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(SDCS)

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
NTS Event 'FONTINA', 12 February 1976.

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K.D. Hill, M.S. Dawkins and M.D. Gillispie
Alexandria Laboratories

Teledyne Geotech, 314 Montgomery Street, Alexandria, Virginia 22314

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June 1976

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16 p.

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Monitored By

VELA Seismological Center

312 Montgomery Street, Alexandria, Virginia 22314

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SDCS EVENT REPORT NO. 86

NTS Event "FONTINA", 12 February 1976

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FONTINA

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	14:56:32.2	14:45:06	38 N	116 W	5.9	N/A
Hagfors	14:56:40.5	14:44:56	37 N	117 W	6.4	5.4

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

14:45:01.7 37.3N 116.5W 6.2 5.9

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. WH2YK short-period data were retrieved from the field station digital tape. All SP channels at HN-ME had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal SP channels at all SDCS stations were rotated.

Long-period signals were recorded at all SDCS stations. WH2YK long-period data were retrieved from the field station digital tape. Operating gains of the LP channels at RK-ON were unknown because the calibration and operation db settings could not be determined from the station log. All LP channels at HN-ME and the LP radial channel at RK-ON had polarity reversals; to correct this, mathematical inversions of the data were performed. Horizontal LP channels at all SDCS stations were rotated.

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	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 52	58.0 N 079 50 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	855	18300	SL210 V SL220 H

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

HYPOCENTER DETERMINATION

INPUT FOR EVENT 12 FEB 76
 14:45:00.0 37.000N 116.000W 0KM.

STA.	ARRIVAL	RESIDUALS		DIST.	AZ.
		CALC	REST		
LAO	14 47 54.5	-0.0	0.5	12.1	35.9
RK-ON	14 49 46.5	-0.1	-0.8	21.1	43.0
CPSD	14 50 25.4	-0.1	0.6	24.9	84.5
WH2YK	14 50 37.4	0.1	0.6	25.2	339.3
PN-WV	14 51 03.0	-0.0	0.1	29.1	76.1
HN-ME	14 52 09.9	0.5	-0.0	36.7	60.4
NAO	14 56 32.2	-0.3	-1.0	73.2	24.0

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
14:45:12.3	37.671N	116.199W	67. CALC	0.2	4	7
14:45:01.7	37.310N	116.470W	0. REST	0.7	3	7

CALC			REST		
1	.	1	1	.	1
0	.	0	0	.	0
0	0.	3 2	0	0.	3 2
.
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= 1.68
 MAJOR 51.7KM. MINOR 37.9KM. AZ= 30 AREA= 7353 SQ.KM. REST

DATA SUMMARY

INPUT FOR EVENT 12 FEB 76
 14:45:00.0 37.000N 116.000W OKM.

