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SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT,
GUATEMALA, 04 FEBRUARY 1976

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Guatemala, 04 February 1976

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MAY 1976

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SDCS EVENT REPORT NO. 83

Guatemala, 04 February 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	09:14:05.4	09:01:52	16 N	090 W	6.5	N/A
Hagfors	09:14:10.3	09:01:48	13 N	083 W	5.8	N/A

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

09:01:47.8 15.6N 089.2W 6.1 N/A

The programs used for LASA, NORSAR and ALPA data recovery are presently undergoing modifications. Information for LASA short-period is reported from their Teleseism Event Report; NORSAR short-period data is obtained from their bulletin. The long-period array beam recovery for these stations will be resumed upon completion of these modifications.

All SDCS stations were operational during this period.

Short-period signals associated with this event were recorded at all SDCS stations, LASA and NORSAR. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at WH2YK, HN-ME and RK-ON were rotated. Signal clipping prevented rotation of the horizontal SP channels at CPSO and FN-WV.

Long-period signals were recorded at all SDCS stations. All SDCS stations exhibited extensive signal clipping on the low-gain LP channels; for this reason LP plots were not included in this report.

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

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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	60.0 N	626	None	31300
		147 44	36.0 W			
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
		079 30	47.0 W			
LASA	Billings, Montana	46 41	19.0 N	744	HS10	7505A V
		106 13	20.0 W			8700C H
HN-ME	Houlton, Maine	46 09	43.0 N	213	KS36000	KS36000
		067 59	09.0 W			
NORSAR	Kjeller, Norway	60 49	25.4 N	379	HS10	7505A V
		010 49	56.5 E			8700C H
RK-ON	Red Lake, Ontario	50 50	20.0 N	366	18300	SL210 V
		093 40	20.0 W			SL220 H
WH2YK	White Horse, Yukon	60 41	41.0 N	855	18300	SL210 V
		134 58	02.0 W			SL220 H

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

HYPOCENTER DETERMINATION

INPUT FOR EVENT 4 FEB 76
 09:01:52.0 15.999N 90.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
CPSO	09 06 23.6	-0.6	0.5	20.2	8.7
FN-WV	09 07 07.0	0.7	0.3	24.4	18.7
LAO	09 08 33.8	0.4	0.7	34.1	339.0
RK-ON	09 08 41.9	-0.5	-2.0	35.3	355.1
HN-ME	09 08 43.5	0.3	0.1	35.3	25.9
WH2YK	09 11 25.3	0.1	0.4	55.7	334.8
NAO	09 14 05.4	-0.4	0.0	81.3	29.2

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
09:02:39.1	17.964N	89.068W	350. CALC	0.5	16	7
09:01:47.8	15.620N	89.238W	0. REST	0.9	3	7

CALC			REST		
0	3 . 2	0	0	3 . 2	0
0	0 . 2	0	0	0 . 2	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= 1.30
 MAJOR 72.0KM. MINOR 49.9KM. AZ= 174 AREA= 11285 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 4 FEB 76
 09:01:52.0 15.999N 90.000W 0KM.

STA.	PHASE	ARRIVAL		INST	PER	A/T	MAGNITUDE		DIR	DIST
		TIME					MB	MS		
CPSO	EP	09 06	23.6	SPZ	1.3	1198.	5.79			20.2
FN-WV	EP	09 07	07.0	SPZ	1.1	492.	5.77			24.4
LAO	EP	09 08	33.8	SAB	39.9	9999.				
HN-ME	EP	09 08	43.5	SPZ	1.4	884.	6.32			35.3
RK-ON	EP	09 08	41.9	SPZ	1.1	452.	6.02			35.3
WH2YKM	EP	09 11	25.3	SPZ	0.9	42.	5.12			55.7
NAO	EP	09 14	05.4	AB	1.2	1016.	6.54			31.3

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STM
09:02:39.1	17.964N	89.068W	350. CALC	5.54	0.66	5
09:01:47.8	15.620N	89.238W	0. REST	6.09	0.34	5

