DEPARTMENT OF NATIONAL RESOURCES

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS

Record 1978/4

PORT MORESBY GEOPHYSICAL OBSERVATORY

ANNUAL REPORT

1975

by

I.D. RIPPER & S.N. SHEARD

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SUMMARY

Standard observatory programs in seismology and geomagnetism were continued at Port Moresby during 1975 by the Australian Bureau of Mineral Resources, Geology and Geophysics.

One seismograph station, Purari (PUR), at the junction of the Purari and Wabo rivers in the Gulf Province, was added to the regional seismograph network. Accelerograph were installed at Yonki (two) and Kandrian.

Seismicity of the New Guinea Solomon Islands region increased from the previous year with the occurrence of two earthquakes with magnitude (M) 7.0 and greater, and of 28 earthquakes with magnitude (M) 6.0 and greater. A major earthquake occurred on 20 July at Motupena Point, south-west Bougainville at a depth of 49 km. The maximum intensity was MM VIII. A two-metre tsunami followed the earthquake, damaging a Posts and Telegraphs communications station at Torokina. Damage exceeded $A300 000.

A second widely felt earthquake occurred on 25 December at a depth of 115 km beneath the Sepik River 110 km east of the Irian Jaya border. The maximum intensity reported was MM VII.

1. INTRODUCTION

The Australian Bureau of Mineral Resources, Geology and Geophysics (BMR) opened a geophysical observatory at Port Moresby in 1957 (Observatory Staff, 1965). The program of investigations was restricted initially to geomagnetic and seismological observations at Port Moresby, but it has been enlarged subsequently to include the operation of a network of regional seismographs. The appendix summarises principal events in the history of the observatory. Detailed annual accounts of operations to 1974 may be found in the BMR Records by several authors.

This report describes the activities during the year 1975. In addition to seismological and geomagnetic work at Port Moresby, networks of seismograph and accelerograph stations were maintained in conjunction with other government and private agencies.

A brief review of 1975 New Guinea regional seismicity and a list of earthquakes for which hypocentres were computed by the United States Geological Survey (USGS) are included.

2. STAFF AND VISITORS

Tables 1 and 2 give details of staff, and Table 3 lists visitors to the Observatory during 1975.

The number of man-days spent by staff visiting other Papua New Guinea centres were: Wabag, 11; Lae, 9; Kavieng, 9; Momote, 7; Rabaul, 6; Madang, 6; Talasea, 5; Panguna, 4; Yonki, 3; Purari, 2; Kandrian, 2; Wewak, 1; and Musa, 1;

3. SEISMOLOGY

Table 4 lists the co-ordinates and instruments of the BMR seismograph stations, and Plate 1 shows the positions of all seismograph stations operating in Papua New Guinea during 1975.

Recording Stations

Port Moresby (PMG) Routine recording of the Port Moresby World Wide Standard Seismograph (WWSS) continued and regular calibration checks were made. The supplementary Willmore, Sprengnether, and Wood-Anderson seismographs continued to operate as standby instruments to the WWSS, for strong ground motion and for magnitude (ML) determinations. A tape recording seismograph was operated for the Carnegie Institution of Washington.

Konedobu (KDB) The station operated whenever a seismograph was available in the office laboratory. Recordings were used for rapid visual monitoring of earthquake activity.

Laetech (LAT) The station was operated by personnel of the Institute of Technology, Lae. Operation was satisfactory.

Kaviang (KVG) Operation was normal except during January to March when frequent pen recorder breakdowns occurred. The small number of seismic arrivals recorded by KVG is mainly due to the low gain of the station, necessitated by high background noise.

Momote (MOM) A new operator commenced duty in December 1974 but was unable to maintain the station efficiently. Operation was intermittent until the station was temporarily closed on 14October. Difficulties with the mains power supply, and telephone and telegraph communications also hampered operations.

Talasea (TLS) Operation was intermittent during the year owing to unreliability of the operator and breakdown of the EMI power supply. The operator ceased duty on 27 November and a new operator was recruited on 3 December.

Wabag (WAB) Operation was normal except for EMI power supply breakdowns in January, February, April, and May.

Madang (MDG) Operation was normal except during July and August when the seismometer was flooded.

Panguna (PAA) Operation was normal except during July when an industrial disturbance occurred at the Bougainville Copper Limited mine in Panguna.

Purari (PUR) A Sprengnether portable seismograph was installed on 11 July at the Snowy Mountain Engineering Corporation (SMEC) camp at the junction of the Purari and Wabo rivers in the Gulf Province to test conditions for proposed permanent SMEC station.

No useful records were obtained after August owing to recorder breakdown and operator difficulties. The recorder was returned to Port Moresby in October for repairs.

Communication with the site is extremely poor.

Accelerograph network

Table 5 lists data on accelerographs operating in Papua New Guinea in 1975. The instrument sites are shown in Plate 1.

A summary of accelerograph movements during 1975 follows:

Date	Type & Block No.	From	To	Action
13 March	MO2 446	Wewak	Wewak B	Change of site owing to vandalism
14 July	SMA-1 S/N 2046	Port Moresby	Yonki A	Installation
12 July	SMA-1 S/N 2045	Port Moresby	Yonki B	Installation
15 July	MO2 476	Lae Posts & Telegraphs	Port Moresby	Dismantled
15 July	MO2 655	Port Moresby	Lae Posts & Telegraphs	Replacement
17 July	SMA-1 S/N 1943	Port Moresby	Kandrian	Installation
02 Sept.	MO2 S/N 45	Port Moresby	Madang O.T.C.	Installation

Collection and distribution of data

Records were airmailed about twice weekly from the seismograph stations and analyses of all seismograms were then carried out at the observatory office, Port Moresby. P-wave arrival times were telegraphed to the USGS. Weekly bulletins listed all seismic analyses. Phase data were transcribed onto punch card forms, which were sent to BMR Canberra, for processing and inclusion in a magnetic tape for the International Seismological Centre (ISC) Edinburgh.

Table 7 lists the monthly number of seismic events recorded by each station.

Earthquake felt effects have not yet been entered on the storage and retrieval computer file held at the Computer Centre, Port Moresby because of a computer program malfunction. Accelerograms were forwarded to BMR Canberra for digitization and analysis.

Published papers, Reports, and Records worked on during the year include those by Gaull (in prep.), Ripper (1978) Everingham (1977), Everingham et al. (1977), Sheard (in prep.), Everingham (1976), and Ripper et al. (1976).

Ripper (1975) presented the paper 'Seismicity and Earthquake Focal Mechanisms in the New Guinea Solomon Islands Region' to the South West Pacific Workshop Symposium, Sydney University, 12-14 February. Gaull (1976) presented the paper 'Accelerograph Recordings of the Musa Earthquake, 16 September 1972' to the South Pacific Regional Conference for Earthquake Engineering, Wellington University, New Zealand, 13-15 May.

New Guinea/Solomon Islands seismicity 1975

Table 8 lists earthquakes which occurred in the New Guinea Solomon Islands region during 1975 (USGS hypocentres), and Table 9 the felt effects with intensity MM IV and above, received through the distribution of questionnaires throughout Papua New Guinea and from the Rabaul Volcanological Observatory. Some reports from the Solomon Islands are also included.

The level of seismicity increased in 1975. Two earthquakes with magnitude M 7 and over occurred (cf. one in 1974) and 26 earthquakes with magnitude M between 6.0 and 6.9 inclusive (cf. twelve in 1974). The increase was largely but not entirely due to the aftershock series of the magnitude M 7.7 earthquake of 20 July in which one M 7 and five M 6 earthquakes occurred before 31 July. Eleven M 6 earthquakes had already occurred throughout the region before 19 July.

The increase is not reflected in the total annual number of earthquakes recorded by local seismic stations. PMG recorded 2246 events in 1974 (Ripper et al 1976) and 1889 in 1975 (Table 7).

The earthquake of 20 July occurred at a depth of 49 km offshore from southwest Bougainville. Intensities of MM VIII were experienced in south Bougainville. Many landslides occurred, domestic water tanks were destroyed, and some bush material houses collapsed. A two-metre tsunami followed the earthquake, damaging a Post and Telegraphs communications station at Torokina. Earthquake damage exceeded $A 300 000. The earthquake and the associated aftershock series are reported in detail by Everingham et al. (1977).

Another widely felt earthquake occurred on 25 December at 2322 UT (26 December at 0922 local time) at a depth of 115 km beneath the Sepik River, 110 km east of the Irian Jaya border. The maximum reported intensity was MM VII and the isoseismal radius for MM VI was approximately 130 km. Several landslides occurred and there was considerable damage to domestic water tanks.

Questionnaires were distributed for the 20 July and 25 December earthquakes, and for a magnitude M 5.8 earthquake which occurred at a depth of 44 km beneath the south coast of the Huon Peninsula on 14 August. The maximum reported intensity for this earthquake was MM V.

4. GEOMAGNETISM

Normal-run magnetograph

The La Cour 15 mm/h magnetograph continued to record variations in geomagnetic horizontal intensity, vertical intensity, and declination at Port Moresby.

Sixty-two hours of record were lost owing to: (a) the recorder gears jammed (12 hours); (b) operator mistakes (50 hours). Nine days of either poor quality or blank records from 7 - 15 November were started by broken electrical wiring in the recording lamp circuit and sustained by modifications which were troublesome.

Control Observations

A set of absolute observations using 3 QHM's, a BMZ, and a declinometer, was made once a week. The preliminary instrument corrections used in the calculation of results are shown in Table 10.

Scale Values

H and Z scale values were measured weekly and D was measured monthly using coil currents of 6 mA and 10 mA provided by an MCO-1 calibrator. The rated accuracy of MCO-1 calibrator is 0.1%. Adopted scale values are shown in Table 11.

Temperature coefficients

Previously derived values, qH = 10 nT/^{o}C and qZ = 0 nT/^{o}C were applied to the ordinates; the temperature range was 28.0^{o}C to 31.8^{o}C.

Baseline values

The H baseline value continued to decrease, requiring decrements in adopted values of 1 nT about every six days. On 20 October both H and Z baselines were adjusted to move the light spot. The D baseline value showed only small fluctuations about the mean. The Z baseline value, also showed only small fluctuations about the mean until August, when the baseline value started to increase. The cause of this was found to be instrumental, and BMZ 68 corrections as found in 1977 are given in Table 10.

A rapid increase of 15 nT during November and December was annulled by cleaning the BMZ 68 magnet pivots in January 1976, and this increase was ignored in baseline adoptions.

Orientation

A test made on the H variometer on 16 April showed the H recording magnet (N Pole) was 0.1 ± 0.2°N of the magnetic E prime vertical. The reference azimuth was 06.1°, and H at the time of measurement was 36085 nT.

A test on the D variometer on 16 April showed the D recording magnet (N Pole) was 0.5 ± 0.2°W of N. The reference azimuth was 06.1° and D at the time of measurement was 06° 16'.

No Z orientation tests were carried out during 1975.

Data reduction and distribution

Adopted scale values and baseline values were sent with the 35 mm magnetogram copies to World Data Centre A, and with the magnetograms to BMR Observatory Group, Canberra, for the mean hourly value derivation program. Recorded solar flare effects, sudden commencements, sudden impulses, and magnetic storms were reported monthly to the Data Centre and to other international agencies.

Monthly mean values for 1975 of D, H, Z, and the K index at Port Moresby are listed in Table 12; H continued to decrease steadily but at a lower rate (about 20 nT/a) than the average (about 25 nT/a) for the past 10 years. D continued its easterly trend of 1'/a. Z increased at a greater rate (about 50 nT/a) than the average (about 37 nT/a) for the last 10 years. Table 13 gives the annual mean values of all components for the 10-year period 1965-1975.

Intercomparisons

No intercomparisons were conducted during 1975.

5. GRAVITY

The earth-tide gravity meter of the Observatoire Royal de Belgique continued operation at the PMG seismograph station until 18 March, when it was dismantled by J. Van Son of BMR and transferred to Darwin, Australia.

