SPECIAL DATA COLLECTION SYSTEM EVENT REPORT, EASTERN KAZAKH, 11 MARCH 1975

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Teledyne Geotech

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Eastern Kazakh, 11 March 1975

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September 1975

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1.

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SDCS Event Report No. 12

Eastern Kazakh, 11 March 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	05:42:52	49.3N	079.2E	5.3	-
LASA	05:42:48	46.3N	079.4E	5.6	-
PDE	05:42:58	49.8N	078.3E	5.4	-
Hagfors Array, Sweden	05:43:12	50 N	076 E	5.9	-

Using RK-ON, WH2YK, LASA, and NORSAR, the epicenter location becomes

SDCS & Arrays	05:43:14	52.4N	078.0E	5.4	3.28

CPSO and FN-WV were not operational for this event.

Amplitude data from RK-ON was not determined due to erratic operation of the calibration circuit. Excessive spiking on the short-period vertical cahnnel at HN-ME precluded identification of the body wave. The long-period vertical and transverse channels at HN-ME were inoperative. At WH2YK, the LPR trave was not operational and the time correction could not be accurately determined due to poor radio reception.

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

Notes:

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

FN-WV, RK-ON, WH2YK and HN-ME horizontal instruments are oriented radial and transverse to the Nevada Test Site. CPSO is oriented N-S and E-W. LASA, NORSAR and ALPA beams have been rotated to radial and transverse with respect to the event location.

HYPOCENTER DETERMINATION

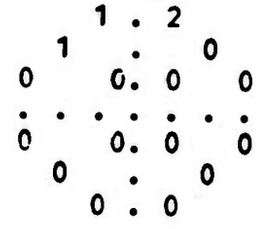
INPUT FOR EVENT 11 MAR 75
05:43:00.0 49.000N 78.000E 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
NAO	05 50 18.9	0.1	0.1	36.3	310.3
WH2YK	05 53 49.3	0.1	0.1	64.2	17.3
RK-ON	05 55 06.7	-0.3	-0.3	76.9	354.6
LAO	05 55 31.0	0.2	0.2	81.2	3.0

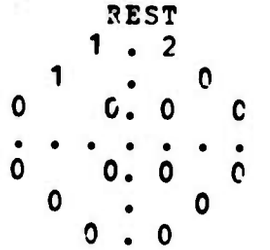
67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
05:43:14.4	52.434N	78.046E	0. CALC	0.2	4	4
05:43:14.4	52.434N	78.046E	0. REST	0.2	4	4

CALC



REST



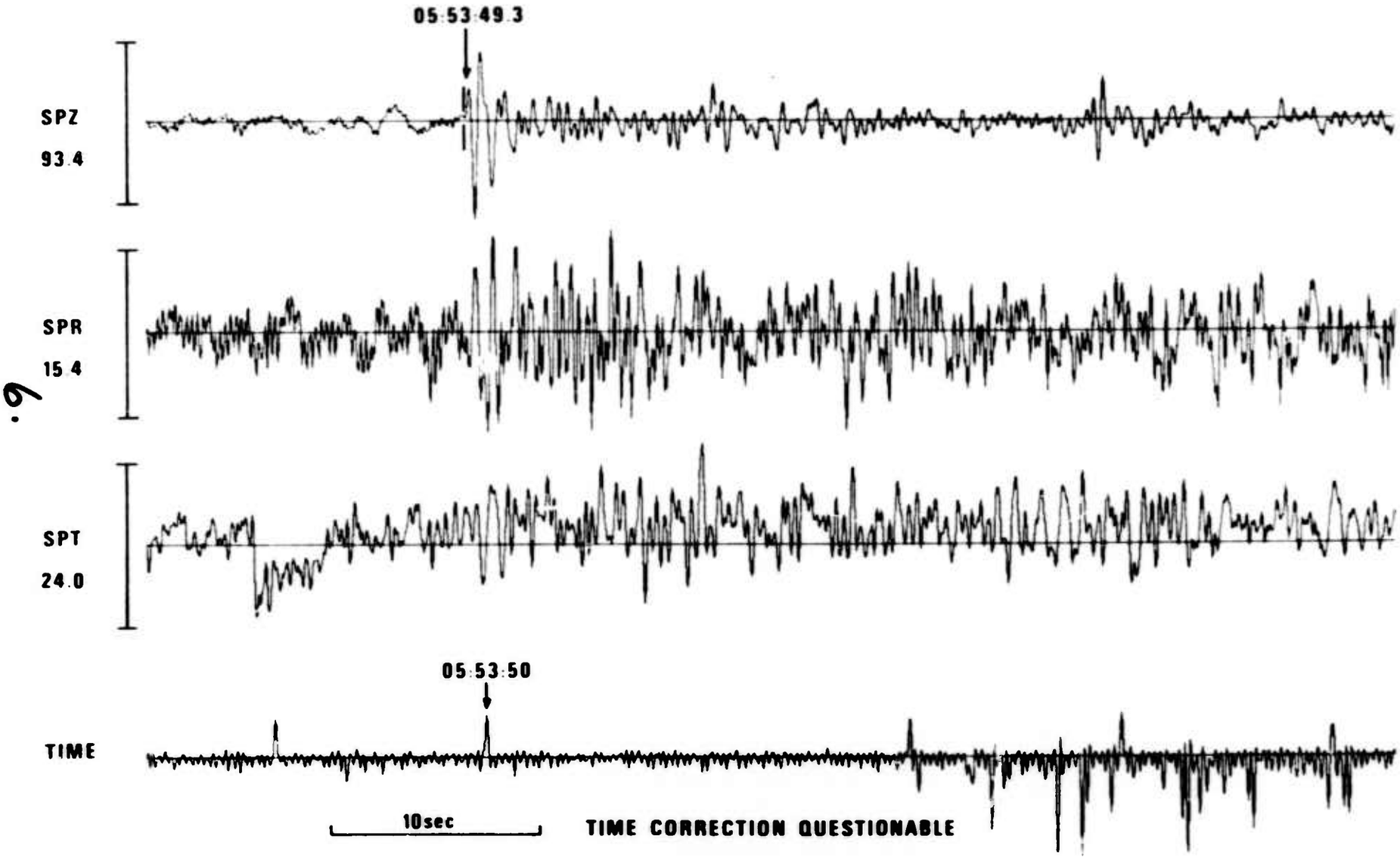
CHI2 COVERAGE ELLIPSE: 95 PER CENT CONF..LEVEL, SDV= 1.00
MAJOR 415.3KM. MINOR 42.5KM. AZ= 177 AREA= 55464 SQ.KM. REST