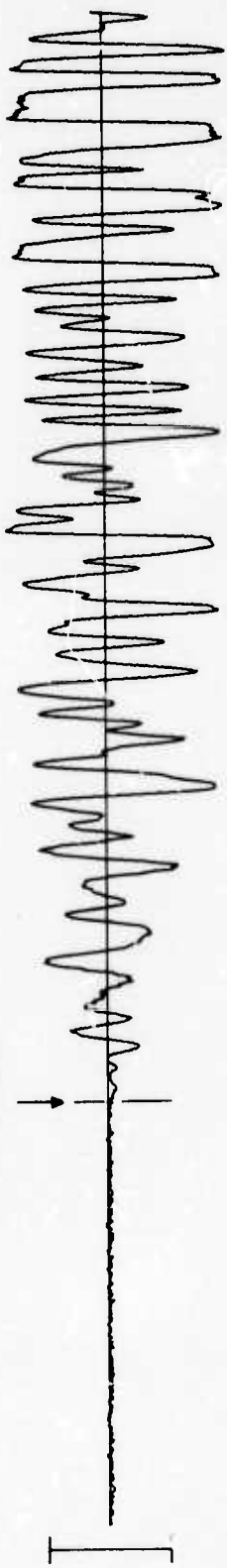
WH2YK NOT USED IN REST RUN SP AVG. MAG.

WH2YK NOT USED IN RESTRAINED SP AVERAGE MAGNITUDE CALCULATION
 BECAUSE ITS MAGNITUDE EXCEEDS THE SDV PARAMETERS OF THE HYPO-
 CENTER PROGRAM.

