1962

COPIED April 1966 D-Double

DURHAM UNIVERSITY OBSERVATORY ENGLAND

Position:- 54° 46'N, 01° 35'W, height above M.S.L. 103 metres

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ration 20:1, magnification 250, recording N and E component desplacements.

SEISMOLOGICAL BULLETIN FOR 1962 JANUARY AND FEBRUARY

Date		Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
JANUARY							
1	✓	iPZ	23 51 45		-	73°	H 23 40 20 (USCGS)
		iSE'	24 02 05		+		
		eSSE	06 13				
		MN	24 34	15	2		
2	✓	iPZ	12 28 50		+	26°	H 12 22 58 (BCIS)
		iXN	29 17		-		
		iSE	33 09		+		
		eXN	33 59				
		ME	12 39	12	2		
3	X	iPKPZ	07 09 26		+	146°	H 06 49 51 .02 deep (USCGS)
3	✓	iPKPZ	24 10 05		+	145°	H 23 50 29 .01 deep (USCGS)
4	✓	iPPZ	04 50 33		-	78°	H 04 35 43 .01 deep (USCGS)
		iXN	58 19		-		
		iXE	58 33		-		
		iSSN	05 02 28		+		
		ME	05 17	35	16		
		ME	05 22	20	9		
5	✓	iPKPZ	08 27 25		-	140°	H 08 08 07 .01 deep (USCGS)

No N recordings January 7 09 hrs to January 29 09 hrs.
No E recordings January 7 09 hrs to January 31 09 hrs.
No Z recordings January 7 09 hrs to February 1 09 hrs.

FEBRUARY

3	X	ME	01 48	24	14	116°	H 00 37 54 (USCGS)
4	✓	iPZ	21 39 36		+	57°	H 21 29 33 (USCGS)
		ME	21 59				
14	✓	iPPE	06 55 18		-	111°	H 06 36 01 (USCGS)
		iXZ	58 45		+		
		iSKSE	07 01 10		+		
		iXE	02 19		-		
		iSE	03 09		+		
		iPSE	04 39		+		
		GN	22 59				
		MN	07 38	21	130		
		MZ	07 38	21			
		ME	07 43	20	130		

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
18	iPZ	17 36 49		-	73°	H 17 25 17
	iPcPZ	37 02		+		.01 deep
	ipPZ	37 07		-		(USCGS)
20	iPZ	16 17 43		-	78°	H 16 05 45
	iPZ	17 44		+		.01 deep
	ME	16 51	20	5		(USCGS)
	MN	16 57	20	5		
20	ePZ	22 14 14			73°	H 22 02 38
	GE	32 10				(USCGS)
	MN	22 45	20	17		
27	iPSE	13 09 29		-	110°	H 12 40 49
	ME	13 45	20	10		.01 deep
						(USCGS)

Additional reading for 1960 JUNE

JUNE						
19	iPKPZ	12 40 20		+	140°	H 12 21 53
						.08 deep
						(USCGS)

22nd May, 1962.

DURHAM UNIVERSITY OBSERVATORY ENGLAND

Position:- 54 46'N, 01 35'W, height above M.S.L. 103 metres

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ration 20:1, magnification 250, recording N and E component displacements.

SEISMOLOGICAL BULLETION FOR MARCH 1962

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
2	iPKPZ	00 00 50		-	139°	H 23 41 15
	MN	00 57	22	3		.01 deep
	ME	01 01	20	3		(USCGS)
6	ePZ	06 08 19			81°	H 05 55 42
	iSE	18 24		+		(USCGS)
	ME	06 53	15			
7	iPZ	02 10 48		-	15°	H 02 07 12
	ePE	10 48				(USCGS)
7	iPZ	11 13 48		-	101°	H 11 01 00
	iPPZ	18 12		+		.11 deep
						(USCGS)
9	iPKPZ	07 15 54		-	143°	H 06 57 09
						.06 deep
						(USCGS)
11	eSNE	19 45 04			102°.5	H 19 19 06
	MN	20 17	21	13		(USCGS)
	MN	20 21	24	18		
12	iPZ	11 52 18		-	78°	H 11 40 13
	iPZ	52 19		+		.01 deep
	ipPZ	52 43		-		(USCGS)
	iPPZ	55 49		-		
	iSNE	12 02 16		+ -		
	iSSN	07 26		+		
	ME	12 17	32	48		
	ME	12 30	16	16		
17	iPZ	20 57 25		-	55°	H 20 47 32
	iPPZ	59 30		+		(USCGS)
	iPPPE	21 00 28		+		
	iSE	05 06		-		
	ME	21 15	10	90		
18	iXZ	15 35 36		-	19°	H 15 30 34
	iXEZ	35 47		- +		(BCIS)
	iXEZ	35 50		+ -		
	iXZ	35 57		+		
	iXZ	36 07		-		
	iXZ	36 10		-		
	iSNE	39 11		- -		
	iSSN	39 46		-		
	iScPZ	42 49		-		
	MLQNE	15 43	19	45		
	MLRNEZ	15 45	11	43		

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
18	MN	21 06	18	7	84°	H 20 18 54 (USCGS)
21	iPPZ	23 15 43		-	108°	H 22 57 51 .10 deep (USCGS)
22	PPE	15 33 32			120°	H 15 13 04 (USCGS)
	PSE	43 15				
	ME	16 18	25	15		
	ME	17 22	20	2		
26	iPZ	12 14 47		-	57°	H 12 04 55 (USCGS)
	iSN	22 41		+		
	MN	12 33	15			
26	ME	17 43	18	10	113°	H 16 32 44 (USCGS)
22	XE	00 39 43			108°	H 00 19 43 .10 deep (USCGS)
	SKSE	42 54				
	SE	43 49				
	iPSE	46 15		-		

24th May, 1962.

