MIRAI MR16-09 Leg1 Radiosonde

Last Modified: 2019-01-24

ReadMe | Observation Data | Data Format

Cruise ID: MR16-09 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/MR16-09_leg1-4_all.pdf

For Using Data

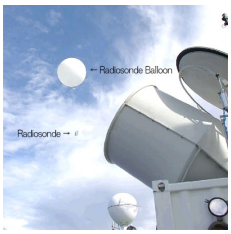
Principal Investigator
Data Management Office

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 atomospheric 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	Type	Serial No.	Age	Atomospheric pressure [hPa]	Air temperature [deg-C]	Relative humidity1 [%]	Relative humidity2 [%]	
16122900.dat	2016/12/28	23:30	26.05S	174.35W	RS92-SGP	L2443813	566	1.70	-0.21	-0.2	-0.1	
16122912.dat	2016/12/29	11:30	27.45S	172.66W	RS92-SGP	L2443816	567	0.33	-0.16	-0.1	-0.1	
16123000.dat	2016/12/29	23:30	29.03S	170.69W	RS92-SGP	L2414043	570	0.29	-0.18	-0.1	-0.2	
16123012.dat	2016/12/30	11:30	30.63S	168.56W	RS92-SGP	L2443800	568	0.16	-0.12	-0.1	-0.1	
16123100.dat	2016/12/30	23:30	32.27S	166.31W	RS92-SGP	L2443899	568	0.57	-0.14	0.0	0.1	
16123112.dat	2016/12/31	11:29	33.82S	163.98W	RS92-SGP	L2443801	569	0.22	-0.13	-0.1	-0.1	
17010100.dat	2016/12/31	23:30	35.34S	161.61W	RS92-SGP	L2443831	569	0.07	-0.13	0.0	0.0	
17010106.dat	2017/01/01	05:30	36.07S	160.38W	RS92-SGP	L2443798	570	0.22	-0.07	-0.1	-0.1	
17010112.dat	2017/01/01	11:30	36.81S	159.13W	RS92-SGP	L2443829	570	0.21	-0.19	-0.1	-0.1	
17010118.dat	2017/01/01	17:30	37.50S	157.82W	RS92-SGP	L2433943	571	0.38	-0.20	-0.2	-0.2	
17010200.dat	2017/01/01	23:30	38.19S	156.54W	RS92-SGP	L2533702	564	0.24	-0.13	-0.2	-0.2	
17010206.dat	2017/01/02	05:30	38.88S	155.20W	RS92-SGP	L2344318	578	0.40	-0.19	-0.4	-0.3	
17010212.dat	2017/01/02	11:30	39.58S	153.73W	RS92-SGP	L2443792	571	0.27	-0.15	-0.2	-0.2	
17010218.dat	2017/01/02	17:30	40.25S	152.31W	RS92-SGP	L2443817	571	-0.16	-0.22	-0.1	-0.1	Drizzle
17010300.dat	2017/01/02	23:30	40.93S	150.87W	RS92-SGP	L2443799	571	0.34	-0.19	-0.1	-0.1	Rain
17010306.dat	2017/01/03	05:30	41.54S	149.38W	RS92-SGP	L2443821	572	-0.06	-0.24	-0.1	-0.1	Drizzle
17010312.dat	2017/01/03	11:30	42.11S	147.84W	RS92-SGP	L2533015	566	0.29	-0.20	-0.2	-0.2	Drizzle
17010318.dat	2017/01/03	17:30	42.73S	146.30W	RS92-SGP	L2414053	575	0.77	-0.11	0.0	0.0	Drizzle
17010400.dat	2017/01/03	23:30	43.19S	145.01W	RS92-SGP	L2443832	572	0.16	-0.21	0.0	0.0	Drizzle
17010412.dat	2017/01/04	11:30	44.15S	142.10W	RS92-SGP	L2414045	576	0.19	-0.26	-0.2	-0.2	Drizzle
17010500.dat	2017/01/04	23:30	44.93S	139.16W	RS92-SGP	L2414049	576	0.33	-0.17	-0.1	-0.2	
17010512.dat	2017/01/05	11:30	45.95S	135.89W	RS92-SGP	L2443809	574	0.09	-0.21	0.0	-0.1	

