KAIMEI KM17-03 Navigation

Last Modified: 2018-10-03

ReadMe | Observation Data | Data Format

Cruise ID: KM17-03
Navigation: Processed (DMO)-QCed
Data Policy: JAMSTEC
Observation Items:
Science Keywords:

Cruise Report
http://www.godac.jamstec.go.jp/catalog/data/doc_catalog/media/KM17-03_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:
Wide Area Differential GPS

Overview

The following information is continuously collected and recorded as the Navigation QCed data during the cruise of R/V KAIMEI.

- Time
- Location
- Surface temperature
- Wind direction and velocity
- Current direction and velocity
- Water depth

Data are recorded every one minute, and data file named after cruise code.

Sensor specifications

1)GPS
Manufacturer: Fugro Survey Limited
Model: StarPack-D
Receiver location:Radar mast

2)Thermometer (seawater temperature)
Manufacturer:Sea-Bird Electronics,Inc.
Model: SBE 38
Range: -5 - 35 deg-C
Accuracy: +/-0.001 deg-C

3)Doppler sonar
Manufacturer:FURUNO ELECTRIC CO., LTD.
Model: DS-60
Range: Ship speed: -10.00 - +40.00 knot [Cross direction]
-9.99 - 9.99 knot [Horizontal direction]
Current direction and speed: 0.00 - 9.99 knot [All direction]
Accuracy: Water tracking: +/-1.0% or +/-0.1 knot, whichever is greater

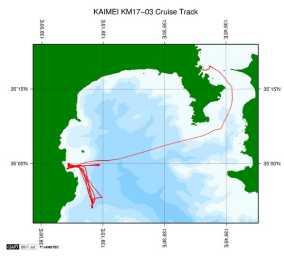
4)Multi narrow beam echo sounder for shallow-medium water
Manufacturer:Kongsberg
Model: EM712
Frequency: 40 - 100kHz
Range: 3 - 3,600m

5)Multi narrow beam echo sounder for deep water
Manufacturer:Kongsberg
Model: EM122
Frequency: 12kHz
Range: 20 - 11,000m

6)Anemometer
Manufacturer:Vaisala Inc.
Model: WMT700
Altitude: 22.9m (above sea level)
Range: Wind direction:all direction
Wind speed: 0 - 65m/s
Accuracy: Wind direction:+/-2degree
Wind speed: +/-0.2degree or 3% of reading, whichever is greater

Related Information

Cruise Data Dive Data



Enlarge Image

KM17-03
Ship Name: KAIMEI
Period: 2017-04-29 - 2017-05-04
Chief Scientist: Fujio Yamamoto (JAMSTEC)

Update History

2018-10-03	An observation data was registerd.
2017-07-31	An observation data was registerd.

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

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Navigation Qced

The one record of this data has 117 bytes of data part and 12 bytes of flag part.

Data part

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 - 19	Datum	a3		W84:WGS84 TD_:TOKYO DATUM
4	21 - 31	Latitude	i2,x1,f7.4,a1	degree - minute	dd-mm.mmmmN(S)
5	33 - 44	Longitude	i3,x1,f7.4,a1	degree - minute	ddd-mm.mmmmE(W)
6	46 - 49	Ship speed (Ground)	f4.1	knot	
7	51 - 55	Course (Ground)	f5.1	degree	
8	57 - 60	Ship speed (Water)	f4.1	knot	*1
9	62 - 66	Gyro	f5.1	degree	
10	68 - 72	Air temperature	f5.1	deg-C	
11	74 - 78	Sea surface temperature (SST)	f5.2	deg-C	
12	80 - 85	Atmospheric pressure	f6.1	hPa	Adjusted to the sea surface level
13	87 - 89	Relative humidity	i3	%	
14	91 - 93	True wind direction	i3	degree	Averaged over the previous 6 seconds *2
15	95 - 98	True wind speed	f4.1	m/sec	Averaged over the previous 6 seconds *2 No anemometer height adjustment
16	100 - 106	Depth	f7.1	m	
17	108 - 112	Current direction	f5.1	degree	Calculated value
18	114 - 117	Current speed	f4.1	knot	Calculated value

