

## FY2018 Ibaraki Prefecture Survey Results

[Outline of 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 - 110 Bq/kg (dry)

Cs-137: 1.4 - 1,300 Bq/kg (dry)

#### Lakes and reservoirs

Cs-134: ND - 200 Bq/kg (dry)

Cs-137: 26 - 2,000 Bq/kg (dry)

#### Coastal areas

Cs-134: ND - 20 Bq/kg (dry)

Cs-137: 1.0 - 150 Bq/kg (dry)

### (3) Surrounding Environment

#### (a) Soil

##### Rivers

Cs-134: ND - 210 Bq/kg (dry)

Cs-137: 13 - 2,200 Bq/kg (dry)

##### Lakes and reservoirs

Cs-134: ND - 180 Bq/kg (dry)

Cs-137: 16 - 1,800 Bq/kg (dry)

#### (b) Ambient dose rate

##### Rivers

0.04 - 0.17  $\mu$ Sv/h

##### Lakes and reservoirs

0.04 - 0.12  $\mu$ Sv/h

# Ibaraki River (Water) 1/5

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	Radioactive cesium Cs-137
R i v e r s	1	Satone River	Yamagoya Bridge	Kitaibaraki City	2018/5/26	Sunny	23.0	0.4	14.5	0.0	Light grayish yellow green	None	91	12.9	2	1.0	<0.68	<0.99
					2018/8/22	Sunny	28.0	1.0	18.9	0.0	Light grayish greenish yellow	None	>100	12.6	2	1.0	<0.68	<0.63
					2018/11/14	Sunny	12.0	0.2	11.1	0.0	Dark grayish yellow green	None	>100	12.3	2	1.0	<0.51	<0.69
			2019/2/13		Sunny	6.0	0.1	6.4	0.0	Grayish yellow green	None	>100	13.5	<1	0.3	<0.84	<0.88	
			2018/5/26		Sunny	23.0	0.4	18.4	0.0	Grayish yellow green	None	>100	20.3	2	1.6	<0.69	<0.80	
			2018/8/21		Sunny	29.5	0.4	24.7	0.0	Grayish yellow green	None	>100	18.3	2	1.2	<0.46	<0.75	
		2	Murayama Bridge	Kitaibaraki City	2018/11/14	Sunny	11.8	0.5	11.4	0.0	Dark grayish yellow green	None	>100	17.0	<1	0.7	<0.76	<0.69
					2019/2/13	Sunny	5.8	0.2	5.6	0.0	Dark grayish yellow green	None	>100	17.0	<1	0.5	<0.77	<0.75
					2018/5/25	Sunny	25.2	0.4	16.4	0.0	Light grayish yellow	None	30	6.2	5	3.7	<0.57	<0.75
					2018/8/22	Sunny	31.0	0.2	20.5	0.0	Grayish yellow	None	>100	6.3	2	0.8	<0.57	<0.88
					2018/11/14	Sunny	14.5	0.2	10.7	0.0	Light grayish yellow	None	>100	6.8	1	0.6	<0.65	<0.80
					2019/2/14	Sunny	2.7	0.2	1.9	0.0	Light grayish yellow	None	>100	7.3	<1	0.2	<0.58	<0.60
	3	Hanazono River	Kurabeishi	Kitaibaraki City	2018/5/26	Sunny	24.5	0.3	18.1	0.0	Light grayish greenish yellow	None	88	22.5	5	2.6	<0.73	<0.80
					2018/8/21	Sunny	27.0	0.2	24.6	0.0	Grayish greenish yellow	None	>100	14.0	3	1.9	<0.69	<0.60
					2018/11/14	Sunny	14.3	0.3	13.8	0.0	Grayish greenish yellow	None	>100	33.9	2	1.5	<0.81	<0.92
					2019/2/13	Sunny	7.5	0.2	6.4	0.0	Grayish yellow	None	66	52.5	3	2.6	<0.68	<0.84
					2018/5/25	Sunny	27.0	0.7	15.5	0.0	Grayish yellow green	None	>100	7.2	3	0.9	<0.58	<0.69
					2018/8/22	Sunny	31.8	0.2	21.0	0.0	Grayish greenish yellow	None	>100	6.9	3	0.8	<0.74	<0.84
	4	Tagagawa River System	Isonare Bridge	Takahagi City	2018/11/14	Sunny	15.5	0.3	9.9	0.0	Grayish greenish yellow	None	>100	7.1	<1	0.4	<0.58	<0.69
					2019/2/14	Sunny	4.8	0.1	3.0	0.0	Light grayish yellow	None	>100	7.3	<1	0.3	<0.43	<0.75
					2018/5/26	Sunny	24.0	0.6	18.6	0.0	Grayish yellow green	None	37	14.1	10	3.8	<0.60	<0.63
					2018/8/21	Sunny	29.3	0.3	23.2	0.0	Grayish yellow	None	>100	12.9	5	2.5	<0.66	<0.54
					2018/11/14	Sunny	17.5	0.5	12.8	0.0	Grayish yellow	None	>100	11.1	3	1.4	<0.83	<0.84
					2019/2/13	Sunny	9.0	0.4	6.3	0.0	Light grayish yellow	None	>100	12.0	<1	1.1	<0.69	<0.80
	5	Okita River	Sakae Bridge	Takahagi City	2018/5/26	Sunny	19.0	0.3	16.0	0.0	Grayish yellow green	None	35	11.7	13	6.8	<0.58	<0.75
					2018/8/21	Sunny	31.3	0.2	24.2	0.0	Dark grayish greenish yellow	None	>100	12.3	6	2.0	<0.49	<0.54
					2018/11/13	Cloudy	15.5	0.5	14.3	0.0	Grayish yellow green	None	>100	12.3	3	1.4	<0.84	<0.84
					2019/2/13	Sunny	8.0	0.2	7.9	0.0	Grayish yellow	None	>100	13.6	<1	0.6	<0.84	<0.89
					2018/5/25	Cloudy	23.0	0.2	19.3	0.0	Grayish greenish yellow	None	44	11.2	5	3.0	<0.60	<0.88
					2018/8/20	Cloudy	27.5	0.3	24.5	0.0	Dark grayish yellow green	None	>100	13.1	1	1.1	<0.51	<0.60
6	Hananuki River	Shinhananuki Bridge	Takahagi City	2018/11/12	Sunny	17.3	0.2	14.8	0.0	Dark grayish yellow green	None	>100	12.3	<1	0.6	<0.74	<0.80	
				2019/2/12	Sunny	9.5	0.3	5.9	0.0	Dark grayish yellow green	None	>100	12.6	9	3.1	<0.78	<0.75	
				2018/5/10	Sunny	13.0	0.5	13.0	0.0	Light grayish greenish yellow	None	23	11.7	23	18	<0.68	<0.84	
				2018/8/20	Cloudy	25.5	0.5	23.0	0.0	Grayish yellow green	None	85	14.9	3	2.5	<0.54	<0.54	
				2018/11/13	Cloudy	15.5	0.4	14.4	0.0	Dark grayish yellow green	None	>100	14.7	3	1.7	<0.77	<0.80	
				2019/2/12	Sunny	5.7	0.8	3.8	0.0	Dark grayish yellow green	None	>100	14.8	<1	0.9	<0.85	<0.85	
7	Kujigawa River System	Iwai Bridge	Hitachiomiya City	2018/5/8	Cloudy	14.0	0.5	14.9	0.0	Grayish yellowish green	None	57	14.3	4	3.5	<0.79	<0.75	
				2018/8/20	Cloudy	27.5	0.5	23.5	0.0	Grayish yellow green	None	>100	17.8	1	0.9	<0.62	<0.70	
				2018/11/12	Cloudy	19.0	0.4	16.3	0.0	Grayish greenish yellow	None	>100	17.1	1	0.7	<0.72	<0.88	
				2019/2/12	Sunny	8.5	0.3	6.4	0.0	Grayish yellow green	None	>100	19.1	<1	0.2	<0.73	<0.88	
				2018/5/26	Cloudy	20.2	0.7	20.2	0.0	Grayish yellow green	None	>100	16.0	3	1.7	<0.68	<0.88	
				2018/8/3	Sunny	30.3	1.0	27.8	0.0	Grayish yellow green	None	>100	19.5	2	1.2	<0.85	<0.92	
8	Nakagawa River Area	Nakagawa River	Shimokunii	2018/11/12	Cloudy	16.0	1.0	15.1	0.0	Dark grayish yellow green	None	>100	18.4	<1	0.6	<0.70	<0.69	
				2019/2/25	Sunny	18.5	1.0	10.3	0.0	Dark grayish yellow green	None	>100	20.1	1	0.7	<0.83	<0.80	

