

NO.45/46

FEB. 1975

CSK NEWSLETTER



JAPAN OCEANOGRAPHIC DATA CENTER

Hydrographic Department, Maritime Safety Agency

Tokyo, Japan

C O N T E N T S

I. Cruise Reports

1. Republic of Korea

Suro No. 3 (23 August - 9 September 1973)

2. Japan

Takuyo (10 - 31 May 1973)

Takuyo (30 October - 28 November 1973)

Ryofu Maru (5 June - 3 August 1973)

Kofu Maru (18 July - 17 August 1973)

Shumpu Maru (12 July - 7 August 1973)

Chofu Maru (11 July - 10 August 1973)

Seifu Maru (21 July - 14 August 1973)

II. Abstracts of the Papers on CSK

III. Publication Received

IV. Summary of Data Received and Publications

V. Number of Serial Oceanographic Stations of CSK

VI. Data Received

Japan (Nagasaki Maru, Ryofu Maru, Chofu Maru-2crs.,
Takuyo-2crs., Seifu Maru, Keifu Maru, Kaiyo)

USSR (Priliv, Volna)

Indonesia (Samudera-2crs.)

Korea (Suro No. 3-2crs.)

I. CRUISE REPORTS

1. Republic of Korea

1.1 Suro No. 3

(ROSCOP)

SHIP OR PLATFORM Suro No. 3		SCIENTIST IN CHARGE Chu Kyo-Sung	
INSTITUTION OR OPERATING AGENCY Hydrographic Office (ROKHO)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. Serial Obs. ROKHO-2-1973		COUNTRY Republic of Korea	
DATE OF CRUISE			
FROM: 23 DAY / 8 MONTH / 1973 YEAR		TO: 9 DAY / 9 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	35	a	a	a	RDC, MT	a.	ROKHO
D 2 STD						b.	
D 3 OXYGEN	35	a	a	a	PUB, MT	c.	
D 4 PHOSPHATES						d.	
D 5 TOTAL-P						e.	
D 6 NITRATES						f.	
D 7 NITRITES							
D 8 TRACE ELEMENTS							
D 9 pH	35	a	a	a	PUB, MT		
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)	35	a	a	a	PUB	F D	FINAL DISPOSITION OF DATA (NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)
D 17 TRANSPARENCY (NO. OF OBS.)						a.	ROKHO
D 18 SOUND VELOCIMETER DATA						b.	KDC/JODC(MT)
D 19 INSTRUMENTED WAVE RECORDING	(✓)					c.	
D 20 TIDES	(✓)					d.	
D 21 SEA	(✓)					e.	
D 22 SWELL	(✓)					f.	
D 23 ICE	(✓)						
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)	21	a	a	a	RDC, MT		
D 25 SEA SURFACE TEMPERATURE	(✓)	✓	a	a	RDC		
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	(✓)						(✓) YES
M 2 SURFACE METEOROLOGICAL OBS.	(✓)	✓	a	a	RDC		() NO
M 3 INCIDENT RADIATION	(✓)						() PART (SPECIFY)
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							

TOTAL KILOMETERS STEAMED:

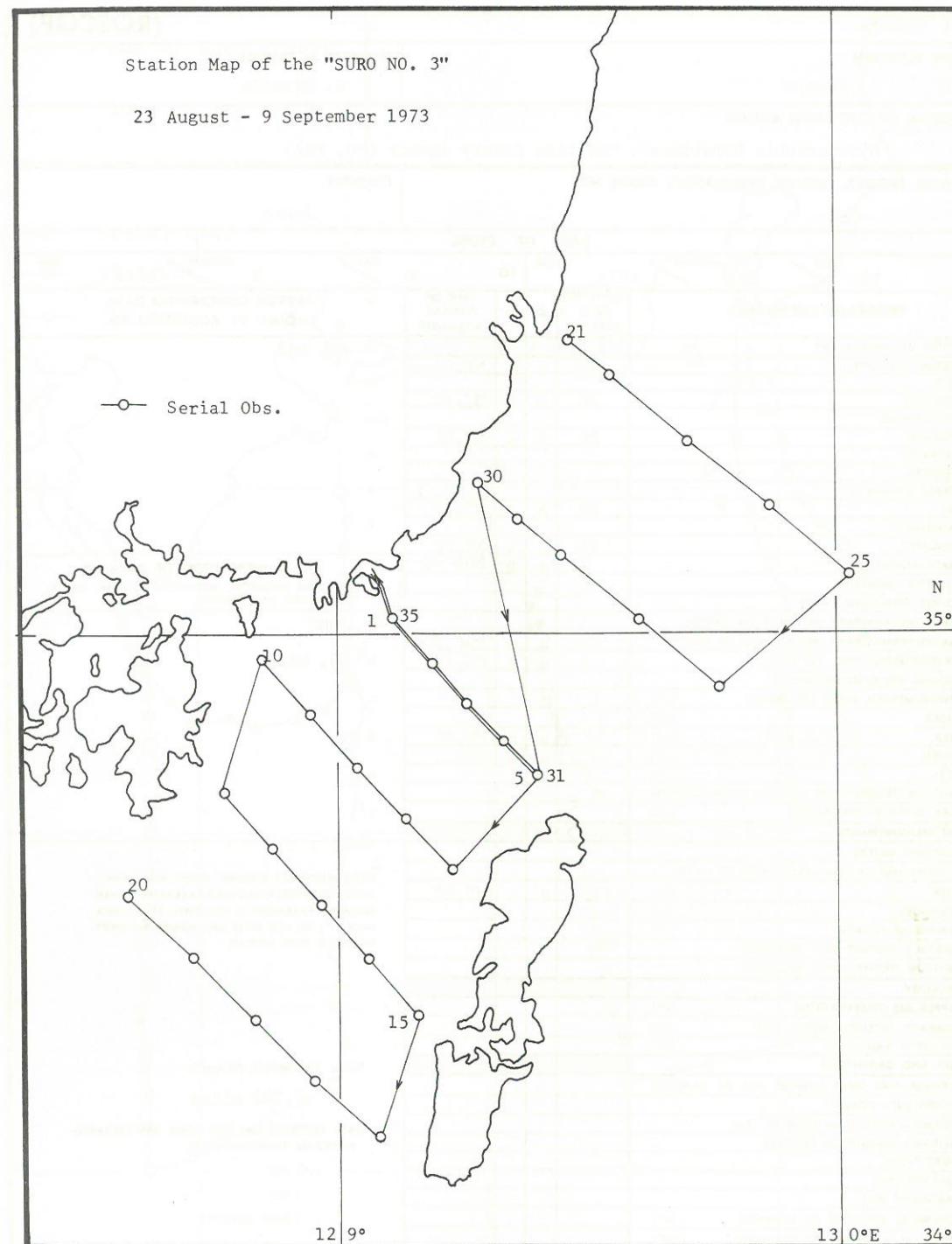
477 miles

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

(✓) YES

() NO

() PART (SPECIFY)

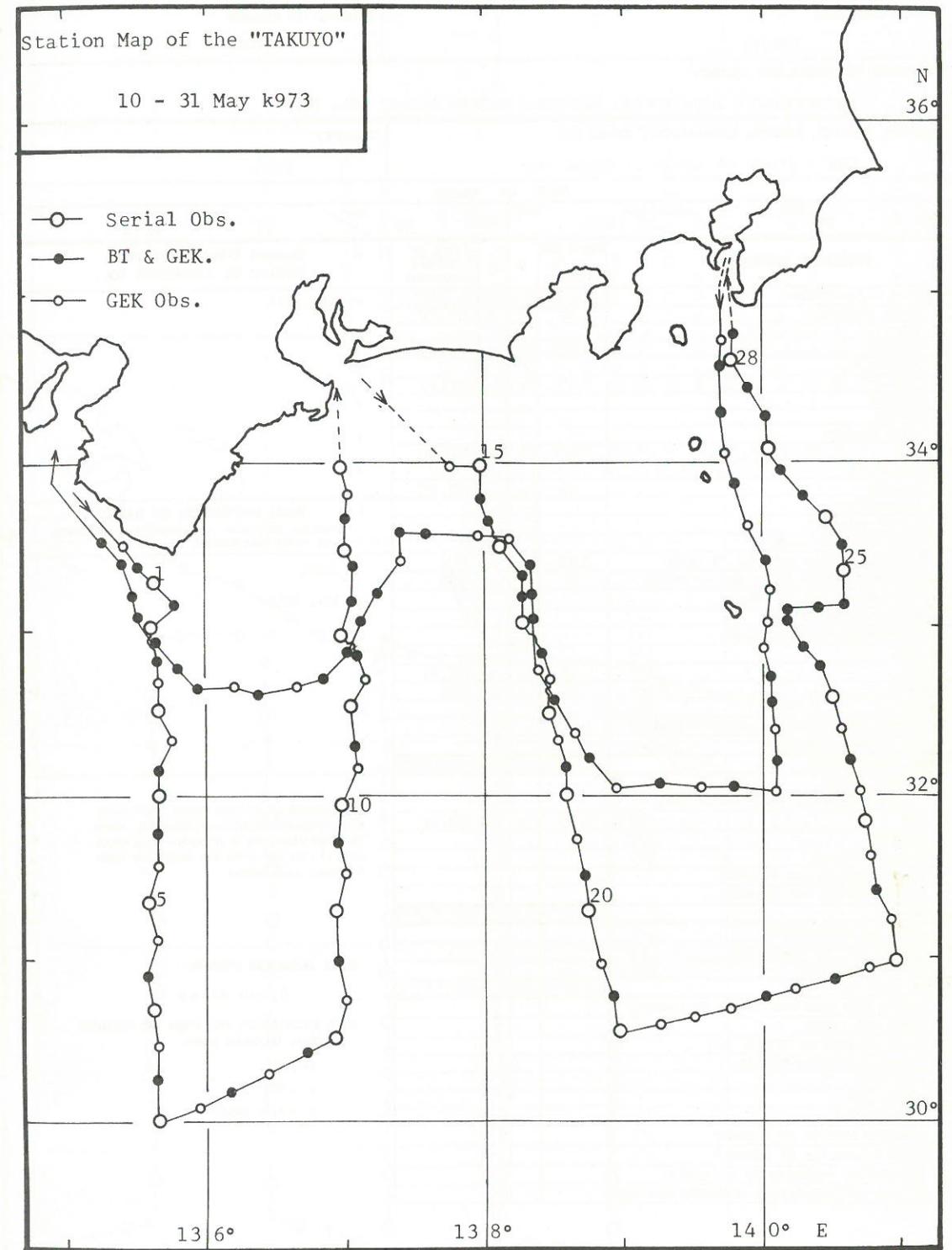


2. Japan

2.1 Takuyo

(ROSCOP)

SHIP OR PLATFORM Takuyo		SCIENTIST IN CHARGE M. Hishida	
INSTITUTION OR OPERATING AGENCY Hydrographic Department, Maritime Safety Agency (HD, MSA)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. CSK		COUNTRY Japan	
DATE OF CRUISE			
FROM:	10 DAY / 5 MONTH / 1973 YEAR	TO:	31 DAY / 5 MONTH / 1973 YEAR
PROGRAMS UNDERTAKEN	TOTAL NO. OF Δ STATIONS	Q	F D TYPE OF FORMAT AVAILABLE
DESCRIPTIVE OCEANOGRAPHY			
D 1 SERIAL STATIONS	28	a	a MT, PC
D 2 STD			
D 3 OXYGEN	28	a	a MT, PC
D 4 PHOSPHATES			
D 5 TOTAL-P	28	a	a MT, PC
D 6 NITRATES			
D 7 NITRITES			
D 8 TRACE ELEMENTS			
D 9 pH	28	a	a MT, PC
D 10 ALKALINITY			
D 11 SILICATES	28	a	a MT, PC
D 12 RADIOACTIVITY	2	a	b RDS
D 13 ISOTOPE CHEMISTRY			
D 14 OTHER DISSOLVED GASES			
F D FINAL DISPOSITION OF DATA (NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)			
D 15 BATHY THERMOGRAPH (XBT) (NO. OF DROPS)			
D 16 BATHY THERMOGRAPH (MECH.) (NO. OF DROPS)	98	a	a RDC, PUB
D 17 TRANSPARENCY (NO. OF OBS.)	5	a	b MT, PC
D 18 SOUND VELOCIMETER DATA			
D 19 INSTRUMENTED WAVE RECORDING (✓)			
D 20 TIDES (✓)			
D 21 SEA (✓)	✓	a	a MT, PC
D 22 SWELL (✓)	✓	a	a PUB
D 23 ICE (✓)			
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)			
D 25 SEA SURFACE TEMPERATURE (✓)			
CURRENT MEASUREMENTS			
C 1 CURRENT METERS			
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)			
C 2 GEK (✓)	139	a	a MT, PC
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. (✓)			
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			
G 5 HEAT FLOW			
G 6 GRAVITY (Km)			
G 7 MAGNETIC (Km)			
G 8 CHEMICAL ANALYSIS OF SEDIMENT (✓)			
G 9 PHYSICAL ANALYSIS OF SEDIMENT (✓)			
G 10 ENGINEERING PROPERTIES OF SEA BOTTOM			
G 11 BOTTOM PHOTOGRAPHY (NO. OF CAMERA STATIONS)			