DURHAM UNIVERSITY OBSERVATORY ENGLAND

Position:- 54° 46'N, 01° 35'W, height above M.S.L. 103 metres

SEISMOLOGICAL BULLETIN FOR APRIL 1962

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec. recording vertical component of velocity.
Milne-Shaw free period 12 sec. damping ratio 20:1 magnification 250 recording N and E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	ePE	00 54 00			47°	H 00 45 15 (USCGS)
No recording 6th April 08 hours to 20 April 08 hours						
22	ePZ	05 57 30			79°	H 04 45 20 .01 deep (USCGS)
	iPcPZ	57 40		-		
	eSE	06 07 24				
	iScSE	07 59		+		
	ME	06 28	25	4		
22	ePE	19 27 44			84°	H 19 15 30 .03 deep (USCGS)
	eSE	38 01				
23	iPZ	06 10 14		-	78°	H 05 58 05 (USCGS)
	iPcPE	10 34		-		
	iPPE	13 11		-		
	iSE	20 05		-		
	iSKSE	20 26		-		
	iPSE	20 50		-		
	iSSE	25 44		+		
	ME	06 38	50	160		
	ME	06 49	20	30		
25	ePZ	04 47 26			10°5	H 04 44 48 (BCIS)
	iSE	49 28		-		
	iXEZ	50 40		- -		
	iXNE	50 57		+ +		
	ME	51 48	6	9		
	iXE	52 59		+		
25	ePZ	15 59 49			82°5	H 15 47 29 .01 deep (USCGS)
	iSE	16 10 02		-		
	ME	16 39	19	10		
28	iPZ	11 24 33		-	25°	H 11 18 53 (BCIS)
	iSNE	29 31		- +		
	MN	11 38	10	7		
	MZ	11 38				
28	ePZ	12 49 22			25°	H 12 43 44 (BCIS)
	eSN	54 20				
	iSE	54 25		-		
	MN	12 02	11	3		
30	iPZ	02 38 38		+	81°	H 02 26 30 .02 deep (USCGS)
	iSE	48 51		+		
	ME	03 11	25	9		
	ME	03 14	20	8		

Date.	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
30	ePKPZ	16 36 09			143°	H 16 16 48 (USCGS)
30	ePKPZ	18 51 07			143°	H 18 31 06 .02 deep (USCGS)
30	ePZ	23 54 39			19°.5	H 23 50 20 (BCIS)
	eSE	57 59				
	ME	24 01	10	3		

9th July, 1962.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

Position:- 54°46'N, 01°W, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR MAY, 1962

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec. damping ratio 20:1, magnification 250, recording N and E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
2	iPZ	09 09 38		-	96°	H 08 56 29 .03 deep (USCGS)
3	ePE	23 30 05			11°	H 23 27 26 (BCIS)
	eSE	32 09				
	ME	23 33	15			
5	iPZ	11 24 28		+	84°.5	H 11 11 51 .01 deep (USCGS)
	eSN	34 51				
	ME	11 58	28	1		
	ME	12 08	15	1		
6	ME	05 00	20		154°.5	H 03 13 49 (USCGS)
6	ePKPZ	19 18 57			117°.5	H 19 00 10 (USCGS)
	iPPZ	20 14		+		
	iXNE	23 16		- +		
	iSKSN	25 49		-		
	MN	20 05	20	11		
	ME	20 21	16	7		
7	ePZ	17 51 43			77°	H 17 39 50 (USCGS)
	iPPE	54 57		-		
	iSE	18 01 20		-		
	iSKSE	01 56		-		
	ME	18 25	20	23		
	ME	18 33	14	22.		
	MZ	18 33	14			
	ME	18 44	11	14		
8	ePZ	23 59 43			26°.5	H 23 53 40 (BCIS)
	iPPZ	24 00 20		-		
	eSE	04 04				
10	iPZ	00 13 55		-	61°	H 00 03 40 (USCGS) .01 deep
	ipPZ	14 09		+		
10	iPZ	00 43 17		+		
10	iPE	11 18 38		-	18°	H 11 14 25 (USCGS)
	ME	11 24				
11	eSN	01 11 16			13°.5	H 01 05 30 (BCIS)

