

**Glaciological Data Collected by the 34th Japanese
Antarctic Research Expedition in 1993**

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1. Outline of Field Observations in 1993

A five-year glaciological program, the deep ice coring project at Dome Fuji, was started from 1992. In 1991 and 1992, the 32nd and 33rd Japanese Antarctic Research Expeditions (JARE-32 and JARE-33) extended the new route from Mizuho Station to Dome Fuji, about 1000 km from Syowa Station (FUJII, 1992; KAMIYAMA *et al.*, 1994)

In 1993, three oversnow traverses were carried out by JARE-34, as shown in Table 1-1. The main glaciological field work in 1993 was carried out along the oversnow traverse route from Syowa Station to Dome Fuji Station. The participants and their assignments in the traverse operations are listed in Table 1-2. The observation items, done along the traverse route, are listed in Table 1-3.

We would like to express sincere thanks to all members of JARE-34, led by Prof. Natsuo Sato of the National Institute of Polar Research (NIPR), who extended generous support in the field work. Our first traverse was supported by JARE-33, led by Prof. Mitsuo Fukuchi of NIPR. We also thank Prof. Okitsugu Watanabe of NIPR, the project supervisor.

References

- FUJII, Y. (1992): Dai-32-ji Nankyoku Chiiki Kansoku-tai Syowa Kiti ettô (1991) hôkoku (Activities of the Wintering Party at Syowa Station by the 32nd Japanese Antarctic Research Expedition in 1991). *Nankyoku Shiryo* (Antarct. Rec.), **36**, 441-472.
- KAMIYAMA, K., FURUKAWA, T., MAENO, H., KISHI, T. and KANAOKA, M. (1994): Glaciological data collected by the 33rd Japanese Antarctic Research Expedition in 1992. *JARE Data Rep.*, **194** (Glaciology 21), 67p.

Table 1-1. Three oversnow traverses carried out by JARE-34.

Traverse No.	Period from to	Traverse route from to	Distance km	Participants	Oversnow vehicle
1993					
1	02 Jan - 17 Jan	S16 - MD364	628	9*	SM100(1), SM50(2), D40PL(3)
1	20 Jan - 31 Jan	MD364 - S16	628	9*	SM100(1), SM50(2), D40PL(3)
2	16 Aug - 3 Sep	S16 - MD364	628	8	SM100(3)
2	6 Sep - 19 Sep	MD364 - S16	628	8	SM100(3)
3	21 Oct - 28 Nov	S16 - Dome Fuji	1005	9	SM100(1), SM50(2), D40PL(3)
1994					
3	10 Jan - 26 Jan	Dome Fuji - S16	1005	9	SM100(1), SM50(2), D40PL(3)

SM50 and SM100 are types of oversnow vehicles, and D40PL that of the Bulldozer. The number of each vehicle is shown in parentheses.

* included in one JARE-33 member.

Table 1-2. Participants and their assignments in the traverse operation.

Name	Assignments	Traverse No.
Hideaki MOTOYAMA	Leader;Glaciology	1, 2, 3
Hiroyuki ENOMOTO	Glacio-meteorology	1, 3
Morihiro MIYAHARA	Ice core drilling, Glaciology	1, 3
Jinji KOIKE	Meteorology	1, 3
Yoshihiro KAMATA	Meteorology	2
Keizo SAKURAI	Meteorology	2
Tsuyoshi MURO	Sub-leader(2);Mechanic	1, 2
Minoru YURI	Sub-leader(1,3);Mechanic	1, 3
Toru ISHIZUKA	Mechanic	3
Shinji KUWAHARA	Mechanic	2
Sadami KADO	Radio operator	2
Ryuji NISHIBUN	Radio operator	1, 3
Rin MAEDA	Medical doctor	1, 3
Syuzo HORIUCHI	Medical doctor	2
Ryuji ASAKA	Field assistant	2
Nozomu NAITO	Field assistant	3
Teruo FURUKAWA (JARE-33)	Navigation;Glaciology	1

Table 1-3. Observations frequently carried out along the routes.

Item	Intervals	Traverse No.
Position	2 km	1, 2, 3
Altitude	2 km	2, 3
Snow stake	2 km	1, 2, 3
Surface feature	10 km	2, 3
Snow sampling	10 km	1, 2, 3
Meteorology	21 (LT)	1, 2, 3
Snow surface temperature	continuous	3
Snow temperature(<2.5m)	100-150 km	3
Air temperature	continuous	2, 3
Wind Speed	continuous	2, 3
GPS positioning	basic glaciological observaion site	1, 3
Aerazol Sampling	100-150 km	1, 3
Automatic weather station	S25, IMO, IM4, MD364, Dome Fuji	-

2. Net Accumulation of Snow by Stake Method

Observers: JARE-33 Teruo FURUKAWA, Kokichi KAMIYAMA,
Hideo MAENO and others

JARE-34 Hideaki MOTOYAMA, Hiroyuki ENOMOTO,
Morihiro MIYAHARA and others

Net accumulation of snow was measured by the stake method along oversnow traverse routes (Fig. 1).

2.1. Route S-H-Z

Stake height along the route was measured several times by JARE-34 in 1993 and January 1994. The height differences which give the net accumulation of snow along the route are tabulated in Table 2-1. The last column of the table gives approximately the annual net accumulation.

2.2. Route MD

Route MD was extended from IM 3 to MD 364 (Relay Point) by JARE-32 in 1991 and from MD364 to DF80 (Dome Fuji area) by JARE-33 in 1992. JARE-34 traced this route several times in 1993 and January 1994. All data along Route MD are shown in Table 2-2. The last column of the table gives approximately the annual net accumulation.

2.3. 36-stake farm, 50-stake row and 101-stake row along traverse routes

A 36-stake farm (100 m x 100 m in area) had been set up along Route S-H-Z as shown in Fig. 2. Measurements were made along it by JARE-34 in 1993 and in January 1994 on the way to Dome Fuji along Route S-H-Z. The results are shown in Table 2-3, -4, -5, -6, -7.

A 101-stake row at Mizuho Station was measured several times by JARE-34 in 1993 and January 1994. This stake row was perpendicular to the prevailing wind direction, as shown in Fig. 3. The results of these measurements are given in Table 2-8, in which the stake numbers are the same as in previous reports (KAMIYAMA *et al.*, 1994).

A 50-stake row was installed at MD-180, -364, -560 and DF80 by JARE-33. The stake heights were re-measured by JARE-34 in 1993 and January 1994. The stake row was

perpendicular to the prevailing wind direction, and the distance between stakes is 2 m (see Fig. 4). Results are shown in Tables 2-9, -10, -11, -12. Annual net accumulation is shown in the last column of these tables.

References

KAMIYAMA, K., FURUKAWA, T., MAENO, H., KISHI, T. and KANAOKA, M. (1994): Glaciological data collected by the 33rd Japanese Antarctic Research Expedition in 1992. JARE Data Rep., 194 (Glaciology 21), 67p.

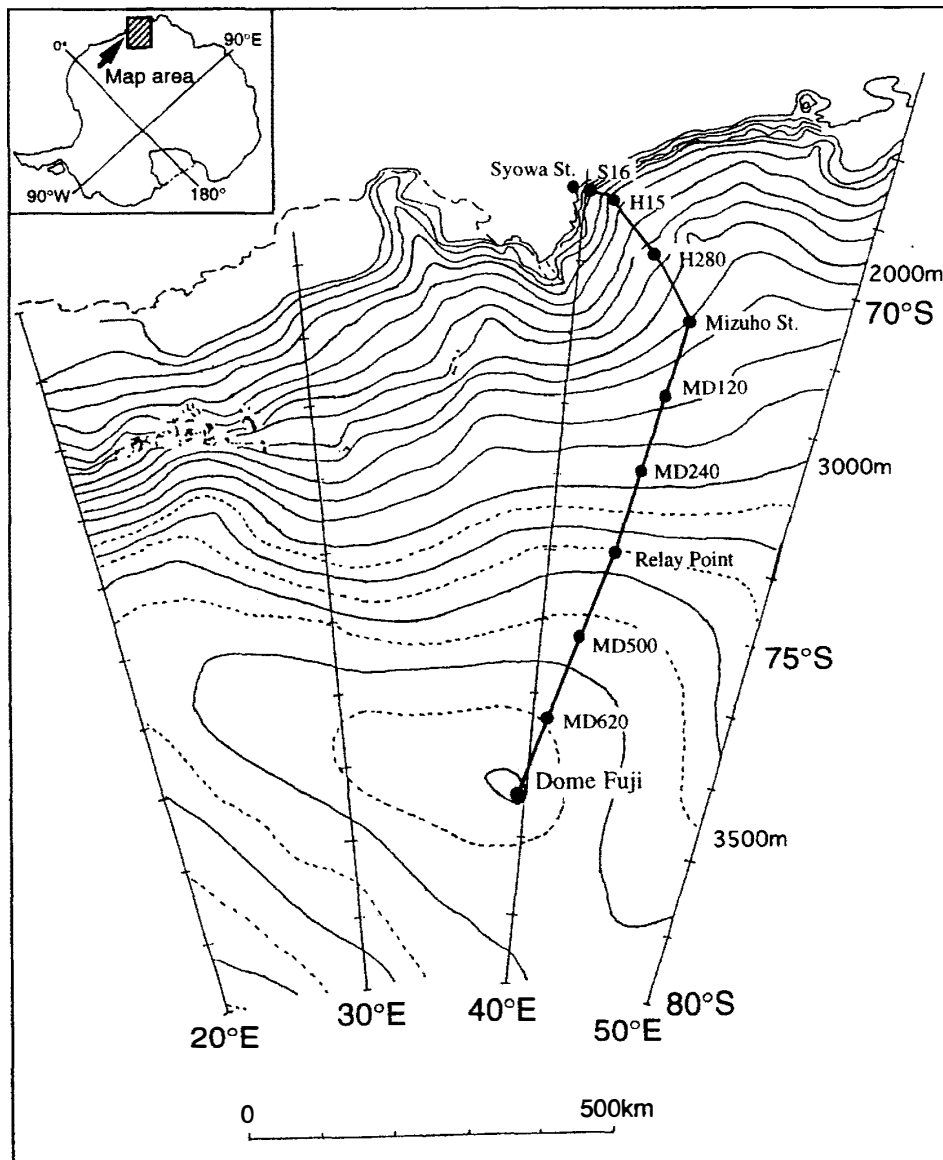


Fig. 1. Map showing the traverse routes traced by JARE-34.

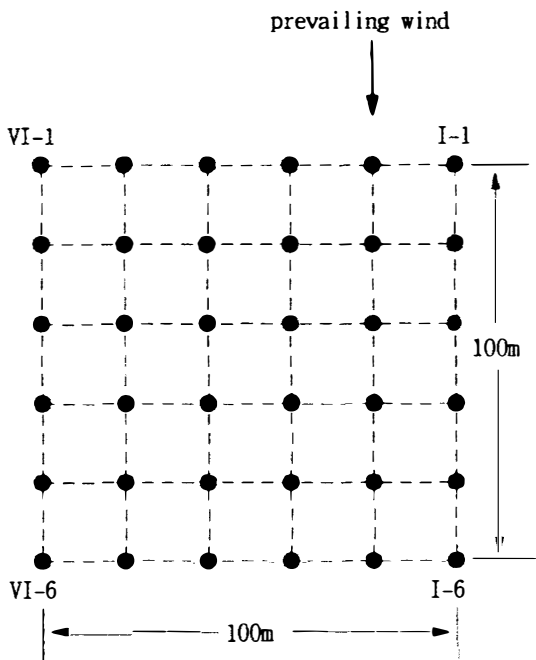


Fig. 2. 36-stake farm at S16, H68, H180, S122 and Z40.

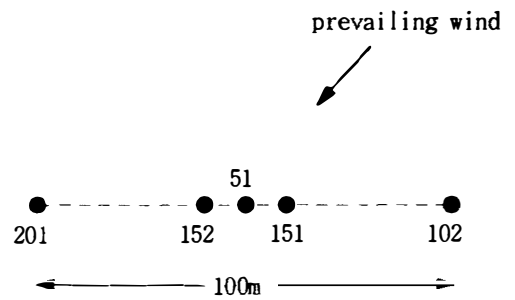


Fig. 3. 101-stake row at Mizuho Station.

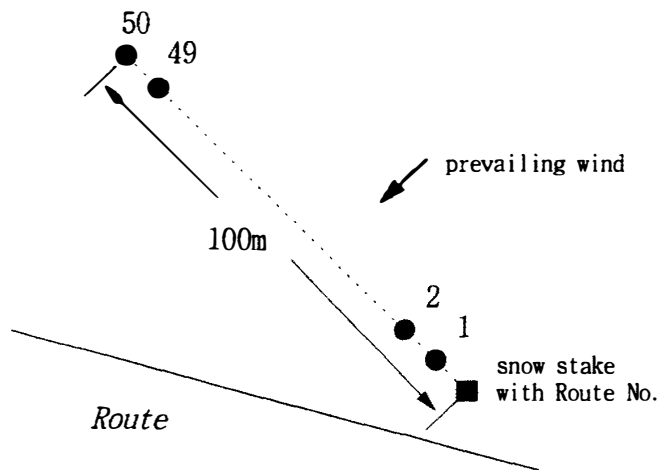


Fig. 4. 50-stake row at MD180, MD364, MD560 and DF80.

Table 2-1. Net accumulation along Route S-H-Z.