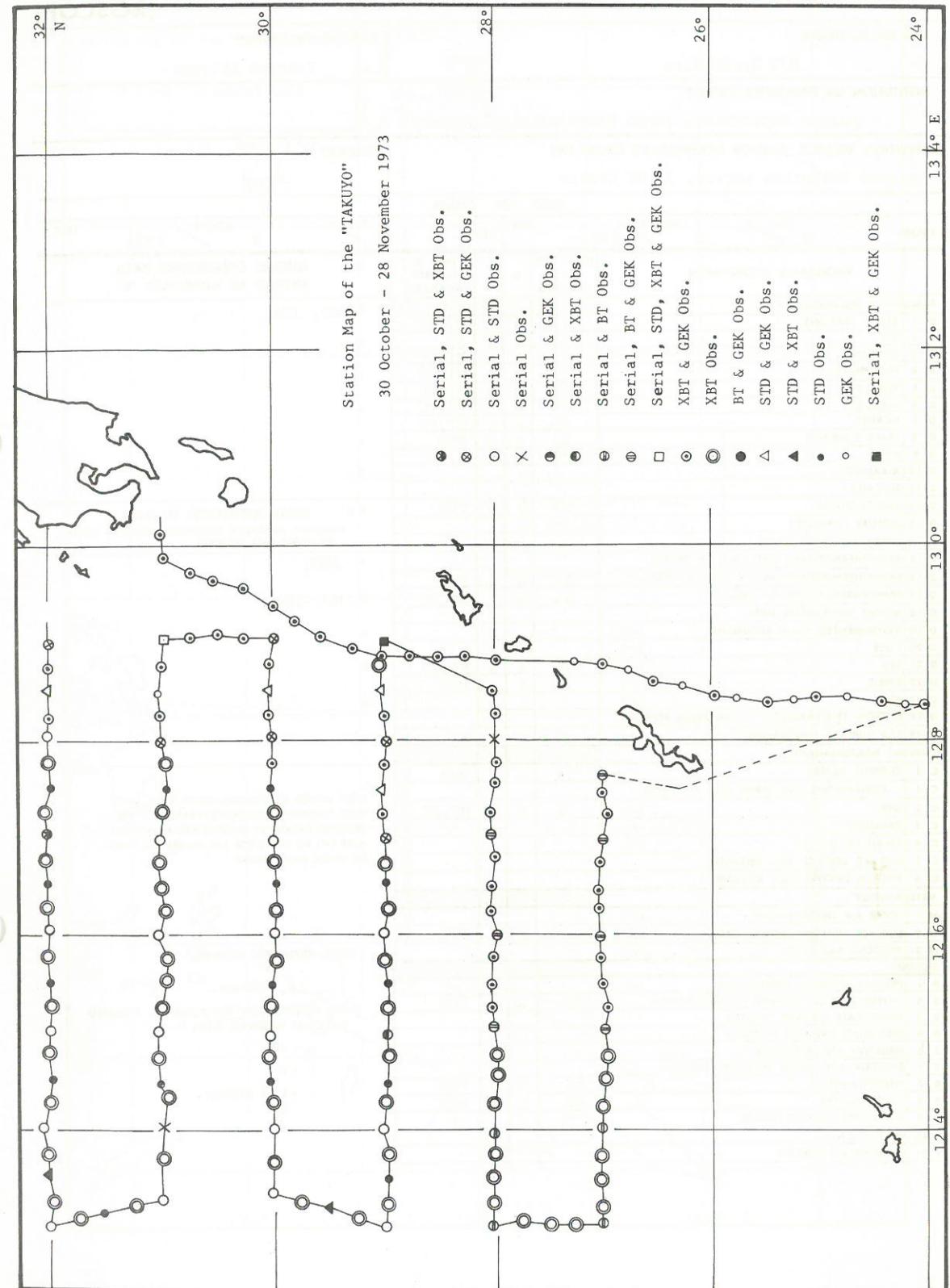
SHIP OR PLATFORM Takuyo		SCIENTIST IN CHARGE M. Shiozaki	
INSTITUTION OR OPERATING AGENCY Hydrographic Department, Maritime Safety Agency (HD, MSA)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. CSK - Study of the East China Sea		COUNTRY Japan	
DATE OF CRUISE			
FROM:	30 DAY / 10 MONTH / 1973 YEAR	TO:	28 DAY / 11 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	40	a	a		MT, PC	a.	HD, MSA
D 2 STD						b.	
D 3 OXYGEN	40	a	a		MT, PC	c.	
D 4 PHOSPHATES						d.	
D 5 TOTAL-P	40	a	a		MT, PC	e.	
D 6 NITRATES						f.	
D 7 NITRITES							
D 8 TRACE ELEMENTS							
D 9 pH	40	a	a		MT, PC		
D 10 ALKALINITY							
D 11 SILICATES	40	a	a		MT, PC		
D 12 RADIOACTIVITY							
D 13 ISOTOPE CHEMISTRY							
D 14 OTHER DISSOLVED GASES							
D 15 BATHY THERMOGRAPH (XBT) (NO. OF DROPS)	102	a	a		PUB	F D	FINAL DISPOSITION OF DATA (NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)
D 16 BATHY THERMOGRAPH (MECH.) (NO. OF DROPS)	81	a	a		PUB	a.	JODC
D 17 TRANSPARENCY (NO. OF OBS.)						b.	HD, MSA
D 18 SOUND VELOCIMETER DATA						c.	
D 19 INSTRUMENTED WAVE RECORDING	(✓)					d.	
D 20 TIDES	(✓)					e.	
D 21 SEA	(✓)	✓	a	a	MT, PC	f.	
D 22 SWELL	(✓)	✓	a	b	RDS		
D 23 ICE	(✓)						
D 24 BOTTOM TEMPERATURE ($\leq 10M$ FROM BOTTOM)							
D 25 SEA SURFACE TEMPERATURE	(✓)						
CURRENT MEASUREMENTS							
C 1 CURRENT METERS							
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)							
C 2 GEK	(✓)	136	a	a	MT, PC		
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.	(✓)						
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							
G 5 HEAT FLOW							
G 6 GRAVITY (Km)							
G 7 MAGNETIC (Km)							
G 8 CHEMICAL ANALYSIS OF SEDIMENT	(✓)						
G 9 PHYSICAL ANALYSIS OF SEDIMENT	(✓)						
G 10 ENGINEERING PROPERTIES OF SEA BOTTOM							
G 11 BOTTOM PHOTOGRAPHY (NO. OF CAMERA STATIONS)							

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:
4,640 miles

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

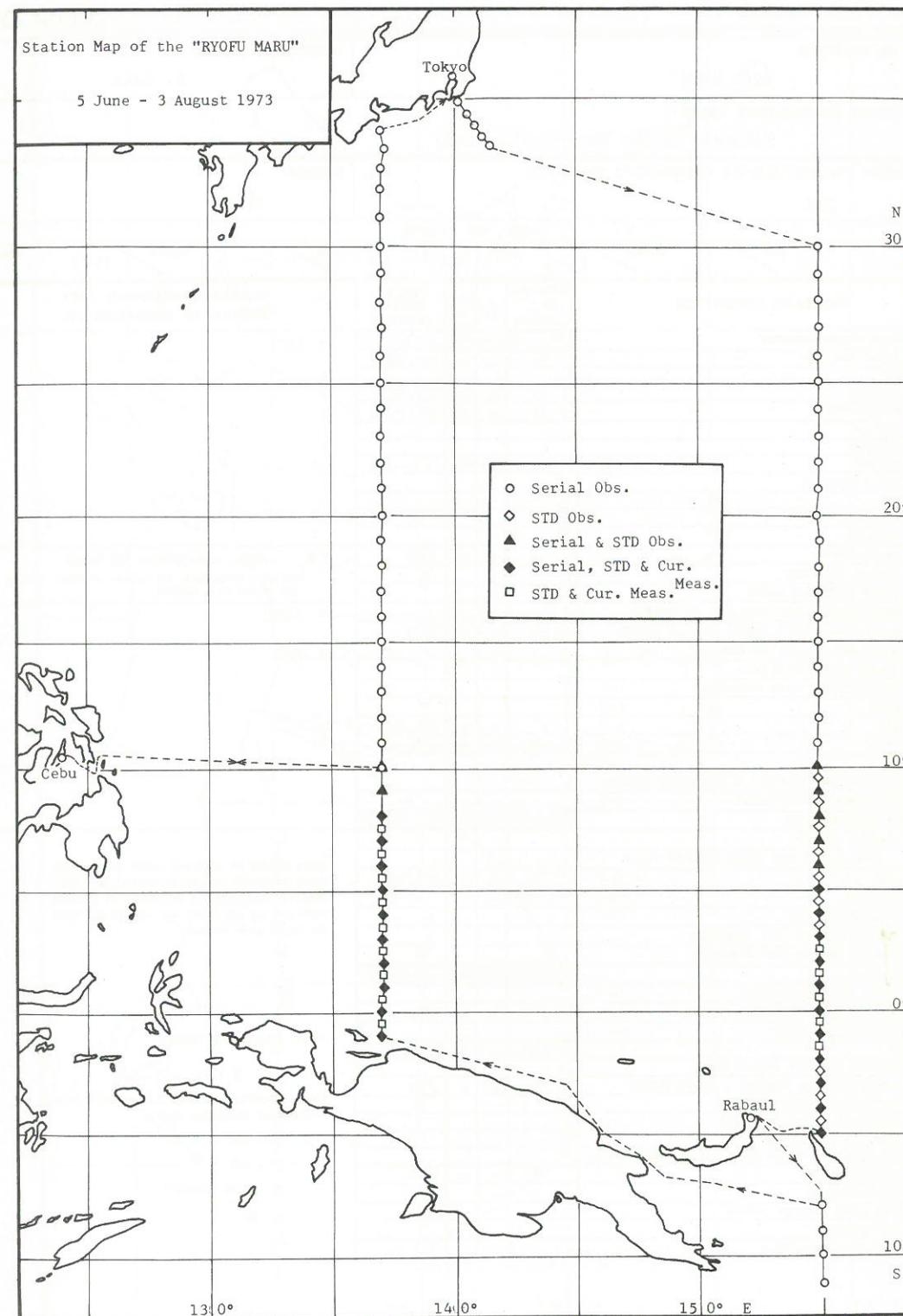


SHIP OR PLATFORM R/V Ryofu Maru		SCIENTIST IN CHARGE Tsutomu Akiyama	
INSTITUTION OR OPERATING AGENCY Marine Department, Japan Meteorological Agency			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. Marine Pollution Survey, 73-06 Cruise		COUNTRY Japan	
DATE OF CRUISE			
FROM:	DAY / MONTH / YEAR	TO:	DAY / MONTH / YEAR
	5 / 6 / 1973		3 / 8 / 1973

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	83	a	a		MT, PC	a.	MD, JMA
D 2 STD	52	a	b		AT	b.	
D 3 OXYGEN	83	a	a		MT, PC	c.	
D 4 PHOSPHATES	83	a	a		MT, PC	d.	
D 5 TOTAL P	20	a	a		MT, PC	e.	
D 6 NITRATES	20	a	a		MT, PC	f.	
D 7 NITRITES	20	a	a		MT, PC		
D 8 TRACE ELEMENTS	20	a	b		PUB		
D 9 pH	20	a	a		MT, PC		
D 10 ALKALINITY							
D 11 SILICATES							
D 12 RADIOACTIVITY	10	a	b		PUB		
FINAL DISPOSITION OF DATA (NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)							
D 13 ISOTOPE CHEMISTRY						a.	JODC
D 14 OTHER DISSOLVED GASES						b.	MD, JMA
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)						c.	
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)	57	a	a		PUB	d.	
D 17 TRANSPARENCY (NO. OF OBS.)	46	a	a		MT, PC	e.	
D 18 SOUND VELOCIMETER DATA						f.	
D 19 INSTRUMENTED WAVE RECORDING (✓)							
D 20 TIDES (✓)							
D 21 SEA (✓)	✓	a	a		MT, PC		
D 22 SWELL (✓)	✓	a	a		PUB		
D 23 ICE (✓)							
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)							
D 25 SEA SURFACE TEMPERATURE (✓)	✓	a	b		AT		
CURRENT MEASUREMENTS							
C 1 CURRENT METERS	35	a	a		PUB		
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)							
C 2 GEK (✓)	5	a	a		MT, PC		
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		PUB		
M 3 INCIDENT RADIATION (✓)							
BIOLOGY							
B 1 PRIMARY ORGANIC PRODUCTION							
B 2 PHYTOPLANKTON PIGMENT CONCENTRATION	82	a	a		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	82	a	a		PUB		
B 8 ZOOPLANKTON	82	a	a		PUB		
B 9 FISH EGGS AND/OR LARVAE							
B 10 MICRONEKTON							
B 11 INVERTEBRATE NEKTON							

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:
16,700 km.
DATA REPORTED ON THIS FORM ARE DECLARED NATIONAL PROGRAM (DNP):
(✓) YES
() NO
() PART (SPECIFY)



SHIP OR PLATFORM				SCIENTIST IN CHARGE			
Kofu Maru				K. Hata			
INSTITUTION OR OPERATING AGENCY							
Hakodate Marine Observatory (HMO)							
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO.				COUNTRY			
CSK				Japan			
DATE OF CRUISE							
FROM:		18 DAY / 7 MONTH / 1973 YEAR		TO:		17 DAY / 8 MONTH / 1973 YEAR	
PROGRAMS UNDERTAKEN		TOTAL NO. OF Δ STATIONS	Q	F	D	TYPE OF FORMAT AVAILABLE	
DESCRIPTIVE OCEANOGRAPHY							
D 1 SERIAL STATIONS		51	a	a		MT, PC	
D 2 STD							
D 3 OXYGEN		51	a	a		MT, PC	
D 4 PHOSPHATES		51	a	a		MT, PC	
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		3	a	a		PUB	
D 13 ISOTOPE CHEMISTRY							
D 14 OTHER DISSOLVED GASES							
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)							
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)		131	a	a		PUB	
D 17 TRANSPARENCY (NO. OF OBS.)							
D 18 SOUND VELOCIMETER DATA							
D 19 INSTRUMENTED WAVE RECORDING						(✓)	
D 20 TIDES						(✓)	
D 21 SEA						(✓) a a MT, PC	
D 22 SWELL						(✓) a a PUB	
D 23 ICE						(✓)	
D 24 BOTTOM TEMPERATURE ($\leq 10M$ FROM BOTTOM)							
D 25 SEA SURFACE TEMPERATURE						(✓)	
CURRENT MEASUREMENTS							
C 1 CURRENT METERS							
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)							
C 2 GEK		135	a	a		MT, PC	
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 PUB	
M 3 INCIDENT RADIATION						(✓)	
BIOLOGY							
B 1 PRIMARY ORGANIC PRODUCTION							
B 2 PHYTOPLANKTON PIGMENT CONCENTRATION		9	a	a		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		9	a	a		PUB	
B 8 ZOOPLANKTON							
B 9 FISH EGGS AND/OR LARVAE							
B 10 MICRONEKTON							
B 11 INVERTEBRATE NEKTON							

Q QUERIES CONCERNING DATA SHOULD BE ADDRESSED TO:

- a. HMO
b.
c.
d.
e.
f.
- F D FINAL DISPOSITION OF DATA
(NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)
- a. JODC
b. HMO
c.
d.
e.
f.

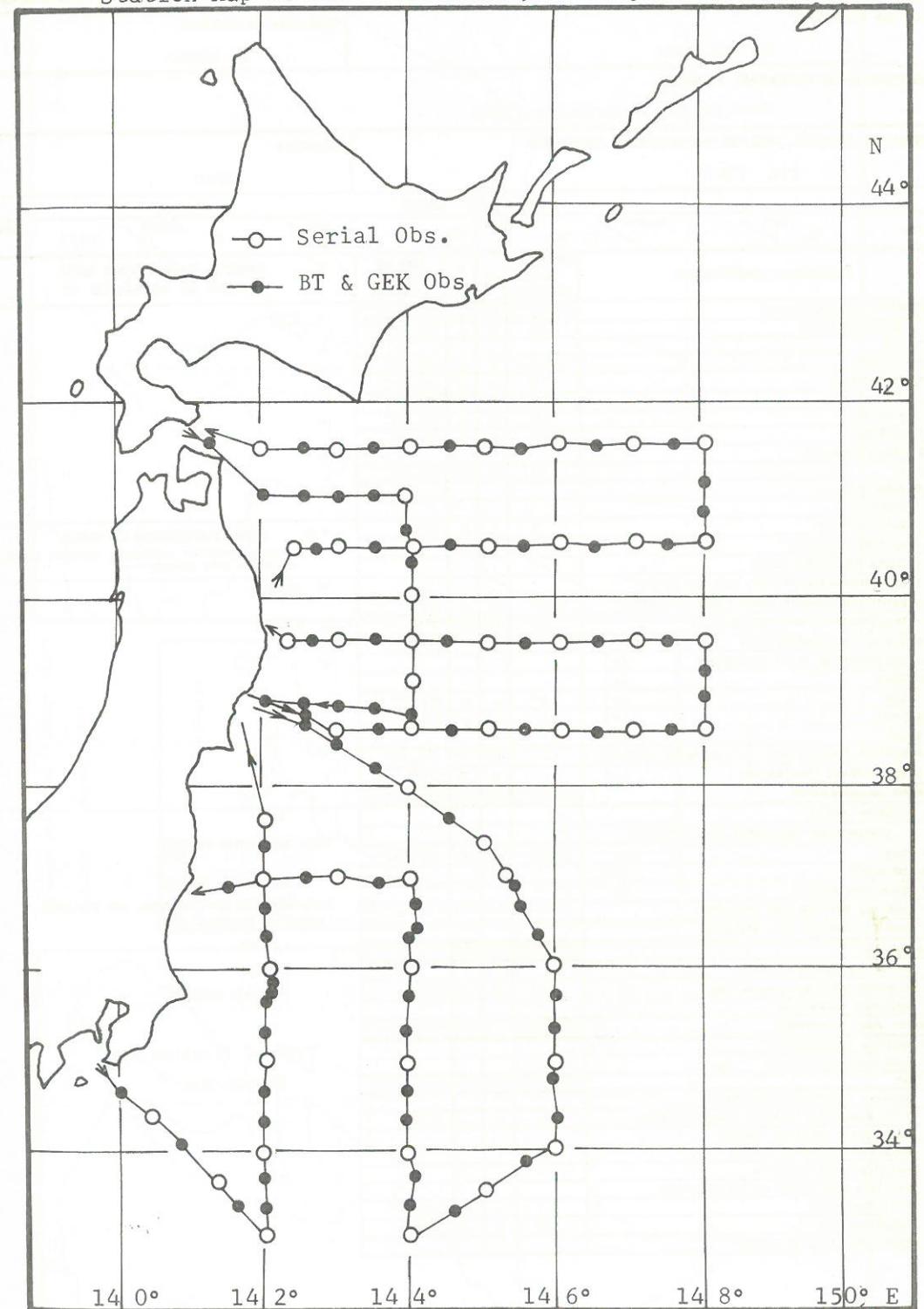
Δ ENTER NUMBER OF STATIONS, EXCEPT WHEN ANNOTATED OTHERWISE FOLLOWING PARAMETER. WHEN OBSERVED PARAMETER IS FOLLOWED BY A CHECK MARK (✓) DO NOT ENTER ANY NUMBER BUT ENTER THE CHECK MARK INSTEAD.

