

NO.49

OCT.1976

CSK NEWSLETTER



JAPAN OCEANOGRAPHIC DATA CENTER

Hydrographic Department, Maritime Safety Agency

Tokyo, Japan

NO. 48
OCT. 1978

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Hydrographic Department, Maritime Safety Agency
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ROSCOP

C O N T E N T S

I. Cruise Reports

1. Japan (ROSCOP)

Hakuho Maru	(6 February - 23 March 1974)
Hakuho Maru	(11 May - 3 August 1972)
Shoyo Maru	(2 October - 30 November 1974)
Oshoro Maru	(22 October - 25 December 1973)
Chofu Maru	(28 January - 27 February 1975)
Seifu Maru	(3 February - 20 March 1975)
Shumpu Maru	(1 February - 27 February 1975)
Ryofu Maru	(14 January - 10 February 1975)

2. Republic of Korea (ROSCOP)

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3. U.S.S.R. CSK Cruises Received during the Period 1 September 1975 - 30 September 1976

II. Abstracts of the Papers on CSK

III. Number of Serial Oceanographic Stations of CSK

IV. Request of the Forwarding of the Inventories and Data Related to the CSK Programme

V. Data Received

Japan (Ryofu Maru-2 crs., Takuyo-3 crs., Kaiyo, Seifu Maru,
Chofu Maru-2 crs., Shumpu Maru-2 crs., Hakuho Maru)

Republic of Korea (Suro No. 3)

U.S.S.R. (Priboy, Seskar-2 crs., Priliv)

I. CRUISE REPORTS

1. Japan

1.1 Hakuho Maru

(ROSCOP)

SHIP OR PLATFORM Hakuho Maru		SCIENTIST IN CHARGE T. Teramoto	
INSTITUTION OR OPERATING AGENCY Ocean Research Institute, University of Tokyo (ORIUT)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. C S K KH - 74 - 1		COUNTRY Japan	
DATE OF CRUISE			
FROM: 06 DAY / 2 MONTH / 1974 YEAR	TO: 23 DAY / 3 MONTH / 1974 YEAR		
PROGRAMS UNDERTAKEN	TOTAL NO. OF Δ STATIONS	Q	F D TYPE OF FORMAT AVAILABLE
DESCRIPTIVE OCEANOGRAPHY			
D 1 SERIAL STATIONS			
D 2 STD	125	a	a AT
D 3 OXYGEN			
D 4 PHOSPHATES			
D 5 TOTAL-P			
D 6 NITRATES			
D 7 NITRITES			
D 8 TRACE ELEMENTS			
D 9 pH			
D 10 ALKALINITY			
D 11 SILICATES			
D 12 RADIOACTIVITY			
D 13 ISOTOPE CHEMISTRY			
D 14 OTHER DISSOLVED GASES			
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)	78	a	ab PUB
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)			
D 17 TRANSPARENCY (NO. OF OBS.)			
D 18 SOUND VELOCIMETER DATA			
D 19 INSTRUMENTED WAVE RECORDING (✓)			
D 20 TIDES (✓)			
D 21 SEA (✓)	✓	a	a RDS
D 22 SWELL (✓)	✓	a	a RDS
D 23 ICE (✓)			
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)			
D 25 SEA SURFACE TEMPERATURE (✓)	✓	a	a RDS
CURRENT MEASUREMENTS			
C 1 CURRENT METERS			
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)			
C 2 GEK (✓)			
C 3 DROGUES (✓)			
C 4 SWALLOW FLOATS (✓)			
C 5 SURFACE DRIFTERS (NO. RELEASED)			
C 6 BOTTOM DRIFTERS (NO. RELEASED)			
METEOROLOGY			
M 1 UPPER AIR OBSERVATIONS (✓)			
M 2 SURFACE METEOROLOGICAL OBS. (✓)	✓	a	a RDS
M 3 INCIDENT RADIATION (✓)			
GEOLOGY AND GEOPHYSICS			
G 1 DREDGE AND GRAB SAMPLES (NO. OF SAMPLES)			
G 2 CORES (NO. CORES)			
G 3 SEISMIC—REFLECTION PROFILES (Km)			
G 4 SEISMIC—REFRACTION PROFILES			

Q QUERIES CONCERNING DATA SHOULD BE ADDRESSED TO:

a. ORIUT

b.

c.

d.

e.

f.

F D FINAL DISPOSITION OF DATA

(NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)

a. ORIUT

b. JODC

c.

d.

e.

f.

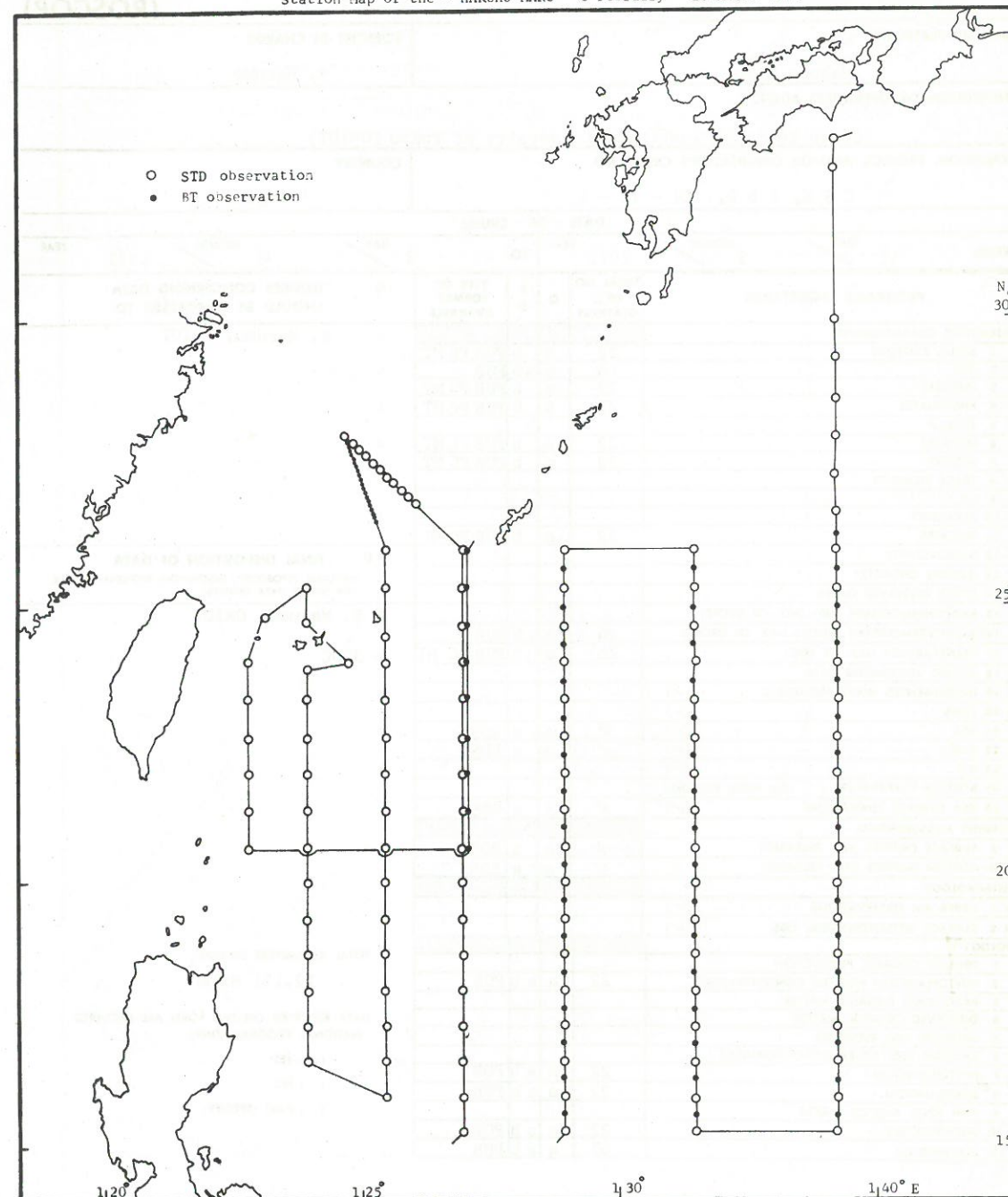
Δ ENTER NUMBER OF STATIONS, EXCEPT WHEN ANNOTATED OTHERWISE FOLLOWING PARAMETER. WHEN OBSERVED PARAMETER IS FOLLOWED BY A CHECK MARK (✓) DO NOT ENTER ANY NUMBER BUT ENTER THE CHECK MARK INSTEAD.

TOTAL KILOMETERS STEAMED:
8,156 Mile

DATA REPORTED ON THIS FORM ARE DECLARED NATIONAL PROGRAM (DNP):

- (✓) YES
- () NO
- () PART (SPECIFY)

Station Map of the " HAKUHO MARU " 6 February - 23 March 1974



1.2 Hakuho Maru

(ROSCOP)

SHIP OR PLATFORM		SCIENTIST IN CHARGE	
Hakuho Maru		R. Marumo	
INSTITUTION OR OPERATING AGENCY			
Ocean Research Institute, University of Tokyo (ORIUT)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO.		COUNTRY	
C S K, I B P, KH - 72 - 1		Japan	
DATE OF CRUISE			
FROM:	11 DAY / 5 MONTH / 1972 YEAR	TO:	3 DAY / 8 MONTH / 1972 YEAR

