



Climate Database Statistics Report

July 2023

A report of monthly climate data and differences from normal:
current observations, late returns and corrections

Summary of the records of Temperature, Rainfall and Sunshine July 2023

Station	Height of Station Above M.S.L.	Air Temperature								Rainfall					Bright Sun—shine Hrs
		Means of		Mean of A and B	Differ—ence From Normal	Absolute Max and Min				Total Fall	No. of Rain Days	Differ—ence From Normal	Max		
		A Max	B Min			Max	Date	Min	Date				Fall	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	mm		
Cape Reinga AWS	213	14.7	10.6	12.7	+0.1	16.1	6	8.4	1	123	26	..	53	20	..
Kaitaia Aero EWS	80	15.8	9.7	12.8	+0.6	17.0	7	2.5	29	140	24	-12	42	20	..
Kaitaia Airport AWS	77	15.9	9.7	12.8	..	17.0	6	2.0	29	160	26	..	46	20	..
Kaitaia EWS	85	16.1	10.3	13.2	+1.2	19.2	7	3.8	29	149	27	-19	41	20	149
Kerikeri EWS	79	16.7	7.9	12.3	+0.6	18.8	15	2.3	31	113	17	-75	43	20	..
Kerikeri Aerodrome Aw	149	15.7	8.2	12.0	+0.8	17.7	15	4.2	30	142	25	-85	50	20	..
Kaikohe AWS	204	14.4	8.9	11.7	+0.4	16.0	6	5.0	31	192	28	-30	57	20	..
Trounson CWS	244	13.8	8.4	11.1	+0.8	15.6	31	3.0	30	192	30	-46	28	20	..
Dargaville 2 EWS	66	15.4	10.0	12.7	+1.2	16.7	8	6.3	29	102	23	-46	15	7	122
Purerua AWS	87	16.6	8.9	12.8	+0.6	18.6	15	5.5	30	81	26	-39	27	7	..
Russell CWS	15	16.2	6.7	11.5	..	17.9	15	1.5	29	97	22	-80	33	20	..
Whangarei Aero AWS	38	15.7	9.4	12.6	+0.8	17.7	8	3.2	29	104	24	-70	27	20	..
Whangarei EWS	12	16.3	8.2	12.3	+1.0	18.1	8	1.6	29	79	22	..	20	20	143
Mokohinau Island AWS	70	15.0	11.9	13.5	+0.3	16.1	15	7.9	27	87	20	-37	39	20	..
Leigh 2 EWS	27	16.5	10.5	13.5	..	18.0	8	7.1	27	114	22	-16	33	20	..
Warkworth EWS	72	15.2	7.6	11.4	+1.0	17.2	8	0.8	29	163	26	-13	43	20	..
Whangaparaoa AWS	100	15.4	9.6	12.5	+0.7	17.3	8	6.5	27	105	26	+5	36	20	..
Tiri Tiri Lighthouse	76	14.9	8.6	11.8	-0.1	16.9	16	5.4	27	84	30	-20	33	20	..
Auckland, Whenuapai A	26	15.3	8.3	11.8	+1.3	17.0	16	1.0	29	158	25	..	54	20	..
Auckland, North Shore	64	15.7	8.5	12.1	+1.5	17.5	16	2.2	29	123	25	-22	49	20	..
Auckland, Motat EWS	16	15.9	8.7	12.3	..	18.0	16	2.1	29	158	23	..	66	20	133
Manukau Heads EWS	240	13.2	9.5	11.4	..	14.6	16	6.4	27	133	24	..	37	20	124
Whitianga Aero AWS	5	15.6	8.2	11.9	+1.4	17.5	15	0.0	29	203	23	-27	98	20	..
Whitianga EWS	1	16.2	8.1	12.2	+1.6	18.3	19	0.3	29	189	16	..	98	20	..
Thames EWS	3	15.4	7.8	11.6	..	17.4	16	1.9	29	89	14	..	40	20	..
Matamata, Hinuera EWS	85	14.1	4.6	9.4	+1.0	16.6	16	-2.5	29	46	13	-52	14	7	..
Tauranga CWS	3	16.1	8.1	12.1	..	..	..	..	..	..	..	..	..	..	..
