

# METEOROLOGY.

JANUARY, 1874.

PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37ft abv sea level, corrected and reduced.		Self-registering Thermometers.				Wind.		
	Highest.	Lowest.	Highest in Shade.	Lowest in Shade.	Highest in Sun.	Lowest on Grass.	Direction from three daily registers.	Force in lbs. per square foot.	Rain in Inches.
1	30·133	30·029	78	58	115·5	40·0	SE	1·04	
2	30·017	29·961	70	54	113·0	40·5	NW SE	1·04	
3	29·952	29·940	75	59	95·0	37·0	SE	1·30	
4	29·915	29·885	69	56	109·0	35·5	SE	1·04	0·43
5	29·857	29·776	63	55	96·0	33·5	SE	·78	
6	29·956	29·924	72	50	112·0	35·0	SE	1·04	
7	29·865	29·806	77	56	116·0	36·0	NW SE	1·04	
8	29·986	29·941	77	56	110·5	36·5	NW SW	3·64	
9	29·971	29·931	75	48	111·0	37·0	NW SE	3·64	
10	30·134	30·107	71	45	108·5	36·5	SW SE	1·56	
11	30·167	30·089	77	49	110·5	40·0	NW SE	1·04	
12	30·015	29·855	80	54	104·0	43·5	NW SE NE	1·04	
13	29·894	29·824	78	61	115·0	42·5	SE	3·42	
14	30·131	30·090	76	54	110·0	40·0	SE	1·04	
15	29·958	29·859	79	52	114·5	39·5	NW SE	3·38	
16	29·805	29·761	78	60	115·0	42·0	SE	1·30	
17	29·559	29·367	71	59	78·0	40·0	SE	·52	0·62
18	29·647	29·585	69	47	110·0	38·5	SE NW	3·72	0·07
19	30·046	29·918	76	59	116·5	40·0	NW SE	1·56	
20	29·948	29·695	85	52	119·0	38·5	NW SE	1·04	
21	29·891	29·752	80	59	114·0	42·0	SE NW	3·64	
22	29·726	29·669	73	51	103·5	39·5	NW	8·33	
23	30·082	29·965	78	52	111·5	39·5	SE NW SE	1·30	
24	30·021	29·897	73	53	109·0	40·0	NW SE	1·30	
25	29·702	29·607	75	54	109·0	47·0	SE	1·30	0·01
26	29·925	29·860	68	51	105·0	43·0	NW	3·72	
27	30·111	30·078	63	55	119·5	40·0	NW SE	1·04	
28	30·021	30·097	74	54	110·0	48·0	NW SE	·78	0·02
29	29·960	29·889	82	58	114·0	45·0	NE SE	1·04	
30	29·318	29·583	83	53	115·0	47·0	NW	1·30	
31	29·887	29·782	70	52	107·0	36·0	NW SW	13·02	
Monthly mean 29·900			66·77	109·00	40·00		Total Force...74·93	1·15	

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

The direction of the wind is registered from currents moving at a height of 192 feet and the force according to Lind's Wind Gauge. The supposition, however, of a uniform velocity during the month is a very arbitrary one, and the results can be considered only approximately correct.

The relations of the quantities of rain which fell under the different winds are registered each evening at sundown.

The 30 years' standard tables are used for obtaining the difference from the average.

Barometer mean, 29·900in., being 0·156in. above the average.

Temperature, mean, 66·77°, being 4·08° above the ditto.

Solar intensity, mean, 109·60, being 1·58 above the ditto.

Dew point mean, 52·6°, being 2·19° above the ditto.

Humidity of air mean, ·58·54, being ·8·41 per cent. below the ditto.

Elastic force of vapour mean, ·384, being ·011 per cent. above the ditto.

Total amount of rain, 1·15in., being 0·42in. below the ditto.

Increase of spontaneous evaporation on rain-fall, 2·98in.

Mean amount of ozone, 5·50, being 1·43 of chromatic scale below ditto.

Electricity active all through the month, except on the 4th and 7th.

A fall of snow on Mount Wellington on the 25th, and again on the 31st.

