SPECIAL DATA COLLECTION ON SYSTEM EVENT REPORT. GULF OF CALIFORNIA, 8 JULY 1975

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Teledyne Geotech

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Gulf of California, 8 July 1975

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SDCS Event Report No. 31

Gulf of California, 8 July 1975

This event report contains seismic data from the Special Data Collection System (SDCS), and other sources for the above event. Published epicenter information from seismic observations is:

	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	09:37:29	30 N	114 W	5.8	N/A
PDE	09:37:24	29.6N	113.4W	N/A	6.8
Hagfors Array, Sweden	09:37:23	28 N	111 W	5.5	6.0

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become

09:37:23.1	29.2N	113.4W	6.0	N/A

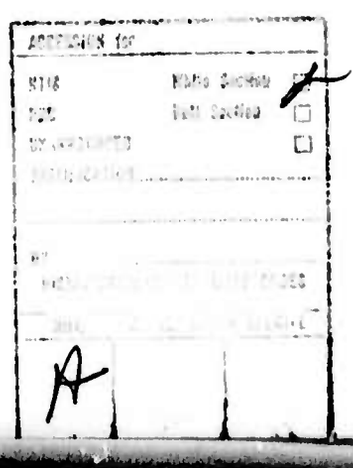
All SDCS stations were operational during this period.

Short period signals associated with this event were recorded at all SDCS stations and LASA. NORSAR data was obtained from their bulletin, the TAL transmission was not recoverable. The operating gains of the vertical and east SP channels at CPSO were unknown.

Long-period signals were recorded at all SDCS stations and LASA. Horizontal channel rotations were not performed due to signal clipping at all SDCS stations. The vertical and north LP channels at CPSO had unknown gains and the LP east channel was inoperative. NORSAR and ALPA long-period data appear to be invalid and are not included in this report.

Details of the program used to obtain vertical, radial and transverse long-period data at LASA are in the process of being reviewed. The vertical beam is probably valid while the horizontal beams are questionable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA. LASA SP scaling factors are millimicrons per inch.



STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION SHORT-PERIOD	LONG-PERIOD
ALPA	Alaska	65 14 00.0 N 147 44 36.0 W	626	None	31300
CPSG	McMinnville, Tennessee	35 35 41.4 N 085 34 13.5 W	574	6480 V 7515 H	SL210 V SL220 H
FN-WV	Franklin, West Virginia	38 32 58.0 N 079 30 47.0 W	910	KS36000	KS36000
LASA	Billings, Montana	46 41 19.0 N 106 13 20.0 W	744	HS10	7505A V 8700C H
HN-ME	Houlton, Maine	46 09 43.9 N 067 59 09.0 W	213	18300	SL210 V SL220 H
NORSAR	Kjeller, Norway	60 49 25.4 N 010 49 56.5 E	379	HS10	7505A V 8700C H
RK-ON	Red Lake, Ontario	50 50 20.0 N 093 40 20.0 W	366	18300	SL210 V SL220 H
WH2YK	White Horse, Yukon	60 41 41.0 N 134 58 02.0 W	853	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be 316° ± 5° based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 8 JUL 75
09:37:29.0 28.999N 113.000W 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
LAC	09 41 37.8	0.5	0.6	18.3	15.9
CPO	09 42 41.1	-0.3	-0.0	24.3	67.6
RK-ON	09 42 57.4	-1.0	-1.4	26.2	29.0
FN-WV	09 43 28.3	-0.2	-0.1	29.5	62.6
WH2YR	09 44 13.4	-0.3	-0.1	34.7	341.5
HN-ME	09 44 52.4	0.8	0.6	39.2	51.6
NAC	09 49 31.1	0.6	0.3	79.5	24.3

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
09:37:31.1	29.415N	113.282W	49. CALC	0.6	3	7
09:37:23.1	29.192N	113.403W	0. REST	0.7	3	7

