

MIRAI MR08-03 Radiosonde

Last Modified: 2014-07-11

ReadMe Observation Data Data Format

Cruise ID: **MR08-03**

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/MR08-03_all.pdf

For Using Data

Principal Investigator

Data Management Office

Use Constraints

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

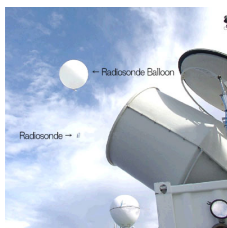
Data Citation

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

Instrument

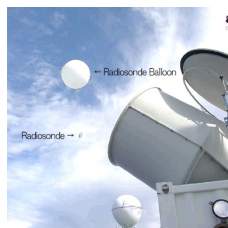
Instrument:

Radiosonde (MR11-03 - MR15-E01 Leg3)



Instrument:

Radiosonde (MR04-03 Leg1 - MR11-02)



Instrument:

Radiosonde (- MR04-02)



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[%]	
08070312.dat	2008/07/03	11:30	11.07N	145.45E	D1814699	66	1.68	-0.34	-0.06	-0.58	
08070400.dat	2008/07/03	23:30	8.86N	146.17E	D1814696	66	1.52	-0.36	-0.23	-0.24	
08070412.dat	2008/07/04	11:30	6.54N	146.76E	D1814700	66	1.49	-0.41	-0.04	-0.27	
08070500.dat	2008/07/04	23:30	5.00N	146.93E	D1814692	67	1.68	-0.41	-0.05	-0.08	
08070512.dat	2008/07/05	11:30	5.38N	146.95E	D1715669	74	1.75	-0.38	-0.18	-0.23	Rain
08070600.dat	2008/07/05	23:30	4.96N	147.01E	D1715665	75	1.56	-0.34	-0.23	-0.28	Rain
08070612.dat	2008/07/06	11:30	3.66N	147.20E	D1814224	68	1.16	-0.49	-0.06	-0.10	
08070700.dat	2008/07/06	23:30	3.00N	147.01E	D1813373	69	1.14	-0.41	-0.05	-0.09	
08070712.dat	2008/07/07	11:30	1.98N	147.06E	D1814222	70	1.09	-0.32	-0.08	-0.08	
08070800.dat	2008/07/07	23:30	2.00N	147.05E	D1814218	70	1.21	-0.37	-0.04	-0.06	
08070812.dat	2008/07/08	11:30	1.94N	147.21E	D1814718	70	1.57	-0.31	-0.18	-0.23	Rain
08070900.dat	2008/07/08	23:30	2.07N	146.98E	D1814713	71	1.62	-0.37	-0.32	-0.35	
08070912.dat	2008/07/09	11:30	0.22N	146.99E	D1813379	72	1.31	-0.55	-0.17	-0.19	

08071000.dat	2008/07/10	23:30	0.02S	146.97E	D175579	1.63	-0.33	-0.17	-0.36	
08071012.dat	2008/07/10	11:30	0.20S	147.52E	D1812409	1.63	-0.33	-0.17	-0.36	
08071100.dat	2008/07/10	23:30	0.00N	147.06E	D1715856	80	1.33	-0.37	-0.19	Note
08071112.dat	2008/07/11	11:30	0.09S	147.07E	D1814670	74	1.30	-0.34	-0.34	
08071200.dat	2008/07/11	23:30	0.07N	146.98E	D1715677	81	1.16	-0.44	-0.21	
08071212.dat	2008/07/12	11:30	0.38S	148.97E	D1715821	82	1.45	-0.40	-0.29	
08071300.dat	2008/07/12	23:30	1.02S	151.75E	D1715227	82	1.51	-0.29	-0.14	Rain
08071312.dat	2008/07/13	11:30	1.65S	154.57E	D1814674	76	1.25	-0.64	0.01	
08071400.dat	2008/07/13	23:30	1.99S	156.02E	D1814666	76	1.31	-0.39	-0.10	
08071412.dat	2008/07/14	11:30	2.08S	156.06E	D1814682	76	1.46	-0.45	-0.03	
08071500.dat	2008/07/14	23:30	1.92S	155.77E	D1814698	77	1.51	-0.29	-0.14	
08071512.dat	2008/07/15	11:30	3.93S	155.99E	D1814684	78	1.51	-0.28	-0.07	
08071600.dat	2008/07/15	23:30	4.96S	156.01E	D1814695	78	1.57	-0.28	-0.06	
08071612.dat	2008/07/16	11:30	5.07S	156.05E	D1814680	78	2.21	-0.33	-0.07	
08071700.dat	2008/07/16	23:30	5.05S	155.98E	D1814683	79	1.27	-0.36	-0.11	
08071712.dat	2008/07/17	11:30	3.05S	155.99E	D1814687	80	1.55	-0.43	-0.23	
08071800.dat	2008/07/17	23:30	1.99S	156.03E	D1814668	80	1.53	-0.38	-0.19	
08071812.dat	2008/07/18	11:30	1.97S	155.97E	D1754134	84	1.34	-0.54	-0.08	
08071900.dat	2008/07/18	23:30	0.99S	155.99E	D1824326	80	1.16	-0.47	-0.13	
08071912.dat	2008/07/19	11:30	0.02N	155.96E	D1754146	84	1.29	-0.40	-0.28	
08072000.dat	2008/07/19	23:30	0.02S	155.96E	D1754123	85	1.16	-0.40	-0.21	
08072012.dat	2008/07/20	11:30	0.05N	156.04E	D1754144	86	1.03	-0.35	-0.35	
08072100.dat	2008/07/20	23:30	0.04N	155.99E	D1824325	82	1.09	-0.52	-0.28	
08072112.dat	2008/07/21	11:30	1.95N	156.02E	D1754802	86	1.52	-0.40	-0.13	
08072200.dat	2008/07/21	23:30	1.96N	156.00E	D1754141	87	1.39	-0.63	-0.20	
08072212.dat	2008/07/22	11:30	2.02N	156.26E	D1754124	88	1.46	-0.50	-0.24	
08072300.dat	2008/07/22	23:30	2.09N	156.05E	D1754135	88	1.30	-0.60	-0.18	
08072312.dat	2008/07/23	11:30	3.84N	156.00E	D1754794	88	1.71	-0.58	-0.24	Rain
08072400.dat	2008/07/23	23:30	4.97N	156.03E	D1754140	89	1.28	-0.31	-0.26	Rain
08072412.dat	2008/07/24	11:30	4.28N	156.06E	D1754125	90	1.29	-0.48	-0.28	
08072500.dat	2008/07/24	23:30	5.03N	155.93E	D1754793	90	1.63	-0.60	-0.15	
08072512.dat	2008/07/25	11:30	5.78N	156.00E	D1754801	90	1.83	-0.38	-0.04	
08072600.dat	2008/07/25	23:30	7.50N	156.00E	D1754814	91	1.44	-0.49	-0.24	
08072612.dat	2008/07/26	11:30	8.02N	156.10E	D1824327	88	1.28	-0.36	-0.15	
08072700.dat	2008/07/26	23:30	7.98N	155.99E	D1824328	88	1.11	-0.47	-0.23	
08072712.dat	2008/07/27	11:30	8.60N	155.75E	D1754126	92	1.29	-0.58	-0.23	
08072800.dat	2008/07/27	23:30	10.85N	154.75E	D1754803	93	1.85	-0.45	-0.30	
08072812.dat	2008/07/28	11:30	13.14N	153.72E	D1754128	94	1.42	-0.60	-0.27	
08072900.dat	2008/07/28	23:30	15.30N	152.74E	D1754127	94	1.09	-0.43	-0.33	
08072912.dat	2008/07/29	11:30	17.53N	151.72E	D1754137	94	1.41	-0.66	-0.41	
08073000.dat	2008/07/29	23:30	19.72N	150.70E	D1824322	91	1.16	-0.45	-0.36	
08073012.dat	2008/07/30	11:30	21.96N	149.63E	D1754131	96	1.21	-0.60	-0.41	Rain
08073100.dat	2008/07/30	23:30	24.20N	148.58E	D1754813	96	1.77	-0.57	-0.55	Rain
08073112.dat	2008/07/31	11:30	26.42N	147.41E	D1754810	96	1.70	-0.24	-0.49	
08080100.dat	2008/07/31	23:30	28.66N	146.19E	D1754817	97	1.63	-0.49	-0.51	
08080112.dat	2008/08/01	11:30	30.79N	144.96E	D1824329	94	1.13	-0.39	-0.14	
08080200.dat	2008/08/01	23:30	32.85N	144.66E	D1813333	95	1.55	-0.50	-0.09	
08080206.dat	2008/08/02	05:30	33.89N	145.06E	D1754800	98	1.49	-0.45	-0.12	
08080212.dat	2008/08/02	11:30	34.85N	145.44E	D1813325	96	1.20	-0.58	-0.16	
08080218.dat	2008/08/02	17:30	36.01N	145.91E	D1813332	96	1.39	-0.45	-0.13	
08080300.dat	2008/08/02	23:30	37.09N	146.33E	D1813328	96	1.18	-0.39	-0.15	
08080306.dat	2008/08/03	05:30	38.17N	146.51E	D1813322	96	1.17	-0.47	-0.13	
08080312.dat	2008/08/03	11:30	39.02N	147.11E	D1754130	100	1.67	-0.47	-0.19	
08080318.dat	2008/08/03	17:30	39.23N	146.37E	D1754132	100	1.23	-0.44	-0.13	
08080400.dat	2008/08/03	23:30	39.49N	145.31E	D1813330	97	1.21	-0.36	-0.18	

