

# *Meteorological Observations during the JARE South Pole Traverse 1968–69*

*Nobukazu NISHIBE\**, and *Zenbei SEINO\*\**

Throughout the period of traverse, September 28, 1968 to February 13, 1969, surface meteorological observations were carried out at 06, 12, and 18 GMT, except the days spent at the Plateau Station and the South Pole Station.

The technical details of observation were all in accordance with WMO's regulations.

## **1. Instruments and Methods of Observation**

### *1.1. Wind*

A windmill with a vane type anemometer was installed on the roof of snow vehicle No. 604 and was read by the indicator setting in the cabin. The wind speed sensor was of electric generator type. The wind direction was transmitted by self-synchronous motors to the indicator. The accuracy of wind speed sensor was  $\pm 0.5$  m/s at below 10 m/s and  $\pm 5\%$  above it. The accuracy in determining the wind direction was  $\pm 0.5\%$ .

At the observation time, the snow vehicle was halted as horizontally as possible. The mean values were estimated by observing the indicators for several minutes. The true course of wind direction was obtained making the correction for the direction of the snow vehicle heading.

### *1.2. Atmospheric pressure*

A wide-range Aneroid type barometer was used for the observation in the cabin. Its accuracy was  $\pm 0.7$  mb. The instrument was checked by comparing with the standard barometers at the Syowa, Plateau, and South Pole Stations.

### *1.3. Temperature*

Two kinds of thermometers were used: a thermistor-thermometer with a shelter which was mounted on the roof of the snow vehicle, and a sling, a mercurial thermometer. Since the former showed large errors due to solar radiation, only the sling thermometer was used for regular observations which were carried out in the shade of snow vehicles. The accuracy was  $\pm 0.1^\circ\text{C}$ .

Wet-bulb thermometers were not used because they are not reliable in the extremely cold air.

---

\* NTT Tokyo Radio-Communication Bureau, Minato-ku, Tokyo. Member of the JARE South Pole Traverse 1968–69.

\*\* Japan Meteorological Agency, Chiyoda-ku, Tokyo. Member of the summer party, JARE 1967–68.

#### 1.4. Others

Visibility, cloud, and weather observations were done visually. The visibility was estimated at 30 km when the horizon was clear.

The location and altitude of each observation point are given in the report of the graphical party.

## 2. Results

All the data are given in Table 1. The values at the Plateau Station and the South Pole Station have been given from these stations.

The wind direction at the South Pole Station and its vicinity is given taking  $40^{\circ}\text{E}$  longitudinal line as the *north*, as is done by the Pole Station.

Fig. 1 shows the daily mean temperatures (mean values at 06, 12, and 18

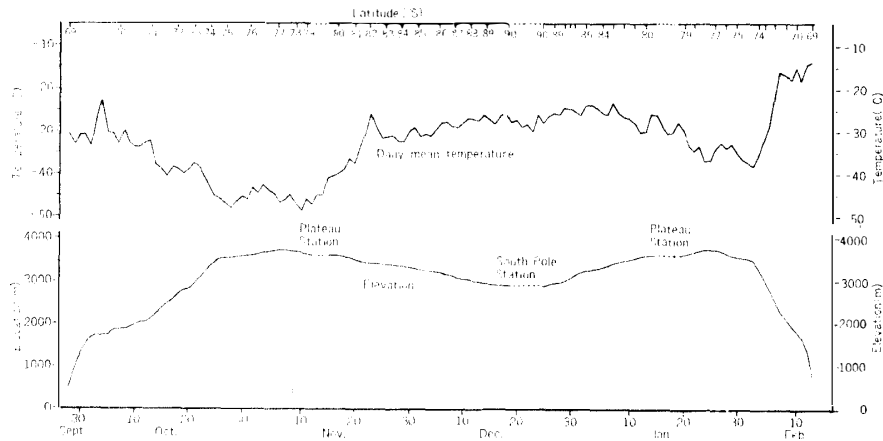


Fig. 1. Daily mean temperature.

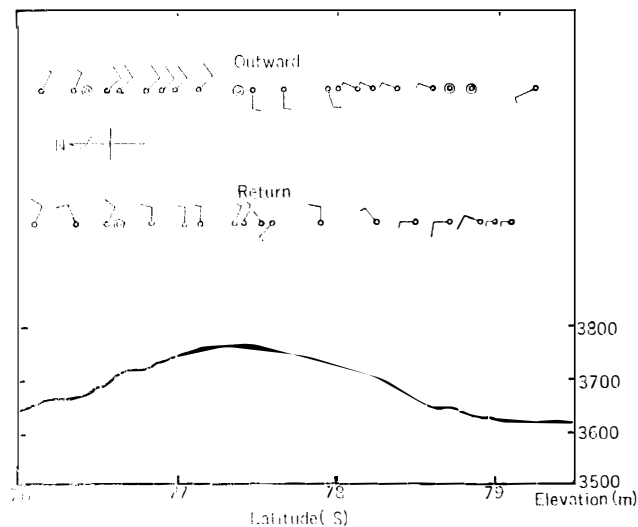


Fig. 2. Variation of surface wind direction.

Table 1. Meteorological data during the JARE South Pole Traverse 1968-69.

