DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

ROYAL OBSERVATORY 17 APR 1959 EDINBURGH

SEISMOLOGICAL BULLETIN FOR JANUARY 1959.

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

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
2	ePnZ	05 21 32			07°	H 05 19 45 (BCIS)
	eXZ	21 52				
	eXZ	23 26				
	iSgN	23 33		-		
3	ME	12 09	20	4		
4	iPZ	23 19 25		+		H 23 14 30 (USCGS)
5	iPKPZ	10 06 27		+	147°	H 09 46 42 (USCGS)
6	iPZ	15 02 45		+	106°	H 14 48 03 (USCGS)
7	ePN	05 21 58			48°	H 05 13 18 (USCGS)
8	ePEZ	01 43 52			60°	H 01 33 48 .02 deep (USCGS)
	eSN	51 41				
	eSSE	55 42				
	ME	02 08				
9	eSE	02 04 46			25°	H 01 55 05 (BCIS)
11	ePZ	07 34 16			77°	H 07 22 40 .03 deep (USCGS)
	iSE	43 37		-		
15	ePKPZ	21 39 26			151°.5	H 21 20 26 .08 deep (USCGS)
16	iPZ	01 42 37		+	73°.5	H 01 31 22 (USCGS)
	iPPZ	45 45		-		
	ME	02 20				
16	ME	17 28	18	2	65°.5	H 16 50 40 (USCGS)
16	?ePZ	18 11 34			09°	H 18 09 16 (BCIS)
18	iPKPZ	22 42 02			145°.5	H 22 23 15 .08 deep (USCGS)
22	iPE	05 23 05		-	87°	H 05 10 25 (USCGS)
	iPPE	26 20		-		
	oSKSE	33 09				
	iSKSNE	33 11		+ -		
	iSSE	38 45		-		
	iLQN	44 16		-		
	ME	05 55	25	120		
	MN	06 03	21	180		
	MZ	06 03				

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

JANUARY 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
24	ePE	05 20 45			83°	H 05 08 35 .02 deep (USCGS)
	iSE	30 47		+		
24	iPKPZ	16 11 16		-	143°	H 15 51 47 .02 deep (USCGS)
24	iPE	20 00 22		+	23°.5	H 19 55 14 (USCGS)
	iXZ	00 30		+		
	iPcPZ	04 09		-		
	iXZ	04 28		-		
	iSNE	04 46		+ +		
	iSSE	05 46		-		
	iSSSN	06 14		-		
	iXN	06 36		+		
	iXE	06 40		+		
	iXN	06 44		-		
	MN	20 08	11	27		
	MZ	20 08	11			
	MN	20 11	11	27		
26	iPZ	11 44 29		-	27°	H 11 38 35 (USCGS)
27	iPNZ	03 39 26		- +	18°	H 03 35 29 (USCGS)
	iPPZ	39 53		+		
	iSNE	42 48		- -		
	MN	03 45	16	1		
29	iPNZ	23 28 26		+ -	17°	H 23 24 25 (BCIS)
	iXZ	28 32		-		
	iPPZ	28 46		+		
	iXZ	29 11		-		
	iSNZ	31 44		+ +		
	ME	23 35	15	13		
	ME	23 38	11	9		
	MN	23 40	14	9		
30	iPKPZ	18 29 25		+	156°	H 18 09 02 (USCGS)
30	ePZ	20 50 55			77°	H 20 38 58 (USCGS)
	ME	21 24	19	11		
30	ePZ	22 28 43			77°	H 22 16 47 (USCGS)
	eSE	38 42				
	ME	23 02	20	24		

10th April, 1959

International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY
EDINBURGH
25 MAY 1959

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR FEBRUARY 1959.

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

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
5	iPZ	01 15 33		+	76°	H 01 04 43 (USCGS)
6	iPZ	14 44 40		+	74°	H 14 32 58 (USCGS)
	eSN	54 16				
7	ePNZ	09 49 36			88°	H 09 36 51 (USCGS)
	iPNEZ	49 42		- + +		
	iPcPN	49 49		-		
	iPPEZ	53 16		- -		
	iPaNE	56 57		+ +		
	iSKSE	10 00 07		+		
	iSN	00 23		-		
	iScSN	00 46		+		
	iPSNE	01 25		- +		
	iPPSN	01 53		+		
	iSSNE	06 01		- +		
	iSSSE	09 35		-		
	iSaNE	13 13		- -		
	ME	10 27	20	33		
	ME	10 33	16	20		
	MZ	10 33	16			
7	iPZ	20 13 24		+	23°	H 20 08 17 (USCGS)
	iPPZ	13 46		-		
	iSN	17 34		-		
8	iPZ	01 06 28		+	17°	H 01 02 25 (BCIS)
	ePE	06 28				
	iPE	06 31		+		
	iPPEZ	06 47		+ -		
	eSN	09 47				
	iSSE	10 18		-		
	MN	01 12	11	10		
	ME	01 12	15	13		
9	iPZ	04 54 21		+	75°	H 04 42 33 (USCGS)
	iXZ	54 51		+		
	ePPN	57 12				
	iSE	05 03 54		-		
9	iPKPZ	21 32 32		-	127°	H 21 13 18 .02 deep (USCGS)
11	iPZ	14 04 29		-	81°	H 13 52 13 (USCGS)
				-		
14	iPZ	22 37 17		-	72°	H 22 25 50 (USCGS)
15	ePKPE	05 01 35			116°	H 04 42 35 (USCGS)
	iXE	03 18		-		
	iSKSE	08 30		-		
	MNE	05 47				

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

FEBRUARY 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
16	iPZ	00 52 09		-	85°	H 00 39 32 (USCGS)
	iPPZ	55 24		-		
17	iPZ	12 14 43		+	74°	H 12 03 05 (USCGS)
	iPPZ	17 29		-		
	eSE	24 14				
20	iPZ	18 28 06		-	77°	H 18 16 22 .02 deep (USCGS)
	iSE	37 44		-		
	iSKSE	37 52		+		
23	ePZ	10 42 28			71°	H 10 31 07 (USCGS)
23	iPZ	16 16 26		-	74°	H 16 04 48 (USCGS)
	iPPZ	19 16		+		
	No NS or EW record.					
25	iPKPZ	10 21 26		-	145°	H 10 02 43 .08 deep (USCGS)
27	iPKPZ	15 40 14		+	148°.5	H 15 20 27 (USCGS)

20th May, 1959.

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR MARCH 1959.

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

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	iPZ	00 36 00		-	20°.5	H 00 31 20 (USCGS)
	iPPZ	36 38		-		
1	ePKPZ	17 07 21			115°.5	H 16 49 13 .02 deep (USCGS)
	iPSE	18 44		+		
	iSSE	25 01		-		
	ME	17 49	20	55		
2	iPZ	16 00 25		+	51°	H 15 51 38 .03 deep (USCGS)
	iPZ	00 26		-		
4	iXZ	01 04 40		-	73°	H 00 52 49 (USCGS)
4	iPKPZ	19 14 12		+	145°.5	H 18 55 03 .02 deep (USCGS)
	ipPKPZ	14 30		+		
5	iPZ	00 26 09		-	70°.5	H 00 15 08 (USCGS)
16	iPZ	08 14 08		-	77°	H 08 02 10 (USCGS)
17	ePZ	08 38 18			89°.5	H 08 25 22 (USCGS)
	iSKSE	48 50		+		
	iSE	49 03		+		
	ME	09 24	11	10		
18	iSKSE	01 04 48		-	89°.5	H 00 41 17 (USCGS)
	iSE	05 01		-		
19	iPZ	08 31 58		-	31°	H 08 25 32 (USCGS)
	iSE	36 58		-		
	iSSE	38 49		-		
	ME	08 41	14	13		
21	iPKPZ	04 45 53		-	144°	H 04 27 21 .09 deep (USCGS)
22	ePZ	22 38 39			09°	H 22 36 36 (BCIS)
	iXZ	40 25		-		
	iXZ	40 29		-		
	iXZ	40 45		+		
	iXZ	41 12		+		
	iSEZ	41 18		+ +		
	No NS or EW record after 22 March.					
23	iXZ	07 22 26		+	71°	H 07 10 22 (USCGS)

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

MARCH 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
26	iPKPZ	02 43 16		-	129°	H 02 24 12 .01 deep (USCGS)
27	iPZ	07 11 58		-	51°	H 07 01 47 .01 deep (USCGS)
28	iPZ	18 51 30		-	52°	H 18 42 45 .03 deep (USCGS)
28	iPKPZ	20 05 40		+	146°.5	H 19 47 07 .10 deep (USCGS)
	iZ	05 41		-		
	iPKPZ	05 45		-		

20th May, 1959.

International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY
15 JUN 1959
EDINBURGH

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR APRIL 1959

Instrument :- Wilson-Lamison seismometer free period 1 sec, coupled to G.E. galvanometer free period 3.6 sec, recording vertical component of velocity.

[The Milne-Shaw (horizontal) seismographs have not been recording this month.]

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	iPZ	00 40 37		-	31°	H 00 34 18 (USCGS)
1	iPKPZ	15 07 45		-	143°	H 14 48 28 .02 deep (USCGS)
1	iPKPZ	19 35 18		-	142°	H 19 15 38 (USCGS)
5	ePZ	10 50 36			12°	H 10 47 52 (BCIS)
	iPZ	50 39		-		
	iPPZ	50 48		+		
	iXZ	51 08		+		
	iXZ	51 21		+		
	iSZ	52 58		-		
	iSSZ	53 25		-		
5	iPZ	20 11 20		-	77°	H 19 59 58 (USCGS)
10	iPKPZ	06 06 25		-	151°	H 05 47 34 .10 deep (USCGS)
	iPKPZ	06 35		+		
	ipPKPZ	07 31		+		
	iSKPZ	08 49		+		
12	iPZ	10 06 43		-	78°	H 09 54 51 .02 deep (USCGS)
14	ePZ	07 31 07			66°	H 07 20 28 .01 deep (USCGS)
18	iPKPZ	06 36 57		-	127°	H 06 17 51 (USCGS)
22	iPZ	11 06 25		+	71°	H 10 55 05 (USCGS)
22	iPZ	11 13 57		-	78°	H 19 01 41 (USCGS)
24	ePKPZ	18 17 54			156°.5	H 17 57 58 (USCGS)
	iPKPZ	17 57		-		
	iXZ	18 26		-		
	iPKPZ	18 32		-		
	iPPZ	22 11		-		
25	iPZ	00 32 24		+	27°	H 00 26 41 (BCIS)
	iXZ	34 32		+		
25	ePZ	01 11 26			27°	H 01 05 42

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

APRIL 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
26	PZ	14 48 14			13°	H 14 45 16 (BCIS)
27	iPZ	20 53 13		+	87°	H 20 40 38 .02 deep (USCGS)
	ipPZ	53 47		-		
	iXZ	54 03				
	iPaZ	21 00 09		+		
	iXZ	01 14		+		
	iSZ	03 45		-		
	iSaZ	17 25		+		
	MZ	21 38	12			
28	iPZ	11 21 33		-	79°	H 11 09 30 (USCGS)
	iXZ	22 13		-		
	iXZ	22 34		+		
	iXZ	23 40		+		
	MZ	11 56	17			

12 June 1959

International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY
25 MAY 1959
EDINBURGH

Durham University Seismological Bulletins.

