

**Glaciological Data Collected by the 43rd Japanese
Antarctic Research Expedition during 2001-2003**

Takashi SAITO^{1*}, Jun KINOSHITA², Shin KANEHAMA³,
Koji YOSHII¹ and Kokichi KAMIYAMA⁴

CONTENTS

1. Outline of field observations during 2001-2003	-----	2
2. Net accumulation of snow	-----	7
3. Surface meteorological data during oversnow traverses	-----	22

¹ Disaster Prevention Research Institute, Kyoto University, Gokasyo, Uji 611-0011.

*Corresponding author. E-mail: saito@slope.dpri.kyoto-u.ac.jp

² Oyama National College of Technology, Nakakuki 771, Oyama 323-0806.

³ Japan Meteorological Agency, 3-4, Otemachi 1-chome, Chiyoda-ku, Tokyo 100-8122.

⁴ National Institute of Polar Research, Research Organization of Information and Systems, Kaga 1-chome, Itabashi-ku, Tokyo 173-8515.

1. Outline of field observations during 2001-2003

The second deep ice coring project at Dome Fuji Station ($77^{\circ}19'01''S$, $39^{\circ}42'12''E$, 3910 m a.s.l.) started from JARE-42. The tasks of JARE-43 were mainly to reopen the Dome Fuji Station after 5-years closure and build a new drilling site for a new core hole. JARE-43 had carried out two major inland oversnow traverses to transport fuels and materials for the wintering of JARE-44 at Dome Fuji Station. During the two major inland traverses, glaciological studies have been carried out to clarify the change in surface mass balance of the ice sheet by the snow-stake method, and the distributions of chemical properties and isotopic composition by sampling the surface snow.

The oversnow traverse routes of JARE-43 are shown in Fig. 1. Observations of surface accumulation, surface flow velocity and chemistry in surface snow have been conducted since JARE-32 during traverses from the coast to Mizuho Station, Relay Point and Dome Fuji Station (Fujii, 1992; Kamiyama *et al.*, 1994; Motoyama *et al.*, 1995, 1999, 2002; Shiraiwa *et al.*, 1996; Azuma *et al.*, 1997; Fujita *et al.*, 1998; Furukawa *et al.*, 2002).

Oversnow traverses conducted by JARE-43 are listed in Table 1-1. Table 1-2 shows the glaciological and meteorological observations conducted during the oversnow traverses. The participants and their assignments in the JARE-43 program are listed in Table 1-3.

We would like to express our sincere thanks to all members of JARE-43 who extended generous and long term support in the fieldwork.

References

- Azuma, N., Kameda, T., Nakayama, Y., Tanaka, Y., Yoshimi, H., Furukawa, T. and Ageta, Y. (1997): Glaciological data collected by the 36th Japanese Antarctic Research Expedition during 1995-1996. JARE Data Rep., **223** (Glaciology 26), 83 p.
- Fujii, Y. (1992): Activities of the wintering party at Syowa Station by the 32nd Japanese Antarctic Research Expedition in 1991. Nankyoku Shiryô (Antarct. Rec.), **36**, 441-472 (in Japanese with English abstract).
- Fujita, S., Kawada, K. and Fujii, Y. (1998): Glaciological data collected by the 37th Japanese Antarctic Research Expedition during 1996-1997. JARE Data Rep., **234** (Glaciology 27), 46 p.
- Furukawa, T., Yamada, T., Suzuki, K., Suzuki, T., Matsuoka, K., Horikawa, K., Murakata, E., Yasugahira, K. and Iizuka, Y. (2002): Glaciological data collected by the 39th and 40th Japanese Antarctic Research Expedition during 1997-2000. JARE Data Rep., **267** (Glaciology 29), 61 p.
- Kamiyama, K., Furukawa, T., Maeno, H., Kishi, T. and Kanao, M. (1994): Glaciological data collected by the 33rd Japanese Antarctic Research Expedition in 1992. JARE Data Rep., **194** (Glaciology 21), 67 p.
- Motoyama, H., Enomoto, H., Miyahara, M. and Koike, J. (1995): Glaciological data collected by

the 34th Japanese Antarctic Research Expedition in 1993. JARE Data Rep., **202** (Glaciology 23), 42 p.

Motoyama, H., Kawamura, Y., Kanao, M., Hirasawa, N., Kaneto, S. and Yamanouchi, T. (1999): Glaciological data collected by the 38th Japanese Antarctic Research Expedition in 1997-1998. JARE Data Rep., **239** (Glaciology 28), 74 p.

Motoyama, H., Nishimura, K., Kubo, S., Aoki, T., Wada, M., Yamaguchi, K. and Kato, Y. (2002): Glaciological data collected by the 41st and 42nd Japanese Antarctic Research Expedition during 2000-2002. JARE Data Rep., **268** (Glaciology 30), 58 p.

Shiraiwa, T., Saito, T., Saito, T., Shoji, H., Taguchi, Y., Abo, T., Yamamoto, Y., Inagawa, Y., Yokoyama, K. and Watanabe, O. (1996): Glaciological data collected by the 35th Japanese Antarctic Research Expedition during 1994-1995. JARE Data Rep., **211** (Glaciology 25), 69 p.

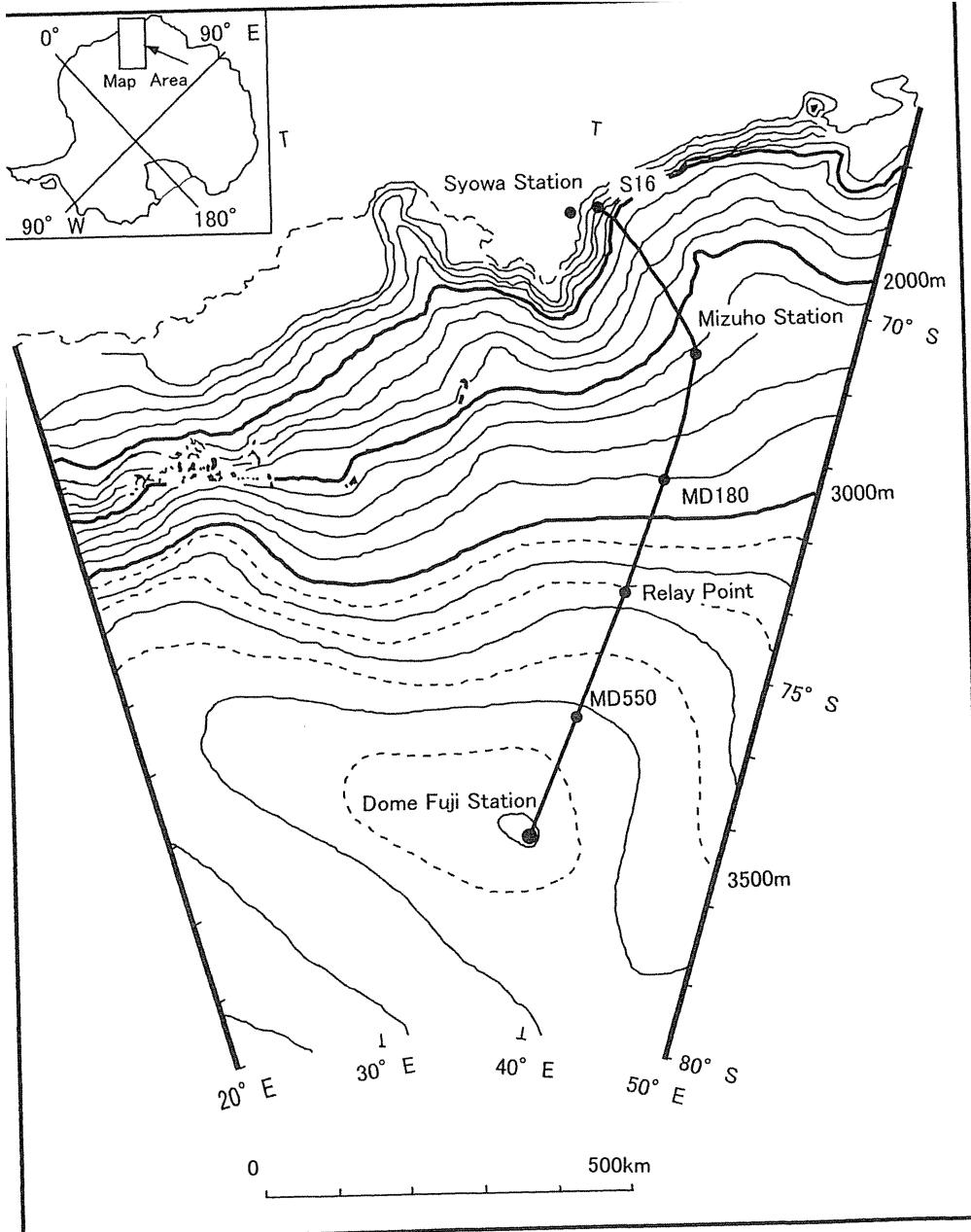


Fig. 1. Location map of the traverse routes.

Table 1-1. Oversnow traverses carried out by JARE43 during 2002-2003

Traverse No.	Period from to	Traverse Route from through to	Distance (km)	Participants	Oversnow Vehicles
1-a	15 Aug.-21 Sep.	Syowa MD364	658	9	SM110,112,
-b		MD364 Syowa	658		111,113,108
2-a	12 Oct.-12 Nov.	Syowa MD364 Dome F	1030	11	SM112,111,
-b	2 Dec.- 16 Dec.	Dome F MD364 S16	1000	3	102,103,109,
-c	24 Jan.-9 Feb.	Dome F MD364 S16	1000	8	110
3-a	16 Oct.-31 Oct.	Syowa Mizuho	287	4	SM107,110,
-b		Mizuho Syowa	287		109,SM518

SM50 and SM100 are types of oversnow vehicles. The numbers of each type vehicle are shown in parentheses.

Table 1-2. Glaciological and meteorological observations during the oversnow traverses.

Item	Interval	Traverse No.	Main Observers
Snow accumulation along routes	2km	1-a	Saito
		2-a	Kinoshita
Stake farm and stake row			Saito
Snow sampling	10km	1-a and 2-a	Saito
Set-up and maintenances of AWS		1 and 2	Saito
Meteorological observations		1,2 and 3	Kanehama, Saito and Yoshii

AWS: abbreviation of Automatic Weather Station

Table 1-3. Participants in the oversnow traverses and their assignments in the JARE-43 program.

Name	Assignments	Traverse No.
Takashi SAITO	Glaciologist	1-a, 1-b, 2-a, 2-b
Koji NAKANO	Mechanic	1-a, 1-b
Norio ISHIZAKI	Field assistant	1-a, 1-b, 2-a, 2-c
Michinori HASHIMOTO	Medical doctor	1-a, 1-b
Noriaki OBARA	Upper atmospheric scientist	1-a, 1-b
Akinori KAWAZOE	General manager	1-a, 1-b
Hiroyuki UJIIE	Radio communicator	1-a, 1-b
Michinori OWADA	Mechanic	1-a, 1-b
Shin KANEHAMA	Atmospheric	1-a, 1-b
Tsuneyuki YODA	Architect	2-a, 2-b
Jun KINOSHITA	Glaciologist	2-a, 2-b
Musubu TANAKA	Radio communicator	2-a, 2-c
Nozomi YOSHIDA	Mechanic	2-a, 2-b
Toshihiro NAKAMURA	Mechanic	2-a, 2-b
Norifumi SHIMOEDA	Medical doctor	2-a, 2-b
Koichi TOGASHI	Carpenter	2-a, 2-b
Kenji KURODA	Cook	2-a, 2-c
Masaaki FUJIGAKI	Logistics	2-a, 2-b
Yasuaki YOSHIHIRO	Upper atmospheric scientist	3-a,3-b
Koji YOSHII	Geophysicist	3-a,3-b
Susumu SHIOHAMA	Mechanic	3-a,3-b
Koji KUBOTA	Mechanic	3-a,3-b

2. Net accumulation of snow

Observers: 1-a: Takashi SAITO

2-a: Jun KINOSHITA

Net accumulation of snow was measured by the stake method along oversnow traverse routes in 2002 (Fig. 1).

2.1. Route S-H-Z (Mizuho Route)

Stake heights along the route were measured in October 2001 by JARE-42 (Motoyama *et al.* 2002), in August 2002 and in October 2002 by JARE-43. The height differences which approximate the net balance of snow from the latest observations are tabulated in Table 2-1. The minimum readings were 1 cm. Snow surface condition near the stake is described as follows: E; erosional surface, D; depositional surface, G; glazed surface, and C; crusted surface.

2.2. Route MD between IM0 and MD364 (Relay Point)

Stake heights along the routes from IM0 to MD364 (Relay Point) were measured in October 2001 by JARE-42 (Motoyama *et al.* 2002) in August and September 2002 and in October and November 2002 by JARE-43. The height differences are tabulated in Table 2-2. The minimum readings were 1 cm.

2.3. Route MD between MD364 (Relay Point) and Dome Fuji Station

Stake heights along the routes from MD364 (Relay Point) to Dome Fuji Station were measured in November 2001 by JARE-42 (Motoyama *et al.*, 2002) and November 2002 by JARE-43. The height differences are tabulated in Table 2-3. The minimum readings were 1 cm.

2.4. 36-stake farms, 50-stake rows and 101-stake row along the route

36-stake farms (100 m × 100 m in area, see Fig. 2 in Azuma *et al.*, 1977) are set at S16, H68, H180, S122 and Z40 along the Mizuho route and Dome Fuji Station. Stake heights of all farms were measured by JARE-42 and stake heights of H68, H180, S122 and Dome Fuji Station were measured by JARE-43. The results are shown in Tables 2-4, 2-5, 2-6 and 2-7.

50-stake rows are set at MD180, MD364, MD560 and DF80. These stake rows are perpendicular to the prevailing wind direction, and the distance between stakes is 2 m (see Fig. 4 in Azuma *et al.*, 1997). Stake heights of MD180, MD560 and DF80 were measured by JARE-43. The results of the measurements are given in Table 2-8, 2-9 and 2-10.

