Zooplankton Data Collected with BIOMASS Programme at Syowa Station in 1982 by JARE-23 II. "NIPR-I" Samples : Stn. 3

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As part of the International BIOMASS (Biological Investigations of Marine Antarctic Systems and Stocks) programme, the Japanese Antarctic Research Expedition (JARE) conducted a three-year programme of marine biological investigations in the fast ice area near Syowa Station between 1982 (JARE-23) and 1984 (JARE-25). Zooplankton was sampled at six stations using three kinds of nets (i.e. Norpac net, Parasol net and "NIPR-I " sampler). Details of the sampling methods and the sampling frequencies are published in JARE Data Reports, No. 98 (Fukuchi *et al.*, 1985).

This report summarizes the data on zooplankton collected with "NIPR-I" sampler at Stn. 3 during the JARE-23 overwintering programme in 1982 (Fig. 1). A total of 272 samples were obtained with modified "NIPR-I" sampler from 8 layers between 0 and 40 m depths during March through December in 1982 (Fukuchi *et al.*, 1985). The sampling system of the modified "NIPR-I" sampler is shown in Fig. 2. The results of the primary sorting are presented here.

Zooplankton were sorted into 29 categories as shown in the attached tables. Copepoda (Category 9) were comprised of Calanoida, Cyclopoida and Harpacticoida. Euphausiacea were counted separately for the nauplius stages (Category 24) and the other stages (Category 15). Eggs (Category 23) include those of crustacean and benthic invertebrates, etc. Planktonic larval forms (Category 27) includes benthic invertebrate larvae other than Polychaeta

(Category 6). Sample processing and treatment of the data were the same as described in preceding reports (Tanimura *et al.*, 1989, 1990). Specimens for each category were sorted into individual vials and preserved with formalin (3% in seawater). These are retained at the National Institute of Polar Research, Tokyo.

We hope that this publication and the curated specimens will be of use other scientists. Further details about data and specimens can be obtained from:

Department of Biological Data
Division of Data Collection and Processing
National Institute of Polar Research
9-10, Kaga 1-chome, Itabashi-ku, Tokyo 173

References

Fukuchi, M., Tanimura, A., Ohtsuka, H. and Hoshiai, T. (1985): Marine biological data of BIOMASS programme at Syowa Station in the 1982 winter (JARE-23). JARE Data Rep., 98 (Mar. Biol. 6), 113p.

Tanimura, A., Fukuchi, M., Ohtsuka, H. and Hoshiai, T. (1989): Zooplankton data collected with BIOMASS programme at Syowa Station in 1982 by JARE-23. I. Norpac net samples. JARE Data Rep., 147 (Mar. Biol. 15), 162p.

Tanimura, A., Fukuchi, M., Ohtsuka, H. and Hoshiai, T. (1990): Zooplankton data collected with BIOMASS programme at Syowa Station in 1982 by JARE-23. II. "NIPR-I" samples: Stn. 1. JARE Data Rep., 158 (Mar. Biol. 17), 75p.

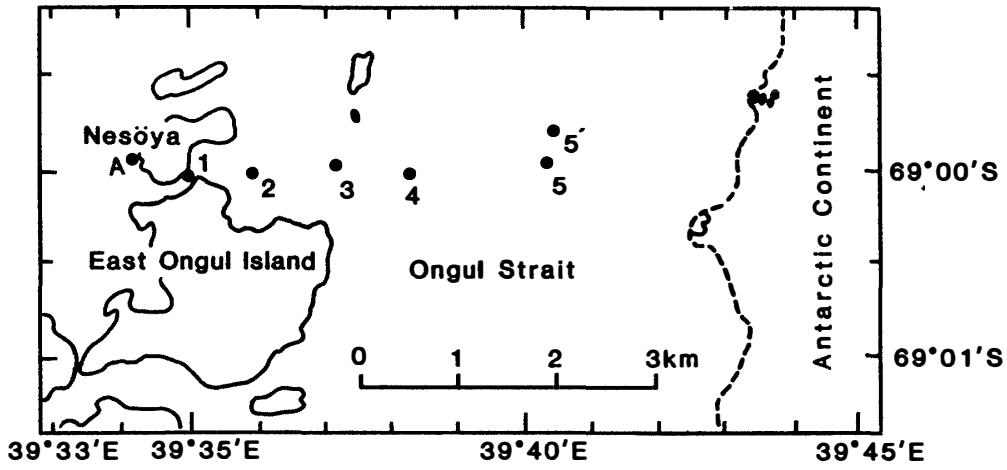

Fig. 1. Sampling locations for routine observations during JARE-23. The results of the primary sorting of the zooplankton collected at Stn. 3 from Ongul Strait are reported here.

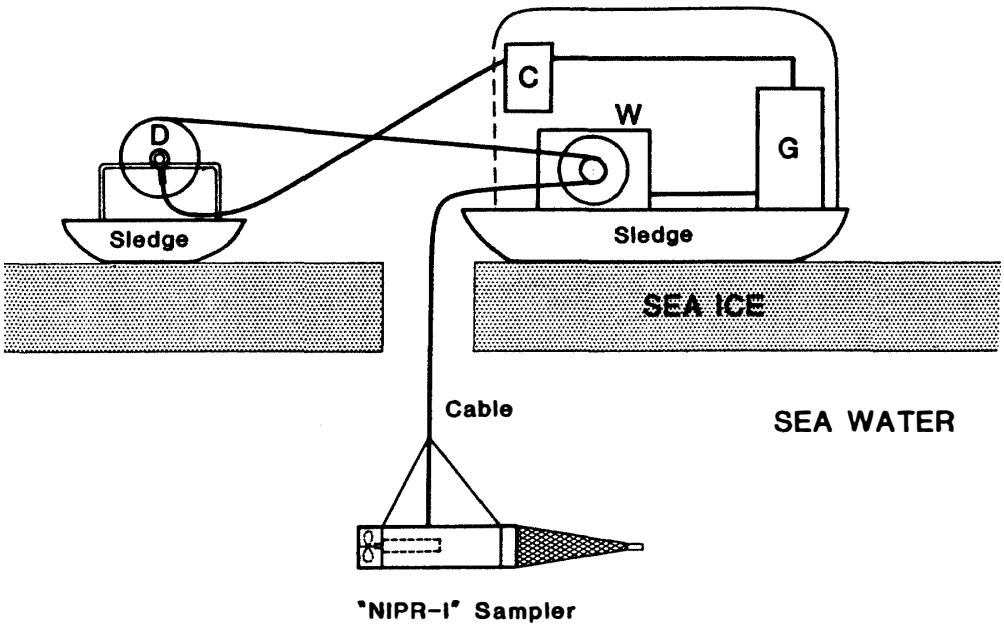

Fig. 2. Modified "NIPR-I" sampler for zooplankton collection under the sea ice. C: Control box for the sampler; G: Electric generator to drive winch and sampler; W: Winch; D: Cable drum

ZOOPLANKTON RECORD SHEET

Series No.NIPR-073

1. Sample No.·····2303001
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 11:58-12:01
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2893
16. Volume of water filtered(m3) 4.6
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1118

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	19					19	4
7. Cladocera							0	0
8. Ostracoda	I-8	4					4	1
9. Calanoida Copepoda	I-9-1	15					15	3
Cyclopoida Copepoda			II-9-2	347			3470	754
Harpacticoida Copepoda	I-9-3	102					102	22
10. Copepoda, nauplius			II-10	134			1340	291
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	115					115	25
22. Thaliacea							0	0
23. Egg	I-23	39					39	8
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	27					27	6
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		333		481		0	5143	1118

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-074

1. Sample No.·····2303002
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 12:04-12:07
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2698
16. Volume of water filtered(m3) 4.29
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····155

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	2					2	+
Cyclopoida Copepoda	I-9-2	354					354	83
Harpacticoida Copepoda	I-9-3	57					57	13
10. Copepoda, nauplius	I-10	27					27	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	163					163	38
22. Thaliacea							0	0
23. Egg	I-23	42					42	10
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		665		0		0	665	155

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-075

1. Sample No.·····2303003
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 12:11-12:14
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3089
16. Volume of water filtered(m3) 4.91
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····913

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	71					71	14
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	18					18	4
Cyclopoida Copepoda			II-9-2	333			3330	678
Harpacticoida Copepoda	I-9-3	38					38	8
10. Copepoda, nauplius			II-10	53			530	108
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	6					6	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	309					309	63
22. Thaliacea							0	0
23. Egg	I-23	113					113	23
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	26					26	5
28. Unidentified forms	I-28	38					38	8
29. Radiolaria	I-29	2					2	+
Total		622		386		0	4482	913

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-076

1. Sample No.·····2303004
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 12:18-12:21
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2911
16. Volume of water filtered(m3) 4.63
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····629

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae	I-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	51					51	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	17					17	4
Cyclopoida Copepoda			II-9-2	1188			2376	513
Harpacticoida Copepoda	I-9-3	32					32	7
10. Copepoda, nauplius			II-10	55			110	24
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	164					164	35
22. Thaliacea							0	0
23. Egg	I-23	130					130	28
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	2
28. Unidentified forms	I-28	17					17	4
29. Radiolaria							0	0
Total		423		1243		0	2909	629

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-077

1. Sample No.·····2303005
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 12:25-12:28
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3180
16. Volume of water filtered(m3) 5.05
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····632

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	86					86	17
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	21					21	4
Cyclopoida Copepoda			II-9-2	751			2503	496
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	54			180	36
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	201					201	40
22. Thaliacea							0	0
23. Egg	I-23	126					126	25
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	44					44	9
29. Radiolaria							0	0
Total		507		805		0	3190	632

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-078

1. Sample No.·····2303008
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 12:32-12:35
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2829
16. Volume of water filtered(m3) 4.5
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····355

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	29					29	6
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	49					49	11
Cyclopoida Copepoda	I-9-2	1129					1129	251
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius	I-10	31					31	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	121					121	27
22. Thaliacea							0	0
23. Egg	I-23	193					193	43
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	2
28. Unidentified forms	I-28	27					27	6
29. Radiolaria							0	0
Total		1597		0		0	1597	355

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-079

1. Sample No.·····2303007
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 12:40-12:43
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2902
16. Volume of water filtered(m3) 4.62
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····72

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	36					36	8
Cyclopoida Copepoda	Ⅰ-9-2	192					192	42
Harpacticoida Copepoda	Ⅰ-9-3	2					2	+
10. Copepoda, nauplius	Ⅰ-10	7					7	2
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	15					15	3
22. Thaliacea							0	0
23. Egg	Ⅰ-23	53					53	11
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	4					4	1
28. Unidentified forms	Ⅰ-28	13					13	3
29. Radiolaria							0	0
Total		331		0		0	331	72

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-080

1. Sample No. ····· 2303008
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Mar. 1 '82, 12:53-12:56
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 45
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 2845
16. Volume of water filtered(m3) 4.53
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 37

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	15					15	3
Cyclopoida Copepoda	Ⅰ-9-2	102					102	23
Harpacticoida Copepoda	Ⅰ-9-3	7					7	2
10. Copepoda, nauplius	Ⅰ-10	1					1	+
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	1					1	+
22. Thaliacea							0	0
23. Egg	Ⅰ-23	38					38	8
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		168		0		0	168	37

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-081

1. Sample No.·····2303009
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 17:20-17:23
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2375
16. Volume of water filtered(m3) 4.74
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····850

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	107					107	23
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	3					3	1
Cyclopoida Copepoda			II-9-2	251			2510	530
Harpacticoida Copepoda	I-9-3	67					67	14
10. Copepoda, nauplius			II-10	127			1270	268
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	34					34	7
22. Thaliacea							0	0
23. Egg	I-23	14					14	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	15					15	3
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		246		378		0	4026	850

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-082

1. Sample No.·····2303010
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 17:25-17:28
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3018
16. Volume of water filtered(m3) 4.79
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····853

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	52					52	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	5					5	1
Cyclopoida Copepoda			Ⅱ-9-2	304			3040	635
Harpacticoida Copepoda	Ⅰ-9-3	33					33	7
10. Copepoda, nauplius			Ⅱ-10	87			870	182
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	52					52	11
22. Thaliacea							0	0
23. Egg	Ⅰ-23	21					21	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	9					9	2
28. Unidentified forms	Ⅰ-28	2					2	+
29. Radiolaria							0	0
Total		176		391		0	4086	853

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-083

1. Sample No.·····2303011
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 17:30-17:33
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2929
16. Volume of water filtered(m3) 4.66
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····730

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora	I-2	2					2	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	46					46	10
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	5					5	1
Cyclopoida Copepoda			II-9-2	219			2190	470
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	102			1020	219
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	61					61	13
22. Thaliacea							0	0
23. Egg	I-23	47					47	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	10					10	2
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		190		321		0	3400	730

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-084

1. Sample No.·····2303012
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 17:37-17:40
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3103
16. Volume of water filtered(m3) 4.93
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····918

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	145					145	29
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	15					15	3
Cyclopoida Copepoda			II-9-2	310			3100	629
Harpacticoida Copepoda	I-9-3	8					8	2
10. Copepoda, nauplius			II-10	96			960	195
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	6					6	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	107					107	22
22. Thaliacea							0	0
23. Egg	I-23	164					164	33
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	12					12	2
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		465		406		0	4525	918

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-085

1. Sample No.·····2303013
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 17:45-17:48
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2873
16. Volume of water filtered(m3) 4.57
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····542

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	126					126	28
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	13					13	3
Cyclopoida Copepoda			II-9-2	357			1785	391
Harpacticoida Copepoda	I-9-3	16					16	4
10. Copepoda, nauplius			II-10	57			285	62
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	158					158	35
22. Thaliacea							0	0
23. Egg	I-23	62					62	14
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	20					20	4
29. Radiolaria							0	0
Total		402		414		0	2472	542

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-086

1. Sample No.·····2303014
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 17:53-17:56
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2939
16. Volume of water filtered(m3) 4.67
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····599

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	98					98	21
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	41					41	9
Cyclopoida Copepoda			II-9-2	667			2223	476
Harpacticoida Copepoda	I-9-3	8					8	2
10. Copepoda, nauplius			II-10	61			203	43
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	128					128	27
22. Thaliacea							0	0
23. Egg	I-23	66					66	14
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	16					16	3
28. Unidentified forms	I-28	11					11	2
29. Radiolaria							0	0
Total		370		728		0	2796	599

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-087

1. Sample No.·····2303015
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 18:04-18:07
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3013
16. Volume of water filtered(m3)4.79
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····117

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora	I -2	2					2	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	24					24	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	24					24	5
Cyclopoida Copepoda	I -9-2	398					398	83
Harpacticoida Copepoda	I -9-3	6					6	1
10. Copepoda, nauplius	I -10	27					27	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	46					46	10
22. Thaliacea							0	0
23. Egg	I -23	20					20	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	4					4	1
28. Unidentified forms	I -28	9					9	2
29. Radiolaria							0	0
Total		562		0		0	562	117

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-088

1. Sample No.·····2303016
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 18:17-18:20
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2283
16. Volume of water filtered(m3) 4.74
    calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····21

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I -2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	11					11	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	7					7	1
Cyclopoida Copepoda	I -9-2	55					55	12
Harpacticoida Copepoda	I -9-3	2					2	+
10. Copepoda, nauplius	I -10	1					1	+
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	8					8	2
22. Thaliacea							0	0
23. Egg	I -23	12					12	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1					1	+
28. Unidentified forms	I -28	1					1	+
29. Radiolaria							0	0
Total		99		0		0	99	21

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-089

1. Sample No.·····2303017
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 23:03-23:06
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3005
16. Volume of water filtered(m3) 4.78
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1739

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I -1	2					2	+
2. Siphonophora							0	0
3. Other medusae	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha	I -5	1					1	+
6. Polychaeta	I -6	443					443	93
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	12					12	3
Cyclopoida Copepoda			II -9-2	553			5530	1157
Harpacticoida Copepoda	I -9-3	108					108	23
10. Copepoda, nauplius			II -10	172			1720	360
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	14					14	3
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	349					349	73
22. Thaliacea							0	0
23. Egg	I -23	77					77	16
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	38					38	8
28. Unidentified forms	I -28	13					13	3
29. Radiolaria							0	0
Total		1058		725		0	8308	1739

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-090_

1. Sample No. ·····2303018
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Mar. 1 '82, 23:09-23:12
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 1
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 2836
16. Volume of water filtered(m3) 4.51
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 795

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	211					211	47
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	21					21	5
Cyclopoida Copepoda			II-9-2	253			2530	561
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius			II-10	48			480	106
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	179					179	40
22. Thaliacea							0	0
23. Egg	I-23	120					120	27
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	12					12	3
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		572		301		0	3582	795

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-091

1. Sample No.·····2303019
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 23:16-23:19
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3199
16. Volume of water filtered(m3) 5.08
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····777

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	258					258	51
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	13					13	3
Cyclopoida Copepoda			II-9-2	250			2500	492
Harpacticoida Copepoda	I-9-3	17					17	3
10. Copepoda, nauplius			II-10	71			710	140
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	277					277	55
22. Thaliacea							0	0
23. Egg	I-23	148					148	29
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	12					12	2
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		736		321		0	3946	777

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-092

1. Sample No.·····2303020
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 23:22-23:25
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2904
16. Volume of water filtered(m3) 4.62
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····796

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	235					235	51
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	27					27	6
Cyclopolda Copepoda			II-9-2	490			2450	530
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	82			410	89
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	6					6	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	363					363	79
22. Thaliacea							0	0
23. Egg	I-23	146					146	32
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	8					8	2
28. Unidentified forms	I-28	19					19	4
29. Radiolaria							0	0
Total		813		572		0	3673	796

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-093

1. Sample No.·····2303021
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT)Mar. 1 '82, 23:28-23:31
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 10
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3116
16. Volume of water filtered(m3) 4.95
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 566

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	2					2	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	159					159	32
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	32					32	6
Cyclopoida Copepoda			II-9-2	372			1860	376
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	44			220	44
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	302					302	61
22. Thaliacea							0	0
23. Egg	I-23	161					161	33
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	2					2	+
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	15					15	3
28. Unidentified forms	I-28	43					43	9
29. Radiolaria							0	0
Total		723		416		0	2803	566

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-094

1. Sample No.·····2303022
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 23:34-23:37
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3364
16. Volume of water filtered(m3) 5.34
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····314

