SPECIAL DATA COLLECTION SYSTEM (SDCS) EVENT REPORT, KURILE ISLANDS, 19 MAY 1975

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Teledyne Geotech

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SPECIAL DATA COLLECTION SYSTEM EVENT REPORT
Kurile Islands, 19 May 1975

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January 1976

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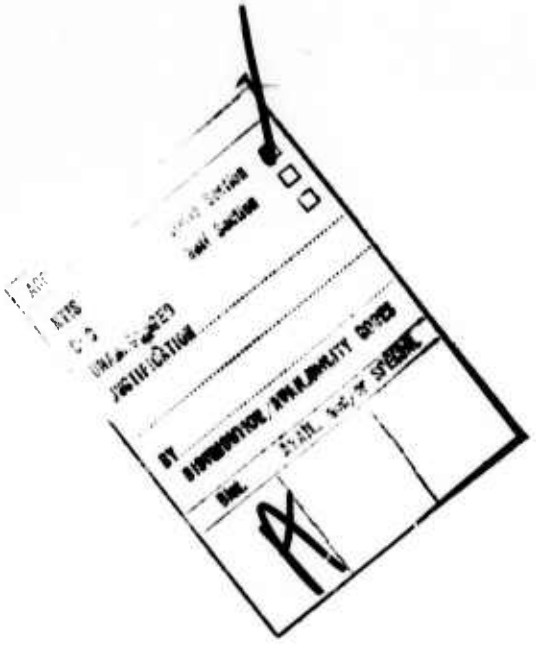

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SDCS EVENT REPORT NO. 56

Kurile Islands, 19 May 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	22:53:01.3	22:42:14	49 N	156 E	5.7	N/A
LASA	22:52:19.0	22:42:14	50.3N	156.1E	5.7	N/A
PDE		22:42:14.2	49.7N	157.5E	5.4	N/A
Hagfors	22:53:02.0	22:42:33	53 N	156 E	5.7	4.4

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

22:42:06.3	48.9N	156.8E	5.3	4.2

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, LASA and NORSAR. CPSO short-period data were not recoverable from the analog tape. Horizontal SP channels at WH2YK, RK-ON, and HN-ME were rotated. Horizontal SP channels at FN-WV were not rotated because of unknown instrument orientation.*

Long-period signals were recorded at WH2YK, RK-ON, FN-WV, ALPA, LASA and NORSAR. HN-ME did not record long-period signal arrivals and was not included in this report. CPSO long-period data were not recoverable from the analog tape. Horizontal LP channels at RK-ON and WH2YK were rotated. Horizontal LP channels at FN-WV were not rotated because of unknown instrument orientation.* Validity of the ALPA, LASA and NORSAR long-period vertical beams is questionable and horizontal beams were not included because of program recovery problems.

Scaling factors on plots are millimicrons at 1 Hz (not corrected for instrument response) with the exception of LASA and NORSAR short-period plots. LASA SP scaling factors are millimicrons per inch. Scaling factors are not reported for NORSAR short-period.

* Due to operational problems the instrument hole lock was repositioned and the known orientation lost. Situation corrected 24 May 75 when the instrument was moved to a new borehole.

STATION DESCRIPTION

SITE CODE	LOCATION	SITE COORDINATES DEG MN SECS	ELEVATION METERS	INSTRUMENTATION 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	213	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 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

HYPOCENTER DETERMINATION

INPUT FOR EVENT 19 MAY 75
22:42:14.0 50.300N 150.100E 0KM.

STA.	ARRIVAL	RESIDUALS CALC	RESIDUALS REST	DIST. REST	AZ. REST
WH2YK	22 49 35.5	0.0	0.1	39.2	46.2
IAC	22 52 19.0	0.3	0.9	60.7	51.6
RK-CN	22 52 38.3	-0.5	-0.8	63.8	41.7
NAC	22 53 01.3	-0.[illegible]	0.2	67.2	342.7
HM-ME	22 54 03.2	0.5	-0.1	77.6	30.1
FN-WV	22 54 14.7	-0.4	-0.3	79.7	41.5

67 HERRIN TRAVEL TIME TABLES

ORIGIN	LAT.	LONG.	DEPTH (KM)	SDV	IT	STA
22:42:40.4	50.399N	157.450E	225. CALC	0.4	6	6
22:42:06.3	48.891N	156.798E	0. REST	0.6	4	6

