

METEOROLOGY FOR JULY, 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 instrumental error and to mean sea level.		Thermometers (Reading.)			Thermometers (Self-Registering.)			Relative Humidity (Per cent)		Clouds.			Wind.			Rain in Inches.	Spon. Evap.	Ozone Chron. Scale.					
	7 30 a.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.	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.									
1 20-530	30-510	5 0	41 0	53 0	82 0	60 0	30 0	85	80	0	0	K	5 0	NW	0	N	0	—	4 0					
2 30-510	30-430	4 5	39 0	40 0	82 5	60 0	29 0	100	80	KS	5 5	KS	3 5	N	0	NW	26	—	5 0					
3 30-515	30-445	5 5	40 5	43 0	65 0	54 0	30 5	92	86	K	3 0	K	10 0	N	26	NW	26	—	3 5					
4 30-535	30-500	3 5	38 5	49 0	75 0	60 0	31 0	92	86	KS	5 5	K	5 0	NW	0	NW	0	—	6 0					
5 30-420	30-320	2 5	36 5	49 0	74 5	55 0	28 5	91	80	KS	7 0	K	7 0	N	26	NW	0	—	5 5					
6 30-325	30-300	6 0	43 0	54 0	56 0	54 5	34 5	85	80	KN	10 0	K	10 0	N	0	NW	0	—	4 0					
7 30-320	30-215	5 5	42 0	55 0	85 0	68 0	33 0	92	87	K	6 5	NW	0	N	0	N	0	—	0 1					
8 30-035	29 82 5	5 0	41 0	57 0	78 0	61 0	32 5	85	87	K	7 0	K	10 0	N	26	NW	52	—	3 5					
9 30 003	29 91 0	4 0	40 0	53 0	82 0	53 0	31 0	92	64	K	3 0	K	4 0	NW	26	N	26	—	0 1					
10 30-245	30 315	2 0	36 0	52 0	74 5	52 0	28 5	83	50	K	2 0	K	2 0	S	0	NW	26	—	4 7					
11 30-425	30 415	4 0	39 0	54 0	75 0	59 0	30 0	92	74	K	6 5	K	4 0	W	0	NW	0	—	3 0					
12 30-380	30 320	3 0	38 0	52 0	73 0	59 0	28 0	84	84	0	0	KS	7 0	SW	0	NW	0	—	4 0					
13 30-310	30 230	3 0	37 0	53 0	73 5	64 0	28 5	84	74	KS	7 0	K	6 0	NW	26	SW	0	—	7 5					
14 30-430	30 430	2 5	36 5	51 0	83 0	60 0	27 5	100	86	K	5 5	0	0	NW	26	SE	0	—	4 0					
15 30 510	30 410	2 0	35 0	50 0	75 5	56 0	27 0	92	80	K	5 0	KN	4 0	NW	26	N	0	—	4 0					
16 30 325	30 205	4 0	39 0	52 0	65 5	56 0	29 0	92	80	K	7 5	N	10 0	NW	0	NE	0	—	2 5					
17 29 940	29 910	8 0	47 0	53 0	—	57 0	34 0	93	93	K	10 0	N	10 0	NW	0	S	0	—	2 0					
18 29 600	29 520	13 0	55 5	57 0	—	57 0	34 5	100	93	N	10 0	N	10 0	S	52	S	52	—	1 50					
19 29 515	29 910	10 0	50 0	52 0	—	55 0	31 0	100	100	N	10 0	K	10 0	S	26	S	26	—	3 5					
20 30 140	30 140	7 5	46 0	51 0	—	53 0	30 5	85	80	KS	6 0	K	10 0	NW	0	S	0	—	7 5					
21 30 225	30 120	3 5	38 0	53 0	65 0	58 0	29 0	85	74	K	2 0	0	6 0	N	0	NW	26	—	9 4					
22 30 310	30 230	3 0	38 0	51 0	87 5	72 0	31 0	84	74	K	3 0	K	0	N	26	SE	0	—	5 5					
23 30 230	30 115	3 0	37 0	52 0	68 0	57 0	31 0	91	86	K	7 5	K	4 5	S	0	NW	26	—	5 0					
24 30 110	30 0 20	4 0	39 0	57 0	83 0	60 0	34 0	84	61	K	10 0	K	3 0	SW	0	NW	26	—	4 0					
25 30 110	30 0 00	6 5	44 0	59 0	87 0	61 0	36 0	79	61	KS	5 0	K	5 5	N	0	NW	26	—	3 0					
26 29 910	29 740	4 5	40 5	55 0	78 0	62 0	34 0	78	66	K	6 0	K	7 5	N	26	NW	26	—	3 5					
27 29 410	29 2 10	7 5	46 0	58 0	72 0	58 0	35 5	86	74	K	10 0	K	5 0	SW	0	N	52	—	7 5					
28 29 625	29 625	6 5	44 0	60 0	80 0	65 0	36 0	84	71	K	5 5	K	7 0	NW	26	W	26	—	3 5					
29 29 820	29 845	9 0	48 5	61 0	87 5	63 0	37 5	86	62	K	9 0	K	7 0	S	0	W	52	—	4 0					
30 29 120	30 040	10 5	51 0	65 0	95 0	69 0	38 0	70	59	K	1	K	1 0	NW	26	N	0	—	70					
31 29 910	29 810	5 0	41 0	60 0	85 0	64 0	33 0	85	66	0	0	KS	6 0	N	0	N	0	—	2 5					
Mean Press.	30 132	Mean	5 28	M'n. Tem.	47 63	Mean	77 72	Mean	59 70	Mean	71 70	Mean	82	Mean for Month.	6 00	Mean Force ...	13 lbs.	Tl.	Tl.	Tl.	1 96	2 11	137 0	
Greatest do.	30 530	Max.	13 00	Max.	95 00	Max.	72 00	Max.	33 00	Prev. Character,	K & KS.	Greatest Force	52 "	"	"	"	"	"	Mean	4 43
Least do.	29 210	Min.	2 00	Min.	56 00	Min.	53 00	Min.	27 00	Least Force...	0 "	"	"	"	"	"	...	
												Prevailing Direction.			N.W.,									

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 July, 1877.

- 10th. *Arbutus unedo* commencing to flower.
- 10th. *Garrya elliptica* commencing to flower.
- 13th. *Pavia Californica* buds bursting.
- 13th. White mulberry commencing to leaf.

20th. Yellow Crocus in flower.
 21st. Almond in full flower.
 F. ABBOTT, JUN., Superintendent.

Results of observations taken at New Norfolk for July, 1877, in accordance with new forms, and registered at 7 30 a.m., and 4 30 p.m. :—

Barometer, mean of two daily readings, corrected and reduced, 30 160 in.

Thermometer, mean of 2 ditto, 43 53 deg.

Ditto, mean of maximum and minimum in shade, 44 46 deg.

Dew point, mean position of 2 daily readings, 39 15 deg.

Elastic force of vapour, mean of 2 ditto, 240.

Humidity of air, mean of 2 ditto, 84.

Solar intensity, mean of maximum temperature, 100 04 deg.

Terrestrial radiation, mean of minimum temperature, 29 42 deg.

Rainfall, 1 27 ins. on five days.

Clouds, mean of 2 daily registers, 5 90.

Ozone, mean of 2 daily ditto, 7 62.

W. E. SHOORIDGE, Bushy Park.

NOTE.—On 16th the observatory was removed to Bushy Park, and the observations on four days, except the rainfall, were not registered, consequently the above means are from 27 days only. As it is in the same valley the removal is not expected to influence the results in any material degree.

W. E. S.