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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
SOUTHERN CALIFORNIA, 1 JUNE 1975

J. R. Woolson, et al

Teledyne Geotech

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Southern California, 1 June 1975

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October 1975

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SDCS Event Report No. 29

Southern California, 1 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	01:38:57	35.1N	116.9W	4.3	N/A
LASA	01:38:22	32.7N	118.1W	4.8	N/A

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

01:38:51.4	34.6N	116.4W	4.8	4.9
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All SDCS stations were operational during this period.

Well-defined short-period signals were recorded at CPSO and RK-ON. At WH2YK a questionable P-arrival has been marked. The hypocenter determination has zero residual for this time. There is no observable signal at FN-WV. Comparison should be made with the 03 June 75 event (SDCS-ER-75-21) where relatively low amplitude was obtained at FN-WV as compared with CPSO for nearly identical azimuths. At HN-ME the short-period vertical data appears to be invalid. LASA and NORSAR event processing outputs are included. The signal is well-defined at LASA and weak, but apparently valid, at NORSAR.

Long-period signals were received at all five SDCS sites. Long-period array beams are included for LASA and NORSAR; ALPA long-period data were unrecoverable.

Details of the program used to obtain vertical, radial and transverse long-period data at LASA 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.

1.

ACCESSION log	
RTIS -	Photo Section <input checked="" type="checkbox"/>
ENC	with section <input type="checkbox"/>
DESCRIPTION	<input type="checkbox"/>
DATE	
TIME	
BY	
REMARKS	

A

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		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 1 JUN 75
 01:38:22.0 32.700N 118.100W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	REST
LAC	01 42 14.0	0.0	0.1	14.3	29.6
RK-ON	01 43 57.8	-0.1	-0.1	23.2	38.6
CPO	01 44 18.1	-0.0	0.1	25.2	78.9
WH2YK	01 44 49.3	-0.0	0.0	28.7	341.0
NAO	01 50 37.2	0.1	-0.0	75.6	23.7

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STP
01:38:53.2	34.656N	116.422W	10. CALC	0.0	5	5
01:38:51.4	34.619N	116.449W	0. REST	0.1	3	5

CALC	REST
1 . 1	1 . 1
0 . 0	0 . 0
0 0. 2 1	0 0. 2 1
.
0 0. 0 0	0 0. 0 0
0 . 0	0 . 0
0 . 0	0 . 0

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 1.74
 MAJOR 71.1KM. MINOR 47.9KM. AZ= 25 AREA= 10702 SQ.KM. RFST

DATA SUMMARY

INERT FOR EVENT 1 JUN 75
 01:38:22.0 32.700N 118.100W OKM.

STA.	PHASE	ARRIVAL		INST	FEE	A/T	MAGNITUDE		DIF	DIST
		TIME					MB	MS		
IAC	M EP	01 42	14.0	AE	1.1	54.	4.94			14.3
IAC	LR	01 48	05.0	LPZ	18.0	301.		4.75		14.3
RK-CN	EP	01 43	57.8	SFZ	0.9	104.	5.02			23.2
RK-CN	LQ	01 50	55.0	LFT	17.0	944.				
RK-CN	LR	01 52	37.0	LFZ	17.0	666.		5.31		23.2
CEC	EP	01 44	19.1	SPZ	0.9	65.	4.99			25.2
CEC	LQ	01 52	44.0	LFT	18.0	784.				
CEC	LR	01 54	24.0	LPZ	17.0	354.		5.07		25.2
WH2YK	EP	01 44	49.3	SFZ	1.3	24.	4.68			28.7
WH2YK	IC	01 55	01.0	LFT	21.0	347.				
WH2YK	IR	01 56	04.0	LFZ	21.0	120.		4.66		28.7
FN-WV	LQ	01 55	06.0	LFT	19.0	821.				
FN-WV	LR	01 57	10.0	LFZ	19.0	238.		4.97		29.2
HN-ME	IC	01 59	34.0	LFT	18.0	183.				
HN-ME	LR	02 01	57.0	LPZ	18.0	188.		4.99		38.1
NAC	EP	01 50	37.2	AE	1.0	7.	4.41			75.6
NAC	LR	02 23	00.0	LFZ	20.0	21.		4.32		75.6

CFIGIN	LAT.	LCNG.	DEPTH (KM)	MAG	SDV	STA	IPMAG	LPSDV	LPSTA
01:38:53.2	34.656N	116.422W	10. CAIC	4.75	0.29	4	4.86	0.3	7
01:38:51.4	34.619N	116.449W	C. REST	4.77	0.29	4	4.87	0.3	7

IAC NOT USED IN CALC RUN SE AVG. MAG.
 IAC NOT USED IN REST RUN SE AVG. MAG.

