I. Introduction

The 25th Japanese Antarctic Research Expedition 1983-1985 (JARE-25) extended the field work of the East Queen Maud Land Glaciological Project (abbreviated to EQGP). The details of the project were described by Higashi (1981) and Associate Committee on Glaciological Research Program in East Queen Maud Land (1982a, b), which was initiated by JARE-23 (Nishio, 1984). The major activities in 1984 involved an ice core drilling of an intermediate depth at Mizuho Station, and an oversnow traverse into the inland area in the 1984-85 field season (Fujii et al., 1985)

The traverse was planned to reach around 77°S and 35°E, the second highest dome of the Antarctic ice sheet, but was suppressed at 75°S and 35°E by the leader of JARE-25 because Syowa Station urgently needed the medical doctor of the traverse party for medical treatment of a wounded person there. Several other trips were also made in 1984, inclusive of the ones commissioned to support and supply Mizuho Station. Oversnow traverses by JARE-25 are shown in Fig. A (see the end of this volume), and listed in Table I-1, where the inland traverse is conventionally divided into several sections. Among the data obtained during these traverses, the following data are compiled in this report : Position, elevation and ice thickness of stations ; net accumulation of snow measured by the stake method ; surface meteorological data during the oversnow traverses. The other data such as surface flow velocity, surface strain rate and surface slope of the ice sheet, will be presented in different papers.

The ice core drilling attained a depth of 700.6 m at Mizuho Station, and in situ observations were made intensively on the core samples. Those activities will be reported separately, hence not included here. Surface meteorological data at Mizuho Station was published as JARE Data Reports, No.107 (Meteorology 18) by Yoshida et al. (1985). Present report includes following data at Mizuho Station ; the net accumulation of snow and the temperature profiles in a surface snow layer.

The authors would like to thank Professor Akira Higashi of International Christian University, the supervisor of the present project and Dr. Kou Kusunoki, the emeritus professor of the National Institute of Polar Research, for their valuable advice. Thanks are also due to all members of the wintering party of JARE-25 led by Professor Takeo Hirasawa, who extended generous supports in the field work.

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Table I-1. Oversnow traverses carried out by JARE-25, 1983-1985.

Period	Traverse route	Distance (km)	Postition and elevation	Ice thikness	Surface meteorological data	Net accumulation
27 Dec. 1983 - 2 Jan. 1984	S16-Mizuho	260	———	———	Table III-1	Table IV-1 (Route S-H-Z)
8 Aug. 1984 -25 Aug. 1984	Syowa-Mizuho -Syowa	520	———	———	Table III-2	———
4 Oct. 1984 -19 Oct. 1984	Syowa-Mizuho-G1	80	Table II-1 (Route IM)	Table II-5	Table III-3	Table IV-2 (Route IM)
20 Oct. 1984 -20 Nov. 1984	G1-Advance Camp (A.C.)	420		Table II-5	Table III-3	———
3 Nov. 1984 -14 Nov. 1984	γ2-G7-SS150	220	Table II-4 (Route ES)	Table II-5	Table III-4	Table IV-3 (Route SS)
21 Nov. 1984 -25 Nov. 1984	A.C.-γ5-A.C.	170	Table II-2 (Route ID)	Table II-5	Table III-3	———
26 Nov. 1984 -15 Dec. 1984	A.C.-Yamato Mts.	320	Table II-3 (Route IY)	Table II-5	Table III-3	———
16 Dec. 1984 -22 Dec. 1984	Yamato Mts.-Mizuho	360	———	———	Table III-3	Table IV-4 (Route YM)
25 Dec. 1984 -27 Jan. 1985	Mizuho-G15 -Mizuho-S16	430	———	———	Table III-3	Table IV-5 (Route NY)

II. Position, Elevation and Ice Thickness of Stations

1. Position along new routes

Observers : Kunio KAWADA and Yoshiyuki FUJII

Four routes were newly established in 1984 by JARE-25 (see Fig. A). Route IM was extended from G1 grid station to 74°12'S and 34°59'E, where the Advance Camp was established in November 1984. Route ES runs along a flow line of the Shirase Glacier from γ2 to γ4 and connects G7 grid station. Route ID extends from the Advance Camp toward the second highest dome of the Antarctica. Route IY connects the Advance Camp with the southern end of a triangulation network called Route K.

In all the new routes, the marker stakes were installed every 1 km, because the short distance between stakes was thought to be helpful for the next visit conducted by JARE-26 in 1985. Every other marker stake was numbered from the beginning to the end of the routes. These numbered stakes were to be used for snow accumulation measurements. The stakes between the numbered stakes were called with prime, for example, a stake between IM 10 and IM 11 was called IM 10'. The place of an individual stake is to be called station.

Navigational data, the azimuth and the distance between neighbouring stations, were obtained with a magnetic hand compass and an odometer of a vehicle, respectively. By operating a doppler satellite positioning system (JMR 4A), the positions of stations were determined from place to place along the routes. The JMR data, which were calculated on the WGS-72 earth ellipsoid with broadcasted ephemerides, were interpolated by the help of the navigational data using a standard spherical trigonometry. The positions of the stations were thus obtained on the new routes as shown in Tables II-1 for Route IM, II-2 for Route ID, II-3 for Route IY and II-4 for Route ES. For positioning with JMR, the number of pass was 10 to 50 at most stations, and the error would be 10 to 30 m (Shibuya et al., 1982), which approximately

corresponds to ±1" in latitude and ±3" in longitude. The overall error for the position of a station is considered to be at most ±10" (±30") in latitude (longitude) for the new routes when the errors in the navigational data were taken into account.

2. Elevation along new routes

Observers : Kunio KAWADA, Yoshiyuki FUJII and Tatsuo HARA

The measurements with barometric altimeters (American Paulin Altimeter MM1 and Thomen 3B4) were made every 2 km along the new routes (IM, ID, IY and ES. See Table I-1). On Routes ID and IY, the measurements were made with two altimeters, but only with one on Routes IM and ES where two detached parties moved separately.

The observations with JMR also gave the data on elevation. These data are much more precise than those by barometric altimeter, thus are considered as basic data for elevation. They were obtained, however, only sporadically along the routes, and hence the JMR data were interpolated by the use of barometric data for stations between the JMR stations. The final results on elevation are tabulated in Table II-1 for Route IM, II-2 for Route ID, II-3 for Route IY and II-4 for Route ES. The errors in determining elevations by JMR would be about ±10 m for the pass number of 10 to 50 (Shibuya et al., 1982).

3. Ice thickness along new routes

Observers : Minoru YOSHIDA and Kazunobu YAMASHITA

The ice thickness was measured using a radio echo sounder equipped on an oversnow vehicle. The instrument was a NIPR type consisting of a 179 MHz transmitter and a receiver with an oscilloscope as an indicator. Their specifications were given by Wada et al., (1980). A pair of 6-element Yagi antennas (8 dB) was

used, each for transmitting and for receiving. The antennas were set up on snow surface facing each other at distance about 4 m.

The measurements were not made on the running vehicle but made at nightstop stations. A reflective wave displayed on an oscilloscope, showing a time-intensity curve (A scope), was photographed at each station. The echo time was measured on the photographs, and converted into ice thickness using the wave velocity of 169 m μs^{-1} (Robin et al., 1969). When the multiple echo was observed, the longest echo time was used for the ice thickness calculations. The results are shown in Tables II-5.

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Table II-1. Position and elevation of stations along Route IM.

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
Mizuho St.*	70° 42′ 03″	44° 17′ 36″	2247
IM 1	70 43 06	44 16 40	2251
IM 2	70 44 13	44 16 28	2266
IM 3	70 45 14	44 15 22	2265
IM 4	70 46 20	44 14 25	2252
IM 5	70 47 24	44 13 33	2269
IM 6	70 48 27	44 12 40	2284
IM 7	70 49 30	44 11 44	2235
IM 8	70 50 33	44 10 41	2237
IM 9	70 51 37	44 09 52	2250
IM 10	70 52 42	44 08 54	2252
IM 11*	70 53 45	44 07 48	2298
IM 12	70 54 49	44 07 06	2302
IM 13	70 55 51	44 06 09	2306
IM 14	70 56 55	44 05 19	2292
IM 15	70 57 58	44 04 26	2303
IM 16	70 59 03	44 03 32	2313
IM 17	71 00 04	44 02 25	2319
IM 18	71 01 09	44 01 31	2325
IM 19	71 02 13	44 00 44	2325
IM 20	71 03 17	43 59 54	2316
IM 21	71 04 18	43 58 40	2325
IM 22	71 05 23	43 58 00	2334
IM 23	71 06 28	43 57 19	2341
IM 24	71 07 31	43 56 19	2347
IM 25	71 08 35	43 55 32	2353

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 26	71° 09′ 31″	43° 53′ 40″	2357
IM 27	71 10 32	43 52 26	2363
IM 28	71 11 37	43 51 49	2361
IM 29	71 12 40	43 50 55	2365
IM 30	71 13 44	43 50 00	2366
IM 31	71 14 47	43 48 59	2370
IM 32*	71 15 52	43 48 18	2381
IM 33	71 16 56	43 47 21	2386
IM 34	71 18 00	43 46 34	2389
IM 35	71 19 05	43 45 42	2403
IM 36	71 20 09	43 44 40	2403
IM 37	71 21 11	43 43 36	2417
IM 38	71 22 16	43 42 52	2420
IM 39	71 23 20	43 41 53	2420
IM 40(G1)*	71 24 24	43 40 55	2416
IM 41	71 25 15	43 39 16	2416
IM 42	71 26 07	43 37 38	2417
IM 43	71 27 02	43 36 08	2418
IM 44	71 27 56	43 34 27	2419
IM 45	71 28 52	43 32 52	2420
IM 46*	71 29 40	43 30 56	2421
IM 47	71 30 34	43 29 10	2423
IM 48	71 31 31	43 28 28	2426
IM 49	71 32 20	43 26 43	2429
IM 50	71 33 12	43 24 34	2431
IM 51	71 34 06	43 22 39	2434
IM 52	71 34 53	43 20 42	2437

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 53	71° 35′ 51″	43° 19′ 20″	2440
IM 54	71 36 36	43 17 03	2442
IM 55	71 37 23	43 14 57	2445
IM 56	71 38 19	43 13 03	2448
IM 57	71 39 14	43 11 09	2451
IM 58*	71 40 04	43 09 08	2453
IM 59	71 40 54	43 07 26	2471
IM 60	71 41 49	43 06 03	2490
IM 61	71 42 42	43 04 39	2482
IM 62	71 43 33	43 03 17	2483
IM 63	71 44 21	43 01 20	2484
IM 64	71 45 10	42 59 12	2485
IM 65*	71 45 59	42 57 18	2491
IM 66	71 46 51	42 55 27	2476
IM 67	71 47 39	42 53 32	2481
IM 68	71 48 31	42 51 31	2485
IM 69	71 49 26	42 49 40	2495
IM 70	71 50 19	42 47 49	2503
IM 71	71 51 14	42 45 54	2512
IM 72	71 52 06	42 43 32	2519
IM 73	71 52 54	42 41 30	2527
IM 74	71 53 46	42 39 22	2533
IM 75	71 54 40	42 37 15	2533
IM 76	71 55 32	42 35 05	2531
IM 77	71 56 27	42 32 23	2527
IM 78	71 57 23	42 29 44	2525
IM 79	71 58 19	42 27 09	2527

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 80(γ1)*	71° 59′ 07″	42° 24′ 05″	2552
IM 81	72 00 02	42 22 05	2557
IM 82	72 01 04	42 20 27	2562
IM 83	72 02 03	42 18 23	2573
IM 84	72 03 03	42 16 13	2582
IM 85	72 04 00	42 14 20	2573
IM 86	72 04 58	42 12 23	2587
IM 87	72 05 54	42 10 39	2612
IM 88	72 06 48	42 08 45	2619
IM 89	72 07 40	42 06 54	2608
IM 90	72 08 34	42 04 56	2610
IM 91	72 09 26	42 02 53	2619
IM 92	72 10 18	42 00 52	2632
IM 93	72 11 12	41 58 55	2642
IM 94	72 12 04	41 56 54	2649
IM 95*	72 13 00	41 54 48	2655
IM 96	72 13 58	41 52 45	2657
IM 97	72 14 54	41 50 57	2662
IM 98	72 15 51	41 49 16	2671
IM 99	72 16 41	41 47 04	2677
IM 100	72 17 35	41 45 03	2680
IM 101	72 18 33	41 43 06	2680
IM 102	72 19 28	41 40 56	2681
IM 103	72 20 18	41 38 43	2685
IM 104	72 21 12	41 36 42	2699
IM 105*	72 22 01	41 34 14	2708
IM 106	72 22 51	41 32 16	2711

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 107	72° 23′ 38″	41° 29′ 51″	2715
IM 108	72 24 29	41 27 53	2720
IM 109	72 25 21	41 26 06	2727
IM 110	72 26 14	41 24 07	2736
IM 111	72 27 09	41 22 24	2743
IM 112	72 28 02	41 20 27	2749
IM 113	72 28 55	41 18 45	2756
IM 114	72 29 48	41 16 54	2763
IM 115	72 30 44	41 14 51	2772
IM 116	72 31 39	41 12 58	2776
IM 117	72 32 33	41 10 51	2781
IM 118(ℓ2)*	72 33 27	41 09 04	2791
IM 119	72 34 20	41 07 06	2799
IM 120	72 35 14	41 05 03	2802
IM 121	72 36 08	41 03 12	2811
IM 122	72 37 01	41 01 14	2825
IM 123	72 37 53	40 59 10	2828
IM 124	72 38 49	40 57 23	2837
IM 125	72 39 41	40 55 00	2843
IM 126	72 40 38	40 52 56	2840
IM 127	72 41 33	40 50 54	2854
IM 128	72 42 23	40 48 37	2871
IM 129	72 43 16	40 46 34	2873
IM 130	72 44 12	40 44 43	2877
IM 131	72 45 06	40 42 38	2880
IM 132*	72 45 59	40 40 39	2886
IM 133	72 46 50	40 38 43	2890

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 134	72° 47′ 42″	40° 36′ 50″	2898
IM 135	72 48 29	40 34 46	2907
IM 136	72 49 23	40 32 57	2914
IM 137	72 50 12	40 30 55	2916
IM 138	72 50 59	40 28 49	2919
IM 139	72 51 47	40 27 05	2923
IM 140	72 52 36	40 24 59	2927
IM 141	72 53 24	40 22 48	2928
IM 142	72 54 13	40 20 41	2932
IM 143*	72 54 58	40 18 20	2934
IM 144	72 55 48	40 16 10	2934
IM 145	72 56 38	40 14 00	2938
IM 146	72 57 31	40 11 48	2940
IM 147	72 58 20	40 09 25	2948
IM 148	72 59 07	40 06 57	2963
IM 149	72 59 56	40 04 29	2963
IM 150	73 00 45	40 01 59	2967
IM 151	73 01 34	39 59 31	2977
IM 152	73 02 25	39 57 25	2983
IM 153	73 03 12	39 55 02	2989
IM 154*	73 03 57	39 52 33	2995
IM 155	73 04 55	39 50 13	2998
IM 156	73 05 48	39 47 54	3002
IM 157(G6)*	73 06 40	39 45 31	3006
IM 158	73 07 31	39 42 50	3011
IM 159	73 08 25	39 40 27	3012
IM 160	73 09 12	39 37 52	3023

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 161	73° 10′ 00″	39° 35′ 19″	3037
IM 162	73 10 50	39 32 54	3048
IM 163	73 11 38	39 30 21	3055
IM 164	73 12 24	39 27 45	3053
IM 165	73 13 13	39 25 09	3058
IM 166	73 14 03	39 22 26	3058
IM 167	73 14 49	39 19 52	3060
IM 168	73 15 37	39 17 20	3064
IM 169	73 16 22	39 14 33	3065
IM 170	73 17 10	39 11 55	3066
IM 171	73 17 56	39 09 20	3068
IM 172	73 18 43	39 06 32	3084
IM 173	73 19 33	39 04 09	3090
IM 174*	73 20 23	39 01 49	3098
IM 175	73 21 09	38 58 47	3110
IM 176	73 21 55	38 56 16	3113
IM 177	73 22 42	38 53 34	3118
IM 178	73 23 27	38 50 50	3122
IM 179	73 24 14	38 47 59	3128
IM 180	73 25 01	38 45 20	3129
IM 181	73 25 46	38 42 31	3132
IM 182	73 26 31	38 39 43	3130
IM 183	73 27 18	38 37 03	3134
IM 184	73 28 03	38 34 18	3140
IM 185	73 28 48	38 31 30	3142
IM 186	73 29 34	38 28 47	3145
IM 187	73 30 20	38 26 01	3149

