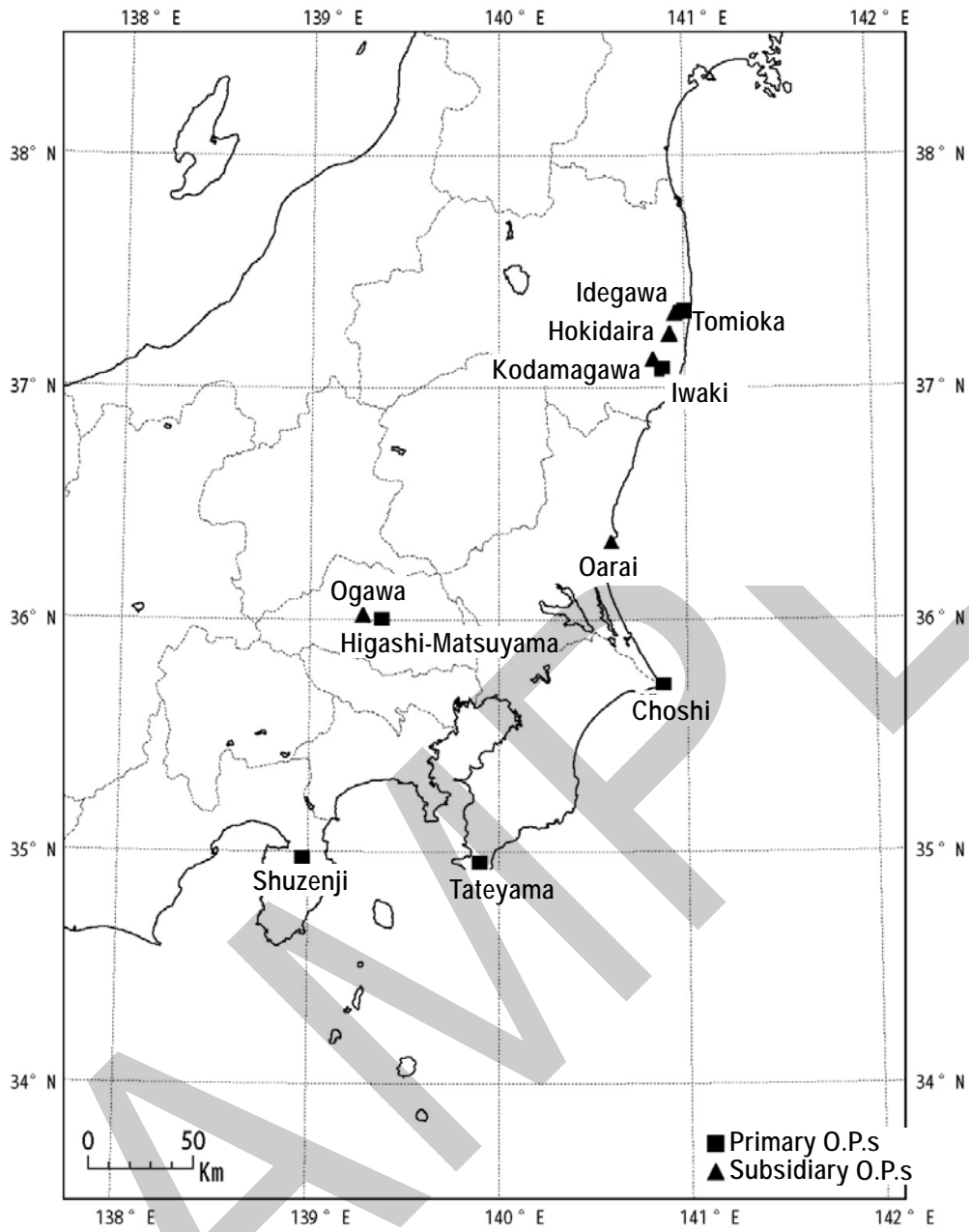


This document describes the organization and content of the CR-ROM.