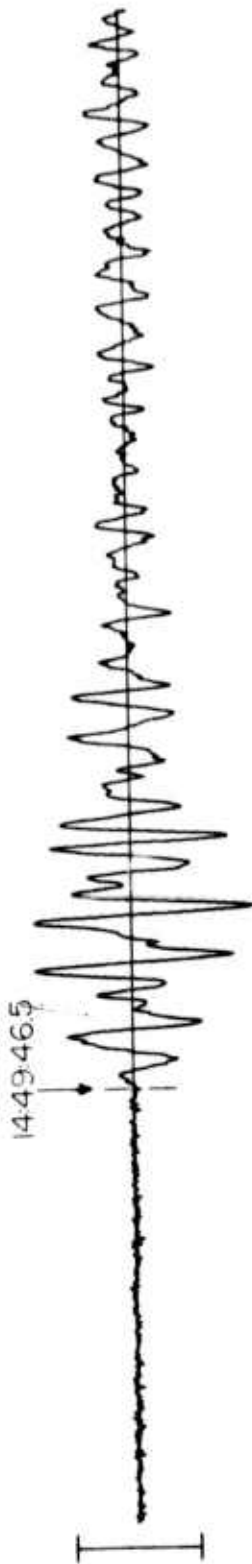
STA.	PHASE	ARRIVAL TIME	INST	PER	A/T	MAGNITUDE		DIR	DIST
						MB	MS		
LAO	EP	14 47 54.5	SAB	99.9	9999.				
RK-ON	EP	14 49 46.5	SPZ	1.1	3439.	6.35			21.1
RK-ON	LQ	14 56 52.0	LPT	18.0	9999.				
RK-ON	LR	14 58 41.0	LPZ	13.0	9999.		0.0		21.1
CPSO	EP	14 50 25.4	SPZ	0.8	3016.	6.65			24.9
CPSO	LQ	14 58 45.0	LPT	17.0	2372.				
CPSO	LR	15 00 28.0	LPZ	15.0	8834.		6.46		24.9
WH2YK	EP	14 50 37.4	SPZ	1.0	520.	5.93			25.2
WH2YK	LQ	14 59 35.0	LPT	20.0	1463.				
WH2YK	LR	15 01 53.0	IPZ	18.0	1792.		5.79		26.2
FN-WV	EP	14 51 03.0	SPZ	1.5	686.	6.14			29.1
FN-WV	LQ	15 00 58.0	LPT	18.0	2584.				
FN-WV	LR	15 03 06.0	LPZ	18.0	4382.		6.22		29.1
HN-ME	EP	14 52 09.9	SPZ	1.3	1789.	6.48			36.7
HN-ME	LQ	15 04 59.0	LPT	20.0	1839.				
HN-ME	LR	15 07 34.0	LPZ	20.0	931.		5.55		36.7
NAO	EP	14 56 32.2	AB	0.9	223.	5.93			73.2

ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	LPSTA
14:45:12.3	37.671N	116.199W	67. CALC	6.15	0.37	5	5.89	0.3	3
14:45:01.7	37.310N	116.470W	0. REBT	6.23	0.32	6	5.89	0.3	3

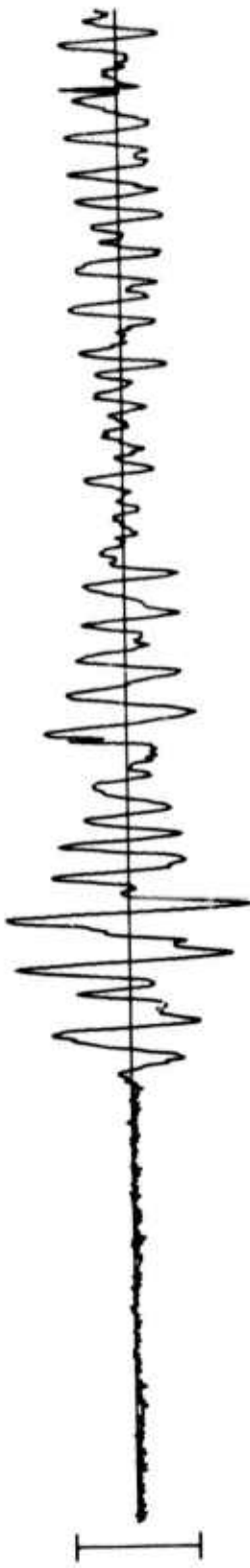
Average long-period magnitude (M_S) is based on Rayleigh wave observations in the period range of 17 to 23 seconds per cycle.

