

AD-A021 395

SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
SOUTHERN SINKIANG PROVINCE, 27 OCTOBER 1975

K. J. Hill, et al

Teledyne Geotech

Prepared for:

Air Force Technical Applications Center

13 January 1976

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Southern Sinkiang Province, 27 October 1975

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January 1976

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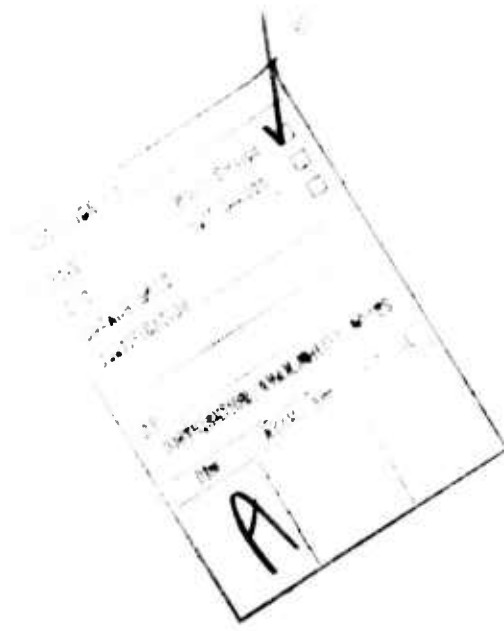
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REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1 REPORT NUMBER SDCS-ER-75-45 ✓	2 GOVT ACCESSION NO.	3 RECIPIENT'S CATALOG NUMBER
4 TITLE (and Subtitle) SPECIAL DATA COLLECTION SYSTEM (SDCS) <i>EVENT REPORT</i> Southern Sinkiang Province, 27 October 1975		5 TYPE OF REPORT & PERIOD COVERED Technical ✓
		6 PERFORMING ORG. REPORT NUMBER
7 AUTHOR(s) Hill, K. J., Dawkins, M. S., and Baumstark, R. R., and Gillespie, M. D.		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 22314		12 REPORT DATE 13 January 1976
		13 NUMBER OF PAGES 22
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)		

SDCS EVENT REPORT NO. 45

Southern Sinkiang Province, 27 October 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	Lat.	Long.	m_b	M_s
NORSAR	01:08:47.7	00:59:51	41 N	089 E	4.4	N/A

Using HN-ME, LASA and NORSAR, the epicenter location and magnitudes become

01:00:05.2 42.5N 088.5E 4.9 N/A

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at HN-ME, LASA and NORSAR. High-level background noise prevented determination of signal arrivals at WH2YK and RK-ON. Horizontal SP channels at WH2YK, FN-WV, HN-ME and CPSO were rotated. Rotation of horizontal SP channels at RK-ON could not be accomplished because the SP transverse channel was inoperative.

No long-period signals were recorded at the SDCS stations, ALPA, LASA and NORSAR. All SDCS stations had high level background motion. Horizontal LP channels at CPSO, FN-WV and WH2YK were rotated. Rotation of LP horizontal channels at HN-ME could not be accomplished because of unknown operating gain of the LP radial channel. At RK-ON horizontal LP channels were not rotated because the LP transverse channel was inoperative. Validity of the ALPA and NORSAR long-period vertical beams is uncertain. LASA long-period array data are recoverable in 6 minutes 40 seconds segment lengths; one segment is included in this report.

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		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.

27 OCT 75

T R I X

STATION	YR	DOY	ARR	TIME
HN-ME	75	300	1 13	2.5
NAO	75	300	1 8	47.7
LD2	75	300	1 13	8.0

YR	DOY	G-TIME	LAT	LONG
75	300	1 2 25.9	68.199N	86.683E
75	300	1 0 5.2	42.491N	88.472E

T R I X

DATA SUMMARY

27 OCT 75

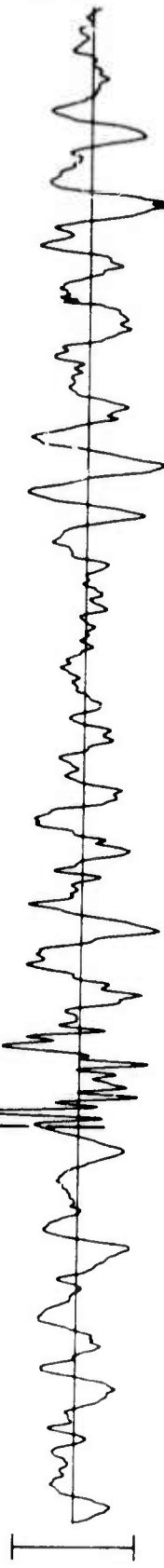
S a.	Phase	Arrival Time	Inst.	Per	A/T	Magnitude*		Dist.**
						m_b	M_s	
NAO	EP	01:08:47.7	AB	0.5	6.	4.37	--	48.1
HN-ME	EP	01:13:02.5	SPZ	0.5	20.	5.02	--	88.3
LD2	EP	01:13:08.0	AB	1.1	43.	5.33	--	90.0

