

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

 Position:- $54^{\circ}46'N$, $01^{\circ}35'W$, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR JANUARY 1966

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
13	iPZ	10 52 25		+	73°	H 10 41 11 (USCGS)
16	iPZ	12 34 26		-	06°	H 12 32 51 (BCIS)
	iXZ	34 45		-		
	iXZ	35 21		+		
	iXZ	35 34		-		
	iSN	35 38		-		
17	iPKPZ	18 08 22		+	146°	H 17 49 59 .09 deep (USCGS)
22	ePN	14 38 02			67°	H 14 27 08 (USCGS)
	iSE	46 43		+		
	ME	15 11	15	18		
24	iPZ	07 32 42		-	56°	H 07 23 08 (USCGS)
	iSE	40 13		+		
	ME	08 02				

SEISMOLOGICAL BULLETIN FOR FEBRUARY 1966

5	iPZ	02 06 22		-	23°	H 02 01 49 (BCIS)
	iSE	10 25		+		
	ME	02 16	12	30		
5	iPZ	15 24 06		-	77°	H 15 12 29 (USCGS)
	MN	15 55				
5	iPZ	16 27 07		+	74°	H 16 16 01 (USCGS)
7	iPZ	04 35 33		-	56°	H 04 26 14 (USCGS)
	MN	05 01	18	3		
7	iPZ	23 15 55		-	56°	H 23 06 35 (USCGS)
	iSE	23 59		+		
	MN	23 41				
	ME	23 45				
10	iPZ	14 35 08		-	100°	H 14 21 11 (USCGS)
	iSKSE	45 22		-		
	eSE	46 12				
	iPSE	47 55		+		
	eSSE	53 02				
	ME	15 11	30	30		
13	iPZ	05 06 07		-	44°	H 04 58 00 (BCIS)
	iSE	12 46		-		

sheet 2 FEBRUARY 1966 continued

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude and direction microns	Epicentral distance	Notes
16	iPKPZ	03 37 42		-	143°	H 03 18 27 (USCGS)
	iXZ	37 58		-		
	iPPZ	41 13		-		
	iSKKSN	47 32		-		
	ME	04 41	20	12		
17	iPSE	12 16 31		+	111°	H 11 48 01 (USCGS)
	iSSE	22 45		-		
22	iPKPZ	05 21 39		+	126°	H 05 02 37 (USCGS)
	iPKJKP	21 41		+		
	iPKIKP	21 46		-		
	ME	06 18	20	30		
28	iPZ	02 13 39		-	77°	H 02 02 14 .03 deep (USCGS)

SEISMOLOGICAL BULLETIN FOR MARCH 1966

2	iPZ	12 02 34		-	73°	H 11 51 21 (USCGS)
3	iPZ	03 37 07		+	75°	H 03 25 28 (USCGS)
6	iPZ	02 25 44		-	61°	H 02 15 57 (USCGS)
	iPPE	29 52		+		
	iSE	34 23		+		
	MN	02 50	20	83		
7	iPE	01 22 18		+	33°	H 01 16 11 (BCIS)
	iSE	28 15		-		
	ME	01 41	11	4		
7	iPZ	21 40 39		+	74°	H 21 29 17 (USCGS)
	eSE	50 16				
	iSKSE	51 04		+		
	MN	22 12	18	200		
8	iPPZ	01 36 44		-	138°	H 01 13 42 (USCGS)
8	iPZ	02 15 10		-	74°	H 02 04 20 (USCGS)
	ME	02 35	20			
8	iPPZ	06 00 11		+	109°	H 05 41 05 (USCGS)
	iPSE	09 16		+		
	MN	06 47	20	7		
12	iPZ	16 44 05		-	88°	H 16 31 22 .01 deep (USCGS)
	iPNE	44 14		- -		
	iPPE	47 04		+		
	iXN	47 43		-		
	iSNE	54 22		- -		
	iSKSN	54 38		-		
	ME	17 19	20	1000		
13	iPKPZ	19 00 14		-	146°	H 18 40 41 .01 deep (USCGS)