- Overview_of_data.xls : Overview of data obtained at each observation point from each event between March and April 2011
- Data_summary.xls : Summary of all data obtained between March and April 2011 from the observation points
- Observation_Points.xls : Longitude, latitude, and geological structure of the observation points
- Observation_Channels.xls : Summary of all observation channels.
- dataform.xls : Description of data format
- DATA_SAMP.TXT : A sample data (for format checking)
- /201103 : Folder containing data from March 2011 (62 files)
- /201104 : Folder containing data from April 2011 (120 files)
- 201103_HED.txt : Collection of header information from the March 2011 data files
- 201104_HED.txt : Collection of header information from the April 2011 data files

DRAFT

Ref No	Time of Occurrence		Name of Epicenter	Location of Focus		Depth (km)	M	Observ Point	Hypocent Dist. (km)	Epicent. Dist. (km)	A-MAX (Gal)	Record Start H M S	Samp. (Hz)	Duration (s)	Notes
	Y M D	H M S		N Latitude	E Longitude										
1726	2011/ 3/ 1	23:12:54.39	E OFF FUKUSHIMA PREF	37°09.61'	141°27.94'	47.19	4.0	IDG	68	49	5.2	23:12:46.840	200.0	89.000	
1727	2011/ 3/ 9	11:45:12.97	FAR E OFF MIYAGI PREF	38°19.71'	143°16.79'	8.28	7.3	TMK	229	229	6.6	11:45:42.755	200.0	217.900	No. 1-3 (9 components): Unknown
1728	2011/ 3/10	06:22:11.40	FAR E OFF MIYAGI PREF	38°07.97'	143°13.12'	17.83	6.3	TMK	215	215	7.5	06:22:53.590	200.0	261.700	No. 1-3 (9 components): Unknown
*	2011/ 3/10	06:23:59.75	FAR E OFF MIYAGI PREF	38°10.33'	143°02.69'	9.30	6.8	TMK	203	203	7.5	06:22:53.590	200.0	261.700	No. 1-3 (9 components): Unknown Contained in same file as No. 1728
1729	2011/ 3/11	14:46:18.12	FAR E OFF MIYAGI PREF	38°06.21'	142°51.66'	23.74	Mw 9.0	SZJ	492	493	31.9	14:47:44.000	100.0	300.000	No. 1 EW, No. 3 EW: Unknown
1730								TTT	439	439	39.2	14:47:16.000	100.0	300.000	
1731								OGW	393	394	58.8	14:47:10.180	200.0	300.000	
1732								OAR	281	281	158.6	14:47:12.000	200.0	927.150	
1733								KDG	211	210	144.6	14:46:45.050	200.0	190.000	No. 2 NS: Unknown
1734								IDG	191	190	163.9	14:46:38.740	200.0	95.000	Recording was terminated before motion ended
1735								HKD	197	196	157.3	14:46:44.000	200.0	681.390	
1736	2011/ 3/11	14:51:27.43	E OFF FUKUSHIMA PREF	36°44.09'	142°01.74'	11.00	6.8	TTT	276	276	6.0	14:51:56.000	100.0	300.000	
*								OAR	136	136	158.6	14:47:12.000	200.0	927.150	Contained in same file as No. 1732
*								HKD	113	113	157.3	14:46:44.000	200.0	681.390	Contained in same file as No. 1735
*	2011/ 3/11	14:54:31.51	E OFF FUKUSHIMA PREF	37°30.09'	141°19.88'	35.78	5.8	HKD	58	46	157.3	14:46:44.000	200.0	681.390	Contained in same file as No. 1735
*	2011/ 3/11	14:54:42.22	NORTHERN IBARAKI PREF	36°43.03'	140°34.58'	9.06	5.7	OAR	43	42	158.6	14:47:12.000	200.0	927.150	Contained in same file as No. 1732
*								HKD	66	66	157.3	14:46:44.000	200.0	681.390	Contained in same file as No. 1735
