

SEPTEMBER, 1875.

PRIVATE OBSERVATORY, HOBART TOWN.

Day of Month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		
	Highest.	Lowest.	Highest in shade.	Lowest in shade.	Highest in sun.	Lowest on grass.	Direction from three daily re- gisters.	Force in lbs. per square foot.	Rain in inches.
1	29.428	29.418	55.41	84.0	33.0		SE S	3.33	0.62
2	29.538	29.446	55.37	85.0	33.5		NW SW	1.04	0.04
3	29.706	29.627	52.39	80.0	32.0		SW W	2.86	0.08
4	30.120	30.026	62.37	91.0	30.5		SW SE NW	.78	0.19
5	29.900	29.715	64.41	97.5	33.0		SW NW	5.72	0.09
6	29.821	29.637	63.47	94.0	36.5		NW W	.52	0.03
7	30.111	29.966	69.40	96.0	36.0		NW W	3.33	
8	29.654	29.317	72.40	86.5	34.5		NW	10.94	0.18
9	29.538	29.423	64.42	87.0	34.0		S SE NW	1.04	0.01
10	29.451	29.317	66.43	94.0	35.0		NW SW	20.84	0.03
11	29.764	29.726	60.42	83.5	33.5		NW W	1.30	0.05
12	29.693	29.553	60.45	85.0	33.0		SW	3.33	0.04
13	29.998	29.969	58.36	91.0	31.0		SW	1.56	0.01
14	30.176	30.162	63.35	95.0	31.5		NW SE	.26	
15	30.349	30.198	64.35	92.0	31.5		NW SE	.78	
16	30.061	29.821	62.40	94.0	35.0		NW	1.20	
17	29.948	28.924	64.44	96.5	36.0		NE SE	.26	0.06
18	30.001	29.915	67.38	101.0	34.5		NW SE	1.04	
19	29.950	29.835	67.39	95.5	32.5		NW	1.04	
20	29.682	29.644	70.46	104.0	33.0		NW SW	1.04	
21	29.630	29.493	64.40	92.0	34.0		NW	5.99	0.15
22	30.071	30.028	58.38	92.0	32.5		NW	5.46	
23	30.171	30.152	69.45	103.0	33.0		NW SE	3.12	
24	30.200	30.157	66.43	81.5	37.0		NW SW	.78	
25	30.291	30.252	72.42	103.0	34.5		NW SE	.78	
26	30.005	29.902	70.43	96.0	33.0		NW SW	3.33	0.12
27	29.733	29.604	68.50	77.5	34.0		NW	1.04	0.01
28	29.711	29.654	68.47	104.0	33.5		NW S SW	7.80	
29	29.562	29.430	68.44	88.0	35.0		SW W	26.05	0.10
30	29.770	29.737	62.40	97.0	33.0		NW W	3.64	
Monthly mean			56.02	92.22	34.47	Total force...	121.01	2.01	
29.819									

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, 29.819in., being 0.046in. above the average.
 Temperature mean, 56.02°, being 4.50° above the ditto.
 Solar intensity mean, 92.22°, being 2.77° above the ditto.
 Dew point mean, 42.4°, being 0.16° above the ditto.
 Humidity of air mean, .62, being .14 per cent. below the ditto.
 Elastic force of vapour mean, .278, being .002 per cent. below the ditto.
 Total amount of rain, 2.01in.
 Increase of spontaneous evaporation on rain-fall, 1.25in.
 Mean amount of ozone, 4.10in., being 0.19in. below the ditto.
 Electricity, 45 positive, 15 negative, nil 0.
 A covering of fresh snow on Mount Wellington on the 1st. Wind, snow, hail, and rain continuous on the 3rd. A fresh fall of snow on Mount Wellington on the 30th.
 FRANCIS ABBOTT.

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

- 20th.—Ash commencing to break into leaf.
- 24th.—Grape vines commencing to start.
- 25th.—Oak commencing to break into leaf.
- 26th.—Moutan Peony commencing to flower.
- 30th.—Horse Chestnut ditto.
- „.—Robinia Pseudo Acacia commencing to start.

Results of Observations made at New Norfolk during the month :

Barometer mean of three daily readings, corrected and reduced, 29·947in.

Thermometer mean of ditto, 49°25'.

Dew point mean temperature of ditto, 39°10'.

Humidity mean of ditto, '63.

Elastic force of vapour mean of ditto, '240.

Solar intensity mean of maximum temperature, 115°30'.

Terrestrial radiation mean of minimum temperature, 32°30'.

Rainfall, 2·37in.

Evaporation, 4·64in., in excess of rainfall, 2·27in.

Ozone mean of two daily registers, 7·58.

Clouds mean of three daily registers, 5·06.

Wind total force of three ditto, 75·96 lbs. per square foot.

Wind horizontal movement, 2354 miles.

Electricity, 25 negative, 5 positive.

W. E. SHOBRIDGE, Valleyfield.

OCTOBER, 1875.

PRIVATE OBSERVATORY, HOBART TOWN.