Rain, with thunder, on the 17th.

Mean daily amount of sunlight for December, 1872 and 1873, taken hourly for antipating clear weather at the transit of Venus in December of the present year, 75 per cent.

ii.

*Leafing, Flowering, and Fruiting of a few Standard Plants in the Royal Society's Gardens, during the Month.*

- 8th.—Apricots (Royal) ripening.  
10th.—*Veronica augustifolia* in full flower.  
10th.—Jargonelle pear ripening.  
13th.—*Grevillea robusta* in full flower.  
16th.—*Catalpa syringifolia* ditto.  
18th.—Black mulberries commencing to ripen.

FRANCIS ABBOTT.

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The following are the results of the observations made at New Norfolk during the month :—

- Barometer mean, 29·946 inches.  
Temperature mean, 64·75° (in shade).  
Solar intensity mean, 99·93°.  
Elastic force of vapour, ·406in.  
Humidity of air, ·64.  
Dew point, mean position, ·533.  
Cloud (0-10) mean, 3·81.  
Ozone, mean daily amount, 7·66.  
Rainfall, 1·25in.  
Evaporation, 7·51in.  
Ditto in excess, 6·26in.

W. E. SHOOBRIDGE.

Valleyfield, January, 1874.

## FEBRUARY, 1874.

## PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		Rain in inches.
	Highest.	Lowest.	Highest in shade.	Lowest in shade.	Highest in sun.	Lowest on grass.	Direction from three daily re- gisters.	Force in lb. per square foot.	
1	30·032	29·947	71 46	111 0	42 0		NW	1 04	} The mean in all cases is taken from the sums of the three daily registers, and not from the maximum and minimum. The direction of the wind is registered from currents moving at a height of 192 feet and the force according to Lind's Wind Gauge. The supposition, however, of a uniform velocity during the month is a very arbitrary one, and the results can be considered only approximately correct. The relations of the quantities of rain which fell under the different winds are registered each evening at sundown. The 30 years' standard tables are used for obtaining the difference from the average.
2	29·813	29·676	69 52	107 0	40 0		NW SW	20 34	
3	29·992	29·933	67 44	106 0	39 0		NW SE	1 30	
4	29·632	29·420	53 50	116 0	33 5		NW	3 33	
5	29·530	29·416	75 50	104 5	41 0		NW	18 48	
6	29·587	29·548	81 56	119 0	41 0		NW	5 46	
7	29·533	29·483	84 62	119 0	48 0		NW SE	3 64	
8	29·715	29·622	80 50	111 0	44 5		NW	1 04	
9	30·015	29·978	74 48	112 5	45 0		SW SE	1 56	
10	30·086	30·034	75 48	107 5	43 0		NE SE	1 30	
11	30·248	29·419	70 50	106 0	47 5		SE	1 04	
12	30·230	30·073	80 47	115 0	44 0		NW NE	1 04	
13	30·053	29·891	91 54	124 5	47 0		NW	1 04	
14	29·839	29·703	83 65	105 0	48 5		NW SE	0	
15	29 805	29 735	77 52	79 0	55 0		SE	1 04	
16	30 074	29 936	77 43	104 5	46 0		SE	0 06	
17	30 146	30 009	68 48	105 0	45 0		NW SE SW	78	
18	30 101	30 004	65 47	76 0	43 5		SW SE	52	
19	30 137	30 128	65 47	106 5	44 5		SE	1 30	
20	30 184	30 154	62 50	88 0	29 0		SW SE	78	
21	30 218	30 193	67 50	102 0	46 5		NW SE	52	
22	30 232	30 141	73 53	109 0	49 5		NW	78	
23	30 055	30 017	77 50	109 5	42 0		NW SE	52	
24	30 140	30 081	70 55	102 0	42 5		SW SE	8 33	
25	30 239	30 229	66 47	102 0	44 0		SE S SW	1 56	
26	30 293	30 271	69 47	105 0	41 5		NW E SE	78	
27	30 029	29 725	81 49	116 0	44 0		NW	8 33	
28	29 665	29 454	79 57	89 5	47 5		NW SW	10 41	
Monthly mean			63 17	106 0	44 60	Total Force ..	97 59	2 26	
			29 933						

Barometer mean, 29·933in., being 0·091 above the average.

