

For Using Data

Data Policy	JAMSTEC
Principal Investigator	Data Management Office
Use Constraints	See Terms and Conditions about constrain of use.
Data Citation	See Terms and Conditions about data citation.

Quality level

Raw

Instrument

Doppler radar (MR14-04 Leg1 -)



Measurement System

- 1) Doppler radar

Manufacturer :	TOSHIBA CORPORATION
Type :	TW4419A
Frequency :	5370MHz (C-band)
Transmitter :	Solid-state transmitter
Pulse configuration :	Using pulse-compression
Polarimetry :	Horizontal and vertical
Peak power :	6kW(H) + 6kW(V)
Antenna diameter :	4m
Beam angle :	1.0 degree
Location (from sea surface) :	24m (center position of antenna)
- 2) Inertial navigation system

Manufacturer :	iXBlue SAS
Type :	PHINS
Location (from sea surface) :	21m

Parameter

Surveillance Scan

Scan Interval [min] :	30
Elevations [deg] :	0.5
Pulse width (short/long)[μ s] :	2 / 200
Scan speed [deg/sec] :	18
Pulse Repetition Frequency [Hz] :	400
Sweep integration (Pulse /Ray) :	16 samples
Ray spacing [deg] :	0.7
Bin spacing [m] :	150
Max. range [km] :	300

Volume Scan

Scan interval [min] :	6					
Elevations [deg] :	0.5	1.0, 1.8, 2.6, 3.4, 4.2, 5.1, 6.2, 7.6, 9.7, 12.2, 15.2	18.7, 23.0, 27.9, 33.5, 40.0			
Pulse width (short/long) [μ s] :	1 / 64	1 / 32	1 / 32			
Scan speed [deg/sec] :	18	24	36			
Pulse Repetition	dual PRF (ray alternative) *					
Frequency [Hz] :	667	833	938	1250	1333	2000
Sweep integration (Pulse /Ray) :	26 samples	33 samples	27 samples	34 samples	37 samples	55 samples

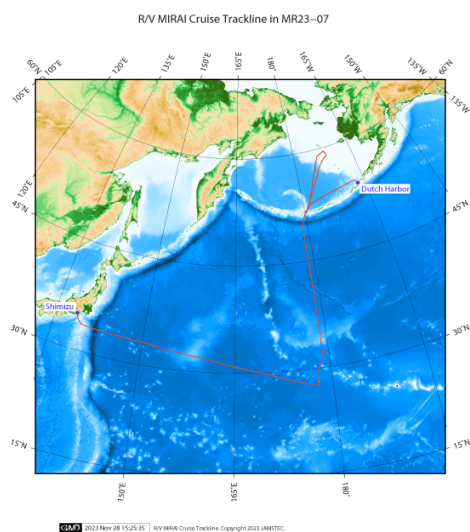
Ray spacing [deg] :	0.7	0.7	1.0
Bin spacing [m] :	150		
Max. range [km] :	150	100	60

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

Note

If you would like the raw data set, please contact DMO at "dmo@jamstec.go.jp".

Related Information



MR23-07

Ship Name: MIRAI
Period: 2023/10/06 - 2023/11/08
Chief Scientist: Katsuro Katsumata (JAMSTEC)
Proposal: Quantitative observation experiment in the North Pacific subarctic gyre — GO-SHIP Observation P14

Organic alkalinity

Float Deployments with GO-BGC

Biology Observation with GO-SHIP

Distribution of Iodine and Iodites in the North Pacific Ocean

Biogeography of Plankton in the North Pacific Ocean

Vertical mixing and transport of heat and material in the North Pacific Ocean and Bering Sea

Float Deployments to Capture Environmental Changes in the North Pacific Ocean

Polycyclic Aromatic Hydrocarbons, Radium, Cesium

Multifaceted Observation of Cloud and Rain System in the North Pacific

Speciation of Iodine, Ammonia, Nitrite in the North Pacific Ocean

Deployment of EM-APEX floats as part of US Partnership Project

Experiment on DFMC SBASS from QZSS