# Ibaraki River (Water) 2/5

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	12	Nakagawa River Area	Nakagawa River	Katsuta Bridge	Mito City/ Hitachinaka City	2018/5/26	Cloudy	22.5	3.5	20.9	0.0	Dark grayish yellow green	None	85	16.8	3	2.5	<-0.60	<-0.80	
						2018/8/3	Sunny	30.8	4.2	29.5	0.0	Grayish yellow green	None	64	244	4	2.7	<-0.77	<-0.70	
			2018/11/1	Sunny	20.0	3.7	15.9	0.0	Dark grayish yellow green	None	>100	138	<1	0.8	<-0.82	<-0.54				
			2019/2/25	Cloudy	13.0	3.4	9.5	0.0	Grayish yellow	None	>100	701	2	2.1	<-0.63	<-0.89				
	13	Nakagawa River Area	Nakamaru River	Yanagisawa Bridge	Hitachinaka City	2018/5/25	Cloudy	23.9	1.5	22.2	0.0	Grayish greenish yellow	None	53	51.9	7	4.7	<-0.59	<-0.84	
						2018/8/2	Sunny	32.8	1.7	28.9	0.0	Grayish yellow	None	55	318	6	5.7	<-0.78	<-0.69	
						2018/11/2	Sunny	15.2	1.3	14.2	0.0	Grayish yellow	None	>100	54.9	5	3.4	<-0.69	<-0.66	
						2019/2/19	Cloudy	8.0	1.2	9.1	0.0	Dark grayish yellow	None	38	1,030	7	5.3	<-0.89	<-0.75	
	14	Nakagawa River System	Hinumagawa River Area	Hinumamae River	Nagaoka Bridge	Ibaraki Town	2018/5/25	Cloudy	20.8	0.2	18.1	0.0	Grayish yellow green	None	52	18.1	9	5.3	<-0.74	<-0.84
							2018/8/1	Sunny	34.2	0.2	29.7	0.0	Grayish yellow	None	73	21.6	7	5.0	<-0.66	<-0.69
							2018/11/1	Sunny	17.8	0.2	15.0	0.0	Grayish greenish yellow	None	>100	24.9	2	2.9	<-0.74	<-0.60
							2019/2/18	Sunny	13.2	0.1	12.6	0.0	Grayish yellow	None	71	29.3	4	3.5	<-0.81	<-0.84
	15	Nakagawa River System	Hinumagawa River Area	Hinuma River	Takahashi	Ibaraki Town	2018/5/25	Cloudy	23.0	0.2	19.0	0.0	Grayish yellow	None	47	17.5	14	5.5	<-0.72	<-0.80
							2018/8/1	Sunny	31.0	0.4	30.8	0.0	Light grayish yellow	None	>100	25.2	5	3.6	<-0.60	<-0.69
							2018/11/1	Sunny	15.0	0.2	13.0	0.0	Grayish yellow	None	>100	26.5	1	1.8	<-0.90	<-0.60
							2019/2/18	Sunny	11.0	0.1	8.8	0.0	Grayish yellow	None	>100	29.1	3	2.0	<-0.68	<-0.84
	16	Nakagawa River System	Hinumagawa River Area	Kansei River	Kansei Bridge	Ibaraki Town	2018/5/25	Cloudy	24.5	0.1	19.2	0.0	Grayish yellow	None	55	22.1	6	3.6	<-0.60	<-0.69
							2018/8/1	Sunny	31.2	0.2	26.5	0.0	Light grayish yellow	None	72	24.7	5	3.7	<-0.51	<-0.75
							2018/11/1	Sunny	13.9	0.2	12.2	0.0	Grayish yellow	None	>100	32.0	3	2.4	<-0.83	<-0.80
							2019/2/18	Sunny	13.8	0.7	11.1	0.0	Grayish greenish yellow	None	>100	27.0	1	1.6	<-0.74	<-0.80
	17	Nakagawa River System	Hinumagawa River Area	Oya River	Oya Bridge	Hokota City	2018/5/25	Cloudy	23.5	1.2	19.3	0.0	Dark grayish yellow	None	>100	32.3	4	2.4	<-0.76	<-0.84
							2018/8/1	Sunny	34.2	0.4	25.5	0.0	Grayish yellow	None	83	35.6	6	3.5	<-0.65	<-0.61
							2018/11/1	Sunny	20.8	0.4	16.1	0.0	Grayish greenish yellow	None	>100	36.2	4	2.7	<-0.70	<-0.88
							2019/2/18	Sunny	11.2	0.4	9.4	0.0	Light grayish yellow	None	57	65.5	4	2.6	<-0.68	<-0.69
	18	Nakagawa River System	Hinumagawa River Area	Hinuma River	Hinuma Bridge	Mito City/ Oarai Town	2018/5/25	Cloudy	25.3	0.7	21.8	0.0	Grayish yellow	None	55	1,130	13	8.2	<-0.81	<-0.63
							2018/8/2	Sunny	30.2	0.7	27.6	0.0	Grayish yellow green	None	69	2,560	4	2.5	<-0.68	<-0.63
							2018/11/2	Sunny	15.3	0.6	16.4	0.0	Grayish yellow green	None	61	789	6	5.2	<-0.84	<-0.82
							2019/2/18	Sunny	12.0	0.8	10.6	0.0	Grayish yellow green	None	68	4,210	4	1.9	<-0.74	<-0.87
	19	Nakagawa River System	Hokota River Area	Hokota River	Asahi Bridge	Hokota City	2018/5/22	Sunny	24.9	0.7	19.4	0.0	Light grayish yellow	None	62	41.7	8	5.4	<-0.74	<-0.88
							2018/8/6	Cloudy	24.9	0.6	26.1	0.0	Light grayish greenish yellow	None	>100	37.2	5	2.8	<-0.61	<-0.61
							2018/11/8	Sunny	18.5	0.9	14.9	0.0	Dark grayish yellow	None	71	35.5	5	3.4	<-0.65	<-0.80
							2019/2/6	Cloudy	9.5	1.0	9.8	0.0	Grayish yellow	None	23	33.3	16	11	<-0.83	<-0.88
	20	Nakagawa River System	Hokota River Area	Tomoe River	Shintomogawa Bridge	Hokota City	2018/5/21	Sunny	26.5	0.6	23.5	0.0	Light grayish yellow	None	69	26.8	7	3.4	<-0.54	<-0.69
							2018/8/6	Cloudy	23.0	0.7	26.0	0.0	Light grayish yellow green	None	>100	30.1	5	3.3	<-0.72	<-0.63
							2018/11/8	Sunny	19.0	1.0	15.9	0.0	Grayish greenish yellow	None	92	31.3	4	3.1	<-0.66	<-0.80
							2019/2/6	Cloudy	9.0	1.0	9.9	0.0	Grayish yellow	None	38	33.2	10	5.9	<-0.67	<-0.75
	21	Nakagawa River System	Hokota River Area	Taiyo River	Tazuka Bridge	Hokota City	2018/5/21	Sunny	26.0	0.2	20.5	0.0	Grayish yellow	None	43	26.7	25	14	<-0.63	<-0.63
							2018/8/6	Cloudy	27.1	0.1	24.4	0.0	Light grayish yellow	None	>100	27.1	6	3.5	<-0.56	<-0.66
							2018/11/8	Sunny	16.0	0.2	15.5	0.0	Light grayish yellow	None	77	25.9	7	3.9	<-0.67	<-0.75
							2019/2/7	Sunny	14.0	0.2	11.7	0.0	Light grayish yellow	None	>100	27.0	2	1.3	<-0.57	<-0.80
	22	Nakagawa River System	Kitaura River Area	Takeda River	Uchijuku-ohashi Bridge	Namegata City	2018/5/21	Sunny	26.8	0.3	22.5	0.0	Light grayish yellow	None	>100	24.0	5	3.4	<-0.65	<-0.96
							2018/8/6	Cloudy	25.0	0.3	24.6	0.0	Light grayish greenish yellow	None	77	30.1	8	3.0	<-0.73	<-0.80
							2018/11/7	Cloudy	17.5	0.4	16.5	0.0	Light grayish yellow	None	31	26.2	18	9.2	<-0.70	<-0.75
							2019/2/7	Cloudy	13.5	0.4	11.6	0.0	Light grayish yellow	None	70	28.8	5	3.0	<-0.90	<-0.88
23	Nakagawa River System	Kitaura River Area	Yamada River	Nioroshi Bridge	Namegata City	2018/5/21	Sunny	23.8	0.2	20.4	0.0	Light grayish greenish yellow	None	65	28.9	11	7.7	<-0.70	<-0.63	
						2018/8/6	Cloudy	27.5	0.2	26.1	0.0	Light grayish greenish yellow	None	77	30.0	8	5.0	<-0.69	<-0.84	
						2018/11/7	Cloudy	17.8	0.3	17.0	0.0	Grayish yellow	None	22	25.6	120	77	<-0.76	<-0.84	
						2019/2/7	Cloudy	13.0	0.3	10.4	0.0	Light grayish greenish yellow	None	44	29.4	12	8.3	<-0.67	<-0.80	
24	Nakagawa River System	Kitaura River Area	Kurakawa River	Kurakawa Bridge	Namegata City	2018/5/21	Cloudy	23.2	0.3	17.9	0.0	Light grayish greenish yellow	None	49	27.8	16	9.7	<-0.70	<-0.80	
						2018/8/6	Cloudy	26.5	0.9	26.2	0.0	Light grayish greenish yellow	None	56	28.4	14	7.1	<-0.58	<-0.88	
						2018/11/7	Sunny	19.8	0.9	18.0	0.0	Dark grayish reddish yellow	None	25	26.5	51	23	<-0.77	<-0.70	
						2019/2/7	Cloudy	13.8	0.8	10.2	0.0	Grayish yellow	None	24	29.5	25	17	<-0.76	<-0.80	
25	Nakagawa River System	Kitaura River Area	Gantsu River	JA Yokohashi Bridge	Namegata City	2018/5/21	Cloudy	20.5	0.1	19.2	0.0	Light grayish yellow	None	84	30.1	9	5.8	<-0.68	<-0.96	
						2018/8/6	Cloudy	26.2	0.2	24.9	0.0	Light grayish greenish yellow	None	48	31.6	12	7.8	<-0.66	<-0.84	
						2018/11/7	Cloudy	18.0	0.2	17.3	0.0	Grayish yellow	None	65	27.5	6	6.0	<-0.62	<-0.84	
						2019/2/7	Cloudy	11.4	0.2	11.7	0.0	Grayish yellow	None	50	29.0	7	7.0	<-0.88	<-0.63	