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct	Speed (m/s)							
1968 Sep. 28	12	69°02'2	40°01'	523	SE	5	900.0	-23.0	○	0	20	16	-23.1
	18	69 01.7	40 18	720	E	6	883.3	-38.0	○	0	20	22	
29	06	69 01.9	40 24	784	ESE	8	878.0	-30.6	○ ↗	0	8	24	-30.4
	12	69 04.8	41 05	1083	ESE	8	843.8	-31.0	○	0	30	39	
30	18	69 04.2	41 35	1203	SE	7	828.7	-37.1	↗	1Ci	3	50	
	06	"	"	"	ESE	10	823.2	-33.4	○ ↗	2Ci	0.1	"	-27.0
Oct. 1	12	69 03.7	41 51	1268	SE	8	812.3	-27.3	○ ↗	0	8	56	
	18	69 06.9	42 29	1393	SE	9	796.4	-31.9	○ ↗	2Sc	6	70	
2	06	"	"	"	E	8	804.5	-29.6	↗	0	1.0		-24.7
	12	69 13.1	42 32	1472	E	8	805.7	-28.3	○	0	6	76	
3	18	69 23.5	42 39	1558	E	6	789.6	-34.1	○	0	30	86	
	06	69 25.6	42 41	1578	SE	12	796.8	-34.0	↗	0	0.1	88	-26.0
4	12	69 40.1	42 51	1683	E	10	788.2	-30.4	○ ↗	2Ci	2	102	
	18	69 48.5	42 56	1745	SE	14	781.6	-35.0	⊕ ↗	7CiAc	0.1	110	
5	06	"	"	"	SE	17	771.6	-32.2	↗	×	0.1	"	-23.5
	12	"	"	"	SE	12	767.9	-24.6	↗	×	0.1	"	
6	18	"	"	"	SE	13	766.2	-23.5	↗	×	0.1	"	
	06	"	"	"	ESE	9	769.5	-21.5	↗	×	0.1	"	-19.5
7	12	"	"	"	SE	14	770.0	-22.0	↗	×	0.1	"	
	18	"	"	"	SE	14	773.4	-24.8	↗	×	0.1	"	
8	06	69 46.4	42 55	1730	E	12	778.0	-28.2	⊙ ↗	9×	0.2	108	-19.9
	12	69 48.5	42 56	1745	ENE	12	772.2	-27.5	↗	×	0.1	110	
9	18	69 59.0	43 04	1875	ENE	12	760.2	-34.7	○ ↗	×	0.2	120	
	06	70 01.1	43 06	1881	SE	9	763.0	-30.6	○ ↗	0	0.2	122	-24.0
10	12	"	"	"	SE	12	763.2	-28.0	⊕ ↗	4×	0.3	"	

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Oct. 6	18	70°01'1	43°06'	1881	SE	9	766.0	-32.8	☉ ↗	5 ×	1.0	122	
7	06	"	"	"	SE	10	776.7	-33.2	☉ ↗	×	0.2	"	- 24.6
	12	"	"	"	SE	10	767.2	-30.2	☉ ↗	2 ×	1.0	"	
	18	"	"	"	SE	8	766.8	-33.4	☉ ↗	×	0.3	"	
8	06	"	"	"	SE	12	766.2	-29.0	☉ ↗	×	0.3	"	- 24.5
	12	"	"	"	SE	7	768.2	-27.6	☉ ↗	0	0.3	"	
	18	"	"	"	SE	12	769.0	-33.3	☉ ↗	0	10	"	
9	06	"	"	"	SE	16	767.2	-32.4	↗	×	0.1	"	- 22.2
	12	70 03.2	43 06	1893	E	10	770.2	-27.6	↗	0	0.2	124	
	18	70 15.6	43 06	1933	ESE	10	765.2	-38.0	↗	0	1.0	136	
10	06	70 17.7	43 06	1949	E	10	767.2	-34.3	☉ ↗	0	2.0	138	- 28.3
	12	70 31.9	43 06	2001	SSE	6	763.2	-29.6	○	0	40	152	
	18	70 44.3	43 07	2060	E	4	758.1	-37.2	○	0	40	164	
11	06	70 46.4	43 07	2052	SE	9	762.0	-34.5	☉ ↗	0	6	166	- 28.4
	12	70 50.5	43 07	2062	SE	7	775.6	-30.2	○	0	30	170	
	18	"	"	"	E	10	764.8	-36.5	↗	0	6	"	
12	06	"	"	"	SE	14	761.2	-36.2	↗	×	0.1	"	- 19.5
	12	"	"	"	SE	10	760.0	-29.4	↗	×	0.1	"	
	18	"	"	"	SE	12	759.2	-32.5	↗	×	0.2	"	
13	06	70 51.5	43 05		SSE	14	756.5	-31.6	↗	×	0.3	171	- 18.5
	12	71 00.9	42 57	2113	E	17	748.2	-28.5	☉ ↗	4 Ci	10	182	
	18	71 06.0	42 58		E	11	743.8	-36.3	☉ ↗	4 Ci	0.3	187	
14	06	71 10.1	42 58		E	12	744.2	-38.5	○	0	1.0	191	- 24.5
	12	71 18.3	43 00		SE	10	734.6	-33.8	↗	×	1.0	199	
	18	71 26.5	43 02		E	10	729.5	-40.5	☉ ↗	0	10	207	
15	06	71 29.6	43 03	2359	E	10	727.4	-39.0	☉ ↗	0	10	210	- 27.3

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat.(S)	Long.(E)		Direct.	Speed (m/s)							
Oct. 15	12	71°39.7	43°04'	2427	ESE	10	720.0	-35.5	○ ↕	0	10	220	
	18	71 44.8	43 05		E	10	741.0	-41.6	○ ↕	0	10	225	
16	06	71 45.8	43 06	2478	E	10	714.1	-42.0	↕	0	0.3	226	-22.7
	12	71 54.0	43 08	2535	E	9	713.2	-37.0	○	0	20	234	
17	18	72 04.2	43 09	2617	E	11	709.2	-42.0	○	0	20	244	
	06	"	"	"	SE	10	706.0	-38.0	↕	×	0.1	"	-22.9
18	12	"	"	"	SE	7	704.3	-36.7	○	0	20	"	
	18	"	"	"	SE	8	705.5	-40.4	↕	×	0.3	"	
18	06	72 12.2	43 08	2681	ESE	9	700.0	-36.5	○	0	20	252	-25.5
	12	72 22.3	43 07	2734	ESE	12	692.9	-35.0	○	0	30	262	
19	18	72 30.4	43 06	2802	ESE	9	684.0	-44.8	○	0	10	270	
	06	"	"	"	ESE	8	679.5	-41.7	⊙ ↕	9×	0.3	"	-24.5
20	12	"	"	"	ESE	8	677.4	-36.0	↕	×	0.3	"	
	18	"	"	"	ESE	9	676.9	-42.0	⊖	4×	30	"	
20	06	"	"	"	ESE	9	677.2	-39.3	↕	×	0.2	"	-24.9
	12	"	"	"	ESE	6	678.2	-35.4	○ ↕	0	0.5	"	
21	18	72 38.7	43 05	2837	ESE	8	675.1	-42.0	○	2×	1.0	278	
	06	72 47.0	43 02	2921	ESE	11	667.8	-38.0	↕	×	0.3	286	-23.8
22	12	72 56.3	43 00		E	10	664.1	-34.0	↕	×	0.3	295	
	18	73 05.6	42 57	3038	ESE	9	658.2	-40.0	⊙	10 Sc	0.5	304	
22	06	73 10.8	42 57		ESE	7	658.0	-37.0	↕	×	0.7	309	-23.2
	12	73 23.2	42 55		ESE	7	650.0	-34.8	↕	9×	0.5	321	
23	18	73 32.5	42 55	3177	ESE	7	644.0	-41.9	↕	×	10	330	
	06	73 38.7	42 55	3204	SE	9	641.8	-39.2	↕	×	0.3	336	-24.5
23	12	73 42.8	42 55	3220	SE	9	638.0	-37.0	↕	×	0.3	340	
	18	73 47.0	42 54	3247	ESE	6	635.0	-46.0	↕	×	0.3	344	