CALC

```
    1 . 0
  0   .   5
0    0. 0   0
. . . . . . .
C    0. 0   0
  0   .   0
    0 . 0
```

REST

```
    1 . 0
  0   .   5
0    0. 0   0
. . . . . . .
0    0. 0   0
  0   .   0
    0 . 0
```

CHI2 COVERAGE ELLIPSE; 95 PER CENT CONF..LEVEL, SDV= 0.99
MAJOR 168.9KM. MINOR 41.9KM. AZ= 8 AREA= 22253 SQ.KM. REST

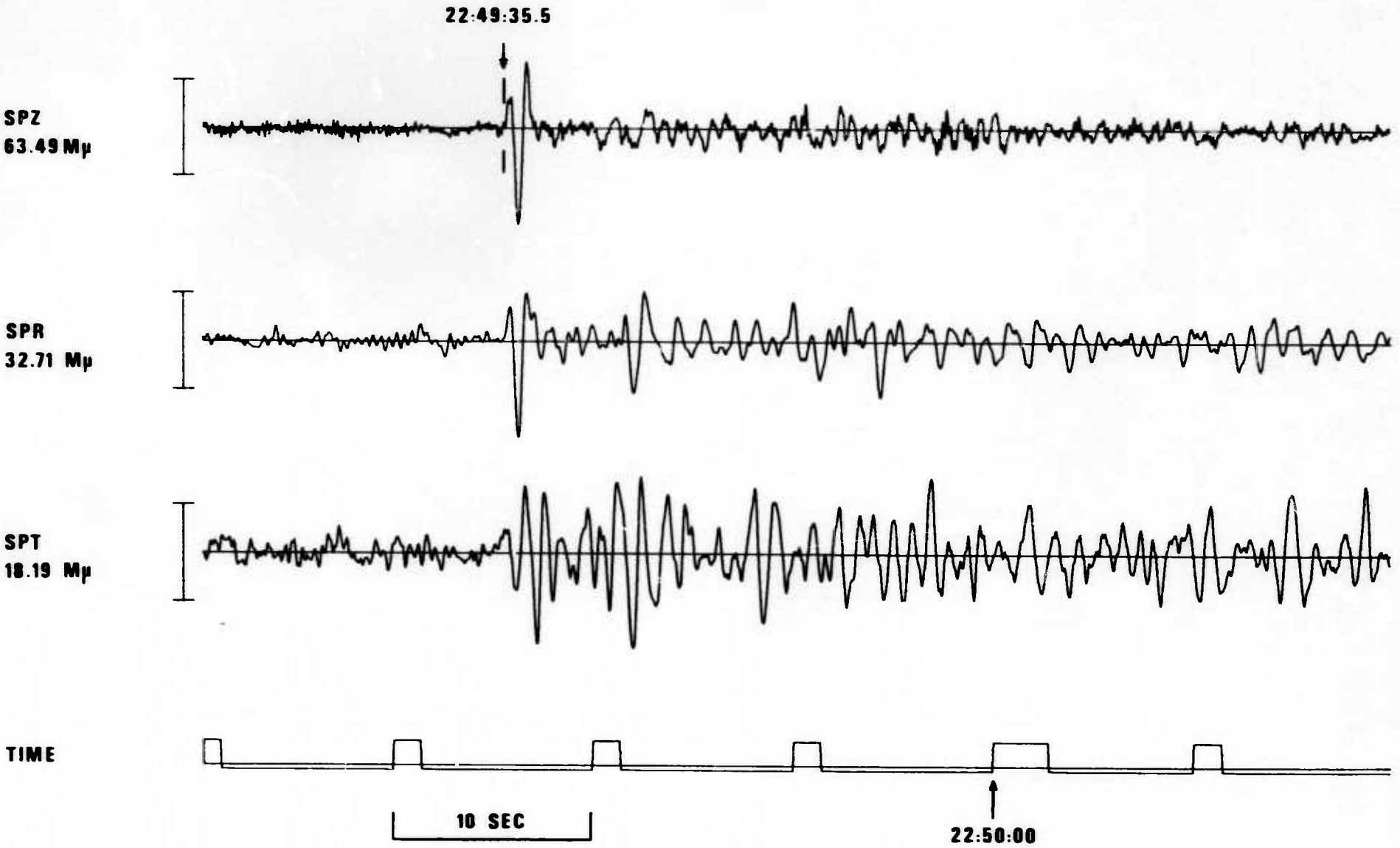
DATA SUMMARY

INPUT FOR EVENT 19 MAY 75
22:42:14.0 50.300N 156.100E 0KM.