Average $m_b = 4.91$

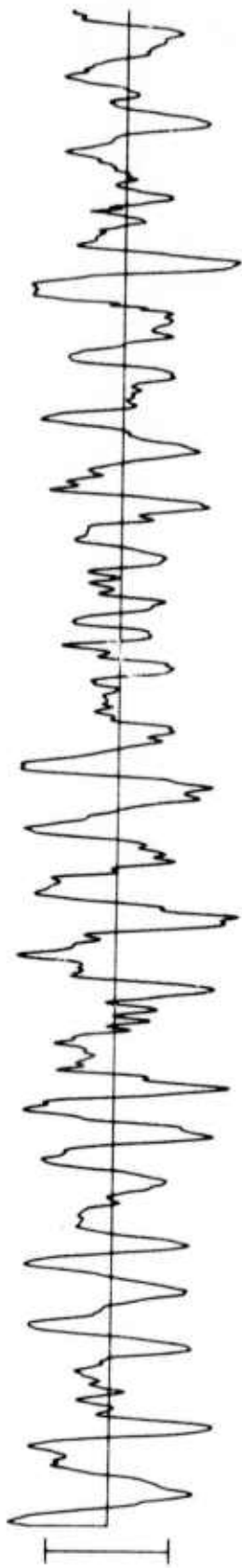
- * For event source at surface
- ** Distances are calculated to TRIX epicenter

