AD-A019 239

SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT, EASTERN KAZAKH, 8 JUNE 1975

J. R. Woolson, et al

Teledyne Geotech

Prepared for:

Air Force Technical Applications Center
Defense Advanced Research Projects Agency

23 September 1975

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SDCS-ER-75-24

ADA019239

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Eastern Kazakh, 8 June 1975

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September 1975

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The Defense Advanced Research Projects Agency
Nuclear Monitoring Research Office
1400 Wilson Boulevard, Arlington, Virginia 22209
ARPA Order No. 2897

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SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER SDCS-ER-75-24 ✓	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE *(and Subtitle)* SPECIAL DATA COLLECTION SYSTEM (SDCS) Eastern Kazakh, 8 June 1975		5. TYPE OF REPORT & PERIOD COVERED Technical 6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Woolson, J. R., Solari, D. D., Dawkins, M. S., Hill, K. J., and Markle, R. J.		8. CONTRACT OR GRANT NUMBER(s) F08606-74-C-0013
9. PERFORMING ORGANIZATION NAME AND ADDRESS Teledyne Geotech 314 Montgomery Street Alexandria, Virginia 22314		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS T/4703
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Advanced Research Projects Agency Nuclear Monitoring Research Office 1400 Wilson Blvd.-Arlington, Virginia 22209		12. REPORT DATE 23 September 1975 13. NUMBER OF PAGES 23
14. MONITORING AGENCY NAME & ADDRESS *(if different from Controlling Office)* VELA Seismological Center 312 Montgomery Street Alexandria, Virginia 22314		15. SECURITY CLASS. *(of this report)* Unclassified 15a. DECLASSIFICATION DOWNGRADING SCHEDULE

16. DISTRIBUTION STATEMENT *(of this Report)*

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

17. DISTRIBUTION STATEMENT *(of the abstract entered in Block 20, if different from Report)*

18. SUPPLEMENTARY NOTES

19. KEY WORDS *(Continue on reverse side if necessary and identify by block number)*

20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)*

DD FORM 1 JAN 73 1473 EDITION OF 1 NOV 65 IS OBSOLETE

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SECURITY CLASSIFICATION OF THIS PAGE *(When Data Entered)*

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SDCS Event Report No. 24

Eastern Kazakh, 8 June 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	03:27:01	50.2N	077.6E	5.5	N/A
LASA	03:26:56	48.2N	079.6E	5.6	N/A
Hagfors Array, Sweden	03:27:24	52 N	075 E	6.2	N/A

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

03:27:00	49.8N	077.8E	5.3	3.6

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

Analysis of SDCS, LASA and ALPA long-period data failed to produce recognizable signals associated with this event. The LP vertical magnification at HN-ME is unknown due to calibration problems. The horizontal LP gains at HN-ME are unknown due to erratic calibration amplitudes and, therefore, were not rotated to orientations radial and transverse to this event location. The horizontal array beams from NORSAR were unrecoverable.

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

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

HYPOCENTER DETERMINATION

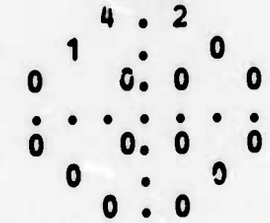
INPUT FOR EVENT 8 JUN 75
03:27:00.0 48.000N 79.000E 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
NAO	03 34 18.4	-0.1	-0.1	38.0	312.9
WH2YK	03 37 51.6	-0.0	-0.1	66.7	16.8
RK-ON	03 39 06.8	-0.6	-0.5	79.5	354.5
HN-ME	03 39 10.6	0.7	0.9	79.9	336.6
LAC	03 39 30.9	0.6	0.5	83.8	2.8
FN-WV	03 39 59.5	0.0	-0.0	89.8	342.4
CPO	03 40 17.1	-0.7	-0.7	93.7	346.5

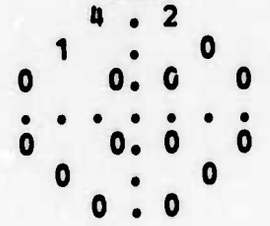
67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LCNG.	DEPTH (KM)	SDV	IT	STA
NO CONVERGENCE ON CALC RUN						
03:26:41.2	49.268N	78.003E	-101. CALC	0.5	16	7
03:27:00.1	49.798N	77.804E	0. REST	0.5	3	7

CALC



REST



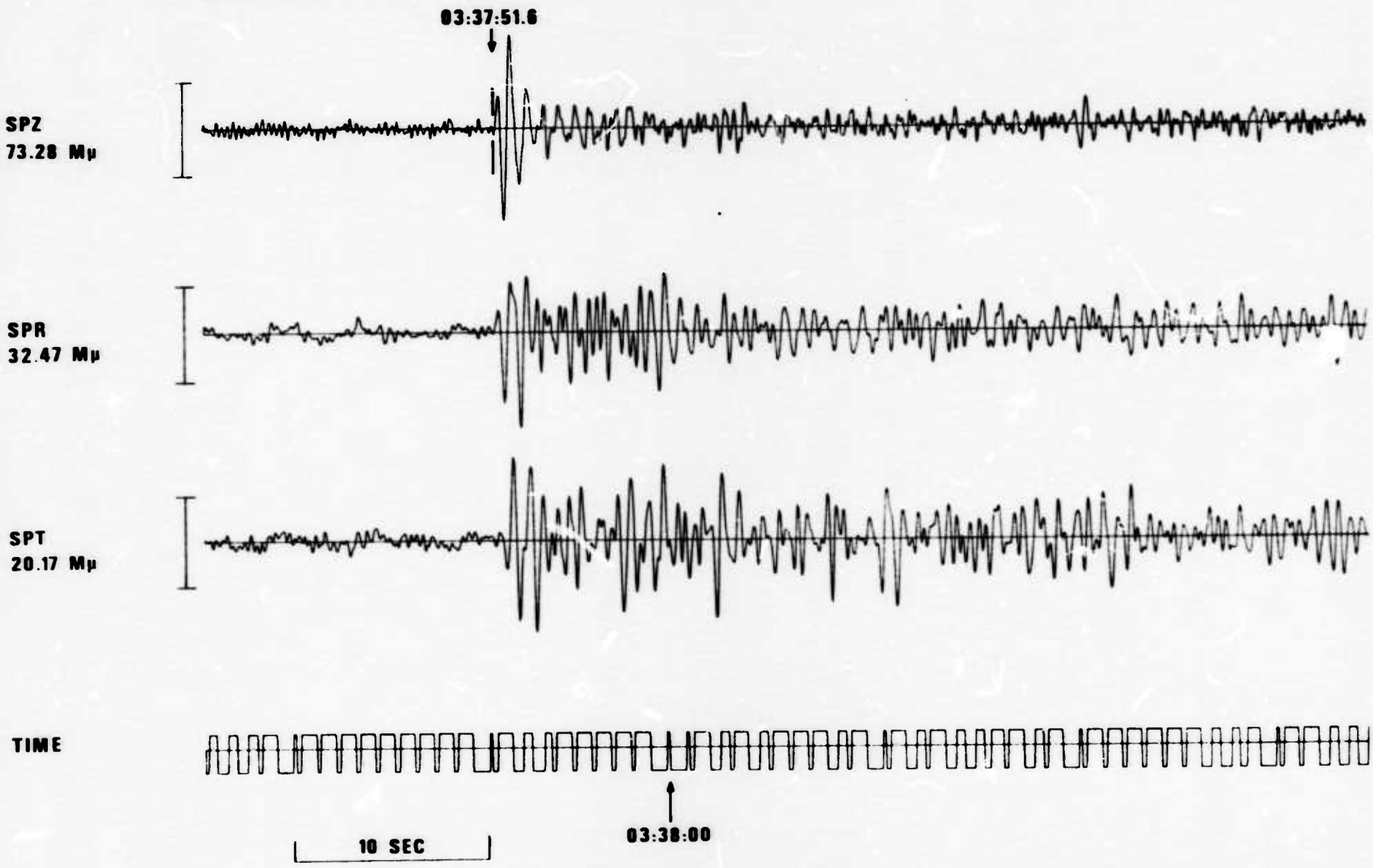
CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 0.92
MAJOR 164.0KM. MINOR 40.8KM. AZ= 179 AREA= 21029 SQ.KM. REST

