

Zooplankton Data Collected with BIOMASS Programme

at Syowa Station in 1982 by JARE-23

II. "NIPR-I" Samples : Stn. 1

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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 samplings at six stations using three kinds of nets, *i.e.* Norpac net, Parasol net and "NIPR-I" sampler, were carried out in JARE-23 (Fig. 1). 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 from 4 to 5 layers between 0 and 7 m depths at Stn. 1 during the JARE-23 overwintering programme in 1982 (Fig. 1). Among the total of 125 samples obtained with two types of "NIPR-I" sampler (Fukuchi *et al.*, 1985), the results of primary sorting for 72 samples obtained with the modified "NIPR-I" sampler during March through December in 1982 are presented. The sampling

system of the modified "NIPR-I" sampler is schematically shown in Fig. 2.

Zooplankton were assorted into 29 categories as seen in the following tables. Copepoda (Category 9) were counted for each of Calanoida, Cyclopoida and Harpacticoida. Euphausiacea were counted for the nauplius stages (Category 24) and the other stages (Category 15). Eggs (Category 23) include those of crustacean and/or benthic invertebrate, etc. Planktonic larval form (Category 27) includes benthic invertebrate larvae other than polychaeta (Category 6).

Sample processing and treatment of the data are aligned same as the preceding report (Tanimura et al., 1989).

All specimens sorted into each category were preserved in each vial tube filled with 3 % formalin seawater and are kept at the National Institute of Polar Research, Tokyo.

It is hoped that not only this publication but also specimens sorted are submitted to scientists for use. Further details about data and specimens should be asked for at the following.

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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.

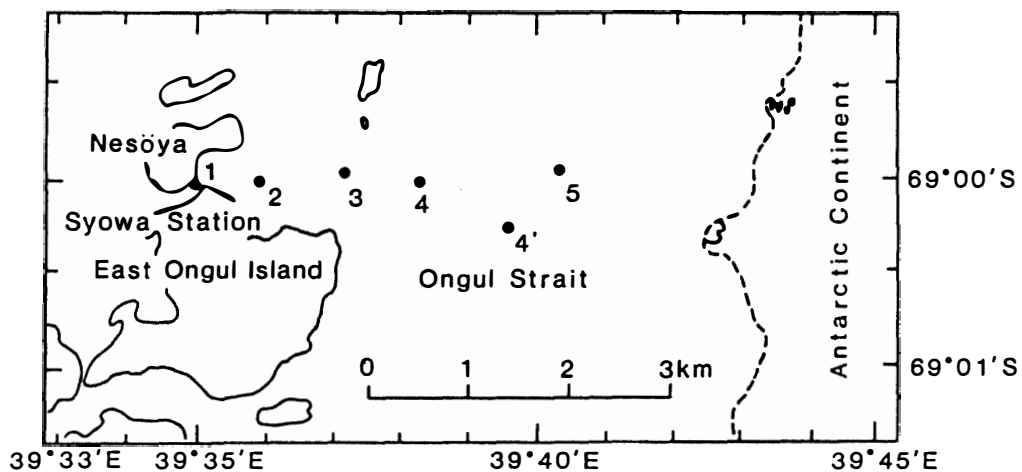


Fig. 1. Sampling locations for routine observations by JARE-23.

The results of primary sorting of the zooplankton collected at Stn. 1 from "Kita-no-seto" strait are reported here.

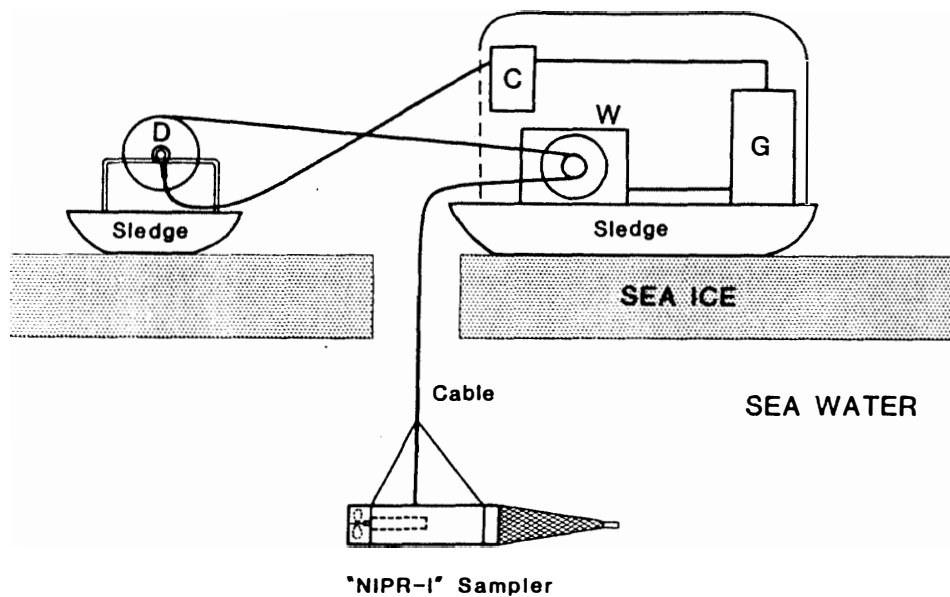


Fig. 2. Modified "NIPR-I" sampler for zooplankton collection under the sea ice.

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-001

1. Sample No. <u>2301052</u>	11. Wire run out(m) <u> </u>
2. JARE <u>23</u>	12. Wire angle(') <u> </u>
3. Area <u>Syowa Station</u>	13. Depth of haul(m)※ <u>0</u>
4. Station No. <u>1</u>	estimated by <u> </u>
5. Position <u>69° 00' 00" S</u>	14. Flow-meter used <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading <u>3033</u>
6. Sea depth(m) <u>10</u>	16. Volume of water filtered(m ³) <u>4.82</u>
7. Date & time(LMT) <u>Mar. 29 '82, 10:09-10:12</u>	calculated by <u>Flow-meter</u>
(GMT) <u> </u>	17. Wet weight(mg) per m ³ <u> </u>
8. Net used <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m ³ .. <u> </u>
9. Method of haul .. <u>Layered</u>	19. Total number per m ³ <u>82</u>
10. Duration of haul <u>3 min</u>	

Proprtion of Sample sorted	I/I Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	4					4	1
Cyclopoida Copepoda	I-9-2	136					136	28
Harpacticoida Copepoda	I-9-3	28					28	6
10. Copepoda, nauplius	I-10	225					225	47
11. Cumacea							0	0
12. Isopoda							0	0
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		394		0		0	394	82

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-002

1. Sample No. 2301053
 2. JARE 23
 3. Area Syowa Station
 4. Station No. 1
 5. Position 69° 00' 00" S
 39° 35' 00" E
 6. Sea depth(m) 10
 7. Date & time(LMT) Mar. 29 '82, 10:14-10:17
 (GMT)
 8. Net used Modified NIPR-1(100 μ m)
 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 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 244

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	1					1	+
Cyclopoida Copepoda	I-9-2	314					314	69
Harpacticoida Copepoda	I-9-3	20					20	4
10. Copepoda, nauplius	I-10	775					775	170
11. Cumacea							0	0
12. Isopoda							0	0
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							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		1112		0		0	1112	244

+ : less than 1 indiv./m³

* Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-003

1. Sample No. 2301054	11. Wire run out(m)
2. JARE 23	12. Wire angle(')
3. Area Syowa Station	13. Depth of haul(m)※ 2
4. Station No. 1	estimated by
5. Position 69° 00' 00" S	14. Flow-meter used GO 2030
39° 35' 00" E	15. Flow-meter reading 3042
6. Sea depth(m) 10	16. Volume of water filtered(m ³) 4.84
7. Date & time(LMT) Mar. 29 '82, 10:20-10:23	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used Modified NIPR-1(100 μm)	18. Settling volume(cc) per m ³
9. Method of haul .. Layered	19. Total number per m ³ 301
10. Duration of haul 3 min	

Proportion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	5					5	1
Cyclopoida Copepoda	I-9-2	555					555	115
Harpacticoida Copepoda	I-9-3	12					12	2
10. Copepoda, nauplius	I-10	870					870	180
11. Cumacea							0	0
12. Isopoda							0	0
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	I-24	1					1	+
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		1458		0		0	1458	301

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-004

1. Sample No. 2301055	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 5
4. Station No..... 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 2945
6. Sea depth(m).... 10	16. Volume of water filtered(m ³) 4.68
7. Date & time(LMT) Mar. 29 '82, 10:25-10:28	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... Modified NIPR-1(100 μm)	18. Settling volume(cc) per m ³ ..
9. Method of haul.. Layered	19. Total number per m ³ 143
10. Duration of haul 3 min	