RK-ON 12 FEB 76

SPZ
1643.64 MU



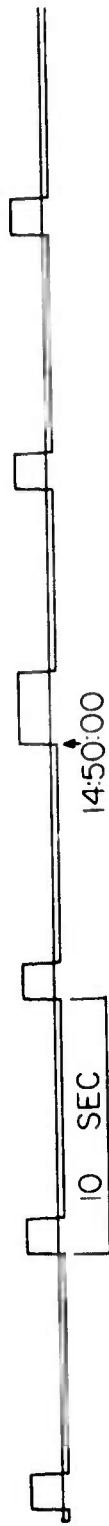
SPR
804.85 MU



SP^T
264.57 MU

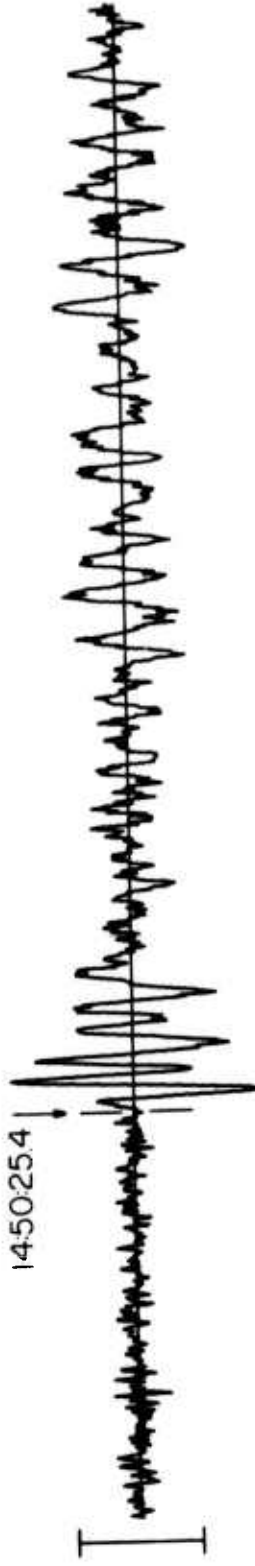


TIME

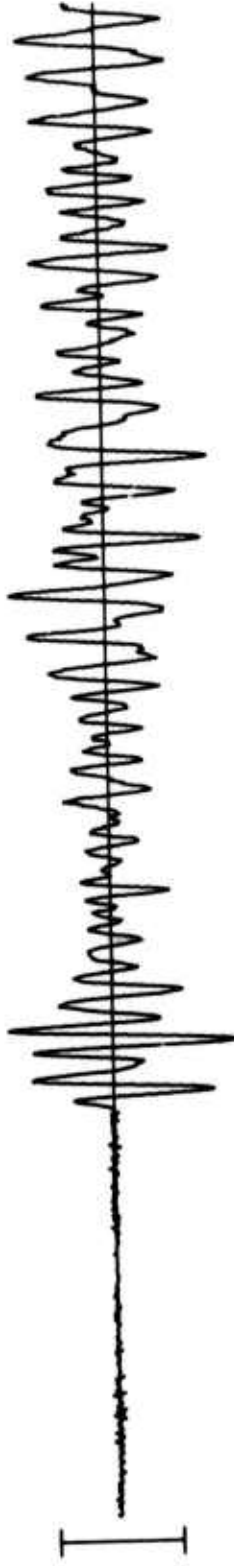


CPSO 12 FEB 76

SPZ
1610.63 MU



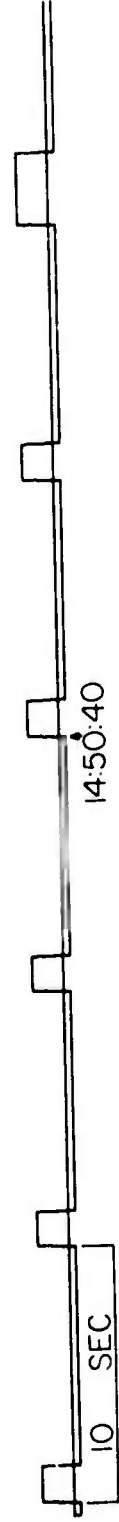
