

MIRAI MR12-02 Leg1 Radiosonde

Last Modified: 2018-04-09

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

Cruise ID: [MR12-02 Leg1](#)

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/MR12-02_leg1-2_all.pdf

For Using Data

Principal Investigator

Data Management Office

Use Constraints

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

Data Citation

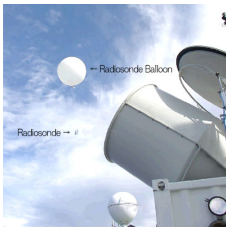
See [Terms and Conditions](#) about data citation.

Instrument

Instrument:

Radiosonde (MR11-03 - MR15-E01

Leg3)



Overview

Correction method

· 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. \(2002\)](#).

Note

Information about each radiosonde data are listed in the table of data page. 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[%]	
12060603.dat	2012/06/06	02:30	41.15N	146.98E	H0653566	123	1.13	-0.18	0.08	0.00	
12061303.dat	2012/06/13	02:30	47.00N	160.00E	H0624264	133	-0.09	-0.21	-0.30	-0.31	
12061310.dat	2012/06/13	09:30	47.00N	160.00E	A2740467	2539	0.69	-0.63	-0.63	-0.66	
12061314.dat	2012/06/13	13:30	47.04N	160.16E	H0624270	134	0.01	-0.19	-0.13	-0.18	
12061603.dat	2012/06/16	02:30	44.49N	159.72E	H0624231	136	-0.01	-0.17	-0.09	-0.10	
12061614.dat	2012/06/16	13:30	44.60N	158.99E	H0653558	134	-0.10	-0.23	-0.15	-0.15	
12061914.dat	2012/06/19	13:30	37.95N	146.59E	G0540028	509	0.79	-0.18	0.08	-0.02	Rain
12061916.dat	2012/06/19	15:30	37.74N	146.51E	G0540039	509	1.14	-0.20	-0.15	-0.19	Rain
12061917.dat	2012/06/19	16:30	37.47N	146.38E	G0540815	509	0.40	-0.17	-0.02	-0.17	
12061919.dat	2012/06/19	18:30	37.20N	146.26E	G0540821	509	0.22	-0.16	-0.04	-0.07	Rain
12061920.dat	2012/06/19	19:30	36.91N	146.13E	G0540798	509	0.36	-0.13	-0.03	-0.07	Rain, Max:3,713m
12062115.dat	2012/06/21	14:30	33.84N	144.90E	H0653576	139	-0.20	-0.15	-0.30	-0.32	
12062303.dat	2012/06/23	02:30	38.09N	146.34E	H0653383	140	0.39	-0.30	-0.34	-0.39	

Reference

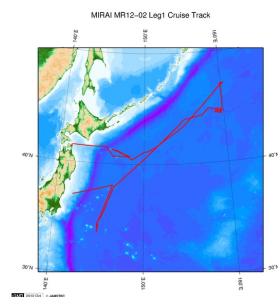
K. Yoneyama, M.Hanyu, S.Sueyoshi, F.Yoshiura, and M.Katsumata, 2002:Radiosonde observation from the ship in the tropical region.[[PDF:400kbyte](#)]
JAMSTECR, Vol.45, 31-39.

Others

- Main processor: DigiCORAlll, MW31(after 2011 Apr.) [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](#)

MR12-02 Leg1

Ship Name: MIRAI

Period: 2012-06-04 - 2012-06-24

Chief Scientist: Makio Honda (JAMSTEC)

Project Name: [Station K2, Station KNOT]

Proposal ▶ Change in material cycles and ecosystem by the climate change and its feedback
Title:

Update History

2018-04-09	An observation data was registerd.
2014-08-09	An observation data was registerd.
2014-07-30	An observation data was registerd.

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Dive ID:

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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 MR12-02 Leg1 Radiosonde

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Cruise ID: [MR12-02 Leg1](#)

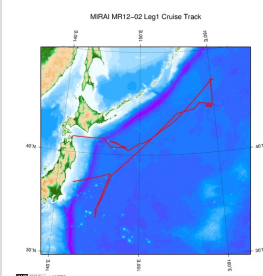
Radiosonde: Processed (DMO)-Corrected

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



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MIRAI MR12-02 Leg1 Radiosonde

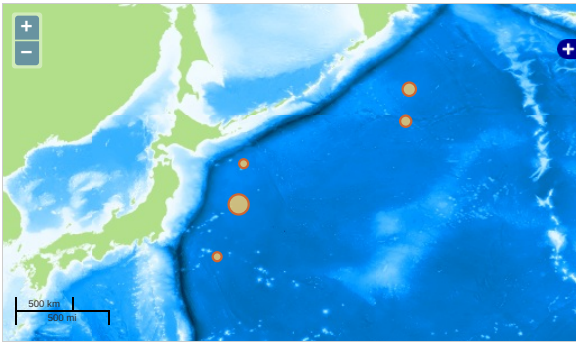
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Observation Map

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



Imagery reproduced from ...

... Observation Line

... Navigation

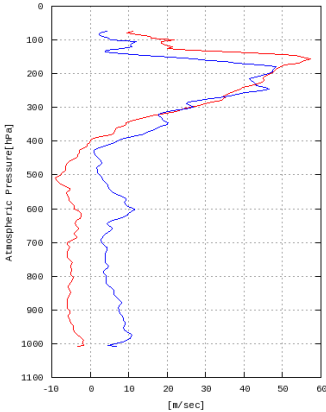
... Observation, Dive Point, Hole

Figures

12060603

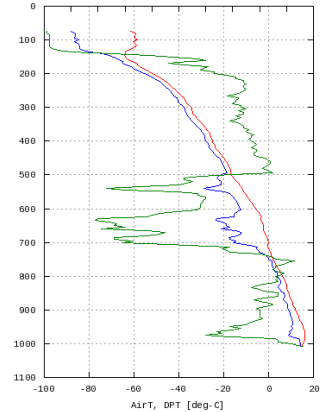
MR12-02 Leg1: 12060603
Radiosonde

Zonal — Meridional — wind speed



Air and Dew point temperatures

AirT — DPT — RH [%]

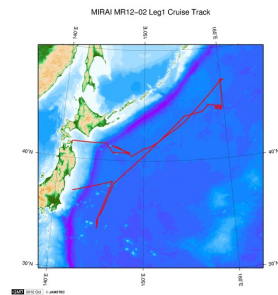


Data List

Add to Basket

<input type="checkbox"/>	File names
<input type="checkbox"/>	12060603.dat
<input type="checkbox"/>	12061303.dat
<input type="checkbox"/>	12061310.dat
<input type="checkbox"/>	12061314.dat
<input type="checkbox"/>	12061603.dat
<input type="checkbox"/>	12061614.dat
<input type="checkbox"/>	12061914.dat
<input type="checkbox"/>	12061916.dat
<input type="checkbox"/>	12061917.dat
<input type="checkbox"/>	12061919.dat
<input type="checkbox"/>	12061920.dat
<input type="checkbox"/>	12062115.dat
<input type="checkbox"/>	12062303.dat

Related Information



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