Proportion of Sample sorted	I/I Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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							0	0
Cyclopoida Copepoda	I-9-2	247					247	53
Harpacticoida Copepoda	I-9-3	3					3	1
10. Copepoda, nauplius	I-10	402					402	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							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	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							0	0
29. Radiolaria							0	0
Total		663		0		0	663	143

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-005

1. Sample No. <u>2301056</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>7</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>2773</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.41</u>
7. Date & time(LMT) <u>Mar. 29 '82, 10:38-10:41</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>41</u>
10. Duration of haul <u>3 min</u>	

Proprtion of Sample sorted	I/I Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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							0	0
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda							0	0
Cyclopoida Copepoda	I-9-2	119					119	27
Harpacticoida Copepoda	I-9-3	20					20	5
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	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							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		180		0		0	180	41

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-006

1. Sample No. 2301057	11. Wire run out(■).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(■)※..... 0
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 2945
6. Sea depth(■).... 10	16. Volume of water filtered(■3) 4.68
7. Date & time(LMT) Apr. 21 '82, 09:20-09:23	calculated by Flow-meter
(GMT)	17. Wet weight(■g) per ■3.....
8. Net used..... Modified NIPR-I(100 μ■)	18. Settling volume(cc) per ■3..
9. Method of haul.. Layered	19. Total number per ■3..... 118
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per ■3
	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	1					1	+
Cyclopoida Copepoda	I-9-2	301					301	64
Harpacticoida Copepoda	I-9-3	21					21	4
10. Copepoda, nauplius	I-10	215					215	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	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	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							0	0
29. Radiolaria							0	0
Total		552		0		0	552	118

+ : less than 1 indiv./■3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-007

1. Sample No. 2301058	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 1
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 2939
6. Sea depth(m).... 10	16. Volume of water filtered(m ³) 4.67
7. Date & time(LMT) Apr. 21 '82, 09:25-09:28	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m ³ ..
9. Method of haul.. Layered	19. Total number per m ³ 515
10. Duration of haul 3 min	

Proportion of Sample sorted	Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	6					6	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	12					12	3
Cyclopoida Copepoda	I-9-2	1259					1259	270
Harpacticoida Copepoda	I-9-3	39					39	8
10. Copepoda, nauplius	I-10	1057					1057	226
11. Cumacea							0	0
12. Isopoda							0	0
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	4
22. Thaliacea							0	0
23. Eggs	I-23	10					10	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	2					2	+
29. Radiolaria							0	0
Total		2405		0		0	2405	515

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-008

1. Sample No. 2301059	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 2
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3000
6. Sea depth(m).... 10	16. Volume of water filtered(m ³) 4.77
7. Date & time(LMT) Apr. 21 '82, 09:40-09:43	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... Modified NIPR-1(100 μm)	18. Settling volume(cc) per m ³ ...
9. Method of haul.. Layered	19. Total number per m ³ 875
10. Duration of haul 3 min	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	I-8	3					3	1
9. Calanoida Copepoda	I-9-1	12					12	3
Cyclopoida Copepoda			II-9-2	167			1670	350
Harpacticoida Copepoda	I-9-3	75					75	16
10. Copepoda, nauplius			II-10	235			2350	493
11. Cumacea							0	0
12. Isopoda							0	0
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	42					42	9
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							0	0
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		147		402		0	4167	875

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-009

1. Sample No. <u>2301060</u> 2. JARE..... <u>23</u> 3. Area..... <u>Syowa Station</u> 4. Station No. <u>1</u> 5. Position..... <u>69° 00' 00" S</u> <u>39° 35' 00" E</u> 6. Sea depth(m).... <u>10</u> 7. Date & time(LMT) <u>Apr. 21 '82, 09:30-09:33</u> (GMT) 8. Net used..... <u>Modified NIPR-I(100 μm)</u> 9. Method of haul.. <u>Layered</u> 10. Duration of haul <u>3 min</u>	11. Wire run out(m)..... 12. Wire angle(')..... 13. Depth of haul(m)※..... <u>5</u> estimated by 14. Flow-meter used..... <u>G0 2030</u> 15. Flow-meter reading..... <u>2956</u> 16. Volume of water filtered(m ³) <u>4.70</u> calculated by <u>Flow-meter</u> 17. Wet weight(mg) per m ³ 18. Settling volume(cc) per m ³ .. 19. Total number per m ³ <u>512</u>
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Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	1					1	+
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	6					6	1
Cyclopoida Copepoda			II -9-2	243			1215	259
Harpacticoida Copepoda	I -9-3	73					73	16
10. Copepoda, nauplius			II -10	219			1095	233
11. Cumacea							0	0
12. Isopoda							0	0
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							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		462		0	2405	512

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-010

1. Sample No. <u>2301061</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>7</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>2996</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m ³) <u>4.76</u>
7. Date & time(LMT) <u>Apr. 21 '82, 09:35-09:38</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... <u>Modified NIPR-I(100 μm)</u>	18. Settling volume(cc) per m ³ ..
9. Method of haul.. <u>Layered</u>	19. Total number per m ³ <u>609</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	1					1	+
7. Cladocera							0	0
8. Ostracoda	I-8	11					11	2
9. Calanoida Copepoda	I-9-1	16					16	3
Cyclopoida Copepoda			II-9-2	254			1270	267
Harpacticoida Copepoda	I-9-3	449					449	94
10. Copepoda, nauplius			II-10	224			1120	235
11. Cumacea							0	0
12. Isopoda							0	0
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	12					12	3
22. Thaliacea							0	0
23. Egg	I-23	5					5	1
24. Euphausiacea, nauplius							0	0
25. Nematoda	I-25	1					1	+
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms							0	0
29. Radiolaria	I-29	1					1	+
Total		507		478		0	2897	609

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-011

1. Sample No. 2301062	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No..... 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 2953
6. Sea depth(m)..... 10	16. Volume of water filtered(m3) 4.70
7. Date & time(LMT) May 10 '82, 09:27-09:30	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 347
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	68					68	14
Cyclopoida Copepoda			II-9-2	250			1250	266
Harpacticoida Copepoda	I-9-3	12					12	3
10. Copepoda, nauplius			II-10	56			280	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	1					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	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		98		306		0	1628	347

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-012

1. Sample No. <u>2301063</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>1</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>2952</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m ³) <u>4.69</u>
7. Date & time(LMT) <u>May 10 '82, 09:32-09:35</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... <u>Modified NIPR-1(100μm)</u>	18. Settling volume(cc) per m ³ ..
9. Method of haul.. <u>Layered</u>	19. Total number per m ³ <u>1608</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	251					251	54
Cyclopoida Copepoda			II-9-2	557			5570	1188
Harpacticoida Copepoda	I-9-3	23					23	5
10. Copepoda, nauplius			II-10	164			1640	350
11. Cumacea							0	0
12. Isopoda							0	0
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	44					44	9
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	1
28. Unidentified forms							0	0
29. Radiolaria							0	0
Total		333		721		0	7543	1608

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-013

1. Sample No. <u>2301064</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>2</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>2872</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m ³) <u>4.57</u>
7. Date & time(LMT) <u>May 10 '82, 09:37-09:40</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... <u>Modified NIPR-1(100μm)</u>	18. Settling volume(cc) per m ³ ..
9. Method of haul.. <u>Layered</u>	19. Total number per m ³ <u>1086</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	21					21	5
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	161					161	35
Cyclopoida Copepoda			II -9-2	388			3880	849
Harpacticoida Copepoda	I -9-3	40					40	9
10. Copepoda, nauplius			II -10	82			820	179
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							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	35					35	8
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		263		470		0	4963	1086

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-014

1. Sample No. 2301065	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 5
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3009
6. Sea depth(m).... 10	16. Volume of water filtered(m ³) 4.78
7. Date & time(LMT) May 10 '82, 09:42-09:45	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... Modified NIPR-1(100μm)	18. Settling volume(cc) per m ³ ..
9. Method of haul.. Layered	19. Total number per m ³ 1651
10. Duration of haul 3 min	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	237					237	50
Cyclopoida Copepoda			II -9-2	611			6110	1278
Harpacticoida Copepoda	I -9-3	25					25	5
10. Copepoda, nauplius			II -10	145			1450	303
11. Cumacea							0	0
12. Isopoda							0	0
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	20					20	4
22. Thaliacea							0	0
23. Egg	I -23	43					43	9
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		332		756		0	7892	1651