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	Ⅰ-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	50					50	9
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	66					66	12
Cyclopoida Copepoda			Ⅱ-9-2	633			1266	237
Harpacticoida Copepoda	Ⅰ-9-3	2					2	+
10. Copepoda, nauplius	Ⅰ-10	47					47	9
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	78					78	15
22. Thaliacea							0	0
23. Egg	Ⅰ-23	137					137	26
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	14					14	3
28. Unidentified forms	Ⅰ-28	18					18	3
29. Radiolaria							0	0
Total		413		633		0	1679	314

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-095

1. Sample No.·····2303023
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 23:40-23:43
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2876
16. Volume of water filtered(m3) 4.57
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····228

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	16					16	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	64					64	14
Cyclopoida Copepoda			II-9-2	362			724	158
Harpacticoida Copepoda	I-9-3	3					3	1
10. Copepoda, nauplius	I-10	31					31	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	55					55	12
22. Thaliacea							0	0
23. Egg	I-23	132					132	29
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		315		362		0	1039	228

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-096

1. Sample No.·····2303024
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 1 '82, 23:47-23:50
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2510
16. Volume of water filtered(m3)4
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····10

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	3					3	1
Cyclopoida Copepoda	I-9-2	16					16	4
Harpacticoida Copepoda	I-9-3	1					1	+
10. Copepoda, nauplius							0	0
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	10					10	3
22. Thaliacea							0	0
23. Egg	I-23	9					9	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		41		0		0	41	10

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-097

1. Sample No.·····2303025
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:18-05:20
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 1 min 38 sec
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····1562
16. Volume of water filtered(m3) 2.48
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····2335

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	18					18	7
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	6					6	2
Cyclopoida Copepoda			Ⅱ-9-2	247			2470	996
Harpacticoida Copepoda	Ⅰ-9-3	65					65	26
10. Copepoda, nauplius			Ⅱ-10	319			3190	1286
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	2					2	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	23					23	9
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	6					6	2
28. Unidentified forms	Ⅰ-28	10					10	4
29. Radiolaria							0	0
Total		131		566		0	5791	2335

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-098

1. Sample No.·····2303026
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:23-05:26
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2710
16. Volume of water filtered(m3) 4.31
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····2683

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	26					26	6
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	11					11	3
Cyclopoida Copepoda			II-9-2	641			6410	1487
Harpacticoida Copepoda	I-9-3	73					73	17
10. Copepoda, nauplius			II-10	497			4970	1153
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	52					52	12
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	2
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		182		1138		0	11562	2683

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-099

1. Sample No.·····2303027
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:28-05:31
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2852
16. Volume of water filtered(m3) 4.54
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····2539

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	195					195	43
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	11					11	2
Cyclopoida Copepoda			II-9-2	635			6350	1399
Harpacticoida Copepoda	I-9-3	46					46	10
10. Copepoda, nauplius			II-10	466			4660	1026
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	109					109	24
22. Thaliacea							0	0
23. Egg	I-23	105					105	23
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	25					25	6
28. Unidentified forms	I-28	20					20	4
29. Radiolaria							0	0
Total		517		1101		0	11527	2539

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-100

1. Sample No.·····2303028
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:34-05:37
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2625
16. Volume of water filtered(m3) 4.18
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····281

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	53					53	13
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	6					6	1
Cyclopoida Copepoda			II-9-2	426			852	204
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	66			132	32
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	70					70	17
22. Thaliacea							0	0
23. Egg	I-23	45					45	11
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	8					8	2
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		190		492		0	1174	281

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-101

1. Sample No.·····2303029
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:41-05:44
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2966
16. Volume of water filtered(m3) 4.72
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····407

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	146					146	31
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	20					20	4
Cyclopoida Copepoda			II-9-2	225			1125	238
Harpacticoida Copepoda	I-9-3	2					2	+
10. Copepoda, nauplius			II-10	58			290	61
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	6					6	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	206					206	44
22. Thaliacea							0	0
23. Egg	I-23	110					110	23
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	12					12	3
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		506		283		0	1921	407

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-102

1. Sample No.·····2303030
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:48-05:51
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 20
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2902
16. Volume of water filtered(m3) 4.62
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 359

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	58					58	13
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	68					68	15
Cyclopoida Copepoda			II-9-2	600			1200	260
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	52			104	23
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	88					88	19
22. Thaliacea							0	0
23. Egg	I-23	110					110	24
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	2
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		349		652		0	1653	359

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-103

1. Sample No.·····2303031
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 05:55-05:58
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2920
16. Volume of water filtered(m3) 4.64
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····148

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	21					21	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	50					50	11
Cyclopoida Copepoda	I -9-2	452					452	97
Harpacticoida Copepoda	I -9-3	1					1	+
10. Copepoda, nauplius	I -10	36					36	8
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	22					22	5
22. Thaliacea							0	0
23. Egg	I -23	95					95	20
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	4					4	1
28. Unidentified forms	I -28	3					3	1
29. Radiolaria							0	0
Total		685		0		0	685	148

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-104

1. Sample No.·····2303032
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 06:03-06:06
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2391
16. Volume of water filtered(m3)4.5
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····153

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	35					35	8
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	54					54	12
Cyclopoida Copepoda	Ⅰ-9-2	482					482	107
Harpacticoida Copepoda							0	0
10. Copepoda, nauplius	Ⅰ-10	34					34	8
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	18					18	4
22. Thaliacea							0	0
23. Egg	Ⅰ-23	60					60	13
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	2					2	+
28. Unidentified forms	Ⅰ-28	4					4	1
29. Radiolaria							0	0
Total		689		0		0	689	153

+ : less than 1 Indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-105

1. Sample No.·····2303033
2. JARE·····23
3. Area····· Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 11:06-11:09
   (GMT)
8. Net used····· Modified NIPR-I(100μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 0
    estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2837
16. Volume of water filtered(m3) 4.51
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 724

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	24					24	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	6					6	1
Cyclopoida Copepoda			II-9-2	217			1085	241
Harpacticoida Copepoda	I-9-3	72					72	16
10. Copepoda, nauplius			II-10	413			2065	458
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		113		630		0	3263	724

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-106

1. Sample No.·····2303034
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 11:11-11:14
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2692
16. Volume of water filtered(m3) 4.29
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1154

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	18					18	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	3					3	1
Cyclopoida Copepoda			II-9-2	239			2390	557
Harpacticoida Copepoda	I-9-3	50					50	12
10. Copepoda, nauplius			II-10	248			2480	578
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		82		487		0	4952	1154

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-107_

1. Sample No.·····2303035
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 11:16-11:19
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2634
16. Volume of water filtered(m3) 4.19
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····2709

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	140					140	33
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	6					6	1
Cyclopoida Copepoda			II-9-2	675			6750	1611
Harpacticoida Copepoda	I-9-3	117					117	28
10. Copepoda, nauplius			II-10	416			4160	993
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	33					33	8
22. Thaliacea							0	0
23. Egg	I-23	108					108	26
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	11					11	3
28. Unidentified forms	I-28	26					26	6
29. Radiolaria							0	0
Total		442		1091		0	11352	2709

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-108

1. Sample No.·····2303036
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 11:21-11:24
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3030
16. Volume of water filtered(m3) 4.82
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····784

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	254					254	53
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	22					22	5
Cyclopoida Copepoda			II-9-2	244			2440	506
Harpacticoida Copepoda	I-9-3	40					40	8
10. Copepoda, nauplius			II-10	72			720	149
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	168					168	35
22. Thaliacea							0	0
23. Egg	I-23	90					90	19
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	23					23	5
28. Unidentified forms	I-28	16					16	3
29. Radiolaria							0	0
Total		618		316		0	3778	784

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-109

1. Sample No.·····2303037
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 11:27-11:30
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3014
16. Volume of water filtered(m3) 4.79
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····652

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	199					199	42
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	17					17	4
Cyclopolda Copepoda			Ⅱ-9-2	215			2150	449
Harpacticoida Copepoda	Ⅰ-9-3	23					23	5
10. Copepoda, nauplius			Ⅱ-10	52			520	109
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	13					13	3
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	80					80	17
22. Thaliacea							0	0
23. Egg	Ⅰ-23	75					75	16
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	20					20	4
28. Unidentified forms	Ⅰ-28	11					11	2
29. Radiolaria							0	0
Total		441		267		0	3111	652

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-110

1. Sample No.·····2303038
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 2 '82, 11:32-11:35
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2798
16. Volume of water filtered(m3) 4.45
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····478

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	46					46	10
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	64					64	14
Cyclopoida Copepoda			II-9-2	300			1500	337
Harpacticoida Copepoda	I-9-3	3					3	1
10. Copepoda, nauplius			II-10	68			340	76
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	41					41	9
22. Thaliacea							0	0
23. Egg	I-23	106					106	24
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	24					24	5
29. Radiolaria							0	0
Total		292		368		0	2132	478

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-111

1. Sample No. ·····2303039
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Mar. 2 '82, 11:40-11:43
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 30
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 2680
16. Volume of water filtered(m3) 4.27
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 268

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I -1	2					2	+
2. Siphonophora							0	0
3. Other medusae	I -3	2					2	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	19					19	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	72					72	17
Cyclopoida Copepoda	I -9-2	785					785	184
Harpacticoida Copepoda	I -9-3	6					6	1
10. Copepoda, nauplius	I -10	32					32	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	13					13	3
22. Thaliacea							0	0
23. Egg	I -23	197					197	46
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	6					6	1
28. Unidentified forms	I -28	12					12	3
29. Radiolaria							0	0
Total		1146		0		0	1146	268

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-112

1. Sample No. ····· 2303040
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Mar. 2 '82, 11:50-11:53
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 45
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 2738
16. Volume of water filtered(m3) 4.36
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 58

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	29					29	7
Cyclopoida Copepoda	I-9-2	136					136	31
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius	I-10	29					29	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	32					32	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		253		0		0	253	58

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-113

1. Sample No.·····2303041
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 12:35-12:38
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2259
16. Volume of water filtered(m3) 4.53
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····132

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	2					2	+
Cyclopoida Copepoda	I-9-2	220					220	49
Harpacticoida Copepoda	I-9-3	95					95	21
10. Copepoda, nauplius	I-10	276					276	61
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		598		0		0	598	132

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-114

1. Sample No.·····2303042
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 12:40-12:43
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3228
16. Volume of water filtered(m3) 5.13
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····302

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	6					6	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	5					5	1
Cyclopoida Copepoda			II-9-2	313			626	122
Harpacticoida Copepoda	I-9-3	10					10	2
10. Copepoda, nauplius			II-10	439			878	171
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	9					9	2
22. Thaliacea							0	0
23. Egg	I-23	9					9	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		47		752		0	1551	302

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-115

1. Sample No.·····2303043
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 12:45-12:48
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2903
16. Volume of water filtered(m3) 4.62
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····387

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	6					6	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	2					2	+
Cyclopoida Copepoda			II-9-2	328			656	142
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius			II-10	526			1052	228
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	14					14	3
22. Thaliacea							0	0
23. Egg	I-23	29					29	6
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		82		854		0	1790	387

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-116

1. Sample No.·····2303044
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT)Mar. 31 '82, 12:50-12:53
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 5
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3008
16. Volume of water filtered(m3) 4.78
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 256

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	7					7	1
Cyclopoida Copepoda			II-9-2	244			488	102
Harpacticoida Copepoda	I-9-3	7					7	1
10. Copepoda, nauplius			II-10	352			704	147
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg	I-23	4					4	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		32		596		0	1224	256

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-117

1. Sample No.·····2303045
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 12:55-12:58
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2958
16. Volume of water filtered(m3)4.7
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····300

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda							0	0
Cyclopoida Copepoda	I -9-2	611					611	130
Harpacticoida Copepoda	I -9-3	5					5	1
10. Copepoda, nauplius	I -10	762					762	162
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	21					21	4
22. Thaliacea							0	0
23. Egg	I -23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	7					7	1
29. Radiolaria							0	0
Total		1410		0		0	1410	300

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-118

1. Sample No. ····· 2303046
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Mar. 31 '82, 13:00-13:03
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 20
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 2526
16. Volume of water filtered(m3) 4.02
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 114

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	3					3	1
Cyclopoida Copepoda	I-9-2	195					195	49
Harpacticoida Copepoda	I-9-3	4					4	1
10. Copepoda, nauplius	I-10	249					249	62
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	4					4	1
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		457		0		0	457	114

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-119

1. Sample No.·····2303047
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 13:05-13:08
   (GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2827
16. Volume of water filtered(m3)4.5
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····239

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	10					10	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	4					4	1
Cyclopoida Copepoda	Ⅰ-9-2	509					509	113
Harpacticoida Copepoda	Ⅰ-9-3	8					8	2
10. Copepoda, nauplius	Ⅰ-10	525					525	117
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	10					10	2
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	Ⅰ-28	5					5	1
29. Radiolaria							0	0
Total		1075		0		0	1075	239

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-120

1. Sample No. ·····2303048
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Mar. 31 '82, 13:12-13:15
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 45
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 2502
16. Volume of water filtered(m3) 3.99
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 72

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora	I-2	1					1	+
3. Other medusae	I-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	5					5	1
Cyclopoida Copepoda	I-9-2	141					141	35
Harpacticoida Copepoda	I-9-3	11					11	3
10. Copepoda, nauplius	I-10	105					105	26
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	11					11	3
22. Thaliacea							0	0
23. Egg	I-23	5					5	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		286		0		0	286	72

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-121

1. Sample No.·····2303049
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:10-17:13
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 0
    estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 666
16. Volume of water filtered(m3) 4.4
    calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 48

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	3					3	1
Cyclopoida Copepoda	I-9-2	71					71	16
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius	I-10	119					119	27
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		212		0		0	212	48

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-122

1. Sample No.·····2303050
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:15-17:18
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2921
16. Volume of water filtered(m3) 4.64
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····437

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera							0	0
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta	I-6	7					7	2
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	I-9-1	4					4	1
Cyclopoida Copepoda			II-9-2	325			650	140
Harpacticoida Copepoda	I-9-3	38					38	8
10.Copepoda, nauplius			II-10	655			1310	282
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda	I-18	3					3	1
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	I-21	6					6	1
22.Thaliacea							0	0
23.Egg	I-23	4					4	1
24.Euphausiacea, nauplius							0	0
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms	I-27	2					2	+
28.Unidentified forms	I-28	3					3	1
29.Radiolaria							0	0
Total		67		980		0	2027	437

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-123

1. Sample No.·····2303051
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:20-17:23
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2633
16. Volume of water filtered(m3) 4.19
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····255

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	2					2	+
Cyclopoida Copepoda			II-9-2	222			444	106
Harpacticoida Copepoda	I-9-3	11					11	3
10. Copepoda, nauplius			II-10	298			596	142
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		29		520		0	1069	255

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-124

1. Sample No.·····2303052
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:26-17:29
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2972
16. Volume of water filtered(m3) 4.72
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····403

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	10					10	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	7					7	1
Cyclopoida Copepoda	I-9-2	702					702	149
Harpacticoida Copepoda	I-9-3	14					14	3
10. Copepoda, nauplius	I-10	1151					1151	244
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		1902		0		0	1902	403

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-125

1. Sample No.·····2303053
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:32-17:35
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2595
16. Volume of water filtered(m3) 4.13
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····88

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	11					11	3
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	3					3	1
Cyclopoida Copepoda	I -9-2	165					165	40
Harpacticoida Copepoda	I -9-3	1					1	+
10. Copepoda, nauplius	I -10	170					170	41
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	5					5	1
22. Thaliacea							0	0
23. Egg	I -23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	4					4	1
29. Radiolaria							0	0
Total		363		0		0	363	88

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-126_

1. Sample No.·····2303054
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:38-17:41
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2559
16. Volume of water filtered(m3) 4.08
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····250

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	13					13	3
Cyclopoida Copepoda	I-9-2	595					595	146
Harpacticoida Copepoda	I-9-3	11					11	3
10. Copepoda, nauplius	I-10	371					371	91
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	14					14	3
22. Thaliacea							0	0
23. Egg							C	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	7					7	2
29. Radiolaria							0	0
Total		1018		0		0	1018	250

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-127

1. Sample No.·····2303055
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:44-17:47
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2821
16. Volume of water filtered(m3) 4.49
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····139

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	3					3	1
Cyclopoida Copepoda			II -9-2	172			344	77
Harpacticoida Copepoda	I -9-3	1					1	+
10. Copepoda, nauplius			II -10	128			256	57
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	9					9	2
22. Thaliacea							0	0
23. Egg	I -23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	1					1	+
29. Radiolaria							0	0
Total		23		300		0	623	139

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-128

1. Sample No.·····2303056
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Mar. 31 '82, 17:51-17:54
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2881
16. Volume of water filtered(m3) 4.58
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····202

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	5					5	1
Cyclopoida Copepoda	I-9-2	420					420	92
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius	I-10	480					480	105
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	4					4	1
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		923		0		0	923	202

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-129_

1. Sample No.·····2303057
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:19-09:22
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····1580
16. Volume of water filtered(m3) 4.3
    calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····5514

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I -1	5					5	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	7					7	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	131					131	30
Cyclopoida Copepoda	I -9-2	73	II -9-2	871			8783	2043
Harpacticoida Copepoda	I -9-3	190					190	44
10. Copepoda, nauplius			II -10	1419			14190	3300
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	7					7	2
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	375					375	87
22. Thaliacea							0	0
23. Egg	I -23	8					8	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1					1	+
28. Unidentified forms	I -28	12					12	3
29. Radiolaria							0	0
Total		809		2290		0	23709	5514

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-130

1. Sample No.·····2303058
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:23-09:26
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2323
16. Volume of water filtered(m3) 4.3
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····5750

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	67					67	16
Cyclopoida Copepoda			II-9-2	672			6720	1563
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius			II-10	1773			17730	4123
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	163					163	38
22. Thaliacea							0	0
23. Egg	I-23	9					9	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		277		2445		0	24727	5750

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Serles No.NIPR-131

1. Sample No.·····2303059
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:28-09:31
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 2
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2479
16. Volume of water filtered(m3) 3.95
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 3281