6. NOTES ON OPERATIONS

January: Accountancy procedures were transferred from the Sub-Treasury, Department of Housing and Construction, Port Moresby to the Department of Minerals and Energy, Canberra.

September: The Observatory manned a week-long seismology display for the Papua New Guinea Independence Day celebrations on 16 September.

7. ACKNOWLEDGEMENTS

The co-operation of the Prime Minister; the Australian Department of Housing and Construction, the Civil Aviation Agency, the Bureau of Water Resources, the Papua New Guinea Departments of Lands, Survey, and Mines and Agriculture, Stocks and Fisheries, Kennecott Pacific Pty Ltd, Carpentaria Exploration Company, Bougainville Copper Limited and the Snowy Mountains Engineering Corporation in the operation and maintenance of the seismic and accelerograph networks is gratefully acknowledged.

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APPENDIX

PRINCIPAL EVENTS

PORT MORESBY GEOPHYSICAL OBSERVATORY, 1957-1975

1957 Mar	Port Moresby regular absolute observations (D, H, Z) commenced
1957 Dec	PMG seismograph recording commenced
1958 Mar	Port Moresby normal-run geomagnetic recording commenced
1964 Nov - 1966 Dec	TPN LP-Z seismograph operation
1964 Dec - 1965 Dec	POP LP-Z seismograph operation
1965 Dec - 1967 Mar	KRG LP-Z seismograph operation
1966 Feb - 1966 Oct	DNG LP-Z seismograph operation
1966 Jul	DTM wide-band high dynamic range seismograph installed at PMG
1966 Nov - 1967 May	LAE LP-Z seismograph operation
1967 Jan - 1967 May	TPN SP-Z seismograph operation
1967 May	LAE seismograph converted to SP-Z
1967 Jul - 1970 May	GRK SP-Z seismograph operation
1967 Aug	2 MO2 accelerographs (property of CRA) installed at Kieta and subsequently moved to Panguna
1967 Oct	Ramu (Yonki) MO2 (CDW) accelerograph installed
1968 Apr - 1972 Nov	Rabaul (Sulphur Creek) MO2 (CDW) accelerograph operation
1968 Sep	WEW aftershock recording
1968 Oct - 1968 Dec	WEK aftershock recording
1968 Oct	Wewak MO2 (CDW) accelerograph installed
1968 Dec	WAB SP seismograph operation commenced
1969 Apr - 1969 Jun	Regional magnetic survey, Papua New Guinea

1969 Jul	Ramu (Intake) MO2 (CDW) accelerograph installed
1969 Oct	MOM SP seismograph operation commenced
1970 Mar - 1972 Nov	GKA SP seismograph operation (in lieu of GRK)
1970 May	LAT SP seismograph operation (in lieu of LAE)
1970 Nov	MAD aftershock recordings
1971 May	Frieda River A MO2 accelerograph (property of Carpentaria Exploration) installed
1971 Jul	Lae (CDW yard) MO2 accelerograph installed
1971 Aug - 1972 May	PNB SP seismograph operation and aftershock recordings
1971 Aug	KAV SP seismograph operation commenced
1971 Aug	Rabaul (Observatory) MO2 accelerograph installed
1971 Aug	Frieda River B MO2 accelerograph (property of Carpentaria Exploration) installed
1971 Aug	Star Mountains (No. 1) MO2 accelerograph (property of Kennecott) installed
1971 Sep	Star Mountains (No. 2) MO2 accelerograph (property of Kennecott) installed
1971 Nov	Lae (Botany Building) MO2 (CDW) accelerograph installed
1972 Jun - 1972 Dec	Musa Dam site - two MO2 accelerographs operated
1972 Aug - 1972 Nov	Lae P&T repeater station - SMA/1 (CDW) accelerograph operated
1972 Sep - 1972 Nov	Lae DCA transmitter station - SMA/1 (CDW) accelerograph operated

1972 Nov	Rabaul (Wanliss Street) MO2 (CDW) accelerograph installed (removed from Sulphur Creek)
1972 Dec	Two small (CDW) accelerographs installed at Musa Dam site
1973 Feb	Lae DCA transmitter station - MO2 (BMR) accelerograph installed
1973 Aug	KVG recording commenced (in lieu of KAV)
1974 Sep - 1975 Mar	Temporary operation of Earth-Tide Gravity Meter at PMG
1974 Nov	MDG SP Z recording commenced
1975 Jul	PUR SP Z recording commenced
1975 Jul	Ramu Dam site, two SMA/1 (PWD) accelerographs installed (Yonki A & B)
1975 Jul	Kandrian - SMA/1 (BMR) accelerograph installed
1975 Sep	Madang - MO2 (BMR) accelerograph installed

TABLE 1. OBSERVATORY STAFF, 1975

Officer	Designation
AUSTRALIAN PUBLIC SERVICE	
I.B. Everingham	Observer-in-Charge (on leave until Feb.; Acting-Supervisor Observatories section Canberra, 5 May - 6 June)
I.D. Ripper	Geophysicist Class 2
B.A. Gaull	Geophysicist Class 1 (on leave from 19 September)
S.N. Sheard	Geophysicist Class 1
E. Hassel	Technical Officer Grade 2
Mrs. C. Capp	Typist
PAPUA NEW GUINEA PUBLIC SERVICE	
P. Rupa	Clerk Class 3
A. Tom	Technical Assistant Grade 1
B. Nesol	Technical Assistant Grade 1 (until 24 April)
D. Kepalan	Observer, Wabag
A. Kaila	Gardener

TABLE 2.

ASSOCIATED PERSONNEL, 1975

Officer	Designation
D. Amolevesa	Cleaner
J. Wui	Gardener
R. Gorea	Observer, Talasea (until 27 November)
C. Reu	Observer, Talasea (from 3 December)
Mrs. D. Simpson	Typist (29 Sept to 10 Dec)
Mrs. D. Sheard	Typist (from 17 Dec)

TABLE 3

VISITORS TO THE PORT MORESBY GEOPHYSICAL OBSERVATORY, 1975

Visitor	Organisation	Month
Dr. J. Hodgson	United Nations Development Program	March
Prof. E. Carman	Uni. of PNG	March
J. Van Son	BMR	March
A. Hara	PNG Public Works Dept.	March
C. Jackson	PNG Public Works Dept.	March
L. Noakes	Director, BMR	May
B. Radford	Snowy Mountains Engineering Corporation	May
Dr. L. Kroenke	United Nations Development Program	May
I. Brazier	PNG Uni. of Technology	July
Dr. K. Sandralinghan	PNG Uni. of Technology	July

TABLE 4

PORT MORESBY GEOPHYSICAL OBSERVATORY SEIMOGRAPH NETWORK, 1975

STATION DETAILS

Station	Code	Lat (°S)	Long (°E)	Elevation (m)	Foundation
Port Moresby	PMG	09°24'33"	147°09'14"	67	Eocene chert
Konedobu	KDB	09°28'23"	147°09'11"	35	Eocene chert
Kavieng	KVG	02°34'20"	150°47'42"	1	Coral
Laetech	LAT	06°39'10"	147°00'00"	72	Alluvium
Momote	MOM	02°04'28"	147°24'41"	10	Coral
Wabag	WAB	05°29'41"	143°43'42"	2032	Clay
Talasea	TLS	05°18'35"	150°02'41"	(40)	Volcanic soil
Panguna	PAA	06°18'02"	155°29'28"	699	Diorite stock
Madang	MDG	05°14'59"	145°46'47"	20	Coral
Purari	PUR	06°59'17"	145°04'24"	30	River gravel

commenced operation 11 July

TABLE 4 (Cont'd

STATION INSTRUMENTS

Station	Seismometer	Component	Ts(s)	Tg(s)	Magnification	Recorder
PMG	WWSS	Z,N,E	1.0	0.75	25 000 at 1 s	Photo drum
		Z	15.0	100	15 00 at 15 s	Photo drum
		N,E	15.0	100	375 at 15 s	Photo drum
	Willmore	Z	0.7	0.3	30 000	Photo drum
	Wood-Anderson	N,E	0.8	-	2042	Photo drum
	Sprengnether	N,E	15.0	14	-	Photo drum
KDB	Willmore	Z	0.7	-	-	Pen drum
KVG	Willmore	Z	0.7	-	-	Pen drum
LAT	Willmore	Z	0.7	0.7	-	Photo drum
	Willmore	Z	1.0	14	-	Photo drum
	Wood-Anderson	E	0.8	-	2042	Photo drum
MOM	Willmore	Z	1.0	0.3	-	Photo drum
	Wood-Anderson	E	0.8	-	2042	
	Wood-Anderson	E	0.8	-	2042	Photo drum
WAB	Willmore	Z	1.0	1.3	-	Photo drum
	Wood-Anderson	N	0.8	-	2042	Photo drum
PAA	Willmore	Z	1.0	-	40 000	Helicorder
TLS	Willmore	Z	0.7	0.7	-	Photo drum
	Wood-Anderson	E	0.8	-	2042	Photo drum
MDG	Willmore	Z	0.7	-	2000	Pen drun
PUR	Sprengnether	Z	0.5	-	3000	Smoked paper drum

TABLE 5

PAPUA NEW GUINEA ACCELEROGRAPHS

01. SITE DATA

Place	Operator	Co-ordinates	Elevation (m)	Foundation
Bougainville Panguna (1)	Bougainville Copper Pty Ltd	6.325°S 155.485°E	640	Unconsolidated volcanic ash
Frieda River A	Carpentaria Exploration/ BMR	4.7°S 141.8°E	-	Alluvium
Frieda River B	Carpentaria Exploration/ BMR	4.7°S 141.8°E	-	Hard Rock
Kandrian	BMR	6.208°S 149.542°E	4	Coral
Lae Botany	BMR	6.713°S 146.999°E	50	Alluvium
Lae PWD	BMR	6.723°S 146.989°E	25	Coarse clastic alluvials
Lae CAA	BMR	6.731°S 146.986°E	5	Alluvium near swamp
Lae P & T	BMR	6.728°S 147.009°E	-	Consolidated rock overlain by clay
Lae Bumbu Bridge	Civil Engineering	6.698°S 147.000°E	-	On concrete pier 20 m gravel
Lae Uni. of Tech.	Civil Engineering	6.674°S 146.995°E	58	30 m gravel
Madang O.T.C.		5.250°S 145.780°E	20	Coral
Musa River A	BMR	9.556°S 148.674°E	406	Alluvium
Musa River B	BMR	9.556°S 148.679°E	112	Weathered gabbro

Place	Operator	Co-ordinates	Elevation (m)	Foundation
Konedobu	BMR	9.472°S 147.160°E	35	Eocene chert
Rabaul Observatory	BMR	4.191°S 152.170°E	184	Basalt flow
Rabaul Wanliss St.	BMR	4.194°S 152.186°E	25	Basalt flow
Ramu Intake	Aust. Dept. of Housing & Const. (DHC)	6.232°S 145.975°E	1190	Miocene siltstone & greywacke
Ramu Yonki	DHC/BMR	6.245°S 145.978°E	1250	Recent lake sediments
Star Mts 1 (Base camp)	Kennecott/BMR	5.209°S 141.197°E	678	Landslide material underlaid by siltstone
Star Mts 2 (Hong Kong)	Kennecott/BMR	5.207°S 141.137°E	2076	Quartz porphyry
Wewak A	BMR	3.590°S 143.687°E	10	Weathered coral
Wewak B	BMR	3.584°S 143.683°E	6	Weathered coral
Yonki A	BMR	6.247°S 145.979°E	1266	Recent lake sediment
Yonki B	BMR	6.248°S 145.978°E	1218	Siltstone & greywacke

TABLE 5 (continued)

