

## VIII. SURFACE METEOROLOGICAL CONDITION IN MIZUHO PLATEAU IN 1971 - 1972

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### 1. Introduction

Surface meteorological observations were made along the following traverse routes in Mizuho Plateau, shown in Fig.A (folded map), by traverse parties of JARE-12 (1971 - 1972) and -13(1972 - 1973) as daily routine during the travels in 1971 - 1972.

JARE-12: April 22 - 28, 1971: From Syowa Station to H79 (Table 1).

May 30 - July 26, 1971: Around trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 2).

September 23 - 27, 1971: From Syowa Station to Mizuho Camp, via routes S, H and Z (Table 3).

JARE-13: January 14 - 23, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 4).

April 17 - May 15, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 5).

August 24 - September 11, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 6).

October 23 - November 7, 1972: A round trip from Syowa Station to Mizuho Camp, via routes S, H and Z (Table 7).

### 2. Observations

During the travels, surface meteorological observations were made several times a day as daily routine, basically 5 times a day at 0900, 1200, 1500, 1800, 2100 LT (45° E LMT, GMT + 3h). Observations were made on the air temperature, direction and speed of wind, atmospheric pressure, weather condition, amount of cloud, and surface visibility.

#### 2.1. Air temperature

The air temperature was measured with a calibrated sling-type alcohol thermometer at a height of about 1.5m above the snow surface in the shade from solar radiation. The accuracy of measurement was about  $\pm 0.2^{\circ}\text{C}$ .

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## 2.2. Speed and direction of wind

JARE-12: A Robinson-type anemometer was installed above the roof of a snow-vehicle (KD-60) by the use of a metal pole at a level of 3.6m above the snow surface; the wind speed was read by an indicator installed inside the vehicle. The accuracy of measurement was about  $\pm 1$  m/s.

JARE-13: A Robinson-type anemometer was held at a level of 1.8m above the snow surface, and the wind speed was read directly.

The direction of wind was observed by the use of a magnetic compass, whereby a correction was made for the magnetic declination. The direction of wind was expressed in 16 directions, i.e., N:  $0^\circ$ , NNE:  $23^\circ$ , NE:  $45^\circ$ , E:  $90^\circ$ , S:  $180^\circ$ , W:  $270^\circ$  and so on.

## 2.3. Atmospheric pressure

The atmospheric pressure was measured by the use of a wide-range aneroid barometer, which was calibrated with the standard Fortin barometer at Syowa Station immediately before leaving. The accuracy of measurement was about  $\pm 2$  mb.

## 3. Notes for the Tables

LT : local standard time at Syowa Station (GMT + 3 hours)

Cloud : amount of cloud (10: overcast)

Weather : present weather

○ clear	↔ ice prism
⊙ fine	⊕ high blowing snow
⊙ cloudy	⊕ low blowing snow
* snow	

Location of the stations on route H: values of latitude and longitude were figured out by a simple interpolation between S30 and S122, both were the astronomic points (Shimizu et al., 1972), their elevations were according to the result of JARE-14's survey (1973 - 1974).

## Reference

Shimizu. H., R. Naruse, K. Omoto and A. Yoshimura (1972): Position of stations, surface elevation and thickness of the ice sheet, and snow temperature at 10m depth in the Mizuho Plateau - West Enderby Land Area, East Antarctica, 1969 - 1971. JARE Data Rep., 17 (Glaciology), 38 - 47.

Table 1. Surface meteorological data from Syowa Station to H79 (April 22-28, 1971).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
Apr. 22	15	S 17	69° 02'	40° 04'	583	7	113°	—	-20.8	2	⊕ ↗	> 70
	21	18	69 02	40 07	609	6	90	—	-24.0	—	⊕	—
23	09	"	69 02	40 07	609	6	113	—	-26.0	—	⊙	> 70
	15	26	69 02	40 29	870	5	68	—	-28.0	—	⊕	> 70
24	21	30	69 03	40 40	961	4	113	—	-28.0	—	⊙	—
	09	"	69 03	40 40	961	7	113	—	-25.0	—	⊕ ↗	0.3
25	15	H 50	69 09	40 58	1114	10	90	—	-25.0	—	↗	0.2
	21	55	69 10	41 00	1118	12	90	—	-20.0	—	↗	—
26	09	"	"	"	"	20	90	—	-15.8	—	↗	< 0.1
	15	"	"	"	"	11	45	—	-14.8	—	↗	0.2
	21	"	"	"	"	6	45	—	-15.0	—	⊙	—
27	09	"	"	"	"	9	23	—	-17.0	—	↗	0.1
	12	"	"	"	"	—	—	—	—	—	—	—
	15	75	69 16	41 14	1190	6	68	—	-16.0	—	↗	0.1
28	21	79	69 16	41 16	1198	6	68	—	-17.0	—	↗	—
	00	"	"	"	"	—	—	—	—	—	—	—
	09	"	"	"	"	10	45	—	-24.0	—	↗	< 0.1
	15	"	"	"	"	15	90	—	-19.7	—	↗	< 0.1
	21	"	"	"	"	23	90	—	-11.0	—	↗	—
28	00	"	"	"	"	—	—	—	—	—	—	—
	12	"	"	"	"	22	45	—	-11.0	—	↗	< 0.1
	15	"	"	"	"	24	45	—	-11.0	—	↗	< 0.1
21	"	"	"	"	—	23	—	-12.0	—	↗	—	

Table 2. Surface meteorological data between Syowa Station and Mizuho Camp (May 30 - June 26, 1971).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
May 30	15	Tottuki Point	69° 17'	39° 50'	0	0	—	—	0	0	○	> 70
	18	Tottuki Point	"	"	0	8	—	968	-21.5	0	○	—
31	12	S 17	69 02	40 04	583	8	—	922	-22.0	—	—	45
	15	21	69 02	40 15	699	11	90°	899	-23.2	2	⬇	—
	18	27-4	69 03	40 35	916	8	90	880	-24.6	3	⊖	—
June 1	09	30	69 03	40 40	961	10	135	867	-33.0	2	⬇	> 70
	12	H 39	69 08	40 55	1086	10	113	856	-30.0	9	⊙	> 70
	15	69	69 12	41 06	1165	11	90	849	-29.8	2	⬇	> 70
	18	92	69 17	41 16	1249	12	90	835	-31.6	4	⬇	—
	21	101	69 19	41 22	1287	12	68	828	-28.8	10	⬇	—
2	15	115	69 22	41 29	1322	9	360	810	-17.0	9	⬇	—
	18	127	69 24	41 35	1357	7	360	808	-17.2	—	⬇	—
3	06	140	69 27	41 42	1384	8	68	807	-20.3	4	⬇	—
	09	142	69 28	41 43	1390	8	68	807	-23.2	—	⬇	—
	12	170	69 33	41 57	1482	5	45	800	-24.6	—	—	—
	18	187	69 37	42 06	1532	2	45	792	-31.4	5	—	—
4	21	200	69 39	42 12	1560	5	—	789	-32.5	10	⊙	—
	07	200	69 39	42 12	1560	5	90	784	-30.0	4	⊖	—
	09	"	"	"	"	4	90	784	-33.0	—	⊙	—
	12	220	69 43	42 23	1610	5	113	778	-37.0	9	⊙	> 70
5	18	264	69 52	42 45	1740	5	135	764	-37.0	10	⊙	—
	21	280	69 56	42 53	1792	6	90	759	-37.5	10	⊙	—
	09	"	"	"	"	7	90	760	-38.9	—	—	—
	12	297	69 59	43 02	1847	8	90	756	-45.7	—	⊖	> 2
6	15	300	70 00	43 03	1870	11	113	758	-47.5	—	⬆	> 2
	18	"	"	"	"	12	113	759	-47.5	—	⬆	—
	09	"	"	"	"	14	113	761	-43.0	—	⬆	< 0.1
	12	"	"	"	"	13	113	762	-42.0	—	⬆	< 0.1
	15	"	"	"	"	14	113	764	-41.0	—	⬆	< 0.1

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
June 6	18	H 300	70° 00'	43° 03	1870	15	113°	764	-38.6	—	↕	—
	21	"	"	"	"	17	90	765	-33.4	—	↕	—
7	06	"	"	"	"	17	90	769	-29.4	—	↕	—
	18	"	"	"	"	14	90	775	-32.0	—	↕	—
8	06	"	"	"	"	17	90	771	-35.0	—	↕	< 0.1
	18	"	"	"	"	14	90	762	-34.5	—	↕	< 0.1
	21	"	"	"	"	14	90	761	-33.2	—	↕	—
9	12	"	"	"	"	13	90	756	-37.4	—	↕	< 0.1
	21	"	"	"	"	9	90	757	-40.0	0	⊕	—
10	06	"	"	"	"	7	90	759	-39.5	0	⊕	—
	15	"	"	"	"	10	90	765	-44.7	0	↕	< 0.1
	18	"	"	"	"	11	90	766	-45.7	0	↕	< 0.1
	21	"	"	"	"	12	90	768	-45.4	0	↕	—
11	00	"	"	"	"	13	90	769	-46.0	0	↕	—
	09	"	"	"	"	14	90	770	-44.2	0	↕	> 0.3
	15	"	"	"	"	13	90	770	-46.1	0	—	0.2
	18	"	"	"	"	12	90	770	-47.2	0	↕	0.2
12	09	"	"	"	"	10	90	773	-45.2	1	⊙	1
	12	"	"	"	"	11	90	—	-44.2	1	↕	> 70
	15	"	"	"	"	11	90	774	-43.4	1	↕	—
13	09	S 122	70 01	43 07	1853	9	90	773	-33.5	10	⊙	> 1
	12	"	"	"	"	9	90	774	-29.6	10	⊙	< 0.3
	15	Z 6	70 04	43 11	1903	9	68	770	-29.6	10	↕	< 0.3
	18	11	70 06	43 15	1916	9	68	769	-29.4	—	↕	—
14	06	"	"	"	"	8	90	769	-28.4	10	⊙	—
	12	23	70 12	43 24	1958	9	90	767	-29.4	10	↔ ↕	> 70
	15	29-1	70 15	43 29	1993	5	90	762	-29.9	10	↔ ↕	—
	18	36	70 18	43 34	2016	9	68	760	-31.3	10	↕	> 3
	21	"	"	"	"	10	68	758	-35.0	3	↕	—
15	06	"	"	"	"	10	68	753	-39.5	2	↕	—
	09	39	70 20	43 37	2021	9	68	751	-42.0	0	↕	> 1

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
June 15	12	Z 52	70° 24'	43° 43'	2020	10	68°	749	-42.0	1	↕	> 2
	15	62	70 26	43 47	2042	9	68	746	-42.0	2	↕	> 0.5
16	06	73	70 29	43 53	2068	7	68	740	-44.0	3	⊙	—
	12	83	70 33	44 01	2095	7	68	741	-46.5	2	↕	0.6
	15	89	70 36	44 06	2107	8	68	740	-46.0	3	↕	< 0.1
	18	90	70 36	44 06	2111	13	68	739	-45.7	2	↕	0.3
	21	"	"	"	"	14	68	739	-46.2	2	↕	0.3
	17	18	"	"	"	"	18	68	736	-44.5	3	↕
21		"	"	"	"	15	68	736	-44.4	3	↕	—
18	09	"	"	"	"	14	68	734	-44.2	3	↕	—
	15	"	"	"	"	15	68	734	-44.5	4	↕	0.1
	18	"	"	"	"	15	68	734	-45.0	6	↕	—
	21	"	"	"	"	15	68	734	-44.5	—	↕	0.1
19	00	"	"	"	"	18	68	733	-44.1	—	↕	0.1
	18	"	"	"	"	15	68	735	-33.4	—	↕	—
20	00	"	"	"	"	14	68	739	-36.0	—	↕	—
	03	"	"	"	"	13	68	739	-37.8	—	↕	—
	15	"	"	"	"	12	68	740	-35.2	—	↕	—
	18	"	"	"	"	12	90	741	-35.0	—	↕	—
21	21	"	"	"	"	10	90	741	-36.5	—	↕	—
	00	"	"	"	"	12	90	741	-36.1	—	↕	—
	06	"	"	"	"	13	90	741	-39.2	—	↕	—
	09	"	"	"	"	13	90	740	-40.9	—	↕	0.1
	12	"	"	"	"	15	90	740	-42.4	2	↕	0.2
	15	"	"	"	"	14	90	740	-44.4	1	↕	0.2
22	00	"	"	"	"	15	90	740	-46.5	—	↕	—
	02	"	"	"	"	16	90	740	-47.5	—	↕	—
	08	"	"	"	"	12	90	741	-48.5	—	↕	—
	09	"	"	"	"	14	90	741	-49.0	1	↕	0.5
	12	"	"	"	"	13	90	741	-49.2	0	↕	0.6
	16	"	"	"	"	14	90	742	-50.0	—	↕	—

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
June 22	18	Z 90	70° 36'	44° 06'	2111	13	90°	742	-50.0	—	↕	—
23	00	"	"	"	"	13	90	741	-50.6	—	↕	—
	02	"	"	"	"	14	90	741	-51.0	—	↕	—
	06	"	"	"	"	15	90	—	-50.5	—	↕	—
	12	"	"	"	"	14	90	740	-51.2	—	↕	0.2
	15	"	"	"	"	14	90	740	-52.5	—	↕	—
	21	"	"	"	"	14	90	738	-53.0	—	↕	—
24	00	"	"	"	"	14	90	737	-52.0	—	↕	—
	03	"	"	"	"	15	90	737	-52.0	—	↕	—
	12	"	"	"	"	12	90	736	-50.0	1	↕	1
	15	"	"	"	"	10	90	739	-52.0	1	↕	—
	18	"	"	"	"	10	90	740	-51.0	—	↕	—
	21	"	"	"	"	10	90	742	-51.2	—	↕	—
25	00	"	"	"	"	11	90	742	-51.7	—	↕	—
	03	"	"	"	"	11	90	745	-50.2	—	↕	—
	12	"	"	"	"	12	90	747	-47.8	1	↕	0.3
	15	"	"	"	"	12	90	747	-49.2	—	↕	—
	20	"	"	"	"	13	90	747	-48.7	—	↕	—
	21	"	"	"	"	14	90	746	-47.3	—	↕	—
26	00	"	"	"	"	15	90	745	-46.7	—	↕	—
	03	"	"	"	"	16	90	743	-46.0	—	↕	—
	09	"	"	"	"	17	90	739	-43.5	—	↕	—
	14	"	"	"	"	19	90	738	-43.6	—	↕	—
	15	"	"	"	"	19	90	737	-43.5	—	↕	—
	18	"	"	"	"	19	90	735	-43.1	—	↕	—
27	00	"	"	"	"	18	90	734	-38.2	—	↕	—
	03	"	"	"	"	18	90	735	-34.4	—	↕	—
	14	"	"	"	"	16	90	740	-28.9	—	↕	0.2
	15	"	"	"	"	17	90	740	-28.4	—	↕	—
28	21	"	"	"	"	15	90	745	-29.3	—	↕	—
	00	"	"	"	"	13	90	747	-29.2	—	↕	—

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
June 28	06	Z 90	70° 36'	44° 06'	2111	13	90°	749	-30.7	—	↕	—
	09	"	"	"	"	14	90	751	-31.5	—	↕	1
	15	103	70 42	44 16	2156	13	90	749	-35.0	—	↕	1
	18	Mizuho Camp	70 42	44 17	2169	15	90	746	-36.5	—	↕	—
	21	"	"	"	"	15	90	745	-37.9	—	↕	—
29	00	"	"	"	"	14	90	742	-37.5	—	↕	—
	09	"	"	"	"	14	90	740	-36.0	—	↕	—
	15	"	"	"	"	15	90	740	-38.5	—	↕	0.8
30	21	"	"	"	"	14	90	739	-39.5	—	↕	—
	00	"	"	"	"	14	90	740	-41.7	—	↕	—
	09	"	"	"	"	15	90	738	-42.6	—	↕	—
	15	"	"	"	"	16	90	736	-44.5	—	↕	—
	21	"	"	"	"	20	90	734	-45.0	—	↕	—
July 1	00	"	"	"	"	17	90	735	-45.5	—	↕	—
	02	"	"	"	"	15	90	—	-42.0	—	↕	—
	15	"	"	"	"	15	90	735	-41.5	—	↕	—
	18	"	"	"	"	17	90	735	-40.7	—	↕	—
	21	"	"	"	"	17	90	735	-40.7	—	↕	—
2	00	"	"	"	"	17	90	735	-40.0	—	↕	—
	03	"	"	"	"	16	90	735	-40.0	—	↕	—
	11	"	"	"	"	12	90	738	-39.5	—	↕	—
	15	"	"	"	"	11	90	742	-40.2	—	↕	—
	18	"	"	"	"	13	90	744	-41.0	—	↕	—
3	21	"	"	"	"	12	90	746	-41.2	—	↕	—
	00	"	"	"	"	13	90	747	-39.8	—	↕	—
	09	"	"	"	"	13	68	750	-29.1	—	↕	—
	15	"	"	"	"	—	68	754	-26.7	—	↕	—
	23	"	"	"	"	11	68	756	-33.6	—	↕	—
4	00	"	"	"	"	11	68	757	-34.5	—	↕	—
	09	"	"	"	"	10	68	757	-40.0	—	↕	—
	12	"	"	"	"	10	68	756	-40.1	2	↕	1



Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
July 4	18	Mizuho Camp	70° 42'	44° 17'	2169	13	113°	—	-39.5	—	↑	—
	21	"	"	"	"	12	113	753	-39.5	—	↑	—
5	00	"	"	"	"	14	113	751	-39.1	—	↑	—
	02	"	"	"	"	15	—	750	-38.7	—	—	—
	09	"	"	"	"	12	113	745	-37.5	—	↑	—
	15	"	"	"	"	16	90	742	-38.9	—	↑	—
	18	"	"	"	"	19	113	739	-39.5	—	↑	0.1
	21	"	"	"	"	20	90	737	-39.7	—	↑	—
6	02	"	"	"	"	17	90	738	-40.2	—	↑	—
	12	"	"	"	"	16	90	739	-39.4	—	↑	0.1
	15	"	"	"	"	12	90	741	-40.6	—	↑	0.1
	18	"	"	"	"	13	90	741	-42.0	—	↑	—
7	00	"	"	"	"	15	90	740	-40.5	—	↑	—
	03	"	"	"	"	16	90	739	-39.5	—	↑	—
	09	"	"	"	"	14	90	736	-35.0	—	↑	—
	12	"	"	"	"	15	90	736	-35.0	—	↑	0.3
8	21	"	"	"	"	14	90	734	-38.2	—	↑	—
	11	"	"	"	"	12	90	734	-40.7	—	↑	—
	12	"	"	"	"	13	90	735	-41.0	0	↑	1.0
	15	"	"	"	"	11	90	735	-38.5	—	↑	—
	18	"	"	"	"	12	90	736	-37.5	—	↑	—
	21	"	"	"	"	11	90	737	-40.5	—	↑	—
9	03	"	"	"	"	12	90	738	-40.5	—	↑	—
	15	"	"	"	"	13	90	736	-43.5	—	↑	—
	22	"	"	"	"	12	90	736	-45.6	—	↑	—
10	00	"	"	"	"	13	90	736	-45.8	—	↑	—
	09	"	"	"	"	13	90	734	-48.6	—	↑	—
	12	"	"	"	"	12	90	735	-48.7	0	↑	0.7
	16	"	"	"	"	13	90	735	-49.0	—	↑	—
	20	"	"	"	"	12	90	733	-49.5	—	↓	—
	21	"	"	"	"	12	90	733	-49.5	—	↓	—

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
July 11	09	Mizuho Camp	70° 42'	44° 17'	2169	14	90°	730	-48.3	—	↑	—
	12	"	"	"	"	14	90	730	-44.1	—	↑	—
	21	"	"	"	"	12	113	729	-35.2	—	↑	—
12	06	"	"	"	"	10	113	732	-31.6	—	↓	—
	10	"	"	"	"	5	90	736	-34.7	10	☉	>70
	12	"	"	"	"	8	90	737	-35.6	10	☉	—
13	08	"	"	"	"	12	90	730	-38.9	—	↑	—
	12	"	"	"	"	12	90	731	-40.5	—	↑	0.2
	15	Z 98	70 40	44 13	2138	11	90	734	-41.2	—	↑	—
14	00	85	70 34	44 03	2094	12	90	739	-41.7	—	↑	—
	07	"	"	"	"	12	90	740	-42.0	—	—	—
	09	Z 84-1	70 34	44 02	2094	11	90	740	-42.7	—	↑	—
15	12	75	70 30	43 54	2074	11	90	742	-43.8	0	↑	0.3
	15	70	70 28	43 50	2059	10	90	744	-44.2	0	↑	0.2
	18	49	70 23	43 42	2022	12	90	748	-44.2	—	↑	—
	00	40	70 20	43 37	2020	12	90	748	-44.2	—	↑	—
	09	"	"	"	"	11	90	747	-46.0	0	↑	0.3
	12	"	"	"	"	—	—	—	-46.5	—	—	—
16	15	"	"	"	"	11	90	747	-47.5	—	↑	—
	21	"	"	"	"	9	90	747	-48.0	—	↓	—
	00	"	"	"	"	10	90	749	-48.0	—	↓	—
	06	"	"	"	"	8	90	748	-49.0	—	↓	—
	09	"	"	"	"	8	90	749	-49.0	0	↓	—
	12	"	"	"	"	8	90	749	-49.5	0	↓	1
17	15	"	"	"	"	8	90	749	-49.7	—	↓	—
	18	"	"	"	"	6	—	747	-49.4	—	—	—
	21	"	"	"	"	7	—	745	—	—	—	—
	00	"	"	"	"	9	90	745	-51.0	—	↓	—
	09	"	"	"	"	10	90	744	-53.0	—	—	—
	12	"	"	"	"	12	90	745	-53.0	0	↓	—
	18	"	"	"	"	12	90	747	-52.0	—	↑	—

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
July 17	21	Z 40	70° 20'	43° 37'	2020	11	—	747	-52.0	—	↓	—
18	00	"	"	"	"	10	—	748	-52.0	—	↓	—
	06	"	"	"	"	—	—	—	-49.0	—	—	—
	09	"	"	"	"	10	—	—	-46.0	—	↓	—
	12	"	"	"	"	7	90°	752	-37.5	10	↔	—
	15	34	70 17	43 32	2010	8	90	755	-32.4	7	↓	—
	18	22	70 12	43 23	1952	12	90	760	-29.8	—	↑	—
	21	13	70 07	43 17	1919	12	90	764	-30.5	—	↑	—
19	00	3	70 03	43 09	1876	10	90	767	-29.5	—	↑	—
	15	S 122	70 01	43 07	1853	11	113	768	-30.7	—	↓	0.8
	18	H 282	69 56	42 54	1806	11	90	771	-33.8	—	↑	0.7
	21	276	69 55	42 51	1783	12	90	778	-33.3	—	↑	0.2
20	00	266	69 53	42 46	1748	11	90	783	-33.6	—	↑	—
	09	260	69 52	42 43	1735	13	90	784	-35.0	—	↑	0.1
	12	247	69 49	42 36	1697	8	90	789	-36.2	—	↓	0.1
	15	225	69 44	42 25	1628	8	90	796	-35.8	—	↓	0.3
	18	200	69 39	42 12	1560	9	90	805	-35.2	—	↓	—
	21	180	69 35	42 02	1519	10	90	809	-35.8	—	↑	—
21	09	"	"	"	"	12	90	808	-35.2	—	↑	—
	12	159	69 29	41 46	1421	11	90	815	-35.9	1	↑	0.5
	15	138	69 26	41 41	1375	13	90	823	-36.4	0	↑	0.2
	18	114	69 22	41 29	1323	11	90	831	-35.8	—	↑	—
	23	100	69 19	41 22	1285	14	90	—	-36.3	—	↑	—
22	09	98	69 18	41 21	1260	12	90	837	-35.0	—	↑	—
	12	79	69 16	41 16	1200	12	90	845	-34.7	1	↑	0.7
	15	68	69 14	41 10	1162	13	90	851	-34.8	1	↑	0.2
	18	48	69 09	40 58	1111	10	113	858	-34.0	—	↑	—
23	00	35	69 07	40 54	1070	12	113	863	-33.6	—	↑	—
	09	"	"	"	"	10	113	866	-34.5	0	↑	—
	12	S 30	69 03	40 40	981	10	113	880	-33.9	—	↓	—
	15	26-2	69 02	40 29	870	12	90	891	-33.1	0	↑	—

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
July 23	23	S 16	69° 02'	40° 03'	553	15	—	834	-28.7	—	—	—
24	15	"	"	"	"	22	90°	917	-23.4	—	↑	—
	21	"	"	"	"	20	68	910	-23.7	—	↑	—
25	00	"	"	"	"	22	68	907	-19.2	—	↑	—
	21	"	"	"	"	23	68	915	-17.0	—	↑	—
26	08	"	"	"	"	18	—	922	-20.4	—	↑	—
	09	"	"	"	"	17	90	922	-20.7	1	↑	—
	12	"	"	"	"	16	90	923	-21.2	1	↑	—
	15	"	"	"	"	16	90	961	-18.8	1	↓	—
	18	Tottuki Point	69 17	39 50	0	19	90	982	-17.0	2	↓	—

Table 3. Surface meteorological data from Syowa Station to Mizuho Camp (September 23-27, 1971).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
Sep. 23	06	S 25	69° 02'	40° 27'	844	8	90°	895	-37.7	0	○ ↓	> 70
	09	H 0	69 03	40 40	961	10	113	—	-34.5	0	○ ↓	> 70
	12	17	69 05	40 48	1014	13	113	879	-29.4	0	○ ↑	< 0.1
	15	56	69 10	41 00	1120	15	113	869	-28.6	0	○ ↑	< 0.1
	21	63	69 11	41 03	1138	13	90	869	-27.3		⊕ ↑	
24	09	75	69 14	41 09	1187	10	90	869	-23.9	10	⊙ ↓	0.9
	12	100	69 19	41 22	1285	8	90	861	-23.0	10	⊙ ↓	0.7
	15	132	69 25	41 38	1365	8	90	853	-23.4	10	⊙ ↓	> 70
	18	174	69 34	41 59	1503	8	90	839	-27.5	5	⊕	> 70
	21	180	69 35	42 02	1519	9	68	839	-28.2	4	⊕	
25	09	"	"	"	"	8	68	840	-26.1	0	○	> 70
	12	212	69 42	42 19	1595	14	135	833	-23.0	0	○	> 70
	15	235	69 46	42 30	1658	18	68	826	-23.5	0	○	> 70
	18	273	69 43	42 24	1769	19	90	815	-27.5	0	○ ↓	0.1
	21	280	69 56	42 53	1792	15	68	810	-28.5	2	⊕	

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temperature (°C)	Cloud	Weather	Visibility (km)
Sep. 26	06	280	69° 56'	42° 53'	1792	19	68°	805	-27.2	1	○ ↕	0.8
	09	S 122	70 01	43 07	1853	17	90	793	-26.4	0	○ ↕	0.5
	12	Z 11	70 06	43 15	1916	18	90	786	-24.6	1	↑	0.3
	15	25	70 13	43 26	1971	15	90	782	-24.8	0	↕	> 70
	18	39	70 20	43 37	2021	13	90	775	-29.3	0	○	> 70
27	21	Z 40	70 20	43 37	2020	13	90	773	-31.5	0	○	
	06	"	"	"	"	16	90	771	-31.3	0	↕	0.6
	09	"	"	"	"	15	90	774	-30.0	0	↕	0.7
	12	71	70 28	43 51	2061	16	90	770	-28.0	0	↑	0.2
	15	84	70 34	44 02	2094	12	90	767	-27.0	0	↕	1.0
	18	99	70 40	44 13	2137	12	90	762	-30.7	1	↑	0.3

Table 4. Surface meteorological data between Syowa Station and Mizuho Camp (January 14-23, 1972).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Temperature (°C)	Cloud	Weather	Visibility (km)
Jan. 14	0900	S 16	69° 02'	40° 03'	553	—	—	—	2	⊙	5
15		S30→S191	—	—	—	—	—	—	2	⊙	5
16		S191→Z 3	—	—	—	—	—	—	10	⊙ *	0.5
17		Z 3→Mizuho	—	—	—	—	—	—	3	⊙ ↕	1
18		Mizuho	70° 42'	44° 18'	2169	—	—	—	—	⊙ ↕	—
19		"	"	"	"	—	—	—	—	⊙ ↕	—
20		"	"	"	"	—	—	—	3	⊙ ↕	1
21		Mizuho→Z 40	—	—	—	—	—	—	1	⊙ ↕ ⊙	0.5
22		Z40→H137	—	—	—	—	—	—	1	⊙ ↕ ⊙	0.5
23		H137→S16	—	—	—	—	—	—	3	⊙	5

Table 5. Surface meteorological data between Syowa Station and Mizuho Camp  
(April 17 - May 15, 1972).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Pressure (mb)	Temper- ature (°C)	Cloud	Weather	Visibility (km)
Apr. 17	0900	S 16	69° 02'	40° 03'	553	9.5	135°	—	-16.0	—	—	—
19	0900	S 16	"	"	"	18.0	158	—	-12.5	3	↕	0.2
20	0900	S 26	69 02	40 29	870	19.0	135	881	-11.5	7	↕	0.2
	1500	H 26	69 06	40 51	1047	15.0	158	866	-18.3	6	↕	1
21	0900	H 37	69 08	40 54	1078	10.0	180	860	-25.0	0	↕	10
	1500	H 107	69 20	41 25	1307	10.0	180	835	-25.0	0	↕	10
22	0900	H 128	69 25	41 36	1359	9.0	180	826	-27.0	0	↕	10
	1500	H 195	69 38	42 10	1539	10.0	158	807	-28.5	3	↕	10
23	0900	H 219	69 43	42 22	1609	9.0	180	801	-29.2	3	↕	10
	1500	H 262	69 52	42 44	1738	10.5	135	790	-29.5	3	↕	1
24	0900	H 282	69 56	42 54	1803	—	—	785	-32.0	0	↕	0.5
	1500	S 122	70 01	43 07	1853	10.5	158	778	-32.0	0	↕	1
25	0900	Z 2	70 02	43 08	1866	10.5	158	779	-30.5	8	↕	0.5
	1500	Z 35	70 18	43 34	2012	11.5	135	762	-29.8	8	↕	1
26	0900	Z 47	70 22	43 41	2025	8.5	135	768	-36.5	0	↕	1
	1500	Z 88	70 35	44 05	2103	11.0	135	765	-35.5	4	↕	0.5
27	0900	Z 90	70 36	44 06	2111	10.0	135	765	-31.5	9	↕	0.5
May. 7	1500	Z 83	70 33	44 01	2095	6.0	135	751	-25.5	10	☉	1
8	0900	Z 73	70 29	43 53	2078	10.0	135	750	-34.5	0	↕	0.3
	1500	Z 23	70 12	43 24	1958	10.0	135	765	-33.5	1	↕	1
9	0900	Z 16	70 09	43 19	1927	13.0	135	768	-35.5	0	↕	0.3
10	0900	Z 16	"	"	"	6.0	135	—	-40.0	0	↕	1
11	0900	Z 16	"	"	"	13.0	135	—	-41.0	0	↕	—
12	0900	Z 16	"	"	"	—	—	—	-41.0	0	↕	—
13	0900	Z 16	"	"	"	—	—	—	-40.0	0	↕	—
14	0900	H 280	69 56	42 53	1797	—	—	—	-42.0	0	○	—
15	0900	H 100	69 19	41 22	1280	—	—	—	-29.0	0	↕	—

Table 6. Surface meteorological data between Syowa Station and Mizuho Camp  
(August 24 - September 11, 1972).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Temper- ature (°C)	Cloud	Weather	Visibility (km)
Aug. 24	1500	S 20	69° 02'	40° 12'	653	9.5	90°	-16.5	7Ac	↗	0.2
25	0900	H 30	69 07	40 52	1050	3.0	90	-30.5	2Ac, Ci	○	50
	1500	H 120	69 23	41 32	1340	3.0	90	-27.5	9Ci, Cs	☉	50
26	0900	H 173	69 34	41 59	1502	3.0	90	-34.8	8Ac	☉	50
	1500	H 255	69 51	42 10	1720	2.0	113	-33.7	8St, Ac, Cs	*	30
27	1020	S 122	70 01	43 06	1853	6.0	113	-42.0	—	↘	2
28	0900	Z 35	70 17	43 33	2012	9.0	113	-43.5	10Ci, Cs	↗	0.2
	1500	Z 80	70 32	43 58	2091	10.0	113	-42.9	3Ac, Ci	↗	0.3
29	1100	Mizuho	70 41	44 18	2169	9.0	113	-44.0	—	↗	0.2
Sep. 5	1500	Z 70	70 28	43 50	2059	11.5	113	-34.5	6Ci, Cs	↘	0.3
6	0900	Z 35	70 17	43 33	2012	11.5	113	-36.0	9As, Ac	↘	0.3
	1500	Z 16	70 09	43 19	1927	8.0	90	-35.2	8Ci, Cs	☉	5
7	1415	Z 16	"	"	"	8.5	90	-31.5	8As, Ci, Cs	☉	1
8	0900	S 122	70 01	43 06	1853	9.0	90	-24.5	10Cs	↘	50
9	0900	H 285	69 57	42 56	1816	12.0	90	-26.5	10As	↗	0.1
	1500	H 213	69 42	42 19	1600	2.5	90	-26.0	10As	*	3
10	0900	H 140	69 27	41 42	1385	10.5	90	-28.8	10Ci, Cs	↗	0.2
	1800	S 16	69 02	40 03	553	13.0	68	-23.5	—	↗	0.03
11	0900	S 16	"	"	"	19.0	68	-18.5	—	* ↗	0.01

Table 7. Surface meteorological data between Syowa Station and Mizuho Camp  
(October 23 - November 7, 1972).

Date	Time (LT)	Station number	Latitude (°S)	Longitude (°E)	Altitude (m)	Wind speed (m/s)	Wind direction	Temper- ature (°C)	Cloud	Weather	Visibility (km)
Oct. 23	0900	Tottuki Point	69° 17'	39° 50'	0	12.0	—	-12.5	10	☉ ↕	0.2
24	0900	S 17	69 02	40 04	583	11.0	—	- 7.5	10	*	0.2
25	0900	S 25	69 02	40 27	844	12.0	—	- 8.0	10	☉	0.3/2
26	0900	H 150	69 29	41 47	1427	4.0	—	-14.5	10	☉	0.3
27	0900	Z 10	70 06	43 14	1911	9.0	—	-21.0	0	○ ↕	2
28	0900	Z 85	70 34	44 03	2094	11.0	—	-29.0	0	○ ↕	0.1
Nov. 4	0900	Z 80	70 32	43 58	2091	8.0	—	-20.0	2	⊕ ↕	1
5	0900	S 122	70 01	43 07	1853	11.0	—	-16.0	5	⊕	2
6	0900	H 175	69 34	42 00	1506	15.0	—	-19.0	10	↕	0.05
7	0900	H 70	69 12	41 06	1165	12.0	—	-13.0	5	⊕	2