

FY2014 Ibaraki Prefecture Survey Results

[Survey Results]

(1) Water

Rivers

Radioactive cesium (Cs-134, Cs-137): Not detectable at any location

Lakes and reservoirs

Radioactive cesium (Cs-134, Cs-137): Not detectable at any location

Coastal areas

Radioactive cesium (Cs-134, Cs-137): Not detectable at any location

(2) Sediments

Rivers

Cs-134: ND - 440 Bq/kg (dry)

Cs-137: 3.7 - 1,200 Bq/kg (dry)

Lakes and reservoirs

Cs-134: 1.2 - 780 Bq/kg (dry)

Cs-137: 3.7 - 2,400 Bq/kg (dry)

Coastal areas

Cs-134: ND - 16 Bq/kg (dry)

Cs-137: 1.2 - 51 Bq/kg (dry)

(3) Surrounding Environment

(a) Soil

Rivers

Cs-134: ND - 2,400 Bq/kg (dry)

Cs-137: ND - 7,200 Bq/kg (dry)

Lakes and reservoirs

Cs-134: ND - 650 Bq/kg (dry)

Cs-137: ND - 2,400 Bq/kg (dry)

(b) Ambient dose rate

Rivers

0.04 - 0.21 μ Sv/h

Lakes and reservoirs

0.04 - 0.18 μ Sv

Ibaraki River (Water) 1/5

No.	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks	
	Water area	Location	Municipality					General items					Activity concentration(Bq/L)						
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium			
				Cs-134	Cs-137														
R i v e r s	1	Satone River	Yamagoya Bridge	Kitaibaraki City	2014/5/31	Sunny	30.0	1.0	16.0	0.0	Light grayish blue	None	>100	4.2	4	0.2	<0.51 ± 0.11	<0.78 ± 0.16	
					2014/8/2	Sunny	24.8	0.3	20.2	0.0	Light grayish green	None	>100	10.5	12	0.4	<0.60 ± 0.13	<0.52 ± 0.12	
					2014/11/13	Cloudy	15.4	0.3	12.3	0.0	Light grayish yellowish green	None	>100	10.4	3	0.6	<0.70 ± 0.15	<0.59 ± 0.12	
			2015/2/5		Cloudy	5.8	0.3	6.7	0.0	Light grayish yellow green	None	>100	12.3	<1	0.7	<0.67 ± 0.15	<0.74 ± 0.15		
			2014/5/31		Sunny	28.5	0.7	18.5	0.0	Light grayish blue	None	>100	4.3	2	0.6	<0.55 ± 0.10	<0.71 ± 0.13		
			2014/8/2		Sunny	29.6	0.6	23.1	0.0	Grayish yellowish green	None	>100	16.1	4	0.5	<0.64 ± 0.14	<0.60 ± 0.12		
		2	Murayama Bridge	Kitaibaraki City	2014/11/4	Sunny	16.9	0.4	13.9	0.0	Light grayish yellow	None	>100	15.0	9	1.2	<0.65 ± 0.14	<0.60 ± 0.11	
					2015/2/5	Cloudy	6.2	0.4	5.0	0.0	Light grayish yellowish green	None	>100	19.5	<1	0.6	<0.46 ± 0.093	<0.92 ± 0.20	
					2014/5/31	Sunny	29.9	0.5	15.0	0.0	Light grayish yellow	None	>100	4.2	2	0.5	<0.60 ± 0.12	<0.62 ± 0.16	
					2014/8/2	Sunny	31.2	0.5	20.4	0.0	Dark grayish reddish yellow	None	>100	5.6	5	0.6	<0.57 ± 0.11	<0.49 ± 0.069	
					2014/11/13	Sunny	16.1	0.4	11.3	0.0	Light grayish greenish yellow	None	>100	6.2	3	0.5	<0.52 ± 0.12	<0.86 ± 0.16	
					2015/2/5	Cloudy	4.4	0.3	3.6	0.0	Light grayish yellow green	None	>100	7.1	<1	0.4	<0.71 ± 0.13	<0.78 ± 0.16	
		3	Hanazono River	Kurabeishi	Kitaibaraki City	2014/5/24	Sunny	18.8	0.5	14.7	0.0	Grayish reddish yellow	None	>100	36.6	3	1.2	<0.65 ± 0.11	<0.75 ± 0.13
						2014/8/7	Sunny	26.8	0.4	24.2	0.0	Light grayish greenish yellow	None	96	20.4	5	0.9	<0.62 ± 0.14	<0.58 ± 0.14
						2014/12/1	Cloudy	15.2	0.7	11.8	0.0	Light grayish yellow	None	>100	24.2	3	1.5	<0.57 ± 0.092	<0.63 ± 0.16
	2015/2/7					Sunny	5.2	0.6	4.1	0.0	Light grayish yellow green	None	>100	31.9	2	1.9	<0.67 ± 0.13	<0.53 ± 0.086	
	2014/5/31					Sunny	28.1	0.6	16.0	0.0	Light grayish yellowish green	None	>100	4.1	4	0.6	<0.61 ± 0.13	<0.56 ± 0.15	
	2014/8/2					Sunny	30.1	0.3	18.9	0.0	Light grayish yellow	None	>100	6.0	9	0.6	<0.59 ± 0.12	<0.58 ± 0.11	
	4	Isonare Bridge	Takahagi City	Okita River	2014/11/4	Sunny	14.1	0.4	10.7	0.0	Light grayish yellow green	None	>100	7.0	2	0.7	<0.52 ± 0.11	<0.55 ± 0.092	
					2015/2/17	Cloudy	4.0	0.6	4.8	0.0	Light grayish yellow green	None	>100	11.5	<1	0.4	<0.63 ± 0.13	<0.47 ± 0.12	
					2014/5/24	Sunny	19.9	0.8	15.3	0.0	Grayish yellowish green	None	>100	12.2	7	1.0	<0.61 ± 0.11	<0.66 ± 0.12	
					2014/8/7	Sunny	25.0	0.5	22.4	0.0	Grayish reddish yellow	None	95	11.8	9	0.9	<0.39 ± 0.11	<0.42 ± 0.088	
					2014/12/1	Cloudy	15.2	0.5	12.1	0.0	Grayish yellow	None	78	11.2	6	2.8	<0.50 ± 0.11	<0.52 ± 0.10	
					2015/2/7	Sunny	5.8	0.6	4.2	0.0	Light grayish yellow green	None	>100	12.7	5	1.6	<0.61 ± 0.12	<0.78 ± 0.19	
	5	Sakae Bridge	Takahagi City	Hananuki River	2014/5/24	Sunny	21.8	0.4	18.2	0.0	Light grayish reddish yellow	None	>100	11.8	4	1.0	<0.67 ± 0.13	<0.62 ± 0.11	
					2014/8/7	Sunny	29.0	0.3	26.7	0.0	Grayish reddish yellow	None	85	11.0	4	0.8	<0.73 ± 0.17	<0.62 ± 0.13	
					2014/11/14	Sunny	18.2	0.4	13.4	0.0	Grayish reddish yellow	None	>100	10.3	3	1.1	<0.50 ± 0.11	<0.63 ± 0.10	
					2015/2/7	Sunny	9.0	0.4	8.7	0.0	Light grayish yellow green	None	>100	12.0	1	0.6	<0.68 ± 0.14	<0.60 ± 0.11	
					2014/5/24	Sunny	22.1	0.4	20.8	0.0	Grayish yellow	None	>100	12.6	3	0.4	<0.55 ± 0.14	<0.66 ± 0.11	
					2014/8/5	Sunny	33.6	0.5	30.1	0.0	Dark grayish yellowish green	None	>100	11.5	4	0.3	<0.59 ± 0.13	<0.68 ± 0.14	
	6	Sakai Bridge	Takahagi City	Hananuki River	2014/11/6	Sunny	20.4	0.4	15.1	0.0	Grayish reddish yellow	None	>100	11.2	2	0.6	<0.50 ± 0.092	<0.52 ± 0.11	
2015/2/2					Sunny	6.1	0.4	4.7	0.0	Dark grayish reddish yellow	None	84	12.5	4	3.4	<0.67 ± 0.15	<0.49 ± 0.10		
2014/5/24					Sunny	23.4	0.5	20.8	0.0	Dark grayish yellow	None	72	13.8	22	3.7	<0.42 ± 0.096	<0.62 ± 0.11		
2014/8/5					Sunny	32.3	0.6	29.1	0.0	Grayish yellow	None	>100	14.4	12	2.9	<0.54 ± 0.14	<0.47 ± 0.096		
2014/11/6					Cloudy	17.1	0.6	15.7	0.0	Dark grayish yellow	None	88	15.1	18	5.2	<0.54 ± 0.12	<0.67 ± 0.14		
2015/2/9					Sunny	7.0	0.2	5.7	0.0	Grayish greenish yellow	None	68	13.6	17	4.5	<0.67 ± 0.12	<0.56 ± 0.14		
7	Shibanami Bridge	Takahagi City	Hananuki River	2014/5/23	Cloudy	13.8	0.6	17.2	0.0	Grayish yellow	None	>100	16.0	2	1.2	<0.64 ± 0.15	<0.56 ± 0.12		
				2014/8/22	Sunny	30.4	0.7	26.8	0.0	Grayish yellow green	None	>100	14.0	2	0.4	<0.65 ± 0.11	<0.62 ± 0.11		
				2014/11/17	Cloudy	14.8	0.6	12.9	0.0	Dark grayish greenish yellow	None	>100	16.6	<1	0.5	<0.57 ± 0.12	<0.63 ± 0.15		
				2015/2/9	Sunny	1.5	0.1	5.8	0.0	Grayish yellow green	None	>100	16.8	2	2.1	<0.51 ± 0.11	<0.66 ± 0.12		
				2014/5/23	Cloudy	19.0	1.5	19.5	0.0	Greenish yellowish light gray	None	79	21.8	1	1.8	<0.58 ± 0.12	<0.78 ± 0.18		
				2014/8/22	Sunny	32.4	0.9	27.5	0.0	Light grayish greenish yellow	None	85	14.6	4	0.6	<0.47 ± 0.10	<0.85 ± 0.16		
8	Yamagata	Hitachiomiya City	Kujigawa River	2014/11/17	Sunny	15.2	1.3	14.6	0.0	Grayish greenish yellow	None	>100	18.3	4	0.7	<0.65 ± 0.14	<0.49 ± 0.097		
				2015/2/9	Sunny	5.5	0.5	6.8	0.0	Grayish yellow green	None	68	16.8	5	2.5	<0.69 ± 0.13	<0.57 ± 0.12		
				2014/5/24	Sunny	22.1	0.4	20.8	0.0	Grayish yellow	None	>100	12.6	3	0.4	<0.55 ± 0.14	<0.66 ± 0.11		
				2014/8/5	Sunny	33.6	0.5	30.1	0.0	Dark grayish yellowish green	None	>100	11.5	4	0.3	<0.59 ± 0.13	<0.68 ± 0.14		
				2014/11/6	Sunny	20.4	0.4	15.1	0.0	Grayish reddish yellow	None	>100	11.2	2	0.6	<0.50 ± 0.092	<0.52 ± 0.11		
				2015/2/2	Sunny	6.1	0.4	4.7	0.0	Dark grayish reddish yellow	None	84	12.5	4	3.4	<0.67 ± 0.15	<0.49 ± 0.10		
9	Sakaki Bridge	Hitachi City/Tokai Village	Kujigawa River	2014/5/24	Sunny	23.4	0.5	20.8	0.0	Dark grayish yellow	None	72	13.8	22	3.7	<0.42 ± 0.096	<0.62 ± 0.11		
				2014/8/5	Sunny	32.3	0.6	29.1	0.0	Grayish yellow	None	>100	14.4	12	2.9	<0.54 ± 0.14	<0.47 ± 0.096		
				2014/11/6	Cloudy	17.1	0.6	15.7	0.0	Dark grayish yellow	None	88	15.1	18	5.2	<0.54 ± 0.12	<0.67 ± 0.14		
				2015/2/9	Sunny	7.0	0.2	5.7	0.0	Grayish greenish yellow	None	68	13.6	17	4.5	<0.67 ± 0.12	<0.56 ± 0.14		
				2014/5/23	Cloudy	13.8	0.6	17.2	0.0	Grayish yellow	None	>100	16.0	2	1.2	<0.64 ± 0.15	<0.56 ± 0.12		
				2014/8/22	Sunny	30.4	0.7	26.8	0.0	Grayish yellow green	None	>100	14.0	2	0.4	<0.65 ± 0.11	<0.62 ± 0.11		
10	Nakagawa River System	Nakagawa River	Noguchi	Hitachiomiya City/Shirosato Town	2014/11/17	Cloudy	14.8	0.6	12.9	0.0	Dark grayish greenish yellow	None	>100	16.6	<1	0.5	<0.57 ± 0.12	<0.63 ± 0.15	
					2015/2/9	Sunny	1.5	0.1	5.8	0.0	Grayish yellow green	None	>100	16.8	2	2.1	<0.51 ± 0.11	<0.66 ± 0.12	
					2014/5/23	Cloudy	19.0	1.5	19.5	0.0	Greenish yellowish light gray	None	79	21.8	1	1.8	<0.58 ± 0.12	<0.78 ± 0.18	
11	Shimokunii	Mito City	Nakagawa River	2014/8/22	Sunny	32.4	0.9	27.5	0.0	Light grayish greenish yellow	None	85	14.6	4	0.6	<0.47 ± 0.10	<0.85 ± 0.16		
				2014/11/17	Sunny	15.2	1.3	14.6	0.0	Grayish greenish yellow	None	>100	18.3	4	0.7	<0.65 ± 0.14	<0.49 ± 0.097		
				2015/2/9	Sunny	5.5	0.5	6.8	0.0	Grayish yellow green	None	68	16.8	5	2.5	<0.69 ± 0.13	<0.57 ± 0.12		

Ibaraki River (Water) 2/5

No.	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
	Water area	Location	Municipality	Water temperature (°C)					Sampling depth (m)	General items			Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Activity concentration(Bq/L)			
										Color	Odor	Transparency (cm)				Radioactive cesium			
												Cs-134	Cs-137						
12	Nakagawa River	Katsuta Bridge	Mito City/Hinuchina City	2014/5/23	Sunny	20.2	1.5	19.8	0.0	Yellowish gray	None	70	45.9	5	3.6	<0.74 ± 0.15	<0.56 ± 0.14		
				2014/8/22	Sunny	30.5	1.8	27.6	0.0	Grayish yellow	None	59	42.6	8	1.3	<0.58 ± 0.11	<0.71 ± 0.13		
13	Nakamaru River	Yanagisawa Bridge	Hitachinaka City	2014/11/17	Sunny	13.8	1.1	12.9	0.0	Grayish yellow	Dark olive	>100	237.0	1	0.7	<0.55 ± 0.10	<0.55 ± 0.092		
				2015/2/10	Sunny	9.2	2.3	7.8	0.0	Grayish yellow green	None	58	450.0	6	4.1	<0.70 ± 0.14	<0.49 ± 0.097		
14	Hinumamae River	Nagaoka Bridge	Ibaraki Town	2014/5/23	Cloudy	17.8	0.6	18.6	0.0	Grayish yellowish green	Faint drain	68	291.6	9	2.9	<0.56 ± 0.11	<0.76 ± 0.18		
				2014/8/11	Sunny	28.2	0.5	25.7	0.0	Grayish yellow	None	51	26.7	2	2.2	<0.48 ± 0.11	<0.60 ± 0.14		
15	Hinuma River	Takahashi	Ibaraki Town	2014/11/17	Sunny	13.9	1.6	13.0	0.0	Dark grayish reddish yellow	Dark olive	81	69.2	6	1.9	<0.64 ± 0.13	<0.58 ± 0.12		
				2015/2/10	Sunny	9.0	1.1	10.0	0.0	Grayish yellow	None	57	86.3	5	3.9	<0.60 ± 0.12	<0.60 ± 0.095		
16	Kansei River	Kansei Bridge	Hokota City	2014/5/22	Cloudy	17.6	0.5	17.9	0.0	Light grayish reddish yellow	None	80	28.1	28	6.1	<0.63 ± 0.14	<0.61 ± 0.16		
				2014/8/12	Cloudy	28.5	0.3	24.8	0.0	Grayish yellow	None	81	18.9	6	1.6	<0.48 ± 0.074	<0.58 ± 0.13		
17	Daiya River	Oya Bridge	Hokota City	2014/11/18	Cloudy	15.2	0.4	13.3	0.0	Grayish yellow green	None	86	29.5	3	2.4	<0.66 ± 0.14	<0.51 ± 0.11		
				2015/2/12	Sunny	9.8	0.2	8.1	0.0	Grayish yellow green	None	84	26.1	3	2.5	<0.56 ± 0.14	<0.52 ± 0.10		
18	Hinuma River	Hinuma Bridge	Mito City/Oarai Town	2014/5/22	Cloudy	18.9	0.5	18.1	0.0	Grayish yellow red	None	82	27.1	19	5.4	<0.55 ± 0.10	<0.64 ± 0.14		
				2014/8/22	Sunny	31.3	0.4	29.2	0.0	Grayish yellow red	None	>100	22.7	6	0.9	<0.64 ± 0.13	<0.56 ± 0.11		
19	Hokota River	Asahi Bridge	Hokota City	2014/11/18	Sunny	16.3	0.5	14.0	0.0	Grayish yellow red	None	>100	26.7	1	1.1	<0.65 ± 0.15	<0.73 ± 0.16		
				2015/2/12	Sunny	8.0	0.5	7.5	0.0	Light grayish yellow green	None	>100	70.4	4	1.6	<0.64 ± 0.13	<0.52 ± 0.10		
20	Tomoe River	Shimonegawa Bridge	Hokota City	2014/5/22	Sunny	22.9	0.4	18.7	0.0	Grayish yellow red	None	72	27.2	12	4.6	<0.68 ± 0.14	<0.59 ± 0.13		
				2014/8/12	Cloudy	27.4	0.4	20.3	0.0	Grayish reddish yellow	None	73	24.4	6	1.6	<0.58 ± 0.11	<0.63 ± 0.13		
21	Taiyo River	Tazuka Bridge	Namegata City	2014/11/18	Sunny	16.3	0.7	14.2	0.0	Dark grayish reddish yellow	None	68	28.5	6	2.4	<0.66 ± 0.14	<0.55 ± 0.12		
				2015/2/12	Sunny	9.0	0.2	10.1	0.0	Grayish greenish yellow	None	98	26.6	4	2.2	<0.54 ± 0.11	<0.63 ± 0.12		
22	Takeda River	Ushijima-shahi Bridge	Namegata City	2014/5/22	Sunny	21.7	0.5	16.6	0.0	Dark grayish yellow	None	70	44.2	21	4.4	<0.54 ± 0.12	<0.61 ± 0.10		
				2014/8/12	Cloudy	28.7	0.5	23.3	0.0	Dark grayish yellow	None	65	33.8	3	1.5	<0.58 ± 0.13	<0.60 ± 0.14		
23	Yamada River	Nioroshi Bridge	Namegata City	2014/11/18	Sunny	15.2	0.3	14.5	0.0	Dark grayish yellow	None	80	51.8	8	2.6	<0.70 ± 0.15	<0.47 ± 0.088		
				2015/2/12	Sunny	9.8	0.6	11.3	0.0	Grayish yellow	None	79	36.2	3	2.8	<0.58 ± 0.13	<0.74 ± 0.19		
24	Kurakawa River	Kurakawa Bridge	Namegata City	2014/5/23	Sunny	20.2	0.3	19.3	0.0	Grayish yellow	None	52	1,335.0	9	4.0	<0.52 ± 0.14	<0.63 ± 0.14		
				2014/8/22	Sunny	28.2	0.3	27.7	0.0	Grayish yellow green	None	38	1,970.0	8	0.8	<0.52 ± 0.14	<0.78 ± 0.15		
25	Gantsu River	JA Yokohashi Bridge	Namegata City	2014/11/18	Sunny	15.1	0.4	14.1	0.0	Dark grayish yellow	None	71	1,430.0	11	7.0	<0.57 ± 0.13	<0.62 ± 0.14		
				2015/2/10	Sunny	7.5	0.4	6.7	0.0	Grayish yellow	None	57	1,720.0	6	5.2	<0.61 ± 0.14	<0.62 ± 0.11		
19	Tomoe River	Shimonegawa Bridge	Hokota City	2014/5/28	Sunny	22.6	1.2	19.6	0.0	Grayish reddish yellow	None	69	25.6	18	2.3	<0.62 ± 0.16	<0.90 ± 0.15		
				2014/8/18	Cloudy	27.9	0.8	22.9	0.0	Grayish reddish yellow	None	96	36.9	3	0.6	<0.78 ± 0.15	<0.66 ± 0.15		
20	Taiyo River	Tazuka Bridge	Namegata City	2014/11/19	Sunny	14.6	0.8	12.3	0.0	Grayish reddish yellow	None	>100	38.3	4	1.4	<0.64 ± 0.13	<0.66 ± 0.13		
				2015/2/16	Sunny	7.2	1.5	7.3	0.0	Dark grayish greenish yellow	None	35	51.0	9	1.8	<0.67 ± 0.14	<0.67 ± 0.14		
21	Takeda River	Ushijima-shahi Bridge	Namegata City	2014/5/28	Sunny	23.9	1.4	19.9	0.0	Grayish reddish yellow	None	60	27.6	13	4.4	<0.52 ± 0.11	<0.68 ± 0.19		
				2014/8/18	Cloudy	27.8	0.5	22.3	0.0	Grayish reddish yellow	None	>100	26.3	8	0.6	<0.60 ± 0.13	<0.66 ± 0.12		
22	Yamada River	Nioroshi Bridge	Namegata City	2014/11/19	Sunny	14.3	0.3	13.6	0.0	Grayish reddish yellow	None	>100	33.1	4	1.7	<0.61 ± 0.14	<0.66 ± 0.12		
				2015/2/16	Sunny	7.9	0.5	8.0	0.0	Grayish yellow green	None	>100	30.3	3	1.4	<0.57 ± 0.13	<0.58 ± 0.11		
23	Kurakawa River	Kurakawa Bridge	Namegata City	2014/5/28	Sunny	25.5	0.2	18.7	0.0	Dark grayish reddish yellow	None	65	10.8	10	3.9	<0.71 ± 0.13	<0.68 ± 0.13		
				2014/8/18	Sunny	30.2	0.2	25.5	0.0	Light grayish yellow	None	68	24.1	11	1.3	<0.55 ± 0.12	<0.62 ± 0.14		
24	Gantsu River	JA Yokohashi Bridge	Namegata City	2014/11/19	Sunny	12.9	0.2	11.7	0.0	Light grayish yellow	None	>100	30.3	4	1.6	<0.47 ± 0.096	<0.56 ± 0.12		
				2015/2/16	Sunny	7.8	0.3	9.5	0.0	Light grayish yellow green	None	>100	26.9	1	1.1	<0.51 ± 0.11	<0.60 ± 0.10		
25	Takeda River	Ushijima-shahi Bridge	Namegata City	2014/5/28	Sunny	26.8	0.5	20.5	0.0	Light grayish yellow	None	53	25.6	15	3.2	<0.56 ± 0.14	<0.68 ± 0.14		
				2014/8/18	Sunny	29.4	0.6	23.2	0.0	Light grayish yellow	None	>100	27.7	8	0.9	<0.62 ± 0.13	<0.78 ± 0.13		
26	Yamada River	Nioroshi Bridge	Namegata City	2014/11/19	Sunny	12.1	0.3	10.8	0.0	Light grayish yellow	None	82	34.4	4	1.6	<0.55 ± 0.12	<0.74 ± 0.12		
				2015/2/10	Sunny	10.4	0.2	8.6	0.0	Light grayish yellow	None	70	29.0	1	1.5	<0.69 ± 0.14	<0.71 ± 0.14		
27	Kurakawa River	Kurakawa Bridge	Namegata City	2014/5/28	Sunny	27.1	0.4	25.2	0.0	Light grayish yellow	None	51	25.2	20	6.3	<0.78 ± 0.15	<0.68 ± 0.13		
				2014/8/18	Cloudy	26.9	0.3	22.1	0.0	Grayish yellow	None	57	28.4	22	6.7	<0.47 ± 0.13	<0.62 ± 0.12		
28	Gantsu River	JA Yokohashi Bridge	Namegata City	2014/11/19	Sunny	12.8	0.2	11.7	0.0	Dark grayish yellow red	None	42	32.9	14	6.5	<0.64 ± 0.15	<0.62 ± 0.12		
				2015/2/10	Sunny	11.8	0.2	9.0	0.0	Dark grayish yellow red	None	53	27.6	12	9.9	<0.64 ± 0.14	<0.42 ± 0.081		
29	Kurakawa River	Kurakawa Bridge	Namegata City	2014/5/28	Sunny	27.6	0.7	26.7	0.0	Grayish reddish yellow	None	37	23.3	26	7.9	<0.59 ± 0.12	<0.68 ± 0.12		
				2014/8/19	Sunny	33.1	0.5	28.7	0.0	Grayish reddish yellow	None	39	28.2	10	1.9	<0.52 ± 0.12	<0.63 ± 0.14		
30	Gantsu River	JA Yokohashi Bridge	Namegata City	2014/11/20	Cloudy	13.8	0.4	12.4	0.0	Dark grayish yellow red	None	50	30.1	10	4.5	<0.84 ± 0.17	<0.62 ± 0.11		
				2015/2/14	Sunny	7.8	0.3	5.8	0.0	Grayish reddish yellow	None	58	29.9	8	6.6	<0.61 ± 0.13	<0.68 ± 0.14		
31	Kurakawa River	Kurakawa Bridge	Namegata City	2014/5/28	Sunny	25.8	0.4	25.6	0.0	Grayish yellow	None	30	24.3	35	9.3	<0.56 ± 0.13	<0.58 ± 0.096		
				2014/8/19	Sunny	32.7	0.3	28.9	0.0	Grayish yellow	None	33	28.8	29	11	<0.59 ± 0.14	<0.68 ± 0.15		
32	Gantsu River	JA Yokohashi Bridge	Namegata City	2014/11/20	Cloudy	14.2	0.2	13.5	0.0	Dark grayish yellow	None	35	29.5	14	11	<0.58 ± 0.090	<0.55 ± 0.13		
				2015/2/14	Sunny	7.2	0.2	5.6	0.0	Grayish yellow	None	47	29.4	14	8.2	<0.67 ± 0.13	<0.62 ± 0.11		

