

MIRAI MR12-03 Radiosonde

Last Modified: 2017-08-23

ReadMe Observation Data Data Format

Cruise ID: **MR12-03**

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/MR12-03_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)



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[%]	
12071721.dat	2012/07/17	20:30	37.85N	142.76E	G2123918	427	0.99	-0.36	-1.30	-1.25	
12071803.dat	2012/07/18	02:30	36.73N	143.04E	G2123897	427	0.92	-0.26	-1.40	-1.41	Rain
12071809.dat	2012/07/18	08:30	35.75N	143.26E	G2143245	425	0.40	-0.26	-0.33	-0.35	
12071815.dat	2012/07/18	14:30	34.71N	143.52E	G2123928	428	0.45	-0.17	-0.31	-0.30	
12071821.dat	2012/07/18	20:30	33.60N	143.76E	G2123906	428	0.46	-0.23	-0.27	-0.28	
12072003.dat	2012/07/20	02:30	27.62N	144.90E	H0653528	167	0.50	-0.14	-0.17	-0.20	
12072115.dat	2012/07/21	14:30	20.87N	146.09E	H0653533	169	0.42	-0.23	-0.33	-0.36	
12072303.dat	2012/07/23	02:30	13.64N	146.66E	H0713065	167	0.17	-0.09	-0.31	-0.38	
12072415.dat	2012/07/24	14:30	6.79N	146.79E	H0653551	172	-0.10	-0.26	-0.38	-0.38	
12072503.dat	2012/07/25	02:30	4.97N	146.97E	H0653554	172	0.03	-0.21	-0.28	-0.31	Drizzle
12072715.dat	2012/07/27	14:30	1.53N	146.97E	H0653552	175	0.10	-0.15	-0.20	-0.21	Drizzle
12072803.dat	2012/07/28	02:30	2.08N	146.96E	H0653546	175	0.31	-0.17	-0.13	-0.15	Drizzle
12073015.dat	2012/07/30	14:30	0.10S	149.16E	H0653573	178	0.28	-0.19	-0.31	-0.34	
12073103.dat	2012/07/31	02:30	0.21S	151.54E	H0653569	178	-0.16	-0.18	-0.36	-0.40	
12080202.dat	2012/08/02	01:30	3.27S	153.07E	H0653545	180	0.55	-0.22	-0.31	-0.33	
12080215.dat	2012/08/02	14:30	4.87S	154.25E	H0653531	181	0.41	-0.22	-0.11	-0.15	
12080503.dat	2012/08/05	02:30	4.58S	156.00E	H0623939	186	0.24	-0.22	-0.38	-0.38	
12080515.dat	2012/08/05	14:30	4.27S	157.00E	H0623926	187	0.44	-0.18	-0.42	-0.49	Rain

12080715.dat	2012/08/07 14:30	4.78S	157.59E	H0623909	189	0.12	-0.19	-0.20	-0.21	
12080803.dat	2012/08/03 02:30	4.28S	157.39E	H0623909	189	0.24	-0.20	-0.25	-0.24	
12080815.dat	2012/08/08 14:30	2.72S	156.44E	H0623902	190	0.05	-0.17	-0.23	-0.23	Note
12081003.dat	2012/08/10 02:30	1.79S	155.98E	H0623913	191	0.14	-0.20	-0.33	-0.28	
12081015.dat	2012/08/10 14:30	0.59S	156.02E	H0623950	192	0.12	-0.21	-0.44	-0.45	
12081100.dat	2012/08/10 23:30	0.02S	156.10E	H0623917	192	-0.20	-0.22	-0.19	-0.20	
12081103.dat	2012/08/11 02:30	0.04S	156.14E	H0623907	192	0.82	-0.20	-0.25	-0.28	
12081104.dat	2012/08/11 03:30	0.05S	156.06E	H0623900	192	0.26	-0.16	-0.20	-0.20	
12081203.dat	2012/08/12 02:30	0.04S	156.13E	H0623659	193	0.50	-0.20	-0.28	-0.32	
12081215.dat	2012/08/12 14:30	0.00N	155.98E	H0624232	194	0.04	-0.22	-0.39	-0.32	Drizzle
12081313.dat	2012/08/13 12:30	0.00N	155.99E	H0624825	195	0.41	-0.13	-0.44	-0.47	
12081403.dat	2012/08/14 02:30	0.36N	156.00E	H0623957	195	-0.02	-0.19	-0.37	-0.39	
12081415.dat	2012/08/14 14:30	1.25N	156.00E	H0623947	196	-0.05	-0.22	-0.54	-0.54	
12081613.dat	2012/08/16 12:30	2.41N	156.09E	H0623924	198	0.15	-0.17	-0.23	-0.23	
12081703.dat	2012/08/17 02:30	2.38N	156.02E	H0623906	198	0.35	-0.17	-0.23	-0.27	
12081903.dat	2012/08/19 02:30	5.25N	155.99E	H0623954	200	0.11	-0.22	-0.49	-0.50	
12081915.dat	2012/08/19 14:30	7.26N	156.00E	H0623923	201	0.26	-0.22	-0.22	-0.25	
12082003.dat	2012/08/20 02:30	7.97N	156.02E	H0624273	201	0.59	-0.22	-0.08	-0.19	
12082215.dat	2012/08/22 14:30	14.58N	153.18E	H0624254	204	-0.79	-0.18	-0.51	-0.51	Rain
12082315.dat	2012/08/23 14:30	18.18N	151.59E	H0623661	205	0.21	-0.21	-0.15	-0.18	
12082403.dat	2012/08/24 02:30	20.52N	150.66E	H0623932	205	0.34	-0.21	-0.13	-0.13	
12082503.dat	2012/08/25 02:30	25.43N	148.66E	H0623925	206	0.61	-0.20	-0.24	-0.28	
12082615.dat	2012/08/26 14:30	32.65N	145.55E	H0623660	208	0.36	-0.21	-0.42	-0.42	
12082621.dat	2012/08/26 20:30	33.81N	145.03E	G2123899	467	0.48	-0.23	-0.20	-0.21	
12082703.dat	2012/08/27 02:30	34.91N	144.52E	G2143231	465	0.83	-0.26	-0.41	-0.41	
12082709.dat	2012/08/27 08:30	36.08N	143.99E	G2123929	467	0.24	-0.25	-0.31	-0.34	
12082715.dat	2012/08/27 14:30	37.25N	143.44E	G2123953	468	0.40	-0.19	-0.39	-0.40	