A part of 101-stake row located at Mizuho Station was measured (see Fig. 3 in Azuma *et al.*, 1997). The results of the measurements are given in Table 2-11.

References

- Azuma, N., Kameda, T., Nakayama, Y., Tanaka, Y., Yoshimi, H., Furukawa, T. and Ageta, Y. (1997): Glaciological data collected by the 36th Japanese Antarctic Research Expedition during 1995-1996. JARE Data Rep., **223** (Glaciology 26), 83 p.
- Motoyama, H., Nishimura, K., Kubo, S., Aoki, T., Wada, M., Yamaguchi, K. and Kato, Y. (2002): Glaciological data collected by the 41st and 42nd Japanese Antarctic Research Expedition during 2000-2002. JARE Data Rep., **268** (Glaciology 30), 58 p.

Table 2-1. Net accumulation along Routes S-H-Z in 2001-2002.

Station No.	(cm in depth)			
	Oct. 26-29 2001	Aug. 16-25 2002	Oct. 26-29 2001	Surrface condition
	Aug. 16-25 2002	Oct. 15-23 2002	Oct. 15-23 2002	
	(294-303 days)	(60-68 days)	(354-362 days)	
S 16				
S 17				
S 18				
S 19	-58			
S 20	-15			
S 21	37			
S 22	-19			
S 23	58			
S 24	44			
S 25	44			
S 26	-88			
S 27	-73			
S 28	-75			
S 29	37			
S 30	42			
H 3				
H 9	36			
H 15	38			
H 21	-67			
H 27	-77			
H 35	33			
H 42	21			
H 48	12			
H 54	-26			
H 60	14			
H 64	23			
H 68	9			
H 72				E
H 76	-1	1	0	G
H 80	3	35	38	D
H 84	54	-1	53	E
H 88	51	0	51	E
H 92	13	-1	12	D
H 96	26	9	35	E
H 100	30	0	30	D
H 104	19	3	22	E
H 108	23	1	24	E
H 112	30	0	30	G
H 116	19	1	20	E
H 120	37	0	37	G
H 124	0	0	0	G
H 128	6	1	7	E
H 132	2	2	4	E
H 136	14	0	14	G

Station No.	Oct. 26-29	Aug. 16-25	Oct. 26-29	Surrface condition
	2001	2002	2001	
	Aug. 16-25	Oct. 15-23	Oct. 15-23	
	2002	2002	2002	
	(294-303 days)	(60-68 days)	(354-362 days)	
H 140			11	G
H 144	11	5	16	E
H 148	26	-5	21	G
H 152	4	0	4	E
H 156	6	66	72	E
H 160	12	17	29	E
H 164	23	3	26	E
H 168	11	15	26	G
H 172	14	0	14	G
H 176	22	0	22	E
H 180	-6			
H 184	27	6	33	E
H 188	12	0	12	G
H 192	8	0	8	E
H 196	25	34	59	E
H 200			3	E
H 204	33	-1	32	E
H 208	11	-1	10	E
H 212	21	0	21	G
H 216	18	12	30	E
H 220			11	G
H 224	23	2	25	E
H 228	8	-1	7	E
H 232	8	-1	7	G
H 236	5	0	5	G
H 240	20	-79	49	E
H 244	2	5	7	G
H 248	9	-1	8	G
H 252			2	E
H 256			5	E
H 260			15	E
H 264			38	E
H 268	31	7	38	E
H 272	7	5	12	E
H 276			64	E
H 280	20	4	24	E
H 284	6	0	6	E
H 288			18	E
H 293	-6	4	-2	E
H 297	-3	-1	-4	G
H 301	-1	1	0	G
S 122	3	0	3	E
Z 2	4	1	5	E
Z 4	-3	64	61	E
Z 6			75	E

Station No.	Oct. 26-29	Aug. 16-25	Oct. 26-29	Surrface condition
	2001	2002	2001	
	Aug. 16-25 2002 (294-303 days)	Oct. 15-23 2002 (60-68 days)	Oct. 15-23 2002 (354-362 days)	
Z 8			42	E
Z 10	18	1	19	E
Z 12	7	-1	6	E
Z 14	37			
Z 16	29	1	30	G
Z 18	0	44	44	E
Z 20	9	-1	8	E
Z 22	13	6	19	G
Z 24	-1	14	13	E
Z 26	-6	-18	-24	E
Z 28			1	E
Z 30	-2	1	-1	G
Z 32	9	0	9	E
Z 34	-3	1	-2	G
Z 36	-6	0	-6	G
Z 38	0	0	0	E
Z 40	29	-4	25	E
Z 42	7	1	8	E
Z 46	50	-1	49	E
Z 50	5	4	9	E
Z 52				E
Z 54	22	28	50	E
Z 58	-4	0	-4	E
Z 62	-18	0	-18	G
Z 66	163	-86	77	E
Z 70	3	0	3	G
Z 72	16	20	36	E
Z 74	18	11	29	E
Z 76	12	0	12	E
Z 78	-6	4	-2	G
Z 80	6	12	18	E
Z 82	27			
Z 84	28	-2	26	E
Z 86			10	E
Z 88	8	-4	4	E
Z 90	6	0	6	E
Z 92	-7	1	-6	G
Z 94	0	-4	-4	E
Z 96	-6	-1	-7	G
Z 98	4	0	4	G
Z 100	27	-33	-6	E
Z 102	-5	5	0	E

Mizuho St. *

Table 2-2. Net accumulation along Route MD between Mizuho Station and MD364 (Relay Point) in 2001-2002.

Station No.		(cm in depth)			
		Oct. 29-Nov. 8 2001	Aug. 26-Sep. 5 2002	Oct. 29-Nov. 8 2001	Surfface condition
		Aug. 26-Sep. 5 2002	Oct. 24-Nov. 3 2002	Oct. 24-Nov. 3 2002	
		(294-303 days)	(68-71 days)	(362-365 days)	
IM	0				
IM	1				
IM	2			0	E
MD 0 (IM 3)				-5	G
MD	2			-15	G
MD	4			13	E
MD	6			-5	G
MD	8			-5	E
MD	10			4	D
MD	12			29	E
MD	14			46	E
MD	16	27	0	27	E
MD	18			-8	E
MD	20			10	E
MD	22			14	E
MD	24			29	E
MD	26	0	-3	-3	E
MD	28	2	-1	1	E
MD	30	9	10	19	E
MD	32	28	32	60	E
MD	34	24	6	30	E
MD	36	41	-1	40	G
MD	38	29	-1	28	E
MD	40	-4	-1	-5	E
MD	42	-4	1	-3	G
MD	44	81	0	81	E
MD	46	39	7	46	E
MD	48	9	15	24	E
MD	50	29	1	30	E
MD	52	-5	-1	-6	G
MD	54	-4	-1	-5	G
MD	56	-6	-1	-7	G
MD	58	62	1	63	E
MD	60	-4	-1	-5	E
MD	62	18	1	19	E
MD	64	-5	0	-5	G
MD	66	1	0	1	E
MD	68	6	21	27	E
MD	70	-3	0	-3	E
MD	72	-6	2	-4	
MD	74	26	0	26	E
MD	76			-116	E
MD	78	45	-21	24	E
MD	80	0	24	24	E
MD	82	20	0	20	E
MD	84	39	-3	36	E
MD	86	-4	37	33	G
MD	88	10	1	11	E
MD	90	89	0	89	E
MD	92	10	3	13	E
MD	94	-2	0	-2	G
MD	96	1	3	4	E
MD	98	2	5	7	E
MD	100	22	34	56	E

Station No	Oct. 29-Nov 8		Aug. 26-Sep. 5		Surrface condition	
	2001		2002			
	Aug. 26-Sep. 5		Oct. 24-Nov. 3			
	2002		2002			
	(294–303 days)	(68–71 days)		(362–365 days)		
MD 102				-105	E	
MD 104	20	0		20	E	
MD 106	-3	1		-2	E	
MD 108	-5	0		-5	G	
MD 110	-4	2		-2	G	
MD 112	55	22		77	D	
MD 114	20	0		20	E	
MD 116	-4	12		8	E	
MD 118	1	1		2	G	
MD 120	1	9		10	E	
MD 122	14	0		14	E	
MD 124	-4	-1		-5	E	
MD 126	1	107		108	D	
MD 128	-25	61		36	E	
MD 130	77	-46		31	E	
MD 132	-4	-11		-15	G	
MD 134	1	0		1	G	
MD 136	-3	-1		-4	E	
MD 138	4	-4		0	E	
MD 140	33	-2		31	E	
MD 142	11	7		18	E	
MD 144	3	0		3	E	
MD 146	24	-4		20	E	
MD 148	36	16		52	E	
MD 150	9	9		18	E	
MD 152	-9	0		-9	G	
MD 154	-4	-1		-5	E	
MD 156	4	1		5	E	
MD 158	29	-3		26	E	
MD 160	38	4		42	E	
MD 162	7	12		19	E	
MD 164	8	52		60	E	
MD 166	-2	-1		-3	E	
MD 168	-2	-1		-3	E	
MD 170	19	6		25	E	
MD 172	2	0		2	E	
MD 174	10	0		10	E	
MD 176	31	0		31	E	
MD 178	-2	-2		-4	G	
MD 180	3	-1		2	G	
MD 182	-3	2		-1	G	
MD 184	-12	2		-10	G	
MD 186	2	-1		1	G	
MD 188	20	9		29	E	
MD 190	18	26		44	E	
MD 192	26	2		28	D	
MD 194	0	5		5	E	
MD 196	-2	0		-2	G	
MD 198	-3	1		-2	G	
MD 200	-4	-1		-5	G	
MD 202	-2	0		-2	G	
MD 204	-5	1		-4	E	
MD 206	8	54		62	E	
MD 208	-6	0		-6	E	
MD 210	-3	-1		-4	E	
MD 212	-3	0		-3	G	
MD 214	30	-1		29	E	

Station No.	Oct. 29–Nov. 8		Aug. 26–Sep. 5		Oct. 29–Nov. 8		Surfice condition	
	2001		2002		2001			
	Aug. 26–Sep. 5		Oct. 24–Nov. 3		Oct. 24–Nov. 3			
	2002		2002		2002			
	(294–303 days)		(68–71 days)		(362–365 days)			
MD 216	-3		0		-3		E	
MD 218	16		-2		14		E	
MD 220	-2		-1		-3		G	
MD 222	-1		0		-1		G	
MD 224	28		0		28		E	
MD 226	-14		137		123		E	
MD 228	18		0		18		E	
MD 230	58		-1		57		E	
MD 232	12		1		13		E	
MD 234	-4		0		-4		G	
MD 236	0		0		0		E	
MD 238	65		1		66		E	
MD 240	-2		0		-2		G	
MD 242	-13		11		-2		E	
MD 244	1		1		2		G	
MD 246	-3		0		-3		G	
MD 248	4		0		4		E	
MD 250	17		4		21		E	
MD 252	-14		-9		-23		G	
MD 254	-4		0		-4		G	
MD 256	-3		2		-1		E	
MD 258	55		9		64		E	
MD 260	18		5		23		E	
MD 262	4		0		4		E	
MD 264	11		17		28		D	
MD 266	-2		4		2		D	
MD 268	36		-6		30		E	
MD 270	21		-20		1		E	
MD 272	35		49		84		D	
MD 274	18		0		18		G	
MD 276	39		0		39		G	
MD 278	14		-1		13		G	
MD 280	26		8		34		E	
MD 282	7		-1		6		E	
MD 284	5		-2		3		E	
MD 286	-12		-1		-13		E	
MD 288	-1		-1		-2		E	
MD 290	29		0		29		E	
MD 292	12		1		13		E	
MD 294	-1		0		-1		E	
MD 296	-1		0		-1		E	
MD 298	-4		1		-3		G	
MD 300	-1		-2		-3		G	
MD 302	-5		0		-5		G	
MD 304	4		1		5		E	
MD 306	9		55		64		E	
MD 308	13		3		16		E	
MD 310	-5		2		-3		E	
MD 312	25		3		28		E	
MD 314	4		3		7		E	
MD 316	-3		11		8		E	
MD 318	-2		1		-1		E	
MD 320	-12		-2		-14		E	
MD 322	21		1		22		E	
MD 324	13		-2		11		E	
MD 326	3		-7		-4		E	
MD 328	17		1		18		E	

Station No.	Oct. 29–Nov. 8		Aug. 26–Sep. 5	Oct. 29–Nov. 8	Surrface condition
	2001	2002			
	Aug. 26–Sep. 5		Oct. 24–Nov. 3	Oct. 24–Nov. 3	
	2002	2002	2002	(362–365 days)	
	(294–303 days)	(68–71 days)			
MD 330	-2		1	-1	E
MD 332	-2		0	-2	G
MD 334	-2		1	-1	G
MD 336	4		0	4	E
MD 338	22		3	25	E
MD 340	13		0	13	E
MD 342	15		-7	8	E
MD 344	17		2	19	E
MD 346	6		-3	3	E
MD 348	44		-30	14	E
MD 350	6		-10	-4	E
MD 352	-6		2	-4	E
MD 354	26		0	26	E
MD 356	5		-6	-1	E
MD 358	15		-1	14	E
MD 360	-3		1	-2	E
MD 362	-3		1	-2	E

Table 2-3. Net accumulation along Route MD between MD364 and Dome Fuji Station in 2001-2002.