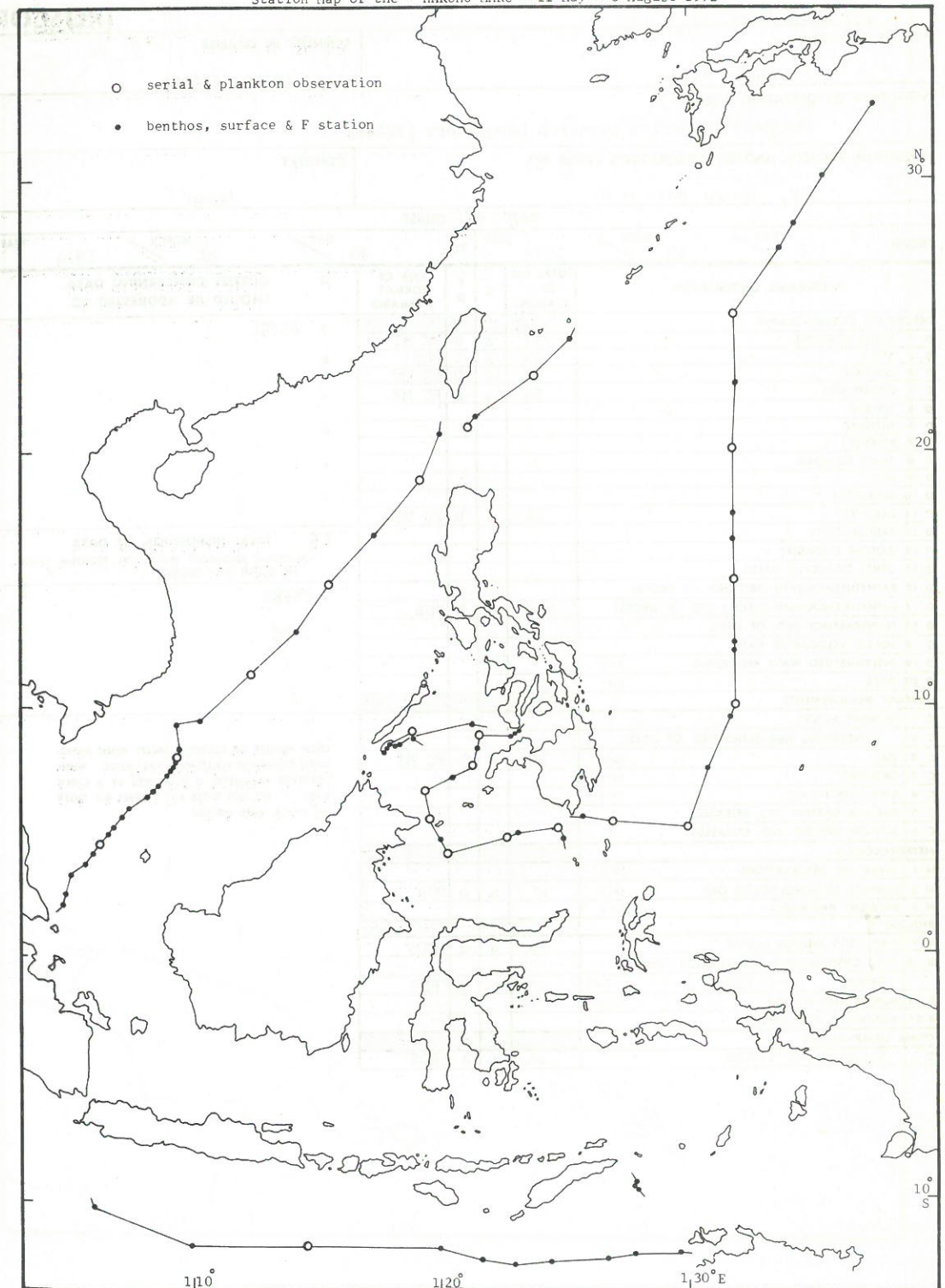
PROGRAMS UNDERTAKEN	TOTAL NO. OF Δ STATIONS	Q	F D	TYPE OF FORMAT AVAILABLE	Q	QUERIES CONCERNING DATA SHOULD BE ADDRESSED TO:
DESCRIPTIVE OCEANOGRAPHY						
D 1 SERIAL STATIONS	22	a	b	PUB PC MT	a.	R. Marumo, ORIUT
D 2 STD	14	a	ab	PUB	b.	
D 3 OXYGEN	22	a	b	PUB PC MT	c.	
D 4 PHOSPHATES	22	a	b	PUB PC MT	d.	
D 5 TOTAL-P					e.	
D 6 NITRATES	22	a	b	PUB PC MT	f.	
D 7 NITRITES	22	a	b	PUB PC MT		
D 8 TRACE ELEMENTS						
D 9 pH						
D 10 ALKALINITY						
D 11 SILICATES	22	a	b	PUB PC MT		
D 12 RADIOACTIVITY						
D 13 ISOTOPE CHEMISTRY						
D 14 OTHER DISSOLVED GASES						
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)						
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)	24	a	a b	PUB	a.	R. Marumo, ORIUT
D 17 TRANSPARENCY (NO. OF OBS.)	15	a	b	PUB PC MT	b.	JODC
D 18 SOUND VELOCIMETER DATA					c.	
D 19 INSTRUMENTED WAVE RECORDING (✓)					d.	
D 20 TIDES (✓)					e.	
D 21 SEA (✓)	✓	a	a	RDS	f.	
D 22 SWELL (✓)	✓	a	a	RDS		
D 23 ICE (✓)						
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)						
D 25 SEA SURFACE TEMPERATURE (✓)	✓	a	a	RDS		
CURRENT MEASUREMENTS						
C 5 SURFACE DRIFTERS (NO. RELEASED)	✓	a	a	RDS		
C 6 BOTTOM DRIFTERS (NO. RELEASED)	✓	a	a	RDS		
METEOROLOGY						
M 1 UPPER AIR OBSERVATIONS (✓)						
M 2 SURFACE METEOROLOGICAL OBS. (✓)						
BIOLOGY						
B 1 PRIMARY ORGANIC PRODUCTION						
B 2 PHYTOPLANKTON PIGMENT CONCENTRATION	22	a	a b	PUB		
B 3 PARTICULATE ORGANIC MATTER						
B 4 DISSOLVED ORGANIC MATTER						
B 5 NEUSTON AND PLEUSTON						
B 6 BACTERIA AND OTHER MICROORGANISMS						
B 7 PHYTOPLANKTON	22	a	a b	PUB		
B 8 ZOOPLANKTON	22	a	a b	PUB		
B 9 FISH EGGS AND/OR LARVAE						
B 10 MICRONEKTON	22	a	a b	PUB		
B 15 ZOOBENTHOS	45	a	a b	PUB		

TOTAL KILOMETERS STEAMED:
12,131 Mile

DATA REPORTED ON THIS FORM ARE DECLARED
NATIONAL PROGRAM (DNP):

(✓) YES
() NO
() PART (SPECIFY)

Station Map of the " HAKUHO MARU " 11 May - 3 August 1972



1.3 Shoyo Maru (ROSCOP)

SHIP OR PLATFORM: Shoyo Maru SCIENTIST IN CHARGE: Chiomi Shingu

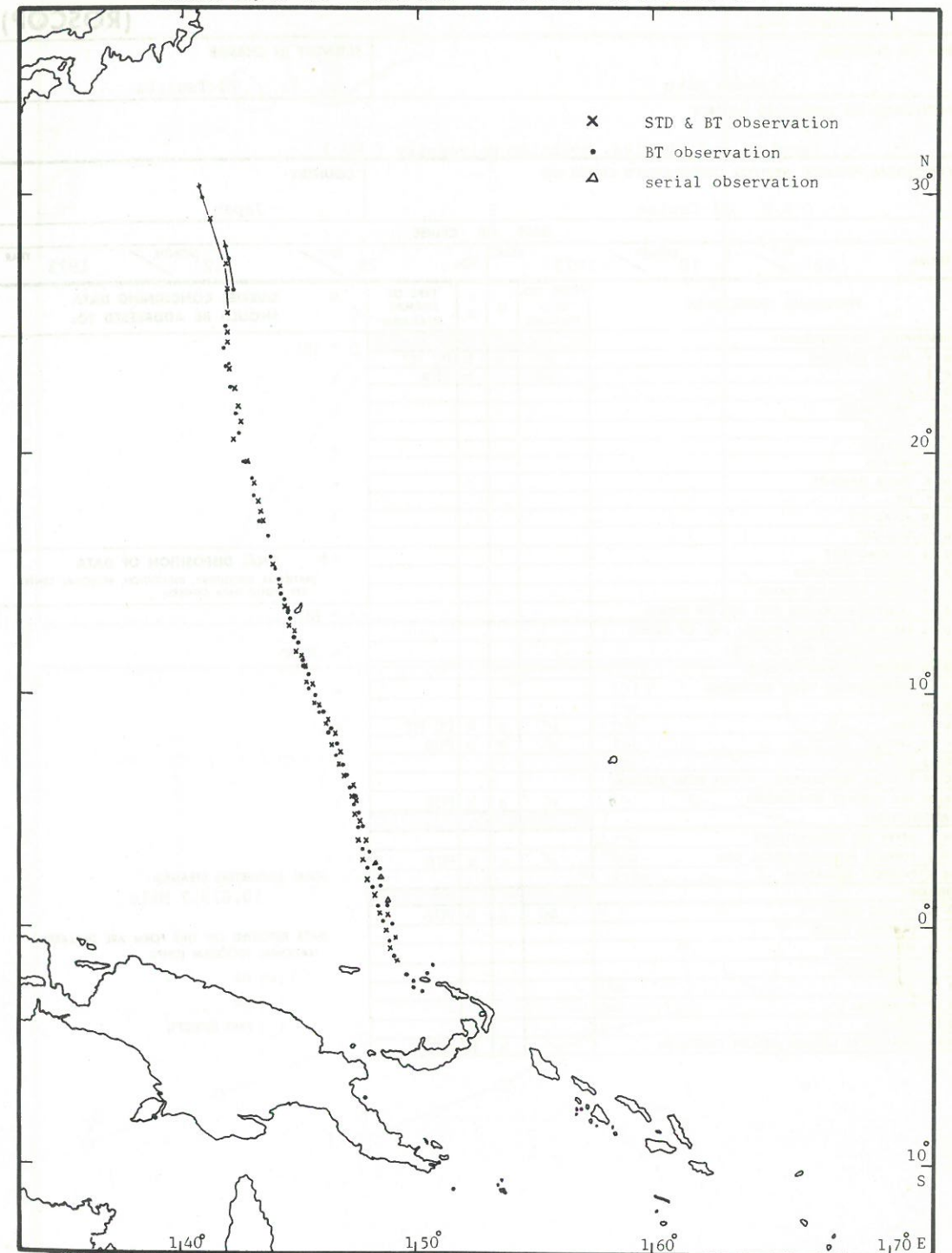
INSTITUTION OR OPERATING AGENCY: Far Seas Fisheries Research Laboratory (FSFRL)

EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO.: C S K, Shoyo Maru - 74 COUNTRY: Japan

DATE OF CRUISE: FROM: 2 DAY / 10 MONTH / 1974 YEAR TO: 30 DAY / 11 MONTH / 1974 YEAR

PROGRAMS UNDERTAKEN	TOTAL NO. OF Δ STATIONS	Q	F	D	TYPE OF FORMAT AVAILABLE	Q	QUERIES CONCERNING DATA SHOULD BE ADDRESSED TO:
DESCRIPTIVE OCEANOGRAPHY							
D 1 SERIAL STATIONS	57	a	b		PC MT	a.	FSFRL
D 2 STD	56	a	b		PUB	b.	
D 3 OXYGEN	54	a	b		PC MT	c.	
D 4 PHOSPHATES	54	a	b		PC MT	d.	
D 5 TOTAL-P						e.	
D 6 NITRATES						f.	
D 7 NITRITES							
D 8 TRACE ELEMENTS							
D 9 pH							
D 10 ALKALINITY							
D 11 SILICATES	54	a	b		PC MT		
D 12 RADIOACTIVITY							
D 13 ISOTOPE CHEMISTRY							
D 14 OTHER DISSOLVED GASES							
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)						F D	FINAL DISPOSITION OF DATA (NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)	119	a	b		PUB	a.	FSFRL
D 17 TRANSPARENCY (NO. OF OBS.)						b.	JODC
D 18 SOUND VELOCIMETER DATA						c.	
D 19 INSTRUMENTED WAVE RECORDING (✓)							
D 20 TIDES (✓)							
CURRENT MEASUREMENTS							
C 1 CURRENT METERS							
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)						Δ	ENTER NUMBER OF STATIONS, EXCEPT WHEN ANNOTATED OTHERWISE FOLLOWING PARAMETER. WHEN OBSERVED PARAMETER IS FOLLOWED BY A CHECK MARK (✓) DO NOT ENTER ANY NUMBER BUT ENTER THE CHECK MARK INSTEAD.
C 2 GEK (✓)	19	a	b		PC MT		
C 3 DROGUES (✓)							
C 4 SWALLOW FLOATS (✓)							
C 5 SURFACE DRIFTERS (NO. RELEASED)							
C 6 BOTTOM DRIFTERS (NO. RELEASED)							
METEOROLOGY							
M 1 UPPER AIR OBSERVATIONS (✓)							
M 2 SURFACE METEOROLOGICAL OBS. (✓)	✓	a	b		PUB		
M 3 INCIDENT RADIATION (✓)							
BIOLOGY							
B 9 FISH EGGS AND/OR LARVAE	38	a	a		RDS		
B 22 FIELD OBSERVATIONS ON BEHAVIOR (SPECIFY GROUP) (TONAS) (✓)	✓	a	a		RDS		
B 23 BORERS AND FOULERS (✓)							
B 24 BIOLOGICAL POLLUTANTS							
OTHER OBSERVATIONS							
O 1 Tagging of Tonas (✓)	✓	a	a		RDS		