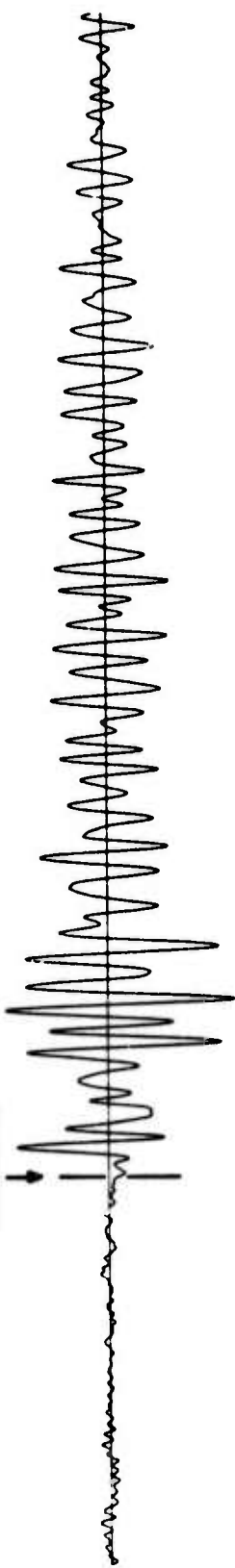
Short-period magnitudes (mb) used in averaging are restricted to those recorded at distances between 20 and 110 degrees from the epicenter.

RK-ON 01 JUN 75

01:43:57.8

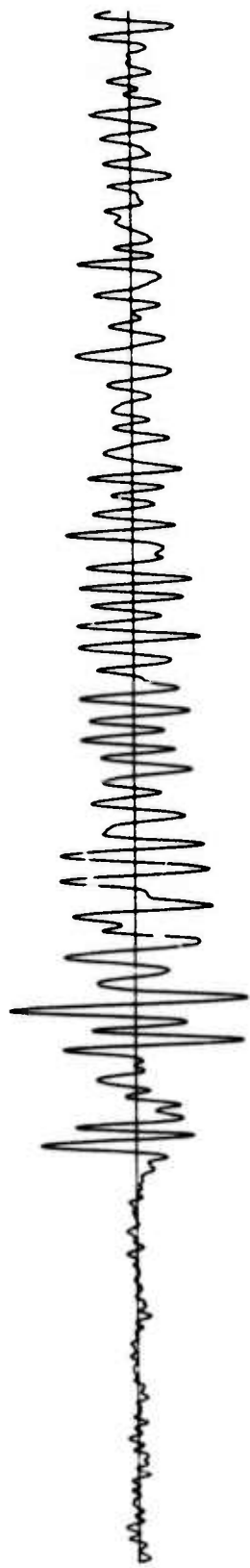
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**SPZ
66.97 MHz**