(cm in depth)

Station No.	Jan. 26-31 1993 (197-207days)	Aug. 16-21 1993 (61-74)	Oct. 21-29 1993 (85-97)	Jan. 22-26 1994	Jan. 1993 -Jan. 1994 (356-365)
S 16	47	1	-11		37
S 17	27	18	5		50
S 18	49	15	-31		33
S 19	69	19	-5		83
S 20	62	16	-6		72
S 21	68	18	2		88
S 22	80	17	-4		93
S 23	90	10	-16		84
S 24	70	18	-2		86
S 25	51	19	-1		69
S 26	56	20	-5		71
S 27	72	27	-30		69
S 28	69	27	-25		71
S 29	77	11	-3		85
S 30	76	34	-9		101
H 3	79	25	-19		85
H 9	62	32	-15		79
H 15	83	3	1		87
H 21	73	17	-6		84
H 27	47				
H 35	64	15	-2		77
H 42	41	17	-16		42
H 48	56	11	-7		60
H 54	46	25	-1		70
H 60	58	9	8		75
H 64	52	12	-2		62
H 68	33	1	-9		25
H 72	67	32	-5		94
H 76	59	1	-13		47
H 80	60	30	-34		56
H 84	55	7	-82		-20
H 88	42	2	-2		42
H 92	60	12	-86		-14
H 96	57	6	8		71
H 100	46	31	-22		55
H 104	37	0	-3		34
H 108	37	11	-5		43
H 112	17	11	11		39
H 116	35	8	-2		41
H 120	51	-2	-7		42
H 124	19	-1	-7		11
H 128	34	12	-3		43

(cm in depth)

Station No.	Jan. 26-31 1993 (197-207days)	Aug. 16-21 1993 (61-74)	Oct. 21-29 1993 (85-97)	Jan. 22-26 1994	Jan. 1993 -Jan. 1994 (356-365)
H 132	20	21	-19		22
H 136	30	16	-5		41
H 140	33	14	68		115
H 144	15	12	-12		15
H 148	42	14	-11		45
H 152	41	8	1		50
H 156	37	2	-10		29
H 160	22	5	5		32
H 164	-3	57	-6		48
H 168	39	1	-1		39
H 172	42	1	-9		34
H 176	31	19	1		51
H 180	28	16	0		44
H 184	34	12	3		49
H 188	11	15	-13		13
H 192	29	11	1		41
H 196	41	18	-10		49
H 200	36	2	-6		32
H 204	30	26	-16		40
H 208	35	16	-6		45
H 212	33	10	-3		40
H 216	44	10	-7		47
H 220	37	12	-6		43
H 224	24	23	-10		37
H 228	27	18	5		50
H 232	31	1	-3		29
H 236	20	1	49		70
H 240	38	9	-8		39
H 244	12	7	16		35
H 248	17	2	-1		18
H 252	55	4	-9		50
H 256	23	4	-7		20
H 260	34	26	-9		51
H 264	20	31	-4		47
H 268	23	-1	-5		17
H 272	39	-1	4		42
H 276	78	-1	-12		65
H 280	39	12	0		51
H 284	22	3	-13		12
H 288	30				
H 293	17	-1	-8		8
H 297	14	6	9		29
H 301	14	20	-6		28
S 122	27	1	-7		21

(cm in depth)

Station No.	Jan. 26-31 1993 (197-207days)	Aug. 16-21 1993 (61-74)	Oct. 21-29 1993 (85-97)	Jan. 22-26 1994	Jan. 1993 -Jan. 1994 (356-365)
Z 2	5	1	-1		5
Z 4	13	4	-9		8
Z 6	14	3	-5		12
Z 8	9	7	-7		9
Z 10	15	15	-5		25
Z 12	7	8	-3		12
Z 14	30	24	12		66
Z 16	-1	10	10		19
Z 18	32	0	-9		23
Z 20	-2	14	-8		4
Z 22	77	-1	-7		69
Z 24	28	0	0		28
Z 26	34	1	-8		27
Z 28	0	1	-5		-4
Z 30	0	1	-5		-4
Z 32	5	2	-5		2
Z 34	10	0	2		12
Z 36	6	8	-8		6
Z 38	3	0	-5		-2
Z 40	-1	20	-7		12
Z 42	12	0	-11		1
Z 46	21	-1	-10		10
Z 50	41	-1	3		43
Z 54	-1	6	-6		-1
Z 58	37	2	-7		32
Z 62	54	-7	3		50
Z 66	1	4	-4		1
Z 70	1	3	-5		-1
Z 72	5	1	-2		4
Z 74	-1	0	-3		-4
Z 76	0	0	-3		-3
Z 78	2	5	7		14
Z 80	8	0	2		10
Z 82	43	1	-4		40
Z 84	19	1	-5		15
Z 86	33	0	3		36
Z 88	50	0	-5		45
Z 90	36	1	-4		33
Z 92	-2	3	-2		-1
Z 94	2	3	16		21
Z 96	18	0	-5		13
Z 98	6	0	-6		0
Z 100	35	1	-3		33
Z 102	51	-21	-8		22

Table 2-2. Net accumulation along Route MD.

(cm in depth)

Station No.	Oct. 5	Nov. 1	Jan. 10	Station No.	Oct. 5	Nov. 1	Jan. 10
	1992 (369-417days)	1993 (45-84)	1994		1992 (369-417days)	1993 (45-84)	1994
IM 0			-3	MD 68	44		-6
IM 1	29		-7	MD 70	43		4
IM 2	12		-9	MD 72	55		-7
MD 0	0		-1	MD 74	56		-6
MD 2	25		-3	MD 76	57		-4
MD 4	-6		-5	MD 78	18		-2
MD 6	-5		-6	MD 80	46		11
MD 8	49		-4	MD 82	3		-3
MD 10	21		-8	MD 84	-8		-4
MD 12	7	(325days)	-10	MD 86	6		-3
MD 14	17	(325days)	-10	MD 88	9		-3
MD 16	20	(325days)	2	MD 90	-70		-5
MD 18	51	(325days)	-5	MD 92	-4		6
MD 20	-41		21	MD 94	6		1
MD 22	47		3	MD 96	3		6
MD 24	35		-1	MD 98	-9		-5
MD 26	9		-5	MD 100	-49		6
MD 28	12		7	MD 102	68		2
MD 30	-1		-3	MD 104	20		-1
MD 32	16		2	MD 106	7		-4
MD 34	47		-5	MD 108	7		-2
MD 36	-30		-5	MD 110	52		7
MD 38	31		-2	MD 112	34		-4
MD 40	9		11	MD 114	21		42
MD 42	7		-2	MD 116	0		1
MD 44	26		-6	MD 118	6		-9
MD 46	57		-7	MD 120	11		3
MD 48	28		8	MD 122	-5		16
MD 50	42		21	MD 124	7		1
MD 52	11		-3	MD 126	-7		-1
MD 54	46		-3	MD 128	-41		0
MD 56	-4		-3	MD 130	-57		-5
MD 58	9		-2	MD 132	31		12
MD 60	18		-2	MD 134	3		-2
MD 62	30		0	MD 136	23		-3
MD 64	29		-1	MD 138	23		20
MD 66	12		-1	MD 140	56		-7

(cm in depth)

Station No.	Oct. 5 -28 1992 (369-417days)	Nov. 1 -26 1993 (45-84)	Jan. 10 -24 1994	Station No.	Oct. 5 -28 1992 (369-417days)	Nov. 1 -26 1993 (45-84)	Jan. 10 -24 1994
MD 142	20	9		MD 220	-14	-1	
MD 144	-7	16		MD 222	3	11	
MD 146	18	-1		MD 224	39	-3	
MD 148	15	-3		MD 226	19	-2	
MD 150	14	-2		MD 228	-27	-2	
MD 152	-50	21		MD 230	-10	6	
MD 154	29	-4		MD 232	31	-3	
MD 156	26	12		MD 234	28	-1	
MD 158	30	-3		MD 236	-2	5	
MD 160	-1	-2		MD 238	41	-4	
MD 162	9	-3		MD 240	51	7	
MD 164	11	-1		MD 242	-4	17	
MD 166	30	-2		MD 244	-2	-1	
MD 168	26	1		MD 246	10	3	
MD 170	13	3		MD 248	19	3	
MD 172	37	-1		MD 250	-7	24	
MD 174	50	-6		MD 252	20	-2	
MD 176	-4	-2		MD 254	36	3	
MD 178	-4	2		MD 256	35	-3	
MD 180	-3	11		MD 258	11	12	
MD 182	1	-4		MD 260	16	2	
MD 184	1	18		MD 262	19	-1	
MD 186	22	1		MD 264	31	-2	
MD 188	-3	23		MD 266	-1	10	
MD 190	14	7		MD 268	25	-3	
MD 192	80	-12		MD 270	54	-4	
MD 194	49	10		MD 272	53	1	
MD 196	9	-1		MD 274	-14	22	
MD 198	0	4		MD 276	54	-1	
MD 200	-1	10		MD 278	6	-2	
MD 202	-5	-2		MD 280	9	-1	
MD 204	20	2		MD 282	13	5	
MD 206	11	9		MD 284	39	-9	
MD 208	26	-1		MD 286	21	5	
MD 210	-2	17		MD 288	-2	23	
MD 212	-1	-2		MD 290	13	15	
MD 214	-2	7		MD 292	31	1	
MD 216	2	0		MD 294	33	19	
MD 218	-1	-1		MD 296	-1	-1	

(cm in depth)

Station No.	Oct. 5 -28 1992 (369-417days)	Nov. 1 -26 1993 (45-84)	Jan. 10 -24 1994	Station No.	Oct. 5 -28 1992 (369-417days)	Nov. 1 -26 1993 (45-84)	Jan. 10 -24 1994
MD 298	-4	10		MD 376	13	12	
MD 300	25	-9		MD 378	19	3	
MD 302	21	-2		MD 380	5	9	
MD 304	9	-1		MD 382	18	-2	
MD 306	-1	4		MD 384	13	-4	
MD 308	32	3		MD 386	19	-6	
MD 310	2	-4		MD 388	22	-2	
MD 312	38	-2		MD 390	5	-2	
MD 314	74	-6		MD 392	3	27	
MD 316	43	0		MD 394	-2	9	
MD 318	26 (347days)	-3		MD 396	8	-2	
MD 320	31	0		MD 398	12	-2	
MD 322	27 (347days)	3		MD 400	29	-1	
MD 324	4	32		MD 402	10	-2	
MD 326	-11	2		MD 404	23	-1	
MD 328	22	-6		MD 406	24	-7	
MD 330	11	-1		MD 408	-3	1	
MD 332	-1	0		MD 410	11	7	
MD 334	4	1		MD 412	13	0	
MD 336	6	3		MD 414	36	-7	
MD 338	11	-2		MD 416	2	8	
MD 340	7	7		MD 418	10	-4	
MD 342	-7	3		MD 420	9	-1	
MD 344	14	2		MD 422	8	0	
MD 346	23	-1		MD 424	30	-2	
MD 348	22	-3		MD 426	14	6	
MD 350	18	-1		MD 428	26	1	
MD 352	14	-8		MD 430	12	1	
MD 354	19	-2		MD 432	19	0	
MD 356	13	1		MD 434	16	-5	
MD 358	28	-2		MD 436	29	-3	
MD 360	25	0		MD 438	11	7	
MD 362	6	8		MD 440	19	-3	
MD 364	0	-1		MD 442	13	-1	
MD 366	11	-1		MD 444	7	-1	
MD 368	31	4		MD 446	14	15	
MD 370	4	-3		MD 448	8	-1	
MD 372	21	7		MD 450	8	2	
MD 374	20	-2		MD 452	19	-4	

(cm in depth)

Station No.	Oct. 5	Nov. 1	Jan. 10	Station No.	Oct. 5	Nov. 1	Jan. 10
	-28 1992 (369-417days)	-26 1993 (45-84)	-24 1994		-28 1992 (369-417days)	-26 1993 (45-84)	-24 1994
MD 454	8	-2		MD 532	14	-2	
MD 456	9	14		MD 534	12	-1	
MD 458	10	0		MD 536	11	-2	
MD 460	19	5		MD 538	10	-1	
MD 462	10	-2		MD 540	16	3	
MD 464	3	4		MD 542	5	2	
MD 466	-3	2		MD 544	21	-1	
MD 468	18	18		MD 546	15	0	
MD 470	6	5		MD 548	16	-1	
MD 472	5	-2		MD 550	17	-2	
MD 474	11	5		MD 552	10	-1	
MD 476	16	2		MD 554	2	-1	
MD 478	1	0		MD 556	7	-1	
MD 480	15	-2		MD 558	4	-1	
MD 482	10	-1		MD 560	4	2	
MD 484	21	2		MD 562	21	-3	
MD 486	11	-1		MD 564	13	-2	
MD 488	17	-2		MD 566	0	-1	
MD 490	-1	-2		MD 568	-4	0	
MD 492	21	-2		MD 570	-3	-1	
MD 494	11	-1		MD 572	3	11	
MD 496	-3	2		MD 574	17	4	
MD 498	-1	0		MD 576	11	0	
MD 500	13	-2		MD 578	9	0	
MD 502	14	-2		MD 580	11	7	
MD 504	10	0		MD 582	4	0	
MD 506	14	3		MD 584	15	-2	
MD 508	7	-2		MD 586	5	2	
MD 510	13	0		MD 588	4	7	
MD 512	5	-1		MD 590	18	-3	
MD 514	15	0		MD 592	2	4	
MD 516	6	0		MD 594	6	0	
MD 518	8	4		MD 596	15	-1	
MD 520	19	0		MD 598	7	-1	
MD 522	0	-1		MD 600	14	-1	
MD 524	8	-1		MD 602	20	0	
MD 526	18	4		MD 604	6	2	
MD 528	1	-1		MD 606	9	-1	
MD 530	-2	-1		MD 608	4	3	

(cm in depth)

Station No.	Oct. 5	Nov. 1	Jan. 10	Station No.	Oct. 5	Nov. 1	Jan. 10
	-28 1992 (369-417days)	-26 1993 (45-84)	-24 1994		-28 1992 (369-417days)	-26 1993 (45-84)	-24 1994
MD 610	17	-1		MD 688	3		3
MD 612	9	3		MD 690	32		-4
MD 614	27	-2		MD 692	6		4
MD 616	5	7		MD 694	13		-1
MD 618	3	1		MD 696	14		0
MD 620	6	3		MD 698	27		-10
MD 622	17	-3		MD 700	9		-1
MD 624	8	3		MD 702	-3		-1
MD 626	17	1		MD 704	5		15
MD 628	6	-2		MD 706	4		3
MD 630	-4	-1		MD 708	5		10
MD 632	6	-2		MD 710	2		0
MD 634	25	-3		MD 712	2		6
MD 636	5	-1		MD 714	12		-2
MD 638	2	2		MD 716	9		8
MD 640	15	0		MD 718	6		0
MD 642	3	-1		MD 720	8		-1
MD 644	12	2		MD 722	15		0
MD 646	9	0		MD 724	16		0
MD 648	8	2		MD 726	9		-2
MD 650	4	0		MD 728	3		5
MD 652	12	2		MD 730	12		1
MD 654	1	4		MD 732	1		1
MD 656	4	4		MD 734	8		-1
MD 658	3	2		MD 736	6		0
MD 660	7	-1		MD 738			1
MD 662	-1	0					
MD 664	3	11					
MD 666	2	4					
MD 668	10	-2					
MD 670	16	-1					
MD 672	25	-10					
MD 674	2	-2					
MD 676	5	1					
MD 678	4	0					
MD 680	-2	-2					
MD 682	16	0					
MD 684	-2	-1					
MD 686	12	-1					

Table 2-3. Net accumulation in 36-stake farm at S16 in 1993-1994.