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	41					41	10
Cyclopoida Copepoda			Ⅱ-9-2	538			5380	1362
Harpacticoida Copepoda	Ⅰ-9-3	22					22	6
10. Copepoda, nauplius			Ⅱ-10	733			7330	1856
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	154					154	39
22. Thaliacea							0	0
23. Egg	Ⅰ-23	15					15	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	Ⅰ-28	2					2	1
29. Radiolaria							0	0
Total		245		1271		0	12955	3281

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-132

1. Sample No.·····2303060
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:34-09:37
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2833
16. Volume of water filtered(m3)4.51
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1607

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	14					14	3
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	43					43	10
Cyclopoida Copepoda			II-9-2	297			2970	659
Harpacticoida Copepoda	I-9-3	18					18	4
10. Copepoda, nauplius			II-10	413			4130	916
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	51					51	11
22. Thaliacea							0	0
23. Egg	I-23	11					11	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		146		710		0	7246	1607

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-133

1. Sample No.·····2303061
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:40-09:43
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 10
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2668
16. Volume of water filtered(m3) 4.25
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 548

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	31					31	7
Cyclopoida Copepoda			II-9-2	266			1330	313
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	183			915	215
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	15					15	4
22. Thaliacea							0	0
23. Egg	I-23	23					23	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		86		449		0	2331	548

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-134

1. Sample No.·····2303062
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:46-09:49
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2843
16. Volume of water filtered(m3) 4.52
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····434

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	10					10	2
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	29					29	6
Cyclopoida Copepoda			II-9-2	190			950	210
Harpacticoida Copepoda	I-9-3	14					14	3
10. Copepoda, nauplius			II-10	172			860	190
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	81					81	18
22. Thaliacea							0	0
23. Egg	I-23	18					18	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		155		362		0	1965	434

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-135

1. Sample No.·····2303063
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 09:53-09:56
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2479
16. Volume of water filtered(m3) 3.95
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····404

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	13					13	3
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	44					44	11
Cyclopoida Copepoda			Ⅱ-9-2	174			870	220
Harpacticoida Copepoda	Ⅰ-9-3	7					7	2
10. Copepoda, nauplius			Ⅱ-10	124			620	157
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	24					24	6
22. Thaliacea							0	0
23. Egg	Ⅰ-23	16					16	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	2					2	1
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		106		298		0	1596	404

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-136

1. Sample No.·····2303064
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Apr. 22 '82, 10:00-10:03
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2918
16. Volume of water filtered(m3) 4.64
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····174

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	34					34	7
Cyclopoida Copepoda			II-9-2	244			488	105
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	119			238	51
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	25					25	5
22. Thaliacea							0	0
23. Egg	I-23	13					13	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		85		363		0	811	174

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-137

1. Sample No.·····2303065
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:15-09:18
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····1001
16. Volume of water filtered(m3) 4.49
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····639

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	361					361	80
Cyclopoida Copepoda			II-9-2	396			1980	441
Harpacticoida Copepoda	I-9-3	124					124	28
10. Copepoda, nauplius			II-10	72			360	80
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	26					26	6
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		529		468		0	2869	639

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-138

1. Sample No.·····2303066
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:20-09:23
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2746
16. Volume of water filtered(m3) 4.37
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1265

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	17					17	4
2. Siphonophora	I -2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	161					161	37
Cyclopoida Copepoda			II -9-2	468			4680	1071
Harpacticoida Copepoda	I -9-3	2					2	+
10. Copepoda, nauplius			II -10	62			620	142
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I -23	32					32	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	9					9	2
29. Radiolaria							0	0
Total		228		530		0	5528	1265

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-139

1. Sample No.·····2303067
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:25-09:28
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····13
16. Volume of water filtered(m3) 4.49
    calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1274

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	149					149	33
Cyclopoida Copepoda			II-9-2	467			4670	1040
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	85			850	189
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	31					31	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		201		552		0	5721	1274

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-140

1. Sample No.·····2303068
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:32-09:35
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3013
16. Volume of water filtered(m3) 4.79
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1865

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	4					4	1
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	258					258	54
Cyclopoida Copepoda			II-9-2	711			7110	1484
Harpacticoida Copepoda	I-9-3	24					24	5
10. Copepoda, nauplius			II-10	148			1480	309
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	47					47	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		341		859		0	8931	1865

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-141

1. Sample No.·····2303069
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:38-09:41
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3185
16. Volume of water filtered(m3) 5.06
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1630

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	7					7	1
2. Siphonophora	I-2	2					2	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	238					238	47
Cyclopoida Copepoda			II-9-2	652			6520	1289
Harpacticoida Copepoda	I-9-3	26					26	5
10. Copepoda, nauplius			II-10	137			1370	271
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	74					74	15
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		356		789		0	8246	1630

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-142

1. Sample No.·····2303070
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:44-09:47
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2785
16. Volume of water filtered(m3) 4.43
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····542

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	74					74	17
Cyclopoida Copepoda			II-9-2	383			1915	432
Harpacticoida Copepoda	I-9-3	7					7	2
10. Copepoda, nauplius			II-10	77			385	87
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	12					12	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		99		460		0	2399	542

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-143

1. Sample No.·····2303071
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:51-09:54
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 30
    estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2532
16. Volume of water filtered(m3) 4.03
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 387

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	58					58	14
Cyclopoida Copepoda			II-9-2	216			1080	268
Harpacticoida Copepoda	I-9-3	8					8	2
10. Copepoda, nauplius			II-10	77			385	96
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	23					23	6
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		95		293		0	1560	387

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-144

1. Sample No.·····2303072
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 11 '82, 09:59-10:02
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2675
16. Volume of water filtered(m3) 4.26
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····669

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	1713					1713	402
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	Ⅰ-5	1					1	+
6. Polychaeta	Ⅰ-6	12					12	3
7. Cladocera							0	0
8. Ostracoda	Ⅰ-8	34					34	8
9. Calanoida Copepoda	Ⅰ-9-1	67					67	16
Cyclopoida Copepoda			Ⅱ-9-2	249			498	117
Harpacticoida Copepoda	Ⅰ-9-3	133					133	31
10. Copepoda, nauplius			Ⅱ-10	60			120	28
11. Cumacea	Ⅰ-11	1					1	+
12. Isopoda	Ⅰ-12	4					4	1
13. Amphipoda	Ⅰ-13	8					8	2
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	8					8	2
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	Ⅰ-23	7					7	2
24. Euphausiacea, nauplius							0	0
25. Nematoda	Ⅰ-25	8					8	2
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	20					20	5
28. Unidentified forms	Ⅰ-28	214					214	50
29. Radiolaria							0	0
Total		2230		309		0	2848	669

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-145

1. Sample No.·····2303073
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 09:23-09:26
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3112
16. Volume of water filtered(m3) 4.94
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1435

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	1418					1418	287
Cyclopoida Copepoda			Ⅱ-9-2	386			3860	781
Harpacticoida Copepoda	Ⅰ-9-3	121					121	24
10. Copepoda, nauplius			Ⅱ-10	164			1640	332
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	38					38	8
22. Thaliacea							0	0
23. Egg	Ⅰ-23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		1588		550		0	7088	1435

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-146

1. Sample No.·····2303074
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 09:30-09:33
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3168
16. Volume of water filtered(m3) 5.03
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1233

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	526					526	105
Cyclopoida Copepoda			II-9-2	391			3910	777
Harpacticoida Copepoda	I-9-3	44					44	9
10. Copepoda, nauplius			II-10	172			1720	342
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		571		563		0	6201	1233

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-147

1. Sample No.·····2303075
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 09:37-09:40
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2922
16. Volume of water filtered(m3) 4.65
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1809

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	322					322	69
Cyclopoida Copepoda			II-9-2	696			6960	1497
Harpacticoida Copepoda	I-9-3	11					11	2
10. Copepoda, nauplius			II-10	112			1120	241
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		333		808		0	8413	1809

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-148

1. Sample No.·····2303076
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 09:42-09:45
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2990
16. Volume of water filtered(m3) 4.75
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1830

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	220					220	46
Cyclopoida Copepoda			II-9-2	771			7710	1623
Harpacticoida Copepoda	I-9-3	7					7	1
10. Copepoda, nauplius			II-10	75			750	158
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	4					4	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		234		846		0	8694	1830

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-149

1. Sample No.·····2303077
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 09:47-09:50
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 10
    estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3234
16. Volume of water filtered(m3) 5.14
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 1496

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda	I-8	2					2	+
9. Calanoida Copepoda	I-9-1	145					145	28
Cyclopoida Copepoda			II-9-2	659			6590	1282
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	94			940	183
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		162		753		0	7692	1496

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-150

1. Sample No.·····2303078
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 09:54-09:57
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2840
16. Volume of water filtered(m3) 4.52
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1367

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	157					157	35
Cyclopoida Copepoda			II-9-2	534			5340	1181
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	67			670	148
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		170		601		0	6180	1367

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-151

1. Sample No.·····2303079
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 10:03-10:06
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2680
16. Volume of water filtered(m3) 4.27
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····869

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	103					103	24
Cyclopoida Copepoda			II-9-2	291			2910	681
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	68			680	159
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		120		359		0	3710	869

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-152

1. Sample No.·····2303080
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)May 25 '82, 10:10-10:13
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2763
16. Volume of water filtered(m3) 4.4
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····340

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	64					64	15
Cyclopoida Copepoda			II-9-2	200			1000	227
Harpacticoida Copepoda	I-9-3	4					4	1
10. Copepoda, nauplius			II-10	84			420	95
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		75		284		0	1495	340

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-153

1. Sample No.·····2303081
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 10:15-10:18
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2531
16. Volume of water filtered(m3) 4.03
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1209

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	105					105	26
Cyclopoida Copepoda			II-9-2	388			3880	963
Harpacticoida Copepoda	I-9-3	175					175	43
10. Copepoda, nauplius			II-10	70			700	174
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		293		458		0	4873	1209

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-154

1. Sample No.·····2303082
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT) June 10 '82, 10:20-10:23
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 1
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3030
16. Volume of water filtered(m3) 4.82
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 1061

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	154					154	32
Cyclopoida Copepoda			II-9-2	403			4030	836
Harpacticoida Copepoda	I-9-3	76					76	16
10. Copepoda, nauplius			II-10	84			840	174
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	8					8	2
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		242		487		0	5112	1061

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-155

1. Sample No.·····2303083
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 10:25-10:28
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2834
16. Volume of water filtered(m3) 4.51
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1403

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	192					192	43
Cyclopoida Copepoda			II-9-2	517			5170	1146
Harpacticoida Copepoda	I-9-3	29					29	6
10. Copepoda, nauplius			II-10	92			920	204
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	14					14	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		239		609		0	6329	1403

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-156

1. Sample No.·····2303084
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 10:29-10:32
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2539
16. Volume of water filtered(m3) 4.04
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····599

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera							0	0
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta							0	0
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	I-9-1	103					103	25
Cyclopoida Copepoda			II-9-2	409			2045	506
Harpacticoida Copepoda	I-9-3	7					7	2
10.Copepoda, nauplius			II-10	53			265	66
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda							0	0
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia							0	0
22.Thaliacea							0	0
23.Egg							0	0
24.Euphausiacea, nauplius							0	0
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms							0	0
28.Unidentified forms							0	0
29.Radiolaria							0	0
Total		110		462		0	2420	599

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-157

1. Sample No.·····2303085
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 10:34-10:37
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2801
16. Volume of water filtered(m3) 4.46
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1613

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	382					382	86
Cyclopoida Copepoda			II-9-2	581			5810	1303
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	99			990	222
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		393		680		0	7193	1613

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-158

1. Sample No.·····2303086
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 10:40-10:43
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2797
16. Volume of water filtered(m3) 4.45
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····963

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	189					189	42
Cyclopoida Copepoda			II-9-2	357			3570	802
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	52			520	117
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		196		409		0	4286	963

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-159

1. Sample No.·····2303087
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 10:45-10:48
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2856
16. Volume of water filtered(m3) 4.54
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····636

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	143					143	31
Cyclopoida Copepoda			II-9-2	476			2380	524
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	71			355	78
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		153		547		0	2888	636

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-160

1. Sample No.·····2303088
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT) June 10 '82, 10:51-10:54
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2690
16. Volume of water filtered(m3) 4.28
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····355

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	119					119	28
Cyclopoida Copepoda	I-9-2	1138					1138	266
Harpacticoida Copepoda	I-9-3	8					8	2
10. Copepoda, nauplius	I-10	254					254	59
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		1521		0		0	1521	355

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-161

1. Sample No.·····2303089
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:20-17:23
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2721
16. Volume of water filtered(m3) 4.33
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····2039

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	322					322	74
Cyclopoida Copepoda			II-9-2	758			7580	1751
Harpacticoida Copepoda	I-9-3	174					174	40
10. Copepoda, nauplius			II-10	74			740	171
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	7					7	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		509		832		0	8829	2039

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-162

1. Sample No.·····2303090
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:25-17:28
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2835
16. Volume of water filtered(m3) 4.51
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1732

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	264					264	59
Cyclopoida Copepoda			II-9-2	640			6400	1419
Harpacticoida Copepoda	I-9-3	17					17	4
10. Copepoda, nauplius			II-10	112			1120	248
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		287		752		0	7807	1732

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-163

1. Sample No.·····2303091
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:30-17:33
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2786
16. Volume of water filtered(m3) 4.43
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1729

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	281					281	63
Cyclopoida Copepoda			II-9-2	671			6710	1515
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius			II-10	64			640	144
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		310		735		0	7660	1729

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-164

1. Sample No.·····2303092
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:35-17:38
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3068
16. Volume of water filtered(m3) 4.88
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1316

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	289					289	59
Cyclopoida Copepoda			II-9-2	550			5500	1127
Harpacticoida Copepoda	I-9-3	14					14	3
10. Copepoda, nauplius			II-10	61			610	125
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		313		611		0	6423	1316

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-165

1. Sample No.·····2303093
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:40-17:43
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2864
16. Volume of water filtered(m3) 4.56
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1256

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	242					242	53
Cyclopoida Copepoda			II-9-2	481			4810	1055
Harpacticoida Copepoda	I-9-3	16					16	4
10. Copepoda, nauplius			II-10	54			540	140
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	10					10	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		275		545		0	5725	1256

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-166

1. Sample No.·····2303094
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:45-17:48
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2871
16. Volume of water filtered(m3) 4.57
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1215

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	283					283	62
Cyclopoida Copepoda			II-9-2	461			4610	1009
Harpacticoida Copepoda	I-9-3	7					7	2
10. Copepoda, nauplius			II-10	65			650	142
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		294		526		0	5554	1215

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-167_

1. Sample No.·····2303095
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT) June 10 '82, 17:51-17:54
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 30
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2323
16. Volume of water filtered(m3) 3.71
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 124

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	26					26	7
Cyclopoida Copepoda	I-9-2	397					397	107
Harpacticoida Copepoda	I-9-3	1					1	+
10. Copepoda, nauplius	I-10	34					34	9
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		459		0		0	459	124

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-168

1. Sample No.·····2303096
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 10 '82, 17:59-18:02
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2721
16. Volume of water filtered(m3) 4.33
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····501

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	100					100	23
Cyclopoida Copepoda			II-9-2	347			1735	401
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	63			315	73
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	12					12	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		118		410		0	2168	501

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-169

1. Sample No.·····2303097
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 11 '82, 23:21-23:24
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····1243
16. Volume of water filtered(m3) 4.86
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····564

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	230					230	47
Cyclopoida Copepoda			II-9-2	196			1960	403
Harpacticoida Copepoda	I-9-3	31					31	7
10. Copepoda, nauplius			II-10	47			470	97
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		313		243		0	2743	564

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-170

1. Sample No.·····2303098
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 11 '82, 23:26-23:29
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3048
16. Volume of water filtered(m3) 4.84
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1600

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	479					479	99
Cyclopoida Copepoda			II-9-2	633			6330	1308
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	89			890	184
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	2					2	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	14					14	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		522		722		0	7742	1600

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-171

1. Sample No.·····2303099
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT) June 11 '82, 23:33-23:36
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3209
16. Volume of water filtered(m3) 5.1
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1144

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	380					380	75
Cyclopoida Copepoda			II-9-2	495			4950	971
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	48			480	94
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		402		543		0	5832	1144

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-172

1. Sample No.·····2303100
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 11 '82, 23:39-23:42
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3337
16. Volume of water filtered(m3) 5.3
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1296

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda	I-8	3					3	1
9. Calanoida Copepoda	I-9-1	499					499	94
Cyclopoida Copepoda			II-9-2	544			5440	1026
Harpacticoida Copepoda	I-9-3	12					12	2
10. Copepoda, nauplius			II-10	91			910	172
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		519		635		0	6869	1296

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-173

1. Sample No.·····2303101
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 11 '82, 23:44-23:47
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3131
16. Volume of water filtered(m3) 4.97
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1118

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	389					389	78
Cyclopoida Copepoda			II-9-2	458			4580	922
Harpacticoida Copepoda	I-9-3	7					7	1
10. Copepoda, nauplius			II-10	56			560	113
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	11					11	2
29. Radiolaria							0	0
Total		414		514		0	5554	1118

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-174

1. Sample No.·····2303102
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 11 '82, 23:49-23:52
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2974
16. Volume of water filtered(m3) 4.73
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1086

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	144					144	30
Cyclopoida Copepoda			II-9-2	448			4480	947
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	48			480	101
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	9					9	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	11					11	2
29. Radiolaria							0	0
Total		177		496		0	5137	1088

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-175

1. Sample No.·····2303103
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 11 '82, 23:55-23:58
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2675
16. Volume of water filtered(m3) 4.26
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1006

Proprtion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	Ⅰ-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	276					276	65
Cyclopoida Copepoda			Ⅱ-9-2	748			3740	878
Harpacticoida Copepoda	Ⅰ-9-3	10					10	2
10. Copepoda, nauplius			Ⅱ-10	46			230	54
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	2					2	+
22. Thaliacea							0	0
23. Egg	Ⅰ-23	8					8	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	Ⅰ-28	15					15	4
29. Radiolaria							0	0
Total		314		794		0	4284	1006

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-176

1. Sample No. ····· 2303104
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) June 12 '82, 00:01-00:04
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 45
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 3011
16. Volume of water filtered(m3) 4.79
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 486