Tauranga Aero AWS	2	15.7	8.1	11.9	+1.4	..	..	2.9	27	..	..	..	..	..	..
Te Puke EWS	123	15.0	6.6	10.8	+1.0	17.4	16	0.4	29	88	13	-80	45	7	..
Whakatane Aero AWS	8	15.5	4.6	10.1	+0.8	17.9	15	-0.9	27	57	16	-79	25	7	..
Whakatane Sunshine	7	..	..	..	..	..	..	..	..	..	..	..	..	..	176
Whakatane EWS	1	16.1	5.1	10.6	..	18.8	15	0.1	27	47	7	..	18	7	..
Mamaku Radar WXT AW617	9.0	4.8	6.9	+0.2	..	..	..	..	..	..	..	..	..	..	..
Kawerau AWS	42	15.8	4.1	10.0	+0.6	18.3	11	-2.2	27	..	..	..	..	..	155
Rotorua EWS	288	13.1	4.8	9.0	..	15.3	15	-2.4	27	46	12	..	14	8	154
Rotorua Aero AWS	286	12.7	4.4	8.6	+0.8	14.5	15	-2.6	27	45	11	-92	13	7	..
Galatea AWS	175	13.7	2.0	7.9	+0.7	15.8	15	-3.8	30	41	20	..	13	9	..
Taupo CWS	360	13.5	4.9	9.2	..	..	..	..	..	..	..	..	..	..	..
Tarapounamu EWS	701	8.0	2.2	5.1	-0.3	11.3	15	-2.5	27	74	21	-89	17	3	..
Taupo Aero AWS	402	12.0	4.0	8.0	+1.2	14.0	15	-3.6	29	66	17	-34	17	9	..
Motu EWS	488	12.4	1.4	6.9	+0.5	16.5	15	-4.5	31	91	13	-106	45	21	..
Auckland, Mangere 2 E	16	15.5	9.2	12.4	..	17.7	16	2.7	29	104	22	-35	35	20	137
Auckland Aero	7	15.2	9.1	12.2	+1.0	17.4	16	3.2	29	98	27	-39	30	20	..
Auckland Aero Backup	7	15.2	9.2	12.2	+1.1	17.4	16	3.8	29	96	27	..	29	20	..
Ardmore Aero AWS	41	15.3	7.6	11.5	..	17.0	14	1.0	27	..	..	..	..	..	..
Pukekohe EWS	88	14.5	7.7	11.1	+0.6	16.2	16	1.4	27	96	23	-51	13	1	..
Firth Of Thames EWS	3	15.4	6.1	10.8	+1.2	17.6	16	-0.7	29	48	16	-64	7	3	124
Hamilton, Ruakura 2 E	45	15.3	6.3	10.8	+1.8	16.8	14	-1.3	29	45	14	-79	11	7	129
Hamilton Aero AWS	53	14.6	5.5	10.1	+1.2	16.5	15	-2.6	29	47	19	-92	9	7	..
Lake Karapiro CWS	55	14.6	7.3	11.0	+1.4	17.0	16	1.6	29	37	16	-87	6	1	..
Port Taharoa AWS	18	14.6	9.9	12.3	+1.1	16.4	19	4.2	23	104	25	-33	16	31	..
Awakino EWS	400	11.1	6.5	8.8	..	12.7	24	3.4	22	128	28	-64	13	3	..
Waikeria EWS	37	14.8	4.4	9.6	..	17.1	16	-2.7	29	45	16	-77	7	8	120
Te Kuiti EWS	61	14.8	4.9	9.9	+1.3	17.4	16	-1.3	29	69	18	-105	19	1	106
Pureora Forest CWS	549	10.2	3.8	7.0	+1.2	12.3	22	-3.3	29	77	19	-70	15	1	..
Taumarunui EWS	170	13.8	3.5	8.7	+1.2	16.2	15	-1.7	27	87	27	-70	17	1	..
Taumarunui AWS	186	13.5	3.2	8.4	+0.9	15.9	15	-2.5	27	84	24	..	14	1	92
Turangui 2 EWS	360	..	3.1	..	..	..	..	-4.9	29	98	13	-56	21	3	..
New Plymouth Aero AWS	28	14.4	7.6	11.0	+1.3	16.2	16	0.7	29	89	25	-52	17	1	155
Lower Retaruke CWS	233	12.6	4.1	8.4	+0.8	15.2	8	-0.9	29	94	23	-60	15	3	..
Mt Ruapehu, Chateau E	1097	6.2	..	..	..	..	..	..	..	..	..	..	..	..	..
Pahiatua EWS	110	12.9	4.0	8.5	+1.0	16.8	20	-2.6	7	93	23	..	11	9	..
Masterton Aero AWS	105	13.7	2.4	8.1	+0.6	18.3	18	-2.1	7	118	22	..	25	9	..