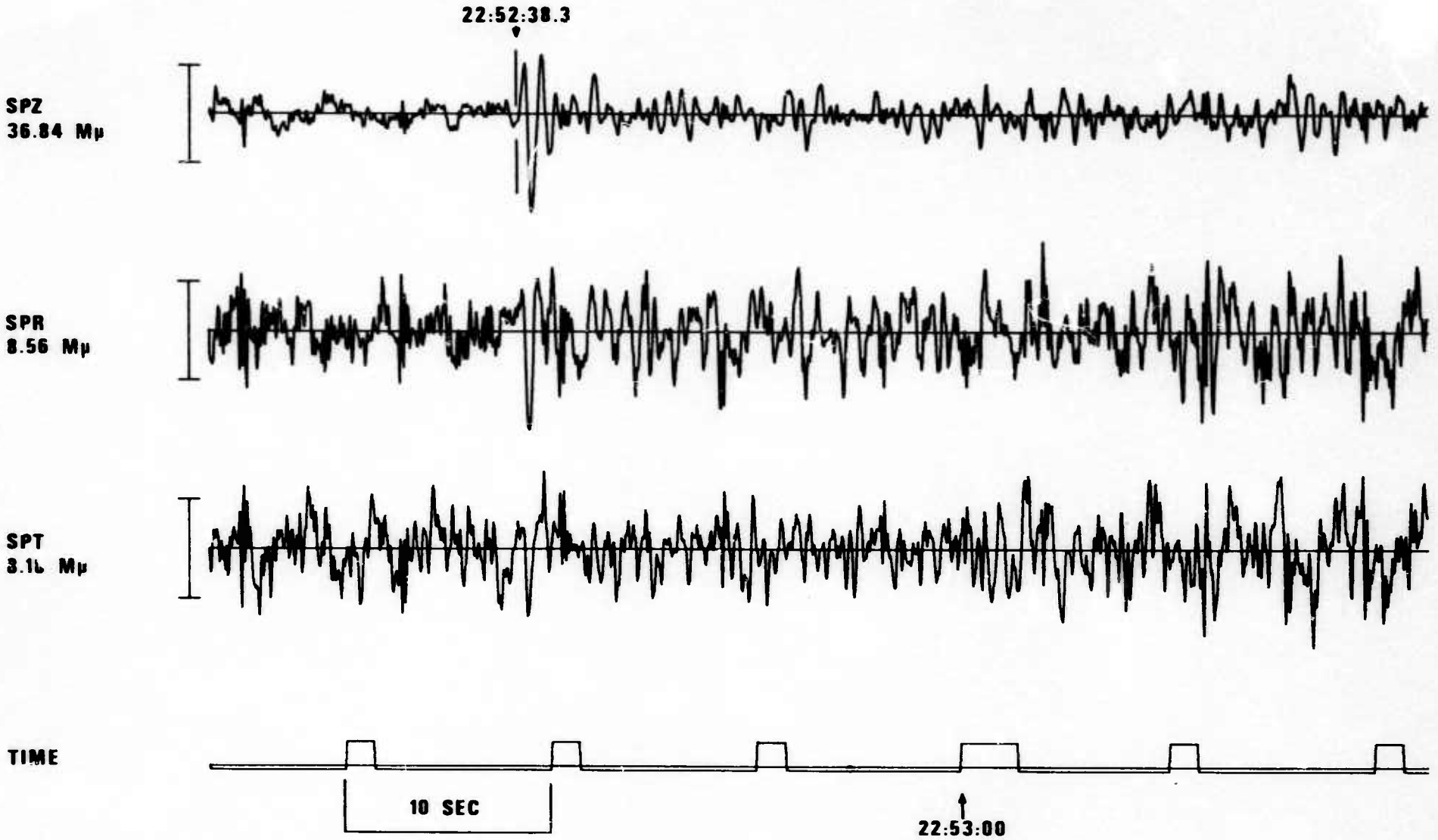
STA.	PHASE	ARRIVAL TIME	INSI	PER	A/T	MAGNITUDE MB	MS	DIR	DIST
AIPA	IR	23 01 32.0	IPZ	23.0	12.		3.72		33.0
WH2YK	EP	22 49 35.5	SPZ	0.8	78.	4.99			39.2
WH2YK	IR	23 04 40.0	IPZ	22.0	39.		4.30		39.2
IAC	EP	22 52 19.0	AE	0.9	92.	5.53			60.7
IAC	IR	23 21 00.0	IPZ	20.0	23.		4.26		60.7
FK-CN	EP	22 52 38.3	SPZ	0.8	43.	5.32			63.8
FK-CN	IR	23 21 46.0	IPZ	22.0	35.		4.47		63.8
NAC	EP	22 53 01.3	AE	0.8	132.	5.82			67.2
NAC	IR	23 27 57.0	IPZ	19.0	17.		4.18		67.2
HN-ME	EP	22 54 03.2	SPZ	0.9	55.	5.34			77.6
FN-WV	EP	22 54 14.7	SPZ	0.7	36.	4.99			79.7
FN-WV	IR	23 31 36.0	IPZ	20.0	22.		4.36		79.7