# Ibaraki River (Water) 3/5

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	Radioactive cesium Cs-137
26	Kitaura River Area	Nagare River	Suhoi Bridge	Kashima City	2018/5/16	Sunny	28.5	0.1	26.5	0.0	Grayish yellow	None	68	39.6	5	4.6	<-0.84	<-0.75
					2018/8/1	Sunny	31.8	0.1	31.9	0.0	Light grayish yellow	None	58	40.3	12	6.6	<-0.51	<-0.84
					2018/11/6	Cloudy	20.1	0.1	18.7	0.0	Light grayish yellow	None	22	7.0	14	12	<-0.77	<-0.61
					2019/2/8	Cloudy	5.5	0.2	5.4	0.0	Grayish yellow	None	>100	47.7	1	2.2	<-0.75	<-0.80
27		Sonobe River	Sonobeshin Bridge	Omitama City	2018/5/22	Sunny	27.6	1.5	21.0	0.0	Light grayish greenish yellow	None	34	26.1	14	12	<-0.83	<-0.88
					2018/8/15	Sunny	28.0	1.6	29.5	0.0	Grayish greenish yellow	Faint sewage	62	27.7	17	7.6	<-0.67	<-0.71
					2018/11/5	Cloudy	21.9	1.3	18.0	0.0	Grayish yellow	None	46	29.4	7	5.6	<-0.68	<-0.75
					2019/2/6	Cloudy	7.8	1.5	8.7	0.0	Grayish yellow	None	63	31.6	7	4.7	<-0.89	<-0.75
28		Sanno River	Tokoro Bridge	Omitama City	2018/5/22	Sunny	28.8	0.6	25.5	0.0	Light grayish greenish yellow	None	87	58.9	6	3.2	<-0.82	<-0.80
					2018/8/16	Sunny	30.3	0.5	27.1	0.0	Grayish yellow green	None	>100	51.2	23	10	<-0.75	<-0.54
					2018/11/5	Cloudy	21.2	0.5	20.8	0.0	Grayish yellow	None	84	42.7	4	1.9	<-0.92	<-0.70
					2019/2/6	Cloudy	7.8	0.7	9.4	0.0	Grayish greenish yellow	None	63	104	4	3.1	<-0.91	<-0.84
29		Koise River	Heiwa Bridge	Ishioka City	2018/5/22	Sunny	24.6	0.4	25.1	0.0	Light grayish yellow	None	41	21.5	10	9.3	<-0.86	<-0.88
					2018/8/16	Cloudy	28.0	0.3	27.5	0.0	Grayish greenish yellow	None	46	24.1	13	12	<-0.60	<-0.61
					2018/11/5	Cloudy	21.9	0.2	19.1	0.0	Light grayish yellow	None	30	20.8	16	11	<-0.81	<-0.75
					2019/2/6	Cloudy	9.0	0.4	8.0	0.0	Grayish yellow	None	66	20.0	7	4.4	<-0.60	<-0.84
30		Kajinashi River	Kamishuku Bridge	Namegata City	2018/5/22	Sunny	20.8	0.5	19.3	0.0	Light grayish greenish yellow	None	42	30.7	12	8.6	<-0.58	<-0.84
					2018/8/15	Sunny	29.9	0.3	27.3	0.0	Grayish yellow green	None	53	31.7	25	13	<-0.67	<-0.61
					2018/11/8	Sunny	19.5	0.5	16.3	0.0	Grayish yellow	None	68	34.7	13	5.9	<-0.59	<-0.66
					2019/2/6	Cloudy	6.3	0.3	8.7	0.0	Grayish yellow	None	63	37.9	6	2.9	<-0.68	<-0.84
31		Hishiki River	Hishiki Bridge	Kasumigaura City	2018/5/22	Sunny	23.0	0.5	25.0	0.0	Light grayish greenish yellow	None	63	26.0	8	3.3	<-0.86	<-0.84
					2018/8/15	Sunny	33.5	0.3	29.6	0.0	Light grayish greenish yellow	None	82	27.0	13	5.1	<-0.72	<-0.66
					2018/11/8	Sunny	20.2	0.4	17.1	0.0	Light grayish yellow	None	93	29.0	3	2.7	<-0.70	<-0.75
					2019/2/6	Cloudy	5.0	0.5	6.4	0.0	Light grayish yellow	None	90	32.3	3	3.0	<-0.63	<-0.63
32	Tonegawa River System	Ichinose River	Kawanaka Bridge	Kasumigaura River Area	2018/5/23	Cloudy	23.0	1.1	19.8	0.0	Light grayish yellow	None	39	26.0	16	11	<-0.65	<-0.88
					2018/8/15	Sunny	33.1	1.2	28.7	0.0	Grayish yellow	None	>100	27.7	11	5.6	<-0.67	<-0.66
					2018/11/8	Sunny	21.0	1.2	17.1	0.0	Light grayish yellow	None	23	24.8	49	54	<-0.73	<-0.70
					2019/2/5	Cloudy	7.2	1.3	7.6	0.0	Light grayish greenish yellow	None	28	29.9	13	11	<-0.54	<-0.75
33		Sakai River	Sakai Bridge/ National Route 354	Tsuchiura City	2018/5/23	Cloudy	18.8	0.4	21.6	0.0	Grayish yellow	None	22	49.2	53	45	<-0.71	<-0.75
					2018/8/15	Sunny	31.2	0.3	28.0	0.0	Light grayish yellow	Faint swamp	60	51.0	28	10	<-0.63	<-0.61
					2018/11/5	Sunny	25.8	0.2	22.2	0.0	Grayish yellow	None	21	43.8	86	65	<-0.88	<-0.88
					2019/2/5	Cloudy	8.0	0.4	12.8	0.0	Grayish yellow	None	35	46.9	20	15	<-0.85	<-0.69
34		Shinkawa River	Shinten Bridge	Tsuchiura City	2018/5/16	Sunny	21.3	1.7	22.7	0.0	Grayish greenish yellow	None	28	29.3	20	15	<-0.55	<-0.74
					2018/8/15	Sunny	31.8	1.7	29.6	0.0	Grayish greenish yellow	Faint sewage	49	31.6	10	6.4	<-0.56	<-0.71
					2018/11/5	Sunny	24.2	1.7	19.7	0.0	Dark grayish yellow green	None	38	44.7	5	5.0	<-0.69	<-0.61
					2019/2/5	Cloudy	9.0	2.0	7.3	0.0	Grayish greenish yellow	None	42	33.9	6	6.6	<-0.63	<-0.87
35		Sakura River	Eiri Bridge	Tsuchiura City/ Tsukuba City	2018/5/23	Cloudy	19.8	0.7	22.1	0.0	Light grayish yellow	None	41	24.3	9	8.0	<-0.72	<-0.75
					2018/8/16	Sunny	30.8	0.5	28.8	0.0	Grayish yellow green	None	60	23.4	12	6.4	<-0.70	<-0.54
					2018/11/5	Sunny	21.0	0.4	16.7	0.0	Grayish greenish yellow	None	>100	49.6	3	2.8	<-0.77	<-0.88
					2019/2/5	Cloudy	11.0	0.5	7.8	0.0	Light grayish yellow	None	70	24.4	9	5.6	<-0.72	<-0.80
36		Bizen River	Bizengawa Bridge	Tsuchiura City	2018/5/16	Sunny	25.6	0.7	22.0	0.0	Light grayish yellow green	None	38	28.9	16	7.8	<-0.71	<-0.80
					2018/8/15	Sunny	30.0	0.5	28.6	0.0	Grayish yellow green	None	35	30.7	18	8.3	<-0.70	<-0.61
					2018/11/5	Sunny	20.5	0.6	18.0	0.0	Grayish yellow	None	25	30.3	14	9.8	<-0.86	<-0.70
					2019/2/5	Cloudy	9.0	0.9	8.0	0.0	Grayish yellow	None	25	30.1	18	14	<-0.83	<-0.80
37		Hanamuro River	Shinwa Bridge	Tsuchiura City	2018/5/16	Sunny	25.4	0.5	22.7	0.0	Grayish greenish yellow	None	39	24.1	17	9.7	<-0.53	<-0.70
					2018/8/14	Sunny	29.5	0.2	30.5	0.0	Grayish greenish yellow	None	58	26.8	17	6.7	<-0.60	<-0.66
					2018/11/5	Sunny	21.2	0.3	17.7	0.0	Grayish greenish yellow	None	38	30.2	11	6.2	<-0.68	<-0.75
					2019/2/5	Cloudy	9.8	0.2	8.6	0.0	Grayish yellow	None	32	42.0	10	8.8	<-0.73	<-0.63
38		Seimei River	Katsushashi Bridge	Ami Town	2018/5/16	Sunny	27.2	0.5	22.6	0.0	Light grayish yellow green	None	66	26.8	8	3.3	<-0.70	<-0.84
					2018/8/14	Sunny	28.2	0.3	29.5	0.0	Light grayish yellow	None	59	21.6	13	7.1	<-0.60	<-0.54
					2018/11/6	Cloudy	20.8	0.4	16.8	0.0	Grayish yellow	None	49	35.3	10	5.1	<-0.54	<-0.61
					2019/2/5	Cloudy	6.8	0.5	7.1	0.0	Grayish yellow	None	35	38.6	14	9.3	<-0.68	<-0.84