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Oct. 24	06	73°53'3	42°53'	3275	ESE	6	634.3	-40.0	⊙	4	1.0	350	-28.0
	12	74 09.8	42 52	3353	ESE	6	630.2	-39.5	○	0	20	366	
	18	74 20.2	42 52	3407	SE	6	626.2	-48.8	○	0	20	376	
25	06	74 26.4	42 52	3437	ESE	4	628.2	-42.5	○	0	20	382	-26.4
	12	74 41.0	42 51	3475	SE	4	627.4	-41.0	○	0	20	396	
	18	74 45.2	42 51	3478	ESE	6	624.8	-52.0	○	0	30	400	
26	06	74 49.3	42 51	3483	ESE	4	624.8	-47.0	○	0	30	404	-25.6
	12	74 59.7	42 50	3519	ESE	4	622.0	-42.8	○	0	30	414	
	18	"	"	"	SE	4	621.8	-48.0	○	0	30	"	
27	05	"	"	"	SE	4	621.2	-52.0	○	0	30	"	-23.9
	12	"	"	"	SE	4	620.0	-40.2	○	0	30	"	
	18	"	"	"	SE	4	621.0	-48.8	○	0	30	"	
28	06	75 03.8	42 48	3514	SE	6	620.9	-48.0	○	0	30	418	-24.0
	12	75 16.2	42 41	3547	SE	3	617.0	-45.0	○	0	30	430	
	18	75 26.5	42 36	3556	SE	4	617.2	-50.7	○	0	30	440	
29	06	"	"	"	ESE	8	617.0	-45.0	↔ ⊕	×	0.3	"	-26.2
	12	"	"	"	SE	7	616.5	-42.0	○	0	20	"	
	18	"	"	"	ESE	4	615.6	-52.0	○	0	30	"	
30	06	75 32.7	42 34	3559	ESE	8	616.2	-47.0	↔ ⊕	×	0.3	446	-26.9
	12	75 39.0	42 31	3591	ESE	8	614.4	-44.0	↔ ⊕	×	0.3	452	
	18	75 49.2	42 28	3612	SE	6	613.8	-45.0	↔	0	1.0	462	
31	06	75 57.4	42 23	3613	ESE	7	617.0	-47.0	○	0	20	470	-24.9
	12	"	"	"	ESE	7	617.2	-42.3	○	0	20	"	
	18	"	"	"	ESE	4	617.0	-48.2	○	0	20	"	
Nov. 1	06	"	"	"	SE	8	614.0	-42.0	○	0	20	"	-19.0
	12	76 09.8	42 17	3639	ESE	3	610.0	-41.0	○	0	20	482	

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long.(E)		Direct.	Speed (m/s)							
Nov. 1	18	76° 22' 2	42° 11'	3645	ESE	2	607.0	-47.0	○	0	20	494	
2	06	"	"	"	ESE	4	609.2	-45.0	☉	8 Ci	10	"	-23.2
	12	"	"	"	E	4	610.9	-41.0	☉	8 Ci	10	"	
	18	"	"	"	E	2	612.5	-47.5	⊕	6 As Ci	20	"	
3	06	76 26.2	42 08	3652	—	0	616.5	-44.0	○	0	30	498	-26.8
	12	76 37.4	42 01		—	0	611.1	-39.3	○	0	30	509	
	18	76 34.4	42 03	3655	SE	4	611.0	-44.2	○	0	30	506	
4	06	76 38.4	42 00	3672	SE	5	607.8	-40.7	○	0	30	510	-28.2
	12	"	"	"	ESE	3	607.2	-39.1	○	0	30	"	
	18	76 45.6	41 56		SE	5	608.9	-45.6	○	0	30	517	
5	06	76 48.7	41 55	3673	SE	6	608.0	-44.0	○	0	30	520	-29.1
	12	76 54.9	41 51	3691	SE	4	604.0	-42.0	○	0	30	526	
	18	76 59.0	41 48	3696	SE	4	601.8	-48.0	○	0	30	530	
6	06	"	"	"	SE	6	604.8	-47.0	○	0	30	"	-27.2
	12	77 09.3	41 41	3710	SE	4	603.2	-44.7	○	0	30	540	
	18	77 18.6	41 35		SE	4	599.2	-48.4	○	0	30	549	
7	06	"	"		—	0	601.2	-46.0	○	0	30	"	-26.7
	12	77 32.2	41 28	3712	—	0	598.2	-43.5	○	0	30	562	
	18	77 38.5	41 24	3711	W	2	600.0	-48.5	○	0	30	568	
8	06	77 40.6	41 21	3710	W	2	600.3	-44.5	○	0	30	570	-28.7
	12	77 45.6	41 17		WSW	2	603.2	-44.0	○	0	30	575	
	18	77 56.7	41 12	3698	WSW	1	601.4	-46.0	○	0	30	586	
9	06	78 00.6	41 10	3694	—	0	601.4	-44.0	○	0	30	590	-26.3
	12	"	"	"	NNE	2	603.0	-43.0	○	0	30	"	
	18	78 08.6	41 02	3682	NNE	2	603.0	-53.2	○	0	30	598	
10	06	78 14.5	40 58	3679	NNE	1	604.2	-45.2	○	1 As	30	604	-29.1

