

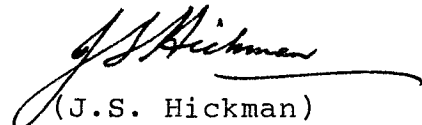
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NEW ZEALAND METEOROLOGICAL SERVICE

TECHNICAL INFORMATION CIRCULAR NO.191

EXTREME WIND GUSTS

This is a revision of Technical Information Circular No.151 which was published in 1975. It updates information on extreme wind gusts since that date and also incorporates data from additional stations. It is circulated for general information and reference purposes.

  
(J.S. Hickman)  
Director

New Zealand Meteorological Service  
P.O. Box 722  
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15 June 1983

NEW ZEALAND METEOROLOGICAL SERVICE

EXTREME WIND GUSTS

TABLE OF HIGHEST GUSTS RECORDED

Station	Period	Highest Gust* (Knots)	Direction (Degrees) (True)	Date of Occurrence
Cape Reinga	1974-	108	060	8 Apr. 1976
Waipapakauri	1942-47	64	050	21 Feb. 1944
Kaitaia Aerodrome	1950-	96	080	14 Mar. 1959
Kaikohe	1954-61	69	090	14 Mar. 1959
Kerikeri	1964-66	60	330	26 Apr. 1966
Dargaville	1957-59	61	320	27 May 1958
Whangarei Aerodrome	1954-	86	330	15 Sep. 1969
Leigh	1973-	81	050	14 Jun. 1975
Warkworth	1973-	71	270	22 May 1975
Marsden Point	1961-62, 1961-	83	050	28 Jun. 1977
Auckland				
Whenuapai	1941-	63	270	18 Nov. 1944
Hobsonville	1930-41	57	080	26 Mar. 1936
Training College	1942-44	58	300	18 Nov. 1944
Mechanics Bay	1939-63	63	270	18 Nov. 1944
Otara	1979	52	020	8 Oct. 1979
Mangere	1939-50	59	060 / 230	14.1.40/8.6.44
International Airport	1962-	79	200	6 Sep. 1981
Airedale Street	1967-72	62	070 / 290	2.7.71/27.11.71
Airways Building	1962-	67	250	21 Sep. 1972
Ardmore Aerodrome	1945-49	55	250	28 May 1945
Musick Point	1980-	80	240	2 Aug. 1982
Silverdale	1976-78	67	-	30 May 1977
Glenbrook	1975-	59	160	15 Mar. 1980
Manukau Heads	1980-	85	340	8 Dec. 1981
Huntly	1980-	57	250	2 Aug. 1982
Rukuhia, Hamilton	1945-54	64	220	27 May 1945
Mt Te Aroha (elevation 951 m)	1978-81	120	090	19 Jul. 1978
Tauranga Aerodrome	1942-	64	220	15 Apr. 1969
Whakatane Aerodrome	1959-	79	080	10 Apr. 1968
East Cape	1974-	98	280	15 Jul. 1975
Rotorua				
Whakarewarewa Aero. Aerodrome	1939-55	56	050	14 Jan. 1940
Hinemoa Point	1965-	61	160	9 Apr. 1982
Hinemoa Point	1951-57	47	060	13 Aug. 1953
Kaiangaroa	1981-	56	140 / 320	9.4.82/12.12.82
Port Taharoa	1978-	71	300	2 Aug. 1982

\* For equivalent speed in km/h or m/s see end of Table.

Station	Period	Highest Gust* (Knots)	Direction (Degrees) (True)	Date of Occurrence
Omata	1975-81	60	240 / 250	12.7.76/30.5.77
Paritutu	1966-76	76	-	9 Sep. 1966
New Plymouth Aerodrome	1939-	85	140	9 Apr. 1981
Cape Egmont	1972-	68	360 / 260	1.5.77 / 3.9.81
East Egmont (elevation 1037 m)	1974	100	350	19 Dec. 1976
Wairakei	1963-66	65	200	31 May 1966
Taupo	1981-	60	160	9 Apr. 1982
Turangi	1973-	60	220	16 Jun. 1974
Ohakune	1961-65	60	010	28 Jul. 1961
Waiouru	1970-	81	020	19 Aug. 1975
Gisborne Aerodrome	1942-	76	050	10 Apr. 1968
Wairoa	1954-57	58	180	14 Jul. 1955
Napier Aerodrome	1948-	70	260	17 May 1977
Portland Island	Apr.1979-Feb'80	70	-	4 Jan. 1980
Castlepoint	1972-	90	310	1 Oct. 1973
Wanganui Aerodrome	1954-	83	210	10 Apr. 1968
Ohakea	1939-	84	270	10 Apr. 1968
Palmerston Nth.Aero.	1940-51 1965-	67	240	26 Nov. 1968
Wharite Peak	1979-	86	290	20 May 1982
Dannevirke	1961-64	74	280	15 Apr. 1962
Masterton	1956-59	80	300	25 Nov. 1957
Shannon	1937-1946	73	130	26 Aug. 1942
Levin	1942-43 1967-	69	290 / 100	26.11.68/19.7.78
Paraparaumu Aerodrome	1937-39 1946-	93	210	10 Apr. 1968
Wellington				
Colonial Knob (elevation 465 m)	1962-66	94	-	2 Oct. 1965
Kaukau (elevation 425 m)	1969-	100	360	24 Sep. 1970
Tinakori Hill (elevation 300 m	1912-18	108	-	13 Sep. 1916
Kelburn (elevation 125 m)	1928-	107	210	10 Apr. 1968
Evans Bay	1952-56	83	350	14 Jun. 1955
Hawkins Hill (elevation 451 m)	1959-72	134	-	6.11.59/4.7.62
Rongotai	1930-37	76	-	2 May 1936
Wellington Aero.	1959-	101	210	10 Apr. 1968
Moa Point	1938-53	97	320	20 Sep. 1951
Baring Head	1944-46	81	340	29 Oct. 1944
Oteranga Bay (elevation 174 M)	1965-	131	220	10 Apr. 1968
Gracefield	1960-	98	210	10 Apr. 1968
Farewell Spit	1973-	75	340	16 Aug. 1980
Westport Aerodrome	1948-	73	140	16 Jul. 1976