HN-ME 27 OCT 75

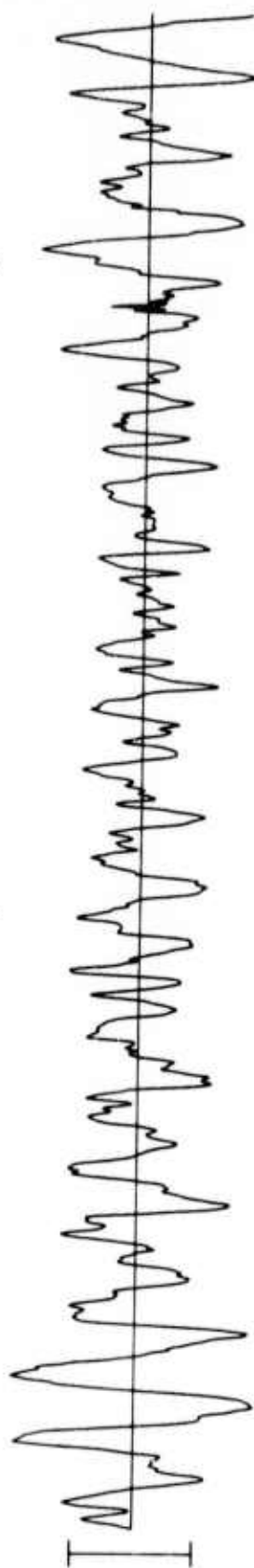
01:13:02.5



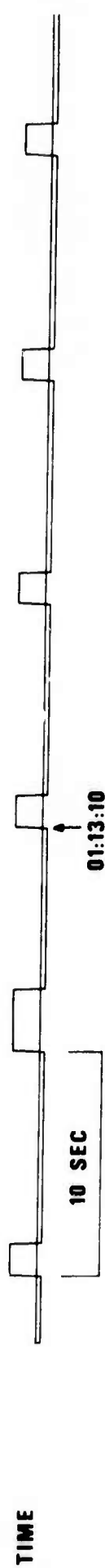
SPZ
29.66 MP



SPR
18.88 MP



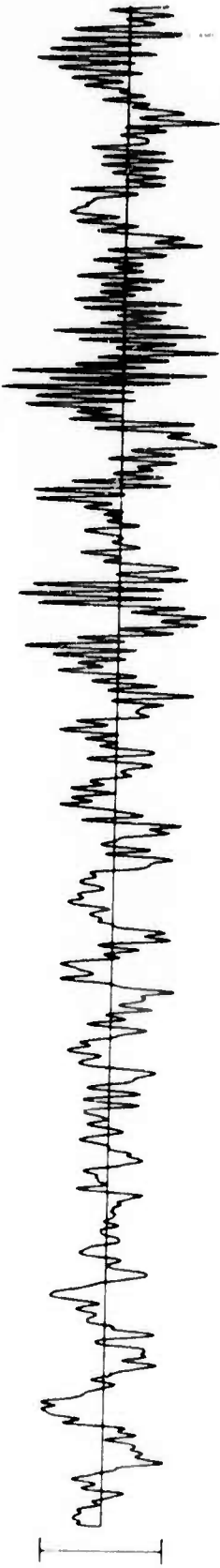
SPT
17.73 MP



TIME

WH2YK 27 OCT 75

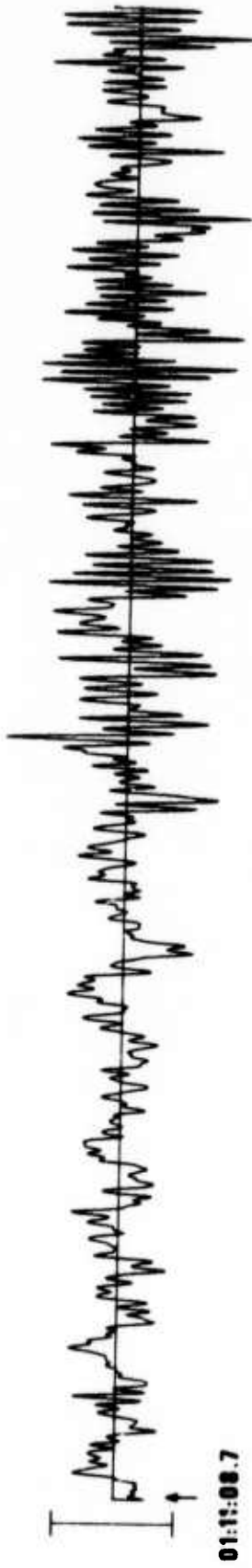
SPZ
13.20 MHz



SPR
18.17 MHz

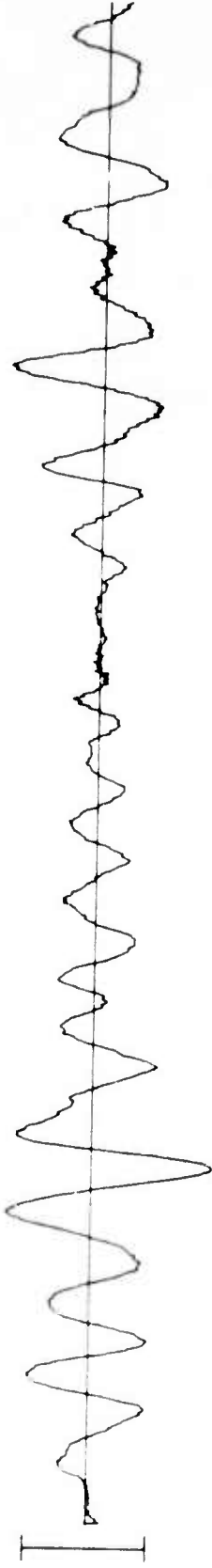