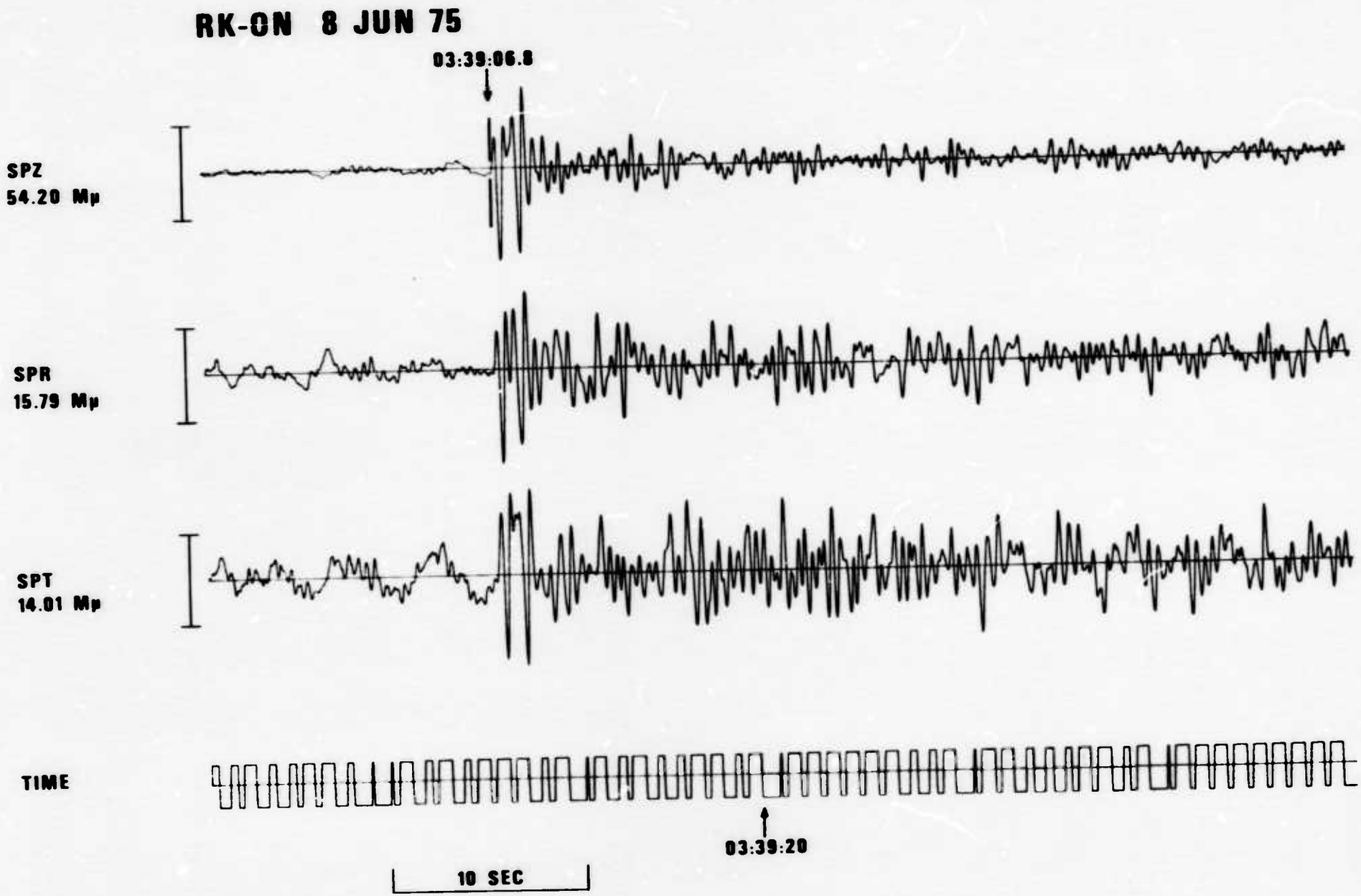
DATA SUMMARY

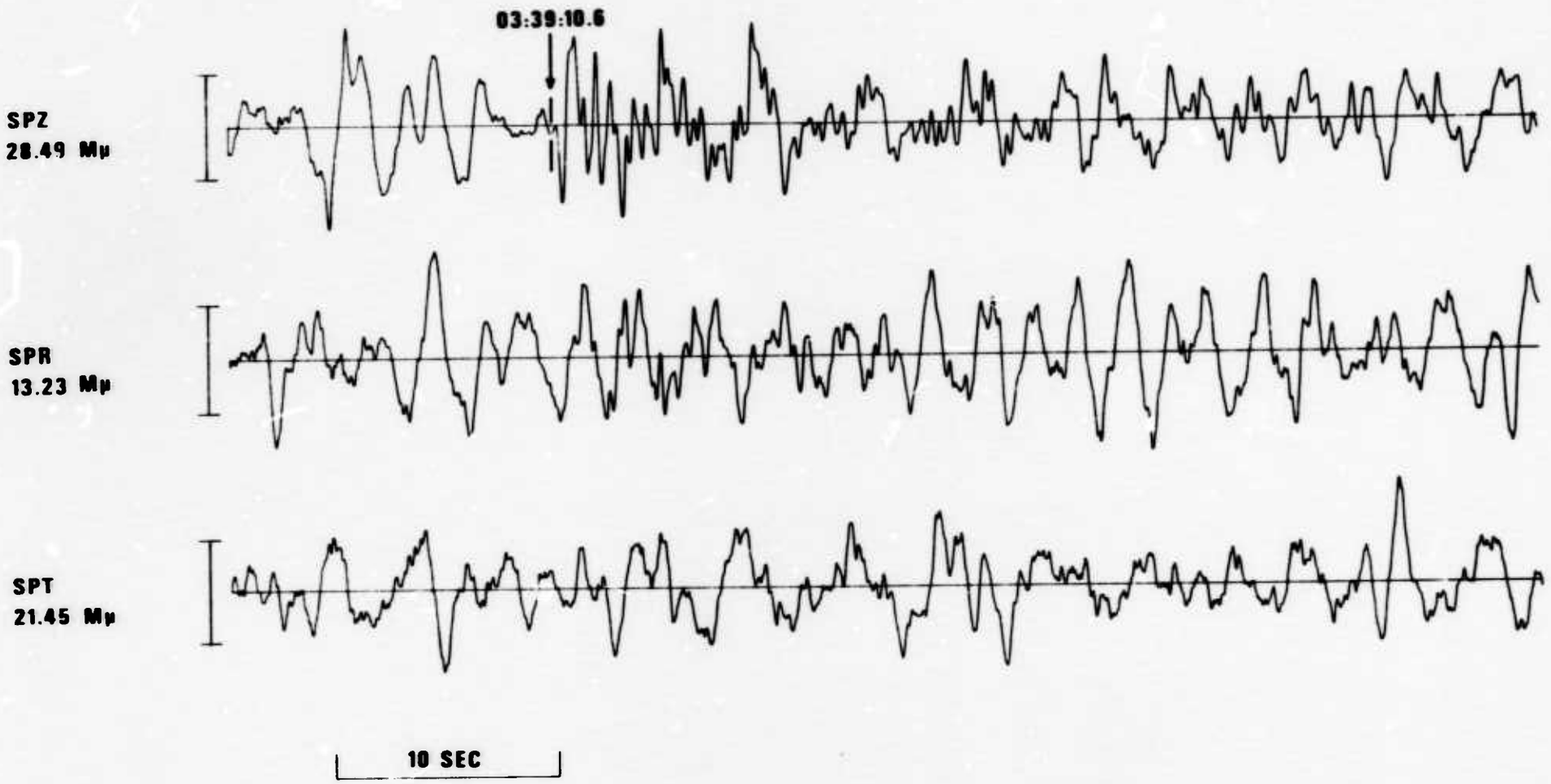
INPUT FOR EVENT 8 JUN 75
03:27:00.0 48.000N 79.000E 0KM.

