

MIRAI MR11-03 Radiosonde

Last Modified: 2014-08-08

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Cruise ID: [MR11-03](#)

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/MR11-03_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[%]	
11041603.dat	2011/04/16	02:30	38.21N	143.40E	G0150592	105	0.08	-0.17	-0.14	-0.13	
11041802.dat	2011/04/18	01:30	44.04N	155.10E	G0210126	104	0.02	-0.14	-0.06	-0.11	
11042002.dat	2011/04/20	01:30	47.00N	160.07E	G0540040	82	0.11	-0.23	0.16	0.14	Fog
11042013.dat	2011/04/20	12:30	47.06N	160.13E	G0540025	83	-0.16	-0.11	0.07	0.14	
11042102.dat	2011/04/21	01:30	47.00N	160.08E	G0540813	83	-0.25	-0.21	0.09	0.03	Rain
11042113.dat	2011/04/21	12:30	47.01N	160.07E	G0540027	84	-0.11	-0.20	0.30	0.04	
11042202.dat	2011/04/22	01:30	47.05N	160.10E	G0540041	84	0.10	-0.20	0.01	-0.02	
11042213.dat	2011/04/22	12:30	47.07N	160.05E	G0540034	85	0.18	-0.24	0.08	-0.26	
11042302.dat	2011/04/23	01:30	46.94N	160.06E	G0540048	85	0.34	-0.26	0.04	0.01	
11042313.dat	2011/04/23	12:30	47.06N	160.01E	G0540024	86	0.02	-0.24	0.08	0.04	
11042605.dat	2011/04/26	04:30	38.05N	146.38E	F4060158	205	0.24	-0.23	0.06	0.05	
11042607.dat	2011/04/26	06:30	37.82N	146.33E	F4060150	205	0.23	-0.24	0.10	0.12	
11042608.dat	2011/04/26	07:30	37.56N	146.26E	F4030363	208	0.27	-0.21	0.25	0.23	
11042610.dat	2011/04/26	09:30	37.29N	146.15E	F4030370	208	0.33	-0.25	0.16	0.16	
11042611.dat	2011/04/26	10:30	37.04N	146.08E	F4050414	206	0.00	-0.19	0.05	-0.02	
11042613.dat	2011/04/26	12:30	36.80N	146.02E	F4060145	206	0.41	-0.23	0.07	0.07	
11042615.dat	2011/04/26	14:30	36.56N	145.93E	F4060178	206	0.79	-0.19	0.07	0.02	Rain
11042616.dat	2011/04/26	15:30	36.31N	145.86E	F4060148	206	0.57	-0.29	0.10	0.10	
11042617.dat	2011/04/26	16:30	36.06N	145.79E	F4050741	207	0.23	-0.25	0.12	0.11	

11042619.dat	2011/04/26	19:30	35.80N	145.69E	G0540829	89	0.21	-0.18	0.20	0.14	
11042620.dat	2011/04/26	19:30	35.53N	145.61E	G0540829	89	0.35	-0.23	0.14	0.12	
11042622.dat	2011/04/26	21:30	35.30N	145.52E	G0540829	89	-0.17	-0.18	0.25	0.15	Note
11042623.dat	2011/04/26	22:30	35.04N	145.44E	G0540823	89	-0.24	-0.13	0.16	0.14	
11042701.dat	2011/04/27	00:30	34.79N	145.35E	G0540820	89	-0.21	-0.15	0.11	0.07	
11042702.dat	2011/04/27	01:30	34.55N	145.28E	G0540775	89	0.55	-0.27	0.18	0.10	
11042704.dat	2011/04/27	03:30	34.31N	145.21E	G0540784	89	0.18	-0.22	0.10	0.06	
11042706.dat	2011/04/27	05:30	34.07N	145.12E	G0540793	89	-0.25	-0.17	0.09	0.03	
11042707.dat	2011/04/27	06:30	33.81N	145.03E	G0540810	89	0.00	-0.26	0.04	0.05	
11042708.dat	2011/04/27	07:30	33.57N	144.95E	G0540805	89	0.13	-0.23	0.07	0.02	
11042710.dat	2011/04/27	09:30	33.32N	144.87E	G0540791	89	0.03	-0.19	0.04	0.15	
11042712.dat	2011/04/27	11:30	33.06N	144.79E	G0540094	90	0.08	-0.25	0.03	0.00	
11042713.dat	2011/04/27	12:30	32.80N	144.68E	G0540809	90	0.04	-0.14	-0.02	-0.06	Drizzle
11042715.dat	2011/04/27	14:30	32.49N	144.58E	G0540030	90	0.24	-0.17	0.02	-0.02	Drizzle
11042814.dat	2011/04/28	13:30	30.02N	145.01E	G0250063	111	-0.06	-0.18	-0.13	-0.19	
11043003.dat	2011/04/30	02:30	30.00N	145.00E	G0150578	119	0.08	-0.14	-0.14	-0.14	
11043014.dat	2011/04/30	13:30	29.94N	145.08E	G0150593	120	0.23	-0.12	-0.10	-0.13	
11050103.dat	2011/05/01	02:30	30.01N	144.96E	G0150596	120	-0.06	-0.15	-0.20	-0.18	
11050114.dat	2011/05/01	13:30	29.92N	145.05E	G0150595	121	0.28	-0.18	-0.22	-0.22	
11050203.dat	2011/05/02	02:30	30.62N	144.68E	G0150615	121	0.15	-0.17	-0.30	-0.28	Rain
11050214.dat	2011/05/02	13:30	30.51N	144.77E	G0250062	115	0.34	-0.27	-0.10	-0.04	Rain
11050303.dat	2011/05/03	02:30	30.30N	144.66E	G0150594	122	0.29	-0.12	-0.21	-0.21	Fog, Drizzle