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Nov. 10	12	78°22'6	40°53'	3668	NNE	2	607.0	-46.0	○	0	30	612	
	18	78 37.1	40 46	3649	NNE	1	610.8	-54.2	○	0	30	626	
11	06	78 43.1	40 42	3648	—	0	612.8	-45.5	○	0	30	632	-30.3
	12	78 51.3	40 39	3629	—	0	612.5	-41.2	○	0	30	640	
12	06	79 14.8	40 30	3624	NNW	3	613.5	-47.5			24	Plateau St.	-23.7
	12	"	"	"	N	3	615.2	-42.9			24	"	
	18	"	"	"	N	5	616.5	-50.6			24	"	
13	06	"	"	"	N	4	618.4	-48.4			24	"	-26.2
	12	"	"	"	N	5	618.7	-40.6			24	"	
	18	"	"	"	N	6	618.5	-45.4			24	"	
14	06	"	"	"	NNW	4	617.5	-42.7			24	"	-30.0
	12	"	"	"	NNE	3	617.2	-38.7			24	"	
	18	"	"	"	NNE	4	616.4	-45.4			24	"	
15	06	"	"	"								"	-24.6
	12	"	"	"	E	4	614.7	-38.0			24	"	
	18	"	"	"	E	5	613.3	-44.0			24	"	
16	06	79 20.5	40 31	3621	ESE	2	613.4	-39.5	○	0	30	666	-31.6
	12	79 30.1	40 33	3603	E	1	613.0	-36.0	○	0	30	671	
	18	79 37.8	40 34	3584	E	1	612.8	-46.0	○	●	30	675	
17	06	79 41.6	40 35	3583	ENE	2	615.8	-39.5	○	●	30	677	-32.0
	12	79 51.3	40 37	3574	NE	3	614.1	-36.3	⊙	3 Ci	30	682	
	18	80 01.1	40 39	3563	NE	1	615.4	-43.6	○	●	30	687	
18	06	"	"	"	NE	4	617.0	-39.0	⊙	8 As Ci	30	"	-30.1
	12	80 03.1	40 39	3562	NE	6	617.4	-35.5	⊙	8 As Ci	30	688	
18	18	80 13.0	40 38	3561	NE	3	619.9	-42.0	⊙	8 As	20	693	
	06	80 19.0	40 38	3553	NE	4	622.2	-35.6	○	0	30	696	-29.1



Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long.(E)		Direct.	Speed (m/s)							
Nov.19	12	80°30'9	40°38'	3538	NE	2	622.9	-33.7	⊕	4Cs	30	702	
	18	80 36.9	40 37	3532	NE	2	623.2	-39.6	⊙	8Cs	30	705	
20	06	80 40.8	40 37	3518	NE	4	625.1	-37.8	○	0	30	707	-27.5
	12	80 54.7	40 36	3490	NE	7	627.2	-36.4	○	0	30	714	
21	18	81 00.7	40 36	3481	NE	7	628.8	-38.0	○	0	30	717	
	06	"	"	"	NNE	9	630.4	-33.7	⊕	×	0.5	"	-25.5
22	12	81 04.7	40 36	3467	NNE	10	632.2	-31.4	⊕	×	0.5	719	
	18	81 12.8	40 36	3468	NNE	6	632.7	-36.0	↔	×	0.5	723	
23	06	81 16.8	40 36	3461	NE	10	636.0	-29.8	↔	×	0.5	725	-23.2
	12	81 31.0	40 36	3446	NNE	7	636.8	-28.0	↔	×	0.3	732	
24	18	81 37.1	40 37	3432	N	12	637.2	-33.0	↔	×	0.3	735	
	06	81 43.2	40 37	3416	N	9	640.5	-27.5	↔	×	0.3	738	-20.0
25	12	81 52.8	40 37	3401	NNW	10	639.4	-23.0	✱	×	0.2	743	
	18	82 00.1	40 37	3407	NNW	6	639.6	-27.0	○	2As	30	747	
26	06	"	"	"	N	5	640.0	-29.4	○	2Cs	30	"	-27.5
	12	82 02.1	40 37	3404	NW	4	638.8	-26.6	⊕	4Cs	30	748	
27	18	82 12.1	40 36	3402	NW	2	639.0	-31.5	⊙	9As	30	753	
	06	82 18.0	40 35	3405	NW	2	637.0	-33.5	○	0	30	756	-26.1
28	12	82 30.1	40 34	3392	NW	2	637.0	-28.2	↔	6As	10	762	
	18	82 36.1	40 33	3369	N	6	638.4	-33.0	⊕	6Cs	30	765	
29	06	82 42.2	40 33	3373	NNE	6	636.0	-32.8	⊕	4Cs	10	768	-16.9
	12	82 52.3	40 32	3372	NNE	4	637.0	-28.9	⊙	8Cs	20	773	
30	18	83 00.4	40 31	3362	NW	6	638.0	-32.5	⊙	8Cs	30	777	
	06	"	"	"	NW	7	639.2	-31.4	⊕	6Cs	30	"	-19.5
31	12	83 04.5	40 31	"	NNE	4	639.9	-29.0	⊕	6Cs	30	779	
	18	83 12.8	40 32	3353	NNW	4	640.0	-33.2	⊕	4Cs	30	783	

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Nov. 28	06	83° 19'0	40° 33'	3352	NW	2	640.8	-32.5	⊕	4 Cs	30	786	-25.7
	12	83 29.3	40 34	3313	NW	2	641.5	-28.0	⊕	3 Ci	30	791	
	18	83 37.5	40 35	3300	NNE	10	644.0	-36.0	○	2 Cs	30	795	
29	06	83 41.6	40 35	3299	NNW	7	642.0	-33.8	⊕	7 Cs	10	797	-25.0
	12	83 55.9	40 36	3294	NNW	9	643.3	-29.0	⊕ ↗	3 Cs	20	804	
	18	84 02.0	40 37	3291	NW	8	642.6	-34.0	↗	×	0.5	807	
30	06	"	"		NW	7	642.0	-34.0	○	0	30	"	-29.0
	12	84 06.1	40 37	3292	NNW	8	642.5	-25.5	⊕	3 Cs	30	809	
	18	84 14.3	40 36	3282	NNW	4	644.0	-30.5	○	0	30	813	
Dec. 1	06	84 20.4	40 35	3271	NNE	5	646.0	-29.7	○	0	30	816	-26.9
	12	84 30.7	40 34	3253	NNW	3	647.1	-26.7	○	1 Cs	30	821	
	18	84 38.9	40 33	3249	—	0	647.0	-30.7	○	0	30	825	
2	06	84 45.0	40 33	3253	NE	4	645.7	-31.5	○	0	30	828	-27.4
	12	84 55.2	40 32	3207	NNE	5	647.7	-29.3	○	0	30	833	
	18	85 03.3	40 31	3194	NNE	2	648.4	-32.4	○	0	30	837	
3	06	"	"	"	NW	7	648.0	-33.0	⊙	8 Cs	10	"	-25.0
	12	"	"	"	NW	7	648.2	-28.5	○	2 Cs	30	"	
	18	"	"	"	NW	2	649.0	-29.8	○	0	30	"	
4	06	"	"	"	NNW	6	650.0	-31.0	○	0	30	"	-19.0
	12	85 05.3	40 30	3197	NNW	6	653.9	-29.3	○	0	30	838	
	18	85 15.5	40 25	3189	NW	2	654.3	-32.5	○	0	30	843	
5	06	85 19.5	40 23	3188	NNW	2	655.3	-30.5	⊕	4 Cs	30	845	-19.7
	12	85 31.9	40 17	3166	NNW	4	656.6	-26.7	○	0	30	851	
	18	85 40.4	40 12	3154	—	0	656.8	-31.2	○	0	30	855	
6	06	85 44.6	40 10	3152	N	5	657.0	-29.4	○	0	30	857	-18.7
	12	85 56.9	40 04	3137	NNW	5	656.0	-25.4	○	0	30	863	

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Dec. 6	18	86°05'0	40°00'	3116	NW	4	657.0	-29.2	○	1 Cs	30	867	
7	06	"	"	"	N	3	657.0	-27.2	○	0	30	"	-20.2
	12	86 07.1	39 59	3107	NE	4	657.6	-25.5	○	0	30	868	
	18	86 17.5	39 55	3103	NNE	2	657.6	-30.0	⊙	6 Cs	30	873	
8	06	86 21.7	39 54	3080	NW	6	660.2	-29.5	⊙	5 Cs	30	875	-21.5
	12	86 34.4	39 49	3064	N	7	662.0	-26.3	⊙	5 Cs	30	881	
	18	86 43.0	39 46	3030	NW	6	665.1	-30.6	⊙	7 Cs	20	885	
9	06	86 49.4	39 44	3016	NW	8	668.2	-29.0	↔	×	1.0	888	-19.2
	12	86 57.9	39 41	2980	NW	9	674.0	-28.0	↔	×	1.0	892	
	18	87 08.4	39 37	2945	NNW	7	676.4	-29.8	↔	×	5	897	
10	06	"	"	"	NW	8	679.0	-27.4	↔	×	1.0	"	-20.6
	12	87 10.4	39 40	"	NNW	5	681.2	-26.9	↔	×	2	898	
	18	87 20.2	39 52	2933	NW	7	683.4	-29.5	↔	×	2	903	
11	06	87 26.2	40 00	2944	NNW	5	679.0	-27.6	⊙	3 Cs	30	906	-22.1
	12	87 32.1	40 07	2938	NNW	5	681.1	-25.6	⊙	4 Cs	20	909	
	18	87 44.3	40 23	2910	NNW	6	680.9	-27.8	⊙	4 Cs	30	915	
12	06	87 50.4	40 30	2897	NW	6	681.5	-28.2	↔	×	2	918	-20.8
	12	87 58.5	40 40	2894	NW	4	682.0	-25.6	⊙	8 Cs	10	922	
	18	87 08.4	40 53	2859	NW	2	684.8	-28.0	⊙	7 Cs	20	927	
13	06	"	"	"	N	1	686.7	-29.0	○	0	30	"	-15.5
	12	88 10.4	40 54	2859	NW	1	686.0	-25.5	○	2 Cs	30	928	
	18	88 20.6	40 56	2874	—	0	685.6	-28.2	○	2 Cs	30	933	
14	06	88 24.7	40 57	2856	NW	2	688.0	-26.5	⊙	9 Ac	20	935	-18.1
	12	88 36.8	41 00	2818	—	0	691.8	-24.5	⊙	10 As	10	941	
	18	88 44.9	41 02	2832	—	0	691.6	-28.0	⊙	5 Ac	30	945	
15	06	88 48.9	41 03	2807	SE	2	691.8	-27.0	⊙	3 Ac	10	947	-20.4

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Dec. 15	12	89°00'9	41°06'	2792	—	0	692.0	-25.4	☉	3 Cs	30	953	
	18	89 08.8	41 08	2816	NE	2	690.0	-29.3	○	1 Ci	30	957	
16	06	89 12.8	41 15	2832	E	2	688.2	-28.5	○	0	30	959	-23.6
	12	89 22.9	41 34	2810	E	3	688.0	-27.4	○	0	30	964	
17	18	89 37.2	41 59	2826	E	2	688.0	-28.9	○	0	30	971	
	06	89 45.4	42 14	2801	—	0	689.2	-26.0	○	0	30	975	-16.6
18	12	"	"	"	—	0	690.1	-27.0	○	0	30	"	
	18	"	"	"	E	1	691.2	-26.8	○	0	30	"	
19	06	"	"	"	NE	2	692.0	-26.5	○	1 Ci	30	"	-18.0
	12	"	"	"	—	0	692.0	-25.2	○	0	30	"	
20	18	"	"	"	E	1	693.0	-25.5	○	0	30	"	
	06	89 59.9		2800	E	3	692.0	-27.6	○	2 Ci	30	South Pole St.	-20.8
21	12	"	"	"	E	2	693.0	-27.8	○	0	30	"	
	18	"	"	"	E	2	693.2	-27.6	○	0	30	"	
22	06	"	"	"	ENE	6	686.0	-27.5	○	0	30	"	-21.0
	12	"	"	"	E	5	687.5	-27.2	○	0	30	"	
23	18	"	"	"	ENE	5	689.3	-27.2	○	0	30	"	
	06	"	"	"	ENE	4	680.9	-30.4	○	0	30	"	-22.5
24	12	"	"	"	NNE	2	681.7	-28.3	○	0	30	"	
	18	"	"	"	E	5	682.8	-28.3	○	0	30	"	
25	06	"	"	"	W	4	685.3	-28.8	☉	4 Ci	30	"	-20.8
	12	"	"	"	W	6	686.7		✳↔	10 AsCi	5	"	
26	18	"	"	"	NNW	1	683.1	-28.2	○	1 Ci	30	"	
	06	"	"	"	WNW	8	689.9	-31.0	☉	10 AsCi	13	"	-19.7
27	12	"	"	"	WNW	8	690.0	-28.3	✳↕	10 As	0.5	"	
	18	"	"	"	WNW	3	689.9	-31.0	☉	8 As Ci	13	"	

