

Errata and updated statistics for the 2013 Annual Climate Summary

Issued: 16 April 2015

Every year, an annual climate summary and a table of annual statistics are provided by NIWA, usually within the first two weeks of January. This summary is based on data available at the time, and often includes preliminary (real-time) annual climate statistics which are as yet not fully quality checked.

Each year during April, the annual statistics from the calendar year prior are updated, including both automated and manual climate station data. The purpose of the update is two-fold; to enable manual climate data to be incorporated, since manual stations typically take 1-2 months for data to be received and entered into the National Climate Database; and to log errata found in subsequent quality checks performed in the National Climate Database, or site visits undertaken in January and February. This update is for the 2013 annual climate summary. This update was based on available data as at 31 March 2015.

Errata and notes

1. Following the update of station data contained within the Water Resources Archive, the rankings for wettest sites in New Zealand for 2013 have changed. The wettest four locations are now: Cropp River at Waterfall (10874 mm), Cropp River at Cropp Hut (9770 mm), Tuke River at Tuke Hut (9473 mm), and Haast River at Cron Creek (8080 mm). Doon River rainfall site has been excluded from this update due to data availability restrictions.
2. Some sites have missing days of data. The number of missing days is indicated by a superscript number next to the annual value in the tables below.
3. Offshore and outlying island stations were not included in this update.
4. Data were sourced from the National Climate Database (<http://cliflo.niwa.co.nz>), with the exception of 37 rainfall stations contained within NIWA's Water Resources Archive which have a complete set of 2013 data. These are marked with an asterisk (*) in the annual rainfall table here.

Location	Mean temp (°C)				
DARGAVILLE 2 EWS ¹	16.5	WARKWORTH EWS	14.7	CAPE CAMPBELL AWS	13.1
WHANGAREI AERO AWS	16.3	TOENEPI EWS	14.5	CHRISTCHURCH, KYLE ST EWS	13.0
WHANGAPARAOA AWS	16.2	WAIKERIA 2	14.4	WALLACEVILLE EWS	12.9
AUCKLAND AERO	16.1	WELLINGTON AERO	14.4	STRATFORD EWS	12.9
KAITAIA AERO EWS	16.0	WANGANUI AWS	14.4	CHRISTCHURCH GARDENS	12.9
MUSICK PT EWS, AUCKLAND	16.0	CASTLEPOINT AWS	14.3	REEFTON EWS	12.6
AUCKLAND, HENDERSON	15.9	MANA ISLAND	14.3	TAUPO AWS	12.5
AUCKLAND, MANGERE EWS	15.9	HAMILTON AWS	14.2	TAKAPAU PLAINS AWS	12.5
TAURANGA AERO AWS	15.8	NEW PLYMOUTH AWS	14.2	HOKITIKA AERO	12.4
PORT TAHAROA AWS	15.8	PALMERSTON NORTH AWS	14.2	HOKITIKA AWS	12.4
KAITAIA EWS	15.7	PELORUS SOUND, CRAIL BAY	14.2	SECRETARY ISLAND AWS	12.4
HICKS BAY AWS	15.7	MATAMATA, HINUERA EWS	14.0	LINCOLN, BROADFIELD EWS	12.4
KAIKOHE AWS	15.5	LEVIN AWS	14.0	TURANGI 2 EWS	12.3
KERIKERI AERODROME AWS	15.4	AKAROA EWS	14.0	OKARITO	12.3
AUCKLAND, WHENUAPAI AWS	15.2	NELSON AWS	13.9	ASHBURTON COUNCIL	12.2
PENROSE EWS, AUCKLAND	15.2	TE KUITI EWS	13.8	RANGIORA EWS	12.2
PUKEKOHE EWS	15.2	BLENHEIM RESEARCH EWS	13.8	DARFIELD	12.2
NGAWI AWS	15.2	PARAPARAUMU AERO AWS	13.7	CHRISTCHURCH AERO	12.2
WHITIANGA AERO AWS	15.1	WELLINGTON, KELBURN AWS	13.7	MOTU EWS	12.0
AUCKLAND, ARDMORE	15.0	MARTINBOROUGH EWS	13.6	TAIHAPE REC	12.0
GISBORNE AWS	15.0	DANNEVIRKE	13.4	FRANZ JOSEF EWS	12.0
NAPIER NELSON PARK	15.0	WESTPORT AERO AWS	13.4	ALEXANDRA	12.0
PAEROA AWS	14.9	LYTTELTON HARBOUR	13.4	HAAST AWS	11.9
WANGANUI, SPRIGGENS PARK	14.9	ROTORUA AERO AWS	13.3	DUNEDIN, MUSSELBURGH EWS	11.8
FAREWELL SPIT AWS	14.9	HAWERA AWS	13.3	QUEENSTOWN	11.8
WHAKATANE AERO AWS	14.8	TAKAKA EWS	13.3	CROMWELL EWS	11.7
OPOTIKI	14.8	BLENHEIM AERO AWS	13.3	WANAKA AERO AWS	11.6
HAMILTON, RUAKURA 2 EWS	14.8	KOPIA	13.2	OAMARU AWS	11.6
NAPIER AERO AWS	14.8	GREYMOUTH AERO	13.2	TIMARU EWS	11.5
MAHIA AWS	14.8	MOTUEKA, RIWAKA EWS	13.2	MILFORD SOUND	11.4
		KAIKOURA AWS	13.2	ORARI ESTATE	11.4