PAPUA NEW GUINEA ACCELEROGRAPHS, 1975

2. INSTRUMENT DATA

Type and Block No.	Calibration Data (g/cm)	Site	Date	Owner	Remarks
MO2 39	0.564 0.576 0.372	Bougainville Panguna (1)	1975	CRA	
MO2 416	0.610 0.602 0.372	Frieda River A	1975	Carpentaria Exploration	
MO2 453	0.614 0.593 0.400	Frieda River B	1975	Carpentaria Exploration	
SMA-1 1943	0.288 0.251 0.279	Kandrian	From 17.7.75	BMR	
MO2 259	0.581 0.596 0.403	Lae Botany	1975	BMR	
MO2 1118A	0.560 0.524 0.371	Lae PWD	1975	BMR	
MO2	0.509 0.517 0.374	Lae Posts & Tel.	to 15.7.75	BMR	Makeshift timing No Z component
MO2 655	0.632 0.611 0.421	Lae Post & Tel.	From 15.7.75	BMR	
MO2 249	0.639 0.636 0.418	Lae Bumbu Bridge	1975	Uni. of Technology	
MO2 79	0.612 0.628 0.412	Lae Uni. of Technology	1975	Uni. of Technology	

Type and Block No.	Calibration Data (g/cm)	Site	Date	Owner	Remarks
SMA-1 S/N1281	0.257 0.284 0.266	Lae Uni. of Technology	1975	Uni. of Technology	
MO2 117	0.627 0.634 0.408	Lae CAA	1975	BMR	
MO2 656	0.654 0.623 0.436	Madang O.T.C.	From 3.9.75	BMR	
SMA-1 S/N 578	0.270 0.274 0.283	Musa River A	1975	PWD	
SMA-1 S/N 577	0.256 0.263 0.294	Musa River B	1975	PWD	
MO2 SMA-1		Port Moresby Observatory Office Konedobu		BMR	Tests
MO2 1467A	0.611 0.636 0.385	Rabaul Observatory	1975	BMR	
MO2 475	0.559 0.566 0.397	Rabaul Wanliss St.	1975	PWD	
MO2 44	0.555 0.566 0.384	Ramu, Intake	1975	PWD	
MO2 425	0.614 0.591 0.425	Ramu, Yonki	1975	PWD	
MO2 1428	0.581 0.604 0.402	Star Mts. 1 (Ok Tedi)	1975	Kennecott	
MO2 1454	0.619 0.615 0.404	Star Mts. 2 (Hong Kong)	1975	Kennecott	

Type and Block No.	Calibration Data (g/cm)	Site	Date	Owner	Remarks
MO2 446	0.589 0.638 0.393	Wewak A	To 13.3.75	PWD	
MO2 446	0.589 0.638 0.393	Wewak B	From 13.3.75	PWD	
SMA-1 S/N 2046	0.133 0.140 0.135	Yonki A	From 14.7.75	PWD	No Z Component
SMA-1 S/N 2045	0.140 0.141 0.130	Yonki B	From 14.7.75	PWD	

TABLE 6

PAPUA NEW GUINEA ACCELEROGRAPH TRIGGERINGS 1975

MN	DY	HR	MIN	SEC	DPH	LAT°S	LONG°E	M	ML	ACCELEROGRAPH	INTENSITY (MM) AT SITE	PRELIM. MAX. ACCEL(g) (1 component)	PREDOM. PERIOD(s) AT MAX ACCEI
02	16	04	58	55.7	174	7.2	146.1	5.9	5.4	Ramu Yonki	--	0.052	0.28
02	27	14	23	59.3	078	06.1	148.2	6.1	5.3	Lae CAA	--	0.012	0.19
02	27	17	42	48.1	073	05.0	144.4	4.8	5.2	Ramu Yonki	--	0.004	0.15
04	09	06	26	22.2	133	4.0	152.7	6.6	6.8	Rabaul Obs.	IV-V	0.015	0.13
06	05	04	19	00.8	115	05.7	145.7	5.3	5.3	Ramu Yonki	--	0.018	0.20
07	30	21	Two Rabaul Harbour Events							Rabaul Obs	IV-V	0.019	0.26
08	14	17	44	23.8	044	06.9	147.7	5.8	5.6	Lae CAA	--	0.009	0.30
										Lae PWD	--	0.015	0.25
										Lae P&T	--	0.006	0.27
										Kandrian	III	0.014	0.22
08	16	15	24	55	Rabaul Harbour Event					Rabaul Obs	IV-V	0.007	0.18
08	18	12	49	32.7	055	04.7	152.4	5.4	4.9	Rabaul Obs.	IV	0.040	0.15
09	18	17	10	52	33	06.5	149.3		4.6	Kandrain	--	0.038	0.15
10	01	09	06	48.5	122	06.4	146.6	5.1	5.1	Ramu Yonki	V	0.015	0.19
										Yonki A	V	0.007	0.15
12	07	04	02	18.5	040	04.5	153.4	6.3	6.4	Rabaul Obs.	V	0.040	0.46
12	25	23	22	21.7	115	04.1	142.0	6.9	6.4	Frieda A	VI	0.120	0.09

TABLE 7

NUMBER OF SEISMIC ARRIVALS RECORDED BY EACH STATION 1975

	PMG	KVG	LAT	MDG	MOM	PAA	PUR	TLS	WAB
Jan	145	5	132	21	2	72		10	3
Feb	152	3	133	26	9	83		31	43
Mar	147	7	145	21	0	78		11	88
Apr	116	9	96	17	15	61		24	24
May	108	17	92	19	0	41		7	35
Jun	124	18	149	30	28	59		31	93
Jul	270	29	237	11	10	167	17	64	155
Aug	179	20	215	22	0	153	3	37	166
Sep	135	7	157	8	19	96		26	106
Oct	240	13	177	21	18	84		13	112
Nov	149	8	171	32	0	94		0	129
Dec	174	8	92	31	0	92		3	97
Total	1889	144	1796	259	101	1090	20	257	1051

TABLE 8

EARTHQUAKES IN THE NEW GUINEA SOLOMON ISLANDS REGION, 1975

(USGS HYPOCENTRES)

MB(GS)	Body wave magnitude published by the United States Geological Survey
ML	Richter magnitude derived from Papua New Guinea stations
MS	Surface wave magnitude derived from teleseismic stations bulletins and USGS
M	Weighted unified magnitude on the surface-wave scale.

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
01	01	02	05	06.2	05.7	154.5	104					11	3
	01	12	24	44.2	04.9	140.3	033	4.7				13	1
	01	19	00	45.4	05.5	145.4	025	5.0	5.5		5.0	25	1
	02	05	46	33.5	09.5	155.1	023	5.4			5.7	38	1
	04	10	03	15.4	05.0	130.0	030	5.1			5.1	19	1
	05	03	48	27.9	05.1	153.9	140	4.6	5.5		5.0	17	1
	05	15	55	41.6	05.0	130.0	045	5.0			5.0	20	1
	06	04	51	34.1	10.2	161.3	033	4.9			4.9	10	7
	10	18	24	19.4	09.1	158.6	033	4.9			4.9	13	3
	11	16	26	54.5	07.3	155.1	033	4.5				8	7
	12	06	40	18.2	05.0	130.0	033	4.9			4.9	17	2
	13	22	57	26.8	08.7	159.4	106	5.2			5.3	27	4
	14	19	37	19.4	05.0	130.0	039	5.9			6.6	55	2
	14	19	48	59.2	05.0	130.0	033	6.3		6.7	6.9	83	2
	14	20	38	45.5	04.9	130.0	033	4.9			4.9	8	2
	14	22	34	21.0	07.3	155.9	033	5.1			5.1	22	3
	18	10	27	59.1	03.6	139.8	103	4.8			4.9	23	6
	19	09	52	00.7	10.7	161.7	082	5.2			5.3	35	7
	20	09	38	03.8	06.2	148.4	056	4.8				17	5
	20	09	56	26.9	05.1	153.3	098	4.7				8	7
	22	21	57	44.1	06.4	155.0	104	5.1			5.1	26	8
	26	19	29	56.7	05.0	130.2	033	4.8				10	18
	27	20	09	56.2	04.7	153.1	082	4.5				9	17
	31	00	16	35.3	04.9	130.1	033	5.0			5.0	29	12

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
02	01	06	40	53.7	06.1	145.9	059		4.1			6	8
	01	09	39	45.1	04.1	143.4	127	4.5				8	10
	01	19	42	37.8	04.8	153.2	057	5.0			5.0	25	6
	02	07	19	45.8	05.0	130.0	033	4.8				8	12
	02	17	57	00.2	05.2	145.3	080	4.5	4.3			12	6
	03	09	44	45.8	02.6	141.3	033					6	11
	03	16	45	15.0	04.9	130.0	022	5.6			6.0	46	6
	04	15	08	28.7	05.0	130.2	052					6	10
	04	15	48	28.4	05.0	130.0	033	4.8				12	9
	05	17	46	06.5	03.5	131.2	030	5.1			5.1	31	8
	06	12	16	56.2	05.9	147.9	134	4.9			4.9	22	8
	06	12	38	57.7	03.7	131.1	033					7	11
	07	04	51	44.0	07.3	149.5	033	6.3	6.3	6.5	6.5	94	9
	07	05	07	54.2	02.6	139.2	033	5.4			5.4	13	9
	07	05	27	35.8	07.2	149.7	015	5.4	5.5		5.2	25	9
	07	06	16	52.6	07.0	149.4	032	4.8	5.1		4.7	14	9
	07	08	40	44.3	06.5	155.9	033	4.5				7	12
	07	09	08	11.3	05.1	130.0	035	5.1			5.1	13	9
	09	05	05	50.7	05.0	130.1	034	4.4				12	9
	09	07	54	20.2	04.9	130.1	033					7	13
	09	11	54	57.2	07.3	149.7	031		4.5			9	10
	10	03	06	00.4	05.8	153.6	018	4.9	5.2		4.9	18	12
	10	05	17	15.4	06.6	149.1	039	5.0			4.9	10	10
	10	18	56	33.8	05.0	130.0	033	5.0			4.9	9	11
	10	19	11	44.7	05.0	130.0	033	5.0			5.0	16	9
	10	21	02	37.2	05.1	130.0	033					7	11
	12	01	43	40.5	07.2	149.6	034		5.0			5	11
	12	23	58	31.4	03.7	144.4	033	4.8				8	10
	13	01	02	46.4	04.6	154.8	492	5.4	6.5		6.2	78	10
	14	17	31	20.0	05.0	130.0	034	5.1			5.1	19	9
	16	04	58	55.7	07.2	146.1	174	5.7	5.4		5.9	72	12
	19	06	19	05.1	04.9	152.7	065	5.3	5.2		5.3	45	16
	20	02	50	09.1	06.8	147.6	085	4.9	5.0		4.8	13	17