Reference

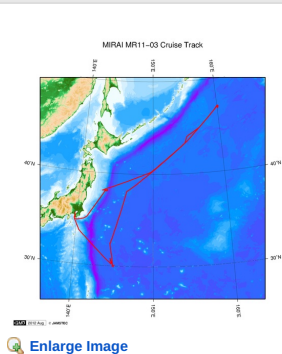
K. Yoneyama, M.Hanyu, S.Sueyoshi, F.Yoshiura, and M.Katsumata, 2002:Radiosonde observation from the ship in the tropical region.[PDF:400kbyte]
JAMSTECR, Vol.45, 31-39.

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



MR11-03

Ship Name: MIRAI
Period: 2011-04-14 - 2011-05-05
Chief Scientist: Makio Honda (JAMSTEC)
Project Name: [Station K2,Station S1,Station KEO,Station KNOT]
Proposal ▶ Studies on the microbial-geochemical processes that regulate the operation of the biological pump in the subarctic and subtropical regions of the western North Pacific

Update History

2014-08-08 An observation data was registered.
2014-07-30 An observation data was registered.

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SHINKAI 6500
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URASHIMA
YOKOSUKA DEEP TOW
6K Camera DEEP TOW
6K Sonar DEEP TOW
KM-ROV
POWER GRAB SAMPLER (SHELL)
POWER GRAB SAMPLER (CLOW)
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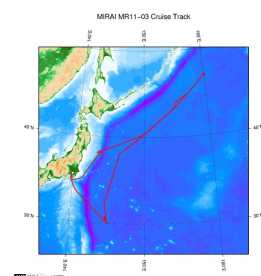
Radiosonde: Processed (DMO)-Corrected

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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

Related Information



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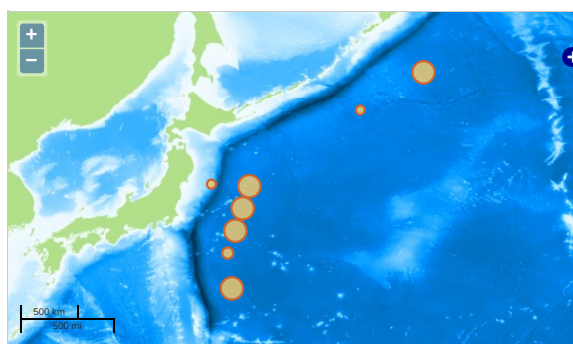
Observation Items: Atmospheric pressure, Air temperature, Dew point temperature, Relative humidity, Wind speed (zonal, meridional), Height

Science Keywords:

ATMOSPHERE > ATMOSPHERIC WATER VAPOR > DEW POINT TEMPERATURE
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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.

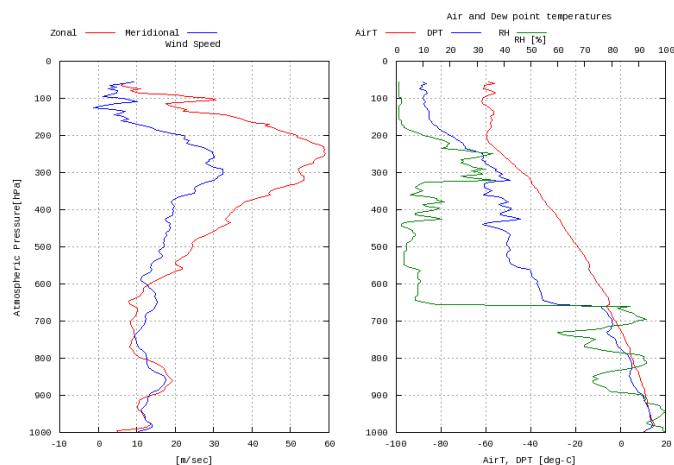


— ... Observation Line — ... Navigation ● ... Observation, Dive Point, Hole

Figures

11041603

MR11-03: 11041603
Radiosonde



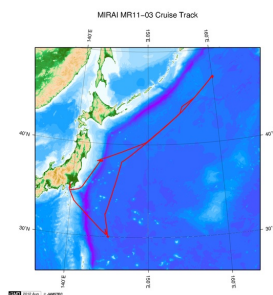
Data List

☐ File names

- ☐ 11041603.dat
- ☐ 11041802.dat
- ☐ 11042002.dat
- ☐ 11042013.dat
- ☐ 11042102.dat
- ☐ 11042113.dat
- ☐ 11042202.dat
- ☐ 11042213.dat
- ☐ 11042302.dat
- ☐ 11042313.dat
- ☐ 11042605.dat
- ☐ 11042607.dat
- ☐ 11042608.dat
- ☐ 11042610.dat

<input type="checkbox"/>	Files
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<input type="checkbox"/>	11050203.dat
<input type="checkbox"/>	11050214.dat
<input type="checkbox"/>	11050303.dat

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