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-015

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	174					174	36
Cyclopoida Copepoda			II -9-2	421			4210	866
Harpacticoida Copepoda	I -9-3	36					36	7
10. Copepoda, nauplius			II -10	126			1260	259
11. Cumacea							0	0
12. Isopoda							0	0
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	42					42	9
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		264		547		0	5734	1180

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-016

1. Sample No.	2301067	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	0
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	00 2030
	39° 35' 00" E	15. Flow-meter reading	3068
6. Sea depth(m)	10	16. Volume of water filtered(m3)	4.88
7. Date & time(LMT) May 24 '82, 09:48-09:51		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	1509
10. Duration of haul	3 min		

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 #3
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	165					165	34
Cyclopoida Copepoda	I -9-2	5935					5935	1216
Harpacticoida Copepoda	I -9-3	22					22	5
10. Copepoda, nauplius	I -10	1062					1062	218
11. Cumacea							0	0
12. Isopoda							0	0
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	170					170	35
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	I -29	3					3	1
Total		7361		0		0	7361	1509

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-017

1. Sample No. <u>2301068</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>1</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>2973</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.73</u>
7. Date & time(LMT) <u>May 24 '82, 09:53-09:56</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-I(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1723</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	I/I Sample [Sort I]		Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	4					4	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	166					166	35
Cyclopoida Copepoda	I-9-2	6728					6728	1422
Harpacticoida Copepoda	I-9-3	23					23	5
10. Copepoda, nauplius	I-10	993					993	210
11. Cumacea							0	0
12. Isopoda							0	0
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	I-20	1					1	+
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	231					231	49
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	I-29	2					2	+
Total		8150		0		0	8150	1723

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-018

1. Sample No. 2301069	11. Wire run out(m)
2. JARE 23	12. Wire angle(')
3. Area Syowa Station	13. Depth of haul(m)※ 2
4. Station No. 1	estimated by
5. Position 69° 00' 00" S	14. Flow-meter used GO 2030
39° 35' 00" E	15. Flow-meter reading 3055
6. Sea depth(m) 10	16. Volume of water filtered(m ³) 4.86
7. Date & time(LMT) May 24 '82, 09:58-10:01	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used Modified NIPR-1(100μm)	18. Settling volume(cc) per m ³ ..
9. Method of haul .. Layered	19. Total number per m ³ 1532
10. Duration of haul 3 min	

Proportion of Sample sorted	I/I Sample [Sort I]		I/I0 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	156					156	32
Cyclopoida Copepoda			II-9-2	585			5850	1204
Harpacticoida Copepoda	I-9-3	25					25	5
10. Copepoda, nauplius			II-10	118			1180	243
11. Cumacea							0	0
12. Isopoda							0	0
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	229					229	47
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	I-29	3					3	1
Total		415		703		0	7445	1532

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-019_

1. Sample No.	2301070	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	5
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	GO 2030
	39° 35' 00" E	15. Flow-meter reading	3096
6. Sea depth(m)	10	16. Volume of water filtered(m3)	4.92
7. Date & time(LMT) May 24 '82, 10:03-10:06		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	1450
10. Duration of haul	3 min		

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No.	Indiv. No.
Category	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	per haul	per m ³
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	31
Cyclopoida Copepoda			II -9-2	567			5670	1152
Harpacticoida Copepoda	I -9-3	47					47	10
10. Copepoda, nauplius			II -10	105			1050	213
11. Cumacea							0	0
12. Isopoda							0	0
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	205					205	42
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	I -29	4					4	1
Total		412		672		0	7132	1450

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-020

1. Sample No. <u>2301071</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>7</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>2640</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.20</u>
7. Date & time(LMT) <u>May 24 '82, 10:08-10:11</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1005</u>
10. Duration of haul <u>3 min</u>	

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
	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	I-8	1					1	+
9. Calanoida Copepoda	I-9-1	78					78	19
Cyclopoida Copepoda			II-9-2	345			3450	821
Harpacticoida Copepoda	I-9-3	44					44	10
10. Copepoda, nauplius			II-10	50			500	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	2					2	+
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	142					142	34
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		271		395		0	4221	1005

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-021

1. Sample No. 2301072	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3159
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.02
7. Date & time(LMT) June 16 '82, 09:46-09:49	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1487
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	413					413	82
Cyclopoida Copepoda			II-9-2	597			5970	1189
Harpacticoida Copepoda	I-9-3	22					22	4
10. Copepoda, nauplius			II-10	102			1020	203
11. Cumacea							0	0
12. Isopoda							0	0
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	25					25	5
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	7					7	1
28. Unidentified forms	I-28	3					3	1
29. Radiolaria							0	0
Total		475		699		0	7465	1487

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-022

1. Sample No. 2301073
 2. JARE 23
 3. Area Syowa Station
 4. Station No. 1
 5. Position 69° 00' 00" S
 39° 35' 00" E
 6. Sea depth(m) 10
 7. Date & time(LMT) June 16 '82, 09:51-09:54
 (GMT)
 8. Net used Modified NIPR-1(100 μ m)
 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 3292
 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 1391

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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							0	0
9. Calanoida Copepoda	I-9-1	413					413	79
Cyclopoida Copepoda			II-9-2	602			6020	1151
Harpacticoida Copepoda	I-9-3	23					23	4
10. Copepoda, nauplius			II-10	78			780	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	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	19					19	4
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		474		680		0	7274	1391

+ : less than 1 indiv./m³

* Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-023

1. Sample No. <u>2301074</u>	11. Wire run out(m) <u> </u>
2. JARE <u>23</u>	12. Wire angle(') <u> </u>
3. Area <u>Syowa Station</u>	13. Depth of haul(m) * <u>2</u>
4. Station No. <u>1</u>	estimated by <u> </u>
5. Position <u>69° 00' 00" S</u>	14. Flow-meter used <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading <u>3167</u>
6. Sea depth(m) <u>10</u>	16. Volume of water filtered(m ³) <u>5.03</u>
7. Date & time(LMT) <u>June 16 '82, 09:56-09:59</u>	calculated by <u>Flow-meter</u>
(GMT) <u> </u>	17. Wet weight(mg) per m ³ <u> </u>
8. Net used <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m ³ .. <u> </u>
9. Method of haul .. <u>Layered</u>	19. Total number per m ³ <u>986</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	312					312	62
Cyclopoida Copepoda			II-9-2	386			3860	767
Harpacticoida Copepoda	I-9-3	129					129	26
10. Copepoda, nauplius			II-10	63			630	125
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	17					17	3
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	6					6	1
29. Radiolaria							0	0
Total		469		449		0	4959	986

+ : less than 1 indiv./m³

* Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-024

1. Sample No. 2301075	11. Wire run out(m)
2. JARE	12. Wire angle(')
3. Area	13. Depth of haul(m)※
4. Station No. 1	estimated by
5. Position	14. Flow-meter used
69° 00' 00" S	G0 2030
39° 35' 00" E	15. Flow-meter reading
6. Sea depth(m) 10	3130
7. Date & time(LMT) June 16 '82, 10:01-10:04	16. Volume of water filtered(m3) 4.97
(GMT)	calculated by Flow-meter
8. Net used	17. Wet weight(mg) per m3
Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3
9. Method of haul .. Layered	19. Total number per m3
10. Duration of haul 3 min	610

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
	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	187					187	38
Cyclopoida Copepoda			II-9-2	436			2180	439
Harpacticoida Copepoda	I-9-3	282					282	57
10. Copepoda, nauplius			II-10	74			370	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	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							0	0
29. Radiolaria							0	0
Total		481		510		0	3031	610

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-025

1. Sample No. <u>2301076</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>7</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3081</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.90</u>
7. Date & time(LMT) <u>June 16 '82, 10:13-10:16</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1525</u>
10. Duration of haul <u>3 min</u>	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	137					137	28
Cyclopoida Copepoda	I-9-2	963					963	197
Harpacticoida Copepoda			II-9-3	609			6090	1243
10. Copepoda, nauplius	I-10	268					268	55
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							0	0
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	2					2	+
28. Unidentified forms	I-28	2					2	+
29. Radiolaria							0	0
Total		1384		609		0	7474	1525

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-026

1. Sample No. 2301077	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 2990
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 4.75
7. Date & time(LMT) July 5 '82, 10:56-10:59	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 927
10. Duration of haul 3 min	

