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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
EASTERN KAZAKH, 29 OCTOBER 1975

Teledyne Geotech

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5 February 1976

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SDCS-ER-75-70



AD A 023520

SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Eastern Kazakh, 29 October 1975

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February 1976

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SDCS EVENT REPORT NO. 70

Eastern Kazakh, 29 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	04:54:20.7	04:47:00	50 N	079 E	6.1	N/A
Hagfors	04:54:11.2	04:46:24	48 N	085 E	6.7	3.6

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

04:47:02.5 50.5N 078.7E 5.7 3.5

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at WH2YK, HN-ME, RK-ON, FN-WV and NORSAR. Horizontal SP channels at HN-ME, WH2YK and FN-WV were rotated. Horizontal SP channels at CPSO were not rotated because the SP north channel was inoperative. Horizontal channels at RK-ON were not rotated because of data spikes. LASA short-period data were not recoverable.

NORSAR recorded a long-period signal for this event. Signal arrivals at the SDCS stations and ALPA could not be determined because of signal masking by event from Mexico. Horizontal LP channels at all SDCS stations were rotated. Validity of ALPA and NORSAR long-period vertical beams is questionable and horizontal beams were not included because of program recovery problems. LASA long-period data were not recoverable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of the NORSAR short-period plot. Scaling factors are not reported for NORSAR short-period.

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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	215	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 095 40 20.0 W	566	18300	SL210 V SL220 H
WHZYK	White Horse, Yukon	60 41	41.0 N 154 58 02.0 W	855	18300	SL210 V SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be $316^{\circ} \pm 5^{\circ}$ based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INERT FOR EVENT 29 OCT 75
04:47:00.0 49.000N 79.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CAIC	REST		
NAC	04 54 20.7	-0.1	-0.0	38.0	312.4
WB2YK	04 57 49.0	0.2	0.2	65.9	17.4
FR-CN	04 59 05.7	-0.5	-0.6	78.9	355.1
FN-ME	04 59 10.5	0.6	0.5	79.5	337.2
FN-WV	04 59 59.6	-0.2	-0.1	89.3	343.1

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
04:47:13.4	50.938N	78.557E	62. CAIC	0.4	13	5
04:47:02.5	50.478N	78.723E	0. REST	0.4	3	5

CAIC			
3 . 1			
1	.	0	
0	C . 0	0	
.	.	.	.
C	C . 0	0	0
C	.	0	
0	.	0	

REST			
3 . 1			
1	.	0	
C	0 . 0	0	
.	.	.	.
C	0 . 0	0	0
0	.	0	
0	.	0	

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 0.96
MAJCF 209.9KM. MINCF 43.7KM. AZ= 178 AREA= 28788 SQ.KM. REST

DATA SUMMARY

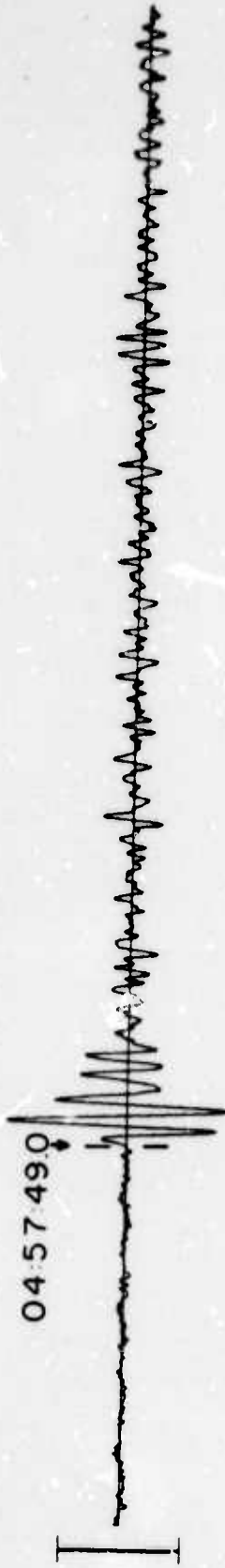
INPUT FOR EVENT 29 OCT 75
04:47:00.0 49.000N 79.000E 0FM.

