

The radio time signals received at the Observatory generally agreed with the Observatory clock within one second of time. Greater differences, however, have been observed in the following cases :—

	Differences from Observatory Clock.	
	From 1 to 2 secs.	From 2 to 3 secs.
Honolulu (NPM)	15	1
Nauen (POZ)	6	3
Malabar (PKX)	7	2
Bordeaux (LY)	2	..
Kavite (NPO)	8	..
Annapolis (NSS)	1	..

The Observatory is indebted to the Bureau Internationale de l'Heure, Paris, and to the U.S. Naval Observatory, Washington, for the corrections to the radio time signals sent out by the French and American observatories.

Time Service.

The time service has been maintained, and the regular signals have been sent out. The signals have been transmitted daily. The total number of time signals sent from the Observatory was 1,647. Of these, 460 were sent by wireless telegraph, 657 were sent by special circuit to the Telegraph-office, 300 by the signal lights at the Observatory, 102 by switching off lights on the Harbour Board building at Auckland, 100 by dropping the time-ball at Lyttelton, and 28 by telephone.

No radio time signals were sent on the following dates, owing to—

- (1) The Wellington Radio Station (VLW), standing by for distress calls : Friday, 18th February, 1927 (at 09 h. G.M.T.).
- (2) Line interruptions between the Wellington Radio Station and the Dominion Observatory : Monday, 21st March, 1927 ; Thursday, 13th October, 1927 ; Thursday, 1st December, 1927.
- (3) Accident to circuit in Observatory : Saturday, 23rd July, 1927.

The present programme at the Observatory provides for the following time signals, most of which are sent by the Observatory standard clock, which is usually kept accurate to the nearest second of time—

Automatic Time Signals—

- (1) To the General Post Office, Wellington, by telegraph, daily :
- (2) To the Railway Department, Wellington, by telegraph, daily :
- (3) To ships and to the general public at Wellington, by electric lights at the Observatory, daily :
- (4) To the Auckland Harbour Board, by electric lights at Auckland, on Tuesdays and Fridays, except Government holidays :
- (5) To the Lyttelton Harbour Board, by dropping the time-ball at Lyttelton, on Tuesdays and Fridays, except Government holidays :
- (6) To the South Island telegraph-offices, by telegraph, on Tuesdays and Fridays :
- (7) Radio time signals through the Wellington Radio Station (VLW) every day at 10.30 a.m.
- (8) Radio time signals through the Wellington Radio Station (VLW), on Tuesday and Friday evenings at 8.30 p.m., except on Government holidays :

Non-automatic Time Signals :—

- (1) To ships and watchmakers in Wellington and to the Public Works Department by telephone, on application to the Observatory.
- (2) The Observatory automatic time signals sent to the General Post Office are distributed by telegraphic hand signals at 9 a.m. daily to some 2,300 telegraph and telephone offices distributed all over New Zealand.
- (3) Similar hand signals are also sent to all railway offices in New Zealand at 9 a.m. daily—by telegraph to 221 offices, and by telephone to 257 stations.

Government Buildings Clock.—The Government Buildings clock has been kept under fairly close control. A record is obtained at the Observatory by direct circuit from the clock, and the adjusting weights on the pendulum are altered from time to time. On 6th–9th December, 1927, the clock was being cleaned and overhauled, as it was found that it had been running very irregularly. The clock has been showing a better rate since it has been attended to.

Sun-spots.

The regular observation of sun-spots has been discontinued.

An enlarging camera for photographing sun-spots has been obtained, and is fitted for use with the Wellington City Council's 9 in. equatorial telescope. The camera is available for any particularly interesting groups of sun-spots.

International Astronomical Union.

By courtesy of the Central Astronomical Bureau, arrangements have been made for this Observatory to receive advice of all important astronomical discoveries. The information is forwarded by the Bureau at Copenhagen to this Observatory through the Melbourne Observatory.