*	2011/ 3/11	14:55:53.16	FAR E OFF IBARAKI PREF	36°29.98'	141°48.11'	29.00	5.8	OAR	113	110	158.6	14:47:12.000	200.0	927.150	Contained in same file as No. 1732
1737	2011/ 3/11	15:06:10.75	E OFF IWATE PREF	39°02.50'	142°23.88'	26.56	6.4	OAR	340	340	16.1	15:04:09.000	200.0	664.325	
1738	2011/ 3/11	15:08:20.32	HAKONE REGION	35°10.81'	139°01.51'	5.91	4.6	SZJ	25	24	16.6	15:08:08.000	100.0	204.000	No. 1 EW, No. 3 EW: Unknown
*								OAR	191	191	16.1	15:04:09.000	200.0	664.325	Contained in same file as No. 1737
*	2011/ 3/11	15:11:18.95	NORTHERN IBARAKI PREF	36°51.86'	140°37.18'	7.89	5.6	OAR	59	59	16.1	15:04:09.000	200.0	664.325	Contained in same file as No. 1737
*	2011/ 3/11	15:12:58.41	E OFF FUKUSHIMA PREF	37°12.28'	141°39.61'	27.05	6.2	OAR	138	135	16.1	15:04:09.000	200.0	664.325	Contained in same file as No. 1737 Initially M6.1, later corrected as M6.2
1739	2011/ 3/11	15:15:34.46	FAR E OFF IBARAKI PREF	36°06.50'	141°15.92'	43.18	7.6	SZJ	247	244	8.2	15:16:08.000	100.0	300.000	No. 1 EW, No. 3 EW: Unknown, Initially M7.7 later M7.6
1740								TTT	183	178	26.8	15:15:56.000	100.0	300.000	
1741								HKD	135	129	10.6	15:15:49.000	200.0	82.775	
1742	2011/ 3/11	16:14:56.80	FAR E OFF IBARAKI PREF	36°33.32'	142°04.13'	20.00	6.8	OAR	135	134	10.2	16:14:15.000	200.0	113.920	Initially M6.7, later corrected as M6.8
1743	2011/ 3/11	16:30:15.36	E OFF FUKUSHIMA PREF	37°21.38'	141°16.85'	27.01	6.0	HKD	43	34	33.4	16:29:43.000	200.0	86.190	
1744	2011/ 3/11	17:31:07.61	E OFF FUKUSHIMA PREF	37°28.33'	141°23.74'	30.39	5.9	IDG	53	43	123.5	17:30:58.380	200.0	125.000	
1745	2011/ 3/11	17:35:22.39	E OFF IBARAKI PREF	36°04.53'	141°07.82'	34.30	5.2	OAR	66	56	15.0	17:35:29.000	200.0	79.360	
1746	2011/ 3/11	17:40:54.13	E OFF FUKUSHIMA PREF	37°25.51'	141°19.07'	27.36	6.0	OAR	139	137	6.6	17:41:18.000	200.0	79.790	Initially M6.1, later corrected as M6.0
1747								IDG	44	35	130.1	17:40:43.750	200.0	188.000	
1748								HKD	49	40	36.2	17:40:49.000	200.0	82.350	
1749	2011/ 3/12	10:13:55.98	E OFF FUKUSHIMA PREF	37°18.69'	141°14.34'	28.35	4.7	HKD	40	29	13.4	10:13:53.000	200.0	79.360	
1750	2011/ 3/12	22:15:41.76	E OFF FUKUSHIMA PREF	37°11.85'	141°25.58'	40.08	6.2	HKD	60	44	20.6	22:15:39.000	200.0	80.215	
1751	2011/ 3/14	15:52:22.87	E OFF FUKUSHIMA PREF	36°57.30'	141°07.20'	51.76	5.2	KDG	61	32	6.6	15:52:12.360	200.0	97.000	No. 2 NS: Unknown
1752								HKD	63	36	14.4	15:52:19.000	200.0	119.470	
1753	2011/ 3/15	07:29:21.92	EASTERN FUKUSHIMA PREF	37°04.12'	140°44.88'	8.86	4.3	KDG	13	9	9.4	07:29:05.350	200.0	86.000	No. 2 NS: Unknown
1754	2011/ 3/15	22:31:46.34	MT. FUJI REGION	35°18.57'	138°42.87'	14.31	6.4	SZJ	46	44	18.0	22:31:36.000	100.0	137.000	No. 1 EW, No. 3 EW: Unknown
1755								OGW	95	94	6.5	22:31:45.690	200.0	112.000	
1756	2011/ 3/16	10:08:07.80	E OFF IBARAKI PREF	36°17.58'	140°57.52'	38.60	4.2	OAR	51	33	5.4	10:07:51.000	200.0	80.060	
1757	2011/ 3/16	12:52:02.77	NEAR CHOSHI CITY	35°50.22'	140°54.39'	9.97	6.1	OAR	63	62	52.4	12:51:46.000	200.0	102.835	