Launch time (UTC)			Launch station		Sensor information			Calibration result				
Data file	Date	Time	Latitude	Longitude	Type	Serial No.	Age	Atmospheric pressure [hPa]	Air temperature [deg-C]	Relative humidity1 [%]	Relative humidity2 [%]	Note
17010600.dat	2017/01/05	23:30	46.75S	122.89W	RS92-SGP	L2520209	568	0.09	-0.14	0.1	-0.1	
17010612.dat	2017/01/06	11:30	47.43S	128.84W	RS92-SGP	L2533873	569	0.10	-0.10	0.2	-0.1	
17010700.dat	2017/01/06	23:30	48.04S	125.11W	RS41-SGP	M2750101	189	1.57	N/A	0.4	N/A	
17010709.dat	2017/01/07	08:30	48.37S	122.34W	RS41-SGP	L2520220	571	1.10	N/A	0.2	N/A	
17010712.dat	2017/01/07	11:30	48.47S	121.40W	RS41-SGP	M2750092	190	1.44	N/A	0.4	N/A	
17010800.dat	2017/01/07	23:30	48.77S	118.05W	RS41-SGP	M2750088	190	1.24	N/A	0.4	N/A	
17010809.dat	2017/01/08	08:29	48.96S	115.41W	RS41-SGP	M2750077	191	1.42	N/A	0.4	N/A	
17010812.dat	2017/01/08	11:30	49.02S	114.64W	RS41-SGP	M2750086	191	1.49	N/A	0.7	N/A	
17010900.dat	2017/01/08	23:30	49.08S	111.41W	RS41-SGP	M2750087	191	1.34	N/A	0.4	N/A	
17010906.dat	2017/01/09	05:30	49.10S	109.73W	RS41-SGP	M2750119	192	1.55	N/A	0.4	N/A	
17010912.dat	2017/01/09	11:29	49.10S	108.01W	RS41-SGP	M2750332	192	1.63	N/A	0.4	N/A	
17011000.dat	2017/01/09	23:30	49.05S	105.04W	RS41-SGP	M2750081	192	1.26	N/A	0.5	N/A	
17011006.dat	2017/01/10	05:30	48.97S	103.61W	RS41-SGP	M2750496	193	1.47	N/A	0.3	N/A	Drizzle
17011012.dat	2017/01/10	11:30	48.87S	102.26W	RS41-SGP	M2750333	193	1.67	N/A	0.4	N/A	
17011100.dat	2017/01/10	23:30	48.70S	99.46W	RS41-SGP	M2750334	193	1.54	N/A	0.3	N/A	
17011106.dat	2017/01/11	05:30	48.54S	98.03W	RS41-SGP	M2750061	194	1.16	N/A	0.4	N/A	
17011112.dat	2017/01/11	11:30	48.41S	96.66W	RS41-SGP	M2750200	194	1.08	N/A	0.4	N/A	Drizzle
17011200.dat	2017/01/11	23:30	48.06S	93.84W	RS41-SGP	M2750062	194	1.40	N/A	0.4	N/A	
17011206.dat	2017/01/12	05:30	47.85S	92.54W	RS41-SGP	M2750082	195	1.31	N/A	0.4	N/A	
17011212.dat	2017/01/12	11:40	47.68S	91.15W	RS41-SGP	M2750497	195	1.40	N/A	0.4	N/A	
17011300.dat	2017/01/12	23:30	47.22S	88.68W	RS41-SGP	M2750198	195	1.71	N/A	0.4	N/A	
17011306.dat	2017/01/13	05:30	46.95S	87.36W	RS41-SGP	M2750331	196	1.80	N/A	0.4	N/A	
17011312.dat	2017/01/13	11:30	46.70S	86.09W	RS41-SGP	M2750199	196	1.66	N/A	0.6	N/A	
17011400.dat	2017/01/13	23:29	45.92S	82.62W	RS41-SGP	M2750211	196	1.60	N/A	0.5	N/A	
17011406.dat	2017/01/14	05:30	45.50S	81.00W	RS41-SGP	M2750356	197	1.33	N/A	0.4	N/A	
17011412.dat	2017/01/14	11:30	44.94S	80.05W	RS41-SGP	M2750184	197	1.74	N/A	0.4	N/A	
17011418.dat	2017/01/14	17:29	44.66S	80.14W	RS41-SGP	M2750201	197	1.42	N/A	0.4	N/A	
17011500.dat	2017/01/14	23:30	44.54S	80.11W	RS41-SGP	M2750215	197	1.13	N/A	0.3	N/A	
17011506.dat	2017/01/15	05:30	44.40S	80.02W	RS41-SGP	M2750216	198	1.48	N/A	0.3	N/A	

