

MIRAI MR16-08 Radiosonde

Last Modified: 2018-12-29

ReadMe Observation Data Data Format

Cruise ID: **MR16-08**

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/MR16-08_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 (MR15-01 -)



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 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 (however, RS41 sonde sensor has only one humidity sensor and is not necessary to calibrate temperature sensor). 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	Type	Serial No.	Age	Atmospheric pressure [hPa]	Air temperature [deg-C]	Relative humidity1 [%]	Relative humidity2 [%]	
16120112.dat	2016/12/01	11:30	14.54N	136.85E	RS41-SGP	M3540039	98	0.48	N/A	0.1	N/A	
16120212.dat	2016/12/02	11:30	12.81N	137.05E	RS41-SGP	M3540038	99	0.41	N/A	0.2	N/A	
16120312.dat	2016/12/03	11:30	12.74N	136.89E	RS41-SGP	M3540031	100	0.46	N/A	0.2	N/A	
16120412.dat	2016/12/04	11:30	8.78N	136.92E	RS41-SGP	M3540033	101	0.42	N/A	0.4	N/A	
16120512.dat	2016/12/05	11:30	7.66N	136.75E	RS41-SGP	M3540056	102	0.87	N/A	0.2	N/A	
16120612.dat	2016/12/06	11:30	6.08N	137.01E	RS41-SGP	M3530709	104	0.86	N/A	0.1	N/A	
16120712.dat	2016/12/07	11:30	4.54N	137.35E	RS41-SGP	M3540026	104	1.29	N/A	0.1	N/A	
16120912.dat	2016/12/09	11:30	0.72N	144.10E	RS41-SGP	M3540027	106	1.06	N/A	0.1	N/A	
16121000.dat	2016/12/09	23:30	0.11N	146.76E	RS41-SGP	M3540060	106	1.29	N/A	0.0	N/A	
16121012.dat	2016/12/10	11:30	0.77N	147.01E	RS41-SGP	M3540032	107	0.41	N/A	0.1	N/A	
16121015.dat	2016/12/10	14:31	1.34N	146.98E	RS41-SGP	M3540058	107	1.08	N/A	0.2	N/A	
16121018.dat	2016/12/10	17:30	1.83N	146.96E	RS41-SGP	M3530719	108	0.23	N/A	0.2	N/A	
16121100.dat	2016/12/10	23:30	2.06N	146.95E	RS41-SGP	M3540091	107	1.33	N/A	0.2	N/A	
16121112.dat	2016/12/11	11:30	2.06N	148.87E	RS41-SGP	M3540059	108	1.01	N/A	0.1	N/A	
16121200.dat	2016/12/11	23:30	2.06N	151.33E	RS41-SGP	M3540055	108	0.95	N/A	0.0	N/A	
16121212.dat	2016/12/12	11:30	2.05N	153.81E	RS41-SGP	M3530712	110	1.19	N/A	0.2	N/A	
16121300.dat	2016/12/12	23:30	2.03N	156.01E	RS41-SGP	M3530760	110	0.60	N/A	0.0	N/A	
16121309.dat	2016/12/13	08:40	1.47N	156.01E	RS41-SGP	M3540057	110	1.19	N/A	0.1	N/A	
16121312.dat	2016/12/13	11:30	0.91N	155.99E	RS41-SGP	M3540029	110	0.99	N/A	0.1	N/A	
16121315.dat	2016/12/13	14:30	0.59N	155.99E	RS41-SGP	M3310397	127	1.09	N/A	0.3	N/A	
16121400.dat	2016/12/13	23:30	0.08S	155.04E	RS41-SGP	M3310457	127	0.83	N/A	0.6	N/A	