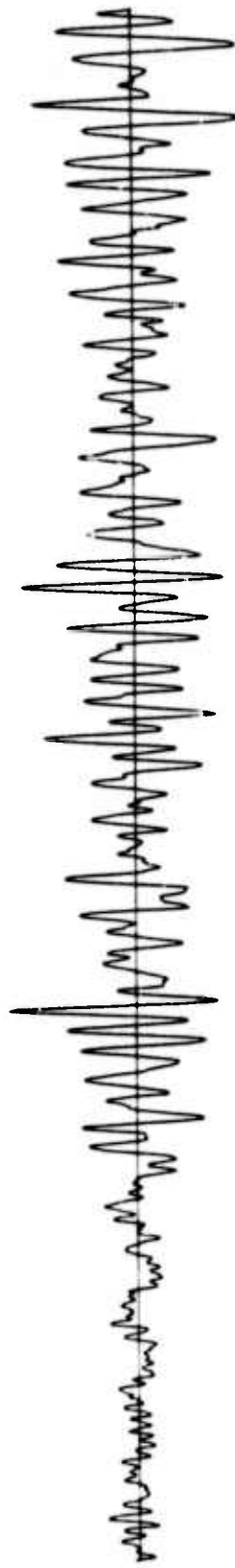
┌
└

**SPR
47.48 MHz**



┌
└

**SPT
13.72 MHz**

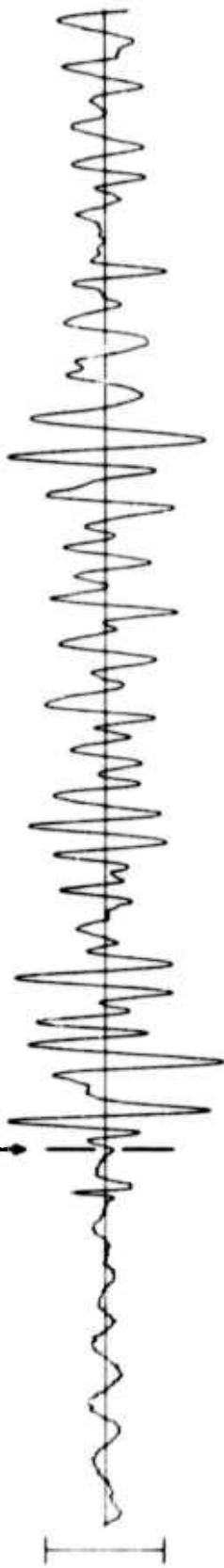


┌
└
10 SEC

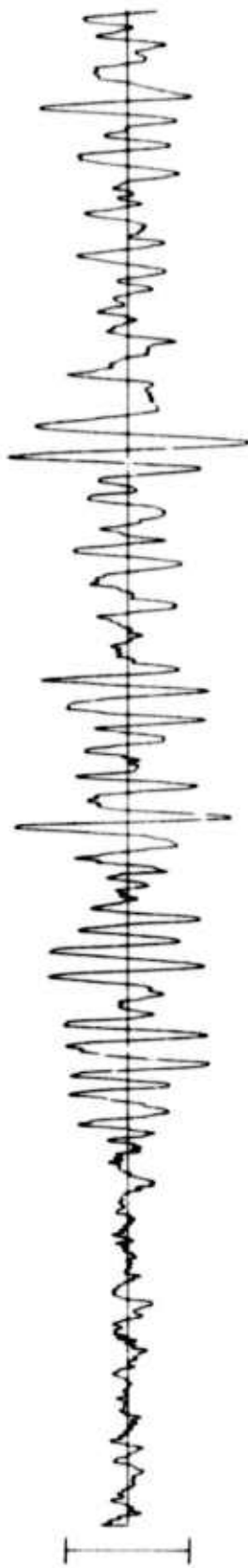
CP-SO 1 JUN 75

01:44:18.1

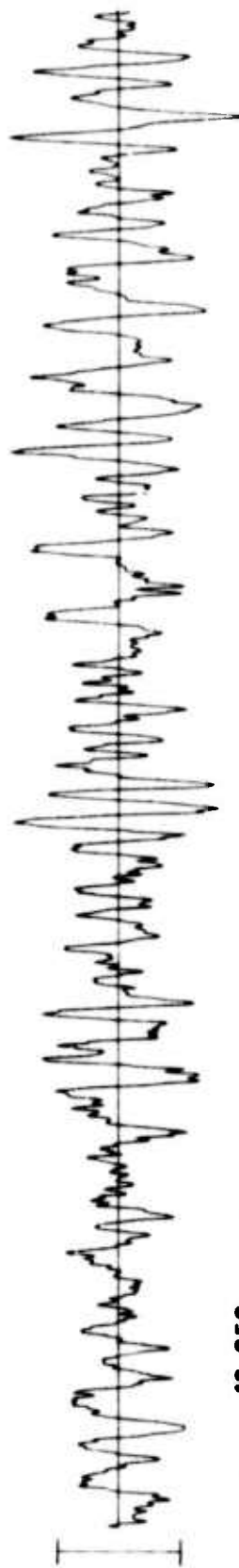
**SPZ
39.25 Mμ**



**SPR
10.75 Mμ**



