

January, 1964



Geology Department

Provisional Bulletin

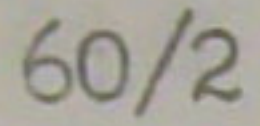
Limitations: This station is only in process of establishment. Inexperienced operators are in training. Chronometer at present read to half second. Improved installation proposed.

No.	Date 19 60	Phase	Time (GMT) h. m. s.	Per	A _E (Instr)	Remarks
1.	January 2	eS eSSS eLQ	E E E	12 43 48 52 42 00.8	13 18 25	Masked by microseisms USCGS: Sth. Atlantic Ocean, W of Bouvet Is. H: 12 21 51
2.	7	e eL M	E E E	14 01 24 07.7 10.1	25 23 17	Masked by microseisms. USCGS: Sandwich Is. H: 13 28 16
3.	7	eL	E	23 58.5	18	Masked by microseisms. USCGS: 6 $\frac{1}{2}$ N, 94 $\frac{1}{2}$ E. H: 23 17 08
4.	8	eL	E	15 28.5	24	Masked by microseisms. USCGS: 55 $\frac{1}{2}$ S, 27 $\frac{1}{2}$ W H: 14 45 53
5.	11	eL M	E E	23 15.4 18.1	22 14	USCGS: 2S, 140 $\frac{1}{2}$ E H: 22 54 03
6.	13	eL	E	07 47.9	13	USCGS: 8 $\frac{1}{2}$ S, 140E H: 07 26 26
7.	13	iPP iSKS i i iPS i iPPS	E E E E E E E	15 59 28 16 05 09 06 50 07 49 08 55 09 09 09 38	10 12 16 20 10 7 16	+ $\frac{1}{2}$ -1 +1 +2 +1 $\frac{1}{2}$ +2 +2 USCGS: 16S, 72W H: 15 40 34 h: 200 km. ca.

Continued.



No.	Date 1959	Phase	Time (GMT) h. m. s.	Per	A _E (Instr.)	Remarks
		e(SS) E	16 14 44	22		
		i(SKKS) E	15 43	4		
		iSKKKS E	19 36	27	-3	
		e E	25 46	35	-3	
		e E	17 26.9	82		
		(e) E	54.9			
8.	January 15	e E	09 56 41	(9)		USCGS: 15S, 75W
		i E	57 01	7	+	H: 09 30 24
		iPS E	58 45	9	+	h: 150 km. ca.
		iSS E	10 04 49	13	+	
		eSKKS E	06 45	20		
		eSSS E	08 33	(11)		
		e E	15 49	39		
9.	16	? E	07 06 29			No record 0700-0706
		iL E	07.0	8	-	USCGS: 59½S, 149½E
						H: 06 59 00
10.	21	eL E	10 59.9	14		Masked by microseisms
		M E	02.0	26		
11.	23	i E	04 49 31	3	+½	
		e E	50 45	9		
		iS E	55 23	5	-1	
		eSS E	57 59	12		
		iSSS E	58 38	12	-2	
		eLQ E	05 00.9	39		
		eLR E	04.0	19	+4	
		M E	05.7	17	4	
12.	23	e E	07 42 14	7		No record 0735-0740.
		iS E	45 39	7	-2	
		i E	45 10	6	-2	
		iSS E	48 54	8	-4	
		i E	50 11	6	+2	
		iLQ E	51.6	37	+3	
		iLR E	55.3	15	-4	
		M E	55.6	15	5	
13.	23	eP E	18 04 53	1		H: 17 57 11
		i E	05 42	2	+1	Δ: 40°.5
		i E	07 19	3	-½	
		eS E	11 02	9		
		eSS E	13 23	18		
		eSSS E	14 08	20		
		eL E	16.8	34		
		M E	19.8	19	3	
14.	24	iP E	04 29 20	2	+1	H: 04 21 49
		ipP E	29 30	2	-½	Δ 39°.7
		iPP E	30 59	3	-1	h: 0.00
		iPPP E	31 19	3	-1	
		iS E	35 21	11	+2	
		i(sS) E	35 40	7	-1	
		eL E	40.2	27		
		M E	41.4	23	3	
15.	25	eLQ E	16 48.0			Masked by microseisms
						USCGS: 16 29 26
						16S, 179W



Geology Department

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February, 1968

International Seismological Centre

FORT NELSON SEISMOLOGICAL STATION, HOBART

Provisional Bulletin

No.	Date	1960	Phase		Time (GMT)			Per	A _E (Instr.)	Remarks
					h.	m.	s.			
16	February	3	eP	E	02	26	42	2		Masked by microseisms
			eL	E		33.9		15		USCGS: 37S, 179E
										H: 02 20 55
17		3	eL	E	14	50.4		17		USCGS: 19S, 173 $\frac{1}{2}$ W
										H: 14 28 39
18		4	iP	E	03	54	00	(1)	-1	H: 03 46 36
			ipP	E		54	11	1	-1	Δ 38 ⁰ .9 h 0.00 ca.
			i	E		54	27	2	-1	
			i	E		54	48	1 $\frac{1}{2}$	+1	USCGS: 4 $\frac{1}{2}$ S, 153 $\frac{1}{2}$ E
			e	E		54	59	(1)		H: 03 46 30
			i	E		55	53	(1)	+2	
			i	E		56	01	2	+2	
			iPcP	E		56	18	(1)	+2	
			i	E		56	29	3	+4	
			i	E		57	22	3	+2	
			iS	E		59	56	(5)	+2	
			i	E	04	00	25	13	+7	
			i	E		00	38	18	+3	
			i	E		02	52	7	+4	
			eSSS	E		03	04	31		
			iL	E		05.2		30	+11	
			M	E		05.8		32	21	
19		4	eSSS	E	09	43	55			USCGS: 5S, 154E
			eL	E		47.6		(14)		H: 09 27 23
										h: 100 km. ca.
20		4	eL _R	E	17	36.6		27		USCGS: 39N, 143E
										H: 16 50 30

No.	Date	1960	Phase		Time (GMT)			Per	A _E (Instr.)	Remarks
					h.	m.	s.			
21	February	8	eS	E	13	07	01	18		USCGS: 58S, 67W H: 12 45 34
			eSSS	E		15	40	30		
			eL	E		28.5				
22.		9	iS	E	12	13	58	(9)		USCGS: 4S, 128E H: 11 56 12
			eL	E		17.6		28		
23.		10	iP	E	00	03	56	2	$-\frac{1}{2}$	H: 23 56 04 Δ 42° .3, h: 0.00 ca.
			ipP	E		04	07	2	$+\frac{1}{2}$	
			isP	E		04	13	2	+2	
			i(PP)	E		05	22	11	+1	USCGS: 4S, 128E H: 23 55 49
			i	E		06	00	2	+2	
			iPPP	E		06	08	2	+1	
			i	E		06	28	1	+2	
			iS	E		10	14	12	-2	
			isS	E		10	34	12	$-\frac{1}{2}$	
			iSS	E		13	07	(30)	+2	
			iScS	E		13	46	(10)	+9	
			eSSS	E		14	03	(26)		
			e(L)	E		15.0		40		
			M	E		19.4		18	12	
			i	E		23	00	8	-5	
24.		10	eL	E	02	22.2		9		USCGS: 3 $\frac{1}{2}$ S, 128E H: 01 59 05
25.		10	eL	E	23	42.4		20		USCGS: 15 $\frac{1}{2}$ S, 173W H: 23 19 55
26.		17	eS	E	12	54	09	11		USCGS: 30S, 112 $\frac{1}{2}$ W H: 12 32 10
			e	E	13	04	44			
			eL	E		07.1		(13)		
27.		17	eL	E	17	11.0		11		USCGS: 5S, 142 $\frac{1}{2}$ E H: 16 49 42
			eL	E		12.5		19		
28.		19	iPP	E	10	55	18	4		USCGS: 36N, 70 $\frac{1}{2}$ E H: 10 36 46 h: 200 km. ca.
			i	E		56	17	6		
			eS	E	11	02	25	7		
			e	E		05	17	(16)		
			eSS	E		09	52	(25)		
29.		21	iP	E	00	51	23	1	+	H: 00 46 56 Δ : 19° .5
			i	E		51	31	3	+2	
			i	E		51	37	3	-2	
			i	E		51	56	2	-1	USCGS: 42S, 173E H: 00 46 56 h: 60 km. ca.
			i	E		52	11	2	+1	
			eS	E		54	54	7		
			eL	E		55.9		18		
			M	E		56.7		24		
30.		23	e(L)	E	16	22.2		13		USCGS: 6S, 154 $\frac{1}{2}$ E H: 16 04 50
			eL	E		24.0		17		
			M	E		25.0		15		
31.		24	(e)	E	21	43	50	(2)		Masked by microseisms USCGS: 7 $\frac{1}{2}$ S, 156E H: 21 37 04
			i	E		44	30	3	+	
			eS	E		49	51	(18)		
			eSSS	E		52	47	27		
			eL	E		55.1		22		
			M	E		57.2		17		



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No.	Date 1960	Phase	Time (GMT) h. m. s.	Per	A _E (instr.)	Remarks
32.	February 26	eL M	E E 02 30.7 34.2	25 15		USCGS: 1S, 138E H: 02 08 31
33.	27	(i) iS i eSS eL M	E E E E E E 09 02 50 07 10 07 23 08 46 09.8 15.5	2 6 (6) 15 26 15	+ - -	USCGS: 30 $\frac{1}{2}$ S, 179 $\frac{1}{2}$ W H: 08 56 00
34.	28	eLQ M	E E 23 25.4 31.0	(37) 13		USCGS: 3S, 142E H: 23 05 39

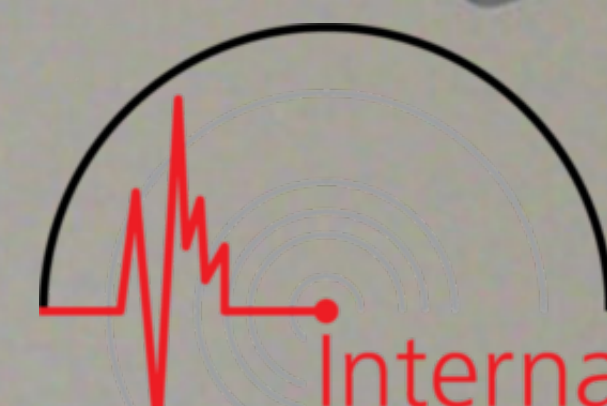
R. Green,
Director,
Seismological Stations.



The University of Tasmania

Geology Department

JUN 14 1960



International
Seismological
Centre

60/3

March, 1960.

FORT NELSON SEISMOLOGICAL STATION, HOBART

Provisional Bulletin

Address: The Director, Seismological Stations, University of Tasmania, Box 252c, G.P.O., Hobart, Tasmania.

Location: Fort Nelson, latitude $42^{\circ}55'35''\text{S}$, longitude $147^{\circ}21'10''\text{E}$, altitude 209m.

Foundation: Jurassic dolerite.

Instruments: Sprengnether horizontal 15.3 sec. EW. (Interim installation pending permanent base equipment).

Limitations: This station is only in process of establishment. Inexperienced operators are in training. Chronometer at present read to half second. Improved installation proposed.

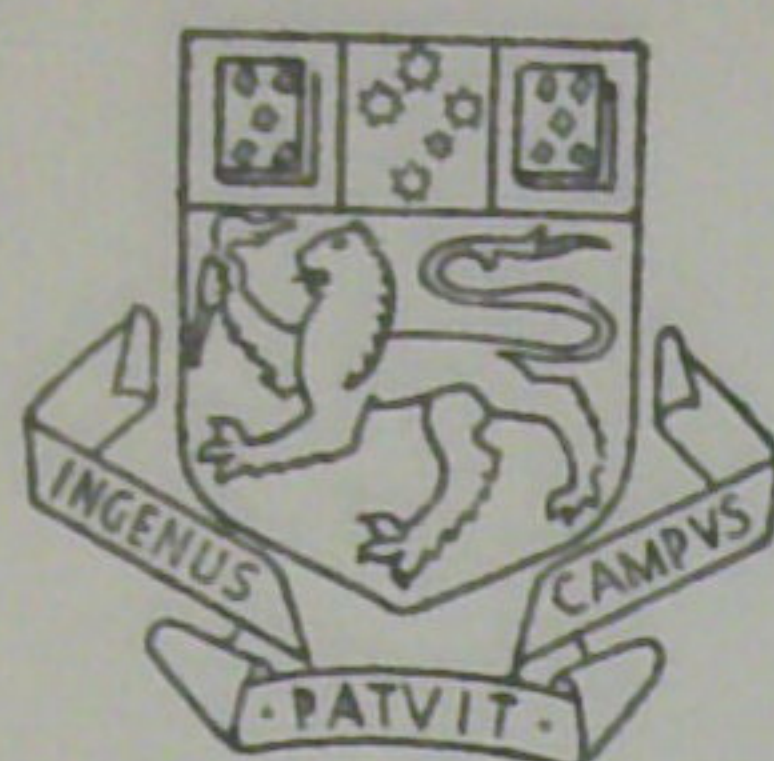
No.	Date	1960	Phase	Time (GMT)	Per	A_E (Instr.)	Remarks
				h. m. s.			
35.	March	5	iP E	13 58 01	1	+	Masked by microseisms
			iPP E	59 48	(2)	+	H: 13 49 21
			iPPP E	14 00 41	(3)	+	Δ : $47^{\circ}.7$
			i E	01 07	(3)	+	
			eS E	04 57			USCGS: 1N, 129E
			e(SS) E	08 01	24		H: 13 49 16
			eG E	10.0	47		
36.		6	e E	02 40 45			USCGS: 1N, 129E
			eL E	48.0	(25)		H: 02 22 06
37.		8	iP E	16 39 43	(2)	+	H: 16 33 39
			i E	39 58	2	-2	Δ : $31^{\circ}.6$ h: 0.03
			iPPP E	41 04	4	-4	
			e E	41 22	1		USCGS: $16\frac{1}{2}\text{S}$, $168\frac{1}{2}\text{E}$
			iS E	44 34	4	-7	H: 16 33 38
			i! E	44 39	5	+13	h: 250Km. ca.
			iS E	45 51	4	-5	
			iSSS E	47 15	8	-6	
			eL E	48.3	14		
			iScS E	49 50	5	-8	
			e E	50 20	22		
			M E	51.7	15	6	
38.		10	eL E	00 48.9			USCGS: 16S, 72W
							H: 23 54 20
							h: 150km ca
39.		12	iP E	20 37 56	2	-	Masked by microseisms
			i E	38 30	3	-	H: 20 30 57
			iPP E	39 22	4	-	Δ : $35^{\circ}.1$
			eS E	43 27	(13)		
			eLQ E	47.3	36		USCGS: 6S, 152E
			(iScS) E	48 06	(5)	(-)	H: 20 30 37
			eL E	48.8	25		
			M E	51.0	20		