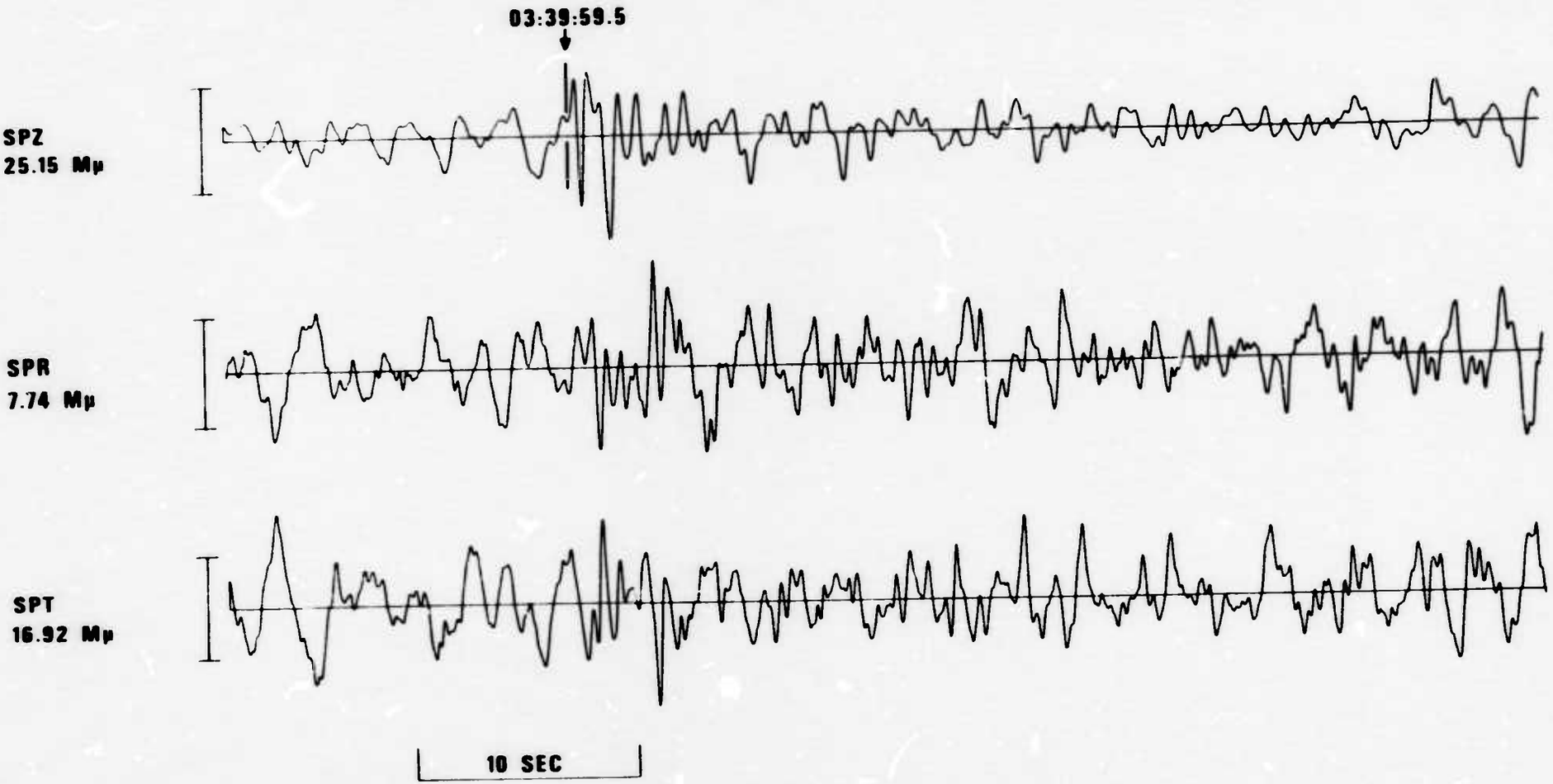
STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIR	DIST
NAO	EP	03 34 18.4	AB	0.6	89.	5.15			38.0
NAO	LR	03 50 17.0	LAB	19.0	8.		3.60		38.0
WH2YK	EP	03 37 51.6	SPZ	0.8	107.	5.73			66.7
RK-ON	EP	03 39 06.8	SPZ	0.5	56.	5.20			79.5
HN-ME	EP	03 39 10.6	SPZ	0.7	27.	4.84			79.9
LAC	EP	03 39 30.9	AB	0.9	53.	5.42			83.8
FN-WV	EP	03 39 59.5	SPZ	0.8	25.	5.10			89.8
CPO	EP	03 40 17.1	SPZ	0.8	43.	5.46			93.7