DATA SUMMARY

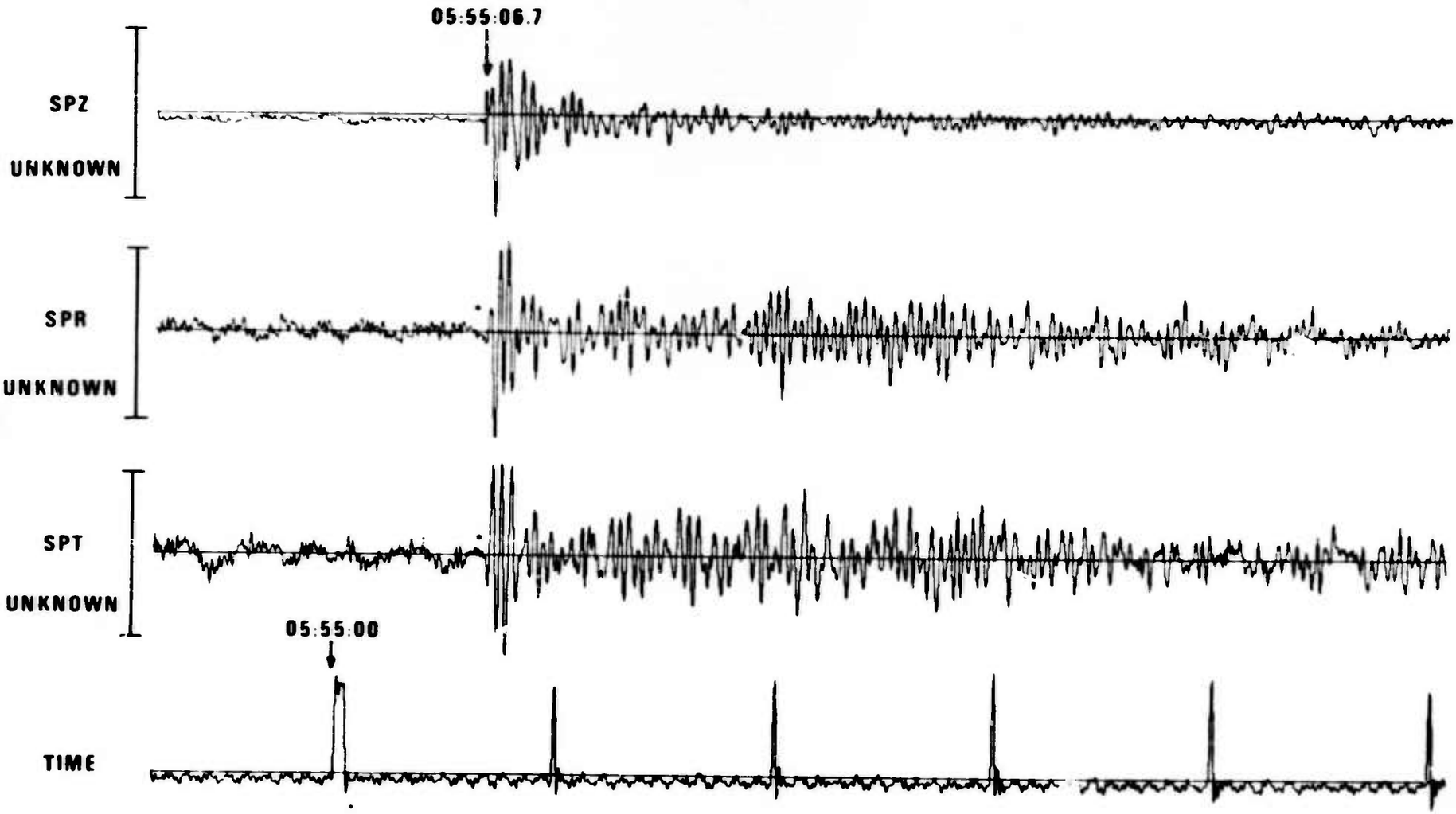
INPUT FOR EVENT 11 MAR 75
05:43:00.0 49.000N 78.000E 0KM.

STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE MB	MS	DIF	DIST
NAO	EP	05 50 18.9	AB	0.6	59.	5.04			36.3
NAO	LP	06 05 04.0	LAB	19.0	4.		3.26		36.3
WH2YK	EP	05 53 49.3	SPZ	0.5	57.	5.46			64.2
RK-ON	EP	05 55 06.7	SPZ	0.4	9999.				
LAO	EP	05 55 31.0	AB	1.0	107.	5.55			81.2

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
05:43:14.4	52.434N	78.046E	0. CALC	5.35	0.27	3	3.28******		1
05:43:14.4	52.434N	78.046E	0. REST	5.35	0.27	3	3.28******		1

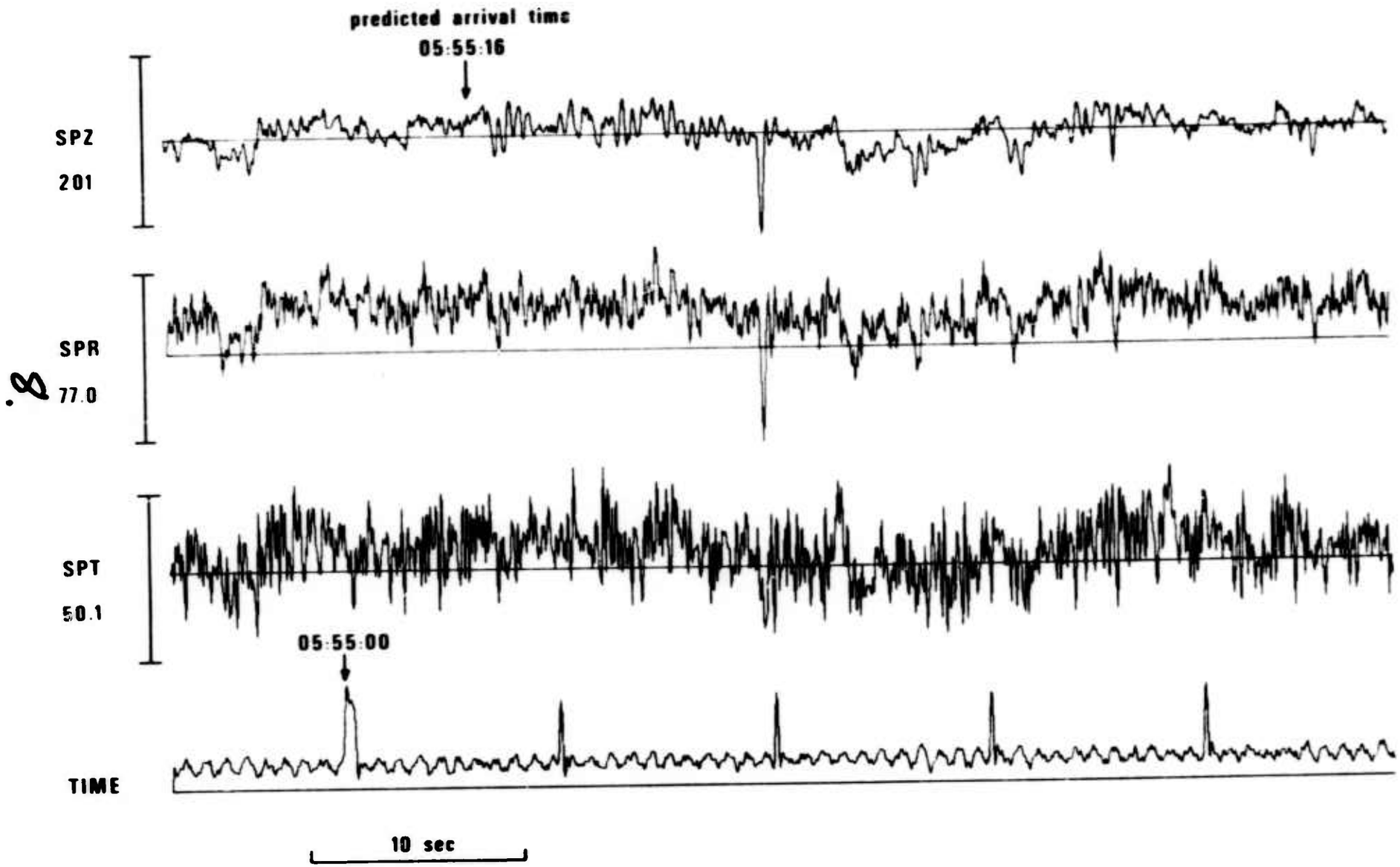

WH2YK 11 MAR 75
05:53:49.3
SPZ
93.4
SPR
15.4
SPT
24.0
05:53:50
TIME
10sec
TIME CORRECTION QUESTIONABLE

RK-ON 11 MAR 75



GAINS NOT RESOLVED;CALIBRATOR FLUCTUATING

* polarity reversed

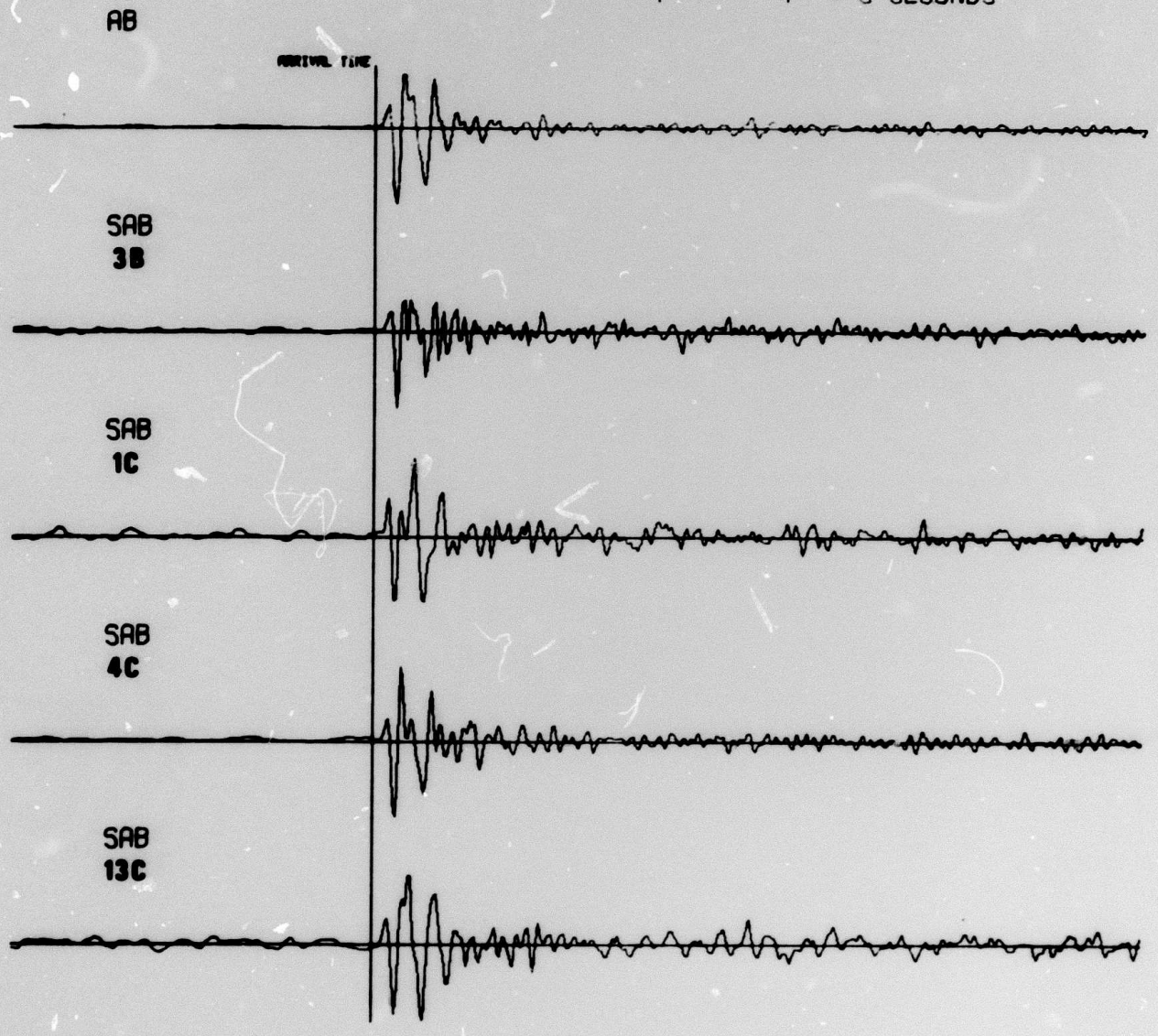

HN-ME 11 MAR 75
predicted arrival time
05:55:16
SPZ
201
SPR
77.0
.8
SPT
50.1
05:55:00
TIME
10 sec