Ibaraki River (Water) 4/5

Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks	
No.	Water area		Municipality					General items					Activity concentration(Bq/L)						
	Location							Water temperature (°C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium			
														Cs-134	Cs-137				
R i v e r s	39	Kasumigaura River	Onogawa River	Oshara-shahi Bridge	Ryugasaki City/Ushiku City	2014/5/16	Sunny	22.4	0.4	21.3	0.0	Dark grayish yellow green	None	53	30.3	20	9.5	<0.82 ± 0.20	<0.68 ± 0.17
						2014/8/6	Sunny	33.2	0.4	29.4	0.0	Grayish yellow	None	58	49.4	12	1.5	<0.51 ± 0.090	<0.68 ± 0.14
						2014/11/27	Sunny	16.2	0.4	13.5	0.0	Dark grayish yellow green	None	43	25.5	18	6.4	<0.54 ± 0.13	<0.62 ± 0.17
	40		Shintone River	Shintone Bridge	Inashiki City	2015/2/6	Sunny	9.0	0.2	7.2	0.0	Light grayish greenish yellow	None	53	35.3	9	3.9	<0.66 ± 0.14	<0.54 ± 0.13
						2014/5/28	Sunny	26.0	0.8	25.4	0.0	Light grayish green	None	28	24.5	17	11	<0.55 ± 0.14	<0.57 ± 0.14
						2014/8/6	Sunny	32.3	0.7	30.4	0.0	Grayish yellow	None	39	98.7	11	2.3	<0.51 ± 0.094	<0.66 ± 0.15
	41	Hiachitonegawa River	Yorokoshi River	Horionouchi Bridge	Itako City	2014/11/27	Sunny	13.9	0.4	12.6	0.0	Dark grayish yellow red	None	39	45.6	13	8.1	<0.61 ± 0.11	<0.66 ± 0.15
						2015/2/6	Sunny	10.0	2.0	6.5	0.0	Grayish greenish yellow	None	54	46.4	10	8.5	<0.47 ± 0.12	<0.51 ± 0.14
						2014/5/28	Sunny	27.5	0.7	24.0	0.0	Light grayish yellow	None	42	30.6	28	6.1	<0.60 ± 0.12	<0.55 ± 0.14
	42		Maekawa River	Ayame Bridge	Itako City	2014/8/19	Sunny	32.6	0.2	27.5	0.0	Light grayish greenish yellow	None	31	34.2	38	28	<0.52 ± 0.12	<0.80 ± 0.14
						2014/11/20	Cloudy	14.0	0.5	11.3	0.0	Grayish reddish yellow	None	38	36.4	7	5.0	<0.48 ± 0.093	<0.55 ± 0.13
						2015/2/13	Sunny	10.0	0.4	9.6	0.0	Grayish reddish yellow	None	53	34.1	13	6.2	<0.67 ± 0.13	<0.59 ± 0.13
	43	Kinugawa River	Kinugawa River	Kawashima Bridge	Chikusei City	2014/5/28	Sunny	28.0	2.6	23.0	0.0	Dark grayish greenish yellow	None	23	34.3	18	16	<0.60 ± 0.14	<0.58 ± 0.14
						2014/8/19	Sunny	31.2	2.1	28.9	0.0	Grayish yellow red	None	36	33.2	11	3.4	<0.55 ± 0.073	<0.74 ± 0.15
						2014/11/20	Cloudy	14.2	2.4	13.8	0.0	Dark grayish reddish yellow	None	37	39.8	10	9.7	<0.56 ± 0.11	<0.55 ± 0.11
	44		Kinugawa River	Takishita Bridge	Moriya City	2015/2/13	Sunny	11.2	2.6	8.1	0.0	Dark grayish reddish yellow	None	42	36.6	9	9.0	<0.65 ± 0.14	<0.47 ± 0.088
						2014/5/15	Sunny	23.9	0.6	19.9	0.0	Greenish pale gray	None	>100	17.0	2	0.7	<0.52 ± 0.12	<0.51 ± 0.096
						2014/8/29	Cloudy	25.8	0.6	20.1	0.0	Grayish yellow green	None	>100	12.9	9	1.6	<0.61 ± 0.13	<0.47 ± 0.10
	45		Tagawa River	Tagawa Bridge	Chikusei City	2014/11/21	Sunny	14.8	0.6	14.2	0.0	Grayish yellow green	None	>100	17.1	3	0.6	<0.64 ± 0.13	<0.56 ± 0.12
						2015/2/13	Sunny	5.0	0.5	8.9	0.0	Light grayish yellow green	None	>100	24.1	3	1.1	<0.48 ± 0.11	<0.47 ± 0.088
						2014/5/16	Sunny	22.7	0.4	19.7	0.0	Dark grayish yellowish green	None	50	21.1	12	4.4	<0.74 ± 0.15	<0.58 ± 0.14
	46		Kokai River	Kuroko Bridge	Chikusei City	2014/8/23	Sunny	30.8	0.5	27.2	0.0	Light grayish reddish yellow	None	51	16.5	29	7.6	<0.64 ± 0.12	<0.62 ± 0.13
						2014/11/29	Cloudy	14.4	0.4	12.8	0.0	Dark grayish greenish yellow	None	>100	19.3	4	1.9	<0.63 ± 0.12	<0.43 ± 0.096
						2015/2/16	Sunny	8.8	0.6	7.5	0.0	Grayish yellow green	None	76	25.4	5	1.8	<0.61 ± 0.14	<0.71 ± 0.13
	47		Yatagawa River	Fumimaki Bridge	Toride City	2014/5/15	Cloudy	21.8	0.4	21.3	0.0	Yellow greenish dark gray	None	61	25.5	10	3.3	<0.73 ± 0.16	<0.62 ± 0.14
						2014/8/29	Cloudy	25.9	0.3	22.7	0.0	Dark grayish yellow	None	>100	23.5	5	0.9	<0.59 ± 0.13	<0.55 ± 0.11
						2014/11/21	Sunny	14.9	0.3	13.3	0.0	Dark grayish yellow green	None	>100	28.9	4	0.9	<0.51 ± 0.11	<0.62 ± 0.094
	48		Nishiyata River	Sakamatsu Bridge	Tsukuba City	2015/2/13	Sunny	9.5	0.4	11.0	0.0	Light grayish yellow green	None	78	28.8	3	1.3	<0.56 ± 0.13	<0.71 ± 0.16
						2014/5/29	Sunny	28.4	1.3	24.3	0.0	Grayish greenish yellow	None	65	19.1	13	3.4	<0.56 ± 0.12	<0.63 ± 0.13
						2014/8/29	Cloudy	25.4	0.4	24.1	0.0	Dark grayish reddish yellow	None	58	28.1	14	4.6	<0.64 ± 0.14	<0.51 ± 0.14
49		Inari River	Oguki Bridge	Tsukuba City	2014/11/21	Sunny	14.7	0.4	13.6	0.0	Dark grayish yellow green	None	>100	26.8	4	1.9	<0.47 ± 0.11	<0.62 ± 0.12	
					2015/2/13	Sunny	9.0	0.4	8.4	0.0	Grayish yellow	None	33	26.4	12	11	<0.56 ± 0.12	<0.47 ± 0.10	
					2014/5/16	Sunny	22.4	0.6	20.6	0.0	Dark grayish yellow green	None	45	21.5	19	9.8	<0.72 ± 0.17	<0.64 ± 0.14	
50					2014/8/23	Sunny	29.7	1.2	28.2	0.0	Grayish yellow	None	52	21.7	9	0.8	<0.69 ± 0.16	<0.56 ± 0.12	
					2014/11/29	Cloudy	14.0	1.4	13.2	0.0	Dark grayish yellow	None	71	21.9	13	4.3	<0.65 ± 0.14	<0.58 ± 0.13	
					2015/2/12	Sunny	12.8	1.7	9.4	0.0	Grayish yellow	None	55	24.0	8	4.1	<0.64 ± 0.12	<0.66 ± 0.11	
50					2014/5/20	Cloudy	24.6	1.1	23.7	0.0	Grayish reddish yellow	None	37	28.6	10	6.7	<0.51 ± 0.13	<0.72 ± 0.16	
					2014/8/23	Cloudy	28.7	1.2	28.1	0.0	Light grayish reddish yellow	None	40	25.2	20	6.8	<0.54 ± 0.12	<0.66 ± 0.16	
					2014/12/5	Sunny	13.3	1.0	11.3	0.0	Dark grayish yellow green	None	81	26.6	6	2.3	<0.59 ± 0.11	<0.58 ± 0.13	
50					2015/2/16	Sunny	9.8	0.5	9.3	0.0	Dark grayish greenish yellow	None	64	28.2	13	3.6	<0.50 ± 0.082	<0.56 ± 0.13	
					2014/5/20	Sunny	25.9	0.5	24.6	0.0	Grayish yellow red	None	45	26.6	7	5.0	<0.57 ± 0.099	<0.64 ± 0.16	
					2014/8/23	Cloudy	29.1	0.5	28.1	0.0	Light grayish reddish yellow	None	56	23.5	7	1.3	<0.61 ± 0.12	<0.59 ± 0.14	
50					2014/11/29	Cloudy	13.8	0.2	12.6	0.0	Grayish reddish yellow	None	65	33.1	8	5.3	<0.52 ± 0.10	<0.43 ± 0.096	
					2015/2/16	Sunny	10.2	0.5	9.1	0.0	Grayish yellow	None	84	28.0	10	7.4	<0.74 ± 0.13	<0.74 ± 0.15	
					2014/5/29	Sunny	25.7	0.7	24.1	0.0	Dark grayish yellow green	None	63	22.4	13	3.7	<0.60 ± 0.13	<0.52 ± 0.12	
50					2014/8/28	Cloudy	24.8	0.5	22.4	0.0	Dark grayish yellow red	None	94	18.7	5	1.0	<0.54 ± 0.11	<0.51 ± 0.11	
					2014/12/5	Sunny	12.9	0.4	11.4	0.0	Dark grayish yellow red	None	>100	23.2	4	1.4	<0.59 ± 0.12	<0.58 ± 0.12	
50					2015/2/6	Sunny	13.0	0.7	8.5	0.0	Grayish greenish yellow	None	57	24.1	7	2.9	<0.71 ± 0.16	<0.57 ± 0.16	

Ibaraki River (Water) 5/5

	Location					Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
	No.	Water area		Location	Municipality					General items					Activity concentration(Bq/L)					
										Water temperature (°C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium		
		Cs-134	Cs-137																	
R i v e r s	51	Tonegawa River System	Tonegawa River	Tonegawa River	Kurahashi Bridge	Koga City	2014/5/15	Cloudy	24.1	0.7	17.4	0.0	Greenish dark gray	None	77	13.1	8	1.7	<0.61 ± 0.14	<0.47 ± 0.12
							2014/8/25	Cloudy	25.2	0.6	24.6	0.0	Grayish yellow	None	73	20.4	8	0.8	<0.54 ± 0.12	<0.55 ± 0.12
							2014/11/21	Sunny	10.8	0.3	9.7	0.0	Dark grayish yellow	None	86	25.4	8	4.5	<0.62 ± 0.12	<0.60 ± 0.12
							2015/2/13	Sunny	6.1	0.4	5.7	0.0	Grayish yellow green	None	85	29.8	4	2.5	<0.54 ± 0.11	<0.55 ± 0.14
							2014/5/16	Sunny	23.4	0.8	20.6	0.0	Dark grayish yellow	None	60	27.6	6	3.2	<0.59 ± 0.11	<0.59 ± 0.13
	52	Tonegawa River System	Tonegawa River	Tonegawa River	Fukawa	Tone Town	2014/8/6	Sunny	31.4	0.6	29.1	0.0	Grayish yellow	None	82	23.2	6	0.7	<0.70 ± 0.14	<0.82 ± 0.16
							2014/11/27	Sunny	14.1	0.7	11.6	0.0	Dark grayish yellow green	None	77	26.0	7	4.1	<0.58 ± 0.11	<0.58 ± 0.13
							2015/2/12	Sunny	10.7	0.8	8.4	0.0	Dark grayish yellow green	None	82	25.9	7	4.6	<0.73 ± 0.16	<0.62 ± 0.14
							2014/5/31	Sunny	24.9	0.6	25.2	0.0	Light grayish reddish yellow	None	32	20.8	11	6.5	<0.41 ± 0.096	<0.51 ± 0.12
							2014/8/6	Sunny	32.1	0.2	30.2	0.0	Grayish greenish yellow	None	78	29.5	5	0.8	<0.58 ± 0.13	<0.71 ± 0.15
	53	Tonegawa River System	Tonegawa River	Tonegawa River	Sawara	Inashiki City	2014/11/27	Sunny	13.8	0.4	12.5	0.0	Dark grayish yellow red	None	76	33.4	6	4.4	<0.58 ± 0.14	<0.63 ± 0.13
							2015/2/16	Sunny	5.4	0.4	4.9	0.0	Dark grayish yellow red	None	42	35.8	23	13	<0.66 ± 0.12	<0.56 ± 0.11

Ibaraki River (Sediment) 1/5

No.	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks				
	Water area	Location	Municipality					General items																					
								Sediment temperature (°C)	Sample length (cm)	Color	Odor	Grain size distribution (%)					Silt	Clay	Sediment content (%)	Density (g/cm ³)	Property	Activity concentration [Bq/kg(dry)]							
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand						Fine sand	Radioactive cesium	Cs-134		Cs-137	Total		
1	Tagagawa River System	Yamagaya Bridge	Kitaharaki City	2014/5/31	Sunny	30.0	1.0	16.0	5	Black	None	0.0	27.7	27.2	25.1	15.5	2.2	0.6	1.6	82.1	2.899	Sand	12	±	3.0	43	±	4.6	35
				2014/8/2	Sunny	24.8	0.3	19.3	7	Faint hydrogen sulfide	None	0.0	5.0	20.6	37.0	22.9	7.3	4.2	2.9	83.5	2.881	Gravel/sand	11	±	2.3	33	±	3.6	44
				2014/11/3	Cloudy	15.4	0.3	12.0	3	Faint hydrogen sulfide	None	0.0	0.4	8.5	13.1	55.7	16.2	3.9	2.2	87.4	2.803	Sand/gravel	16	±	2.6	50	±	4.1	66
				2015/2/5	Cloudy	5.8	0.3	7.0	4	Blackish brown	None	0.0	17.9	48.0	24.3	3.7	2.9	1.3	2.0	92.6	2.908	Gravel	<5.6	±	2.2	23	±	3.1	23
				2014/5/31	Sunny	28.5	0.7	17.0	8	Grayish olive	None	4.8	14.4	4.6	11.1	53.7	6.6	1.9	3.0	76.4	2.703	Sand	37	±	4.9	100	±	7.6	137
				2014/8/2	Sunny	29.0	0.6	22.2	5	Grayish olive	None	0.0	2.8	13.4	37.3	40.4	1.8	0.8	3.6	78.4	2.711	Sand	22	±	3.2	59	±	5.1	81
		2014/11/4	Sunny	16.9	0.4	13.2	4	Blackish brown	None	0.0	0.2	1.4	5.9	38.7	41.8	7.0	5.1	72.2	2.708	Sand	54	±	5.4	180	±	9.2	234		
		2015/2/5	Cloudy	6.2	0.4	5.2	5	Dark brown	None	0.0	0.6	3.5	23.1	51.1	13.2	3.9	4.7	75.9	2.712	Sand	27	±	3.7	110	±	6.8	137		
		2014/5/31	Sunny	29.9	0.5	18.0	6	Brownish gray	None	0.0	8.2	15.8	33.6	32.7	5.5	2.4	1.8	77.9	2.689	Sand	12	±	3.6	44	±	5.2	56		
		2014/8/2	Sunny	31.2	0.5	18.7	2	Dark grayish yellow	None	0.0	0.0	2.8	19.2	63.4	10.3	0.4	4.0	76.9	2.712	Sand	24	±	3.4	65	±	5.5	89		
		2014/11/13	Sunny	16.1	0.4	10.2	3	Dim yellowish brown	None	0.0	2.6	3.1	49.6	40.7	1.8	0.1	2.2	79.6	2.687	Sand/gravel	12	±	2.5	48	±	4.4	60		
		2015/2/5	Cloudy	4.4	0.3	3.8	4	Dim yellowish brown	None	0.9	15.5	21.6	33.0	25.0	1.9	0.6	1.4	89.2	2.707	Sand/gravel	<7.8	±	2.5	21	±	3.1	21		
	2014/5/24	Sunny	18.8	0.5	16.2	6	Brown	None	0.0	7.1	15.4	34.8	37.0	1.8	0.4	3.5	78.4	2.640	Sand	14	±	3.0	40	±	4.2	54			
	2014/8/7	Sunny	26.8	0.4	23.0	5	Grayish olive	None	0.5	6.0	10.7	39.4	38.0	2.5	0.3	2.6	81.2	2.653	Sand/gravel	14	±	2.8	43	±	4.3	57			
	2014/12/1	Cloudy	15.2	0.7	10.2	5	Olive black	None	0.0	0.0	0.0	0.4	73.9	19.8	0.6	5.3	77.4	2.685	Sand	26	±	4.5	86	±	7.0	112			
	2015/2/7	Sunny	5.2	0.6	5.0	4	Dim yellowish orange	None	0.0	0.0	0.9	11.1	80.8	3.5	0.5	3.2	77.0	2.647	Sand	35	±	3.8	120	±	7.0	155			
	2014/5/31	Sunny	28.1	0.6	16.0	6	Brownish gray	None	3.9	31.5	28.6	16.9	14.8	2.0	0.9	1.4	82.9	2.757	Sand	7.9	±	2.5	12	±	3.2	19.9			
	2014/8/2	Sunny	30.1	0.3	18.9	4	Dim yellowish orange	None	0.0	0.3	0.2	2.3	38.2	41.4	11.0	6.8	63.5	2.688	Sand	2.0	±	0.47	7.0	±	0.57	9.0			
	2014/11/4	Sunny	14.1	0.4	10.2	6	Olive black	None	0.0	0.0	0.3	5.7	56.7	33.0	1.0	3.3	69.9	2.739	Sand	21	±	3.7	71	±	6.1	92			
	2015/2/17	Cloudy	4.0	0.6	4.0	4	Reddish brown	None	0.0	0.3	14.9	52.6	25.9	3.3	0.2	2.8	79.6	2.689	Sand	<8.9	±	2.4	11	±	3.3	11			
	2014/5/24	Sunny	19.9	0.8	17.4	7	Dim yellowish brown	None	0.0	6.3	27.6	49.4	11.9	1.6	0.4	3.0	81.0	2.656	Sand	15	±	2.8	35	±	4.0	50			
	2014/8/7	Sunny	25.6	0.5	22.2	6	Dim yellowish brown	None	0.0	8.9	43.5	20.5	19.8	5.6	0.2	1.5	87.6	2.690	Gravel/sand	14	±	2.4	36	±	3.9	50			
	2014/12/1	Cloudy	15.0	0.5	11.7	3	Dim yellowish brown	None	0.0	29.8	35.7	21.1	10.3	1.7	0.4	1.0	89.9	2.734	Gravel/sand	<8.2	±	2.5	24	±	4.0	24			
	2015/2/7	Sunny	5.8	0.6	4.8	3	Olive yellow	None	0.0	1.5	16.9	48.3	22.4	6.9	1.5	2.5	81.6	2.683	Sand	12	±	2.6	49	±	4.2	61			
2014/5/24	Sunny	21.8	0.4	18.1	7	Brown	None	0.0	0.4	0.4	21.2	70.1	3.8	1.9	3.2	74.6	2.613	Sand/clay	41	±	4.6	100	±	6.9	141				
2014/8/7	Sunny	29.0	0.3	27.0	5	Dim yellowish brown	None	0.0	0.0	3.3	34.4	56.7	2.1	0.3	3.2	77.1	2.637	Sand	32	±	4.0	76	±	5.8	108				
2014/11/4	Sunny	18.2	0.4	13.0	6	Dim yellowish brown	None	0.0	0.4	0.5	8.4	74.4	10.8	1.4	4.1	74.2	2.603	Sand	42	±	4.7	140	±	7.8	182				
2015/2/7	Sunny	9.0	0.4	9.0	3	Yellowish brown	None	1.8	4.3	1.2	5.0	67.8	16.8	1.8	1.5	77.5	2.639	Sand	31	±	4.0	120	±	6.9	151				
2014/5/24	Sunny	22.1	0.4	22.1	7	Dim yellowish brown	None	0.0	8.2	10.4	24.0	45.7	6.3	1.3	4.1	83.4	2.635	Sand	6.3	±	2.1	16	±	2.8	22.3				
2014/8/5	Sunny	33.6	0.5	29.6	3	Faint hydrogen sulfide	Dark olive	0.0	0.0	0.1	2.9	75.7	16.0	1.6	3.8	79.1	2.650	Sand	<9.0	±	2.4	24	±	3.9	24				
2014/11/6	Sunny	20.4	0.4	14.8	3	Dim yellowish brown	Dark olive	0.0	0.4	0.6	10.5	78.3	5.3	0.0	5.1	77.2	2.644	Sand	<7.2	±	2.0	12	±	2.8	12				
2015/2/2	Sunny	6.1	0.4	4.8	4	Blackish brown	None	0.0	3.9	5.6	17.3	66.4	4.1	0.1	2.5	82.1	2.632	Sand	<5.7	±	1.8	15	±	2.9	15				
2014/5/24	Sunny	23.4	0.5	20.1	6	Blackish brown	Faint drum	0.0	37.7	34.4	6.7	4.4	8.8	4.4	3.7	71.3	2.565	Sand	14	±	2.8	35	±	4.4	49				
2014/8/5	Sunny	32.3	0.6	28.6	4	Dark brown	None	0.0	0.0	0.0	0.2	33.1	60.6	2.1	4.0	75.9	2.654	Sand	<7.3	±	2.3	18	±	3.2	18				
2014/11/6	Cloudy	17.1	0.6	14.4	5	Dim yellowish brown	None	0.0	4.0	21.5	13.2	28.8	27.4	3.1	2.0	78.3	2.633	Sand	7.4	±	2.0	14	±	2.6	21.4				
2015/2/9	Sunny	7.0	0.2	5.0	3	Dim yellowish orange	None	0.0	0.0	0.4	6.9	68.8	18.8	1.1	4.1	77.6	2.656	Sand	<7.4	±	2.1	14	±	3.4	14				
2014/5/23	Cloudy	13.8	0.6	16.2	8	Dark brown	None	0.0	18.6	17.1	15.6	34.6	12.0	0.0	2.1	79.1	2.651	Sand	5.2	±	0.47	15	±	0.61	20.2				
2014/8/22	Sunny	30.4	0.7	26.5	2	Dim yellowish brown	None	0.0	36.3	22.7	13.0	23.8	3.0	0.2	1.0	82.3	2.696	Sand/gravel	<7.2	±	2.2	11	±	2.7	11				
2014/11/17	Cloudy	14.8	0.6	12.2	4	Dark olive brown	Dark olive	0.0	10.1	9.4	7.3	56.8	13.2	1.1	2.0	78.2	2.709	Sand/gravel	3.1	±	0.38	12	±	0.54	15.1				
2015/2/9	Sunny	1.5	0.1	5.0	2	Dark grayish yellow	None	0.0	69.1	30.4	0.4	0.0	0.0	0.0	0.0	95.5	2.638	Gravel	2.6	±	0.45	8.0	±	0.59	10.6				
2014/5/23	Cloudy	19.0	1.5	19.8	6	Dark brown	None	0.0	0.0	0.0	0.1	13.6	66.8	7.2	12.3	67.5	2.626	Sand	20	±	3.7	53	±	5.7	73				
2014/8/22	Sunny	32.4	0.9	27.2	4	Dark brown	None	0.0	0.0	0.4	0.1	1.6	33.5	40.7	23.7	47.8	2.557	Silt/sand	89	±	11	280	±	18	369				
2014/11/17	Sunny	15.2	1.3	14.2	5	Dark brown	None	0.0	0.0	0.0	0.0	19.8	65.6	8.4	6.3	65.4	2.662	Sand	12	±	3.8	50	±	5.7	62				
2015/2/9	Sunny	5.3	0.5	7.0	3	Olive black	None	0.0	0.0	0.2	0.2	11.4	55.4	20.2	12.7	62.0	2.625	Silt/clay	32	±	6.2	110	±	9.5	142				

