VAPOR > DEW POINT TEMPERATURE  
ATMOSPHERE > ATMOSPHERIC WATER VAPOR > HUMIDITY  
ATMOSPHERE > ATMOSPHERIC TEMPERATURE > TEMPERATURE PROFILES  
ATMOSPHERE > ATMOSPHERIC WINDS > UPPER LEVEL WINDS  
ATMOSPHERE > ATMOSPHERIC WINDS > WIND PROFILES

### Observation Map

1. Clicking the icon displays a balloon with observation information.
2. Then click the observation name, figures will be displayed.

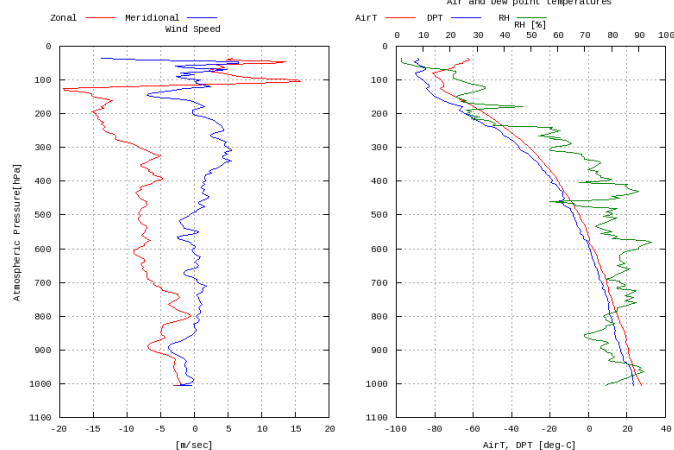


— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole

### Figures

06112900

MR06-05 Leg2: 06112900  
Radiosonde



### Data List

☐ File names

☐ 06112900.dat

☐ 06112906.dat

☐ 06112912.dat

☐ 06112918.dat

☐ 06113000.dat

☐ 06113006.dat

☐ 06113012.dat

☐ 06113018.dat

☐ 06120100.dat

☐ 06120106.dat

☐ 06120112.dat

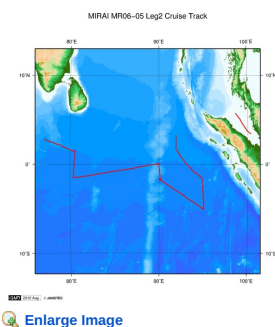
☐ 06120118.dat

☐ 06120200.dat

☐ 06120206.dat

<input type="checkbox"/>	File names
<input type="checkbox"/>	2011-12-18
<input type="checkbox"/>	06120218.dat
<input type="checkbox"/>	06120300.dat
<input type="checkbox"/>	06120306.dat
<input type="checkbox"/>	06120312.dat
<input type="checkbox"/>	06120318.dat
<input type="checkbox"/>	06120400.dat
<input type="checkbox"/>	06120406.dat
<input type="checkbox"/>	06120412.dat
<input type="checkbox"/>	06120418.dat
<input type="checkbox"/>	06120500.dat
<input type="checkbox"/>	06120503.dat
<input type="checkbox"/>	06120506.dat
<input type="checkbox"/>	06120509.dat
<input type="checkbox"/>	06120512.dat
<input type="checkbox"/>	06120515.dat
<input type="checkbox"/>	06120518.dat
<input type="checkbox"/>	06120521.dat
<input type="checkbox"/>	06120600.dat
<input type="checkbox"/>	06120603.dat
<input type="checkbox"/>	06120606.dat
<input type="checkbox"/>	06120612.dat
<input type="checkbox"/>	06120618.dat
<input type="checkbox"/>	06120700.dat
<input type="checkbox"/>	06120706.dat
<input type="checkbox"/>	06120712.dat
<input type="checkbox"/>	06120718.dat
<input type="checkbox"/>	06120800.dat
<input type="checkbox"/>	06120806.dat
<input type="checkbox"/>	06120812.dat
<input type="checkbox"/>	06120818.dat
<input type="checkbox"/>	06120900.dat
<input type="checkbox"/>	06120906.dat
<input type="checkbox"/>	06120912.dat
<input type="checkbox"/>	06120918.dat
<input type="checkbox"/>	06121000.dat
<input type="checkbox"/>	06121006.dat

#### Related Information



#### MR06-05 Leg2

Ship Name: MIRAI

Period: 2006-11-28 - 2006-12-13

Chief Scientist: Yoshifumi Kuroda (JAMSTEC)

Project Name: [Mirai Indian ocean cruise for the Study of the MJO convection Onset, MJO Research, Tropical Ocean Climate Study (TOCS)]

#### Update History

2014-07-11	An observation data was registerd.
2014-06-13	An observation data was registerd.
2012-11-25	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:

