

GLACIOLOGICAL RESEARCH PROGRAM
IN EAST QUEEN MAUD LAND, EAST ANTARCTICA

PART 5, 1985

Yutaka AGETA*, Tokio KIKUCHI**, Kokichi KAMIYAMA***
and Fumio OKUHIRA****

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* Water Research Institute, Nagoya University, Furo-cho,
Chikusa-ku, Nagoya 464.

** Faculty of Science, Kochi University, 5-1, Akebonocho
2-chome, Kochi 780.

*** Geophysical Research Station, Kyoto University, Noguchi-
hara, Beppu 874.

**** Gifu Prefectural Research Institute for Environmental
Pollution, 58-2, Yabuta 8-chome, Gifu 500.

I. Introduction

The 26th Japanese Antarctic Research Expedition 1984-1986 (JARE-26) 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 of JARE-26 involved oversnow traverses toward the inland plateau and Sør Rondane Mountains, and ice core drillings of 200m, 40m and 100m in depth at the Advance Camp (A.C.: 74°12'S, 34°59'E), the Dome Camp (D.C.: 77°00'S, 35°00'E) and S25 (69°02'S, 40°28'E), respectively. And also, temperature distributions and variations of diameters of the drill-hole were measured at Mizuho Station using the hole of 700m in depth bored by JARE-24 and -25.

The main traverse of JARE-26 was planned to make observations around the dome-like plateau (Valkyrjedomen), where the second highest dome of the Antarctic ice sheet is situated. The highest area of that plateau was called as 'Dome Fuji' by our party, unofficially. At the end of the first summer of our wintering in February 1985, a base house was constructed at the Advance Camp, which would be used as a base camp for glaciological and meteorological observations, and also for traverses behind this camp. The traverse toward the dome was carried out during the second summer of our wintering in November and December 1985, and the highest place of this dome was found at 77°22'S, 39°37'E with an altitude of 3807m by the use of the doppler satellite positioning system. After the above traverse, the routes from the Advance Camp to Asuka Camp at the north of Sør Rondane Mountains were connected by our party using the routes traced by JARE-24 partly. Other trips for support and supply to Mizuho Station were also made in 1985.

Oversnow traverses by JARE-26 are shown in Fig. A (see the end of this volume), and listed in Table I-1. 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 will be presented in different publications.

Surface meteorological data at Mizuho Station was published as JARE Data Reports, No. 120 (Meteorology 19) by Kikuchi et al. (1986). Present report includes following data at Mizuho Station; the net accumulation of snow and the temperature profiles in surface snow layer. Meteorological and glaciological data at the Advance Camp will be published as JARE Data Reports (Glaciology 15) in near future, hence not included here.

The authors would like to thank Prof. Akira Higashi of International Christian University, the supervisor of the present project and Dr. Kou Kusunoki, the emeritus Prof. of the National Institute of Polar Research, for their valuable advices. Thanks are also due to all members of the wintering party of JARE-26 led by Dr. Hiroshi Fukunishi, who extended generous supports in the field work.

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Table I-1. Oversnow traverses carried out by JARE-26, 1985-1986.

Period	Traverse route	Route name	Distance (km)	Position and elevation	Ice thickness	Surface meteorological data	Net accumulation
'85 Jan. 11-13	S16-Mizuho	S,H,Z	260				
Jan. 14-18	S16-Mizuho	S,H,Z	260			Table III-1	Table IV-1
Jan. 26-Feb. 7	Mizuho-A.C.	IM	250			-2	-2
Mar. 1-12	A.C.-Mizuho	IM	250			-2	-2
Mar. 20-Apr. 1	Mizuho-Tottsuki-Mizuho	S,H,Z	550			-3	
Aug. 5-30	Syowa-Mizuho-Syowa	S,H,Z	570			-4	
Sep. 17-Oct. 6	Syowa-Mizuho-Syowa	S,H,Z	570				
Oct. 27-Nov. 6	Syowa-Mizuho-Syowa	S,H,Z	570			-6	
Sep. 27-Oct. 14	Mizuho-A.C.	IM	250		Table II-5	-5	-2
Nov. 9-Dec. 25	A.C.-Dome Fuji-A.C.	ID,DF	1130	Table II-1, 2	-5	-7	-3
'86 Jan. 3-14	A.C.-Mizuho	IM	250			-8	-2
Jan. 19-Feb. 2	Mizuho-S16	S,H,Z	260			-8	
Jan. 8-26	A.C.-Asuka Camp	IR,KR,RY	530	-3,4		-9	-4,5

A.C. : the Advance Camp

II. Position, Elevation and Ice Thickness of Stations

1. Position along new routes

Observers: Kokichi KAMIYAMA, Junichi FUJII,
Fumio OKUHIRA and Tokio KIKUCHI

Four routes were newly established in 1985-1986 by JARE-26 (see Fig. A). Route ID was extended from ID 43, where JARE-25 turned back. Route DF was set from ID155 (the Dome Camp) for the survey of the second highest dome of the Antarctic ice sheet. After the above observation, Route ID was extended from ID155 and finally returned to the Advance Camp. Route IR starts from the Advance Camp and joins to Route KR which was set from Route RY by JARE-24. Route RY was extended to Asuka Camp from RY175 where JARE-24 reached. Consequently, the routes between the Advance Camp and Asuka Camp were connected.

In Route ID from the Advance Camp to the Dome Camp and Routes IR and RY, the marker stakes were installed every 1km, because the short distance between stakes was thought to be helpful for the next visit. All marker stakes which were set every 2km were numbered from the beginning to the end of the routes. These numbered stakes were to be used for snow accumulation measurements. The stakes between numbered stakes were called with prime, for example, a stake between ID100 and ID101 was called ID101'.

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 ID (43-409'), II-2 for Route DF (-150), II-3 for Route IR (-70) and II-4 for Route RY (175-258'). For positioning with JMR, the number of pass was 10 to 50 at most stations, and the error would be 10 to 30m (Shibuya *et al.*, 1982). However, the errors of results in Table II-4 are thought to be more, since positionings with JMR were made at 2 stations only. Corrected results on this part will be published by JARE-27 as JARE Data Reports (Glaciology).

2. Elevation along new routes

Observer : Yutaka AGETA

The measurements with barometric altimeters (American Paulin Altimeter MM1 and Thommen 3B4) were made every 1 or 2 km along the routes. 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 together with positions. 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 the routes

Observers: Kokichi KAMIYAMA and Jun'ichi FUJII

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. (1981). The details of the operation and the method for deciding the ice thickness were similar to those used by JARE 25 reported by Fujii et al. (1986). The results are shown in Table II-5. The oblique bar in the table indicates the station where no echo was obtained. The value in parentheses is the one at the station where the echo was distinguished but not so obvious. The measurements were carried out not on the running vehicle but at lunchtime-stop and overnight-stop stations. Unfortunately at some stations the measurements were missed by the poor condition of the contact with the antenna systems caused by low temperature.

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

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 43(γ 5)*(JARE25)	74° 59' 59"	35° 00' 57"	3396
ID 43'	75 00 33	35 01 03	
ID 44	75 01 06	35 00 59	3401
ID 44'	75 01 38	35 01 01	3414
ID 45	75 02 10	35 01 04	3416
ID 45'	75 02 42	35 01 05	3430
ID 46	75 03 14	35 01 06	3441
ID 46'	75 03 44	35 01 07	
ID 47	75 03 31	35 01 06	3450
ID 47'	75 04 06	35 01 07	
ID 48	75 04 40	35 01 13	3459
ID 48'	75 05 14	35 01 10	3465
ID 49	75 05 49	35 01 06	3467
ID 49'	75 05 51	35 01 05	3475
ID 50	75 06 28	35 01 11	3478
ID 50'	75 07 06	35 01 12	3478
ID 51	75 07 41	35 01 17	3476
ID 51'	75 08 18	35 01 18	3476
ID 52	75 08 58	35 01 20	3478
ID 52'	75 09 31	35 01 17	3480
ID 53	75 10 08	35 01 13	3483
ID 53'	75 10 45	35 01 15	3487
ID 54	75 11 22	35 01 18	3487
ID 54'	75 11 59	35 01 13	3486
ID 55	75 12 36	35 01 14	3483
ID 55'	75 13 13	35 01 15	3486
ID 56*	75 13 50	35 01 16	3487
ID 56'	75 14 22	35 01 06	3488
ID 57	75 14 54	35 01 14	3485
ID 57'	75 15 29	35 01 21	3489
ID 58	75 15 58	35 01 16	3491
ID 58'	75 16 30	35 01 18	3491
ID 59	75 17 03	35 01 19	3495
ID 59'	75 17 35	35 01 21	3500
ID 60	75 18 07	35 01 15	3505
ID 60'	75 18 43	35 01 05	3511
ID 61	75 19 13	35 01 04	3515
ID 61'	75 19 46	35 00 54	3517
ID 62	75 20 17	35 00 49	3516
ID 62'	75 20 52	35 00 44	3517
ID 63	75 21 24	35 00 43	3517
ID 63'	75 21 56	35 00 33	3521
ID 64	75 22 29	35 00 28	3524
ID 64'	75 23 02	35 00 23	3526
ID 65	75 23 34	35 00 22	3525
ID 65'	75 24 06	35 00 21	3529
ID 66	75 24 38	35 00 21	3530
ID 66'	75 24 51	35 00 18	3534
ID 67	75 25 25	35 00 17	3538

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 67'	75° 26' 00"	35° 00' 16"	3542
ID 68	75 26 34	35 00 16	3544
ID 68'	75 26 58	35 00 13	3547
ID 69	75 27 35	35 00 07	3546
ID 69'	75 28 11	35 00 02	3548
ID 70	75 28 43	34 59 59	3551
ID 70'	75 29 21	34 59 49	3552
ID 71*	75 30 00	34 59 42	3550
ID 71'	75 30 32	34 59 42	3555
ID 72	75 31 02	34 59 42	3556
ID 72'	75 31 35	34 59 36	3557
ID 73	75 32 08	34 59 29	3561
ID 73'	75 32 41	34 59 34	3561
ID 74	75 33 12	34 59 30	3563
ID 74'	75 33 44	34 59 32	3568
ID 75	75 34 17	34 59 26	3570
ID 75'	75 34 49	34 59 19	3573
ID 76	75 35 21	34 59 20	3576
ID 76'	75 35 53	34 59 15	3582
ID 77	75 36 25	34 59 16	3585
ID 77'	75 36 58	34 59 18	3591
ID 78	75 36 51	34 59 16	3599
ID 78'	75 37 24	34 59 19	3605
ID 79	75 37 58	34 59 14	3610
ID 79'	75 38 32	34 59 15	3612
ID 80	75 39 06	34 59 06	3616
ID 80'	75 39 09	34 59 04	3619
ID 81	75 39 45	34 59 04	3619
ID 81'	75 40 20	34 59 07	3618
ID 82	75 40 56	34 59 07	3621
ID 82'	75 41 31	34 58 58	3618
ID 83	75 42 08	34 58 52	3618
ID 83'	75 42 43	34 58 52	3620
ID 84	75 43 19	34 58 45	3619
ID 84'	75 43 54	34 58 50	3618
ID 85	75 44 30	34 58 55	3626
ID 85'	75 45 07	34 58 56	3628
ID 86	75 45 43	34 59 03	3630
ID 86'	75 46 18	34 59 05	3630
ID 87	75 46 54	34 59 13	3631
ID 87'	75 47 31	34 59 13	3635
ID 88	75 48 09	34 59 23	3638
ID 88'	75 48 44	34 59 26	3637
ID 89*	75 49 23	34 59 24	3642
ID 89'	75 49 57	34 59 26	3644
ID 90	75 50 28	34 59 28	3648
ID 90'	75 51 00	34 59 29	3656
ID 91	75 51 32	34 59 31	3659
ID 91'	75 51 15	34 59 31	3660

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 92	75° 51' 50"	34° 59' 35"	3657
ID 92'	75 52 26	34 59 39	3658
ID 93	75 53 01	34 59 41	3659
ID 93'	75 53 36	34 59 43	3655
ID 94	75 54 11	34 59 44	3655
ID 94'	75 54 47	34 59 41	3652
ID 95	75 55 21	34 59 46	3652
ID 95'	75 55 34	34 59 45	3654
ID 96	75 56 12	34 59 47	3655
ID 96'	75 56 50	34 59 48	3652
ID 97	75 57 28	34 59 53	3654
ID 97'	75 58 06	34 59 59	3654
ID 98	75 58 45	34 59 56	3654
ID 98'	75 59 20	34 59 56	3655
ID 99(γ6)*	76 00 02	34 59 55	3657
ID 99'	75 59 31	34 59 54	3662
ID 100	76 00 04	34 59 58	3664
ID 100'	76 00 39	35 00 01	3668
ID 101	76 01 13	34 59 56	3665
ID 101'	76 01 47	34 59 59	3667
ID 102	76 02 22	34 59 53	3673
ID 102'	76 02 57	34 59 50	3673
ID 103	76 03 30	34 59 51	3673
ID 103'	76 04 05	34 59 55	3676
ID 104	76 03 57	34 59 54	3676
ID 104'	76 03 53	34 59 53	3671
ID 105	76 04 32	34 59 47	3672
ID 105'	76 05 11	34 59 39	3671
ID 106	76 05 49	34 59 41	3672
ID 106'	76 06 28	34 59 37	3672
ID 107	76 07 06	34 59 41	3675
ID 107'	76 07 18	34 59 40	3676
ID 108	76 07 59	34 59 36	3676
ID 108'	76 08 40	34 59 31	3678
ID 109	76 09 01	34 59 30	3680
ID 109'	76 09 27	34 59 29	3682
ID 110	76 10 12	34 59 23	3683
ID 110'	76 10 59	34 59 20	3682
ID 111	76 11 45	34 59 21	3685
ID 111'	76 12 32	34 59 25	3688
ID 112	76 13 11	34 59 24	3690
ID 112'	76 13 58	34 59 20	3693
ID 113	76 14 44	34 59 19	3697
ID 113'*	76 15 35	34 59 11	3699
ID 114	76 16 07	34 59 01	3702
ID 114'	76 16 39	34 58 58	3705
ID 115	76 17 12	34 58 50	3706
ID 115'	76 17 44	34 58 40	3707
ID 116	76 17 20	34 58 35	3708

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 116'	76° 17' 53"	34° 58' 32"	3709
ID 117	76 18 27	34 58 24	3710
ID 117'	76 19 01	34 58 14	3712
ID 118	76 19 34	34 58 01	3719
ID 118'	76 20 09	34 57 53	3721
ID 119	76 20 43	34 57 45	3719
ID 119'	76 21 16	34 57 38	3719
ID 120	76 21 50	34 57 35	3715
ID 120'	76 22 24	34 57 25	3711
ID 121	76 22 57	34 57 22	3713
ID 121'	76 23 32	34 57 19	3716
ID 122	76 24 05	34 57 16	3715
ID 122'	76 24 38	34 57 17	3718
ID 123	76 25 12	34 57 05	3718
ID 123'	76 25 45	34 56 57	3719
ID 124	76 26 18	34 56 54	3722
ID 124'	76 26 52	34 56 44	3726
ID 125	76 27 27	34 56 51	3728
ID 125'	76 28 01	34 56 50	3730
ID 126	76 28 14	34 56 45	3732
ID 126'	76 28 50	34 56 42	3736
ID 127	76 29 08	34 56 37	3740
ID 127'	76 29 45	34 56 34	3743
ID 128	76 30 23	34 56 38	3745
ID 128'	76 30 48	34 56 33	3747
ID 129	76 31 17	34 56 27	3747
ID 129'	76 31 58	34 56 29	3747
ID 130	76 32 39	34 56 31	3751
ID 130'	76 33 14	34 56 26	3750
ID 131	76 33 56	34 56 33	3748
ID 131'	76 34 39	34 56 37	3748
ID 132*	76 35 21	34 56 34	3747
ID 132'	76 35 54	34 56 31	3752
ID 133	76 36 26	34 56 28	3755
ID 133'	76 36 58	34 56 27	3759
ID 134	76 37 30	34 56 26	3760
ID 134'	76 38 02	34 56 18	3763
ID 135	76 38 36	34 56 20	3762
ID 135'	76 39 07	34 56 17	3763
ID 136	76 39 39	34 56 19	3763
ID 136'	76 40 11	34 56 11	3763
ID 137	76 40 43	34 56 08	3765
ID 137'	76 41 16	34 56 10	3764
ID 138	76 41 48	34 56 09	3762
ID 138'	76 42 20	34 56 11	3763
ID 139	76 42 13	34 56 05	3765
ID 139'	76 42 47	34 55 55	3767
ID 140	76 43 21	34 55 59	3766
ID 140'	76 43 55	34 55 58	3766

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 141	76° 44' 29"	34° 55' 58"	3767
ID 141'	76 45 03	34 55 59	3766
ID 142	76 45 37	34 56 04	3768
ID 142'	76 46 11	34 56 03	3767
ID 143	76 46 45	34 56 02	3773
ID 143'	76 47 19	34 56 07	3776
ID 144	76 47 53	34 56 06	3783
ID 144'	76 48 27	34 56 03	3777
ID 145	76 49 01	34 56 00	3781
ID 145'	76 49 35	34 56 04	3781
ID 146	76 50 09	34 56 03	3781
ID 146'	76 50 43	34 56 10	3783
ID 147	76 51 16	34 56 12	3784
ID 147'	76 51 52	34 56 14	3783
ID 148	76 52 24	34 56 13	3783
ID 148'	76 52 58	34 56 05	3785
ID 149	76 53 32	34 55 57	3785
ID 149'	76 54 06	34 56 02	3787
ID 150*	76 54 40	34 55 56	3787
ID 150'	76 55 13	34 56 20	3788
ID 151	76 55 44	34 56 44	3786
ID 151'	76 56 16	34 57 08	3784
ID 152	76 56 49	34 57 34	3780
ID 152'	76 57 21	34 57 58	3780
ID 153	76 57 53	34 58 24	3775
ID 153'	76 58 25	34 58 48	3773
ID 154	76 58 57	34 59 09	3768
ID 154'	76 59 29	34 59 31	3767
ID 155(D.C.)*	77 00 01	35 00 00	3761
ID 156	76 59 57	34 55 12	3757
ID 157	76 59 52	34 50 24	3758
ID 158	76 59 50	34 45 36	3758
ID 159	76 59 48	34 40 49	3754
ID 160	76 59 46	34 36 01	3751
ID 161	76 59 42	34 31 13	3752
ID 162	76 59 38	34 26 25	3749
ID 163	76 59 37	34 21 38	3748
ID 164	76 59 32	34 16 50	3744
ID 165	76 59 20	34 12 06	3747
ID 166	76 59 15	34 07 18	3746
ID 167	76 59 07	34 02 32	3743
ID 168	76 59 06	33 57 44	3742
ID 169	76 59 06	33 52 57	3741
ID 170	76 59 05	33 48 10	3745
ID 171	76 59 02	33 43 23	3745
ID 172	76 59 01	33 38 36	3744
ID 173	76 59 03	33 33 49	3740
ID 174	76 59 04	33 29 02	3740
ID 175	76 59 03	33 24 15	3739

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 176	76° 59' 07"	33° 19' 30"	3740
ID 177	76 59 06	33 14 43	3739
ID 178	76 59 05	33 09 55	3740
ID 179	76 58 57	33 05 09	3739
ID 180	76 58 54	33 00 22	3738
ID 181	76 58 53	32 55 35	3743
ID 182	76 58 53	32 50 49	3740
ID 183	76 58 55	32 46 02	3742
ID 184	76 58 51	32 41 15	3736
ID 185	76 58 51	32 36 28	3738
ID 186	76 58 56	32 31 43	3737
ID 187	76 58 55	32 26 57	3734
ID 188	76 58 55	32 22 10	3735
ID 189	76 59 00	32 17 25	3736
ID 190	76 58 59	32 12 38	3734
ID 191	76 58 57	32 07 51	3734
ID 192	76 58 52	32 03 05	3733
ID 193	76 58 47	31 58 18	3733
ID 194	76 58 45	31 53 31	3735
ID 195	76 58 41	31 48 45	3734
ID 196	76 58 38	31 43 58	3731
ID 197	76 58 35	31 39 11	3737
ID 198	76 58 29	31 34 25	3739
ID 199	76 58 25	31 29 38	3737
ID 200	76 58 21	31 24 51	3737
ID 201	76 58 17	31 20 05	3734
ID 202	76 58 14	31 15 18	3730
ID 203	76 58 09	31 10 32	3730
ID 204	76 58 05	31 05 46	3727
ID 205 (γ7)*	76 57 56	31 01 01	3730
ID 206	76 56 37	31 01 41	3733
ID 207	76 55 28	31 02 11	3736
ID 208	76 54 29	31 02 42	3739
ID 209	76 53 20	31 03 27	3741
ID 210	76 52 11	31 04 07	3746
ID 211	76 51 03	31 04 52	3749
ID 212	76 49 54	31 05 47	3749
ID 213	76 48 45	31 06 12	3750
ID 214	76 47 37	31 06 47	3752
ID 215	76 46 28	31 07 32	3754
ID 216	76 45 19	31 08 12	3757
ID 217	76 44 11	31 09 17	3757
ID 218	76 43 02	31 10 11	3754
ID 219	76 41 54	31 10 27	3757
ID 220	76 40 45	31 11 02	3751
ID 221	76 39 36	31 11 42	3754
ID 222	76 38 27	31 12 07	3749
ID 223	76 37 19	31 13 02	3747
ID 224	76 36 10	31 13 51	3750

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 225	76° 35' 01"	31° 14' 12"	3746
ID 226	76 33 53	31 15 25	3744
ID 227	76 32 45	31 16 00	3744
ID 228	76 31 36	31 16 45	3743
ID 229	76 30 27	31 17 20	3741
ID 230	76 31 18	31 17 50	3738
ID 231	76 30 14	31 18 25	3738
ID 232*	76 29 10	31 19 10	3736
ID 233	76 27 57	31 18 55	3735
ID 234	76 26 43	31 18 59	3731
ID 235	76 25 29	31 19 22	3731
ID 236	76 24 15	31 19 31	3728
ID 237	76 23 01	31 19 26	3729
ID 238	76 21 47	31 19 49	3729
ID 239	76 20 33	31 20 02	3724
ID 240	76 19 19	31 20 11	3719
ID 241	76 18 05	31 20 20	3721
ID 242	76 16 51	31 20 30	3719
ID 243	76 15 37	31 20 29	3717
ID 244	76 14 23	31 20 52	3712
ID 245	76 13 10	31 20 29	3708
ID 246	76 11 56	31 20 43	3705
ID 247	76 10 41	31 21 06	3701
ID 248	76 09 27	31 21 15	3693
ID 249	76 08 13	31 21 48	3685
ID 250	76 06 59	31 22 02	3674
ID 251	76 05 45	31 22 16	3667
ID 252	76 04 31	31 22 16	3671
ID 253	76 04 57	31 22 44	3671
ID 254	76 03 49	31 22 35	3667
ID 255	76 02 40	31 22 35	3663
ID 256	76 03 25	31 23 03	3664
ID 257	76 02 21	31 23 03	3661
ID 258	76 01 16	31 23 12	3654
ID 259(γ 8)*	76 00 12	31 23 17	3648
ID 260	75 58 51	31 23 20	3651
ID 261	75 57 31	31 23 17	3649
ID 262	75 56 17	31 23 29	3650
ID 263	75 54 59	31 23 50	3642
ID 264	75 53 40	31 24 16	3641
ID 265	75 52 22	31 24 33	3636
ID 266	75 51 04	31 24 58	3633
ID 267	75 49 46	31 25 01	3631
ID 268	75 48 27	31 24 59	3627
ID 269	75 47 09	31 24 57	3624
ID 270	75 45 51	31 24 55	3626
ID 271	75 44 32	31 25 16	3624
ID 272	75 43 14	31 25 42	3623
ID 273	75 41 56	31 25 58	3625

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 274	75° 40' 37"	31° 26' 01"	3622
ID 275	75 39 19	31 25 59	3621
ID 276	75 38 40	31 26 11	3612
ID 277	75 37 24	31 26 09	3608
ID 278	75 36 08	31 26 12	3608
ID 279	75 34 52	31 26 01	3602
ID 280	75 33 36	31 25 55	3588
ID 281	75 32 20	31 26 20	3576
ID 282	75 31 04	31 26 27	3573
ID 283	75 29 48	31 26 44	3573
ID 284	75 28 32	31 26 51	3573
ID 285	75 28 16	31 27 03	3574
ID 286	75 28 05	31 27 15	3575
ID 287	75 26 53	31 27 31	3575
ID 288	75 25 42	31 27 39	3570
ID 289	75 24 30	31 27 41	3562
ID 290	75 23 19	31 27 40	3559
ID 291	75 22 08	31 27 47	3560
ID 292	75 20 56	31 27 50	3555
ID 293	75 19 45	31 27 58	3550
ID 294	75 18 33	31 28 05	3540
ID 295	75 17 22	31 28 13	3536
ID 296	75 16 10	31 28 11	3534
ID 297	75 16 27	31 28 23	3536
ID 298	75 15 17	31 28 30	3534
ID 299	75 14 08	31 28 55	3531
ID 300	75 14 34	31 29 07	3533
ID 301	75 13 27	31 28 57	3536
ID 302	75 12 20	31 29 05	3529
ID 303	75 11 14	31 29 12	3520
ID 304	75 10 07	31 29 19	3507
ID 305	75 09 00	31 29 14	3487
ID 306	75 09 42	31 29 26	3478
ID 307	75 08 37	31 29 24	3474
ID 308	75 07 33	31 29 27	3472
ID 309	75 06 28	31 29 26	3459
ID 310	75 05 24	31 29 29	3439
ID 311	75 04 19	31 29 32	3432
ID 312	75 03 21	31 30 04	3427
ID 313	75 02 17	31 29 49	3425
ID 314	75 01 13	31 29 48	3420
ID 315 (Y 9)*	75 00 09	31 29 21	3414
ID 316	74 58 53	31 29 18	3409
ID 317	74 57 43	31 29 32	3406
ID 318	74 56 30	31 29 55	3397
ID 319	74 55 17	31 30 14	3389
ID 320	74 54 04	31 30 41	3377
ID 321	74 52 51	31 31 00	3372
ID 322	74 51 37	31 31 19	3366

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 323	74° 50' 25"	31° 32' 03"	3362
ID 324	74 49 12	31 32 30	3355
ID 325	74 47 59	31 32 49	3344
ID 326	74 46 45	31 33 12	3340
ID 327	74 45 32	31 33 30	3335
ID 328	74 44 19	31 33 40	3331
ID 329	74 43 06	31 33 59	3322
ID 330	74 41 53	31 34 26	3313
ID 331	74 40 40	31 34 49	3313
ID 332	74 39 27	31 34 59	3310
ID 333	74 39 05	31 35 13	3302
ID 334	74 37 55	31 35 40	3294
ID 335	74 36 45	31 35 46	3285
ID 336	74 36 35	31 36 01	3283
ID 337	74 35 28	31 36 19	3276
ID 338	74 34 20	31 36 29	3276
ID 339	74 33 13	31 36 39	3275
ID 340	74 32 05	31 36 49	3274
ID 341	74 30 58	31 37 25	3264
ID 342	74 29 51	31 37 47	3246
ID 343	74 28 44	31 38 23	3236
ID 344	74 29 00	31 38 37	3237
ID 345	74 27 55	31 38 56	3229
ID 346	74 26 51	31 39 18	3214
ID 347	74 25 46	31 39 37	3200
ID 348	74 24 42	31 40 04	3183
ID 349	74 23 37	31 40 14	3173
ID 350	74 22 33	31 40 24	3170
ID 351	74 21 28	31 40 26	3164
ID 352	74 20 24	31 40 36	3153
ID 353	74 19 19	31 40 46	3148
ID 354	74 18 15	31 40 56	3142
ID 355	74 17 10	31 41 15	3132
ID 356	74 16 06	31 41 17	3120
ID 357	74 15 01	31 41 18	3111
ID 358	74 13 57	31 41 45	3100
ID 359	74 12 52	31 42 12	3094
ID 360(γ 10)*	74 11 48	31 42 47	3092
ID 361	74 11 44	31 46 43	3093
ID 362	74 11 46	31 50 41	3094
ID 363	74 11 44	31 54 38	3091
ID 364	74 11 44	31 58 36	3086
ID 365	74 11 48	32 02 33	3077
ID 366	74 11 48	32 06 31	3076
ID 367	74 11 48	32 10 29	3099
ID 368	74 11 48	32 14 26	3130
ID 369	74 11 50	32 18 24	3144
ID 370	74 11 56	32 22 21	3148
ID 371	74 11 59	32 26 19	3156

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
ID 372	74° 11' 56"	32° 30' 16"	3160
ID 373	74 11 52	32 34 13	3165
ID 374	74 11 57	32 38 11	3171
ID 375	74 11 56	32 42 08	3169
ID 376	74 11 53	32 46 05	3165
ID 377	74 11 50	32 50 02	3168
ID 378	74 11 49	32 54 00	3170
ID 379	74 11 46	32 57 57	3180
ID 380	74 11 46	33 01 55	3186
ID 381	74 11 49	33 05 52	3187
ID 382	74 12 00	33 09 49	3185
ID 383	74 11 56	33 13 46	3182
ID 384	74 11 59	33 17 44	3179
ID 385	74 11 58	33 21 41	3177
ID 386	74 11 55	33 25 38	3179
ID 387	74 11 49	33 29 35	3184
ID 388	74 11 47	33 33 32	3186
ID 389	74 11 49	33 37 30	3184
ID 390	74 11 46	33 41 27	3183
ID 391	74 11 40	33 45 23	3179
ID 392	74 11 37	33 49 20	3177
ID 393	74 11 40	33 53 18	3174
ID 394	74 11 43	33 57 16	3180
ID 395	74 11 42	34 01 14	3184
ID 396	74 11 35	34 05 09	3188
ID 397	74 11 29	34 09 05	3188
ID 398	74 11 22	34 13 00	3191
ID 399	74 11 14	34 16 55	3198
ID 400	74 11 17	34 20 53	3201
ID 401	74 11 16	34 24 51	3201
ID 402	74 11 22	34 28 49	3200
ID 403	74 11 18	34 32 46	3195
ID 404	74 11 19	34 36 44	3192
ID 405	74 11 14	34 40 40	3192
ID 406	74 11 14	34 44 38	3191
ID 407	74 11 15	34 48 36	3189
ID 408	74 11 18	34 52 34	3190
ID 409	74 11 42	34 56 18	3196
ID 409'	74 11 57	34 58 08	3199
IM252 (A.C.)*	74 12 02	34 59 08	3198

A.C. = Advance Camp

D.C. = Dome Camp

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

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
DF 1	77° 00' 02"	35° 04' 43"	3762
DF 2	77 00 07	35 09 32	3761
DF 3	77 00 12	35 14 21	3760
DF 4	77 00 08	35 19 10	3764
DF 5	77 00 07	35 23 59	3766
DF 6	77 00 04	35 28 49	3767
DF 7	77 00 08	35 33 38	3765
DF 8	77 00 07	35 38 28	3766
DF 9	77 00 04	35 43 17	3767
DF 10	77 00 03	35 48 07	3768
DF 11	77 00 00	35 52 49	3766
DF 12	76 59 58	35 57 46	3770
DF 13	76 59 55	36 02 35	3772
DF 14	76 59 49	36 07 23	3773
DF 15	76 59 48	36 12 13	3774
DF 16	76 59 46	36 17 02	3777
DF 17	76 59 42	36 21 51	3779
DF 18	76 59 40	36 26 41	3781
DF 19	76 59 34	36 31 29	3782
DF 20	76 59 28	36 36 10	3782
DF 21	76 59 23	36 41 05	3781
DF 22	76 59 23	36 45 55	3779
DF 23	76 59 16	36 50 35	3780
DF 24	76 59 13	36 55 24	3778
DF 25*	76 59 18	37 00 13	3780
DF 26	76 59 10	37 05 01	3783
DF 27	76 59 11	37 09 50	3785
DF 28	76 59 07	37 14 38	3782
DF 29	76 59 03	37 19 27	3783
DF 30	76 58 57	37 24 16	3786
DF 31	76 58 52	37 29 04	3787
DF 32	76 58 45	37 33 51	3788
DF 33	76 58 37	37 38 32	3785
DF 34	76 58 40	37 43 20	3785
DF 35	76 58 41	37 48 09	3786
DF 36	76 58 26	37 52 50	3786
DF 37	76 58 20	37 57 38	3789
DF 38	76 58 22	38 02 27	3789
DF 39	76 58 22	38 07 15	3786
DF 40	76 58 22	38 12 04	3785
DF 41	76 58 22	38 16 53	3787
DF 42	76 58 15	38 21 41	3789
DF 43	76 58 09	38 26 28	3789
DF 44	76 58 01	38 31 08	3793
DF 45	76 58 01	38 36 11	3795
DF 46	76 58 04	38 40 59	3795
DF 47	76 58 10	38 45 46	3795
DF 48	76 58 04	38 50 34	3794
DF 49	76 58 02	38 55 22	3791

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
DF 50*	76° 58' 07"	39° 00' 10"	3789
DF 51 (from DF46)	76 59 09	38 39 54	3794
DF 52	77 00 13	38 38 49	3796
DF 53	77 01 17	38 37 24	3797
DF 54	77 02 20	38 36 05	3798
DF 55	77 03 25	38 34 54	3796
DF 56	77 04 28	38 33 25	3797
DF 57	77 05 18	38 30 02	3800
DF 58	77 06 02	38 26 36	3801
DF 59	77 06 51	38 23 18	3802
DF 60	77 07 37	38 26 49	3803
DF 61	77 08 15	38 30 49	3803
DF 62	77 08 58	38 34 31	3803
DF 63*	77 09 42	38 38 09	3801
DF 64	77 10 23	38 41 56	3803
DF 65	77 11 09	38 45 23	3802
DF 66	77 11 55	38 48 53	3802
DF 67	77 12 40	38 52 27	3804
DF 68	77 13 21	38 56 15	3804
DF 69	77 14 05	38 59 53	3803
DF 70	77 14 31	39 04 19	3801
DF 71	77 15 02	39 08 37	3803
DF 72*	77 15 29	39 13 04	3802
DF 73	77 16 22	39 15 55	3804
DF 74	77 17 14	39 18 50	3803
DF 75	77 18 08	39 21 36	3808
DF 76	77 19 01	39 24 31	3805
DF 77	77 19 51	39 27 39	3804
DF 78	77 20 41	39 30 46	3807
DF 79	77 21 34	39 33 42	3808
DF 80*	77 22 24	39 36 50	3807
DF 81	77 22 32	39 31 51	3807
DF 82	77 22 32	39 26 53	3805
DF 83	77 22 33	39 21 45	3804
DF 84	77 22 34	39 16 57	3803
DF 85	77 22 33	39 11 59	3801
DF 86	77 22 31	39 07 01	3801
DF 87	77 22 32	39 02 04	3803
DF 88	77 22 35	38 56 59	3801
DF 89	77 22 35	38 52 09	3799
DF 90	77 22 35	38 47 11	3801
DF 91	77 22 40	38 42 14	3798
DF 92	77 22 35	38 37 17	3794
DF 93	77 22 29	38 32 19	3796
DF 94	77 22 29	38 27 22	3798
DF 95	77 22 29	38 22 24	3798
DF 96	77 22 30	38 17 26	3795
DF 97	77 22 29	38 12 28	3795
DF 98	77 22 21	38 07 32	3795

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
DF 99	77° 22' 20"	38° 02' 35"	3794
DF 100	77 22 19	37 57 37	3790
DF 101	77 22 19	37 52 39	3790
DF 102	77 22 15	37 47 42	3787
DF 103	77 22 11	37 42 44	3789
DF 104*	77 22 12	37 37 47	3788
DF 105	77 22 09	37 32 49	3788
DF 106	77 22 12	37 27 52	3786
DF 107	77 22 12	37 22 43	3784
DF 108	77 22 15	37 17 57	3780
DF 109	77 22 12	37 12 58	3779
DF 110	77 22 10	37 08 00	3776
DF 111	77 22 14	37 03 04	3778
DF 112	77 22 14	36 58 06	3778
DF 113	77 22 12	36 53 08	3778
DF 114	77 22 13	36 48 10	3772
DF 115	77 22 11	36 43 12	3771
DF 116	77 22 08	36 38 14	3770
DF 117	77 22 14	36 33 18	3767
DF 118	77 22 09	36 28 20	3766
DF 119	77 22 06	36 23 22	3765
DF 120	77 22 12	36 18 27	3765
DF 121	77 22 11	36 13 29	3764
DF 122	77 22 13	36 08 32	3764
DF 123	77 22 18	36 03 35	3763
DF 124	77 22 22	35 58 39	3764
DF 125	77 22 18	35 53 41	3763
DF 126	77 22 15	35 48 43	3763
DF 127	77 22 17	35 43 46	3763
DF 128	77 22 13	35 38 48	3762
DF 129	77 22 10	35 33 51	3761
DF 130	77 22 07	35 28 53	3761
DF 131	77 22 09	35 23 56	3760
DF 132*	77 22 07	35 18 58	3758
DF 133	77 21 58	35 14 27	3758
DF 134	77 21 53	35 09 57	3756
DF 135	77 21 52	35 05 30	3753
DF 136	77 21 45	35 01 40	3748
DF 137	77 19 58	35 01 33	3747
DF 138	77 18 11	35 01 35	3747
DF 139	77 16 24	35 02 14	3758
DF 140	77 16 02	35 02 39	3759
DF 141	77 14 26	35 02 25	3761
DF 142	77 12 50	35 01 48	3760
DF 143	77 11 14	35 01 34	3758
DF 144	77 09 38	35 01 51	3759
DF 145	77 08 02	35 01 15	3758
DF 146	77 06 26	35 01 09	3759
DF 147	77 04 49	35 00 48	3761

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
DF 148	77° 03' 13"	35° 00' 27"	3761
DF 149	77 01 37	34 59 58	3760
DF 150 (ID155 = D.C.)*	77 00 01	35 00 00	3761

D.C. = Dome Camp

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

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
IM 252 (A.C.)*	74° 12' 02"	34° 59' 08"	3198
IR 0'	74 11 40	34 57 44	3193
IR 1	74 11 19	34 56 14	3187
IR 1'	74 10 58	34 54 46	3188
IR 2	74 10 37	34 53 17	3185
IR 2'	74 10 16	34 51 51	3178
IR 3	74 09 54	34 50 24	3177
IR 3'	74 09 33	34 48 57	3172
IR 4	74 09 11	34 47 30	3171
IR 4'	74 08 48	34 46 09	3170
IR 5	74 08 25	34 44 48	3170
IR 5'	74 08 03	34 43 24	3173
IR 6	74 07 41	34 42 00	3170
IR 6'	74 07 19	34 40 32	3167
IR 7	74 06 58	34 39 04	3158
IR 7'	74 06 37	34 37 36	3157
IR 8	74 06 16	34 36 09	3156
IR 8'	74 05 55	34 34 41	3156
IR 9	74 05 34	34 33 13	3157
IR 9'	74 05 14	34 31 42	3153
IR 10	74 04 54	34 30 12	3147
IR 10'	74 04 35	34 28 39	
IR 11	74 04 15	34 27 05	3142
IR 11'	74 03 56	34 25 32	3141
IR 12	74 03 37	34 23 59	3134
IR 12'	74 03 15	34 22 33	3130
IR 13	74 02 54	34 21 07	3126
IR 13'	74 02 34	34 19 37	3128
IR 14	74 02 13	34 18 06	3129
IR 14'	74 01 53	34 16 37	3130
IR 15	74 01 32	34 15 08	3132
IR 15'	74 01 12	34 13 38	3134
IR 16	74 00 52	34 12 08	3132
IR 16'	74 00 29	34 10 45	3127
IR 17	74 00 07	34 09 22	3119
IR 17'	73 59 46	34 07 56	3116
IR 18	73 59 24	34 06 30	3110
IR 18'	73 59 03	34 05 04	
IR 19	73 58 41	34 03 38	3099
IR 19'	73 58 23	34 02 03	3092
IR 20	73 58 05	34 00 28	3086
IR 20'	73 57 44	33 58 58	3070
IR 21	73 57 24	33 57 28	3057
IR 21'	73 57 04	33 55 58	3060
IR 22	73 56 44	33 54 28	3066
IR 22'	73 56 25	33 52 54	3063
IR 23	73 56 07	33 51 19	3060
IR 23'	73 55 47	33 49 48	3057
IR 24	73 55 27	33 48 17	3050

Station	Latitude (S)	Longitude (E)	Elevation (m)
IR 24'	73° 55' 04"	33° 47' 00"	3048
IR 25	73 54 40	33 45 43	3044
IR 25'	73 54 19	33 44 16	3042
IR 26	73 53 58	33 42 49	3040
IR 26'	73 53 38	33 41 20	3043
IR 27	73 53 17	33 39 50	3047
IR 27'	73 52 56	33 38 25	3048
IR 28	73 52 34	33 36 59	3045
IR 28'	73 52 14	33 35 31	3042
IR 29	73 51 53	33 34 03	3038
IR 29'	73 51 33	33 32 32	3036
IR 30	73 51 14	33 31 02	3031
IR 30'	73 50 51	33 29 41	3023
IR 31	73 50 28	33 28 20	3018
IR 31'	73 50 07	33 26 55	3017
IR 32	73 49 46	33 25 29	3016
IR 32'	73 49 25	33 24 02	3014
IR 33	73 49 04	33 22 34	3007
IR 33'	73 48 43	33 21 09	3005
IR 34	73 48 21	33 19 44	3006
IR 34'	73 48 00	33 18 17	2998
IR 35	73 47 39	33 16 51	2993
IR 35'	73 47 18	33 15 24	2990
IR 36	73 46 57	33 13 58	2988
IR 36'	73 46 35	33 12 35	2985
IR 37	73 46 14	33 11 11	2987
IR 37'	73 45 52	33 09 46	2987
IR 38	73 45 31	33 08 21	2985
IR 38'	73 45 10	33 06 52	2984
IR 39	73 44 50	33 05 24	2987
IR 39'	73 44 28	33 04 00	2984
IR 40	73 44 07	33 02 37	2981
IR 40'	73 43 47	33 01 07	2975
IR 41	73 43 27	32 59 37	2975
IR 41'	73 43 04	32 58 18	2972
IR 42	73 42 41	32 56 59	2972
IR 42'	73 42 21	32 55 30	2970
IR 43	73 42 01	32 54 02	2971
IR 43'	73 41 39	32 52 37	2969
IR 44	73 41 18	32 51 13	2958
IR 44'	73 40 55	32 49 51	2946
IR 45	73 40 33	32 48 30	2939
IR 45'	73 40 09	32 47 14	2937
IR 46	73 39 46	32 45 58	2933
IR 46'	73 39 25	32 44 31	2928
IR 47	73 39 04	32 43 04	2923
IR 47'	73 38 43	32 41 40	2912
IR 48	73 38 21	32 40 15	2900
IR 48'	73 37 56	32 39 09	2885
IR 49	73 37 30	32 38 03	2870

Station	Latitude (S)	Longitude (E)	Elevation (m)
IR 49'	73° 37' 08"	32° 36' 40"	2856
IR 50	73 36 46	32 35 18	2846
IR 50'	73 36 26	32 33 48	2847
IR 51	73 36 06	32 32 19	3848
IR 51'	73 35 46	32 30 52	2843
IR 52	73 35 25	32 29 25	2843
IR 52'	73 35 04	32 28 01	2846
IR 53	73 34 42	32 26 37	2842
IR 53'	73 34 23	32 25 08	2838
IR 54	73 34 03	32 23 39	2831
IR 54'	73 33 43	32 22 10	2829
IR 55	73 33 23	32 20 41	2826
IR 55'	73 33 02	32 19 16	2824
IR 56	73 32 41	32 17 50	2822
IR 56'	73 32 19	32 16 29	2820
IR 57	73 31 57	32 15 08	2816
IR 57'	73 31 36	32 13 42	2816
IR 58	73 31 16	32 12 16	2812
IR 58'	73 30 54	32 10 52	2812
IR 59	73 30 33	32 09 28	2810
IR 59'	73 30 11	32 08 05	2812
IR 60	73 29 50	32 06 41	2808
IR 60'	73 29 28	32 05 19	2811
IR 61	73 29 06	32 03 57	2804
IR 61'	73 28 45	32 02 33	2802
IR 62	73 28 23	32 01 10	2798
IR 62'	73 28 02	31 59 46	2796
IR 63	73 27 40	31 58 23	2798
IR 63'	73 27 19	31 57 01	2795
IR 64	73 26 57	31 55 39	2793
IR 64'	73 26 35	31 54 15	2781
IR 65	73 26 14	31 52 52	2777
IR 65'	73 25 54	31 51 24	2774
IR 66	73 25 34	31 49 55	2767
IR 66'	73 25 13	31 48 31	2767
IR 67	73 24 52	31 47 06	2764
IR 67'	73 24 30	31 45 47	2762
IR 68	73 24 07	31 44 28	2762
IR 68'	73 23 48	31 42 57	2759
IR 69	73 23 29	31 41 27	2758
IR 69'	73 23 04	31 40 17	2756
IR 70	73 22 39	31 39 07	2755
KR 72 (JARE-24)	73 22 04	31 37 31	2749

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

* JMR station

Station	Latitude (S)	Longitude (E)	Elevation (m)
RY 175*(JARE-24)	72° 07' 44"	27° 51' 58"	1615
RY 175'	72 07 12	27 51 36	1606
RY 176	72 06 39	27 51 18	1586
RY 176'	72 06 12	27 50 16	1568
RY 177	72 05 43	27 49 23	1562
RY 177'	72 05 12	27 48 45	1563
RY 178	72 04 40	27 49 15	1556
RY 178'	72 04 11	27 50 02	1529
RY 179	72 03 38	27 49 56	1519
RY 179'	72 03 00	27 49 42	1482
RY 180	72 02 24	27 49 26	1462
RY 180'	72 01 57	27 48 24	
RY 181	72 01 32	27 47 29	
RY 181'	72 01 00	27 46 59	
RY 182	72 00 38	27 45 54	1355
RY 182'	72 00 06	27 45 29	
RY 183	71 59 39	27 46 29	
RY 183'	71 59 06	27 46 35	
RY 184	71 58 37	27 46 06	
RY 184'	71 58 04	27 46 16	
RY 185	71 57 45	27 45 17	1249
RY 185'	71 57 43	27 43 32	1240
RY 186	71 57 46	27 41 48	1233
RY 186'	71 57 45	27 40 04	1224
RY 187	71 57 27	27 38 28	1245
RY 187'	71 56 58	27 37 52	1274
RY 188	71 56 28	27 37 03	1266
RY 188'	71 55 59	27 36 13	1258
RY 189	71 55 31	27 35 17	1258
RY 189'	71 55 04	27 34 16	1254
RY 190	71 54 31	27 34 08	1251
RY 190'	71 54 01	27 33 22	
RY 191	71 53 35	27 32 17	1203
RY 191'	71 53 07	27 31 20	1197
RY 192	71 52 41	27 30 14	1185
RY 192'	71 52 15	27 29 08	1171
RY 193	71 51 48	27 28 04	1150
RY 193'	71 51 22	27 27 01	1135
RY 194	71 50 53	27 26 08	1124
RY 194'	71 50 25	27 25 02	1123
RY 195	71 50 03	27 23 45	1110
RY 195'	71 49 40	27 22 27	1093
RY 196	71 49 11	27 21 35	1089
RY 196'	71 48 39	27 21 13	1082
RY 197	71 48 08	27 20 30	1078
RY 197'	71 47 39	27 19 32	1076
RY 198	71 47 11	27 18 36	1072
RY 198'	71 46 47	27 17 24	1066
RY 199	71 46 23	27 15 42	1061

Station	Latitude (S)	Longitude (E)	Elevation (m)
RY 199'	71° 46' 05"	27° 14' 15"	1060
RY 200	71 45 45	27 12 51	1057
RY 200'	71 45 26	27 11 26	1051
RY 201	71 45 06	27 10 01	1042
RY 201'	71 44 47	27 08 36	1023
RY 202	71 44 28	27 07 11	1007
RY 202'	71 44 08	27 05 46	1002
RY 203	71 43 49	27 04 21	993
RY 203'	71 43 26	27 03 04	991
RY 204	71 43 01	27 01 57	986
RY 204'	71 42 35	27 00 52	978
RY 205	71 42 08	26 59 51	963
RY 205'	71 41 40	26 58 54	953
RY 206	71 41 10	26 58 10	950
RY 206'	71 40 40	26 57 25	939
RY 207	71 40 11	26 56 33	937
RY 207'	71 39 58	26 54 57	912
RY 208	71 39 45	26 53 21	888
RY 208'	71 39 32	26 51 45	878
RY 209	71 39 22	26 50 29	865
RY 209'	71 39 09	26 48 53	866
RY 210	71 38 55	26 47 18	869
RY 210'	71 38 41	26 45 44	862
RY 211	71 38 28	26 44 08	851
RY 211'	71 38 16	26 42 32	836
RY 212	71 38 04	26 40 55	827
RY 212'	71 37 53	26 39 18	821
RY 213	71 37 41	26 37 41	819
RY 213'	71 37 29	26 36 04	811
RY 214	71 37 17	26 34 27	797
RY 214'	71 37 05	26 32 51	783
RY 215	71 36 53	26 31 14	781
RY 215'	71 36 39	26 29 32	786
RY 216	71 36 25	26 28 06	784
RY 216'	71 36 12	26 26 30	784
RY 217	71 35 57	26 24 59	793
RY 217'	71 35 43	26 23 25	799
RY 218	71 35 29	26 21 51	802
RY 218'	71 35 16	26 20 16	805
RY 219	71 35 03	26 18 40	805
RY 219'	71 34 50	26 17 05	807
RY 220	71 34 38	26 15 28	805
RY 220'	71 34 24	26 13 55	794
RY 221	71 34 12	26 12 18	793
RY 221'	71 33 59	26 10 43	788
RY 222	71 33 45	26 08 58	781
RY 222'	71 33 33	26 07 32	779
RY 223	71 33 19	26 05 48	777
RY 223'	71 33 14	26 04 06	773
RY 224	71 33 09	26 02 09	771

Station	Latitude (S)	Longitude (E)	Elevation (m)
RY 224'	71° 33' 04"	26° 00' 43"	771
RY 225	71 32 58	25 59 01	772
RY 225'	71 32 54	25 57 20	771
RY 226	71 32 49	25 55 38	771
RY 226'	71 32 44	25 53 56	779
RY 227	71 32 37	25 52 15	788
RY 227'	71 32 54	25 50 49	792
RY 228	71 32 49	25 49 07	786
RY 228'	71 32 45	25 47 26	783
RY 229	71 32 40	25 45 44	780
RY 229'	71 32 35	25 44 02	778
RY 230	71 32 30	25 42 20	773
RY 230'	71 32 26	25 40 39	769
RY 231	71 32 22	25 38 57	773
RY 231'	71 32 17	25 37 15	776
RY 232	71 32 13	25 35 33	777
RY 232'	71 32 09	25 33 51	776
RY 233	71 32 06	25 32 09	780
RY 233'	71 32 05	25 30 26	783
RY 234	71 32 02	25 28 44	789
RY 234'	71 31 56	25 27 03	793
RY 235	71 31 51	25 25 21	793
RY 235'	71 31 46	25 23 40	805
RY 236	71 31 41	25 21 59	811
RY 236'	71 31 37	25 20 16	814
RY 237	71 31 33	25 18 35	822
RY 237'	71 31 29	25 16 53	836
RY 238	71 31 25	25 15 06	837
RY 238'	71 31 20	25 13 29	836
RY 239	71 31 16	25 11 47	833
RY 239'	71 31 13	25 10 05	833
RY 240	71 31 08	25 08 24	833
RY 240'	71 31 04	25 06 42	835
RY 241	71 31 00	25 05 00	835
RY 241'	71 30 57	25 03 18	832
RY 242	71 30 53	25 01 36	832
RY 242'	71 30 50	24 59 54	832
RY 243	71 30 47	24 58 12	832
RY 243'	71 30 44	24 56 26	834
RY 244	71 30 41	24 54 48	841
RY 244'	71 30 37	24 53 06	841
RY 245	71 30 33	24 51 10	854
RY 245'	71 30 30	24 49 42	
RY 246	71 30 26	24 48 01	851
RY 246'	71 30 22	24 46 19	
RY 247	71 30 19	24 44 37	882
RY 247'	71 30 15	24 42 55	876
RY 248	71 30 11	24 41 13	859
RY 248'	71 30 08	24 39 31	843
RY 249	71 30 05	24 37 49	847

Station	Latitude (S)	Longitude (E)	Elevation (m)
RY 249'	71° 30' 02"	24° 36' 07"	851
RY 250	71 29 59	24 34 25	855
RY 250'	71 29 56	24 32 43	843
RY 251	71 29 53	24 31 01	840
RY 251'	71 29 51	24 29 19	840
RY 252	71 29 48	24 27 37	840
RY 252'	71 29 45	24 25 55	837
RY 253	71 29 42	24 24 13	837
RY 253'	71 29 39	24 22 31	839
RY 254	71 29 36	24 20 49	849
RY 254'	71 29 33	24 19 08	856
RY 255	71 29 29	24 17 26	861
RY 255'	71 29 26	24 15 44	873
RY 256	71 29 47	24 14 29	881
RY 256'	71 30 08	24 13 13	889
RY 257	71 30 29	24 11 58	902
RY 257'	71 30 50	24 10 43	905
RY 258	71 31 12	24 09 28	917
RY 258' (Asuka)*	71 31 34	24 08 17	930

Table II-5. Ice thickness of stations.

Station	Latitude (S)	Longitude (E)	Elevation (m)	Ice thickness (m)
IM 40 (G1)	71° 24'	43° 41'	2416	2306
IM 80 (Y1)	71 59	42 24	2552	1917
ID 43 (Y5)	75 00	35 01	3396	2678
ID 56	75 14	35 01	3487	/
ID 62	75 20	35 01	3516	3035
ID 71	75 30	35 00	3550	(2515)
ID 79'	75 39	34 59	3612	(2443)
ID 99 (Y6)	76 00	35 00	3657	2838
ID 150	76 55	34 56	3787	2508
ID 155 (DC)	77 00	35 00	3761	2778
ID 165	76 59	34 12	3747	(2282)
ID 178	76 59	33 10	3740	2171
ID 190	76 59	32 13	3734	(2443)
ID 205 (Y7)	76 58	31 01	3730	2624
ID 216	76 45	31 08	3757	2662
ID 232	76 29	31 19	3736	(2125)
ID 243	76 16	31 20	3717	2812
ID 259 (Y8)	76 00	31 23	3648	3165
ID 270	75 46	31 25	3626	(2235)
ID 283	75 30	31 27	3573	2811
ID 294	75 19	31 28	3540	2616
ID 303	75 11	31 29	3520	2611
ID 315 (Y9)	75 00	31 29	3414	2359
ID 331	74 41	31 35	3313	2577
ID 341	74 31	31 37	3264	2437
ID 352	74 20	31 41	3153	(2443)
ID 360 (Y10)	74 12	31 43	3092	(2594)
ID 365	74 12	32 03	3077	2295
ID 378	74 12	32 54	3170	/
ID 390	74 12	33 41	3183	(2771)
ID 402	74 11	34 29	3200	1788
DF 37	76 58	37 58	3789	(2165)
DF 50	76 58	39 00	3789	(2100)
DF 63	77 10	38 38	3801	2841
DF 72	77 15	39 13	3802	2894
DF 76	77 19	39 25	3805	(3091)
DF 80	77 22	39 37	3807	(2833)
DF 80-2	77 24	39 43	3806	2673
DF 87	77 23	39 02	3803	3336
DF 103	77 22	37 43	3789	3204
DF 117	77 22	36 33	3767	2955
DF 132	77 22	35 19	3758	(2970)
DF 142	77 13	35 02	3760	3274

III. Surface Meteorological Data During Oversnow Traverses

Observers: Tokio KIKUCHI, Yutaka AGETA,

Shizuo FUKUSAWA and Masao WAKABAYASHI

The observations were made during the oversnow traverses listed in Table I-1. The item, instrument, and accuracy of the observations are given below.

Item	Instrument	Accuracy
Air temperature	Alcohol thermometer	$\pm 0.2^{\circ}\text{C}$
Wind speed	Portable 3-cup anemometer or Vane anemometer	$\pm 1.0\text{m/s}$ $\pm 0.5\text{m/s}$
Wind direction	Magnetic compass	$\pm 5^{\circ}$
Visibility	Visual observation	
Amount of cloud	Visual observation	
Weather and phenomena	Visual observation	

Notations in the tables are as follows:

LT: Local standard time (GMT+3h)

Ta: Air temperature ($^{\circ}\text{C}$)

WS: Wind speed (m/s)

WD: Wind direction

V: Visibility (km)

N: Amount of cloud (in tenth)

W: Present weather and phenomena

○ clear

⊕ fine

- ☉ cloudy
- ☉ cloudy (upper cloud is predominant)
- * snow
- *† snowstorm
- † blowing snow
- † drifting snow
- ↔ ice prism
- ⊕ halo

Position and elevation of stations are given in Tables II-1, II-2, II-3 and II-4 for Routes ID (43 - 409'), DF, IR and RY (175 - 258'), respectively. For Routes S-H-Z, IM-ID (0 - 43) and KR-RY (0-175) refer to Naruse and Yokoyama (1975), Fujii et al. (1986) and Nakawo et al. (1984), respectively.

References

- Fujii, Y., Kawada, K., Yoshida, M. and Matsumoto, S. (1986) : Position, elevation and ice thickness of stations. JARE Data Rep., 116 (Glaciol. 13), 5-27.
- 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.

Table III-1. Surface meteorological data along Route S-H-Z during 10-18 January 1985.

Date	LT	Station	Ta	WD	WS	V	N	W	
JAN.10	18	S16	-1.4	ENE	2.0	5.0	10	⊙	10St
JAN.10	21	S16	-2.8	ESE		30.	10	⊙	10St
JAN.11	09	S16	-1.8	ENE	6.0		9	⊕ ⊙	8Cu 1Ac
JAN.11	15	S16	-2.6	NE		30.	7	⊕	7Cu
JAN.11	18	S16	-1.6	ENE	1.0	30.	1	⊙	1Ac
JAN.12	12	S16	-1.3		5.0	30.	1	⊙	
JAN.12	15	S16	-0.9	NE	4.0	30.	1	⊙	
JAN.12	18	S16	-1.5	NE	3.0	30.	2	⊙	1St 2Cs
JAN.12	21	S16	-3.7	ENE		30.	3	⊕	
JAN.13	09	S16	-2.1	E	7.0	10.	5	⊕	1Ac 4Cc
JAN.13	12	S16	-1.1	ENE	5.0	30.	3	⊕	
JAN.13	15	S16	1.3	ENE	2.0	30.	8	⊕	
JAN.13	18	S16	-1.1	ENE	5.0	30.	9	⊙	
JAN.13	21	S16	-3.1	NE	4.0	30.	9	⊙	
JAN.14	09	S16		E	5.0	30.	0	⊙	
JAN.14	12	S16				30.	1	⊙	
JAN.14	15	S16				30.	1	⊙	
JAN.14	18	S26	-3.4	ENE	5.0	30.	1	⊙	
JAN.14	21	H7	-7.3	ENE	5.0	30.	1	⊙	
JAN.15	09	H7	-3.3	ENE	5.0	30.	0+	⊕ ⊙	0+Cs
JAN.15	21	H180	-12.7	SE	3.0	30.	10	⊕	10Cs
JAN.16	09	H180	-8.5	E	4.0	30.	1	⊙	1As
JAN.18	09	Z70	-21.0	E	12.2	1.0	0	⊕ ⊙	

Table III-2. Surface meteorological data along Route IM during 26 January - 12 March 1985.

Date	LT	Station	Ta	WD	WS	V	N	W	
JAN.26	15	IM4	-12.3	E	9.0	.50	4	⊕ ⊕	4Ci
JAN.26	18	IM10	-14.0	E	10.0	.50	2	⊕ ⊙	2Ci
JAN.26	21	IM16	-19.0	ESE	11.0	.50	1	⊕ ⊙	1Ci
JAN.27	09	IM16	-18.5	ESE	14.3	.10	0	⊕ ⊙	
JAN.27	12	IM20	-14.5	E	15.8	.10	0	⊕ ⊙	
JAN.27	15	IM24	-12.5	ESE	10.0	.20	0+	⊕ ⊙	0+Cs
JAN.27	18	IM30		ESE		.30	0	⊕ ⊙	
JAN.28	15	IM40	-14.0		9.3				
JAN.29	09	IM40	-17.4	ESE		5.0	10-	⊙	
JAN.29	12	IM47	-11.0	ESE		1.0	10-	⊕ ⊙	
JAN.29	15	IM51	-13.9	E	5.3	1.0	10-	⊕ ⊕	10-Cs
JAN.29	18	IM57	-12.6	ESE	7.0	1.0	10-	⊕ ⊕	10-Cs
JAN.29	21	IM63'	-16.0	ESE	9.4	1.0	10	⊕ ⊕	10As
JAN.30	09	IM63'	-15.5	E		.20	3	⊕ ⊕	3As
JAN.30	12	IM69	-11.6	ESE		.50	10	⊕ ⊕	10Cs
JAN.30	15	IM74	-12.6	E	8.3	1.0	10	⊕ ⊕	10As
JAN.30	18	IM80	-14.6	E		10.	10	⊕ ⊕	⊕ 10Cs
JAN.30	21	IM86	-18.0	E	9.8	10.	8	⊕ ⊕	8Cs
JAN.31	09	IM86	-18.2	ESE		10.	4	⊕ ⊕	4Cs

Date	LT	Station	Ta	WD	WS	V	N	W	
JAN. 31	12	IM93	-15.2	ESE		10.	2	○	2Ci
JAN. 31	15	IM96	-13.5	E	7.7	10.	1	○	1Ci
JAN. 31	18	IM103	-10.3	E		10.	8	⊕	8Ci
JAN. 31	21	IM109	-19.9	E	9.3	5.0	8	⊕	8Cs
FEB. 1	12	IM112		ESE	7.2	2.0	9	⊕	9Cs
FEB. 1	18	IM118		E			2		
FEB. 2	12	IM122'		ESE		10.	0	○	
FEB. 2	15	IM127	-18.0	ESE	10.1	10.	0	○	
FEB. 2	18	IM134		ESE		20.	0	○	
FEB. 3	09	IM141		ESE		20.	0	○	
FEB. 3	12	IM145	-19.0	ESE		20.	0	○	
FEB. 3	15	IM150	-16.4	ESE	5.9	20.	0	○	
FEB. 3	18	IM157		ESE		20.	0	○	
FEB. 3	21	IM157	-26.1	ESE	3.9	30.	0	○	
FEB. 4	09	IM157	-27.8			30.	0	○	
FEB. 4	12	IM162		ESE		10.	1	○	
FEB. 4	15	IM166'		ESE	4.9	5.0	3	⊕	3Cs
FEB. 4	18	IM172		ESE		5.0	5	⊕	5Cs
FEB. 4	21	IM178'	-24.0	E	1.0	10.	10	⊕	10Cs
FEB. 5	09	IM178'	-29.3	ESE		10.	7	⊕	7Ci
FEB. 5	12	IM184	-19.4	ESE		10.	7	⊕	7Ci/Cs
FEB. 5	15	IM188'	-25.3	NE	5.3	10.	7	⊕	7Ci/Cs
FEB. 5	18	IM196		ENE		20.	10	⊕	10As
FEB. 5	21	IM202	-29.7	ENE	4.0	5.0	10	⊕	10As
FEB. 6	09	IM202		E		2.0	10	⊕	10As
FEB. 6	12	IM205		E		2.0	10	⊕	10As
FEB. 6	15	IM212		ENE	7.0	1.0	10	⊕	10As
FEB. 6	18	IM219		NNW		5.0	10	*	10As
FEB. 7	12	IM233		ESE	2.5	10.	3	*	3Cs
FEB. 7	15	IM239		ENE	2.4	10.	5	*	5Cs
FEB. 7	18	IM249				30.	2	○	2Ci

Stay at IM252 (Advance Camp) 8 - 28 February.

MAR. 1	09	IM252	-48.2	ESE	8.0	2.0	0	⊕	○
MAR. 1	15	IM246'	-42.2	ESE	10.6	.50	0	⊕	○
MAR. 1	18	IM237	-42.8	SE	8.6	.50	0	⊕	○
MAR. 1	21	IM230	-46.4	ESE	9.4	.50	0	⊕	○
MAR. 2	09	IM230	-46.2	ESE	8.7	.50	0	⊕	○
MAR. 2	12	IM226	-41.7	SE	10.6	.30	0	⊕	○
MAR. 2	15	IM218	-38.8	ESE	10.7	.50	0	⊕	○
MAR. 2	18	IM209	-40.0	ESE	10.8	1.0	0+	⊕	○ 0+Cs
MAR. 2	21	IM203	-42.8	ESE	8.3	1.0	0+	⊕	○ 0+Cs
MAR. 3	09	IM203	-41.3	ESE	11.5	.20	0	⊕	○
MAR. 3	12	IM199	-38.0	ESE	13.5	.20	0	⊕	○
MAR. 3	15	IM192'	-35.8	ESE	11.5	.30	0	⊕	○
MAR. 3	18	IM185	-36.3	ESE	7.7	1.0	0	⊕	○
MAR. 3	21	IM178	-40.6	ESE	7.6	1.0	0+	⊕	○ 0+Cs
MAR. 4	09	IM178	-37.5	SE	5.6	1.0	0+	⊕	○ 0+Cs
MAR. 4	12	IM173	-33.4	ESE	10.6	.50	0	⊕	○
MAR. 4	15	IM167'	-32.0	SE	11.4	.50	0	⊕	○

Date	LT	Station	Ta	WD	WS	V	N	W
MAR. 4	18	IM157	-33.5	ESE	13.2	.30	0	+ ⊙
MAR. 5	09	IM153'	-35.9	ESE	14.2	.01	X	*+
MAR. 5	15	IM153'	-30.0	ESE	13.4	.02	X	*+
MAR. 5	21	IM153'	-32.3	E	15.0	.03	X	+
MAR. 6	09	IM153'	-32.0	ESE	13.5	.03	X	+
MAR. 6	12	IM152	-31.0	E	14.5	.05	X	+
MAR. 6	15	IM145	-29.2	E	13.0	.10	X	+
MAR. 6	18	IM138'	-30.0	E	15.5	.05	10	*+ 10St
MAR. 6	21	IM137	-30.0	E	12.0	.05	10	*+ 10St
MAR. 7	09	IM137	-34.0	ESE	10.5	.30	X	+
MAR. 7	12	IM132	-30.5	ESE	9.8	.30	7	+ ⊕ 7Cs
MAR. 7	15	IM125	-29.2	E	10.8	.50	2	+ ⊙ 2Cs
MAR. 7	18	IM117	-31.0	E	10.0	1.0	1	+ ⊙ 1Cs
MAR. 8	09	IM113	-36.5	ESE	8.5	1.0	1	+ ⊙ 1Cs
MAR. 8	12	IM109				2.0	2	+ ⊙ 2Cs
MAR. 8	15	IM105	-32.3	ESE	10.9	2.0	2	+ ⊙ 2Cs
MAR. 8	18	IM96	-33.6	ESE	10.5	.30	3	+ ⊕ 3Cs
MAR. 8	21	IM91	-36.5	ESE	10.6	.30	4	+ ⊕ 4Cs
MAR. 9	09	IM91	-34.0	E	14.3	.05	X	+
MAR. 9	12	IM86	-29.8	ESE	14.9	.05	X	+
MAR. 9	15	IM82	-27.5	ESE	15.3	.05	X	+
MAR. 9	21	IM77	-29.2	E	12.0	.10	X	+
MAR.10	09	IM77	-30.0	E	10.6	.30	9	+ ⊕ 9Cs
MAR.10	12	IM70	-28.0	ESE	12.3	.50	8	+ ⊕ 8Cs
MAR.10	15	IM63'	-26.1	ESE	11.2	1.0	3	+ ⊕ 3Cs
MAR.10	18	IM52	-29.0	E	10.5	1.0	8	+ ⊕ 8Cs
MAR.10	21	IM47	-31.5	E	8.7	1.0	10	+ ⊕ 10As
MAR.11	09	IM47	-31.5	E	11.9	.50	2	+ ⊙ 2Cs
MAR.11	12	IM40	-29.5	ESE	12.2	.50	3	+ ⊕ 3Ci
MAR.11	15	IM37'	-26.0	E	11.5	1.0	1	+ ⊙ 1Cs
MAR.11	18	IM28	-29.5	E	10.6	3.0	1	+ ⊙ 3Cs
MAR.11	21	IM24	-33.0	E	6.7	5.0	0+	+ ⊙ 0+Cs
MAR.12	09	IM24	-32.0	E	7.1	10.	0	+ ⊙
MAR.12	12	IM18	-27.5	E	6.1	10.	1	⊙ 1Cs
MAR.12	15	IM11	-26.8	ENE	4.8	10.	0+	⊙ 0+Cs

Table III-3. Surface meteorological data along Route S-H-Z during 21 March - 1 April 1985.

Date	LT	Station	Ta	WD	WS	V	N	W
MAR.21	09	Z84	-30.7	E	7.3	10.	9	+ ⊙
MAR.21	15	Z32	-23.7	E	8.9	10.	10-	+ ⊕ 1Ac 10-Cs
MAR.22	09	S122	-18.7	E	8.9	10.	10-	+ ⊙ 10-As
MAR.22	15	H204	-15.5	ENE	8.8	10.	10	+ ⊕ 2Ac 10Cs
MAR.23	08	H130	-16.7	ENE	5.3	5.0	10	* 2Ac 10Cs
MAR.23	15	S30	-13.0	E	3.3	10.	10	*
MAR.26	15	S16						*
MAR.27	09	S16	-12.5	WSW	2.1	5.0	9	* 1Cu 9As
MAR.27	12	S16						+

Date	LT	Station	Ta	WD	WS	V	N	W
MAR.27	18	S30						+
MAR.29	09	S30				2.0	1	+ ○ 1Ac
MAR.29	15	H136	-25.0	ENE	11.3	10.	1	+ ○ 1Ac
MAR.30	09	H200	-32.0	E	9.3	10.		+ ○
MAR.30	18	H260						+ ○
MAR.31	09	H260	-39.0	ESE	13.5	.20	1	+ ○
MAR.31	15	Z13	-39.8	E	10.5	.20		+
APR. 1	09	Z33	-42.5	E	14.2	.20	1	+ ○

Table III-4. Surface meteorological data along Route S-H-Z during 5 to 30 August 1985.

Date	LT	Station	Ta	WD	WS	V	N	W
AUG. 5	15	T18	-22.8		5.0	40.		⊕
AUG. 5	21	S18	-27.6		8.0	1.0		○
AUG. 6	08	S18	-26.2	E	8.0	.10		+
AUG. 6	15	S25	-28.0	E	8.0	.08		+
AUG. 6	21	H3	-30.6		6.0	.50		+
AUG. 7	08	H3	-32.0	E	6.0	2.0		○
AUG. 7	15	H80	-33.7	E	7.0	.50		+
AUG. 7	21	H98	-33.6		10.0	.20		+
AUG. 8	08	H98	-33.0	E	10.0	.20		+
AUG. 8	15	H145	-36.0	E	8.0	.40		+
AUG. 8	21	H164	-39.2		5.0	.80		+
AUG. 9	08	H164	-39.4	ENE	5.0	.50		+
AUG. 9	15	H219	-39.8	ENE	5.0	2.0		○
AUG. 9	21	H235	-40.6		5.0	1.0		○
AUG.10	08	H235	-39.0	E	4.0	1.0		⊕
AUG.10	15	H284	-44.2	E	7.0	.20		+
AUG.10	21	H297	-42.5		7.0	.10		+
AUG.11	08	H297	-41.7	E	7.0	.08		+
AUG.11	15	Z11	-42.2	E	8.0	.08		+
AUG.11	21	Z16	-42.3		7.0	.05		+
AUG.12	08	Z16	-39.0	E	12.0	.05		+
AUG.12	15	Z23.5	-37.5	ENE	14.0	.04		+
AUG.12	21	Z23.5	-30.8		14.0	.02		⊕+
AUG.13	08	Z23.5	-25.6	ENE	13.0	.01		⊕+
AUG.13	15	Z23.5	-27.8	NE	8.0	.01		⊕+
AUG.13	21	Z23.5	-31.5	ENE	5.0	.08		+
AUG.14	08	Z23.5	-41.8	E	3.0	10.		⊕
AUG.14	15	Z47	-45.2	E	6.0	25.		○
AUG.14	21	Z77.5	-46.9		9.0	.30		+
AUG.15	08	Z77.5	-49.1	ENE	9.0	.08		+
AUG.15	15	Z77.5	-49.7	ENE	8.0	.10		+
AUG.15	21	Z77.5	-50.0		10.0	.10		+
AUG.16	08	Z77.5	-49.0	E	10.0	.05		+
AUG.16	15	Z77.5	-47.2	E	14.0	.05		+
AUG.16	21	Z77.5	-48.0		13.0	.04		+
AUG.17	08	Z77.5	-49.5	E	9.0	.08		+

Date	LT	Station	Ta	WD	WS	V	N	W
AUG.17	15	Z77.5	-49.8	ENE	8.0	.15		+
AUG.17	21	Z77.5	-52.0		8.0	.20		+
AUG.18	08	Z77.5	-49.2	ENE	5.0	.30		+
AUG.18	15	Z95	-42.5	E	8.0	.20		+

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AUG.22	15	Z81.5	-42.3	E	11.0	.20		+
AUG.22	21	Z56	-46.8		10.0	.15		+
AUG.23	08	Z56	-47.1	E	7.0	.30		+
AUG.23	15	Z21.5	-41.2	E	5.0	.70		+
AUG.23	21	Z6	-44.9		8.0	.50		+
AUG.24	08	Z6	-44.4	E	9.0	.20		+
AUG.24	15	H269	-39.0	E	8.0	.40		+
AUG.24	21	H240	-38.5		6.0	.50		+
AUG.25	08	H240	-38.2	E	7.0	.40		+
AUG.25	15	H185	-36.1	E	5.0	20.		○
AUG.25	21	H150	-38.4		6.0	20.		○
AUG.26	08	H150	-39.9	E	7.0	1.0		○
AUG.26	15	H117	-33.2	E	8.0	10.		○
AUG.26	21	H97	-32.1		10.0	.50		+
AUG.27	08	H97	-34.1	E	7.0	2.0		○
AUG.27	15	H15	-29.3	E	7.0	20.		○
AUG.27	21	S25	-29.3		9.0	10.		○
AUG.28	08	S25	-22.3	ENE	10.0	.15		+
AUG.28	15	S25	-17.4	ENE	17.0	.01		⊕+
AUG.28	21	S25	-14.1		16.0	.03		⊕+
AUG.29	08	S25	-14.2	ENE	15.0	.08		⊕+
AUG.29	15	S25	-12.3	ENE	19.0			⊕+
AUG.29	21	S25	-15.8		16.0	.08		⊕+
AUG.30	08	S25	-27.4	ENE	4.0	1.0		⊕

Table III-5. Surface meteorological data along Route IM during 27 September - 14 October 1985.

Date	LT	Station	Ta	WD	WS	V	N	W
SEP.27	15	IM5	-33.6	E	8.9	1.0	10	+ ⊕ 10Cs
SEP.27	20	IM13	-38.5	E	8.5	1.0	10	⊕ 10Cs
SEP.28	07	IM13	-43.4		7.8			
SEP.28	09	IM13	-40.7	E	8.2	5.0	0+	○ 0+Cs
SEP.28	12	IM20		ESE		20.	0	○
SEP.28	15	IM24	-38.8	ESE	4.9	30.	1	○ 1Ci
SEP.28	18	IM30	-43.5	ESE	7.4	30.	0+	○ 0+Ci
SEP.29	09	IM31				.30	10	+ ⊕ 10Cs
SEP.29	11	IM36'	-42.3	ESE	9.6	.50	8	+ ⊕ 8Ci
SEP.30	09	IM40	-42.2	SE	10.2	1.0	0	+ ○
SEP.30	14	IM40				.20	0	+ ○
SEP.30	14	IM46	-40.8	ESE	10.2	.40	0	+ ○
SEP.30	18	IM47'	-42.7	SE	11.7	.10	0	+ ○

Date	LT	Station	Ta	WD	WS	V	N	W
OCT. 1	09	IM47'	-43.2	ESE	18.2	.02	X	☼☼
OCT. 1	12	IM47'	-41.0	E	16.4	.01	X	☼☼
OCT. 1	15	IM47'	-38.2	E	14.4	.03	X	☼☼
OCT. 1	18	IM47'	-35.5	E	13.9	.03	X	☼☼
OCT. 1	21	IM47'	-36.0	E	13.8	.02	X	☼
OCT. 2	06	IM47'	-36.0	E	12.2	.05	X	☼
OCT. 2	09	IM47'	-36.0	E	12.8	.03	X	☼
OCT. 2	12	IM47'	-35.0	E	13.2	.07	X	☼
OCT. 2	15	IM47'	-35.0	E	11.8	.10	0	☼○
OCT. 2	18	IM47'	-39.3	ESE	14.7	.10	0	☼○
OCT. 2	21	IM47'	-40.7	ESE	12.8	.10	0	☼○
OCT. 3	07	IM47'	-39.0		12.8			
OCT. 3	09	IM47'	-38.0	ESE	13.5		0	☼○
OCT. 3	12	IM47'				.10	0	☼○
OCT. 3	15	IM55	-31.1	E	10.0	.05	10	☼⊕ 10Cs
OCT. 3	18	IM57'	-33.7	ESE	8.2	.50	10	☼⊗ 10As
OCT. 3	21	IM57'	-36.5	E	7.5	.50	10	☼⊗ 10As
OCT. 4	07	IM57'	-39.6					
OCT. 4	09	IM57'	-38.0	E	10.7	.50	7	☼⊕ 3Ac 4Cc
OCT. 4	12	IM63	-36.0	E	11.1	.80	8	☼⊕ 8Ci
OCT. 4	15	IM69	-35.8	ESE	9.8	2.0	5	☼⊕ 5Ci
OCT. 4	18	IM75				1.0	8	☼⊕ 3Ac 5Ci
OCT. 5	09	IM77'	-39.5	ESE	12.1	2.0	10-	☼⊕ 10-Ci
OCT. 5	12	IM83	-35.2	ESE	12.6	2.0	10-	☼⊕ 10-Ci
OCT. 5	15	IM89	-35.5	ESE	11.6	2.0	10-	☼⊕ 10-Ci
OCT. 5	21	IM95	-41.3	ESE	10.3	2.0	3	☼⊕ 3Ci
OCT. 6	07	IM95	-43.3		13.0	1.0	0	☼○
OCT. 6	09	IM95	-40.5	ESE	9.6	1.0	0	☼○
OCT. 6	12	IM102	-36.5	ESE	11.3	1.0	2	☼○ 2Cs
OCT. 6	15	IM108	-37.0	ESE	7.2	3.0	1	☼○ 1Cs
OCT. 6	18	IM113	-39.9	ESE	8.9	2.0	2	☼○ 2Cs
OCT. 6	21	IM113	-42.2	ESE	7.8	3.0	0	☼○
OCT. 7	07	IM113	-45.0		7.4			
OCT. 7	09	IM113	-42.2	ESE	8.9	2.0	0	☼○
OCT. 7	12	IM118	-38.5	ESE	9.5	2.0	0	☼○
OCT. 7	15	IM123	-39.0	ESE	8.8	5.0	0+	☼○ 0+Ci
OCT. 7	18	IM127	-42.0	ESE	10.2	5.0	0+	☼○ 0+Cs
OCT. 7	21	IM127	-45.0		9.3	3.0	0	☼○
OCT. 8	09	IM127	-45.2	ESE	11.0	.50	0	☼○
OCT. 8	12	IM132'	-42.0	ESE	10.1	.50	0	☼○
OCT. 8	15	IM137	-41.0	ESE	8.0	1.0	0	☼○
OCT. 8	21	IM145	-47.2	ESE	7.9	2.0	0	☼○
OCT. 9	09	IM145	-46.9	SE	7.9	2.0	0	☼○
OCT. 9	12	IM149	-43.2	SE	8.6	2.0	1	☼○ 1Ci
OCT. 9	15	IM157	-43.1	SE	6.9	10.	1	☼○ 1Ci
OCT. 9	18	IM160	-46.5	SE	6.5	20.	0	☼○
OCT. 9	21	IM164	-51.1	ESE	6.1	20.	0	☼○
OCT.10	09	IM164	-50.2	ESE	7.7	1.0	10	☼⊕ 10Cs
OCT.10	12	IM164	-46.5	ESE	7.4	1.0	0	☼
OCT.10	15	IM169	-45.2	ESE	8.6	1.0	1	☼
OCT.10	18	IM176	-47.8	E	7.3	1.0	10-	☼⊕ 10-Ci

Date	LT	Station	Ta	WD	WS	V	N	W
OCT.10	21	IM179	-51.3	E	8.5	2.0	10-	⊕ ⊕ 10-Cs
OCT.11	09	IM179	-49.7	ESE	8.4	1.0	10-	⊕ ⊕ 10-Cs
OCT.11	12	IM180	-46.0	ESE	8.5	1.0	2	↔ ⊕ 2Cs
OCT.11	15	IM185	-45.0	ESE	8.2	1.0	1	↔ ⊕ 1Cs
OCT.11	18	IM193'	-47.2	E	8.7	2.0	1	⊕ ⊙ 1Cs
OCT.12	09	IM198	-47.8	ESE	11.4	.30	8	⊕ ⊕ 8Cs
OCT.12	12	IM200	-44.6	ESE	12.1	.10	10	⊕ ⊕ 10Cs
OCT.12	15	IM205	-42.8	ESE	11.1	.30	10	⊕ ⊕ 10Cs
OCT.12	18	IM211	-45.0	ESE	9.9	.30	10	⊕ ⊕ 10Cs
OCT.12	21	IM215	-47.6	ESE	7.6	.30	10	⊕ ⊕ 10Cs
OCT.13	09	IM215	-49.0	ESE	8.8	1.0	0	⊕ ⊙
OCT.13	12	IM217	-45.2	ESE	5.4	10.	0	⊙
OCT.13	15	IM222	-44.0	E	6.0	20.	0	⊙
OCT.13	18	IM229	-47.0	ESE	4.4	30.	0+	⊙ 0+Cs
OCT.13	21	IM232	-53.2	ESE	4.4	30.	1	⊙ 1Cs
OCT.14	09	IM232	-48.2	ESE	5.3	10.	2	⊙ 2Cs
OCT.14	12	IM235'	-43.2	E	6.9	10.	10	⊕ 10Cs
OCT.14	15	IM242	-42.9	ESE	5.7	15.	3	⊕ 3Cs
OCT.14	18	IM251	-45.5	ESE	6.8	20.	3	⊕ 3Cs

Table III-6. Surface meteorological data along Route S-H-Z during 27 October - 6 November 1985.

Date	LT	Station	Ta	WD	WS	V	N	W
OCT.27	15	S16	-12.7	ENE	13.0	10.	10-	⊕ ⊕ 0+Ac 10-Ci
OCT.27	20	H34	-22.3	ENE	10.0	5.0	0+	⊕ ⊙ 0+Ac 0+Ci
OCT.28	08	H34	-19.7	ENE	13.0	.50	5	⊕ ⊕ 5Ci
OCT.28	14	H144	-18.1	ENE	12.0	1.0	2	⊕ ⊙ 2Ci
OCT.28	20	H227	-25.1	E	9.0	2.0	0+	⊕ ⊙ 0+Ci
OCT.29	07	H227	-27.5	E	9.0	1.0	2	⊕ ⊙ 2Ci
OCT.29	14	Z6	-23.7	E	11.0	20.	0+	⊕ ⊙ 0+Ci
OCT.29	20	Z42	-31.3	E	7.0	50.	0+	⊙ 0+Ci
OCT.30	07	Z42	-35.0	E	10.0	1.0	0+	⊕ ⊙ 0+Ci
OCT.30	12	Z80	-28.3	ENE	10.0	20.	0+	⊕ ⊙ 0+Ci

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NOV. 3	15	Z77	-27.3	NE	5.0	50.	0+	⊙ 0+Ci
NOV. 3	22	Z22	-33.5	ENE	7.0	50.	7	⊕ 7Ci
NOV. 4	07	Z22	-31.3	ENE	9.0	15.	10-	⊕ ⊕ 0+Ac 8Ci 10-Cs
NOV. 4	15	H266	-21.6	NNE	8.0	20.	10	⊕ 10Cs
NOV. 4	22	H154	-22.3	ENE	8.0	.30	10	⊕ ⊕ 10As
NOV. 5	07	H154	-24.5	E	6.0	5.0	10	⊕ ⊕ 1As 10Cs
NOV. 5	15	H50	-17.8	NE	7.0	50.	5	⊕ ⊕ 2Cu 4Ci
NOV. 5	19	S16	-15.6	NE	5.0	15.	3	↔ 1St 0+Cb 1Cu 3Ci
NOV. 6	08	S16	-14.0	ENE	6.0	15.	10	⊙ 0+Sc 10Ac

Table III-7. Surface meteorological data along Route ID-DF during
9 November - 25 December 1985.

Date	LT	Station	Ta	WD	WS	V	N	W	
NOV. 9	15	ID5	-34.5	ENE	2.8	30.	6	⊕	6Ci
NOV. 9	18	ID12	-35.9	E	3.4	30.	9	⊕	9Cs/Ci
NOV.10	09	ID16'	-36.7	E	5.7	5.0	9	⊕ ⊕	9Cs/Ci
NOV.10	12	ID21'	-33.5	E	4.3	5.0	10-	*	10-Cs/Ci
NOV.10	15	ID25'	-33.0	E	5.4	10.	8	⊕	8Cs/Ci
NOV.10	18	ID33'	-35.2	ESE	4.2	5.0	8	⊕ ⊕	8Cs/Ci
NOV.10	21	ID38'	-40.7	E	4.4	30.	6	⊕	6Ci
NOV.11	09	ID38'	-31.0	E	9.7	.20	10-	**+	10-Cs
NOV.11	12	ID39'	-29.2	E	10.0	.10	10-	**+	
NOV.11	15	ID41'	-27.8	ENE	9.8	.20	10-	**+	
NOV.11	21	ID43	-31.9	E	7.5	.40	9	⊕	9Cs/Ci
NOV.12	09	ID43	-33.7	E	5.2	10.	9	⊕	9Cs/Ci
NOV.12	15	ID43	-29.0	ENE	6.4	5.0	10-	⊕ ⊕	10-Cs/Ci
NOV.12	18	ID43	-34.2	ENE	4.6	10.	10-	⊕ ⊕	10-Cs
NOV.12	21	ID43	-38.9	E	3.8	30.	9	* ⊕	9Cs/Ci
NOV.13	09	ID43	-36.0	SE	6.6	5.0	7	+ ⊕	7Ci
NOV.13	12	ID45	-34.3	ESE	7.5	5.0	7	+ ⊕ ⊕	7Ci/Cs
NOV.13	15	ID47	-32.7	E	7.4	5.0	8	+ ⊕	8Ci/Cs
NOV.13	18	ID52	-35.2	E	6.9	5.0	9	+ ⊕	9Ci/Cs
NOV.14	09	ID56	-33.6	ENE	7.7	.50	10-	**+ ⊕	10-Cs
NOV.14	12	ID58'	-31.5	ENE	7.8	1.5	10-	**+ ⊕	10-Cs
NOV.14	15	ID62	-30.1	NE	5.9	10.	10-	* ⊕	10-Cs
NOV.14	18	ID66'	-31.9	ENE	4.0	10.	10-	* ⊕	10-Cs
NOV.15	09	ID71	-37.9			10.	9	* ⊕	9Cs/Ci
NOV.15	12	ID75	-33.7	Calm		30.	8	* ⊕	8Cs/Ci
NOV.15	15	ID79'	-29.8	Calm		30.	7	* ⊕	7Cs/Ci
NOV.15	18	ID85	-37.7	Calm		30.	6	* ⊕	6Cs/Ci
NOV.15	21	ID89	-42.9	Calm		30.	1	○	0+As 0+Ci
NOV.16	09	ID89	-43.8	SSE	3.0	30.	0+	○	0+As 0+Ci
NOV.16	12	ID92'	-38.7	SSE	2.6	30.	0+	○	0+Ci
NOV.16	15	ID97	-37.7	SE	2.2	30.	1	○	1Ci
NOV.17	09	ID99	-44.7	ESE	4.5	30.	0+	○	0+Ci
NOV.17	15	ID99	-38.9	ESE	4.3	30.	0	○	
NOV.17	21	ID99	-46.3	E	3.6	30.	0	○	
NOV.18	09	ID99	-40.7	E	4.9	30.	6	⊕	6Ci
NOV.18	12	ID103	-37.7	ENE	5.3	5.0	6	* ⊕	6Ci/Cs
NOV.18	15	ID107'	-34.3	NE	5.9	5.0	9	* ⊕	9Ci/Cs
NOV.18	18	ID113'	-36.7	ENE	3.2	5.0	8	* ⊕	8Ci/Cs
NOV.19	09	ID113'	-39.5			10.	8	⊕ ⊕	8Ci/Cs
NOV.19	12	ID113'	-33.5	ENE	1.5	30.	7	⊕	7Ci/Cs
NOV.19	15	ID113'	-34.3	ENE	2.1	30.	9	⊕ ⊕	9Ci/Cs
NOV.19	18	ID113'	-37.3	ESE	1.8	10.	9	⊕ ⊕	9Ci/Cs
NOV.19	21	ID113'	-42.7	Calm		10.	9	⊕	9Ci/Cs
NOV.20	09	ID113'	-35.7	E	5.3	10.	10-	⊕ ⊕	10-Cs
NOV.20	12	ID117'	-33.9	ENE	5.7	5.0	10	⊕	10Cs
NOV.20	15	ID122	-32.9	ENE	5.2	30.	10	* ⊕	10Cs
NOV.20	18	ID127	-34.5	ENE	3.4	30.	10	⊕ ⊕	10Cs
NOV.21	09	ID132	-35.5	ENE	2.6	10.	9	⊕ ⊕	9Ci/Cs
NOV.21	12	ID135'	-32.5	NE	3.3	30.	9	⊕ ⊕	9Ci/Cs

Date	LT	Station	Ta	WD	WS	V	N	W	
NOV.21	15	ID140	-32.7	N	3.9	10.	10	⊕ ⊕	10Cs
NOV.21	18	ID145'	-33.7	N	3.0	10.	10-	* ⊕	10-Cs
NOV.22	09	ID150	-39.3	NNW	3.0	10.	7	⊕	7Ci
NOV.22	12	ID153	-34.1	NNW	3.7	30.	2	○	2Ci
NOV.22	15	ID155	-33.8	NW	4.2	30.	6	⊕	6Ci
NOV.23	09	ID155	-40.0			5.0	10-	* ⊕	10-Cs
NOV.23	12	DF4	-36.8	WNW	2.7	30.	3	⊕	3Ci
NOV.23	15	DF11	-32.0	WNW	2.8	30.	8	* ⊕	8Ci/Cs
NOV.23	18	DF18	-37.7	NW	1.6	30.	8	* ⊕	8Ci/Cs
NOV.24	09	DF25	-40.7	NW	2.5	10.	6	*	6Ci
NOV.24	12	DF30	-36.5	WNW	4.0	30.	7	* ⊕	7Ci/Cs
NOV.24	15	DF37	-34.7	W	3.7	30.	7	⊕	7Ci
NOV.24	18	DF44	-37.7	NW	1.5	10.	6	*	1St 6Ci
NOV.25	09	DF50	-39.8	W	1.3	30.	1	○	1St 1Ci
NOV.25	15	DF53	-34.8	NW	3.1	30.	1	○	1Ci
NOV.26	09	DF63	-36.7	WNW	3.2	30.	5	⊕	5Ci
NOV.26	15	DF72	-34.0	WNW		30.	1	○	0+Ac 1Ci
NOV.27	12	DF72	-35.7	W	1.6	30.	0+	○	0+Ci
NOV.27	15	DF72	-32.0	WNW	1.3	30.	0+	○	0+Ci
NOV.27	21	DF80	-44.3	NNW	1.6	10.	3	*	1St 1Ac 2Ci
NOV.28	12	DF80	-35.9	WNW	3.7	30.	3	⊕	3Ci
NOV.28	15	DF87	-31.5	NW	3.2	30.	2	*	2Ci
NOV.28	18	DF96	-35.7	NNW	2.2	30.	3	⊕	3Ci
NOV.29	09	DF104	-38.9	NNW	2.8	10.	8	⊕ ⊕	8Ci/Cs
NOV.29	12	DF110	-32.5	NW	4.0	10.	9	* ⊕	9Ci/Cs
NOV.29	15	DF117	-31.7	NW	4.6	30.	7	* ⊕	7Ci/Cs
NOV.29	18	DF125	-34.7	NNW	2.5	30.	7	* ⊕	7Ci/Cs
NOV.30	09	DF132	-36.6	N	3.7	30.	1	○	1Ci
NOV.30	12	DF137	-35.0	NNW	3.4	30.	2	○	2Ci
NOV.30	15	DF142	-31.0	N	2.8	30.	7	⊕	0+Ac 7Ci
NOV.30	18	DF148	-34.1	N	2.1	30.	8	*	0+Ac 8Ci/Cs
DEC. 1	12	ID155	-33.2	NNE	5.6	5.0	10-	* ⊕	10-Ci/Cs
DEC. 1	15	ID155	-32.3	NNE	6.2	10.	10	* ⊕	10Ci/Cs
DEC. 1	18	ID155	-32.7	N	5.1	10.	10	* ⊕	10Ci/Cs
DEC. 1	21	ID155	-36.8	NNE	4.0	10.	10-	* ⊕	10Ci/Cs
DEC. 2	09	ID155	-35.7	NNW	5.0	10.	10	*	1As 10Ci/Cs
DEC. 2	12	ID155	-31.0	NW	5.8	10.	10	*	1As 10Ci/Cs
DEC. 2	15	ID155	-31.0	NNW	6.6	10.	10-	* ⊕	10-Cs
DEC. 2	21	ID155	-37.9	NNE	2.2	10.	9	* ⊕	9Ci/Cs
DEC. 3	09	ID155	-37.5	NNE	3.0	10.	8	* ⊕	8Ci/Cs
DEC. 3	21	ID155	-38.7	NE	4.2	10.	8	* ⊕	8Ci/Cs
DEC. 4	12	ID155	-33.3	NE	8.6	1.0	10	* ⊕	10Ci/Cs
DEC. 4	21	ID155	-34.7	NNE	7.0	1.0	10	* ⊕	10Ci/Cs
DEC. 5	09	ID155	-32.7	NE	6.2	1.0	10	* ⊕	10Ci/Cs
DEC. 5	21	ID155	-36.7	NE	2.4	10.	9	* ⊕	9Ci/Cs
DEC. 6	09	ID155	-34.2	ENE	3.4	30.	9	* ⊕	9Ci/Cs
DEC. 6	12	ID155	-32.0	NE	4.8	30.	8	* ⊕	8Ci/Cs
DEC. 6	15	ID155	-31.5	NE	4.5	30.	7	*	7Ci/Cs
DEC. 6	21	ID155	-37.5	E	2.6	30.	2	○	2Ci
DEC. 7	09	ID155	-35.4	ENE	4.3	30.	7	* ⊕	6Cs 1Ci
DEC. 7	15	ID155	-31.6	ENE	5.7	30.	1	* ⊕	1Ci

Date	LT	Station	Ta	WD	WS	V	N	W
DEC. 8	09	ID155	-35.7	NE	4.0	10.	8	*⊕ 8Ci/Cs
DEC. 8	15	ID155	-30.8	NNE	4.4	30.	7	*⊕ 7Ci/Cs
DEC. 9	09	ID155	-36.0			10.	3	⊕ 3Ci
DEC. 9	12	ID159	-31.2	NNW	2.3	30.	8	*⊕ 8Ci/Cs
DEC. 9	15	ID165	-29.7	NNW	4.8	30.	7	*⊕ 7Ci/Cs
DEC. 9	18	ID171	-31.2	N	2.4	30.	0+	++ 0+Ci
DEC.10	09	ID178	-33.0	NE	4.6	30.	6	* 6Ci/Cs
DEC.10	12	ID184	-31.0	NE	7.0	30.	6	* 6Ci/Cs
DEC.10	15	ID190	-28.3	NE	7.4	10.	9	+ ⊕⊕ 9Ci/Cs
DEC.10	18	ID198	-30.2	NE	7.6	10.	4	+ ⊕ 4Ci/Cs
DEC.11	15	ID205	-29.0	N	6.8	30.	1	⊙ 1Ci
DEC.11	18	ID205	-29.3	N	5.6	30.	1	⊙ 1Ci
DEC.12	09	ID205	-32.3	NNW	1.2	30.	1	⊙ 0+Ac 1Ci
DEC.12	12	ID210	-27.4	Calm		30.	4	+ ⊕ 0+Ac 3Cs 1Ci
DEC.12	15	ID216	-28.0	S	1.2	30.	1	⊙ 0+Ac 1Ci
DEC.12	18	ID225	-28.3	SSE	1.8	30.	1	⊙ 1Ci
DEC.13	09	ID232	-32.0	SE		30.	1	⊙ 1Ci
DEC.13	12	ID237	-28.2	SE	5.4	30.	1	⊙ 1Ci
DEC.13	15	ID243	-27.0	SE	5.0	30.	1	⊙ 0+Ac 0+Ci
DEC.13	18	ID250	-26.5	SE	6.2	30.	0+	⊙ 0+Ci
DEC.14	15	ID259	-27.3	ENE	1.9	30.	8	⊕ 8Ci/Cs
DEC.15	09	ID259	-33.2	E	1.0	30.	9	* 9Ci/Cs
DEC.15	15	ID259	-29.3	NE	3.4	30.	8	* ⊕ 8Ci/Cs
DEC.16	09	ID259	-35.2	ESE	2.6	30.	0+	⊙ 0+Ci
DEC.16	12	ID264	-31.2	ESE	3.8	30.	0+	⊙ 0+Ci
DEC.16	15	ID270	-30.2	ESE	4.9	30.	1	⊙ 1Cu
DEC.16	18	ID277	-30.2	ESE	6.4	30.	0+	⊙ 0+Cu
DEC.16	21	ID283	-32.2	SE	3.8	30.	0	⊙
DEC.17	09	ID283	-32.7	E	7.8	5.0	0	+ ⊙
DEC.17	12	ID288	-28.3	ESE	9.1	1.5	1	+ ⊙ 1Ci
DEC.17	15	ID294	-26.3	E	10.8	1.5	7	+ ⊕ 7Ci
DEC.17	18	ID300	-24.4	E	9.7	1.0	9	*+ ⊕ 9Ci/Cs
DEC.18	09	ID303	-23.5	ENE	10.8	.30	10	*+ 10Cs
DEC.18	12	ID303	-22.2	ENE	11.8	.20	10	*+ 10Cs
DEC.18	15	ID303	-22.4	NE	10.9	.20	10	*+ 10Cs
DEC.18	18	ID303	-23.2	NE	9.4	.50	10-	+ ⊕ 2Cu 9Ci/Cs
DEC.18	23	ID303	-27.1	E	7.0	1.0	10-	⊕⊕ 2Ac 9Ci/Cs
DEC.19	09	ID303	-23.8	NE	7.1	1.0	10	+ ⊕⊕ 10Ci/Cs
DEC.19	12	ID307	-21.2	NE	8.4	.50	10	*+ ⊕ 10Ci/Cs
DEC.19	15	ID312	-22.6	NE	8.2	.50	10	*+ ⊕ 10Ci/Cs
DEC.19	21	ID315	-25.4	ENE	5.0	5.0	9	*+ ⊕ 2St 8Ci/Cs
DEC.20	09	ID315	-23.2	ENE	8.0	.80	10	*+ ⊕ 10Cs
DEC.20	12	ID315	-23.7	ENE	7.4		10	*+ ⊕ 2Cu 10Ci/Cs
DEC.20	15	ID320	-24.0	E	8.6	5.0	8	+ ⊕ 1Cu 2Ci 6Cs
DEC.20	18	ID325	-24.9	ESE	9.1	3.0	3	+ ⊕ 1As 3Ci
DEC.20	21	ID331	-27.8	ESE	4.7	30.	6	⊕ 6Ci
DEC.21	09	ID331	-28.0	ESE	7.7	5.0	1	+ ⊙ 0+Ci
DEC.21	12	ID336	-25.3	ESE	10.4	3.0	0+	+ ⊙ 0+Ci
DEC.21	15	ID341	-23.2	ESE	8.5	3.0	0+	+ ⊙ 0+Ci
DEC.21	18	ID347	-23.2	E	7.0	5.0	1	+ ⊙ 1Ci
DEC.21	21	ID352	-25.9	ESE	6.0	30.	0+	+ ⊙ 0+Ci

Date	LT	Station	Ta	WD	WS	V	N	W
DEC.22	09	ID352	-27.3	ESE	7.8	10.	7	+ ⊕ 1Ac 7Ci
DEC.22	12	ID356	-25.4	ESE	8.4	30.	5	+ ⊕ 5Ci/Cs
DEC.22	15	ID360	-23.8	ESE	7.5	30.	6	+ ⊕ 6Ci
DEC.22	21	ID360	-26.2	ESE	6.0	30.	1	○ 1Ci
DEC.23	09	ID360	-28.3	ESE	8.0	30.	0+	+ ○ 0+Ac 0+Ci
DEC.23	12	ID360	-25.3	ESE	8.8	10.	0+	+ ○ 0+Ci
DEC.23	15	ID365	-24.2	ESE	9.2	10.	1	+ ○ 0+Ci
DEC.23	18	ID372	-25.2	ESE	10.0	10.	0+	+ ○ 0+Ci
DEC.24	09	ID378	-28.5	ESE	5.6	30.	0+	○ 0+Ci
DEC.24	12	ID383	-26.5	E	8.0	30.	0+	○ 0+Ci
DEC.24	15	ID390	-24.4	ESE	7.2	30.	0+	+ ○ 0+Ci
DEC.24	18	ID396	-24.7	E	7.2	30.	0+	+ ○ 0+Ci
DEC.25	09	ID402	-25.8	E	9.5	.70	9	+ ⊕ ⊕ 9Ci/Cs
DEC.25	12	ID406	-23.8	E	8.8	1.0	10	*+ ⊕ 10Ci/Cs

Table III-8. Surface meteorological data along Route IM-Z-H-S during 3 January to 3 February 1986.

Date	LT	Station	Ta	WD	WS	V	N	W
1986								
JAN. 3	15	IM242	-22.0	ENE	9.3	.50	8	+ ⊕ 8Cs
JAN. 4	15	IM213	-20.0	E	9.4	2.0	10	*+ 3Cu 7Cs
JAN. 4	21	IM196	-24.0	E	3.6	30.	6	* 6Ci
JAN. 5	09	IM196	-22.7	E	12.0	.30	10	*+ 10Cs
JAN. 5	15	IM184	-20.5	E	12.3	.50	3	+ ⊕ 1Cc 2Cs
JAN. 6	15	IM157	-20.2	E	11.6	1.0	1	+ ○ 1Cs
JAN. 7	09	IM157	-24.2	E	8.8	2.0	7	+ ⊕ 7Cc
JAN. 7	15	IM145	-20.7	ESE	10.3	3.0	0	+ ○
JAN. 8	15	IM111	-20.0	E	12.0	.30	X	+
JAN. 8	21	IM97'	-22.2	ESE	11.6	.30	5	+ ⊕ 5As
JAN. 9	09	IM97'	-17.4	E	11.4	.20	10	*+ 10As
JAN. 9	15	IM97'	-14.7	E	12.7	.20	10	*+ 10As
JAN.10	09	IM97'	-17.2	E	19.0	.01	10	*+ 10St
JAN.10	15	IM97'	-14.5	E	16.9	.03	10	*+ 10St
JAN.11	09	IM97'	-15.4	E	14.2	.05	10	+ ⊕ 10As
JAN.11	15	IM97'	-14.0	E	13.8	.10	10	+ ⊕ 5As 5Cs
JAN.12	15	IM97'	-14.2	E	10.6	.50	10	+ ⊕ 10Cs
JAN.13	09	IM80	-14.5	E	13.6	.10	2	+ ○ 2Cs
JAN.13	15	IM66	-10.3	E	10.3	2.0	1	+ ○ 1Cs
JAN.14	15	IM22	-11.0	E	12.3	.50	0	+ ○

Stay at Mizuho Station 15 - 19 January 1986.

JAN.20	15	H206	-10.5	ENE	3.1	30.	0	○
JAN.22	06	S16	-7.6	E	9.0	30.	9	⊙ 9Ac
JAN.23	15	S25	-8.0	ENE	6.7	30.	0+	○ 0+Cs
JAN.24	15	S25	-8.0	NNE	3.5	30.	1	○ 1Ac
JAN.25	15	S25	-8.2	ENE	6.0	30.	1	○ 1Ac
JAN.26	15	S25	-8.0	ENE	8.0	30.	5	+ ⊕ 5Ci

Date	LT	Station	Ta	WD	WS	V	N	W	
JAN.27	15	S25	-9.0	ENE	9.0	5.0	8	+	8Ac
JAN.28	15	S25	-9.0	NE	4.5	30.	2	○	2As 0+Cc
JAN.29	15	S25	-9.0	S	2.8	30.	1	○	1Cc
JAN.30	15	S25	-7.6	ENE	4.9	30.	9	⊕	5Cc 4Cs
FEB. 1	15	S25	-10.2	ENE	10.3	2.0	10	*+	10As
FEB. 2	15	S16	-8.3	ENE	10.4	10.	10	*	10As
FEB. 3	06	S16	-12.5	ENE	10.0	20.	9	+ ⊗	9Ac

Table III-9. Surface meteorological data along Route IR-KR-RY during 8 - 31 January 1986.

Date	LT	Station	Ta	WD	WS	V	N	W	
JAN. 8	15	IR5	-23.1	E	11.6	2.0	0	+ ○	
JAN. 8	18	IR11	-24.1	E	10.4	1.0	0+	+ ○	0+Ac
JAN. 9	09	IR16	-24.2	E	13.0	.10	10-	*+	
JAN. 9	15	IR16	-18.3	ENE	12.9	.10	10	*+	
JAN.10	09	IR16	-18.1	ENE	14.6	.05	10-	*+	
JAN.10	15	IR16	-17.2	ENE	16.2	.05	10-	*+	
JAN.10	21	IR16	-18.8	ENE	11.2	.05	10-	*+	
JAN.11	09	IR16	-15.8	ENE	11.8	.10	10	*+	
JAN.11	15	IR16	-16.8	ENE	9.0	.10	10	*+	
JAN.11	21	IR16	-18.2	E	12.0	.30	10-	*+	10-As
JAN.12	09	IR16	-19.4	E	10.8	.40	9	+ ⊗	8Sc 1Ac
JAN.12	12	IR19	-16.1	E	8.4	.70	10-	*+	
JAN.12	15	IR19'	-17.1	ENE	12.9	.10	10-	*+	
JAN.12	18	IR19'	-17.8	ENE	9.5	.30	10-	+ ⊗	7Sc 1As 6Cs
JAN.12	21	IR19'	-18.9	ENE	9.4	10.	9	+ ⊗	1St 8As/Ac
JAN.13	09	IR19'	-16.9	E	9.6	1.5	9	+ ⊕	2Ac 8Cs/Ci
JAN.13	12	IR26'	-14.6	E	11.5	1.5	10-	*+	10-Ac/As
JAN.13	15	IR32'	-14.2	E	8.9	2.0	3	+ ⊕	1Ac 2Ci
JAN.13	18	IR40'	-13.5	ENE	10.1	3.0	9	+ ⊕	2Ac 8Ci
JAN.14	09	IR50	-15.7	E	12.4	1.2	2	+ ○	2Ci
JAN.14	12	IR54	-14.2	E	13.8	.70	2	+ ○	1Ac 1Ci
JAN.14	15	IR58'	-12.5	ENE	15.2	.70	1	+ ○	0+Ac 0+Ci
JAN.14	18	IR64	-13.2	E	13.8	.50	1	+ ○	1Ac 0+Ci
JAN.15	15	KR73	-14.2	E	9.8	2.0	0+	+ ○	0+Ci
JAN.16	12	KR61	-16.1	ESE	12.0	3.0	1	+ ○	1Ac
JAN.16	15	KR54	-14.1	ESE	10.5	5.0	0+	+ ○	0+Ac
JAN.16	18	KR44	-14.2	ESE	9.1	10.	1	+ ○	0+Ac 0+Ci
JAN.17	09	KR37	-20.6	SE	9.1	10.	1	+ ○	0+Ac 0+Ci
JAN.17	12	KR34	-17.1	ESE	9.1	10.	3	+ ⊕	1Ac 3Ci
JAN.17	15	KR26	-14.2	ESE	9.4	30.	1	+ ○	0+Cu 0+Ac 0+Ci
JAN.17	18	KR20	-13.8	ESE	7.2	30.	0+	○	0+Cu 0+Ac
JAN.18	09	KR10	-16.9	ESE	9.7	30.	0+	○	0+Ac
JAN.18	12	KR5	-13.4	ESE	10.0	30.	0+	○	0+Ac
JAN.18	15	RY135	-11.4	E	7.8	30.	0+	+ ○	0+Cu 0+Ac
JAN.18	21	RY135	-15.1	E	5.1	30.	0+	○	0+Ac
JAN.19	09	RY135	-16.1	ESE	7.3	30.	0+	○	0+Ac 0+Ci
JAN.19	12	RY142	-12.7	ESE	8.0	30.	0+	○	0+Ac 0+Ci

Date	LT	Station	Ta	WD	WS	V	N	W		
JAN.19	15	RY150	-11.1	ESE	6.8	30.	0+	+	○	0+Ac 0+Ci
JAN.21	09	RY155	-16.9	SSE	9.3	30.	0	+	○	
JAN.21	12	RY163	-12.2	SSE	10.2	5.0	0	+	○	
JAN.21	15	RY167	-8.6	SE	8.7	30.	0+	+	○	0+Cu
JAN.21	18	RY176'	-7.0	SE	7.3	30.	0+	○		0+Cu
JAN.23	09	RY185'	-11.1	SE	7.4	30.	3	⊕		3Ci
JAN.23	12	RY187	-8.2	SE	9.6	30.	2	○		2Ci
JAN.23	15	RY190	-7.1	ESE	9.4	30.	2	○		2Ci
JAN.24	12	RY201	-8.2	ESE	7.6	30.	0	○		
JAN.24	15	RY206	-6.5	ESE	7.4	30.	0	○		
JAN.24	18	RY211	-5.2	E	6.6	30.	0	○		
JAN.25	09	RY217	-9.3	ESE	9.8	30.	0	○		
JAN.25	15	RY225'	-7.4	E	9.0	30.	0+	○		0+Ac
JAN.25	18	RY231				30.	0+	○		0+Ac
JAN.25	21	RY239	-11.4	E	5.4	30.	0+	○		0+Ac
JAN.26	09	RY239	-11.8	SE	12.4	.50	0	+	○	
JAN.26	12	RY244	-9.3	ESE	13.0	1.5	0+	+	○	0+Ac
JAN.26	15	RY250'	-8.1	ESE	12.8	3.0	0	+	○	
JAN.27	15	Asuka	-8.9	ESE	12.6	2.0	0+	+	○	0+Cu
JAN.28	15	Asuka	-10.3	E	12.4	5.0	0+	+	○	0+Ac
JAN.29	15	Asuka	-9.5	E	10.4	10.	1	○		1Ac
JAN.30	15	Asuka	-8.9	ESE	16.2	5.0	7	+	⊕	
JAN.31	15	Asuka	-8.6	ESE	16.0	5.0	7	+	⊕	3Ac 5Ci/Cc

IV. Net Accumulation of Snow along Traverse Routes

Observers: JARE-24 Masayoshi NAKAWO and others
JARE-25 Yoshiyuki FUJII and
Kunio KAWADA
JARE-26 Yutaka AGETA and others
JARE-27 Fumihiko NISHIO and others

Net accumulation of snow was measured by the stake method along several traverse routes as shown in Table I-1 and Fig. A. Data at the Advance Camp (100-stake row) will be published as JARE Data Reports (Glaciology 15) in near future.

Condition of snow surface around each stake was observed and classified as follows:

E: Erosional surface consisting of sastrugi, erosional pit or smooth surface.

D: Depositional surface consisting of barchan or dune.

G: Glazed surface consisting of ice crust.

I: Bare ice./ S: Snow surface.

Surface condition which is indicated with 2 letters (for example, DE) means the mixed or intermediate one of those 2 conditions.

1. Route S-H-Z

The stake height of the route was measured several times in 1985, and by JARE-27 in January 1986. The height differences which give approximately the annual net accumulation along the route are tabulated in Table IV-1. The positions of the stations are given by Naruse and Yokoyama (1975).

2. Route IM

Route IM from Mizuho Station was extended to the Advance Camp by JARE-25 in 1984. JARE-26 made two round trips along this route in 1985-1986. All data along Route IM are shown in Table IV-2. The last column of the table give approximately the annual net accumulation for 11-12 months. The position and elevation of the stations are shown in Fujii et al. (1986).

3. Route ID

Since JARE-25 set a route from the Advance Camp to ID 43 in November 1984, net accumulation for about 1 year could be observed by JARE-26 on the way to Dome Fuji in November 1985. Results are shown in Table IV-3. The position and elevation of the stations are shown in Fujii et al.(1986).

4. Route KR

Route KR was set by JARE-24 in December 1983. Net accumulation for about 25 months (2 years including 3 summers) could be observed by JARE-26 on the way to Sør Rondane Mountains from the Advance Camp. Results are shown in Table IV-4. Since stakes could not be found at KR 2, 3, 8, 21 and 22, they are thought to be buried due to heavy snow accumulation. Heights of these stakes which were measured by JARE-24 in December 1983, are shown in parentheses for reference. The position and elevation of the stations are shown in Nakawo et al. (1984).

5. Route RY

Route RY was established by JARE-24 up to RY 185 in November 1983. Net accumulation for about 26 months (2 years including 3 summers) could be observed by JARE-26 on the way to Asuka Camp through Sør Rondane Mountains. Results are shown in Table IV-5. Data shown in parentheses at RY 150 and 151 are the stake heights measured by JARE-24, same as Route KR, such as described above. The position and elevation of the stations are shown in Nakawo et al.(1984).

6. A 100-stake row and a 36-stake farm along Route IM

A 100-stake row was set at 71 (IM80) in October 1984 by JARE-25, and net accumulation was measured by JARE-26 on the way of two round trips from Mizuho Station to the Advance Camp. Direction of this stake row is perpendicular to the prevailing wind direction, and the distance between each stake is 5 m.

Results are shown in Table IV-6. Annual net accumulation could be calculated from these results as shown in the last column of this table.

A 36-stake farm (100m x100m in area) was set at G6 (IM 157) and measured by JARE-26 on the way of two round trips along Route IM. The stakes of this farm are distributed and numbered as same as that of Mizuho Station which is shown in Fig. 1 in the next chapter. Results are shown in Table IV-7 with totals for 11 months.

References

- Fujii, Y., Kawada, K., Yoshida, M. and Shin'ichi Matsumoto (1986): Position, elevation and ice thickness of stations. JARE Data Rep., 116 (Glaciol. 13), 5-27.
- 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.

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

				(cm in depth)	
Station No.	Jan.1985 -Jan.1986 (362days)	Station No.	Jan.1985 -Jan.1986 (362days)	Station No.	Jan.1985 -Jan.1986 (362days)
S16		H136	20.0	Z 2	17.0
17	75.5	140	40.5	4	-4.0
18	86.0	144	45.0	6	9.0
19	84.0	148	20.5	8	5.0
20	164.0	152	31.0	10	16.0
21	4.0	156	21.0	12	0.0
22	127.0	160	18.0	14	64.0
23	106.0	164	58.0	16	-5.0
24	93.0	168	19.0	18	1.0
25	66.0	172	15.0	20	25.0
26	91.0	176	39.0	22	53.0
27	65.0	180	25.0	24	-6.5
28	62.0	184	15.0	26	30.5
29	63.0	188	21.0	28	16.0
30	85.0	192	23.0	30	-0.5
H 3	84.0	196	71.0	32	41.5
9	69.0	200	11.0	34	3.0
15	89.0	204	26.0	36	3.0
21	59.0	208	15.0	38	-4.0
27	79.0	212	33.5	40	-6.0
35	74.0	216	24.0	42	0.0
42	35.5	220	19.5	46	16.0
48	51.0	224	11.0	50	43.0
54	69.5	228	23.5	54	21.5
60	57.0	232	1.5	58	1.5
64	49.0	236	20.0	62	17.0
68	0.5	240	33.5	66	12.0
72	92.0	244	29.0	70	-9.0
76	19.0	248	32.0	72	11.0
80	39.0	252	33.5	74	-4.0
84	21.0	256	52.0	76	28.5
88	65.0	260	61.0	78	22.0
92	50.0	264	32.0	80	-1.5
96	50.0	268	43.0	82	13.0
100	9.0	272	45.0	84	56.0
104	8.0	276	36.0	86	9.5
108	49.0	280	30.0	88	2.0
112	22.0	284	-8.0	90	44.0
116	45.5	288	22.0	92	5.0
120	32.0	293	-4.0	94	15.5
124	22.5	297	-2.0	96	14.0
128	29.5	301	8.0	98	15.0
132	28.5	S122	15.5	100	30.0

Table IV-2. Net accumulation along Route IM in 1984-1986.

		(cm in depth)						
Station No.	Oct.12 -Nov.14 (106-85days)	Jan.26 -Feb. 7	Mar.1 -12 (45-22)	Sep.27 -Oct.14 (199-227)	Jan.3 -14 (109-81)	Jan.-Feb.'85 -Jan.'86 (353-330)		
IM 1	-16.0	E	2.0	E	7.5	E	3.0	12.5
2	-9.5	E	-1.0	E	2.5	E	-6.0	-4.5
3	-7.5	E	0.0	E	-0.5	E	-3.5	-4.0
4	-10.0	E	14.0	E	0.5	E	5.0	19.5
5	-4.5	E	-0.5	E	0.0	E	-3.5	-4.0
6	5.0	E	-1.0	E	4.0	E	6.5	9.5
7	5.5	E	15.5	DE	5.5	E	20.0	41.0
8	-109.5	E	13.0	E	40.0	E	9.0	62.0
9	11.5	E	-5.0	E	2.0	E	13.5	10.5
10	12.5		9.5	E	7.0	E	8.0	24.5
11	8.0	E	0.0	E	0.0	E	13.0	13.0
12	-2.0		-0.5	E	57.5	E	3.5	60.5
13	-8.0	DE	-3.0	E	17.5	E	-1.0	13.5
14	-43.0	DE	13.0	E	31.0	E	-1.5	42.5
15	-6.5	E	1.0	E	0.5	E	12.0	13.5
16	-3.0	E	-2.5	E	0.5	E	-1.5	-3.5
17	-3.0	E	-1.0	E	0.5	E	-0.5	-1.0
18	7.0	E	-18.0	E	0.0	E	-1.0	-19.0
19	2.5	E	11.0	DE	-1.0	E	-2.5	7.5
20	8.5	E	0.0	E	7.0	E	17.5	24.5
21	-5.0	DE	1.0	E	1.0	E	-4.5	-2.5
22	15.0	E	-5.5	E	12.5	E	-6.0	1.0
23	-117.0	E	-1.0	E	7.0	E	8.0	14.0
24	1.0	E	-2.0	E	61.0	E	11.0	70.0
25	-3.0	E	1.0	E	8.5	E	-4.0	5.5
26	-105.5	E	12.0	E	20.0	E	31.0	63.0
27	-4.5	E	-0.5	E	9.0	E	3.5	12.0
28	-4.0	E	0.5	E				
29	-5.0	E	0.5	E	0.5	E	18.0	19.0
30	-1.5	E	9.0	E	18.0	E	-13.0	14.0
31	-3.0	E	0.0	E	0.5	E	17.5	18.0
32	-5.5	DE	13.0	DE	23.5	E	2.0	38.5
33	5.0	DE	-2.0	E	0.0	E	4.0	2.0
34	5.5	E	35.0	DE	-3.5	DE	4.0	35.5
35	-5.0	E	-1.0	E	1.0	E	-1.0	-1.0
36	-3.0	E	-0.5	E	9.0	E	2.5	11.0
37	-5.0	E	0.0	E	1.5	E	-3.5	-2.0
38	-1.5	DE	-1.0	E	29.5	D	0.0	28.5
39	-8.0	E	17.0	E	38.0	D	31.5	86.5
40	11.5	E	11.0	E	98.0	DE	10.0	119.0
41	-7.0	E	-0.5	E	53.5	DE	28.0	81.0
42	-8.5	E	1.5	E	6.5	E	24.5	32.5

(cm in depth)

Station No.	Oct.12 -Nov.14 (106-85days)	Jan.26 -Feb. 7	Mar.1 -12 (45-22)	Sep.27 -Oct.14 (199-227)	Jan.3 -14 (109-81)	Jan.-Feb.'85 -Jan.'86 (353-330)		
IM 43	-5.0	E	2.0	E	0.0	E	6.0	8.0
44	4.0	E	13.5	D	21.0	E	-4.5	30.0
45	2.0	E	14.5	D	44.5	E	10.5	69.5
46	9.5	E	7.5	E	52.0	E	8.0	67.5
47	10.5	E	-0.5	E	74.5	E	-13.0	61.0
48	23.5	E	20.0	E	17.5	E	5.0	42.5
49	1.0	E	10.0	E	0.0	E	-2.5	7.5
50	5.0	E	5.5	E	21.5	E	2.0	29.0
51	25.5	E	-1.5	E	16.0	E	11.0	25.5
52	-8.0	E	0.0	E	16.0	E	-5.0	11.0
53	-5.0	E	22.5	DE	-0.5	E	16.0	38.0
54	-12.0	E	0.0	E	1.0	E	39.0	40.0
55	8.5	E	-2.0	E	22.0	E	6.0	26.0
56	-8.5		-0.5	E	1.0	E	16.5	17.0
57	-1.0	DE	6.5	DE	31.0	E	-0.5	37.0
58	-3.5	E	4.0	E	47.5	D	22.5	74.0
59	14.0	E	-1.5	E	30.5	DE	-16.5	12.5
60	7.0	E	-0.5	E	28.0	E	0.5	28.0
61	-7.5	DE	-0.5	E	18.0	E	17.0	34.5
62	8.0	E	-0.5	E	27.5	E	5.5	32.5
63	-2.5	E	0.5	E	61.5	DE	-7.5	54.5
64	-2.0	E	-1.5	E	1.5	E	-3.0	-3.0
65	-3.0	E	2.5	E	0.5	E	29.5	32.5
66	-4.0	E	-0.5	E	8.5	E	60.5	68.5
67	4.0	E	6.5	E	25.0	E	23.0	54.5
68	-5.0	E	2.0	DE	28.5	DE	22.5	53.0
69	27.0	E	-1.0	E	3.0	E	7.0	9.0
70	-2.0	E	16.5	DE	24.5	E	15.0	56.0
71	-6.0	E	13.0	E	5.0	E	20.0	38.0
72	1.0	E	1.0	E	25.5	E	10.5	37.0
73	8.5	E	0.5	E	39.5	E	-0.5	39.5
74	-3.5	E	2.0	E	54.5	D	-27.0	29.5
75	-4.0	E	-0.5	E	0.5	E	7.5	7.5
76	9.0	E	-0.5	E	29.5	E	4.0	33.0
77	-5.0	E	5.0	E	0.0	E	47.5	52.5
78	-5.0	E	1.0	E	17.0	E	24.5	42.5
79	-5.0	G	1.0	G	1.0	E	-1.0	1.0
80	-1.0	G	0.0	E	0.5	G	30.0	30.5
81	-1.0	G	-1.0	E	-1.0	G	17.0	15.0
82	-2.0	G	-2.5	E	0.5	G	16.0	14.0
83	-4.0	E	0.5	E	-0.5	G	-1.0	-1.0
84	-2.5	E	-0.5	EG	0.0	G	28.5	28.0

							(cm in depth)
Station No.	Oct.12 -Nov.14 (106-85days)	Jan.26 -Feb. 7	Mar.1 -12 (45-22)	Mar.1 -12 (199-227)	Sep.27 -Oct.14 (109-81)	Jan.3 -14	Jan.-Feb.'85 -Jan.'86 (353-330)
IM 85	8.0	DE	-0.5	E	0.5	G	17.0
86	-3.0	E	-0.5	E	0.0	G	73.0
87	2.5	E	-0.5	E	0.0	G	10.5
88	-1.0	E	-1.0	E	0.0	G	4.0
89	19.0	E	35.0	D	-9.5	E	17.5
90	-2.5	E	1.0	E	4.5	E	30.0
91	-3.0	E	-0.5	E	0.5	E	17.0
92	0.5	E	-0.5	E	1.0	G	15.0
93	-3.5	E	11.5	DE	-12.5	G	21.0
94	4.5	DE	11.5	DE	-11.5	E	11.0
95	0.0	E	-2.0	E	29.0	D	-9.0
96	-5.0	DE	6.0	DE	12.0	E	5.0
97	2.0	E	-1.0	EG	6.5	D	9.0
98	19.5	E	-1.5	E	32.0	E	1.5
99	14.0	E	7.0	DE	30.0	D	-14.0
100	-1.5	E	24.5	DE			
101	12.0	E	15.0	DE	46.5	E	9.5
102	-4.5	E	0.5	DE	57.0	E	16.0
103	-2.0	E	27.5	DE	53.5	E	-4.5
104	2.0	E	0.0	E	27.5	E	31.0
105	-3.0	E	0.0	EG	30.0	D	-4.0
106	5.0	E	-2.0	EG	5.0	E	0.0
107	21.0	D	1.0	E	17.0	DE	6.0
108	2.0	DE	10.0	E	15.0	E	-1.0
109	-3.0	E	7.5	DE	49.5	E	17.0
110	-3.0	E	-2.0	E	26.0	E	13.0
111	7.0	E	0.0	E	0.0	E	-2.0
112	-0.5	E	-0.5	E	57.0	E	18.0
113	27.0	E	-0.5	E	4.5	E	13.5
114	-4.0	E	-1.0	E	43.0	E	10.0
115	-0.5	E	-0.5	E	21.5	E	-1.5
116	-7.0	E	-2.0	EG	21.0	D	28.0
117	1.0	E	0.0	EG	30.0	DE	-5.0
118	-2.0	E	10.0	E	2.5	DE	2.0
119	-4.0	E	1.0	E	10.0	E	-1.0
120	-4.0	E	7.0	E	36.5	E	3.5
121	3.5	E	20.0	E	50.0	E	-1.5
122	1.0	E	1.5	E	24.0	E	19.5
123	0.5	E	0.0	E	28.5	E	-3.0
124	15.5	DE	1.5	E	6.5	E	38.0
125	-2.0	E	-1.5	E	0.5	E	7.5
126	-2.0	E	9.5	D	49.0		-1.5

(cm in depth)

Station No.	Oct.12 -Nov.14 (106-85days)	Jan.26 -Feb. 7	Mar.1 -12 (45-22)	Sep.27 -Oct.14 (199-227)	Jan.3 -14 (109-81)	Jan.-Feb.'85 -Jan.'86 (353-330)		
IM127	-2.0	G	0.0	E	0.5	G	-4.5	-4.0
128	-2.5	G	-1.0	E	0.5	G	-2.0	-2.5
129	-6.0	E	26.0	E	9.0	E	-1.5	33.5
130	13.0	E	19.0	E	8.5	E	8.5	36.0
131	-3.0	E	-0.5	E	26.5	E	17.5	43.5
132	24.0	E	-0.5	E	0.5	E	-1.5	-1.5
133	-6.0	E	39.5	DE	-19.0	E	12.5	33.0
134	-2.5	E	-0.5	E	0.5	E	-3.0	-3.0
135	-1.0	E	0.0	E	0.0	G	-1.5	-1.5
136	-3.0	E	0.5	E	28.0	E	-3.0	25.5
137	14.0	D	15.0	D	-16.0	E	-1.5	-2.5
138	0.0	E	15.0	E	23.0	E	-2.0	36.0
139	-7.0	DE	30.0	D	0.0	E	11.0	41.0
140	-2.0	E	0.0	E	66.5	E	-3.5	63.0
141	-4.5	E	0.0	E	29.5	DE	0.5	30.0
142	-4.0	E	0.0	E	26.5	DE	-3.5	23.0
143	17.5	DE	0.0	E	27.5	E	0.0	27.5
144	-2.5	E	-0.5	E	29.5	E	10.5	39.5
145	-7.5	E	-0.5	E	63.5	D	-6.5	56.5
146	-9.0	E	36.0	D	30.0	DE	-25.0	41.0
147	-11.0	E	-1.0	E	8.0	G	-2.0	5.0
148	-2.0	E	-2.0	E	2.0	G	9.5	9.5
149	0.0	E	-1.0	E	32.0	E	-3.5	27.5
150	-4.0	E	1.0	E	34.5	DE	9.5	45.0
151	-7.5	E	-1.0	E	7.0	E	16.0	22.0
152	7.5	DE	-2.5	E	36.5	E	16.5	50.5
153	-1.0	E	-0.5	E	2.0	E	-3.5	-2.0
154	7.5	DE	-0.5	E	8.0	E	-2.0	5.5
155	-3.0	E	11.0	D	-5.0	E	0.0	6.0
156	-5.0	E	-1.0	E	0.5	G	3.0	2.5
157	3.0	DE	-0.5	E	2.0	E	7.0	8.5
158	-3.5	E	1.0	E	7.5	G	-1.0	7.5
159	-3.5	E	1.5	E	37.0	E	-1.0	37.5
160	-6.0	E	2.0	E	0.0	E	-2.5	-0.5
161	-4.5	E	0.5	E	17.5	DE	-10.0	8.0
162	-2.0	E	-0.5	E	-0.5	G	-2.5	-3.5
163	-1.0	E	-0.5	E	15.5	E	14.5	29.5
164	-2.5	E	0.5	E	1.0	E	-3.0	-1.5
165	-2.0	E	0.0	E	39.0	E	-9.5	29.5
166	-2.5	E	0.5	E	15.5	E	26.5	42.5
167	-3.0	E	1.0	E	23.0	E	12.0	36.0
168	-3.0	E	13.0	DE	56.5	DE	23.5	93.0

(cm in depth)

Station No.	Oct.12 -Nov.14 (106-85days)	Jan.26 -Feb. 7	Mar.1 -12 (45-22)	Sep.27 -Oct.14 (199-227)	Jan.3 -14 (109-81)	Jan.-Feb.'85 -Jan.'86 (353-330)		
IM169	-2.5	E	-0.5	EG	6.0	E	3.0	8.5
170	-3.0	E	1.0	EG	22.0	E	-11.0	12.0
171	-2.0	E	0.0	E	47.0	G	10.0	57.0
172	5.0	E	11.0	D	5.0	G	14.0	30.0
173	0.0	DE	11.0	E	10.0	E	6.5	27.5
174	-4.0	E	34.0	D	5.0	E	13.0	52.0
175	-3.0	E	3.0	D	17.5	D	10.5	31.0
176	-19.5	E	-1.5	E	47.0	E	10.0	55.5
177	-1.0	E	7.5	D	-7.5	G	-1.0	-1.0
178	5.0	DE	0.0	E	20.0	E	3.0	23.0
179	-2.5	E	0.0	E	0.5	E	-2.0	-1.5
180	2.0	E	-0.5	E	12.5	E	0.0	12.0
181	1.0	E	14.0	E	18.0	E	-5.0	27.0
182	-3.0	E	1.0	DE	-2.0	G	-2.0	-3.0
183	-0.5	DE	10.5	E	29.0	DE	-4.5	35.0
184	8.5	E	-0.5	E	7.5		-1.0	6.0
185	-2.5	E	0.0	E	-0.5	E	22.0	21.5
186	-1.5	E	0.0	E	-0.5	G	11.0	10.5
187	-2.0	E	0.0	E	15.0	E	-3.0	12.0
188	9.0	E	-0.5	E	13.5	E	14.0	27.0
189	9.5	DE	-0.5	E	18.5	E	-1.5	16.5
190	-4.5	E				E	8.5	
191	-1.0	E	0.0	G	1.0	E	-2.0	-1.0
192	-2.0	G	10.0	D	4.0	E	7.0	21.0
193	3.0	DE	0.0	E	3.5	E	-0.5	3.0
194	-2.0	G	4.0	D	-3.5	G	-0.5	0.0
195	-2.0	E	0.0	E	0.5	G	3.5	4.0
196	-2.0	E	0.0	EG	-0.5	G	-0.5	-1.0
197	-2.5	E	0.0	E	0.5	G	-2.0	-1.5
198	-3.0	E	3.0	E	-3.0	G	-1.5	-1.5
199	-3.0	G	0.5	G	-0.5	G	0.0	0.0
200	-1.0	G	-0.5	E	-0.5	G	0.0	-1.0
201	-3.0	E	24.0	D	-23.5	E	-1.5	-1.0
202	-6.0	E	4.0	E				
203	-2.0	E	0.5	E	0.5	E	9.0	10.0
204	3.5	DE	18.5	DE	-18.0	G	-1.0	-0.5
205	7.5	E	-1.0	E	2.5	E	22.0	23.5
206	-3.0	E	2.0	E	33.5	E	-4.0	31.5
207	-3.0	E	0.0	E	1.0	G	-1.5	-0.5
208	5.5	E	1.5	E	10.0	E	-1.0	10.5
209	6.0	D	3.5	E	-1.5	E	9.0	11.0
210	-1.0	E	-0.5	G	11.5	E	17.5	28.5

(cm in depth)

Station No.	Oct.12 -Nov.14 (106-85days)	Jan.26 -Feb. 7	Mar.1 -12 (45-22)	Sep.27 -Oct.14 (199-227)	Jan.3 -14 (109-81)	Jan.-Feb.'85 -Jan.'86 (353-330)		
IM211	10.0	DE	5.0	E	14.0	E	-2.0	17.0
212	6.0	E	0.5	E	36.5	E	-5.0	32.0
213	3.5	E	-1.5	E	34.5	D	-17.5	15.5
214	-1.0	E	15.5	D	-3.5	E	-1.0	11.0
215	-1.0	E	7.0	E	26.0	E	-3.0	30.0
216	-3.5	E	0.0	E	0.0	G	0.0	0.0
217	11.5	E	6.5	E	6.0	E	14.5	27.0
218	-8.0	E	0.0	EG	44.0	E	-4.0	40.0
219	-2.0	E	-1.0	E	23.0	E	-4.0	18.0
220	-1.0	E	-0.5	E	-0.5	EG	-1.0	-2.0
221	-1.5	E	-0.5	E	67.0	DE	-17.0	49.5
222	-0.5	E	8.5	D	12.0	E	4.0	24.5
223	1.5	E	6.5	DE	31.5	E	-7.0	31.0
224	9.0	E	2.0	E	20.0	E	-2.0	20.0
225	-2.0	DE	11.5	DE	27.5	E	12.0	51.0
226	-3.0	E	2.5	E	-1.5	G	-2.0	-1.0
227	6.0	E	1.5	E	-1.5	G	23.5	23.5
228	-12.5	E	10.5	G	-0.5	E	-0.5	9.5
229	-2.5	E	1.5	G	23.0	E	38.0	62.5
230	-4.0	E	15.0	D	12.0	D	-5.0	22.0
231	-3.5	E	0.0	EG	0.5	E	10.0	10.5
232	1.5	E	0.5	E	28.0	D	-11.5	17.0
233	9.0	E	-1.0	E	7.0	E	-6.0	0.0
234	-2.5	E	0.5	EG	26.0	DE	3.0	29.5
235	4.0	DE	0.0	E	1.0	E	4.0	5.0
236	1.5	E	34.0	D	7.0	E	1.5	42.5
237	2.0	E	-4.0	E	27.5	E	-4.5	19.0
238	1.5	E	15.5	DE	31.0	E	-3.0	43.5
239	-2.5	E	0.0	EG	0.5	G	9.0	9.5
240	4.0	E	3.5	E	-3.5	E	6.0	6.0
241	29.5	E	0.0	G	5.5	E	19.0	24.5
242	1.0	E	0.5	DE	43.0	E	-2.5	41.0
243	16.5	E	0.5	E	35.0	D	-3.0	32.5
244	4.0	E	-1.0	G	12.0	E	3.0	14.0
245	-1.0	E	11.0	DE	-4.0	E	19.0	26.0
246	-0.5	E	8.0	E	39.5	E	-9.0	38.5
247	5.0	E	2.0	D	52.0	E	-9.0	45.0
248	-2.5	E	4.5	D	20.0	E	5.0	29.5
249	6.0	E	6.0	DE	20.0	E	49.0	75.0
250	-2.0	E	7.5	E	16.5	E	-2.0	22.0
251	4.0	E	11.0	E	-2.0	E	-2.5	6.5
252		E	0.5	E	1.5	E	-5.0	17.0

Table IV-3. Net accumulation along Route ID.

(cm in depth)

Station No.	Nov.1984 -Nov.1985 (353days)	Surface condition (Nov.1985)
ID 1	57.5	E
2	-3.0	E
3	19.5	E
4	28.5	E
5	15.0	E
6	26.5	E
7	45.0	E
8	35.0	E
9	31.0	E
10	25.0	E
11	46.0	DE
12	12.5	E
13	6.0	G
14	-0.5	E
15		
16	-2.5	G
17	-2.0	G
18	5.0	G
19	16.0	E
20	2.0	E
21	0.0	G
22	5.0	E

(cm in depth)

Station No.	Nov.1984 -Nov.1985 (353days)	Surface condition (Nov.1985)
ID23	13.0	E
24	11.5	E
25	-2.5	E
26	9.0	E
27	0.5	E
28	39.5	E
29	16.0	E
30	1.0	G
31	10.5	E
32	3.0	E
33	27.0	E
34	-4.0	G
35	11.5	G
36	2.0	G
37	8.0	E
38	-	E
39	26.0	E
40	7.5	E
41	-	E
42	19.5	E
43	33.0	E

Table IV-4. Net accumulation along Route KR.

(cm in depth)			(cm in depth)		
Station No.	Dec.1983 -Jan.1986 (769-762days)	Surface condition (Jan.1986)	Station No.	Dec.1983 -Jan.1986 (769-762days)	Surface condition (Jan.1986)
KR 1	104.5	E	KR41	19.9	E
2	(189)	E	42	-0.4	E
3	(176)	E	43	6.2	E
4	57.4	E	44		
5	20.0	E	45	4.6	E
6	77.8	E	46	-15.3	E
7	78.1	E	47	-0.4	E
8	(176)	E	48	77.8	E
9	8.5	E	49	79.0	E
10	-9.8	E	50	115.7	E
11	-2.2	E	51	-3.9	E
12	78.8	E	52	-5.9	G
13	38.8	E	53	3.2	E
14	28.9	E	54	-0.5	E
15	122.1	E	55	26.4	E
16	128.4	E	56	74.7	E
17	92.1	E	57	138.5	E
18	130.4	E	58	31.7	E
19	123.6	E	59	21.3	E
20	170.4	E	60	35.7	E
21	(170)	E	61	-7.1	G
22	(185)	E	62	-6.1	E
23	98.0	E	63	-7.2	G
24	61.3	E	64	13.2	E
25	60.1	E	65	6.8	E
26	-6.7	G	66	-7.5	G
27	55.2	E	67	-8.1	G
28	0.6	E	68	22.0	E
29	9.3	E	69	96.3	E
30	-6.9	G	70	26.6	E
31	16.0	E	71	42.5	E
32	-7.9	G	72	17.8	E
33	66.3	E	73	55.2	E
34	26.2	E	74	65.4	E
35	-2.2	G	75	96.9	E
36	150.8	E			
37	57.5	E			
38	29.5				
39	67.3	E			
40	67.2	E			

Table IV-5. Net accumulation along Route RY.

(cm in depth)

Station No.	Nov.1983 -Jan.1986 (792-784days)	Surface condition (Jan.1986)
RY135	117.7	E
6	113.8	E
7	34.2	E
8	60.3	E
9	26.3	E
140	32.5	E
1	46.3	E
2	98.0	E
3	94.9	E
4	17.1	E
5	9.3	E
6	-0.3	E
7	19.2	E
8	3.4	E
9	102.0	E
150	(186)	E
1	(189)	E
2	74.7	E
3	55.8	E
4	26.5	E
5	23.0	E
6	2.7	E
7	3.8	E
8	16.5	E
9	0.4	E
160	62.3	E

(cm in depth)

Station No.	Nov.1983 -Jan.1986 (792-784days)	Surface condition (Jan.1986)
RY161	-2.1	E
2	8.2	E
3	-1.9	E
4	-7.2	E
5	-12.9	SI
6	-1.9	SI
7	-24.3	I
8	-28.6	I
9	-11.9	SI
170	-24.1	I
1	-20.4	I
2	-24.3	I
3	-26.2	I
4	-23.4	I
5	-28.0	I
6	-29.6	I
7	-32.4	I
8	-26.3	I
9	-30.6	I
180	-38.5	I
1	-31.8	I
2	-35.9	I
3		
4	-50.7	I
5	-49.0	I

Table IV-6. Net accumulation with a 100-stake row at 71 (Route IM) in 1984-1986.