(cm in depth)					
Station No.	Nov. 8.-Nov. 14 2001	Surfase condition	Station No.		
	Nov. 5-Nov. 12 2002		Nov. 8.-Nov. 14 2001		
	(362-369 days)		(362-369 days)		
MD 364	8	E	MD 464	16	E
MD 366	14	E	MD 466	20	E
MD 368	-8	E	MD 468	18	E
MD 370	47	E	MD 470	-2	E
MD 372	35	E	MD 472	4	E
MD 374	35	E	MD 474	38	D
MD 376	18	E	MD 476	4	E
MD 378	35	E	MD 478	5	E
MD 380	32	E	MD 480	4	E
MD 382	4	E	MD 482	3	E
MD 384	4	G	MD 484	-2	E
MD 386	0	E	MD 486	23	E
MD 388	-2	E	MD 488	36	E
MD 390	23	D	MD 490	-2	G
MD 392	-2	G	MD 492	20	E
MD 394	-2	E	MD 494	5	E
MD 396	3	E	MD 496	22	E
MD 398	17	E	MD 498	4	E
MD 400	0	E	MD 500	13	E
MD 402	5	E	MD 502	12	D
MD 404	18	E	MD 504	20	E
MD 406	7	E	MD 506	19	E
MD 408	4	D	MD 508	8	E
MD 410		E	MD 510	9	E
MD 412	8	E	MD 512	7	E
MD 414	20	E	MD 514	4	E
MD 416	12	G	MD 516	23	E
MD 418	-5	E	MD 518	4	E
MD 420	12	E	MD 520	13	E
MD 422	0	E	MD 522	25	E
MD 424	6	E	MD 524	11	E
MD 426	1	E	MD 526	28	E
MD 428	12	E	MD 528	1	E
MD 430	15	E	MD 530	23	E
MD 432	10	E	MD 532	0	E
MD 434	8	E	MD 534	6	E
MD 436	3	E	MD 536	3	E
MD 438	0	E	MD 538	22	D
MD 440	34	E	MD 540	7	E
MD 442	25	E	MD 542	12	E
MD 444	18	D	MD 544	16	E
MD 446	-1	E	MD 546	0	E
MD 448	17	E	MD 548	6	E
MD 450	1	E	MD 550	11	E
MD 452	0	E	MD 552	7	E
MD 454	9	E	MD 554	8	E
MD 456	18	E	MD 556	10	E
MD 458	16	E	MD 558	22	D
MD 460	17	E	MD 560	12	E
MD 462	20	E	MD 562	-3	E
			MD 564	15	E
			MD 566	0	E

Station No.	Nov. 8.-Nov. 14		Surfase condition		Station No.	Nov. 8.-Nov. 14		Surfase condition	
	2001					2001			
	Nov. 8.-Nov. 14	(362-369 days)	2002	(362-369 days)		Nov. 5-Nov. 12	2002	(362-369 days)	
MD 568	27	E			MD 672	6	E		
MD 570	13	E			MD 674	6	E		
MD 572	1	E			MD 676	3	E		
MD 574	15	E			MD 678	14	E		
MD 576	24	E			MD 680	20	E		
MD 578	1	D			MD 682	34	E		
MD 580	9	E			MD 684	4	E		
MD 582	7	D			MD 686	17	E		
MD 584	0	E			MD 688	6	E		
MD 586	8	E			MD 690	8	D		
MD 588	4	E			MD 692	13	E		
MD 590	8	D			MD 694	2	E		
MD 592	1	E			MD 696	17	E		
MD 594	12	E			MD 698	6	E		
MD 596	9	E			MD 700	4	E		
MD 598	0	D			MD 702	6	D		
MD 600	0	D			MD 704	3	E		
MD 602	4	E			MD 706	19	E		
MD 604	12	D			MD 708	15	E		
MD 606	6	E			MD 710	12	D		
MD 608	10	E			MD 712	22	E		
MD 610	20	E			MD 714	8	E		
MD 612	-1	E			MD 716	0	E		
MD 614	7	E			MD 718	5	E		
MD 616	14	E			MD 720	16	D		
MD 618	15	E			MD 722	5	E		
MD 620	24	D			MD 724	-5	E		
MD 622	3	E			MD 726	7	E		
MD 624	7	D			MD 728	25	E		
MD 626	7	E			MD 730	3	E		
MD 628	4	E			MD 732	42	E		
MD 630	19	E			MD 734	33	D		
MD 632	3	E			MD 736	28	D		
MD 634	16	E			MD 738	35	D		
MD 636	11	D			DF 80	29	D		
MD 638	11	D							
MD 640	9	D							
MD 642	3	D							
MD 644	7	D							
MD 646	14	D							
MD 648	2	D							
MD 650	7	D							
MD 652	-3	D							
MD 654	6	E							
MD 656	15	E							
MD 658	7	E							
MD 660	-2	E							
MD 662	22	E							
MD 664	3	E							
MD 666	4	D							
MD 668	4	E							
MD 670	37	E							

Table 2-4. Net accumulation in 36-stake farm at H68 in 2001-2002.

(cm in depth)		
Stake No.	27 Nov. 2001 Surrface	15 Oct. 2002 condition (322 days)
I -1	73	D
-2	76	G
-3	60	D
-4	-44	G
-5	-66	G
-6	-46	G
II -1	27	E
-2	48	E
-3	24	G
-4	5	E
-5	-36	D
-6	8	E
III -1	-22	E
-2	-33	E
-3	26	G
-4	-32	E
-5	56	G
-6	49	G
IV -1	0	G
-2	-16	E
-3	-69	D
-4	74	E
-5	35	E
-6	-3	G
V -1	103	E
-2	33	E
-3	3	E
-4	18	E
-5	2	G
-6	-69	D
VI -1	30	E
-2	44	E
-3	26	D
-4	31	E
-5	-9	E
-6	-3	E

Table 2-5. Net accumulation in 36-stake farm at H180 in 2001-2002.

(cm in depth)		
Stake No.	27 Nov. 2001	Surrface condition (357 days)
I -1	55	E
-2	-59	E
-3	27	E
-4	34	E
-5	106	E
-6	4	E
II -1	15	E
-2	20	E
-3	3	E
-4	20	E
-5	3	E
-6	31	E
III -1	51	E
-2	-56	E
-3	31	E
-4	16	E
-5	108	E
-6	1	E
IV -1	20	E
-2	43	E
-3	51	G
-4	8	E
-5	5	G
-6	29	G
V -1	34	E
-2	-56	E
-3	-55	G
-4	109	E
-5	134	E
-6	24	E
VI -1	32	E
-2	55	E
-3	47	E
-4	11	E
-5	-3	E
-6	16	E

Table 2-6. Net accumulation in 36-stake farm at S122 in 2001-2002.

(cm in depth)		
Stake No.	28 Oct. 2001 21 Oct. 2002 (358days)	Surrface condition
I -1	-12	G
-2	-7	G
-3	5	G
-4	-4	G
-5	5	G
-6	12	G
II -1	69	G
-2	25	E
-3	-12	E
-4	26	E
-5	-27	E
-6	3	E
III-1	67	E
-2	11	E
-3	-6	G
-4	8	G
-5	-19	E
-6	16	E
IV-1	-1	E
-2	-15	E
-3	-1	E
-4	22	E
-5	27	E
-6	29	E
V-1	-22	G
-2	73	G
-3	68	G
-4	-52	E
-5	36	D
-6	48	E
VI-1	-30	E
-2	80	G
-3	22	E
-4	23	G
-5	1	G
-6	37	G

Table 2-7. Net accumulation in 36-stake farm at Dome Fuji Station in 2001-2003.

(cm in depth)		
Stake No.	27 Nov. 2001 13 Jan. 2003 (401days)	Surrface condition
I -1	3	E
-2	-18	E
-3	-17	D
-4	27	E
-5	26	D
-6	43	D
II -1	-1	E
-2	5	E
-3	21	E
-4	14	E
-5	1	E
-6	10	E
III-1	5	E
-2	13	E
-3	-4	E
-4	-3	E
-5	8	E
-6	9	E
IV-1	1	E
-2	2	E
-3	7	D
-4	25	E
-5	0	E
-6	16	E
V-1	23	E
-2	7	D
-3	-6	E
-4	3	E
-5	12	E
-6	16	E
VI-1	8	D
-2	20	E
-3	25	E
-4	-17	D
-5	2	E
-6	-23	D

Table 2-8. Net accumulation along 50-stake row at MD180 in 2001-2002.

Stake No.	(cm in depth)	
	3 Nov. 2001 29 Oct. 2002 (360days)	Surfase condition
1	-2	G
2	-3	G
3	-13	G
4	-17	G
5	8	G
6	1	G
7	-15	G
8	-14	G
9	-2	G
10	-2	G
11	-3	G
12	-2	G
13	-3	G
14	-4	G
15	-3	G
16	-5	G
17	-2	G
18	-3	G
19	-4	G
20	-3	G
21	-9	G
22	-3	G
23	-3	G
24	-2	G
25	-2	G
26	-3	G
27	-4	G
28	-3	G
29	-2	G
30	-2	G
31	0	G
32	-3	G
33	-2	G
34	-3	G
35	-2	G
36	-2	G
37	-4	G
38	-4	G
39	-3	G
40	-3	G
41	-3	G
42	-2	G
43	-2	G
44	-1	G
45	-1	G
46	-3	G
47	-4	G
48	-4	G
49	-3	G
50	-2	G

Table 2-9. Net accumulation along 50-stake row at MD560 in 2001-2002.

Stake No.	(cm in depth)	
	11 Nov. 2001 9 Nov. 2002 (363days)	Surfase condition
1	13	E
2	-1	E
3	10	E
4	16	E
5	34	E
6	13	E
7	17	E
8	4	E
9	0	E
10	0	E
11	-2	E
12	2	E
13	7	E
14	8	E
15	16	G
16	8	E
17	18	E
18	7	E
19	10	E
20	6	E
21	8	E
22	1	E
23	-2	E
24	8	E
25	19	E
26	21	E
27	9	E
28	8	E
29	-1	E
30	9	E
31	6	E
32	1	E
33	16	E
34	10	E
35	12	E
36	4	E
37	8	E
38	12	E
39	15	E
40	18	E
41	22	E
42	17	E
43	4	E
44	2	E
45	0	E
46	5	E
47	1	E
48	3	G
49	11	G
50	6	G

Table 2-10. Net accumulation along 50-stake row
at DF80 in 2001-2002.

Stake No.	(cm in depth)	
	20 Dec. 2001 30 Nov. 2002 (345days)	Surrface condition
1	4	D
2	4	D
3	14	D
4	9	D
5	10	D
6	10	E
7	7	D
8	6	D
9	4	D
10	14	D
11	12	D
12	21	D
13	17	D
14	17	D
15	14	D
16	9	E
17	8	D
18	10	D
19	12	D
20	11	D
21	8	D
22	10	D
23	14	D
24	12	D
25	16	D
26	4	D
27	12	D
28	16	D
29	13	D
30	8	D
31	8	D
32	14	D
33	11	D
34	8	D
35	6	E
36	9	E
37	11	D
38	8	E
39	5	D
40	5	E
41	6	E
42	3	D
43	7	E
44	7	E
45	7	D
46	8	E
47	5	D
48	5	E
49	9	D
50	15	E

Table 2-11. Net accumulation along a part of 101-stake row
at Mizuho Station in 2001-2002.

Stake No.	(cm in depth)	
	20 Oct. 2001 4 Feb. 2003 (369days)	Surrface condition
102	0	G
103	0	G
104	-6	G
105	-2	G
106	-7	G
107	-8	G
108	-8	G
109	-6	G
110	-5	G
111	-9	E
112	-1	E
113	-1	E
114	-5	E
115	-3	G
116	-7	G
117	-2	G
118	-6	G
119	-4	G
120	-7	G
121	-10	G
122	-2	G
123	-1	E
124	14	E
125	30	D
126	35	D
127	31	D
128	1	E
129	19	E
130	13	E
131	-4	G
132	25	G
133	26	E
134	17	E
135	17	G
136	6	E

3. Surface meteorological data during oversnow traverses

Observers: Shin KANEHAMA:	Traverse 1
Takashi SAITO:	Traverse 2-a and 2-b
Koji YOSHII:	Traverse 3

Meteorological observations were carried out during the oversnow traverse several times a day. We measured air pressure (Pa), air temperature (Ta), wind direction (WD) and wind speed (WS) with instruments and observed visibility (V), weather (W), hydrometeors (Hydro), cloud amount in tenths (N) and individual cloud amount and genus (CL). The instruments and accuracy of the measurements are given in Table 3-1. The notation used in this section is shown in Table 3-2.

Tables 3-3, 3-4 and 3-5 show meteorological data observed during traverses 1, 2-a -b and 3, respectively. The meteorological data during traverses between S16 and Dome Fuji have been published in Kamiyama *et al.* (1994), Motoyama *et al.* (1995, 1999, 2002), Shiraiwa *et al.* (1996), Azuma *et al.* (1997), Fujita *et al.* (1998) and Furukawa *et al.* (2002).

References

- Azuma, N., Kameda, T., Nakayama, Y., Tanaka, Y., Yoshimi, H., Furukawa, T. and Ageta, Y. (1997): Glaciological data collected by the 36th Japanese Antarctic Research Expedition during 1995-1996. JARE Data Rep., **223** (Glaciology 26), 83 p.
- Fujita, S., Kawada, K. and Fujii, Y. (1998): Glaciological data collected by the 37th Japanese Antarctic Research Expedition during 1996-1997. JARE Data Rep., **234** (Glaciology 27), 46 p.
- Furukawa, T., Yamada, T., Suzuki, K., Suzuki, T., Matsuoka, K., Horikawa, K., Murakata, E., Yasugahira, K. and Iizuka, Y. (2002): Glaciological data collected by the 39th and 40th Japanese Antarctic Research Expedition during 1997-2000. JARE Data Rep., **267** (Glaciology 29), 61 p.
- Kamiyama, K., Furukawa, T., Maeno, H., Kishi, T. and Kanao, M. (1994): Glaciological data collected by the 33rd Japanese Antarctic Research Expedition in 1992. JARE Data Rep., **194** (Glaciology 21), 67 p.
- Motoyama, H., Enomoto, H., Miyahara, M. and Koike, J. (1995): Glaciological data collected by the 34th Japanese Antarctic Research Expedition in 1993. JARE Data Rep., **202** (Glaciology 23), 42 p.
- Motoyama, H., Kawamura, Y., Kanao, M., Hirasawa, N., Kaneto, S. and Yamanouchi, T. (1999): Glaciological data collected by the 38th Japanese Antarctic Research Expedition in 1997-1998. JARE Data Rep., **239** (Glaciology 28), 74 p.
- Motoyama, H., Nishimura, K., Kubo, S., Aoki, T., Wada, M., Yamaguchi, K. and Kato, Y. (2002): Glaciological data collected by the 41st and 42nd Japanese Antarctic Research Expedition

during 2000-2002. JARE Data Rep., **268** (Glaciology 30), 58 p.