Ibaraki River (Sediment) 2/5

No.	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																Remarks					
	Water area	Location	Municipality	General items										Sediment content (%)			Activity concentration [Bq/kg(dry)]													
				Sediment temperature (°C)					Sample length (cm)	Color	Odor	Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Gravel	Sand	Silt	Density (g/cm ³)	Property		Cs-134		Cs-137		Total
R i v e r s y s t e m	Nakagawa River	Katsuna Bridge	Mito City/Hinchinaka City	2014/5/23	Sunny	20.2	1.8	20.0	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.1	0.2	4.0	48.9	28.4	18.4	55.8	2.862	Silt	68	±	7.1	190	±	12	356	
				2014/8/22	Sunny	30.4	1.8	27.4	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.1	0.0	4.4	42.8	29.0	26.7	52.7	2.557	Silt	64	±	8.5	210	±	15	274	
				2014/11/17	Sunny	15.8	1.1	12.6	4	Faint hydrogen sulfide	Dark olive	0.0	0.0	0.0	0.0	0.8	50.9	35.3	12.9	58.2	2.990	Sand/silt	40	±	5.3	130	±	9.6	170	
		2015/2/10	Sunny	9.2	2.3	7.2	4	Grayish olive	Faint drain	0.0	0.0	0.0	0.0	1.3	51.1	35.6	12.0	54.3	2.616	Silt	42	±	6.1	160	±	10	202			
		2014/5/23	Cloudy	17.8	0.6	19.2	4	Black	Moist drain	0.0	3.2	1.2	0.9	2.8	35.7	30.0	26.3	44.2	2.501	Silt	180	±	14	550	±	23	730			
		2014/8/11	Sunny	28.2	0.5	25.6	4	Black	Faint drain	0.0	0.0	0.0	0.1	1.1	37.3	39.3	22.2	38.3	2.642	Silt	200	±	15	610	±	23	816			
	Nakagawa River System	Hinumagawa River	Kamei Bridge	Hitachinaka City	2014/11/17	Sunny	13.9	1.6	12.8	3	Faint hydrogen sulfide	Iron sewage	0.0	0.0	0.6	0.6	2.7	32.4	40.1	24.1	44.3	2.497	Silt	160	±	13	540	±	23	700
					2015/2/10	Sunny	9.0	1.1	9.0	7	Black	Faint drain	0.0	2.4	3.6	4.9	9.4	39.6	20.5	19.6	51.6	2.539	Silt	150	±	11	530	±	19	680
					2014/5/22	Cloudy	17.6	0.5	18.1	7	Brown	None	0.0	0.7	2.1	1.8	32.2	56.0	3.6	3.6	72.4	2.712	Sand	82	±	7.5	230	±	12	312
			2014/8/12	Cloudy	28.5	0.3	21.6	4	Dark brown	None	0.0	0.0	0.0	0.0	19.0	65.5	4.4	1.1	72.1	2.664	Sand	48	±	4.8	140	±	8.1	188		
			2014/11/18	Cloudy	15.2	0.4	13.1	3	Blackish brown	None	0.7	42.8	21.1	8.2	19.5	4.5	0.2	2.0	85.3	2.720	Gravel/sand	15	±	2.6	46	±	4.1	61		
			2015/2/12	Sunny	9.8	0.2	9.0	2	Brown	None	0.0	12.2	12.8	4.0	29.6	34.5	1.8	5.3	73.4	2.647	Sand/gravel	34	±	4.2	92	±	6.6	126		
	Nakagawa River System	Hinumagawa River	Takahashi	Ibaraki Town	2014/5/22	Cloudy	18.9	0.5	18.0	30	Dim yellowish brown	None	0.0	6.7	8.8	8.0	4.3	30.0	22.4	19.7	58.0	2.570	Sand	130	±	11	350	±	17	480
					2014/8/22	Sunny	31.3	0.4	28.9	6	Dim yellowish brown	None	0.0	0.0	1.0	27.2	49.6	15.8	4.0	2.4	76.0	2.640	Sand	11	±	3.3	44	±	5.5	55
					2014/11/18	Sunny	16.3	0.5	13.9	3	Dim yellowish brown	None	0.8	44.9	19.7	12.0	17.1	4.6	0.2	0.8	86.3	2.834	Gravel	<6.6	±	2.0	16	±	2.8	16
			2015/2/12	Sunny	8.0	0.5	6.0	6	Brown	None	0.0	0.0	0.3	74.6	8.6	1.6	10.0	5.0	78.7	2.611	Sand	7.9	±	2.2	13	±	2.9	20.9		
			2014/5/22	Sunny	22.9	0.4	17.2	6	Dim yellowish brown	None	0.0	0.5	0.5	0.5	6.3	28.4	30.7	32.8	37.7	2.427	Sand	12	±	2.3	39	±	3.3	51		
			2014/8/12	Cloudy	27.4	0.4	19.9	3	Blackish brown	Faint drain	0.0	0.0	1.2	2.2	12.8	31.7	24.3	27.9	54.9	2.483	Sand	8.5	±	2.1	24	±	2.8	32.5		
	Nakagawa River System	Hinumagawa River	Kamei Bridge	Ibaraki Town	2014/11/18	Sunny	16.3	0.7	14.0	4	Blackish brown	None	0.0	0.0	0.0	0.4	13.0	37.4	25.7	23.5	59.0	2.561	Sand/silt	20	±	5.2	93	±	8.2	113
					2015/2/12	Sunny	9.0	0.2	9.0	1	Dim yellowish brown	None	0.0	23.4	28.5	15.7	24.5	9.7	0.2	0.9	85.6	2.669	Sand/gravel	9.3	±	2.2	31	±	3.6	40.3
					2014/5/22	Sunny	21.7	0.5	16.6	7	Blackish brown	None	0.0	0.0	0.0	0.3	15.1	71.3	7.5	5.8	62.1	2.578	Sand	110	±	9.3	290	±	15	400
			2014/8/12	Cloudy	28.7	0.5	22.1	3	Dark brown	None	0.0	0.0	0.0	0.0	11.8	66.9	5.6	15.7	70.2	2.593	Sand	80	±	6.2	210	±	10	290		
			2014/11/18	Sunny	15.2	0.3	14.4	2	Dark brown	Iron sewage	0.0	3.5	8.9	24.5	51.2	6.0	2.3	3.7	74.1	2.618	Gravel/sand	37	±	4.2	100	±	7.0	137		
			2015/2/12	Sunny	9.8	0.6	11.0	1	Blackish brown	None	0.0	4.3	9.8	14.5	54.5	14.9	0.6	1.4	82.8	2.703	Sand/gravel	18	±	2.7	39	±	4.6	77		
Nakagawa River System	Hinumagawa River	Oya Bridge	Hokota City	2014/5/23	Sunny	20.2	0.3	18.8	7	Blackish brown	Faint drain	0.0	19.2	23.9	14.3	27.8	8.7	1.7	4.4	80.3	2.666	Sand	140	±	7.6	410	±	13	550	
				2014/8/22	Sunny	28.2	0.3	25.8	3	Faint hydrogen sulfide	Dark olive	0.0	19.3	34.0	16.4	21.6	7.1	0.1	1.5	78.8	2.677	Gravel/sand	100	±	7.2	290	±	12	390	
				2014/11/18	Sunny	15.1	0.4	13.9	3	Faint hydrogen sulfide	Faint drain	0.0	22.2	30.8	13.0	25.8	5.3	0.2	2.7	82.5	2.690	Gravel/sand	84	±	5.6	280	±	10	364	
		2015/2/10	Sunny	7.5	0.4	8.0	5	Faint hydrogen sulfide	Faint drain	3.9	23.4	21.1	7.5	20.1	12.4	5.7	5.9	55.0	2.612	Silt/sand	82	±	7.3	360	±	14	442			
		2014/5/28	Sunny	22.6	1.2	21.6	5	Blackish brown	None	0.0	0.0	2.9	30.9	43.2	14.8	3.5	4.8	58.6	2.392	Sand	43	±	5.0	120	±	8.4	163			
		2014/8/18	Cloudy	27.9	0.8	22.2	4	Dark brown	Faint drain	0.0	3.1	0.1	1.3	22.5	59.2	6.1	7.5	71.2	2.617	Sand/silt	62	±	4.8	140	±	8.4	182			
Nakagawa River System	Hinumagawa River	Asahi Bridge	Mito City/Ozari Town	2014/11/19	Sunny	14.6	0.8	12.0	4	Faint hydrogen sulfide	Faint drain	0.0	1.2	2.5	8.8	26.5	32.9	11.5	16.8	48.1	2.583	Silt	72	±	8.1	280	±	15	352	
				2015/2/16	Sunny	7.2	1.5	7.0	4	Blackish brown	None	0.0	0.9	2.9	16.6	40.4	30.0	3.5	5.7	72.7	2.635	Sand/silt	26	±	4.4	87	±	8.1	113	
				2014/5/28	Sunny	23.9	1.4	20.1	5	Blackish brown	None	5.2	0.0	0.0	0.3	8.8	73.1	4.1	8.6	67.5	2.659	Silt	46	±	5.1	110	±	7.8	156	
		2014/8/18	Cloudy	27.8	0.5	20.6	4	Blackish brown	Faint drain	0.0	0.0	0.8	6.6	74.5	14.3	0.7	3.1	73.7	2.647	Sand/silt	23	±	3.5	76	±	5.9	99			
		2014/11/19	Sunny	14.3	0.3	13.1	4	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	5.3	47.9	24.9	21.8	33.2	2.535	Silt	98	±	13	280	±	19	348			
		2015/2/16	Sunny	7.9	0.5	7.5	8	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	5.4	54.5	18.4	21.8	46.3	2.491	Silt/sand	52	±	8.9	190	±	15	242			
Nakagawa River System	Hinumagawa River	Tazuka Bridge	Hokota City	2014/5/28	Sunny	25.5	0.2	18.7	10	Dark brown	None	0.0	0.5	2.4	7.9	32.6	37.4	7.4	11.7	70.5	2.588	Sand/silt	44	±	5.1	130	±	7.9	174	
				2014/8/18	Sunny	30.2	0.2	23.8	4	Blackish brown	None	0.0	9.0	5.4	10.5	47.7	23.2	0.9	3.3	80.8	2.625	Sand	24	±	3.3	69	±	5.3	93	
				2014/11/19	Sunny	12.9	0.2	10.7	3	Dark brown	None	0.0	0.8	3.8	19.8	38.4	17.6	10.3	9.2	68.7	2.576	Sand	24	±	4.4	130	±	8.2	154	
		2015/2/16	Sunny	7.8	0.3	9.5	6	Yellowish brown	None	0.0	0.0	0.7	7.7	61.1	26.4	0.4	3.7	75.2	2.617	Sand	21	±	4.1	120	±	8.3	141			
		2014/5/28	Sunny	26.8	0.5	22.1	7	Dark brown	None	0.0	0.0	0.0	0.2	27.2	63.3	3.3	6.0	72.9	2.607	Sand	50	±	5.3	140	±	8.5	190			
		2014/8/18	Sunny	29.4	0.6	22.6	5	Dark brown	Faint drain	0.0	0.0	0.1	0.0	16.7	66.3	5.2	11.7	69.3	2.603	Sand	58	±	5.3	170	±	9.5	228			
Nakagawa River System	Hinumagawa River	Utsunomiya Bridge	Namegata City	2014/11/19	Sunny	12.1	0.3	10.2	4	Dark brown	None	0.0	0.0	0.0	0.1	18.9	56.8	15.1	9.1	69.2	2.634	Sand/silt	68	±	6.5	170	±	11	258	
				2015/2/10	Sunny	10.4	0.2	8.4	5	Olive black	None	0.0	0.4	0.3	0.5	17.3	73.6	4.3	4.3	72.2	2.614	Sand	50	±	4.6	170	±	8.9	220	
				2014/5/28	Sunny	27.1	0.4	26.1	4	Brown	Dark olive	0.0	0.5	2.4	9.2	55.3	25.3	1.2	6.1	74.8	2.621	Sand	25	±	3.7	67	±	5.5	92	
		2014/8/18	Cloudy	26.9	0.3	20.6	3	Brown	None	0.0	0.0	0.2	1.1	26.4	59.1	3.8	5.0	68.0	2.579	Sand	35	±	4.4	130	±	8.2	165			
		2014/11/19	Sunny	12.8	0.2	11.0	4	Dark olive brown	None	0.0	0.1	1.9	5.6	45.8	43.1	0.1	3.4	70.9	2.640	Sand	25	±	4.1	110	±	7.2	135			
		2015/2/10	Sunny	11.8	0.2	8.8	4	Dark olive brown	None	0.0	0.2	1.0	2.1	33.3	55.0	3.2	4.2	74.8	2.617	Sand	20	±	3.7	94	±	6.4	114			
Nakagawa River System	Hinumagawa River	Nishino Bridge	Namegata City	2014/5/28	Sunny	27.6	0.7	26.3	6	Blackish brown	Faint drain	0.0	0.1	0.8	28.1	35.9	20.3	14.8	45.9	2.561	Silt	79	±	8.9	240	±	15	319		
				2014/8/19	Sunny	33.1	0.5	28.4	4	Faint hydrogen sulfide	None	0.0	0.0	0.2	0.2	12.2	52.3	23.5	31.7	57.9	2.558	Silt	15	±	3.4	43	±	5.7	58	
				2014/11/20	Cloudy	13.8	0.4	12.1	4	Dark brown	None	1.7	24.2	7.7	8.3	44.8	7.7	2.8	2.9	79.4	2.621	Sand/gravel	29	±	3.8	88	±	6.2	117	
		2015/2/14	Sunny	7.8	0.3	5.7	4	Dark brown	None	3.6	23.0	7.6	13.1	38.2	6.6	2.6	5.3	72.5	2.581	Sand/gravel	21	±	4.6	100	±	8.0	121			
		2014/5/28	Sunny	25.8	0.4	24.1	3	Dark brown	None	0.0	0.3	0.4</																		

Ibaraki River (Sediment) 3/5

No.	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks							
	Water area	Location	Municipality	General items																													
				Sediment temperature (°C)					Sample length (cm)	Color	Odor	Grain size distribution (%)					Silt (%)	Clay (%)	Density (g/cm ³)	Property	Activity concentration [Bq/kg(dry)]												
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand					Fine sand	Cs-134	Cs-137	Total									
R i v e r s	Tonegawa River System	Kasumigaura River	Kasumigaura River	Kasumigaura City	2014/5/28	Sunny	26.3	0.1	23.5	47.4	2	Black	Faint drain	14.7	14.5	8.7	11.0	2.5	0.4	0.8	79.0	2.701	Gravel/sand	52	±	4.5	130	±	71	182			
					2014/8/19	Sunny	29.3	0.1	23.1																	Gravel/sand	49	±	4.6	170	±	810	219
					2014/11/20	Cloudy	12.4	0.1	11.4	1	1	Dark olive brown	Faint sewage	1.0	16.7	11.9	12.5	43.0	13.4	0.6	1.1	72.0	2.686	Sand	48	±	5.3	140	±	8.4	188		
					2015/2/13	Sunny	5.7	0.2	6.0	2	2	Dark olive brown	None	0.0	15.5	21.0	15.6	36.6	10.1	0.2	1.0	84.0	2.682	Sand/gravel	24	±	4.0	120	±	7.8	144		
					2014/5/31	Sunny	26.0	1.7	23.3	20	8	Blackish brown	Faint drain	0.0	0.0	0.0	0.2	2.5	20.9	51.1	25.3	29.6	2.382	Silt	220	±	22	580	±	35	800		
					2014/8/9	Cloudy	28.2	0.7	24.9	3	3	Blackish brown	Faint drain	0.0	1.5	0.5	0.2	3.1	13.3	64.8	17.9	49.4	2.566	Silt	<5.4	±	1.8	11	±	2.5	11		
					2014/12/2	Sunny	13.3	0.7	12.1	5	5	Blackish brown	None	0.0	0.1	0.1	0.3	31.3	62.8	1.6	4.0	80.6	2.738	Sand	19	±	4.1	78	±	6.3	97		
					2015/2/7	Sunny	8.3	0.8	8.0	4	4	Blackish brown	None	0.0	0.0	0.0	0.0	0.0	0.0	6.7	72.9	2.654	Sand	42	±	4.3	120	±	7.2	162			
					2014/5/31	Sunny	28.2	0.7	23.1	6	6	Dark grayish yellow	Faint drain	0.0	0.0	0.3	4.8	58.1	28.0	3.1	5.7	79.8	2.670	Silt/sand	11	±	2.7	20	±	3.6	31		
					2014/8/20	Sunny	33.1	0.4	29.4	4	4	Faint hydrogen sulfide	Dark olive	0.0	0.0	1.3	13.0	69.9	11.3	0.5	4.1	77.9	2.624	Sand	190	±	9.5	490	±	16	680		
					2014/12/2	Sunny	15.9	1.2	13.6	5	5	Faint hydrogen sulfide	None	0.0	4.2	8.3	23.2	49.3	13.7	0.1	1.6	84.0	2.651	Sand	88	±	6.6	280	±	12	368		
					2015/2/7	Sunny	10.2	0.8	9.0	4	4	Faint hydrogen sulfide	None	0.0	0.0	0.4	1.9	73.1	22.6	0.4	1.6	76.5	2.650	Sand	120	±	7.0	470	±	14	590		
					2014/5/31	Sunny	30.4	0.8	25.7	7	7	Blackish brown	Faint drain	0.0	0.0	0.0	0.1	16.0	73.0	6.4	4.5	65.9	2.618	Sand/silt	73	±	4.9	190	±	8.2	263		
					2014/8/9	Cloudy	27.9	0.9	25.8	6	6	Dim yellowish brown	None	0.0	0.0	0.5	5.2	64.3	14.6	6.9	8.5	75.8	2.599	Sand/silt	9.0	±	2.8	34	±	4.0	43.0		
					2014/12/2	Sunny	13.6	0.6	10.8	3	3	Grayish olive	None	0.0	0.4	2.5	26.3	68.7	0.7	0.7	0.8	79.4	2.629	Sand/gravel	8.5	±	1.7	31	±	2.7	39.5		
					2015/2/7	Cloudy	8.0	0.7	7.3	4	4	Dim yellowish brown	None	0.0	0.0	0.1	9.6	71.9	13.2	1.9	3.3	77.2	2.628	Sand	17	±	3.2	53	±	4.7	70		
					2014/5/31	Sunny	30.6	1.1	25.6	9	9	Brownish gray	None	7.0	43.0	11.9	16.1	18.5	1.7	0.3	1.6	83.6	2.634	Sand/gravel	16	±	3.0	41	±	4.7	57		
					2014/8/20	Sunny	33.2	0.6	25.6	3	3	Dim yellowish brown	None	0.0	3.6	5.6	16.0	62.2	8.2	0.9	3.6	83.2	2.666	Sand/gravel	17	±	3.6	71	±	6.0	88		
					2014/12/2	Sunny	14.6	0.5	13.0	5	5	Dim yellowish brown	None	0.0	0.2	0.4	5.8	77.8	14.7	0.2	0.8	83.1	2.677	Sand	12	±	2.7	43	±	4.7	55		
					2015/2/7	Sunny	6.9	0.5	6.5	3	3	Dim yellowish brown	None	0.0	1.6	4.2	12.7	69.7	9.5	0.0	2.3	84.8	2.666	Sand/gravel	12	±	2.7	56	±	4.4	68		
					2014/5/31	Sunny	25.9	0.5	24.1	4	4	Blackish brown	None	0.0	0.0	0.0	0.1	8.2	56.8	18.7	16.2	67.2	2.563	Sand	150	±	10	460	±	17	610		
					2014/8/9	Cloudy	25.2	0.3	23.6	4	4	Dark brown	Dark olive	0.0	0.0	0.0	0.4	53.8	37.7	2.8	5.3	73.0	2.613	Sand	94	±	6.3	270	±	11	364		
					2014/12/3	Sunny	12.0	0.4	8.3	3	3	Dark brown	None	0.0	0.1	1.9	14.7	74.6	7.3	0.6	0.8	78.6	2.637	Sand	71	±	6.2	230	±	11	301		
					2015/2/17	Cloudy	5.2	0.4	4.6	4	4	Faint hydrogen sulfide	None	0.0	0.0	2.9	11.9	65.9	15.3	0.8	3.3	70.4	2.642	Sand	74	±	6.7	250	±	12	324		
					2014/5/31	Sunny	27.7	0.8	23.9	10	10	Dark brown	None	0.0	18.6	18.1	28.3	24.9	5.6	2.9	2.5	79.3	2.618	Sand	74	±	6.1	210	±	10	284		
					2014/8/9	Cloudy	26.3	1.2	23.6	2	2	Dark brown	None	0.0	0.5	4.9	19.5	36.7	12.1	10.7	15.5	31.0	2.558	Silt/sand	210	±	15	620	±	26	830		
					2014/12/3	Sunny	11.8	1.1	8.1	3	3	Blackish brown	None	0.0	0.0	3.4	27.6	52.1	3.7	4.8	8.4	52.7	2.605	Sand/silt	110	±	11	350	±	18	460		
					2015/2/17	Cloudy	5.9	1.6	5.3	3	3	Faint hydrogen sulfide	None	0.0	0.9	4.1	19.2	40.5	9.9	13.6	11.8	66.0	2.559	Sand/silt	72	±	7.7	310	±	14	382		
					2014/5/17	Sunny	21.7	0.4	17.0	6	6	Faint hydrogen sulfide	None	9.3	14.2	4.7	5.4	28.5	16.8	5.9	15.3	83.0	2.582	Sand	20	±	3.9	50	±	5.2	70		
					2014/8/21	Sunny	32.4	0.4	28.2	4	4	Faint hydrogen sulfide	None	2.4	15.4	11.2	12.1	32.2	13.9	4.9	7.8	76.6	2.637	Sand/gravel	11	±	3.5	26	±	4.3	37		
					2014/12/3	Sunny	14.6	0.3	11.1	4	4	Faint hydrogen sulfide	None	0.0	18.5	19.3	10.9	24.5	13.3	6.3	7.2	82.6	2.656	Gravel/sand	14	±	3.3	32	±	4.3	46		
					2015/2/18	Cloudy	4.8	0.5	6.0	3	3	Faint hydrogen sulfide	None	1.5	21.2	25.8	17.0	23.6	7.4	1.9	1.6	85.0	2.662	Gravel/sand	19	±	3.3	61	±	5.5	80		
					2014/5/17	Sunny	26.6	1.3	20.4	5	5	Black	Faint drain	0.0	0.0	0.0	0.1	0.4	1.7	48.6	49.3	23.2	2.314	Silt	440	±	35	1,200	±	58	1,640		
					2014/8/21	Sunny	33.4	2.4	29.9	4	4	Black	Medium rain	0.0	0.0	0.1	0.2	3.8	4.3	45.1	46.5	26.0	2.363	Silt	440	±	32	1,200	±	54	1,640		
					2014/12/3	Sunny	14.3	1.0	11.2	4	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.2	1.0	0.8	54.0	44.0	23.3	2.414	Silt	380	±	32	1,100	±	53	1,480		
					2015/2/17	Cloudy	8.3	2.5	7.7	4	4	Black	Faint drain	0.0	0.0	0.2	0.2	5.8	5.6	50.8	37.5	23.7	2.386	Silt	310	±	30	1,100	±	53	1,410		
					2014/5/29	Sunny	28.1	0.6	25.6	6	6	Brown	None	0.0	0.8	4.6	10.6	53.8	20.8	4.0	5.5	72.5	2.625	Sand/gravel	16	±	3.1	57	±	5.4	73		
					2014/8/28	Cloudy	23.1	0.5	20.8	4	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	1.1	32.1	33.0	33.7	47.4	2.553	Silt/sand	47	±	4.6	62	±	6.7	79		
					2014/11/29	Light rain	13.3	0.6	12.0	6	6	Grayish olive	None	0.0	0.0	0.0	0.0	5.1	53.0	20.2	21.7	72.8	2.599	Sand/silt	<9.3	±	2.5	21	±	4.3	21		
					2015/2/19	Sunny	11.9	1.0	6.3	4	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	4.0	62.4	16.0	17.7	52.7	2.593	Sand/silt	9.5	±	1.9	37	±	3.0	46.5		
					2014/5/17	Sunny	24.3	1.3	20.3	5	5	Black	Faint drain	0.0	0.0	0.1	1.9	77.8	16.1	1.0	3.1	75.0	2.660	Sand	390	±	15	1,100	±	24	1,490		
					2014/8/21	Sunny	33.0	1.2	28.8	2	2	Black	Faint drain	0.0	11.2	8.3	10.5	35.6	21.8	5.5	7.1	75.2	2.572	Sand/gravel	280	±	13	830	±	22	1,110		
					2014/11/25	Cloudy	13.8	1.2	12.2	2	2	Faint hydrogen sulfide	Faint drain	0.0	11.4	25.4	24.8	27.0	7.3	1.0	3.0	82.2	2.640	Sand/gravel	80	±	6.7	270	±	12	350		
					2015/2/14	Sunny	8.9	0.5	6.4	2	2	Black	Faint drain	0.0	7.5	18.3	5.3	6.2	22.8	31.8	2.6	5.5	57.6	2.592	Sand/gravel	150	±	11	570	±	21	720	
					2014/5/17	Sunny	25.1	0.4	21.1	3	3	Faint hydrogen sulfide	None	0.0	2.5	1.7	3.6	57.8	29.1	1.2	4.3	74.3	2.709	Sand	230	±	11	600	±	18	830		
					2014/8/21	Sunny	31.4	0.4	28.3	2	2	Faint hydrogen sulfide	None	0.0	1.5	1.3	5.4	37.8	43.1	3.7	7.2	74.7	2.623	Sand	220	±	10	710	±	18	930		
					2014/11/29	Light rain	15.3	0.2	13.8	4	4	Olive brown	None	0.0	7.7	6.8	13.0	48.6	12.9	4.5	6.6	78.3	2.644	Sand	92	±	7.3	340	±	13	432		
					2015/2/19	Sunny	11.2	0.3	7.9	4	4	Faint hydrogen sulfide	Faint drain	0.0	9.0	14.1	12.0	45.6	15.7	1.0	2.6	80.5	2.649	Sand/gravel	86	±	6.9	310	±	13	396		
					2014/5/29	Sunny	25.5	0.7	22.0	8	8	Blackish brown	None	7.8	18.8	4.4	12.6	48.1	4.4	1.8	2.5	76.0	2.681	Sand/gravel	150	±	8.3	460	±	14	610		
					2014/8/21	Sunny	29.8	0.5	28.1	2	2	Faint hydrogen sulfide	None	0.0	5.1	2.7	12.0	59.8	11.7	3.0	5.7	70.4	2.632	Sand	260	±	12	710	±	21	970		
2014/11/29	Light rain	13.8	0.8	13.5	1	1	Yellowish gray	Faint drain	0.0	0.9	1.3	5.0	70.4	15.3	1.8	5.3	74.3	2.663	Sand/silt	230	±	11	690	±	20	920							
2015/2/19	Sunny	6.0	0.4	6.1	3	3	Dark olive brown	None	8.0	4.2	3.2	8.6	60.3	10.9	2.1	2.7	74.6	2.651	Sand	160	±	10	630	±	19	790							