# Ibaraki River (Water) 4/5

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	39	Kasumigaura River Area	Onogawa River	Okuhara-ohashi Bridge	Ryugasaki City/ Ushiku City	2018/5/16	Sunny	25.2	0.3	23.0	0.0	Grayish yellow green	None	42	27.2	18	8.3	<-0.86	<-0.74	
						2018/8/14	Sunny	32.4	0.4	28.6	0.0	Grayish yellow green	None	34	26.2	22	11	<-0.60	<-0.66	
						2018/11/6	Cloudy	20.7	0.7	17.8	0.0	Light grayish yellow	None	38	45.7	11	7.5	<-0.66	<-0.69	
			2019/2/5	Cloudy	6.2	0.4	8.5	0.0	Grayish yellow	None	39	46.1	10	6.2	<-0.57	<-0.89				
			40	Shintone River	Shintone Bridge	Inashiki City	2018/5/16	Sunny	23.4	2.6	22.6	0.0	Grayish yellow	None	25	26.1	24	16	<-0.51	<-0.80
							2018/8/1	Sunny	35.2	3.2	34.5	0.0	Dark grayish yellow	Faint sewage	32	22.5	7	7.6	<-0.72	<-0.80
	2018/11/6	Cloudy					23.0	3.4	18.6	0.0	Dark grayish yellow	None	33	51.7	13	12	<-0.47	<-0.75		
	41	Hitachitonegawa River Area	Yorokoshi River	Horinouchi Bridge	Itako City	2019/2/8	Cloudy	6.0	3.3	6.9	0.0	Grayish yellow	None	29	50.2	18	17	<-0.80	<-0.89	
						2018/5/16	Sunny	28.2	0.7	24.0	0.0	Light grayish yellow	None	29	30.6	26	13	<-0.78	<-0.55	
						2018/8/1	Sunny	34.1	0.4	30.0	0.0	Grayish yellow	None	32	37.9	14	10	<-0.63	<-0.75	
			2018/11/6	Cloudy	19.5	0.6	17.6	0.0	Light grayish yellow	None	25	33.7	66	34	<-0.83	<-0.80				
			2019/2/8	Cloudy	7.0	0.4	6.6	0.0	Grayish yellow	None	>100	38.4	3	2.8	<-0.90	<-0.75				
			2018/5/16	Sunny	24.0	2.3	22.4	0.0	Light grayish greenish yellow	None	29	31.3	14	4.6	<-0.74	<-0.63				
	42	Mackawa River	Ayame Bridge	Itako City	2018/8/1	Sunny	36.0	2.3	34.8	0.0	Grayish yellow green	None	31	41.9	8	4.7	<-0.68	<-0.75		
					2018/11/7	Cloudy	19.8	2.2	18.1	0.0	Dark grayish greenish yellow	None	36	38.2	11	10	<-0.81	<-0.80		
					2019/2/7	Cloudy	13.7	2.3	8.0	0.0	Dark grayish greenish yellow	None	36	51.0	10	10	<-0.73	<-0.84		
					2018/5/14	Sunny	24.2	0.7	22.0	0.0	Light grayish yellow green	None	>100	17.3	4	1.2	<-0.73	<-0.66		
					2018/8/27	Sunny	33.0	0.3	25.9	0.0	Light grayish greenish yellow	None	60	14.3	4	1.7	<-0.68	<-0.96		
					2018/11/20	Sunny	12.8	0.2	14.0	0.0	Grayish yellow green	None	>100	16.5	2	1.4	<-0.72	<-0.69		
	43	Kinugawa River Area	Kinugawa River	Kawashima Bridge	Chikusei City	2019/2/1	Sunny	8.5	1.5	7.9	0.0	Dark grayish yellow green	None	>100	19.8	2	1.1	<-0.60	<-0.69	
						2018/5/11	Sunny	16.3	0.5	16.2	0.0	Light grayish yellow	None	28	17.4	30	13	<-0.74	<-0.63	
						2018/8/28	Cloudy	30.3	1.0	25.8	0.0	Grayish yellow	None	30	17.0	27	6.3	<-0.70	<-0.63	
			44	Tagawa River	Tagawa Bridge	Moriya City	2018/11/20	Cloudy	14.0	0.2	14.2	0.0	Dark grayish yellow green	None	95	18.5	4	2.4	<-0.90	<-0.88
							2019/2/1	Sunny	2.3	0.4	5.8	0.0	Dark grayish greenish yellow	None	>100	26.3	3	1.8	<-0.63	<-0.80
							2018/5/14	Sunny	23.4	0.4	21.0	0.0	Grayish yellow	None	40	20.8	14	3.1	<-0.54	<-0.61
	45	Tagawa River	Tagawa Bridge	Chikusei City	2018/8/27	Sunny	28.2	0.5	25.9	0.0	Grayish greenish yellow	None	63	21.7	11	3.4	<-0.65	<-0.75		
					2018/11/20	Sunny	14.5	0.2	15.5	0.0	Grayish yellow	None	67	28.5	5	2.4	<-0.75	<-0.80		
					2019/2/1	Sunny	6.5	0.2	9.6	0.0	Grayish greenish yellow	None	>100	31.0	5	1.7	<-0.71	<-0.84		
					2018/5/14	Sunny	19.3	1.0	21.0	0.0	Grayish yellow	None	28	17.6	22	10	<-0.74	<-0.69		
					2018/9/12	Cloudy	23.0	2.3	22.2	0.0	Grayish yellow	None	75	19.8	6	3.2	<-0.60	<-0.89		
2018/11/20					Cloudy	15.0	0.3	15.4	0.0	Dark grayish yellow	None	71	27.2	7	4.4	<-0.63	<-0.84			
46	Kokai River	Kuroko Bridge	Chikusei City	2019/2/1	Sunny	7.2	0.3	7.3	0.0	Grayish yellow green	None	45	30.7	7	5.6	<-0.60	<-0.63			
				2018/5/15	Sunny	27.2	2.3	23.1	0.0	Grayish greenish yellow	None	37	16.7	20	13	<-0.71	<-0.61			
				2018/8/28	Cloudy	29.2	1.4	29.6	0.0	Grayish yellow	None	39	20.0	17	7.2	<-0.60	<-0.84			
		47	Fumimaki Bridge	Toride City	2018/11/21	Sunny	18.5	0.9	13.8	0.0	Grayish yellow green	None	82	26.3	5	3.0	<-0.70	<-0.63		
					2019/2/15	Cloudy	3.1	0.7	3.4	0.0	Grayish yellow green	None	51	31.5	4	3.1	<-0.60	<-0.82		
					2018/5/16	Sunny	26.2	1.4	24.0	0.0	Grayish yellow green	None	43	23.8	12	8.6	<-0.80	<-0.80		
48	Yatagawa River	Maruyama Bridge	Tsukuba City	2018/8/27	Sunny	32.2	1.2	31.1	0.0	Grayish yellow	None	37	27.2	8	4.8	<-0.63	<-0.63			
				2018/11/21	Cloudy	14.0	1.4	13.0	0.0	Grayish greenish yellow	None	46	27.7	6	5.8	<-0.79	<-0.75			
				2019/2/14	Sunny	8.8	1.3	8.3	0.0	Grayish greenish yellow	None	64	29.6	5	4.5	<-0.63	<-0.70			
				2018/5/15	Sunny	24.7	1.3	23.0	0.0	Light grayish greenish yellow	None	43	21.0	10	6.5	<-0.69	<-0.61			
				2018/8/27	Sunny	35.0	0.3	31.7	0.0	Grayish greenish yellow	None	46	24.2	12	6.6	<-0.63	<-0.84			
				2018/11/21	Sunny	13.0	0.3	13.4	0.0	Grayish greenish yellow	None	51	28.8	7	6.3	<-0.71	<-0.81			
49	Nishiyata River	Sakaimatsu Bridge	Tsukuba City	2019/2/14	Sunny	8.2	0.1	8.4	0.0	Grayish yellow	None	36	28.8	13	9.3	<-0.44	<-0.54			
				2018/5/15	Sunny	28.0	1.0	24.5	0.0	Light grayish yellow	None	64	21.5	7	6.0	<-0.74	<-0.84			
				2018/8/27	Sunny	28.0	0.6	29.8	0.0	Dark grayish yellow green	None	50	27.6	3	1.9	<-0.68	<-0.69			
				2018/11/21	Cloudy	15.5	0.6	11.7	0.0	Grayish yellow green	None	>100	26.5	2	2.8	<-0.60	<-0.75			
				2019/2/15	Cloudy	2.7	0.6	5.6	0.0	Grayish yellow green	None	78	29.8	5	3.0	<-0.52	<-0.66			
				2019/2/15	Cloudy	2.7	0.6	5.6	0.0	Grayish yellow green	None	78	29.8	5	3.0	<-0.52	<-0.66			