¹ AWS – operated by MetService. EWS – operated by NIWA.

TIMARU AERO AWS	11.3
ETTRICK NO.2	11.3
OAMARU AIRPORT AWS	11.2
TIWAI POINT EWS	11.2
NUGGET POINT AWS	11.2
TAUTUKU	11.2
PEEL FOREST	11.0
PALMERSTON	11.0
GORE AWS	11.0
DUNEDIN AERO AWS	10.9
INVERCARGILL AERO	10.9
INVERCARGILL AERO AWS	10.9
STEWART IS	10.9
SOUTH WEST CAPE AWS	10.9
SNOWDON RAWS	10.8
BALCLUTHA, FINEGAND	10.7
HANMER FOREST EWS	10.5
MIDDLEMARCH EWS	10.5
QUEENSTOWN AERO AWS	10.5
LUMSDEN AWS	10.4
LAUDER EWS	10.4
MANAPOURI AERO AWS	10.3
RANFURLY EWS	9.7
MT COOK EWS	9.4
LAKE TEKAPO, AIR SAFARIS	9.4
LAKE TEKAPO EWS	9.3
ARTHURS PASS EWS	8.8
MT RUAPEHU, CHATEAU EWS	8.7

Location	Rainfall (mm)
CROPP AT WATERFALL*	10874
CROPP AT CROPP HUT*	9770
TUKE AT TUKE HUT*	9473
HAAST AT CRON CREEK*	8080
IVORY AT RIPPLEROCK*	7253
HOKITIKA AT PRICES FLAT*	6928
HOKITIKA AT RAPID CREEK*	6715
HOKITIKA AT COLLIER'S CREEK*	6636
NORTH EGMONT	6345
HAAST AT ROARING BILLY*	6249
WAIHO AT DOUGLAS HUT*	6200
RAKAIA AT LAKE RAMSEY*	5701
INCHBONNIE 2	4988
WHATAROA AT SH BRIDGE*	4870
ARTHURS PASS EWS	4751
MT COOK EWS	4542
HAAST AT MOA CREEK*	4409
MATHIAS AT NZDSA HUT*	4399
TAIPO AT SH BRIDGE*	4334
LOWER WHATAROA	3650
BUTCHERS CK AT BUTCHERS GULLY*	3491
KOWHITIRANGI NO 2	3386
AHURIRI AT CASSINIA MORAINES*	3274
BAINHAM	3095
PUKEITI	3050
COLLINGWOOD, FERNTOWN	3049
ROSS	2860
PUTARA	2832
ROUTE BURN STN	2731
OKARITO	2712
HOKITIKA AERO	2657
PAROA	2655