**SPT
12.03 Mμ**



10 SEC

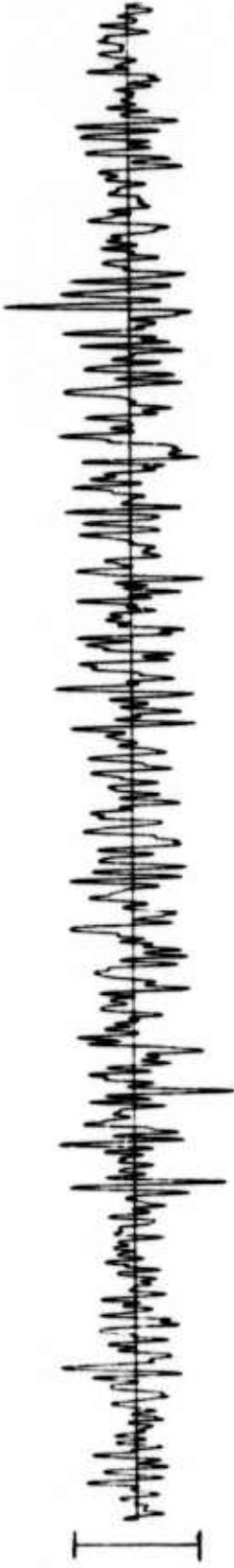
WH2YK 1 JUN 75

01:44:49.3

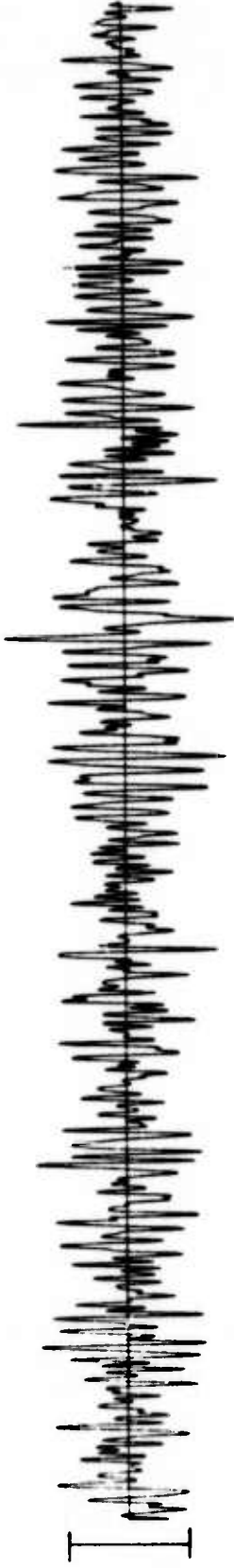
**SPZ
8.92 MP**



**SPR
10.70 MP**



**SPT
7.62 MP**



TIME

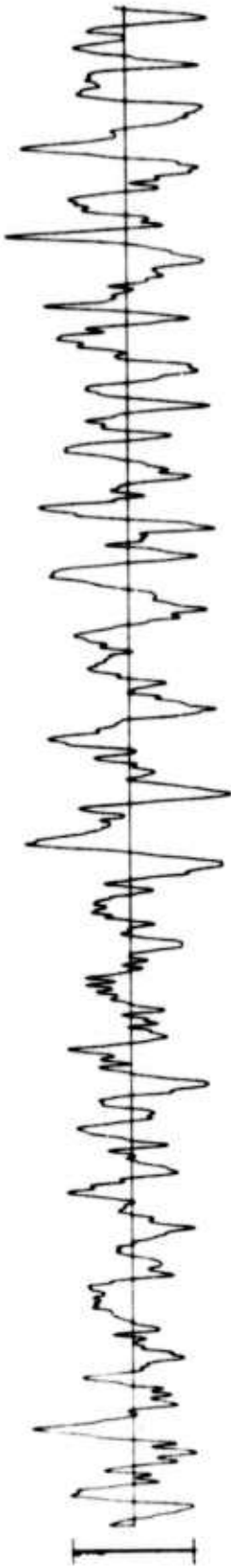
10 SEC

01:45:10

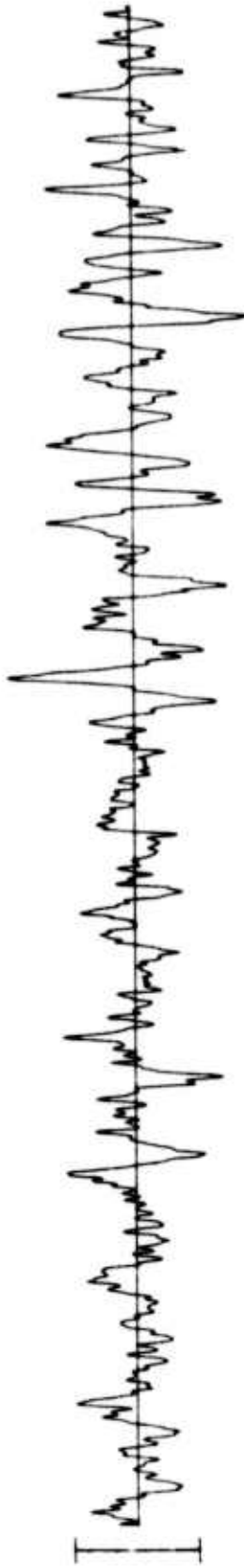
7.