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 188*	73° 31′ 05″	38° 23′ 15″	3154
IM 189	73 31 52	38 20 10	3160
IM 190	73 32 40	38 17 14	3164
IM 191	73 33 26	38 14 18	3165
IM 192	73 34 13	38 11 17	3167
IM 193	73 34 56	38 08 24	3170
IM 194	73 35 41	38 05 24	3171
IM 195	73 36 26	38 02 36	3172
IM 196	73 37 14	37 59 35	3173
IM 197	73 38 04	37 56 28	3176
IM 198(SS150)	73 38 40	37 53 53	3178
IM 199	73 39 21	37 50 51	3178
IM 200	73 40 10	37 48 05	3177
IM 201	73 41 00	37 45 15	3178
IM 202	73 41 40	37 42 04	3176
IM 203	73 42 15	37 38 45	3181
IM 204	73 42 52	37 35 28	3185
IM 205*	73 43 31	37 32 21	3187
IM 206	73 44 12	37 29 19	3189
IM 207	73 44 52	37 26 20	3189
IM 208	73 45 30	37 23 19	3190
IM 209	73 46 09	37 20 16	3191
IM 210	73 46 48	37 17 13	3190
IM 211	73 47 26	37 14 01	3190
IM 212	73 48 03	37 10 55	3188
IM 213	73 48 43	37 07 55	3189
IM 214	73 49 22	37 04 51	3190

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 215*	73° 50′ 01″	37° 01′ 48″	3191
IM 216	73 50 39	36 58 31	3193
IM 217	73 51 17	36 55 21	3195
IM 218	73 51 54	36 52 07	3195
IM 219	73 52 31	36 48 51	3194
IM 220	73 53 06	36 45 36	3195
IM 221	73 53 43	36 42 21	3196
IM 222	73 54 19	36 39 06	3197
IM 223	73 54 55	36 35 56	3196
IM 224	73 55 32	36 32 43	3194
IM 225	73 56 09	36 29 28	3195
IM 226	73 56 45	36 26 12	3197
IM 227	73 57 24	36 22 54	3197
IM 228	73 57 59	36 19 36	3196
IM 229	73 58 37	36 16 16	3195
IM 230	73 59 15	36 13 00	3195
IM 231	73 59 52	36 09 42	3195
IM 232*	74 00 28	36 06 24	3198
IM 233	74 01 03	36 03 00	3199
IM 234	74 01 38	35 59 40	3198
IM 235	74 02 14	35 56 22	3198
IM 236	74 02 48	35 53 00	3199
IM 237	74 03 22	35 49 37	3198
IM 238	74 03 56	35 46 17	3197
IM 239	74 04 31	35 42 56	3198
IM 240	74 05 10	35 39 45	3200
IM 241	74 05 43	35 36 17	3200

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 242	74° 06′ 15″	35° 32′ 50″	3200
IM 243	74 06 50	35 29 29	3198
IM 244	74 07 25	35 26 07	3196
IM 245	74 08 00	35 22 46	3197
IM 246	74 08 35	35 19 25	3197
IM 247	74 09 09	35 16 03	3197
IM 248	74 09 43	35 12 39	3196
IM 249	74 10 17	35 09 16	3195
IM 250	74 10 52	35 05 52	3195
IM 251	74 11 27	35 02 30	3195
IM 252(A.C.)*	74 12 02	34 59 08	3193

A.C. means Advance Camp

Table II-2. Position and elevation of stations along Route ID.

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
Advance Camp	74° 12′ 02″	34° 59′ 08″	3193
ID 1	74 13 12	34 59 08	3204
ID 2	74 14 22	34 58 56	3212
ID 3	74 15 31	34 58 40	3213
ID 4	74 16 40	34 58 32	3214
ID 5	74 17 47	34 58 12	3218
ID 6	74 18 54	34 58 00	3226
ID 7	74 20 02	34 57 48	3230
ID 8	74 21 12	34 57 31	3233
ID 9	74 22 20	34 57 19	3240
ID 10	74 23 27	34 57 16	3247
ID 11	74 24 35	34 57 04	3251
ID 12	74 25 43	34 56 48	3254
ID 13	74 26 50	34 56 32	3261
ID 14	74 27 57	34 56 16	3265
ID 15	74 29 05	34 56 08	3269
ID 16*	74 30 12	34 55 56	3277
ID 17	74 31 19	34 55 54	3301
ID 18	74 32 26	34 56 04	3313
ID 19	74 33 34	34 56 10	3320
ID 20	74 34 41	34 56 16	3319
ID 21	74 35 48	34 56 22	3329
ID 22	74 36 54	34 56 28	3343
ID 23	74 38 02	34 56 38	3354
ID 24	74 39 10	34 56 49	3350
ID 25	74 40 18	34 56 55	3357
ID 26	74 41 25	34 57 01	3350

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 27	74° 42′ 33″	34° 57′ 07″	3338
ID 28	74 43 40	34 57 13	3329
ID 29	74 44 47	34 57 23	3333
ID 30	74 45 55	34 57 29	3336
ID 31	74 47 02	34 57 31	3340
ID 32	74 48 09	34 57 37	3345
ID 33	74 49 16	34 57 39	3350
ID 34*	74 50 23	34 57 49	3371
ID 35	74 51 28	34 58 11	3409
ID 36	74 52 32	34 58 27	3428
ID 37	74 53 35	34 58 43	3425
ID 38	74 54 37	34 59 00	3422
ID 39	74 55 42	34 59 25	3425
ID 40	74 56 47	34 59 50	3422
ID 41	74 57 50	35 00 15	3409
ID 42	74 58 55	35 00 36	3400
ID 43(ﾒ5)*	74 59 59	35 00 57	3396

Table II-3. Position and elevation of stations along Route IY.

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
Advance Camp	74° 12′ 02″	34° 59′ 08″	3193
IY 1	74 10 58	34 59 22	3178
IY 2	74 09 53	34 59 37	3175
IY 3	74 08 45	34 59 47	3168
IY 4	74 07 39	35 00 06	3159
IY 5	74 06 33	35 00 25	3154
IY 6	74 05 26	35 00 40	3156
IY 7	74 04 20	35 00 55	3156
IY 8	74 03 14	35 01 09	3139
IY 9	74 02 09	35 01 24	3131
IY 10*	74 01 03	35 01 39	3129
IY 11	73 59 56	35 01 46	3105
IY 12	73 58 49	35 01 54	3112
IY 13	73 57 42	35 02 01	3110
IY 14	73 56 36	35 02 09	3105
IY 15	73 55 29	35 02 17	3112
IY 16	73 54 24	35 02 24	3117
IY 17	73 53 18	35 02 40	3098
IY 18	73 52 11	35 02 47	3096
IY 19	73 51 04	35 02 59	3110
IY 20	73 49 57	35 03 06	3113
IY 21	73 48 51	35 03 18	3113
IY 22	73 47 44	35 03 38	3062
IY 23	73 46 38	35 03 45	3079
IY 24	73 45 31	35 03 57	3078
IY 25	73 44 24	35 04 01	3071
IY 26	73 43 18	35 04 13	3071

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IY 27	73° 42′ 12″	35° 04′ 16″	3061
IY 28*	73 41 05	35 04 24	3033
IY 29	73 39 55	35 04 31	3009
IY 30	73 38 49	35 04 37	2988
IY 31	73 37 42	35 04 48	2983
IY 32	73 36 34	35 04 54	2985
IY 33	73 35 27	35 05 05	2972
IY 34	73 34 21	35 05 12	2975
IY 35	73 33 12	35 05 18	2971
IY 36	73 32 06	35 05 25	2961
IY 37	73 31 01	35 05 31	2948
IY 38	73 29 55	35 05 38	2953
IY 39	73 28 49	35 05 44	2953
IY 40	73 27 43	35 05 51	2952
IY 41	73 26 36	35 05 57	2955
IY 42*	73 25 30	35 06 08	2950
IY 43	73 24 25	35 06 11	2924
IY 44	73 23 21	35 06 15	2903
IY 45	73 22 17	35 06 19	2903
IY 46	73 21 13	35 06 22	2904
IY 47	73 20 09	35 06 26	2897
IY 48	73 19 06	35 06 33	2889
IY 49	73 18 03	35 06 36	2881
IY 50	73 16 59	35 06 40	2876
IY 51	73 15 55	35 06 43	2871
IY 52	73 14 51	35 06 47	2868
IY 53	73 13 48	35 06 50	2862

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IY 54	73° 12′ 45″	35° 06′ 58″	2849
IY 55	73 11 41	35 07 02	2840
IY 56	73 10 38	35 07 08	2833
IY 57	73 09 35	35 07 12	2831
IY 58	73 08 31	35 07 12	2820
IY 59	73 07 28	35 07 15	2814
IY 60	73 06 23	35 07 22	2808
IY 61	73 05 20	35 07 30	2806
IY 62	73 04 16	35 07 33	2802
IY 63	73 03 12	35 07 36	2796
IY 64	73 02 08	35 07 40	2786
IY 65*	73 01 04	35 07 43	2780
IY 66	72 59 59	35 07 53	2773
IY 67	72 58 55	35 08 02	2765
IY 68	72 57 50	35 08 16	2746
IY 69	72 56 45	35 08 22	2733
IY 70	72 55 43	35 08 35	2728
IY 71	72 54 40	35 08 48	2721
IY 72	72 53 36	35 08 57	2719
IY 73	72 52 31	35 09 07	2706
IY 74	72 51 27	35 09 16	2700
IY 75	72 50 23	35 09 25	2692
IY 76	72 49 17	35 09 39	2693
IY 77	72 48 12	35 09 10	2692
IY 78	72 47 23	35 06 55	2645
IY 79	72 46 18	35 06 27	2639
IY 80*	72 45 15	35 05 18	2598

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IY 81	72° 44′ 13″	35° 04′ 37″	2596
IY 82	72 43 12	35 04 55	2583
IY 83	72 42 10	35 05 24	2563
IY 84	72 41 11	35 06 31	2569
IY 85	72 40 09	35 07 08	2577
IY 86	72 39 07	35 07 33	2571
IY 87	72 38 04	35 08 06	2558
IY 88	72 37 01	35 08 42	2555
IY 89	72 35 59	35 09 08	2551
IY 90	72 34 57	35 08 13	2530
IY 91	72 33 54	35 07 27	2494
IY 92	72 32 51	35 07 56	2480
IY 93	72 31 53	35 09 06	2468
IY 94	72 30 55	35 10 19	2456
IY 95	72 29 57	35 11 29	2468
IY 95′(K34)			

Table II-4. Position and elevation of stations along Route ES.

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
γ 2(IM118)*	72° 33′ 27″	41° 09′ 04″	2791
ES 1	72 34 29	41 09 01	2801
ES 2	72 35 33	41 08 58	2811
ES 3	72 36 35	41 08 55	2810
ES 4	72 37 43	41 08 51	2818
ES 5	72 38 53	41 08 48	2835
ES 6	72 39 55	41 08 45	2850
ES 7	72 41 06	41 08 42	2854
ES 8	72 42 01	41 08 29	2866
ES 9	72 43 06	41 08 26	2876
ES 10*	72 44 07	41 08 34	2888
ES 11	72 45 08	41 08 39	2893
ES 12	72 46 12	41 08 44	2902
ES 13	72 47 10	41 08 53	2902
ES 14	72 48 12	41 09 34	2899
ES 15	72 49 10	41 09 54	2910
ES 16	72 50 17	41 10 12	2929
ES 17	72 51 19	41 09 25	2931
ES 18	72 52 23	41 09 39	2929
ES 19	72 53 24	41 09 44	2938
ES 20	72 54 24	41 09 30	2937
ES 21	72 55 31	41 09 52	2947
ES 22	72 56 38	41 09 58	2954
ES 23	72 57 45	41 10 04	2974
ES 24	72 58 43	41 10 09	2972
ES 25	72 59 56	41 10 20	2983
ES 26	73 01 03	41 10 17	2995

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ES 27	73° 02′ 07″	41° 10′ 06″	3006
ES 28	73 03 07	41 10 03	3013
ES 29	73 04 11	41 09 57	3019
ES 30(γ3)*	73 05 09	41 10 09	3029
ES 31	73 06 14	41 10 06	3029
ES 32	73 07 22	41 09 51	3042
ES 33	73 08 24	41 10 04	3047
ES 34	73 09 36	41 10 01	3047
ES 35	73 10 38	41 09 58	3036
ES 36	73 11 40	41 09 56	3071
ES 37	73 12 45	41 09 49	3080
ES 38	73 13 50	41 09 47	3093
ES 39	73 14 49	41 09 37	3086
ES 40	73 15 51	41 09 30	3089
ES 41	73 16 59	41 09 28	3100
ES 42	73 18 00	41 10 04	3114
ES 43	73 18 59	41 10 02	3127
ES 44	73 20 01	41 09 59	3116
ES 45	73 21 03	41 09 57	3117
ES 46	73 22 02	41 09 55	3124
ES 47	73 23 01	41 09 52	3129
ES 48	73 24 03	41 09 50	3136
ES 49	73 25 02	41 09 47	3135
ES 50*	73 26 04	41 09 29	3153
ES 51	73 27 06	41 09 31	3168
ES 52	73 28 05	41 09 16	3180
ES 53	73 29 06	41 09 39	3177

*JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ES 54	73° 30′ 05″	41° 09′ 12″	3180
ES 55	73 31 04	41 09 30	3184
ES 56	73 32 02	41 09 35	3203
ES 57	73 33 04	41 09 24	3205
ES 58	73 34 03	41 09 06	3216
ES 59	73 35 02	41 09 08	3216
ES 60(γ4)*	73 36 07	41 09 05	3221
ES 61	73 36 11	41 05 23	3222
ES 62	73 36 29	41 01 59	3225
ES 63	73 36 36	40 58 15	3229
ES 64	73 36 44	40 54 30	3223
ES 65*	73 36 50	40 50 34	3226
ES 66	73 36 54	40 46 48	3226
ES 67	73 36 58	40 42 51	3227
ES 68	73 36 51	40 39 03	3227
ES 69	73 37 03	40 35 32	3229
ES 70	73 37 28	40 32 18	3227
ES 71	73 37 27	40 28 41	3230
ES 72	73 37 30	40 25 05	3233
ES 73	73 37 43	40 21 36	3233
ES 74	73 37 50	40 17 51	3235
ES 75	73 37 58	40 14 55	3235
ES 76	73 38 05	40 10 24	3232
ES 77	73 38 14	40 06 04	3227
ES 78	73 38 22	40 02 41	3232
ES 79	73 38 29	39 59 07	3234
ES 80	73 38 38	39 55 34	3230
ES 80'(G7,SS125)	73 39 09	39 49 47	3235

Table II-5. Ice thickness of stations.

Station	Latitude (S)	Longitude (E)	Elevation (m)	Ice thickness (m)
Mizuho St.	70° 42′	44° 18′	2247	2028
IM 11	70 54	44 08	2298	2084
IM 20′	71 03	44 00	2316	2141
IM 32	71 16	43 48	2381	2141
IM 40(G1)	71 24	43 41	2416	2197
IM 46	71 30	43 31	2421	2253
IM 58	71 40	43 09	2453	2028
IM 65	71 46	42 57	2491	2282
IM 80(ダ1)	71 59	42 24	2552	1704
IM 95	72 13	41 55	2655	1915
IM 105	72 22	41 34	2708	2169
IM 118(ダ2)	72 33	41 09	2791	2310
IM 132	72 46	40 41	2886	2225
IM 143	72 55	40 18	2934	2422
IM 157(G6)	73 07	39 46	3006	2479
IM 174	73 20	39 02	3098	2507
IM 188	73 31	38 23	3154	2253
IM 205	73 44	37 32	3187	2197
IM 215	73 50	37 02	3191	1915
IM 232	74 00	36 06	3198	2338
A.C. (IM 252)	74 12	34 59	3193	2141
ID 16	74 30	34 56	3277	2366
ID 25	74 40	34 57	3357	2028
ID 34	74 50	34 58	3371	2479
ID 43(ダ5)	75 00	35 01	3396	2648
IY 10	74 01	35 02	3129	2084
IY 28	73 41	35 04	3033	1521
IY 42	73 26	35 06	2950	1859
IY 65	73 01	35 08	2780	2084
IY 80	72 45	35 05	2598	958
K 28-26	72 24	35 18	2413	1296
G 15	71 18	46 16	2584	1890

III. Surface Meteorological Data During Oversnow Traverses

Observers : Minoru YOSHIDA, Yoshiyuki FUJII
and Kazunobu YAMASHITA

The observations were made during oversnow traverses listed in Table I-1. Continuous records of air and room temperatures and wind speed were obtained with a digital recorder (Procos IIV, Chino Co. Ltd.) from 09 LT to 24 LT during the inland traverse.

The air and wind sensors were installed on the roof of an oversnow vehicle. The data of wind speed are not corrected for the speed (3-10 km h^{-1} = 1-3 m s^{-1}) of the oversnow vehicle.

The item, instrument, and accuracy of the observations are given below.

Item	Instrument	Accuracy
Air temperature	Alcohol thermometer or thermocupple	$\pm$ 0.2°C $\pm$ 0.5°C
Wind speed	Vane anemometer or 3-cup anemometer	$\pm$ 0.2m s^{-1} $\pm$ 3 m s^{-1}
Wind direction	Magnetic compass	$\pm$ 5°
Visibility	Visual observation	———
Cloud	Visual observation	———
Weather	Visual observation	———

The meteorological data are shown in Tables III-1, III-2, III-3 and III-4, corresponding to each traverse. Notations in the tables are as follows:

LT : Local standard time at Syowa Station (69°00'S, 39°35'E : GMT+3h)

$T(T_{air})$: Air temperature (C°)

T_{in} : Room temperature in a oversnow vehicle (°C)

v : Wind speed (m s^{-1})
d : Wind direction
V : Visibility (km)
N : Amount of cloud (in tenth)
W : Present weather

○ Clear
◐ Fine
◎ Cloudy
◍ Cloudy (upper cloud are predominant)
✳ Snow
✳ Snowstorm
⊹ Blowing snow
⊹ Drifting snow

Position and elevation of stations are given in Tables II-1, II-2, II-3 and II-4 for Routes IM, ID, IY and ES, respectively. For Route S-H-Z, refer to Naruse and Yokoyama (1975), and for Routes YM and SS, to Nishio et al. (1986).

References

Naruse, R. and Yokoyama, K. (1975) : Position, elevation and ice thickness of stations. JARE Data Rep., 28 (Glaciol. 3), 7-47.

Nishio, F., Ohmae, H. and Ishikawa, M. (1986) : Position, elevation and ice thickness of stations. JARE Data Rep., 110 (Glaciol. 12), 5-37.

Table III-1. Surface meteorological data along Route S-H-Z during 27 December 1983 - 2 January 1984.

Date	LT	Station	T	V	d	N	W
1983 Dec. 27	2100	S 16	-9.0	3.9	---	0+	○
28	0900	S 20	-4.0	9.0	ENE	0+	○
29	1500	H 68	-6.3	2.0	NE	4	○
30	1500	H 175	-8.0	5.8	NE	0+	○
31	1500	H 256	-10.0	4.9	N	9	◎
1984 Jan. 1	1500	Z 16	-11.5	6.7	NE	10	×
2	1500	Z 76	-13.5	4.3	ENE	10	◎

Table III-2. Surface meteorological data along Route between Syowa and Mizuho Stations in August 1984.

Date	LT	Station	T	V	d	N	W
1984 Aug. 8	1500	S 24	-21.2	6	E		
9	1300	H 90	-27.3	6	E		
10	1300	H 203	-39.2	4	E		
11	1200	H 305	-41.5	1	NE		
12	1500	Z 31	-45.3	6	E		
13	1400	Z 42	-36.4	10	E		
14	1400	Z 65	-38.9	13	E		
15	0800	Z 71	-42.2	13	E		
19	1800	Z 98	-43.6	14	SE	10	✕-↑→
20	1500	Z 88	-41.8	12	--	10	↑→
21	1500	Z 46	-42.8	10	--	0	↑→
22	1900	H 240	-29.0	11	SE	6	◎
23	1800	H 86	-26.8	11	--	3	○
24	1800	S 16	-19.6	11	--	10	↓→
25	0700	S 16	-15.2	16	--	9	↓→

Table III-3. Surface meteorological data along Route Syowa St. - Mizuho St. - A.C. - γ5 - A.C. - Yamato Mts. - Mizuho St. - G15 - Mizuho St. - S16 during October 1984 - January 1985.

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984 ·										
Oct. 4	09	Syowa								
	12		7.6		-10.6					
	15	S 30	6.4	E	-16.2		0+	0 0 0	○	10.0
	18	S 30	4.3		-28.0					
5	09	S 30	10.2		-28.0					
	12	H 120	0.9		-23.0					
	15	H 147	0.4	E	-24.1		10	0 2 X	✳	1.0
	18	H 180	0.8		-27.6					
6	09	H 180	4.2		-36.3					
	12	H 236	10.3	E	-33.1					
	15		13.3	E	-34.5		1	0 0 8	⇉	10.0
	18	Z 8	10.9		-40.1					
7	09	Z 8	9.2		-31.3					
	12		12.4		-32.7					
	15		7.7	E	-31.2				⇉	
	18	Z 80	5.2		-37.4					
	21	Z 80	4.8		-37.9					
8	09	Z 80	3.2		-33.7					
	12		3.3		-32.0					
	15	Mizuho	6.7	E	-33.5		1	0 0 1	○	20.0
9	15	Mizuho	9.8	E	-32.1		2	0 3 2	○	10.0
10	15	Mizuho	6.5	ENE	-28.6		10	0 0 7	✳	0.8
11	15	Mizuho	5.2	ENE	-31.1		10	0 3 7	✳	5.0
12	15		3.0	E	-35.0		0	0 0 0	⇉	0.8
	18		4.0		-36.6	33.4				
	21	YM 11	10.8		-40.8	-3.4				
13	09	YM 11	9.6		-38.8	-27.5				
	12		8.1		-36.8	23.1				
	15		8.0		-37.3	17.7	0	0 0 0	⇉	0.4
	18	IM 20'	14.4		-42.3	23.3				
14	15	IM 28							⇉	0.5