MAKARORA STATION	2610
COBB AT TRILOBITE*	2499
GLENFINNAN	2354
BAKER ROAD, NEW PLYMOUTH	2326
MAHOENUI 2	2313
WHAKAPAPA AT MT RUAPEHU EWS*	2280
MT RUAPEHU, CHATEAU EWS	2279
UPPER TAKAKA 2	2258
WAIPAPOA AT MANGUTU DIVIDE*	2233
COBB POWER STATION	2157
PAKAWAU 2	2132
TAHAROTO	2122
LAKE MANGAMAHOE	2120
MAKOTUKU AT F TRIG*	2106
NGAHERE AT NGAHERE HUT*	2092
PURANGI	2082
GLENORCHY	2066
WESTPORT AERO AWS	2024
TONGARIRO AT WAIPAKIHI*	2019
HOME BURN STN	2008
BOYLE RIVER LODGE	1968
LAKE RATAPIKO	1902
GREYMOUTH AERO	1902
MATAKITAKI	1899
WHAKAMARAMA	1893
KAIHOKA	1889
STRATFORD EWS	1877
HAPUKU-GRANGE HILL	1864
BRENTWOOD	1836
ANAWAI	1836
PELORUS SOUND, CRAIL BAY	1834
TAKAKA POHARA	1810
TARATA	1804

GRAHAM POKORORO 2	1795	WHALESBACK STATION	1554	MANGAMINGI, AORERE RD	1361
EARNSLAW	1774	WAIROA, WAIPUTAPUTA STATION	1552	PEEL FOREST	1359
MOTU, WAIWHERO	1744	MOTUEKA, RIWAKA EWS	1552	WALLACEVILLE EWS	1350
MANGAKOWHAI	1744	WAIKAWA VALLEY, BLACKTHORN	1551	OHUI, GISBORNE	1346
MOTU EWS	1716	WAIKAWA VALLEY, BLACKTHORN	1548	RINGS BEACH	1345
GLENTHORNE	1711	WAIKAWA VALLEY, BLACKTHORN	1548	NGAHINAPOURI	1345
MOKAIRAU, PAKARAE	1701	WAIKAWA VALLEY, BLACKTHORN	1543	LAKE OHAU STATION	1345
WHANGAPOUA 2	1695	WAIKAWA VALLEY, BLACKTHORN	1535	JUDGEFORD	1340
TOLAGA BAY, MANGATUNA	1694	WAIKAWA VALLEY, BLACKTHORN	1524	RUKUHANGA STATION	1338
AWANUI STN	1688	WAIKAWA VALLEY, BLACKTHORN	1524	KAWHIA	1338
TE REHUNGA	1687	WAIKAWA VALLEY, BLACKTHORN	1508	KAEO NORTHLAND	1332
MURCHISON, FAIRFAX ST	1686	WAIKAWA VALLEY, BLACKTHORN	1507	WAIERUA	1330
ROUND HILL	1674	WAIKAWA VALLEY, BLACKTHORN	1499	TAPAWERA 2	1320
OWHIRO	1666	WAIKAWA VALLEY, BLACKTHORN	1491	MOKORETA	1314
OKIWI BAY	1656	WAIKAWA VALLEY, BLACKTHORN	1471	PARAKAO	1311
OWHANGO, KAKAHI TCE	1653	WAIKAWA VALLEY, BLACKTHORN	1445	RUSSELL	1310
KAKA 2	1651	WAIKAWA VALLEY, BLACKTHORN	1439	WAIKANAE WATERWORKS	1307
REEFTON EWS	1640	WAIKAWA VALLEY, BLACKTHORN	1438	PURUKOHUKOHU AT NO 4*	1306
WHITIANGA AERO AWS	1630	WAIKAWA VALLEY, BLACKTHORN	1437	RAKAIA AT DRY ACHERON*	1301
OCEAN BAY	1621	WAIKAWA VALLEY, BLACKTHORN	1436	ANIWHENUA	1287
MANGLES VALLEY	1611	WAIKAWA VALLEY, BLACKTHORN	1421	FERN GLEN	1284
BRANDY CREEK	1607	WAIKAWA VALLEY, BLACKTHORN	1420	HIGH PEAK STATION	1284
OWHANGO	1606	WAIKAWA VALLEY, BLACKTHORN	1416	AUCKLAND, ARDMORE	1282
LINKWATER	1604	WAIKAWA VALLEY, BLACKTHORN	1411	BRIGHTWATER 2	1279
RODING RIVER	1602	WAIKAWA VALLEY, BLACKTHORN	1409	KOMAKO	1278
TONGARIRO HATCHERY	1597	WAIKAWA VALLEY, BLACKTHORN	1409 ¹	LICHFIELD, SCRIVENERS ROAD	1271
OROPI WATER TREATMENT PLANT	1595	WAIKAWA VALLEY, BLACKTHORN	1406	TE WHARAU, WAIMOANA	1270
TITIRANGI BAY	1587	WAIKAWA VALLEY, BLACKTHORN	1392	SAWYERS DOWNS	1264
KAIKOHE AWS	1570	WAIKAWA VALLEY, BLACKTHORN	1383	KIMBELL	1263
RIVERLEA	1569	WAIKAWA VALLEY, BLACKTHORN	1371	MARANGAI STATION	1262
AWAKINO 2	1566	WAIKAWA VALLEY, BLACKTHORN	1366	PUHATA	1257
MINARET BAY	1566	WAIKAWA VALLEY, BLACKTHORN	1364	RAWENE 2	1256
SMEDLEY	1555	WAIKAWA VALLEY, BLACKTHORN	1362		

