

# UNIVERSITY OF QUEENSLAND

## SEISMOLOGICAL STATION

BRISBANE

$\phi = 27^{\circ} 28' 41''$  S.,  $\lambda = 153^{\circ} 1' 52''$  E.,  $h = 15$ m.

*Foundation:* Semi-consolidated alluvium of raised river terrace.

### INSTRUMENTS AND CONSTANTS.

INSTRUMENT	COMPONENT	FREE PERIOD	DAMPING	MAGNIFICATION
Milne Shaw No. 58 .. .. .	N.—S.	12 sec.	20 : 1	250
Milne Shaw No. 60 .. .. .	E.—W.	12 sec.	20 : 1	250

The Station is maintained and operated by the University of Queensland assisted by a grant from the funds of the Australian Council for Scientific and Industrial Research.

DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
1938. Jan. 1 to Jan. 3					Station closed.
Jan. 7	iPNE iSN iSE ME F	15 -	31.8 36.1 36.2 41.1		$\Delta = 250$ ca.
Jan. 10	eLN	21 -	23.7		
Jan. 13	eE eE ME	10 -	18.6 21.5 26.3		
Jan. 18	iE eL	4 -	36.8 50.9		
Jan. 23	iPN eSN eSSN eLN	8 -	43.9 52.9 57.2		
Jan. 24	ePE iSE iPSE eLE ME F	10 - 11 - 13 -	44.9 56.0 57.3 8.9 31.5 16 ca		
Jan. 25	iPNE eSNE LE LN MN ME F	16 - 17 -	59.2 4.0 5.0 5.1 7.9 8.8		
Jan. 26	eN	4 -	11.7		Long waves of small amplitude

DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
Jan. 28	ePNE	4	-	16.3	
	eSN			20.3	
	eSE			20.4	
	eLN			23.7	
	eLE			25.5	
	ME			27.0	
Jan. 29	eLE	11	-	46.0	Long waves of small amplitude
Jan. 30	ePE	17	-	17.3	
	eSNE			21.5	
	ME			26.5	
	MN			26.7	

Certain discontinuities in this and in the preceding Bulletin are due to the University having been in vacation.

W. H. Bryan

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Officer in Charge.

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DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
1938. March 2	ePNE iPPNE iSNE ME	20	-	50.8 51.3 54.5 0.1	$\Delta = 21^{\circ}$ ca.
March 4	iPN ePE iPPE iSNE ME MN	7	-	37.7 37.8 38.2 41.6 46.0 46.1	$\Delta = 21^{\circ}$ ca.
March 5	iE eE	11	-	41.3 45.6	Very small amplitudes.
March 6	iPN iN iSN MN	2	-	1.2 2.3 5.2 9.5	$\Delta = 23^{\circ}$ ca.
March 8	ePN ePE iPPN iSNE MNE	5	-	40.3 40.5 40.7 44.3 48.1	$\Delta = 23^{\circ}$ ca.
	ePN eE iSN iSE	20	-	0.7 3.5 4.7 4.8	$\Delta = 23^{\circ}$ ca.
March 9	iPE ePN iPPN eE iSN MN ME	2	-	9.6 9.7 10.7 13.8 14.3 20.4 21.5	$\Delta = 27^{\circ}$ ca.
March 10	ePN iSN iScS?N	16	-	28.6 34.7 38.4	

DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
March 21	? FNE	1	-	34ca 30ca	Long waves; earlier part of record obscured.
March 22	iPn ePE eE iSN iSE iE iSSNE ME MN	15	-	40.5 40.5 43.0 46.9 47.0 48.2 49.8 55.4 55.5	$\Delta = 44^\circ$ ca.
March 24	iPNE iSE iSN	20	-	8.6 9.3 9.4	$\Delta = 4^\circ$ ca. This is unusually close
March 25	iPE ePPN iPPE eE iSNE LN ME MN	15	-	55.4 56.4 56.4 0.0 0.5 1.6 5.4 5.7	$\Delta = 31^\circ$ ca.
March 26	ePE iSE ME	9	-	14.1 14.8 17.0	$\Delta = 4^\circ$ ca. Compare with March 24.