	Launch time (UTC)	Launch station	Sensor information	Calibration result	
Data file					Note
16121400.dat	2016/12/13 23:30	0.03S 156.11E	RS41-SGP M3310394	1.03 Atmospheric	N/A
16121412.dat	2016/12/14 11:30	0.03S 156.11E	RS41-SGP M3310394	1.03 Atmospheric	N/A
16121500.dat	2016/12/14 23:30	0.03S 156.04E	RS41-SGP M3540030	1.27 pressure	N/A
16121512.dat	2016/12/15 11:30	0.07S 156.07E	RS41-SGP M3540022	1.26 [hPa]	N/A
16121600.dat	2016/12/15 23:30	0.03S 156.13E	RS41-SGP M3310391	0.89	N/A
16121612.dat	2016/12/16 11:30	1.17S 156.02E	RS41-SGP M3310393	0.77	N/A
16121618.dat	2016/12/16 17:30	1.95S 155.99E	RS41-SGP M3540021	0.75	N/A
16121700.dat	2016/12/16 23:30	2.01S 155.96E	RS41-SGP M3530708	1.20	N/A
16121706.dat	2016/12/17 05:30	2.17S 156.22E	RS41-SGP M3540049	0.36	N/A
16121712.dat	2016/12/17 11:30	2.75S 157.27E	RS41-SGP M3540048	1.20	N/A
16121718.dat	2016/12/17 17:30	3.34S 158.31E	RS41-SGP M3530762	0.62	N/A
16121800.dat	2016/12/17 23:30	3.89S 159.29E	RS41-SGP M3540043	0.32	N/A
16121806.dat	2016/12/18 05:30	4.60S 160.20E	RS41-SGP M3540044	0.42	N/A
16121812.dat	2016/12/18 11:30	5.33S 161.12E	RS41-SGP M3540047	0.52	N/A
16121818.dat	2016/12/18 17:30	6.10S 162.05E	RS41-SGP M3540042	0.62	N/A
16121900.dat	2016/12/18 23:30	6.87S 163.00E	RS41-SGP M3540046	0.72	N/A
16121906.dat	2016/12/19 05:30	7.63S 163.91E	RS41-SGP M3540040	0.30	N/A
16121912.dat	2016/12/19 11:30	8.34S 164.79E	RS41-SGP M3540041	0.38	N/A
16121918.dat	2016/12/19 17:34	9.10S 165.70E	RS41-SGP M3540037	0.37	N/A
16121921.dat	2016/12/19 20:30	9.44S 166.12E	RS41-SGP M3530710	0.33	N/A
16122000.dat	2016/12/19 23:32	9.82S 166.57E	RS41-SGP M2750059	2.05	N/A
16122003.dat	2016/12/20 02:30	10.21S 167.03E	RS41-SGP M2750159	1.33	N/A
16122006.dat	2016/12/20 05:30	10.54S 167.42E	RS41-SGP M2750118	1.56	N/A
16122009.dat	2016/12/20 08:30	10.85S 167.79E	RS41-SGP M2750083	1.24	N/A
16122012.dat	2016/12/20 11:30	11.25S 168.27E	RS41-SGP M2750091	1.10	N/A
16122018.dat	2016/12/20 17:30	11.98S 169.16E	RS41-SGP M2750075	1.39	N/A
16122100.dat	2016/12/20 23:30	12.70S 170.03E	RS41-SGP M2750355	1.09	N/A
16122106.dat	2016/12/21 05:30	13.17S 170.58E	RS41-SGP M2750157	1.33	N/A
16122112.dat	2016/12/21 11:30	13.57S 171.07E	RS41-SGP M2750160	1.36	N/A
16122118.dat	2016/12/21 17:30	14.02S 171.62E	RS41-SGP M2750158	1.34	N/A
16122200.dat	2016/12/21 23:30	14.78S 172.54E	RS41-SGP M2750227	1.12	N/A
16122206.dat	2016/12/22 05:30	15.47S 173.40E	RS41-SGP M2750096	1.74	N/A
16122212.dat	2016/12/22 11:30	16.21S 174.30E	RS41-SGP M2750223	1.63	N/A
16122300.dat	2016/12/22 23:30	17.56S 175.97E	RS41-SGP M2750078	1.85	N/A