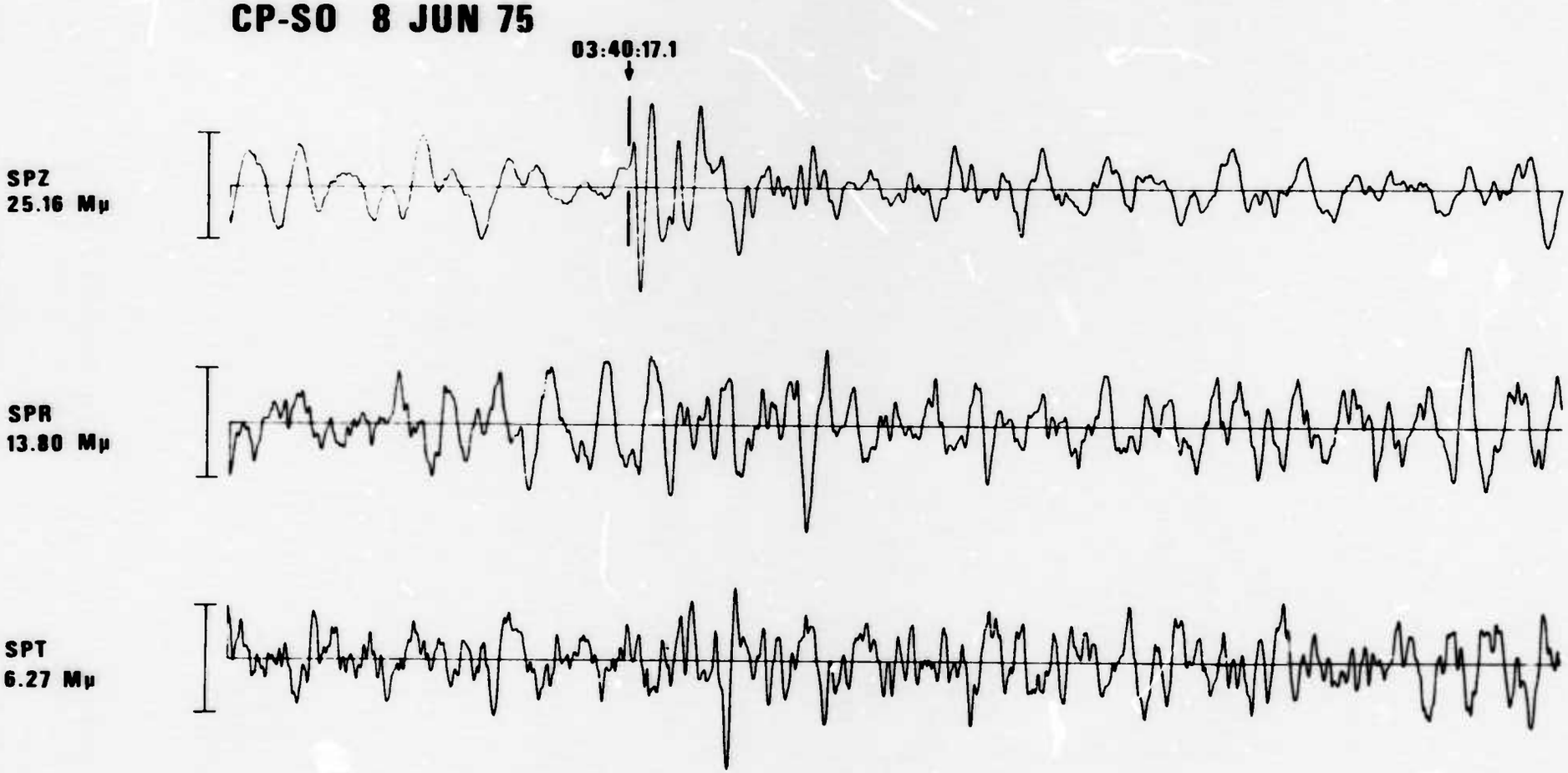
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
03:27:00.1	49.798N	77.804E	0. REST	5.27	0.29	7	3.60******		1