FN-WV 1 JUN 75

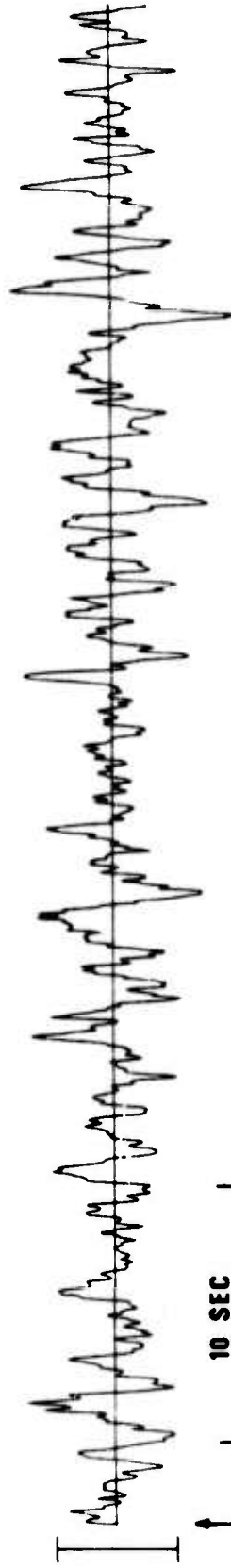
**SPZ
5.84 MP**



**SPR
6.25 MP**



**SPT
7.51 MP**



↑
10 SEC

01:44:30

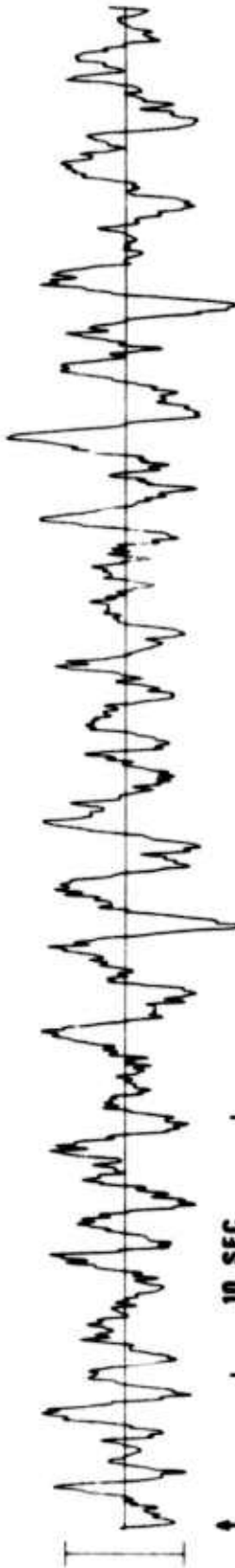
HN-ME 1 JUN 75



**SPZ
UNKNOWN**



**SPR
8.38 Mμ**



**SPT
7.26 Mμ**

↑ 10 SEC

01:45:41.7

LASA

1 1 JUN 1975

2 1 41 40 45.1N 108.0W

3 1 42 15.4 LAO P

OG D 3.1 456 MONTANA

17.5 1.0 7.9 2.0 220.2

EPX 20976

BP-B 0.6-2.0 HZ

ABN 6.5

01:42:05.4

AB 44

FAB 42

PAB1 43

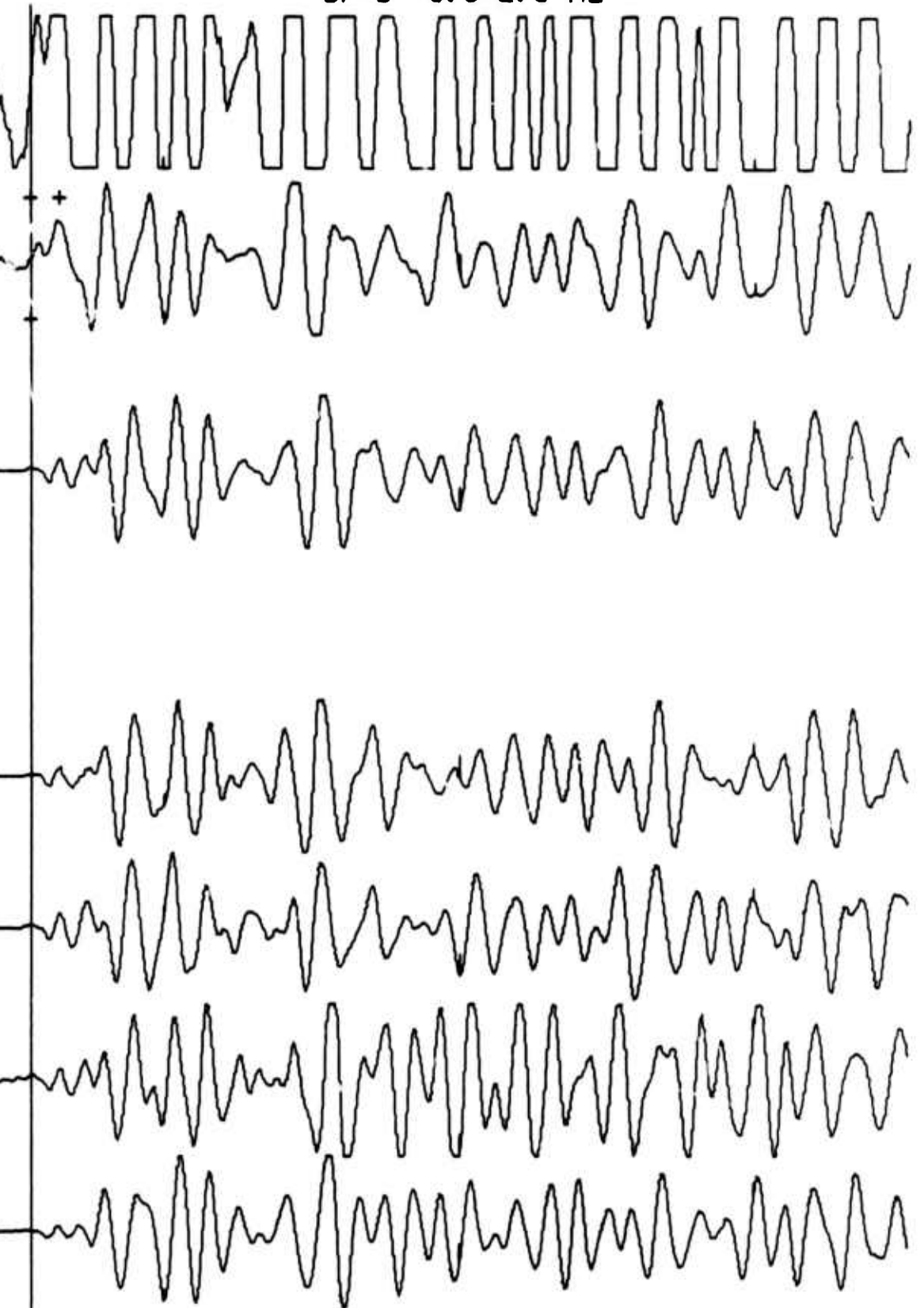
PAB2 53

PAB3 45

PAB4 50

10 SEC

10.