SPR
513.38 MU



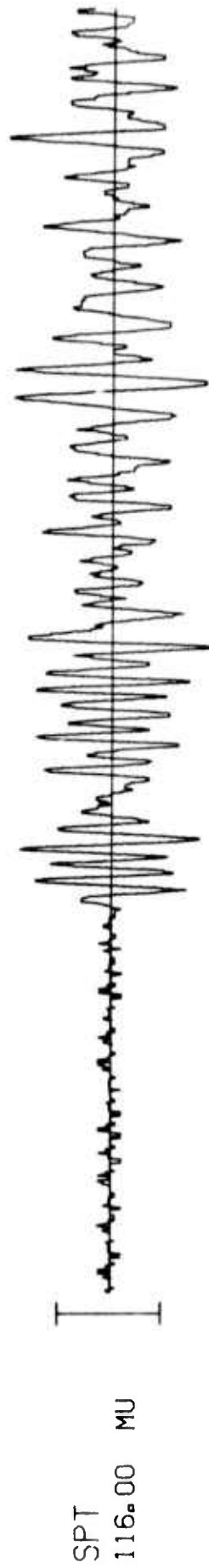
SPT
311.18 MU



TIME

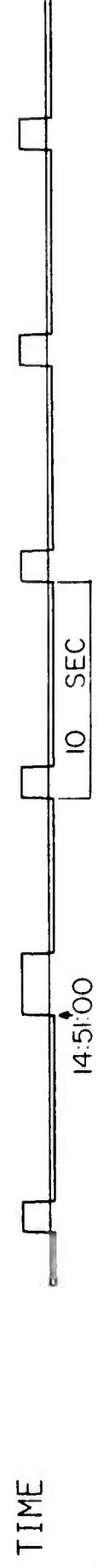
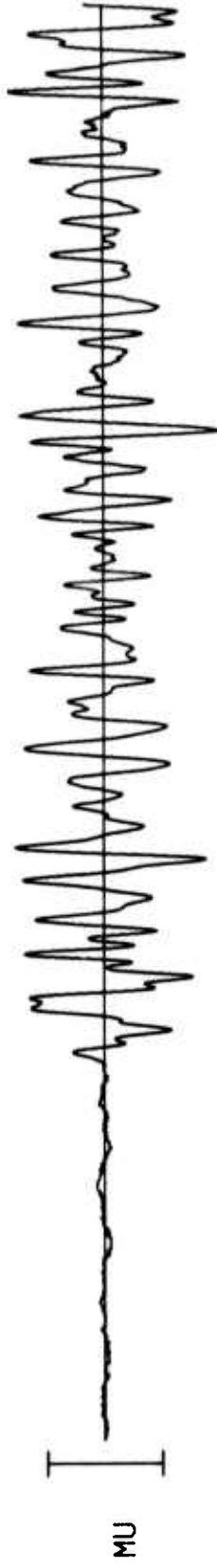


WH2YK 12 FEB 76



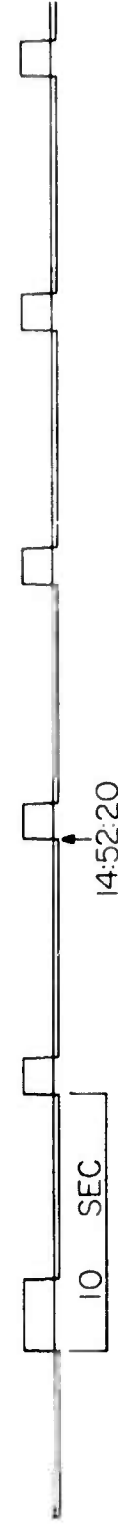
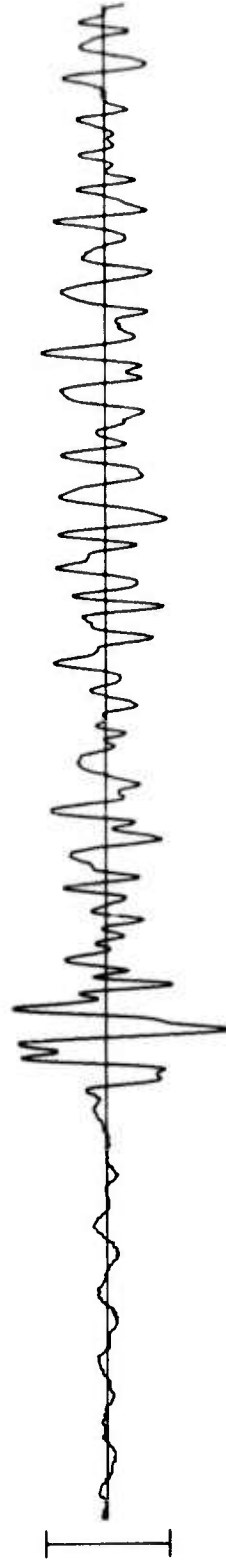
10 SEC

