

DOMINION OBSERVATORY.

REPORT ON THE ACTIVITIES OF THE OBSERVATORY DURING THE YEAR ENDED
31ST DECEMBER, 1935.

BUILDINGS AND EQUIPMENT.

The Observatory buildings and equipment have been kept in good order and condition. The Observatory grounds have been attended to periodically by the Wellington City Council.

ASTRONOMY (TIME SERVICE).

Time Signals received.—The Observatory signal clock has been controlled mainly by the reception of radio time signals. The following radio time signals were received :—

Station.	Call Sign and Wave.	Hour.		Number of Times received.
		(G.M.T.).	(N.Z.M.T.).	
		h.	h. m.	
Saigon	FZR (SW)	19	6 30	18
Pontoise	FYB (SW)	20	7 30	14
Washington.. .. .	NAA (SW)	21	8 30	145
Monte Grande	LSD (SW)	23·8	11 15	94
Washington.. .. .	NAA (SW)	00	11 30	51
Norddeich	DAN (SW)	00	11 30	43
Nauen	DFY (LW)	00	11 30	11
Honolulu	NPM (LW)	00	11 30	37
Malabar	PKX (LW)	01	12 30	12
Washington.. .. .	NAA (SW)	03	14 30	27
San Francisco	NPG (SW)	03	14 30	158
Honolulu	NPM (SW)	03	14 30	52
Washington.. .. .	NAA (SW)	05	16 30	5
Washington.. .. .	NAA (SW)	08	19 30	91
San Francisco	NPG (SW)	08	19 30	11
Honolulu	NPM (SW)	08	19 30	6
Pontoise	FYB (SW)	08	19 30	22
Bordeaux	FYL (LW)	08	19 30	6

Total number of signals received : 803.

It is not possible to make regular use of the British time signals from Rugby Radio, owing to the unsuitable times of transmission (5 h. 30 m. and 21 h. 30 m. N.Z.M.T.).

Transit Observations.—The clocks at the Observatory were also checked frequently by observations with the transit instrument. Observations were taken on forty-two days, the number of separate transits being as follows : Sun, 24 ; stars, 99 ; Venus, 2 ; Mars, 1 : Total number of transits, 126.

Time Signals sent out.—The time service was maintained as previously, and the regular time signals sent out. The routine at the Observatory provided for the following time signals, most of which were sent automatically by the Observatory clock, the error of which seldom exceeded a quarter of a second of time.

(a) Automatic signals :—

- (1) Through the Wellington Radio Station ZLW, daily at 10 h. 30 m. (=23 h. G.M.T.).
- (2) Through the Wellington Radio Station ZLW, on Tuesdays and Fridays at 20 h. 30 m. (=9 h. G.M.T.), except on Government holidays.
- (3) Through Radio Broadcasting Board's station 2YA at Wellington, at 10 h. 30 m., 15 h. 30 m., and 19 h. 30 m. N.Z.M.T. (23 h., 4 h., and 8 h. G.M.T.) on week days, and at 15 h. 30 m. N.Z.M.T. on Sundays. The Board's station 3YA at Christchurch rebroadcasts the signals from station 2YA. As the broadcasting of these signals is controlled by 2YA, the Observatory cannot guarantee regularity in the time service through stations 2YA and 3YA. The time signals are sometimes suppressed when special broadcasts are in progress.