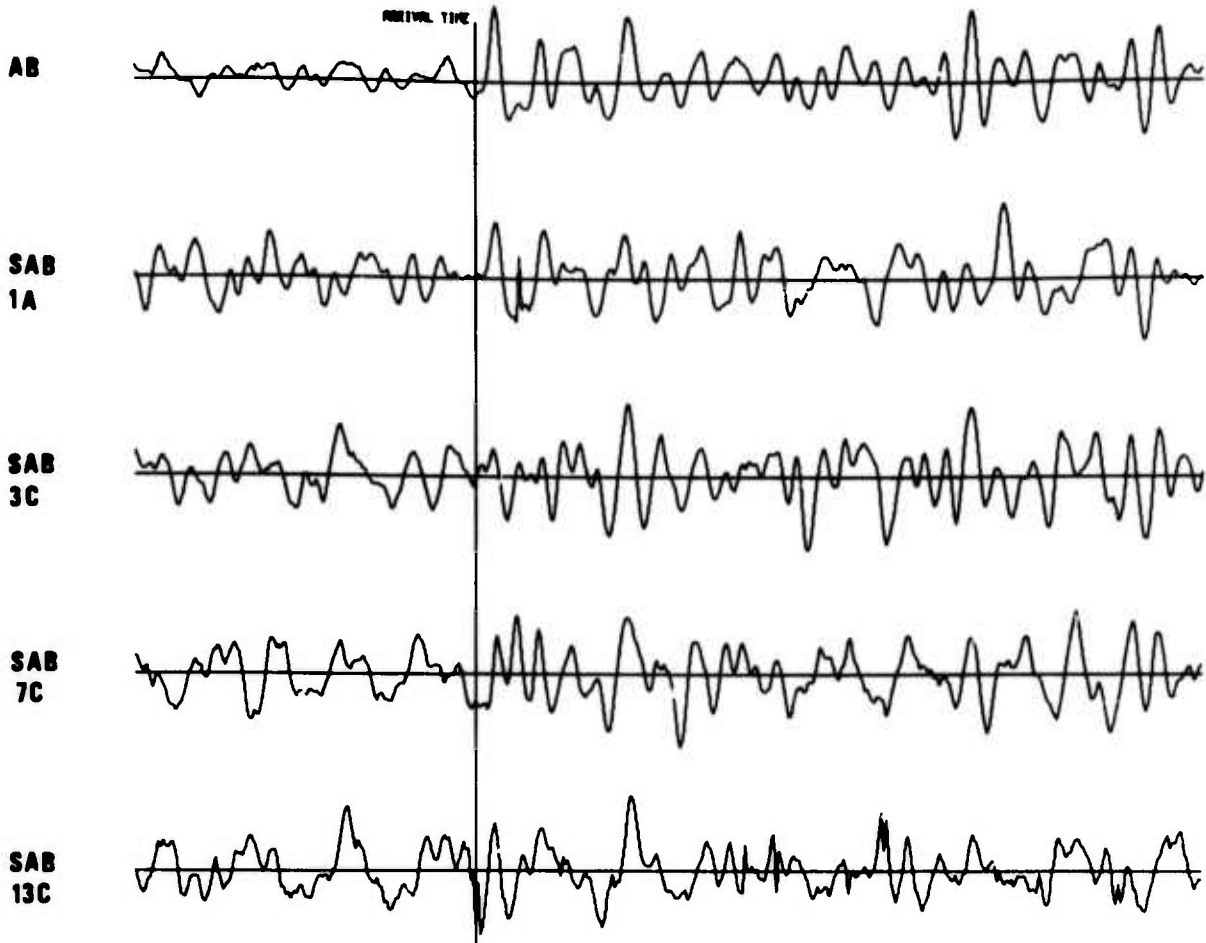


NORSAR EVENT FILE 1975 JUN 1

EPX NO. 91830 ARR. 1.50.36.9 35.1N 116.9W 4.1MB 33KM

DIST = 75.3 AZI = 317.9 AMP = 2.1 PER = 0.9 UMETH 2

SCALE  = 5 SECONDS



RK-ON 01 JUN 75

LPZ
4861.96 MP

01:52:37



LPR
4875.86 MP

01:50:55



LPT
7206.57 MP



TIME