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Oct. 15	09	IM 32			-45.7	-28.9				
	12	IM 32	16.9		-41.0	-25.9				
	15	IM 32	5.0	E	-38.2	7.8	X	X X X		0.1
	18	IM 32	11.4		-41.0	7.4				
	21	IM 32	12.1		-44.7	3.1				
	24	IM 32	13.0		-47.1	-4.8				
16	09	IM 32	11.7		-42.7	-18.9				
	12		10.0		-37.7	23.3				
	15		10.7	E	-37.8	27.7	0	0 0 0		0.8
	18	IM 40	8.5		-41.3	22.7				
	21	(G 1)	13.0		-45.2	-13.0				
	24	(G 1)	10.3		-46.7	-14.5				
17	09	IM 40	13.2		-43.2	-5.1				
	12	IM 40	4.8		-38.8	1.8				
	15	IM 40	9.3	E	-38.4	0.5	0	0 0 0		2.0
	18	IM 40	7.6		-41.7	1.5				
	21	IM 40	9.0		-44.0	-12.9				
	24	IM 40	9.9		-46.6	-28.5				
18	09	IM 40	9.9		-44.5	-11.3				
	12	IM 40	7.2		-39.7	16.7				
	15	IM 40	5.0	E	-38.8	24.3	0	0 0 0		10.0
	18	IM 40	6.4		-41.7	20.9				
	21	IM 40	8.2		-45.0	-10.0				
	24	IM 40	8.7		-48.0	-5.7				
19	09	IM 40	9.4		-44.0	-14.2				
	12	IM 40	6.2		-40.1	17.9				
	15	IM 40	5.3	ESE	-38.5	3.3	1	0 0 7		5.0
	18	IM 40	5.0		-41.5	17.5				
	21	IM 40	5.8		-45.0	-5.0				
20	09	IM 40	9.4		-40.0	-1.6				
	18	IM 46	13.0	ESE	-32.6	5.0	10	0 2 X		1.0
	24	IM 46	14.0		-31.2	9.3				
21	09	IM 46	10.5		-28.3	-9.1				
	12	IM 46	13.6		-27.9	13.7				
	15	IM 46	11.2	E	-27.6	-8.8	10	0 2 X		0.1
	18	IM 46	10.6		-29.0	-1.0				
	21	IM 46	11.4		-33.6	-15.0				
	24	IM 46	12.2		-35.9	-1.0				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Oct. 22	09	IM 46	12.6		-36.3	-3.1				
	12		16.0		-33.6	25.4				
	15	IM 51	13.7	ESE	-32.9	27.1	0	0 0 0	⊣↓↦	2.0
	18		5.0		-34.6	23.9				
	21	IM 58	14.0		-39.7	0.4				
	24	IM 58	15.8		-41.9	-3.6				
23	09	IM 58	14.8		-40.4	-21.8				
	12	IM 58	13.0		-38.0	11.6				
	15	IM 58	12.0	ESE	-36.6	-11.0	0	0 0 0	⊣↑↦	0.2
	18	IM 59'	7.0		-37.8	18.6				
	21	IM 60	14.6		-42.0	-15.0				
24	12	IM 60	14.7		-36.2	-2.6				
	15	IM 62	11.2	ESE	-34.8	13.9	4	0 0 2	⊣↑↦	0.8
	18	IM 64	10.0		-38.0	12.2				
	21	IM 65	12.6		-42.8	0.4				
	24	IM 65	18.3		-44.4	-5.6				
25	09	IM 65	17.7		-41.1	-19.9				
	12	IM 65	15.9		-38.5	7.0				
	15	IM 65	16.9	ESE	-37.9	-9.9	0	0 0 0	⊣↑↦	0.1
	18	IM 65	14.8		-39.5	8.4				
	21	IM 65	15.3		-41.6	13.6				
26	09	IM 65	13.2		-39.0	-7.0				
	12		7.6		-35.3	9.8				
	15	IM 73	1.4	ESE	-36.1	12.6	0	0 0 0	⊣↓↦	3.0
	18		6.2		-37.3	21.1				
	21		13.1		-43.0	7.9				
	24	IM 80	13.3		-45.9	-7.9				
		(ゲ 1)								
27	12	IM 80	15.5		-38.2	-5.7				
	15	IM 80	14.0	ESE	-39.2		1	0 0 8	⊣↓↦	2.0
	18	IM 80	12.4		-40.1	5.6				
	21	IM 80	13.6		-44.5	-4.5				
	24	IM 80	13.6		-46.7	3.5				
28	09	IM 80	14.4		-41.4	-21.3				
	12	IM 80	14.1		-39.1	2.5				
	15	IM 80	14.3	ESE	-37.8	-15.4	1	0 0 8	⊣↑↦	1.0
	18	IM 80	12.6		-38.5	-23.3				
	21	IM 80	14.2		-42.3	-7.3				
	24	IM 80	14.9		-45.3	1.4				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Oct. 29	09	IM 80	13.0		-38.8	-13.2				
	12	IM 80	12.0		-36.5	8.4				
	15	IM 80	10.4	ESE	-34.9	13.7	0+	0 0 8	⊣→	10.0
	18	IM 80	7.7		-36.2	-9.7				
	21	IM 80	8.1		-40.5	-10.6				
30	15	IM 85	7.4	ESE	-33.4	14.9	4	0 0 4	○	20.0
	18		4.9		-32.5	28.6				
	21	IM 95	7.6		-39.3	21.7				
	24	IM 95	10.6		-42.6	14.3				
31	09	IM 95	10.8		-37.0	-15.4				
	12	IM 96	7.4		-33.9	15.8	4	0 0 6	↑→	0.8
	15	IM 100	5.2	ESE	-33.5	24.9	1	0 0 2	⊖	5.0
	18		3.4		-33.9	9.2				
	21	IM 105	4.0		-42.2	-5.0				
	24	IM 105	7.0		-45.1	-20.6				
Nov. 1	09	IM 105	8.8		-38.5	-22.4				
	12		4.9		-33.8	11.6				
	15	IM 111'	7.4	ESE	-32.4	22.3	10	0 0 7	⊣→	5.0
	18		3.9		-34.4	31.0				
	21	IM 118	8.0		-40.5	-3.2				
	24	(γ 2)	9.3		-42.2	-22.1				
2	09	IM 118	11.6		-33.4	-17.4				
	12	IM 118	13.3		-31.3	8.1				
	15	IM 118	11.5	ESE	-30.6	13.1	10	0 1 7	×↑→	0.2
	18	IM 118	12.2		-31.5	5.0				
	24	IM 118	9.2		-35.3	9.7				
3	09	IM 118	10.4		-32.1	-18.1				
	12	IM 118	13.4		-30.9	15.8				
	15	IM 118	7.6	ESE	-29.7	0.5	10	0 2 X	×↑→	0.2
	18	IM 118	7.4		-30.5	-4.3				
	21	IM 118	7.8		-33.6	-14.4				
4	09	IM 118	7.5		-33.3	-10.5				
	12		4.2		-27.8	19.8				
	15	IM 125	7.0	ESE	-29.0	22.7	2	0 0 8	⊣→	5.0
	18		3.8		-32.4	30.7				
	21	IM 132	5.2		-37.8	11.4				
	24	IM 132	6.2		-39.6	9.4				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Nov. 5	09	IM 132	10.0		-32.6	-13.6				
	12		9.7		-28.9	23.0				
	15	IM 137	12.8	E	-28.1	4.8	10	0 1 7	⊀↑→	0.5
	18		11.9		-28.3	23.7				
	21	IM 143	9.2		-31.8	14.5				
	24	IM 143	9.5		-31.6	1.2				
6	09	IM 143	9.0	E	-28.1	-15.4	10	0 1 7	⊀↑→	0.5
	12	IM 143	8.2	E	-27.6	13.2	10	0 1 7	⊀↑→	0.5
	15	IM 147	10.8	E	-27.7	22.2	10	0 1 7	⊀↑→	0.5
	18		7.0		-29.1	26.7				
	21	IM 154	9.8		-31.5	4.0				
	24	IM 154	8.2		-33.7	-10.5				
7	09	IM 154	8.2		-31.5	-15.3				
	12		4.8		-27.5	21.6				
	15	IM 157	9.2	ESE	-29.2	-1.1	1	0 0 2	○	10.0
	18	(G 6)	7.2		-31.6	-8.2				
	21	IM 157	9.8		-35.5	-1.8				
8	12	IM 157	8.7		-30.9	-9.5				
	15	IM 157	7.9	ESE	-30.4	-3.9	1	0 0 2	○	10.0
	18	IM 157	6.0		-32.1	3.4				
	21	IM 157	6.0		-37.0	-9.8				
9	09	IM 157	9.6		-33.8	-21.6				
	12		8.8		-27.2	18.1				
	15	IM 164	5.5	ESE	-29.0	25.0	1	0 0 2	○	10.0
	18		6.8		-31.7	30.6				
	21	IM 174	5.8		-37.1	16.8				
	24	IM 174	7.1		-40.9	-10.9				
10	09	IM 174	8.5		-35.5	-17.0				
	12		7.1		-29.7	18.1				
	15	IM 180	2.6	ESE	-29.1	21.4	0	0 0 0	○	10.0
	18		4.7		-33.3	31.6				
	21	IM 188	6.5		-38.8	13.2				
	24	IM 188	5.0		-43.0	-5.5				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Nov. 11	09	IM 188	9.5		-36.4	-17.5				
	12		7.4		-32.7	17.6				
	15	IM 195	5.3	ESE	-30.5	26.2	0	0 0 0	⊣↓→	10.0
	18		9.6		-33.2	26.8				
	21	IM 205	10.0		-38.4	-2.8				
	24	IM 205	10.2		-41.5	-2.1	0+	0 0 4	⊣↓→	10.0
12	09	IM 205	15.2		-36.8	-18.1				
	12		9.0		-32.7	9.6				
	15	IM 208	14.6	ESE	-32.7	12.3	0	0 0 0	⊣↑→	0.5
	18		12.0		-33.4	26.7				
	21	IM 215	10.9		-36.9	-1.3				
13	09	IM 215	10.0		-35.0	-19.5				
	12		6.2		-31.0	14.2				
	15	IM 222	7.6	E	-31.8	25.3	0	0 0 0	⊣↓→	20.0
	18		4.8		-29.7	31.7				
	21	IM 232	6.2		-37.7	18.2				
	24	IM 232	6.1		-41.1	-9.0				
14	09	IM 232	7.2		-35.0	-17.8				
	12		11.2		-31.7	20.5				
	15	IM 239	6.3	ESE	-30.1	16.3	0+	0 0 2	⊣↓→	20.0
	18		5.8		-31.3	31.6				
	21		7.8		-36.0	30.1				
	24	IM 252 (A.C.)	10.8		-40.3	7.5				
15	12	A.C.	10.2		-31.3	-17.1				
	15	A.C.	12.0	E	-29.7	-10.2	1	0 0 2	⊣↓→	5.0
	18	A.C.	9.6		-31.5	16.1				
	21	A.C.	8.8		-35.4	18.2				
16	09	A.C.	11.8		-33.1	-17.5				
	12	A.C.								
	15	A.C.	9.5	E	-30.2		10	0 1 7	×⊣↑→	1.0
17	09	A.C.	8.0		-33.9	-16.2				
	12	A.C.	4.9		-29.8	1.2				
	15	A.C.	5.6	E	-29.1	-10.3	4	0 0 2	⊣↓→	5.0
	18	A.C.	7.0		-30.6	-9.0				
	21	A.C.	8.5		-34.5	-13.7				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Nov. 18	09	A.C.	8.4		-32.4	-19.0				
	12	A.C.	7.6		-30.1	9.4				
	15	A.C.	2.5	E	-27.3	22.1	4	0 0 2		5.0
	18	A.C.	4.4		-30.8	20.0				
	21	A.C.	7.0		-34.8	18.3				
	24	A.C.	6.7		-39.1	8.9				
19	09	A.C.	8.3		-34.3	-15.9				
	12	A.C.	9.9		-32.5	2.9				
	15	A.C.	10.3	E	-31.5	16.9	4	0 0 2		1.0
	18	A.C.	7.6		-32.7	11.2				
	21	A.C.	8.3		-36.0	-1.6				
20	15	A.C.	6.9	ESE	-30.4	-1.8	1	0 0 2		10.0
	18	A.C.	9.4		-31.7	-0.5				
	21	A.C.	6.3		-35.0	-8.0				
	24	A.C.	7.3		-33.6	7.0				
21	12		9.9		-31.2	8.4				
	15	ID 6	2.9	ESE	-30.3	25.6	3	0 0 8		0.8
	18		10.9		-31.3	24.4				
	21	ID 16	10.4		-34.4	8.8				
	24	ID 16	12.3		-37.0	5.1				
22	09	ID 16	14.4		-31.5	-16.8				
	12		7.4		-28.1	15.2				
	15	ID 22'	10.0	NE	-29.4	18.9	10	0 4 2		1.0
	18		1.2		-27.5	33.8				
	21	ID 34	4.7		-34.6	8.7				
	24	ID 34	3.3		-36.7	-8.6				
23	12		2.6		-25.7	17.7				
	15	ID 43	3.0	E	-29.3	28.4	10	0 0 6		10.0
	18	(5)	1.5		-29.6	6.8				
	21	ID 43	2.6		-36.2	1.4				
	24	ID 43	1.5		-39.6	-10.4				
24	03	ID 43	2.8		-40.4	-12.2				
	09	ID 43	5.2		-33.5	-10.9				
	12	ID 43	5.4		-31.2	10.5				
	15	ID 43	5.0	ESE	-29.8	8.0	0+	0 0 1		30.0
	18		2.1		-29.8	34.7				
	21	ID 25	4.8		-34.4	32.3				
	24	ID 25	5.0		-38.6	0.3				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Nov. 25	09	ID 25	4.8		-34.1	-11.3				
	12		6.5		-28.9	24.4				
	15	ID 12'	10.4	ESE	-27.6	24.2	0+	0 0 1	○	20.0
	18		4.8		-27.9	33.8				
	21	A.C.	6.5	ESE	-32.8	12.4	0+	0 0 8	○	20.0
	24	A.C.	7.9	ESE	-36.1	-4.1	0+	0 0 8	○	20.0
26	09	A.C.	7.6		-31.1	-9.7				
	12	A.C.	5.6		-27.6	1.3				
	15	A.C.	3.4	ESE	-25.9	-2.2	3	0 0 5	⊕	10.0
	18		6.5		-27.1	26.5				
	21	IY 10	7.8		-30.1	8.1	10	0 1 6	⊣↓→	10.0
	24	IY 10	7.5		-31.4	10.0				
27	09	IY 10	6.6		-28.9	-9.5				
	12		4.3		-23.6	23.3				
	15	IY 18'	7.9	ESE	-24.8	29.0	0	0 0 0	○	20.0
	18		12.9		-27.2	23.3				
	21	IY 28	13.0		-30.3	-8.1	0	0 0 0	⊣↓→	10.0
	24	IY 28	14.3		-32.3	-11.6				
28	09	IY 28	18.7		-28.2	-16.9				
	12	IY 28	14.3		-25.8	8.0				
	15	IY 30	10.4	E	-23.7	26.5	10	0 0 7	⊣↑→	2.0
	18		11.2		-24.6	22.8				
	21	IY 42	5.1		-27.5	26.6				
	24	IY 42	5.8		-30.2	-1.2				
29	03	IY 42	3.7		-31.2	-9.6				
	09	IY 42	5.8		-26.7	-7.2				
	12		7.2		-24.2	4.3				
	15	IY 52	5.2	E	-20.6	13.3	0+	0 0 2	○	20.0
	18		4.0		-22.6	27.9				
	21	IY 65	3.2		-24.5	32.1				
	24	IY 65	7.8		-30.4	0.7	0+	0 0 2	○	20.0
30	09	IY 65	13.3		-26.2	-4.3				
	12		10.7		-22.1	17.1				
	15	IY 75	9.1	E	-21.7	24.5	0+	0 0 2	○	20.0
	18		8.8		-20.8	9.9				
	21	IY 80	9.3		-22.5	15.9				
	24	IY 80	10.8		-25.6	-4.6				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Dec. 1	09	IY 80	9.8		-22.0	-0.8				
	12		11.7		-20.3	18.7				
	15		5.7	E	-17.0	26.7	0+	0 0 2	⊣↛	30.0
	18		7.5		-18.5	16.9				
	21	K 26'	11.7		-19.7	20.0				
	24	K 26'	11.3		-23.5	2.4				
2	09	K 26'	16.9		-22.1	-8.1				
	12		15.9		-20.1	17.5				
	15	IY 105'	16.5	E	-19.3	24.0	0+	0 0 2	⊣↛	3.0
	18		20.4		-17.9	29.4				
	21	Kurakake	12.2		-18.6	22.5				
	24	kurakake	14.7	E	-20.8	-1.5	0+	0 0 2	⊣↛	10.0
3	09	kurakake	12.6		-19.6	-9.0				
	12		22.8		-17.4	-0.9				
	15	icehill	14.3	E	-14.6	16.9	0	0 0 0	○	20.0
	18		9.3		-13.2	34.7				
	21		18.1		-14.5	33.2				
	24		7.2	E	-16.6	5.5	0+	0 0 2	⊣↛	20.0
4	15	Air port	11.4	E	-12.5		1	0 0 2	○	20.0
	18	Air port	9.3		-14.3	7.9				
	21	Air port	11.2		-16.1	13.5				
	24	Air port	11.7		-19.3	7.9				
5	03	Air port	10.2		-21.2	5.3				
	06	Air port	10.7		-16.2	-1.3				
	09	Air port	9.7		-16.5	-0.2				
	12	Air port	11.2		-15.9	5.0				
	15	Air port	11.0	E	-16.3		1	0 3 0	○	30.0
	24	Air port	6.2		-16.5	-8.1				
6	03	Air port	5.6		-15.7	-5.3				
	06	Air port	6.0		-16.0	-8.1				
	09	Air port	6.2		-16.9	-9.2				
	18	Air port	4.4	E	-17.0	-9.1	1	0 3 0	○	30.0
	21	Air port	5.3		-17.5	-9.9				
	24	Air port	9.7		-19.4	-13.4				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Dec. 7	03	Air port	11.6		-20.3	-16.2				
	06	Air port	13.4		-19.6	-16.2				
	09	Air port	16.5		-17.1	-15.2				
	12	Air port	14.5		-16.0	-5.5				
	15	Air port	25.7	E	-15.5	13.0	2	0 2 X		1.0
	18	Air port	24.0		-15.0	16.9				
	21	Air port	13.7		-15.8	3.2				
	24	Air port	16.7		-16.2	-5.7				
8	03	Air port	11.6		-15.8	-8.6				
	06	Air port	14.6		-15.7	-9.0				
	09	Air port	11.0		-15.0	-7.7				
	12	Air port	10.2		-13.9	-5.1				
	15	Air port	7.0	ENE	-12.5	-5.2	10	0 2 X		0.2
	18	Air port	10.8		-13.4	21.0				
	21	Air port	12.9		-15.0	25.3				
	24	Air port	16.2		-17.8	13.7				
9	03	Air port	15.8		-18.1	-1.7				
	06	Air port	15.3		-16.0	-4.5				
	09	Air port	23.2		-14.4	-4.0				
	12	Air port	17.4		-12.4	-4.5				
	15	Air port	14.9	E	-11.3	-3.7	2	0 3 1		1.0
	18	Air port	17.7		-12.2	-7.1				
	21	Air port	20.8			14.3				
	24	Air port	22.7			17.9				
10	03	Air port	20.7			-2.0				
	06	Air port	22.2			-8.0				
	09	Air port	21.9			-9.1				
	12	Air port	20.7		-13.0	-6.3				
	15	Air port	18.8	E	-11.7	-6.2	2	0 0 1		20.0
	18	Air port	17.3		-9.3	-7.5				
	21	Air port	19.0		-14.2	-8.3				
	24	Air port	22.9		-17.3	4.0				
11	03	Air port	17.5		-18.3	-6.4				
	06	Air port	20.1		-17.8	-8.8				
	09	Air port	20.4		-15.4	-7.0				
	12	Air port	21.0		-13.1	-7.0				
	15	Air port	19.3	E	-12.4	-7.2	8	0 0 1		20.0
	18	Air port	23.2		-12.7	-7.1				
	21	Air port	21.6		-14.6	-8.7				
	24	Air port	21.2		-17.4	14.7				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Dec. 12	03	Air port	22.4		-19.3	-4.6				
	06	Air port	19.0		-18.8	-8.9				
	09	Air port	22.7		-17.2	-8.5				
	12	Air port	23.2		-15.7	14.8				
	15	Air port	20.8	E	-12.7	14.0	6	0 0 1	⊕	20.0
	18	Air port								
	21	Air port	22.1		-13.8	0.8				
	24	Air port	22.8		-15.7	-0.5				
13	03	Air port	21.5		-16.5	-5.9				
	06	Air port	20.0		-15.9	-6.9				
	09	Air port	18.9		-12.7	-2.9				
	12	Air port	20.2		-11.0	6.9				
	15	Air port	20.4	E	-10.1	12.1	2	0 3 1	○	30.0
	18		20.1		-10.3	13.6				
	21	Mt. Nokogiri	21.4		-11.3	22.8				
	24		23.0		-13.4	10.1				
14	03		20.4		-13.6	-0.8				
	06		18.4		-14.1	-4.1				
	09		24.6		-12.9	-1.9				
	12		21.3		-11.6	15.7				
	15	JARE 4 Nunatak	18.8	E	-10.1	12.6	10	0 7 2	●	20.0
	18		20.0		-9.6	22.8				
	21		14.2		-10.3	21.4				
	24		11.3		-11.1	3.4				
15	03		10.0		-12.9	-0.8				
	06		16.0		-11.9	-0.9				
	09		15.2		-11.1	-0.5				
	12		22.6		-10.1	23.5				
	15	Sankaku-iwa	11.4	ENE	-7.9	19.8	8	0 0 2	⊕	30.0
	18		8.2		-8.9	14.1				
	20		9.5		-10.8	11.6				
	24		8.7		-12.5	0.9				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Dec. 16	03		11.7		-12.9	-2.3				
	06		15.9		-11.9	-1.7				
	09		13.2		-10.1	1.4				
	12		22.4		-9.8	29.3				
	15	YM 173'	14.9	ESE	-10.9	28.6	6	0 8 0	◐	30.0
	18		12.4		-12.6	31.3				
	21		7.5		-13.2	9.7				
	24		8.7		-14.5	-1.2				
17	03		11.7		-15.8	-6.7				
	06		13.1		-16.1	-4.9				
	09		10.9		-14.6	-2.0				
	12		15.5		-12.8	29.7				
	15	YM 147	12.8	ESE	-10.5	16.8	2	0 0 2	◐	30.0
	18		9.7		-10.2	17.3				
	21		7.6		-12.7	10.0				
	24		8.8		-15.2	-0.9				
18	03		9.3		-17.1	-7.6				
	06		12.1		-16.1	-9.7				
	09		14.3		-13.6	-7.9				
	12		10.6		-10.8	17.5				
	15	YM 119'	11.6	ESE	-9.9	33.1	0+	0 0 1	○	30.0
	18		13.4		-10.5	37.9				
	21		7.1		-13.3	13.8				
	24		6.4		-16.9	3.7				
19	03		9.6		-17.8	-0.6				
	06		8.3		-16.1	-2.1				
	09		7.4		-12.5	-0.6				
	12		9.4		-9.3	28.3				
	15	YM 88	8.8	ESE	-8.5	21.2	0	0 0 0	○	30.0
	18		8.6		-8.9	25.8				
	21		6.0		-12.1	14.0				
	24		6.0		-15.5	3.6				
20	03		6.0		-16.4	-1.5				
	06		6.1		-15.2	-1.9				
	09		6.1		-12.8	0.8				
	12		7.3		-10.6	33.9				
	15	YM 55	7.7	ENE	-10.9	22.4	2	0 0 2	◐	30.0
	18		6.0		-11.0	23.2				
	21		2.0		-15.0	9.0				
	24		1.9		-18.9	2.0				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1984										
Dec. 21	03		2.3		-17.0	-2.1				
	06		5.2		-16.4	-3.0				
	09		5.5		-14.8	3.8				
	12		11.3		-13.5	17.1				
	15	YM 20'	5.7	ENE	-11.9	17.3	6	0 0 2	⊖	30.0
	18		3.5		-13.0	19.6				
	21		3.6		-17.0	-8.3				
	24		6.8		-20.7	-6.0				
22	03		7.3		-21.9	-9.3				
	06		8.7		-20.4	-7.1				
	09		9.5		-17.5	-3.4				
	12		8.7		-15.2	9.7				
	15	Mizuho	7.6		-14.8	10.3				
	18		4.6		-14.7	6.6				
	21		3.5		-18.7	0.5				
	24		6.0		-22.3	-7.4				
25	09	Mizuho	14.6		-16.9	1.3				
	12		17.2		-16.6	28.4				
	15		15.0		-17.3	32.9	0+	0 0 2	○	20.0
	18		10.7		-18.3	39.2				
	21	G 15	4.0		-22.3	13.2				
	24	G 15	4.5		-26.1	5.4				
26	03	G 15	5.8		-26.5	-4.8				
	06	G 15	5.2		-24.4	-5.2				
	09	G 15	4.8		-21.0	-4.3				
	12	G 15	8.7		-18.7	4.3				
	15	G 15	4.9		-17.6	11.5	10	0 2 X	✳	2.0
	18	G 15	7.0		-18.0	8.0				
	21	G 15	6.9		-19.1	-1.3				
	24	G 15	7.0		-19.7	-5.0				
27	03	G 15	7.2		-20.0	-8.3				
	06	G 15	11.5		-19.4	-9.0				
	09	G 15	11.5		-18.1	-4.3				
	12	G 15	12.7		-16.2	8.4				
	15	G 15	11.3		-15.3	6.7				
	18		5.6		-15.8	34.5				
	21		3.5		-16.0	34.0				
	24	Mizuho	5.5		-18.7	20.1				

Date	L T	St. No.	V (m/s)	d	T (air) (℃)	T (in) (℃)	N	$C_L C_M C_H$	W	V (km)
1985										
Jan. 3	09	Mizuho	10.4		-18.4	-7.8				
	12		9.5		-16.2	27.7				
	15		8.6		-14.5	35.4			⊣↓	
	18		6.6		-16.0	40.4				
	21	H 260	3.1		-18.0	40.3				
	24		6.3		-20.5	7.9				
4	09	H 260	7.7		-16.0	0.8				
	12		7.5		-11.5	26.0				
	15		9.5		-9.8	32.9			●	
	18		7.3		-9.5	35.2				
	21	S 16	4.2		-7.4	41.1				
	24	S 16	7.6		-7.4	21.5				
5	09	S 16								
	12	S 16	6.5		-1.9	7.7				
	15	S 16	4.4		-2.4	15.4			○	
	18	S 16	3.5		-2.9	8.3				
	21	S 16	1.7		-5.2	8.6				
6	09	S 16	9.2		-3.7	8.3				
	12	S 16	2.1		0.0	17.5				
	15	S 16	0.7		1.5	20.6			○	

Table III-4. Surface meteorological data along Route between Mizuho St. - ⊿2 - ⊿4 - G7 - SS150 - Advance Camp during October - November 1984.

Date	LT	Station	T	v	d	V	N	W
Oct. 25	1530	IM 25	-37.0	11.5	ESE	0.1	0	
26	0900	G 1	-40.3	13.7	ESE	0.5	0	
27	1500	G 1	-38.7	7.8	ESE	1.0	0	
28	1530	G 1	-37.2	10.7	ESE	0.6	0	
29	1430	IM 44	-33.8	5.2	ESE	8.0	0	
30	1500	IM 73	-33.0	6.0	ESE	6.0	9	
31	1040	IM 100	-33.5	4.0	ESE	0.3	10	
1	1500	IM 111	-32.9	4.0	ESE			
2	1500	2	-30.6	12.0	ESE	0.2	10	
3	1500	2	-29.7	8.0	ESE	0.2	10	
4	1500	ES 12	-31.2	6.7	ESE	4.0	2	
5	1500	3	-28.7	9.8	ESE	0.8	10	
6	1500	3	-27.0	8.0	E	0.3	10	
7	1500	ES 37	-30.0	7.8	ESE	2.2	0	
8	1510	4	-33.2	6.0	SE	10.0	8	
9	1500	4	-32.3	7.7	SE	1.0	0	
10	1500	ES 67	-33.2	6.8	SE	20.0	0	
11	1500	G 7	-33.9	6.7	SE	3.0	0	
12	1500	G 7	-31.8	9.3	ESE	0.6	0	
13	1500	G 7	-32.4	6.7	SE	20.0	0	
14	1500	SS 140	-31.3	8.0	ESE	15.0	0	
15	1430	IM 210	-30.8	8.5	ESE	1.5	7	
16	1435	IM 234	-30.3	6.7	E	1.0	10	

IV. Net Accumulation of Snow along Traverse Routes in Mizuho Plateau

Observers : Yoshiyuki FUJII and Kunio KAWADA

Net accumulation of snow was measured by the stake method along several traverse routes of JARE-25 in 1983-1985 as listed in Table I-1, and shown in Fig. A attached to the end of this report.

Condition of snow surface around each stake was observed and classified as follows on the basis of the classification by Fujii (1979).

G : Glazed surface consisting of multilayered ice crust.
D : Depositional surface consisting of barchan or dune
E : Erosional surface consisting of sastrugi, erosional pit or smooth surface.
GR : Granular snow.
DH : Depth hoar appeared after disappearauce of ice crust of glazed surface.
I : Bare ice.

1. Route S-H-Z

The stake height of the route was measured in December 1983 and in January 1985 with a help of JARE-26. The height differences gave approximately the annual net accumulation along the route, and the results are tabulated in Table IV-1. The positions of the stations are given by Naruse and Yokoyama (1975).

2. Routes IM and SS

Route IM from Mizuho Station to G1 grid station and Route SS were established by JARE-23 in 1982, and used by JARE-25 again in 1984 for approaching 74°12'S and 34°59'E from Mizuho Station to establish Advance Camp. The Route IM was extended beyond G1 to 74°12'S and 34°59'E during the period from October to November 1984. Net accumulation along Routes IM and SS is shown in Tables IV-2 and IV-3 respectively. The positions and elevation of the stations are shown in Nishio et al. (1986).

3. Route YM

Route YM was established by JARE-23 in 1982, and used again by JARE-24 in 1983 and JARE-25 in 1984. Net accumulation during the period from October 1983 or January 1984 to December 1984 is shown in Table IV-4. The positions of the stations are given by Nishio et al. (1986).

4. Route NY

The latest traverse was carried out by JARE-24 in January 1984 befor a traverse by JARE-25 in December 1984. The net accumulation during the period was obtained and is given in Table IV-5. The positions of the stations are given by Nakawo et al. (1984).

5. 36 and 101-stake farms along Route S-H-Z

Observers : JARE-22 Kazuhide SATOW
JARE-25 Yoshiyuki FUJII, Kunio KAWADA and Minoru YOSHIDA
JARE-26 Yutaka AGETA, Koukichi KAMIYAMA

Five 36-stake farms (100 x 100 m in area) are used for the study on areal variation of snow accumulation along Route S-H-Z from S16 to Mizuho Station ; that is, at S16, H68, H180, S122 and Z40. The stakes of these farms are numbered as shown in Fig. 1. The latest measurements were carried out by JARE-22 in 1982 before the measurements by JARE-25 in December 1983 and January 1984. The measurements were done again in January 1985 with a help of JARE-26. The results are tabulated in Tables IV-6 for S16, H68, and H180, IV-7 for S122 and Z40.

The 100-stake farm at S122 was measured in January 1984 after six years' absence since January 1978. The stakes are arranged and numbered as shown in Fig. 2. The results are given in Table IV-8.

References

Fujii, Y. (1979) : Net accumulation of snow by stake method in 1977. JARE Data Rep., 48 (Glaciol. 6), 3-33.

Nakawo, M., Narita, H. and Isobe, T. (1984) : Position, elevation and ice thickness of stations. JARE Data Rep., 96 (Glaciol. 11), 4-38.

Naruse, R. and Yokoyama, K. (1975) : Position, elevation and ice thickness of stations. JARE Data Rep., 28 (Glaciol. 3), 7-47.

Nishio, F., Ohmae, H. and Ishikawa, M. (1986) : Position, elevation and ice thickness of stations. JARE Data Rep., 110 (Glaciol. 12), 5-37.

Table IV-1. Net accumulation along Route S-H-Z.

(cm in depth)

Station No.	Dec. 1983 -Jan. 1985 (382~384days)	Surface condition (Jan.1985)	Station No.	Dec. 1983 -Jan. 1985 (382~384days)	Surface condition (Jan.1985)
S 16	12.0	GR	H 96	39.0	E
17	25.5	GR	100	27.0	E
18	13.0	GR	104	34.0	E
19	----	GR	108	30.0	D E
20	93.0	GR	112	25.0	E
21	28.0	GR	116	30.0	E
22	----	D	120	36.0	E
23	55.0	D	124	16.5	E
24	59.0	D	128	35.5	E
25	30.5	D	132	20.5	E
26	52.5	E	136	23.0	E
27	59.0	E	140	24.5	E
28	44.0	E	144	30.0	E
29	69.0	E	148	33.5	E
30	58.0	E	152	40.0	E
H 3	69.0	E	156	9.0	E
9	64.0	E	160	26.0	D E
15	60.0	E	164	40.0	D E
21	33.0	E	168	39.0	D E
27	84.0	E	172	26.0	D E
35	69.0	D	176	----	D E
42	45.0	E	180	41.0	D E
48	40.0	E	184	32.0	D E
54	28.0	E	188	26.0	D E
60	32.0	E	192	58.0	D E
64	37.0	E	196	31.0	E
68	28.0	E	200	33.0	E
72	69.0	D E	204	37.0	E
76	23.5	D E	208	33.5	D E
80	22.0	D E	212	9.0	D E
84	20.0	D E	216	40.0	D E
88	23.0	E	220	13.0	D E
92	35.0	D E	224	37.5	D E

(cm in depth)

Station No.	Dec.'83/Jan.'84 -Jan. 1985 (382~384days)	Surface condition (Jan.1985)	Station No.	Jan. 1984 -Jan. 1985 (382~384days)	Surface condition (Jan.1985)
H 228	30.0	D E	Z 26	16.5	E
232	39.0	D E	28	-7.0	DH
236	28.0	D E	30	29.5	E
240	19.5	E	32	6.5	D
244	28.0	D E	34	-24.0	E
248	43.0	E	36	45.0	E
252	28.5	D E	38	6.0	E
256	35.0	D E	40	17.0	DH
260	12.0	E	42	20.0	E
264	32.0	E	46	7.0	DH
268	45.0	D E	50	-1.0	E
272	39.0	E	54	5.5	DH
276	19.0	D E	58	22.5	G
280	50.0	D E	62	12.0	DH
284	83.0	E	66	31.0	E
288	25.0	E	70	75.0	E
293	63.0	E	72	12.0	D
297	43.0	E	74	26.0	E
301	-10.0	E	76	37.0	E
S 122	-5.5	G	78	51.0	DH
Z 2	23.0	E	80	-5.5	DH
4	32.0	E	82	42.0	E
6	10.0	E	84	13.0	E
8	42.0	E	86	46.0	E
10	----	E	88	-13.0	E
12	32.0	E	90	17.0	E
14	48.0	E	92	-9.0	G
16	25.0	E	94	25.0	E
18	1.0	E	96	-2.5	G
20	12.0	E	98	8.0	D E
22	35.0	E	100	29.0	E
24	35.5	E	102	24.0	G

Table IV-2. Net accumulation along Route IM.

(cm in depth)

Station No.		Mar.1982 -Oct.1984 (947~950days)	Station No.	Mar.1982 -Oct.1984 (947~950days)
IM	1	41.0	34	40.0
	2	24.0	35	80.5
	3	16.0	36	-8.0
	4	41.5	37	1.5
	5	59.0	38	47.0
	6	23.0	39	77.5
	7	24.5	40	132.5
	8	73.5		
	9	32.0		
	10	18.0		
	11	37.0		
	12	73.5		
	13	74.5		
	14	78.0		
	15	23.0		
	16	-7.5		
	17	13.0		
	18	7.0		
	19	24.5		
	20	20.5		
	21	56.0		
	22	82.0		
	23	104.5		
	24	100.5		
	25	61.0		
	26	88.5		
	27	48.5		
	28	18.5		
	29	40.0		
	30	17.0		
	31	11.0		
	32	11.0		
	33	13.5		

Table IV-3. Net accumulation along Route SS.

(cm in depth)

Station No.	Dec.1982 -Nov.1984 (709~710days)	Surface condition (Nov.1984)
SS 125(G7)	27.0	E
126	-3.5	G
127	-10.5	G
128	0.5	G
129	4.0	G
130	21.0	E
131	-6.0	G
132	-5.0	G
133	-5.5	G
134	-8.0	G
135	3.5	G
136	-4.0	G
137	2.0	E
138	11.0	G
139	-3.0	G
140	1.0	G
141	31.5	E
142	11.0	E
143	17.5	E
144	5.0	E
145	-9.5	G
146	4.0	E
147	57.5	E
148	34.0	E
149	----	E
150(IM198)	7.5	G

Table IV-4. Net accumulation along Route YM from October 1983/ January 1984 to December 1984.

(cm in depth)

Station No.		Net acc.	Period (days)	Surface condition (Dec.1984)	Station No.	Net acc.	Period (days)	Surface condition (Dec.1984)
YM	1	1.0	443	E	34	6.0	441	E
	2	-8.0	443	E	35	28.0	441	D
	3	16.0	443	E	36	-3.0	441	E
	4	31.5	443	E	37	52.0	441	E
	5		348	E	38	69.0	441	E
	6		443	E	39	105.5	348	E
	7	-9.0	443	E	40	46.5	348	D
	8	13.0	443	E	41	37.5	440	D
	9	19.0	348	E	42	17.0	440	E
	10	4.5	442	E	43	29.0	440	E
	11	28.5	442	E	44	24.5	440	E
	12	26.5	442	E	45	-3.0	440	DH
	13	51.5	442	E	46	-6.0	440	DH
	14	44.5	347	E	47	-9.0	440	E
	15	9.5	442	E	48	-7.0	440	E
	16	-11.0	442	E	49	30.5	440	E
	17	-4.0	442	E	50	91.0	348	E
	18	127.0	442	E	51	66.0	440	E
	19	36.0	442	E	52	134.0	440	D
	20	13.0	442	E	53	55.0	440	E
	21	41.0	442	E	54	17.0	440	D
	22	55.0	441	E	55	121.0	440	E
	23	92.5	348	E	56	41.0	440	D
	24	-14.0	348	D	57	71.0	440	E
	25	77.5	441	E	58	13.0	440	D
	26	-58.5	348	D	59	28.0	440	E
	27	45.0	441	D	60	32.0	440	E
	28	-4.0	441	D	61	73.0	440	E
	29	-6.0	441	E	62	84.0	440	D
	30	123.5	441	E	63	50.0	440	E
	31	-5.5	441	E	64	41.0	440	E
	32	40.0	441	D	65	82.0	440	E
	33	0.0	441	E	66	54.5	439	D

(cm in depth)

Station No.	Net acc.	Period (days)	Surface condition (Dec.1984)	Station No.	Net acc.	Period (days)	Surface condition (Dec.1984)
YM 67	2.5	349	D	YM 100	51.0	436	D
68	92.0	439	E	101	31.5	436	E
69	143.0	349	E	102	4.0	436	E
70	87.5	439	E	103	-21.0	425	E
71	148.0	439	E	104	-7.0	425	E
72	70.5	439	E	105	59.0	424	E
73	102.0	438	E	106	87.0	424	E
74	113.5	438	E	107	-5.5	424	D
75	82.5	438	E	108	-4.0	424	D
76	92.5	438	E	109	-8.5	424	D
77		437	E	110	1.5	424	D
78	6.0	437		111	23.0	424	G
79	91.5	437	D	112	17.5	424	E
80	83.0	437	E	113	18.0	424	D
81	128.0	437	E	114	86.0	424	E
82	38.5	437	D	115	1.0	424	E
83	47.0		E	116	36.0	424	E
84		436		117	66.5	423	E
85	21.0	436	D	118	47.0	423	D
86	14.0	436	E	119	47.5	423	E
87	42.0	436	E	120	45.0	423	D
88	67.0	436	D	121	60.0	423	D
89	46.0	436	D	122	21.5	423	E
90	86.0	436	E	123	25.0	423	E
91	48.0	347	D	124	79.0	423	E
92	-27.0	436	E	125	63.5	423	D
93	104.0	436	E	126	54.5	423	E
94		436	D	127	65.5	423	E
95	15.5	436	D	128	101.0	423	E
96	79.0	436	D	129	12.0	423	E
97	93.0	436		130	23.0	423	E
98	44.0	436	D	131	37.0	423	D
99	166.0	436	E	132	134.0	423	D

(cm in depth)

Station No.	Net acc.	Period (days)	Surface condition (Dec.1984)	Station No.	Net acc.	Period (days)	Surface condition (Dec.1984)
YM 133	171.0	423	E	YM 166		416	
134	172.0	422	D	167	-1.5	416	E
135	110.0	422	E	168	-4.0	416	E
136	16.0	422	D	169	3.5	416	E
137	66.0	422	E	170	-15.0	416	I
138	15.0	422	E	171	-10.0	416	I
139	77.0	422	D	172	-11.0	416	I
140	8.5	422	E	173	4.5	416	I
141	31.0	422	E	174	-20.0	416	E
142	2.5	422	E	175	11.0	416	
143	68.0	422	E	176	3.0	416	D
144	120.0	421	D	177	-13.5	416	I
145	43.5	421	G	178	-14.0	416	I
146	29.0	421	E	179	-13.5	416	I
147	101.0	421	D				
148	59.0	421	E				
149	30.0	421	E				
150	25.5	421	E				
151	-6.0	421	E				
152	11.0	421	E				
153	22.0	421	D				
154	49.0	421	E				
155	59.0	421	E				
156	32.0	421	G				
157	14.0	421	E				
158	64.5	421	E				
159	-4.5	417	D				
160	-5.0	417	E				
161	-11.0	417	E				
162	24.0	417	D				
163	49.5	417	D				
164	14.5	417	E				
165		416					

Table IV-5. Net accumulation along Route NY.

(cm in depth)

Station No.	Jan. 1984 -Dec. 1984 (346~347days)	Surface condition (Dec.1984)	Station No.	Jan. 1984 -Dec. 1984 (346~347days)	Surface condition (Dec.1984)
NY 2	38.6	E	NY 68	24.9	E
4	32.4	E	70	4.8	E
6	21.2	E	72	12.0	E
8	25.5	E	74	49.6	E
10	62.7	E	76	27.0	D
12	65.2	D	78	29.0	D
14	11.1	D	80	48.5	E
16	-0.5	E	82	36.8	E
18	19.5	E	84	4.5	E
20	11.8	E	86	22.5	E
22	39.8	E	88	27.0	E
24	9.5	E	90	19.5	E
26	49.9	D	92	3.5	E
28	6.7	D	94	2.5	E
30	48.7	E	96	10.5	E
32	26.3	E	98	23.5	E
34	83.6	D	100	36.3	E
36	29.4	D			
38	41.3	E			
40	80.0	D			
42	82.6	D			
44	-6.8	D			
46	11.6	D			
48	13.6	E			
50	21.8	E			
52	-4.4	E			
54	-3.4	G			
56	35.3	D			
58	-4.1	E			
60	25.6	E			
62	13.6	D			
64	44.5	D			
66	24.2	D			

Table IV-6. Net accumulation with 36-stake farms at S16, H68 and H180 in 1982-1985.