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	22	03	40	27.8	03.0	139.6	051	5.0			5.0	14	21
	22	21	18	33.4	06.7	148.2	053	4.5	4.1			10	19
	22	21	53	35.9	05.0	130.0	033	5.3			5.4	13	15
	23	10	06	21.1	06.6	130.6	047	5.4			5.7	30	14
	23	13	30	58.1	05.0	130.0	033	4.4				12	19
	24	19	54	29.3	05.0	130.1	033	4.5				13	14
	25	05	20	04.5	07.4	149.8	033	5.5	5.2	4.9	5.6	40	16
	25	08	09	54.3	05.0	130.2	033	5.1			5.0	11	18
	25	10	22	39.6	05.0	130.1	032	5.1			5.1	18	14
	25	15	48	20.3	07.5	150.1	042		4.5			10	15
	26	14	29	00.5	06.5	154.9	054	5.5	5.2		5.6	99	14
	27	14	23	59.3	06.1	148.2	078	5.9	5.3		6.1	128	12
	27	17	42	48.1	05.0	144.4	073	4.8	5.2		4.8	18	12
03	04	11	17	48.3	05.0	130.0	029	5.7		5.4	5.9	65	14
	05	17	14	58.7	06.0	154.0	061	4.7				6	18
	06	04	09	13.1	04.9	130.3	033	4.9	4.2		4.6	7	15
	08	04	28	07.0	06.1	148.8	058	4.9	5.0		4.9	19	14
	08	07	48	29.4	00.6	132.0	033	4.6				8	16
	09	23	13	10.0	09.2	158.0	013	5.0			4.9	12	17
	10	03	49	50.3	05.1	130.0	067	4.1				6	14
	10	14	15	55.9	05.0	130.0	033	4.8				18	13
	10	15	42	42.8	05.6	149.5	167	5.0			5.0	32	14
	11	10	19	05.3	05.3	152.1	060	5.0			5.0	24	15
	12	16	10	55.5	08.8	152.8	048		5.2			8	18
	12	18	42	19.5	03.7	151.1	045	4.9		4.4	4.8	20	17
	13	05	37	04.4	05.0	130.0	033	5.2			5.0	14	15
	13	09	05	05.9	06.2	153.2	020		4.9			11	20
	13	17	15	52.1	11.0	162.1	066	4.6				14	16
	14	18	39	31.8	02.6	138.2	068	4.8				13	17
	14	19	59	03.1	02.1	134.2	035	5.3		5.0	5.3	40	15
	15	03	14	36.6	09.8	159.5	030	5.2		4.7	5.2	39	17
	15	13	10	05.4	02.6	138.2	065	5.2			5.1	12	17
	15	17	02	26.5	03.0	141.8	051	4.9			4.9	22	17

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	16	17	15	11.7	04.9	130.1	052	4.9			4.9	22	19
	17	22	11	01.6	02.5	138.2	033	5.4		6.0	5.9	46	29
	17	22	40	36.0	02.5	138.3	036	5.2			5.3	30	22
	17	23	22	09.8	02.6	138.3	033	5.3		5.3	5.3	35	25
	18	03	56	55.7	02.6	136.6	057					11	18
	18	06	54	08.0	02.6	138.3	048	5.2		5.4	5.4	45	18
	18	07	27	50.1	05.0	130.0	019	5.0			5.0	24	21
	19	03	36	01.9	05.1	130.1	078	4.7				12	20
	20	21	57	38.8	02.6	138.2	027	4.9			4.9	12	28
	22	17	00	15.4	04.7	138.6	033	4.5				12	26
	23	01	03	22.8	02.8	139.2	033	4.9			4.9	21	21
	27	16	45	41.2	06.2	130.1	156	5.0			5.0	22	21
	28	19	32	48.1	07.0	155.6	081	5.1			5.2	44	20
	30	16	12	52.6	04.5	153.8	232	4.9			5.0	34	21
	31	20	28	19.9	04.9	153.1	058					14	22
04	02	19	31	28.2	05.8	147.1	050		4.0			11	19
	06	08	28	17.4	04.6	151.9	176	4.9			4.9	23	21
	07	07	43	21.3	06.2	150.1	056					8	22
	07	20	54	47.4	11.0	162.5	042	5.0			5.0	19	22
	09	06	26	22.2	04.0	152.7	133	6.3	6.8	6.3	6.6	107	20
	09	11	02	16.6	01.8	134.0	026	4.9			4.8	6	23
	10	15	19	59.2	06.7	156.0	148	5.2			5.4	50	22
	14	20	52	49.8	05.6	133.8	026	4.7				12	27
	15	08	14	17.9	05.3	151.5	110	4.9	5.3		4.9	16	24
	16	22	41	33.2	05.6	147.8	174	5.2	4.9		4.9	17	25
	17	00	03	03.2	06.7	156.1	181	4.9			4.9	14	24
	21	03	49	17.9	03.2	147.1	033	5.2	5.9	4.9	5.4	28	24
	22	06	17	54.6	06.0	147.6	078	4.8	5.0		4.8	32	23
	22	13	09	35.8	05.9	147.2	107	4.8	4.9		4.7	19	23
	26	06	41	54.0	05.5	154.4	129	5.1	5.8		5.3	43	30
	28	08	36	49.9	08.9	158.0	041	5.6			5.3	18	29
	29	08	26	17.2	09.9	160.2	008	4.6				7	30
05	02	16	55	23.4	06.2	151.3	018	4.9			4.9	11	32

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	06	05	20	27.2	08.2	148.6	066	5.3	5.7		5.4	25	32
	06	20	49	45.1	03.8	151.4	020	5.3			5.3	16	35
	06	21	56	03.8	04.0	151.8	044					9	36
	07	00	41	54.5	03.9	142.0	108					7	35
	08	15	27	57.0	09.9	160.1	038	5.1			4.9	8	32
	08	22	52	54.1	07.4	155.7	060					7	32
	10	02	25	29.0	03.8	151.8	015	5.2			5.0	12	32
	10	03	22	37.3	04.0	151.9	024	5.2			5.0	11	32
	10	05	23	00.1	05.1	151.3	133	5.1	5.5		5.2	36	31
	13	10	13	21.3	06.3	130.0	151	4.8				8	34
	16	19	14	28.4	05.4	131.1	095	4.9			5.0	26	35
	17	00	48	21.3	06.7	130.0	125	5.1			5.2	52	32
	18	09	56	24.7	06.2	147.5	059	5.2	5.6		5.2	24	32
	19	07	09	11.5	06.8	154.5	053	4.6				9	34
	19	16	41	26.0	04.4	134.0	033	4.7				15	37
	20	15	10	52.6	05.6	149.9	138	5.2	5.1		5.3	54	32
	22	21	20	31.3	03.8	154.3	467	5.0	5.8		5.2	32	33
	23	04	30	50.0	05.1	131.9	165	4.9				5	35
	24	03	56	43.8	00.8	146.7	033	4.7				12	32
	26	04	36	48.6	06.8	155.6	081	5.6	5.8		5.9	86	34
	28	05	05	33.1	06.3	155.1	051	4.8				11	34
	28	05	07	13.6	06.8	155.2	056	4.8				11	37
	30	08	05	28.3	07.6	155.5	033	5.0			4.9	77	38
06	05	04	19	00.8	05.7	145.7	115	5.3	5.3		5.3	49	31
	06	05	18	55.4	04.5	153.6	061	5.8	5.8		6.0	102	32
	07	05	10	30.1	06.0	145.4	033	5.1	4.7		4.9	23	32
	07	05	21	44.2	06.1	147.0	093		4.3			7	34
	07	22	46	59.5	04.2	141.2	102	4.9			4.9	12	35
	09	07	46	30.1	10.2	161.5	093	5.0			5.0	26	32
	09	19	52	09.9	06.1	147.6	063	5.4	5.6		5.6	65	32
	13	01	41	45.9	05.4	154.3	163	5.0			5.0	16	34
	16	22	35	23.2	03.0	147.8	033	6.1	6.0	6.5	6.5	119	34

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	17	01	51	21.9	06.5	152.2	033	5.1	5.1		4.8	7	38
	21	14	02	10.4	05.8	154.4	403	4.9	5.5		5.1	48	33
	22	07	54	18.4	06.0	154.6	094	5.3			5.1	12	36
	23	05	04	57.9	05.8	147.0	173	4.1	4.3			5	35
	24	02	56	07.7	04.2	143.9	115					7	32
	24	14	29	34.6	07.5	157.3	036					5	35
	25	07	20	33.7	05.5	145.7	078		4.3			6	32
	25	14	58	33.9	03.8	146.1	037	4.7				11	35
	26	02	17	36.6	02.5	138.3	041	5.0		4.6	5.0	34	34
	26	04	11	44.2	04.7	154.9	499	4.6	5.6		5.2	27	35
	28	13	29	11.5	08.1	156.4	042	4.2				23	34
07	01	01	25	12.7	04.4	153.7	059	4.9	5.1		4.8	13	32
	02	07	19	20.0	06.7	155.9	126		5.4		4.9	10	34
	03	04	32	55.3	07.9	154.6	041	4.7	4.5		4.9	28	33
	04	02	10	37.9	01.7	134.3	014	4.9			5.0	42	32
	05	20	33	07.4	05.6	154.4	104	4.9	5.1		4.9	14	33
	10	08	10	35.1	04.6	149.7	576	4.8	5.3		4.9	16	32
	11	18	54	27.1	10.3	161.2	079	5.9			6.6	114	33
	14	14	41	39.8	01.6	138.1	033	5.6		5.5	6.0	120	34
	14	20	03	34.8	04.6	153.1	078	5.0			5.0	38	33
	15	01	41	06.0	02.4	134.4	020	5.1			5.0	9	34
	16	09	39	37.9	00.7	131.3	033	5.0			5.0	24	36
	18	15	45	53.4	05.8	147.0	053		4.0			9	48
	19	20	24	11.7	03.4	146.0	033	4.9			4.9	14	36
	20	14	37	39.9	06.6	155.1	049	6.6	7.2	7.8	7.7	158	36
	20	15	12	13.8	07.0	155.4	033	5.1			5.1	17	38
	20	15	24	16.0	07.1	154.4	033	5.5			5.4	17	38
	20	15	32	24.1	07.1	154.9	033					22	38
	20	15	35	47.0	06.8	154.6	054	4.5	5.5			34	40
	20	16	08	32.5	06.8	154.8	033	4.7				22	38
	20	16	14	01.2	06.9	155.0	031	5.4			5.7	45	40
	20	16	34	38.7	06.8	154.5	033	4.5				7	40
	20	16	45	07.7	06.4	154.6	028	4.6				12	48

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	20	16	57	34.4	07.2	154.7	033					6	40
	20	17	00	48.8	07.0	154.4	040	5.4			5.6	19	36
	20	17	10	51.5	06.9	154.8	024	5.4	5.3		5.5	67	36
	20	17	16	26.2	06.9	154.7	051	4.9	5.3		5.0	31	36
	20	17	22	21.3	07.0	154.9	052	5.3			5.4	24	36
	20	17	26	16.8	06.9	154.9	033	5.1			5.2	36	40
	20	17	29	32.7	06.7	154.8	033					13	38
	20	17	36	12.4	07.0	155.1	033	4.8				16	38
	20	18	01	40.4	06.8	154.9	034	4.8				9	38
	20	19	23	13.0	06.8	155.1	049	4.8				17	36
	20	19	47	16.1	069	155.2	053	5.3			5.4	27	37
	20	19	54	27.7	07.1	155.2	044	6.1	6.4	7.6	7.0	141	36
	20	20	09	28.7	06.9	155.0	033	5.6			6.0	73	38
	20	20	11	38.8	06.7	154.9	033	5.6			5.8	19	40
	20	20	52	18.8	07.0	154.9	067	4.9			4.9	18	40
	20	21	08	55.5	07.1	155.1	033	5.3			5.4	17	44
	20	21	27	37.3	07.1	155.3	033	5.3	4.8		5.4	31	40
	20	21	29	01.9	07.1	155.1	033					9	40
	20	21	47	23.2	07.1	155.1	033					16	40
	20	21	49	12.6	07.2	155.2	037	5.2	5.3		5.2	29	38
	20	21	55	25.9	07.0	155.2	033	5.0			5.0	20	40
	20	22	13	20.2	06.3	154.1	033	4.9			4.9	15	40
	20	23	05	18.8	06.6	154.7	050	6.2	6.4	6.7	6.7	151	40
	20	23	27	50.5	06.7	154.6	007	5.4	5.5		5.4	62	36
	20	23	46	44.9	07.3	155.1	040	5.2			5.3	33	36
	21	00	03	56.5	06.5	154.3	033	4.6				15	34
	21	00	49	11.9	06.9	155.1	077	4.5				15	33
	21	00	55	58.0	06.8	155.4	060					16	39
	21	01	18	43.4	07.1	155.2	055					11	39
	21	02	03	59.8	06.7	155.3	047	5.7	6.2	6.8	6.7	233	35
	21	02	30	30.1	06.7	154.7	033		5.0			28	43
	21	02	39	01.2	06.9	155.3	095	6.1	6.4		6.8	209	33
	21	03	17	29.4	07.0	154.3	061	5.4			5.5	25	34

