

Government Meteorological Observatory.

METEOROLOGICAL Observations at Kelburn, Wellington, for the Month of October, 1940. Observations taken at 9 a.m.

Altitude of Observatory, 415 ft.

Date.	Pressure in Millibars, at Sea-level and Standard Gravity.	Temperature (° F.) from Observations at 9 a.m.							Wind.			Rainfall in Points: (100 Points = 1 Inch).	Bright Sunshine: Hours and Tenths.	Weather (Symbols) at 9 a.m.
		In Screen.					Minimum on Grass.	Beaufort Scale.		Anemometer. Miles Run in 24 Hours.				
		At 9 a.m.		Relative Humidity, Per Cent.	Maximum.	Minimum.		Direction.	Force.					
		Dry.	Wet.								Dry.			
1	1003.3	50.9	50.3	96	52.1	44.6	44.5	Calm	..	175	59	0.0	or	
2	1009.8	48.6	44.9	74	52.2	43.3	41.6	SSE	6	401	1	5.8	c	
3	1022.5	52.2	48.0	72	57.9	40.1	32.8	N	1	160	..	10.1	b	
4	1023.8	52.8	48.6	72	54.8	46.3	41.5	SE	4	121	2	3.4	bc	
5	1020.8	48.7	45.2	74	53.2	41.8	38.8	SSE	4	173	..	8.6	o	
6	1019.1	51.1	48.2	80	58.4	39.7	33.0	NW	3	126	..	10.2	c	
7	1011.4	53.8	49.4	71	60.3	47.9	45.1	N	4	258	139	10.3	bc	
8	1009.3	49.2	48.7	97	49.5	46.7	43.1	SSE	4	73	49	0.0	or	
9	1014.3	47.0	41.8	61	50.0	39.6	37.4	SE	5	365	1	4.7	op	
10	1005.5	48.8	45.4	75	58.4	37.0	30.0	N	2	148	..	8.4	o	
11	1012.6	54.2	49.9	72	62.7	42.6	36.6	ENE	1	129	..	11.4	bz	
12	1023.1	54.5	48.7	63	57.2	41.3	32.2	N	2	132	..	6.2	bez	
13	1012.4	57.3	52.0	67	61.5	50.0	47.3	NW	6	210	14	5.7	o	
14	1020.1	48.6	43.8	65	56.2	41.5	40.6	SE	1	199	Trace	6.5	oz	
15	1015.6	52.5	51.7	94	57.4	43.4	37.9	N	4	142	3	0.6	od	
16	1014.9	56.0	54.5	90	58.6	51.2	52.3	NW	5	259	..	0.0	o	
17	1014.2	57.6	55.6	88	60.4	53.9	52.1	NW	7	467	Trace	3.8	oq	
18	1009.0	55.4	54.9	96	57.8	54.1	53.2	NW	7	535	47	0.0	odq	
19	1013.7	57.8	48.2	44	60.3	42.1	37.0	NW	2	183	..	6.0	bc	
20	1023.7	58.2	51.0	57	64.6	45.1	34.3	SE	1	137	..	12.3	b	
21	1027.4	57.9	53.0	71	61.1	46.5	41.7	NNW	3	108	..	9.4	c	
22	1029.6	58.7	54.2	73	63.1	45.1	36.6	NW	3	117	..	12.5	b	
23	1023.5	56.4	50.9	66	61.1	50.7	47.7	NW	6	259	Trace	6.9	o	
24	1010.5	55.3	53.9	91	57.8	51.9	49.8	NW	7	397	7	0.7	oq	
25	1007.0	57.1	48.0	46	59.3	50.0	46.2	NW	4	581	29	5.9	bc	
26	1020.3	54.0	50.0	74	58.1	39.0	33.0	N	4	113	..	9.8	c	
27	1015.3	53.5	48.6	67	57.9	49.0	46.6	NW	5	350	60	7.6	c	
28	1000.3	56.0	55.8	98	59.0	50.0	45.9	NNW	6	506	8	1.5	oir	
29	1002.0	55.0	49.4	65	58.0	48.2	45.5	NW	5	319	1	10.4	b	
30	1015.3	53.9	50.3	75	60.0	42.0	38.1	N	4	193	..	11.2	o	
31	1014.8	59.4	52.6	60	62.4	46.0	39.8	E	2	130	..	12.4	bc	
Means, &c. . .	1015.0	53.9	49.9	74	58.1	45.5	41.4	..	3.8	241	420	202.3	..	