							(cm in depth)		
Oct.27 No.	(95days)	Jan.30 (38)	Mar.9 (210)	Oct.5 (99)	Jan.12	Jan.30 '85 -Jan.12 '86 (347)			
1	-5.0	DE	0.0	G	0.0	G	4.5	4.5	
2	-3.0	DE	-1.0	G	1.0	G	-1.5	-1.5	
3	5.0	DE	0.0	EG	-1.0	E	11.0	10.0	
4	-2.0	G	0.0	G	-1.0	G	13.0	12.0	
5	-1.5	G	-1.5	G	0.0	G	-1.5	-3.0	
6	2.5	DE	-0.5	EG	0.0	E	-5.0	EG	-5.5
7	3.5	DE	-0.5	EG	0.0	E	-2.5	-3.0	
8	-2.0	G	-2.0	G	-0.5	G	7.0	4.5	
9	-1.0	G	-2.0	G	0.0	G	16.5	14.5	
10	2.5	DE	-0.5	EG	-1.0	E	46.0	44.5	
11	-1.0	DE	-1.0	G	0.0	G	19.5	18.5	
12	-3.5	G	-0.5	G	-1.0	G	0.0	-1.5	
13	-2.0	G	0.0	G	-0.5	G	6.5	6.0	
14	-1.5	G	0.5	EG	-1.0	G	13.0	12.5	
15	-1.0	G	0.0	EG	-1.0	G	9.0	8.0	
16	-2.0	G	-1.5	EG	-0.5	G	-1.0	G	-3.0
17	-2.5	G	0.5	G	0.0	G	-2.0	G	-1.5
18	-1.0	G	-2.0	G	0.5	G	-2.0	G	-3.5
19	-3.5	G	-0.5	G	1.0	G	-3.5	G	-3.0
20	-1.0	G	-2.0	G	1.0	G	-2.0	-3.0	
21	-2.0	G	-1.0	G	1.0	G	-1.0	G	-1.0
22	-3.0	G	0.0	G	0.0	G	3.0	3.0	
23	-2.0	G	1.0	G	-1.0	G	-1.0	-1.0	
24	0.5	DE	-0.5	EG	0.0	G	8.0	G	7.5
25	-3.5	G	0.5	G	0.0	G	-3.5	G	-3.0
26	-1.0	DE	-1.0	G	0.0	E	-2.0	G	-3.0
27	-3.5	G	-1.0	G	0.5	G	25.0	EG	24.5
28	-2.0	G	-0.5	G	0.5	G	33.5	33.5	
29	-4.0	G	0.0	G	-1.0	G	21.0	20.0	
30	-1.5	G	-1.5	G	0.0	G	13.5	12.0	
31	-4.5	G	-0.5	G	0.0	G	6.0	5.5	
32	-2.0	G	0.0	G	3.0	G	-5.0	G	-2.0
33	-2.0	G	-1.0	G	0.0	G	1.5	0.5	
34	-2.0	G	-1.0	G	-1.0	G	-3.0	G	-5.0
35	-3.0	G	0.0	G	0.0	G	5.5	5.5	

(cm in depth)

Oct.27 No.	(95days)	Jan.30 (38)	Mar.9 (210)	Oct.5 (99)	Jan.12	Jan.30 '85 -Jan.12 '86 (347)
36	-1.0 G	-1.0 G	0.5 G	-2.5 G	G	-3.0
37	-2.5 G	-0.5 G	0.0 G	1.5 G		1.0
38	6.5 DE	-1.5 EG	0.0 E	-2.0 G		-3.5
39	-3.0 G	-1.5 G	1.5 G	12.0 G		12.0
40	-3.0 G	0.0 G	-1.0 G	2.0 G		1.0
41	-3.0 G	-2.0 G	1.0 G	8.0 G		7.0
42	-2.0 G	-1.5 G	0.0 G	-3.5 G	G	-5.0
43	5.5 DE	-1.0 EG	0.0 G	-2.5 G	G	-3.5
44	-2.5 DE	-0.5 G	-0.5 G	12.0 G		11.0
45	-3.0 G	1.0 G	-1.0 G	16.0 G		16.0
46	7.0 DE	-2.5 EG	0.0 G	8.5 G		6.0
47	-2.5 DE	-0.5 EG	-0.5 G	-1.0 G	G	-2.0
48	-0.5 G	-1.0 EG	-0.5 G	-0.5 G		-2.0
49	-3.5 G	-1.5 G	-1.0 G	8.0 G		5.5
50	2.0 DE	-1.0 EG	0.0 G	0.5 G		-0.5
51	-2.0 G	-1.0 G	0.0 G	3.0 G		2.0
52	-2.5 G	-0.5 G	-1.0 G	13.0 G		11.5
53	-2.5 G	-0.5 G	0.0 G	-4.0 G	G	-4.5
54	-2.0 DE	-0.5 G	0.5 G	9.0 G		9.0
55	-1.5 G	-2.0 G	-0.5 G	14.5 G		12.0
56	-5.5 G	-0.5 G	-1.0 G	30.0 G		28.5
57	-3.0 G	-1.0 G	0.0 G	2.0 G		1.0
58	-2.0 G	-1.0 EG	0.0 G	-3.0 G	G	-4.0
59	3.5 DE	0.5 EG	0.0 G	-2.0 G	G	-1.5
60	0.0 G	-1.0 G	0.0 G	7.0 G		6.0
61	-2.5 G	-0.5 G	0.0 G	-2.0 G	G	-2.5
62	-3.5 DE	-0.5 EG	0.0 G	21.5 G	G	21.0
63	-2.0 G	-0.5 G	0.5 G	1.5 G		1.5
64	-3.0 G	-1.0 G	0.0 G	6.5 G		5.5
65	-2.0 G	0.0 G	-1.0 G	0.5 G		-0.5
66	-3.5 G	-0.5 G	0.0 G	-2.0 G	G	-2.5
67	-2.5 G	-2.0 G	1.5 G	-3.5 G	G	-4.0
68	-2.5 G	-0.5 G	-2.0 G	-2.0 G	G	-4.5
69	-2.0 G	-2.0 G	0.0 G	-2.5 G	G	-4.5
70	-2.5 G	-0.5 G	-0.5 G	-2.5 G	G	-3.5

(cm in depth)

	Oct. 27 No.	(95days)	Jan. 30 (38)	Mar. 9 (210)	Oct. 5 (99)	Jan. 12	Jan. 30 '85 -Jan. 12 '86 (347)		
71	-3.0	G	0.0	G	-1.0	G	1.5	0.5	
72	-1.5	G	-0.5	G	-0.5	G	-2.0	-3.0	
73	-2.5	G	-2.0	G	0.0	G	-2.5	G	-4.5
74	-2.5	G	-0.5	G	0.0	G	4.5	4.0	
75	-2.5	G	0.5	G	0.5	G	-0.5	0.5	
76	-3.0	G	-1.5	G	0.0	G	-2.5	G	-4.0
77	-1.5	G	-1.5	G	0.0	G	-3.0	G	-4.5
78	-2.0	G	0.0	G	-0.5	G	-0.5	G	-1.0
79	2.5	DE	-1.0	EG	0.0	G	6.0	5.0	
80	-1.5	G	-2.0	G	0.5	G	-2.5	G	-4.0
81	-1.0	DE	-1.5	G	-0.5	G	1.0	G	-1.0
82	-1.5	DE	-1.5	EG	0.0	G	-0.5	-2.0	
83	-3.0	G	-0.5	G	-0.5	G	-1.0	G	-2.0
84	-3.5	G	-0.5	G	-1.0	G	-2.0	G	-3.5
85	-3.5	G	-2.0	G	0.5	G	-2.5	G	-4.0
86	-1.0	G	-2.0	G	0.0	G	6.0	4.0	
87	-0.5	G	-1.0	G	0.0	G	-0.5	G	-1.5
88	3.0	DE	-0.5	EG	-0.5	G	7.0	6.0	
89	4.0	DE	-1.0	EG	0.0	G	-2.0	-3.0	
90	-2.0	G	-1.0	G	0.0	G	-1.5	EG	-2.5
91	-2.0	G	-1.0	G	0.0	G	-1.0	EG	-2.0
92	-3.0	G	0.0	G	0.0	G	10.5	10.5	
93	-4.0	G	0.0	G	0.0	G	-3.0	G	-3.0
94	-2.5	G	0.0	G	-0.5	G	8.5	8.0	
95	-2.0	G	-2.0	G	-1.0	G	3.5	0.5	
96	0.0	DE	-1.5	EG	1.0	G	16.0	15.5	
97	-2.5	G	-0.5	G	0.0	G	13.5	13.0	
98	-3.0	G	-0.5	G	-0.5	G	26.0	25.0	
99	-2.5	G	-0.5	G	-1.0	G	0.0	G	-1.5
100	-3.0	G	-0.5	G	0.0	G	-2.5	G	-3.0
Mean	-1.6		-0.8		-0.1		4.4		3.5

Table IV-7. Net accumulation with a 36-stake farm at G6
(Route IM) in 1985-1986.

							(cm in depth)	
No.		Feb.3 (29days)		Mar.4 (219)		Oct.9 (89)	Jan.6	Total (337)
I -1	E	-1.0	E	42.0	E	15.5		56.5
2	EG	37.0	D	-2.5	E	0.0		34.5
3	EG	-14.0	EG	36.0	E	16.5		38.5
4	E	-1.5	E	33.0	E	12.5		44.0
5	DE	7.5	DE	14.5	E	0.5		22.5
6	E	-1.0	E	27.0	D	-4.0		22.0
II -1	DE	-1.5	E	13.5	E	0.5		12.5
2	DE	-2.5	DE	41.5	D	-3.5		35.5
3	DE	27.0	D	-1.5	E	20.5		46.0
4	DE	-1.0	E	28.5	E	6.0		33.5
5	E	49.0	DE	-34.0	E	26.5		41.5
6	EG	-1.0	EG	7.5	E	8.5		15.0
III -1	DE	37.0	DE	-7.0	E	20.5		50.5
2	DE	3.5	E	23.5	E	6.0		33.0
3	E	-1.0	E	24.0	E	1.5		24.5
4	E	32.0	DE	-2.0	E	1.5		31.5
5	DE	9.0	DE	16.0	E	1.5		26.5
6	DE	11.0	D	4.5	E	-1.0		14.5
IV -1	DE	-1.0	E	72.0	E	-3.0		68.0
2	DE	-0.5	E	61.0	E	-1.0		59.5
3	DE	9.0	DE	26.0	E	-1.5		33.5
4	DE	-1.5	E	22.5	E	-1.0		20.0
5	E	72.0	DE	-20.5	DE	-8.5		43.0
6	E	11.5	DE	58.5	E	2.0		72.0
V -1	E	-3.5	E	1.5	E	8.0		6.0
2	E	15.0	D	24.0	E	-3.0		36.0
3	E	-2.0	E	46.0	DE	-4.5		39.5
4	E	-1.0	D	52.5	E	-6.0		45.5
5	E	-1.0	E	26.0	E	-3.5		21.5
6	E	0.5	E	21.5	E	-1.0		21.0
VI -1	E	-1.0	E	19.0	DE	12.0		30.0
2	E	-1.5	E	4.0	D	19.5		22.0
3	E	33.0	DE	-28.5	DE	-7.0		-2.5
4	DE	-3.0	E	2.0	EG	4.5		3.5
5	E	-2.0	E	1.0	EG	11.0		10.0
6	E	-1.0	E	30.0	E	-1.5		27.5
Mean		8.6		19.0		4.0		31.6

V. Net Accumulation of Snow at Mizuho Station

Observers: Yutaka AGETA, Takashi SHIMAMOTO,
Yoshitaka KATO, Fumio OKUHIRA,
Tadashi MURAI, Tokio KIKUCHI,
Takashi FURUDATE and Mikio
NAKASHIMA.

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 100m sides were arranged in a rectangular lattice with spacings of 20 m. The farm was adopted for the routine accumulation measurements in 1985 as well. The results of the measurements are given in Table V-1. The stakes of this farm are distributed and numbered as shown in Fig. 1.

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 as shown in Fig. 2. This stake farm also had been adopted for the accumulation measurements at Mizuho Station. However, the measurements on the stakes of the parallel row to the wind direction was determined to discontinue, and the row of 101 stakes, which was aligned perpendicular to the wind direction, was left for further measurements of snow accumulation, as explained by Nakawo *et al.* (1984). The results of the measurements are given in Table V-2.

Since parts of data sheets for stakes No. I-1~IV-6 of a 36-stake farm and No. 142~201 of a 101-stake row on Jan. 31 and Feb. 28 in 1985 were lost after the measurements and calculations, there are large blanks in Tables V-1 and 2. However, total and mean values for all periods and all stakes of a 36-stake farm could be obtained as seen in Table V-1. On the other hand, mean values of net accumulation with a 101-stake

row during the period from Dec. 31, 1984 to Apr. 1, 1985 were calculated from the data of stakes No. 102~141 only and shown in parentheses as seen in Table V-2. However, total values for all stakes of a 101-stake row could be calculated using the stake heights on Dec. 31, 1984 and Dec. 30, 1985.

Reference

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

Table V-1. Net accumulation with a 36-stake farm at Mizuho Station in 1985.

(cm in depth)																
Dec.31	Jan.31	Feb.28	Apr.1	Apr.28	June1	June28	July29	Aug.28	Sep.30	Oct.28	Nov.26	Dec.30	Total			
No.	(31days)	(28)	(32)	(27)	(34)	(27)	(31)	(30)	(33)	(28)	(29)	(34)	(364)			
I -1				0.0 E	-0.3 E	0.8 E	2.5 E	-2.9 E	0.2 E	-0.6 E	14.2 D	0.1 E	26.5			
2				0.2 E	-0.2 E	0.2 E	0.4 E	-0.3 G	0.5 E	-0.3 E	7.3 D	-1.8 E	5.2			
3				-0.2 E	0.0 E	0.2 E	1.4 E	-0.2 E	0.1 E	-0.7 E	14.5 D	-4.7 E	9.3			
4				-0.2 G	-0.3 G	0.5 G	0.2 G	-0.2 G	0.2 E	0.0 G	14.6 D	-1.6 E	10.6			
5				-4.6 E	-0.4 E	0.3 E	0.2 E	-0.2 E	0.1 E	-0.1 E	11.7 D	5.6 E	17.6			
6				0.5 E	0.1 G	0.0 E	0.4 E	0.0 G	0.0 E	-0.3 E	9.9 D	-2.0 E	6.4			
II -1				-1.5 E	0.3 E	0.4 E	0.4 E	-0.3 E	0.7 E	-0.1 E	26.9 D	-6.3 E	20.3			
2				0.2 E	-0.1 E	0.2 E	-0.1 E	0.2 G	0.1 E	-0.5 E	7.0 D	-5.4 D	5.7			
3				-0.2 G	-0.2 E	0.3 G	0.0 G	0.2 G	0.1 E	-0.1 G	-0.2 G	-2.0 G	-4.0			
4				0.3 G	-0.5 G	0.4 G	0.0 G	0.2 G	-0.2 E	0.0 G	8.8 D	-9.7 E	-4.7			
5				0.2 E	-0.3 E	0.4 E	0.0 E	0.2 E	0.0 E	-0.3 E	-0.3 E	-1.6 E	1.6			
6				0.0 G	0.0 E	0.3 G	0.2 E	0.0 E	0.0 E	0.0 E	25.4 D	-5.8 E	17.0			
III -1				8.8 DE	-6.7 E	0.3 E	22.4 DE	-22.5 E	-0.4 E	0.3 E	9.1 D	-3.9 E	5.4			
2				-0.7 E	0.1 E	0.2 E	0.2 E	3.0 E	0.1 E	-0.3 E	3.4 D	-1.4 E	4.6			
3				0.6 G	-0.1 E	0.3 E	0.0 E	0.2 G	-0.1 E	-0.3 E	9.1 D	-4.1 E	3.4			
4				-0.1 G	0.0 G	0.9 G	-1.7 G	-0.4 G	0.5 E	-0.7 E	4.5 D	-5.5 E	-3.1			
5				-0.2 E	0.0 E	0.2 G	0.0 E	0.0 G	0.1 E	-0.1 E	-0.4 E	-1.8 E	14.8			
6				0.3 G	0.1 G	0.2 G	0.0 G	0.2 G	0.1 E	0.0 E	17.9 D	1.3 E	17.4			
IV -1				-0.3 G	0.1 E	0.2 G	0.0 G	0.2 G	0.1 E	-0.2 E	0.0 E	11.4 E	10.3			
2				-0.3 G	-0.9 E	0.7 G	0.4 G	-0.2 G	0.3 E	-0.3 E	5.1 D	-1.5 E	1.3			
3				0.3 E	0.0 E	0.2 G	0.1 E	0.4 E	0.0 E	-0.2 E	5.2 D	-2.8 E	0.0			
4				0.2 G	0.1 G	0.2 G	0.6 G	-0.1 G	0.1 E	-0.3 E	8.5 D	-3.3 E	3.2			
5				-0.1 G	-0.5 G	0.0 G	0.3 G	0.1 G	0.3 E	-0.4 E	-0.2 E	-1.0 E	-3.1			
6				-0.3 E	-0.1 E	0.5 E	0.0 G	-0.1 G	0.2 E	0.0 E	-0.7 E	-1.3 E	-2.0			
V -1	-2.0	-0.5	-1.2	1.4 G	-0.2 E	0.2 G	-0.5 G	-0.2 G	0.0 G	-0.2 E	-0.4 E	-0.1 E	-3.7			
2	-1.5	-0.6	-0.8	0.9 G	-0.8 E	0.9 G	-0.5 G	0.0 G	0.2 E	-0.4 E	13.0 D	-4.6 E	5.8			
3	-1.4	0.7	-1.5	0.3 G	-0.4 E	0.5 G	0.2 G	0.0 G	0.1 E	-0.1 E	2.2 D	-3.4 G	-2.8			
4	-2.2	-0.8	-0.2	0.0 G	0.0 G	0.4 G	0.1 G	0.2 G	0.1 E	-0.1 G	-0.2 E	-2.2 E	-4.9			
5	-2.0	-1.8	0.9	-1.6 G	0.0 G	1.4 G	0.1 G	-0.1 G	0.0 E	0.2 E	15.2 D	4.1 E	16.4			
6	0.0	-0.8	1.0	0.0 E	-0.1 E	0.2 E	0.0 E	0.1 E	0.2 E	0.0 E	0.7 D	4.4 E	5.7			
VI -1	-2.9	-0.5	-0.2	0.0 G	-0.2 E	0.3 E	-0.1 E	0.0 E	0.1 G	-0.2 E	19.1 D	-3.0 E	12.4			
2	-1.8	6.7	-1.9	0.2 E	-0.2 E	0.2 E	0.0 E	0.0 E	0.1 E	0.0 E	2.5 D	-2.2 E	3.6			
3	-2.4	-0.6	-0.5	0.2 G	-0.2 E	0.4 G	8.2 D	-7.4 G	0.0 E	0.4 E	-1.2 E	9.6 D	6.5			
4	-1.4	15.2	-10.1	-0.2 E	0.2 E	0.0 E	20.6 DE	-20.4 E	0.1 E	0.2 E	-0.5 E	2.0 E	5.7			
5	-3.3	14.8	-4.9	0.1 E	-0.2 E	0.1 E	0.2 E	0.2 E	-0.1 E	-0.6 E	0.9 D	0.6 E	7.8			
6	-4.5	3.5	-4.1	4.4 D	-4.5 E	0.2 E	0.1 E	0.1 E	0.2 E	0.4 E	11.4 D	-3.6 E	3.6			
Mean	-1.7	6.3	-4.7	0.2	-0.5	0.4	1.6	-1.4	0.1	-0.2	7.3	-1.3	6.1			

Table V-2. Net accumulation with a 101-stake row at Mizuho Station in 1985.

														(cm in depth)	
Dec. 31	Jan. 31	Feb. 28	Apr. 1	Apr. 29	Jun. 2	Jun. 28	July 30	Aug. 28	Sep. 30	Oct. 28	Nov. 26	Dec. 30	Total		
No.	(31days)	(28)	(32)	(28)	(34)	(26)	(32)	(29)	(33)	(28)	(29)	(34)	(364)		
102	-2.4	9.3	-10.2	-0.1 G	0.1 E	0.5 G	1.8 E	0.0 E	1.3 E	-1.5 E	9.6 D	-0.3 E	8.1		
103	-1.5	2.1	-3.4	-1.0 G	0.9 E	-0.6 G	0.5 E	0.0 G	0.5 E	0.1 G	12.8 D	-2.4 E	8.0		
104	-2.5	2.8	-3.9	0.0 G	-0.1 E	0.3 G	0.0 E	0.0 G	0.2 G	0.2 E	20.0 D	-13.2 E	3.8		
105	-1.8	-1.3	-0.4	0.2 G	0.2 E	-0.1 G	2.0 E	-1.7 G	0.3 G	-0.5 G	11.5 D	-3.6 E	4.8		
106	-1.8	5.2	-5.8	0.1 G	-0.1 E	0.2 G	0.2 E	-0.2 G	0.2 G	-0.1 G	13.9 D	-4.2 E	7.6		
107	-1.3	14.8	-15.5	0.0 G	0.0 E	0.1 G	3.9 E	-3.7 G	0.2 G	-0.1 E	16.6 D	-5.9 E	9.1		
108	-1.1	20.6	-16.3	-0.1 E	0.1 E	-0.1 E	0.3 E	-0.2 G	0.3 G	-0.5 E	6.8 D	-0.3 E	9.5		
109	-1.6	27.4	-27.7	0.0 E	-0.1 E	0.4 G	2.0 E	-1.6 G	0.4 E	-0.6 E	18.4 D	-3.2 E	13.8		
110	-2.5	30.1	-25.6	3.7 E	-1.3 E	0.5 E	0.0 E	0.0 E	0.2 E	-0.9 E	1.2 D	0.5 E	5.9		
111	-1.9	23.6	-22.0	0.1 E	-0.1 E	0.0 E	0.1 E	10.2 E	-0.1 E	-9.9 E	7.9 D	-1.7 E	6.2		
112	-2.3	14.2	-9.0	0.0 E	-0.1 E	0.6 E	-0.3 E	-0.1 E	0.3 E	-0.2 E	-0.1 E	0.4 E	3.4		
113	-1.2	9.9	-5.3	-0.6 E	0.5 E	0.3 E	0.1 E	0.1 E	0.2 E	-0.1 E	-0.6 E	-0.3 E	3.0		
114	2.3	0.0	-0.6	0.0 E	-0.4 E	0.3 E	0.4 E	0.0 E	0.4 E	-0.4 E	-0.2 E	-1.0 E	0.8		
115	7.1	-1.0	0.0	-0.2 E	0.0 E	0.0 E	0.4 E	0.0 E	0.2 E	-0.6 E	0.8 D	0.2 E	6.9		
116	-1.2	-0.5	0.0	0.2 G	-0.2 G	-0.2 G	0.2 G	0.0 G	0.2 G	-0.3 G	0.0 E	-0.9 E	-2.7		
117	-2.5	-0.6	4.3	-0.3 G	-0.1 E	0.5 E	0.1 E	-0.1 E	0.2 G	-0.1 E	-0.7 E	-2.7 E	-2.0		
118	-2.0	0.8	1.7	0.0 E	-0.2 E	0.2 E	0.2 E	0.0 E	0.1 G	0.0 E	-0.5 E	-2.1 E	-1.8		
119	-2.5	0.0	-1.0	0.1 G	0.0 E	0.4 E	5.6 DE	-5.2 E	0.1 G	-0.3 E	6.0 D	-2.6 E	0.6		
120	0.3	-0.6	-1.4	-0.5 G	-0.2 E	0.6 E	6.2 DE	-5.9 G	0.4 E	-0.4 E	3.8 D	-3.5 E	-1.2		
121	(-5.3)	-0.7	0.0	0.3 G	-0.2 E	0.0 G	1.0 D	-0.7 G	-0.2 G	-0.1 E	-0.5 E	8.3 E	1.9		
122	-2.0	0.3	-2.1	1.3 G	-0.2 E	0.0 G	2.9 D	-3.2 G	0.0 G	-0.2 E	2.0 D	8.7 E	7.5		
123	-1.2	4.5	-3.3	0.2 E	-0.2 E	0.0 E	1.4 D	-1.2 E	0.1 G	-0.3 E	15.3 D	-1.2 E	14.1		
124	-2.0	-0.8	-0.1	0.6 G	-0.2 E	-0.1 E	-0.1 E	0.3 E	0.1 G	-0.5 E	21.1 D	-7.7 E	10.6		
125	-2.0	-0.6	-0.4	0.1 G	0.1 E	0.0 E	0.1 E	0.1 E	0.3 G	-0.1 E	12.4 D	-11.4 E	-1.4		
126	-1.6	6.4	-5.5	1.8 E	-1.1 E	1.0 E	0.0 E	0.2 E	0.1 G	-0.2 E	3.7 D	-5.8 E	-1.0		
127	-1.9	2.6	-2.8	2.1 E	-0.2 E	0.5 E	0.0 E	-0.3 E	0.2 E	-0.2 E	4.8 D	3.0 E	7.8		
128	-2.6	2.2	-3.5	0.7 E	-0.4 E	0.8 E	-0.3 E	0.1 E	-0.1 E	-0.3 E	-0.6 E	9.2 E	5.2		
129	-3.7	6.4	-11.1	-0.8 E	-0.5 E	0.7 E	9.6 DE	-9.9 E	-0.1 E	-0.4 E	14.3 D	4.0 E	8.5		
130	-2.8	-0.7	-0.5	0.1 G	-0.3 E	0.4 E	13.7 DE	-13.7 E	0.2 E	-0.8 E	5.9 D	5.7 E	7.2		
131	-2.4	0.3	-1.6	0.3 G	-0.2 E	0.2 E	11.0 DE	-10.8 E	0.1 E	-0.3 E	2.0 D	-2.4 E	-3.8		
132	-2.6	8.9	-9.1	-0.3 G	-0.2 E	0.1 E	3.6 D	-3.4 E	0.1 E	-0.4 E	2.0 D	-4.0 E	-5.3		
133	-1.0	0.7	-1.5	0.0 G	0.0 E	0.0 E	0.4 E	-0.1 G	0.1 G	-0.2 E	5.4 D	-5.0 E	-1.2		
134	-1.8	-0.2	-0.5	0.3 G	0.0 E	0.3 E	-0.1 E	0.3 G	0.2 G	-0.4 E	6.4 D	-3.2 E	1.3		
135	4.5	-1.6	-1.0	0.5 G	-0.5 E	0.4 E	-0.2 E	-0.1 G	0.1 E	-2.6 E	12.4 D	-3.8 E	8.1		
136	5.2	-0.9	-0.1	0.2 G	0.1 G	-0.2 E	8.2 D	-7.8 G	0.1 G	0.1 G	12.3 D	-3.2 E	14.0		

