



MEXT

MINISTRY OF EDUCATION,
CULTURE, SPORTS,
SCIENCE AND TECHNOLOGY-JAPAN

Monitoring of environmental radioactivity

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August 24, 2011

Readings of Radiation Monitoring under the Action Plan toward the Removal of the Designation of Emergency Evacuation Preparation Areas

August 9, 2011

Emergency Operation Center, MEXT

Team in Charge of Assisting the Lives of Disaster Victims, Cabinet Office

<Outline>

It is urgently needed to conduct various types of monitoring at Minami Soma city, Tamura city, Kawauchi village, Hirono town, and Naraha town, and compile and publicize the results thereof in an easy-to-use manner, with the aim of realizing the removal of the designation of emergency evacuation preparation areas.

In order to secure peaceful life for residents, placing importance on children's points of view and requests from the local communities, MEXT, the Local Nuclear Emergency Response Headquarters, and related organizations conducted monitoring as shown in (i) to (iii) below in July, in collaboration with related ministries and agencies and Fukushima prefecture, and have compiled preliminary radiation distribution maps by combining the measurement results obtained through the monitoring surveys. We publicize the maps, together with respective readings of the monitoring.

- (i) Monitoring at major points on the premises of elementary schools, junior high schools, high schools, kindergartens, and nurseries (hereinafter referred to as "schools, etc."), as well as hospitals, libraries, children's centers, facilities for children with disabilities, and after-school children's clubs (hereinafter referred to as "public facilities, etc.")
- (ii) Vehicle-borne survey and wide-area detailed monitoring in school zones and parks by unmanned helicopter, focusing on people's living space, such as schools, etc. and public facilities, etc.
- (iii) Detailed monitoring in response to requests from municipalities

The results of the monitoring mainly in the emergency evacuation preparation areas show that at almost all points monitored, including those near the major points such as schools, air dose rates measured at the height of 1m and 50cm above the ground were between 1.0 μ Sv/h and less than 1.9 μ Sv/h (indicated in light blue on the maps) or less than 1.0 μ Sv/h (indicated in blue on the maps). However, in some parts of Minami Soma city, Tamura City, and Kawauchi village (at roads close to the planned evacuation areas and points close to the specific spots recommended for evacuation), air dose rates exceeding 3.0 μ Sv/h were detected at the height of 1m above the ground.

○Maximum and minimum air dose rates detected in the monitoring for each municipality

(Upper: at 1m above the ground [$\mu\text{Sv/h}$]; Lower: at 50cm above the ground [$\mu\text{Sv/h}$])

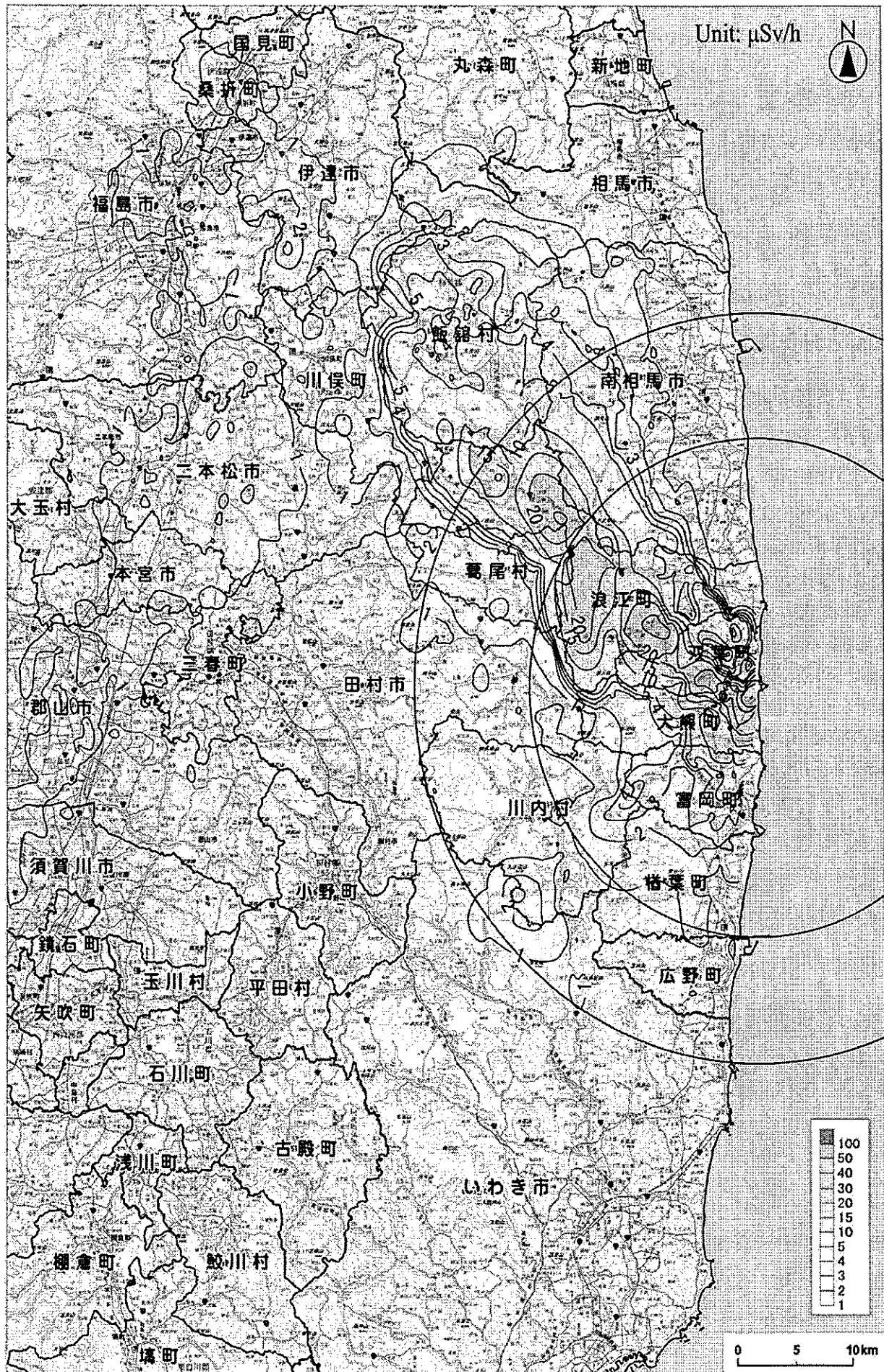
Monitoring [※]	Minami Soma city	Tamura city	Kawauchi village	Hirono town	Naraha town
(i) [Outdoor]	0.1-1.4	0.2-1.0	0.3-0.5	0.3-0.8	—
	0.2-1.4	0.2-1.1	0.4-0.6	0.3-0.9	—
(ii)	0.1-4.2	0.2-3.6	0.2-2.0	0.3-1.6	—
	0.1-4.7	0.3-4.0	0.2-2.2	0.3-1.8	—
(iii)	0.47-3.0	0.2-3.1	0.2-4.5	0.3-1.4	0.6-1.1
	0.47-5.5	—	0.2-4.7	0.5-0.9	0.8-1.6

The results of the current monitoring surveys will be used by the national and local governments as reference data for considering measures for realizing people's return to their homes in the emergency evacuation preparation areas. Detailed radiation distribution maps of the emergency evacuation preparation areas will be publicized by mid-August.

Additional monitoring will be conducted as needed within the emergency evacuation preparation areas, based on the Comprehensive Monitoring Plan (decision by the Monitoring Coordination Meeting on August 2, 2011) and in response to requests from respective municipalities.

Dose Monitoring Map (Estimates)

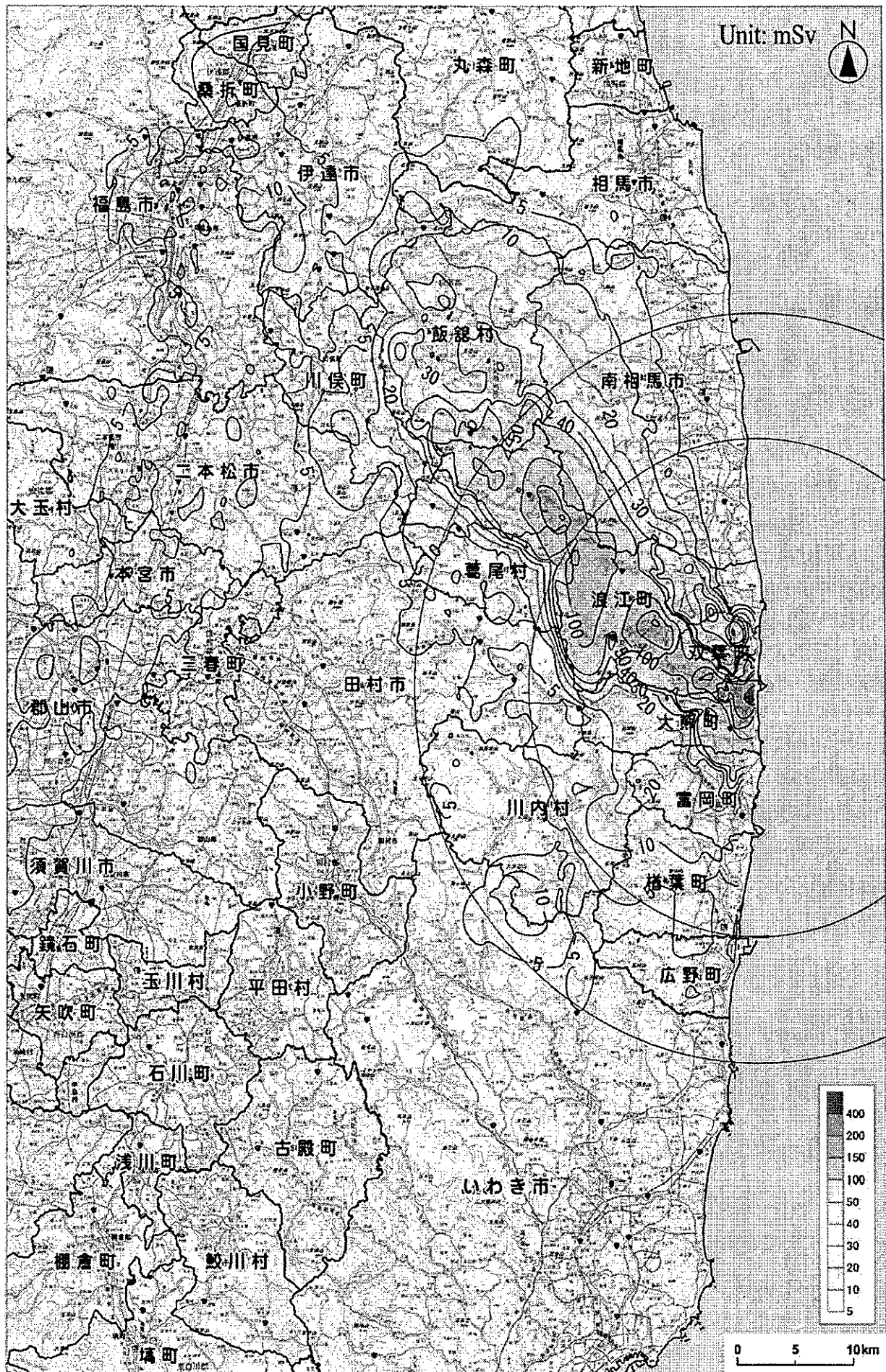
(As of August 11, 2011)