CPSO 4 FEB 76

09:06:23.6

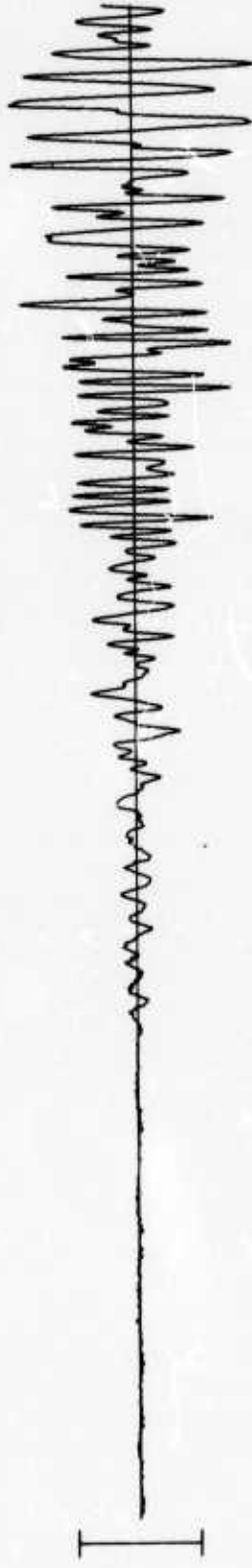
SPZ
861.75 MU



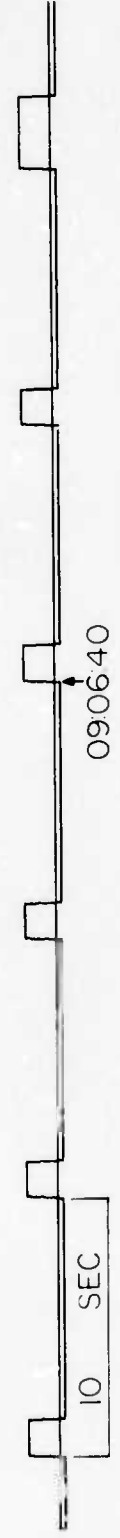
SPN
473.10 MU



SPE
306.51 MU



TIME



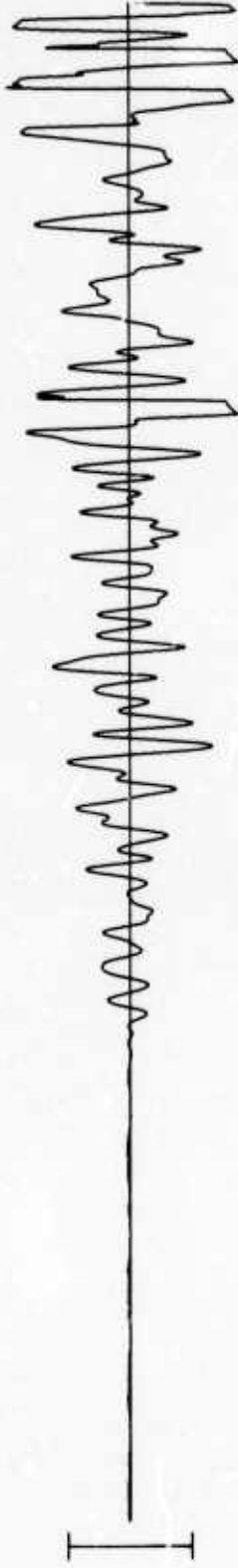
FN-WV 4 FEB 76

09:07:07.0

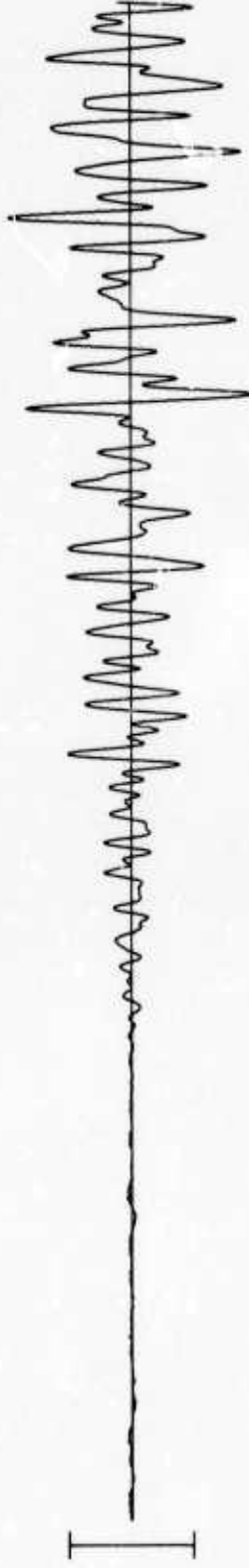
SPZ
389.13 MU



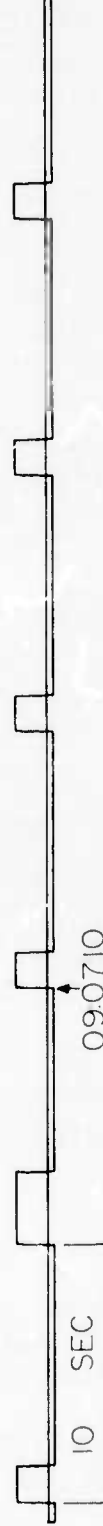
SPR
573.20 MU