	Component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
11	iPZ	14 24 07		-	81°	H 14 11 52 (USCGS)
	iXZ	24 11		-		
	iPcPZ	24 15		-		
	iXZ	25 23		-		
	iPPZ	27 21		+		
	iSN	34 30		-		
	iSKSN	34 48		-		
	iSSN	40 01		-		
	MN	14 59	24	80		
	MN	15 01	20	60		
	ME	15 01	20	120		
	MZ	15 01	20			
12	iPN	19 23 27		+	10°	H 19 21 25 (BCIS)
	iSN	25 18		-		
15	iPKPZ	05 42 35		+	118°	H 05 23 46 (USCGS)
	iXZ	43 36		-		
	iPPZ	43 46		-		
	iSKKSE	50 28		-		
	iXE	51 56		+		
	iPSE	53 38		-		
	iPPSN	54 54		-		
	iXN	55 36		-		
	iSSN	59 41		-		
	iSSSN	06 03 59		-		
	ME	06 25	20	40		
	MN	06 32	28	100		
	ME	06 35	21	50		
15	iPNZ	08 36 43		+ +	23°	H 08 31 45 (BCIS)
15	ePZ	19 43 33			71°.5	H 19 32 23 (USCGS)
19	iPZ	15 10 27		-	81°	H 14 58 13 (USCGS)
	iPcPZ	10 42		-		
	iXZ	11 35		+		
	iXZ	13 29		-		
	iPPZ	13 37		+		
	iXZ	14 10		+		
	iXE	16 57		-		
	iSN	20 45		-		
	iSKSE	20 56		-		
	iXE	24 03		-		
	ME	15 47	20	55		
	MN	15 48	18	38		
	MN	15 49	18	37		
	ME	15 50	15	40		
	ME	15 53	16	41		
	MZ	15 53	16			
	ME	15 58	15	27		
19	iSN	20 58 43		+	13°	H 20 53 26 (BCIS)
21	iPZ	12 13 30		-	66°	H 12 02 51 (USCGS)
	iXNEZ	13 41		- - -		
	iXZ	13 51		+		
	iPcPN	14 03		-		
	iPPZ	16 03		-		
	iPPPZ	17 35		+		
	iScPZ	18 01		-		
	iSNEZ	22 13		- - -		
	iXNEZ	22 21		- - -		
	iPSNE	22 43		+ +		
	iSSN	26 13		-		

Continued on sheet 3.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
	continued from sheet 2.					
21	iSSSE	28 58		+		
	MN	12 39	19	105		
	ME	12 44	15	92		
	MZ	12 44	15			
	MN	12 50	11	50		
21	iPKPZ	21 34 27		+	145°	H 21 15 31 .06 deep (USCGS)
	iPKPZ	34 31		-		
	iXE	34 41		-		
	iXNE	34 44		+ +		
	iXZ	35 21		-		
	iXZ	35 25		-		
	iXZ	35 50		+		
	iXZ	36 10		-		
	ipPKPZ	36 16		+		
	iXZ	36 22		+		
	iXZ	36 30		-		
	isPKPZ	37 02		+		
	iXNE	37 12		+ +		
	iXZ	37 22		-		
	iPPZ	37 48		+		
	ipPPZ	38 21		+		
	iSSE	56 04	18	60		
	isSSE	58 43	20	50		
	iSSSE	22 03 56	20	33.		
22	iPKPZ	08 25 47		+	136°	H 08 06 39 .03 deep (USCGS)
	ipPKPZ	26 21		-		
	isPKPZ	26 31		+		
	iPPN	28 29		-		
	ipPPE	29 16		+		
	isPPN	29 21		+		
22	ME	23 21	21	5	126°	H 22 03 36 .02 deep (USCGS)
25	ePN	00 52 56			17°	H 00 48 57 (USCGS)
	MN	00 58	20			
	MN	01 00	15			
25	iPKPZ	04 39 09		+	146°	H 04 19 57 .05 deep (USCGS)
30	iSN	10 16 10		-	39°	H 10 02 52 (USCGS)
	ME	10 22	14			
31	iSKSE	06 51 47		-	108°	H 06 28 26 .04 deep (USCGS)
	iSE	53 44		+		
	ME	07 20	24			

30th July, 1962.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

Position:- 54° 46'N, 01° 35'W, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR JUNE 1962

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ratio 20:1, magnification 250, recording N and E component displacements.

Date	Phase and component	Time G.M.T.	Period Sec.	Amplitude microns and direction	Epicentral distance	Notes
2	eSNE	12 46 02			67°	H 12 26 10 (USCGS)
	ME	13 03	16	2		
	ME	13 06	15	2		
2	ePNE	17 27 50			86°	H 17 15 09 (USCGS)
	eSKSNE	38 15				
	eSN	38 28				
	ME	18 12	16	7		
3	iPZ	15 10 37		+	47°	H 15 02 25 (USCGS)
	eSN	17 25				
	iSNE	17 35		-		
	MN	15 23	20	5		
	ME	15 36	15	2		
11	iPKPZ	04 53 55		-	145°	H 04 35 01 .06 deep (USCGS)
11	ePZ	07 19 37		-	17°	H 07 15 42 (BCIS)
	iPZ	19 41		+		
	iXZ	20 52		-		
	eSN	22 44				
	iSN	22 56		-		
	iXN	24 27		+		
	iXZ	24 46		+		
	MN	07 26	11	18		
12	iPZ	09 49 34 K		-	13°	H 09 46 27 (USCGS)
	eXN	49 51				
	eSN	51 56				
	iXE	55 10		-		
14	iPZ	08 07 08		+	71°	H 07 55 49 (USCGS)
	ME	08 51	15	2		
14	MN	23 05	18	3	86°.5	H 22 14 11 (USCGS)
	ME	23 12	15	5		
17	iPZ	04 41 48		-	103°	H 04 27 38 (USCGS)
	MN	05 32	18			
18	no recording from 08 hrs to 20 June 09 hrs.					
21	ePZ	04 55 53			80°	H 04 43 43 (USCGS)
	iSN	05 05 57		+		
	eSKSE	06 03				
	ME	05 24	22			
21	PKPZ	08 58 02			146°.5	H 08 38 28 .01 deep (USCGS)

