

AD A 048958

AD No.
FILE COPY

14 SDCS-ER-76-112

1

6 SPECIAL DATA COLLECTION SYSTEM EVENT REPORT,
Western Kazakh, SSR, 29 July 1976.

9 Technical rept.

10 M. S./Dawkins & M. D./Gillispie

Alexandria Laboratories

Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314

11 Nov 77

12 11 P.
DDC
JAN 23 1978
F

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED.

Sponsored by

15 The Defense Advanced Research Projects Agency (DARPA)

F 866-78-C-0007, DARPA Order -2551

Monitored by

AFTAC/VSC

312 Montgomery Street, Alexandria, Virginia 22314

405 601

sent

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER SDCS-ER-76-112 ✓	2. GOVT ACCESSION NO.	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) SPECIAL DATA COLLECTION SYSTEM (SDCS) Western Kazakh, SSR, 29 July 1976		5. TYPE OF REPORT & PERIOD COVERED Technical
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) M. S. Dawkins M. D. Gillispie		8. CONTRACT OR GRANT NUMBER(s) F08606-78-C-0007 ✓
9. PERFORMING ORGANIZATION NAME AND ADDRESS Teledyne Geotech ✓ 314 Montgomery Street Alexandria, Virginia 22314		10. PROGRAM ELEMENT PROJECT, TASK AREA & WORK UNIT NUMBERS VT/8709
11. CONTROLLING OFFICE NAME AND ADDRESS Defense Advanced Research Projects Agency Nuclear Monitoring Research Office 1400 Wilson Blvd. Arlington, Virginia 22209		12. REPORT DATE 23 Nov 77
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) VELA Seismological Center 312 Montgomery Street Alexandria, Virginia 22314		13. NUMBER OF PAGES 10
		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)		

DDC
RECEIVED
JAN 23 1978
F

SDCS Event Report No. 112

Western Kazakh SSR, 29 July 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 ~~provided~~.

	"P" Arrival	Origin Time	Latitude	Longitude	m_b	M_s
NORSAR	05:05:22.4	05:00:00.0	47.6N	047.4E	6.7	N/A
Hagfors	05:05:08.4	05:00:23	50N	047E	6.2	N/A

Using SDCS stations, LASA and NORSAR, the epicenter location and magnitudes become: ~~Origin time -~~ 05:00:08.5; ~~Latitude -~~ 49.1N; ~~Longitude -~~ 047.7E; ~~and m_b sub 6~~ 6.3 ~~N/A~~

Of the SDCS stations, only HN-ME and RK-ON were operational. The other three stations were shut down on 28 July. Three new stations are to be opened at the Nevada Test Site within the near future.

Short-period signals associated with this event were recorded at HN-ME, RK-ON, LASA, and NORSAR. SDCS data were retrieved from the field station digital tapes. LASA data was retrieved from the SDAC/VELA Network detection processor. Information for NORSAR is reported from their bulletin. Horizontal SP channels at SDCS stations were rotated.

Long-period signals associated with this event were recorded at HN-ME and RK-ON. Long-period data for LASA, and NORSAR were unrecoverable. Horizontal LP channels at SDCS stations were rotated.

Scaling factors on plots are millimicrons at 1 Hz for SP and 0.04 Hz for LP (not corrected for instrument response)

ACCESSION for	
NTIS	Write Section ☒
DDC	Buff Section ☐
UNANNOUNCED	☐
JUSTIFICATION	
BY	
DISTRIBUTION/AVAILABILITY CODES	
Dist.	SPECIAL
A	

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION	
				SHORT-PERIOD	LONG-PERIOD
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	KS36000	KS36000
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

-- HYPO --

29JUL INPUT FOR EVENT 29 JUL 76
05:00:00.0 48.000N 48.000E 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST	REST	REST
NAO	05 05 22.4	-2.6	0.1	23.9	313.8
PK-ON	05 11 49.9	-0.9	-0.4	75.0	335.9
HN-ME	05 11 19.4	-1.0	-0.0	69.8	318.3
LAO	05 12 28.5	-0.6	0.3	81.3	342.3

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
NO CONVERGENCE ON CALC RUN						
05:00:58.9	51.458N	46.111E	318. CALC	0.9	16	4
05:00:08.5	49.078N	47.763E	0. REST	0.3	3	4

CALC				REST			
2	.	0		2	.	0	
1	.	0	0	1	.	0	0
0	1.	0	0	0	1.	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= 1.07
MAJOR 301.4KM. MINOR 68.0KM. AZ= 17 AREA= 64343 SQ.KM. REST