Temperature mean, 63 17°, being 1 06° above the average.

Solar intensity mean, 106 0°, being 1 60° below the average.

Dew point mean, 48 2°, being 2 31° below the average.

Humidity of air mean, 61 22, being 8 78 per cent. below the average.

Elastic force of vapour mean, 361, being 0 14 per cent. below the average.

Total amount of rain, 2 26in., being 0 73in. above the average.

Increase of spontaneous evaporation on rainfall, 1 95in.

Mean amount of ozone, 5 5, being 1 67 of chromatic scale below the average.

Electricity active all through the month.

Mean amount of sun-light for the month of December, taken hourly in the years 1872 and 1873—75 per cent.

FRANCIS ABBOTT.

*Leafing, Flowering, and Fruiting of a few Standard Plants in the Royal Society's Gardens during the month.*

8th.—Kerry Pippin commencing to ripen.

10th.—Windsor Pear ditto ditto.

16th.—Bon Chretien ditto ditto.

18th.—Greengage Plum ditto ditto.

25th.—Common Ash commencing to shed seed.

28th.—Common Sycamore ditto ditto.

The following are the results of observations made at New Norfolk during the month :

- Barometer mean, 29.995 inches.
- Temperature mean (in shade), 62.32°.
- Elastic force of vapour, .372in.
- Humidity of air, .67.
- Dew point, mean position, 50.05.
- Cloud (0-10), 5.16.
- Ozone, mean daily amount, 7.78.
- Rainfall, 1.67in.
- Evaporation, 4.99in.
- Ditto in excess of rainfall, 3.32in.
- Valleyfield, Feb., 1874.

W. E. SHOBRIDGE.

MARCH, 1874.  
PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		Rain in inches.
	Highest.	Lowest.	Highest in shade		Highest in sun	Lowest on grass.	Direction from three daily re- gisters.	Force in lb. per square foot.	
			Lowest in shade.	Lowest in shade.					
1	29.934	29.919	70.45	102.0	39.5	NW NE NW	3.64		
2	30.081	30.041	76.51	105.0	47.0	W NW	3.64		
3	30.159	30.117	75.45	106.0	42.5	NW SE	1.04		
4	30.144	30.130	70.55	89.5	40.0	NW SE	.78		
5	30.174	30.055	67.55	74.0	43.0	SW SE	.52		
6	29.974	29.971	64.53	71.5	43.0	SE	.52	0.40	
7	30.265	30.176	67.50	97.0	38.5	SE	.78		
8	30.282	30.253	73.52	102.5	33.5	NW SW SE	.52		
9	30.246	30.111	75.47	116.0	33.0	NW N	.78		
10	30.065	29.878	80.57	109.5	39.5	NE NW NE	.52		
11	29.902	29.770	89.62	117.0	48.0	NW	.78	0.05	
12	29.675	29.641	80.60	117.0	47.0	NW SE	1.04		
13	29.718	29.638	79.55	110.5	41.0	NW SE	.78		
14	29.654	29.607	74.54	95.0	40.0	NE SE	.26		
15	29.855	29.769	70.52	98.0	38.5	NW SE	.78		
16	30.032	30.052	75.45	106.0	30.5	NW SE	.78		
17	29.929	29.752	78.52	111.0	36.0	NW	1.04	0.01	
18	29.686	29.580	71.50	94.0	37.0	NW W	5.20	0.10	
19	29.791	29.790	69.46	100.0	37.5	NW	1.30		
20	29.888	29.736	77.54	102.0	30.5	NW	1.56		
21	29.741	29.697	73.55	107.0	40.0	NW	.52	0.41	
22	29.982	29.949	78.50	89.5	40.5	SE	1.30	0.47	
23	30.014	29.982	71.48	78.0	38.0	SE	.26	0.04	
24	30.221	30.195	73.42	99.0	37.5	NW W SE	.26		
25	30.475	30.439	69.42	100.0	38.0	NW SE	1.19		
26	30.437	30.155	71.45	98.5	41.0	NW NE	.52	0.02	
27	29.915	29.877	68.55	70.0	54.0	NW SE	.26		
28	30.165	30.129	65.51	93.0	50.0	SE	1.04		
29	30.295	30.159	76.48	105.0	44.5	NW SE	1.04	0.06	
30	30.753	30.683	68.50	71.0	47.0	SE E NE	.78		
31	30.550	30.406	69.51	100.5	50.0	NW	.52		
Monthly mean			62.48	97.60	41.10	Total Force	34.21	1.46	
	30.025								

