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ON
STRONG-MOTION RECORDS
No. 8 (1973)

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STRONG-MOTION EARTHQUAKE RECORDS
FROM
PUBLIC WORKS IN JAPAN (1973)
土木構造物における強震記録 (1973)

NOVEMBER 1974

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THE PUBLIC WORKS RESEARCH INSTITUTE
MINISTRY OF CONSTRUCTION

建設省土木研究所



PUBLICATIONS ON STRONG-MOTION RECORDS

The Public Works Research Institute has published the following reports on strong-motion earthquake records reproduced in full size. In the reports there are three kinds of series, ANNUAL REPORT, SPECIAL REPORT, and SUMMARIZED REPORT.

(I) ANNUAL REPORT: These reports are series of general ones published annually and contain almost all strong-motion records obtained during the period indicated in the title of each report.

- No. 1 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1961-1966), Technical Memorandum of P.W.R.I., No. 217, December, 1966.
- No. 2 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1967), Technical Memorandum of P.W.R.I., No. 341, February, 1968.
- No. 3 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1968), Technical Memorandum of P.W.R.I., No. 430, April, 1969.
- No. 4 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1969), Technical Memorandum of P.W.R.I., No. 641, March, 1970.
- No. 5 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1970), Technical Memorandum of P.W.R.I., No. 718, March, 1972.
- No. 6 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1971), Technical Memorandum of P.W.R.I., No. 718, March, 1973.
- No. 7 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (1972), Technical Memorandum of P.W.R.I., No. 913, March, 1974.

(II) SPECIAL REPORT: These reports are series of special ones on specified earthquakes or quake swarms published immediately after each quake. Usually these records are also contained in ANNUAL REPORT, but sometimes they are not contained.

- No. 1 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (THE MATSUSHIRO QUAKE SWARM, DECEMBER 9, 1965-FEBRUARY 28, 1966, THE OCHIAI BRIDGE), Technical Memorandum of P.W.R.I., No. 163, April, 1966.
- No. 2 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (THE MATSUSHIRO QUAKE SWARM, MARCH 1 - JUNE 22, 1966, THE OCHIAI BRIDGE), Technical Memorandum of P.W.R.I., No. 194, July 1966.
- No. 3 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (THE MATSUSHIRO QUAKE SWARM, JUNE 25 - DECEMBER 1, 1966, THE OCHIAI BRIDGE), Technical Memorandum of P.W.R.I., No. 254, March, 1967.

- No. 4 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (THE MATSUSHIRO QUAKE SWARM, MAY 27 - OCTOBER 23, 1966, THE SUSOBANA DAM), Technical Memorandum of P.W.R.I., No. 263, March, 1967.
- No. 5 STRONG-MOTION EARTHQUAKE RECORDS FROM PUBLIC WORKS IN JAPAN (THE MATSUSHIRO QUAKE SWARM, OCTOBER 8, 1966 - FEBRUARY 2, 1967, THE CHIKUMAGAWA EMBANKMENT), Technical Memorandum of P.W.R.I., No. 236, March 1967.

REFERENCES

The following references are available for utilization and evaluation of the records

- 1) Earthquake Resistant Structure Section: "Digitized Data of Strong-Motion Earthquake Records (No. 1)", (in Japanese) Technical Memorandum of the Public Works Research Institute, No. 317, March, 1968.
- 2) Earthquake Resistant Structure Section: "Digitized Data of Strong-Motion Earthquake Records (No. 2)", (in Japanese) Technical Memorandum of the Public Works Research Institute, No. 318, 1968.
- 3) Structure Section: "Examination on the Characteristics of a SMAC-B2 Accelerograph and an Underground Seismograph", (in Japanese) Technical Memorandum of P.W.R.I., No. 399, March, 1968.
- 4) Eiichi Kuribayashi, Toshio Iwasaki. "Observed Earthquake Responses of Bridges", 4th WCEE, Chile, January, 1969.
- 5) Earthquake Resistant Structure Section: "Digitized Data of Strong-Motion Earthquake Records (No. 3)", (in Japanese) Technical Memorandum of the Public Works Research Institute, No. 461, May, 1969.
- 6) Earthquake Resistant Structure Section: "Digitized Data of Strong-Motion Earthquake Records (No. 4)", (in Japanese) Technical Memorandum of the Public Works Research Institute, No. 877, December, 1973.
- 7) Earthquake Resistant Structure Section: "Digitized Data of Strong-Motion Earthquake Records Revision (No. 1 - No. 3)", (in Japanese) Technical Memorandum of the Public Works Research Institute, No. 876, December, 1973.



STRONG-MOTION EARTHQUAKE RECORDS
FROM
PUBLIC WORKS IN JAPAN (1973)

NOVEMBER 1974

THE PUBLIC WORKS RESEARCH INSTITUTE
MINISTRY OF CONSTRUCTION

Abstract

This memorandum reports strong-motion earthquake records of ground motions and responses of engineering structures such as highway bridges, tunnels, dams, and embankments administrated by Ministry of Construction, Public Corporations, Hokkaido Development Bureau and Regional Governments.

The photographs of major record traces of strong earthquakes occurred in and around Japan in 1973 are reproduced in full size. Also the maximum amplitudes of all seismograph records are presented.

Preface

Strong-motion earthquake record is most helpful to establish reasonable design methods of structures subjected to earthquake motions.

In 1960 the Public Works Research Institute proposed a recommendation to the Ministry of Construction on project of survey of ground motions and structural responses during strong-motion earthquakes. In response to the recommendation the Ministry gave the approval. Since then the project has obliged it to install instruments, to consult the way of installing and instrumentation, and to analyze and publish the records obtained.

Total number of SMAC type accelerographs (three component accelerometer) operated is one hundred and eighty nine and total number of the accelerometers is five hundred and sixty eight seven. Meanwhile, total number of electro-magnetic type accelerometers is two hundred and forty six.

Several reports reproducing record traces in full size have already published as shown inside front cover of this report. And some analyses have been done and these typical reports are shown in References.

The present report reproduces strong-motion seismograph records obtained from public works in Japan--such as highway bridges, tunnels, dams, and embankments--and on grounds near the structures during the year of 1973, and summarizes their maximum acceleration values.

The structures which served strong-motion seismographs are administrated by Ministry of Construction, Public Corporations, Hokkaido Development Bureau and Regional Governments.

December 1974

compiled by

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Acknowledgements

The present network of strong-motion instrumentation on public works in Japan is due to efforts of the staff of the Public Works Research Institute that have installed the instruments and serviced instrumentation since 1960. The purchase of the instruments has been a cooperative effort of the Regional Construction Bureaus of the Ministry of Construction, Regional Governments throughout Japan, Public Corporations (such as Japan Highway, Tokyo Expressway, Hanshin Expressway, and Water Resources Development), and Hokkaido Development Bureau under the general direction of the Public Works Research Institute.

We should mention the skill and care which has been put into the design and fabrication of the instruments by the members of SMEOC (Strong-Motion Earthquake Observation Committee established in 1951 in Japan) and the manufacturing companies.

The members dealing with field work made notable contributions to the success of the surveys.

Table 1. Strong-Motion Seismograph Stations for SMAC-Type Accelerographs,
Including Station Expected in Future

as of March, 1974

Station Number	Station (Name of Structure)	Number of Instruments	Seismograph Type	Location	Year & Month Installed
101	Shinkatsushika Bridge	2 (Ground 1, Pier 1)	SMAC-B2	Matsudo-City, Chiba-Pref.	1966-3
102	Yoneyama Ōhashi "	3 (Ground 1, Pier 2)	" "	Kashiwazaki-City, Niigata-Pref.	66-2, 66-5
103	Ajigawa Ōhashi "	3 (" 1, " 2)	" "	Benten-Chō, Minato-Ku, Ōsaka	1963-3
104	Shintonegawa "	2 (Ground 1, Pier 1)	SMAC-B2	Kurihashi-Chō, Saitama-Pref.	1967-2
105	Masaki Ōhashi "	2 (" 1, " 1)	SMAC-E2	Otobe, Tarō-Chō, Shimohei-Gun, Iwate-Pref.	1971-2
106	Soka "	2 (Ground 1, Pier 1)	SMAC-B2	Soka-City, Saitama-Pref.	1968-3
107	Ōiso "				*
108	Myoko "	2 (Ground 1, Pier 1)	SMAC-E2	Myok-Cho, Nakakubiki-Gun, Niigata-Pref.	1972-11
109	Ōhira "	2 (" 1, " 1)	SMAC-Q	Zuiho-ku, Nagoya-City, Aichi-Pref.	1974-3
110	Hijiyama "				*
111	Mimitsu "				*
112	Kinokawa Ōhashi "	2 (Ground 1, Pier 1)	SMAC-B2	Wakayama-City, Wakayama-Pref.	1967-3
113	Heiwa "	2 (" ")	SMAC-B2, D	Waga-Gun, Waga-Chō, Iwate-Pref.	69-3, 70-3
114	Amagasaki "	2 (" ")	SMAC-B2, C2	Amagasaki-City, Hyōgo-Pref.	1963-3
115	Sakuragawa "				*
201	Oya "	2 (Ground 1, Pier 1)	SMAC-B2	Aizuwakamatsu-City, Fukushima-Pref.	1965-3
202	Uonuma "	2 (" ")	" "	Ojiya-City, Niigata-Pref.	1965-12
203	Yokokurasawa "	2 (" ")	" "	Yokokura, Sakae-Mura, Nagano-Pref.	1965-10
204	Shinyawata "	2 (" ")	" "	Chita-Chō, Aichi-Pref.	1965-11
205	Ishiseto "	2 (" ")	" "	Nojiri-Chō, Miyazaki-Pref.	1965-3
206	Omigawa Ōhashi "	2 (" ")	" -E2	Omigawa-Cho, Katori-Gun, Chiba-Pref.	1973-3
207	Takatsu "	2 (" ")	SMAC-B2	Masuda-City, Shimane-Pref.	1967-3
208	Turusaki "				*
209	Zuikoji "	2 (Ground 2, Pier 1)	SMAC-Q	Yamaizu-Cho, Kawanuma-Gun, Fukushima-Pref.	1973-3
301	Yūhei "	2 (Ground 1, Pier 1)	SMAC-B2	Jumonji-Chō, Akita-Pref.	1966-12
302	Kaihoku "	2 (" ")	" "	Ishinomaki-City, Miyagi-Pref.	1966-3
303	Kahoku "	2 (" ")	" "	Sagae-City, Yamagata-Pref.	1965-3
304	Date "	2 (" ")	" "	Date-Chō, Fukushima-Pref.	1965-10
305	Minato Ōhashi "	2 (" ")	" "	Tsuiyama, Toyooka-City, Hyōgo-Pref.	1965-3
306	Myōken "	2 (" ")	" "	Nishisono-Chō, Izumo-City, Shimane-Pref.	66-3, 67-3
307	Godaisan "	2 (" ")	" "	Godaisan, Kōchi-City, Kōchi-Pref.	1966-3

Note: Stations with star-mark * are expected in future.

Table 1. (Continued)

Station Number	Station (Name of Structure)	Number of Instruments	Seismograph Type	Location	Year & Month Installed
308	Itajima Bridge	2 (Ground 1, Pier 1)	SMAC-B2	Uwajima-City, Ehime-Pref.	1966-3
309	Otomo "	2 (" ")	" "	Otome, Mifune-Chō, Kumamoto-Pref.	1965-3
310	Hirai "	3 (Ground 1, Pier 2)	" "	Hirai, Edogawa-Ku, Tōkyō	1965-8
311	Toyohama Ōhashi Bridge	2 (Ground 1, Pier 1)	" "	Ise-City, Mie-Pref.	1966-9
312	Akagi "	2 (" ")	" "	Kumanogawa-Chō, Wakayama-Pref.	1966-9
313	Ishizuchi "	2 (" ")	" "	Ishizuchi, Komatsu-Chō, Ehime-Pref.	1967-3
314	Kiyokawa "	2 (" ")	" "	Kiyokawa, Tachikawa-Chō, Yamagata-Pref.	68-10, 69-3
315	Shimpō "				*
316	Tsugaru Ōhashi Bridge	2 (Ground 1, Pier 1)	SMAC-D	Nakazato-Chō, Aomori-Pref.	1970-3
317	Sezume Bridge	2 (" ")	SMAC-B2	Yamakawa-Chō, Tokushima-Pref.	1967-3
318	Shinden "	2 (" ")	" -E2	Shinden-Cho, Okawa-City, Fukuoka-Pref.	1973-2
319	Shitoku Ōhashi Bridge	2 (" ")	SMAC-B2	Shitoku, Nakagawa-Mura, Nagano-Pref.	1966-12
320	Akkeshi Ōhashi "	2 (" ")	SMAC-E2	Akkeshi-Chō, Akkeshi-Gun, Hokkaidō	1971-11
401	Biwako Ōhashi "	1 (Box girder)	SMAC-B2	Katada-Chō, Shiga-Pref.	1964-9
402					*
501	Tōkyō Bay (Futtu Cape)	1 (Ground)	SMAC-B2	Futtu-Chō, Chiba-Pref.	1965-10
502	Kanmon Bridge	2 (Ground 2)	" "	Yamaguchi-Pref. & Fukuoka-Pref.	1965-10
503	Tōkyō Bay (Kannonzaki)	1 (Ground)	" "	Yokosuka-City, Kanagawa-Pref.	1967-3
601	Muromaki Dam	1 (Dam)	SMAC-B2	Yatsuo-Chō, Nei-Gun, Toyama-Pref.	1961-8
602	Yokoyama "	2 (Rock 1, Dam 1)	" "	Fujihashi-Mura, Gifu-Pref.	1964-6
603	Sarutani "	1 (Ground)	SMAC-A	Ōtō-Mura, Yoshino-Gun, Nara-Pref.	1958-3
604	Amagase "	1 (Dam)	SMAC-B2	Ujikaneido, Uji-City, Kyōto-Pref.	1964-8
605	Susobana "	2 (Rock 1, Dam 1)	SMAC-B2, D	Konabe, Nagano-City, Nagano-Pref.	66-5, 69-12
606	Tsuruta "	2 (Ground 1, Dam 1)	SMAC-D	Tsuruta-Chō, Kagoshima-Pref.	1968-12
607	Kanayama "				*
608	Ōishi "	1 (Ground)		Arakawa-Chō, Iwafune-Gun, Niigata-Pref.	1973-8
609					*
610	Koshibu "	2 (Rock 1, Dam 1)	SMAC-D	Nakagawa-Mura, Nagano-Pref.	1968-12
611	Saigawa "				*
612	Kimigano "				*

Table 1. (Continued)

Station Number	Station (Name of Structure)	Number of Instruments	Seismograph Type	Location	Year & Month Installed
613					*
614					*
701	Yodogawa Embankment	2 (Ground 1, Emb. 1)	SMAC-B2	Shin-Machi, Hirakata-City, Ōsaka-Pref.	1966-3
702	Tōkyō "				*
703	Niigata Diversion Weir	2 (Ground 1, Dam 1)	SMAC-E2	Niiura-Town, Niigata-City, Niigata-Pref.	1971-11
704	Okayama Embankment				*
705					*
801	Ariake Sea Embankment	1 (Ground)	SMAC-B2	Daijugarami, Higashiyoka-Chō, Saga-Pref.	1965-8
802	Aomori				*
803	Toyama				*
804	Kanazawa				*
805	Okayama				*
806					*
901	P. W. R. I., Chiba Branch	3 (Ground)	SMAC-B2 2, Q. 1	Anagawa, Chiba-City, Chiba-Pref.	62-3 (73-2)
902	Nishiarai Bridge	3 (Ground 1, Pier 2)	" "	Nishiarai-Chō, Adachi-Ku, Tōkyō	1962-3
903	Shōwa Ōhashi "	2 (" Pier 1)	" "	Niigata-City, Niigata-Pref.	1965-1
904	Shintenryugawa "	2 (" ")	" " , Q	Toyoda-Mura, Iwate-Gun, Shizuoka-Pref.	1964-12
905	Ochiai "	3 (Ground 2, ")	" "	Nagano-City, Nagano-Pref.	1965-12
906	P. W. R. I., Kashima	1 (Ground)	" "	Kashima-Gun, Ibaragi-Pref.	1967-3
907	Taira Bridge	2 (Ground 1, Abutment 1)	" "	Taira, Iwaki-City, Fukushima-Pref.	1968-1
908	Honjō "				*
909	Miyako				*
910	Hachinohe				*
911	Takamatsu				*
912	Miyazaki				*
1001					*
1002	Fujikawa Bridge	2 (Ground 1, Pier 1)	SMAC-B2	Fuji-City, Shizuoka-Pref.	1967-3
1003	Hamanako "	2 (" ")	SMAC-D	Inase-Gun, Shizuoka-Pref.	68-12, 69-3
1004	Sakaigawa "	2 (" ")	SMAC-B2	Uenohara-Chō, Yamanashi-Pref.	1967-3

Table 1. (Continued)

Station Number	Station (Name of Structure)	Number of Instruments	Seismograph Type	Location	Year & Month Installed
1005	Ubakubo Bridge	2 (Ground 1, Pier 1)	SMAC-B2	Ubakubo, Hino-City, Tōkyō	1967-3
1006	Tsurukawa "	2 (" ")	" "	Uenohara-Chō, Yamanashi-Pref.	1967-3
1007	Toyokawa Bridge	2 (" ")	" "	Ichinomiya-Chō, Hoi-Gun, Aichi-Pref.	1968-3
1008	Urato "	3 (Ground 1, Pier 2)	SMAC-E2	Urato-Town, Kōchi-City, Kōchi-Pref.	1972-3
1009	Sakawagawa "	2 (Ground 1, Pier 1)	SMAC-D	Ashigarakami-Gun, Kanagawa-Pref.	1969-3
1101	Meguro-Ku Ōhashi (Route 3)	2 (" ")	SMAC-E2	Aobadai, Meguro-Ku, Tōkyō	1972-1
1102	Suginamiku Shimotakaido (Route 4)	3 (Ground 1, Pier 2)	" "	Shimotakaidō, Suginami-Ku, Tōkyō	1972-1
1103	Sumidaku Tsutsumidoori (Route 6)	2 (Ground 1, Pier 1)	" "	Tsutsumidoori, Sumida-Ku, Tōkyō	1972-1
1104	Gokokuji-Kanrisho Building	2 (1st Floor, 9th Floor)	" "	3-26-9, Mejirodai, Bunkyo-Ku, Tokyo	1972-5
1105					*
1106					*
1107					*
1108	Ichinohashi Bridge	2 (Ground 1, Pier 1)	SMAC-B2	Azabu, Minato-Ku, Tōkyō	1967-7
1109	Haneda Undersea Tunnel	3 (Ground 1, Tunnel 2)	" "	Ōmoriminami-Chō, Ōta-ku, Tōkyō	1968-2
1201	Nishiyokobori Bridge	2 (Ground 1, Pier 1)	SMAC-B2	Minamisumiya-Machi, Minami-Ku, Osaka	1965-3
1202	Ikue-Chō, Asahi-Ku				*
1203	Minamitsumori Bridge	2 (" ")	SMAC-D	Tsumori-Chō, Nishinari-Ku, Osaka	1970-3
1301	Civil Engineering Research Institute				moved
1302	Chiyoda Bridge	3 (Ground 1, Pier 2)	SMAC-B2	Makubetsu-Chō, Nakagawa-Gun, Tokachi	1966-11
1303	Shin-ishikari "	2 (Ground 1, Pier 1)	" "	Tsuishikari, Ebetsu-City, Ishikari	67-8, 68-11
1304	Otanoshike "	2 (" ")	" "	Otanoshike, Kushiro-City, Kushiro	1967-10
1305	Horoman "	2 (" ")	" "	Horoman, Samani-Chō, Samani-Gun, Hidaka	1967-12
1306	Asahikawa "	2 (" ")	" "	Kamui-Chō, Asahikawa-City, Kamikawa	68-11, 69-3
1307	Shichihō "	2 (" ")	" "	Yunosato, Shiriuchi-Chō, Kamiiso-Gun, Oshima	1968-11
1308	Ishikarikakō "	3 (Ground 1, Pier 2)	" "	Yasuba, Ishikari-Chō, Ishikari-Gun, Ishikari	1970-3
1309	Muine "	2 (Ground 1, Pier 1)	SMAC-D	Jōzankei, Sapporo-City, Ishikari	1969-10
1310	Syari "	2 (" ")	SMAC-D, E2	Toyokura, Syari-Chō, Syari-Gun, Abashiri	1970-1
1311	Isoya "	2 (" ")	SMAC-D	Minato-Town, Isoya-Gun, Shiribeshi, Hokaido	1970-11

Table 1. (Continued)

Station Number	Station (Name of Structure)	Number of Instruments	Seismograph Type	Location	Year & Month Installed
1312	Toukei Bridge	2 (Ground, Pier)	SMAC-E2	Mashike-Town, Mashike-Gun, Hokaido	1971-11
1313	Koetoi "	2 (" , Abutment 1)	" -B2	Wakkanai-City, Hokkaido	1972-11
1314	Shibushi "	2 (" , Pier)	" - "	Shibushi, Yuubetsu-Cho, Monbetsu-Gun, Hokkaido	1972-12
1401	Tonegawa Estuary Dam	2 (Ground 1, Dam 1)	SMAC-D	Tōnosyō-Chō, Katori-Gun, Chiba-Pref.	1969-3
1501	Iwaya	1 (Ground)	SMAC-B	Iwaya, Awaji-Chō, Tsuna-Gun, Hyōgo-Pref.	1962-10
1502	Akashi	1 (1st Floor)	SMAC-B2	Hitomaru-Chō, Akashi-City, Hyōgo-Pref.	"
1503	Ōmishima	1 (Ground)	SMAC-B	Kamiura-Town, Koshichi-Gun, Ehime-Pref.	1971
1504	Naruto	1 (")	" "	Tosadomariura, Naruto-Chō, Naruto-City, Tokushima	1963-3
1505	Bannosu	1 (")	" "	Kawasaki-Town, Sakaide-City, Kagawa-Pref.	1971-8
1506	Takamatsu	1 (")	" "	Hamano-Cho, Takamatsu-City, Kagawa-Pref.	"

Table 4. Number of Strong-Motion Seismograph Stations
and that of Instruments in Relation to the Variety of Structures

Operated as of March, 1974

Variety of Structure		Number of Stations		Number of Instruments		
		SMAC	Electro- Magnetic- type Seismograph	Number of SMAC		Number of Components of Electro- Magnetic- type Seismograph
				Ground	Struc- ture	
Bridge		72	13	74	79	136
Tunnel		1	-	1	2	-
Dam	Concrete	8	14	6	6	120
	Fill-type	-	3	-	-	24
Embank- ment	River	3	5	2	4	43
	Coast	-	-	-	-	-
Future Structure Site		9	8	9	-	97
Others		3	1	4	2	9
Total		96	45	96	93	429

別表 所有者別・会計別にみた強震計台数

1974.3

会計 所有者	一 会	般 計	道 特	路 会	海 特	岸 会	治 特	水 会	都 県	公 団	北海道 開発局	合 計
地 方 建設局	-	-	28	-	1	-	14	-	-	-	-	43
土 木 研究所	8	-	8	-	-	-	-	-	-	-	-	16
都 県	-	-	-	-	-	-	-	-	59	-	-	59
5 公団	-	-	-	-	-	-	-	-	-	43	-	43
北海道 開発局	-	-	-	-	-	-	-	-	-	-	28	28
合 計	8	-	36	-	1	-	14	-	59	43	28	189

Table 2. Strong-Motion Seismograph Stations with Electro-Magnetic Type Seismographs

as of March, 1974

Station Number	Station (Name of Structure)	Number of Components	Location	Year Installed
01	Yuda Dam	6, (Accelerometer)	Waga-Chō, Waga-Gun, Iwate-Pref.	1965
02	Minase "	6, (")	Minase-Mura, Okachi-Gun, Akita-Pref.	1963
03	Narugo "	8, (Displacementmeter)	Narugo-Chō, Tamazukuri-Gun, Miyagi-Pref.	1957
04	Kawamata "	10, (Accelerometer)	Kuriyama-Mura, Shioya-Gun, Tochigi-Pref.	1964
05	Muromaki "	12, (9 Acc. and 3 Disp.)	Yatsuo-Chō, Nei-Gun, Toyama-Pref.	1961
06	Sasaogawa "	10, (4 Acc. and 6 Disp.)	Nishitani-Mura, Ōno-Gun, Fukui-Pref.	1966
07	Yokoyama "	12, (7 Acc. and 5 Disp.)	Fujihashi-Mura, Ibi-Gun, Gifu-Pref.	1962
08	Amagase "	12, (Accelerometer)	Ujikaneido, Uji-City, Kyōto-Pref.	1964
09	Sarutani "	5, (2 Acc. and 3 Disp.)	Ōtō-Mura, Yoshino-Gun, Nara-Pref.	1957
10	~~Ayakita "~~	~~6, (Accelerometer)~~	~~Suki-Mura, Nishimorokata-Gun, Miyazaki-Pref.~~	1961 △
11	Shinkatsushika Bridge	6, (3 Acc. and 3 Earth-pressure)	Matsudo-City, Chiba-Pref.	1967
12	Suruga "	6, (Accelerometer)	Minamiabe, Shizuoka-City, Shizuoka-Pref.	1959
13	~~Yoshida "~~	~~6, (")~~	~~Toyohashi-City, Aichi-Pref.~~	1959 △
14	~~Honshu-shikoku (Tarumi)~~	~~16, (11 Acc. and 5 Disp.)~~	~~Tarumi-Ku, Kobe-City, Hyogo-Pref.~~	1972 △
15	" sakaide (Bannosu)	12, (9 Acc. and 3 Disp.)	Sakaide-City, Kagawa-Pref.	1973
16	Biwako Ohashi Bridge	6, (2 Acc. and 4 Disp.)	Katada-Chō, Shiga-Pref.	1963
17	Wakato "	18, (Accelerometer)	Wakamatsu-Ku, Kitakyushu-City, Fukuoka-Pref.	1961
18	Ariake-Sea Embankment (Ōyano Jima)	3, (")	Ōyanō-Cho, Amakusa-Gun, Kumamoto-Pref.	1963
19	Toyokawa "	8, (4 Acc. and 4 Disp.)	Toyohashi-City, Aichi-Pref.	1966
20	Tonegawa "	9, (6 Acc. and 3 Disp.)	Kurihashi-Chō, Saitama-Pref.	1968
21	Ōtagawa "	8, (4 Acc. and 4 Disp.)	Hiroshima-City, Hiroshima-Pref.	1965
22	Nagano (Under ground)	9, (Accelerometer)	Nagano-City, Nagano-Pref.	1966
23	~~Hirai Bridge~~	~~8, (5 Acc. and 3 Earth-pressure)~~	~~Hirai, Edogawa-Ku, Tokyo~~	1967 △
24	Shijushida Dam	9, (Accelerometer)	Shimokuriyagawa, Morioka-City, Iwate-Pref.	1967
25	Onomichi Bridge	11, (")	Mukaihigashi-Chō, Mitsugi-Gun, Hiroshima-Pref.	1968
26	Saigawa Dam	10, (")	Futamatahin-Machi, Kanazawa-City, Ishikawa-Pref.	1968
27	Yahagi "	13, (")	Asahi-Mura, Higashikamo-Gun, Aichi-Pref.	1970-3
28	Futtu Cape (Under ground)	9, (")	Futtu-Chō, Kimitsu-Gun, Chiba-Pref.	1970-2
29	Ukishima Park (")	12, (")	Ukishima-Chō, Kawasaki-City, Kanagawa-Pref.	1970-3
30	Kamafusa Dam	6, (")	Kawasaki-Chō, Shibata-Gun, Miyagi-Pref.	1970-3
31	Akkeshi Ohashi Bridge	10, (")	Akkeshi-Chō, Akkeshi-Gun, Kushiro	1971-3
32	Kannonzaki (Under ground)	9, (")	Hashirimizu, Yokosuka-City, Kanagawa-Pref.	1971-3

Station Number	Station (Name of Structure)	Number of Components	Location	Year Installed
33	Bekkai Bridge (Under ground)	6, (Accelerometer)	Bekkai, Bekkai-Village, Nemuro-Cicho, Hokkaido	1971
34	Shizunai " (")	6, (")	Sizunai-Town, Hidaka-Cicho, Hokkaido	1971
35	Koori Dam (")	6, (")	878, Kimitsu-Gun, Chiba-Pref.	1972
36	Matsubarashimouke Dam	8, (")	Kurobuchi, Oguni-Town, Aso-Gun, Kumamoto-Pref.	1971
37	Akigawa Dam	3, (")	Higashino, Ena-City, Gifu-Pref.	1972
38	Shin-iinogawa Bridge	6, (")	Kahoku-Town, Monou-Gun, Miyagi-Pref.	1972
39	Sakaisuido Bridge	11, (")	Sakaiminato-City, Tottori-Pref.	1972
40	Osaka, Nanko (Underground)	9, (")	Nanko, Osaka	1973
41	Honshu-Shikoku, Imabari (Underground)	12, (9 Acc. and 3 Disp.)	Imabari-City, Ehime-Pref.	1973

Note: Stations with delta-mark Δ are out of operation.

Table 3. Number of Strong-Motion Seismograph Stations
and that of Instruments in Relation to the Groups Defined by Sponsorship

Operated as of March, 1974

Group (Administrative Sponsor)		Type	Strong-Motion Accelerograph, SMAC													Electro-Magnetic Type Seismograph	
		Number of Station	Number of Instruments											Total	Number of Station	Number of Instruments	
			before 1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973				
I	First National Highway Section, Road Bureau (道路局国道一課)	11	5	0	3	6	2	1	1	2	0	2	2	24	4	24A 3E	
II	Second National Highway Section, Road Bureau (道路局国道二課)	8	0	4	6	2	0	0	0	0	0	5	0	17	0	0	
III	Local Road Section, Road Bureau (道路局地方道課)	19	0	6	12	13	0	2	2	0	2	2	0	39	1	10A	
IV	Toll Road Section, Road Bureau (道路局有料道路課)	1	0	1	0	0	0	0	0	0	0	0	0	1	1	2A 4D	
V	Planning Section, Road Bureau (道路局企画課)	3	0	0	3	1	0	0	0	0	0	0	0	4	3	30A	
VI	Development Section, River Bureau (河川局開発課)	8	4	1	0	1	0	4	1	0	0	0	1	12	17	117A 27D	
VII	River Improvement Section, River Bureau (河川局治水課)	2	0	0	2	0	0	0	0	0	2	0	0	4	2	8A 8D	
VIII	Seacoast Section, River Bureau (河川局海岸課)	1	0	0	1	0	0	0	0	0	0	0	0	1	1	3A	
IX	Public Works Research Institute (土木研究所)	7	4	4	2	2	2	0	0	0	0	2	0	16	3	24A 3D	
X	Japan Highway Public Corporation (日本道路公団)	8	0	0	0	8	2	4	0	0	3	0	0	17	1	11A	
XI	Tokyo Expressway Public Corporation (首都高速道路公団)	6	0	0	0	0	5	0	0	0	7	2	0	14	0	0	
XII	Hanshin Expressway Public Corporation (阪神高速道路公団)	2	0	2	0	0	0	0	2	0	0	0	0	4	0	0	
XIII	Hokkaido Development Bureau (北海道開発局)	13	1	0	0	3	4	5	6	2	2	5	0	28	2	12A	
XIV	Water Resources Development Corporation (水資源開発公団)	1	0	0	0	0	0	2	0	0	0	0	0	2	0	0	
XV	Honshu-Shikoku Bridge Authority (本州四国連絡橋公団)	6	6	0	0	0	0	0	0	0	0	0	0	6	3	29A 11D	
Total		96	20	18	29	36	15	18	12	4	16	18	3	189	40	229A, 3E, 53D	

Note 1) Each SMAC has three accelerometers (One Vertical and two Horizontal).

2) A, E and D in the extremely right column mean Accelerometers, Earth-pressure-meters and Displacement-meters, respectively.

Fig. 1 Sites of Strong-Motion Seismograph Stations for SMAC-Type Accelerographs
- Observation Network of Ground Motions and Earthquake Responses of
Highway Bridges, Tunnels, Dams, and Embankments -

as of March, 1974

Legend

- Station Operated as of March, 1974
- Station Expected in future

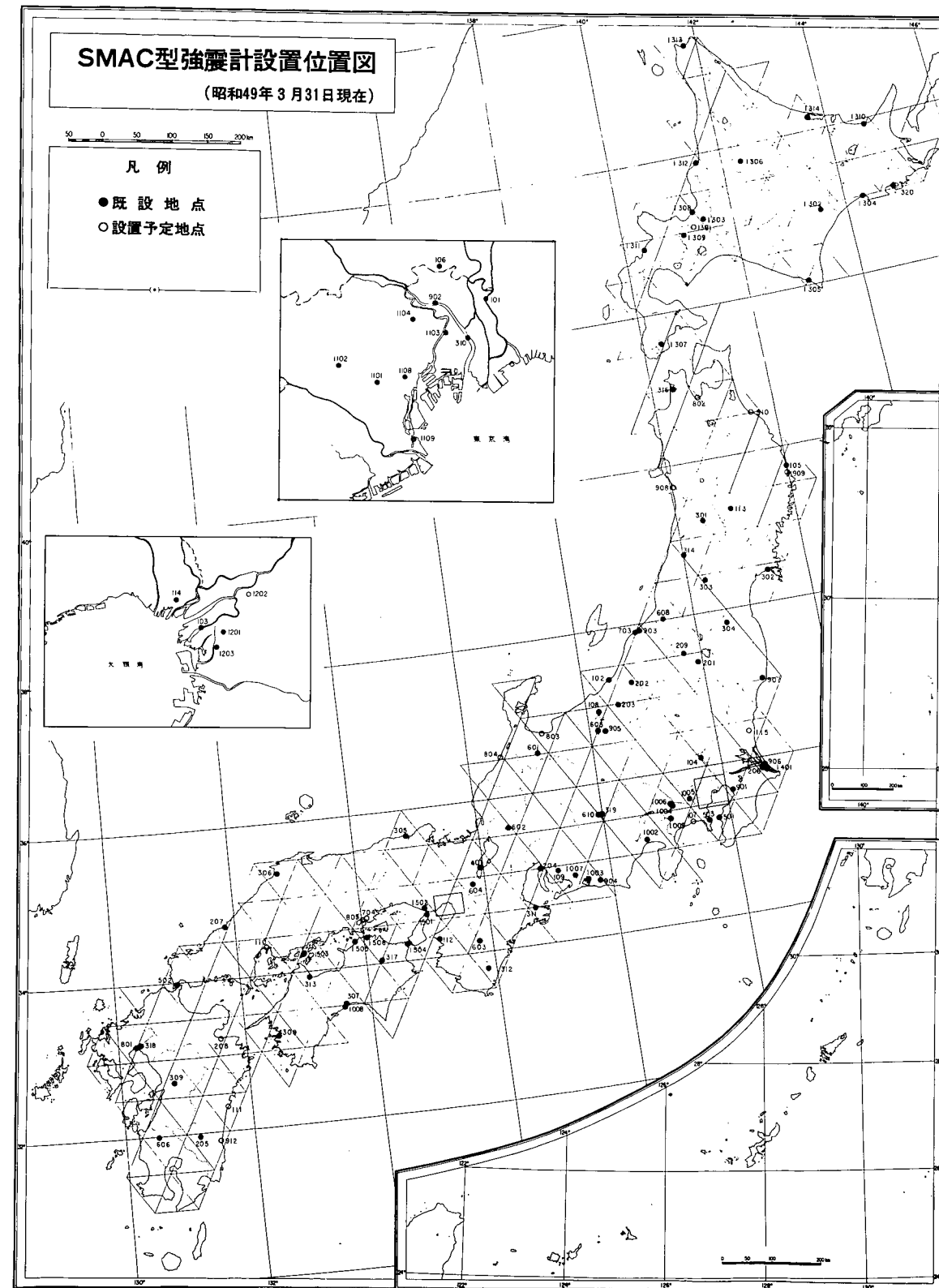


表1 SMAC型強震計配置計画一覧表

建設省土木研究所 (1974.3.31現在)																
№	観測所名	型式	台数	設置箇所	県名	維持管理	設置年月	№	観測所名	型式	台数	設置箇所	県名	維持管理	設置年月	
1. 国道一課								8. 海岸課								
101	新葛飾橋	B2	2	地盤・橋脚	千葉	首都国道	41-3	801	有明海	B2	1	地盤	佐賀	筑後川工事	40-8	
102	米山大橋	"	2	地盤・基礎・橋脚	新潟	長岡工事	41-3	802	青森	"	1	"	青森	"	"	
103	安治川大橋	"	3	地盤・橋脚	大阪	大阪国道工事	36-3	803	富山	"	1	"	富山	"	"	
104	新利根川橋	"	2	地盤・橋脚	埼玉	宇都宮国道	42-2	804	金沢松任	"	1	"	石川	"	"	
105	真崎大橋	E2	2	"	岩手	三陸国道	46-2	805	岡山	"	1	"	岡山	"	"	
106	草加高架橋	B2	2	地盤・橋脚	埼玉	大宮国道	43-3	806								
107	大磯	"	2	"	神奈川			9. 土木研究所								
108	妙高大橋	E2	2	地盤・橋脚	新潟	高田工事	47-11	901	土研千葉支所	B2,Q	3	地盤	千葉	土研(千葉)	37-3	
109	大平橋	Q	2	"	愛知	愛知国道	49-3	902	西新井橋	B2	3	地盤・橋脚	東京	"	37-3	
110	松山橋	"	2	"	愛知	"		903	昭和大橋	"	2	地盤・橋脚	新潟	新潟県庁(委)	40-1	
111	美々津橋	"	2	"	宮崎	"		904	新天竜川橋	B2,Q	2	"	静岡	浜松工事	39-12	
112	紀ノ川大橋	B2	2	地盤・橋脚	和歌山	和歌山工事	42-3	905	落合橋	B2	3	地盤・橋脚	長野	長野県道(委)	40-12	
113	平和橋	B2,D	2	"	岩手	岩手工事事務所	44-3	906	土研・鹿島研究所	"	1	地盤	茨城	鹿島試験所	42-3	
114	尼崎高架橋	B2,C	2	"	兵庫	兵庫国道	38-3	907	平大橋	"	2	地盤・橋台	福島	磐城国道(委)	43-1	
115	桜川橋	"	2	"	茨城	"		908	本荘大橋	"	2	"	秋田	"	"	
116								909	宮古市	"	2	"	岩手	"	"	
2. 国道二課								910	八戸市	"	2	"	青森	"	"	
201	小谷橋	B2	2	地盤・橋脚	福島	会津若松建設	40-3	911	高松市	"	2	"	香川	"	"	
202	魚沼橋	"	2	"	新潟	小千谷土木	40-12	912	宮崎市	"	2	"	宮崎	"	"	
203	横倉沢橋	"	2	"	長野	飯山建設	40-10	913								
204	新八幡橋	"	2	"	愛知	半田土木	40-11	10. 日本道路公団								
205	石瀬戸橋	"	2	"	宮崎	小林土木	40-3	1001								
206	小見川大橋	E2	2	"	千葉	香取土木	48-3	1002	東名・富士川橋	B2	2	地盤・橋脚	静岡	静岡局	42-3	
207	高津大橋	B2	2	地盤・橋脚	島根	益田土木	42-3	1003	東名・浜名湖橋	D	2	"	"	"	42-3	
208	鶴崎橋	"	2	"	大分	"		1004	境川橋	B2	2	"	山梨	八王子局	42-3	
209	瑞光寺橋	Q	3	地盤・橋脚	福島	会津若松建設	48-3	1005	姥久保橋	"	2	"	東京	"	42-3	
3. 地方道路課								1006	鶴川橋	"	2	"	山梨	"	42-3	
301	雄平橋	B2	2	地盤・橋脚	秋田	雄勝土木	41-12	1007	東名・豊川橋	"	2	"	愛知	名古屋局	43-3	
302	開北橋	"	2	"	宮城	石巻土木	41-3	1008	浦戸大橋	E2	3	地盤・橋脚	高知	大阪支社	46-5	
303	河北橋	"	2	"	山形	寒河江建設	40-3	1009	東名・酒匂川橋	D	2	地盤・橋脚	神奈川	"	44-3	
304	伊達橋	"	2	"	福島	保原土木	40-10	1010								
305	港大橋	"	2	"	兵庫	豊岡土木	40-3	11. 首都高速道路公団								
306	妙見橋	"	2	"	島根	出雲土木	42-3	1101	目黒区大橋1丁目	E2	2	地盤・橋脚	3号線	工務部	47-1	
307	五台山橋	"	2	"	高知	高知土木	41-3	1102	杉区下谷戸5丁目	"	3	地盤・橋脚	2号線	"	47-1	
308	板島橋	"	2	"	愛媛	宇和島中央土木	41-3	1103	墨田区地通1丁目	"	2	地盤・橋脚	6号線	"	47-1	
309	乙女橋	"	2	"	熊本	矢部土木	40-3	1104	護国寺管理所	"	2	1F,9F	5号線	"	47-5	
310	平井大橋	"	3	地盤・橋脚	東京	第5建設	40-8	1105								
311	豊浜大橋	"	2	地盤・橋脚	三重	伊勢土木	41-9	1106								
312	赤木橋	"	2	地盤・橋台	和歌山	新宮土木	41-9	1107								
313	石鐘橋	"	2	"	愛媛	丹原土木	42-3	1108	一ノ橋高架橋	B2	2	地盤・橋脚	2号線	工務部	42-7	
314	清川橋	"	2	"	山形	庄内支庁	42-10	1109	羽田海底トンネル	"	3	地盤・トンネル	1号線	"	43-2	
315	新保橋	"	2	"	福井	"		1110								
316	津軽大橋	D	2	地盤・橋脚	青森	五所川原土木	45-3	1111								
317	瀬詰大橋	B2	2	"	徳島	川島土木	42-3	12. 阪神高速道路公団								
318	新田大橋	E2	2	"	福岡	柳川土木	48-2	1201	西横堀高架橋	B2	2	地盤・橋脚	1号線	管理部保全課	40-5	
319	四徳大橋	B2	2	地盤・橋脚	長野	伊那建設	41-12	1202	旭区生江町	"	2	"	3号線	"	"	
320	厚岸大橋	E2	2	"	北海道	北海道庁	46-11	1203	南津守高架橋	D	2	地盤・橋脚	4号線	管理部保全課	45-3	
4. 有料道路課								1204								
401	琵琶湖大橋	B2	1	橋脚	滋賀	大津土木	39-9	1205								
402		"	2	"				13. 北海道開発局								
403		"	1	"				1301	土木試験所	"	0	"	石狩	開発局		
5. 道路企画課								1302	千代田橋	B2	3	地盤・基礎・橋脚	十勝	"	41-11	
501	東京湾(富津呼)	B2	1	地盤	千葉	東京湾岸道路	40-10	1303	新石狩大橋	"	2	地盤・橋脚	石狩	"	42-8	
502	関門架橋	"	2	地盤(門司下関)	福岡	北九州国道	40-10	1304	大桑毛橋	"	2	"	釧路	"	42-10	
503	東京湾(観音崎)	"	1	地盤	神奈川	東京湾岸道路	42-3	1305	梶崎橋	"	2	"	日高	"	42-12	
504								1306	旭川大橋	"	2	"	石狩	"	43-11	
6. 開発課								1307	七峰橋	"	2	"	渡島	"	43-12	
601	室牧ダム	B2	1	堤体	富山	管理所(県)	36-8	1308	石狩河口橋	"	3	地盤・橋脚	2	石狩	"	45-3
602	横山ダム	"	2	地盤・堤体	岐阜	"(建)	37-7	1309	無意根大橋	D	2	地盤・橋脚	"	"	44-10	
603	猿谷ダム	A	1	地盤	奈良	"(県)	33-3	1310	斜里大橋	D-E2	2	"	網走	"	45-3	
604	天ヶ瀬ダム	B2	1	堤体	京都	"(県)	39-8	1311	磯谷橋	D	2	"	後志	"	45-11	
605	堀花ダム	B2,D	2	地盤・堤体	長野	"(県)	41-5	1312	森景橋	E2	2	"	留萌	"	47-11	
606	鶴田ダム	D	2	"	鹿児島	"(建)	43-12	1313	声間橋	B2	2	"	宗谷	"	47-11	
607	金山ダム	"	1	"	北海道	"		1314	志撫子橋	"	2	"	網走	"	47-12	
608	大石ダム	E2	1	地盤	新潟	ダム工事(建)	48-10	14. 水資源開発公団								
609								1401	利根川河口堰	D	2	地盤・堤体	千葉	河口堰管理所	44-3	
610	小沢ダム	D	2	地盤・堤体	長野	管理所(建)	43-12	1402								
611								1403								
612	君ヶ野ダム	"	1	"	三重	"		15. 本州四国連絡橋公団								
613								1501	岩屋	B	1	地盤	兵庫	本木公団	37-10	
7. 治水課								1502	明石	B2	"	1F	"	"	"	
701	淀川堤防	B2	2	地盤・本体	大阪	淀川工事	41-3	1503	大三島	B	"	"	愛媛	"	移設	
702	東京高潮堰	"	1	"	東京	"		1504	鳴門	"	"	"	徳島	"	38-3	
703	新島大堰	E2	2	地盤・本体	新潟	信濃川下流工事	46-11	1505	番ノ洲	"	"	"	香川	"	移設	
704	岡山	"	1	"	岡山	"		1506	高松	"	"	1F	"	"	"	
705								1507								

Fig. 2 Sites of Strong-Motion Seismograph Stations for Electro-Magnetic Type Seismographs
- Observation Network of Ground Motions and Earthquake Responses of Highway Bridges, Dams, and Embankments -
as of March, 1974

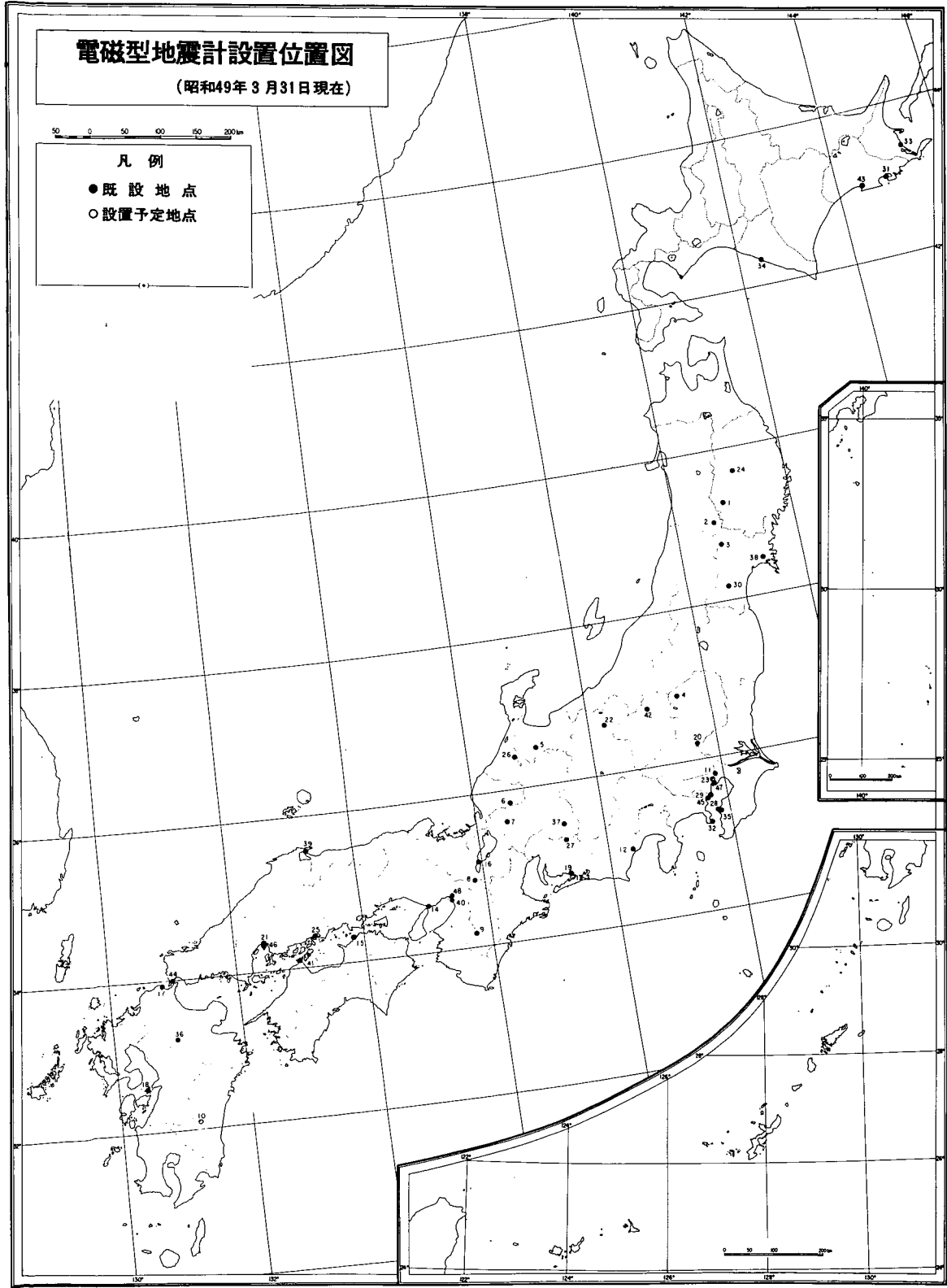


表2 電磁式強震計設置位置一覧表
昭和49年3月

番号	観測所名	成分数	維持管理	設置年
1	湯田ダム	6	東北地建湯田ダム管理所	1965
2	皆瀬ダム	6	秋田県皆瀬ダム管理事務所	1963
3	鳴子ダム	10	東北地建鳴子ダム管理所	1957
4	川俣ダム	13	関東地建川俣ダム管理所	1964
5	室牧ダム	12	富山県室牧ダム管理事務所	1961
6	笹生川ダム	10	福島県笹生川ダム管理事務所	1966
7	横川ダム	12	中部地建横山ダム管理所	1962
8	天ヶ瀬ダム	12	近畿地建天ヶ瀬ダム管理支所	1964
9	猿谷ダム	5	近畿地建猿谷ダム管理所	1957
10	△綾北ダム	6	宮崎県綾北ダム管理事務所	1961
11	新葛飾橋	6	関東地建首都国道工事事務所	1967
12	駿河大橋	6	中部地建静岡国道工事事務所	1959
13	吉田大橋	6	中部地建名古屋国道工事事務所	1959
14	本州四国・垂水(地中)	16	本州四国連絡橋公団	1972
15	〃坂出(地中)	12	〃	1973
16	琵琶湖大橋	6	滋賀県大津土木事務所	1963
17	若戸大橋	18	日本道路公団	1961
18	有明海締切堤(大矢野島)	3	九州地建熊本工事事務所	1963
19	豊川放水路堤防	8	中部地建豊橋工事事務所	1966
20	利根川堤防	9	土木研究所	1968
21	太田川堤防	8	中国地建太田川工事事務所	1965
22	長野(落合橋付近地中)	9	土木研究所	1966
23	△平井大橋	8	東京都第五建設事務所	1967
24	四十四田ダム	12	東北地建四十四田ダム管理所	1967
25	尾道大橋	11	日本道路公団	1968
26	犀川ダム	10	石川県犀川ダム管理事務所	1968
27	矢作ダム	13	中部地建矢作ダム管理所	1970
28	富津岬(地中)	9	関東地建東京湾岸道路調査事務所	1970
29	川崎・浮島公園(地中)	12	〃	1970
30	釜房ダム	6	東北地建釜房ダム管理所	1970
31	厚岸大橋	10	北海道庁	1971
32	観音崎(地中)	9	関東地建東京湾岸道路調査事務所	1971
33	別海橋(地中)	6	北海道開発局	1971
34	静内橋(地中)	6	〃	1971
35	郡ダム(地中)	9	千葉県開発庁	1972
36	松原下釜ダム	8	九州地建松原下釜ダム管理所	1971
37	阿木川ダム	3	水資源開発公団	1972
38	新飯野川橋	12	東北地建仙台工事事務所	1972
39	境水道大橋	11	日本道路公団	1972
40	大阪・南港(地中)	12	近畿地建阪神国道工事事務所	1973
41	藤原ダム	3	藤原ダム管理所	1973
42	本州四国・今治(地中)	12	本州四国連絡橋公団	1973
43	釧路(釧網跨線橋)	9	北海道開発局	1973
44	関門橋(地中・主塔)	31	日本道路公団	1973
45	横浜・扇島(地中)	12	関東地建東京湾岸道路調査事務所	1973
46	大島大橋	10	日本道路公団	1973
47	荒川堤防	9	土木研究所	1973
48	大阪・淀川堤防	9	土木研究所	1973

Table 5. Number of Records Obtained from Station with
Strong-Motion Accelerographs, SMAC in 1973.

