SPECIAL DATA COLLECTION SYSTEM EVENT REPORT - CENTRAL SIBERIA, 29 SEPTEMBER 1975

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Teledyne Geotech

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SDCS-ER-75-39

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Central Siberia, 29 September 1975

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SDCS Event Report No. 39

Central Siberia, 29 September 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:

	"P" Arrival	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	11:06:27.0	11:00:00	70 N	090 E	4.7	N/A

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

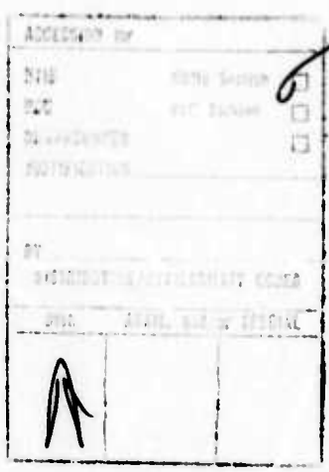
10:59:55.0	68.7N	090.9E	4.9	N/A

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR.

No long-period signals were recorded at any of the SDCS stations. The vertical LP channel at WH2YK had an unknown operating gain and the data appeared to be invalid. All LP channels at RK-ON had unknown operating gains. The scaling factor for the C4LZ channel at LASA was questionable. ALPA and NORSAR long-period array data were not included due to program recovery problems.

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



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
CPSO	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 43.0 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.

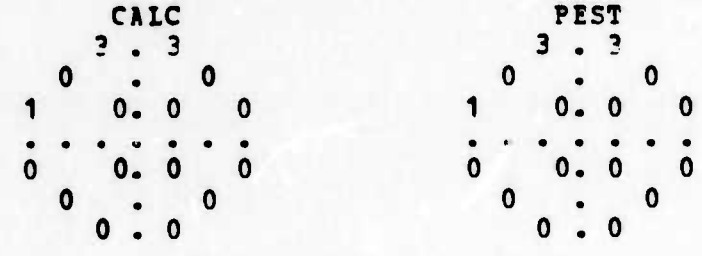
HYPOCENTER DETERMINATION

INPUT FOR EVENT 29 SEP 75
11:00:00.0 70.002N 90.000E 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
NAC	11 06 27.0	-0.1	-0.0	32.6	296.5
WM2YK	11 08 24.9	0.1	0.2	46.8	29.0
RK-CN	11 10 05.6	-1.4	-1.3	60.8	3.3
LAO	11 10 31.4	1.0	0.9	64.3	13.0
HN-ME	11 10 32.4	1.1	1.1	64.4	343.9
FN-WV	11 11 24.3	-0.1	-0.2	72.9	352.1
CPO	11 11 42.3	-0.5	-0.6	76.0	357.0

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
10:59:57.9	68.615N	90.865E	22. CALC	0.8	5	7
10:59:55.0	68.663N	90.865E	0. REST	0.8	4	7



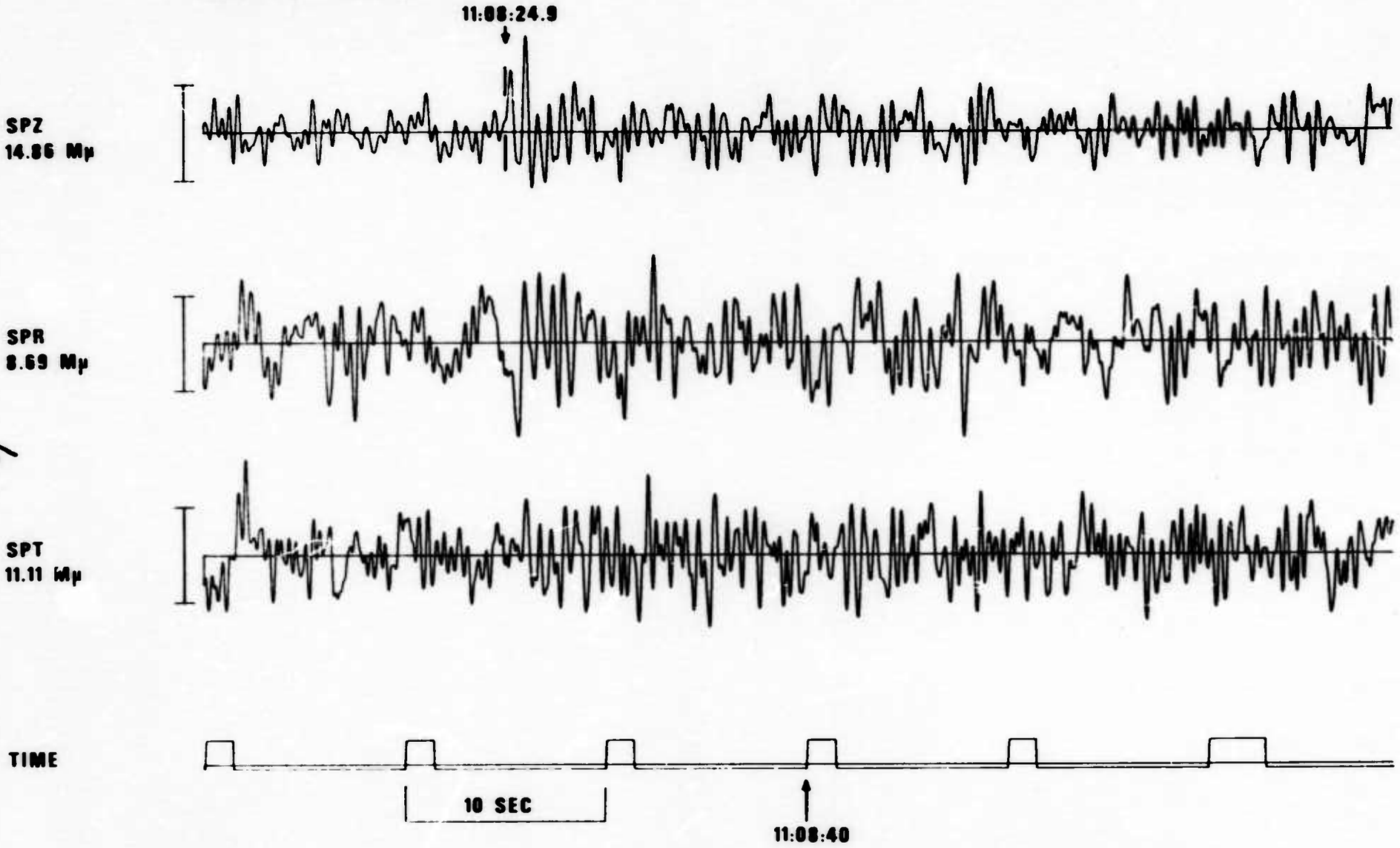
CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.03
MAJOR 291.9KM. MINOR 30.6KM. AZ= 166 AREA= 28065 SQ.KM. REST