TOTAL KILOMETERS STEAMED:

3,684 miles

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

- (✓) YES
() NO
() PART (SPECIFY)



SHIP OR PLATFORM Shumpu Maru		SCIENTIST IN CHARGE K. Shuto	
INSTITUTION OR OPERATING AGENCY Kobe Marine Observatory (KMO)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. CSK 7307		COUNTRY Japan	
DATE OF CRUISE			
FROM:	12 DAY / 7 MONTH / 1973 YEAR	TO:	7 DAY / 8 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	65	a	a		MT, PC	a.	KMO
D 2 STD						b.	
D 3 OXYGEN	64	a	a		MT, PC	c.	
D 4 PHOSPHATES	77	a	a		MT, PC	d.	
D 5 TOTAL-P	18	a	a		MT, PC	e.	
D 6 NITRATES	18	a	a		MT, PC	f.	
D 7 NITRITES	54	a	a		MT, PC		
D 8 TRACE ELEMENTS							
D 9 pH	3	a	a		MT, PC		
D 10 ALKALINITY							
D 11 SILICATES							
D 12 RADIOACTIVITY	3	a	b		RDC		
D 13 ISOTOPE CHEMISTRY							
D 14 OTHER DISSOLVED GASES							
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)							
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)	120	a	a		PUB	a.	JODC
D 17 TRANSPARENCY (NO. OF OBS.)	40	a	a		PUB	b.	KMO
D 18 SOUND VELOCIMETER DATA						c.	
D 19 INSTRUMENTED WAVE RECORDING (✓)						d.	
D 20 TIDES (✓)						e.	
D 21 SEA (✓)	✓	a	a		MT, PC	f.	
D 22 SWELL (✓)	✓	a	a		PUB		
D 23 ICE (✓)							
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)	37	a	a		MT, PC		
D 25 SEA SURFACE TEMPERATURE (✓)	✓	a	a		PUB		
CURRENT MEASUREMENTS							
C 1 CURRENT METERS							
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)							
C 2 GEK (✓)	83	a	a		MT, PC		
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		PUB		
M 3 INCIDENT RADIATION (✓)							
GEOLOGY AND GEOPHYSICS							
G 22 BOTTOM RADIOACTIVITY (✓)							
G 23 SIDE-SCANNING SONAR (Km)							
BIOLOGY							
B 1 PRIMARY ORGANIC PRODUCTION							
B 2 PHYTOPLANKTON PIGMENT CONCENTRATION	16	a	a		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	7	a	a		PUB		
B 8 ZOOPLANKTON	28	a	a		PUB		
B 9 FISH EGGS AND/OR LARVAE							

TOTAL KILOMETERS STEAMED:

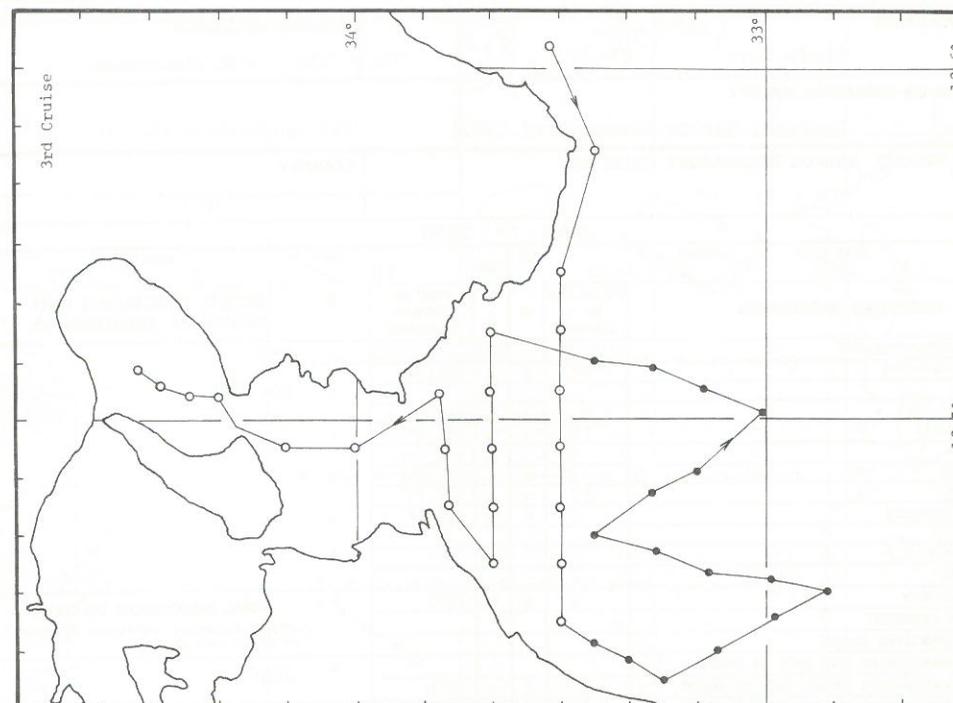
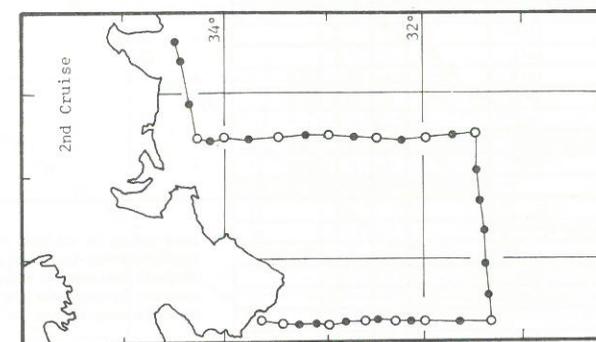
1,796.5 miles

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

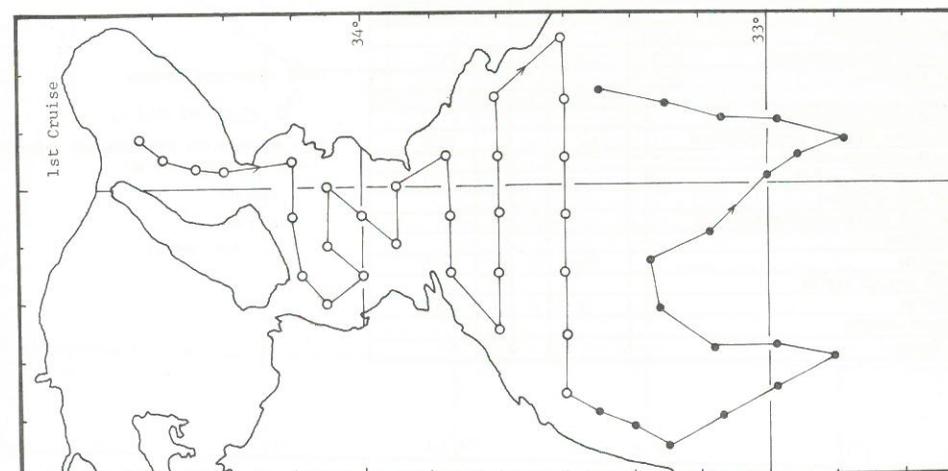
 YES NO PART (SPECIFY)

Type of Plankton Net:

Norpac Net

Station Map of the "SHUMPU MARU"
12 July - 7 August 1973

○ Serial Obs.
● BT & GEK Obs.



SHIP OR PLATFORM Chofu Maru				SCIENTIST IN CHARGE M. Matsuzaki			
INSTITUTION OR OPERATING AGENCY Nagasaki Marine Observatory (NMO)							
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. CSK - 73 - 07				COUNTRY Japan			
DATE OF CRUISE FROM: 11 DAY / 7 MONTH / 1973 YEAR TO: 10 DAY / 8 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							a. NMO
D 1 SERIAL STATIONS		65	a	a		MT, PC	b. MD, JMA
D 2 STD							c.
D 3 OXYGEN		65	a	a		MT, PC	d.
D 4 PHOSPHATES		17	a	a		MT, PC	e.
D 5 TOTAL-P		3	a	a		MT, PC	f.
D 6 NITRATES		3	a	a		MT, PC	
D 7 NITRITES		17	a	a		MT, PC	
D 8 TRACE ELEMENTS		3	b	a		MT, PC	
D 9 pH							
D 10 ALKALINITY							
D 11 SILICATES							
D 12 RADIOACTIVITY		9	a	b		RDC	F D FINAL DISPOSITION OF DATA (NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)
D 13 ISOTOPE CHEMISTRY							a. JODC
D 14 OTHER DISSOLVED GASES							b. MD, JMA
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)							c. NMO
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)		127	a	a		PUB	d.
D 17 TRANSPARENCY (NO. OF OBS.)		34	a	a		PUB	e.
D 18 SOUND VELOCIMETER DATA							f.
D 19 INSTRUMENTED WAVE RECORDING	(<input checked="" type="checkbox"/>)						
D 20 TIDES	(<input checked="" type="checkbox"/>)						
D 21 SEA	(<input checked="" type="checkbox"/>)		<input checked="" type="checkbox"/>	a	b	PUB	
D 22 SWELL	(<input checked="" type="checkbox"/>)		<input checked="" type="checkbox"/>	a	b	PUB	
D 23 ICE	(<input checked="" type="checkbox"/>)						
D 24 BOTTOM TEMPERATURE ($\leq 10M$ FROM BOTTOM)		30	a	a		PUB	
D 25 SEA SURFACE TEMPERATURE	(<input checked="" type="checkbox"/>)		<input checked="" type="checkbox"/>	a	c	RDC	
CURRENT MEASUREMENTS							
C 1 CURRENT METERS							
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)							
C 2 GEK	(<input checked="" type="checkbox"/>)	72	a	a		MT, PC	
C 3 DROGUES	(<input checked="" type="checkbox"/>)						
C 4 SWALLOW FLOATS	(<input checked="" type="checkbox"/>)						
C 5 SURFACE DRIFTERS (NO. RELEASED)							
C 6 BOTTOM DRIFTERS (NO. RELEASED)							
METEOROLOGY							
M 1 UPPER AIR OBSERVATIONS	(<input checked="" type="checkbox"/>)						
M 2 SURFACE METEOROLOGICAL OBS.	(<input checked="" type="checkbox"/>)		<input checked="" type="checkbox"/>	a	b	PUB	
M 3 INCIDENT RADIATION	(<input checked="" type="checkbox"/>)						
BIOLOGY							
B 1 PRIMARY ORGANIC PRODUCTION							
B 2 PHYTOPLANKTON PIGMENT CONCENTRATION		17	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							
B 8 ZOOPLANKTON		36	a	b		PUB	
B 9 FISH EGGS AND/OR LARVAE							
B 10 MICRONEKTON		9	a	b		PUB	
B 11 INVERTEBRATE NEKTON							
B 12 PELAGIC FISHES							

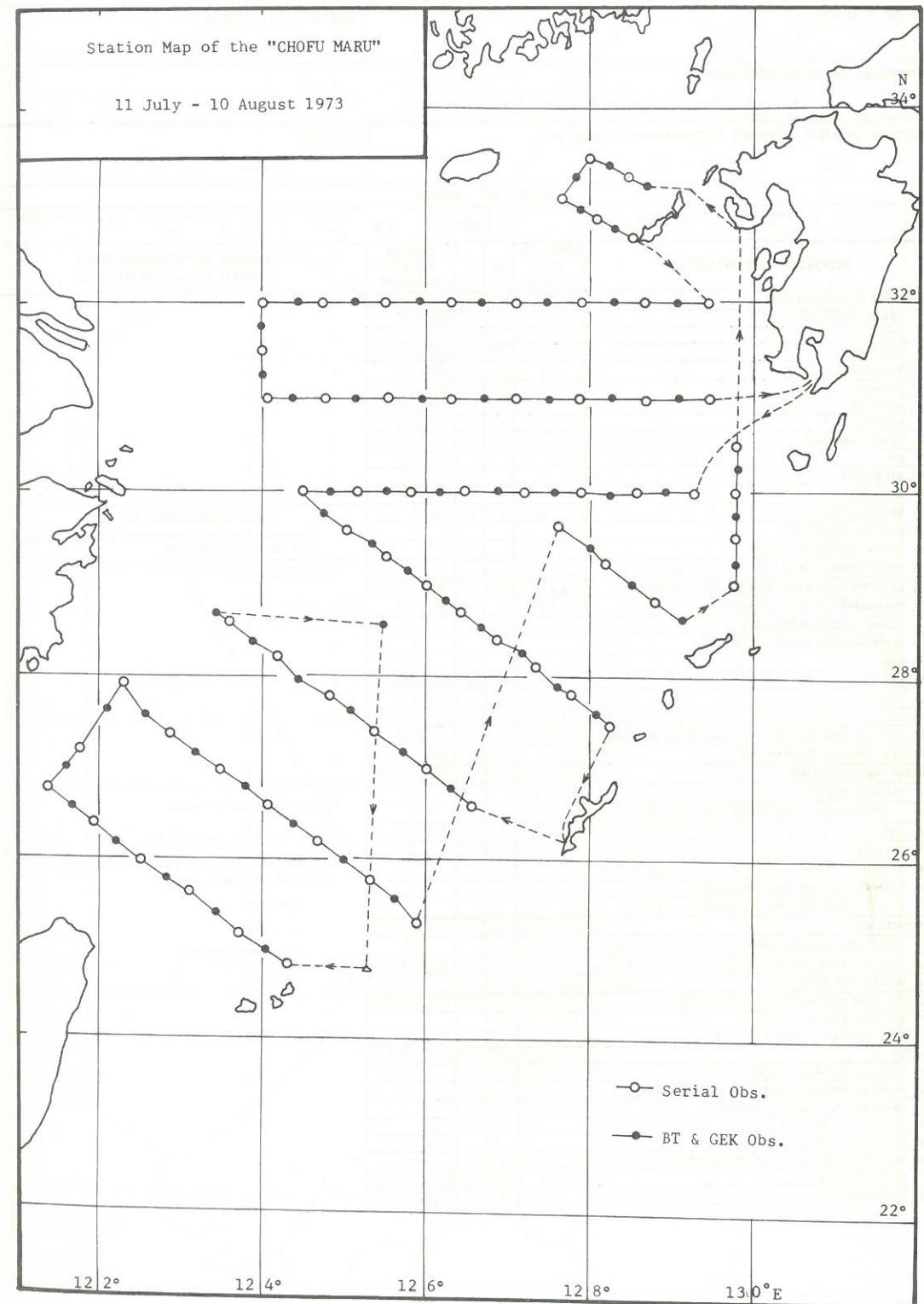
Δ ENTER NUMBER OF STATIONS, EXCEPT WHEN ANNOTATED OTHERWISE FOLLOWING PARAMETER. WHEN OBSERVED PARAMETER IS FOLLOWED BY A CHECK MARK () DO NOT ENTER ANY NUMBER BUT ENTER THE CHECK MARK INSTEAD.