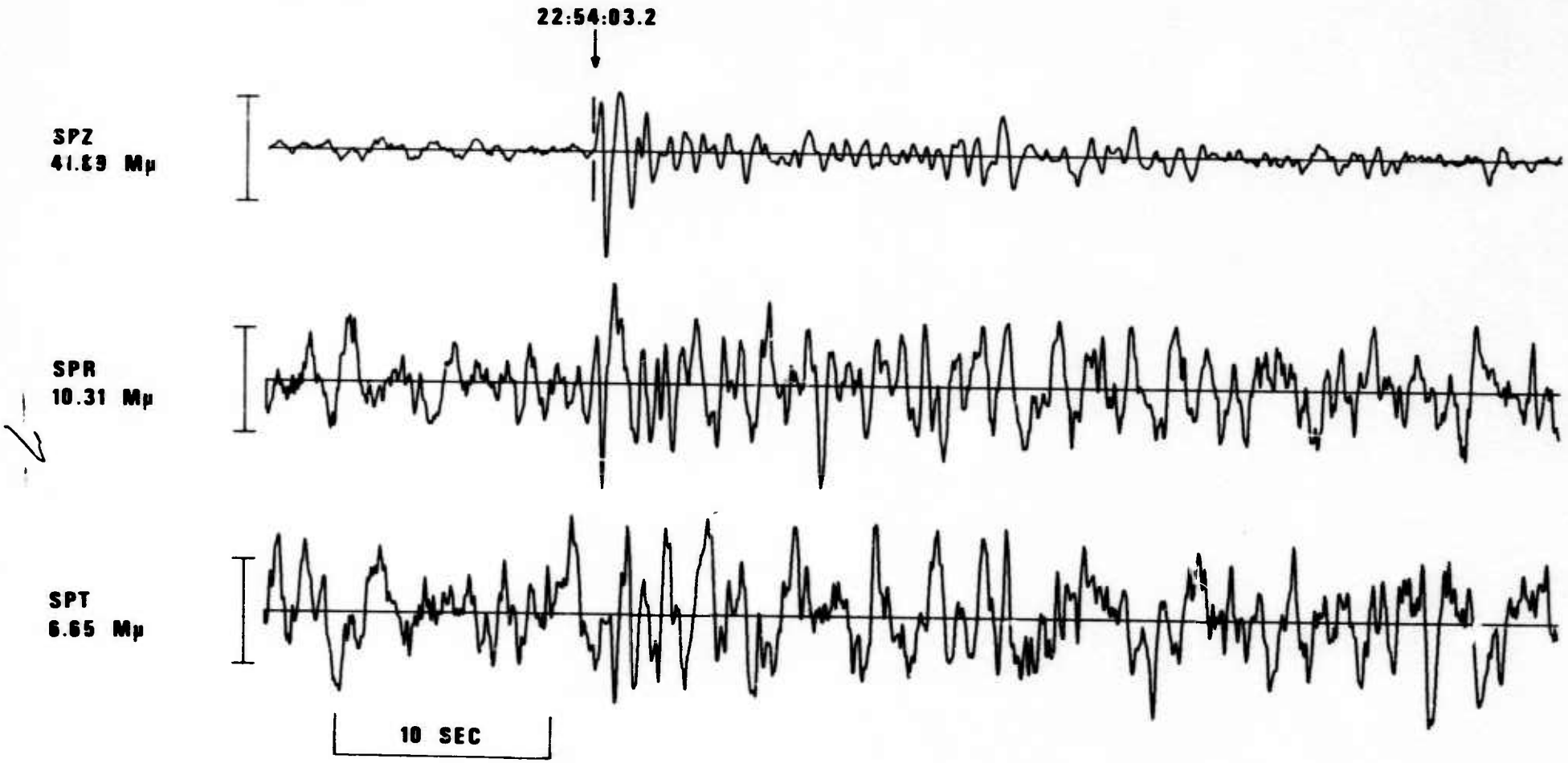
ORIGIN	LAT.	LONG.	DEPTH (KM)	MAG	SDV	STA	LPMAG	LPSDV	IPSTA
22:42:40.4	50.399N	157.450E	225. CALC	4.97	0.21	6	4.20	0.3	6
22:42:06.3	48.891N	156.798E	0. REST	5.33	0.32	6	4.22	0.3	6