sheet 3 MARCH 1966 continued

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
15	ePZ	11 26 54			88°	H 11 14 01 .01 deep (USCGS)
15	ePZ ME	23 45 05 24 27			88°	H 23 31 46 (USCGS)
16	iPKPZ iPKPZ	12 32 35 32 44		+ -	146°	H 12 13 02 (USCGS)
17	iPKPZ iPPZ iSSE	16 09 02 12 30 30 34		- + +	146°	H 15 50 32 .10 deep (USCGS)
20	iPZ iPcPZ iPPZ iPcSN iSE iSSN ME ME	01 52 52 53 42 55 04 57 45 02 01 04 05 00 02 16 02 21		- - - - - + 18 190 15 200	60°	H 01 42 50 (USCGS)
20	iPZ	05 58 27		-	46°	H 05 50 00 (BCIS)
20	iPKPZ iPKPZ	09 24 02 24 10		+ -	146°	H 09 04 32 .01 deep (USCGS)
22	iPZ iPcPZ iPPE iSN iSKSE iSSN MN	08 31 12 31 35 33 52 40 33 41 16 45 20 09 02		- - - + + - 18 420	73°	H 08 19 34 (USCGS)
23	iPZ iPcPZ iSKSE iSE MN	00 17 24 17 30 28 02 28 15 00 52		- - - - 25 24	89°	H 00 04 35 (USCGS)
26	MN	16 01	17	30	73°	H 15 19 03 (USCGS)
29	MN	06 54	15	8	73°	H 06 12 00 (USCGS)
30	iPE iSE	04 28 29 36 52		+ +	58°	H 04 18 38 (USCGS)
30	iSE ME	12 59 44 13 20		- 7	67°	H 12 40 01 (USCGS)
31	iPZ iSE	23 46 45 54 26		- +	52°	H 23 38 01 (USCGS)

26th September, 1966.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

 Position:- $54^{\circ} 46'N$, $01^{\circ} 35'W$, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR APRIL 1966

Instruments:- Wilson-Lanison 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
3	eSE ME	11 45 28 11 52			22°	H 11 36 30 (BCIS)
8	iPZ iSN MN	01 58 10 02 07 34 02 36		- - 20 10	73°	H 01 46 45 (USCGS)
8	iPZ iSE MN	05 56 58 06 00 30 06 02		- - 12 5	19°	H 05 52 41 (BCIS)
11	iPZ	17 29 45		+	81°	H 17 17 34 (USCGS)
11	iSE	23 20 07		-	67°	H 23 00 24 (USCGS)
12	iXZ	23 36 25		+	142°	H 23 15 30 (USCGS)
12	iPSE ME ME	24 06 37 24 43 24 47		+ 19 18 19 22	111°	H 23 37 42 (USCGS)
13	ePSE ME	04 04 04 04 42			111°	H 03 35 16 (USCGS)
13	iPKPZ	04 46 40		-	149°	H 04 27 55 (USCGS)
16	iPZ ME	01 38 02 02 09		- 19 13	66°	H 01 27 15 (USCGS)
16	iPKPZ	15 42 13		-	146°	H 15 23 29 (USCGS)
20	iPZ iPPE iSE ME	16 48 54 50 20 54 34 17 06		- + - 15 8	35°	H 16 42 03 (BCIS)
21	eSE	16 08 22			84°	H 15 45 25 (USCGS)
22	ePSE ME	03 35 22 04 11			111°	H 03 06 32 (USCGS)
22	ME	24 10	15	4	66°	H 23 27 21 (USCGS)
23	iPPZ iPSE ME	00 28 40 38 28 01 05		+ - 36 32	110°	H 00 09 34 (USCGS)
27	MN	20 10	15	4	34°	H 19 48 51 (BCIS)

7th December, 1966.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

Position:- $54^{\circ} 46' N$, $01^{\circ} 35' W$, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR MAY 1966.