NORSAR EVENT FILE 1975 MAR 11

EPX NO. 7520 ARR. 5.50.18.7 49.1N 75.6E 5.4Mb 13KM

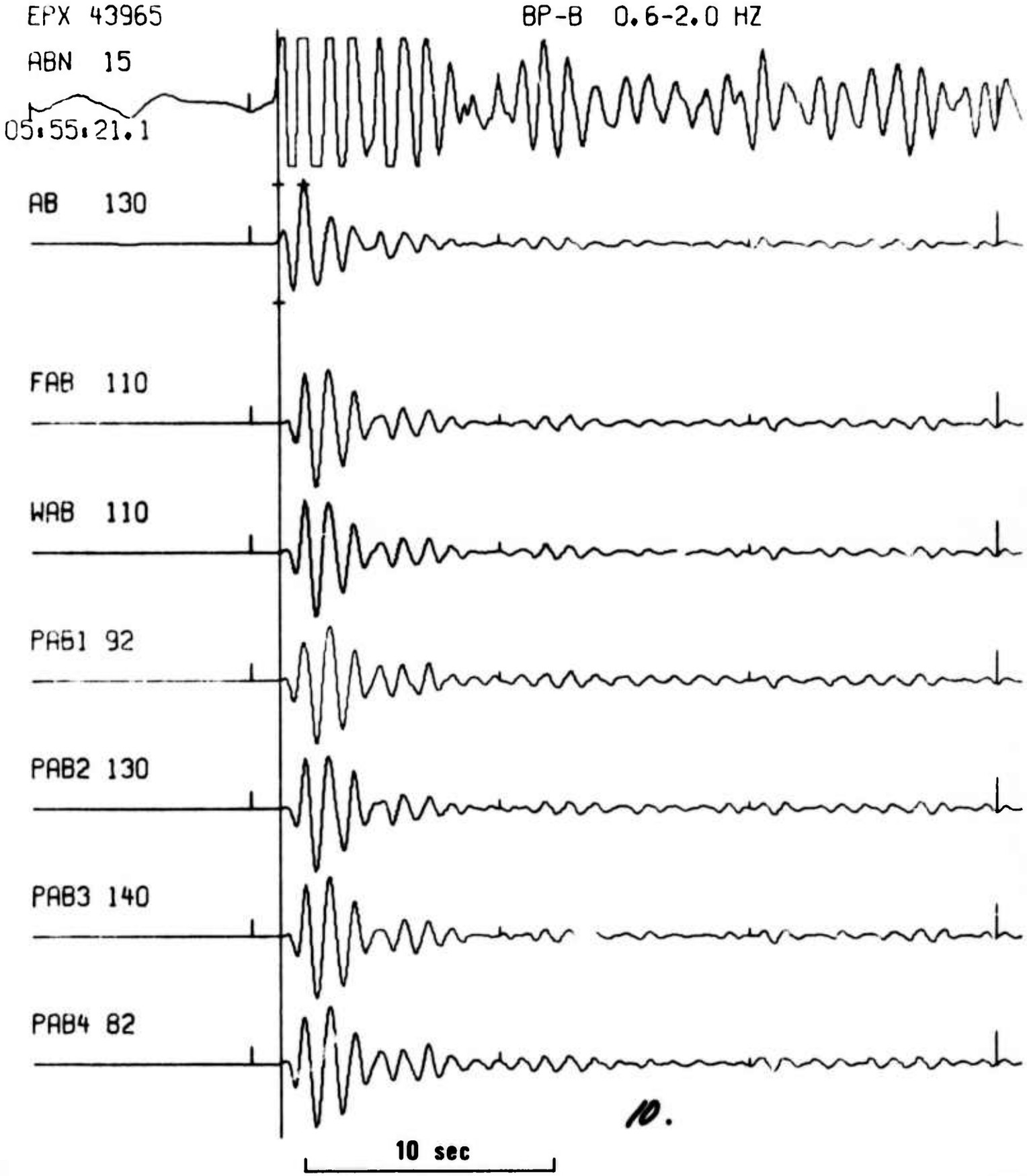
DIST = 39.3 AZI = 75.2 AMP = 62.4 PER = 1.0