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	21	04	09	54.8	07.0	154.6	033	5.4	5.7		5.7	116	34
	21	04	21	05.3	07.0	154.6	028	5.2	5.2		5.3	70	33
	21	04	36	48.5	07.2	154.9	068	5.1			5.1	26	33
	21	04	44	02.7	06.5	154.4	033					7	36
	21	05	08	11.1	06.7	155.3	068					13	37
	21	05	22	01.7	07.0	154.8	068	5.1	4.9		5.0	20	33
	21	06	09	55.6	07.8	154.2	033					7	39
	21	06	35	03.9	07.1	155.2	046	5.4		4.9	5.6	66	33
	21	06	56	14.0	07.0	155.2	056	5.2			5.4	37	33
	21	07	13	40.2	06.4	154.9	033	4.4				6	39
	21	09	54	55.0	07.0	155.3	040	5.1			5.2	41	33
	21	10	51	58.5	06.8	154.6	041	5.0			4.9	9	35
	21	12	48	55.8	07.2	154.7	173					10	33
	21	13	34	30.5	06.4	154.9	050	5.5	5.6	5.2	5.6	70	35
	21	17	17	19.2	06.4	155.0	051	4.8			4.8	9	36
	21	18	56	11.1	06.5	155.3	067	4.3				11	37
	21	19	00	21.8	06.8	154.9	075	5.2			5.2	14	36
	21	20	10	59.5	06.9	154.8	044	4.7				15	33
	21	20	22	58.8	06.2	147.8	063	5.1	4.8		5.0	19	34
	21	23	11	51.4	07.1	155.3	033	5.5			5.2	17	33
	21	23	43	17.8	06.6	154.6	036	5.5	5.0		5.3	54	35
	22	03	12	54.3	07.1	155.1	045	5.1	4.9	4.9	5.1	67	33
	22	03	25	02.7	07.3	154.6	033	5.2			5.1	18	33
	22	04	50	19.5	06.4	155.0	073	5.5	5.2		5.7	122	33
	22	13	31	43.1	06.3	155.0	068	5.5			5.7	96	36
	22	14	08	39.4	06.0	155.2	024					7	35
	22	14	31	36.7	06.5	154.3	072	4.8				9	35
	22	15	51	36.2	06.5	154.6	070	5.4			5.4	15	39
	22	16	01	55.7	06.7	154.7	047	4.9			5.0	36	33
	22	19	20	13.8	07.2	155.7	036	5.7	5.8	6.1	8.0	183	36
	22	22	26	39.0	07.1	155.6	070	5.5			5.2	10	39
	23	04	06	53.9	07.0	155.4	054	4.9			5.0	40	32
	23	12	48	23.8	06.7	154.9	033	4.0				5	37

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	23	17	42	15.1	07.2	154.9	035	5.1	5.0		5.1	55	33
	23	20	05	32.9	07.4	154.2	033					7	36
	23	22	20	00.8	06.5	154.9	033	5.1			4.9	8	38
	23	23	22	43.8	07.2	155.1	042	5.6	5.7	5.7	5.7	58	33
	24	00	02	32.6	06.6	154.4	056	5.0	5.3		5.0	46	36
	24	07	41	18.0	06.1	155.3	075					7	38
	24	13	20	34.0	06.6	154.6	035	4.8			4.8	11	34
	24	16	05	14.5	06.6	154.6	033	4.6				8	35
	24	18	49	00.2	07.1	155.7	054					12	32
	25	01	35	10.4	06.6	153.7	088	5.0			4.9	6	37
	25	14	18	16.8	06.7	154.4	024			3.9		10	35
	25	16	36	40.6	06.9	154.8	042	5.0			5.0	17	35
	26	06	01	13.6	06.5	130.6	033.6	4.7				12	40
	26	13	19	42.1	06.6	155.3	033	5.1			5.1	20	35
	26	17	30	25.3	06.8	154.9	033	4.8				9	40
	26	17	39	32.0	07.1	154.6	042	4.6				20	35
	26	18	24	07.7	07.2	154.5	039	5.2	5.1		5.3	47	35
	28	08	44	55.3	06.9	154.5	038	5.7	5.9	5.7	6.0	109	35
	28	18	11	22.7	07.3	155.0	024	4.9			4.9	11	36
	28	18	22	53.6	06.9	154.8	044	4.9		5.3	5.1	40	34
	28	21	25	04.7	06.8	154.6	037	5.3	5.5		5.3	57	35
	29	12	29	50.2	06.6	154.9	047	4.8				7	48
	29	16	53	29.1	06.5	155.1	059					14	35
	30	14	40	38.8	07.2	155.1	039	4.9			4.9	19	34
	30	16	02	33.0	07.0	155.2	033	4.7				8	36
	31	16	24	32.5	05.2	152.8	053	5.7	5.5	5.8	6.0	109	35
	31	16	26	27.2	05.1	152.9	040	5.7			5.9	78	40
08	01	12	14	00.0	04.5	143.7	073	5.0	5.0		5.0	24	32
	01	22	10	08.4	06.3	154.8	057	4.8	5.4		5.0	30	32
	03	04	13	54.2	07.0	154.7	043	4.7				18	33
	03	10	19	09.1	06.9	130.3	033	4.7				15	34
	03	21	03	03.5	03.1	137.1	055	5.1			5.0	11	33
	04	03	51	03.6	05.2	151.3	028	5.0			5.0	14	33
	05	02	54	38.9	06.6	155.1	055	4.9	5.4		5.1	35	32

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	05	04	39	50.6	05.2	151.7	138	5.0	5.1		4.9	24	32
	05	19	49	39.8	06.9	155.5	062					11	35
	07	03	10	27.2	06.5	154.9	055	5.0	5.5		5.1	40	32
	07	1	28	24.2	03.8	139.7	065	5.6	5.7		5.8	86	32
	08	00	38	53.9	06.6	154.9	033	4.4	4.0			16	40
	08	00	39	28.5	06.3	154.7	033	5.3		5.3	5.4	60	40
	08	01	49	12.7	06.7	131.7	028					8	34
	08	02	54	58.9	04.2	153.0	041					11	34
	08	05	56	37.0	06.4	147.8	065	4.9	5.4		5.1	32	32
	08	16	34	24.2	07.0	155.6	062					11	34
	08	21	43	03.5	06.9	155.6	070					13	34
	10	02	24	54.4	07.2	155.2	033	5.1			5.0	13	34
	10	03	28	25.8	07.1	154.9	053					13	37
	10	04	10	38.9	07.0	154.8	034	5.1	5.2		5.1	40	33
	10	04	13	13.3	07.0	154.7	025	5.3	5.6		5.3	21	33
	10	04	40	41.8	07.2	154.8	034	4.8				9	38
	10	05	08	19.0	07.2	155.0	029	4.6				12	33
	10	05	39	55.9	07.1	154.8	034	4.9			4.9	12	34
	13	04	08	48.9	03.1	139.7	014	4.6				37	33
	13	18	05	46.8	05.7	150.9	097		4.9			10	35
	14	05	57	53.8	06.9	155.0	053	4.2				6	35
	14	13	33	25.5	02.9	139.4	020	4.5				10	37
	14	17	44	23.8	06.9	147.7	044	5.8	5.6	5.5	5.8	126	33
	16	18	30	34.0	06.3	154.8	047	4.9			4.9	7	46
	17	13	18	18.5	06.7	147.4	073	5.1			5.0	9	48
	18	00	23	12.8	05.1	153.4	049	5.1	5.1		5.0	13	38
	18	12	49	32.7	04.7	152.4	055	5.2	4.9		5.4	39	34
	19	06	48	08.1	03.4	146.8	034	5.1	5.2	5.2	5.2	42	35
	20	17	06	46.7	05.2	144.0	102					10	42
	21	04	27	14.3	03.1	147.1	033	4.9			4.9	9	39
	21	05	29	29.2	06.3	154.9	060	5.0			5.1	52	34
	21	06	48	30.3	05.9	154.4	430	5.3	5.7		5.5	98	33
	21	09	25	14.9	07.1	154.7	048					8	37

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	21	09	46	42.4	06.6	154.9	050	5.8	6.0	5.9	6.2	180	35
	22	07	13	14.3	10.3	161.6	072	4.9			4.9	13	39
	22	13	13	14.7	06.6	155.0	045	4.9			4.9	16	34
	23	04	05	58.8	03.2	137.6	057	5.8			6.2	120	35
	23	05	56	31.3	03.8	137.6	093					6	37
	24	00	07	40.7	05.2	153.0	039		48			6	36
	24	06	46	44.4	04.3	137.5	073					7	32
	24	10	47	29.6	06.5	154.9	047	5.0		4.2	4.8	17	34
	24	14	35	31.6	09.7	159.9	045	5.4		4.9	5.5	25	35
	24	20	26	51.7	03.6	131.0	033					8	34
	25	05	07	00.3	05.5	152.3	049	4.6	5.2			20	33
	25	08	11	24.5	06.9	155.8	073	5.6			5.9	49	32
	26	16	58	21.5	03.5	151.5	019		5.2			10	36
	27	20	30	50.3	04.7	155.1	502	4.8	5.8		4.9	21	35
	29	04	39	31.2	05.4	146.2	078		4.3			7	48
	30	17	42	30.3	05.6	154.5	106					14	38
	31	04	48	58.7	06.5	155.1	058	4.6				14	37
	31	10	53	38.3	06.1	148.6	033		4.1			6	48
	31	21	50	48.0	03.7	140.1	020	5.7			5.2	21	38
09	01	19	07	45.6	06.2	145.5	124		3.2			15	34
	02	08	12	15.0	07.1	154.8	034	5.1			5.1	17	32
	03	00	35	22.9	05.4	147.6	187	4.6	4.7			13	33
	03	05	10	10.7	04.9	152.0	112	4.9	5.0		4.8	17	33
	03	23	18	19.1	06.7	130.2	054	4.9			4.8	14	32
	05	06	04	20.9	05.7	154.4	106	5.1	5.4		5.1	28	32
	05	22	41	26.6	06.8	154.4	035	5.2	5.3		5.1	28	32
	07	21	26	40.2	07.0	154.5	013	4.8				7	35
	10	07	26	58.1	07.1	154.8	047	4.9	5.3		4.9	9	33
	13	21	17	39.2	07.2	154.5	043					7	35
	13	23	14	56.6	09.4	161.9	098	4.9			4.9	22	33
	14	16	28	22.9	04.6	153.8	049					7	32
	15	03	43	35.2	07.6	159.3	060	5.2			5.2	32	33
	15	17	53	11.8	06.7	147.3	072	5.3	5.1		5.2	19	32
	15	18	55	47.0	02.5	140.0	037	5.4			5.3	24	32