Shiraiwa, T., Saito, T., Saito, T., Shoji, H., Taguchi, Y., Abo, T., Yamamoto, Y., Inagawa, Y., Yokoyama, K. and Watanabe, O. (1996): Glaciological data collected by the 35th Japanese Antarctic Research Expedition during 1994-1995. JARE Data Rep., **211** (Glaciology 25), 69 p.

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

Item	Instruments	Accuracy
Air pressure	Wrist watch type	1 hPa
Air temperature	Sling type glass thermometer	0.5
Wind direction	Magnetic compass	5 degrees
Wind speed	Portable 3-cup anemometer	0.5 m/s
Weather	Visual observation	
Visibility	Visual observation	
Cloud amount	Visual observation	
Individual cloud	Visual observation	

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

LT: Local standard time at Syowa Station (UTC + 3hours)

Pa: Air pressure in hPa

Ta: Air temperature in degree C

WD: Wind direction

WS: Wind speed in m/s

W: Weather

Clear, Fine, Cloudy (upper level clouds were dominant), Cloudy, Snow, Blowing snow, Drifting snow, Snow storm, Diamond dust, Fog, Low fog

Hydro: Hydrometeors

V: Visibility in km

N: Cloud amount in tenths

CL: Individual cloud amount and genus

Table 3-3. Meteorological data observed during the traverse between Syowa Station and MD364 (15-August-2002 to 21-September-2002).

Date	LT(h)	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
15-Aug-02	09	Syowa	990	-16.5	⊕	-	C	≥30	10-		0+Ac,10-Ci
15-Aug-02	12	Tottuki	986	-19.7	⊕	-	C	≥30	10-		0+Ac,10-Ci
15-Aug-02	15	N16	953	-21.0	⊕	ESE	3	≥30	10-		0+Sc,3Ac,10-Ci
15-Aug-02	18	N50	912	-17.8	⊕	E	6	8	4	†	1Ac,6Ci
15-Aug-02	21	S16	910	-18.1	⊕	E	8	8	6	†	0+Ac,6Ci
15-Aug-02	24	"	911	-20.7	⊕	E	7	15	2	†	2Ci
16-Aug-02	06	"	905	-18.8	○	ESE	8	≥30	0+	†	0+Ac
16-Aug-02	09	"	904	-21.9	○	ESE	12	2	1	†	0+Sc,0+Ac,1Ci
16-Aug-02	12	S17-3	902	-22.6	†	ESE	11	0.4	0+	†	0+Ac,0+Ci
16-Aug-02	15	S21	891	-22.2	○	E	12	1.5	1	†	0+Sc,0+Ac,1Ci
16-Aug-02	18	S30	856	-24.8	○	E	11	2	0+	†	0+Ac,0+Ci
16-Aug-02	21	H3	850	-24.5	⊕	E	12	1	2	†	2Ci
16-Aug-02	24	"	849	-23.5	†	ENE	14	0.5	2	†	2Ci
17-Aug-02	06	"	845	-22.9	○	E	11	1	0+	†	0+Ac
17-Aug-02	09	"	846	-22.5	⊕	E	13	1.5	10-	†	0+Sc,2Ac,10-Ci
17-Aug-02	12	H25	842	-22.2	†	E	12	0.5	10-	†	2Sc,6Ac,10-Ci
17-Aug-02	15	H57	835	-21.4	†	ENE	12	0.8	10-	†	10-Sc,XAc
17-Aug-02	18	H68	831	-22.3	†	ENE	11	0.6	10-	†	1Ac,10-Ci
17-Aug-02	21	H71	829	-21.1	†	E	11	0.5	10-	†	10-Ci
17-Aug-02	24	"	830	-21.0	†	E	10	0.5	10-	†	10-Ci
18-Aug-02	06	"	826	-19.8	†	ENE	11	0.5	10-	†	10-Sc
18-Aug-02	09	"	828	-19.5	†	E	9	0.5	10-	†	10-Sc,XAc
18-Aug-02	12	H84	822	-19.7	†	E	11	0.8	10-	†	10-Sc,XAc,XCi
18-Aug-02	15	H106	813	-20.6	†	ENE	13	0.7	10	†	10Sc
18-Aug-02	18	H136	805	-22.0	†	NE	12	0.5	10	†	2Sc,10Ac
18-Aug-02	21	H140	803	-22.2	†	ENE	11	0.5	10-	†	10-Ci
18-Aug-02	24	"	804	-23.4	†	ENE	11	0.3	4	†	4Ci
19-Aug-02	06	"	809	-25.3	⊕	ENE	9	1	2	†	1Sc,2Ac
19-Aug-02	09	"	808	-24.6	○	ENE	7	2	10-	†	10-Sc,XAc
19-Aug-02	12	H156	805	-24.5	✗	ENE	6	2	10-	†	10-Sc,XAc
19-Aug-02	15	H180	798	-30.3	○	ESE	4	10	9		1Sc,9Ac
19-Aug-02	18	H212	789	-31.2	✗	ESE	4	10	10-	✗	1Sc,10-Cs
19-Aug-02	21	H219	785	-36.3	○	ESE	4	20	1		0+Sc,1Ci
19-Aug-02	24	"	786	-38.2	○	ESE	4	20	0		-
20-Aug-02	06	"	791	-32.0	⊕	ESE	4	20	10-		3Sc,10-Ci
20-Aug-02	09	"	788	-39.5	○	ESE	4	≥30	1		0+Sc,1Ac
20-Aug-02	12	H232	786	-37.1	○	ESE	3	≥30	10-		10-Sc
20-Aug-02	15	H246	784	-29.1	≡	-	C	0.05	10	≡	10If
20-Aug-02	18	H258	780	-30.1	✗	ESE	3	1	10-	✗,≡	10-Sc
20-Aug-02	21	H264	777	-31.9	✗	E	4	1	10-	✗	10-Sc
20-Aug-02	24	"	777	-32.8	✗	ESE	4	1.5	10-	✗	10-Sc
21-Aug-02	06	"	776	-40.9	⊕	SSE	3	≥30	8		1Sc,2Ac,8Ci
21-Aug-02	09	"	772	-42.0	⊕	ESE	3	≥30	9		0+Sc,0+Ac,9Ci
21-Aug-02	12	H284	769	-40.3	○	ESE	2	≥30	0+		0+Ac

Date	LT(h)	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
21-Aug-02	15	H291-292	764	-43.0	○	SE	3	≥30	0+	+	0+Ac
21-Aug-02	18	Z4	756	-45.4	○	E	7	2	0	+	-
21-Aug-02	21	Z6	751	-46.2	○	E	6	1	0	+	-
21-Aug-02	24	"	751	-46.1	+	E	7	0.5	0	+	-
22-Aug-02	06	"	754	-46.3	○	E	7	1	0+	+	0+Ac
22-Aug-02	09	"	746	-46.0	+	E	6	0.5	0+	+	0+Sc
22-Aug-02	12	Z12	746	-44.7	+	E	8	0.3	0	+	-
22-Aug-02	15	Z20	744	-44.5	+	E	6	0.2	0	+	-
22-Aug-02	18	Z32	738	-45.4	+	E	9	0.05	0	+	-
22-Aug-02	21	Z35	735	-45.3	+	E	9	0.3	0	+	-
22-Aug-02	24	"	737	-45.3	+	E	11	0.3	0	+	-
23-Aug-02	06	"	739	-44.6	+	E	8	0.5	0+	+	0+Sc
23-Aug-02	09	"	734	-44.1	+	E	10	0.5	0+	+	0+Ci
23-Aug-02	12	Z46	733	-43.5	+	E	9	0.8	0+	+	0+Ac
23-Aug-02	15	Z60	730	-43.5	+	E	11	0.8	0+	+	0+Ci
23-Aug-02	18	Z78	730	-45.3	+	E	8	0.7	0	+	-
23-Aug-02	21	Z86	727	-44.7	○	E	11	1	0	+	-
23-Aug-02	24	"	727	-45.7	○	E	9	1	0	+	-
24-Aug-02	06	"	731	-46.5	○	E	8	1	0	+	-
24-Aug-02	09	"	726	-46.4	○	E	8	1.5	0	+	-
24-Aug-02	12	Z96	728	-45.7	+	E	8	0.8	0+	+	0+Sc,0+Ci
24-Aug-02	15	Z103'	725	-45.8	⊕	E	7	1	3	+	0+Sc,3Ci
24-Aug-02	18	"	725	-48.0	○	E	7	1	0+	+	0+Sc,0+Ac,0+Ci
24-Aug-02	21	"	725	-47.2	○	E	8	1	0+	+	0+Ci
24-Aug-02	24	"	725	-45.0	+	E	10	0.5	6	+	6Cs
25-Aug-02	06	"	728	-43.7	+	E	7	0.8	0	+	-
25-Aug-02	09	"	723	-41.8	+	E	9	0.5	0+	+	0+Sc
25-Aug-02	12	"	725	-39.4	+	E	10	0.3	10-	+	0+Sc,10-Ci
25-Aug-02	15	"	725	-37.8	+	E	10	0.3	10-	+	8Ac,10-Ci
25-Aug-02	18	"	726	-36.5	+	ESE	9	0.2	X	+	10BS
25-Aug-02	21	"	725	-34.6	+	ESE	11	0.3	X	+	10BS
25-Aug-02	24	"	727	-33.0	+	E	10	0.5	10-	+	10Ci
26-Aug-02	06	"	724	-33.2	+	E	9	0.8	10	+	10Ac
26-Aug-02	09	"	729	-33.7	+	E	9	0.5	10-	+	10-Ac
26-Aug-02	12	MD2	726	-32.5	+	E	10	0.3	10-	+	10-Ac
26-Aug-02	15	MD4	726	-33.2	○	E	8	1	10-	+	10-Ac
26-Aug-02	18	MD20	726	-35.5	⊕	E	7	2	8	+	3Sc,1Ac,8Ci
26-Aug-02	21	MD24	724	-37.2	○	ESE	7	2	0+	+	0+Ci
26-Aug-02	24	"	726	-38.5	⊕	E	6	5	3	+	0+Sc,0+Ac,3Ci
27-Aug-02	06	"	724	-39.2	○	E	4	5	10-	+	10-Ac
27-Aug-02	09	"	728	-37.9	⊕	ESE	5	3	8	+	1Sc,4Ac,8Ci
27-Aug-02	12	MD26	729	-37.0	*	ESE	4	0.5	1	+	1Ac
27-Aug-02	15	MD32-34	724	-36.2	+	ESE	5	0.5	10-	+	10-Ac
27-Aug-02	18	MD40	724	-35.3	+	ESE	7	0.8	2	+	2Ac
27-Aug-02	21	MD42-44	720	-37.2	+	ESE	7	0.8	1	+	1Ac
27-Aug-02	24	"	719	-36.4	○	E	7	1	0	+	-

Date	LT(h)	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
28-Aug-02	06	"	712	-39.8	+	E	7	0.3	2	+	1Ac,2Ci
28-Aug-02	09	"	717	-38.7	+	ESE	9	0.3	10-	+	10-Ac
28-Aug-02	12	MD54	713	-37.6	+	E	13	0.1	10-	+	2Ac,10-Ac,Xci
28-Aug-02	15	MD60	710	-37.8	+	ESE	11	0.1	10-	+	10-Ac
28-Aug-02	18	MD68-70	708	-37.5	+	ESE	11	0.3	X	+	10BS
28-Aug-02	21	MD72-74	705	-37.5	*	ESE	9	0.3	7	+	3Ac,7Ac
28-Aug-02	24	"	707	-39.3	+	ESE	8	0.5	0	+	-
29-Aug-02	06	"	713	-43.5	+	ESE	8	0.8	10-	+	10-Ac
29-Aug-02	09	"	715	-46.5	①	ESE	7	1	4	+	0+Sc,1Ac,4Ci
29-Aug-02	12	MD86	710	-48.2	+	ESE	9	0.5	0+	+	0+Ac,0+Ci
29-Aug-02	15	MD96	708	-50.6	○	SE	6	1	0	+	-
29-Aug-02	18	MD108	709	-53.0	○	SE	9	1	1	+	1Ac
29-Aug-02	21	MD122-124	704	-55.0	○	SE	6	2	0	+	-
29-Aug-02	24	"	704	-56.4	○	SE	7	1	0	+	-
30-Aug-02	06	"	702	-53.1	+	SE	10	0.3	0	+	-
30-Aug-02	09	"	703	-51.6	+	ESE	10	0.1	X	+	10BS
30-Aug-02	12	MD130	699	-48.5	+	SE	15	0.1	X	+	10BS
30-Aug-02	15	MD138	691	-47.5	+	SE	14	0.05	X	+	10BS
30-Aug-02	18	MD152-154	687	-47.2	+	SE	14	0.05	X	+	10BS
30-Aug-02	21	MD156-158	685	-47.8	+	SE	11	0.05	X	+	10BS
30-Aug-02	24	"	684	-48.5	+	SE	11	0.05	X	+	10BS
31-Aug-02	06	"	685	-49.8	○	ESE	9	1	0	+	-
31-Aug-02	09	"	689	-50.2	+	ESE	8	0.5	0	+	-
31-Aug-02	12	MD172	685	-51.1	+	SE	9	0.3	0	+	-
31-Aug-02	15	MD182	679	-51.1	+	SE	8	0.5	0	+	-
31-Aug-02	18	MD200	671	-54.9	○	SSE	7	1	0+	+	0+Ac
31-Aug-02	21	MD206	668	-56.7	○	SSE	5	1	0	+	-
31-Aug-02	24	"	667	-57.5	+	SE	8	0.5	0	+	-
1-Sep-02	06	"	665	-59.4	+	SE	6	0.5	0	+	-
1-Sep-02	09	"	664	-59.5	+	SE	7	0.5	0	+	-
1-Sep-02	12	"	667	-58.1	+	SSE	5	0.8	0	+	-
1-Sep-02	15	MD220	658	-59.2	+	SE	5	0.8	0	+	-
1-Sep-02	18	MD226	655	-64.2	○	SE	5	1	0+	+	0+Ac
1-Sep-02	21	"	654	-68.2	○	SE	4	1	0	+	-
1-Sep-02	24	"	654	-68.1	○	SE	5	1	0	+	-
2-Sep-02	06	"	655	-64.2	○	SE	5	1	0+	+	0+Ci
2-Sep-02	09	"	655	-61.2	①	SE	4	1	8	+	0+Ac,8Ci
2-Sep-02	12	"	656	-54.3	*	SE	4	0.5	10-	+	10-Ac
2-Sep-02	15	"	658	-50.2	+	SE	6	0.3	10	+	10Ac
2-Sep-02	18	"	659	-48.5	+	ESE	7	0.1	X	+	10BS
2-Sep-02	21	"	661	-45.5	+	NE	5	0.2	10	+	10Ac
2-Sep-02	24	"	662	-45.4	+	ESE	5	0.5	0	+	-
3-Sep-02	06	"	665	-45.5	+	SE	4	0.6	0	+	-
3-Sep-02	09	"	666	-47.0	+	SE	5	0.3	10-	+	10-Ac
3-Sep-02	12	MD240	663	-46.5	+	SE	7	0.3	10-	+	6Ac,10-Ci
3-Sep-02	15	MD258	655	-48.2	+	SE	6	0.3	10-	+	10-Ac