(cm in depth)

	S 16		H 68			H180	
	'83,Dec.27 -'85,Jan.14		'82,Jan.16 -'83,Dec.29	'83,Dec.29 -'85,Jan.15		'83,Dec.30 -'85,Jan.15	
No.	(385days)		(712days)	(384days)		(383days)	
I-1	-6.0			16.0	E	44.0	E
2	2.0			12.5	E	36.5	E
3	-15.0		38.9	19.5	E	37.0	E
4	14.0	D	38.0	24.5	E	35.0	E
5	-5.5		40.5	29.0	E	32.0	E
6	-14.0		35.5	8.0	E	24.5	E
II-1	8.0	D	63.4	22.0	D	40.5	E
2	4.0		55.1	24.0	E	29.5	E
3	2.5		29.0	23.0	E	16.5	E
4	-7.0		30.2	18.0	E	37.5	E
5	7.0		33.0	16.0	E	40.0	E
6	-15.5		29.7	18.0	E	37.0	E
III-1	8.5			10.5	D	28.5	E
2	3.5		39.1	14.5	E	38.0	E
3	4.5		19.6	35.0	E	31.5	E
4	5.0		30.5	26.0	E	38.0	E
5	5.0		34.2	24.0	E	43.5	E
6	-5.5		32.8	25.5	E	34.5	E
IV-1	-6.0		42.2	22.5	E	39.0	E
2	1.0		37.1	21.0	D	42.5	E
3	8.5		36.3	16.5	E	43.5	E
4	-2.0		31.8	19.0	E	43.5	E
5	8.0			15.0	D	41.0	E
6	25.5		51.7	8.0	E	46.0	E
V-1	9.5			1.0	E	25.0	E
2	4.0		42.9	20.0	E	47.5	E
3	-6.0		40.3	18.5	E	32.5	E
4	11.0		53.6	7.0	E	33.5	E
5	8.5		51.9	13.0	D	37.5	E
6	16.5		62.6	5.0	E	36.5	E
VI-1	22.0			14.5	E	28.0	E
2	14.0		46.6	10.5	E	28.0	E
3	5.0		50.6	4.5	E	35.0	E
4	18.0		59.0	8.5	D	30.5	E
5	17.0		62.3	5.5	E	43.0	E
6	16.5		70.0	14.0	E	45.0	E
mean	4.62		42.94	16.38		36.15	

Table IV-7. Net accumulation with 36-stake farms at S122 and at Z40 in 1982-1985.

(cm in depth)

	S122			Z 40		
	'82,Jan.17 -'84,Jan. 1	'84,Jan. 1 -'85,Jan.16		'82,Jan.18 -'84,Jan. 2	'84,Jan. 2 -'85,Jan.17	
No.	(714days)	(382days)		(714days)	(382days)	
I-1	30.2	-5.0	E	11.3	-1.0	E
2	55.6	-3.5	E	10.1	15.0	E
3	53.1	-8.5	E	28.4	-1.0	DH
4	32.3	15.0	E	3.9	14.5	E
5	14.2	48.0	E	8.1	7.5	E
6	40.9	33.5	E	12.2	17.0	DH
II-1	13.5	19.5	E	11.5	22.0	E
2	6.7	-5.0	E	3.2	2.5	DH
3	38.6	10.0	E	-7.3	16.5	E
4	42.7	-4.0	E	-6.5	20.0	DH
5	70.7	-16.0	E	-9.6	44.0	E
6	49.9	-8.5	E	19.7	11.5	E
III-1	10.1	51.5	E	4.9	-1.5	G
2	20.8	19.0	E	4.6	4.0	DH
3	-6.8	19.0	E	9.1	17.5	DH
4	21.4	0.0	E	4.0	30.0	E
5	2.8	14.0	E	19.5	16.0	DH
6	12.9	11.0	E	11.6	25.0	E
IV-1	26.9	3.5	E	-8.2	-5.0	DH
2	12.5	12.5	E	-3.5	32.5	DH
3	5.5	28.5	E	12.6	16.5	E
4	-1.0	18.0	E	2.7	0.0	DH
5	7.4	44.0	E	-1.8	46.0	E
6	20.6	16.5	E	1.5	44.0	DH
V-1	31.9	26.0	E	13.9	-4.0	DH
2	23.1	12.0	E	17.7	-9.0	DH
3	21.5	13.0	E	5.0	24.0	E
4	26.8	17.5	E	-0.9	18.5	DH
5	40.9	29.0	E	-1.0	0.0	DH
6	39.6	23.0	E	-3.4	35.0	DH
VI-1	3.0	0.5	E	1.1	-9.0	DH
2	25.9	13.0	E	11.1	-5.0	DH
3	23.3	30.0	E	7.9	-10.0	DH
4	42.0	31.5	E	30.4	-5.0	G
5	58.4	18.0	E	15.8	-7.0	E
6	37.9	11.5	E	8.1	3.0	DH
mean	26.55	14.94		6.88	11.80	

Table IV-8. Net accumulation with a 100-stake farm at S122 in 1978-1984.

(cm in depth)

No.	'78,Feb.4 -'84,Jan.1 (2158days)		No.	'78,Feb.4 -'84,Jan.1 (2158days)	
101	77.6	D	126	34.8	D
102	73.0	D	127	37.0	D
103	79.2	G	128	33.5	D
104	77.0	D	129	38.0	G
105	77.8	D	130	37.9	G
106	73.9	D	131	47.0	G
107	73.1	D	132	50.3	G
108	70.6	D	133	45.0	G
109	70.0	D	134		
110	71.7	D	135	57.4	D
111	63.5	D	136	55.5	D
112	63.5	D	137	61.6	D
113	50.8	D	138		
114	58.4	G	139	67.5	G
115	59.0	D	140	70.0	G
116	50.5	D	141	72.7	D
117	51.5	D	142	79.0	G
118	39.6	D	143	75.9	D
119	42.3	D	144	78.0	D
120	49.5	D	145		D
121	46.0	G	146	74.7	G
122	44.4	D	147	73.9	G
123	35.0	D	148	73.5	D
124	26.5	D	149	75.5	D
125	27.0	D	150	73.2	D

(cm in depth)

No.	'78,Feb.4 -'84,Jan.1 (2158days)		No.	'78,Feb.4 -'84,Jan.1 (2158days)	
151	79.1	D	176	68.2	G
152		D	177		G
153	69.7	D	178	79.1	G
154		G	179	83.2	G
155	55.9	D	180	-9.4	G
156	70.3	D	181	-16.1	G
157	56.1	D	182	79.9	D
158		D	183	84.3	D
159		G	184	93.2	D
160	56.8	D	185		D
161	60.5	D	186	91.3	D
162	62.5	D	187	81.3	G
163	70.0	D	188	80.6	G
164		G	189	70.7	G
165	72.3	D	190	71.9	D
166	75.2	D	191	83.4	D
167	66.2	D	192	67.2	D
168	56.0	G	193	72.7	D
169	49.3	G	194	80.6	D
170	46.5	G	195	80.8	D
171		G	196	72.4	D
172		G	197	75.8	G
173	50.9	D	198	63.0	D
174	55.2	G	199	62.1	D
175		D	200	52.0	G
			mean	61.89	

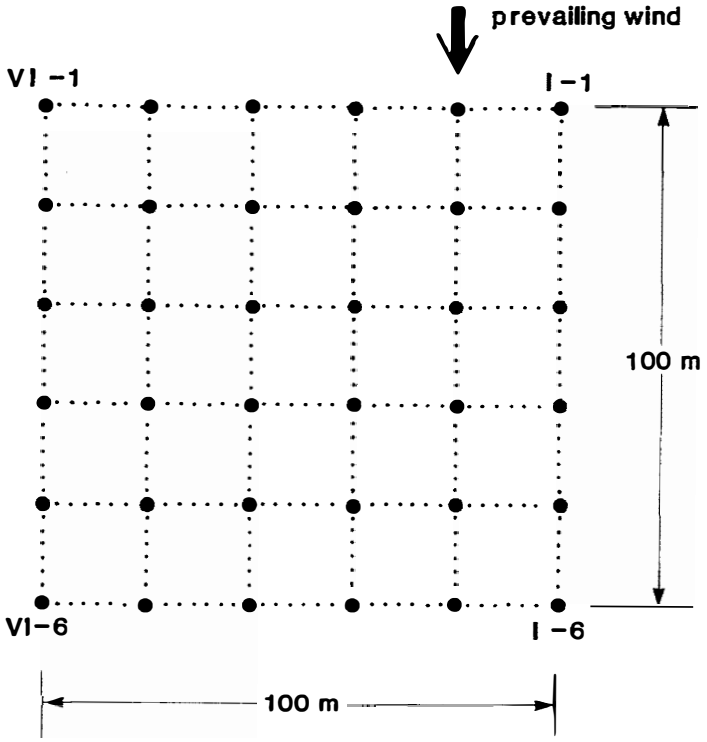

Fig. 1. 36-stake farm at S16, H68, H180, S122 and Z40.

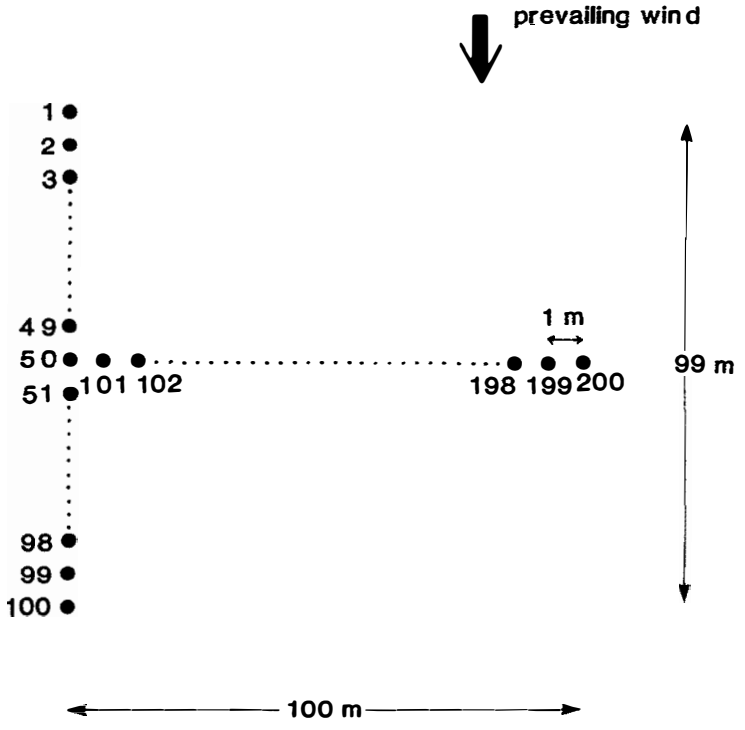

Fig. 2. 200-stake farm at S122.

V. Net Accumulation of snow at Mizuho Station

Observers : Yoshiyuki FUJII, Kunio KAWADA, Minoru YOSHIDA, Shin'ichi MATSUMOTO, Noriyuki SUZUKI, Tatsuo HARA, Yuzuru INAGAWA, Takashi NOMOTOBORI, Masayuki KOBAYASHI, Yasuhiro YAMAGAMI, Seiichi ASHIDA, Toshio TOBASHIRA and Masahiro KOHTAKA.

The measurements were made once a month using a 36-stake farm and a 101-stake row. The former was installed in 1972, in which 36 bamboo stakes in a square of 100 m sides were arranged in a rectangular lattice with spacings of 20 m. The farm was adopted for the accumulation measurements in 1984 as well. The results of the measurements are given in Table V-1, in which the stake number is the same as in the previous reports (Fig. 3; Yamada et al., 1975 ; Takahashi, 1984).

Another stake farm of 201 stakes with 1 m spacing was prepared in 1973, which basically consisted of two rows of stakes, one perpendicular and the other parallel to the direction of the prevailing wind. They crossed each other, forming an X shape. This stake farm also had been adopted for the accumulation measurements at Mizuho Station. It was brought to an attention, however, that the stakes aligned parallel to the wind direction could generate a vigorous turbulence, since the spacing of the stakes was as short as 1 m. Therefore, it was determined to discontinue the measurements on the stakes of the parallel row to the wind direction, and the row of 101 stakes, which was aligned perpendicular to the wind direction, was left for further measurements of snow accumulation. The results of the measurements are given in Table V-2, in which the stake number is the same as in the previous reports (Fig. 4; Takahashi, 1984 ; Nakawo et al., 1984).

References

Nakawo, M., Narita, H. and Isobe, T. (1984) : Net accumulation of snow at Mizuho Station. JARE Data Rep., 96 (Glaciol. 11), 66-78.

Takahashi, S. (1984) : Net accumulation of snow by stake method in 1982. JARE Data Rep., 94 (Glaciol. 10), 15-61.

Yamada, T., Narita, H., Okuhira, F., Fukutani, H., Fujisawa, I. and Shiratsuchi, T. (1975) : Net accumulation of snow by stake measurement in Sôya Coast-Mizuho Plateau in 1971-1973. JARE Data Rep., 27 (Glaciol. 2), 10-67.

Table V-1. Net accumulation with a 36-stake farm at Mizuho Station in 1984.

(cm in depth)