BRIGHTWATER, TEAPOT VALLEY	1255
TE HORO, LONGCROFT	1254
HUNTER VALLEY 2	1251
GLENTUI 1	1250
EDGE CUMBE	1247
MANGAKINO 2	1247
MAROKOPA	1246
TAREHA	1244
KIRITAKI	1243
EASTRY STATION	1238
WAIAWA, WHAREAMA	1237
PONGAROA, WAIKAKAHI RD	1235
MONOWAI	1235
PIRINOA	1229
LAKE TAYLOR STATION	1228
WHANGANUI AT BELOW PIRIKA*	1228
TAUMARUNUI	1222
MOTUPIKO	1220
LILLBURN	1215
WARKWORTH EWS	1214
TE POHUE, HAWKES BAY	1214
TE HORO, JONELLE	1204
MELROSE STATION	1202
PUKEHINAU	1201
MANGARE STM AT MANGERE RD*	1197
WHAKAURU AT MOSSOP RD*	1191
AKAROA EWS	1189
GREENTOPS	1184
WAIPAPA AT TTT RD CULVERT*	1182
KOPUA	1181
ALFORD FOREST 1	1180
WAIPAPA AT NGAROMA RD*	1180

TIWAI POINT EWS	1168
MAUNGATAUTARI	1166
MANAPOURI AERO AWS	1161
GWAVAS	1160
MAPUA	1159
PUKEKOHE EWS	1158
HANMER FOREST EWS	1152
EASTERN BUSH	1152
MATAPOURI	1149
AUCKLAND, MANGERE EWS	1145 ²
CAMBRIDGE	1144
MANGAKINO AT DILLON RD*	1144
TAUTUKU	1142
NITHDALE	1138
CHEVIOT, MONTGOMERY ST	1135
INVERCARGILL AERO	1135
WAIHARARA	1134
NGAIO DOWNS	1134
MT SOMERS	1132
WAIWHERO STATION	1129
CASTLEPOINT STATION	1124
POKAIWHENUA AT PUKETURUA*	1119
DUNEDIN, BTL GARDENS	1117
WAIPUNA WOODVILLE	1111
HORORATA WEST	1110
KAPITI ISLAND	1109
WAIMARINO AT KEPA ROAD*	1106
WAIKOUKOU, LONGBUSH	1102
WAIRAU VLY, SOUTHWOLD	1100
GLENTHORNE LOWER STATION	1094
MT NIMROD 2	1094
KAITAIA OBSERVATORY	1092