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 iSN isSN	16 35 25 45 47 46 54		- - -	88°	H 16 22 56 .03 deep (USCGS)
4	ePE eSE ME	06 42 00 45 56 06 52			22°	H 06 37 01 (BCIS)
4	iSE MN	21 59 19 22 04	12	- 2	26°	H 21 48 58 (BCIS)
5	iPZ iSKSE iSE MN	14 34 09 44 23 44 52 15 12	20	+ - - 20	88°	H 14 21 23 (USCGS)
5	iSE	15 31 13		-	$15^{\circ}.5$	H 15 25 12 (USCGS)
5	iPZ iSE ME	15 56 15 59 00 16 02	10	- + 5	$15^{\circ}.5$	H 15 52 37 (BCIS)
7	iPZ iSE iXE MN	13 13 54 18 34 18 51 13 23	15	- - - 6	26°	H 13 08 15 (BCIS)
9	iPZ eSE iXE ME	00 48 48 53 42 54 01 00 59	17	- - - 17	$28^{\circ}.5$	H 00 42 55 (BCIS)
9	iSE	04 01 27		+	$28^{\circ}.5$	H 03 51 08 (BCIS)
10	MN	21 41			54°	H 21 04 04 (USCGS)
11	ePZ eSE MN	14 30 21 38 47 15 08	19	7	$73^{\circ}.5$	H 14 17 34 (USCGS)
11	MN	15 18	19	6	$73^{\circ}.5$	H 14 26 42 (USCGS)
11	ePZ MN	21 52 21 22 28			$73^{\circ}.5$	H 21 39 35 (USCGS)
14	iPZ	20 39 18		-	66°	H 20 27 27 (USCGS)
15	iPZ	10 17 14		-	29°	H 10 11 08 (BCIS)
15	iPZ iPPZ eSE	14 58 48 15 01 09 08 24		- - -	74°	H 14 46 07 (USCGS)
16	iPPZ	03 06 31		-	118°	H 02 46 42 .03 deep (USCGS)

Sheet 2. May

Date	Phase and component	Time G.M.T.	Period Sec.	Amplitude mecrons and direction	Epicentral distance	Notes
18	ePZ ME	07 44 11 08 14			79°	H 07 32 07 (USCGS)
19	iPZ eSE iXN	07 18 43 28 05 28 15		+ -	70°	H 07 06 27 (USCGS)
20	iPPZ iSE iSSE MN	09 33 16 40 26 48 04 10 20		- + +	105°.5	H 09 14 49 .01 deep (USCGS)
24	iPZ	09 44 46		-	24°	H 09 39 28 (BCIS)
25	iPKPZ	12 26 41		-	146°	H 12 07 05 (USCGS)
25	iPKPZ	13 42 12		-	169°	H 13 20 56 (USCGS)
26	iPKPZ	18 49 21		-	146°	H 18 30 07 .035 deep (USCGS)
27	ePE eSE	22 24 03 32 00			59°	H 22 14 14 (USCGS)
28	ePE iSKSE iSE	00 16 33 27 04 27 23		+ +	87°	H 00 03 57 (USCGS)
28	iPZ	22 01 18		-	73°.5	H 21 50 12 (USCGS)

7th December, 1966.

ADDITIONAL READING MAYDURHAM UNIVERSITY OBSERVATORY, ENGLAND.Position:- $54^{\circ} 46'N$, $01^{\circ} 35'W$, height above M.S.L. 103 metres.SEISMOLOGICAL BULLETIN FOR MAY 1966.

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
29	iPKPZ	14 02 17	-	-	$146^{\circ}.5$	H 13 44 33 (USCGS)

16th December, 1966.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

Position:- $54^{\circ} 46'N$, $01^{\circ} 35'W$, height M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR JUNE 1966

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 ePKPZ ePPN	12 07 07 07 19 10 45		+	148°	H 11 47 33 (USCGS)
2	iPZ iPcPZ ePPN iSN iScSN ME	03 39 29 39 41 42 04 49 02 49 07 04 20	15	+ - - +	74°	H 03 27 53 (USCGS)
4	iPZ eSN	05 20 39 27 40		-	51°	H 05 11 55 (BCIS)
4	ePZ iXE eSE	06 22 00 25 34 26 18		+	24°	H 06 16 55 (BCIS)
4	ePZ iPcPZ iSN iSKSN iScSN iPSN MN	24 00 02 00 31 09 50 10 12 10 36 10 47 24 37	19	+ - - + +	76°	H 23 48 18 (USCGS)
6	iPZ iPcPZ ipPN iXE iSE iXE iXE iXE	07 55 00 56 02 56 10 57 57 08 02 00 03 20 06 10 07 00		- + + - + - + -	51°	H 07 46 15 (BCIS)
6	ePN ePPN iSN MN	21 01 12 05 37 12 57 21 44	22	-	102°	H 20 47 11 (USCGS)
7	ePZ ePPE eSKSE iSN ME ME	01 13 00 16 42 23 31 24 11 01 51 03 21	19	+ 15	93°	H 00 59 47 (USCGS) minor arc major arc
7	ePZ iPPZ iSKSE iSE iSPZ iPSE ME ME	14 13 37 18 12 24 21 24 45 27 26 28 00 14 50 15 05	35 20	- - - + + 65 45	$105^{\circ}.5$	H 13 59 36 .01 deep (USCGS)