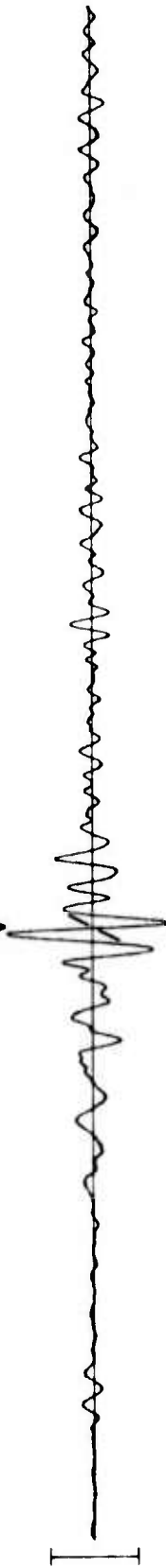
01:50:00

2 MIN

CP-SO 01 JUN 75

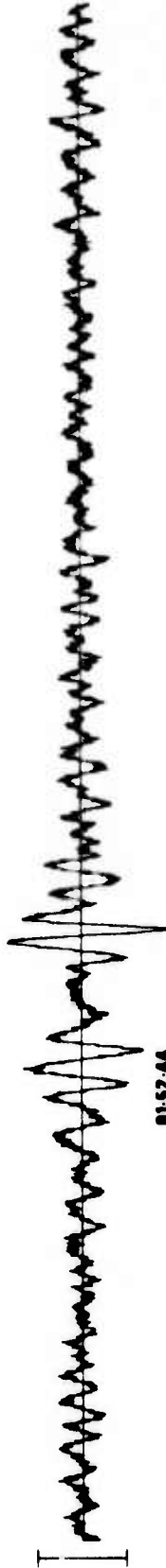
LPZ
2500.00 MP

01:54:24



LPR
1475.50 MP

01:52:44



LPT
0310.97 MP

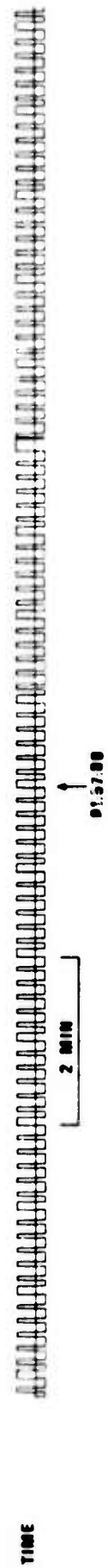
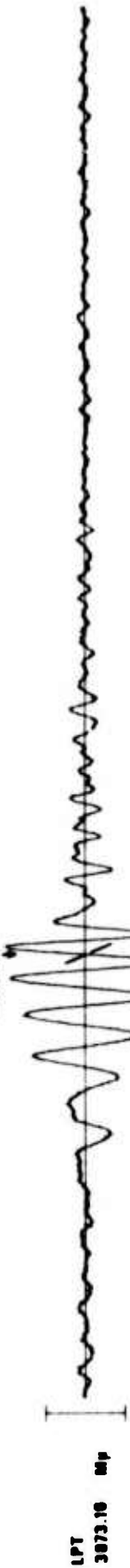
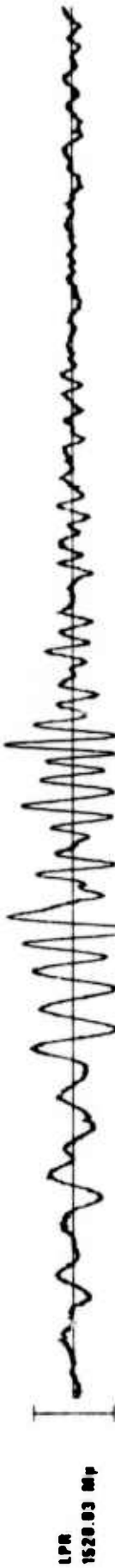