No.	Date	1960	Phase		Time (GMT)			Per	A _E (Instr.)	Remarks
					h.	m.	s.			
40.	March	15	e	E	10	30.3				Distant
41.		16	eL M	E E	17	59.8 04.7		26 18		USCGS: 15½S, 173½W H: 17 36 16
42.		19	eP eSS eLQ eLR M	E E E E E	19	23 22 32 13 34.3 37.7 39.4		1 (16) 14 3 3		USCGS: 3S, 138E H: 19 15 37
43.		20	eP iPcP iSKS iS iScS isS iSS iLQ iL	E E E E E E E E E	17	20 06 20 13 30 06 30 13 30 26 31 14 35 43 46.8 49.4		2 2 6 6 ? (11) 21 25 21	+ +1½ +2 + +2 +2 -3 +4	H: 17 07 54 Δ: 83°0 h: 0.015 USCGS: 40N, 143½E H: 17 07 30 h: 60 km ca.
44.		21	e eL	E E	02	10 21 12.2				
45.		21	eL	E	12	02.2		(18)		USCGS: 16½S, 172½W H: 11 40 15
46.		22	eP i iPP iS iSS iL M	E E E E E E E	02	35 45 35 50 36 06 39 16 39 37 40.1 40.7		1 1 2 10 18 13 12	-1 +2 -6 -12 +20 31	H: 02 31 18 Δ: 19 .1
47.		22	iP eL M	E E E	13	52 59 56.2 57.7		2 25 11	+	USCGS: 60½S, 153E H: 13 48 43
48.		23	e(P) e e iS iSKS i e(SS) e e e(L) M eW ₂	E E E E E E E E E E E E	00	35 59 37 29 43 08 45 53 46 10 46 41 50 29 51 31 56 42 57.3 01 02.8 03 05.7		2 1 6 9 8 7 13 16 17 20 22 22	+ + +	USCGS: 39½N, 143E H: 00 23 22
49.		27	iP iS eSSS eL M i e	E E E E E E E	03 04	55 17 00 35 03 15 05.3 06.6 08 06 12 00		2 7 21 20 17 5 13	+ - + +	H: 03 48 38 Δ: 33°0 USCGS: 13½S, 166E H: 03 48 27

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No.	Date 1960	Phase	Time (GMT) h. m. s.	Per	A _E (Instr.)	Remarks	
50.	March 27	iP eS iSSS iL M i	E E E E E E	09 04 40 10 08 12 25 15.3 17.1 20 33	2 (7) 24 18 16 7	+ - -	H: 08 57 49 Δ: 34° .4 USCGS: 13½S, 166½E H: 08 57 53
51.	27	iP i i i	E E E E	23 32 58 33 05 33 13 33 25	2 1 2 2	-2 -1 +1 +2	USCGS: 37½S, 177E H: 23 28 04
52.	28	e(L)	E	06 53.0	17		USCGS: 13½S, 165E H: 06 36 27 h: 300 km ca.
53.	29	iP i i i iPP i iS i(sS) eSS iSSS eL M	E E E E E E E E E E E E	06 37 21 37 37 37 42 38 05 38 31 38 58 42 25 42 38 43 20 44 34 46.7 49.0	2 2 ? 3 3 4 8 (6) 16 20 17 16	-1 -2 + -1 -1 -1 +3 +2 -4 11	H: 06 31 00 Δ: 31° .5
54.	29	eL M	E E	22 28.2 31.9	(38) 22		USCGS: 6S, 147E H: 22 10 20
55.	30	eS eSSS eL	E E E	11 01 55 04 42 06.7	13 23 16		USCGS: 13½S, 166E H: 10 49 47
56.	30	eS eL M	E E E	15 30 37 33.8 36.8	(13) 20 18		USCGS: 22½S, 174½E H: 15 19 30

R. Green,
Director,
Seismological Station.



The University of Tasmania

Geology Department



60/4

April, 1960

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57.	April	5	eSSS eL	E E	07 48 54 55.5	30 24		USCGS: 61S, 26W H: 07 17 45
58.		7	eP eS	E E	13 53 24 58 08	1 7		H: 13 47 28 Δ $32^{\circ}.9$ USCGS: 24S, $179\frac{1}{2}W$ H: 13 47 28 h: 500 km. $\approx$
59.		15	eL M	E E	04 03.2 07.7	(28) 16		Masked by micro-seisms. USCGS: 27S, 113W H: 03 25 38
60.		15	iS eSSS eL	E E E	22 16 55 19 26 21.7	(12) 23 27	+	USCGS: $13\frac{1}{2}S$, 166E H: 22 05 06
61.		20	eL	E	21 59.8	21		USCGS: $2\frac{1}{2}S$, 140E H: 21 36 41

-2-

No.	Date 1960		Phase		Time (GMT) h. m. s.			Per	A_E (instr.)	Remarks
62.	April	24	iP	E	03	30	16	(2)	-1	H: 03 22 31 Δ : 47° 4 h: 600 km.ca. USCGS: 6S, 113½E H: 03 22 23 h: 600 km.ca.
			i(PcP)	E		30	32	½	+½	
			iPP	E		32	15	2	-½	
			i	E		32	36	2	+1	
			i	E		32	56	2	+1½	
			i	E		33	05	2	+i	
			i	E		34	18	2	-1	
			i(ScP)	E		34	35	1	+1	
			i	E		35	02	2	+1½	
			iPcS	E		35	25	3	+1	
			iS	E		36	26	6	+6	
			i	E		36	36	5	-3	
			i	E		37	27	4	+2	
			iScS	E		38	47	5	+2	
			i	E		39	03	3	-2	
			esS	E		40	03	11		
			i	E		41	29	3	-1	
			ipScS	E		42	02	4	+1	
			e	E		42	26	16		
			eL	E		47.8		19		
63.		27	eL	E	17	32.5				USCGS: 3½S, 146½E H: 17 11 30
64.		28	eL	E	05	29.7				USCGS: 3½S, 144½E H: 05 08 07
			eL	E		31.7	12			
			M	E		31.9	12			

R. Green,
Director.



The University of Tasmania

Geology Department

7/22/40



60/5

May, 1960

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Improved installation proposed.

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65.	May	11	iS	E	18	50	15	13	+	USCGS: 3S, 131E H: 18 36 00
			iSS	E		53	28	13	+	
			eSSS	E		54	19	18		
			eL	E		57.9		26		
			M	E	19	01.3		20		
66.		18	eL	E	07	09.1		45		USCGS: 29N, 130E H: 06 35 09 h: 100 km.ca.
67.		19	eL	E	10	47.7		16		
68.		19	eL	E	14	36.9		15		
69.		20	eiP	E	11	17	29	3	-1½	H: 11 12 24 Δ: 22°.8
			i	E		17	44	4	-5	
			iPP	E		18	01	?	+	USCGS: 28S, 167½E H: 11 12 31
			iPPP	E		18	10	3	-3	
			i	E		19	31	8	+2	
			i	E		20	25	8	-3	
			iS	E		21	35	13	+4	
			e	E		22	07	12		
			eSSS	E		22	40	14		
			iLQ	E		23.1		16	-9	
			iLR	E		25.7		12	+10	
			M	E		26.7		12	18	

No.	Date 1960	Phase	Time (GMT) h. m. s.	Per	A _E (Instr.)	Remarks
70.	May 21	iP E i E eSKS E iSKKS E iScS E i E i E eSS E e(SKKS) E eW ₂ E	10 16 22 17 32 26 45 26 58 27 14 27 25 27 37 33 14 40 11 04.8	3 2 (18) (20) ? 12 10 20 52 44	+ - + - + + 	H: 10 03 19 ca. Δ: 90° ca. USCGS: 37½S, 73½W H: 10 02 50
71.	22	eL E	01 08.7	(21)		
72.	24	eiP E iPP E i E eS E iL E M E eT E	14 50 09 50 16 50 59 52 55 53.83 54.1 15 04 21	2 2 3 10 15 14 ¼	-1 +4 +3 +17 27	H: 14 46 37 Δ: 14° 8 USCGS: 44½S, 167½E H: 14 46 34 Duration 5 mins.
73.	24	eL E	20 33.2	14		Probable aftershock of 72.
74.	25	eP E eS E eL E M E eT E	02 41 24 44 16 44.8 45.4 55.57	2 14 13 12 ¼		H: 02 37 45 Δ: 15° 3 USCGS: 44S, 168E H: 02 37 42
75.	25	(e) E eL E eT E	04 09 00 06.2 18.1	13 ¼		Probable aftershock
76.	25	eP E eSKS E e E e(L) E	08 47 16 57 42 09 03 40 09 29	2 41		USCGS: 45S, 76W H: 08 34 33
77.	25	eL E	10 31.1	17		
78.	25	e(S) E eL E	14 04 58 05.9	(17) 22		

R. Green,
Director,
Seismological Station.



The University of Tasmania

Geology Department



60/6

June, 1960

FORT NELSON SEISMOLOGICAL STATION, HOBART

Provisional Bulletin

Address: The Director, Seismological Stations, University of Tasmania,
Box 252c, G.P.O., Hobart, Tasmania.

Location: Fort Nelson, latitude $42^{\circ}55'35''\text{S}$, longitude $147^{\circ}21'10''\text{E}$,
altitude 209 m.

Foundation: Jurassic dolerite

Instruments: Sprengnether horizontal 15.3 sec. EW (Interim installation
pending permanent base equipment.)

Limitations: This station is only in process of establishment. Inexperienced
operators are in training. Chronometer at present read to half
second. Improved installation proposed.

No.	Date 1960	Phase	Time (GMT) h. m. s.	Per	A _E Instr.	Remarks
79.	June 2	eS E eSS E eL E M E	08 00 18 03 16 05.2 07.2	27 14 27 23		USCGS: $5\frac{1}{2}\text{S}$, $151\frac{1}{2}\text{E}$ H: 07 47 11
80.	5	eL E	19 46.8	14		USCGS: $31\frac{1}{2}\text{S}$, 177W H: 19 30 30
81.	6	iP E i E i E i E i E i E	06 08 31 09 04 09 24 09 37 10 22 11 02	2 2 2 5 6 5	+ $+\frac{1}{2}$ +1 +1 -1 +1	USCGS: $45\frac{1}{2}\text{S}$, $73\frac{1}{2}\text{W}$ H: 05 55 44
		iSS E iG! E	24 31 31 02	29 42	-4 +18	No record 0615-0620 GMT
82.	9	eSSS E iLQ E eLR E M E	11 37 16 38.5 40.7 41.1	11 25 18 18	+ 	USCGS: 18S , 169E H: 11 23 51
83.	10	eLQ E eLR E M E	21 33 30 37 04 37 22	20 17 17		USCGS: $15\frac{1}{2}\text{S}$, 174W H: 21 12 05
84.	11	iP E i E eS E e E eL E M E	15 20 59 22 28 26 35 28 36 29.7 32.9	$1\frac{1}{2}$ 4 15 17 39 17	+2 +2 20	H: 15 13 58 Δ : $35^{\circ}.6$ USCGS: 9S , $152\frac{1}{2}\text{E}$ H: 15 14 07

No.	Date 1960	Phase		Time (GMT) h. m. s.			Per	A _E Instr.	Remarks
85.	June 11	eP	E	16	44	41	3		H: 16 37 50
		i	E		46	22	3	+1	Δ : 34° 4
		eS	E		50	09	17		
		i	E		52	12	14	-4	USCGS: 9½S, 152½E
		iL	E		53.2		40	+5	H: 16 37 40
		M	E		56.4		16	21	
86.	12	eL	E	07	58.3		24		USCGS: 36S, 98W H: 07 19 43
87.	14	eL	E	23	59.0				USCGS: 9S, 152½E H: 23 28 12
88.	15	eL	E	23	05.1		(12)		USCGS: 32S, 177½W H: 22 49 39
89.	15	e	E	23	44	03	(23)		USCGS: ½S, 133E
		eSS	E		45	47	14		H: 23 27 40
		eSSS	E		46	52	46		
		M	E		52.8		14		
90.	18	e	E	02	48	48	20		
		eL	E		50.1		18		
91.	20	e(P)	E	02	14	50	1½		USCGS: 38S, 73½W
		eSKS	E		24	49	(12)		H: 02 01 08
		eSKKS	E		24	59	-		
		iS	E		25	13	19	+	
		ePPS	E		26	19	16		
		eSS	E		31	25	26		
		eL	E		37.6		20		
92.	20	eP	E	13	13	04	2		Masked by microseisms
		iSKS	E		23	37	(8)	+	H: 12 59 47
		i	E		23	47	(9)	-	Δ : 93°
		i	E		24	27	14	+	
		i(PPS)	E		25	49	7	+	USCGS: 39½S, 73W
		e	E		29	46	28		H: 12 59 40
		eL	E		43.9		20		
93.	22	eSSS	E	03	06	52	13		USCGS: 62S, 156½E
		eL	E		07.3		19		H: 02 58 24
		M	E		08.3		11		
94.	22	eP	E	04	25	28			Local: HO4 25 12
		iS	E		25	39		+	71 km.
95.	25	eL	E	02	20.4				Masked by microseisms
									USCGS: 30½S, 177W
									H: 02 02 35
96.	25	iP	E	14	48	07	(1)	+	USCGS: 30½S, 177W
		e(S)	E		53	45	14		H: 14 41 42
		eL	E		56.4		24		
		M	E		57.9		22		
97.	27	eL	E	17	07.0		25		Masked by microseisms
98.	29	eL	E	04	44.3		15		USCGS: 30S, 177½W
		M	E		47.5		18		H: 04 29 12

OCT 24 1960



The University of Tasmania

Geology Department



60/7

July, 1960

FORT NELSON SEISMOLOGICAL STATION, HOBART

Provisional Bulletin

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Foundation: Jurassic dolerite.

Instruments: Sprengnether horizontal 15.3 sec. EW (Interim installation pending permanent base equipment)

Limitations: This station is only in process of establishment. Inexperienced operators are in training. Chronometer at present read to half second. Improved installation proposed.