WH2YK 8 JUN 75
03:37:51.6
SPZ
73.28 Mμ
SPR
32.47 Mμ
SPT
20.17 Mμ
TIME
03:38:00
10 SEC


RK-ON 8 JUN 75
03:39:06.8
SPZ
54.20 Mμ
SPR
15.79 Mμ
SPT
14.01 Mμ
TIME
03:39:20
10 SEC


HN-ME 8 JUN 75
03:39:10.6
SPZ
28.49 Mμ
SPR
13.23 Mμ
SPT
21.45 Mμ
10 SEC


FN-WV 8 JUN 75
03:39:59.5
SPZ
25.15 Mμ
SPR
7.74 Mμ
SPT
16.92 Mμ
10 SEC

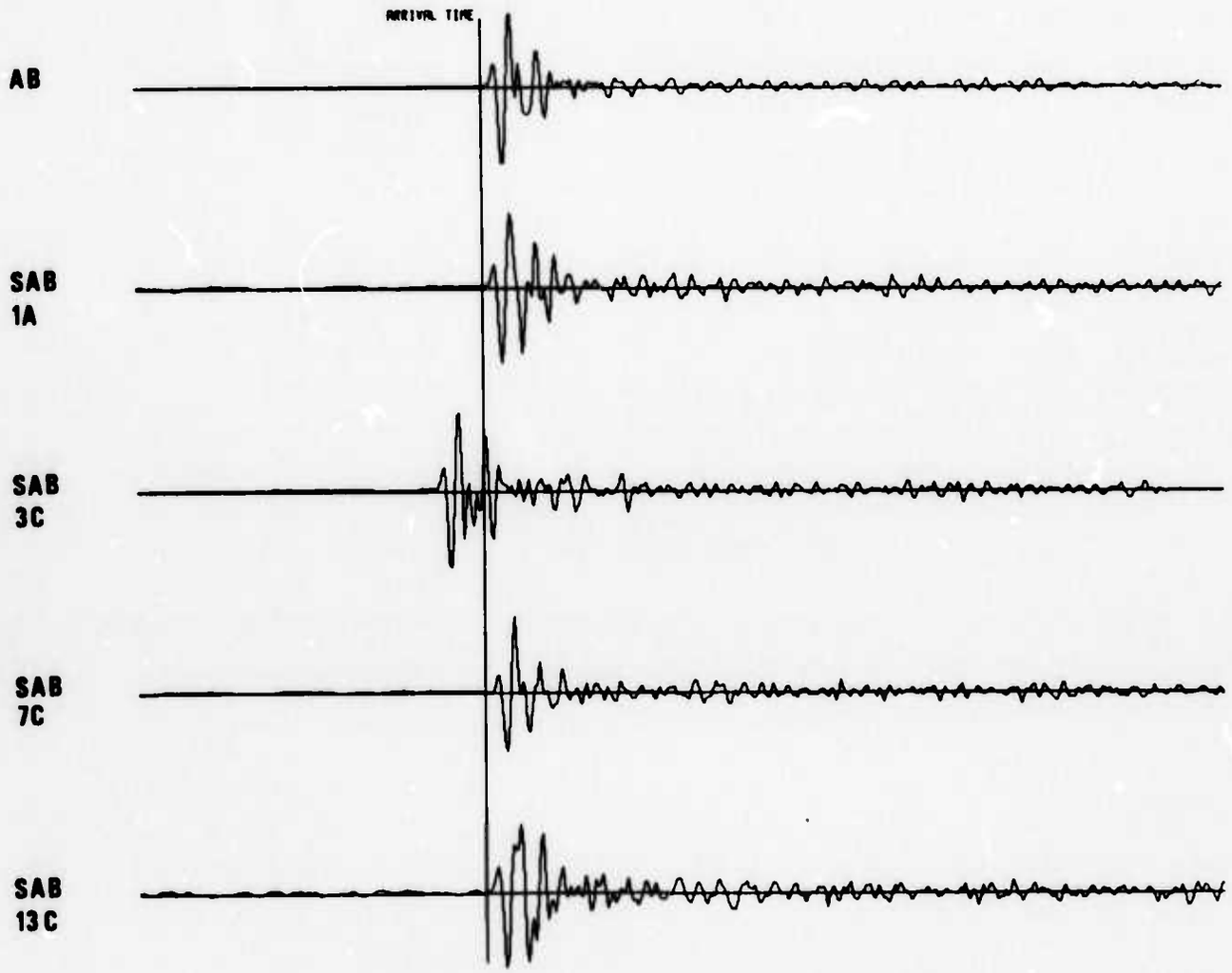

CP-SO 8 JUN 75
03:40:17.1
SPZ
25.16 Mμ
SPR
13.80 Mμ
SPT
6.27 Mμ
10 SEC

NORSAR EVENT FILE 1975 JUN 8

EPX NO. 16240 ARR. 3.34.18.3 50.2N 77.6E 5.5MB 33KM

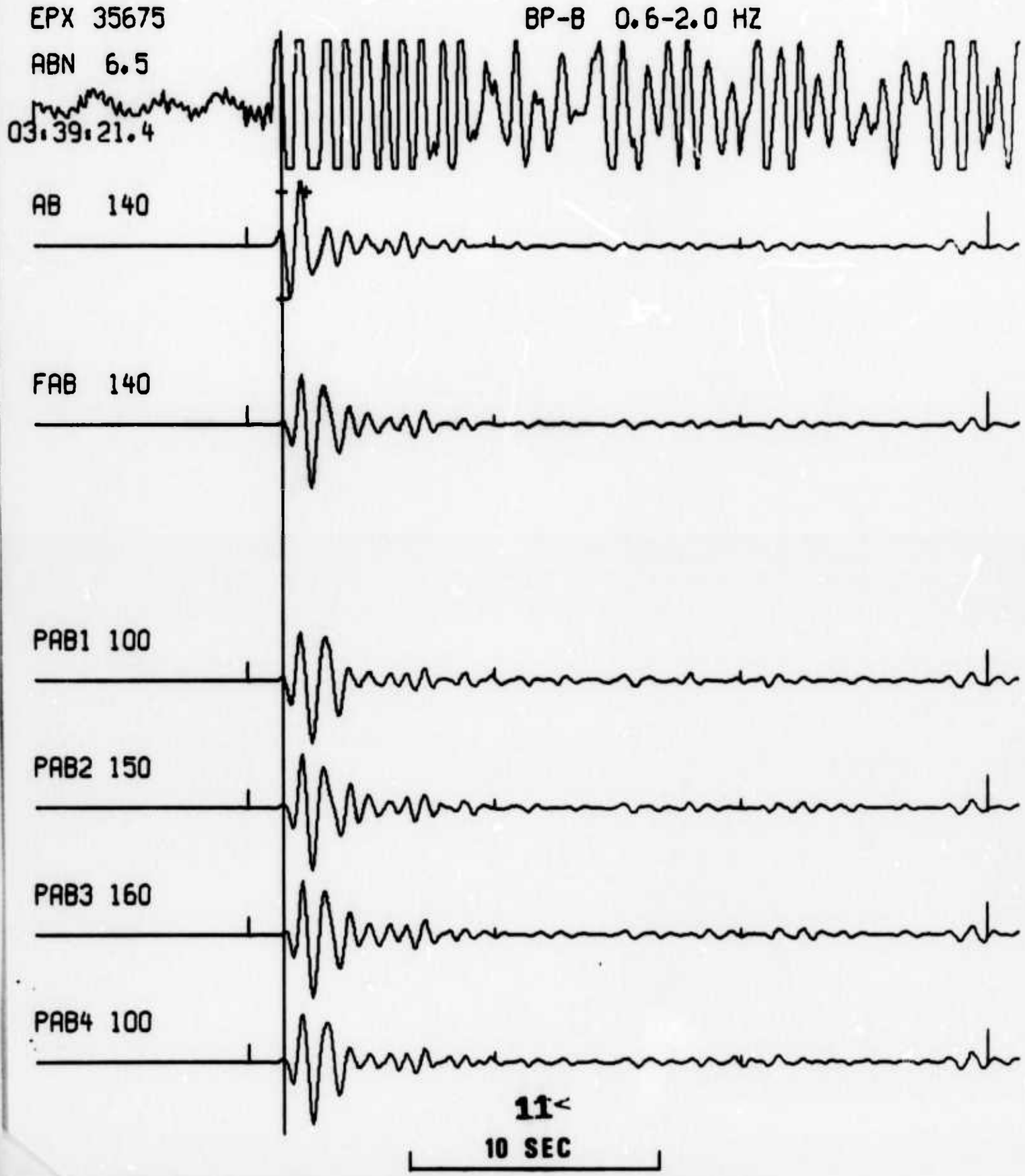
DIST = 37.6 AZI = 75.4 AMP = 72.0 PER = 0.9 UMETH 2

