

MIRAI MR04-05 Doppler Radar

Last Modified: 2016-11-23

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Cruise ID: [MR04-05](#)

Doppler Radar: Raw

Data Policy: [JAMSTEC](#)

Observation Items: Reflectivity, Doppler velocity

Science Keywords:

ATMOSPHERE > PRECIPITATION
ATMOSPHERE > CLOUDS
ATMOSPHERE > ATMOSPHERIC WINDS
SPECTRAL/ENGINEERING > RADAR > DOPPLER VELOCITY
SPECTRAL/ENGINEERING > RADAR > RADAR REFLECTIVITY

Cruise Report

http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR04-05_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:

Doppler radar (- MR14-02)



Specifications

Manufacturer/model: Mitsubishi Electric Co. Ltd., Japan / RC-52B
Location (from sea surface): 18m
Frequency: 5290MHz (C band)
Peak power: 250kW
Beam angle: <1.5degree
Inertial navigation system
Manufacturer/model: Honeywell Inc., USA / DRUH
Processing system
Manufacturer/model: Vaisala Inc. Sigmet Product Line, USA / RVP-7
Data acquisition software
Manufacturer/model: Vaisala Inc. Sigmet Product Line, USA / IRIS ver. 8.5.10

Parameter

	Surveillance scan	Volume scan
Pulse width [μs]	2.0	0.5
Scan speed [deg/sec]	18	18
PRF *1 [Hz]	260	900 / 720 *2
Sweep integration	32 samples	32 samples
Ray spacing [deg]	about 1.0	about 1.0
Bin spacing [m]	250	125
Elevations [deg]	0.5	0.5, 1.2, 2.0, 3.0, 4.0, 5.0, 6.0, 7.0, 8.0, 9.0, 10.1, 11.3, 12.8, 14.6, 16.6, 18.9, 21.6, 25.0, 29.0
Range [km]	300	160
Scan interval	30 min	10 min

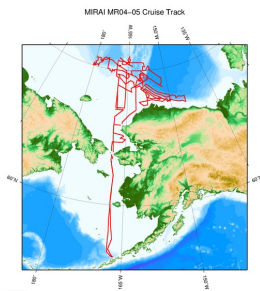
*1 Pulse Repetition Frequency

*2 During this cruise, the data were measured with the dual-PRF mode. Therefore, unfolding of Doppler velocity was applied automatically.

About this data

If you need the raw data set, please refer to "Contact Us" above.

Related Information



 [Enlarge Image](#)

MR04-05

Ship Name: MIRAI

Period: 2004-09-01 - 2004-10-13

Chief Scientist: Koji Shimada (JAMSTEC)

Project Name: [Arctic Ocean Climate System Reaserch]

Update History

Date	Description
2016-11-23	An observation data was registerd.

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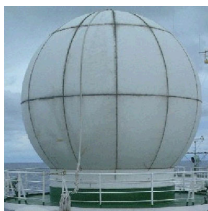
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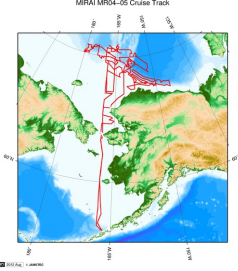
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Related Information



MIRAI MR04-05 Cruise Track

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MR04-05

Ship Name: MIRAI
Period: 2004-09-01 - 2004-10-13
Chief Scientist: Koji Shimada (JAMSTEC)
Project Name: [Arctic Ocean Climate System Reaserch]

Update History	
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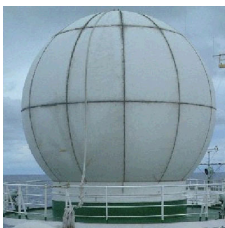
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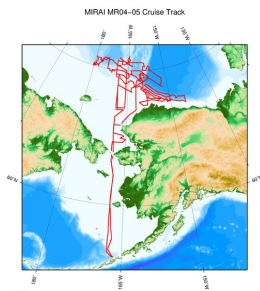
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