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	93					93	19
Cyclopoida Copepoda			II-9-2	941			1882	393
Harpacticoida Copepoda	I-9-3	12					12	3
10. Copepoda, nauplius			II-10	157			314	66
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia			II-21	1			2	+
22. Thaliacea							0	0
23. Egg	I-23	9					9	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	9					9	2
29. Radiolaria							0	0
Total		126		1099		0	2324	486

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-177

1. Sample No.·····2303105
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 06:38-06:41
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2868
16. Volume of water filtered(m3) 4.56
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····2655

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	1192					1192	261
Cyclopoida Copepoda			II-9-2	1009			10090	2213
Harpacticoida Copepoda	I-9-3	212					212	46
10. Copepoda, nauplius			II-10	58			580	127
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	3					3	1
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea	I-22	1					1	+
23. Egg	I-23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	10					10	2
29. Radiolaria	I-29	6					6	1
Total		1435		1067		0	12105	2655

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-178

1. Sample No.·····2303106
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 06:44-06:47
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3052
16. Volume of water filtered(m3) 4.85
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1979

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	529					529	109
Cyclopoida Copepoda			II-9-2	819			8190	1689
Harpacticoida Copepoda	I-9-3	20					20	4
10. Copepoda, nauplius			II-10	78			780	161
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	47					47	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	24					24	5
29. Radiolaria							0	0
Total		630		897		0	3600	1979

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-179

1. Sample No.·····2303107
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 06:49-06:52
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3208
16. Volume of water filtered(m3)5.1
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1242

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	359					359	70
Cyclopoida Copepoda			II-9-2	529			5290	1037
Harpacticoida Copepoda	I-9-3	11					11	2
10. Copepoda, nauplius			II-10	64			640	125
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	18					18	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	10					10	2
29. Radiolaria	I-29	2					2	+
Total		405		593		0	6335	1242

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-180

1. Sample No. ····· 2303108
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) June 12 '82, 06:54-06:57
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 5
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 3120
16. Volume of water filtered(m3) 4.96
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 1512

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	414					414	83
Cyclopoida Copepoda			II-9-2	631			6310	1272
Harpacticoida Copepoda	I-9-3	10					10	2
10. Copepoda, nauplius			II-10	74			740	149
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	19					19	4
29. Radiolaria							0	0
Total		451		705		0	7501	1512

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-181

1. Sample No.·····2303109
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT)June 12 '82, 06:58-07:01
(GMT)
8. Net used····· Modified NIPR-I(100μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 10
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3045
16. Volume of water filtered(m3) 4.84
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 1301

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	403					403	83
Cyclopoida Copepoda			II-9-2	528			5280	1091
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	56			560	116
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	13					13	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	17					17	4
29. Radiolaria							0	0
Total		453		584		0	6293	1301

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-182

1. Sample No.·····2303110
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Positlon·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 07:03-07:06
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2994
16. Volume of water filtered(m3) 4.68
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1472

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	371					371	79
Cyclopoida Copepoda			II -9-2	573			5730	1224
Harpacticoida Copepoda	I -9-3	6					6	1
10. Copepoda, nauplius			II -10	74			740	158
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	1					1	+
22. Thaliacea							0	0
23. Egg	I -23	13					13	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1					1	+
28. Unidentified forms	I -28	22					22	5
29. Radiolaria							0	0
Total		417		647		0	6887	1472

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-183

1. Sample No.·····2303111
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 07:09-07:12
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2599
16. Volume of water filtered(m3)4.14
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1062

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	289					289	70
Cyclopoida Copepoda			II-9-2	739			3695	893
Harpacticoida Copepoda	I-9-3	11					11	3
10. Copepoda, nauplius			II-10	72			360	87
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	15					15	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	16					16	4
29. Radiolaria	I-29	1					1	+
Total		339		811		0	4394	1062

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-184

1. Sample No.·····2303112
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 07:15-07:18
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2961
16. Volume of water filtered(m3) 4.71
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····694

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	231					231	49
Cyclopoida Copepoda			II-9-2	551			2755	585
Harpacticoida Copepoda	I-9-3	7					7	1
10. Copepoda, nauplius			II-10	54			270	57
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		244		605		0	3269	694

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-185

1. Sample No.·····2303113
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:14-11:17
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2077
16. Volume of water filtered(m3) 4.64
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····695

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	560					560	121
Cyclopoida Copepoda			II-9-2	187			1870	403
Harpacticoida Copepoda	I-9-3	163					163	35
10. Copepoda, nauplius			II-10	62			620	134
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		735		249		0	3225	695

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-186

1. Sample No.·····2303114
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:19-11:22
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3027
16. Volume of water filtered(m3) 4.81
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1178

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	327					327	68
Cyclopoida Copepoda			II-9-2	442			4420	919
Harpacticoida Copepoda	I-9-3	17					17	4
10. Copepoda, nauplius			II-10	87			870	181
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	13					13	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	13					13	3
29. Radiolaria							0	0
Total		371		529		0	5661	1178

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-187

1. Sample No.·····2303115
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:25-11:28
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3020
16. Volume of water filtered(m3) 4.8
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····946

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	315					315	66
Cyclopoida Copepoda			II-9-2	340			3400	708
Harpacticoida Copepoda	I-9-3	15					15	3
10. Copepoda, nauplius			II-10	79			790	165
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda			II-18	1			10	2
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		342		420		0	4542	946

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-188

1. Sample No.·····2303116
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:30-11:33
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2999
16. Volume of water filtered(m3) 4.77
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1464

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	313					313	66
Cyclopoida Copepoda			II-9-2	609			6090	1277
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	54			540	113
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	18					18	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	11					11	2
29. Radiolaria							0	0
Total		352		663		0	6982	1464

+ : less than 1 Indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-189

1. Sample No.·····2303117
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:35-11:38
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2986
16. Volume of water filtered(m3) 4.75
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1293

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	316					316	67
Cyclopoida Copepoda			Ⅱ-9-2	532			5320	1120
Harpacticoida Copepoda	Ⅰ-9-3	8					8	2
10. Copepoda, nauplius			Ⅱ-10	47			470	99
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	Ⅰ-23	10					10	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1					1	+
28. Unidentified forms	Ⅰ-28	13					13	3
29. Radiolaria							0	0
Total		349		579		0	6139	1293

+ : less than 1 Indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-190

1. Sample No.·····2303118
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:41-11:44
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2495
16. Volume of water filtered(m3) 3.98
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····807

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta			II-6	1			5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	182					182	46
Cyclopoida Copepoda			II-9-2	541			2705	680
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	60			300	75
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	10					10	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	1
29. Radiolaria							0	0
Total		200		602		0	3210	807

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-191

1. Sample No.·····2303119
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:46-11:49
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2956
16. Volume of water filtered(m3)4.7
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1571

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	281					281	60
Cyclopoida Copepoda			II-9-2	642			6420	1366
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	63			630	134
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	34					34	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	9					9	2
29. Radiolaria							0	0
Total		332		705		0	7382	1571

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-192

1. Sample No.·····2303120
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)June 12 '82, 11:53-11:56
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2958
16. Volume of water filtered(m3) 4.7
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····526

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	136					136	29
Cyclopoida Copepoda			II-9-2	400			2000	426
Harpacticoida Copepoda	I-9-3	2					2	+
10. Copepoda, nauplius			II-10	62			310	66
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	7					7	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	8					8	2
29. Radiolaria							0	0
Total		161		462		0	2471	526

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-193

1. Sample No.·····2303121
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:45-11:48
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2403
16. Volume of water filtered(m3) 3.83
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····633

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	I-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	560					560	146
Cyclopoida Copepoda			II-9-2	226			1130	295
Harpacticoida Copepoda	I-9-3	115					115	30
10. Copepoda, nauplius	I-10	1	II-10	121			606	158
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	2					2	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	2					2	1
29. Radiolaria							0	0
Total		690		347		0	2425	633

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-194

1. Sample No.·····2303122
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:40-11:43
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3054
16. Volume of water filtered(m3) 4.85
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····479

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	413					413	85
Cyclopoida Copepoda			II-9-2	288			1440	297
Harpacticoida Copepoda	I-9-3	42					42	9
10. Copepoda, nauplius			II-10	82			410	85
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	4					4	1
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		468		370		0	2318	479

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-195

1. Sample No.·····2303123
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:35-11:38
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3107
16. Volume of water filtered(m3) 4.94
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1045

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	263					263	53
Cyclopoida Copepoda			II-9-2	424			4240	858
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	62			620	126
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	6					6	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	6					6	1
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		302		486		0	5162	1045

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-198

1. Sample No.·····2303124
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
   39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:30-11:33
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2758
16. Volume of water filtered(m3)4.39
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····787

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	7					7	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	185					185	42
Cyclopoida Copepoda			II-9-2	276			2760	629
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	49			490	112
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		207		325		0	3457	787

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-197

1. Sample No.·····2303125
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:24-11:27
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3006
16. Volume of water filtered(m3) 4.78
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1110

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	191					191	40
Cyclopoida Copepoda			II-9-2	442			4420	925
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	66			660	138
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	7					7	1
22. Thaliacea							0	0
23. Egg	I-23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		226		508		0	5306	1110

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-198

1. Sample No.·····2303126
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:18-11:21
   (GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3078
16. Volume of water filtered(m3) 4.89
    caiculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····801

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	210					210	43
Cyclopoida Copepoda			II-9-2	661			3305	676
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	73			365	75
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		247		734		0	3917	801

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-199

1. Sample No.·····2303127
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT) July 7 '82, 11:12-11:15
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2417
16. Volume of water filtered(m3) 3.85
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····415

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	134					134	35
Cyclopoida Copepoda			II-9-2	669			1338	348
Harpacticoida Copepoda	I-9-3	2					2	1
10. Copepoda, nauplius			II-10	55			110	29
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	1
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		144		724		0	1592	415

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-200

1. Sample No.·····2303128
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 7 '82, 11:05-11:08
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2563
16. Volume of water filtered(m3) 4.08
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····95

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	46					46	11
Cyclopoida Copepoda	I-9-2	287					287	70
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I 10	36					36	9
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	5					5	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	3					3	1
29. Radiolaria	I-29	2					2	+
Total		389		0		0	389	95

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-201

1. Sample No.·····2303129
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT) July 29 '82, 11:30-11:33
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3188
16. Volume of water filtered(m3) 5.06
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····444

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	11					11	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	81					81	16
Cyclopoida Copepoda			II -9-2	146			1460	289
Harpacticoida Copepoda	I -9-3	74					74	15
10. Copepoda, nauplius			II -10	60			600	119
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	8					8	2
22. Thaliacea							0	0
23. Egg	I -23	1					1	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1					1	+
28. Unidentified forms	I -28	5					5	1
29. Radiolaria							0	0
Total		182		206		0	2242	444

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-202

1. Sample No.·····2303130
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 11:26-11:29
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3102
16. Volume of water filtered(m3) 4.93
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····492

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	124					124	25
Cyclopoida Copepoda			II-9-2	171			1710	347
Harpacticoida Copepoda	I-9-3	44					44	9
10. Copepoda, nauplius			II-10	53			530	108
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	5					5	1
29. Radiolaria	I-29	1					1	+
Total		182		224		0	2422	492

+ : less than 1 Indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-203

1. Sample No.·····2303131
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 11:21-11:24
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3172
16. Volume of water filtered(m3) 5.04
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····404

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	12					12	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	116					116	23
Cyclopoida Copepoda			II-9-2	126			1260	250
Harpacticoida Copepoda	I-9-3	29					29	6
10. Copepoda, nauplius			II-10	59			590	117
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	17					17	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		184		185		0	2034	404

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-204_

1. Sample No.·····2303132
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 11:16-11:19
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3199
16. Volume of water filtered(m3) 5.08
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····343

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	11					11	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	88					88	17
Cyclopoida Copepoda			II-9-2	239			1195	235
Harpacticoida Copepoda	I-9-3	34					34	7
10. Copepoda, nauplius			II-10	78			390	77
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	7					7	1
22. Thaliacea							0	0
23. Egg	I-23	7					7	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		156		317		0	1741	343

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-205

1. Sample No.·····2303133
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 11:11-11:14
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3150
16. Volume of water filtered(m3) 5
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····784

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	107					107	21
Cyclopoida Copepoda			II-9-2	661			3305	661
Harpacticoida Copepoda	I-9-3	17					17	3
10. Copepoda, nauplius			II-10	92			460	92
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	18					18	4
22. Thaliacea							0	0
23. Egg	I-23	5					5	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		156		753		0	3921	784

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-206

1. Sample No.·····2303134
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 11:06-11:09
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3204
16. Volume of water filtered(m3) 5.09
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····922

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	257					257	50
Cyclopoida Copepoda			II-9-2	781			3905	767
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	92			460	90
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg	I-23	26					26	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		326		873		0	4691	922

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-207

1. Sample No.·····2303135
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 11:00-11:03
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3127
16. Volume of water filtered(m3) 4.97
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····426

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	155					155	31
Cyclopoida Copepoda			II-9-2	321			1605	323
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	67			335	67
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		178		388		0	2118	426

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-208

1. Sample No.·····2303136
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)July 29 '82, 10:54-10:57
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3188
16. Volume of water filtered(m3) 5.06
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····180

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	68					68	13
Cyclopoida Copepoda			II-9-2	352			704	139
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	61			122	24
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	7					7	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		84		413		0	910	180

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-209

1. Sample No.·····2303137
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 11:24-11:27
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3073
16. Volume of water filtered(m3) 4.88
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····481

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	92					92	19
Cyclopoida Copepoda			II-9-2	148			1480	303
Harpacticoida Copepoda	I-9-3	85					85	17
10. Copepoda, nauplius			II-10	64			640	131
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	11					11	2
22. Thaliacea							0	0
23. Egg	I-23	5					5	1
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	4					4	1
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	17					17	3
29. Radiolaria							0	0
Total		226		212		0	2346	481

+ : less than 1 Indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-210

1. Sample No.·····2303138
2. JARE·····23
3. Area····· Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 11:20-11:23
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3119
16. Volume of water filtered(m3) 4.96
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····481

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	84					84	17
Cyclopoida Copepoda			II-9-2	159			1590	321
Harpacticoida Copepoda	I-9-3	42					42	8
10. Copepoda, nauplius			II-10	63			630	127
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	20					20	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	8					8	2
29. Radiolaria							0	0
Total		163		222		0	2383	481

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-211

1. Sample No.·····2303139
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 11:16-11:19
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2980
16. Volume of water filtered(m3)4.74
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····367

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera							0	0
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta	I-6	7					7	1
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	I-9-1	104					104	22
Cyclopoida Copepoda			II-9-2	217			1085	229
Harpacticoida Copepoda	I-9-3	17					17	4
10.Copepoda, nauplius			II-10	102			510	108
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda	I-18	1					1	+
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	I-21	5					5	1
22.Thaliacea							0	0
23.Egg							0	0
24.Euphausiacea, nauplius							0	0
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms	I-27	3					3	1
28.Unidentified forms	I-28	4					4	1
29.Radiolaria							0	0
Total		141		319		0	1736	367

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-212

1. Sample No.·····2303140
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 11:12-11:15
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3229
16. Volume of water filtered(m3) 5.13
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····408

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	92					92	18
Cyclopoida Copepoda			II-9-2	132			1320	257
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	63			630	123
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg	I-23	12					12	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	8					8	2
29. Radiolaria							0	0
Total		144		195		0	2094	408

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-213

1. Sample No.·····2303141
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 11:07-11:10
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3182
16. Volume of water filtered(m3)5.05
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····710

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	130					130	26
Cyclopoida Copepoda			II-9-2	268			2680	531
Harpacticoida Copepoda	I-9-3	17					17	3
10. Copepoda, nauplius			II-10	73			730	145
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	10					10	2
22. Thaliacea							0	0
23. Egg							0	0
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		171		341		0	3581	710

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-214

1. Sample No.·····2303142
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 11:02-11:05
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3036
16. Volume of water filtered(m3) 4.83
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····510

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	152					152	31
Cyclopoida Copepoda			II-9-2	174			1740	360
Harpacticoida Copepoda	I-9-3	15					15	3
10. Copepoda, nauplius			II-10	52			520	108
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	22					22	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		205		226		0	2465	510

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-215

1. Sample No.·····2303143
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 10:56-10:59
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2632
16. Volume of water filtered(m3) 4.19
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····263

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	144					144	34
Cyclopoida Copepoda			II-9-2	405			810	193
Harpacticoida Copepoda	I-9-3	8					8	2
10. Copepoda, nauplius			II-10	58			116	28
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	17					17	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		175		463		0	1101	263

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-216

1. Sample No.·····2303144
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Aug. 16 '82, 10:49-10:52
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3090
16. Volume of water filtered(m3) 4.91
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····176

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	105					105	21
Cyclopoida Copepoda			II -9-2	305			610	124
Harpacticoida Copepoda	I -9-3	19					19	4
10. Copepoda, nauplius			II -10	47			94	19
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	2					2	+
22. Thaliacea							0	0
23. Egg	I -23	25					25	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	3					3	1
29. Radiolaria							0	0
Total		160		352		0	664	176

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-217_

1. Sample No.·····2303145
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:43-15:46
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3019
16. Volume of water filtered(m3) 4.8
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····329

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	20					20	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	61					61	13
Cyclopoida Copepoda			II -9-2	160			800	167
Harpacticoida Copepoda	I -9-3	58					58	12
10. Copepoda, nauplius			II -10	109			545	114
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	6					6	1
22. Thaliacea							0	0
23. Egg	I -23	25					25	5
24. Euphausiacea, nauplius							0	0
25. Nematoda	I -25	3					3	1
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	52					52	11
29. Radiolaria							0	0
Total		228		269		0	1573	329

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-218

1. Sample No.·····2303146
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:39-15:42
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3135
16. Volume of water filtered(m3) 4.98
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····313

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	7					7	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	63					63	13
Cyclopoida Copepoda	I-9-2	1112					1112	223
Harpacticoida Copepoda	I-9-3	51					51	10
10. Copepoda, nauplius	I-10	291					291	58
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	26					26	5
22. Thaliacea							0	0
23. Egg	I-23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		1560		0		0	1560	313

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-219

1. Sample No.·····2303147
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:34-15:37
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3283
16. Volume of water filtered(m3) 5.21
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····347