Ibaraki River (Sediment) 4/5

No.	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks	
	Water area	Location	Municipality	General items					Grain size distribution (%)							Sediment content			Activity concentration [Bq/kg(dry)]								
				Sediment temperature (°C)					Sample length (cm)	Color	Odor	Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Coarse (%)	Density (g/cm ³)	Property	Cs-134		Cs-137		Total
39	Kasumigaura River	Otsuka-shahi Bridge	Ryugasaki City/Utsuki City	2014/5/16	Sunny	22.4	0.4	29.0	6	Dark brown	None	0.0	0.0	0.0	0.6	48.9	44.5	1.7	7.3	66.0	2.636	Sand	170	± 11	140	± 17	410
				2014/8/26	Sunny	33.2	0.4	28.1	5	Blackish brown	None	0.0	0.0	0.0	0.5	52.8	41.4	0.2	5.1	72.0	2.619	Sand/silt	120	± 7.4	330	± 13	450
				2014/11/27	Sunny	16.2	0.4	13.1	4	Dark olive brown	Faint drain	0.0	0.0	0.0	0.3	40.9	48.9	2.8	7.1	73.5	2.616	Sand	92	± 7.9	340	± 15	432
				2015/2/6	Sunny	9.0	0.2	7.0	4	Olive black	None	0.0	0.0	0.0	0.2	28.2	55.7	5.7	10.2	66.2	2.606	Sand	110	± 6.4	410	± 12	520
				2014/5/28	Sunny	26.0	0.8	25.4	8	Black	Faint drain	0.0	1.6	1.5	2.3	16.9	33.8	23.7	20.2	60.1	2.530	Silt/sand	<6.2	± 1.9	11	± 2.3	11
40	Shimone River	Shimone Bridge	Inashiki City	2014/8/6	Sunny	32.3	0.7	29.8	5	Faint hydrogen sulfide	Faint drain	0.0	0.3	0.2	1.0	25.8	64.0	1.4	7.3	76.3	2.659	Sand/silt	59	± 5.1	190	± 9.1	249
				2014/11/27	Sunny	13.9	0.4	12.2	3	Faint hydrogen sulfide	None	0.0	0.1	0.4	1.4	29.9	52.8	5.9	9.6	73.6	2.679	Sand	39	± 5.6	160	± 9.8	199
				2015/2/6	Sunny	10.0	2.0	6.8	2	Grayish olive	Faint drain	0.0	0.0	0.6	1.8	25.5	53.0	6.9	12.1	70.4	2.649	Silt	44	± 4.8	150	± 8.4	194
				2014/5/28	Sunny	27.5	0.7	24.0	10	Black	None	11.7	47.8	16.9	7.8	10.8	2.6	0.7	1.8	78.0	2.700	Gravel/sand	9.3	± 2.2	34	± 3.3	43.3
				2014/8/19	Sunny	32.6	0.2	26.6	3	Faint hydrogen sulfide	Faint drain	0.0	7.9	2.5	2.8	22.7	22.7	16.8	24.8	57.5	2.576	Silt	12	± 2.9	24	± 4.1	36
41	Hinchinogawa River	Hainouchi Bridge	Ihako City	2014/11/20	Cloudy	14.0	0.5	11.0	3	Faint hydrogen sulfide	Faint drain	0.0	48.9	26.0	7.0	12.0	2.7	1.2	2.2	84.2	2.722	Silt	6.8	± 2.2	22	± 3.1	28.8
				2015/2/13	Sunny	10.0	0.4	9.2	6	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.3	4.0	9.8	41.9	43.8	27.2	2.509	Silt	39	± 1.4	250	± 2.3	329
				2014/5/28	Sunny	24.0	2.6	23.0	8	Dark olive brown	Faint drain	1.9	7.6	3.4	4.1	31.8	39.7	3.5	8.0	75.7	2.660	Silt/sand	6.0	± 1.9	16	± 2.6	22.0
				2014/8/19	Sunny	31.2	2.1	28.1	3	Faint hydrogen sulfide	Faint drain	0.0	1.1	2.0	2.9	33.3	55.2	1.2	5.4	71.2	2.627	Silt	100	± 8.4	330	± 14	430
				2014/11/20	Cloudy	14.2	2.4	13.1	4	Faint hydrogen sulfide	Faint drain	0.0	1.7	1.3	2.3	29.1	45.5	10.8	9.5	66.7	2.651	Silt/sand	89	± 7.5	320	± 13	409
42	Makawa River	Ayame Bridge	Ihako City	2015/2/13	Sunny	11.2	2.6	8.0	4	Faint hydrogen sulfide	Faint drain	0.0	0.6	0.8	1.6	39.4	47.8	2.4	7.5	72.9	2.632	Sand/silt	93	± 6.5	380	± 13	473
				2014/5/15	Sunny	23.9	0.6	20.1	5	Faint hydrogen sulfide	None	0.0	1.6	2.0	2.5	30.8	53.2	7.0	2.9	73.7	2.686	Sand	6.9	± 1.6	17	± 2.2	23.9
				2014/8/29	Cloudy	25.8	0.6	18.8	4	Grayish olive	None	0.0	1.1	0.7	0.7	27.9	58.6	4.8	6.2	82.2	2.690	Sand	<6.3	± 1.9	20	± 3.1	20
				2014/11/21	Sunny	14.8	0.6	13.6	3	Faint hydrogen sulfide	None	4.5	20.3	6.2	9.1	46.2	8.2	1.7	3.9	88.4	2.679	Sand/gravel	1.1	± 0.23	3.7	± 0.27	4.8
				2015/2/13	Sunny	5.0	0.5	9.6	4	Olive brown	None	0.0	1.4	1.9	3.9	58.4	32.2	0.6	1.6	81.6	2.614	Sand	1.4	± 0.40	5.1	± 0.54	6.5
43	Kimagawa River	Karasawa Bridge	Chikusei City	2014/5/15	Sunny	23.9	0.6	20.1	5	Faint hydrogen sulfide	None	0.0	1.6	2.0	2.5	30.8	53.2	7.0	2.9	73.7	2.686	Sand	6.9	± 1.6	17	± 2.2	23.9
				2014/8/29	Cloudy	25.8	0.6	18.8	4	Grayish olive	None	0.0	1.1	0.7	0.7	27.9	58.6	4.8	6.2	82.2	2.690	Sand	<6.3	± 1.9	20	± 3.1	20
				2014/11/21	Sunny	14.8	0.6	13.6	3	Faint hydrogen sulfide	None	4.5	20.3	6.2	9.1	46.2	8.2	1.7	3.9	88.4	2.679	Sand/gravel	1.1	± 0.23	3.7	± 0.27	4.8
				2015/2/13	Sunny	5.0	0.5	9.6	4	Olive brown	None	0.0	1.4	1.9	3.9	58.4	32.2	0.6	1.6	81.6	2.614	Sand	1.4	± 0.40	5.1	± 0.54	6.5
				2014/5/16	Sunny	22.7	0.4	18.6	5	Faint hydrogen sulfide	None	0.0	0.2	1.1	1.2	29.8	51.7	3.3	8.8	62.7	2.647	Sand	63	± 7.0	150	± 11	213
44	Kimagawa River	Takishita Bridge	Moriya City	2014/8/23	Sunny	30.8	0.5	26.8	4	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	1.3	63.3	20.5	14.8	54.6	2.631	Sand/silt	18	± 2.8	57	± 4.6	75
				2014/11/29	Cloudy	14.4	0.4	12.4	4	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.2	9.7	48.1	29.1	12.8	68.7	2.654	Sand	16	± 2.4	40	± 3.6	56
				2015/2/16	Sunny	8.8	0.6	7.3	5	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.1	11.2	75.9	4.5	8.4	64.5	2.623	Sand	21	± 4.3	69	± 7.2	90
				2014/5/15	Cloudy	21.8	0.4	23.2	5	Faint hydrogen sulfide	None	0.0	10.5	9.6	17.0	43.8	9.9	2.3	5.0	69.0	2.668	Sand	15	± 4.1	50	± 5.7	65
				2014/8/29	Cloudy	25.9	0.3	21.6	4	Faint hydrogen sulfide	None	0.0	32.5	24.2	15.3	21.2	5.0	0.3	1.4	86.6	2.671	Sand/gravel	4.7	± 0.41	16	± 0.58	20.7
45	Tagawa River	Tagawa Bridge	Chikusei City	2014/11/21	Sunny	14.9	0.3	12.9	3	Faint hydrogen sulfide	None	1.1	35.1	16.7	17.1	24.7	3.1	0.4	1.7	90.4	2.679	Gravel/sand	<6.7	± 2.1	17	± 2.9	17
				2015/2/13	Sunny	9.5	0.4	10.0	3	Olive black	Faint drain	0.0	17.9	20.6	21.3	27.6	8.5	1.3	2.6	85.8	2.667	Sand/gravel	7.4	± 2.0	16	± 2.9	23.4
				2014/5/29	Sunny	28.4	1.3	24.3	7	Faint hydrogen sulfide	Faint drain	0.0	0.2	1.0	2.7	36.8	44.5	6.2	8.7	60.6	2.642	Silt	34	± 5.1	97	± 8.0	131
				2014/8/29	Cloudy	25.4	0.4	24.4	5	Faint hydrogen sulfide	None	0.0	0.0	0.3	0.3	5.2	35.0	24.0	35.2	43.4	2.695	Sand/silt	<6.2	± 2.0	13	± 2.4	13
				2014/11/21	Sunny	14.7	0.4	13.1	5	Faint hydrogen sulfide	Faint drain	0.0	1.1	11.2	12.0	44.0	21.3	3.2	7.2	80.0	2.660	Sand	<4.3	± 1.5	23	± 2.9	23
46	Kokai River	Kokai Bridge	Chikusei City	2015/2/13	Sunny	9.0	0.4	9.0	5	Grayish olive	Faint drain	0.0	0.5	2.0	6.1	39.2	41.9	4.6	5.9	71.5	2.641	Silt/sand	14	± 3.2	62	± 5.5	76
				2014/5/16	Sunny	22.4	0.6	19.6	6	Grayish olive	None	0.0	0.0	0.0	0.1	41.9	48.1	3.3	6.7	57.1	2.690	Sand	40	± 6.9	110	± 9.6	150
				2014/8/23	Sunny	29.7	1.2	28.1	3	Dark brown	None	0.0	0.3	1.4	31.1	61.4	0.5	0.3	5.1	75.3	2.628	Sand	17	± 3.3	40	± 5.3	57
				2014/11/29	Cloudy	14.0	1.4	12.9	4	Dark brown	None	0.0	0.0	0.4	11.2	78.8	3.1	0.9	5.6	78.5	2.653	Sand/silt	12	± 3.3	41	± 5.0	53
				2015/2/12	Sunny	12.8	1.7	9.2	3	Blackish brown	None	0.0	0.0	0.1	1.7	82.2	12.5	1.3	2.3	78.4	2.675	Sand	10	± 2.6	40	± 4.2	50
47	Kokigawa River	Yanagawa River	Manyama Bridge	2014/5/20	Cloudy	24.6	1.1	24.4	5	Blackish brown	None	0.0	0.0	0.1	0.4	14.6	74.7	3.7	6.5	67.1	2.629	Sand	52	± 6.5	160	± 11	212
				2014/8/23	Cloudy	28.7	1.2	28.0	4	Blackish brown	Faint drain	0.0	0.0	0.0	0.1	1.3	48.2	28.4	22.1	42.4	2.536	Sand	190	± 16	470	± 25	660
				2014/12/5	Sunny	12.3	1.0	10.8	4	Blackish brown	Faint algae	0.0	0.0	0.0	0.2	7.5	81.9	3.5	7.0	71.1	2.649	Silt/sand	41	± 5.0	130	± 8.2	171
				2015/2/16	Sunny	9.8	0.5	9.0	4	Blackish brown	None	0.0	0.0	0.1	0.1	6.8	88.3	1.9	2.9	70.0	2.632	Sand/silt	37	± 5.3	140	± 9.4	177
				2014/5/20	Sunny	25.9	0.5	24.2	4	Blackish brown	None	1.9	4.5	1.7	2.3	18.9	26.2	18.5	26.0	50.6	2.460	Sand	10	± 1.5	27	± 2.2	37
48	Kokigawa River	Sakamoto Bridge	Tsukuba City	2014/8/23	Cloudy	29.1	0.5	26.2	3	Blackish brown	Faint drain	2.1	18.4	4.3	2.5	15.1	14.6	19.1	23.9	45.4	2.405	Sand/gravel	58	± 8.9	150	± 14	208
				2014/11/29	Cloudy	13.8	0.2	11.7	6	Blackish brown	Faint drain	0.0	0.2	0.4	5.2	34.6	27.8	11.8	20.0	62.6	2.610	Sand	100	± 8.6	350	± 16	450
				2015/2/16	Sunny	10.2	0.5	8.9	4	Blackish brown	None	0.0	10.4	13.0	6.0	34.0	16.1	8.1	12.4	54.8	2.697	Sand	9.6	± 1.9	30	± 3.1	36.6
				2014/5/29	Sunny	25.7	0.7	24.1	10	Brown	None	0.0	26.0	17.2	14.5	29.6	4.8	3.6	4.4	73.2	2.622	Gravel	170	± 8.8	470</		

Ibaraki River (Sediment) 5/5

R i v e r s	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																Remarks				
	No.	Water area		Location					Municipality	Sediment temperature (°C)	Sample length (cm)	Color	Odor	General items								Sediment content (%)	Density (g/cm³)	Property		Activity concentration [Bq/kg(dry)]			
		Coarse gravel	Medium gravel											Fine gravel	Grain size distribution (%)		Fine sand	Silt	Clay	Cs-134	Radioactive cesium								
															Coarse sand	Medium sand					Total								
51	Tonegawa River System	Tonegawa River	Tonegawa River	Kurohoshi Bridge	Koga City	2014/5/15	Cloudy	24.1	0.7	18.3	9	Faint hydrogen sulfide	Faint algae	0.0	0.3	1.9	14.0	27.2	34.5	12.7	9.5	68.4	2.687	Sand	39 ± 5.5	110 ± 8.5	149		
						2014/8/25	Cloudy	25.7	0.6	23.2	4	Faint hydrogen sulfide	None	0.0	0.0	0.9	8.9	31.2	46.9	6.3	5.8	74.8	2.748	Sand	13 ± 2.5	29 ± 4.0	42		
						2014/11/21	Sunny	10.8	0.3	9.2	4	Faint hydrogen sulfide	Faint algae	0.0	0.0	1.0	37.8	41.6	15.6	1.5	2.5	82.7	2.758	Sand	<6.4 ± 1.9	20 ± 3.4	20		
						2015/2/13	Sunny	6.1	0.4	6.0	3	Grayish olive	Faint swam	0.0	0.0	0.8	22.7	44.0	26.0	2.4	4.1	80.4	2.735	Sand/gravel	9.9 ± 2.6	29 ± 3.5	38.9		
						2014/5/16	Sunny	23.4	0.8	19.7	5	Faint hydrogen sulfide	None	0.0	0.3	0.2	0.2	21.0	68.6	3.2	6.7	74.1	2.789	Sand	13 ± 3.3	44 ± 5.4	57		
						2014/8/6	Sunny	31.4	0.6	27.6	4	Faint hydrogen sulfide	None	0.0	2.4	0.9	0.3	7.0	61.5	16.0	11.5	59.0	2.663	Sand/silt	28 ± 4.3	72 ± 7.0	100		
	52	Tonegawa River System	Tonegawa River	Tonegawa River	Fukawa	Tone Town	2014/11/27	Sunny	14.1	0.7	11.1	5	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.1	0.8	21.7	53.9	23.6	61.2	2.557	Silt/sand	66 ± 7.2	170 ± 12	236	
							2015/2/12	Sunny	10.7	0.8	8.1	4	Faint hydrogen sulfide	None	0.0	0.0	0.2	0.2	10.6	71.3	10.7	6.9	68.6	2.697	Sand	12 ± 3.1	53 ± 5.4	65	
							2014/5/31	Sunny	24.9	0.6	27.1	7	Faint hydrogen sulfide	None	0.0	12.5	5.1	3.4	13.0	46.8	10.1	9.2	77.4	2.682	Sand	3.2 ± 0.25	11 ± 0.47	14.2	
							2014/8/6	Sunny	32.1	0.2	28.2	4	Faint hydrogen sulfide	None	0.0	37.1	16.5	7.1	16.6	18.6	1.9	2.2	79.9	2.683	Gravel/sand	<7.8 ± 2.1	14 ± 2.8	14	
							2014/11/27	Sunny	13.8	0.4	12.0	3	Faint hydrogen sulfide	None	0.0	6.9	22.3	8.6	2.5	15.6	30.1	6.8	7.3	78.0	2.685	Sand/gravel	26 ± 4.0	64 ± 5.8	90
							2015/2/16	Sunny	5.4	0.4	4.8	3	Faint hydrogen sulfide	Faint drain	3.0	23.2	20.1	11.3	25.7	13.1	1.5	2.2	87.1	2.691	Sand/gravel	4.6 ± 1.4	15 ± 2.4	19.6	
53	Tonegawa River System	Tonegawa River	Tonegawa River	Sawara	Inashiki City	2014/11/27	Sunny	13.8	0.4	12.0	3	Faint hydrogen sulfide	None	0.0	6.9	22.3	8.6	2.5	15.6	30.1	6.8	7.3	78.0	2.685	Sand/gravel	26 ± 4.0	64 ± 5.8	90	
						2015/2/16	Sunny	5.4	0.4	4.8	3	Faint hydrogen sulfide	Faint drain	3.0	23.2	20.1	11.3	25.7	13.1	1.5	2.2	87.1	2.691	Sand/gravel	4.6 ± 1.4	15 ± 2.4	19.6		

Ibaraki River (Surrounding Environment) 1/5

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment (Soil, Air dose)												Remarks					
							Left bank						Right bank											
No.	Water area		Location	Municipality	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)						
								Radioactive cesium							Radioactive cesium									
								Cs-134	Cs-137	Total					Cs-134	Cs-137	Total							
R i v e r s	1	Satone River	Yamagoya Bridge	Kitaibaraki City	2014/5/31	Sunny	30.0	Blackish brown	faint earth	Loamy	790 ± 30	2,100 ± 50	2,890	0.11	Blackish brown	faint earth	Loamy	1,000 ± 34	2,700 ± 57	3,700	0.11			
					2014/8/2	Sunny	24.8	Blackish brown	faint earth	Loamy	660 ± 24	1,800 ± 39	2,460	0.12	Blackish brown	faint earth	Loamy	480 ± 20	1,300 ± 33	1,780	0.11			
					2014/11/13	Cloudy	15.4	Black	faint earth	Loamy	430 ± 21	1,500 ± 40	1,930	0.17	Black	faint earth	Loamy	460 ± 22	1,500 ± 40	1,960	0.17			
			2015/2/5		Cloudy	5.8	Black	None	Loamy	570 ± 24	1,800 ± 44	2,370	0.21	Blackish brown	faint earth	Loamy	290 ± 16	990 ± 30	1,280	0.18				
			2014/5/31		Sunny	28.5	Blackish brown	faint earth	Loamy	220 ± 16	620 ± 27	840	0.06	Blackish brown	faint earth	Loamy	690 ± 31	1,900 ± 52	2,590	0.08				
			2014/8/2		Sunny	29.6	Blackish brown	faint earth	Loamy	560 ± 25	1,700 ± 43	2,260	0.07	Blackish brown	faint earth	Loamy	540 ± 25	1,400 ± 40	1,940	0.10				
			2014/11/4		Sunny	16.9	Blackish brown	faint earth	Loamy	150 ± 14	520 ± 26	670	0.13	Blackish brown	faint earth	Loamy	680 ± 31	2,200 ± 57	2,880	0.10				
			2015/2/5		Cloudy	6.2	Blackish brown	faint earth	Loamy	280 ± 17	920 ± 31	1,200	0.11	Blackish brown	faint earth	Loamy	520 ± 24	1,800 ± 46	2,320	0.12				
			2014/8/2		Sunny	29.9	Black	None	Loamy	430 ± 25	1,200 ± 42	1,630	0.07	Dim yellowish brown	faint earth	Loamy	170 ± 15	470 ± 24	640	0.08				
			2014/11/13		Sunny	31.2	Blackish brown	faint earth	Loamy	260 ± 16	730 ± 26	990	0.06	Blackish brown	faint earth	Loamy	230 ± 15	690 ± 25	920	0.06				
			3		Hanazono River	Kurabeishi	Mitsuba City	2014/11/13	Sunny	16.1	Blackish brown	faint earth	Loamy	340 ± 21	1,100 ± 38	1,440	0.11	Dark brown	faint earth	Loamy	210 ± 16	690 ± 28	810	0.13
								2015/2/5	Cloudy	4.4	Blackish brown	faint earth	Loamy	190 ± 15	630 ± 28	820	0.12	Dark brown	faint earth	Loamy	130 ± 12	420 ± 22	550	0.09
								2014/5/24	Sunny	18.8	Blackish brown	faint earth	Loamy	370 ± 18	930 ± 29	1,300	0.10	Blackish brown	faint earth	Loamy	360 ± 18	920 ± 29	1,280	0.13
			4		Tagagawa River System	Isonare Bridge	Mitsuba City	2014/8/7	Sunny	26.8	Blackish brown	faint earth	Loamy	160 ± 12	500 ± 21	660	0.11	Dark grayish yellow	faint earth	Loamy	350 ± 20	1,200 ± 37	1,550	0.17
								2014/12/1	Cloudy	15.2	Blackish brown	faint earth	Loamy	280 ± 17	850 ± 29	1,130	0.07	Dim yellowish brown	faint earth	Loamy	250 ± 18	840 ± 33	1,090	0.13
	2015/2/7	Sunny		5.2				Brown	faint earth	Loamy	140 ± 12	460 ± 21	600	0.14	Dark brown	faint earth	Loamy	250 ± 19	910 ± 36	1,160	0.19			
	2014/5/31	Sunny		28.1				Dark olive brown	None	Sandy	35 ± 7.3	110 ± 12	145	0.04	Blackish brown	None	Sandy	140 ± 13	460 ± 23	600	0.04			
	5	Okita River	Sakae Bridge	Takahagi City	2014/8/2	Sunny	30.1	Dim yellowish brown	faint earth	Loamy	110 ± 12	380 ± 21	490	0.06	Dark brown	faint earth	Loamy	76 ± 8.5	230 ± 14	306	0.05			
					2014/11/4	Sunny	14.1	Dim yellowish brown	faint earth	Sandy	41 ± 8.4	130 ± 14	171	0.07	Dark brown	faint earth	Loamy	270 ± 20	820 ± 35	1,090	0.07			
					2015/2/17	Cloudy	4.0	Olive black	Faint grass	Sandy	42 ± 8.1	180 ± 15	222	0.08	Dim yellowish brown	faint earth	Loamy	130 ± 14	430 ± 25	560	0.06			
	6	Sakai Bridge	Kitaibaraki City	Mitsuba City	2014/5/24	Sunny	19.9	Blackish brown	faint earth	Loamy	23 ± 5.7	88 ± 10	111	0.08	Dark brown	faint earth	Loamy	33 ± 7.9	100 ± 11	133	0.11			
					2014/8/7	Sunny	25.6	Dark brown	faint earth	Loamy	210 ± 17	640 ± 28	850	0.14	Dark brown	faint earth	Loamy	150 ± 11	500 ± 20	650	0.16			
					2014/12/1	Cloudy	15.0	Dark brown	faint earth	Loamy	180 ± 17	560 ± 28	740	0.09	Dark brown	faint earth	Loamy	230 ± 20	860 ± 36	1,090	0.10			
	7	Hanunuki River	Shinhanunuki Bridge	Takahagi City	2015/2/7	Sunny	5.8	Blackish brown	faint earth	Loamy	150 ± 16	500 ± 27	650	0.13	Dim yellowish brown	faint earth	Loamy	220 ± 17	700 ± 31	920	0.16			
					2014/5/24	Sunny	21.8	Blackish brown	Faint grass	Loamy	47 ± 6.9	130 ± 11	177	0.08	Blackish brown	Faint grass	Loamy	44 ± 6.9	140 ± 11	184	0.06			
					2014/8/7	Sunny	29.0	Dark brown	faint earth	Loamy	170 ± 12	490 ± 21	660	0.11	Dark grayish yellow	faint earth	Loamy	260 ± 16	820 ± 28	1,080	0.11			
	8	Kujigawa River System	Kujigawa River	Yamagata	Hitachiomiya City	2014/11/14	Sunny	18.2	Dark brown	faint earth	Loamy	46 ± 7.1	150 ± 12	196	0.10	Dark brown	faint earth	Loamy	130 ± 12	380 ± 20	510	0.07		
						2015/2/7	Sunny	9.0	Dark brown	faint earth	Loamy	84 ± 9.9	280 ± 17	364	0.11	Blackish brown	faint earth	Loamy	56 ± 7.8	220 ± 14	276	0.11		
						2014/5/24	Sunny	22.1	Blackish brown	Faint grass	Loamy	33 ± 5.5	97 ± 8.8	130	0.09	Dark brown	faint earth	Loamy	24 ± 5.7	75 ± 7.6	99	0.08		
	9	Sakaki Bridge	Hitachi City/Tokai Village	Mitsuba City	2014/8/5	Sunny	33.6	Dim yellowish brown	Faint grass	Loamy	94 ± 8.8	270 ± 15	364	0.10	Dark grayish yellow	None	Sandy	<8.6 ± 2.4	22 ± 4.2	22	0.08			
2014/11/6					Sunny	20.4	Dark brown	faint earth	Loamy	<6.0 ± 1.9	8.4 ± 2.3	8.4	0.10	Dim yellowish brown	None	Sandy	<4.7 ± 1.6	7.7 ± 2.2	7.7	0.09				
2015/2/2					Sunny	6.1	Blackish brown	None	Loamy	41 ± 6.2	140 ± 11	181	0.10	Blackish brown	None	Sandy	67 ± 6.9	220 ± 13	287	0.09				
10	Nakagawa River	Noguchi	Hitachi City/Tokai Village	2014/5/24	Sunny	23.4	Dark brown	faint earth	Loamy	82 ± 10	230 ± 15	312	0.08	Dim yellowish brown	faint earth	Loamy	110 ± 11	300 ± 16	410	0.09				
				2014/8/5	Sunny	32.3	Dark brown	faint earth	Loamy	170 ± 14	480 ± 22	650	0.09	Dark brown	faint earth	Loamy	150 ± 11	420 ± 20	570	0.09				
				2014/11/6	Cloudy	17.1	Dark brown	faint earth	Loamy	90 ± 12	310 ± 20	400	0.09	Dim yellowish brown	faint earth	Loamy	26 ± 2.8	73 ± 4.8	99	0.09				
11	Shimokuni	Mito City	Mitsuba City	2015/2/9	Sunny	7.0	Yellowish brown	faint earth	Loamy	11 ± 2.1	32 ± 3.4	43	0.12	Olive black	faint earth	Loamy	22 ± 5.0	77 ± 9.8	99	0.11				
				2014/5/23	Cloudy	13.8	Blackish brown	faint earth	Loamy	17 ± 4.2	47 ± 6.1	64	0.08	Blackish brown	faint earth	Loamy	5.1 ± 1.6	16 ± 2.7	21.1	0.08				
				2014/8/22	Sunny	30.4	Blackish brown	faint earth	Loamy	190 ± 17	530 ± 29	720	0.09	Dim yellowish brown	faint grass	Sandy	<4.9 ± 1.3	9.0 ± 1.7	9.0	0.10				
11	Mito City	Shimokuni	Mitsuba City	2014/11/17	Cloudy	14.8	Dark brown	faint earth	Loamy	100 ± 10	340 ± 19	440	0.09	Dark brown	None	Sandy	<4.4 ± 1.4	9.9 ± 2.4	9.9	0.09				
				2015/2/9	Sunny	1.5	Dim yellowish brown	faint earth	Loamy	30 ± 7.1	110 ± 11	140	0.09	Olive black	faint earth	Loamy	<5.1 ± 1.7	18 ± 2.4	18	0.06				
				2014/5/23	Cloudy	19.0	Dark brown	Faint grass	Loamy	110 ± 12	320 ± 20	430	0.08	Dark brown	faint earth	Loamy	180 ± 15	490 ± 24	670	0.08				
11	Mito City	Shimokuni	Mitsuba City	2014/8/22	Sunny	32.4	Dark brown	faint earth	Loamy	49 ± 8.4	170 ± 14	219	0.08	Dark brown	faint earth	Loamy	130 ± 13	360 ± 22	490	0.09				
				2014/11/17	Sunny	15.2	Dark brown	faint earth	Loamy	64 ± 8.1	200 ± 14	264	0.08	Dark brown	None	Loamy	44 ± 7.4	150 ± 13	194	0.09				
2015/2/9	Sunny	5.5	Brown	faint earth	Loamy	18 ± 2.5	52 ± 3.9	70	0.07	Brown	faint earth	Loamy	51 ± 10	290 ± 20	341	0.11								