STA.	PHASE	ARRIVAL		INST	FEE	A/T	MAGNITUDE		FIE	DIST
		TIME					MP	MS		
NAC	EP	04 54 20.7		AB	0.8	473.	5.87			38.0
NAC	IR	05 10 08.0		IFZ	20.0	6.		3.48		38.0
WH2YK	EP	04 57 49.0		SPZ	0.8	124.	5.79			65.9
FR-CN	EP	04 59 05.7		SPZ	0.4	182.	5.77			78.9
HN-ME	EP	04 59 10.5		SPZ	0.9	162.	5.66			79.5
FN-WV	EP	04 59 59.6		SPZ	0.8	54.	5.43			89.3

CRIGIN	IAT.	ICNG.	DEPTH (FP)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
04:47:13.4	50.938N	76.557E	62. CAIC	5.64	0.23	5	3.47*****		1
04:47:02.5	50.478N	76.723E	0. REST	5.71	0.17	5	3.48*****		1

WH2YK 29 OCT 75

SPZ
92.29 MU



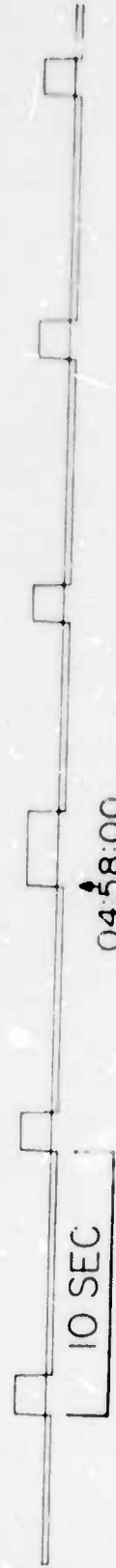
SPR
54.04 MU



SFT
29.28 MU



TIME



RK-QN 29 OCT 75

SPZ
213.95 MU

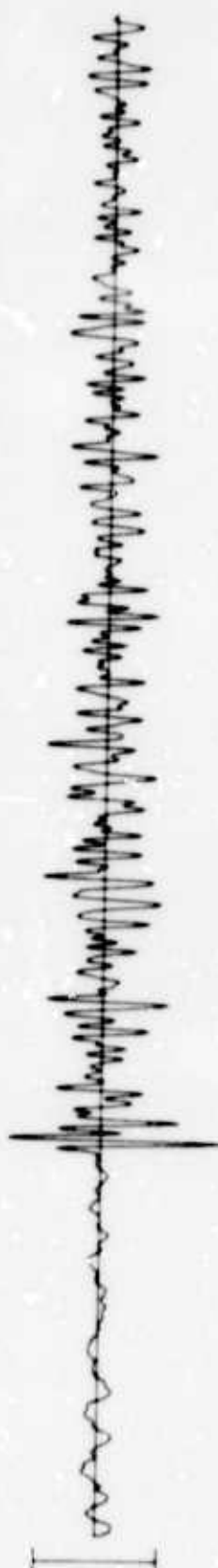
04 59 05.7



SPR
58.65 MU



SPT
60.49 MU



TIME



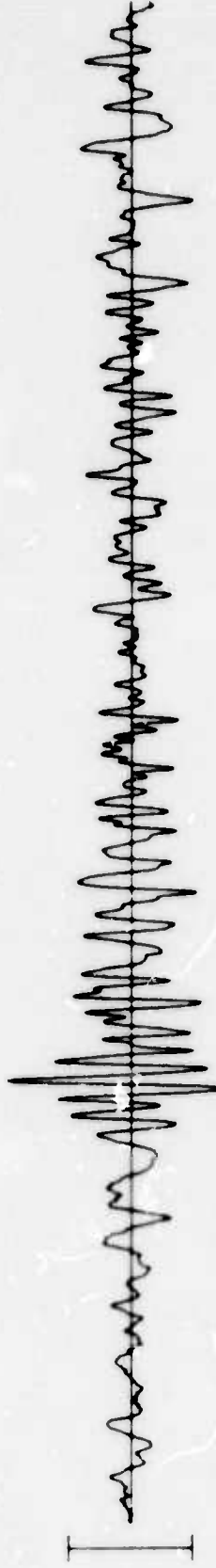
04:59:30

HN-ME 29 OCT 75
04:59:10.5

SPZ
103.95 MUJ



SPR
31.27 MU



SPT
24.10 MU



TIME



04:59:30

FN-WV 29 OCT 75

SEPERATE EVENT 04:59:59.6

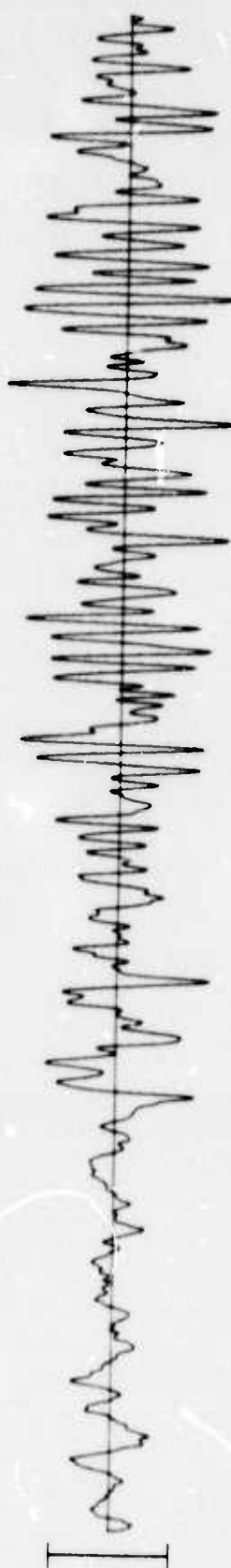
SPZ
40.28 MU



SPR
34.52 MU



SPT
24.39 MU



TIME