(cm in depth)

Stake No.	31 Jan. 1993 -13 May 1993 (102days)	13 May 1993 -16 Aug. 1993 (95)	16 Aug. 1993 -20 Sep. 1993 (35)	20 Sep. 1993 -21 Oct. 1993 (31)	21 Oct. 1993 -28 Jan. 1994 (99)	31 Jan. 1993 -28 Jan. 1994 (362)
I -1	0	39	-1	6	-18	26
-2	5	30	0	13	-20	28
-3	3	21	7	7	-4	34
-4	5	23	1	13	-24	18
-5	3	21	1	19	-29	15
-6	1	25	0	8	-15	19
II -1	13	26	-1	7	-20	25
-2	3	27	2	9	-25	16
-3	5	29	6	9	-24	25
-4	7	20	9	0	-7	29
-5	-5	24	12	-2	-15	14
-6	10	22	9	-1	-15	25
III -1	0	26	0	6	-16	16
-2	7	17	3	2	-15	14
-3	11	16	0	4	-16	15
-4	-6	29	1	3	-11	16
-5	5	22	2	9	-13	25
-6	-1	25	8	3	-17	18
IV -1	-2	14	13	5	-16	14
-2	-4	24	0	4	-16	8
-3	-2	32	0	0	-10	20
-4	2	19	2	0	-9	14
-5	-6	28	0	7	-17	12
-6	10	34	0	0	-11	33
V -1	14	2	1	0	-6	11
-2	-2	13	1	1	-10	3
-3	8			6	-19	
-4	-6	49	0	-1	-23	19
-5	8	16	1	6	-20	11
-6	14	2	3	4	-13	10
VI -1	2	25	0	0	-12	15
-2	26	13	2	11	-23	29
-3	16	15	1	0	-9	23
-4	7	13	4	-2	-12	10
-5	9	9	8	6	-18	14
-6	12	7	1	15	-18	17

Table 2-4. Net accumulation in 36-stake farm at H68 in 1993-1994.

(cm in depth)

Stake No.	29 Jan. 1993 -17 Aug. 1993 (200days)	17 Aug. 1993 -22 Oct. 1993 (66)	22 Oct. 1993 -26 Jan. 1994 (96)	29 Jan. 1993 -26 Jan. 1994 (362)
I -1	24	1	-4	21
-2	38	2	-22	18
-3	24	7	-5	26
-4	19	17	-11	25
-5	19	6	-6	19
-6	32	1	-3	30
II -1	35	2	-3	34
-2	27	7	-11	23
-3	28	5	-10	23
-4	23	3	-10	16
-5	23	14	-19	18
-6	13	2	-5	10
III -1	22	3	-2	23
-2	21	4	-13	12
-3	19	8	-8	19
-4	16	12	9	37
-5	26	7	0	33
-6	23	1	-9	15
IV -1	27	18	-11	34
-2	21	3	-7	17
-3	4	8	-5	7
-4	28	0	-4	24
-5	29	6	-16	19
-6	17	0	-1	16
V -1	27	4	-1	30
-2	38	8	-15	31
-3	35	1	-2	34
-4	27	0	-5	22
-5	23	9	-12	20
-6	33	0	-8	25
VI -1	32	7	-13	26
-2	32	11	-8	35
-3	27	3	-3	27
-4	13	0	-4	9
-5	18	13	-13	18
-6	45	2	-22	25

Table 2-5. Net accumulation in 36-stake farm at H180 in 1993-1994.

(cm in depth)

Stake No.	28 Jan. 1993 -18 Aug. 1993 (202)	18 Aug. 1993 -23 Oct. 1993 (66)	23 Oct. 1993 -25 Jan. 1994 (94)	28 Jan. 1993 -25 Jan. 1994 (362)
I -1	43	14	-11	46
-2	45	4	-12	37
-3	37	15	-11	41
-4	32	24	-12	44
-5	22	25	-9	38
-6	19	16	4	39
II -1	26	18	-1	43
-2	38	7	-2	43
-3	32	9	0	41
-4	31	13	-8	36
-5	51	8	-7	52
-6	54	2	-4	52
III -1	25	13	-8	30
-2	38	6	-9	35
-3	38	3	-9	32
-4	37	12	-10	39
-5	38	16	-7	47
-6	31	19	-4	46
IV -1	3	12	-5	10
-2	26	10	-6	30
-3	24	13	-8	29
-4	22	10	-4	28
-5	30	11	-2	39
-6	13	21	-5	29
V -1	35	6	5	46
-2	25	18	-5	38
-3	24	17	-7	34
-4	30	7	-4	33
-5	22	14	-9	27
-6	42	7	-12	37
VI -1	34	16	-6	44
-2	28	10	-5	33
-3	34	10	2	46
-4	43	12	-4	51
-5	47	3	7	57
-6	37	0	4	41

Table 2-6. Net accumulation in 36-stake farm at S122 in 1993-1994.

(cm in depth)

Stake No.	27 Jan. 1993 -19 Aug. 1993 (204days)	19 Aug. 1993 -27 Oct. 1993 (69)	27 Oct. 1993 -25 Jan. 1994 (90)	27 Jan. 1993 -25 Jan. 1994 (363)
I -1	17	0	-5	12
-2	15	0	-5	10
-3	-1	0	-3	-4
-4	-1	0	-2	-3
-5	-1	0	-4	-5
-6	9	0	-8	1
II -1	35	-8	-5	22
-2	8	2	-5	5
-3	0	0	7	7
-4	33	-24	-1	8
-5	13	0	1	14
-6	15	2	-7	10
III -1	23	-1	1	23
-2	10	0	-1	9
-3	5	24	-4	25
-4	37	-5	1	33
-5	16	-2	-2	12
-6	4	8	8	20
IV -1	21	2	-4	19
-2	2	0	-5	-3
-3	7	0	-7	0
-4	24	-14	1	11
-5	7	11	-2	16
-6	-1	8	-7	0
V -1	8	-1	-2	5
-2	4	-1	-1	2
-3	4	0	2	6
-4	32	13	-4	41
-5	55	8	9	72
-6	43	2	6	51
VI -1	15	0	-10	5
-2	53	-1	-7	45
-3	29	1	0	30
-4	48	1	-6	43
-5	62	-1	-4	57
-6	57	1	-5	53

Table 2-7. Net accumulation in 36-stake farm at Z40 in 1993-1994.

(cm in depth)

Stake No.	26. Jan. 1993 -20. Aug. 1993 (206days)	20 Aug. 1993 -28 Oct. 1993 (69)	28 Oct. 1993 -24 Jan. 1994 (88)	26 Jan. 1993 -24 Jan. 1994 (363)
I -1	2	0	-4	-2
-2	7	10	-2	15
-3	19	-2	-9	8
-4	19	12	-14	17
-5	6	3	-5	4
-6	37	2	-2	37
II -1	46	0	0	46
-2	46	0	-7	39
-3	44	1	-4	41
-4	34	6	-6	34
-5	17	11	-3	25
-6	0	5	-8	-3
III -1	33	1	-10	24
-2	2	2	0	4
-3	7	3	-2	8
-4	23	2	-5	20
-5	8	0	-5	3
-6	11	0	1	12
IV -1	11	3	-5	9
-2	0	3	-5	-2
-3	5	1	4	10
-4	5	0	6	11
-5	25	-4	-1	20
-6	1	1	-3	-1
V -1	9	6	-2	13
-2	-1	0	5	4
-3	23	1	-11	13
-4	18	0	-4	14
-5	-3	1	-3	-5
-6	-1	0	-2	-3
VI -1	8	-1	5	12
-2	19	1	-6	14
-3	9	6	-3	12
-4	-1	1	-4	-4
-5	21	0	-1	20
-6	16	0	-6	10

Table 2-8. Net accumulation along 101-stake row at Mizuho Station in 1993-1994.

(cm in depth)

Stake No.	25 Jan. 1993 -21 Aug. 1993 (208days)	21 Aug. 1993 -30 Oct. 1993 (70)	30 Oct. 1993 -23 Jan. 1994 (85)	25 Jan. 1993 -23 Jan. 1994 (363)
102	0	1	1	2
103	-3	0	-1	-4
104	1	0	-2	-1
105	2	-3	-4	-5
106	0	-1	-6	-7
107	-2	0	-7	-9
108	-3	0	-3	-6
109	0	0	-3	-3
110	0	-1	-2	-3
111	-5	4	0	-1
112	-1	1	-2	-2
113	-1	0	-3	-4
114	1	1	-4	-2
115	-2	2	-6	-6
116	-1	1	-5	-5
117	-1	0	-3	-4
118	-1	2	-4	-3
119	0	-1	-3	-4
120	-1	0	-3	-4
121	-1	0	-3	-4
122	-1	0	-4	-5
123	-4	1	-3	-6
124	-3	1	-8	-10
125	-10	7	-4	-7
126	-1	0	-2	-3
127	-1	0	-4	-5
128	0	0	-3	-3
129	0	0	-5	-5
130	-2	2	-3	-3
131	-1	-1	-3	-5
132	-6	6	-4	-4
133	-3	-1	-10	-14
134	-4	1	-6	-9
135	-2	0	-2	-4
136	-1	0	-3	-4

(cm in depth)

Stake No.	25 Jan. 1993 -21 Aug. 1993 (208days)	21 Aug. 1993 -30 Oct. 1993 (70)	30 Oct. 1993 -23 Jan. 1994 (85)	25 Jan. 1993 -23 Jan. 1994 (363)
137	1	-1	-3	-3
138	2	-2	-2	-2
139	-2	2	-5	-5
140	-2	2	-4	-4
141	-2	2	-4	-4
142	-1	1	-3	-3
143	-1	1	-3	-3
144	0	1	-1	0
145	0	-1	2	1
146	0	0	2	2
147	-1	0	-1	-2
148	-1	2	-3	-2
149	-1	0	3	2
150	1	1	1	3
151	-1	1	1	1
51	-1	0	-2	-3
152	-2	0	-4	-6
153	-4	1	-4	-7
154	-2	1	-2	-3
155	-15	12	1	-2
156	-7	6	2	1
157	-2	0	12	10
158	-2	2	9	9
159	-3	1	8	6
160	-4	0	-2	-6
161	0	1	-3	-2
162	0	3	-4	-1
163	1	1	-4	-2
164	6	0	-8	-2
165	1	-1	-3	-3
166	-2	4	-4	-2
167	4	9	11	24
168	6	12	-1	17
169	2	2	6	10
170	4	0	12	16
171	8	-2	9	15
172	-2	5	17	20

(cm in depth)

Stake No.	25 Jan. 1993 -21 Aug. 1993 (208days)	21 Aug. 1993 -30 Oct. 1993 (70)	30 Oct. 1993 -23 Jan. 1994 (85)	25 Jan. 1993 -23 Jan. 1994 (363)
173	1	-1	17	17
174	11	-7	16	20
175	-1	8	4	11
176	-1	10	0	9
177	-1	10	-5	4
178	7	-4	-9	-6
179	-1	8	-3	4
180	-2	6	-5	-1
181	-2	4	-3	-1
182	-3	8	3	8
183	-1	2	8	9
184	-1	1	5	5
185	0	2	16	18
186	6	5	2	13
187	3	1	3	7
188	0	2	-4	-2
189	3	1	-4	0
190	5	1	-5	1
191	-1	0	-3	-4
192	0	0	-3	-3
193	1	0	-3	-2
194	0	0	-5	-5
195	2	1	-3	0
196	12	1	4	17
197	11	1	3	15
198	10	1	1	12
199	5	7	-3	9
200	7	0	-3	4
201	3	0	-4	-1

Table 2-9. Net accumulation along 50-stake row at MD180 in 1993-1994.

(cm in depth)

Stake No.	22 Jan. 1993 -9 Sep. 1993 (230days)	9 Sep. 1993 -5 Nov. 1993 (57)	5 Nov. 1993 -20 Jan. 1994 (76)	22 Jan. 1993 -20 Jan. 1994 (363)
0 (MD180)	0	0	11	11
1	-2	1	-1	-2
2	-2	0	14	12
3	-1	0	21	20
4	1	0	11	12
5	-1	1	6	6
6	-2	1	13	12
7	1	-1	10	10
8	-2	0	0	-2
9	0	-1	0	-1
10	-2	0	-1	-3
11	0	0	-1	-1
12	-3	1	-2	-4
13	1	-1	1	1
14	0	2	-4	-2
15	-1	0	-1	-2
16	-3	1	0	-2
17	-2	-1	0	-3
18	0	0	-2	-2
19	1	-1	0	0
20	1	0	-2	-1
21	-2	1	-1	-2
22	0	1	-1	0
23	-2	1	-2	-3
24	-1	0	-1	-2
25	1	0	-3	-2
26	-1	2	-3	-2
27	-1	3	-3	-1
28	-2	2	-4	-4
29	-1	0	-1	-2
30	2	-2	0	0
31	-1	1	-2	-2
32	-2	1	-2	-3
33	-1	1	3	3
34	-1	1	-2	-2
35	-1	1	-2	-2
36	-2	0	-2	-4
37	-2	1	-3	-4
38	0	0	-3	-3
39	0	0	-2	-2
40	-1	1	-4	-4
41	-7	7	0	0
42	1	-1	3	3
43	-3	1	19	17
44	-1	1	8	8
45	-1	0	1	0
46	-2	1	9	8
47	0	0	-3	-3
48	-2	1	-2	-3
49	-1	0	-2	-3
50	0	0	-1	-1

Table 2-10. Net accumulation along 50-stake row at MD364 in 1993-1994.