SPT
19.34 MHz

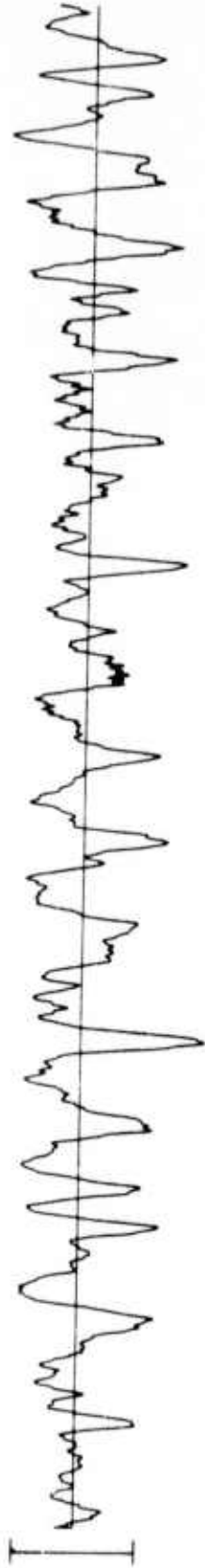


10 SEC

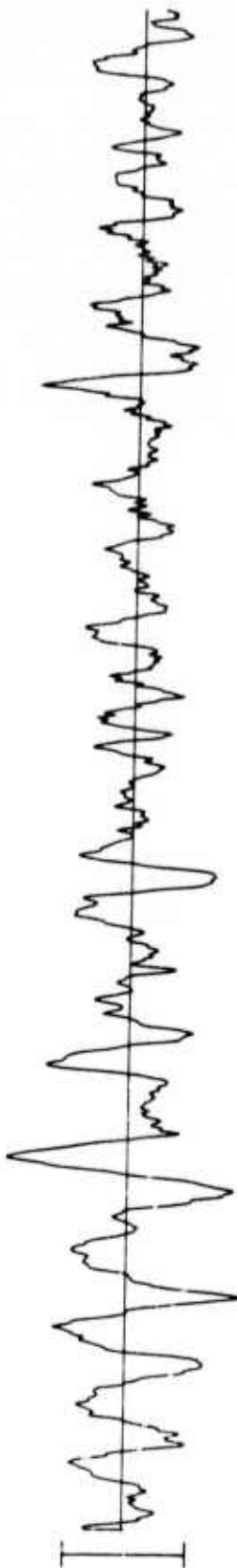
CPSO 27 OCT 75



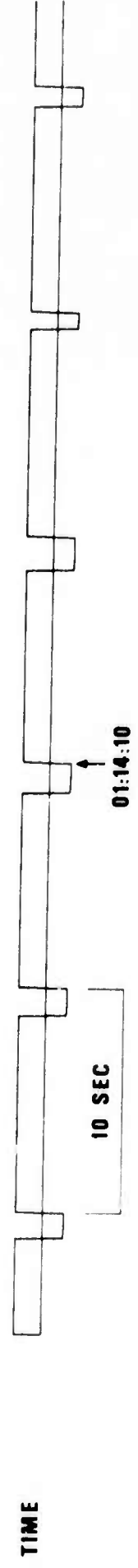
SPZ
51.26 Mμ



SPR
12.30 Mμ



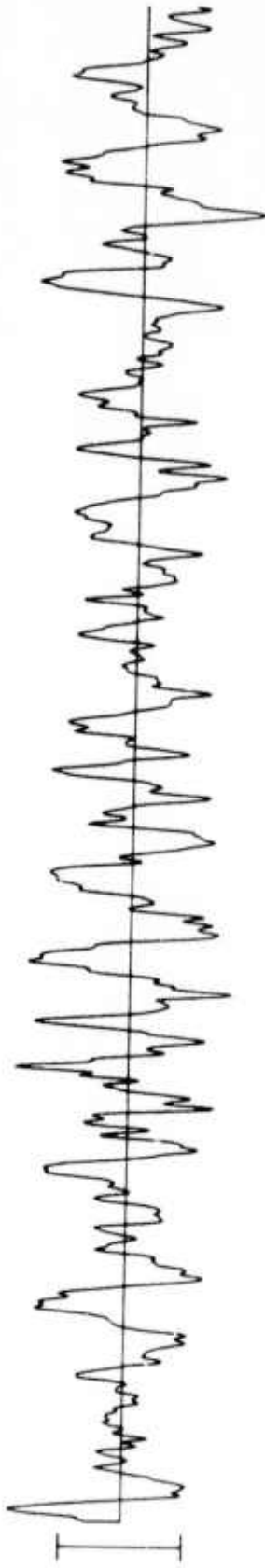
SPT
11.25 Mμ



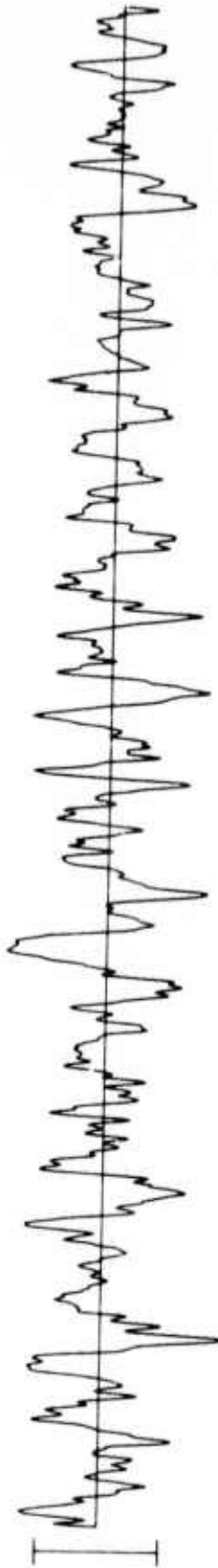
TIME

RK-ON 27 OCT 75

**SPZ
16.74 Mμ**



