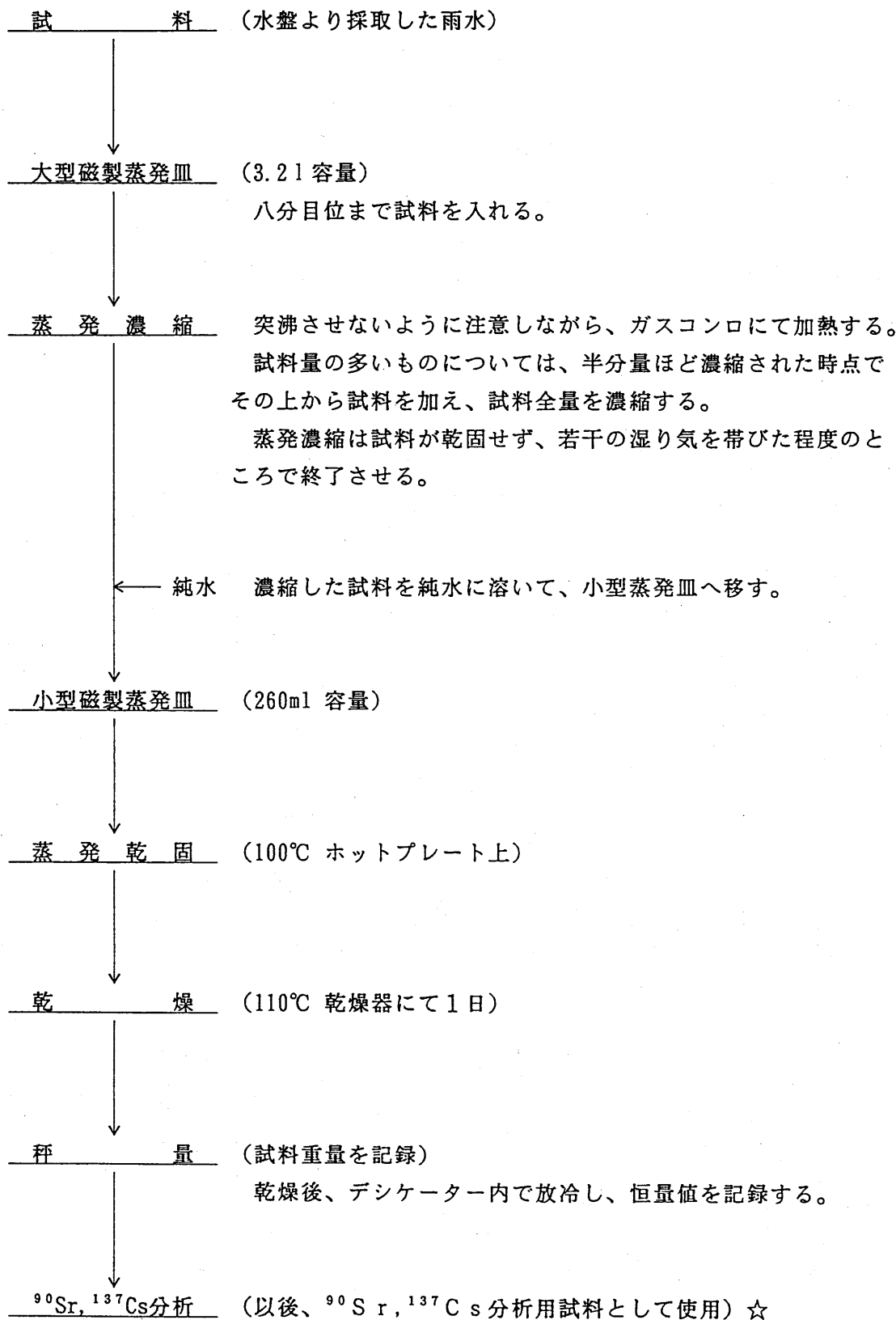


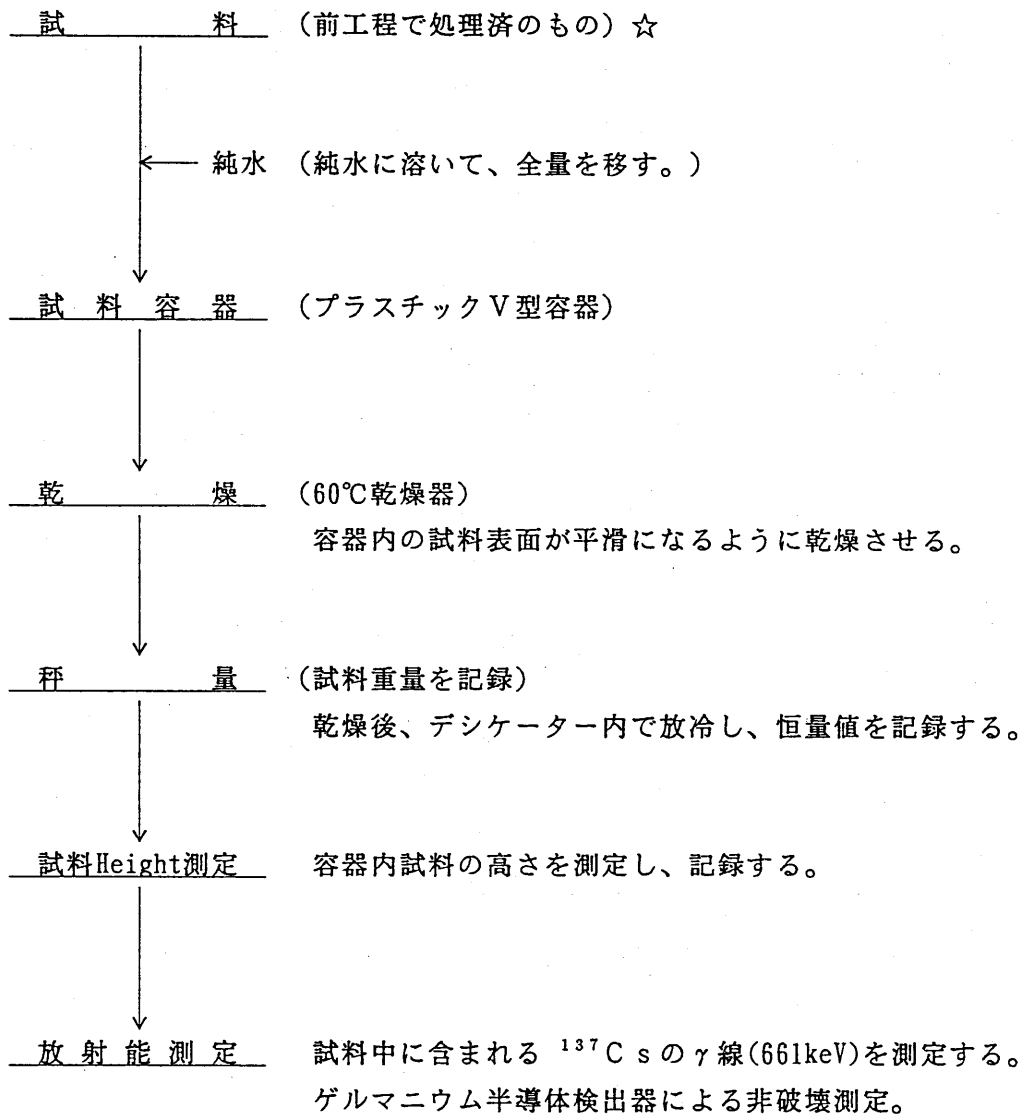
(付 録)  
分 析 要 領

Appendix 1  
Analytical Scheme of  $^{90}\text{Sr}$ ,  $^{137}\text{Cs}$  and plutonium isotopes.

1.  $^{90}\text{Sr}$ ,  $^{137}\text{Cs}$  分析用降下物の前処理

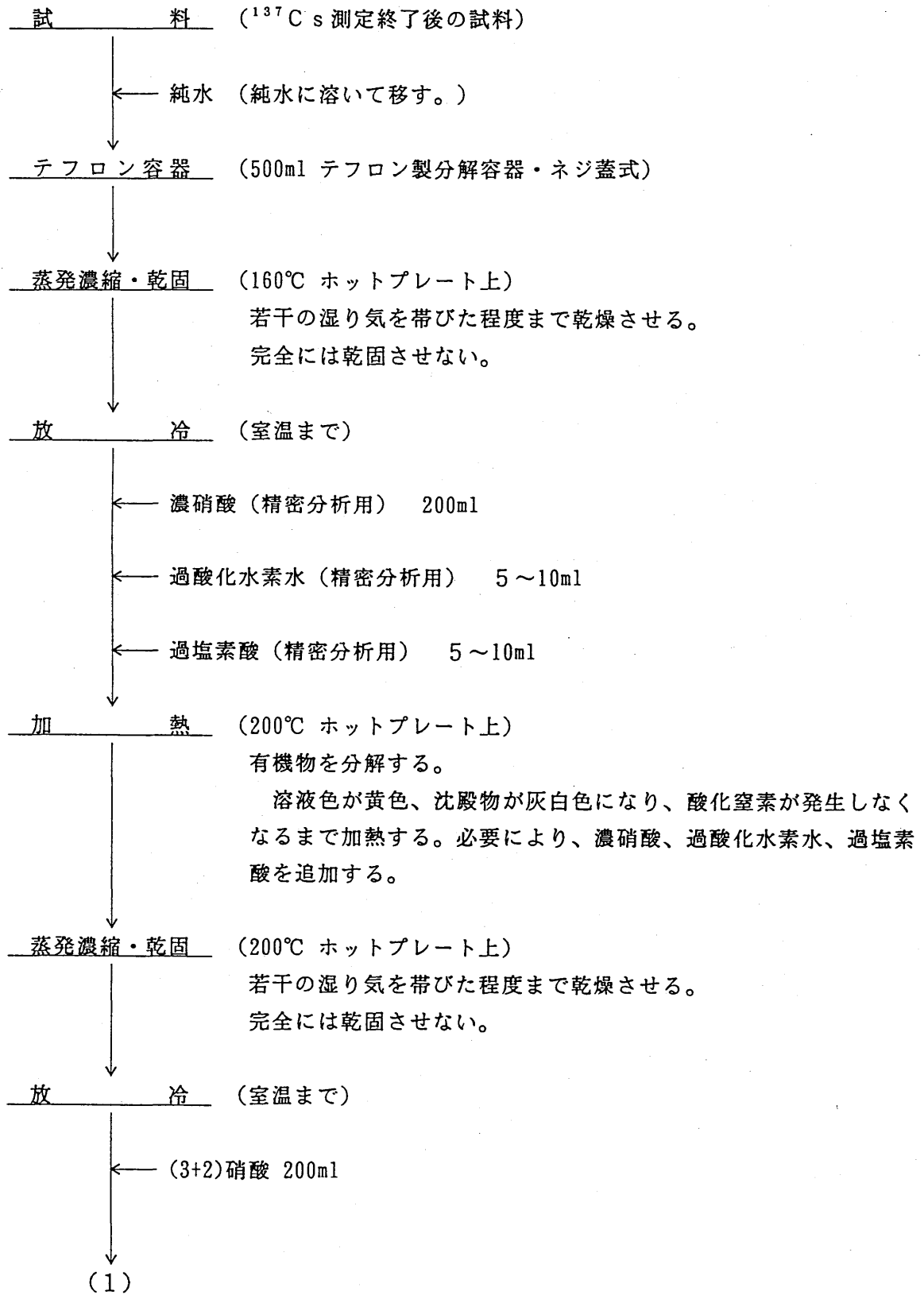


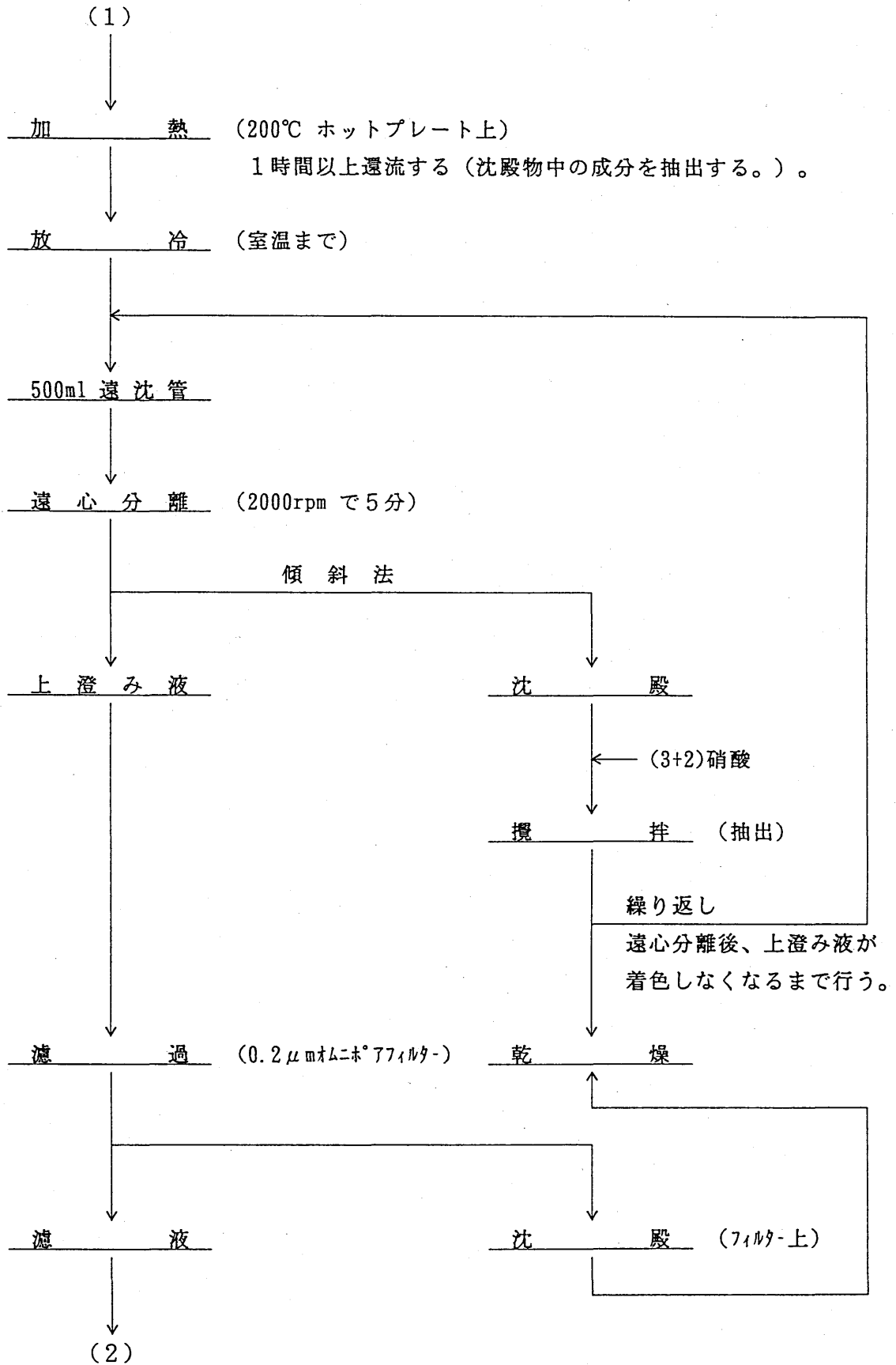
## 2. $^{137}\text{Cs}$ 分析

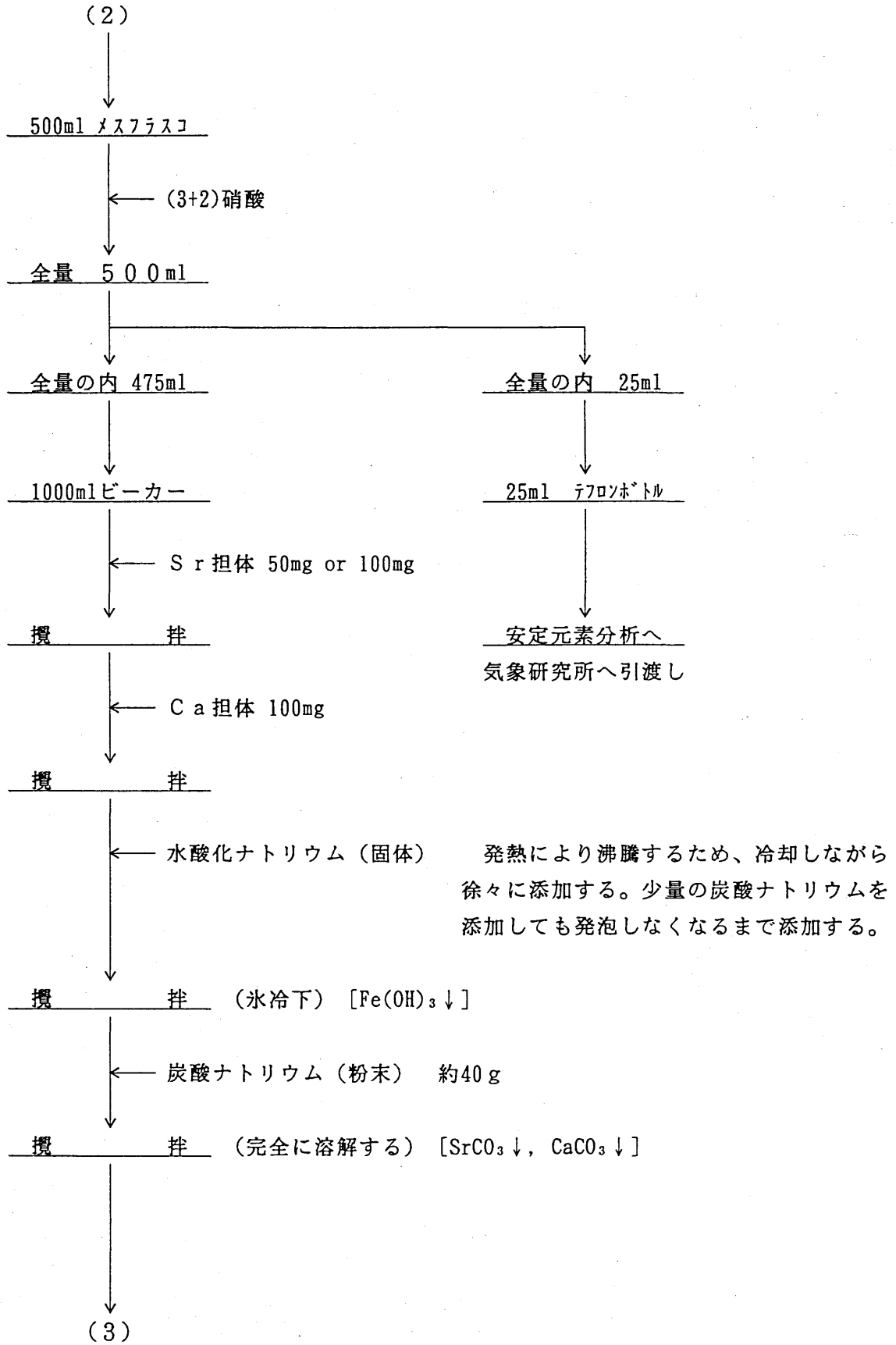


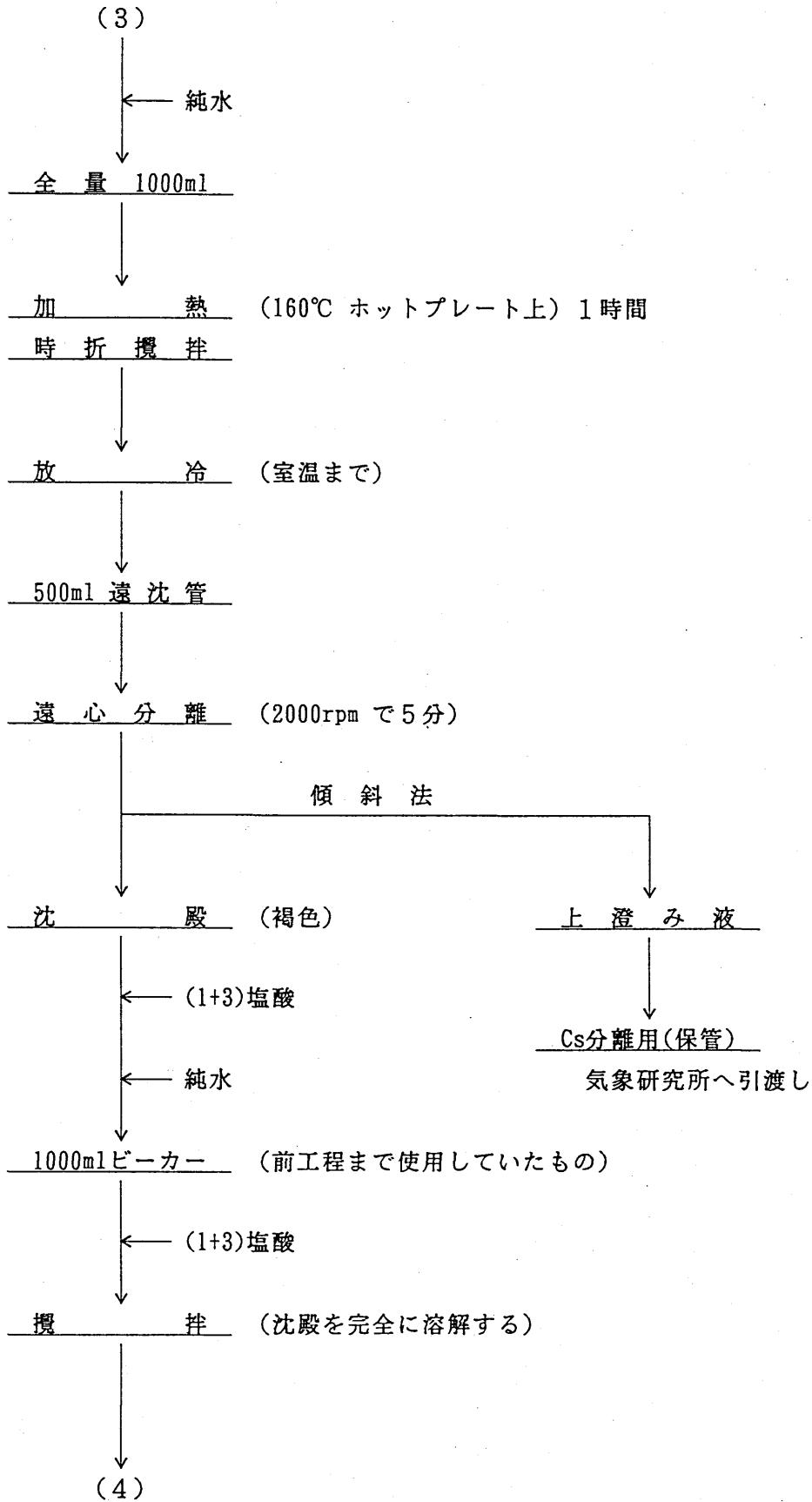
得られた放射能濃度と試料を採取した水盤の面積から降下物中の  $^{137}\text{Cs}$  濃度 ( $\text{mBq}/\text{m}^2$ ) を算出する。

3.  $^{90}\text{Sr}$  分析

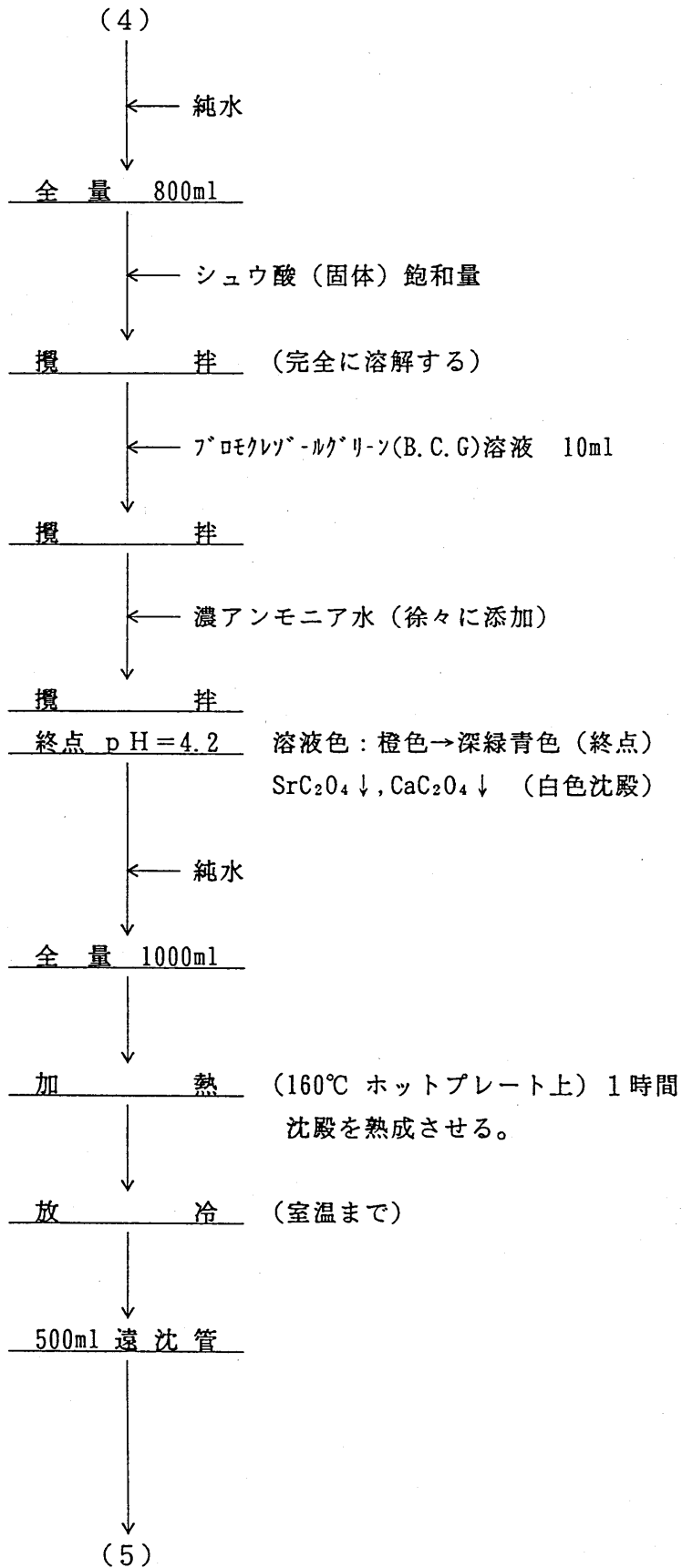


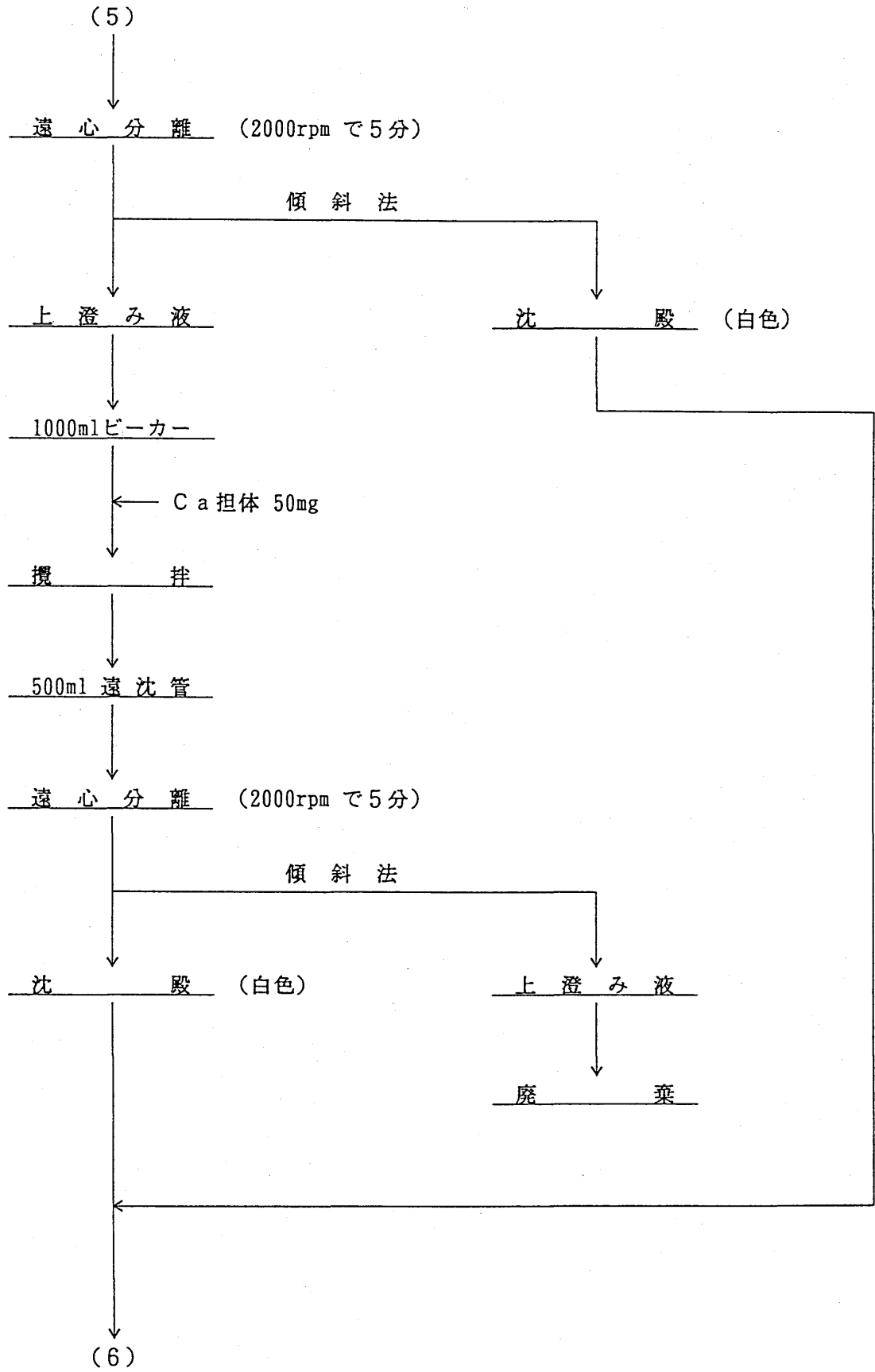


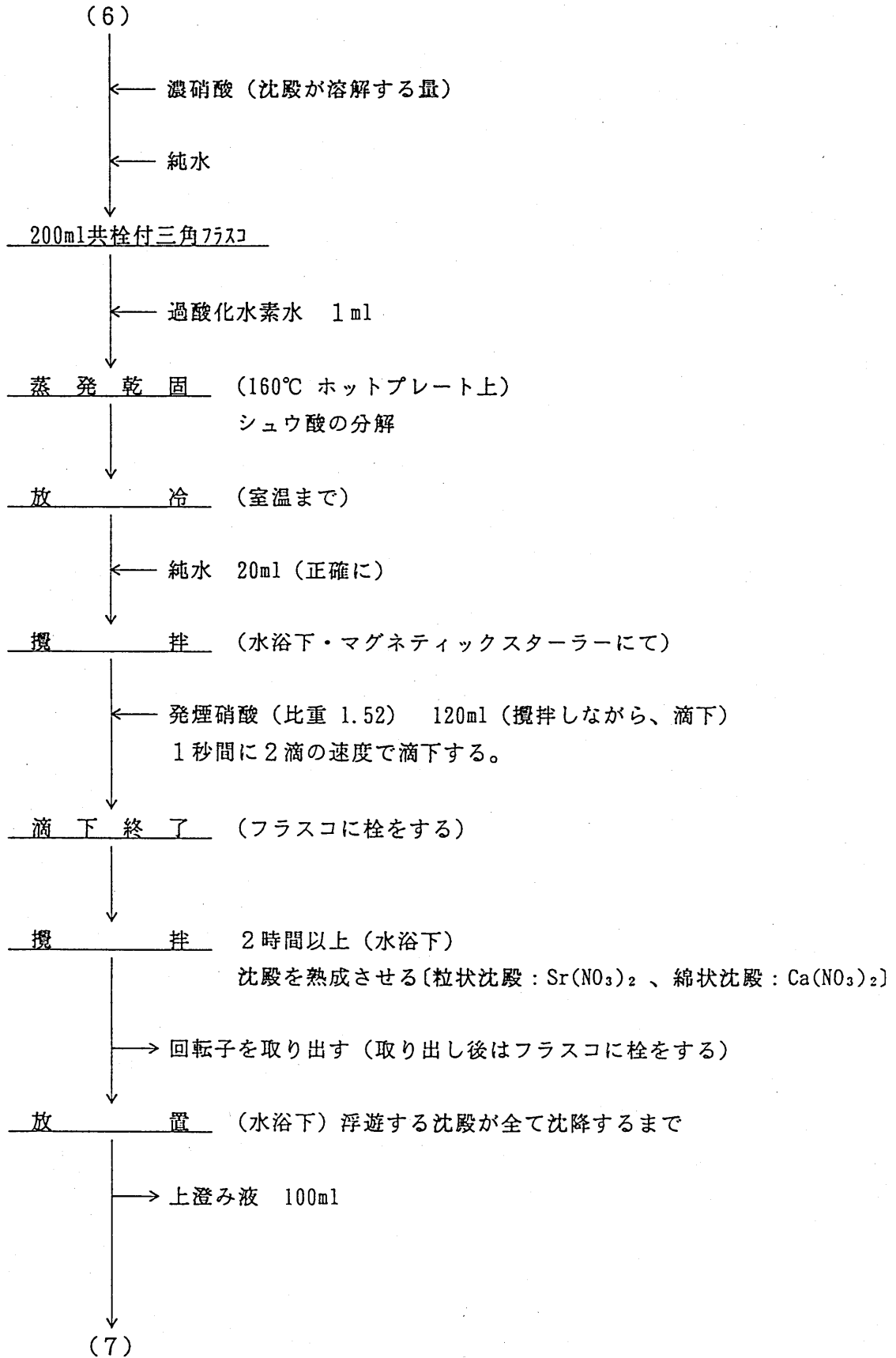


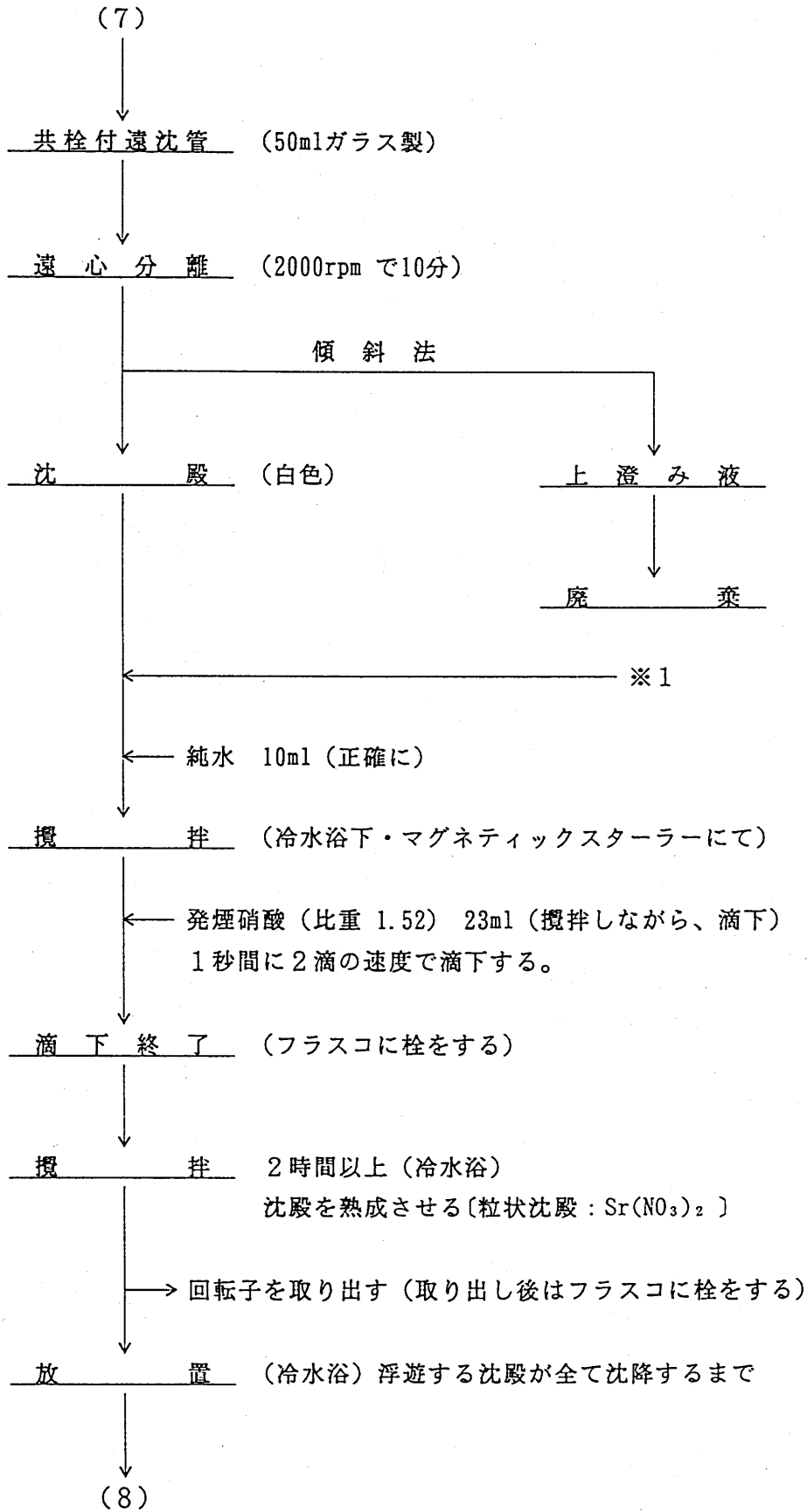


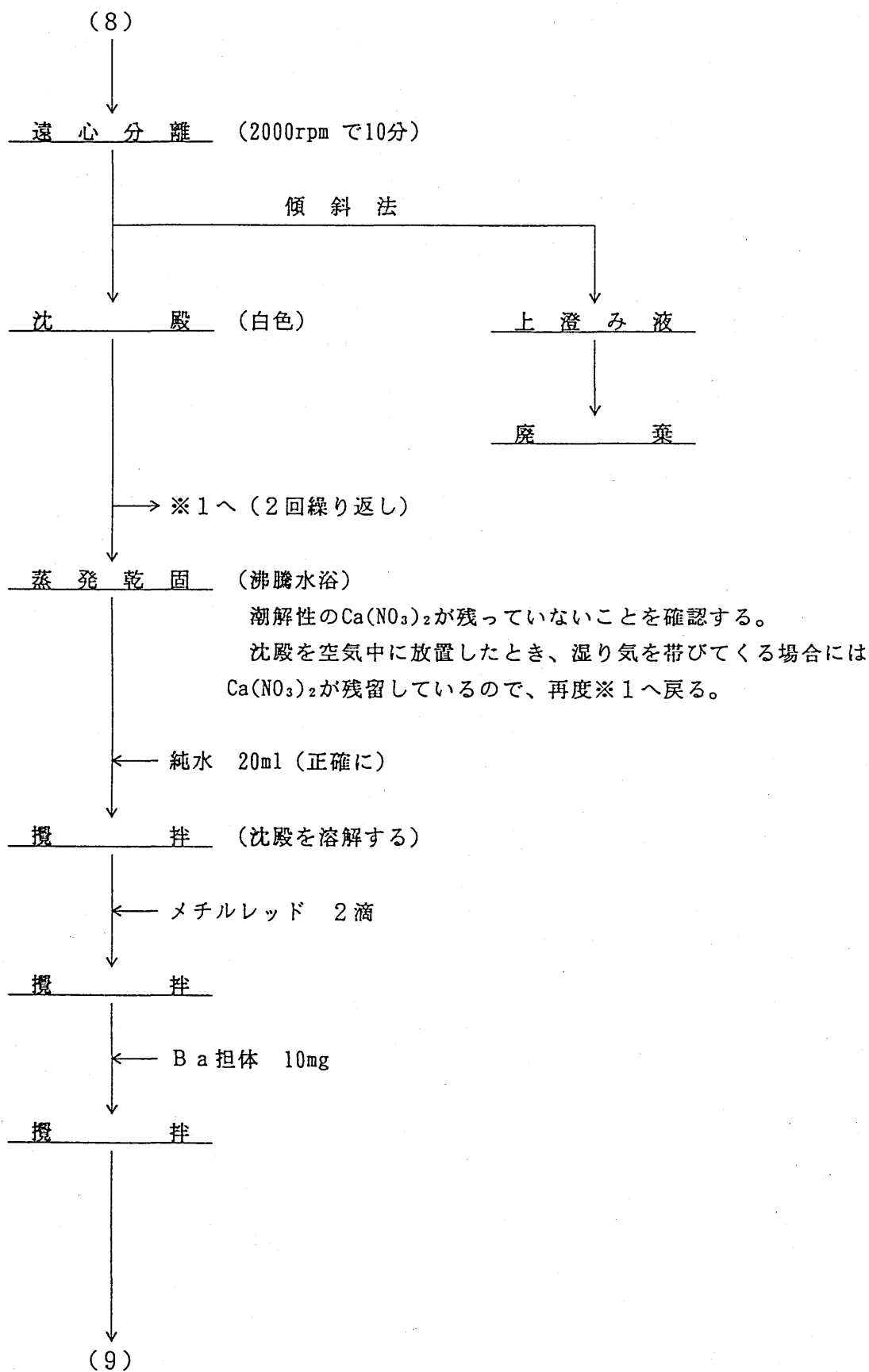


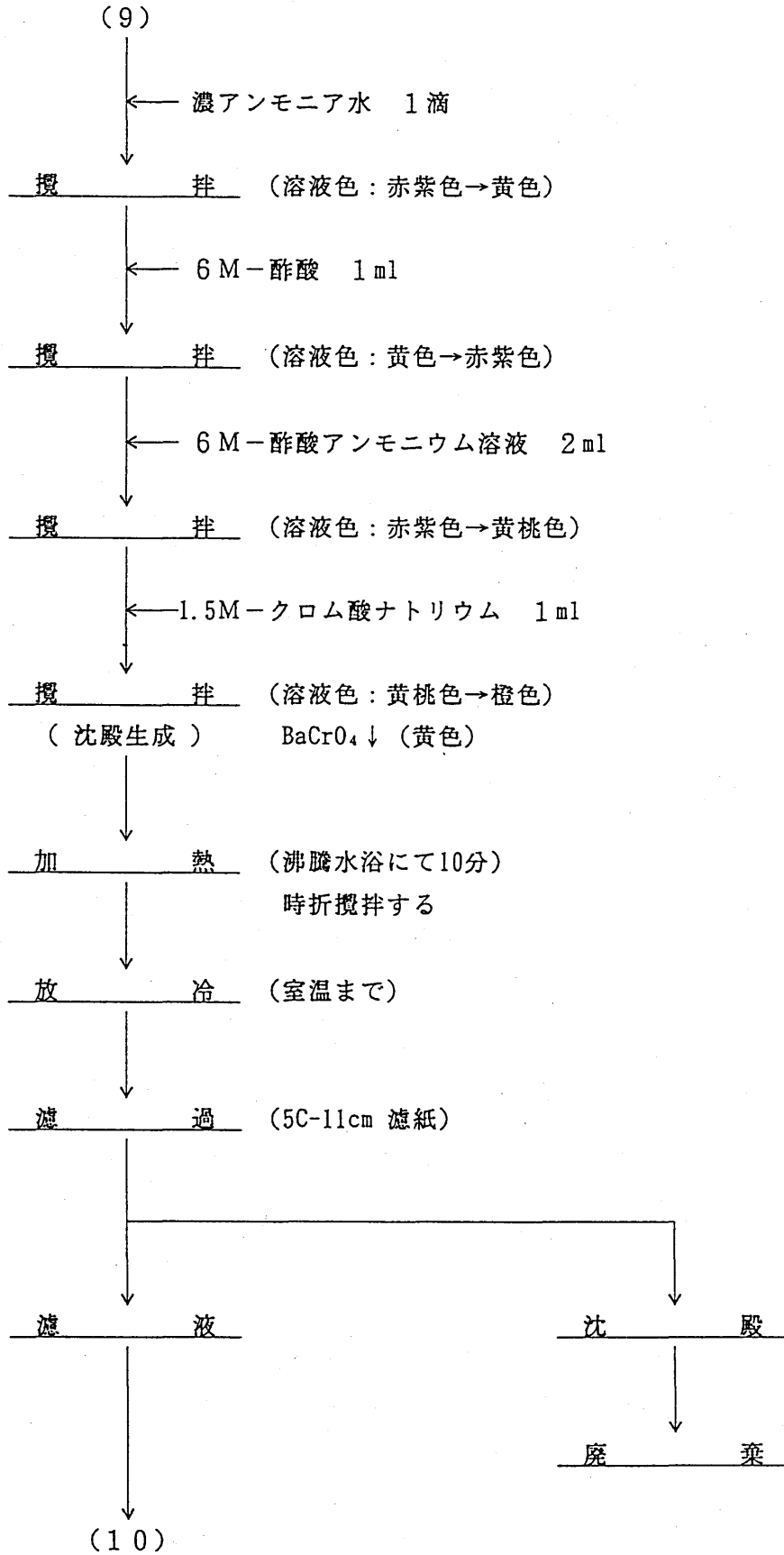


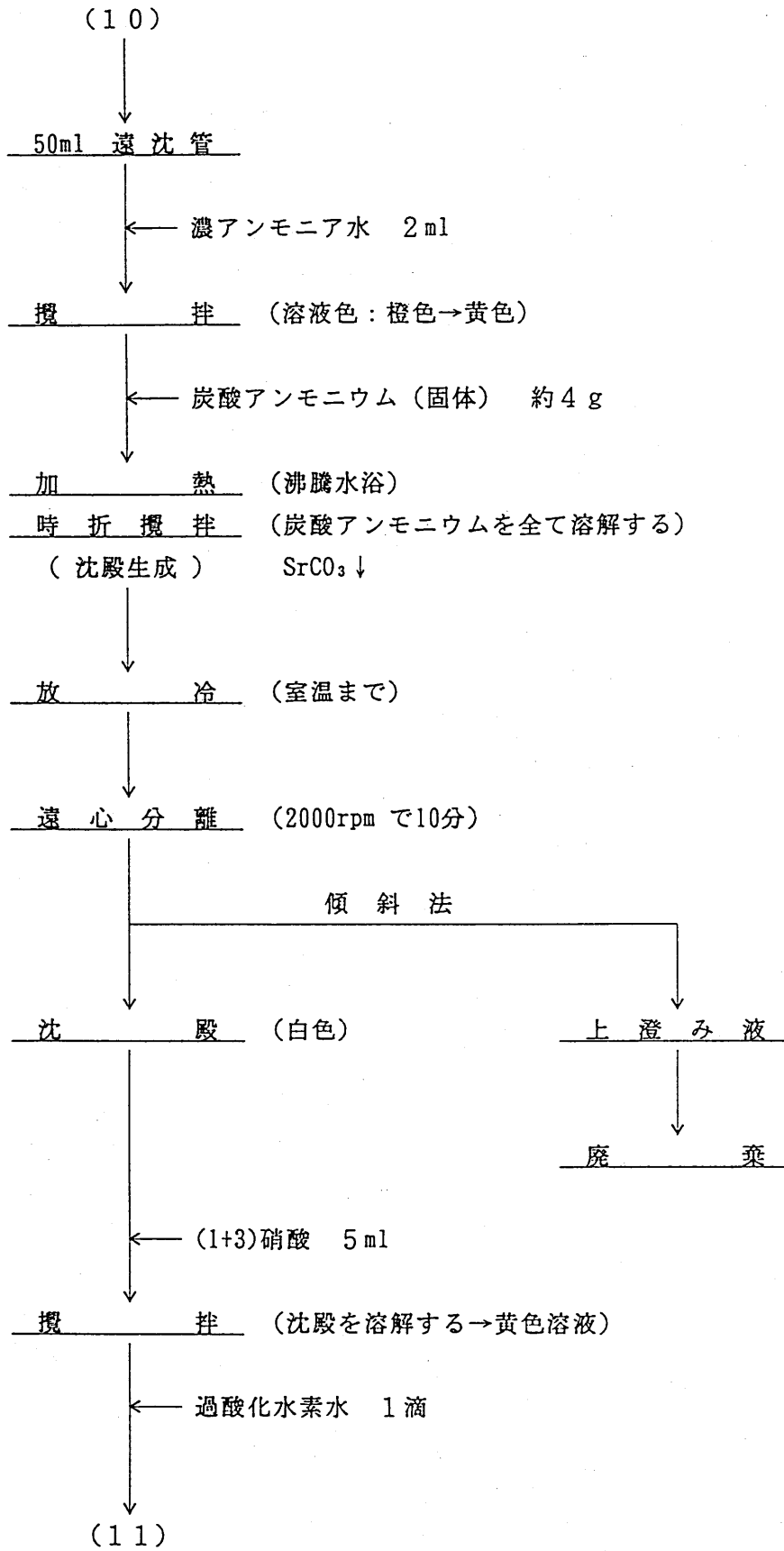


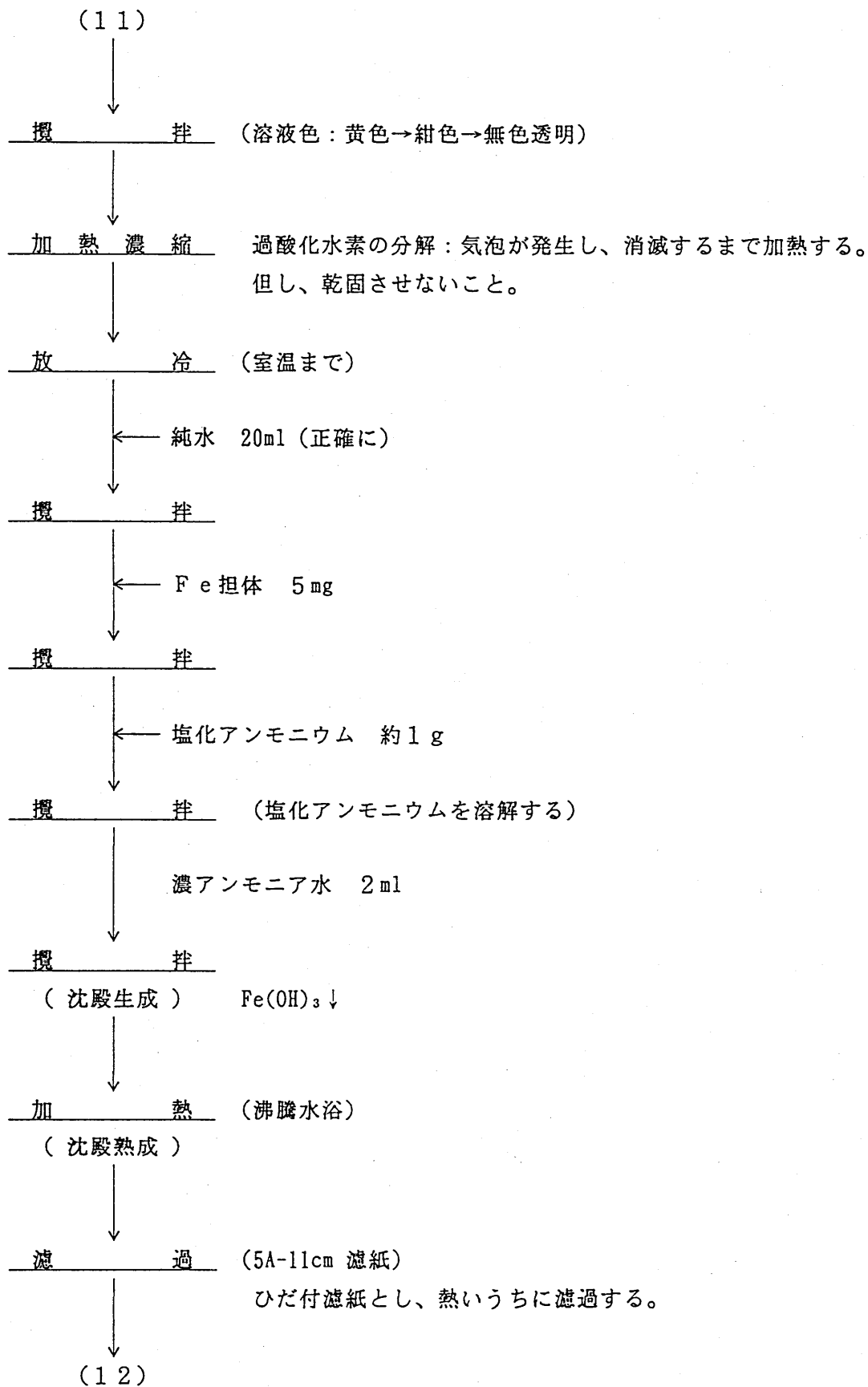




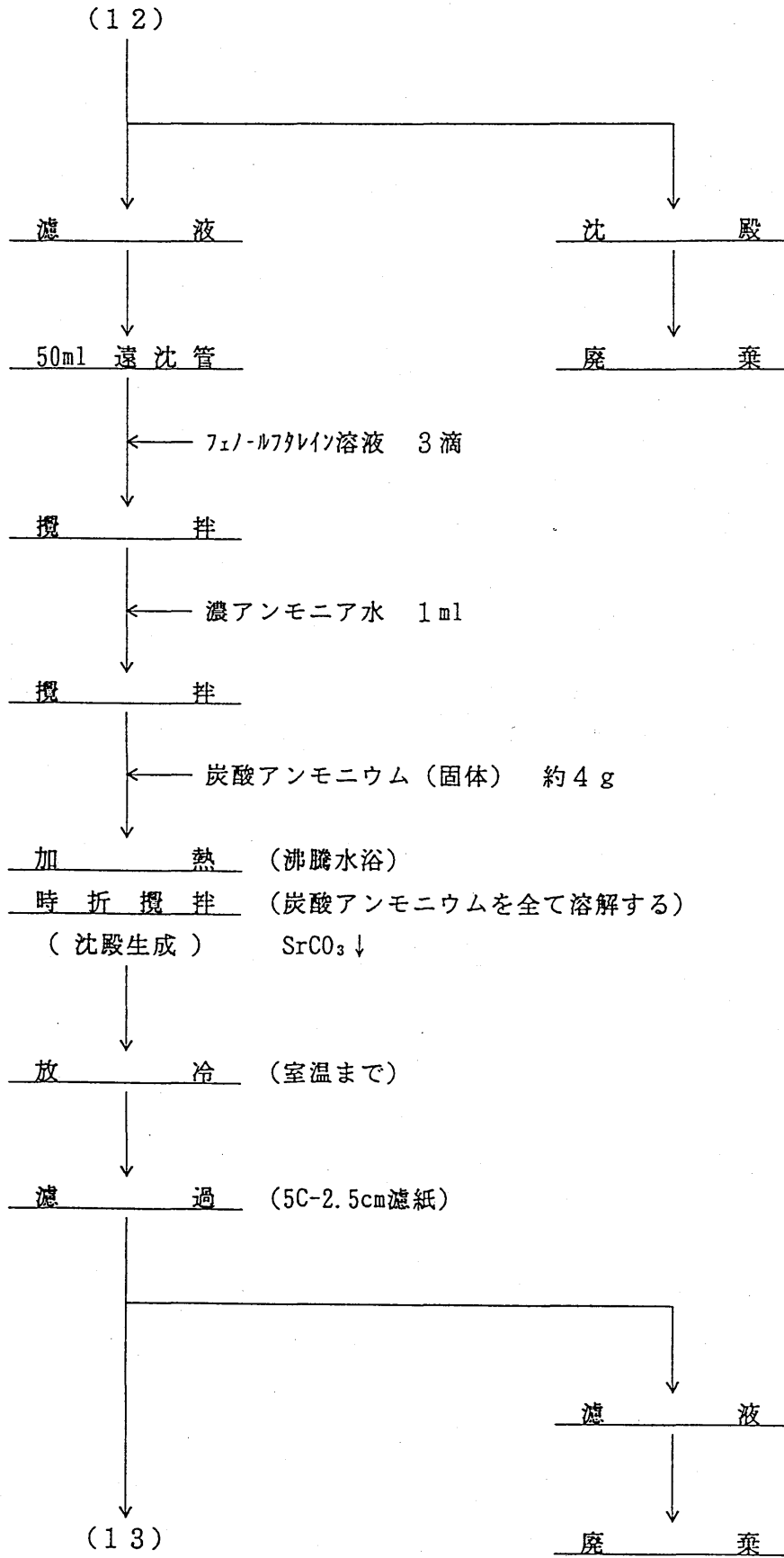


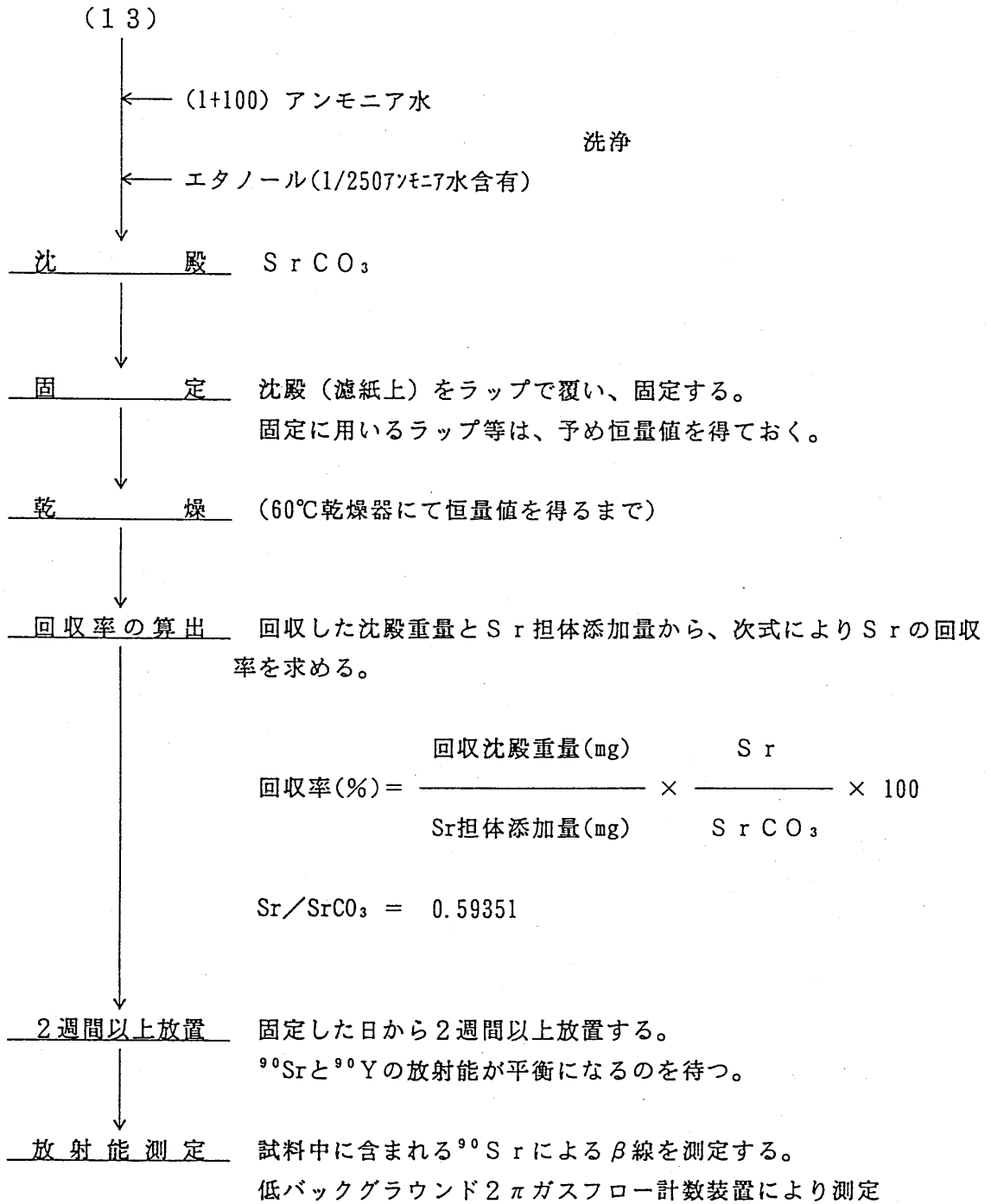






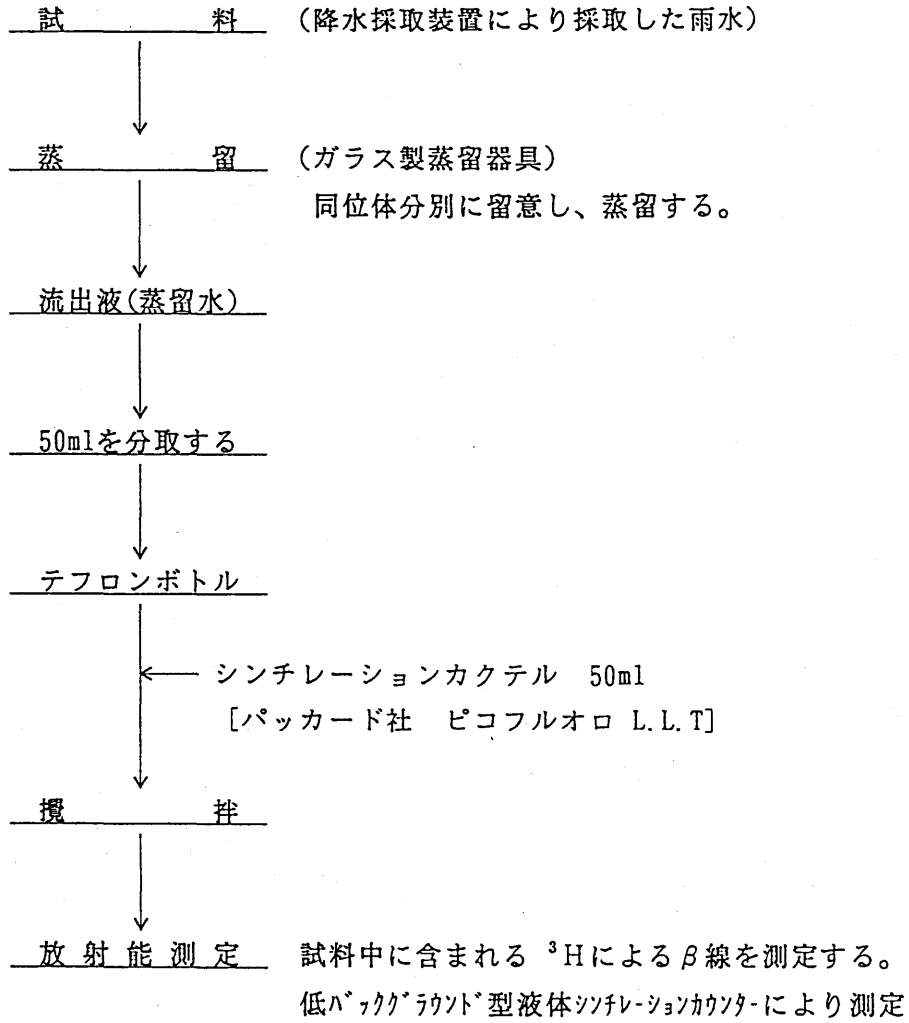






得られた放射能濃度と試料を採取した水盤の面積から降水物中の<sup>90</sup>Sr濃度(mBq/m<sup>2</sup>)を算出する。

4.  $^3\text{H}$ 分析



得られた放射能濃度と試料を採取した水盤の面積から降下物中の  $^3\text{H}$ 濃度 ( $\text{mBq}/\text{m}^2$ )を算出する。

## 降水物試料のPu分析法フロー

乾燥降水物試料（テフロン分解容器使用）

├ HNO<sub>3</sub>

├ H<sub>2</sub>O<sub>2</sub>, HClO<sub>4</sub>

有機物分解（ホットプレート加熱）

├ Puトレーサー（ある程度有機物分解が進んでから添加する）

加熱濃縮

石英ビーカーに移す

テフロン容器を、HNO<sub>3</sub>+純水で洗浄し、  
洗浄液は先の石英ビーカーに合わせる

石英ビーカーの内容物を乾固させる

高温設定可のホットプレートで強熱する。  
（昇温、降温は徐々に行う）

放冷（徐々に行う）

電気炉加熱（500℃、6hr）

放冷（徐々に行う）

├ 純水

ガラス棒にて内容物の塊を粉碎

├ HCl

加熱溶解（主に酸化鉄の溶解）

乾固手前まで濃縮

├ 8M-HNO<sub>3</sub>

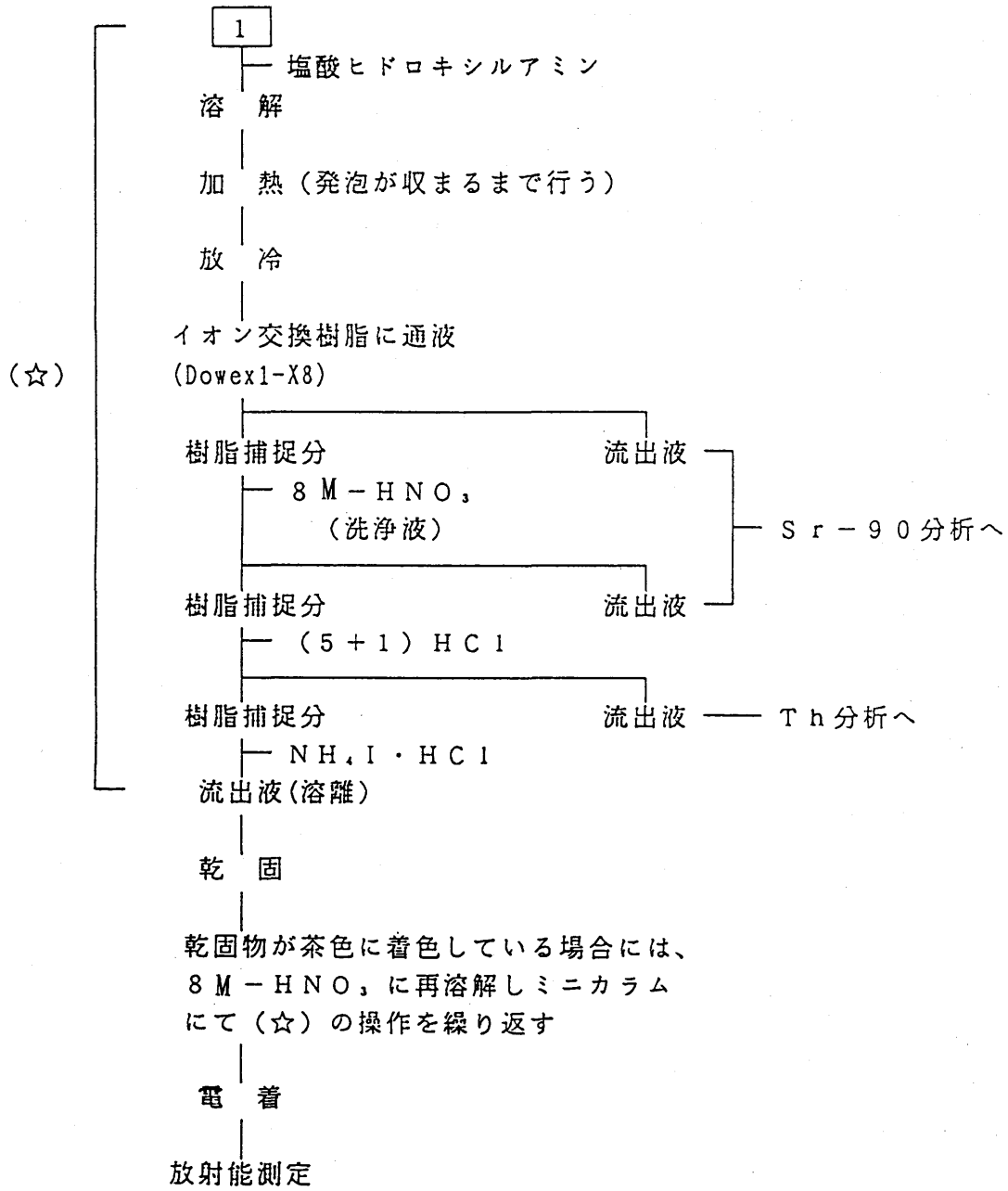
加熱（溶解成分の抽出）

放冷

遠心分離及び濾過

抽出液

1



## Appendix 2

Examples of  $^{90}\text{Sr}$  analysis of reference materials.

試料名		$^{90}\text{Sr}$ 放射能濃度 (mBq/g)	
標準試料	3-27	$1.97 \times 10^2$	$\pm 1.00 \times 10^0$
標準試料	4-57	$2.03 \times 10^2$	$\pm 4.50 \times 10^0$
標準試料	7-3	$1.88 \times 10^2$	$\pm 2.90 \times 10^0$
標準試料	10-24	$1.86 \times 10^2$	$\pm 2.90 \times 10^0$
標準試料	10-25	$2.12 \times 10^2$	$\pm 7.20 \times 10^0$
標準試料	1-53	$1.92 \times 10^2$	$\pm 6.79 \times 10^0$
標準試料	3-1	$1.93 \times 10^2$	$\pm 2.95 \times 10^0$
標準試料	4-50	$2.08 \times 10^2$	$\pm 3.23 \times 10^0$
標準試料	7-51	$1.90 \times 10^2$	$\pm 2.86 \times 10^0$
標準試料	16-44	$2.06 \times 10^2$	$\pm 6.38 \times 10^0$
標準試料	16-45	$2.05 \times 10^2$	$\pm 5.18 \times 10^0$
標準試料	16-46, 47	$2.13 \times 10^2$	$\pm 5.49 \times 10^0$
標準試料	16-48, 49, 50	$2.07 \times 10^2$	$\pm 5.30 \times 10^0$
標準試料	16-52, 53	$2.04 \times 10^2$	$\pm 3.84 \times 10^0$
標準試料	16-54, 55, 56	$2.00 \times 10^2$	$\pm 5.70 \times 10^0$

試料名		$^{90}\text{Sr}$ 放射能濃度 (mBq/g)	
標準試料	16-57	$2.18 \times 10^2$	$\pm 8.95 \times 10^0$
標準試料	16-58,59	$2.05 \times 10^2$	$\pm 5.16 \times 10^0$
標準試料	16-44	$2.06 \times 10^2$	$\pm 6.38 \times 10^0$



試料名		$^{90}\text{Sr}$ 放射能濃度 (mBq/g)	
M. R. I	3-36	$1.89 \times 10^2$	$\pm 3.70 \times 10^0$
M. R. I	5-28	$1.90 \times 10^2$	$\pm 3.10 \times 10^0$
M. R. I	8-15	$1.94 \times 10^2$	$\pm 6.40 \times 10^0$
M. R. I	10-19	$1.97 \times 10^2$	$\pm 1.50 \times 10^0$
M. R. I	13-43	$2.13 \times 10^2$	$\pm 4.00 \times 10^0$
M. R. I	1-29	$2.05 \times 10^2$	$\pm 1.40 \times 10^0$
M. R. I	11-35	$2.15 \times 10^2$	$\pm 6.30 \times 10^0$
M. R. I	13-22	$2.02 \times 10^2$	$\pm 5.70 \times 10^0$
M. R. I	混合試料(A) <sup>*1</sup>	$2.03 \times 10^2$	$\pm 2.80 \times 10^0$
M. R. I	混合試料(B) <sup>*2</sup>	$2.05 \times 10^2$	$\pm 2.80 \times 10^0$

※1 ロット番号：7-28, 8-46, 12-25, 12-33, 15-2, 15-45の計6試料を混合したもの

※2 ロット番号：4-11, 10-20, 6-25, 13-12, 12-59, 1-3, 3-7, 4-49, 2-53, 15-16, 2-46, 9-39, 12-38, 13-8, 15-49の計15試料を混合したもの

### Appendix 3

Background values of gas-flow  $\beta$  counter.

[1993年降下物用]

Sr-90 バックグラウンド 1995年2月  
セルNo.1 (効率曲線用)

測定番号	測定日	測定時間	count
1	95/02/03	999.9	483
2	95/02/03	999.9	528
3	95/02/04	999.9	536
4	95/02/05	999.9	499
5	95/02/05	999.9	540
6	95/02/18	999.9	574
7	95/02/19	999.9	540
8	95/02/19	999.9	560
9	95/02/20	999.9	540
10	95/02/21	999.9	573

average 537.3

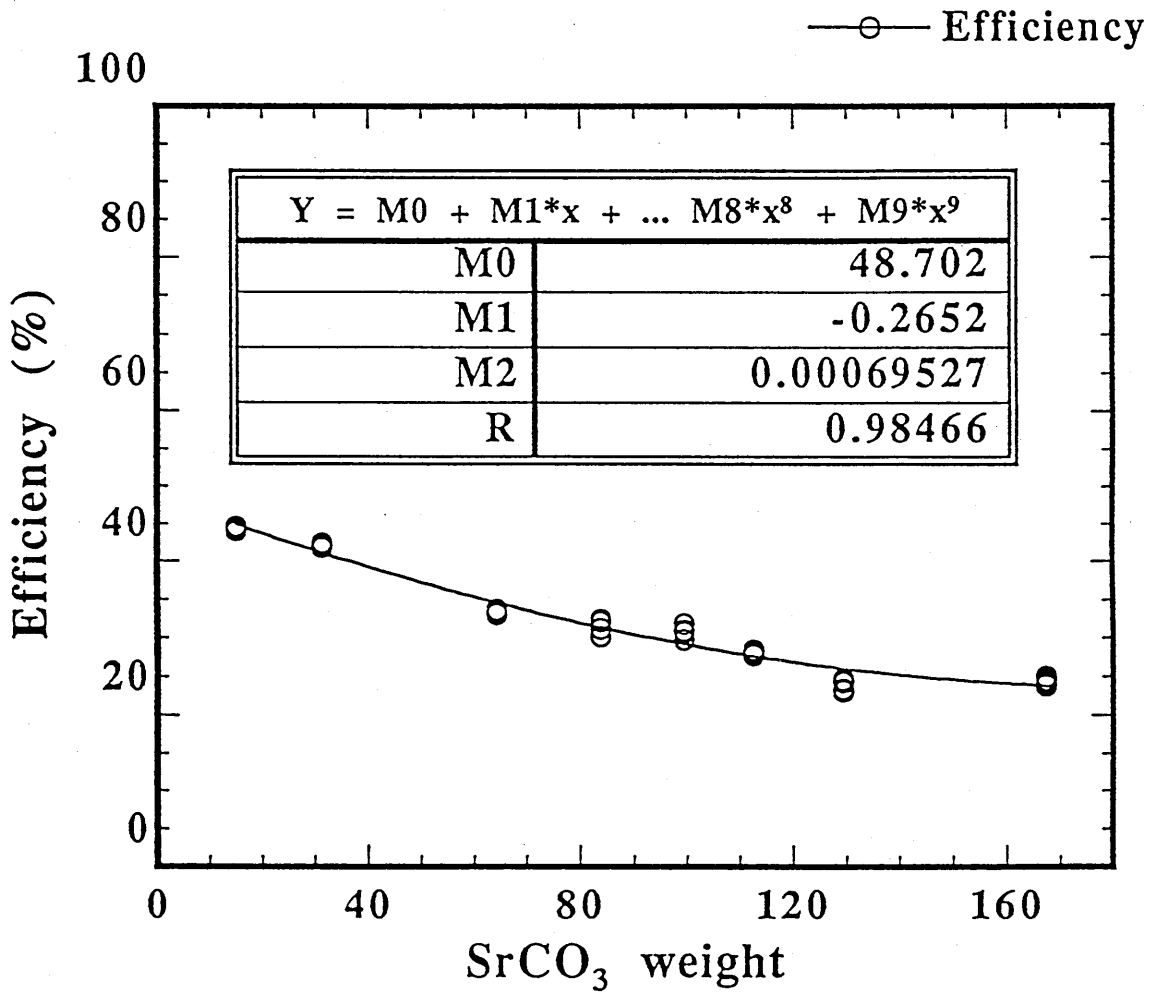
std div 27.68

Sr-90 バックグラウンド 1995年3月  
セルNo.1 (試料用)

測定番号	測定日	測定時間	count
1	95/03/09	999.9	500
2	95/03/10	999.9	472
3	95/03/10	999.9	499
4	95/03/21	999.9	515
5	95/03/21	999.9	521

average 501.4

std div 16.98



Sr-90 weight-counting efficiency curve

Appendix 4-1.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at 14 stations in Japan from 1957 to 1981 (Katsuragi, 1983).

M R I

	<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>137</sup> Cs	Rainfall amount		<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>137</sup> Cs	Rainfall amount		<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>137</sup> Cs	Rainfall amount
	mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm		mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm		mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm
1957. 1					1960. 1	0.60	0.26		58.3	1963. 1	0.19	0.11	10.3	0.2
2					2	0.82	0.22		6.8	2	0.71	0.31	12.7	21.1
3					3	0.72	0.38		61.1	3	4.85	2.58	0.9	84.7
4	1.10	0.40	10.6	107.5	4	1.33	0.44		135.7	4	3.42	1.16	6.0	79.0
5	1.96	0.56	9.4	170.6	5	0.85	0.20		126.0	5	5.58	2.66	4.0	118.7
6	4.01	0.64	12.0	309.0	6	0.64	0.20		80.9	6	1.48	4.59	1.2	239.8
7	1.03	0.37	20.8	119.3	7	0.41	0.13		20.4	7	5.10	2.24	1.9	125.6
8	0.52	0.16	5.9	43.2	8	0.24	0.24		213.3	8	7.09	1.89		416.9
9	1.94	0.42	27.4	357.2	9	0.20	0.14		147.3	9	5.33	1.66		156.5
10	0.43	0.15	3.7	120.5	10	0.14	0.08		157.6	10	4.28	1.47		315.4
11	0.27	0.08	13.2	65.7	11	0.14	0.04		92.3	11	0.53	0.23		79.1
12	0.28	0.06	5.5	97.5	12	0.10	0.06		76.2	12	0.42	0.16		19.7
						6.19	2.39		1175.9		5.229	19.06		1656.5
1958. 1	0.20	0.09	12.0	67.4	1961. 1	0.09	0.03		31.7	1964. 1	1.24	0.80		130.0
2	0.41	0.10	0.6	73.9	2	0.09	0.04		38.6	2	1.06	0.50		43.5
3	1.20	0.44	6.8	63.4	3	0.20	0.17		102.5	3	1.50	0.76		107.0
4	0.92	0.42	8.6	26.1	4	0.37	0.20		166.9	4	3.87	1.58		95.6
5	1.34	0.41	6.9	87.5	5	0.23	0.13		49.1	5	2.69	1.50		75.7
6	1.26	0.41	5.8	52.8	6	0.57	0.31		299.2	6	2.58	1.24		120.6
7	1.45	1.21	15.3	184.4	7	0.11	0.05		19.6	7	0.81	0.53		46.0
8	0.85	0.36	34.5	80.6	8	0.08	0.02		28.2	8	0.53	0.28		115.3
9	0.99	0.19	25.5	704.0	9	0.30	0.05	26.3	86.8	9	0.57	0.45		159.7
10	1.31	0.72	48.7	275.0	10	3.22	0.60	30.6	313.2	10	0.63	0.63		131.7
11	0.48	0.30	33.6	91.5	11	1.37	0.25	50	52.8	11	0.36	0.20		56.3
12	1.00	0.63	39.0	89.0	12	0.71	0.23	40	43.7	12	0.29	0.13		54.4
	11.41	5.28		1795.6		7.34	2.08		1232.3		16.13	8.60		1135.8
1959. 1	1.08	0.70	13.6	62.2	1962. 1	0.89	0.19	30.3	31.7	1965. 1	0.39	0.24		45.1
2	1.27	0.71	18.7	109.3	2	0.78	0.22	25.8	14.5	2	0.45	0.29		17.0
3	3.64	0.96	4.3	85.5	3	1.89	0.58	17.9	57.5	3	1.88	0.68		61.0
4	3.90	1.28	7.0	171.0	4	3.16	1.08	15.0	112.6	4	1.54	0.65		81.3
5	5.22	1.65	6.0	172.0	5	3.97	1.63	7.2	184.7	5	2.12	0.64		431.7
6	3.54	1.67	3.0	154.8	6	4.18	1.21	8.8	203.7	6	1.82	0.59		217.6
7	1.24	0.31		63.9	7	1.60	0.80	5.7	155.0	7	0.49	0.18		105.7
8	0.77	0.19		193.3	8	0.70	0.29	6.7	102.9	8	0.97	0.34		300.5
9	0.72	0.20		147.7	9	0.31	0.10	11.8	4.1	9	0.48	0.33		247.5
10	0.88	0.15		224.3	10	1.73	0.58	13.5	82.4	10	0.32	0.11		73.3
11	0.77	0.14		103.7	11	2.02	1.00	20.3	141.7	11	0.22	0.14		124.7
12	0.55	0.13		124.4	12	0.69	0.41	30.2	62.1	12	0.12	0.08		55.7
	23.58	8.09		1612.1		21.92	8.09		1152.9		10.60	4.27		1761.1

M R I

	<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>90</sup> Sr	Rainfall amount		<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>90</sup> Sr	Rainfall amount		<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>90</sup> Sr	Rainfall amount
	mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm		mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm		mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm
1966. 1	0.20	0.08		46.5	1969. 1	0.064	0.045		74.8	1972. 1	0.140	0.057	2.10	129.7
2	0.54	0.18		140.5	2	0.091	0.034		114.5	2	0.124	0.047	2.3	158.0
3	0.59	0.23		110.7	3	0.154	0.047		140.9	3	0.110	0.032	0.93	40.7
4	0.59	0.27		138.0	4	0.190	0.072	5.2	72.9	4	0.162	0.059	7.4	175.3
5	1.11	0.35		210.9	5	0.321	0.209	5.8	104.9	5	0.135	0.067	8.9	100.3
6	1.10	0.36		551.7	6	0.340	0.170	7.6	185.3	6	0.219	0.104	11.0	138.0
7	0.27	0.10		166.1	7	0.341	0.173	4.0	188.4	7	0.124	0.069	10.5	359.6
8	0.19	0.06		100.0	8	0.127	0.087	4.8	120.9	8	0.045	0.030	6.2	100.3
9	0.13	0.06		195.2	9	0.201	0.148	3.3	181.9	9	0.122	0.049	5.5	322.9
10	0.09	0.04		98.3	10	0.193	0.099	4.0	148.6	10	0.018	0.018	2.5	39.6
11	0.09	0.03		28.2	11	0.096	0.055	4.4	110.7	11	0.018	0.010	1.0	31.0
12	0.05	0.02		10.2	12	0.031	0.027	2.7	27.7	12	0.027	0.012	0.9	105.8
	4.95	1.78		1796.3		2.149	1.166		147.15		1.244	0.554		170.12
1967. 1	0.29	0.07		33.1	1970. 1	0.073	0.022	5.2	74.6	1973. 1	0.023	0.014	0.7	135.7
2	0.25	0.12		55.1	2	0.081	0.035	4.6	40.4	2	0.023	0.013	0.49	51.6
3	0.39	0.11		69.1	3	0.120	0.044	4.6	51.0	3	0.020	0.007	0.86	8.5
4	0.28	0.15		111.3	4	0.318	0.124	5.0	95.4	4	0.074	0.031	0.35	136.9
5	0.22	0.10		59.2	5	0.462	0.236	4.6	150.9	5	0.069	0.036	0.25	99.1
6	0.33	0.12		147.1	6	0.960	0.542	4.0	209.5	6	0.072	0.023	5.1	145.6
7	0.10	0.03		130.1	7	0.303	0.159	2.6	56.3	7	0.043	0.023	9.2	83.7
8	0.08	0.02		140.1	8	0.116	0.041	2.4	62.9	8	0.016	0.013	2.1	113.9
9	0.08	0.03		211.5	9	0.121	0.081	1.6	84.5	9	0.025	0.009	9.8	151.0
10	0.09	0.04		158.3	10	0.102	0.072	0.8	100.9	10	0.007	0.007	8.0	205.4
11	0.03	0.01		64.2	11	0.084	0.051	1.8	127.2	11	0.016	0.011	3.1	75.7
12	0.03	0.01		28.9	12	0.026	0.026	0.4	28.5	12	0.007	0.002	1.9	0
	2.18	0.81		1208.0		2.766	1.433		1082.1		0.395	0.189		1207.1
1968. 1	0.10	0.04		9.5	1971. 1	0.039	0.025	1.8	61.5	1974. 1	0.020	0.007	6.9	27.7
2	0.04	0.02		72.9	2	0.052	0.035	4.4	46.8	2	0.054	0.029	5.0	70.5
3	0.21	0.10		77.6	3	0.219	0.109	11.0	79.3	3	0.140	0.078	4.6	128.7
4	0.43	0.17		131.7	4	0.456	0.236	7.1	111.6	4	0.296	0.144	3.3	138.4
5	0.34	0.14		174.7	5	0.268	0.148	6.3	95.7	5	0.199	0.087	2.2	88.5
6	0.43	0.26		203.7	6	0.478	0.171	5.0	98.2	6	0.426	0.239	2.5	206.2
7	0.44	0.22		177.8	7	0.431	0.177	3.3	119.3	7	0.268	0.198	2.3	416.8
8	0.17	0.07		268.2	8	0.092	0.027	1.3	185.5	8	0.045	0.023	11.7	135.7
9	0.28	0.12		111.9	9	0.124	0.048	0.9	276.3	9	0.074	0.035	11.5	320.3
10	0.17	0.07		160.5	10	0.072	0.066		255.7	10	0.054	0.041	4.5	155.6
11	0.04	0.03		39.8	11	0.027	0.025	0.9	26.4	11	0.025	0.012	3.3	34.4
12	0.10	0.05		215.7	12	0.016	0.007	2.5	39.6	12	0.050	0.026	6.4	33.7
	2.75	1.29		1644.0		2.274	1.074		1395.9		1.651	0.919		1756.5

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	<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>137</sup> Cs	Rainfall amount		<sup>137</sup> Cs	<sup>90</sup> Sr	<sup>90</sup> Sr/ <sup>137</sup> Cs	Rainfall amount
	mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm		mCi/km <sup>2</sup>	mCi/km <sup>2</sup>		mm
1975. 1	0.065	0.039	4.0	59.5	1978. 1	0.021	0.020	0.9	31.0
2	0.054	0.029	3.5	84.5	2	0.058	0.071	0.4	37.5
3	0.129	0.045	2.8	93.1	3	0.117	0.078	2.4	111.0
4	0.194	0.094	2.0	163.4	4	0.262	0.154	3.7	232.2
5	0.180	0.107	1.3	159.4	5	0.215	0.130	1.5	117.9
6	0.151	0.072	0.8	125.3	6	0.112	0.059	0.45	97.4
7	0.056	0.026	0.5	170.1	7	0.020	0.013	0.68	50.0
8	0.020	0.008	0.4	54.4	8	0.012	0.005	-	24.3
9	0.027	0.009	0.5	112.7	9	0.050	0.037	0.04	112.7
10	0.057	0.027	0.3	291.6	10	0.025	0.020	0.27	153.2
11	0.057	0.025	-	252.0	11	0.032	0.018	0.32	69.5
12	0.018	0.004	-	54.5	12	0.019	0.010	74.2	27.1
	1.008	0.485		1620.5		0.943	0.615		1063.8
1976. 1	0.006	0.002	1.2	0	1979. 1	0.019	0.014	8.4	87.3
2	0.016	0.008	28.0	113.7	2	0.046	0.029	0.33	92.0
3	0.033	0.018	0.9	86.5	3	0.072	0.033	0.27	85.5
4	0.047	0.034	1.5	151.4	4	0.096	0.037	0.24	111.3
5	0.027	0.014	0.5	199.3	5	0.098	0.039	0.25	227.9
6	0.030	0.020	-	145.2	6	0.032	0.012	-	71.9
7	0.015	0.015	-	121.7	7	0.051	0.034		97.8
8	0.013	0.010	-	137.3	8	0.026	0.011		102.7
9	0.009	0.011	24.0	367.9	9	0.020	0.011		186.8
10	0.022	0.028	84.1	124.1	10	0.029	0.012		303.5
11	0.015	0.014	44.7	76.3	11	0.011	0.007		164.0
12	0.006	0.004	18.2	35.2	12	0.006	0.002		44.3
	0.239	0.178		1558.6		0.506	0.241		1575.0
1977. 1	0.007	0.003	7.3	20.7	1980. 1	0.010	0.005		97.0
2	0.015	0.006	3.5	31.5	2	0.008	0.004		26.8
3	0.049	0.024	17.1	170.2	3	0.021	0.012		164.3
4	0.055	0.044	19.4	115.7	4	0.026	0.016		124.2
5	0.053	0.029	11.7	-91.0	5	0.040	0.022		165.6
6	0.150	0.115	10.3	214.6	6	0.020	0.016		169.1
7	0.110	0.078	6.4	93.5	7	0.028	0.014		204.4
8	0.150	0.114	4.8	365.9	8	0.009	0.005		108.1
9	0.053	0.034	3.6	318.7	9	0.011	0.007		113.5
10	0.041	0.027	17.9	57.2	10	0.007	0.006		138.4
11	0.053	0.032	5.4	92.4	11	0.010	0.003		120.2
12	0.025	0.023	2.3	45.1	12	0.009	0.007		47.8
	0.761	0.529		1616.5		0.199	0.117		1479.4



	Sapporo			Sendi			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1958. 1		0.25	148		0.16	60		0.22	70		0.15	85		0.31	66			
2		0.69	145		0.21	91		0.12	67		0.11	65		0.27	60			
3		0.62	75		0.20	39		0.38	63		0.38	106		1.36	214			
4		0.12	31		0.35	35		0.77	42		1.14	250		0.96	260			
5		0.27	30		0.77	57		0.61	86		0.18	84		0.37	115			
6		0.62	60		0.86	97		0.55	63		0.25	163		0.60	143			
7		0.32	146		0.97	322		1.08	198		0.20	29		0.50	35			
8		0.41	111		0.53	143		0.30	80		0.07	108		0.48	793			
9		0.13	123		0.39	723		0.22	673		0.32	196		0.15	48			
10		0.27	110		0.64	143		0.34	276		0.30	184		0.25	103			
11		0.12	69		0.07	62		0.30	84		0.14	74		0.42	83			
12		0.08	105		0.29	129		0.31	84		0.13	65		0.34	83			
		3.90	1153		5.44	1901		5.20	1786		3.37	1409		6.01	2003			
1959. 1			108			21		0.33	59			108			207			
2		0.48	55		0.29	61		0.30	123		0.28	158		1.17	74			
3			49			116		0.40	93			101			130			
4			141			127		0.41	158			198			165			
5		0.28	64		3.69	40		1.46	202		0.81	148		0.99	130			
6			32			174		1.10	122			40			91	1.36	135	
7			59			190	1.30	0.39	72			254			505			310
8	1.75	0.56	88	1.32	0.99	273	0.64	0.13	137	1.65	0.49	258	0.32	0.16	52	0.85	0.38	154
9			163			187	0.63	0.20	162			127			140			187
10			70			91	0.37	0.12	217			118			19			139
11	0.58	0.42	111	1.58	1.13	106	0.64	0.14	118	1.33	0.79	166	0.76	0.51	100	2.14	1.53	138
12			93			41	0.42	0.10	147			105			96			142
		1.74	1033		6.10	1427		5.08	1610		2.37	1781		2.83	1709			
1960. 1			94.2	0.63	0.45	45.1	0.36	0.30	64.4			54.4	0.46	0.19	83.9	2.83	1.02	210.9
2	1.24	0.92	49.9			17.4	0.70	0.41	8.8	1.85	0.52	14.2			15.7			118.5
3			59.8	0.92	0.60	51.4	0.50	0.31	51.5			54.2	1.56	0.71	73.0	1.19	0.20	139.4
4			131.9			102.8	1.01	0.56	161.9			133.8			163.4			158.7
5	1.32	0.55	62.3	2.73	1.16	107.2	0.64	0.11	146.9	1.66	1.43	211.1	1.50	1.31	203.5	3.61	1.37	146.1
6			91.9			70.5	0.90	0.22	82.9			176.3			242.4			130.4
7			111.5			82.8	0.28	0.06	31.4			146.6			46.0			119.5
8	0.52	0.18	76.8	0.21	0.16	85.1	0.94	0.34	211.2	0.60	0.13	250.7	0.32	0.29	76.6	1.28	0.33	162.6
9			138.4			132.7	0.47	0.18	180.8			107.4			514.3			256.5
10			74.4			213.3	0.35	0.08	177.0			70.8			82.9			96.4
11	0.44	0.36	106.1	0.66	0.16	68.2	0.09	0.05	124.1	0.23	0.06	109.0	0.41	0.08	78.9	1.25	0.22	157.0
12			48.7			52.1	0.14	0.07	73.3			46.8			39.7			193.7
	3.52	2.01	1045.9	5.15	2.53	1028.6	6.38	2.69	1314.2	4.34	2.14	1375.3	4.25	2.58	1620.3	10.16	3.14	1899.2

	Sapporo			Sendai			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1961. 1			66.1			59.1	0.10	0.04	38.9			54.7			47.5			73.3
2	0.79	0.56	90.2	0.79	0.32	45.4	0.15	0.06	43.5	0.25	0.12	36.0	0.45	0.18	47.7	2.05	0.82	169.5
3			65.1			36.3	0.75	0.18	106.6			111.7			103.3			50.1
4			29.5			87.5	0.34	0.12	183.1			137.3			98.2			132.0
5	0.42	0.10	99.8	0.76	0.34	59.2	0.20	0.13	54.1	0.77	0.36	114.2	0.78	0.53	153.5	1.64	0.54	134.3
6			32.9			186.7	0.92	0.27	306.7			354.2			91.3			133.9
7	0.93	0.42	193.8	0.58	0.13	110.3	0.22	0.07	29.7	0.16	0.10	97.0	0.16	0.10	157.1	0.68	0.18	296.0
8			99.1			142.5	0.08	0.02	30.9			69.3			94.1			166.7
9	0.34	0.21	147.1	0.29	0.13	126.8	0.12	0.03	23.0	0.09	0.02	86.2	0.35	0.11	232.1	0.09	0.04	336.3
10	0.41	0.24	100.2	1.12	0.50	259.1	0.60	0.35	352.3	0.31	0.10	318.1	1.69	0.72	259.5	0.40	0.18	98.1
11	0.70	0.35	87.4	0.61	0.20	87.2	0.32	0.25	50.7	0.39	0.13	63.6	0.44	0.22	67.9	1.12	0.69	222.1
12	0.66	0.35	52.4	0.48	0.29	46.9	0.60	0.19	40.5	0.52	0.22	23.5	1.73	0.94	52.7	2.97	1.35	181.9
	4.25	2.23	1063.6	4.63	1.91	1247.0	4.40	1.71	1260.0	2.49	1.05	1464.8	5.60	2.80	1404.9	8.95	3.80	1994.2
1962. 1	1.39	0.95	132.9	0.30	0.15	107.1	0.65	0.18	40.5	0.19	0.15	31.1	5.31	1.58	117.5	1.10	0.59	144.0
2	1.55	0.92	68.4	0.64	0.31	24.9	0.53	0.10	13.5	0.51	0.38	18.6	2.80	0.81	43.1	3.27	1.31	124.4
3	2.57	0.82	91.6	0.30	0.10	35.0	0.78	0.26	65.5	1.86	0.31	35.8	3.05	0.84	47.6	3.14	1.14	93.2
4	1.19	0.39	70.0	2.44	0.73	104.7	2.57	0.89	124.2	1.76	0.34	136.6	2.85	1.35	71.8	1.95	1.03	116.5
5	1.58	0.99	20.8	4.01	1.81	97.1	3.84	2.21	211.5	2.18	0.63	127.4	0.77	0.41	145.2	2.08	0.85	99.2
6	3.37	1.34	55.8	3.19	1.25	111.4	3.86	0.93	243.0	1.66	0.84	367.1	2.64	2.11	208.3	2.86	1.10	159.2
7	0.92	0.68	117.1	3.74	2.08	170.3	1.70	1.39	168.4	1.04	0.52	195.3	1.14	0.95	451.2	1.59	0.36	87.9
8	1.87	1.31	363.8	1.49	0.87	163.8	0.29	0.05	48.1	0.15	0.11	58.3	0.47	0.33	157.8	1.19	0.75	254.1
9	1.34	0.60	124.6	1.37	0.75	107.0	0.27	0.13	4.9	0.34	0.07	44.1	0.40	0.15	161.4	1.30	0.50	138.4
10	0.88	0.48	19.0	1.21	0.67	77.6	1.46	0.23	119.8	0.65	0.19	72.5	1.23	0.44	115.8	2.56	1.43	129.9
11	1.66	0.92	71.5	0.88	0.60	46.6	2.88	1.26	151.6	0.51	0.34	81.4	1.35	0.69	132.2	3.02	2.20	130.0
12	2.49	1.18	106.4	1.52	0.80	59.8	1.50	0.50	63.2	1.43	0.47	56.3	4.89	2.70	95.7	7.60	3.37	191.3
	20.81	10.58	1241.9	21.09	10.12	1105.3	20.33	8.13	1254.2	12.28	4.35	1224.5	26.90	12.36	1747.6	31.66	14.63	1668.1
1963. 1	1.99	0.96	68.2	1.81	0.53	35.6	0.60	0.11	0.2	1.18	0.50	21.3	8.99	3.29	120.1	14.7	5.58	200.3
2	1.80	0.78	57.0	1.73	0.49	40.2	1.02	0.30	21.3	1.33	0.29	32.8	3.40	1.07	61.5	13.1	4.03	90.1
3	5.71	1.85	59.6	8.31	2.12	109.1	6.29	2.05	86.7	4.87	1.53	113.9	4.25	2.09	83.7	9.88	4.10	93.4
4	6.43	2.18	96.0	6.55	1.45	51.3	5.81	2.43	76.1	2.83	0.99	128.9	6.02	2.18	142.8	10.7	3.40	147.7
5	8.06	3.07	46.3	3.41	1.14	41.4	5.24	1.59	133.5	9.57	2.68	379.8	10.05	3.51	523.3	16.3	3.46	228.3
6	4.18	1.20	110.9	13.5	3.28	142.1	14.30	4.47	250.3	13.2	3.39	206.8	9.64	3.06	430.7	15.5	2.90	127.1
7	5.00	2.80	99.1	7.94	3.87	156.5	3.26	2.43	44.0	2.60	1.65	71.7	1.44	0.81	295.6	7.73	3.75	219.3
8	3.34	2.15	80.6	1.05	0.80	136.5	2.75	1.58	357.1	1.26	0.78	191.6	1.85	1.04	318.9	3.68	3.26	265.0
9	5.18	3.14	195.2	1.70	1.05	33.6	2.49	1.61	124.7	0.69	0.53	88.0	0.15	0.15	80.9	4.63	2.42	185.7
10	1.81	1.14	110.7	1.45	0.85	168.3	3.14	1.89	361.2	0.69	0.48	116.9	0.95	0.67	107.0	2.34	1.22	145.1
11	2.41	1.08	99.2	2.03	0.77	119.0	0.88	0.39	90.6	0.61	0.25	36.1	1.34	0.55	60.1	3.20	1.27	189.4
12	1.31	0.91	110.0	0.73	0.65	22.8	0.49	0.49	29.8	0.91	0.72	24.2	1.96	1.55	70.6	6.09	4.89	182.8
	47.22	21.26	1132.8	50.21	17.00	1056.4	46.27	19.34	1575.5	39.74	13.79	1412.0	50.04	19.97	2295.2	107.85	40.28	2074.8

	Sapporo			Sendai			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1964. 1	3.76	2.24	98.1	1.79	0.85	71.6	1.90	0.82	125.7	1.50	0.68	86.3	1.88	1.07	145.5	4.38	2.54	161.4
2	2.30	1.03	118.1	1.05	0.51	83.5	1.48	0.66	82.9	1.40	0.56	89.6	1.53	0.71	62.1	3.57	1.59	81.2
3	2.08	0.94	34.8	2.30	1.12	53.2	2.74	1.37	99.7	1.87	0.91	79.8	2.66	1.52	58.4	6.68	3.23	118.2
4	1.98	1.47	116.4	2.53	1.04	51.2	2.19	0.94	94.2	3.44	2.31	137.4	2.71	1.17	173.1	5.23	2.24	400.0
5	3.25	5.24	69.1	7.61	4.50	121.1	3.55	2.08	80.4	1.56	1.06	63.6	2.88	2.02	148.9	4.31	2.60	86.2
6	5.23	2.65	159.3	5.71	2.37	148.1	3.12	1.35	139.9	1.39	0.56	134.2	1.54	0.58	184.4	5.33	2.21	70.4
7	2.08	1.13	89.1	3.00	1.39	187.3	0.58	0.34	45.9	1.09	0.58	120.7	0.48	0.24	91.7		2.66	235.2
8	1.51	0.58	168.2	3.25	1.05	327.1	0.48	0.52	110.8	0.24	0.11	42.4	0.49	0.21	131.1	9.65	0.43	276.3
9	1.28	0.49	88.8	1.65	0.73	339.3	0.72	0.33	131.6	0.35	0.16	104.5	0.52	0.23	143.4		0.31	198.8
10	1.21	0.79	95.9	0.75	1.02	65.9	0.79	0.64	131.3	0.66	0.41	93.5	0.46	0.36	101.4		1.24	149.6
11	0.63	0.33	87.1	0.49	0.28	62.4	0.42	0.22	49.0	0.30	0.18	67.7	0.64	0.32	106.2	2.76	1.29	252.4
12	1.02	0.52	147.8	0.43	0.26	37.0	0.25	0.13	47.5	0.19	0.10	15.3	0.72	0.30	42.9	2.30	0.95	130.0
	26.33	17.41	1272.7	30.56	15.12	1547.6	18.22	9.40	1138.9	13.99	7.62	1035.0	16.51	8.73	1389.1	44.21	21.29	2159.7
1965. 1	0.84	0.67	100.7	0.53	0.27	83.6	0.88	0.35	48.0	0.44	0.24	59.0	1.20	0.88	57.8	2.96	1.86	208.2
2	0.91	0.47	166.3	0.72	0.28	13.1	0.35	0.14	10.5	0.32	0.14	29.3	0.38	0.18	31.1	3.69	1.70	91.6
3	1.05	0.66	104.4	0.76	0.33	26.1	1.05	0.42	44.5	0.80	0.21	104.4	1.27	0.55	71.6	5.04	2.19	111.1
4	0.63	0.36	57.9	0.77	0.36	41.6	1.33	0.53	87.0	1.09	0.46	104.7	1.13	0.51	142.2	1.42	0.99	79.5
5	0.55	0.14	38.8	2.21	0.40	195.4	1.73	0.44	400.0	1.29	0.34	269.4	1.08	0.35	194.3	1.60	0.33	92.5
6	0.66	0.29	39.9	1.06	0.36	125.3	1.43	0.56	219.5	0.78	0.29	192.0	0.85	0.31	244.6	1.68	0.74	111.2
7	0.49	0.15	69.7	1.09	0.31	218.4	0.34	0.18	97.0	0.43	0.14	200.4	0.33	0.15	236.5	0.99	0.29	339.6
8	0.28	0.04	26.7	0.36	0.10	105.2	0.35	0.18	234.5	0.13	0.04	8.3	0.38	0.17	134.8	0.30	0.28	38.4
9	0.82	0.50	480.4	0.49	0.25	97.1	0.55	0.22	204.5	0.28	0.23	371.4	0.24	0.20	196.9	0.62	0.42	194.2
10	0.29	0.13	57.5	0.16	0.06	20.4	0.22	0.07	47.0	0.11	0.06	74.1	0.20	0.10	38.9	0.45	0.19	140.7
11	0.42	0.21	96.0	0.27	0.12	66.5	0.14	0.14	137.5	0.20	0.12	130.3	0.24	0.15	131.5	0.83	0.40	210.9
12	0.34	0.18	97.6	0.37	0.16	87.2	0.12	0.05	66.0	0.32	0.13	53.2	0.37	0.21	60.3	1.09	0.53	268.6
	7.28	3.80	1335.9	8.79	3.00	1079.9	8.49	3.28	1596.0	6.19	2.40	1596.5	7.67	3.76	1540.5	20.67	9.92	1886.5
1966. 1	0.81	0.49	180.0	0.22	0.08	31.3	0.17	0.10	23.8	0.37	0.19	55.1	0.42	0.15	34.1	2.68	1.05	173.5
2	0.68	0.37	78.4	0.46	0.18	78.5	0.34	0.19	121.8	0.36	0.19	97.7	0.34	0.18	53.1	1.61	0.83	117.9
3	0.48	0.25	143.0	0.74	0.17	141.1	0.54	0.28	99.7	0.41	0.20	136.5	0.61	0.30	109.1	0.98	0.53	145.1
4	0.62	0.39	75.9	0.69	0.31	118.6	0.52	0.25	118.9	0.56	0.27	116.7	0.34	0.22	130.8	0.49	0.25	95.6
5	0.73	0.14	42.8	1.03	0.24	113.6	0.82	0.32	211.3	0.59	0.40	170.5	0.42	0.25	85.9	0.84	0.23	103.6
6	0.39	0.17	96.7	0.90	0.38	252.6	0.83	0.38	510.6	0.04	0.03	176.3	0.52	0.28	139.9	0.60	0.31	141.6
7	0.45	0.15	56.8	0.33	0.14	130.7	0.27	0.13	160.5	0.21	0.12	273.5	0.19	0.10	183.9	0.53	0.27	369.1
8	0.17	0.05	117.8	0.13	0.10	50.7	0.07	0.04	54.5	0.10	0.10	140.7	0.09	0.08	52.2	0.18	0.14	142.3
9	0.16	0.07	102.6	0.15	0.07	311.2	0.12	0.06	197.5	0.06	0.04	218.4	0.08	0.04	342.0	0.28	0.10	143.7
10	0.14	0.06	169.4	0.11	0.06	85.6	0.13	0.05	108.8	0.06	0.05	67.4	0.12	0.09	110.3	0.19	0.09	238.0
11	0.19	0.13	80.9	0.09	0.03	16.4	0.10	0.05	29.0	0.07	0.04	54.7	0.06	0.06	122.8	0.49	0.29	252.8
12	0.06	0.04	184.5	0.03	0.03	29.6	0.08	0.04	8.0	0.02	0.05	23.8	0.09	0.11	48.8	0.17	0.14	195.1
	4.88	2.31	1328.8	4.88	1.79	1359.9	3.99	1.89	1644.4	2.85	1.68	1531.3	3.28	1.86	1412.6	9.04	4.23	2118.3

	Sapporo			Sendi			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	$^{137}\text{Cs}$ $\text{mCi}/\text{km}^2$	$^{90}\text{Sr}$ $\text{mCi}/\text{km}^2$	Rain fall amount mm	$^{137}\text{Cs}$ $\text{mCi}/\text{km}^2$	$^{90}\text{Sr}$ $\text{mCi}/\text{km}^2$	Rain fall amount mm	$^{137}\text{Cs}$ $\text{mCi}/\text{km}^2$	$^{90}\text{Sr}$ $\text{mCi}/\text{km}^2$	Rain fall amount mm	$^{137}\text{Cs}$ $\text{mCi}/\text{km}^2$	$^{90}\text{Sr}$ $\text{mCi}/\text{km}^2$	Rain fall amount mm	$^{137}\text{Cs}$ $\text{mCi}/\text{km}^2$	$^{90}\text{Sr}$ $\text{mCi}/\text{km}^2$	Rain fall amount mm	$^{137}\text{Cs}$ $\text{mCi}/\text{km}^2$	$^{90}\text{Sr}$ $\text{mCi}/\text{km}^2$	Rain fall amount mm
1967. 1	0.05	0.04	96.9	0.07	0.04	65.3	0.07	0.01	32.0	0.06	0.08	67.0	0.09	0.09	111.9	0.49	0.40	104.2
2	0.11	0.10	37.1	0.13	0.04	11.3	0.13	0.09	43.9	0.13	0.06	41.2	0.19	0.10	50.8	0.34	0.28	61.6
3	0.20	0.09	91.9	0.21	0.06	58.6	0.27	0.09	69.4	0.24	0.10	169.3	0.37	0.14	117.7	0.45	0.17	142.6
4	0.39	0.24	63.5	0.33	0.18	98.6	0.30	0.18	103.5	0.27	0.17	239.6	0.31	0.23	215.4	0.51	0.35	168.4
5	0.28	0.13	49.2	0.32	0.12	66.5	0.19	0.10	49.6	0.13	0.11	58.9	0.12	0.07	59.3	0.59	0.30	78.5
6	0.22	0.11	119.2	0.42	0.16	165.6	0.10	0.038	109.1	0.10	0.09	109.9	0.09	0.09	60.8	0.08	0.02	62.6
7	0.15	0.065	101.5	0.14	0.062	184.3	0.07	0.034	90.7	0.12	0.05	286.7	0.09	0.04	373.4	0.16	0.06	132.0
8	0.13	0.056	91.6	0.06	0.022	85.1	0.08	0.034	67.0	0.05	0.045	46.9	0.06	0.04	69.8	0.10	0.053	225.4
9	0.10	0.036	174.5	0.08	0.044	202.3	0.01	0.01	148.8	0.04	0.02	144.1	0.05	0.02	23.6	0.11	0.034	185.7
10	0.12	0.07	99.7	0.06	0.14	140.5	0.09	0.04	214.6	0.04	0.03	138.0	0.06	0.04	100.7	0.10	0.05	186.6
11	0.08	0.02	66.3	0.05	0.01	42.3	0.03	0.01	61.4	0.04	0.01	80.4	0.04	0.01	92.9	0.17	0.03	145.7
12	0.03	0.04	114.3	0.05	0.03	34.6	0.06	0.02	33.1	0.05	0.02	28.0	0.13	0.10	60.7	0.02	0.01	205.0
	1.86	1.00	1105.7	1.92	0.90	1155.0	1.40	0.65	1023.1	1.27	0.79	1410.0	1.60	0.97	1337.0	3.12	1.75	1698.3
1968. 1	0.12	0.06	106.4	0.08	0.02	8.4	0.12	0.04	9.5	0.06	0.15	42.9	0.12	0.21	71.8	0.29	0.18	154.4
2	0.10	0.05	109.1	0.14	0.03	26.9	0.04	0.02	73.2	0.10	0.03	30.2	0.22	0.08	130.3	0.32	0.14	109.8
3	0.13	0.12	41.3	0.08	0.07	45.5	0.09	0.11	94.0	0.15	0.12	126.8	0.14	0.11	80.8	0.18	0.20	90.4
4	0.16	0.08	36.8	0.17	0.09	80.0	0.38	0.16	113.0	0.24	0.15	105.4	0.33	0.18	66.6	0.34	0.18	109.2
5	0.35	0.17	97.2	0.47	0.23	172.4	0.37	0.15	190.5	0.23	0.10	96.3	0.15	0.08	50.1	0.34	0.17	147.5
6	0.19	0.17	37.1	0.39	0.27	129.8	0.40	0.29	175.0	0.34	0.21	114.4	0.19	0.15	151.2	0.34	0.24	80.8
7	0.13	0.08	53.5	0.27	0.13	98.4	0.29	0.14	136.0	0.28	0.15	304.6	0.16	0.08	323.3	0.20	0.10	82.4
8	0.17	0.12	130.5	0.21	0.13	224.4	0.14	0.10	230.0	0.06	0.04	103.0	0.04	0.02	100.8	0.45	0.28	337.4
9	0.11	0.05	88.7	0.22	0.18	81.7	0.18	0.06	135.5	0.13	0.11	233.0	0.11	0.09	227.2	0.07	0.06	28.0
10	0.14	0.06	95.2	0.07	0.03	39.9	0.14	0.06	152.5	0.09	0.05	121.6	0.13	0.06	99.0	0.09	0.04	111.4
11	0.13	0.14	139.2	0.04	0.03	12.0	0.07	0.06	69.5	0.08	0.07	36.2	0.07	0.06	53.2	0.18	0.15	132.0
12	0.11	0.10	89.6	0.11	0.07	160.6	0.09	0.06	188.0	0.06	0.06	85.2	0.09	0.08	134.4	0.19	0.14	157.0
	1.84	1.20	1024.6	2.25	1.28	1180.0	2.31	1.25	1516.7	1.82	1.24	1399.6	1.75	1.20	1488.7	2.99	1.88	1540.3
1969. 1	0.100	0.103	70.1	0.079	0.035	24.0	0.069	0.044	35.5	0.043	0.049	53.8	0.236	0.106	94.9	0.339	0.220	117.5
2	0.108	0.053	115.0	0.101	0.028	85.1	0.195	0.052	119.0	0.087	0.036	113.3	0.115	0.051	96.9	0.084	0.111	69.4
3	0.146	0.053	43.3	0.135	0.041	78.2	0.158	0.048	121.0	0.132	0.057	163.3	0.120	0.045	80.0	0.392	0.149	75.0
4	0.073	0.035	35.9	0.123	0.057	53.4	0.186	0.084	72.5	0.202	0.118	127.8	0.205	0.123	118.3	0.354	0.178	202.5
5	0.195	0.156	82.5	0.274	0.232	112.8	0.189	0.186	88.0	0.153	0.211	100.9	0.175	0.197	98.2	0.346	0.307	124.0
6	0.189	0.133	107.8	0.206	0.166	121.9	0.198	0.131	186.5	0.249	0.159	316.9	0.202	0.124	239.6	0.217	0.124	85.0
7	0.165	0.079	63.8	0.340	0.177	148.4	0.200	0.100	104.0	0.143	0.084	152.7	0.180	0.094	274.4	0.238	0.137	200.5
8	0.233	0.188	153.6	0.221	0.173	171.2	0.099	0.098	131.5	0.036	0.011	77.9	0.118	0.082	149.2	0.144	0.130	245.5
9	0.142	0.145	108.8	0.080	0.086	34.6	0.229	0.240	238.5	0.053	0.049	32.7	0.093	0.074	102.6	0.129	0.115	143.5
10	0.122	0.062	91.6	0.098	0.072	147.8	0.103	0.070	146.0	0.047	0.025	58.9	0.078	0.023	57.1	0.132	0.075	97.0
11	0.049	0.049	72.5	0.021	0.015	38.7	0.063	0.050	78.5	0.055	0.032	56.7	0.095	0.069	78.6	0.229	0.172	151.6
12	0.069	0.111	79.3	0.038	0.030	33.3	0.037	0.031	22.0	0.065	0.076	49.8	0.160	0.147	86.8	0.285	0.304	221.5
	1.591	1.167	1024.2	1.716	1.112	1049.4	1.726	1.134	1343.0	1.265	0.907	1304.7	1.777	1.135	1476.6	2.889	2.022	1733.0

	Sapporo			Sendai			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1970. 1	0.080	0.040	74.2	0.079	0.025	47.6	0.077	0.017	58.0	0.068	0.017	44.8	0.063	0.026	36.9	0.215	0.11	142.8
2	0.090	0.079	122.2	0.097	0.043	38.5	0.090	0.047	30.5	0.093	0.048	58.4	0.084	0.054	56.6	0.402	0.26	144.5
3	0.145	0.087	150.9	0.082	0.032	44.0	0.128	0.038	50.0	0.109	0.050	50.5	0.047	0.026	25.0	0.365	0.271	93.5
4	0.113	0.054	52.8	0.140	0.059	44.5	0.265	0.127	94.0	0.198	0.102	221.5	0.355	0.179	162.3	0.246	0.102	107.0
5	0.262	0.137	40.1	0.412	0.224	148.0	0.354	0.206	161.5	0.228	0.141	98.6	0.233	0.150	192.9	0.465	0.193	49.5
6	0.316	0.217	97.2	0.194	0.117	62.5	0.597	0.387	218.0	0.409	0.249	322.9	0.371	0.213	314.6	0.300	0.171	53.0
7	0.170	0.084	74.2	0.207	0.107	70.5	0.323	0.158	118.0	0.092	0.047	135.4	0.313	0.153	139.9	0.221	0.116	58.0
8	0.126	0.051	102.6	0.157	0.059	88.0	0.049	0.026	20.0	0.059	0.029	52.3	0.082	0.032	137.3	0.318	0.076	91.0
9	0.145	0.077	205.7	0.087	0.061	97.0	0.099	0.055	86.0	0.067	0.044	205.9	0.097	0.057	184.1	0.210	0.127	185.0
10	0.078	0.080	80.3	0.071	0.049	79.5	0.119	0.092	98.5	0.057	0.047	94.5	0.095	0.090	154.3	0.250	0.196	164.0
11	0.154	0.100	81.0	0.041	0.018	125.5	0.116	0.050	144.5	0.043	0.020	107.0	0.079	0.036	60.2	0.233	0.100	96.5
12	0.068	0.056	72.0	0.038	0.017	6.5	0.059	0.031	30.5	0.022	0.018	45.0	0.109	0.076	29.6	0.160	0.159	143.0
	1.747	1.062	1153.2	1.605	0.811	852.1	2.276	1.234	1109.5	1.445	0.812	1436.8	1.928	1.092	1483.7	3.385	1.881	1327.8
1971. 1	0.098	0.042	108.5	0.062	0.014	35.0	0.132	0.026	32.0	0.039	0.017	29.0	0.136	0.048	117.5	0.162	0.051	87.5
2	0.083	0.032	49.0	0.085	0.026	51.0	0.100	0.029	38.0	0.049	0.025	32.0	0.106	0.052	59.5	0.340	0.125	115.5
3	0.150	0.082	48.5	0.115	0.057	57.0	0.212	0.103	78.5	0.327	0.201	121.5	0.301	0.162	73.5	0.353	0.179	125.5
4	0.268	0.096	20.0	0.352	0.210	97.5	0.395	0.221	123.0	0.302	0.201	107.5	0.284	0.172	38.5	0.660	0.327	104.0
5	0.178	0.127	64.5	0.270	0.202	106.0	0.27	0.150	110.0	0.448	0.375	161.0	0.201	0.152	101.0	0.600	0.441	88.0
6	0.234	0.130	81.5	0.329	0.127	50.0	0.438	0.171	91.5	0.340	0.141	211.5	0.270	0.094	141.5	0.388	0.122	155.5
7	0.255	0.112	92.0	0.376	0.147	207.0	0.437	0.184	153.5	0.168	0.074	102.5	0.198	0.077	199.0	0.440	0.198	267.5
8	0.064	0.015	40.0	0.153	0.046	245.5	0.108	0.026	202.5	0.070	0.024	143.5	0.077	0.039	210.5	0.189	0.057	270.0
9	0.076	0.023	126.5	0.162	0.060	248.0	0.130	0.047	265.5	0.061	0.032	131.5	0.056	0.033	141.5	0.098	0.051	151.0
10	0.083	0.079	181.5	0.036	0.052	126.0	0.172	0.142	258.5	0.046	0.048	109.5	0.040	0.047	30.0	0.122	0.126	154.5
11	0.077	0.047	49.5	0.031	0.009	8.0	0.035	0.032	30.5	0.052	0.024	4.0	0.068	0.059	18.0	0.116	0.062	69.0
12	0.052	0.047	94.5	0.047	0.022	24.0	0.060	0.026	55.0	0.052	0.030	59.0	0.138	0.092	66.0	0.357	0.210	197.0
	1.618	0.832	956.0	2.017	0.972	1255.0	2.489	1.157	1438.5	1.954	1.192	1212.5	1.875	1.027	1196.5	3.825	1.949	1785.0
1972. 1	0.067	0.034	136.5	0.155	0.129	125.0	0.077	0.035	113.5	0.065	0.041	65.0	0.147	0.088	194.5	0.206	0.118	155.5
2	0.193	0.143	267.5	0.089	0.049	129.0	0.108	0.053	141.5	0.063	0.036	99.5	0.099	0.068	118.0	0.170	0.114	80.5
3	0.068	0.037	50.5	0.093	0.025	54.5	0.100	0.029	44.0	0.137	0.039	112.5	0.140	0.044	145.5	0.180	0.061	162.0
4	0.143	0.061	57.0	0.117	0.068	92.5	0.105	0.035	149.0	0.070	0.048	118.0	0.083	0.071	150.0	0.082	0.066	136.5
5	0.192	0.088	115.5	0.138	0.095	179.0	0.148	0.053	108.5	0.095	0.054	97.5	0.114	0.053	123.5	0.095	0.046	130.0
6	0.172	0.077	90.5	0.117	0.061	70.0	0.140	0.070	105.5	0.103	0.053	182.0	0.103	0.068	363.5	0.153	0.084	140.5
7	0.074	0.032	26.0	0.113	0.060	154.5	0.135	0.064	301.0	0.124	0.062	335.0	0.140	0.068	537.5	0.175	0.079	247.0
8	0.076	0.026	63.5	0.064	0.022	184.5	0.043	0.021	94.0	0.066	0.023	104.5	0.050	0.028	226.0	0.056	0.031	91.0
9	0.076	0.055	284.0	0.048	0.032	245.0	0.069	0.044	281.0	0.040	0.027	217.0	0.062	0.044	185.5	0.025	0.029	144.5
10	0.048	0.056	94.5	0.022	0.026	35.0	0.040	0.043	43.5	0.039	0.037	73.5	0.041	0.059	117.0	0.068	0.109	211.0
11	0.065	0.032	248.5	0.054	0.015	144.0	0.036	0.014	43.0	0.037	0.013	77.0	0.067	0.027	141.0	0.065	0.028	149.0
12	0.045	0.037	110.0	0.033	0.013	80.0	0.034	0.016	155.5	0.035	0.017	38.5	0.045	0.031	59.5	0.103	0.065	194.0
	1.219	0.678	1544.0	1.043	0.595	1493.0	1.035	0.477	1580.0	0.874	0.450	1520.0	1.091	0.649	2361.5	1.378	0.830	1841.5

	Sapporo			Sendai			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm
1973. 1	0.002	0.002	91.5	0.031	0.019	68.5	0.053	0.024	136.0	0.034	0.013	113.0	0.042	0.037	118.0	0.050	0.046	154.0
2	0.051	0.051	66.0	0.015	0.004	10.0	0.054	0.009	45.0	0.044	0.018	45.5	0.037	0.025	42.5	0.085	0.062	107.0
3	0.050	0.028	88.0	0.040	0.016	38.5	0.073	0.025	10.0	0.054	0.022	15.0	0.067	0.032	24.5	0.077	0.040	89.5
4	0.025	0.017	47.0	0.068	0.032	77.0	0.069	0.052	143.0	0.055	0.041	213.0	0.054	0.041	223.5	0.103	0.073	110.5
5	0.152	0.099	45.5	0.027	0.021	39.5	0.070	0.045	97.5	0.083	0.054	143.5	0.034	0.036	121.5	0.065	0.055	88.5
6	0.023	0.008	8.0	0.039	0.012	65.5	0.045	0.013	121.5	0.034	0.013	79.0	0.018	0.007	170.0	0.012	0.014	25.5
7	0.037	0.005	15.5	0.018	0.004	27.0	0.037	0.007	50.0	0.063	0.028	52.0	0.061	0.033	207.5	0.031	0.010	18.5
8	0.033	0.017	277.0	0.038	0.006	50.0	0.034	0.012	50.0	0.018	0.009	66.0	0.021	0.011	84.5	0.021	0.015	165.0
9	0.012	0.006	201.0	0.025	0.013	366.0	0.004	0.003	157.0	0.021	0.009	155.5	0.016	0.010	249.0	0.033	0.011	300.0
10	0.009	0.002	174.5	0.019	0.006	93.5	0.023	0.007	208.5	0.016	0.008	200.0	0.028	0.017	85.5	0.044	0.017	259.5
11	0.005	0.002	98.0	0.013	0.007	33.0	0.033	0.017	104.5	0.031	0.021	12.5	0.019	0.024	31.0	0.072	0.064	244.0
12	0.003	0.001	64.0	0.021	0.004	12.5	0.028	0.007	0	0.029	0.012	3.0	0.046	0.035	43.0	0.076	0.084	311.0
	0.402	0.238	1176.0	0.354	0.144	881.0	0.523	0.221	1123.0	0.482	0.248	1098.0	0.443	0.308	1400.5	0.669	0.491	1873.0
1974. 1	0.061	0.042	95.0	0.050	0.019	25.0	0.041	0.013	29.0	0.028	0.011	18.0	0.023	0.010	30.0	0.096	0.053	183.5
2	0.079	0.064	71.0	0.068	0.036	59.5	0.067	0.040	71.0	0.099	0.069	96.0	0.041	0.023	59.5	0.246	0.248	128.0
3	0.072	0.065	44.5	0.114	0.065	69.0	0.124	0.066	121.5	0.143	0.077	81.5	0.161	0.089	113.5	0.208	0.125	84.5
4	0.255	0.140	100.0	0.319	0.164	99.5	0.222	0.110	143.5	0.105	0.054	218.0	0.171	0.089	108.0	0.527	0.240	105.5
5	0.191	0.092	53.0	0.324	0.166	78.5	0.167	0.076	93.5	0.079	0.056	72.5	0.126	0.081	137.5	0.255	0.139	89.0
6	0.260	0.178	95.0	0.322	0.179	214.5	0.310	0.218	205.5	0.175	0.152	191.0	0.089	0.070	83.5	0.207	0.141	109.0
7	0.102	0.072	47.5	0.234	0.144	209.5	0.224	0.166	269.5	0.085	0.064	255.5	0.090	0.090	333.0	0.227	0.192	266.5
8	0.105	0.037	156.0	0.105	0.041	109.5	0.074	0.023	232.5	0.027	0.013	150.0	0.069	0.027	102.0	0.080	0.041	175.5
9	0.081	0.038	100.0	0.116	0.047	328.0	0.059	0.032	193.0	0.052	0.031	106.5	0.032	0.023	79.0			123.0
10	0.067	0.031	137.0	0.035	0.018	57.0	0.054	0.041	165.0	0.024	0.021	172.5	0.030	0.024	159.0	0.054	0.030	186.0
11	0.062	0.033	72.5	0.015	0.009	56.0	0.041	0.021	30.5	0.026	0.012	51.5	0.034	0.021	31.0	0.138	0.097	125.0
12	0.061	0.036	89.5	0.063	0.025	19.5	0.034	0.020	39.0	0.026	0.020	60.0	0.036	0.028	66.5	0.061	0.050	76.5
	1.396	0.828	1061.0	1.765	0.913	1325.5	1.417	0.826	1593.5	0.869	0.580	1473.0	0.902	0.575	1302.5	2.099	1.356	1652.0
1975. 1	0.097	0.075	77.0	0.036	0.027	51.0	0.047	0.041	67.0	0.057	0.044	42.5	0.054	0.051	70.0	0.127	0.082	98.0
2	0.045	0.067	61.5	0.097	0.066	68.5	0.065	0.055	75.0	0.073	0.065	50.5	0.094	0.085	61.0	0.180	0.184	101.5
3	0.237	0.113	129.0	0.245	0.099	142.5	0.091	0.057	108.0	0.075	0.035	37.5	0.082	0.042	28.0	0.113	0.050	118.0
4	0.111	0.063	39.0	0.086	0.044	36.0	0.182	0.085	161.5	0.105	0.060	155.0	0.116	0.069	185.0	0.144	0.096	77.0
5	0.167	0.100	37.0	0.075	0.044	52.0	0.120	0.086	151.0	0.088	0.061	65.5	0.084	0.066	60.0	0.169	0.123	130.5
6	0.068	0.049	71.5	0.098	0.057	96.5	0.113	0.058	106.5	0.068	0.048	171.0	0.049	0.040	360.0	0.093	0.054	63.5
7	0.066	0.030	112.5	0.030	0.015	87.0	0.047	0.025	175.5	0.029	0.019	184.0	0.013	0.017	47.0	0.047	0.022	231.0
8	0.032	0.015	348.5	0.004	0.004	65.0	0.013	0.012	26.5	0.014	0.010	232.5	0.018	0.034	73.5	0.011	0.006	98.0
9	0.021	0.012	99.5	0.019	0.012	97.5	0.026	0.013	99.5	0.021	0.010	134.0	0.017	0.014	148.5	0.022	0.017	185.5
10	0.034	0.036	198.5	0.018	0.012	85.5	0.030	0.023	273.0	0.017	0.023	205.5	0.016	0.021	100.5	0.030	0.036	181.0
11	0.025	0.028	180.5	0.031	0.017	243.0	0.037	0.020	245.0	0.008	0.010	65.0	0.021	0.019	96.0	0.037	0.040	176.0
12	0.033	0.020	72.5	0.009	0.006	12.0	0.025	0.008	51.5	0.032	0.012	55.5	0.047	0.020	91.0	0.030	0.019	113.5
	0.936	0.604	1427.0	0.748	0.402	1036.5	0.796	0.480	1540.0	0.587	0.394	1398.5	0.611	0.478	1320.5	1.003	0.727	1573.5

	Sapporo			Sendai			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1976. 1	0.028	0.029	107.5	0.011	0.008	5.5	0.009	0.009	0.5	0.011	0.012	3.0	0.011	0.012	13.0	0.072	0.068	128.0
2	0.017	0.014	60.5	0.024	0.008	91.0	0.026	0.008	128.5	0.012	0.007	115.0	0.026	0.016	139.0	0.026	0.018	113.0
3	0.038	0.029	68.5	0.020	0.012	14.0	0.028	0.019	89.5	0.022	0.014	111.5	0.022	0.016	71.0	0.032	0.031	67.5
4	0.044	0.034	24.0	0.016	0.012	66.0	0.030	0.023	133.5	0.024	0.025	154.5	0.026	0.026	189.5	0.030	0.028	125.0
5	0.022	0.016	33.0	0.025	0.006	40.5	0.032	0.015	212.0	0.021	0.012	184.5	0.016	0.011	155.5	0.022	0.012	81.5
6	0.017	0.017	78.5	0.034	0.023	142.5	0.032	0.020	184.5	0.020	0.019	202.5	0.011	0.011	268.0	0.016	0.016	115.5
7	0.024	0.030	18.5	0.020	0.018	95.5	0.020	0.017	102.0	0.022	0.024	122.0	0.020	0.021	267.0	0.017	0.015	113.0
8	0.016	0.008	105.0	0.011	0.015	381.5	0.012	0.006	159.0	0.007	0.004	104.5	0.006	0.004	259.5	0.013	0.007	186.5
9	0.011	0.004	87.0	0.016	0.010	399.0	0.009	0.009	284.0	0.013	0.015	302.0	0.010	0.003	244.0	0.022	0.016	232.5
10	0.019	0.020	184.0	0.019	0.017	180.0	0.029	0.029	155.0	0.013	0.011	103.5	0.015	0.011	153.5	0.022	0.020	122.0
11	0.018	0.010	122.0	0.012	0.007	61.5	0.013	0.010	78.0	0.003	0.002	43.5	0.011	0.007	78.5	0.034	0.017	188.5
12	0.018	0.014	107.5	0.013	0.007	68.5	0.006	0.004	31.5	0.011	0.008	53.5	0.018	0.016	69.0	0.016	0.018	106.0
	0.272	0.225	996.0	0.221	0.143	1545.5	0.246	0.169	1558.0	0.179	0.153	1500.0	0.192	0.154	1907.5	0.322	0.266	1579.0
1977. 1	0.010	0.010	95.5	0.013	0.009	9.0	0.010	0.007	19.5	0.005	0.003	19.0	0.012	0.010	38.5	0.016	0.019	51.5
2	0.013	0.018	86.0	0.023	0.013	12.0	0.015	0.010	27.0	0.008	0.008	48.0	0.013	0.012	48.0	0.023	0.032	89.0
3	0.022	0.024	81.5	0.045	0.028	102.0	0.063	0.032	167.0	0.054	0.047	149.0	0.040	0.033	132.0	0.018	0.015	98.0
4	0.077	0.036	120.5	0.078	0.030	126.0	0.068	0.025	110.5	0.088	0.037	114.5	0.061	0.028	161.0	0.058	0.023	137.5
5	0.068	0.042	75.0	0.079	0.045	151.0	0.049	0.030	96.5	0.038	0.029	74.0	0.067	0.037	211.0	0.041	0.025	132.5
6	0.025	0.046	7.5	0.178	0.124	156.0	0.131	0.088	203.0	0.060	0.058	203.0	0.085	0.079	254.0	0.039	0.038	86.5
7	0.066	0.052	58.0	0.069	0.042	68.0	0.106	0.082	90.5	0.046	0.042	53.5	0.015	0.015	85.5	0.054	0.044	82.5
8	0.235	0.222	188.5	0.114	0.066	169.0	0.088	0.076	290.5	0.016	0.015	62.5	0.011	0.009	120.0	0.058	0.042	140.5
9	0.126	0.070	99.5	0.040	0.015	165.5	0.053	0.023	233.5	0.044	0.025	67.5	0.059	0.035	65.0	0.091	0.051	114.0
10	0.041	0.033	20.0	0.045	0.030	42.5	0.043	0.024	60.0	0.046	0.028	63.0	0.013	0.017	36.5	0.053	0.035	36.0
11	0.095	0.065	150.5	0.057	0.027	104.5	0.059	0.042	102.5	0.042	0.038	170.0	0.056	0.042	162.0	0.084	0.041	323.5
12	0.107	0.089	116.0	0.044	0.027	48.0	0.056	0.041	53.5	0.028	0.023	37.5	0.076	0.039	40.0	0.100	0.077	141.5
	0.885	0.707	1098.5	0.785	0.456	1153.5	0.741	0.480	1454.0	0.475	0.353	1061.5	0.508	0.356	1353.5	0.635	0.442	1433.0
1978. 1	0.181	0.074	167.5	0.062	0.024	24.0	0.038	0.017	28.0	0.103	0.046	33.0	0.026	0.054	79.5	0.063	0.025	80.5
2	0.111	0.063	117.0	0.080	0.037	24.5	0.105	0.063	32.0	0.072	0.041	9.5	0.130	0.062	55.0	0.132	0.067	51.5
3	0.328	0.187	100.0	0.256	0.096	110.5	0.149	0.085	115.5	0.092	0.060	46.0	0.072	0.060	62.0	0.230	0.077	79.0
4	0.229	0.119	52.1	0.191	0.099	102.0	0.286	0.139	187.0	0.130	0.070	63.0	0.155	0.074	57.0	0.238	0.111	56.5
5	0.156	0.079	45.0	0.189	0.085	75.0	0.285	0.135	129.5	0.127	0.065	93.0	0.053	0.032	42.5	0.376	0.180	154.5
6	0.107	0.048	13.5	0.141	0.057	160.0	0.126	0.054	108.0	0.122	0.056	257.0	0.115	0.061	353.0	0.065	0.028	217.5
7	0.104	0.056	46.0	0.024	0.013	37.5	0.038	0.021	45.5	0.062	0.027	92.0	0.040	0.016	44.5	0.039	0.024	63.5
8	0.039	0.020	69.5	0.029	0.015	101.5	0.019	0.009	21.5	0.024	0.012	10.5	0.013	0.007	99.5	0.027	0.014	140.0
9	0.038	0.027	52.5	0.070	0.036	114.0	0.051	0.030	124.0	0.016	0.020	91.0	0.028	0.027	125.5	0.017	0.009	192.5
10	0.064	0.041	123.0	0.050	0.027	70.0	0.042	0.026	147.0	0.030	0.016	94.5	0.010	0.013	84.5	0.036	0.019	185.5
11	0.050	0.038	88.4	0.027	0.012	43.0	0.055	0.025	65.0	0.019	0.014	47.0	0.021	0.014	54.5	0.072	0.039	108.5
12	0.037	0.020	101.0	0.007	0.004	5.5	0.021	0.011	27.0	0.012	0.006	47.5	0.010	0.005	80.5	0.024	0.013	176.5
	1.444	0.772	975.5	1.126	0.505	867.5	1.215	0.615	1030.0	0.809	0.433	884.0	0.673	0.425	1138.0	1.319	0.606	1506.0

	Sapporo			Sendai			Tokyo (TDMO)			Osaka			Fukuoka			Akita		
	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm
1979. 1	0.027	0.023	129.0	0.042	0.022	88.5	0.041	0.022	67.0	0.036	0.019	33.0	0.024	0.026	54.5	0.106	0.085	123.5
2	0.041	0.044	84.0	0.042	0.027	107.5	0.049	0.025	88.0	0.040	0.031	69.5	0.042	0.032	105.0	0.071	0.041	77.5
3	0.072	0.053	114.0	0.053	0.025	41.5	0.079	0.035	92.0	0.046	0.022	100.5	0.121	0.046	158.0	0.028	0.011	91.0
4	0.055	0.040	41.0	0.101	0.034	114.5	0.080	0.031	109.5	0.121	0.039	175.0	0.060	0.026	136.0	0.097	0.041	174.0
5	0.035	0.020	38.0	0.102	0.042	149.0	0.090	0.036	149.0	0.102	0.041	138.5	0.026	0.018	81.5	0.048	0.024	45.5
6	0.025	0.009	48.0	0.045	0.020	85.0	0.052	0.019	64.5	0.053	0.023	327.0	0.020	0.009	586.5	0.036	0.016	354.0
7	0.032	0.028	81.0	0.064	0.032	218.0	0.038	0.026	87.0	0.018	0.020	73.5	0.019	0.025	150.0	0.022	0.016	235.5
8	0.023	0.009	41.5	0.032	0.011	147.0	0.035	0.013	104.5	0.008	0.009	73.5	0.012	0.007	112.0	0.024	0.005	252.5
9	0.003	0.001	138.5	0.021	0.009	165.5	0.037	0.015	160.0	0.016	0.007	211.5	0.014	0.005	70.0	0.009	0.003	278.0
10	0.010	0.004	194.5	0.025	0.009	165.0	0.023	0.008	307.0	0.016	0.005	98.0	0.008	0.005	100.5	0.014	0.005	130.5
11	0.019	0.013	106.0	0.018	0.005	130.5	0.025	0.007	182.5	0.019	0.008	89.5	0.022	0.008	105.5	0.015	0.007	183.5
12	0.014	0.013	59.0	0.012	0.005	11.0	0.018	0.007	43.0	0.004	0.004	25.5	0.013	0.006	81.5	0.005	0.002	149.0
	0.356	0.257	1074.5	0.557	0.241	1423.0	0.567	0.244	1454.0	0.479	0.228	1415.0	0.381	0.213	1741.0	0.475	0.256	2094.5
1980. 1		0.013	97.0		0.009	33.0		0.006	88.5		0.005	86.5		0.008	57.0		0.033	156.5
2		0.039	145.5		0.013	25.0		0.013	26.0		0.009	35.5		0.017	40.5		0.004	54.5
3		0.013	108.0		0.013	133.5		0.009	173.5		0.010	134.0		0.005	123.5		0.009	91.0
4		0.015	86.0		0.006	96.5		0.006	129.5		0.013	166.0		0.007	101.5		0.006	152.0
5		0.041	28.0		0.022	112.0		0.029	131.5		0.053	212.0		0.029	233.0		0.020	149.0
6		0.051	125.5		0.020	90.0		0.035	172.5		0.057	157.5		0.023	201.5		0.044	130.0
7		0.016	86.0		0.022	445.5		0.013	202.5		0.045	264.5		0.005	848.5		0.018	186.5
8		0.012	126.5		0.017	331.5		0.009	168.0		0.024	195.0		0.045	846.5		0.009	239.0
9		0.009	34.5		0.010	54.5		0.012	181.5		0.012	134.0		0.016	196.5		0.020	79.0
10		0.016	128.0		0.013	161.5		0.016	136.0		0.012	193.0		0.014	200.5		0.016	153.0
11		0.005	65.0		0.004	26.5		0.006	133.5		0.004	77.5		0.005	76.0		0.008	69.5
12		0.021	144.5		0.009	129.5		0.011	34.0		0.015	46.5		0.022	50.5		0.057	197.5
		0.251	1174.5		0.158	1638.5		0.165	1577.0		0.259	1702.0		0.196	2975.5		0.244	1657.5
1981. 1		0.020	161.0		0.008	25.5		0.005	3.5		0.007	20.0		0.013	69.5		0.032	64.0
2		0.023	39.5		0.023	26.0		0.023	38.0		0.033	47.5		0.042	68.5		0.084	82.0
3		0.082	137.5		0.045	44.0		0.052	113.0		0.088	110.5		0.042	60.0		0.073	95.0
4		0.079	89.5		0.109	115.5		0.096	166.0		0.161	156.0		0.061	147.0		0.105	124.0
5																		
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	Mito				Mito				Mito				Mito		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm		<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm		<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm		<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1964. 1				1965. 1	0.56	0.25	74.2	1966. 1	0.11	0.03	27.2	1967. 1	0.06	0.07	45.4
2				2	0.25	0.10	15.2	2	0.58	0.23	137.8	2	0.19	0.11	48.7
3				3	0.61	0.31	27.4	3	0.93	0.43	138.9	3	0.39	0.15	124.2
4				4	1.15	0.53	81.3	4	0.68	0.34	122.7	4			
5				5	2.23	0.67	335.7	5	0.89	0.24	178.3	5			
6				6	1.20	0.53	225.9	6	0.74	0.46	310.0	6			
7				7	0.61	0.23	154.9	7	0.22	0.11	104.2	7			
8				8	0.44	0.20	102.3	8	0.09	0.07	25.7	8			
9		0.34	113.5	9	0.56	0.38	294.1	9	0.14	0.04	167.5	9			
10	0.65	0.67	139.5	10	0.18	0.09	70.2	10	0.16	0.07	96.3	10			
11	0.40	0.23	51.3	11	0.18	0.09	96.5	11	0.11	0.06	42.8	11			
12	0.27	0.16	49.6	12	0.38	0.17	90.4	12	0.07	0.04	11.1	12			
					8.35	3.55	1568.1		4.72	2.12	1362.5				

	Wakkanai			Wajima			Yonago		
	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm	<sup>137</sup> Cs mCi/km <sup>2</sup>	<sup>90</sup> Sr mCi/km <sup>2</sup>	Rain fall amount mm
1975. 1									
2				0.370	0.379	166.0			
3				0.212	0.100	136.0			
4	0.012	0.012	31.5	0.137	0.070	123.0	0.115	0.067	130.0
5	0.138	0.088	39.0	0.064	0.038	95.0	0.173	0.095	92.5
6	0.043	0.025	67.5	0.032	0.020	77.5	0.043	0.029	95.5
7	0.009	0.007	109.0	0.032	0.020	164.0	0.030	0.015	159.5
8	0.026	0.012	70.0	0.006	0.007	144.5	0.008	0.006	276.5
9	0.017	0.009	112.0	0.031	0.010	221.0	0.025	0.012	149.0
10	0.022	0.022	111.5	0.047	0.022	302.5	0.045	0.034	213.5
11	0.007	0.010	126.0	0.042	0.033	156.0	0.032	0.022	178.5
12	0.020	0.020	80.0	0.057	0.042	247.5	0.049	0.026	181.0
	0.294	0.202		1.030	0.739	2045.5	0.520	0.304	1947.5
1976. 1	0.016	0.010	83.5	0.104	0.083	273.5	0.039	0.032	119.5
2	0.016	0.011	43.5	0.040	0.027	212.0	0.044	0.030	187.5
3	0.016	0.017	31.5	0.030	0.024	105.0	0.030	0.032	122.0
4	0.022	0.024	35.5	0.034	0.019	158.0	0.028	0.034	168.5
5	0.019	0.016	24.0	0.013	0.005	65.5	0.026	0.014	130.5
6	0.021	0.017	36.5	0.037	0.016	197.5	0.022	0.020	118.0
7	0.017	0.016	108.5	0.008	0.007	135.5	0.014	0.028	45.0
8	0.009	0.009	140.0	0.004	0.008	430.5	0.010	0.007	463.5
9	0.011	0.003	74.5	0.036	0.015	405.0	0.007	0.003	253.0
10	0.035	0.029	149.5	0.037	0.027	158.0	0.016	0.015	120.5
11	0.029	0.013	172.0	0.056	0.034	294.5	0.030	0.017	177.0
12	0.010	0.016	116.5	0.037	0.037	253.0	0.026	0.023	101.5
	0.221	0.181	1015.5	0.436	0.302	2688.0	0.292	0.255	2006.5

	Wakkanii			Wajima			Yonago			Kushiro			Okinawa		
	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm
1977. 1	0.011	0.015	79.0	0.040	0.031	189.5	0.015	0.011	87.5	0.008	0.007	14.0	0.009	0.003	141.0
2	0.009	0.014	57.0	0.040	0.093	136.5	0.015	0.018	127.0	0.008	0.011	17.0	0.006	0.009	41.5
3	0.015	0.017	56.0	0.040	0.035	138.0	0.029	0.026	159.5	0.013	0.016	73.0	0.049	0.034	63.5
4	0.040	0.019	66.0	0.055	0.030	150.0	0.059	0.032	134.0	0.068	0.041	98.0	0.050	0.030	48.0
5	0.066	0.039	92.5	0.035	0.022	116.5	0.053	0.034	61.0	0.089	0.068	95.5	0.013	0.008	95.5
6	0.051	0.044	63.0	0.048	0.042	100.5	0.042	0.041	200.5	0.065	0.059	77.5	0.012	0.022	290.5
7	0.146	0.096	70.0	0.020	0.007	39.5	0.054	0.025	101.5	0.260	0.169	167.0	0.027	0.022	100.0
8	0.060	0.049	43.0	0.052	0.031	232.5	0.062	0.049	251.0	0.103	0.074	124.0	0.009	0.008	145.5
9	0.305	0.165	145.5	0.132	0.066	122.0	0.113	0.037	136.5	0.119	0.048	127.5	0.103	0.022	243.0
10	0.072	0.062	79.0	0.024	0.018	50.0	0.100	0.068	97.0	0.019	0.016	5.0	0.034	0.028	59.5
11	0.064	0.071	121.4	0.134	0.167	385.0	0.060	0.041	140.0	0.091	0.059	200.5	0.025	0.021	120.3
12	0.104	0.089	147.9	0.303	0.259	308.5	0.110	0.096	139.0	0.060	0.041	22.0	0.059	0.041	132.5
	0.943	0.680	1020.3	0.923	0.801	1968.5	0.712	0.478	1634.5	0.903	0.609	1021.0	0.396	0.248	1480.8
1978. 1	0.114	0.078	129.0	0.505	0.176	301.5	0.378	0.131	152.5	0.077	0.034	70.5	0.164	0.044	112.0
2	0.056	0.034	44.0	0.518	0.214	188.0	0.292	0.118	131.0	0.036	0.021	45.5	0.107	0.049	73.8
3	0.097	0.047	60.0	0.187	0.082	97.5	0.298	0.127	100.0	0.091	0.047	50.5	0.200	0.088	267.5
4	0.406	0.184	80.0	0.090	0.060	70.0	0.119	0.059	55.0	0.337	0.168	94.5	0.226	0.092	281.5
5	0.785	0.318	119.0	0.138	0.069	117.5	0.162	0.080	76.0	0.458	0.186	156.5	0.138	0.075	234.5
6	0.156	0.056	42.0	0.114	0.061	286.0	0.098	0.052	180.5	0.117	0.062	92.5	0.059	0.031	250.0
7	0.218	0.086	99.5	0.017	0.010	1.5	0.050	0.022	56.5	0.122	0.057	87.5	0.064	0.038	315.0
8	0.122	0.061	163.5	0.010	0.005	142.5	0.011	0.005	35.5	0.059	0.030	92.0	0.037	0.020	515.0
9	0.082	0.056	43.0	0.027	0.024	192.5	0.025	0.011	211.5	0.076	0.046	120.5	0.023	0.016	164.5
10	0.056	0.037	73.5	0.052	0.023	165.5	0.053	0.044	161.5	0.048	0.033	70.0	0.048	0.025	298.5
11	0.030	0.023	38.5	0.033	0.026	109.0	0.068	0.033	142.0	0.037	0.026	63.5	0.021	0.016	26.0
12	0.030	0.016	71.0	0.077	0.035	245.0	0.032	0.017	182.0	0.016	0.009	14.0	-	(0.009)	115.5
	2.152	0.996	963.0	1.768	0.785	1916.5	1.586	0.699	1484.0	1.474	0.719	957.5		0.503	2653.8
1979. 1	0.038	0.038	91.5	0.145	0.075	186.5	0.068	0.038	116.0	0.025	0.023	31.0	0.052	0.036	190.5
2	0.043	0.050	89.0	0.152	0.101	214.0	0.122	0.073	186.0	0.033	0.028	105.0	0.045	0.025	106.5
3	0.038	0.044	69.0	0.129	0.048	144.5	0.079	0.034	98.0	0.069	0.052	88.5	0.037	0.031	139.5
4	0.029	0.023	28.5	0.099	0.033	139.0	0.067	0.027	86.0	0.124	0.088	107.0	0.033	0.019	91.5
5	0.045	0.033	27.0	0.021	0.010	77.5	0.069	0.029	121.0	0.096	0.069	55.0	0.097	0.049	403.0
6	0.036	0.016	113.5	0.033	0.015	138.5	0.072	0.032	216.0	0.133	0.053	110.5	0.027	0.018	161.5
7	0.027	0.022	67.0	0.010	0.012	98.5	0.021	0.019	99.5	0.065	0.024	84.5	0.029	0.035	53.0
8	0.021	0.011	8.5	0.047	0.011	298.0	0.017	0.006	98.5	0.050	0.018	66.0	0.004	0.020	308.0
9	0.029	0.010	95.5	0.026	0.009	359.5	0.034	0.012	350.0	0.067	0.022	160.5	0.039	0.013	36.0
10	0.046	0.020	131.0	0.019	0.008	202.0	0.015	0.007	237.0	0.042	0.015	249.0	0.032	0.023	180.0
11	0.040	0.022	112.5	0.044	0.021	307.5	0.023	0.009	134.0	0.039	0.014	149.0	0.045	0.015	226.0
12	0.030	0.025	51.5	0.079	0.026	256.0	0.024	0.012	75.0	0.030	0.014	33.5	0.011	0.006	43.5
	0.422	0.314	884.5	0.804	0.369	2421.5	0.611	0.298	1817.0	0.773	0.420	1239.5	0.451	0.290	1939.0

	Wakkanai			Wajima			Yonago			Kushiro			Ishigaki		
	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	Rain fall amount mm
1980. 1		0.018	145.5		0.066	354.5		0.013	181.0		0.013	65.5		0.010	884.5
2		0.026	92.5		0.047	154.5		0.023	61.0		0.010	13.5		0.018	204.5
3		0.017	62.0		0.007	131.0		0.006	131.0		0.011	67.0		0.006	140.5
4		0.009	51.5		0.003	102.0		0.003	108.0		0.014	54.5		0.012	447.0
5		0.046	67.0		0.016	217.5		0.067	240.0		0.050	77.5		0.026	153.5
6		0.033	58.5		0.015	153.5		0.022	100.5		0.046	114.5		0.020	24.5
7		0.019	72.5		0.008	304.5		0.019	345.5		0.016	45.5		0.005	219.5
8		0.011	24.5		0.006	244.5		0.004	339.0		0.015	114.5		0.012	190.5
9		0.016	90.0		0.006	111.0		0.011	28.5		0.014	80.5		0.011	188.0
10		0.011	112.5		0.027	289.5		0.018	233.5		0.023	127.0		0.061	404.5
11		0.008	58.5		0.010	122.5		0.008	155.0		0.005	14.5		0.003	170.5
12		0.021	164.5		0.070	476.0		0.060	175.0		0.013	73.5		0.031	71.5
		0.235	999.5		0.281	2661.0		0.254	2098.0		0.230	848.0		0.215	3099.0
1981. 1		0.027	60.5		0.046	177.0		0.034	98.0		0.005	28.0		0.013	59.5
2		0.031	43.0		0.105	110.0		0.104	120.5		0.018	24.5		0.030	52.0
3		0.044	93.0		0.054	72.0		0.034	55.5		0.021	64.5		0.021	195.0
4		0.079	41.0		0.052	133.5		0.082	152.0		0.106	102.0		0.035	195.0
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Appendix 4-2.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at 12 stations in Japan from 1981 to 1983 (Katsuragi and Aoyama, 1986).

Table 1. Monthly deposition of  $^{137}\text{Cs}$  and  $^{90}\text{Sr}$  fallout, activity ratio of  $^{137}\text{Cs}/^{90}\text{Sr}$  and  $^{89}\text{Sr}/^{90}\text{Sr}$ , and precipitation amount at Meteorological Research Institute (M.R.I.) from 1980 to 1983.

		$^{137}\text{Cs}$ $\mu\text{Ci}/\text{km}^2$	$^{90}\text{Sr}$ $\mu\text{Ci}/\text{km}^2$	$^{137}\text{Cs}/^{90}\text{Sr}$	$^{89}\text{Sr}/^{90}\text{Sr}$	Rainfall amount mm
1980.	1	10.0	5.0	2.0		97.0
	2	8.0	4.0	2.0		26.8
	3	21.0	12.0	1.8		164.3
	4	26.0	16.0	1.6		124.2
	5	40.0	22.0	1.8		165.6
	6	20.0	16.0	1.3		169.1
	7	28.0	14.0	2.0		204.4
	8	9.0	5.0	1.8		108.1
	9	11.0	7.0	1.6		113.5
	10	7.0	6.0	1.2	5.8	138.4
	11	10.0	3.0	3.3	86.0	120.2
	12	9.0	7.0	1.3	30.0	47.8
	T	199.0	117.0	1.7		1479.4
1981.	1	6.0	2.0	3.0	51.0	4.9
	2	17.0	18.0	0.9	25.2	41.8
	3	87.0	66.0	1.3	20.2	121.8
	4	144.0	85.0	1.7	16.1	142.8
	5	120.0	122.0	1.0	10.1	114.6
	6	161.0	149.0	1.1	6.1	117.6
	7	41.0	36.0	1.1	3.0	41.8
	8	21.0	13.0	1.6	2.3	124.5
	9	22.0	11.0	2.0	2.0	141.2
	10	13.0	5.0	2.6		307.3
	11	8.0	4.5	1.8		58.6
	12	2.0	1.0	2.0		5.2
	T	648.0	512.5	1.3		1222.1
1982.	1	7.0	4.0	1.8		34.4
	2	15.0	7.0	2.1		35.5
	3	19.0	9.0	2.1		76.9
	4	18.0	12.0	1.5		100.0
	5	18.0	9.0	2.0		80.4
	6	14.0	11.0	1.3		156.7
	7	10.0	4.2	2.4		166.0
	8	8.0	3.3	2.4		117.0
	9	9.0	4.6	2.0		275.9
	10	6.0	3.6	1.7		141.0
	11	6.0	2.0	3.0		118.1
	12	2.0	1.0	2.0		21.6
	T	132.0	70.7	1.9		1323.5
1983.	1	1.8	1.0	1.8		22.8
	2	3.8	2.5	1.5		63.7
	3	8.0	4.2	1.9		114.3
	4	9.2	4.6	2.0		133.5
	5	2.4	3.2	0.7		76.3
	6	12.8	5.9	2.2		179.9
	7	10.1	6.0	1.7		225.1
	8	1.2	1.4	0.9		128.9
	9	2.0	2.0	1.0		234.5
	10	3.2	1.5	2.1		112.4
	11	2.5	1.8	1.4		64.0
	12	1.1	0.5	2.2		6.3
	T	58.1	34.6	1.7		1361.7

Table 2. Monthly deposition of <sup>137</sup>Cs and <sup>90</sup>Sr fallout and precipitation amount at 11 stations in Japan.

	SAPPORO			SENDAI			TOKYO			OSAKA		
	<sup>137</sup> Cs μCi/km <sup>2</sup>	<sup>90</sup> Sr μCi/km <sup>2</sup>	Rainfall amount mm	<sup>137</sup> Cs μCi/km <sup>2</sup>	<sup>90</sup> Sr μCi/km <sup>2</sup>	Rainfall amount mm	<sup>137</sup> Cs μCi/km <sup>2</sup>	<sup>90</sup> Sr μCi/km <sup>2</sup>	Rainfall amount mm	<sup>137</sup> Cs μCi/km <sup>2</sup>	<sup>90</sup> Sr μCi/km <sup>2</sup>	Rainfall amount mm
1980.												
1	23.0	13.0	97.0	25.0	9.0	33.0	18.0	6.0	88.5	8.0	5.0	86.5
2	37.0	39.0	145.5	26.0	13.0	25.0	20.0	13.0	26.0	5.0	9.0	35.5
3	15.0	13.0	108.0	40.0	13.0	133.5	16.0	9.0	173.5	21.0	10.0	134.0
4	25.0	15.0	86.0	22.0	6.0	96.0	10.0	6.0	129.5	44.0	13.0	166.0
5	31.0	41.0	28.0	33.0	22.0	112.0	52.0	29.0	131.5	57.0	53.0	212.0
6	47.0	51.0	125.5	33.0	20.0	90.0	46.0	35.0	172.5	68.0	57.0	157.5
7	30.0	16.0	86.0	66.0	22.0	445.5	26.0	13.0	202.5	67.0	45.0	264.5
8	25.0	12.0	126.5	37.0	17.0	331.5	16.0	9.0	168.0	21.0	24.0	195.0
9	14.0	9.0	34.5	10.0	10.0	54.5	19.0	12.0	181.5	15.0	12.0	134.0
10	19.0	16.0	128.0	14.0	13.0	161.5	19.0	16.0	136.0	38.0	12.0	193.0
11	17.0	5.0	65.0	13.0	4.0	26.5	20.0	6.0	133.5	15.0	4.0	77.5
12	22.0	21.0	144.5	17.0	9.0	129.5	14.0	11.0	34.0	15.0	15.0	46.5
T	305.0	251.0	1174.5	336.0	158.0	1638.5	276.0	165.0	1577.0	374.0	259.0	1702.0
1981.												
1	28.0	20.0	161.0	25.0	8.0	25.5	17.0	5.0	3.5	14.0	7.0	20.0
2	25.0	23.0	39.5	32.0	23.0	26.0	28.0	23.0	38.0	36.0	33.0	47.5
3	81.0	82.0	137.5	81.0	45.0	44.0	70.0	52.0	113.0	130.0	88.0	110.5
4	135.0	79.0	89.5	181.0	109.0	115.5	177.0	96.0	166.0	334.0	161.0	156.0
5	166.0	157.0	70.5	196.0	148.0	149.5	141.0	131.0	151.5	343.0	219.0	134.0
6	74.0	81.0	50.0	176.0	172.0	240.0	115.0	95.0	103.5	110.0	95.0	143.5
7	50.0	34.0	41.0	97.0	53.0	56.0	105.0	67.0	166.5	45.0	35.0	65.5
8	111.0	48.0	644.0	45.0	17.0	109.5	18.0	13.0	133.0	14.0	10.0	58.0
9	36.0	18.0	176.5	20.0	11.0	177.5	52.0	20.0	158.5	34.0	13.0	142.0
10	22.0	7.0	83.5	12.0	5.0	108.5	21.0	8.0	323.5	37.0	16.0	129.0
11	24.0	15.0	70.5	25.0	9.0	48.0	30.0	10.0	99.0	19.0	7.0	79.0
12	20.0	13.0	103.5	22.0	10.0	21.0	16.0	8.0	7.5	10.0	6.0	14.5
T	772.0	577.0	1667.0	912.0	610.0	1121.0	790.0	528.0	1463.5	1126.0	690.0	1099.5
1982.												
1	22.0	15.0	125.5	27.0	9.0	30.5	20.0	9.0	32.5	16.0	7.0	12.5
2	26.0	31.0	88.5	22.0	11.0	13.5	28.0	12.0	63.0	12.0	8.0	39.0
3	27.0	26.0	98.0	26.0	13.0	77.0	25.0	10.0	61.5	20.0	8.0	113.0
4	18.0	12.0	132.5	46.0	17.0	177.0	33.0	17.0	148.0	37.0	14.0	110.5
5	34.0	22.0	28.0	39.0	20.0	197.5	29.0	15.0	88.5	15.0	9.0	128.5
6	18.0	17.0	51.0	14.0	11.0	100.5	18.0	13.0	207.5	10.0	13.0	90.0
7	14.0	5.0	44.5	18.0	6.0	130.5	13.0	4.0	158.5	29.0	9.0	234.0
8	17.0	8.0	47.0	12.0	4.0	96.5	15.0	5.0	134.0	5.0	2.0	271.0
9	8.4	4.2	133.0	4.7	3.6	227.5	21.0	9.7	371.5	3.8	1.7	77.0
10	5.1	9.2	137.5	8.2	7.7	85.5	7.6	11.0	159.5	2.4	5.6	29.5
11	9.3	4.8	80.5	2.6	2.4	59.0	4.3	2.9	136.0	10.0	2.0	107.5
12	4.6	7.8	85.0	2.8	2.1	13.5	0.3	1.8	15.0	2.3	1.8	29.5
T	203.4	162.0	1051.0	222.3	106.8	1208.5	214.2	110.4	1575.5	162.5	81.1	1242.0
1983.												
1		5.2	57.5		2.8	8.0		1.8	29.5		1.6	35.0
2		12.9	127.0		4.2	70.5		4.0	50.5		2.8	28.5
3		8.3	71.5		8.3	129.0		4.6	99.0		2.1	112.5
4		17.5	24.5		4.3	81.0		5.2	114.5		7.3	135.0
5		4.2	42.0		2.8	107.5		2.8	105.5		1.9	108.5
6		5.4	59.0		6.1	138.0		6.4	198.0		5.7	170.0
7		5.6	44.5		6.5	299.0		5.3	141.5		4.1	165.5
8		3.1	96.5		3.7	144.5		1.7	168.5		1.5	50.5
9		1.9	121.5		1.8	250.0		3.0	243.0		0.7	325.5
10		1.7	86.5		2.5	51.0		3.2	129.5		1.2	86.5
11		4.1	85.5		2.0	47.5		2.3	53.5		1.6	16.0
12		5.9	61.5		2.0	3.5		2.5	7.5		1.8	8.5
T		75.8	877.5		47.0	1329.5		42.8	1340.5		32.3	1242.0

Table 2. cont.

YONAGO				KUSHIRO			ISHIGAKI			
	<sup>137</sup> Cs	<sup>90</sup> Sr	Rainfall	<sup>137</sup> Cs	<sup>90</sup> Sr	Rainfall	<sup>137</sup> Cs	<sup>90</sup> Sr	Rainfall	
	μCi/km <sup>2</sup>	μCi/km <sup>2</sup>	amount mm	μCi/km <sup>2</sup>	μCi/km <sup>2</sup>	amount mm	μCi/km <sup>2</sup>	μCi/km <sup>2</sup>	amount mm	
1980.	1	22.0	13.0	181.0	38.0	13.0	65.5	14.0	10.0	884.5
	2	33.0	23.0	61.0	5.0	10.0	13.5	31.0	18.0	204.5
	3	13.0	6.0	131.0	8.0	11.0	67.0	10.0	6.0	140.5
	4	9.0	3.0	108.0	16.0	14.0	54.5	27.0	12.0	447.0
	5	68.0	67.0	240.0	55.0	50.0	77.5	30.0	26.0	153.5
	6	26.0	22.0	100.5	46.0	46.0	114.5	9.0	20.0	24.5
	7	39.0	19.0	345.5	25.0	16.0	45.5	10.0	5.0	219.5
	8	13.0	4.0	339.0	14.0	15.0	114.5	9.0	12.0	190.5
	9	9.0	11.0	28.5	22.0	14.0	80.5	14.0	11.0	188.0
	10	16.0	18.0	233.5	21.0	23.0	127.0	136.0	61.0	404.5
	11	22.0	8.0	155.0	8.0	5.0	14.5	5.0	3.0	170.5
	12	49.0	60.0	175.0	22.0	13.0	73.5	31.0	31.0	71.5
	T	319.0	254.0	2098.0	280.0	230.0	848.0	326.0	215.0	3099.0
1981.	1	54.0	34.0	98.0	15.0	5.0	28.0	26.0	13.0	59.5
	2	97.0	104.0	120.5	18.0	18.0	24.5	26.0	30.0	52.0
	3	54.0	34.0	55.5	28.0	21.0	64.5	27.0	21.0	159.0
	4	162.0	82.0	152.0	142.0	106.0	102.0	65.0	35.0	159.0
	5	145.0	118.0	121.0	189.0	173.0	205.0	69.0	45.0	146.5
	6	112.0	83.0	407.5	174.0	175.0	180.5	56.0	68.0	144.0
	7	44.0	43.0	273.5	191.0	103.0	78.5	62.0	28.0	629.5
	8	28.0	10.0	131.0	142.0	47.0	171.5	29.0	10.0	375.0
	9	24.0	9.0	135.5	25.0	13.0	128.0	17.0	9.0	164.0
	10	22.0	11.0	127.5	20.0	8.0	152.5	2.0	1.0	36.0
	11	33.0	19.0	199.0	23.0	10.0	39.0	13.0	5.0	174.5
	12	47.0	12.0	90.5	29.0	18.0	29.5	23.0	15.0	54.0
	T	822.0	559.0	1911.5	996.0	697.0	1203.5	415.0	280.0	2153.0
1982.	1	61.0	30.0	201.5	16.0	14.0	63.0	16.0	9.0	60.0
	2	33.0	20.0	67.0	18.0	12.0	3.5	42.0	24.0	162.5
	3	29.0	21.0	124.5	30.0	25.0	60.0	15.0	9.0	29.5
	4	41.0	17.0	128.0	36.0	25.0	83.5	43.0	14.0	217.5
	5	25.0	14.0	61.0	31.0	25.0	83.5	14.0	11.0	99.0
	6	14.0	13.0	53.5	16.0	18.0	119.0	17.0	8.0	254.0
	7	4.0	1.0	107.5	17.0	8.0	117.5	13.0	7.0	120.5
	8	11.0	6.0	191.5	10.0	7.0	52.0	10.0	13.0	235.5
	9	5.3	2.4	265.5	6.1	4.5	105.5	8.2	4.0	129.5
	10	14.3	14.0	51.0	11.4	13.0	83.5	4.9	14.0	45.5
	11	5.9	4.8	83.5	4.0	5.9	92.5	10.2	3.3	329.0
	12	6.0	4.6	75.5	5.7	4.3	32.5	4.8	1.8	148.0
	T	249.5	147.8	1410.0	201.2	161.7	896.0	198.1	118.1	1830.5
1983.	1		6.8	123.0		6.8	19.0		3.7	170.5
	2		13.5	137.0		6.0	33.5		6.4	248.0
	3		9.4	204.0		8.5	80.0		9.4	326.5
	4		4.9	119.5		15.7	46.5		3.6	116.0
	5		3.3	119.5		3.0	92.5		3.3	304.0
	6		5.6	136.5		8.1	179.5		4.8	39.0
	7		3.8	333.0		8.0	123.0		6.0	13.0
	8		4.9	265.0		4.2	206.5		3.1	262.0
	9		3.1	341.5		3.1	95.5		2.5	232.0
	10		3.3	89.0		4.3	76.5		2.9	337.5
	11		10.7	177.0		5.1	54.5		3.4	77.5
	12		14.4	200.5		7.2	4.5		2.6	89.5
	T		83.7	2245.5		80.0	1011.5		51.7	2215.5

Table 2. cont.

	FUKUOKA			AKITA			WAKKANAI			WAJIMA		
	<sup>137</sup> Cs μCi·km <sup>2</sup>	<sup>90</sup> Sr μCi·km <sup>2</sup>	Rainfall amount mm	<sup>137</sup> Cs μCi·km <sup>2</sup>	<sup>90</sup> Sr μCi·km <sup>2</sup>	Rainfall amount mm	<sup>137</sup> Cs μCi·km <sup>2</sup>	<sup>90</sup> Sr μCi·km <sup>2</sup>	Rainfall amount mm	<sup>137</sup> Cs μCi·km <sup>2</sup>	<sup>90</sup> Sr μCi·km <sup>2</sup>	Rainfall amount mm
1980.												
1	17.0	8.0	57.0	40.0	33.0	156.5	17.0	18.0	145.5	103.0	66.0	354.5
2	19.0	17.0	40.5	8.0	4.0	54.5	17.0	26.0	92.5	60.0	47.0	154.5
3	11.0	5.0	123.5	15.0	9.0	91.0	16.0	17.0	62.0	20.0	7.0	131.0
4	12.0	7.0	101.5	20.0	6.0	152.0	20.0	9.0	51.5	15.0	3.0	102.0
5	28.0	29.0	233.0	28.0	20.0	149.0	67.0	46.0	67.0	47.0	16.0	217.5
6	28.0	23.0	201.5	45.0	44.0	130.0	38.0	33.0	58.5	20.0	15.0	153.5
7	6.0	5.0	848.5	33.0	18.0	186.5	28.0	19.0	72.5	15.0	8.0	304.5
8	108.0	45.0	846.5	26.0	9.0	239.0	22.0	11.0	24.5	27.0	6.0	244.5
9	12.0	16.0	196.5	17.0	20.0	79.0	18.0	16.0	90.0	8.0	6.0	111.0
10	15.0	14.0	200.5	28.0	16.0	153.0	17.0	11.0	112.5	27.0	27.0	289.5
11	12.0	5.0	76.0	17.0	8.0	69.5	23.0	8.0	58.5	27.0	10.0	122.5
12	23.0	22.0	50.5	55.0	57.0	197.5	13.0	21.0	164.5	109.0	70.0	476.0
T	291.0	196.0	2975.5	332.0	244.0	1657.5	296.0	235.0	999.5	478.0	281.0	2661.0
1981.												
1	24.0	13.0	69.5	53.0	32.0	64.0	23.0	27.0	60.5	96.0	46.0	177.0
2	51.0	42.0	68.5	79.0	84.0	82.0	21.0	31.0	43.0	108.0	105.0	110.0
3	53.0	42.0	60.0	67.0	73.0	95.0	36.0	44.0	93.0	66.0	54.0	72.0
4	139.0	61.0	147.0	195.0	105.0	124.0	137.0	79.0	41.0	117.0	52.0	133.5
5	115.0	71.0	81.5	372.0	260.0	161.0	358.0	254.0	90.5	276.0	138.0	252.0
6	163.0	68.0	446.5	348.0	212.0	212.5	47.0	46.0	48.5	193.0	157.0	296.5
7	51.0	26.0	217.5	66.0	38.0	346.5	42.0	22.0	125.5	19.0	12.0	93.0
8	24.0	12.0	179.5	153.0	66.0	322.5	180.0	59.0	217.5	32.0	13.0	259.5
9	20.0	8.0	97.5	29.0	11.0	93.0	31.0	9.0	125.5	24.0	9.0	181.0
10	12.0	6.0	157.0	47.0	16.0	214.0	22.0	11.0	161.0	23.0	12.0	193.0
11	23.0	8.0	111.0	25.0	9.0	165.5	18.0	6.0	121.0	61.0	21.0	216.0
12	23.0	10.0	49.0	26.0	14.0	246.0	45.0	30.0	103.5	48.0	29.0	218.0
T	698.0	367.0	1684.5	1460.0	920.0	2126.0	960.0	618.0	1230.5	1063.0	648.0	2201.5
1982.												
1	23.0	11.0	63.0	44.0	27.0	124.5	27.0	31.0	97.5	50.0	31.0	267.0
2	17.0	7.0	65.5	25.0	30.0	64.0	23.0	16.0	53.5	8.0	4.0	78.0
3	22.0	17.0	121.5	45.0	31.0	101.0	24.0	13.0	47.0	38.0	30.0	137.0
4	24.0	13.0	127.5	33.0	23.0	150.0	20.0	15.0	73.0	27.0	15.0	147.0
5	16.0	9.0	66.5	47.0	33.0	221.5	28.0	15.0	59.0	19.0	9.0	143.0
6	30.0	12.0	44.0	12.0	14.0	97.0	8.0	12.0	33.5	19.0	9.0	59.5
7	48.0	21.0	554.0	19.0	7.0	109.0	12.0	5.0	29.0	10.0	5.0	145.5
8	11.0	4.0	314.5	7.0	5.0	146.0	6.0	3.0	58.0	5.0	4.0	263.0
9	6.4	4.2	188.0	3.9	2.8	147.5	4.9	2.6	103.5	10.5	3.9	178.5
10	5.3	6.1	53.0	6.5	6.1	117.5	13.8	17.6	157.0	1.3	2.9	76.5
11	5.2	1.8	116.0	7.4	9.1	151.5	10.5	7.8	118.0	11.0	7.6	179.5
12	10.1	3.9	60.5	25.8	20.0	228.5	6.5	9.3	116.5	27.7	10.0	314.0
T	218.0	110.0	1774.0	275.6	208.0	1658.0	183.7	147.3	945.5	226.5	131.4	1988.5
1983.												
1		1.5	48.0		10.4	94.0		10.4	87.5		12.2	229.0
2		5.7	72.0		12.6	71.0		11.5	94.0		21.4	217.0
3		2.9	217.0		10.6	87.5		4.3	43.0		7.0	155.0
4		8.7	117.5		11.7	139.5		8.0	39.5		4.0	175.0
5		4.4	162.5		4.4	98.0		4.1	91.5		1.4	135.5
6		7.9	150.5		7.4	104.0		1.2	40.5		4.6	93.0
7		8.3	430.5		6.9	160.0		4.1	73.5		6.7	300.0
8		4.0	144.5		6.0	133.0		2.7	56.5		1.6	68.5
9		2.6	242.0		1.6	147.0		1.7	111.0		2.6	255.5
10		1.9	86.0		6.2	128.5		5.5	192.5		4.1	129.0
11		1.8	29.5		8.2	177.5		6.1	88.5		7.0	178.5
12		2.7	17.5		21.4	171.0		14.2	100.5		22.7	249.5
T		52.4	1717.5		107.4	1511.0		73.8	1018.5		95.3	2185.5



Appendix 4-3.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at Tsukuba in 1984  
(Bulletin of the Atmospheric Radioactivity, 68, JAM, 1986)

Year	Month	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$\frac{^{137}\text{Cs}}{^{90}\text{Sr}}$	$\frac{^{90}\text{Sr}}{^{90}\text{Sr}}$	Precipitation mm
1984	Jan.	0.001	0.003	2.4		31.8
	Feb.	0.001	0.003	2.8		90.8
	Mar.	0.002	0.004	1.8		56.6
	Apr.	0.002	0.003	1.6		61.7
	May	0.002	0.005	2.1		56.4
	June	0.002	0.004	2.0		199.8
	July	0.001	0.002	3.1		85.5
	Aug.	0.001	0.001	0.5		18.8
	Sept.	0.001	0.003	4.1		49.4
	Oct.	0.001	0.004	4.5		77.7
	Nov.	0.001	0.002	3.0		39.5
	Dec.	0.001	0.002	2.2		57.6
Sum		0.015	0.033	2.3		825.6

Appendix 4-4.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at Tsukuba in 1985  
(Bulletin of the Atmospheric Radioactivity, 70, JAM, 1988)

Year	Month	$^{90}\text{Sr}$ mCi/km <sup>2</sup>	$^{137}\text{Cs}$ mCi/km <sup>2</sup>	$\frac{^{137}\text{Cs}}{^{90}\text{Sr}}$	$\frac{^{89}\text{Sr}}{^{90}\text{Sr}}$	Precipitation mm
1985	Jan.	0.0004	0.0005	1.5		6.8
	Feb.	0.0007	0.0031	4.6		158.5
	Mar.	0.0013	0.0034	2.6		174.2
	Apr.	0.0010	0.0038	3.7		168.7
	May	0.0009	0.0023	2.7		83.8
	June	0.0011	0.0020	1.8		363.6
	July	0.0009	0.0005	0.5		49.3
	Aug.	0.0006	0.0005	0.8		125.7
	Sep.	0.0004	0.0006	1.4		52.3
	Oct.	0.0008	0.0002	0.2		98.6
	Nov.	0.0006	0.0007	1.0		63.2
	Dec.	0.0005	0.0008	1.5		29.5
Sum		0.0093	0.0184	2.0		1374.2

Appendix 4-5.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at Tsukuba from 1986 to 1988(Aoyama et al., 1991)

Month	$^{137}\text{Cs}$ ( $\text{Bq m}^{-2}$ )	$^{134}\text{Cs}$ ( $\text{Bq m}^{-2}$ )	$^{90}\text{Sr}$ ( $\text{Bq m}^{-2}$ )	Rainfall (mm)
<i>1986</i>				
Jan.	0.036 ± 0.010	ND	0.021 ± 0.003	12.5
Feb.	0.083 ± 0.016	ND	0.027 ± 0.004	29.5
Mar.	0.080 ± 0.016	ND	0.094 ± 0.011	184.0
Apr.	0.097 ± 0.013	ND	0.024 ± 0.002	88.0
May	131.0 ± 13.4	67.1 ± 6.9	1.235 ± 0.141	144.5
June	2.51 ± 0.27	1.24 ± 0.14	0.164 ± 0.019	108.5
July	0.783 ± 0.084	0.358 ± 0.041	0.015 ± 0.002	72.0
Aug.	0.369 ± 0.045	0.167 ± 0.025	0.018 ± 0.002	239.0
Sep.	0.087 ± 0.014	0.029 ± 0.009	0.011 ± 0.002	117.0
Oct.	0.106 ± 0.020	0.079 ± 0.020	0.016 ± 0.002	71.5
Nov.	0.071 ± 0.012	0.033 ± 0.007	0.019 ± 0.002	38.5
Dec.	0.078 ± 0.016	0.020 ± 0.014	0.010 ± 0.001	76.5
<i>1987</i>				
Jan.	0.117 ± 0.018	0.034 ± 0.010	0.013 ± 0.002	43.5
Feb.	0.137 ± 0.020	0.042 ± 0.011	0.017 ± 0.002	47.0
Mar.	0.105 ± 0.016	0.041 ± 0.010	0.014 ± 0.002	71.5
Apr.	0.158 ± 0.022	0.058 ± 0.012	0.021 ± 0.002	36.0
May	0.088 ± 0.014	0.025 ± 0.007	0.012 ± 0.002	78.0
June	0.064 ± 0.013	0.018 ± 0.008	0.010 ± 0.001	87.5
July	0.066 ± 0.011	0.016 ± 0.007	0.007 ± 0.001	113.5
Aug.	0.079 ± 0.013	0.026 ± 0.008	0.005 ± 0.001	128.5
Sep.	0.024 ± 0.006	0.008 ± 0.005	0.006 ± 0.001	227.0
Oct.	0.040 ± 0.008	ND	0.006 ± 0.001	145.5
Nov.	0.041 ± 0.009	ND	0.011 ± 0.002	71.5
Dec.	0.035 ± 0.007	0.010 ± 0.004	0.011 ± 0.001	48.5
<i>1988</i>				
Jan.	0.051 ± 0.008	0.016 ± 0.005		21.0
Feb.	0.053 ± 0.009	0.007 ± 0.004		9.5
Mar.	0.070 ± 0.011	0.020 ± 0.006		123.5
Apr.	0.088 ± 0.012	0.012 ± 0.005		79.0
May	0.076 ± 0.013	0.006 ± 0.004		138.5
June	0.052 ± 0.013	0.006 ± 0.003		195.5
July	0.028 ± 0.007	ND		171.5
Aug.	0.016 ± 0.005	ND		207.5
Sep.	0.008 ± 0.003	ND		279.5
Oct.	0.027 ± 0.007	ND		47.0
Nov.	0.025 ± 0.006	ND		22.5
Dec.	0.074 ± 0.013	0.014 ± 0.006		0.5

Note: The uncertainties are one sigma of the counting error plus 10%.  
ND = Not determined.

Appendix 4-6.

Weekly deposition of  $^{137}\text{Cs}$  and short-lived radionuclides observed at 12 stations in Japan in May 1986 (Aoyama et al., 1987).

Table 2a  
Total deposition at Wakkanai

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	0.0	8.5±1.0	3.9±0.6	128±15	ND	11.3±1.6
May 8–May 15	4.0	65.6±7.2	32.5±3.6	285±43	1±8	78.7±9.4
May 15–May 22	16.5	25.0±2.5	10.5±1.1	139±19	1±2	37.8±3.8
May 22–June 1	50.5	31.1±3.7	15.1±2.3	90±13	ND	55.8±6.7

Table 2b  
Total deposition at Kushiro

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	35.5	7.2±0.9	3.4±0.5	94±11	59± 7	12.8± 1.9
May 8–May 15	6.0	66.3±7.3	32.9±3.6	470±66	14±13	98.3±11.8
May 15–May 22	22.0	33.0±3.3	16.3±1.6	245±34	1± 4	66.9± 6.7
May 22–June 1	28.5	57.4±6.9	27.3±3.5	108±15	ND	80.3± 9.6

Table 2c  
Total deposition at Sapporo

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	12.0	8.5±1.1	4.0±0.6	192±23	17±2	9.6±1.6
May 8–May 15	0.0	29.7±3.3	14.6±1.7	262±39	ND	39.9±4.8
May 15–May 22	16.0	14.8±1.5	5.8±0.6	83±12	ND	14.2±1.4
May 22–June 1	48.0	22.7±3.0	12.1±1.8	79±11	ND	48.3±5.8

Table 2d  
Total deposition at Akita

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	22.5	172.1±18.9	86.7±9.5	2585±310	209±25	302.8±33.3
May 8–May 15	6.5	71.2± 7.8	36.2±4.0	416± 58	ND	115.0±13.8
May 15–May 22	50.5	75.3± 7.5	37.2±3.7	510± 66	12± 8	163.8±16.4
May 22–June 1	35.5	95.5±11.5	47.5±6.2	206± 29	ND	215.0±23.6

Table 2e  
Total deposition at Sendai

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	28.5	22.9± 2.5	11.1±1.3	527±63	22± 3	36.1± 4.3
May 8–May 15	57.0	102.6±11.3	51.3±5.6	533±75	17±13	159.3±17.5
May 15–May 22	21.0	10.8± 1.1	4.9±0.5	137±21	ND	10.8± 1.1
May 22–June 1	38.5	14.9± 2.2	7.3±1.3	38± 5	ND	49.6± 6.0

Table 2f  
Total deposition at Tokyo

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	35.5	99.2±10.9	50.3±5.5	1758±211	61±7	140.1±15.4
May 8–May 14	0.0	10.3± 1.3	5.3±0.8	94± 15	ND	12.3± 2.3
May 14–May 22	114.5	54.0± 5.4	26.3±2.6	246± 37	ND	46.5± 4.7
May 22–June 1	41.5	8.7± 1.3	3.8±0.8	24± 4	ND	23.3± 3.0

Table 2g  
Total deposition at Wajima

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	16.0	126.6±13.9	63.4±7.0	2281±274	136±16	196.9±21.7
May 8–May 15	11.0	141.1±15.5	71.0±7.8	566± 74	13± 7	227.8±25.1
May 15–May 22	79.5	22.0± 2.2	10.9±1.1	155± 22	8± 4	34.4± 3.4
May 22–June 1	23.5	12.6± 2.0	6.1±1.2	59± 9	ND	33.5± 4.4

Table 2h  
Total deposition at Osaka

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	91.0	23.1±2.5	11.8±1.4	570±68	156±19	44.1±5.3
May 8–May 15	25.0	30.9±3.4	15.1±1.8	180±34	ND	45.5±5.9
May 15–May 22	89.5	22.9±2.3	9.8±1.0	173±28	4±13	15.4±1.5
May 22–June 1	19.0	3.0±0.7	1.3±0.5	15± 4	ND	7.9±1.4

Table 2i  
Total deposition at Yonago

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	17.0	27.8±3.1	13.6±1.6	431±52	29±3	48.6±5.8
May 8–May 15	32.0	50.8±5.6	25.5±3.1	190±28	8±7	74.4±8.9
May 15–May 22	66.5	13.4±1.3	5.9±0.6	179±27	2±5	21.7±2.2
May 22–June 1	37.5	5.3±1.1	1.8±0.6	22± 4	ND	13.0±1.9

Table 2j  
Total deposition at Fukuoka

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	104.0	49.9±5.5	25.9±2.8	145±17	ND	83.0±10.0
May 8–May 15	61.5	21.0±2.5	10.4±1.4	102±21	ND	24.2± 3.6
May 15–May 22	45.0	6.0±0.6	2.7±0.3	45± 8	ND	4.4± 0.4
May 22–June 1	29.5	9.2±1.6	5.3±1.1	26± 6	ND	24.1± 3.4

Table 2k  
Total deposition at Ishigaki

Collection period	Precipitation, mm	$^{137}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}$ , Bq · m <sup>-2</sup>	$^{131}\text{I}$ , Bq · m <sup>-2</sup>	$^{132}\text{I}$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}$ , Bq · m <sup>-2</sup>
May 1–May 8	3.5	2.4±0.4	1.3±0.3	30± 4	11± 1	2.1±1.0
May 8–May 15	65.5	4.4±0.7	2.3±0.4	27±11	40±24	4.9±1.4
May 15–May 22	63.0	4.8±0.5	3.7±0.4	35± 5	ND	6.1±0.6
May 22–June 1	122.5	3.1±0.6	1.7±0.5	26± 6	ND	4.0±0.8



Table 3  
The cumulative deposition of the Chernobyl' radioactivity, decay corrected to April 26, 1986,  
during the period from 9:00 on May 1 through 9:00 on June 1, 1986

Station	Precipitation, mm	$^{137}\text{Cs}^*$ , Bq · m <sup>-2</sup>	$^{134}\text{Cs}^*$ , Bq · m <sup>-2</sup>	$^{131}\text{I}^*$ , Bq · m <sup>-2</sup>	$^{132}\text{I}^*$ , Bq · m <sup>-2</sup>	$^{103}\text{Ru}^*$ , Bq · m <sup>-2</sup>
Wakkanai	71.0	130.4±14.5	63.3± 7.6	5 136± 747	269±1003	288.7± 33.7
Kushiro	92.0	164.1±18.4	81.8± 9.5	7 398±1030	1874±1968	410.0± 47.6
Sapporo	76.0	75.8± 8.8	37.3± 4.9	4 423± 630	224± 27	181.1± 21.9
Akita	115.0	414.6±45.8	211.8±23.9	18 792±2437	5687±2385	1198.4±130.8
Sendai	145.0	151.4±17.1	76.0± 8.9	6 357± 873	1257± 755	377.6± 42.8
Tokyo	191.5	172.4±19.0	87.1± 9.9	8 290±1105	786± 94	307.5± 35.3
Wajima	130.0	302.6±33.7	153.8±17.3	12 110±1551	4471±1686	678.9± 75.4
Osaka	224.5	80.0± 9.0	38.6± 4.8	4 492± 710	3025±3630	157.2± 19.9
Yonago	153.0	97.4±11.1	47.5± 6.0	4 374± 635	1472±1689	222.6± 26.8
Fukuoka	240.0	86.2±10.2	45.1± 5.6	1 941± 354	ND	188.6± 24.4
Ishigaki	254.5	14.7± 2.2	9.2± 1.6	1 130± 259	2434±1371	26.6± 5.5

Appendix 4-7.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at Tsukuba in 1989  
(Bulletin of the Atmospheric Radioactivity, 68, JAM, 1986).

Year	Month	$^{90}\text{Sr}$		$^{137}\text{Cs}$		$\frac{^{137}\text{Cs}}{^{90}\text{Sr}}$	$\frac{^{89}\text{Sr}}{^{90}\text{Sr}}$	Precipitation mm
		mBq/m <sup>2</sup>	mCi/km <sup>2</sup>	mBq/m <sup>2</sup>	mCi/km <sup>2</sup>			
1989	Jan.	7	0.0002	32	0.0009	5		60.5
	Feb.	4	0.0001	91	0.0025	21		130.0
	Mar.	6	0.0002	79	0.0021	12		121.5
	Apr.	20	0.0006	69	0.0019	3		144.0
	May	11	0.0003	39	0.0010	3		133.0
	Jun.	10	0.0003	55	0.0015	5		165.5
	Jul.	2	0.0000	11	0.0003	6		122.0
	Aug.	3	0.0001	21	0.0006	7		254.0
	Sep.	4	0.0001	22	0.0006	6		125.0
	Oct.	3	0.0001	28	0.0008	10		174.0
	Nov.	5	0.0001	11	0.0003	2		62.5
	Dec.	4	0.0001	16	0.0004	4		27.5
Sum		79	0.0022	474	0.0128	6		1519.5

pendix 4-8.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at Tsukuba from 1990 to 1992 arashi et al., 1996).

Date	$^{90}\text{Sr}$ ( $\text{mBq m}^{-2}$ )	$^{137}\text{Cs}$ ( $\text{mBq m}^{-2}$ )	$^{137}\text{Cs}/^{90}\text{Sr}$	Residue ( $\text{g m}^{-2}$ )
1990 Jan.	$4.9 \pm 0.3^a$	$15 \pm 4^b$	3.0	1.4
Feb.	$8.2 \pm 2.4$	$15 \pm 4$	1.8	2.0
Mar.	$17.5 \pm 1.0$	$65 \pm 6$	3.7	5.2
Apr.	$21.2 \pm 1.0$	$30 \pm 4$	1.4	3.0
May	$10.9 \pm 1.2$	$28 \pm 3$	2.6	2.3
Jun.	$7.9 \pm 0.5$	$20 \pm 3$	2.6	1.9
Jul.	$23.9 \pm 4.7$	$29 \pm 3$	1.2	2.0
Aug.	$10.0 \pm 1.5$	$25 \pm 4$	2.5	3.9
Sep.	$9.1 \pm 0.9$	$16 \pm 2$	1.8	2.8
Oct.	$7.5 \pm 4.0$	$11 \pm 2$	1.4	1.4
Nov.	$6.7 \pm 0.8$	$17 \pm 2$	2.6	2.7
Dec.	$8.4 \pm 0.8$	$23 \pm 4$	2.7	1.8
1991 Jan.	$7.3 \pm 0.7$	$23 \pm 4$	3.2	2.9
Feb.	$15.9 \pm 0.5$	$74 \pm 4$	4.7	6.2
Mar.	$16.7 \pm 0.4$	$38 \pm 4$	2.3	2.6
Apr.	$26.1 \pm 0.9$	$43 \pm 4$	1.6	5.5
May	$27.5 \pm 0.4$	$51 \pm 5$	1.9	7.8
Jun.	$15.2 \pm 0.8$	$33 \pm 5$	2.2	4.4
Jul.	$8.3 \pm 0.2$	$23 \pm 5$	2.7	3.8
Aug.	$4.7 \pm 0.4$	$14 \pm 4$	3.0	2.4
Sep.	$11.7 \pm 0.8$	$24 \pm 3$	2.0	1.6
Oct.	$5.3 \pm 0.5$	$14 \pm 4$	2.6	2.0
Nov.	$4.6 \pm 0.2$	$7 \pm 4$	1.5	1.7
Dec.	$15.6 \pm 1.3$	$13 \pm 4$	0.9	2.0
1992 Jan.	$4.4 \pm 0.3$	$17 \pm 3$	3.8	2.0
Feb.	$5.4 \pm 0.2$	$14 \pm 3$	2.6	2.3
Mar.	$15.5 \pm 0.8$	$26 \pm 4$	1.7	3.6
Apr.	$28.5 \pm 0.2$	$78 \pm 5$	2.7	5.9
May	$13.5 \pm 0.2$	$36 \pm 3$	2.7	4.5
Jun.	$9.6 \pm 0.6$	$12 \pm 2$	1.3	2.3
Jul.	$14.1 \pm 0.1$	$26 \pm 3$	1.8	4.8
Aug.	$22.7 \pm 1.2$	$43 \pm 6$	1.9	4.9
Sep.	$11.2 \pm 0.5$	$31 \pm 6$	2.8	5.2
Oct.	$4.0 \pm 0.1$	$13 \pm 4$	3.3	2.1
Nov.	$6.9 \pm 0.3$	$8 \pm 3$	1.2	2.3
Dec.	$11.0 \pm 0.4$	$15 \pm 4$	1.4	3.0

<sup>a</sup>Standard deviations in 3-5 measurements.

<sup>b</sup>Errors are from 1 Poisson SD in  $\gamma$ -ray counting.

Appendix 4-9.

Monthly deposition of  $^{90}\text{Sr}$  and  $^{137}\text{Cs}$  observed at Tsukuba in 1993 and 1994 (Unpublished data)

試料名		$^{90}\text{Sr}$ 放射能濃度 [降下量] (mBq/m <sup>2</sup> )	
M. R. I	9301 (4m <sup>2</sup> )	$9.89 \times 10^0$	$\pm 6.74 \times 10^{-1}$
M. R. I	9302 (4m <sup>2</sup> )	$1.05 \times 10^1$	$\pm 2.70 \times 10^{-1}$
M. R. I	9303 (4m <sup>2</sup> )	$2.52 \times 10^1$	$\pm 5.92 \times 10^{-1}$
M. R. I	9304 (4m <sup>2</sup> )	$2.30 \times 10^1$	$\pm 1.36 \times 10^0$
M. R. I	9305 (4m <sup>2</sup> )	$2.15 \times 10^1$	$\pm 4.35 \times 10^{-1}$
M. R. I	9306 (4m <sup>2</sup> )	$1.59 \times 10^1$	$\pm 5.53 \times 10^{-1}$
M. R. I	9307 (1m <sup>2</sup> )	$1.11 \times 10^1$	$\pm 3.66 \times 10^{-1}$
M. R. I	9308 (4m <sup>2</sup> )	$1.21 \times 10^1$	$\pm 2.46 \times 10^{-1}$
M. R. I	9309 (1m <sup>2</sup> )	$8.02 \times 10^0$	$\pm 3.60 \times 10^{-1}$
M. R. I	9310 (1m <sup>2</sup> )	$5.35 \times 10^0$	$\pm 1.61 \times 10^{-1}$
M. R. I	9311 (4m <sup>2</sup> )	$7.46 \times 10^0$	$\pm 0.00 \times 10^0$
M. R. I	9312 (1m <sup>2</sup> )	$3.89 \times 10^0$	$\pm 6.77 \times 10^{-1}$

試料名		<sup>137</sup> Cs放射能濃度 [降下量] (mBq/m <sup>2</sup> )	
M. R. I	9301 (4m <sup>2</sup> )	1.47 × 10 <sup>1</sup>	± 2.89 × 10 <sup>0</sup>
M. R. I	9302 (4m <sup>2</sup> )	1.94 × 10 <sup>1</sup>	± 3.52 × 10 <sup>0</sup>
M. R. I	9303 (4m <sup>2</sup> )	5.56 × 10 <sup>1</sup>	± 5.93 × 10 <sup>0</sup>
M. R. I	9304 (4m <sup>2</sup> )	5.42 × 10 <sup>1</sup>	± 4.03 × 10 <sup>0</sup>
M. R. I	9305 (4m <sup>2</sup> )	7.90 × 10 <sup>1</sup>	± 5.35 × 10 <sup>0</sup>
M. R. I	9306 (4m <sup>2</sup> )	6.90 × 10 <sup>1</sup>	± 6.15 × 10 <sup>0</sup>
M. R. I	9307 (4m <sup>2</sup> )	1.09 × 10 <sup>1</sup>	± 2.82 × 10 <sup>0</sup>
M. R. I	9308 (4m <sup>2</sup> )	8.79 × 10 <sup>0</sup>	± 2.53 × 10 <sup>0</sup>
M. R. I	9309 (4m <sup>2</sup> )	9.83 × 10 <sup>0</sup>	± 3.04 × 10 <sup>0</sup>
M. R. I	9310 (4m <sup>2</sup> )	8.64 × 10 <sup>0</sup>	± 2.09 × 10 <sup>0</sup>
M. R. I	9311 (4m <sup>2</sup> )	8.73 × 10 <sup>0</sup>	± 2.46 × 10 <sup>0</sup>
M. R. I	9312 (4m <sup>2</sup> )	7.20 × 10 <sup>0</sup>	± 2.15 × 10 <sup>0</sup>

試料名		$^{90}\text{Sr}$ 放射能濃度 [降下量] (mBq/m <sup>2</sup> )	
M. R. I	9401 (4m <sup>2</sup> )	$2.01 \times 10^1$	$\pm 6.64 \times 10^{-1}$
M. R. I	9402 (4m <sup>2</sup> )	$1.59 \times 10^1$	$\pm 5.18 \times 10^{-1}$
M. R. I	9403 (4m <sup>2</sup> )	$1.16 \times 10^1$	$\pm 3.84 \times 10^{-1}$
M. R. I	9404 (4m <sup>2</sup> )	$2.00 \times 10^1$	$\pm 5.71 \times 10^{-1}$
M. R. I	9405 (4m <sup>2</sup> )	$2.61 \times 10^1$	$\pm 8.92 \times 10^{-1}$
M. R. I	9406 (4m <sup>2</sup> )	$1.58 \times 10^1$	$\pm 5.00 \times 10^{-1}$
M. R. I	9407 (4m <sup>2</sup> )	$2.29 \times 10^1$	$\pm 7.12 \times 10^{-1}$
M. R. I	9408 (4m <sup>2</sup> )	$8.65 \times 10^0$	$\pm 1.02 \times 10^{-1}$
M. R. I	9409 (4m <sup>2</sup> )	$7.44 \times 10^0$	$\pm 2.17 \times 10^{-1}$
M. R. I	9410 (4m <sup>2</sup> )	$1.56 \times 10^1$	$\pm 4.60 \times 10^{-1}$
M. R. I	9411 (4m <sup>2</sup> )	$6.98 \times 10^0$	$\pm 5.03 \times 10^{-1}$
M. R. I	9412 (2m <sup>2</sup> )	$4.39 \times 10^0$	$\pm 6.25 \times 10^{-1}$

試料名		$^{137}\text{Cs}$ 放射能濃度 [降下量] ( $\text{mBq}/\text{m}^2$ )	
M. R. I	9401 ( $4\text{m}^2$ )	$8.27 \times 10^1$	$\pm 4.14 \times 10^0$
M. R. I	9402 ( $4\text{m}^2$ )	$4.50 \times 10^1$	$\pm 7.08 \times 10^0$
M. R. I	9403 ( $4\text{m}^2$ )	$2.20 \times 10^1$	$\pm 3.62 \times 10^0$
M. R. I	9404 ( $4\text{m}^2$ )	$3.99 \times 10^1$	$\pm 4.74 \times 10^0$
M. R. I	9405 ( $4\text{m}^2$ )	$4.03 \times 10^1$	$\pm 5.73 \times 10^0$
M. R. I	9406 ( $4\text{m}^2$ )	$1.88 \times 10^1$	$\pm 3.05 \times 10^0$
M. R. I	9407 ( $4\text{m}^2$ )	$3.08 \times 10^1$	$\pm 5.20 \times 10^0$
M. R. I	9408 ( $4\text{m}^2$ )	$1.36 \times 10^1$	$\pm 2.56 \times 10^0$
M. R. I	9409 ( $4\text{m}^2$ )	$1.05 \times 10^1$	$\pm 3.45 \times 10^0$
M. R. I	9410 ( $4\text{m}^2$ )	$2.16 \times 10^1$	$\pm 7.18 \times 10^0$
M. R. I	9411 ( $4\text{m}^2$ )	$8.84 \times 10^0$	$\pm 2.41 \times 10^0$
M. R. I	9412 ( $4\text{m}^2$ )	$8.52 \times 10^0$	$\pm 4.10 \times 10^0$
M. R. I	9401 ( $1\text{m}^2$ )	$2.35 \times 10^1$	$\pm 8.26 \times 10^0$
M. R. I	9402 ( $1\text{m}^2$ )	$3.05 \times 10^1$	$\pm 1.29 \times 10^1$
M. R. I	9403 ( $1\text{m}^2$ )	$2.87 \times 10^1$	$\pm 1.07 \times 10^1$



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