Summary of the records of Temperature, Rainfall and Sunshine July 2023

Station	Height of Station Above M.S.L.	Air Temperature								Rainfall					Bright Sun—shine Hrs
		Means of		Mean of A and B	Differ—ence From Normal	Absolute Max and Min				Total Fall	No. of Rain Days	Differ—ence From Normal	Max		
		A Max	B Min			Max	Date	Min	Date				Fall	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	mm		
Masterton EWS	90	13.9	2.1	8.0	+0.8	18.1	15	-2.5	3	105	20	..	22	9	134
Masterton, Te Ore Ore	110	14.4	3.2	8.8	+0.8	19.1	18	-1.7	3	113	21	-1	19	9	..
Takapau Plains AWS	346	11.8	4.5	8.2	+1.4	15.3	16	-1.7	31	112	22	-9	41	8	..
Dannevirke EWS	207	12.6	5.2	8.9	+1.4	15.5	20	-1.2	27	79	22	-21	19	8	90
Cape Turnagain AWS	285	11.1	7.2	9.2	+0.8	13.9	16	2.6	3	146	20	..	32	9	..
Akitio EWS	245	11.7	6.0	8.9	+0.5	15.0	20	0.8	3	106	21	..	30	8	148
Castlepoint AWS	120	13.1	7.7	10.4	+0.7	16.1	15	3.5	3	139	20	+22	23	8	..
Baring Head	79	..	6.5	..	..	..	..	2.4	3	49	12	..	19	23	..
Te Wharau, Brackenfie	292	12.3	3.4	7.9	+0.4	16.9	14	-0.7	3	220	16	+18	53	8	..
Martinborough EWS	20	14.1	3.6	8.9	+0.8	17.5	18	-1.1	30	76	15	-11	19	27	109
Ngawi AWS	8	14.2	8.5	11.4	+0.9	18.8	14	4.9	30	117	19	+3	33	23	..
Hicks Bay AWS	46	15.1	8.5	11.8	+0.4	17.8	15	..	..	66	11	-94	14	7	..
Gisborne Aero AWS	5	15.3	5.7	10.5	+0.6	18.4	14	1.4	7	133	13	+5	36	21	151
Gisborne EWS	12	15.4	4.9	10.2	+0.1	18.6	15	0.9	31	118	13	-1	36	21	..
Tolaga Bay WXT AWS	15	15.1	6.9	11.0	+0.8	..	..	..	..	..	..	..	..	..	..
Tutira CWS	235	13.8	4.7	9.3	+1.1	17.8	16	-0.5	27	150	16	+5	48	21	..
Napier Aero AWS	3	15.2	4.8	10.0	+0.7	18.4	14	-1.6	31	69	16	-28	26	9	..
Napier EWS	7	15.9	5.1	10.5	..	19.5	16	0.0	31	70	12	-35	30	9	..
Maraekakaho CWS	150	15.1	3.5	9.3	..	18.9	16	-1.2	27	80	11	..	31	8	..
Hastings AWS	16	15.4	3.2	9.3	+0.5	19.8	18	-1.4	31	58	13	..	19	9	..
Whakatu EWS	5	16.3	2.5	9.4	+1.0	19.7	14	-2.5	3	74	13	-25	30	9	..
Waipawa EWS	130	14.2	3.0	8.6	+1.0	18.0	16	-2.4	31	93	17	-8	33	8	153
Wairoa, North Clyde E	15	16.1	4.8	10.5	+1.0	21.1	18	0.8	31	101	17	-22	36	21	..
Wairoa Aero AWS	13	15.0	4.2	9.6	+0.9	18.6	14	-0.1	31	109	21	..	31	21	..
Mahia Radar WXT AWS	419	10.7	6.9	8.8	+0.4	..	..	..	..	..	..	..	..	..	..
Mahia AWS	136	13.2	8.2	10.7	+0.4	16.2	14	3.6	3	211	20	+67	53	8	..
Cape Kidnappers WXT A	113	14.2	8.8	11.5	+1.1	17.8	16	4.0	3	..	..	..	..	..	..
Paraparaumu Aero	5	14.2	5.0	9.6	+0.6	17.2	14	-0.4	7	54	18	-50	15	9	140
Paraparaumu Aero AWS	8	13.9	5.3	9.6	+0.8	17.0	14	0.0	7	54	14	-40	16	9	..