# Ibaraki River (Water) 5/5

R i v e r s	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water								Remarks			
	No.	Water area							Location	Municipality	General items					Activity concentration(Bq/L)				
		Water area	Water area	Water area							Water temperature (°C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)		SS (mg/L)	Turbidity (FNU)	Radioactive cesium
51	Tonegawa River System	Tonegawa River Area	Tonegawa River	Kurihashi Bridge	Koga City	2018/5/14	Sunny	18.5	0.8	16.5	0.0	Light grayish yellow green	None	49	16.2	14	6.7	<0.69	<0.55	
						2018/8/28	Cloudy	31.0	1.0	27.1	0.0	Grayish yellow	None	21	17.7	37	32	<0.74	<0.84	
						2018/11/20	Sunny	13.0	0.4	12.6	0.0	Grayish greenish yellow	None	96	25.4	4	2.6	<0.73	<0.63	
						2019/2/1	Sunny	4.2	0.2	5.2	0.0	Grayish yellow green	None	63	25.7	7	3.7	<0.66	<0.69	
	52	Tonegawa River System	Tonegawa River Area	Tonegawa River	Fukawa	Tone Town	2018/5/23	Cloudy	19.3	1.1	22.6	0.0	Light grayish yellow	None	61	21.7	7	5.3	<0.61	<0.66
							2018/8/28	Cloudy	31.5	0.3	28.8	0.0	Grayish yellow	None	36	18.4	9	5.5	<0.86	<0.75
							2018/11/21	Sunny	16.5	1.0	14.1	0.0	Grayish yellow green	None	69	25.1	5	3.7	<0.86	<0.70
							2019/2/15	Cloudy	5.0	0.1	5.7	0.0	Grayish yellow green	None	72	29.2	4	3.3	<0.60	<0.66
	53	Tonegawa River System	Tonegawa River Area	Tonegawa River	Sawara	Inashiki City	2018/5/16	Sunny	28.6	0.3	21.3	0.0	Light grayish greenish yellow	None	36	19.9	20	11	<0.76	<0.80
							2018/8/1	Sunny	33.3	0.3	31.5	0.0	Light grayish yellow	Faint sewage	28	23.5	16	9.7	<0.70	<0.80
							2018/11/6	Cloudy	22.1	0.3	19.4	0.0	Grayish yellow	None	47	31.5	18	12	<0.77	<0.63
							2019/2/8	Cloudy	7.0	0.3	7.0	0.0	Light grayish yellow	None	27	38.7	14	11	<0.69	<0.75

# 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	Olor	Grain size distribution(%)						Sediment content (%)	Density (g/cm <sup>3</sup> )	Property	Activity concentration [Bq/kg(dry)]						
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand				Silt	Clay	Cs-134		Cs-137	Total	
1	Sotone River	Yamagaya Bridge	Kitaburaki City	2018/5/26	Sunny	23.0	0.4	15.0	4	Blackish brown	None	0.0	4.7	5.8	9.8	27.4	23.6	24.9	3.9	78.7	2.829	Sand	12	96	108		
				2018/8/22	Sunny	28.0	1.0	20.5	3	Blackish brown	None	0.0	0.4	2.6	11.5	63.8	14.8	5.0	1.9	73.6	2.764	Sand/gravel	<5.4	63	63		
				2018/11/14	Sunny	12.0	0.2	10.8	5	Blackish brown	None	0.0	0.3	9.8	32.2	27.8	18.6	7.1	4.3	75.3	2.856	Sand	<5.0	62	62		
				2019/2/13	Sunny	6.0	0.1	6.5	3	Blackish brown	None	0.0	0.8	16.7	43.7	27.3	4.8	3.6	3.1	78.5	2.824	Sand/silt	<4.2	31	31		
				2018/5/26	Sunny	23.0	0.4	20.0	3	Dull yellowish brown	None	1.9	6.7	19.5	30.1	26.5	9.9	3.4	2.1	77.9	2.754	Sand/gravel	<4.9	51	51		
		2	Muryama Bridge	Kitaburaki City	2018/8/21	Sunny	29.5	0.4	26.0	3	Dull yellowish brown	None	0.0	7.2	20.8	40.3	28.6	1.0	0.7	1.4	76.5	2.729	Sand/gravel	<5.0	34	34	
					2018/11/14	Sunny	11.8	0.5	11.3	1	Brown	None	7.4	25.1	11.6	14.0	25.4	9.9	4.0	2.7	76.7	2.738	Sand/gravel	5.6	62	67.6	
					2019/2/13	Sunny	5.8	0.2	6.0	1	Dark brown	None	0.0	3.9	1.8	3.2	59.8	19.8	7.4	4.2	70.9	2.661	Sand/gravel/silt	7.8	77	84.8	
					2018/5/25	Sunny	25.2	0.4	16.8	5	Dull yellowish brown	None	0.0	0.0	7.8	66.0	23.0	0.4	1.0	1.8	73.9	2.677	Sand	<5.4	27	27	
					2018/8/22	Sunny	31.0	0.2	22.0	0.0	0.0	5.4	48.5	29.8	14.1	0.9	0.5	0.9			77.6	2.657	Sand/gravel	<3.8	18	18	
3	Hamazono River	Kurabetsu	Kitaburaki City	2018/11/14	Sunny	14.5	0.2	11.5	5	Dull yellowish brown	None	3.2	24.3	8.5	22.4	37.3	1.8	0.7	1.8	76.5	2.746	Sand/gravel	<5.3	25	25		
				2019/2/14	Sunny	2.7	0.2	3.0	2	Dull yellowish brown	None	0.0	17.5	17.3	27.8	32.3	3.1	0.1	1.9	74.9	2.698	Sand/gravel	<4.8	40	40		
				2018/5/26	Sunny	24.5	0.3	19.0	3	Dull yellowish brown	None	0.0	0.2	1.0	11.0	78.5	5.3	2.1	1.9	73.7	2.661	Sand	<5.5	48	48		
				2018/8/21	Sunny	27.0	0.2	25.0	4	Dull yellowish brown	None	0.0	7.4	7.2	18.2	50.3	10.6	3.7	2.6	75.9	2.651	Sand/gravel	5.7	52	57.7		
				2018/11/14	Sunny	14.3	0.3	14.0	5	Dull yellowish brown	Faint sewage	0.0	1.5	4.8	19.7	60.3	7.3	1.9	4.5	74.3	2.684	Sand	<5.0	46	46		