Station Number	Station	Number of Instruments		Total Number of Records			Number of Records Printed in this Report		
		Ground	Structure	Ground	Structure	Total	Ground	Structure	Total
105	Masaki Ohashi Bridge	1	1	1	1	2	1	1	2
106	Soka Bridge	2	1	3	3	6	3	3	6
112	Kinokawa Ohashi Bridge	1	1	2	2	4	2	2	4
204	Shinyawata Ohashi Bridge	1	1	3	0	3	1	0	1
206	Omigawa Ohashi Bridge	1	1	0	1	1	0	1	1
207	Takatsu Bridge	1	1	1	0	1	1	0	1
305	Minato Ohashi Bridge	1	1	2	0	2	0	0	0
306	Myoken Bridge	1	1	3	3	6	0	1	1
310	Hirai Bridge	1	2	5	4	9	2	2	4
311	Toyohama Ohashi Bridge	1	1	2	1	3	2	1	3
312	Akagi Ohashi Bridge	1	1	1	2	3	1	2	3
313	Ishizuchi Ohashi Bridge	1	1	1	0	1	1	0	1
320	Akkeshi Ohashi Bridge	1	1	1	1	2	0	0	0
501	Tokyo Bay (Futtu Cape)	1	0	2	0	2	1	0	1
503	Tokyo Bay (Kannonzaki)	1	0	1	0	1	1	0	1
801	Ariake Sea Embankment	1	0	2	0	2	0	0	0
901	P. W. R. I., Chiba Branch	3	0	5	0	0	3	0	3
902	Nishiarai Bridge	1	2	3	3	6	1	2	3
904	Shintenryugawa Bridge	1	2	3	0	3	0	0	0
905	Ochiai Bridge	2	1	1	1	2	1	1	2
906	P. W. R. I., Kashima	1	0	3	0	3	2	0	2
907	Taira Bridge	1	1	7	7	14	2	1	3
1201	Nishiyokobori Bridge	1	1	1	1	2	0	1	1
1302	Chiyoda Bridge	1	2	3	3	6	1	1	2
1303	Shin-ishikari Bridge	1	1	1	0	1	0	0	0
1304	Otanoshike Bridge	1	1	4	6	10	1	1	2
1305	Horoman Bridge	1	1	2	2	4	1	1	2
1314	Shibushi Bridge	1	1	1	0	1	0	0	0

Table 6. In 1973 Earthquake Origins

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTE(KM)	MAGNITUDE
			*-	*-		
73001	S-W, OF IBARAKI PREF.	1973,01,21,17,16	139 52 1	36 3 1	50,0	4,8
73002	W, OF HIROSHIMA PREF.	1973,02,25,19,09	132 25 1	34 44 1	0,	5,0
73003	SHIZUOKA-KANAGAWA BORDER	1973,03,18,12,33	139 6 1	35 17 1	20,0	3,9
73004	TOKYO BAY	1973,03,27,11,08	139 56 1	35 31 1	60,0	4,9
73005	NEAR SEA OF HACHIJOJIMA	1973,04,25,23,21	140 57 2	33 32 1	50,0	5,5
73006	NEAR OKAYAMA CITY	1973,05,05,23,19	133 51 2	34 41 2	30,0	0,
73007	S-W OFF NEMURO PEN.	1973,06,16,09,54	145 47 4	43 8 2	40,0	4,3
73008	NEAR KUSHIRO	1973,06,16,10,37	144 46 2	42 55 2	60,0	4,7
73009	S-E OFF NEMURO PEN.	1973,06,17,12,55	145 57 3	42 58 1	40,0	7,4
73010	OFF NEMURO PEN.	1973,06,17,21,14	145 29 2	42 52 1	40,0	5,2
73011	OFF NEMURO PEN.	1973,06,17,22,33	145 28 2	42 52 1	40,0	5,7
73012	OFF NEMURO PEN.	1973,06,17,22,43	146 42 5	42 37 2	30,0	5,5
73013	OFF NEMURO PEN.	1973,06,24,11,43	146 45 4	42 57 2	30,0	7,1
73014	OFF IBARAKI PREF.	1973,07,20,17,13	141 2 2	36 25 1	40,0	5,9
73015	OFF FUKUSHIMA PREF.	1973,08,24,08,50	142 15 2	37 14 1	20,0	5,8
73016	IYONADA	1973,09,10,13,41	132 33 1	33 46 1	50,0	4,8
73017	NEAR SEA OF ISHIGAKIJIMA	1973,09,12,08,19	124 51 6	25 7 7	180,0	0,
73018	N, OF NARA PREF.	1973,09,14,06,56	135 58 1	34 44 1	10,0	3,3
73019	NEAR MATSUSHIRO	1973,09,19,16,13	138 15 1	36 35 1	10,0	4,0
73020	W, OF HYOGO PREF.	1973,09,21,11,21	134 31 1	35 6 1	10,0	5,1
73021	A LONG WAY OFF TOKAIDO	1973,09,21,14,07	137 55 2	33 35 2	360,0	0,
73022	NEAR KYOTO CITY	1973,09,24,03,54	135 37 0	35 3 0	10,0	4,3
73023	NEAR VLADIOSTOK	1973,09,29,09,45	130 58 4	42 11 2	600,0	0,
73024	NEAR CHOSHI	1973,09,30,15,18	140 40 2	35 39 1	50,0	5,9
73025	NEAR CHOSHI	1973,10,01,23,16	140 48 3	35 37 2	60,0	5,8
73026	TTOTORI-SHIMANE BORDER	1973,10,27,13,44	133 16 1	35 12 1	10,0	5,1
73027	OFF MIYAGI PREF.	1973,11,13,10,12	142 22 2	38 35 1	60,0	5,5
73028	OFF MIYAGI PREF.	1973,11,19,22,02	142 9 2	38 53 1	50,0	6,4
73029	W, OF WAKAYAMA PREF.	1973,11,25,13,25	135 25 1	33 51 1	60,0	5,9
73030	CENTER OF WAKAYAMA PREF.	1973,11,25,18,19	135 23 1	33 53 1	60,0	5,8
73031	N, OF IBARAKI PREF.	1973,12,11,14,39	140 33 1	36 43 1	80,0	0,
73032	CENTER OF CHIBA PREF.	1973,12,22,10,20	140 17 1	35 13 1	70,0	0,

Table 7. Strong-Motion Seismograph Results(1973)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
			+-	+-		
73001	S-W. OF IBARAKI PREF.	1973.01.21.17.16	139 52 1	36 3 1	50.0	4.8

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
106	GR-1	22	12.5	3.1	9.4
106	PI-1	21	11.3	5.0	18.8
907	GR-1	69	0.1	0.1	0.

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
			+-	+-		
73002	W. OF HIROSHIMA PREF.	1973.02.25.19.09	132 25 1	34 44 1	0.	5.0

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
306	GR-1	4	6.3	3.1	8.1
306	PI-1	12	3.1	1.3	12.5

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
			+-	+-		
73003	SHIZUOKA-KANAGAWA BORDER	1973.03.18.12.33	139 6 1	35 17 1	20.0	3.9

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
904	GR-1	12	6.3	1.3	1.3

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73004	TOKYO BAY	1973,03,27,11,08	139 56 ⁺⁻ 1	35 31 ⁺⁻ 1	60,0	4,9

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
106	PI-1	22	32,5	6,3	25,0
501	GR-1	76	43,8	12,5	58,8
503	GR-1	18	118,8	25,0	56,3
901	GR-1	58	31,3	6,3	15,0
902	PI-1	52	18,8	6,3	25,0
902	PI-2	27	25,0	12,5	12,5
904	GR-1	13	1,3	1,3	1,3
907	GR-1	70	0,1	0,1	0,1
907	AB-1	24	0,6	0,6	0,6

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73005	NEAR SEA OF WACHIJOJIMA	1973,04,25,23,21	140 57 ⁺⁻ 2	33 32 ⁺⁻ 1	50,0	5,5

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
904	GR-1	14	0,6	0,6	0,6
907	GR-1	71	6,3	6,3	6,3
907	AB-1	25	3,1	1,3	6,3

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73006	NEAR OKAYAMA CITY	1973,05,05,23,19	133 51 ⁺⁻ 2	34 41 ⁺⁻ 2	30,0	0,

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
207	GR-1	3	9,4	3,1	9,4

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ, NO,	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73007	S-W OFF NEMURO PEN,	1973,06,16,09,54	145 47 4 ⁺⁻	43 8 2 ⁺⁻	40,0	4,3

STATION NO,	INSTRUMENTS	RECORD NO,	HORI,A	VERTICAL	HORI,B (GAL)
1304	PI-1	3	18,8	1,9	2,5

LIST OF EARTHQUAKE ORIGINS

EQ, NO,	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73008	NEAR KUSHIRO	1973,06,16,10,37	144 46 2 ⁺⁻	42 55 2 ⁺⁻	60,0	4,7

STATION NO,	INSTRUMENTS	RECORD NO,	HORI,A	VERTICAL	HORI,B (GAL)
1304	PI-1	4	7,5	1,3	12,5
1305	PI-1	6	4,4	3,1	6,3

LIST OF EARTHQUAKE ORIGINS

EQ, NO,	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73009	S-E OFF NEMURO PEN,	1973,06,17,12,55	145 57 3 ⁺⁻	42 58 1 ⁺⁻	40,0	7,4

STATION NO,	INSTRUMENTS	RECORD NO,	HORI,A	VERTICAL	HORI,B (GAL)
105	GR-1	5	2,3	1,5	1,5
105	PI-1	5	7,5	1,5	7,5
320	GR-1	1	93,7	0,	118,7
320	PI-1	1	94,7	87,5	125,0
1302	GR-1	11	52,1	21,3	62,5
1302	PI-1	9	70,0	18,8	57,5
1303	GR-1	6	6,3	1,3	6,3
1304	GR-1	5	43,7	45,0	75,0
1304	PI-1	5	76,3	27,5	95,0
1305	GR-1	12	12,5	12,0	12,5
1305	PI-1	7	18,8	12,5	12,5
1314	GR-1	1	6,3	6,3	8,7

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73010	OFF NEMURO PEN,	1973.06.17,21,14	145 29 2 ⁺⁻	42 52 1 ⁺⁻	40.0	5.2

STATION NO.	INSTRUMENTS	RECORD NO.	HORI,A	VERTICAL	HORI,B (GAL)
1302	GR-1	12	2,5	1,3	2,5
1302	PI-1	10	6,3	1,3	6,3
1304	GR-1	6	6,3	1,3	9,4
1304	PI-1	6	10,0	1,3	12,5

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73011	OFF NEMURO PEN,	1973.06.17,22,33	145 28 2 ⁺⁻	42 52 1 ⁺⁻	40.0	5.7

STATION NO.	INSTRUMENTS	RECORD NO.	HORI,A	VERTICAL	HORI,B (GAL)
1302	GR-1	13	12,5	6,3	12,5
1302	PI-1	11	13,1	7,5	12,5
1304	GR-1	7	0,	6,3	12,5
1304	PI-1	7	21,9	2,5	31,3

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73012	OFF NEMURO PEN,	1973.06.17,22,43	146 42 5 ⁺⁻	42 37 2 ⁺⁻	30.0	5.5

STATION NO.	INSTRUMENTS	RECORD NO.	HORI,A	VERTICAL	HORI,B (GAL)
1304	GR-1	8	5,0	1,3	6,3
1304	PI-1	8	6,3	1,3	12,5

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73013	OFF NEMURO PEN,	1973,06,24,11,43	146 45 4 ⁺⁻	42 57 2 ⁺⁻	30,0	7,1

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
1305	GR-1	13	6,0	4,0	6,0

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73014	OFF IBARAKI PREF,	1973,07,20,17,13	141 2 2 ⁺⁻	36 25 1 ⁺⁻	40,0	5,9

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
206	PI-1	1	15,0	1,5	15,0
501	GR-1	77	1,3	1,3	1,3
901	GR-1	59	1,3	1,3	1,3
906	GR-1	16	12,5	12,5	12,5
907	AB-1	26	12,5	6,3	12,5

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73015	OFF FUKUSHIMA PREF,	1973,08,24,08,50	142 15 2 ⁺⁻	37 14 1 ⁺⁻	20,0	5,8

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
907	AB-1	27	1,3	1,3	1,3

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ, NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73016	IYONADA	1973,09,10,13,41	132 33 1 ⁺⁻	33 46 1 ⁺⁻	50,0	4,8

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
313	GR-1	7	25,0	2,5	16,3

LIST OF EARTHQUAKE ORIGINS

EQ, NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73017	NEAR SEA OF ISHIGAKIJIMA	1973,09,12,08,19	124 51 6 ⁺⁻	25 7 7 ⁺⁻	180,0	0,

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
801	GR-1	6	6,3	1,3	6,3

LIST OF EARTHQUAKE ORIGINS

EQ, NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH(KM)	MAGNITUDE
73018	N. OF NARA PREF.	1973,09,14,06,56	135 58 1 ⁺⁻	34 44 1 ⁺⁻	10,0	3,3

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
312	PI-1	2	31,3	6,3	40,6

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73019	NEAR MATSUSHIRO	1973.09.19,16,13	138 15 1 ⁺⁻	36 35 1 ⁺⁻	10.0	4.0

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
905	GR-1	270	25.0	6.3	12.5
905	PI-1	430	25.0	6.3	12.5

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73020	W. OF HYOGO PREF.	1973.09.21,11,21	134 31 1 ⁺⁻	35 6 1 ⁺⁻	10.0	5.1

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
305	GR-1	7	1.3	1.3	1.3
306	GR-1	5	6.3	0.1	0.1
306	PI-1	13	12.5	6.3	26.3

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73021	A LONG WAY OFF TOKAIDO	1973.09.21,14,07	137 55 2 ⁺⁻	33 35 2 ⁺⁻	360.0	0.

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
204	GR-1	21	0.1	0.1	0.1

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73022	NEAR KYOTO CITY	1973.09.24.03.54	135 37 0 ⁺⁻	35 3 0 ⁺⁻	10.0	4.3

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
305	GR-1	8	1.3	1.3	1.3
312	GR-1	3	37.5	6.3	12.5
312	PI-1	3	34.4	7.5	2.5

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73023	NEAR VLADIOSTOK	1973.09.29.09.45	130 58 4 ⁺⁻	42 11 2 ⁺⁻	600.0	0.

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
901	GR-1	60	1.3	1.3	1.3
902	GR-1	32	18.8	3.1	12.5
902	PI-2	28	1.3	1.3	6.3
907	AB-1	28	0.6	0.6	0.6
907	GR-1	72	1.3	1.3	1.3

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73024	NEAR CHOSHI	1973.09.30.15.18	140 40 2 ⁺⁻	35 39 1 ⁺⁻	50.0	5.9

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
106	GR-1	23	12.5	3.1	13.9
106	PI-1	23	18.8	1.3	15.6
310	GR-1	20	12.5	6.3	12.5
310	PI-1	17	31.5	1.3	7.5
310	PI-2	17	20.0	1.3	18.8
901	GR-1	61	18.8	12.5	18.8
902	GR-1	33	18.8	5.0	10.0
906	GR-1	17	100.0	12.5	75.0
907	GR-1	73	1.3	1.3	1.3

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73025	NEAR CHOSHI	1973.10.01,23,16	140 48 3 ⁺⁻	35 37 2 ⁺⁻	60.0	5.8

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
106	GR-1	24	12.5	1.3	15.6
310	GR-1	21	7.5	3.1	7.5
901	GR-1	62	18.8	12.5	25.0
902	GR-1	34	6.3	1.3	6.3
906	GR-1	18	87.5	12.5	58.8
907	GR-1	74	1.3	1.3	1.3

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73026	TTOTORI-SHIMANE BORDER	1973.10.27,13,44	133 16 1 ⁺⁻	35 12 1 ⁺⁻	10.0	5.1

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
306	GR-1	6	6.3	1.3	3.1
306	PI-1	14	7.5	3.1	21.9

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73027	OFF MIYAGI PREF,	1973.11.13,10,12	142 22 2 ⁺⁻	38 35 1 ⁺⁻	60.0	5.5

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
105	GR-1	6	7.5	1.5	7.5
105	PI-1	6	7.5	1.5	10.5
310	GR-1	22	1.3	1.3	1.3

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
			+-	+-		
73028	OFF MIYAGI PREF.	1973.11.19,22,02	142 9 2	38 53 1	50,0	6,4

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
105	PI-1	7	30,0	7,5	37,5
105	GR-1	7	22,5	7,5	22,5
310	GR-1	23	0,	0,	0,
310	PI-1	18	6,3	1,3	6,3
310	PI-2	18	12,5	1,3	6,3
907	GR-1	75	12,5	6,3	12,5

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
			+-	+-		
73029	W. OF WAKAYAMA PREF.	1973.11.25,13,25	135 25 1	33 51 1	60,0	5,9

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
112	GR-1	25	50,0	12,5	46,3
112	PI-1	6	37,5	12,5	75,0
204	GR-1	22	6,3	3,1	6,3
311	GR-1	7	6,3	1,3	6,3

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTRAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
			+-	+-		
73030	CENTER OF WAKAYAMA PREF.	1973.11.25,18,19	135 23 1	33 53 1	60,0	5,8

STATION NO.	INSTRUMENTS	RECORD NO.	HORI, A	VERTICAL	HORI, B (GAL)
112	GR-1	26	47,6	12,5	37,5
112	PI-1	7	50,0	12,5	50,0
204	GR-1	23	7,5	6,3	6,3
311	GR-1	8	20,0	1,3	13,8
311	PI-1	8	31,3	5,0	18,8
1201	GR-1	8	6,3	1,3	6,3
1201	PI-1	10	20,0	6,3	7,5

Table 7. (Continued)

LIST OF EARTHQUAKE ORIGINS

EQ. NO.	EPICENTAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73031	N. OF IBARAKI PREF.	1973,12,11,14,39	140 33 1 ⁺⁻	36 43 1 ⁺⁻	80.0	0.

STATION NO.	INSTRUMENTS	RECORD NO.	HORI. A	VERTICAL	HORI. B (GAL)
310	GR-1	24	1.3	1.3	1.3
907	AB-1	29	0.1	0.1	0.1

LIST OF EARTHQUAKE ORIGINS

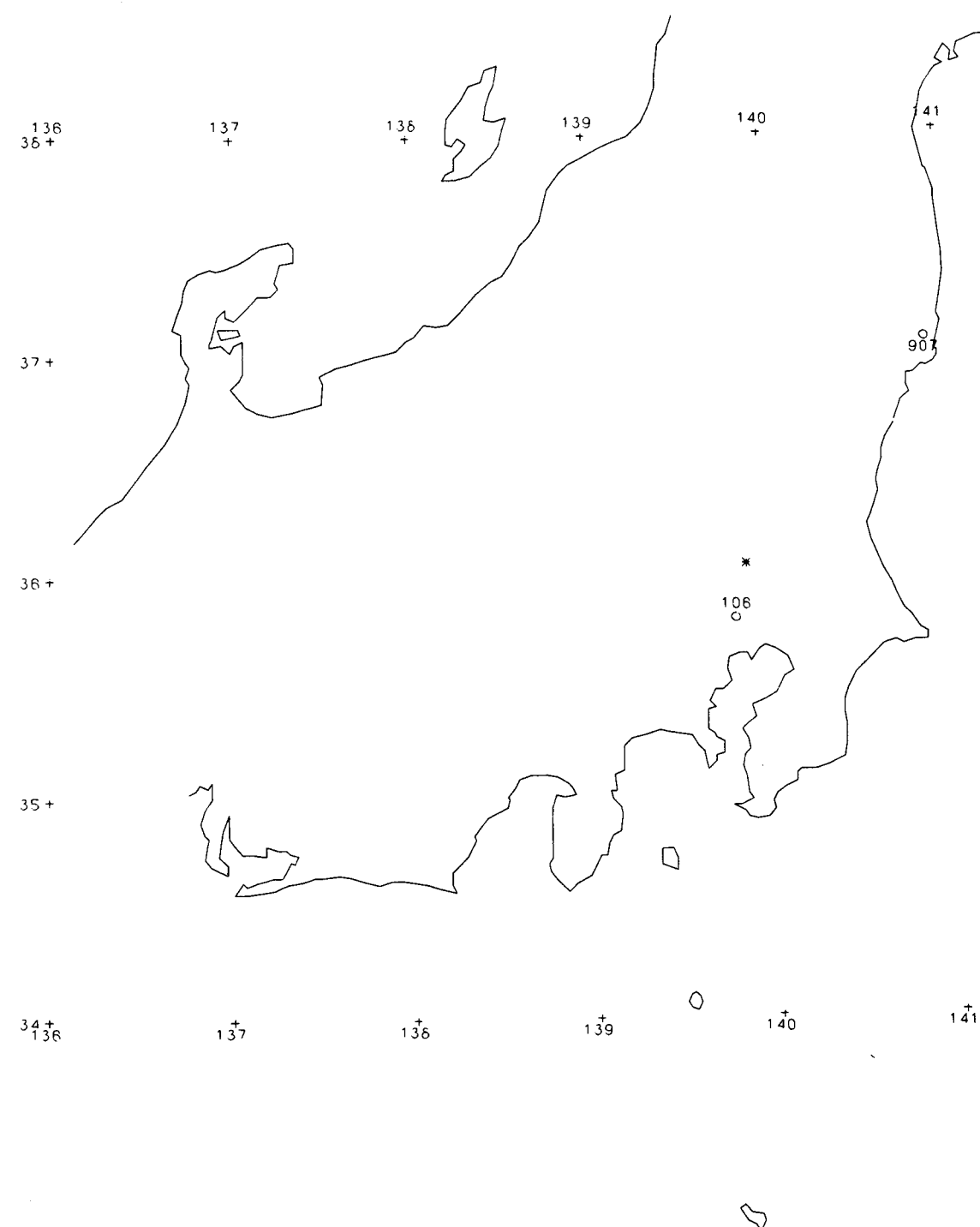
EQ. NO.	EPICENTAL REGION	EARTHQUAKE TIME AND DAY	LONGITUDE	LATITUDE	DEPTH (KM)	MAGNITUDE
73032	CENTER OF CHIBA PREF.	1973,12,22,10,20	140 17 1 ⁺⁻	35 13 1 ⁺⁻	70.0	0.

STATION NO.	INSTRUMENTS	RECORD NO.	HORI. A	VERTICAL	HORI. B (GAL)
907	AB-1	30	0.1	0.1	0.1

73001 S-W. OF IBARAKI PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SOKA BRIDGE	106 GR-1 22	12.5	3.1	9.4	1973.01.21.17.16
SOKA BRIDGE	106 PI-1 21	11.3	5.0	18.8	
TAIRA BRIDGE	907 CR-1 69	0.1	0.1	0.0	

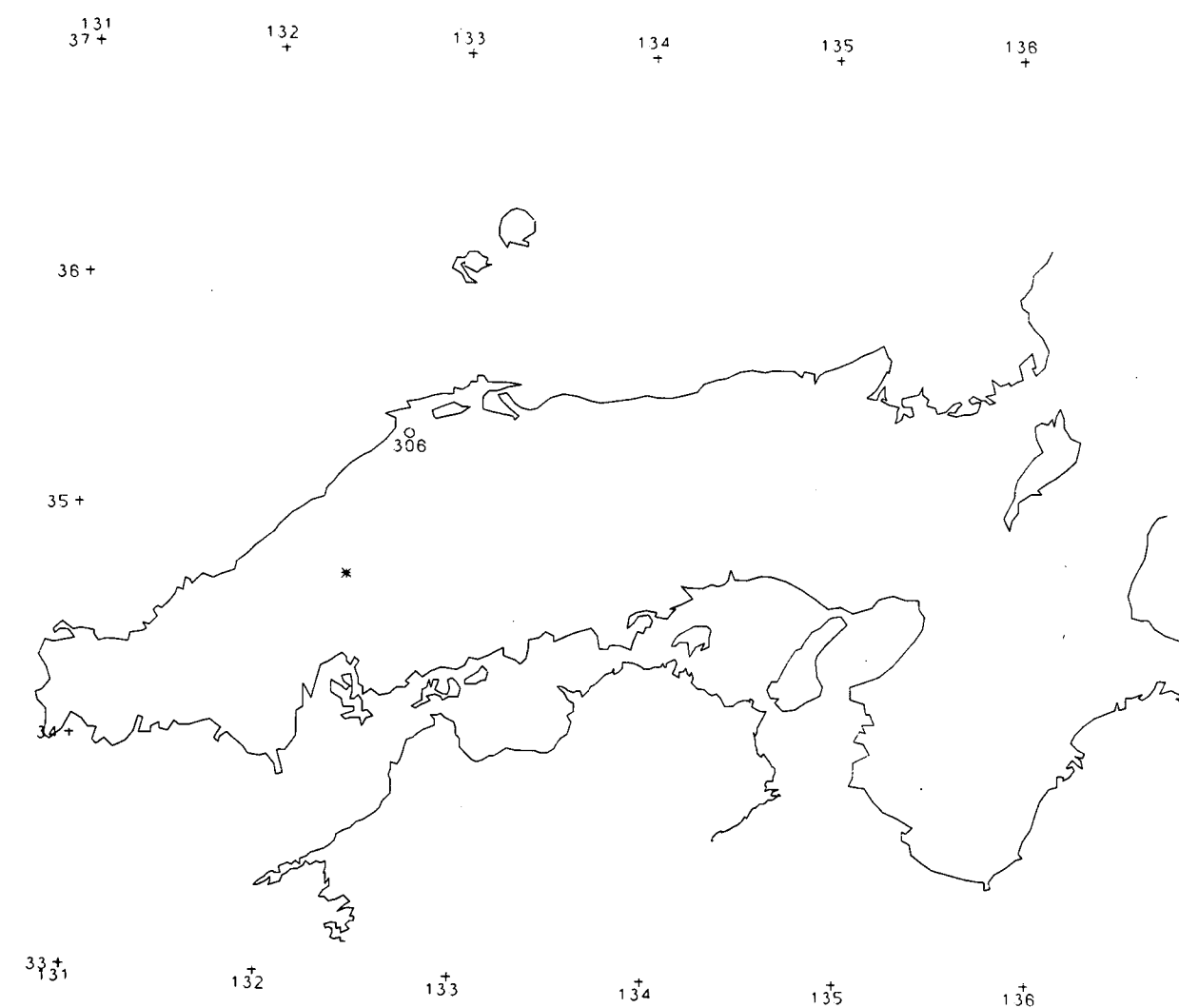
LOCATION OF
EPICENTER
LO=139 52
LA= 36 3
DEPTH, MAGNITUDE
50.0 KM, M= 4.8
(* E.Q. CENTER)



73002 W. OF HIROSHIMA PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
MYOKEN BRIDGE	306 GR-1 4	6.3	3.1	8.1	1973.02.25.19.09
MYOKEN BRIDGE	306 PI-1 12	3.1	1.3	12.5	

LOCATION OF
EPICENTER
LO=132 25
LA= 34 44
DEPTH, MAGNITUDE
0.0 KM, M= 5.0
(* E.Q. CENTER)



73003

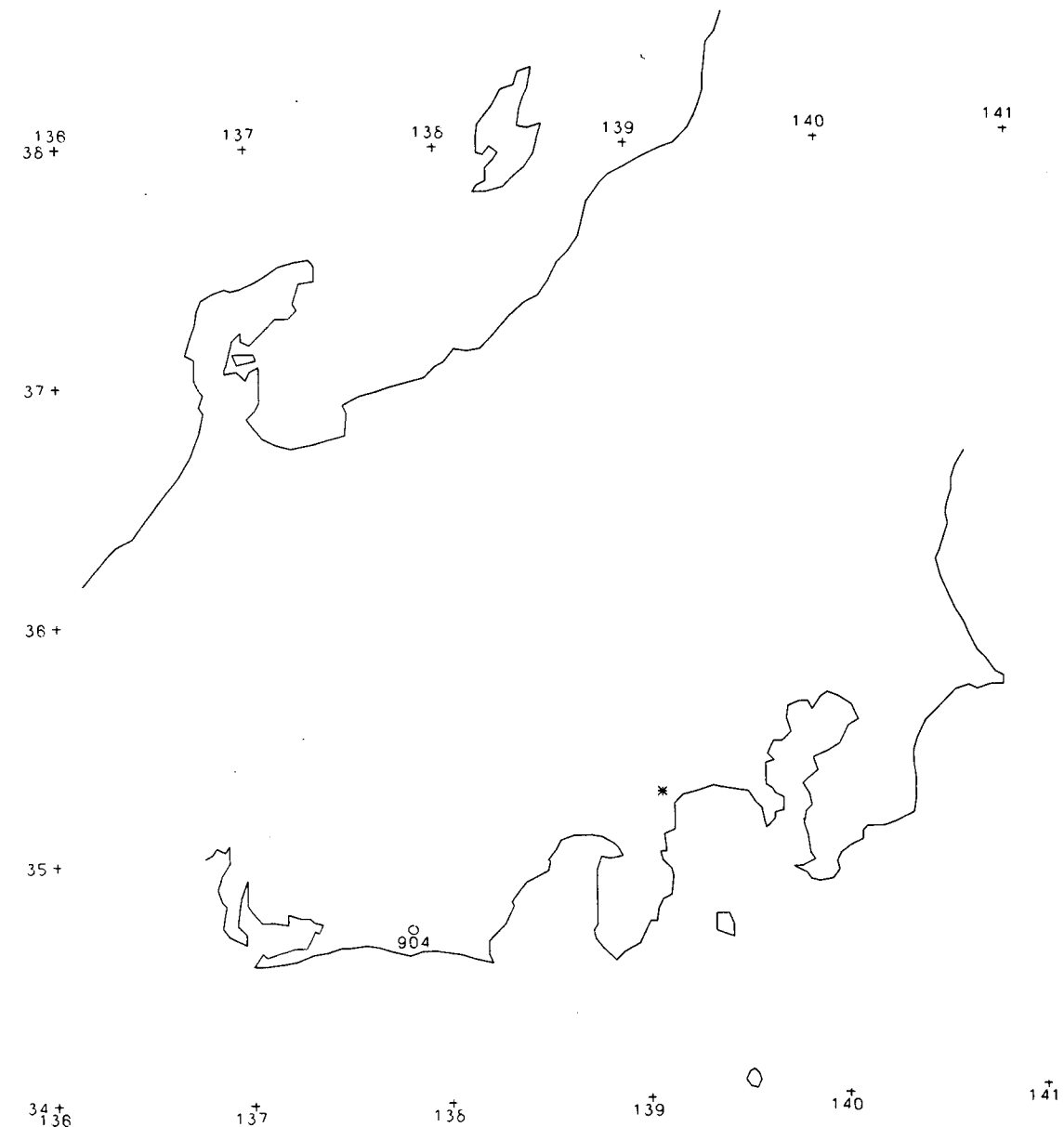
SHIZUOKA-KANAGAWA BORDER

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SHINTENRYUGAWA BRIDGE	904 GR-1 12	6.3	1.3	1.3	1973.03.18.12.33

LOCATION OF
EPICENTER
LO=139 6
LA= 35 17

DEPTH, MAGNITUDE
20.0 KM, M= 3.9

(* E.Q. CENTER)



73004

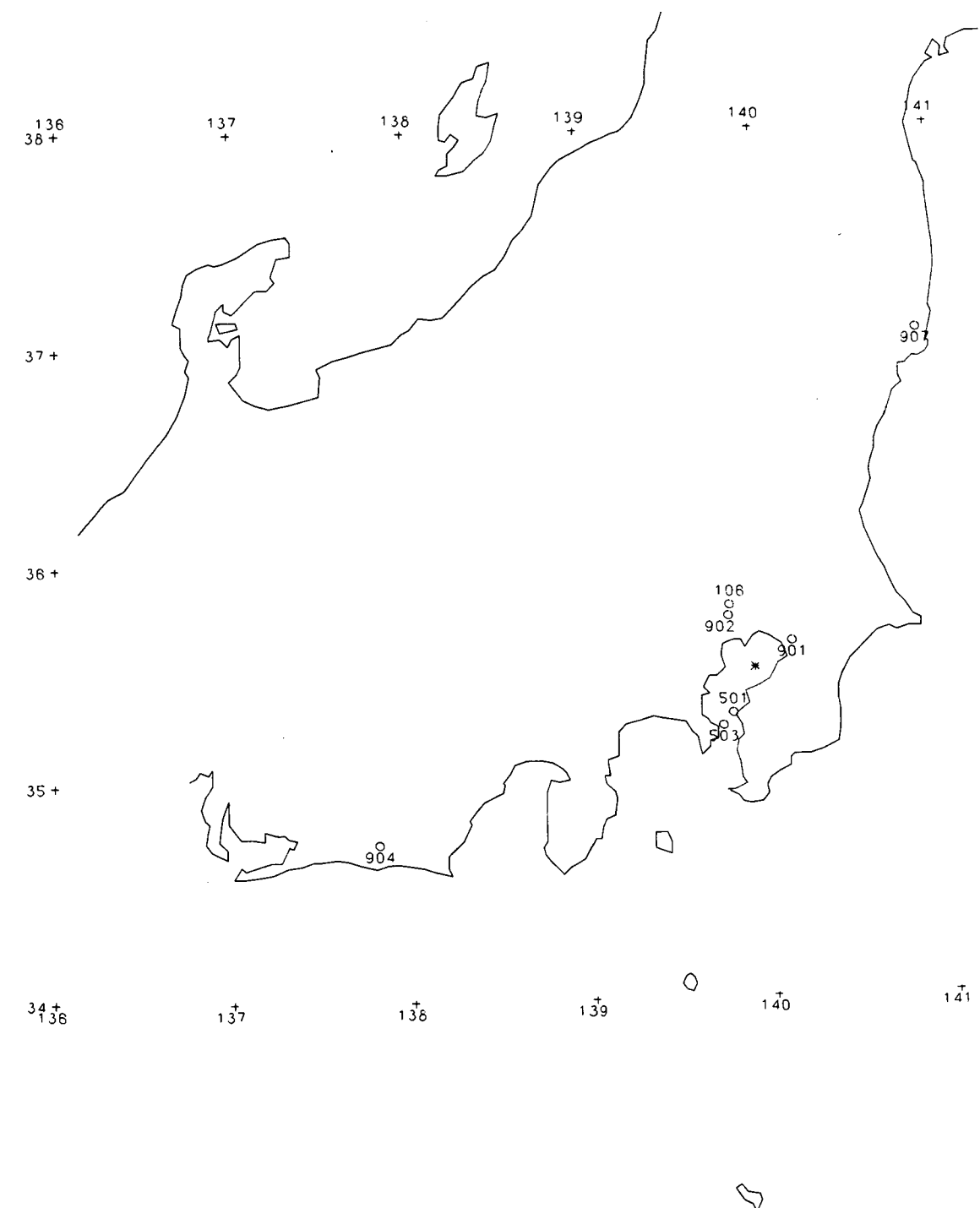
TOKYO BAY

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SOKA BRIDGE	106 PI-1 22	32.5	6.3	25.0	1973.03.27.11.08
TOKYO BAY (FUTTU CAPE)	501 GR-1 76	43.8	12.5	58.8	
TOKYO BAY (KANNONZAKI)	503 GR-1 18	118.6	25.0	56.3	
P.W.R.I. CHIBA BRANCH	901 GR-1 58	31.3	6.3	15.0	
NISHIARAI BRIDGE	902 PI-1 52	18.8	6.3	25.0	
NISHIARAI BRIDGE	902 PI-2 27	25.0	12.5	12.5	
SHINTENRYUGAWA BRIDGE	904 GR-1 13	1.3	1.3	1.3	
TAIRA BRIDGE	907 GR-1 70	0.1	0.1	0.1	
TAIRA BRIDGE	907 AB-1 24	0.6	0.6	0.6	

LOCATION OF
EPICENTER
LO=139 56
LA= 35 31

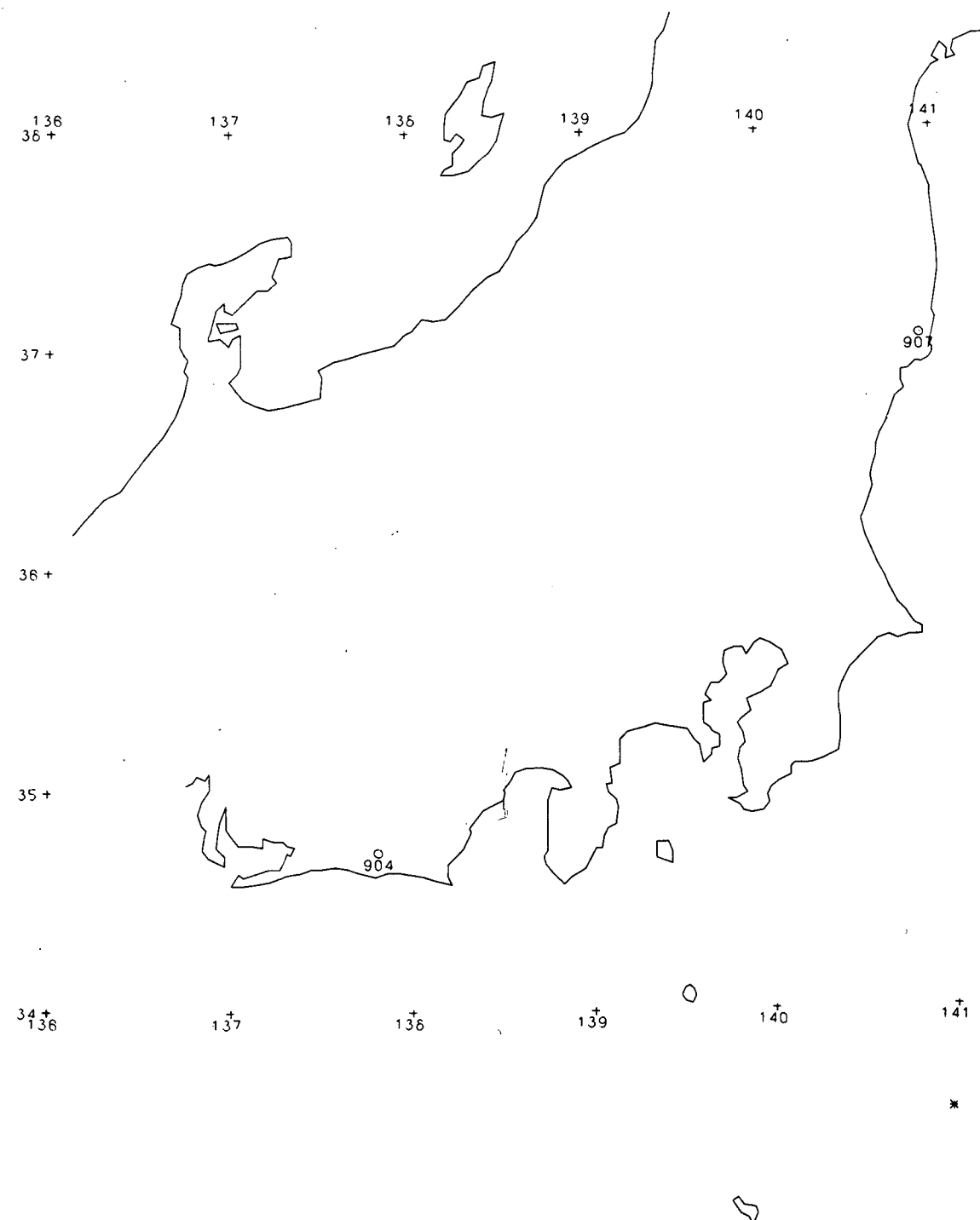
DEPTH, MAGNITUDE
60.0 KM, M= 4.9

(* E.Q. CENTER)