CALC

```
    1 . 2
  0   .   1
0   0. 2   1
. . . . . . .
0   0. 0   0
  0   .   0
    0 . 0
```

REST

```
    1 . 2
  0   .   1
0   0. 2   1
. . . . . . .
0   0. 0   0
  0   .   0
    0 . 0
```

CHI2 COVERAGE ELLIPSE: 95 PER CENT CONF..LEVEL, SDV= 1.41
MAJOR 74.0KM. MINOR 35.8KM. AZ= 30 AREA= 8324 SQ.KM. REST

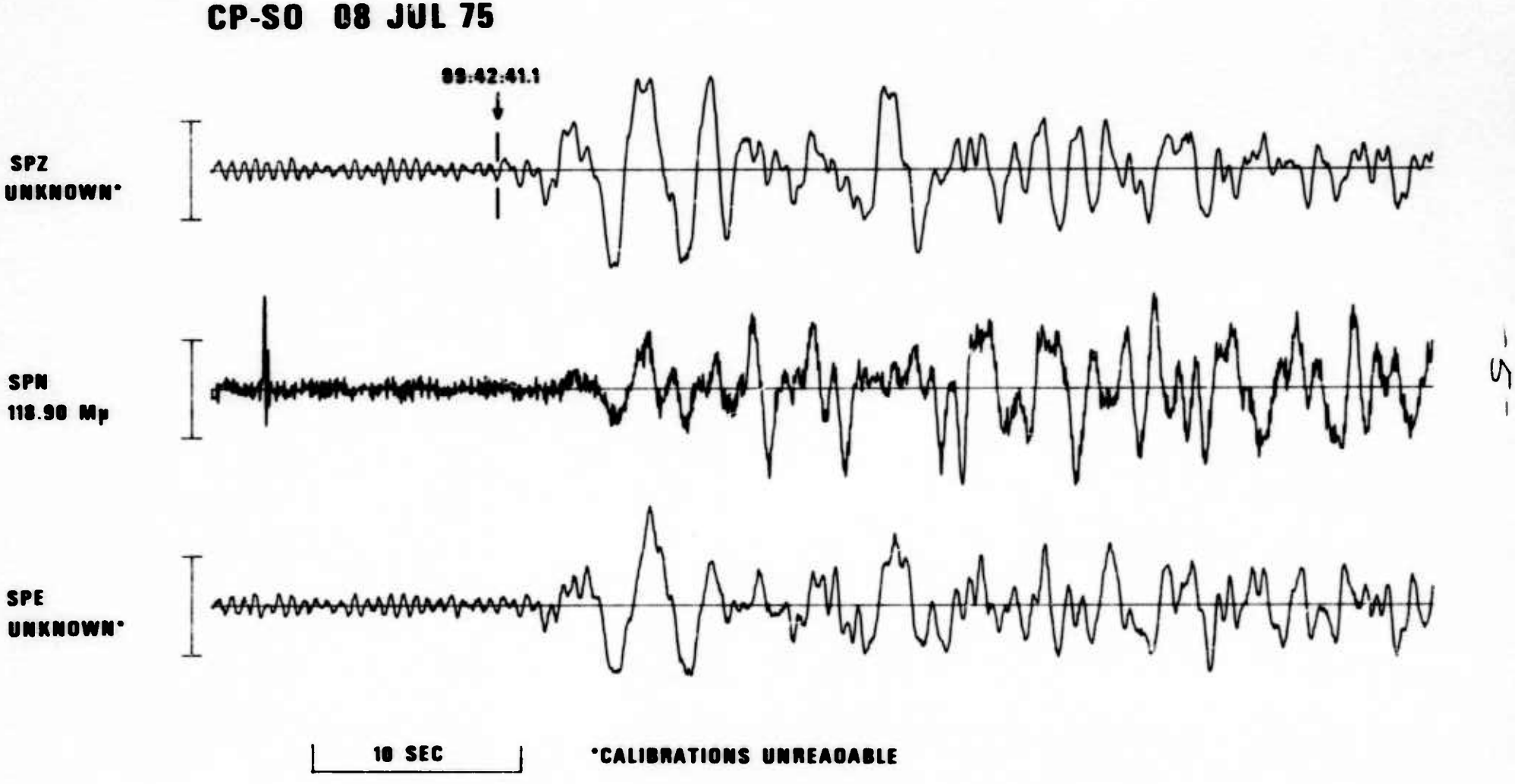
DATA SUMMARY

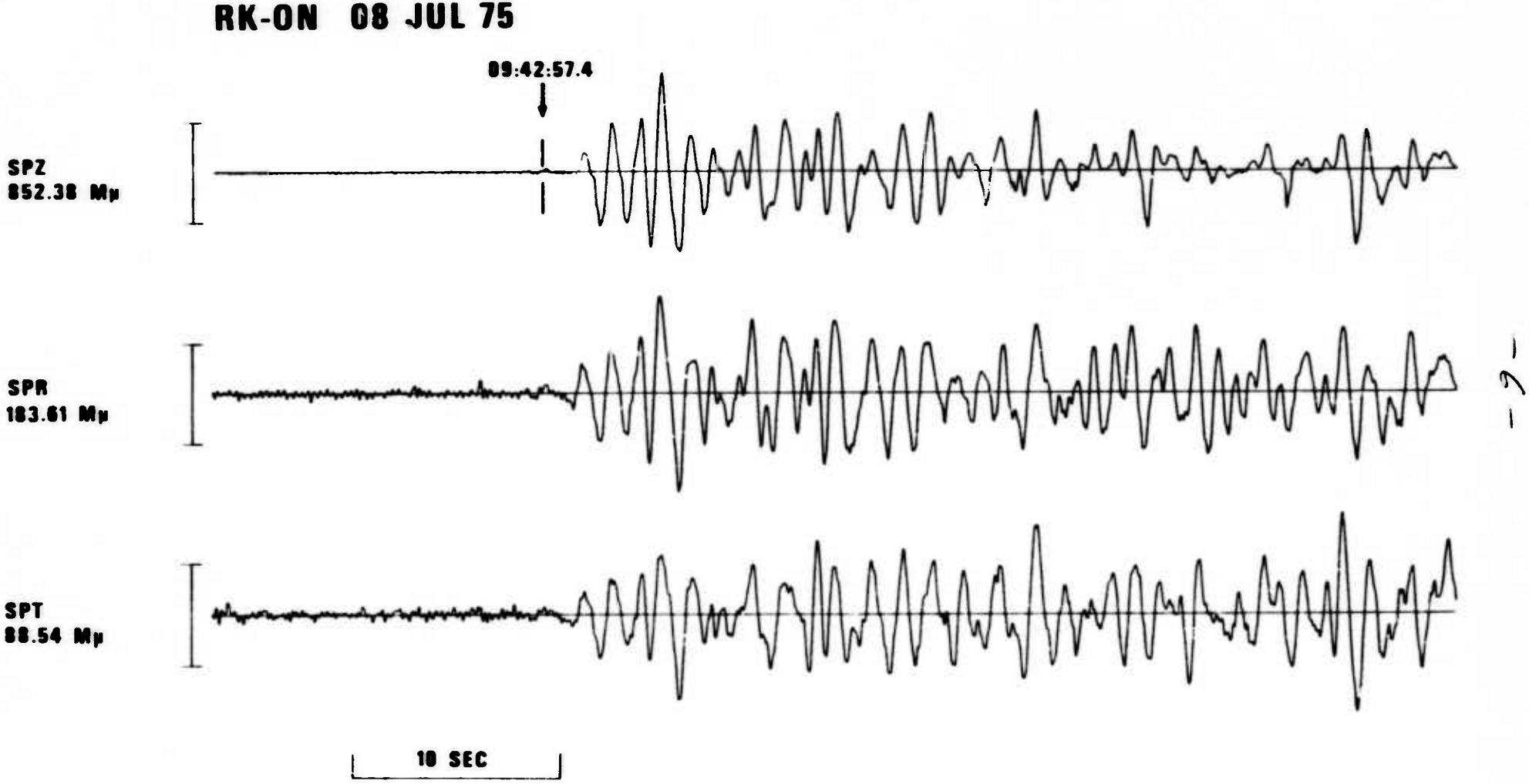
INPUT FOR EVENT 8 JUL 75
09:37:29.0 28.998N 113.000W 0KM.