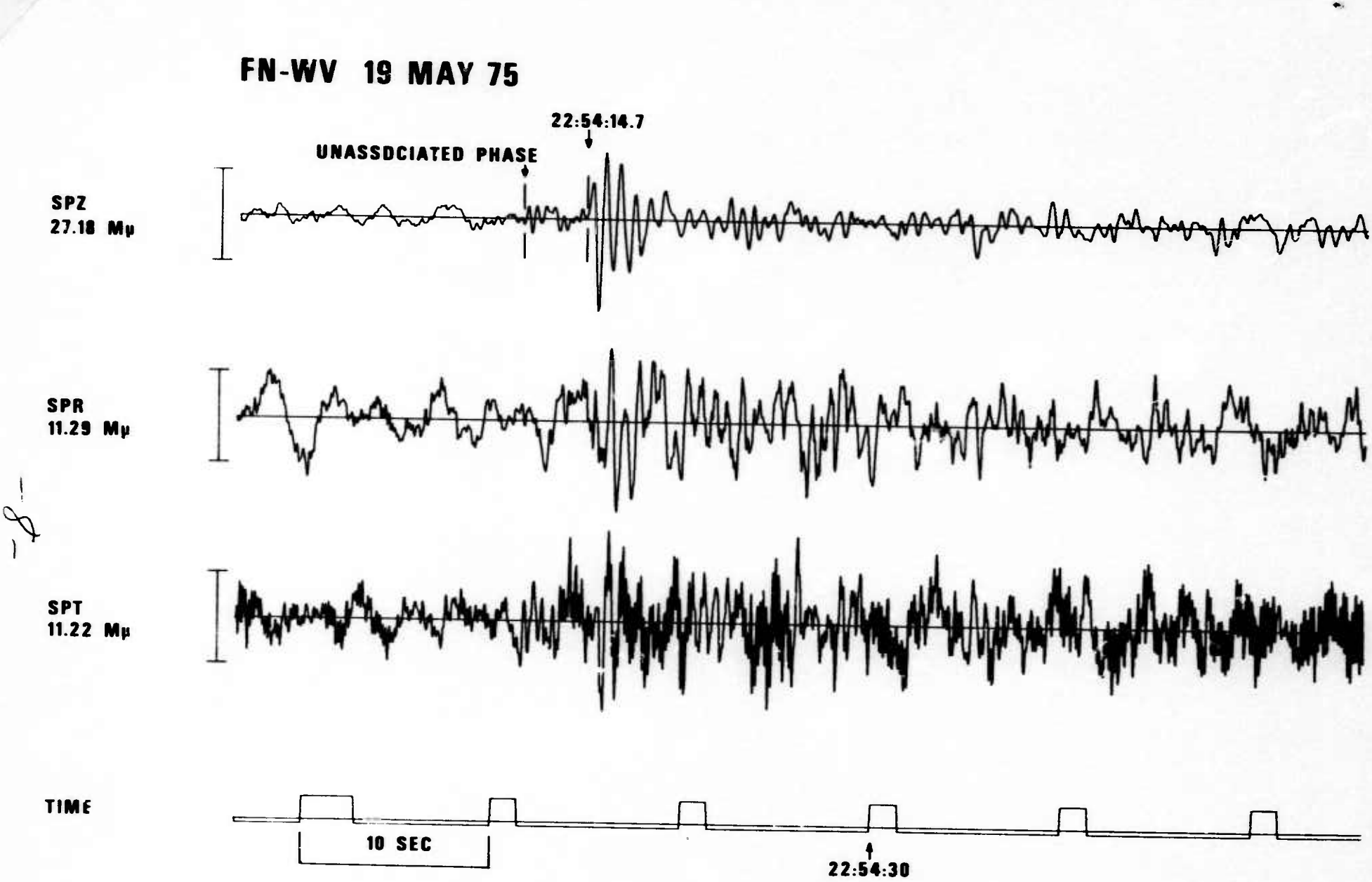
WH2YK 19 MAY 75



RK-ON 19 MAY 75

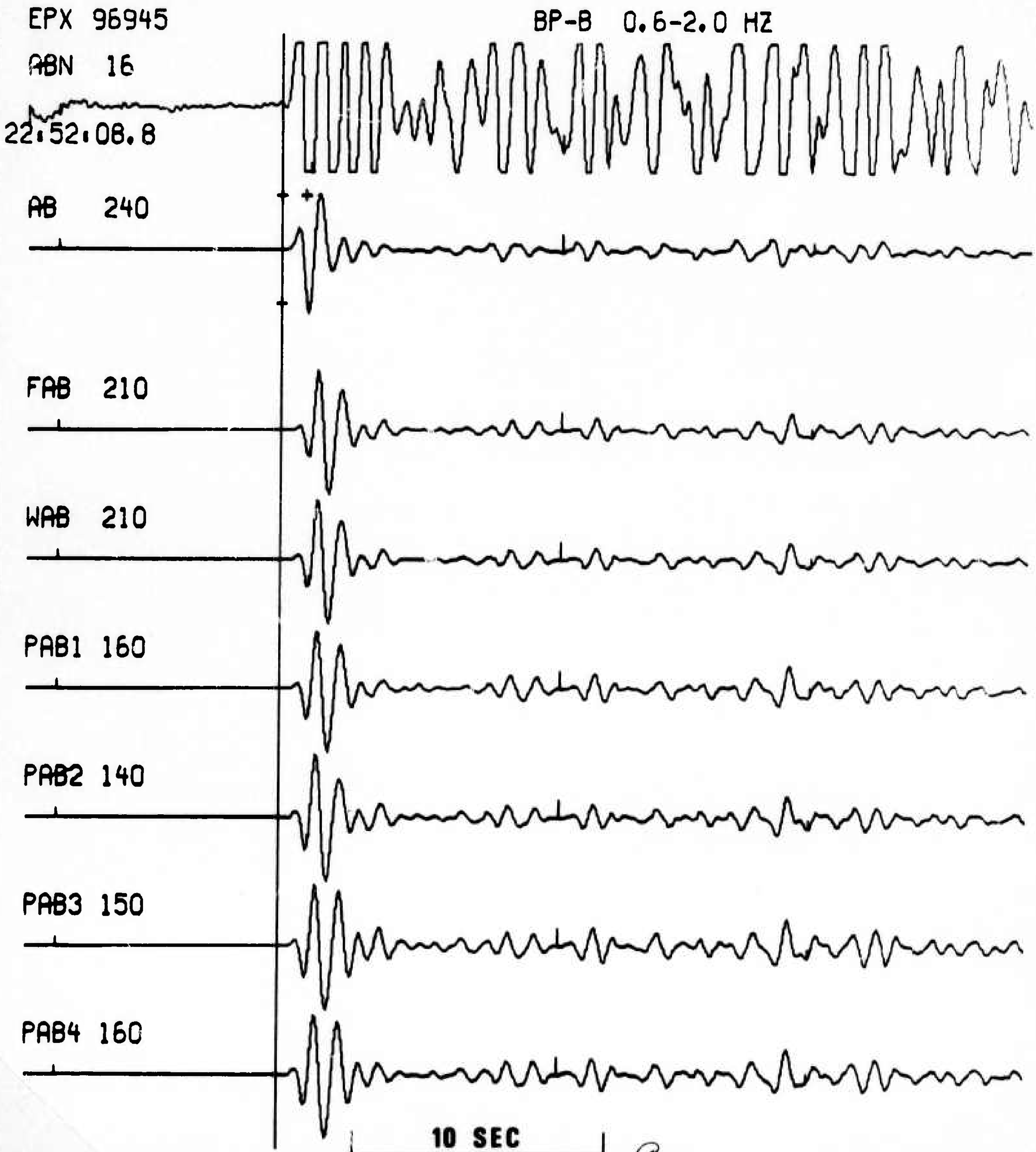



HN-ME 19 MAY 75
22:54:03.2
SPZ
41.89 Mμ
SPR
10.31 Mμ
SPT
6.65 Mμ
10 SEC


FN-WV 19 MAY 75