Date	Phase and component	Time G.M.T.	Period	Amplitude microns and direction	Epicentral distance	Notes
23	ePN	09 57 36			89°	H 09 44 38 (USCGS)
	iSKSN	10 08 04		+		
	iSN	08 23		+		
	ME	10 34	22	27		
	ME	10 39	15	18		
	ME	10 43	15	22		
	MZ	10 43	15			
24	MN	02 04	19	4	77°.5	H 01 21 18 (USCGS)
25	iPKPZ	01 50 14		+	147°	H 01 31 42 .10 deep (USCGS)
25	MN	07 34			111°	H 06 26 50 (USCGS)
25	iPZ	11 23 19		-	88°.5	H 11 10 23 (USCGS)
	iPPZ	26 53		-		
	iSKSE	33 44		+		
	iSE	33 58		-		
	ME	12 00	21	13		
	ME	12 08	15	33		
	MZ	12 08	15			
28	iPN	06 55 55		-	20°.5	H 06 51 05 (BCIS)
	iSE	59 27		+		
29	ePN	16 38 15			61°	H 16 28 04 (USCGS)
	eSE	46 30				
	ME	17 08				
29	eSNE	22 49 47			42°	H 22 35 41 (USCGS)
	MN	23 02	16			
30	ePN	19 43 27			94°.5	H 19 29 51 (USCGS)
	ME	20 24	21	2		

27th August, 1962.

DURHAM UNIVERSITY OBSERVATORY ENGLAND.

Position:- 54° 46'N. 01°35'W. height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR JULY 1962

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec. damping ratic 20:1 magnification 250, recording N and E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance.	Notes.
1	ME	21 56	20		52°	H 21 23 42 (USCGS)
	MN	21 57	11			
2	iPKPZ	08 51 49		+	134°	H 08 32 38 .01 deep (USCGS)
	iPPZ	54 26		-		
3	iSN	01 03 52		-	10°	H 00 59 41 (BCIS)
3	MN	19 45	20		158°	H 18 13 36 (USCGS)
3	MN	20 00	20		152°	H 18 22 06 (USCGS)
4	ME	08 09			20°	H 07 57 45 (USCGS)
4	MN	08 58				
5	eSKSN	18 04 29			88°	H 17 40 55 (USCGS)
	eSN	04 38				
	ME	18 39		15		
	MN	18 43		15		
6	ePEZ	02 22 42			62°.5	H 02 12 20 (USCGS)
	ePcPZ	23 48				
	iSN	31 05		+		
6	iPZ	09 21 13		+	23°	H 09 16 19 (BCIS)
	iXZ	21 40		+		
	iXZ	21 48		+		
	iXZ	21 55		-		
	iXZ	22 13		-		
	iXZ	23 16		-		
	iSN	25 18		+		
	iXE	29 54		-		
	iLRE	32 53		+		
	MN	09 33	10	7		
	MZ	09 33	10			
	MZ	09 39	8			

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance.	Notes
6	iPZ	23 14 15		-	51°	H 23 05 32 .03 deep (USCGS)
	ipPZ	15 06		-		
	iPcPE	15 27		+		
	iPPE	16 14		-		
	ipPPE	16 58		-		
	iPPPZ	17 24		+		
	iScPZ	19 06		+		
	iSN	21 14		+		
	isSE	22 41		-		
	iScSN	23 43		+		
	iSSE	25 18		+		
	isSSN	26 23		-		
7	ePNZ	06 24 20			74°.5	H 06 12 49 .01 deep (USCGS)
	eSN	34 06				
	MN	07 07	19	2		
8	iPZ	07 40 28		+	55°	H 07 30 50 (USCGS)
10	iPKPZ	05 30 42		-	146°.5	H 05 12 06 .09 deep (USCGS)
10	eSN	10 15 16			23°	H 10 06 03 (USCGS)
	MN	10 20	17			
11	eSN	01 20 35			52°	H 01 03 59 (USCGS)
	MN	01 36	20			
11	MN	13 38	20		98°	H 12 40 31 (USCGS)
12	iPZ	05 45 46		+		
13	eSKSN	03 56 17			98°	H 03 32 01 .01 deep (USCGS)
	eSN	57 11				
	ME	04 38	16	2		
14	MN	20 25	14			H 19 43 53 (USCGS)
15	iPZ	06 59 26		-	80°.5	H 06 47 22 .02 deep (USCGS)
16	iPZ	13 04 54		+	61°	H 12 54 41 (USCGS)
	eSN	13 16				
	MN	13 32	20			
17	ePPZ	05 52 00			116°	H 05 32 09 (USCGS)
	eSSN	06 07 49				
	MN	06 30	17			
	MN	06 40	18			
	MN	06 45	18			
17	iPZ	17 32 24		+	78°	H 17 20 23 (USCGS)
	eSN	42 15		-		
	MN	18 11	21	1		
24	ePE	21 20 08			78°	H 21 08 23 .02 deep (USCGS)
	epPE	20 35				
	iSE	29 53		-		
	ME	21 56	15			