Flag part

No.	Column	Description	Format	Remarks
19	119	Flag 1	i1	QC flag for 'Latitude' and 'Longitude'
20	120	Flag 2	i1	QC flag for 'Ship speed (Ground)'
21	121	Flag 3	i1	QC flag for 'Course (Ground)'
22	122	Flag 4	i1	QC flag for 'Ship speed (Water)'
23	123	Flag 5	i1	QC flag for 'Gyro'
24	124	Flag 6	i1	QC flag for 'Air temperature'
25	125	Flag 7	i1	QC flag for 'Sea Surface Temerature (SST)'
26	126	Flag 8	i1	QC flag for 'Atmospheric pressure'
27	127	Flag 9	i1	QC flag for 'Relative humidity'
28	128	Flag 10	i1	QC flag for 'Wind direction' and 'Wind speed'
29	129	Flag 11	i1	QC flag for 'Depth'
30	130	Flag 12	i1	QC flag for 'Current direction' and 'Current speed'

*1 The plus and minus sign of No.8 [Ship speed (Water)] about R/V KAIREI indicates the velocity of direction of a bow and stem.
*2 No.14 [True wind direction] and No.15 [True wind speed] about R/V SHINSEI MARU are instantaneous value.
* The terminator of each record is 'CR+LF' code.
* Missing value and format error value are filled with '9'.

Definition of Quality Control Flags
Flag 1 : Longitude and Latitude
1 - accepted
2 - questionable value
4 - failed in location check
9 - system error or input error

Flag 2 : Ship speed (ground)
1 - accepted
2 - questionable value
4 - failed range check (under 20 knots)
9 - system error or input error

Flag 3 : Course (ground)
1 - accepted
2 - questionable value
4 - failed range check (0 ~ 360 degree)
9 - system error or input error

Flag 4 : Ship speed (water)
1 - accepted
4 - failed range check (under 20 knots)
9 - system error or input error

Flag 5 : Gyro
1 - accepted
4 - failed range check (0 ~ 360 degree)
9 - system error or input error

Flag 6 : Air temperature
3 - assumed good*
4 - failed range check (-20 ~ 40 degC)
9 - system error or input error

Flag 7 : Sea surface temperature
3 - assumed good*
4 - failed range check (-3 ~ 37 degC)
9 - system error or input error

Flag 8 : Atmospheric pressure
3 - assumed good*
4 - failed range check (890 ~ 1040 hPa)
9 - system error or input error

Flag 9 : Relative humidity
3 - assumed good*
4 - failed range check (0 ~ 100 %)
9 - system error or input error

Flag 10 : Wind direction and wind speed
3 - assumed good*
4 - failed range check (0 ~ 360 degree : wind direction, 0 ~ 60 m/s : wind speed)
9 - system error or input error

Flag 11 : Depth
3 - assumed good*
4 - failed range check (4 ~ 11000 m)
9 - system error or input error

Flag 12 : Current direction and current speed
3 - assumed good*
4 - failed range check (0 ~ 360 degree : current direction, 0 ~ 5 knots : current speed)
9 - system error or input error

* 'assumed good' means that this data passed range check but may contains leap or inappropriate zero.

Related Information

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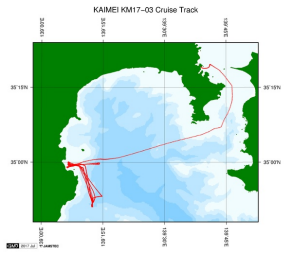

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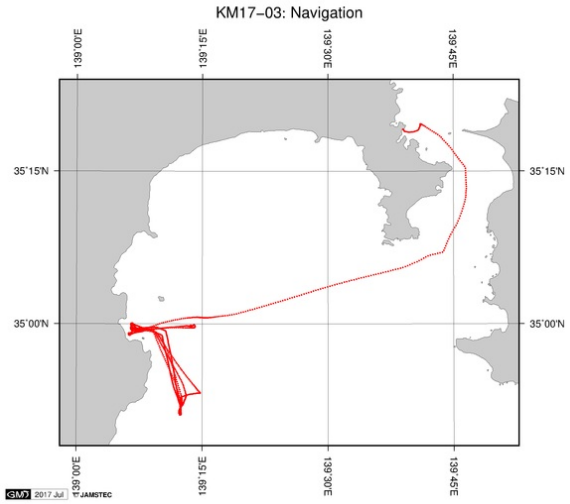
Science Keywords:

Observation Map

Imagery reproduced from ...

... Observation Line ... Navigation ... Observation, Dive Point, Hole

Figures



Data List

Add to Basket

File names
KM17-03.dat

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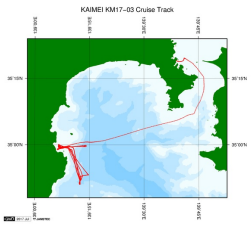
Cruise Data Dive Data



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