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**SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
EASTERN KAZAKH, SSR, 09 JUNE 1976**

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September 1976

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SDCS EVENT REPORT NO. 105

event. ←

→ Eastern Kazakh SSR ↑ 09 June 1976

↓
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	03:10:20.8	03:02:48.0	50.0N	081.0E	5.3	N/A
Hagfors	03:10:11.2	03:03:06.0	51.0N	078.0E	5.9	N/A

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

03:02:59.7 50.1N 078.9E 5.2 N/A

The programs used for LASA and NORSAR data recovery, previously listed as undergoing modifications, are now usable. Beginning with this report, data from these two arrays, both short period and long period, will be included whenever possible.

All SDCS stations were operational during this period.

There is an apparent 24-second timing error at RK-ON. The cause is presently unknown. Both systems, analog and digital, agree; therefore the data is not used in the hypocenter determination.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. All SDCS data were retrieved from the digital field tapes and horizontal channels were rotated. NORSAR short-period array trace presentations were obtained from their event tape. Analysis data were taken from their bulletin. LASA short-period array data were obtained from the new detection processing system.

No long-period signals for this event were received at the SDCS stations. Long-period array data for LASA and NORSAR were unobtainable.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response).

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ACCESSION #	DATE	BY	REVISION
105	06/09/76	UNIDENTIFIED/ANALYST/SDCS	1
FILE #	FILE NAME	FILE TYPE	FILE EXTENSION
105	105	105	105
SEARCHED	INDEXED	SERIALIZED	FILED
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES		ELEVATION METERS	INSTRUMENTATION	
		DEG	MN SECS		SHORT-PERIOD	LONG PERIOD
CPSO	McMinnville, Tennessee	35	35 41.4 N	574	6480 V	SL210 V
		085	34 13.5 W		7515 H	SL220 H
FN-WV	Franklin, West Virginia	38	32 58.0 N	910	KS36000	KS36000
LASA	Billings, Montana	46	41 19.0 N	744	HS10	7505A V
		106	13 20.0 W		KS36000	8700C H
HN-ME	Houlton, Maine	46	09 43.0 N	213	KS36000	KS36000
NORSAR	Kjeller, Norway	60	49 25.4 N	379	HS10	7505A V
		010	49 56.5 E		18300	8700C H
RK-ON	Red Lake, Ontario	50	50 20.0 N	366	18300	SL210 V
WH2YK	White Horse, Yukon	093	40 20.0 W	853	18300	SL220 H
		60	41 41.0 N		18300	SL210 V
		134	58 02.0 W			SL220 H

Note: The orientation of the radial instruments at FN-WV is assumed to be $16^\circ \pm 5^\circ$ based on empirical data (event recordings). Rotation, where performed, is referenced to this azimuth and may be questionable.

HYPOCENTER DETERMINATION

INPUT FOR EVENT 9 JUN 76
 03:03:00.0 50.000N 80.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
NAO	03 10 20.8	-17.2	-0.2	38.3	312.9
WH2YK	03 13 48.2	-15.5	-0.2	66.3	17.4
RK-ON*	03 14 41.9	-38.1 *	-24.0 *	79.3	355.2
HN-ME	03 15 10.2	-13.6	0.7	79.9	337.3
LAO	03 15 28.8	-14.3	0.3	83.5	3.5
PN-WV	03 15 59.0	-14.5	0.1	89.7	343.2
CPSO	03 16 16.3	-15.3	-0.7	93.6	347.4

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
NO CONVERGENCE ON CALC RUN						
03:02:53.1	49.031N	79.310E	-49. CALC	1.3	16	6
03:02:59.7	50.056N	78.879E	0. REST	0.5	2	6

CALC				REST			
3	.	2		3	.	2	
1	.	0		1	.	0	
0	0.	0	0	0	0.	0	0
.
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= 0.93
 MAJOR 170.0KM. MINOR 41.3KM. AZ= 180 AREA= 22055 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 9 JUN 76
 03:03:00.0 50.000N 80.000E 0KM.