		4	Isonare Bridge	Kitaburaki City	2019/2/13	Sunny	7.5	0.2	6.3	3	Dull yellowish brown	None	0.0	0.0	0.2	4.9	80.0	9.1	1.1	4.9	73.7	2.643	Sand	<5.8	52	52	
					2018/5/25	Sunny	27.0	0.7	16.3	3	Grayish yellowish brown	None	3.3	10.0	21.0	22.0	28.7	11.8	1.3	1.9	79.4	2.732	Sand/gravel	<4.6	23	23	
					2018/8/22	Sunny	31.8	0.2	23.0	3	Grayish yellowish brown	None	2.7	21.5	9.5	8.6	37.3	17.2	1.6	1.6	75.0	2.775	Sand/gravel	<6.1	27	27	
					2018/11/14	Sunny	15.5	0.3	12.0	3	Grayish yellowish brown	None	3.1	9.9	12.5	15.2	41.2	13.1	1.5	3.5	76.4	2.748	Sand/gravel	<4.2	20	20	
					2019/2/14	Sunny	4.8	0.1	5.5	2	Grayish yellowish brown	None	0.0	22.8	15.2	19.7	26.3	13.0	1.2	1.8	77.0	2.749	Sand/gravel	<3.3	5.2	5.2	
5	Okita River	Sakae Bridge	Takahagi City	2018/5/26	Sunny	24.0	0.6	20.0	3	Brown	None	0.0	15.9	19.2	23.6	25.4	11.8	2.2	1.9	79.1	2.704	Sand/gravel	<4.9	46	46		
				2018/8/21	Sunny	29.3	0.3	23.2	3	Brown	Faint sewage	0.0	11.2	21.8	19.0	21.0	19.1	3.8	4.2	77.9	2.648	Sand/gravel	6.6	81	87.6		
				2018/11/14	Sunny	17.5	0.5	13.5	5	Brown	None	0.0	0.1	3.4	31.2	50.2	9.5	2.9	2.8	76.2	2.696	Sand	<6.0	53	53		
				2019/2/13	Sunny	9.0	0.4	7.3	3	Brown	None	0.0	7.1	31.8	27.0	20.3	10.2	1.0	2.6	80.2	2.645	Sand/gravel	<4.3	32	32		
				2018/5/26	Cloudy	19.0	0.3	15.8	7	Dull yellowish brown	None	0.0	0.0	4.0	52.8	40.4	0.9	0.1	1.9	76.4	2.641	Sand	<5.3	22	22		
		6	Sakai Bridge	Kitaburaki City	2018/8/21	Sunny	31.3	0.2	25.0	5	Dull yellowish brown	None	0.0	0.2	1.7	18.8	70.5	4.8	1.6	2.3	74.2	2.628	Sand/gravel	4.9	40	44.9	
					2018/11/13	Cloudy	15.5	0.5	14.8	3	Dull yellowish brown	None	3.0	12.1	8.8	22.6	46.6	3.1	1.3	2.5	75.4	2.645	Sand/gravel	<7.1	76	76	
					2019/2/13	Sunny	8.0	0.2	9.0	3	Dull yellowish brown	None	0.0	9.1	4.8	21.2	55.4	4.5	1.8	3.4	74.6	2.615	Sand	5.5	62	67.5	
					2018/5/25	Cloudy	23.0	0.2	20.7	3	Dark brown	None	0.1	1.5	12.9	69.5	9.1	3.6	3.3			72.1	2.657	Sand	<7.0	17	17
					2018/8/20	Cloudy	27.5	0.3	26.0	5	Dark brown	None	0.0	15.7	17.6	22.7	28.4	7.5	3.5	3.8	76.6	2.638	Sand/gravel/silt	<5.8	14	14	
8	Kujigawa River System	Iwai Bridge	Hitachiomiya City	2018/11/12	Sunny	17.3	0.2	15.3	3	Dark brown	None	0.0	4.6	8.3	15.0	57.0	9.1	2.4	3.7	77.5	2.657	Sand/gravel	<4.5	11	11		
				2019/2/12	Sunny	9.5	0.3	6.3	3	Dark brown	None	0.0	1.6	1.9	6.1	73.4	7.1	4.9	5.1	74.7	2.616	Sand/silt	<5.3	14	14		
				2018/5/10	Sunny	13.0	0.5	13.0	2	Dark brown	None	0.0	1.1	0.1	0.3	21.6	58.7	11.3	6.9	73.5	2.662	Sand/gravel	<6.8	33	33		
				2018/8/20	Cloudy	25.5	0.5	24.0	4	Blackish brown	None	0.0	0.3	0.1	0.4	16.3	57.9	14.8	10.2	63.7	2.627	Sand	<6.6	39	39		
				2018/11/13	Cloudy	15.5	0.4	15.0	3	Dark brown	None	0.0	1.6	0.1	0.4	19.1	64.5	8.5	5.9	74.2	2.671	Sand/silt/gravel	<4.9	14	14		
		9	Sakai Bridge	Hitachi City/ Tokai Village	2019/2/12	Sunny	5.7	0.8	5.0	2	Dark brown	None	0.0	0.0	0.0	0.1	17.9	69.3	7.9	4.9	71.5	2.651	Sand	<5.3	14	14	
					2018/5/8	Cloudy	14.0	0.5	15.2	3	Dark brown	None	8.4	33.7	15.7	9.9	23.8	6.4	0.5	1.7	83.2	2.745	Sand/gravel	<4.6	17	17	
					2018/8/20	Cloudy	27.5	0.5	24.2	3	Dark brown	None	0.0	34.3	18.2	14.8	29.3	2.0	0.5	0.9	80.8	2.732	Sand/gravel	<4.8	9.7	9.7	
					2018/11/12	Cloudy	19.0	0.4	17.0	5	Dark brown	None	0.0	32.0	31.4	17.8	15.1	2.3	0.0	1.4	83.0	2.661	Sand/gravel	<2.6	6.1	6.1	
					2019/2/12	Sunny	8.5	0.3	7.5	3	Dark brown	None	0.0	4.3	8.0	14.8	51.2	18.2	0.9	2.5	75.4	2.670	Sand/gravel	<4.1	9.9	9.9	
10	Nakagawa River Area	Nakagawa-ohashi Bridge	Hitachiomiya City/ Shirasato Town	2018/5/26	Cloudy	20.2	0.7	20.0	4	Blackish brown	Faint sewage	0.0	0.0	0.0	0.1	15.8	72.5	7.6	4.0	73.9	2.729	Sand/silt	<6.3	22	22		
				2018/8/3	Sunny	30.3	1.0	28.8	2	Blackish brown	None	0.0	1.5	0.7	0.6	14.6	43.2	27.6	11.8	64.8	2.661	Sand/silt/gravel	<6.9	24	24		
				2018/11/12	Cloudy	16.0	1.0	16.0	3	Blackish brown	None	0.0	0.0	0.2	0.1	15.6	57.9	16.1	10.2	64.4	2.672	Sand/silt	7.1	76	83.1		
				2019/2/25	Sunny	18.5	1.0	10.5	3	Blackish brown	Faint sewage	0.0	0.2	0.1	0.1	18.8	70.3	4.8	5.8	69.3	2.700	Sand/silt	<7.0	21	21		