Sheet 2. June

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
8	iPZ	20 07 47		-	72°	H 19 56 21 (USCGS)
9	ePZ iPZ	00 24 55 24 58		+	87°	H 00 12 12 (USCGS)
11	iPN iXZ MN	05 24 32 29 16 05 50	20	+ + 4		
11	iPZ eSE	12 10 08 14 28		-	24°	H 12 05 01 (BCIS)
13	iPKPZ	07 52 56		-	146°	H 07 33 13 (USCGS)
13	ePZ	13 23 42			19°	H 13 19 35 (USCGS)
13	iPZ	14 18 37		-	25°	H 14 12 58 (BCIS)
13	ePZ	14 51 36			19°	H 14 47 22 (USCGS)
13	iPKPZ ipPKPZ iPPZ iSKPZ ipPPE iSSE ME	18 27 31 28 30 30 12 30 44 31 04 48 11 19 18	22	+ - - - - + 3	135°.5	H 18 08 38 .04 deep (USCGS)
15	ePKPZ eYT iPPZ iPKSE iPKPScSE iSS□ ME ME ME	01 19 02 21 26 21 44 22 41 34 28 39 36 02 06 02 18 02 21	30 20 20	240 95 105	133°	H 00 59 46 (USCGS)
15	ePZ iXZ iPPZ	01 52 09 54 36 54 53		+ -	133°	H 01 32 55 (USCGS)
16	iPE iSE ME	17 09 28 12 36 17 15	12	- - -	17°	H 17 05 21 (BCIS)
21	iPZ eSE	18 23 41 33 06		-	78°	H 18 11 43 .01 deep (USCGS)
23	ePZ	23 18 03			73°.5	H 23 06 26 (USCGS)
22	ePKPZ iXZ iXZ iPPZ iXE iSKSE iXE	20 46 49 46 54 46 58 48 08 49 54 52 55 54 06		- - - - - -	116°	H 20 29 04 .08 deep (USCGS)

Continued on Sheet 2.

Sheet 3. June

Date	Phase and Component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
	iSPE	56 56		-		
	iXE	21 06 48		+		
	ME	21 34	20	7		
23	iPZ	05 13 09		-	75°.5	H 05 01 42 (USCGS)
24	iPKPZ	08 37 27		-	152°	H 08 17 50 .02 deep (USCGS)
27	iPZ	10 51 27		-	62°	H 10 41 09 (USCGS)
	iPoPZ	52 15		-		
	eSE	59 48				
	eSSN	11 03 39				
	GN	06 47				
	ME	11 21	15	15		
27	iPZ	11 09 38		+	62°	H 10 59 18 (USCGS)
	iPoPZ	10 07		+		
	iPPZ	11 59		-		
	iSE	18 11		-		
	GE	24 47				
	ME	11 39	15	30		
28	ePZ	04 38 18			75°	H 04 26 12 (USCGS)
	iSN	47 54		+		
	iSKSN	48 27		+		
	ME	05 07	20	7		
	ME	05 11	18	12		
	ME	05 14	18	15		
29	iPZ	07 06 27		+	46°	H 06 58 00 (BCIS)
30	ePE	09 10 42			74°	H 08 59 48 .07 deep (USCGS)

8th December, 1966.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

Position:-- $54^{\circ} 46'N$, $01^{\circ} 35'W$, height above M.S.L. 103 metres.

