

# METEOROLOGY FOR DECEMBER, 1877.

PRIVATE OBSERVATORY, HOBART TOWN.

Latitude 42° 52' 13" S.; Longitude 9h. 49m. 29.2s. E.  
(Registered for the Royal Society of Tasmania.)

Day of Month.	Bar. corrected for temperature instrumental error, and to mean sea level.	Thermometers		Relative Humidity.	Clouds.	Wind.		Rain. in Inches.	Spou. Evap.	Ozone. Scale.										
		(Reading.)																		
		(Self-Registering.)																		
7 30 a.m.	4 30 p.m.	Centigrade, 7 30 a.m.	Fahrenheit, 7 30 a.m.	Fahrenheit, 7 30 a.m.	Highest in Sun, 4 30 p.m.	Highest in Shade, 4 30 p.m.	Lowest on Grass, 7 30 a.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	7 30 a.m.	4 30 p.m.	
Character.	Amount.	Character.	Amount.	Direction from.	Force in lbs. per square foot.	Direction from.	Force in lbs. per square foot	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	7 30 a.m.	
1 29.567	29.688	13.0	56.0	71.0	110.0	85.0	34.5	70	32	K	10.0	KN	7.5	NW	2.60	W	5.21			7.0
2 29.583	29.278	13.5	57.0	64.0	107.0	78.0	35.5	61	59	KS	3.0	K	7.5	NW	2.60	W	5.21	.01		2.9
3 29.827	29.648	12.5	55.5	61.0	88.5	72.0	36.0	70	67		6.0	KN	10.0	N	.52	S	.52			10.0
4 29.130	29.354	14.0	58.0	61.0	76.5	66.5	38.5	57	66		4.0	KN	7.5	NW	2.60	NW	2.60			8.0
5 29.320	29.464	7.5	45.5	58.0	104.0	62.0	34.0	67	70	K	4.0	K	5.0	W	.26	W	2.60	.00		3.5
6 29.695	29.683	11.0	52.0	66.0	99.5	70.0	37.5	59	51	K	7.5	K	5.5	N	.52	NW	2.60	.01		2.5
7 29.722	29.739	13.5	57.0	67.5	95.5	74.0	39.5	71	56	K	8.0	K	4.0	N	.26	N	2.60			4.0
8 29.730	29.631	13.5	57.0	61.0	84.5	72.0	39.0	75	88	K	9.0	K	10.0	NW	.52	SE	.52			5.0
9 29.881	30.020	12.5	55.0	61.0	102.0	62.5	37.0	65	58	K	10.0	K	6.0	N	.26	SW	.52	.01		3.0
10 29.979	30.044	10.5	55.5	68.0	95.0	72.0	37.0	70	52	K	10.0	K	6.0	NW	.52	NW	.52			2.0
11 30.066	30.075	14.0	56.0	68.0	108.0	74.0	39.5	61	68	K	5.0	K	5.5	NW	.52	SE	.52	.02		3.0
12 30.087	29.917	12.5	55.0	75.0	105.0	75.0	37.0	81	64	K	7.0	K	6.0	NW	0	SE	.23			3.5
13 29.524	29.675	18.0	65.0	72.0	110.0	84.0	40.0	69	52	K	2.0	K	4.0	N	0	SW	2.60			2.0
14 29.717	29.583	14.0	58.0	70.0	108.0	75.0	36.5	61	53	K	6.0	K	6.0	N	.52	SE	.52			2.5
15 29.614	29.420	16.5	62.5	79.0	112.0	82.0	39.0	59	55	K	6.0	K	9.0	NW	2.60	W	5.21			3.0
16 29.188	29.341	13.0	56.0	61.0	97.5	78.5	36.5	66	66	K	6.0	K	4.0	N	.52	NW	2.60	.04		4.0
17 29.685	29.666	11.0	52.0	68.0	100.0	70.0	34.5	89	49	K	7.5	K	4.5	N	.52	W	.52	.01		5.5
18 29.380	29.306	14.0	58.0	63.0	93.0	72.0	37.0	67	67	K	10.0	K	9.0	N	.26	W	.52	.06		5.0
19 29.525	29.644	12.5	52.0	63.0	109.0	72.0	35.5	70	67	K	6.0	K	7.0	SW	2.60	W	.52	.06	1.91	4.0
20 29.875	29.969	13.0	56.0	66.0	110.0	69.0	37.0	60	59	K	6.5	K	2.0	S	2.60	SW	.52			2.5
21 30.005	29.902	9.0	49.0	65.0	95.5	72.0	35.0	63	67	0	0	K	9.0	NE	0	S	.52			2.0
22 29.722	29.549	15.0	60.0	60.5	78.0	66.5	37.5	71	94	KN	10.0	KN	10.0	NW	.26	NW	0			5.0
23 29.409	29.466	11.5	54.0	62.0	80.0	70.0	36.5	80	74	KN	9.0	KN	7.0	NW	0	W	0	.95		7.0
24 29.765	29.702	11.0	52.0	55.0	78.0	64.0	35.5	69	70	K	8.5	KN	10.0	SW	2.60	W	.52	.02		3.5
25 29.635	29.729	11.0	52.0	60.0	98.0	65.0	35.5	93	82	KN	10.0	K	4.5	NW	.26	SE	.52	.07		6.0
26 29.750	29.827	12.5	55.0	64.0	95.5	68.0	38.0	81	63	K	5.5	K	3.5	N	0	N	.52			4.0
27 29.926	29.915	12.5	55.0	62.0	108.0	70.0	38.0	81	77	K	10.0	K	8.0	S	0	NE	.52			2.5
28 30.021	30.011	13.5	57.0	67.0	110.0	74.0	40.0	81	73	K	3.0	0	0	SE	.26	SE	.52			5.5
29 30.130	30.030	13.0	56.5	72.0	112.0	77.0	40.0	81	78	K	3.0	K	2.0	E	0	SE	.52			2.0
30 29.957	29.885	17.0	63.0	89.0	116.0	88.0	33.5	77	63	K	3.0	K	4.0	N	.26	S	.52			3.0
31 29.877	29.857	19.0	67.0	62.0	105.0	62.0	40.0	56	68	K	5.0	K	10.0	NW	.23	S	2.60		1.09	4.0
Mean Press.	29.719	Mean	M'n. Tem.	Mean	Mean	Mean	Mean	Mean	Mean	Mean for Month.	6.35	Mean Force	1.13 lb.	Tl.	Tl.	Tl.	1.35	5.10	125.5	
Greatest do.	30.096	Max.	60.94	Max.	Max.	Max.	Max.	Max.	Max.	Prev. Character,	K	Greatest Force	5.21						Me'n	4.05
Least do.	29.153	Min.	7.50	Min.	Min.	Min.	Min.	Min.	Min.	Least Force.	0	Least Force.	0							
										Prevailing Direction.	NW, W, N									

The Meteorological form brought into use at the beginning of 1876 differs in some respects from the former one. It has been adopted with the view of assimilating the Hobart Town records more closely with those of stations in Europe, America, etc., in order to co-operate in a system of International Meteorology. Readings are added from the centigrade thermometer, that being the instrument generally used on the continent of Europe.

The mean is in all cases taken from the sums of the two daily registers, not from the maximum and minimum.

The direction of the wind is registered from currents at a height of 92 feet above sea level, and its force in lbs. per square foot.

The relative quantity of rain that fell under the different winds is registered each morning at 7.30 a.m.

The 35 years' standard tables are used for obtaining the difference from average.

FRANCIS ABBOTT, F.R.A.S., etc.

Time of leafing, flowering and fruiting of a few standard plants in the Royal Society's Gardens during the month of December, 1877.

- 14th.—First bunch Red Currants ripe.
- 16th.—Common Privet commencing to flower.
- 17th.—First bunch Black Currants ripe.
- 25th.—Mella Azeleach commencing to flower.
- 31st.—Doyenne d'Ete Pear commencing to ripen.
- 31st.—Jemeating Apple commencing to ripen.

A. F. ABBOTT, JUN., Superintendent.

Results of observations taken at New Norfolk, in accordance with new forms, at 7.30 a.m. and 4.30 p.m. :—

Barometer, mean of two daily readings, corrected and reduced, 29.849in.

Thermometer, mean of 2 ditto, 60.32deg.

Ditto mean of maximum and minimum in shade, 59.37deg.

Dew point, mean of 2 ditto, 46.79 deg.

Humidity mean of 2 ditto, .62.

Elastic force of vapour mean, of 2 ditto .322.

Solar intensity, mean of maximum temperature, 131.80deg.

Terrestrial radiation, mean of minimum temperature, 41.06deg.

Rainfall, 1.49in.

Evaporation, 7.23in., in excess of rainfall, 5.74.  
Clouds, mean amount of 2 daily observations, 5.25.  
Ozone, mean ditto, 2 ditto ditto, 7.19.

W. E. SHOOBRIDGE, Bushy Park.

Rainfall at Hill Station, 1,550ft. above sea level, 1.57in.

## DECEMBER WEATHER, 1877. AT NEW NORFOLK, TASMANIA.

December 1 will be remembered for the severe hurricane from N.W. that set in here at 1 p.m., and lasted five or six hours, with dry, warm air; that, fortunately, brought on some slight showers and cooled the air after the violence of the gale had abated. The barometer rose rapidly to 29.80 on the 3rd, and fell suddenly next day to 29.28, with every prospect of rain, and although some showers fell on evenings of 4th and 5th to the amount of .17 inches, it gave place all too soon to cold, harsh wind from N.W. till 7th, when the barometer rose, and the wind veered more to W., with stiller weather. On the evening of the 8th there were light showers and thick clouds, as if there had been rain elsewhere. The barometer gradually rose to 30.04 on 12th, with clear, bright weather and sea breezes, and the thermometer at 87deg. in the shade made it feel like summer, and it continued so till 15th. The humidity of the air for seven days at 4.30 p.m. did not vary .03 from the mean of .47 per cent. On 15th the wind changed to stiff N.W., and on 16th the barometer was down to 29.16, and it rained again but soon went off. For two or three days the weather was unsettled and showery, with currents of wind from different directions, that on 18th brought on a slight thunderstorm, which cleared the air, and S.W. wind made it still colder; and on morning of 21st there was a severe frost, the thermometer on grass being down to 28deg. A hot day brought up a cool sea breeze laden with damp sea air, and meeting the W. wind the barometer fell from 30.29 to 29.60 next day, and thick clouds gathered, and we had the heaviest rain of the month. .74 inch falling in 36 hours. Cold S.W. storms prevailed on 24th, but the cold, windy weather had apparently run its course, for the barometer rose and kept up steadily till the end of the month, and the holidays set in warm and bright, the mean of minimum temperature on the grass not varying more than .3deg. from 43deg. for 10 days, and the sea breezes tempering the rather fierce heat of the sun made the holiday weather as enjoyable as could be desired for out-door amusements. The rain fall for the month was 1.49 inches, making a total of 22.63 inches for the year to 23.54 inches in 1876, 28.17 inches in 1875, and 23.04 inches in 1874.

W. E. SHOOBRIDGE, Bushy Park.