WARD, CHANCET	1092
RAKAIA, GREENFIELDS	1091
MESOPOTAMIA	1088
HAMILTON AWS	1086
KAITAIA EWS	1085
HORSHAM DOWNS 2	1083
ROTOWAI	1082
TURANGI 2 EWS	1072
INAHA	1072
MANAKAU	1071
WAIHEKE ISLAND, AWAROA VALLEY	1064
MAIRETAHI	1063
LIVING SPRINGS	1060
HUNTERVILLE, KOEKE EAST	1055
CAIRNMUIR MANGAWEKA	1055
OTOKO	1053
HASTINGS, FLAG RANGE RD	1053
TAURANGA AERO AWS	1052
KAITAIA AERO EWS	1051
NGAKURU	1046
DUNEDIN, BALACLAVA	1044
RIPIA	1037
NELSON AERO	1037
DANNEVIRKE	1031
WHANGAREI AERO AWS	1030
PARAPARAUMU AERO	1030
WAKARUA	1030
PLAINS STATION	1028
GOVERNORS BAY	1027
ESKDALE HEDGELEY	1022
MANA ISLAND	1021
THORNTON EAST	1020

PARAPARAUMU AERO AWS	1018
HORORATA	1014
FLEMINGTON	1000
LAKE PUKAKI, BRAEMAR	996
KEREPEHI	995
GISBORNE AWS	993
STANTON AT CHEDDAR VALLEY*	992
CASTLEPOINT AWS	990
WAITUNA	989
ARAMOANA	988
LAKE COLERIDGE HOMESTEAD	988
NGAPUKE 2	987
WAIOURU TREATMENT PLANT	985
OPOTIKI	982
HOT SPRINGS MIRANDA	981
NGAHERE ITI	981
HAMILTON, RUAKURA 2 EWS	980
SOUTHERN RESERVOIR	979
SPRINGBURN	977
QUEENSTOWN	977
ELSTOW	974
PARAPARAUMU EWS	973
GREATFORD	969
MANGATAWHIRI	967
ROSEBANK	966
GLADSTONE, BANNOCKBURN	957
LEVIN AWS	956
GLENLEDI RD	956
TE AROHA, BOWLER ROAD	955
WHANGAPARAOA AWS	947
ROSE HILL	946
GLADSTONE TE KOPI	943

WINTON 2	940
WAIKATO AT CAMBRIDGE GOLF COURSE*	940
DARFIELD	939
TAPANUI	939
EASTWOODHILL STATION 2	936
MANDEVILLE	935
THE DOWNS	934
WAIHIRERE, GLANAVON	929
HILLEND	929
MT VERNON 2	926
WAITOA	922
KOPURIKI, GRANT RD	922
WAIARAPA CADET FARM	922
MATUKITUKI AT WEST WANAKA*	921
MCQUEENS VALLEY	917
KAKAHU BUSH	914
WHAKATANE AERO AWS	909
MASTERTON, TE ORE ORE CWS	907
MELFORD HILLS	907
AMBERLEY, RED OAK	905
TAIHAPE REC	902
TROTTERS CREEK	901
OXTON	898
ARROWTOWN NO.2	894
KAHUTARA	893
PUKEOKAHU, KOITIATA	892
GLEN OROUA, MILNER ROAD	891
AHURIRI AT SOUTH DIADEM*	890
RIVERSIDE	887
ONGAONGA	884
BAINESSE	882