SEISMOLOGICAL BULLETIN FOR JULY 1966

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	06 03 13		-	86 ^o .5	H 05 50 39 .02 deep (USCGS)
	iPcPZ	03 22		-		
	ipPZ	03 45		+		
	iPPZ	06 43		-		
	iSE	13 30		-		
	iSKSE	13 42		-		
	isSE	14 28		+		
	iPSE	15 07		-		
	iSSE	19 30		+		
	ME	06 38	20	5		
ME	06 48	15	4			
3	iPKPZ	04 29 07		+	146 ^o	H 04 09 30 (USCGS)
	iPKPZ	29 19		-		
4	iPZ	03 07 10		-	73 ^o	H 02 55 36 (USCGS)
4	iPZ	12 20 37		-	23 ^o	H 12 15 25 (BCIS)
	iSE	24 56		+		
	ME	12 29	10	8		
	ME	12 30	8	6		
4	iPZ	18 45 17		-	73 ^o	H 18 33 36 (USCGS)
	iKZ	45 37		-		
	iSE	54 54		+		
	iXE	55 27		-		
	iPSE	56 22		-		
	iSSE	59 24		-		
	MN	19 29	15	63		
4	iPZ	19 12 53		-		
5	iPZ	02 27 23		-	23 ^o	H 02 22 22 (EC3)
	eSE	32 00				
5	iPZ	05 14 14		-	23 ^o	H 05 09 03 (BCIS)
	eSE	18 35				
	ME	05 22	8			
10	iPZ	16 25 35		-	89 ^o	H 16 12 41 (USCGS)
	eSKSN	35 59				
	iSN	36 09		-		
	iPSE	37 30		+		
	iSSE	42 15		-		
	ME	17 10	19	25		
10	ePZ	22 17 18			89 ^o	H 22 04 24 (USCGS)
12	ePZ	03 01 58			25 ^o .5	H 02 56 21 (BCIS)
	eSE	06 23				
12	iPZ	18 59 04		-	27 ^o	H 18 53 05 (BCIS)
	iPPZ	59 17		+		
	iXE	19 03 17		-		

Sheet 2. July

Date	Phase and component	Time G.M.T.	Period Sec.	Amplitude microns and direction	Epicentral distance	Notes
12	iXE	03 22		+		
	iSN	03 37		+		
	ME	19 11	20	10		
17	iPKPZ	02 43 41		-	146°	H 02 24 07 .01 deep (USCGS)
19	ePZ	01 51 59			69°	H 01 40 54 (USCGS)
	iSN	02 01 03		-		
	eSSE	05 40				
	MN	02 18	21	2		
	MN	02 31	15	5		
20	iSN	10 24 25		+	22°	H 10 16 08 (BCIS)
21	iPZ	04 06 29		-	46°	H 03 58 00 (BCIS)
21	iPKPZ	18 48 37		+	143°	H 18 30 15 .095 deep (USCGS)
22	iSN	10 38 39		+	73°	H 10 17 23 (USCGS)
23	eSnZ	01 52 50			05°	H 01 50 05 (BCIS)
	iS _x E	53 00		-		
	iSgZ	53 17		-		
24	iPKPZ	17 37 45		-	145°	H 17 18 18 .02 deep (USCGS)
27	iSN	15 03 04		-	42°	H 14 49 01 (BCIS)

8th December, 1966.

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

SEISMOLOGICAL BULLETIN FOR AUGUST 1966

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 eSE MN ME	19 19 29 27 06 19 42 19 52		- 5 6	55°	H 19 09 57 (BCIS)
1	iPZ iSN MN	20 40 29 48 07 21 07		- + 3	55°	H 20 30 57 (BCIS)
1	iPZ eSE	20 44 01 53 55		-	78°	H 20 32 01 (USCGS)
1	iPZ iXZ iXZ iSN iPSN iGE ME	21 12 30 13 01 13 19 20 14 20 28 25 07 21 41		- + - + + - 45	54°	H 21 03 00 (BCIS)
1	iPZ	22 40 30		-	54°	H 22 30 58 (BCIS)
5	iPZ	04 06 29		+	46°	H 03 58 00 (BCIS)
6	eSE	02 38 55			19°	H 02 31 07 (BCIS)
7	ePZ iPZ iPcPZ iPPZ iSE iSSE ME ME	02 24 42 24 46 24 53 27 24 34 21 39 03 03 00 05 06		+ + - + + + 14 20	74°	H 02 13 05 (USCGS)
7	ePKPZ	14 00 58			149°	H 13 42 08 .09 deep (USCGS)
7	ePZ eSE	14 22 18 31 17			59°5	H 14 11 51 (USCGS)
7	ePZ eXZ eSE ME ME MZ	17 48 19 48 29 58 02 18 18 18 25 18 25			76°	H 17 36 27 (USCGS)
8	iPZ iSE	08 15 17 25 53		+ -	84°	H 08 02 46 (USCGS)