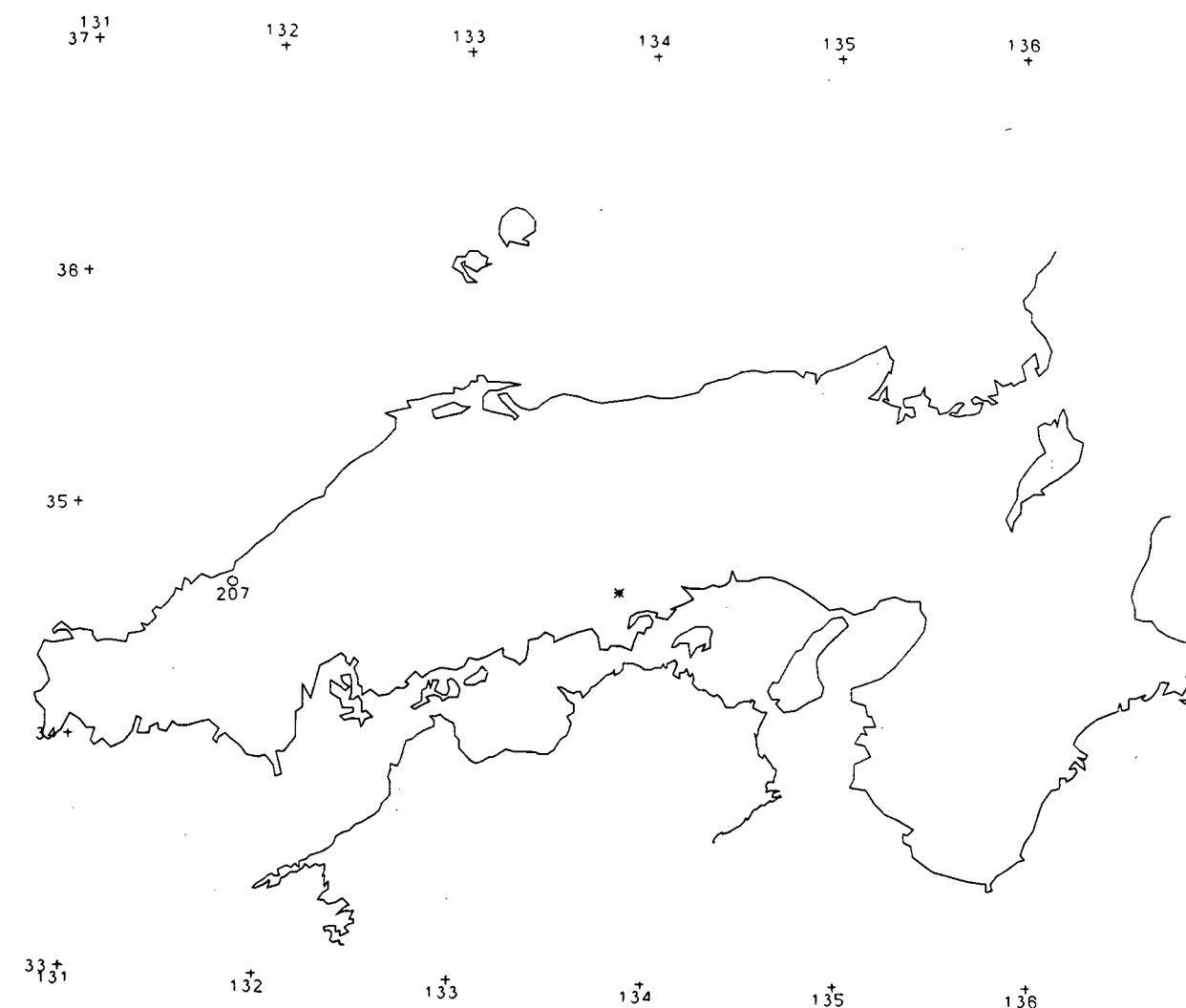
73005 NEAR SEA OF HACHIJOJIMA

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SHINTENRYUGAWA BRIDGE	904 CR-1 14	0.6	0.6	0.6	1973.04.25.23.21 LOCATION OF EPICENTER LO=140 57 LA= 33 32 DEPTH, MAGNITUDE 50.0 KM, M= 5.5 (* E.Q. CENTER)
TAIRA BRIDGE	907 CR-1 71	6.3	6.3	6.3	
TAIRA BRIDGE	907 AB-1 25	3.1	1.3	6.3	



73006 NEAR OKAYAMA CITY

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
TAKATSU BRIDGE	207 CR-1 3	9.4	3.1	9.4	1973.05.05.23.19 LOCATION OF EPICENTER LO=133 51 LA= 34 41 DEPTH, MAGNITUDE 30.0 KM, M= 0.0 (* E.Q. CENTER)



73007

S-W OFF NEMURO PEN.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
OTANOSHIKE BRIDGE	1304 PI-1 3	18.8	1.9	2.5	1973.06.16.09.54

LOCATION OF
EPICENTER
LO=145 47
LA= 43 8
DEPTH, MAGNITUDE
40.0 KM, M= 4.3
(* E.Q. CENTER)



73008

NEAR KUSHIRO

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
OTANOSHIKE BRIDGE	1304 PI-1 4	7.5	1.3	12.5	1973.06.16.10.37
HOROMAN BRIDGE	1305 PI-1 6	4.4	3.1	6.3	

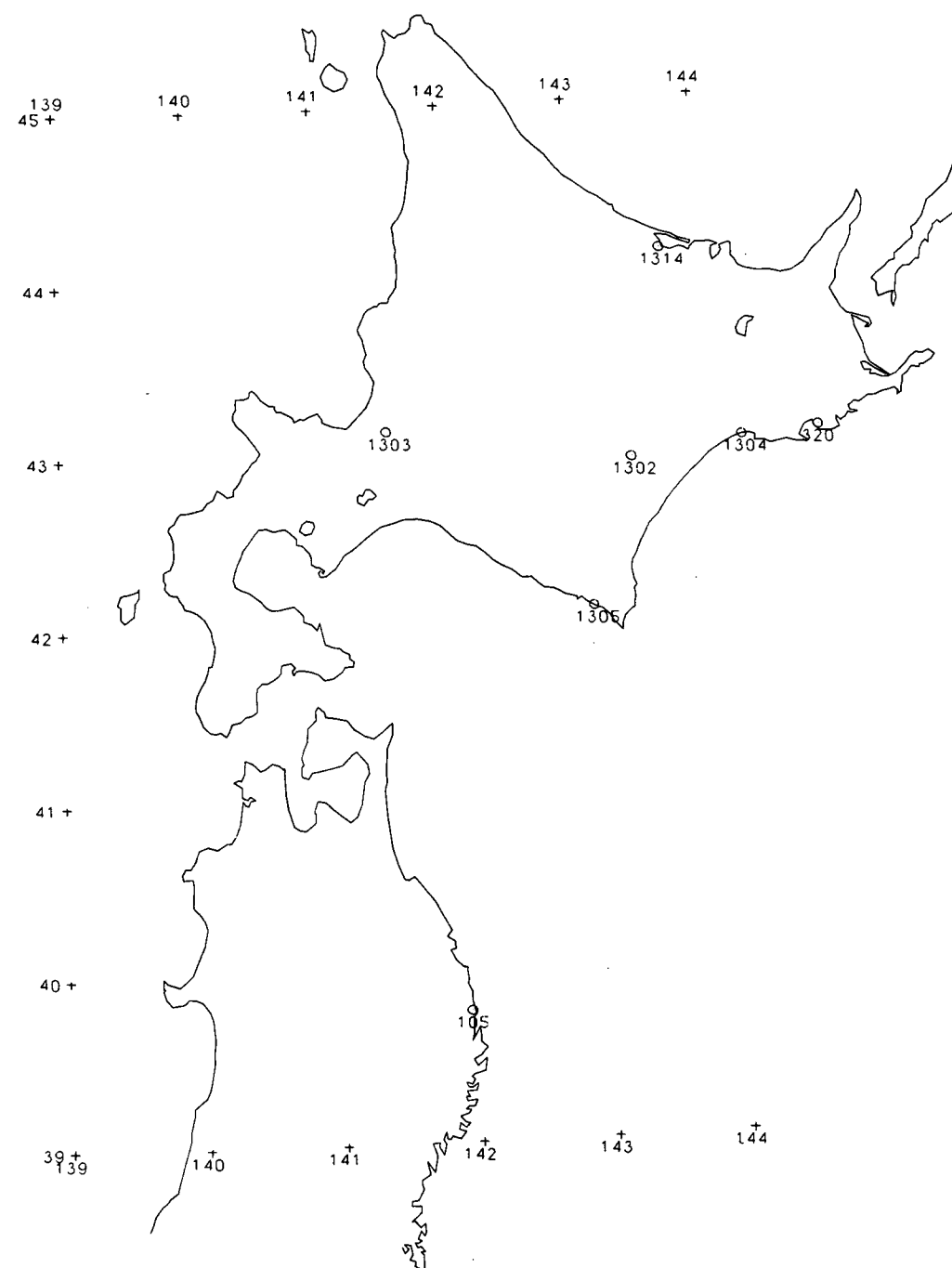
LOCATION OF
EPICENTER
LO=144 46
LA= 42 55
DEPTH, MAGNITUDE
60.0 KM, M= 4.7
(* E.Q. CENTER)



73009

S-E OFF NEMURO PEN.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
MASAKI BRIDGE	105 GR-1 5	2.3	1.5	1.5	1973.06.17.12.55
MASAKI BRIDGE	105 PI-1 5	7.5	1.5	7.5	
AKKESHI BRIDGE	320 GR-1 1	93.7	0.0	118.7	LOCATION OF EPICENTER LO=145 57 LA= 42 58
AKKESHI BRIDGE	320 PI-1 1	94.7	87.5	125.0	
CHIYODA BRIDGE	1302 GR-1 11	52.1	21.3	62.5	DEPTH, MAGNITUDE 40.0 KM, M= 7.4
CHIYODA BRIDGE	1302 PI-1 9	70.0	18.8	57.5	
SHINISHIKARI BRIDGE	1303 GR-1 6	6.3	1.3	6.3	(* E.Q. CENTER)
OTANOSHIKE BRIDGE	1304 GR-1 5	43.7	45.0	75.0	
OTANOSHIKE BRIDGE	1304 PI-1 5	76.3	27.5	95.0	
HOROMAN BRIDGE	1305 GR-1 12	12.5	12.0	12.5	
HOROMAN BRIDGE	1305 PI-1 7	18.8	12.5	12.5	
SHIBUSHI BRIDGE	1314 GR-1 1	6.3	6.3	8.7	



73010

OFF NEMURO PEN.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
CHIYODA BRIDGE	1302 GR-1 12	2.5	1.3	2.5	1973.06.17.21.14
CHIYODA BRIDGE	1302 PI-1 10	6.3	1.3	6.3	
OTANOSHIKE BRIDGE	1304 GR-1 6	6.3	1.3	9.4	LOCATION OF EPICENTER LO=145 29 LA= 42 52
OTANOSHIKE BRIDGE	1304 PI-1 6	10.0	1.3	12.5	
					DEPTH, MAGNITUDE 40.0 KM, M= 5.2
					(* E.Q. CENTER)



73011

OFF NEMURO PEN.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
CHIYODA BRIDGE	1302 GR-1 13	12.5	6.3	12.5	1973.06.17.22.33 LOCATION OF EPICENTER LO=145 28 LA= 42 52 DEPTH, MAGNITUDE 40.0 KM. M= 5.7 (* E.Q. CENTER)
CHIYODA BRIDGE	1302 PI-1 11	13.1	7.5	12.5	
OTANOSHIKE BRIDGE	1304 GR-1 7	0.0	6.3	12.5	
OTANOSHIKE BRIDGE	1304 PI-1 7	21.9	2.5	31.3	



73012

OFF NEMURO PEN.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
OTANOSHIKE BRIDGE	1304 GR-1 8	5.0	1.3	6.3	1973.06.17.22.43 LOCATION OF EPICENTER LO=146 42 LA= 42 37 DEPTH, MAGNITUDE 30.0 KM. M= 5.5 (* E.Q. CENTER)
OTANOSHIKE BRIDGE	1304 PI-1 8	6.3	1.3	12.5	



73013

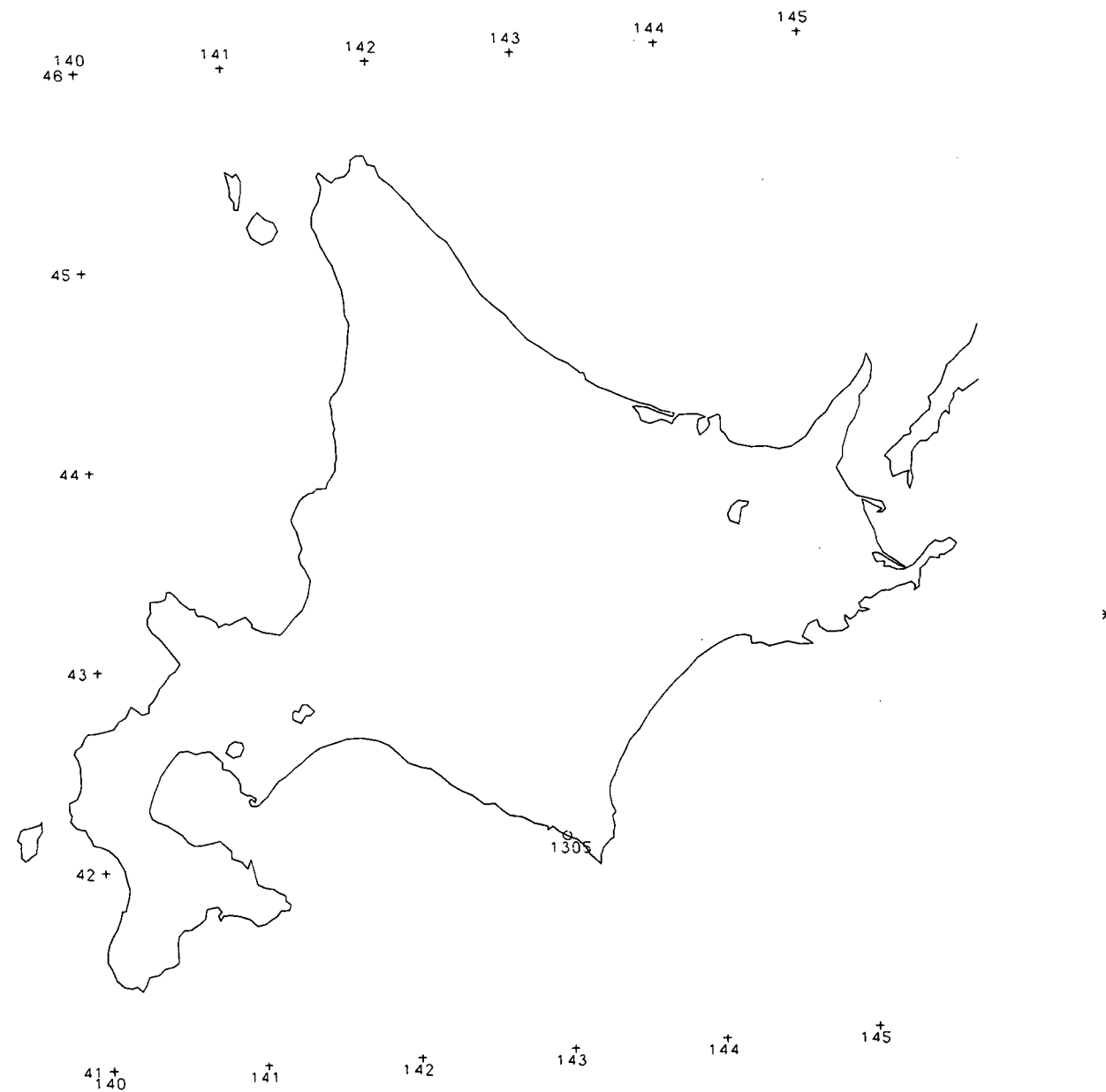
OFF NEMURO PEN.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
HOROMAN BRIDGE	1305 GR-1 13	6.0	4.0	6.0	1973.06.24.11.43

LOCATION OF
EPICENTER
LO=146 45
LA= 42 57

DEPTH, MAGNITUDE
30.0 KM. M= 7.1

(* E.Q. CENTER)



73014

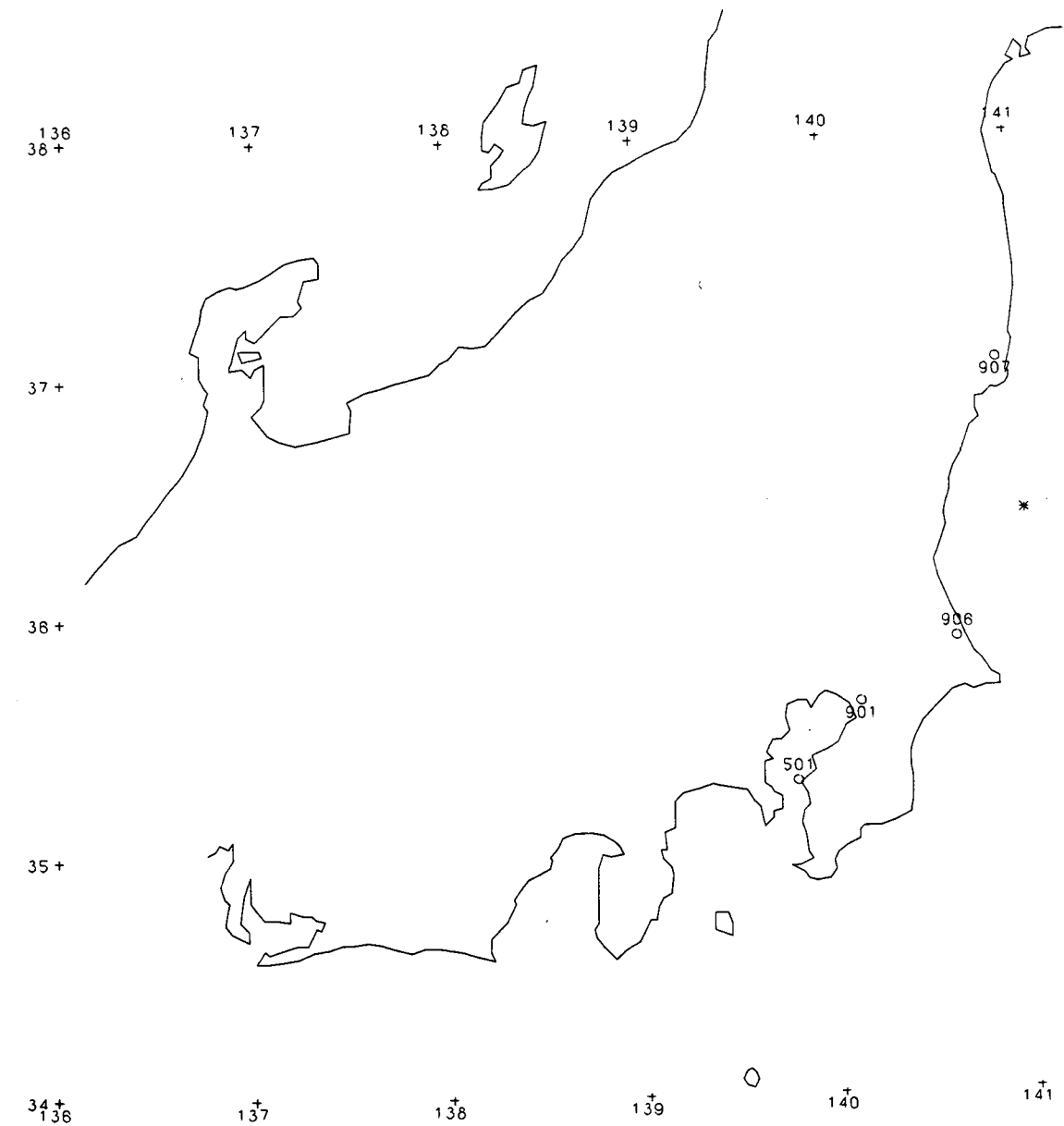
OFF IBARAKI PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
TOKYO BAY (FUTTU CAPE)	501 CR-1 77	1.3	1.3	1.3	1973.07.20.17.13
P.W.R.I. CHIBA BRANCH	901 CR-1 59	1.3	1.3	1.3	
P.W.R.I. KASHIMA E.L.	906 GR-1 16	12.5	12.5	12.5	
TAIRA BRIDGE	907 AB-1 26	12.5	6.3	12.5	

LOCATION OF
EPICENTER
LO=141 2
LA= 36 25

DEPTH, MAGNITUDE
40.0 KM. M= 5.9

(* E.Q. CENTER)



73015

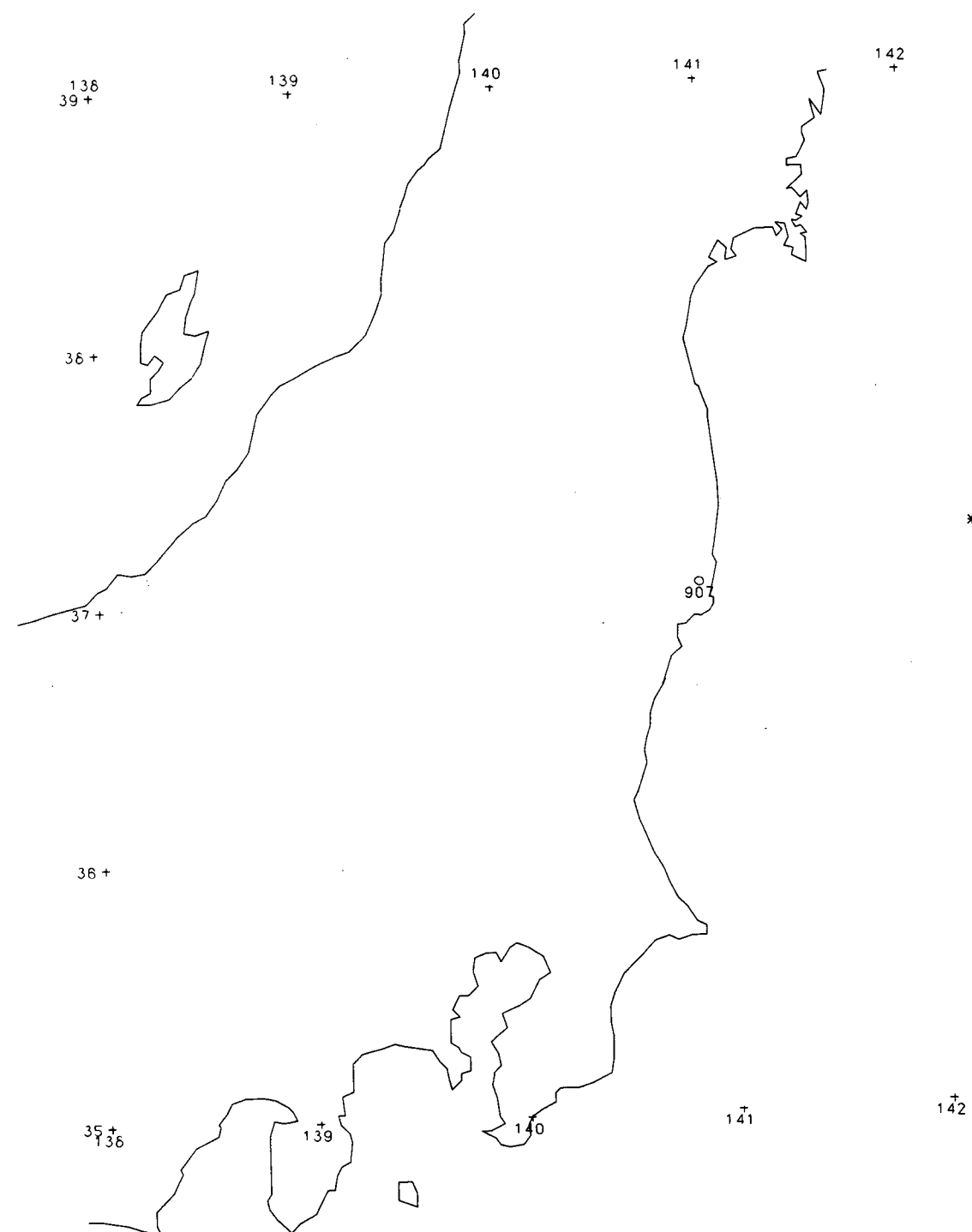
OFF FUKUSHIMA PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
TAIRA BRIDGE	907 AB-1 27	1.3	1.3	1.3	1973.08.24.08.50

LOCATION OF
EPICENTER
LO=142 15
LA= 37 14

DEPTH, MAGNITUDE
20.0 KM, M= 5.8

(* E.Q. CENTER)



73016

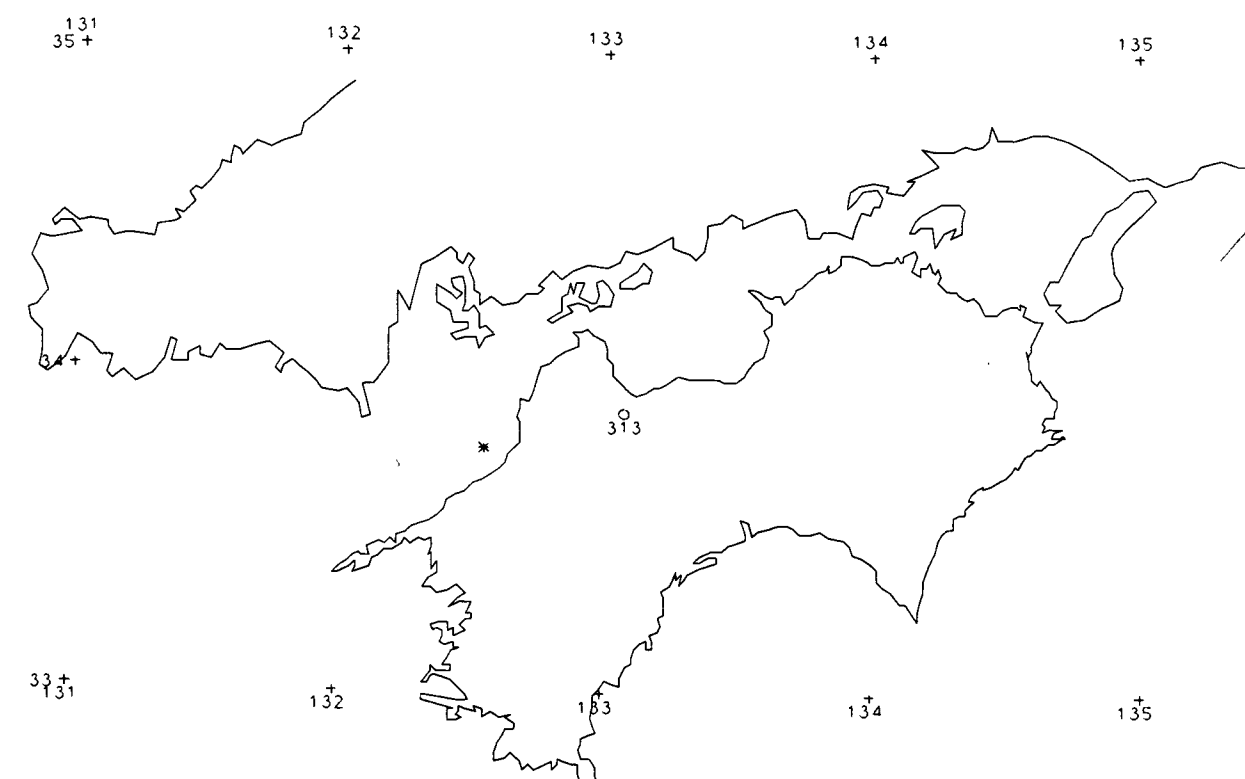
IYONADA

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
ISHIZUCHI BRIDGE	313 CR-1 7	25.0	2.5	16.3	1973.09.10.13.41

LOCATION OF
EPICENTER
LO=132 33
LA= 33 46

DEPTH, MAGNITUDE
50.0 KM, M= 4.8

(* E.Q. CENTER)



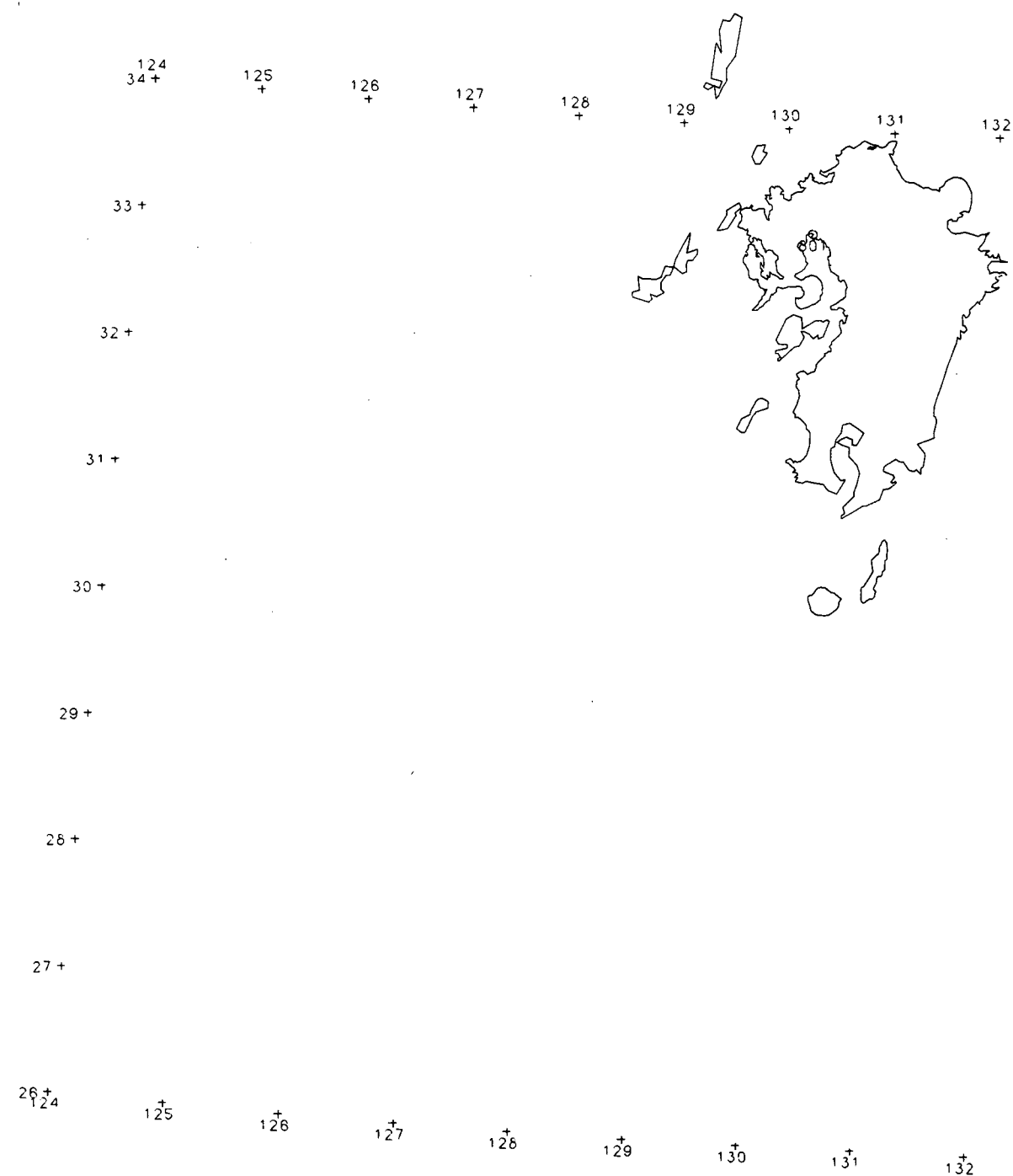
73017 NEAR SEA OF ISHIGAKIJIMA

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
ARIAKE-SEA EMBANKMENT	801 CR-1 6	6.3	1.3	6.3	1973.09.12.08.19

LOCATION OF
EPICENTER
LO=124 51
LA= 25 7

DEPTH, MAGNITUDE
180.0 KM, M= 0.0

(* E.Q. CENTER)



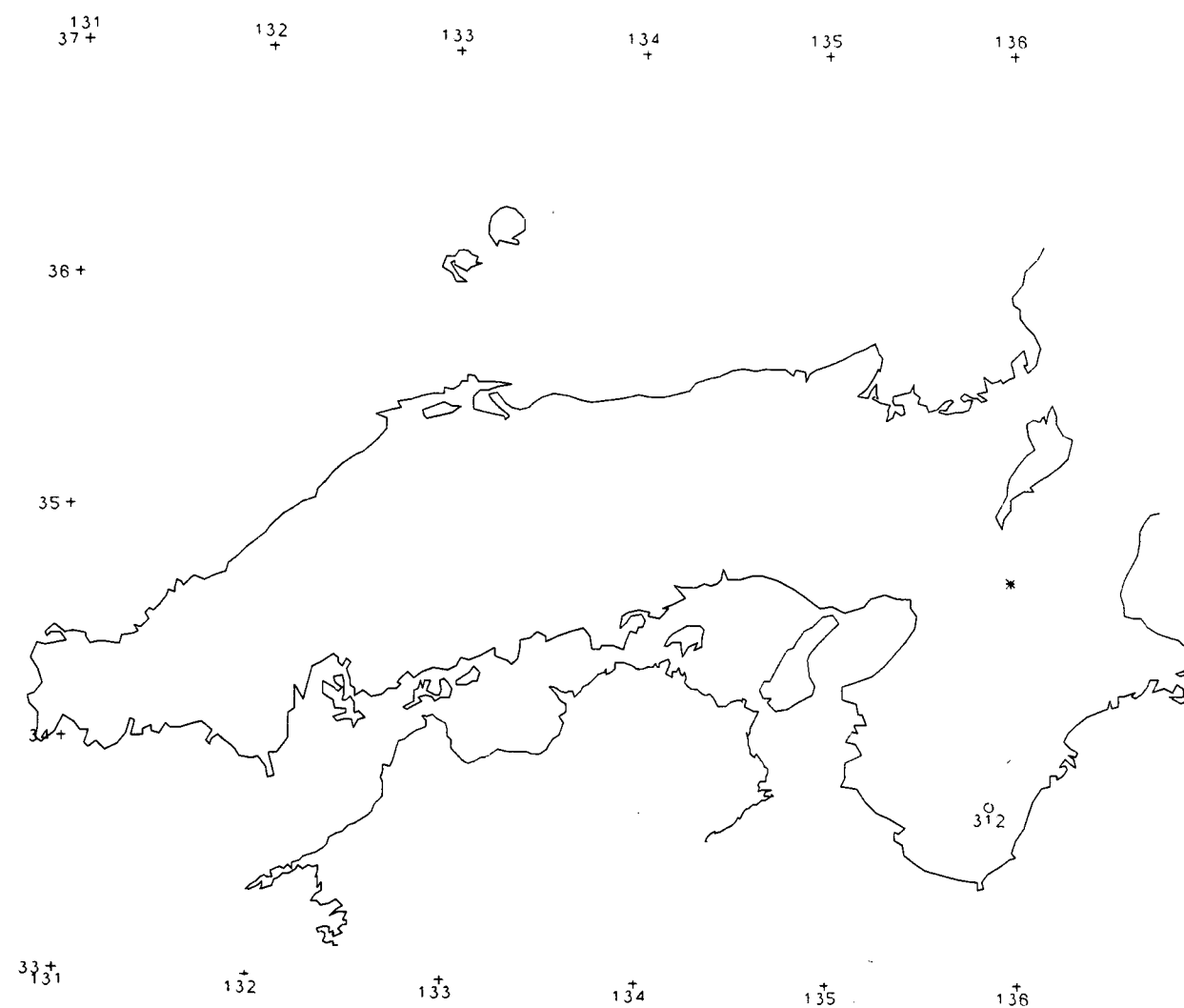
73018 N. OF NARA PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
AKAGI BRIDGE	312 PI-1 2	31.3	6.3	40.6	1973.09.14.06.56

LOCATION OF
EPICENTER
LO=135 58
LA= 34 44

DEPTH, MAGNITUDE
10.0 KM, M= 3.3

(* E.Q. CENTER)



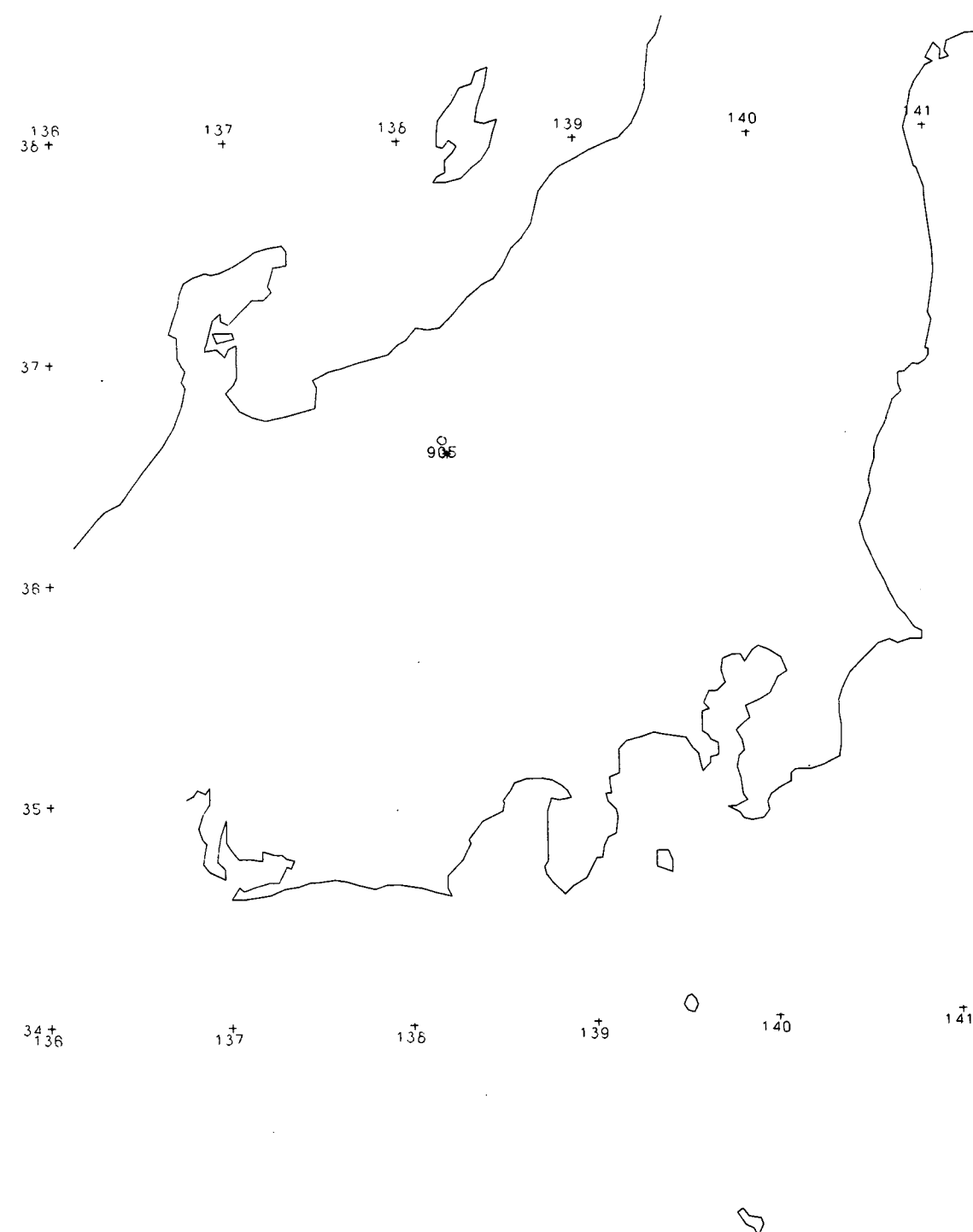
73019 NEAR MATSUSHIRO

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
OCHIAI BRIDGE	905 GR-1270	25.0	6.3	12.5	1973.09.19.16.13
OCHIAI BRIDGE	905 PI-1430	25.0	6.3	12.5	

LOCATION OF
EPICENTER
LO=138 15
LA= 36 35

DEPTH, MAGNITUDE
10.0 KM, M= 4.0

(* E.Q. CENTER)



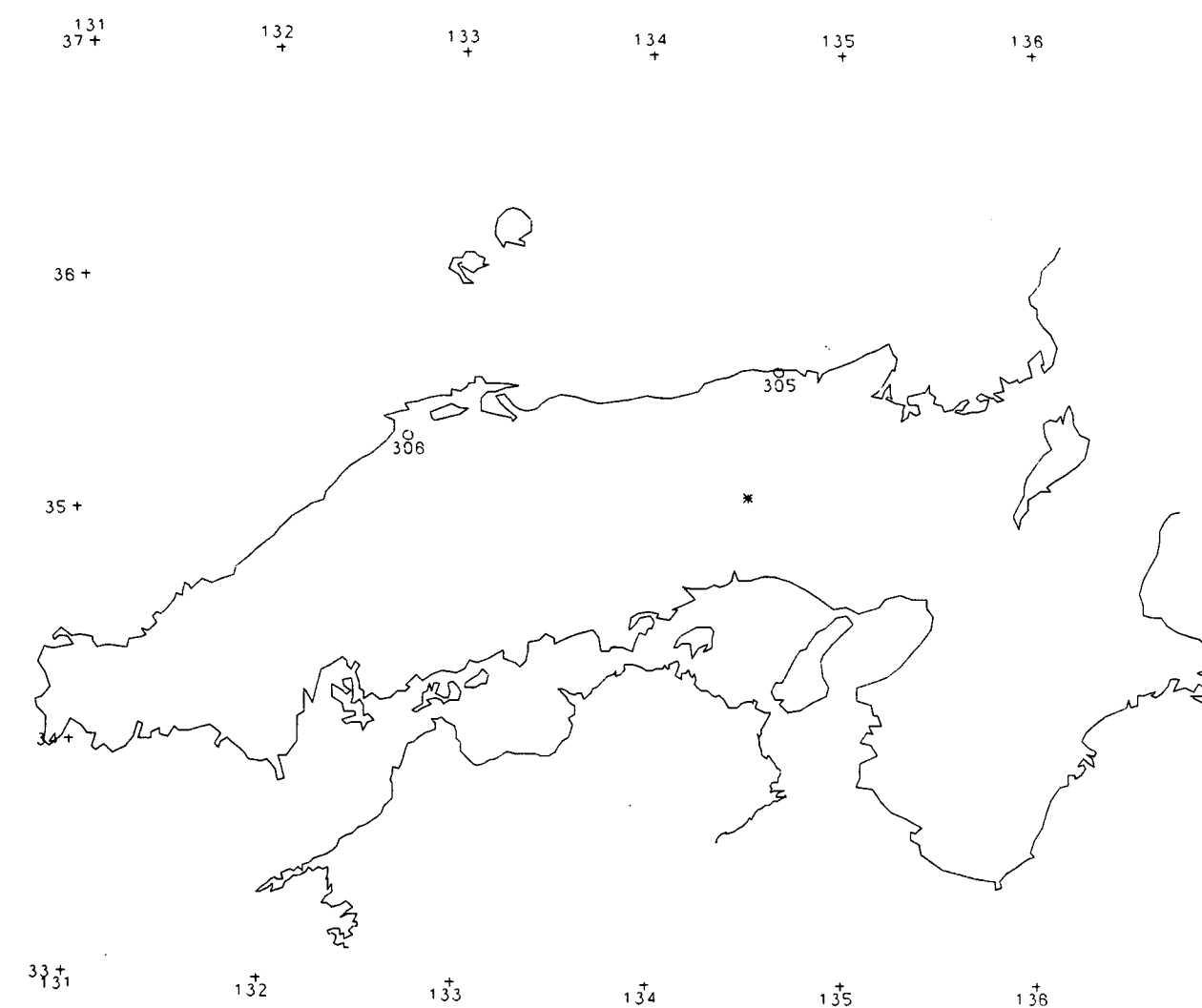
73020 W. OF HYOGO PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
MINATO BRIDGE	305 GR-1 7	1.3	1.3	1.3	1973.09.21.11.21
MYOKEN BRIDGE	306 GR-1 5	6.3	0.1	0.1	
MYOKEN BRIDGE	306 PI-1 13	12.5	6.3	26.3	1973.09.21.11.21

LOCATION OF
EPICENTER
LO=134 31
LA= 35 6

DEPTH, MAGNITUDE
10.0 KM, M= 5.1

(* E.Q. CENTER)



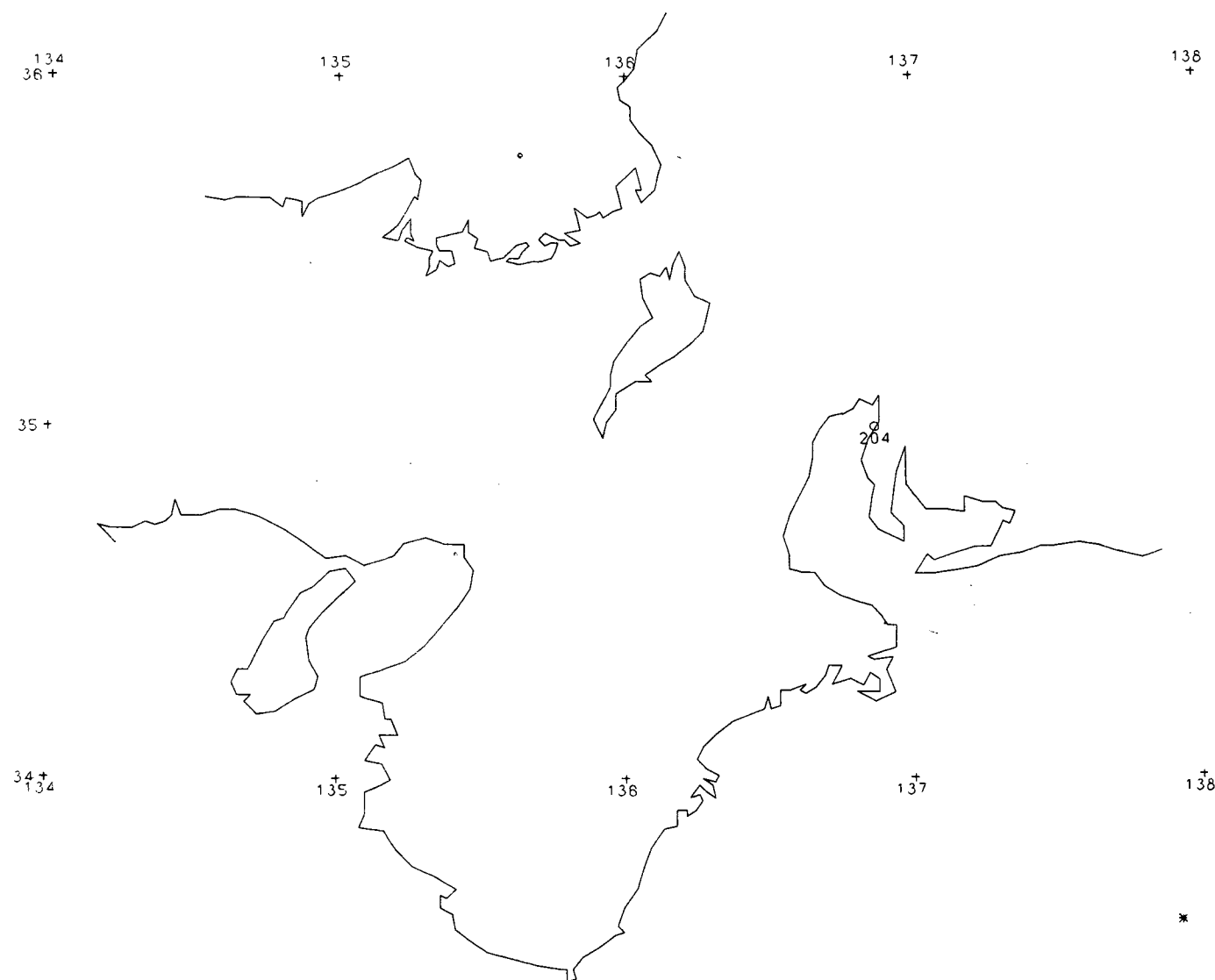
73021 A LONG WAY OFF TOKAIDO

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SHINYAWATA BRIDGE	204 GR-1 21	0.1	0.1	0.1	1973.09.21.14.07

LOCATION OF
EPICENTER
LO=137 55
LA= 33 35

DEPTH, MAGNITUDE
360.0 KM. M= 0.0

(* E.Q. CENTER)