Further note on nomenclature.

Pa, Sa stand respectively for longitudinal and transverse waves which have travelled along the wave guide formed by the asthenosphere.

E.F. Baxter.

May 1959.

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR MAY 1959

Instrument:- Wilson-Lamison seismometer free period 1 sec, coupled to G.E. galvanometer free period 3.7 sec, recording vertical component of velocity.
(Work on the instrument prevented recording from 20 May to 10 June. The Milne-Shaw (horizontal) seismographs have not recorded).

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
4	iPZ	07 27 01			72°	H 07 15 42 .01 deep (USCGS)
	iPPPZ	31 36				
	iSZ	36 29				
	iSKSZ	36 57		-		
	MZ	07 52	32			
	iLgZ	54 56		-		
	MZ	08 07	18			
8	iPZ	11 46 09			72°	H 11 34 50 .01 deep (USCGS)
11	iPZ	16 40 33		-	72°	H 16 28 49 (USCGS)
12	iPZ	05 09 12		-	71°	H 04 57 35 (USCGS)
	iPPZ	11 35		-		
	iSZ	17 55		-		
12	MZ	10 39	20		95°	H 09 46 51 (USCGS)
14	iPZ	06 42 35		-	26°.5	H 06 36 59 (BCIS)
	MZ	06 55	12			
14	iPKPZ	13 38 52		-	145°	H 13 19 32 .025 deep (USCGS)
16	iPKPZ	06 35 23		-	127°	H 06 16 23 .01 deep (USCGS)

19 August 1959

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR JUNE 1959

Instrument:- Wilson-Lamison seismometer free period 1 sec, coupled to G.E. galvanometer free period 3.7 sec, recording vertical component of velocity.
(Work on the instrument prevented recording from 20 May to 10 June. The Milne-Shaw (horizontal) seismographs have not recorded).

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
13	ePZ	21 59 39			12°.5	H 21 56 45 (BCIS)
14	iPZ	00 25 19		-	94°	H 00 11 57 .02 deep (USCGS)
	ipPZ	25 44		+		
	iPcPZ	25 46		-		
	iPPZ	28 56		-		
	ipPPZ	29 29		+		
	isPPZ	29 43		-		
	iXZ	29 52		+		
	iXZ	30 14		-		
	iSZ	35 41		-		
	iSKSZ	36 14		-		
	isSZ	37 32		-		
	iSPZ	38 13		-		
	MZ	01 03	22			
15	ePKPZ	02 58 14			130°	H 02 38 48 (USCGS)
18	iPZ	15 42 55		-	70°.5	H 15 31 25 (USCGS)
	iXZ	44 33		-		
	MZ	16 25				
25	iPZ	06 50 29		+	15°	H 06 46 55 (USCGS)
	iXZ	50 32		-		
	iXZ	52 42		-		
	MZ	06 56	12			
	MZ	06 58	9			
27	iPZ	19 20 42		+	53°	H 19 11 23 (USCGS)
	iXZ	20 49		-		
	iXZ	21 08		+		
	iXZ	21 39		+		
	ePcPZ	21 54				
	iXZ	22 03		+		
	iPPZ	22 22		-		
27	ePKPZ	19 24 18			159°	H 19 04 27 .02 deep (USCGS)
	iPKPZ	24 21		-		
	ipPKPZ	24 29		+		
	iPKPZ	24 55		-		
	ipPKPZ	25 18		-		
	iPPZ	28 34		+		
	iSKSZ	30 20		-		
	iPPPZ	32 18		+		
	iXZ	33 29		-		
	iSKKSZ	34 37		+		
	iSKKSZ	39 40		+		
	MZ	19 45	12			

ROYAL OBSERVATORY
20 AUG 1959
EDINBURGH

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

JUNE 1959 sheet 2

Date	Phase and Component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
28	ePZ	04 26 38			13°	H 04 23 28 (USCGS)
	eXZ	32 27				
28	ePKPZ	20 02 12			119°.5	H 19 43 22 (USCGS)

19 August 1959

ROYAL OBSERVATORY
20 AUG 1959
EDINBURGH

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR JULY 1959

Instrument:- Wilson-Lamison seismometer free period 1 sec. coupled to galvanometer free period 3.7 sec, recording vertical component of velocity.
(The Milne-Shaw (horizontal) seismographs have not recorded).

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
2	iPKPZ	11 52 52		-	145°.5	H 11 27 45 .10 deep (USCGS)
3	eXZ	18 15 26			141°	H 17 55 29 .03 deep (USCGS)
	iPPZ	16 42		+		
4	iPKPZ	05 14 00		-	150°	H 04 54 14 .02 deep (USCGS)
6	iPZ	09 22 46		-	96°	H 09 10 17 .10 deep (USCGS)
	epPZ	24 59				
	ipPZ	25 04		+		
	iXZ	25 51		-		
	iPPZ	26 44		+		
	iPPPZ	28 31		-		
	iSKSZ	32 27		-		
6	iPZ	09 35 58			96°	H 09 23 27 .10 deep (USCGS)
	ipPZ	38 12		-		
	ePZ	39 58				
	iPZ	40 00		-		
	iSKSZ	45 36		+		
	iSZ	45 48		+		
	iXZ	47 20		-		
	iXZ	47 46		+		
	iXZ	48 04		-		
8	ePZ	02 08 09			18°.5	H 02 04 00 (USCGS)
9	ePZ	16 18 32			94°	H 16 05 18 .02 deep (USCGS)
	ipPZ	19 02		+		
	isPZ	19 16		+		
	iPPZ	22 14		-		
	iXZ	22 24		+		
	iXZ	23 10		+		
11	?SKSZ	12 27 04			114°	H 12 01 36 (USCGS)
11	PZ	18 34 44			77°.5	H 18 23 00 (USCGS)
12	iPKPZ	00 43 16		+	145°	H 00 24 22 .07 deep (USCGS)
16	iPKPZ	19 33 35		-	146°	H 19 13 52 (USCGS)
	iPKPZ	33 46		+		
18	iPZ	20 08 06		-	95°	H 19 54 45 (USCGS)
	iXZ	11 11		+		
	iPPZ	11 55		-		
	iXZ	12 55		-		
	iSZ	19 09		-		
	iSPZ	20 17		-		

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

JULY 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
19	iPZ	15 18 55		+	91°	H 15 06 10 .03 deep (USCGS)
	ipPZ	19 46		-		
	isPZ	19 57		-		
	iPPZ	22 31		-		
	iXZ	22 43		+		
	ipPPZ	23 20		+		
	isPPZ	23 27		+		
	iXZ	26 17		-		
	iSKSZ	28 48		-		
	iSZ	29 18		-		
	iSPZ	30 39		-		
	iPSZ	30 55		+		
20	iSZ	03 07 17		+	107°	H 02 41 13 (USCGS)
20	iXZ	17 12 14		+		
	iXZ	14 37		+		
21	ePPZ	08 02 15			110°.5	H 07 43 13 (USCGS)
21	iPZ	12 41 23		+	80°.5	H 12 29 09 (USCGS)
21	iXZ	20 23 07		-		
	iXZ	26 14		-		
	iXZ	28 36		-		
22	iPZ	19 34 30		+	70°.5	H 19 24 17 .10 deep (USCGS)
	pPZ	36 39				
	iPPZ	37 20		-		
	isPZ	37 33		+		
22	iPKPZ	23 21 28		+	126°	H 23 02 27 .01 deep (USCGS)
	ipPKPZ	21 48		+		
	PPZ	23 08				
23	iPKPZ	15 16 30		-	139°.5	H 14 56 45 .01 deep (USCGS)
	ipPKPZ	17 02		-		
	iXZ	17 21		-		
24	ePZ	01 34 43			73°	H 01 23 09 (USCGS)
	iPcPZ	35 02		+		
	iPPZ	37 30		-		
	iXZ	42 46		-		
24	iPZ	16 29 08		+	74°	H 16 17 30 (USCGS)
	iPcPZ	29 47		+		
26	iPZ	17 12 14		+	24°	H 17 07 03 (USCGS)
	iPcPZ	15 57		-		
31	ePZ	20 01 42			50°	H 19 53 02 (USCGS)

7 October 1959

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR AUGUST 1959

Instrument:- Wilson-Lamison seismometer free period 1 sec. coupled to galvanometer free period 3.7 sec, recording vertical component of velocity.
(The Milne-Shaw (horizontal) seismographs have not recorded).

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
4	PKPZ	08 20 52			146°	H 08 02 17 .01 deep (USCGS)
7	eXZ	09 41 10				
7	ePZ	10 54 16			65°.5	H 10 43 32 (USCGS)
	iPZ	54 23		-		
	iPPZ	56 42		-		
7	PZ	21 56 18			65°.5	H 21 45 26 (USCGS)
	iSZ	22 04 40		-		
8	PZ	00 57 55			70°	H 00 47 38 (USCGS)
12	iPKPZ	10 17 54		-	142°	H 09 58 22 (USCGS)
	iPPZ	21 07		-		
15	ePZ	09 09 55			88°	H 08 57 04 (USCGS)
	iPZ	09 57		+		
	iXZ	10 52		-		
	iXZ	13 15		-		
	iPPZ	13 37		-		
	iSKSZ	20 47		+		
	MZ	09 55	14			
15	ePKPZ	13 34 08			145°.5	H 13 14 26 (USCGS)
16	ePKPZ	01 11 19			146°	H 00 51 40 (USCGS)
	iPKPZ	11 20		+		
	iPKPZ	11 35		-		
	iSKSZ	18 37		+		
	iXZ	19 27		-		
16	iPZ	01 34 08		+	88°	H 01 21 05 (USCGS)
16	eXZ	18 47 21				
17	iPZ	01 15 31		+	88°	H 01 02 37 (USCGS)
17	ePZ	01 37 42			20°	H 01 33 14 (BCIS)
	iPZ	37 44		+		
	iXZ	37 57		-		
	iXZ	38 36		+		
	iSZ	41 45		+		
	MZ	01 48				
17	ePZ	04 33 40			20°	H 04 29 10
17	iPKPZ	21 23 56		-	130°	H 21 04 40 (USCGS)
	iXZ	24 20		+		
	iXZ	25 57		+		
	iPPZ	26 21		+		
	iPPPZ	29 22		-		
	iSPZ	36 34		+		