No.	Dec.30 (32days)		Jan.31 (29)		Feb.29 (31)		Mar.31 (30)		Apr.30 (31)		May 31 (30)		June30 (30)		July30 (32)		Aug.31 (30)		Sep.30 (31)		Oct.31 (30)		Nov.30 (31)		Dec.31	Total
I-1	-4.5	E	-1.5	E	0.1	E	0.4	G	0.2	E	-0.6	E	-0.2	G	0.4	G	-0.2	G	-0.1		-0.7	E	-2.2	G		-8.9
2	-1.9	E	-0.8	E	30.1	E	0.1	E	3.2	E	-2.6	G	-0.4	E	0.3	E	-0.2	E	-0.2		-0.3	E	-2.5	E		24.8
3	-2.1	E	0.0	D	24.8	D	-11.3	E	-0.1	E	-0.3	E	0.0	E	0.4	E	-0.3	E	-0.1		-1.0	E	-2.3	E		7.7
4	-1.5	E	-0.8	E	-0.1	E	0.0	E	-9.6	G	9.8	G	0.1	G	0.0	G	-0.2	G	-0.1		-0.6	E	-1.5	G		-4.5
5	-2.7	E	-1.4	E	-0.3	E	7.4	E	-3.8	D	-0.3	E	0.0	E	0.7	D	5.6	E	-0.1		-0.6	E	-1.4	E		3.1
6	-1.8	E	-2.1	E	0.1	E	20.8	E	-20.9	G	0.1	G	0.0	E	5.1	E	-4.8	G	-0.1		-0.5	E	-1.7	E		-5.8
II-1	2.8	E	-1.4	E	-0.4	E	0.6	E	-0.1	E	0.3	E	-0.2	G	0.1	E	-0.1	G	0.1		-0.7	E	-2.2	G		-1.2
2	-3.5	E	2.3	D	8.2	E	-4.5	E	-1.0	E	0.9	E	0.0	E	0.1	E	0.1	E	-0.1		-0.5	E	-6.5	E		-4.5
3	-1.7	E	-1.3	E	-0.7	E	0.0	G	0.1	E	0.9	G	-0.1	G	0.5	G	-0.1	G	0.0		-0.3	E	-2.6	G		-5.3
4	-1.5	E	-0.8	E	5.0	E	-5.2	G	0.7	E	-0.4	G	-0.6	G	5.7	G	0.2	G	-0.1		-0.5	E	-1.9	E		0.6
5	-5.2	E	3.7	D	1.9	D	-0.5	E	0.5	E	0.0	G	0.1	E	0.1	E	0.2	E	-0.2		-0.6	E	-2.7	E		-2.7
6	-1.4	E	-0.8	E	38.6	D	-28.9	E	-0.1	E	-0.8	G	0.0	E	1.2	E	-0.9	E	0.0		-0.6	E	-2.3	E		4.0
III-1	-2.7	E	-1.8	E	13.4	D	-4.6	E	0.1	E	0.2	E	0.2	E	0.0	E	0.4	E	-0.1		-0.8	E	-3.0	E		1.3
2	2.5	E	-1.4	E	8.7	E	-0.8	E	0.9	E	-0.9	E	-0.1	E	0.4	E	-0.2	E	0.0		-0.8	E	-6.2	E		2.1
3	-1.7	E	-0.9	E	-0.5	E	0.7	E	0.0	E	0.4	E	0.3	E	0.8	D	-0.8	E	0.1		-0.8	D	-2.2	E		-4.6
4	-1.7	E	-0.6	D	0.8	E	-1.6	G	0.3	G	0.4	G	-0.2	G	0.6	G	0.1	G	0.1		-0.8	E	-2.2	G		-4.8
5	-1.0	E	-1.1	E	0.1	E	0.3	E	-0.3	E	0.3	G	-0.1	E	0.6	E	-0.4	E	0.1		-0.6	E	-1.6	E		-3.7
6	-0.7	E	-1.2	E	-0.6	E	0.0	G	-0.2	G	0.6	G	0.0	G	0.3	E	0.1	G	0.2		-0.9	E	-0.6	E		-3.0
IV-1	-1.2	E	-1.5	E	-0.1	E	0.4	E	0.0	E	1.0	G	-0.2	G	-0.6	G	0.9	E	-0.1		-0.4	E	-3.6	G		-5.4
2	-1.7	E	-1.3	E	-0.5	G	0.7	E	9.9	G	-9.8	G	0.3	G	0.0	G	0.2	G	0.0		-0.3	E	-1.6	E		-4.1
3	-2.3	E	-0.2	E	-1.6	E	0.7	G	0.2	E	-0.5	G	0.0	G	0.8	E	-0.5	G	0.0		-1.0	E	-3.3	E		-7.7
4	-2.0	E	-0.8	E	0.8	E	-1.3	G	0.5	G	0.1	G	-0.1	G	0.1	E	0.1	G	0.2		-0.4	E	-1.9	E		-4.7
5	-3.0	E	-7.7	E	5.4	E	0.1	E	0.8	E	-0.1	G	-0.4	G	-0.1	E	0.2	G	0.2		-0.9	E	-2.1	E		-7.6
6	-1.5	E	-0.7	E	4.1	E	0.0	E	-0.7	E	1.1	E	-0.4	E	2.3	D	-2.0	E	2.2		-2.6	E	-5.8	E		-4.0
V-1	-1.2	E	-1.3	E	-0.8	E	0.2	E	0.2	E	1.0	G	-0.7	E	0.5	G	-0.2	G	-0.2		0.0	E	-2.0	E		-4.5
2	-1.6	E	6.3	D	20.6	D	-27.6	E	1.2	G	-1.3	G	0.0	G	0.0	G	0.2	G	0.2		-0.5	E	-1.6	G		-4.1
3	6.0	E	0.2	D	-1.8	E	-0.1	G	0.6	E	-0.3	E	-0.1	E	0.3	E	0.2	E	-0.2		-0.8	E	-6.6	E		-2.6
4	-2.8	E	-1.3	E	0.3	E	0.1	G	1.2	G	-0.6	G	-0.2	G	0.0	E	0.3	G	-0.1		-0.7	E	-2.5	E		-6.3
5	-1.4	E	-0.8	E	30.2	D	-30.8	G	0.1	E	1.3	G	0.2	E	0.2	E	0.1	E	-0.1		-0.8	E	-2.2	E		-4.0
6	-2.1	E	-0.4	E	20.3	E	-13.2	E	-0.5	D	0.7	E	2.2	D	-0.8	D	-1.0	E	0.1		-0.2	E	-2.0	E		3.1
VI-1	-4.4	E	0.2	D	1.7	E	0.5	E	0.0	E	0.0	E	-0.2	E	0.6	E	-0.2	E	-0.1		35.0	D	-16.4	D		16.7
2	-3.1	E	-0.2	E	-0.5	G	0.2	E	0.3	G	-0.4	G	-0.1	G	0.2	G	0.5	G	-0.2		-0.3	E	-1.8	G		-5.4
3	-1.6	E	-1.2	E	8.5	E	-5.4	E	0.2	D	-0.3	E	0.1	E	0.0	E	0.1	E	-0.1		-1.2	E	-4.0	E		-4.9
4	-2.0	E	-3.2	E	27.2	D	-9.9	E	-0.1	G	1.1	G	-0.5	E	0.4	E	0.2	E	-0.2		10.8	E	-7.1	E		16.7
5	-1.4	E	-0.3	D	13.7	E	18.5	E	-4.4	D	1.5	E	0.0	E	-1.1	E	1.5	E	-0.2		-1.4	E	-2.4	E		24.0
6	-1.8	E	-1.8	E	16.1	E	0.0	E	0.4	D	0.1	G	0.2	E	7.7	D	-7.7	E	0.0		12.2	D	-5.2	E		20.2
mean	-1.68		-0.78		7.6		-2.6		-0.6		0.07		0.0		0.8		-0.2		0.0		1.0		-3.3			

Table V-2. Net accumulation with a 101-stake farm at Mizuho Station in 1983-1984.

(cm in depth)

	Dec.30		Jan.31		Feb.29		Mar.31		Apr.30		May 31		July2		July31		Aug.31		Sep.30		Oct.31		Nov.30		Dec.31		
No.	(32)		(29)		(31)		(30)		(31)		(32)		(29)		(32)		(29)		(31)		(30)		(31)		Total
102	-0.2	E	-0.8	E	33.6	D	-4.8	E	-1.7	E	1.3	E	0.0	E	0.0	E	0.2	E	-0.2	E	-0.7	E	-2.3	E	24.4
103	-2.6	E	7.0	D	23.9	D	-2.4	E	0.0	E	-0.4	E	0.0	E	0.2	E	0.2	E	-0.2	E	-0.2	E	-2.6	E	22.9
104	-2.2	E	-1.3	E	30.2	E	-3.4	E	0.0	E	-0.5	E	0.0	E	1.4	E	-1.4	E	-0.1	E	-0.3	E	-4.7	E	17.7
105	-1.7	E	-1.0	E	24.6	E	-5.4	E	0.0	E	0.0	E	0.8	E	2.7	D	-2.6	E	0.0	E	-0.6	E	-2.9	E	13.9
106	-2.7	E	-1.0	E	21.6	E	-5.4	E	0.6	E	2.2	E	-2.4	E	0.3	E	-0.2	E	0.0	E	-0.8	E	-2.8	E	9.4
107	-2.2	D	0.5	E	22.3	D	-9.8	E	0.3	E	-0.1	E	0.2	E	0.6	E	-0.5	E	-0.1	E	-1.4	E	-6.3	E	3.5
108	-2.3	E	-0.1	E	29.7	E	-13.5	E	-0.1	E	0.5	E	0.9	E	0.2	E	-1.2	E	0.0	E	-0.7	E	-3.0	E	10.4
109	-2.8	E	1.0	E	15.6	E	-6.6	E	3.2	E	0.1	E	-3.1	E	0.2	E	0.0	E	-0.6	E	1.2	E	-4.1	E	4.1
110	-7.7	E	5.8	D	25.7	E	7.0	D	-16.7	E	5.1	E	1.3	E	0.0	E	-0.1	E	0.0	E	-1.7	E	-4.5	E	14.2
111	-3.1	E	-1.2	E	28.4	E	0.6	D	-7.2	E	-0.3	E	1.0	E	0.0	E	0.0	E	-0.1	E	-0.5	E	-3.5	E	14.1
112	-3.6	E	0.1	E	28.1	D	-3.5	D	-1.3	E	0.5	E	1.8	E	-0.1	E	-0.5	E	0.6	E	-1.2	E	-2.4	D	18.5
113	-2.2	E	1.0	E	38.0	E	-6.5	E	-0.3	E	0.3	E	0.2	E	0.2	E	0.0	E	-0.2	E	-3.1	E	-3.1	E	24.3
114	-3.0	E	-2.1	E	37.8	E	-8.4	E	-0.3	E	-0.4	E	1.8	E	-0.2	E	-0.2	E	-0.1	E	-0.8	E	-3.7	E	20.4
115	-4.9	E	-0.4	E	32.3	E	-5.3	E	0.0	E	0.1	E	-0.9	E	0.4	E	-0.1	E	-0.2	E	-0.9	E	-2.5	D	17.6
116	-4.9	E	-1.9	E	31.7	E	6.6	E	0.0	E	0.0	E	-0.5	E	0.0	D	0.4	E	1.8	E	-2.4	E	-2.1	E	28.7
117	-3.1	E	0.3	E	46.0	E	-23.9	E	15.1	E	-0.1	E	-0.5	E	1.5	D	-1.3	E	-0.3	E	-0.9	E	-4.0	E	28.8
118	-2.8	E	-0.3	E	34.3	E	-7.1	E	0.2	E	-0.2	E	0.5	E	0.0	D	-0.3	E	-0.1	E	6.5	E	-3.1	E	27.6
119	-4.7	E	0.0	D	36.5	E	3.0	E	-11.0	E	0.2	E	0.8	E	0.0	D	0.0	E	-0.6	E	0.9	E	-3.8	D	21.3
120	-2.7	E	0.4	E	24.6	E	20.2	E	-12.0	E	-0.5	E	0.6	E	1.7	E	-0.6	E	0.7	E	-1.5	E	-2.4	E	28.5
121	-3.3	E	-0.6	E	20.6	E	27.5	E	-0.6	E	0.6	E	0.1	E	0.2	E	-0.1	E	-0.3	E	-0.3	E	-7.9	E	35.9
122	-3.6	E	-0.5	E	20.6	E	20.7	D	-1.0	E	0.0	E	0.5	E	-0.1	E	0.1	E	0.9	E	-1.4	E	-1.5	E	34.7
123	-1.6	E	-1.6	E	27.8	D	18.8	D	-10.6	E	-0.2	E	1.8	E	0.2	E	1.6	E	-1.8	E	2.5	E	-3.7	E	33.2
124	-3.2	E	0.2	E	17.4	D	33.1	D	-15.3	E	1.5	E	-0.2	E	0.0	E	0.0	E	0.0	E	1.5	E	-2.7	E	32.3
125	-3.2	E	2.4	D	14.8	E	36.0	D	0.0	E	1.6	E	-0.4	E	0.3	E	-0.2	E	-0.1	E	-1.2	E	-3.1	E	46.9
126	-2.3	E	2.9	D	25.0	E	23.5	E	0.0	E	-0.5	E	-0.2	E	2.0	E	-0.3	E	0.1	D	-1.5	E	-0.2	D	48.5
127	-1.9	E	6.9	D	25.2	E	1.0	D	11.3	E	-1.3	E	0.1	E	0.3	E	-0.1	E	-0.2	E	1.2	E	-4.8	D	37.7
128	-2.2	E	3.3	D	30.4	E	10.1	E	-0.3	E	-0.2	E	-0.1	E	0.1	E	-0.3	E	-0.1	E	-1.7	E	-3.9	D	35.1
129	-2.4	D	7.5	D	26.2	E	-6.5	E	7.6	E	0.7	E	0.2	E	0.5	D	0.3	E	-0.2	E	-0.6	E	-3.7	E	29.6
130	-2.1	E	0.0	D	32.3	E	-1.5	E	2.5	E	-0.1	E	-0.3	E	6.6	D	-6.2	E	-0.1	E	-1.0	E	-2.4	D	27.7
131	-2.2	E	-1.0	E	33.2	E	-8.0	E	-0.7	E	9.5	E	0.0	D	8.5	D	-8.3	E	-0.2	E	-0.8	E	-4.6	D	25.4
132	-4.2	E	0.1	E	38.6	E	-2.9	E	1.7	E	-1.6	E	2.9	D	1.3	D	-3.7	E	-0.1	E	3.9	E	-8.8	D	27.2
133	-4.9	E	0.6	E	40.9	E	-12.4	E	5.2	E	-0.8	E	0.3	E	0.0	E	0.1	E	-0.3	E	-0.6	E	-2.8	E	25.3
134	-2.2	E	1.0	D	43.8	D	-15.5	E	-0.4	E	2.3	E	-0.5	E	0.3	E	-0.2	E	0.0	E	-1.4	E	-5.6	D	21.6
135	-4.2	E	0.3	E	30.8	E	-6.6	E	0.5	E	-0.4	E	0.1	E	0.1	E	0.0	E	-0.2	E	-1.4	E	-5.8	D	13.2

(cm in depth)

Dec.30	Jan.31	Feb. 29	Mar.31	Apr.30	May 31	Jul.2	Jul.31	Aug.31	Sep.30	Oct.31	Nov.30	Dec.31	
No.	(32)	(29)	(31)	(30)	(31)	(32)	(29)	(32)	(29)	(31)	(30)	(31)	Total
136	-1.7 E	0.3 E	18.6 E	-3.4 E	3.0 E	-1.5 E	0.2 E	0.2 E	0.3 E	-1.1 E	-1.3 E	-2.5 D	11.1
137	1.5 D	0.0 E	19.7 E	1.0 E	-1.0 E	1.0 E	0.0 E	0.0 E	0.2 E	0.1 E	-0.7 E	-5.2 D	16.6
138	-5.7 E	5.0 E	19.2 E	9.3 D	-16.2 E	-0.1 E	0.1 E	2.7 D	-2.6 E	-0.2 E	-0.9 E	-7.7 E	2.9
139	-1.5 E	0.1 E	11.6 D	11.1 D	-16.0 E	0.3 E	-1.5 E	3.5 D	-3.3 E	-0.5 E	-0.6 E	-4.6 E	-1.4
140	-2.6 E	-1.2 E	18.4 D	-1.2 D	-17.8 G	0.4 E	0.3 G	5.1 D	-5.1 G	1.7 E	1.6 E	-4.9 E	-5.3
141	-2.0 D	-1.1 E	2.7 D	-23.3 D	21.4 E	-1.1 E	0.0 E	2.5 D	-2.3 E	-0.1 E	-0.5 E	-3.6 E	-7.4
142	-1.9 E	-1.0 E	0.4 E	-0.6 G	0.1 G	0.7 E	-0.3 G	0.3 G	0.1 G	-0.1 E	-0.5 E	-1.7 E	-4.5
143	4.6 D	-2.8 E	1.7 D	-1.7 G	1.8 E	-1.4 E	-1.3 G	1.2 E	0.1 E	-0.1 E	-1.1 E	2.7 E	3.7
144	-3.1 E	-2.9 E	0.5 E	-0.3 G	0.0 G	0.0 E	0.0 G	0.3 E	0.0 E	-0.1 E	-0.7 E	-1.9 E	-8.2
145	-3.5 E	0.1 E	-0.7 G	0.0 G	0.0 G	0.0 G	0.2 G	0.3 G	0.0 G	-0.1 E	-0.2 E	-1.4 E	-5.3
146	-2.6 E	0.2 E	2.0 E	-2.1 G	0.9 E	0.5 E	-1.2 E	0.1 G	0.2 E	-0.3 E	0.1 E	-2.7 E	-4.9
147	-3.4 E	-0.9 E	2.8 E	0.1 E	-0.3 E	1.5 E	0.8 E	0.1 E	0.0 E	0.0 E	-0.2 E	-1.8 E	-1.3
148	-3.0 D	-0.3 E	0.1 E	0.5 E	-0.2 E	-0.2 E	0.2 E	1.9 E	0.2 E	-0.2 E	-0.2 E	-2.5 E	-3.7
149	-0.1 E	-4.0 E	12.9 E	-6.3 E	0.1 E	-0.1 E	0.0 E	1.9 D	-1.9 E	-0.1 E	-0.6 E	-1.6 E	0.2
150	-4.3 E	-2.3 E	23.5 E	-6.2 E	2.6 E	0.6 E	-2.5 E	0.6 E	-0.2 E	0.4 D	-0.3 E	-2.6 E	9.3
151	-2.9 E	11.5 D	-3.7 E	0.0 E	-0.3 E	4.6 E	0.2 E	-0.1 E	-0.2 E	-0.2 E	0.1 E	-4.6 E	4.4
51	-2.2 D	3.0 D	2.0 E	-0.5 E	0.1 E	-0.2 E	0.0 E	-0.1 E	0.2 E	-0.1 E	-0.2 E	-3.5 E	-1.5
152	-2.9 E	-1.0 E	0.2 E	-0.2 G	4.0 E	-4.2 G	0.1 G	0.0 G	0.2 G	-0.2 G	-0.6	-1.8 E	-6.4
153	-2.3 E	0.3 E	0.1 E	-0.4 G	0.4 G	0.0 G	-0.3 G	0.1 G	-0.2 G	0.1 G	-0.3	-2.0 E	-4.5
154	-2.8 E	-0.6 E	0.3 E	-0.5 G	0.4 G	-0.4 G	-5.0 G	4.9 G	0.3 G	-0.1 G	-0.4	-2.1 E	-6.0
155	-3.0 E	-0.1 E	-0.3 E	-0.3 G	0.0 G	-0.7 G	0.8 G	0.6 G	-0.3 G	-0.1 G	-0.1	-2.9 E	-6.4
156	-3.3 E	-1.4 E	0.1 E	0.1 G	-0.1 G	-0.1 G	0.7 G	-0.1 G	0.1 G	0.0 G	-0.3	-1.9 E	-6.2
157	-2.6 E	-0.2 E	-0.4 E	-0.2 G	0.2 G	0.0 G	0.5 G	-0.3 G	0.6 G	-0.2 G	-0.7	-2.2 E	-5.5
158	-2.9 E	-0.1 E	-0.3 G	-0.3 G	0.6 G	-0.1 G	-0.1 G	-0.2 G	0.3 G	-0.2 G	-0.6	-1.6 E	-5.5
159	-3.3 E	-0.3 E	-0.3 G	0.1 G	0.4 G	-0.6 G	0.7 G	-0.1 G	0.1 G	-0.1 G	0.0	-1.6 E	-5.0
160	-2.8 E	-0.2 E	-0.2 G	0.0 G	0.3 G	0.1 G	-0.3 G	0.0 G	0.2 G	0.0 G	-0.4	-1.3 E	-4.6
161	-2.9 D	-0.5 E	-0.1 E	-0.7 G	1.1 G	0.4 G	-1.0 E	0.0 G	0.0 E	-0.1 E	-1.0 E	-2.3 E	-7.1
162	6.0 E	-0.5 E	1.2 E	-0.7 G	0.6 G	-0.1 G	0.5 E	0.0 E	0.1 E	-0.2 E	-0.3 E	-1.9 E	4.7
163	-3.6 E	-0.6 E	0.1 E	-0.6 G	0.8 E	-0.3 G	0.0 G	0.1 E	-0.1 E	-0.2 E	-0.2 E	-2.1 E	-6.7
164	-3.6 E	-0.5 E	0.7 G	8.5 E	0.0 E	0.3 E	0.1 E	0.2 E	-0.2 E	-0.3 E	-4.8 E	-6.0 E	-5.6
165	-4.9 E	-0.1 E	-1.0 G	0.7 G	-1.3 G	1.0 E	0.8 E	-0.2 G	0.2 E	-0.1 E	-0.4 E	-1.4 E	-6.7
166	-2.6 E	0.5 E	-0.1 G	6.8 E	-1.0 E	0.0 E	1.2 E	0.0 E	-2.6 E	-0.9 E	-2.0 E	-3.1 E	-3.8
167	-4.2 E	-0.3 E	-0.5 G	0.3 E	-0.2 E	0.2 E	-0.1 G	0.1 E	0.1 E	0.3 E	-1.4 E	-3.4 E	-9.1
168	-7.8 E	-2.4 E	0.8 G	-0.7 G	0.5 E	0.2 E	-0.9 G	0.2 E	0.1 E	-0.1 E	-0.8	-2.2 E	-13.1