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	77					77	15
Cyclopoida Copepoda			II-9-2	233			1165	224
Harpacticoida Copepoda	I-9-3	47					47	9
10. Copepoda, nauplius			II-10	90			450	86
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	12					12	2
22. Thaliacea							0	0
23. Egg	I-23	37					37	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		192		323		0	1807	347

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-220

1. Sample No.·····2303148
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:29-15:32
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3004
16. Volume of water filtered(m3) 4.78
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····280

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	34					34	7
Cyclopoida Copepoda			II-9-2	178			890	186
Harpacticoida Copepoda	I-9-3	69					69	14
10. Copepoda, nauplius			II-10	56			280	59
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	10					10	2
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	29					29	6
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	17					17	4
29. Radiolaria							0	0
Total		170		234		0	1340	280

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-221

1. Sample No.·····2303149
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:24-15:27
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3154
16. Volume of water filtered(m3) 5.01
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····433

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	18					18	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	93					93	19
Cyclopoida Copepoda			II-9-2	140			1400	279
Harpacticoida Copepoda	I-9-3	35					35	7
10. Copepoda, nauplius			II-10	56			560	112
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	12					12	2
22. Thaliacea							0	0
23. Egg	I-23	40					40	8
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		211		196		0	2171	433

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-222

1. Sample No.·····2303150
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT) Sep. 2 '82, 15:19-15:22
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3250
16. Volume of water filtered(m3) 5.16
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····574

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	27					27	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	300					300	58
Cyclopoida Copepoda			II-9-2	208			2080	403
Harpacticoida Copepoda	I-9-3	18					18	3
10. Copepoda, nauplius			II-10	47			470	91
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	12					12	2
22. Thaliacea							0	0
23. Egg	I-23	53					53	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		417		255		0	2967	574

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-223

1. Sample No.·····2303151
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:13-15:16
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3009
16. Volume of water filtered(m3) 4.78
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····352

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	196					196	41
Cyclopoida Copepoda			II-9-2	349			1163	243
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	66			220	46
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	80					80	17
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		298		415		0	1681	352

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-224

1. Sample No.·····2303152
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 2 '82, 15:05-15:08
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3077
16. Volume of water filtered(m3) 4.89
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····121

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera							0	0
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta	I-6	1					1	+
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	I-9-1	73					73	15
Cyclopoida Copepoda			II-9-2	198			396	81
Harpacticoida Copepoda	I-9-3	3					3	1
10.Copepoda, nauplius			II-10	52			104	21
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda			II-18	1			2	+
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	I-21	1					1	+
22.Thaliacea							0	0
23.Egg	I-23	9					9	2
24.Euphausiacea, nauplius							0	0
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms	I-27	1					1	+
28.Unidentified forms							0	0
29.Radiolaria							0	0
Total		88		251		0	590	121

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-225

1. Sample No.·····2303153
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 11:24-11:27
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3205
16. Volume of water filtered(m3) 5.09
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····243

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	26					26	5
Cyclopoida Copepoda			II-9-2	124			620	122
Harpacticoida Copepoda	I-9-3	50					50	10
10. Copepoda, nauplius			II-10	105			525	103
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	3					3	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		91		229		0	1236	243

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-226

1. Sample No. ····· 2303154
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Sep. 16 '82, 11:20-11:23
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 1
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 3218
16. Volume of water filtered(m3) 5.11
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 314

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	62					62	12
Cyclopoida Copepoda			II-9-2	182			910	178
Harpacticoida Copepoda	I-9-3	48					48	9
10. Copepoda, nauplius			II-10	112			560	110
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	4					4	1
22. Thaliacea							0	0
23. Egg	I-23	9					9	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		135		294		0	1605	314

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-227

1. Sample No.·····2303155
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 11:16-11:19
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3239
16. Volume of water filtered(m3) 5.14
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····378

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	122					122	24
Cyclopoida Copepoda			II-9-2	106			1060	206
Harpacticoida Copepoda	I-9-3	51					51	10
10. Copepoda, nauplius			II-10	67			670	130
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	17					17	3
22. Thaliacea							0	0
23. Egg	I-23	13					13	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		215		173		0	1945	378

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-228

1. Sample No.·····2303156
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 11:11-11:14
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2858
16. Volume of water filtered(m3) 4.55
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····242

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	86					86	19
Cyclopoida Copepoda			II-9-2	139			695	153
Harpacticoida Copepoda	I-9-3	24					24	5
10. Copepoda, nauplius			II-10	57			285	63
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	2					2	+
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		122		196		0	1102	242

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-229

1. Sample No.·····2303157
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 11:06-11:09
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3065
16. Volume of water filtered(m3) 4.87
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····510

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	10					10	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	276					276	57
Cyclopoida Copepoda			II-9-2	366			1830	376
Harpacticoida Copepoda	I-9-3	18					18	4
10. Copepoda, nauplius			II-10	66			330	68
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	4					4	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		318		432		0	2478	510

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-230

1. Sample No.·····2303158
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 11:01-11:04
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3225
16. Volume of water filtered(m3) 5.12
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····292

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	23					23	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	215					215	42
Cyclopoida Copepoda			II-9-2	170			850	166
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	53			265	52
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	7					7	1
22. Thaliacea							0	0
23. Egg	I-23	120					120	23
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		378		223		0	1493	292

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-231

1. Sample No.·····2303159
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 10:55-10:58
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3220
16. Volume of water filtered(m3) 5.11
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····185

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	15					15	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	187					187	37
Cyclopoida Copepoda			II-9-2	305			610	119
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	49			98	19
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	24					24	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		238		354		0	946	185

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-232

1. Sample No.·····2303160
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 10:49-10:52
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3141
16. Volume of water filtered(m3) 4.99
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····314

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	185					185	37
Cyclopoida Copepoda	I-9-2	267					267	54
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I-10	43					43	9
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg			II-23	105			1050	210
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	13					13	3
29. Radiolaria							0	0
Total		516		105		0	1566	314

+ : less than 1 Indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-233

1. Sample No.·····2303161
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:52-17:55
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3101
16. Volume of water filtered(m3) 4.93
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····355

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	180					180	37
Cyclopoida Copepoda			II-9-2	217			1085	220
Harpacticoida Copepoda	I-9-3	35					35	7
10. Copepoda, nauplius			II-10	77			385	78
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	42					42	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		274		294		0	1744	355

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-234

1. Sample No.·····2303162
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:48-17:51
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3037
16. Volume of water filtered(m3) 4.83
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····320

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	161					161	33
Cyclopoida Copepoda			II-9-2	190			950	197
Harpacticoida Copepoda	I-9-3	27					27	6
10. Copepoda, nauplius			II-10	76			380	79
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg	I-23	6					6	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		214		266		0	1544	320

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-235

1. Sample No.·····2303163
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:43-17:46
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3153
16. Volume of water filtered(m3) 5.01
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····306

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	177					177	35
Cyclopoida Copepoda			Ⅱ-9-2	204			1020	204
Harpacticoida Copepoda	Ⅰ-9-3	33					33	7
10. Copepoda, nauplius			Ⅱ-10	53			265	53
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	10					10	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	13					13	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1					1	+
28. Unidentified forms	Ⅰ-28	4					4	1
29. Radiolaria							0	0
Total		244		257		0	1529	306

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-236

1. Sample No.·····2303164
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:39-17:42
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3176
16. Volume of water filtered(m3) 5.05
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····361

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	11					11	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	166					166	33
Cyclopoida Copepoda			II-9-2	250			1250	248
Harpacticoida Copepoda	I-9-3	14					14	3
10. Copepoda, nauplius			II-10	61			305	60
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	62					62	12
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		268		311		0	1823	361

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-237

1. Sample No.·····2303165
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:34-17:37
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3053
16. Volume of water filtered(m3) 4.85
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····479

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera			Ⅱ-1	1			5	1
2. Siphonophora							0	0
3. Other medusae	Ⅰ-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	36					36	7
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	282					282	58
Cyclopoida Copepoda			Ⅱ-9-2	334			1670	344
Harpacticoida Copepoda	Ⅰ-9-3	7					7	1
10. Copepoda, nauplius			Ⅱ-10	54			270	56
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	8					8	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	37					37	8
24. Euphausiacea, nauplius	Ⅰ-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1					1	+
28. Unidentified forms	Ⅰ-28	6					6	1
29. Radiolaria							0	0
Total		380		389		0	2325	479

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-238

1. Sample No.·····2303166
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:29-17:32
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2733
16. Volume of water filtered(m3) 4.35
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····303

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	10					10	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	200					200	46
Cyclopoida Copepoda			II-9-2	469			938	216
Harpacticoida Copepoda	I-9-3	7					7	2
10. Copepoda, nauplius			II-10	51			102	23
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	49					49	11
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		276		520		0	1316	303

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-239

1. Sample No.·····2303167
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:23-17:26
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3129
16. Volume of water filtered(m3) 4.97
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····357

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	Ⅰ-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	282					282	57
Cyclopoida Copepoda			Ⅱ-9-2	632			1264	254
Harpacticoida Copepoda	Ⅰ-9-3	4					4	1
10. Copepoda, nauplius			Ⅱ-10	67			134	27
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	12					12	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	66					66	13
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1					1	+
28. Unidentified forms	Ⅰ-28	3					3	1
29. Radiolaria							0	0
Total		377		699		0	1775	357

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-240

1. Sample No.·····2303168
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 17:15-17:18
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3094
16. Volume of water filtered(m3) 4.92
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····113

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	100					100	20
Cyclopoida Copepoda			II-9-2	139			278	57
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I-10	41					41	8
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	124					124	25
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		277		139		0	555	113

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-241

1. Sample No.·····2303169
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 23:15-23:18
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3133
16. Volume of water filtered(m3)4.98
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····527

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	14					14	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	158					158	32
Cyclopoida Copepoda			II-9-2	160			1600	321
Harpacticoida Copepoda	I-9-3	43					43	9
10. Copepoda, nauplius			II-10	64			640	129
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	14					14	3
22. Thaliacea							0	0
23. Egg	I-23	48					48	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	90					90	18
29. Radiolaria							0	0
Total		375		224		0	2615	527

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-242

1. Sample No.·····2303170
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 23:11-23:14
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3160
16. Volume of water filtered(m3) 5.02
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····410

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	12					12	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	160					160	32
Cyclopoida Copepoda			II-9-2	274			1370	273
Harpacticoida Copepoda	I-9-3	22					22	4
10. Copepoda, nauplius			II-10	68			340	68
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	17					17	3
22. Thaliacea							0	0
23. Egg	I-23	45					45	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	88					88	18
29. Radiolaria							0	0
Total		348		342		0	2058	410

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-243

1. Sample No.·····2303171
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 23:06-23:09
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3167
16. Volume of water filtered(m3) 5.03
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····460

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	13					13	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	171					171	34
Cyclopoida Copepoda			II-9-2	331			1655	329
Harpacticoida Copepoda	I-9-3	23					23	5
10. Copepoda, nauplius			II-10	63			315	63
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	10					10	2
22. Thaliacea							0	0
23. Egg	I-23	74					74	15
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	34					34	7
29. Radiolaria							0	0
Total		334		394		0	2304	460

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-244

1. Sample No.·····2303172
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 23:02-23:05
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3070
16. Volume of water filtered(m3) 4.88
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····365

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera	Ⅰ-1	1					1	+
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta	Ⅰ-6	9					9	2
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	Ⅰ-9-1	197					197	40
Cyclopoida Copepoda			Ⅱ-9-2	226			1130	232
Harpacticoida Copepoda	Ⅰ-9-3	17					17	3
10.Copepoda, nauplius			Ⅱ-10	72			360	74
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda							0	0
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	Ⅰ-21	5					5	1
22.Thaliacea							0	0
23.Egg	Ⅰ-23	49					49	10
24.Euphausiacea, nauplius							0	0
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms							0	0
28.Unidentified forms	Ⅰ-28	14					14	3
29.Radiolaria							0	0
Total		292		298		0	1782	365

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-245

1. Sample No.·····2303173
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 22:57-23:00
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3086
16. Volume of water filtered(m3) 4.9
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····356

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I -5	1					1	+
6. Polychaeta	I -6	5					5	1
7. Cladocera							0	0
8. Ostracoda	I -8	1					1	+
9. Calanoida Copepoda	I -9-1	235					235	48
Cyclopoida Copepoda			II -9-2	243			1215	248
Harpacticoida Copepoda	I -9-3	14					14	3
10. Copepoda, nauplius			II -10	47			235	48
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	9					9	2
22. Thaliacea							0	0
23. Egg	I -23	25					25	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1					1	+
28. Unidentified forms	I -28	2					2	+
29. Radiolaria							0	0
Total		293		290		0	1743	356

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-246

1. Sample No.·····2303174
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT) Sep. 16 '82, 22:52-22:55
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 20
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 2947
16. Volume of water filtered(m3) 4.69
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 344

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	11					11	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	288					288	61
Cyclopoida Copepoda			II-9-2	553			1106	236
Harpacticoida Copepoda	I-9-3	7					7	1
10. Copepoda, nauplius			II-10	71			142	30
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	11					11	2
22. Thaliacea							0	0
23. Egg	I-23	39					39	8
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		366		624		0	1614	344

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-247

1. Sample No.·····2303175
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 22:46-22:49
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2827
16. Volume of water filtered(m3)4.5
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····266

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I -5	1					1	+
6. Polychaeta	I -6	15					15	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	306					306	68
Cyclopoida Copepoda			II -9-2	374			748	166
Harpacticoida Copepoda	I -9-3	7					7	2
10. Copepoda, nauplius			II -10	48			96	21
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	4					4	1
22. Thaliacea							0	0
23. Egg	I -23	16					16	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1					1	+
28. Unidentified forms	I -28	5					5	1
29. Radiolaria							0	0
Total		355		422		0	1199	266

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-248

1. Sample No.·····2303176
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 16 '82, 22:39-22:42
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3050
16. Volume of water filtered(m3) 4.85
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····94

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	3					3	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	105					105	22
Cyclopoida Copepoda	I-9-2	294					294	61
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I-10	29					29	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	14					14	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		455		0		0	455	94

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-249

1. Sample No.·····2303177
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 07:31-07:34
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3145
16. Volume of water filtered(m3)5
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····549

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	Ⅰ-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	13					13	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	284					284	57
Cyclopoida Copepoda			Ⅱ-9-2	187			1870	374
Harpacticoida Copepoda	Ⅰ-9-3	53					53	11
10. Copepoda, nauplius			Ⅱ-10	48			480	96
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	5					5	1
22. Thaliacea							0	0
23. Egg	Ⅰ-23	28					28	6
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	Ⅰ-28	5					5	1
29. Radiolaria							0	0
Total		389		235		0	2739	549

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-250

1. Sample No.·····2303178
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 07:27-07:30
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3158
16. Volume of water filtered(m3) 5.02
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····663

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	27					27	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	324					324	65
Cyclopoida Copepoda			II-9-2	230			2300	458
Harpacticoida Copepoda	I-9-3	33					33	7
10. Copepoda, nauplius			II-10	52			520	104
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	16					16	3
22. Thaliacea							0	0
23. Egg	I-23	94					94	19
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	7					7	1
29. Radiolaria							0	0
Total		508		282		0	3328	663

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-251

1. Sample No.·····2303179
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 07:23-07:26
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3176
16. Volume of water filtered(m3) 5.05
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····502

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1.Foraminifera							0	0
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta	I-6	30					30	6
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	I-9-1	258					258	51
Cyclopoida Copepoda			II-9-2	345			1725	342
Harpacticoida Copepoda	I-9-3	23					23	5
10.Copepoda, nauplius			II-10	94			470	93
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda	I-18	2					2	+
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	I-21	13					13	3
22.Thaliacea							0	0
23.Egg							0	0
24.Euphausiacea, nauplius	I-24	1					1	+
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms	I-27	1					1	+
28.Unidentified forms	I-28	8					8	2
29.Radiolaria							0	0
Total		336		439		0	2531	502

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-252

1. Sample No.·····2303180
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT)Sep. 17 '82, 07:19-07:22
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 5
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3165
16. Volume of water filtered(m3) 5.03
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 509

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	33					33	7
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	285					285	57
Cyclopoida Copepoda			II-9-2	345			1725	343
Harpacticoida Copepoda	I-9-3	18					18	4
10. Copepoda, nauplius			II-10	82			410	82
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	14					14	3
22. Thaliacea							0	0
23. Egg	I-23	50					50	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	9					9	2
29. Radiolaria							0	0
Total		415		427		0	2550	509

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-253

1. Sample No.·····2303181
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 07:14-07:17
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3071
16. Volume of water filtered(m3) 4.88
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····451

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	48					48	10
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	246					246	50
Cyclopoida Copepoda			II-9-2	296			1480	303
Harpacticoida Copepoda	I-9-3	10					10	2
10. Copepoda, nauplius			II-10	56			280	57
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	10					10	2
22. Thaliacea							0	0
23. Egg	I-23	117					117	24
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		441		352		0	2201	451

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-254

1. Sample No.·····2303182
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 07:09-07:12
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2660
16. Volume of water filtered(m3) 4.23
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····312

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	Ⅰ-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	264					264	62
Cyclopoida Copepoda			Ⅱ-9-2	443			886	209
Harpacticoida Copepoda	Ⅰ-9-3	5					5	1
10. Copepoda, nauplius			Ⅱ-10	53			106	25
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	9					9	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	33					33	8
24. Euphausiacea, nauplius	Ⅰ-24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	2					2	+
28. Unidentified forms	Ⅰ-28	3					3	1
29. Radiolaria							0	0
Total		326		496		0	1318	312

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-255

1. Sample No.·····2303183
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 07:03-07:06
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2629
16. Volume of water filtered(m3)4.19
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····90

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	82					82	20
Cyclopoida Copepoda	I -9-2	209					209	50
Harpacticoida Copepoda	I -9-3	6					6	1
10. Copepoda, nauplius	I -10	18					18	4
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	1					1	+
22. Thaliacea							0	0
23. Egg	I -23	58					58	14
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms	I -28	1					1	+
29. Radiolaria							0	0
Total		377		0		0	377	90

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-256

1. Sample No.·····2303184
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 06:55-06:58
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2970
16. Volume of water filtered(m3) 4.72
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····67

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	41					41	9
Cyclopoida Copepoda	Ⅰ-9-2	113					113	24
Harpacticoida Copepoda	Ⅰ-9-3	3					3	1
10. Copepoda, nauplius	Ⅰ-10	10					10	2
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	Ⅰ-23	143					143	30
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		314		0		0	314	67