22:54:14.7
UNASSOCIATED PHASE
SPZ
27.18 Mμ
SPR
11.29 Mμ
SPT
11.22 Mμ
TIME
10 SEC
22:54:30

LASA

1 19 MAY 1975
2 22 42 14 50.3N 156.1E 33C C 5.7 221 KURILE ISLANDS
3 22 52 18.8 LAO P 109.4 1.0 16.3 60.2 313.0

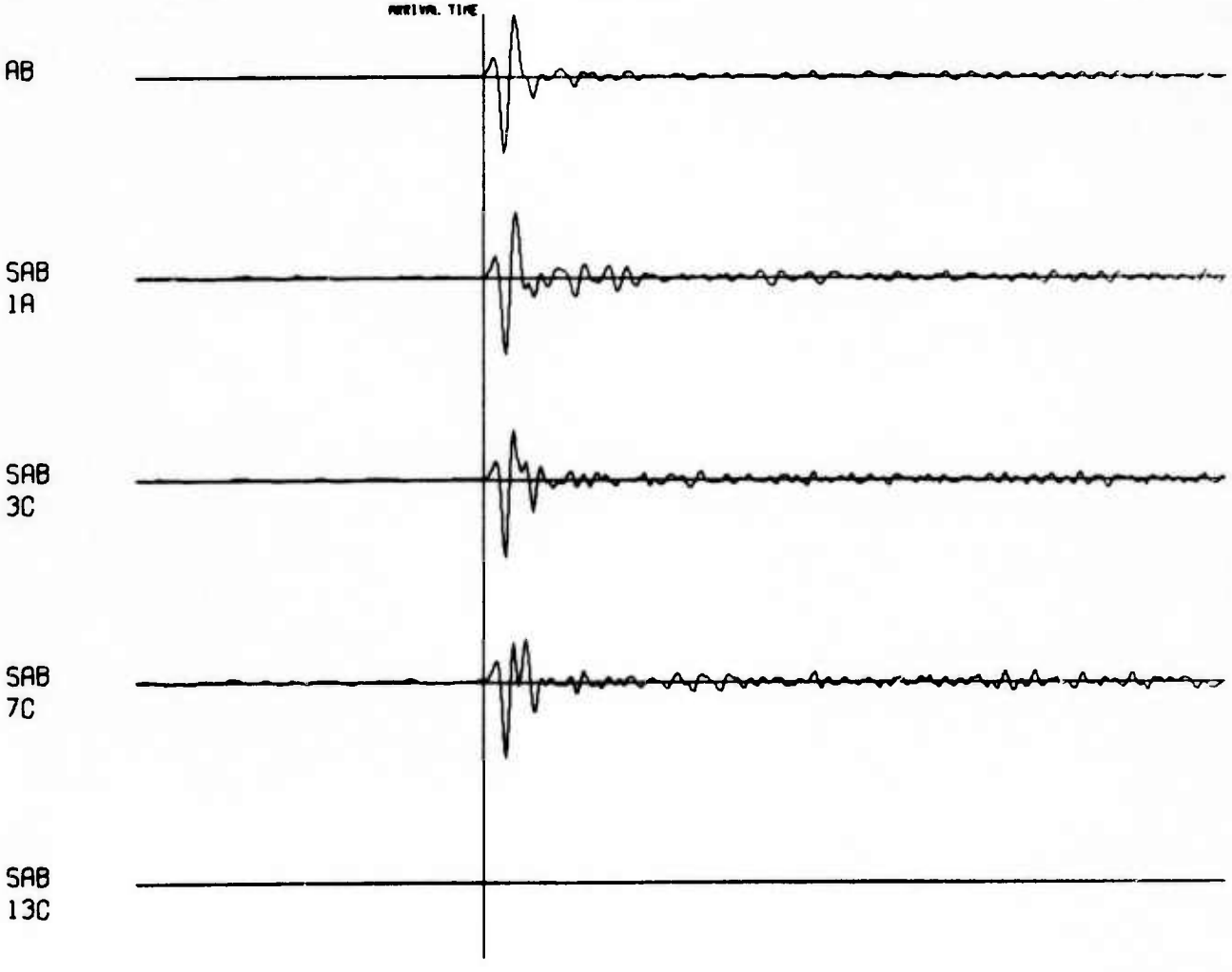


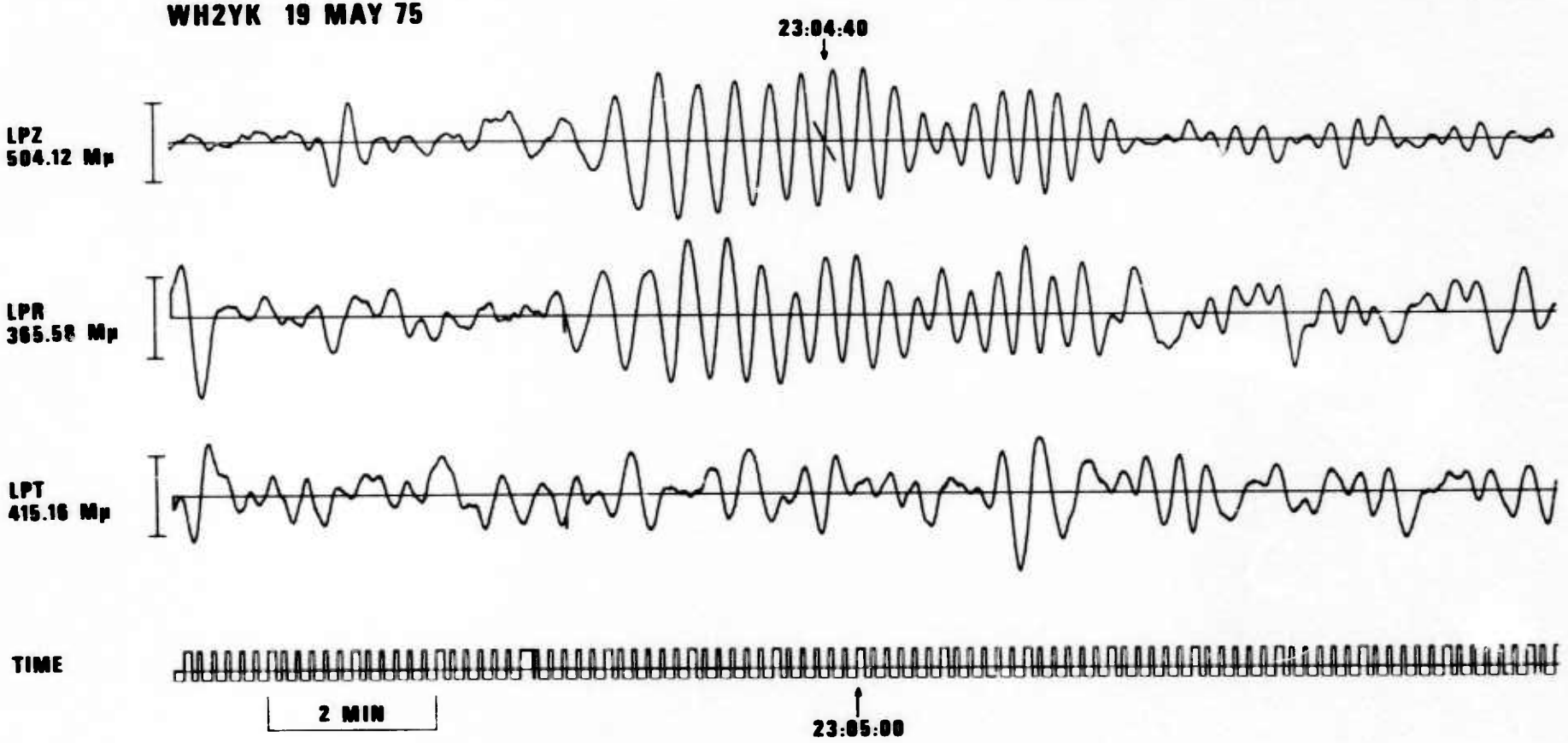
NORSAR EVENT FILE 1975 MAY 19

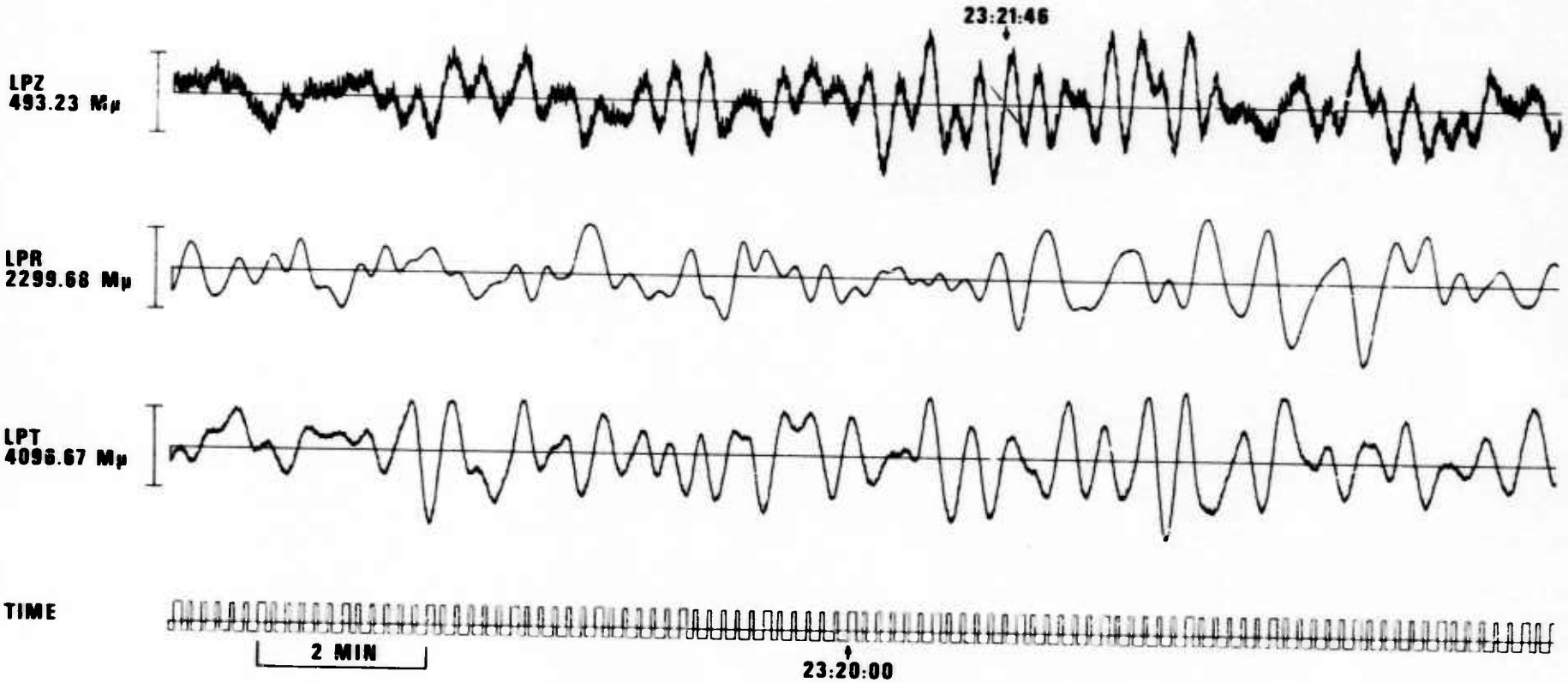
EPX NO. 51000 ARR. 22.53.1.4 49.3N 156.2E 5.6 B 33KM