Map: Online map by the Geospatial Information Authority of Japan

Integrated Dose Map (Estimation)

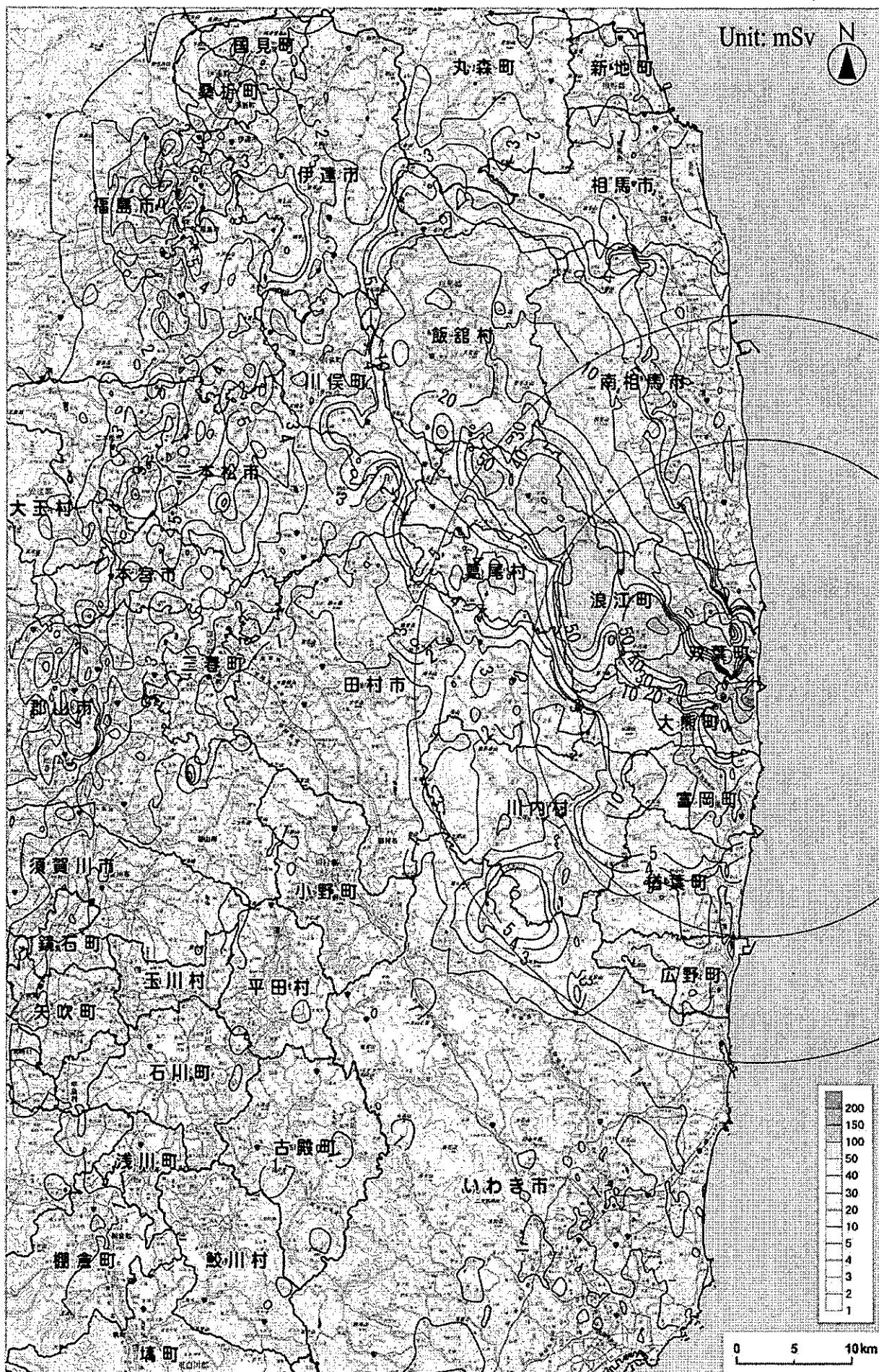
(Integrated Dose up to March 11, 2012)



Map: Online map by the Geospatial Information Authority of Japan

Adopting monitored values up to 24:00 on August 11, 2011

(Integrated Dose up to August 11, 2011)



Map: Online map by the Geospatial Information Authority of Japan

Adopting monitored values up to 24:00 on August 11, 2011

Estimated Integrated Dose at Each Monitoring Location based on Measured Values

Location Number	Reading Point【※11】	From TEPCO Fukushima Dai-ichi NPP		Date on which air dose monitoring was commenced	Estimates of Integrated Dose 【※1】		Latest Readings (Mean value) 【※3】		Estimates of Integrated Dose as of March 11, 2012 (mSv) 【※4】
		Direction	Distance		(mSv)	Note	(mSv/h)	Note	
(1)Planned evacuation zones									
33	Soma county Iitate Village Nagadoro	North/West	33km	2011/3/16	27.0	【※5】	0.0068	【※6】	47.9
62	Soma county Iitate Village Kusano Taishido	North/West	39km	2011/3/17	13.7		0.0046		27.6
61	Soma county Iitate Village Yagisawa	North/West	36km	2011/3/17	10.6		0.0036		21.8
63	Soma county Iitate Village Nimaibashi	North/West	44km	2011/3/17	4.3		0.0011		7.7
46	Date county Kawamata town Yamakiya Mukaideyama	West/North/West	34km	2011/3/17	11.8	【※2】	0.0033	【※6】	21.9
36	Date county Kawamata town Yamakiya Oonukari	West/North/West	38km	2011/3/20	7.9		0.0019		13.9
83	Futaba county Namie town Akougi Kunugidaira	North/West	24km	2011/3/24	107.9	【※2】	0.0300	【※6】	199.9
81	Futaba county Namie town Akougi Ishikoya	North/West	30km	2011/3/24	61.2	【※2】	0.0202		123.3
32	Futaba county Namie town Akougi Teshichiro	North/West	31km	2011/3/16	49.0	【※5】	0.0130		89.0
79	Futaba county Namie town shimotsushima kayabuka	West/North/West	29km	2011/3/16	22.7	【※5】	0.0060		41.0
31	Futaba county Namie town Tsushima Nakaoki	West/North/West	30km	2011/3/17	21.2	【※5】	0.0053		37.3
34	Futaba county Namie town Tsushima Taikougi	West/North/West	30km	2011/3/19	10.4	【※2】【※5】	0.0028		18.9
21	Futaba county Katsurao Village Kaminogawa	West/North/West	32km	2011/3/17	7.0	【※5】	0.0024		14.4
104	Futaba county Katsurao Village Oaza Ochiai aza Ochiai	West/North/West	25km	2011/4/7	4.8	【※2】	0.0010		7.9
(2) The emergency evacuation preparation areas									
42	Tamura city Tokiwa town Yamane Tomioka	West	33km	2011/3/17	1.9	【※5】	0.0007	【※6】	4.2
15	Tamura city Tokiwa town Yamane Kashima	West	32km	2011/3/17	2.0		0.0005		3.7
41	Tamura city Miyakoji town Furumichi	West	21km	2011/3/17	1.6		0.0005		3.1
105	Tamura city Miyakoji town Furumichi aza Teranomae	West	21km	2011/4/7	0.9	【※2】	0.0003		1.9
45	Futaba county Naraha town Yamadaoka Utsukushimori	South	20km	2011/3/17	2.1		0.0005		3.7
71	Futaba county Hirono town Shimokitaba Nawashirogae	South	23km	2011/3/20	1.6	【※2】【※5】	0.0003		2.7
87	Futaba county Kawauchi village Kamikawauchi Hananouchi	West/South/West	29km	2011/3/27	2.1	【※2】	0.0004	【※6】	3.2
43	Futaba county Kawauchi village Shimokawauchi Miyawata	West/South/West	22km	2011/3/16	1.2		0.0004		2.2
76	Futaba county Kawauchi village Kamikawauchi Hayawata	West/South/West	22km	2011/3/20	1.2	【※2】【※5】	0.0003		2.1
108	Minami Soma city Haramachi ward Ohara Daihata	North/North/West	30km	2011/4/7	7.5	【※2】	0.0018	【※6】	13.2
107	Minami Soma city Haramachi ward Baba shimo nakouchi	North/North/West	23km	2011/4/7	5.9	【※2】	0.0012		9.5
103	Minami Soma city Haramachi ward Taka Mamegarauchi	North	21km	2011/4/7	1.4	【※2】	0.0004		2.6
80	Minami Soma city Haramachi ward Takami town	North	25km	2011/3/20	1.2	【※2】【※5】	0.0003		2.1
(3) Other zones									
4	Date county Kawamata town oaza Tsurusawa aza Kawabata	North/West	47km	2011/3/17	2.7	【※2】	0.0007	【※6】	4.9
78	Date county kawamata town Tsurusawa	North/West	48km	2011/3/20	2.4		0.0003		3.4
37	Date city Ryozen town Ishida Hojizawa	North/West	48km	2011/3/31	9.7	【※2】	0.0026	【※6】	17.6
3	Date city Ryozen town Ishida Hikohei	North/West	46km	2011/3/17	6.1		0.0021		12.5
102	Date city Tsukidate town	North/West	51km	2011/4/7	3.2	【※2】	0.0009	【※6】	5.9
101	Date city Ryozen town Oishi aza Minowa	North/West	55km	2011/4/7	2.5	【※2】	0.0002		3.1
2	Fukushima city Onami Takinoiri	North/West	56km	2011/3/17	5.6	【※2】	0.0013	【※6】	9.7
88	Fukushima city Hikerigaoka	West/North/West	58km	2011/4/3	3.7		0.0004		4.9
1	Fukushima city Sugitsuma town	North/West	62km	2011/3/16	2.3	【※5】	0.0004	【※6】	3.4
85	Fukushima city Arai Harajiku	West/North/West	66km	2011/3/27	1.1	【※2】	0.0003		2.0
6	Minami Soma city Kashima ward Nishimachi	North	32km	2011/3/17	2.2	【※5】	0.0008	【※6】	4.5
7	Minami Soma city Kashima ward Terauchi Motoyashiki	North/North/West	32km	2011/3/17	1.7		0.0005		3.2