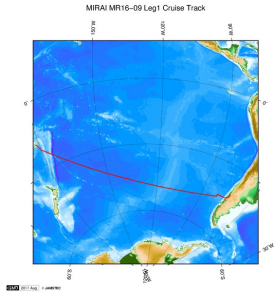
Reference

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



Enlarge Image

MR16-09 Leg1
Ship Name: MIRAI
Period: 2016-12-26 - 2017-01-17
Chief Scientist: Akihiko Murata (JAMSTEC)
Proposal Title: Ship-borne measurements of aerosols in the marine atmosphere: Investigation of potential influence of marine aerosol particles on the climate;

Update History

2019-01-24 An observation data was registerd.

MIRAI MR16-09 Leg1 Radiosonde

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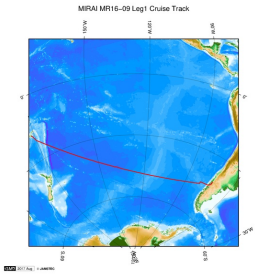
Data Policy: JAMSTEC

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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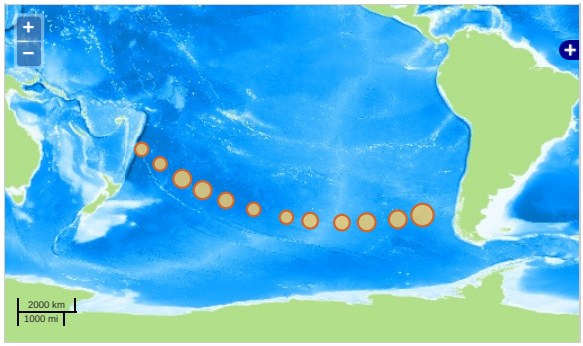
ATMOSPHERE > ATMOSPHERIC WINDS > UPPER LEVEL WINDS
ATMOSPHERE > ATMOSPHERIC WINDS > WIND PROFILES

Observation Map

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

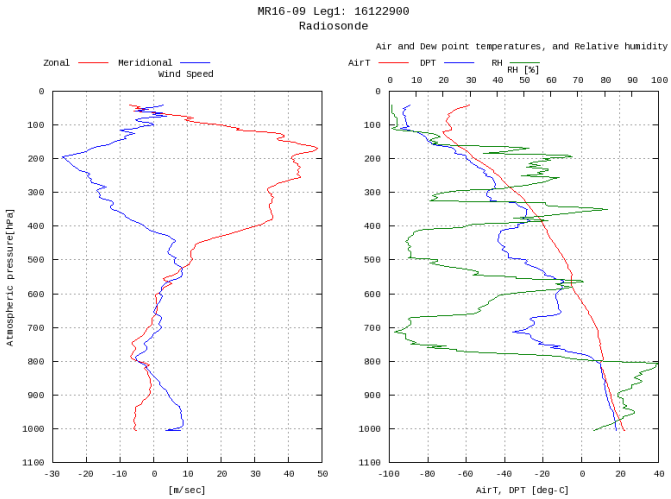


Imagery reproduced from ...

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

Figures

16122900



Data List

Add to Basket

File names
16122900.dat
16122912.dat
16123000.dat
16123012.dat
16123100.dat
16123112.dat
17010100.dat
17010106.dat
17010112.dat
17010118.dat
17010200.dat
17010206.dat
17010212.dat
17010218.dat

File name
17010306.dat
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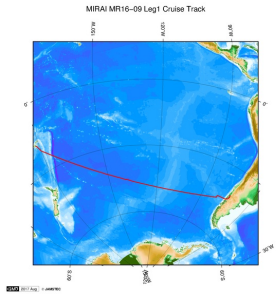

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