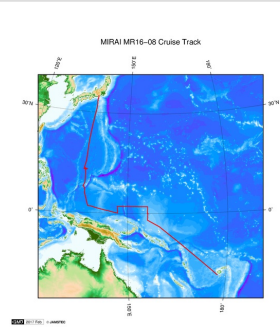
Reference

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: DigiCORA, MW41(after 2015 Jun.) [VAISALA, Finland]
- Launcher Location: 22m (from base line)

Related Information



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MR16-08

Ship Name: MIRAI
Period: 2016-11-27 - 2016-12-23
Chief Scientist: Iwao Ueki (JAMSTEC)
Project Name: [Tropical Ocean Climate Study (TOCS)]
Proposal ▶ Tropical Ocean Climate Study/Operation of TRITON Buoy
Title:

Update History

2018-12-29 An observation data was registered.

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YOKOSUKA
MIRAI
KAIREI
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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)
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Cruise ID:

Go to a Dive Information

Dive ID:



MIRAI MR16-08 Radiosonde

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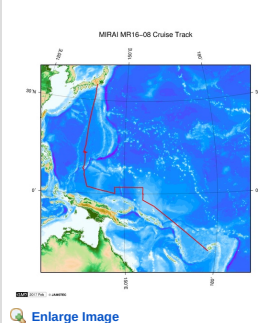
Radiosonde: Processed (DMO)-Corrected

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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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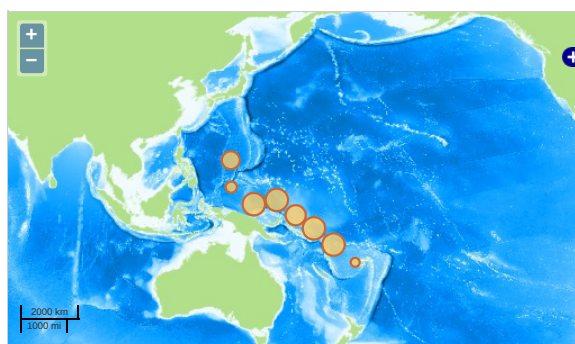
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Observation Map

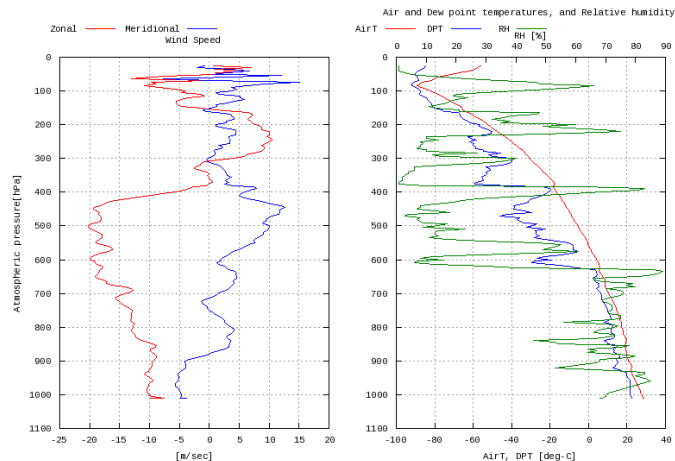
- Clicking the icon displays a balloon with observation information.
- Then click the observation name, figures will be displayed.



Figures

16120112

MR16-08: 16120112
Radiosonde



Data List

☐ File names

☐ 16120112.dat

☐ 16120212.dat

☐ 16120312.dat

☐ 16120412.dat

☐ 16120512.dat

☐ 16120612.dat

☐ 16120712.dat

☐ 16120912.dat

☐ 16121000.dat

☐ 16121012.dat

☐ 16121015.dat

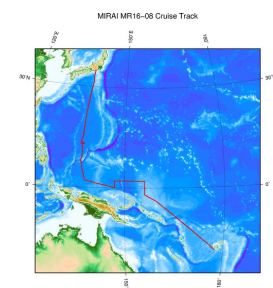
☐ 16121018.dat

☐ 16121100.dat

☐ 16121112.dat

<input type="checkbox"/> File names
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<input type="checkbox"/> 16122200.dat
<input type="checkbox"/> 16122206.dat
<input type="checkbox"/> 16122212.dat
<input type="checkbox"/> 16122300.dat

Related Information



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