Estimated Integrated Dose at Each Monitoring Location based on Measured Values

Location Number	Reading Point【※1】	From TEPCO Fukushima Dai-ichi NPP		Date on which air dose monitoring was commenced	Estimates of Integrated Dose 【※1】		Latest Readings (Mean value) 【※3】		Estimates of Integrated Dose as of March 11, 2012 (mSv) 【※4】
		Direction	Distance		(mSv)	Note	(mSv/h)	Note	
114	Iwaki city Ogawa town Kamiogawa	South/West	26km	2011/3/20	3.1	【※2】	0.0012		6.8
73	Iwaki city Yotsukura town	South	35km	2011/3/20	1.3	【※2】	0.0004		2.5
44	Iwaki city Ohisa town Ohisa Yanomezawa	South/South/West	28km	2011/3/17	1.6		0.0003		2.4
38	Iwaki city Yotsukura town Shiraiwa Hokita	South/South/West	34km	2011/3/31	1.1	【※2】【※5】	0.0004		2.3
72	Iwaki city Hisanohama town Hisanohama aza Kitaaramaki	South	31km	2011/3/20	1.3	【※2】	0.0003		2.2
106	Iwaki city Kawamae town Ojiro aza Syokangoya	West/South/West	32km	2011/4/7	0.7	【※2】	0.0003		1.7
74	Iwaki city Ogawa town Takahagi	South/South/West	36km	2011/3/20	0.8	【※2】	0.0002	【※6】	1.4
84	Iwaki city Miwa town Saiso	South/West	39km	2011/3/26	0.5	【※2】【※5】	0.0001		0.9
75	Iwaki city Uchigoumimaya town	South/South/West	43km	2011/3/20	0.5	【※2】	0.0001		0.9
86	Koriyama city Ootsuki town Choemonbayashi	West	63km	2011/3/27	2.5	【※2】	0.0006		4.3
39	Soma city Yamakami Kaminamiki	North/North/West	41km	2011/4/1	1.6	【※2】【※5】	0.0005		3.1
5	Soma city Nakanoteramae	North/North/West	42km	2011/3/17	1.3		0.0003		2.2
51	Tamura county Ono town Ononimachi Tatemawari	West/South/West	39km	2011/3/17	0.6		0.0001	【※6】	0.9
23	Tamura City Huneiki town Minamiutsushi Suicyuuchi	West/North/West	37km	2011/3/17	1.6		0.0005		3.1
20	Tamura City Huneiki town Niitate shimo	West	41km	2011/3/17	1.3		0.0004		2.5
22	Tamura city Huneiki town Kamiutsushi Aza Ushirota	West/North/West	35km	2011/3/17	1.0		0.0003		2.0
12	Tamura city Tokiwa town Nishimuki Yakata	West	39km	2011/3/17	0.8		0.0003	【※6】	1.6
13	Tamura city Huneiki town Funehiki aza Ozawakawashiro	West	37km	2011/3/17	0.9		0.0002		1.5
14	Tamura city Tokiwa town Tokiwa Uchimachi	West	34km	2011/3/17	0.7		0.0002		1.4
52	Tamura city Huneiki town funehiki Babakawara	West	41km	2011/3/17	0.6		0.0002	【※6】	1.2
11	Nihonmatsu city Ota aza Shimoda	West/North/West	43km	2011/3/17	3.0		0.0009		5.7
35	Nihonmatsu city Tazawahagidaira	West/North/West	37km	2011/3/19	2.2	【※2】	0.0009	【※6】	4.8
10	Nihonmatsu city Harimichi Nakajima	West/North/West	44km	2011/3/17	2.0		0.0005		3.6

This table was jointly compiled by the Nuclear Safety Commission, MEXT, and the Nuclear and Industrial Safety Agency.

*1 Shown values are integrated values monitored from 6:00, March 12 through 24:00, August 11.

The same estimation method as that used by the Nuclear Safety Commission on March 26, 2011 is used, whereby the values are estimated by multiplying the monitored

*2 For locations where the monitoring was started on or after March 19, the dose data for the period from March 17 to the day before the start of monitoring has been derived by assuming that the dose has changed in proportion to changes at Location No. 3

*3: The average of the estimates from July 9 to July 11. As for locations 【※5】 where actual values have been obtained by a simple integrating dosimeter, this is the average (from August 9 to August 11) of the integrated values monitored since the time of the

*4 Shown values have been obtained by the same method as that mentioned in *1, while supposing that the Latest Readings (Mean value) 【※3】 will stay unchanged on and after August 12.

*5 For the period where actual values monitored by a simple integrating dosimeter are available, such values are indicated.

*6: As there are no monitored values available from August 9 to August 11, shown values have been obtained by the same method as that mentioned in *3, while supposing that the doses are proportionate to those at location 32.

Estimated Integrated Dose at Each Monitoring Location based on Measured Values

Location Number	Reading Point[※11]	From TEPCO Fukushima Dai-ichi NPP		Date on which air dose monitoring was commenced	Estimates of Integrated Dose (mSv) [※8, 9]	Latest Readings (Average) (mSv/h)	Estimates of Integrated Dose as of March 11, 2012 (mSv) [※10]
		Direction	Distance				
(4) The restricted areas (added point)							
31	Tamura city Miyakoji town Furumichi	West/South/West	18km	2011/5/6	3.9	0.0012	7.7
24	Tamura city Miyakoji town Furumichi	West	17km	2011/5/6	3.5	0.0010	6.6
37	Futaba county Okuma Town Koirino	West/South/West	3km	2011/5/6	278.0	0.0750	508.1
29	Futaba county Okuma Town Oaza Ottozawa	West	2.5km	2011/5/6	210.5	0.0597	393.7
47	Futaba county Okuma Town Oaza Kumagawa	South/South/West	3.5km	2011/5/6	124.8	0.0353	233.0
36	Futaba county Okuma Town Shimonogami	West/South/West	5km	2011/5/6	105.5	0.0302	198.1
30	Futaba county Okuma Town Oaza Ottozawa	West	2.5km	2011/5/6	93.9	0.0246	169.2
23	Futaba county Okuma Town Oaza Ottozawa	West/North/West	2.5km	2011/5/6	80.8	0.0204	143.4
50	Futaba county Okuma Town Oaza Kumagawa	South	4km	2011/5/6	70.5	0.0183	126.7
35	Futaba county Okuma Town Nogami	West/South/West	7km	2011/5/6	53.8	0.0149	99.5
38	Futaba county Okuma Town Koirino	West/South/West	3.5km	2011/5/6	45.9	0.0114	80.9
28	Futaba county Okuma Town Nogami	West	11km	2011/5/6	13.0	0.0037	24.2
34	Futaba county Okuma Town Ogawara	West/South/West	8km	2011/5/6	12.8	0.0035	23.5
25	Futaba county Okuma Town Oaza Nogami	West	14km	2011/5/6	10.6	0.0036	21.6
19	Futaba county Namie town Kawabusa	North/West	20km	2011/5/6	118.6	0.0343	223.7
21	Futaba county Namie town Oaza Ide	West/North/West	9km	2011/5/6	83.2	0.0213	148.5
20	Futaba county Namie town Oaza Omaru	West/North/West	12km	2011/5/6	76.0	0.0226	145.4
14	Futaba county Namie town Hirusone	North/West	20km	2011/5/6	67.5	0.0253	145.1
15	Futaba county Namie town Murohara	North/West	16km	2011/5/6	69.7	0.0190	127.8
17	Futaba county Namie town Oaza Suemori	North/West	11km	2011/5/6	35.2	0.0087	61.8
9	Futaba county Namie town Sakai	North/North/West	7km	2011/5/6	32.3	0.0084	57.9
13	Futaba county Namie town Oaza Tatsuno	North/West	14km	2011/5/6	22.7	0.0051	38.3
16	Futaba county Namie town Oaza Tatsuno	North/North/West	11km	2011/5/6	20.2	0.0058	38.0
2	Futaba county Namie town Oaza Kitakiyohashi	North	8km	2011/5/6	2.3	0.0006	4.1
8	Futaba county Futaba town Oaza Nagatsuka	North/North/West	5km	2011/5/6	92.4	0.0261	172.4
27	Futaba county Futaba town Ishikuma	West	7km	2011/5/6	65.9	0.0198	126.6
10	Futaba county Futaba town Oaza Nagatsuka	North/North/West	4km	2011/5/6	39.6	0.0091	67.4
28	Futaba county Futaba town Oaza Yamada	West	7km	2011/5/6	35.0	0.0104	66.9
22	Futaba county Futaba town Oaza Maeta	West/North/West	3.5km	2011/5/6	29.7	0.0074	52.5
18	Futaba county Futaba town Terasawa	North/West	7km	2011/5/6	23.1	0.0071	45.0
11	Futaba county Futaba town Oaza Shinzan	North/West	3.5km	2011/5/6	16.0	0.0042	28.8
46	Futaba county Tomioka town Oaza Oragahama	South/South/West	6km	2011/5/6	64.4	0.0166	115.3
45	Futaba county Tomioka town Oaza Motooka	South/South/West	7km	2011/5/6	42.6	0.0112	77.0
42	Futaba county Tomioka town OazaKamiteoka	South/West	8km	2011/5/6	26.6	0.0042	39.5
39	Futaba county Tomioka town OazaKamiteoka	South/West	13km	2011/5/6	20.7	0.0041	33.2
49	Futaba county Tomioka town Oaza Kobama	South	10km	2011/5/6	14.6	0.0049	29.6
43	Futaba county Tomioka town Oaza Kamikoriyama	South/South/West	13km	2011/5/6	12.0	0.0032	21.7
40	Futaba county Tomioka town OazaKamiteoka	West/South/West	10km	2011/5/6	7.4	0.0020	13.7
44	Futaba county Naraha town Kamishigeoka	South/South/West	14km	2011/5/6	8.5	0.0022	15.4
41	Futaba county Naraha town Oaza Ide	South/West	15km	2011/5/6	7.2	0.0019	13.1
48	Futaba county Naraha town Oaza Ide	South	16km	2011/5/6	2.6	0.0008	5.1
32	Futaba county Kawauchi Village Shimokawauchi	West/South/West	19km	2011/5/6	6.1	0.0017	11.4
33	Futaba county Kawauchi Village Shimokawauchi	West/South/West	16km	2011/5/6	4.0	0.0012	7.8
12	Minamisoma City Odakaku Kanaya	North/West	18km	2011/5/6	29.7	0.0076	53.1
7	Minamisoma City Odakaku Kamiyama	North/North/West	13km	2011/5/6	6.8	0.0018	12.4
6	Minamisoma City Odakaku Otomi	North/North/West	19km	2011/5/6	6.1	0.0018	11.8
3	Minamisoma City Odakaku Katakusa	North/North/West	18km	2011/5/6	3.7	0.0009	6.5
4	Minamisoma City Odakaku Izumisawa	North/North/West	14km	2011/5/6	2.3	0.0006	4.1
5	Minamisoma City Odakaku Nasedu	North/North/West	11km	2011/5/6	1.8	0.0006	3.7
1	Minamisoma City Odakaku Oi	North	16km	2011/5/6	2.0	0.0005	3.6