**SPR
14.32 Mμ**



**SPT
INOPERATIVE**



TIME

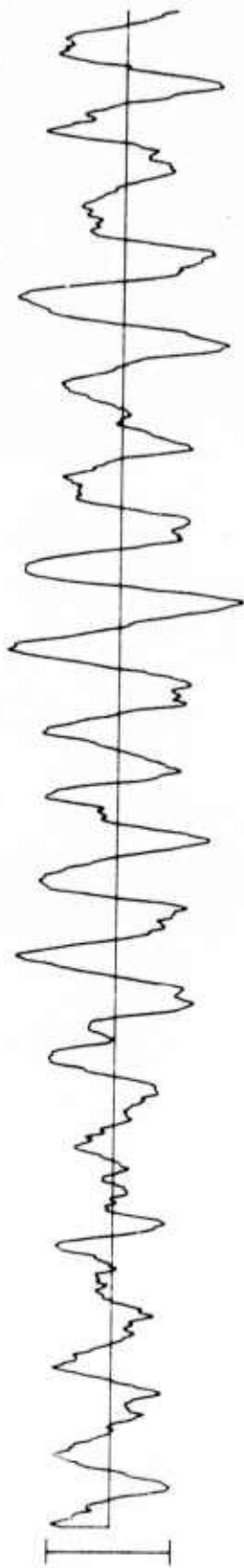


01:13:00

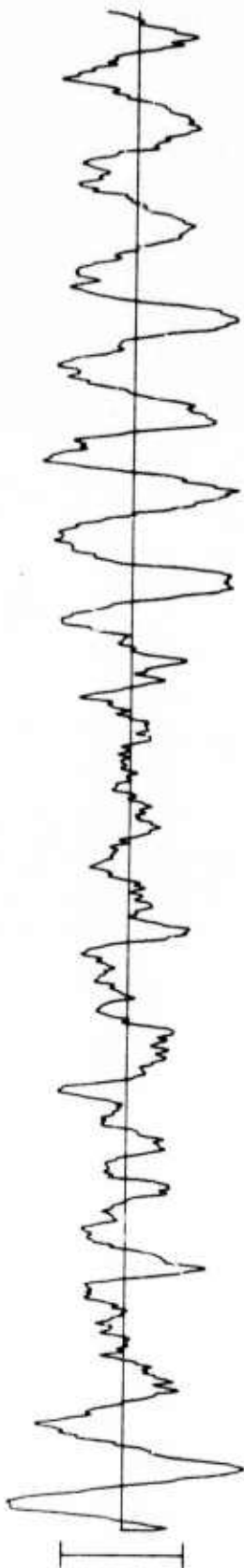
10 SEC

FN-WV 27 OCT 75

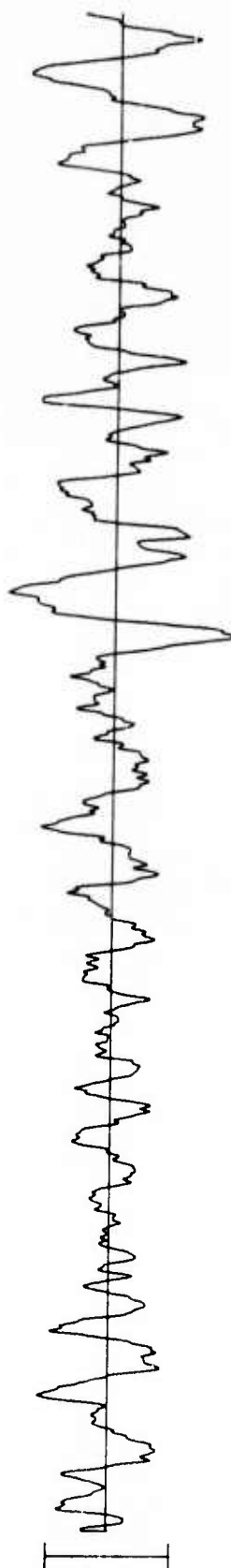
**SPZ
16.59 M μ**



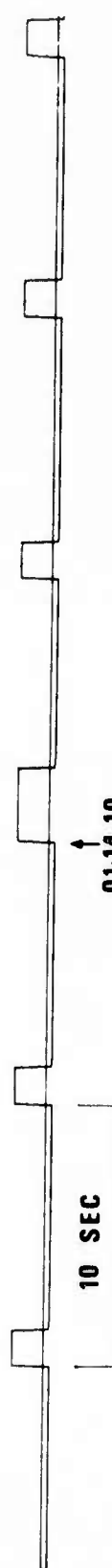
**SPR
13.15 M μ**



**SPT
12.85 M μ**



TIME



10 SEC