Paraparaumu Aero EWS	5	14.4	5.4	9.9	..	17.4	14	0.1	7	46	15	-49	14	9	142
Ohakea AWS	47	13.6	6.4	10.0	+0.9	15.3	16	0.3	7	64	18	..	17	9	..
Palmerston North Aero	39	13.7	6.0	9.9	+1.1	17.0	20	-0.7	3	65	19	-20	17	9	..
Palmerston North EWS	21	14.0	5.4	9.7	+0.9	16.7	20	-0.3	27	61	19	-27	13	9	92
Levin AWS	15	14.4	5.2	9.8	+1.0	16.6	20	-1.0	7	60	21	-34	24	9	..
Levin EWS	23	14.3	4.9	9.6	..	16.5	18	-1.2	7	50	15	..	20	9	135
Mana Island AWS	110	12.4	7.4	9.9	+0.8	15.1	4	3.7	27	83	20	..	23	9	..
Porirua, Elsdon Park	7	13.7	4.5	9.1	..	16.7	14	-0.7	29	94	21	..	20	9	135
Wellington, Kelburn A	125	12.7	6.5	9.6	+0.4	16.4	14	2.5	3	114	22	-33	26	23	..
Wellington Aero	4	13.5	6.9	10.2	+0.4	17.1	4	2.2	30	85	20	-25	26	23	..
Wellington, Greta Poi	3	14.2	7.8	11.0	+0.8	18.5	4	4.4	30	87	17	..	22	23	..
Wellington Aero Backu	4	13.5	6.9	10.2	+0.4	17.0	4	2.6	30	88	24	-31	25	23	..
Upper Hutt, Trentham	50	13.4	3.1	8.3	+0.8	16.5	14	-2.5	3	97	18	-35	22	27	122
Stratford EWS	280	12.1	5.6	8.9	+1.0	16.0	16	-0.2	29	58	19	-142	8	3	98
Hawera AWS	100	13.4	7.6	10.5	+1.8	15.7	8	1.6	23	51	27	-66	12	1	..
Ohakune EWS	607	10.4	3.4	6.9	+1.3	15.2	8	-3.8	7	106	24	-43	20	25	..
Waiouru Aero AWS	820	7.8	2.0	4.9	+1.1	11.0	20	-4.1	27	131	26	..	25	9	..
Waiouru EWS	803	7.9	2.3	5.1	..	11.8	20	-2.5	27	130	27	-2	29	9	..
Taihape Rec	433	11.9	3.6	7.8	+1.4	16.0	8	-2.0	7	116	21	+24	18	9	..
Flat Hills WXT AWS	262	12.1	6.2	9.2	+1.3	15.5	8	1.5	27	129	27	+43	25	9	..
Whanganui, Spriggens	15	14.2	7.5	10.9	+1.2	16.1	16	1.9	7	63	19	-24	14	9	..
Whanganui Aero AWS	14	14.4	8.0	11.2	+1.5	16.2	20	1.9	7	71	23	-13	15	9	..
Wanganui 2 AWS	18	15.6	7.5	11.6	+1.8	19.0	8	2.0	7	..	..	..	..	..	..
Takaka EWS	20	15.0	2.4	8.7	+0.8	18.9	16	-1.3	28	48	13	-130	31	7	205
Farewell Spit AWS	3	16.7	8.3	12.5	+2.1	18.5	16	4.4	29	105	13	+4	69	7	..
Westport Aero AWS	5	13.3	6.1	9.7	+0.8	16.5	24	2.4	28	198	27	+28	23	12	..
Westport EWS	6	..	..	..	..	..	..	..	..	167	24	..	20	19	129
Arapito EWS	3	14.0	5.4	9.7	+1.5	17.0	20	0.6	22	204	20	+21	33	13	108
Hokitika Aero	39	12.8	4.5	8.7	+1.1	16.7	24	-0.5	22	141	21	-87	29	19	123
Hokitika Aero AWS	40	12.8	4.5	8.7	+1.2	16.6	24	-0.6	22	156	24	-52	31	19	142
Hokitika EWS	39	12.8	4.4	8.6	..	16.7	24	-0.7	22	129	19	..	28	19	..
Reefton EWS	198	11.2	2.3	6.8	+1.4	15.2	20	-3.3	22	119	21	-43	18	13	86
Greymouth Aero EWS	5	13.4	5.3	9.4	+1.4	18.4	24	0.8	3	97	23	-100	13	26	117
Mt Philistine EWS	1655	1.8	-3.1	-0.7	+0.3	7.1	29	-7.2	21	113	23	..	35	13	..