Date	LT(h)	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
3-Sep-02	18	MD272	653	-48.9	↑	SE	6	0.5	10-	↑	10-Ac
3-Sep-02	21	MD276-278	647	-48.6	↑	SE	7	0.5	0	↑	-
3-Sep-02	24	"	651	-50.4	↑	SSE	6	0.5	0	↑	-
4-Sep-02	06	"	647	-49.5	↑	SE	6	0.3	0+	↑	0+Ac,0+Ci
4-Sep-02	09	"	647	-50.3	↑	SE	8	0.3	10-	↑	0+Ac,10-Ci
4-Sep-02	12	MD294	642	-51.0	↑	SE	7	0.6	10-	↑	0+Ac,10-Ci
4-Sep-02	15	MD308	636	-52.5	↑	SE	3	0.8	10-	↑	1Ac,10-Ci
4-Sep-02	18	MD326	635	-51.5	↑	SE	6	0.8	7	↑	1Ac,7Ci
4-Sep-02	21	MD334-336	631	-55.5	○	SE	5	2	0	↑	-
4-Sep-02	24	"	631	-55.5	○	SE	7	2	0	↑	-
5-Sep-02	06	"	628	-56.2	○	SE	7	1	0+	↑	0+Ac,0+Ci
5-Sep-02	09	"	631	-55.7	↑	SE	8	0.6	10-	↑	10-Ac,Xci
5-Sep-02	12	MD352	628	-51.7	↑	SE	4	0.8	10-	↑	2Ac,10-Ci
5-Sep-02	15	MD362-364	623	-54.2	↑	SE	6	0.8	4	↑	0+Ac,4Ci
5-Sep-02	18	MD364	624	-56.2	↑	SSE	6	0.2	1	↑	0+Ac,1Ci
5-Sep-02	21	"	624	-57.2	↑	SE	4	0.5	0	↑	-
5-Sep-02	24	"	624	-53.7	↑	SE	7	0.5	0	↑	-
6-Sep-02	06	"	624	-51.9	×	SE	5	0.3	10-	↑	10-Ac,XCi
6-Sep-02	09	"	626	-51.5	↑	SE	4	0.3	10-	↑	10-Ac,XCi
6-Sep-02	12	"	627	-51.6	↑	SE	4	0.5	10-	↑	0+Ac,10-Ci
6-Sep-02	15	"	626	-50.4	↑	SSE	4	0.5	10-	↑	10-Ac,XCi
6-Sep-02	18	"	626	-51.4	↑	SE	5	0.3	10-	↑	10-Ac,XCi
6-Sep-02	21	"	623	-51.2	↑	SE	6	0.3	0	↑	-
6-Sep-02	24	"	626	-49.2	↑	ESE	7	0.3	0	↑	-
7-Sep-02	06	"	623	-50.1	↑	ESE	6	0.2	10	↑	10Ac
7-Sep-02	09	"	624	-49.2	↑	SE	6	0.2	10-	↑	10-Ac
7-Sep-02	12	"	621	-47.8	↑	ESE	7	0.2	10-	↑	0+Ac,10-Cs
7-Sep-02	15	"	626	-48.8	↑	ESE	6	0.5	10-	↑	0+Ac,4Cs,6Ci
7-Sep-02	18	"	624	-51.0	↑	SE	6	0.2	10-	↑	0+Ac,10-Ci
7-Sep-02	21	"	624	-53.0	↑	SE	6	0.5	0+	↑	0+Ci
7-Sep-02	24	"	625	-53.5	↑	SE	7	0.5	0	↑	-
8-Sep-02	06	"	624	-54.0	↑	ESE	7	0.5	10-	↑	0+Ac,10-Ci
8-Sep-02	09	"	623	-54.7	↑	SE	5	0.8	10-	↑	4Ac,10-Ci
8-Sep-02	12	MD348	632	-52.7	○	ESE	3	1	10-	↑	0+Sc,4Ac,10-Ci
8-Sep-02	15	MD334	635	-52.5	○	SE	5	1	10-	↑	2Ac,3Cs,7Ci
8-Sep-02	18	MD322	636	-53.4	○	SE	5	1	9	↑	2Ac,9Ci
8-Sep-02	21	MD316-314	641	-53.4	↑	SE	5	0.8	0	↑	-
8-Sep-02	24	"	642	-55.5	↑	SE	5	0.8	0	↑	-
9-Sep-02	06	"	643	-58.2	↑	SE	4	0.8	0	↑	-
9-Sep-02	09	"	647	-58.1	↑	SSE	5	0.5	0	↑	-
9-Sep-02	12	MD300	651	-56.7	↑	SE	4	0.8	0	↑	-
9-Sep-02	15	MD288-286	656	-54.6	↑	SSE	8	0.3	0	↑	-
9-Sep-02	18	MD270	661	-53.5	↑	SSE	7	0.5	0+	↑	0+Ac
9-Sep-02	21	MD262	662	-53.6	↑	SSE	6	0.5	0	↑	-
9-Sep-02	24	"	661	-53.6	↑	SSE	5	0.8	0	↑	-
10-Sep-02	06	"	661	-54.6	↑	SSE	7	0.3	9	↑	9Ci

Date	LT(h)	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
10-Sep-02	09	"	663	-52.4	↑	SE	10	0.3	7	↑	7Ci
10-Sep-02	12	MD244	668	-50.3	↑	SSE	11	0.2	0	↑	-
10-Sep-02	15	MD232	673	-50.1	↑	SE	8	0.2	0	↑	-
10-Sep-02	18	MD212	677	-50.7	↑	SE	11	0.2	0+	↑	0+Ac,0+Ci
10-Sep-02	21	MD200	683	-51.7	↑	SE	10	0.2	0	↑	-
10-Sep-02	24	"	676	-52.1	↑	SE	11	0.3	0	↑	-
11-Sep-02	06	"	674	-51.5	↑	SE	10	0.3	10-	↑	10-Ac,XCi
11-Sep-02	09	"	676	-50.9	↑	SE	9	0.3	10-	↑	0+Ac,10-Ci
11-Sep-02	12	MD184	683	-46.6	↑	ESE	8	0.2	10-	↑	4Cs,6Ci
11-Sep-02	15	MD172	688	-44.0	↑	ESE	7	0.8	10-	↑	0+Ac,4Sc,6Ci
11-Sep-02	18	MD154	693	-44.7	◎	ESE	7	1	10-	↑	8Ac,10-Ci
11-Sep-02	21	MD142	696	-46.0	○	SE	6	1	0	↑	-
11-Sep-02	24	"	695	-46.5	∅	SE	6	1	10-	↑	10-Ci
12-Sep-02	06	"	696	-45.2	◎	ESE	6	1	10	↑	10Ac
12-Sep-02	09	"	698	-46.5	∅	SE	4	1.5	10-	↑	0+Ac,10-Ci
12-Sep-02	12	MD128	706	-43.1	∅	ESE	6	1.5	8	↑	2Ac,8Ci
12-Sep-02	15	MD116	709	-43.6	∅	ESE	6	1.5	9	↑	0+Ac,9Ci
12-Sep-02	18	MD98	712	-44.8	∅	ESE	7	1	9	↑	2Ac,9Ci
12-Sep-02	21	MD96-94	710	-46.2	↑	ESE	8	0.5	2	↑	2Ci
12-Sep-02	24	"	710	-47.2	↑	SE	8	0.5	2	↑	2Ci
13-Sep-02	06	"	707	-50.9	↑	SE	12	0.5	0+	↑	0+Ci
13-Sep-02	09	"	706	-51.2	↑	SE	8	0.8	0	↑	-
13-Sep-02	12	MD76	710	-51.0	↑	ESE	10	0.3	1	↑	1Ci
13-Sep-02	15	MD64	712	-49.7	↑	ESE	11	0.2	0+	↑	0+Ci
13-Sep-02	18	MD46	716	-50.4	↑	ESE	9	0.2	0	↑	-
13-Sep-02	21	MD34-32	716	-49.6	↑	E	8	0.3	1	↑	1Ci
13-Sep-02	24	"	718	-45.7	✗	E	8	0.1	X	↑	-
14-Sep-02	06	"	720	-47.4	✗	E	8	0.2	10	↑	10Ac
14-Sep-02	09	"	722	-45.2	✗	E	6	0.2	10-	↑	9Ac;10-Ci
14-Sep-02	12	MD16	727	-41.1	↑	E	5	0.6	10-	↑	4Ac;10-Ci
14-Sep-02	15	MD2	733	-38.5	∅	E	4	1.5	10-	↑	0+Sc;3Ac;10-Ci
14-Sep-02	18	IM1	734	-43.1	∅	E	4	1.5	8	↑	0+Sc;1Ac;8Ci
14-Sep-02	21	"	733	-45.5	○	E	5	1	0	↑	-
14-Sep-02	24	"	733	-46.0	○	ESE	7	1	0+	↑	0+Ci
15-Sep-02	06	"	733	-37.9	↑	ESE	12	0.1	X	↑	10BS
15-Sep-02	09	"	732	-34.4	↑	E	15	0.08	X	↑	10BS
15-Sep-02	12	"	727	-30.5	↑	E	15	0.05	X	↑	10BS
15-Sep-02	15	"	726	-28.3	✗	E	16	0.04	X	↑	10SS
15-Sep-02	18	"	723	-25.5	✗	E	16	0.02	X	↑	10SS
15-Sep-02	21	"	723	-25.3	✗	ENE	15	0.03	X	↑	10SS
15-Sep-02	24	"	724	-25.2	✗	E	13	0.04	X	↑	10SS
16-Sep-02	06	"	726	-27.0	✗	E	9	0.05	X	↑	10SS
16-Sep-02	09	"	724	-27.3	↑	E	8	0.08	X	↑	10BS
16-Sep-02	12	"	729	-27.2	↑	ENE	7	0.3	10	↑	10Ac
16-Sep-02	15	"	731	-27.5	✗	ENE	7	0.3	10	↑	10Ac
16-Sep-02	18	"	731	-34.4	∅	ESE	3	3	6	↑	0+Sc,1Ac,6Ci

Date	LT(h)	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
16-Sep-02	21	"	730	-36.1	○	E	4	2	0+	†	0+Ac
16-Sep-02	24	"	730	-38.2	○	E	4	3	1	†	1Ci
17-Sep-02	06	"	724	-41.0	○	E	5	10	0+	-	0+Ac
17-Sep-02	09	"	726	-38.6	†	E	8	0.3	0+	†	0+Ci
17-Sep-02	12	Z96	730	-36.1	†	E	10	0.3	0	†	-
17-Sep-02	15	Z82	731	-35.5	†	E	7	0.3	8	†	0+Sc,8Ci
17-Sep-02	18	Z62	734	-34.5	†	E	10	0.5	10-	†	0+Sc,4Ac,10-Ci
17-Sep-02	21	Z37-36	738	-33.0	⊕	E	9	2	10-	†	0+Ac,6Cs,4Ci
17-Sep-02	24	"	737	-31.5	⊕	E	9	1	10-	†	10-Cs
18-Sep-02	06	"	736	-30.6	✗	E	7	2	10	†	10Ac
18-Sep-02	09	Z34	743	-27.5	✗	ENE	7	2	10-	†	1Ac,3Cs,7Ci
18-Sep-02	12	Z15	752	-26.4	✗	ENE	5	2	10-	†	1Ac,10-Ci
18-Sep-02	15	S122	758	-26.1	⊕	ENE	5	10	10-	-	1Sc,3Ac,10-Ci
18-Sep-02	18	H276	771	-24.9	✗	ENE	4	5	10-	✗	10-Sc,XAc
18-Sep-02	21	H256	778	-25.0	✗	ENE	5	5	10-	✗	1Sc,10-Ac
18-Sep-02	24	"	779	-24.2	✗	ENE	6	5	10-	†	0+Sc,10-Ac
19-Sep-02	06	"	781	-24.5	○	E	5	5	10-	†	10-Sc
19-Sep-02	09	H254	782	-24.8	○	E	7	10	10-	-	10-Sc,XAc
19-Sep-02	12	H220	792	-22.6	○	ENE	6	20	10-	-	10-Sc
19-Sep-02	15	H202	796	-22.5	○	E	5	10	10-	-	10-Sc
19-Sep-02	18	H164	807	-22.0	✗	E	3	5	10	✗	10Sc
19-Sep-02	21	H136-132	816	-22.0	✗	E	5	3	10	✗	10Sc
19-Sep-02	24	"	815	-22.7	✗	E	6	5	10-	✗	10-Sc
20-Sep-02	06	"	811	-26.0	○	ENE	8	2	10-	†	1Sc,10-Ac,XCi
20-Sep-02	09	H133	815	-24.0	⊕	E	6	1	10-	†	2Sc,2Ac,10-Ci
20-Sep-02	12	H96	827	-22.4	⊕	ENE	7	2	10-	†	0+Sc,1Ac,10-Ci
20-Sep-02	15	H68	836	-23.2	⊕	E	4	20	10-	-	0+Sc,3Ac,10-Ci
20-Sep-02	18	H15	853	-25.5	⊕	E	6	20	10-	-	0+Sc,3Ac,10-Ci
20-Sep-02	21	S24	875	-26.0	○	E	7	5	1	†	1Ac,0+Ci
20-Sep-02	24	"	877	-26.8	○	E	8	5	1	†	0+Sc,1Ac,0+Ci
21-Sep-02	06	"	874	-28.2	○	E	7	5	0+	†	0+Sc,0+Ac,0+Ci
21-Sep-02	09	S22-23	883	-25.0	○	E	8	10	0+	†	0+Sc,0+Ac,0+Ci
21-Sep-02	12	S16	905	-20.2	⊕	E	5	20	8	-	0+Sc,0+Ac,8Ci
21-Sep-02	15	Tottuki	972	-13.7	⊕	-	C	≥30	10-	-	0+Sc,1Ac,10-Ci

Table 3-4. Meteorological data observed during the traverse between S16 and Dome Fuji Station
 (12-October-2002 to 9-February-2003).