STA.		PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIP	DIST
LAO	M	EP	09 41 37.8	SAB	1.6	1294.	5.75			18.3
CPO		EP	09 42 41.1	SPZ	0.0	CLIPPED				
RK-ON		EP	09 42 57.4	SPZ	1.1	1748.	6.36			26.2
FN-WV		EP	09 43 28.3	SPZ	0.0	CLIPPED				
WH?YK		EP	09 44 13.4	SPZ	2.3	536.	6.13			30.7
HN-ME		EP	09 44 52.4	SPZ	1.2	248.	5.49			30.2
NAO		EP	09 49 31.1	AE	1.5	300.	5.93			70.6

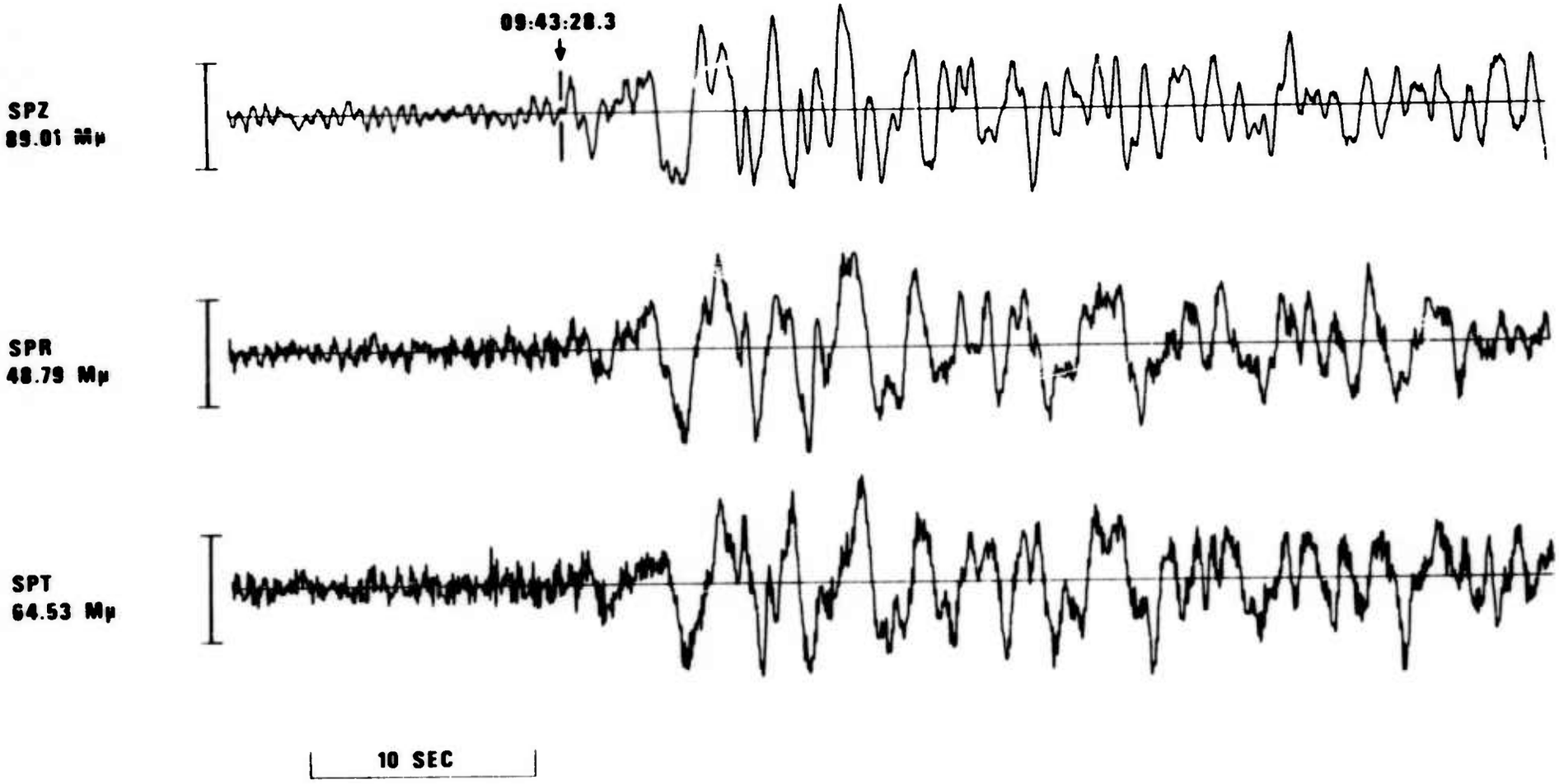
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA
09:37:31.1	29.415N	113.282W	40. CALC	5.98	0.28	4
09:37:23.1	29.192N	113.403W	0. FRST	5.98	0.37	4

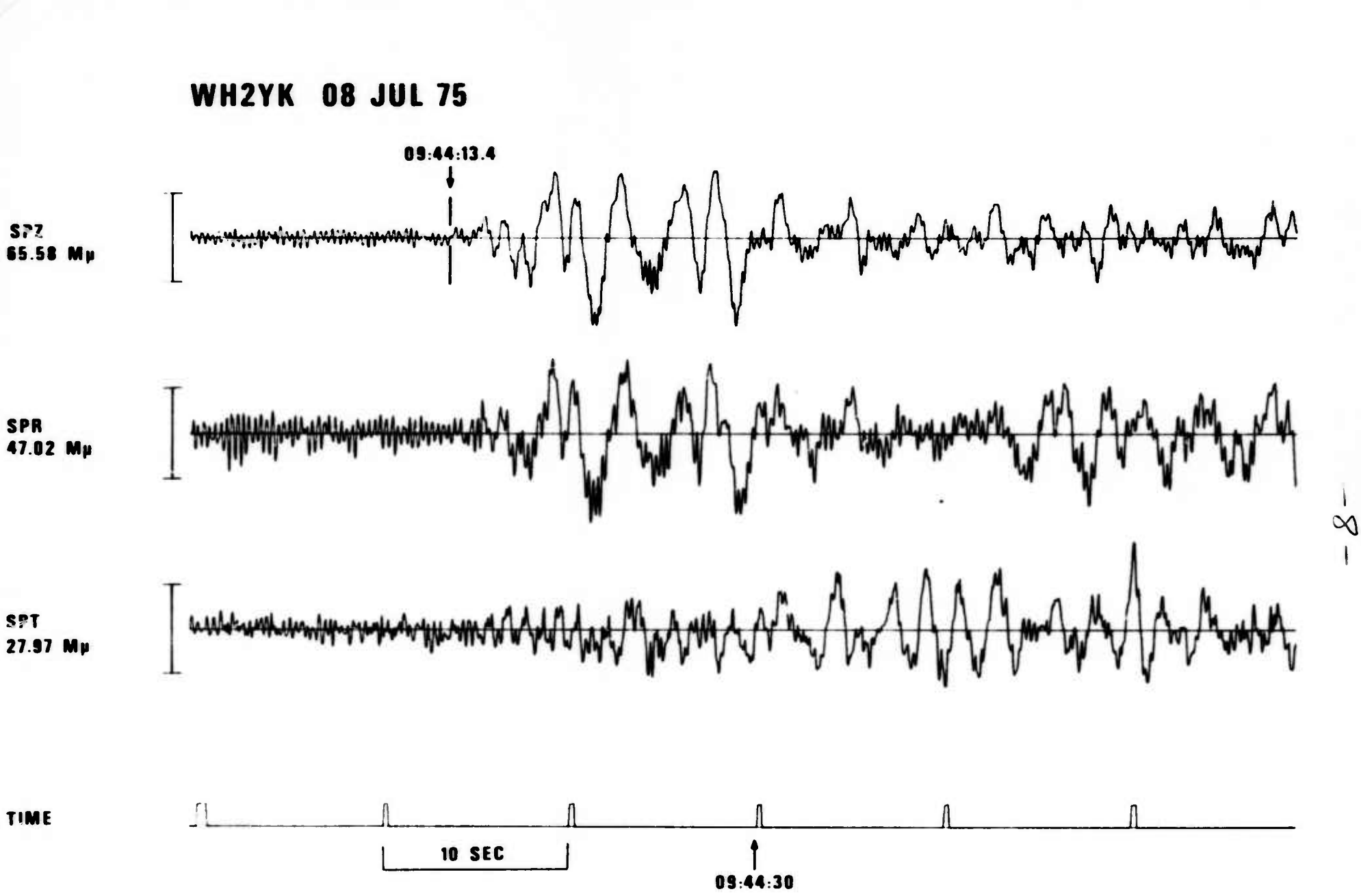
Short-period magnitudes (m_b) used in averaging are restricted to those recorded at distances between 20 and 110 degrees from the epicenter.