No.	Date 1960		Phase		Time (GMT) h. m. s.	Per	A _E Instr.	Remarks
99.	July	2	e(L)	E	01 55 02	29		Seismic ?
100.		2	eL	E	12 34.6	24		USCGS: 56S, 27W H: 11 55 41
101.		4	eSKKS eL	E E	05 05 19 22.8	19 (31)		USCGS: 52N, $131\frac{1}{2}W$ H: 04 28 33
102.		10	eS e(SSS) eL	E E E	00 24 08 30 59 36.3	20 25 28		USCGS: 0, 198E. H: 00 05 18
103.		11	eL	E	07 39.3	(14)		USCGS: 54S, $140\frac{1}{2}E$ H: 07 33 32
104.		11	eL	E	12 18.0	21		USCGS: 16S, 172W H: 11 55 10
105.		13	e eL	E E	08 23 07 30.3	(19) (33)		Obscured by micro-seisms USCGS: $53\frac{1}{2}S$, $1\frac{1}{2}E$ H: 07 55 54
106.		18	eS eL M	E E E	01 56 26 02 02.2 05.2	 26		USCGS: $4\frac{1}{2}S$, 151E H: 01 43 29 h: 200 km ca.
107.		20	eL M	E E	21 12.3 14.4	37 20		USCGS: $20\frac{1}{2}S$, 169E H: 20 59 25 h: 200 km.ca.

No.	Date 1960	Phase	Time (GMT) h. m. s.	Per	A _E Instr.	Remarks
108.	July 25	eS eL	E E	04 06 21 23.9	12 (18)	USCGS: 55N, 163E H: 03 41 05
109.	25	eS isS eSP ePS eSKKS i eL	E E E E E E E	11 35 44 36 38 37 10 37 31 46 54 46 58 52.5	12 13 10 14 21 16 20	USCGS: 54N, 159E H: 11 12 00 h: 100 km.ca.
110.	25	eL	E	22 56.2	20	USCGS: 3S, 148E H: 21 36 46
111.	27	eL	E	09 24.2		Obscure. USCGS: 5.6S, 103.6E H: 00 56 22.9 h: 93 km.
112.	27	eSKS e(L)	E E	10 27 57 47.1	9	USCGS: 44.7S, 75.1W H: 10 04 53.0 h: 25 km.
113.	29	(e) eS eSSS iL M	E E E E E	00 30 46 35 11 37 12 38.2 40.6	1 (18) 21 31 17	USCGS: 19½S, 170½E H: 00 24 06
114.	29	e eS i eSS e(SSS) eL M	E E E E E E E	17 44 33 54 14 54 50 59 40 18 02 41 06.4 15.6	1 15 (7) 21 29 31 20	USCGS: 40.1N, 142.3E H: 17 31 39.5 h: 50 km.
115.	31	e i e eS eSSS i iScS eL M	E E E E E E E E E	03 03 12 04 18 05 15 08 45 11 22 12 48 13 12 13.8 17.2	1 3 9 29 20 13 6 34 19	USCGS: 5.6S, 150.0E H: 02 55 46.2 h: 25 km.
116.	31	e eL	E E	07 18 39 23 40	23 22	USCGS: 6.0S, 150.0E H: 07 04 37.1 h: 93 km.

S. Warren Carey,
Professor of Geology.



The University of Tasmania

Geology Department



60/8

August, 1960

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117.	August 2	eP i e(S) e(SS) e e eL M	E E E E E E E E	05 13 28 14 15 18 01 18 44 19 05 20 07 20.9 24.1	2 5 13 5 10 11 29 15	USCGS: 22.2S, 171.5E
118.	2	eL M	E E	09 45.9 50.1	25 17	USCGS: 28.2S, 176.6W
119.	4	(eSKS) eS eSS	E E E	07 59 02 59 58 06 34	11 12 14	Obscured by microseisms USCGS: 51.4N, 179.1E
120.	9	e	E	08 14 59	18	Seismic?
121.	9	e eL M	E E E	17 00 52 03.2 11.4	12 14 13	USCGS: 24.5S, 177.1W
122.	9	eL	E	23 52.2	25	USCGS: 11.5S, 166.3E
123.	13	eL	E	14 58.0	22	USCGS: 39.7S, 74.8W
124.	18	eL	E	23 09.7		USCGS: 11.4S, 166.2E
125.	20	eL	E	20 50.6	60	USCGS: 35.6S, 15.4W
126.	20	eL	E	22 29.6	16	
127.	21	eL	E	01 19.9	15	

-2-

No.	Date 1960		Phase		Time (GMT) h. m. s.			Per	A _E (instr.)	Remarks
128.	August	21	eL	E	17	42.0		21		USCGS: 15.3S, 176.0W
129.		23	eL	E	23	04.5		32		USCGS: 14.5S, 176.4W
			M	E		06.7		20		
130.		24	eL	E	06	08.7		18		USCGS: 19.0S, 174.1W
131.		26	eL	E	18	42.1		17		USCGS: 13.5S, 165.9E

S. Warren Carey,
Joint Director,
Seismological Station.

JUL 26 1967

JOINT DIRECTORS

Professor S. Warren Carey
Professor Gordon H. Newstead



Box 252c, G. P. O.,
Hobart, Tasmania.



TASMANIA UNIVERSITY RADIO-TELEMETERED SEISMIC NET

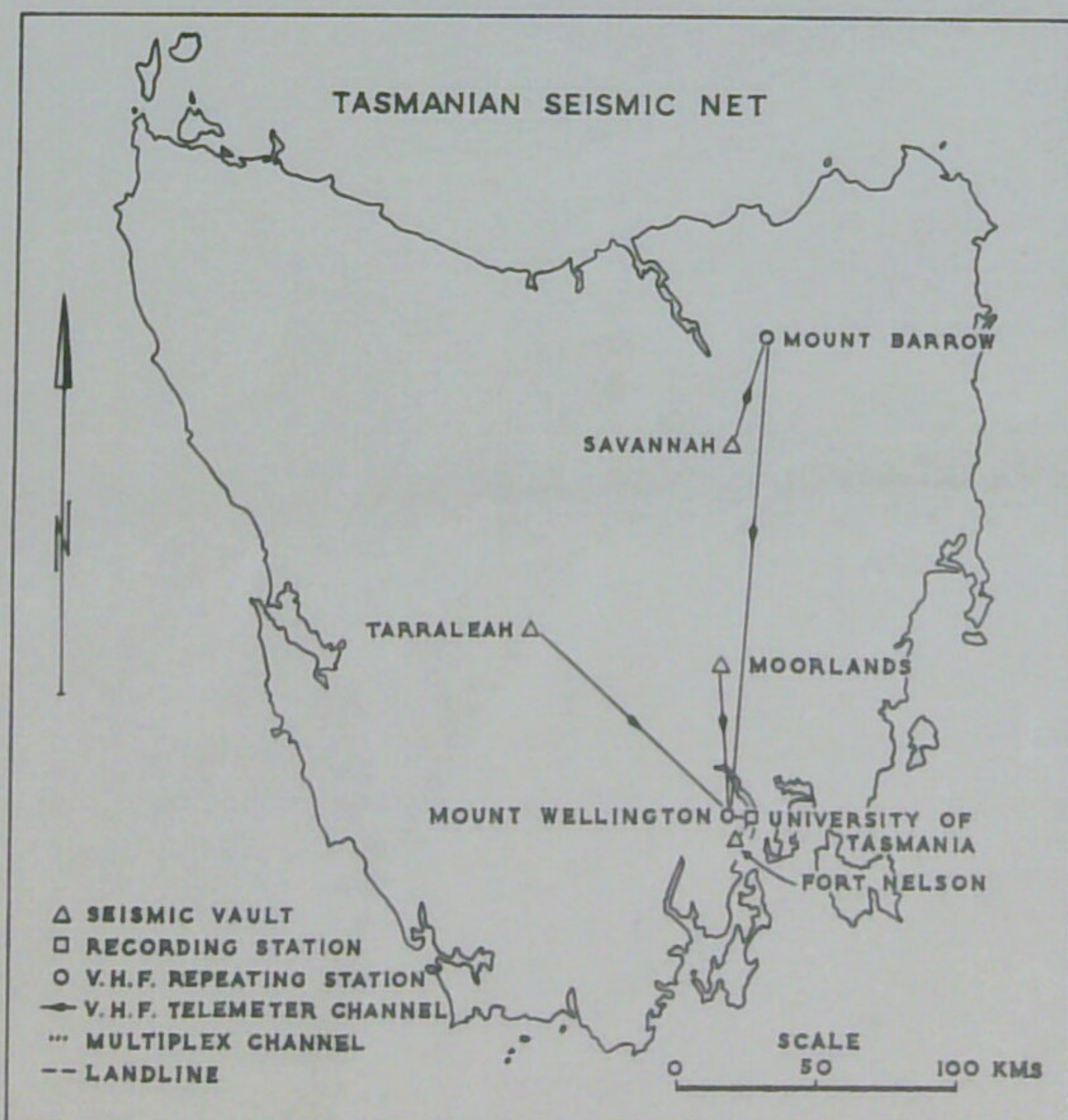
Station Co-ordinates			Altitudes (metres)	Foundations
Fort Nelson (FN)	42° 55' 35.39"S	147° 21' 13.02"E	184.1	Dolerite
Tarraleah (T)	42° 18' 16.34"S	146° 27' 03.51"E	579.1	Basalt
Moorlands (M)	42° 26' 33.31"S	147° 11' 29.26"E	324.6	Top contact of dolerite sill
Savannah (S)	41° 43' 17.59"S	147° 11' 22.41"E	179.8	Dolerite

Inter-station distances(metres)		Bearings	Back Bearings
FN - T	101285	305° 42' 15"	133° 18' 55"
FN - M	55375	346° 03' 28"	166° 10' 04"
FN - S	134526	354° 10' 30"	174° 17' 08"
T - M	62891	104° 21' 43"	283° 51' 46"
T - S	89086	43° 27' 24"	223° 07' 44"
M - S	80089	359° 53' 12"	179° 53' 17"

TIME

All stations are radio-telemetered to record on a single multipen recorder (90 mm. per min., response to 50 cycles per sec.) timed by a Rohdë & Schwartz quartz crystal clock. The system is also recorded in parallel on multi-channel magnetic tape.

Seismometer installations not yet permanent, current installation is given overleaf.



PROVISIONAL SEISMOLOGICAL BULLETIN



September 1960

Instruments

FN Sprengnether (Series H) EW, pendulum 15.3 sec., galvanometer $6\frac{3}{4}$ sec.
 FN Willmore short period vertical (operating intermittently)
 M Willmore short period vertical " "
 T Willmore short period vertical " "

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
32	Sept. 1	FN	eL	E	07 53.3	16		USCGS: 27.6S, 176.9W H 07 35 21.9, h 500 km
33	1	FN	e(S)	E	09 39 47	10		Masked by microseisms
			e	E	42 06	13		USCGS; 16.8S, 167.6E
			eL	E	43.2	22		H 09 28 19.5, h 63 km
			M	E	48.3	14		
34	1	FN	eS	E	10 46 30	8		USCGS: 16.5S, 167.6E
			eL	E	49.9	26		H 10 35 01.1, h 27 km
			M	E	51.3	20		
35	1	FN	eL	E	20 20.4	21		USCGS: 16.1S, 179.6W H 20 02 12.8, h 183 km
36	2	FN	eL	E	22 53.3	20		USCGS: 52.0N, 171.4W H 22 02 48.9, h 49 km
37	3	M	eP ✓	Z	05 48 56.5	1		USCGS: 20.9S, 174.4W
		FN	eL	E	06 02.0			H 05 41 39.9, h 61 km
38	3	M	iP ✓	Z	07 52 44.5	1	-	Dilatation
			ipP ✓	Z	53 19.5	1	-	USCGS: 19.0S, 169.1E H 07 46 53.5, h 212 km
39	3	M	iP ✓	Z	12 48 05.5	$\frac{1}{2}$	-	Dilatation
			iScP	Z	53 19.0	2	-	
		FN	iP ✓	E	12 48 10	1		Masked by microseisms
			iS	E	53 27	5		H 12 41 35 Δ 37 ^{0.2}
			e(SS)	E	56 06	21		h 0.06
			iScS	E	57 35	2		USCGS: 6.1S, 154.5E
			eL	E	13 00.8	16		H 12 41 34.9, h 457 km
			M	E	03.7	11		
40	3	FN	eL	E	16 04.3			USCGS: 20.1S, 178.6W H 15 17 28.4, h 645 km

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
141	Sept. 3	M FN	i eL	Z E	23 59 25.0 00 39.9	1	+	Masked by interference USCGS: 44.6N, 149.1E H 23 46 23.9, h 27 km
142	5	M	iP ✓	Z	09 46 12	1		USCGS: 48.9S, 121.2E H 09 41 52.6, h 89 km
143	6	M	iP ✓	Z	14 08 55.5	1	-	Compression
			i	Z	09 13.5	1	-	USCGS: 20.4S, 169.4E
			i	Z	09 29.5	$\frac{3}{4}$	-	H 14 03 01.8, h 35 km
			iPcP	Z	12 05.5	1	-	
		FN	eL	E	14 16.9	25		
144	8	M	iP ✓	Z	11 16 52.0	1	+	Compression
			iPP	Z	18 52.5	1	+	USCGS: 6.2N, 126.2E
			e	Z	18 59.5	2		H 11 07 40.8, h 47 km
145	10	T	iP ✓	Z	10 53 00.0	$\frac{1}{4}$	-	Dilatation
			ipP ✓	Z	55 02.0	1	-	USCGS: 4.0N, 122.6E
			iScP	Z	57 06.0	$\frac{3}{4}$	-	H 10 44 51.2, h 629 km
		FN	iS	E	10 59 47	5	-	
			iScS	E	11 01 52	6	-	
			e	E	06 35	15		
			eL	E	09.9	31		
			M	E	11.7	20		
146	10	T	iP ✓	Z	14 11 12.5	1	-	Dilatation
			ipP	Z	11 25.0	1	-	USCGS: 11.2S, 163.1E
		FN	eL	E	14 23.0			H 14 04 31.9, h 48 km
147	10	T	eP	Z	15 56 25.5 ✓	$\frac{1}{2}$		Masked by microseisms
			ipP	Z	56 35.0 ✓	$\frac{3}{4}$	+	USCGS: 6.6N, 93.8E H 15 45 22.6, h 29 km
148	11	T	i	Z	04 36 42.0	$\frac{1}{2}$	-	Seismic?
149	12	T	e	Z	06 06 30.0	$\frac{1}{2}$		Local?
150	12	T	iP	Z	12 28 28.5 ✓	1	+	Compression
			ipP	Z	28 41.0 ✓	1	-	USCGS: 27.3N, 128.4E
			i	Z	29 04.5	1	-	H 12 17 08.1, h 48 km
			e	Z	29 47.0	1		
		M	iP	Z	12 28 41.5 ✓	$1\frac{1}{2}$	+	Compression
			i	Z	28 52.0 ✓	1	-	
151	12	T	iP	Z	16 09 23.5 ✓	$\frac{1}{2}$	-	Dilatation
			i	Z	09 32.5	$\frac{3}{4}$	-	
			iPcP	Z	10 56.0	$\frac{1}{2}$	-	USCGS: 7.0S, 117.0E
			ipP	Z	11 17.5 ✓	$\frac{1}{2}$	-	H 16 02 05.8, h 611 km
			i	Z	11 57.0	$\frac{1}{2}$	-	
			isP	Z	12 28.0	$\frac{3}{4}$	-	
			iScP	Z	13 52.5	1	+	
		M	iP	Z	16 09 27.5 ✓	1	-	Dilatation
			i	Z	09 37.0	1	-	