Station Map of the " SHOYO MARU " 2 October - 30 November 1974



1.4 Oshoro Maru

(ROSCOP)

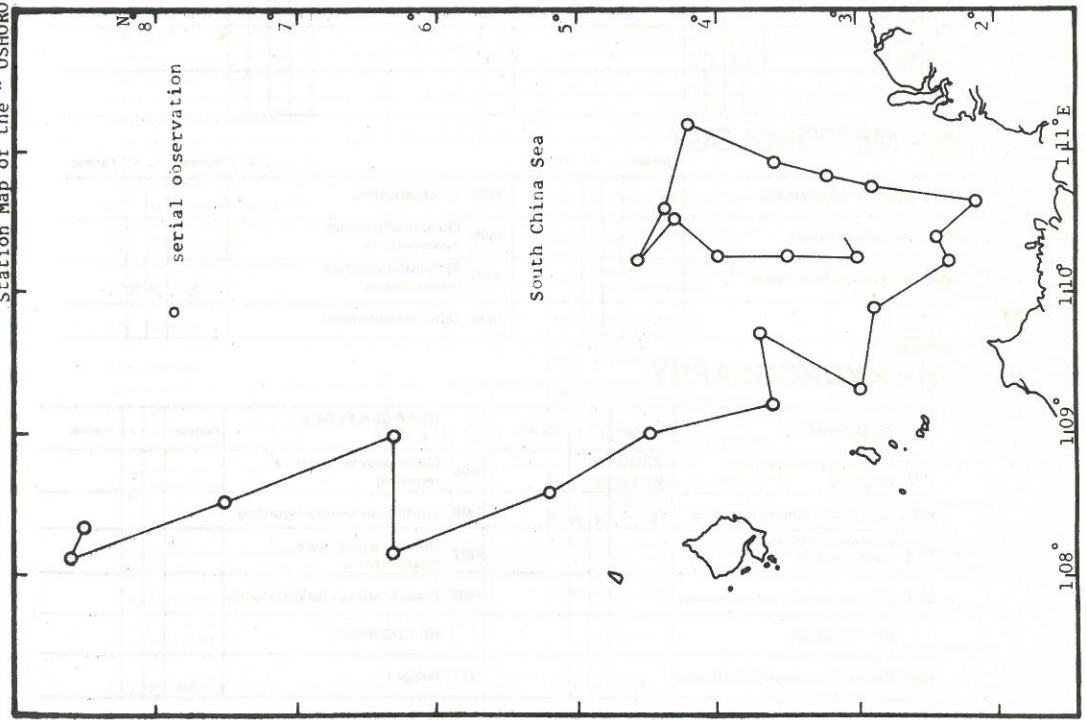
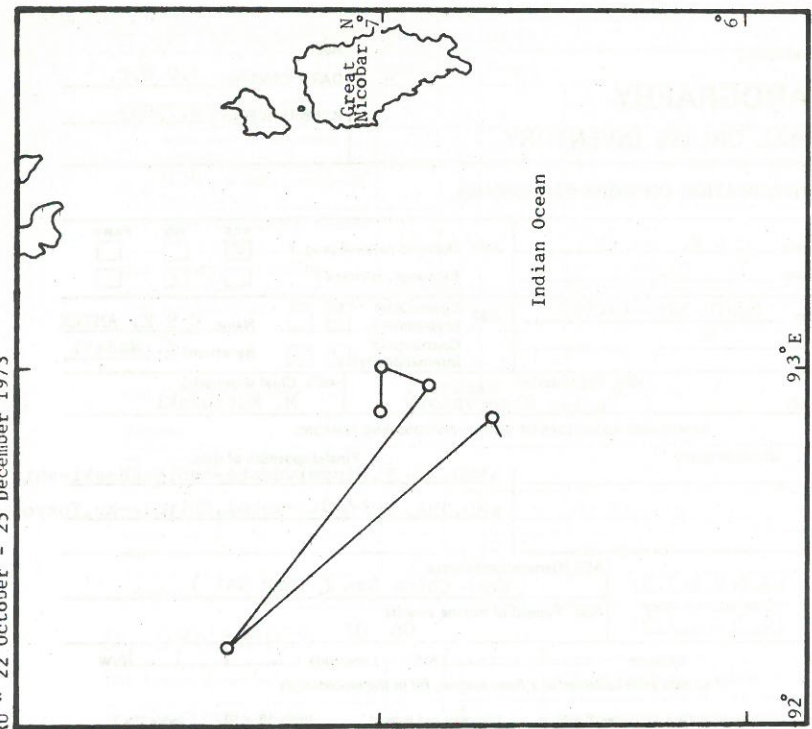
SHIP OR PLATFORM		SCIENTIST IN CHARGE	
Oshoro Maru		T. Tsujita	
INSTITUTION OR OPERATING AGENCY			
Faculty of Fisheries, Hokkaido University (HU)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO.		COUNTRY	
C S K 51 Cruise		Japan	
DATE OF CRUISE			
FROM:	22 DAY / 10 MONTH / 1973 YEAR	TO:	25 DAY / 12 MONTH / 1973 YEAR

PROGRAMS UNDERTAKEN	TOTAL NO. OF Δ STATIONS	Q	F D	TYPE OF FORMAT AVAILABLE	Q	QUERIES CONCERNING DATA SHOULD BE ADDRESSED TO:
DESCRIPTIVE OCEANOGRAPHY						
D 1 SERIAL STATIONS	29	a	b	PC MT	a.	HU
D 2 STD	29	a	b	PUB	b.	
D 3 OXYGEN					c.	
D 4 PHOSPHATES					d.	
D 5 TOTAL-P					e.	
D 6 NITRATES					f.	
D 7 NITRITES						
D 8 TRACE ELEMENTS						
D 9 pH						
D 10 ALKALINITY						
D 11 SILICATES						
D 12 RADIOACTIVITY						
D 13 ISOTOPE CHEMISTRY						
D 14 OTHER DISSOLVED GASES						
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)						
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)						
D 17 TRANSPARENCY (NO. OF OBS.)						
D 18 SOUND VELOCIMETER DATA						
D 19 INSTRUMENTED WAVE RECORDING (✓)						
D 20 TIDES (✓)						
D 21 SEA (✓)	✓	a	b	PC MT	d.	
D 22 SWELL (✓)	✓	a	b	PUB	e.	
D 23 ICE (✓)					f.	
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)						
D 25 SEA SURFACE TEMPERATURE (✓)	✓	a	b	PUB		
METEOROLOGY						
M 1 UPPER AIR OBSERVATIONS (✓)						
M 2 SURFACE METEOROLOGICAL OBS. (✓)	✓	a	b	PUB		
M 3 INCIDENT RADIATION (✓)						
BIOLOGY						
B 12 PELAGIC FISHES	40	a	b	PUB		
B 13 DEMERSAL FISHES						
B 14 PHYTOBENTHOS						
B 15 ZOOBENTHOS						
B 16 AVES (✓)						
B 17 PINNIPEDIA (✓)						
B 18 CETACEA (✓)						
B 19 BIOLOGICAL SOUNDS (SPECIFY CRUSTACEA) (✓)	✓	a	b	PUB		

TOTAL KILOMETERS STEAMED:
10,623.7 Mile

DATA REPORTED ON THIS FORM ARE DECLARED NATIONAL PROGRAM (DNP):
(✓) YES
() NO
() PART (SPECIFY)

Station Map of the " OSHORO MARU " 22 October - 25 December 1973



OCEANOGRAPHY
GENERAL CRUISE INVENTORY

A00
DATA CENTRE: J.O.D.C.
REFERENCE No: R.75009

A - GENERAL INFORMATION ON WORK PERFORMED

A01 Expedition/Project C S K, AMTEX Cruise No. or name 75 - 01	A91 Declared national prog.? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> PART Exchange restricted? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> PART
A02 Ship or platform Chofu Maru (JPQX) Platform type 01	A92 Co-operative programme? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Co-ordinated internationally? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Name C S K, AMTEX By whom? K. Wadati
A03 Country Japan	A04 Organization Nagasaki Marine Observatory
A05 Chief scientist(s) M. Matsuzaki	

A06 NAMES AND ADDRESSES OF ORGANIZATIONS AND PERSONS

Whom to query	Final disposition of data
a NMO	A NMO, 11-51, Minamiyamate-cho, Nagasaki-shi
b MD, JMA	B MD, JMA, 1-3-4, Ote-machi, Chiyoda-ku, Tokyo
c	C

A07 Date: from: 2, 8, 0, 1, 7, 5 DAY MONTH YEAR to: 2, 7, 0, 2, 7, 5	A08 General ocean areas East China Sea (Tung Hai)
A09 Type(s) of marine zone(s) 06 07	

A10 Geographic area Latitude Longitude

If all data were collected at a fixed station, fill in the co-ordinates

Discipline and type of measurements	Index 10 x 10 Qc L G G	Index 1° x 1°	Discipline and type of measurements	Index 10 x 10 Qc L G G	Index 1° x 1°
M, HS, HP, HC, P, D, B,	1 2 1 2				
M, HS, HP, HC, P, D, B,	1 3 1 2				

M - METEOROLOGY

Number	i	l	Format	Number	i	l	Format
M01 Upper air observations				M04 Ice observations			
M02 Incident radiation				M05 Occasional standard measurements			
M03 Air-sea interface studies				M06 Systematic standard measurements	X	a	A 1
				M90 Other measurements			

Remarks

H - HYDROGRAPHY

HS SURFACE				NEAR SEA FLOOR (< 10 m)			
Number	i	l	Format	Number	i	l	Format
H01 Continuous temperature recording	2800	Mile	a A 3	H05 Continuous temperature recording			
H02 Continuous salinity recording	2800	Mile	a A 3	H06 Continuous salinity recording			
H03 Discrete temperature measurements				H07 Discrete temperature measurements			
H04 Discrete salinity measurements				H08 Discrete salinity measurements			
HP PHYSICAL				HC CHEMICAL			
H09 Classical oceanographic stations	38	a	A 1	H21 Oxygen	38	a	A 1

H - HYDROGRAPHY (Continued)

	Number	i	l	Format		Number	i	l	Format
H10 Vertical profiles (STD/CTD)	20	a	A	3	H22 Phosphates	5	a	A	1
H11 sub-surface measurements underway					H23 Total - P	2	a	A	1
H12 Mechanical bathythermograph (no. of drops)	57	a	A	8	H24 Nitrates	2	a	A	1
H13 Bathythermograph-expendable (no. of drops)	66	a	A	3	H25 Nitrites	2	a	A	1
H14 Sound velocity stations					H26 Silicates				
H15 Acoustic stations					H27 Alkalinity				
H16 Transparency	16	a	A	1	H28 pH	2	a	A	1
H80 Other measurements					H31 Radioactivity				