TOTAL KILOMETERS STEAMED:

3,400 miles

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

() YES
() NO
() PART (SPECIFY)



SHIP OR PLATFORM Seifu Maru		SCIENTIST IN CHARGE I. Fujiwara	
INSTITUTION OR OPERATING AGENCY Maizuru Marine Observatory (MMO)			
EXPEDITION, PROJECT, AND/OR ORIGINATOR'S CRUISE NO. CSK 73 - 05		COUNTRY Japan	
DATE OF CRUISE			
FROM:	21 DAY / 7 MONTH / 1973 YEAR	TO:	14 DAY / 8 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	61	a	a	MT, PC	a.	MMO
D 2 STD					b.	
D 3 OXYGEN	61	a	a	MT, PC	c.	
D 4 PHOSPHATES	37	a	a	MT, PC	d.	
D 5 TOTAL-P	3	a	a	MT, PC	e.	
D 6 NITRATES	3	a	a	MT, PC	f.	
D 7 NITRITES	3	a	a	MT, PC		
D 8 TRACE ELEMENTS						
D 9 pH						
D 10 ALKALINITY						
D 11 SILICATES						
D 12 RADIOACTIVITY	8	a	b	RDC		
D 13 ISOTOPE CHEMISTRY						
D 14 OTHER DISSOLVED GASES						
D 15 BATHYTHERMOGRAPH (XBT) (NO. OF DROPS)						
D 16 BATHYTHERMOGRAPH (MECH.) (NO. OF DROPS)	122	a	a	RDC, PUB	a.	JODC
D 17 TRANSPARENCY (NO. OF OBS.)	37	a	a	MT, PC	b.	MMO
D 18 SOUND VELOCIMETER DATA					c.	
D 19 INSTRUMENTED WAVE RECORDING (✓)					d.	
D 20 TIDES (✓)					e.	
D 21 SEA (✓)	✓	a	a	MT, PC	f.	
D 22 SWELL (✓)	✓	a	a	PUB		
D 23 ICE (✓)						
D 24 BOTTOM TEMPERATURE (≤ 10M FROM BOTTOM)	5	a	a	MT, PC		
D 25 SEA SURFACE TEMPERATURE (✓)	✓	a	b	RDS		
CURRENT MEASUREMENTS						
C 1 CURRENT METERS						
C 1 CONTINUOUS TIME SERIES (NO. OF DAYS)						
C 2 GEK (✓)	100	a	a	MT, PC		
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	RDC, PUB		
M 3 INCIDENT RADIATION (✓)						
GEOLOGY AND GEOPHYSICS (CONTINUED)						
G 22 BOTTOM RADIOACTIVITY (✓)						
G 23 SIDE-SCANNING SONAR (Km)						
BIOLOGY						
B 1 PRIMARY ORGANIC PRODUCTION						
B 2 PHYTOPLANKTON PIGMENT CONCENTRATION						
B 3 PARTICULATE ORGANIC MATTER						
B 4 DISSOLVED ORGANIC MATTER						
B 5 NEUSTON AND PLEUSTON						
B 6 BACTERIA AND OTHER MICROORGANISMS						
B 7 PHYTOPLANKTON	11	a	b	RDC, PUB		
B 8 ZOOPLANKTON	11	a	b	RDC, PUB		

F D FINAL DISPOSITION OF DATA
(NATIONAL REPOSITORY, INSTITUTION, REGIONAL CENTER, OR WORLD DATA CENTERS)

a. JODC

b. MMO

c.

d.

e.

f.

TOTAL KILOMETERS STEAMED:

3,800 miles

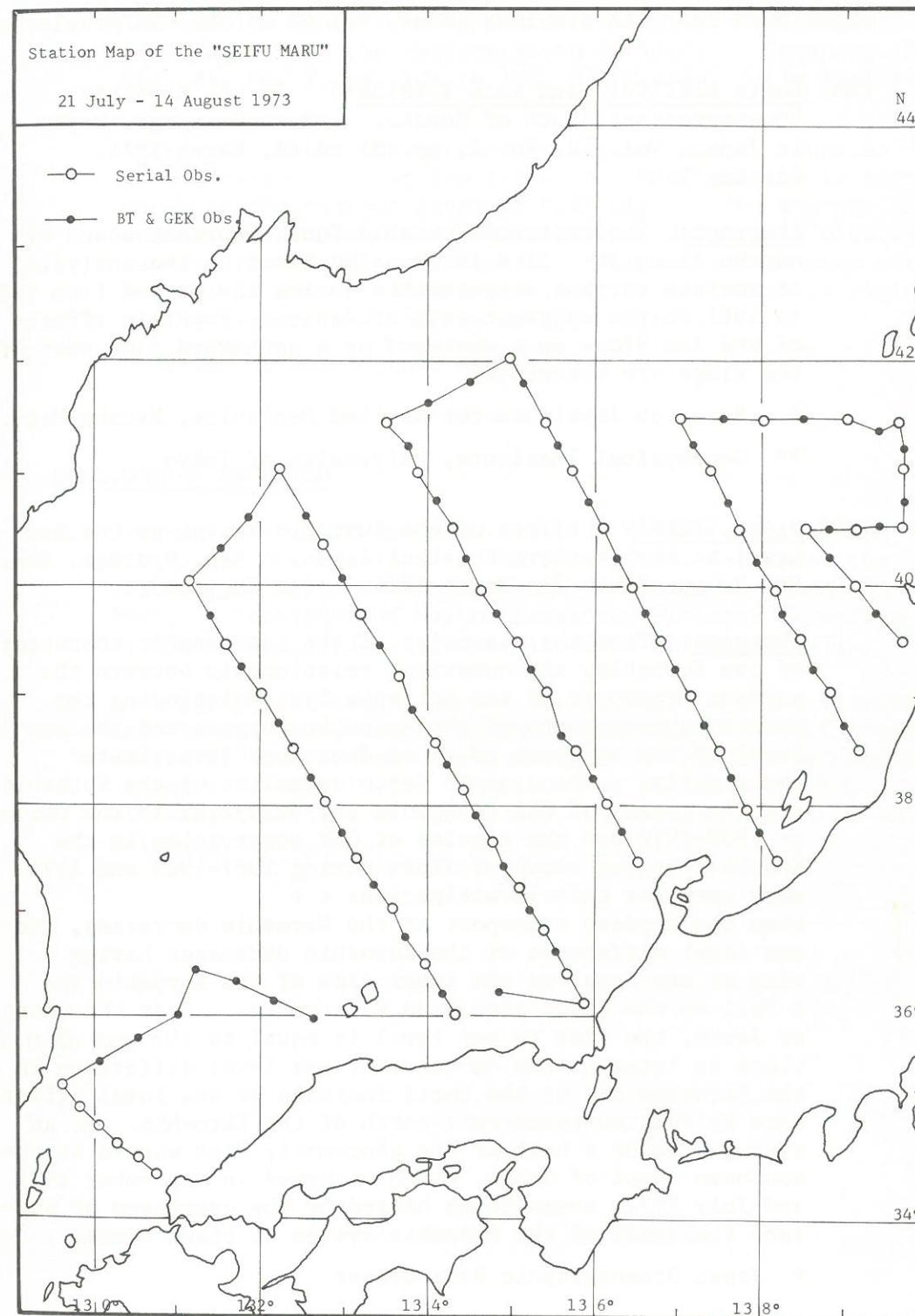
DATA REPORTED ON THIS FORM ARE DECLARED NATIONAL PROGRAM (DNP):

(✓) YES

() NO

() PART (SPECIFY)

B 8: Norpac Standard Net



II. ABSTRACTS OF THE PAPERS ON CSK

(Continued from the previous issue, No. 43 of the CSK Newsletter)

- (89) Kunio RIKIISHI* and Kozo YOSHIDA** On the Kuroshio Countercurrent South of Honshu. Res. Oceanogr. Works in Japan, Vol. 12, No. 2, pp. 31 to 43, March 1974. (in English)

Abstract: The westward Kuroshio Countercurrent south of Honshu along 30° - 31°N is revealed based on the analysis of surface current measurements during the period from 1955 to 1967 in the adjacent seas of Japan. Possible effects of the Izu Ridge on a westward or a southward flow west of the ridge are discussed.

* Research Institute for Applied Mechanics, Kyushu Univ.

** Geophysical Institute, University of Tokyo

- (90) Hideo NITANI* Effect of the Kuroshio System on the Sea Level at the Southern Coast of Japan. Rep. Hydrogr. Res., No. 9, pp. 51 to 70, March 1974. (in English)

Abstract: From the viewpoint of the geostrophic character of the Kuroshio, the numerical relationship between the surface transport of the Kuroshio System including the countercurrent north of the Kuroshio current and the sea level of the southern coast of Japan was investigated empirically. The dynamic depth anomalies of the Kuroshio off the coasts of Kii Peninsula and Omae-zaki in the period of 1958-1970 and the results of GEK observation in the Kuroshio region south of Japan during 1967-1969 and 1971 were used for this investigation.

When the surface transport of the Kuroshio decreases, the sea level difference of the Kuroshio decreases having a rise of sea level on the inner side of the Kuroshio and a fall on the outer side, and vice versa. Near the coast of Japan, the rise in sea level is equal to the sum of 0.36 times as large as the decrease of sea level difference in the Kuroshio and of the total increase of sea level difference in the countercurrent north of the Kuroshio. On an average, about a half of the abnormally high waters at the southern coast of Japan, which occurred in September 1971 and July 1972, seems to be caused by the decreases of surface transport of the Kuroshio System at these times.

* Japan Oceanographic Data Center

- (91) Takeshi SAGI*, Takeshi YURA* and Tsutomu AKIYAMA*

The Cadmium content in Sea Water in the Adjacent Regions of Japan and in the Western North Pacific. Oceanogr. Mag., Vol. 25, No. 2, pp. 101 to 110, March 1974. (in English)

Abstract: Dithizone extraction method has been applied to the measurement of the trace amount of cadmium in sea water at the content level of 0.01 µg/L. The average content of cadmium in 66 surface water samples is 0.06 µg/L ranging from 0.00 to 0.65 µg/L. The average in deep water samples at about 1,000m depth is 0.11 µg/L which is significantly higher than that in surface waters.

* Japan Meteorological Agency

III. PUBLICATION RECEIVED

1. Oceanographical Cruise Report No. 3, Oceanographical and Biological Observations in the South China Sea under the CSK Program by the R.V. Samudera, February 12 - March 5, 1971. Institute of Marine Research, National Institute of Oceanology, Indonesian Institute of Sciences, 1971.
2. Oceanographical Cruise Report No. 6, Hydrological, Plankton and Pigment Observations in the South China Sea (CSK Program, Cruise II) and around Seribu Islands by the R.V. Jalanidhi, December 6 - 28, 1971. Institute of Marine Research, National Institute of Oceanology, Indonesian Institute of Sciences, 1971.

IV. SUMMARY OF DATA RECEIVED AND PUBLICATIONS as of 31 December 1974

Kuroshio Data Center												
Date Received	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	BTS	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK
Mo. Day/Yr.												Pub. No. Mo./Yr.
11.28/65	49K301 SH	KMOJMA	05.16-05.17,1965	S.E.YAKU	7 T S O	PH	13	13				26 11/66
12.10/65	49K001 TA	HDMSA	06.25-09.07,1965	E.PHILIP.	103 T S O P	N2 N3 SI PH	279	245	D	P		2 05/66
02.14/66	49K003 RY	MDJMA	06.25-08.09,1965	E.JAPAN	53 T S O P	N2 N3 SI PH	221	222	D	P		10 10/66
03.18/66	49K302 CH	NMOJMA	07.01-07.02,1965	S.E.YAKU	7 T S O P		9	13	D	P		26 11/66
12.05/65	49K009 SN	TUF	07.09-07.21,1965	S.JAPAN	13 T S O	PH	25	13	DTP			5 06/66
04.09/66	49K013 NA	SUF	07.13-07.22,1965	E.CHIN.SEA	16 T S O		28	5	DTP	V		1 05/66
02.14/66	49K004 KO	HMOJMA	07.15-07.19,1965	S.JAPAN	12 T S O		12	2	D			6 06/66
11.28/65	49K005 SH	KMOJMA	07.22-07.28,1965	E.JAPAN	16 T S O P		29	29	D	P		14 10/66
02.14/66	49K006 CH	NMOJMA	07.27-07.29,1965	S.JAPAN	8 T S O P	N2	15	15	P	P		11 08/66
08.18/66	49K010 KG	KU	07.28-08.07,1965	E.CHIN.SEA	29 T S O P		54	53	D	P		12 06/66
12.05/65	49K008 UM	TUF	07.28-08.10,1965	E.CHIN.SEA	16 T S O		39	2	P	P		7 07/66
12.10/66	49K002 KA	HDMSA	08.07-08.17,1965	S.JAPAN	13 T S O P	TP N2 N3 SI PH	25	13	D			4 06/66
02.14/66	49K007 SI	MNOJMA	08.10-08.30,1965	S.E.JAPAN	38 T S O P	N2	94	149	D			3 06/66
02.18/66	49K303 CH	NMOJMA	08.12-08.01,1965	JAPAN SEA	23 T S O P	SI PH	44	43	D	P		13 08/66
10.09/65	49K014 KY	SUF	08.12-08.14,1965	S.E.YAKU	7 T S O P		9	13	D	P		26 11/66
08.18/66	49K011 KE	KU	08.23-08.31,1965	E.CHIN.SEA	19 T S		29	1	D			1 05/66
03.18/66	49K304 CH	NMOJMA	09.29-09.04,1965	E.CHIN.SEA	15 T S		25	8	D	P		8 07/66
02.09/66	49K015 SU	NRFL	10.05-09.27,1965	S.E.YAKU	7 T S O P		9	17	D	P		26 11/66
12.10/65	49K401 KA	HDMSA	10.05-10.07,1965	S.JAPAN	11 T S		11	27	D			9 06/66
12.10/65	49K403 ME	HDMSA	10.09-10.18,1965	S.JAPAN	47 T S		90	65	D			19 08/66
12.10/65	49K402 TA	HDMSA	10.09-10.18,1965	S.JAPAN	7 T S		76	124	D			18 08/66
03.18/66	49K305 CH	NMOJMA	10.10-10.18,1965	S.JAPAN	8 T S		9	13	D	P		26 11/66
03.18/66	49K306 SH	KMOJMA	11.01-11.02,1965	S.E.YAKU	7 T S O P	PH	14	14	D	P		26 11/66
			11.11-11.12,1965	S.E.YAKU	482*/ 23		1229*	1205*				
05.04/66	21K001 YM	NCOR	08.10-10.13,1965	ADJ.TAIWAN	38 T S O P	TP N2 N3 SI PH		22	D	C		22 11/66
					38*/ 1							
12.25/65	24K002 KE	FRDA	08.09-08.27,1965	YELLOW SEA	69 T S O P	PH		16	D			16 06/66
12.25/65	24K001 BU	FRDA	08.14-09.06,1965	JAPAN SEA	84 T S O P	PH		17	D			05/66
12.25/65	24K003 SU	HO	08.14-08.27,1965	S.KOREA	32 T S O P	PH		15	D			08/66
04.30/66	24K004 BU	FRDA	12.02-12.12,1965	JAPAN SEA	41 T S O P	PH		37	D			12/66
04.30/66	24K005 KE	FRDA	12.04-01.03,1965	YELLOW SEA	40 T S O P	PH		38	D			12/66
					266*/ 5							
09.28/66	31K001 AT	WHUI	08.04-09.23,1965	S.JAPAN	106 T S O			20	D			10/66
					106*/ 1							
02.17/66	74K001 CM	FRS	10.02-10.10,1965	S.CHIN.SEA	27 T S O P	N3		21	D			12/66
					27*/ 1							
07.06/66	90K001 SH		07.16-08.18,1965	E.S.JAPAN	71 T S O P	N2	SI PH	23	D			12/66
09.29/66	90K003 GR		07.20-09.03,1965	E.S.JAPAN	62 T S O	PH		25	D			12/66
09.29/66	90K002 ZH		07.28-10.09,1965	E.S.JAPAN	66 T S O P	SI PH		24	D			12/66
					199*/ 3							
08.08/66	49K022 OS	HU	11.30-01.25,1966	S.JAPAN	17 T S O P	TP N2 N3	PH	9	D			11/66
07.20/66	49K307 CH	NMOJMA	01.18-01.20,1966	S.E.YAKU	7 T S O P			13	D			02/67
07.20/66	49K020 CH	NMOJMA	01.26-02.28,1966	E.CHIN.SEA	29 T S O P		54	24	D			11/66

Date Received	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	BTS	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
												Pub. No.	Mo./Yr.
10.12/66	49K017 RY	MDJMA	02.04-03.09,1966	E.JAPAN	28 T S O P	NH N2 N3 SI		74	D			28	11/66
07.12/66	49K019 SH	KMOJMA	02.10-03.14,1966	S.JAPAN	7 T S O P	N2	PH	15	D			30	10/66
12.27/66	49K018 KO	NMOJMA	02.12-03.14,1966	E.JAPAN	13 T S O P			30	D			29	02/67
05.13/66	49K021 SI	MNOJMA	02.12-03.10,1966	JAPAN SEA	23 T S O P	SI PH		37	D			32	11/66
11.18/66	49K525 SU	NRFL	02.23-03.13,1966	S.W.KYUSHU	41 T S	N2	SI PH	63	D			27	10/66
12.02/66	49K526 YO	SRFL	02.24-03.10,1966	E.CHIN.SEA	14 T S			19	D			48	03/67
07.20/66	49K308 CH	NMOJMA	03.15-03.25,1966	S.E.YAKU	7 T S O P			9	D			60	02/67
05.08/67	49K023 KE	KU	04.19-04.28,1966	S.E.YAKU	7 T S O P			9	D			47	10/67
10.12/66	49K310 SH	KMOJMA	04.22-05.01,1966	E.CHIN.SEA	21 T S			13	D			60	02/67
12.15/66	49K032 NA	NU	05.23-06.09,1966	S.E.YAKU	7 T S O P	PH		14	D			60	02/67
04.23/67	49K422 KY	SUF	06.15-06.24,1966	S.W.JAPAN	12 T S O P	N2 N3 SI		28	DTP	P		58	02/67
01.17/67	49K024 TA	HDMSA	06.21-06.23,1966	W.NORPAC	103 T S O P	NH N2 N3 SI PH		256	D			52	09/67
12.27/66	49K311 CH	NMOJMA	07.01-09.13,1966	E.PHILIP.	7 T S O P	N2 N3 SI PH		353	D			50	02/67
11.07/67	49K036 TE	SUF	07.02-07.03,1966	S.E.YAKU	14 T S O P	SI PH		19	D			61	09/67
12.27/66	49K028 CH	NMOJMA	07.06-07.17,1966	E.TAIWAN	7 T S O P	SI PH		14	DT			64	02/68
03.17/67	49K034 KY	SUF	07.13-07.23,1966	E.CHIN.SEA	30 T S O P	SI PH		32	D			54	02/67
12.09/68	49K421 SY	TRFL	07.18-08.14,1966	S.JAPAN	16 T S O			33	DTP			62	10/67
11.28/66	49K020 SN	TUF	07.19-08.11,1966	S.JAPAN	17 T S O P	N3 SI PH		131	D			56	02/67
12.09/68	49K420 SU	NRFL	07.19-08.14,1966	S.JAPAN	8 T S O P	N2	PH	133	D			53	02/67
03.13/67	49K419 TN	ORIT	07.25-08.02,1966	S.JAPAN	13 T S O			18				79	09/67
05.08/67	49K031 KG	KU	08.05-08.14,1966	E.CHIN.SEA	27 T S O P	SI PH		81	D			57	11/67
01.23/67	49K025 KA	HDMSA	08.10-08.30,1966	S.E.JAPAN	7 T S O	SI PH		33	DT			51	03/67
03.17/67	49K035 KY	SUF	08.18-08.31,1966	E.CHIN.SEA	17 T S O	SI PH		102	D			65	02/68
02.23/67	49K029 SI	MNOJMA	08.21-09.19,1966	E.CHIN.SEA	17 T S O P	SI PH		35	DTP			63	10/67
12.27/66	49K312 CH	NMOJMA	08.27-08.29,1966	JAPAN SEA	24 T S O P	SI		17	DTP			55	09/67
02.10/67	49K413 TA	HDMSA	09.11-09.23,1966	S.E.YAKU	7 T S O P	PH		34	D			61	09/67
12.23/66	49K414 ME	HDMSA	10.14-10.24,1966	OFF KII	8 T S	NH N2 N3 SI		113	D			59	02/67
03.17/67	49K313 SH	KMOJMA	10.14-10.17,1966	S.JAPAN	7 T S O P			36	D			76	05/67
03.17/67	49K038 KY	SUF	10.27-10.31,1966	S.E.YAKU	10 T S O P	N3 SI		10	DTP			61	09/67
05.08/67	49K314 CH	NMOJMA	10.26-10.29,1966	S.JAPAN	7 T S O P			49	D			66	12/67
			12.07-12.08,1966	S.E.YAKU	642*/ 35		1256*	1541*				61	09/67
10.24/66	21K002 YM	NCOR	03.12-04.25,1966	ADJ.TAIWAN	40 T S O P	N2 N3 SI PH		62	D			39	01/67
08.2 /67	21K003 YM	NCOR	09.10-10.14,1966	ADJ.TAIWAN	36 T S O P	N2 N3 SI PH		62*	C			67	11/67
					76*/ 2								
08.01/66	24K007 BU	FRDA	03.08-04.03,1966	YELLOW SEA	64 T S O P	SI PH			D			45	01/67
08.01/66	24K006 BA	FRDA	03.21-04.10,1966	JAPAN SEA	57 T S O P	SI PH			D			44	01/67
08.01/66	24K008 SU	HO	07.14-07.28,1966	S.KOREA	29 T S O P	PH			D			46	01/67
01.23/67	24K009 BA	FRDA	07.14-07.28,1966	JAPAN SEA	61 T S O P	N2	SI PH		D			68	05/67
01.23/67	24K010 BU	FRDA	07.16-08.09,1966	YELLOW SEA	66 T S O P	SI PH			D			69	05/67
01.30/67	24K011 SU	HO	10.12-11.02,1966	S.KOREA	38 T S O P	SI PH			D			70	05/67
					315*/ 6								
09.07/66	31K002 CH	CG	01.22-01.27,1966	E.JAPAN	15 T S O				D			35	01/67

Date Received Mo./Day/Yr.	KDC Ref. No.	Ship Code	Agency	Period	Area	No. of Stas.	Serial Data	BTs	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
													Pub. No.	Mo./Yr.
01/31/67	31K003	AR SIO		01.27-04.01,1966	N•NORPAC	222	T S O P		D				36	02/67
09/06/66	31K004	KE BCFBL		02.01-04.06,1966	N•NORPAC	56	T S O		D				34	01/67
09/07/66	31K005	RS CG		07.08-07.14,1966	E•JAPAN	17	T S O		D				71	05/67
						310*	4							
05/20/67	74K002	CM FRS		01.09-01.16,1966	S•CHIN•SEA	27	T S O		D				72	10/67
06/05/67	74K003	CM FRS		06.01-06.08,1966	S•CHIN•SEA	27	T S O		D				77	11/67
06/20/67	74K004	CM FRS		08.27-09.07,1966	S•CHIN•SEA	53	T S O		D				78	11/67
06/09/67	74K005	CM FRS		11.24-12.07,1966	S•CHIN•SEA	35	T S O		D				80	11/67
						142*	4							
02/27/67	90K004	SH		12.12-03.31,1966	N•W•NORPAC	242	T S O		D				40	10/67
02/27/67	90K007	VI		12.17-04.15,1966	W•NORPAC	122	T S		DRP				43	09/67
02/27/67	90K005	NE		01.27-04.29,1966	N•W•NORPAC	252	T S O		D				41	10/67
02/27/67	90K006	OR		02.12-04.21,1966	W•NORPAC	156	T S O		D				42	10/67
08/07/67	90K009	OR		07.09-09.12,1966	N•W•NORPAC	66	T S O		D				74	11/67
05/17/67	90K008	NE		07.13-09.17,1966	N•W•NORPAC	58	T S O		D				73	11/68
11/01/67	90K010	SH		07.20-08.23,1966	N•W•NORPAC	71	T S O	AL N2	D				75	11/68
						967*	7							
						2452*	58						1318*	1541*
09/18/67	49K040	RY MDJMA		01.11-02.25,1967	W•NORPAC	88	T S O	AL N2	D				57	01/68
05/08/67	49K043	CH NMOJMA		01.13-02.24,1967	E•CHIN•SEA	25	T S O	SI PH	P				85	11/67
05/08/67	49K315	CH NMOJMA		01.13-01.14,1967	S•E•YAKU	7	T S O	TP	P				104	12/67
05/08/67	49K045	OS HU		01.19-02.01,1967	S•JAPAN	12	T S O	PH	P				87	11/67
06/10/67	49K046	NA NU		01.19-01.22,1967	E•CHIN•SEA	12	T S O	PH	P				88	11/67
07/18/67	49K041	KO HMOJMA		02.04-04.07,1967	E•JAPAN	27	T S O	PH	P				83	12/67
05/08/67	49K042	SH KMOJMA		02.08-03.21,1967	S•JAPAN	8	T S O	PH	P				84	11/67
07/11/67	49K044	SI NMOJMA		02.10-03.02,1967	JAPAN SEA	24	T S O	PH	P				86	01/68
03/31/67	49K039	TA HDMSA		02.23-03.16,1967	S•E•JAPAN	30	T S O	SI PH	D				81	09/67
05/08/67	49K316	CH NMOJMA		03.16-03.21,1967	S•E•YAKU	7	T S O	PH	P				104	12/67
07/11/67	49K317	CH NMOJMA		04.14-04.17,1967	S•E•YAKU	7	T S O	PH	P				104	12/67
05/14/68	49K052	KE KU		04.20-05.12,1967	E•CNIN•SEA	24	T S O	PH	P				101	02/69
07/11/67	49K050	SH KMOJMA		04.29-05.18,1967	S•JAPAN	6	T S O	PH	D				99	11/67
11/08/67	49K047	KA HDMSA		05.10-05.29,1967	S•JAPAN	28	T S O	SI PH	D				96	01/68
03/01/68	49K049	KO HMOJMA		05.11-05.30,1967	E•JAPAN	7	T S O	SI	D				98	10/68
07/11/67	49K318	CH NMOJMA		05.11-05.29,1967	S•E•YAKU	7	T S O	PH	P				104	12/67
07/11/67	49K051	CH NMOJMA		05.17-05.18,1967	E•CHIN•SEA	11	T S O	PH	P				100	11/67
11/07/67	49K048	RY MDJMA		05.02-06.23,1967	E•JAPAN	20	T S O	AL N3 SI PH	D				97	02/68
09/26/67	49K061	NA NU		05.13-06.17,1967	S•JAPAN	7	T S O	PH	D				113	12/67
11/07/67	49K319	CH NMOJMA		07.03-07.04,1967	S•E•YAKU	7	T S O	PH	P				134	10/68
10/11/67	49K053	TA HDMSA		07.12-08.30,1967	CEN•NORPAC	37	T S O	N2	P				105	01/68
11/07/67	49K062	KY SUF		07.14-07.21,1967	E•CHIN•SEA	24	T S O	PH	D				114	02/68
01/09/70	49K433	TN ORIUT		07.15-07.21,1967	E•JAPAN	5	T S	PH	D				146	06/71
09/17/68	49K055	KO HMOJMA		07.17-08.18,1967	E•JAPAN	18	T S O	N2 SI PH	P				107	02/69
10/27/67	49K439	SN TUF		07.18-07.30,1967	IZL IS.	14	T S O	PH	D				145	02/68
11/07/67	49K056	SH KMOJMA		07.19-07.21,1967	S•JAPAN	8	T S O	N2 N3	D				108	02/68
03/18/69	49K441	SY TRFRL		07.27-08.18,1967	S•JAPAN	1	T S	PH	D				158	06/71
01/09/70	49K434	TN ORIUT		07.29-08.09,1967	E•JAPAN	9	T S O	PH	D				133	02/68
11/07/67	49K057	CH NMOJMA		07.31-08.01,1967	E•CHIN•SEA	9	T S O	PH	D				109	02/68
03/18/69	49K440	SU NFRRL		08.01-08.07,1967	S•JAPAN	75		PH	D				74	

Date Received Mo./Day/Yr.	KDC Ref. No.	Ship Code	Agency	Period	Area	No. of Stas.	Serial Data	BTs	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
													Pub. No.	Mo./Yr.
03/18/69	49K442	YO SRFRL		08.01-08.04,1967	S•JAPAN	12	T S O		50				110	10/68
12/11/67	49K058	SI NMOJMA		08.02-08.24,1967	JAPAN SEA	35	T S O	SI PH					106	02/68
05/14/68	49K060	KG KU		08.08-08.28,1967	E•S•JAPAN	23	T S O	PH					112	02/69
11/05/68	49K430	KY SUF		08.08-09.03,1967	E•CNIN•SEA	39	T S O	PH					143	03/69
11/05/68	49K431	TE SUF		08.19-08.26,1967	S•KYUSHU	15	T S O	PH					144	03/69
11/07/67	49K320	CH NMOJMA		08.23-08.26,1967	S•KYUSHU	7	T S O	PH					134	10/68
12/22/67	49K059	HK ORIUT		08.28-08.29,1967	S•E•YAKU	11	T S O	PH					111	10/68
03/01/68	49K428	TA HDMSA		09.06-09.20,1967	S•JAPAN	21	T S O	PH					142	10/68
12/22/67	49K065	CH NMOJMA		09.25-10.17,1967	IZU IS.	7	T S O	PH					130	10/68
12/22/67	49K321	CH NMOJMA		10.05-10.06,1967	E•CHIN•SEA	7	T S O	PH					134	10/68
05/06/68	49K423	RY MDJMA		10.06-10.07,1967	S•E•YAKU	7	T S O	N2					141	05/69
01/14/69	49K424	KO HMOJMA		10.09-11.04,1967	S•JAPAN	30	T S O	N2					141	05/69
09/17/68	49K425	SH KMOJMA		10.09-11.04,1967	S•JAPAN	13	T S O	N2					141	05/69
09/17/68	49K426	CH NMOJMA		10.09-11.04,1967	S•JAPAN	6	T S O	N2					141	05/69
09/17/68	49K427	SI NMOJMA		10.09-11.04,1967	S•JAPAN	7	T S O	N2					141	05/69
01/09/70	49K437	HK ORIUT		10.13-10.14,1967	S•JAPAN	9	T S O	PH					132	03/69
11/05/68	49K067	KY SUF		10.29-10.31,1967	E•CHIN•SEA	7	T S O	PH					133	10/68
01/29/68	49K076	NA NU		11.07-11.20,1967	E•CHIN•SEA	7	T S O	PH					134	10/68
12/22/67	49K322	CH NMOJMA		11.09-11.10,1967	S•E•YAKU	23	T S O	PH					128	10/68
02/12/68	49K063	KA HDMSA		11.13-12.01,1967	W•NORPAC	19	T S O	PH					131	03/69
10/03/68	49K066	HM TUF		11.01-02.23,1967	W•NORPAC	15	T S O	PH					150	02/69
09/09/68	49K438	HK ORIUT		12.12-01.25,1967	W•NORPAC	79**/	49	PH					2270*	2536*
03/20/68	21K004	YM NCROR		04.01-05.14,1967	ADJ•TAIWAN	34	T S O	N2 N3 SI PH					102	11/68
08/26/69	21K005	YM NCROR		09.03-10.29,1967	ADJ•TAIWAN	31	T S O	N2					135	01/70
						65**/	2						42*	
07/31/67	24K012	BK FRDA		02.16-03.25,1967	JAPAN SEA	114	T S O	PH					89	02/68
07/31/67	24K013	BU FRDA		02.16-03.09,1967	YELLOW SEA	57	T S O	PH					90	02/68
07/31/67	24K014	SU HO		05.04-05.10,1967	S•KOREA	21	T S O	PH					103	02/68
07/31/67	24K015	SU HO		05.23-05.27,1967	S•KOREA	21	T S O	PH					103	02/68
02/20/68	24K016	BA FRDA		08.12-08.25,1967	JAPAN SEA	70	T S O	PH					117	11/68
02/20/68	24K018	HA FRDA		08.12-09.04,1967	E•CHIN•SEA	39	T S O	PH					115	11/68
02/20/68	24K017	CH FRDA		08.13-08.21,1967	YELLOW SEA	66	T S O	PH					116	11/68
02/20/68	24K019	SU HO		09.23-10.21,1967	S•KOREA	43	T S O	PH					136	10/68
						431**/	8							
05/14/68	31K007	RS CG		01.14-01.18,1967	E•JAPAN	8	T S O	PH					91	11/68
						8**/	1							
02/05/68	42K001	BU HO		08.25-09.05,1967	S•CHIN•SEA	32	T S O	PH					119	11/68
02/05/68	42K002	JA HO		10.04-10.19,1967	S•CHIN•SEA	40	T S O	PH				</		

Date Received Mo./Day/Yr.	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	BTs	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
												Pub. No.	Mo./Yr.
05.15/68	86K002	01 HD,RTN	03.18-03.23,1967	GULF THAI.	38 T S O				D			125	12/68
05.15/68	86K003	01 HD,RTN	06.07-06.12,1967	GULF THAI.	38 T S O				D			126	12/68
05.15/68	86K004	01 HD,RTN	08.02-08.11,1967	GULF THAI.	38 T S O				D			127	12/68
05.15/68	86K005	F2 DF	11.01-12.10,1967	GULF THAI.	121 T S O				D			139	12/68
01.09/70	86K011	01 HD,RTN	12.14-01.18,1967	GULF THAI.	95 T S O				D			148	05/70
					368*/	6							
03.01/68	90K011	GR	02.05-02.25,1967	N.W.NORPAC	66 T S				D			93	05/69
01.08/68	90K012	OR	02.05-03.11,1967	N.W.NORPAC	59 T S O				D			94	11/68
08.06/68	90K013	SH	02.08-03.04,1967	N.W.NORPAC	69 T S O				D			95	05/69
07.18/68	90K014	SH	04.28-06.03,1967	N.W.NORPAC	70 T S O				D			121	03/69
03.01/68	90K015	OR	07.29-09.03,1967	N.W.NORPAC	61 T S O				D			122	03/69
09.26/68	90K016	NE	08.21-11.26,1967	N.W.NORPAC	62 T S O				D			123	05/69
07.18/68	90K017	OR	10.16-11.23,1967	N.W.NORPAC	61 T S O				D			140	05/69
					448*/	7							
					2310*/	78							
07.24/68	49K075	OS HU	01.05-02.02,1968	S.JAPAN	21 T S O				D			160	02/69
06.05/68	49K069	RY MDJMA	01.13-03.22,1968	S.JAPAN	129 T S O				D			155	11/68
04.26/68	49K072	CH NMOJMA	02.02-02.04,1968	E.CHIN-SEA	10 T S O				D			158	10/68
08.12/68	49K323	SH KMOJMA	02.05-02.06,1968	S.E.YAKU	6 T S O				D			169	02/69
04.26/68	49K070	KO HMOJMA	02.07-02.26,1968	E.JAPAN	16 T S O				D			156	01/69
04.26/68	49K071	SH KMOJMA	02.17-02.28,1968	S.JAPAN	7 T S O				D			157	10/68
05.04/68	49K073	SI MWOJMA	02.17-02.24,1968	JAPAN SEA	10 T S O				D			159	01/69
06.06/68	49K068	TA HDMSA	02.19-03.10,1968	S.E.JAPAN	24 T S O				D			154	10/68
04.26/68	49K324	CH NMOJMA	02.24-02.28,1968	S.E.YAKU	7 T S O				D			169	02/69
04.30/69	49K079	KE KU	04.23-05.12,1968	E.CHIN-SEA	16 T S O				D			173	11/69
08.26/68	49K325	CH NMOJMA	04.27-04.28,1968	S.E.YAKU	7 T S O				D			169	02/69
06.02/69	49K080	TO TOKA-U	05.02-05.19,1968	S.E.JAPAN	16 T S O				D			174	11/69
07.19/68	49K077	TA HDMSA	05.14-05.23,1968	S.JAPAN	28 T S O				D			171	01/69
04.25/69	49K078	HK ORIUT	05.15-06.08,1968	E.CHIN-SEA	10 T S O				D			172	12/69
09.01/70	49K074	RY MDJMA	07.16-07.21,1968	S.E.JAPAN	13 T S O				D			174	11/69
06.02/69	49K081	TO TOKA-U	05.22-06.11,1968	S.E.JAPAN	14 T S O				D			174	11/69
06.02/69	49K093	TO TOKA-U	05.25-06.06,1968	S.E.JAPAN	14 T S O				D			178	06/71
06.25/69	49K084	KO HMOJMA	06.27-08.09,1968	E.JAPAN	64 T S O				D			179	01/69
10.07/68	49K085	SH KMOJMA	06.27-07.31,1968	S.JAPAN	13 T S O				D			182	09/69
04.08/69	49K088	SN TUF	07.13-08.01,1968	S.JAPAN	13 T S O				D			184	03/69
11.05/68	49K090	KY SUF	07.16-07.21,1968	E.CHIN-SEA	24 T S O				D			176	03/69
02.02/69	49K082	TA HDMSA	07.19-09.06,1968	CEN-NORPAC	39 T S O				D			195	01/70
07.16/69	49K448	YO SRFL	07.22-08.10,1968	S.JAPAN	8 T C				D			193	01/70
07.16/69	49K446	SU TRFL	07.23-08.30,1968	S.JAPAN	37 T C				D			194	01/70
12.13/68	49K086	CH NMOJMA	08.04-08.05,1968	E.CHIN-SEA	44 T C				D			180	03/69
01.09/69	49K087	SI MWOJMA	08.06-08.10,1968	JAPAN SEA	13 T S O				D			181	03/69
12.06/68	49K083	KA HDMSA	08.08-08.28,1968	S.E.JAPAN	11 T S O				D			177	02/69
04.30/69	49K089	KG KU	08.15-08.26,1968	E.CHIN-SEA	45 T S				D			183	11/69
11.05/68	49K091	KY SUF	08.17-08.24,1968	S.KYUSHU	45 T S				D			185	03/69
01.14/69	49K449	RY MDJMA	08.31-09.02,1968	E.CHIN-SEA	6 T S O				D			186	03/69
09.29/69	49K450	KO HMOJMA	10.07-11.08,1968	E.CHIN-SEA	83 T S O				D			217	11/69
09.29/69	49K451	SH KMOJMA	10.07-11.08,1968	E.CHIN-SEA	65 T S O				D			218	03/70
					51 T S O				D			219	03/70

Date Received Mo./Day/Yr.	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	BTs	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
												Pub. No.	Mo./Yr.
09.29/69	49K453	SI MWOJMA	10.07-11.08,1968	E.CHIN-SEA	64 T S O				D			221	03/70
09.29/69	49K452	CH NMOJMA	10.11-11.08,1968	S.CHIN-SEA	33 T S O				D			220	03/70
03.18/69	49K454	TA HDMSA	10.14-11.05,1968	S.KYUSHU	53 T S O				D			206	11/69
07.14/69	49K096	UM TUF	10.16-11.06,1968	S.CHIN-SEA	22 T S O				D			190	01/70
07.14/69	49K455	SA NSA	10.18-10.30,1968	S.KYUSHU	7 T S O				D			189	09/69
05.18/69	49K095	NA NU	11.11-12.02,1968	E.CHIN-SEA	27 T S O				D			188	05/69
01.09/69	49K094	ME HDMSA	11.12-12.02,1968	S.JAPAN	6 T				D			174	11/69
06.02/69	49K097	TO TOKA-U	11.14-11.28,1968	S.E.JAPAN	6 T				D			184	05/70
12.04/69	49K104	OS HU	11.21-01.08,1968	W.NORPAC	24 T S O				D			216	05/70
					1124*/	42							
08.26/69	21K006	YM NCOR	05.14-06.18,1968	ADJ-TAIWAN	40 T S O				D			196	01/70
04.04/70	21K007	YM NCOR	09.10-10.29,1968	ADJ-TAIWAN	33 T S O				D			164	03/71
					73*/	2							
08.29/68	24K021	HA FRDA	02.15-03.12,1968	YELLOW SEA	73 T S O				D			162	12/68
08.29/68	24K022	TA FRDA	02.16-03.12,1968	S.KOREA	39 T S O				D			163	12/68
08.29/68	24K020	BA FRDA	02.17-03.12,1968	JAPAN SEA	64 T S O				D			161	12/68
11.25/69	24K023	SR HO	07.22-08.07,1968	S.KOREA	59 T S O				D			197	05/70
01.13/69	24K026	JI FRDA	07.29-08.15,1968	S.KOREA	52 T S O				D			200	05/69
01.13/69	24K024	BA FRDA	08.01-08.22,1968	JAPAN SEA	53 T S O				D			198	07/69
01.13/69	24K025	HA FRDA	08.01-08.13,1968	YELLOW SEA	72 T S O				D			199	05/69
03.03/69	24K027	SR HO	10.12-11.08,1968	S.KOREA	54 T S O				D			201	05/70
					466*/	8							
01.14/69	66K001	RE PFC	04.30-07.19,1968	N.E-PHIL.	95 T S O				D			202	11/69
					95*/	1							
10.03/68	74K009	CM FRS	01.06-01.14,1968	S.CHIN-SEA	48 T S O				D			165	03/69
10.03/68	74K010	CM FRS	05.16-05.23,1968	S.CHIN-SEA	49 T S O				D			203	03/69
02.02/69	74K011	CM FRS	09.18-09.26,1968	S.CHIN-SEA	49 T S O				D			205	09/69
					146*/	3							
01.14/69	86K006	F2 DF	02.01-02.28,1968	S.CHIN-SEA	91 T S O				D			166	07/69
01.14/69	86K007	F2 DF	03.05-03.27,1968	S.CHIN-SEA	88 T S O				D			167	07/69
01.14/69	86K008	F2 DF	04.05-04.21,1968	S.CHIN-SEA	17 T S O				D			204	07/69
01.14/69	86K009	F2 DF	05.05-05.17,1968	S.CHIN-SEA	12 T S O				D			204	07/69
01.14/69	86K010	F2 DF	05.25-05.30,1968	S.CHIN-SEA	2 T S O				D			204	07/69
					210*/	5							
05.21/69	90K019	IS	01.26-03.11,1968	N.W.NORPAC	63 T S O				D			187	12/69
04.30/69	90K018	OR	07.17-05.22,1968	N.W.NORPAC	62 T S O				D			175	03/70
04.30/69	90K020	OR	07.21-08.20,1968	N.W.NORPAC	63 T S O				D			191	12/69
08.26/69	90K021	SH	09.17-10.08,1968	N.W.NORPAC	71 T S O				D			192	09/70
11.24/69	90K022	OR	10.31-12.08,1968	N.W.NORPAC	63 T S O				D			208	09/70
05.07/70	90K024	NE	10.28-01.14,1968	N.W.NORPAC	102 T S O				D			209	12/70
					424*/	6							
					2538*/	67							
10.08/69	49K099	RY MDJMA	01.14-03.24,1969	W.NORPAC	139 T S O				D			211	03/70
04.10/69	49K326	CH NMOJMA	01.15-01.16,1969	S.E.YAKU	7 T S O				D			212	09/70

Date Received No./Day/Yr.	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	Bfts	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
												Pub. No.	No./Yr.
01.23/70	49K100	KO HMOJMA	02.03-02.22,1969	E. JAPAN	16 T S O P				D			224	09/70
04.10/69	49K101	SH KNOJMA	02.06-02.08,1969	S. JAPAN	8 T S O P		117	100	D			213	09/69
04.10/69	49K102	CH NMOJMA	02.06-02.07,1969	S. CHIN. SEA	7 T S O P				D			214	09/69
06.30/69	49K103	SI MNOJMA	02.08-02.26,1969	JAPAN SEA	10 T S O P				D			215	12/69
05.21/69	49K098	TA HDMSA	02.18-02.13,1969	S. E. JAPAN	28 T S O P	SI PH	66	87	D			210	09/69
10.19/70	49K109	KE KU	04.23-02.12,1969	E. CHIN. SEA	15 T S				D			247	06/71
12.08/69	49K106	RY MDJMA	04.26-02.30,1969	N. W. NORPAC	45 T S O P	NH N2 N3 SI			D			223	05/70
12.10/70	49K107	SI MNOJMA	05.07-06.14,1969	S. W. JAPAN	7 T S O				D			242	06/71
08.01/69	49K105	TA HDMSA	05.09-02.30,1969	S. JAPAN	29 T S O P	SI PH	58	96	D			222	01/70
11.26/70	49K108	TE SUF	06.13-08.30,1969	JAPAN SEA	42 T S O P		30	15	D			243	06/71
01.23/70	49K110	KO HMOJMA	07.12-08.20,1969	E. JAPAN	18 T S O P	N3 SI	17	16	D			246	09/70
11.27/69	49K111	SH MNOJMA	07.18-08.14,1969	S. JAPAN	9 T S O P				D			228	05/70
09.08/69	49K114	CH NNOJMA	07.24-07.31,1969	W. JAPAN	24 T S O				D			231	01/70
10.27/69	49K115	SI MNOJMA	08.07-08.10,1969	JAPAN SEA	37 T S O P	SI PH	71	123	D			232	01/70
11.10/69	49K112	TA HDMSA	08.11-09.02,1969	S. E. JAPAN	37 T S O P		59		D			229	05/70
06.29/70	49K461	TN ORJUT	09.16-09.24,1969	E. JAPAN	27 T S O				D			255	09/70
03.02/70	49K462	TA HDMSA	10.02-10.19,1969	S. JAPAN	40 T S	PH			D			261	02/72
04.15/71	49K117	KY SUF	10.25-01.24,1969	S. E. PACIF.	21 T S	PH			D			262	09/70
03.23/70	49K119	OS HU	11.01-01.15,1969	S. CHIN. SEA	16 T S O P	SI PH	83	90	D			257	12/70
03.11/70	49K116	KA HDMSA	11.07-11.29,1969	S. JAPAN	6 T S		10		D			253	03/74
08.21/73	49K169	UM TUF	11.16-11.20,1969	S. CHIN. SEA	563*/	22	511*	527*			F		
04.04/70	21K008	YM NCOR	04.12-02.12,1969	ADJ. TAIWAN	38 T S O P	N2 N3 SI PH			D			244	03/71
07.22/69	24K029	HA FRDA	02.03-02.14,1969	YELLOW SEA	61 T S O P	N2			D			234	01/70
07.22/69	24K028	BA FRDA	02.08-02.13,1969	JAPAN SEA	52 T S O P	SI PH			D			233	01/70
07.22/69	24K030	JI FRDA	02.08-02.28,1969	S. KOREA	64 T S O P	SI PH			D			235	01/70
12.25/69	24K031	SU HO	04.11-02.02,1969	S. KOREA	68 T S O	PH			D			240	05/70
12.25/69	24K035	SR HO	07.23-08.19,1969	S. KOREA	53 T S O P	SI			D			239	05/70
11.25/69	24K034	JI FRDA	08.07-08.29,1969	S. KOREA	53 T S O P	SI			D			250	09/70
11.25/69	24K032	RA FRDA	08.09-09.06,1969	JAPAN SEA	68 T S O P	SI			D			238	05/70
11.25/69	24K033	HA FRDA	08.09-08.21,1969	YELLOW SEA	482*/	8			D				
06.03/70	31K008	HU NAVOCO	06.15-08.22,1969	S. CHIN. SEA	49 T S				D			248	03/71
12.09/69	66K002	RE PFC	01.25-04.01,1969	N. E. PHIL.	101 T S O	PH			D			237	09/70
04.07/70	74K012	CM FRS	01.14-01.23,1969	S. CHIN. SEA	41 T S O	PH			D			225	09/70
04.07/70	74K013	CM FRS	03.28-03.31,1969	S. CHIN. SEA	20 T S P				D			226	09/70
04.07/70	74K014	CM FRS	09.22-09.25,1969	S. CHIN. SEA	20 T S				D			260	09/70
02.23/70	86K012	F2 DF	06.28	S. CHIN. SEA	1 T S O P	PH			D			249	03/71
02.23/70	86K013	F2 DF	07.26	S. CHIN. SEA	1 T S O P	PH			D			249	03/71
02.23/70	86K014	F2 DF	08.13	S. CHIN. SEA	3*/	3			D			249	03/71