Summary of the records of Temperature, Rainfall and Sunshine July 2023

Station	Height of Station Above M.S.L.	Air Temperature								Rainfall					Bright Sun—shine Hrs
		Means of		Mean of A and B	Differ—ence From Normal	Absolute Max and Min				Total Fall	No. of Rain Days	Differ—ence From Normal	Max		
		A Max	B Min			Max	Date	Min	Date				Fall	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	mm	mm		
Mahanga EWS	1995	-0.2	-4.7	-2.5	-0.1	4.3	30	-11.8	3	..	..	..	..	..
Ivory Glacier CWS	1390	3.8	-1.4	1.2	..	7.9	6	-5.3	3	94	20	-480	35	31	
Okarito EWS	1	12.8	3.5	8.2	..	16.3	20	-0.3	3	100	19	..	17	31	
Franz Josef EWS	80	13.0	2.5	7.8	+1.0	18.8	24	-1.1	3	145	17	-172	32	13	
Lake Moeraki EWS	10	12.4	2.0	7.2	..	18.5	24	-1.7	6	207	20	..	46	15	
Haast AWS	1	12.6	4.3	8.5	+0.7	18.4	24	-1.2	2	169	23	-83	24	17	
Milford Sound AWS	3	10.6	3.0	6.8	+1.4	14.8	23	-0.7	6	362	21	-106	65	31	
Milford Sound EWS	3	10.4	2.9	6.7	..	14.7	24	-0.5	6	..	..	..	..	..
Castle Mount EWS	2000	1.1	-5.9	-2.4	+1.1	7.6	6	-11.4	2	165	18	..	126	23	
Secretary Island AWS	19	12.0	6.9	9.5	+0.4	16.0	23	3.1	6	..	..	..	..	..
Puyssegur Point AWS	45	11.5	7.1	9.3	+0.9	13.5	15	3.7	2	279	25	+82	47	19	
Stephens Island AWS	188	12.8	8.9	10.9	..	..	..	..	..	..	..	..	..	..
Motueka, Riwaka EWS	8	15.2	2.5	8.9	+1.8	19.1	14	-2.0	29	55	7	-65	40	7	
Pelorus Sd, Crail Bay	13	14.1	6.6	10.4	+1.1	18.3	18	3.6	26	53	11	-118	15	21	
Nelson Aero	2	14.0	4.1	9.1	+1.5	17.7	14	0.1	29	28	8	-51	22	7	
Appleby 2 EWS	18	14.7	2.1	8.4	+1.5	18.0	14	-2.8	31	31	5	-43	26	7	
Richmond EWS	1	13.4	2.4	7.9	+0.6	17.1	14	-2.6	29	27	5	..	22	7	
Nelson Aero AWS	6	13.9	4.3	9.1	+1.4	..	..	..	..	..	..	..	..	..
Blenheim Research EWS	4	14.5	2.5	8.5	+0.4	19.8	18	-1.0	29	24	9	-40	10	8	
Blenheim Aero AWS	36	14.4	1.7	8.1	+0.9	18.7	14	-2.4	29	45	15	-24	15	8	
Brothers Island AWS	68	13.4	9.4	11.4	+1.1	18.4	4	..	..	..	..	..	..	..
Grassmere Salt Works	2	14.4	5.4	9.9	+1.1	20.3	14	1.2	3	53	9	-7	23	8	
Cape Campbell AWS	6	13.2	7.4	10.3	+0.9	18.7	14	3.9	29	77	14	+18	24	23	
Hanmer Forest EWS	363	11.2	-1.3	5.0	+0.8	17.1	18	-5.9	7	210	14	+108	119	23	
Kaikoura, Middle Cree	5	13.3	2.4	7.9	+1.3	19.9	18	-0.9	4	14	8	..	5	23	
Kaikoura AWS	108	12.9	6.1	9.5	+1.1	19.1	18	2.6	3	207	15	+121	83	23	
Arthurs Pass	745	7.8	0.4	4.1	+1.9	12.5	14	-3.2	..	161	19	-167	49	31	
Arthurs Pass EWS	745	7.8	0.2	4.0	+1.7	12.5	14	-3.3	7	169	17	..	47	31	
Arthurs Pass AWS	743	7.4	0.4	3.9	+1.7	12.2	14	-3.0	3	192	22	..	51	31	
Culverden AWS	181	12.3	-0.1	6.1	+0.5	18.1	14	-5.6	7	97	19	+40	34	22	
Medbury CWS	232	11.9	-0.4	5.8	+0.0	17.0	14	-6.0	7	92	14	..	32	23	
Waipara North Branch	497	11.4	-0.1	5.7	..	16.1	14	-7.1	7	118	13	..	47	22	
Waiiau School CWS	136	13.0	0.7	6.9	+0.9	18.4	14	-3.3	7	99	15	+24	45	22	
Cheviot EWS	75	13.5	1.3	7.4	+0.8	19.0	14	-2.9	29	202	15	+135	62	22	
Upper Rakaia EWS	1752	2.3	-2.6	-0.2	+1.1	7.1	29	-7.9	22	52	22	-35	17	24	
Mt Potts EWS	2128	-0.2	-5.3	-2.8	+0.5	4.5	29	-11.4	23	25	7	..	18	15	
Mt Cook EWS	730	8.9	0.0	4.5	+2.0	14.9	5	-4.4	22	127	18	-162	35	23	
Mueller Hut EWS	1818	2.0	-3.3	-0.7	+0.5	7.6	6	-9.8	22	52	14	..	17	24	
Mt Cook Aero AWS	656	9.6	-1.0	4.3	+2.3	15.7	4	-6.9	22	96	18	..	36	23	
Cass EWS	571	10.4	-0.8	4.8	..	14.9	14	-9.1	7	66	13	..	24	22	
Methven CWS	313	12.2	1.8	7.0	+0.9	18.3	4	-2.6	7	161	14	+88	72	22	
Winchmore 2 EWS	164	11.6	0.6	6.1	..	17.4	31	-3.6	7	163	13	+99	76	22	
Mayfield at Ruapuna F	325	11.8	0.7	6.3	..	17.9	4	..	..	153	15	..	71	23
Peel Forest	286	11.3	0.3	5.8	+0.8	18.9	18	-3.6	7	144	15	+69	70	22	
Lismore, Racemans Hou	168	13.4	3.0	8.2	+2.2	19.7	18	-1.6	7	149	11	..	75	22	
Ashburton Council	101	12.6	1.7	7.2	+1.2	18.1	31	-1.8	7	180	13	+118	87	22	
Ashburton Aero AWS	88	12.1	1.0	6.6	+0.9	17.9	31	-2.3	6	147	16	+79	74	22	
Ohoka CWS	12.4	0.9	6.7	..	19.0	18	-3.4	7	..	..	..	..	..	..
Rangiora EWS	23	12.9	1.6	7.3	+1.2	20.0	18	-2.0	7	171	13	+117	94	22	
Christchurch Aero	37	12.3	0.8	6.6	+0.6	18.5	18	-3.5	13	155	23	+91	86	22	
Christchurch Aero Bac	37	12.3	0.8	6.6	+0.8	18.5	18	-3.4	13	138	21	..	76	22	
Christchurch Gardens	7	12.9	2.6	7.8	+1.0	20.0	18	-1.3	3	145	17	+81	70	22	
Christchurch, Kyle St	6	12.3	2.2	7.3	+0.6	18.4	18	-1.7	3	112	14	+48	69	22	
Christchurch Botanic	17	12.6	2.7	7.7	..	19.9	18	-1.2	3	137	16	..	69	22	
Bromley EWS	3	12.4	3.7	8.1	..	18.5	18	-0.5	3	115	12	..	55	22	
Lincoln, Broadfield E	18	12.3	2.7	7.5	+1.1	18.6	18	-2.0	6	123	14	+70	66	22	
Lincoln, Broadfield E	17	12.1	2.3	7.2	..	18.6	18	-2.4	6	126	16	..	68	22	
Sugar Loaf AWS	496	9.9	4.3	7.1	+0.9	15.6	18	0.6	1	..	..	..	..	..
Diamond Harbour EWS	122	12.2	4.7	8.5	+1.1	19.7	18	0.7	2	156	13	..	75	22	
Akaroa EWS	45	12.9	5.4	9.2	+0.9	21.0	18	2.2	30	400	16	+279	199	22	
Le Bons Bay AWS	238	11.1	6.1	8.6	+1.0	18.3	18	1.5	3	203	20	+136	60	22	
Lake Tekapo, Air Safa	762	9.0	-1.8	3.6	+1.9	15.3	18	-6.6	22	50	11	+0	20	22	
Lake Tekapo EWS	762	9.5	-1.2	4.2	+2.3	16.0	18	-6.6	22	52	9	+2	39	23	