(cm in depth)

Stake No.	19 Jan. 1993 -3 Sep. 1993 (227days)	3 Sep. 1993 -16 Nov. 1993 (74)	16 Nov. 1993 -16 Jan. 1993 (61)	19 Jan. 1993 -16 Jan. 1993 (362)
0(MD364)	1	0	-1	0
1	4	-2	-2	0
2	2	3	1	6
3	2	-1	-1	0
4	1	0	-2	-1
5	0	1	-2	-1
6	2	-1	-1	0
7	3	-1	1	3
8	-6	6	-2	-2
9	0	0	-2	-2
10	-1	1	-2	-2
11	0	1	-2	-1
12	20	-18	-2	0
13	1	-1	-2	-2
14	0	1	-3	-2
15	2	-1	-2	-1
16	-2	2	-2	-2
17	1	1	0	2
18	-1	1	-1	-1
19	-1	1	-2	-2
20	1	1	-2	0
21	3	-3	1	1
22	-1	1	3	3
23	1	-1	0	0
24	1	-1	1	1
25	0	1	-3	-2
26	0	0	-1	-1
27	0	0	-1	-1
28	2	1	-3	0
29	0	0	-1	-1
30	1	-1	-1	-1
31	0	1	-2	-1
32	0	0	-1	-1
33	0	0	0	0
34	0	0	-1	-1
35	-2	1	6	5
36	0	0	21	21
37	-2	3	3	4
38	0	0	1	1
39	1	0	0	1
40	8	-3	-3	2
41	-2	1	-1	-2
42	1	-1	-2	-2
43	-1	1	0	0
44	0	-1	0	-1
45	1	-1	-1	-1
46	-1	2	-2	-1
47	1	0	-1	0
48	1	1	-1	1
49	-1	-9	7	-3
50	0	1	-2	-1

Table 2-11. Net accumulation along 50-stake row at MD560 in 1993-1994.

Stake No.	(cm in depth)	
	22 Nov. 1992 -21 Nov. 1993 (364days)	21 Nov. 1993 -12 Jan. 1994 (52)
0 (MD560)	3	2
1	2	0
2	4	-1
3	4	-1
4	7	2
5	8	-1
6	2	2
7	2	-1
8	11	-1
9	8	-1
10	8	-1
11	10	2
12	8	1
13	0	-1
14	-2	0
15	2	-1
16	2	0
17	4	-1
18	3	-1
19	5	-1
20	2	0
21	17	0
22	13	0
23	1	-1
24	5	4
25	13	-1
26	20	-1
27	3	4
28	8	0
29	10	0
30	12	3
31	15	-1
32	14	4
33	16	11
34	22	-9
35	0	5
36	6	0
37	1	3
38	-1	4
39	3	2
40	14	5
41	4	-3
42	6	4
43	0	4
44	0	0
45	4	7
46	5	6
47	6	0
48	5	-2
49	9	-1
50	9	-2

Table 2-12. Net accumulation along 50-stake row at DF80 in 1993-1994.

Stake No.	(cm in depth)	
	15 Nov. 1992 -26 Nov. 1993 (376)	26 Nov. 1993 -6 Jan. 1994 (41)
0 (DF80)		-1
1	17	-2
2	14	-1
3	15	-1
4	7	0
5	13	-1
6	16	-1
7	20	-1
8	12	-1
9	16	-2
10	22	-1
11	15	-1
12	19	0
13	17	0
14	19	-1
15	18	0
16	17	2
17	22	-1
18	15	-3
19	13	0
20	15	-1
21	15	0
22	17	0
23	23	-3
24	15	0
25	12	-1
26	9	5
27	16	2
28	16	5
29	21	4
30	17	5
31	17	2
32	15	6
33	18	-1
34	16	0
35	16	1
36	17	-1
37	13	-3
38	7	-1
39	5	0
40	14	3
41	9	5
42	11	4
43	19	5
44	17	4
45	19	3
46	16	5
47	15	9
48	20	0
49	18	-2
50	9	0

3. Surface Meteorological Data during Oversnow Traverses

The meteorological observations were carried out at least at 2100 LT by members of the meteorological section of JARE-34. A meteorological instrument, a combination of air temperature, pressure and wind speed sensors, was used continuously during the traverses with a data logging system. The instrument was set up over the snow surface during the meteorological observations. The items, instrument and accuracy of the observation are given in Table 3-1. The notations used in this section are shown in Table 3-2.

3.1. Surface meteorological data during the first traverse

Observer: Jinji KOIKE

The electrical aspiration fan for air temperature measurement broke down. So the portable aspirated thermometer was used at observation time. The lower value of temperatures was accepted. The data obtained are listed in Table 3-1.

3.2. Surface meteorological data during the second traverse

Observers: Yoshihiro KAMATA and Keizo SAKURAI

The electrical aspiration fan for air temperature measurement broken down because of low temperature. The anemometer was sometimes troubled by snow packed in the rotating fan bearing. The data obtained are listed in Table 3-2.

3.3 Surface meteorological data during the last traverse

Observer: Jinji KOIKE

The data logger broke down several times. The data obtained are listed in Table 3-3.

Table 3-1. Instruments and accuracy of meteorological observations.

Item	Instrument	Accuracy
Air pressure	Aneroid gauge	± 0.1 hPa
Air temperature	Platinum resistance	± 0.1 °C
Wind direction	Magnetic compass	± 5
Wind speed	3-cup anemometer	± 0.1 m/s
Visibility	Visual observation	
Cloud amount	Visual observation	
Weather	Visual observation	
Individual cloud	Visual observation	

Table 3-2. Notation used in tables in this section.

LT	: local standard time at Syowa station (UTC + 3 hours)
Pa	: Air pressure (hPa)
Ta	: Air temperature (°C)
WD	: Wind direction (degree north)
WS	: Wind speed (m/s)
V	: Visibility (km)
W	: Weather
○	Clear
⊕	Fine
⊗	Cloudy(upper cloud are predominant)
⊙	Cloudy
✖	Snow
↕	Drifting Snow
⇄	Blowing snow
⚡	Snow storm
↔	Diamond dust
⚡	Ice needles
≡	fog
(≡)	partially fog
CA	: Cloud amount (in tenth)
Cloud	: Individual cloud amount and type

Table 3-3. Meteorological data observed during traverse No. 1.

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/01/01	12:00	S16	919.3	-3.0	ENE	17.1	0.05	↗	X	X ↗	
93/01/01	21:00	S16	923.7	-5.3	NE	10.8	0.1	↗	X	X Ac	
93/01/02	09:00	S16			NE		20	☉	10-	2 Sc ; 8 Ac ; X Ci	
93/01/02	15:00	S16		(-3.4)	NE	(7)	30	☉	10-	0+Cu ; 1 Ac ; 10-Ci	
93/01/02	21:40	S24		(-8.3)	ENE	(8)	30	☉	10-	10-Ac	
93/01/03	09:00	S24	895.6	(-7.2)	ENE	11.8	1	☉	10-	10-Ac	↗
93/01/03	12:00	S26-5	887.8	(-6.4)	ENE	10.1	1	☉	10-	10-Ac	↗
93/01/03	21:00	H90	848.4	(-11.2)	ENE	6.4	30	☉	9	8 Ac ; X Ci	
93/01/04	08:00	H90	847.4	(-12.0)	ENE	6.1	30	⊙	9	9 Ci	
93/01/04	12:00	H104	837.2	(-7.2)	E	3.6	30	⊙	8	8 Ci	
93/01/04	21:00	H188	809.5	(-12.2)	E	2.9	30	☉	9	6 Ac ; 2 Cc ; X Ci	
93/01/05	08:00	H188	812.0	(-12.2)	E	6.4	30	⊙	8	8 Ci	
93/01/05	12:00	H218	805.6	(-7.9)	E	5.7	30	⊙	10-	10-Ci	
93/01/05	21:00	H299	780.6	(-14.9)	E	4.3	30	⊙	6	4 Ac ; X Ci	
93/01/06	08:00	H299	783.8	(-15.3)	E	9.9	30	○	0		↗
93/01/06	12:00	Z12	774.0	(-12.1)	E	9.2	30	○	0+	0+Ac	↗
93/01/06	21:00	Z42	759.5	(-16.8)	E	5.9	30	○	0		
93/01/07	08:00	Z42	755.0	-18.5	E	14.5	0.05	↗	X	X ↗	
93/01/07	12:00	Z42	755.8	-14.8	E	10.8	0.15	↗	7	7 Ac	
93/01/07	21:00	Z86	750.1	(-20.0)	E	3.2	30	○	0+	0+Sc ; 0+Ac	
93/01/08	08:00	Z86	754.3	(-18.0)	E	6.3	5	☉	10-	10-Ac	
93/01/08	12:00	Z98	752.1	(-13.4)	E	7.0	20	☉	10	10 Ac	
93/01/08	21:00	IM0	749.9	(-15.2)	E	4.9	10	☉	10	10 As	
93/01/09	09:00	IM0	753.3	(-13.4)	ESE	9.6	0.2	↗	10	10 Ac	↗
93/01/09	12:00	IM0	752.1	-11.8	ESE	9.1	2	✕	10	10 Ns	↗
93/01/09	21:00	IM0	750.3	(-15.4)	E	9.8	30	⊙	3	1 Ac ; 2 Ci	↗
93/01/10	08:00	IM0	750.3	-15.4	E	15.1	0.1	↗	3	3 Ci	
93/01/10	12:00	MD4	748.3	-12.2	E	15.0	0.2	↗	10-	6 Ac ; X Ci	
93/01/10	21:00	MD38	740.7	-14.6	E	12.4	0.4	↗	10	10 As	
93/01/11	08:00	MD38	742.7	-15.4	E	11.6	0.4	↗	10-	3 Ac ; 10-Ci	
93/01/11	12:00	MD50	738.0	-12.6	E	13.3	0.4	↗	4	4 Ci	
93/01/11	21:00	MD90	724.2	-17.4	SE	8.9	30	⊙	2	2 Ci	↗
93/01/12	09:00	MD90	720.5	-16.9	ESE	10.9	0.4	↗	0		
93/01/12	12:00	MD96	716.1	-14.1	ESE	11.8	0.4	↗	0		
93/01/12	21:00	MD132	710.0	-17.4	ESE	8.5	30	○	0+	0+Ac	↗
93/01/13	08:20	MD132	715.4	-20.7	ESE	10.1	0.6	↗	0		
93/01/13	12:00	MD144	712.6	-18.4	ESE	11.7	0.4	↗	0		
93/01/13	21:00	MD176	703.3	-21.6	ESE	8.9	5	○	0		↗

Date	LT	Point	Pa hPa	Ta ℃	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/01/14	08:00	MD176	702.6	-22.2	ESE	9.2	5	○	0+	0+Ac	↕
93/01/14	12:00	MD188	695.8	(-20.2)	ESE	8.5	1.5	○	0+	0+Ac	↕
93/01/14	21:00	MD226	680.8	(-22.4)	ESE	4.3	30	⊕	8	8 Ac	
93/01/15	08:00	MD226	680.6	-23.3	ESE	6.7	2	⊕	10-	4 Cs ; X Ci	
93/01/15	12:00	MD240	677.0	(-19.2)	ESE	7.5	10	⊕	10-	10-Ci	
93/01/15	21:00	MD270	670.5	(-24.0)	ESE	5.3	30	○	0+	0+Ac	
93/01/16	08:00	MD270	675.5	(-25.6)	ESE	5.4	30	⊕	4	4 Ci	↔
93/01/16	12:00	MD284	673.2	(-22.0)	ESE	7.4	30	⊕	10-	1 Ac ; 10-Ci	↕
93/01/16	21:00	MD318	666.8	(-25.9)	ESE	3.9	30	⊙	9	9 Ac	
93/01/17	08:00	MD318	667.7	(-27.6)	ESE	5.4	30	○	0		
93/01/17	12:00	MD332	663.1	(-26.2)	ESE	6.0	30	○	0+	0+Ci	
93/01/17	21:00	MD364	653.7	(-30.1)	ESE	3.3	30	○	0+	0+Ac ; 0+Ci	
93/01/18	09:00	MD364	652.9	(-28.6)	ESE	6.8	1	○	0		↕
93/01/18	12:00	MD364	651.4	(-23.4)	SE	6.3	30	○	0+	0+Sc ; 0+Ac	
93/01/18	21:00	MD364	650.6	-29.5	ESE	6.0	30	○	0+	0+Ac	
93/01/19	09:00	MD364	653.0	-27.4	ESE	7.6	1	○	0+	0+Ac	↕
93/01/19	12:00	MD364	652.0	(-23.0)	ESE	6.1	30	⊕	4	0+Sc ; 4 Ac	
93/01/19	21:00	MD364	651.9	(-25.8)	ESE	4.1	5	✖	10-	10-Ac	
93/01/20	09:00	MD364	653.8	-28.3	ESE	5.5	2	⊕	2	0+Ac ; 2 Ci	
93/01/20	15:00	MD348	658.6	(-23.9)	ESE	6.5	30	⊕	2	2 Ac	↔
93/01/20	21:00	MD314	664.6	(-28.4)	E	5.1	30	○	0+	0+Sc ; 0+Ac	
93/01/21	08:00	MD314	663.7	-28.4	SE	6.6	30	○	0+	0+Ac	↕
93/01/21	12:00	MD300	665.2	(-23.8)	ESE	7.4	30	⊕	2	0+Ac ; 2 Ci	↕
93/01/21	21:00	MD240	682.1	(-23.5)	ESE	8.1	5	⊙	10-	10-Ac	↕
93/01/22	08:00	MD240	684.9	(-26.2)	ESE	11.2	0.2	↕	10-	10-Ci	
93/01/22	12:00	MD224	688.6	(-19.6)	ESE	9.5	2	○	0+	0+Ac	↕
93/01/22	21:00	MD178	703.1	(-21.4)	ESE	6.9	30	○	0+	0+Ci	
93/01/23	08:00	MD178	702.3	-22.4	ESE	8.6	30	○	0+	0+Ac ; 0+Ci	
93/01/23	12:00	MD164	704.9	(-18.6)	ESE	10.0	30	○	0+	0+Ac	↕
93/01/23	21:00	MD120	715.4	(-19.9)	ESE	6.8	30	⊕	10-	4 Ac ; X Ci	
93/01/24	08:00	MD120	717.0	-21.3	ESE	6.9	5	✖	10-	3 Ac ; X Ci	↕
93/01/24	12:00	MD102	723.9	(-17.4)	E	6.1	5	✖	10-	2 Ac ; 10-Ci	↕
93/01/24	21:00	MD54	736.2	(-21.7)	E	3.8	30	⊕	10-	2 Ac ; 10-Ci	
93/01/25	08:00	MD54	735.6	-23.3	E	8.1	30	○	0+	0+Ci	↕
93/01/25	12:00	MD42	737.0	(-19.0)	E	8.0	30	○	0+	0+Ac	↕
93/01/25	21:00	IM1	747.1	(-22.8)	E	4.3	30	○	0		
93/01/26	09:00	IM1	747.1	-21.2	E	9.1	30	○	0		↕
93/01/26	12:00	Z88	753.1	(-16.8)	E	7.6	30	○	0		↕
93/01/26	21:00	Z32	764.0	(-19.4)	E	7.4	30	○	0		↕