Remarks

P - POLLUTION

P01 Suspended solids					P07 Waste water : BOD				
P02 Heavy metals	2	b	B	1	P08 Waste water : Nitrates				

Remarks

D - DYNAMICS

D01 Current meters (no. of stat.)					D07 Drift cards (no. released)				
D02 Current meters (average duration of measurement)					D08 Bottom drifters (no. released)				
D03 Currents measured from ship drift					D09 Tidal observations (duration)				
D04 GEK	43	a	A	1	D10 Sea and swell (no. of observations)				
D05 Drifters (number)					D90 Other				
D06 Swallow floats (number)									

B - BIOLOGY

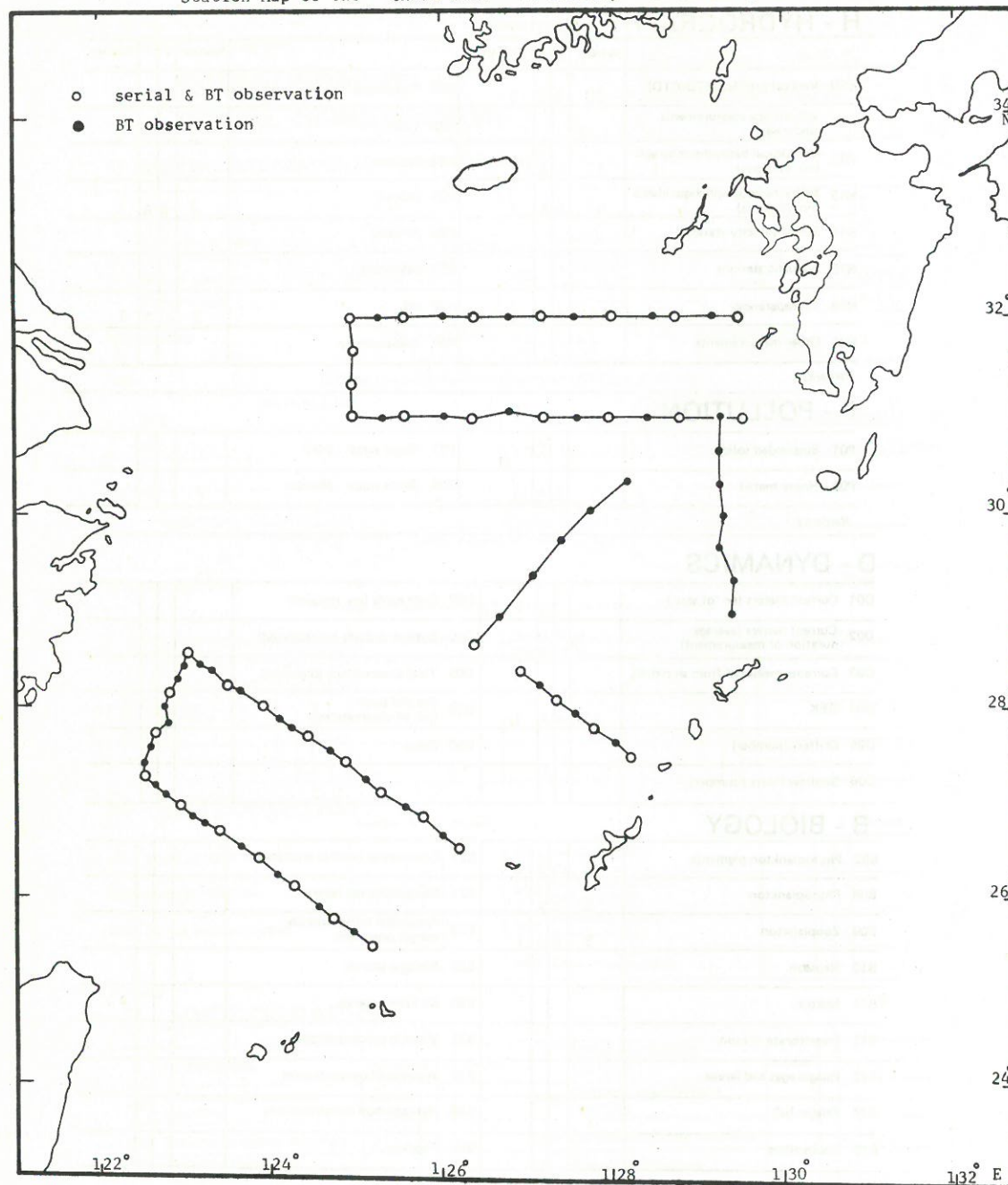
B02 Phytoplankton pigments	5	a	A	1	B21 Commercial benthic crustacean				
B08 Phytoplankton	5	a	A	1	B27 Deep scattering layers				
B09 Zooplankton	5	a	A	1	B28 Acoustical reflections on marine organisms				
B10 Neuston					B29 Biologic sounds				
B11 Nekton					B30 Bioluminescence				
B12 Invertebrate nekton					B31 Vitamin concentrations				
B13 Pelagic eggs and larvae					B32 Aminoacid concentration				
B14 Pelagic fish					B33 Hydrocarbon concentrations				
B18 Zoobenthos					B37 Taggings				

Remarks

BS TYPES OF STUDIES				B60 Physiology			
Number	i	l	Format	Number	i	l	Format
B51 Identification				B61 Behaviour			

* Data Format: 1. manuscript or publication, 2. automatic printing
3. graph recording, 4. punched card, 5. punched tape
6. analogue recording on magnetic tape.
7. digital recording on magnetic tape
8. photograph, 9. samples, 0. other or unspecified

Station Map of the " CHOFU MARU " 28 January - 27 February 1975



1.6 Seifu Maru

ROSCOP (2nd edition)

OCEANOGRAPHY
GENERAL CRUISE INVENTORY

A00

DATA CENTRE: J.O.D.C.

REFERENCE No: R.75011

A - GENERAL INFORMATION ON WORK PERFORMED

A01 Expedition/Project <u>C S K</u> Cruise No. or name <u>75 - 01</u>	A91 Declared national prog. ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> PART Exchange restricted ? <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
A02 Ship or platform <u>Seifu Maru (JPVB)</u> Platform type <u>01</u>	A92 Co-operative programme ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Name <u>C S K</u> Co-ordinated internationally? <input checked="" type="checkbox"/> <input type="checkbox"/> By whom? <u>K. Wadati</u>
A03 Country <u>Japan</u>	A04 Organization <u>Maizuru Marine Observatory</u>
A05 Chief scientist(s) <u>I. Fujiwara</u>	
A06 NAMES AND ADDRESSES OF ORGANIZATIONS AND PERSONS	
Whom to query	Final disposition of data
a <u>MMO</u>	A <u>MMO, Shimofukui, Maizuru-shi</u>
b _____	B _____
c _____	C _____
A07 Date : from: <u>10,31,0,21,7,5</u> DAY MONTH YEAR to: <u>2,01,0,31,7,5</u>	A08 General ocean areas <u>Sea of Japan</u>
A09 Type(s) of marine zone(s) <u>04 05</u>	

A10 Geographic area Latitude _____ N/S Longitude _____ E/W
If all data were collected at a fixed station, fill in the co-ordinates

Discipline and type of measurements	Index 10 x 10				Index 1° x 1°		Discipline and type of measurements	Index 10 x 10				Index 1° x 1°	
	Oc	L	G	G				Oc	L	G	G		
M, HS, HP, HC, D, B,	1	3	1	2									
	1	3	1	3									
	1	4	1	3									

M - METEOROLOGY

	Number	i	l	Format		Number	i	l	Format
M01 Upper air observations					M04 Ice observations				
M02 Incident radiation					M05 Occasional standard measurements				
M03 Air-sea interface studies					M06 Systematic standard measurements	X	a	A	1
					M90 Other measurements				

Remarks

H - HYDROGRAPHY

HS SURFACE				NEAR SEA FLOOR (< 10 m)					
	Number	i	l	Format		Number	i	l	Format
H01 Continuous temperature recording	4200				H05 Continuous temperature recording				
	Mile	a	A	3	H06 Continuous salinity recording				
H02 Continuous salinity recording	4200				H07 Discrete temperature measurements	3	a	A	1
	Mile	a	A	3	H08 Discrete salinity measurements	3	a	A	1
H03 Discrete temperature measurements	X	a	A	1					
H04 Discrete salinity measurements	X	a	A	1					
HP PHYSICAL				HC CHEMICAL					
H09 Classical oceanographic stations	51	a	A	1	H21 Oxygen	51	a	A	1

H - HYDROGRAPHY (Continued)

	Number	i	l	Format		Number	i	l	Format
H10 Vertical profiles (STD/CTD)					H22 Phosphates	16	a	A	1
H11 sub-surface measurements underway					H23 Total - P	3	a	A	1
H12 Mechanical bathythermograph (no. of drops)	124	a	A	8	H24 Nitrates				
H13 Bathythermograph-expendable (no. of drops)	6	a	A	3	H25 Nitrites	3	a	A	1
H14 Sound velocity stations					H26 Silicates				
H15 Acoustic stations					H27 Alkalinity				
H16 Transparency	24	a	A	1	H28 pH	3	a	A	1
H80 Other measurements					H31 Radioactivity	8	a	A	1

Remarks

P - POLLUTION

P01 Suspended solids					P07 Waste water : BOD				
P02 Heavy metals					P08 Waste water : Nitrates				

Remarks

D - DYNAMICS

D01 Current meters (no. of stat.)					D07 Drift cards (no. released)				
D02 Current meters (average duration of measurement)					D08 Bottom drifters (no. released)				
D03 Currents measured from ship drift					D09 Tidal observations (duration)				
D04 GEK	121	a	A	1	D10 Sea and swell (no. of observations)				
D05 Drifters (number)					D90 Other				
D06 Swallow floats (number)									