CPSO 29 OCT 75

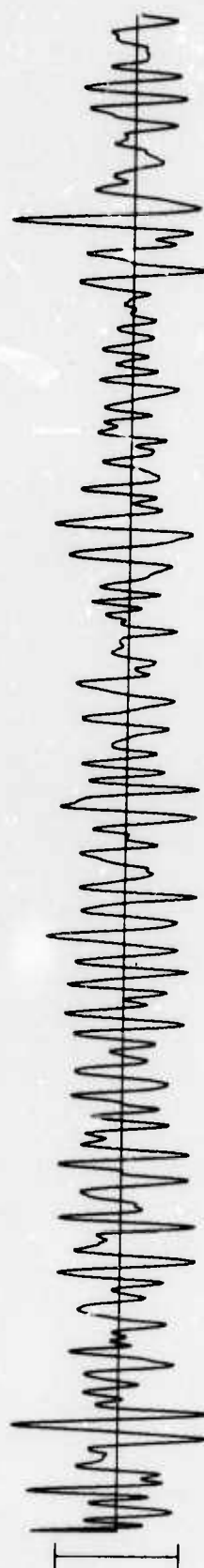
SPZ
47.91 MU



SPN
2.76 MU



SPE
30.76 MU



TIME



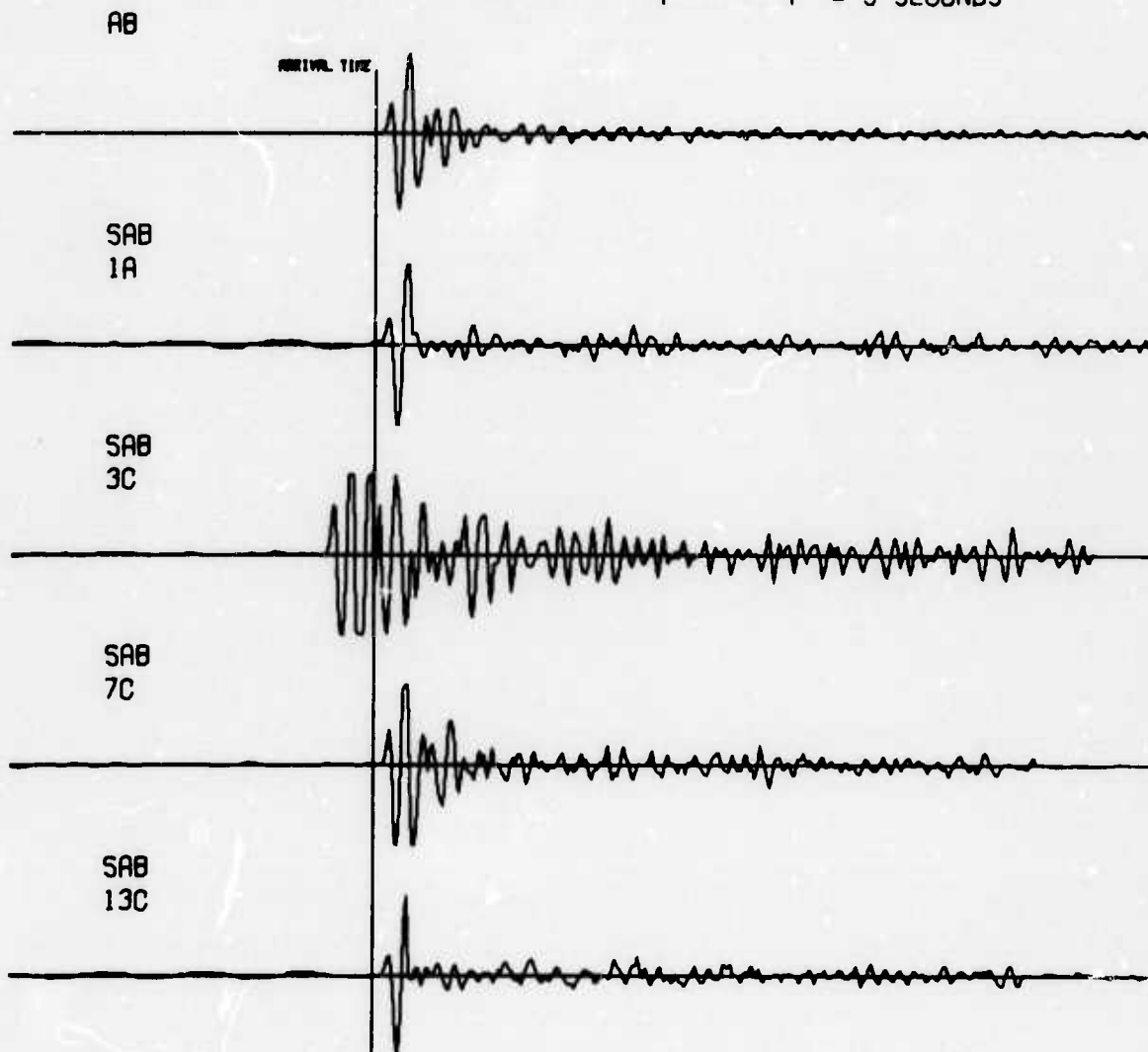
NORSAR EVENT FILE

1975 OCT 29

EPX NO. 56870 ARR. 04:54:20.5 47.8N 83.0E 5.8MB -OKM

DIST - 0.0 AZI - 0.0 AMP - 147.0 PER - 1.9

— = 5 SECONDS



WH2YK 29 OCT 75

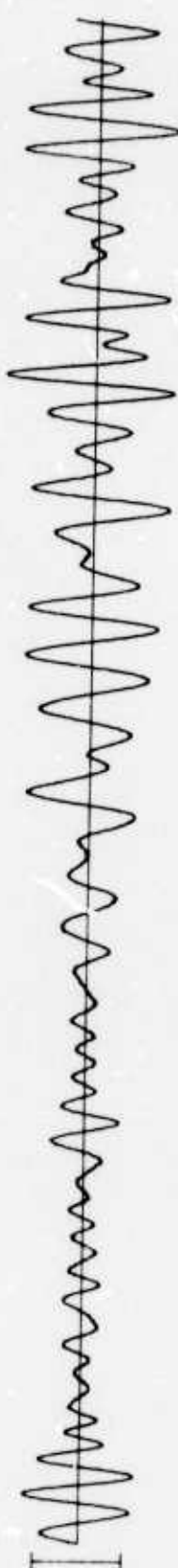
LPZ
5402.86 MU



LPR
5058.88 MU



LPT
7114.14 MU



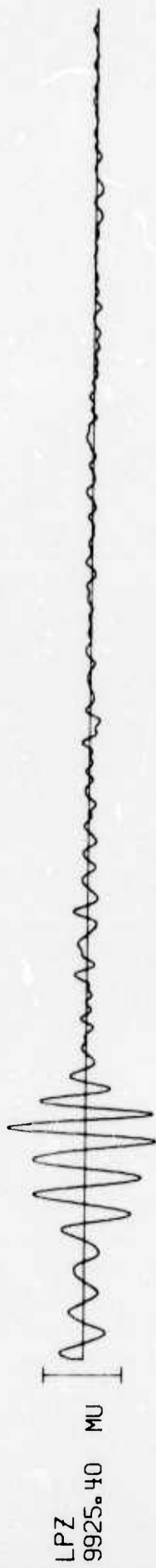
TIME



2 MIN

05:30 00

RK-ON 29 OCT 75



TIME



04:35:00