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

The direction of the wind is registered from currents moving at a height of 192 feet and the force according to Lind's Wind Gauge. The supposition, however, of a uniform velocity during the month is a very arbitrary one, and the results can be considered only approximately correct.

The relations of the quantities of rain which fell under the different winds are registered each evening at sundown.

The 30 years' standard tables are used for obtaining the difference from the average.

- Barometer mean, 30.025in., being 0.148in. above the average.
- Temperature mean, 62.48°, being 2.56° above the ditto.
- Solar intensity mean, 97.60°, being 5.90° below the ditto.
- Dew point mean, 50.08°, being 0.86° above the ditto.
- Humidity of air mean, .66, being .05 per cent. below the ditto.
- Elastic force of vapour mean, .373, being .016 below the ditto.
- Total amount of rain, 1.46in., being 0.14in. below the ditto.
- Increase of spontaneous evaporation on rain-fall, 1.34in.
- Mean amount of ozone, 6.00, being 1.11 of chromatic scale below the ditto.
- Electricity active all through the month.

FRANCIS ABBOTT.

*Leafing, Flowering, and Fruiting of a few Standard Plants in the Royal Society's Gardens, during the month.*

- 9th.—Tips of Hornbeam commencing to turn brown.
- 17th.—Coe's Golden-drop Plum ripe
- 18th.—Seckle Pear commencing to ripen.
- 20th.—Tips of Elm commencing to turn yellow.
- 22nd.—Horsechestnut leaves turning brown.
- 25th.—Ash leaves commencing to fall.
- 28th.—Oak leaves ditto. Acorns ripe.

The following are the results of observations made at New Norfolk during the month :  
 Barometer mean, 30·060 inches.  
 Thermometer mean of three daily readings, 61·96deg. ; max. and min. in shade, mean, 61·19 ; max., 84 ; min., 41.  
 Dew point mean temperature, 54·8.  
 Elastic force of vapour, 423 inches.  
 Humidity of air, 77.  
 Rainfall in inches, 99.  
 Evaporation, 4·43 ; in excess, 3·49.  
 Clouds, 6·41 ; scale, 0-10.  
 Mean daily amount of ozone, 7·51.