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
12-Oct-02	18:00	S16	924	-12.3	◎	E	15	2	10		Sc
13-Oct-02	06:00	S16	925	-11.2	✗	ENE	16	0.1	10	+	Sc
13-Oct-02	12:00	S16	928	-10.4	✗	NE	15	0.2	10	+	
13-Oct-02	18:00	S16	927	-11.0	◎	NE	13	0.5	10	+	
14-Oct-02	06:00	S16	925	-10.5	◎	E	14	0.3	10	+	9Sc
14-Oct-02	12:00	S16	926	-8.0	◎	ENE	8	5	10	+	8Sc,2Ci
14-Oct-02	19:45	H35	865	-14.4	◎	ENE	8	2	9	+	8Sc,3Ac,2Ci
15-Oct-02	06:00	H35	858	-15.0	◎	E	14	1	9	+	2Sc,8Ac
15-Oct-02	12:45	H68	850	-13.0	◎	ENE	18	0.1	10	+	Sc,Ac,Ci
15-Oct-02	19:10	H120	828	-17.0	◎	E	18	0.4	5	+	Sc,Ci
16-Oct-02	06:00	H120	828	-18.0	◎	ENE	7	2	10	+	Sc,Ac
16-Oct-02	12:00	H120	832	-14.0	◎	ENE	8	2	10	+	Ac,Ci
16-Oct-02	18:00	H120	831	-18.6	○	ENE	4	30	5		Ac,Ci
17-Oct-02	06:00	H120	834	-23.4	○	ENE	8	5	10		Ac,Sc
17-Oct-02	12:00	H120	832	-19.6	◎	NE	6.5	5	7	+	Ac,Ci
17-Oct-02	18:00	H120	833	-21.6	○	ENE	8	30	2		Ac
18-Oct-02	06:00	H120	832	-19.9	◎	NE	16	0.2	10	+	Sc
18-Oct-02	09:00	H120	832	-18.5	◎	ENE	17	0.2	10	+	Sc
18-Oct-02	12:00	H120	831	-17.9	✗	ENE	18	0.1	10	+	Sc
18-Oct-02	18:00	H120	833	-17.6	◎	ENE	14	0.2	9	+	Ci,Ai
19-Oct-02	06:00	H120	828	-20.4	○	E	17	0.4	2	+	Ac
19-Oct-02	19:45	H180	805	-20.5	○	E	16	0.6	3	+	Ac
20-Oct-02	06:00	H180	804	-22.0	○	E	17	0.1	5	+	Ac
20-Oct-02	12:45	H219	797	-19.5	○	E	21	0.1	0	+	
20-Oct-02	20:10	H252	785	-26.5	◎	ESE	18	0.2	0	+	
21-Oct-02	06:00	H252	780	-28.9	○	E	14	0.6	0	+	
21-Oct-02	13:30	H290	769	-22.7	○	ESE	14.5	1	0	+	
21-Oct-02	19:10	Z13	754	-29.3	○	ESE	11	20	0	+	
22-Oct-02	06:00	Z13	751	-33.0	○	E	12	2	0	+	
22-Oct-02	12:10	Z27	751	-26.5	○	E	12	1	0	+	
22-Oct-02	19:30	Z66	746	-32.5	○	E	8	5	0		
23-Oct-02	06:00	Z66	751	-35.6	○	E	12	5	0	+	
23-Oct-02	13:00	Z86	753	-24.8	○	E	8	30	0		
23-Oct-02	18:00	IMO	746	-26.5	○	E	6	30	1		Sc
24-Oct-02	06:00	IMO	745	-30.4	◎	E	5.5	10	10		Ac,Sc
24-Oct-02	12:45	Mizuho	745	-26.9	○	E	8	10	2	+	Sc
24-Oct-02	18:20	IMO	742	-29.6	○	E	7.5	10	4		Ci,Sc
25-Oct-02	06:00	IMO	738	-36.5	○	E	12	0.6	1		Sc
25-Oct-02	14:30	IMO	741	-27.0	○	E	9	20	1		Sc
25-Oct-02	20:45	MD20	734	-36.5	○	E	12	5	6	+	Ac
26-Oct-02	06:00	MD20	733	-36.0	○	E	15	1	5	+	Ac
26-Oct-02	12:20	MD36	729	-27.0	○	E	13	1	8		Ac
26-Oct-02	20:00	MD68	725	-33.5	○	E	11	2	7	+	Ac
27-Oct-02	06:00	MD68	721	-35.9	◎	ESE	12	2	9	+	Ac,Sc
27-Oct-02	12:40	MD82	722	-28.9	○	ESE	12	2	1	+	Ac

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
27-Oct-02	19:30	MD108	714	-35.9	⊕	ESE	12	2	2	+	Ac,Ci
28-Oct-02	06:00	MD108	710	-41.0	○	ESE	13	1	1	+	Ac
28-Oct-02	12:10	MD124	710	-32.9	○	ESE	12	1	1	+	Ac
28-Oct-02	19:30	MD156	702	-37.6	⊕	ESE	10	1	3	+	Ci
29-Oct-02	06:00	MD156	700	-40.6	⊕	ESE	10	0.5	3	+	Ac
29-Oct-02	12:10	MD172–MD174	698	-32.7	⊕	ESE	13	1	2	+	Ci
29-Oct-02	19:20	MD210	685	-39.0	○	ESE	10.5	5	1	+	Ci
30-Oct-02	06:00	MD210	685	-43.5	○	ESE	13	0.4	1	+	Ci
30-Oct-02	12:00	MD230	680	-37.2	○	SE	14.5	0.1	0	+	
30-Oct-02	19:40	MD246	672	-42.0	○	ESE	14	0.4	0	+	
31-Oct-02	06:00	MD246	673	-44.0	○	SE	12	0.4	0	+	
31-Oct-02	12:20	MD246	673	-36.0	◎	SE	14	0.1	9	+	Ac
31-Oct-02	19:25	MD280	670	-39.0	⊕	SE	9	0.6	0	+	
1-Nov-02	06:00	MD280	661	-41.2	⊕	SE	10	0.8	4	+	Ci
1-Nov-02	12:20	MD280	660	-34.6	○	SE	11	0.4	7	+	Ac,Ci
1-Nov-02	19:00	MD280	660	-37.4	○	ESE	10	1	1	+	Ac
2-Nov-02	06:00	MD280	661	-43.1	⊕	ESE	9	0.6	0	+	
2-Nov-02	12:00	MD298	659	-34.6	○	ESE	10	1	3	+	Ac,Ci
2-Nov-02	19:00	MD336	649	-40.1	⊕	ESE	6.5	20	1		Ac
3-Nov-02	06:00	MD336	650	-45.5	⊕	ESE	6.5	5	4		Ac
3-Nov-02	12:40	MD364	649	-35.8	⊕	SE	6.5	5	6		Ac
3-Nov-02	19:30	MD364	645	-41.6	⊕	ESE	4.5	30	4		Ac,Ci
4-Nov-02	06:00	MD364	645	-44.4	⊕	ESE	5.5	2	5		Ac
4-Nov-02	12:40	MD364	647	-35.0	⊕	ESE	6.5	30	6		Ac
4-Nov-02	18:00	MD364	647	-38.0	⊕	ESE	5	30	6		Ac,Ci
5-Nov-02	06:00	MD364	646	-41.5	◎	ESE	6.5	5	9		Ac
5-Nov-02	12:40	MD372	648	-33.0	◎	ESE	7	1	9		Ac
5-Nov-02	19:15	MD408	640	-40.5	⊕	SE	7	10	6		Ac
6-Nov-02	06:00	MD408	637	-43.5	○	ESE	7.5	0.6	1	+	Ac
6-Nov-02	12:00	MD427	638	-34.5	⊕	ESE	9	0.4	5	+	Ac
6-Nov-02	19:00	MD454	630	-39.6	⊕	ESE	7.5	2	6	+	Ac
7-Nov-02	06:00	MD454	626	-42.2	◎	ESE	8	0.4	10	+	Ac
7-Nov-02	12:15	MD470	626	-34.0	◎	E	12	0.1	10	+	Ac
7-Nov-02	19:30	MD500	623	-36.5	⊕	E	7	2	7	+	Ac
8-Nov-02	06:00	MD500	621	-45.2	⊕	ESE	4	20	4		Ac,Ci
8-Nov-02	12:00	MD516	623	-35.5	⊕	ESE	6	10	6		Ac,Ci
8-Nov-02	20:00	MD556	616	-40.2	◎	ESE	3.5	5	9		Ac,Ci
9-Nov-02	06:00	MD556	617	-46.5	○	ESE	<3	20	1		Ac
9-Nov-02	12:00	MD576	618	-38.3	○	SE	5	30	1		Ci
9-Nov-02	21:00	MD614	613	-46.8	○	S	4	30	1		Ci
10-Nov-02	06:00	MD614	612	-47.8	○	SE	3	30	1		Ci
10-Nov-02	12:30	MD626	611	-38.4	⊕	SE	4.5	20	2		Ci
10-Nov-02	19:40	MD660	609	-47.0	○	SSE	3	30	0		
11-Nov-02	06:00	MD660	608	-50.2	○	SE	<3	30	0		
11-Nov-02	13:00	MD674	609	-37.2	○	SE	5	30	0		
11-Nov-02	19:20	MD708	605	-44.5	○	SSE	3	30	0		
12-Nov-02	06:00	MD708	602	-47.8	○	SSE	3.5	30	0		

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
12-Nov-02	13:10	MD730	604	-35.6	○	SSW	3	30	4		Ci
12-Nov-02	18:10	DOME Fuji	602	-38.0	○	WSW	3	30	6		Ci
13-Nov-02	06:15	DOME Fuji	602	-45.0	○	SW	3	30	5		Ci
13-Nov-02	12:00	DOME Fuji	601	-37.0	○	SW	4	30	6		Ci
13-Nov-02	18:00	DOME Fuji	602	-38.5	○	SSW	3	30	9		Ci
14-Nov-02	06:00	DOME Fuji	601	-48.2	○	SSW	<3	30	4		Ci
14-Nov-02	12:00	DOME Fuji	603	-37.0	○	WSW	<3	30	8		Ci
14-Nov-02	18:00	DOME Fuji	602	-38.5	○	SSW	<3	30	9		Ci
15-Nov-02	06:00	DOME Fuji	603	-47.0	○	SW	<3	30	1		Ci
15-Nov-02	12:00	DOME Fuji	601	-37.5	○	WSW	<3	30	0		
15-Nov-02	18:00	DOME Fuji	602	-41.0	○	SSW	3	30	6		Ci
16-Nov-02	06:00	DOME Fuji	600	-47.6	○	SSW	4	30	6		Ci
16-Nov-02	12:00	DOME Fuji	600	-36.8	○	SSW	3	30	3		Ci
16-Nov-02	18:00	DOME Fuji	597	-38.0	○	SSW	3	30	8		Ci
17-Nov-02	06:00	DOME Fuji	596	-48.5	○	SSW	<3	10	9		Ci
17-Nov-02	12:00	DOME Fuji	597	-38.5	○	SW	<3	30	4		Ci
17-Nov-02	18:00	DOME Fuji	596	-36.5	○	-	0	30	6	↔	Ci
18-Nov-02	06:00	DOME Fuji	592	-45.5	○	-	0	1	0	≡	
18-Nov-02	12:00	DOME Fuji	592	-39.0	○	N	<3	30	2		Ci
18-Nov-02	18:00	DOME Fuji	592	-40.8	○	N	<3	30	1		Ci
19-Nov-02	06:00	DOME Fuji	592	-48.2	○	N	<3	5	1		Ci
19-Nov-02	12:00	DOME Fuji	592	-48.2	○	N	<3	30	4		Ci
19-Nov-02	18:00	DOME Fuji	593	-38.5	○	N	3	30	1		Ac
20-Nov-02	06:00	DOME Fuji	596	-47.3	○	N	5	5	3		Ac,Ci
20-Nov-02	12:00	DOME Fuji	597	-38.5	○	NNW	6	2	1		Ac
20-Nov-02	18:00	DOME Fuji	597	-38.2	○	N	3	30	2		Ci,Ac
21-Nov-02	06:00	DOME Fuji	599	-46.1	○	N	<3	10	1		Ac
21-Nov-02	12:15	DOME Fuji	598	-36.0	○	W	<3	20	4		Ac,Ci
21-Nov-02	19:00	DOME Fuji	597	-39.0	○	W	<3	30	2		Ci
22-Nov-02	06:00	DOME Fuji	594	-43.5	○	W	<3	2	4		Ci
22-Nov-02	12:00	DOME Fuji	592	-37.2	○	W	<3	30	2		Ci
22-Nov-02	18:00	DOME Fuji	591	-38.5	○	-	0	30	2		Ci
23-Nov-02	06:00	DOME Fuji	589	-47.5	○	SE	<3	10	1		Ci
23-Nov-02	12:00	DOME Fuji	589	-39.1	○	SE	<3	20	1		
23-Nov-02	18:00	DOME Fuji	589	-41.5	○	SE	<3	30	0		
24-Nov-02	06:00	DOME Fuji	591	-48.4	○	ENE	<3	20	1		Ci
24-Nov-02	12:00	DOME Fuji	590	-37.4	○	ENE	4	30	4		Ac,Ci
24-Nov-02	18:00	DOME Fuji	591	-39.9	○	ENE	<3	30	2		Ci
25-Nov-02	06:00	DOME Fuji	593	-46.3	○	-	0	10	3		Ci
25-Nov-02	12:00	DOME Fuji	594	-35.9	○	ENE	<3	30	2		Ci
25-Nov-02	18:00	DOME Fuji	594	-38.2	○	-	0	30	1		Ci
26-Nov-02	06:00	DOME Fuji	593	-44.6	○	NE	<3	10	2		Ci
26-Nov-02	12:00	DOME Fuji	594	-36.2	○	NNW	<3	30	3		Ci
26-Nov-02	18:00	DOME Fuji	595	-38.3	○	W	<3	5	8		Ci
27-Nov-02	06:00	DOME Fuji	595	-44.0	×	W	<3	2	9		Ac,Ci
27-Nov-02	12:00	DOME Fuji	595	-36.1	○	W	<3	5	4		Ci
27-Nov-02	18:00	DOME Fuji	594	-34.5	○	W	<3	2	6	↔	Ci