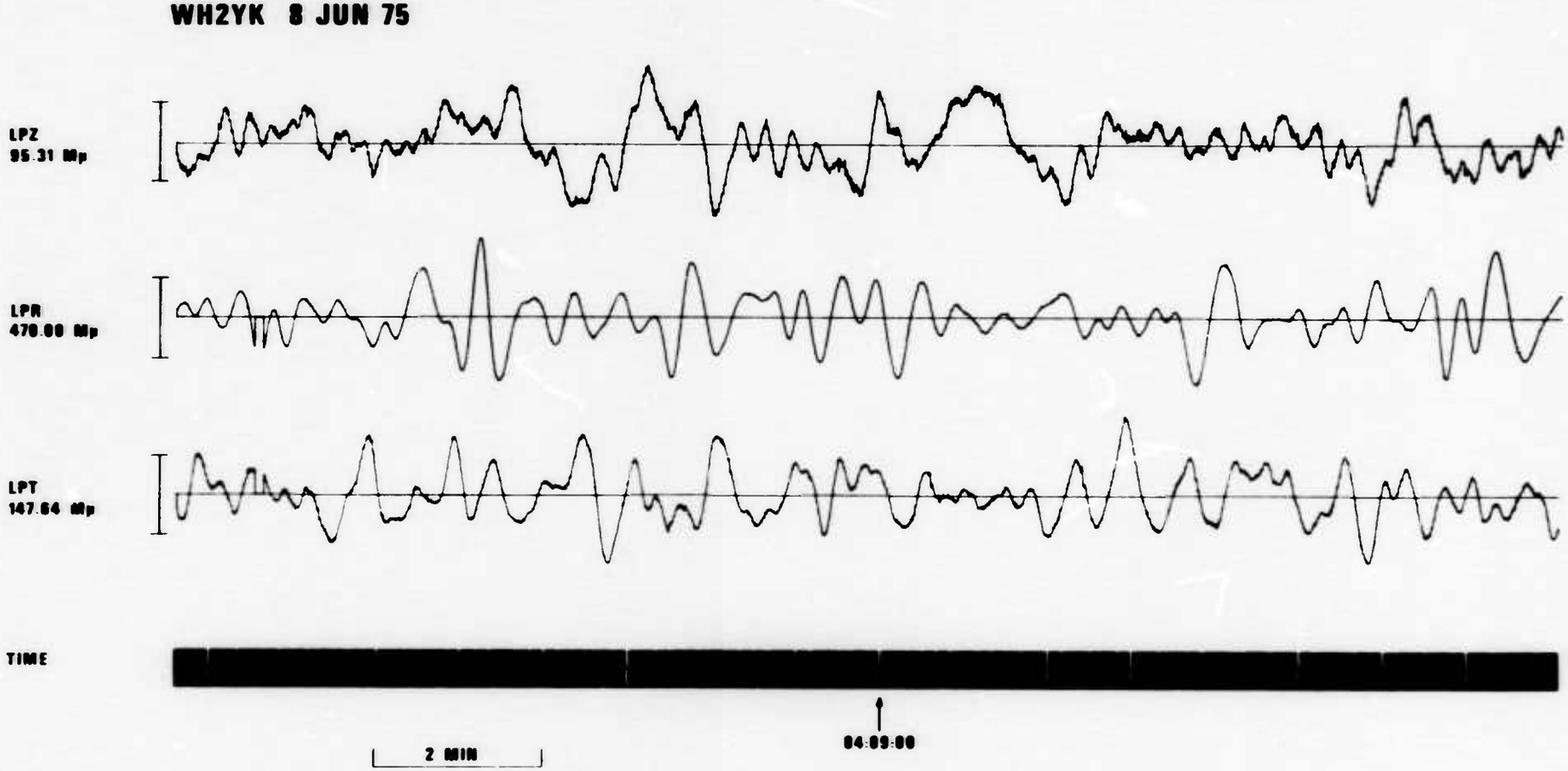
SCALE└──────┘= 5 SECONDS



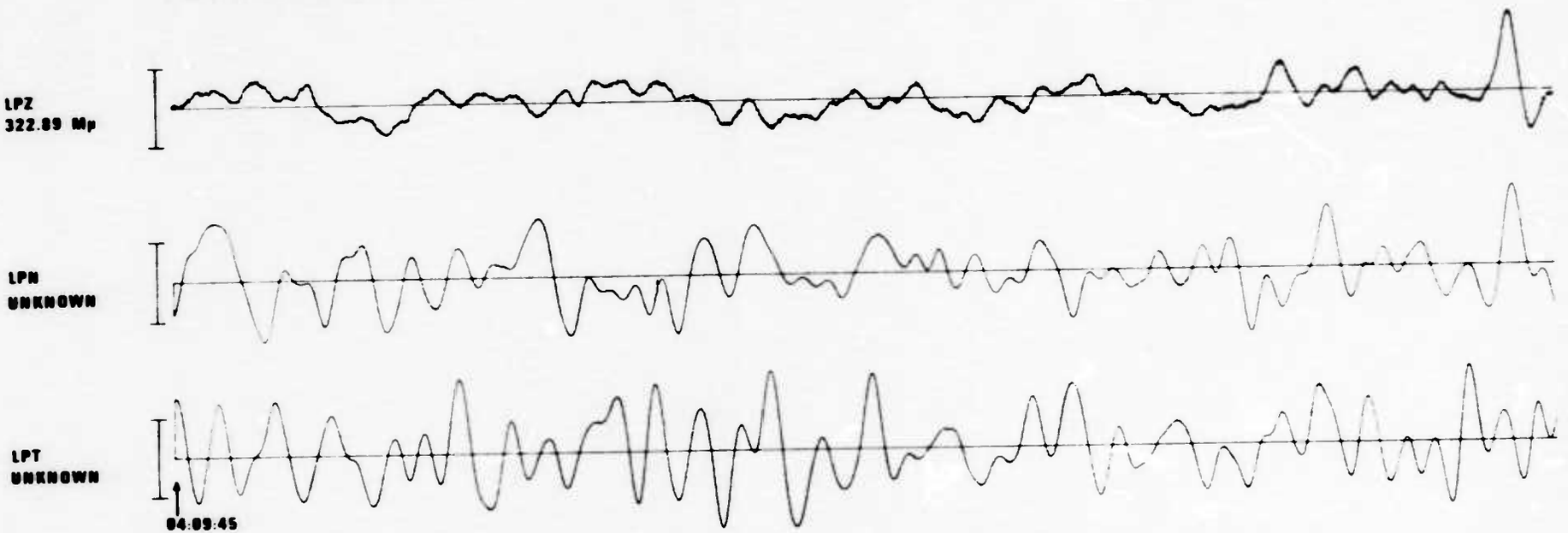
LASA

1 8 JUN 1975
2 3 26 57 48.2N 79.6E 33G B 5.7 329 EASTERN KAZAKH SSR
3 3 39 31.4 LAO P 64.2 1.0 22.5 85.5 356.1

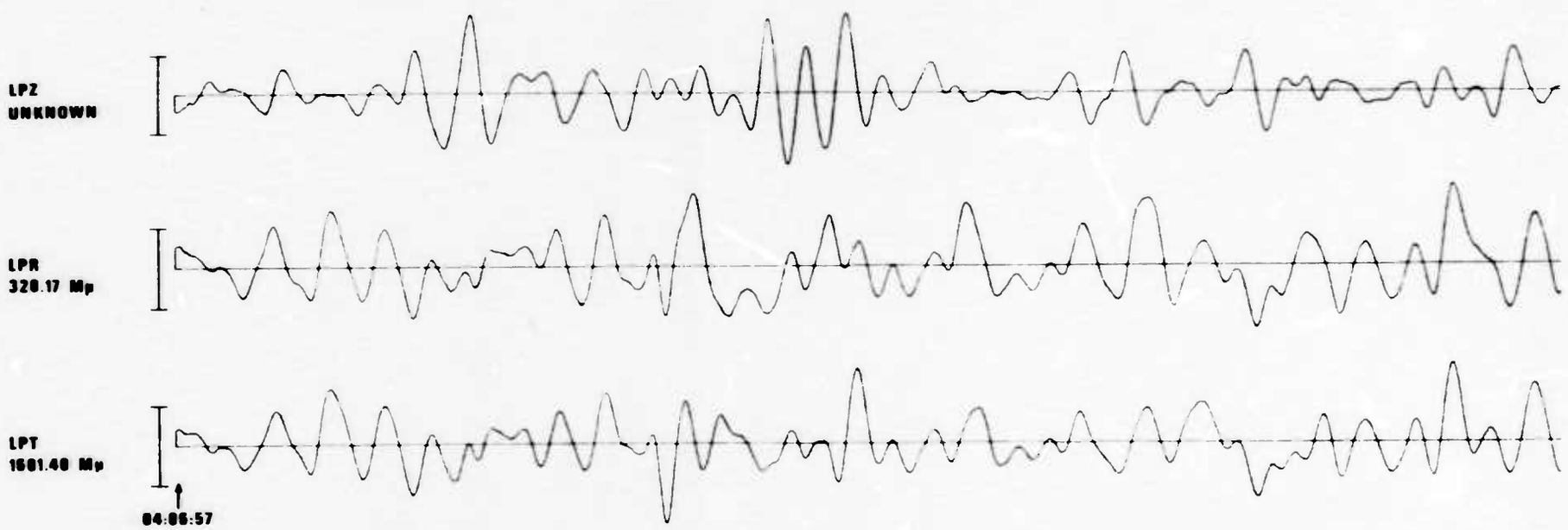


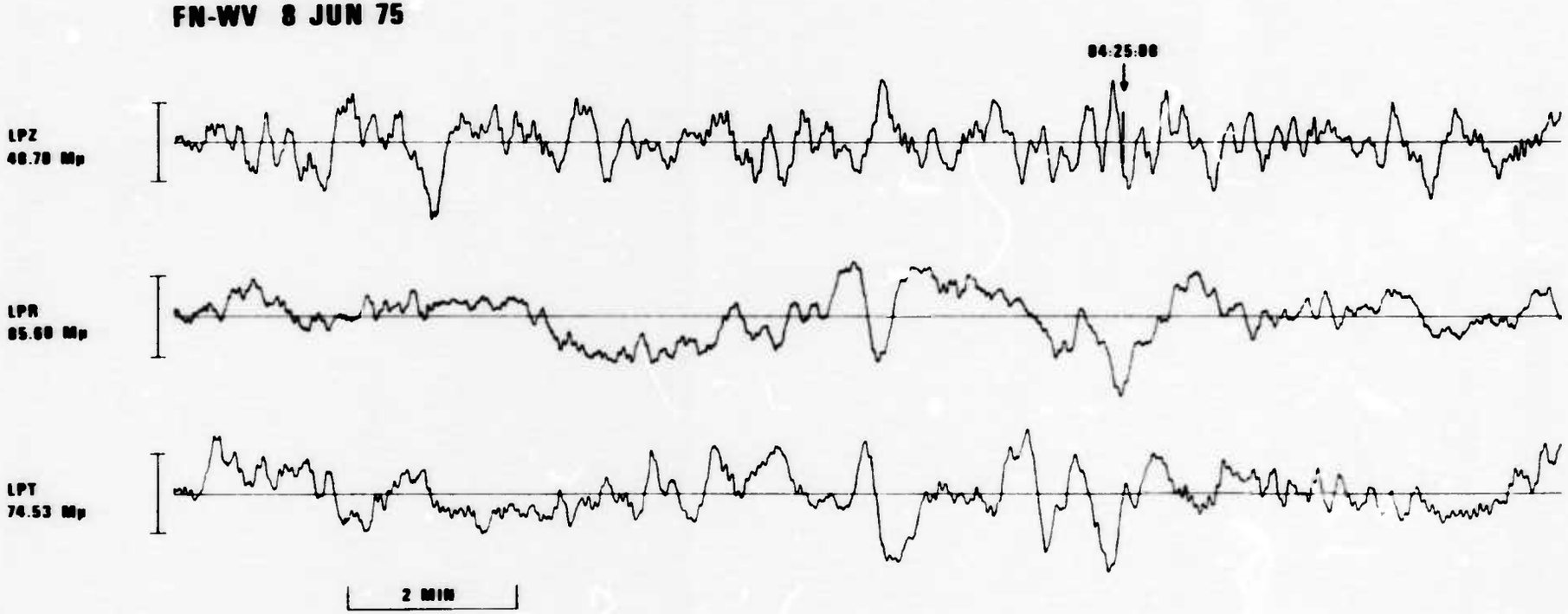

WH2YK 8 JUN 75
LPZ
95.31 Mp
LPR
470.88 Mp
LPT
147.64 Mp
TIME
2 MIN
04:09:00

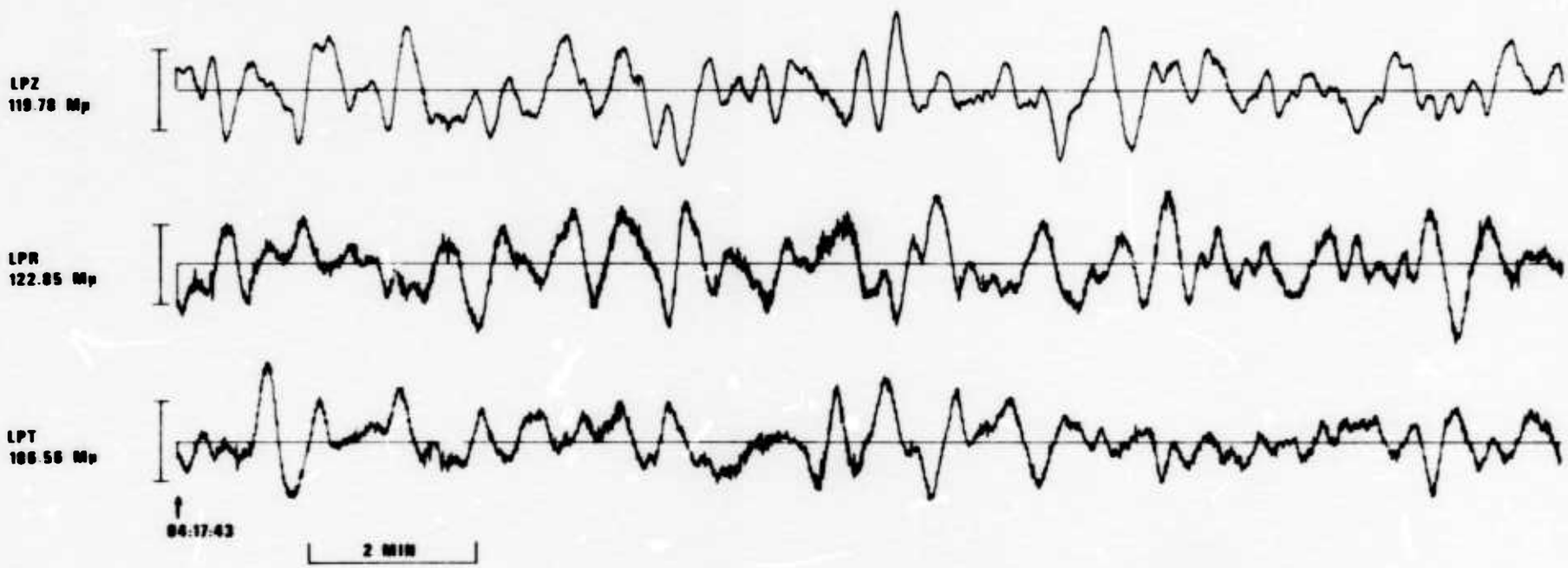
RK-ON 8 JUN 75



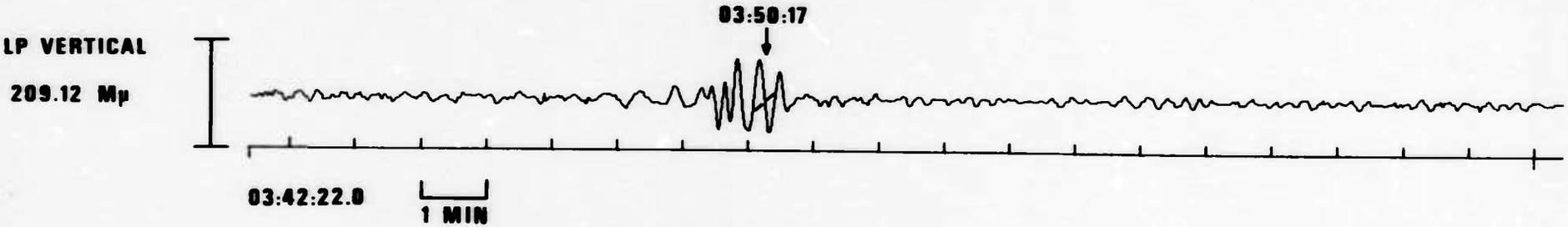
HN-ME 8 JUN 75




FN-WV 8 JUN 75
04:25:08
LPZ
46.78 Mp
LPR
85.68 Mp
LPT
74.53 Mp
2 MIN