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-257

1. Sample No.·····2303185
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:46-11:49
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2795
16. Volume of water filtered(m3) 4.45
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····314

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	75					75	17
Cyclopoida Copepoda			Ⅱ-9-2	154			770	173
Harpacticoida Copepoda	Ⅰ-9-3	152					152	34
10. Copepoda, nauplius			Ⅱ-10	72			360	81
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	8					8	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	17					17	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	6					6	1
28. Unidentified forms	Ⅰ-28	2					2	+
29. Radiolaria							0	0
Total		267		226		0	1397	314

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-258

1. Sample No.·····2303186
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:42-11:45
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3028
16. Volume of water filtered(m3) 4.81
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····220

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	2					2	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	55					55	11
Cyclopoida Copepoda			II-9-2	129			645	134
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius			II-10	59			295	61
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	9					9	2
22. Thaliacea							0	0
23. Egg	I-23	22					22	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		116		188		0	1056	220

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-259

1. Sample No.·····2303187
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:38-11:41
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3134
16. Volume of water filtered(m3) 4.98
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····264

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	97					97	19
Cyclopoida Copepoda			II-9-2	159			795	160
Harpacticoida Copepoda	I-9-3	40					40	8
10. Copepoda, nauplius			II-10	61			305	61
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	7					7	1
22. Thaliacea							0	0
23. Egg	I-23	54					54	11
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		217		220		0	1317	264

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-260

1. Sample No.·····2303188
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:34-11:37
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2728
16. Volume of water filtered(m3) 4.34
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····268

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	128					128	29
Cyclopoida Copepoda			Ⅱ-9-2	405			810	187
Harpacticoida Copepoda	Ⅰ-9-3	19					19	4
10. Copepoda, nauplius			Ⅱ-10	86			172	40
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	Ⅰ-13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	9					9	2
22. Thaliacea	Ⅰ-22	1					1	+
23. Egg	Ⅰ-23	15					15	3
24. Euphausiacea, nauplius	Ⅰ-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	3					3	1
28. Unidentified forms	Ⅰ-28	1					1	+
29. Radiolaria							0	0
Total		180		491		0	1162	268

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-261

1. Sample No.·····2303189
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT) Sep. 17 '82, 11:29-11:32
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3015
16. Volume of water filtered(m3) 4.79
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····485

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	14					14	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	502					502	105
Cyclopoida Copepoda			II-9-2	301			1505	314
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	47			235	49
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	11					11	2
22. Thaliacea							0	0
23. Egg	I-23	42					42	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		583		348		0	2323	485

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-262

1. Sample No.·····2303190
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:24-11:27
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3061
16. Volume of water filtered(m3) 4.86
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····413

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera	I-1	1					1	+
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha							0	0
6.Polychaeta	I-6	35					35	7
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	I-9-1	542					542	112
Cyclopoida Copepoda			II-9-2	632			1264	260
Harpacticoida Copepoda	I-9-3	6					6	1
10.Copepoda, nauplius			II-10	51			102	21
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda	I-18	1					1	+
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	I-21	7					7	1
22.Thaliacea							0	0
23.Egg	I-23	31					31	6
24.Euphausiacea, nauplius	I-24	4					4	1
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms	I-27	9					9	2
28.Unidentified forms	I-28	3					3	1
29.Radiolaria							0	0
Total		639		683		0	2005	413

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-263

1. Sample No.·····2303191
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:18-11:21
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2999
16. Volume of water filtered(m3)4.77
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····313

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	22					22	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	381					381	80
Cyclopoida Copepoda			II-9-2	456			912	191
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	47			94	20
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg	I-23	69					69	14
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	2					2	+
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		489		503		0	1495	313

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-264

1. Sample No.·····2303192
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Sep. 17 '82, 11:11-11:14
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3043
16. Volume of water filtered(m3) 4.84
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····142

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	Ⅰ-5	1					1	+
6. Polychaeta	Ⅰ-6	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	198					198	41
Cyclopoida Copepoda	Ⅰ-9-2	431					431	89
Harpacticoida Copepoda	Ⅰ-9-3	4					4	1
10. Copepoda, nauplius	Ⅰ-10	36					36	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	2					2	+
22. Thaliacea							0	0
23. Egg	Ⅰ-23	10					10	2
24. Euphausiacea, nauplius	Ⅰ-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	2					2	+
28. Unidentified forms	Ⅰ-28	1					1	+
29. Radiolaria							0	0
Total		687		0		0	687	142

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-265

1. Sample No.·····2303193
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 15:31-15:34
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3060
16. Volume of water filtered(m3) 4.86
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····499

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	44					44	9
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	170					170	35
Cyclopoida Copepoda			II-9-2	584			1947	401
Harpacticoida Copepoda	I-9-3	29					29	6
10. Copepoda, nauplius			II-10	51			170	35
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	7					7	1
22. Thaliacea							0	0
23. Egg	I-23	36					36	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	22					22	5
29. Radiolaria							0	0
Total		309		635		0	2426	499

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-266

1. Sample No.·····2303194
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 15:26-15:29
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3110
16. Volume of water filtered(m3) 4.94
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····448

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	47					47	10
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	229					229	46
Cyclopoida Copepoda			II-9-2	322			1610	326
Harpacticoida Copepoda	I-9-3	16					16	3
10. Copepoda, nauplius			II-10	53			265	54
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	6					6	1
22. Thaliacea							0	0
23. Egg	I-23	31					31	6
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		339		375		0	2214	448

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-267

1. Sample No.·····2303195
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 15:22-15:25
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3020
16. Volume of water filtered(m3) 4.8
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····416

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	44					44	9
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	186					186	39
Cyclopoida Copepoda			II-9-2	774			1548	323
Harpacticoida Copepoda	I-9-3	12					12	3
10. Copepoda, nauplius			II-10	75			150	31
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	10					10	2
22. Thaliacea							0	0
23. Egg	I-23	38					38	8
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		297		849		0	1995	416

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-268

1. Sample No. ····· 2303196
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Oct. 18 '82, 15:17-15:20
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 5
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 3010
16. Volume of water filtered(m3) 4.78
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 417

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	65					65	14
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	190					190	40
Cyclopoida Copepoda			II-9-2	273			1365	286
Harpacticoida Copepoda	I-9-3	2					2	+
10. Copepoda, nauplius			II-10	55			275	58
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	83					83	17
24. Euphausiacea, nauplius	I-24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	1					1	+
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		354		328		0	1994	417

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-269

1. Sample No.·····2303197
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 15:09-15:12
   (GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····1184
16. Volume of water filtered(m3) 4.62
    calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····302

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	63					63	14
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	188					188	41
Cyclopoida Copepoda			Ⅱ-9-2	460			920	199
Harpacticoida Copepoda	Ⅰ-9-3	6					6	1
10. Copepoda, nauplius			Ⅱ-10	72			144	31
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	11					11	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	59					59	13
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1					1	+
28. Unidentified forms	Ⅰ-28	2					2	+
29. Radiolaria							0	0
Total		331		532		0	1395	302

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-270

1. Sample No.·····2303198
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 15:03-15:06
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2721
16. Volume of water filtered(m3) 4.33
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····201

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	21					21	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	192					192	44
Cyclopoida Copepoda			II-9-2	263			526	121
Harpacticoida Copepoda	I-9-3	1					1	+
10. Copepoda, nauplius			II-10	48			96	22
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	23					23	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		249		311		0	871	201

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-271

1. Sample No.·····2303199
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 14:58-15:01
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2511
16. Volume of water filtered(m3) 4.05
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····182

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	10					10	2
2. Siphonophora	Ⅰ-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	19					19	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	136					136	34
Cyclopoida Copepoda			Ⅱ-9-2	226			452	112
Harpacticoida Copepoda	Ⅰ-9-3	21					21	5
10. Copepoda, nauplius	Ⅰ-10	42					42	10
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	13					13	3
22. Thaliacea							0	0
23. Egg	Ⅰ-23	38					38	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1					1	+
28. Unidentified forms	Ⅰ-28	5					5	1
29. Radiolaria							0	0
Total		287		226		0	739	182

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-272

1. Sample No.·····2303200
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Oct. 18 '82, 14:46-14:49
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····700
16. Volume of water filtered(m3) 4.62
calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····53

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	I-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	102					102	22
Cyclopoida Copepoda	I-9-2	97					97	21
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I-10	19					19	4
11. Cumacea							0	0
12. Isopoda	I-12	1					1	+
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	4					4	1
22. Thaliacea							0	0
23. Egg	I-23	4					4	1
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		246		0		0	246	53

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-273

1. Sample No.·····2303201
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:53-14:56
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3234
16. Volume of water filtered(m3) 5.14
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····274

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	100					100	19
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	121					121	24
Cyclopoida Copepoda			Ⅱ-9-2	168			840	163
Harpacticoida Copepoda	Ⅰ-9-3	25					25	5
10. Copepoda, nauplius			Ⅱ-10	51			255	50
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	3					3	1
22. Thaliacea							0	0
23. Egg	Ⅰ-23	48					48	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	5					5	1
28. Unidentified forms	Ⅰ-28	11					11	2
29. Radiolaria							0	0
Total		313		219		0	1408	274

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-274

1. Sample No.·····2303202
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:49-14:52
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3186
16. Volume of water filtered(m3) 5.06
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····310

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	2					2	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	93					93	18
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	179					179	35
Cyclopoida Copepoda			II-9-2	172			860	170
Harpacticoida Copepoda	I-9-3	17					17	3
10. Copepoda, nauplius			II-10	50			250	49
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	152					152	30
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	7					7	1
29. Radiolaria							0	0
Total		458		222		0	1568	310

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-275

1. Sample No.·····2303203
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:45-14:48
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3180
16. Volume of water filtered(m3) 5.05
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····326

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	126					126	25
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	225					225	45
Cyclopoida Copepoda			II-9-2	306			1020	202
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius			II-10	54			180	36
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	4					4	1
22. Thaliacea							0	0
23. Egg	I-23	67					67	13
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	9					9	2
29. Radiolaria							0	0
Total		440		360		0	1640	326

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-276

1. Sample No.·····2303204
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:40-14:43
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3152
16. Volume of water filtered(m3) 5.01
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····350

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	2					2	+
6. Polychaeta	I-6	148					148	30
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	250					250	50
Cyclopoida Copepoda			II-9-2	173			865	173
Harpacticoida Copepoda	I-9-3	10					10	2
10. Copepoda, nauplius			II-10	57			285	57
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	164					164	33
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	4					4	1
28. Unidentified forms	I-28	17					17	3
29. Radiolaria							0	0
Total		601		230		0	1751	350

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-277

1. Sample No.·····2303205
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:27-14:30
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3165
16. Volume of water filtered(m3) 5.03
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····507

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	160					160	32
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	410					410	82
Cyclopoida Copepoda			II-9-2	276			1380	274
Harpacticoida Copepoda	I-9-3	13					13	3
10. Copepoda, nauplius			II-10	54			270	54
11. Cumacea							0	0
12. Isopoda	I-12	1					1	+
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	8					8	2
22. Thaliacea							0	0
23. Egg	I-23	261					261	52
24. Euphausiacea, nauplius	I-24	3					3	1
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	1
28. Unidentified forms	I-28	29					29	6
29. Radiolaria	I-29	1					1	+
Total		894		330		0	2544	507

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-278

1. Sample No.·····2303206
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:22-14:25
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3239
16. Volume of water filtered(m3) 5.14
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····252

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1.Foraminifera							0	0
2.Siphonophora							0	0
3.Other medusae							0	0
4.Ctenophora							0	0
5.Chaetognatha	Ⅰ-5	1					1	+
6.Polychaeta	Ⅰ-6	75					75	15
7.Cladocera							0	0
8.Ostracoda							0	0
9.Calanoida Copepoda	Ⅰ-9-1	274					274	53
Cyclopoida Copepoda			Ⅱ-9-2	353			706	137
Harpacticoida Copepoda	Ⅰ-9-3	5					5	1
10.Copepoda, nauplius			Ⅱ-10	84			168	33
11.Cumacea							0	0
12.Isopoda							0	0
13.Amphipoda							0	0
14.Mysidacea							0	0
15.Euphausiacea							0	0
16.Decapoda							0	0
17.Other Crustacea							0	0
18.Heteropoda/Pteropoda							0	0
19.Cephalopoda							0	0
20.Other Mollusca							0	0
21.Appendicularia	Ⅰ-21	4					4	1
22.Thaliacea							0	0
23.Egg	Ⅰ-23	47					47	9
24.Euphausiacea, nauplius							0	0
25.Nematoda							0	0
26.Fish larvae							0	0
27.Planktonic larval forms	Ⅰ-27	8					8	2
28.Unidentified forms	Ⅰ-28	6					6	1
29.Radiolaria							0	0
Total		420		437		0	1294	252

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-279

1. Sample No.·····2303207
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:17-14:20
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2769
16. Volume of water filtered(m3) 4.41
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····129

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	4					4	1
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	20					20	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	100					100	23
Cyclopoida Copepoda			II-9-2	131			262	59
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I-10	27					27	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	134					134	30
24. Euphausiacea, nauplius	I-24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	3					3	1
28. Unidentified forms	I-28	5					5	1
29. Radiolaria							0	0
Total		305		131		0	567	129

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-280

1. Sample No.·····2303208
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 2 '82, 14:10-14:13
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2975
16. Volume of water filtered(m3) 4.73
    calculated by Flow-meter
17. Wet welght(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····50

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	21					21	4
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	41					41	9
Cyclopoida Copepoda	I-9-2	54					54	11
Harpacticoida Copepoda	I-9-3	17					17	4
10. Copepoda, nauplius	I-10	13					13	3
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca	I-20	1					1	+
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	75					75	16
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda	I-25	2					2	+
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	5					5	1
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		237		0		0	237	50

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-281

1. Sample No.·····2303209
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:55-14:58
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3352
16. Volume of water filtered(m3) 5.32
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····501

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	89					89	17
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	116					116	22
Cyclopoida Copepoda			II-9-2	213			1065	200
Harpacticoida Copepoda	I-9-3	64					64	12
10. Copepoda, nauplius			II-10	182			910	171
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	81					81	15
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	102					102	19
28. Unidentified forms	I-28	231					231	43
29. Radiolaria							0	0
Total		688		395		0	2663	501

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-282

1. Sample No.·····2303210
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:51-14:54
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3314
16. Volume of water filtered(m3) 5.26
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····339

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	84					84	16
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	101					101	19
Cyclopoida Copepoda			II-9-2	202			673	128
Harpacticoida Copepoda	I-9-3	30					30	6
10. Copepoda, nauplius			II-10	193			643	122
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	37					37	7
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	70					70	13
28. Unidentified forms	I-28	141					141	27
29. Radiolaria							0	0
Total		467		395		0	1783	339

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-283

1. Sample No.·····2303211
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:44-14:47
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2091
16. Volume of water filtered(m3)4.87
    calculated by Assumption
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····312

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	5					5	1
2. Siphonophora							0	0
3. Other medusae	Ⅰ-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	80					80	16
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	53					53	11
Cyclopoida Copepoda			Ⅱ-9-2	285			570	117
Harpacticoida Copepoda	Ⅰ-9-3	23					23	5
10. Copepoda, nauplius			Ⅱ-10	263			526	108
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	1					1	+
22. Thaliacea							0	0
23. Egg	Ⅰ-23	42					42	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	53					53	11
28. Unidentified forms	Ⅰ-28	164					164	34
29. Radiolaria							0	0
Total		422		548		0	1518	312

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-284

1. Sample No.·····2303212
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:40-14:43
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3306
16. Volume of water filtered(m3) 5.25
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····262

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	59					59	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	111					111	21
Cyclopoida Copepoda			II-9-2	158			790	150
Harpacticoida Copepoda	I-9-3	2					2	+
10. Copepoda, nauplius			II-10	54			270	51
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	54					54	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	33					33	6
28. Unidentified forms	I-28	55					55	10
29. Radiolaria							0	0
Total		317		212		0	1377	262

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-285_

1. Sample No.·····2303213
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:36-14:39
(GMT)
8. Net used·····Modified NIPR-1(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3120
16. Volume of water filtered(m3) 4.96
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····285

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	140					140	28
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	168					168	34
Cyclopoida Copepoda			II-9-2	401			802	162
Harpacticoida Copepoda	I-9-3	2					2	+
10. Copepoda, nauplius			II-10	65			130	26
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	66					66	13
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	43					43	9
28. Unidentified forms	I-28	61					61	12
29. Radiolaria							0	0
Total		481		466		0	1413	285

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-286_

1. Sample No.·····2303214
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:30-14:33
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2838
16. Volume of water filtered(m3) 4.51
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····232

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	130					130	29
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	171					171	38
Cyclopoida Copepoda			II -9-2	244			488	108
Harpacticoida Copepoda	I -9-3	3					3	1
10. Copepoda, nauplius			II -10	56			112	25
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	1					1	+
22. Thaliacea							0	0
23. Egg	I -23	46					46	10
24. Euphausiacea, nauplius	I -24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	20					20	4
28. Unidentified forms	I -28	72					72	16
29. Radiolaria							0	0
Total		445		300		0	1045	232

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-287

1. Sample No.·····2303215
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:25-14:28
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····2675
16. Volume of water filtered(m3)4.26
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····65

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I -1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	27					27	6
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	41					41	10
Cyclopoida Copepoda	I -9-2	137					137	32
Harpacticoida Copepoda	I -9-3	5					5	1
10. Copepoda, nauplius	I -10	14					14	3
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I -23	35					35	8
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	4					4	1
28. Unidentified forms	I -28	11					11	3
29. Radiolaria							0	0
Total		276		0		0	276	65

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-288

1. Sample No.·····2303216
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Nov. 15 '82, 14:18-14:21
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····45
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3300
16. Volume of water filtered(m3) 4.52
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····45

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	13					13	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	33					33	7
Cyclopoida Copepoda	I-9-2	79					79	17
Harpacticoida Copepoda	I-9-3	2					2	+
10. Copepoda, nauplius	I-10	24					24	5
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	19					19	4
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	14					14	3
28. Unidentified forms	I-28	17					17	4
29. Radiolaria							0	0
Total		205		0		0	205	45

