

METEOROLOGY FOR DECEMBER, 1878.

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

Days of Month.	Bar. corrected for temperature instrumental error, and to mean sea level.		Thermometers (Reading.)		Thermometers (Self-Registering.)		Relative Humidity.		Clouds.		Wind.		Rain in Inches	Spon. Evap.	Ozone. Chrom. Scale.													
	7 30 a.m.		7 30 a.m.		7 30 a.m.		Per cent		7 30 a.m. 4 30 p.m.		7 30 a.m. 4 30 p.m.																	
	4 30 p.m.	Centigrade, 7 30 a.m.	Fahrenheit, 7 30 a.m.	Fahrenheit, 4 30 p.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.	Character.	Amount.	Character.				Amount.	Direction from.	Force in lbs. per square foot.	Direction from.	Force in lbs. per square foot.								
1	30	07.0	30	06.0	13	56	65	115	70	40	70	67	K	10	K	1	SE	0	SE	52	52	2.5						
2	30	52.2	29	72.8	12	54	71	110	73	40	70	82	K	7	K	6	NE	0	SE	52	52	6						
3	30	49.3	29	45.2	16	61	60	112	70	41	63	62	K	10	K	7	NW	26	NW	26	60	7						
4	30	49.3	29	61.8	9	49	60	110	65	37	86	58	KN	10	K	7	W	52	SW	26	60	8						
5	30	77.2	29	89.2	13	56	65	105	67	39	65	51	K	8	K	4	SW	26	SW	26	60	3						
6	30	98.8	29	90.5	11	52	54	79	65	38	69	61	K	9	KN	10	SE	26	SE	26	60	2.5						
7	30	88.2	29	80.0	12	54	65	115	68	40	81	63	K	10	KS	6	N	0	SE	26	60	3						
8	30	69.8	29	68.0	18	65	70	120	75	42	73	73	K	3	K	7	SE	0	SE	26	60	7						
9	30	55.0	29	61.6	20	68	70	110	75	43	69	78	K	7	K	7	NW	5.21	NW	26	60	5						
10	30	81.5	29	89.1	16.5	62	70	109	74	40	51	73	K	5	K	6	NW	26	NW	26	60	3						
11	30	81.1	29	90.5	15	59	63	94	72	37	62	67	K	10	KN	10	W	26	S	52	60	3						
12	30	91.5	29	93.2	15	60	62	90	63	37	76	76	K	8	K	6	E	0	SW	52	60	2						
13	30	91.3	29	89.4	16.5	62	71	120	80	38	68	69	K	7	K	3	NW	0	SE	26	60	6.5						
14	30	91.2	29	61.7	20	68	91	120	93	49	73	35	K	9	K	7	NW	26	NE	26	60	5						
15	30	64.8	29	59.4	20	68	72	110	90	40	68	61	KN	10	K	2	SE	52	SE	23	60	1.5						
16	30	25.0	29	25.4	20.5	67	60	77	78	36	83	88	K	5	KN	10	NW	26	NW	26	60	10						
17	30	18.1	29	31.7	13	55	62	119	74	34	66	67	K	6	K	6	W	52	NW	26	60	76						
18	30	58.3	29	71.4	12	54	61	95	67	34	74	62	K	10	K	7	NW	26	SE	26	60	4						
19	30	98.2	30	94.6	12	51	65	95	63	34	70	63	K	10	K	7	NW	26	NW	52	60	4						
20	30	92.0	29	55.9	14	58	63	79	67	36	87	72	K	10	K	10	NW	26	NW	52	60	3.5						
21	30	63.0	29	65.4	14	58	65	93	71	36	71	56	K	8	K	10	N	26	W	26	60	7						
22	30	52.2	29	85.4	15	60	60	96	72	39	58	69	K	10	K	9	W	26	W	26	60	1						
23	30	33.0	29	33.0	12	55	53	98	68	36	65	66	K	9	K	6	NW	26	W	26	60	3						
24	30	50.5	29	40.6	10.5	55	65	105	67	34	65	51	K	7	K	10	NW	26	NW	52	60	7.5						
25	30	22.2	29	17.1	14	58	59	80	64	38	53	61	K	6	K	10	W	26	NW	26	60	5						
26	30	53.3	29	51.7	12	54	61	89	64	36	70	67	K	10	K	7	N	26	W	26	60	4.5						
27	30	46.6	29	21.8	12.5	55	58	98	68	36	70	70	K	6	K	5	NW	52	W	26	60	3						
28	30	54.1	29	52.6	10.5	51	59	72	62	35	74	61	K	7	K	6	W	52	SW	52	60	4						
29	30	57.8	29	67.5	10.5	51	55	82	60	32	80	70	K	7	K	7	W	0	NW	52	60	2						
30	30	77.6	30	75.7	11	53	60	106	69	34	74	59	K	7	K	4	W	52	S	26	60	4						
31	30	87.5	29	89.4	16	51	71	115	76	36	67	61	K	7	KS	7	NW	52	S	52	60	3						
Mean Press.	29.673	Mean	M'n. Tem.	61.37	Mean	10:17	Mean	70:90	Mean	37.32	Mean	67																
Greatest do.	30.082	Max.		20:50	Max.	120:00	Max.	93:00	Max.	43:00																		
Least do.	29.171	Min.		9:00	Min.	72:00	Min.	60:00	Min.	32:00																		
Mean for Month.	7:35	Mean Force	1:34 lb.	TL.	TL.	TL.	2:00	3:45	14:10																			
Prev. Character.	K	Greatest Force	5:21 lb.																									
Least Force.	0	Prevailing Direction	NW, W, and SE																									

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 suns 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 25 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 Botanic Gardens during the month of December, 1873:—

- 15th. First bunch Red Currants ripe.
- 15th. Common Privet commencing to flower.

- 21st. First bunch Black Currants ripe.
- 24th. *Melia Azederach* commencing to flower.
- 27th. Doyenne d'Élé Pear commencing to ripen.
- 30th. Juneating Apple commencing to ripen.

F. ABBOTT, JUN., Superintendent.

Results of observations taken at New Norfolk December, 1873, in accordance with new forms, at 7:30 a.m. and 4:30 p.m.:—

- Barometer.—Mean of two daily readings, corrected and reduced, 29.780 inches.
- Thermometer.—Mean of two ditto, 58.40 deg.
- Mean of max. and min. in shade, 57.83 deg.
- Dew Point.—Mean position of two ditto, 47.88 deg.
- Elastic Force of Vapour.—Mean of two ditto, .333.
- Humidity of Air.—Mean of two ditto, .68.
- Solar Intensity.—Mean of max. temperature, 126.16 deg.
- Terrestrial Radiation.—Mean of min. temperature, 41.60 deg.
- Rainfall.—2.96 inches. Total for the year, 27.83 inches; total for 1877, 22.63 inches; ditto for 1876, 23.54 inches; ditto for 1875, 28.17 inches; ditto for 1876, 23.04 inches.
- Evaporation.—5.45 inches, in excess of rainfall, 2.49 inches.
- Clouds.—Mean of two daily registers, 5.32.
- Ozone.—Mean of two ditto, 6.90.

E. W. SHOEBIDGE, Bushy Park.