Estimated Integrated Dose at Each Monitoring Location based on Measured Values

Location Number	Reading Point【※11】	From TEPCO Fukushima Dai-ichi NPP		Date on which air dose monitoring was commenced	Estimates of Integrated Dose (mSv) 【※8, 9】	Latest Readings (Average) (mSv/h)	Estimates of Integrated Dose as of March 11, 2012 (mSv) 【※10】
		Direction	Distance				
(3)Planned evacuation zones (added point)							
i27	Soma county Iitate Village Nagadoro	North/West	33km	2011/4/26	45.2	0.0170	97.3
i28	Soma county Iitate Village Hiso	North/West	34km	2011/4/26	48.1	0.0116	83.8
i26	Soma county Iitate Village Nagadoro	North/West	31km	2011/4/26	32.3	0.0096	61.7
i24	Soma county Iitate Village Komiya	North/West	32km	2011/4/26	28.0	0.0078	51.9
i4	Soma county Iitate Village Fukaya	North/West	41km	2011/4/25	26.4	0.0075	49.2
i25	Soma county Iitate Village Warabidaira	North/West	29km	2011/4/26	26.7	0.0072	48.9
i22	Soma county Iitate Village Komiya	North/West	35km	2011/4/26	22.3	0.0068	43.1
i23	Soma county Iitate Village Komiya	North/West	36km	2011/4/26	18.3	0.0056	35.6
i13	Soma county Iitate Village Maeta	North/West	43km	2011/4/25	20.7	0.0048	35.5
i19	Soma county Iitate Village Sekisawa	North/West	38km	2011/4/26	19.8	0.0051	35.4
i29	Soma county Iitate Village Hiso	North/West	38km	2011/4/26	18.7	0.0052	34.7
i20	Soma county Iitate Village Sekisawa	North/West	36km	2011/4/26	18.4	0.0051	34.0
i21	Soma county Iitate Village Komiya	North/West	33km	2011/4/26	17.3	0.0052	33.4
i6	Soma county Iitate Village Fukaya	North/West	41km	2011/4/25	18.6	0.0048	33.2
i9	Soma county Iitate Village Maeta	North/West	45km	2011/4/25	16.4	0.0048	31.1
i31	Soma county Iitate Village Itoi	North/West	38km	2011/4/26	14.8	0.0050	30.1
i10	Soma county Iitate Village Sasu	North/West	46km	2011/4/25	15.7	0.0045	29.4
i14	Soma county Iitate Village Kusano	North/West	40km	2011/4/25	15.9	0.0041	28.6
i7	Soma county Iitate Village Usuiishi	North/West	42km	2011/4/25	14.4	0.0042	27.3
i2	Soma county Iitate Village Itamizawa	North/West	39km	2011/4/25	14.3	0.0038	25.9
i32	Soma county Iitate Village Itoi	North/West	37km	2011/4/26	12.7	0.0043	25.8
i5	Soma county Iitate Village Fukaya	North/West	40km	2011/4/25	13.9	0.0037	25.2
i3	Soma county Iitate Village Kusano	North/West	39km	2011/4/25	13.8	0.0036	24.7
i11	Soma county Iitate Village Sasu	North/West	46km	2011/4/25	12.8	0.0037	24.0
i1	Soma county Iitate Village Itamizawa	North/West	39km	2011/4/25	12.6	0.0036	23.6
i30	Soma county Iitate Village Itoi	North/West	40km	2011/4/26	12.5	0.0035	23.4
i18	Soma county Iitate Village Yagisawa	North/West	36km	2011/4/25	11.7	0.0034	22.2
i17	Soma county Iitate Village Kusano	North/West	38km	2011/4/25	11.4	0.0023	18.4
i12	Soma county Iitate Village Sasu	North/West	43km	2011/4/25	8.6	0.0024	16.0
i15	Soma county Iitate Village Ookura	North/North/West	40km	2011/4/25	9.1	0.0021	15.4
i8	Soma county Iitate Village Nimaibashi	North/West	44km	2011/4/25	7.9	0.0022	14.7
i16	Soma county Iitate Village Ookura	North/North/West	40km	2011/4/25	7.1	0.0020	13.2
kw6	Date county Kawamata town Yamakiya	West/North/West	33km	2011/4/26	24.3	0.0073	46.9
kw4	Date county Kawamata town Yamakiya	West/North/West	37km	2011/4/26	8.3	0.0022	15.2
kw5	Date county Kawamata town Yamakiya	West/North/West	34km	2011/4/26	5.6	0.0016	10.6
kw3	Date county Kawamata town Yamakiya	West/North/West	40km	2011/4/26	5.6	0.0015	10.3
K8	Futaba County Katsurao Village Katsurao	North/West	21km	2011/4/25	57.6	0.0156	105.4
K7	Futaba County Katsurao Village Katsurao	North/West	23km	2011/4/25	30.5	0.0109	64.0
K6	Futaba County Katsurao Village Katsurao	West/North/West	26km	2011/4/25	28.3	0.0076	51.8
K9	Futaba County Katsurao Village Ochiai	West/North/West	21km	2011/4/25	9.4	0.0022	16.1
K4	Futaba County Katsurao Village Nogawa	West/North/West	28km	2011/4/25	7.7	0.0019	13.8
K11	Futaba County Katsurao Village Ochiai	West/North/West	21km	2011/4/25	6.2	0.0016	11.1
K1	Futaba County Katsurao Village Katsurao	West/North/West	32km	2011/4/25	6.2	0.0014	10.5
K2	Futaba County Katsurao Village Katsurao	West/North/West	30km	2011/4/25	5.7	0.0015	10.3
K3	Futaba County Katsurao Village Katsurao	West/North/West	28km	2011/4/25	5.2	0.0015	9.7
K10	Futaba County Katsurao Village Ochiai	West/North/West	24km	2011/4/25	4.5	0.0013	8.5
K5	Futaba County Katsurao Village Nogawa	West/North/West	29km	2011/4/25	4.9	0.0011	8.4
n5	Futaba county Namie town Hirusone	North/West	22km	2011/4/27	115.0	0.0375	229.9
n11	Futaba county Namie town Hirusone	North/West	20km	2011/5/2	80.5	0.0202	142.6
n2	Futaba county Namie town Akougi	North/West	28km	2011/4/27	61.9	0.0226	131.2
n11	Futaba county Namie town Akougi	North/West	31km	2011/4/27	65.8	0.0194	125.1
n7	Futaba county Namie town Minamitsushima	North/West	23km	2011/4/27	62.8	0.0186	119.9
n4	Futaba county Namie town Akougi	North/West	26km	2011/4/27	58.2	0.0179	113.2
n6	Futaba county Namie town Shimotsushima	North/West	25km	2011/4/27	50.2	0.0143	94.0
n8	Futaba county Namie town Minamitsushima	North/West	27km	2011/4/27	42.7	0.0127	81.8
n3	Futaba county Namie town Akougi	North/West	28km	2011/4/27	38.9	0.0110	72.5
n9	Futaba county Namie town Shimotsushima	West/North/West	29km	2011/4/27	28.6	0.0083	54.0
n10	Futaba county Namie town Hatsuke	West/North/West	33km	2011/4/27	6.2	0.0018	11.6
ms6	Minami Soma city Haramachi ward Baba aza Godaisan	North/West	21km	2011/4/26	35.3	0.0106	67.7
ms4	Minami Soma city Haramachi ward Takanokura aza Mori	North/North/West	27km	2011/4/26	14.6	0.0040	26.7

Estimated Integrated Dose at Each Monitoring Location based on Measured Values

Location Number	Reading Point【※11】	From TEPCO Fukushima Dai-ichi NPP		Date on which air dose monitoring was commenced	Estimates of Integrated Dose (mSv) 【※8, 9】	Latest Readings (Average) (mSv/h)	Estimates of Integrated Dose as of March 11, 2012 (mSv) 【※10】
		Direction	Distance				
(6) The emergency evacuation preparation areas (added point)							
113	Tamura city Miyakoji town Iwaisawa	West	25km	2011/5/20	4.2	0.0011	7.6
110	Tamura city Miyakoji town Furumichi	West	25km	2011/5/18	3.5	0.0007	5.7
112	Futaba county Hirono town Kamiazamigawa	South/South/West	24km	2011/5/18	1.8	0.0006	3.8
177	Futaba county Kawauchi Village Shimokawauchi	South/West	25km	2011/5/23	3.0	0.0009	5.8
111	Futaba county Kawauchi Village Kamikawauchi	West/South/West	28km	2011/5/18	2.1	0.0005	3.5
181	Futaba county Kawauchi Village Kamikawauchi	West/South/West	25km	2011/5/20	1.6	0.0005	3.1
ms5	Minami Soma city Haramachi ward Takakura aza Domae	North/North/West	26km	2011/4/26	8.9	0.0029	17.7
ms11	Minami Soma city Haramachi ward Ohara aza Daihata	North/North/West	29km	2011/4/26	6.9	0.0020	13.0
ms7	Minami Soma city Haramachi ward Baba aza Nakouchi	North/North/West	23km	2011/4/26	3.6	0.0012	7.3
ms9	Minami Soma city Haramachi ward Takami town	North	24km	2011/4/26	1.2	0.0003	2.1
ms10	Minami Soma city Haramachi ward taka aza Mamegarauchi	North	21km	2011/4/26	0.7	0.0004	1.8
ms8	Minami Soma city Haramachi ward Kanezawa aza Oiai	North	28km	2011/4/26	0.7	0.0003	1.6
(7) Other zones (added point)							
115	Iwaki city Kawamae town Shimookeuri	South/West	28km	2011/5/30	8.7	0.0023	16.9
174	Iwaki city Ogawa town Takahagi	South/South/West	36km	2011/5/23	0.3	0.0001	0.6
ko3	Koriyama city Toyota town	West	59km	2011/4/3	4.3	0.0018	10.5
ko1	Koriyama city Tsurumidan	West	59km	2011/4/25	3.9	0.0013	8.4
ko2	Koriyama city Saikon	West	60km	2011/4/25	3.5	0.0012	7.7
kw1	Date county Kawamata town Kotsunagi	North/West	42km	2011/4/26	3.7	0.0011	7.5
kw2	Date county Kawamata town Kotsunagi	North/West	42km	2011/4/26	3.3	0.0011	7.1
d4	Date city Ryozen town Kamioguni	North/West	55km	2011/4/27	8.4	0.0037	21.4
d2	Date city Ryozen town Shimooguni	North/West	55km	2011/4/27	7.2	0.0031	18.0
d3	Date city Ryozen town Kamioguni	North/West	55km	2011/4/27	6.1	0.0028	15.8
d5	Date city Ryozen town Ishida	North/West	48km	2011/4/27	6.7	0.0023	14.7
ni1	Nihonmatsu city Kamikawasaki	West/North/West	51km	2011/4/25	3.4	0.0013	7.9
ni2	Nihonmatsu city Tazawa	West/North/West	36km	2011/4/26	2.5	0.0007	5.0
d13	Fukushima City Nankodai	North/West	59km	2011/4/27	5.0	0.0024	13.6
d11	Fukushima City Higashihama town	North/West	61km	2011/4/27	4.4	0.0020	11.5
d6	Fukushima City Koganeyama	North/West	62km	2011/4/27	4.1	0.0016	9.7
d1	Fukushima City Minamiyanome	North/West	66km	2011/4/27	3.7	0.0018	10.0
d8	Fukushima City Miyashita town	North/West	63km	2011/4/27	2.7	0.0014	7.6
d12	Fukushima City Watari	North/West	61km	2011/4/27	3.5	0.0017	9.5
d10	Fukushima City Kamihamata town	North/West	61km	2011/4/27	2.7	0.0008	5.4
d7	Fukushima City Sankyoe	North/West	63km	2011/4/27	2.7	0.0008	5.5
d9	Fukushima City Shinhamata town	North/West	82km	2011/4/27	2.1	0.0010	5.4
ms1	Minami Soma city Haramachi ward Ohara aza Hobiishi	North/North/West	33km	2011/4/26	9.2	0.0037	22.1
ms2	Minami Soma city Kashima ward Jisabara aza Kamahai	North/North/West	32km	2011/4/26	4.6	0.0017	10.7
ms3	Minami Soma city Kashima ward Kamitochikubo aza Kanodai	North/North/West	37km	2011/4/26	2.9	0.0015	8.3
mo1	Motomiya City Wada	West/North/West	52km	2011/4/25	6.0	0.0019	12.6

※8: Shown values are integrated values monitored from 6:00, March 12 through 24:00, August 11, incorporating the exposure reduction effect of wooden buildings when staying indoors for 16 hours.

※9: The dose data for the period from March 17 to the day before the start of monitoring has been derived by assuming that the dose has changed in proportion to changes at Location No. 32, where the steepest dose change has been observed.

※10: Shown values have been obtained while supposing that the latest estimates (the average of estimates from August 9 to August 11) will stay unchanged on and after August 12.

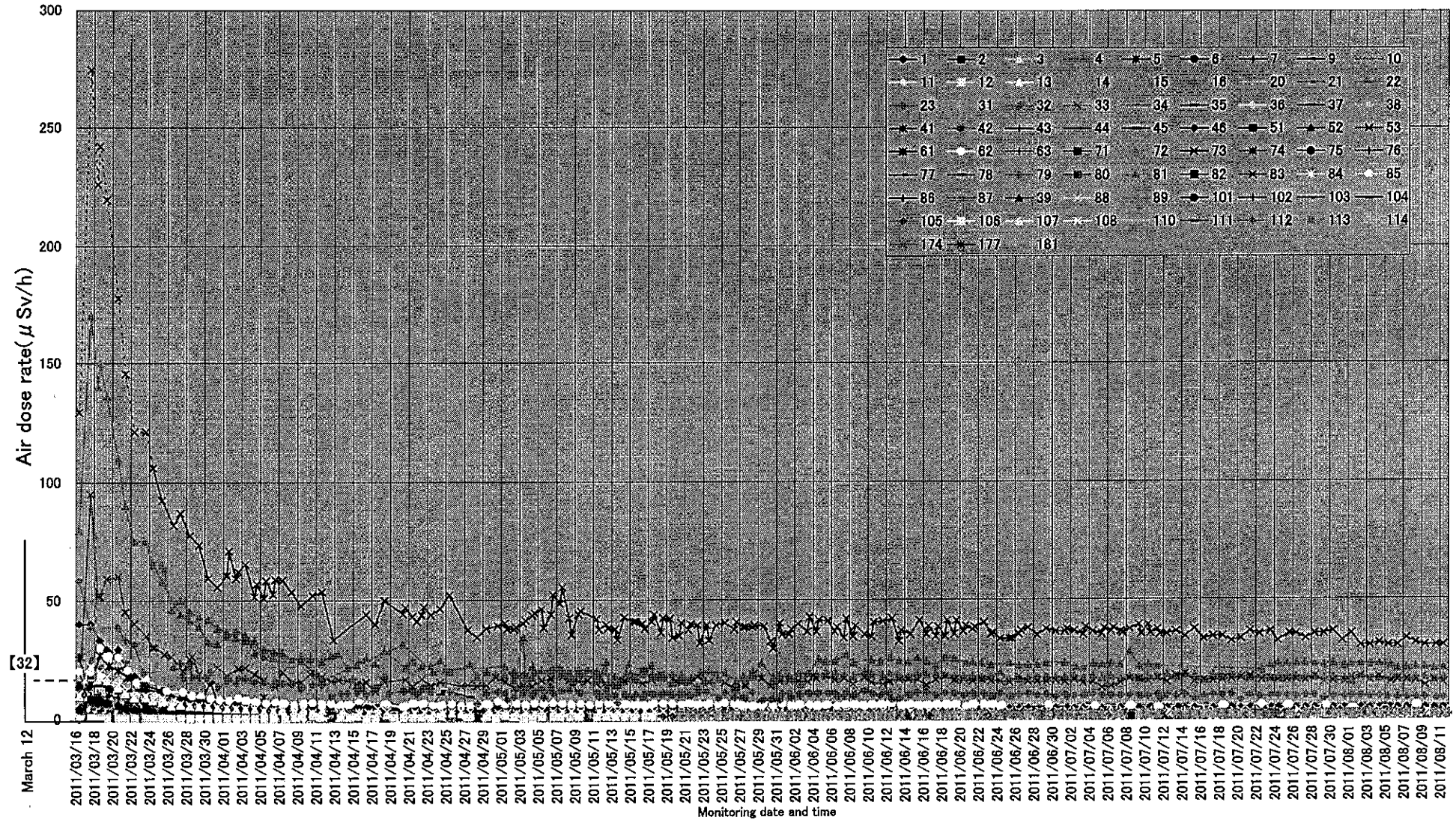
※11: Information on the latitude and longitude of each monitoring spot is available on the MEXT website.

Continued on the next page

The air dose monitoring locations of the isogram map of estimated integrated dose, the value for a total 4,283 locations were used .
(the 210 locations mentioned above the plus, below [4073 locations])

- 1) Air dose rates observed in the emergency environmental monitoring conducted by Fukushima Prefecture from March 30 to August 11: 97 locations.
- 2) Air dose rates observed in monitoring conducted by MEXT on April 9 in Katsurao Village and Namie town: 16 locations.
- 3) Air dose rates observed in monitoring conducted by MEXT on April 12, 14 in Iitate Village, Iwaki City, Katsurao Village, Kawwauchi village, Tamura City, Namie Town, Hirono Town and Minami Soma City and in monitoring conducted by MEXT on June 5,6,10,13,14,24 in Date City, Minami Soma City, Iwaki City and Kawauchi Village and in monitoring conducted by MEXT on April 26, May 12,20,25 in Kawamata Town:411 locations.
- 4) Air dose rates observed in grid survey conducted by Fukushima Prefecture on April 12 to April 16: 1788 locations.
- 5) Air dose rates observed in the environmental radioactivity monitoring conducted by Fukushima Prefecture(municipalities and 7 regions in Fukushima : and area within 20 to 50km): 64locations.
- 6) Air dose rates observed inside 20km zone in monitoring conducted by MEXT and TEPCO: 178 locations.
- 7) Air dose rates continuously monitored from April 12 at monitoring posts 1 to 8 near the border of the site of Fukushima Dai-ichi NPP: 8locations
- 8) Air dose rates of distribution map of radiation dose released by MEXT on August 2 : 1511 locations

Changes in air dose rates



Notes: In cases where more than one reading was taken during the six-hour period, the maximum value is plotted.
 The dotted lines show estimates assumed as being proportional to the value at location 32, not measured values.

Wide-area Airborne Monitoring by MEXT

August 22, 2011

Ministry of Education, Culture, Sports, Science and Technology

1. Plan for wide-area airborne monitoring by MEXT

MEXT has conducted airborne monitoring* within 100km of the Fukushima Dai-ichi NPP (up to 120km in the southern part of the Fukushima Dai-ichi NPP) so as to ascertain the wide-area distribution of radioactive substances and assess air dose rates and the accumulation of radioactive substances at evacuation areas in the future.

In addition to this, MEXT has also conducted airborne monitoring in other prefectures and found that there are some points that show relatively high air dose rates. Therefore, MEXT decided to conduct a wide-area monitoring survey covering Aomori prefecture to Aichi prefecture, so as to widely check the distribution of radioactive substances.

Under the initiative of the Japan Atomic Energy Agency, which has so far led the airborne monitoring, we will conduct the wide-area monitoring using four measuring equipment units with the cooperation of the Nuclear Safety Technology Center, OYO Corporation, and an Australian company, FUGRO Airborne Surveys.

In order to complete this plan sooner, monitoring will be carried out utilizing private helicopters, as well as disaster-prevention helicopters owned by municipalities, as necessary.