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
	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	6					6	1
7. Cladocera							0	0
8. Ostracoda	I -8	1					1	+
9. Calanoida Copepoda	I -9-1	302					302	64
Cyclopoida Copepoda			II -9-2	295			2950	621
Harpacticoida Copepoda	I -9-3	67					67	14
10. Copepoda, nauplius			II -10	102			1020	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	I -18	1					1	+
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	15					15	3
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	32					32	7
29. Radiolaria							0	0
Total		432		337		0	4402	927

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-027

1. Sample No. <u>2301078</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>1</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3108</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.94</u>
7. Date & time(LMT) <u>July 5 '82, 10:50-10:53</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>804</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	333					333	67
Cyclopoida Copepoda			II-9-2	276			2760	559
Harpacticoida Copepoda	I-9-3	69					69	14
10. Copepoda, nauplius			II-10	77			770	156
11. Cumacea							0	0
12. Isopoda							0	0
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	10					10	2
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	4					4	1
29. Radiolaria							0	0
Total		438		353		0	3968	804

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-028

1. Sample No. <u>2301079</u> 2. JARE <u>23</u> 3. Area <u>Syowa Station</u> 4. Station No. <u>1</u> 5. Position <u>69° 00' 00" S</u> <u>39° 35' 00" E</u> 6. Sea depth(m) <u>10</u> 7. Date & time(LMT) <u>July 5 '82, 10:45-10:48</u> (GMT) 8. Net used <u>Modified NIPR-1(100 μm)</u> 9. Method of haul .. <u>Layered</u> 10. Duration of haul <u>3 min</u>	11. Wire run out(m) 12. Wire angle(') 13. Depth of haul(m)※ <u>2</u> estimated by 14. Flow-meter used <u>G0 2030</u> 15. Flow-meter reading <u>3108</u> 16. Volume of water filtered(m3) <u>4.94</u> calculated by <u>Flow-meter</u> 17. Wet weight(mg) per m3 18. Settling volume(cc) per m3 .. 19. Total number per m3 <u>931</u>
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Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	370					370	75
Cyclopoida Copepoda			II -9-2	325			3250	658
Harpacticoida Copepoda	I -9-3	62					62	13
10. Copepoda, nauplius			II -10	85			850	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	I -21	8					8	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	I -27	9					9	2
28. Unidentified forms	I -28	20					20	4
29. Radiolaria	I -29	1					1	+
Total		495		410		0	4595	931

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-029

1. Sample No. <u>2301080</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>5</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3114</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.95</u>
7. Date & time(LMT) <u>July 5 '82, 10:40-10:43</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-I(100 μm)</u>	18. Settling volume(cc) per m3...
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>858</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	289					289	58
Cyclopoida Copepoda			II -9-2	297			2970	600
Harpacticoida Copepoda	I -9-3	73					73	15
10. Copepoda, nauplius			II -10	89			890	180
11. Cumacea							0	0
12. Isopoda							0	0
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	2					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	5					5	1
28. Unidentified forms	I -28	1					1	+
29. Radiolaria							0	0
Total		386		386		0	4246	858

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-030

1. Sample No. 2301081	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 7
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3300
6. Sea depth(m).... 10	16. Volume of water filtered(m ³) 5.24
7. Date & time(LMT) July 5 '82, 10:35-10:38	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... Modified NIPR-I(100μm)	18. Settling volume(cc) per m ³ ..
9. Method of haul.. Layered	19. Total number per m ³ 936
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	7					7	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	349					349	67
Cyclopoida Copepoda			II -9-2	365			3650	697
Harpacticoida Copepoda	I -9-3	60					60	11
10. Copepoda, nauplius			II -10	79			790	151
11. Cumacea							0	0
12. Isopoda							0	0
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	9					9	2
22. Thaliacea							0	0
23. Egg	I -23	16					16	3
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	18					18	3
29. Radiolaria							0	0
Total		465		444		0	4905	936

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No.NIPR-031

1. Sample No. 2301082	11. Wire run out(m)
2. JARE	12. Wire angle(')
3. Area	13. Depth of haul(m)※
4. Station No.	estimated by
5. Position	14. Flow-meter used
6. Sea depth(m)	15. Flow-meter reading
7. Date & time(LMT) July 27 '82, 10:55-10:58	16. Volume of water filtered(m3) 4.86
(GMT)	calculated by Flow-meter
8. Net used	17. Wet weight(mg) per m3
9. Method of haul .. Layered	18. Settling volume(cc) per m3 ..
10. Duration of haul 3 min	19. Total number per m3

Proportion of Sample sorted	I/I Sample [Sort I]		I/I Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	9					9	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	180					180	37
Cyclopoida Copepoda			II-9-2	417			4170	858
Harpacticoida Copepoda	I-9-3	51					51	10
10. Copepoda, nauplius			II-10	168			1680	346
11. Cumacea							0	0
12. Isopoda							0	0
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	13					13	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	6					6	1
28. Unidentified forms	I-28	34					34	7
29. Radiolaria							0	0
Total		328		585		0	6178	1271

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-032

1. Sample No. <u>2301083</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>1</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3157</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>5.02</u>
7. Date & time(LMT) <u>July 27 '82, 10:50-10:53</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-I(100μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1166</u>
10. Duration of haul <u>3 min</u>	

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
	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	5					5	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	162					162	32
Cyclopoida Copepoda			II-9-2	439			4390	875
Harpacticoida Copepoda	I-9-3	40					40	8
10. Copepoda, nauplius			II-10	121			1210	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	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	16					16	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	23					23	5
29. Radiolaria							0	0
Total		251		560		0	5851	1166

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-033

1. Sample No. <u>2301084</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>2</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3144</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>5.00</u>
7. Date & time(LMT) <u>July 27 '82, 10:45-10:48</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-I(100 μ m)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1485</u>
10. Duration of haul <u>3 min</u>	

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
	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	12					12	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	188					188	38
Cyclopoida Copepoda			II-9-2	545			5450	1090
Harpacticoida Copepoda	I-9-3	48					48	10
10. Copepoda, nauplius			II-10	166			1660	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	I-18	8					8	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	17					17	3
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	11					11	2
28. Unidentified forms	I-28	18					18	4
29. Radiolaria							0	0
Total		311		711		0	7421	1485

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-034

1. Sample No.	2301085	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	5
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	GO 2030
	39° 35' 00" E	15. Flow-meter reading	3127
6. Sea depth(m)	10	16. Volume of water filtered(m3)	4.97
7. Date & time(LMT) July 27 '82, 10:40-10:43		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	1027
10. Duration of haul	3 min		

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	15					15	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	126					126	25
Cyclopoida Copepoda			II-9-2	368			3680	740
Harpacticoida Copepoda	I-9-3	70					70	14
10. Copepoda, nauplius			II-10	117			1170	235
11. Cumacea							0	0
12. Isopoda							0	0
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	8					8	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	3					3	1
28. Unidentified forms	I-28	8					8	2
29. Radiolaria							0	0
Total		252		485		0	5102	1027

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ZOOPLANKTON RECORD SHEET

Series No. NIPR-035

1. Sample No. 2301086	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 7
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3011
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 4.79
7. Date & time(LMT) July 27 '82, 10:35-10:38	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1246
10. Duration of haul 3 min	

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
	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	11					11	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	181					181	38
Cyclopoida Copepoda			II-9-2	430			4300	898
Harpacticoida Copepoda	I-9-3	51					51	11
10. Copepoda, nauplius			II-10	139			1390	290
11. Cumacea							0	0
12. Isopoda							0	0
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	3					3	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	I-27	1					1	+
28. Unidentified forms	I-28	13					13	3
29. Radiolaria							0	0
Total		274		569		0	5964	1246

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-036

1. Sample No. 2301087	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No..... 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3204
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.09
7. Date & time(LMT) Aug. 13 '82, 10:48-10:51	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1965
10. Duration of haul 3 min	

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
	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	8					8	2
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	208					208	41
Cyclopoida Copepoda			II-9-2	339			3390	666
Harpacticoida Copepoda	I-9-3	143					143	28
10. Copepoda, nauplius			II-10	617			6170	1212
11. Cumacea							0	0
12. Isopoda							0	0
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	41					41	8
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	20					20	4
29. Radiolaria							0	0
Total		439		956		0	9999	1965