FN-WV 12 FEB 76



HN-ME 12 FEB 76

14:52:09.9



RK-ON 12 FEB 76

LPZ
UNKNOWN



LPR
UNKNOWN



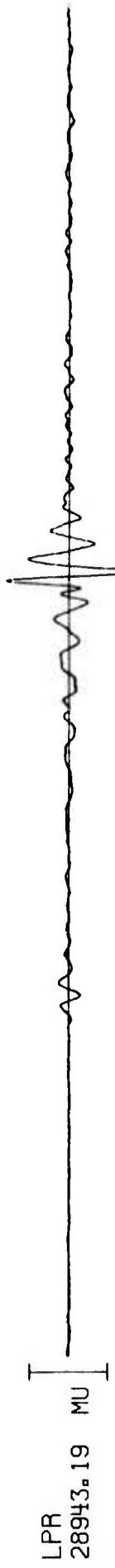
LPT
UNKNOWN



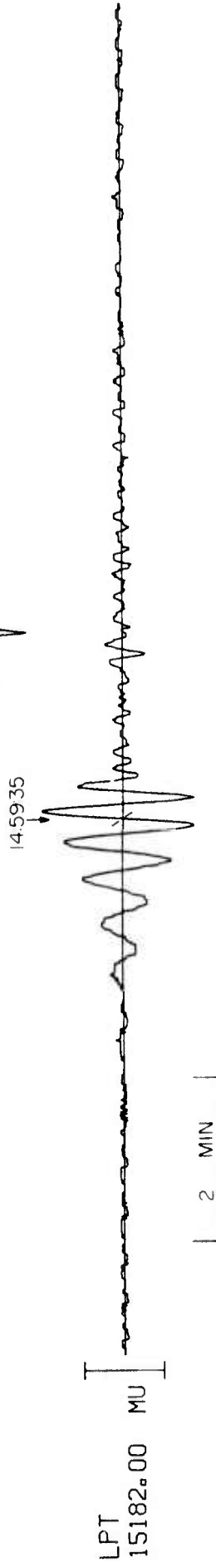
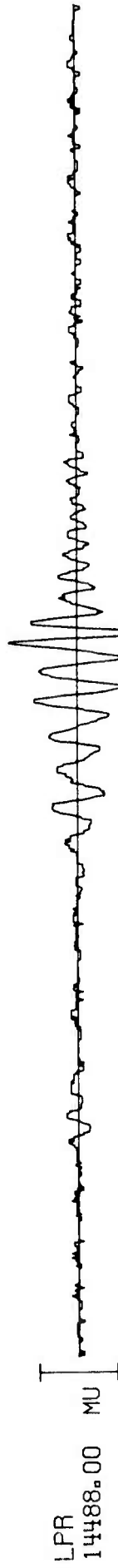
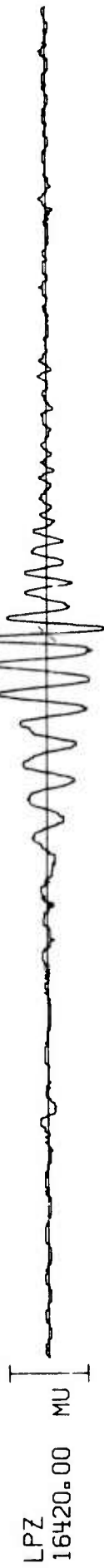
TIME



CPSO 12 FEB 76



WH2YK 12 FEB 76



FN-WV 12 FEB 76



HN-ME 12 FEB 76