Ibaraki River (Surrounding Environment) 2/5

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment (Soil, Air dose)												Remarks									
							Left bank						Right bank															
No.	Water area		Location	Municipality	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (µSv/h)	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (µSv/h)										
	Radioactive cesium							Radioactive cesium																				
	Cs-134	Cs-137	Total	Cs-134				Cs-137	Total																			
R i v e r s	12	Nakagawa River	Katsuta Bridge	Mito City/Hitachinaka City	2014/5/23	Sunny	20.2	Blackish brown	faint earth	Loamy	61 ± 7.3	150 ± 12	211	0.07	Blackish brown	faint earth	Loamy	180 ± 14	550 ± 23	730	0.09							
					2014/8/22	Sunny	30.5	Brown	faint earth	Loamy	23 ± 9.0	61 ± 9.1	84	0.08	Dark grayish yellow	faint earth	Loamy	190 ± 15	480 ± 24	670	0.10							
					2014/11/17	Sunny	13.8	Blackish brown	faint earth	Loamy	70 ± 9.5	260 ± 17	330	0.08	Blackish brown	faint earth	Loamy	87 ± 9.2	250 ± 15	337	0.10							
					2015/2/10	Sunny	9.2	Brown	faint earth	Loamy	51 ± 10	240 ± 18	291	0.09	Blackish brown	faint earth	Loamy	31 ± 3.3	100 ± 5.5	131	0.10							
					2014/5/23	Cloudy	17.8	Blackish brown	faint earth	Loamy	89 ± 10	280 ± 17	369	0.09	Blackish brown	faint earth	Loamy	<5.4 ± 1.7	10 ± 2.2	10	0.08							
	13	Nakamaru River	Yanagisawa Bridge	Hitachinaka City	2014/8/11	Sunny	28.2	Dark brown	faint earth	Loamy	89 ± 12	340 ± 21	429	0.08	Dim yellowish brown	faint earth	Loamy	22 ± 2.9	55 ± 4.2	77	0.08							
					2014/11/17	Sunny	13.9	Dim yellowish brown	faint earth	Loamy	75 ± 9.1	240 ± 16	315	0.08	Dim yellowish brown	faint earth	Loamy	14 ± 2.1	34 ± 3.4	48	0.08							
					2015/2/10	Sunny	9.0	Dark brown	faint earth	Loamy	140 ± 14	510 ± 26	650	0.10	Dim yellowish brown	faint earth	Loamy	12 ± 2.3	34 ± 3.4	46	0.08							
					2014/5/22	Cloudy	17.6	Blackish brown	Faint grass	Loamy	10 ± 1.9	20 ± 2.5	30	0.06	Dark brown	None	Sandy	91 ± 12	240 ± 19	331	0.06							
					2014/8/12	Cloudy	28.5	Blackish brown	faint earth	Loamy	32 ± 3.6	76 ± 5.7	108	0.07	Blackish brown	faint earth	Loamy	200 ± 15	560 ± 26	760	0.07							
	14	Hinumanae River	Nagaoka Bridge	Ibaraki Town	2014/11/18	Cloudy	15.2	Blackish brown	faint earth	Loamy	21 ± 3.6	71 ± 6.2	92	0.08	Blackish brown	faint earth	Loamy	150 ± 12	380 ± 19	530	0.09							
					2015/2/12	Sunny	9.8	Brown	faint earth	Loamy	10 ± 2.7	27 ± 3.7	37	0.08	Dark brown	faint earth	Loamy	170 ± 17	660 ± 35	830	0.11							
					2014/5/22	Cloudy	18.9	Dark brown	Faint grass	Loamy	7.5 ± 1.8	22 ± 2.8	29.5	0.06	Blackish brown	Faint grass	Loamy	120 ± 10	270 ± 15	390	0.06							
					2014/8/22	Sunny	31.3	Dim yellowish brown	None	Loamy	10 ± 3.3	34 ± 4.5	44	0.07	Blackish brown	faint earth	Loamy	43 ± 8.3	150 ± 14	193	0.07							
					2014/11/18	Sunny	16.3	Dark brown	faint earth	Loamy	8.2 ± 2.2	40 ± 4.2	48.2	0.08	Blackish brown	faint earth	Loamy	50 ± 8.1	200 ± 15	250	0.07							
	15	Hinuma River	Takahashi	Ibaraki Town	2015/2/12	Sunny	8.0	Brown	faint earth	Loamy	11 ± 3.1	39 ± 5.1	50	0.08	Dim yellowish brown	faint earth	Loamy	12 ± 2.2	31 ± 3.6	43	0.10							
					2014/5/22	Sunny	22.9	Blackish brown	faint earth	Loamy	31 ± 4.5	72 ± 6.7	103	0.06	Blackish brown	None	Loamy	200 ± 18	640 ± 31	840	0.07							
					2014/8/12	Cloudy	27.4	Blackish brown	faint earth	Loamy	57 ± 9.4	200 ± 15	257	0.07	Blackish brown	faint earth	Loamy	61 ± 8.1	140 ± 13	201	0.07							
					2014/11/18	Sunny	16.3	Blackish brown	faint earth	Loamy	93 ± 10	330 ± 19	423	0.07	Blackish brown	faint earth	Loamy	82 ± 9.5	320 ± 17	402	0.07							
					2015/2/12	Sunny	9.0	Blackish brown	faint earth	Loamy	47 ± 4.2	190 ± 7.9	237	0.08	Dark brown	faint earth	Loamy	130 ± 14	510 ± 26	640	0.09							
	16	Kansei River	Kansei Bridge	Hokota City	2014/5/22	Sunny	21.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed				
					2014/8/12	Cloudy	28.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed		
					2014/11/18	Sunny	15.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	Soil not exposed	
					2015/2/12	Sunny	9.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	Soil not exposed	
					2014/5/23	Sunny	20.2	Blackish brown	faint earth	Loamy	300 ± 19	860 ± 32	1,160	0.11	Blackish brown	faint earth	Loamy	430 ± 21	1,200 ± 36	1,630	0.12							
17	Daiya River	Oya Bridge	Hokota City	2014/8/22	Sunny	28.2	Dim yellowish brown	faint earth	Loamy	350 ± 24	1,000 ± 42	1,350	0.12	Dark grayish yellow	faint earth	Loamy	320 ± 20	980 ± 34	1,300	0.12								
				2014/11/18	Sunny	15.1	Blackish brown	faint earth	Loamy	310 ± 24	940 ± 42	1,250	0.11	Dim yellowish brown	faint earth	Loamy	210 ± 14	640 ± 24	850	0.11								
				2015/2/10	Sunny	7.5	Blackish brown	faint earth	Loamy	87 ± 11	330 ± 20	417	0.11	Dark brown	faint earth	Loamy	52 ± 6.5	210 ± 13	262	0.12								
				2014/5/28	Sunny	22.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed		
				2014/8/18	Cloudy	27.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.09	Soil not exposed	
18	Hinuma River	Hinuma Bridge	Mito City/Oarai Town	2014/11/19	Sunny	14.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.08	Soil not exposed		
				2015/2/16	Sunny	7.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed
				2014/5/28	Sunny	23.9	Dim yellowish brown	faint earth	Loamy	21 ± 2.9	45 ± 3.9	66	0.08	Dim yellowish brown	faint earth	Loamy	24 ± 5.0	68 ± 7.5	92	0.09								
				2014/8/18	Cloudy	27.8	Dim yellowish brown	faint earth	Loamy	15 ± 4.0	48 ± 6.3	63	0.09	Dim yellowish brown	faint earth	Loamy	120 ± 11	380 ± 18	500	0.09								
				2014/11/19	Sunny	14.3	Dim yellowish brown	faint earth	Loamy	28 ± 6.4	140 ± 12	168	0.09	Dark brown	faint earth	Loamy	70 ± 8.5	240 ± 15	310	0.09								
19	Tomoe River	Shantomogawa Bridge	Hokota City	2015/2/16	Sunny	7.9	Dim yellowish brown	faint earth	Loamy	42 ± 9.0	140 ± 13	182	0.09	Dim yellowish brown	faint earth	Loamy	51 ± 8.4	170 ± 14	221	0.09								
				2014/5/28	Sunny	25.5	Extremely dark brown	faint earth	Loamy	64 ± 7.2	170 ± 12	234	0.08	Extremely dark brown	faint earth	Loamy	65 ± 7.4	190 ± 12	255	0.08								
				2014/8/18	Sunny	30.2	Dark brown	faint earth	Loamy	91 ± 8.2	250 ± 16	341	0.07	Dark brown	faint earth	Loamy	87 ± 8.2	260 ± 14	347	0.08								
				2014/11/19	Sunny	12.9	Dark brown	faint earth	Loamy	160 ± 13	520 ± 23	680	0.09	Dark brown	faint earth	Loamy	81 ± 8.4	270 ± 15	351	0.09								
				2015/2/16	Sunny	7.8	Brown	faint earth	Sandy	120 ± 13	420 ± 23	540	0.09	Blackish brown	faint earth	Loamy	59 ± 8.4	200 ± 14	259	0.08								
20	Taiyo River	Tazuka Bridge	Hokota City	2014/5/28	Sunny	26.8	Blackish brown	faint earth	Loamy	140 ± 11	420 ± 19	560	0.08	Blackish brown	faint earth	Loamy	200 ± 14	590 ± 23	790	0.07								
				2014/8/18	Sunny	29.4	Dark brown	faint earth	Loamy	150 ± 12	490 ± 21	640	0.09	Dark grayish yellow	faint earth	Loamy	150 ± 12	490 ± 22	640	0.08								
				2014/11/19	Sunny	12.1	Dark grayish yellow	faint earth	Loamy	88 ± 10	380 ± 19	468	0.09	Brown	faint earth	Loamy	92 ± 9.8	330 ± 17	422	0.09								
				2015/2/10	Sunny	10.4	Dark brown	Faint grass	Loamy	67 ± 7.8	240 ± 14	307	0.09	Dark brown	faint earth	Loamy	130 ± 6.8	460 ± 12	590	0.11								
				2014/5/28	Sunny	27.1	Dark brown	faint earth	Loamy	58 ± 8.3	180 ± 13	238	0.08	Dark brown	faint earth	Loamy	180 ± 13	490 ± 21	670	0.08								
21	Takeda River	Uchijuku-ohashi Bridge	Namegata City	2014/8/18	Cloudy	26.9	Dark brown	faint earth	Loamy	120 ± 11	380 ± 19	500	0.08	Dark brown	faint earth	Loamy	190 ± 12	490 ± 19	680	0.09								
				2014/11/19	Sunny	12.8	Brown	Faint grass	Loamy	35 ± 6.4	170 ± 12	205	0.09	Brown	Faint grass	Loamy	23 ± 4.7	94 ± 8.5	117	0.09								
				2015/2/10	Sunny	11.8	Dim yellowish brown	Faint grass	Loamy	31 ± 5.6	120 ± 11	151	0.08	Dark brown	Faint grass	Loamy	120 ± 5.2	410 ± 9.9	530	0.09								
				2014/5/28	Sunny	27.6	Blackish brown	faint earth	Loamy	100 ± 8.9	270 ± 14	370	0.07	Blackish brown	faint earth	Loamy	110 ± 9.0	310 ± 15	420	0.07								
				2014/8/19	Sunny	33.1	Blackish brown	faint earth	Loamy	160 ± 13	490 ± 23	650	0.08	Blackish brown	faint earth	Loamy	160 ± 12	390 ± 19	550	0.08								
22	Kurakawa River	Kurakawa Bridge	Namegata City	2014/11/20	Cloudy	13.8	Dark brown	faint earth	Loamy	34 ± 6.1	120 ± 9.5	154	0.08	Blackish brown	faint earth	Loamy	270 ± 17	880 ± 30	1,150	0.08								
				2015/2/14	Sunny	7.8	Dark brown	faint earth	Loamy	78 ± 9.2	280 ± 18	358	0.10	Dark brown	faint earth	Loamy	50 ± 8.7	210 ± 15	260	0.09								
				2014/5/28	Sunny	25.8	Blackish brown	faint earth	Loamy	220 ± 16	660 ± 27	880	0.07	Blackish brown	faint earth	Loamy	250 ± 16	630 ± 26	880	0.07								
				2014/8/19	Sunny	32.7	Blackish brown	faint earth	Loamy	180 ± 13	520 ± 21	700	0.07	Blackish brown	faint earth	Loamy	200 ± 14	590 ± 23	790	0.08								
				2014/11/20	Cloudy	14.2	Dark brown	faint earth	Loamy	78 ± 8.3	220 ± 14	298	0.08	Dark brown	faint earth	Loamy	73 ± 8.1	260 ± 14	333	0.08								
23	Gantsu River	JA Yokohashi Bridge	Namegata City	2015/2/14	Sunny	7.2	Blackish brown	faint earth	Loamy	54 ± 9.4	210 ± 16	264	0.09	Blackish brown	faint earth	Loamy	96 ± 10	340 ± 19	436	0.09								

Ibaraki River (Surrounding Environment) 3/5

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment (Soil, Air dose)											Remarks		
							Left bank						Right bank							
							Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (µSv/h)	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (µSv/h)
Radioactive cesium			Radioactive cesium																	
No.	Water area	Location	Municipality				Cs-134	Cs-137	Total				Cs-134	Cs-137	Total					
26	Nagare River	Suhoi Bridge	Kashima City	2014/5/28	Sunny	26.3	-	-	-	-	0.06	-	-	-	-	0.07	Soil not exposed			
				2014/8/19	Sunny	29.3	-	-	-	-	-	-	0.06	-	-	-	-	0.07	Soil not exposed	
				2014/11/20	Cloudy	12.4	-	-	-	-	-	-	0.08	-	-	-	-	-	0.08	Soil not exposed
27	Sonobe River	Sonobeshin Bridge	Omitama City	2015/2/13	Sunny	5.7	-	-	-	-	0.08	-	-	-	-	0.08	Soil not exposed			
				2014/8/9	Sunny	26.0	Brown	faint earth	Loamy	180 ± 17	540 ± 30	720	0.09	Dark brown	faint earth	Loamy	330 ± 34	750 ± 51	1,080	0.07
				2014/12/2	Sunny	13.3	Blackish brown	faint earth	Loamy	120 ± 13	440 ± 24	560	0.07	Blackish brown	faint earth	Loamy	42 ± 7.5	180 ± 15	222	0.08
28	Samo River	Tokoro Bridge	Omitama City	2015/2/7	Sunny	8.3	Dark brown	faint earth	Loamy	120 ± 13	330 ± 21	450	0.08	Black	faint earth	Loamy	85 ± 9.4	300 ± 17	385	0.07
				2014/5/31	Sunny	28.2	Brown	faint earth	Loamy	130 ± 14	410 ± 23	540	0.10	Brown	faint earth	Loamy	140 ± 13	390 ± 20	530	0.10
				2014/8/20	Sunny	33.1	Dim yellowish brown	faint earth	Loamy	150 ± 12	370 ± 20	520	0.09	Dim yellowish brown	faint earth	Loamy	160 ± 14	480 ± 23	640	0.09
29	Koise River	Heiwa Bridge	Ishioka City	2014/12/2	Sunny	15.9	Dark brown	faint earth	Loamy	440 ± 26	1,300 ± 44	1,740	0.09	Dim yellowish brown	faint earth	Loamy	90 ± 8.6	230 ± 14	320	0.08
				2015/2/7	Sunny	10.2	Dim yellowish brown	None	Loamy	140 ± 13	420 ± 22	560	0.09	Dim yellowish brown	None	Loamy	78 ± 8.9	270 ± 15	348	0.11
				2014/5/31	Sunny	30.4	Dark brown	faint earth	Loamy	25 ± 3.5	61 ± 5.0	86	0.09	Dim yellowish brown	faint earth	Loamy	53 ± 7.0	120 ± 11	173	0.10
30	Kajinashi River	Kamishuku Bridge	Namegata City	2014/8/9	Cloudy	27.9	Dim yellowish brown	faint earth	Loamy	630 ± 31	1,800 ± 53	2,430	0.11	Dark brown	faint earth	Loamy	140 ± 13	500 ± 24	640	0.11
				2014/12/2	Sunny	13.6	Blackish brown	faint earth	Loamy	260 ± 17	940 ± 32	1,200	0.11	Blackish brown	faint earth	Loamy	340 ± 31	1,200 ± 57	1,540	0.11
				2015/2/7	Cloudy	8.0	Dim yellowish brown	faint earth	Loamy	200 ± 16	790 ± 31	990	0.10	Dark brown	faint earth	Loamy	110 ± 10	340 ± 18	450	0.09
31	Hishiki River	Hishiki Bridge	Kasumigaura City	2014/5/31	Sunny	30.6	Dim yellowish brown	faint earth	Loamy	130 ± 11	360 ± 19	490	0.09	Brown	faint earth	Loamy	90 ± 10	210 ± 14	300	0.09
				2014/8/20	Sunny	33.2	Dark brown	faint earth	Loamy	55 ± 7.4	210 ± 13	265	0.07	Dark brown	faint earth	Loamy	57 ± 6.7	170 ± 11	227	0.07
				2014/12/2	Sunny	14.6	Blackish brown	faint earth	Loamy	80 ± 10	320 ± 18	400	0.07	Blackish brown	faint earth	Loamy	33 ± 6.1	170 ± 11	203	0.08
32	Ichinose River	Kawanaka Bridge	Kasumigaura City	2015/2/7	Sunny	6.9	Blackish brown	faint earth	Loamy	64 ± 8.7	200 ± 14	264	0.08	Dark brown	faint earth	Loamy	19 ± 2.5	50 ± 3.9	69	0.08
				2014/5/31	Sunny	25.9	Blackish brown	faint earth	Loamy	95 ± 11	280 ± 19	375	0.09	Blackish brown	faint earth	Loamy	95 ± 11	240 ± 18	335	0.09
				2014/8/9	Cloudy	25.2	Dim yellowish brown	faint earth	Loamy	42 ± 8.5	180 ± 15	222	0.09	Dim yellowish brown	faint earth	Loamy	120 ± 13	380 ± 22	500	0.10
33	Sakai River	Sakai Bridge/National Route 354	Tsuchiura City	2014/12/3	Sunny	12.0	Blackish brown	faint earth	Loamy	77 ± 10	280 ± 16	357	0.10	Blackish brown	faint earth	Loamy	180 ± 14	580 ± 25	760	0.10
				2015/2/17	Cloudy	5.2	Dark brown	None	Loamy	15 ± 2.1	43 ± 3.5	58	0.07	Dark brown	None	Loamy	91 ± 11	290 ± 20	381	0.09
				2014/5/31	Sunny	27.7	Blackish brown	faint earth	Loamy	75 ± 11	220 ± 18	295	0.10	Blackish brown	faint earth	Loamy	84 ± 12	240 ± 19	324	0.10
34	Shinkawa River	Shinten Bridge	Tsuchiura City	2014/8/9	Cloudy	26.3	Blackish brown	faint earth	Loamy	100 ± 13	280 ± 20	380	0.10	Dim yellowish brown	faint earth	Loamy	42 ± 7.6	100 ± 12	142	0.12
				2014/12/3	Sunny	11.8	Blackish brown	faint earth	Loamy	54 ± 4.1	180 ± 7.4	234	0.10	Blackish brown	faint earth	Loamy	86 ± 9.0	310 ± 17	396	0.10
				2015/2/17	Cloudy	5.9	Dark brown	faint earth	Loamy	110 ± 14	300 ± 22	410	0.09	Dark brown	faint earth	Loamy	56 ± 9.1	180 ± 15	236	0.08
35	Sakura River	Eiri Bridge	Tsuchiura City/Tsukuba City	2014/5/17	Sunny	21.7	Dark brown	faint earth	Loamy	92 ± 8.6	250 ± 13	342	0.09	Dark brown	faint earth	Loamy	120 ± 9.3	370 ± 16	490	0.09
				2014/8/21	Sunny	32.6	Brown	faint earth	Loamy	180 ± 13	530 ± 22	710	0.09	Brown	faint earth	Loamy	200 ± 14	610 ± 24	810	0.09
				2014/12/3	Sunny	14.6	Dark brown	faint earth	Loamy	300 ± 19	1,100 ± 37	1,400	0.09	Dark brown	Faint grass	Loamy	110 ± 10	320 ± 18	430	0.09
36	Bizen River	Bizengawa Bridge	Tsuchiura City	2015/2/18	Cloudy	4.8	Dark brown	faint earth	Loamy	82 ± 10	360 ± 20	442	0.12	Dark brown	faint earth	Loamy	81 ± 11	250 ± 18	331	0.09
				2014/5/17	Sunny	26.6	Dark brown	faint earth	Loamy	270 ± 15	690 ± 24	960	0.09	Dark brown	faint earth	Loamy	260 ± 13	660 ± 21	920	0.09
				2014/8/21	Sunny	33.4	Dark brown	faint earth	Loamy	390 ± 21	970 ± 33	1,360	0.10	Dark brown	faint earth	Loamy	390 ± 21	1,200 ± 37	1,590	0.09
37	Hanumuro River	Shinwa Bridge	Tsuchiura City	2014/12/3	Sunny	14.3	Dark brown	faint earth	Loamy	250 ± 17	800 ± 30	1,050	0.10	Dark brown	faint earth	Loamy	220 ± 15	710 ± 25	930	0.09
				2015/2/17	Cloudy	8.3	Dark brown	faint earth	Loamy	140 ± 11	530 ± 22	670	0.08	Dark brown	faint earth	Loamy	230 ± 14	830 ± 28	1,060	0.08
				2014/5/29	Sunny	28.1	Brown	faint earth	Loamy	69 ± 8.1	180 ± 13	249	0.07	Dark brown	faint earth	Loamy	32 ± 6.9	100 ± 10	132	0.09
38	Seimei River	Katsubashi Bridge	Ami Town	2014/8/28	Cloudy	23.1	Dim yellowish brown	faint earth	Loamy	92 ± 12	240 ± 18	332	0.06	Blackish brown	faint earth	Loamy	58 ± 10	220 ± 17	278	0.07
				2014/11/29	Light rain	13.5	Brown	faint earth	Loamy	24 ± 5.3	94 ± 9.0	118	0.07	Blackish brown	faint earth	Loamy	52 ± 6.8	130 ± 11	182	0.10
				2015/2/19	Sunny	11.9	Dark brown	faint earth	Loamy	29 ± 6.2	120 ± 11	149	0.09	Blackish brown	faint earth	Loamy	34 ± 6.6	120 ± 11	154	0.10
38	Seimei River	Katsubashi Bridge	Ami Town	2014/5/17	Sunny	24.3	Blackish brown	faint earth	Loamy	150 ± 10	490 ± 17	640	0.11	Dark brown	faint earth	Loamy	200 ± 12	550 ± 20	750	0.10
				2014/8/21	Sunny	33.0	Brownish gray	faint earth	Loamy	330 ± 15	910 ± 25	1,240	0.12	Dark brown	faint earth	Loamy	120 ± 10	430 ± 18	550	0.11
				2014/11/25	Cloudy	13.8	Blackish brown	faint earth	Loamy	160 ± 12	510 ± 22	670	0.15	Blackish brown	faint earth	Loamy	180 ± 15	600 ± 27	780	0.12
38	Seimei River	Katsubashi Bridge	Ami Town	2015/2/14	Sunny	8.9	Dark brown	None	Loamy	130 ± 12	450 ± 21	580	0.12	Blackish brown	None	Loamy	280 ± 16	940 ± 30	1,220	0.11
				2014/5/17	Sunny	25.1	Dark brown	faint earth	Loamy	52 ± 13	200 ± 13	252	0.12	Dark brown	faint earth	Loamy	260 ± 19	710 ± 31	970	0.11
				2014/8/21	Sunny	31.4	Dark brown	faint earth	Loamy	260 ± 15	780 ± 26	1,040	0.13	Dark brown	faint earth	Loamy	260 ± 15	740 ± 25	1,000	0.12
38	Seimei River	Katsubashi Bridge	Ami Town	2014/11/29	Light rain	15.5	Blackish brown	faint earth	Loamy	500 ± 21	1,800 ± 39	2,300	0.16	Blackish brown	faint earth	Loamy	460 ± 20	1,500 ± 36	1,960	0.13
				2015/2/19	Sunny	11.2	Blackish brown	faint earth	Loamy	280 ± 17	1,100 ± 33	1,380	0.15	Dark brown	faint earth	Loamy	21 ± 4.4	98 ± 9.6	119	0.13
				2014/5/29	Sunny	24.5	Dark brown	faint earth	Sandy	330 ± 18	900 ± 31	1,230	0.13	Dark brown	faint earth	Sandy	69 ± 8.5	200 ± 14	269	0.15
38	Seimei River	Katsubashi Bridge	Ami Town	2014/8/21	Sunny	29.8	Brown	faint earth	Loamy	230 ± 14	580 ± 24	810	0.11	Brown	faint earth	Loamy	180 ± 13	550 ± 23	730	0.11
				2014/11/29	Light rain	13.8	Dark grayish yellow	faint earth	Loamy	160 ± 11	510 ± 20	670	0.18	Dim yellowish brown	faint earth	Loamy	15 ± 4.8	62 ± 7.4	77	0.17
				2015/2/19	Sunny	6.0	Dark brown	faint earth	Sandy	32 ± 5.7	140 ± 11	172	0.14	Brown	faint earth	Loamy	17 ± 4.5	54 ± 7.5	71	0.12