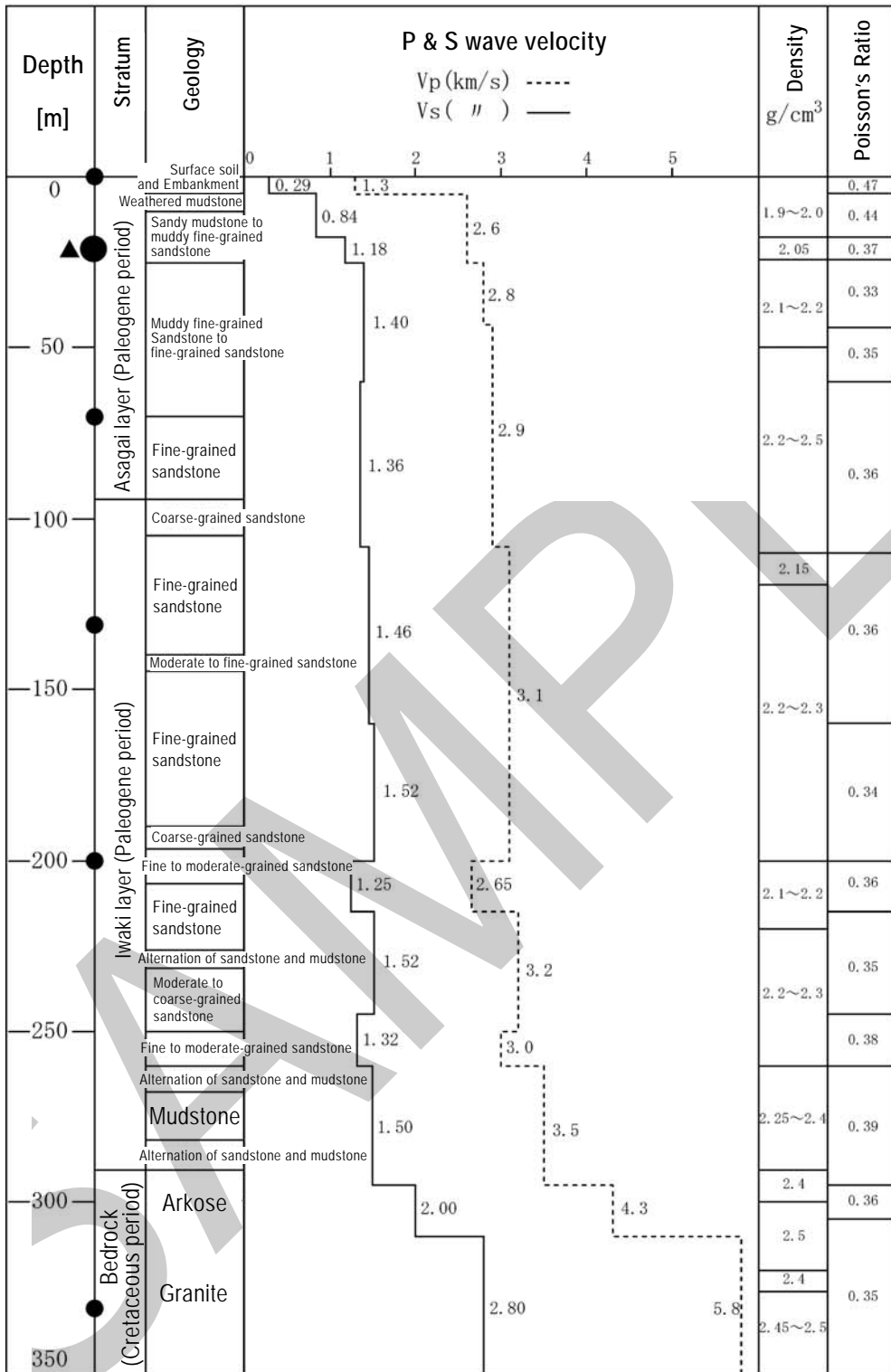


Geographic location of Observation Points (O.P.s)

Latitude and Longitude of Observation Points (Japanese Geodetic Datum 2000)

Observation Points	North Latitude	East Longitude
[Primary] Higashi-Matsuyama	36°0.19'	139°22.82'
[Primary] Shuzenji	34°58.2'	138°57.81'
[Primary] Tateyama	34°57.2'	139°53.81'
[Primary] Choshi	35°43.2'	140°51.8'
[Primary] Iwaki	37°5.19'	140°52.8'
[Primary] Tomioka	37°20.18'	140°59.8'
[Subsidiary] Ogawa	36°1.19'	139°16.81'
[Subsidiary] Oarai	36°20.19'	140°35.8'
[Subsidiary] Kodamagawa	37°7.19'	140°49.8'
[Subsidiary] Idegawa	37°19.18'	140°56.8'
[Subsidiary] Hokidaira	37°14.18'	140°55.8'