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance.	Notes
25	iPZ	04 48 52		-	69°	H 04 37 51 (USCGS)
	iSE	58 00		+		
	ME	05 11	16	8		
	ME	05 20	1[illegible]	9		
26	iPZ	08 26 47		+	79°	H 08 14 42 (USCGS)
	iPZ	26 48		-		
	iPPE	29 55		-		
	iSE	36 46		+		
	iSKSE	37 05		+		
	iSSE	42 06		+		
	ME	08 57	20	70		
	MZ	08 57	20			
	ME	09 03	18	80		
	MZ	09 03	18			
28	ePKPZ	00 24 35			141°	H 00 05 11 (USCGS)
	PKSN	28 17				
	MN	01 22	20			
30	ePKPN	17 35 42			121°	H 17 16 44 (USCGS)
	iPPN	37 13		-		
	iPPPZ	39 45		-		
	SKSN	42 49				
	iSSN	54 17		+		
	MN	18 31	21	20		
	MN	18 34	18	8		
30	iPZ	20 30 41		-	77°	H 20 18 49 .02 deep (USCGS)
	ipPE	31 23		+		
	iXZ	32 15		-		
	iSE	40 20		+		
	iSKSE	41 00		-		
	isSE	41 20		-		
	iSSN	45 25		-		
	iLQE	49 49	20	32		
	ME	21 03	14	11		
31	iSE	05 37 10		+	91°.5	H 05 13 04 (USCGS)
	iSKSE	36 43		+		
	MN	06 05	19			
	MN	06 11	18			

16th October, 1962.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

Position:- 54° 46'N, 01°35'W, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR AUGUST 1962.

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ratio 20:1, magnification 250, recording N and E component displacements.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance	Notes
1	iPKPZ	04 55 49		+	146°	H 04 36 58 (USCGS)
	iPKPZ	55 54		-		
	eXE	57 25				
	iXN	57 37		-		
	iPPZ	05 00 13		+		
	iSKKSE	07 27		-		
	MN	05 50	22	7		
	MN	06 36	18	3		
2	ePZ	15 41 53			55°	H 15 32 21 (USCGS)
3	iPZ	09 09 33		+	95°	H 08 56 12 .01 deep (USCGS)
	iPPZ	13 28		-		
	iSKSN	19 58		+		
	iSN	20 37		-		
	iPSE	21 50		+		
	iPPSN	23 06		-		
	iSSN	26 40		+		
	iP'P'Z	34 34		+		
	ME	09 53	15	4		
	ME	10 00	19	4		
3	ePZ	11 12 56			50°	H 11 04 04 (USCGS)
	iSN	20 51		+		
	eSSN	23 53				
	MN	11 37	12	3		
	MN	11 39	12	3		
5	MN	09 29	14	4	29°	H 09 08 46 (BCIS) Changing of charts at calculated times of body waves.
6	iPZ	01 42 30		-	35°	H 01 35 31
	ePPN	43 56				
	iSN	48 11		+		
	iSSN	50 56		+		
	MN	01 53	12	6		
6	ePKPZ	21 11 41			152°	H 20 51 57 .01 deep (USCGS)
	iPKPZ	11 47		-		
	ePPZ	15 34				
	ME	22 19	19			
10	iPZ	21 07 56		-	17°	H 21 03 59
	iSN	11 16		-		
	ME	21 13	15	4		
11	iPKPZ	02 06 08			145°	H 01 47 40 .10 deep (USCGS)
	ePPN	09 36				