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	16	14	35	14.9	06.7	147.4	069		4.4			12	32
	16	18	34	36.0	05.6	154.4	119	5.0	5.5		5.1	38	39
	18	12	59	50.2	05.4	152.8	048	5.1	4.7		4.9	7	38
	18	14	29	49.8	07.2	156.0	054	5.6			5.8	26	33
	18	17	35	49.2	05.4	152.8	054	4.8	4.9	4.6	4.7	21	34
	19	23	15	34.0	06.4	154.9	047	5.4	5.9	5.6	5.7	74	33
	21	02	05	46.0	06.1	154.5	033					12	38
	21	03	45	14.4	06.1	147.5	087	5.5			5.4	6	38
	21	04	01	18.8	03.0	139.2	045	5.1		4.4	5.0	27	35
	21	13	01	57.4	05.6	149.6	145		4.8			8	42
	23	07	14	39.8	06.3	154.7	033	5.1			5.0	9	35
	25	18	10	16.4	06.5	154.9	061	5.5	5.5		5.5	61	33
	26	00	52	27.0	06.9	155.0	062					5	37
	27	07	23	16.2	07.3	154.7	041	5.0			4.9	5	33
	30	00	21	45.2	06.8	156.1	086	5.7			5.4	9	36
10	01	09	06	48.5	06.4	146.6	122	5.2	5.1		5.1	29	32
	03	04	10	59.2	07.9	156.5	044	4.5				13	33
	03	14	16	17.1	10.1	160.5	056	5.8			5.8	41	33
	04	11	51	39.1	06.4	154.6	043	4.5				6	34
	05	01	30	50.4	06.8	154.3	047	4.7				10	36
	07	13	33	35.6	06.1	146.6	063	5.3	5.1		5.0	9	34
	08	17	13	59.8	06.6	154.8	062	5.3			5.0	9	36
	10	11	49	50.0	06.1	146.6	047	5.0	5.4		5.0	13	34
	11	07	29	49.4	03.4	148.6	033	5.2	5.3	5.4	5.3	64	35
	11	18	00	59.6	03.3	148.5	033	5.7	6.3		6.2	101	38
	16	03	00	53.4	05.5	153.8	090	5.0	5.3		4.9	12	36
	17	06	42	24.0	06.6	155.0	043	5.2			4.9	8	45
	17	18	12	43.9	06.1	145.9	111		4.1			6	45
	18	13	58	01.2	05.9	146.3	120		3.7			5	37
	19	11	07	46.8	06.9	146.8	052		4.6			10	44
	19	19	02	28.5	05.3	146.0	063					5	38
	20	14	42	04.7	05.7	152.5	033	4.7	5.3		4.8	9	38
	20	15	47	16.4	05.3	152.0	098		5.2			5	37
	20	15	59	19.0	06.9	155.2	056	5.1			5.1	14	34

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	23	00	34	40.5	02.0	138.8	049	4.7				8	35
	23	18	54	24.5	02.7	139.5	093	5.5			5.6	17	37
	23	21	50	49.3	05.5	131.0	091	5.1			5.1	25	35
	23	23	18	07.8	06.7	154.7	052	5.2	5.4		5.1	24	36
	25	02	59	26.6	05.4	145.5	078		4.6			8	42
	25	09	50	22.6	06.1	146.8	089	4.4				6	37
	25	16	03	55.1	06.4	148.8	055		4.7			9	37
	25	16	23	11.4	06.6	148.9	027		4.6			7	40
	26	06	28	12.4	05.7	147.1	033		4.0			7	38
	29	09	02	19.3	10.4	161.6	044					6	37
	29	14	56	09.7	05.5	146.4	022		4.4			6	42
11	02	18	10	12.4	06.3	155.1	071	5.1			5.1	13	44
	02	18	19	04.0	02.8	139.1	032					17	36
	02	19	47	13.0	06.5	155.0	087	5.1			5.0	8	44
	09	02	57	37.8	10.2	161.0	043	4.7		4.8	4.8	12	45
	11	11	16	08.4	05.5	152.3	035	5.0			5.0	12	38
	11	17	56	56.4	06.7	154.8	046					18	42
	14	22	27	46.0	10.1	161.5	067	5.4	5.8		5.5	23	39
	19	03	34	28.1	06.8	154.5	024	5.6	5.7		5.6	57	45
	19	03	51	26.6	06.9	154.4	042	5.2			5.2	17	38
	19	21	23	53.6	03.5	150.7	033	4.7				13	38
	20	15	05	01.9	03.8	151.8	024	4.8	4.9		4.7	7	40
	20	22	14	53.8	03.4	153.5	042		4.9			6	40
	22	02	13	25.2	06.3	150.9	048					8	42
	23	00	36	35.8	06.3	154.8	056		6.0	5.4	5.6	61	37
	24	10	52	07.3	06.2	154.7	416	4.5				8	37
	25	08	06	45.4	09.2	156.7	033	5.7	6.5	6.1	6.1	57	37
	25	18	14	08.7	06.4	149.4	033		4.8			7	37
	28	12	38	19.2	05.2	139.7	033	4.1				7	46
	30	02	04	54.5	04.7	145.2	023					8	37
	30	03	50	29.5	06.2	130.4	131	5.2	5.4		5.2	40	40
	30	03	51	53.1	05.1	145.2	047	5.7			6.0	59	36
12	02	12	19	43.2	07.5	154.5	016	4.6	4.2			7	44
	07	04	02	18.5	04.5	153.4	040	5.7	6.4	5.8	6.3	75	36

MN	DY	HR	MI	SEC	LAT°S	LONG°E	DPH (km)	MB (GS)	ML	MS	M	NO. STNS	PDE
	08	01	42	50.9	04.4	153.4	048	5.0	5.3		5.0	15	42
	09	11	32	15.4	06.2	149.5	047	4.7	4.4			13	44
	10	02	11	24.7	03.3	139.8	034	5.0		4.6	4.9	22	36
	12	13	36	02.8	04.6	140.4	086	5.3			5.5	58	37
	14	04	21	16.3	06.6	155.1	059	4.5				9	37
	15	17	04	34.5	02.5	139.7	033					15	39
	15	21	10	06.3	02.8	139.4	033					18	39
	16	03	11	41.4	06.1	147.6	069		4.2			5	47
	16	06	28	26.7	06.6	149.9	034		4.4			9	43
	17	07	42	06.7	07.0	155.7	067	5.8	6.9		6.7	152	39
	17	08	17	24.7	06.9	155.8	071	5.0				11	39
	18	00	23	11.3	05.1	151.3	125	5.5	5.6		5.7	82	40
	18	17	51	19.2	05.7	146.6	081					6	46
	20	22	49	46.1	10.7	162.1	033	4.9			4.9	18	39
	22	11	47	20.2	06.4	150.5	071		4.8			8	36
	24	07	13	24.3	05.9	153.4	033					6	36
	24	08	05	16.7	02.5	139.7	033					9	40
	24	08	55	52.9	02.5	152.7	042		4.8			6	42
	24	15	32	14.2	05.0	153.9	115					9	47
	25	23	22	21.7	04.1	142.0	115	6.6	6.4	6.8	6.9	90	36
	26	00	22	01.5	04.0	146.0	104					11	44
	26	10	34	57.6	06.0	145.0	050					5	48
	27	01	56	18.3	09.1	160.9	074					5	48
	27	20	42	22.5	08.5	148.6	052		4.1			8	46
	28	08	59	50.2	05.0	144.9	160					6	46
	28	13	47	25.4	05.1	153.9	100					7	42
	29	11	53	46.1	05.5	147.1	199	4.9	4.3		4.8	6	40
	29	12	13	16.2	04.9	154.0	112		5.2		4.8	10	39
	29	15	36	54.3	09.9	150.3	010	4.1				11	42
	29	16	29	37.9	05.0	153.9	104	5.3			5.6	62	37
	29	17	53	41.0	06.0	151.3	037	4.9	5.1		4.9	15	40

TABLE 9

PNG EARTHQUAKE FELT REPORTS, 1975 - COLLATED BY THE PORT MORESBY GEOPHYSICAL OBSERVATORY

(SOME REPORTS FROM THE SOLOMON ISLANDS ARE ALSO INCLUDED)

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
01	01	19	02	6.05	145.42	Goroka	IV
01	01	19	02	5.23	145.83	Madang	III
01	01	19	02	5.92	144.68	Minj	IV
01	02	02	32	4.17	152.17	Rabaul	III
01	07	10	00	9.95	148.37	Afore	III
01	20	09	38	5.88	148.80	Kilenge	III
01	20	09	57	3.67	152.47	Namatanai	III
01	22	21	57	6.33	155.50	Panguna	IV
01	27	20	10	4.17	152.17	Rabaul	III
02	01	19	43	4.17	152.17	Rabaul	III
02	01	19	43	4.17	152.50	Duke of York Island	III
02	02	17	58	6.05	145.42	Goroka	IV
02	03	03	23	6.25	149.58	Kandrian	IV
02	07	04	52	8.78	148.25	Popndetta	IV
02	07	04	52	6.25	149.58	Kandrian	IV
02	07	04	52	5.50	148.50	Cape Gloucester	IV
02	07	04	52	9.67	150.75	Salamo	III
02	07	04	52	4.17	152.17	Rabaul	III
02	07	04	52	9.73	150.82	Esa Ala	III
02	07	04	52	9.35	150.33	Bohibatu	III
02	10	05	55	9.67	150.75	Salamo	III
02	14	13	15	9.67	150.75	Salamo	III
02	15	02	56	4.17	152.17	Rabaul	III
02	16	04	59	6.28	145.88	Kainantu	III
02	16	04	59	6.24	145.98	Yonki	IV
02	16	04	59	7.90	147.17	Garina	IV
02	16	04	59	5.23	145.83	Madang	III
02	16	04	59	6.52	145.97	Obura	III

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
02	26	14	29	6.33	155.50	Panguna	V
02	26	14	29	6.25	155.50	Arawa	V
02	26	14	29	6.57	155.35	Boku	V
02	26	14	29	6.25	155.08	Piva	IV
02	26	17	00	5.73	148.05	Lab Lab	IV
02	27	14	24	5.88	148.80	Kilenge	IV
02	27	14	24	6.52	145.97	Obura	IV
02	27	14	24	6.25	149.58	Kandrian	III
02	27	14	24	8.78	148.25	Popondetta	III
02	27	04	52	9.73	150.82	Esa Ala	III
02	27	14	24	6.24	145.98	Yonki	V
02	27	14	24	6.28	145.88	Kainantu	IV
02	28	10	00	8.35	147.83	Ioma	IV
03	16	05	40	9.73	150.82	Esa Ala	III
03	28	19	33	6.57	155.35	Boku	IV
03	28	19	33	6.25	155.50	Arawa	IV
03	31	20	29	4.17	152.17	Rabaul	III
04	06	05	30	9.25	150.20	Watabuma	IV
04	09	06	27	6.25	155.50	Arawa	III
04	09	06	28	4.17	152.17	Rabaul	V
04	09	06	28	3.67	152.4	Namatanai	V
04	09	06	28	9.73	150.82	Esa Ala	III
04	09	06	28	8.78	148.25	Popondetta	III
04	09	06	28	5.00	151.25	Ulamona	III
04	09	06	28	4.33	152.03	Keravat	V
04	10	15	20	6.33	155.50	Panguna	III
04	15	05	30	5.73	148.05	Lab Lab	III
04	22	06	18	5.73	148.05	Lab Lab	III
04	25	13	45	5.63	146.48	Saider	III
05	06	05	20	8.78	148.25	Popondetta	III
05	06	20	50	4.17	152.17	Rabaul	III
05	07	03	26	4.17	152.17	Rabaul	III
05	07	04	01	9.05	148.37	Aforo	III
05	10	02	25	4.17	152.17	Rabaul	III

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
05	10	03	22	4.17	152.17	Rabaul	III
05	10	05	23	4.17	152.17	Rabaul	III
05	18	09	57	6.52	145.97	Obura	III
05	20	15	11	9.05	148.37	Afore	IV
05	21	15	11	8.35	147.83	Ioma	III
05	23	03	05	7.90	147.17	Garaina	IV
05	26	04	37	6.57	155.35	Boku	III
05	28	05	06	6.57	155.35	Boku	III
06	05	04	20	5.23	145.83	Madang	III
06	05	04	20	6.05	145.42	Goroka	V
06	05	04	20	6.25	145.63	Henganefi	III
06	05	04	20	5.90	144.85	Kerewagi	IV
06	05	04	20	6.98	145.87	Manawaka	III
06	05	04	20	4.73	145.92	Dogowan	III
06	05	05	19	4.17	152.17	Rabaul	IV
06	06	05	19	4.05	153.67	Feni Is.	III
06	07	05	11	5.23	145.83	Madang	III
06	07	05	11	6.05	145.42	Goroka	V
06	09	19	52	6.73	147.02	Lae	IV
06	09	19	52	5.23	145.83	Madang	III
06	09	19	52	6.52	145.97	Obura	IV
06	09	19	52	8.78	148.25	Popondetta	III
06	09	19	52	5.73	148.05	Lab Lab	III
06	09	19	52	5.58	148.32	Sag Sag	IV
06	26	15	54	5.88	148.80	Kilenge	III
06	28	05	45	4.17	152.17	Rabaul	III
07	01	01	25	4.17	152.17	Rabaul	III
07	05	11	51	3.67	152.47	Namatanai	IV
07	13	09	52	6.25	149.58	Kandrian	III
07	14	20	03	4.17	152.17	Rabaul	III
07	15	01	25	6.83	155.75	Buin	IV
07	19	18	30	4.10	145.01	Tabele	III
07	19	19	26	4.10	145.01	Tabele	III
07	20	14	40	6.48	155.42	Sovele	VII