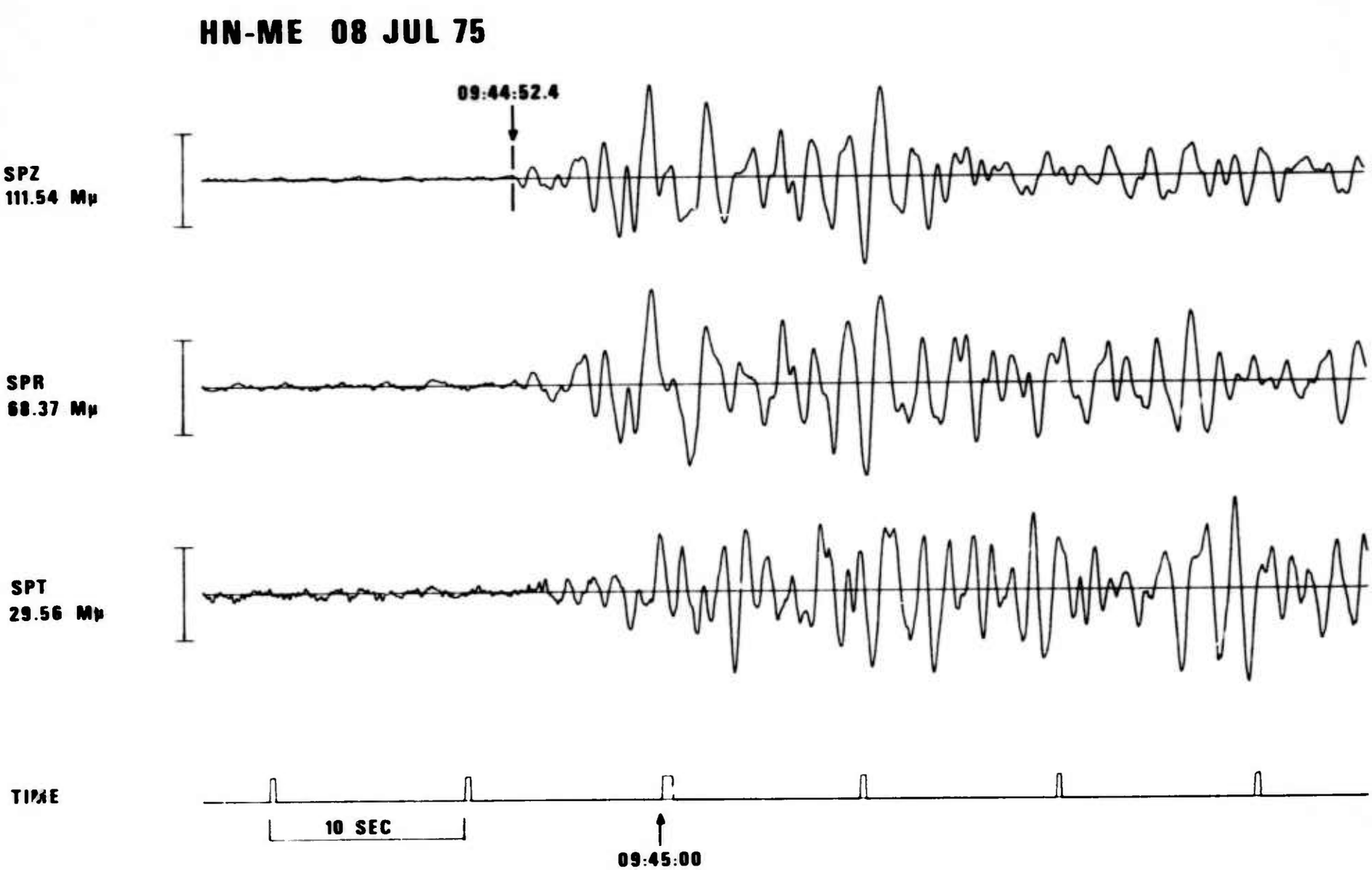

CP-SO 08 JUL 75
08:42:41.1
SPZ
UNKNOWN*
SPN
118.90 Mp
SPE
UNKNOWN*
10 SEC
*CALIBRATIONS UNREADABLE

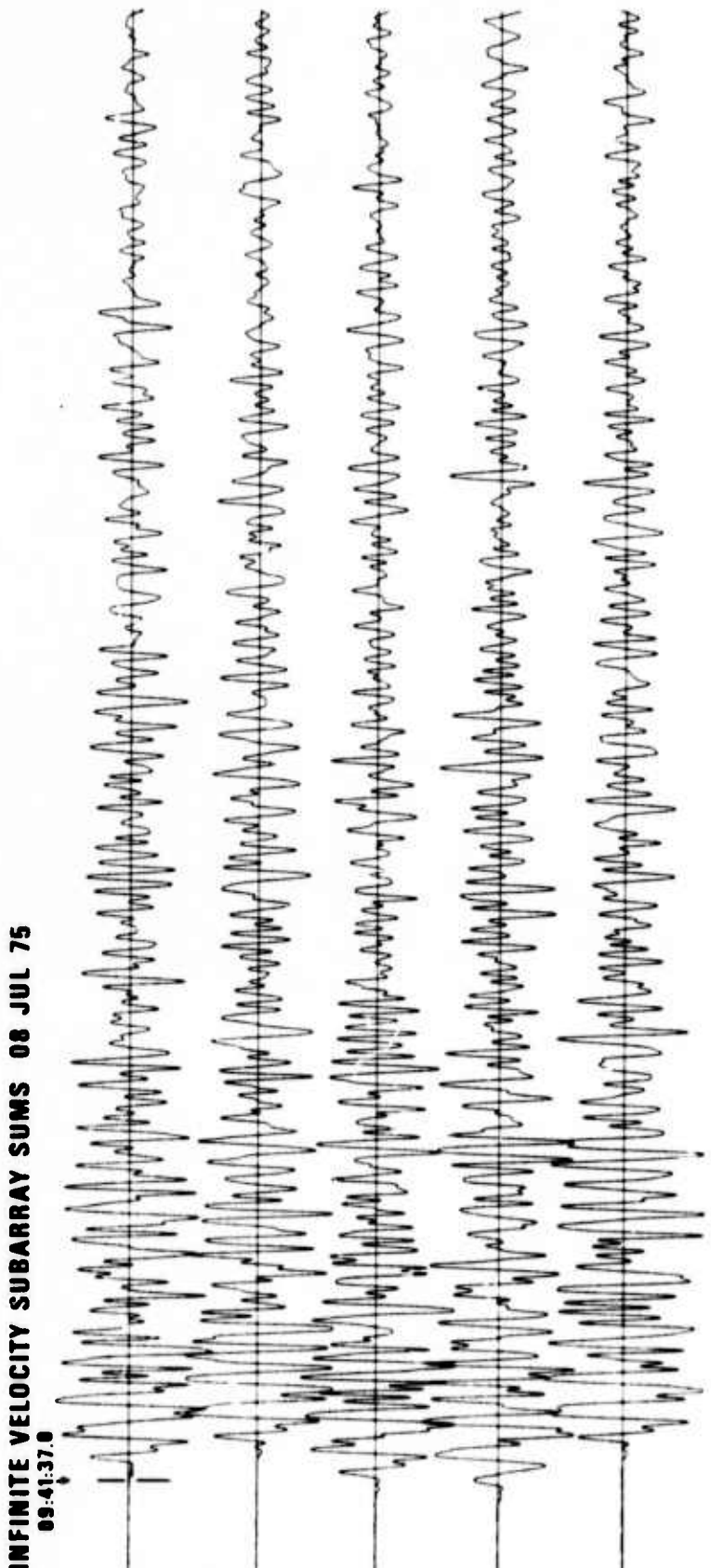