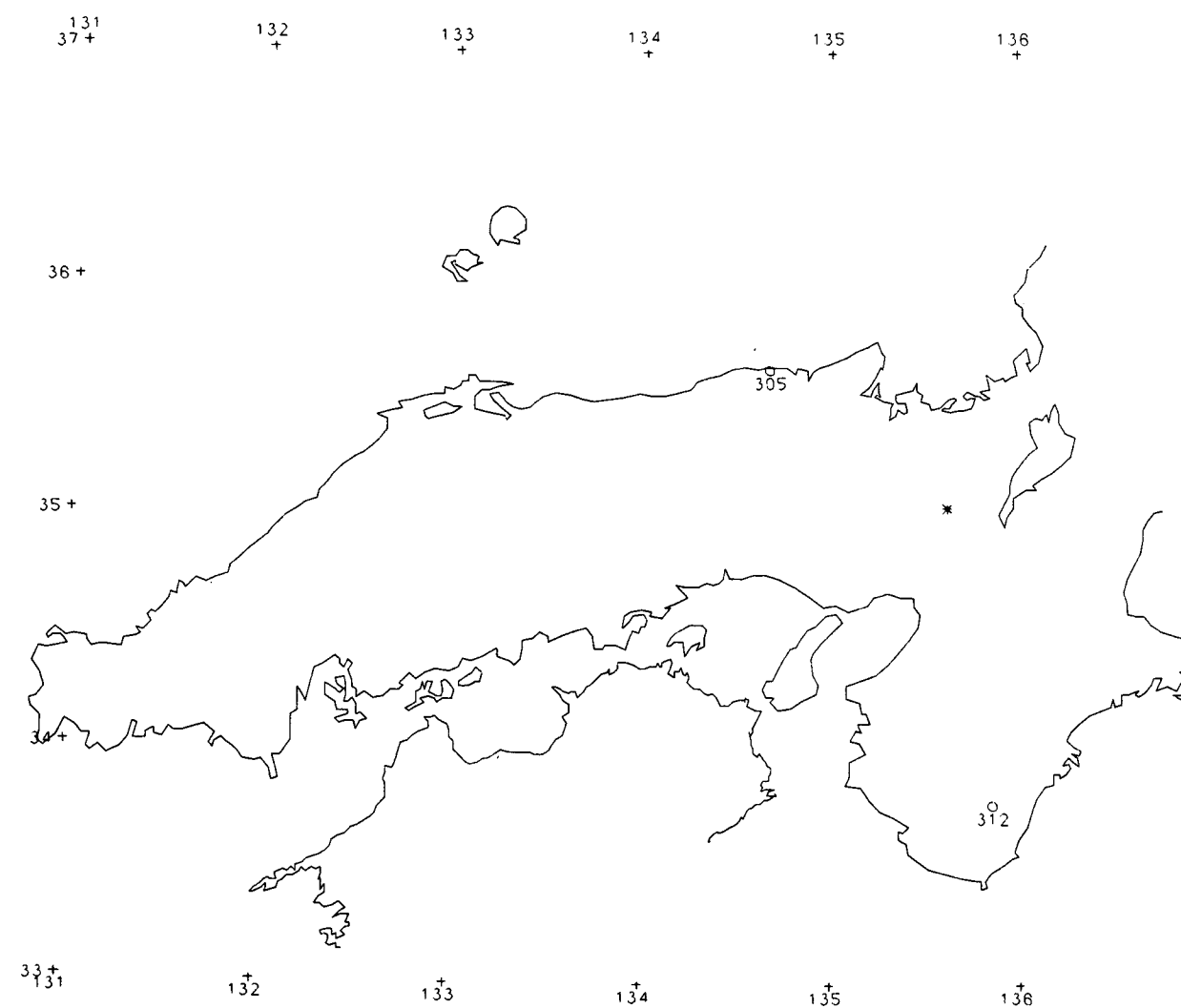
73022 NEAR KYOTO CITY

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
MINATO BRIDGE	305 GR-1 8	1.3	1.3	1.3	1973.09.24.03.54
AKAGI BRIDGE	312 GR-1 3	37.5	6.3	12.5	
AKAGI BRIDGE	312 PI-1 3	34.4	7.5	2.5	

LOCATION OF
EPICENTER
LO=135 37
LA= 35 3

DEPTH, MAGNITUDE
10.0 KM. M= 4.3

(* E.Q. CENTER)



73023

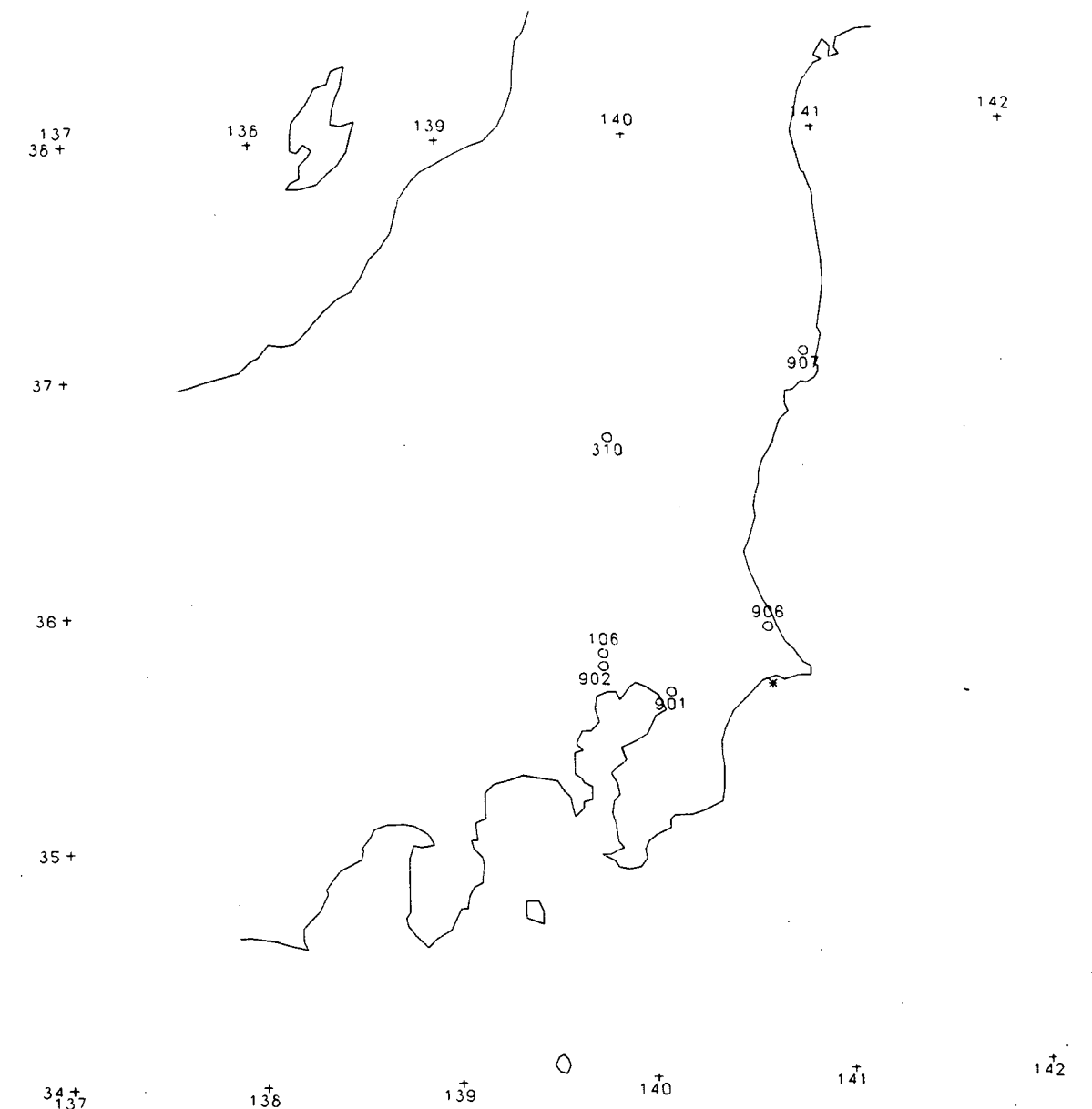
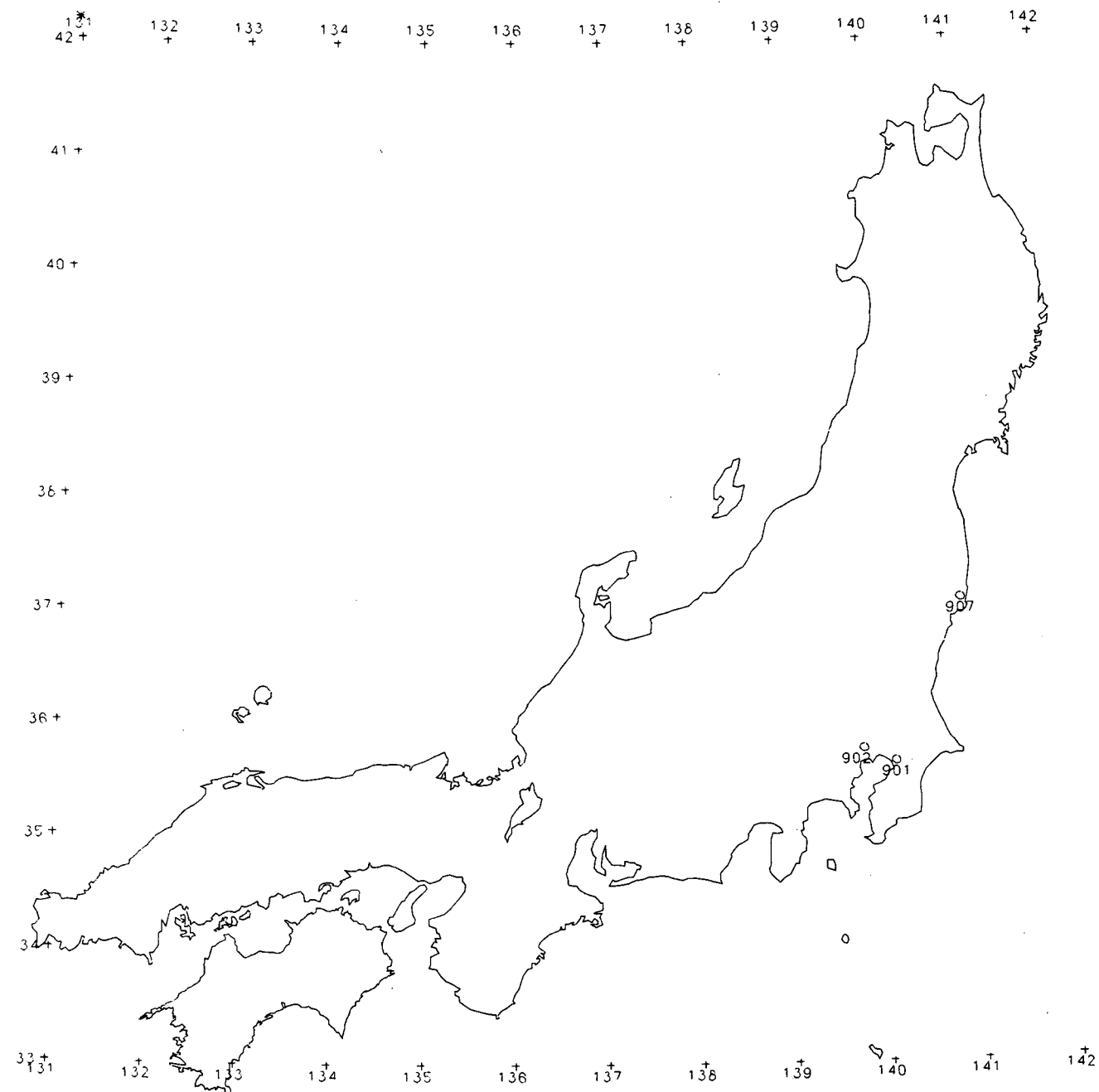
NEAR VLADIOSTOK

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
P.W.R.I. CHIBA BRANCH	901 CR-1 60	1.3	1.3	1.3	1973.09.29.09.45 LOCATION OF EPICENTER LO=130 58 LA= 42 11 DEPTH, MAGNITUDE 600.0 KM. M= 0.0 (* E.Q. CENTER)
NISHIARAI BRIDGE	902 GR-1 32	18.8	3.1	12.5	
NISHIARAI BRIDGE	902 PI-2 28	1.3	1.3	6.3	
TAIRA BRIDGE	907 AB-1 28	0.6	0.6	0.6	
TAIRA BRIDGE	907 CR-1 72	1.3	1.3	1.3	

73024

NEAR CHOSHI

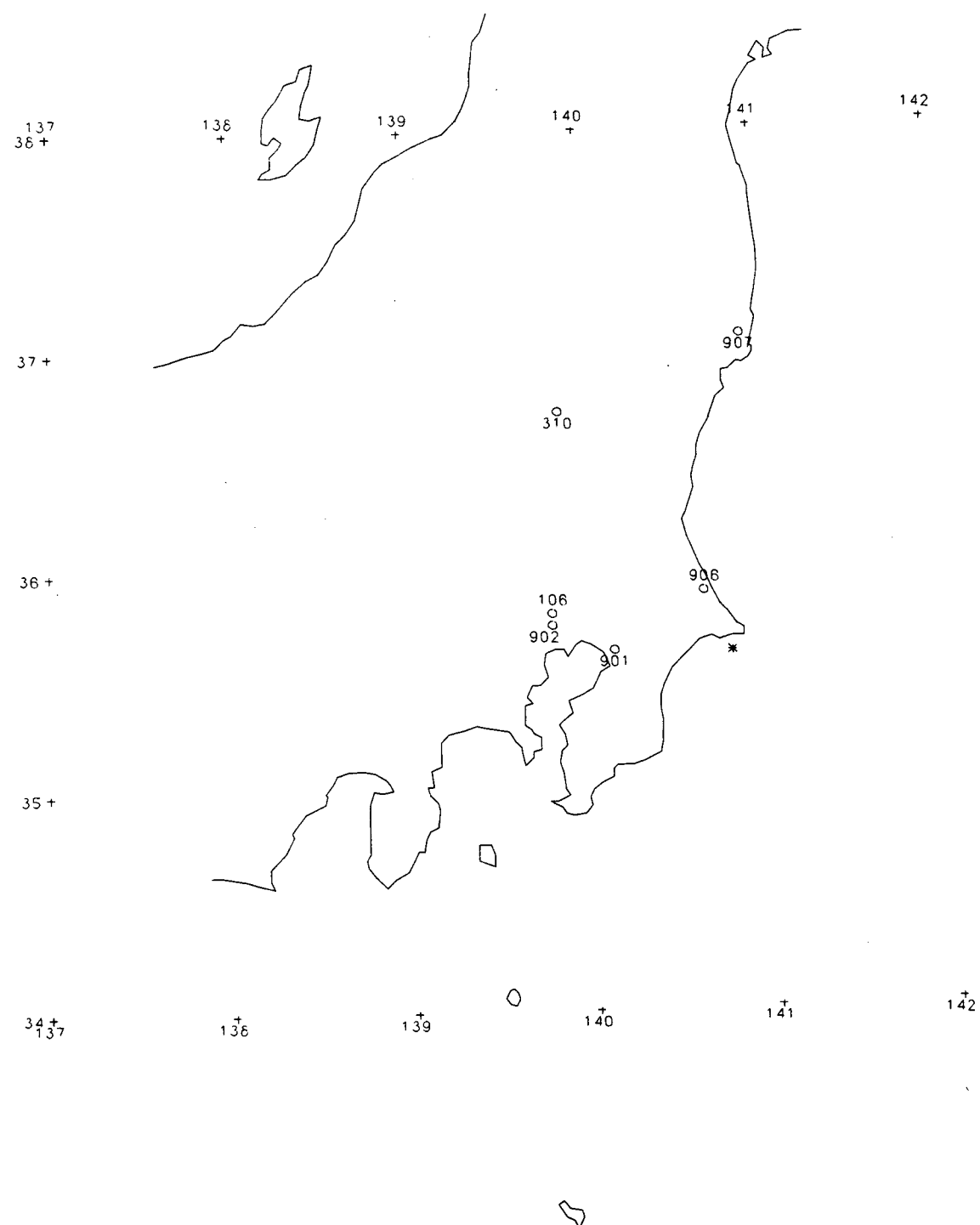
STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SOKA BRIDGE	106 GR-1 23	12.5	3.1	13.9	1973.09.30.15.18 LOCATION OF EPICENTER LO=140 40 LA= 35 39 DEPTH, MAGNITUDE 50.0 KM. M= 5.9 (* E.Q. CENTER)
SOKA BRIDGE	106 PI-1 23	18.8	1.3	15.6	
HIRAI BRIDGE	310 GR-1 20	12.5	6.3	12.5	
HIRAI BRIDGE	310 PI-1 17	31.5	1.3	7.5	
HIRAI BRIDGE	310 PI-2 17	20.0	1.3	18.8	
P.W.R.I. CHIBA BRANCH	901 CR-1 61	18.8	12.5	18.8	
NISHIARAI BRIDGE	902 GR-1 33	18.8	5.0	10.0	
P.W.R.I. KASHIMA E.L.	906 GR-1 17	100.0	12.5	75.0	
TAIRA BRIDGE	907 GR-1 73	1.3	1.3	1.3	



73025

NEAR CHOSHI

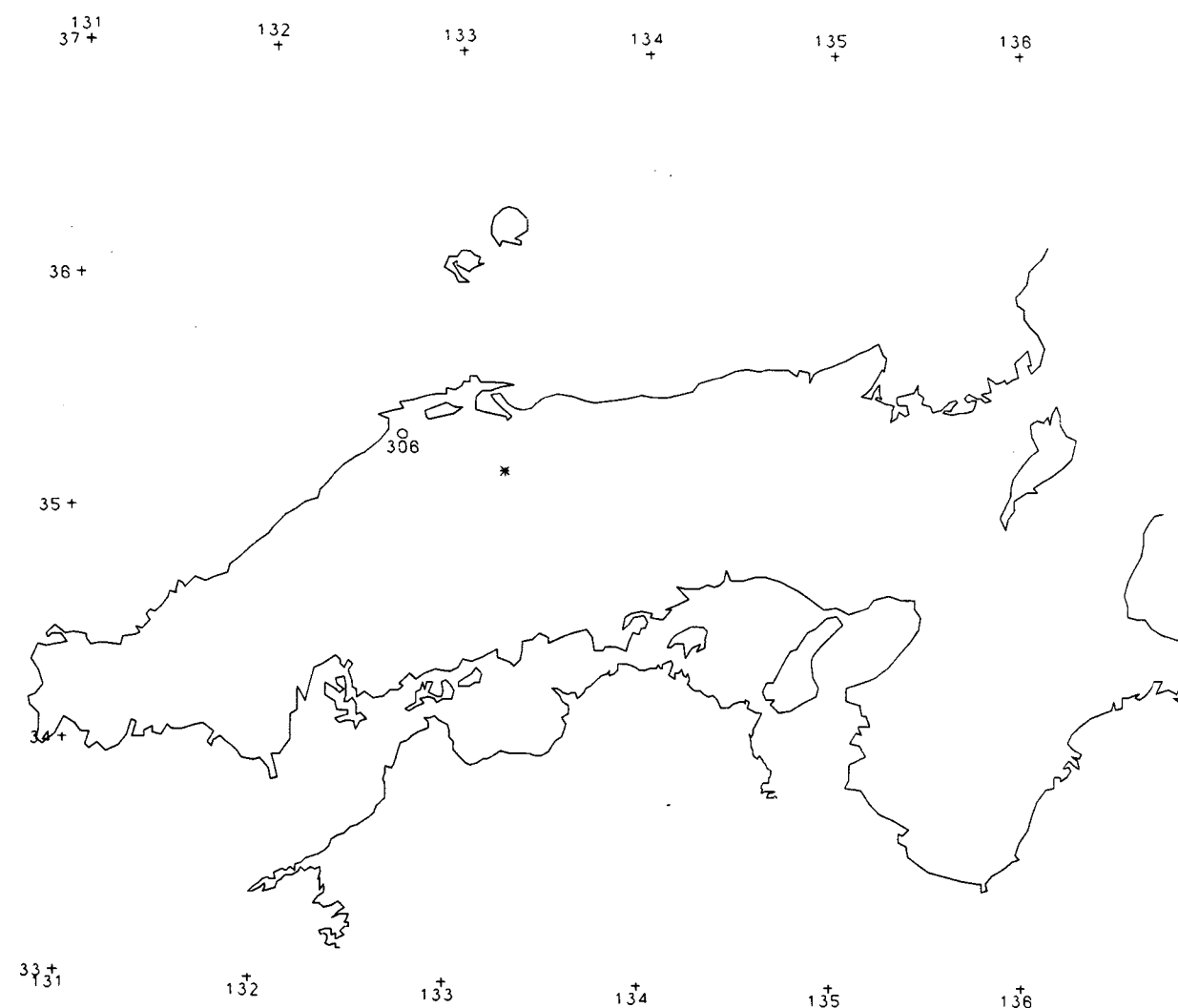
STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
SOKA BRIDGE	106 GR-1 24	12.5	1.3	15.6	1973.10.01.23.16 LOCATION OF EPICENTER LO=140 48 LA= 35 37 DEPTH, MAGNITUDE 60.0 KM. M= 5.8 (* E.Q. CENTER)
HIRAI BRIDGE	310 CR-1 21	7.5	3.1	7.5	
P.W.R.I. CHIBA BRANCH	901 CR-1 62	16.8	12.5	25.0	
NISHIARAI BRIDGE	902 CR-1 34	6.3	1.3	6.3	
P.W.R.I. KASHIMA E.L.	906 CR-1 16	67.5	12.5	58.8	
TAIRA BRIDGE	907 CR-1 74	1.3	1.3	1.3	



73026

TTOTORI-SHIMANE BORDER

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
MYOKEN BRIDGE	306 GR-1 6	6.3	1.3	3.1	1973.10.27.13.44 LOCATION OF EPICENTER LO=133 16 LA= 35 12 DEPTH, MAGNITUDE 10.0 KM. M= 5.1 (* E.Q. CENTER)
MYOKEN BRIDGE	306 PI-1 14	7.5	3.1	21.9	



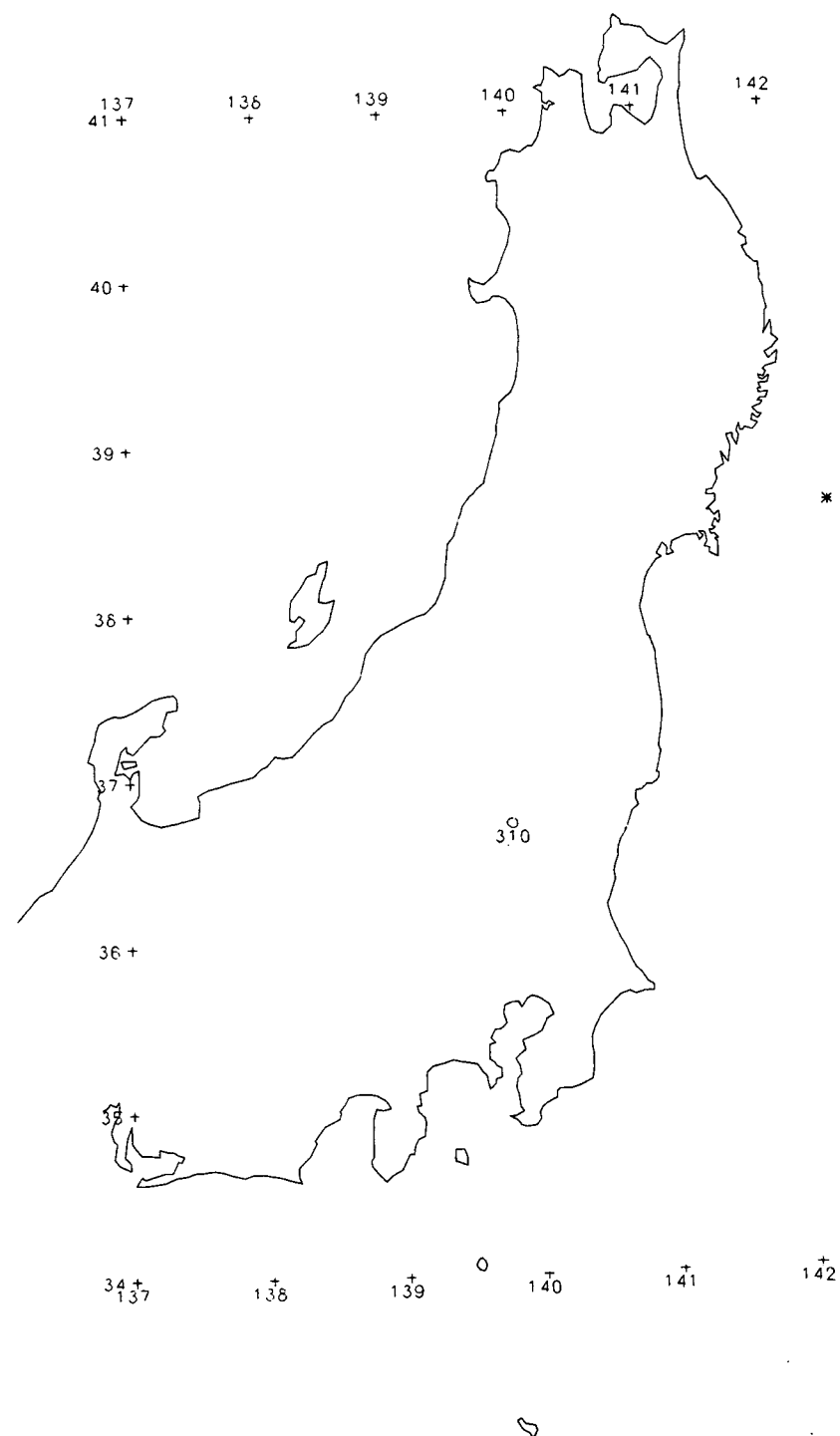
73027 OFF MIYAGI PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
HIRAI BRIDGE	310 GR-1 22	1.3	1.3	1.3	1973.11.13.10.12

LOCATION OF
EPICENTER
LO=142 22
LA= 38 35

DEPTH. MAGNITUDE
60.0 KM. M= 5.5

(* E.Q. CENTER)



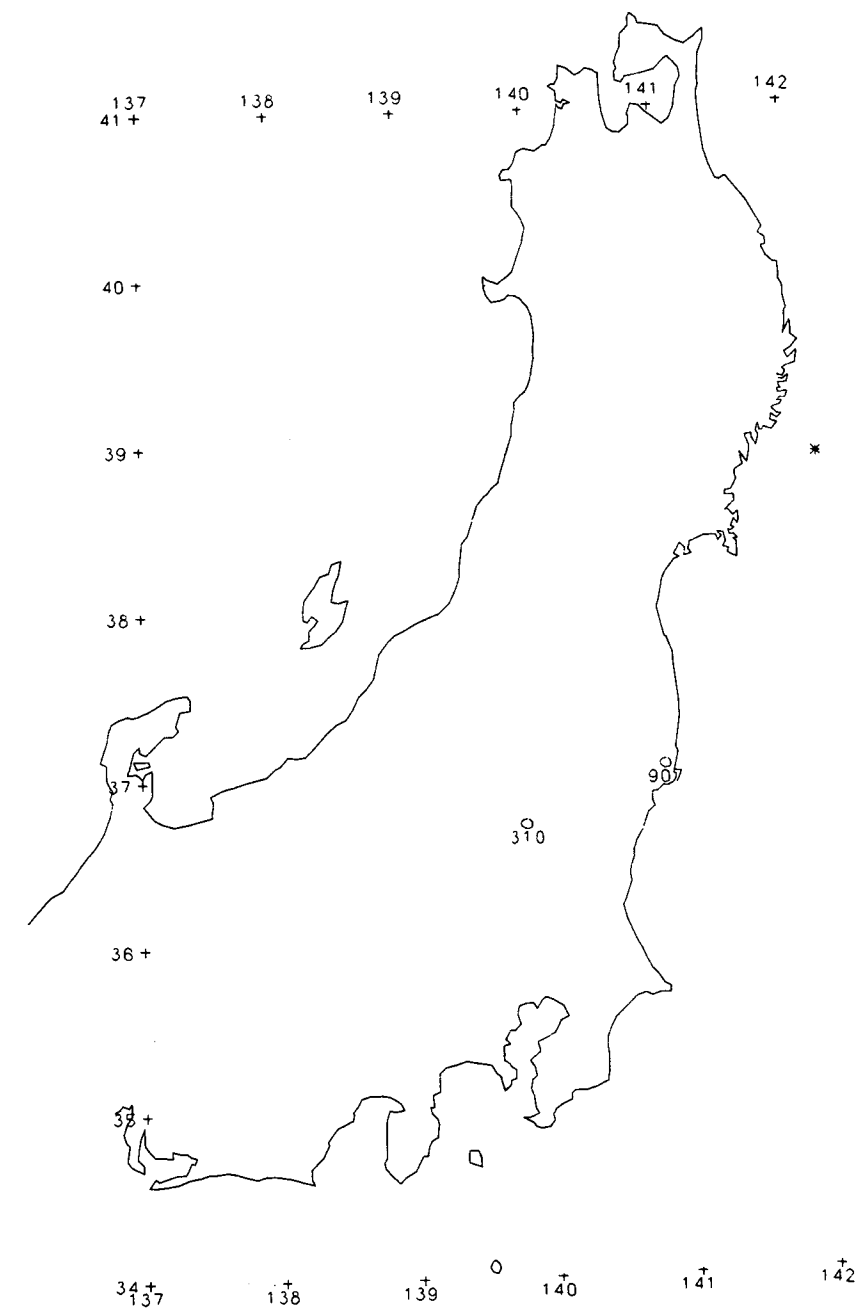
73028 OFF MIYAGI PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
HIRAI BRIDGE	310 GR-1 23	0.0	0.0	0.0	1973.11.19.22.02
HIRAI BRIDGE	310 PI-1 18	6.3	1.3	6.3	
HIRAI BRIDGE	310 PI-2 18	12.5	1.3	6.3	
TAIRA BRIDGE	907 CR-1 75	12.5	6.3	12.5	

LOCATION OF
EPICENTER
LO=142 9
LA= 38 53

DEPTH. MAGNITUDE
50.0 KM. M= 6.4

(* E.Q. CENTER)



73029

W. OF WAKAYAMA PREF.

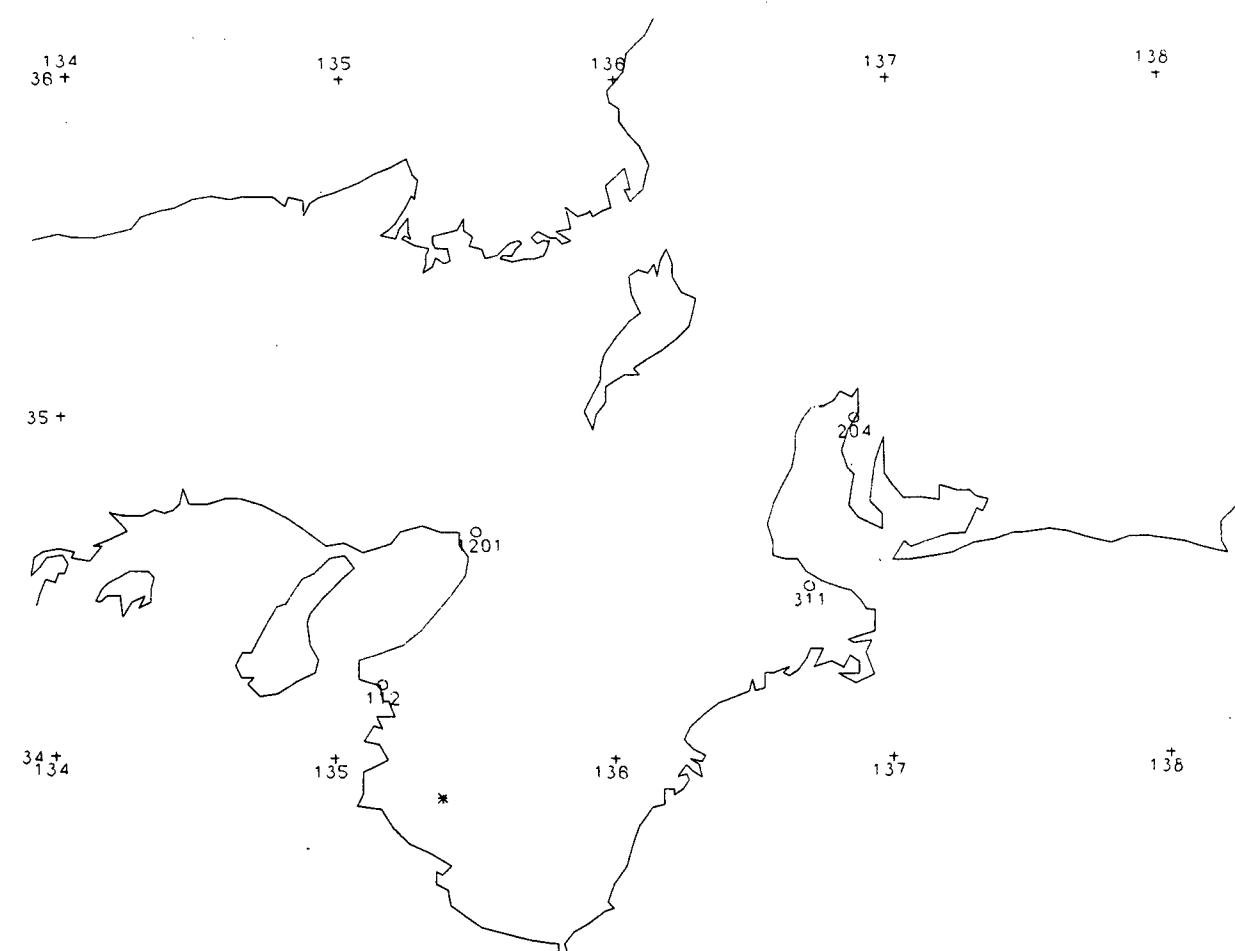
STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
KINOKAWA BRIDGE	112 GR-1 25	50.0	12.5	46.3	1973.11.25.13.25 LOCATION OF EPICENTER LO=135 25 LA= 33 51 DEPTH, MAGNITUDE 60.0 KM, M=5.9 (* E.Q. CENTER)
KINOKAWA BRIDGE	112 PI-1 6	37.5	12.5	75.0	
SHINYAWATA BRIDGE	204 GR-1 22	6.3	3.1	6.3	
TOYOHAMA BRIDGE	311 CR-1 7	6.3	1.3	6.3	



73030

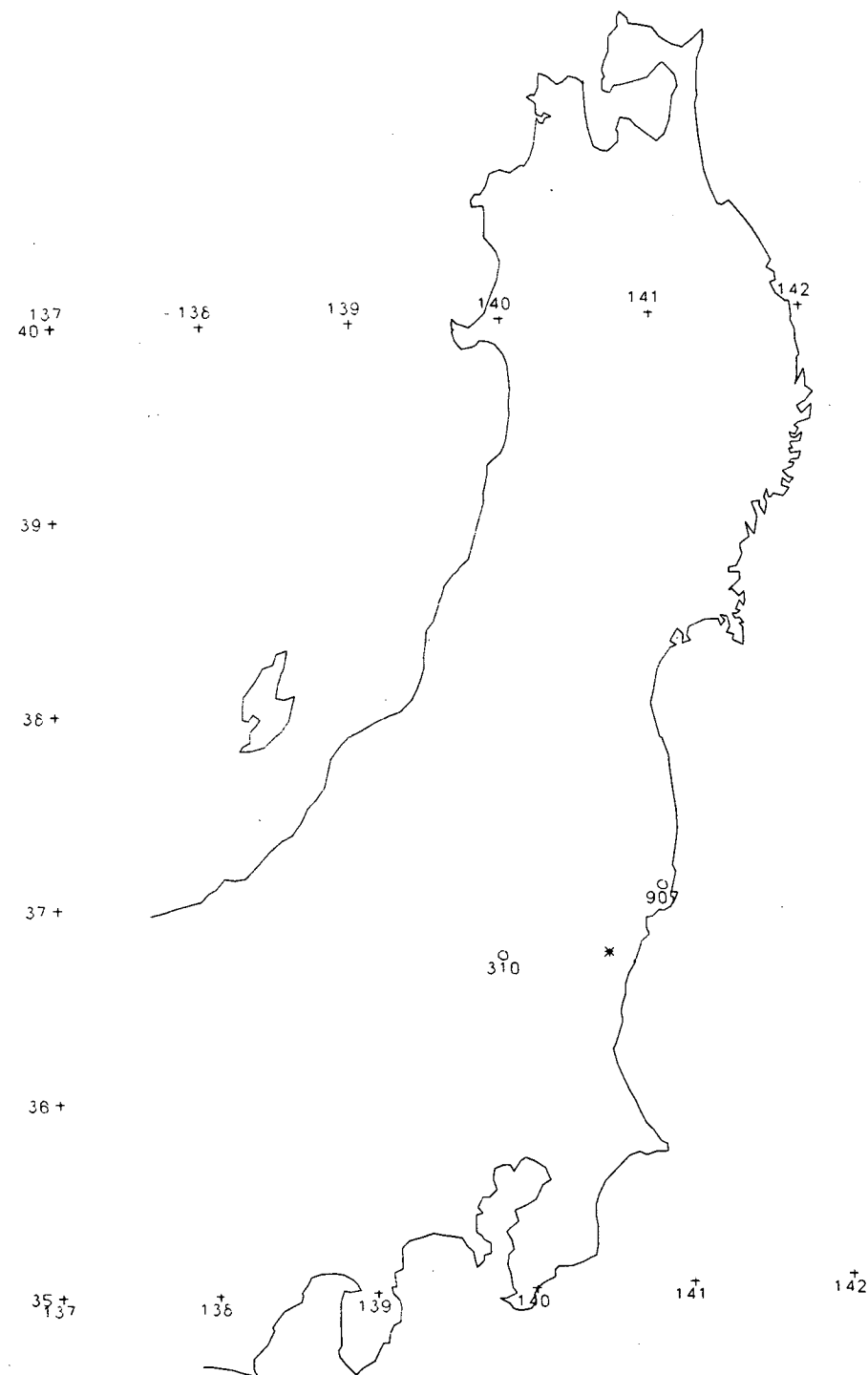
CENTER OF WAKAYAMA PREF.

STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)			EARTHQUAKE TIME AND DATE
		HORI. A	VERTICAL	HORI. B	
KINOKAWA BRIDGE	112 GR-1 26	47.6	12.5	37.5	1973.11.25.18.19 LOCATION OF EPICENTER LO=135 23 LA= 33 53 DEPTH, MAGNITUDE 60.0 KM, M=5.8 (* E.Q. CENTER)
KINOKAWA BRIDGE	112 PI-1 7	50.0	12.5	50.0	
SHINYAWATA BRIDGE	204 GR-1 23	7.5	6.3	6.3	
TOYOHAMA BRIDGE	311 CR-1 8	20.0	1.3	13.8	
TOYOHAMA BRIDGE	311 PI-1 8	31.3	5.0	18.8	
NISHIYOKOBORI BRIDGE	1201 CR-1 8	6.3	1.3	6.3	
NISHIYOKOBORI BRIDGE	1201 PI-1 10	20.0	6.3	7.5	



N. OF IBARAKI PREF.

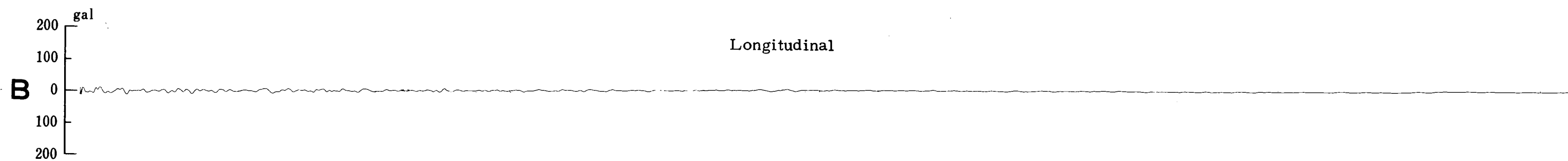
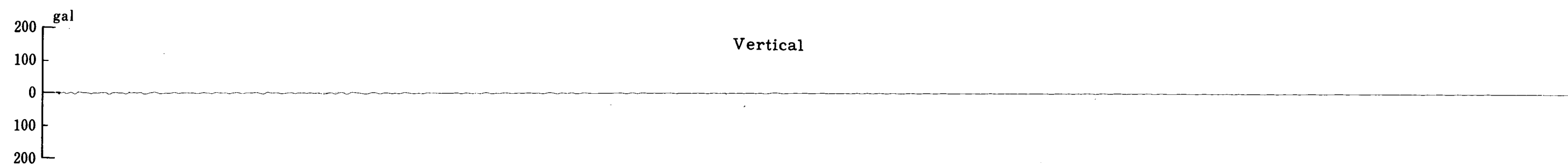
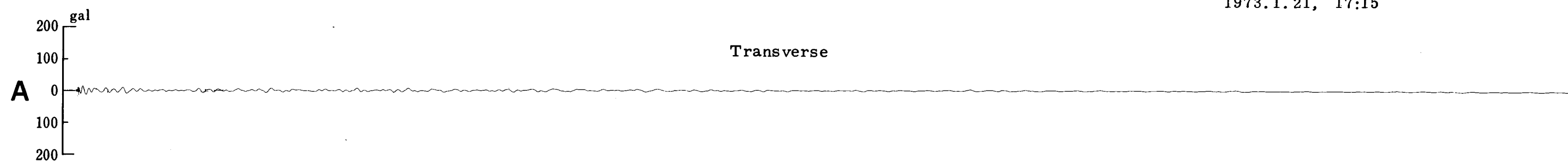
STATION NAME OF STRUCTURE	RECORD NUMBER	MAX. AMPLITUDE (GALS)	HORI. A	VERTICAL	HORI. B	EARTHQUAKE TIME AND DATE
TAIRA BRIDGE	907 AB-1 30	0.1	0.1	0.1	1973.12.22.10.20	
						LOCATION OF EPICENTER
						LO=140 17
						LA= 35 13
						DEPTH. MAGNITUDE
						70.0 KM. M= 0.0
						(* E.Q. CENTER)



1sec

Soka Bridge 106-Gr-22

1973.1.21, 17:15

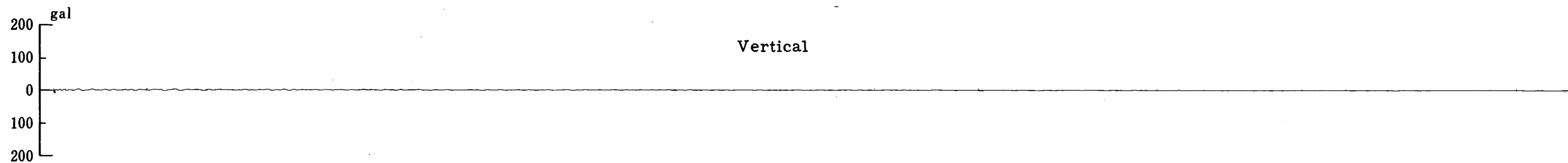
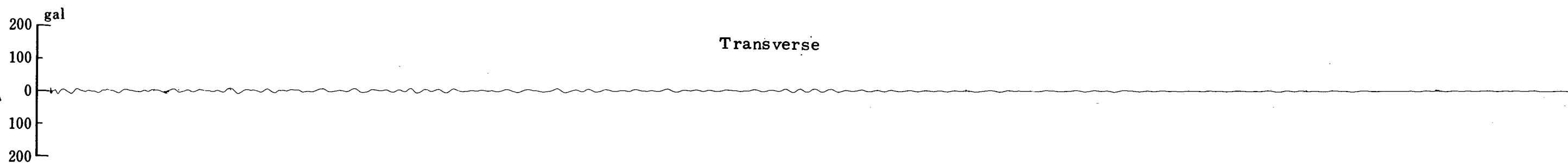


1sec

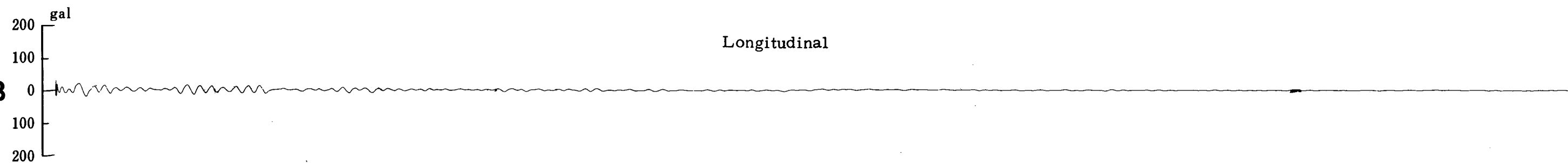
Soka Bridge 106-P-21

1973.1.21, 17:15

A



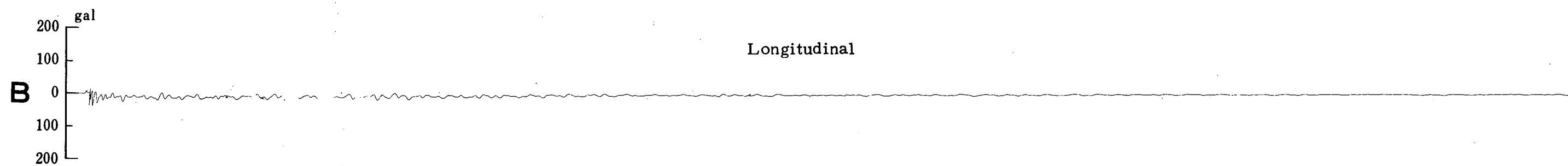
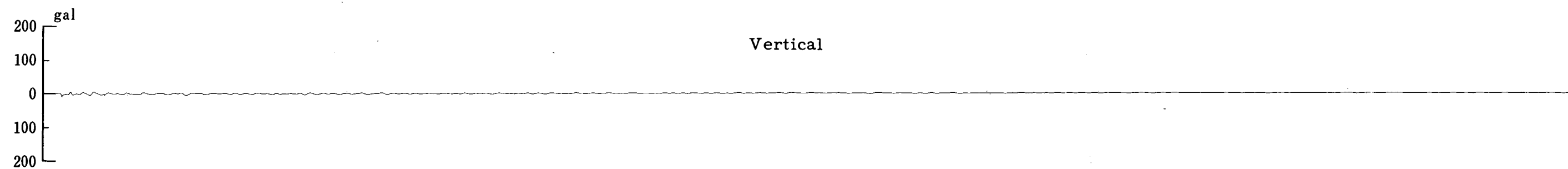
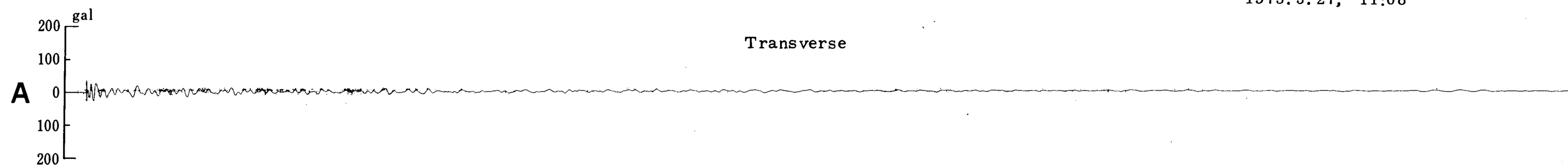
B



1sec

Soka Bridge 106-P-22

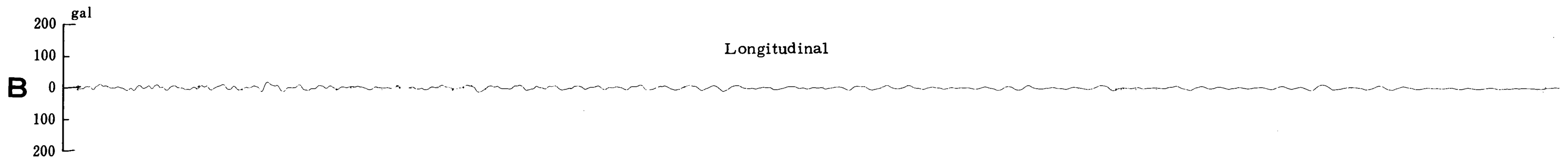
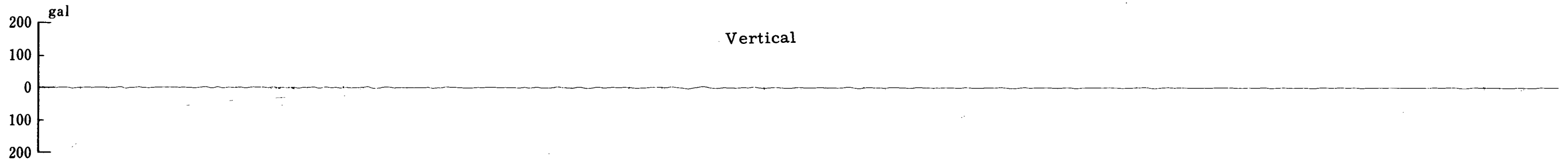
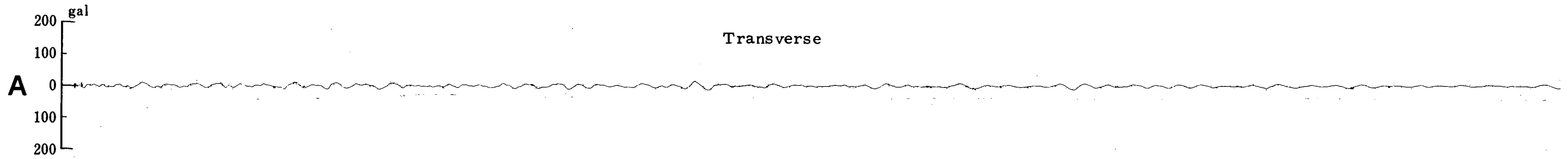
1973.3.27, 11:08



1sec

Soka Bridge 106-Gr-23

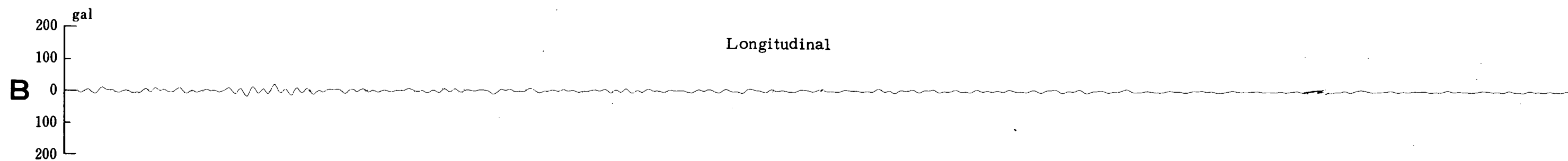
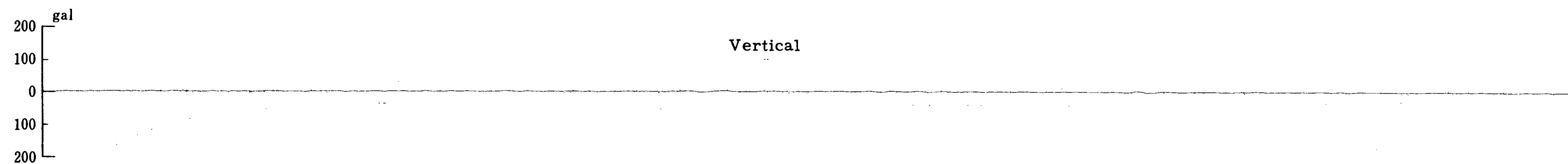
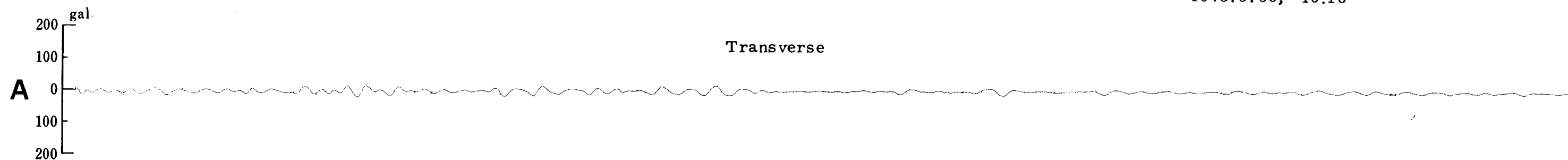
1973.9.30, 15:18



1sec

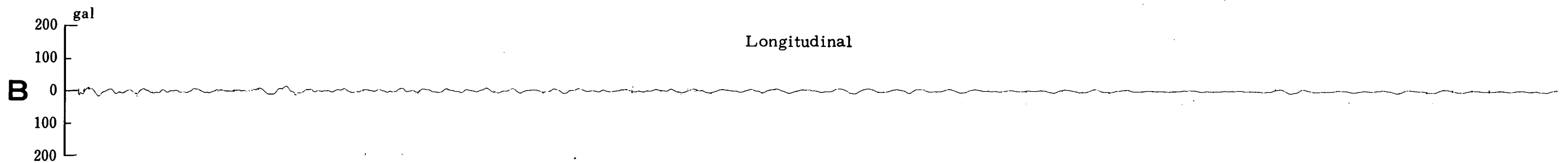
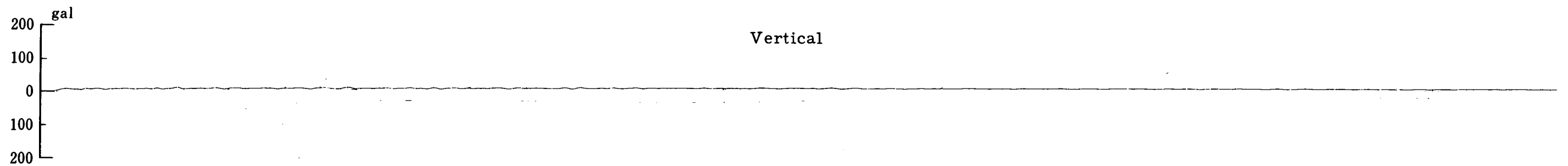
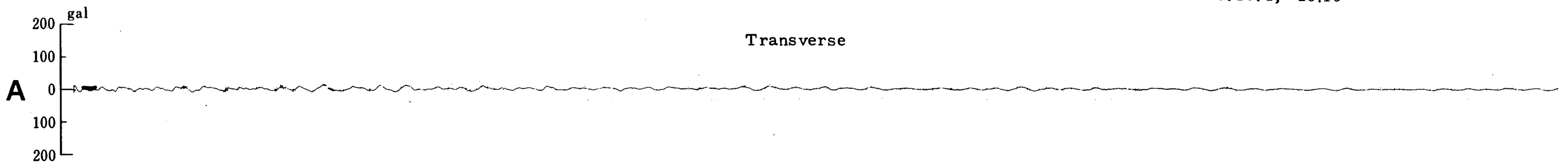
Soka Bridge 106-P-23

1973.9.30, 15:18



1sec

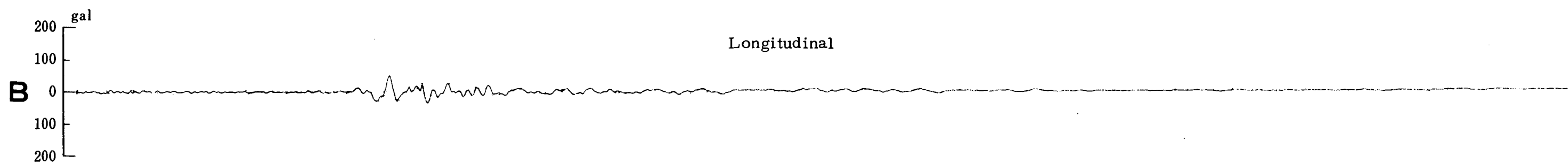
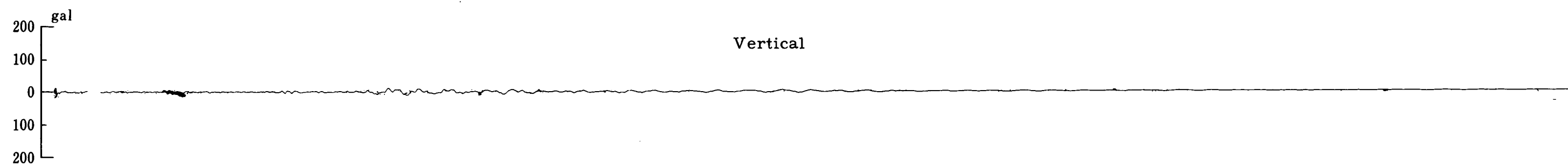
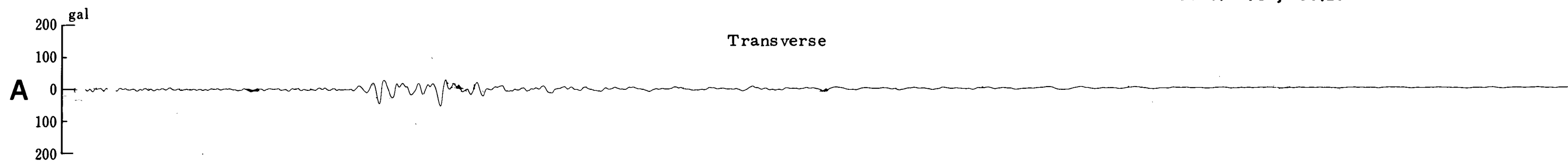
Soka Bridge 106-Gr-24
1973.10.1, 23:16



1sec

Kinokawa Bridge 112-Gr-25

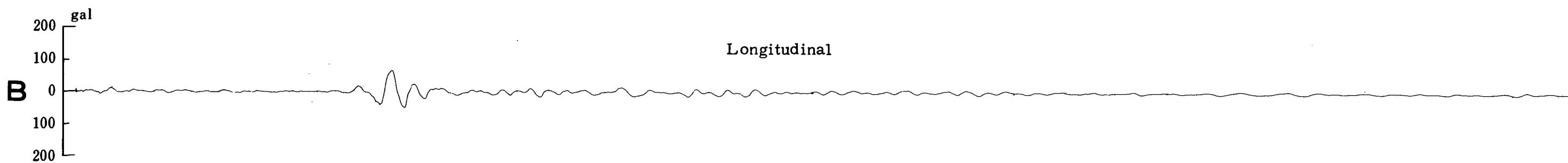
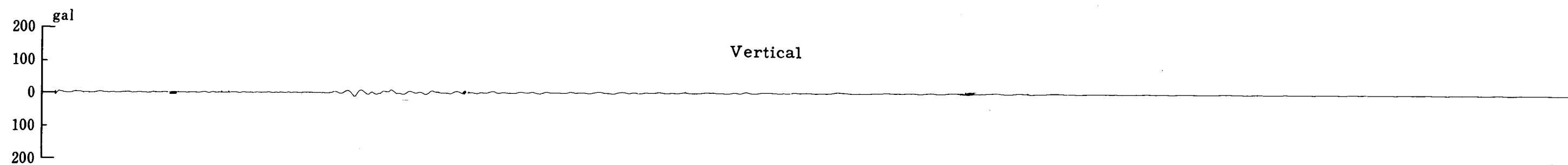
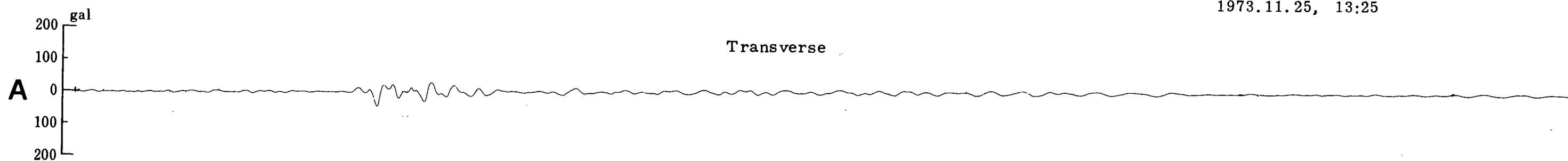
1973.11.25, 13:25



1sec

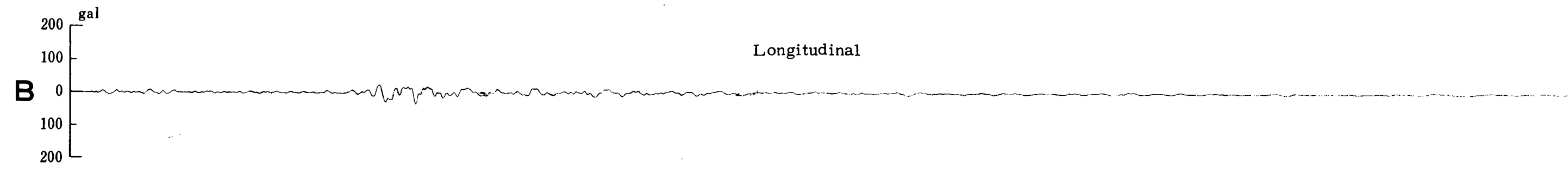
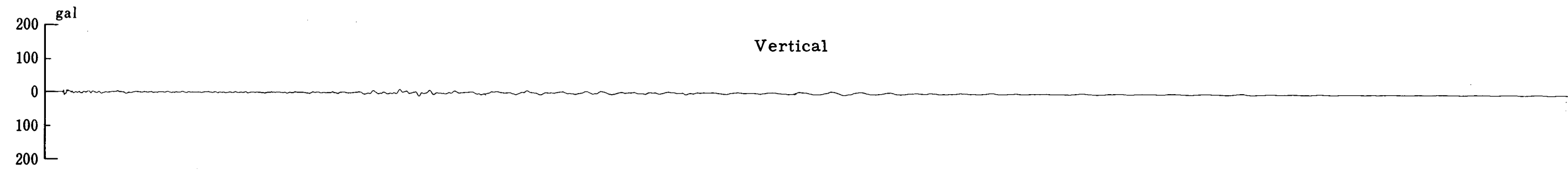
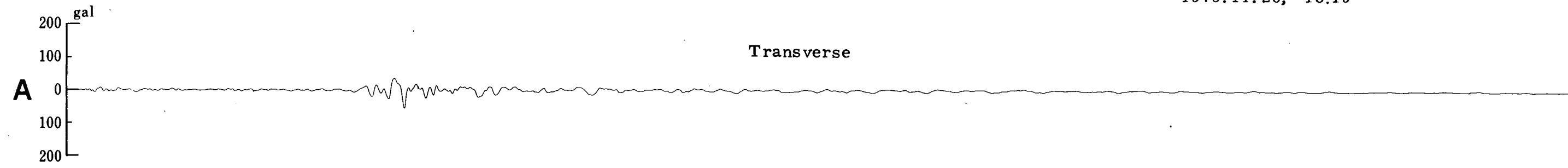
Kinokawa Bridge 112-P-6

1973.11.25, 13:25



1sec

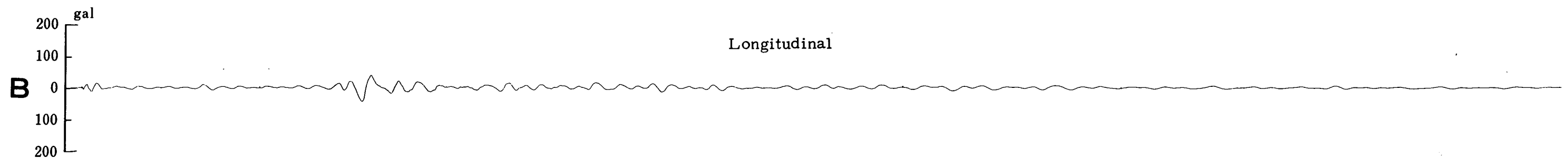
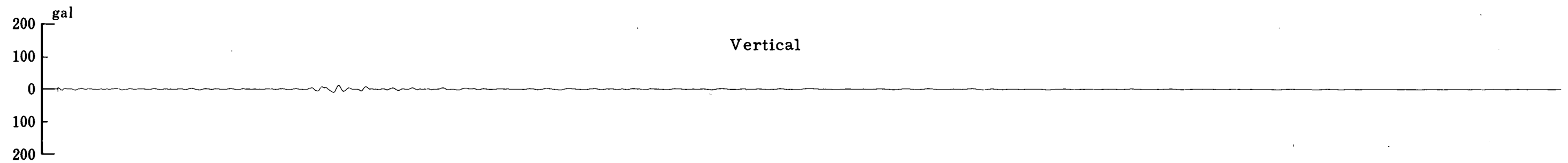
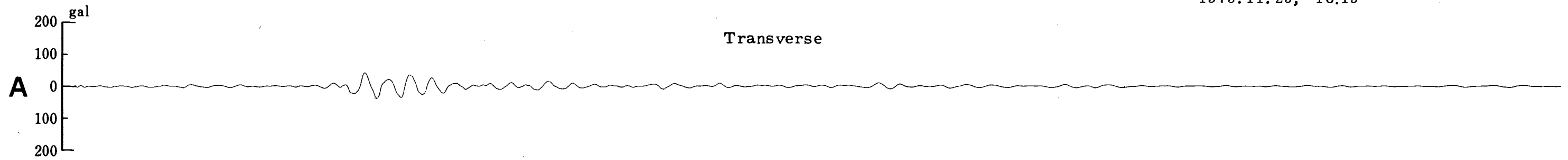
Kinokawa Bridge 112-Gr-26
1973.11.28, 18:19



1sec

Kinokawa Bridge 112-P-7

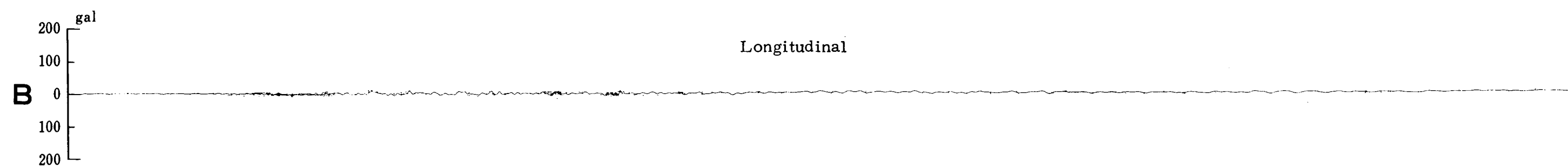
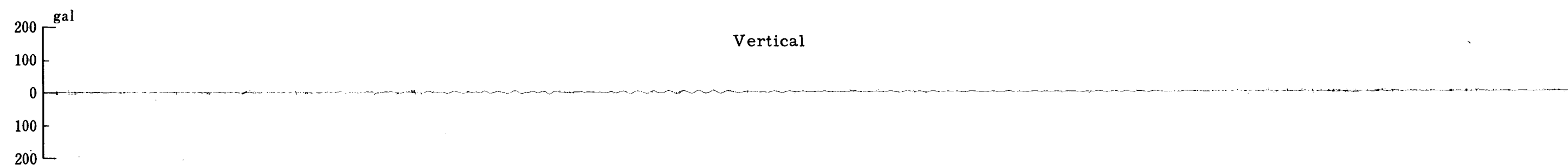
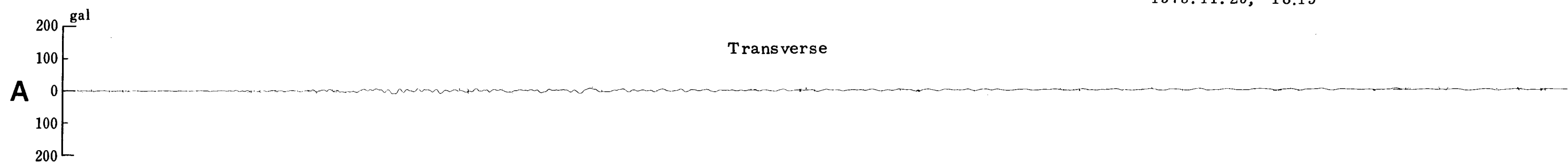
1973.11.25, 18:19

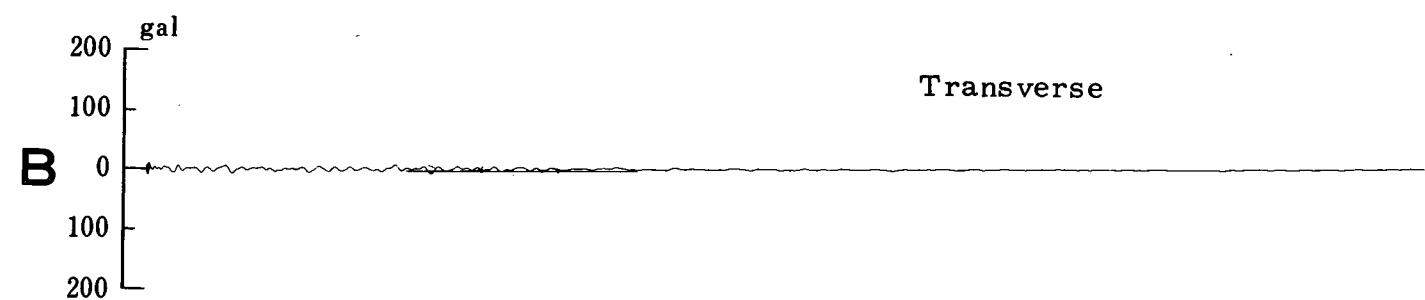
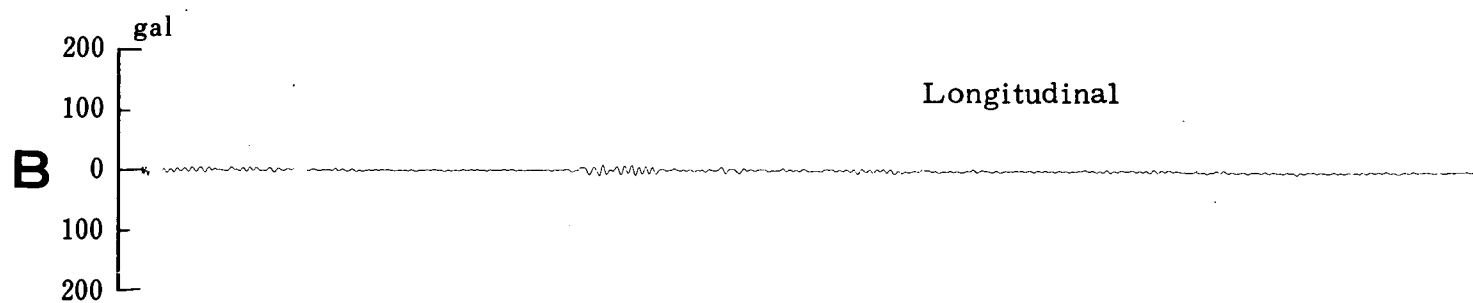
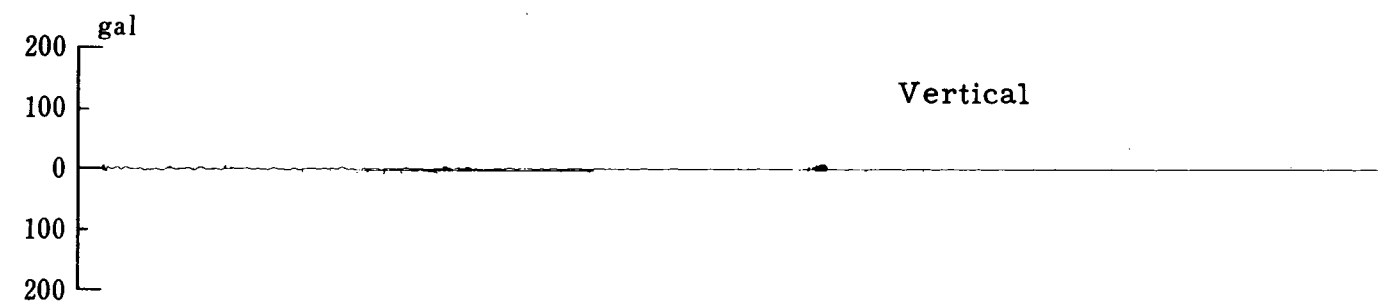
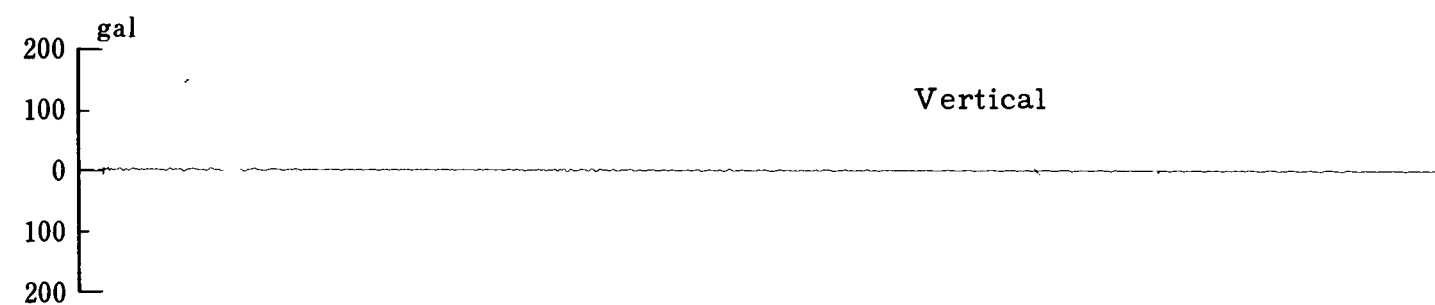
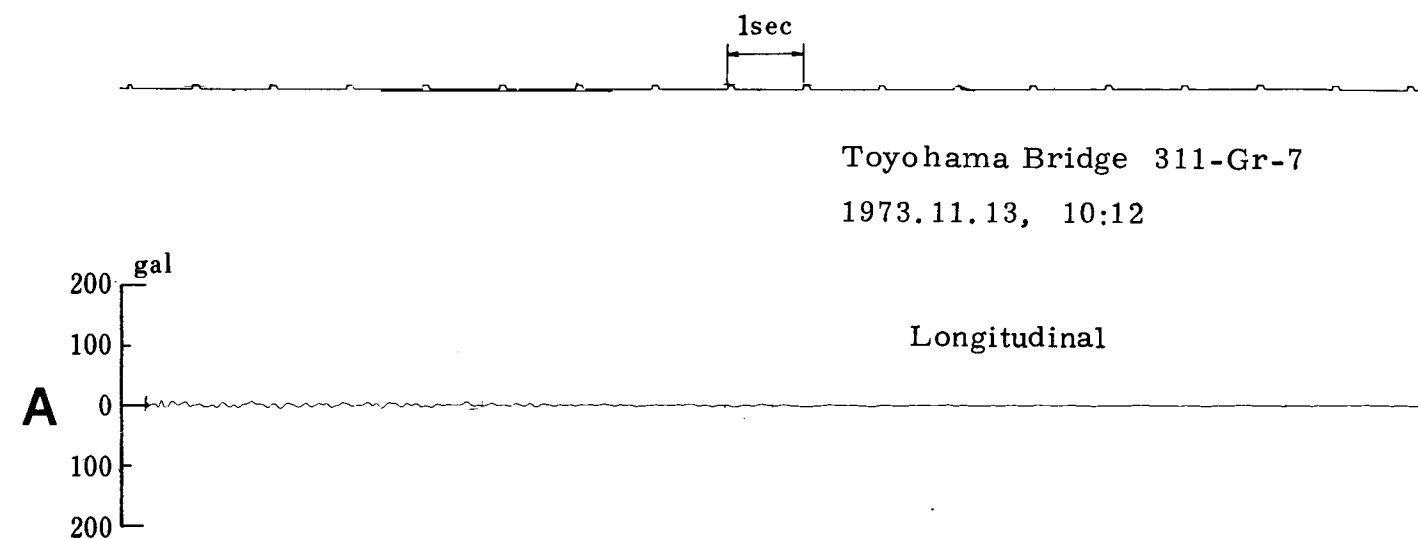
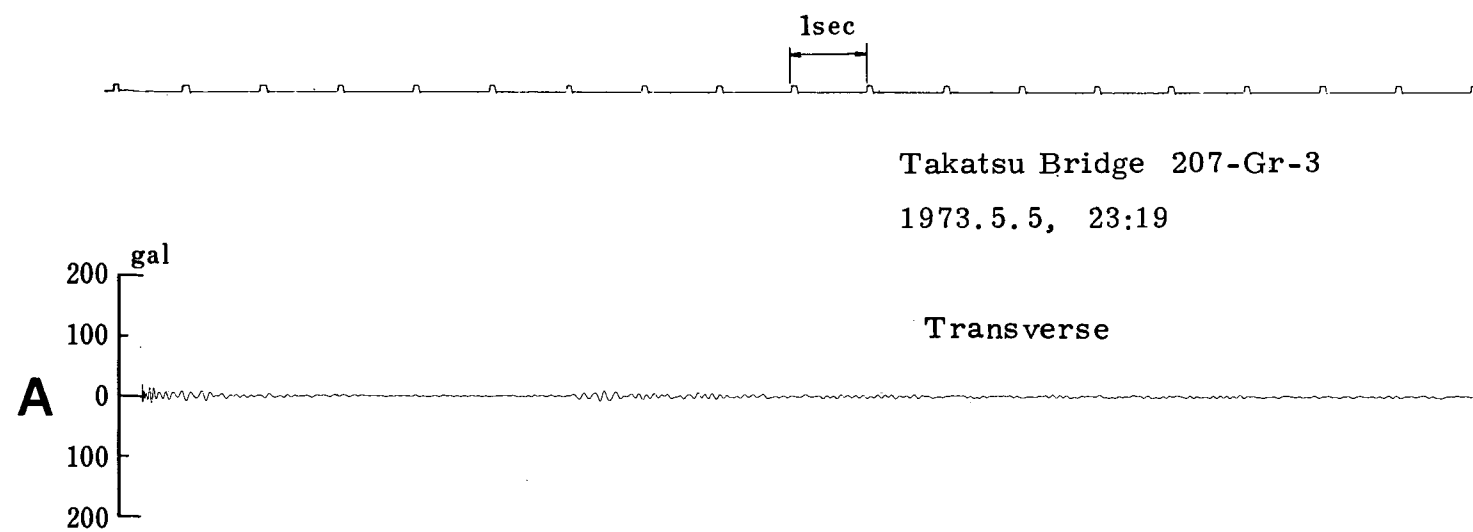


1sec

Shinyawata Bridge 204-Gr-23

1973.11.25, 18:19

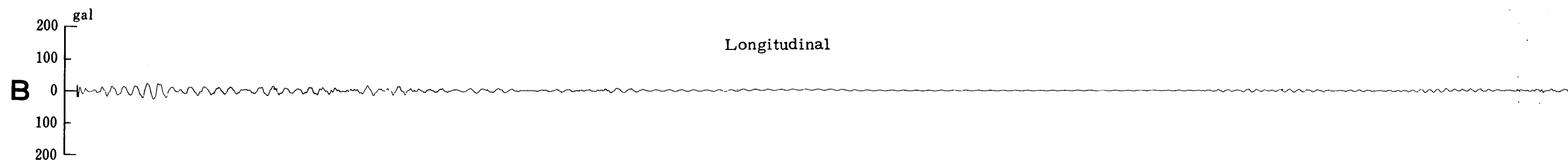
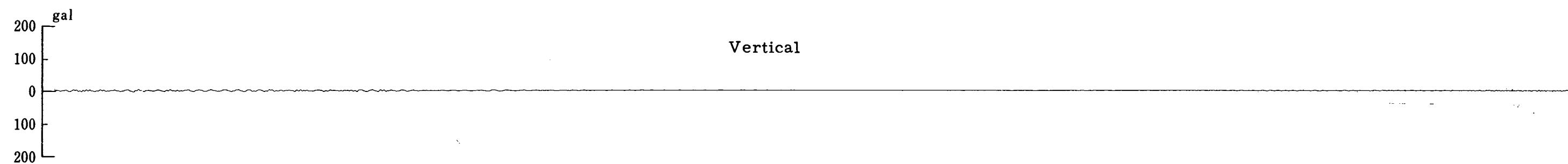
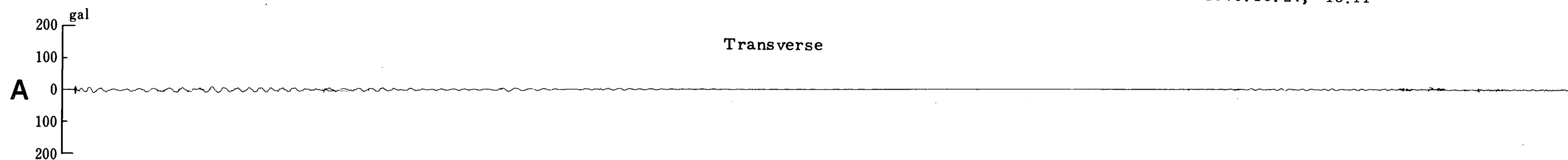




1sec

Myoken Bridge 306-P-14

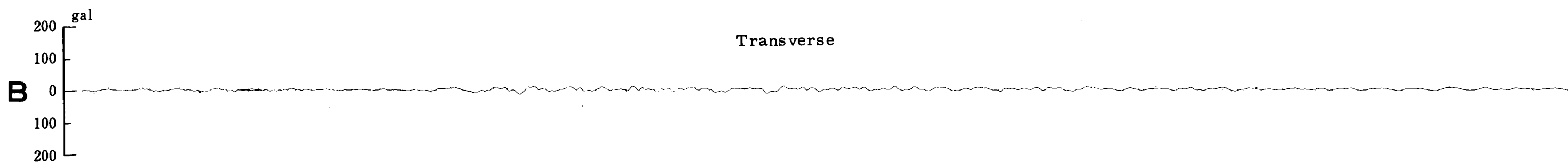
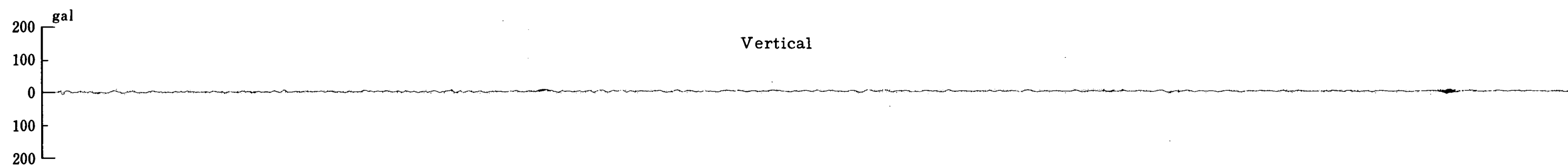
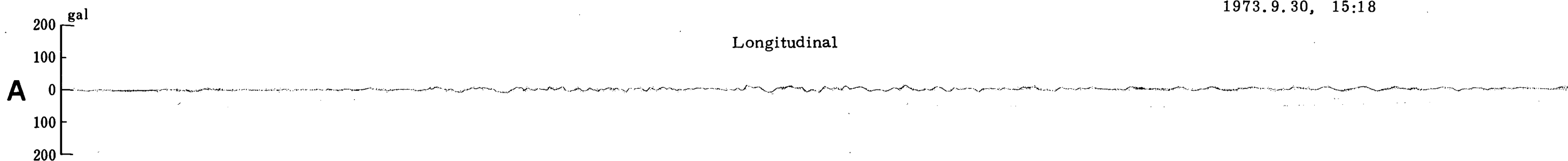
1973.10.27, 13:44



1sec

Hirai Bridge 310-Gr-20

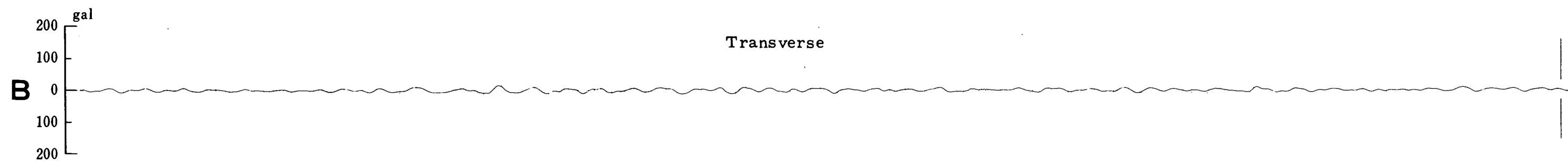
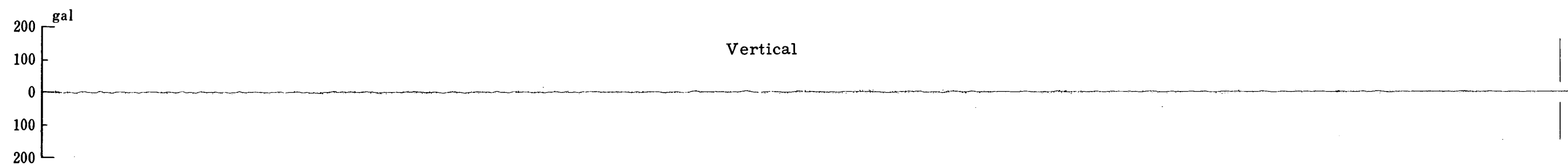
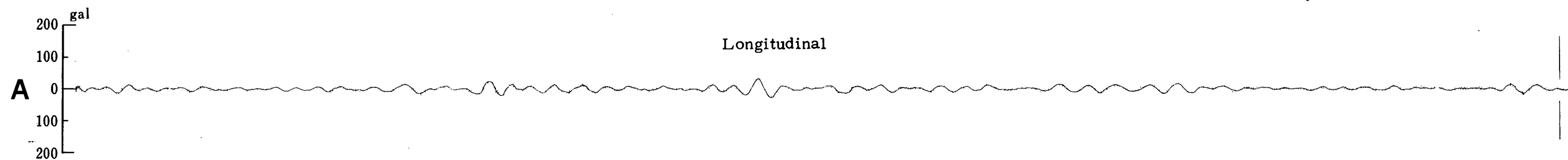
1973.9.30, 15:18



1sec

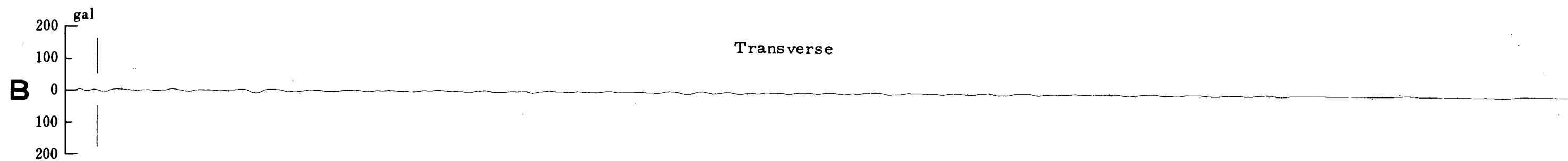
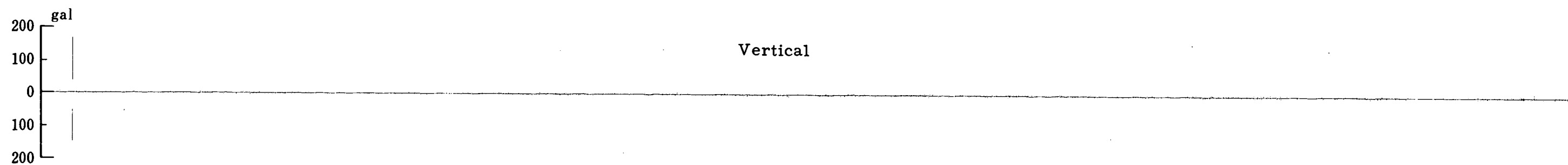
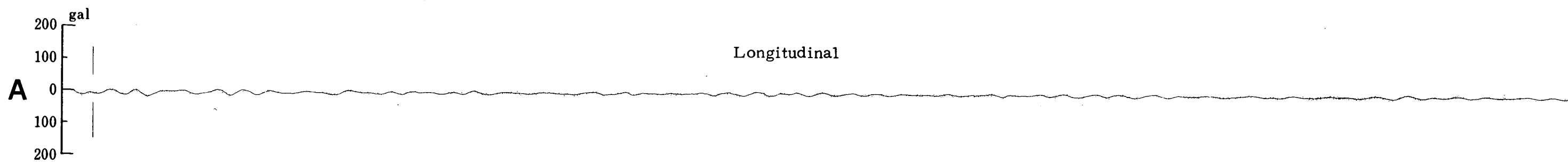
Hirai Bridge 310-P5-17

1973.9.30, 15:18



1sec

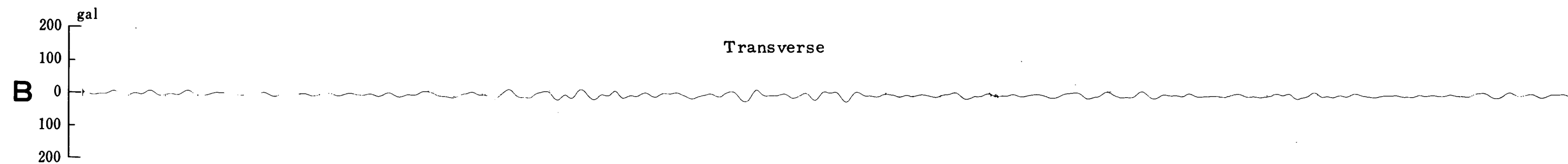
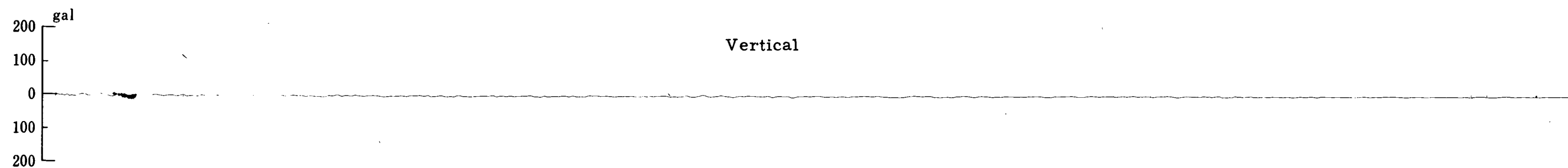
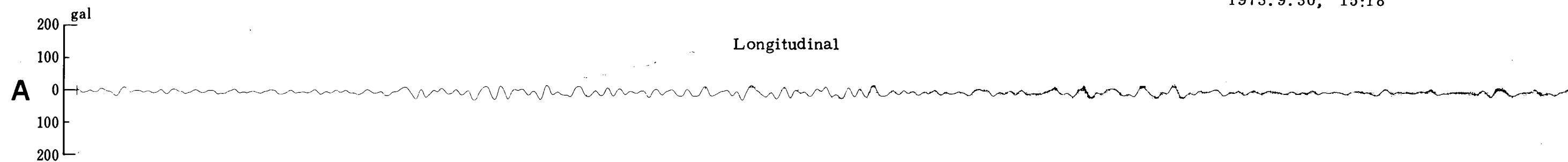
310-P5-17 (cont.)