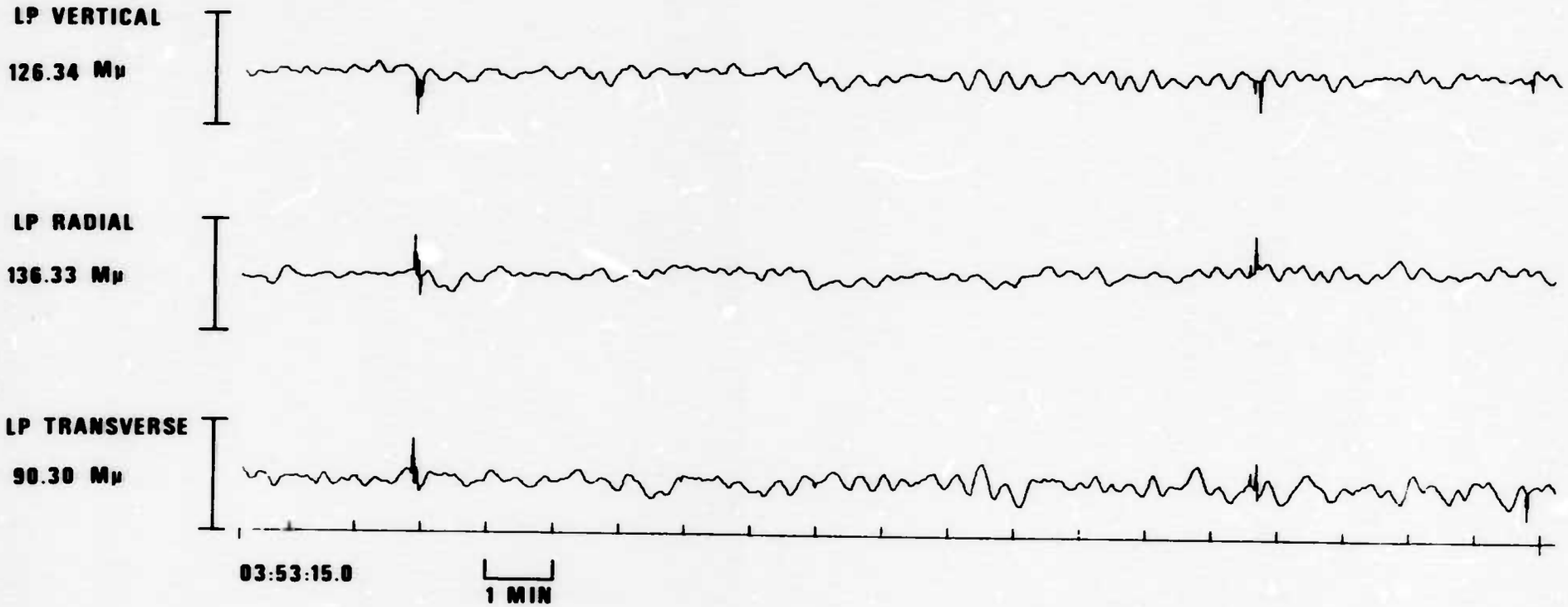
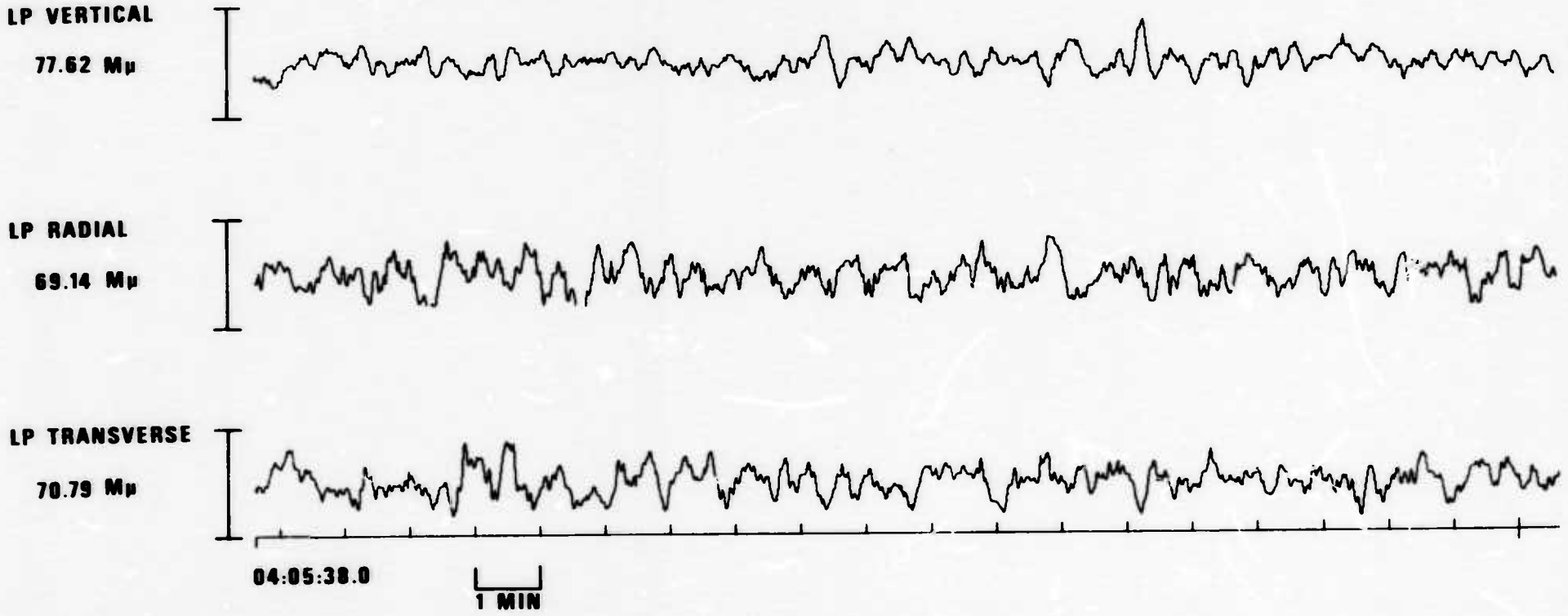

CP-SO 8 JUN 75
LPZ
119.78 Mp
LPR
122.85 Mp
LPT
186.56 Mp
04:17:43
2 MIN

NORSAR LONG-PERIOD BEAMS 8 JUN 75



RADIAL AND TRANSVERSE CHANNELS NOT RECOVERABLE

ALPA LONG-PERIOD BEAMS 8 JUN 75



LASA LONG-PERIOD BEAMS 8 JUN 75