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
11	iPZ	08 28 17		+	86°	H 08 15 45 .02 deep (USCGS)
	ipPZ	28 56		+		
	ePPZ	31 42				
	iSN	38 46		+		
	iSSN	44 37		-		
	ME	09 02	26	4		
13	iPZ	06 48 27		+	83°.5	H 06 35 56 (USCGS)
	eSN	58 49				
	eSSE	07 04 22				
	ME	07 17	23			
13	eSN	20 29 38			59°	H 20 11 36 (USCGS)
	ME	20 51	11			
14	ME	01 58			169°	H 01 10 51 (USCGS)
	MN	02 53	20	1		
17	eSN	05 29 36			99°	H 05 04 31 (USCGS)
	MN	06 00	20	8		
18	eSN	17 02 26			61°	H 16 43 54 (USCGS)
18	ePZ	17 56 28			61°	H 17 46 15 (USCGS)
	iSN	18 05 01		-		
	MN	18 22	18			
19	iPZ	18 35 45 A		+	51°	H 18 26 39 (USCGS)
	iXZ	35 55		-		
	iPcPZ	37 09		-		
	iPPZ	37 50		-		
	iXZ	39 34		+		
	iSN	43 00		-		
	iSSN	46 29		-		
	MN	18 54	08	19		
	MN	18 59	12	14		
	MZ	18 59	12			
21	iPZ	18 13 13		-	18°	H 18 08 59 (BCIS)
	eSN	16 32				
	SNE	16 36				
	iXNE	16 47				
21	iPZ	18 23 39		-	18°	H 18 19 25 (BCIS)
	iSNE	26 58		-		
	MN	18 31	11	60		
	MN	18 33	10	27		
21	ePKPZ	21 26 06			154°	H 21 06 00 .01 deep (USCGS)
	ipPKPZ	27 01		-		
	iPPZ	29 54		-		
	eXN	38 40				
	eXN	47 47				
	MN	22 26	18	5		
	MN	22 41	15	2		
25	iPKPZ	08 50 26		+	145°	H 08 31 49 .10 deep (USCGS)
	iXZ	50 29		-		
	iXZ	50 56				
25	ME	20 09	12		18°	H 19 58 48 (USCGS)

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
26	iSN	07 12 10		+	85°	H 06 48 57 (USCGS)
	ME	07 34	25	2		
	ME	07 45	15	4		
28	iPNEZ	11 05 01		- + +	22°	H 10 59 49 .025 deep (BCIS)
	ipPNE	05 28		+ -		
	iPPNE	05 36		+ -		
	iXNE	06 01		- +		
	iPcPZ	09 05		-		
	iXNE	09 07		+ -		
	iSNE	09 14		- +		
	iXNE	11 02		+ +		
	iXNE	14 08		- -		
	iXN	24 05		-		
29	ePE	22 49 57			85°	H 22 36 54 (USCGS)
	iSN	23 00 01		+		
	MN	23 29	17	3		
30	ePZ	13 46 19			65°	H 13 35 29 (USCGS)
	eSE	55 12				
	ME	14 15	15	4		
30	iPKPZ	17 37 31		+	146°	H 17 17 52 .01 deep (USCGS)
	iPKPZ	37 40		-		
	eSSE	59 47				
31	MN	11 53	20		140°	H 10 33 30 .01 deep (USCGS)
31	iPZ	17 14 22		-	74°.5	H 17 02 43 (USCGS)
	eSN	23 53				
	iSKSN	24 37		-		
	iSSE	27 57		+		
	GN	33 12				
	ME	17 49	20	3		
	ME	17 58	16	3		

13th November, 1962.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

Position:- 54°46'N, 01°35'W, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR SEPTEMBER, 1962.

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec. damping ratio 20:1, magnification 250, recording N and E component displacements.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance	Notes
1	iPZ	03 57 42		+	74°	H 03 46 05 (USCGS)
	iPPE	04 00 36		-		
	iSE	07 18		-		
	MN	04 39	15	2		
1	iPZ	04 53 17		+	74°	H 04 41 41 (USCGS)
1	ePKPZ	05 10 59			140°	H 04 52 15 .04 deep (USCGS)
	iPKPZ	11 14		-		
	ipPKPZ	12 15		+		
	iPPZ	14 27		+		
	iXZ	14 42		+		
	ipPPZ	15 17		-		
	iXZ	16 42		+		
	iSSN	32 04		-		
1	iPZ	08 02 43		-	74°	H 07 51 08 (USCGS)
	iSN	12 17		+		
	MN	08 46	15	1		
1	iPZ	15 10 41		+	56°	H 15 01 05 (USCGS)
	ipPZ	10 48		+		
	iSE	18 29		+		
	ME	15 41	13	1		
	ME	15 45	11	2		
1	iPZ	19 28 14		-	39°	H 19 20 40 (BCIS)
	iXE	29 40		+		
	iPPE	29 48		+		
	iPcPZ	30 22		-		
	iXZ	31 01		-		
	iPcSN	34 11		+		
	iSE	34 17		-		
	iSSE	37 07		-		
	iScSE	38 31		-		
	MN	19 47	17	330		
	ME	19 50	15	210		
	MZ	19 50	15			
2	ePZ	19 56 10			17°	H 19 52 07 (USCGS)
4	ePN	13 37 52			39°	H 13 30 18 (BCIS)
	eSN	43 47				
	MN	13 55	20			
4	ePZ	23 05 57			34°	H 22 59 17 (BCIS)
	eSN	11 27				
	MN	23 18	25	4		
	MN	23 24	15	2		
10	MN	09 55	12	4	28°	H 09 36 28 (BCIS)