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Snow * (00Z) (°C)
		Lat. (S)	Long.(E)		Direct.	Speed (m/s)							
Dec. 24	06	89° 59'9		2800	W	8	692.0	-26.1	✱ ⇄	10 As	1.4	South Pole St.	-18.8
	12	"		"	W	9	691.5	-25.8	✱ ⇄	10 As	0.5	"	
	18	"		"	W	9	690.8	-26.1	✱ ⇄	10 As	0.5	"	
25	06	"		"	N	2	691.0	-27.5	☉	8 As	20	"	-18.2
	12	"		"	N	2	691.9	-28.3	⊕	3 Ci	30	"	
	18	89 49.4	42° 15'	2803	N	1	693.2	-28.3	○	0	30	977	
26	06	89 43.4	42 10	2811	N	2	697.0	-27.6	○	0	30	974	-18.9
	12	89 29.0	41 45	2831	—	0	697.8	-26.2	○	0	30	967	
	18	89 20.8	41 30	2813	—	0	697.0	-25.9	○	0	30	963	
27	06	89 14.8	41 19	2818	—	2	700.2	-26.5	○	1 Ci	30	960	-19.8
	12	89 02.8	41 06	2802	—	3	702.8	-24.6	⊕	3 Ci	30	954	
	18	89 48.9	41 03	2807	NNE	4	703.2	-26.7	☉	8 As Ci	30	947	
28	06	89 42.8	41 02	2829	NNW	4	701.8	-25.8	☉	8 Cs	30	944	-20.1
	12	89 22.7	40 56	2863	—	0	699.5	-26.2	⊕	3 Cs	30	934	
	18	88 08.4	40 53	2859	—	0	698.0	-26.3	○	0	30	927	
29	06	"	"	"	NNE	2	697.5	-24.6	○	2 Ci	30	"	-18.7
	12	88 00.5	40 43	2873	NNE	5	695.0	-24.9	○	0	30	923	
	18	87 38.2	40 15	2920	N	2	690.2	-24.2	○	0	30	912	
30	06	87 30.1	40 05	2942	N	4	683.9	-25.9	○	0	30	908	-17.8
	12	87 12.3	39 42	2946	NW	4	681.8	-23.2	⊕	3 Ci	30	899	
	18	86 51.5	39 43	3005	NNW	2		-25.2	○	8 Cs	30	889	
31	06	86 40.8	39 47	3033	—	0	670.8	-24.8	⊕	3 Ci	30	884	-18.2
	12	86 28.0	39 52	3079	—	0	666.2	-25.3	○	0	30	878	
	18	86 15.5	39 56	3107				-26.2				872	
1969 Jan. 1	06	85 46.7	40 09	3146	NE	2	658.2	-26.0	○	1 Ci	30	858	-16.1
	12	85 40.4	40 12	3154	—	0	657.2	-25.4	○	1 Ci	30	855	

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Jan. 1	18	85° 40'4	40° 12'	3154	E	6	657.0	-27.4	○	0	30	855	
	06	85 29.8	40 18	3169	N	6	654.6	-25.3	⊙	4 Ci	30	850	-17.8
2	12	85 13.4	40 26	3190	NNW	6	653.7	-24.2	○	1 Ci	30	842	
	18	85 03.3	40 31	3194	N	5	652.4	-22.8	⊙	8 As	30	837	
	06	"	"	"	N	7	653.0	-25.2	⊙	9 As	30	"	-20.3
	12	"	"	"	NW	7	653.5	-23.5	✱	10 Ac	3	"	
3	18	"	"	"	N	5	654.2	-22.7	⊙	7 As	30	"	
	06	"	"	"	NNW	7	657.2	-24.2	⊙	7 As	0.5	"	-19.1
4	12	84 55.2	40 32	3207	NW	7	653.5	-24.1	↔	×	0.2	833	
	18	84 36.8	40 34	3245	NW	7	652.4	-25.1	⊙	9 As Ci	20	824	
	06	84 26.6	40 35	3257	N	5	651.9	-26.7	○	1 Ci	30	819	-15.3
5	12	84 08.2	40 36	3288	N	8	649.2	-24.2	○	1 Ci	20	810	
	18	84 00.0	40 37	3298	N	8	648.5	-26.3	○	2 Ci	30	806	
	06	83 47.8	40 36	3298	N	8	647.2	-27.9	○	2 Ci	30	800	-21.6
6	12	83 35.5	40 34	3306	N	8	647.1	-24.5	↔	×	1.0	794	
	18	83 25.2	40 33	3337	N	8	647.0	-25.6	↔	×	5	789	
	06	83 16.9	40 33	3349	N	7	647.0	-23.8	↔	×	2	785	-21.4
7	12	82 58.4	40 31	3368	NNW	5	646.2	-22.5	⊙	6 As	30	776	
	18	82 48.3	40 32	3370	N	7	646.8	-24.5	⊙	4 Ac Ci	30	771	
	06	"	"	"	NNW	6	649.2	-25.5	⊙	4 Ac Ci	30	"	-20.4
8	12	82 42.2	40 33	3373	NW	4	647.8	-23.5	○	2 Ci	30	768	
	18	82 24.0	40 35	3402	—	0	647.0	-28.3	○	1 Ci	30	759	
	06	"	"	"	NNW	2	646.2	-29.5	○	2 Ci	30	"	-17.5
9	12	82 18.0	40 35	3405	NNW	4	646.2	-24.9	⊙	10 As	20	756	
	18	82 04.1	40 37	3411	NNW	4	646.0	-25.7	⊙	4 As	30	749	
10	06	81 56.4	40 37	3394	NNE	6	647.1	-28.4	○	2 Ci	30	745	-16.8

