Geological Survey Office,
Department of Mines,
Union of South Africa.

SEISMOLOGICAL BULLETIN.

The data herewith give the results from a network of seismographs intended particularly for the study of earthquakes occurring in or near South Africa. This bulletin is, however, prepared regularly and will be sent to interested organisations on request.

Stations	Pretoria (Pta)	Grahamstown (G)	Pietermaritzburg (Pmb)	Kimberley (K)
Lat.:	25°45.2'S	33°18.6'S.	29°37.2'S.	28°45.1'S.
Long.:	28°11.4'E.	26°34.5'E.	30°23.8'E.	24°46.8'E.
Lithologic foundation:	Weathered Shale (Pretoria series).	Dwyka shale.	Soft Ecca shale.	Dolerite boulders embedded in decayed dolerite.
Height:	1350 m.	558 m.	656 m.	1321 m.
Instrument:	Benioff S.P. vertical.	Benioff S.P. vertical with short & long period recorders.	Benioff S.P. vertical.	Benioff S.P. vertical.
Seismo. Officer:	The Director.	Dr. M.E. Szendrei.	The Professor of Physics.	Rev. Br: T.N. Purcell.
Observer:	Mr. T.E. Dicker.	Dr. M.E. Szendrei.	Mr. W.L. Mouton.	Rev. Br. H.F. McGreevy.
Institution:	Geological Survey Office.	Rhodes University.	Natal University.	Christian Brothers College.

Notes: "Earth tremors" originating in the mining district of the Witwatersrand are recorded several times daily by the Pretoria station, and less frequently by the others. These are not dealt with in this bulletin.

Data are occasionally reported herein by courtesy of the Union Observatory, Johannesburg, which operates a 200 kg. Wiechert Horizontal seismograph. This station is called J, and is at 26° 10.9'S., 28° 04.5' E., height 1806 metres.

All times given are G.M.T.

The supervision of this network and bulletin is at present in the hands of the undersigned, to whom all inquiries should be addressed.

Address:
Geophysical Research Institute,
University of the Witwatersrand,
Johannesburg, South Africa.

P.G. Gane.
Seismological Officer.

JANUARY, 1954.

Date	Station	Phase	G. C. T. h. m. s.	Arc Distance	Remarks
1	Pmb	eP	13 17 07	89°	USCGS H = 13 04 17
	Pta	eP	13 17 18	92°	8½°S. 124°E.
	K	eP	13 17 28	94°	
2	Pta	e	01 23 50		
	K	e	01 24 09		
2	K	e	20 37 32		
		i	20 37 39		
	Pta	e	20 37 49		
4	G	iP	12 14 00	23½°	USCGS H = 12 08 49
	K	iP	12 14 31	27°	Bouvet Island Region,
	Pmb	eP	12 14 44	28°	S. Atlantic.
	Pta	iP	12 15 06	30½°	
6	K	iP_1	15 35 49	150 kms.	h = 15 35 24, Small
		iS_1	15 36 06		shock on the border
	G	ePn	15(36 20)	370 "	of Fauresmith Tromp-
		eP_1	15 36 25		berg district, O.F.S.,
		eS_1	15 37.1		S. Africa.
	Pmb	iPn	15 36 26	450 "	
		eS_1	15 37 29		
	Pta	ePn	15 36.7	550 "	
		eiP_1	15 36 52		
		eS_1	15 37 53		
6	Pta	i	23 06 50		Portuguese East
	Pmb	i	23 07 23		Africa?
		i	23 08 57		
	K	i	23 07 45		
		ei	23 09 39		
		e	23 10 44		
	G	e	23(10 41)		
		e	23 12.2		
9	K	i	00 40 07		
	Pta	i	00 40 31		
9	Pta	i	18 19 59		
10	Pta	e	18 30 48		Near shock.
		e	18 33 45		
11	Pta	i	22 53 29		
12	G	i	14 29 26	90°	USCGS H = 14 16 22
	K	eP	14 29 48	95°	49°S. 165°E.
	Pta	eP	14 29 58	96°	
13	K	$ePKP_1$	23 53 36	149°	USCGS H = 23 33 46.5
	Pta	$ePKP_1$	23 53 41	150°	35°N. 119.1°W.
13	G	eP	00 26 15	90°	USCGS H = 00 13 06
		i	00 26 21		49°S. 165°E.
	Pmb	eP	00 26 23	92°	
	K	iP	00 26 36	95°	
	Pta	eP	00 26 43	96°	
14	Pta	$ePKP_1$	19 57 29	150°	USCGS H = 19 37 38
					Fox Islands,
					Aleutian Isles.
15	K	i	01 13 11		
	Pta	e	01 13.4		
15	Pta	i	22 05 25		
	K	i	22 05 53		
15	K	i	23 49 46		
16	K	e	22 13 18		
	Pta	e	22 13.8		
16	K	e	23 05 24		
	Pta	e	23 05 25		
17	Pta	iP	17 42 20		USCGS H = 17 39 33
		iPP	17 42 26		16½°S. 36°E. Our
		eiS	17 44 21		data gives H =
	J	traces P	17 42.5		17 39 21 ± 6 secs.
		eS	17 44 30		approx. ½° N.E. of
	Pmb	iP	17 42 51		the above epicentre.
		iPP	17 42 58		

Date	Station	Phase	G. C. T. h. m. s.	Arc Distance	Remarks
	K	iP	17 43 14		
		iPP	17 43 23		
		eiS	17 46 00		
	G	iP	17 43 54		
		iPP	17 43 02		
17	K	e	18 37 04		
17	Pta	iPKP	21 03 09	148°	USCGS H = 20 43 43
	Pmb	iPKP	21 03 14	150°	52°N. 178½°E.
	K	iPKP	21 03 20	152°	h = ± 150 kms.
17	Pta	i	23 15 02		
	K	i	23 15 23		
18	Pta	eP	11 00 44	98°	USCGS H = 10 47 07
	K	eP	11 00 56	100°	Banda Sea.
19	Pta	e	20 37.2		
20	K	iPKP	14 08 59	128°	USCGS H = 13 50 14
	Pta	ePKP	14 09 03	129°	21°S. 176½°W. d = ± 200 kms.
20	Pta	e	16 15.5		
	K.	e	16 16 46		
21	Pta	traces	11 34.4		
21	Pta	traces	17 37.4		
22	Pta	i	01 42 27		
22	Pta	$iPKP_1$	11 35 55	151°	USCGS H = 11 16 07
	K	$iPKP_1$	11 36 02	155°	54°N. 163°W. h = ± 60 km.
22	K	i	21 41 50		
23	Pta	eP	16 18 13	76°	USCGS H = 16 06 30
	K	iP	16 18 37	80°	37½°N. 72½°E.
24	Pta	traces	00 45.2		
27	Pta	e	14 39.6		
28	Pta	e	04 39 28		
	K	traces	04 51 15		
28	Pta	i	23 44 57		
	K	i	23 45 10		
29	Pta	e	10 56 24		
29	Pta	e	22 52.6		
	K	e	22 54.0		
30	Pta	$iPKP_1$	18 47 39	151°	USCGS H = 18 27 44 54°N. 163°W.

B.M.M. HURST.