Date	LT	Point	Pa hPa	Ta ℃	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/01/27	08:00	Z32	765.9	-21.2	E	12.7	0.4	↗	0		
93/01/27	12:00	Z9	774.5	-15.1	E	12.6	0.2	↗	0+	0+Ci	
93/01/27	21:00	H260	794.0	-15.1	E	11.4	2	○	0+	0+Ac	↗
93/01/28	08:00	H260	790.0	-16.1	E	12.5	0.4	↗	8	8 Ci	
93/01/28	12:00	H220	800.8	-8.6	E	10.8	10	⊙	10-	2 Ac ; 10-Ci	↗
93/01/28	21:00	H124	827.3	(-11.4)	E	6.6	30	⊙	9	3 Ac ; X Ci ; X Cc	
93/01/29	08:00	H124	832.2	-9.5	ENE	11.2	0.4	↗	10-	0+Ac ; 10-Ci	
93/01/29	12:00	H94	844.1	-7.6	NE	11.5	0.1	↗	X	X ↗	
93/01/29	21:00	H15	868.5	(-6.8)	NE	11.0	0.4	↗	X	X ↗	
93/01/30	09:00	H15	861.4	-7.2	E	14.3	0.1	↗	X	X ↗	
93/01/30	15:00	H15	859.1	-5.7	ENE	11.5	0.4	↗	X	X Ac ; X Ci	
93/01/30	21:00	H15	861.2	-6.8	NE	8.7	0.4	✖	X	X ✖	↗
93/01/31	08:00	H15	871.9	(-6.7)	N	5.8	2	✖	10-	10-Ns	
93/01/31	12:00	S24-3	895.6	(-4.4)	NNE	7.9	5	✖	10-	7 Sc ; X Ac	↗
93/01/31	21:00	S16	929.5	(-4.2)	NE	7.4	2	✖	10	0+Sc ; 10 Ac	
93/02/01	09:00	S16	927.8	(-5.0)	ENE	7.7	30	⊙	10-	2 Sc ; 7 Ac ; X Ci	
93/02/01	11:00	S16	927.4	(-3.4)	ENE	7.2	30	⊙	8	0+Sc ; 7 Ac ; X Ci	
93/02/01	12:00	S16	926.9	(-2.9)	ENE	6.5	30	⊙	10-	0+Sc ; 10-Ac	
93/02/01	13:00	S16	926.7	(-3.0)	ENE	6.8	30	⊙	10-	0+Sc ; 10-Ac	
93/02/01	21:00	S16	923.2	(-6.0)	ENE	5.6	20	⊙	10-	3 Sc ; X Ac	
93/02/02	09:00	S16	921.0	-6.2	ENE	9.9	5	⊙	10-	0+Sc ; 10-Ac	↗
93/02/02	18:00	S16	921.0	(-5.9)	WSW	1.7	30	⊙	10	1 Sc ; 10 Ac	
93/02/03	09:00	S16	923.8	-5.4	ENE	9.8	30	⊙	10-	2 Sc ; 10-Ac	↗
93/02/03	18:00	S16	924.9	-4.9	NE	10.5	2	✖	10	0+Sc ; 10 As	↗
93/02/04	09:00	S16	925.9	-4.8	ENE	13.9	0.2	↗	X	X Ac	
93/02/04	11:00	S16	923.3	-3.9	ENE	13.6	0.2	↗	X	X Ac	
93/02/04	13:00	S16	923.0	-3.2	ENE	13.0	0.2	↗	X	X ↗	
93/02/04	15:00	S16	923.6	-3.0	ENE	11.4	0.2	↗	X	X ↗	
93/02/04	16:00	S16	923.5	-2.8	ENE	11.0	0.4	↗	X	X Ac	
93/02/04	17:00	S16	923.7	-3.1	ENE	10.7	0.4	↗	X	X Ac	
93/02/04	21:00	S16	924.3	-4.7	NE	12.0	0.4	↗	X	X Sc ; X Ac	
93/02/05	05:00	S16	925.7	-4.2	ENE	7.8	5	⊙	10	1 Sc ; 10 As	↗
93/02/05	06:00	S16	925.6	-4.1	ENE	7.4	5	⊙	10-	1 Sc ; 10-Ac	↗
93/02/05	07:00	S16	925.5	-3.5	ENE	6.5	10	⊙	9	1 Sc ; 9 Ac ; X Ci	↗
93/02/05	08:00	S16	925.2	-2.9	NE	6.4	20	⊙	10-	1 Sc ; 10-Ac	

[notes] the parenthesized AT is the value observed by portable ventilated thermometer
the parenthesized WS is the value observed by portable anamometer

Table 3-4. Meteorological data observed during traverse No. 2.

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/08/15	21:00	S16	902.0	-14.6	E	11.1	2	⊙	2	2 Ac	
93/08/16	09:00	S16	902.5	-14.7	E	11.5	10	⊙	10-	8 Ac ; 10-Ci	
93/08/16	21:40	H0	854.2	-17.8	E	10.3	2	○	0		+
93/08/17	09:00	H0	855.9	-24.5	E	7.9	10	⊙	10-	2 Ac ; 10-Cs	
93/08/17	21:00	H140	811.9	-32.7	E	8.3	10	○	0		+
93/08/18	09:00	H140	812.9	-34.7	E	7.5	20	○	1	1 Ci	+
93/08/18	21:00	H268	772.9	-37.6	ESE	5.5	30	○	0		
93/08/19	09:00	H268	774.8	-39.6	ESE	5.4	30	○	1	1 Ci	
93/08/19	21:00	Z32	745.8	-44.2	ENE	6.3	30	○	0		
93/08/20	09:00	Z32	747.0	-46.9	E	7.4	20	⊙	10-	1 Ci ; 10-Cs	
93/08/20	21:12	Z90	734.6	-43.1	E		20	○	0		+
93/08/21	09:00	Z90	710.9		E	6.0	20	○	0+	0+Ci	
93/08/21	21:03	IM0	728.3	-50.5	SE	9.0	30	○	1	1 Ci	
93/08/22	09:00	IM0	722.6	-50.2	ESE	7.7	20	○	0+	0+Ci	
93/08/22	21:10	MD14			E		0.2	+	X	X +	
93/08/23	09:30	MD14	710.2	-49.0	E	7.8	0.4	+	X	X +	
93/08/23	21:00	MD56	700.7	-54.9	ESE	9.5	1	○	0		+
93/08/24	09:00	MD56	703.1	-53.0	ESE	10.9	0.2	+	X	X +	
93/08/24	21:00	MD90	696.2	-55.4	SE	10.8	1	○	0		+
93/08/25	09:00	MD90	692.2	-56.2	SE	13.9	0.1	+	X	X +	
93/08/25	21:00	MD104	696.0	-53.5	SSE	12.9	0.1	+	X	X +	
93/08/26	09:00	MD104	693.7	-54.3	SE		0.2	+	X	X +	
93/08/26	21:00	MD136	679.2	-54.2	SE	11.7	0.2	+	X	X +	
93/08/27	09:00	MD136	670.4	-55.2	SE	11.2	0.2	+	X	X +	
93/08/27	20:50	MD170	660.8	-59.2	SE		0.2	+	X	X +	
93/08/28	09:00	MD170	666.3	-58.0	SE	6.0	0.4	+	X	X +	
93/08/28	20:50	MD216	655.2	-59.5	SE	7.5	0.4	+	X	X +	
93/08/29	09:00	MD216	655.7	-60.3	SSE	10.0	0.1	+	X	X +	
93/08/29	21:00	MD216	656.5	-54.3	SE	13.1	0.03	+	X	X +	
93/08/30	09:00	MD216	655.3	-46.3	SE	13.7	0.05	+	X	X +	
93/08/30	21:00	MD216	656.2	-54.2	SE	12.7	0.05	+	X	X +	
93/08/31	09:00	MD216	657.2	-50.9	SE	11.5	0.1	+	X	X +	
93/08/31	21:00	MD242	655.4	-49.6	SE	13.1	0.05	+	X	X +	

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/09/01	09:00	MD242	660.7	-48.7	SE	12.5	0.05	↗	X	X ↗	
93/09/01	21:00	MD280	648.8	-46.5	ESE	10.4	0.1	↗	X	X ↗	
93/09/02	09:00	MD280	648.2	-47.6	ESE	8.9	0.4	↗	10-	10-Ci	
93/09/02	21:00	MD332	635.8	-53.3	SE	8.5	1	⊙	2	2 Ci	↗
93/09/03	09:00	MD332	634.5	-54.5	SE	7.0	10	○	1	1 Ci	↗
93/09/03	21:00	MD364	623.5	-51.0	ESE	7.0	10	○	0		↗
93/09/04	09:00	MD364	621.2	-45.3	ESE	7.7	5	⊙	10	3 Ci ; 10 Cs	↗
93/09/04	21:00	MD364	619.5	-47.7	SE	7.2	2	⊙	3	3 Cs	↗
93/09/05	09:00	MD364	618.9	-50.0	SE	7.6	2	⊙	7	7 Cs	↗
93/09/05	21:00	MD364		-56.1	SE	6.2	10	○	0		↗
93/09/06	09:00	MD364		-57.4	SE	5.2	10	○	0		
93/09/06	21:00	MD312	637.2	-54.5	SSW	2.8	20	○	0		
93/09/07	09:00	MD312	636.8	-53.2	SSE	7.7	1	○	0		↗
93/09/07	21:00	MD252	647.9	-53.7	SE	9.9	2	○	0		↗
93/09/08	09:00	MD252	645.1	-55.0	SE	11.4	0.2	↗	X	X ↗	
93/09/08	21:00	MD206	658.7	-55.7	SE	10.8	0.4	↗	X	X ↗	
93/09/09	09:00	MD206	657.8	-53.7	ESE	9.2	1	○	0		↗
93/09/09	21:00	MD154	675.2	-51.3	ESE	10.1	1	○	0		↗
93/09/10	09:00	MD154	678.3	-53.2	ESE	7.6	2	○	0		
93/09/10	21:00	MD94	702.3	-50.3	ESE	7.4	10	⊙	2	2 Ci	↗
93/09/11	09:00	MD94	705.1	-49.4	ESE	6.1	0.4	↗	10	10 Cs ; 2 Ci	
93/09/11	21:00	MD42	719.0	-37.1	ESE	8.4	0.4	↗	X	X ↗	
93/09/12	09:00	MD42	716.0	-32.6	SE	12.7	0.03	↗	X	X ↗	
93/09/12	21:00	MD42	717.1	-30.9	ESE	11.9	0.1	↗	X	X ↗	
93/09/13	09:00	MD42	720.8	-33.6	ESE	12.5	0.05	↗	X	X ↗	
93/09/13	21:10	MD42	718.8	-34.7	ESE	11.5	0.05	↗	X	X ↗	
93/09/14	09:00	MD42	712.3	-36.4	ESE	9.6	1	⊙	10	10 Cs	↗
93/09/14	21:00	IM1	724.1	-42.9	ESE	7.6	5	○	0		↗
93/09/15	09:00	IM1	730.6	-46.9	E	9.8	1	○	0+	0+Ci	↗
93/09/15	20:50	Z62	747.5	-46.4	E	8.3	5	○	0		↗
93/09/16	09:00	Z62	750.7	-46.1	E	10.2	1	○	0		↗
93/09/16	21:00	H301	773.7	-37.8	E	12.7	0.2	↗	X	X ↗	
93/09/17	09:00	H301	774.0	-34.3	E	12.4	0.4	↗	X	X ↗	
93/09/17	21:00	H172	811.3	-27.3	E	10.1	1	⊙	3	3 As	↗

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/09/18	09:00	H172	807.7	-24.9	E	9.0	1	☉	10	10 As	↕
93/09/18	21:00	H80	832.0	-22.9	ENE	8.8	5	☉	6	6 Ac	↕
93/09/19	09:00	H80	828.4	-26.2	E	8.4	10	○	0+	0+Ac ; 0+Ci	↕
93/09/19	21:00	S16	906.3	-23.1	ENE	7.3	20	○	0+	0+Ac	
93/09/20	09:00	S16	907.2	-18.6	E	8.1	5	☉	10	10-Ac ; X As	

Table 3-5. Meteorological data observed during traverse No. 3.