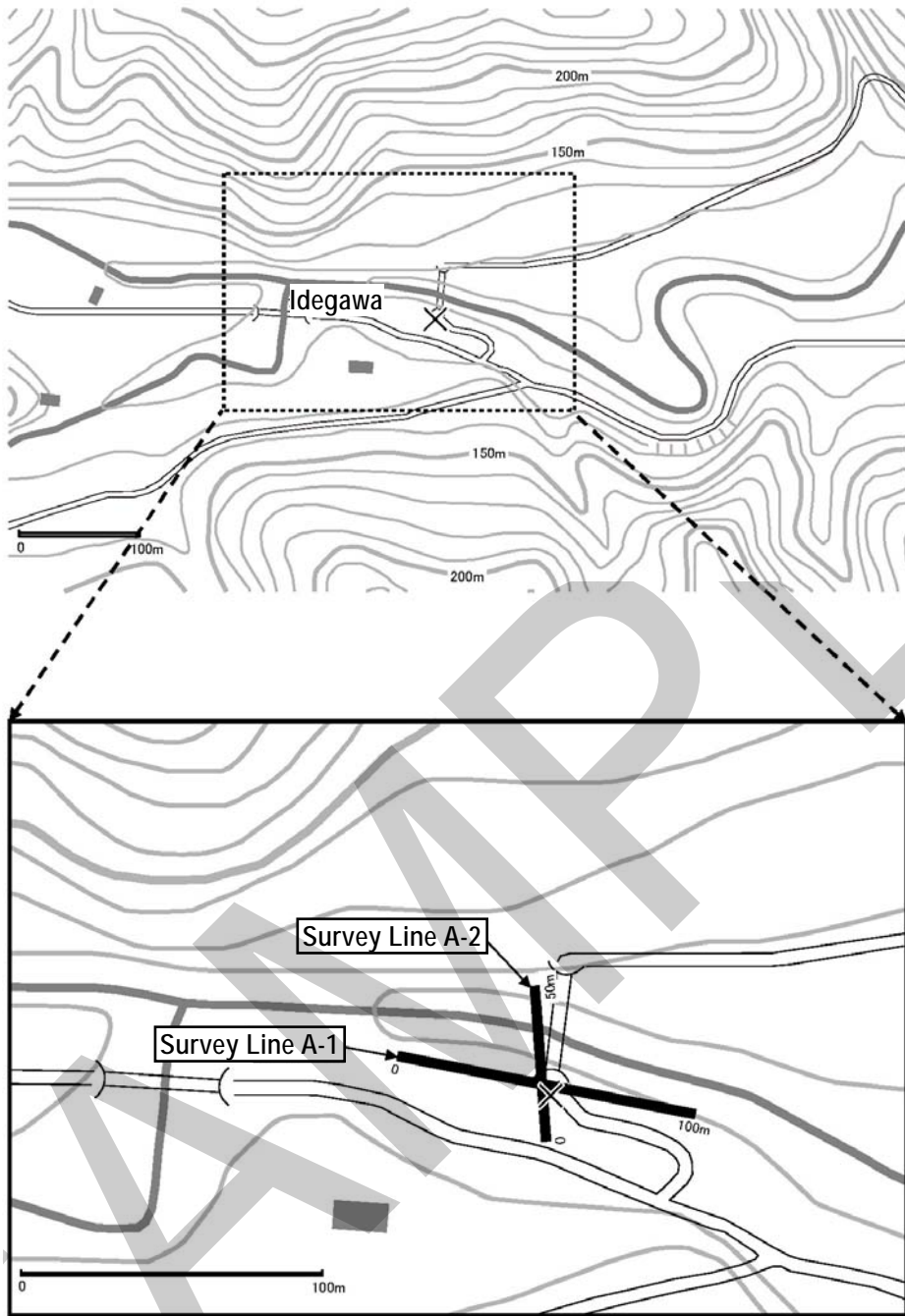
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Subsurface exploration results for Iwaki O.P.