Ibaraki River (Surrounding Environment) 4/5

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment (Soil, Air dose)											Remarks		
No.	Water area	Location	Municipality				Left bank						Right bank							
							Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			
										Radioactive cesium							Radioactive cesium			
			Cs-134	Cs-137	Total	Cs-134	Cs-137	Total												
R i v e r s	Onogawa River	Okuhara-ohashi Bridge	Ryugasaki City/Utsuki City	2014/5/16	Sunny	22.4	Dark brown	faint earth	Loamy	66 ± 9.1	170 ± 14	236	0.09	Blackish brown	faint earth	Loamy	75 ± 10	190 ± 15	265	0.09
				2014/8/6	Sunny	33.2	Dark brown	faint earth	Loamy	130 ± 11	360 ± 18	490	0.10	Dark brown	faint earth	Loamy	120 ± 11	380 ± 19	500	0.09
				2014/11/27	Sunny	16.2	Dark brown	faint earth	Loamy	58 ± 8.8	210 ± 15	268	0.11	Blackish brown	faint earth	Loamy	<9.8 ± 3.2	14 ± 4.4	14	0.09
				2015/2/6	Sunny	9.0	Dim yellowish brown	faint earth	Loamy	73 ± 9.5	240 ± 15	313	0.12	Blackish brown	faint earth	Loamy	17 ± 4.6	50 ± 6.5	67	0.10
	Shintone River	Shintone Bridge	Inashiki City	2014/5/28	Sunny	26.0	Blackish brown	faint earth	Loamy	200 ± 18	460 ± 29	660	0.10	Dark brown	faint earth	Loamy	120 ± 12	410 ± 22	530	0.09
				2014/8/6	Sunny	32.3	Dim yellowish brown	faint earth	Loamy	40 ± 5.5	91 ± 8.3	131	0.08	Dark grayish yellow	faint earth	Loamy	690 ± 23	2,000 ± 40	2,690	0.08
				2014/11/27	Sunny	13.9	Dark brown	faint earth	Loamy	99 ± 11	340 ± 20	439	0.08	Blackish brown	faint earth	Loamy	350 ± 20	1,200 ± 37	1,550	0.08
				2015/2/6	Sunny	10.0	Olive black	faint earth	Loamy	84 ± 10	320 ± 18	404	0.10	Dark brown	faint earth	Loamy	100 ± 11	390 ± 21	490	0.10
	Yorokoshi River	Horinouchi Bridge	Itako City	2014/5/28	Sunny	27.2	Dark brown	faint earth	Loamy	52 ± 7.1	120 ± 10	172	0.07	Dark brown	faint earth	Loamy	35 ± 6.0	120 ± 10	155	0.08
				2014/8/19	Sunny	32.6	Dim yellowish brown	faint earth	Loamy	150 ± 12	440 ± 20	590	0.06	Dim yellowish brown	faint earth	Loamy	120 ± 11	380 ± 19	500	0.08
				2014/11/20	Cloudy	14.0	Dim yellowish brown	faint earth	Clay-loamy	39 ± 6.3	140 ± 12	179	0.06	Dark brown	faint earth	Loamy	99 ± 11	360 ± 20	459	0.07
				2015/2/13	Sunny	10.0	Dark brown	faint earth	Loamy	47 ± 6.4	150 ± 11	197	0.08	Dark brown	faint earth	Loamy	33 ± 5.1	130 ± 9.8	163	0.08
	Mackawa River	Ayame Bridge	Itako City	2014/5/28	Sunny	28.0	Dim yellowish brown	faint earth	Loamy	29 ± 5.3	92 ± 8.9	121	0.06	Dark brown	faint earth	Loamy	33 ± 6.3	110 ± 10	143	0.06
				2014/8/19	Sunny	31.2	Brown	faint earth	Loamy	14 ± 3.9	46 ± 6.1	60	0.06	Dim yellowish brown	faint earth	Sandy	56 ± 6.8	180 ± 12	236	0.06
				2014/11/20	Cloudy	14.2	Dim yellowish brown	faint earth	Loamy	42 ± 6.5	150 ± 12	192	0.06	Brown	faint earth	Loamy	31 ± 6.1	78 ± 8.3	109	0.06
				2015/2/13	Sunny	11.2	Dark brown	None	Loamy	30 ± 4.5	120 ± 8.7	150	0.06	Dim yellowish brown	None	Sandy	47 ± 7.0	160 ± 11	207	0.07
	Kimugawa River	Kawashima Bridge	Chikusei City	2014/5/15	Sunny	23.9	Blackish brown	faint earth	Loamy	16 ± 3.9	42 ± 5.6	58	0.08	Blackish brown	faint earth	Loamy	17 ± 3.0	39 ± 4.5	56	0.08
				2014/8/29	Cloudy	25.8	Blackish brown	faint earth	Loamy	34 ± 5.9	77 ± 8.3	111	0.09	Dark brown	faint earth	Loamy	21 ± 6.4	96 ± 10	117	0.10
				2014/11/21	Sunny	14.8	Dark brown	faint earth	Loamy	9.8 ± 1.9	39 ± 3.2	48.8	0.08	Blackish brown	faint earth	Loamy	32 ± 7.8	110 ± 13	142	0.08
				2015/2/13	Sunny	5.0	Blackish brown	faint earth	Loamy	17 ± 4.0	45 ± 6.0	62	0.09	Dim yellowish brown	faint earth	Loamy	6.2 ± 1.7	27 ± 2.9	33.2	0.08
	Tagawa River	Tagawa Bridge	Moriya City	2014/5/16	Sunny	22.7	Dark brown	faint earth	Loamy	26 ± 7.5	110 ± 12	136	0.09	Dark brown	faint earth	Loamy	330 ± 24	890 ± 39	1,220	0.12
				2014/8/23	Sunny	30.8	Blackish brown	faint earth	Loamy	320 ± 23	930 ± 40	1,250	0.10	Blackish brown	faint earth	Loamy	560 ± 31	1,500 ± 52	2,060	0.13
				2014/11/29	Cloudy	14.4	Dark brown	faint earth	Loamy	290 ± 19	910 ± 33	1,200	0.10	Dark brown	faint earth	Loamy	210 ± 15	760 ± 28	970	0.13
				2015/2/16	Sunny	8.8	Dark brown	faint earth	Loamy	150 ± 17	590 ± 33	740	0.10	Dark brown	faint earth	Loamy	280 ± 20	920 ± 38	1,200	0.14
	Kokai River	Kuroko Bridge	Chikusei City	2014/5/15	Cloudy	21.8	Blackish brown	faint earth	Loamy	12 ± 3.1	43 ± 4.8	55	0.06	Dark brown	faint earth	Loamy	12 ± 3.8	36 ± 4.5	48	0.06
				2014/8/29	Cloudy	25.9	Dim yellowish brown	faint earth	Loamy	46 ± 7.5	110 ± 11	156	0.07	Blackish brown	faint earth	Loamy	<5.3 ± 1.7	13 ± 2.4	13	0.07
				2014/11/21	Sunny	14.9	Dark brown	faint earth	Loamy	43 ± 8.3	130 ± 14	173	0.08	Blackish brown	faint earth	Loamy	<6.6 ± 1.9	20 ± 2.7	20	0.07
				2015/2/13	Sunny	9.5	Brown	faint earth	Loamy	9.4 ± 2.0	40 ± 3.5	49.4	0.07	Dark brown	faint earth	Loamy	6.3 ± 1.9	28 ± 3.1	34.3	0.08
	Fumimaki Bridge	Toride City	2014/5/29	Sunny	28.4	Blackish brown	faint earth	Loamy	210 ± 15	680 ± 26	890	0.08	Dark brown	faint earth	Loamy	16 ± 5.0	49 ± 7.6	65	0.07	
			2014/8/29	Cloudy	25.4	Blackish brown	faint earth	Loamy	51 ± 7.7	160 ± 13	211	0.08	Blackish brown	faint earth	Loamy	43 ± 7.5	160 ± 13	203	0.10	
			2014/11/21	Sunny	14.7	Dark brown	faint earth	Loamy	36 ± 10	130 ± 16	166	0.08	Dark brown	faint earth	Loamy	59 ± 9.3	170 ± 17	229	0.08	
			2015/2/13	Sunny	9.0	Brown	faint earth	Loamy	54 ± 8.4	190 ± 15	244	0.08	Brown	faint earth	Loamy	17 ± 4.5	46 ± 7.5	63	0.06	
	Maruyama Bridge	Tsukuba City	2014/5/16	Sunny	22.4	Dim yellowish brown	faint earth	Loamy	55 ± 8.7	160 ± 14	215	0.11	Dark brown	faint earth	Loamy	83 ± 10	200 ± 15	283	0.10	
			2014/8/23	Sunny	29.7	Dim yellowish brown	faint earth	Loamy	2,400 ± 57	7,200 ± 100	9,600	0.12	Dim yellowish brown	faint earth	Loamy	110 ± 12	340 ± 20	450	0.11	
			2014/11/29	Cloudy	14.0	Dark brown	faint earth	Loamy	200 ± 14	600 ± 24	800	0.12	Dark brown	faint earth	Loamy	110 ± 10	340 ± 18	450	0.11	
			2015/2/12	Sunny	12.8	Dark brown	None	Loamy	75 ± 9.3	290 ± 17	365	0.10	Faint yellowish soil	faint earth	Loamy	89 ± 6.0	320 ± 11	409	0.11	
	Nishiyata River	Sakaimatsu Bridge	Tsukuba City	2014/5/20	Cloudy	24.6	Blackish brown	None	Sandy	200 ± 15	570 ± 25	770	0.11	Blackish brown	None	Sandy	210 ± 16	560 ± 26	770	0.09
				2014/8/23	Cloudy	28.7	Blackish brown	faint earth	Loamy	140 ± 12	350 ± 19	490	0.12	Blackish brown	faint earth	Loamy	190 ± 14	480 ± 23	670	0.09
				2014/12/5	Sunny	13.3	Blackish brown	faint earth	Loamy	340 ± 23	1,100 ± 41	1,440	0.11	Blackish brown	faint earth	Loamy	190 ± 16	710 ± 27	900	0.11
				2015/2/16	Sunny	9.8	Dark brown	faint earth	Loamy	150 ± 15	630 ± 30	780	0.11	Blackish brown	faint earth	Loamy	61 ± 8.8	240 ± 17	301	0.12
Oguki Bridge	Inari River	Oguki Bridge	2014/5/20	Sunny	25.9	Brownish gray	faint earth	Sandy	12 ± 1.8	29 ± 2.7	41	0.05	Blackish brown	faint earth	Sandy	25 ± 7.9	79 ± 11	104	0.06	
			2014/8/23	Cloudy	29.1	Blackish brown	faint earth	Loamy	<7.1 ± 2.3	33 ± 3.4	33	0.07	Blackish brown	faint earth	Loamy	<6.1 ± 2.0	26 ± 3.2	26	0.07	
			2014/11/29	Cloudy	13.8	Blackish brown	faint earth	Loamy	16 ± 2.5	46 ± 3.9	62	0.07	Blackish brown	faint earth	Loamy	7.8 ± 2.2	11 ± 2.6	18.8	0.09	
			2015/2/16	Sunny	10.2	Blackish brown	None	Loamy	14 ± 3.1	45 ± 4.7	59	0.08	Dark brown	None	Loamy	24 ± 3.2	98 ± 5.9	122	0.07	
2014/5/29	2014/8/28	2014/11/25	2015/2/6	Sunny	25.7	Dim yellowish brown	faint earth	Loamy	210 ± 14	620 ± 24	830	0.10	Dim yellowish brown	faint earth	Loamy	620 ± 28	1,700 ± 47	2,320	0.14	
				Cloudy	24.8	Blackish brown	faint earth	Loamy	620 ± 28	1,900 ± 50	2,520	0.12	Blackish brown	faint earth	Loamy	100 ± 11	330 ± 20	430	0.12	
				Sunny	12.9	Blackish brown	faint earth	Loamy	350 ± 20	1,200 ± 37	1,550	0.12	Blackish brown	faint earth	Loamy	330 ± 20	1,100 ± 36	1,430	0.12	
2015/2/6	Sunny	13.0	Dark brown	faint earth	Loamy	220 ± 16	780 ± 30	1,000	0.11	Blackish brown	faint earth	Loamy	150 ± 14	490 ± 25	640	0.15				

Ibaraki River (Surrounding Environment) 5/5

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air,dose)											Remarks				
No.	Water area	Location	Municipality				Left bank						Right bank									
							Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (µSv/h)	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (µSv/h)		
										Radioactive cesium							Radioactive cesium					
			Cs-134	Cs-137	Total				Cs-134	Cs-137	Total											
R i v e r s	Tonegawa River System	Tonegawa River	Kuribashi Bridge	Koga City	2014/5/15	Cloudy	24.1	Dark brown	Faint grass	Sandy	<6.5 ± 1.8	<9.7 ± 2.8	-	0.05	Dark brown	Faint grass	Sandy	32 ± 6.6	110 ± 11	142	0.06	
					2014/8/25	Cloudy	25.2	Blackish brown	faint earth	Loamy	<4.2 ± 1.3	<4.6 ± 1.5	-	0.05	Dark brown	faint earth	Loamy	100 ± 13	330 ± 22	430	0.05	
					2014/11/21	Sunny	10.8	Brown	faint earth	Loamy	<5.4 ± 1.6	7.4 ± 1.8	7.4	0.05	Dark brown	faint earth	Loamy	39 ± 10	140 ± 15	179	0.06	
			2015/2/13	Sunny	6.1	Brown	faint earth	Loamy	<6.1 ± 1.8	<6.4 ± 2.0	-	0.06	Dark brown	faint earth	Loamy	17 ± 2.6	50 ± 4.1	67	0.07			
			2014/5/16	Sunny	23.4	Blackish brown	faint earth	Loamy	130 ± 12	360 ± 21	490	0.09	Faint hydrogen sulfate	faint earth	Loamy	52 ± 7.4	150 ± 13	202	0.06			
			2014/8/6	Sunny	31.4	Blackish brown	None	Loamy	140 ± 12	410 ± 20	550	0.10	Dark grayish yellow	None	Loamy	62 ± 8.5	170 ± 13	232	0.06			
	52	Tonegawa River System	Tonegawa River	Fukawa	Tone Town	2014/11/27	Sunny	14.1	Dark brown	faint earth	Loamy	100 ± 12	340 ± 21	440	0.09	Dark brown	faint earth	Loamy	8.7 ± 1.8	21 ± 2.7	29.7	0.08
						2015/2/12	Sunny	10.7	Dark brown	faint earth	Loamy	170 ± 6.8	610 ± 13	780	0.12	Blackish brown	faint earth	Loamy	19 ± 3.2	69 ± 5.2	88	0.08
						2014/5/31	Sunny	24.9	Brown	faint earth	Loamy	13 ± 2.6	43 ± 3.8	56	0.06	Blackish brown	faint earth	Loamy	<8.7 ± 2.0	<8.7 ± 2.3	-	0.06
	53	Tonegawa River System	Tonegawa River	Sawara	Inashiki City	2014/8/6	Sunny	32.1	Dark grayish yellow	faint earth	Loamy	34 ± 6.8	100 ± 10	134	0.07	Dark grayish yellow	faint earth	Sandy	<5.6 ± 1.6	9.4 ± 2.1	9.4	0.07
						2014/11/27	Sunny	13.8	Dim yellowish brown	faint earth	Loamy	25 ± 6.8	80 ± 10	105	0.07	Dark brown	faint earth	Loamy	11 ± 1.9	32 ± 2.7	43	0.07
						2015/2/16	Sunny	5.4	Dark brown	faint earth	Loamy	28 ± 6.9	110 ± 13	138	0.06	Dark brown	faint earth	Loamy	12 ± 2.3	36 ± 3.9	48	0.07

Ibaraki Lakes and Reservoirs (Water) 1/4

Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
No.	Water area	Location						General items						Activity concentration(Bq/L)				
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium		
													Cs-134	Cs-137				
L a k e s a n d R e s e r v o i r s	54	Hiroura	Surface layer	2014/5/19	Cloudy	20.1	2.5	21.3	0.5	Soft yellow	None	0.5	1,270.0	23	17	<0.55 ± 0.13	<0.64 ± 0.12	
			Deep layer					20.6	1.5	-	None		1,709.0	23	11	<0.55 ± 0.14	<0.56 ± 0.10	
			Surface layer	2014/8/8	Cloudy	31.8	2.5	30.6	0.5	Grayish yellow	None	0.7	1,350.0	3	2.5	<0.57 ± 0.12	<0.59 ± 0.15	
			Deep layer					29.7	1.5	-	None		1,430.0	5	2.0	<0.48 ± 0.10	<0.59 ± 0.10	
			Surface layer	2014/11/7	Sunny	18.5	2.7	17.4	0.5	Dark grayish yellow	None	1.0	1,340.0	10	7.7	<0.82 ± 0.18	<0.65 ± 0.15	
			Deep layer					17.1	1.7	-	None		1,370.0	10	7.9	<0.74 ± 0.15	<0.60 ± 0.13	
	55	Hinuma	Miyamac	Surface layer	2015/2/20	Sunny	9.0	2.6	6.6	0.5	Dark grayish yellow	None	1.1	1,480.0	5	7.2	<0.43 ± 0.13	<0.65 ± 0.14
				Deep layer					6.5	1.6	-	None		1,520.0	8	6.7	<0.50 ± 0.11	<0.60 ± 0.13
				Surface layer	2014/5/19	Cloudy	20.3	3.2	21.2	0.5	Soft yellow	None	0.5	1,156.0	21	19	<0.74 ± 0.15	<0.63 ± 0.15
				Deep layer					20.3	2.2	-	None		1,623.0	14	6.2	<0.74 ± 0.14	<0.63 ± 0.15
				Surface layer	2014/8/8	Cloudy	31.8	3.4	31.2	0.5	Grayish yellow	None	0.7	1,370.0	2	2.0	<0.45 ± 0.10	<0.52 ± 0.12
				Deep layer					30.7	2.4	-	None		1,370.0	2	1.7	<0.53 ± 0.14	<0.55 ± 0.14
	56	Oyazawa		Surface layer	2014/11/7	Sunny	18.1	3.2	16.8	0.5	Dark grayish yellow	None	1.0	1,370.0	10	8.1	<0.61 ± 0.12	<0.50 ± 0.11
				Deep layer					16.6	2.2	-	None		1,380.0	10	7.5	<0.63 ± 0.11	<0.66 ± 0.15
				Surface layer	2015/2/20	Sunny	8.9	3.3	6.7	0.5	Dark grayish yellow	None	1.1	1,160.0	7	7.7	<0.48 ± 0.096	<0.59 ± 0.11
				Deep layer					6.3	2.3	-	None		1,290.0	6	7.7	<0.54 ± 0.12	<0.59 ± 0.12
				Surface layer	2014/5/19	Cloudy	19.8	2.5	22.0	0.5	Soft yellow	None	0.4	850.0	36	30	<0.69 ± 0.16	<0.51 ± 0.16
				Deep layer					21.9	1.5	-	None		859.0	32	29	<0.79 ± 0.17	<0.80 ± 0.17
	57	Offshore of Tamatsukuri	Surface layer	2014/8/8	Cloudy	31.7	2.4	31.3	0.5	Grayish yellow	None	0.6	1,260.0	4	1.9	<0.53 ± 0.11	<0.71 ± 0.17	
			Deep layer					29.6	1.4	-	None		1,350.0	3	1.9	<0.47 ± 0.10	<0.59 ± 0.15	
			Surface layer	2014/11/7	Sunny	18.2	2.5	16.9	0.5	Dark grayish yellow	None	0.9	1,400.0	13	9.7	<0.59 ± 0.15	<0.63 ± 0.16	
			Deep layer					16.7	1.5	-	None		1,720.0	14	11	<0.61 ± 0.12	<0.63 ± 0.11	
			Surface layer	2015/2/20	Sunny	8.8	2.3	8.0	0.5	Dark grayish yellow	None	1.2	899.0	8	9.0	<0.69 ± 0.15	<0.75 ± 0.16	
			Deep layer					7.9	1.3	-	None		919.0	7	8.4	<0.64 ± 0.11	<0.66 ± 0.13	
58		Lake Kasumigaura	Offshore of Kakeuma	Surface layer	2014/5/14	Sunny	26.2	6.6	21.1	0.5	Dark yellow green	None	0.6	9.9	19	12	<0.48 ± 0.13	<0.76 ± 0.14
				Deep layer					18.8	5.6	-	None		10.8	25	18	<0.73 ± 0.12	<0.68 ± 0.15
				Surface layer	2014/8/13	Sunny	31.1	6.5	28.8	0.5	Greenish yellowish dark gray	None	0.5	25.3	18	4.4	<0.52 ± 0.12	<0.63 ± 0.15
				Deep layer					27.2	5.5	-	None		26.1	22	6.0	<0.52 ± 0.090	<0.52 ± 0.095
				Surface layer	2014/11/5	Cloudy	16.1	6.5	16.6	0.5	Dark grayish yellow green	None	0.8	9.6	12	12	<0.64 ± 0.13	<0.55 ± 0.13
				Deep layer					16.4	5.5	-	None		7.7	18	14	<0.64 ± 0.13	<0.52 ± 0.10
59	Center		Surface layer	2015/2/4	Sunny	8.2	6.9	6.3	0.5	Dark grayish yellow green	None	1.0	26.0	6	6.2	<0.59 ± 0.12	<0.63 ± 0.14	
			Deep layer					5.4	5.9	-	None		27.1	6	7.0	<0.56 ± 0.11	<0.58 ± 0.14	
			Surface layer	2014/5/14	Sunny	26.1	2.1	20.7	0.5	Dark yellow green	None	0.7	25.4	25	19	<0.75 ± 0.15	<0.68 ± 0.14	
			Deep layer					20.2	1.1	-	None		25.4	22	18	<0.59 ± 0.12	<0.63 ± 0.15	
			Surface layer	2014/8/13	Sunny	29.9	2.0	28.4	0.5	Yellow greenish dark gray	None	0.5	26.0	20	6.0	<0.50 ± 0.094	<0.55 ± 0.092	
			Deep layer					28.0	1.0	-	None		25.9	19	5.5	<0.48 ± 0.093	<0.63 ± 0.15	
59	Center		Surface layer	2014/11/5	Cloudy	14.9	2.2	15.7	0.5	Dark grayish yellow green	None	0.7	8.4	17	14	<0.45 ± 0.089	<0.52 ± 0.095	
			Deep layer					15.9	1.2	-	None		8.5	13	14	<0.67 ± 0.13	<0.65 ± 0.13	
			Surface layer	2015/2/4	Sunny	7.9	2.4	5.3	0.5	Dark grayish yellow green	None	0.9	26.5	7	6.7	<0.48 ± 0.098	<0.83 ± 0.18	
			Deep layer					5.4	1.4	-	None		26.7	7	6.7	<0.65 ± 0.13	<0.72 ± 0.15	
			Surface layer	2014/5/14	Sunny	24.0	6.2	20.0	0.5	Deep green	None	0.8	27.3	18	14	<0.62 ± 0.13	<0.72 ± 0.16	
			Deep layer					19.1	5.2	-	None		24.7	24	16	<0.62 ± 0.12	<0.58 ± 0.11	
	59	Center		Surface layer	2014/8/13	Sunny	25.8	6.3	27.4	0.5	Yellowish dark gray	None	0.7	7.7	15	3.9	<0.45 ± 0.095	<0.71 ± 0.15
				Deep layer					26.9	5.3	-	None		9.2	22	3.8	<0.64 ± 0.12	<0.52 ± 0.077
				Surface layer	2014/11/5	Cloudy	14.8	5.5	16.6	0.5	Dull yellow green	None	0.8	25.8	14	12	<0.57 ± 0.13	<0.55 ± 0.12
				Deep layer					16.6	4.5	-	None		25.6	16	12	<0.58 ± 0.13	<0.63 ± 0.13
				Surface layer	2015/2/4	Sunny	7.0	6.3	5.3	0.5	Dull yellow green	None	1.0	26.3	8	7.7	<0.42 ± 0.065	<0.63 ± 0.15
				Deep layer					5.1	5.3	-	None		26.7	8	8.6	<0.70 ± 0.14	<0.76 ± 0.19

Ibaraki Lakes and Reservoirs (Water) 3/4

Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks	
No.	Water area	Location	Location					General items						Activity concentration(Bq/L)					
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium			
														Cs-134	Cs-137				
L a k e s R e s e r v o i r s	66	Mizunuma Dam	Center	Surface layer	2014/5/29	Sunny	22.1	15.3	18.7	0.5	Grayish reddish yellow	None	1.5	5.4	2	1.2	<0.56 ± 0.12	<0.41 ± 0.051	
				Deep layer					13.1	14.3	-	None		2	1.1	<0.56 ± 0.12	<0.69 ± 0.13		
				Surface layer	2014/8/1	Sunny	31.3	12.5	22.3	0.5	Dark grayish reddish yellow	None	1.9	5.9	2	0.3	<0.67 ± 0.14	<0.62 ± 0.13	
				Deep layer					20.1	11.5	-	None		4	0.4	<0.67 ± 0.14	<0.71 ± 0.14		
				Surface layer	2014/11/13	Sunny	14.8	20.1	12.3	0.5	Dark grayish yellow green	None	1.7	6.3	<1	0.7	<0.49 ± 0.12	<0.60 ± 0.12	
				Deep layer					9.6	19.1	-	None		2	7.1	<1	0.7	<0.56 ± 0.14	<0.48 ± 0.088
		67	Koyama Dam	Center	Surface layer	2014/5/29	Sunny	23.8	15.8	22.3	0.5	Dark grayish yellow	None	1.8	6.3	2	1.9	<0.61 ± 0.13	<0.55 ± 0.12
	Deep layer								9.1	14.8	-	None		3	2.5	<0.59 ± 0.14	<0.47 ± 0.11		
	Surface layer				2014/8/1	Sunny	32.2	15.4	26.9	0.5	Dark grayish yellow	None	2.2	7.2	1	0.7	<0.59 ± 0.12	<0.55 ± 0.11	
	Deep layer								17.1	14.4	-	None		3	1.0	<0.56 ± 0.14	<0.52 ± 0.12		
	Surface layer				2014/11/4	Sunny	16.8	16.3	14.6	0.5	Dark grayish yellow	None	2.5	7.4	2	1.3	<0.45 ± 0.083	<0.51 ± 0.11	
	Deep layer								10.0	15.3	-	None		5	4.6	<0.45 ± 0.097	<0.51 ± 0.12		
		68	Hananuki Dam	Center	Surface layer	2015/2/3	Sunny	5.7	15.7	4.7	0.5	Dark grayish yellow green	None	3.4	7.7	3	2.5	<0.64 ± 0.12	<0.56 ± 0.094
	Deep layer								4.5	14.7	-	None		2	2.4	<0.58 ± 0.11	<0.71 ± 0.14		
	Surface layer				2014/5/29	Cloudy	23.9	18.7	20.8	0.5	Yellowish gray	None	2.6	6.0	2	1.4	<0.56 ± 0.13	<0.68 ± 0.14	
	Deep layer								16.3	17.7	-	None		2	2.2	<0.54 ± 0.12	<0.62 ± 0.14		
	Surface layer				2014/8/4	Sunny	29.9	20.4	26.7	0.5	Dark grayish yellow green	None	2.9	6.1	2	1.3	<0.50 ± 0.098	<0.55 ± 0.092	
	Deep layer								20.2	19.4	-	None		2	1.6	<0.48 ± 0.11	<0.77 ± 0.14		
		69	Jyuou Dam	Center	Surface layer	2014/11/11	Cloudy	15.9	26.6	13.4	0.5	Dark grayish yellow green	None	2.7	6.1	1	1.1	<0.61 ± 0.13	<0.57 ± 0.13
	Deep layer								12.1	25.6	-	None		2	1.0	<0.63 ± 0.12	<0.48 ± 0.10		
	Surface layer				2015/2/6	Sunny	5.1	22.3	4.5	0.5	Dark grayish yellow green	None	2.8	6.7	2	3.0	<0.62 ± 0.13	<0.62 ± 0.15	
	Deep layer								4.3	21.3	-	None		2	3.0	<0.56 ± 0.11	<0.57 ± 0.12		
	Surface layer				2014/5/30	Sunny	27.2	26.2	24.0	0.5	Grayish yellow	None	1.5	9.1	5	2.3	<0.68 ± 0.15	<0.62 ± 0.13	
	Deep layer								17.6	25.2	-	None		5	3.6	<0.61 ± 0.14	<0.55 ± 0.096		
	70	Ryuji Dam	Center	Surface layer	2014/8/4	Sunny	31.2	23.4	26.1	0.5	Grayish yellow green	None	2.9	9.0	2	1.4	<0.50 ± 0.092	<0.55 ± 0.12	
Deep layer								18.9	22.4	-	None		2	2.9	<0.51 ± 0.090	<0.42 ± 0.088			
Surface layer				2014/11/14	Sunny	15.6	27.3	12.7	0.5	Dark grayish yellow	None	2.7	8.5	1	1.0	<0.64 ± 0.14	<0.71 ± 0.14		
Deep layer								10.6	26.3	-	None		2	0.8	<0.62 ± 0.14	<0.62 ± 0.14			
Surface layer				2015/2/6	Sunny	11.8	30.7	5.0	0.5	Grayish yellow green	None	3.4	10.3	2	2.2	<0.61 ± 0.16	<0.64 ± 0.14		
Deep layer								4.8	29.7	-	None		2	2.0	<0.55 ± 0.11	<0.57 ± 0.12			
	70	Ryuji Dam	Center	Surface layer	2014/5/30	Sunny	23.8	21.3	20.9	0.5	Grayish yellow	None	2.8	6.4	2	0.7	<0.59 ± 0.12	<0.59 ± 0.15	
Deep layer								14.7	20.3	-	None		2	0.8	<0.59 ± 0.14	<0.71 ± 0.16			
Surface layer				2014/8/5	Sunny	28.8	20.2	24.6	0.5	Dark grayish reddish yellow	None	1.7	7.1	2	1.5	<0.66 ± 0.14	<0.68 ± 0.12		
Deep layer								20.1	19.2	-	None		2	1.5	<0.54 ± 0.10	<0.55 ± 0.14			
Surface layer				2014/11/6	Sunny	19.8	22.5	16.6	0.5	Grayish yellow	None	2.8	6.5	3	2.5	<0.54 ± 0.12	<0.55 ± 0.14		
Deep layer								13.1	21.5	-	None		5	4.1	<0.51 ± 0.10	<0.51 ± 0.12			
	70	Ryuji Dam	Center	Surface layer	2015/2/2	Sunny	2.1	21.6	4.3	0.5	Dark grayish yellow red	None	3.5	7.8	2	1.5	<0.50 ± 0.13	<0.60 ± 0.11	
Deep layer								3.9	20.6	-	None		2	7.6	<1	1.5	<0.67 ± 0.13	<0.58 ± 0.11	

Ibaraki Lakes and Reservoirs (Water) 4/4

I a k e s a n d R e s e r v o i r s	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water							Activity concentration(Bq/L)		Remarks
	No.	Water area	Location					General items				Radioactive cesium					
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Cs-134	
71	Fujigawa Dam	Center	Surface layer	2014/5/26	Cloudy	22.4	13.5	20.2	0.5	Dark grayish reddish yellow	None	2.5	15.8	2	1.4	<0.48 ± 0.11	<0.42 ± 0.11
			Deep layer					9.8	12.5	-	None		17.2	2	1.0	<0.59 ± 0.15	<0.68 ± 0.15
			Surface layer	2014/8/7	Sunny	30.1	13.5	28.6	0.5	Dark grayish reddish yellow	None	2.0	12.1	<1	0.6	<0.54 ± 0.10	<0.71 ± 0.15
			Deep layer					21.6	12.5	-	None		16.2	<1	0.7	<0.56 ± 0.13	<0.55 ± 0.14
			Surface layer	2014/11/10	Sunny	18.9	13.2	15.3	0.5	Dark grayish reddish yellow	None	3.8	17.6	1	1.6	<0.68 ± 0.14	<0.45 ± 0.072
			Deep layer					13.1	12.2	-	None		17.9	2	1.8	<0.45 ± 0.11	<0.76 ± 0.15
			Surface layer	2015/2/9	Sunny	5.6	15.5	5.2	0.5	Dark grayish reddish yellow	None	2.3	16.0	1	1.6	<0.61 ± 0.14	<0.62 ± 0.12
			Deep layer					5.0	14.5	-	None		19.9	2	2.2	<0.58 ± 0.13	<0.88 ± 0.23
			Surface layer	2014/5/26	Cloudy	22.1	15.9	20.9	0.5	Grayish yellow red	None	5.5	12.9	<1	0.3	<0.57 ± 0.14	<0.47 ± 0.11
			Deep layer					10.6	14.9	-	None		12.6	<1	1.6	<0.56 ± 0.13	<0.65 ± 0.14
72	Bda Dam	Center	Surface layer	2014/8/7	Sunny	32.1	15.8	28.9	0.5	Grayish yellow green	None	2.7	10.2	<1	0.6	<0.54 ± 0.096	<0.68 ± 0.14
			Deep layer					20.8	14.8	-	None		12.5	<1	0.6	<0.56 ± 0.12	<0.59 ± 0.13
			Surface layer	2014/11/10	Sunny	19.6	17.6	16.6	0.5	Grayish yellow green	None	3.4	7.9	<1	0.6	<0.74 ± 0.16	<0.70 ± 0.13
			Deep layer					14.7	16.6	-	None		9.1	<1	0.6	<0.77 ± 0.15	<0.74 ± 0.14
			Surface layer	2015/2/9	Sunny	5.5	15.8	5.4	0.5	Grayish yellow green	None	3.0	12.3	<1	1.7	<0.59 ± 0.13	<0.62 ± 0.13
			Deep layer					5.1	14.8	-	None		12.3	1	1.6	<0.45 ± 0.11	<0.51 ± 0.10

Ibaraki Lakes and Reservoirs (Sediment) 1/2

Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Activity concentration [Bq/kg(dry)]				Remarks
No.	Water area	Location					Sediment temperature (°C)	Sample length (cm)	Color	Odor	Grain size distribution(%)							Sediment content (%)	Density (g/cm ³)	Property	Radioactive cesium							
											Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt				Clay	Cs-134	Cs-137	Total				
54	Hiroura		2014/5/19	Cloudy	20.1	2.5	19.1	10	Faint hydrogen sulfide	None	0.0	0.3	0.7	0.6	1.5	11.2	41.0	44.8	42.2	2.590	Silt	36 ± 5.9	100 ± 8.7	136				
			2014/8/8	Cloudy	31.8	2.5	28.4	9	Grayish olive	Faint drain	0.0	0.2	0.3	0.2	1.7	13.8	47.5	36.5	42.4	2.580	Silt	20 ± 6.5	91 ± 9.7	111				
			2014/1/7	Sunny	18.5	2.7	16.9	7	Faint hydrogen sulfide	None	0.0	0.2	0.3	0.5	1.8	10.2	46.2	40.8	41.9	2.595	Silt	39 ± 5.6	97 ± 8.4	136				
	55	Miyamae		2015/2/20	Sunny	9.0	2.6	6.1	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.2	0.2	3.4	23.1	45.8	27.3	38.3	2.597	Silt	18 ± 5.6	76 ± 9.6	94			
				2014/5/19	Cloudy	20.3	3.2	19.0	10	Faint hydrogen sulfide	Weak hydrogen sulfide	0.0	0.3	0.1	0.1	1.4	7.6	47.8	42.8	27.3	2.508	Silt	32 ± 7.6	87 ± 11	119			
				2014/8/8	Cloudy	31.8	3.4	28.9	8	Faint hydrogen sulfide	Dim yellow	0.0	0.0	0.0	0.1	0.8	5.8	53.0	40.4	20.9	2.504	Silt	84 ± 14	180 ± 20	264			
				2014/11/7	Sunny	18.1	3.2	16.6	6	Blackish brown	Dim yellow	0.0	0.0	0.0	0.1	0.6	4.0	49.5	45.9	24.8	2.531	Silt	29 ± 6.7	91 ± 11	120			
				2015/2/20	Sunny	8.9	3.3	6.0	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.1	0.0	0.6	5.1	61.0	33.1	23.7	2.529	Silt	21 ± 6.5	98 ± 10	119			
				2014/5/19	Cloudy	19.8	2.5	22.0	5	Faint hydrogen sulfide	None	0.0	0.4	0.0	0.1	0.6	5.6	46.2	47.2	32.3	2.479	Silt	110 ± 16	340 ± 25	450			
	56	Oyazawa		2014/8/8	Cloudy	31.7	2.4	28.5	8	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.3	4.4	56.2	39.1	32.5	2.418	Silt	92 ± 12	350 ± 21	442			
				2014/1/7	Sunny	18.2	2.5	16.7	7	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.3	2.8	50.5	30.8	2.473	Silt	120 ± 15	340 ± 22	460				
				2015/2/20	Sunny	8.8	2.3	7.8	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.2	2.2	58.8	38.7	28.3	2.492	Silt	150 ± 16	440 ± 26	590			
57	Offshore of Tamatsukuri		2014/5/14	Sunny	26.2	6.6	18.1	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.2	1.1	55.4	43.3	18.2	2.394	Silt	110 ± 26	400 ± 38	510				
			2014/8/13	Sunny	31.1	6.5	26.8	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.1	1.2	54.0	44.7	18.8	2.321	Silt	160 ± 26	420 ± 38	580				
			2014/11/5	Cloudy	16.1	6.5	16.8	8	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.1	0.3	1.5	46.2	51.9	16.7	2.412	Silt	100 ± 24	440 ± 37	540				
			2015/2/4	Sunny	8.2	6.9	7.2	9	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.2	1.9	43.8	54.2	19.3	2.383	Silt	110 ± 18	400 ± 32	510				
			2014/5/14	Sunny	26.1	2.1	19.5	5	Faint hydrogen sulfide	None	0.0	0.0	1.0	0.9	54.5	40.8	0.6	2.2	76.7	2.685	Sand	45 ± 5.1	120 ± 8.6	165				
			2014/8/13	Sunny	29.9	2.0	28.8	2	Blackish brown	None	0.0	0.0	0.9	2.3	1.6	41.9	46.0	3.0	4.4	77.5	2.705	Sand	38 ± 5.2	130 ± 8.7	168			
	58	Offshore of Kakeuma		2014/11/5	Cloudy	14.9	2.2	15.4	3	Blackish brown	None	0.0	2.8	3.8	2.9	31.1	51.5	2.4	5.6	75.0	2.716	Sand/silt	15 ± 3.4	63 ± 5.4	78			
				2015/2/4	Sunny	7.9	2.4	5.2	3	Blackish brown	None	0.0	3.0	2.7	1.7	43.7	45.4	0.8	2.6	73.3	2.667	Sand	42 ± 4.0	140 ± 7.6	182			
				2014/5/14	Sunny	24.0	6.2	17.6	8	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.2	0.5	36.6	62.7	16.5	2.368	Silt	62 ± 7.4	180 ± 13	242			
				2014/8/13	Sunny	25.8	6.3	26.8	8	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.2	0.3	51.0	48.6	16.7	2.319	Silt	52 ± 8.7	140 ± 13	192			
				2014/11/5	Cloudy	14.8	5.5	18.0	5	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.1	0.3	46.0	53.6	15.1	2.396	Silt	110 ± 21	350 ± 34	460			
				2015/2/4	Sunny	7.0	6.3	6.8	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.3	0.5	33.2	65.9	15.0	2.373	Silt	100 ± 20	260 ± 30	360			
60	Offshore of Aso		2014/5/14	Sunny	22.0	2.2	18.9	5	Faint hydrogen sulfide	Faint swamp	0.0	0.0	0.0	0.1	3.1	92.3	1.4	3.2	77.4	2.690	Sand/silt	33 ± 4.9	110 ± 8.3	143				
			2014/8/13	Sunny	29.6	2.3	27.1	5	Faint hydrogen sulfide	Faint rottenness	0.0	0.0	0.2	0.1	3.1	92.7	0.8	3.2	77.3	2.670	Sand	34 ± 4.2	100 ± 7.5	134				
			2014/11/5	Cloudy	13.2	2.4	16.8	5	Faint hydrogen sulfide	None	0.0	0.0	0.2	0.1	3.0	93.5	0.8	2.4	73.8	2.699	Sand/silt	29 ± 3.9	110 ± 7.1	139				
			2015/2/4	Sunny	2.9	2.5	5.6	6	Dark olive brown	None	0.0	0.0	0.1	0.1	3.2	92.1	3.0	1.5	75.0	2.701	Sand/silt	28 ± 3.5	110 ± 6.7	138				
			2014/5/14	Sunny	26.8	7.1	19.2	8	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.1	0.8	36.6	62.5	15.0	2.297	Silt	120 ± 18	430 ± 31	550				
			2014/8/13	Sunny	31.6	6.7	26.6	8	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.2	0.8	46.8	52.3	15.5	2.247	Silt	63 ± 13	140 ± 20	203				
61	Offshore of Kamaya		2014/11/5	Cloudy	17.3	6.8	18.0	5	Faint hydrogen sulfide	faint earth	0.0	0.0	0.0	0.0	0.2	0.9	43.0	56.0	13.5	2.311	Silt	76 ± 22	340 ± 37	416				
			2015/2/4	Sunny	8.8	7.1	7.5	5	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.1	0.6	31.5	67.9	14.1	2.280	Silt	99 ± 17	330 ± 29	429				
			2014/5/14	Sunny	27.2	2.6	20.8	3	Faint hydrogen sulfide	None	0.0	1.2	1.3	3.6	20.6	60.4	2.0	11.0	71.4	2.660	Sand/silt	21 ± 4.3	78 ± 7.3	99				
			2014/8/13	Sunny	32.1	2.7	26.7	6	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.1	0.2	10.8	71.3	5.8	11.8	69.7	2.600	Silt/sand	23 ± 4.3	84 ± 7.5	107				
			2014/11/5	Cloudy	17.1	2.9	17.4	4	Faint hydrogen sulfide	None	0.0	0.0	0.3	1.7	17.5	58.7	6.2	15.6	66.6	2.614	Sand/silt	25 ± 4.2	90 ± 7.1	115				
			2015/2/4	Sunny	7.8	2.9	6.1	3	Faint hydrogen sulfide	None	0.0	6.1	1.9	3.8	25.7	49.5	2.8	10.3	75.1	2.627	Sand/silt	21 ± 3.2	65 ± 5.4	86				
62	Jingu Bridge		2014/5/14	Sunny	22.1	2.6	18.9	4	Faint hydrogen sulfide	None	0.0	1.3	0.2	0.2	2.3	65.9	12.8	17.5	62.5	2.705	Sand/silt	14 ± 3.2	35 ± 4.4	49				
			2014/8/13	Sunny	32.2	3.4	27.2	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	2.5	82.1	6.1	9.2	77.1	2.667	Sand	21 ± 3.8	55 ± 5.8	76				
			2014/11/5	Cloudy	16.7	3.0	17.0	5	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.1	2.5	70.6	9.0	17.8	61.7	2.660	Sand/silt	9.9 ± 3.1	42 ± 5.6	51.9				
			2015/2/4	Sunny	7.1	2.7	5.8	6	Dark olive brown	Faint clam	0.0	0.0	0.0	0.1	4.8	76.0	4.5	14.7	68.7	2.628	Sand/silt	14 ± 3.0	65 ± 5.6	79				
			2014/5/14	Sunny	20.9	5.1	20.0	2	Faint hydrogen sulfide	None	0.0	0.4	1.1	5.1	27.4	62.9	0.7	2.4	78.5	2.698	Sand	18 ± 3.8	56 ± 5.7	74				
			2014/8/13	Sunny	32.2	5.0	27.5	2	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.5	14.8	81.1	0.2	3.4	73.8	2.683	Sand	22 ± 4.3	75 ± 6.9	97				
64	Iksai		2014/11/5	Cloudy	16.9	5.3	17.2	3	Blackish brown	None	0.0	0.0	0.2	0.5	14.6	80.3	1.3	3.0	73.8	2.693	Sand	26 ± 3.6	69 ± 6.2	95				
			2015/2/4	Sunny	7.4	5.2	6.6	2	Faint hydrogen sulfide	None	0.0	0.3	0.2	1.3	22.3	72.6	0.5	2.8	78.4	2.690	Sand	16 ± 3.0	75 ± 6.5	91				
			2014/5/20	Sunny	24.2	1.9	22.8	10	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	2.3	8.8	53.9	35.1	23.6	2.370	Silt	190 ± 24	650 ± 42	840				
65	Lake Ushikunuma	Center of Lake Ushikunuma	2014/8/20	Sunny	32.6	1.9	29.6	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	7.0	33.0	31.2	28.7	40.9	2.500	Silt	130 ± 14	380 ± 23	510				
			2014/11/12	Cloudy	15.6	2.0	14.3	6	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.6	4.8	57.7	36.9	33.0	2.468	Silt	160 ± 15	580 ± 27	740				
			2015/2/12	Sunny	10.7	1.9	6.1	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	2.7	11.1	55.1	31.0	23.3	2.385	Silt	160 ± 20	600 ± 35	760				

Ibaraki Lakes and Reservoirs (Sediment) 2/2

Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment															Activity concentration [Bq/kg(dry)]				Remarks
							Sediment temperature (°C)	Sample length (cm)	Color	Odor	Grain size distribution(%)						Sediment content (%)	Density (g/cm ³)	Property	Radioactive cesium						
Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt					Clay	Cs-134	Cs-137		Total											
L a k e s	66	Mizunuma Dam	Center	2014/5/29	Sunny	22.1	15.3	15.1	7	Dark brown	Faint drain	0.0	0.0	0.0	0.1	0.2	0.7	56.5	42.6	17.7	2,271	Silt	720 ± 46	2,000 ± 76	2,720	
				2014/8/1	Sunny	31.3	12.5	18.4	6	Dark brown	Faint drain	0.0	0.0	0.1	0.1	0.2	0.5	57.1	42.0	15.8	2,256	Silt	780 ± 51	2,200 ± 87	2,980	
				2014/11/13	Sunny	14.8	20.1	9.2	6	Dim yellowish brown	None	0.0	0.0	0.1	0.1	0.5	4.6	60.6	34.3	18.7	2,272	Silt	770 ± 43	2,400 ± 77	3,170	
	67	Koyama Dam	Center	2015/2/2	Sunny	2.3	16.3	3.8	5	Dark brown	Faint drain	0.0	0.0	0.0	0.2	5.3	60.1	34.4	16.7	2,234	Silt	640 ± 45	2,300 ± 84	2,940		
				2014/5/29	Sunny	23.8	15.8	9.7	7	Dark grayish yellow	Faint drain	0.0	0.4	0.5	0.6	1.0	13.6	41.8	42.3	36.3	2,464	Silt	200 ± 16	540 ± 26	740	
				2014/8/1	Sunny	32.2	15.4	15.9	7	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.2	3.1	8.8	37.5	50.3	27.4	2,481	Silt/sand	170 ± 18	520 ± 31	690	
	68	Hanasaki Dam	Center	2014/11/4	Sunny	16.8	16.3	9.2	6	Faint hydrogen sulfide	Faint drain	0.0	1.0	2.7	2.0	3.2	2.7	34.0	54.5	22.2	2,436	Silt	190 ± 24	580 ± 36	770	
				2015/2/3	Sunny	5.7	15.7	4.7	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.7	5.2	36.2	57.9	24.5	2,488	Silt	350 ± 27	1,400 ± 52	1,750	
				2014/5/29	Cloudy	23.9	18.7	13.1	5	Blackish brown	Faint drain	0.0	3.6	5.8	9.9	14.7	7.4	27.7	30.9	23.1	2,511	Silt	160 ± 19	450 ± 31	610	
	69	Jyauu Dam	Center	2014/8/4	Sunny	29.9	20.4	19.8	7	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.2	0.5	58.6	40.7	22.4	2,295	Silt	340 ± 28	950 ± 47	1,290	
				2014/11/11	Cloudy	15.9	26.6	11.8	5	Faint hydrogen sulfide	Faint earth	0.0	0.0	2.1	3.7	5.6	7.0	42.8	38.9	24.7	2,382	Silt/sand	260 ± 21	790 ± 38	1,050	
				2015/2/6	Sunny	3.1	22.9	4.3	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.2	1.3	58.2	40.2	25.4	2,333	Silt	280 ± 25	1,100 ± 44	1,380	
70	Ryuji Dam	Center	2014/5/30	Sunny	27.2	26.2	14.6	7	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.2	1.3	52.4	46.0	23.3	2,394	Silt	520 ± 38	1,400 ± 61	1,920		
			2014/8/4	Sunny	31.2	23.4	16.8	6	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.1	46.4	53.6	15.0	2,349	Silt	480 ± 40	1,500 ± 72	1,980			
			2014/11/14	Sunny	15.6	27.3	10.3	8	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.1	0.2	44.4	55.3	14.5	2,386	Silt	540 ± 51	2,000 ± 88	2,540		
71	Fujiigawa Dam	Center	2015/2/6	Sunny	11.8	30.7	4.8	4	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.1	49.4	50.3	17.3	2,331	Silt	260 ± 30	1,100 ± 56	1,360			
			2014/5/30	Sunny	23.8	21.3	13.2	7	Faint hydrogen sulfide	Faint drain	0.0	18.2	11.7	8.5	12.1	7.8	22.0	19.7	60.4	2,463	Sand	1.2 ± 0.30	3.7 ± 0.35	4.9		
			2014/8/5	Sunny	28.8	20.2	18.8	3	Faint hydrogen sulfide	Faint drain	0.0	0.8	1.8	1.6	2.7	2.9	40.8	49.4	21.0	2,328	Silt	190 ± 23	710 ± 43	900		
72	Ida Dam	Center	2014/11/6	Sunny	19.8	22.5	13.2	5	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.3	1.5	50.6	47.5	19.7	2,303	Silt	160 ± 21	580 ± 40	740		
			2015/2/2	Sunny	2.1	21.6	3.7	4	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.0	0.1	0.2	53.8	45.9	18.6	2,386	Silt	120 ± 19	370 ± 32	490		
			2014/5/26	Cloudy	22.4	13.5	9.2	3	Brown	None	0.0	5.6	5.1	9.0	31.4	23.0	11.4	14.6	50.0	2,574	Silt	53 ± 6.5	140 ± 11	193		
73	Fujiigawa Dam	Center	2014/8/7	Sunny	30.1	13.5	20.6	8	Blackish brown	Faint drain	0.0	0.0	0.1	0.2	0.5	1.9	61.7	35.7	26.6	2,411	Silt	98 ± 15	400 ± 28	498		
			2014/11/10	Sunny	18.9	13.2	13.0	7	Blackish brown	Faint drain	0.0	2.7	6.4	4.7	7.4	3.2	43.2	32.4	21.4	2,452	Silt	34 ± 5.3	83 ± 7.7	117		
			2015/2/9	Sunny	5.6	15.5	5.1	3	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.0	0.1	3.2	60.7	36.0	32.4	2,411	Silt	96 ± 15	250 ± 22	346		
74	Ida Dam	Center	2014/5/26	Cloudy	22.1	15.9	10.2	9	Black	Faint drain	0.0	0.0	0.1	0.0	2.1	9.5	57.1	31.1	18.7	2,409	Silt	60 ± 12	120 ± 17	180		
			2014/8/7	Sunny	32.1	15.8	19.4	7	Faint hydrogen sulfide	Faint drain	0.0	0.0	0.0	0.1	0.2	0.3	54.7	44.7	17.8	2,370	Silt	4.6 ± 1.0	11 ± 0.99	15.6		
			2014/11/10	Sunny	19.6	17.6	14.0	6	Faint hydrogen sulfide	Faint drain	0.0	1.8	3.1	1.4	5.9	16.5	42.7	28.6	25.1	2,500	Silt	12 ± 3.6	43 ± 5.2	55		
				2015/2/9	Sunny	5.5	15.8	4.9	4	Faint hydrogen sulfide	Faint drain	0.0	3.3	0.0	0.0	0.1	0.2	54.0	42.4	28.2	2,325	Silt	26 ± 5.7	130 ± 9.2	156	