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/10/20	21:30	S16	902.0	-19.7	ENE	5.4	20	⊕	10	10 Ci	
93/10/21	10:10	S16	904.3	-14.9	ENE	2.4	5	✕	10	10 As	
93/10/21	21:30	H35	841.4	-22.7	SW	3.4	5	✕	10	4 Ac ; 10 As	
93/10/22	07:30	H35	841.6	-26.2	E	1.8	5	○	0+	0+Ci	☉
93/10/22	21:30	H144	812.3	-34.1	E	6.3	30	○	0		
93/10/23	07:30	H144			E		30	⊕	10-	10-Ci	☉
93/10/23	21:00	H240	796.5	-29.2	E	4.2	10	⊕	10	2 Ci ; 10 Cs	
93/10/24	07:20	H240	794.9	-24.7	E	9.6	10	⊕	10-	10-Ci	☉
93/10/24	21:00	H291		(-20.8)	E	(19)	0.05	☉	X	X ☉	
93/10/25	09:00	H291		(-22.0)	E	(18)	0.05	☉	X	X ☉	
93/10/25	17:30	H291	758.2	-23.5		12.8					
93/10/25	21:00	H291		(-27.0)	E	(15)	0.1	☉	10-	10-Ac	
93/10/26	09:00	H291		-26.2	E	(13)	0.05	☉	10	10 Ac	
93/10/26	15:00	H291	762.5	-22.8	E	10.4	0.3	☉	8	8 Ci ; 0+Cc	
93/10/26	21:00	H291	767.0	-29.2	E	8.2	5	○	0+	0+Ac	☉
93/10/27	07:30	H291			E		1	○	0+	0+Ac	☉
93/10/27	21:00	Z32	748.4	-33.2	ENE	6.7	30	○	0		
93/10/28	07:10	Z32	747.7	-38.0	E	6.0	30	○	0		
93/10/28	21:00	Z88	739.2	-36.5	E	5.8	30	○	0		
93/10/29	07:30	Z88	741.2	-37.3	E	8.9	30	○	0+	0+Ci	☉
93/10/29	21:00	IM0	736.2	-35.1	E	8.0	30	⊕	3	3 Ci	☉
93/10/30	09:00	IM0	735.5	-29.8	E	10.7	5	⊕	10-	10-Ci	☉
93/10/30	21:00	IM0	735.2	-28.7	E	8.8	1	⊕	10-	10-Ci	☉
93/10/31	09:00	IM0	737.3	-28.6	E	9.0	3	⊕	10-	10-Ci	☉
93/10/31	21:00	IM0	738.9	-30.8	E	4.3	5	⊕	10-	10-Ci	☉
93/11/01	09:00	IM0	740.3	-29.7	E	8.0	20	⊕	10-	10-Ci	☉
93/11/01	21:00	MD30	729.7	-36.4	E	4.0	30	⊕	9	3 Ac ; 9 Ci	
93/11/02	07:20	MD30	728.9	-37.0	E	7.2	3	⊕	5	5 Ci	☉
93/11/02	21:00	MD70	716.9	-35.4	E	6.2	30	⊕	4	4 Ac	
93/11/03	08:48	MD70		-35.8	E		1	⊕	10-	10-Ci	☉
93/11/03	21:00	MD110	703.6	-35.0	E	5.9	10	✕	10-	10-Ci	
93/11/04	07:30	MD110	702.3	-33.3	E	8.6	2	⊕	10-	10-Ci	☉
93/11/04	21:00	MD152	688.8	-32.6	ESE	6.6	3	✕	10	2 As ; 10 Ci	

Date	LT	Point	Pa hPa	Ta ℃	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/11/05	07:30	MD152	690.2	-34.6	ESE	8.1	2	✕	10	10 Ci	↗
93/11/05	21:00	MD194	678.5	-32.9	E	3.1	3	✕	10	4 As ; 10 Ci	
93/11/06	07:30	MD194	680.5	-37.9	E	4.3	10	☉	10-	8 Ac ; 2 Ci	
93/11/06	21:00	MD244	666.4	-41.4	ESE	6.4	30	○	0+	0+Ci	
93/11/07	10:00	MD244	668.4	-38.8	SE	8.7	2	⊕	7	7 Ci	↗
93/11/07	21:00	MD244	666.9	-39.5	SE	8.1	10	⊕	10-	10-Ci	↗
93/11/08	10:00	MD244	664.8	-36.2	SE	9.8	2	⊕	10-	10-Ci	↗
93/11/08	21:30	MD244	661.3	-39.3	SE	10.5	5	⊕	10-	10-Ci	↗
93/11/09	06:00	MD244	660.6	-39.7	SE	12.4	1	○	1	1 Ci	↗
93/11/09	07:30	MD244	660.6	-38.9	SE	13.0	0.4	↗	0+	0+Ci	
93/11/09	09:30	MD244	660.4	-36.6	SE	13.3	0.4	↗	0		
93/11/09	12:00	MD244	660.8	-33.7	SE	12.6	0.2	↗	0		
93/11/09	15:00	MD244	660.0	-33.3	SE	12.1	0.2	↗	8	8 Ci	
93/11/09	18:00	MD244	659.9	-34.5	SE	9.5	2	⊕	2	2 Ci	↗
93/11/09	21:00	MD244	659.8	-39.3	SE	10.9	2	○	0+	0+Ci	↗
93/11/10	06:00	MD244	658.6	-42.1	SE	12.8	0.1	↗	X	X ↗	
93/11/10	07:30	MD244	658.6	-40.6	SE	13.0	0.1	↗	X	X ↗	
93/11/10	09:00	MD244	658.1	-39.3	SE	13.6	0.1	↗	X	X ↗	
93/11/10	10:00	MD244	658.1	-37.9	SE	13.2	0.1	↗	X	X ↗	
93/11/10	11:00	MD244	657.8	-37.7	SE	13.7	0.1	↗	X	X ↗	
93/11/10	12:00	MD244	657.4	-36.8	SE	13.7	0.1	↗	X	X ↗	
93/11/10	13:00	MD244	657.3	-35.8	SE	14.2	0.1	↗	X	X ↗	
93/11/10	14:00	MD244	657.2	-34.9	SE	14.5	0.1	↗	X	X ↗	
93/11/10	15:00	MD244	658.0	-34.0	SE	12.9	0.1	↗	X	X ↗	
93/11/10	16:00	MD244	657.3	-33.7	SE	13.0	0.1	↗	X	X ↗	
93/11/10	17:00	MD244	657.3	-32.7	SE	12.4	0.1	↗	X	X ↗	
93/11/10	18:00	MD244	657.2	-34.3	SE	11.9	0.2	↗	3	3 Ci	
93/11/10	21:00	MD244	657.6	-36.9	SE	11.4	0.6	↗	0+	0+Ac	
93/11/11	07:30	MD244	660.3	-38.2	SE	13.2	0.2	↗	X	X ↗	
93/11/11	21:00	MD282	653.2	-38.8	ESE	11.7	0.4	↗	0		
93/11/12	08:30	MD282	653.3	-37.0	SE	12.9	0.1	↗	X	X ↗	
93/11/12	21:00	MD306	647.6	-35.3	SE	9.8	0.4	↗	10-	2 Ac ; 10-Ci	
93/11/13	07:30	MD306	646.4	-36.0	SE	13.6	0.05	↗	X	X ↗	
93/11/13	21:00	MD316	643.4	-34.3	SE	13.2	0.1	↗	X	X ↗	
93/11/14	07:30	MD316	639.9	-35.7	SE	12.9	0.1	↗	0		
93/11/14	22:20	MD364	626.5	-36.8	SE	10.6	0.4	↗	10-	3 Ac ; 10-Ci	
93/11/15	08:30	MD364	629.1	-37.4	SE	12.3	0.4	↗	X	X Cs	
93/11/15	21:00	MD364	631.6	-39.4	SE	6.0	30	○	0+	0+Ac	↗
93/11/16	09:30	MD364	633.1	-38.9	SE	7.2	1	⊕	5	5 Cs ; 0+Ci	↗
93/11/16	21:00	MD364	633.5	-41.0	SE	5.5	20	○	0+	0+Ac	

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/11/17	07:30	MD364	635.7	-41.4	SE	7.4	2	⊙	5	5 Ci	↕
93/11/17	21:00	MD404	626.5	-40.0	ESE	8.5	1	⊙	10-	10-Cs ; 1 Ci	↕
93/11/18	07:30	MD404	624.8	-40.3	ESE	10.2	0.4	↕	X	X Ci	
93/11/18	21:00	MD442	621.7	-41.1	ESE	4.0	30	○	0+	0+Ac	
93/11/19	07:30	MD442	624.3	-41.0	ESE	6.9	0.6	↕	10	10 Ci	
93/11/19	21:00	MD482	619.9	-38.4	SE	6.6	2	⊙	10	10 Ci	↕
93/11/20	07:30	MD482	620.0	-40.5	ESE	5.6	10	⊙	10-	10-Ci	↕
93/11/20	21:00	MD524	615.5	-37.9	ESE	5.6	2	⊙	10-	10-Ci	↕
93/11/21	08:50	MD524	615.5	-36.8	ESE	6.3	2	⊙	10-	10-Ci	↕
93/11/21	21:00	MD560	612.9	-40.6	ESE	4.5	30	⊙	10-	10-Ci	
93/11/22	07:30	MD560	614.2	-41.4	ESE	4.8	30	⊙	10-	10-Ci	
93/11/22	21:00	MD604	608.7	-41.0	E	2.9	30	⊙	10-	10-Ci	
93/11/23	07:30	MD604	609.2	-40.5	E	2.1	5	⊙	10	10 Cs	↔
93/11/23	21:00	MD646	604.9	-40.3	N	1.7	30	⊙	9	9 Ac	
93/11/24	07:00	MD646	604.3	-40.6	-	0.0	10	⊙	10-	10-Ci	↔
93/11/24	21:00	MD690	601.9	-39.4	-	0.0	30	○	0		
93/11/25	07:30	MD690	602.2	-42.9	SW	2.5	5	⊙	10-	10-Ac	↔
93/11/25	21:00	MD730	598.6	-38.9	W	3.2	10	⊙	10-	0+Ac ; 10-Ci	
93/11/26	09:30	MD730	596.9	-37.2	SSW	4.5	30	○	1	0+Ac ; 1 Ci	↔
93/11/26	21:00	MD730	594.2	-40.3	S	1.6	30	⊙	10-	10-Ci	
93/11/27	12:10	MD730	591.3	-36.3	NNE	2.4	10	⊙	7	7 Ci	
93/11/27	21:00	MD730	590.0	-40.3	NNE	1.8	10	⊙	10-	10-Ci	↔
93/11/28	09:00	MD730	589.6	-40.9	N	1.7	10	⊙	7	7 Ci	
93/11/28	15:00	DOME F	589.3	-37.0	N	3.3	10	⊙	2	2 Ci	
93/11/28	21:00	DOME F	589.4	-44.1	N	2.1	30	○	1	1 Ci	
93/11/29	09:00	DOME F	590.1	-39.9	NNW	2.7	5	⊙	10-	6 Ci ; 4 Cs	↔
93/11/29	15:00	DOME F	589.8	-35.8	ESE	4.5	5	⊙	10-	10-Ci	↔
93/11/29	21:00	DOME F	589.3	-43.2	WSW	1.7	30	○	0+	0+Ci	
93/11/30	09:00	DOME F	589.7	-41.2	S	2.1	5	⊙	10-	10-Ci	↔
93/11/30	15:00	DOME F	590.5	-37.4	WSW	2.6	30	⊙	9	9 Ci	↔
93/11/30	21:00	DOME F	590.3	-42.0	E	2.6	20	⊙	9	9 Ci	↔
93/12/01	09:00	DOME F	590.6	-40.4	-	0.0	30	⊙	2	2 Ci	↔
93/12/01	15:00	DOME F	590.8	-37.8	N	0.8	30	○	0+	0+Ci	
93/12/01	21:00	DOME F	591.1	-40.3	SSW	0.6	10	○	0+	0+Ci	
93/12/02	09:00	DOME F	590.8	-42.9	NW	1.8	5	⊙	10-	10-Ci	↔
93/12/02	15:00	DOME F	590.0	-37.2	NNW	4.2	5	⊙	10-	4 Ci ; 6 Cs	↔
93/12/02	21:00	DOME F	590.2	-41.4	SW	2.7	20	○	1	1 Ci	

