### CLIMATOLOGICAL SUMMARY FOR 1973

By D. W. S. LIMBERT

The annual mean sea-level pressure at each station was approximately 2 mbar below the average for the previous 10 years, 1963–72, except at Signy Island where the mean annual pressure was only 1·2 mbar lower than usual. The greater part of the pressure deficit at all stations was a result of the large negative pressure anomalies that occurred in April. The April anomalies from the 1963–72 average were:

South Georgia —6 mbar (lowest since 1964).

Signy Island —9 mbar (lowest since records began in 1947).

Argentine Islands —11 mbar (lowest since continuous records began in 1947).\*

Adelaide Island —11 mbar (lowest since 1962, probably since 1947 in lat. 68° S.).

Halley Bay -6 mbar (lowest since 1966).

All the extreme minimum pressures for the year occurred within a 7 week period in autumn:

South Georgia
Signy Island
Argentine Islands
Adelaide Island
Halley Bay

959 · 6 mbar (3 May)
941 · 1 mbar (11 April)
940 · 9 mbar (5 April)
941 · 4 mbar (5 April)
946 · 7 mbar (15 March)

The one at Halley Bay was the second lowest annual pressure on record for that station and the one for Signy Island was the lowest so far.† The individual extreme high pressures

were not exceptional.

The cyclonic activity of March and April had little discernible effect on monthly mean temperatures. The two Antarctic Peninsula stations, Argentine Islands and Adelaide Island, recorded annual temperatures below the 1971 and 1972 peak years, but they were still about a degree warmer than the 1947–72 average, whilst the Signy Island temperature was the same as in 1972. The Antarctic Peninsula stations had mild Augusts but, for the second year in succession, Signy Island recorded a cold June, 5° C below average. At Halley Bay, the three winter months were persistently cold with an average temperature of  $-32.8^{\circ}$  C but, because of a warm January and the warmest November on record, the resultant annual temperature was similar to that for 1972 and only a half degree colder than average. Temperatures at South Georgia were about average.

The winter wind speed at South Georgia was below average and a large number of calms was reported. Wind speeds were also low in spring. At Signy Island, the cyclonic activity of March and April produced a 30 per cent increase of westerly winds with gales on 13 and 12 days, respectively. There was a corresponding reduction in southerly and easterly winds. For the same 2 months the Antarctic Peninsula stations recorded higher than usual wind peeds. In summer and autumn there were twice the usual number of northerlies at the Argentine Islands and a corresponding reduction in the number of calms. In contrast, at Adelaide Island there was double the number of westerlies in summer at the expense of the northerly winds. In winter, however, there was a high frequency of northerlies at Adelaide and a corresponding reduction in westerlies.‡ The mean wind speed for the 4 months July-October was 17·5 kt with an average of 12 gale days/month. At Halley Bay, persistent moderate to strong east winds produced the highest mean wind speed for November (17·0 kt).

The effect of the passage of depressions in March and April is seen in the general cloudiness for those months. Adelaide Island suffered 29 cloudy days in April with only 10 per cent

<sup>\*</sup> Lower mean pressures have been recorded in other months. The lowest recorded mean was 973.9 mbar in March 1935 (British Graham Land Expedition) when pressures were also very low at Laurie Island.

<sup>†</sup> The lowest pressures recorded at each station are as follows: South Georgia 932·0 mbar (25 February 1966), Signy Island 941·1 mbar (11 April 1973), Argentine Islands 931·6 mbar (28 September 1959), Adelaide Island 936·8 mbar (16 September 1962), Halley Bay 940·4 mbar (14 October 1961).

<sup>‡</sup> Because of the topography, the dominant wind direction at Adelaide Island is north or north-east.

of possible sunshine, and Signy Island had its lowest March sunshine (only 5 per cent of possible). However, there were redeeming features at other times. South Georgia had its sunniest September (58 per cent of possible), Signy Island its sunniest February (with only 23 per cent of possible), and the Argentine Islands and Adelaide Island the sunniest Januarys with 46 and 37 per cent sunshine, respectively. South Georgia experienced the second wettest May (347 mm.) since 1906\* of which 90.5 mm. fell on 27 May.

### STATION NOTES FOR 1973

### South Georgia

- Shading cuts out about 1½ hr. of possible sunshine each day in the months October– March but this rapidly increases at the equinoxes to almost total shading in June.
- 2. The maximum snow depth was recorded on 11 July.
- 3. There was one occasion with wind speed missing in summer.

### Signy Island

- 1. One full synoptic observation is made at 09.00 hr. zone time (12.00 GMT). Data in parentheses in the following tables, total cloud amount, humidity and the frequency of weather types are based on these single daily observations.
- The loss of sunshine due to shading varies from about 2½ hr./day in summer to about 1½ hr. in winter.
- 3. There were three occasions with wind speed missing in summer, three in winter and one in spring.
- 4. Mixed snow accumulation and rainfall is given as water equivalent as calculated at the station. The reliability of these data is not known. The snow-accumulation stakes were on Orwell Glacier, 150 ft [45 m.] above M.S.L. Measurements did not start until 10 May and maximum depth occurred on 25 September. NR signifies "not reported".

### Argentine Islands

- 1. The loss of sunshine due to shading varies from about 2 hr./day in summer to  $\frac{1}{2}$  hr. in winter.
- 2. Datum for net snow depth is 7 April. No records were kept before that date. Maximum depth was measured on 8 and 9 November.

### Adelaide Island

- There was almost complete shading in June and negligible shading in December. The remainder of the year averages about 1½ hr. shading/day.
- Rainfall or snow water-equivalent data are not available. Maximum snow depth was recorded on 11 September.

### Halley Bay

- 1. Reference point for all net snow-depth measurements is 1 January. An estimate of the gross water equivalent of precipitation is based on daily measurements of snow depth and density. The maximum snow depth occurred on 8 December.
- 2. The exposure of the sunshine recorder is excellent. Any losses are inherent to the type of instrument in use.

### MS. received 3 February 1976

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### Climatological Summary for 1973 South Georgia (88903) lat. $54^{\circ}16'S$ ., long. $36^{\circ}30'W$ . Zone Time = GMT -2 hr. Station Level 4 m. a.s.l. Anemometer at 10 m.

	M.S.L. F	RESSURE	(mbar)		AIR TE	MPERAT	URE (°C)			WIND	SPE	ED			ANALY:	SIS OF W	IND RE	PORT	ED AT 1	THE EIG	GHT SY	NOPTI	CHOURS
MONTH	Daily	Extre	emes	Daily	Mean	daily	Extr	emes	Mean	Н		Recon	d		ber of		Seas	onal fre	equency	of wind	direction	on and s	speed 3
	mean	Highest	Lowest	mean	Max.	Min.	Max.	Min.	speed kt	Me deg.	-	Gu: deg./		≥34 kt	Calm	Speed kt	North	East	South	West	Vari- able	Total	Season
December o	f the previo	us year							6.9	250	37	240	71	1	39	1-10 11-21	126 52	186 11	22 1	56 101	31	421 165	Summer
January	988.4	1008.3	961.6	4.3	8.2	1.7	14.6	-1.6	7.9	320	25	320	59	0	35	22-33 ≥ 34	3			11		14	Dec., Jan., Fe
February	992.4	1019.8	960.0	3.8	7.7	1.2	16.1	-1.2	6.0	280	22	320	45	0	45	Total	181	197	23	168	31	600	
March	1000.1	1021.6	975.5	6.6	10.6	3.0	18.7	-0.2	11.0	250	32	260	63	0	29	1-10	74	48	9	57	40	228	
April	989.5	1013.4	966.8	2.7	6.3	-0.1	13.2	-4.5	8.1	230	28	270)	60	0	55	11-21 22-33	145	10	1	150 31		307 42	Autumn
May	990.8	1013.0	959.6	0.6	3.9	-2.7	13.3	-7.8	8.2	-	34	-	59	0	75	≥34						577	Mar., Apr., Ma
June	994.7	1016.9	966.7	-1.7	1.6	-4.2	12.1	-8.2	5.9	130	32	240	65	0	90	Total	229	58	12	238	40	7.00	
July	1004.4	1026.7	961.4	-1.9	2.1	-4.7	10.0	-9.8	6.1	290	37	270	82	1	86	1-10	65 112	24 11	12	72 88	75	248 216	
August	993.1	1018.9	965.5	0.5	3.7	-2.4	8,2	-8.2	7.5	260	26	260	53	0	72	22-33	2	1	3	17		23	Winter Jun., Jul., Au
September	998.2	1019.5	966.7	0.8	4.6	-2.7	13.9	-8.6	8.1	320	27	240) 330)	47	0	32	≥ 34 Total	179	1 37	20	177	75	488	3011, 301., A0
October	1003.0	1018.7	965.9	2.3	6.2	-0.5	11.5	-6.8	5.8	280	25	350	55	0	77								
November	993.0	1014.2	961.1	3.2	7.0	-0.4	15.2	-3.5	6.9	110	28	350	51	0	41	1-10	114	72 16	5	65 75	103	359 203	Spring
December	990.5	1012.3	964.1	4.8	9.3	1.7	17.6	-1.2	8.8	280	25	270	65	0	40	22-33	4	2	- 1	10		16	Sep., Oct., No
YEAR	994.9	1026.7	959.6	2.2	5.9	-0.8	18.7	-9.8	7.5	290	37	270	82	1	677	≥34 Total	227	90	8	150	103	578	

	ним	IDITY	TOTAL	CLOUD A	MOUNT	SUNS	SHINE 1	PRECIP	ITATION <sup>2</sup>				WEATH	ER-NU	MBER O	F DAYS	WITH:			
MONTH			Mean	Perce	entage		Per cent	Net	Rainfall	F	Precipitat	ion forms	S.'	Drift	Blowing	True	Visi-			
MONTH	Vapour pressure	Relative humidity	tota/		vations	Total	of max.	snow	or snow	Rain	Snow	Hail	Prisms,	snow	snow	water	bility	Gale	Cloudy	
	(mbar)	(%)	amount Oktas	0 – 2 Oktas	6 – 8 Oktas	hours	possible record	depth (cm.)	equiva- lent (mm.)	or drizzle	or sleet	>5 mm. diam.	grains, etc.	(level <1.8 m)	(level >1.8 m.)	or ice fog	below 1,000 m.		skies	skies
January	5.9	72	6.1	6.4	68.1	153.7	32.9	0	86	18	16		6				2		17	
February	6.0	75	5.9	14.3	66.5	116.6	31.3	0	75	17	16		11				3		16	1
March	6.3	66	5.6	15.3	60.5	135.2	41.2	0	89	27	7	- 9	3					1	9	
April	5.8	78	6.4	10.8	73.7	44.1	23.0	0	203	16	19		3				3		21	
May	5.0	80	6,2	10.9	71.0	22.7	21.8	18	347 ·	13	23		1	8	3	1	9	1	20	
June	4.4	81	5.5	20.8	59.2	-	-	40	121	8	21		1	8	2	2	3	2	18	3
July	4.1	77	4.5	32.3	44.4	22.6	50.2	12	42	3	13			9	4	2	3	3	10	4
August	5.0	80	5.7	18.5	63.3	55.7	33.2	10	297	15	20			7	5	3	5		17	1
September	4.5	70	4.7	31.3	47.9	156.1	56.2	0	44	9	15			2	1	1	1		9	2
October	5.5	77	6.2	12.1	71.8	128.3	33.6	0	116	18	16			2	1	1	4		19	
November	5.2	70	5.0	25.8	49.2	197.5	45.7	0	63	10	10		2						13	3
December	5.7	69	6.2	8.5	70.2	151.0	31.4	0	135	24	12		2	1	1	1	2		19	
YEAR	5.3	75	5.7	17.2	62.2	1183.5	36.4	66MAX	1618	178	188	NIL	29	37	17	11	35	7	188	14

# Climatological Summary for 1973 Signy Island (88925) lat. $60^{\circ}43'$ S., long. $45^{\circ}36'$ W. Zone Time = GMT -3 hr. Station Level 12 m. a.s.l. Anemometer at 10 m.

	M.S.L.	PRESSURE	(mbar)		AIR TE	MPERAT	URE (°C)			WIND	SPE	ED			ANALY	SIS OF W	IND RE	PORT	ED AT	THE EIG	SHT SY	NOPTI	CHOURS
MONTH	Daily	Extre	emes	Daily	Mear	n daily	Ext	remes	Mean	Н		Recor	d		ber of		Seaso	onal fre	quency	of wind	directio	on and s	peed 3
	mean	Highest	Lowest	mean	Max.	Min,	Max.	Min.	kt	Me deg.		Gu deg./		≥34 kt	Calm	Speed kt	North	East	South	West	Vari- able	Total	Season
December of	of the previo	us year		1			1		12.6	270	41	270	72	2	5	1-10	27 24	113	58	109 151	12	319 243	
January	988.7	1003.2	964.6	-0.5	+1.1	-1.7	+5.7	-4.5	9.0	120	32	220	55	0	32	22-33	7	10	4	72	1	94	Summer
February	988.2	1007.7	962.2	+1.0	+3.1	-0.4	+4.6	-3.4	13.0	290	45	290	62	5	17	≥ 34 Total	58	177	71	339	18	663	Dec., Jan., Feb
March	986.5	1008.2	944.4	+0.6	+3.3	-1.1	+10.4	-6.8	20.2	270	42	240	73	26	3		13	39	48	118	12	230	
April	982.2	1009.0	941.1	-3.5	-0.2	-6.2	+5.2	-21.8	15.9	230	47	230	98	15	12	1-10	23	20	16	143	4	206	
May	990.8	1006.6	968.8	-10.5	-6.6	-14.6	+4.8	-29.4	8.8	230	40	230	67	4	60	22-33	15	15	4	146 38		180 Autum	Autumn Mar., Apr., May
June	998.1	1017.4	965.4	-13.0	-7.8	-19.0	+5.3	-29.0	6.5	290	30	330	56	0	76	≥ 34 Total	55	76	69	445	16	661	, , , , , , , , , , , , , , , , , , , ,
July	1002.6	1028.4	976.7	-9.8	-6.4	-14.6	+6.7	-30.4	10.8	260	39	260	51	1	44	1.10	16	40	54	141	24	275	
August	990.8	1011.4	965.0	-8.3	-4.1	-13.0	+3.8	-26.4	11.6	290	40	260	57	11	56	11-21	12	7	13	149	. 1	181	Winter
September	992.9	1026.1	962.3	-7.5	-3.3	-12.9	+6.3	-26.6	12.4	330	39	330	56	4	32	22-33 ≥ 34	- 2	12	1	72	2	89 12	Jun., Jul., Aug.
October	996.6	1015.5	972.7	-1.2	+1.8	-3.7	+4.5	-14.6	14.7	290	39	290	55	3	11	Total	30	64	68	369	26	557	
November	992.5	1013.0	974.6	-1.2	+0.9	-2.9	+4.9	-9.1	10.1	290	43	290	59	4	35	1-10	14	50	42	127	31	264	
December	987.1	1003.5	974.9	+0.5	+2.7	-0.9	+6.5	-4.8	9.1	300	36	280	58	0	31	11-21 22-33	11	19	8	209	4	251	Spring
YEAR	001.5	1000 /	0/1.													≥ 34	8 2	2	1	111	1	123	Sep., Oct., Nov.
TEAR	991.5	1028.4	941.1	-4.5	-1.3	-7.6	+10.4	-30.4	11.8	230	47	230	98	71	404	Total	35	71	51	456	36	649	

	ним	IDITY	TOTAL	CLOUD A	MOUNT <sup>1</sup>	SUNS	SHINE 2	PRECIP	ITATION4				WEATH	IER—NU	JMBER O	F DAYS	S WITH:			
MONTH	Vapour	Relative	Mean		entage		Per cent	Net	Rainfall	1	Precipitat	ion forms	5.	Drift	Blowing	True	Visi-			
	pressure	humidity	tota/		vations	Total	of max.	snow	or snow	Rain	Snow	Hail	Prisms,	snow	snow	water	bility	Gale	Cloudy	Clear
	(mbar)	(%)	amount Oktas	0 – 2 Oktas	6 – 8 Oktas	hours	record (cr	depth (cm.)	lent (mm.)	or drizzle	or sleet	>5 mm. diam.	grains, etc.	(level <1.8 m.)	(level >1.8 m.)	or ice fog	below 1,000 m.	Gare	skies	skies
January	(5.2)	(85)	(7.6)	(0.0)	(96.8)	49.6		NR	117	(2)	(16)					(1)	(2)	1		
February	(5.6)	(83)	(7.2)	(0.0)	(89.3)	82.5	22.7	NR	55	(2)	(9)							3		
March	(5.5)	(85)	(7.8)	(0.0)	(90.3)	16.4	5.0	NR	88	(7)	(6)				(1)		(1)	13		
April	(4.5)	(86)	(7.4)	(0.0)	(96.7)	22.3	9.2	NR	155	(2)	(16)			(1)	(1)		(2)	12		
May	(2.6)	(85)	(6.6)	(0.0)	(71.0)	29.2	16.5	-2	31	(1)	(7)				(2)	(1)	(1)	4		
June	(2.1)	(78)	(6.2)	(3.3)	(66.7)	11.1	9.1	+13	41		(9)					(3)	(6)	0		
July	(2.9)	(84)	(6.9)	(0.0)	(83.9)	18.4	11.9	+21	14	(2)	(5)				(1)	(2)	(4)	2		
August	(3,3)	(86)	(6.5)	(6.5)	(71.0)	41.4	18.6	+37	61	(1)	(10)			(2)	(2)		(1)	8		
September	(3.4)	(84)	(6.4)	(3.3)	(70,0)	70.8	23.1	+43	81		(11)			(1)	(3)			7 -		
October	(5.3)	(91)	(6.6)	(0.0)	(74.2)	69.6	17.6	+39	46	(3)	(11)			(1)				3		
November	(5.0)	(88)	(6.9)	(0.0)	(80.0)	84.4	19.0	+34	38	(1)	(10)					(1)	(1)	4		
December	(5.6)	(89)	(7.5)	(0.0)	(87.1)	58.3	11.4	NR	48	(4)	(12)							2		
YEAR	(4.3)	(85)	(7.0)	(1.1)	(81.4)	554.0	14.8	MAX 45	775	(25)	(122)	(NIL)	(NIL)	(5)	(10)	(8)	(18)	59		

### Climatological Summary for 1973 Argentine Islands (88952) lat. $65^{\circ}15'S.$ , long. $64^{\circ}16'W.$ Zone Time = GMT -4 hr. Station Level 10 m. a.s.l. Anemometer at 10 m.

	M.S.L.	PRESSURE	(mbar)		AIR TE	MPERAT	URE (°C)			WIND SPE	ED		ANALY	SIS OF W	IND RE	PORT	ED AT	THE EIG	GHT SY	NOPTI	CHOURS
MONTH	Daily	Extre	rmes	Daily	Mean	daily	Ext	remes	Mean		Record		ber of		Seas	onal fre	quency	of wind	directio	on and s	peed
	mean	Highest	Lowest	mean	Max.	Min.	Max.	Min.	speed kt	Mean deg./kt	hest Gust deg./kt	≥34 kt	Calm	Speed kt	North	East	South	West	Vari- able	Total	Season
December o	f the previo	ous year							7.7	060 27	060 40	0	42	1-10 11-21	104 108	58 17	185 11	35 8	1	383 144	Summer
January	992.8	1003.1	979.3	0.2	2.4	-1.9	4.1	-4.8	3.9	130 29	140 59	0	83	22-33 ≥ 34	11	5	1			17	Dec., Jan., Feb
February	985.3	1002.3	964.0	1.0	3.0	-0.8	4.7	-3.2	6.6	030 30	030 42	0	51	Total	223	80	197	43	1	544	
March	981.1	1003.9	960.8	-0.6	1.0	-2.1	4.9	-6.2	10.0	050 39	050 55	3	33	1-10	35	72	147	50		354	
April	978.0	1007.5	940.9	-3.3	-0.9	-5.1	4.8	-10.0	11.6	050 39	050 58	1	12	11-21	131 36	17	55	36		239 61 Autumi	Autumn
May	987.3	1011.1	965.4	-4.5	-2.4	-6.5	2.8	-10.4	8.5	140 35	150 59	0	33	22-33 ≥ 34	1	3				4	Mar., Apr., May
June	996.7	1020.6	969.0	-7.4	-5.1	-9.8	3.6	-13.9	7.4	050 30	050 44	0	5.7	Total	253	106	208	91		658	
July	1001.9	1031.5	965.6	-9.1	-5.7	-12.4	4.9	-24.8	6.6	040 32	040 45	0	70	1 10	69 107	64	200	30 10		363 143	
August	983.9	1008.2	960.5	-5.7	-2.4	-9.3	5.0	-23.6	8.8	050 36	040 52	0	48	11-21 22-33	42	12	10	1		55	Winter
September	985.8	1011.8	956.3	-7.3	-4.1	-11.5	2.4	-24.9	8.8	050 36	050 52	1	55	≥ 34	218	84	218	41		561	Jun., Jul., Aug
October	990.0	1006.8	958.6	-3.7	-0.7	-7.3	2.8	-16.4	8.9	020) 31	020 45	0	57	Total	210	0.4	210	41		201	
November	988.4	1017.7	960.5	-1.7	0.9	-4.3	4.4	-7.9	5.3	010 33	030 44	0	74	1-10	85 131	55	157	33		330 153	_
December	984.7	1008.4	968.2	0.1	2.6	-2.3	6.0	-7.9	3.6	010 23	010 31	0	91	22-33	46	10	/	2		58	Spring Sep., Oct., Nov
YEAR	988.0	1031.5	940.9	-3.5	-1.0	-6.1	6.0	-24.9	7.5	050 39	140) 59 150) 59	5	664	≥34 Total	262	1 72	164	44		1 542	

	ним	IDITY	TOTAL	CLOUD A	MOUNT	SUNS	HINE 1	PRECIP	TATION <sup>2</sup>				WEATH	IER—NU	IMBER O	F DAYS	WITH:			
MONTH			Mean	Perce	entage		Per cent	Net	Rainfall	F	Precipitat	ion forms		Drift	Blowing	True	Visi-			
WONTH	Vapour	Relative	total	obser	vations	Total	of max.	snow	or snow	Rain	Snow	Hail	Prisms,	snow	snow	water	bility	Gale	Cloudy	Clear
	(mbar)	(%)	amount Oktas	0 – 2 Oktas	6 – 8 Oktas	hours	possible record	depth (cm.)	equiva- lent (mm.)	or drizzle	or sleet	>5 mm. diam.	grains, etc.	(level <1.8 m)	(level >1.8 m.)	or ice fog	below 1,000 m.	Guie	skies	skies
January	4.6	75	5.4	24.2	61.7	261.4	45.8	NR	18	3	10						1		17	5
February	5.2	79	6.7	9.4	84.8	107.0	25.5	. NR	43	11	18					1	4		24	1
March	5.1	86	7.0	8.5	87.1	43.3	12.4	NR	71	10	27		5	8	3		6	2	26	1
April	4.0	82	7.3	0.8	91.7	19.8	8.0	13	46	8	28		3	20	12		7	1	28	
May	3.5	79	6.6	10.9	80.6	19.4	12.3	8	18	1	25		1	17	4		1	1	23	
June	3.0	82	5.3	27.9	60.0	(12.6)	(15.6)	2.8	8	2	19			10	5	3	4		18	5
July	3.3	90	6.3	15.3	74.6	9.4	7.4	49	32	11	22		.5	13	3	2	4	1	21	1
August	3.7	86	6.5	12.9	77.8	32.4	14.7	5.3	13	3	22		4	19	11	4	14	3	21	2
September	3.4	86	6.6	11.7	79.2	69.5	22.5	7.5	14	5	23		5	16	11	3	16	2	24	2
October	4.3	88	6.9	7.3	88.3	78.4	18.4	87	16	10	23		1	16	11	10	17		26	2
November	4.8	88	7.0	6.7	84.6	118.6	23.3	90	38	8	23		4	10	4	11	18	1	26	
December	5.2	85	6.4	13.3	79.0	174.9	28.9	54	18	8	19		2			7	9		22	2
YEAR	4,2	84	6.5	12.4	79.1	946.7	23.5	MAX101	335	80	259	NIL	30	129	64	41	101	11	276	21

## $\begin{array}{c} \text{Climatological Summary for 1973} \\ \text{Adelaide Island (88958) lat. } 67^{\circ}46'\text{S., long. } 68^{\circ}55'\text{W.} \\ \text{Zone Time} = \text{GMT} - 5 \text{ hr. Station Level 14 m. a.s.l. Anemometer at 10 m. (Effective Height 6·7 m.)} \end{array}$

	M.S.L. I	PRESSURE	(mbar)		AIR TE	MPERATU	JRE (°C)			WIND 9	SPE	ED			ANALY	SIS OF W	IND RE	PORTE	ED AT 1	THE EIG	SHT SY	NOPTI	CHOURS
MONTH	Daily	Extre	mes	Daily	Mean	daily	Ext	remes	Mean			Reco	rd		ber of		Seaso	onal fre	quency	of wind	directio	on and s	speed
	mean	Highest	Lowest	mean	Max.	Min.	Max.	Min.	kt	Mean deg./k		Gu deg.		obser ≥34 kt	Calm	Speed kt	North	East	South	West	Vari- able	Total	Season
December o	f the previo	ous year							9.8	340	36	350	54	2	8	1-10	114	156 83	77 8	128		475	
January February	992.7 983.9	1003.3	980.3 956.5	-0.8 -0.2	1.2	-2.9 -2.4	4.2	-5.5	5.8			090	42	0	11	22-33 ≥ 34	30	7		10		168 47	Summer Dec., Jan., Feb
March	977.2	997.4	956.4	-2.1	0.2	-4.2	6.5 4.8	-6.5 -13.5	9.9			330	71	22	5	Total	186	246	85	179		696	
April	976.2	999.5	941.4	-6.6	-3.6	-9.2	2.8	-19.6	15.9			360	77	20	5	1-10	83 71	100	40 26	37 113	11	271	
May	987.1	1013.7	965.6	-8.4	-5.6	-11.6	3.0	-21.8	11.4	360	55	360	75	6	22	22-33 ≥ 34	46 30	14		35		291 Autum	Autumn Mar., Apr., Ma
June	996.4	1022.1	969.3	-10.1	-7.1	-13.5	1.7	-19.1	11.3	360	40	360	57	8	17	Total	230	198	66	200	11	705	
July	997.6	1024.8	958.9	-8.7	-5.3	-12.3	4.9	-29.5	18.6	005	58	005	79	45	14	1-10	140	94	31	27	13	305	
August	980.0	1001.3	954.6	-6.5	-3.1	-10.1	3.8	-20.6	16.1	360	62	005	83	31	9	11-21 22-33	64 97	80 29	6	26		176 131	Winter
September	982.1	1004.6	955.1	-7.0	-4.5	-9.8	2.7	-18.5	17.1	340	55	340	77	3.5	5	> 34	79	5				84	Jun., Jul., Au
October	985.7	1002.8	960.7	-4.1	-1.4	-6.8	3.7	-17.2	18.0	350	54	355	75	51	19	Total	380	208	37	58	13	696	
November	986.6	1014.0	953.3	-1.4	0.6	-3.9	5.0	-7.5	12.2	360	51	360	76	3	17	1-10	58 61	128 87	51 18	36 36	15	288 202	
December	983.3	1007.5	970.1	0.3	2.4	-1.9	5.5	-6.2	7.9	360	39	360	53	9	21	22-33	67	30	3	8		108	Spring Sep., Oct., No
YEAR	985.8	1024.8	941.4	-4.7	-2.0	-7.4	6.5	-29.5	13.4	360	62	005	83	234	149	≥34 Total	89 275	245	72	80	15	89 687	

	ним	IDITY	TOTAL	CLOUD A	MOUNT	SUNS	HINE1	PRECIP	ITATION <sup>2</sup>				WEATH	IER-NI	JMBER C	F DAYS	S WITH:			
MONTH	Vapour	Relative	Mean		entage vations		Per cent	Net	Rainfall	_	recipitat	ion form	-	Drift	Blowing	True	Visi-			
	pressure (mbar)	humidity (%)	amount Oktas	0 – 2 Oktas	6 – 8 Oktas	Total hours	of max. possible record	depth (cm.)	or snow equiva- lent (mm.)	Rain or drizzle	Snow or sleet	Hail >5 mm. diam.	Prisms, grains, etc.	snow (level <1.8 m.)	snow (level >1.8 m.)	water or ice fog	bility below 1,000 m.	Gale	Cloudy skies	Clear skies
January	4.5	77	5.7	21.4	69.0	256.5	38.5	(13)		1	14		2				1		19	5
February	4.8	79	6.8	7.6	82.1	124.2	27.5	(8)		4	17		3	5	1		4	3	20	
March	4.5	83	6.9	5.2	84.3	61.8	17.4	14		2	25		3	16	4		5	10	26	
April	3.3	82	7.3	3.8	90.4	21.9	9.9	29		4	26		1	26	9		8	10	29	
May	2.6	77	6.2	13.3	75.4	(13.0)	(13.5)	31		1	18		1	22	9		7	5	21	1
June	2.4	80	5.2	25.8	55.4	(0.0)	-	34			15		2	21	8	1	5	3	14	6
July	3.3	84	5.9	14.9	70.6	(0,0)	(0.0)	48		4	22		3	20	15		11	14	23	4
August	3.3	83	6.0	13.7	67.7	41.9	22.9	74		1	19		3	24	13	1	13	11	21	3
September	3.3	86	6.3	12.5	75.4	56.3	19.0	77			21		1	21	12		11	11	22	2
October	4.0	85	6.3	16.5	79.4	147.5	34.5	78		1	22		2	22	12		11	12	23	3
November	4.5	81	6.1	12.9	72.9	201.0	33.8	61		4	11		5	14	10		6	2	21	1
December	4.9	79	6.0	16.1	69.4	260.1	35.1	37		3	18		4	2	2	2	7	4	22	3
YEAR	3.8	81	6.2	13.7	74.3	1184.2	29.1	88MAX		25	228	NIL	30	193	85	4	89	85	261	28

## CLIMATOLOGICAL SUMMARY FOR 1973 HALLEY BAY (89022) lat. 75°31′S., long. $26^{\circ}40^{\circ}W$ . Zone Time = GMT -2 hr. Station Level 31 m. a.s.l. Anemometer at 11 m.

	M.S.L. F	RESSURE	(mbar)		AIR TE	MPERATI	URE (°C)			WIND SPE	EED		ANALY	SIS OF W	IND R	PORT	ED AT 1	THE EIG	SHT SY	NOPTI	CHOURS
MONTH	Daily	Extre	mes	Daily	Mean	daily	Exti	remes	Mean		Record	1	nber of		Seas	onal fre	quency	of wind	direction	on and s	peed
	mean	Highest	Lowest	mean	Max.	Min.	Max.	Min.	speed kt	Mean deg./kt	Gust deg./kt	≥34 kt	Calm	Speed kt	North	East	South	West	Vari- able	Total	Season
December o	f the previo	us year							11.3	080 33	080 41	0	4	1-10 11-21	19 8	207 270	58 22	37 27		321 327	
January	994.9	1008.3	985.9	-3.9	-0.9	-7.5	+2.8	-13.9	12.7	080 34	090 41	0	4	22-33	4	52	5	3		64	Summer Dec., Jan., Feb.
February	990.1	997.7	968.7	-10.4	-6.9	-14.1	-1.4	-28.0	12.6	220 24	220 34	0	0	≥ 34 Total	31	529	85	67		712	
March	981.4	993.7	946.7	-16.6	-12.1	-22.3	-2.7	-35.2	14.0	070 49	070 63	8	6	1-10	18	106	59	50		233	
April	983.5	993.1	961.8	-19.0	-14.0	-25.1	-6.9	-37.2	16.4	080 44	080 56	14	13	11-21	4	257	31	50		342	Autumn
May	993.3	1008.1	966.6	-24.8	-19.1	-31.4	-4.8	-41.0	12.1	080 51	070 63	10	16	22-33 ≥ 34		92 32		2		94	Mar., Apr., May
June	995.9	1019.1	977.3	-31.7	-26.5	-37.0	-15.2	-46.2	10.5	070 26	060 32	0	6	Total	22	487	90	102		701	
July	983.9	1010.2	950.0	-30.0	-24.5	-36.0	-5.0	-50.9	16.0	230 44	070 59	7	6	1-10	21	127	48	77		273	
August	988.8	1008.7	969.0	-36.8	-30.7	-42.4	-21.9	-41.5	10.9	070 29	070 37	0	18	11-21 22-33	5	214 57	49	85		353 73	Winter
September	986.5	1000.6	971.0	-26.0	-21.1	-31.8	-13.5	-44.4	15.0	070 42	070 52	10	3	≥34		3	2	2		7	Jun., Jul., Aug.
October	987.7	1004.4	959.9	-17.0	-12.6	-22.3	-7.2	-30.7	16.0	070 44	060 56	14	8	Total	26	401	107	172		706	
November	984.1	1004.1	966.1	-9.9	-6.6	-14.6	-2.5	-21.8	17.0	080 42	080 55	31	6	1-10	19	128	59 30	31		237 286	
December	986.4	1005.3	968.4	-6.5	-3.2	-10.4	-0.2	-17.9	11.3	080 37	080 47	5	9	11-21 22-33	14	128	2	3		133	Spring Sep., Oct., Nov.
YEAR	988.0	1019.1	946.7	-19.4	-14.9	-24.6	+2.8	-50.9	13.7	080 51	070 63	99	95	≥ 34 Total	33	55 514	91	73		55 711	Зер., ОСС, NOV.

	ним	IDITY	TOTAL	CLOUD A	MOUNT	SUNS	HINE <sup>2</sup>	PRECIP	TATION <sup>1</sup>				WEATH	ER-NU	MBER O	F DAYS	WITH:			
MONTH	14		Mean	Perce	entage		Per cent	Net	Rainfall	1	Precipitat	ion forms	Ţ	Drift	Blowing	True	Visi-			
	Vapour pressure	Relative humidity	total		vations	Total	of max.	snow	or snow	Rain	Snow	Hail	Prisms,	snow	snow	water	bility	Gale	Cloudy	Clear
	(mbar)	(%)	amount Oktas	0 – 2 Oktas	6 – 8 Oktas	hours	possible record	depth (cm.)	lent (mm.)	or drizzle	or sleet	>5 mm. diam.	grains, etc.	(level <1.8 m.)	(level >1.8 m.)	or ice fog	below 1,000 m.	Out	skies	skies
January	4.2	89	5.2	31.9	64.1	332.4	44.7	1	19		18	2	8	15	4	2	6	1	15	7
February	2.5	85	6.3	14.3	79.0	151.0	25.4	11	26		20		Z <sub>k</sub>	20	4	3	11		21	3
March	1.7	83	5.4	28.6	60.5	159.0	38.4	29	75		16			13	6	3	10	3	14	4
April	1.4	83	5.5	24.6	63.8	51.1	25.8	40	40		19		3	17	12	6	16	7	17	2
May	0.9	79	4.6	44.8	42.7	0.0	-	40	12		6		6	9	5	2	6	3	8	8
June	0.4	74	4.4	36.3	38.8	SUN BELOW	HORIZON	47	28		9		15	13	1	3	4		9	5
July	0.6	75	4.1	40.3	36.7	2 MAY TO		47	15		9		19	18	10	4	13	6	9	6
August	0.2	70	5.1	25.4	55.2	34.2	32.4	47	4		1		11	9		5	5		13	4
September	0.7	78	6.1	12.1	71.7	98.7	29.9	53	41		13		14	14	9	4	11	3	18	1
October	1.5	85	6.1	15.7	73.8	187.6	33.5	63	50		15		8	16	10	4	14	7	20	4
November	2.6	87	5.6	20.8	66.3	309.8	43.0	69	31		16		1	17	9		11	6	17	3
December	3.5	90	5.7	22.6	67.7	273.9	36.8	74	18		21		2	15	3	4	10	3	18	3
YEAR	1.7	81	5.3	26.6	59.9	1597.7	36.2	78MAX	359	NIL	163	2	91	176	73	40	117	39	179	50