Summary of the records of Temperature, Rainfall and Sunshine July 2023

Station	Height of Station Above M.S.L.	Air Temperature								Rainfall					Bright Sun—shine
		Means of		Mean of A and B	Differ—ence From Normal	Absolute Max and Min				Total Fall	No. of Rain Days	Differ—ence From Normal	Max		
		A Max	B Min			Max	Date	Min	Date				Fall	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs		
Fairlie AWS	403	12.1	1.9	7.0	+1.7	17.9	18	-2.4	7	84	15	..	41	22	..
Pukaki Aerodrome AWS	461	10.2	-2.9	3.7	+1.9	17.9	18	-7.4	7	..	..	..	..	..	..
Orari Estate	81	12.3	1.0	6.7	+1.5	20.0	19	-2.6	7	157	12	+103	76	22	..
Orari Estate EWS	81	12.4	0.5	6.5	+0.9	19.1	19	-3.2	7	158	12	..	75	22	..
Timaru Aero AWS	27	12.3	0.6	6.5	+1.5	17.9	4	-3.1	6	96	13	+54	46	22	..
Timaru EWS	17	12.0	2.6	7.3	+1.9	18.1	4	-0.5	29	103	9	+61	42	22	..
Otaio @ Springbank ro	14	12.3	2.8	7.6	..	18.4	18	-1.5	3	109	12	..	47	23	..
Waimate CWS	39	12.7	2.6	7.7	+1.9	18.9	19	-0.6	29	93	11	+50	35	23	..
Oamaru Airport AWS	30	11.5	2.4	7.0	+1.5	17.8	18	-0.8	6	97	14	+55	31	23	..
Albert Burn	1280	4.8	-1.6	1.6	+1.3	9.3	7	-7.3	23	92	21	-131	24	31	..
Mt Larkins EWS	1900	0.2	-4.6	-2.2	+2.1	6.4	21	-10.2	2	23	12	..	12	12	..
Eglinton, Knobs Flat	365	8.4	-0.2	4.1	+0.7	12.1	8	-4.6	6	174	21	-54	39	31	..
Tara Hills AWS	485	10.2	-1.9	4.2	+1.8	16.5	14	-7.4	22	17	14	-22	4	22	..
Wanaka CWS	331	10.4	-0.1	5.2	..	15.7	18	-4.0	22	15	8	..	8	31	..
Wanaka Aero AWS	352	10.2	0.2	5.2	+1.5	15.1	14	-4.3	22	18	14	-28	8	31	..
Windsor EWS	81	13.0	1.0	7.0	+1.8	18.9	18	-3.3	6	55	11	+19	22	23	..
Ranfurly EWS	450	9.8	-1.6	4.1	+1.5	15.9	18	-6.0	7	9	8	-14	3	22	..
Oamaru AWS	40	12.1	3.8	8.0	+1.5	19.3	18	-0.3	7	90	15	+31	37	23	..
Palmerston	21	12.3	1.8	7.1	+1.9	19.2	18	-3.0	7	106	11	+54	49	23	127
Middlemarch EWS	213	11.3	0.0	5.7	+1.9	18.4	18	..	..	32	11	-22	11	19	..
Swampy Summit AWS	716	6.9	1.9	4.4	+1.4	..	..	..	..	..	..	..	..	..	..
Dunedin Aero AWS	2	11.6	2.1	6.9	+2.0	18.3	31	-3.2	7	98	21	+58	24	23	..
Dunedin, Musselburgh	4	11.6	5.4	8.5	+1.8	16.8	19	1.1	3	79	15	+27	20	23	93
Oamaru EWS	20	12.1	2.9	7.5	+2.1	19.3	18	-2.2	7	67	12	..	23	23	151
Murchison Mtns EWS	1140	4.2	-0.6	1.8	+1.1	6.9	8	-5.2	3	208	23	-37	41	13	..
Te Anau At Park HQ Cw	204	8.9	1.7	5.3	..	13.2	31	-2.5	6	..	..	..	..	..	..
Manapouri, West Arm J	178	7.7	1.7	4.7	+1.3	10.5	17	-2.2	6	401	21	+72	58	31	..
Manapouri Aero AWS	209	9.6	0.4	5.0	+1.0	14.6	15	-5.5	23	106	24	+12	16	31	..
Birchwood WXT AWS	149	10.8	2.4	6.6	+1.2	16.2	31	-2.4	22	107	17	..	24	19	..
Queenstown EWS	322	10.2	1.7	6.0	..	15.4	18	-1.7	22	24	10	..	8	31	..
Queenstown Aero AWS	357	9.9	0.5	5.2	+1.8	15.1	18	-4.3	22	30	15	-26	7	15	140
Five Rivers CWS	260	10.6	1.4	6.0	+1.9	16.0	31	-5.2	22	80	16	..	18	31	..
Lumsden AWS	194	9.9	1.0	5.5	+1.4	..	..	..	..	..	..	..	..	..	..
Waipounamu CWS	152	10.5	0.9	5.7	+1.8	17.9	31	-5.6	22	108	16	..	36	2	..
Cromwell EWS	213	11.6	0.0	5.8	+1.9	18.7	18	-6.2	22	12	9	-13	3	15	144
Lauder EWS	375	10.1	-0.9	4.6	+1.9	17.2	18	-5.6	22	12	13	-10	4	19	..
Ophir 2	305	10.8	-2.6	4.1	+2.0	18.0	18	-8.5	22	11	8	-8	4	19	..
Alexandra	150	11.9	-0.7	5.6	+2.4	19.9	18	-6.2	22	18	15	-7	4	19	127
Clyde 2 EWS	170	11.4	-1.7	4.9	+1.6	19.0	18	-7.1	22	16	12	-7	3	31	..
Alexandra AWS	231	10.7	-0.2	5.3	+2.2	18.4	18	-5.1	22	16	18	..	4	19	..
Alexandra EWS	132	11.5	-0.3	5.6	..	19.3	18	-5.5	22	17	13	..	4	19	153
Roxburgh WXT AWS	160	10.9	3.0	7.0	+1.5	17.2	18	-0.2	1	..	..	..	21	2	..
Tapanui EWS	180	10.4	1.5	6.0	..	17.4	31	-3.2	7	110	17	..	38	2	..
Waitutu CWS	30	10.5	2.6	6.6	+1.3	14.2	29	-1.8	23	..	..	..	..	..	..
Gore AWS	123	10.3	2.8	6.6	+1.8	16.5	31	-1.6	7	131	23	+72	35	2	..
Gore EWS	60	10.6	2.5	6.6	..	17.5	31	-2.8	22	106	19	..	21	2	112
Invercargill Aero	1	10.9	3.1	7.0	+1.5	..	..	..	..	..	..	..	..	..	..
Invercargill Aero AWS	3	10.9	2.8	6.9	+1.5	16.5	31	-2.8	8	143	25	+55	22	12	..
Invercargill Aero 2 E	..	11.0	2.8	6.9	+1.6	16.5	31	-3.1	8	133	21	+60	22	12	..
Tiwai Point EWS	5	10.9	4.5	7.7	+1.3	15.8	31	-0.5	22	121	21	+33	20	13	..
Stewart Island EWS	3	10.8	4.6	7.7	..	16.0	15	-0.2	8	188	22	..	28	31	..
Balclutha, Telford Ew	11	10.8	2.1	6.5	+1.8	18.1	31	-2.8	7	86	16	+25	18	2	101
Balclutha, Finegand E	6	10.9	2.2	6.6	..	18.2	31	-2.6	7	92	16	..	18	2	..
Nugget Point AWS	131	9.9	5.1	7.5	+1.2	16.5	31	0.5	2	96	22	+37	26	2	..
Tautuku EWS	25	10.8	4.3	7.6	..	17.1	31	0.6	7	194	22	..	33	2	..
South West Cape AWS	103	10.1	5.9	8.0	+0.3	12.8	31	1.4	2	130	26	+23	27	19	..
Kiribati,Cassidy Chri	3	31.3	26.0	28.7	..	32.7	8	24.1	2	..	..	..	..	..	..
Solomon, Munda	6	..	24.7	..	..	..	..	..	..	..	..	..	..	..	..
Solomon, Honiara	56	31.3	24.0	27.7	..	..	..	..	..	..	..	..	..	..	..
Solomon, Henderson	9	31.5	23.0	27.3	..	..	..	..	..	..	..	..	..	..	..
Solomon, Santa Cruz	24	..	24.1	..	..	..	..	..	..	..	..	..	..	..	..
Vanuatu,Pekoa	56	27.1	22.1	24.6	..	..	..	..	..	..	..	..	..	..	..
Vanuatu,Burtonfield	70	..	17.6	..	..	..	..	..	..	..	..	..	..	..	..