RK-ON 08 JUL 75
09:42:57.4
SPZ
852.38 Mμ
SPR
183.61 Mμ
SPT
88.54 Mμ
10 SEC

FN-WV 08 JUL 75

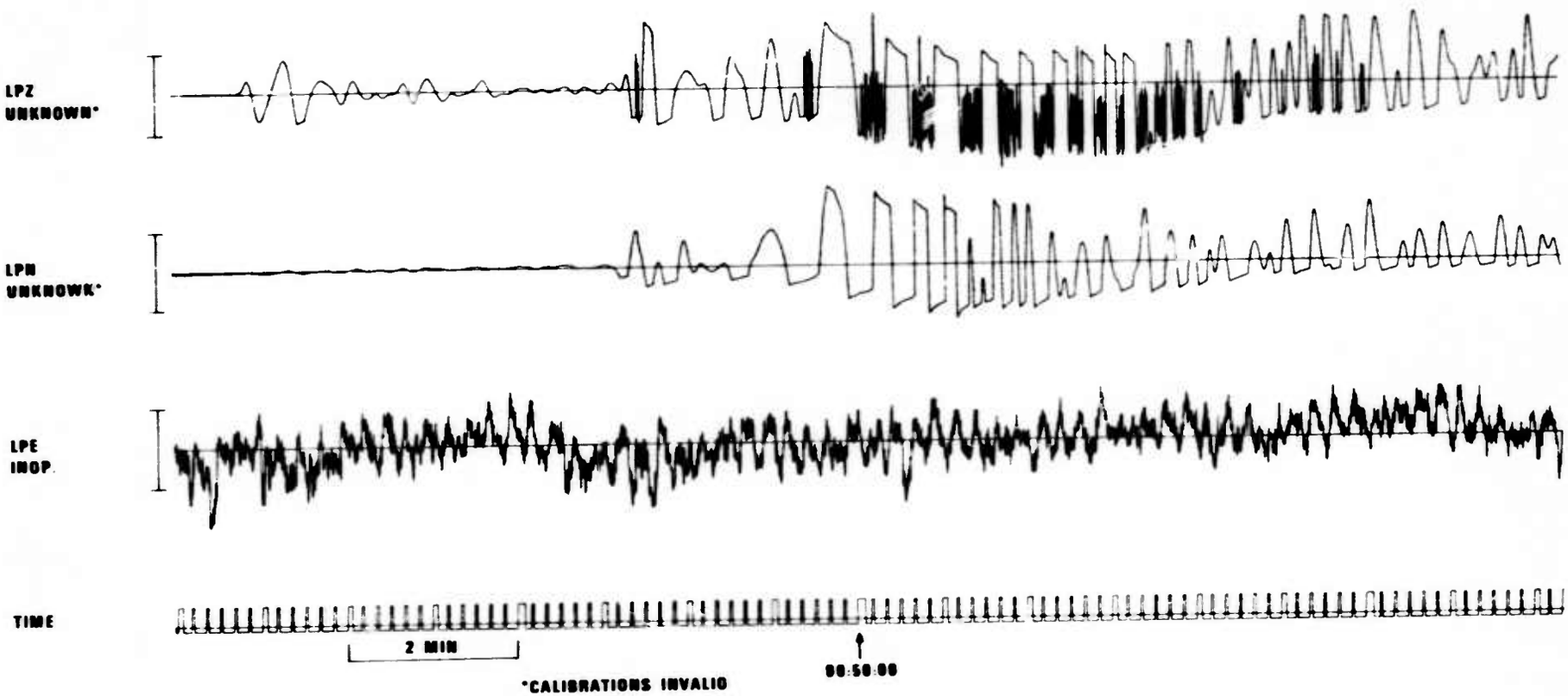


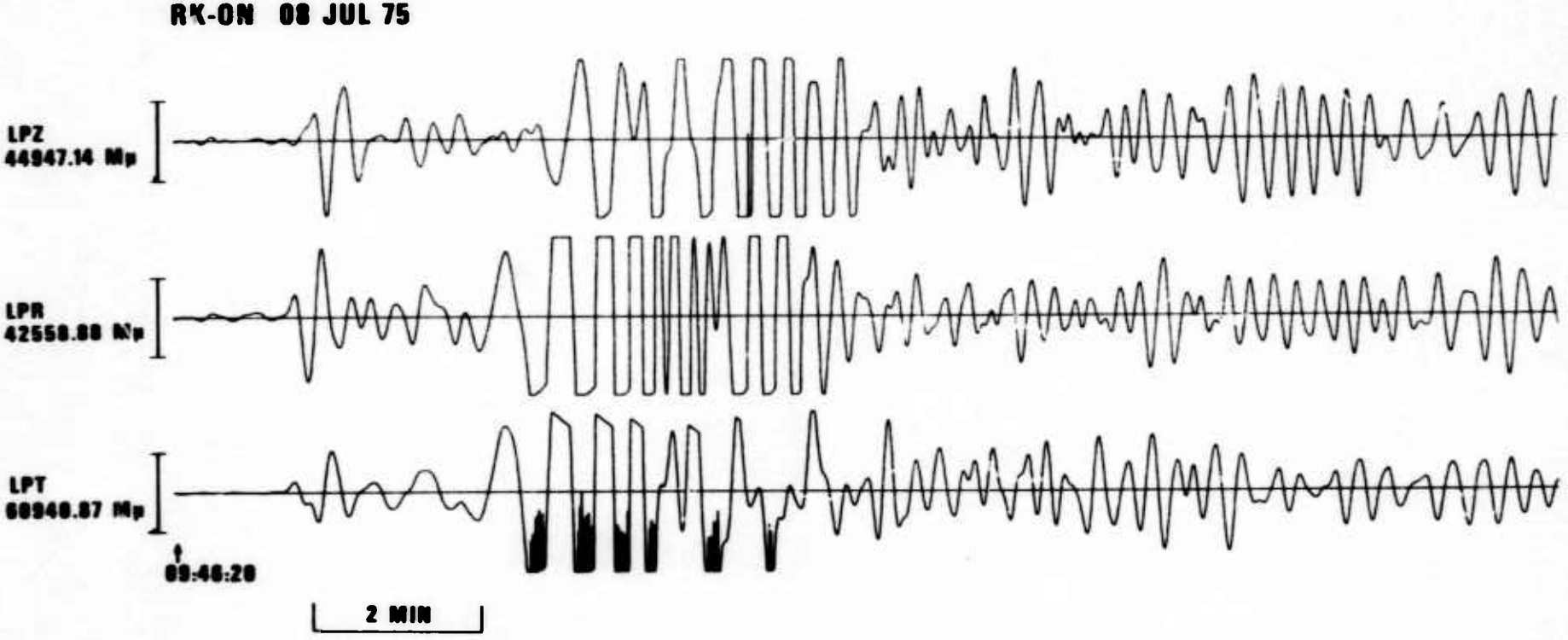

WH2YK 08 JUL 75