August 1966 Sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
10	iPKPZ	05 20 40		+	145°	H 05 01 09 .015 deep (USCGS)
10	iPZ	15 27 44		-	248°5	H 15 22 35 (BCIS)
11	iPKPZ	23 45 25		-	148°	H 23 25 38 (USCGS)
12	iPKPZ	04 19 21		+	148°	H 03 59 50 .02 deep (USCGS)
12	ePE eSE	20 28 00 37 03			69°5	H 20 17 00 (USCGS)
15	MN	03 41	20	6	97°	H 02 45 33 (USCGS)
15	eSE	10 41 10			73°	H 10 20 42 (USCGS)
16	iPZ eSE eXE	02 25 05 32 17 33 25		-	51°	H 02 16 20 (USCGS)
16	iPZ eSN	03 58 18 04 02 08		+	21°	H 03 53 38 (BCIS)
16	ePZ eSE ME ME	18 13 50 23 19 18 42 18 45	20 15	2 3	72°	H 18 02 36 (USCGS)
17	ePZ eSE	21 10 06 19 32			73°	H 20 58 36 (USCGS)
18	iPZ ipPZ eSE iSKSE isSN ME	10 45 09 45 27 55 01 55 21 55 51 11 15	25	- - + + 6	78°	H 10 33 17 .01 deep (USCGS)
18	iPnZ iPxZ iPgZ	11 23 12 23 19 23 38		+ - -	05°	H 11 22 11 (BCIS)
18	iPPZ iPPSE	14 53 11 15 03 21		- +	110°	H 14 34 00 (USCGS)
19	iPZ iPPZ iPcPZ iSN ME	12 28 47 29 51 31 36 33 58 12 45	12	+ - - - 160	33°	H 12 22 13 (BCIS)
19	iPZ	14 01 02		+	33°	H 13 54 30 (BCIS)
20	iPZ ipPZ eSE isSE	07 55 48 56 19 08 06 00 07 00		- - + +	84°	H 07 43 28 .02 deep (USCGS)

August 1966 sheet 3

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
20	iPZ	09 44 01		--	77°	H 09 32 32 .025 deep (USCGS)
	iPcPZ	44 14		--		
	ipPZ	44 53		--		
	iXZ	44 59		--		
	iSE	53 46		--		
	isSE	55 20		--		
20	iPZ	12 05 39		--	32°5	H 11 59 12 (BCIS)
	ePcPE	08 31		--		
	iSE	10 53		--		
	ME	12 22	16	35		
20	iPZ	12 09 32		--	19°	H 12 05 13 (BCIS)
20	iPKPZ	23 14 46		+	149°	H 22 55 03 (USCGS)
	iXZ	15 01		--		
	iPKPN	15 16		--		
21	iPZ	01 36 03		--	25°	H 01 30 43 (BCIS)
	iSE	40 21		+		
	ME	01 45	11	3		
21	ePE	05 14 09			103°	H 05 00 27 .01 deep (USCGS)
	iSKSE	24 58		+		
	iSE	25 36		+		
	isSN	26 06		--		
22	ePZ	14 31 23			72°	H 14 21 14 .10 deep (USCGS)
	eSE	40 09				
22	ePKPZ	18 01 49			147°	H 17 42 11 (USCGS)
	iPKPZ	01 51		+		
	iPPZ	05 09		--		
	MN	19 12	20	9		
22	iPN	21 53 23		--	18°	H 21 49 17 (USCGS)
	eSN	56 45		--		
	ME	21 59	15	1.5		
28	iPKPZ	10 21 10		--	126°	H 10 03 03 .08 deep (USCGS)
	ipPKPZ	23 03		--		
30	iPZ	20 31 07		--	61°	H 20 20 54 (USCGS)
	iSN	39 29		+		
	isSE	43 27		--		
31	iPZ	18 19 32		--	17°	H 18 15 33 (BCIS)
	iXZ	19 35		--		
	eSE	22 40		--		
	iXN	22 53		--		
	ME	19 25	12	3		

April 18th. 1967.

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR SEPTEMBER 1966.

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	eSE ME	01 45 29 01 48	12	1	17°	H 01 38 32 (BCIS)
1	iPZ iPPZ iSN iSSE ME	14 28 08 28 19 32 23 32 48 14 40	14	-- -- + -- 5	23°5	H 14 22 54 (BCIS)
1	iPZ iXZ iSE ME	19 21 55 21 58 25 09 19 27	12	-- -- + 2	17°	H 19 17 56 (BCIS)
8	ePE iPPZ iSKSE iPSE iSSE ME	21 30 08 34 48 41 07 43 59 50 22 22 18	20	-- + -- -- 20	109°	H 21 15 53 .015 deep (USCGS)
8	iPKPZ	21 36 50		+	147°	H 21 17 21 .01 deep (USCGS)
8	iPZ	22 07 34		--	77°	H 21 55 40 (USCGS)
11	iPZ ipPZ	17 49 19 49 43		-- +	74°	H 17 38 04 .03 deep (USCGS)
12	iPKPZ iPKPZ iSKKSN ME	11 49 19 49 30 11 59 38 12 56	20	-- + -- 4	148°	H 11 29 40 (USCGS)
12	ME	17 23	12	7	72°	H 16 41 02 (USCGS)
14	iPSE ME	23 48 28 24 23	15	-- 40	116°	H 23 18 42 (USCGS)
15	ME	18 01	20	10	88°	H 17 10 47 (USCGS)
18	iPZ ipPZ iPcPZ eSE ME	20 52 34 53 00 54 02 59 34 21 19		-- -- -- -- --	48°5	H 20 43 58 (BCIS)
19	iPZ iXZ	11 39 54 39 58		-- --	12°5	H 11 37 00 (BCIS)

SEPTEMBER 1966 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
21	iPZ	08 39 53		-	12°5	H 08 37 00 (BCIS)
24	iSE	07 12 20		-	12°5	H 07 07 01 (BCIS)
25	iPZ ePPZ eSE	06 14 35 18 31 24 36			81°	H 06 02 26 .01 deep (USCGS)
26	iPZ iSE ME	05 22 11 31 11 05 56	15	+ + -	70°	H 05 10 58 (USCGS)
28	iPZ iPcPZ iSE iSKSE iPSE iSSSE iXE ME	14 12 02 12 22 21 40 22 04 22 25 30 07 34 10 14 43	25	- .. + - + - - 13	74°	H 14 00 23 (USCGS)
29	iPKPZ	09 03 28		-	145°	H 08 44 19 .04 deep (USCGS)
30	iPZ	09 42 29		-	93°	H 09 29 12 .02 deep (USCGS)

April 28th 1967

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR OCTOBER 1966

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	iPZ	11 26 09		-	20°	H 11 21 45 (BCIS)
	iSE	29 46		-		
	iXE	29 57		-		
7	iPKPZ	16 14 33			147°	H 15 55 11 .025 deep (USCGS)
	ipPKPZ	15 20		+		
	iXZ	17 54		+		
	iSKSE	21 12		+		
	iSKKSN	24 32		-		
	iXN	28 02		+		
	iPSE	29 02		-		
	iSSE	36 40		-		
	ME	17 08	21	6		
7	iPZ	21 06 09		-	61°	H 20 55 56 .01 deep (USCGS)
8	ePKPZ	00 31 50			141°	H 00 12 18 (USCGS)
8	iPKPZ	02 40 54		-	144°	H 02 21 56 .04 deep (USCGS)
9	iPKPZ	02 24 57		-	143°	H 02 06 35 .10 deep (USCGS)
9	iPZ	06 57 37		-	49°	H 06 48 40 (BCIS)
	iSE	07 04 36		-		
	eSSE	08 19				
	ME	07 18	20	7		
	ME	07 26	11	5		
14	iPZ	01 14 37		-	61°	H 01 04 43 (USCGS)
	eSE	23 10		-		
	ME	01 44	15	4		
15	iSE	07 07 20		-	20°	H 06 59 19 (BCIS)
17	iPKPZ	07 59 32		+	148°	H 07 30 07 .08 deep (USCGS)
17	iPE	21 55 00		+	91:5	H 21 41 56 (USCGS)
	iPcPZ	55 05		-		
	iPPN	58 55		-		
	iPPPE	22 00 50		-		
	iSKSE	05 29		-		
	iSE	05 59		+		
	iSSE	12 22		+		
	iSSSN	15 50		-		