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
152	Sept. 13	T	e	Z	18 34 32.0	$\frac{1}{2}$		Local
153	14	T	eP	Z	16 06 11.5	$\frac{3}{4}$		Masked by microseisms
			i	Z	06 21.0	$\frac{1}{2}$	-	USCGS: 6.5S, 155.1E H 15 59 01.7, h 100 km
154	14	T	iP	Z	16 30 40.0	$\frac{1}{2}$	-	Dilatation
			i	Z	30 50.5	$\frac{1}{2}$	-	USCGS: 17.5S, 178.9W
		M	eP	Z	16 30 47.0	1		H 16 24 12.8, h 562 km
155	14	M	eP	Z	22 23 02.0	1		Dilatation
		T	iP	Z	22 23 05.5	1	-	USCGS: 20.9S, 174.1W H 23 18 35.1, h 25 km
156	15	FN	iP	Z	16 05 01.5	$\frac{1}{2}$	+	Dilatation. Local?
157	15	T	iP	Z	18 07 41.0	1	+	Compression
			i	Z	09 49.0	$\frac{3}{4}$	-	
		FN	iP	Z	18 07 44.5	1	-	Compression
			i	Z	07 55.5	$\frac{1}{2}$	-	USCGS: 21.4N, 142.9E
			e	Z	10 14.5	1		H 17 57 42.7, h 361 km
		M	eP	Z	18 07 45.0	1		Obscure
158	16	FN	i	Z	02 42 00.0	$\frac{1}{2}$	-	Quarry blast?
159	17	M	eP	Z	08 18 34.5	$1\frac{1}{2}$		USCGS: 49.4N, 155.2E
		FN	eP	Z	08 18 35.0	$\frac{3}{4}$		H 08 05 29.5, h 28 km
		T	iP	Z	08 18 35.0	1	+	Compression
160	17	T	iP	Z	13 05 48.5	1	-	Dilatation
			iPcP	Z	08 09.5	$\frac{3}{4}$	+	
		M	iP	Z	13 05 49.0	1	-	Dilatation
			iPcP	Z	08 09.5	1	+	
		FN	iP	Z	13 05 52.5	$\frac{3}{4}$	+	Dilatation
			iPcP	Z	08 10.5	$\frac{3}{4}$	+	USCGS: 6.3S, 154.4E H 12 58 56.4, h. 134 km
161	17	T	iP	Z	16 01 41.5	$\frac{3}{4}$	+	Compression
		FN	eP	Z	16 01 44.0	$\frac{3}{4}$		USCGS: 6.3S, 148.8E H 15 54 38.1, h 79 km
162	17	FN	eP	Z	20 03 31.5	$\frac{1}{2}$		USCGS: 20.9S, 174.5W
			ipP	Z	03 41.5	$\frac{3}{4}$	-	H 19 56 11.1, h 28 km
			i	Z	03 52.0	$\frac{3}{4}$	-	
			eL	E	15.3	(8)		Obscure
		T	e	Z	20 03 35.5	1		



International
Seismological
Centre

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s			
163	Sept. 18	T	iP	Z	09 47 42.5	$\frac{1}{2}$	+	Compression
			iPP	Z	49 20.5	1	+	
		M	iP	Z	09 47 45.5	1	+	Compression
			iPP	Z	49 19.5	$\frac{3}{4}$	-	
		FN	iP	EZ	09 47 50.0	1	-	Compression
			e(PP)	Z	49 20.0	1		
			ePPP	Z	49 54.5	$\frac{3}{4}$		USCGS: 6.8S, 129.2E
			eL	E	56.9	3		H 09 40 28.3, h 83 km
			M	E	10 02.1	5		
164	19	FN	iP	Z	01 38 42.0	$\frac{1}{2}$	-	Compression. Local.
165	19	T	e	Z	02 05 02.0	$\frac{1}{4}$		Local
166	19	FN	eL	E	04 05.1	(18)		USCGS: 15.6N, 120.0E H 03 39 40.9, h 97 km
167	19	FN	iP	Z	05 53 47.5	$\frac{1}{2}$	+	Dilatation. Local.
168	19	FN	eL	E	20 01.0			Obscure USCGS: 6.9N, 77.5W H 19 01 25.4, h 66 km
169	20	FN	iP	Z	00 47 50.5	1	-	Compression USCGS: 29.8S, 177.9W H 00 42 22.0, h 493 km
170	20	FN	iP	Z	02 00 05.0	$\frac{1}{2}$	-	Compression. Local
171	20	M	iP	Z	03 09 53.0	1	-	Dilatation
		FN	iP	Z	03 09 55.0	$\frac{3}{4}$	+	Dilatation USCGS: 36.9S, 177.2E H 03 04 53.0, h 91 km
172	20	T	iP	Z	03 04 59.0	$\frac{3}{4}$	-	Dilatation
			i	Z	41 20.5	1	-	
		M	iP	Z	03 40 59.0	1	+	Compression?
		FN	iP	Z	03 41 01.0	1	+	Dilatation
			eL	E	49.9			USCGS: 28.2S, 177.9W H 03 35 34.6, h 47 km
173	20	FN	eP	Z	05 06 21.0	$\frac{1}{4}$		Local
			i	Z	06 22.0	$\frac{1}{2}$	-	
174	21	FN	iP	Z	16 19 12.0	$\frac{1}{2}$	+	Dilatation
			i	Z	19 16.0	$\frac{1}{2}$	+	
		M	iP	Z	16 19 13.0	1	-	Dilatation USCGS: 26.5N, 124.8E H 16 08 14.7, h 207 km



International
Seismological
Centre

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
					h	m	s	s		
175	Sept. 22	FN	e(SS)	E	09	48	46	17		USCGS: 2.8S, 29.8E
			eSSS	E		52	27	22		H 09 14 58.0, h 20 km
			e(L)	E		56.5		27		
			M	E	10	09.2		18		
176	23	T	iP	Z	06	09	32.0	$\frac{1}{2}$	-	Dilatation. Local
			eS	Z		10	17.5	$\frac{1}{4}, 3$		H 06 08 31.43 ^{0.8}
		FN	(e)	Z	06	09	44.0			
			i	Z		10	21.0	$\frac{1}{2}$	+	
			i	Z		10	47.5	$\frac{3}{4}$	+	
		M	e	Z	06	10	23.5			
177	23	FN	iP	Z	16	01	40.0	$\frac{1}{2}$	+	Dilatation
		T	iP	Z	16	01	44.0	$\frac{1}{2}$	-	Dilatation
										USCGS: 23.7S, 179.5W
										H 15 55 46.2, h 473 km
178	23	FN	eP	Z	23	09	35.0	$\frac{3}{4}$		USCGS: 22.2S, 174.8W
			eL	E		22.6		(27)		H 23 02 24.3, h 39 km
			M	E		28.0		14		
179	25	FN	eP	Z	15	47	04.0	$\frac{3}{4}$		USCGS: 17.3S, 173.4W
			e	Z		47	22.0	$\frac{3}{4}$		H 15 39 27.4, h 132 km
180	25	FN	iP	Z	17	40	18.0	$\frac{3}{4}$	+	Dilatation
			i	Z		40	25.0	$\frac{1}{2}$	-	USCGS: 19.5S, 145.6E
										H 17 30 18.4, h 95 km
181	29	T	iP	Z	11	28	30.0	$\frac{3}{4}$	+	Compression
			i	Z		29	02.5	1	-	
			i	Z		29	13.0	1	+	
			iScP	Z		32	29.5	$1\frac{1}{4}$	-	
		M	iP	Z	11	28	32.5	1	+	Compression
			i	Z		29	26.0	1	+	
			iScP	Z		32	30.0	$1\frac{1}{4}$	-	
		FN	iP	Z	11	28	33.0	$\frac{3}{4}$	-	Compression
			i	Z		28	50.0	$\frac{1}{2}$	+	USCGS: 18.9N, 144.7E
			i	Z		29	09.0	1	-	H 11 18 52.9, h 469 km
			iScP	Z		32	32.0	$1\frac{1}{4}$	-	
			eL	E		51.6		24		Obscure

Seismograms read by
Lesley Read.

JUL 26 1964



Box 252c, G. P. O.,
Hobart, Tasmania.

JOINT DIRECTORS
Professor S. Warren Carey
Professor Gordon H. Newstead



TASMANIA UNIVERSITY RADIO-TELEMETERED SEISMIC NET

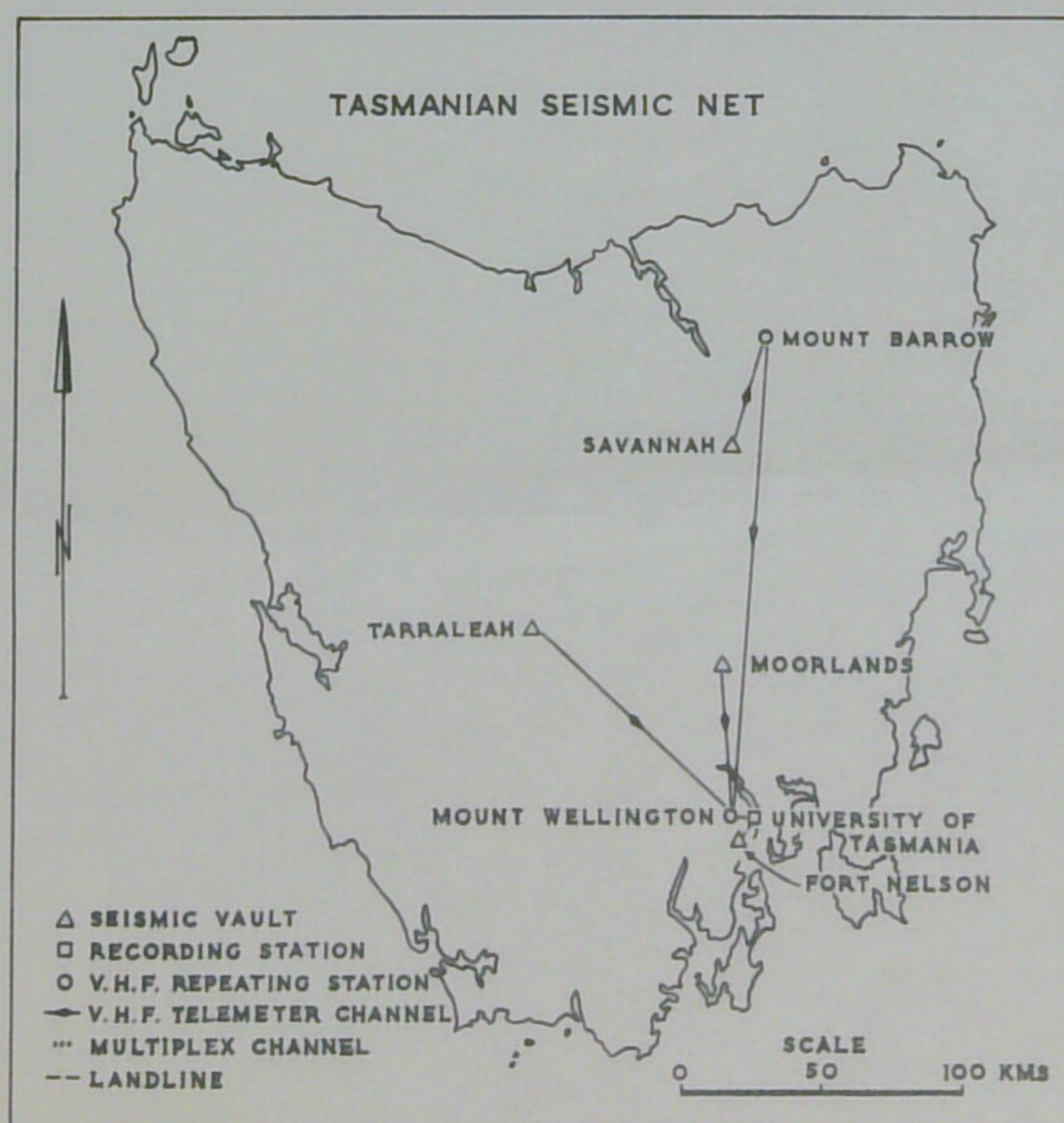
	Station Co-ordinates		Altitudes (metres)	Foundations
Fort Nelson (FN)	42°55'35.39"S	147°21'13.02"E	184.1	Dolerite
Tarraleah (T)	42°18'16.34"S	146°27'03.51"E	579.1	Basalt
Moorlands (M)	42°26'33.31"S	147°11'29.26"E	324.6	Top contact of dolerite sill
Savannah (S)	41°43'17.59"S	147°11'22.41"E	179.8	Dolerite

	Inter-station distances(metres)	Bearings	Back Bearings
FN - T	101285	305°42'15"	133°18'55"
FN - M	55375	346°03'28"	166°10'04"
FN - S	134526	354°10'30"	174°17'08"
T - M	62891	104°21'43"	283°51'46"
T - S	89086	43°27'24"	223°07'44"
M - S	80089	359°53'12"	179°53'17"

TIME

All stations are radio-telemetered to record on a single multipen recorder (90 mm. per min., response to 50 cycles per sec.) timed by a Rohdë & Schwartz quartz crystal clock. The system is also recorded in parallel on multi-channel magnetic tape.