Day of month.	Bar. 37 feet abv. sea level corrected & reduced.		Self-Registering Thermometers.				Wind.		
	Highest.	Lowest.	Highest in shade.	Lowest in shade.	Highest in sun.	Lowest on grass.	Direction from three daily re- gisters.	Force in lbs. per square foot.	Rain in Inches.
	In.	In.	°	°	°	°			
1	29·600	29·538	58	45	65·0	40·0	NW SE W	·26	0·30
2	29·643	29·417	64	41	93·0	34·5	NW W	1·56	0·06
3	29·430	29·345	63	47	96·0	40·0	NW W	6·25	0·04
4	29·667	29·608	62	44	90·5	29·5	SW NW	16·15	0·54
5	30·015	29·945	61	43	93·0	34·0	SW NW	5·46	0·17
6	30·112	30·002	68	40	99·5	36·0	NW SE	1·56	0·02
7	29·718	29·563	78	49	107·0	37·5	SW S	10·94	0·30
8	30·048	29·984	62	43	90·5	36·0	S SE	1·04	
9	30·006	29·900	63	39	92·0	34·5	NW SE	·78	0·06
10	30·046	29·990	59	45	83·5	33·0	E SE	·78	0·03
11	30·245	30·193	61	46	101·0	40·0	SE	1·30	
12	30·145	29·932	70	45	101·5	39·5	NW	1·04	
13	29·767	29·606	77	46	109·0	43·0	NW S	5·20	0·09
14	29·475	29·235	77	47	108·0	44·0	NW N	5·47	0·04
15	29·383	29·352	73	46	99·0	40·0	W NW	13·02	0·01
16	29·433	29·250	66	44	99·0	40·5	NW SE	1·04	0·01
17	29·300	29·205	64	44	90·0	42·0	NW W	10·41	0·43
18	29·794	29·725	62	40	100·0	37·0	NW W	1·04	0·01
19	29·648	29·430	58	43	71·0	39·0	NW	5·21	0·35
20	29·826	29·758	59	40	60·5	36·0	SE SW	·78	0·01
21	30·015	29·942	61	43	100·0	40·5	SE	·78	0·01
22	30·140	30·078	63	39	102·0	35·0	NW SE	1·04	
23	30·042	30·015	61	45	90·0	40·0	NW S	·52	0·02
24	30·085	29·960	66	45	100·5	41·5	SE	1·30	0·02
25	29·871	29·815	64	50	90·0	45·0	NW SE	1·30	0·02
26	29·942	29·882	59	48	60·0	43·0	NW SE	0·	
27	29·884	29·848	65	45	99·0	43·0	NW SE	1·04	0·15
28	29·895	29·871	60	44	102·5	41·5	NW S	·78	0·04
29	29·998	29·937	60	38	99·0	32·5	S SE W	3·12	0·05
30	29·978	29·837	68	39	104·0	33·0	W N	1·30	
31	29·580	29·420	59	48	74·0	42·5	W N	·52	
Mean monthly 29·779	56·83	92·74	39·0				Total Force....	108·02	2·83

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, 29·779in., being 0·001in. above the average.
 Temperature mean, 56·88°, being 2·49° above the average.
 Solar intensity mean, 92·74°, being 4·38° below the ditto.
 Dew point mean, 45·5°, being 0·94° above the ditto.
 Humidity of air mean, '68, being '05 per cent. below the ditto.
 Elastic force of vapour mean, '318, being '005 per cent. above the ditto.
 Total amount of rain, 2·83in., being 0·77in. above the ditto.
 Increase of spontaneous evaporation on rainfall, 2·43in.
 Mean amount of ozone, 4·26, being 3·67 of chromatic scale below the ditto.
 Electricity active all through the month,—36 *positive*, 22 *negative*, and 4 *nil*, on the 1st and 19th.
 Thunder and lightning on the 13th and 14th.
 A fresh covering of snow on Mount Wellington on the 16th and 19th.

FRANCIS ABBOTT.

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

12th.—Carpinus Betulus commencing to break
 22nd.—Ailanthus Glandulosa ditto.
 26th.—Lime Trees ditto.
 30th.—Black Mulberry ditto.
 31st.—Elm seeds falling.

Results of observations made at New Norfolk during the month :

Barometer mean of three daily readings, corrected and reduced, 29·763in.
 Thermometer mean of three daily readings, 54·35.
 Dew point mean, position of three ditto, 44·41.
 Elastic force of vapour mean of three ditto, '286.
 Humidity mean of three ditto, '68.
 Terrestrial radiation, mean of minimum temperature, 37·61.
 Solar intensity, mean of maximum temperature, 118·64.
 Rainfall, 3·20in.
 Evaporation, 5·25in., in excess of rainfall 2·05in.
 Clouds, mean of three daily observations, 5·70.
 Ozone, mean of two daily observations, 7·38.
 Electricity,—52 *negative*, 3 *positive*, 7 *nil*.
 Windforce in lbs. per square foot, total of three daily observations, 68·48lbs. Horizontal movement, 3065 miles.

W. E. SHOORIDGE, Valleyfield.

Rainfall at Hill station 1550 feet above sea level, 3·01in.