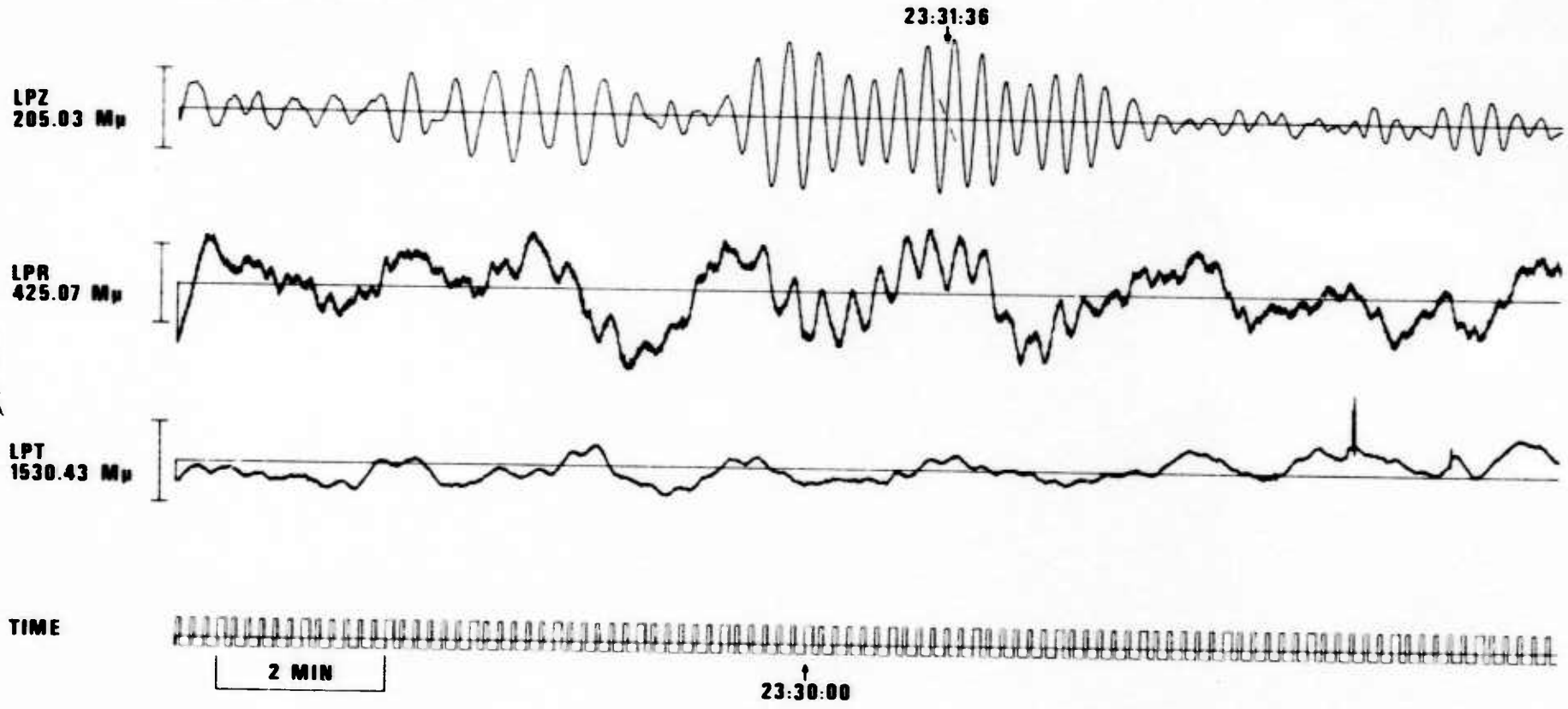
DIST = 66.7 AZI = 23.9 AMP = 78.6 PER = 1.1 UMETH 2

= 5 SECONDS




WH2YK 19 MAY 75
23:04:40
LPZ
504.12 Mμ
LPR
365.58 Mμ
LPT
415.16 Mμ
TIME
2 MIN
23:05:00


RK-ON 19 MAY 75
23:21:46
LPZ
493.23 Mμ
LPR
2299.68 Mμ
LPT
4096.67 Mμ
TIME
2 MIN
23:20:00


FN-WV 19 MAY 75
23:31:36
LPZ
205.03 Mμ
LPR
425.07 Mμ
LPT
1530.43 Mμ
TIME
2 MIN
23:30:00

ARRAY LONG PERIOD VERTICAL BEAMS 19 MAY 75