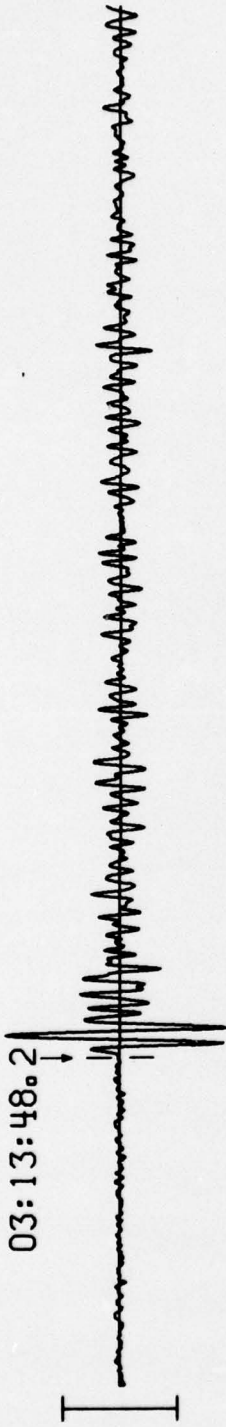
STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
NAO	EP	03 10	20.8	AB	0.7	107.	5.20			38.3
WH2YK	EP	03 13	48.2	SPZ	0.7	69.	5.54			66.3
RK-ON*	EP	03 14	41.9	SPZ	0.4	88.	5.42			79.3
HN-ME	EP	03 15	10.2	SPZ	0.8	37.	4.97			79.9
LAO	EP	03 15	28.8	SAB	0.8	25.	5.10			83.5
FN-WV	EP	03 15	59.0	SPZ	0.7	13.	4.81			89.7
CPSO	EP	03 16	16.3	SPZ	0.5	33.	5.36			93.6