Mean earth temperature at 1 ft., 55.2°; and at 3 ft., 53.8°. Number of rain days, 14. Total rainfall, 19 per cent. above normal. Sunshine, 50 per cent. of the possible; four days without any bright sunshine recorded. Mean dew-point at 9 a.m., 45.7°; mean vapour pressure, 0.306 in.

DIRECTION OF WIND.

Gale (force 8 or more).	Forces 4 to 7.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Calm.
..	19	8	½	1½	5½	1½	13	1

NOTE.—Two strong north-westerly gales were experienced, that of the 24th reaching force 9 on the Beaufort Scale. It was a very boisterous and stormy day, and in the afternoon a gust of 77 miles per hour was recorded at Kelburn. On the night of the 27th another strong north-west gale blew up and at 11.50 p.m. a gust of 72 miles per hour was recorded. Light hail was experienced on the 9th.

NOTES ON THE WEATHER FOR OCTOBER.

General Notes.—There was much more wind during this October than in the months immediately preceding, although the windiness was not unusual for the season. The gales blowing on the 27th and the 28th were strong over a wide area, causing extensive damage to trees, telegraph poles, and numerous small buildings, besides shifting the dry top-soil from farm lands in the South Island. Windy conditions have produced some yellowing in Canterbury wheat crops and have been detrimental to orchards. The weather went through a variety of rapid changes, but, generally speaking, the month was sunny and rather cool, satisfactory growth being maintained although some of the rainfall was too intense to give the maximum benefit to the ground.

Rainfall did not depart greatly from normal over most of the country. The outstanding deviations were in eastern districts south of Christchurch and in the far south, where rainfall was extremely light and where dry north-westerlies have further accentuated the deficiency. Totals were in excess in the west and about the high country of the South Island. In the north the distribution was erratic but the surpluses were confined chiefly to the Waikato, Northern Taranaki, and the region from Hawke's Bay to East Cape. Severe thunderstorms over the northern portions of the North Island interrupted power and telephone services on the 1st. Noteworthy were the heavy rains in the southern ranges which culminated in serious flooding in Westland on the 18th and again in Southland on the 28th, when several main roadways became impassable.

Temperatures were a little below normal except in the dry area south of Christchurch where several warm days resulted from föhn winds (or "north-westers"). Throughout the month there were several moderate frosts which checked, and in some cases damaged, tender vegetable crops.

Sunshine.—Most stations received the average amount of sunshine or more. Auckland and Timaru had excesses of about 50 hours, but Napier had the highest total corresponding to an average of 8 hours daily throughout the month.

Weather sequence.—For the first two days, as a cyclonic disturbance crossed over the North Island, strong southerlies prevailed and considerable rain fell, but conditions improved with rising pressures in the south. On the 4th an old disturbance became more active in the north and caused strong south-easterly winds with some rain in the far north.

An anticyclone was over the North Tasman Sea and New Zealand on the 6th, but as a disturbance advanced over the country during the 7th to 9th north-westerly winds were replaced by fresh southerlies, accompanied by snow on the ranges. Most districts received some precipitation during this period, very heavy rain being experienced in the East Cape region.

From the 10th to the 19th the westerly type of situation persisted, winds varying between north-west and south-west and fluctuating considerably in force. Remarkably little rain fell with the earlier disturbances in the series but the weather became increasingly dull until the 16th and 17th when very heavy rain fell in and west of the Southern Alps, so that the west coast rivers were in heavy flood while the Canterbury rivers were running well above their normal level. At the same time there were a number of north-westerly or westerly gales, and central districts also experienced some of the heavy rain on the 18th.