= 5 SECONDS

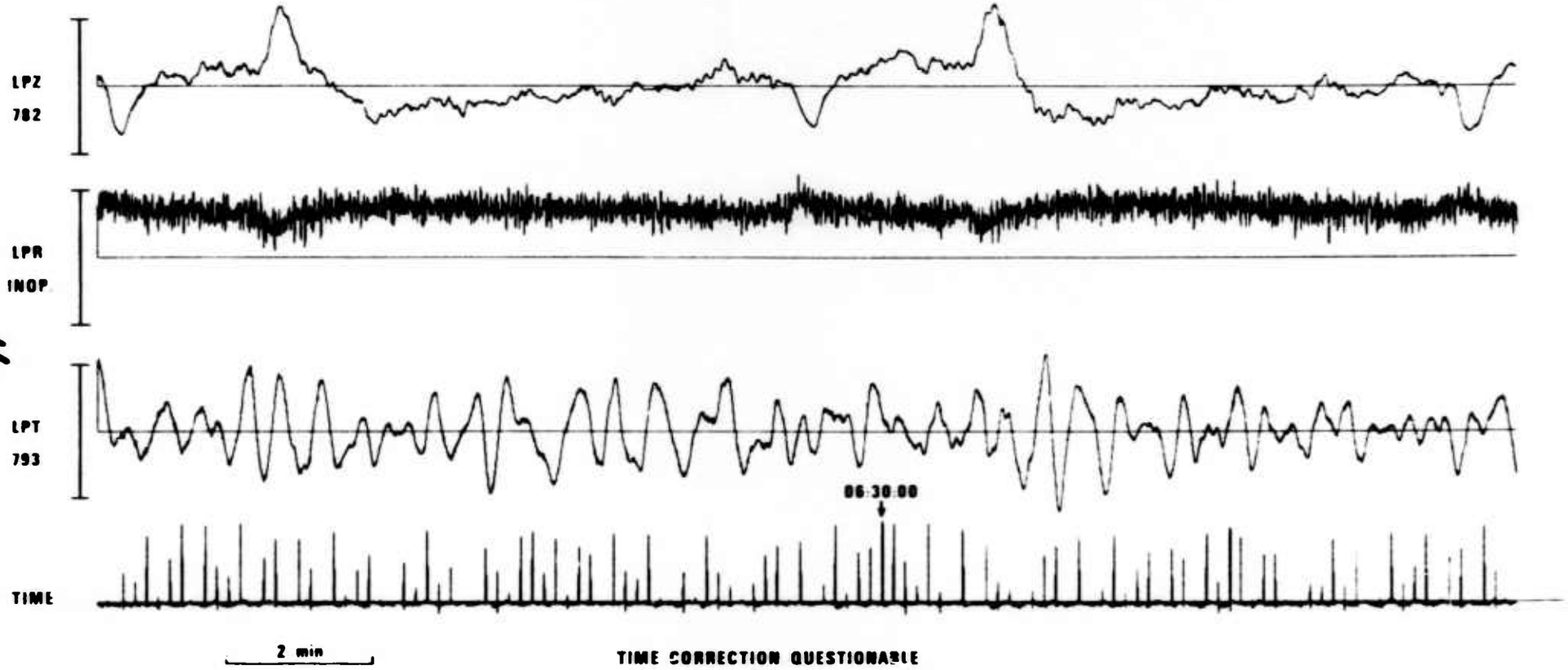


LASA

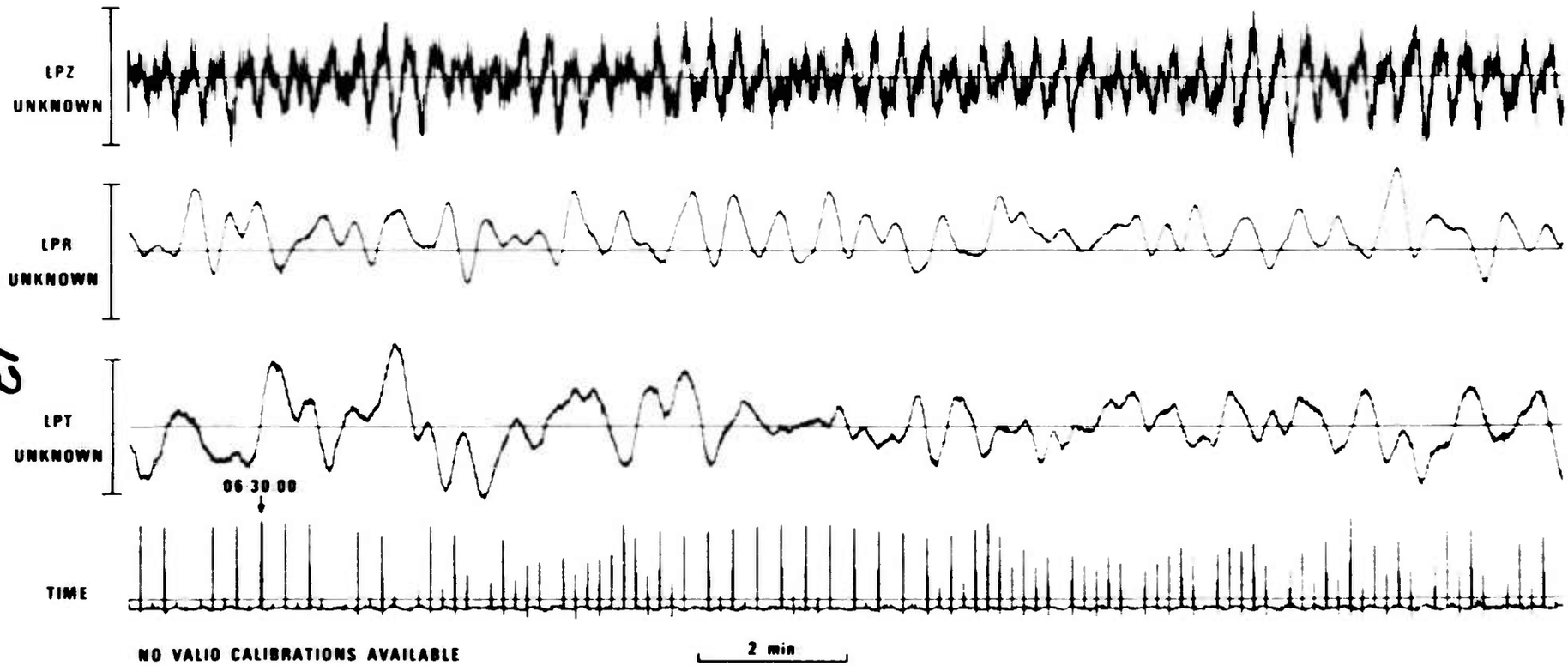
1 11 MAR 1975
2 5 42 48 46.3N 79.4E 33C C 5.7 329 EASTERN KAZAKH SSR
3 5 55 31.1 LAO P 62.6 1.0 23.1 87.4 356.1