Seismometer installations not yet permanent, current installation is given overleaf.



PROVISIONAL SEISMOLOGICAL BULLETIN

October 1960



Instruments

FN Sprengnether (Series H) EW, pendulum 15.3 sec., galvanometer $6\frac{3}{4}$ sec.
 FN Newstead-Watt horizontal EW (operating intermittently)
 FN Willmore short period vertical " "
 M Willmore short period vertical " "
 T Willmore short period vertical " "

No.	Date 1960		Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
						h	m	s	s		
182	Oct.	1	T	i	Z	04	13	02.5	1	-	
183		2	FN	eL	E	12	32.6				USCGS: 38.7S, 91.5W H 11 53 44.1, h 84 km
184		2	T	eP	Z	16	40	46.0	1		USCGS: 3.1N, 127.7E
			FN	eP	Z	16	40	53.0	$\frac{3}{4}$		H 16 32 06.1, h 31 km
185		2	T	iP	Z	18	19	54.0	1	-	Dilatation
				iPcP	Z		20	11.5	$\frac{3}{4}$	+	
			FN	iP	Z	18	19	59.0	1	+	Dilatation
				iPcP	Z		20	16.5	$\frac{1}{2}$	+	USCGS: 18.6N, 94.9E H 18 08 12.4, h 104 km
186		3	FN	eP	Z	05	23	30.0	1		USCGS: 38.7S, 75.3W
				epP	Z		23	40.0	1		H 05 10 37.3, h 43 km
			M	eP	Z	05	23	32.5	1		
				ipP	Z		23	43.0	1	-	
187		3	T	eP	Z	10	19	36.0	$\frac{1}{2}$		
			FN	iP	Z	10	19	43.5	$\frac{3}{4}$	-	Compression
											USCGS: 3.3S, 137.8E H 10 12 07.8, h 29 km
188		3	FN	eL	E	20	18.4		26		USCGS: 5.7S, 103.0E H 19 50 48.8, h 51 km
189		4	T	eP	Z	09	57	58.0	1		USCGS: 7.5S, 155.3E
				i	Z		58	09.0	$\frac{3}{4}$		H 09 51 16.1, h 134 km
			FN	iP	Z	09	58	04.5	1	+	Dilatation
				i	Z		58	17.0	1	+	
				epP	Z		58	33.0	$\frac{3}{4}$		
				eL	E	10	10.5		19		Masked by microseisms
190		5	FN	iP	E	05	40	50.5	$\frac{1}{8}$	-	Local. Quarry blast?
				i	E		40	51.0	$\frac{1}{8}$	-	
				i	Z		40	51.0	$\frac{1}{2}$	+	



No.	Date 1960		Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
						h	m	s	s		
191	Oct.	5	FN	i	E	05	43	18.5	$\frac{1}{4}$	+	Local. Quarry blast?
192		6	M	iP	Z	06	14	52.5	1	-	Dilatation
			FN	iP	Z	06	14	53.0	1	+	Dilatation
				iP	E		14	53.5	$\frac{3}{4}$	+	
			T	iP	Z	06	14	57.5		-	Dilatation
											USCGS: 27.3S, 179.8E H 06 08 18.8, h 506 km
193		7	FN	i	Z	05	17	04.5	$\frac{3}{4}$	+	
194		7	T	iP	Z	15	25	43.0	1	-	Dilatation
			M	iP	Z	15	25	43.5	1	-	Dilatation
			FN	iP	Z	15	25	47.0	1	+	Dilatation
				eP	E		25	47.5	$1\frac{1}{3}$		
				i	E		25	55.5	$1\frac{1}{2}$	-	H 15 18 39
				ipP	E		25	57.5	$\frac{3}{4}$	+	Δ 37 ⁰ .2, h 0.00 ca.
				i(sP)	E		26	08.0	1	-	
				i	E		27	56	$1\frac{1}{2}$	-	USCGS: 7.4S, 130.7E
				i	E		28	11	$2\frac{1}{2}$	-	H 15 18 30.8, h 45 km.
				i	E		28	58.5	$1\frac{1}{2}$	-	
				iS	E		31	33	8	-	
				iPcS	E		31	54	7	-	
				i	E		32	16	6	+	
				e	E		32	40	21		
				eL	E		32.9		5,17		
				eL	Z		34.1		6		
				eL	E		34.3		3		
				M	E		39.6		9,14		
				M	Z		39.9		4		
195		7	FN	eL	E	20	42.4				USCGS: 20.4S, 113.7W H 20 01 32.6, h 203 km
196		8	T	iP	Z	06	04	31.0	1		
				e	Z		05	22.0	5		H 05 53 08
				ipP	Z		06	45.0	1	-	Δ 85 ⁰ .0 h 0.095 ca
				iPP	Z		07	08.5	$\frac{3}{4}$	-	
			M	iP	Z	06	04	32.0	1	+	Compression
				epP	Z		06	45.5	1		
				iSoS	Z		14	17.5	3	-	USCGS: 40.0N, 129.7E
			FN	eP	E	06	04	39	(3)		H 05 53 01.1, h 608 km
				iPcP	E		04	44	1	+	
				iS	E		14	16	6	-	
				iScS	E		14	22	6	+	
				eSP	E		15	45	8		
				i	E		18	10	7		
				eSS	E		20	03	10		
				i	E		23	10	(11)		
				e	E		26	49	12		
				eL	E		30.6		24		



No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
197	Oct. 8	FN	i(P)	Z	17 39 21.0	1	+	USCGS: 35.9S, 176.9E
			eL	E	48.1	27		H 17 34 00.7, h 176 km
		M	e	Z	17 40 27.0	1	+	
198	8	FN	eL	E	21 15.3	36		USCGS: 7.9N, 92.9E
								H 20 40 06.6, h 84 km
199	9	T	iP	Z	09 12 55.5	1	+	Compression
			i	Z	14 43.5	1 1/2	-	
			e	Z	16 09.5	1 1/2		
		FN	iP	Z	09 12 59.5	1/2	-	Compression
			eP	E	12 59.5	1		
			ipP	Z	13 23.5	1/2	+	USCGS: 40.8N, 141.2E
			i(sP)	Z	13 38.5	3/4	-	H 09 00 42.0, h 155 km
			e	Z	15 15.5	1 1/4		
			eL	E	35.6			Obscure
200	9	FN	iP	Z	09 59 11.0	3/4	+	Dilatation
			epP	Z	59 41.5	3/4		USCGS: 15.1S, 174.0W
			i	Z	10 00 07.0	3/4	-	H 09 51 19.1, h 129 km
		T	iP	Z	09 59 14.0	1	-	Dilatation
			isP	Z	59 57.5	3/4	-	
201	13	FN	eS	E	15 17 33			Obscure
			e(SSS)	E	27 56			
			e	E	32 53	38		USCGS: 54.8N, 161.2E
			eL	E	37.8	31		H 14 52 34.7, h 35 km
202	14	FN	eP	Z	12 25 48.0	1/2		USCGS: 4.7S, 103.1E
			i	Z	25 51.5	3/4	+	H 12 16 30.5, h 159 km
203	14	M	iP	Z	15 37 41.5	1	-	Dilatation
			isP	Z	38 00.5	1	-	
		FN	iP	Z	15 37 45.0	3/4	+	Dilatation
			e	Z	37 52.0	3/4		USCGS: 4.8N, 125.5E
								H 15 28 39.0, h 36 km
204	14	FN	e(PS)	E	21 46 29	24		Masked by microseisms
			e(SS)	E	52 00	23		
			e(SSS)	E	56 24	(22)		USCGS: 51.7N, 172.1W
			eL	E	22 07.0	25		H 21 19 11.4, h 50 km
		M		E	16.9	19		
205	16	FN	iP	Z	04 59 53.0	1/2	-	Compression
								USCGS: 22.9S, 179.3E
								H 04 53 59.2, h 565 km
206	16	FN	eL	E	13 41.3	18		USCGS: 36.2S, 177.3E
								H 13 27 44.5, h 25 km
207	16	FN	i	Z	23 24 55.0	1/2	+	
208	17	FN	eL	E	07 36.7	20		



No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
209	Oct. 18	FN	iP i	Z Z	11 00 14.5 00 21.0	$\frac{3}{4}$ $\frac{3}{4}$	+ -	Dilatation USCGS: 18.7S, 173.3W H 10 52 36.6, h 90 km
210	20	FN	e e	Z Z	00 23 26.5 23 40.0	$\frac{1}{3}$ $\frac{1}{3}$		
211	20	FN	iP iP i ipP iPcP e eL M	Z E E Z Z E E E	11 13 53.0 13 53.0 13 58 14 05.5 16 24.5 18 45 22.5 29.9	1 $1\frac{1}{2}$ $1\frac{1}{2}$ $\frac{1}{2}$ 1 (17) 13 15	- - + + - 	Compression USCGS: 11.0S, 164.9E H 11 05 58.3, h 40 km
212	20	FN	iP	Z	13 18 24.0	$\frac{1}{2}$	+	
213	20	FN	eP e(pP)	Z Z	20 24 11.0 24 21.0	$\frac{1}{2}$ $\frac{1}{2}$		
214	21	FN	eP eP i	Z E Z	14 49 28.0 49 29.0 50 06.0	$\frac{1}{2}$ $\frac{1}{3}$ $\frac{3}{4}$	 +	
215	22	FN	iP iP ipP isP i iPP eS e i(SS) eSSS eL	Z E Z Z Z Z E E E E E	08 28 46.0 28 47 29 04.0 29 15.0 29 36.5 30 09.5 34 14 34 33 36 46 37 04 38.1	$1\frac{1}{2}$ 2 1 2 $\frac{3}{4}$ $1\frac{1}{2}$ 10 (12) 12 24 29	- + - - + - + 	Compression H 08 21 56 Δ 35°.6, h 0.005 ca USCGS: 10.3S, 161.2E H 08 22 00.9, h 93 km
216	24	M T FN	iP iPcP iP isP iPcP iP iP isP iPcP ePcP	Z Z Z Z Z Z E Z Z E	05 18 28.5 21 13.5 05 18 30.5 19 03.0 21 14.0 05 18 30.5 18 30.5 19 02.5 21 14.0 21 14.0	1 1 $1\frac{1}{4}$ 1 1 $\frac{3}{4}$ (1) $\frac{3}{4}$ 1 1	+ + + - + - + + - 	Compression Compression Compression USCGS: 15.0S, 167.4E H 05 12 04.4, h 145 km
217	24	FN	eL	E	17 27.9	22		USCGS: 6.0S, 150.6E H 17 09 14.4, h 122 km
218	25	FN	eP	Z	01 13 45.0	$\frac{3}{4}$		USCGS: 20.0S, 174.6W H 01 06 20.6, h 64 km.



No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
219	Oct. 26	T	i	Z	02 06 17.5	1/3	-	Local
220	26	FN	iP	Z	17 41 04.5	$\frac{3}{4}$	-	Compression
		T	iP	Z	17 41 07.5	1	+	Compression
			i	Z	41 15.5	$\frac{1}{2}$	-	USCGS: 17.8S, 178.6W
			i	Z	41 21.5	$\frac{3}{4}$	-	H 17 34 39.8, h 589 km
221	27	FN	eL	E	15 52.5			Obscure
222	28	T	ePKP	Z	04 38 28.5	1		USCGS: 71.3N, 8.6W
			i	Z	38 39.0	1	-	H 04 18 41.9, h 48 km
		M	ePKP	Z	04 38 29.0	1		
		FN	i	Z	04 38 39.5	$\frac{3}{4}$	+	
223	28	T	e	Z	05 29 42.0			T masked by
			i	Z	29 46.0			interference.
		FN	iP	Z	05 29 58.0	$\frac{1}{2}$		Local.
			eP	E	29 58.0	$\frac{1}{4}$		
224	28	T	ePKP	Z	08 06 33.0	1		USCGS: 71.3N, 8.4W
								H 07 46 38.5, h 61 km
225	28	T	eP	Z	13 31 29.0	1		USCGS: 52.0N, 157.4E
			epP	Z	31 58.0	$\frac{3}{4}$		H 13 18 14.3, h 96 km
			isP	Z	32 13.5	$\frac{3}{4}$	-	
			i	Z	32 23.5	$\frac{3}{4}$	+	
		FN	iS	E	13 42 39	5	-	
			esS	E	43 24	7		
			ePS	E	44 27	5		
226	28	FN	eL	E	23 11.4	27		USCGS: 34.4N, 141.1E
								H 22 29 26.6, h 96 km
227	29	T	i	Z	09 17 46.0	$\frac{1}{2}$	-	Seismic?
			i	Z	17 50.5	1	-	
			e	Z	17 58.5	$\frac{1}{2}$		
228	29	T	iP	Z	09 45 44.0	1	-	Compression
								USCGS: 15.8S, 172.9W
								H 09 37 41.6, h 99 km

Seismograms read by Lesley Read

AUG 30 1961

AUG 31 1961



JOINT DIRECTORS

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Box 252c, G. P. O.,
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TASMANIA UNIVERSITY RADIO-TELEMETERED SEISMIC NET