09:44:13.4
SPZ
65.58 Mμ
SPR
47.02 Mμ
SPT
27.97 Mμ
TIME
10 SEC
09:44:30

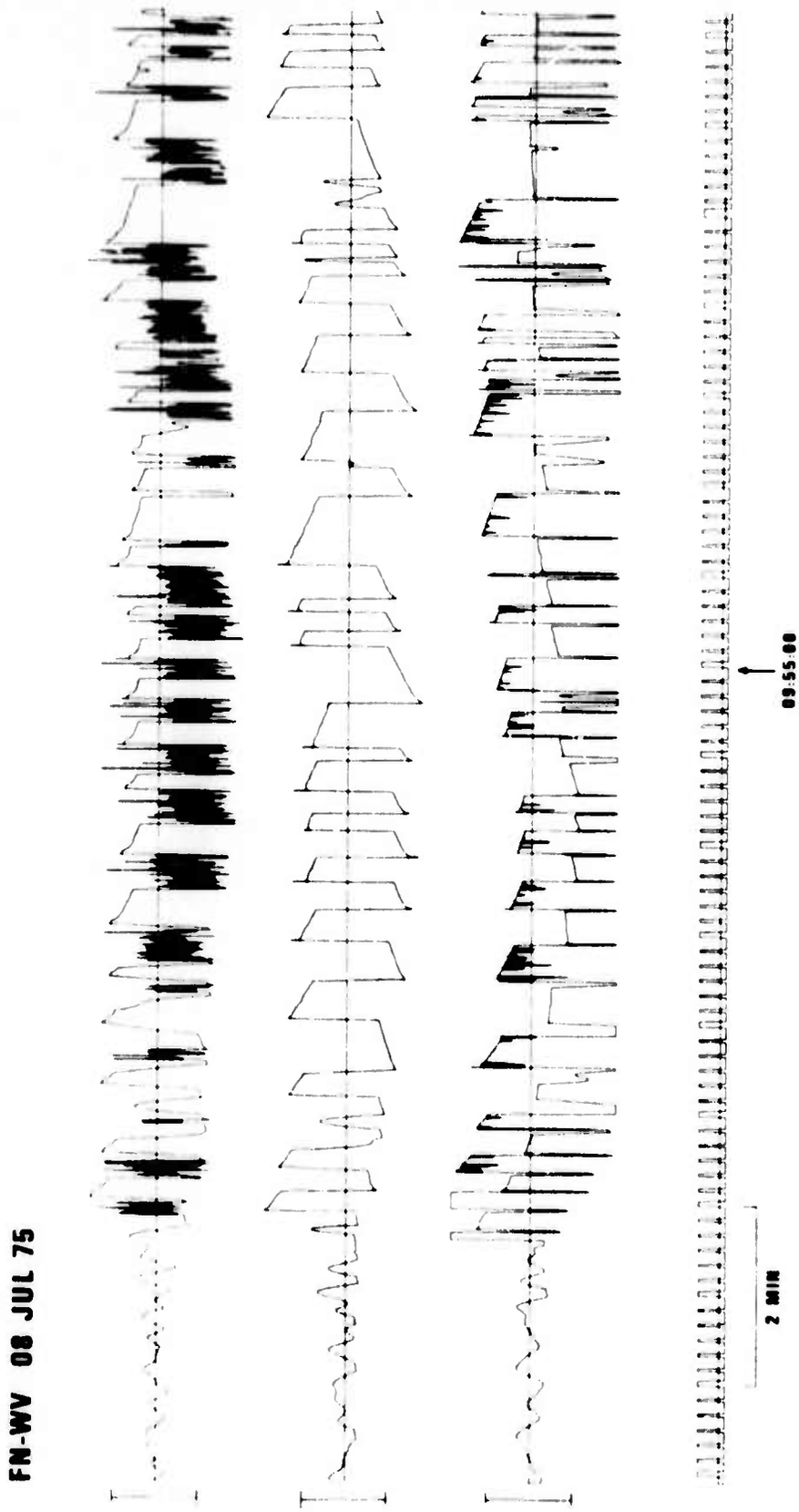

HN-ME 08 JUL 75
09:44:52.4
SPZ
111.54 Mμ
SPR
68.37 Mμ
SPT
29.56 Mμ
TIME