DATA SUMMARY

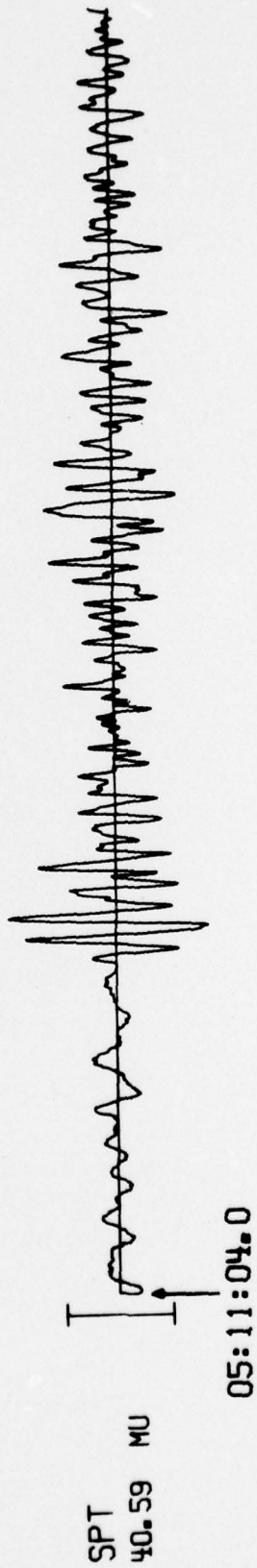
29JUL INPUT FOR EVENT 29 JUL 76
05:00:00.0 48.000N 48.000E 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
NAO	EP	05 05 22.4		AB	0.8	3566.	6.55			23.9
HN-ME	EP	05 11 19.4		SPZ	1.1	310.	6.11			69.8
HN-ME	LR	05 42 15.0		LPZ	2.0	13.		4.08		69.8
RK-ON	EP	05 11 49.9		SPZ	0.7	408.	6.11			75.0
RK-ON	LR	05 46 00.0		LPZ	2.1	13.		4.11		75.0
LAO	EP	05 12 28.5		SAB	0.8	504.	6.28			81.8

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA
05:00:08.5	49.078N	47.763E	0. REST	6.25	0.21	4

Average long-period magnitude (M_S) is based on Rayleigh wave observations in the period range of 17 to 23 seconds per cycle.