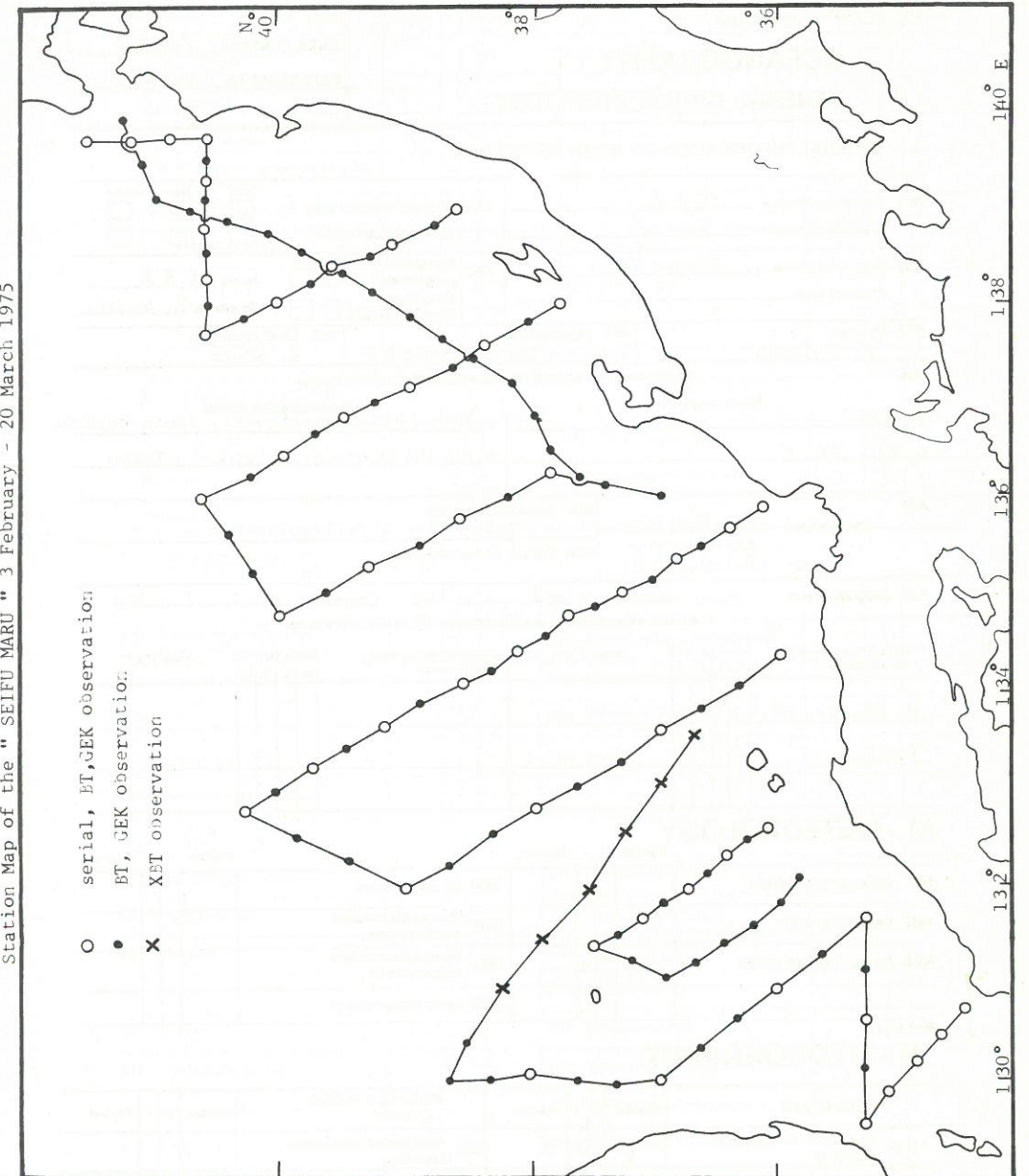
B - BIOLOGY

B02 Phytoplankton pigments	10	a	A	1	B21 Commercial benthic crustacean				
B08 Phytoplankton	10	a	A	1	B27 Deep scattering layers				
B09 Zooplankton	10	a	A	1	B28 Acoustical reflections on marine organisms				
B10 Neuston					B29 Biologic sounds				
B11 Nekton					B30 Bioluminescence				
B12 Invertebrate nekton					B31 Vitamin concentrations				
B13 Pelagic eggs and larvae					B32 Aminoacid concentration				
B14 Pelagic fish					B33 Hydrocarbon concentrations				
B18 Zoobenthos					B37 Taggings				

Remarks Norpac Standard Net

BS TYPES OF STUDIES					
B51 Identification					
B60 Physiology					
B61 Behaviour					

Station Map of the "SEIFU MARU" 3 February - 20 March 1975



ROSCOP (2nd edition)
OCEANOGRAPHY
GENERAL CRUISE INVENTORY

A00
 DATA CENTRE: J.O.D.C.
 REFERENCE No: R.75012

A - GENERAL INFORMATION ON WORK PERFORMED

A01 Expedition/Project C S K
 Cruise No. or name 75 - 02

A02 Ship or platform Shumpu Maru
 Platform type 01

A03 Country Japan
 A04 Organization Kobe Marine Observatory
 A05 Chief scientist(s) K. Shutō

A91 Declared national prog. ? YES NO PART
 Exchange restricted ? YES NO PART

A92 Co-operative programme ? YES NO
 Co-ordinated internationally? YES NO
 Name C S K
 By whom? K. Wadati

A06 NAMES AND ADDRESSES OF ORGANIZATIONS AND PERSONS

Whom to query
 a KMO
 b M.D., JMA
 c _____

Final disposition of data
 A KMO, 178 Nakayamatedori, Ikuta-ku, Kobe
 B HD, JMA Otomachi, Chiyoda-ku, Tokyo
 C _____

A07 Date: from: 10, 11, 0, 21, 7, 5
 DAY MONTH YEAR
 to: 12, 7, 10, 21, 7, 5
 DAY MONTH YEAR

A08 General ocean areas Inland Sea & Philippine Sea
 A09 Type(s) of marine zone(s) 04 05 06

A10 Geographic area Latitude _____ N/S Longitude _____ E/W
 If all data were collected at a fixed station, fill in the co-ordinates

Discipline and type of measurements	Index 10 x 10				Index 1° x 1°			
	Oc	L	G	G	Oc	L	G	G
M, HS, HP, HC,	1	3	1	3				
P, B, D,	1	3	1	3				

M - METEOROLOGY

Number	i	l	Format	Number	i	l	Format
M01				M04			
M02				M05			
M03	78	a	A	M06			
		b		M90			

Remarks

H - HYDROGRAPHY

HS SURFACE				NEAR SEA FLOOR (< 10 m)			
Number	i	l	Format	Number	i	l	Format
H01	X	a	A	H05			
		b		H06			
H02	X	a	A	H07	41	a	A
		b				b	
H03	80	a	A	H08	41	a	A
		b				b	
H04	80	a	A				
		b					
HP PHYSICAL				HC CHEMICAL			
H09	65	a	A	H21	65	a	A
		b				b	

H - HYDROGRAPHY (Continued)

Number	i	l	Format	Number	i	l	Format
H10				H22	65	a	A
						b	
H11				H23	40	a	A
						b	
H12	76	a	A	H24	40	a	A
		b				b	
			1, 8	H25	65	a	A
						b	
H13				H26	10	a	A
						b	
H14				H27			
H15	54	a	A	H28	30		
		b					
H16	37	a	A	H31	5	a	A
		b				b	
H80							1

Remarks

P - POLLUTION

P01				P07			
P02	2	a	A	P08	40	a	A
		b				b	
			1				1

Remarks

D - DYNAMICS

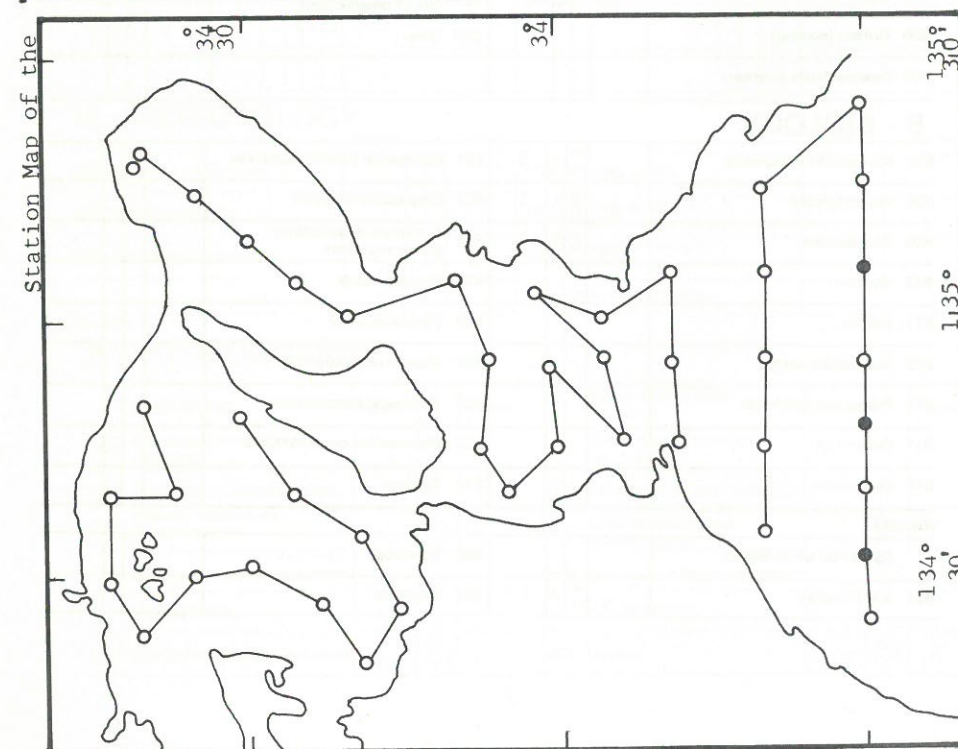
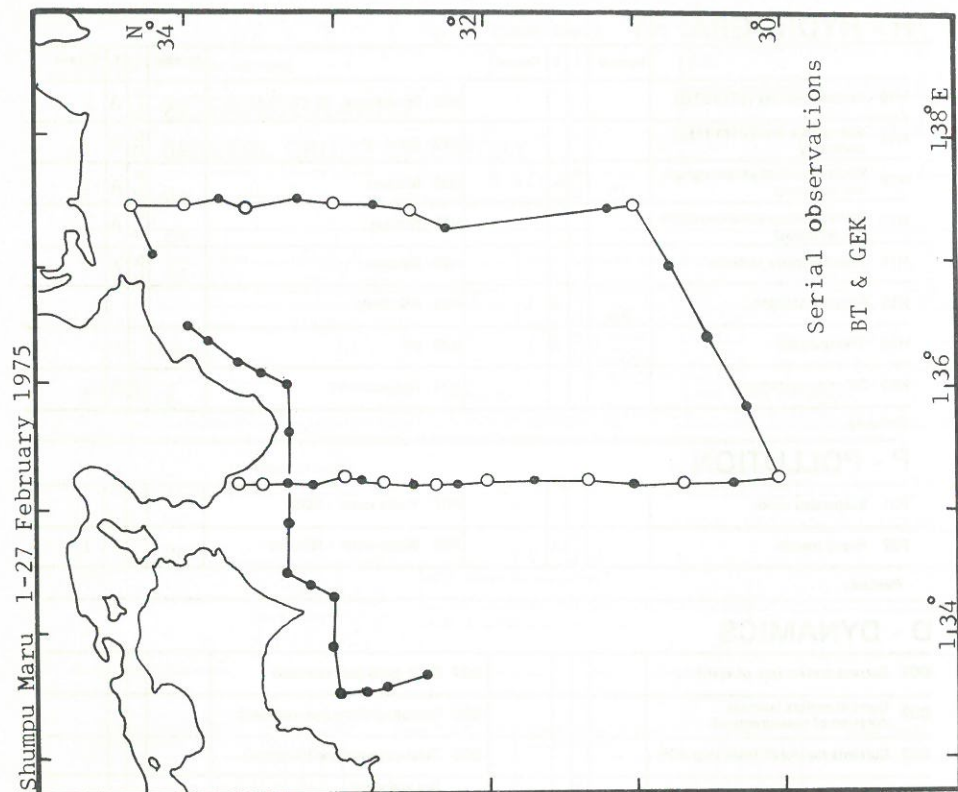
D01				D07			
D02				D08			
D03				D09			
D04	54	a	A	D10			
		b					
			1				
D05				D90			
D06							

B - BIOLOGY

B02	49	a	A	B21			
		b					
			1	B27			
B08	31	a	A	B28			
		b					
			1	B29			
B09	39	a	A	B30			
		b					
			1	B31			
B10				B32			
B11				B33			
B12				B37			
B13							
B14							
B18							

Remarks

BS TYPES OF STUDIES				B60 Physiology			
B51	9	a	A	B61			
		b					
			1				



1.8 Ryofu Maru

ROSCOP (2nd edition)