# Ibaraki River (Sediment) 4/5

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(%)						Sediment content (%)	Density (g/cm³)	Property	Activity concentration [Bq/kg(dry)]							
	Course gravel								Medium gravel		Fine gravel		Coarse sand		Medium sand		Fine sand		Silt		Clay		Radioactive cesium					
Coarse gravel						Medium gravel		Fine gravel		Coarse sand		Medium sand		Fine sand		Silt		Clay		Cs-134	Cs-137	Total						
R I V E R S Y S T E M	39	Kasumigaura River Area	Onogawa River	Okuhara-ohashi Bridge	Ryugasaki City/ Utsunomiya City	2018/5/16	Sunny	25.2	0.3	21.6	5	Dark olive brown	None	0.0	0.0	0.0	0.0	13.5	73.0	6.3	7.2	62.3	2.620	Sand	27	290	317	
						2018/8/14	Sunny	32.4	0.4	27.6	5	Blackish brown	None	0.0	0.0	0.1	15.7	64.6	12.4	7.2	52.8	2.611	Sand	30	270	300		
						2018/11/6	Cloudy	20.7	0.7	19.0	5	Blackish brown	None	0.0	0.0	0.0	0.1	17.1	67.0	7.3	8.5	57.4	2.692	Sand/silt	22	280	302	
			40	Shintone River	Shintone Bridge	Inashiki City	2019/2/5	Cloudy	6.2	0.4	9.0	5	Olive black	None	0.0	0.0	0.0	0.0	19.3	66.6	7.7	6.4	68.8	2.636	Sand	20	230	250
							2018/5/16	Sunny	23.4	2.6	19.2	5	Olive black	Faint sewage	0.0	0.0	0.5	1.0	8.8	42.8	31.3	15.8	33.1	2.638	Silt	22	250	272
							2018/8/1	Sunny	35.2	3.2	27.0	6	Olive black	Faint sewage	0.0	0.0	0.2	0.6	5.4	27.6	40.7	25.5	36.2	2.543	Silt	19	240	259
	41	Hitachinogawa River Area	Yorokoshi River	Horinouchi Bridge	Itako City	2018/11/6	Cloudy	23.0	3.4	18.8	5	Olive black	Faint sewage	0.0	0.5	0.8	0.7	2.7	22.0	55.5	17.9	39.1	2.653	Silt	17	160	177	
						2019/2/8	Cloudy	6.0	3.3	8.0	4	Olive black	Faint sewage	0.0	4.5	3.1	2.1	1.9	11.6	57.7	19.1	49.0	2.614	Silt/sand	-9.6	89	89	
						2018/5/16	Sunny	28.2	0.7	24.0	1	Blackish brown	Faint sewage	0.0	6.7	5.7	2.8	37.1	24.4	15.1	8.1	48.7	2.750	Silt/sand	<10	35	35	
						2018/8/1	Sunny	34.1	0.4	26.1	3	Blackish brown	Faint sewage	0.0	5.9	3.9	2.5	23.2	19.4	24.4	30.8	31.6	2.586	Silt/sand	14	120	134	
						2018/11/6	Cloudy	19.5	0.6	18.0	4	Blackish brown	None	0.0	0.5	1.9	2.6	18.8	36.0	23.4	16.0	43.7	2.654	Silt/sand	<11	120	120	
						2019/2/8	Cloudy	7.0	0.4	6.8	4	Blackish brown	Faint sewage	0.0	0.1	0.7	0.3	2.9	11.9	61.7	22.4	29.3	2.542	Silt	<18	98	98	
			42	Mackawa River	Ayame Bridge	Itako City	2018/5/16	Sunny	24.0	2.3	19.7	1	Olive black	Faint sewage	0.0	0.0	0.0	0.3	16.0	58.0	16.2	9.5	48.7	2.677	Silt	20	170	190
							2018/8/1	Sunny	36.0	2.3	29.0	4	Blackish brown	Faint sewage	0.0	0.0	0.0	0.5	31.4	59.2	5.5	3.4	70.0	2.669	Sand/silt	11	80	91
							2018/11/7	Cloudy	19.8	2.2	18.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.2	5.3	48.7	30.1	15.7	45.3	2.632	Silt	15	180	195
							2019/2/7	Cloudy	13.7	2.3	6.3	10	Olive black	Faint sewage	0.0	0.0	0.0	0.2	3.3	49.2	32.2	15.2	44.7	2.602	Silt	19	190	209
							2018/5/14	Sunny	24.2	0.7	17.9	5	Blackish brown	None	0.0	0.0	0.2	1.1	41.2	52.7	1.9	3.0	70.6	2.700	Sand	<0.8	6.0	6.0
							2018/8/27	Sunny	33.0	0.3	26.0	5	Blackish brown	None	2.6	21.0	7.4	9.1	42.2	11.3	3.8	2.6	77.9	2.687	Sand/gravel	<0.52	1.4	1.4
	43	Kinugawa River Area	Kinugawa River	Kawashima Bridge	Chikusei City	2018/11/20	Sunny	12.8	0.2	15.2	2	Blackish brown	None	2.9	24.3	3.2	6.0	50.5	10.0	1.4	1.7	79.3	2.694	Sand/gravel	<0.50	3.3	3.3	
						2019/2/1	Sunny	8.5	1.5	9.0	5	Blackish brown	None	0.0	0.0	0.0	0.5	54.0	40.2	2.0	3.3	72.7	2.721	Sand	<0.56	6.4	6.4	
						2018/5/11	Sunny	16.3	0.5	22.5	2	Dark olive brown	None	0.0	0.6	0.7	1.1	7.7	17.6	49.1	23.2	36.7	2.614	Silt/sand	<19	130	130	
						2018/8/28	Cloudy	30.3	1.0	27.0	3	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.5	16.5	50.9	31.1	35.1	2.519	Silt/sand	<15	57	57	
						2018/11/20	Cloudy	14.0	0.2	14.5	1	Olive black	None	0.0	1.9	0.2	0.1	1.3	26.2	53.2	17.1	38.4	2.620	Silt/sand	<14	73	73	
						2019/2/1	Sunny	2.3	0.4	6.0	3	Olive black	None	0.0	1.7	4.1	4.5	40.3	40.1	4.3	5.1	71.9	2.692	Sand/silt	7.3	82	89.3	
			44	Tagawa River	Tagawa Bridge	Chikusei City	2018/5/14	Sunny	23.4	0.4	20.2	2	Blackish brown	None	0.0	45.5	14.4	9.8	19.0	8.6	1.9	0.8	82.5	2.747	Sand/gravel	<5.7	10	10
							2018/8/27	Sunny	28.2	0.5	28.0	3	Blackish brown	None	45.5	41.3	5.1	2.6	3.3	1.7	0.2	0.4	87.1	2.695	Gravel/sand	<6.1	11	11
							2018/11/20	Sunny	14.5	0.2	16.3	1	Blackish brown	None	6.5	38.4	7.6	7.2	17.1	19.6	2.1	1.6	78.4	2.727	Sand/gravel	<5.4	12	12
							2019/2/1	Sunny	6.5	0.2	11.0	3	Blackish brown	None	4.4	45.9	12.8	11.3	14.9	7.9	1.3	1.6	72.6	2.690	Sand/gravel	<4.5	9.5	9.5
							2018/5/14	Sunny	19.3	1.0	20.4	2	Blackish brown	None	0.0	0.6	2.8	2.6	12.9	39.3	28.4	13.5	61.1	2.634	Sand/silt	<6.9	18	18
							2018/9/12	Cloudy	23.0	2.3	23.4	2	Blackish brown	None	7.2	62.1	9.8	2.9	9.0	7.9	0.7	0.7	78.9	2.688	Sand/gravel	<5.0	15	15
	45	Kokai River	Kuroko Bridge	Chikusei City	2018/11/20	Cloudy	15.0	0.3	16.2	3	Olive black	Faint sewage	0.0	1.0	2.6	1.5	20.0	60.5	10.0	4.4	61.4	2.682	Sand/silt	<7.7	33	33		
					2019/2/1	Sunny	7.2	0.3	8.0	3	Olive black	None	0.0	0.0	0.0	1.6	25.3	55.0	8.2	9.9	66.7	2.643	Sand/silt	<7.7	51	51		
					2018/5/15	Sunny	27.2	2.3	21.7	4	Blackish brown	None	0.0	0.1	0.2	3.5	90.0	3.2	1.0	1.9	74.8	2.678	Sand	<6.7	31	31		
					2018/8/28	Cloudy	29.2	1.4	30.4	4	Blackish brown	None	0.0	0.0	0.0	0.3	82.7	14.1	1.0	2.0	75.1	2.653	Sand	<6.8	33	33		
					2018/11/21	Sunny	18.5	0.9	14.2	2	Blackish brown	None	0.0	0.0	0.0	4.1	81.4	10.7	0.1	3.8	75.4	2.708	Sand	<4.9	32	32		
					2019/2/15	Cloudy	3.1	0.7	4.0	4	Blackish brown	None	0.0	0.0	0.0	2.5	85.3	9.1	0.2	2.9	75.2	2.669	Sand	<5.1	27	27		
	46	Kokai River	Funimaki Bridge	Toride City	2018/5/16	Sunny	26.2	1.4	20.8	4	Blackish brown	Faint sewage	0.0	0.0	0.0	0.0	5.8	88.9	2.3	3.1	70.7	2.626	Sand/silt	<5.8	62	62		
					2018/8/27	Sunny	32.2	1.2	30.0	5	Blackish brown	Faint swamp	0.0	0.0	0.0	0.3	8.6	66.5	15.6	8.9	54.2	2.603	Silt/sand	12	120	132		
					2018/11/21	Cloudy	14.0	1.4	13.7	3	Blackish brown	Faint sewage	0.0	0.0	0.0	0.0	5.7	87.1	4.2	3.0	72.1	2.672	Sand/silt	8.5	84	92.5		
					2019/2/14	Sunny	8.8	1.3	9.0	3	Blackish brown	Faint sewage	0.0	0.2	0.4	0.2	7.3	54.3	20.7	16.9	38.6	2.552	Silt	<14	160	160		
					2018/5/15	Sunny	24.7	1.3	21.0	3	Black	None	0.0	0.6	4.4	2.4	27.4	37.5	15.4	12.4	50.7	2.594	Sand	29	390	417		
					2018/8/27	Sunny	35.0	0.3	32.5	3	Blackish brown	None	0.0	0.0	0.0	0.4	22.7	24.9	26.5	25.6	30.4	2.303	Sand/silt	<18	32	32		
	47	Kokai River	Yatagawa River	Maruyama Bridge	Tsukuba City	2018/11/21	Sunny	13.0	0.3	15.0	5	Black	Faint sewage	0.0	0.0	0.0	3.0	21.7	39.8	27.6	8.0	56.9	2.668	Sand/silt	22	260	282	
						2019/2/14	Sunny	8.2	0.1	10.3	3	Black	Faint sewage	0.0	0.1	1.6	4.9	46.9	32.4	4.8	9.4	65.8	2.755	Sand	20	220	240	
						2018/5/15	Sunny	28.0	1.0	20.3	4	Dark brown	Faint swamp	0.0	1.5	6.3	14.9	54.9	13.9	5.8	2.8	67.7	2.651	Sand/silt	37	380	417	
						2018/8/27	Sunny	28.0	0.6	29.3	3	Blackish brown	Faint sewage	0.0	3.1	9.1	15.7	47.6	11.0	10.5	3.2	60.7	2.617	Sand/silt/gravel	45	350	395	
						2018/11/21	Cloudy	15.5	0.6	14.0	2	Blackish brown	Faint sewage	0.0	1.2	3.0	6.7	46.7	26.8	10.3	5.3	59.3	2.664	Sand/silt	37	370	407	
						2019/2/15	Cloudy	2.7	0.6	7.0	5	Dark brown	Faint sewage	0.0	0.9	2.0	7.0	44.1	27.4	7.3	10.9	58.8	2.628	Sand/silt	32	350	382	