10 SEC
09:45:00

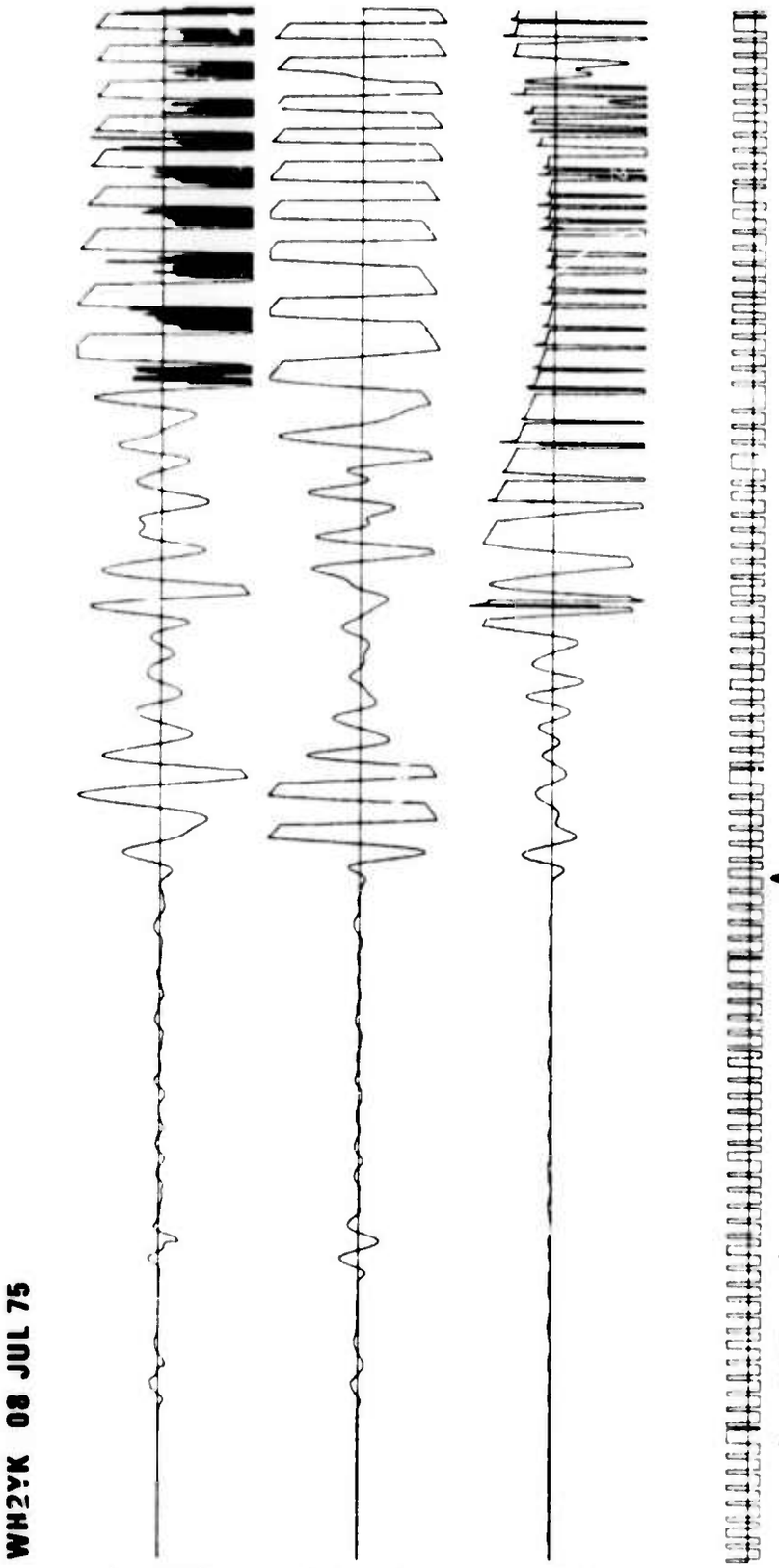

LASA INFINITE VELOCITY SUBARRAY SUMS 08 JUL 75
09:41:37.0
A1
699.17 Mp
D1
700.49 Mp
D2
700.82 Mp
D3
678.89 Mp
D4
700.82 Mp
20 SEC