ORIGIN LAT. LONG. DEPTH (KM) MAG SDV STA
 03:02:59.7 50.056N 78.879E 0. REST 5.16 0.26 6

*Apparent, unexplained 24 second timing error at RK-ON

WH2YK 9 JUN 76

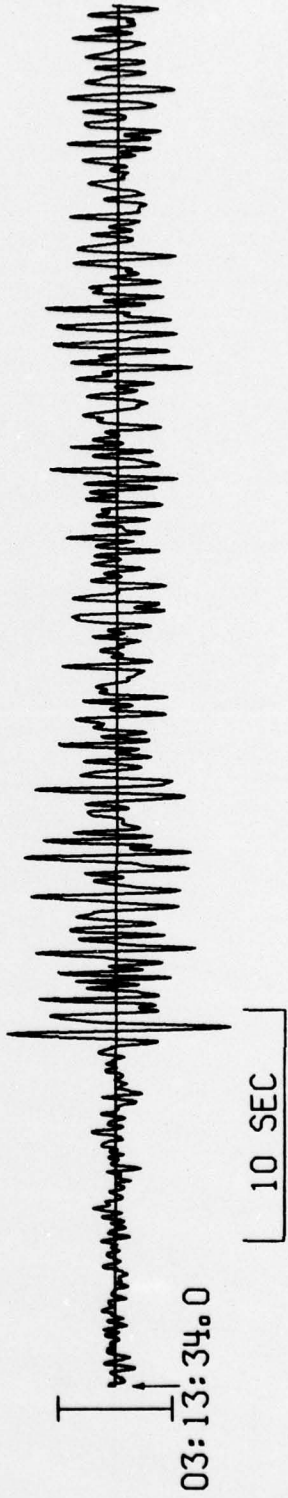
SPZ
54.24 MU



SPR
19.18 MU



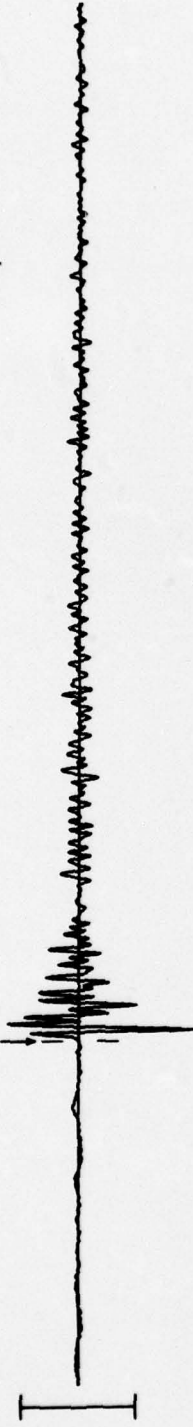
SPT
17.66 MU



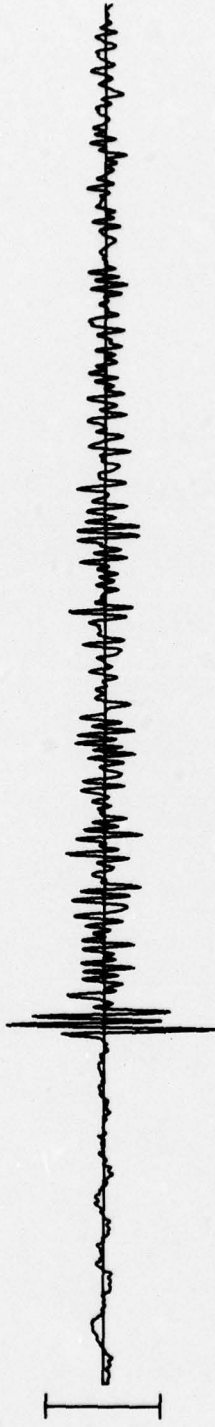
RK-ON 9 JUN 76

03:14:41.9

SPZ
88.40 MU



SPR
36.34 MU



SPT
14.01 MU



03:14:27.0

10 SEC

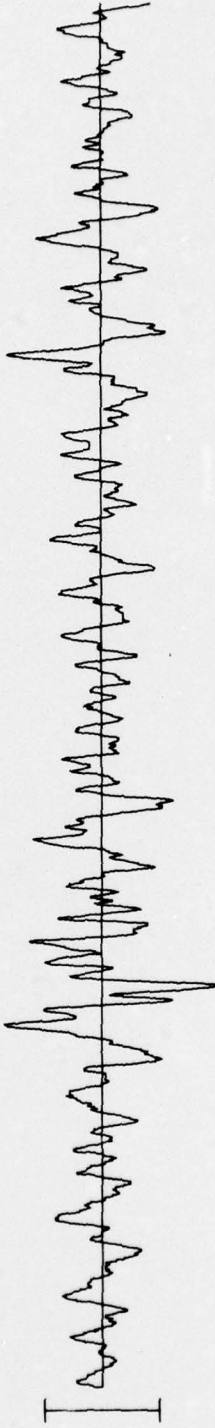
HN - ME 9 JUN 76

03:15:10.2

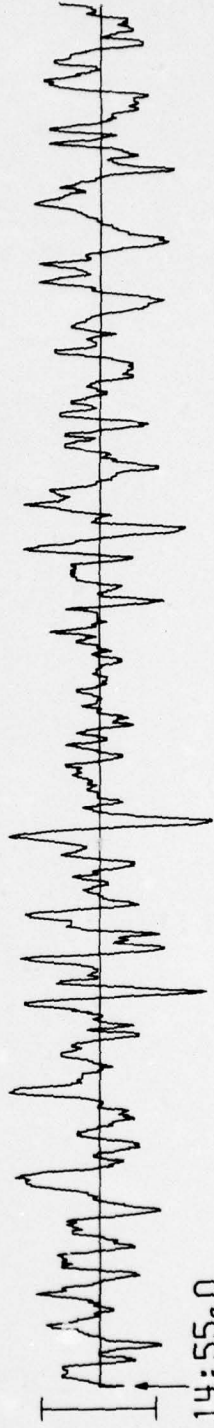
SPZ
30.57 MU



SPR
16.04 MU



SPT
11.02 MU



03:14:55.0

10 SEC

FN-WV 09 JUN 76

03:15:59.0

SPZ
13.03 MU



SPR
7.99 MU



SPT
11.01 MU



03:15:45.0

10 SEC

CPSO 09 JUN 76