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
07	20	14	40	7.03	155.78	Tenu	VIII
07	20	14	40	6.07	146.18	Morokiamori	VIII
07	20	14	40	5.85	155.22	Wakunai	V
07	20	14	40	6.57	155.35	Boku	VIII
07	20	14	40	6.65	155.75	Kihili	VII
07	20	14	40	6.60	155.93	Turiboiru	VII
07	20	14	40	6.83	155.75	Buin	VII
07	20	14	40	6.33	155.30	Deomorig	VI
07	20	14	40	6.40	155.30	Siwai	VII
07	20	14	40	6.25	155.18	Morotona	VII
07	20	14	40	6.68	155.73	Konga	VII
07	20	14	40	6.25	144.08	Torokina	VII
07	20	14	40	6.00	155.24	Manetai	VIII
07	20	14	40	6.35	155.43	Lehu	V
07	20	14	40	6.05	155.02	Kangara	VI
07	20	14	40	6.25	155.50	Arawa	VI
07	20	14	40	6.33	155.50	Panguna	VI
07	20	14	40	6.40	155.43	Tabago	VII
07	20	14	40	6.20	155.63	Kieta	VI
07	20	14	40	5.15	154.58	Karooka Pltn.	VII
07	20	14	40	5.83	155.25	Numa Numa	VII
07	20	14	40	4.45	155.20	Carteret Is.	V
07	20	14	40	6.33	155.68	Aropa	V
07	20	14	40	5.73	154.72	Kunua	V
07	20	14	40	5.67	155.10	Iaun	V
07	20	14	40	5.11	155.01	Tinputz	V
07	20	14	40	5.40	154.67	Hutjena	V
07	20	14	40	5.45	154.68	Sohano	IV
07	20	14	40	4.43	152.10	Gaulim	V
07	20	14	40	5.53	151.52	Pomio	V
07	20	14	40	3.08	152.65	Londolovit	IV
07	20	14	40	4.32	152.20	Vunalama	III
07	20	14	40	4.92	151.17	Lolebau	IV
07	20	14	40	4.33	152.25	Kokopo	VI

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
07	20	14	40	4.23	152.00	George Brown Hgh Sch	V
07	20	14	40	4.17	152.17	Rabaul	IV
07	20	14	40	3.38	153.32	Tanga	V
07	20	14	40	4.33	152.03	Kerevat	IV
07	20	14	40	5.00	151.25	Ulamona	IV
07	20	14	40	4.25	152.48	Mioko Is.	IV
07	20	14	40	8.30	152.12	Wide Bay	IV
07	20	14	40	5.03	150.00	Talasea	III
07	20	14	40	5.28	151.04	Bialli Pltn.	III
07	20	14	40	5.55	150.17	Kimbe	III
07	20	14	40	4.90	151.00	Open Bay	V
07	20	14	40	3.15	152.02	Lemeris Pt.	IV
07	20	14	40	3.92	152.83	Susurunga	IV
07	20	14	40	3.08	152.61	Lihir	IV
07	20	14	40	3.27	152.03	Lemeris	V
07	20	14	40	3.78	152.55	Sehun	IV
07	20	14	40	3.67	152.47	Namatanai	IV
07	20	14	40	3.20	151.90	Konos	III
07	20	14	40	4.05	153.67	Fenni Is.	III
07	20	14	40	8.52	151.07	Lesuia	V
07	20	14	40	9.67	150.75	Salamo	IV
07	20	14	40	7.10	155.87	Poporang	VII
07	20	14	40	7.07	155.87	Korovou	VII
07	20	14	40	6.98	155.72	Koliai	VII
07	20	14	40	8.28	157.10	Vonavona	VI
07	20	14	40	7.00	155.88	Balialae	VII
07	20	14	40	6.75	156.75	North Cheiseal	V
07	20	14	40	8.12	156.83	Gizo	IV
07	20	14	40	6.62	156.55	Sirovanga	IV
07	20	14	40	7.45	157.75	Wagina	IV
07	20	14	40	8.52	160.00	Usu Usu	IV
07	20	14	40	10.30	162.03	Wainoni Bay	V
07	20	19	55	6.83	155.75	Buin	VII
07	20	22	55	6.83	155.75	Buin	VII

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
07	20	23	29	5.23	145.83	Madang	III
07	21	02	04	6.83	155.75	Buin	VII
07	21	02	04	6.57	155.35	Boku	V
07	21	02	30	6.83	155.83	Buin	VII
07	21	02	40	6.57	155.75	Boku	V
07	21	02	40	4.17	152.17	Rabaul	IV
07	21	06	56	6.83	155.75	Buin	III
07	21	20	23	5.73	148.05	Lab Lab	III
07	21	20	23	5.88	148.80	Kilenge	III
07	22	13	32	6.25	155.08	Piva	IV
07	22	14	09	6.25	155.08	Piva	III
07	22	16	03	6.25	155.08	Piva	IV
07	22	19	21	6.25	155.08	Piva	IV
07	23	01	45	6.25	155.08	Piva	III
07	23	03	07	6.25	155.08	Piva	IV
o7	24	00	02	6.25	155.08	Piva	III
07	28	08	45	6.83	155.75	Buin	III
07	30	21	20	4.17	152.17	Rabaul	IV
07	31	15	43	4.17	152.17	Rabaul	III
07	31	16	25	4.35	152.01	Vudal	IV
07	31	16	25	4.17	152.17	Rabaul	IV
07	31	16	26	4.17	152.17	Rabaul	IV
08	01	22	30	5.88	148.80	Piva	IV
08	02	12	14	4.10	145.01	Tabele	III
08	04	03	51	5.00	151.25	Ulamona	IV
08	04	03	51	4.17	152.17	Rabaul	III
08	04	16	35	5.00	151.25	Ulamona	III
08	05	02	54	6.33	155.50	Panguna	IV
08	05	02	54	7.10	155.70	Korovou	IV
08	05	04	40	4.17	152.17	Rabaul	III
08	07	00	31	4.17	152.17	Rabaul	III
08	07	03	10	6.33	155.50	Panguna	IV
08	07	13	30	6.01	141.01	Ok Tedi	III
08	07	21	10	4.17	152.17	Rabaul	III

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
08	08	00	39	6.33	155.50	Panguna	IV
08	08	00	39	4.17	152.17	Rabaul	IV
08	08	02	55	4.17	152.17	Rabaul	III
08	08	05	57	6.73	147.02	Lae	IV
08	11	04	30	9.35	150.33	Bolubolu	IV
08	12	06	18	4.17	152.17	Rabaul	III
08	12	06	20	4.17	152.17	Rabaul	III
08	12	06	22	4.17	152.17	Rabaul	III
08	12	06	23	4.17	152.17	Rabaul	III
08	14	17	45	6.00	146.04	Finschafen	V
08	14	17	45	6.25	149.58	Kandrian	III
08	14	17	45	6.73	147.02	Lae	IV
08	14	17	45	8.78	148.25	Popondetta	IV
08	14	17	45	8.35	147.83	Ioma	III
08	14	17	45	5.88	148.80	Kilenge	III
08	16	15	25	4.17	152.17	Rabaul	V
08	16	15	25	4.23	152.18	Matupit Is.	V
08	18	12	49	4.42	152.08	Malabunga	VI
08	18	12	49	4.17	152.17	Rabaul	IV
08	18	12	49	5.00	151.25	Ulamona	III
08	18	18	40	4.17	152.17	Rabaul	III
08	20	17	07	5.85	144.22	Mt. Hagen	III
08	21	05	29	6.33	155.50	Panguna	IV
08	21	06	05	6.33	155.50	Panguna	IV
08	21	09	46	6.33	155.50	Panguna	V
08	24	10	47	6.33	155.50	Panguna	IV
08	25	02	22	6.33	155.50	Panguna	III
08	25	08	11	6.33	155.50	Panguna	III
08	31	09	30	5.73	148.05	Lab Lab	III
09	13	06	47	6.33	155.50	Panguna	III
09	15	17	52	5.88	148.80	Kilenge	III
09	17	14	42	4.17	152.17	Rabaul	III
09	19	23	15	6.33	155.50	Panguna	IV
09	25	18	10	6.33	155.50	Panguna	IV

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
09	25	18	10	6.57	155.35	Boku	IV
10	20	15	47	4.42	152.08	Malabunga	IV
10	20	15	47	4.17	152.17	Rabaul	III
11	02	18	10	6.25	155.50	Arawa	III
11	02	19	47	6.25	155.50	Arawa	III
11	02	19	47	6.33	155.50	Panguna	III
11	16	01	59	4.17	152.17	Rabaul	III
11	20	14	46	9.50	147.13	Port Moresby	III
11	23	00	36	5.88	148.80	Piva	IV
11	30	03	52	4.75	145.00	Josephastaal	V
11	30	03	52	5.23	145.83	Madang	III
12	02	01	50	4.17	152.17	Rabaul	IV
12	02	02	45	4.17	152.17	Rabaul	III
12	02	06	46	4.17	152.17	Rabaul	IV
12	07	04	02	4.17	152.17	Rabaul	V
12	08	01	43	4.17	152.17	Rabaul	III
12	16	12	35	6.33	155.50	Panguna	III
12	17	07	42	6.33	155.50	Panguna	IV
12	18	06	35	9.58	150.00	Sonarva	IV
12	25	23	23	3.90	141.8	Green River	VII
12	25	23	23	5.03	142.02	Oksapmin	VII
12	25	23	23	3.07	142.08	Drekikir	VII
12	25	23	23	3.06	143.01	Ulupu	VI
12	25	23	23	5.01	141.06	Telefomin	VI
12	25	23	23	5.02	141.02	Tabbubil	VI
12	25	23	23	3.55	141.23	Amanab	VI
12	25	23	23	4.23	142.82	Anbunti	VI
12	25	23	23	4.35	142.00	Frieda River	VI
12	25	23	23	4.20	141.66	Ama	VI
12	25	23	23	4.63	143.57	Amboin	V
12	25	23	23	3.63	143.07	Maprik	V
12	25	23	23	3.67	143.30	Yangoru	V
12	25	23	23	3.12	142.33	Aitape	IV
12	25	23	23	4.07	144.10	Angoram	IV

MN	DY	HR	MI	LAT°S	LONG°E	PLACE	INT. MM
12	25	23	23	3.20	141.13	Bewani	IV
12	25	23	23	2.67	141.32	Vanimo	IV
12	25	23	23	3.55	143.68	Wewak	IV
12	25	23	23	5.88	142.97	Tari	IV
12	25	23	23	4.73	145.92	Dogowan	IV
12	25	23	23	5.22	141.47	Alsobip	IV
12	25	23	23	6.13	143.43	Nipa	IV
12	27	20	42	8.35	147.83	Ioma	III
12	28	03	53	3.55	143.68	Wewak	III
12	28	20	40	8.35	147.83	Ioma	III
12	29	13	38	6.33	155.50	Panguna	III
12	29	15	37	10.31	150.44	Alotau	IV

TABLE 10

PRELIMINARY MAGNETOMETER CORRECTIONS, 1975

1975	OHM 187 (nT)	OHM 188 (nT)	OHM 189 (nT)	Decl. 580339 (mins)	BMZ 68 (nT)	
Jan	-125	-11	-86	0	0	
Feb	-125	-11	-86	0	0	
Mar	-126	-11	-86	0	0	
Apr	-126	-11	-87	0	0	
May	-126	-12	-87	0	0	
Jun	-126	-12	-87	0	0	
Jul	-127	-12	-88	0	0	
Aug 01	-127	-13	-88	0	0*	+1**
Aug 21					0*	+2**
Sep 01	-127	-13	-88	0	0*	+3**
Sep 11					0*	+4**
Sep 21					0*	+5**
Oct 01	-128	-13	-89	0	0*	+6**
Nov 01	-128	-13	-89	0	0*	+7**
Nov 16					0*	+8**
Dec 01	-128	-14	-89	0	0*	+9**
Dec 16					0*	+10**

* Used in the baseline determinations for the monthly BMR Geophysical Observatory Reports and the magnetograph data forwarded to the Data Centre

** Used to compile Tables 12 and 13 of this report

TABLE 11

MAGNETOGRAPH PARAMETERS, 1975

COMPONENT	DATE	SCALE VALUE	STD DEVIATION SCALE VALUE	STD DEVIATION BASELINE VALUE
D	1975	0.445	0.002	0.12
H	1975	2.75	0.02	2.3
Z	Jan 01	3.3	0.03	1.5
	Jul 01	3.4		

The H scale value is So; "a" factor = 0.003

D values in minutes and minutes per mm.