Date Received No./Day/Yr.	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	Bfts	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
												Pub. No.	No./Yr.
11.24/69	90K023	OR	01.27-03.06,1969	N. W. NORPAC	62 T S O P	N2						227	12/70
05.07/70	90K025	SI	01.30-03.31,1969	CEN. NORPAC	146 T S O P	AL N2						230	03/71
02.18/71	90K027	KO	01.23-04.01,1969	W. NORPAC	59 T S O P	AL N2						241	09/71
05.07/70	90K026	IS	05.02-06.19,1969	N. W. NORPAC	63 T S O P	SI PH						245	03/71
02.18/71	90K028	IS	07.24-09.03,1969	N. W. NORPAC	62 T S O P	N2						254	09/71
02.18/71	90K029	KO	09.06-09.20,1969	N. W. NORPAC	44 T S O P	AL N2						256	02/72
02.18/71	90K030	IS	10.19-12.05,1969	N. W. NORPAC	61 T S O P	N2						258	02/72
					497*/	7							
					1814*/	46	511*	527*					
03.12/71	49K118	RY MDJMA	01.16-03.02,1970	S. W. NORPAC	83 T S O P	N3 SI			D			263	02/72
02.26/71	49K121	KO HMOJMA	01.19-01.21,1970	W. JAPAN	9 T S O				D			267	12/70
05.26/70	49K124	SI MNOJMA	02.03-03.13,1970	E. JAPAN	40 T S O P	N3			D			274	09/71
05.27/70	49K122	SH KNOJMA	02.12-03.07,1970	S. E. JAPAN	21 T S O P	SI PH		108	D			268	12/70
02.08/71	49K129	KE KU	02.21-03.11,1970	S. JAPAN	3 T S O P	SI		43	D			266	12/70
09.01/70	49K125	TA HDMSA	04.25-05.09,1970	S. E. TAIWAN	16 T S				D			273	08/72
06.15/71	49K132	KO HMOJMA	05.08-05.25,1970	S. JAPAN	27 T S O P	SI PH	99	131	D			269	03/71
12.11/70	49K127	SH KNOJMA	07.03-08.11,1970	E. JAPAN	42 T S O P	N2 N3 SI	107	107	D			285	08/72
06.22/71	49K134	CH NMOJMA	07.10-07.30,1970	S. E. JAPAN	34 T S O P	SI PH	128	91	D			278	06/71
06.22/71	49K135	SI MNOJMA	07.16-08.08,1970	S. JAPAN	10 T S O P	SI	18	18	D			279	06/71
01.21/71	49K128	TA HDMSA	07.16-07.30,1970	E. JAPAN	29 T S O P	N2 N3 SI			D			284	08/72
11.12/71	49K137	IY F5FRL	07.24-08.20,1970	E. CHIN. SEA	43 T S O				D			286	08/72
10.15/73	49K160	OS HU	07.27-08.29,1970	JAPAN SEA	34 T S O		183	159	D			287	08/72
05.17/71	49K130	TA HDMSA	08.12-09.03,1970	S. E. JAPAN	24 T S O P	SI PH	28	75	D			277	07/73
					25 T S O		28		D			291	03/73
					25 T S O P	SI PH	82	87	D			289	09/71
					546*/	18	788*	819*					
06.05/70	24K036	BA FRDA	02.04-02.20,1970	S. KOREA	50 T S O P	SI PH			D			270	12/70
06.05/70	24K037	HA FRDA	02.11-02.24,1970	YELLOW SEA	56 T S O P	SI PH			D			271	12/70
11.18/70	24K039	TA FRDA	02.18-02.26,1970	JAPAN SEA	40 T S O P	SI PH			D			272	12/70
11.18/70	24K040	CH FRDA	08.13-08.26,1970	JAPAN SEA	54 T S O P	SI PH			D			280	09/71
11.18/70	24K041	HA FRDA	08.13-08.26,1970	S. KOREA	43 T S O P	SI PH			D			281	09/71
02.16/71	24K042	SR HO	08.16-08.25,1970	YELLOW SEA	53 T S O P	SI PH			D			282	09/71
					318*/	7			D			290	09/71
11.30/70	74K015	CM FRS	03.03-03.06,1970	S. CHIN. SEA	24 T S				D			275	06/71
11.30/70	74K016	CM FRS	08.13-08.17,1970	S. CHIN. SEA	26 T S				D			283	09/71
					50*/	2							
02.18/71	90K031	OR	01.16-03.29,1970	N. W. NORPAC	61 T S O P	N2						265	02/72
02.18/71	90K032	OR	04.26-06.25,1970	N. W. NORPAC	60 T S O P	N2						276	08/72
09.29/71	90K033	UC TINRO	10.15-12.24,1970	N. W. NORPAC	62 T S O P	N2						292	03/73
					183*/	3							
01.11/72	MSK001	PE DF	08.11-10.05,1970	S. CHIN. SEA	130 T S O				D				
					130*/	1							

Date Received Mo./Day/Yr.	KDC Ref. No.	Ship Code	Agency	Period	Area	No. of Stas.	Serial Data	Bottom Topography	Sediments	Biological	Data Report of CSK	
											Pub. No.	Mo./Yr.
						1227*/	31				788*	819*
01.12/72	49K139 RY MDJMA			01.13-03.03,1971	W.PACIFIC	85 T S O P	N2 N3 SI					293 07/73
01.12/72	49K140 CH NMOJMA			01.28-02.11,1971	E.CHIN.SEA	38 T S O P						298 03/73
05.25/71	49K131 KO HMOJMA			02.03-03.15,1971	E.JAPAN	33 T S O P	SI				87	295 03/73
01.12/72	49K141 SI HMOJMA			02.04-03.12,1971	JAPAN SEA	43 T S O						299 03/73
02.16/72	49K143 KE KU			05.01-05.08,1971	S.E.TAIWAN	5 T S						303 07/73
08.23/71	49K136 KA HDMSA			05.11-05.31,1971	S.JAPAN	29 T S O P	SI PH				101	300 07/73
12.20/71	49K138 IY FSRL			05.16-06.04,1971	S.CHIN.SEA	29 T S O P	SI				127	302 07/73
05.25/72	49K144 KO HMOJMA			07.01-08.11,1971	E.JAPAN	77 T S O P						304 03/74
05.25/72	49K145 SH KMOJMA			07.19-08.17,1971	S.JAPAN	51 T S O P	N2 N3 SI					305 03/74
05.25/72	49K146 CH NMOJMA			07.19-08.13,1971	E.CHIN.SEA	30 T S O P	N2 N3					306 03/74
02.15/72	49K147 SI HMOJMA			07.22-08.28,1971	JAPAN SEA	69 T S O P					127	307 03/74
06.02/72	49K142 TA HDMSA			08.18-09.21,1971	E.JAPAN	12 T S O					156	310 03/74
06.02/72	49K148 KA HDMSA			08.21-09.21,1971	S.JAPAN	21 T S O P	SI PH					311 03/74
07.24/73	49K167 ME HDMSA			11.11-11.23,1971	S.JAPAN	13 T S O P	SI PH				598*	313 03/74
						535*/	14					
01.10/72	24K043 SR HO			09.23-10.23,1971	S.KOREA	33 T S O	PH					314 07/73
						33*/	1					
06.09/71	42K004 SA IMR			02.12-03.05,1971	S.CHIN.SEA	57 T S O P	N3					296 03/73
03.10/72	42K005 JA HO			12.07-12.28,1971	S.CHIN.SEA	87 T S O	N3 SI PH					
						144*/	2					
02.01/72	74K017 CM FRS			02.09-02.12,1971	S.CHIN.SEA	23 T S						294 03/73
02.01/72	74K018 CM FRS			08.24-08.28,1971	S.CHIN.SEA	26 T S						308 07/73
						49*/	2					
02.02/73	86K015 CH HDRTN			07.20-08.17,1971	GULF THAI.	40 T S O						312 03/74
						40*/	1					
02.01/72	90K034 S8 TINRO			04.13-06.13,1971	S.E.JAPAN	112 T S O P	N2 SI PH					297 07/73
04.15/74	90K043 PI			06.09-09.10,1971	W.NORPAC	74 T S O P	AL N2 SI PH					
04.03/72	90K035 OR TINRO			07.30-09.04,1971	N.W.NORPAC	42 T S O P	N2 SI PH					
04.15/74	90K044 PR			09.17-10.18,1971	W.NORPAC	91 T S O P	AL N2 SI PH					
						319*/	4					
01.11/72	M5K002 PE DF			03.24-05.02,1971	S.CHIN.SEA	20 T S O						301 03/73
						20*/	1					
01.10/72	SJK001 CH MFRD			10.12-10.25,1971	S.CHIN.SEA	13 T					142	
01.11/72	SJK002 CH MFRD			11.27-12.06,1971	S.CHIN.SEA	7 T						
01.11/72	SJK003 CH MFRD			12.11-12.22,1971	STR.MALAC.	10 T					142*	
						30*/	3					
10.19/72	49K149 CH NMOJMA			01.27-02.16,1972	E.CHIN.SEA	36 T S O P					740*	560*
02.02/73	49K154 RY MDJMA			01.13-03.02,1972	W.NORPAC	78 T S O P	TP N2 N3					
02.02/73	49K155 KO HMOJMA			02.01-03.14,1972	JAPAN SEA	50 T S O P	TP N2 N3					
						30 T S O P	N3 SI					
						1170*/	28					
02.02/73	49K156 SH KMOJMA			02.22-03.12,1972	S.JAPAN	17 T S O P	N2					
11.07/72	49K150 TA HDMSA			03.08-03.25,1972	S.E.JAPAN	23 T S O P	SI PH					326 03/74
02.02/73	49K151 TA HDMSA			05.13-05.30,1972	S.JAPAN	30 T S O P	SI PH					328 03/74
02.02/73	49K158 RY MDJMA			06.01-06.30,1972	W.NORPAC	86 T S O P	TP N3					331 03/74
03.27/73	49K162 SH KMOJMA			07.10-09.13,1972	E.JAPAN	98 T S O P	TP N2 N3				232	
02.02/73	49K159 SI HMOJMA			07.17-08.13,1972	S.JAPAN	66 T S O P	N2 N3				130	
11.07/72	49K152 TA HDMSA			08.14-08.30,1972	JAPAN SEA	73 T S O P	TP N2 N3					340 03/74
01.19/73	49K153 TA HDMSA			10.25-11.13,1972	S.E.JAPAN	34 T S O P	SI PH					336 03/74
01.10/74	49K175 OS HU			11.14-12.06,1972	S.JAPAN	29 T S O P	SI PH					344 03/74
11.07/74	49K166 CH NMOJMA			07.27-08.14,1972	E.CHIN.SEA	43 T S O P	TP N2 N3 NH				363*	312*
						719*/	15					
04.09/73	24K044 SR HO			05.03-05.05,1972	S.KOREA	20 T S O	PH					332 03/74
04.09/73	24K045 SR HO			05.28-05.30,1972	S.KOREA	20 T S O	PH					333 03/74
04.09/73	24K046 SR HO			08.15-08.16,1972	S.KOREA	20 T S O	PH					341 03/74
04.09/73	24K047 SR HO			09.09-09.11,1972	S.KOREA	18 T S O	PH					342 03/74
						78*/	4					
08.20/73	86K016 KL HDRTN			01.22-05.05,1972	ANCAMA.SEA	137 T S O						
						137*/	1					
05.30/73	90K041 PI			12.07-02.01,1972	W.NORPAC	160 T S O P	AL N2 SI PH					
03.01/73	90K038 VO			01.16-02.12,1972	N.W.NORPAC	43 T S O P	AL N2 SI PH					
04.15/74	90K045 SH			01.31-04.23,1972	PACIFIC	161 T S O P	AL N2 SI PH					
08.08/72	90K036 PR			02.20-02.27,1972	E.JAPAN	40 T S O P	AL N2					
03.01/73	90K037 OR		TINRO	04.11-06.24,1972	W.NORPAC	99 T S O P	SI PH					
03.01/73	90K039 VO			05.15-06.09,1972	N.W.NORPAC	121 T S O P	AL N2 SI PH					
07.26/73	90K040 SH			07.13-07.21,1972	E.JAPAN	52 T S O P	AL N2 SI PH					
05.23/74	90K042 OR			07.20-09.21,1972	W.NORPAC	108 T S O P	AL N2 SI PH					
07.05/74	90K046 VO			09.22-09.30,1972	E.JAPAN	22 T S O P	AL N2 SI PH					
						53 T S O	PH					
						859*/	10					
07.05/74	42K006 SA IMR			07.22-08.02,1972	S.CHIN.SEA	46 T S O P	N3 SI					
						46*/	1					
02.16/72	SJK004 CH MFRD			01.19-01.23,1972	S.CHIN.SEA	6 T S						
03.10/72	SJK005 CH MFRD			02.04-02.10,1972	S.CHIN.SEA	7 T S						
06.26/72	SJK006 CH MFRD			04.20-05.12,1972	S.CHIN.SEA	56 T S						
07.19/72	SJK007 CH MFRD			06.17-06.25,1972	S.CHIN.SEA	26 T S						
11.09/72	SJK008 CH MFRD			09.16-09.27,1972	S.CHIN.SEA	25 T S						
11.09/72	SJK009 CH MFRD			10.07-10.12,1972	S.CHIN.SEA	3 T S						
11.14/72	SJK010 CH MFRD			10.24-10.29,1972	S.CHIN.SEA	3 T S						
02.20/73	SJK011 CH MFRD			11.15-11.25,1972	S.CHIN.SEA	10 T S						
02.22/73	SJK012 CH MFRD			11.29-12.15,1972	S.CHIN.SEA	9 T S						
						145*/	9					
						1984*/	40					
04.13/73	49K163 RY MDJMA			01.14-02.28,1973	W.NORPAC	78 T S O P	TP N2 N3 NH PH					
03.20/73	49K161 CH NMOJMA			01.26-02.11,1973	E.CHIN.SEA	29 T S O P	TP N2 N3					24
						51						
						363*						312*