Date	Phase and component	Time G.M.T.	Period sec.	Aplitude microns and direction	Epicentral distance	Notes
10	iPKPZ	16 02 30		-	146°.5	H 15 43 59 .10 deep (USCGS)
	iPKPZ	02 34		+		
	ipPKPZ	03 52		-		
	iPKSZ	05 12		+		
	iPPZ	06 00		-		
12	iPZ	21 05 55		-	50°.5	H 20 57 00 .01 deep
	ipPZ	06 11		-		
	iPcPZ	07 11		-		
	iXZ	08 23		+		
	iSN	13 00		-		
	isSN	13 54		+		
	eSSN	16 38				
	MN	21 29	13	15		
14	iPKPZ	18 36 48		-	145°.5	H 18 17 52 (USCGS)
	iPKPZ	36 50		+		
15	iPZ	23 02 35		+	75°	H 22 50 46 (USCGS)
	iPcPZ	02 49		-		
	ME	23 43	20	7		
17	iPKPZ	18 14 19		-	146°.5	H 17 55 45 .10 deep (USCGS)
18	iPZ	00 40 53		-	79°	H 00 29 05 (USCGS)
	iPcPZ	41 00		-		
	eXZ	41 46				
	iPPZ	44 16				
	iSE	51 04		+		
19	iXE	11 06 56			29°	H 11 01 01 (BCIS)
	ME	11 22	14	1		
22	iPZ	07 03 07		+	73°	H 06 51 32 (USCGS)
	iPcPZ	03 38		-		
	iSN	12 36		+		
	MN	07 32	27	16		
24	iPZ	14 50 24		+	78°	H 14 38 22 (USCGS)
25	iXNEZ	13 08 20			29°	H 13 02 40 (BCIS)
	MN	13 24	14	3		
27	MN	08 25	14	3	29°	H 08 03 21 (BCIS)
28	iPZ	19 07 49		-	77°	H 18 56 09 (USCGS)
	ipPZ	08 31		+		
29	ePZ	15 30 22			97°	H 15 17 48 .09 deep (USCGS)
	eSN	40 56				

3rd December, 1962.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

Position:- 54° 46'N, 01°35'W, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR OCTOBER, 1962.

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ratio 20:1, magnification 250, recording N and E component displacements.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance.	Notes
1	iPZ	12 22 42		+	49°	H 12 13 50 (BCIS)
	iXZ	22 46		+		
	MN	12 48				
3	MNE	01 33			23°.5	H 01 16 47 (USCGS)
4	MNE	04 56			23°.5	H 04 42 06 (USCGS)
4	ePZ	19 51 15			23°	H 19 46 10 (BCIS)
	iprZ	51 23		-		
	iSE	55 33		-		
	isSE	55 46		-		
	MN	20 01				
5	ePEZ	20 10 46			45°	H 20 02 22 (BCIS)
6	iPZ	03 22 13		+	24°	H 03 17 00 (BCIS)
	eSN	26 32				
	iSE	26 36		-		
	MN	03 31	9	3		
6	P	04 00 — (in hour break)			24°	H 03 54 58 (USCGS)
	eSN	04 24				
	iSN	04 27				
	MN	04 09	9	2		
6	PKPZ	04 43 — (in minute break)			141°.5	H 04 23 24 (USCGS)
	ME	05 45	20	5		
	ME	05 51	20	5		
	ME	06 00	16	4		
6/7	ME	01 00			142°	H 23 31 28 (USCGS)
	ME	01 05				
8	PZ	22 09 — (in minute break)			87°	H 21 56 22 (USCGS)
	iSN	19 36		+		
	iPSN	20 58		-		
	MN	22 46	18	20		
	MN	22 53	15	80		
	MZ	22 53	15			
8	iPZ	22 36 43		-	87°	H 22 24 07 (USCGS)
9	ePKPZ	20 33 36			122°	H 20 14 38 (USCGS)
	eSKSE	40 11				
	ME	21 28	21			
13	ePZ	10 31 11			39°.5	H 10 23 37 (BCIS)
	ePPZ	32 57				
	iSN	37 15		-		
	iSSE	40 12		-		
	ME	10 49	13			

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and directions	Epicentral distance	Notes
14	ME	16 04			84°	H 15 08 59 (USCGS)
22	MN	09 28	14	2	29°	H 09 06 10 (USCGS)
22	eSN	15 44 40			73°	H 15 23 33 (USCGS)
	MN	16 14	20			
23	PKP	00 45 37			140°	H 00 26 00 (USCGS)
26	iPZ	11 32 15		+	29°.5	H 11 26 13 (BCIS)

10th January, 1963.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

Position:- 54°46'N, 01°35'W , height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR NOVEMBER 1962.