*Airborne monitoring is a technique in which highly sensitive, large radiation detectors are installed in an aircraft, and gamma rays from radioactive substances accumulated in the ground are quickly measured over a large area, in order to check the surface deposition.

2. Details of the plan for wide-area airborne monitoring by MEXT

Monitoring will be conducted sequentially by taking into account the distance from the Fukushima Dai-ichi NPP to the border of each prefecture. The monitoring period may be extended due to weather conditions, but the monitoring will preferably be concluded before the snow season.

oFuture schedule

- Aug.: Yamagata*, Western part of Fukushima*, Gunma, and Niigata
*Currently conducted
- Sep. and Oct.: Aichi, Aomori, Akita, Ishikawa, Iwate, Kanagawa, Gifu, Saitama, Shizuoka, Chiba, Tokyo, Toyama, Nagano, Fukui, and Yamanashi

○Aircraft:

Private helicopters and disaster-prevention helicopters owned by municipalities

○Items covered:

Air dose rates at the height of 1m above the ground surface and deposition of radioactive substances on the ground surface

○Method of release of the results:

Released by MEXT

Airborne Monitoring Survey by MEXT and Gunma Prefecture

August 22, 2011

Ministry of Education, Culture, Sports Science and Technology
Gunma Prefecture

1. Airborne monitoring by MEXT and Gunma Prefecture

MEXT has conducted airborne monitoring* within 100km of the Fukushima Dai-ichi NPP (up to 120km in the southern part of the Fukushima Dai-ichi NPP) so as to ascertain the wide-area distribution of radioactive substances and assess air dose rates and the accumulation of radioactive substances at evacuation areas in the future.

In addition to this, MEXT will also conduct airborne monitoring in Gunma prefecture, where airborne monitoring has never been conducted, for the purpose of ascertaining the effects of radioactive substances in a wider area.

In order to complete the monitoring in Gunma sooner, this monitoring will be conducted by the staff of the Japan Atomic Energy Agency using an airborne monitoring system, which is borrowed from the U.S. Department of Energy and is installed in a disaster-prevention helicopter owned by Gunma prefecture.

*1: Airborne monitoring is a technique in which highly sensitive, large radiation detectors are installed in an aircraft, and gamma rays from radioactive substances accumulated in the ground are quickly measured over a large area, in order to check the surface deposition.

2. Details of the airborne monitoring by MEXT and Gunma Prefecture

○Monitoring dates: Around ten days, from Tuesday, August 23

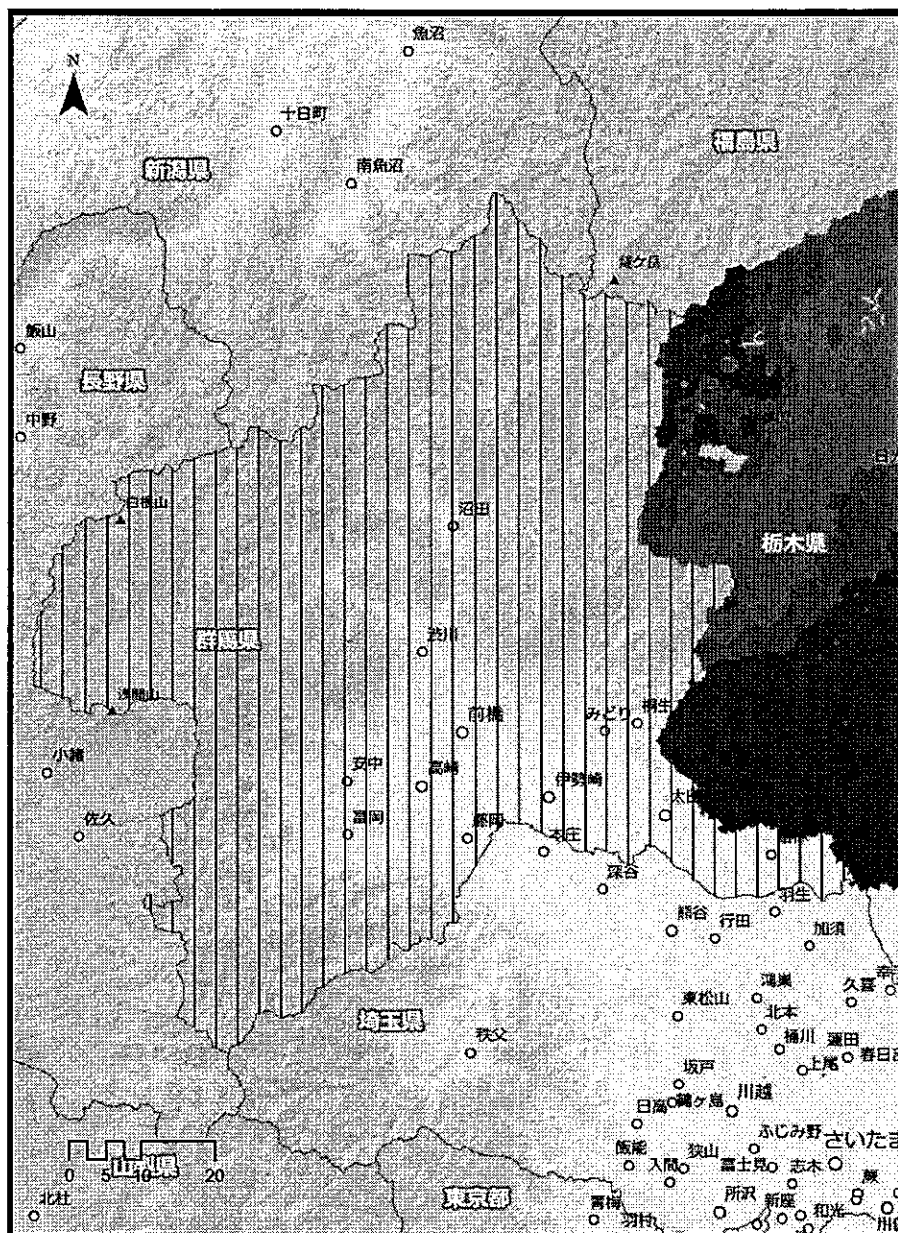
*Monitoring dates may be changed according to preparation or weather conditions.

○Aircraft: A disaster-prevention helicopter of Gunma Prefecture (BELL 412EP)

○Items covered: Air dose rate 1m above the ground surface in Gunma prefecture (see the Attachment) and deposition of radioactive substances on the ground surface

○Method of release of the results: Released by MEXT and Gunma Prefecture

Airborne Monitoring Survey by MEXT and Gunma Prefecture



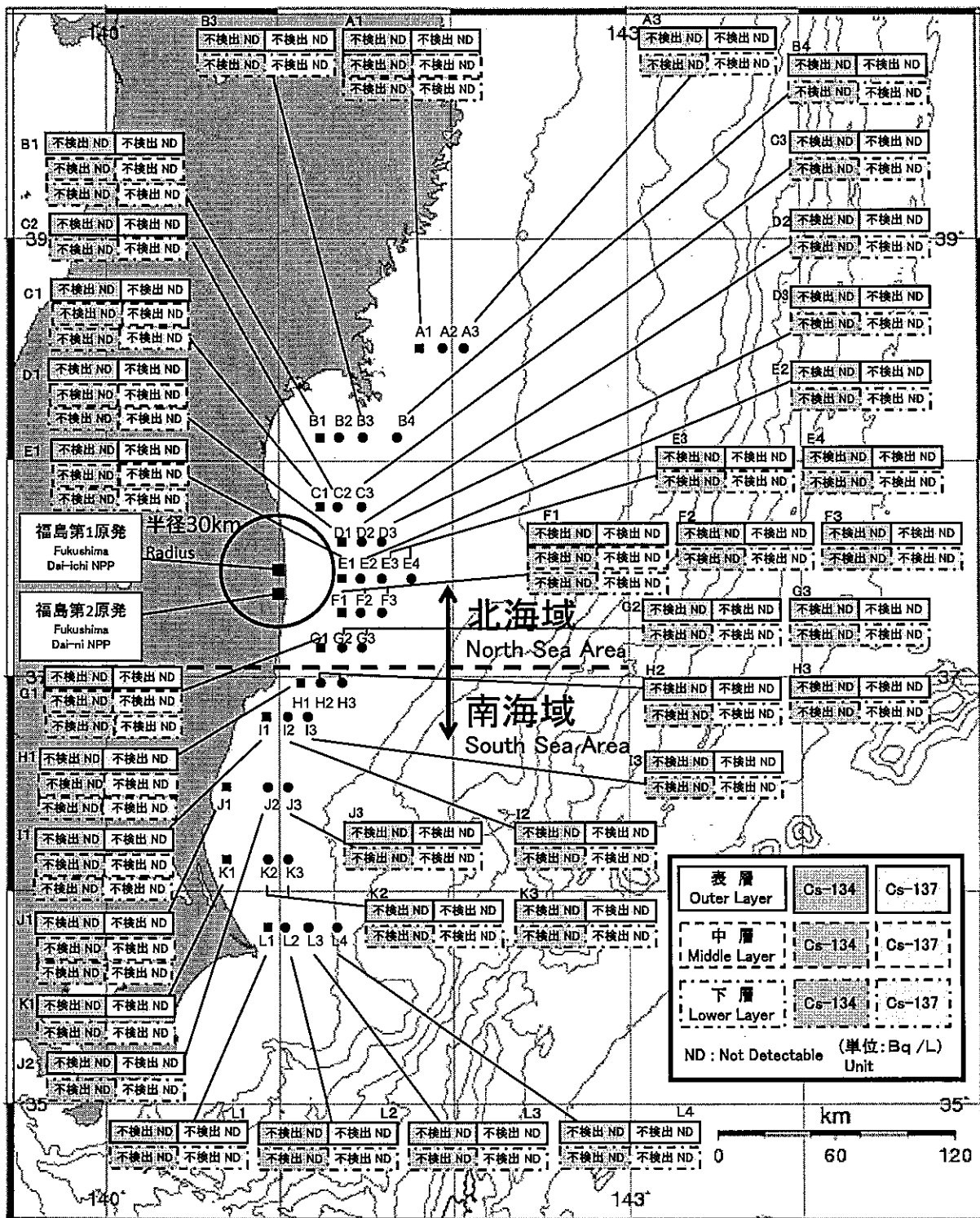
*The monitoring period may be changed according to local weather conditions, etc.

* In mountainous areas, measurement may not be conducted as low altitude flights are difficult.

(Monitoring Specifications)

- Monitoring grid: 3km (In densely populated areas and places showing high air dose rates, more detailed monitoring is to be conducted.)
- Target altitude for monitoring: 150–300 m
- Monitoring period: Around ten days from August 23
- Items covered: Air dose rate 1 m above the ground surface and deposition of radioactive substances on the ground surface in Gunma prefecture (shaded part)

海域モニタリング結果(平成23年7月25日～31日採水)
Readings of Sea Area Monitoring (Jul 25-31, 2011)

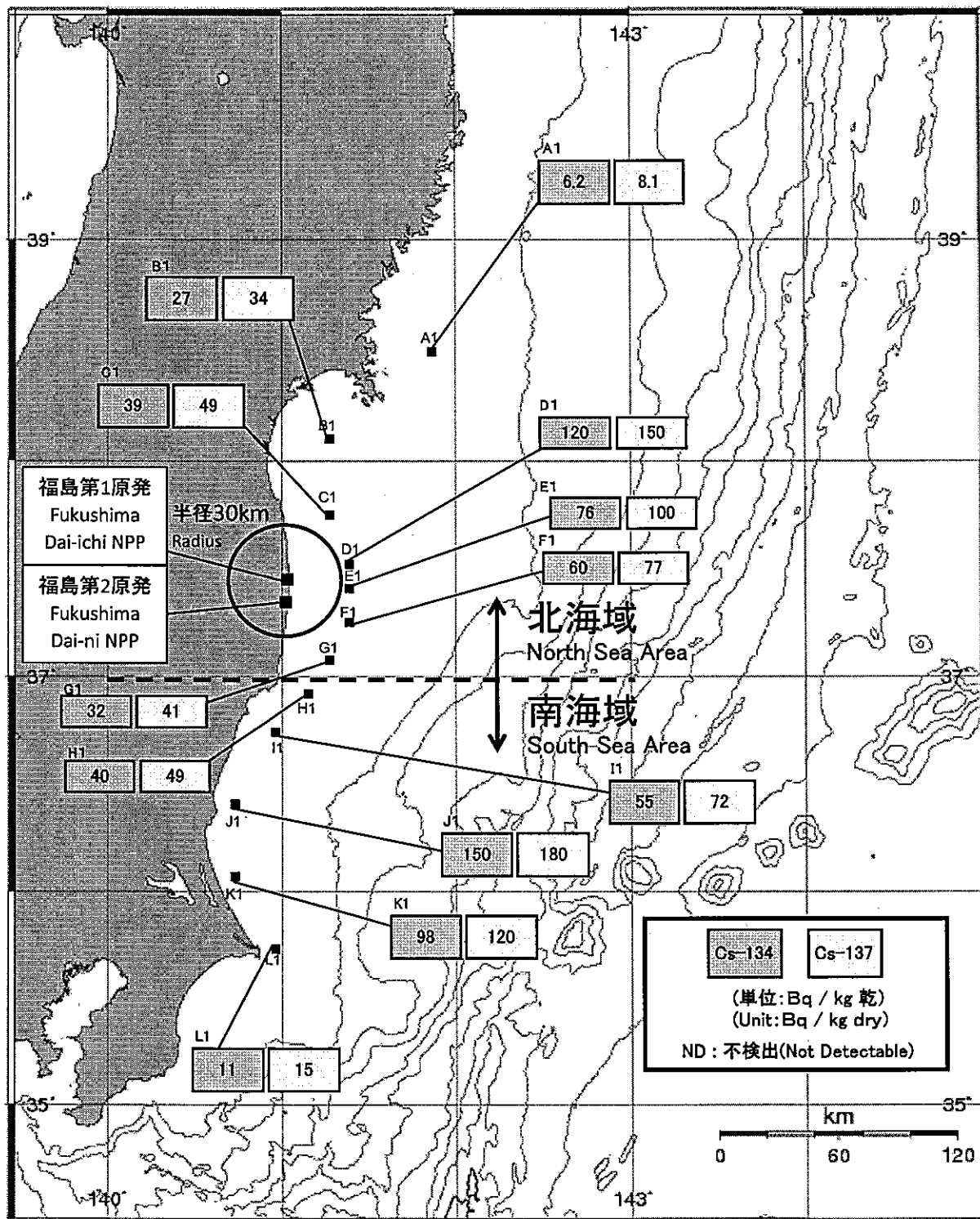


海域モニタリング結果(平成23年7月25日～31日採取)

Readings of Sea Area Monitoring (Jul 25-31, 2011)

海底土のCs-134及びCs-137の放射能濃度分布

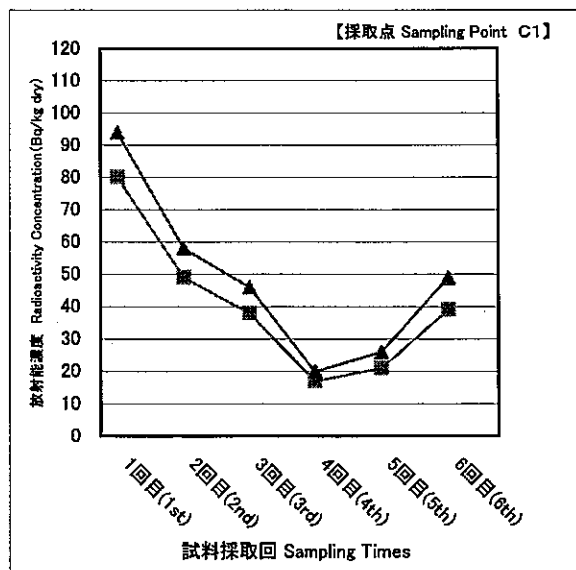
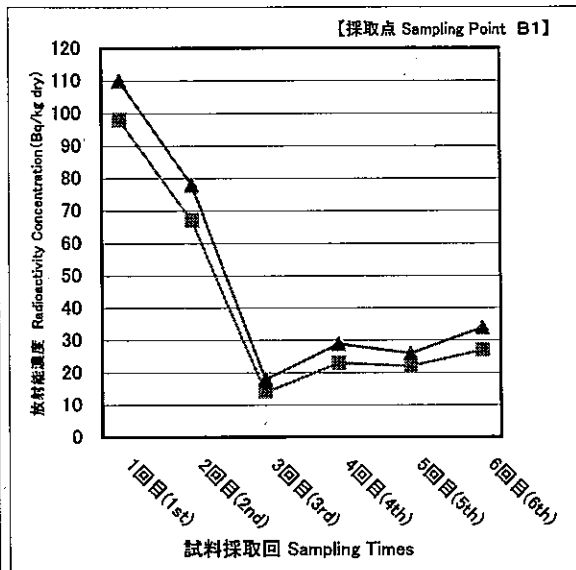
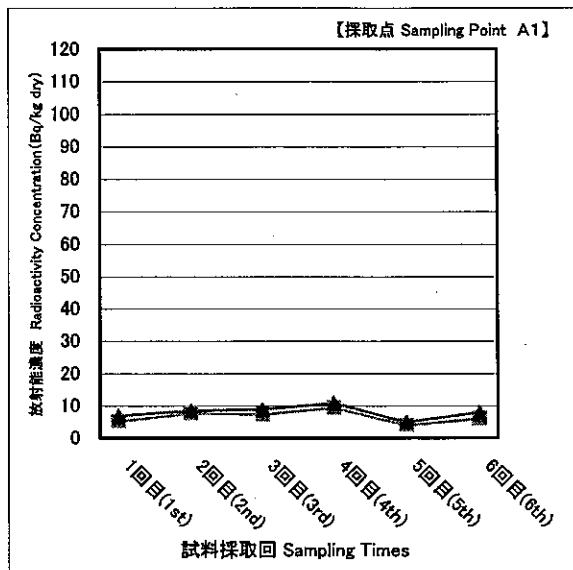
Distribution map of radioactivity concentration of Cs-134 and Cs-137 in marine soil



独立行政法人日本原子力研究開発機構の測定結果より作成。

Based on measurements by JAEA.

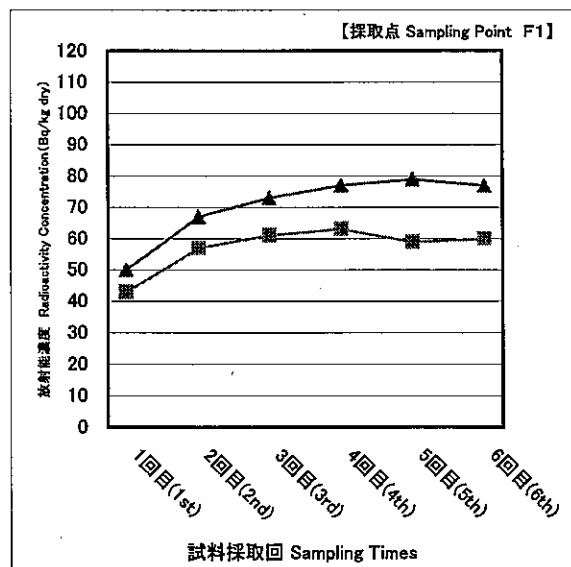
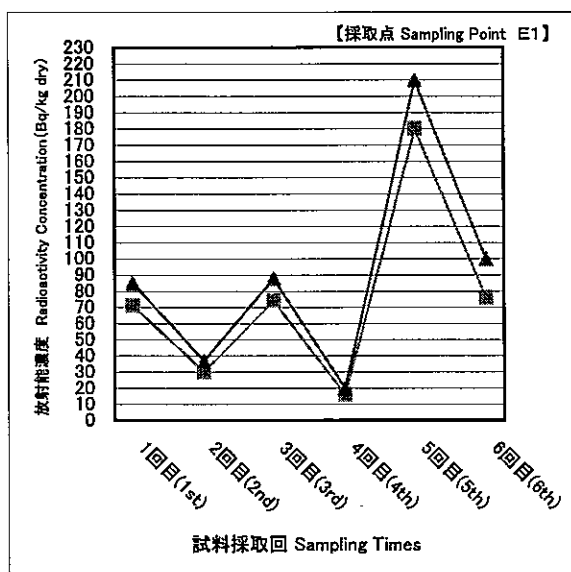
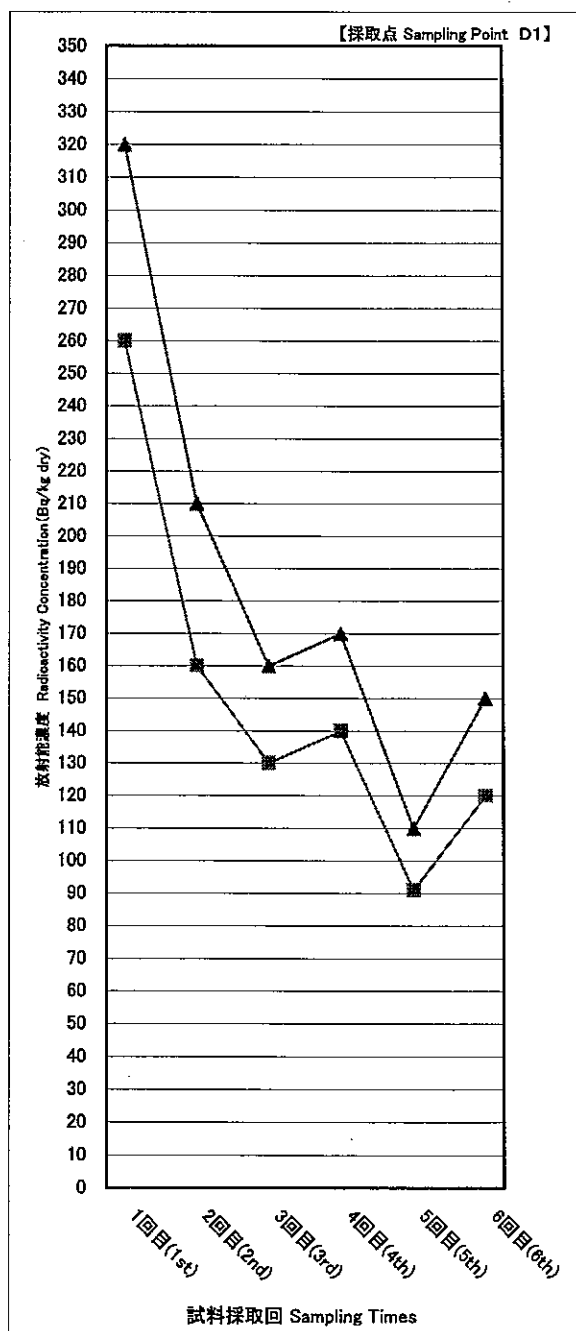
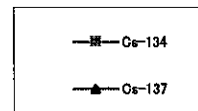
海底土のCs-134及びCs-137の放射能濃度の傾向 Trends of radioactivity concentration of Cs-134 and Cs-137 in marine soil