OCTOBER 1966 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
	ME	22 33	18	830		
17 contd	MZ	22 33	18			
	MZ	24 12	18			
	ME	25 52	18			
18	iPKPZ	04 21 56		-	148°	H 04 03 09 .09 deep (USCGS)
19	iPZ	04 06 29		-	46°	H 03 58 00 (BCIS)
19	iPZ	08 11 21		-	58°	H 08 01 34 (USCGS)
	iXN	11 39		-		
	iPPE	13 48		-		
	iSN	19 18		-		
	iSPZ	19 38		-		
	iSSE	23 30		+		
	ME	08 35	13	150		
27	iPZ	06 04 01			29°	H 05 58 00 (BCIS)
	iXZ	05 12		-		
	iPcPZ	07 09		+		
	iSN	08 58		+		
	iScSE	14 38		-		
27	iPZ	14 34 49		-	99°	H 14 21 05 (USCGS)
	iSN	46 16		+		
	ME	15 11	28	6		
27	ePE	23 58 49			78°	H 23 46 48 .01 deep (USCGS)
	eSE	24 08 25				
29	iPZ	02 44 20		+	22°	H 02 39 25 (BCIS)
	iPPE	44 49		-		
	iSE	48 21		-		
	iSSE	49 07		-		
	ME	02 55	11	10		
	MZ	02 55	11			
29	ePN	12 19 19			29°	H 12 13 06 (BCIS)
	eSN	24 14				

April 29th 1967

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

6 JUL 1967

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

SEISMOLOGICAL BULLETIN FOR NOVEMBER 1966

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	07 12 44		+	78°	H 07 01 00 .02 deep (USCGS)
3	ePZ	16 34 43			61°	H 16 24 31 (USCGS)
	iPcPZ	35 14		-		
	eXE	40 19		-		
	iSN	43 02		-		
	iScSN	44 33		+		
	ME	17 06				
4	iPKPZ	16 00 49		-	151°	H 15 43 09 .10 deep (USCGS)
9	iPZ	15 17 29		-	22°	H 15 12 27 (BCIS)
12	iPZ	13 01 47		+	79°	H 12 49 44 (USCGS)
	eSN	11 41				
12	ePKPZ	19 04 26			140°	H 18 45 01 (USCGS)
	iPPZ	07 59		-		
19	ePN	07 18 16			26°	H 07 12 39 (BCIS)
	iSE	22 44		+		
	ME	07 29				
22	iPZ	06 41 24			73°	H 06 29 53 .07 deep (USCGS)
	eSE	49 42				
26	iPN	03 28 35		-	23°.5	H 03 23 46 (BCIS)
	eSN	33 22		+		
27	iSN	20 22 41		+	24°	H 20 13 01 (USCGS)

21st June 1967

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR DECEMBER 1966

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	05 16 11		-	138°	H 04 56 58 .02 deep (USCGS)
	ipPKPZ	16 52		-		
	iPPZ	19 38		+		
3	iPKPZ	14 32 21		-	150°	H 14 13 25 .08 deep (USCGS)
7	ePZ	17 29 53			79°	H 17 17 42 (USCGS)
	iPZ	30 10		-		
10	iPZ	13 18 37		-	79°	H 13 06 33 (USCGS)
	iPcPZ	18 47		-		
	iSE	28 28		+		
	iScSE	29 00		+		
	ME	13 53	15	15		
14	iPZ	03 53 25		-	72°5	H 03 44 02 (USCGS) .04 deep
14	iPKPZ	21 26 45		+	123°5	H 21 07 52 (USCGS)
	iSKSE	32 35		-		
	iSSE	45 11		+		
	ME	22 18	26	10		
17	iPZ	06 03 09		-	17°	H 05 59 04 (BCIS)
18	iPZ	05 06 26		+	46°	H 04 58 00 (BCIS)
20	iPZ	15 41 29		+		
21	iPKPZ	09 11 08		-	145°	H 08 52 00 .04 deep (USCGS)
23	iPKPZ	16 09 22		+	126°	H 15 50 20 (USCGS)
	iXZ	09 41		-		
28	MN	17 00			99°	H 08 18 07 (USCGS)
	ePZ	08 31 50				
	iPcPZ	31 52		+		
	iXZ	35 31		-		
	iPPZ	35 53		-		
	iSKSE	42 12		-		
	iSE	42 22		+		
	iSSN	50 20		-		
	ME	09 11	20	520		
MZ	09 11					
31	iPKPN	18 42 52		-	138°	H 18 23 04 (USCGS)
	iPPN	45 30		+		
	iXN	46 20		-		
	MN	19 44	20	245		
	MZ	19 44	20			
31	iPKEN	22 35 53		-	138°	H 22 15 14 (USCGS)
	iPPN	37 30		+		