01:14:10

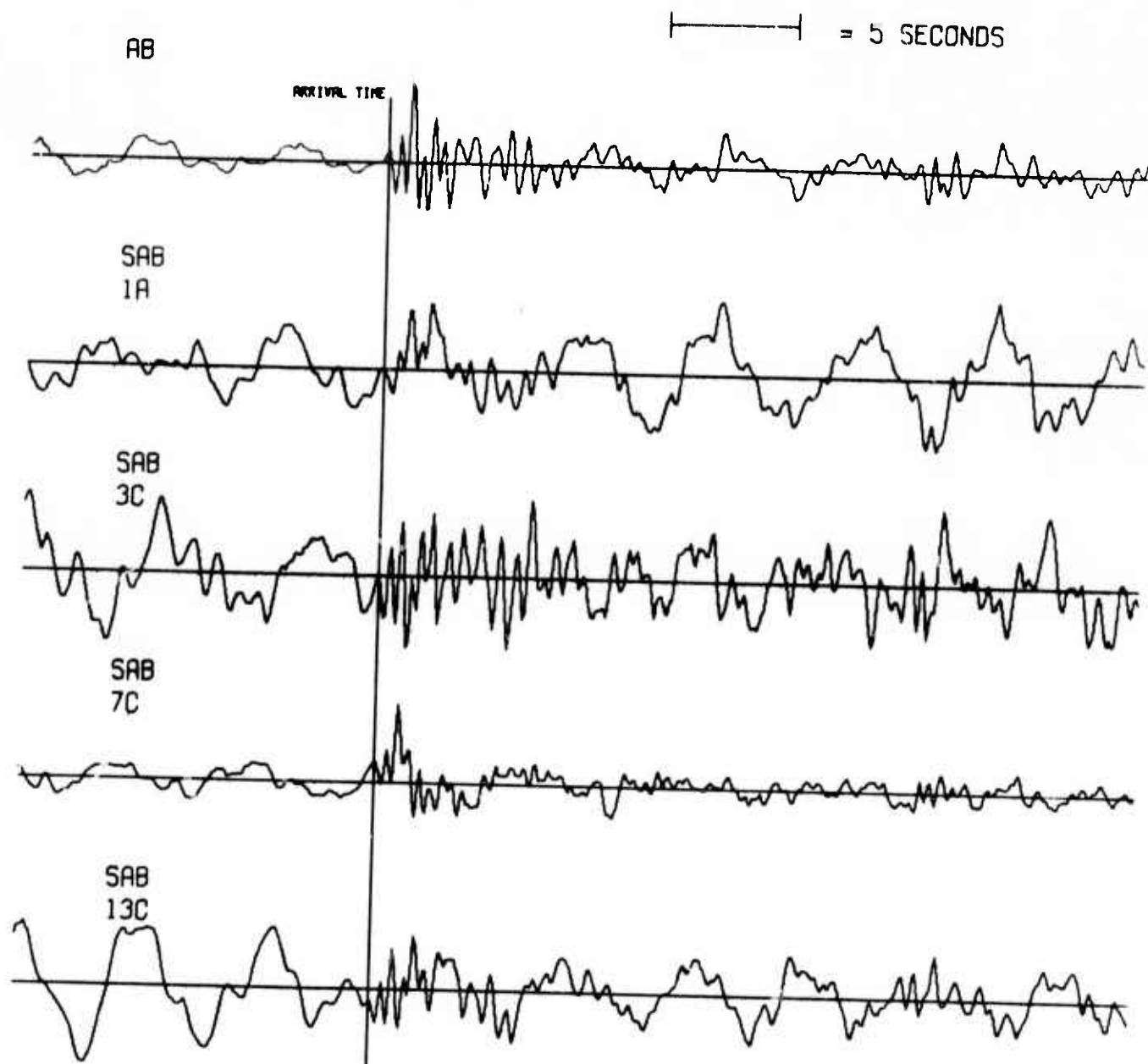
9<

NORSAR EVENT FILE

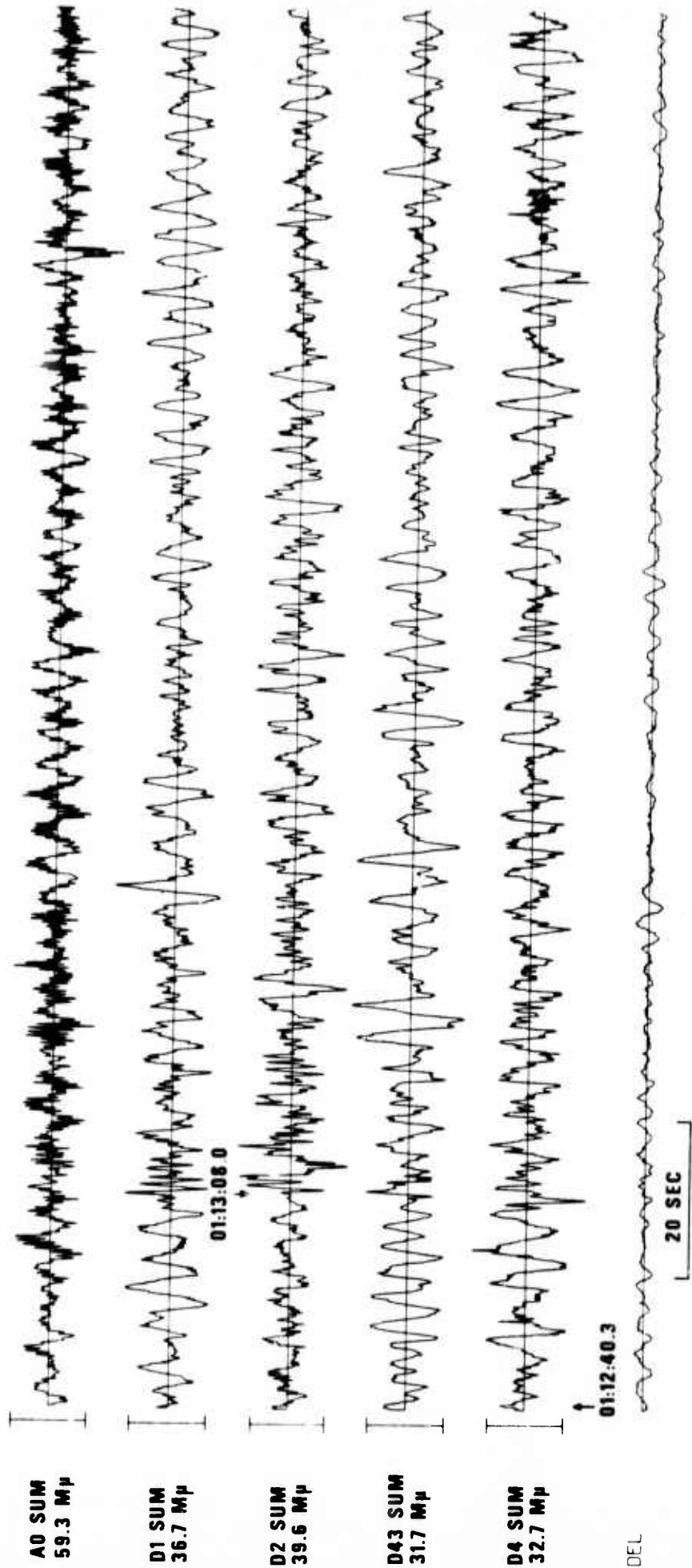
27 OCT 75

EPX NO. 47500 ARR. 1.6.47.8 40.7N 86.9E 4.5M₀ 33KM

DIST = 50.0 AZI = 76.3 AMP = 2.8 PER = 0.4



LASA INFINITE VELOCITY SUBARRAY SUMS 27 OCT 75



WH2YK 27 OCT 75



LPZ
96.61 MHz



LPR
459.66 MHz



LPT
512.11 MHz

