Particulars of the most important earthquakes in 1941 are as follows:—

1941.	Time of Shock (G.M.T.).*	Approximate Epicentre.		Focal Depth (km.): N = Normal.	Instrumental Magnitude.	Maximum Felt Intensity (R.-F.).	Remarks.
		Latitude S. (Deg.)	Longitude E. (Deg.)				
	d. h. m.						
January ..	9 02 39·4	38·1	177·1	10	5	8	Bay of Plenty, northern Hawke's Bay.
February ..	6 18 20·6	43·2	171·4	N	5	6–7	Canterbury and parts of Westland.
February ..	11 23 11·2	40·2	174·7	N?	4½	5	West of North Island from New Plymouth to Wellington.
April ..	6 18 46·8	41·6	172·9	80 ca.	5½	6	From Taumarunui and Hastings to Queenstown and Dunedin.
May ..	29 11 17·1	40·5	176·8	N	5	6+	Parts of southern Hawke's Bay.
June ..	9 18 13·8	42¾	171½	N	3	5–6	Otira.
July ..	17 01 39·9	41·6	173·3	80–100	5	5	Cook Strait and northern parts of South Island.
August ..	10 10 05·2	45	168	?	5	6	Southland, parts of Otago.
September..	24 11 39·5	38·6	177·1	150 ca.	5?	6	Opotiki to Wanganui and Waipawa.
November	21 10 05·9	40·3	174·3	N	4½	5	New Plymouth, Taihape, Cook Strait region.
December ..	17 11 51·3	41·7	173·7	N	4½	3	Central districts.

* To obtain the corresponding New Zealand mean time, add 11 h. 30 m., and to obtain New Zealand summer (or daylight saving) time, add 12 h.

Early in 1941 a system was devised for indicating the accuracy of epicentre determinations. This is employed in published reports and bulletins.

Seismograph Stations.—The seismograph stations operating on 31st December, 1941, were as follows, the types of seismograph being given in parentheses: Auckland (Milne-Shaw), Arapuni (Milne) Rotorua (Jaggar), Tuai (Wood-Anderson), New Plymouth (Wood-Anderson), Hastings (Jaggar), Bunnythorpe (Jaggar), Wellington Central Station (Galitzin-Wilip, Milne-Shaw, Wood-Anderson, Jones, Imamura), Takaka (Imamura), Greymouth (Jaggar), Christchurch (Galitzin three components, Wood-Anderson), Monowai (Jaggar).

Milne-Shaw seismograph No. 36 was installed at the Auckland Museum early in April. However, it was not until November that the necessary apparatus was obtained for maintaining accurate time.

Progress was made with the establishment of a Wood-Anderson station at Kaimata, near Greymouth, but there has been considerable delay in this project owing to the war.

The Public Works officials at Rotorua have developed an improved method of producing Jaggar seismograph records. The method results in blue-print paper records instead of smoked cardboard ones.

The seismograph at Chatham Islands has been temporarily suspended owing to the war.

Research in Seismology—Research work has been extremely restricted owing to circumstances. However, some work was done on the revision of local earthquake epicentres for the period 1931–40, and a paper on the subject was prepared for publication. A revision of the distribution of earthquake effects in various parts of New Zealand was also carried out, and a paper on the results prepared for publication.

MAGNETIC OBSERVATORY, CHRISTCHURCH.

Director: H. F. Baird.

SUMMARY OF OPERATIONS FOR THE YEAR ENDED 31st MARCH, 1942.

The usual programmes of terrestrial, magnetic, seismological, atmospheric electric, cosmic, radiation, and climatological observations have been maintained. Considerable extra work arose from occupation of sixty-two points throughout New Zealand in connection with a magnetic resurvey of the Dominion.

Terrestrial Magnetism.

The three types of photographic variometers by Eschenhagen, Adie, and La Cour gave continuous record of magnetic elements at our substation in Amberley Domain. Absolute observations and determination of scale-values there were made regularly as usual. The sensitivity of the Adie variometers was reduced so that little or no trace would be lost during large magnetic storms. Tabulation of mean monthly values of magnetic declination, horizontal force, and vertical force is well forward.

Local data of international magnetic character figures have been prepared quarterly and forwarded to Carnegie Institution, Washington. Similarly, further "K" values, or the three-hour range index of geomagnetic activity, have been sent to the International Association of Terrestrial Magnetism and Electricity at Washington, D.C., United States of America.

Magnetic Resurvey.

So far, twenty-five points in the North Island and thirty-seven in the South Island have been either reoccupied or established. In improving communication services, navigation, preparation of charts, and geological investigation, modern knowledge of the degree of magnetic variability over a country is always important. During war, up-to-date knowledge of magnetic elements is important in many directions. With the lapse of time, magnetic elements at any place go through what is known as a secular variation whose rate is accelerated in some years and decelerated in others. Until a year ago, when instruments lent by the Carnegie Institution of Washington were put into field use, this country lacked any systematic knowledge as to what was the rate of secular variation at increasing