Date	LT	Point	Pa hPa	Ta ℃	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/12/03	09:00	DOME F	591.0	-44.2	S	2.2	10	○	0+	0+Ac	
93/12/03	15:00	DOME F	591.1	-39.8	SE	4.0	5	○	1	1 Ac ; 0+Ci	↔
93/12/03	21:00	DOME F	590.9	-45.7	S	1.8	10	○	0+	0+Ac	↔
93/12/04	09:20	DOME F	590.0	-44.3	SSE	4.8	5	○	0+	0+Ci	↔
93/12/04	15:00	DOME F	590.2	-39.3	SE	4.6	5	○	0+	0+Ci	↔
93/12/04	21:00	DOME F	590.7	-45.4	SE	1.7	5	○	1	1 Ci	↔
93/12/05	09:00	DOME F	592.6	-43.2	E	1.3	20	○	0+	0+Ac	
93/12/05	15:00	DOME F	593.9	-38.8	NE	0.8	30	○	1	0+Ac ; 1 Ci	
93/12/05	21:00	DOME F	595.8	-43.6	SSE	1.5	30	○	0+	0+Ac	
93/12/06	09:00	DOME F	598.6	-41.7	SE	2.8	30	○	0		
93/12/06	15:00	DOME F	600.2	(-36.1)	E	(3)	30	○	0		
93/12/06	21:00	DOME F	601.5	-42.9	ESE	1.7	30	○	0+	0+Ac	
93/12/07	09:00	DOME F	604.6	-40.6	E	1.9	30	○	0+	0+Ac	
93/12/07	15:00	DOME F	605.8	(-34.5)	ENE	(3)	30	○	0+	0+Ac	
93/12/07	21:00	DOME F	606.7	-41.2	ENE	2.6	30	○	0+	0+Ac	
93/12/08	09:00	DOME F	607.0	-36.2	ENE	5.9	1.5	⊕	10-	10-Ci	
93/12/08	15:00	DOME F	606.4	-30.5	NNE	10.2	0.4	⊕	X	X Cc ; X Ci	
93/12/08	21:00	DOME F	606.3	-32.4	NNE	7.8	1	⊕	10-	4 Ci ; 6 Cc	⊕
93/12/09	09:00	DOME F	609.4	-31.7	N	6.2	5	⊕	10-	10-Ci ; 0+Cc	↔
93/12/09	15:00	DOME F	609.9	(-25.3)	N	(5)	5	⊕	10	10 Ci	
93/12/09	21:00	DOME F	610.4	-31.5	NE	3.3	5	⊕	10	0+Ac ; 8 Ci ; 2 Cs	
93/12/10	09:30	DOME F	609.7	-30.7	E	1.2	5	⊕	10-	5 Ci ; 5 Cs	↔
93/12/10	15:00	DOME F	608.7	-26.9	NNE	2.6	5	⊕	10	10 Cs	↔
93/12/10	21:00	DOME F	607.5	-31.7	SE	0.9	10	⊕	10-	0+Ac ; 10-Ci	↔
93/12/11	09:00	DOME F	606.5	-31.2	E	1.8	5	⊕	2	2 Ci	↔
93/12/11	15:00	DOME F	606.6	-27.2	ENE	2.2	20	⊕	10-	10-Ci	
93/12/11	18:00	DOME F	607.2	-28.2	ENE	1.1	10	⊕	6	6 Ci	↔
93/12/11	21:00	DOME F	606.8	-31.1	NE	1.2	20	⊕	7	7 Ci	↔
93/12/12	09:00	DOME F	606.9	-31.4	WSW	2.0	30	○	0+	0+Ci	
93/12/12	12:00	DOME F	606.8	-28.8	W	0.8	30	○	0+	0+Ci	
93/12/12	15:00	DOME F	606.5	-26.3	W	2.7	30	○	0+	0+Ci	
93/12/12	18:00	DOME F	606.1	-27.9	WSW	1.6	30	○	1	1 Ci	
93/12/12	21:00	DOME F	605.7	-32.5	SW	1.8	30	○	1	1 Ci	
93/12/12	24:00	DOME F	605.3	-37.1	WSW	2.1	5	○	1	1 Ci	
93/12/13	09:00	DOME F	604.0	-32.8	S	1.4	20	⊕	4	4 Ci	
93/12/13	12:30	DOME F	603.0	-28.2	SSW	2.2	30	○	0+	0+Ci	↔
93/12/13	15:20	DOME F	602.6	-26.0	SSE	1.1	30	○	0		
93/12/13	18:10	DOME F	602.2	-28.6	SSE	1.4	30	○	0		
93/12/13	21:00	DOME F	602.2	-30.9	SSE	1.6	30	○	0		
93/12/13	24:00	DOME F	601.9	-33.1	ESE	0.3	2	○	0		(≡)

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/12/14	09:00	DOME F	601.5	-31.4	W	2.4	30	○	0+	0+Ci	
93/12/14	12:00	DOME F	601.2	-28.6	W	3.3	30	○	0		
93/12/14	15:00	DOME F	600.9	-26.5	WSW	2.8	30	○	0		
93/12/14	18:10	DOME F	600.4	-28.1	W	1.7	30	○	0		
93/12/14	21:00	DOME F	600.4	-32.6	W	1.8	30	○	0		
93/12/14	24:00	DOME F	599.6	-36.6	SW	1.5	2	○	0		☐
93/12/15	09:00	DOME F	598.8	-32.6	SW	1.8	10	⊕	5	0+Ac ; 5 Ci	
93/12/15	12:00	DOME F	598.4	-29.6	SW	2.4	30	○	0+	0+Ac ; 0+Ci	↕
93/12/15	15:00	DOME F	598.1	-27.2	SW	2.2	30	○	0+	0+Ci	↕
93/12/15	21:00	DOME F	597.2	-33.5	SSW	1.9	30	⊕	2	2 Ci	
93/12/15	24:00	DOME F	597.3	-36.7	SW	2.2	5	○	1	1 Ci	
93/12/16	09:00	DOME F	597.1	-32.0	SW	1.9	10	⊕	9	9 Ci	↕
93/12/16	12:00	DOME F	597.0	-27.8	S	1.5	20	⊕	10-	10-Ci	
93/12/16	15:00	DOME F	596.8	-26.3	S	1.7	20	⊕	10-	10-Ci	
93/12/16	21:00	DOME F	596.2	-32.9	WSW	1.6	20	⊕	2	0+Ac ; 2 Ci	
93/12/16	24:00	DOME F	595.2	-37.1	W	2.5	30	○	1	1 Ci	
93/12/17	09:00	DOME F	593.9	-32.7	SW	3.8	5	⊕	10-	10-Ci	↕
93/12/17	12:00	DOME F	594.0	-29.5	SW	4.1	10	⊕	3	3 Ci	↕
93/12/17	15:00	DOME F	594.2	-27.8	SSW	3.6	5	⊕	2	2 Ci	↕
93/12/17	18:00	DOME F	593.7	-28.8	S	1.7	30	⊕	4	0+Ac ; 4 Ci	↕
93/12/17	21:00	DOME F	594.4	-33.4	S	1.6	5	✕	10-	0+Ac ; 10-Ci	
93/12/17	24:00	DOME F	594.3	-39.3	S	1.2	30	○	0+	0+Ac	
93/12/18	09:00	DOME F	596.3	-34.5	ESE	1.9	20	○	0+	0+Ac ; 0+Ci	
93/12/18	12:00	DOME F	596.9	-32.0	E	1.3	30	○	1	1 Ci	
93/12/18	15:00	DOME F	597.2	-29.4	NE	1.2	20	⊕	6	6 Ci	↕
93/12/18	18:00	DOME F	597.4	-29.9	N	1.0	20	⊕	10-	10-Ci	
93/12/18	21:00	DOME F	597.8	-34.3	N	1.0	10	⊕	10-	10-Ci	
93/12/18	24:00	DOME F	598.4	-40.6	N	1.3	5	⊕	10-	0+Ac ; 10-Ci	↕
93/12/19	09:00	DOME F	600.2	-35.0	NNW	3.3	5	⊕	3	0+Ac ; 3 Ci	↕
93/12/19	12:00	DOME F	601.1	-32.1	NNW	5.4	20	⊕	2	2 Ci	↕
93/12/19	15:00	DOME F	601.5	-31.1	NNW	5.1	5	⊕	4	0+Ac ; 4 Ci	
93/12/19	18:00	DOME F	602.2	-31.8	NNW	4.3	5	⊕	8	8 Ci	
93/12/19	21:00	DOME F	602.6	-35.3	NNW	2.7	5	⊕	10-	10-Ci	↕
93/12/19	24:00	DOME F	603.1	-40.8	NNW	2.6	10	⊕	10-	10-Ci	
93/12/20	09:00	DOME F	604.1	-34.2	NW	3.8	20	⊕	10-	10-Ci	
93/12/20	13:00	DOME F	604.3	-31.2	WNW	4.7	5	⊕	10-	10-Ci	↕
93/12/20	15:00	DOME F	604.2	-31.1	WNW	4.7	5	⊕	8	7 Ci ; 1 Cc	↕
93/12/20	18:00	DOME F	603.8	-31.5	WNW	3.0	10	⊕	6	0+Ac ; 6 Ci	↕
93/12/20	21:00	DOME F	603.7	-35.3	WNW	2.6	10	⊕	9	9 Ci	↕
93/12/20	24:00	DOME F	603.5	-38.9	NW	1.5	10	⊕	8	4 Ci ; 4 Cs	↕
93/12/21	09:00	DOME F	602.7	-34.3	SW	1.3	30	⊕	6	6 Ci	
93/12/21	12:00	DOME F	602.6	-30.2	WSW	0.7	30	○	1	1 Ci	
93/12/21	15:00	DOME F	602.3	-31.0	SE	0.9	30	○	0+	0+Ci	
93/12/21	18:00	DOME F	602.2	-31.6	ESE	1.1	30	○	0+	0+Ci	
93/12/21	21:00	DOME F	602.4	-36.5	E	1.3	30	○	0+	0+Ci	
93/12/21	24:00	DOME F	602.9	-41.4	E	1.5	30	○	0+	0+Ac ; 0+Ci	

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/12/22	09:00	DOME F	604.4	-34.1	NE	3.1	20	⊕	8	8 Ac ; 0+Ci	↔
93/12/22	12:00	DOME F	604.7	-31.0	NE	4.2	30	○	1	1 Ci	↔
93/12/22	15:00	DOME F	605.1	-29.5	NE	4.8	10	⊕	4	4 Ac ; 0+Ci	↔
93/12/22	21:00	DOME F	605.8	-34.2	NE	2.3	30	○	0+	0+Ac ; 0+Ci	↔
93/12/22	24:00	DOME F	606.4	-37.7	NE	2.7	10	⊕	5	0+Ac ; 5 Ci	↔
93/12/23	09:00	DOME F	607.8	-32.3	NNE	4.5	5	⊕	10-	10-Ci	↔
93/12/23	12:00	DOME F	607.9	-29.9	NNE	5.2	5	⊕	10-	10-Ci ; 0+Cc	↔
93/12/23	15:00	DOME F	607.6	-28.9	NNE	4.6	10	⊕	4	0+Ac ; 4 Ci	↔
93/12/23	18:00	DOME F	607.5	-29.4	NNE	3.0	10	⊕	10-	0+Ac ; 10-Ci	↔
93/12/23	21:00	DOME F	607.4	-32.6	NE	1.5	5	⊕	10-	7 Ci ; 3 Cs	↔
93/12/23	24:00	DOME F	608.0	-37.1	NNE	2.1	10	⊕	10-	10-Ci	↔
93/12/24	09:00	DOME F	606.8	-31.7	ENE	0.6	10	⊕	8	8 Ci	↔
93/12/24	12:00	DOME F	605.6	-28.9	ENE	2.3	10	⊕	8	8 Ci	↔
93/12/24	15:00	DOME F	604.2	-27.9	ENE	2.1	10	⊕	10-	10-Ci	↔
93/12/24	18:00	DOME F	603.1	-28.4	NE	0.9	10	⊕	10-	10-Ci	↔
93/12/24	21:00	DOME F	602.0	-33.8	ESE	1.5	10	⊕	9	9 Ci	↔
93/12/24	24:00	DOME F	601.5	-36.0	E	1.2	5	⊕	10-	10-Ci	↔
93/12/25	09:00	DOME F	597.7	-33.7	E	2.6	30	○	0+	0+Ci	↔
93/12/25	12:00	DOME F	596.7	-30.9	ESE	3.7	30	○	0+	0+Ci	↔
93/12/25	15:00	DOME F	595.5	-29.7	E	4.2	30	○	0+	0+Ci	↔
93/12/25	18:00	DOME F	595.2	-30.5	E	3.3	30	○	0+	0+Ci	↔
93/12/25	21:00	DOME F	594.2	-34.5	ESE	1.7	30	○	0+	0+Ci	↔
93/12/25	24:00	DOME F	594.0	-39.7	ESE	2.4	30	○	0+	0+Ci	↔
93/12/26	09:00	DOME F	595.3	-34.3	NE	2.4	20	⊕	2	2 Ac ; 0+Ci	↔
93/12/26	12:00	DOME F	596.0	-30.5	NE	4.1	10	⊕	9	9 Ac	↔
93/12/26	15:00	DOME F	596.9	-29.7	NNE	5.4	10	⊕	8	8 Ac	↔
93/12/26	18:10	DOME F	597.7	-30.4	NNE	4.3	30	○	0+	0+Ac	↔
93/12/26	21:00	DOME F	598.1	-34.4	NNE	2.6	20	⊕	8	0+Ac ; 8 Ci	↔
93/12/26	24:00	DOME F	598.9	-38.5	NNE	2.6	30	⊕	8	0+Ac ; 8 Ci	↔
93/12/27	09:00	DOME F	600.0	-33.1	N	4.7	10	⊕	10-	0+Ac ; 9 Ci ; 0+Cc	↔
93/12/27	12:00	DOME F	600.0	-30.4	N	4.5	20	⊕	10-	0+Ac ; 10-Ci	↔
93/12/27	15:00	DOME F	599.6	-29.3	NNW	4.6	10	⊕	10-	10-Ci	↔
93/12/27	18:00	DOME F	599.4	-29.4	NW	2.9	5	⊕	8	8 Ac ; 0+Ci	↔
93/12/27	21:00	DOME F	599.3	-34.9	NNW	1.4	10	⊕	10-	0+Ac ; 10-Ci	↔
93/12/27	24:00	DOME F	599.3	-38.3	NW	1.9	20	⊕	3	3 Ac	↔
93/12/28	09:00	DOME F	599.8	-33.8	SSE	1.6	10	⊕	7	5 Ac ; 3 Ci	↔
93/12/28	12:00	DOME F	599.6	-31.8	SE	2.0	30	○	0+	0+Ac	↔
93/12/28	15:00	DOME F	600.3	-30.9	ESE	1.3	30	○	0+	0+Ac	↔
93/12/28	18:00	DOME F	600.8	-31.1	ENE	1.2	30	○	0+	0+Ac	↔
93/12/28	21:00	DOME F	601.3	-35.6	NE	1.2	30	○	0+	0+Ac	↔
93/12/28	24:00	DOME F	602.5	-39.1	NE	2.0	30	○	0		↔