TIME



2 MIN

01:40:00

CPSO 27 OCT 75

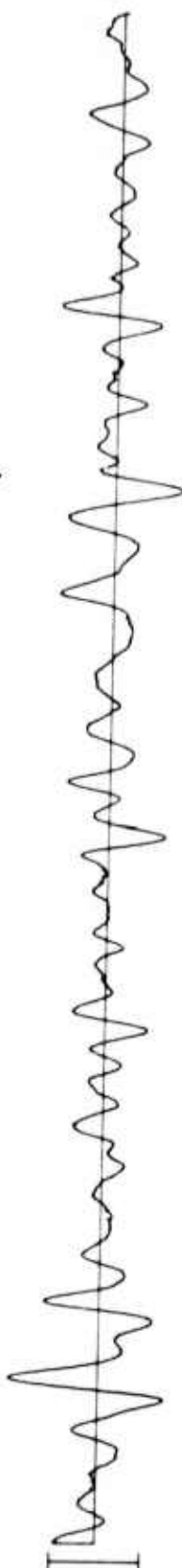


HN-ME 27 OCT 75

LPZ
1015.79 MHz



LPR
UNKNOWN



LPT
4411.25 MHz

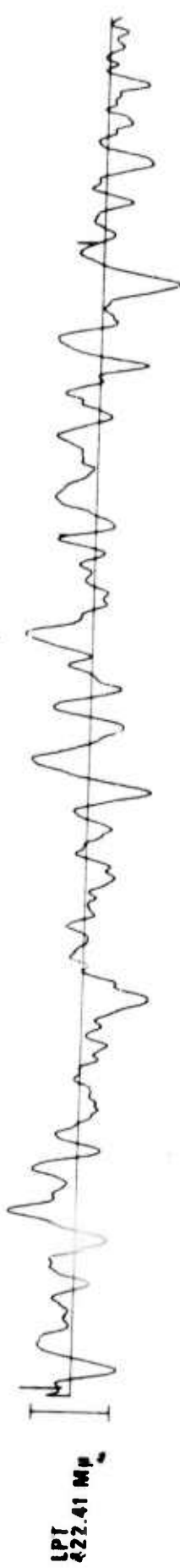
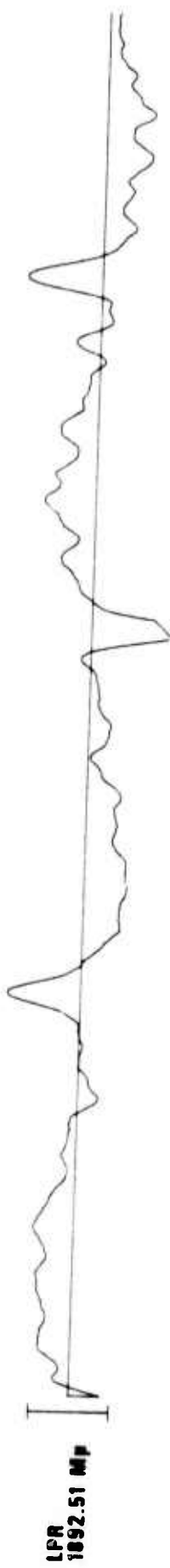


TIME



INVALID CALIBRATION

RK-ON 27 OCT 75



FN-WV 27 OCT 75



LPZ
857.90 Mμ



LPR
97.55 Mμ