03:16:16.3



SPZ
21.30 MU



SPR
9.70 MU

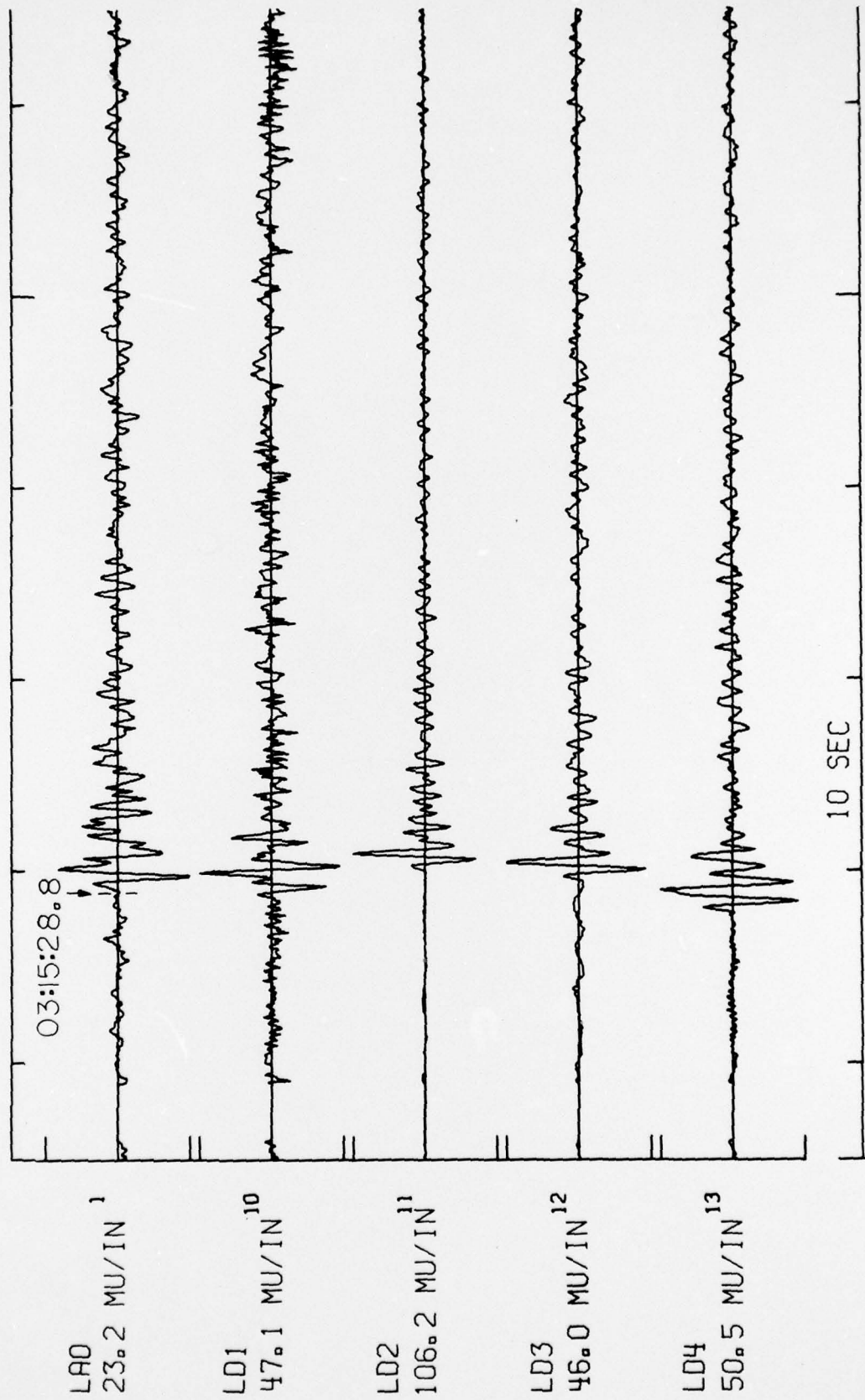


SPT
5.59 MU

03:16:02.0

10 SEC

LASA 9 JUN 1976 INFINITE VELOCITY SUBARRAY SUMS

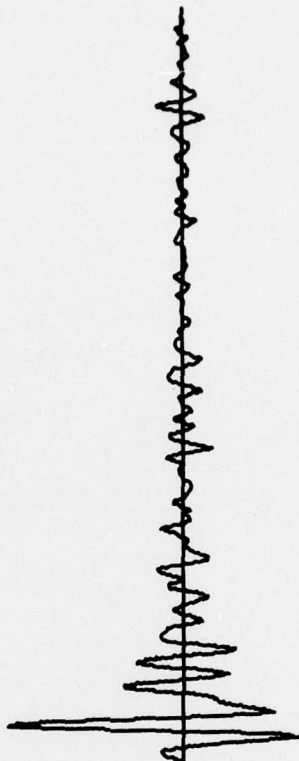


03:15:15.0

NORSAR ARRAY BEAM 9 JUNE 1976

UB 84.0 NM

03:10:12.1



10 SEC

01A
 373.9 NM/IN
 01B
 441.8 NM/IN
 02B
 454.2 NM/IN
 03B
 364.2 NM/IN
 04B
 640.2 NM/IN
 05B
 333.7 NM/IN
 06B
 119.5 NM/IN
 07B
 216.8 NM/IN
 01C
 276.3 NM/IN
 02C
 258.5 NM/IN
 03C
 993.2 NM/IN
 04C
 977.7 NM/IN
 05C
 801.2 NM/IN
 06C
 993.2 NM/IN
 07C
 494.7 NM/IN
 08C
 253.6 NM/IN
 09C
 140.4 NM/IN
 10C
 214.4 NM/IN
 11C
 168.3 NM/IN
 12C
 116.5 NM/IN
 13C
 273.0 NM/IN
 14C
 292.1 NM/IN

NORSAR SUBARRAY BEAMS 9 JUNE 1976