WH2YK 11 MAR 75

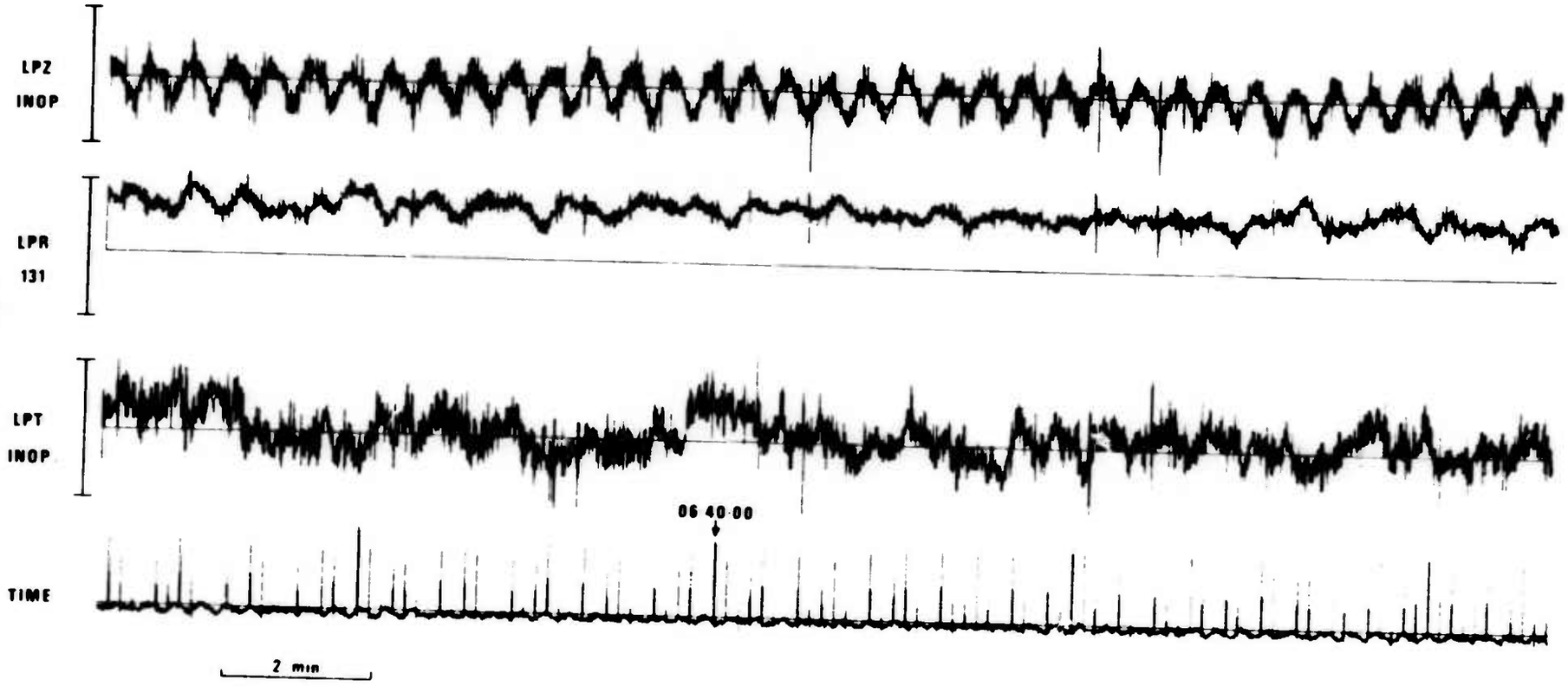


RK-ON 11 MAR 75



12.