SPT
296.43 MU

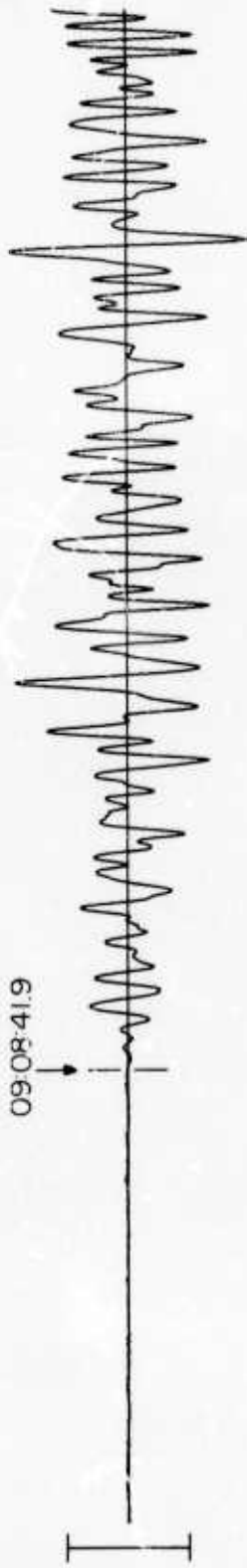


TIME



RK-QIN 4 FEB 76

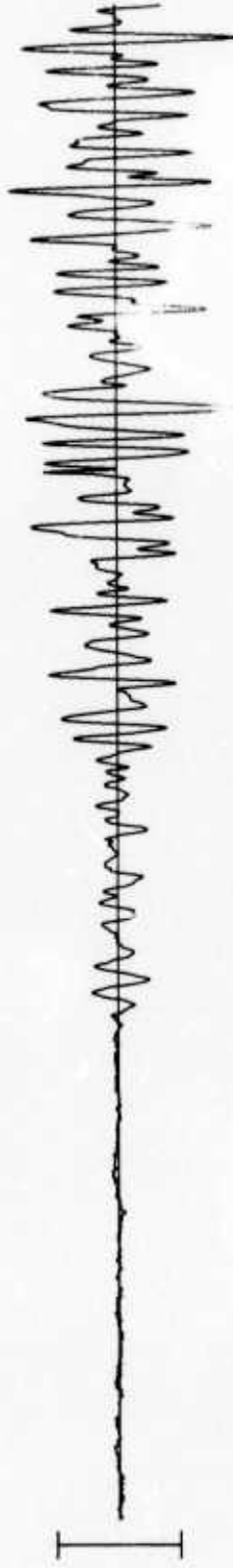
SPZ
647.76 MU



SPR
406.19 MU



SPT
179.40 MU

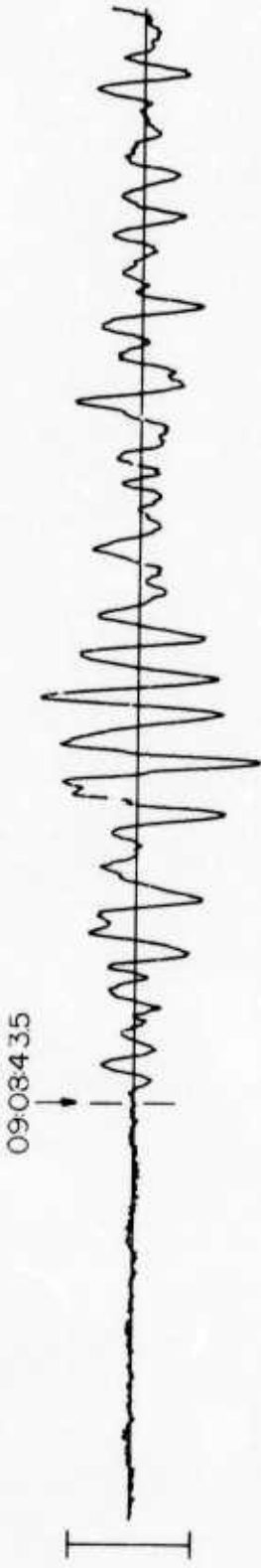


TIME

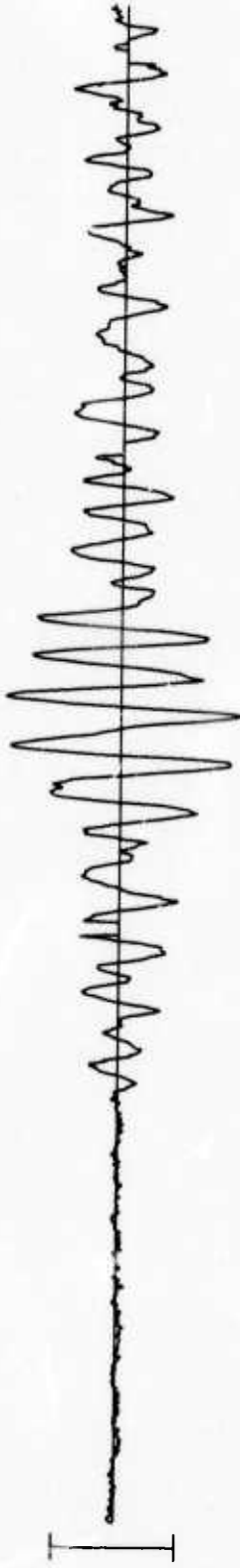


HN-ME 4 FEB 76

SPZ
718.18 MU



SPR
500.50 MU



SPT
150.46 MU



TIME



WH2YK 4 FEB 76