Instruments:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ratio 20:1, magnification 250, recording N and E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
4	ME	24 02	18	5	116°	H 22 53 34 (USCGS)
7	iSE	13 07 18		+	23°.5	H 12 57 46 (USCGS)
10	iPZ	01 45 15		-	77°.5	H 01 33 19 .01 deep (USCGS)
	iXZ	45 18		-		
	ipPZ	45 38		-		
	iSE	54 57		-		
	ME	02 16	27	2		
	ME	02 23	20	2		
	ME	02 26	22	2		
11	iPZ	11 41 08		-	57°	H 11 31 45 (USCGS)
	iSN	49 27		+		
	iXE	49 32		-		
	ME	12 07	18	3		
11	iPZ	15 24 31		-	49°	H 15 15 34 (USCGS)
	iSE	31 29		-		
	ME	15 46	18	4		
11	ME	17 31	19	1	137°	H 16 09 58 .01 deep (USCGS)
11	ePPE	22 34 21			116°	H 22 14 19 (USCGS)
	ME	23 22	20	5		
	ME	23 27	16	3		
	ME	23 30	18	3		
12	ME	13 50			89°	H 12 49 11 (USCGS)
15	ME	17 01	18		110°	H 15 51 58 (USCGS)
15	iPZ	23 38 15		+	90°	H 23 25 16 (USCGS)
	iSKSE	48 33		+		
	SE	49 (in minute break)				
	ME	24 13	22			
	ME	24 18	18			
16	ME	08 42			127°	H 07 18 37 (USCGS)
16	iPZ	21 22 21		+	82°	H 21 10 02 (USCGS)
	iXZ	22 33		+		
	iSE	32 21		+		
	iSKSE	32 31		+		
	ME	22 07	15	12		
23	iPZ	00 43 19		+	93°	H 00 30 05 (USCGS)
	iPPZ	47 06		+		
	iPSE	55 47		-		
	ME	01 21	20			

contd....

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction.	Epicentral distance	Notes
23	iPKPZ	23 24 23		+	147°	H 23 05 47 .10 deep (USCGS)
24	ME	15 39	22		69°	H 14 21 40 (USCGS)
24	ME	16 50			55°	H 16 19 45 (USCGS)
26	ME	06 03	16	4	52°	H 05 29 30 (USCGS)
26	iPKPZ	16 18 34		-	149°	H 15 58 46 (USCGS)
27	iPZ	07 05 28		-	87°	H 06 52 58 .02 deep (USCGS)
29	ME	20 30	22		142°	H 19 06 38 (USCGS)
30	iPZ	22 05 33		+	80°	H 21 51 23 .01 deep (USCGS)

25th February, 1963.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

Position:- 54°46'N, 01°35'W, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR DECEMBER 1962

Instrument:- Wilson-Lamison seismometer free period 1 sec. coupled to G.E. galvanometer free period 3.4 sec., recording vertical component of velocity.
Milne-Shaw free period 12 sec., damping ratio 20:1, magnification 250, recording N and E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	iPZ	02 01 28		-	72°	H 01 50 20 (USCGS)
7	iPZ	14 15 54		-	90°	H 14 03 37 .07 deep (USCGS)
	ipPZ	17 16		+		
	iPPZ	19 31		-		
	iPPPZ	21 28		-		
	iSKSE	25 40		-		
	iSE	26 03		-		
	iSKKSE	27 43		-		
	iXE	28 58		-		
	iSSE	32 17		+		
8	iPZ	21 39 48		-	96°	H 21 27 22 .10 deep (USCGS)
	iSKSN	49 27		+		
	iSN	50 17		-		
	iSSE	57 29		-		
	ME	22 23	18	8		
8	iPZ	22 06 44		+	75°	H 22 55 01 (USCGS)

No recording 20 December 09 hrs. to 21 December 10 hrs.

22	iPKPZ	01 12 06		-	147°	H 00 52 24 (USCGS)
	iPKPZ	12 15		-		
22	iPKPZ	01 38 31		+	147°	H 01 28 50 (USCGS)
	iPKPZ	38 38		-		
22	iPZ	15 32 00		-	72°	H 15 20 31 (USCGS)
	iPcPZ	32 22		+		
	iSN	41 14		+		
	iSKSN	42 09		+		
	iSSE	46 02		+		
	ME	16 11	14	7		
24	ME	11 33	10	3	29°	H 11 11 44 Atomic Explosion (BCIS)
25	ME	13 54	7		29°	H 13 36 Atomic Explosion (BCIS)
26	iPZ	09 02 15		-	17°	H 08 58 12 (BCIS)
	iSE	05 15		+		
	iXZ	05 30		-		
	iXZ	05 44		-		
	iXZ	06 03		-		
	iXZ	06 16		+		
	iXE	07 58		+		
	ME	09 09	12	3.5		

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
26	iPZ	22 36 35		-	72°	H 22 25 15 (USCGS)
	iSE	45 50		+		
	iSKSE	46 39		-		
	ME	23 14	17	9		
	ME	23 17	17	10		
	ME	23 20	13	7		
26	iPZ	23 35 14		-	57°	H 23 25 17 (USCGS)
	iSE	42 56		+		
27	iPZ	18 30 53		+	80°	H 18 18 42 (USCGS)
29	iPZ	10 54 22		-	94°	H 10 41 04 (USCGS)
	iPPE	58 17		-		
	iSKSE	11 04 56		+		
	iSE	05 15		-		
	ME	11 32	20	7		
29	iPKPZ	15 08 17		-	156°	H 14 47 41 (USCGS)
	ME	16 17	20	2		
31	iPKPZ	20 00 06		-	148°	H 19 40 11 (USCGS)

7th March, 1963.