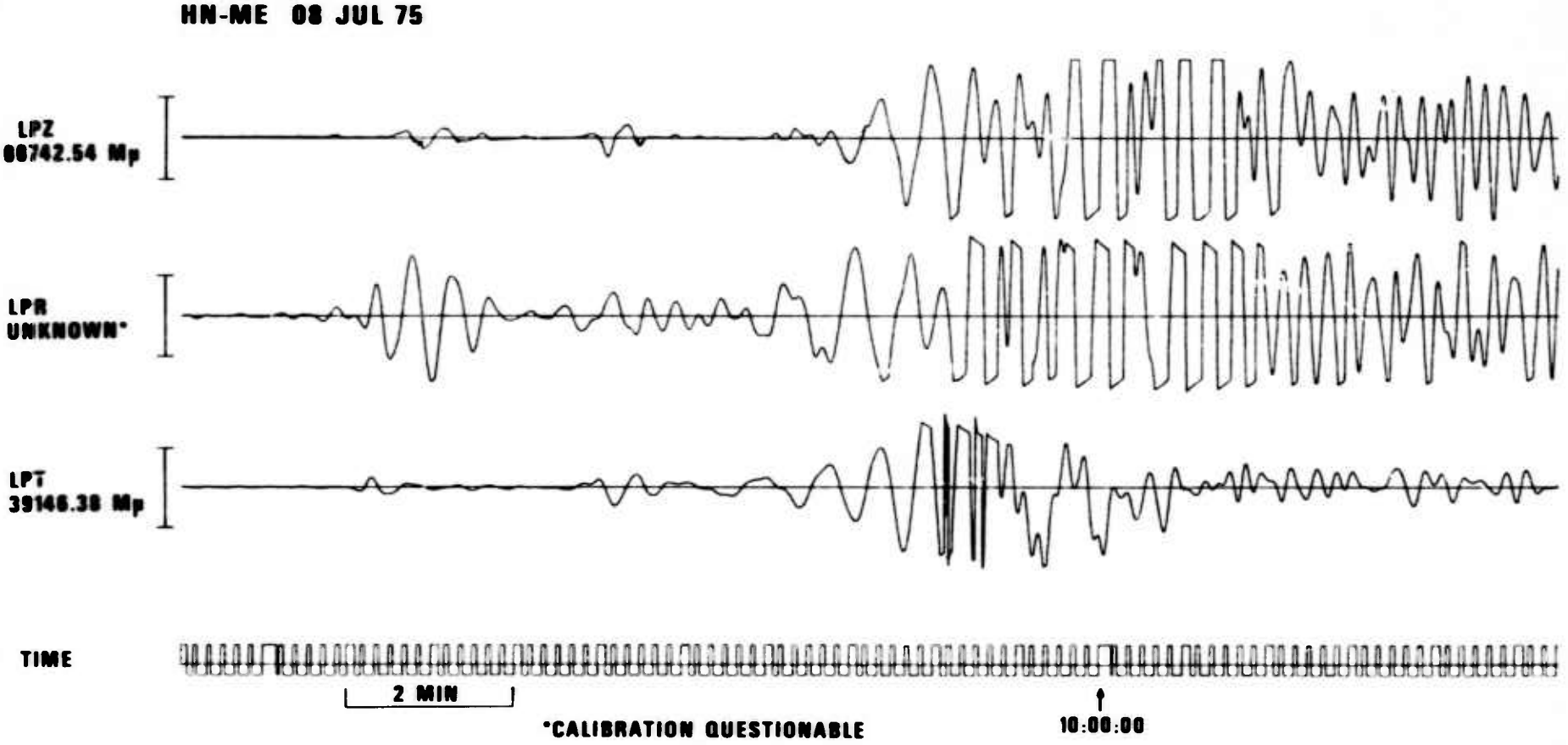
CP-SO 08 JUL 75

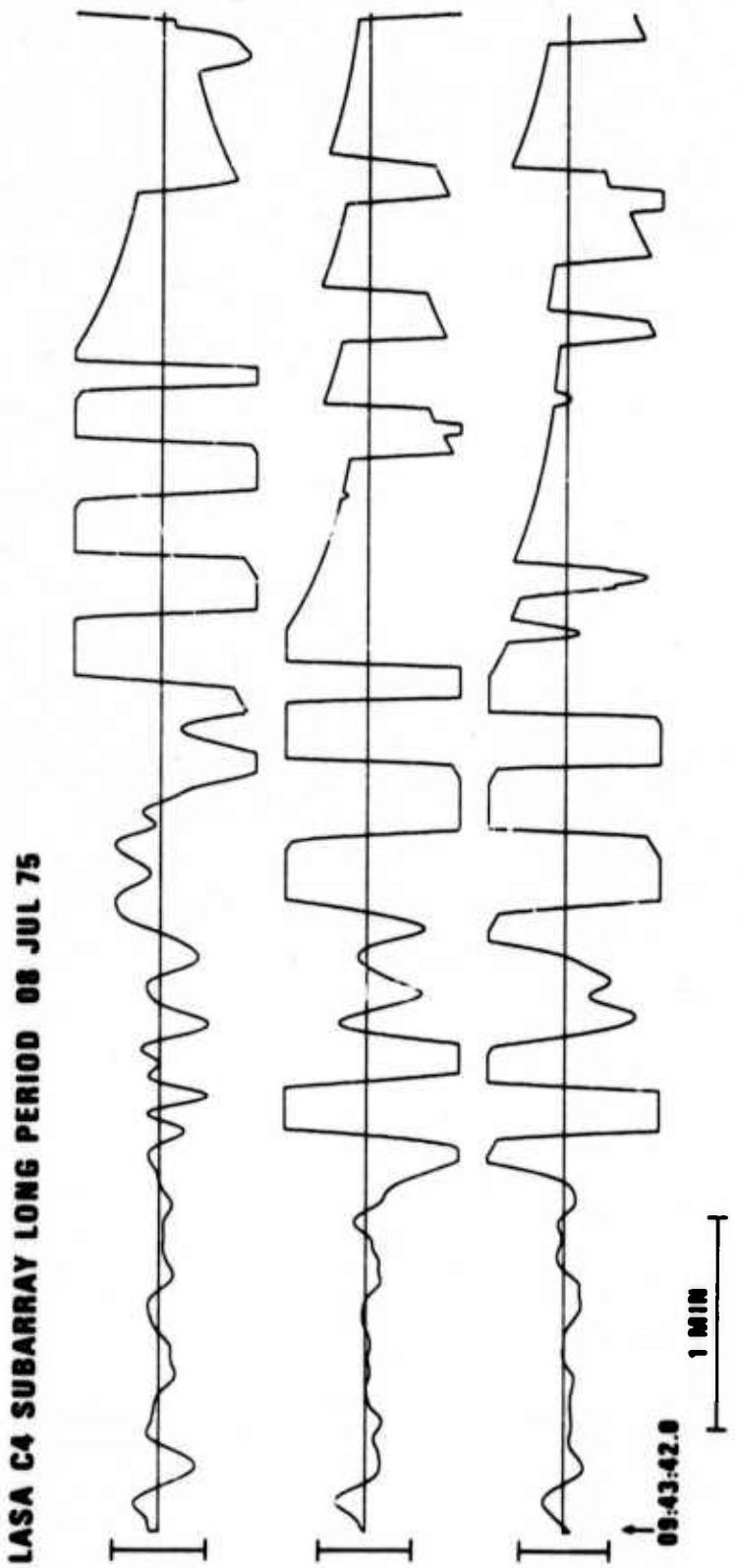



RK-ON 08 JUL 75
LPZ
44947.14 Mp
LPR
42558.88 Mp
LPT
68948.87 Mp
09:46:20
2 MIN


FN-WV 08 JUL 75
LPZ
7411.3 Hz
LPR
8734.8 Hz
LPT
8714.8 Hz
TIME
09:55:00
2 MIN


WH2YK 08 JUL 75
LPZ
25410.80 Mp
LPR
31715.12 Mp
LPT
20043.10 Mp
TIME
2 MIN
00:50:00


HN-ME 08 JUL 75
LPZ
88742.54 Mp
LPR
UNKNOWN*
LPT
39146.38 Mp
TIME
2 MIN
*CALIBRATION QUESTIONABLE
10:00:00


LASA C4 SUBARRAY LONG PERIOD 08 JUL 75
C4LZ
41900 Mp
C4LN
43500 Mp
C4LE
43500 Mp
09:43:42.0
1 MIN