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-037

1. Sample No. <u>2301088</u>	11. Wire run out(m) <u> </u>
2. JARE <u>23</u>	12. Wire angle(') <u> </u>
3. Area <u>Syowa Station</u>	13. Depth of haul(m)※ <u>1</u>
4. Station No. <u>1</u>	estimated by <u> </u>
5. Position <u>69° 00' 00" S</u>	14. Flow-meter used <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading <u>3107</u>
6. Sea depth(m) <u>10</u>	16. Volume of water filtered(m ³) <u>4.94</u>
7. Date & time(LMT) <u>Aug. 13 '82, 10:43-10:46</u>	calculated by <u>Flow-meter</u>
(GMT) <u> </u>	17. Wet weight(mg) per m ³ <u> </u>
8. Net used <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m ³ .. <u> </u>
9. Method of haul .. <u>Layered</u>	19. Total number per m ³ <u>1437</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	I-2	3					3	1
3. Other medusae	I-3	1					1	+
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	223					223	45
Cyclopoida Copepoda			II-9-2	309			3090	626
Harpacticoida Copepoda	I-9-3	104					104	21
10. Copepoda, nauplius			II-10	358			3580	725
11. Cumacea							0	0
12. Isopoda							0	0
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	10					10	2
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	4					4	1
28. Unidentified forms	I-28	26					26	5
29. Radiolaria							0	0
Total		427		667		0	7097	1437

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-038

1. Sample No. <u>2301089</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>2</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3133</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.98</u>
7. Date & time(LMT) <u>Aug. 13 '82, 10:38-10:41</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1153</u>
10. Duration of haul <u>3 min</u>	

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
	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	7					7	1
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	133					133	27
Cyclopoida Copepoda			II -9-2	278			2780	558
Harpacticoida Copepoda	I -9-3	70					70	14
10. Copepoda, nauplius			II -10	267			2670	536
11. Cumacea							0	0
12. Isopoda							0	0
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	9					9	2
22. Thaliacea	I -22	3					3	1
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	4					4	1
28. Unidentified forms	I -28	15					15	3
29. Radiolaria							0	0
Total		294		545		0	5744	1153

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-039

1. Sample No. 2301090	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 5
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 3305
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.25
7. Date & time(LMT) Aug. 13 '82, 10:32-10:35	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1100
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	15					15	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	156					156	30
Cyclopoida Copepoda			II-9-2	279			2790	531
Harpacticoida Copepoda	I-9-3	68					68	13
10. Copepoda, nauplius			II-10	266			2660	507
11. Cumacea							0	0
12. Isopoda							0	0
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	20					20	4
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	4					4	1
28. Unidentified forms	I-28	23					23	4
29. Radiolaria							0	0
Total		325		545		0	5775	1100

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-040

1. Sample No. 2301091	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 6
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3124
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 4.96
7. Date & time(LMT) Aug. 13 '82, 10:25-10:28	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1224
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	3					3	1
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	110					110	22
Cyclopoida Copepoda			II -9-2	260			2600	524
Harpacticoida Copepoda	I -9-3	64					64	13
10. Copepoda, nauplius			II -10	323			3230	651
11. Cumacea							0	0
12. Isopoda							0	0
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	16					16	3
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	3					3	1
28. Unidentified forms	I -28	8					8	2
29. Radiolaria							0	0
Total		242		583		0	6072	1224

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-041

1. Sample No. <u>2301092</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>0</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3279</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>5.21</u>
7. Date & time(LMT) <u>Aug. 30 '82, 11:00-11:03</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-I(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1397</u>
10. Duration of haul <u>3 min</u>	

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
	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	I-5	1					1	+
6. Polychaeta	I-6	22					22	4
7. Cladocera							0	0
8. Ostracoda	I-8	2					2	+
9. Calanoida Copepoda	I-9-1	335					335	64
Cyclopoida Copepoda			II-9-2	515			5150	988
Harpacticoida Copepoda	I-9-3	87					87	17
10. Copepoda, nauplius			II-10	166			1660	319
11. Cumacea							0	0
12. Isopoda							0	0
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	17					17	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		470		681		0	7280	1397

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-042

1. Sample No.	2301093	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	1
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	G0 2030
	39° 35' 00" E	15. Flow-meter reading	3115
6. Sea depth(m)	10	16. Volume of water filtered(m3)	4.95
7. Date & time(LMT) Aug. 30 '82, 10:55-10:58		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	984
10. Duration of haul	3 min		

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	I -3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha	I -5	1					1	+
6. Polychaeta	I -6	13					13	3
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	227					227	46
Cyclopoida Copepoda			II -9-2	318			3180	642
Harpacticoida Copepoda	I -9-3	61					61	12
10. Copepoda, nauplius			II -10	132			1320	267
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	3					3	1
22. Thaliacea							0	0
23. Egg	I -23	56					56	11
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	I -29	1					1	+
Total		371		450		0	4871	984

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-043

Proprtion 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 m ³
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	I -8	1					1	+
9. Calanoida Copepoda	I -9-1	169					169	35
Cyclopoida Copepoda			II -9-2	262			2620	544
Harpacticoida Copepoda	I -9-3	67					67	14
10. Copepoda, nauplius			II -10	128			1280	266
11. Cumacea							0	0
12. Isopoda							0	0
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	29					29	6
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	1					1	+
29. Radiolaria							0	0
Total		296		390		0	4196	871

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-044

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	31					31	6
7. Cladocera							0	0
8. Ostracoda	I -8	1					1	+
9. Calanoida Copepoda	I -9-1	105					105	20
Cyclopoida Copepoda			II -9-2	192			1920	373
Harpacticoida Copepoda	I -9-3	43					43	8
10. Copepoda, nauplius			II -10	86			860	167
11. Cumacea							0	0
12. Isopoda							0	0
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	36					36	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	1					1	+
29. Radiolaria							0	0
Total		221		278		0	3001	583

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-045_

1. Sample No.	2301096	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	7
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	GO 2030
	39° 35' 00" E	15. Flow-meter reading	3254
6. Sea depth(m)	10	16. Volume of water filtered(m3)	5.17
7. Date & time(LMT) Aug. 30 '82, 10:38-10:41		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	741
10. Duration of haul	3 min		

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	19					19	4
7. Cladocera							0	0
8. Ostracoda	I -8	4					4	1
9. Calanoida Copepoda	I -9-1	149					149	29
Cyclopoida Copepoda			II -9-2	231			2310	447
Harpacticoida Copepoda	I -9-3	62					62	12
10. Copepoda, nauplius			II -10	122			1220	236
11. Cumacea							0	0
12. Isopoda							0	0
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	43					43	8
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		290		353		0	3820	741

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-046

1. Sample No. 2301097	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3042
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 4.83
7. Date & time(LMT) Sep. 23 '82, 10:37-10:40	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 997
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	3					3	1
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha	I -5	1					1	+
6. Polychaeta	I -6	20					20	4
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	81					81	17
Cyclopoida Copepoda			II -9-2	378			1890	391
Harpacticoida Copepoda	I -9-3	104					104	22
10. Copepoda, nauplius			II -10	493			2465	510
11. Cumacea							0	0
12. Isopoda							0	0
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	20					20	4
22. Thaliacea							0	0
23. Egg	I -23	215					215	45
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	2
29. Radiolaria							0	0
Total		462		871		0	4817	997

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-047

1. Sample No. 2301098	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 1
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 2937
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 4.67
7. Date & time(LMT) Sep. 23 '82, 10:33-10:36	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1046
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	61					61	13
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	131					131	28
Cyclopoida Copepoda			II -9-2	271			2710	580
Harpacticoida Copepoda	I -9-3	68					68	15
10. Copepoda, nauplius			II -10	160			1600	343
11. Cumacea							0	0
12. Isopoda							0	0
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	13					13	3
22. Thaliacea							0	0
23. Egg	I -23	272					272	58
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	12					12	3
29. Radiolaria							0	0
Total		568		431		0	4878	1046

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-048

1. Sample No. 2301099	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 2
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3138
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 4.99
7. Date & time(LMT) Sep. 23 '82, 10:28-10:31	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 936
10. Duration of haul 3 min	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	93					93	19
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I - 9-1	146					146	29
Cyclopoida Copepoda			II - 9-2	505			2525	506
Harpacticoida Copepoda	I - 9-3	75					75	15
10. Copepoda, nauplius			II - 10	312			1560	313
11. Cumacea							0	0
12. Isopoda							0	0
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	245					245	49
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	15					15	3
29. Radiolaria							0	0
Total		586		817		0	4671	936