※測定結果が不検出であった場合は、0Bq/kg乾として表示した。
※“Not Detectable” is illustrated as 0Bq/kg dry.

海底土のCs-134及びCs-137の放射能濃度の傾向

Trends of radioactivity concentration of Cs-134 and Cs-137 in marine soil

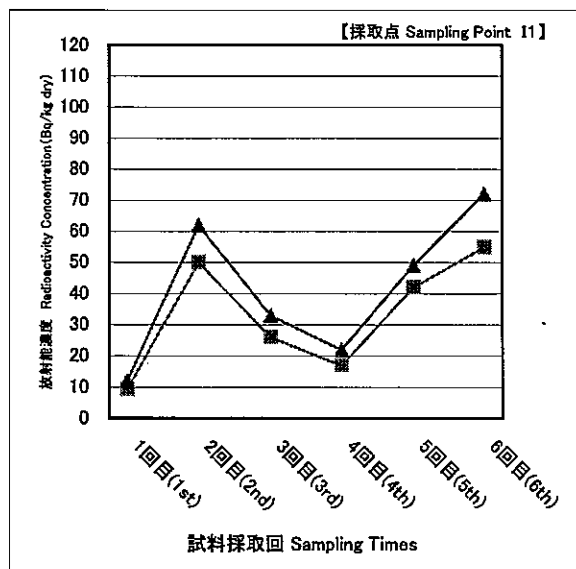
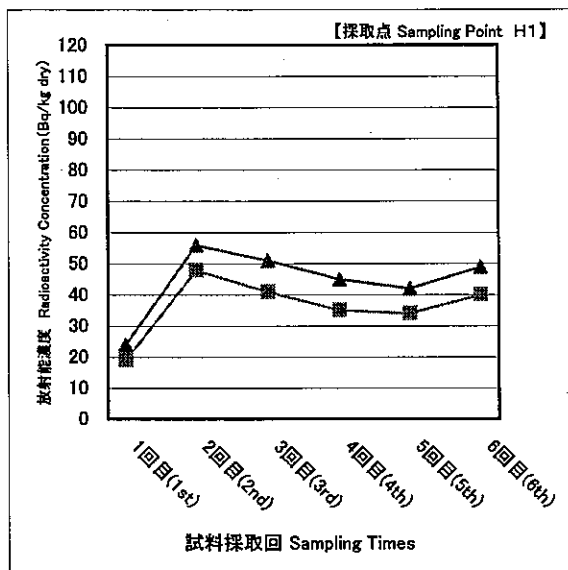
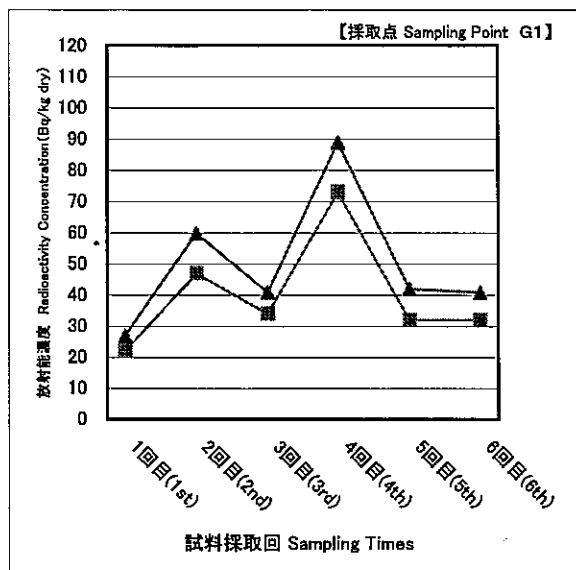
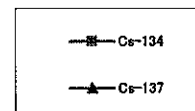


※測定結果が不検出であった場合は、0Bq/kg乾として表示した。

※"Not Detectable" is illustrated as 0Bq/kg dry.

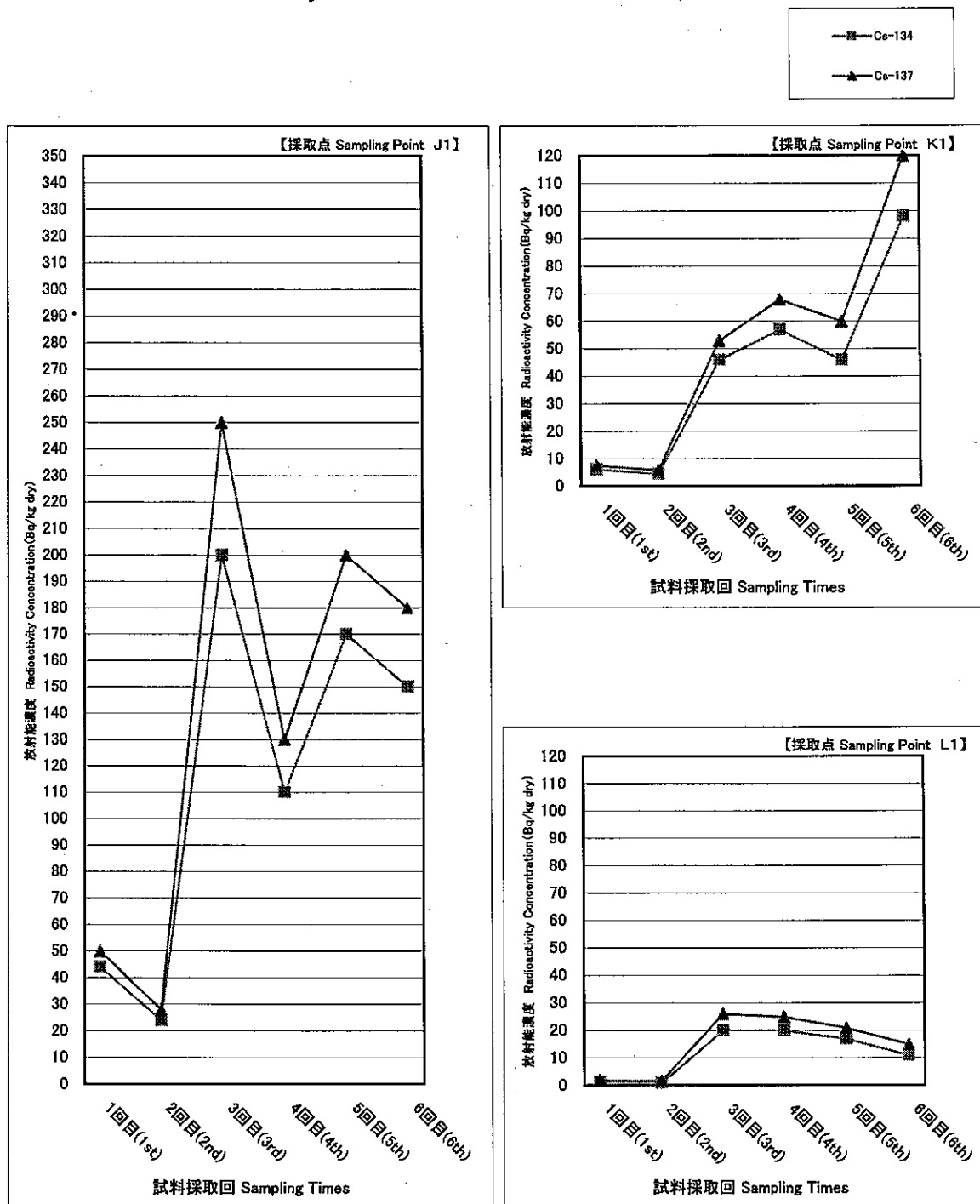
海底土のCs-134及びCs-137の放射能濃度の傾向

Trends of radioactivity concentration of Cs-134 and Cs-137 in marine soil



※測定結果が不検出であった場合は、0Bq/kg乾として表示した。
 ※"Not Detectable" is illustrated as 0Bq/kg dry.

海底土のCs-134及びCs-137の放射能濃度の傾向 Trends of radioactivity concentration of Cs-134 and Cs-137 in marine soil



※測定結果が不検出であった場合は、0Bq/kg乾として表示した。
 ※“Not Detectable” is illustrated as 0Bq/kg dry.

海域モニタリング結果(平成23年6月6日～8日、10日採取)

Readings of Sea Area Monitoring (June 6-8 and 10, 2011)

海底土の放射能濃度

Radioactivity concentration in marine soil