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
93/12/29	09:00	DOME F	606.0	-35.1	NNE	2.4	20	○	1	1 Ac	
93/12/29	12:00	DOME F	607.0	-31.8	NE	3.2	30	⊕	3	3 Ac	↕
93/12/29	15:00	DOME F	607.7	-30.3	NNE	4.4	30	⊕	4	4 Ci	↕
93/12/29	18:00	DOME F	608.1	-31.1	NE	2.8	30	⊕	3	3 Ci	↕
93/12/29	21:00	DOME F	609.1	-35.0	NNE	2.3	30	⊕	9	0+Ac ; 9 Ci	
93/12/29	24:00	DOME F	609.4	-38.3	NE	1.9	30	⊕	10-	2 Ac ; 10-Ci	
93/12/30	09:00	DOME F	608.4	-34.3	SSW	1.5	10	⊕	10-	0+Ac ; 10-Ci	↕
93/12/30	12:20	DOME F	607.1	-31.2	ESE	2.2	30	⊕	3	0+Ac ; 3 Ci	
93/12/30	15:00	DOME F	606.0	-29.7	SE	2.8	10	⊕	6	0+Ac ; 6 Ci	↕
93/12/30	18:00	DOME F	604.5	-30.9	SE	3.4	30	○	0+	0+Ac ; 0+Ci	↕
93/12/30	21:00	DOME F	603.8	-34.1	SSE	1.9	30	○	0+	0+Ac ; 0+Ci	
93/12/30	24:00	DOME F	602.5	-38.1	SSE	2.0	30	○	0		
93/12/31	09:00	DOME F	599.8	-34.6	SE	4.3	10	⊕	6	0+Ac ; 6 Ci	↕
93/12/31	12:00	DOME F	600.0	-31.7	ESE	5.9	5	⊕	10-	0+Ac ; 7 Ci ; 3 Cs	↕
93/12/31	15:00	DOME F	600.4	-28.8	E	6.0	5	⊕	10-	10-Ci	↕
93/12/31	18:00	DOME F	601.3	-27.7	NNE	4.9	10	⊕	8	0+Ac ; 8 Ci	
93/12/31	21:00	DOME F	602.7	-32.7	NE	3.1	10	⊕	8	0+Ac ; 8 Ci	↕
93/12/31	24:00	DOME F	603.7	-36.6	NNE	3.8	30	○	1	0+Ac ; 1 Ci	↕
94/01/01	03:00	DOME F	604.4	-39.9	N	2.8	20	○	0+	0+Ac ; 0+Ci	
94/01/01	06:00	DOME F	604.8	-38.4	N	2.6	10	⊕	2	0+Ac ; 2 Ci	↕
94/01/01	09:00	DOME F	604.7	-33.9	NNW	2.9	30	⊕	3	0+Ac ; 3 Ci	↕
94/01/01	12:00	DOME F	604.5	-31.1	NW	2.2	30	⊕	3	0+Ac ; 3 Ci	↕
94/01/01	15:00	DOME F	604.4	-29.2	W	1.8	30	⊕	4	4 Ci	
94/01/01	18:00	DOME F	604.2	-29.1	SSW	1.7	30	⊕	4	4 Ci	
94/01/01	21:00	DOME F	604.4	-32.7	S	2.1	30	⊕	7	7 Ci	
94/01/01	24:00	DOME F	604.7	-36.8	SSE	1.1	30	○	1	0+Ac ; 1 Ci	
94/01/02	09:00	DOME F	605.9	-32.1	E	3.8	10	⊕	9	9 Ac	↕
94/01/02	12:00	DOME F	606.5	-30.0	E	3.7	10	○	0+	0+Ac ; 0+Ci	↕
94/01/02	15:00	DOME F	607.1	-29.8	ENE	4.4	10	○	0+	0+Ac	↕
94/01/02	18:00	DOME F	607.2	-30.5	ENE	3.4	20	⊕	4	0+Ac ; 4 Ci	↕
94/01/02	21:00	DOME F	607.4	-34.6	ESE	2.9	30	⊕	9	0+Ac ; 9 Ci	
94/01/02	24:00	DOME F	608.0	-40.6	E	2.0	30	⊕	8	1 Ac ; 8 Ci	↕
94/01/03	09:00	DOME F	608.4	-33.5	E	2.2	30	⊕	10-	10-Ci	↕
94/01/03	12:00	DOME F	608.3	-30.6	E	3.9	5	⊕	10-	10-Ac	↕
94/01/03	15:00	DOME F	608.1	-30.0	E	4.1	10	⊕	3	3 Ac ; 0+Ci	↕
94/01/03	18:00	DOME F	607.9	-30.3	E	4.9	20	⊕	3	0+Ac ; 3 Ci	↕
94/01/03	21:00	DOME F	608.3	-33.0	E	3.4	20	⊕	3	0+Ac ; 3 Ci	↕
94/01/03	24:00	DOME F	609.5	-35.0	ENE	3.4	5	⊕	10-	7 Ac ; 3 Ci	↕
94/01/04	09:00	DOME F	611.9	-31.1	NNE	5.9	5	⊕	2	0+Ac ; 2 Ci	↕
94/01/04	12:10	DOME F	612.8	-29.3	E	4.3	10	○	1	0+Ac ; 1 Ci	↕
94/01/04	15:00	DOME F	613.3	-29.0	NE	5.1	5	⊕	2	2 Ac	↕
94/01/04	18:00	DOME F	613.8	-29.5	ENE	4.5	20	⊕	10-	8 Ac ; 2 Ci	↕
94/01/04	21:00	DOME F	613.5	-30.3	ENE	5.0	10	⊕	10-	10-Ac	
94/01/04	24:00	DOME F	614.4	-34.7	ENE	3.5	20	⊕	2	0+Ac ; 1 Cc ; 1 Ci	

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
94/01/05	09:00	DOME F	614.8	-29.5	E	5.7	10	☉	10-	7 Ac ; X Ci	↔
94/01/05	12:00	DOME F	615.1	-28.4	ENE	4.5	5	☉	10-	0+Ac ; 10-Ci	↔
94/01/05	15:00	DOME F	614.8	-26.3	ENE	5.4	10	☉	10-	3 Ac ; 10-Ci	
94/01/05	18:00	DOME F	614.8	-27.0	ENE	4.8	5	☉	10-	3 Ac ; 10-Ci	
94/01/05	21:00	DOME F	615.1	-29.4	ENE	3.7	10	☉	9	3 Ac ; 6 Ci	↔
94/01/05	24:00	DOME F	615.0	-35.1	E	3.0	30	○	0+	0+Ci	
94/01/06	09:00	DOME F	613.9	-29.5	E	4.5	20	☉	3	3 Ci	
94/01/06	12:00	DOME F	613.5	-27.3	E	6.3	10	☉	10-	10-Ci	
94/01/06	15:00	DOME F	612.8	-26.3	E	6.3	20	☉	10-	2 Ac ; 4 Cc ; 4 Ci	
94/01/06	18:00	DOME F	612.2	-27.9	E	5.9	20	○	0+	0+Ci ; 0+Cc	
94/01/06	21:00	DOME F	612.1	-31.1	E	5.5	30	○	0+	0+Ac ; 0+Ci	
94/01/06	24:00	DOME F	611.7	-33.9	E	5.3	10	☉	10-	10-Ac	↔
94/01/07	09:00	DOME F	611.0	-32.5	E	6.3	10	☉	3	0+Ac ; 3 Ci	↔
94/01/07	12:00	DOME F	610.8	-30.2	E	6.8	10	☉	10-	10-Ci	↔
94/01/07	15:00	DOME F	610.9	-29.1	E	6.5	20	☉	8	8 Ci	↔
94/01/07	18:00	DOME F	611.1	-29.5	E	4.8	10	☉	10-	10-Ci	↔
94/01/07	21:00	DOME F	610.7	-32.3	E	3.0	10	☉	10-	0+Ac ; 10-Ci	↔
94/01/07	24:00	DOME F	610.6	-35.2	ESE	2.7	5	☉	10-	0+Ac ; 10-Ci	↔
94/01/08	09:00	DOME F	608.9	-30.9	E	6.3	5	☉	8	0+Ac ; 8 Ci	↔
94/01/08	12:00	DOME F	609.0	-27.9	E	6.4	5	☉	9	2 Ac ; 9 Ci	↔
94/01/08	15:00	DOME F	608.6	-25.6	E	10.1	2	☉	10-	10-Ac	↔
94/01/08	18:00	DOME F	608.6	-25.8	ENE	5.9	5	☉	10-	7 Ac ; X Ci	
94/01/08	21:00	DOME F	608.6	-28.7	E	4.8	2	☉	10-	2 Ac ; 5 Cs ; 4 Ci	↔
94/01/08	24:00	DOME F	609.1	-28.6	E	5.5	2	☉	10-	10-Ac	↔
94/01/09	09:00	DOME F	608.7	-30.5	E	6.0	2	☉	10-	0+Ac ; 10-Ci	↔
94/01/09	12:00	DOME F	608.2	-27.1	E	7.6	2	☉	10-	5 Cs ; 5 Ci	↔
94/01/09	15:00	DOME F	607.1	-26.3	E	7.1	2	☉	10	10 Cs	↔
94/01/09	18:00	DOME F	606.6	-26.9	E	6.9	2	☉	10	6 Cs ; 4 Ci	↔
94/01/09	21:00	DOME F	606.5	-31.8	E	3.0	5	☉	5	5 Ac	↔
94/01/09	24:00	DOME F	606.4	-36.2	E	2.7	10	☉	8	8 Ac	↔
94/01/10	07:30	DOME F	605.3	-36.3	ENE	2.1	5	☉	4	0+Ac ; 4 Ci	↔
94/01/10	21:00	MD664	609.2	-35.4	E	1.9	30	☉	9	9 Ac	
94/01/11	09:00	MD664	611.8	-36.6	E	0.7	30	○	0+	0+Ac ; 0+Ci	
94/01/11	21:00	MD620	615.1	-35.7	SSE	2.9	30	○	0+	0+Ac ; 0+Ci	
94/01/12	07:30	MD620	613.1	-35.8	SSE	5.8	2	☉	3	3 Ci	↔
94/01/12	21:00	MD550	618.5	-32.2	ESE	5.3	2	☉	3	3 Ci	↔
94/01/13	07:30	MD550	618.2	-32.3	SE	6.3	1	☉	7	7 Ci	↔, ↔
94/01/13	21:00	MD500	623.8	-32.4	SSE	3.0	5	☉	7	1 Ac ; 7 Ci	↔
94/01/14	07:30	MD500	622.6	-33.9	ESE	8.0	0.4	↗	X	X ↗	↔
94/01/14	21:00	MD430	630.9	-32.8	ESE	4.7	30	○	0		
94/01/15	07:30	MD430	627.7	-34.0	SE	9.3	0.2	↗	X	X Ci	
94/01/15	21:00	MD364	637.5	-31.1	E	6.0	10	☉	10-	10-Ac	↔

Date	LT	Point	Pa hPa	Ta °C	WD (GD)	WS m/s	V km	W	CA 0-10	Cloud CA, Type	Remarks
94/01/16	09:00	MD364	639.3	-33.3	ESE	7.3	5	⊙	4	4 Ci	↕, ↔
94/01/16	12:00	MD364	639.8	-30.4	E	6.8	5	⊙	9	2 Ac ; 7 Ci	↔
94/01/16	21:00	MD364	639.9	-32.6	ESE	4.1	30	⊙	8	0+Ac ; 8 Ci	↔
94/01/17	07:30	MD364	638.9	-35.8	SE	5.7	2	○	1	1 Ac	↔
94/01/17	21:00	MD296	650.5	-31.5	SE	4.7	30	○	0+	0+Ac	
94/01/18	09:00	MD296	652.1	-32.5	ESE	8.7	1	⊙	10-	10-Ci	↕
94/01/18	21:00	MD264	660.3	-28.6	ESE	5.3	10	⊙	10-	10-Ac	
94/01/19	07:30	MD264	661.7	-27.9	E	7.8	0.4	↕	X	X Ac	
94/01/19	21:00	MD200	682.1	-24.0	E	7.0	10	⊙	10-	1 Ac ; 10-Ci	
94/01/20	07:30	MD200	683.7	-24.5	E	8.1	1	✕	10	10 As	
94/01/20	21:00	MD134	705.8	-21.1	ESE	9.8	1	⊙	10-	10-Ac	↕
94/01/21	07:30	MD134	707.1	-24.8	ESE	8.1	5	⊙	7	1 Ac ; 7 Ci	↕
94/01/21	21:00	MD66	726.3	-21.2	ESE	4.4	30	⊙	3	2 Ac ; 2 Ci	
94/01/22	07:30	MD66	726.9	-23.7	E	8.5	30	○	0+	0+Ac	↕
94/01/22	21:00	IM1	740.0	-18.3	E	10.2	5	⊙	10-	0+Ac ; 10-Ci	↕
94/01/23	09:00	IM1	741.5	-19.6	E	10.9	5	⊙	9	5 Ac ; X Ci	↕
94/01/23	21:00	IM1	741.1	-19.2	ESE	5.2	30	○	0+	0+Ac	
94/01/24	07:30	IM1	740.2	-22.7	E	9.2	30	○	0+	0+Ci	
94/01/24	21:00	Z8	765.9	-18.4	E	3.9	30	⊙	2	0+Ac ; 2 Ci	
94/01/25	07:30	Z8	768.0	-20.8	E	6.9	30	⊙	2	2 Ci	
94/01/25	21:00	H140	828.1	-15.9	ENE	3.5	30	⊙	4	4 Ci	
94/01/26	07:30	H140	827.5	-15.8	ENE	5.0	10	⊙	10-	9 Ac ; X Ci	
94/01/26	24:00	S16	918.3	-6.7	ENE	1.1	0.4	✕	10	10 As	
94/01/27	12:00	S16	915.0	-6.6	N	2.7	2	✕	10	3 Ac ; 7 As	
94/01/27	21:00	S16	913.1	-6.5	N	3.6	0.2	✕	X	X ✕	≡
94/01/28	07:30	S16	914.0	-7.5	ENE	3.5	10	⊙	10-	10-Ac	
94/01/28	21:00	S16	917.3	-7.7	NE	4.1	10	⊙	10-	10-Ac	
94/01/29	04:50	S16	919.8	-8.5	ENE	7.6	30	⊙	10	10 Ac	
94/01/29	06:00	S16	920.2	-7.9	ENE	7.0	20	⊙	10	10 Ac	
94/01/29	07:00	S16	920.3	-8.0	ENE	7.3	10	⊙	10	10 Ac	
94/01/29	15:00	S16	921.2	-5.8	SW	1.0	10	✕	10-	10-Ac	
94/01/29	21:00	S16	921.1	-7.1	E	0.7	10	⊙	10-	2 Ac ; 8 As	
94/01/30	05:00	S16	920.3	-8.8	ENE	4.0	30	⊙	10-	10-Ac	
94/01/30	06:00	S16	920.1	-8.5	E	4.5	30	⊙	10-	10-Ac	
94/01/30	07:00	S16	919.6	-8.4	E	5.2	30	⊙	9	9 Ac	

[notes] the parenthesized AT is the value observed by portable ventilated thermometer or sling thermometer
the parenthesized WS is the value observed by portable anemometer