MARTINBOR, RIVERSIDE	881
BULLS, FOREST ROAD	881
MORRINSVILLE, GEORGE ST	879
SEVENOAKS	877
GREEN ISLAND, KAIKORAI EAST	874
PALMERSTON	873
MAHAKI	869
LAKE PUKAKI, GUIDE HILL	869
MAMARANUI	864
GREENPARK	864
LONG BEACH	857
BROCKWORTH	855
ISLAY DOWNS	855
MOSGIEL TOWN	854
MOAWHANGO, POKAKA	853
LOVELLS FLAT	851
FOXDOWN STATION	849
PALMERSTON NORTH AWS	847
ASHBURTON COUNCIL	845
OPIKI	844
GORE AWS	842
BALMORAL, OUTRAM	840
PREBBLETON VALWAY	837
KAWEKU	836
AWATERE VALLEY, UPCOT	831
BURNHAM SEWAGE PLANT	830
SANSON, NGAHERE	829
FEILDING SANDON RD	825
DARGAVILLE 2 EWS	820
WAIKATO AT REIDS FARM*	809
RAINBOW POINT	806
NAPIER NELSON PARK	806

WOODEND, GLADSTONE	802
WANGANUI, SPRIGGENS PARK	800
WAIPARA, WATTLE GROVE	795
HINDON, ARDACHY	789
INCHCLUTHA, TELEGRAPH RD	782
WANGANUI AWS	777
CHRISTCHURCH GARDENS	775
DUNEDIN, MUSSELBURGH EWS	775
PALMERSTON NORTH EWS	772
ORARI ESTATE	772
BLENHEIM AERO AWS	759
LINCOLN, BROADFIELD EWS	751
MAGNET BAY	751
HAWEA FLAT	745
LYNDHURST LIMWOOD FARM	732
BAVERSTOCK WAIWERA	729
LAKE TEKAPO, AIR SAFARIS	712
CHRISTCHURCH AERO	683
TAUPO AWS	645
CARDRONA	644
OAMARU AIRPORT AWS	642
LAKE ONSLOW AUTO	639
TIMA	628
LAKE TEKAPO, MT HAY STN	607
NAPIER AERO AWS	605
LAUDER FLAT	603
TIMARU EWS	581
MATAKANUI	578
WANAKA AERO AWS	571
MIDDLEMARCH EWS	565
ETTRICK NO.2	552
RANFURLY EWS	508

CROMWELL EWS	492
MOANAROA	457
ALEXANDRA CWS	455
LAUDER EWS	453

Location	Sunshine (hours)
WHAKATANE	2792
TAURANGA AERO	2515
GISBORNE AWS	2483 ¹
LAKE TEKAPO EWS	2482
NELSON AERO	2428
BLENHEIM RESEARCH EWS	2428 ³
NAPIER NELSON PARK	2392
WAIPAWA EWS	2377 ¹
CROMWELL EWS	2361
KAITAIA EWS	2315
CHEVIOT EWS	2314
TAKAKA EWS	2261 ²
KAITAIA OBSERVATORY	2255
ASHBURTON AERO AWS	2248
QUEENSTOWN AERO AWS	2235 ¹
RANGIORA EWS	2234 ¹
TURANGI 2 EWS	2224 ¹
AUCKLAND, MANGERE EWS	2199 ²
AKAROA EWS	2197
MARTINBOROUGH EWS	2148 ¹
DARGAVILLE 2 EWS	2140
PARAPARAUMU AERO	2135
DANNEVIRKE EWS	2121
HAMILTON, RUAKURA 2 EWS	2114
WELLINGTON, KELBURN	2108 ³
GREYMOUTH AERO EWS	2076

BALCLUTHA, TELFORD EWS	2062
CHRISTCHURCH AERO	2024 ³
STRATFORD EWS	2004
WALLACEVILLE EWS	1895
PALMERSTON NORTH EWS	1876
HOKITIKA AWS	1861
DUNEDIN, MUSSELBURGH EWS	1817
REEFTON EWS	1764
MIDDLEMARCH EWS	1733
INVERCARGILL AERO 2 EWS	1730
PALMERSTON	1661
MT COOK EWS	1562