

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

Raw

Instrument

Shipboard gravimeter



Microgravimeter (- MR11-05 Leg2)



Measurement System

1) Shipboard gravity meter

The system consists of two main assemblies; the gyro-stabilized platform including the gravity sensor and the data handling & control system.

Manufacturer :	LaCoste & Romberg
Type :	S-116
Measurement range :	12,000 mGal
Accuracy :	1.0 mGal
Drift rate :	< 3.0 mGal/month
Location :	Gravity meter room
Reference :	"Model S Air-Sea Dynamic Gravity Meter System II" INSTRUCTION MANUAL LaCoste and Romberg Gravity Meters, Inc. 2004

2) Portable gravity meter

The portable gravity meter consists of two modules; the data acquisition/control module and the gravity sensor module. The gravity sensor is enclosed in a thermostatically controlled vacuum chamber. The portable gravity meter is used to calculate the absolute gravity of the port with reference to the gravity station of the Japan Gravity Standardization Net of the Geographical Survey Institute of Japan.

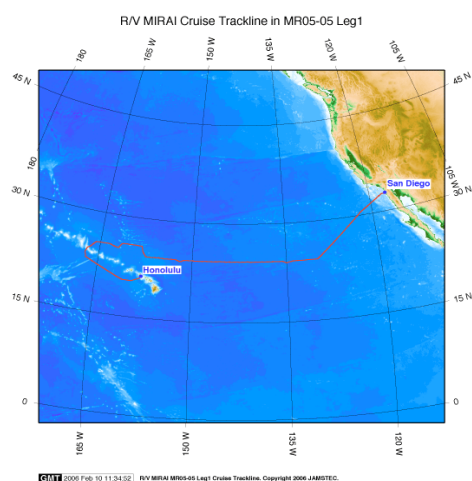
Manufacturer :	SCINTREX
Model :	CG-3M
Measurement range :	7,000 mGal
Standard deviation :	0.005 mGal
Drift rate :	< 0.02 mGal/day
Reference :	"CG-3M AUTOGRAV AUTOMATED GRAVITY METER OPERATOR MANUAL", 'SCINTREX

About this data

It was appeared that errors in a part of gravity data obtained by using R/V Mirai, associated with converting into absolute gravity. Inappropriate processing was also performed on this cruise, we decided not to process the data due to equipment failure etc., result of data re-analysis in March 2024.

Please contact "dmo@jamstec.go.jp", if you wish to use the raw data.

Related Information



MR05-05 Leg1

Ship Name:	MIRAI
Period:	2005/10/31 - 2005/11/24
Chief Scientist:	Takeshi Kawano (JAMSTEC)
Project Name:	[POST-WOCE Hydrography]

Format Description for Gravity Corrected

No.	Column	Content	Format	Unit	Remarks
1	1 - 8	Date	i4,i2,i2		YYYYMMDD (UTC)
2	10 - 15	Time	i2,i2,i2		hhmmss (UTC)
3	17 - 25	Latitude	f9.5	degree	No sign for the northern hemisphere. Negative for the southern hemisphere.
4	27 - 36	Longitude	f10.5	degree	No sign for eastern hemisphere. Negative for the western hemisphere.
5	38 - 45	Absolute gravity	f8.1	mGal	
6	48 - 53	Free-air anomaly	f6.1	mGal	