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-049

1. Sample No. <u>2301100</u> 2. JARE <u>23</u> 3. Area <u>Syowa Station</u> 4. Station No. <u>1</u> 5. Position <u>69° 00' 00" S</u> <u>39° 35' 00" E</u> 6. Sea depth(m) <u>10</u> 7. Date & time(LMT) <u>Sep. 23 '82, 10:24-10:27</u> (GMT) _____ 8. Net used <u>Modified NIPR-1(100 μm)</u> 9. Method of haul .. <u>Layered</u> 10. Duration of haul <u>3 min</u>	11. Wire run out(m) _____ 12. Wire angle(') _____ 13. Depth of haul(m)※ <u>5</u> estimated by _____ 14. Flow-meter used <u>G0 2030</u> 15. Flow-meter reading <u>2786</u> 16. Volume of water filtered(m3) <u>4.43</u> calculated by <u>Flow-meter</u> 17. Wet weight(mg) per m3 _____ 18. Settling volume(cc) per m3 .. _____ 19. Total number per m3 <u>885</u>
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Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	3					3	1
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I -6	49					49	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	150					150	34
Cyclopoida Copepoda			II -9-2	421			2105	475
Harpacticoida Copepoda	I -9-3	57					57	13
10. Copepoda, nauplius			II -10	268			1340	302
11. Cumacea							0	0
12. Isopoda							0	0
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	188					188	42
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	18					18	4
29. Radiolaria							0	0
Total		477		689		0	3922	885

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-050

1. Sample No. 2301101	11. Wire run out(m)
2. JARE	12. Wire angle(')
3. Area	13. Depth of haul(m)※
4. Station No. 1	estimated by
5. Position	14. Flow-meter used
69° 00' 00" S	G0 2030
39° 35' 00" E	15. Flow-meter reading
6. Sea depth(m) 10	3006
7. Date & time(LMT) Sep. 23 '82, 10:19-10:22	16. Volume of water filtered(m3) 4.78
(GMT)	calculated by Flow-meter
8. Net used	17. Wet weight(mg) per m3
Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..
9. Method of haul .. Layered	19. Total number per m3
10. Duration of haul 3 min	732

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
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	75					75	16
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	156					156	33
Cyclopoida Copepoda			II -9-2	318			1590	333
Harpacticoida Copepoda	I -9-3	77					77	16
10. Copepoda, nauplius			II -10	257			1285	269
11. Cumacea							0	0
12. Isopoda							0	0
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	11					11	2
22. Thaliacea							0	0
23. Egg	I -23	261					261	55
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	7					7	1
28. Unidentified forms	I -28	26					26	5
29. Radiolaria							0	0
Total		621		575		0	3496	732

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-051

1. Sample No. <u>2301102</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>0</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3174</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>5.04</u>
7. Date & time(LMT) <u>Oct. 18 '82, 09:52-09:55</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1076</u>
10. Duration of haul <u>3 min</u>	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	89					89	18
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	123					123	24
Cyclopoida Copepoda			II-9-2	564			2820	560
Harpacticoida Copepoda	I-9-3	117					117	23
10. Copepoda, nauplius			II-10	138			690	137
11. Cumacea							0	0
12. Isopoda							0	0
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	1558					1558	309
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	14					14	3
29. Radiolaria							0	0
Total		1913		702		0	5423	1076

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-052

1. Sample No. 2301103	11. Wire run out(m)
2. JARE	12. Wire angle(')
3. Area	13. Depth of haul(m) *
4. Station No. 1	estimated by
5. Position	14. Flow-meter used
69° 00' 00" S	GO 2030
39° 35' 00" E	15. Flow-meter reading
6. Sea depth(m) 10	3040
7. Date & time(LMT) Oct. 18 '82, 09:47-09:50	16. Volume of water filtered(m ³)
(GMT)	4.83
8. Net used	calculated by
Modified NIPR-I (100 μm)	Flow-meter
9. Method of haul .. Layered	17. Wet weight(mg) per m ³
10. Duration of haul 3 min	18. Settling volume(cc) per m ³ ..
	19. Total number per m ³
	824

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	59					59	12
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	109					109	23
Cyclopoida Copepoda			II-9-2	362			1810	375
Harpacticoida Copepoda	I-9-3	37					37	8
10. Copepoda, nauplius			II-10	102			510	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	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	1432					1432	296
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	9					9	2
29. Radiolaria							0	0
Total		1656		464		0	3976	824

+ : less than 1 indiv./m³

* Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-053

1. Sample No. <u>2301104</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>2</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3161</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>5.02</u>
7. Date & time(LMT) <u>Oct. 18 '82, 09:43-09:46</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>556</u>
10. Duration of haul <u>3 min</u>	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	66					66	13
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	106					106	21
Cyclopoida Copepoda			II -9-2	197			985	196
Harpacticoida Copepoda	I -9-3	34					34	7
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							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	1253					1253	250
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	6					6	1
29. Radiolaria							0	0
Total		1470		264		0	2790	556

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-054

1. Sample No. <u>2301105</u>	11. Wire run out(m) <u> </u>
2. JARE <u>23</u>	12. Wire angle(') <u> </u>
3. Area <u>Syowa Station</u>	13. Depth of haul(m)※ <u>5</u>
4. Station No. <u>1</u>	estimated by <u> </u>
5. Position <u>69° 00' 00" S</u>	14. Flow-meter used <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading <u>3059</u>
6. Sea depth(m) <u>10</u>	16. Volume of water filtered(m ³) <u>4.86</u>
7. Date & time(LMT) <u>Oct. 18 '82, 09:38-09:41</u>	calculated by <u>Flow-meter</u>
(GMT) <u> </u>	17. Wet weight(mg) per m ³ <u> </u>
8. Net used <u>Modified NIPR-I (100 μm)</u>	18. Settling volume(cc) per m ³ .. <u> </u>
9. Method of haul .. <u>Layered</u>	19. Total number per m ³ <u>646</u>
10. Duration of haul <u>3 min</u>	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	52					52	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	105					105	22
Cyclopoida Copepoda			II -9-2	272			1360	280
Harpacticoida Copepoda	I -9-3	30					30	6
10. Copepoda, nauplius			II -10	79			395	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							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	1177					1177	242
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	11					11	2
29. Radiolaria							0	0
Total		1384		351		0	3139	646

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-055

1. Sample No. 2301106	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 7
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3362
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.34
7. Date & time(LMT) Oct. 18 '82, 09:32-09:35	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 927
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
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	59					59	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	162					162	30
Cyclopoida Copepoda			II -9-2	258			1290	242
Harpacticoida Copepoda	I -9-3	848					848	159
10. Copepoda, nauplius			II -10	73			365	68
11. Cumacea	I -11	1					1	+
12. Isopoda	I -12	1					1	+
13. Amphipoda	I -13	4					4	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	I -21	4					4	1
22. Thaliacea							0	0
23. Egg	I -23	2178					2178	408
24. Euphausiacea, nauplius							0	0
25. Nematoda	I -25	19					19	4
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	4					4	1
28. Unidentified forms	I -28	8					8	1
29. Radiolaria							0	0
Total		3297		331		0	4952	927

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-056

1. Sample No. 2301107	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 3298
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.24
7. Date & time(LMT) Nov. 2 '82, 09:43-09:46	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 1174
10. Duration of haul 3 min	

Proprtion of Sample sorted	I/I Sample [Sort I]		I/IO Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	48					48	9
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	499					499	95
Cyclopoida Copepoda			II -9-2	360			3600	687
Harpacticoida Copepoda	I -9-3	142					142	27
10. Copepoda, nauplius			II -10	181			1810	345
11. Cumacea							0	0
12. Isopoda							0	0
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	25					25	5
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	20					20	4
29. Radiolaria							0	0
Total		742		541			0	6152 1174

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-057

1. Sample No.	2301108	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	1
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	GO 2030
	39° 35' 00" E	15. Flow-meter reading	1548
6. Sea depth(m)	10	16. Volume of water filtered(m3)	5.15
7. Date & time(LMT) Nov. 2 '82, 09:38-09:41		calculated by	Assumption
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	1088
10. Duration of haul	3 min		

Proportion of Sample sorted	I/1 Sample [Sort I]		I/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	129					129	25
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	320					320	62
Cyclopoida Copepoda			II -9-2	331			3310	643
Harpacticoida Copepoda	I -9-3	82					82	16
10. Copepoda, nauplius			II -10	123			1230	239
11. Cumacea							0	0
12. Isopoda							0	0
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	472					472	92
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	18					18	3
28. Unidentified forms	I -28	34					34	7
29. Radiolaria							0	0
Total		1060		454		0	5600	1088