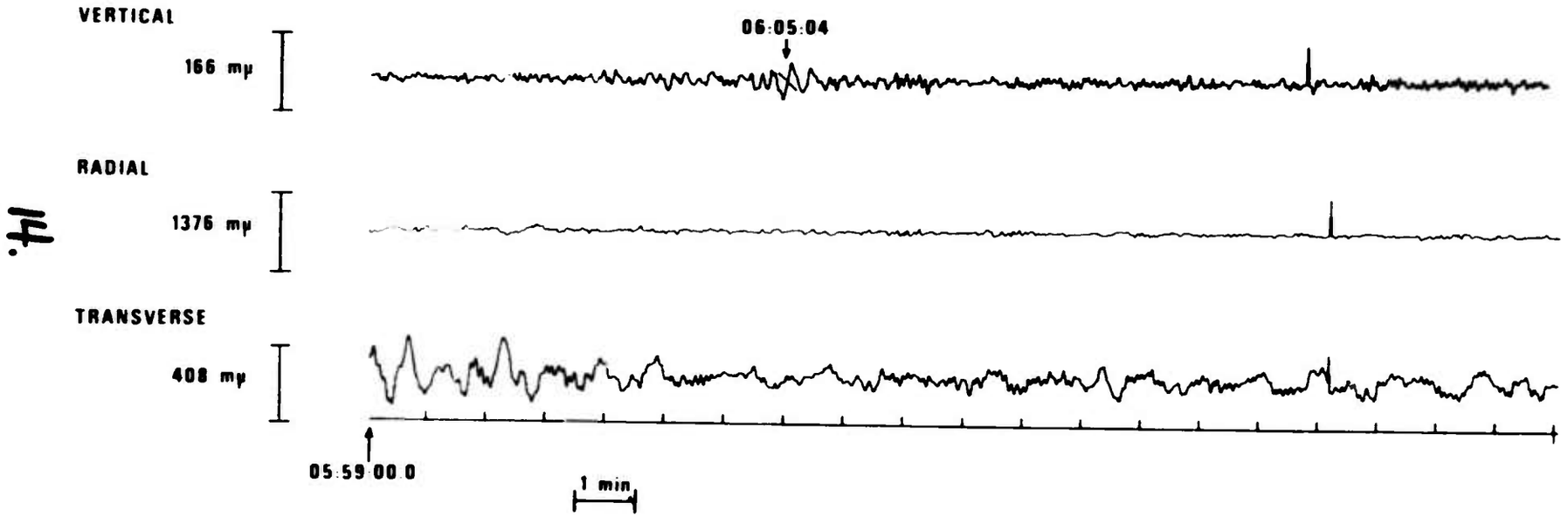
HN-ME 11 MAR 75



13.

NORSAR LONG-PERIOD BEAMS

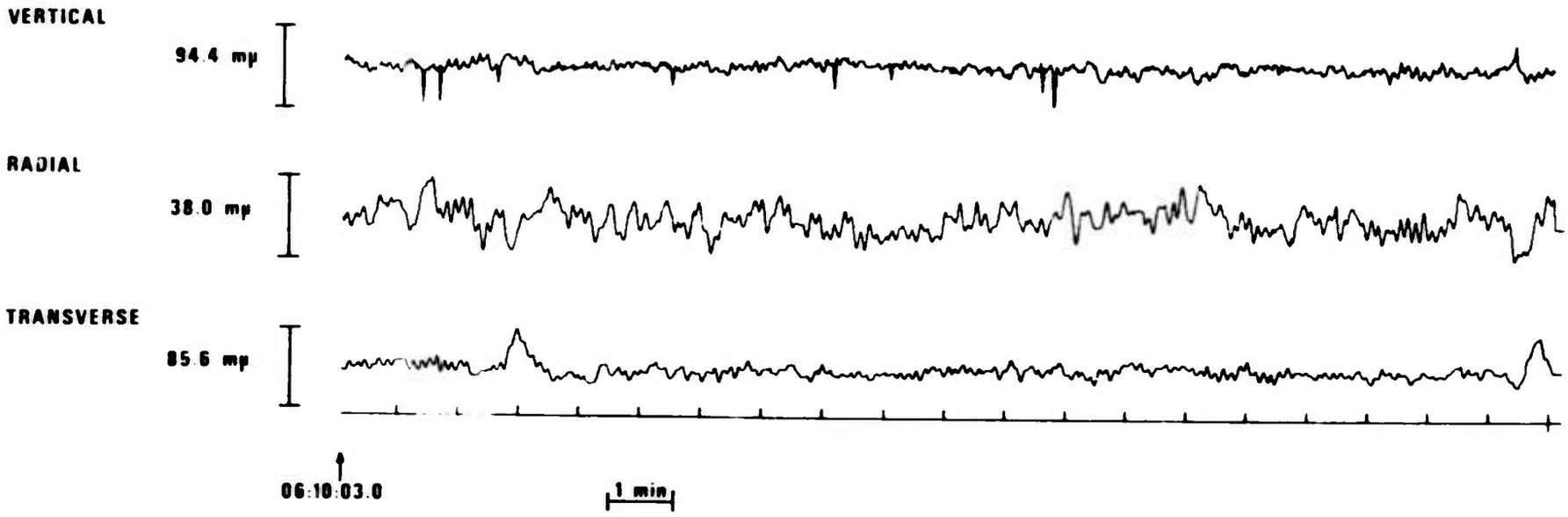
11 MAR 75



14.

ALPA LONG-PERIOD BEAMS

11 MARCH 75



LASA LONG-PERIOD BEAMS

11 MARCH 75