Reference

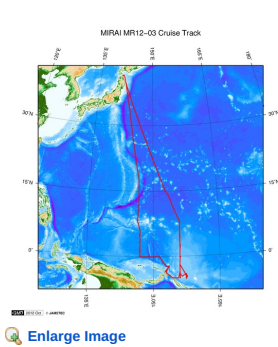
K. Yoneyama, M.Hanyu, S.Sueyoshi, F.Yoshiura, and M.Katsumata, 2002:Radiosonde observation from the ship in the tropical region.[PDF:400kbyte]
JAMSTECR, Vol.45, 31-39.

Others

- Main processor: DigiCORAll, 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



MR12-03
Ship Name: MIRAI
Period: 2012-07-16 - 2012-08-29
Chief Scientist: Yuji Kashino (JAMSTEC)
Project Name: [Tropical Ocean Climate Study (TOCS)]

Update History

2017-08-23	An observation data was registered.
2015-05-13	An observation data was registered.
2014-08-29	An observation data was registered.

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SHINKAI 6500
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HYPER-DOLPHIN
URASHIMA
YOKOSUKA DEEP TOW
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6K Sonar DEEP TOW
KM-ROV
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POWER GRAB SAMPLER (CLOW)
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MIRAI MR12-03 Radiosonde

Last Modified: 2017-08-23

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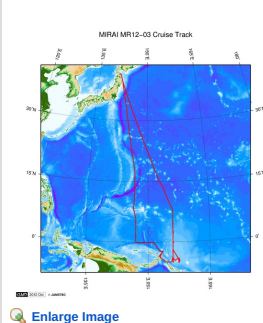
Radiosonde: Processed (DMO)-Corrected

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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

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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.

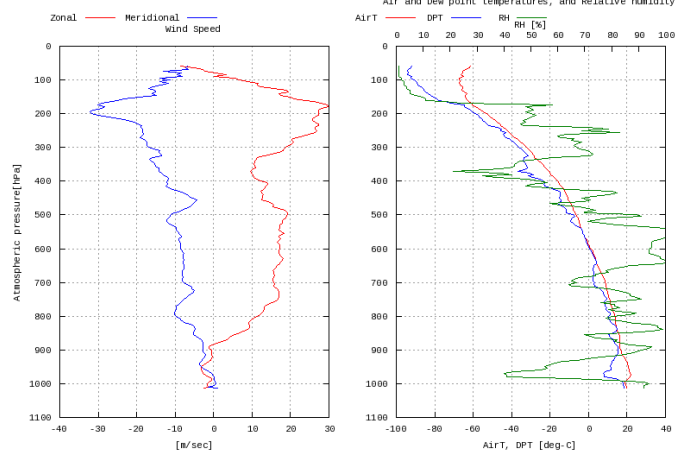


— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole

Figures

12071721

MR12-03: 12071721
Radiosonde



Data List

☐ File names

☐ 12071721.dat

☐ 12071803.dat

☐ 12071809.dat

☐ 12071815.dat

☐ 12071821.dat

☐ 12072003.dat

☐ 12072115.dat

☐ 12072303.dat

☐ 12072415.dat

☐ 12072503.dat

☐ 12072715.dat

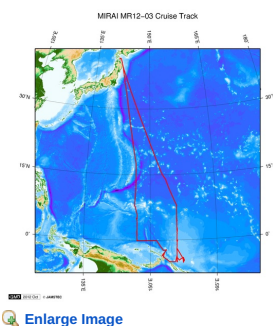
☐ 12072803.dat

☐ 12073015.dat

☐ 12073103.dat

<input type="checkbox"/>	Files
<input type="checkbox"/>	12080215.dat
<input type="checkbox"/>	12080503.dat
<input type="checkbox"/>	12080515.dat
<input type="checkbox"/>	12080715.dat
<input type="checkbox"/>	12080803.dat
<input type="checkbox"/>	12080815.dat
<input type="checkbox"/>	12081003.dat
<input type="checkbox"/>	12081015.dat
<input type="checkbox"/>	12081100.dat
<input type="checkbox"/>	12081103.dat
<input type="checkbox"/>	12081104.dat
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<input type="checkbox"/>	12081613.dat
<input type="checkbox"/>	12081703.dat
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<input type="checkbox"/>	12082503.dat
<input type="checkbox"/>	12082615.dat
<input type="checkbox"/>	12082621.dat
<input type="checkbox"/>	12082703.dat
<input type="checkbox"/>	12082709.dat
<input type="checkbox"/>	12082715.dat

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