W. E. SHOOBRIDGE.

APRIL, 1874.  
 PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		Rain in inches.
	Highest.	Lowest.	Highest in shade.		Lowest in shade.		Direction from three daily registers.	Force in lb. per square foot.	
	In.	In.	°	°	°	°			
1	30·065	29·902	68	56	78·0	52·0	SE	0	0·65
2	29·710	29·592	69	57	79·0	55·0	NW	·52	0·59
3	29·684	29·647	69	49	85·5	50·0	E SE NE	0	0·11
4	29·514	29·317	68	43	97·0	44·5	NW W NW	18·71	0·05
5	29·472	29·327	66	49	92·0	46·5	NW W	13·02	
6	29·615	29·530	71	50	99·5	47·5	W	31·26	0·04
7	30·184	30·160	68	50	104·0	48·0	NW SE	·52	
8	30·276	30·253	78	45	110·0	41·0	NW SE	·52	
9	30·244	30·069	82	45	106·5	41·0	NE NW	·52	0·03
10	30·223	30·165	74	50	85·0	45·5	SE	·26	
11	30·184	30·082	75	50	100·0	47·0	NW E SE	·52	
12	30·049	29·947	77	57	95·5	47·0	NW SE	·52	0·21
13	29·747	29·622	68	53	72·0	49·0	NW SE NE	·26	
14	30·121	29·912	63	46	86·0	39·5	NW NE SW	1·04	
15	30·186	30·142	60	35	79·0	30·0	NW NE SE	·26	
16	30·153	30·115	70	41	95·0	38·5	NW NE SE	·26	0·01
17	30·053	29·921	65	45	85·0	42·0	NW	·78	
18	29·977	29·946	71	52	102·5	47·0	NW W	·78	
19	30·092	30·033	71	45	96·0	40·0	NW	1·04	
20	29·945	29·703	67	46	91·5	42·0	NW	1·04	
21	30·138	30·092	67	46	95·0	40·0	NW SE	·26	
22	30·106	29·855	72	49	95·0	37·0	NW	5·72	0·18
23	29·662	29·567	68	55	77·5	52·5	NW	2·86	0·08
24	30·044	29·950	65	42	91·0	37·5	NW	1·56	
25	30·267	30·200	71	43	96·5	39·0	E NW SE	·52	
26	30·452	30·430	66	44	82·0	39·0	NW SE	·52	
27	30·433	30·402	61	50	80·0	46·5	SW SE	0	
28	30·333	30·224	60	50	62·0	43·0	NWE	0	
29	30·220	30·180	58	48	63·5	45·0	NW NE	0	
30	30·183	30·033	73	49	94·0	40·5	W NW	·26	
Monthly mean	29·996	29·900	59·00	43·77	89·18	43·77	Total force	69·01	1·95

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

The direction of the wind is registered from currents moving at a height of 162 feet and the force according to Lind's Wind Gauge. The supposition, however, of a uniform velocity during the month is a very arbitrary one, and the results can be considered only approximately correct.

The relations of the quantities of rain which fell under the different winds are registered each evening at sundown.

The 30 years' standard tables are used for obtaining the difference from the average.

Barometer mean, 29·996in., being 0·115in. above the average.  
 Temperature mean, 59·00°, being 3·67° above the ditto.  
 Solar intensity mean, 89·18°, being 2·56° below the ditto.  
 Dew point mean, 49·5°, being 2·33° above the ditto.  
 Humidity of air mean, '71, being '05 per cent. below the ditto.  
 Elastic force of vapour mean, '355, being '026 per cent. above the ditto.  
 Total amount of rain, 1·95in., being 0·18in. above the ditto.  
 Increase of spontaneous evaporation on rainfall, 0·48in.  
 Mean amount of ozone, 5·0, being 1·85 of chromatic scale below ditto.  
 Electricity active on 23 days, feeble on 6 days, and *nil* on 2 days. A strong force of N.W. wind on the 4th, 5th, and 6th, varying from 2·60lb. to 15·62lb. to the square foot; or with an approximate speed of 4½ feet to 24 feet per second. On the 8th, a strong bluish-coloured Aurora from S.W. to S.E., with an altitude of 70°.

FRANCIS ABBOTT.

*Leafing, Flowering, and Fructifying of a few Standard Plants in the Royal Society's Gardens, during the Month.*

10th.—Coe's late Plum ripe.  
 16th.—Elm leaves commencing to fall.  
 18th.—Chinese Chrysanthemum commencing to flower.  
 27th.—Mountain Ash leaves commencing to fall.  
 28th.—Black Mulberry leaves commencing to fall.  
 30th.—Seeds of Hornbeam ripe.

The following are the results of observations made at New Norfolk during the month :

Barometer mean, 30·019in.  
 Temperature, mean of three daily readings, 57·15°  
 Maximum and Minimum Thermometers (in shade) mean, 56·3°.  
 Maximum Temperature in shade, 74·0°.  
 Minimum Temperature in shade, 39·0°.  
 Dew point mean temperature, 53·05°.  
 Elastic force of vapour, '403in.  
 Humidity of Air, '86.  
 Total amount of Rain, 1·41in.  
 Evaporation, 2·18in., being '77in. in excess of rainfall.  
 Extent of cloudy sky, 5·75 (*Scale 0-10*).  
 Ozone, mean daily amount, 7·0.

Valleyfield.

W. E. SHOBRIDGE.