Upgraded equipment started operation on 2011/4/15

Channel identification listed in Observation_Channels.xls

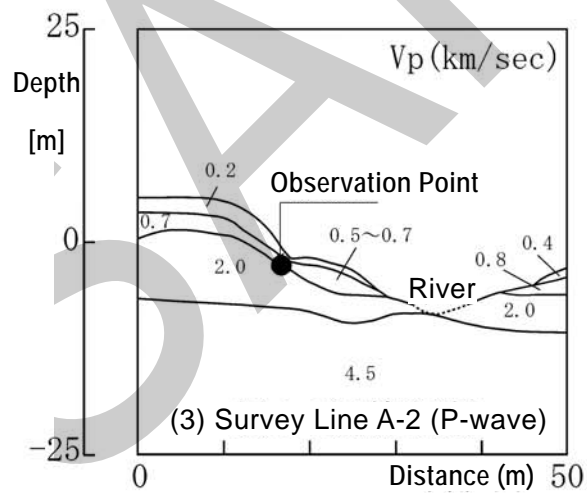
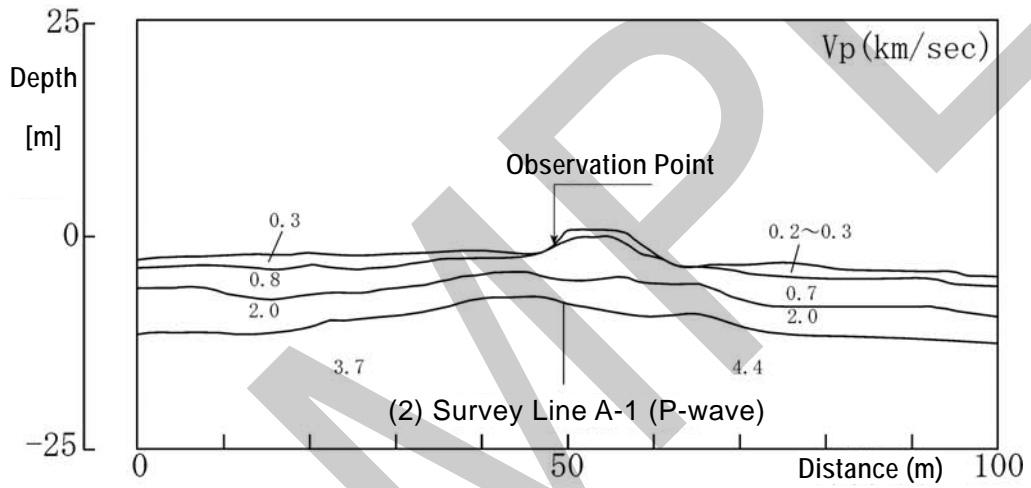
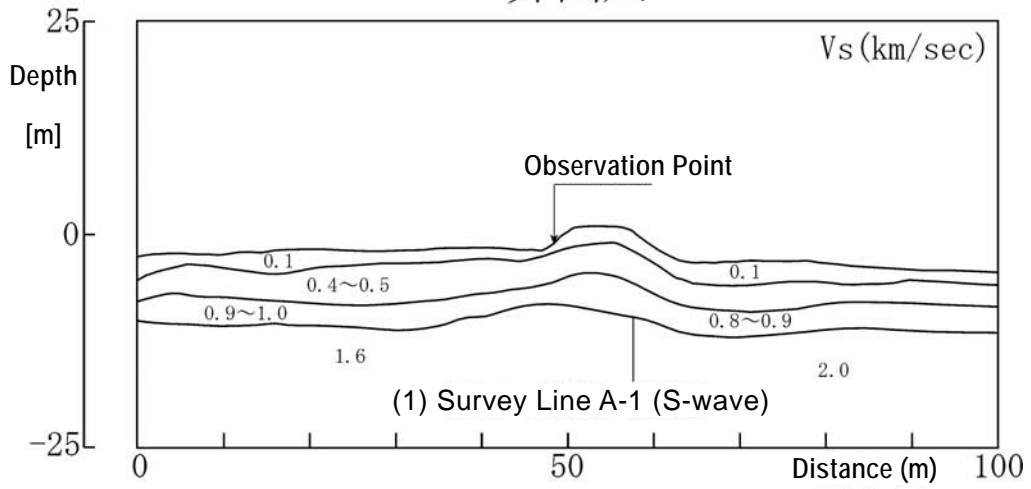


X marks the location of Idegawa Observation Point

(1) Survey lines for reflection survey

Subsurface exploration results for Idegawa O.P.