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Jan. 10	12	81° 37'1	40° 37'	3432	N	2	645.2	-24.5	○	0	30	735	
	18	81 18.8	40 36	3457	N	2	642.0	-28.2	○	0	30	726	
11	06	81 08.7	40 36	3467	N	2	641.5	-28.4	○	0	30	721	-23.6
	12	80 54.7	40 36	3490	N	4	640.0	-25.3	○	0	30	714	
12	18	80 42.8	40 37	3517	—	0	637.5	-30.8	○	0	30	708	
	06	80 36.9	40 37	3532	NNE	6	635.0	-30.5	○	0	30	705	-15.0
	12	80 26.9	40 38	3545	NNE	5	634.1	-28.3	○	0	30	700	
13	18	80 07.1	40 39	3559	—	0	634.2	-32.3	○	0	30	690	
	06	80 01.1	40 39	3563	NNW	5	634.1	-31.0	○	0	30	687	-20.8
	12	79 53.3	40 38	3574	NNE	5	635.4	-27.2	○	0	30	683	
14	18	79 35.8	40 34	3592	NE	5	635.8	-32.0	○	1 Ci	30	674	
	06	79 26.3	40 32	3609	NNE	8	636.2	-26.1	↔	×	1.0	669	-17.5
	12	79 18.6	40 31	3615	NNE	4	634.0	-22.8	○	2 Ac	30	665	
15	18	79 14.8	40 30	3624	—	0	633.0	-29.7	○	0	30	Plateau St.	
	06	"	"	"	N	2	632.4	-27.0	⊕	4 Ac	30	"	-12.5
	12	"	"	"	—	0	631.0	-25.5	⊕	4 Ac	30	"	
16	18	"	"	"	"	"	"	"	"	"	"	"	
	06	"	"	"	NNE	2	628.9	-29.7	○	0	30	"	-15.2
	12	"	"	"	N	3	627.8	-27.9	○	0	30	"	
17	18	"	"	"	"	"	"	"	"	"	"	"	
	06	"	"	"	NNE	6	627.0	-31.0	○	2 Ci	30	"	-20.0
	12	"	"	"	NNE	5	627.0	-27.4	○	2 Ci	30	"	
18	18	"	"	"	N	4	627.8	-33.3	○	2 Ci	30	"	
	06	"	"	"	NW	6	630.0	-31.8	☉	8 Cc	20	"	-22.9
	12	"	"	"	NW	5	630.7	-26.7	○	0	30	"	
	18	"	"	"	NW	3	631.6	-32.3	○	0	30	"	
	"	"	"	"	"	"	"	"	"	"	"	"	

Meteorological Observations during the JARF South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long.(E)		Direct.	Speed (m/s)							
Jan. 19	06	79° 14.8'	40° 30'	3624	NW	2	632.7	-26.5	○	1 Cs	30	Plateau St.	-21.5
	12	"	"	"	SW	2	632.6	-26.7	○	0	30	"	
	18	"	"	"	NW	3	632.0	-31.2	○	0	30	"	
20	06	"	"	"	N	3	632.3	-27.2	⊕	3 Ci	30	"	-18.2
	12	79 07.7	40 32	3613	N	2	633.0	-27.2	○	0	30	656	
	18	79 01.5	40 35	3619	N	2	633.2	-35.1	○	0	30	650	
21	06	78 55.4	40 38	3622	NNE	4	631.3	-32.5	↔	×	1.5	644	-17.7
	12	78 43.1	40 42	3648	N	4	629.9	-31.5	⊕	4 Ci	20	632	
	18	78 30.9	40 48	3659	N	2	628.8	-36.5	○	0	30	620	
22	06	78 25.7	40 51		N	1	627.5	-35.0	○	1 Ci	30	615	-18.7
	12	78 16.5	40 56	3674	NE	2	625.1	-32.2	○	0	30	606	
	18	78 05.6	41 05		NE	3	623.6	-37.2	○	1 Ci	30	595	
23	06	77 54.7	41 13	3702	E	5	620.9	-32.9	↔	×	2	584	-24.0
	12	77 45.6	41 17		E	6	619.9	-30.5	↔	×	2.0	575	
	18	77 36.5	41 25	3709	NW	2	619.0	-37.0	⊕	3 Cs	30	566	
24	06	77 32.2	41 28	3712	NE	2	615.7	-38.0	↔	×	5	562	
	12	77 26.0	41 32	3717	ESE	6	615.4	-34.6	⊕	3 Cs	30	556	
	18	"	"	"	ESE	3	615.0	-38.7	⊕	5 Ci	30	"	
25	06	"	"	"	ESE	2	615.0	-39.0	⊕	3 Cs	30	"	-27.7
	12	77 23.8	41 32	3714	ESE	2	614.6	-33.9	○	3 Cs	30	554	
	18	77 09.3	41 41	3710	E	2	614.2	-37.5	○	0	30	540	
26	06	77 03.2	41 45	3702	E	3	614.2	-36.4	⊕	3 Ci	20	534	-27.4
	12	76 50.8	41 54	3683	E	4	616.1	-30.5	↔	×	5	522	
	18	76 38.4	42 00	3672	—	0	615.2	-36.9	⊕	6 Cs	30	510	
27	06	76 34.4	42 03	3655	ESE	4	613.0	-32.6	↔	×	1.0	506	-27.5
	12	76 22.2	42 11	3645	ENE	6	613.3	-29.9	↔	×	4	494	



Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long.(E)		Direct.	Speed (m/s)							
Jan. 27	18	76° 12'9"	42° 16'		E	2	612.7	-36.0	⊙	4 Ns Cs	30	485	
28	06	76 07.7	42 18	3635	ESE	4	613.2	-35.4	⊙	3 Cc	30	480	-27.5
	12	75 57.4	42 23	3613	FSE	5	616.0	-29.4	⊙	4 Cs	20	470	
	18	"	"	"	SE	2	615.8	-36.7	⊙	4 Ns Ci	30		
29	06	75 52.3	42 26		ESE	2	618.0	-34.4	⊙	4 Ns Ci	10	465	-23.2
	12	75 41.0	42 29	3594	ENE	4	620.2	-28.4	⊙	6 Cs	30	454	
30	18	75 30.6	42 34	3556	ESE	2	623.0	-36.1	⊙	8 Ns Cs	30	444	
	06	75 24.4	42 37	3549	E	3	622.2	-35.8	⊙	8 Cs	10	438	-25.8
	12	75 08.9	42 46		ENE	3	624.4	-30.8	↔	×	2	423	
31	18	74 59.7	42 50	3519	—	0	625.0	-38.2	⊙	6 Cs	30	414	
	06	"	"	"	ENE	5	624.0	-36.4	⊙	4 Cs	20	"	-25.4
	12	"	"	"	ENE	4	624.1	-34.0	⊙	4 Cs	30	"	
Feb. 1	18	"	"	"	ENE	2	624.2	-39.5	⊙	3 Cs	30	"	
	06	"	"	"	ENE	2	625.0	-38.4	⊙	4 Ci	30	"	-24.0
	12	"	"	"	—	0	625.7	-32.4	⊙	3 Ci	30	"	
2	18	"	"	"	—	0	626.0	-41.8	○	0	30	"	
	06	74 51.4	42 51	3495	—	0	628.2	-39.5	○	0	30	406	-21.5
	12	74 31.6	42 51		S	1	629.8	-32.5	○	1 Ci	30	387	
3	18	74 18.1	42 52	3390	SSE	2	632.8	-41.8	○	0	30	374	
	06	74 11.9	42 52	3362	ESE	2	638.0	-39.9	⊙	7 As Ci	30	368	-19.6
	12	73 51.1	42 54	3278	ESE	4	644.6	-31.2	○	1 Ci	30	348	
4	18	73 34.5	42 55	3180	SE	5	652.8	-36.5	○	0	30	332	
	06	73 32.5	42 55	3177	SE	7	653.0	-34.6	⊙	3 Ci	30	330	-18.7
	12	73 23.2	42 55		E	7	659.9	-28.9	⊙	7 Cs	30	321	
Feb. 5	18	73 01.5	42 59	3003	E	7	673.8	-33.6	○	1 Ci	30	300	
	06	72 54.2	43 01		SE	6	677.7	-31.3	⊙	6 Cs	30	293	-18.0

Meteorological Observations during the JARE South Pole Traverse

Date	GMT	Position		Elevation (m)	Wind		Pressure (mb)	Temp. (°C)	Weather	Cloud	Visi- bility (km)	Station No.	Temp. above Syowa * (00Z) (°C)
		Lat. (S)	Long. (E)		Direct.	Speed (m/s)							
Feb. 5	12	72° 39.7	43° 04'		ESE	8	688.2	-25.5	⊙	3 Ci	30	279	
	18	72 25.3	43 07		E	9	709.3	-30.5	○	2 Ci	30	265	
6	06	72 18.2	43 07	2719	E	6	710.5	-26.0	⊙	10 Ns	2	258	-16.8
	12	72 04.2	43 09	2617	E	4	723.4	-19.9	✱	10 Ns	0.2	244	
7	18	71 46.8	43 06		E	2	730.8	-20.6	⊙	10 Ns	30	227	
	06	71 39.7	43 04	2427	E	5	732.2	-21.2	⊙	10 Ns	10	220	-15.2
8	12	71 27.5	43 02	2348	E	4	738.5	-16.7	⊙	10 As	10	208	
	18	71 11.2	42 58	2236	E	4	747.7	-20.8	⊙	10 As	10	192	
9	06	71 07.0	42 58	2183	E	2	751.8	-20.5	⊙	10 As	20	188	-14.6
	12	70 55.8	42 56		E	1	763.2	-14.6	⊙	6 As	30	177	
10	18												
	06	70 45.3	43 07		E	6	762.9	-20.7	⊙	9 AcCi	10	165	-13.8
11	12	70 31.9	43 06	2001	E	2	769.0	-15.0	⊙	10 Ac	20	152	
	18	70 19.8	43 06	1961	E	2	772.1	-18.9	⊙	4 As	30	140	
12	06	70 12.5	43 06		E	2	774.0	-19.6	⊙	3 Ac	30	133	-12.9
	12	70 01.1	43 06	1881	—	0	777.0	-16.4	⊙	8 As	30	122	
13	18	"	"	"	—	0	779.0		⊙	10 As	20	"	
	06	69 54.8	43 02	1812	E	4	783.2	-14.7	⊙	10 As	30	116	-14.1
14	12	69 38.1	42 50	1675	W	4	792.7	-13.8	⊙	7 Ac	30	100	
	18												
15	06	69 22.5	42 38		E	4	715.8	-15.6	⊙	10 As	10	85	-20.0
	12	69 06.9	42 29	1393	NNE	4	832.0	- 9.5	⊙	9 As	30	70	
16	18	"	"	"	ENE	4	833.3	-16.4	⊙	9 As	30	"	
	06	69 05.2	42 07	1327	SE	5	843.8	-21.5	○	2 Ac Ci	30	62	-11.9

Code : ⇨ Drifting snow ⇨ Blowing snow ⇨ Ice prisms ✱ Snow ○ Clear ⊙ Fine ⊙ Cloudy

\*Air temperature above Syowa Station corresponding with the pressure level observed by the traverse party.

GMT) during the traverse.

Warm air inflows due to coastal depressions were observed several times in the coastal area. Even at 82°S, about 2,500 km from the coast, a significant warm air inflow accompanied by relatively strong winds and cloudy and snowy weather was observed once, which was the influence of a remaining depression.

Fig. 2 shows the variations in surface wind direction at the Fuji Divide (tentative) and its vicinity. On the northern slope of this divide the surface wind direction was generally from east to southeast. At the top area of this divide, the wind direction was variable, and it changed to northerly on the south slope. It is presumed that the katabatic winds originate around the watershed of the continental plateau.

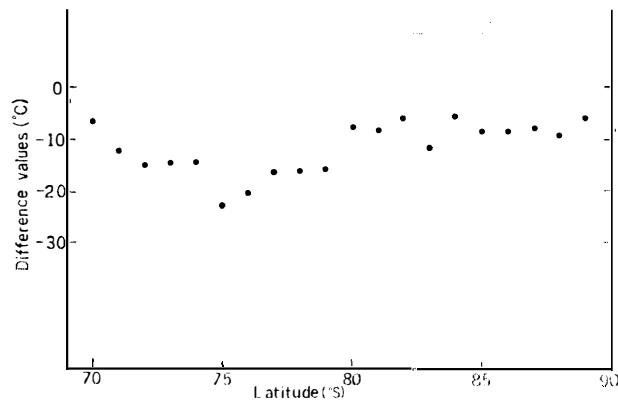


Fig. 3. Difference values between surface temperature and temperature of free atmosphere above Syowa at the same pressure level.

Fig. 3 shows the difference between the surface temperature on the continent and the temperature of the free atmosphere at the same level above Syowa Station. The mean values for each latitude are given. It seems that the former is generally lower by 10-20°C than the latter.