

## MIRAI MR04-01 Doppler Radar

Last Modified: 2016-11-23

### ReadMe

Cruise ID: [MR04-01](#)

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

### For Using Data

#### Principal Investigator

Data Management Office

JAMSTEC / BPPT joint cruise in the Indonesian waters.

#### 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. Sigmat Product Line, USA / RVP-7  
Data acquisition software  
Manufacturer/model: Vaisala Inc. Sigmat 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

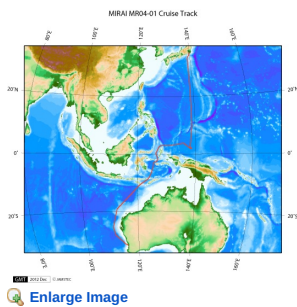
\*1 Pulse Repetition Frequency

\*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



**MR04-01**  
Ship Name: MIRAI  
Period: 2004-02-22 - 2004-03-22  
Chief Scientist: Kunio Yoneyama (JAMSTEC)  
Project Name: [MJO Research]

#### Update History

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

#### JAMSTEC

Site Policy  
Privacy Policy  
Application for Data and Samples  
Data Policy

What's New  
Update History  
Feeds

#### Lists

Publication List  
Amount of Public Info.

#### Data

Map Search  
Data Tree  
Detailed Search

#### 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:

Copyright 2011 Japan Agency for Marine-Earth Science and Technology

 **JAMSTEC** 国立研究開発法人  
海洋研究開発機構  
JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

## MIRAI MR04-01 Doppler Radar

Last Modified: 2016-11-23

### ReadMe

Cruise ID: [MR04-01](#)

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  
SPECTRAL/ENGINEERING > RADAR REFLECTIVITY

### For Using Data

#### Principal Investigator

Data Management Office

JAMSTEC / BPPT joint cruise in the Indonesian waters.

#### 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

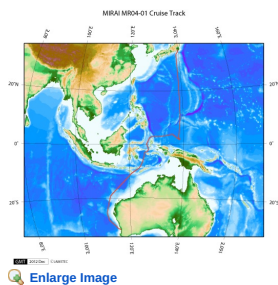
\*1 Pulse Repetition Frequency

\*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



**MR04-01**  
Ship Name: MIRAI  
Period: 2004-02-22 - 2004-03-22  
Chief Scientist: Kunio Yoneyama (JAMSTEC)  
Project Name: [MJO Research]

#### Update History

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

#### JAMSTEC

Site Policy  
Privacy Policy  
Application for Data and Samples  
Data Policy

What's New  
Update History  
Feeds

#### Lists

Publication List  
Amount of Public Info.

#### Data

Map Search  
Data Tree  
Detailed Search

#### 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:

Copyright 2011 Japan Agency for Marine-Earth Science and Technology



**JAMSTEC**

JAPAN AGENCY FOR MARINE-EARTH SCIENCE AND TECHNOLOGY

国立研究開発法人  
海洋研究開発機構

## MIRAI MR04-01 Doppler Radar

Last Modified: 2016-11-23

### ReadMe

Cruise ID: [MR04-01](#)

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

### For Using Data

#### Principal Investigator

Data Management Office

JAMSTEC / BPPT joint cruise in the Indonesian waters.

#### 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. Sigmat Product Line, USA / RVP-7  
Data acquisition software  
Manufacturer/model: Vaisala Inc. Sigmat 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



Ship Name: MIRAI  
Period: 2004-02-22 - 2004-03-22  
Chief Scientist: Kunio Yoneyama (JAMSTEC)  
Project Name: [MJO Research]

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

- Lists
  - Publication List
  - Amount of Public Info.
- Data
  - Map Search
  - Data Tree
  - Detailed Search

**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

Cruise ID:  Go

Dive ID:

Copyright 2011 Japan Agency for Marine-Earth Science and Technology



**JAMSTEC**  
JAPAN AGENCY FOR MARINE-EARTH SCIENCE

国立研究開発法人  
海洋研究開発機構  
SCIENCE AND TECHNOLOGY