Reference

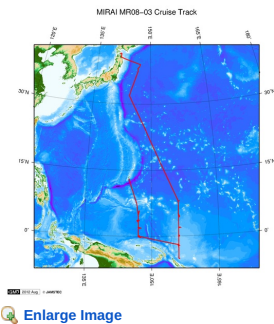
- K. Yoneyama, M.Hanyu, S.Sueyoshi, F.Yoshiura, and M.Katsumata, 2002:Radiosonde observation from the ship in the tropical region.[\[PDF:400kbyte\]](#)
JAMSTECR, Vol.45, 31-39.
- K. Yoneyama, M.fujita, N.Sato, M.Fujiwara, Y.Inai, and F.Hasebe, 2008:Correction for Radiation Dry Bias Found in RS92 Radiosonde 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



MR08-03

Ship Name: MIRAI

Period: 2008-07-02 - 2008-08-06

Chief Scientist: Yuji Kashino (JAMSTEC)

Project Name: [Tropical Ocean Climate Study (TOCS), Station KEO]

Proposal Tropical Ocean Climate Study

Title:

Update History

2014-07-11	An observation data was registerd.
2014-06-13	An observation data was registerd.
2012-10-26	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:

Copyright 2011 Japan Agency for Marine-Earth Science and Technology



JAMSTEC
JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

国立研究開発法人
海洋研究開発機構

MIRAI MR08-03 Radiosonde

Last Modified: 2014-07-11

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

Cruise ID: [MR08-03](#)

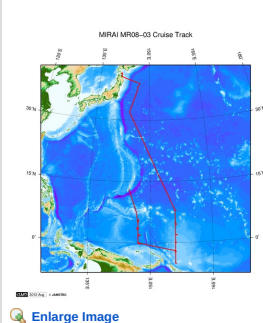
Radiosonde: Processed (DMO)-Corrected

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



MR08-03

Ship Name: MIRAI

Period: 2008-07-02 - 2008-08-06

Chief Scientist: Yuji Kashino (JAMSTEC)

Project Name: [Tropical Ocean Climate Study (TOCS), Station KEO]

Proposal Tropical Ocean Climate Study

Title:

Update History

2014-07-11	An observation data was registerd.
2014-06-13	An observation data was registerd.
2012-10-26	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 MR08-03 Radiosonde

Last Modified: 2014-07-11

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

Cruise ID: [MR08-03](#)