HN-ME 29 JUL 76
05:11:19.4



10 SEC.

RK-ON 29 JUL 76
05:11:49.9

SPZ
330.00 MU



SPR
137.00 MU



SPT
50.00 MU

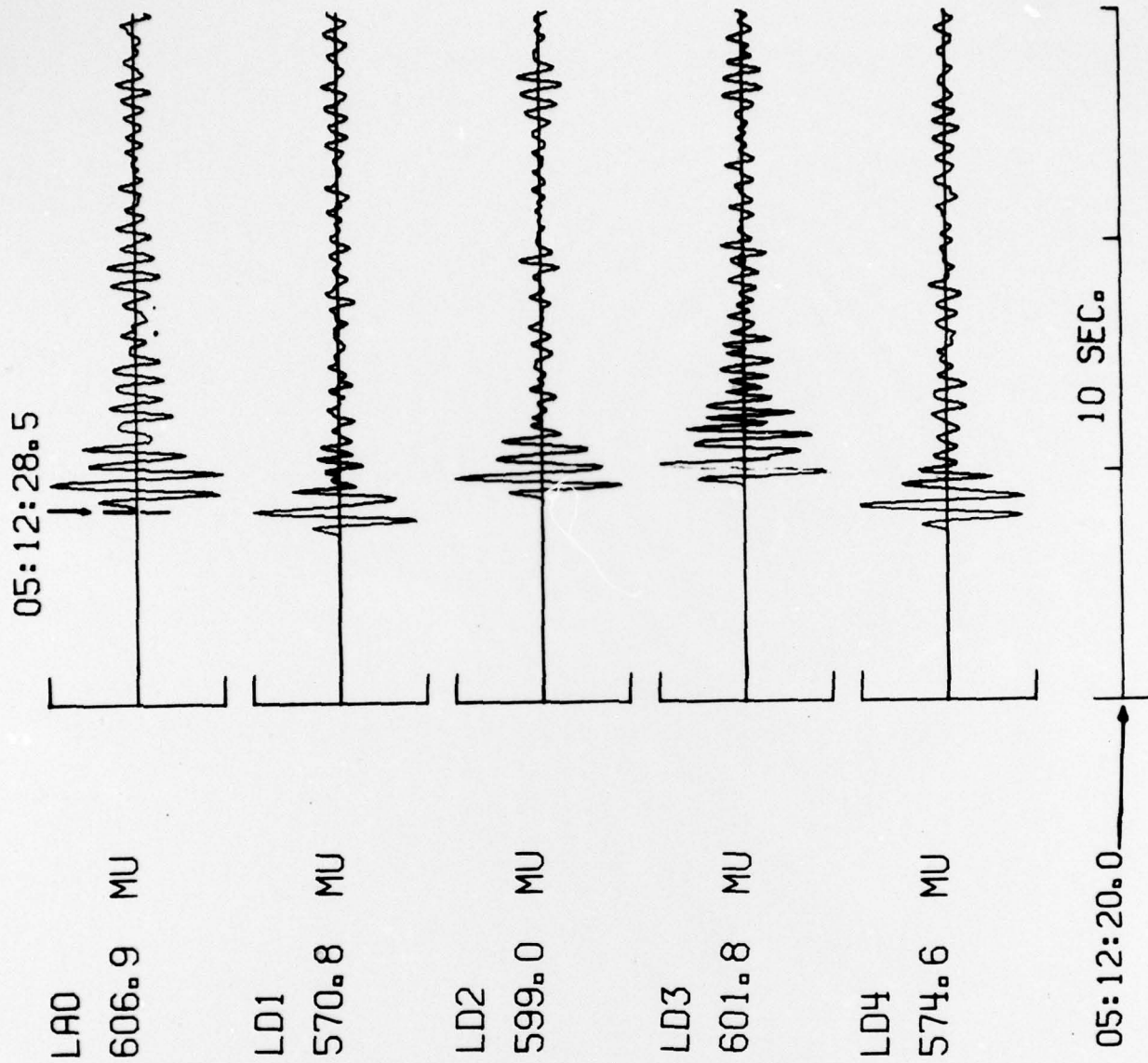


05:11:35.0

10 SEC.

LASA

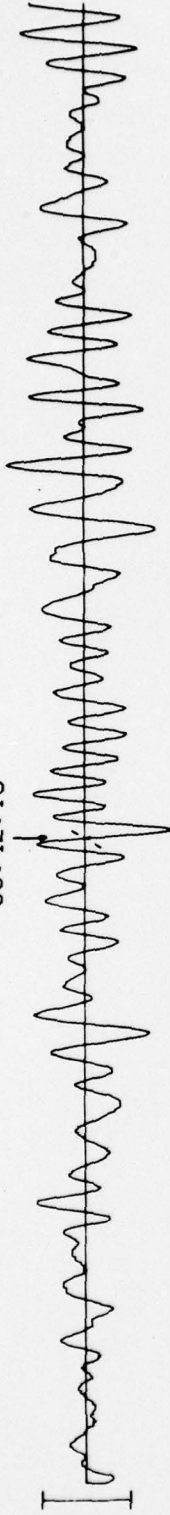
29 JUL 76



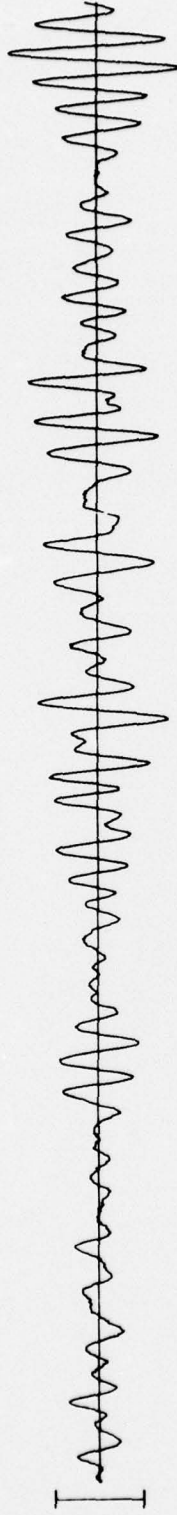
HN-ME 29 JUL 76

05:42:15

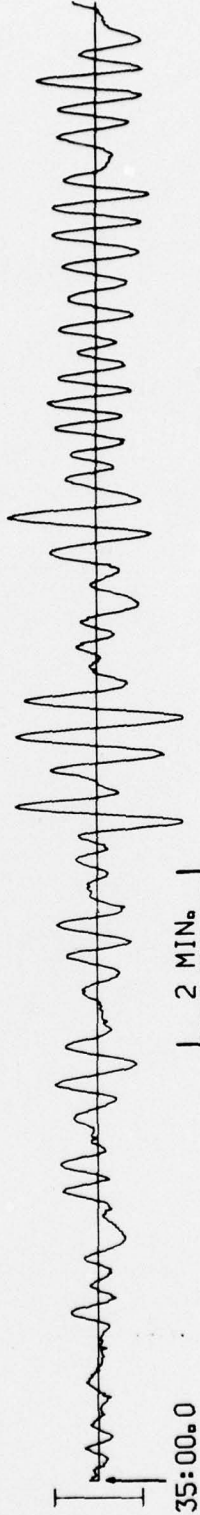
LPZ
133.82 MU



LPR
118.46 MU



LPT
118.78 MU



05:35:00.0

2 MIN.

RK-QN 29 JUL 76