Summary of the records of Temperature, Rainfall and Sunshine July 2023

Station	Height of Station Above M.S.L.	Air Temperature								Rainfall					Bright Sun—shine
		Means of		Mean of A and B	Differ—ence From Normal	Absolute Max and Min				Total Fall	No. of Rain Days	Differ—ence From Normal	Max		
		A Max	B Min			Max	Date	Min	Date				Fall	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs		
New Cal, Koumac	18	25.2	15.5	20.4	..	27.3	18	12.7	24	..	..	..	..	..
New Cal, Oulop	7	25.6	18.6	22.1	..	28.3	8	11.5	23	..	..	..	..	..
New Cal, Ouanaham	29	24.8	15.9	20.4	..	27.5	8	8.6	11	..	..	..	..	..
New Cal, La Roche	42	25.0	14.1	19.6	..	30.0	8	7.1	24	..	..	..	..	..
New Cal, La Tontouta	14	24.9	14.3	19.6	..	29.0	8	9.7	24	..	..	..	..	..
New Cal, Nouma	72	23.7	17.1	20.4	..	27.9	7	14.7	30	..	..	..	..	..
New Cal, Moue	97	22.9	16.3	19.6	..	26.0	7	12.1	12	..	..	..	..	..
Kiribati,Butaritari	2	31.1	26.5	28.8	..	..	..	..	..	..	..	..	..	..
Kiribati,Tarawa	2	..	25.3	..	..	..	..	..	..	..	..	..	..	..
Kiribati, Bonriki Int	4	31.4	25.2	28.3	..	32.9	20	..	..	..	..	..	..	..
Kiribati,Beru	2	..	26.3	..	..	..	25.0	14	..	..	..	..	..	..
Kiribati,Arorae	7	32.3	26.2	29.3	..	..	..	..	..	..	..	..	..	..
Tuvalu,Nui Is	2	31.7	26.2	29.0	..	..	..	..	..	..	..	..	..	..
Tuvalu,Funafuti Aero	1	32.1	27.0	29.6	..	..	..	..	..	..	..	..	..	..
Tuvalu, Niulakita Is	3	..	25.7	..	..	..	..	..	..	..	..	..	..	..
Fiji,Nadi Aero	15	27.9	19.6	23.8	..	31.2	9	16.6	1	..	..	..	..	..
Fiji,Nausori Aero	6	25.9	19.3	22.6	..	..	..	..	..	..	..	..	..	..
Wallis Island, Hihifo	27	29.6	25.2	27.4	..	31.0	31	22.6	29	..	..	..	..	..
Maopoopo, Futuna Isla	36	30.1	25.7	27.9	..	32.5	20	24.3	31	125	24	..	32	12	
Samoa,Faleolo	4	..	23.2	..	..	..	..	..	..	..	..	..	..	..
Samoa, Apia	1	..	23.3	..	..	..	..	..	..	..	..	..	..	..
Samoa, Pago Pago Aero	3	29.4	25.3	27.4	..	31.3	9	..	..	..	..	..	..	..
CI Rarotonga Aero	7	27.2	20.3	23.8	..	..	..	..	..	..	..	..	..	..
Vanuatu, Saratamata	18	..	20.9	..	..	..	..	..	..	..	..	..	..	..
Hiva Hoa, Atuona	51	29.0	23.8	26.4	..	30.7	25	21.9	22	100	17	..	26	31	
Society Is, Mopelia		28.8	24.4	26.6	..	29.8	4	20.4	16	..	..	..	..	..
Tahiti - Faaa	1	29.2	22.7	26.0	..	31.0	24	19.6	21	99	9	..	36	27	
Tuamotu, Takaroa	2	29.2	24.8	27.0	..	29.9	27	22.7	22	..	..	..	..	..
Gambier, Rikitea	91	24.3	20.1	22.2	..	..	..	17.1	22	91	16	..	45	24
Tubuai	2	27.5	22.2	24.9	..	29.6	5	16.1	23	..	..	..	..	..
Rapa	1	22.2	18.1	20.2	..	25.1	11	12.6	23	103	19	..	20	18	
Raoul Island AWS	50	19.7	14.2	17.0	+0.3	21.1	2	8.5	31	105	25	-15	23	8	
Enderby Is AWS	39	8.6	4.8	6.7	..	10.7	17	-0.4	1	116	26	..	15	18	
Campbell Island AWS	16	7.3	3.9	5.6	+0.5	9.9	30	-1.1	3	199	29	+84	39	9	
Chatham Island Aero A	12	12.2	7.0	9.6	+1.2	..	..	..	..	..	..	..	..	..
Georg Von Neumayer	40	-15.1	-24.2	-19.7	..	-2.6	6	-39.5	2	..	..	..	..	..
Ant South Pole	2827	-54.2	-62.9	-58.6	..	-31.9	8	-75.6	1	..	..	..	..	..
Gen Belgrano 2	256	-15.7	-22.8	-19.3	..	-5.6	9	-37.6	4	..	..	..	..	..
Bellingshausen	16	-1.9	-4.8	-3.4	..	..	..	-14.3	22	..	..	..	..	..
Base Jubany	4	0.1	-5.7	-2.8	..	4.8	3	-16.2	22	..	..	..	..	..
V C Marambio	198	-7.7	-15.9	-11.8	..	6.5	11	-33.7	22	..	..	..	..	..
Eduardo Frei	10	-2.8	-5.2	-4.0	..	2.7	2	..	..	..	..	..	..	..
Arturo Prat		-2.2	-4.4	-3.3	..	1.2	2	-14.4	22	..	..	..	..	..
Great Wall	10	-1.5	-5.7	-3.6	..	..	..	-14.5	22	..	..	..	..	..
Bernado Ohiggins	10	-5.6	-8.0	-6.8	..	..	..	..	..	..	..	..	..	..
Palmer Station	8	-1.9	-5.4	-3.7	..	..	..	..	..	..	..	..	..	..
Rothera Point	16	-3.0	-7.1	-5.1	..	4.1	2	-16.5	21	..	..	..	..	..
Argentine Is, Faraday	11	-1.4	-5.8	-3.6	..	8.7	2	-11.6	22	..	..	..	..	..
Gen San Martin	4	-2.4	-9.1	-5.8	..	5.5	15	-19.3	21	..	..	..	..	..
Novolax Arevskaja	99	-13.9	-18.6	-16.3	..	-8.0	26	-24.7	15	..	..	..	..	..
Syowa	21	-12.1	-19.3	-15.7	..	-3.7	4	-29.9	22	..	..	..	..	..
Mawson	16	-16.7	-23.6	-20.2	..	..	..	-32.9	31	..	..	..	..	..
Davis	13	-18.3	-26.4	-22.4	..	..	..	-36.1	27	..	..	..	..	..
Progress	64	-18.0	-20.4	-19.2	..	..	..	-36.0	31	..	..	..	..	..
Mirnyj	30	-16.9	-21.7	-19.3	..	-9.0	11	..	..	..	..	..	..	..
Vostok	3420	-63.7	-68.3	-66.0	..	..	..	-78.7	2	..	..	..	..	..
Casey	41	-13.3	-23.8	-18.6	..	..	..	-36.4	28	..	..	..	..	..
Durmont Durville	43	-13.8	-19.4	-16.6	..	-6.7	14	-31.6	29	..	..	..	..	..
Mcmurdo	24	-27.1	-35.3	-31.2	..	-19.9	13	-41.5	23	190	6	..	51	10	
Arrival Heights EWS	187	-28.4	-35.1	-31.8	..	-20.9	16	-44.4	24	..	..	..	..	..
Scott Base 2 EWS	42	-28.3	-39.5	-33.9	..	-21.4	16	-48.9	30	..	..	..	..	..
Darwin Airport	31	31.2	14.2	22.7	..	34.7	31	8.5	31	..	..	..	..	..