*W.H. Bryan*

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The Seismological Station of the University of Queensland acknowledges with gratitude the receipt of Bulletins and other publications from the following institutions;

Adelaide Observatory  
Apia Observatory  
California University  
Capetown University  
Kew Observatory  
Manila Observatory  
Melbourne Observatory  
Ottawa - Dominion Observatory  
Oxford University Observatory  
Pasadena Seismological Laboratory  
Poona - Meteorological Department  
Paris - Institut de Physique du Globe de l'Universite  
Riverview College Observatory  
Saint Louis - Jesuit Seismological Association  
Strasbourg:  
    Bureau Central  
    L'Institut  
    Union International  
Washington - United States Coast and Geodetic Survey  
Wellington - Dominion Observatory.

W.H. Bryan,  
Officer in Charge.

February, 1938.

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DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
1938.					
April 2	iE	6	-	25.9	
	iE			32.1	
	ME	7	-	8.5	
	F	8	-	0ca	
April 3	eN	11	-	2.1	
	iN			13.3	
	MN			16.0	
	F	12	-	0ca	
April 4	eE	20	-	47.6	
	iN			47.9	
	ePN	21	-	16.2	$\Delta = 34^{\circ}$ ca.
	iPE			16.2	
	iPPE			17.3	
	i?N			19.6	
	i?E			19.7	
	eSE			21.6	
iSN			21.8		
April 7	i?N	10	-	13.0	
	L?N			16.0	
	F			40 ca.	
April 9	iPE	9	-	14.8	$\Delta = 19^{\circ}$ ca.
	i?E			16.2	
	iSE			18.3	
	ME			23.5	
	F	10	-	30 ca.	
April 13	eN	18	-	51.6	Very small.
April 14	iE	15	-	59.5	Small
	eN	16	-	1.2	
	e?E			2.8	
	MN			10.5	
April 15	eP?N	3	-	3.6	Small
	eP?E			3.8	
	iS?E			6.3	
	iL?N			7.6	
	iL?E			7.7	
	MN			9.8	
	ME			10.2	

DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
April 17 and 18					Station out of order.
April 19	i?NE	11	-	20.7	
	ME	12	-	15.6	
	MN			17.4	
	F	13	-	30.0ca	
April 20	ePN	21	-	48.0	$\Delta = 22^\circ$ ca. Larger amplitudes but otherwise comparable with preceding shock.  Maximum very early.
	iPE			48.1	
	eS?E			51.6	
	iSN			51.8	
	MN			56.4	
	F	8	-	30.0ca	
April 21	iPNE	6	-	31.7	$\Delta = 23^\circ$ ca.
	iSN			35.6	
	LN			36.6	
	LE			36.8	
	MN			38.2	
	ME			38.6	
	F	8	-	30.0ca	
April 23	ePN	16	-	26.0	
	iSN			30.0	
	eSE			30.0	
	ME			35.9	
	MN			36.2	
	F	17	-	0.ca.	
April 24	iS?E	0	-	45.9	
	iSS?E			47.7	
	M			54.3	
April 25	e?N	0	-	11.6	Small
	eN			18.9	
	F	1	-	15.0ca.	
April 26	iNE	9	-	30.2	Very small
	eN			32.4	
	eE			32.5	
April 26	iP?E	13	-	0.4	
	iPP?E			1.0	
	iSE			4.6	
	LE			6.6	
	ME			10.4	
	F	14	-	0 ca.	

*W.H. Bryan*

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N.B. Advice received as to the position of the epicentre of the earthquake recorded on March 22nd shows that the several phases were wrongly interpreted in our last bulletin. The phases recorded as P, S, SS and M were in fact PP, SKS, PS and SS respectively.

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DATE	PHASE	G. M. T.			REMARKS	
		h.	m.	s.		
1938. July 4	iP?N	16-	52.3			
	iSNE		56.2			
	iE	17-	0.0			
	iPE	21-	16.2			
	iPN		16.3			
	iN		19.6			
	iPcPE		19.7			
	iSE		20.7			
	" 5	iPE	2-	7.2		
		iPN		7.3		
		iSN		10.5		
		iE		11.3		
		MN		14.5		
		iPE	2-	58.4		
ePN			58.4			
eS?E		3-	1.6			
iS?N			1.7			
iN			2.3			
LE			4.2			
iPE		9-	54.7			
iPN			54.8			
iSN			58.0			
iSE		58.1				
eLE		59.0				
MN	10-	0.8				
ME		1.4				
" 6	iPE	22-	11.2			
	iSE		14.7			
	" 6	iPE	1-	28.5		
		ePN		28.6		
		iSE		31.6		
		iSN		31.7		
		MN		34.5		
	" 6	iP?E	6-	6.7		
		eP?N		6.7		
		iS?N		10.0		
		iS?E		10.1		
		" 6	iPE	9-	43.6	
	ePN			43.6		
	iSN			46.8		
iSE			47.0			





DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
July 8	iPE ePN eS?E eLNE	22-	1.3 1.3 4.6 7.0		
" 12	eN eN iPNE iSN iSE	3- 12-	34.3 42.2 40.9 44.0 44.1		
" 14	iPNE iSNE	23-	36.0 40.0		
" 16	eE eE iE	9-	5.1 6.3 7.6		
" 22	eLNE	8-38	ca		Long waves
" 23	ePE iSE	23-	5.0 9.1		
" 28	eP?N iS?N eS?E	21-	6.9 10.5 10.6		
" 29	iE iN iE eN iE eLE MN ME	13-	16.4 24.5 24.6 26.1 26.3 39.1 41.1 44.1		

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		h.	m.	s.	
1938 Aug. 1	eN	12-42.1			
	eE	44.1			
	eN	44.6			
	eE	45.0			
" 8	eE	12-42.5			
	iN	42.8			
	iE	46.5			
	iN	46.9			
	eE	48.7			
	eN	50.5			
" 12	ePNE	4-11.0			
	i?NE	13.9			
	iS?NE	15.4			
" 16	ePE	4-39.5			
	ePN	39.7			
	iSNE	49.3			
	eN	6.26.5			Obscured by coda of previous quake
	eN	27.6			
	eN	17-12.9			Very small
eE	13.0				
eN	15.7				
" 18	iPE	9-39.2			
	ePN	39.3			
	iSNE	46.7			
" 19	iN	17- 1.4			Very small
	eE	1.6			
	eN	3.8			
	iE	5.3			
" 20	iPE	5-15.4			
	eSE	21.1			
	ePE	8-36.8			
	iSE	41.3			

DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
Aug. 24	iE	15-	51.0		
	iN		56.5		
	iE		59.0		
	iN	16-	1.1		
	eE		1.4		
" 25	ePN	1-	37.4		
	iPE		37.4		
	iSNE		45.0		
	eN		50.2		
	eN	8-	7.5		Very small
	eN		12.9		
" 29	iPNE	15-	31.0		
	iSN		38.0		
	iSE		38.1		
	iN		41.7		
	iE		41.8		
" 30	iPN	11-	55.0		
	ePE		55.1		
	iSN		59.7		
	iSE		59.8		
	iPE	17-	15.3		
	ePN		15.4		
	iS?NE		20.7		
	iE		23.7		
	iN		26.1		
	" 31	iPNE	17-	50.0	
iSNE			53.8		

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		h.	m.	s.	
1938 Sept. 5	?PNE ?SNE iE iE eE iN	14-	54.1 58.6 59.6 0.6		
" 7	iPNE iSNE iN  iPN iSN eSE iSSN  iPNE iPPNE iSNE	2-   4-   13-	2.2 8.3 11.5  13.4 21.4 21.5 25.3  3.0 3.4 6.7	$\Delta = 40^{\circ}$ ca.   $\Delta = 58^{\circ}$ ca.   $\Delta = 21^{\circ}$ ca.	
" 9	?PN ?SNE	5-	44.5 48.5		
" 16	eLN  iN eLN	4-  5-	43.0  41.7 45.1		
" 20	eE ?SNE iE MN	13-	40.8 41.3 42.9 49.3		
" 21	iNE iE eN eE MN	19-	11.2 12.5 15.4 18.4 25.5		
" 25	iPN iPPN iSN	20-	18.1 18.6 21.8	$\Delta = 21^{\circ}$ ca.	



DATE	PHASE	G. M. T.			REMARKS
		h.	m.	s.	
Sept. 27	iPN ePE iSNE MN	10-20.6 20.7 24.7 28.7			$\Delta = 23^\circ$ ca.
" 28	iPNE iSNE ME MN	18-18.0 21.8 24 ca 24.6			$\Delta = 21^\circ$ ca.
" 29	eE eLE	10-58.2 11- 5.6			

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