

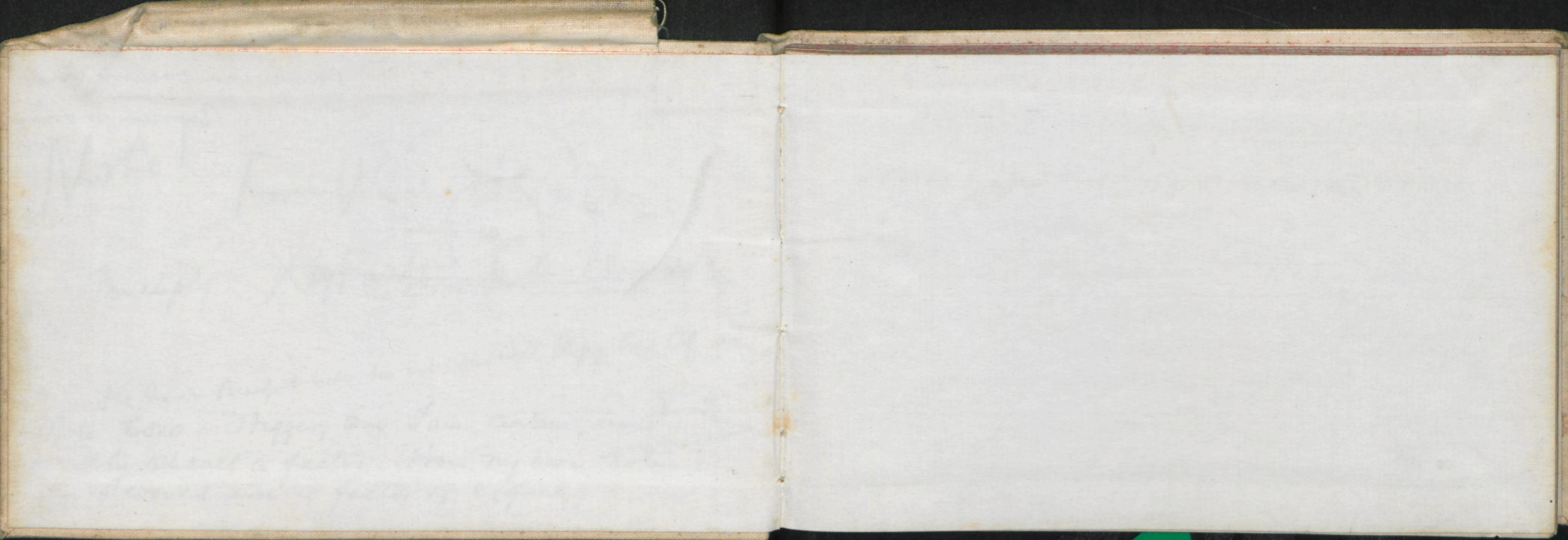
29 OCT. 1912. 28 NOV 1912.

1912

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BRITISH ANTHROPOLOGICAL EXHIBITION 1881
INSTRUMENTS IN USE, AND THEIR CORRECTIONS

METEOROLOGICAL OBSERVATIONS

TAKEN AT	
STATION	
Name of Station	
During 18	
By	
Position of Station: Lat.	
Long.	
Height of Barometer Cistern above Mean Sea Level	

BRITISH ANTARCTIC EXPEDITION, 1910.

METEOROLOGICAL OBSERVATIONS

TAKEN ~~AT~~

SLEDGE JOURNEY on BARRIER

During 1912 - ~~11~~

By

Torgeir Grav

Position of Station: Lat. _____ Long. _____

Height of Barometer Cistern above Mean Sea Level _____ feet.

INSTRUMENTS IN USE, AND THEIR CORRECTIONS.

BAROMETER, No. 757 COMPARED WITH STANDARD at 1157 ^{no 1157} C. Evans in 19 12.

Oct

Correction
required

-0.220 to reduce to 1157 at 0°C.

THERMOMETERS

III

Dry Bulb. No.

Max. in Shade. No.

Min. in Shade. No.

Max. in Sun. No.

Min. on Snow. No.

No.

No.

WEATHER.—Initials of the Beaufort Notation and Symbols adopted by international agreement for recording phenomena of weather.

b.	blue sky	r.	● rain.	~	glazed frost.
c.	detached clouds.	p.	passing showers.		
o.	overcast.	d.	drizzling rain.	☙	gale.
m.	☰ ^o mist.	e.	wet air without rain falling.	q.	squally.
f.	☰ fog.	s.	* snow.		
g.	gloomy.	†	snow drift.	○	solar corona.
u.	ugly, threatening.	☒	snow lying.*	⊕	solar halo.
z.	∞ dust haze or smoke.	←	ice crystals.	☾	lunar corona.
v.	unusual visibility.	h.	▲ hail.	☾	lunar halo.
t.	⊥ thunder.	Δ	soft-hail.		
l.	< lightning.	w.	☾ dew.	(rainbow.
Κ	thunderstorm.	x.	⊥ hoar frost.	☙	aurora.
		∇	silver-thaw. rime.		

* More than half the country in sight round the station covered with snow.

NOTE.—Do not use "h" for haze, nor "sh" for showers.

A line under an initial or the exponent "2," appended to a symbol, denotes intensity thus h or ▲² indicates heavy hail, ☰^o indicates light fog or mist.

BEAUFORT WIND SCALE.

Beaufort Number.	Description of Wind.	Equivalent velocity in miles per hour.
0	Calm.	0
1	} Light Breeze.	2
2		5
3		10
4	} Moderate Breeze.	15
5		21
6		27
7	} Strong Wind.	35
8		42
9	} Gale forces.	50
10		59
11	} Storm forces.	68
12		above 75
	Hurricane.	

INSTRUCTIONS.

Barometer.—The aneroid barometer should be lightly tapped before taking a reading.

Hypsometer.—Only pure water obtained from snow to be used. No water should be allowed to splash into the bulb of the thermometer during an observation.

Thermometer.—The aluminium sling thermometer should be allowed to remain in the open for at least ten minutes before a reading is taken in order that the bulb may acquire a temperature near that of the air. When an observation is to be made the thermometer should be opened and swung for a minute; the swinging must then be repeated until three readings have been obtained, each giving the same temperature. The final steady reading should then be entered in the note book.

Wind.—All wind directions must be "true" and not "magnetic"

Clouds.—The proportion of the sky covered by cloud should be indicated on a numerical scale running from 0, cloudless, to 10, completely overcast. The numbers given are to refer solely to the amount of the sky covered and not to the density, height or other quality of the cloud. Fog must be regarded as a cloud at ground level, and 10 must accordingly be entered for the amount of cloud on foggy days. If clouds can be seen through a thin mist, the amount of real cloud should be entered in the column and a note made under "Remarks."

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

The following are the chief cloud forms:

Cirrus	...	(Ci)	...	} High.
Cirro-Stratus	...	(Ci-St)	...	
Cirro-Cumulus	...	(Ci-Cu)	...	
Alto-Cumulus	...	(A-Cu)	...	
Alto-Stratus	...	(A-St)	...	
Strato-Cumulus	...	(St-Cu)	...	} Low.
Cumulus	...	(Cu)	...	
Stratus	...	(St)	...	
Nimbus	...	(Nb)	...	

Enter cloud directions as you would wind directions, *i.e.*, the direction from which they are coming.

Weather.—The Beaufort notation given on page 3 should be used.

Remarks.—Haloes and any unusual phenomena should be noted. It is also desirable that general topographical notes should be added, as for instance, "In valley running N.W.," "To-day's camp higher than yesterday's," etc.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from upper lower	
October													
Tuesday 29	13.30	Glacier Tongue		28.98		+4.5	E	2-3		2	A. St		
Wed 30	23.30	1 mile S 69 E of Sl		28.76		-10.7		0		5	A		
Thurs 31	4.00	Barrier		28.74		-9.5	S	1		10	A. St		
- 31	19.00	Barrier		28.84		-6.0		0	*	10	St		
Frid Nov I	0.30	12 miles S 69 E from Safety Camp		28.82		-4.0	S	1	*	10	St		
- I	8.00	18 miles S 69 E of Sl		28.90		-8.0		0		4	A. St		
- I	19.20	do - do		28.925		-10.3	E	1		0	-		
Sun 2	1.00	Corner Camp		28.79		-23.0	E	2		8	A. St		
do	8.00	do - do		28.74		-18.5	ESE	1		3	A. St		
	19.00	do - do		28.78		-1.7	SSW	3-4	m	10	St		
Mon 3	1.00	7 1/2 miles S of Camp		28.80		-2.7	SSW	3-4	m * 1/2	10	St		
	7.30	11 S of Corner Camp		28.88		-10.5	South	6	1/2	0	-		

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Erebus observed clear to the south & SW. 1 mile S 69 E of Safety Camp. Hazy to South. Light fog over barrier. 6 miles S 69 E of Safety Camp. Very hazy all round. 6 - S 69 E of Safety Camp. Started snowing and drifting about 7 hrs, but during day wind dropped and at noon almost calm. Wind SSW. Min - 7.5. Thick and snowing all night. About 6 hrs started clearing. Bright sunshine & calm. Min during day - 15.3. Lovely sunshine and almost calm all day. Clouds coming up from the N. Terror obscured. Temp. med. - 22.5. A. St. to the E & on the middle part of Terror. Hazy to the South. Very dull. Sunshine over Hut Point. Temp 15^{hrs} 0°. Very gloomy. Snowing & drifting slightly all night. Clearing to the South. Cleared about 6 hrs. Wind getting stronger & moderate surface drift.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.		
		Lat.	Long.							Amount	Kind	Direction from upper lower
Nov 3	12.30	11 South	66 E	29.08		-2.5	SSW	4	☼	7	a. St	
- 4	1.30	18	-	29.12		-6.2	Var	1	*	10	SE	
Nov 4	6.30	23 miles	C.E	29.14		-2.9	SSW	4-5	☼	10	SE	
-	19.30	do	do	29.21		-1.5	SSW	4	☼	10	a. St SE	
Nov 5	3.00	do	do	29.21		-5.0	SSW	2		10	a. St	
-	8.00	do	do	29.25		-1.5	SSW	1		10	a. St	
-	19.20	do	do	29.15		+0.5	NW	1		10	a. St	
Nov 6	1.00	31 miles	C.E	29.04		-10.0	-	0		1	a. St	
-	5.30	35	land	29.05		-10.5		0		0	-	
-	20.00	do	do	29.01		-11.3	SSW	2		7	a. St a. St	
Nov 7	1.30	42 miles	C.E	29.03		-13.2	SW	1		10	a. St	SW
-	7.00	47	land	29.11		-17.0	N	1		0	-	

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.


Clear to the SW
 Drifting & blowing all day, but clear sunshine. Sea much rougher. Overcast.
 Very dull. Southerly wind all night with surface drift. Clear to the W & SW. Slight
 Very gloomy all night. Started blowing again at 2nd.
 - - all day. Drifting & blowing. Now coming up a little. Min - 5.0
 Clearing to the South & sun now & then breaking through clouds.
 Very dull & almost calm. Looks as sun shining to the W & North West.
 Quite dull & almost calm. Clearing to the South & West. Bubbled day.
 Cleared off about 23rd. Now sunnier. A St to the N. Calm.
 Bright sunshine & calm. Temp at 3rd - 17. Wind from SE. Velocity 1-2.
 Strong southerly wind with surface drift all day. Calmed down at 19th. Min - 15.
 Clear to the S & W & N Temp mid night - 15.7. Light southwesterly all night. Dull.
 Bright sunshine & almost calm. Cleared up at 2nd. Temp at 3rd - 20.

DAY.	HOUR	POSITION		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Nov 11	4.00	1° 00' S	170° 00' W	29.07		-7.0	SSW	2-3	±	10	ci		
-	8.30	do - do		29.10		-6.8	SSW	2-3		3	ci		
-	19.30	do do		29.12		+0.3	SSW	1-2		3	ci		
Nov 12	2.00	7° 15' S	169° 15' W	29.15		-18.0	SW	1		0	-		
-	8.00	12° 30' S	170° 00' W	29.15		-17.0	SSW	1-2		0	-		
-	20.00	11° 30' S	170° 00' W	29.20		-5.3	SW	0-1		5	ci		
Nov 13	0.30	do do		29.19		-19.0	SW	2		5	ci		
	7.00	79° 48' S	169° 15' W	29.17		-11.5	SW	2-3		8	ci		
	19.00	79° 48' S	do	29.26		+6.0	SSW	2-3	* ±	10	ci		
Nov 14	1.00	79° 54' S	do	29.22		-18.0	SSW	2-3		5	ci		
	8.00	80° 3' S	170° 00' W	29.18		-0.5	SSW	4-5	* ±	10	SE		
	20.00	do do		28.87		+3.5	SW	3	±	3	ci		

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Very slight surface drift. Halo round sun with one mocksun.  W
 Cleared off and bright sunshine. ci SE to the South & SW.
 Moderate surface drift with high southerly wind during day.
 Strong mirage to the West. Light southerly all night.
 Clear sky. Light SE during night. Whirlwinds to the NW.
 Bright sunshine all day.
 ci SE round the sun. Clear to the north.
 Clear to NE. Ice crystals falling. Heavy to the South West.
 Snowing & drifting during the day. Now only a very little.
 Squalls with low drift - slight wind & falling ice crystals all night.
 Started "blizzing" at 1st - quite thick with moderate snowfall & drift.
 Snowing & drifting during day. Cased up and only drifting a little.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.		
		Lat.	Long.							Amount	Kind	Direction from upper lower
Nov 15	1.30	79°53	-	28.86		+2.0	SSW	3-4	±	10	AS	SE
	7.00	79.48	-	28.77		+6.2	SW	3-4	±	10	AS	SE
	19.30	do	-	28.65		+6.5	SW	3-4	±	10	AS	SE
Nov 16	1.30	Camp	Long	28.58		+11.0	SW	5-6	* ±	10	SE	
	8.00	do	do	28.53		+22.0	SSW	3-4	* ±	10	SE	
	19.00	do	do	28.64		+15.0	SSW	2-3		10	AS	SE
Nov 17	1.00	79.34	±	28			SSW	2-3		10	SE	
	10.00	One Ton	D	28.			SW	2-3	*	10	SE	
	20.00	do	-	28.82		+18.0	South	2-3	±	10	SE	
Nov 18	2.00	79.22	±	28.90		+12.5	SSE	3	*	10	SE	
	8.30	79.17	-	28.87		+18.7	SSW	4-5	* ±	10	SE	
Nov 18	20.00	do	do	28.70		+18.9	SSW	3-4	±	10	SE	

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

OBSERVER'S
INITIALS.

Drifting a little. Sun breaking through clouds.
do do Clear to the south. The snow all night.
Drifting & snowing during the day. Snow clearing to the south.
Started blipping at about 11^{am}. Large snowflakes falling. Very thick.
Easing up a little. Good strong surface. Strong wind & drift during night.
Drifting & snowing during day. AS to the N-W & E. Sunshine
Come very thick on about 22nd. Murky all night & light weather.
Snowing. Very dull & thick all night.
Thick weather with very slight surface drift.
Clearing to the E & SE. Snowing a little.
Strong southerly wind with surface drift. Slightly snowing.
Very slight surface drift. Drifting & blowing during day.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Nov 19 th	1.30	79° 10'	—	28.73		+15.7	8W	3-4	☼	10	St	South	88W
	7.30	79° 4'	—	28.71		+15.3	SW	4	☼	10	St		
	20.00	do	do	28.77		+19.1	SW	3-4	☼	10	St		
Dec 20	1.00	78° 58'	—	28.84		+18.0	SW	3-4	☼	10	St		
	6.00	78° 53'	—	28.89		+20.0	SSW	5-7	☼	10	St		
	19.10	do	do	29.12		+18.3	SW	3-4		10	St		
Dec 21	1.15	78° 46'	—	29.20		+19.0		0	☼	3	St		SSW
	6.30	78° 41'	—	29.24		+11.5	N	2	☼	10	St		
	19.15	78° 41'	—	29.42		+16.0		0		0	—		
Dec 22	1.20	78° 34'	—	29.54		+19.3		0		0	—		
	8.00	78° 28'	—	29.62		+14.9		0		3	St		
	19.10	do	—	29.70		+14.0	NE	1		9	St		

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Whale Back over West. land. Very slight surface drift. Very dull weather.
Slight surface drift. Sunshine on the Bluff. Thick to the S.
Very dull & quite thick. Drifting & snowing during day - more only a little.
Very dull - snowing & drifting moderately all night. Very thick.
Heavy snowfall with rising wind & drift all night. Great snowflakes.
Clearing to the weather. Very squally during day. Now drifting a little. Dull.
Cleared about midnight. Hazy over Erebus and West mountains.
Very light mist. Fog low to the West. Clear sunshine about for 2 hrs.
Mist gone about 11^{hrs} & glorious sunshine rest of day. Patches of St to the South.
Low mist all round the horizon. Here bright sunshine. Hazy round the sun.
do - do - Bright sunshine. Clear to the North E.
Clear to the South. Fine all day. Very hazy to the N. & W.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.		
		Lat.	Long.							Amount	Kind	Direction from upper lower
Nov 23	1.00	78° 21'	168° 30'	29.65		+11.0	NW	1	Drizzle	10	AS	
	6.00	78° 15'		29.67		+14.2	Var	1	do	10	Fog	
	19.07	do	do	29.75		+21.0	-	0	do*	10	SE	
Nov 24	1.15	78° 7'		29.74		+19.8	SE	1-2	Mist*	10	SE	
	7.15	Corner lamp		29.76		+18.5	S	1-2		10	SE	
	19.30	do do		29.74		+15.0	S	3-4		5	SE	
Nov 25	1.30	7° NW C. day		29.73		+4.0	SE	0		8	SE	
	7.30	12		29.72		+8.0	SSW	1-2	Hazy	10	SE	
	19.20	do do		29.70		+13.1	SSW	1-2		7	SE	
Nov 26	1.15	4° E Safety C.		29.65		+11.0	ESE	2-3		8	SE	S NNE
	7.00	Safety lamp		29.70		+9.5	E	2		7	SE	3 N
	19.00	do do		29.64		+21.0	SE	2		0	-	-

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Hazy all night. Coming mist on about midnight. Thick to the North.
Thick mist all night. Very breezy. From NE to West.
Thick all day. Slightly snowing. Southerly air. At 19⁰⁰ White Ice in sight.
Slightly snowing all night. Clearing to the E & NE. Wind freshening.
Clearing to the south. Sun shining on the Bluff & Western land.
Strong southerly with surface drift greater part of the night.
South Westing, breezy all night. At midnight temp = 3 x Iceberg. Pavilion
Double halo round sun. (See front of book.) Wind freshening.
Wind dropped about noon. Clear to the South. Very gloomy to NE & E.
Very gloomy over Cape Crozier & to the E. Very slight breeze during night.
Indescent clouds faint colored 10° S of sun. Ice crystals falling. Clouds
Sunshine & slight SE all day. Temp at 1⁰⁰ + 24.4°. Inside tent + 57°F.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Nov 27	3.00	Hul-Point	29.63			+23.0	E	2		0	-		
-	9.00	do do	29.65			+20.7	E by S	3		0			
	20.30	do do	29.73			+23.0	E	3	±	0			
Nov 28	7.00	do do	29.82			+35.5	ESE	3		0			

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

OBSERVER'S
INITIALS.

Fine weather all night with var wind.
do - do E -

Slight surface drift. Clear & E wind with sunsets all day.
E wind & bright sunshine all night.

DAY.

HOUR

POSITION.

Lat.

Long.

Bar

Hypsomet-

Dry
Bulb

Wind
Dir.
True

Wind Force

Weather

CLOUD.

Amount

Kind

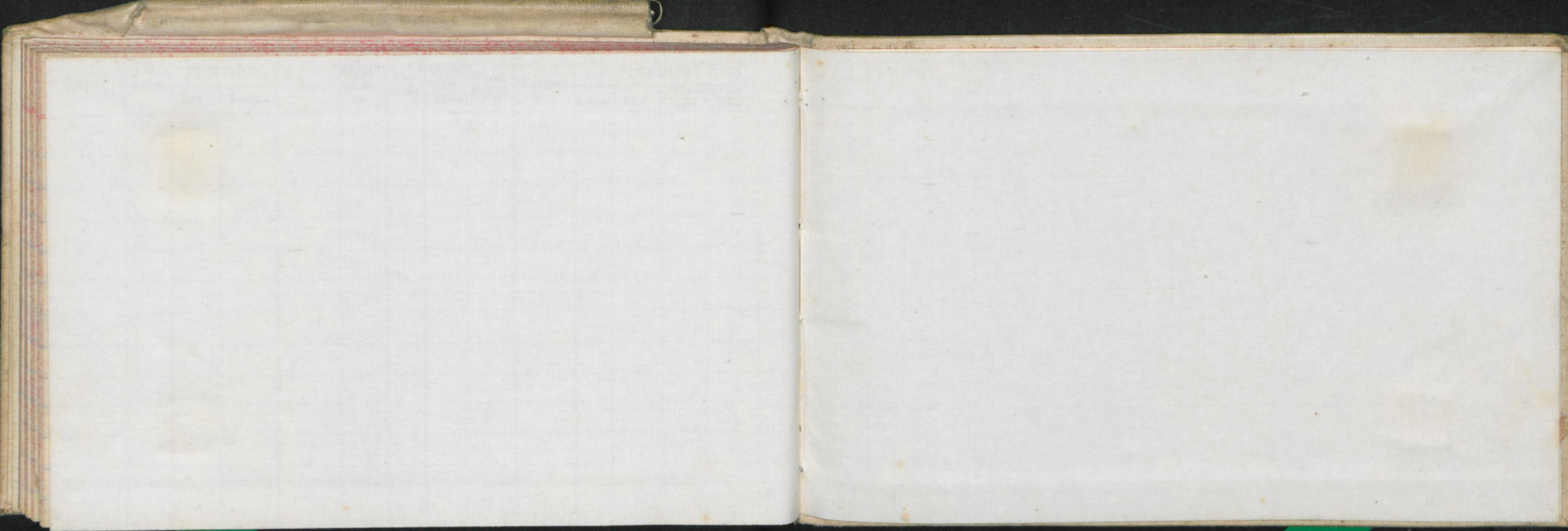
Direction from	
upper	lower

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

OBSERVER'S
INITIALS.

DAY.	HOUR	POSITION.		Bar	Hypsomet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from upper lower	



3 IV to the 11th

2 1/2 out of