(cm in depth)

Dec.30	Jan.31	Feb.29	Mar.31	Apr.30	May 31	Jul.2	Jul.31	Aug.31	Sep.30	Oct.31	Nov.30	Dec.31	
No.	(32)	(29)	(31)	(30)	(31)	(32)	(29)	(32)	(29)	(31)	(30)	(31)	Total
169	-3.1 E	-0.8 E	4.3 E	1.2 D	-5.1 E	0.1 E	-0.1 G	0.2 E	0.0 G	-0.1	-0.2	-2.1 E	-5.7
170	-4.4 E	-1.3 E	6.9 E	21.2 D	-25.7 E	0.0 E	-0.7 E	0.1 E	0.0 E	0.0 E	-0.9	-3.0 E	-7.8
171	-2.6 E	-0.7 E	4.5 E	28.8 D	-33.9 E	1.1 G	-0.4 E	0.4 E	-0.2 E	-0.1 E	-0.2	-1.9 E	-5.2
172	-1.6 E	0.8 E	2.1 E	20.2 D	-21.8 E	-0.1 E	-0.3 E	-0.6 E	0.9 E	-0.2 E	-1.0	-4.5 E	-6.1
173	-2.5 E	-0.2 E	5.4 E	9.3 D	-15.0 G	0.2 G	0.0 G	0.0 G	0.3 G	-0.1 E	-0.3	-1.6 E	-4.5
174	-2.8 E	0.0 E	4.6 G	-5.1 G	0.1 G	0.1 G	0.2 G	-0.1 G	0.3 G	-0.1 G	0.0 G	-2.0 E	-4.8
175	-2.6 E	0.3 E	-0.4 G	3.1 E	-2.8 G	-0.4 G	0.0 G	0.0 G	0.2 G	0.0 G	-0.2 G	-1.8 E	-4.6
176	-1.1 E	0.0 E	0.8 E	0.3 E	-0.1 E	0.0 G	0.3 E	-0.1 E	0.2 E	-0.1 E	-1.0	-0.9 E	-1.7
177	-8.1 E	-1.1 E	-0.2 E	3.8 E	-4.6 E	0.1 E	0.0 E	-0.1 E	-0.3 E	-0.1 E	-1.0	-2.7 E	-14.3
178	-1.9 E	-0.2 E	13.3 D	-12.6 G	0.3 G	-0.4 G	0.2 G	0.5 G	-0.3 G	0.2 G	-0.9	-1.2 E	-3.0
179	-2.6 E	0.1 E	17.8 D	-12.5 E	2.4 D	-2.7 E	0.4 E	0.3 E	0.0 E	0.0 E	-0.6 E	-2.2 E	0.4
180	-4.4 E	-0.7 D	23.7 D	-8.5 E	6.8 E	-0.3 E	0.1 E	0.0 E	0.1 E	-0.2 E	-0.8	-2.8 E	13.0
181	-2.6 D	0.0 E	27.9 E	-18.8 E	0.4 E	-0.3 E	-0.1 E	0.0 E	0.1 E	0.1 E	-0.5 E	-3.1 D	3.1
182	-1.8 E	0.3 E	41.9 E	-16.7 E	1.2 E	-1.0 E	0.2 E	0.3 E	-0.3 E	0.0 E	-0.6 E	-2.9 E	20.6
183	-2.5 E	1.3 E	46.3 D	-29.8 E	0.3 E	3.0 E	0.0 E	4.4 D	-4.1 E	-0.2 E	-0.7 E	-2.7 E	15.3
184	-2.0 E	-0.6 E	43.4 D	-12.5 E	-0.4 E	0.4 E	0.2 E	-0.2 D	0.4 E	-0.1 E	-2.7 E	-7.7 D	18.2
185	-2.3 D	0.3 E	47.8 D	-24.1 E	1.1 E	-0.8 E	0.1 E	-0.2 E	0.4 E	-0.1 E	-1.1 E	-1.5 D	19.6
186	-2.9 E	2.0 D	19.4 E	2.7 E	-2.8 E	-0.2 E	0.2 E	0.3 E	0.2 E	0.3 D	-1.1	-1.6 E	16.5
187	-2.8 E	-0.1 E	31.2 E	9.6 E	-9.7 E	0.6 E	-0.1 E	-0.2 E	0.5 E	-0.1 E	-1.0	-2.5 E	25.4
188	-2.4 E	-0.7 E	29.2 E	4.3 E	-4.2 E	-2.2 E	0.6 E	-0.2 E	0.3 E	-0.5 E	-0.2	-3.1 E	20.9
189	-2.7 E	-0.3 D	11.5 E	20.7 E	-19.6 E	-0.1 E	0.1 E	0.4 D	-0.1 E	0.1 E	-0.6	-3.1 E	6.3
190	-4.3 E	-1.0 E	17.6 E	8.6 E	-8.7 E	-0.5 E	0.2 E	-2.2 E	1.7 E	-0.4 E	2.9	-3.5 E	10.4
191	-2.7 E	0.2 E	10.1 E	43.7 D	-44.4 E	0.1 E	0.3 E	0.0 E	0.1 E	-0.2 E	-0.6	-1.6 E	5.0
192	-2.9 D	-0.7 E	0.3 E	32.4 D	-32.2 G	-0.6 E	0.4 E	0.1 E	0.2 E	0.0 E	-0.7	-1.8 D	-5.5
193	-3.5 E	-1.6 E	5.8 E	31.0 D	-31.8 E	-1.7 E	0.3 E	-0.1 E	0.3 E	-0.4 E	-0.7	-1.0 E	-3.4
194	-4.8 E	-1.8 E	12.4 E	-6.4 E	-0.2 E	0.8 E	0.1 E	0.4 E	-0.2 E	0.1 E	-0.7	-1.8 E	-2.1
195	-4.6 E	0.3 D	6.6 E	-1.1 E	1.0 E	-1.0 E	0.4 E	-0.3 E	0.2 E	-0.1 E	-0.4	-1.8 E	-0.8
196	-3.1 E	-1.3 E	13.1 E	2.9 E	-10.0 E	0.1 E	0.1 E	0.3 E	0.1 E	-0.2 E	-0.4	-3.2 D	-1.6
197	-2.8 E	-1.4 E	14.1 E	-3.5 E	-0.2 E	0.2 E	0.0 E	0.1 E	0.1 E	-0.1 E	-1.1	-3.8 E	1.6
198	-2.4 E	4.4 E	-0.5 E	-4.7 E	0.2 G	-0.5 E	0.4 E	-0.1 E	0.3 E	0.0 E	-0.6	-2.0 E	-5.5
199	-3.4 E	1.8 D	7.7 E	-6.9 E	1.9 E	-1.9 E	0.1 E	0.2 E	0.3 E	0.1 E	-1.7	-2.5 E	-4.3
200	-2.5 E	-0.7 E	5.7 E	-2.6 E	0.1 E	1.6 E	-0.2 E	0.0 E	0.0 E	0.0 E	-0.3	-5.9 E	-4.8
201	-2.5 E	0.2 E	0.0 E	5.0 E	-4.9 E	-0.1 E	0.1 E	-0.1 E	0.2 E	0.0 E	-0.7	-2.4 E	-5.2
mean	-2.8	0.2	15.8	1.2	-3.1	0.1	0.0	0.6	-0.4	-0.1	-0.5	-3.0	8.1

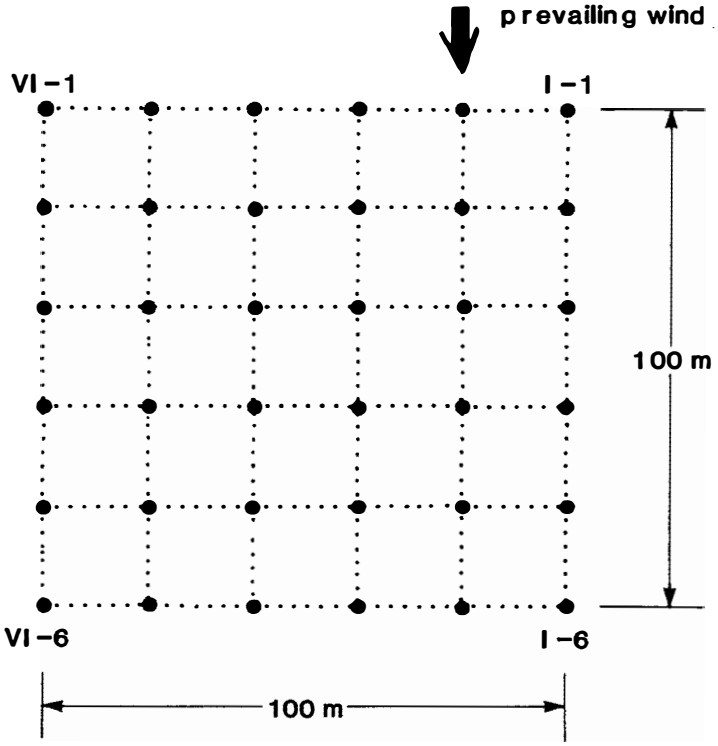

Fig. 3. 36-stake farm at Mizuho Station.

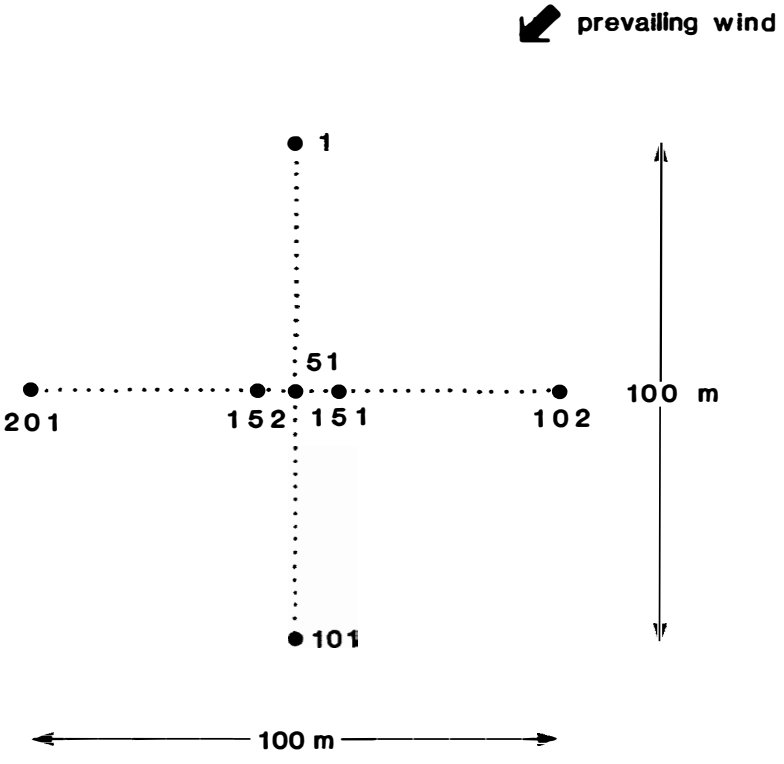

Fig. 4. 201-stake farm at Mizuho Station.

VI. Temperature Profiles in Surface Snow Layer at Mizuho Station

Observers : Yoshiyuki FUJII, Kunio KAWADA, Minoru YOSHIDA, Yuzuru INAGAWA, Yasuhiro YAMAGAMI and Seiichi ASHIDA

The measurements were made using platinum resistance thermometers placed in metal pipes, which were installed in 1980 by Wada et al. (1981) at several depths in a surface snow layer. A spot reading of the resistance for each thermometer was made twice a month with a standard digital voltmeter as was described by Nakawo et al. (1984). The resistance was converted into temperature using a normal formula. The results are tabulated in Table VI-1.

The change in the levels of the thermometers was monitored during the observation period in 1984 by measuring the accumulation/ablation of snow at the place below which the thermometers were located. In early October, 30 cm of snow accumulated on the surface, resulting in lowering of the thermometer levels by the same amount.

References

Nakawo, M., Narita, H. and Isobe, T. (1984) : Temperature profiles in surface snow layer at Mizuho Station. JARE Data Rep., 96 (Glaciol. 11), 79-80.

Wada, M., Yamanouchi, T., Mae, S., Kawaguchi, S. and Kusunoki, K. (1981) : POLEX-South data, Part 2, Micrometeorological data at Mizuho Staion, Antarctica in 1979. JARE Data Rep., 62 (Meteorol. 9), 321p.

Table VI-1. Temperature profile at Mizuho Station.

(℃)

Depth in m	0.9	1.4	3.4	5.4	10.4
1984					
19 Jan.	-25.1	-26.6	-31.6	-33.6	-33.6
1 Feb.	-24.1	-25.6	-30.6	-33.1	-33.3
15 Feb.	-24.6	-25.6	-30.3	-33.1	-33.8
1 Mar.	-27.8	-27.3	-29.6	-32.8	-33.6
15 Mar.	-29.3	-28.6	-29.6	-32.6	-33.6
1 Apr.	-30.6	-30.1	-29.8	-32.1	-33.3
16 Apr.	-33.1	-32.1	-30.6	-32.3	-33.6
1 May.	-36.0	-34.3	-31.8	-33.1	-34.1
15 May.	-36.0	-35.1	-32.1	-32.8	-33.6
31 May.	-34.8	-34.6	-32.6	-32.8	-33.6
19 June.	-35.3	-34.6	-32.6	-33.1	-33.3
2 July.	-37.8	-36.5	-32.8	-33.1	-33.3
17 July.	-39.8	-38.0	-34.1	-33.4	-33.4
1 Aug.	-39.5	-38.3	-34.3	-33.3	-33.3
17 Aug.	-40.3	-39.0	-35.3	-34.1	-33.6
31 Aug.	-39.8	-39.0	-35.8	-34.1	-33.6
15 Sep.	-39.5	-38.8	-36.0	-34.6	-33.6
30 Sep.	-38.3	-37.8	-36.0	-34.6	-33.3
	1.2	1.7	3.7	5.7	10.7
15 Oct.	-38.0	-37.5	-35.8	-34.6	-33.3
31 Oct.	-38.0	-37.5	-35.8	-34.8	-33.6
15 Nov.	-36.0	-36.3	-35.4	-34.3	-33.1
30 Nov.	-33.6	-34.3	-34.8	-34.6	-33.3
15 Dec.	-31.6	-32.8	-35.0	-34.8	-33.6
31 Dec.	-28.8	-30.3	-33.8	-34.3	-33.6