1sec

Hirai Bridge 310-P6-17

1973.9.30, 15:18



1sec

Hirai Bridge 310-Gr-21

1973.10.1, 23:16

A

200 gal
100
0
100
200

Longitudinal

200 gal
100
0
100
200

Vertical

B

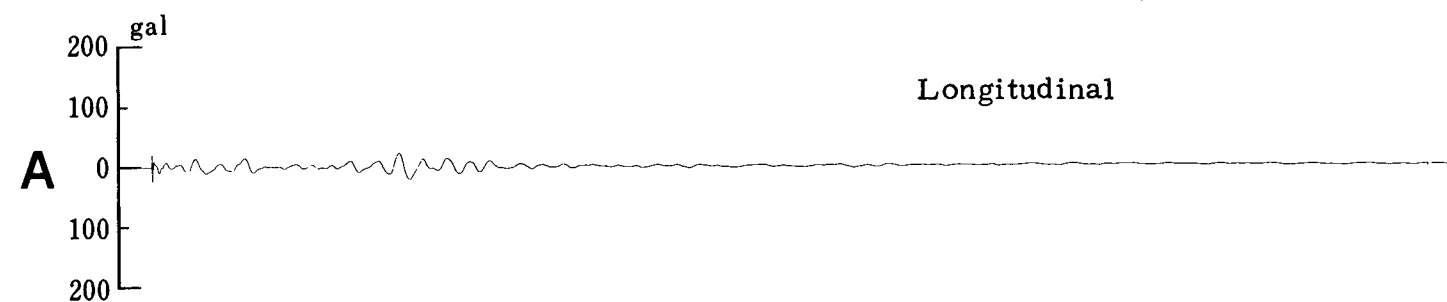
200 gal
100
0
100
200

Transverse

1sec

Toyohama Bridge 311-Gr-8

1973.11.25, 18:19



gal

200
100
0
100
200

Vertical

gal

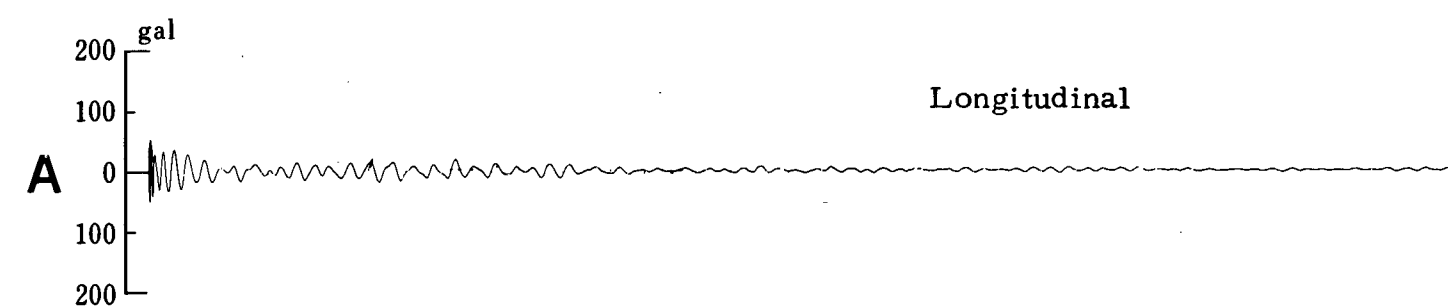
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100
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Transverse

1sec

Toyohama Bridge 311-P-8

1973.11.25, 18:19



gal

200
100
0
100
200

Vertical

gal

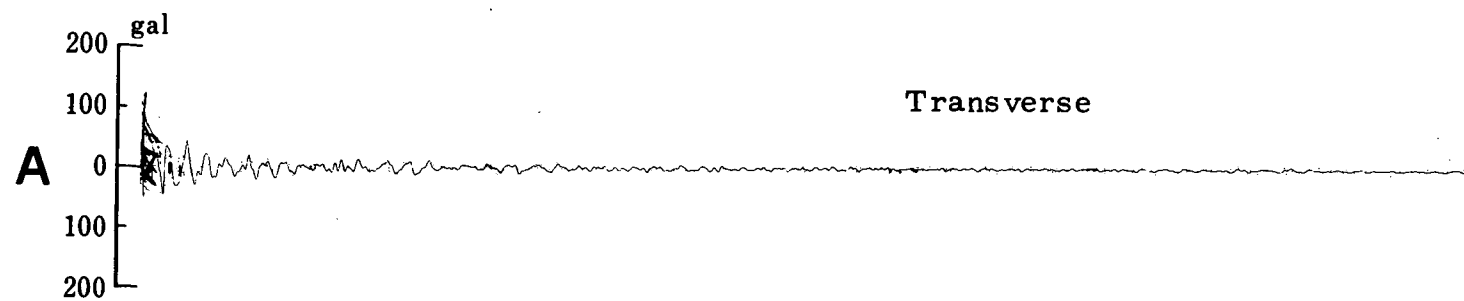
200
100
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100
200

Transverse

1sec

Akagi Bridge 312-Gr-3

1973.9.24, 03:54



gal

200

100

0

100

200

Vertical

gal

200

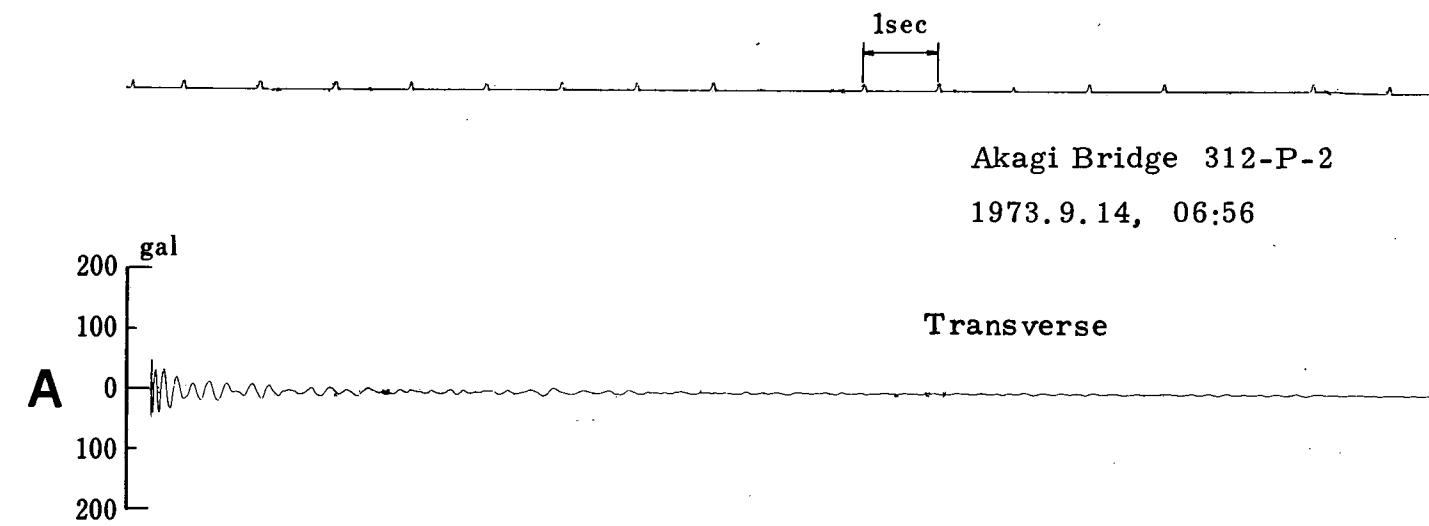
100

0

100

200

Longitudinal



gal

200

100

0

100

200

Vertical

gal

200

100

0

100

200

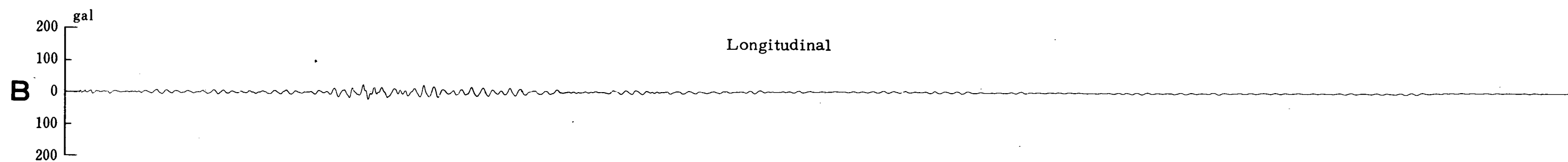
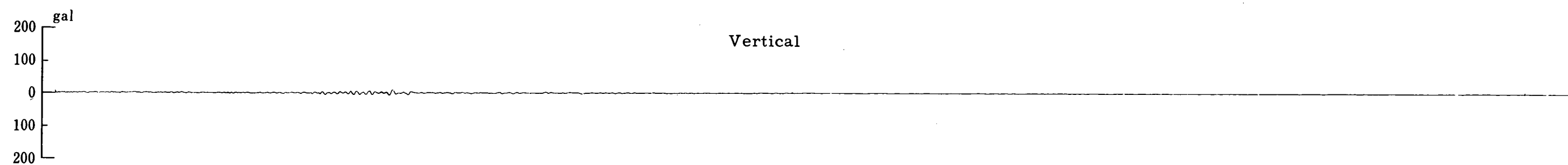
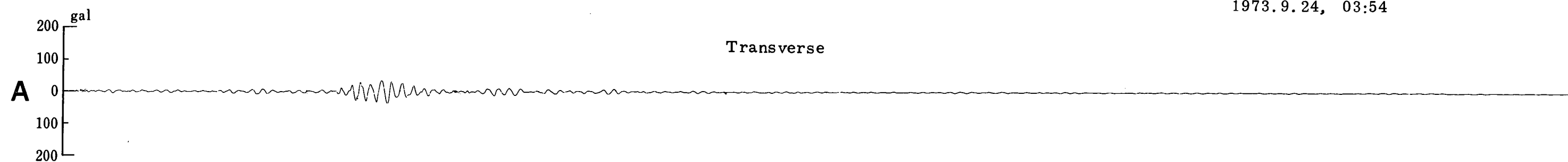
Longitudinal

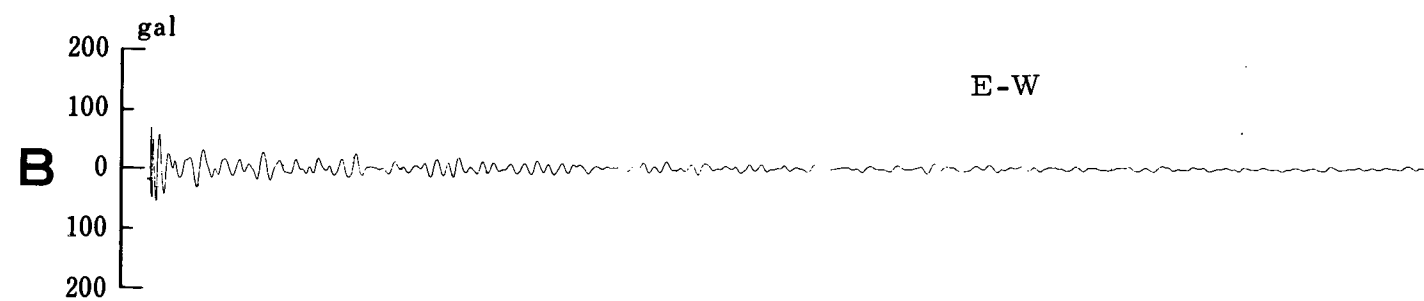
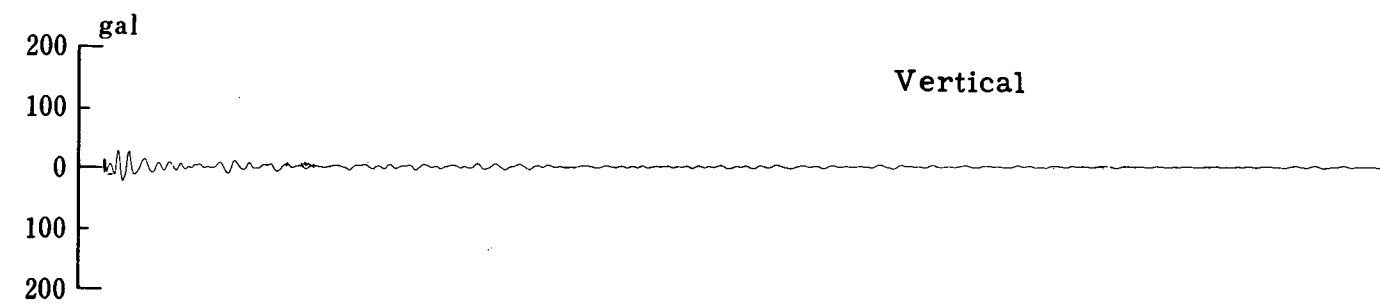
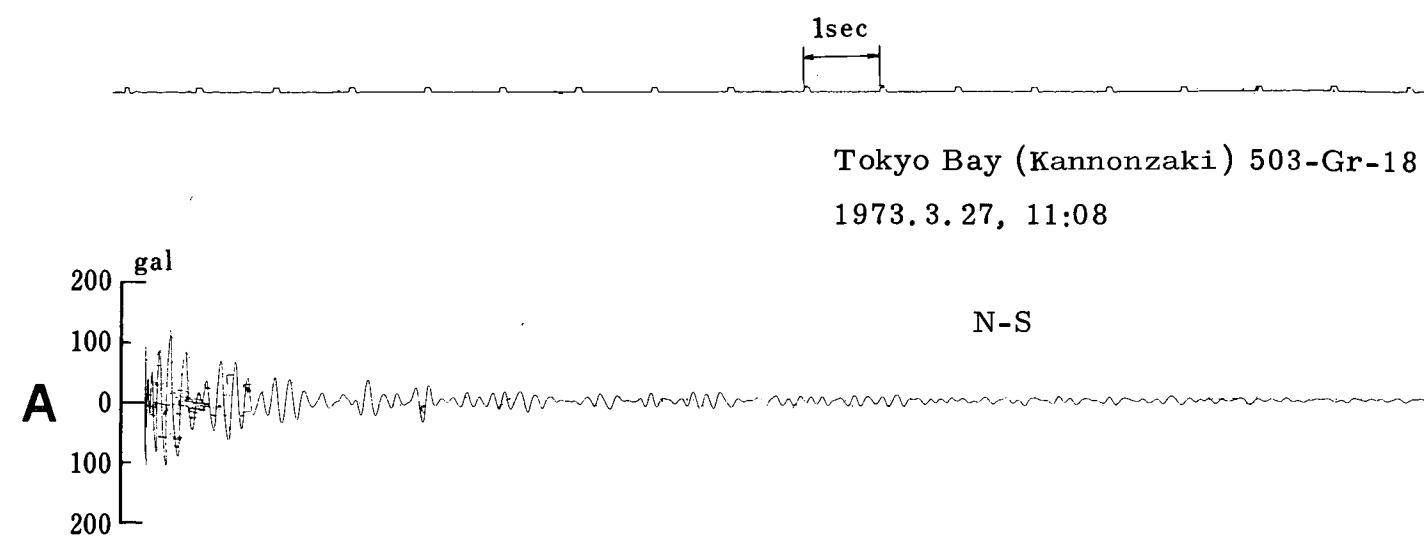
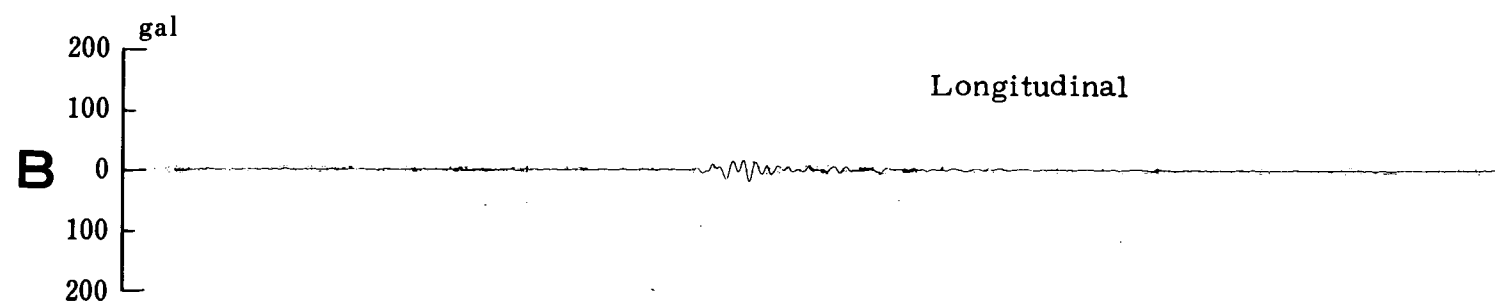
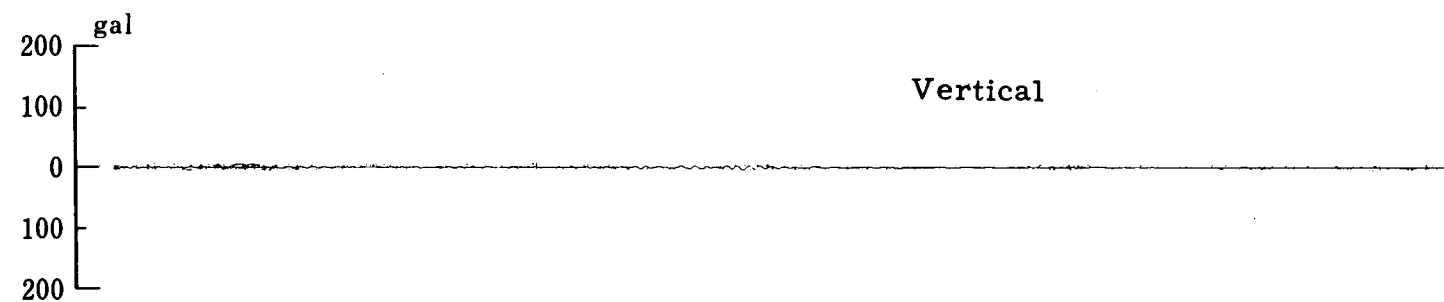
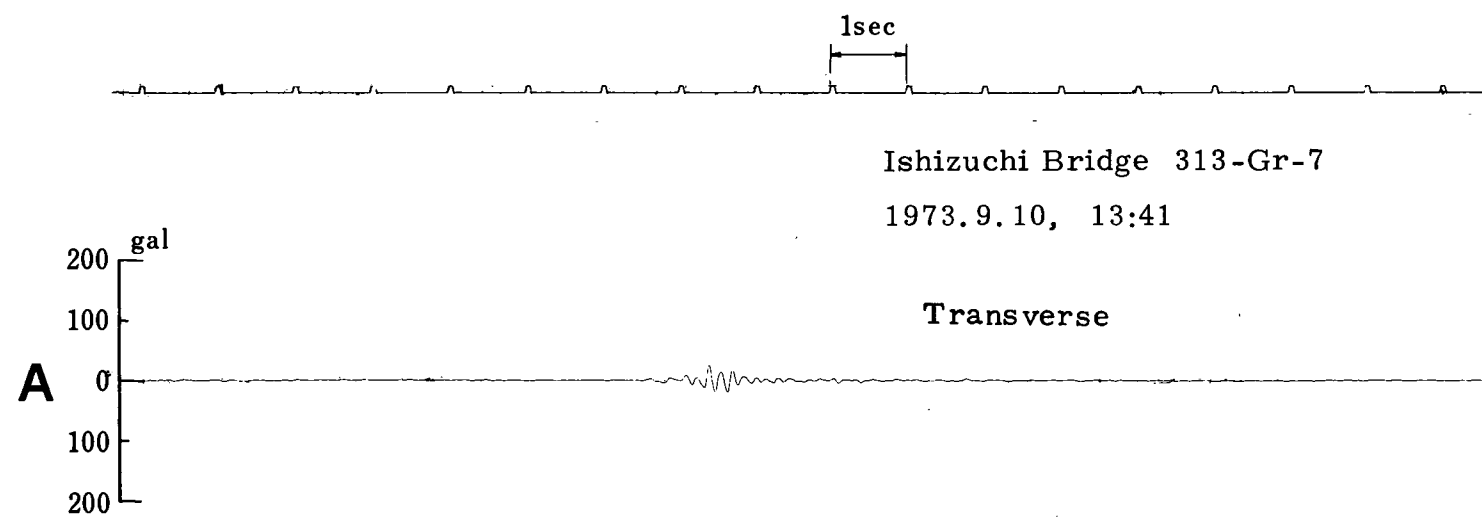
B

1sec

Akagi Bridge 312-P-3

1973.9.24, 03:54

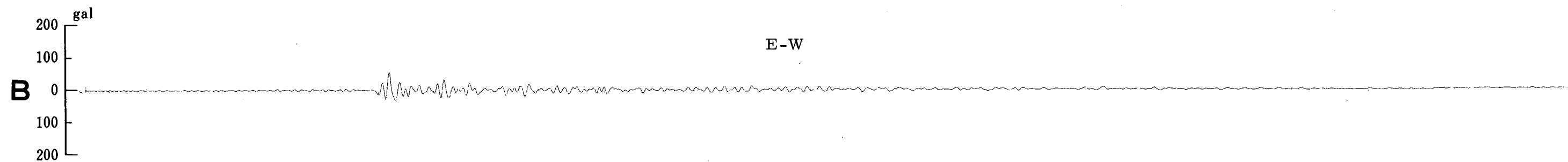
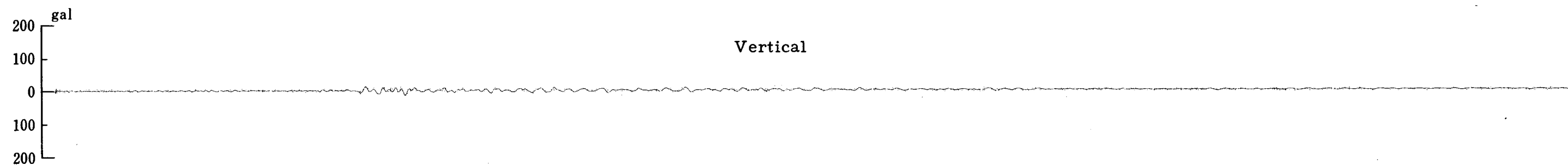
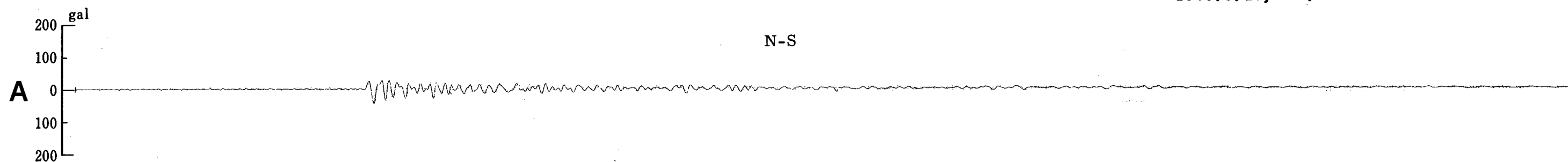




1sec

Tokyo Bay (Futsu) 501-Gr-76

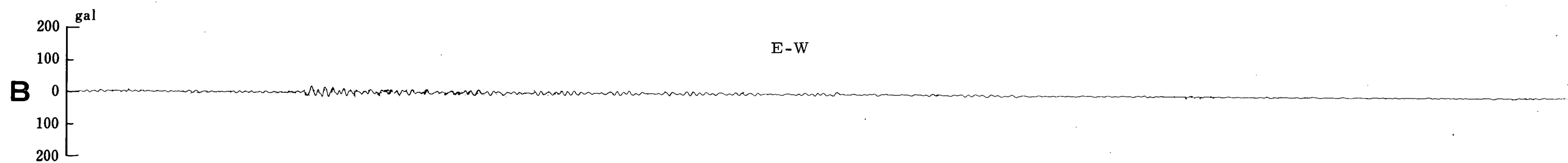
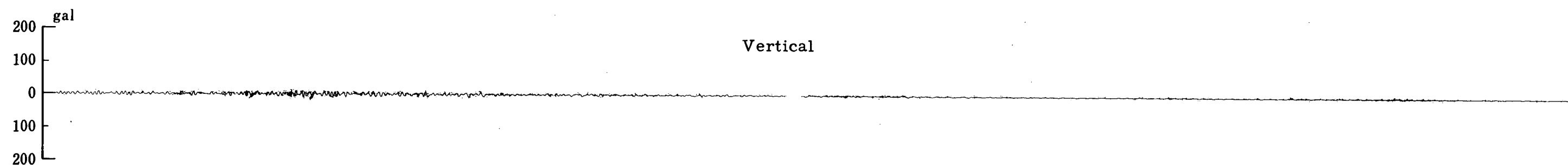
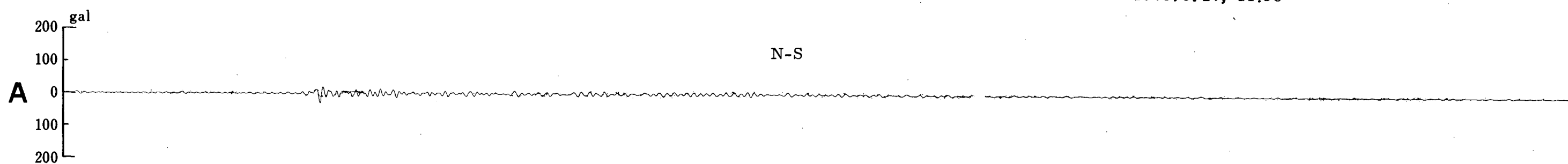
1973.3.27, 11:08



1sec

P. W. R. I. Chiba Branch 901-Gr-58

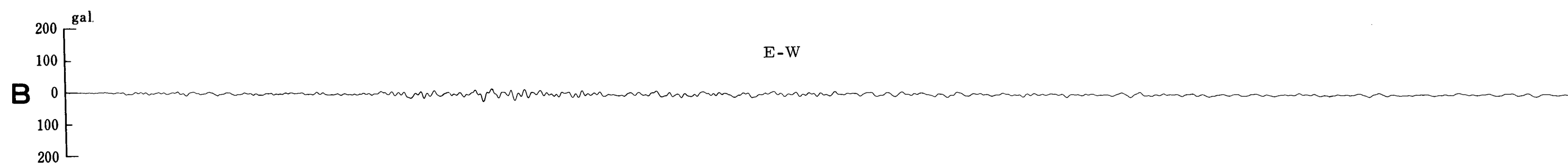
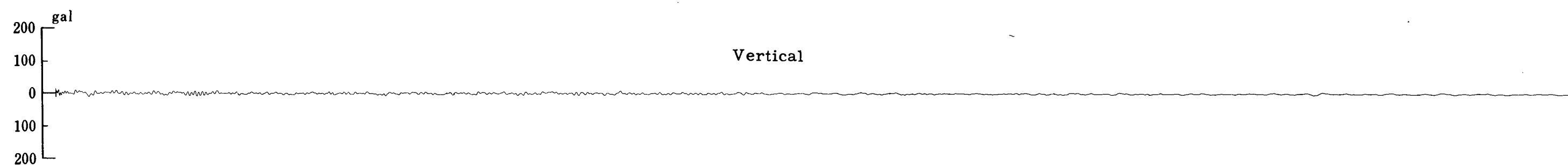
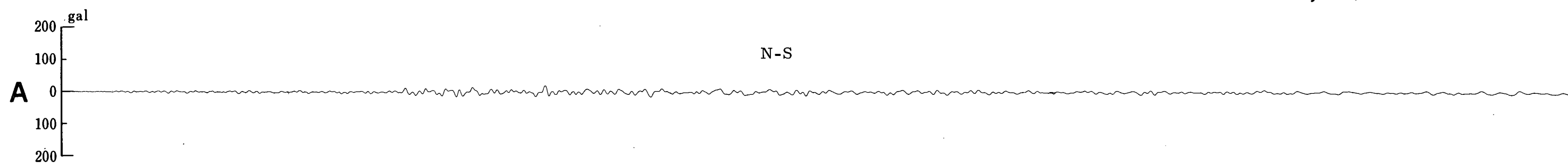
1973.3.27, 11:08



1sec

P.W.R.I. Chiba Branch 901-Gr-61

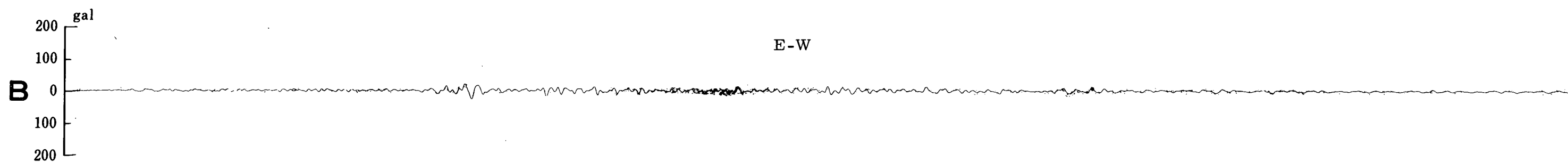
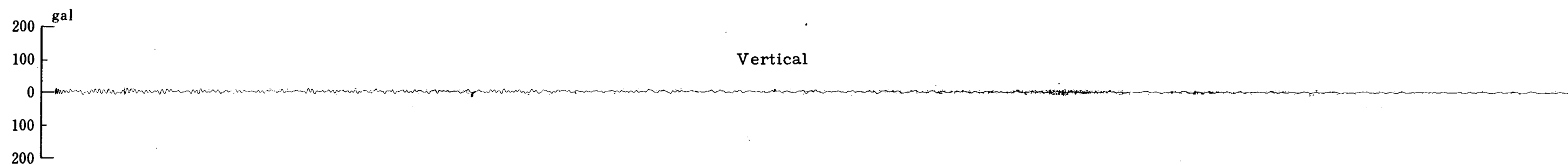
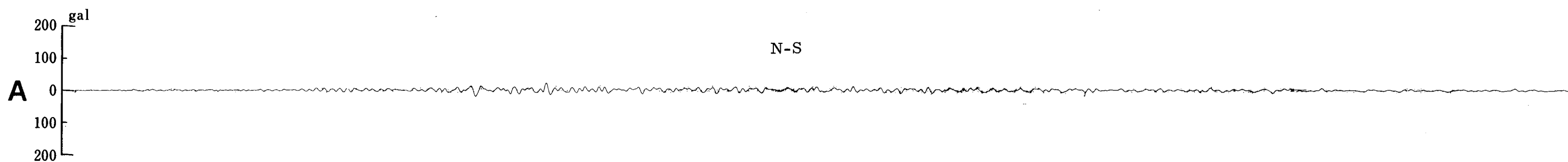
1973.9.30, 15:18



1sec

P.W.R.I. Chiba Branch 901-Gr-62

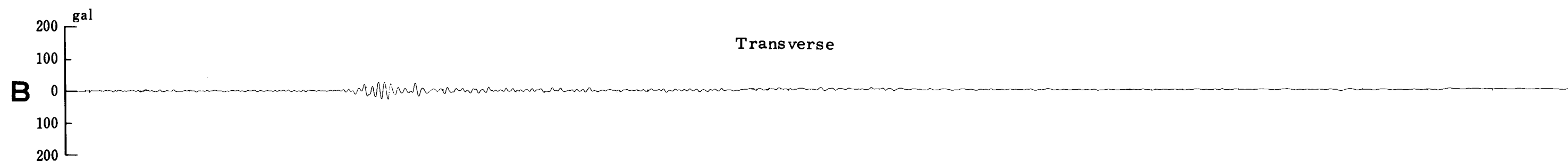
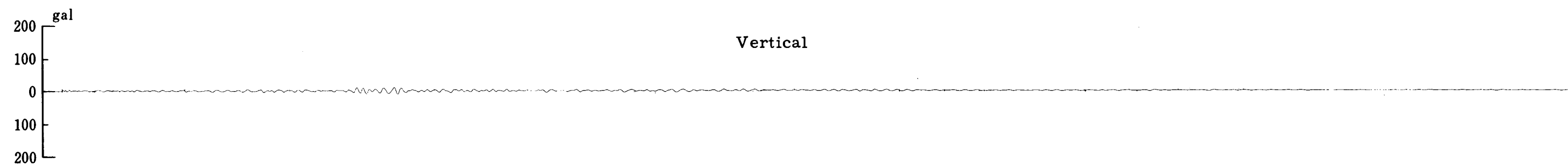
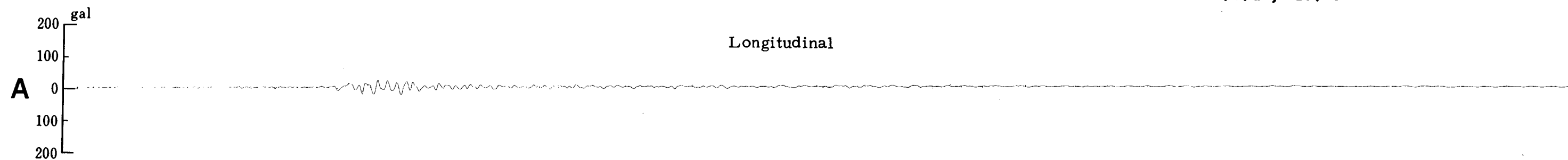
1973.10.01, 23:16



1sec

Nishiarai Bridge 902-P7-52

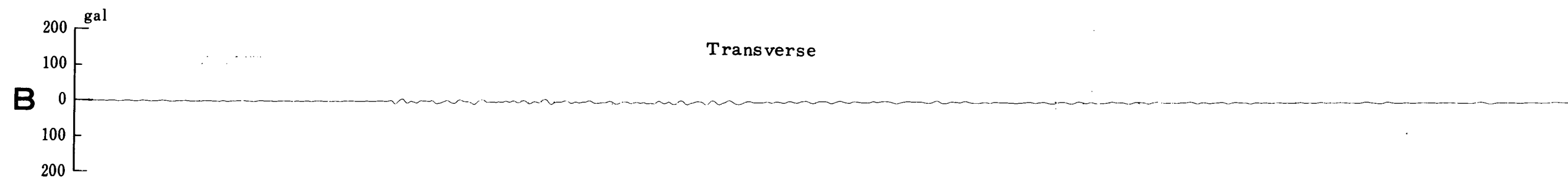
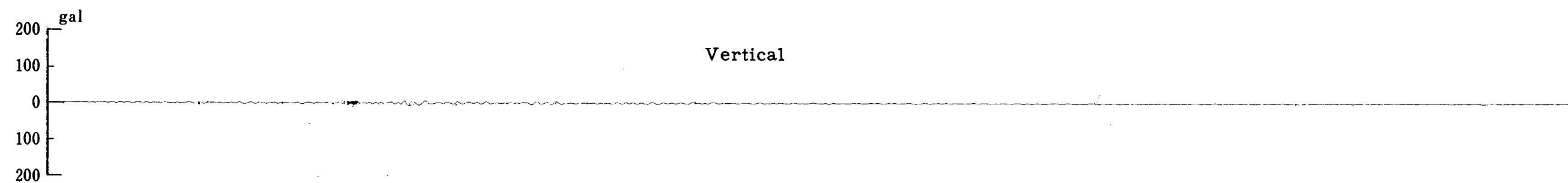
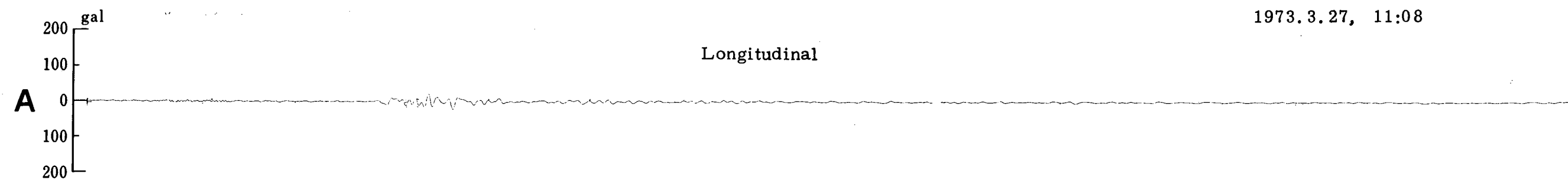
1973.3.27, 11:08



1sec

Nishiarai Bridge 902-P9-27

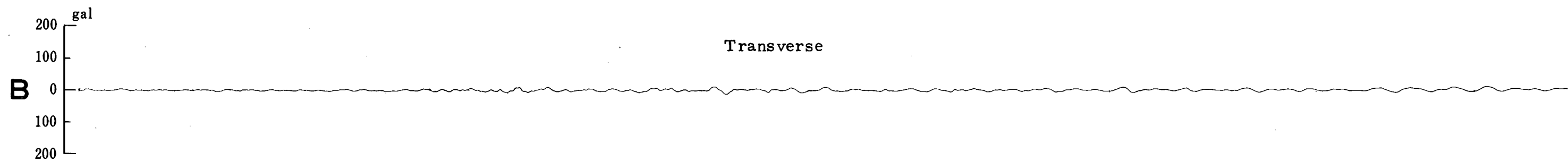
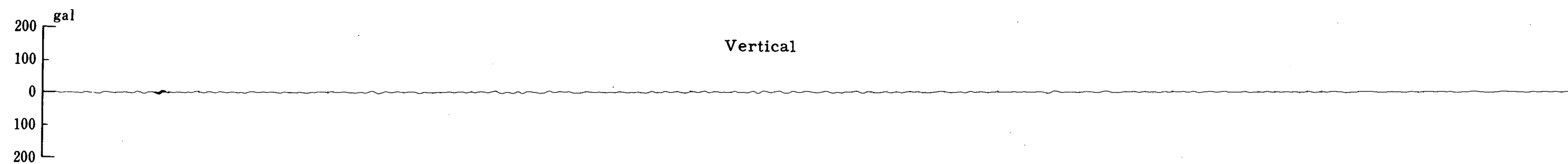
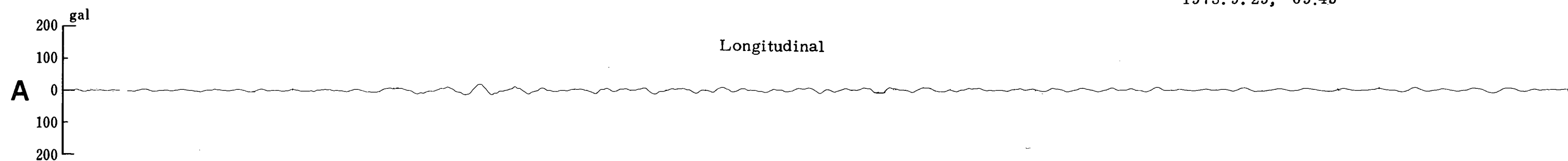
1973.3.27, 11:08



1sec

Nishiarai Bridge 902-Gr-32

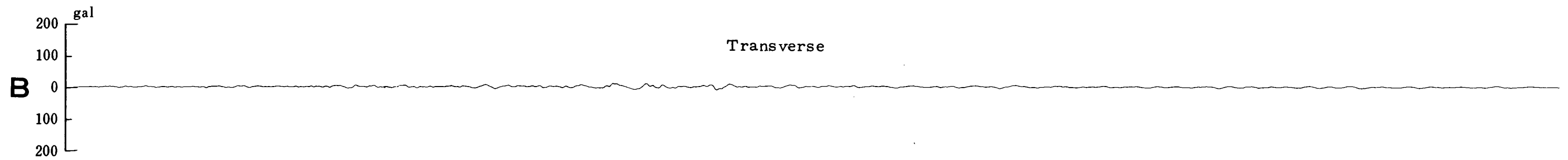
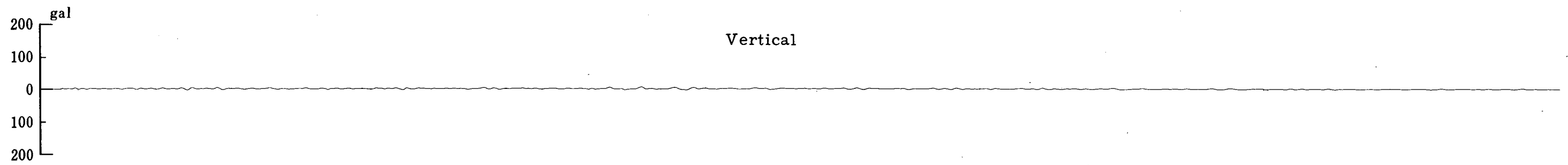
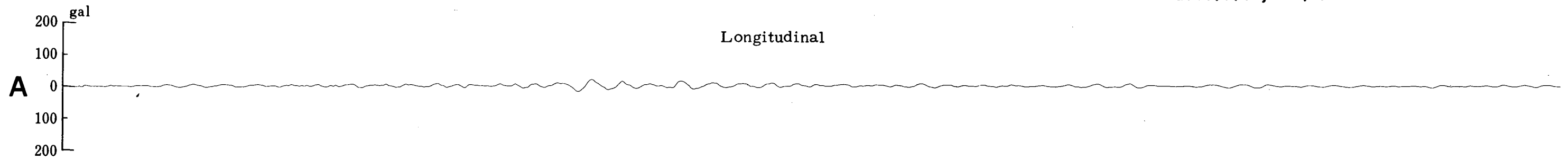
1973.9.29, 09:45



1sec

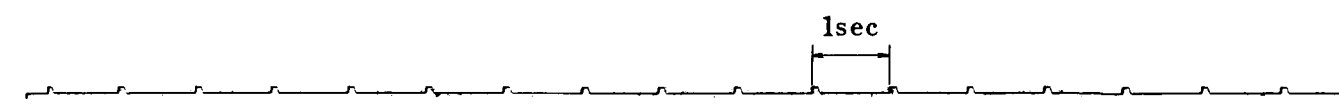
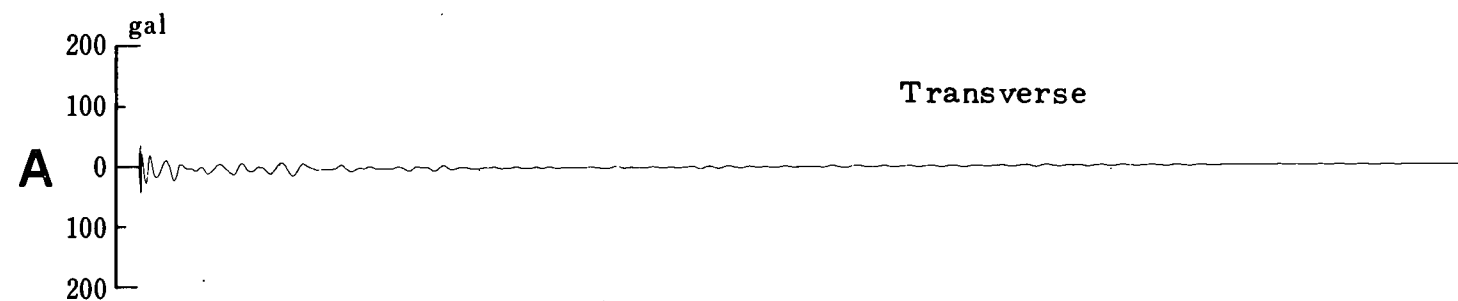
Nishiarai Bridge 902-Gr-33

1973.9.30, 15:18

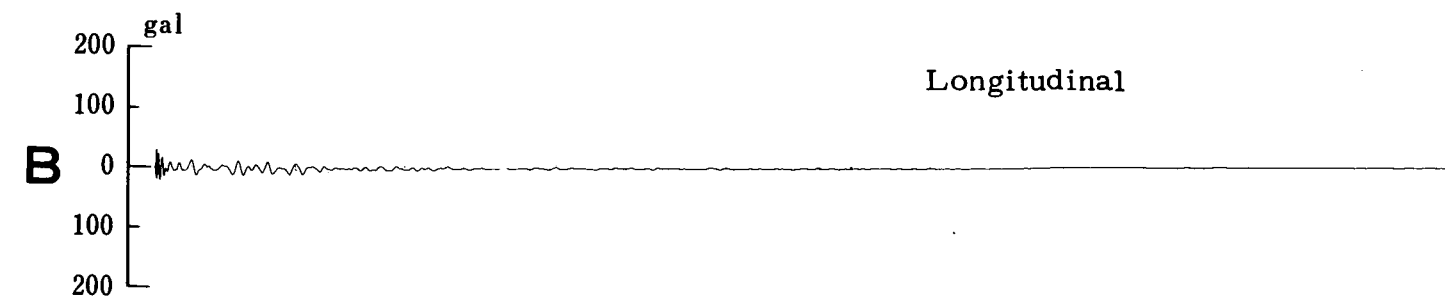
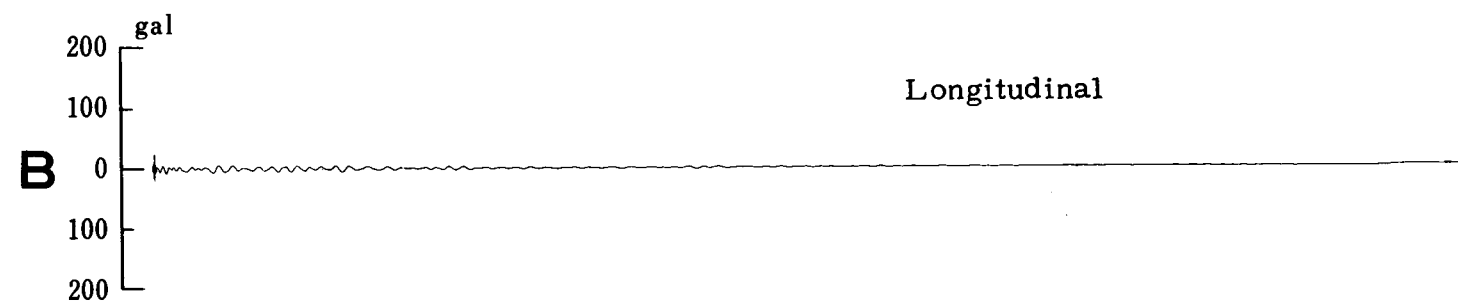
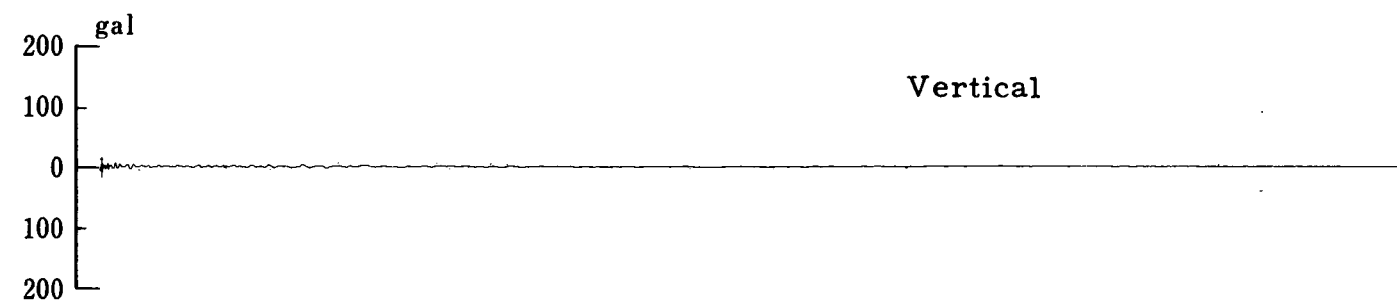
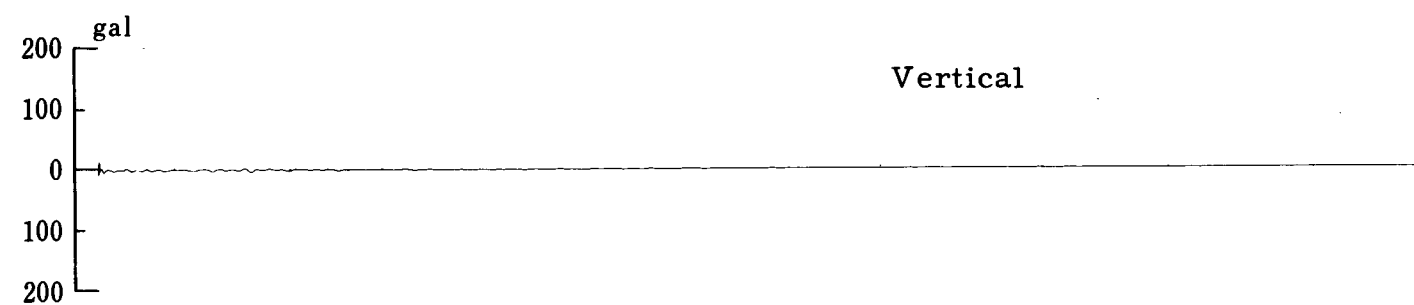
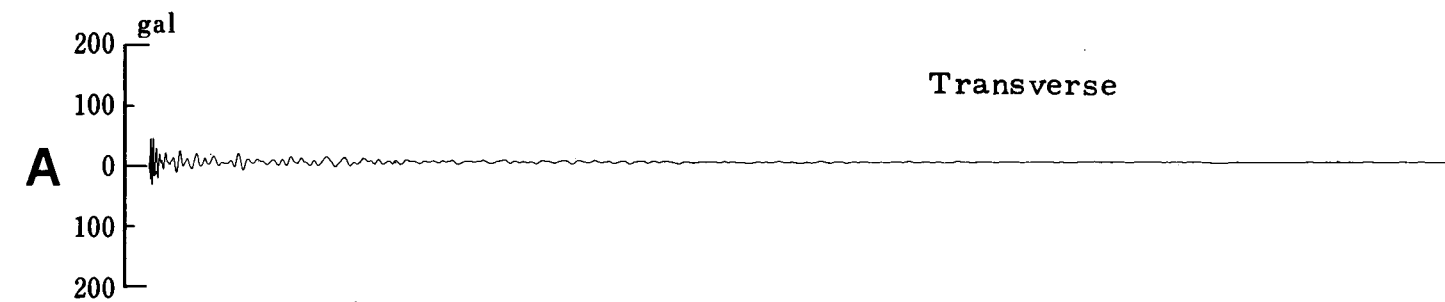




Ochiai Bridge 905-A-430
1973.9.19, 16:13



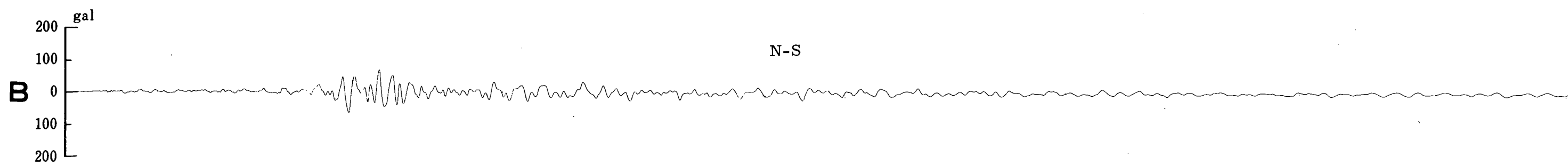
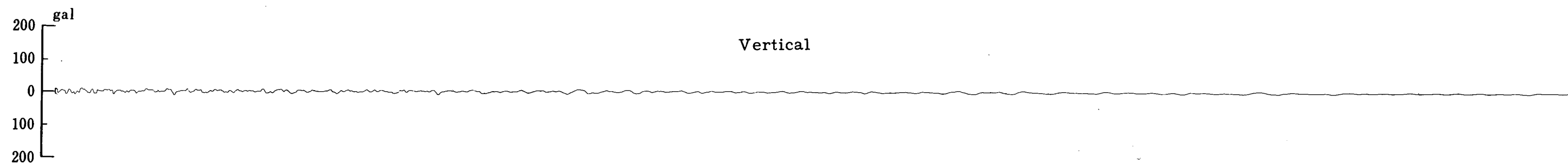
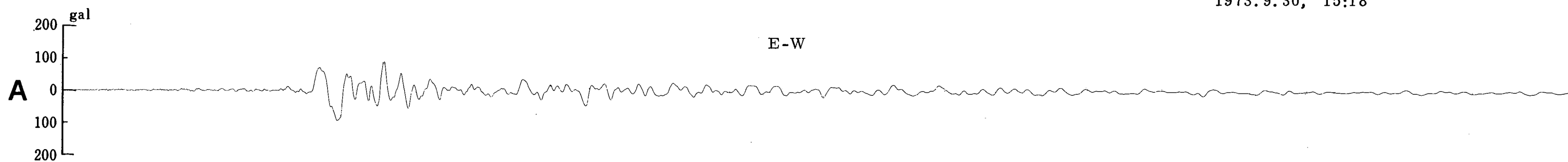
Ochiai Bridge 905-B-270
1973.9.19, 16:13