OCEANOGRAPHY
GENERAL CRUISE INVENTORY

A00
DATA CENTRE: J.O.D.C.
REFERENCE No: R.75017

A - GENERAL INFORMATION ON WORK PERFORMED

A01 Expedition/Project <u>C S K</u> Cruise No. or name <u>75 - 01</u>	A91 Declared national prog. ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> PART Exchange restricted ? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> PART
A02 Ship or platform <u>Ryofu Maru (JGZK)</u> Platform type <u>01</u>	A92 Co-operative programme ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO Name <u>C S K</u> Co-ordinated internationally? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO By whom? <u>K. Wadati</u>
A03 Country <u>Japan</u>	A04 Organization <u>Marine Dep., JMA</u> A05 Chief scientist(s) <u>Y. Kawarada</u>

A06 NAMES AND ADDRESSES OF ORGANIZATIONS AND PERSONS

Whom to query a Oceanography Div., M. D., JMA Final disposition of data A OD, MD, JMA 13-4 Ohte Machi, Chiyoda-Ku
b _____ B _____ Tokyo
c _____ C _____

A07 Date: from: 14, 0, 1, 7, 5 DAY MONTH YEAR
to: 1, 0, 1, 0, 2, 7, 5 DAY MONTH YEAR

A08 General ocean areas N.W. Pacific & Philippine Sea
A09 Type(s) of marine zone(s) 06 07

A10 Geographic area Latitude _____ N/S Longitude _____ E/W
If all data were collected at a fixed station, fill in the co-ordinates

Discipline and type of measurements	Index 10 x 10				Index 1° x 1°	Discipline and type of measurements	Index 10 x 10				Index 1° x 1°
	Qc	L	G	G			Qc	L	G	G	
M, HS, HP, HC, P, B, D	1	3	1	4		M, HS, HP, HC, P, B, D	1	0	1	3	
M, HS, HP, HC, P, B	1	3	1	3		M, HS, HP, HC, P, B, D	3	0	1	3	
M, HS, HP, HC, P, B	1	2	1	3		M, HS	1	2	1	2	
M, HS, HP, HC, P, B	1	1	1	3							

M - METEOROLOGY

Number	i	l	Format	Number	i	l	Format
M01 Upper air observations				M04 Ice observations			
M02 Incident radiation				M05 Occasional standard measurements			
M03 Air-sea interface studies				M06 Systematic standard measurements	X	a	A 1
				M90 Other measurements			

Remarks

H - HYDROGRAPHY

HS SURFACE				NEAR SEA FLOOR (< 10 m)					
	Number	i	l	Format		Number	i	l	Format
H01 Continuous temperature recording	5000 Mile	a	A	3	H05 Continuous temperature recording				
H02 Continuous salinity recording	5000 Mile	a	A	3	H06 Continuous salinity recording				
H03 Discrete temperature measurements					H07 Discrete temperature measurements				
H04 Discrete salinity measurements					H08 Discrete salinity measurements				
HP PHYSICAL				HC CHEMICAL					
H09 Classical oceanographic stations	51	a	A	4	H21 Oxygen	51	a	A	4

H - HYDROGRAPHY (Continued)

	Number	i	l	Format		Number	i	l	Format
H10 Vertical profiles (STD/CTD)					H22 Phosphates	42	a	A	4
H11 sub-surface measurements underway					H23 Total - P	11	a	A	4
H12 Mechanical bathythermograph (no. of drops)					H24 Nitrates	11	a	A	4
H13 Bathythermograph-expendable (no. of drops)	52	a	A	3	H25 Nitrites	11	a	A	4
H14 Sound velocity stations					H26 Silicates				
H15 Acoustic stations					H27 Alkalinity				
H16 Transparency	21	a	A	4	H28 pH	11	a	A	4
H80 Other measurements					H31 Radioactivity	5	a	A	1

Remarks

P - POLLUTION

P01 Suspended solids					P07 Waste water : BOD				
P02 Heavy metals	10	a	A	1	P08 Waste water : Nitrates				

Remarks

D - DYNAMICS

D01 Current meters (no. of stat.)	14	a	A	1	D07 Drift cards (no. released)				
D02 Current meters (average duration of measurement)	(15 Min.)				D08 Bottom drifters (no. released)				
D03 Currents measured from ship drift					D09 Tidal observations (duration)				
D04 GEK	5	a	A	1	D10 Sea and swell (no. of observations)				
D05 Drifters (number)					D90 Other				
D06 Swallow floats (number)									

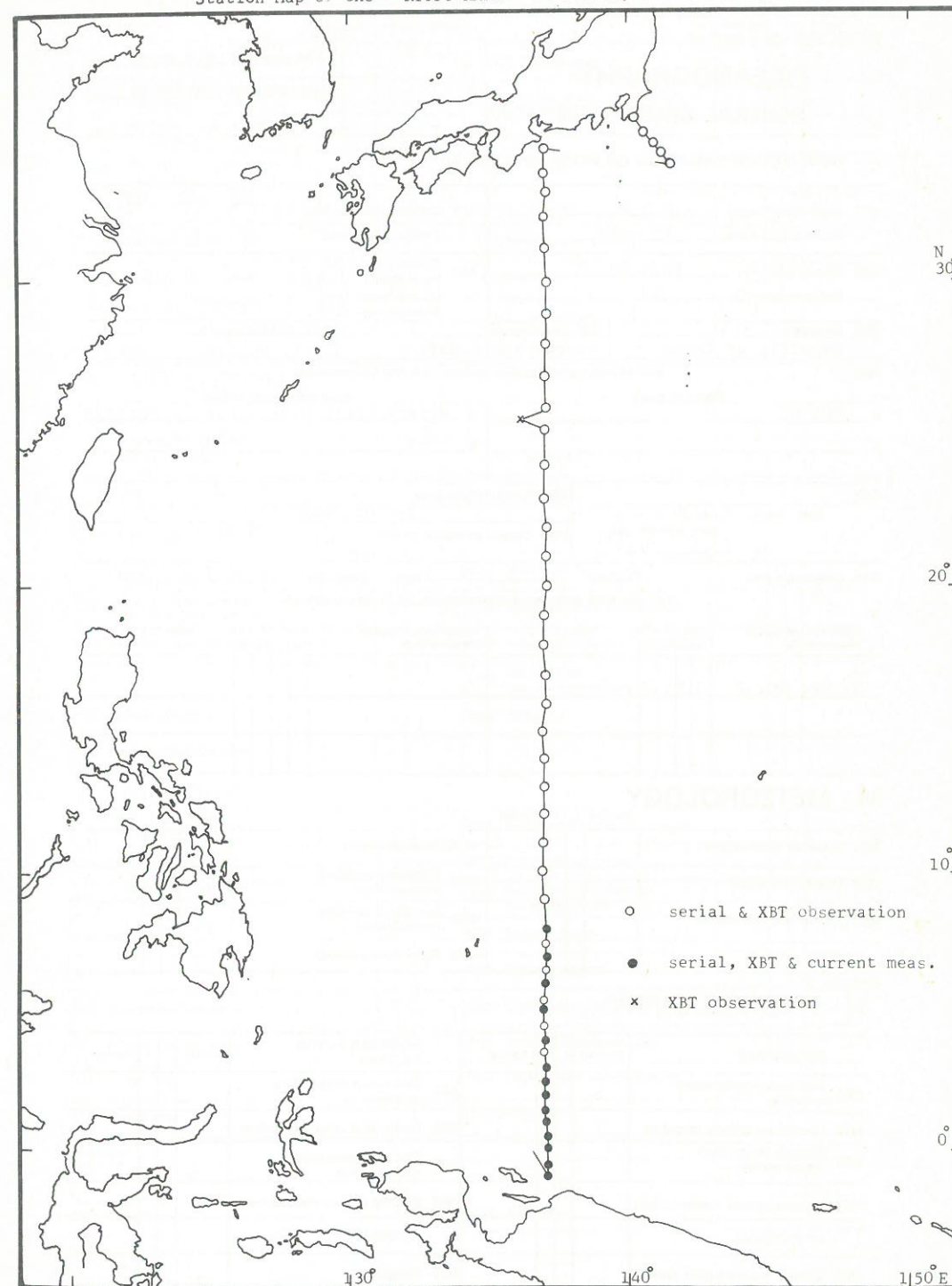
B - BIOLOGY

B02 Phytoplankton pigments	51	a	A	1	B21 Commercial benthic crustacean				
B08 Phytoplankton	51	a	A	1	B27 Deep scattering layers				
B09 Zooplankton	51	a	A	1	B28 Acoustical reflections on marine organisms				
B10 Neuston					B29 Biologic sounds				
B11 Nekton					B30 Bioluminescence				
B12 Invertebrate nekton					B31 Vitamin concentrations				
B13 Pelagic eggs and larvae					B32 Aminoacid concentration				
B14 Pelagic fish					B33 Hydrocarbon concentrations				
B18 Zoobenthos					B37 Taggings				

Remarks

BS TYPES OF STUDIES					B60 Physiology				
B51 Identification					B61 Behaviour				

Station Map of the "RYOFU MARU" 14 January - 10 February 1975



2. Korea
2.1 Suro NO.3

ROSCOP (2nd edition)

OCEANOGRAPHY
GENERAL CRUISE INVENTORY

A00
DATA CENTRE: I.O.D.C.
REFERENCE No: R.76039

A - GENERAL INFORMATION ON WORK PERFORMED

A01 Expedition/Project <u>C S K</u> Cruise No. or name <u>75 - 20</u>	A91 Declared national prog. ? Exchange restricted ?	YES <input type="checkbox"/> NO <input type="checkbox"/> PART <input checked="" type="checkbox"/>
A02 Ship or platform <u>Suro No. 3</u> Platform type <u>01</u>	A92 Co-operative programme ? Co-ordinated internationally?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> Name <u>C S K</u> By whom? _____
A03 Country <u>Republic of Korea</u>	A04 Organization <u>Hydrographic Office</u>	A05 Chief scientist(s) <u>C. H. KIM</u>

A06 NAMES AND ADDRESSES OF ORGANIZATIONS AND PERSONS

a <u>ROK HO</u> Whom to query	Final disposition of data A <u>Hydrographic Office C.P.O. Box 1578</u> B <u>Seoul Korea</u> C _____
----------------------------------	--

A07 Date: from: 02 10 16 17 5
to: 2 0 0 6 7 5

A08 General ocean areas Sea of Japan

A09 Type(s) of marine zone(s) 07

A10 Geographic area Latitude _____ N/S Longitude _____ E/W

If all data were collected at a fixed station, fill in the co-ordinates

Discipline and type of measurements	Index 10 x 10				Index 1° x 1°			
	Q	L	G	G	Q	L	G	G
M, HP, HC, P	1	3	1	2				

M - METEOROLOGY

	Number	i	l	Format
M01 Upper air observations				
M02 Incident radiation				
M03 Air-sea interface studies				
M04 Ice observations				
M05 Occasional standard measurements	20	a	A	1
M06 Systematic standard measurements	20	a	A	1
M90 Other measurements				

Remarks

H - HYDROGRAPHY

HS SURFACE	Number	i	l	Format	NEAR SEA FLOOR (< 10 m)	Number	i	l	Format
H01 Continuous temperature recording					H05 Continuous temperature recording				
H02 Continuous salinity recording					H06 Continuous salinity recording				
H03 Discrete temperature measurements					H07 Discrete temperature measurements				
H04 Discrete salinity measurements					H08 Discrete salinity measurements				
HP PHYSICAL					HC CHEMICAL				
H09 Classical oceanographic stations	20	a	A	1	H21 Oxygen	20	a	A	1