H and Z values in nT and nT per mm.

TABLE 12

PRELIMINARY MONTHLY MEAN MAGNETIC VALUES AND K-INDEX 1975

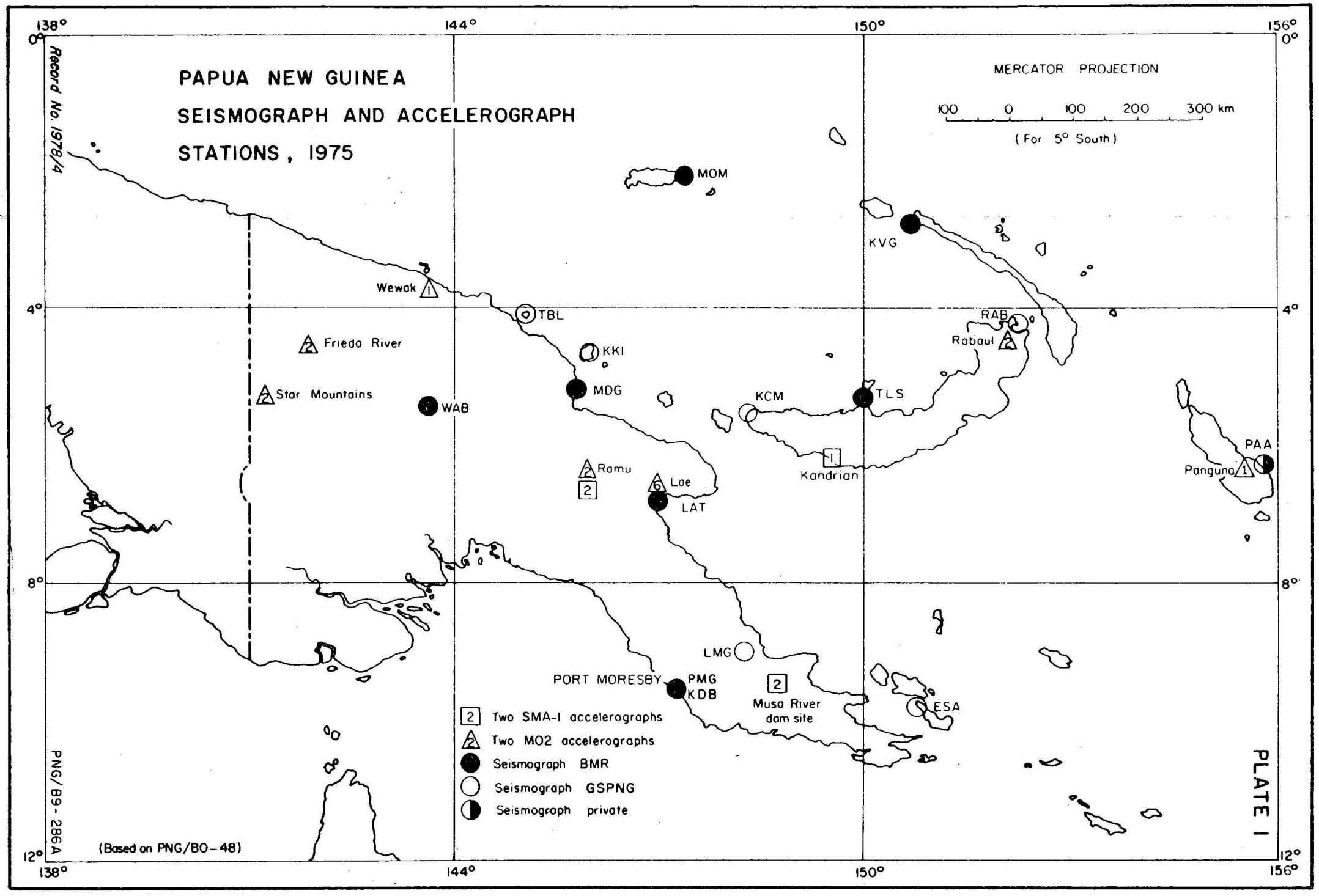
1975	D(E)	H nT	Z nT	F nT	K
Jan	06°18.6'	36085	-23346	42979	2.31
Feb	18.5'	078	350	42975	2.39
Mar	18.5'	080	353	42978	2.41
Apr	18.5'	083	356	42982	2.06
May	18.8'	077	361	42980	2.08
Jun	19.1'	080	366	42985	1.87
Jul	19.0'	070	377	42980	1.98
Aug	19.3'	068	379	42982	1.84
Sep	19.5'	081	385	42996	1.71
Oct	19.6'	070	388	42989	1.83
Nov	19.8'	062	399	42988	2.41
Dec	19.6	072	397	42995	2.01
Annual Mean	06°19.1'	36076	-23371	42984	2.08

TABLE 13

GEOMAGNETIC ANNUAL MEAN VALUES, 1965-1975

YEAR	D	I	H	X	Y	Z	F	NOTES
1965	6° 8.9	-32°19.7	36339	36130	3892	-22998	43005	2B
1966	6° 9.9	-32°23.8	36315	36105	3900	-23043	43009	2B
1967	6°10.5	-32°26.2	36284	36073	3903	-23059	42991	2B
1968	6°11.4	-32°30.2	36256	36045	3909	-23100	42990	2B
1969	6°12.3	-32°33.8	36233	36021	3916	-23139	42991	2B
1970	6°13.1	-32°36.6	36200	35987	3921	-23160	42975	2C
1971	6°14.0	-32°39.4	36178	35964	3928	-23187	42971	2C
1972	6°14.9	-32°43.2	36151	35936	3935	-23226	42969	2C
1973	6°16.0	-32° 47.3	36123	35907	3943	-23269	42969	2C
1974	6°17.5	-32°51.8	36093	35876	3955	-23317	42970	2C
1975	6°19.1		36076			-23371	42984	2C
Mean Annual Change	+ 1.02		-26.3			-37.3	-2.1	2C

NOTES 2B Preliminary mean annual value based on 5 IQ days
2C " " " " " " 10 Q days


PAPUA NEW GUINEA
SEISMOGRAPH AND ACCELEROGRAPH
STATIONS, 1975
Record No. 1978/4
MERCATOR PROJECTION
100 0 100 200 300 km
(For 5° South)
138°
144°
150°
156°
0°
4°
8°
12°
MOM
KVG
Wewak
TBL
KKI
MDG
WAB
Frieda River
Star Mountains
RAB
Rabaul
KCM
TLS
Kandrian
PAA
Panguna
Ramu
Lae
LAT
LMG
PORT MORESBY
PMG
KDB
Musa River dam site
ESA
Two SMA-1 accelerographs
Two MO2 accelerographs
Seismograph BMR
Seismograph GSPNG
Seismograph private
(Based on PNG/BO-48)
PNG/B9-286A
PLATE I

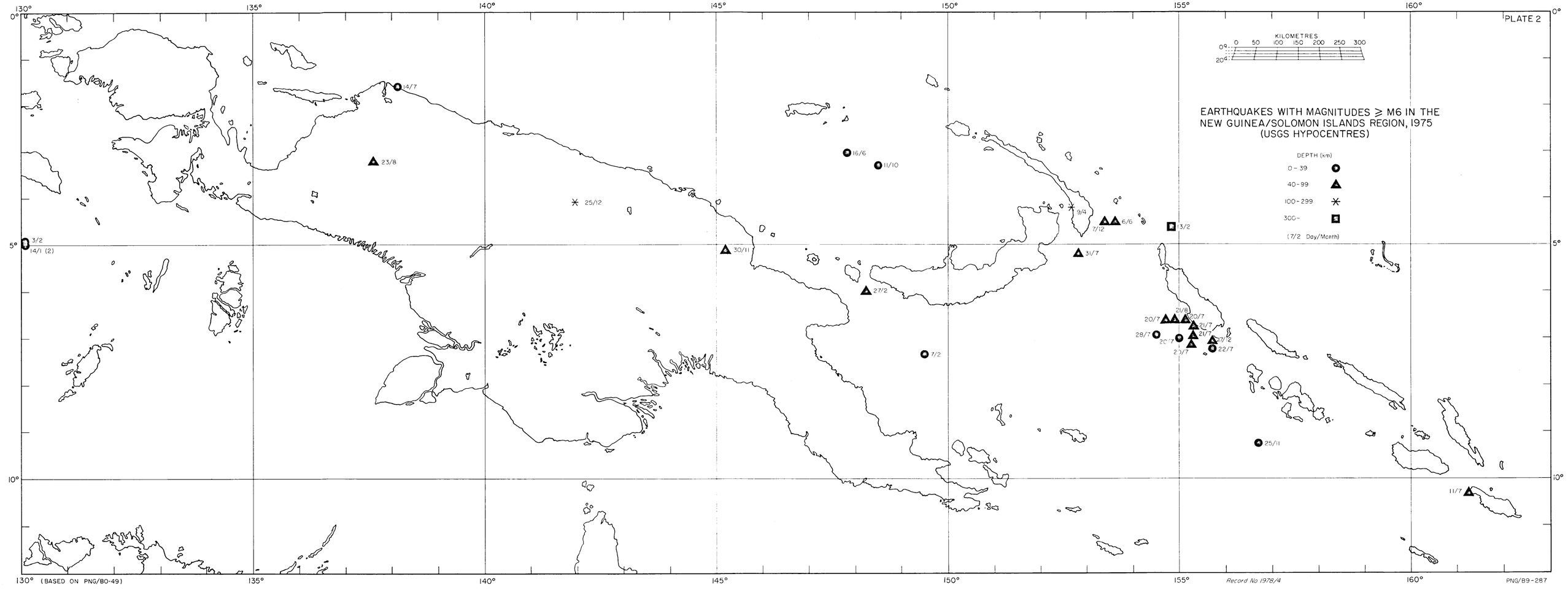


PLATE 2
EARTHQUAKES WITH MAGNITUDES ≥ M6 IN THE NEW GUINEA/SOLOMON ISLANDS REGION, 1975
(USGS HYPOCENTRES)
KILOMETRES
0 50 100 150 200 250 300
DEPTH (km)
0 - 39
40 - 99
100 - 299
300 -
(7/2 Day/Month)
130°
135°
140°
145°
150°
155°
160°
0°
5°
10°
14/7
23/8
25/12
3/2
14/1 (2)
30/11
16/6
11/10
27/2
7/2
9/4
7/12
6/6
13/2
31/7
20/7
21/8
20/7
21/7
21/7
28/7
20/7
20/7
7/2
22/7
25/11
11/7
(BASED ON PNG/80-49)
Record No 1978/4
PNG/89-287