TIME



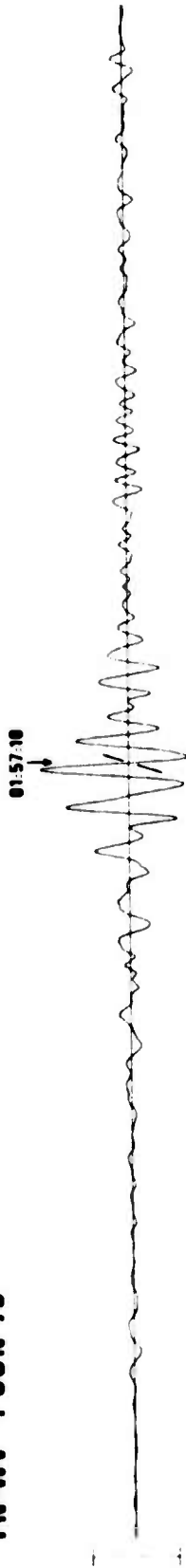
01:55:00

WH2YK 1 JUN 75

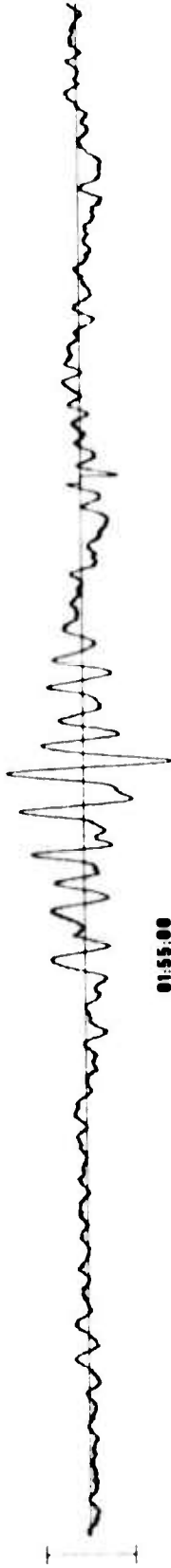


FN-WV 1 JUN 75

LPZ
2160.40 MP



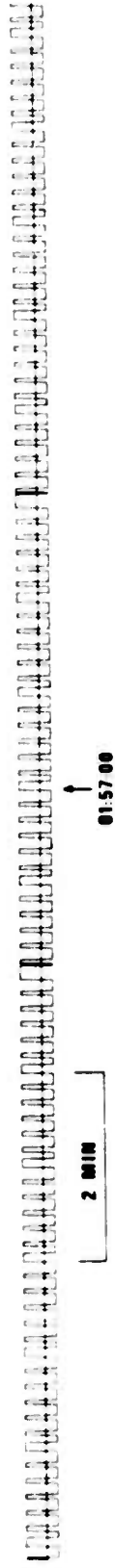
LPR
1401.71 MP



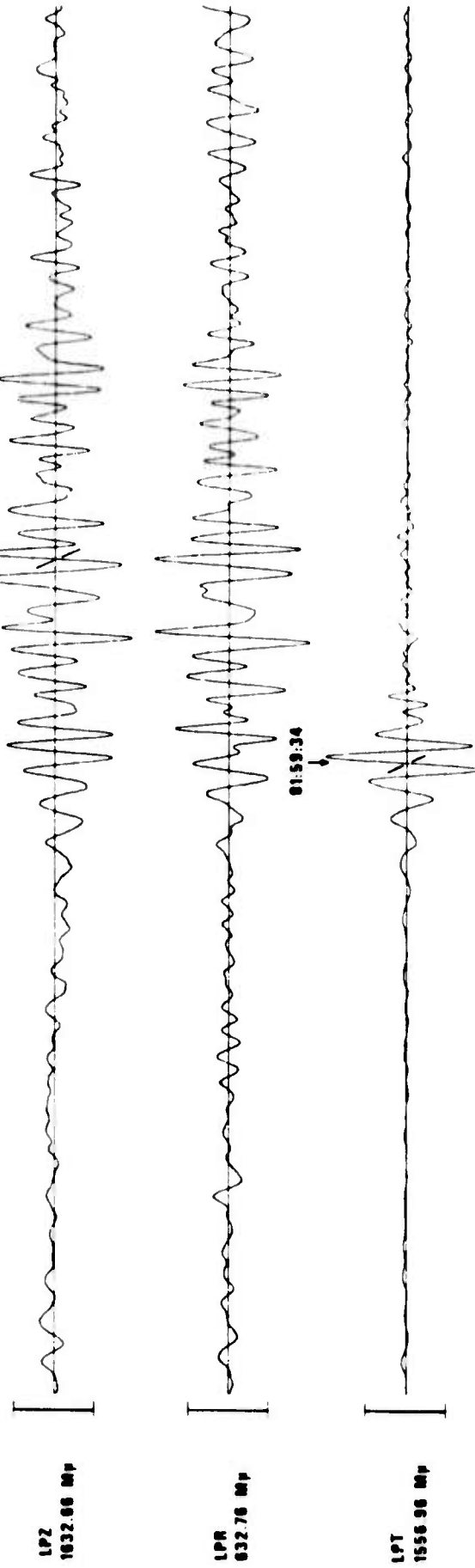
LPT
0605.00 MP



TIME



HN-ME 1 JUN 75



LASA LONG-PERIOD BEAMS 01 JUN 75

01:48:05
↓

LP VERTICAL

7134.28 M μ

LP RADIAL

2768.85 M μ

LP TRANSVERSE

1844.22 M μ

01:41:50
↑

1 MIN

NORSAR LONG-PERIOD BEAMS 01 JUN 75