Summary of the records of Temperature, Rainfall and Sunshine — Late returns

Station	Height of Station Above M.S.L.	Air Temperature								Rainfall					Bright Sunshine
		Means of		Mean of A and B	Difference From Normal	Absolute Max and Min				Total Fall	No. of Rain Days	Difference From Normal	Max		
		A Max	B Min			Max	Date	Min	Date				Fall	Date	
Metres	°C	°C	°C	°C	°C	°C	°C	°C	mm	mm	mm	mm	Hrs		
Late returns and corrections for June 2023															
Tiri Tiri Lighthouse	76	15.6	9.5	12.6	-0.3	18.6	2	7.5	14	164	22	+63	43	22	..
Auckland, Henderson N	7	16.7	7.0	11.9	+0.4	19.8	1	0.8	14	163	21	+5	29	26	..
Auckland Aero	7	16.1	8.7	12.4	+0.3	19.7	2	2.9	15	117	22	-2	20	22	..
Paraparaumu Aero AWS	8	15.6	5.5	10.6	+0.9	19.3	23	-0.7	16	8	9	-99	5	4	..
Wellington Aero	4	14.8	8.9	11.9	+1.3	18.5	2	4.7	16	38	13	-65	16	4	..
Mt Somers, Somer Down	372	11.6	2.0	6.8	..	..	..	-5.0	9	73	7	-14	29	27	..
Ohoka CWS		12.5	2.5	7.5	..	19.0	1	-4.0	11	..	..	..	..	..	..
Christchurch Aero	37	12.5	3.7	8.1	+1.7	18.8	1	-3.3	11	51	20	-17	13	27	92
Cromwell EWS	213	7.6	0.6	4.1	-0.2	19.1	1	-3.0	5	27	8	-7	12	4	55
Clyde 2 EWS	170	6.6	-1.2	2.7	-0.8	19.5	1	-4.3	17	25	8	-8	9	27	..
Stewart Is	3	12.3	3.2	7.8	+0.8	..	..	0.0	30	81	..	-59	28	1	..

Late returns and corrections for May 2023

Tiri Tiri Lighthouse	76	18.1	12.3	15.2	+0.2	20.4	2	7.5	12	166	28	+74	68	9	..
Mt Somers, Somer Down	372	15.5	6.2	10.9	..	23.5	2	0.4	22	63	15	-23	11	20	..

Late returns and corrections for August 2022

Pigeon Creek CWS	105	12.9	4.9	8.9	+1.2	16.6	27	-1.5	11	616	19	..	80	31	..
------------------	-----	------	-----	-----	------	------	----	------	----	-----	----	----	----	----	----

The 'Normal' refers to the present site of the instruments. Standard period for normals is 1991-2020.

No normals are available for stations with only short records.

A rain day is a day with rainfall equal to or greater than 0.1 mm.

Where the extremes of temperature and rainfall occurred more than once during the month, the date of the first is given.

©2023. All rights reserved National Institute of Water and Atmospheric Research Ltd.