H - HYDROGRAPHY (Continued)

	Number	i	l	Format		Number	i	l	Format
H10 Vertical profiles (STD/CTD)					H22 Phosphates				
H11 sub-surface measurements underway					H23 Total - P				
H12 Mechanical bathythermograph (no. of drops)	20	a	A	1. 3	H24 Nitrates				
H13 Bathythermograph-expendable (no. of drops)					H25 Nitrites				
H14 Sound velocity stations					H26 Silicates				
H15 Acoustic stations					H27 Alkalinity				
H16 Transparency	20	a	A	1	H28 pH	20	a	A	1
H80 Other measurements					H31 Radioactivity	20	a	A	1

Remarks

P - POLLUTION

P01 Suspended solids	14	a	A	1	P07 Waste water : BOD				
P02 Heavy metals					P08 Waste water : Nitrates				

Remarks

D - DYNAMICS

D01 Current meters (no. of stat.)					D07 Drift cards (no. released)				
D02 Current meters (average duration of measurement)					D08 Bottom drifters (no. released)				
D03 Currents measured from ship drift					D09 Tidal observations (duration)				
D04 GEK					D10 Sea and swell (no. of observations)				
D05 Drifters (number)					D80 Other				
D06 Swallow floats (number)									

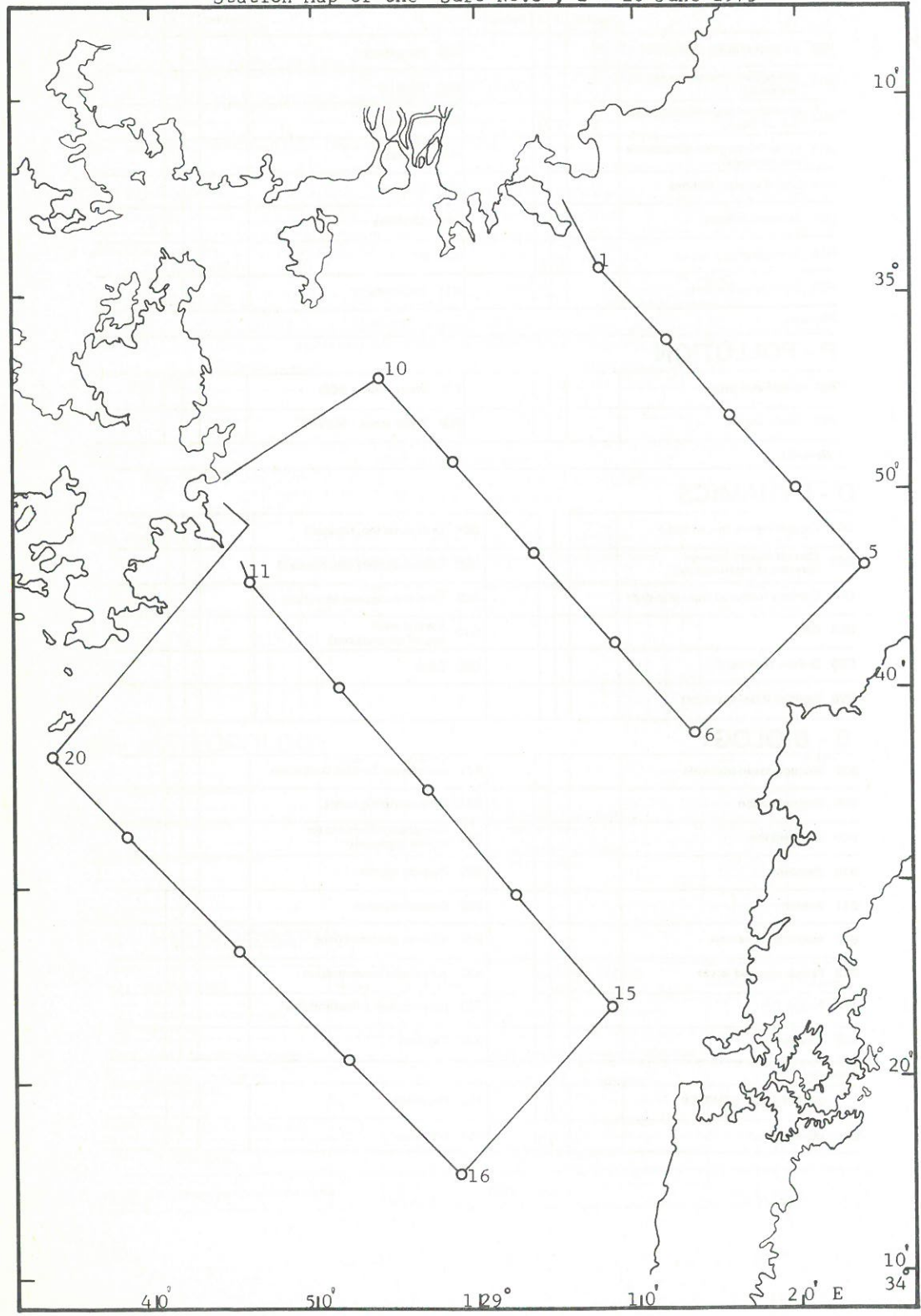
B - BIOLOGY

B02 Phytoplankton pigments					B21 Commercial benthic crustacean				
B08 Phytoplankton					B27 Deep scattering layers				
B09 Zooplankton					B28 Acoustical reflections on marine organisms				
B10 Neuston					B29 Biologic sounds				
B11 Nekton					B30 Bioluminescence				
B12 Invertebrate nekton					B31 Vitamin concentrations				
B13 Pelagic eggs and larvae					B32 Aminoacid concentration				
B14 Pelagic fish					B33 Hydrocarbon concentrations				
B18 Zoobenthos					B37 Taggings				

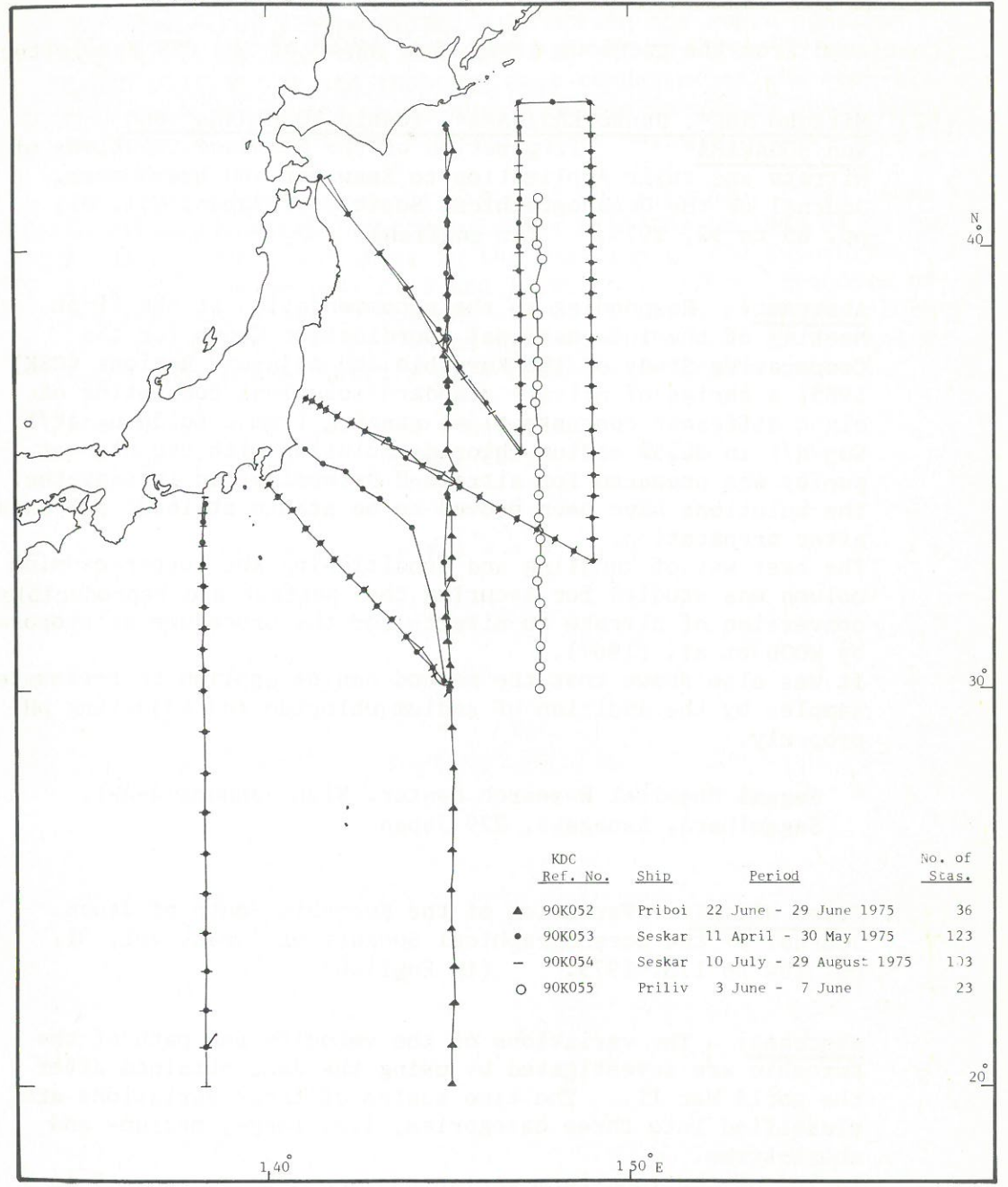
Remarks

BS TYPES OF STUDIES					B60 Physiology				
B51 Identification					B61 Behaviour				

Station Map of the "Suro No.3", 2 - 20 June 1975



3. U.S.S.R. CSK Cruise received during the period 1 Sept. 1975 - 30 Sept. 1976



KDC Ref. No.	Ship	Period	No. of Stas.
▲ 90K052	Priboi	22 June - 29 June 1975	36
● 90K053	Seskar	11 April - 30 May 1975	123
- 90K054	Seskar	10 July - 29 August 1975	103
○ 90K055	Priliv	3 June - 7 June	23

II. ABSTRACTS OF THE PAPERS ON CSK

(Continued from the previous issue, No. 45/46 of the CSK Newsletter)

- (92) Mitsuko ABE*, Junko KAJIWARA*, Toshio YOSHIHARA* and Ken SUGAWARA* Preparation of the Standard Solutions of Nitrate and their Application to Seawater and Freshwater. Journal of the Oceanographical Society of Japan, Vol. 31, pp. 85 to 92, 1975. (in English)

Abstract: Responding to the recommendation at the first Meeting of the International Coordination Group for the Cooperative Study of the Kuroshio and Adjacent Regions (CSK) 1965, a series of nitrate standard solutions consisting of eight different concentrations ranging from 0 to 50 µg-at/l NO₃-N/l in 30.5‰ sodium chloride solution with the highest purity was prepared for nitrate-N determination in seawater. The solutions have been proved to be stable at least 520 days after preparation. The best way of handling and conditioning the copper-cadmium column was studied for securing the perfect and reproducible conversion of nitrate to nitrite for the procedure as proposed by WOOD et al. (1967). It was also shown that the method can be applied to freshwater samples by the addition of sodium chloride and adjusting pH properly.