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ZOOPLANKTON RECORD SHEET

Series No. NIPR-058

1. Sample No. <u>2301109</u>	11. Wire run out(m).....
2. JARE..... <u>23</u>	12. Wire angle(').....
3. Area..... <u>Syowa Station</u>	13. Depth of haul(m)※..... <u>2</u>
4. Station No. <u>1</u>	estimated by
5. Position..... <u>69° 00' 00" S</u>	14. Flow-meter used..... <u>G0 2030</u>
<u>39° 35' 00" E</u>	15. Flow-meter reading..... <u>3132</u>
6. Sea depth(m).... <u>10</u>	16. Volume of water filtered(m3) <u>4.98</u>
7. Date & time(LMT) <u>Nov. 2 '82, 09:34-09:37</u>	calculated by <u>Flow-meter</u>
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... <u>Modified NIPR-1(100 μm)</u>	18. Settling volume(cc) per m3..
9. Method of haul.. <u>Layered</u>	19. Total number per m3..... <u>1135</u>
10. Duration of haul <u>3 min</u>	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	I -5	2					2	+
6. Polychaeta	I -6	178					178	36
7. Cladocera							0	0
8. Ostracoda	I -8	1					1	+
9. Calanoida Copepoda	I -9-1	394					394	79
Cyclopoida Copepoda			II -9-2	287			2870	576
Harpacticoida Copepoda	I -9-3	84					84	17
10. Copepoda, nauplius			II -10	103			1030	207
11. Cumacea							0	0
12. Isopoda							0	0
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	1047					1047	210
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	29					29	6
29. Radiolaria							0	0
Total		1752		390			0	5652

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-059

1. Sample No.	2301110	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	5
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	G0 2030
	39° 35' 00" E	15. Flow-meter reading	3294
6. Sea depth(m)	10	16. Volume of water filtered(m3)	5.23
7. Date & time(LMT) Nov. 2 '82, 09:28-09:31		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	546
10. Duration of haul	3 min		

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 m ³
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	81					81	15
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	371					371	71
Cyclopoida Copepoda			II -9-2	286			1430	273
Harpacticoida Copepoda	I -9-3	80					80	15
10. Copepoda, nauplius			II -10	154			770	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							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	101					101	19
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae	I -26	1					1	+
27. Planktonic larval forms	I -27	11					11	2
28. Unidentified forms	I -28	5					5	1
29. Radiolaria							0	0
Total		655		440		0	2855	546

+ : less than 1 indiv./m³

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ZOOPLANKTON RECORD SHEET

Series No. NIPR-060

1. Sample No. 2301111	11. Wire run out(m)
2. JARE	12. Wire angle(')
3. Area	13. Depth of haul(m) ※
4. Station No. 1	estimated by
5. Position	14. Flow-meter used
69° 00' 00" S	GO 2030
39° 35' 00" E	15. Flow-meter reading
10	1053
6. Sea depth(m)	16. Volume of water filtered(m ³)
10	5.15
7. Date & time(LMT) Nov. 2 '82, 09:21-09:24	calculated by
(GMT)	Assumption
8. Net used	17. Wet weight(mg) per m ³
Modified NIPR-1(100μm)	18. Settling volume(cc) per m ³
9. Method of haul .. Layered	19. Total number per m ³
10. Duration of haul 3 min	6776

Proportion of Sample sorted	1/1 Sample [Sort I]		1/20 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial	Vial No.	Indiv. No. in vial		
1. Foraminifera			II-1	32			640	124
2. Siphonophora							0	0
3. Other medusae							0	0
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	8	II-6	5			108	21
7. Cladocera							0	0
8. Ostracoda			II-8	7			140	27
9. Calanoida Copepoda			II-9-1	3			60	12
Cyclopoida Copepoda			II-9-2	26			520	101
Harpacticoida Copepoda			II-9-3	1073			21460	4167
10. Copepoda, nauplius			II-10	59			1180	229
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I-13	5	II-13	3			65	13
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	441			8820	1713
24. Euphausiacea, nauplius							0	0
25. Nematoda			II-25	91			1820	353
26. Fish larvae							0	0
27. Planktonic larval forms							0	0
28. Unidentified forms			II-28	4			80	16
29. Radiolaria							0	0
Total		13		1744			0 34893	6776

※ Depth from beneath the undersurface of sea ice

Series No. NI PR-061

1. Sample No.	2301112	11. Wire run out (m)	
2. JARE	23	12. Wire angle (°)	
3. Area	Syowa Station	13. Depth of haul (m) ※	0
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	G0 2030
	39° 35' 00" E	15. Flow-meter reading	3458
6. Sea depth (m)	10	16. Volume of water filtered (m ³)	5.49
7. Date & time (LMT) Nov. 15 '82, 09:16-09:19		calculated by	Flow-meter
(GMT)		17. Wet weight (mg) per m ³	
8. Net used	Modified NIPR-1 (100 μm)	18. Settling volume (cc) per m ³ ..	
9. Method of haul ..	Layered	19. Total number per m ³	1070
10. Duration of haul	3 min		

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 m ³
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	265					265	48
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	216					216	39
Cyclopoida Copepoda			II -9-2	395			395	719
Harpacticoida Copepoda	I -9-3	80					80	15
10. Copepoda, nauplius			II -10	96			96	175
11. Cumacea							0	0
12. Isopoda							0	0
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	121					121	22
24. Euphausiacea, nauplius	I -24	2					2	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	238					238	43
28. Unidentified forms	I -28	42					42	8
29. Radiolaria							0	0
Total		965		491		0	5875	1070

+ : less than 1 indiv./m³

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ZOOPLANKTON RECORD SHEET

Series No. NIPR-062

1. Sample No. 2301113
 2. JARE 23
 3. Area Syowa Station
 4. Station No. 1
 5. Position 69° 00' 00" S
 39° 35' 00" E
 6. Sea depth(m) 10
 7. Date & time(LMT) Nov. 15 '82, 09:12-09:15
 (GMT)
 8. Net used Modified NIPR-I(100 μ m)
 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 3161
 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 550

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	I-3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	165					165	33
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	99					99	20
Cyclopoida Copepoda			II-9-2	347			1735	346
Harpacticoida Copepoda	I-9-3	28					28	6
10. Copepoda, nauplius			II-10	108			540	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	112					112	22
24. Euphausiacea, nauplius	I-24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	51					51	10
28. Unidentified forms	I-28	23					23	5
29. Radiolaria							0	0
Total		481		455		0	2756	550

+ : less than 1 indiv./m³

* Depth from beneath the undersurface of sea ice

Series No. NIPR-063_

1. Sample No.	2301114	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	2
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	GO 2030
	39° 35' 00" E	15. Flow-meter reading	3379
6. Sea depth(m)	10	16. Volume of water filtered(m3)	5.36
7. Date & time(LMT) Nov. 15 '82, 09:08-09:11		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	957
10. Duration of haul	3 min		

Proprtion 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 m ³
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	297					297	55
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	183					183	34
Cyclopoida Copepoda			II -9-2	372			3720	694
Harpacticoida Copepoda	I -9-3	60					60	11
10. Copepoda, nauplius			II -10	61			610	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							0	0
19. Cephalopoda							0	0
20. Other Mollusca	I -20	1					1	+
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I -23	126					126	24
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	102					102	19
28. Unidentified forms	I -28	27					27	5
29. Radiolaria							0	0
Total		797		433		0	5127	957

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-064

1. Sample No. 2301115	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 5
4. Station No..... 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 3324
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.28
7. Date & time(LMT) Nov. 15 '82, 09:03-09:06	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 609
10. Duration of haul 3 min	

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
	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	I-5	1					1	+
6. Polychaeta	I-6	119					119	23
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	143					143	27
Cyclopoida Copepoda			II-9-2	200			2000	379
Harpacticoida Copepoda	I-9-3	71					71	13
10. Copepoda, nauplius			II-10	66			660	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							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I-23	81					81	15
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	112					112	21
28. Unidentified forms	I-28	26					26	5
29. Radiolaria							0	0
Total		553		266		0	3213	609

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-065

1. Sample No. 2301116	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No..... 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3659
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.80
7. Date & time(LMT) Dec. 2 '82, 09:13-09:16	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 340
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	28					28	5
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	106					106	18
Cyclopoida Copepoda			II-9-2	263			1315	227
Harpacticoida Copepoda	I-9-3	70					70	12
10. Copepoda, nauplius			II-10	63			315	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							0	0
22. Thaliacea							0	0
23. Egg	I-23	79					79	14
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	47					47	8
28. Unidentified forms	I-28	9					9	2
29. Radiolaria							0	0
Total		339		326			0 1969	340