井出川



(2) Cross-sectional View

Subsurface exploration results for Idegawa O.P. (Continued)

Date file Format

Line 1	Title	Sampling interval (s)	Duration (s)	Maximum value
	A50	F10.3	F10.3	F10.4
Line 1	Data			
{	8F10.4			
}				
Line N	Total Number of Steps = Duration / Sampling Interval			

The cycle of Lines 1 to N is repeated for the number of channels

Notes

Each file contains motion recorded from a single observation point from single earthquake.

The file name is composed of the YMD of occurrence of the earthquake is adopted as the file name, followed by the ID of OP as the file name extension.

The HMS listed in the Title is the time when the trigger was activated. The recording start time (corresponding to the first data in the data file) is listed in Data_Summary.xls .

Time of Occurrence						Location of Earthquake Focus					M	Name of Epicenter	Observation Point ID											
						North latitude		East Longitude		Depth			Higashi Matsuyama HMY	Shuzenji SZJ	Choshi CHS	Tateyama TTY	Iwaki IWK	Tomioka TMK	Ogawa OGW	Oarai OAR	Kodamagawa KDG	Idegawa IDG	Houkidaira HKD	
Year	M	D	H	M	S	D	M	D	M	(km)														
2011	4	22	7	55	48.48	37	8.73	140	51.46	7.00	2.8	EASTERN FUKUSHIMA PREF										⊙		
2011	4	23	0	25	16.16	37	10.17	141	11.69	21.42	5.4	E OFF FUKUSHIMA PREF				⊙						⊙	⊙	⊙
2011	4	23	6	25	27.89	37	13.89	140	55.04	4.89	2.7	EASTERN FUKUSHIMA PREF												⊙
2011	4	24	19	9	51.70	37	3.51	140	38.34	13.51	4.5	EASTERN FUKUSHIMA PREF				⊙							⊙	
2011	4	25	18	0	18.59	36	10.44	141	1.57	38.81	5.0	E OFF IBARAKI PREF									⊙			
2011	4	26	5	24	38.85	37	5.19	141	5.65	31.77	3.9	E OFF FUKUSHIMA PREF											⊙	
2011	4	26	13	1	47.30	37	17.16	141	14.85	12.52	5.2	E OFF FUKUSHIMA PREF											⊙	
2011	4	26	21	12	1.52	36	5.16	139	58.57	46.30	5.0	SW IBARAKI PREF	⊙											
2011	4	27	3	17	58.94	37	28.60	141	19.70	29.42	4.0	E OFF FUKUSHIMA PREF												⊙
2011	4	28	18	27	46.79	37	24.80	141	46.89	43.53	5.7	E OFF FUKUSHIMA PREF				⊙							⊙	⊙
2011	4	28	21	39	31.28	37	5.39	140	49.87	8.03	3.5	EASTERN FUKUSHIMA PREF				⊙								
2011	4	30	2	4	12.68	35	27.47	140	54.90	24.36	4.7	NEAR CHOSHI CITY												
2011	4	30	14	6	31.10	36	45.57	141	16.85	36.94	5.3	E OFF IBARAKI PREF				⊙						⊙	⊙	⊙
2011	4	30	14	46	59.32	37	20.11	141	17.77	32.79	4.5	E OFF FUKUSHIMA PREF											⊙	⊙

The earthquake source data is taken from the Japan Meteorological Agency database

 The 2011 off the Pacific coast of Tohoku Earthquake

 Other earthquakes that exceeded M7

Symbols

⊙ Recorded (maximum horizontal amplitude exceeded 5 Gal at observation point above bedrock)

*1 Recording was terminated before motion ended (duration exceeded 95 s)

Multiple recordings are contained consecutively within a single file

Notes

HMY Recording started on 3/16 after equipment upgrade was completed

SZJ No.1 (GL -100.3 m) EW and No.3 (GL -0.0 m) EW were terminated due to deterioration of the equipment.

CHS Recording started on 4/1 after equipment upgrade was completed

IWK Recording started on 4/15 after equipment upgrade was completed

TMK No.1 (GL -950 m) and No.2 (GL -660 m) were terminated for equipment upgrade. No.3 (GL -251 m) was terminated due to deterioration of the equipment. No data obtained starting 3/11.

KDG No.2 (GL -1 m) NS was terminated due to deterioration of the equipment