

New Zealand Rainfall for April, 1919—continued.

Station.	Total Fall, Points (100 to Inch).	Days with Rain.
SOUTH ISLAND—continued.		
(G.) EAST ASPECT—KAIKOURA TO CAPE SAUNDERS—continued.		
Waratah, Albury	233	9
Kakahu Bush, Geraldine	213	7
Pleasant Point	221	6
Te Pah Farm, Seadown	239	8
Smithfield	324	8
Timaru Reservoir	303	7
Benmore Station, Oamaru	281	7
Otiake	241	9
Livingstone	370	9
Armore, Windsor	241	7
Totara Station, near Oamaru	288	11
Duntroon	258	6
Pukeuri, Oamaru	250	11
Oamaru	227	10
Steward Settlement, Oamaru .. .. .	..	..
Trotter's Creek, Hillgrove	380	10
Kauroo Hill, Maheno	273	13
Balruddery, Kauroo Hill, Maheno	299	11
Bushey Park, Palmerston South	370	11
Opoho, Dunedin (383 ft.)	526	15
Burnside, Dunedin	494	18
Fish-hatchery, Portobello	519	17
Whare Flat	590	13
Mosgiel	442	11
(H.) SOUTH ASPECT—CAPE SAUNDERS TO PUYSEGUR POINT.		
Paerau	525	13
Great Moss Swamp, via Patearoa	374	15
Eweburn Nursery, Ranfurly	414	13
Waipiata	388	13
Nasby	410	8
Gladbrook Station, Middlemarch	367	14
Mount Pisa Station, Cromwell	206	6
Maungawera, Otago	245	4
Luggate, Cromwell	209	7
Manorburn Dam	349	14
Queenstown	279	11
Moa Creek	265	11
Little Valley .. .. .	..	..
St. Bathans	432	8
Blackstone Hill	326	5
Clyde	237	8
Earnsclough	203	9
Roxburgh	400	11
Sunnyvale Orchard, Island Block
Balclutha	345	20
Garston	339	9
Fairlight Station, Nokomai	380	12

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SOUTH ISLAND—continued.		
(H.) SOUTH ASPECT—CAPE SAUNDERS TO PUYSEGUR POINT—continued.		
Glenfalloch Station, Nokomai	412	12
Wendonside	465	14
Wendon	478	15
Lawrence	540	16
Owaka .. .. .	..	..
Kelso, Otago .. .. .	..	..
Tapanui Nursery	590	22
Waikawa Valley	885	24
Wharuarimu	737	23
Uplands, Waimahaka	813	24
Roslin Estate, Woodlands	678	21
Dipton	295	5
Bluff .. .. .	..	..
Radio-Awarua	714	27
Nightcaps	437	18
Otautau	687	18
Creighton	390	14
Manapouri	379	11
(I.) ISLANDS.		
Centre Island	711	21
Stewart Island	867	27
Half-moon Bay, Stewart Island	792	27
Niue Island .. .. .	..	..
Avarua, Rarotonga, Cook Islands .. .. .	..	..
Aitutaki Island, Cook Islands	304	18
Mangaia, Cook Islands	555	10
Chatham Island	161	14
LATE RETURNS.		
Kaituna, February, 1919	27	1
Tutira Lake, January, 1919	83	2
" February, 1919	581	7
" March, 1919	89	6
Okura, March, 1919	1118	10
Keinton Combe, January, 1919	440	2
" February, 1919	250	2
" March, 1919	72	2
Aitutaki, January, 1919	1541	21
" February, 1919	1619	19
" March, 1919	178	13
Strathblane, December, 1918	380	10
Niue Island, November, 1918	661	9
" December, 1918	646	14
" January, 1919	439	9
" February, 1919	556	11

Notice to Mariners.—No. 34 of 1919.

Marine Department,
Wellington, 8th July, 1919.

THE following Notices to Mariners, which have been received from the Hydrographic Office, London, are published for general information.

GEORGE ALLPORT,
Secretary.

MINE WARNING TO MARINERS.

1. MARINERS are hereby informed that the South Atlantic, Indian Ocean, Red Sea, and Pacific Zone defined in Mine Warning to Mariners No. 2, paragraph 8, is considered clear of moored mines, with the exception of the mined areas in the vicinity of Three Kings (North Island, New Zealand) and Cape Farewell (South Island, New Zealand), details of which are given below.

Navigation in this zone is unrestricted except as laid down in sections 2 and 3.

2. THREE KINGS (NEW ZEALAND, NORTH ISLAND).—Mines are laid on a line joining lat. 34° 6' S., long. 172° 40' E., and lat. 34° 19½' S., long. 172° 48' E. Vessels are not to approach within ten miles of this line in any direction.

3. CAPE FAREWELL (NEW ZEALAND, SOUTH ISLAND).—Mines are laid on a line between lat. 40° 7' S., long. 172° 42' E., and lat. 40° 28½' S., long. 172° 26' E. Vessels are to avoid the area bounded on the north by the parallel of lat. 39° 55' S., on the east by the meridian of longitude passing through Farewell Spit Lighthouse (long. 173° 1' E.), on the south by the land, and on the west by the meridian of longitude passing through Kahurangi Point (long. 172° 13' E.).

WIRELESS METEOROLOGICAL INFORMATION TO AND FROM SHIPS AT SEA.

GENERAL REMARKS.

1. It is earnestly hoped that all concerned will assist in making the wireless meteorological service a success. Negotiations are now in hand to extend and unify the system of collecting weather data by wireless from ships at sea all over the world, and at the same time to organize the free transmission of weather bulletins from a sufficient number of wireless stations to admit of ships being constantly supplied with reliable weather reports and forecasts wherever they may be.

2. It should be borne in mind that the needs of ships at sea in regard to information regarding the weather will march hand in hand with the requirements of aircraft. The importance of this service will therefore be constantly increasing, and its success or failure will largely depend upon the co-operation of ships at sea in providing the data, without which accurate forecasting is impossible. The matter does not depend solely upon the efforts of the ships selected to furnish the data. The essence of success lies in rapidity in passing such data by wireless from the ship to the coast station, and thence to the central meteorological office. It follows, therefore, that all ships not taking an active part in supplying data should use the greatest care not to interfere with the transmission of the wireless messages to the shore.

3. The following particulars refer to the scheme now being undertaken by the British Meteorological Office. This notice will, however, be subject to revision from time to time, and endeavours will be made to include in each revision all information available to date of the weather bulletins issued by the wireless stations of the world. Earnest endeavours are being made to obtain international agreement as to the form