※ Depth from beneath the undersurface of sea ice

Series No. NIPR-066

1. Sample No.	2301117	11. Wire run out(m)	
2. JARE	23	12. Wire angle(')	
3. Area	Syowa Station	13. Depth of haul(m)※	1
4. Station No.	1	estimated by	
5. Position	69° 00' 00" S	14. Flow-meter used	G0 2030
	39° 35' 00" E	15. Flow-meter reading	3590
6. Sea depth(m)	10	16. Volume of water filtered(m3)	5.70
7. Date & time(LMT) Dec. 2 '82, 09:09-09:12		calculated by	Flow-meter
(GMT)		17. Wet weight(mg) per m3	
8. Net used	Modified NIPR-1(100μm)	18. Settling volume(cc) per m3 ..	
9. Method of haul ..	Layered	19. Total number per m3	622
10. Duration of haul	3 min		

Proportion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
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	141					141	25
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I - 9-1	59					59	10
Cyclopoida Copepoda			II - 9-2	181			1810	318
Harpacticoida Copepoda	I - 9-3	115					115	20
10. Copepoda, nauplius			II - 10	69			690	121
11. Cumacea							0	0
12. Isopoda							0	0
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	331					331	58
24. Euphausiacea, nauplius	I - 24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I - 27	370					370	65
28. Unidentified forms	I - 28	28					28	5
29. Radiolaria							0	0
Total		1047		250		0	3547	622

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-067

1. Sample No. 2301118	11. Wire run out(m)
2. JARE	12. Wire angle(')
3. Area	13. Depth of haul(m)※
4. Station No.	estimated by
5. Position	14. Flow-meter used
6. Sea depth(m)	15. Flow-meter reading
7. Date & time(LMT) Dec. 2 '82, 09:05-09:08	16. Volume of water filtered(m3) 5.63
(GMT)	calculated by Flow-meter
8. Net used	17. Wet weight(mg) per m3
9. Method of haul ..	18. Settling volume(cc) per m3 ..
10. Duration of haul 3 min	19. Total number per m3

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
	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	178					178	32
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	70					70	12
Cyclopoida Copepoda			II-9-2	265			1325	235
Harpacticoida Copepoda	I-9-3	74					74	13
10. Copepoda, nauplius			II-10	80			400	71
11. Cumacea							0	0
12. Isopoda							0	0
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	421					421	75
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	243					243	43
28. Unidentified forms	I-28	23					23	4
29. Radiolaria							0	0
Total		1010		345		0	2735	486

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-068

1. Sample No. 2301119	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 5
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 3582
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.68
7. Date & time(LMT) Dec. 2 '82, 09:00-09:03	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 201
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		2/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	45					45	8
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	74					74	13
Cyclopoida Copepoda			II -9-2	296			740	130
Harpacticoida Copepoda	I -9-3	39					39	7
10. Copepoda, nauplius			II -10	63			158	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							0	0
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia							0	0
22. Thaliacea							0	0
23. Egg	I -23	70					70	12
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	4					4	1
29. Radiolaria							0	0
Total		242		359		0	1140	201

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-069

1. Sample No. 2301120	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 0
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 3545
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.63
7. Date & time(LMT) Dec. 17 '82, 09:15-09:18	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-1(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 480
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	155					155	28
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I -9-1	43					43	8
Cyclopoida Copepoda			II -9-2	269			1345	239
Harpacticoida Copepoda	I -9-3	113					113	20
10. Copepoda, nauplius			II -10	100			500	89
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda	I -13	5					5	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							0	0
22. Thaliacea							0	0
23. Egg	I -23	103					103	18
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I -27	391					391	69
28. Unidentified forms	I -28	39					39	7
29. Radiolaria	I -29	2					2	+
Total		858		369		0	2703	480

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-070

1. Sample No. 2301121	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 1
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... G0 2030
39° 35' 00" E	15. Flow-meter reading..... 3545
6. Sea depth(m).... 10	16. Volume of water filtered(m ³) 5.63
7. Date & time(LMT) Dec. 17 '82, 09:11-09:14	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m ³
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m ³ ..
9. Method of haul.. Layered	19. Total number per m ³ 559
10. Duration of haul 3 min	

Proportion of Sample sorted	1/1 Sample [Sort I]		1/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m ³
	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	I-3	2					2	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I-6	152					152	27
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I-9-1	44					44	8
Cyclopoida Copepoda			II-9-2	340			1700	302
Harpacticoida Copepoda	I-9-3	54					54	10
10. Copepoda, nauplius			II-10	84			420	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	18					18	3
19. Cephalopoda							0	0
20. Other Mollusca							0	0
21. Appendicularia	I-21	3					3	1
22. Thaliacea							0	0
23. Egg	I-23	120					120	21
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I-27	572					572	102
28. Unidentified forms	I-28	57					57	10
29. Radiolaria							0	0
Total		1022		424		0	3142	559

+ : less than 1 indiv./m³

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-071

1. Sample No. 2301122	11. Wire run out(m).....
2. JARE..... 23	12. Wire angle(').....
3. Area..... Syowa Station	13. Depth of haul(m)※..... 2
4. Station No. 1	estimated by
5. Position..... 69° 00' 00" S	14. Flow-meter used..... GO 2030
39° 35' 00" E	15. Flow-meter reading..... 3438
6. Sea depth(m).... 10	16. Volume of water filtered(m3) 5.46
7. Date & time(LMT) Dec. 17 '82, 09:07-09:10	calculated by Flow-meter
(GMT)	17. Wet weight(mg) per m3.....
8. Net used..... Modified NIPR-I(100 μm)	18. Settling volume(cc) per m3..
9. Method of haul.. Layered	19. Total number per m3..... 550
10. Duration of haul 3 min	

Proprtion of Sample sorted	1/1 Sample [Sort I]		1/10 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	I - 3	1					1	+
4. Ctenophora							0	0
5. Chaetognatha							0	0
6. Polychaeta	I - 6	137					137	25
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I - 9-1	48					48	9
Cyclopoida Copepoda			II - 9-2	179			1790	328
Harpacticoida Copepoda	I - 9-3	39					39	7
10. Copepoda, nauplius			II - 10	50			500	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	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	129					129	24
24. Euphausiacea, nauplius	I - 24	1					1	+
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I - 27	309					309	57
28. Unidentified forms	I - 28	37					37	7
29. Radiolaria							0	0
Total		709		229		0	2999	550

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice

ZOOPLANKTON RECORD SHEET

Series No. NIPR-072

1. Sample No. <u>2301123</u> 2. JARE. <u>23</u> 3. Area. <u>Syowa Station</u> 4. Station No. <u>I</u> 5. Position. <u>69° 00' 00" S</u> <u>39° 35' 00" E</u> 6. Sea depth(m) <u>10</u> 7. Date & time(LMT) <u>Dec. 17 '82, 09:01-09:04</u> (GMT) 8. Net used. <u>Modified NIPR-1(100 μm)</u> 9. Method of haul. <u>Layered</u> 10. Duration of haul <u>3 min</u>	11. Wire run out(m) 12. Wire angle(') 13. Depth of haul(m)※ <u>5</u> estimated by 14. Flow-meter used <u>G0 2030</u> 15. Flow-meter reading <u>3476</u> 16. Volume of water filtered(m3) <u>5.52</u> calculated by <u>Flow-meter</u> 17. Wet weight(mg) per m3 18. Settling volume(cc) per m3 .. 19. Total number per m3 <u>300</u>
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Proprtion of Sample sorted	I/I Sample [Sort I]		I/5 Sample [Sort II]		Sample [Sort III]		Indiv. No. per haul	Indiv. No. per m3
	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	62					62	11
7. Cladocera							0	0
8. Ostracoda							0	0
9. Calanoida Copepoda	I - 9-1	31					31	6
Cyclopoida Copepoda			II - 9-2	153			765	139
Harpacticoida Copepoda	I - 9-3	95					95	17
10. Copepoda, nauplius			II - 10	55			275	50
11. Cumacea							0	0
12. Isopoda							0	0
13. Amphipoda							0	0
14. Mysidacea							0	0
15. Euphausiacea	I - 15	2					2	+
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	8					8	1
22. Thaliacea							0	0
23. Egg	I - 23	177					177	32
24. Euphausiacea, nauplius							0	0
25. Nematoda							0	0
26. Fish larvae							0	0
27. Planktonic larval forms	I - 27	190					190	34
28. Unidentified forms	I - 28	43					43	8
29. Radiolaria							0	0
Total		615		208			0 1655	300

+ : less than 1 indiv./m3

※ Depth from beneath the undersurface of sea ice