DATA SUMMARY

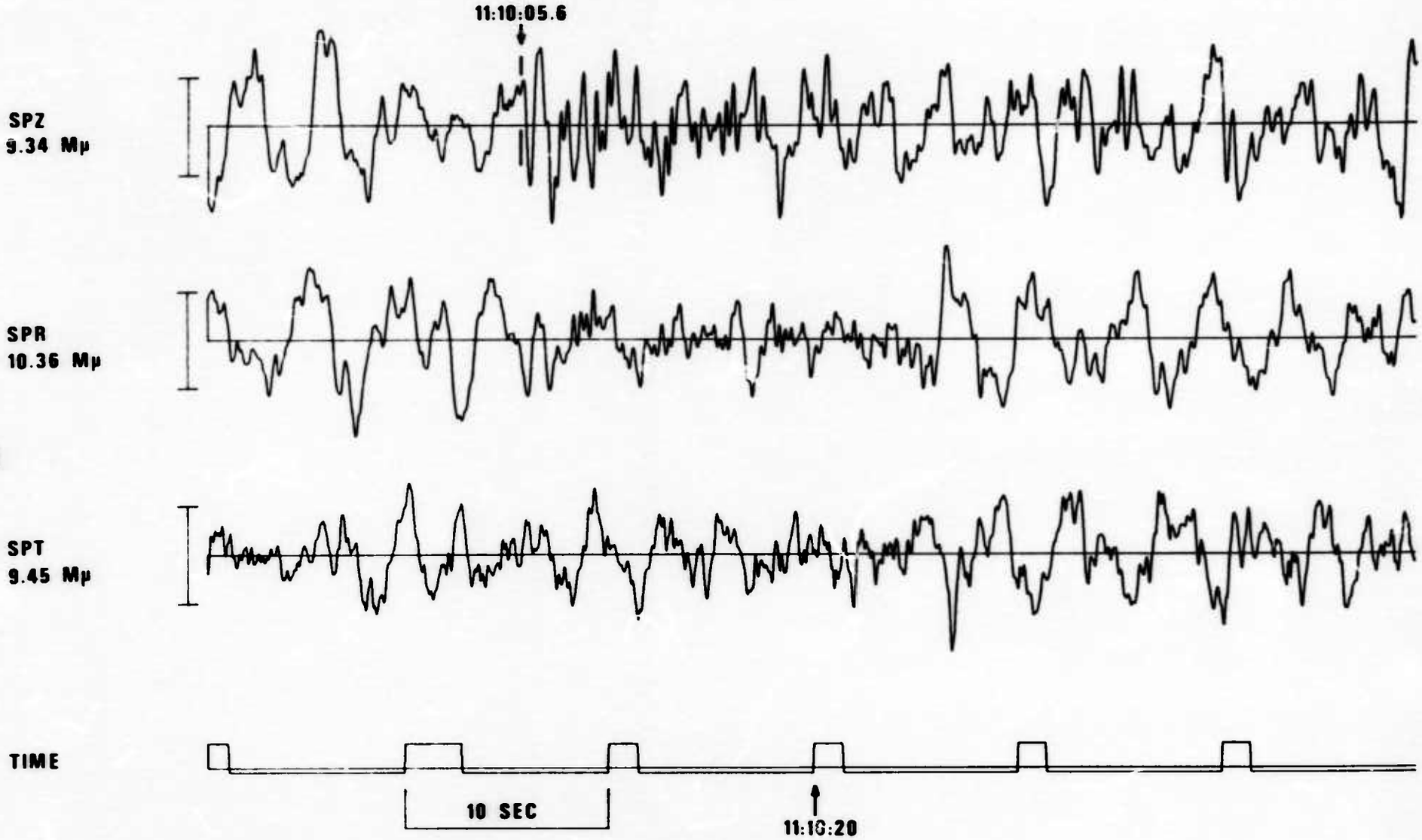
INPUT FOR EVENT 29 SEP 75
11:00:00.0 70.002N 90.000E 0KM.

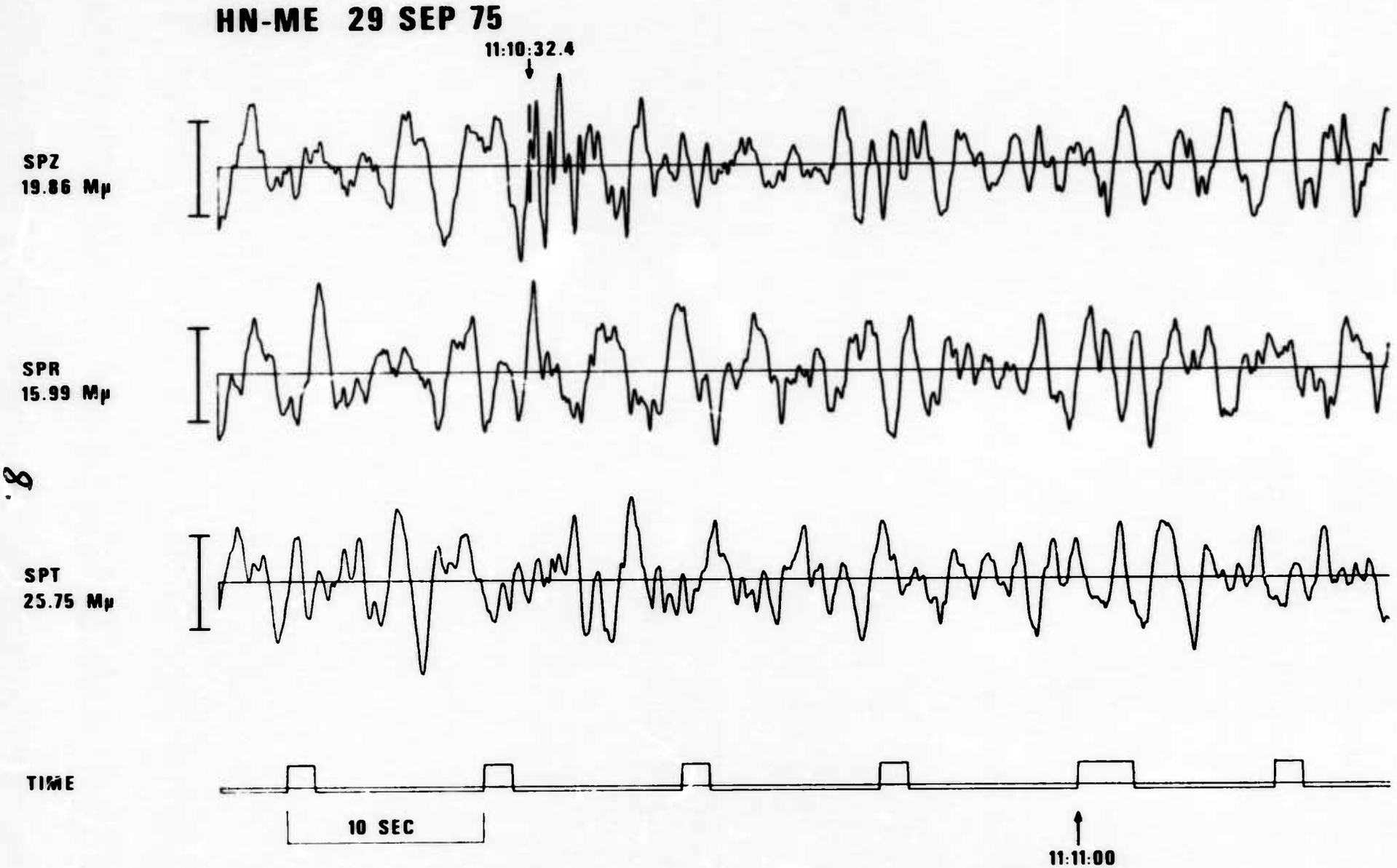
STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIP	DIST
NAO	EP	11 06 27.0	AB	0.7	15.	4.58			32.6
WH2YK	EP	11 08 24.9	SPZ	0.6	14.	4.72			46.8
RK-CN	EP	11 10 05.6	SPZ	0.7	8.	4.48			60.8
LAO	EP	11 10 31.4	SAB	1.0	87.	5.64			64.3
HN-ME	EP	11 10 32.4	SPZ	0.4	14.	4.85			64.4
FN-WV	EP	11 11 24.3	SPZ	0.5	6.	4.38			72.9
CPC	EP	11 11 42.3	SPZ	0.7	64.	5.41			76.0

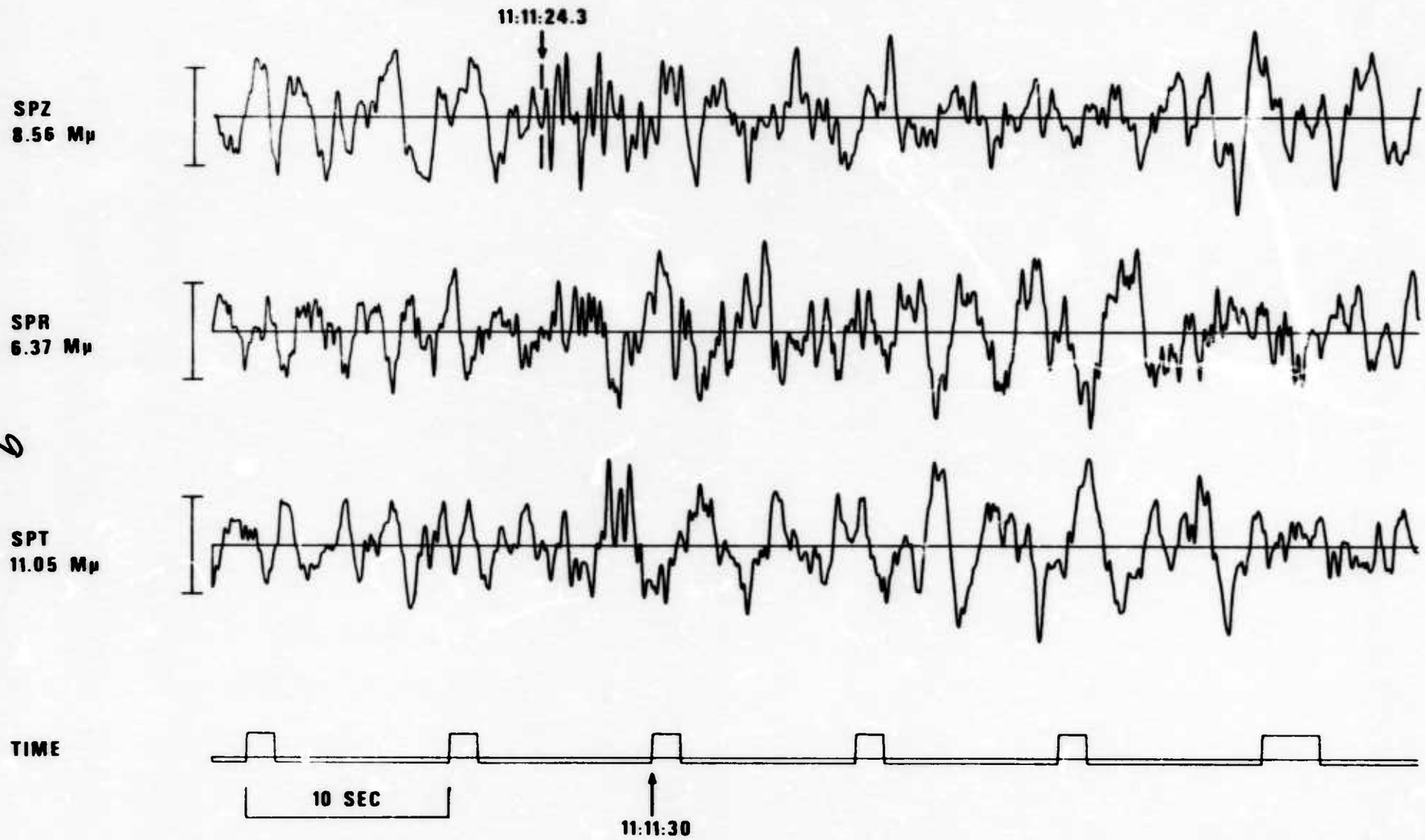
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA
10:59:57.9	68.615N	90.865E	22. CALC	4.81	0.47	7
10:59:55.0	68.663N	90.865E	0. FEST	4.86	0.48	7

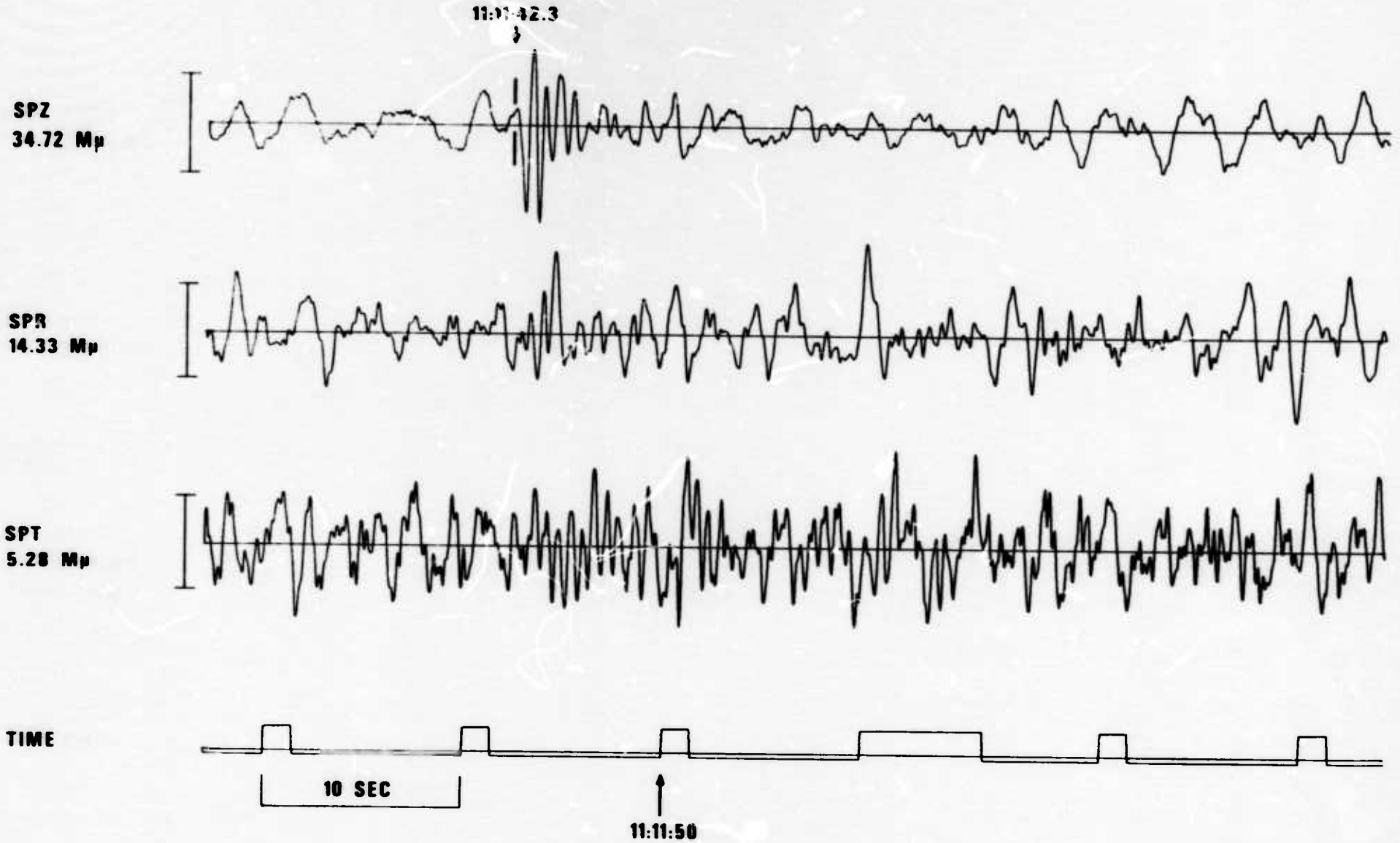

WH2YK 29 SEP 75
11:08:24.9
SPZ
14.86 Mμ
SPR
8.69 Mμ
SPT
11.11 Mμ
TIME
10 SEC
11:08:40

RK-ON 29 SEP 75




HN-ME 29 SEP 75
11:10:32.4
SPZ
19.86 Mμ
SPR
15.99 Mμ
SPT
25.75 Mμ
TIME
10 SEC
11:11:00

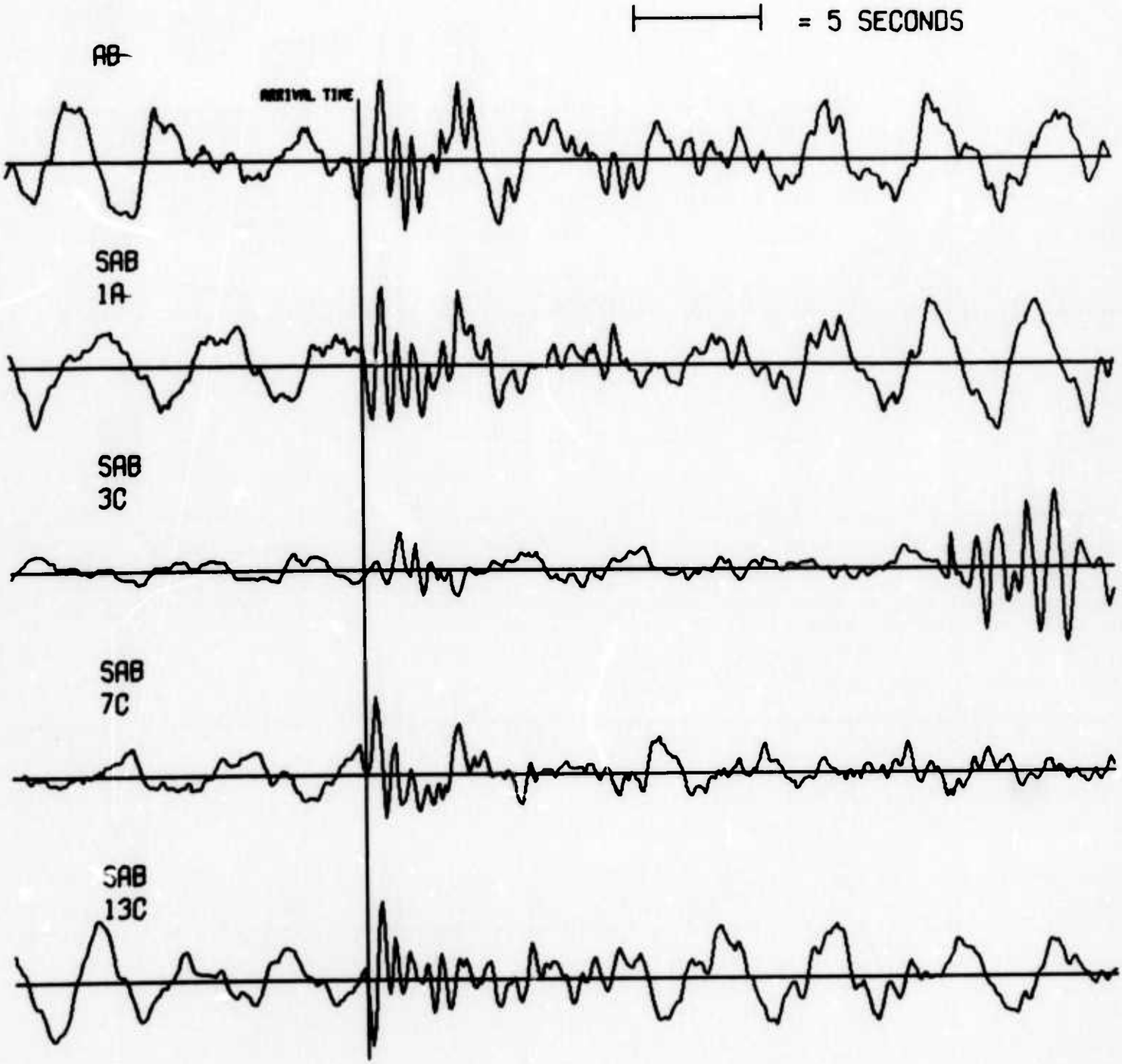

FN-WV 29 SEP 75
11:11:24.3
SPZ
8.56 Mμ
SPR
6.37 Mμ
SPT
11.05 Mμ
TIME
10 SEC
11:11:30


CPSO 29 SEP 75
11:11:42.3
SPZ
34.72 Mμ
SPR
14.33 Mμ
SPT
5.28 Mμ
TIME
10 SEC
11:11:50

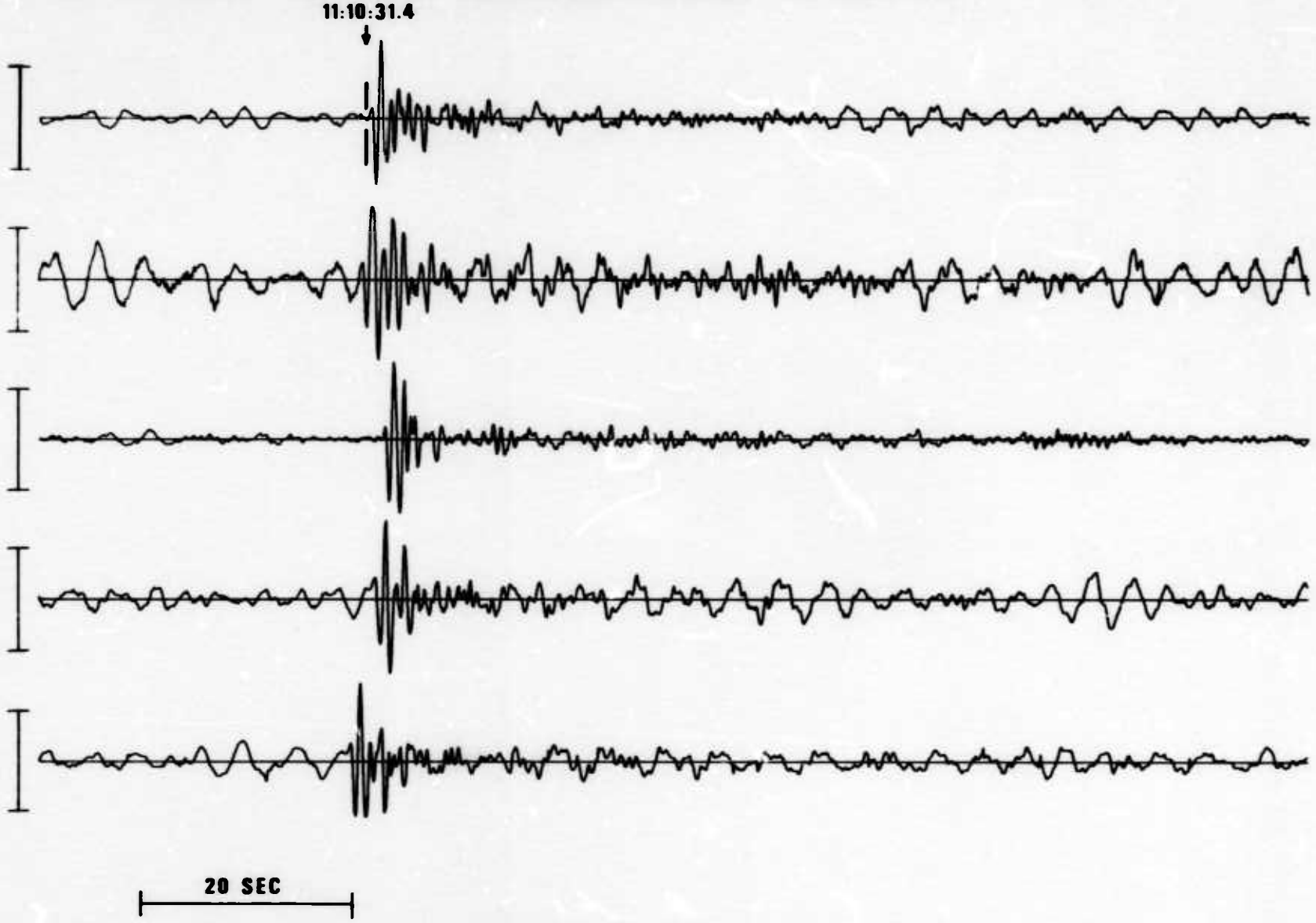
NORSAR EVENT FILE 1975 SEP 29

EPX NO. 66277 ARR. 11.6.27.2 69.7N 90.4E 4.0MB 0KM

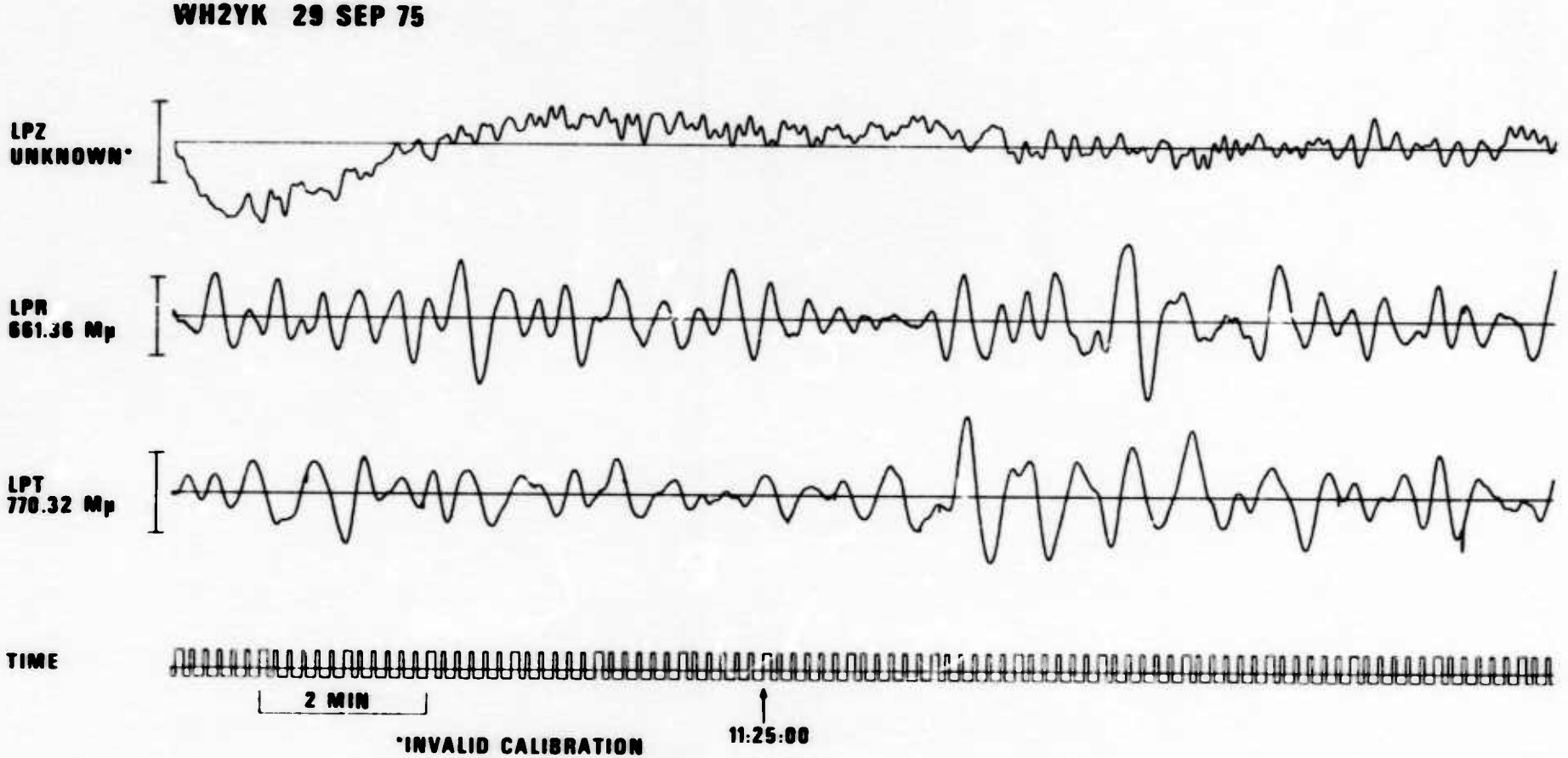
DIST = 32.0 AZI = 40.4 AMP = 1.5 PER = 0.6



LASA INFINITE VELOCITY SUBARRAY SUMS 29 SEP 75

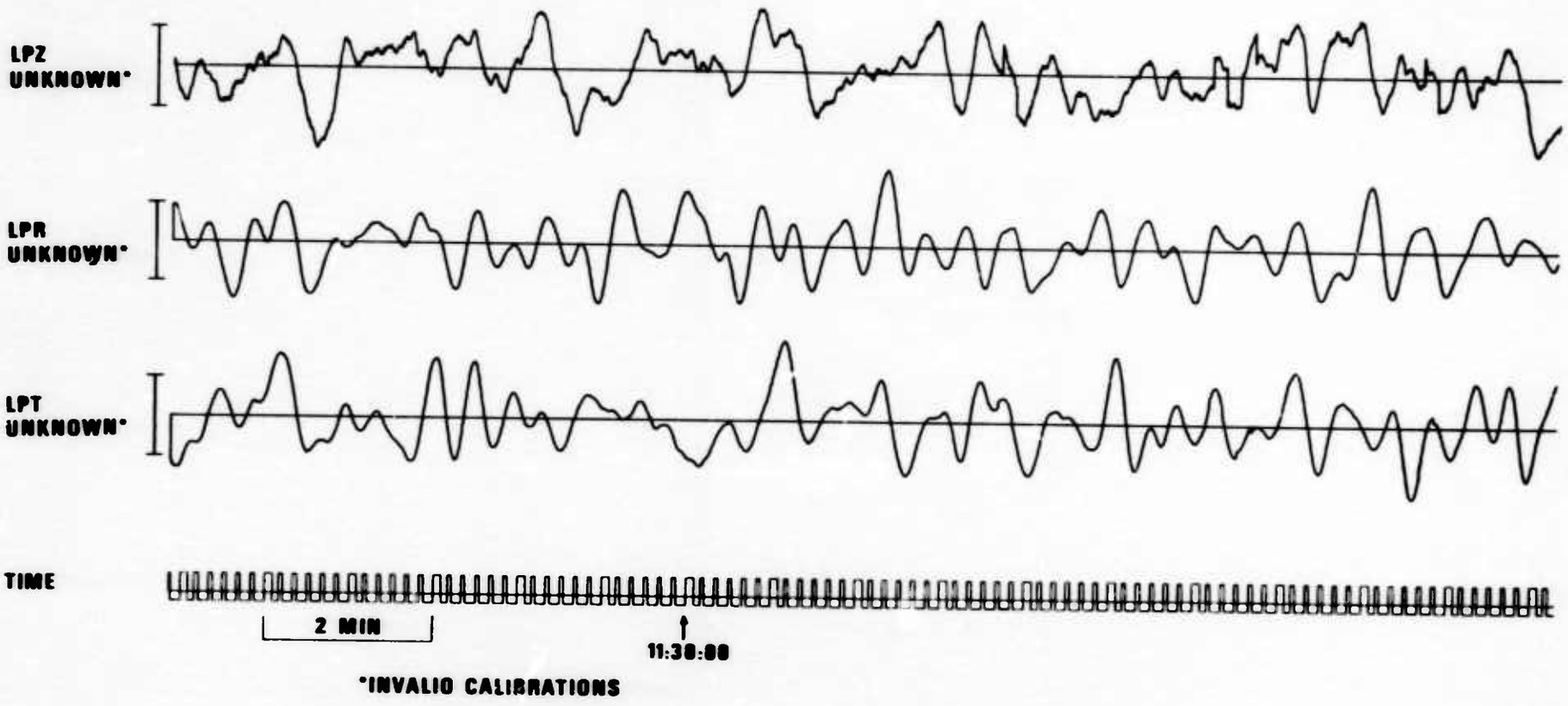


*NUMBER OF INSTRUMENTS CONTRIBUTING IS UNCERTAIN

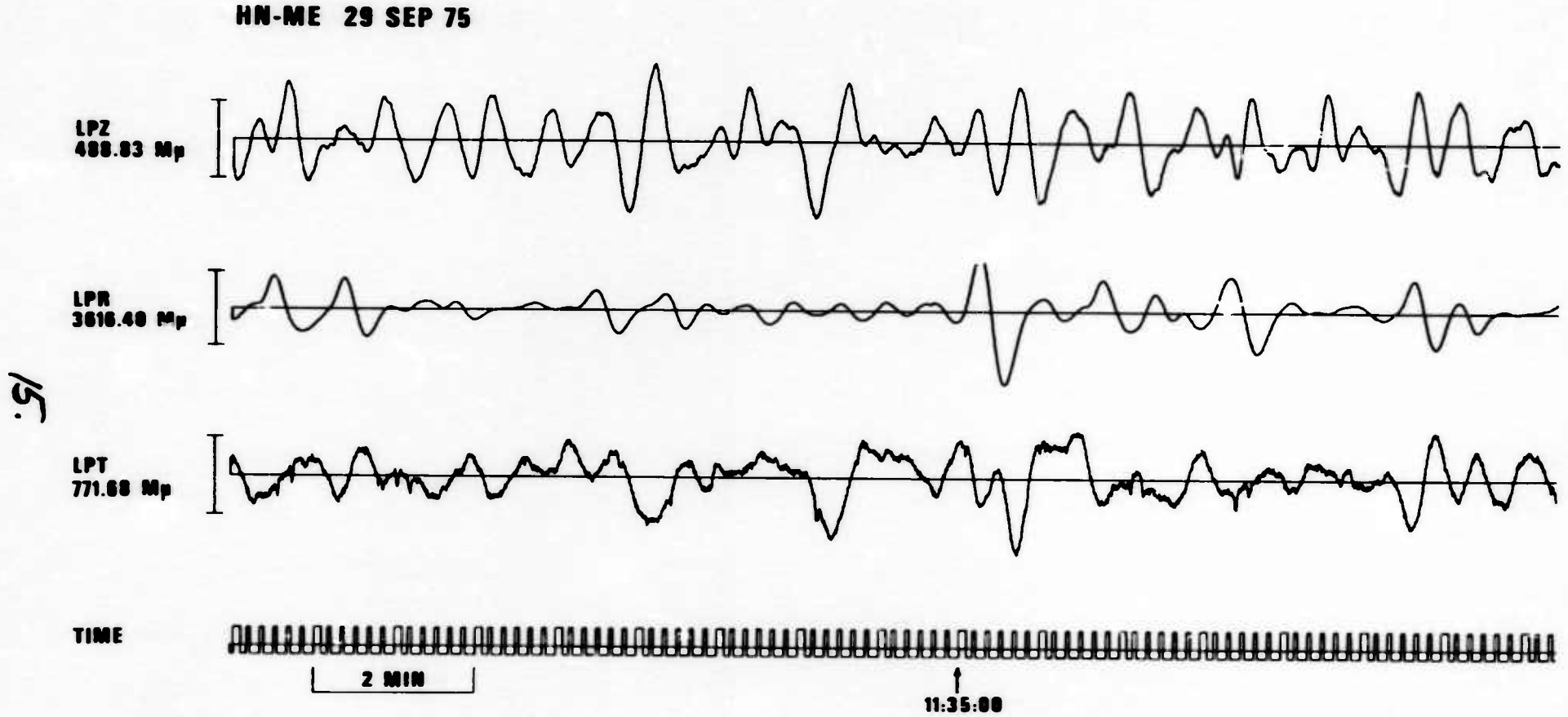

WH2YK 29 SEP 75
LPZ
UNKNOWN*
LPR
661.36 Mp
LPT
770.32 Mp
TIME
2 MIN
*INVALID CALIBRATION
11:25:00

13.

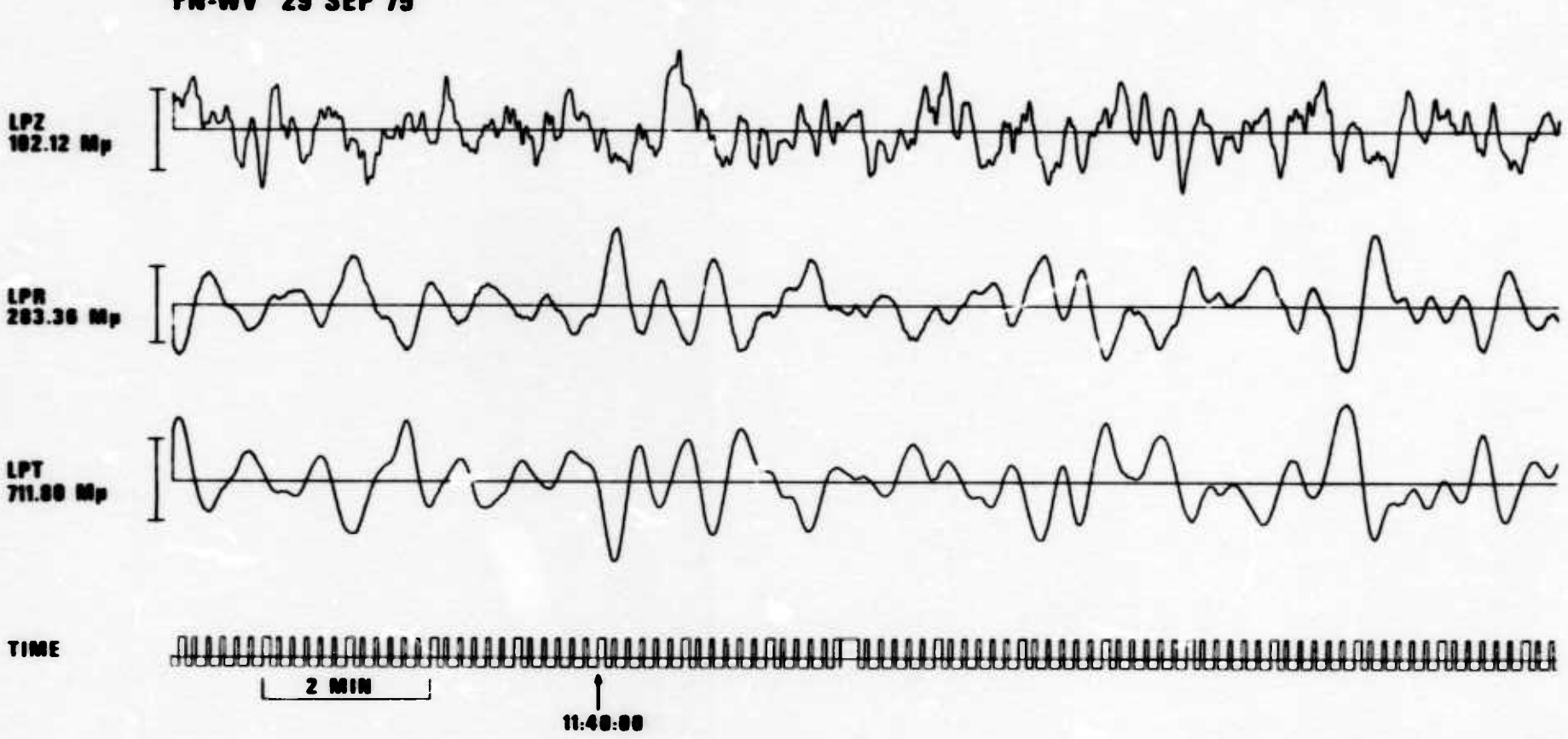
RK-ON 29 SEP 75

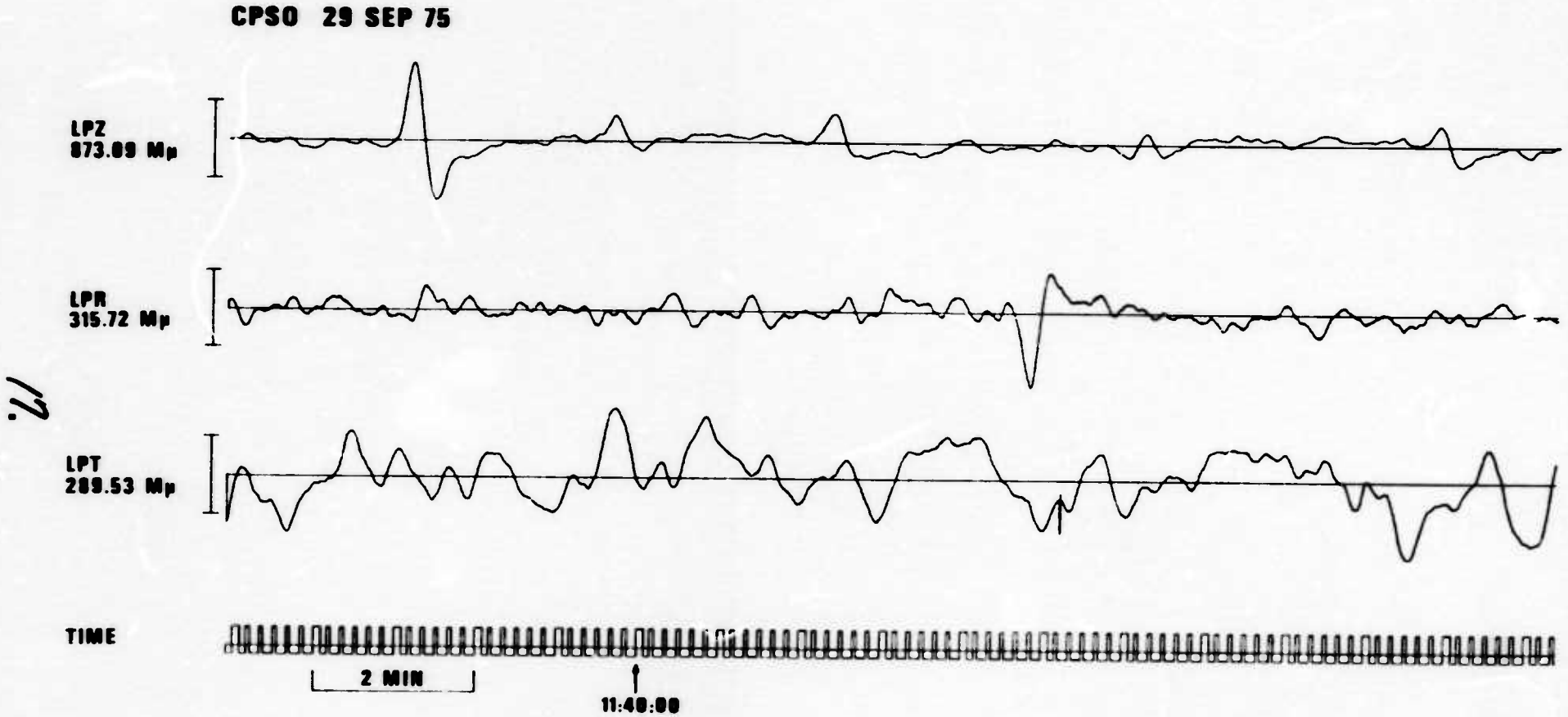


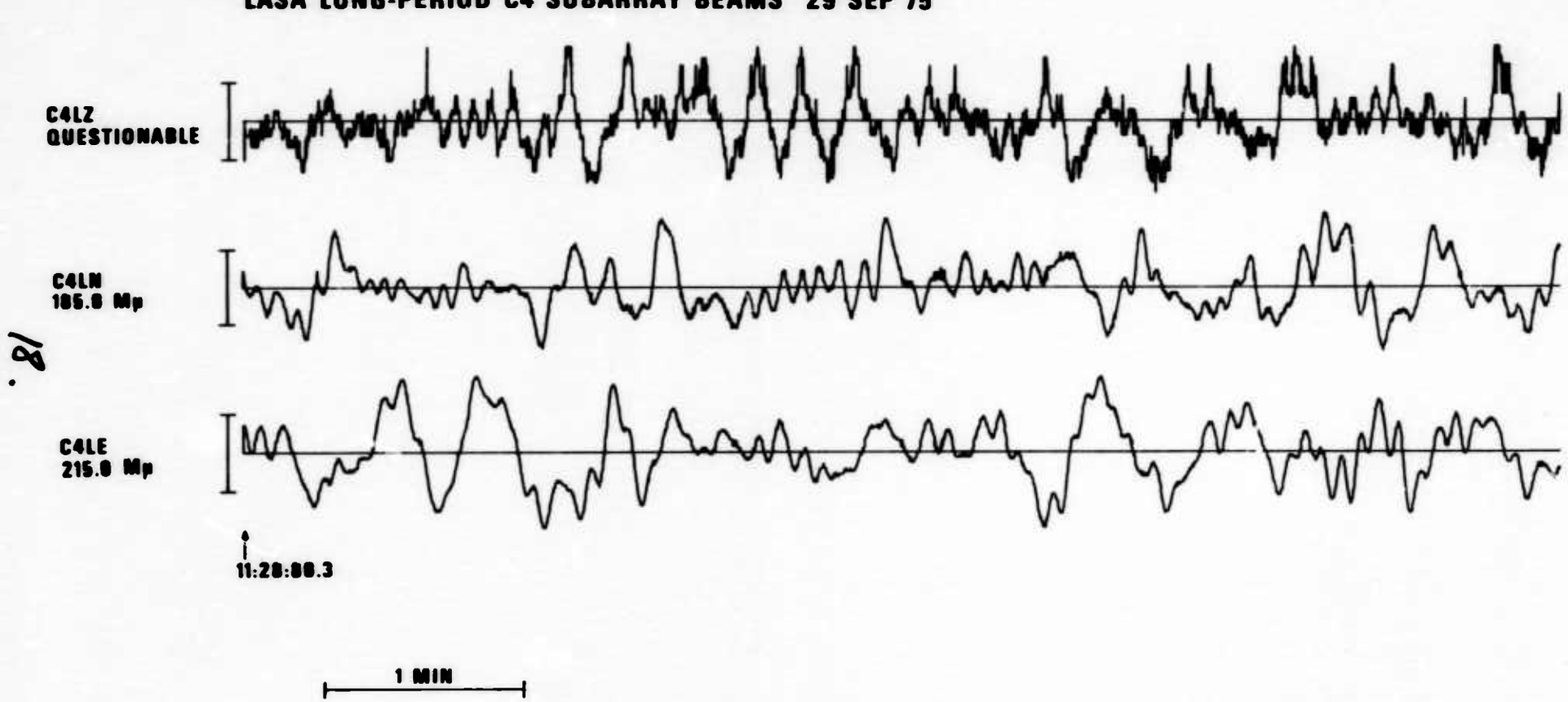
*INVALID CALIBRATIONS


HN-ME 29 SEP 75
LPZ
488.83 Mp
LPR
3616.48 Mp
LPT
771.68 Mp
TIME
2 MIN
11:35:00

15.


FN-WV 29 SEP 75
LPZ
182.12 Mp
LPR
283.36 Mp
LPT
711.88 Mp
TIME
2 MIN
11:40:00


CPSO 29 SEP 75
LPZ
873.89 Mμ
LPR
315.72 Mμ
LPT
289.53 Mμ
TIME
2 MIN
11:40:00


LASA LONG-PERIOD C4 SUBARRAY BEAMS 29 SEP 75
C4LZ
QUESTIONABLE
C4LN
185.8 Mp
C4LE
215.8 Mp
11:28:88.3
1 MIN