\* For equivalent speed in km/h or m/s see end of Table.

Station	Period	Highest Gust* (Knots)	Direction (Degrees) (True)	Date of Occurrence
Hokitika Aerodrome	1944-	72	280	14 May 1979
Milford Sound	1973-	82	340	21 May 1975
Nelson Aerodrome	1940-	82	060	22 Feb. 1944
Picton	1973	75	340	16 Aug. 1980
Blenheim Aerodrome	1941-	66	340	24 Sep. 1970
Vernon Lagoons	1973-	69	300	1 Aug. 1975
Lake Grassmere	1962-	83	180	10 Apr. 1968
Kaikoura	1964-	105	300	1 Aug. 1975
Mt John (elevation 1026 m)	1967-	135	290	18 Apr. 1970
Winchmore	1972-	83	310	1 Aug. 1975
Eyrewell Forest	1973-78	92	310	1 Aug. 1975
Christchurch Aerodrome	1942-	93	290	1 Aug. 1975
Wigram Aerodrome	1930-	86	300	1 Aug. 1975
Bromley	1972-	70	310	1 Aug. 1975
Taumutu, Lake Ellesmere	1950-62	79	200	11 Apr. 1953
Rakaia River TWR 176**	1966-73	71	-	30.11.66/26.18.68
Rakaia River TWR 526**	1866-78	118	-	22 Mar. 1976
Roundtop (elevation 890 m)	1975-79	140	-	14 Feb. 1979
Ashburton Aerodrome	1943-45, 1948-54	70	320	20 Aug. 1950
Mt Cook	1973-76	102	010 / 360	11.10.73/21.10.73
Lake Pukaki No.2	1973-	77	290	13 Oct. 1978
Timaru Aerodrome	1953-55, 1956-	89	300	1 Aug. 1975
Alexandra	1948-50	66	350	1 Nov. 1948
Oamaru	1944-46	57	220	30 Jun. 1944
Lauder	1981-	99	310	2 Oct. 1981
Aviemore	1965-	104	220	17 Jan. 1980
Taiaroa Head	1975-	95	240	16 Mar. 1980
Cape Saunders	1975-79	93	-	30 Apr. 1979
Taieri	1940-79	69	250	11 Apr. 1953
Momona	1953-59	67	260 / 220	3.1.55 / 8.4.55
Dunedin Aerodrome	1962-	85	340	27 Oct 1971
Musselburgh	1981-	56	260	13 Mar. 1982
Queenstown Aerodrome	1972-	70	300	3 Oct. 1981
Gore (Charlton)	1960-64	57	310	15 Nov. 1961
Invercargill Aerodrome	1942-48, 1950-	76	250	20 Sep. 1951
Tiwai Point	1972-	92	260	24 Sep. 1977
Bluff (Rabbit Is)	1952-55	76	280	9 May 1953
Chatham Island	1956-59, 1976-	70	-	22 Jul. 1976
Campbell Island	1964-	110	270	8 Mar. 1969
Scott Base	1967-	92	200	23 Jul. 1974
Norfolk Island	1943-48	63	050	25 May 1944
Raoul Island	1940-43, 1974-	84	360	30 Apr. 1979
Apia, W. Samoa	1927-	82	310	29 Jan. 1966
Nandi Airport, Fiji	1954-	110	360	14 Jan. 1981

\* For equivalent speed in km/h or m/s see end of Table.

Station	Period	Highest Gust* (Knots)	Direction (Degrees) (True)	Date of Occurrence
Rarotonga Aerodrome	1957-	81	220	18 Dec. 1967
Fua'amotu, Tonga	1980-	86	250	30 May 1982
Tarawa, Kiribati	1982-	52	280	18 Nov. 1982
Funafuti, Tuvalu	1982-	50	060	31 Jul. 1982
Faleolo, W. Samoa	1976-78	46	060	31 Dec. 1977
Aitutaki, Cook Is	1982-	40	120	11 Nov. 1982

\*\* Tower 176 43 38'S 171 59'E Elevation 168 m  
 \*\* Tower 426 43 33'S 171 45'E Elevation 335 m

Revised to 31 December 1982.

EQUIVALENT WIND SPEEDS

knots	km/hr	m/s
40	74	21
60	111	31
80	148	41
100	185	52
120	222	62
140	259	72

Issued by:

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