LPT
257.10 Mμ

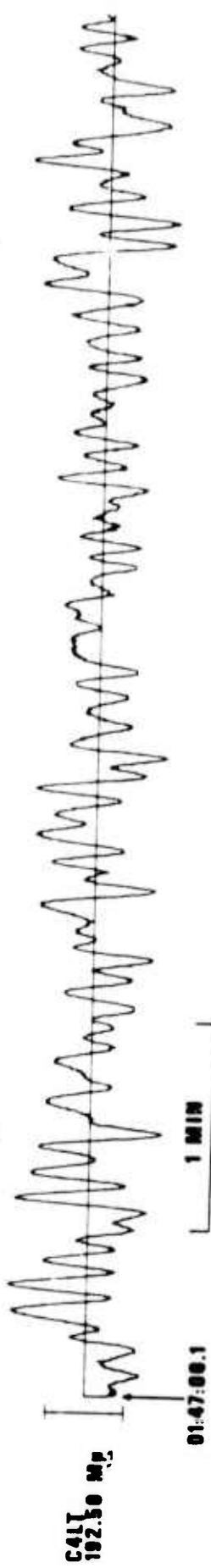
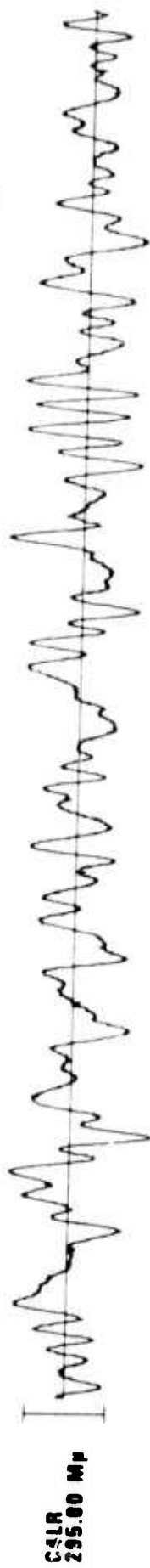


TIME

2 MIN

01:55:00

LASA LONG PERIOD C4 SUBARRAY 27 OCT 75



01:47:00.1

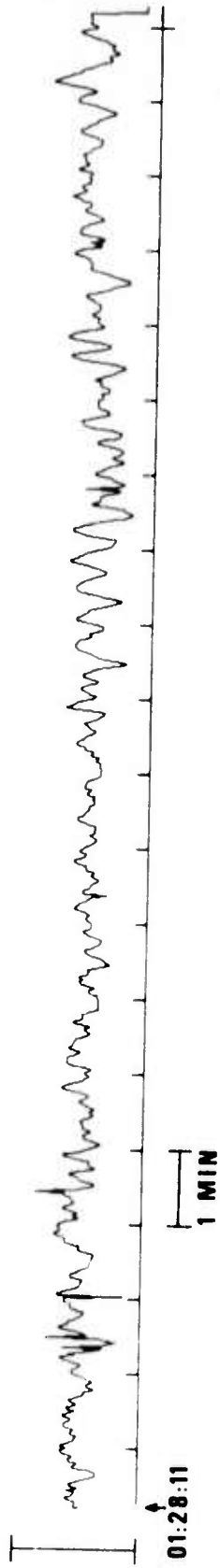
1 MIN

ARRAY LONG PERIOD VERTICAL BEAMS 27 OCT 75

ALPA

LP VERTICAL

18.63 M μ



NORSAR

LP VERTICAL

56.53 M μ