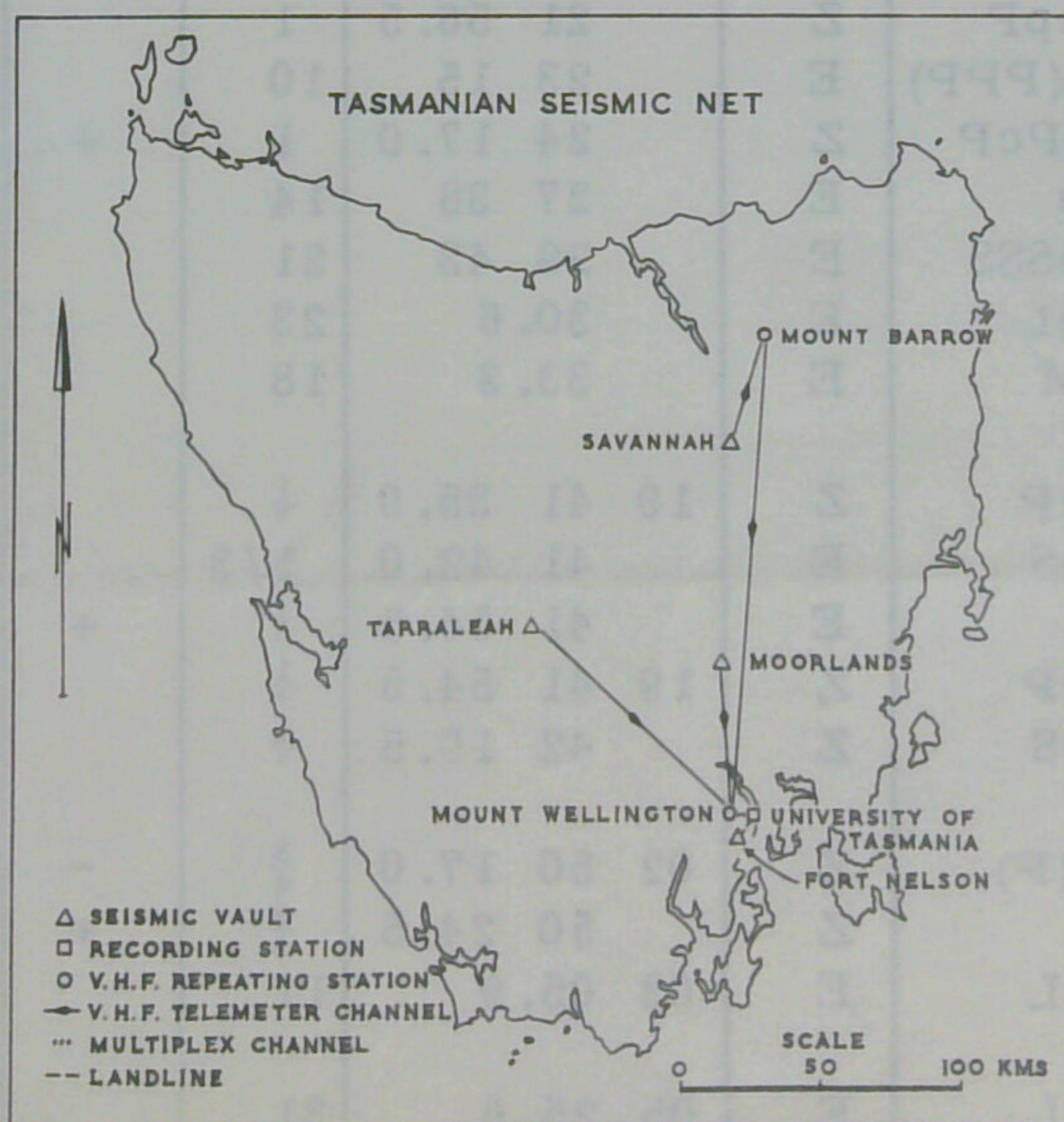
	Station	Co-ordinates	Altitudes (metres)	Foundations
	Fort Nelson (FN)	42° 55' 35.39"S 147° 21' 13.02"E	184.1	Dolerite
	Tarraleah (T)	42° 18' 16.34"S 146° 27' 03.51"E	579.1	Basalt
	Moorlands (M)	42° 26' 33.31"S 147° 11' 29.26"E	324.6	Top contact of dolerite sill
	Savannah (S)	41° 43' 17.59"S 147° 11' 22.41"E	179.8	Dolerite

	Inter-station distances(metres)	Bearings	Back Bearings
FN - T	101285	305° 42' 15"	133° 18' 55"
FN - M	55375	346° 03' 28"	166° 10' 04"
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T - M	62891	104° 21' 43"	283° 51' 46"
T - S	89086	43° 27' 24"	223° 07' 44"
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TIME

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PROVISIONAL SEISMOLOGICAL BULLETIN

November, 1960



Instruments

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 FN Newstead-Watt horizontal EW (operating intermittently)
 FN Willmore short period vertical " "
 M Willmore short period vertical " "
 T Willmore short period vertical " "

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
229	Nov. 1	FN	eP	Z	h m s	s		USCGS: 38.4S, 74.4W H 08 46 01.9, h 97 km
			e	E	08 58 58.5	1		
			e(SKS)	E	59 10	2		
			eL	E	09 10 11	8		
		M	iP	Z	31 18	28		Dilatation
		T	iP	Z	08 59 01.0	$1\frac{1}{2}$	-	Dilatation
230	2	FN	iP	Z	08 59 03.0	1	-	Dilatation
			iP	Z	00 04 21.0	$\frac{3}{4}$	-	Dilatation
		M	iP	Z	00 04 21.0	1	-	Dilatation
			iP	Z	00 04 21.0	1	-	Dilatation
231	2	T	iP	Z	USCGS: 30.2S, 177.7W H 23 58 09.2, h. 43 km			
			ipP	Z	00 04 21.0	$\frac{3}{4}$	-	Dilatation
			iPcP	Z	00 04 21.0	1	-	Dilatation
		FN	iP	Z	17 21 44.0	$1\frac{1}{2}$	-	Dilatation
			iP	Z	21 55.0	$1\frac{1}{2}$	+	
			iP	Z	24 15.5	$1\frac{1}{4}$	+	
			iP	Z	17 21 45.0	$\frac{3}{4}$	-	Dilatation
			iP	E	21 46.0	2	-	
			epP	Z	21 56.5	1		USCGS: 10.9S, 164.9E H 17 14 49.3 h 25 km
			i(PPP)	E	23 15	10		
			iPcP	Z	24 17.0	1	+	
			e	E	27 38	14		
			eSSS	E	29 43	21		
			eL	E	30.6	23		
232	2	FN	M	E	33.3	18		
			eP	Z	19 41 35.0	$\frac{1}{2}$		Local
			eS	E	41 42.0	$1\frac{1}{3}$		
		T	i	E	41 54.5	$\frac{1}{2}$	+	
			eP	Z	19 41 54.5	$\frac{1}{2}$		
233	3	FN	eS	Z	42 19.5	$\frac{1}{2}$		
			i(P)	Z	02 50 17.0	$\frac{3}{4}$	-	USCGS: 22.1S, 175.1W H 02 42 54.5, h 25 km
			i	Z	50 24.5	$\frac{3}{4}$	+	
234	6	FN	eL	E	03 05.9	11		
			eL	E	05 25.6	31		USCGS: 53.0N, 159.8E H 04 38 16.7, h 32 km

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
235	Nov. 6	M FN	iP	Z	h	m	s	s		
			iP	Z	06	21	01.0	1 $\frac{1}{2}$	-	Dilatation
			e	Z	06	21	01.0	$\frac{3}{4}$	-	Dilatation
			e	E		21	12.5	$\frac{1}{2}$		
			e	E		25	57	10		USCGS: 31.0S, 177.7W
			eL	E		28	28	5		H 06 15 05.7, h 184 km
			M	E		29.7		23		
236	8	M FN	iP	Z		33.1		15		
			iP	Z	00	02	55.0	1	-	Dilatation
			eL	E	00	02	57.5	$\frac{3}{4}$	-	Dilatation
237	8	FN	eP	Z		11.7				USCGS: 30.6S, 177.5W
										H 23 56 32.2, h 25 km
238	8	M	e	Z	11	05	54.5	$\frac{1}{2}$		USCGS: 31.1S, 177.6 W
239	9	FN	iP	Z						H 10 59 43.5, h 18 km
239	9	FN	eP	E	01	00	18.0	1 $\frac{1}{2}$		
			ipP	Z	03	29	46.5	$\frac{3}{4}$	+	Compression
			eS	E		29	48.0	$\frac{3}{4}$		
			isS	E		30	00.5	$\frac{3}{4}$	+	H 03 17 59.5
			e	E		39	27	(16)	+	$\Delta 76^{\circ}.2$, h 0.00 ca.
			e	E		39	46	11	+	
			eL	E		44	02	14		USCGS: 60.7S, 24.8W
			M	E		48	36	27		H 03 17 58.5, h 37 km
			iP	Z		53.3		36		
			ipP	E		56.8		20		
				Z	03	29	50.5	1	+	Compression
				Z		30	03.5	1	+	
240	9	FN	e	E						
			eL	E	11	19	27	21		USCGS: 32.7S, 103.4E
241	9	FN				26.1		31		H 10 43 43.1, h 47 km
			eL	E	19	50.0		16		USCGS: 30.7S, 177.1W
242	9	FN								H 19 32 39.0, h 68 km
			eL	E	20	57.9				USCGS: 23.2S, 70.6W
243	9	FN	iP	Z						H 20 06 16.2, h 52 km
			iS	Z	06	59 (11)		$\frac{1}{4}$	+	Compression
244	10	T FN				59 (12.5)		$\frac{1}{4}$	+	Local. Quarry?
			iP	Z	14	52	24.0	1	+	Compression
			isP	Z		52	42.5	1	-	
			i	Z		53	40.5	$\frac{3}{4}$	+	
			eLR	Z	15	05.9		9		
			M	Z		07.1		4		
			eiP	Z	14	52	29.5	1	+	Compression
			iP	E		52	31.0	1 $\frac{1}{2}$	-	
			ipP	Z		52	43.0	$\frac{1}{2}$	+	H 14 44 53
			i	E		53	21	1	+	$\Delta 40^{\circ}.4$, h 0.00 ca.
			i	Z		53	29.5	1	+	
			i	E		53	39.0	2	-	USCGS: 2.6S, 139.4E
			i	Z		53	40.0	$\frac{3}{4}$	+	H 14 44 47.3, h 25 km
			eS	E		58	36.0	5	-	
			i	E		59	14	4	-	
			eSS	E	15	01	32	22		
			eLQ	E		02.6		4, 18		
			eL	Z		06.7		5		
			M	Z		07.2		3		
			M	E		07.7		4		

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
245	Nov. 10	FN	iP eL	Z E	16 35 11.0 48.9	$\frac{3}{4}$ 25	+	Compression USCGS: 22.0S, 171.6E H 16 30 16.2, h 128 km
246	13	FN	iP eP ipP e iPP eS eL M	Z E Z Z Z E E E	06 45 40.5 45 42.0 45 53.0 46 34.0 47 31.0 52 24 55.9 07 06.1	1 $\frac{3}{4}$ 1 $\frac{3}{4}$ 1 11 13 22	- + +	Dilatation H: 06 37 13.5 Δ 47°.1, h 0.00 ca USCGS: 1.4N, 127.2E H 06 37 05.7, h 59 km.
247	13	FN	iSKS iSKKS iSKKKS e(PS) eSS eSSS eL M eW ₂	E E E E E E E E E	09 45 03 45 34 45 39 48 06 53 08 56 55 10 02.8 12.2 11 27.4	7 5 5 20 17 17 24 20 26	+ + +	USCGS: 51.1N, 168.8W H 09 20 36.8, h 65 km
248	14	FN	eP eL M	Z E E	02 10 53.5 13.6 13.9	$\frac{1}{2}$ 9 9		USCGS: 53.5S, 140.7E H 02 08 05.5, h 21 km
249	14	FN	iP	Z	17 59 50.0	$\frac{3}{4}$	-	Dilatation USCGS: 20.5S, 177.7W H 17 53 24.6, h 536 km
250	15	FN	e(L) eL M	E E E	06 36 08 38.4 38.9	14 17 14		USCGS: 62.5S, 161.7W H 06 23 27.5, h 46 km
251	15	FN	eP	Z	09 18 14.0	1		USCGS: 23.2N, 94.3E H 09 05 59.1, h 103 km
252	15	FN	eL	E	21 50.6			USCGS: 35.0S, 178.4E H 21 40 14.4, h 84 km
253	16	FN	eP iPcP M ePcP	Z Z Z	01 29 00.5 31 32.0 01 31 32.0	$\frac{3}{4}$ $\frac{3}{4}$ 1	+	USCGS: 23.7S, 179.3E H 01 23 11.1, h 552 km
254	17	FN	eL	E	04 24.1	19		USCGS: 30.8S, 177.7W H 04 08 03.1, h 71 km
255	17	M	eP iS	Z Z	23 52 04.0 52 20.0	$\frac{1}{2}$ 1/3	+ -	Local Dilatation
		FN	iP iS eS i	Z Z E Z	23 52 11.0 52 34.0 52 34.0 52 37.5	$\frac{1}{4}$ $\frac{1}{2}$ 1/3 $\frac{1}{4}$	+ + +	
256	19	FN	iP	Z	07 11 31.0	$\frac{3}{4}$	+	Compression USCGS: 17.6S, 179.0W H 07 04 58.1, h 594 km



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No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
					h	m	s	s		
257	Nov. 20	FN	e	E	22	27	43	22		USCGS: 6.8S, 80.7W
			e	E		31	12	24		H 22 01 59.9, h 93 km
			i	E		37	29	22	-	
			e	E		39	30	17		
			e(L)	E		49	30	22		
			eL	E		54.0		22		
258	22	FN	eP	Z	03	39	34.5	$\frac{1}{2}$		H 03 31 46
			epP	Z		39	42.5	$\frac{3}{4}$		Δ 41 .9, h 0.00 ca
			eS	E		45	50	8		
			eL	E		51.2				USCGS: 19.2S, 173.1W
			M	E		54.6		19		H 03 31 54.3, h 25 km
259	22	FN	ePS	E	06	42	18	16		USCGS: 35.9S, 52.3E
			eL	E	07	06.8		20		H 06 21 45.0, h 25 km
260	23	T	iP	Z	04	18	11.5	$\frac{3}{4}$	-	Dilatation
			i	Z		18	27.0	$\frac{3}{4}$	+	
			iPcP	Z		20	17.5	1	+	
		FN	iP	Z	04	18	15.0	$\frac{1}{2}$	-	Dilatation
			e	Z		18	39.5	$\frac{3}{4}$		USCGS: 4.9S, 153.8E
			iPcP	Z		20	18.5	$\frac{3}{4}$	-	H 04 11 34.7, h 516 km
261	23	M	eP	Z	14	19	15.5	$1\frac{1}{4}$		USCGS: 24.2S, 176.1W
			e	Z		19	21.0	$1\frac{1}{2}$		H 14 12 21.1, h 28 km
			esP	Z		19	26.5	$3\frac{1}{2}$		
			iPPP	Z		19	43.0	$4\frac{1}{2}$	+	
			i(PcP)	Z		21	55.0	1	+	
		FN	eP	Z	14	19	18.5	$\frac{3}{4}$		
			eP	E		19	22	2		
			epP	Z		19	25.5	$\frac{3}{4}$		
			epP	E		19	25.5	$\frac{1}{2}$		
			esP	E		19	29.0	1		
			iPPP	E		20	48	4	-	
			i(PcP)	Z		22	04.0	1	-	
			e(S)	E		24	38	(10)		
			e	E		26	00	(20)		
			eL	E		27.2		24		
			M	E		35.7		13		
262	23	T	iP	Z	17	01	03.5	1	-	Dilatation
		M	eP	Z	17	01	06.5	1		
		FN	iP	Z	17	01	09.0	$\frac{3}{4}$	-	Dilatation
										USCGS: 4.6N, 125.8E
										H 16 52 12.9, h 143 km
263	23	FN	eL	E	18	14.3		17		USCGS: 24.0S, 176.3W
			M	E		19.8		15		H: 17 56 38.0, h 51 km