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

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

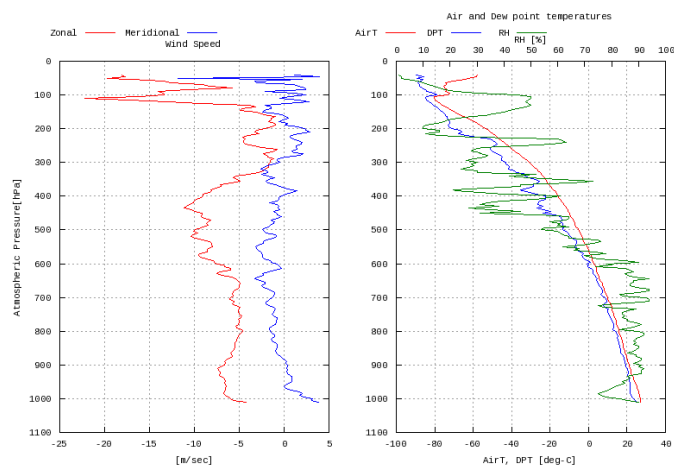


— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole

Figures

08070312

MR08-03: 08070312
Radiosonde



Data List

☐ File names

☐ 08070312.dat

☐ 08070400.dat

☐ 08070412.dat

☐ 08070500.dat

☐ 08070512.dat

☐ 08070600.dat

☐ 08070612.dat

☐ 08070700.dat

☐ 08070712.dat

☐ 08070800.dat

☐ 08070812.dat

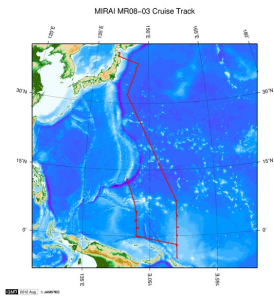
☐ 08070900.dat

☐ 08070912.dat

☐ 08071000.dat

File names
<input type="checkbox"/> 08071000.dat
<input type="checkbox"/> 08071100.dat
<input type="checkbox"/> 08071112.dat
<input type="checkbox"/> 08071200.dat
<input type="checkbox"/> 08071212.dat
<input type="checkbox"/> 08071300.dat
<input type="checkbox"/> 08071312.dat
<input type="checkbox"/> 08071400.dat
<input type="checkbox"/> 08071412.dat
<input type="checkbox"/> 08071500.dat
<input type="checkbox"/> 08071512.dat
<input type="checkbox"/> 08071600.dat
<input type="checkbox"/> 08071612.dat
<input type="checkbox"/> 08071700.dat
<input type="checkbox"/> 08071712.dat
<input type="checkbox"/> 08071800.dat
<input type="checkbox"/> 08071812.dat
<input type="checkbox"/> 08071900.dat
<input type="checkbox"/> 08071912.dat
<input type="checkbox"/> 08072000.dat
<input type="checkbox"/> 08072012.dat
<input type="checkbox"/> 08072100.dat
<input type="checkbox"/> 08072112.dat
<input type="checkbox"/> 08072200.dat
<input type="checkbox"/> 08072212.dat
<input type="checkbox"/> 08072300.dat
<input type="checkbox"/> 08072312.dat
<input type="checkbox"/> 08072400.dat
<input type="checkbox"/> 08072412.dat
<input type="checkbox"/> 08072500.dat
<input type="checkbox"/> 08072512.dat
<input type="checkbox"/> 08072600.dat
<input type="checkbox"/> 08072612.dat
<input type="checkbox"/> 08072700.dat
<input type="checkbox"/> 08072712.dat
<input type="checkbox"/> 08072800.dat
<input type="checkbox"/> 08072812.dat
<input type="checkbox"/> 08072900.dat
<input type="checkbox"/> 08072912.dat
<input type="checkbox"/> 08073000.dat
<input type="checkbox"/> 08073012.dat
<input type="checkbox"/> 08073100.dat
<input type="checkbox"/> 08073112.dat
<input type="checkbox"/> 08080100.dat
<input type="checkbox"/> 08080112.dat
<input type="checkbox"/> 08080200.dat
<input type="checkbox"/> 08080206.dat
<input type="checkbox"/> 08080212.dat
<input type="checkbox"/> 08080218.dat
<input type="checkbox"/> 08080300.dat
<input type="checkbox"/> 08080306.dat
<input type="checkbox"/> 08080312.dat
<input type="checkbox"/> 08080318.dat
<input type="checkbox"/> 08080400.dat

Related Information



[Enlarge Image](#)

MR08-03

Ship Name: MIRAI
 Period: 2008-07-02 - 2008-08-06
 Chief Scientist: Yuji Kashino (JAMSTEC)
 Project Name: [Tropical Ocean Climate Study (TOCS),Station KEO]
 Proposal Tropical Ocean Climate Study
 Title:

Update History

2014-07-11	An observation data was registerd.
2014-06-13	An observation data was registerd.
2012-10-26	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:

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