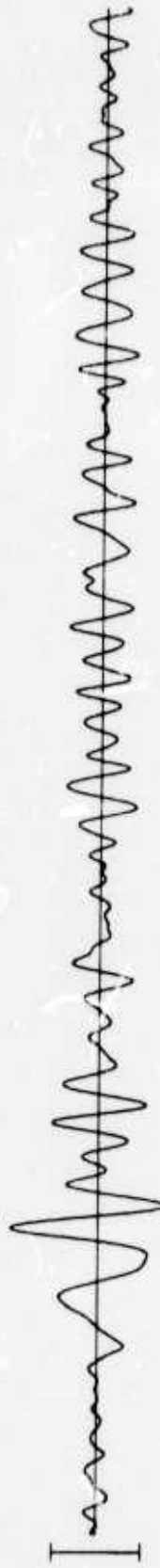
1/2

HN-ME 29 OCT 75

LPZ
2649.77 MU



LPR
2212.16 MU



LPT
1713.38 MU



TIME



05:34:00

FN-WV 29 OCT 75

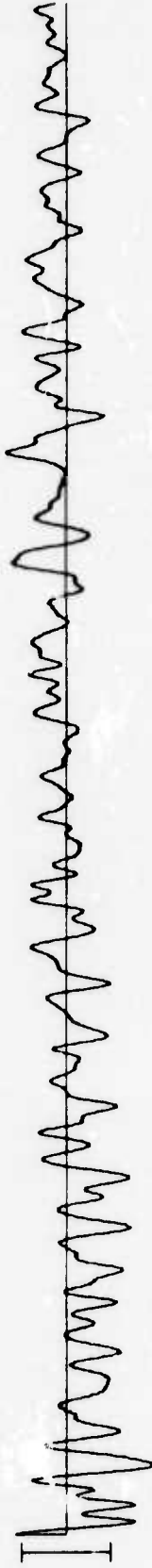
LPZ
949.72 MU



LPR
1053.67 MU



LPT
1015.27 MU



TIME



2 MIN

05:40:00

CPSO 29 OCT 75

LPZ
608.17 MU



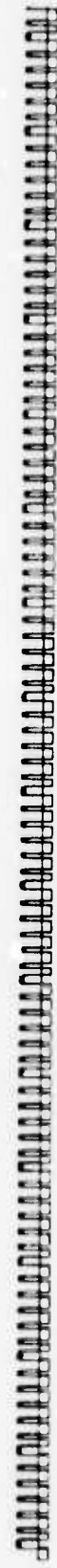
LPR
205.89 MU



LPT
407.36 MU



TIME



2 MIN

054700

-1/5-

ARRAY LONG PERIOD VERTICAL BEAMS 29 OCT 75

NORSAR

LP VERTICAL
404.25 Mμ

05:10:08

05:02:00

1 MIN

ALPA

LP VERTICAL
1050.17 Mμ

05:13:00

1 MIN