

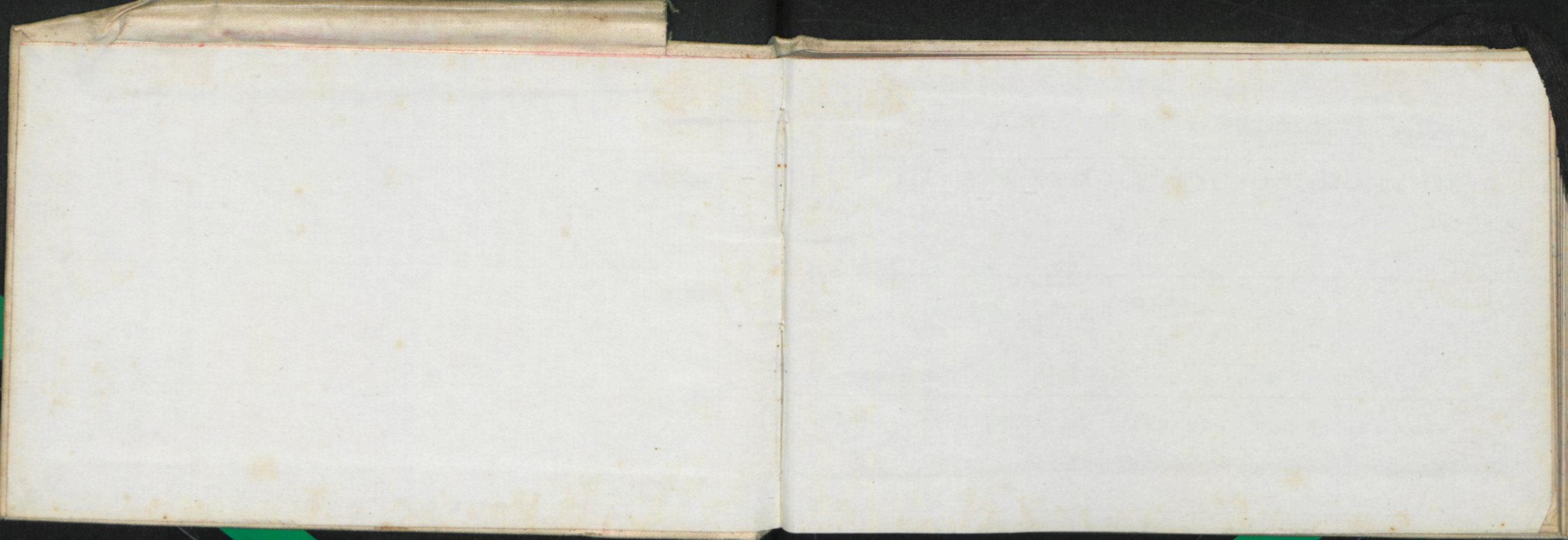
Erebus

CAPE ROYDS AND JOURNEY UP
MOUNT EREBUS.

SEPT. 2. 1912 - 12. DEC 1912.

BAE.

33



BRITISH ANTARCTIC EXPEDITION, 1810
INSTRUMENTS IN USE, AND THEIR CORRECTIONS

METEOROLOGICAL OBSERVATIONS

TAKEN AT

Cape Adare

During 13

By

Position of Station: Lat.

Height of Barometrical Station above Mean Sea Level

BRITISH ANTARCTIC EXPEDITION, 1910.

METEOROLOGICAL OBSERVATIONS

TAKEN AT

Cape Royds and journey up Mt Erebus.

During 19 12

By

Position of Station: Lat. _____ Long. _____

Height of Barometer Cistern above Mean Sea Level _____ feet.

WEATHER.—Initials of the Barometer Notation and Symbols. INSTRUMENTS IN USE, AND THEIR CORRECTIONS.

BAROMETER, No. *758* COMPARED WITH STANDARD at *Cape Evans* in *1912*.

Correction
required

<i>Standard</i>	<i>Aneroid</i>	<i>Diff</i>
<i>hor 25</i>	<i>29.598</i>	<i>42.5</i>
		<i>20.88</i>
		<i>1.28</i>

THERMOMETERS

Dry Bulb. No. *34 V*

Max. in Shade. No. _____

Min. in Shade. No. _____

Max. in Sun. No. _____

Min. on Snow. No. _____

No. _____

No. _____

Dec 3 am 9.45 AM.
No 754 28.153
no 760 28.16

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.	$\overline{\overline{\overline{\circ}}}$ mist.	e.	wet air without rain falling.	q.	squally.
f.	$\overline{\overline{\overline{\text{—}}}}$ 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.
	⊞ thunderstorm.	x.	⊥ hoar frost.	☞	aurora.
		V	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, $\overline{\overline{\overline{\circ}}}$ indicates light fog or mist.

BEAUFORT WIND SCALE.

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

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)	...	} Low.
Strato-Cumulus	...	(St-Cu)	...	
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.

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Note All Wind velocities must be multiplied
by factor 6 to give mileage an hr.

F.S.

DAY.	HOUR	POSITION.		Bar	Hyps-ometer	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Sept II	20.00	Camp I		28.14		+33.1	N	2-3		0	-	-	-
- 3	8.30	do do		28.15		+34.0		0		0			
	20.0	do do		28.13		+27.3	H	1		0	-		
- 4	6.40	do do		28.11		+22.5		0		5	C		
-	1.00	Camp II		26.36		+21.2		0		10	st		
-	18.00	Camp III		24.97		+21.5		0		8	C		
Dec. 5	10.30	do do		25.04		+16.5		0	*	10	st		
	3.00	do do		25.05		+21.0		0	*	10	st		
	20.00	do do		25.05		+14.0	N	1	*	10	st		
Dec 6 th	10.20	do do		25.047		+13.3	NNW	2	*	10	st		
	20.30	do do		25.05		+12.0	N	1	*	10	st		
Dec 7	8.00	Camp III		25.05		+7.0	SE	2		10	st	A SE	

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Boisterous breeze all day. Light C to the weather. Temp about 4000 ft.
Bright clear sunshine. Min last night +27.2°
do - do. Slight southerly. At noon slight southerly
Min 4 18.0
Must come on about midday. Low clearing. Thick mist bank S.W.
Very light mist { The temp about 2700 ft & just in the upper limit of a bank of st clouds
Sometimes the mist rises a couple of 100 ft. Fog bank opposed Sun
Camp 4000 ft. Same bank of cloud over the harbor. W.M. upper part clear. C to NW.
Thick & slightly snowing from SW. Min for night +13.3.
Still thick & snowing from NW. Time to time Cape Royds visible.
do. - do. from N. Snowing large flakes all day.
All night thick & snowing. Camp up almost. Eclair partly visible. Min night +7.5
All day very thick & snowing large flakes.
Clearing & patches of blue sky visible. Eclair partly visible. 2" snow fallen. Min +6.3

DAY.	HOUR	POSITION.		Bar No. 760	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Dec 7	2.10	Camp II		23.43		+7.3	S	1		0	-		
-	20.00	do do		23.39		+4.3	S	1-2		0	-		
Dec 8	7.45	do do		23.40		+7.0	O	0		10	ASE		
	12.45	Camp V		21.95	197.6	+4.3	O	0		3	ASE		
	7.15	Camp VI		21.57		+7.3	O	0		0	-		
Dec 9 th	9.00	do do		21.60		+3.8	SW	1		0	-		
	2.45	do do		21.54		+7.0	W	1		0	-		
	22.00	Camp VII		21.00		-8.0	-	0		0	-		
Dec 10 th	7.30	do do		21.00		-6.2	E	1		0	-		
	11.00	Camp VIII		20.30		+4.0	-	0	*	10	Mist	SE	
	18.00	do do		20.30		-	S	6	*+7	4	ASE	S.E.	

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Camp about 5800 feet. Around the coast of Ross Is a belt of low SE clouds, about 3 miles wide. Height of clouds about 2500. Bright sun. Hazy & B. over W. Mts. Bar changed. Some clouds, now 1000 feet high along the coast of Ross Is SE over W. Mts. Erebus cloudless. Min during night. SE clouds over McMurdo. Erebus partly covered. Camp about 7000 feet. Over McMurdo & Ross Sea SE clouds. Erebus partly covered. Camp about 7200. SE clouds over Ross Sea & along the Western coast of Ross Is. Min during night - 17. Snow 2nd - 14.9. Patches of SE of Ross Sea & McMurdo. Bright Sunshine. Patches of SE clouds over the Sea. Hazy to the W & North. do - do Camp 8500 feet. Erebus smoke from S. Coast Cape Bird SE. Camp in shadow during night. Min - 19.8. Time to time passing clouds on Erebus again some. Camp about 9200. Cloudmist & fine crystals falling. McMurdo visible. At 13 hours gusts of wind from NW. veering thro' W to due South. Clouds over Tang and then mist to N.W. & below.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Dec 11	8.30	Camp VIII		20.24			NW	2-5	*	10			
	18.30	do	do	20.15			WGSW	1-4	*	occasional mist.			
	22.30	do	do	20.15			WGSW	1-4	*	2			
Dec 12	9.0	do	do	20.05						0			
	14.0	do	do	20.03						3	Stratus		
	22.30	do	do	20.00						6	Ci St.	S.E.	
Dec 13	7.30	do	do	20.05		-3.8				3	Ci		
	1.00	Camp IX		23.76		+16.2	SE	3-4	+	2	Ci St		
	20.00	do	do	23.30		+10.5	S	4-5	+	2	Ci St		
Dec 14	11.00	do	do	23.15		+8.5	SSE	4-5	* +	10	St		
	19.20	do	do	23.20	200.4	+3.7	SSE	4-7	* +	10	St		
Dec 15	10.20	do	do	23.15		+8.0	SE	4-5	+	4	h St St		

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

This cloud all round. Old crater hardly visible.
Clearing and clouding all the morning. Wind in gusts from NW to SW.
Clearing above thicker below. Low drift at times.
Perpetually calm and clear.
Fine & calm. Light air 1000' above camp.
Erebus awakes blowing from S.E.
Patches of stratus at 4,000' level. Whaler back to N.E.
Whale Backs over Erebus. Very weak 4000' high St. cl. Light surface drift.
do - do. St along coast. A St over Western mountains. Light surface &
started blowing about midnight. Very thick & moderate drift & moderate
rain during night + 6.5.
Very squally. Sun now & then dimly visible. Blizzards all day.
Whale Backs over Erebus. St over McMurdo blowing up wind & 10

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

Dec 11 8.30 11400 Long - 190.0 -10.0 S 3-4 *± 10

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Overcast & snowing all night. Very equally. During night
loud sound of an explosion from crater. Weather now clearing
up and sun visible through clouds. Then during night 16.3
The min therm. placed between two solid blocks (lava) and
shaking is not possible.

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

Dec 11 13.00 11400 ft - -9.2 SSW 3-4 10

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Sun shining through clouds. Wind easing up a little.
The 'Old Creater' dimly visible. Erebus obscured.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.			
		Lat.	Long.							Amount	Kind	Direction from	
												upper	lower
Dec 11	16.00	11400 feet		-	-	-13.0	SSW	3-4	☼ *	10			

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Eased up a little at dusk but came on thick again at
15 hrs Erebus obscured all day. Growing & 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

Dec 11 20.00 114001 Long - - -16.8 SW 3 B 10

BRITISH ANTARCTIC EXPEDITION, 1910.

OBSERVER'S
INITIALS.

REMARKS.

Halo round sun. Clearing & Boobus visible through light
mist. 1/2" snowfall during afternoon. Large flakes and
distinct structure. 3.50m 1mm light surface drift

DAY.

HOUR

POSITION.

Lat.

Long.

Bar

Hyps-
omet-
erDry
BulbWind
Dir.
TrueWind
Force

Weather

CLOUD.

Amount

Kind

Direction from
upper lower

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

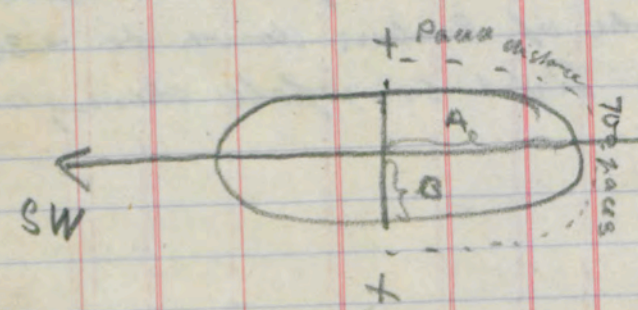
OBSERVER'S
INITIALS.

Dec 12 1.30 11400 f long - - 24.0 - 0 0 -

Bright sunshine & calm. Cleared about midnight and dropped
alm almost immediately after. The Temp whilst sun
behind Erebus or smoke of Erebus down to - 30.5.
by evening, Min - 32.2 Light snowfall during night.
Erebus smoke ESE.

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

Dec 12 5.00 Summit, - -15.0 SE 5 0



Crater forming an Ellipse
 NE A = 300 paces
 B = 50 paces

BRITISH ANTARCTIC EXPEDITION, 1910. REMARKS.

OBSERVER'S INITIALS.

Leaving Camp a fresh Southerly with surface drift sprung up. A hundred feet from the Summit the temperature by swing was found - 24.3. This was just outside the Smoke Limit & in bright sunlight. The temperature on the brink of crater, also by swing - 15.0. The South East Side of the Summit was weathered down to a very smooth surface & differed thoroughly from any other part of the mountain. The Sistrup in the II & III crater indicated prevailing SE wind. Over Ross ice patches of low clouds. The snow full of loose pack-ice. Haze over Barrier & W mountains.

DAY.	HOUR	POSITION.		Bar	Hyps- omet- er	Dry Bulb	Wind Dir. True	Wind Force	Weather	CLOUD.		
		Lat.	Long.							Amount	Kind	Direction from upper lower
Dec 12	10.00	11400 f	100	-	-	-	-	10.0	ESE	4	±	0

Dec 12 10.00 11400 f 100 - - 10.0 ESE 4 ± 0

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

OBSERVER'S
INITIALS.

Erebus smoke ESE. A little surface drift a bright sun
At 6th slight eruption of Erebus. From time to time clouds
passing overhead. Hazy to the East.

[illegible]

BRITISH ANTARCTIC EXPEDITION, 1910.

REMARKS.

OBSERVER'S
INITIALS.