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-289

1. Sample No.·····2303217
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:46-14:49
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3285
16. Volume of water filtered(m3) 5.22
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····223

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	279					279	53
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	66					66	13
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	20					20	4
Cyclopoida Copepoda			II-9-2	163			326	62
Harpacticoida Copepoda	I-9-3	34					34	7
10. Copepoda, nauplius			II-10	61			122	23
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	115					115	22
24. Euphausiacea, nauplius	I-24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	91					91	17
28. Unidentified forms	I-28	105					105	20
29. Radiolaria							0	0
Total		716		224		0	1164	223

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-290

1. Sample No.·····2303218
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:42-14:45
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3563
16. Volume of water filtered(m3) 5.65
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····288

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	58					58	10
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	148					148	26
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	22					22	4
Cyclopoida Copepoda			II-9-2	132			660	117
Harpacticoida Copepoda	I-9-3	27					27	5
10. Copepoda, nauplius			II-10	54			270	48
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	87					87	15
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	218					218	39
28. Unidentified forms	I-28	130					130	23
29. Radiolaria							0	0
Total		697		186		0	1627	288

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-291_

1. Sample No.·····2303219
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:38-14:41
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3575
16. Volume of water filtered(m3) 5.67
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····289

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	Ⅰ-1	16					16	3
2. Siphonophora							0	0
3. Other medusae	Ⅰ-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha	Ⅰ-5	1					1	+
6. Polychaeta	Ⅰ-6	112					112	20
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	22					22	4
Cyclopoida Copepoda			Ⅱ-9-2	158			790	139
Harpacticoida Copepoda	Ⅰ-9-3	7					7	1
10. Copepoda, nauplius			Ⅱ-10	62			310	55
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	Ⅰ-23	102					102	18
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	165					165	29
28. Unidentified forms	Ⅰ-28	115					115	20
29. Radiolaria							0	0
Total		541		220		0	1641	289

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-292

1. Sample No.·····2303220
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:34-14:37
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3430
16. Volume of water filtered(m3) 5.44
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····272

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	125					125	23
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	15					15	3
Cyclopoida Copepoda			II-9-2	269			538	99
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	152			304	56
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	123					123	23
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	242					242	44
28. Unidentified forms	I-28	119					119	22
29. Radiolaria							0	0
Total		636		421		0	1478	272

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-293

1. Sample No.·····2303221
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:30-14:33
   (GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3088
16. Volume of water filtered(m3) 4.91
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····480

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	12					12	2
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	105					105	21
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	26					26	5
Cyclopoida Copepoda			II -9-2	262			1310	267
Harpacticoida Copepoda	I -9-3	7					7	1
10. Copepoda, nauplius			II -10	114			570	116
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	1					1	+
22. Thaliacea							0	0
23. Egg	I -23	112					112	23
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	130					130	26
28. Unidentified forms	I -28	82					82	17
29. Radiolaria							0	0
Total		475		376		0	2355	480

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-294

1. Sample No.·····2303222
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:25-14:28
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3451
16. Volume of water filtered(m3) 5.48
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····232

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	6					6	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	212					212	39
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	65					65	12
Cyclopoida Copepoda			II-9-2	321			642	117
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius			II-10	82			164	30
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	49					49	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	72					72	13
28. Unidentified forms	I-28	55					55	10
29. Radiolaria							0	0
Total		465		403		0	1271	232

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-295

1. Sample No.·····2303223
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:18-14:21
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3348
16. Volume of water filtered(m3) 5.32
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····266

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/2 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	Ⅰ-1	11					11	2
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	Ⅰ-5	2					2	+
6. Polychaeta	Ⅰ-6	213					213	40
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	175					175	33
Cyclopoida Copepoda			Ⅱ-9-2	340			680	128
Harpacticoida Copepoda	Ⅰ-9-3	6					6	1
10. Copepoda, nauplius			Ⅱ-10	77			154	29
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	1					1	+
22. Thaliacea							0	0
23. Egg	Ⅰ-23	76					76	14
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	39					39	7
28. Unidentified forms	Ⅰ-28	58					58	11
29. Radiolaria							0	0
Total		581		417		0	1415	266

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-296

1. Sample No.·····2303224
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 2 '82, 14:07-14:10
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3398
16. Volume of water filtered(m3) 5.39
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····261

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	128					128	24
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	148					148	27
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	124					124	23
Cyclopoida Copepoda			II-9-2	324			648	120
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius			II-10	48			96	18
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	184					184	34
24. Euphausiacea, nauplius	I-24	3					3	1
25. Nematoda	I-25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	29					29	5
28. Unidentified forms	I-28	34					34	6
29. Radiolaria							0	0
Total		664		372		0	1408	261

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-297

1. Sample No.·····2303225
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 11:15-11:18
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3206
16. Volume of water filtered(m3) 5.09
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····224

Proportion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	32					32	6
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	60					60	12
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	34					34	7
Cyclopoida Copepoda			II-9-2	173			433	85
Harpacticoida Copepoda	I-9-3	122					122	24
10. Copepoda, nauplius			II-10	93			233	46
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	11					11	2
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda	I-25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	155					155	30
28. Unidentified forms	I-28	55					55	11
29. Radiolaria							0	0
Total		476		266		0	1142	224

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-298

1. Sample No.·····2303226
2. JARE····· 23
3. Area····· Syowa Station
4. Station No.····· 3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)···· 50
7. Date & time(LMT) Dec. 13 '82, 11:11-11:14
(GMT)
8. Net used····· Modified NIPR-I(100 μm)
9. Method of haul·· Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 1
estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3794
16. Volume of water filtered(m3) 6.02
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 380

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	14					14	2
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	80					80	13
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	51					51	8
Cyclopoida Copepoda			II -9-2	195			975	162
Harpacticoida Copepoda	I -9-3	32					32	5
10. Copepoda, nauplius			II -10	105			525	87
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I -13	1					1	+
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	3					3	+
22. Thaliacea							0	0
23. Egg	I -23	32					32	5
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	480					480	80
28. Unidentified forms	I -28	92					92	15
29. Radiolaria							0	0
Total		788		300		0	2288	380

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-299

1. Sample No.·····2303227
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 11:07-11:10
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3742
16. Volume of water filtered(m3) 5.93
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····307

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	91					91	15
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	72					72	12
Cyclopoida Copepoda			II-9-2	184			920	155
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	65			325	55
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	14					14	2
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	320					320	54
28. Unidentified forms	I-28	52					52	9
29. Radiolaria							0	0
Total		575		249		0	1820	307

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-300

1. Sample No. ·····2303228
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Dec. 13 '82, 11:03-11:06
   (GMT)
8. Net used ····· Modified NIPR-1(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 5
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 3733
16. Volume of water filtered(m3) 5.92
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 312

Proportion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	135					135	23
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	102					102	17
Cyclopoida Copepoda			II-9-2	418			1045	177
Harpacticoida Copepoda	I-9-3	20					20	3
10. Copepoda, nauplius			II-10	68			170	29
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	41					41	7
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	288					288	49
28. Unidentified forms	I-28	43					43	7
29. Radiolaria							0	0
Total		632		486		0	1847	312

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-301

1. Sample No.·····2303229
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 10:59-11:02
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3132
16. Volume of water filtered(m3) 4.98
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····209

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	I -3	4					4	1
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	65					65	13
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	92					92	18
Cyclopoida Copepoda			II -9-2	306			612	123
Harpacticoida Copepoda	I -9-3	5					5	1
10. Copepoda, nauplius			II -10	48			96	19
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	1					1	+
22. Thaliacea							0	0
23. Egg	I -23	40					40	8
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae	I -26	11					11	2
27. Planktonic larval forms	I -27	113					113	23
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		332		354		0	1040	209

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-302_

1. Sample No.·····2303230
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 10:53-10:56
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3725
16. Volume of water filtered(m3) 5.91
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····196

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	119					119	20
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	173					173	29
Cyclopoida Copepoda			II-9-2	352			704	119
Harpacticoida Copepoda	I-9-3	4					4	1
10. Copepoda, nauplius	I-10	46					46	8
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	75					75	13
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	26					26	4
28. Unidentified forms	I-28	12					12	2
29. Radiolaria							0	0
Total		456		352		0	1160	196

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-303

1. Sample No.·····2303231
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 10:48-10:51
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3490
16. Volume of water filtered(m3) 5.54
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····274

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	292					292	53
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	202					202	36
Cyclopoida Copepoda			II -9-2	401			802	145
Harpacticoida Copepoda	I -9-3	5					5	1
10. Copepoda, nauplius	I -10	51					51	9
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	2					2	+
22. Thaliacea							0	0
23. Egg	I -23	119					119	21
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	13					13	2
28. Unidentified forms	I -28	27					27	5
29. Radiolaria							0	0
Total		716		401		0	1518	274

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-304

1. Sample No.·····2303232
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 10:42-10:45
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3589
16. Volume of water filtered(m3) 5.69
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····137

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	24					24	4
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	67					67	12
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	194					194	34
Cyclopoida Copepoda	I-9-2	311					311	55
Harpacticoida Copepoda	I-9-3	5					5	1
10. Copepoda, nauplius	I-10	34					34	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	129					129	23
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	1
28. Unidentified forms	I-28	4					4	1
29. Radiolaria							0	0
Total		778		0		0	778	137

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-305

1. Sample No.·····2303233
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:58-18:01
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3674
16. Volume of water filtered(m3) 5.83
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····453

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	4					4	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	291					291	50
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	98					98	17
Cyclopoida Copepoda			II-9-2	216			1080	185
Harpacticoida Copepoda	I-9-3	84					84	14
10. Copepoda, nauplius			II-10	98			490	84
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	44					44	8
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	406					406	70
28. Unidentified forms	I-28	134					134	23
29. Radiolaria							0	0
Total		1068		314		0	2638	453

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-306

1. Sample No.·····2303234
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:54-17:57
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3785
16. Volume of water filtered(m3)6
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····520

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	307					307	51
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	52					52	9
Cyclopoida Copepoda			II -9-2	177			1770	295
Harpacticoida Copepoda	I -9-3	19					19	3
10. Copepoda, nauplius			II -10	48			480	80
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I -23	85					85	14
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	353					353	59
28. Unidentified forms	I -28	49					49	8
29. Radiolaria							0	0
Total		867		225		0	3117	520

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-307_

1. Sample No.·····2303235
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:50-17:53
(GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3729
16. Volume of water filtered(m3) 5.91
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····567

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	278					278	47
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	62					62	10
Cyclopoida Copepoda			II-9-2	193			1930	327
Harpacticoida Copepoda	I-9-3	15					15	3
10. Copepoda, nauplius			II-10	65			650	110
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	7					7	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	76					76	13
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	290					290	49
28. Unidentified forms	I-28	40					40	7
29. Radiolaria							0	0
Total		772		258		0	3352	567

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-308

1. Sample No.·····2303236
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:46-17:49
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3741
16. Volume of water filtered(m3) 5.93
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····482

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	245					245	41
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	86					86	15
Cyclopoida Copepoda			II-9-2	298			1490	251
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius			II-10	92			460	78
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	7					7	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	77					77	13
24. Euphausiacea, nauplius	I-24	3					3	1
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	392					392	66
28. Unidentified forms	I-28	72					72	12
29. Radiolaria							0	0
Total		904		390		0	2854	482

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-309

1. Sample No.·····2303237
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:42-17:45
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3821
16. Volume of water filtered(m3) 6.06
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····395

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	235					235	39
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	156					156	26
Cyclopoida Copepoda			II-9-2	258			1290	213
Harpacticoida Copepoda	I-9-3	10					10	2
10. Copepoda, nauplius			II-10	52			260	43
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	103					103	17
24. Euphausiacea, nauplius	I-24	4					4	1
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	259					259	43
28. Unidentified forms	I-28	58					58	10
29. Radiolaria							0	0
Total		832		310		0	2382	395

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-310

1. Sample No.·····2303238
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:37-17:40
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3627
16. Volume of water filtered(m3) 5.75
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····230

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	121					121	21
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	106					106	18
Cyclopoida Copepoda			II-9-2	162			810	141
Harpacticoida Copepoda	I-9-3	4					4	1
10. Copepoda, nauplius	I-10	95					95	17
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	2					2	+
22. Thaliacea							0	0
23. Egg	I-23	58					58	10
24. Euphausiacea, nauplius	I-24	5					5	1
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	110					110	19
28. Unidentified forms	I-28	13					13	2
29. Radiolaria							0	0
Total		515		162		0	1325	230

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-311

1. Sample No.·····2303239
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:32-17:35
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3541
16. Volume of water filtered(m3) 5.62
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····73

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	38					38	7
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	75					75	13
Cyclopoida Copepoda	I-9-2	80					80	14
Harpacticoida Copepoda	I-9-3	6					6	1
10. Copepoda, nauplius	I-10	35					35	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	109					109	19
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	60					60	11
28. Unidentified forms	I-28	6					6	1
29. Radiolaria							0	0
Total		410		0		0	410	73

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-312

1. Sample No.·····2303240
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 17:25-17:28
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3607
16. Volume of water filtered(m3) 5.72
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····35

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	6					6	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I -5	1					1	+
6. Polychaeta	I -6	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	28					28	5
Cyclopoida Copepoda	I -9-2	97					97	17
Harpacticoida Copepoda	I -9-3	7					7	1
10. Copepoda, nauplius	I -10	11					11	2
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I -23	36					36	6
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	6					6	1
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		202		0		0	202	35

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-313

1. Sample No.·····2303241
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:33-23:36
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3406
16. Volume of water filtered(m3) 5.41
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····366

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	Ⅰ-1	4					4	1
2. Siphonophora	Ⅰ-2	2					2	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	142					142	26
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	71					71	13
Cyclopoida Copepoda			Ⅱ-9-2	130			650	120
Harpacticoida Copepoda	Ⅰ-9-3	63					63	12
10. Copepoda, nauplius			Ⅱ-10	79			395	73
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	9					9	2
22. Thaliacea							0	0
23. Egg	Ⅰ-23	38					38	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	555					555	103
28. Unidentified forms	Ⅰ-28	44					44	8
29. Radiolaria							0	0
Total		933		209		0	1378	366

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-314

1. Sample No.·····2303242
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:29-23:32
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3846
16. Volume of water filtered(m3) 6.1
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····367

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	6					6	1
2. Siphonophora	I-2	76					76	12
3. Other medusae	I-3	2					2	+
4. Ctenophora							0	0
5. Chaetognatha	I-5	1					1	+
6. Polychaeta	I-6	175					175	29
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	65					65	11
Cyclopoida Copepoda			II-9-2	130			650	107
Harpacticoida Copepoda	I-9-3	28					28	5
10. Copepoda, nauplius			II-10	99			495	81
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	9					9	1
22. Thaliacea							0	0
23. Egg	I-23	44					44	7
24. Euphausiacea, nauplius	I-24	3					3	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	652					652	107
28. Unidentified forms	I-28	28					28	5
29. Radiolaria							0	0
Total		1094		229		0	2239	367

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-315

1. Sample No.·····2303243
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:25-23:28
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3874
16. Volume of water filtered(m3) 6.14
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····294

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/5 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	158					158	26
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	60					60	10
Cyclopoida Copepoda			Ⅱ-9-2	118			590	96
Harpacticoida Copepoda	Ⅰ-9-3	20					20	3
10. Copepoda, nauplius			Ⅱ-10	73			365	59
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	6					6	1
22. Thaliacea							0	0
23. Egg	Ⅰ-23	46					46	7
24. Euphausiacea, nauplius	Ⅰ-24	3					3	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	536					536	87
28. Unidentified forms	Ⅰ-28	22					22	4
29. Radiolaria							0	0
Total		853		191		0	1808	294

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-316

1. Sample No.·····2303244
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:21-23:24
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3639
16. Volume of water filtered(m3) 5.77
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····407

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	4					4	1
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	170					170	29
7. Cladocera							0	0
8. Ostracoda	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	87					87	15
Cyclopoida Copepoda			II-9-2	193			965	167
Harpacticoida Copepoda	I-9-3	11					11	2
10. Copepoda, nauplius			II-10	75			375	65
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	9					9	2
22. Thaliacea							0	0
23. Egg	I-23	43					43	7
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	640					640	111
28. Unidentified forms	I-28	39					39	7
29. Radiolaria							0	0
Total		1009		268		0	2349	407

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-317

1. Sample No.·····2303245
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:16-23:19
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3830
16. Volume of water filtered(m3) 6.07
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····284

Proportion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	104					104	17
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	122					122	20
Cyclopoida Copepoda			II-9-2	373			933	154
Harpacticoida Copepoda	I-9-3	9					9	1
10. Copepoda, nauplius			II-10	55			138	23
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	5					5	1
22. Thaliacea							0	0
23. Egg	I-23	50					50	8
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	318					318	52
28. Unidentified forms	I-28	43					43	7
29. Radiolaria							0	0
Total		652		428		0	1723	284

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-318

1. Sample No.·····2303246
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:12-23:15
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3840
16. Volume of water filtered(m3) 6.09
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····295

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	242					242	40
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	162					162	27
Cyclopoida Copepoda			II-9-2	174			870	143
Harpacticoida Copepoda	I-9-3	13					13	2
10. Copepoda, nauplius	I-10	90					90	15
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	+
22. Thaliacea							0	0
23. Egg	I-23	302					302	50
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	85					85	14
28. Unidentified forms	I-28	24					24	4
29. Radiolaria							0	0
Total		925		174		0	1795	295

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-319

1. Sample No.·····2303247
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:07-23:10
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3619
16. Volume of water filtered(m3)5.74
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····200

Proportion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	223					223	39
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	148					148	26
Cyclopoida Copepoda			II-9-2	229			573	100
Harpacticoida Copepoda	I-9-3	4					4	1
10. Copepoda, nauplius	I-10	32					32	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	120					120	21
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	4					4	1
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	22					22	4
28. Unidentified forms	I-28	8					8	1
29. Radiolaria							0	0
Total		566		229		0	1139	200

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-320_

1. Sample No.·····2303248
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 13 '82, 23:01-23:04
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3186
16. Volume of water filtered(m3) 5.06
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····245