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

AUGUST 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
18	iPZ	00 46 29		+		
	iXZ	47 37		+		
	iXZ	54 24		-		
18	ePZ	06 47 51		-	64°	H 06 37 13 (USCGS)
	iPZ	47 57		-		
	iPcPZ	48 28		-		
	iXZ	48 45		-		
	iXZ	49 23		+		
	iPPZ	50 36		-		
	iXZ	52 22		-		
	iXZ	52 24		-		
	iScPZ	52 47		-		
	iXZ	54 23		+		
	iSZ	56 40		+		
	iSPZ	56 46		-		
	iPPSZ	57 12		+		
	iXZ	57 30		-		
	iXZ	07 01 15		-		
	iXZ	01 31		-		
	iXZ	01 54		-		
	MZ	07 14	17			
	MZ	07 16	14			
	MZ	07 23	15			
18	iPZ	15 36 42		-	64°	H 15 26 06 (USCGS)
	iXZ	36 52		-		
	iXZ	36 57		+		
	iXZ	37 10		-		
	iPcPZ	37 21		+		
	iPPZ	39 10		-		
	iXZ	42 19		+		
18	ePZ	22 08 30			20°	H 22 04 00 (BCIS)
19	ePZ	04 14 41			64°	H 04 04 03 (USCGS)
	ePZ	14 45				
21	eXZ	01 2231				
21	ePKPZ	08 23 42			157°	H 08 03 15 (USCGS)
	iXZ	25 54		-		
	iSKSZ	30 25		+		
21	ePKPZ	09 58 09			157°	H 09 37 49 (USCGS)
				-		
23	iPZ	22 25 47		-	19°	H 22 21 35 (BCIS)
	iPZ	25 48		+		
	iXZ	25 55		+		
	iPPPZ	26 23		+		
	MZ	22 32	5			
	MZ	22 34	9			
24	ePZ	12 40 46			72°	H 12 29 30 (USCGS)
24	iPKPZ	16 59 33		-	135°.5	H 15 41 40 (USCGS)
24	ePKPZ	21 50 08			135°.5	H 21 30 46 (USCGS)
	iPPZ	52 51		+		

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

AUGUST 1959 sheet 3

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
26	iPZ	08 37 25		-	77°	H 08 25 30 (USCGS)
	iXZ	37 38		-		
	iXZ	37 58		-		
	iXZ	38 08		-		
	iXZ	38 50		-		
	iXZ	39 15		-		
	iXZ	39 39		-		
	iXZ	40 18		-		
26	iPZ	10 38 35		+	66°.5	H 10 27 41 (USCGS)
	MZ	11 08	16			
29	iPZ	17 13 06		+	58°	H 17 03 10 (USCGS)
	iXZ	13 13		+		
	iXZ	13 21		-		
	iXZ	13 30		-		
	iPPPZ	16 40		-		
	iXZ	17 47		+		
	iXZ	18 25		+		
	iSPZ	21 47		-		
	MZ	17 41	13			
	MZ	17 46	9			
30	ePZ	03 29 18			19°.5	H 03 24 54 (USCGS)
	iXZ	29 19		+		
	iXZ	29 41		-		
30	iXZ	22 01 16		+	94°	H 21 45 07 (USCGS)

15 October 1959.

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR SEPTEMBER 1959

Instrument:- Wilson-Lamison seismometer free period 1 sec. coupled to galvanometer free period 3.7 sec, recording vertical component of velocity. (The Milne-Shaw (horizontal) seismographs have not recorded).

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	iPZ	10 59 49		-	58°.5	H 10 49 53 (USCGS)
1	iPZ	11 42 13		+	19°.5	H 11 37 40 (BCIS)
	iXZ	42 24		+		
	iPPZ	42 40		-		
	iPPPZ	42 49		-		
	iXZ	42 57		+		
	iXZ	43 50		-		
	iSZ	45 42		-		
	iSSZ	46 23		+		
	MZ	11 55	9			
3	ePZ	04 06 40			19°.5	H 04 02 00 (USCGS)
5	iPKPZ	23 23 30		+	143°	H 23 05 00 .09 deep (USCGS)
10	iPKPZ	05 54 12		+	128°	H 05 35 04 (USCGS)
12	iPKPZ	11 43 59		-	132°	H 11 24 47 (USCGS)
12	iPZ	21 28 47		+	52°	H 21 19 57 .03 deep (USCGS)
	iXZ	29 53		-		
14	iPKPZ	13 35 44		-	149°	H 13 15 49 (USCGS)
	iPKPZ	35 51		+		
14	ePKPZ	14 29 33		-	146°	H 14 09 39 (USCGS)
	iPKPZ	29 49		+		
	iXZ	29 55		-		
	iXZ	30 07		-		
	iXZ	30 12		+		
	iXZ	31 57		+		
	iXZ	33 53		-		
	MZ	15 45	18			
	MZ	15 52	17			
14	iPKPZ	17 26 06		+	146°	H 17 06 15 (USCGS)
	iXZ	26 27		-		
	iXZ	26 41		-		
	iPPZ	30 01		+		
14	iPKPZ	22 44 09		-	146°	H 22 23 53 (USCGS)
15	ePKPZ	06 19 37			146°	H 05 59 42 (USCGS)
	iPKPZ	19 43		+		
	iXZ	19 56		-		
	iXZ	23 34		+		
	iXZ	23 49		-		
	iXZ	26 18		-		
	MZ	07 42	16			

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

SEPTEMBER, 1959 sheet 2

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
15	iPKPZ	11 24 14		+	146°	H 11 05 53
	iPKPZ	24 45		-		.10 deep
	ipPKPZ	26 29		-		(USCGS)
	ipPKPZ	27 02		-		
16	ePZ	05 19 39			27°	H 05 13 50 (USCGS)
16	ePKPZ	16 17 04			146°	H 15 57 03 (USCGS)
21	iPZ	12 28 33		-	51°	H 12 19 30 (USCGS)
23	ePZ	10 46 31			38°	H 10 38 59 (USCGS)
23	iPZ	22 35 43		-	84°	H 22 23 11 (USCGS)
24	ePZ	05 51 09			38°	H 05 43 38
	iXZ	52 16		+		(USCGS)
25	ePZ	02 49 44			90°	H 02 36 48
	iPZ	49 45		+		(USCGS)
	iPPZ	53 21		-		
	eSKSZ	03 00 31				
	eSZ	00 53				
	MZ	03 34	15			
29	iXZ	15 52 17		+	146°	H 15 31 57 (USCGS)
30	iPKPZ	20 45 39		-	143°	H 20 25 58 (USCGS)

17 November 1959

International Seismological Centre From the ISC collection scanned by SISMOS

Dr Tellgetts Room.

024.10

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR OCTOBER 1959.

Instruments:- Wilson-Lamison seismometer free period 1 sec, coupled to G.E. galvanometer free period 3,7 sec, recording vertical component of velocity.
Milne-Shaw free period 12 sec, damping ratio 20:1, magnification 250, recording E component displacement. (from October 31)

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
5	ePZ	20 38 46			20°	H 20 34 04 (USCGS)
7	iPZ	08 35 12		+	20°	H 08 30 41 (USCGS)
	MZ	08 45				
12	iPZ	03 34 40		+	94°	H 03 21 52 (USCGS)
15	iPPZ	06 34 34		+	107°.5	H 06 15 32 (USCGS)
	iPPPZ	36 51		-		
	MZ	07 28	22			
19	iPKPZ	08 47 19		+	153°	H 08 27 21 (USCGS)
	iPKPZ	47 39		+		
24	iPZ	23 49 11		-	48°	H 23 40 34 (USCGS)
26	iPZ	07 47 37		+	83°	H 07 35 12 .01 deep (USCGS)
	ipPZ	48 05		-		
	iPPZ	50 49		+		
	iSKSZ	55 37		-		
	iSZ	57 51		-		
27	iPZ	07 04 39		-	77°	H 06 52 50 .02 deep (USCGS)
	ipPZ	04 56		-		
	iPPZ	07 43		-		
29	iPZ	10 47 10		-	78°	H 10 35 20 (USCGS)
29	iPZ	14 41 10		-	74°	H 14 30 24 .09 deep (USCGS)
30	iPZ	04 09 41		-	55°	H 04 00 26 (USCGS)
31	ePKPEZ	04 45 54			142°	H 04 27 12 .07 deep (USCGS)
	iSKPZ	48 41		+		

CORRECTION TO READING ON 1958 NOVEMBER 8 09 HOURS.

iPZ	09 34 24		+	72°.5	H 09 22 53 (USCGS)
iXZ	35 07		-		
iXNE	36 06		- -		
eSN	43 44				
eSKSN	44 29				
MN	10 14	14	5		

23 December 1959

International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR NOVEMBER 1959.

Instruments:- Wilson-Lamison seismometer free period 1 sec, coupled to G.E. galvanometer free period 3.7 sec, recording vertical component of velocity.
Milne-Shaw free period 12 sec, damping ratio 20:1, magnification 250, recording E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
2	PZ	08 57 36			98°	H 08 43 54 (USCGS)
2	iPKPZ	20 22 21		+	132°	H 20 03 32 .01 deep (USCGS)
2	PKPZ	22 12 55			149°.5	H 21 53 05 (USCGS)
	PKPZ	13 08				
3	ePPZ	09 59 35			111°.5	H 09 40 05 (USCGS)
5	PKPZ	12 09 36			138°	H 11 50 17 .02 deep (USCGS)
6	iPKPZ	01 30 46		-	132°	H 01 11 36 (USCGS)
6	iPKPZ	12 02 58		+	149°.5	H 11 43 06 (USCGS)
7	PZ	02 36 30			19°	H 02 32 08 (BCIS)
	ME	02 42	6	5		
7	iPKPZ	22 36 06		-	149°.5	H 22 16 15 (USCGS)
8	iPZ	14 06 51		+	76°	H 13 54 55 (USCGS)
	iXZ	07 04		+		
	eSE	16 35				
	ME	14 38	20	26		
10	iPZ	21 04 30		-		
	ME	21 30	22	10		
12	iXZ	05 38 31		-		
	iXZ	39 23		-		
	ME	06 01	22	6		
15	iPZ	10 34 24		-	52°	H 10 25 03 (USCGS)
	eSE	41 39				
	ME	11 03	11	5		
15	iPE	17 13 48		-	22°.5	H 17 08 41 (BCIS)
	ePZ	13 48				
	iPPE	14 12		+		
	iSE	17 53		+		
	iSZ	17 55		-		
	iSSE	18 28		+		
	ME	17 22	20	350		
	MZ	17 26	9	40		
	ME	17 32	12	55		

International Seismological Centre From the ISC collection scanned by SISMOS

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
16	iPZ	10 31 10		-	57°.5	H 10 21 17 (USCGS)
	iXZ	31 17		-		
	iPPZ	33 27		-		
	eSE	38 05				
	ME	10 52	18	3		
17	iPZ	02 45 35		-	87°	H 02 32 37 (USCGS)
19	iPE	11 27 01		-	125°	H 11 08 32 (USCGS)
	iSKSE	34 28		+		
	iSSE	46 09		-		
	ME	12 07	36	25		
20	ePZ	19 39 29			57°.5	H 19 29 38 (USCGS)
22	ME	17 53	20	2	154°	H 16 26 34 (USCGS)
22	iPKPZ	19 53 18		-	147°	H 19 34 35 .09 deep (USCGS)
	iPKPZ	53 20		+		
	ipPKPZ	55 28		-		
23	ePKPZ	16 34 39			146°	H 16 14 47 (USCGS)
26	iPPZ	07 24 30		-	103°	H 07 06 19 (USCGS)
	ME	08 09	22	7		
	ME	08 17	20	4		
26/27	iXZ	23 27 01		-	103°	H 23 09 23 (USCGS)
	ME	00 24	20	16		
	ME	00 30	20	21		
27	iPZ	00 27 24		+	22°	H 00 22 30 (USCGS)
	iXZ	27 28		+		
	iXZ	27 31		+		
27	iPZ	00 31 09		+	22°	H 00 26 10 (USCGS)
28	ePKPZ	03 05 48			146°	H 02 45 45 (USCGS)
	ePKPZ	05 51				
28	ME	13 30	18	2	88°	H 12 34 53 (USCGS)
	ME	13 35	19	3		
28	ePKPZ	22 58 40			138°	H 22 39 13 (USCGS)
30	iLgE	11 40 47		+	51°	H 11 12 43 (USCGS)
	ME	11 45	12	11		

International Seismological Centre From the ISC collection scanned by SISMOS

Dr Tellgers Room

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR DECEMBER 1959

Instruments:- Wilson-Lamison seismometer free period 1 sec, coupled to G.E. galvanometer free period 3.7 sec, recording vertical component of velocity.
Milne-Shaw free period 12 sec, damping ratio 20:1, magnification 250, recording E component displacement.

Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	iPZ	12 43 47		-	23°	H 12 38 46 (USCGS)
	iPPZ	44 19		-		
	iSE	47 51		+		
2	ePZ	09 48 38			110°	H 09 34 00 (USCGS)
	iPKPZ	52 36		+		
	ME	10 30	25	8		
12	ME	20 11	15		19°	H 20 00 06 (BCIS)
14	ME	22 52			73°	H 22 00 50 (USCGS)
14/15	iPKPZ	23 40 44		-	117°	H 23 21 56 (USCGS)
	iSKSE	47 44		-		
	ME	00 12	40	40		
	ME	00 36	20	28		
21	iPPPE	11 32 50		+	58°	H 11 19 14 (USCGS)
	iSE	37 20		-		
	ME	12 02	20	50		
23	PZ	09 33 37			20°	H 09 28 56 (USCGS)
27	iPZ	16 04 03		+	69°	H 15 52 55 (USCGS)
	iSE	13 03		+		
	iScSE	14 17		+		
	iLgE	21 06		+		
	ME	16 33	18	20		
28	ePZ	07 31 47			72°	H 07 20 32 (USCGS)
	eSE	41 27				
	ME	08 08	20	15		
~~29~~	iPKPZ	17 34 29		+	147°	H 17 14 40 (USCGS)
31	iPZ	20 58 12		+	24°	H 20 52 55 (USCGS)
	iSEZ	21 02 25		+ -		

CORRECTION TO 1959 JANUARY LIST

Delete entry 4 January iPZ 23 19 25
Delete entry 16 January ?ePZ 18 11 34

7 March 1960

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UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR JANUARY 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	2	iPNZ	02 13 39		- -	25°	H 02 08 15 (USCGS)
		eSN	18 04				
		iXE	18 41		-		
		iXN	20 19		+		
		MN	02 22	20	4		
2	2	ePZ	21 23 54			78°	H 21 12 07 .01 deep (USCGS)
3	2	iPZ	22 45 56		+	63°	H 22 35 29 (USCGS)
4	3	iPZ	06 31 41		+	36°	H 06 24 31 (USCGS)
5	3	iSN	07 15 03		+	36°	H 07 02 07 (USCGS)
6	3	iPZ	10 19 41		+	36°	H 10 12 33 (USCGS)
7	3	iPZ	18 00 31		-	95°	H 17 47 12 (USCGS)
8	5	iPZ	11 40 38		-	59°.5	H 11 30 44 (USCGS)
		MN	12 03	30	36		
9	11	iPKPZ	13 38 43		-	149°	H 13 18 47 (USCGS)
10	13	MN	04 10				
11	13	iPZ	20 26 56		-	84°	H 20 14 27 (USCGS)
		iXEZ	31 43		+ +		
12	14	iPKPZ	06 14 36		+		
13	15	iPEZ	19 27 36		+ +	92°	H 19 14 29 .01 deep (USCGS)
		ipPZ	27 56		+		
		iXZ	29 34		+		
		iXZ	30 27		-		
		iXEZ	31 19		+ -		
		iSKSNE	38 04		+ +		
		ME	19 59	38	180		
		MZ	20 08	16			
14	15	ePKPZ	22 35 03			139°	H 22 15 44 (USCGS)
		eXZ	35 22				
		iSKPZ	38 50		-		
		MN	23 38	22	4		
		MN	24 21	18	1		
15	16	iPZ	04 23 31		-	24°	H 04 18 10
		MN	04 32	10	4		

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR JANUARY 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
16	19	iPZ	14 19 45		-	82°	H 14 07 23 (USCGS)
		iXE	19 54		-		
		iPPZ	22 49		+		
		iSN	29 54		-		
		iSKSNE	30 03		- -		
		ME	14 56	18	110		
17	19	iPZ	14 55 26		-	82°	H 14 43 24 (USCGS)
		iXZ	55 47		-		
18	20	iPZ	02 34 00		+	104°	H 02 19 53 (USCGS)
		ME	03 21				
		MN	03 26				
19	22	MNE	19 18				
		MNE	19 26				
20	23	ePZ	13 37 45			11°	H 13 35 03 (USCGS)
		eSEZ	39 41				
		MN	13 43	18	3		
21	24	iPZ	06 05 13		-	69°	H 05 53 58 (USCGS)
		iSN	14 22		-		
		MNE	06 43				
22	31	iXZ	21 19 23		+		

22 March 1958

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International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR FEBRUARY 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	iPZ	16 22 34		+	82°	H 16 10 15 (USCGS)
		eSN	32 45				
		MN	17 08	20	18		No EW record
2	1	iPZ	18 15 00		+	82°	H 18 02 39 (USCGS) No NS or EW record
3	1	iPZ	20 58 06		+	82°	H 20 45 45 (USCGS) No NS or EW record
4	2	iPZ	08 23 31		+	76°	H 08 11 53 (USCGS)
		iSN	33 06		+		
		MN	09 03				No EW record
5	2	iPZ	09 01 36		-	82°	H 08 49 13 (USCGS) No EW record
6	7	iPZ	23 35 10		+	75°	H 23 23 30 (USCGS)
		iSKSN	45 13		-		
		MN	24 05	20	2		
7	9	ePnZ	23 21 39			02°	H 23 21 06 (Kew) 54°12'N 01°45'E
		eSnNEZ	22 04				
8	15	iPZ	01 58 42		+	79°	H 01 46 40 (USCGS)
9	16	iPZ	06 16 12		+	83°	H 06 04 05 (USCGS)
		MNE	06 47	26	4		
		MNE	06 56	20	7		
10	16	iXE	23 09 57		+		
11	17	iPEZ	05 27 27		+ -	51°.5	H 05 18 35 .03 deep (USCGS)
		iPcPZ	28 34		+		
		iPPZ	29 27		-		
		iSN	34 29		+		
		isSN	35 45		-		
		iSSN	38 30		+		
		isSSN	39 22		+		
		iXE	40 17		+		
12	18	ME	20 49				No NS record
13	19	ME	20 34				No NS record

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR FEBRUARY 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
14	22	iPZ	11 02 07		+	75°	H 10 50 23 (USCGS)
		iPcPZ	02 27		-		
		iSN	11 47		+		
		iSKSN	12 28		-		
		MN	11 40	20	8		
15	24	iPZ	12 37 15		+	60°	H 12 27 06 (USCGS)
		eXE	41 04				
		eSE	45 24				
		ME	13 06	11	10		
16	27	iXNZ	08 17 50		- +		
		iXN	19 08		-		
		iXN	20 23		-		
17	27	iPZ	23 41 08		+	90°	H 23 27 49 (USCGS)
		iPPZ	44 36		-		
		iSKSN	51 17		-		
		iSNE	51 46		- -		
		ME	24 25	12	15		
		MZ	24 25	12			
18	28	iPZ	10 02 01		-	41°.5	H 09 54 53 (USCGS)
		iSN	08 06		-		
		iXNE	09 06		+ +		
		ME	10 15	20	9		

1 May 1958

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR MARCH 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	iPZ	09 35 33		-	49°	H 09 26 46 (USCGS)
2	1	iPKPZ	16 34 16		-	143°	H 16 16 01 (USCGS)
3	3	iPKPZ	04 25 44		+	139°	H 04 06 16 (USCGS)
4	3	ePZ MN MN	07 35 38 08 13 08 20	 14	 3	89°	H 07 22 42 (USCGS)
5	3	iXZ	12 27 30		+		
6	3	iPZ iSN	16 29 28 38 39		+ -	70°	H 16 18 17 (USCGS)
7	3	eSE	17 11 26			52°	H 16 55 38 .03 deep (USCGS)
8	3	iPZ	17 43 59		-	70°	H 17 32 47 (USCGS)
9	9	ePKPZ ME	10 43 21 11 50			159°	H 10 22 25 .01 deep (USCGS)
10	11	iPZ ipPZ iXNE iXNE iXNZ iXNE iSKSE iSNE MN	00 38 42 39 00 39 30 39 53 42 33 43 27 48 57 49 13 01 20	 20	+ - + + - - - + - - - - - 105	88°	H 00 25 56 .01 deep (USCGS)
11	14	MN	00 44	20	5	109°	H 23 49 23 (USCGS)
12	15	MN	01 14	18	150	89°	H 00 24 04 (USCGS)
13	15	eZ MN	06 31 47 06 41			20°.5	H 06 27 00 (USCGS)
14	18	ePZ eXN	22 31 49 41 23			75°	H 22 20 02 (USCGS)

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR MARCH 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
15	20	iPNZ	01 49 47		+ −	75°	H 01 38 04 (USCGS)
		iPPE	52 41		−		
		iSNE	59 27		+ +		
		iSKSNE	02 00 26		+ −		
		iSSNE	04 27		+ +		
		MN	02 24	18	5		
16	22	iPZ	10 23 26		+	74°.5	H 10 11 27 (USCGS)
		iPcPZ	23 37		−		
		MN	10 49	40	16		
17	22	ePZ	11 16 46			50°	H 11 07 47 (USCGS)
		ME	11 41				
18	23	MN	11 12			90°	H 10 14 42 (USCGS)
19	28	iPZ	12 15 12		+	55°	H 12 06 24 .03 deep (USCGS) No EW record
		iXZ	15 29		−		
		iXZ	15 55		−		
		ipPZ	16 13		+		
		iXZ	17 08		−		
		iPPZ	17 29		−		
		iXN	27 16		+		
20	30	iPZ	16 12 23		+	10°	H 16 10 16 (BCIS)

1 May 1958

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ROYAL OBSERVATORY EDINBURGH 13 OCT 1958

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR APRIL 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	3	iPZ	02 28 20		+	20°	H 02 23 43 (USCGS)
		iXZ	28 22		+		
		iSN	31 38		+		
		eXE	31 49				
		ME	02 37	18	9		
2	3	?eXZ	07 26 30			28°	H 07 18 34 (USCGS)
		iSSN	30 32		+		
		MN	07 38				
3	4	ePN	09 23 17			20°	H 09 18 49 (USCGS)
		eSN	25 58				
4	7	iPN	15 40 35		+	59°	H 15 30 38 (USCGS)
		iPZ	40 38		+		
		iPE	40 39		+		
		iPcPZ	41 22		−		
		iPPZ	42 54		−		
		iSN	48 36		−		
		iSE	48 41		−		
		iSSE	52 29		−		
		iXN	52 41		+		
		MN	16 10	16	265		
		MZ	16 10	16			
5	7	iPZ	18 17 31		−	84°	H 18 05 02 (USCGS)
		iPcPZ	17 39		−		
		iSN	27 56		−		
		iSSN	33 41		−		
		ME	18 56	16	27		
		MZ	18 59	20			
6	7	ePZ	18 42 39				
7	7	iPZ	18 50 45		−		
8	7	iPZ	19 23 29		−	60°	H 19 13 20 (USCGS)
		eSE	31 37				
		ME	19 51	13	60		
9	8	iPZ	00 24 16		+	58°	H 00 14 20 (USCGS)
		iSE	32 19		+		
10	9	iPZ	06 25 50		−	64°	H 06 15 12 (USCGS)
		iSN	34 17		−		
		ME	06 54	15	2		
11	10	XZ	10 45 12				
		XZ	49 52				
		MN	11 29	12	1		
12	10	iPZ	12 02 14		+	83°	H 11 50 05 (USCGS)
		iXN	02 42		−		
		iXZ	02 51		−		
		eXE	02 51				

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR APRIL 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
13	10	iPZ	19 23 30		+	103°.5	H 19 10 13
		ipPZ	24 38		+		.03 deep
		iXZ	29 23		-		(USCGS)
		iSKSN	33 42		-		
14	11	ME	00 10	19			
15	11	iPZ	01 10 29		-	83°.5	H 00 58 13
		iSE	20 51		+		(USCGS)
		ME	01 44	21	3		
		ME	01 49	18	5		
16	11	iPZ	23 23 04		+	69°	H 23 11 19
		iPcPZ	23 17		+		(USCGS)
		iPPZ	25 44		+		
		iSNE	32 34		- +		
		iSKSE	33 32		+		
		MN	23 42	14			
17	12	iPZ	11 59 12		+	79°	H 11 46 58
		iSN	12 09 05		-		(USCGS)
		ME	12 35	11	10		
		MZ	12 38	16			
18	12	ePZ	13 38 08			89°	H 13 25 22
		eSN	49 01				(USCGS)
		MN	14 20	18			
19	13	ME	04 49			59°	H 04 08 56
							(USCGS)
							No Z record
20	13	ePN	09 17 28			58°	H 09 07 24
		iSE	25 20		-		(USCGS)
		eXN	26 40				No Z record
		MN	09 46	16	2		
21	13	iPN	12 40 29		-	72°	H 12 29 07
		iSE	49 51		+		(USCGS)
		iSKSN	50 21		-		No Z record
		MN	13 21	18	27		
22	14	iPEZ	21 44 52		+ +	82°.5	H 21 32 28
		iXZ	45 48		-		(USCGS)
		iXZ	46 14		+		
		iXN	51 57		+		
		iSNE	55 09		- -		
		MZ	22 18	18			
		MN	22 19	21	14		
		ME	22 27	19	18		
23	14	iXZ	23 00 56		+		
		ME	23 25	16	1		
24	15	iPEZ	01 43 08		+ -	83°	H 01 30 43
		iSN	53 22		-		(USCGS)
		iSKSN	53 37		-		
		ME	02 21	18	1		

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR APRIL 1958, sheet 3

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
25	15	iPZ	04 04 43		+	78°	H 03 52 39
		iSNE	14 40		+ +		(USCGS)
		ME	04 35	21	5		
		ME	04 43	16	4		
26	17	?XZ	10 21 29			114°	H 10 04 46
		?XZ	22 17				(USCGS)
		MN	11 18				
27	18	ePKPZ	09 22 27			123°	H 09 03 27
		eSKSN	29 28				(USCGS)
28	19	eSN	04 25 50			81°	H 04 03 26
		MN	04 49				(USCGS)
							No EW record
29	19	ePZ	22 53 42			73°	H 22 42 20
							(USCGS)
30	21	MNE	06 28				
31	21	ePKPZ	20 34 22			141°	H 20 14 47
		MN	21 31	20	2		(USCGS)
32	21	ePZ	22 51 50			104°	H 22 37 18
		eSKSN	23 02 44				(USCGS)
		eSE	03 27				
33	22	ePZ	10 08 37			28°.5	H 10 02 43
		MN	10 22				(USCGS)
34	23	iPZ	03 09 56		+	79°	H 02 57 40
		eSE	19 49				(USCGS)
35	24	iPKPZ	13 29 26		-	148°	H 13 09 41
		iXZ	29 38		+		(USCGS)
		eXE	38 52				
		eXE	40 48				
36	26	eXE	09 44 00				
37	27	iPZ	19 15 39		+	73°	H 19 03 50
		iXZ	15 50		-		(USCGS)
		MN	19 53	16	2		
38	28	iPZ	12 00 42		-	89°	H 11 47 40
		eSKSE	11 07				(USCGS)
		iSNE	11 26		+ +		
		ME	12 35	22	6		
		ME	12 41	19	5		
39	30	iPZ	14 12 30		-	19°	H 14 08 00
		iXZ	12 37		+		(USCGS)
		iSNE	16 07		+ -		

8 July 1958

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International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR MAY 1958.

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	iPKPZ	00 48 19		+	138°	H 00 29 15 .03 deep (USCGS)
		ipPKPZ	49 17		-		
		iPPZ	51 36		-		
		ipPPZ	51 55		-		
		iPKSN	52 49		+		
		ME	01 45	21			
2	2	MN	13 36	20			
3	3	eXN	08 20 41				
		MN	08 43	16			
4	3	iPZ	20 23 36		+	24°.5	H 20 18 20 (USCGS)
		iXZ	23 44		+		
		iPPZ	24 21		-		
		eXNE	32 36				
		ME	20 37				
5	4	MN	11 00			12°	H 10 52 45 (BCIS)
6	5	iPZ	05 28 41		-	37°	H 05 21 33 (USCGS)
		eSE	34 39				
		MN	05 45	15	2		
7	5	iPZ	06 42 45		+	69°	H 06 31 39 (USCGS)
		iXZ	43 00		-		
		eSN	52 12				
		MN	07 16	12	1		
8	5/6	eSNE	00 12 27			63°	H 23 53 29 (USCGS)
		ME	00 28	15			
9	6	MN	04 39	12			
10	6	iXE	14 27 13				
		ME	14 34	13			
11	7	eXE	07 40 17				
		eXN	40 27				
12	8	ePN	02 51 45			19°	H 02 47 14 (USCGS)
		MN	02 57				
13	8	ePPZ	12 58 24			106°	H 12 40 46 .03 deep (USCGS)
		iSKSNE	13 04 22		+ +		
14	9	iPZ	02 46 44		-	27°	H 02 40 49 (USCGS)
		ME	02 58				
15	10	ePN	23 04 35			58°	H 22 54 40 (USCGS)
		eSE	12 43				
		MN	23 33	18			

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR MAY 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
16	11	ePN	05 33 58			58°	H 05 23 54 (USCGS)
		eSE	42 02				
		MN	06 02	18			
17	12	eSNE	05 59 24			74°	H 05 38 16 (USCGS)
		MN	06 27	18			
18	15	ePN	04 37 37			74°	H 04 24 50 (USCGS)
19	17	eSE	05 38 39			38°	H 05 25 34 (USCGS)
20	17	ME	08 21				
21	18	iXN	02 55 52		+	139°	H 02 32 52 (USCGS)
		MN	03 52	19	3		
		MN	04 37	19	2		No Z record
22	18	iPKPZ	13 40 27		-	139°	H 12 21 18 (USCGS)
		iXN	44 21		-		
		MN	13 56	19	2		
23	25	MN	01 27	21		74°	H 00 35 23 (USCGS)
24	25	iPZ	15 06 16		+	74°	H 14 54 30 (USCGS)
		MN	15 46	19			
25	25	iPZ	17 53 22		-	85°.5	H 17 40 47 (USCGS)
26	25	iPZ	21 24 14		-	84°	H 21 11 45 .02 deep (USCGS)
		iXZ	24 25		-		
		iSNE	34 41		+ +		
		iSKSE	36 10		+		
		ME	21 59	20	5		
27	26	iPZ	09 02 16		-	84°	H 08 49 47 .02 deep (USCGS)
		iXZ	02 24		-		
		iSN	12 43		+		
28	26	eSE	11 17 36			73°	H 10 56 30 (USCGS)
29	26	iPKPZ	16 36 44		-	148°	H 16 16 48 (BCIS)
30	27	iPZ	18 33 08		-	26°.5	H 18 27 47 (BCIS)
31	30	ePZ	03 20 13			15°	H 03 16 42 (BCIS)
32	30	iPZ	18 16 23		-	73°	H 18 04 50 (USCGS)
		iXZ	17 13		+		No EW record
		iSN	15 59		+		
		MN	18 55	12	3		
33	31	iPZ	03 56 54		-	33°	H 03 50 12 (BCIS)
		MN	04 11	18			

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR MAY 1958, sheet 3

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
34	31	ePKPZ	19 52 02			141°	H 19 32 30 (USCGS)
		iPKPZ	52 09		+		
		iPPN	54 57		-		
		iXN	55 38		+		
		iSKPZ	55 42		-		
		ME	20 43	21	8		
		MN	20 52	22	18		

8 July 1958

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International Seismological Centre From the ISC collection scanned by SISMOS

UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR JUNE 1958.

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	ePN	04 11 23			73°	H 04 00 06 (USCGS)
2	1	iPZ	18 31 35		-		
		ME	18 59				
3	2	iXZ	14 58 47		-		
4	3	iPKPZ	19 51 23		-	140°	H 19 31 52 (USCGS)
		iPPZ	54 22		-		
		iXZ	54 53		+		
		iPKSN	55 00		-		
		eSKSN	58 26				
5	4	iPZ	14 41 17		+	73°	H 14 29 50 (USCGS)
		iSE	50 43		-		
		iXN	50 55		+		
		MN	15 16	20	11		
6	5	ePZ	13 34 51			23°.5	H 13 29 43 (BCIS)
		eXZ	34 56				
		iXZ	35 34		-		
		eSE	39 03				
		ME	13 43				
7	6	ePEZ	09 23 27			79°	H 09 11 18 (USCGS)
		iXZ	23 32		-		
		iPcPZ	23 40		+		
		iXZ	23 45		+		
		ePPE	26 31				
		iSN	33 24		+		
		iScSE	33 46		-		
		iSPE	34 12		-		
		eSSN	38 28				
		ME	10 03	18	10		
8	6	iPZ	19 27 49		+	80°.5	H 19 15 28 (USCGS) No NS record
		iPcPZ	27 58		+		
		ePPZ	30 57				
		eSE	37 41				
		eSKSE	37 58				
		ME	19 56				
9	6	iPZ	22 56 15		+	79°.5	H 22 44 05 (USCGS)
		eSN	23 06 16				
		eSKSN	06 35				
10	8	iPZ	00 50 25		-	72°	H 00 38 52 (USCGS)
		iPPZ	53 19		-		
		iSN	59 37		+		
		iSKSNE	01 00 22		+ -		
		MN	01 29	18			
11	8	eSNE	21 26 36			55°.5	H 21 09 23 (USCGS)
		eSSN	31 13				

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UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR JUNE 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
12	10	ePZ	00 22 01			73°	H 00 10 30 (USCGS)
13	10	ePKPZ	04 20 14			155°	H 04 00 04 (USCGS)
14	12	iPZ	21 04 29		-	73°	H 20 52 57 (USCGS)
		iXZ	05 11		-		
		eSNE	13 53				
		iSKSNE	14 26		+ +		
		MN	21 39	18	20		
15	15	iPKPZ	15 13 08		-	144°	H 14 54 37 .01 deep (USCGS)
		iXZ	16 00		+		
		iSKKSN	22 21		-		
		iSSN	34 15		-		
16	17	iPPZ	19 23 49		+	95°	H 19 06 43 .01 deep (USCGS)
17	18	iPZ	01 18 43		+	16°	H 01 15 02 (USCGS)
		iXZ	18 48		+		
		eSNE	21 43				
		ME	01 25	9.5	7		
		MN	01 26	10	7		
		MZ	01 26	10			
18	18	ePNZ	02 27 10			16°	H 02 23 24 (BCIS)
		eSN	30 09				
		MN	02 34	10	2		
19	18	iPN	04 37 43		+	16°	H 04 34 04 (USCGS)
		ePZ	37 43				
		ePE	37 49				
		eSNE	40 55				
		MN	04 45	10	3		
		MZ	04 45	10			
20	19	ePNZ	05 29 38			74°	H 05 18 00 (USCGS)
		iSN	39 12		+		
		MN	06 08	20	7		
21	23	iPZ	05 20 06		-	59°	H 05 10 03 (USCGS)
		ME	05 49	12	4		
		MZ	05 49	12			
22	23	MN	07 27				
23	23	ePKPZ	19 36 08			144°.5	H 19 17 43 0.1 deep (USCGS)
24	24	iPcPZ	04 59 47		-	53°	H 04 48 15 (USCGS)
		iSN	05 05 08		-		
		iScSE	07 31		+		
		ME	05 21				
25	24	MN	06 19	9		16°	H 06 07 06 (BCIS)
26	24	ME	07 43	20	3		

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International Seismological Centre From the ISC collection scanned by SISMOS

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
27	25	iPKPZ	09 55 28		-	122°	H 09 36 30 (USCGS)
		iXZ	55 33		+		
		iPPZ	57 09		-		
		eSKSE	10 02 23				
		eSSE	13 29				
		ME	10 42	24	38		
		MZ	10 50	20			
		MN	10 52	20	23		
28	26	iPZ	04 49 24		+	70°	H 04 38 12 .02 deep (USCGS)
		ipPZ	49 55		-		
		iSE	58 27		-		
		isSE	59 16		+		
		iXN	05 00 17		+		
29	26/27	iSE	23 53 19		-	89°	H 23 29 32 (USCGS)
		MN	00 32	15			
30	27	MN	06 27			77°.5	H 05 44 28 .01 deep (USCGS)
31	29	iPZ	03 38 41		+	90°.5	H 03 25 42 .02 deep (USCGS)
		eSN	49 21				
32	29	ePKPZ	09 34 27			142°	H 09 14 37 (USCGS)
		eSKSE	41 27				
33	29	ePZ	12 59 37			141°.5	H 12 40 48 (USCGS)
		iXZ	59 50		+		
		eSKSN	13 07 44				
34	30	iPZ	08 48 15		+	27°	H 08 42 41 .01 deep (BCIS)
		iXZ	48 27		+		
		isPNEZ	48 40		- + -		
		iPPZ	49 04		-		
		iXE	52 35		-		
		iSN	52 44		-		
		isSN	53 20		-		
		eXE	53 39				
		eSSN	54 08				
		iScPN	55 05		+		
		iScPZ	55 06		-		
		iScSNE	58 55		+ -		
35	30	iPZ	18 39 17		-	89°	H 18 26 20 (USCGS)
		iXZ	39 31		-		
		eSKSN	49 41				
		iSNE	49 59		- +		
		ME	19 15	20	3		

8 October 1958

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DURHAM UNIVERSITY OBSERVATORY

ENGLAND

International Geophysical Year

Measurement of microseisms 1958.

Throughout the month of JUNE the microseismic displacement as recorded by the N and E component seismographs has been less than 1 micron.

8 October 1958

International Seismological Centre From the ISC collection scanned by SISMOS

International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY 14 NOV 1958 EDINBURGH

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR JULY 1958.

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	ePE	06 04 37			73°.5	H 05 53 07 (USCGS)
		iXZ	06 35		+		
		MN	06 47	15			
2	2	ePKPZ	05 06 45			144°	H 04 48 03 .06 deep (USCGS)
3	3	iPZ	05 58 32		+	92°.5	H 05 45 07 (USCGS)
		eSKSN	06 08 56				
		eSN	09 28				
		MN	06 46	15			
4	3	iPKPZ	06 47 04		+	153°.5	H 06 27 44 .07 deep (USCGS)
		iPKPZ	47 21		+		
		epPKPEZ	48 13				
		iPPZ	50 55		-		
5	4	ePKPZ	00 39 10			144°.5	H 00 19 28 (USCGS)
6	4	eSN	19 00 19			105°	H 18 34 03 (USCGS)
7	5	iXZ	02 13 42		-	30°	H 02 05 57 (MOSCOW)
		ME	02 28				
8	6	iXZ	04 54 02		-	69°	H 04 40 59 (USCGS)
		iXN	05 02 20		-		
9	7	eSN	05 37 30			75°	H 05 16 04 (USCGS)
10	8	ePZ	05 04 25			08°	H 05 02 26 (BCIS)
		iXZ	04 35		-		
		iXZ	04 55		-		
		iXZ	05 10		+		
		iSZ	05 56		-		
		iXZ	06 36		-		
		eXNZ	07 21				
		MN	05 09	7			
11	8	iPKPZ	06 26 12		-	147°	H 06 06 28 (USCGS)
		iPKPN	26 15		-		
		iPPN	29 39		-		
12	8	ME	23 47	18		104°	H 22 48 36 (USCGS)

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International Seismological Centre From the ISC collection scanned by SISMOS

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR JULY 1958, sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
13	10	iPNEZ	06 26 16		+ - -	61°	H 06 15 54 (USCGS)
		iPcPE	27 06		-		
		iXNE	28 38		- -		
		iScPZ	31 06		-		
		iXNE	34 18		- -		
		iSNE	34 45		- -		
		iXNE	34 53		+ +		
		iSSNE	38 48		- +		
		MN	06 54	20	600		
14	10	ME	15 28				
15	11	ePZ	19 23 45			95°	H 19 10 20 (USCGS)
		iPPZ	27 41		+		
		eSE	34 26				
		eSKSE	34 47				
		ME	20 02	20	2		
16	12	ePZ	01 02 38			102°	H 00 48 30 (USCGS)
		eSKSE	13 09				
		eSE	14 14				
		ME	01 45				
17	13	iXZ	20 50 40		+		
		eXNE	51 35				
18	15	ePZ	08 04 54			25°.5	H 07 59 18 (USCGS)
		eSNE	09 34				
		ME	08 15	13			
19	17	iPZ	05 42 01		+	22°	H 05 37 00 (BCIS)
		iSE	45 54		+		
		SSN	46 36				
		ME	05 51	11	5		
20	17	eSE	19 23 20			74°	H 19 02 10 (USCGS)
		ME	19 54	19			
21	17	eSE	21 20 31			74°	H 20 59 17 (USCGS)
		ME	21 50	18			
22	18	iPZ	00 51 25		-	75°	H 00 39 18 (USCGS)
		eSE	01 00 35				
		eSKSE	01 23				
		ME	01 26	16			
23	18	iPZ	01 59 58		+	85°	H 01 47 21 .02 deep (USCGS)
		epPNE	02 00 33				
		eSNE	10 25				
24	18	ePZ	21 50 51			91°	H 21 38 05 (USCGS)
		iSKSN	22 01 00		-		
		iSN	01 24		+		
25	19	ePPN	06 50 24			120°	H 06 30 19 .03 deep (USCGS)
		eSKSN	55 41				
26	19	eSE	15 19 32			79°.5	H 14 57 24 (USCGS)
		ME	15 50				

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR JULY 1958, sheet 3

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
27	19	ePKPE	18 35 42			112°.5	H 18 16 52 (USCGS)
		ePKSNE	39 32				
		iSKSNE	43 28		- -		
		ME	19 26	21	14		
28	20	eXZ	19 31 01			09°	H 19 27 17 (BCIS)
		eXZ	31 13				
		iXNZ	32 00		- +		
		iXZ	32 47		+		
		iXZ	33 11		-		
29	21	iPZ	07 36 58		-	77°.5	H 07 24 58 (USCGS)
		eSN	46 43				
		ME	08 09	21	2		
		MN	08 19	16	2		
30	21	iPNZ	14 48 55		- -	74°	H 14 37 18 (USCGS)
		iSNE	58 28		- +		
		MN	15 21	18	1		
		MN	15 33	15	2		
31	22	iPZ	04 05 52		+	61°.5	H 03 55 35 (USCGS)
		eSE	14 13				
32	23	iXZ	03 10 37		-		
		iXZ	12 19		-		
33	23	ePE	10 40 40			89°	H 10 27 19 (USCGS)
		iXN	50 45		+		
		iSE	51 05		-		
		ME	11 16	19	9		
		ME	11 30	15	10		
34	24	iPZ	13 19 49		+	72°.5	H 13 08 05 (USCGS)
35	26	ePZ	06 27 58			103°	H 06 13 50 (USCGS)
		eSKSNE	38 41				
		eSNE	39 40				
		eSSN	46 52				
		MN	07 19	18	5		
36	26	iPZ	17 49 00		-	89°	H 17 37 09 0.1 deep (USCGS)
		ipPZ	51 13		-		
		iPPE	52 48		-		
		iXE	58 37		-		
		iSKSE	58 46		-		
		iSN	59 02		-		
		iXN	59 21		+		
		eXE	18 00 07				
		isSE	02 10		-		
		iXE	02 47		-		
		iXNZ	03 01		+ -		
		iPKPPKPZ	14 51		-		
		ipPKPPKPZ	17 30		+		
37	27	iPKPZ	00 41 09		-	145°.5	H 00 22 32 0.1 deep (USCGS)
38	27	iPZ	17 32 54		+	99°	H 17 19 03 (USCGS)
		ePPN	36 53				
		eSKSE	43 27				

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR JULY 1958, sheet 4

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
39	27	iPNE	18 35 01		- -	19°	H 18 30 33 (USCGS)
		iSN	38 39		+		
		MN	18 42	10	2		
40	28	MN	16 09	11	2		
41	29	ePNZ	21 46 57			55°	H 21 37 25 (USCGS)
		eXNZ	47 32				
		ePcPN	48 03				
		ePPN	49 08				
		iSN	54 37		+		
		MN	22 04	12	1		
42	30	MN	03 37	20		81°.5	H 02 47 17 (USCGS)
43	30	eSKSE	05 10 33			119°	H 04 44 53 (USCGS)
		ME	05 56	20			
44	31	eSKSE	02 25 32			74°	H 02 03 45 (USCGS)

3 November 1958

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International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY 14 NOV 1958 EDINBURGH

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR AUGUST, 1958.

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	ePKPZ	05 56 30			141°.5	H 05 37 50 .07 deep (USCGS)
		eSKSNE	06 02 36				
2	3	ePKPZ	01 25 06			148°	H 01 06 24 .09 deep (USCGS)
		ePPZ	28 38				
		eSKSNE	31 26				
3	3	iXZ	11 29 20		+		
		eXN	35 23				
		eXN	37 41				
4	4	iXN	04 36 42		+	118°	H 04 13 19 .02 deep (USCGS)
		iXN	39 35		+		
5	6	ePnZ	17 17 36			06°	H 17 16 05 (USCGS)
		eXZ	17 48				
		eXZ	18 20				
		eXZ	18 29				
		eXZ	18 50				
		eXEZ	18 56				
		eXZ	19 06				
		iXZ	19 13		+		
		iXZ	20 14		-		
6	6	iPKPZ	21 28 47		+	141°.5	H 21 09 09 (USCGS)
		iPPN	31 35		+		
		eSSN	50 52				
7	8	eSN	05 35 30			13°.5	H 05 29 35 (BCIS)
		eLNZ	37 06				
8	8	ePZ	20 40 39			13°.5	H 20 37 26 (BCIS)
		eXE	40 53				
		eXNE	44 58				
		eLZ	45 53				
9	11	ePPN	08 15 15			143°.5	H 07 53 12 (USCGS)
10	12	ME	17 12			79°	H 16 23 42 (USCGS)
11	12	ePKPZ	19 43 50			111°	H 19 25 05 (USCGS)
		ePPE	44 20				
		eSKSE	50 35				
		MN	20 34	19	9		
12	13	eXNEZ	07 49 23				
		ME	08 10	12	1		

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR AUGUST 1958 sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
13	13	iPNZ	20 24 45		- +	74°.5	H 20 13 00 (USCGS)
		iSN	34 18		+		
		iSKSN	34 56		+		
		eSSN	39 33				
14	14	ePcPE	11 36 31			39°.5	H 11 27 00 (USCGS)
		eSNE	40 34				
		ME	11 53	21	6		
15	14	iPNZ	15 06 49		- -	73°.5	H 14 55 10 (USCGS)
		iSN	16 16		-		No EW record
		eSKSN	16 50				
		MN	15 46	17	26		
16	15	iPZ	20 06 56		+	71°.5	H 19 55 39 .01 deep (USCGS)
		iPcPZ	07 08		+		
		iXZ	07 27		-		
		iSNE	16 07		- -		
		iSSN	20 40		-		
		MN	20 47	18	16		
17	15	ePE	22 44 16			109°	H 22 29 17 .03 deep (USCGS)
		eXZ	46 48				
		ePKPE	47 17				
		ePKPZ	47 20				
		eXZ	47 32				
		iPPNEZ	47 49		- - +		
		ipPKPZ	48 09		-		
		iXZ	48 37		-		
		iSKSE	53 41		-		
		isSKSE	54 39		-		
		iXE	55 04		+		
		iXNE	56 41		- +		
		MN	23 26	30	116		
		MN	23 29	20	58		
18	16	iPKPZ	11 33 36		+	150°	H 11 13 48 (BCIS)
		iPKPZ	33 47		-		
		ME	12 47	18			
19	16	ePZ	13 29 33			73°.5	H 13 17 52 (USCGS)
		eXE	39 05				
		eSN	39 19				
		eSKSN	40 09				
		MN	14 08	18	4		
20	16	iPNEZ	19 21 18		- - -	39°.5	H 19 13 45 (BCIS)
		iPPEZ	22 49		- -		
		iPcPZ	23 26		-		
		iSN	27 18		-		
		iSSE	30 07		-		
		MN	19 39	19	77		
21	17	ME	05 04	11			No NS record
22	17	ePZ	09 19 54			73°.5	H 09 08 35 (USCGS)
		eSKSE	30 15				No NS record
		ME	09 58	18			
23	17	ePZ	11 27 33			73°.5	H 11 16 13 (USCGS)
24	17	ePZ	18 20 09			122°.5	H 18 01 05
		ePPZ	21 48				
		ME	19 03	26	10		

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR AUGUST 1958, sheet 3

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
25	17	iPKPZ	21 31 07		-	161°	H 21 11 09 (USCGS)
		iPKPZ	31 53		+		
		eXE	39 17				No NS record
26	18	ePE	10 28 36			76°	H 10 16 40 (USCGS)
		eSE	38 19				
		eSKSE	38 49				No NS record
27	18	ePE	15 47 37			75°.5	H 15 19 20 (USCGS)
							No NS record
28	19	ePE	16 40 43			71°	H 16 29 36 (USCGS)
		eSKSN	49 37				
		eSN	49 57				
29	19	ePPN	22 08 31			121°	H 21 48 07 (USCGS)
		eSKSN	14 08				
		eSSN	25 27				
		MN	22 57	21			
30	20	ePKPZ	03 59 40			138°	H 03 40 07 (USCGS)
		iPPN	04 02 27		-		
		eSKPEZ	03 24				
		MN	04 57	20			
31	20	MN	09 44	13	2	70°.5	H 09 20 10 (USCGS)
32	21	iPKPZ	01 28 52		+	149°	H 01 09 00 (USCGS)
33	21	iPKPZ	21 18 13		+	145°	H 20 59 10 .04 deep (USCGS)
		ePKPE	18 13				
		eXZ	20 03				
		iSKPZ	21 11		-		
34	26	eSKPN	23 54 41			138°	H 23 31 38 (USCGS)
35	27	ePZ	02 39 23			102°	H 02 25 32 (USCGS)
		eSKSE	50 11				
		eSE	51 11				
36	27	iPEZ	15 21 38		+ -	22°.5	H 15 16 34 (BCIS)
		iPEZ	21 39		- +		
		iXNE	22 36		+ -		
		iXNE	23 23		+ -		
		iSN	25 48		-		
		iSN	25 49		+		
		iXZ	25 54		-		
		MN	15 34	16	60		
37	29	ePKPN	12 43 49			139°	H 12 24 23 (USCGS)
		iSKSN	50 21		-		
38	30	ePNE	07 40 50			22°.5	H 07 35 42 (BCIS)
		eSN	44 59				
39	30	MN	19 25	12	1	79°	H 18 38 18 (USCGS)

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR AUGUST 1958, sheet 4

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
40	31	iPZ	23 10 15		+	59°	H 23 00 16 (USCGS)
		iPcPZ	11 08		−		
		iXNZ	12 21		+ −		
		iPPE	12 30		+		
		iSE	18 23		−		
		MN	23 36	17	2		
41	31	iPKPZ	23 46 58		−	161°	H 23 27 27 (BCIS)

12 November 1958

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International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY * 24 DEC 1958 * EDINBURGH

DURHAM UNIVERSITY OBSERVATORY, ENGLAND

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

SEISMOLOGICAL BULLETIN FOR SEPTEMBER, 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	iPZ	01 16 59				
2	1	ePEZ	15 40 14			79°.5	**H** 15 29 31 .07 deep (USCGS)
3	2	ePZ	01 18 28			22°.5	H 01 13 27 (USCGS)
		eSE	22 33				
		MN	01 31	14	3		
4	2	ePNE	20 19 13			79°	H 20 07 04 (USCGS)
		ME	20 54	16			
5	3	iPZ	01 41 38		+	39°.5	H 01 34 06 (BCIS)
		iSE	47 38		-		
6	3	iPZ	03 54 07		-	56°	H 03 44 24 (USCGS)
		iXZ	54 20		-		
		iXZ	56 11		-		
		iPPN	56 20		-		
		iSE	04 01 55		+		
		ME	04 20	12	10		
7	3	iPZ	08 22 38		+	80°	H 08 10 26 .01 deep (USCGS)
		iPZ	22 39		-		
		iPPZ	25 30		-		
		ME	08 59	18	5		
8	4	iPZ	00 08 35		+	26°.5	H 00 03 00 .01 deep (USCGS)
		iSN	13 06		-		
		iXE	13 23		+		
		ME	00 19	12			
9	4	iPZ	22 05 19		+	105°.5	H 21 51 08 (USCGS)
		ePPE	09 48				
		eSKSNE	16 01				
		eSN	17 30				
		iXNE	19 10		- -		
		iSSE	24 54		+		
		ME	22 53	18	30		
		MZ	22 53	18			
10	8	iPZ	05 36 56		+	70°.5	H 05 25 37 .01 deep (USCGS)
		ipPZ	37 18		+		
		eSN	46 06				
		iSKSN	46 38		-		
		iXN	47 05		-		
		MN	06 24	20			
11	8	iSN	15 15 45		-	83°	H 14 53 13 .01 deep (USCGS)

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International Seismological Centre From the ISC collection scanned by SISMOS

UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR SEPTEMBER 1958 sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
12	8	ePNZ	22 39 38			107°	H 22 24 55 (USCGS)
		eXEZ	41 13				
		eSKSE	49 35				
		ME	23 25				
13	9	eSE	11 53 43			77°	H 11 32 05 (USCGS)
14	9	eSN	22 44 18			71°	H 22 23 37 (USCGS)
15	11	iPZ	18 15 45		-	104°.5	H 18 01 45 (USCGS)
		iPPZ	19 50		-		
		eSE	27 15				
		ME	19 05	20			
16	12	ePKPE	05 56 20			119°	H 05 37 53 (USCGS)
		eXE	06 02 20				
17	14	iPZ	14 31 42		+	59°.5	H 14 21 37 (USCGS)
		iPcPZ	32 32		+		
		iXZ	32 47		-		
		iPPZ	34 00		-		
		iSN	39 55		+		
		iSSNE	43 44		+ -		
		ME	14 55	10	13		
		MN	15 00	16	9		
		MZ	15 07	10			
18	14	iPZ	21 44 30		-	85°	H 21 31 43 (USCGS)
		iPZ	44 31		+		
		iPPZ	47 43		-		
		eSN	54 52				
19	14	ePZ	21 56 55				
20	15	iPZ	19 58 51		-	105°.5	H 19 45 40 0.1 deep (USCGS)
		ePN	58 51				
		epPZ	20 00 58				
		eXZ	02 57				
		ePPZ	03 19				
		iXEZ	03 25		- -		
		iXNE	05 34		- -		
		iSKSE	08 22		+		
		iXE	09 49		-		
		iSN	09 51		+		
		iXN	12 33		-		
		MN	20 52	20	3		
21	17	iPZ	12 35 37		-	75°	H 12 23 50 (USCGS)
	18	No recordings 01 hrs to 19 hrs.					
22	18	iPZ	21 01 52		-	51°	H 20 53 05 .03 deep (Quetta)
23	19	iPZ	17 30 29		-	72°.5	H 17 18 40 (USCGS)
		iPZ	30 30		+		
24	20	iPKPZ	17 28 32		-	128°	H 17 09 24 (USCGS)
		ME	18 25	20			

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND

SEISMOLOGICAL BULLETIN FOR SEPTEMBER 1958 sheet 3

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
25	21	iPZ	05 57 27		-	82°	H 05 45 10 (USCGS)
26	22	iPKPZ	19 25 42		-	159°	H 19 05 44 (USCGS)
		iPKPZ	26 17		-		
		iXZ	26 30		-		
		iPPNZ	29 56		- +		
		iPPPZ	33 17		-		
		eSKKSN	36 42				
		eSSE	49 59				
		MN	20 48	20	3		
27	24	iPZ	03 54 37		-	62°.5	H 03 44 14 (USCGS)
		iPPZ	57 00		+		
		eSN	04 03 11				
		iXN	03 21		-		
		eSKSN	04 42				
		ME	04 20	16	6		
28	25	iPZ	07 29 33		-	55°	H 07 20 02 (USCGS)
		iXZ	29 44		-		
		iPcPZ	30 53		-		
		iPPZ	32 02		+		
		iSNE	37 30		+ -		
		iSPEZ	37 36		+ +		
		ME	07 50	20	40		
29	25	iXZ	23 42 46				
		MN	23 59				
30	27	ME	11 50				
31	29	iPZ	14 29 45		-	81°.5	H 14 17 11 (USCGS)
		ME	15 05				
32	30	eSE	17 08 40			8°.5	H 17 05 06 (BCIS)

23 December 1958.

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International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY EDINBURGH 5 MAR 1959

IVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR OCTOBER, 1958.

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	iPKPZ	09 49 38		+	163°	H 09 29 43 (USCGS)
		MN	11 03	20			
2	1	ePZ	17 58 33			72°	H 17 47 15 (USCGS)
3	7	ePPE	12 44 46			126°	H 12 23-4[illegible] (USCGS)
		iSKKSZ	51 47		+		
		eSSE	13 01 28				
		ME	13 50	20	7		
4	10	iPZ	08 41 39		+	71°	H 08 30 17 .01 deep (USCGS)
		eSN	50 28				
5	11	iPE	02 11 39		-	71°	H 02 00 40 (USCGS)
6	12	ePZ	15 31 01			86°	H 15 18 42 .04 deep (USCGS)
		iPPZ	34 25		-		
		eSKSN	41 01				
		eSE	41 13				
		esSKSN	42 53				
		esSE	43 01				
		ME	16 18				
7	18	MN	10 13	14	3	29°	H 09 51 10 (Upsala)
8	19	iPKPZ	12 02 38		+	159°.5	H 11 42 42 (USCGS)
		iPKPZ	03 23		+		
9	20	iPKPZ	01 31 45		-	111°	H 01 12 36 (USCGS)
		MN	02 07				
10	22	MN	08 43			29°	H 08 21 11 (Upsala)
11	22-23	ePKPZ	00 02 17			139°.5	H 23 42 47 (USCGS)
12	23	iPZ	15 50 28		-	39°	H 15 43 00 (USCGS)
		iSN	56 33		-		
13	28	PZ	10 56 59			64°	H 10 46 27 (USCGS)
		iXEZ	57 06		- +		
		iSN	11 05 37		+		
		iSKSN	07 04		-		
		MN	11 23	20	17		
14	29	iPNZ	07 55 49		+ +	74°	H 07 44 10 (USCGS)
		iSE	08 05 19		+		
		iSKSN	5 56		-		
		iSSE	10 02		-		
		MN	08 38	18	15		

20 February 1959.

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International Seismological Centre From the ISC collection scanned by SISMOS

ROYAL OBSERVATORY 5 MAR 1959 EDINBURGH

UNIVERSITY OBSERVATORY, ENGLAND.

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

SEISMOLOGICAL BULLETIN FOR NOVEMBER 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	ePKPN	03 57 35			123°.5	H 03 38 36 (USCGS)
		ePPN	59 21				
		MN	04 54	19	5		
2	1	iPKPZ	12 35 17		+	143°.5	H 12 15 43 (USCGS)
3	1	iPKPZ	12 36 09		+	143°.5	H 12 16 36 (USCGS)
		iPPZ	39 12		-		
		iSSN	58 29		-		
		MN	13 36	20			
4	3	iPZ	14 42 08		+	64°	H 14 31 35 (USCGS)
5	4	ME	09 28	16		91°	(USCGS)
6	4-5	ME	00 09	21		145°	H 22 54 46 (USCGS)
7	6	iPNEZ	23 10 02			77°.5	H 22 58 10 (USCGS)
		iPPE	13 11				
		iSZ	19 56		+		
		ME	23 41	30	1000		
		MZ	23 48	20			
8	7	iPZ	01 55 14		+	77°.5	H 01 42 56 (USCGS)
9	7	iPZ	01 57 33		+	77°.5	
10	7	iPZ	02 22 31		+	77°.5	
11	7	iPZ	05 11 52		-	77°.5	H 04 59 50 (USCGS)
		iPPZ	14 14		-		
		iSZ	21 29		+		
		eSKSN	21 59				
		MN	05 52				
12	7	iPZ	07 52 38		+	77°.5	H 07 40 36
13	7	iPZ	11 36 22		-	77°.5	H 11 24 19
14	8	iPZ	09 35 09		-	72°.5	H 09 23 52 (USCGS)
		iXNE	36 06		- -		
		SN	44 38				
		XN	44 43				
		MN	10 14	14	5		
15	12	iPZ	20 35 29		+	77°.5	H 20 23 32 (BCIS)
		iSN	45 17		-		
		iSKSN	45 57		+		
		iSSN	49 51		+		
		ME	21 08	20	150		
		MN	21 14	20	160		
		MZ	21 14				

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR NOVEMBER 1958 sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
16	13	iPZ	04 16 39		-	77°.5	H 04 04 43 (BCIS
		ME	04 55				
17	14	iPZ	05 46 55		-	77°.5	H 05 34 53 (USCGS)
		ME	06 26				
18	14	ePZ	14 07 12			118°	H 13 48 20 (USCGS)
		eSSN	24 40				
		MN	14 58	30			
19	15	iPZ	05 47 55		-	23°.5	H 05 42 42 (BCIS)
		iPZ	48 06		-		
		iPPZ	48 37		+		
		eSN	52 13				
20	15	iPZ	09 12 48		-	77°.5	H 09 00 45 (USCGS)
		iSE	22 36		-		
		ME	09 45	20	2		
21	16	iPZ	06 27 43		-	77°.5	H 06 15 30 (USCGS)
22	16	iPKPZ	18 22 05		+	145°.5	H 18 02 25 (USCGS)
23	19	ePZ	09 35 51			77°.5	H 09 23 45 (USCGS)
		eXNE	41 06				
24	20	MN	06 28			72°	H 05 36 33 (USCGS)
25	20	iPZ	14 29 57		+	78°.5	H 14 18 04 .01 deep (USCGS)
		iSN	39 49		+		
		MN	15 08				
26	22	eSKSE	00 29 41			112°.5	H 00 04 20 (USCGS)
		ME	01 17				
27	25	ePZ	02 26 43			12°	H 02 23 54 (BCIS)
		iSZ	28 56		-		
		iXZ	29 55		-		
		iXZ	30 21		-		
		iXZ	30 31		+		
		iXNZ	30 39		+ -		
28	30	iPZ	01 45 34		-	86°.5	H 01 32 41 (USCGS)
		ME	03 30	17	2		

20 February 1959.

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ROYAL OBSERVATORY 6 APR 1959 EDINBURGH

DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

Position:- 54°45'N 01°35'W, height above M.S.L. 103 metres

SEISMOLOGICAL BULLETIN FOR DECEMBER 1958

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

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
1	1	ME	04 04	19		76°.5	H 03 21 17 (USCGS)
2	3	ME	10 47	15	5	92°	H 09 48 26 (USCGS)
3	6	iPZ	09 45 56		-	80°	H 09 33 45 (USCGS)
4	7	iPZ	01 22 18		-	90°	H 01 09 18 (USCGS)
5	7	iPZ	18 10 31		+	83°	H 17 58 08 (USCGS)
6	8	iPZ	12 20 24		-	78°	H 12 08 23 (USCGS)
		iXZ	20 54		+		
7	10	iPZ	03 52 40		-	51°	H 03 43 33 (USCGS)
		iPPZ	54 31		-		
		eSE	59 52				
8	10	iPKPZ	07 22 30		-	161°	H 07 02 59 .05 deep (USCGS)
		iPKPZ	23 18		-		
		ipPKPZ	24 04		-		
		ipPKPZ	24 47		-		
		iPPZ	26 52		+		
		ipPPZ	27 57		-		
		iPPPZ	30 10		+		
		iPPSN	40 32		-		
		iXN	42 34		-		
		ME	07 52				
9	10	iPZ	22 03 06		-	80°	H 21 49 20 (USCGS)
		ME	22 35				
10	17	ME	16 30			87°.5	H 15 34 08 (USCGS)
11	21	ePZ	05 55 33			51°	H 05 46 26 (USCGS)
		eSSN	06 06 42				
		iRgN	14 02	6	23		
		MN	06 22	10	23		
12	23	iPKPZ	03 49 44			149°	H 03 30 18 (USCGS)
13	23	ePZ	06 39 36			81°	
14	25	iPZ	08 24 27		+	126°.5	H 08 05 33 (USCGS)
		ME	09 12	25	2		
		ME	09 22	20	2		

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DURHAM UNIVERSITY OBSERVATORY, ENGLAND.

SEISMOLOGICAL BULLETIN FOR DECEMBER 1958 sheet 2

No.	Date	Phase and component	Time G.M.T.	Period sec.	Amplitude microns and direction	Epicentral distance	Notes
15	28	iPZ	05 44 56		-	61°.5	H 05 34 36 (USCGS)
		iXZ	45 13		-		
		iPcPZ	45 39		-		
		iPPZ	47 19		-		
		MN	06 14				
16	31	iPKPZ	02 04 57		-	149°	H 01 45 52 .06 deep (USCGS)

13th March, 1959.

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ROYAL OBSERVATORY
9 APR 1959
EDINBURGH

DURHAM UNIVERSITY OBSERVATORY

ENGLAND

International Geophysical Year

Measurement of microseisms

The bulletin for December circulated on April 4 should have been dated 1958.

April 8th, 1959.

International Seismological Centre
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