Ibaraki Lakes and Reservoirs (Surrounding Environment)1/2

Location			Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)								Remarks
						Soil				Air Dose (μSv/h)				
No.	Water area	Location				Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)		
									Radioactive cesium					
									Cs-134	Cs-137	Total			
L a k e s a n d R e s e r v o i r s	54	Hiroura	2014/5/19	Cloudy	20.1	Brown	faint earth	Loamy	250 ± 15	690 ± 25	940	0.13		
			2014/8/8	Cloudy	31.8	Dim yellowish brown	faint earth	Loamy	210 ± 16	580 ± 26	790	0.13		
			2014/1/7	Sunny	18.5	Dark brown	faint earth	Loamy	<3.9 ± 1.3	8.9 ± 2.0	8.9	0.12		
			2015/2/20	Sunny	9.0	Dark brown	faint earth	Loamy	11 ± 1.6	41 ± 2.6	52	0.10		
	55	Hinuma	Miyamae	2014/5/19	Cloudy	20.3	Brown	faint earth	Loamy	<6.9 ± 2.2	13 ± 3.1	13	0.08	
				2014/8/8	Cloudy	31.8	Brown	faint earth	Loamy	8.8 ± 1.5	22 ± 2.0	30.8	0.08	
				2014/1/7	Sunny	18.1	Dim yellowish brown	faint earth	Loamy	<7.1 ± 2.3	21 ± 2.9	21	0.08	
				2015/2/20	Sunny	8.9	Dark brown	faint earth	Loamy	<7.7 ± 2.5	23 ± 3.3	23	0.07	
	56		Oyazawa	2014/5/19	Cloudy	19.8	-	-	-	-	-	-	-	No sampling location
				2014/8/8	Cloudy	31.7	-	-	-	-	-	-	-	No sampling location
				2014/1/7	Sunny	18.2	-	-	-	-	-	-	-	No sampling location
				2015/2/20	Sunny	8.8	-	-	-	-	-	-	-	No sampling location
	57		Offshore of Tamatsukuri	2014/5/14	Sunny	26.2	Olive brown	Faint grass	Sandy	22 ± 4.5	58 ± 6.3	80	0.09	
				2014/8/13	Sunny	31.1	Olive	None	Sandy	16 ± 3.6	54 ± 6.3	70	0.08	
				2014/1/5	Cloudy	16.1	Blackish brown	None	Sandy	15 ± 2.4	43 ± 3.8	58	0.07	
				2015/2/4	Sunny	8.2	Olive black	None	Sandy	7.9 ± 2.1	28 ± 3.1	35.9	0.07	
	58	Lake Kasumigaura	Offshore of Kakeuma	2014/5/14	Sunny	26.1	Olive black	faint earth	Sandy	13 ± 3.3	39 ± 4.6	52	0.09	
				2014/8/13	Sunny	29.9	Olive black	None	Loamy	14 ± 4.1	56 ± 6.6	70	0.09	
				2014/1/5	Cloudy	14.9	Dark olive brown	faint earth	Loamy	650 ± 48	2,400 ± 92	3,050	0.09	
				2015/2/4	Sunny	7.9	Olive black	None	Sandy	30 ± 6.9	120 ± 12	150	0.09	
	59		Center	2014/5/14	Sunny	24.0	-	-	-	-	-	-	-	No sampling location
				2014/8/13	Sunny	25.8	-	-	-	-	-	-	-	No sampling location
				2014/1/5	Cloudy	14.8	-	-	-	-	-	-	-	No sampling location
				2015/2/4	Sunny	7.0	-	-	-	-	-	-	-	No sampling location
	60		Offshore of Aso	2014/5/14	Sunny	22.0	Dark olive brown	faint earth	Sandy	9.1 ± 3.0	21 ± 4.2	30.1	0.09	
				2014/8/13	Sunny	29.6	Dark olive brown	Faint grass	Sandy	85 ± 7.5	240 ± 13	325	0.10	
				2014/1/5	Cloudy	13.2	Dim yellowish brown	faint earth	Sandy	16 ± 4.8	62 ± 8.2	78	0.08	
				2015/2/4	Sunny	2.9	Olive black	None	Sandy	50 ± 7.3	200 ± 14	250	0.11	
61	Lake Kitaura	Offshore of Kamaya	2014/5/14	Sunny	26.8	Olive brown	Faint grass	Sandy	31 ± 5.4	93 ± 8.1	124	0.09		
			2014/8/13	Sunny	31.6	Dark olive brown	Faint grass	Loamy	120 ± 10	370 ± 17	490	0.08		
			2014/1/5	Cloudy	17.3	Dark olive brown	faint earth	Loamy	120 ± 12	380 ± 21	500	0.08		
			2015/2/4	Sunny	8.8	Dark olive brown	faint earth	Loamy	76 ± 10	270 ± 18	346	0.09		
62		Jingu Bridge	2014/5/14	Sunny	27.2	Light brown	None	Loamy	<5.9 ± 1.7	13 ± 2.4	13	0.04		
			2014/8/13	Sunny	32.1	Brown	faint earth	Loamy	<6.3 ± 2.1	15 ± 2.9	15	0.05		
			2014/1/5	Cloudy	17.1	Dark brown	Faint grass	Loamy	9.9 ± 2.1	44 ± 3.7	53.9	0.06		
			2015/2/4	Sunny	7.8	Brown	Faint grass	Loamy	12 ± 2.6	48 ± 4.2	60	0.05		
63	Hitachitone River	Lake Sotonasakaura	2014/5/14	Sunny	22.1	Dark brown	faint earth	Loamy	34 ± 6.3	82 ± 8.4	116	0.06		
			2014/8/13	Sunny	32.2	Dark brown	faint earth	Loamy	39 ± 6.6	130 ± 11	169	0.06		
			2014/1/5	Cloudy	16.7	Dark brown	Faint grass	Loamy	31 ± 3.1	100 ± 5.3	131	0.05		
			2015/2/4	Sunny	7.1	Dark brown	Faint grass	Loamy	22 ± 2.7	64 ± 4.6	86	0.05		
64		Ikisu	2014/5/14	Sunny	20.9	Dark brown	faint earth	Loamy	24 ± 5.4	84 ± 8.5	108	0.05		
			2014/8/13	Sunny	32.2	Dark brown	faint earth	Loamy	42 ± 7.8	180 ± 14	222	0.07		
			2014/1/5	Cloudy	16.9	Dim yellowish brown	faint earth	Loamy	26 ± 7.5	64 ± 11	90	0.08		
			2015/2/4	Sunny	7.4	Dark brown	Faint grass	Loamy	46 ± 4.3	150 ± 7.7	196	0.06		
65	Lake Ushikunuma	Center of Lake Ushikunuma	2014/5/20	Sunny	24.2	Dark brown	faint earth	Loamy	110 ± 4.3	300 ± 6.8	410	0.07		
			2014/8/20	Sunny	32.6	Dark brown	faint earth	Loamy	30 ± 7.1	110 ± 9.9	140	0.07		
			2014/11/12	Cloudy	15.6	Dark brown	faint earth	Loamy	14 ± 2.5	53 ± 4.3	67	0.07		
			2015/2/12	Sunny	10.7	Dark brown	faint earth	Loamy	49 ± 7.8	210 ± 14	259	0.08		

Ibaraki Lakes and Reservoirs (Surrounding Environment) 2/2

	Location			Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)								Remarks
							Soil				Air				
	No.	Water area	Location				General items				Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)	
							Color	Odor	Property	Radioactive cesium					
Cs-134				Cs-137	Total										
L a k e s a n d R e s e r v o i r s	66	Mizunuma Dam	Center	2014/5/29	Sunny	22.1	Dark brown	faint earth	Loamy	44 ± 6.6	120 ± 11	164	0.14		
				2014/8/1	Sunny	31.3	Blackish brown	faint earth	Loamy	70 ± 8.4	270 ± 15	340	0.14		
				2014/11/13	Sunny	14.8	Dark brown	None	Loamy	21 ± 7.0	74 ± 9.7	95	0.14		
				2015/2/3	Sunny	2.3	Blackish brown	faint earth	Loamy	130 ± 10	430 ± 19	560	0.13		
	67	Koyama Dam	Center	2014/5/29	Sunny	23.8	Dim yellowish brown	faint earth	Loamy	17 ± 3.4	42 ± 5.2	59	0.13		
				2014/8/1	Sunny	32.2	Dim yellowish brown	Faint grass	Loamy	63 ± 7.9	180 ± 12	243	0.13		
				2014/11/4	Sunny	16.8	Dim yellowish brown	faint earth	Sandy	26 ± 6.8	100 ± 12	126	0.13		
				2015/2/3	Sunny	5.7	Olive black	faint earth	Sandy	89 ± 9.0	330 ± 16	419	0.10		
	68	Hananuki Dam	Center	2014/5/29	Cloudy	23.9	Blackish brown	faint earth	Loamy	97 ± 11	290 ± 19	387	0.18		
				2014/8/4	Sunny	29.9	Blackish brown	faint earth	Loamy	260 ± 19	860 ± 34	1,120	0.17		
				2014/11/11	Cloudy	15.9	Blackish brown	faint earth	Loamy	180 ± 17	560 ± 29	740	0.17		
				2015/2/6	Sunny	5.1	Blackish brown	faint earth	Loamy	220 ± 19	750 ± 36	970	0.16		
	69	Jyuu Dam	Center	2014/5/30	Sunny	27.2	Dim yellowish brown	faint earth	Loamy	42 ± 6.4	90 ± 9.9	132	0.14		
				2014/8/4	Sunny	31.2	Grayish olive	None	Loamy	110 ± 9.1	360 ± 17	470	0.13		
				2014/11/14	Sunny	15.6	Dim yellowish brown	None	Loamy	280 ± 19	1,000 ± 34	1,280	0.14		
				2015/2/6	Sunny	11.8	Dim yellowish brown	faint earth	Loamy	600 ± 27	2,100 ± 51	2,700	0.12		
	70	Ryuji Dam	Center	2014/5/30	Sunny	23.8	Dim yellowish brown	faint earth	Loamy	<5.9 ± 1.7	<5.9 ± 2.0	-	0.08		
				2014/8/5	Sunny	28.8	Blackish brown	faint earth	Loamy	46 ± 6.7	120 ± 11	166	0.08		
				2014/11/6	Sunny	19.8	Dark brown	None	Loamy	41 ± 7.1	120 ± 12	161	0.09		
				2015/2/2	Sunny	2.1	Blackish brown	faint earth	Loamy	71 ± 8.9	240 ± 15	311	0.10		
	71	Fujigawa Dam	Center	2014/5/26	Cloudy	22.4	Blackish brown	faint earth	Loamy	130 ± 12	340 ± 19	470	0.11		
				2014/8/7	Sunny	30.1	Black	faint earth	Loamy	76 ± 9.1	250 ± 14	326	0.12		
				2014/11/10	Sunny	18.9	Dark brown	faint earth	Loamy	62 ± 9.2	220 ± 16	282	0.11		
				2015/2/9	Sunny	5.6	Blackish brown	faint earth	Loamy	120 ± 12	420 ± 23	540	0.13		
72	Iida Dam	Center	2014/5/26	Cloudy	22.1	Dim yellowish brown	faint earth	Loamy	170 ± 17	420 ± 25	590	0.11			
			2014/8/7	Sunny	32.1	Dim yellowish brown	faint earth	Loamy	140 ± 13	480 ± 22	620	0.12			
			2014/11/10	Sunny	19.6	Dark brown	faint earth	Loamy	90 ± 12	370 ± 22	460	0.10			
			2015/2/9	Sunny	5.5	Dark brown	faint earth	Loamy	130 ± 15	420 ± 26	550	0.09			

Ibaraki Coastal (Water)1/1

Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
No.	Water area						General items					Activity concentration(Bq/L)					
							Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Salinity (‰)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium		
													Cs-134	Cs-137			
C o a s t a l a r e a s	73	Offshore of Satone River Estuary	Surface layer	2014/5/12	Cloudy	18.8	13.0	14.5	0.5	Dark grayish yellow green	None	2.5	30.3	5	2.2	<0.62 ± 0.13	<0.68 ± 0.14
			Deep layer					14.0	12.0	-	None		29.9	6	2.9	<0.58 ± 0.14	<0.59 ± 0.10
		Surface layer	2014/8/25	Cloudy	28.5	13.5	23.5	0.5	Yellow greenish gray	None	5.0	28.0	4	1.1	<0.61 ± 0.16	<0.88 ± 0.19	
		Deep layer					20.1	12.5	-	None		30.4	5	0.4	<0.64 ± 0.13	<0.67 ± 0.16	
		Surface layer	2014/11/19	Sunny	17.8	14.1	17.9	0.5	Dark grayish bluish green	None	8.5	30.6	2	0.5	<0.74 ± 0.15	<0.60 ± 0.11	
		Deep layer					17.7	13.1	-	None		30.8	4	0.4	<0.63 ± 0.14	<0.75 ± 0.14	
	Surface layer	2015/2/3	Sunny	9.8	13.2	9.4	0.5	Grayish yellowish green	None	3.5	30.9	5	1.5	<0.67 ± 0.14	<0.55 ± 0.093		
	Deep layer					8.6	12.2	-	None		31.0	11	2.8	<0.60 ± 0.14	<0.65 ± 0.13		
	74	Offshore of Okita River Estuary	Surface layer	2014/5/12	Cloudy	19.0	12.6	14.9	0.5	Yellow greenish dark gray	None	3.5	30.3	12	2.4	<0.51 ± 0.11	<0.47 ± 0.097
			Deep layer					14.2	11.6	-	None		30.3	34	4.8	<0.57 ± 0.12	<0.71 ± 0.16
			Surface layer	2014/8/25	Cloudy	25.8	12.3	23.6	0.5	Bluish greenish gray	None	5.0	28.1	4	0.8	<0.84 ± 0.19	<0.71 ± 0.17
			Deep layer					20.3	11.3	-	None		30.6	6	0.9	<0.61 ± 0.13	<0.71 ± 0.15
			Surface layer	2014/11/19	Sunny	16.0	12.7	18.4	0.5	Dark grayish bluish green	None	9.0	30.6	5	0.2	<0.70 ± 0.15	<0.60 ± 0.15
			Deep layer					18.6	11.7	-	None		31.1	3	0.4	<0.84 ± 0.17	<0.70 ± 0.14
	Surface layer	2015/2/3	Sunny	10.5	13.1	9.1	0.5	Grayish yellowish green	None	3.5	31.0	4	1.3	<0.60 ± 0.14	<0.61 ± 0.12		
	Deep layer					9.1	12.1	-	None		31.0	8	2.2	<0.45 ± 0.11	<0.52 ± 0.096		
	75	Offshore of Momiya River/Kujigawa River Estuaries	Surface layer	2014/5/12	Sunny	22.5	10.2	16.9	0.5	Dark grayish yellow green	None	2.1	29.7	4	2.7	<0.65 ± 0.14	<0.75 ± 0.16
			Deep layer					15.8	9.2	-	None		30.2	4	2.4	<0.72 ± 0.14	<0.67 ± 0.12
			Surface layer	2014/8/25	Cloudy	24.0	9.8	22.3	0.5	Grayish reddish yellow	None	2.0	27.4	12	4.4	<0.61 ± 0.12	<0.71 ± 0.12
			Deep layer					20.4	8.8	-	None		30.1	25	3.8	<0.47 ± 0.11	<0.67 ± 0.16
			Surface layer	2014/11/19	Sunny	15.2	9.6	18.3	0.5	Dark grayish green	None	4.0	28.4	3	0.7	<0.60 ± 0.14	<0.55 ± 0.10
			Deep layer					19.4	8.6	-	None		31.0	4	1.0	<0.59 ± 0.12	<0.71 ± 0.13
	Surface layer	2015/2/3	Sunny	9.5	11.0	10.8	0.5	Grayish yellow green	None	5.8	25.3	11	1.5	<0.69 ± 0.13	<0.65 ± 0.13		
	Deep layer					11.9	10.0	-	None		31.3	6	1.6	<0.45 ± 0.10	<0.68 ± 0.14		
76	Neighboring water body of Ken-o Offshore of Nakagawa River	Surface layer	2014/5/12	Sunny	23.0	5.3	17.5	0.5	Dark grayish green	None	2.1	18.5	7	2.8	<0.69 ± 0.14	<0.62 ± 0.14	
		Deep layer					15.2	4.3	-	None		30.4	7	2.9	<0.61 ± 0.12	<0.71 ± 0.16	
		Surface layer	2014/8/25	Light rain	24.6	7.0	23.6	0.5	Dark yellow red Dark reddish yellow	None	2.5	8.5	8	3.2	<0.66 ± 0.15	<0.62 ± 0.11	
		Deep layer					21.2	6.0	-	None		28.9	22	5.0	<0.69 ± 0.12	<0.67 ± 0.14	
		Surface layer	2014/11/19	Sunny	12.8	6.7	14.8	0.5	Grayish yellow green	None	3.5	13.9	3	0.9	<0.40 ± 0.11	<0.63 ± 0.14	
		Deep layer					19.0	5.7	-	None		30.1	13	2.1	<0.58 ± 0.12	<0.60 ± 0.14	
Surface layer	2015/2/3	Sunny	5.8	6.5	8.3	0.5	Grayish yellow green	None	2.5	11.1	4	2.1	<0.64 ± 0.15	<0.62 ± 0.14			
Deep layer					11.7	5.5	-	None		30.1	7	1.8	<0.67 ± 0.14	<0.67 ± 0.13			
77	Offshore of Tonegawa River Estuary	Surface layer	2014/5/29	Sunny	16.8	7.7	22.2	0.5	Grayish yellow green	None	1.7	3.5	14	6.4	<0.41 ± 0.098	<0.68 ± 0.14	
		Deep layer					17.1	6.7	-	None		31.1	6	0.8	<0.61 ± 0.14	<0.56 ± 0.14	
		Surface layer	2014/8/16	Cloudy	24.5	8.6	21.8	0.5	Grayish yellow green	None	1.6	19.4	4	1.6	<0.59 ± 0.12	<0.59 ± 0.12	
		Deep layer					20.4	7.6	-	None		29.8	4	0.5	<0.67 ± 0.13	<0.68 ± 0.15	
		Surface layer	2014/11/18	Sunny	13.2	8.1	17.1	0.5	Dark grayish bluish green	None	3.5	25.5	3	0.9	<0.61 ± 0.14	<0.62 ± 0.12	
		Deep layer					18.0	7.1	-	None		30.0	5	0.9	<0.61 ± 0.11	<0.62 ± 0.15	
Surface layer	2015/2/11	Cloudy	8.0	8.2	7.7	0.5	Dark grayish yellow green	None	3.0	17.3	3	1.6	<0.61 ± 0.14	<0.59 ± 0.15			
Deep layer					10.4	7.2	-	None		30.6	12	2.7	<0.51 ± 0.12	<0.59 ± 0.13			

Ibaraki Coastal (Sediment)1/1

Location		Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks
No.	Water area					General items											Sediment content (%)			Activity concentration [Bq/kg(dry)]			
						Sediment temperature (°C)	Sample length (cm)	Color	Odor	Coarse gravel	Medium gravel	Fine gravel	Grain size distribution(%)			Silt	Clay	Density (t/cm ³)	Property	Radioactive cesium			
											Coarse sand	Medium sand	Fine sand					Cs-134	Cs-137		Total		
73	Offshore of Satone River Estuary	2014/5/12	Cloudy	18.8	13.0	13.0	10	Faint hydrogen sulfide	None	0.0	0.0	0.2	1.6	19.5	71.4	1.8	5.5	80.4	2.724	Sand	6.5 ± 1.1	14 ± 1.5	20.5
		2014/8/25	Cloudy	28.5	13.5	21.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.2	1.2	16.0	77.0	1.6	4.0	73.8	2.664	Sand	<7.7 ± 2.4	27 ± 3.6	27
		2014/11/19	Sunny	17.8	14.1	17.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.5	7.5	73.4	12.1	6.4	73.6	2.673	Sand	<7.1 ± 2.3	25 ± 3.6	25
		2015/2/3	Sunny	9.8	13.2	9.0	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.3	5.7	76.1	12.2	5.7	77.1	2.642	Sand	5.0 ± 1.6	25 ± 2.5	30.0
		2014/5/12	Cloudy	19.0	12.6	15.0	10	Grayish olive	None	0.0	0.1	0.3	0.5	33.6	58.8	1.9	4.8	79.4	2.688	Sand	7.3 ± 1.9	13 ± 2.7	20.7
74	Offshore of Okita River Estuary	2014/8/25	Cloudy	25.8	12.3	23.0	10	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.2	10.7	76.1	6.6	6.3	77.4	2.760	Sand	2.9 ± 0.42	9.2 ± 0.61	12.1
		2014/11/19	Sunny	16.0	12.7	18.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.4	19.3	62.9	11.2	6.2	77.5	2.804	Sand	2.6 ± 0.41	10 ± 0.53	12.6
		2015/2/3	Sunny	10.5	13.1	9.0	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.2	7.8	75.4	10.9	5.6	79.2	2.711	Sand	<4.5 ± 1.4	11 ± 1.7	11
		2014/5/12	Sunny	22.5	10.2	16.5	10	Grayish olive	None	0.0	0.0	0.0	0.0	6.6	83.5	5.9	4.0	78.5	2.676	Sand	4.0 ± 1.1	15 ± 1.5	19.0
		2014/8/25	Cloudy	24.0	9.8	21.0	10	Faint hydrogen sulfide	Faint vomit	0.0	0.0	0.1	0.1	11.2	82.1	3.0	3.7	74.8	2.668	Sand/silt	<6.1 ± 1.8	13 ± 2.9	13
75	Offshore of Moniya River/Kujigawa River Estuaries	2014/11/19	Sunny	15.2	9.6	19.2	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	1.3	73.6	17.0	8.1	74.8	2.680	Sand	12 ± 2.6	51 ± 4.8	63	
		2015/2/3	Sunny	9.5	11.0	12.0	10	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.2	1.3	47.1	43.2	8.1	65.8	2.702	Sand	16 ± 2.4	51 ± 3.9	67
		2014/5/12	Sunny	23.0	5.3	16.5	10	Gray	None	0.0	0.0	0.0	0.7	68.3	23.6	1.9	3.5	79.8	2.703	Sand	1.1 ± 0.33	3.1 ± 0.37	4.2
		2014/8/25	Light rain	24.6	7.0	23.0	10	Faint hydrogen sulfide	None	0.0	3.7	4.1	12.9	55.8	20.1	0.5	2.9	79.7	2.713	Sand	0.93 ± 0.31	3.4 ± 0.34	4.33
		2014/11/19	Sunny	12.8	6.7	18.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.1	32.0	64.8	1.5	1.5	75.9	2.758	Sand	2.0 ± 0.38	6.0 ± 0.49	8.0
76	Neighboring water body of Ken-o Offshore of Nakagawa River	2015/2/3	Sunny	5.8	6.5	10.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.7	4.0	77.8	15.8	0.1	1.7	80.6	2.706	Sand	<0.76 ± 0.25	2.9 ± 0.27	2.9
		2014/5/29	Sunny	16.8	7.7	20.2	10	Grayish olive	None	0.0	0.0	0.0	0.0	1.1	92.7	1.2	4.9	76.1	2.678	Sand	0.92 ± 0.26	2.8 ± 0.32	3.72
		2014/8/16	Cloudy	24.5	8.6	20.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.1	1.1	89.1	2.1	7.5	73.7	2.667	Sand	1.2 ± 0.35	4.1 ± 0.48	5.3
		2014/11/18	Sunny	13.2	8.1	17.8	10	Faint hydrogen sulfide	None	0.0	0.0	0.1	0.1	1.8	89.2	3.3	5.6	75.0	2.699	Sand	<0.75 ± 0.25	2.4 ± 0.30	2.4
		2015/2/11	Cloudy	8.0	8.2	9.5	10	Faint hydrogen sulfide	None	0.0	0.0	0.0	0.1	1.3	93.3	2.1	3.2	78.3	2.713	Sand	<0.97 ± 0.31	1.2 ± 0.39	1.2