(cm in depth)

No.	Dec.31 (31days)	Jan.31 (28)	Feb.28 (32)	Apr.1 (28)	Apr.29 (34)	June2 (26)	June28 (32)	July30 (29)	Aug.28 (33)	Sep.30 (28)	Oct.28 (29)	Nov.26 (34)	Dec.30	Total (364)
137	-4.5	1.5	-2.4	-0.1 E	-0.1 E	0.0 E	13.0 D	-13.0 E	0.2 E	-0.1 E	18.7 D	-0.5 E		12.7
138	-1.0	5.4	-5.9	-0.1 G	0.3 E	0.0 E	20.9 DE	-20.6 E	0.0 E	-0.1 E	29.8 D	-5.5 E		23.2
139	-1.0	-0.4	-0.1	0.0 G	-0.3 G	0.3 G	1.0 E	-0.8 E	0.2 E	-0.3 E	21.9 D	-5.5 E		15.0
140	-1.1	-0.5	-0.2	0.3 G	-0.1 G	0.1 G	10.3 DE	-7.4 E	0.5 E	-1.1 E	15.4 D	-7.2 E		9.0
141	-2.9	2.7	-3.4	-0.2 G	0.3 E	0.2 G	4.8 DE	-3.7 E	0.3 E	-0.5 E	21.0 D	-4.7 E		13.9
142				-0.2 E	0.1 E	-0.4 G	0.6 E	-0.2 E	0.2 E	0.0 E	6.1 D	-2.0 E		7.7
143				0.0 E	-0.2 E	0.0 E	0.1 E	0.1 E	0.1 E	-0.5 E	-0.8 E	8.0 E		11.9
144				-0.2 E	0.3 E	-0.2 E	0.2 E	0.3 E	-0.2 E	-0.2 E	10.2 D	-2.9 E		12.9
145				-0.1 E	-0.5 E	0.3 E	0.2 E	-0.2 E	0.1 E	-0.1 E	1.1 D	0.9 E		12.0
146				-0.1 E	-0.3 E	0.3 E	1.0 D	-0.9 E	0.0 E	0.0 E	-0.6 E	-2.4 E		7.6
147				-0.3 E	0.3 E	0.3 E	0.0 E	0.0 E	0.2 E	-0.2 E	0.2 D	-1.0 E		-1.8
148				0.3 E	-0.2 E	-0.1 G	0.4 E	0.0 E	0.2 E	-0.2 E	15.4 D	-2.3 E		11.7
149				0.2 E	0.0 E	0.2 E	4.5 D	-4.7 E	0.5 E	-0.3 E	17.6 D	-2.1 E		16.8
150				0.3 E	-0.1 E	-0.2 E	0.2 E	0.2 E	0.0 E	-0.1 E	7.1 D	-8.2 E		0.2
151				0.0 E	0.0 E	0.1 E	3.8 E	0.0 E	0.1 E	-0.3 E	15.0 D	-1.4 E		15.3
51				0.2 E	-0.2 E	0.2 E	-0.1 E	0.2 E	0.2 E	0.3 E	20.8 D	1.1 E		21.8
152				0.3 G	0.1 G	0.2 G	-0.2 E	0.4 G	0.4 E	-0.2 E	23.6 D	-3.2 E		18.5
153				0.8 G	-0.4 G	0.3 G	0.3 E	0.4 G	0.3 E	0.1 E	12.1 D	-0.2 E		10.8
154				0.7 G	0.1 G	0.0 G	2.7 D	-2.5 G	0.2 G	0.0 E	5.2 D	-1.8 E		1.8
155				0.2 G	-0.1 G	0.1 G	9.9 D	-9.7 G	0.2 E	-0.2 E	16.6 D	-1.6 E		12.3
156				-0.3 E	0.0 E	0.3 E	0.0 E	-0.3 E	0.0 E	-0.1 E	16.4 D	-4.0 E		19.0
157				0.1 E	0.1 E	0.0 E	1.7 D	-1.7 E	0.1 E	0.3 E	19.4 D	-1.6 E		23.1
158				0.1 G	0.2 G	0.6 E	2.5 D	-2.4 E	0.1 E	0.0 E	19.6 D	-2.9 E		15.2
159				0.2 G	1.3 G	5.0 E	0.0 E	0.1 E	2.1 E	-0.8 E	11.8 D	-2.4 E		14.3
160				0.0 G	-0.2 G	2.0 E	4.6 E	-5.0 E	0.3 E	-0.5 E	22.5 D	-2.0 E		19.0
161				3.1 E	-0.8 E	0.0 E	0.3 E	-0.3 E	0.2 E	-0.5 E	16.3 D	-4.6 E		10.6
162				1.2 E	0.4 E	0.0 E	0.0 E	0.3 E	-0.2 E	-0.2 E	14.1 D	-2.0 E		10.6
163				-0.2 G	1.5 E	5.0 E	0.0 E	0.0 E	0.5 E	-0.5 E	8.0 D	-3.1 E		8.7
164				6.4 D	-6.7 G	6.9 E	0.0 E	-0.1 E	0.2 E	0.2 E	4.3 D	-3.8 E		4.7
165				8.5 DE	-7.4 G	6.5 E	4.9 E	-0.1 E	0.1 E	-0.3 E	-0.4 D	0.3 E		8.2
166				0.3 G	-0.2 E	0.3 G	8.2 E	-5.0 E	0.3 E	-3.1 E	4.8 D	4.6 E		6.8
167				-0.2 G	-0.2 E	2.0 G	6.9 D	-6.9 E	0.1 E	-0.2 E	0.4 D	6.9 E		5.9
168				-0.1 G	0.2 E	0.3 G	0.2 E	0.1 G	0.2 G	-0.3 G	-0.4 E	6.7 E		4.3
169				-0.3 E	-0.1 E	0.8 E	2.4 E	-2.3 E	-0.3 E	0.0 E	-0.4 E	8.0 E		7.6
170				0.2 E	-0.2 E	0.2 E	1.2 E	-1.1 E	0.3 E	-0.3 E	0.1 E	-1.4 E		4.5

(cm in depth)

No.	Dec.31 (31days)	Jan.31 (28)	Feb.28 (32)	Apr.1 (28)	Apr.29 (34)	Jun.2 (26)	Jun.28 (32)	July30 (29)	Aug.28 (33)	Sep.30 (28)	Oct.28 (29)	Nov.26 (34)	Dec.30	Total (364)
171				0.0 E	-0.1 E	0.4 E	6.0 E	-5.8 E	0.1 E	-0.4 E	3.3 D	2.9 G		4.7
172				5.6 DE	-5.7 E	0.3 G	5.0 E	-5.1 E	0.3 E	-0.3 G	7.5 D	3.6 E		8.0
173				1.5 DE	-1.5 E	0.5 G	6.4 D	-6.2 E	0.4 E	-0.1 E	6.5 D	-1.2 E		3.1
174				1.0 DE	-0.7 G	0.1 G	1.4 E	-1.1 G	0.3 G	-0.4 G	4.2 D	-1.4 E		-0.6
175				0.3 G	-0.2 G	0.1 G	1.0 E	-0.8 G	0.1 G	0.3 G	-0.9 E	2.9 E		-0.3
176				1.9 E	-0.3 E	0.2 E	0.0 E	0.2 G	0.0 G	-0.5 G	-0.3 E	-2.0 E		-3.5
177				2.3 E	-2.3 G	0.1 G	1.3 D	-1.1 G	0.0 G	-0.2 G	5.0 D	5.8 E		9.1
178				0.4 G	-0.2 G	0.4 G	3.8 E	-3.8 G	0.2 G	-0.2 G	8.0 D	2.2 E		8.3
179				1.7 E	-2.1 E	0.8 G	-0.2 E	0.6 G	-0.4 G	-0.1 G	8.2 D	0.7 E		6.9
180				2.6 E	0.0 E	0.9 E	-0.4 E	-0.1 E	0.2 E	-0.3 E	0.2 E	-3.6 E		-4.2
181				2.1 E	-0.7 E	0.7 E	0.0 E	0.0 E	0.0 E	-0.5 E	9.1 D	-11.2 E		-2.7
182				-0.8 G	-0.4 E	0.3 G	3.8 E	-0.4 E	0.3 E	-0.6 E	-0.1 E	-2.8 E		-2.9
183				-1.9 G	-0.2 E	0.4 G	0.1 E	0.0 E	1.3 E	-1.5 E	0.1 E	-1.4 E		-3.0
184				0.1 G	-0.2 E	0.1 E	0.2 E	0.1 G	0.2 G	-0.4 G	0.0 E	-2.2 E		-5.6
185				0.2 G	0.1 E	-0.1 E	1.0 E	-0.4 G	0.3 G	-0.8 E	0.1 E	-11.6 E		-14.6
186				1.9 E	-0.3 E	0.0 E	9.9 E	-4.5 E	0.0 E	-0.4 E	2.0 D	-2.8 E		3.7
187				1.0 G	-0.6 E	0.1 G	4.3 D	-4.0 G	-0.1 G	-0.3 G	0.0 G	-1.1 G		-3.5
188				0.0 G	-0.2 E	0.2 G	4.8 D	-4.5 G	0.1 G	-0.4 G	0.0 D	-1.7 E		-5.7
189				0.0 G	-0.2 E	0.3 G	8.1 D	-8.0 G	0.3 E	-0.1 E	8.5 D	-8.1 E		-0.8
190				0.1 G	-0.2 E	0.4 G	0.2 E	0.2 G	0.1 E	-0.4 E	4.1 D	-4.4 E		1.3
191				-0.5 G	0.2 E	0.5 G	3.2 D	-3.0 G	-0.2 E	0.0 E	8.9 D	-7.9 E		-2.2
192				-0.2 G	0.0 E	0.2 E	6.0 D	-5.7 E	0.4 G	-0.4 E	8.3 D	-4.9 E		0.3
193				0.3 G	-0.2 E	0.3 E	18.2 E	-17.5 E	2.3 E	-2.4 E	12.3 D	-3.9 E		5.9
194				0.0 G	-0.2 E	0.5 E	3.0 D	-2.5 E	0.1 E	-0.6 E	7.9 D	7.6 D		13.3
195				0.0 G	-0.3 E	0.3 G	8.4 DE	-8.1 E	0.0 E	-0.2 E	0.3 D	18.9 D		16.2
196				0.3 G	0.0 E	0.2 G	4.9 DE	-4.8 G	0.1 E	-0.2 G	15.9 D	6.2 D		19.5
197				0.4 G	-0.4 E	0.5 G	10.8 DE	-10.9 G	0.4 E	-0.1 G	17.8 D	3.9 D		19.5
198				0.0 G	0.3 E	-0.1 G	0.2 E	0.1 G	0.1 E	-0.2 G	12.3 D	8.1 D		18.6
199				-10.0 G	-0.2 E	0.4 G	6.9 D	-6.8 G	0.1 E	-0.2 E	17.4 D	-1.3 E		14.8
200				0.4 G	-0.2 E	0.9 G	1.9 E	-2.3 G	0.2 E	-0.4 E	22.8 D	-2.8 E		17.5
201				0.6 G	-0.1 E	0.4 G	4.2 E	-4.3 G	4.3 E	-0.6 E	23.4 D	-3.4 E		22.0
Mean	(-1.4)	(4.8)	(-4.9)	0.4	-0.4	0.5	3.0	-2.5	0.3	-0.5	8.4	-1.2		6.9

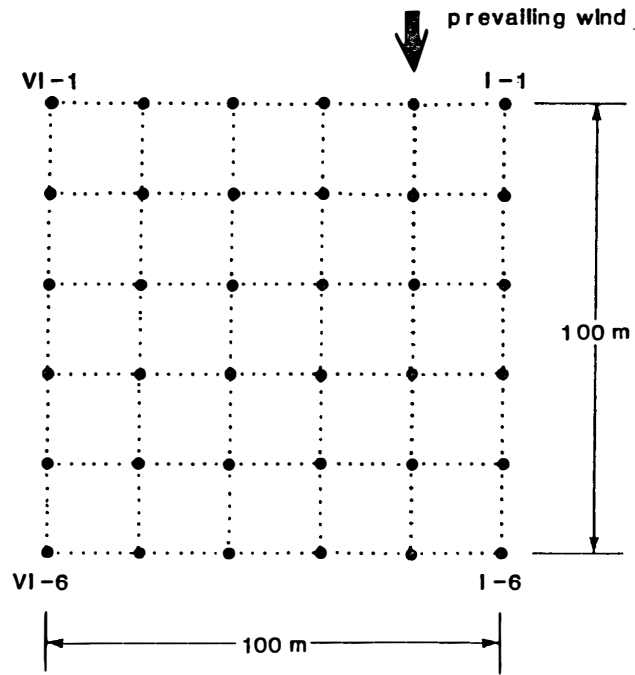


Fig. 1. 36-stake farm at Mizuho Station.

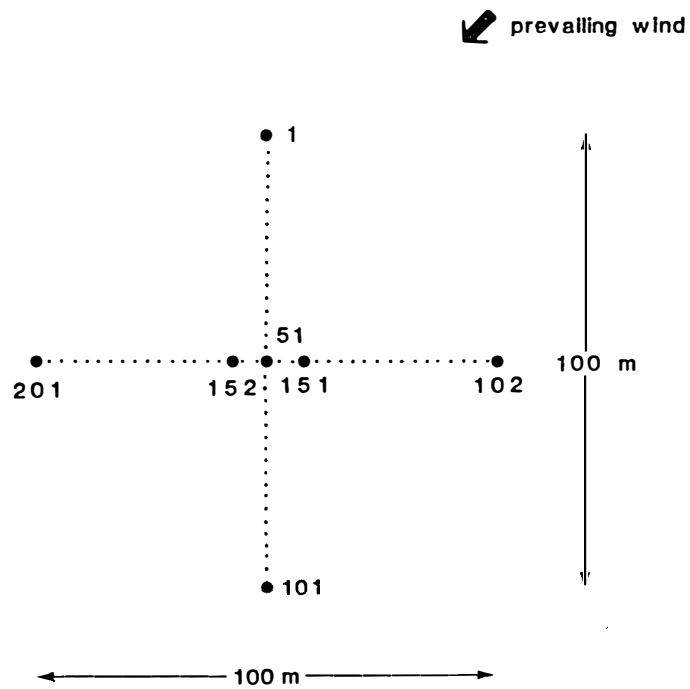


Fig. 2. 201-stake farm at Mizuho Station.

VI. Temperature Profiles in Surface Snow Layer at Mizuho Station

Observers: Fumio OKUHIRA, Tokio KIKUCHI,
Yutaka AGETA
and Takashi SHIMAMOTO

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 approximately twice a month with a standard digital voltmeter as was described by Nakawo et al. (1984). On 6 July 1985, the voltmeter was replaced with a digital thermometer (Thermodegmeter, PT-3DS) to indicate the temperature directly. The results are listed in Table VI-1. The data before the beginning of April was omitted because we had failed to measure the reference (cable) resistance.

The change in the levels of the thermometers was monitored during the observation period in 1985. The difference between the lowest and the highest surface levels, however, was as small as 6 cm and the net difference in the year was 4 cm. Therefore, we considered the change in depths of the thermometers was negligible (Fujii et al., 1986).

References

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Table VI-1. Temperature profile at Mizuho Station.

(°C)

Depth in m		1.2	1.7	3.7	5.7	10.7
1985	16 Apr.	-30.6	-30.0	-30.0	-32.1	-33.1
	2 May	-32.6	-31.9	-30.8	-32.4	-33.2
	15 May	-34.0	-32.9	-31.2	-32.4	-33.2
	1 June	-36.2	-34.8	-32.0	-32.4	-33.1
	18 June	-36.2	-35.2	-32.6	-32.6	-33.0
	2 July	-35.8	-35.3	-33.2	-32.8	-33.0
	6 July	-35.6	-35.2	-33.3	-32.8	-33.0
(by Thermo-degmeter PT-3DS, hereafter)						
	6 July	-35.4	-35.2	-33.4	-32.8	-32.9
	15 July	-35.4	-35.1	-33.2	-32.7	-32.8
	1 Aug.	-38.0	-37.1	-33.8	-33.0	-32.7
	14 Aug.	-37.9	-37.0	-34.0	-33.1	-32.7
	31 Aug.	-39.1	-38.2	-34.6	-33.5	-32.9
	14 Sep.	-38.8	-38.0	-34.8	-33.5	-32.7
	15 Oct.	-37.6	-37.4	-35.2	-34.0	-33.0
	5 Nov.	-35.7	-36.2	-35.2	-34.3	-33.1
	11 Nov.	-35.4	-35.7	-35.2	-34.3	-33.2
	15 Nov.	-34.3	-35.1	-35.1	-34.3	-33.2
	1 Dec.	-32.4	-33.5	-34.7	-34.4	-33.3
	15 Dec.	-30.5	-31.9	-34.1	-34.3	-33.4
1986	2 Jan.	-28.1	-29.9	-33.2	-36.4	-33.4

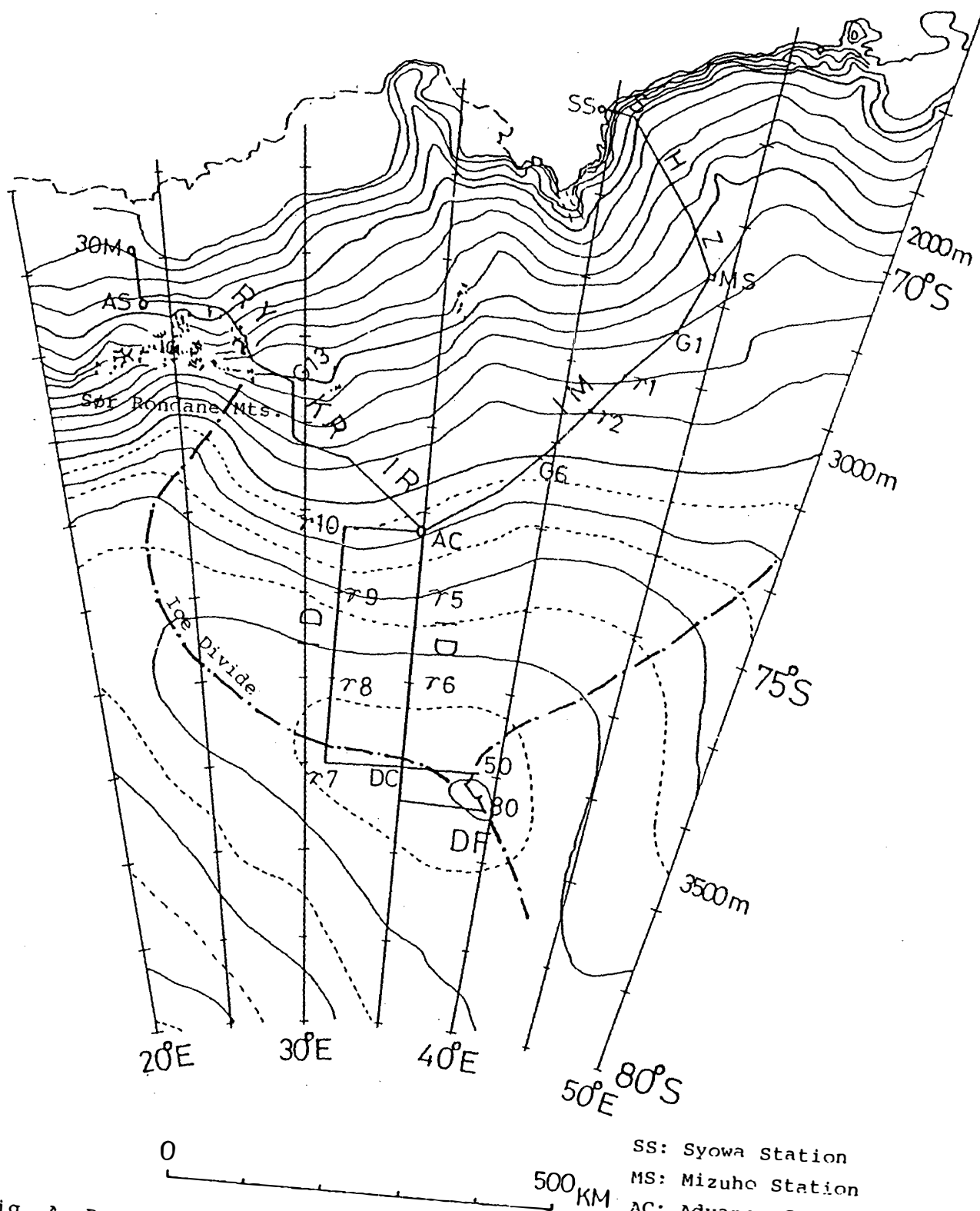


Fig. A. Routes of oversnow traverses by JARE26 (1985-86) in East Queen Maud Land.

- SS: Syowa Station
- MS: Mizuho Station
- AC: Advance Camp
- DC: Dome Camp
- AS: Asuka Camp