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
28-Nov-02	06:00	DOME Fuji	593	-45.6	⊖	W	<3	10	9		Ci
28-Nov-02	12:00	DOME Fuji	593	-37.1	○	W	<3	30	1		Ci
28-Nov-02	18:00	DOME Fuji	593	-37.3	○	WSW	<3	30	1	↔	Ac
29-Nov-02	06:00	DOME Fuji	594	-46.4	○	SW	3	5	1		Ac
29-Nov-02	12:00	DOME Fuji	594	-37.5	○	SW	3	30	1		Ac
29-Nov-02	18:00	DOME Fuji	594	-35.8	○	W	<3	30	1	↔	Ac
30-Nov-02	06:00	DOME Fuji	594	-46.4	○	W	<3	2	1		Cs
30-Nov-02	12:00	DOME Fuji	595	-36.3	○	W	<3	30	1		Ac
30-Nov-02	18:00	DOME Fuji	597	-35.4	⊖	W	<3	2	6	↔	Cs,Ci
1-Dec-02	06:00	DOME Fuji	599	-43.0	⊖	W	<3	10	3		Ci,Cs
1-Dec-02	12:00	DOME Fuji	599	-33.7	○	S	3	30	0	↔	
1-Dec-02	18:00	DOME Fuji	598	-34.6	○	S	<3	30	1		Ac
2-Dec-02	06:00	DOME Fuji	596	-42.6	⊖	SW	<3	30	1		Ac
2-Dec-02	12:00	DOME Fuji	595	-34.6	○	SE	<3	30	1		Ci
2-Dec-02	18:00	DOME Fuji	596	-36.7	○	ENE	<3	30	1		Ci
3-Dec-02	06:00	DOME Fuji	597	-43.7	○	ENE	<3	10	1		Cs
3-Dec-02	12:00	DOME Fuji	597	-33.2	⊖	NE	5	2	7	↔	Ci
3-Dec-02	18:00	DOME Fuji	598	-34.0	○	NNE	3	2	7	↔	Ci
4-Dec-02	06:00	DOME Fuji	600	-41.2	⊖	-	0	10	9		Ci,Ac
4-Dec-02	12:00	DOME Fuji	600	-32.3	○	-	0	30	1		Ac
4-Dec-02	18:00	DOME Fuji	600	-32.3	○	-	0	30	1		Ac
5-Dec-02	06:00	DOME Fuji	599	-40.3	○	-	0	30	1		Ac
5-Dec-02	12:00	DOME Fuji	599	-32.3	○	ENE	<3	30	0		
5-Dec-02	20:30	DOME Fuji	599	-40.2	○	SE	<3	30	0		
6-Dec-02	06:00	DOME Fuji	599	-40.4	○	SE	<3	30	1		Cs
6-Dec-02	12:00	DOME Fuji	599	-32.4	○	ENE	<3	30	1		Cs
6-Dec-02	18:00	DOME Fuji	599	-35.3	○	ENE	<3	30	0		
7-Dec-02	06:00	DOME Fuji	600	-41.0	○	ENE	<3	30	0		
7-Dec-02	12:00	DOME Fuji	600	-32.1	○	S	3	30	5		Ci
7-Dec-02	18:00	DOME Fuji	600	-33.2	⊖	NNW	<3	30	3		Ci
8-Dec-02	06:00	DOME Fuji	598	-37.3	⊖	-	0	20	2		Ci
8-Dec-02	12:00	DOME Fuji	596	-33.4	○	E	<3	30	1		Ci
8-Dec-02	18:00	DOME Fuji	595	-36.4	○	ESE	<3	30	1		Ci
9-Dec-02	06:00	DOME Fuji	594	-40.9	○	ESE	<3	20	1		Ci
9-Dec-02	12:00	DOME Fuji	594	-32.4	⊖	SE	3	30	4		Ci,Cs
9-Dec-02	18:00	DOME Fuji	594	-32.4	⊖	ENE	<3	20	3		Ci
10-Dec-02	06:00	DOME Fuji	597	-39.9	⊖	NNW	<3	10	7		Ci
10-Dec-02	12:00	DOME Fuji	597	-29.7	◎	N	4	2	10	*	Ci
10-Dec-02	18:00	DOME Fuji	598	-28.7	⊖	NNW	3	20	7	↔	Ci
11-Dec-02	06:00	DOME Fuji	599	-38.3	⊖	NNW	<3	30	9		Ci
11-Dec-02	12:00	DOME Fuji	598	-29.4	⊖	N	3	30	8	↔	Ci
11-Dec-02	18:00	DOME Fuji	597	-29.0	⊖	NNW	<3	30	5	↔	Ci
12-Dec-02	06:00	DOME Fuji	598	-37.8	⊖	NNW	<3	20	5	↔	Ci
12-Dec-02	12:00	DOME Fuji	599	-29.5	○	NW	3	30	1	↔	Ci,Ac
12-Dec-02	18:00	DOME Fuji	599	-28.5	⊖	NNW	<3	30	5	↔	Ci
13-Dec-02	06:00	DOME Fuji	602	-35.9	⊖	WNW	3	30	6	↔	Ci
13-Dec-02	12:00	DOME Fuji	604	-28.7	⊖	NNW	6	30	6	↔	Ci

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
13-Dec-02	18:00	DOME Fuji	604	-27.7	○○I	WSW	<3	2	10	↔	Ci
14-Dec-02	06:00	DOME Fuji	606	-37.7	○	WSW	<3	2	1		Ci
14-Dec-02	18:00	DOME Fuji	608	-26.5	○	-	0	30	1		Ci
15-Dec-02	06:00	DOME Fuji	606	-35.9	○	WSW	<3	20	3		Ci
15-Dec-02	12:00	DOME Fuji	605	-27.4	○	WSW	3.5	30	2		Ci
15-Dec-02	18:00	DOME Fuji	606	-28.8	○	WSW	<3	30	1		Ci
16-Dec-02	06:00	DOME Fuji	605	-36.4	○○	W	<3	1	10		Ci
16-Dec-02	12:00	DOME Fuji	605	-28.0	○	W	3	30	2		Ci
16-Dec-02	18:00	DOME Fuji	605	-26.5	○	WSW	3	30	0		
17-Dec-02	06:00	DOME Fuji	604	-35.5	○○	W	<3	1	10		Ci
17-Dec-02	12:00	DOME Fuji	605	-27.5	○	W	<3	30	4		Ci
17-Dec-02	18:00	DOME Fuji	605	-27.7	○	WSW	3	30	1		Ci
18-Dec-02	06:00	DOME Fuji	606	-37.0	○	WSW	<3	1	7		Ci
18-Dec-02	12:00	DOME Fuji	608	-27.5	○	WSW	<3	30	0+		Ci
18-Dec-02	18:00	DOME Fuji	609	-24.9	○	W	<3	30	1+		Ci
19-Dec-02	06:00	DOME Fuji	611	-30.1	○	NNE	<3	2	10	✗	Ci
19-Dec-02	12:00	DOME Fuji	611	-21.5	○	NNE	5	5	10	✗	Ac,Ci
19-Dec-02	18:00	DOME Fuji	611	-20.8	○	NW	3	5	10-	✗	Ac,Ci
20-Dec-02	06:00	DOME Fuji	612	-27.5	○	W	<3	20	4		Ac,Ci
20-Dec-02	12:00	DOME Fuji	612	-17.2	○	WSW	<3	5	10-		Ac,Ci
20-Dec-02	18:00	DOME Fuji	612	-17.2	○	SW	3	1	10	✗	Ac,Ci
21-Dec-02	06:00	DOME Fuji	611	-19.8	○	WSW	<3	1	10	✗	Ac,Ci
21-Dec-02	12:00	DOME Fuji	609	-17.3	○	SW	5	1	10	✗	Ac,Ci
21-Dec-02	18:00	DOME Fuji	608	-19.8	○	SW	5	2	8	✗	Ac,Ci
22-Dec-02	06:00	DOME Fuji	609	-28.8	○	SSW	<3	5	4	✗	Ac,Ci
22-Dec-02	12:00	DOME Fuji	610	-22.0	○	SW	6	2	4	↔	Ac,Ci
22-Dec-02	18:00	DOME Fuji	610	-22.1	○	SSW	<3	10	7		Ac,Ci
23-Dec-02	06:00	DOME Fuji	606	-22.5	○	SSW	4	0.5	10-		Ac,Ci
23-Dec-02	12:00	DOME Fuji	603	-20.8	○	SSW	5.5	10	10-	✗	Ac,Ci
23-Dec-02	18:00	DOME Fuji	603	-23.0	○○	NE	4	20	10-	↔	Ci,Ac
24-Dec-02	06:00	DOME Fuji	602	-34.5	○	NE	4.5	0.5	3	†≡	Ci
24-Dec-02	12:00	DOME Fuji	602	-30.5	○	NE	6	5	0+		Ci
24-Dec-02	18:00	DOME Fuji	602	-31.2	○	NE	6	2	4	↔	Ac,Ci
25-Dec-02	06:00	DOME Fuji	603	-35.5	○○	NE	<3	10	9	↔	Ci,Ac
25-Dec-02	12:00	DOME Fuji	604	-30.5	○	ENE	3.5	10	1		Ac
25-Dec-02	18:00	DOME Fuji	605	-28.9	○	ENE	<3	20	8		Ac,Ci
26-Dec-02	06:00	DOME Fuji	608	-35.5	○	EEW	<3	5	7	↔	Ac,Ci
26-Dec-02	12:00	DOME Fuji	610	-26.0	○	ENE	<3	30	6	↔	Ac,Ci
26-Dec-02	18:00	DOME Fuji	611	-25.5	○	-	0	30	7	↔	Ci,Ac
27-Dec-02	06:00	DOME Fuji	611	-34.0	○	ESE	<3	2	1+	↔≡	Ac
27-Dec-02	12:00	DOME Fuji	610	-28.9	○	SE	4	30	1+		Ac
27-Dec-02	18:00	DOME Fuji	610	-29.5	○	SE	3	30	0+		Ci
28-Dec-02	06:00	DOME Fuji	609	-34.4	○	SE	<3	10	0+	≡	Cs
28-Dec-02	12:00	DOME Fuji	609	-28.9	○	ESE	4.5	30	0+		Cs
28-Dec-02	18:00	DOME Fuji	608	-29.0	○	E	<3	30	0		
29-Dec-02	06:00	DOME Fuji	608	-34.7	○	SSE	<3	1	0+	≡	Cs
29-Dec-02	12:00	DOME Fuji	609	-29.4	○	SE	3	30	0		