Date Received Mo./Day/Yr.	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	BTs	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK	
												Pub. No.	Mo./Yr.
08*21/73	49K170	SH KMOJMA	02.03-02.13,1973	S. JAPAN	44	T S O P N2			D				
10*15/73	49K174	KO HMOJMA	02.05-02.17,1973	E. JAPAN	21	T S O P TP N2 N3	51	45					C H
06*04/73	49K165	SI MHOJMA	02.07-03.23,1973	JAPAN SEA	52	T S O P TP N2 N3 NH	128	136	D				
07*24/73	49K168	YY HDMSA	03.06-03.18,1973	S. E. JAPAN	32	T S O P			D				
09*05/73	49K171	TA HDMSA	05.17-05.31,1973	S. JAPAN	28	T S O P	98	139	D				
09*17/73	49K172	RY MDJMA	06.05-08.03,1973	W. NORPAC	83	T S O P TP N2 N3 NH PH			D				
10*03/73	49K173	CH NHOJMA	07.11-08.10,1973	E. CHIN. SEA	65	T S O P TP N2 N3 NH PH	127	72	D				C H
05*13/74	49K178	SH KMOJMA	07.12-08.07,1973	S. JAPAN	65	T S O P TP N2 N3 NH PH	120	88	D				C H
04*15/74	49K177	KO HMOJMA	07.18-08.17,1973	E. JAPAN	51	T S O P	131	135	D				C H
01*10/74	49K176	SI MHOJMA	07.21-08.14,1973	JAPAN SEA	61	T S O P	122	100	D				C H
08*09/74	49K182	NA NU	07.30-10.24,1973	S. CHIN. SEA	7	T S	828*	739*					
					616*/	13							
08*21/73	24K048	SR HO	04.23-05.06,1973	S. CHIN. SEA	35	T S O			D				
01*10/74	24K049	SR HO	08.23-09.09,1973	S. KOREA	35	T S O			D				
					70*/	2							
05*23/74	90K047	OK	02.08-03.28,1973	W. NORPAC	60	T S O P AL N2			SI PH				
07*05/74	90K049	VO	12.07-12.12,1973	PACIFIC	39	T S O			PH				
					99*/	2							
07*05/74	42K007	SA IMR	06.29-07.17,1973	S. CHIN. SEA	67	T S O P			N3 SI				
					67*/	1							
03*01/73	S1K013	CH MFRD	01.16-01.31,1973	ANCAMA. SEA	13	T			D				F
04*09/73	S1K014	CH MFRD	02.20-03.04,1973	GULF THAI.	9	T			D				F
04*09/73	S1K015	CH MFRD	03.16-06.28,1973	S. CHIN. SEA	3	T			D				F
08*06/73	S1K016	CH MFRD	04.10-04.30,1973	S. CHIN. SEA	16	T			D				F
08*06/73	S1K017	CH MFRD	05.14-05.26,1973	S. CHIN. SEA	13	T			D				F
01*10/74	S1K019	CH MFRD	06.06-07.25,1973	S. CHIN. SEA	41	T S							F
09*17/73	S1K018	CH MFRD	08.15-09.01,1973	S. CHIN. SEA	10	T							F
01*10/74	S1K020	CH MFRD	09.28-10.11,1973	S. CHIN. SEA	16	T							F
01*10/74	S1K021	CH MFRD	11.16-12.11,1973	S. CHIN. SEA	40	T							F
					161*/	9							
					1013*/	27							
06*07/74	49K180	RY MDJMA	01.14-03.03,1974	E. CHIN. SEA	51	T S O P TP			D				C H
05*13/74	49K179	CH NHOJMA	01.28-02.28,1974	E. CHIN. SEA	55	T S O P TP N2 N3 NH PH	90	68	D				C H
06*12/74	49K181	SI MHOJMA	02.02-03.09,1974	JAPAN SEA	36	T S O P TP N2 N3 NH PH	131	131	D				C H
09*11/74	49K183	RY MDJMA	06.07-07.27,1974	W. PACIFIC	76	T S O P TP N2 N3 NH PH			D				C H
09*18/74	49K184	CH NHOJMA	07.21-08.14,1974	E. CHIN. SEA	43	T S O P TP N2 N3 NH PH			D				C H
10*14/74	49K185	TA HDMSA	10.30-11.28,1974	E. CHIN. SEA	40	T S O P			D				C H
11*10/74	49K186	KO HMOJMA	02.05-03.02,1974	E. JAPAN	26	T S O P TP N2 N3 NH PH			D				C H
11*10/74	49K187	KF MDJMA	01.21-02.27,1974	S. JAPAN	37	T S O P TP N2 N3 NH PH			D				C H
12*20/74	49K188	TA HDMSA	05.10-05.28,1974	S. JAPAN	29	T S O P			D				C H
12*20/74	49K189	KA HDMSA	08.09-08.30,1974	S. JAPAN	22	T S O P			D				C H
					415*/	10			221*				199*
12*20/74	24K050	SR HO	05.15-06.27,1974	S. KOREA	20	T S O			D				
12*20/74	24K051	SR HO	08.15-09.28,1974	S. KOREA	19	T S O			D				
					39*/	2							

Date Received Mo./Day/Yr.	KDC Ref. No.	Agency	Period	Area	No. of Stas.	Serial Data	BTs	Currents	Bottom Topography	Sediments	Biological	Data Report of CSK		
												Pub. No.	Mo./Yr.	
02*07/74	S1K022	CH MFRD	01.05-01.15,1974	ANCAMA. SEA	23	T								
					23*/	1								
					417*/	13							221*	199*
					16103#	422#							BTs & Currents--	974# 10228#
					Total No. of Serial Stas./Cruises	----								

CC	COUNTRY	SC	SHIP	AGENCY
49	JAPAN	CH	Chofu Maru	NMO, JMA
		HK	Hakuho Maru	ORI, UT
		IY	Kaiyo Maru	F. A.
		KA	Kaiyo	HD, MSA
		KE	Keiten Maru	KU
		KF	Keifu Maru	MD, JMA
		KG	Kagoshima Maru	KU
		KO	Kofu Maru	HMO, JMA
		KY	Koyo Maru	SUF
		ME	Meiyo	HD, MSA
		NA	Nagasaki Maru	NU
		OS	Oshoro Maru	HU
		RY	Ryofu Maru	MD, JMA
		SA	Satsuma	MSA
		SH	Shumpu Maru	KMO, JMA
		SI	Seifu Maru	MMO, JMA
		SN	Shinyo Maru	TUF
		SU	Shunyo Maru	Nansei PFRL
		SY	Soyo Maru	Tokai RFRL
		TA	Takuyo	HD, MSA
		TE	Tenyo Maru	SUF
		TN	Tansei Maru	ORI, UT
		TO	Tokai University II	Tokai Univ.
		UM	Umitaka Maru	TUF
		YO	Yoko Maru	Seikai PFRL
		YY	Shoyo	HD, MSA
21	CHINA	YM	Yang Ming	
24	KOREA	BA	Baek Du San	FRDA
		BK	Buk Ak San	FRDA
		BU	Buk Han San	FRDA
		CH	Chun Ma San	FRDA
		HA	Han Ra San	FRDA
		JI	Ji Ri San	FRDA
		KE	Kerim	FRDA
		SR	Suro No. 3	HO
		SU	Suro No. 1	HO
		TA	Tae Baek San	FRDA
31	U.S.A.	AR	Argo	SIO
		AT	Atlantis II	WHOI
		BS	Bering Strait	CG
		CH	Chautauqua	CG
		HU	Hunt	NAVOCEANO
		KE	George B. Kelez	BCF
		MA	Marysville	CG
42	INDONESIA	BU	Burudjulasa	NHO
		JA	Jalanidhi	NHO
		SA	Samudera	IMR
66	PHILIPPINES	RE	Researcher I	PFC
74	U.K. (HONG KONG)	CM	Cape St. Mary	FRS
86	THAILAND	CH	Chanthara	HD, RTN
		F2	Fishery Research No. 2	DF
		KL	Kledkeo	HD, RTN
		O1	Oceanographic Vessel No. 1	HD, RTN
90	U.S.S.R.	GR	Uliana Gromova	
		IS	Iskatel	
		KO	A. Korolev	
		NE	G. Nevelskoy	
		OK	Okean	
		OR	Orlick	
		PI	Priboy	
		PR	Priliv	
		S8	SRTM 8-459	
		SH	U.M. Schokalsky	
		SI	A. Shirshov	
		UC	Ucheny	
		VI	Vitjaz	
		VL	Volna	
		VO	A.I. Voeikov	
		ZH	Zhyemchug	
MS	MALAYSIA	PE	Penyelidek I	DF
SI	SINGAPORE	CH	Changi	MFRD

Line 1. --No. of Stations/Cruises on hand as of 31 Dec., 1973;
 Line 2. --No. of Stations/Cruises received from 1 Jan. to 31 Dec., 1974;
 Line 3. --No. of Stations/Cruises on hand as of 31 Dec., 1974.

V. NUMBER OF SERIAL OCEANOGRAPHIC STATIONS OF CSK

NATION	Years Data were observed											TOTALS	
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974			
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	650/13	432/ 9	67/ 1	67/ 1	238/ 5	
	2. 482/23	642/35	794/49	1124/42	563/22	546/18	535/14	69/ 2	184/ 4	46/ 1	46/ 1	113/ 2	
	3. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	719/15	616/13	35/ 1	35/ 1	351/ 7	
49. Japan	1. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	78/ 4	35/ 1	39/ 2	39/ 2	5,768/225	
	2. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	78/ 4	35/ 1	39/ 2	39/ 2	668/ 16	
	3. 266/ 5	315/ 6	431/ 8	466/ 8	482/ 8	318/ 7	33/ 1	78/ 4	70/ 2	39/ 2	39/ 2	6,436/241	
24. Korea	1. 130/ 1					130/ 1	20/ 1					2,424/ 48	
	2. 130/ 1					130/ 1	20/ 1					74/ 3	
	3. 130/ 1					130/ 1	20/ 1					2,498/ 51	
MS. Malaysia	1. 95/ 1				101/ 1							150/ 2	
	2. 95/ 1				101/ 1							150/ 2	
	3. 95/ 1				101/ 1							196/ 2	
66. Philippines	1. 368/ 6	210/ 5	3/ 3			30/ 3	145/ 9	64/ 6				239/ 18	
	2. 368/ 6	210/ 5	3/ 3			30/ 3	145/ 9	97/ 3				120/ 4	
	3. 368/ 6	210/ 5	3/ 3			30/ 3	145/ 9	161/ 9				359/ 22	
SI. Singapore	1. 199/ 3	967/ 7	448/ 7	424/ 6	497/ 7	183/ 3	154/ 2	623/ 7				758/ 16	
	2. 199/ 3	967/ 7	448/ 7	424/ 6	497/ 7	183/ 3	165/ 2	236/ 3				3,495/ 42	
	3. 27/ 1	142/ 4	102/ 2	146/ 3	81/ 3	50/ 2	319/ 4	859/10				500/ 7	
86. Thailand	1. 106/ 1	310/ 4	8/ 1			50/ 2	49/ 2					3,995/ 49	
	2. 106/ 1	310/ 4	8/ 1			50/ 2	49/ 2					597/ 17	
	3. 106/ 1	310/ 4	8/ 1			50/ 2	49/ 2					597/ 17	
90. U.S.S.R.	1. 106/ 1	310/ 4	8/ 1			50/ 2	49/ 2					473/ 7	
	2. 106/ 1	310/ 4	8/ 1			50/ 2	49/ 2					473/ 7	
	3. 106/ 1	310/ 4	8/ 1			50/ 2	49/ 2					473/ 7	
74. U.K. (Hong Kong)	1. 1,118/34	2,452/58	2,310/78	2,538/67	1,814/46	1,227/31	1,170/28	1,984/40	1,013/27	477/13		16,103/422	
	2. 1,118/34	2,452/58	2,310/78	2,538/67	1,814/46	1,227/31	1,170/28	1,984/40	1,013/27	477/13		16,103/422	
	3. 1,118/34	2,452/58	2,310/78	2,538/67	1,814/46	1,227/31	1,170/28	1,984/40	1,013/27	477/13		16,103/422	

Catalogue of Data Received by KDC(JODC), 1 July - 31 December 1974

Date Received Mo. Day/Yr. Ref. No.	KDC	Shp Code*	Agency	Period	Area	No. of Stas.	Serial Data	DTs	Currents	Bottom Topography	Biological	
<u>JAPAN</u>												
08.09/74	49K182	NA	NMOJMA	07.30-10.24,1973	S. China Sea & E. of Indian Ocean	7	T S					
09.11/74	49K183	RY	MDJMA	06.07-07.27,1974	W. of Pacific Ocean	76	T S O P TP N2 N3 NH PH COD			D		
09.18/74	49K184	CH	NMOJMA	07.21-08.14,1974	E. China Sea	43	T S O P TP N2 N3 NH PH COD	91	54	D	Phaeo. Chl.a	
10.14/74	49K185	TA	HDMSA	10.30-11.28,1974	E. China Sea & S. of Japan	40	T S O P			D		
11.07/74	49K166	CH	NMOJMA	07.27-08.14,1974	E. China Sea	43	T S O P TP N2 N3 NH			D		
11.10/74	49K186	KO	HMOJMA	02.05-03.02,1974	E. of Japan	26	T S O P TP N2 N3 NH PH COD	78	70	D	Phaeo. Chl.a	
11.10/74	49K187	KF	MDJMA	01.21-02.27,1974	S. of Japan	37	T S O P TP N2 N3		58	2	D	Phaeo. Chl.a
12.20/74	49K188	TA	HDMSA	05.10-05.28,1974	S. of Japan	29	T S O P		87	104	D	
12.20/74	49K189	KA	HDMSA	08.09-08.30,1974	S. of Japan	22	T S O P		79	111	D	
<u>USSR</u>												
07.05/74	90K048	PR		09.04-10.15,1972	W. of Norpac	53	T S O					
07.05/74	90K049	VL		12.07-12.12,1973	Pacific Ocean	39	T S O					
<u>INDONESIA</u>												
07.05/74	42K006	SA	IMR	07.22-08.02,1972	S. China Sea	46	T S O P	N3 Si		P		
07.05/74	42K007	SA	IMR	06.29-07.17,1973	S. China Sea	67	T S O P	N3 Si		P		
<u>KOREA</u>												
12.20/74	24K050	SR	H0	05.15-06.29,1974	S. of Korea	20	T S O			D		
12.20/74	24K051	SR	H0	08.15-09.28,1974	S. of Korea	19	T S O			D		
Ship Code* NA: Nagasaki Maru RY: Ryofu Maru CH: Chofu Maru TA: Takuyo SI: Seifu Maru KF: Keifu Maru KA: Kaiyo												
JAPAN PR: Priliv VL: Volna USSR SA: Samudera INDONESIA SR: Suro No. 3 KOREA												