No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
264	Nov. 24	M	iP	Z	h	m	s	s		
					04	57	31.0	1	+	Compression
			i	Z		57	41.0	1	+	
			i	Z		57	47.5	1	-	USCGS: 4.6S, 153.0E
			iPcP	Z		59	46.0	1	+	H 04 50 15.8, h 87 km
			isPcP	Z	05	00	16.5	1	+	
		T	ePcS	Z		03	29.5	4		
			e	Z		06	50.0	5		
			iP	Z	04	57	31.0	1	+	Compression
			ipP	Z		57	45.0	$\frac{1}{2}$	+	
			i	Z		58	03.0	$\frac{3}{4}$	-	
			i	Z		58	11.0	1	-	
		FN	iPcP	Z		59	46.0	$\frac{3}{4}$	+	
			ePcS	Z	05	03	30.0	3		
			iP	Z	04	57	34.5	$\frac{3}{4}$	+	Compression
			e	E		57	42	1		H: 04 50 17
			ipP	Z		57	47.0	1	+	Δ 38°.4, h 0.005
			i	Z		58	06.0	$\frac{3}{4}$	+	
			i	Z		58	09.0	$\frac{3}{4}$	-	
			i	Z		58	13.5	1	-	
			iPcP	Z		59	47.0	$\frac{3}{4}$	+	
			ipPcP	Z	05	00	07.0	$\frac{3}{4}$	+	
			eS	E		03	24	13		
			ePcS	Z		03	30.5	3		
			esS	E		03	53	18		
			e	E		06	30	9		
			eSSS	E		06	44	17		
			eScS	E		07	40	2		
			eL	E		09.4		25		
			M	E		10.4		25		
265	24	FN	eP	Z	06	59	36.0	1		USCGS: 24.2S, 176.1W
			eiP	E		59	36.5	2	+	H 06 52 41.1, h. 23 km
			i	Z		59	39.0	$\frac{3}{4}$	-	
			i(pP)	E		59	48	$1\frac{1}{2}$	+	
			i	Z	07	00	19.5	1	-	
			i	E		00	20.0	2	+	
			ePP	E		00	53	3		
			ePPP	E		01	10.0	3		
			ePcP	Z		02	14.0	1		
			i	E		04	04	6	-	
			e	E		04	40	6		
			i(S)	E		05	11	6	-	
			e(L)	E		06.6		31		
			eL	E		07.5		27		
			M	E		13.1		18		
		M	eW ₂	E	09	41.3		25		
			iP	Z	06	59	36.0	2	-	Dilatation
			ePPP	Z	07	01	10.5	3		
		T	iPcP	Z		02	17.0	$1\frac{1}{4}$	-	
			e	Z		03	37.5	5		
			iP	Z	06	59	40.5	1	-	Dilatation
			ipP	Z		59	51.0	$\frac{3}{4}$	+	
			i	Z	07	00	16.5	$\frac{3}{4}$	+	
			iPcP	Z		02	16.0	1	-	

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
266	Nov. 24	FN	eP	Z	08 33 11.0	$\frac{1}{2}$		USCGS: 24.5S, 175.9W
			esP	Z	33 26.5	$\frac{3}{4}$		H 03 26 14.4, h 25 km
		T	eP	Z	08 33 15.0	$\frac{3}{4}$		
267	26	FN	eL	E	18 25.8	13		USCGS: 53.9S, 141.5E
			M	E	26.8	9		H 18 20 22.9, h 25 km
268	27	FN	eL	E	19 04.9	17		
			M	E	05.4	13		
269	27	FN	eL	E	20 55.4	17		
			M	E	57.7	10		
270	28	M	iP	Z	22 01 53.5	$\frac{3}{4}$	+	Compression
		FN	iP	EZ	22 01 55.0	$\frac{1}{2}$	+	Compression
			iS	Z	02 11.5	$\frac{1}{2}$	-	
			eS	E	02 11.5	$\frac{1}{4}$		Local
		T	eP	Z	22 02 02.0	1/3		
			iS	Z	02 22.0	1/3	-	
271	29	FN	iP	Z	07 20 08.5	$\frac{3}{4}$	-	Dilatation
								USCGS: 24.9S, 180.0W
								H 07 14 26.0, h 620 km
272	29	FN	eP	Z	14 18 14.5	$\frac{3}{4}$		USCGS: 26.5N, 126.1E
			epP	Z	18 51.0	1		H 14 07 02.2, h. 147 km.



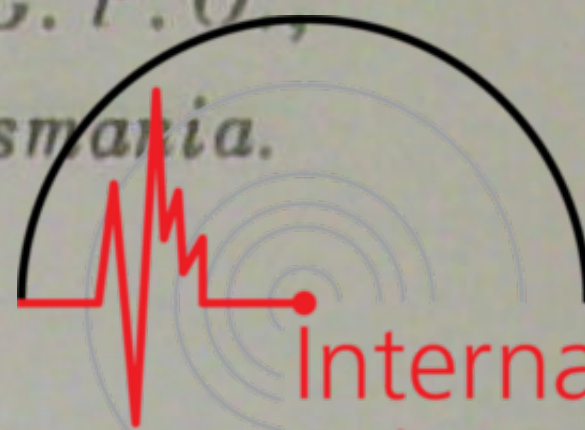
Seismograms read by Lesley Read.



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International
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SEP 12 1961

TASMANIA UNIVERSITY RADIO-TELEMETERED SEISMIC NET

DEC 1960

	Station Co-ordinates		Altitudes	Foundations
			(metres)	
Fort Nelson (FN)	42° 55' 35.39"S	147° 21' 13.02"E	184.1	Dolerite
Tarraleah (T)	42° 18' 16.34"S	146° 27' 03.51"E	579.1	Basalt
Moorlands (M)	42° 26' 33.31"S	147° 11' 29.26"E	324.6	Top contact of dolerite sill
Savannah (S)	41° 43' 17.59"S	147° 11' 22.41"E	179.8	Dolerite

Inter-station distances(metres)

Bearings

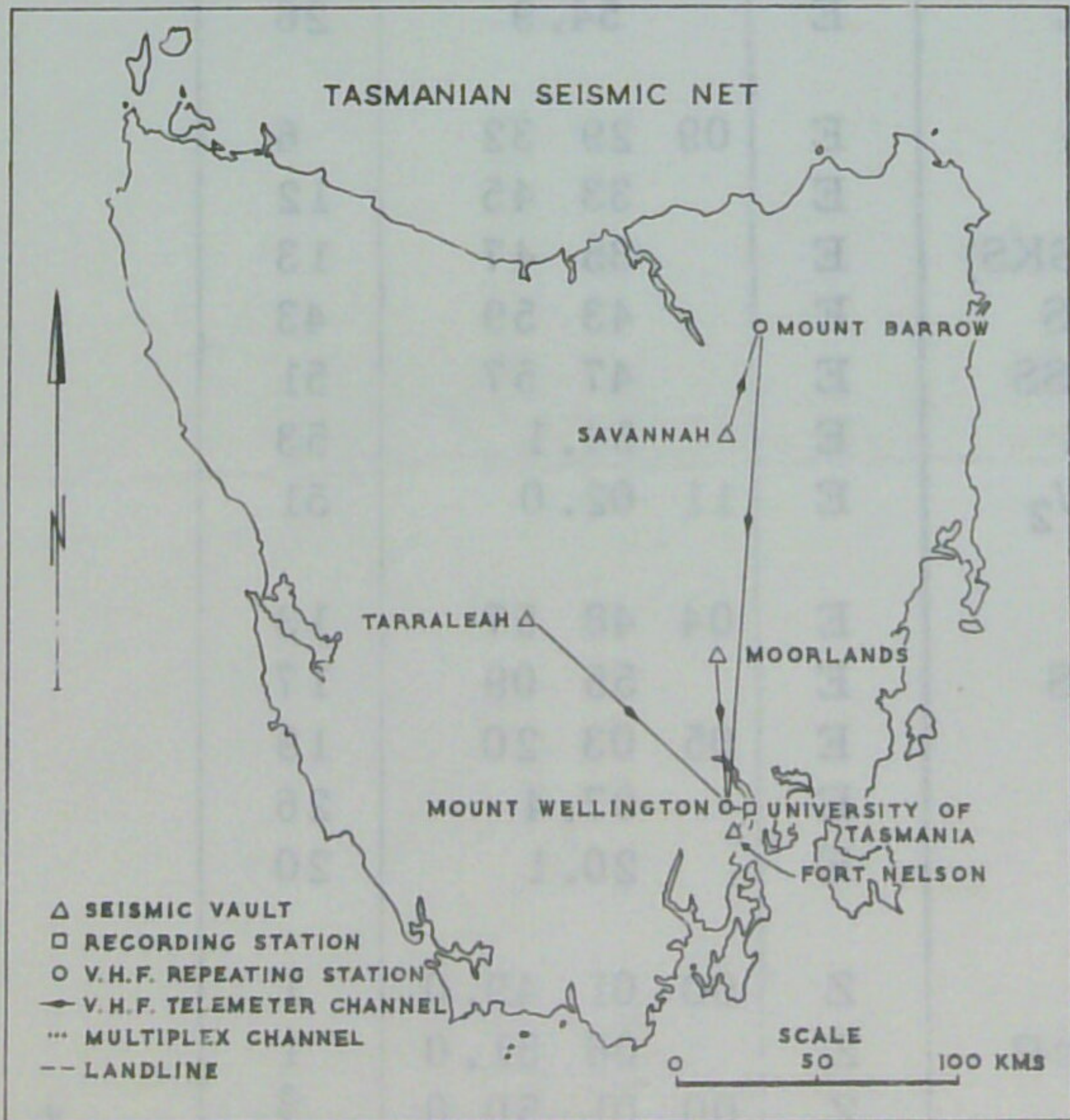
Back Bearings

FN - T	101285	305° 42' 15"	133° 18' 55"
FN - M	55375	346° 03' 28"	166° 10' 04"
FN - S	134526	354° 10' 30"	174° 17' 08"
T - M	62891	104° 21' 43"	283° 51' 46"
T - S	89086	43° 27' 24"	223° 07' 44"
M - S	80089	359° 53' 12"	179° 53' 17"

TIME

All stations are radio-telemetered to record on a single multipen recorder (90 mm. per min., response to 50 cycles per sec.) timed by a Rohdë & Schwartz quartz crystal clock. The system is also recorded in parallel on multi-channel magnetic tape.

Seismometer installations not yet permanent, current installation is given overleaf.



PROVISIONAL SEISMOLOGICAL BULLETIN

December, 1960

Instruments

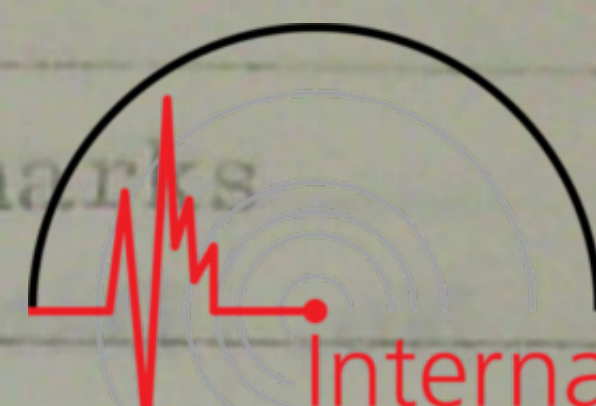
FN Sprengnether (Series H) EW, pendulum 15.3 sec., galvanometer $6\frac{3}{4}$ sec.
 FN Newstead-Watt horizontal EW (operating intermittently)
 FN Willmore short period vertical " "
 M Willmore short period vertical " "
 T Willmore short period vertical " "

No.	Date 1960		Stn.	Phase	Cpt.	Time (GMT)			Per.	Amp.	Remarks
						h	m	s			
3	Dec.	1	T	eP	Z	09	45	40.0	$\frac{1}{2}$		USCGS: 6.9S, 128.9E H 09 38 16.7, h. 32 km.
				e	Z		46	07.0	$\frac{1}{2}$		
			FN	eL	E	09	58.8		17		
4		1	T	iP	Z	10	18	49.5	$\frac{3}{4}$	-	Dilatation USCGS: 5.7S, 145.9E H 10 11 44.6, h. 45 km
			FN	eL	E	10	29.8		(18)		
5		1	FN	eL	E	10	57.8		20		
6		1	FN	eL	E	21	43.9		26		USCGS: 48.8N, 129.3W H 20 47 45.5, h 15 km
7		2	T	eP	Z	04	44	20.5	1		USCGS: 6.6S, 152.5E H 04 37 28.2, h. 33 km.
				eP	Z	04	44	24.0	1		
			FN	eL	E		54.9		26		
8		2	FN	(e)	E	09	29	32	6		USCGS: 14.5S, 69.9W H 09 10 41.0, h 37 km
				e	E		33	45	12		
				e(SKS)	E		35	47	13		
				eSS	E		43	59	43		
				eSSS	E		47	57	51		
				eG	E		54.1		53		
				eW ₂	E	11	02.0		51		
9		3	FN	e	E	04	48	57	13		USCGS: 42.8N, 104.5E H 04 24 17.5, h 45 km.
				eSS	E		55	09	17		
				e	E	05	03	20	19		
				eL	E		07.4		26		
				M	E		20.1		20		
0		5	M	eP	Z	00	01	49.0	1	+	Compression USCGS: 21.2S, 179.0W H 23 55 39.3, h. 633 km
				eScP	Z		06	51.0	1		
			FN	iP	Z	00	01	50.0	$\frac{3}{4}$		
			T	eP	Z	00	01	53.0	1		
				iScP	Z		06	52.0	1		