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
29-Dec-02	18:00	DOME Fuji	609	-28.1	○	SE	<3	30	0+		Ci
30-Dec-02	06:00	DOME Fuji	610	-35.0	○	-	0	0.5	0+	≡	Cs
30-Dec-02	12:00	DOME Fuji	610	-27.7	○	SE	<3	30	0+		Cs
30-Dec-02	18:00	DOME Fuji	610	-28.0	○	-	0	30	0+		Ci
31-Dec-02	06:00	DOME Fuji	610	-35.0	○	-	0	0.5	0+		Ci
31-Dec-02	12:00	DOME Fuji	609	-28.2	○	S	<3	30	0+		Ci
31-Dec-02	18:00	DOME Fuji	610	-27.8	○	-	0	30	1		Ci
1-Jan-03	06:00	DOME Fuji	610	-36.0	○	SSE	<3	1	3+	↔	Ci
1-Jan-03	12:00	DOME Fuji	609	-30.2	○	SSE	3	30	1+		Ci
1-Jan-03	18:00	DOME Fuji	609	-30.1	○	SE	<3	30	0+		Ci
2-Jan-03	06:00	DOME Fuji	609	-36.9	○	SE	<3	10	0+		Ci
2-Jan-03	12:00	DOME Fuji	609	-30.5	○	SE	3	30	0		
2-Jan-03	18:00	DOME Fuji	610	-30.5	○	ESE	<3	30	0		
3-Jan-03	06:00	DOME Fuji	610	-36.4	○	ESE	<3	4	1+		Cs
3-Jan-03	12:00	DOME Fuji	610	-30.6	○	E	4	10	1+		Ci
3-Jan-03	18:00	DOME Fuji	611	-30.1	○	ENE	3	5	4		Ci,Cs
4-Jan-03	06:00	DOME Fuji	612	-36.0	○	E	<3	4	3	↔	Ci,Cs
4-Jan-03	12:00	DOME Fuji	613	-29.0	○	ENE	3	10	5	↔	Ci,Cs
4-Jan-03	18:00	DOME Fuji	612	-30.2	○	ENE	<3	30	3		Ci,Cs
5-Jan-03	06:00	DOME Fuji	614	-35.3	○	ENE	3	10	8	↔	Ci,Cs
5-Jan-03	12:00	DOME Fuji	613	-27.8	○	ENE	7	6	5	↔	Ci,Cs
5-Jan-03	18:00	DOME Fuji	614	-27.2	○	NE	6	2	6	↔	Ci,Cs
6-Jan-03	06:00	DOME Fuji	615	-33.6	○	ENE	3	4	5	↔	Ci,Cs
6-Jan-03	12:00	DOME Fuji	616	-26.3	○	ENE	7	0.5	6	↔+	Ci,Cs
6-Jan-03	18:00	DOME Fuji	616	-26.5	○	NE	7	1.5	9	↔+	Ci,Cs
7-Jan-03	06:00	DOME Fuji	615	-35.1	○	ENE	<3	2	5		Ci,Cs
7-Jan-03	12:00	DOME Fuji	615	-27.1	○	ENE	5.5	30	4		Ci
7-Jan-03	18:00	DOME Fuji	615	-28.4	○	NE	3.5	30	1+		Ci
8-Jan-03	06:00	DOME Fuji	615	-36.5	○	ENE	3	4	5		Ci,Cs
8-Jan-03	12:00	DOME Fuji	615	-29.5	○	NE	6	30	2		Ci
8-Jan-03	18:00	DOME Fuji	614	-29.0	○	NE	4.5	30	2		Cc,Ci
9-Jan-03	06:00	DOME Fuji	615	-36.5	○	NE	3	4	4		Cc,Ci
9-Jan-03	12:00	DOME Fuji	615	-29.3	○	NE	5	10	0+		Cc
9-Jan-03	18:00	DOME Fuji	615	-29.6	○	NE	<3	30	0+		Ci
10-Jan-03	06:00	DOME Fuji	615	-37.0	○	-	0	10	0+		Ci
10-Jan-03	12:00	DOME Fuji	616	-29.1	○	NE	3.5	30	0		
10-Jan-03	18:00	DOME Fuji	615	-30.1	○	NE	<3	30	0+		Ci
11-Jan-03	06:00	DOME Fuji	615	-35.5	○	-	0	4	0+		Ci
11-Jan-03	12:00	DOME Fuji	615	-28.5	○	E	<3	30	0+		Ci
11-Jan-03	18:00	DOME Fuji	614	-30.0	○	E	<3	30	0+		Ci
12-Jan-03	06:00	DOME Fuji	615	-38.0	○	NNE	<3	6	4	↔	Cc
12-Jan-03	12:00	DOME Fuji	615	-28.8	○	NNE	<3	20	1		Ci
12-Jan-03	18:00	DOME Fuji	615	-32.0	○	-	0	30	0+		Cc
13-Jan-03	06:00	DOME Fuji	613	-39.0	○	SE	<3	10	1+		Cc
13-Jan-03	12:00	DOME Fuji	612	-32.6	○	SE	<3	20	1		Ci
13-Jan-03	18:00	DOME Fuji	609	-32.1	○	ESE	<3	20	1+		Cc
14-Jan-03	06:00	DOME Fuji	608	-38.6	○	E	3	4	8		Ci,Cc

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
14-Jan-03	12:00	DOME Fuji	608	-30.6	⊕	NE	8	0.4	9	+	Cc,Ci
14-Jan-03	18:00	DOME Fuji	609	-31.0	⊕	NE	7	1.5	7	↔	Cc,Ci
15-Jan-03	06:00	DOME Fuji	611	-37.0	⊕	NNE	4	2	5		Cc,Ci
15-Jan-03	12:00	DOME Fuji	613	-28.9	⊕	N	5	1	9+	×	Cc,Ci
15-Jan-03	18:00	DOME Fuji	615	-26.6	⊕	N	<3	4	6	↔	Cc,Ci
16-Jan-03	06:00	DOME Fuji	616	-37.0	⊕	NE	<3	4	2+		Cc,Ci
16-Jan-03	12:00	DOME Fuji	617	-30.6	⊕	N	3	10	5	↔	Ci,Cc
16-Jan-03	18:00	DOME Fuji	617	-30.3	○	N	<3	4	1		Ci,Cc
17-Jan-03	06:00	DOME Fuji	616	-38.3	⊕	NE	<3	2	7		Ci,Cc
17-Jan-03	12:00	DOME Fuji	617	-29.2	⊕	NNE	4	10	4	↔	Ci,Ac
17-Jan-03	18:00	DOME Fuji	616	-30.1	⊕	NNE	3	4	4	↔	Ci,Ac
18-Jan-03	06:00	DOME Fuji	616	-39.5	⊕	NE	3	4	2		Ci,Ac
18-Jan-03	12:00	DOME Fuji	617	-31.6	⊕	NE	5	2	2	↔	Ci,Ac
18-Jan-03	18:00	DOME Fuji	617	-31.4	○	NE	3	10	1	↔	Ci,Ac
19-Jan-03	06:00	DOME Fuji	619	-38.6	⊕	WNW	<3	20	3		Ci,Ac
19-Jan-03	12:00	DOME Fuji	620	-28.2	⊕	-	0	20	3	↔	Ci
19-Jan-03	18:00	DOME Fuji	619	-28.6	⊕	-	0	30	5	↔	Ci,Ac
20-Jan-03	06:00	DOME Fuji	619	-35.4	◎	ESE	<3	1	10	↔	Cc
20-Jan-03	12:00	DOME Fuji	619	-30.3	○	E	3	30	0+	↔	Cc
20-Jan-03	18:00	DOME Fuji	619	-30.5	○	ESE	<3	30	0		
21-Jan-03	06:00	DOME Fuji	617	-38.0	○	ESE	<3	4	0+	↔	Cc
21-Jan-03	12:00	DOME Fuji	615	-30.0	◎	NE	4	10	9		Ci,Cc
21-Jan-03	18:00	DOME Fuji	614	-32.0	○	NE	4	30	1	↔	
22-Jan-03	06:00	DOME Fuji	613	-40.1	⊕	NE	3	20	2	↔	Ci
22-Jan-03	12:00	DOME Fuji	614	-32.0	◎	NE	7	0.1	10	↔	Ci
22-Jan-03	18:00	DOME Fuji	616	-32.5	◎	NE	7	1	10-	↔	Ci
23-Jan-03	06:00	DOME Fuji	616	-40.5	⊕	NE	<3	10	2	↔	Ci
23-Jan-03	12:00	DOME Fuji	617	-30.5	○	NE	3	20	2	↔	Ci
23-Jan-03	18:00	DOME Fuji	617	-32.5	○	NE	<3	30	1	↔	Ci
24-Jan-03	06:00	DOME Fuji	615	-39.5	⊕	NE	<3	30	4	↔	Ci
24-Jan-03	12:00	DOME Fuji	612	-31.0	⊕	NE	3	30	6		Ci,Ac
24-Jan-03	20:30	DOME Fuji	615	-32.5	⊕	E	3	10	10-		Ci
25-Jan-03	06:00	MD714	611	-39.3	⊕	-	0	20	3		Ci
25-Jan-03	21:10	MD688	610	-37.3	⊕	NE	<3	6	8		Ci,Ac
26-Jan-03	06:00	MD688	609	-40.4	⊕	-	0	10	6		Ci
26-Jan-03	12:00	MD652	617	-31.0	⊕	E	<3	30	5		Ci,Ac
26-Jan-03	19:00	MD594	618	-37.0	○	ESE	<3	30	0+		Ci
27-Jan-03	06:00	MD594	623	-40.0	⊕	E	<3	2	10-		Ci
27-Jan-03	12:50	MD550	627	-29.5	⊕	ESE	7	1	4		Ci
27-Jan-03	19:40	MD500	628	-26.7	◎	NE	6	1	10		As,Ac
28-Jan-03	06:00	MD500	633	-36.5	⊕	ESE	7	1	10-	+	As,Ac
28-Jan-03	13:45	MD460	634	-27.5	⊕	E	10	0.6	10-		As,Ac
28-Jan-03	20:40	MD404	639	-36.5	○	E	8	1	0+		Ci
29-Jan-03	06:00	MD404	633	-35.0	⊕	ESE	11	0.4	6	↑→	Ci
29-Jan-03	12:15	MD374	643	-27.0	⊕	E	11	0.8	5		Ci
29-Jan-03	18:00	MD364	642	-25.8	⊕	ESE	10	1	10-		As
30-Jan-03	06:00	MD364	643	-32.0	⊕	ESE	8	1	3+	+	Ac,Ci

Date	LT	Station	Pa	Ta	W	WD	WS	V	N	Hydro.	CL
30-Jan-03	12:50	MD328	649	-22.2	◎	ESE	11	0.5	9-		Ac
30-Jan-03	20:30	MD268	663	-22.5	◎	E	7	10	9-		Ac
31-Jan-03	06:00	MD268	660	-28.0	①	ESE	7	1	6		Ac,Ci
31-Jan-03	12:10	MD244	670	-20.5	◎	E	10	0.5	10		Ac
31-Jan-03	19:30	MD198	686	-22.0	①	ESE	8	4	7		Ac,Ci
1-Feb-03	06:00	MD198	683	-26.6	◎	E	10	0.4	10-	+	Ac,Ci
1-Feb-03	13:20	MD162	702	-19.0	①	E	8	4	7		Ac
1-Feb-03	20:20	MD134	706	-23.5	①	E	4	10	6		Ac,Ci
2-Feb-03	06:00	MD134	702	-28.4	①	E	10	6	7	+	Ac,Ci
2-Feb-03	13:15	MD98	715	-21.4	○	E	11	20	1		Ac
2-Feb-03	20:00	MD58	728	-22.5	○	E	7	30	1		Ci
3-Feb-03	06:00	MD58	729	-21.5	○	E	12	5	1	+	Ci
3-Feb-03	12:30	MD30	741	-16.6	①	E	12	2	6		Ac,Ci
3-Feb-03	18:00	MD18	745	-14.7	◎	ENE	8	1	9		Ac
4-Feb-03	06:00	MD18	743	-22.0	①	ENE	5	20	3		Ac,As
4-Feb-03	12:00	Mizuho	751	-15.0	○	ESE	13	30	1		Ac
4-Feb-03	20:10	Z30	767	-17.6	○	E	8	20	1+		Ac
5-Feb-03	06:00	Z30	764	-15.5	◎	ENE	9	4	10		Ac,As
5-Feb-03	12:10	H288	791	-11.7	◎	E	9	1	10-		Ac,As
5-Feb-03	20:30	H168	827	-15.2	①	ENE	4	10	5		Ac
6-Feb-03	06:00	H168	826	-19.4	①	ENE	6.5	20	3	+	Ac
6-Feb-03	12:30	H100	850	-7.8	①	E	7.5	30	3		Ac
6-Feb-03	20:20	S16	928	-7.0	○	ENE	5	30	1+		Ac
7-Feb-03	06:00	S16	925	-10.4	○	ESE	11	20	0+	+	Sc
7-Feb-03	12:00	S16	926	-4.5	○	ENE	8	30	0+		Ac
7-Feb-03	18:40	S16	925	-5.5	①	-	0	30	6		Ac,Ci
8-Feb-03	06:00	S16	923	-9.5	①	E	10	30	8		Ac
8-Feb-03	09:00	S16	925	-6.0	①	E	7	30	8		Ac,Ci
8-Feb-03	12:00	S16	927	-3.8	①	ENE	7	30	5		Ac
8-Feb-03	18:20	S16	926	-6.7	○	ENE	<3	30	1+		Ac
9-Feb-03	06:00	S16	924	-12.6	①	E	10	30	6		Ac

Table 3-5. Meteorological data observed during the traverse between S16 and Mizuho Station (16-October-2002 to 31-October-2002).

Date	LT	Station	Pa	Ta	W	WD	WS	V	N
16-Oct-02	18:15	S16	930	-14.0	◎		calm	30	9
17-Oct-02	07:15	S16	932	-13.7	◎	75	6.0	20	10
17-Oct-02	12:40	S23	904	-11.5	◎	55	6.5	20	10
17-Oct-02	20:00	H84	848	-21.5	○	55	7.5	20	6
18-Oct-02	07:15	H84	849	-17.0	†	80	12.0	0.2	
19-Oct-02					no data				
20-Oct-02	19:10	H200	807	-22.5	†	98	12.0	0.15	0
21-Oct-02	19:45	Z6	762	-28.6	○	80	8.5	5	0
22-Oct-02	20:10	Z71	750	-32.5	○	90	6.2	5	0
23-Oct-02					no data				
24-Oct-02	18:30	IMO	746	-29.5	○	105	6.5	10	4
25-Oct-02	19:45	Z62	753	-31.0	○	98	7.5	10	2
26-Oct-02	19:55	H288	782	-25.5	◎	78	9.0	10	9
27-Oct-02	20:00	H172	818	-24.0	○	88	8.0	10	2
28-Oct-02	20:30	H109	843	-25.0	○	83	4.0	10	4
29-Oct-02	20:10	S28-4	888	-19.0	○	86	4.5	20	9
30-Oct-02					no data				