1sec

P.W.R.I. Kashima E.L. 906-Gr-17

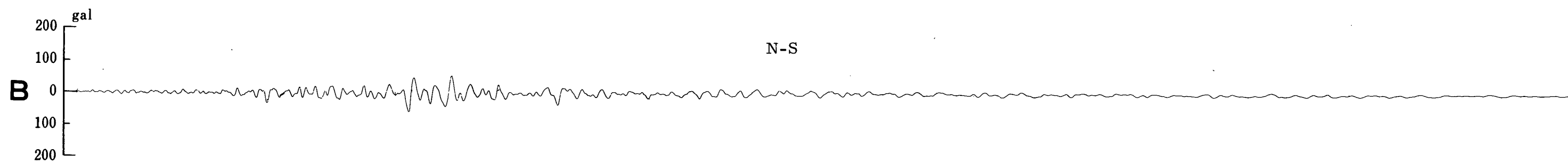
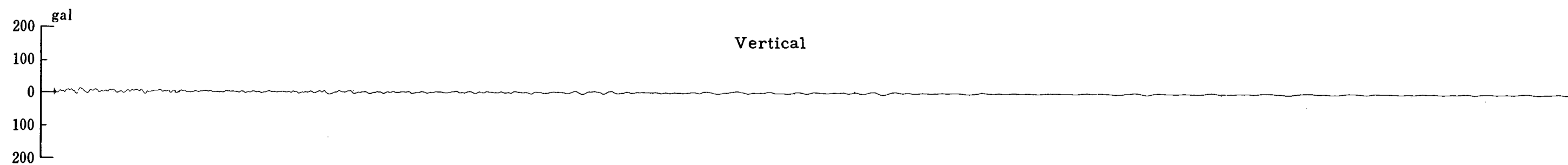
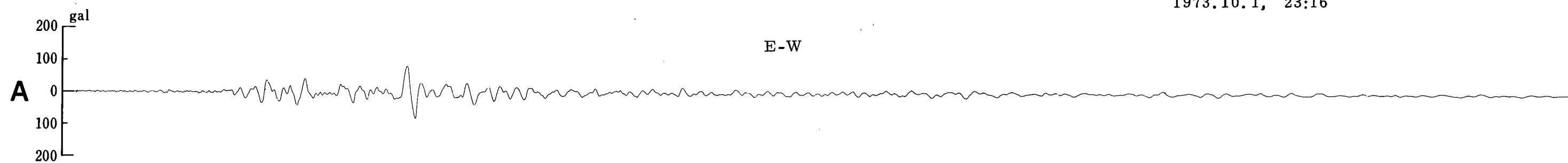
1973.9.30, 15:18

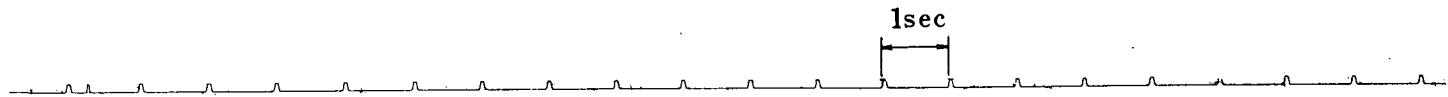


1sec

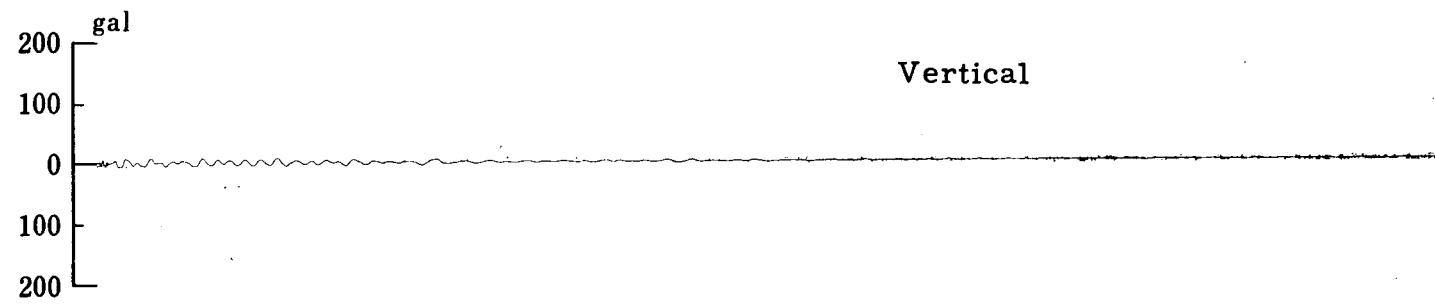
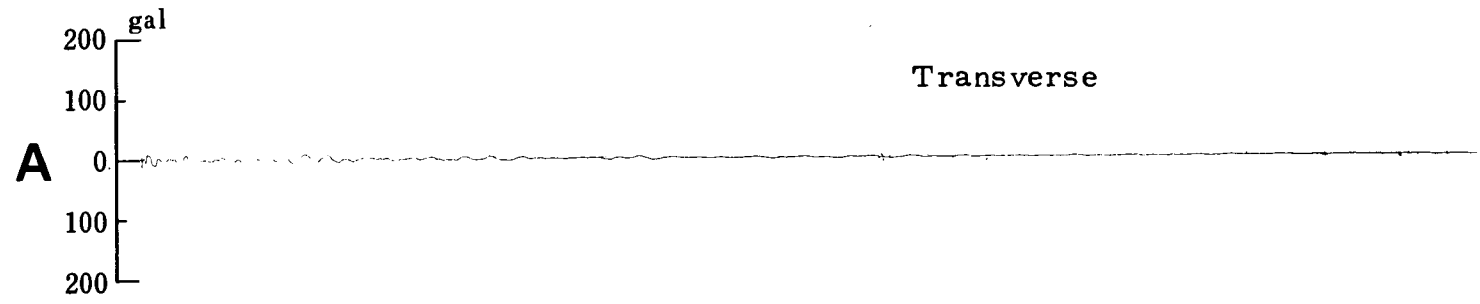
P.W.R.I. Kashima E.L. 906-Gr-18

1973.10.1, 23:16





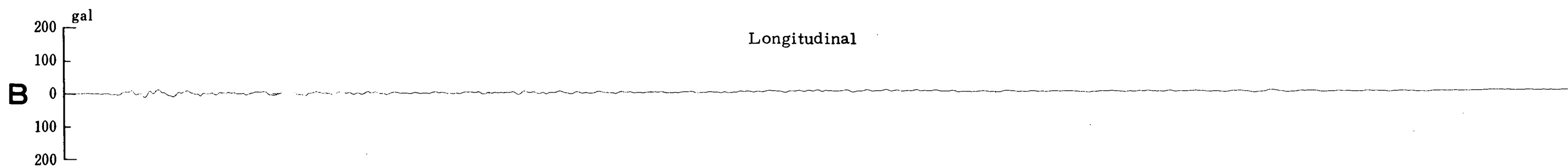
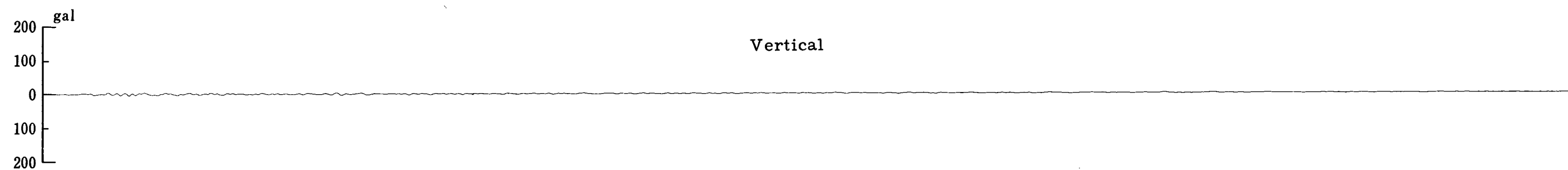
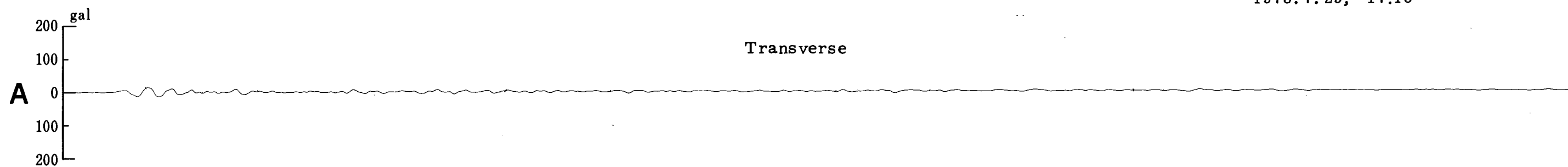
Taira Bridge 907-Gr-71
1973.4.25, 23:21



1sec

Taira Bridge 907-A-26

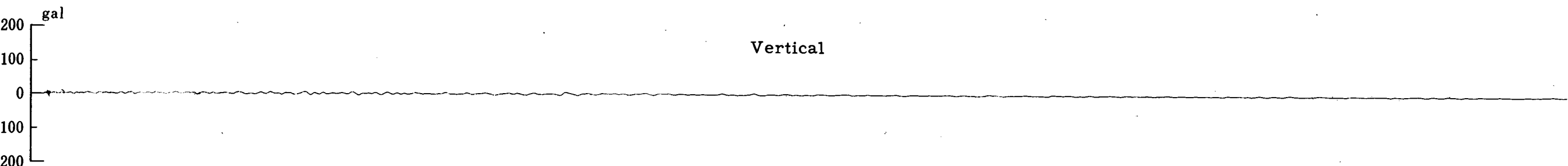
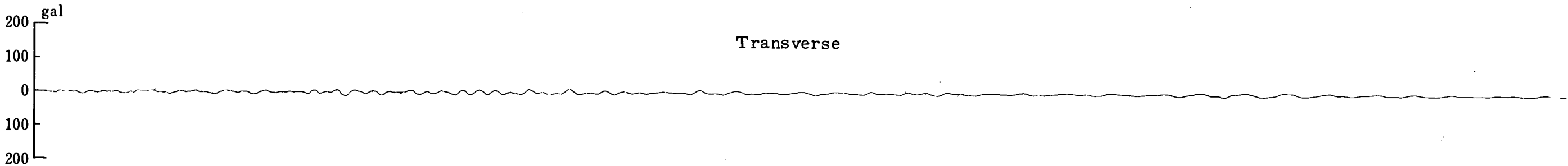
1973.7.29, 17:13



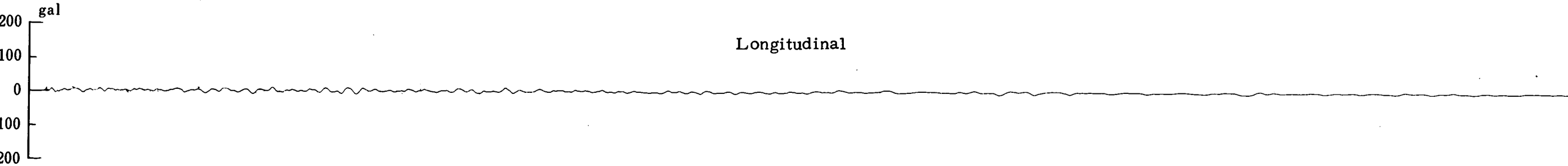
1sec

Taira Bridge 907-Gr-75
1973.11.19, 22:02

A



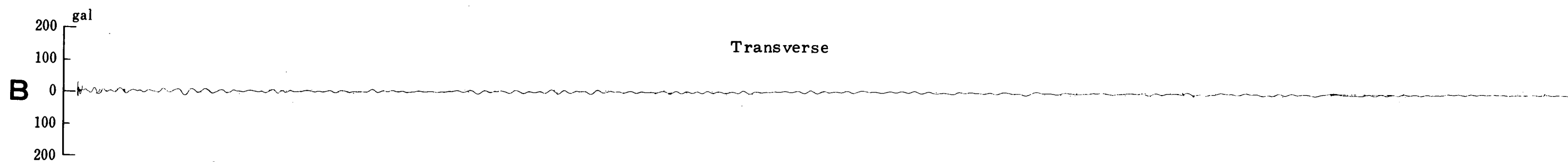
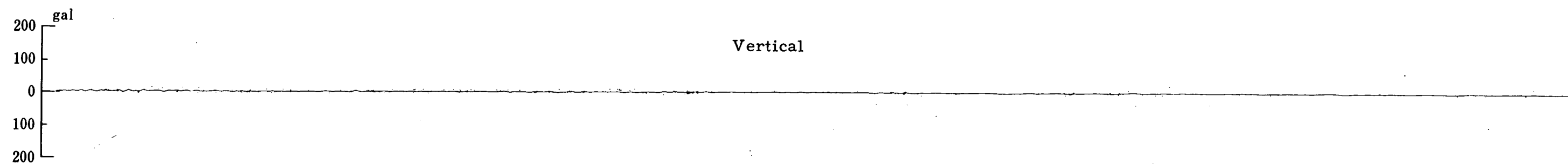
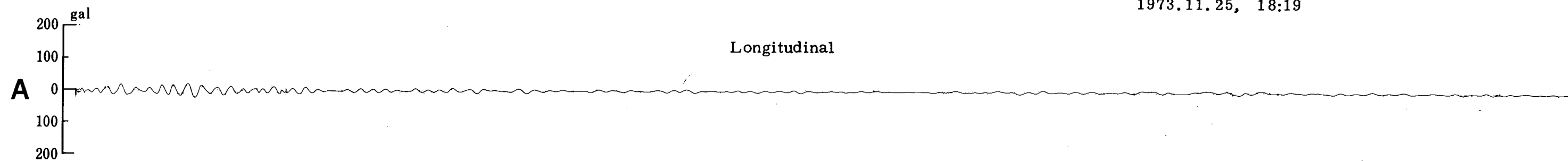
B



1sec

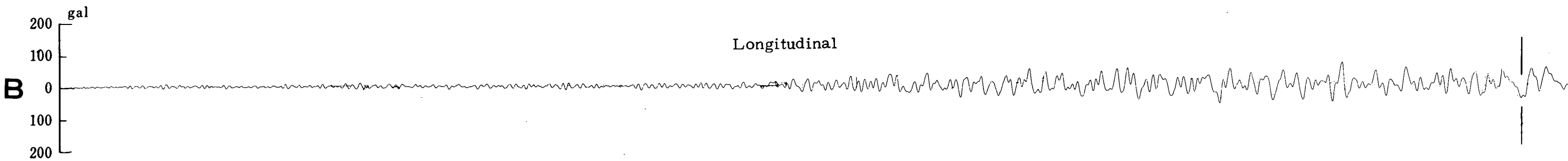
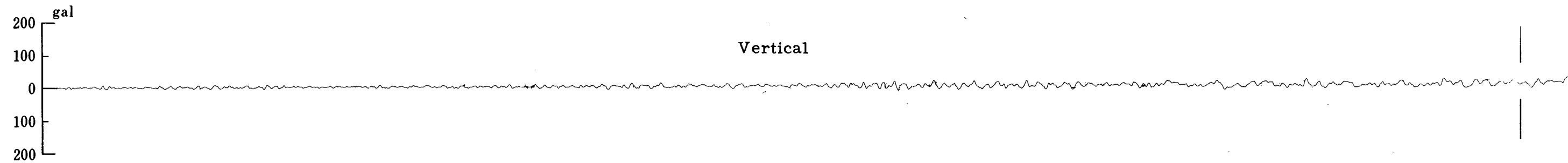
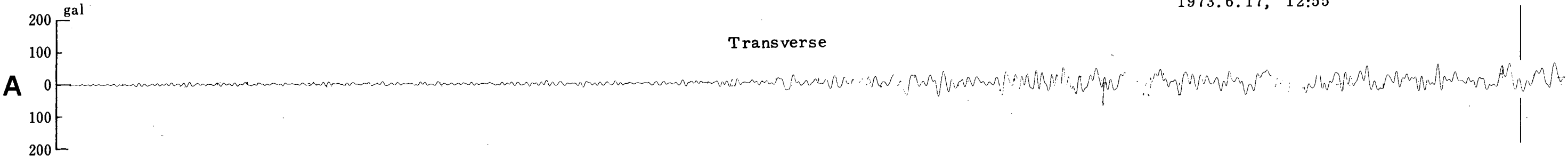
Nishiyokobori Bridge 1201-P-10

1973.11.25, 18:19



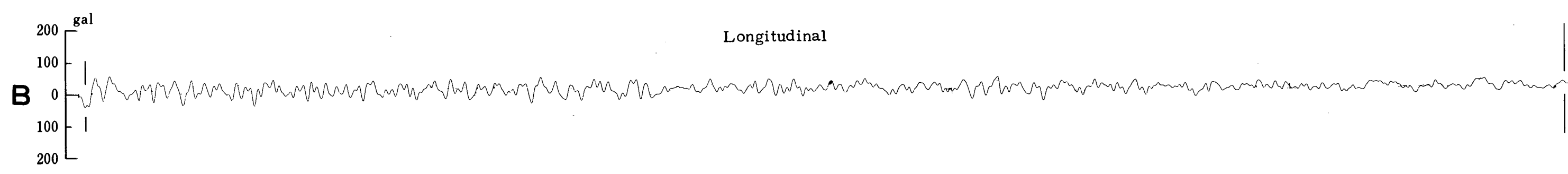
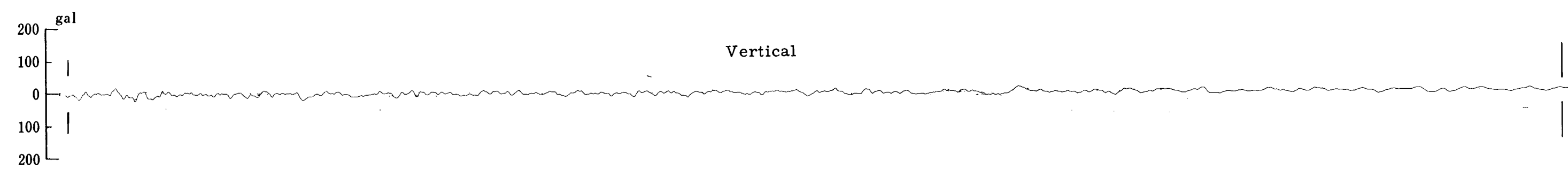
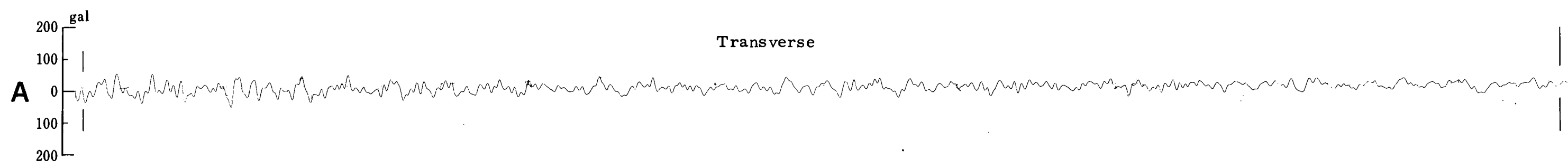
1sec

Chiyoda Bridge 1302-Gr-11
1973.6.17, 12:55



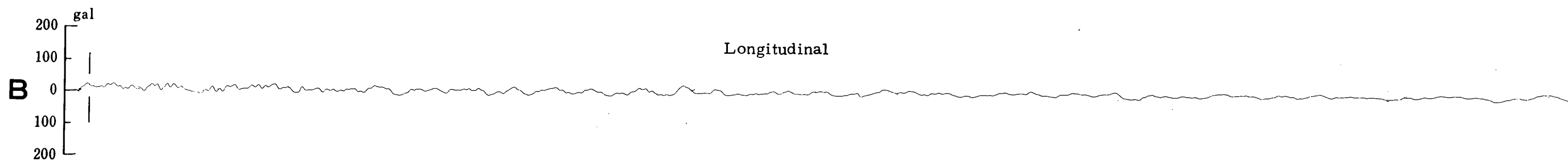
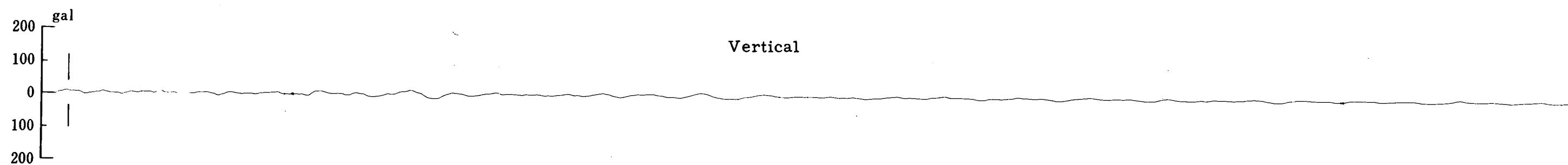
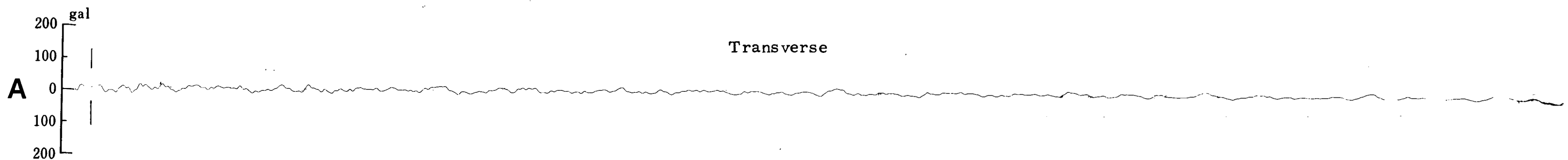
1sec

1302-Gr-11 (cont.)



1sec

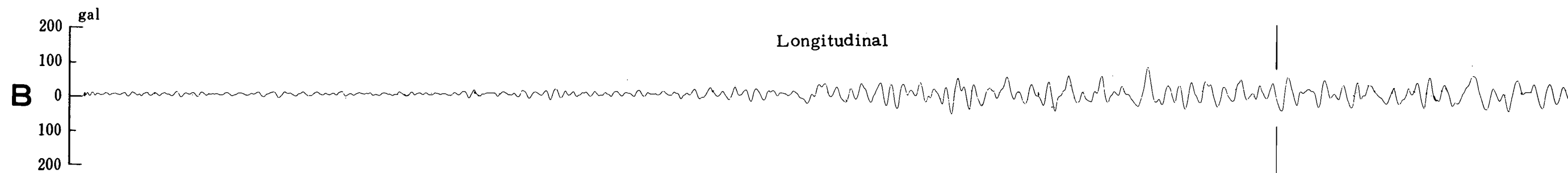
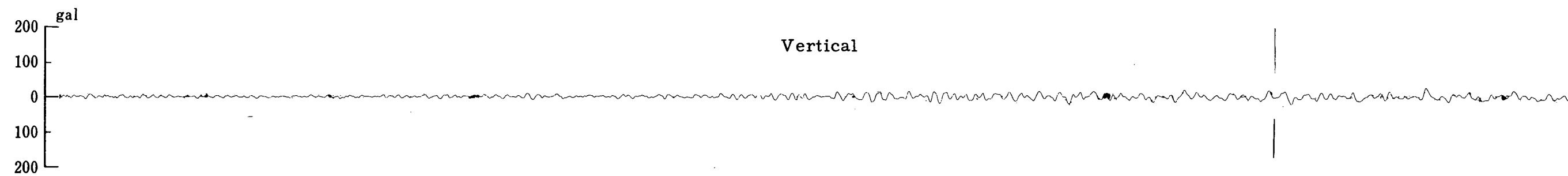
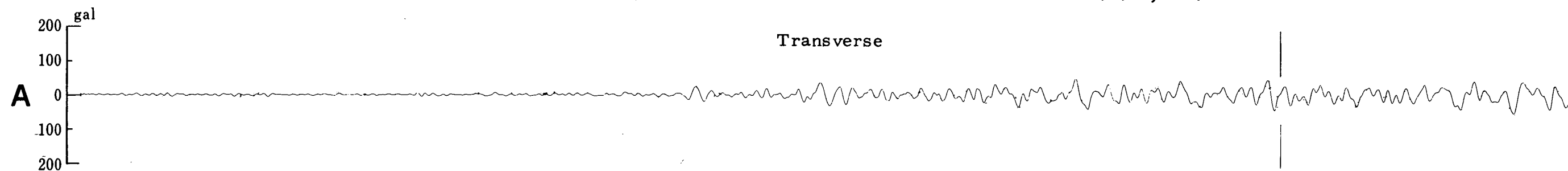
1302-Gr-11 (cont.)



1sec

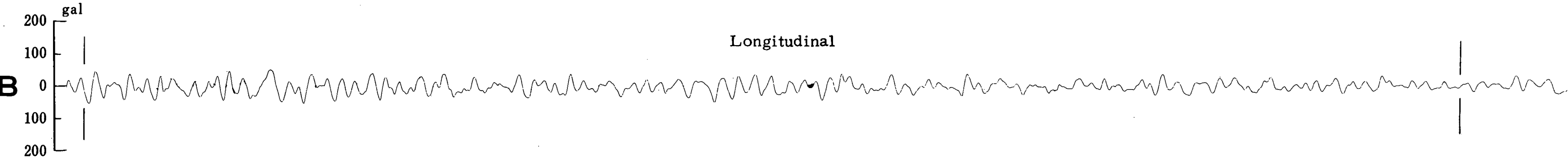
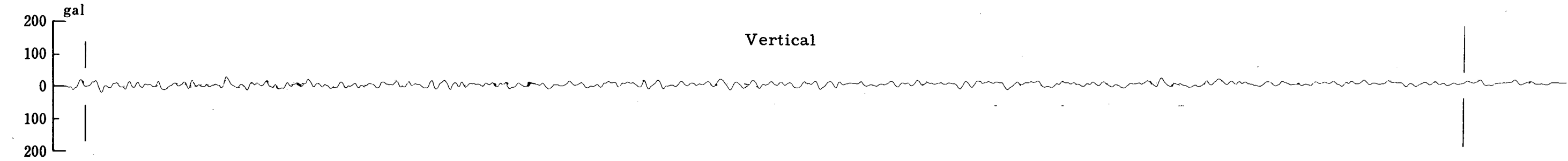
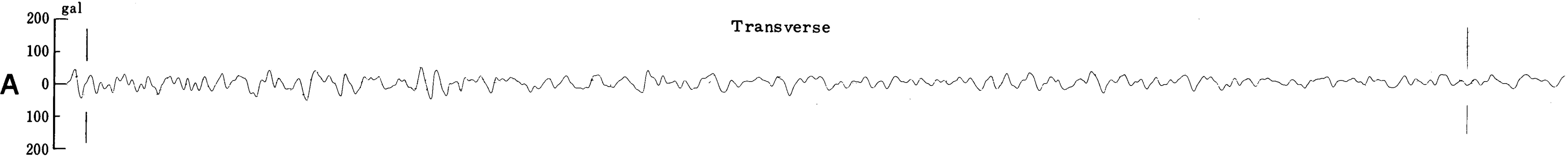
Chiyoda Bridge 1302-P-9

1973.6.17, 12:55



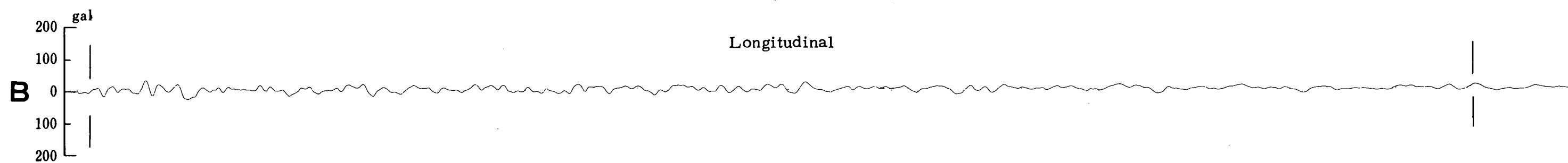
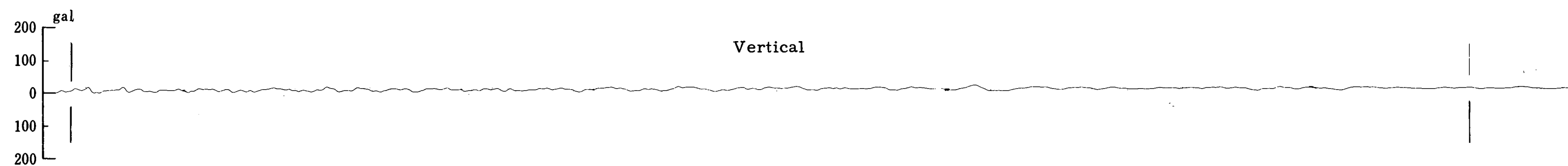
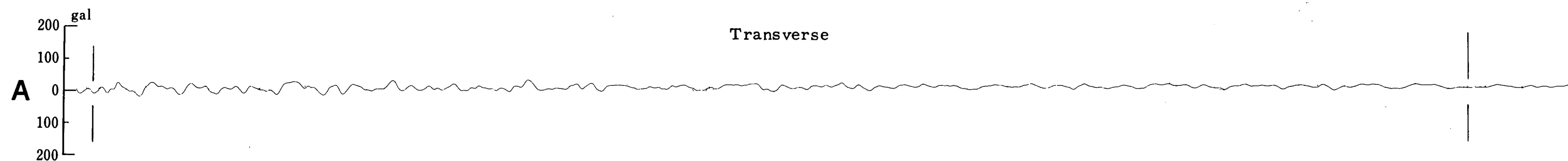
1sec

1302-P-9 (cont.)



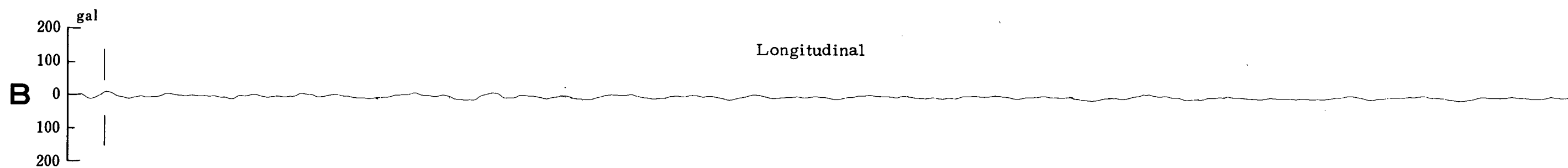
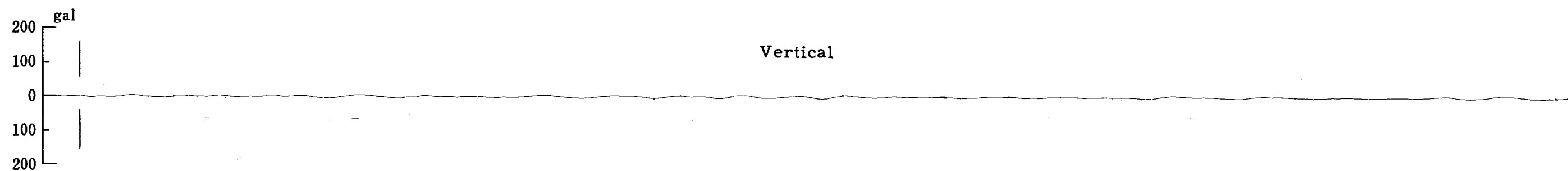
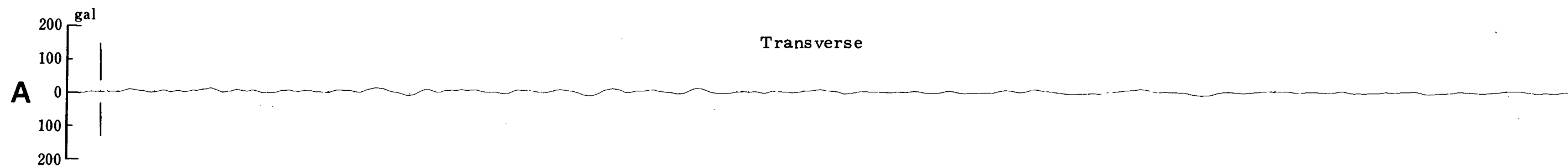
1sec

1302-P-9 (cont.)



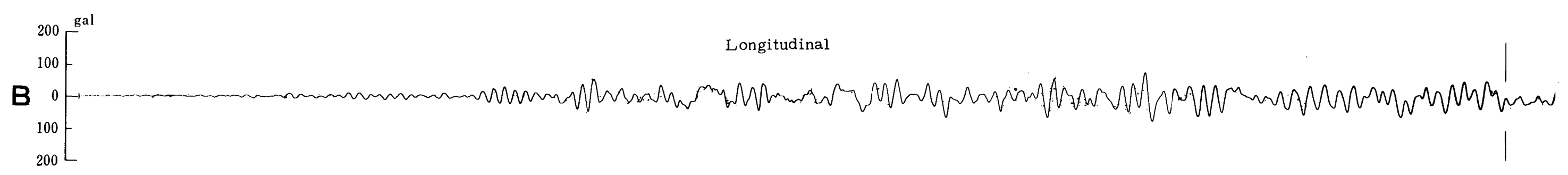
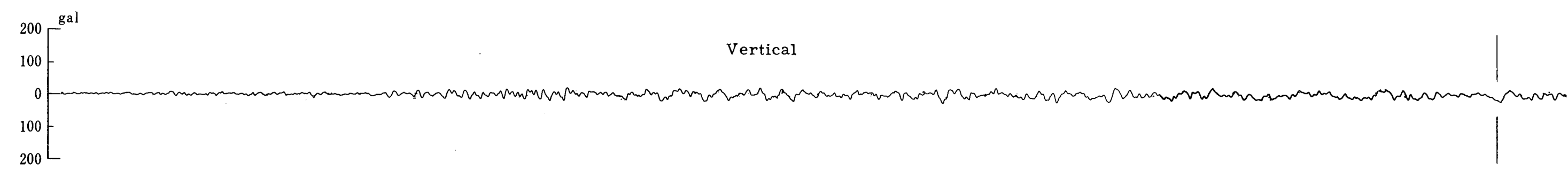
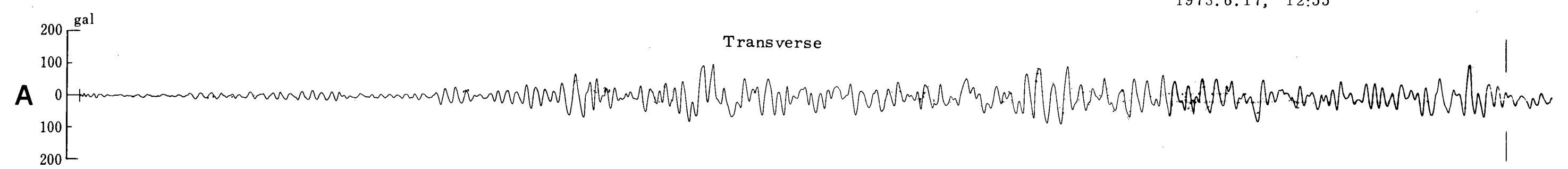
1sec

1302-P-9 (cont.)



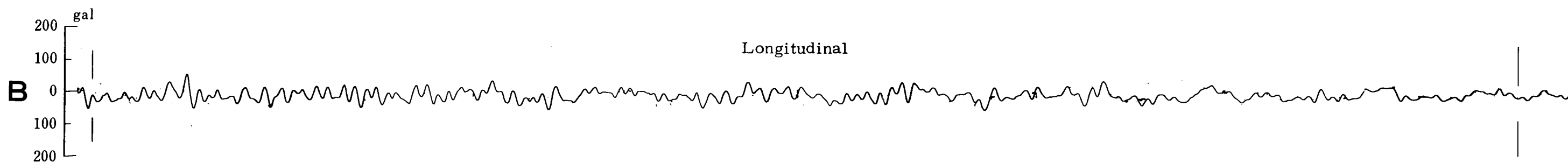
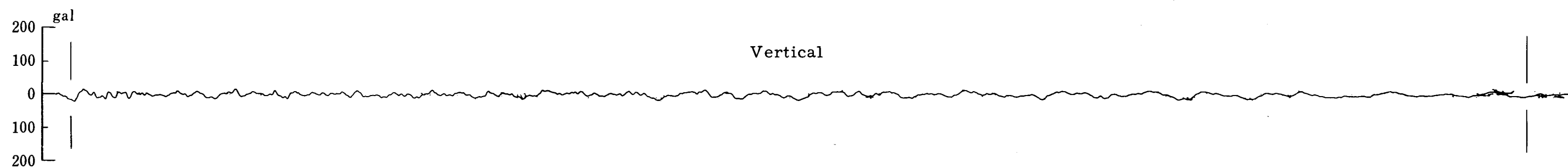
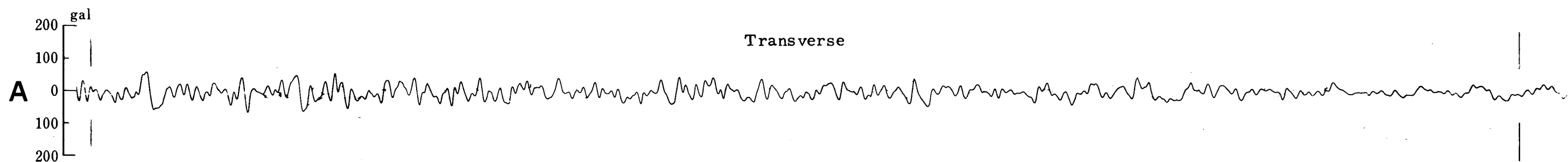
1sec

Otanoshike Bridge 1304-P-5
1973.6.17, 12:55



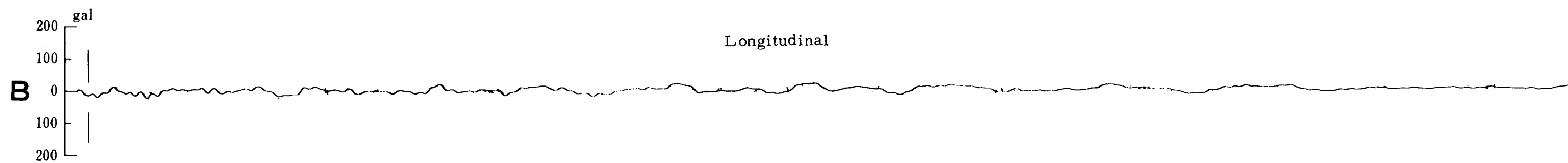
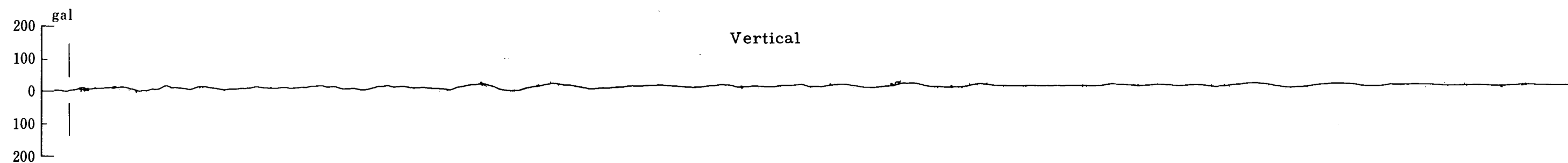
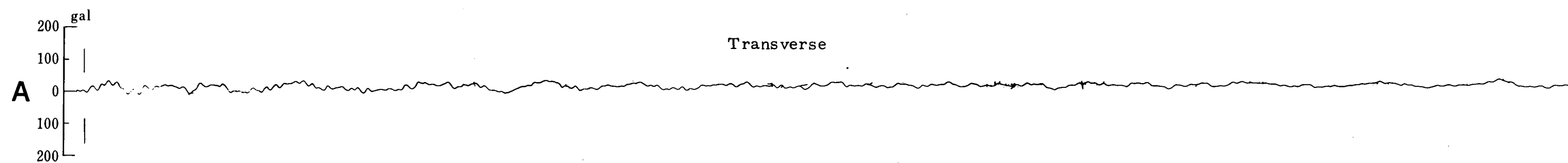
1sec

1304-P-5 (cont.)



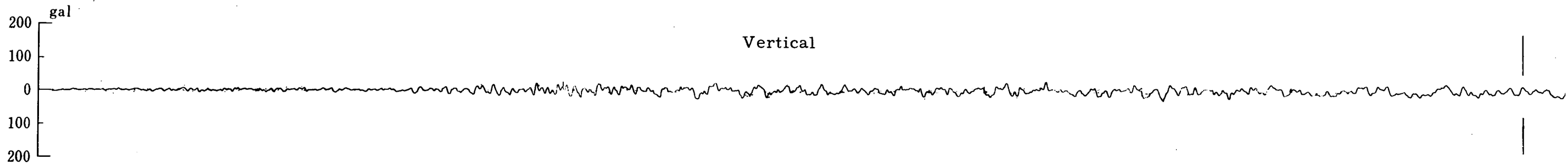
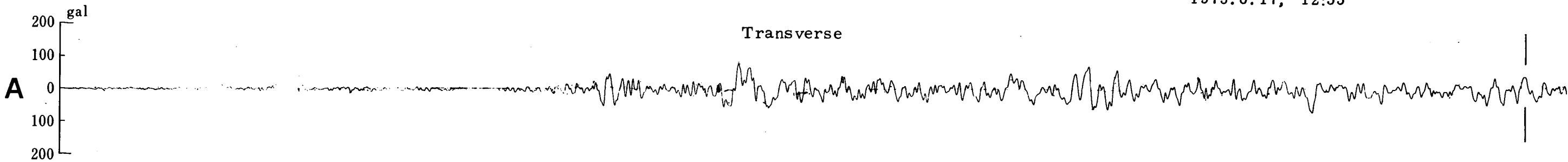
1sec

1304-P-5 (cont.)



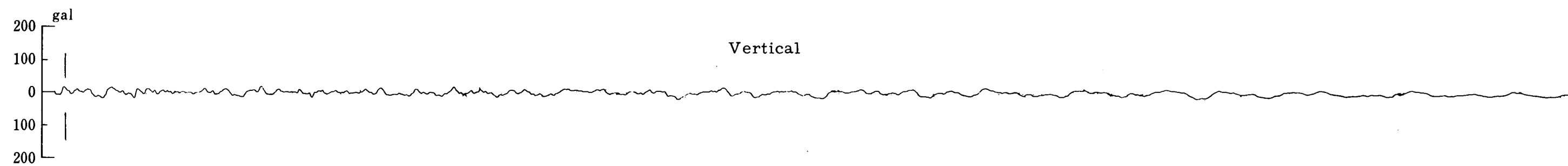
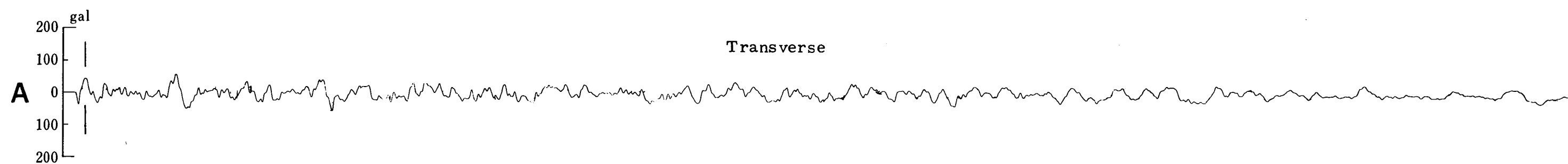
1sec

Otanoshike Bridge 1304-Gr-5
1973.6.17, 12:55



1sec

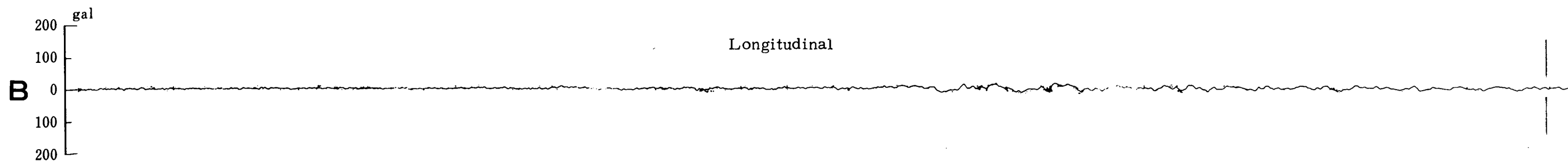
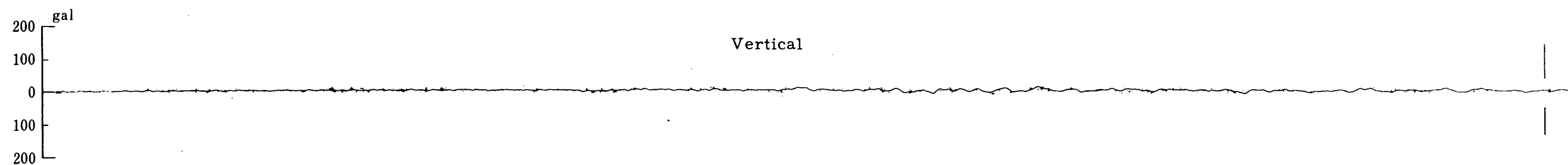
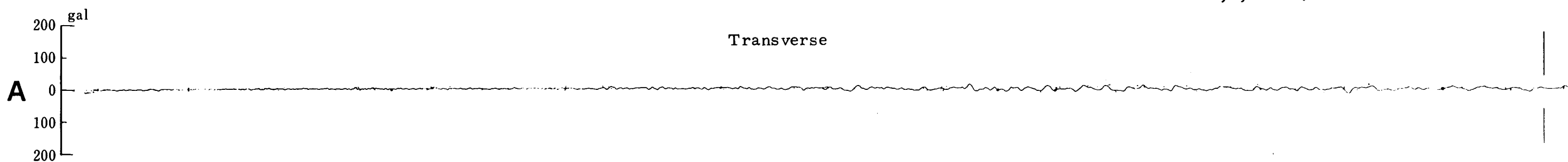
1304-Gr-5 (cont.)