Proportion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I -1	3					3	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	90					90	18
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	175					175	35
Cyclopoida Copepoda			II -9-2	297			743	147
Harpacticoida Copepoda	I -9-3	3					3	1
10. Copepoda, nauplius	I -10	30					30	6
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	3					3	1
22. Thaliacea							0	0
23. Egg	I -23	146					146	29
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	26					26	5
28. Unidentified forms	I -28	7					7	1
29. Radiolaria	I -29	3					3	1
Total		487		297		0	1230	245

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-321

1. Sample No.·····2303249
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 07:14-07:17
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3729
16. Volume of water filtered(m3) 5.91
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····327

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	106					106	18
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	36					36	6
Cyclopoida Copepoda			II -9-2	149			497	84
Harpacticoida Copepoda	I -9-3	130					130	22
10. Copepoda, nauplius			II -10	97			323	55
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	4					4	1
22. Thaliacea							0	0
23. Egg	I -23	28					28	5
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	766					766	130
28. Unidentified forms	I -28	30					30	5
29. Radiolaria							0	0
Total		1106		246		0	1926	327

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-322

1. Sample No.·····2303250
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 07:10-07:13
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3916
16. Volume of water filtered(m3) 6.21
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····265

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	95					95	15
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	73					73	12
Cyclopoida Copepoda			II-9-2	229			763	123
Harpacticoida Copepoda	I-9-3	24					24	4
10. Copepoda, nauplius			II-10	64			213	34
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	12					12	2
22. Thaliacea							0	0
23. Egg	I-23	37					37	6
24. Euphausiacea, nauplius	I-24	3					3	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	394					394	63
28. Unidentified forms	I-28	30					30	5
29. Radiolaria							0	0
Total		672		293		0	1648	265

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-323

1. Sample No.·····2303251
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT) Dec. 14 '82, 07:05-07:08
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※····· 2
    estimated by ····
14. Flow-meter used····· GO 2030
15. Flow-meter reading····· 3739
16. Volume of water filtered(m3) 5.93
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3····· 426

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	1					1	+
2. Siphonophora							0	0
3. Other medusae	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	161					161	27
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	100					100	17
Cyclopoida Copepoda			II -9-2	417			1390	234
Harpacticoida Copepoda	I -9-3	18					18	3
10. Copepoda, nauplius			II -10	62			207	35
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	8					8	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	9					9	2
22. Thaliacea							0	0
23. Egg	I -23	65					65	11
24. Euphausiacea, nauplius	I -24	3					3	1
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	539					539	91
28. Unidentified forms	I -28	26					26	4
29. Radiolaria							0	0
Total		931		479		0	2528	426

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-324

1. Sample No.·····2303252
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 07:01-07:04
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3863
16. Volume of water filtered(m3) 6.12
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····310

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	184					184	30
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	72					72	12
Cyclopoida Copepoda			II -9-2	206			1030	168
Harpacticoida Copepoda	I -9-3	10					10	2
10. Copepoda, nauplius			II -10	49			245	40
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	3					3	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	5					5	1
22. Thaliacea							0	0
23. Egg	I -23	43					43	7
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	288					288	47
28. Unidentified forms	I -28	17					17	3
29. Radiolaria							0	0
Total		623		255		0	1898	310

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-325

1. Sample No.·····2303253
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 06:57-07:00
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3400
16. Volume of water filtered(m3) 5.4
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····342

Proportion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		1/5 Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	161					161	30
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	109					109	20
Cyclopoida Copepoda			II-9-2	163	III-9-2	126	1038	192
Harpacticoida Copepoda	I-9-3	8					8	1
10. Copepoda, nauplius			II-10	69			173	32
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	7					7	1
22. Thaliacea							0	0
23. Egg	I-23	102					102	19
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	228					228	42
28. Unidentified forms	I-28	17					17	3
29. Radiolaria							0	0
Total		635		232		126	1846	342

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-326

1. Sample No.·····2303254
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 06:53-06:56
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3670
16. Volume of water filtered(m3) 5.82
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····222

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	1					1	+
2. Siphonophora	I-2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	160					160	27
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	172					172	30
Cyclopoida Copepoda	I-9-2	188	II-9-2	110			738	127
Harpacticoida Copepoda	I-9-3	9					9	2
10. Copepoda, nauplius	I-10	48					48	8
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	100					100	17
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	50					50	9
28. Unidentified forms	I-28	10					10	2
29. Radiolaria							0	0
Total		741		110		0	1291	222

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-327

1. Sample No.·····2303255
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 06:47-06:50
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3761
16. Volume of water filtered(m3) 5.96
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····329

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	98					98	16
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	208					208	35
Cyclopoida Copepoda	I-9-2	149	II-9-2	136			1509	253
Harpacticoida Copepoda	I-9-3	7					7	1
10. Copepoda, nauplius	I-10	26					26	4
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	1					1	+
22. Thaliacea							0	0
23. Egg	I-23	64					64	11
24. Euphausiacea, nauplius	I-24	8					8	1
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	38					38	6
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		603		136		0	1963	329

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-328

1. Sample No.·····2303256
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 06:41-06:44
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3693
16. Volume of water filtered(m3) 5.86
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····46

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	8					8	1
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	37					37	6
Cyclopoida Copepoda	I -9-2	124					124	21
Harpacticoida Copepoda	I -9-3	5					5	1
10. Copepoda, nauplius	I -10	9					9	2
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	2					2	+
22. Thaliacea							0	0
23. Egg	I -23	67					67	11
24. Euphausiacea, nauplius							0	0
25. Nematoda	I -25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	5					5	1
28. Unidentified forms	I -28	1					1	+
29. Radiolaria							0	0
Total		268		0		0	268	46

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-329

1. Sample No.·····2303257
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:51-11:54
   (GMT)
8. Net used·····Modified NIPR-I(100μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3480
16. Volume of water filtered(m3) 5.52
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····370

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	10					10	2
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	131					131	24
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	63					63	11
Cyclopoida Copepoda			II-9-2	127			423	77
Harpacticoida Copepoda	I-9-3	148					148	27
10. Copepoda, nauplius			II-10	88			293	53
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	3					3	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	8					8	1
22. Thaliacea							0	0
23. Egg	I-23	41					41	7
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	900					900	163
28. Unidentified forms	I-28	22					22	4
29. Radiolaria	I-29	1					1	+
Total		1327		215		0	2043	370

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-330

1. Sample No. ····· 2303258
2. JARE ····· 23
3. Area ····· Syowa Station
4. Station No. ····· 3
5. Position ····· 68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m) ···· 50
7. Date & time(LMT) Dec. 14 '82, 11:47-11:50
   (GMT)
8. Net used ····· Modified NIPR-I(100 μm)
9. Method of haul ·· Layered
10. Duration of haul 3 min
11. Wire run out(m) ·····
12. Wire angle(°) ·····
13. Depth of haul(m)※ ····· 1
    estimated by ····
14. Flow-meter used ····· GO 2030
15. Flow-meter reading ····· 3732
16. Volume of water filtered(m3) 5.92
    calculated by Flow-meter
17. Wet weight(mg) per m3 ·····
18. Settling volume(cc) per m3 ··
19. Total number per m3 ····· 248

Proportion of Sample sorted	1/1 Sample [Sort I]		3/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera	I -1	3					3	1
2. Siphonophora	I -2	23					23	4
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	96					96	16
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	28					28	5
Cyclopoida Copepoda			II -9-2	134			447	76
Harpacticoida Copepoda	I -9-3	43					43	7
10. Copepoda, nauplius			II -10	78			260	44
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	7					7	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	2					2	+
22. Thaliacea							0	0
23. Egg	I -23	28					28	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	513					513	87
28. Unidentified forms	I -28	13					13	2
29. Radiolaria							0	0
Total		756		212		0	1463	248

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-331

1. Sample No.·····2303259
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:43-11:46
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····4010
16. Volume of water filtered(m3) 6.36
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····252

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	171					171	27
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	32					32	5
Cyclopoida Copepoda			II-9-2	96			480	75
Harpacticoida Copepoda	I-9-3	36					36	6
10. Copepoda, nauplius			II-10	10			50	8
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	9					9	1
22. Thaliacea							0	0
23. Egg	I-23	33					33	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	767					767	121
28. Unidentified forms	I-28	21					21	3
29. Radiolaria							0	0
Total		1074		106		0	1604	252

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-332

1. Sample No.·····2303260
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:38-11:41
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3181
16. Volume of water filtered(m3) 5.05
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····180

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	121					121	24
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	40					40	8
Cyclopoida Copepoda	I -9-2	247					247	49
Harpacticoida Copepoda	I -9-3	12					12	2
10. Copepoda, nauplius	I -10	176					176	35
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	5					5	1
22. Thaliacea							0	0
23. Egg	I -23	23					23	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	262					262	52
28. Unidentified forms	I -28	20					20	4
29. Radiolaria							0	0
Total		907		0		0	907	180

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-333

1. Sample No.·····2303261
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:34-11:37
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3997
16. Volume of water filtered(m3) 6.34
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····304

Proportion of Sample sorted	1/1 Sample [Sort I]		4/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	336					336	53
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	113					113	18
Cyclopoida Copepoda			II -9-2	357			893	141
Harpacticoida Copepoda	I -9-3	8					8	1
10. Copepoda, nauplius			II -10	47			118	19
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	6					6	1
22. Thaliacea							0	0
23. Egg	I -23	52					52	8
24. Euphausiacea, nauplius	I -24	3					3	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	361					361	57
28. Unidentified forms	I -28	36					36	6
29. Radiolaria	I -29	1					1	+
Total		918		404		0	1929	304

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-334

1. Sample No.·····2303262
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:29-11:32
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3950
16. Volume of water filtered(m3) 6.26
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····253

Proportion of Sample sorted	1/1 Sample [Sort I]		1/2 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I -2	2					2	+
3. Other medusae	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	251					251	40
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	247					247	39
Cyclopoida Copepoda			II -9-2	266			532	85
Harpacticoida Copepoda	I -9-3	2					2	+
10. Copepoda, nauplius			II -10	45			90	14
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	4					4	1
22. Thaliacea							0	0
23. Egg	I -23	180					180	29
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	251					251	40
28. Unidentified forms	I -28	24					24	4
29. Radiolaria							0	0
Total		964		311		0	1586	253

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-335

1. Sample No.·····2303263
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:24-11:27
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3629
16. Volume of water filtered(m3) 5.76
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····170

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora	I -2	1					1	+
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	122					122	21
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	135					135	23
Cyclopoida Copepoda	I -9-2	537					537	93
Harpacticoida Copepoda	I -9-3	5					5	1
10. Copepoda, nauplius	I -10	41					41	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	1					1	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	2					2	+
22. Thaliacea							0	0
23. Egg	I -23	71					71	12
24. Euphausiacea, nauplius	I -24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	60					60	10
28. Unidentified forms	I -28	6					6	1
29. Radiolaria							0	0
Total		982		0		0	982	170

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-336

1. Sample No.·····2303264
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 14 '82, 11:17-11:20
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3722
16. Volume of water filtered(m3) 5.9
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····370

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophcra							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	149					149	25
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	226					226	38
Cyclopoida Copepoda	I -9-2	247	II -9-2	135			1597	271
Harpacticoida Copepoda	I -9-3	4					4	1
10. Copepoda, nauplius	I -10	44					44	7
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	5					5	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	3					3	1
22. Thaliacea							0	0
23. Egg	I -23	106					106	18
24. Euphausiacea, nauplius	I -24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	36					36	6
28. Unidentified forms	I -28	11					11	2
29. Radiolaria							0	0
Total		833		135		0	2183	370

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-337

1. Sample No.·····2303265
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 09:40-09:43
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····0
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3507
16. Volume of water filtered(m3) 5.57
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····322

Proportion of Sample sorted	1/1 Sample [Sort I]		2/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I -1	22					22	4
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	37					37	7
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	35					35	6
Cyclopoida Copepoda	I -9-2	89	II -9-2	93			554	99
Harpacticoida Copepoda	I -9-3	550					550	99
10. Copepoda, nauplius			II -10	76			380	68
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	8					8	1
22. Thaliacea							0	0
23. Egg	I -23	26					26	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	163					163	29
28. Unidentified forms	I -28	15					15	3
29. Radiolaria	I -29	1					1	+
Total		946		169		0	1791	322

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-338

1. Sample No.·····2303266
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 09:45-09:48
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····1
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3508
16. Volume of water filtered(m3) 5.57
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····780

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I -2	1					1	+
3. Other medusae	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	157					157	28
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	29					29	5
Cyclopoida Copepoda			II -9-2	235			2350	422
Harpacticoida Copepoda	I -9-3	50					50	9
10. Copepoda, nauplius			II -10	46			460	83
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	33					33	6
22. Thaliacea							0	0
23. Egg	I -23	38					38	7
24. Euphausiacea, nauplius							0	0
25. Nematoda	I -25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	1185					1185	213
28. Unidentified forms	I -28	32					32	6
29. Radiolaria							0	0
Total		1531		281		0	4341	780

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-339

1. Sample No.·····2303267
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 09:50-09:53
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····2
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3484
16. Volume of water filtered(m3) 5.53
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····952

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		1/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv. No. per haul	Indiv. No. per m3
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	Ⅰ-6	220					220	40
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	75					75	14
Cyclopoida Copepoda			Ⅱ-9-2	338			3380	611
Harpacticoida Copepoda	Ⅰ-9-3	35					35	6
10. Copepoda, nauplius			Ⅱ-10	41			410	74
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	14					14	3
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	41					41	7
22. Thaliacea							0	0
23. Egg	Ⅰ-23	56					56	10
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	1009					1009	182
28. Unidentified forms	Ⅰ-28	30					30	5
29. Radiolaria							0	0
Total		1480		379		0	5270	952

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-340

1. Sample No.·····2303268
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 09:56-09:59
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····5
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3296
16. Volume of water filtered(m3) 5.23
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····1011

Proportion of Sample sorted	1/1 Sample [Sort I]		2/10 Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora	I-2	23					23	4
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	943					943	180
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	135					135	26
Cyclopoida Copepoda			II-9-2	571			2855	546
Harpacticoida Copepoda	I-9-3	19					19	4
10. Copepoda, nauplius			II-10	81			405	77
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I-18	34					34	7
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	14					14	3
22. Thaliacea							0	0
23. Egg	I-23	43					43	8
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	5					5	1
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	763					763	146
28. Unidentified forms	I-28	48					48	9
29. Radiolaria							0	0
Total		2027		652		0	5287	1011

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-341

1. Sample No.·····2303269
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
   39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 10:00-10:03
   (GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····10
    estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3376
16. Volume of water filtered(m3) 5.36
    calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····339

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		4/10 Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	Ⅰ-5	1					1	+
6. Polychaeta	Ⅰ-6	446					446	83
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	68					68	13
Cyclopoida Copepoda			Ⅱ-9-2	333			833	155
Harpacticoida Copepoda	Ⅰ-9-3	19					19	4
10. Copepoda, nauplius			Ⅱ-10	60			150	28
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	Ⅰ-18	13					13	2
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	Ⅰ-21	6					6	1
22. Thaliacea							0	0
23. Egg	Ⅰ-23	25					25	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	234					234	44
28. Unidentified forms	Ⅰ-28	21					21	4
29. Radiolaria							0	0
Total		833		393		0	1816	339

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-342

1. Sample No.·····2303270
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59' 57" S
39° 37' 16" E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 10:06-10:09
(GMT)
8. Net used·····Modified NIPR-1(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····20
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3440
16. Volume of water filtered(m3) 5.46
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····220

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	289					289	53
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	261					261	48
Cyclopoida Copepoda	I -9-2	445					445	82
Harpacticoida Copepoda	I -9-3	26					26	5
10. Copepoda, nauplius	I -10	62					62	11
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda	I -18	4					4	1
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I -21	5					5	1
22. Thaliacea							0	0
23. Egg	I -23	48					48	9
24. Euphausiacea, nauplius							0	0
25. Nematoda	I -25	9					9	2
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	30					30	5
28. Unidentified forms	I -28	16					16	3
29. Radiolaria							0	0
Total		1195		0		0	1195	220

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-343

1. Sample No.·····2303271
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 10:11-10:14
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····30
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3290
16. Volume of water filtered(m3) 5.22
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····77

Proportion of Sample sorted	1/1 Sample [Sort Ⅰ]		Sample [Sort Ⅱ]		Sample [Sort Ⅲ]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera							0	0
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	Ⅰ-5	1					1	+
6. Polychaeta	Ⅰ-6	46					46	9
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	Ⅰ-9-1	94					94	18
Cyclopoida Copepoda	Ⅰ-9-2	211					211	40
Harpacticoida Copepoda	Ⅰ-9-3	1					1	+
10. Copepoda, nauplius	Ⅰ-10	14					14	3
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	Ⅰ-23	18					18	3
24. Euphausiacea, nauplius							0	0
25. Nematoda	Ⅰ-25	2					2	+
26. Fish larvae							0	0
27. Planktonic larval forms	Ⅰ-27	12					12	2
28. Unidentified forms	Ⅰ-28	2					2	+
29. Radiolaria							0	0
Total		401		0		0	401	77

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-344

1. Sample No.·····2303272
2. JARE·····23
3. Area·····Syowa Station
4. Station No.·····3
5. Position·····68° 59′ 57″ S
39° 37′ 16″ E
6. Sea depth(m)····50
7. Date & time(LMT)Dec. 29 '82, 10:17-10:20
(GMT)
8. Net used·····Modified NIPR-I(100 μm)
9. Method of haul··Layered
10. Duration of haul 3 min
11. Wire run out(m)·····
12. Wire angle(°)·····
13. Depth of haul(m)※·····40
estimated by ····
14. Flow-meter used·····GO 2030
15. Flow-meter reading·····3299
16. Volume of water filtered(m3) 5.24
calculated by Flow-meter
17. Wet weight(mg) per m3·····
18. Settling volume(cc) per m3··
19. Total number per m3·····71

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv.	Indiv.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	No. per haul	No. per m3
1. Foraminifera	I-1	2					2	+
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	19					19	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	100					100	19
Cyclopoida Copepoda	I-9-2	103					103	20
Harpacticoida Copepoda	I-9-3	4					4	1
10. Copepoda, nauplius	I-10	28					28	5
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea							0	0
16. Decapoda							0	0
17. Other Crustacea							0	0
18. Heteropoda/Pteropoda							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	98					98	19
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	9					9	2
28. Unidentified forms	I-28	1					1	+
29. Radiolaria							0	0
Total		367		0		0	367	71

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice