

## MIRAI MR02-K05 Leg1 Doppler Radar

Last Modified: 2016-11-23

### ReadMe

Cruise ID: [MR02-K05 Leg1](#)

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/MR02-K05\\_leg1\\_all.pdf](http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/MR02-K05_leg1_all.pdf)

#### For Using Data

##### Principal Investigator

Data Management Office

##### Use Constraints

See [Terms and Conditions](#) about constrain of use.

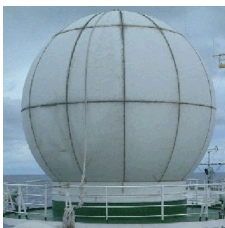
##### Data Citation

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. 7.25

### Parameter

	Surveillance scan	Volume scan
Pulse width [ $\mu$ s]	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, 34.0, 40.0
Range [km]	300	160
Scan interval	30 min	10 min

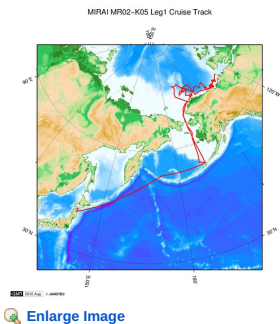
\*1 Pulse Repetition Frequency

\*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



#### MR02-K05 Leg1

Ship Name: MIRAI

Period: 2002-08-24 - 2002-10-10

Chief Scientist: Akihiko Murata (JAMSTEC)/Koji Shimada (JAMSTEC)

Project Name: [Arctic Ocean Climate System Research]

#### Update History

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

#### JAMSTEC

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#### Information of the Ships

NATSUSHIMA  
KAIYO  
YOKOSUKA  
MIRAI  
KAIREI  
CHIKYU  
KAIMEI  
SHINSEI MARU  
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)  
BMS

#### Go to a Cruise Information

Cruise ID:

#### Go to a Dive Information

Dive ID:

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### Cruise Report

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### Related Information

MIRAI MR02-K05 Leg1 Cruise Track



[Enlarge Image](#)

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Ship Name: MIRAI  
 Period: 2002-08-24 - 2002-10-10  
 Chief Scientist: Akihiko Murata (JAMSTEC)/Koji Shimada (JAMSTEC)  
 Project Name: [Arctic Ocean Climate System Reaserch]

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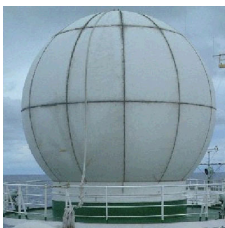
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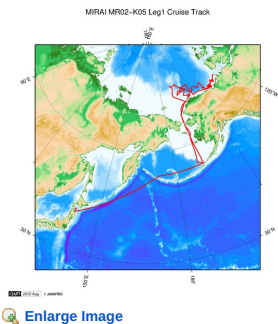
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