1sec

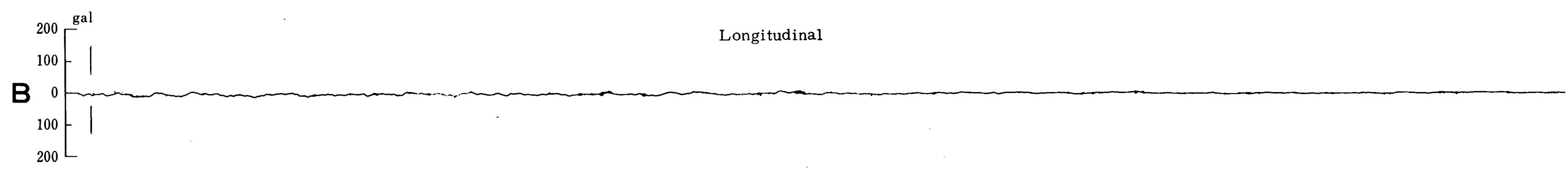
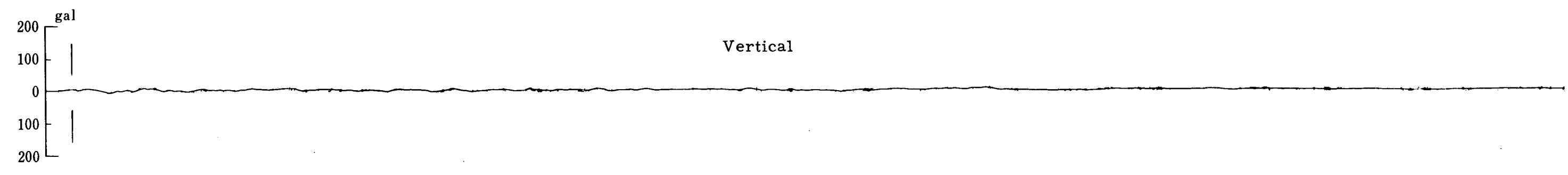
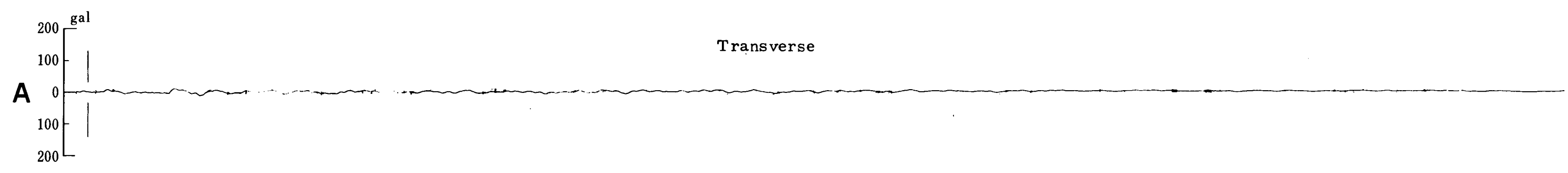
Horoman Bridge 1305-Gr-12

1973, 6, 17 12:55



1sec

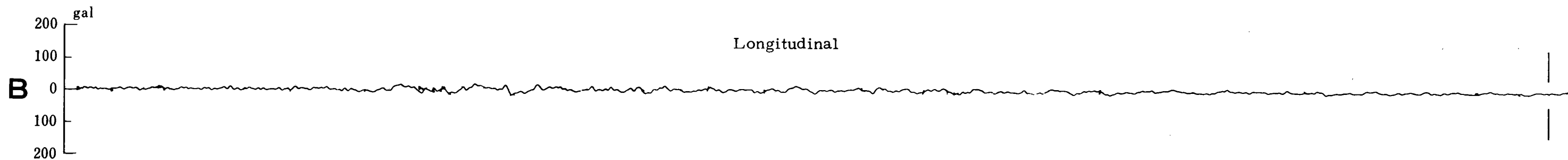
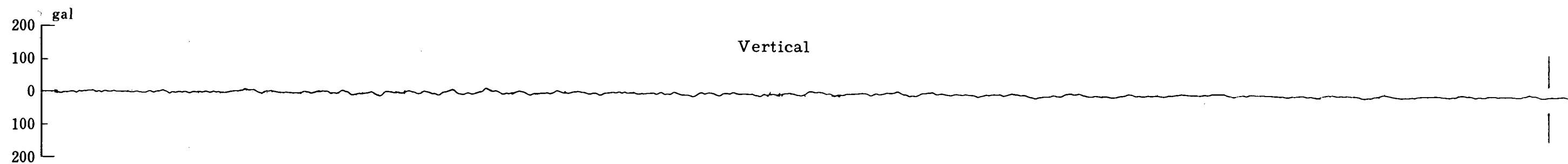
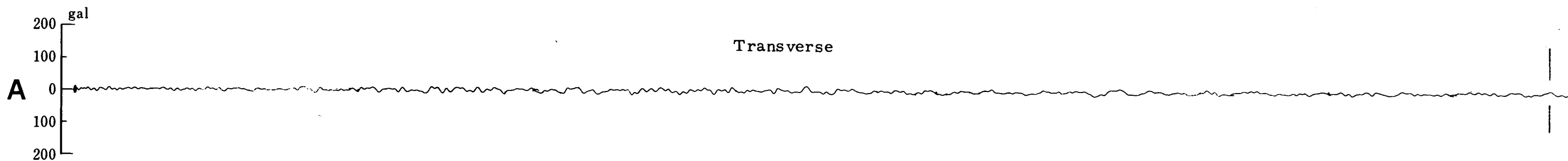
1305-Gr-12 (cont.)



1sec

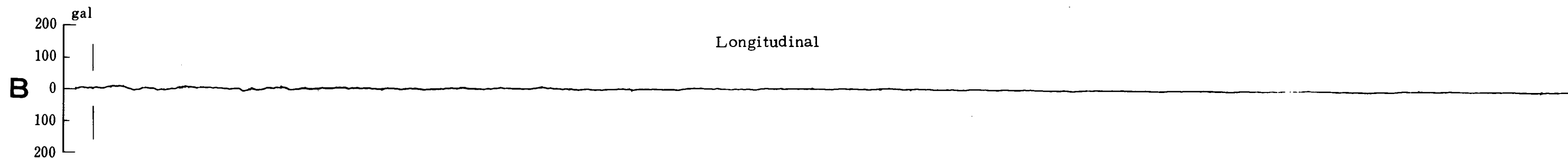
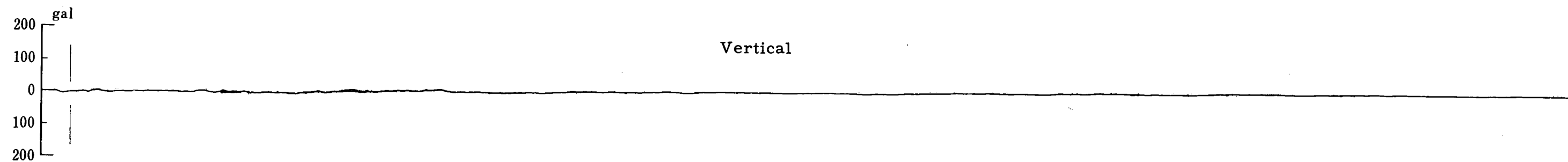
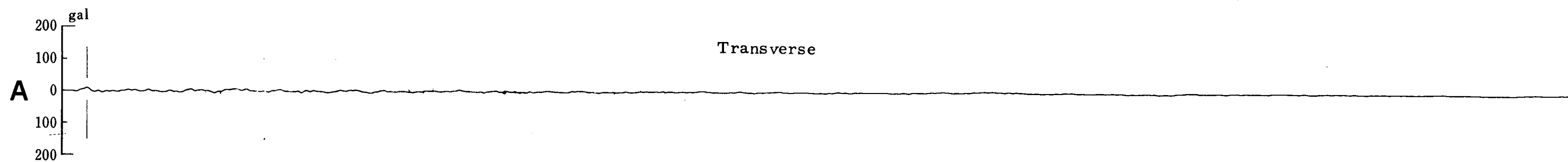
Horoman Bridge 1305-P-7

1973.6.17, 12:55



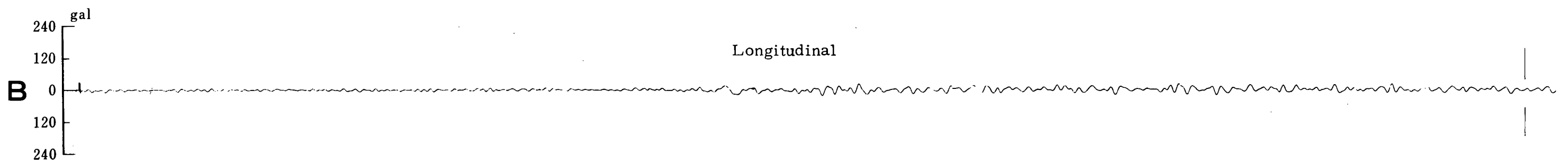
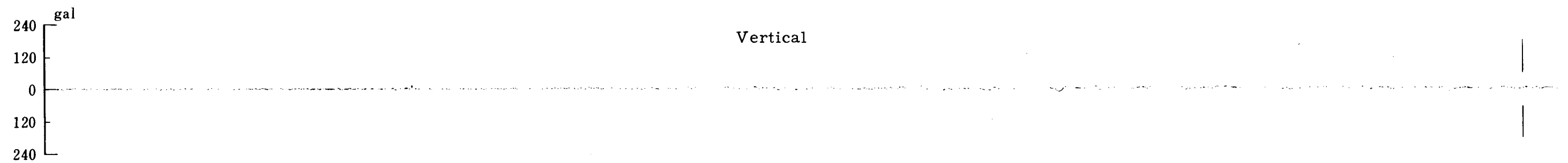
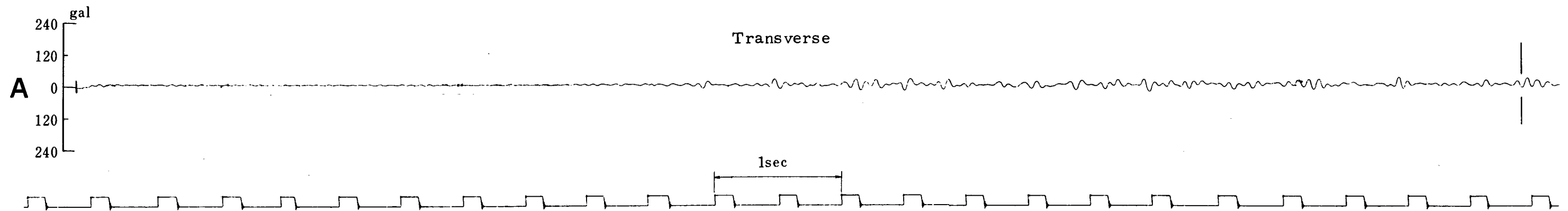
1sec

1305-P-7 (cont.)

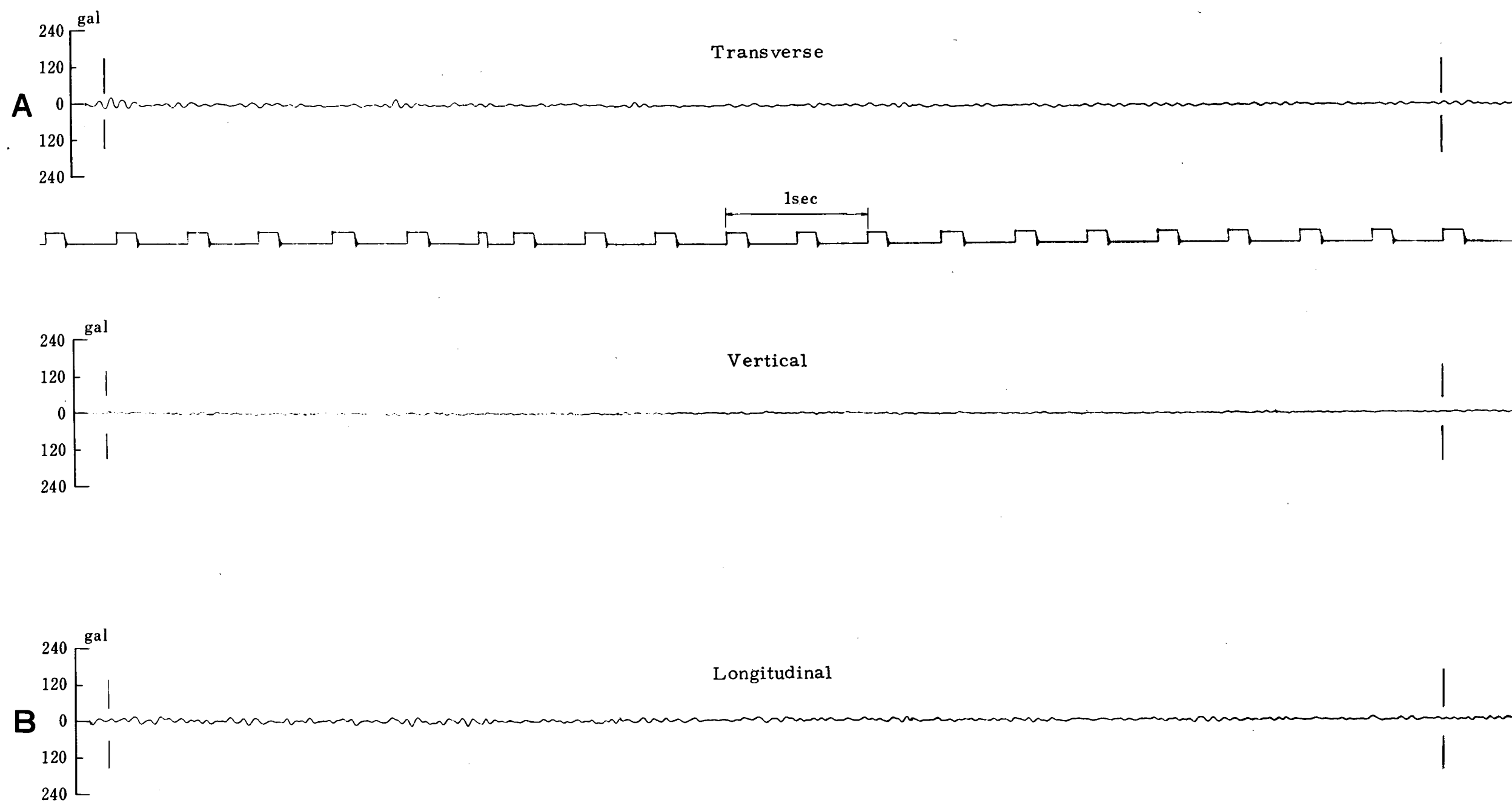


Masaki Bridge 105-Gr-7

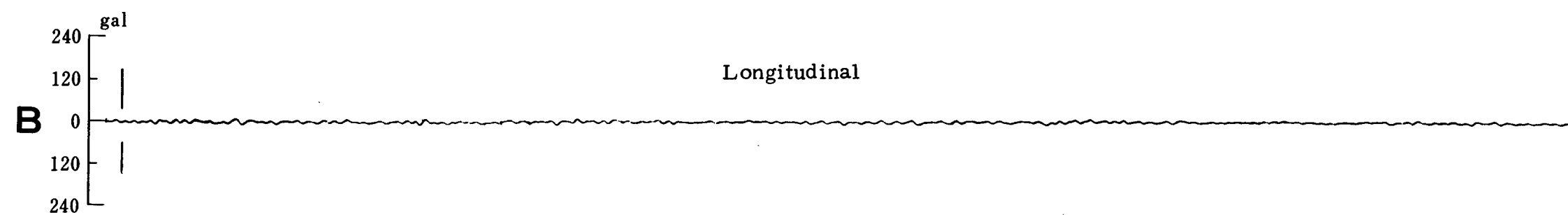
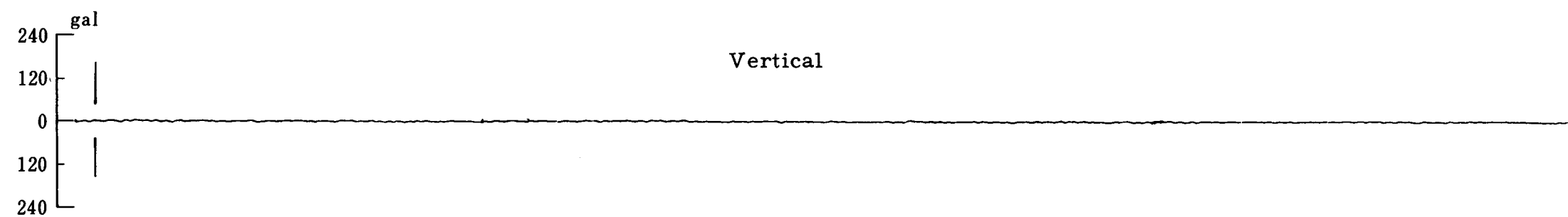
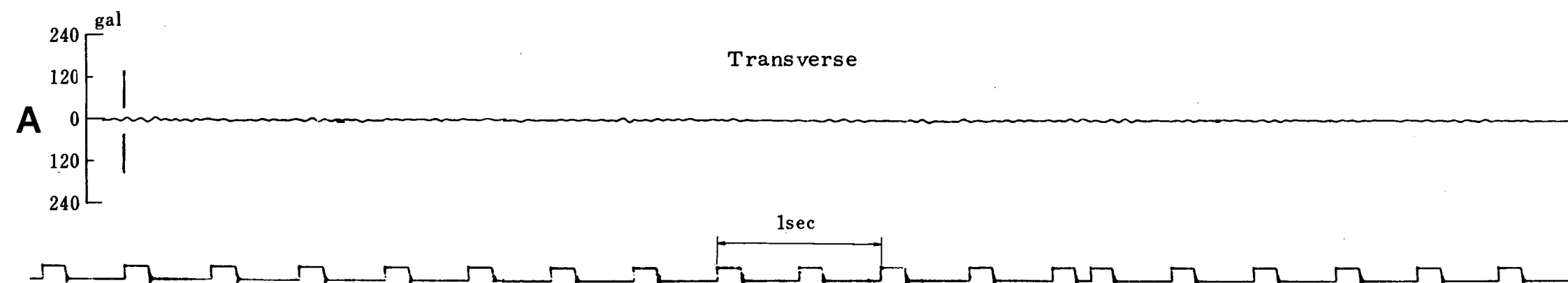
1973.11.19, 22:02



105-Gr-7 (cont.)

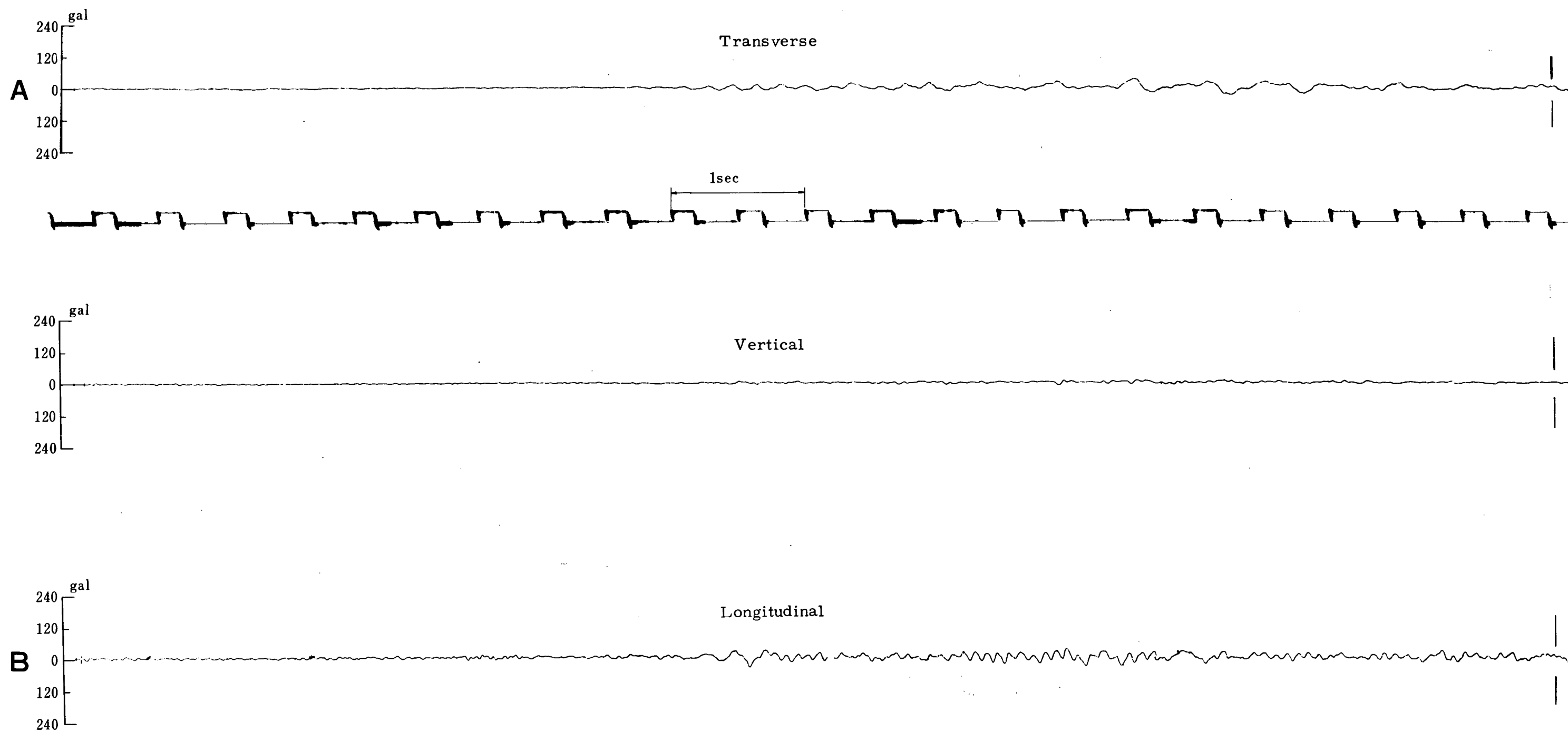


105-Gr-7 (cont.)

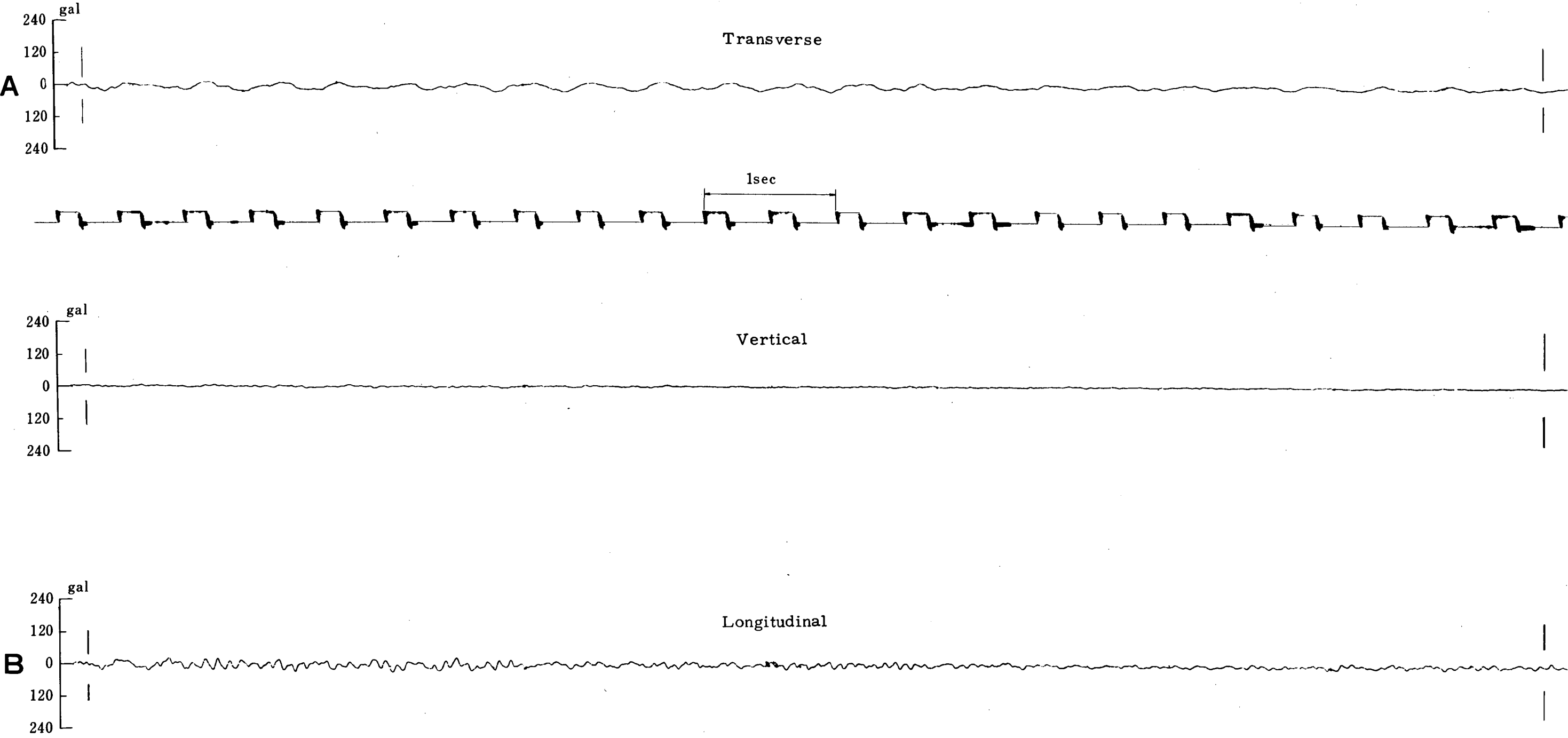


Masaki Bridge 105-P-7

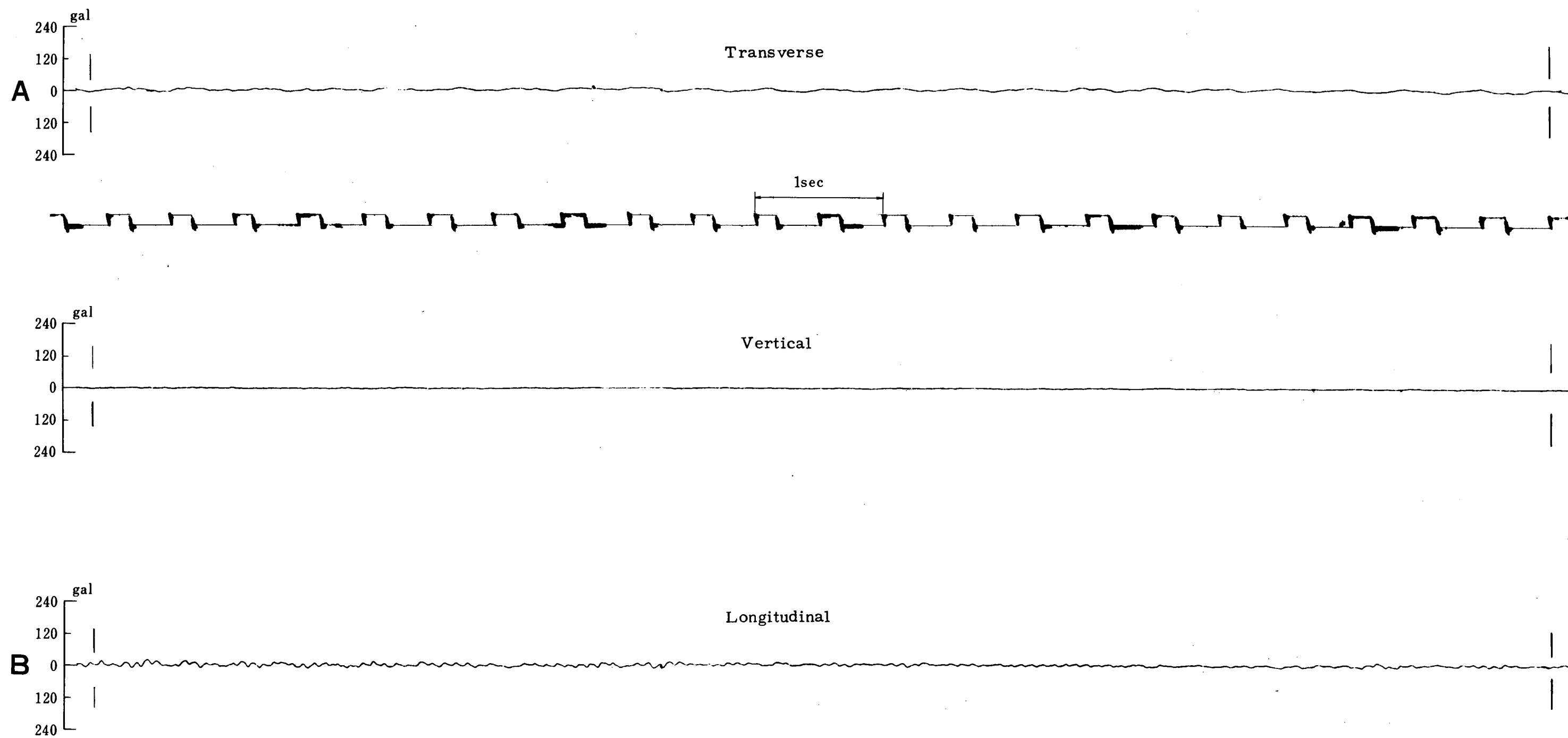
1973, 11.19, 22:02



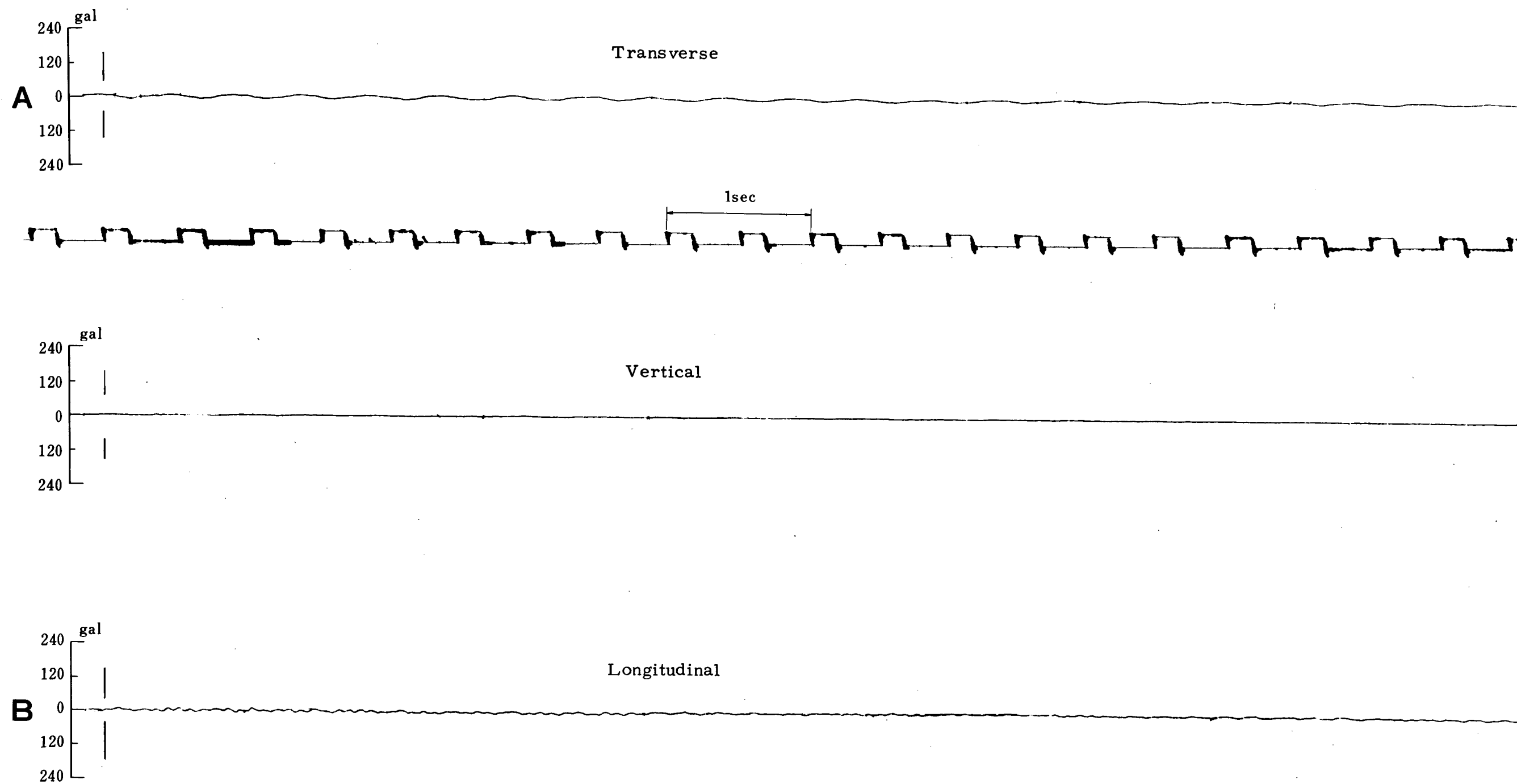
105-P-7 (cont.)



105-P-7 (cont.)

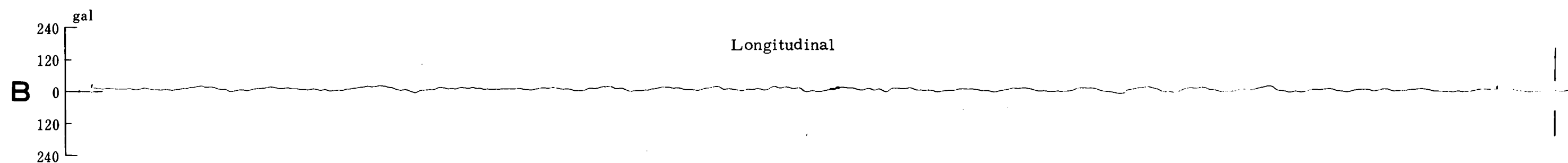
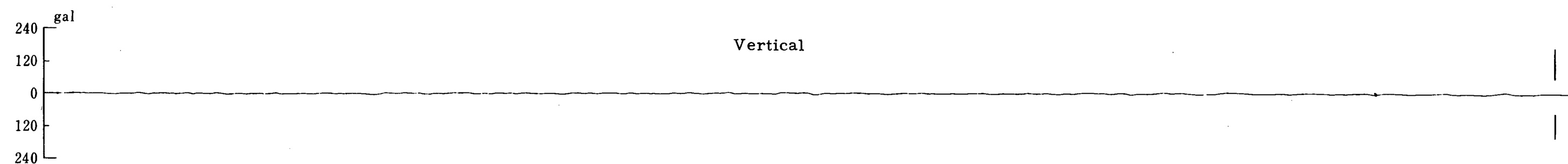
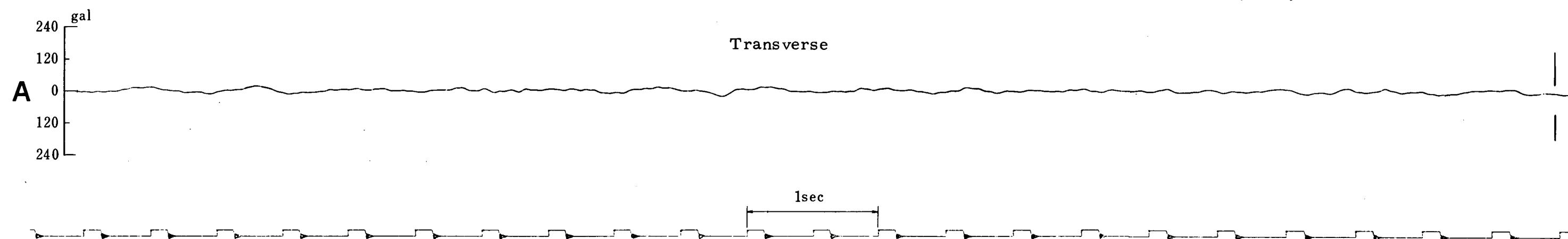


105-P-7 (cont.)

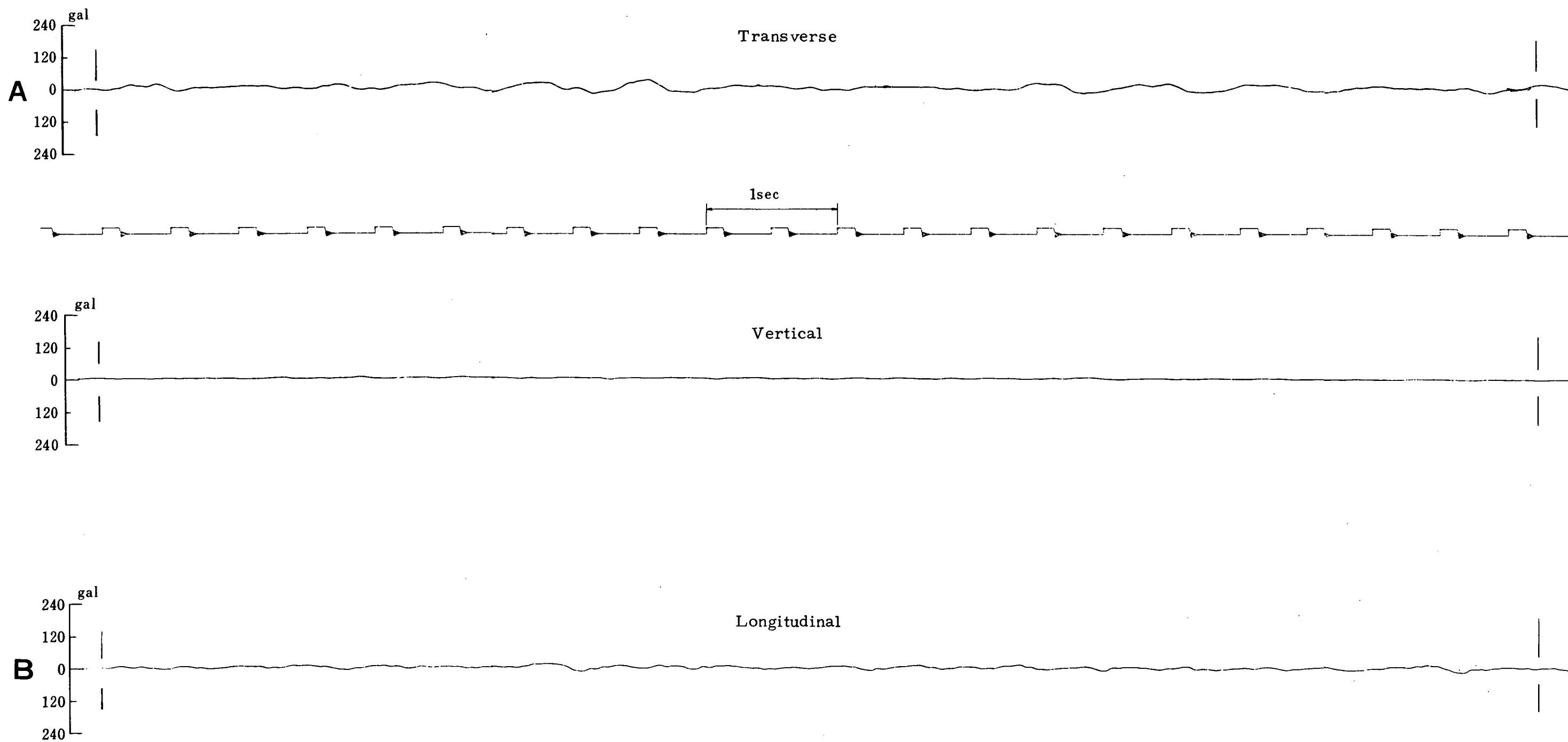


Omigawa Bridge 206-P-1

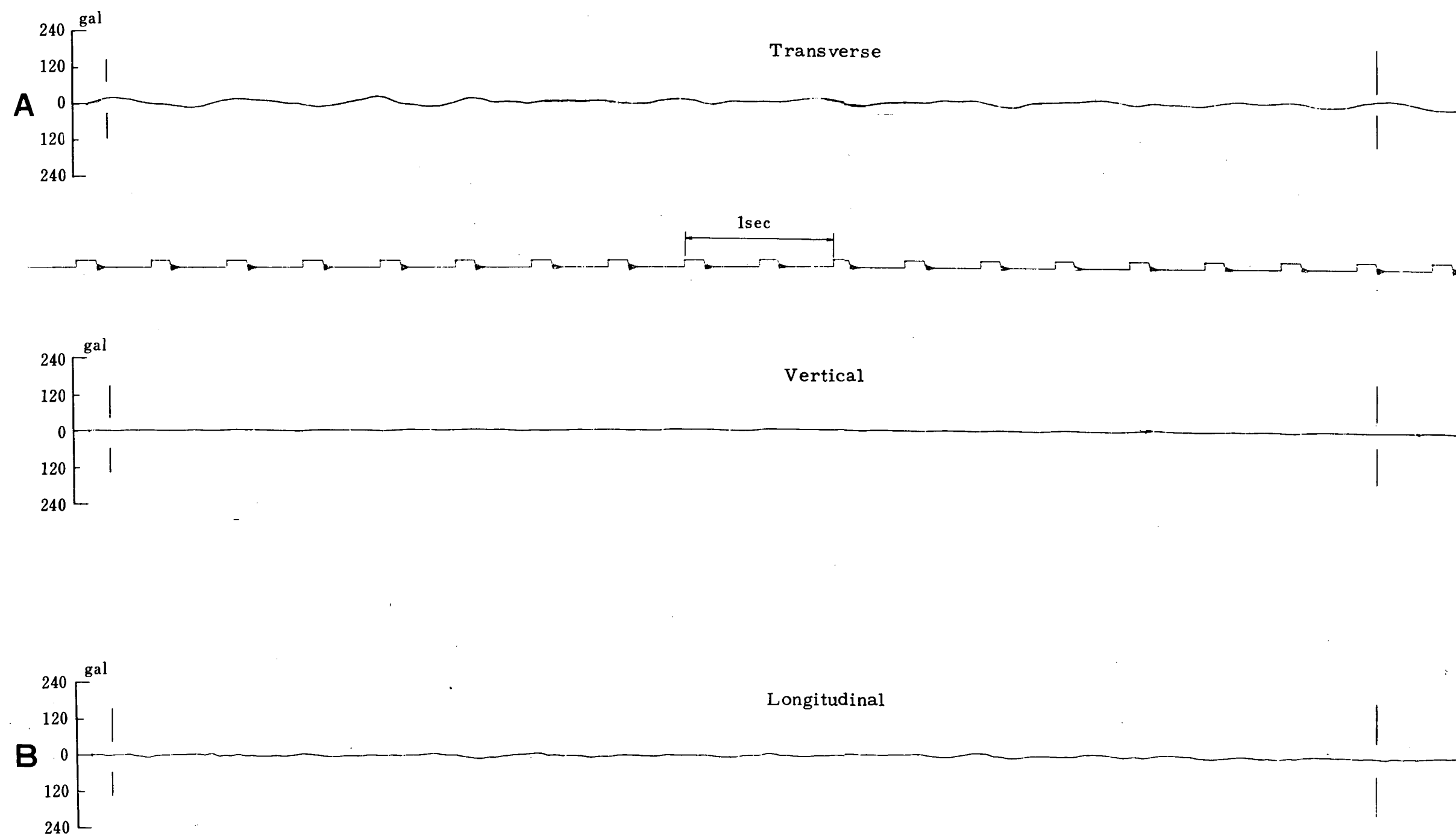
1973, 7. 20, 17:13

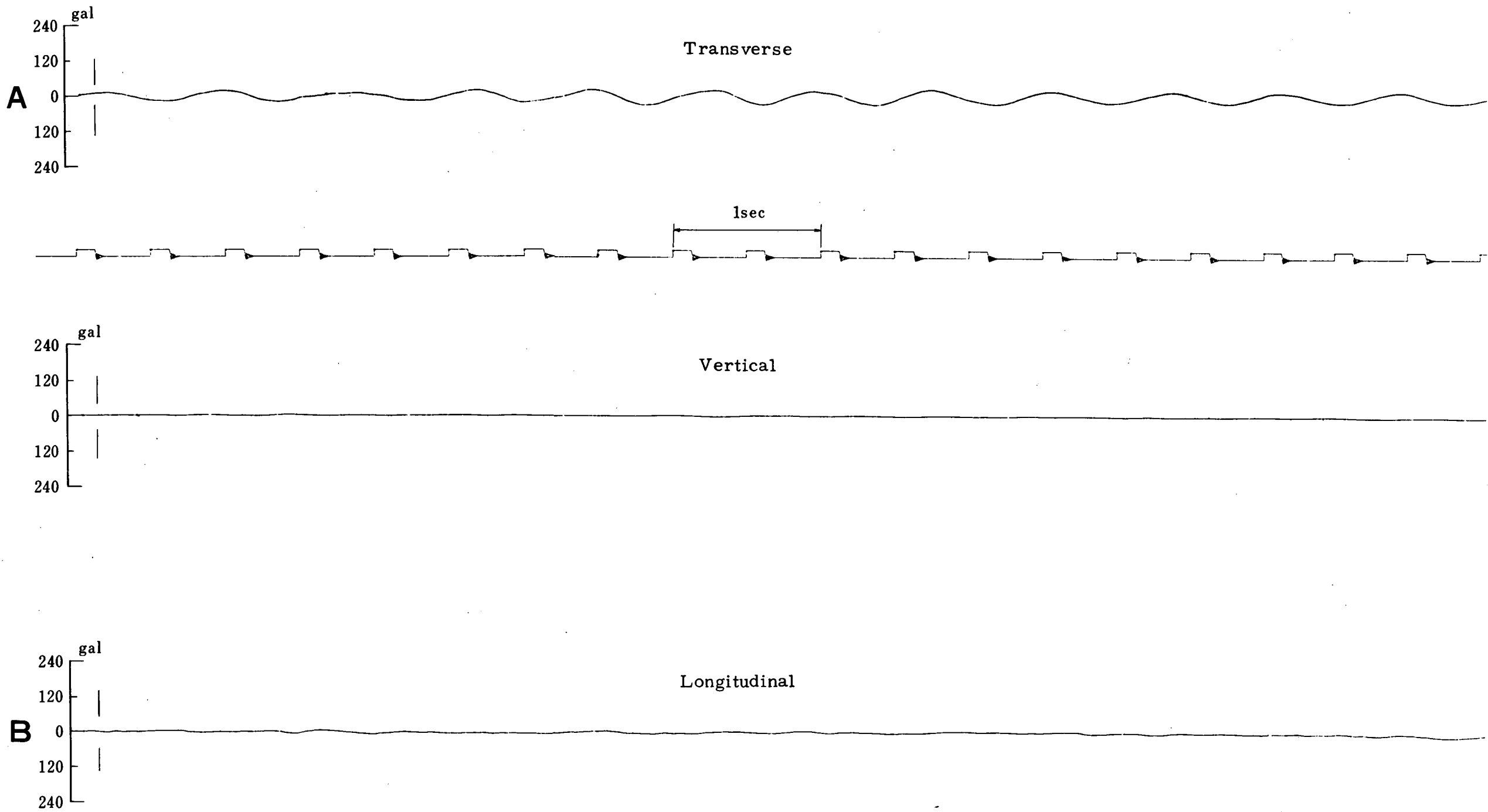


206-P-1 (cont.)



206-P-1 (cont.)





土木構造物における強震記録
(1973)

土木研究所資料第967号
昭和49年11月(1974)

栗林栄一
若林進
高木義和

キーワード：強震記録

要 旨 この報告は、土木構造物およびその近傍地盤に設置した強震計により昭和48年1月から同年12月までの間に得られた記録を原寸大に複写印刷し、各記録の最大値等を表にまとめたものである。