No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
281	Dec. 7	FN	eP	Z	16 29 14.5	1/3		Local
			iS	Z	29 16.0	1/2	+	
282	8	FN	eP	Z	00 06 50.5	3/4		USCGS: 35.8S, 179.6W
			e	Z	06 57.0	3/4		H 01 01 16.2, h 81 km
283	8	M	eP	Z	01 30 18.0			
		FN	iP	Z	01 30 18.5	3/4	+	Compression
		T	eP	Z	01 30 21.5	1		USCGS: 21.8S, 179.4W
								H 01 24 18.9, h 685 km
284	10	T	iP	Z	14 03 31.0	3/4	+	Compression
			ipP	Z	04 30.5	1	+	USCGS: 1.5 N, 124.3E
								H 13 55 16.5, h 292 km
285	10	T	i	Z	15 19 22.0	3/4	-	Seismic ?
286	11	FN	eP	Z	00 06 59.0	3/4		USCGS: 22.1S, 171.4E
			i	Z	07 01.0	3/4	-	H 00 01 10.4, h 144 km
			i	Z	07 01.5	3/4	+	
			e(pP)	Z	07 33.0	3/4		
			eL	E	14.7	25		
			(i)	E	19.5	7	-	
		T	eP	Z	00 07 02.0	1/2		
			i	Z	07 03.5	1	-	
			e	Z	07 10.0	3/4		
			e(pP)	Z	07 36.5	1		
287	11	T	eP	Z	03 26 46.5	1		USCGS: 1.6N, 126.4E
			epP	Z	26 57.0	3/4		H 03 18 10.9, h 52 km
			ePcP	Z	28 17.0	3/4		
288	11	FN	eP	Z	18 59 27.5	1		USCGS: 15.7S, 166.9E
			(eS)	E	19 04 42			H 18 53 09.2, h 133 km
			eL	E	06.9	19		
			M	E	11.0	21		
		T	iP	Z	18 59 29.0	1	+	Compression
			e	Z	59 32.0	1		
			i	Z	19 00 22.5	1	+	
289	12	FN	eP	Z	10 08 52.5	3/4		USCGS: 28.8S, 167.6E
			epP	Z	09 05.0	3/4		H 10 04 02.0, h 54 km
			eL	E	14.2	23		
		T	iP	Z	10 08 55.0	1	+	Compression
			i(pP)	Z	09 06.0	1	+	
			iPP	Z	09 15.0	1	-	
			eLR	Z	14 04.0	2 1/2		
290	13	FN	iP	Z	07 39 17.0	3/4	-	Dilatation
			ePP	E	39 28			
			i	E	39 47	1/2	-	H 07 36 15
			eS	E	41 39	10		△ 12°.8
			iL!	E	42.5	13		
			M	E	44.8	9		USCGS: 52.1S, 160.9E
			eT	Z	50 29.0	3/4		H 07 36 13.8, h 29 km
			eT	E	51 51	1/4		

Cont. on next page.





No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
297	Dec. 14	T	eP	Z	14 26 38.5	$\frac{1}{2}$		
	Cont.		e	Z	26 50.5	1		
			i+	Z	29 05.0	$\frac{1}{2}$	-	
			e	Z	32 51.0	6		
			eT	Z	38 56.0	$\frac{1}{2}$		
			Tmax	Z	39 39.5	$\frac{1}{2}$		
		FN	e	E	14 26 45	1		
			eL	E	28.7	15		
			M	E	32.4	9		
298	15	T	iP	Z	00 00 09.5	1	+	Compression
			i+	Z	00 21.5	1	+	
			i+	Z	00 40.0	1	+	USCGS: 2.9N, 126.5E
			i-	Z	01 02.0	1	-	H 23 51 28.6, h 77 km
			i	Z	02 18.5	$\frac{3}{4}$	+	
			i+	Z	02 29.0	$1\frac{1}{4}$	-	
		M	iP	Z	00 00 12.5	1	+	Compression
			i	Z	01 01.0	1	+	
			i	Z	02 10.0	1	-	
			i	Z	02 28.5	1	-	
		FN	eP	E	00 00 18	$1\frac{1}{2}$		
			iPP	E	02 13	2	+	
			iS	E	07 14	12	+	
			iPS	E	07 35	9	+	
			i-	E	08 21	8		
			iScS	E	09 57	12	+	
			iSS	E	10 41	15	+	
			eG	E	13.6	54		
			M	E	18.3	17		
299	15	FN	iP	Z	14 05 21.5	$\frac{1}{2}$	-	Dilatation
			i	Z	05 29.5	$\frac{3}{4}$	+	
			i+	Z	05 31.5	$\frac{1}{2}$	-	
			eT	Z	17 32.0	$1/3$		
		T	eP	Z	14 05 34.5	$1/3$		
			eT	Z	17 51.0	$1/3$		
300	15	M	eP	Z	18 40 10.5	1		
		FN	iP	Z	18 40 11.5	1	+	Compression
		T	iP	Z	18 40 15.0	1	+	Compression
								USCGS: 18.1S, 178.5W
								H 18 33 45.9, h 702 km
301	16	FN	iP	Z	08 59 30.5	$\frac{3}{4}$		Dilatation
								USCGS: 16.3S, 178.0E
								H 08 52 17.3, h 44 km
302	16	FN	iP	Z	10 18 50.0	$\frac{1}{2}$	+	Compression
		T	eP	Z	10 18 53.5	$\frac{1}{2}$		



No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
303	17	FN	eP	Z	02 16 09.0	$\frac{1}{2}$		H 02 13 12
			iS	Z	02 18 27.0	1	+	$\Delta 12^{\circ}.4$
			eL	E	02 18.7	16		
			eT	Z	02 28 43.0	$\frac{1}{2}$		
			Tmax	Z	02 29 10.5	$\frac{1}{2}$		
		M	eT	Z	02 29 01.5	$\frac{1}{2}$		
		T	eT	Z	02 29 02.0	$\frac{1}{2}$		
304	17	FN	eL	E	05 32.0	17		
305	17	T	iP	Z	10 45 33.0	$1\frac{1}{2}$	+	Compression
			i	Z	10 45 44.0	$1\frac{1}{2}$	+	USCGS: 6.4S, 109.3E
			iPcP	Z	10 46 54.5	1	-	H 10 37 14.1, h 295 km
			ePP	Z	10 47 29.0	1		
		M	iP	Z	10 45 36.5	$1\frac{1}{2}$	+	Compression
		FN	eP	Z	10 45 39.0	$\frac{1}{2}$		
			eP	E	10 45 42	1		
			i	Z	10 45 52.0	$\frac{1}{2}$		
			e(SS)	E	11 55 51	11		
			eL	E	11 01.0	12		
306	18	M	iP	Z	05 17 47.5	1	-	Dilatation
			epP	Z	05 18 13.0	1		
		T	iP	Z	05 17 50.0	1	-	Dilatation
		FN	iP	Z	05 17 50.5	1	-	Dilatation
			epP	Z	05 18 15.5	$\frac{1}{2}$		USCGS: 14.8S, 167.6E
								H 05 11 21.9, h 93 km
307	18	T	eP	Z	18 30 16.0	1		USCGS: 8.5N, 125.9E
		FN	e	E	18 42 37			H 18 20 43.3, h 36 km
308	19	FN	iP	Z	22 20 42.0	$\frac{1}{2}$	+	Compression
			i	Z	22 20 51.5	$\frac{1}{2}$	-	USCGS: 12.6S, 166.8E
			eL	E	22 41.2	13		H 22 13 58.8, h 66 km
309	20	FN	eP	Z	11 48 13.5	$\frac{1}{2}$		USCGS: 21.1S, 179.1W
								H 11 42 04.9, h 662 km
310	20	FN	iP	Z	15 40 37.0	$\frac{1}{2}$	-	Dilatation
			eT	Z	15 52 52.0	$\frac{1}{2}$		
311	20	FN	eP	Z	22 10 51.5	$\frac{1}{2}$		H 22 07 52
			epP	Z	22 11 01.0	$\frac{1}{2}$		$\Delta 12^{\circ}.6$, h 0.00
			iS	Z	22 13 12.0	$\frac{3}{4}$	-	
			eL	E	22 13.3	12		
			eT	Z	22 23 10.5	$\frac{1}{2}$		
312	21	T	iP	Z	22 35 05.5	$1\frac{1}{2}$	-	Dilatation
		FN	e(S)	E	22 39 15	9		
			eL	E	22 39.5	21		USCGS: 62.5S, 167.1E
			M	E	22 42.3	10		H 22 29 54.9, h 29 km

No.	Date 1960	Stn.	Phase	Cpt.	Time(GMT)	Per.	Amp.	Remarks
					h m s	s		
313	Dec. 21	M	eP	Z	23 59 29.5	$\frac{1}{2}$		Local
			i	Z	59 34.0	$\frac{3}{4}$	+	
		FN	eP	Z	23 59 30.5	1/3		
		T	eP	Z	23 59 43.0	$\frac{1}{2}$		
			eS	Z	00 00 05.0	$\frac{1}{2}$		
314	22	FN	iP	Z	02 32 21.5	$\frac{3}{4}$	+	Compression USCGS: 29.8S, 179.6W H 02 25 29.3, h 379 km
315	22	FN	eP	Z	06 37 42.0	$\frac{3}{4}$		USCGS: 30.8 S, 177.1 W
			i	Z	37 47.5	$\frac{3}{4}$	+	H 06 31 21.5, h 46 km
			iS	Z	37 57.5	$\frac{1}{2}$	-	
			eL	E	46.2	28		
			M	E	49.5	19		
316	22	FN	eP	Z	14 18 49.0	$\frac{1}{2}$		USCGS: 27.8S, 176.1W
			eL	E	29.7	17		H 14 12 18.7, h 60 km
			M	E	35.3	16		
317	22	M	iP	Z	21 09 07.0	1	+	Compression
			i	Z	09 12.5	$\frac{1}{4}$	-	
			epP	Z	10 26.0	1 $\frac{1}{2}$		
			eScP	Z	14 28.5	1		
		T	iP	Z	21 09 07.0	$\frac{3}{4}$	+	Compression
			i	Z	09 12.5	$\frac{1}{4}$	-	
			i	Z	09 22.0	1	-	USCGS: 6.8S, 155.3E
			epP	Z	10 25.0	1 $\frac{1}{4}$		H 21 02 41.1, h 469 km
			iPP	Z	10 32.5	1	-	
		FN	iP	Z	21 09 10.5	$\frac{1}{2}$	+	Compression
			eP	E	09 12	1		
			i	Z	09 26.0	$\frac{1}{2}$	-	H 21 02 40
			epP	Z	10 29.5	2		$\Delta 36^{\circ}.6$, h 0.06
			iPP	Z	10 39.0	$\frac{3}{4}$	+	
			ePcP	Z	11 23.5	$\frac{3}{4}$		
			iS	E	14 23	7	-	
			eScP	Z	14 29.5	1		
			iScS	Z	18 40	4	-	
			eL	E	21.0			
318.	23	T	eP	Z	09 51 13.0	1		
		FN	iP	Z	09 51 19.0	1	-	Dilatation
			epP	Z	51 43.5	1		USCGS: 3.3S, 101.9E H 09 41 48.4, h 134 km
319	23	FN	eP	Z	10 57 32.5	$\frac{3}{4}$		USCGS: 8.2N, 125.7E H 10 47 57.9, h 67 km
320	24	T	iP	Z	16 43 12.0		+	Compression.
			i	Z	43 25.0		-	
		FN	iP	E	16 43 27	$\frac{1}{4}$	-	USCGS: 38.4S, 143.6E
			i	E	43 46	$\frac{1}{2}$	+	H 16 42 14.7, h 77 km
			i	E	44 01	1	-	
			i	E	44 47	2	-	



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No.	Date 1960	Stn.	Phase	Cpt.	Time (GMT)	Per.	Amp.	Remarks
					h m s	s		
321	Dec. 26	FN	e(S) eSSS eL	E E E	01 09 00 11 32 12.9	27		USCGS: 23.7S, 176.9W H 00 56 16.6, h 59 km
322	26	FN	e(L) eL	E E	05 05 25 10.2	31		USCGS: 57.4S, 26.2W H 04 32 30.1, h 25 km
323	26	FN	eP eS eL eT	Z Z E Z	09 26 26.0 28 42.0 29.0 38.8	$\frac{1}{2}$ $\frac{3}{4}$ 15 $\frac{1}{2}$		H 09 23 34 $\Delta 12^{\circ}.0$
324	26	FN	iP eS eL M eT Tmax T eP eT T max	Z Z E E Z Z Z Z Z Z Z	13 46 21.0 48 40.0 48.8 49.9 58 55.0 59 47.5 13 46 38.0 59 24.5 14 00 23.5	1 $\frac{3}{4}$ 16 12 $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ $\frac{1}{2}$ 2/3	-	Dilatation H 13 43 23 $\Delta 12^{\circ}.5$ USCGS: 49.4S, 164.3E H 13 43 12.9, h 37 km
325	29	FN	eP ipP eSS eG M T eP	Z Z E E Z Z Z	10 49 12.5 49 23.5 11 04 58 11.8 19 49 15.0 10 49 17.5	1 $\frac{3}{4}$ 21 39 $1\frac{1}{2}$ 1	+	USCGS: 44.8S, 75.6W H 10 36 40.0, h 30 km
326	29	M T FN	eP eP iPcP eL	Z Z Z E	13 49 41.0 13 49 46.0 52 03.0 14 03.0	1 1 $\frac{3}{4}$ 23	+	USCGS: 5.5S, 146.1E H 13 42 34.6, h 57 km
327	31	FN	e(P) e	Z Z	16 13 54.5 14 05.5	$\frac{3}{4}$ $\frac{3}{4}$		USCGS: 7.8S, 120.1E H 16 05 22.1, h 25 km
328	31	FN M T	eP eP eP	Z Z Z	18 20 41.5 18 20 45.5 18 20 48.5	3 $1\frac{1}{2}$ 1		USCGS: 43.9S, 75.0W H 18 08 12.3, h 92 km
329	31	T FN	iP epP iP epP	Z Z Z Z	21 13 05.0 13 28.5 21 13 09.0 13 32.5	$\frac{1}{2}$ $\frac{3}{4}$ $\frac{3}{4}$ 1	- -	Dilatation Dilatation USCGS: 5.0S, 151.4E H 21 06 01.7, h 138 km

Seismograms read by Lesley Read