* Sagami Chemical Research Center, Nishi-Ohnuma 4-4-1, Sagamihara, Kanagawa, 229 Japan

- (93) Hideo NITANI* Variation of the Kuroshio South of Japan. Journal of the Oceanographical Society of Japan, Vol. 31, pp. 154 to 173, 1975. (in English)

Abstract: The variations of the velocity and path of the Kuroshio are investigated by using the data obtained after the world War II. The time scales of these variations are classified into three categories, i.e. long-, medium- and short-terms. Period of the long-term variations seems to be about 7 to 9 years. Large meanders of the Kuroshio off Enshu-nada in 1953-1955 and 1959-1962 are accompanied with the low mean velocity of the Kuroshio. These large meanders are explained as a stationary Rossby wave by applying the equation for the phase velocity of the barotropic Rossby wave with the

disturbance of finite width. To obtain the above conclusion, it is assumed that the Kuroshio extends down to the depth of 2,300 db and that the east component of the over-all mean velocity of the meandering Kuroshio should be substituted for the velocity of the eastward basic current in the above equation.

As for the medium-term variation of the Kuroshio, there seems to exist variations in the velocity with the periods of 4, 6, 8 and 12 months and those in the position of the Kuroshio axis with the periods of 8 and 12 months. These meanders of the Kuroshio progress towards east with the mean phase velocity of about 5 miles a day, which is nearly the same as the calculated mean phase velocity of a progressive Rossby wave.

* Hydrographic Department, Maritime Safety Agency
Tsukiji 5 Cho-me Chuo-ku, Tokyo, 104 Japan

* * * * *

III. NUMBER OF SERIAL OCEANOGRAPHIC STATIONS OF CSK

Line 1. -- No. of Stations/Cruises on hand as of 31 Dec., 1974;
 Line 2. -- No. of Stations/Cruises received from 1 Jan. to 31 Dec., 1975;
 Line 3. -- No. of Stations/Cruises on hand as of 31 Dec., 1975.

NATION	Years Data were observed												TOTALS
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975		
21. China	1. 38/ 1	76/ 2	65/ 2	73/ 2	38/ 1								290/ 8
	2. 38/ 1	76/ 2	65/ 2	73/ 2	38/ 1								290/ 8
42. Indonesia	1. 482/23	642/35	794/49	1124/42	563/22	546/18	535/14	719/15	656/14	372/ 9	353/ 7	6,433/241	
	2. 482/23	642/35	794/49	1124/42	563/22	546/18	535/14	719/15	656/14	372/ 9	353/ 7	6,433/241	
	3. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	78/ 4	708/16	693/14	353/ 7	7,143/236	
24. Korea Rep. of	1. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	78/ 4	708/16	693/14	353/ 7	7,143/236	
	2. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	78/ 4	708/16	693/14	353/ 7	7,143/236	
MS. Malaysia	1. 130/ 1					130/ 1	20/ 1					2,498/ 51	
	2. 130/ 1					130/ 1	20/ 1					2,498/ 51	
	3. 130/ 1					130/ 1	20/ 1					2,498/ 51	
66. Philippines	1. 93/ 1			93/ 1	101/ 1							150/ 2	
	2. 93/ 1			93/ 1	101/ 1							150/ 2	
	3. 93/ 1			93/ 1	101/ 1							150/ 2	
SI. Singapore	1. * Prompt Report						30/ 3*	145/ 9*	161/ 9*	23/ 1*	33/ 1*	359/ 22	
	2. 368/ 6	210/ 5			3/ 3		30/ 3	145/ 9	161/ 9	35/ 1*	33/ 1	68/ 2	
	3. 368/ 6	210/ 5			3/ 3		30/ 3	145/ 9	161/ 9	35/ 1*	33/ 1	68/ 2	
86. Thailand	1. 199/ 3	967/ 7	448/ 7	424/ 6	497/ 7	183/ 3	319/ 4	859/10	99/ 2			738/ 16	
	2. 199/ 3	967/ 7	448/ 7	424/ 6	497/ 7	183/ 3	319/ 4	859/10	99/ 2			738/ 16	
	3. 27/ 1	142/ 4	102/ 2	146/ 3	81/ 3	50/ 2	49/ 2	859/10	100/ 1	45/ 1		3,995/ 49	
90. U.S.S.R.	1. 27/ 1	142/ 4	102/ 2	146/ 3	81/ 3	50/ 2	49/ 2	859/10	100/ 1	45/ 1		145/ 2	
	2. 27/ 1	142/ 4	102/ 2	146/ 3	81/ 3	50/ 2	49/ 2	859/10	100/ 1	45/ 1		145/ 2	
	3. 106/ 1	310/ 4	8/ 1		49/ 1				199/ 3	45/ 1		4,140/ 51	
74. U.K. (Hong Kong)	1. 106/ 1	310/ 4	8/ 1		49/ 1							597/ 17	
	2. 106/ 1	310/ 4	8/ 1		49/ 1							597/ 17	
	3. 106/ 1	310/ 4	8/ 1		49/ 1							597/ 17	
31. U.S.A.	1,118/34	2,452/58	2,310/78	2,538/67	1,814/46	1,227/31	1,170/28	2,008/41	1,205/31	795/19	386/ 8	17,023/441	
	2. 1,118/34	2,452/58	2,310/78	2,538/67	1,814/46	1,227/31	1,170/28	2,008/41	1,205/31	795/19	386/ 8	17,023/441	
	3. 1,118/34	2,452/58	2,310/78	2,538/67	1,814/46	1,227/31	1,170/28	2,008/41	1,205/31	795/19	386/ 8	17,023/441	

IV. REQUEST OF THE FORWARDING OF THE INVENTORIES AND DATA RELATED TO THE CSK PROGRAMME

The following information for the compilation of the "Guide to the CSK Data" which will be issued by KDC in future according to the request from IOC Secretariate was announced by Dr. Hideo Nitani, Director of KDC/JODC to the National Co-ordinators for CSK.

JODC24/76

Jun. 29, 1976

To: National Co-ordinators for CSK

Subject: Forwarding of the inventories and data related to the CSK Programme

Dear Sirs;

According to the reports of the National Co-ordinators for CSK in the summary reports of the ninth and tenth sessions of the International Co-ordination Group for the CSK, many observations, which would be under the CSK Programme, have been conducted in each country. Recently, however, the Kuroshio Data Center (KDC) has received a few or no copies of CSK data from many of the participating countries.

On the tenth session of the International Co-ordination Group for CSK (Tokyo, March 1975), I asked to the delegations of participated countries for the forwarding of inventories (ROSCOP form) and data copies resulted from the CSK Programme to the KDC in a timely manner, because the forwarding of these is essential for the execution of CSK Programme and is even the obligation of the participating countries in the CSK. The same requirement were also stated repeatedly by the IOC Resolution VIII-6 and IX-28 and IODE Recommendation VIII-7.

I hope your kind activities for the acceleration of the sending the ROSCOP forms and CSK data in your country to the KDC for our processing and publication of them in the forms of the CSK Newsletter and CSK Data Report and for the compilation of the "Guide to the CSK Data" which will be issued by the KDC in future according to the request from IOC secretariate.

Please find enclosed the Catalogue of CSK data received by the Kuroshio Data Center (Attachment-I)*and its summary (Attachment-II)*. From these attachments and the Summary Reports of past Sessions of the International Co-ordination Group for CSK in which the executed oceanographic cruises in your country were reported,

you may find the serial observations as well as BT and current observations of which data are not yet sent to KDC.

Ten sheets of ROSCOP forms, which are in use internationally, are also enclosed, and you may request to IOC secretariate or KDC the additional necessary volumes of ROSCOP forms if you need more forms.

Many thanks for your co-operation.

Sincerely yours,

(Signed)

Hideo Nitani
Director, KDC/JODC

c.c.: Dr. Kiyoo Wadati, International Co-ordinator
for CSK
Mr. Peluchon, Chairman, WC IODE
Dr. Tolkachev, Assistant Secretary, IOC
Prof. S.K. El-Wakeel, Vice-Chairman, IOC

* omitted the Attachment I and II in this Newsletter

* * * * *

V. DATA RECEIVED

Catalogue of Data Received by KDC(JODC), 1 February - 30 September 1976

Mo. Day/Yr.	KDC Ref. No.	Shp Code*	Agency	Period	Area	No. of Stas.	Serial	BTs	Currents	Bottom Topography	Biological
<u>JAPAN</u>											
02.02/76	49K205	RY	MDJMA	06.10-08.08.1975	W. of Pacific	107	T S O P TP N2 N3	COD		D	
03.23/76	49K206	TA	HDMSA	03.05-03.22.1974	S. of Japan	22	T S O P			D	
03.23/76	49K207	TA	HDMSA	05.08-05.25.1975	S. of Japan	24	T S O P	Si PH		D	
03.23/76	49K208	KA	HDMSA	08.11-09.03.1975	S. of Japan	31	T S O P	Si PH		D	
03.24/76	49K209	RY	MDJMA	01.14-02.17.1976	W. of Pacific	65	T S O P TP N2 N3 NH PH	COD		D	
04.12/76	49K210	CH	NMOJMA	02.09-02.21.1976	E. China Sea	23	T S O		45 29	D	
05.20/76	49K211	SH	KMOJMA	07.03-08.04.1975	S. of Japan & Osaka Bay	65	T S O P TP N2 N3			D	Phaeo. Chl.a
06.15/76	49K212	SI	NMOJMA	02 03-03.15.1976	Japan Sea	48	T S O TP N2 N3 NH PH	COD 102 89		D	Phaeo. Chl.a
07.08/76	49K213	TA	HDMSA	10.28-11.26.1974	E. China Sea & S. of Japan	44	T S O P	N3 Si PH		D	
08.06/76	49K214	HK	ORIUT	05.11-08.03.1972	Sea of SE. Asia	22	T S O P	N2 N3 Si PH	45	D	Phaeo. Chl.a
08.30/76	49K215	SH	KMOJMA	02.02-02.27.1976	S. of Japan & Osaka Bay	13	T S O P	N2 N3 PH		D	Phaeo. Chl.a
09.08/76	49K216	CH	NMOJMA	07.10-08.07.1976	E. China Sea	46	T S O TP N2 N3	COD 96 58		D	Phaeo. Chl.a
<u>KOREA</u>											
03.23/76	24K052	SR	H0	06.02-06.20.1975	Korea Strait	20	T S O	PH		D	
<u>USSR</u>											
04.07/76	90K052	PI	TINRO	06.22-06.29.1975	W. of Pacific	36	T S O	PH		D	
06.07/76	90K053	SE	TINRO	04.11-05.30.1975	NW. of Pacific	123	T S O P	N2 Si PH		D	
06.07/76	90K054	SE	TINRO	07.10-08.29.1975	NW. of Pacific	103	T S O P	N2		D	
08.09/76	90K055	PR	FEHRI	06.03-06.07.1975	NW. of Pacific	23	T S O P			D	
<u>JAPAN</u>											
Ship Code*	RY	Ryofu Maru	SH	Shumpu Maru	SR	Suro No. 3	USSR	PI	Priboi		
	TA	Takuyo	SI	Seifu Maru	SE	Seskar		SE	Seskar		
	KA	Kaiyo	HK	Hakuho Maru	PR	Priliv		PR	Priliv		
	CH	Chofu Maru									