# Ibaraki River (Sediment) 5/5

R I V E R	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks		
	No.	Water area							Location	Municipality	General items											Activity concentration [Bq/kg(dry)]						
											Sediment temperature (°C)	Sample length (cm)	Color	Odor	Grain size distribution(%)					Sediment content (%)	Density (g/cm <sup>3</sup> )	Property	Radioactive cesium					
															Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand				Fine sand	Silt	Clay		Cs-134	Cs-137
51	Tonegawa River System	Tonegawa River Area	Tonegawa River	Kurihashi Bridge	Koga City	2018/5/14	Sunny	18.5	0.8	15.3	4	Olive black	Faint sewage	0.0	0.7	0.1	1.9	10.8	49.4	25.3	11.7	49.3	2.687	Sand/silt	<9.7	41	41	
						2018/8/28	Cloudy	31.0	1.0	27.8	1	Olive black	Faint sewage	0.0	0.0	0.0	0.5	25.9	59.5	8.7	5.4	69.1	2.790	Sand	<5.8	24	24	
						2018/11/20	Sunny	13.0	0.4	13.5	3	Olive black	None	0.0	0.0	0.0	0.1	24.7	69.4	2.6	3.3	75.5	2.953	Sand	<4.3	6.8	6.8	
				2019/2/1	Sunny	4.2	0.2	5.5	4	Olive black	None	0.0	0.0	0.0	0.5	29.5	58.1	6.6	5.4	75.5	2.814	Sand/silt	<5.0	13	13			
				2018/5/23	Cloudy	19.3	1.1	20.3	4	Dark grayish yellow	None	0.0	0.0	0.0	0.1	13.7	71.6	9.8	4.8	72.2	2.780	Sand/silt	<7.3	27	27			
				2018/8/28	Cloudy	31.5	0.3	29.8	5	Olive black	None	58.8	34.0	1.8	0.4	1.1	2.6	0.9	0.5	75.8	2.638	Gravel/sand/silt	<6.4	25	25			
	52	Tonegawa River System	Tonegawa River Area	Tonegawa River	Fukawa	Tone Town	2018/11/21	Sunny	16.5	1.0	14.7	5	Olive black	Faint sewage	0.0	0.0	0.0	0.0	4.1	37.4	40.1	18.5	41.8	2.608	Sand/silt	<11	110	110
							2019/2/15	Cloudy	5.0	0.1	6.0	2	Olive black	None	0.0	2.8	0.4	0.0	24.5	67.4	1.1	3.7	72.6	2.778	Sand	<5.6	15	15
							2018/5/16	Sunny	28.6	0.3	24.8	1	Blackish brown	Faint hydrogen sulfide	0.0	26.5	18.5	9.2	23.1	12.9	5.5	4.2	74.8	2.676	Silt/gravel/sand	<5.2	23	23
					2018/8/1	Sunny	33.3	0.3	31.1	2	Blackish brown	Faint hydrogen sulfide	0.0	40.4	16.1	10.5	22.3	7.2	2.5	1.0	82.0	2.671	Sand/gravel/silt	<4.3	18	18		
					2018/1/6	Cloudy	22.1	0.3	20.3	3	Olive black	None	0.0	33.9	11.3	8.1	13.1	35.4	0.6	2.7	78.6	2.775	Sand/gravel	<4.4	30	30		
					2019/2/8	Cloudy	7.0	0.3	8.0	1	Olive black	Faint swamp	3.3	42.5	14.3	4.6	12.2	19.3	1.7	2.1	78.0	2.738	Sand/gravel	<5.4	21	21		
53	Tonegawa River System	Tonegawa River Area	Tonegawa River	Sawara	Inashiki City	2018/8/1	Sunny	33.3	0.3	31.1	2	Blackish brown	Faint hydrogen sulfide	0.0	40.4	16.1	10.5	22.3	7.2	2.5	1.0	82.0	2.671	Sand/gravel/silt	<4.3	18	18	
						2018/1/6	Cloudy	22.1	0.3	20.3	3	Olive black	None	0.0	33.9	11.3	8.1	13.1	35.4	0.6	2.7	78.6	2.775	Sand/gravel	<4.4	30	30	
						2019/2/8	Cloudy	7.0	0.3	8.0	1	Olive black	Faint swamp	3.3	42.5	14.3	4.6	12.2	19.3	1.7	2.1	78.0	2.738	Sand/gravel	<5.4	21	21	

# Ibaraki River (Surrounding Environment) 1/5

No.	Location			Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)													Remarks			
	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)		
										Cs-134	Cs-137	Total					Cs-134	Cs-137	Total				
R i v e r s	1	Satoné River	Yamagoya Bridge	Kitabaraki City	2018/5/26	Sunny	23.0	Blackish brown	Faint earth	Loamy	210	1,900	2,110	0.12	Blackish brown	Faint earth	Loamy	120	1,200	1,320	0.12		
					2018/8/22	Sunny	28.0	Blackish brown	Faint earth	Loamy	200	2,200	2,400	0.11	Blackish brown	Faint earth	Loamy	99	1,200	1,299	0.13		
					2018/11/14	Sunny	12.0	Blackish brown	Faint earth	Loamy	130	1,400	1,530	0.11	Blackish brown	Faint earth	Loamy	120	1,200	1,320	0.17		
					2019/2/13	Sunny	6.0	Blackish brown	Faint earth	Loamy	200	2,100	2,300	0.10	Blackish brown	Faint earth	Loamy	120	1,400	1,520	0.10		
					2018/5/26	Sunny	23.0	Blackish brown	Faint earth	Loamy	51	490	541	0.07	Blackish brown	Faint earth	Loamy	170	1,500	1,670	0.08		
			2		Murayama Bridge	Kitabaraki City	2018/8/21	Sunny	29.5	Blackish brown	Faint earth	Loamy	32	360	392	0.08	Blackish brown	Faint earth	Loamy	210	2,200	2,410	0.08
							2018/11/14	Sunny	11.8	Blackish brown	Faint earth	Loamy	38	390	428	0.08	Blackish brown	Faint earth	Loamy	150	1,600	1,750	0.09
							2019/2/13	Sunny	5.8	Blackish brown	Faint earth	Loamy	57	620	677	0.06	Blackish brown	Faint earth	Loamy	130	1,500	1,630	0.07
							2018/5/25	Sunny	25.2	Blackish brown	Faint earth	Loamy	39	420	459	0.08	Blackish brown	Faint earth	Loamy	58	540	598	0.08
							2018/8/22	Sunny	31.0	Blackish brown	Faint earth	Loamy	26	360	386	0.08	Blackish brown	Faint earth	Loamy	56	530	586	0.10
	3	Hanazono River	Kurabeishi	Kitabaraki City	2018/11/14	Sunny	14.5	Blackish brown	Faint earth	Loamy	28	290	318	0.08	Blackish brown	Faint earth	Loamy	45	420	465	0.09		
					2019/2/14	Sunny	2.7	Blackish brown	Faint earth	Loamy	65	630	695	0.07	Blackish brown	Faint earth	Loamy	30	370	400	0.08		
					2018/5/26	Sunny	24.5	Dark brown	Faint earth	Loamy	33	380	413	0.06	Blackish brown	Faint earth	Loamy	75	800	875	0.11		
					2018/8/21	Sunny	27.0	Dark brown	Faint earth	Loamy	21	250	271	0.06	Dark brown	Faint earth	Loamy	37	320	357	0.08		
					2018/11/14	Sunny	14.3	Dark brown	Faint earth	Loamy	31	400	431	0.06	Blackish brown	Faint earth	Loamy	84	980	1,064	0.13		
	4	Tagagawa River System	Isonare Bridge	Takahagi City	2019/2/13	Sunny	7.5	Blackish brown	Faint earth	Loamy	26	320	346	0.06	Dark brown	Faint earth	Loamy	140	1,300	1,440	0.11		
					2018/5/25	Sunny	27.0	Dull yellowish brown	Faint earth	Loamy	8.6	120	128.6	0.06	Blackish brown	Faint earth	Loamy	22	300	322	0.06		
					2018/8/22	Sunny	31.8	Dull yellowish brown	Faint earth	Sandy	6.5	92	98.5	0.07	Blackish brown	Faint earth	Loamy	18	230	248	0.06		
					2018/11/14	Sunny	15.5	Dull yellowish brown	Faint earth	Sandy	7.1	93	100.1	0.06	Blackish brown	Faint earth	Loamy	17	200	217	0.06		
					2019/2/14	Sunny	4.8	Dull yellowish brown	Faint earth	Loamy	<10	96	96	0.06	Blackish brown	Faint earth	Loamy	23	230	253	0.05		
	5	Okita River	Sakae Bridge	Takahagi City	2018/5/26	Sunny	24.0	Blackish brown	Faint earth	Loamy	60	520	580	0.08	Dark brown	Faint earth	Loamy	38	410	448	0.09		
					2018/8/21	Sunny	29.3	Blackish brown	Faint earth	Loamy	48	490	538	0.10	Dark brown	Faint earth	Loamy	24	240	264	0.08		
					2018/11/14	Sunny	17.5	Blackish brown	Faint earth	Loamy	44	470	514	0.09	Dark brown	Faint earth	Loamy	41	380	421	0.09		
					2019/2/13	Sunny	9.0	Blackish brown	Faint earth	Loamy	48	580	628	0.08	Dark brown	Faint earth	Loamy	34	410	444	0.08		
					2018/5/26	Cloudy	19.0	Dark brown	Faint earth	Loamy	38	350	388	0.07	Blackish brown	Faint earth	Loamy	72	700	772	0.06		
6	Sakai Bridge	Kitabaraki City	Takahagi City	2018/8/21	Sunny	31.3	Blackish brown	Faint earth	Loamy	9.9	120	129.9	0.08	Blackish brown	Faint earth	Loamy	68	620	688	0.08			
				2018/11/13	Cloudy	15.5	Dark brown	Faint earth	Loamy	15	180	195	0.08	Blackish brown	Faint earth	Loamy	73	710	783	0.07			
				2019/2/13	Sunny	8.0	Dark brown	Faint earth	Loamy	10	98	108	0.07	Blackish brown	Faint earth	Loamy	56	550	606	0.06			
				2018/5/25	Cloudy	23.0	Black	Faint earth	Loamy	6.2	81	87.2	0.08	Dull yellowish brown	Faint earth	Loamy	9.5	66	75.5	0.08			
				2018/8/20	Cloudy	27.5	Blackish brown	Faint earth	Loamy	5.1	41	46.1	0.09	Dull yellowish brown	Faint earth	Loamy	<6.1	42	42	0.09			
7	Hananuki River	Shinhananuki Bridge	Takahagi City	2018/11/12	Sunny	17.3	Black	Faint earth	Loamy	15	150	165	0.09	Dull yellowish brown	Faint earth	Sandy	<7.0	48	48	0.09			
				2019/2/12	Sunny	9.5	Black	Faint earth	Loamy	19	220	239	0.08	Dull yellowish brown	Faint earth	Loamy	<12	54	54	0.07			
				2018/5/10	Sunny	13.0	Dark brown	Faint earth	Loamy	13	180	193	0.07	Blackish brown	Faint earth	Loamy	51	560	611	0.08			
				2018/8/20	Cloudy	25.5	Dark brown	Faint earth	Loamy	20	200	220	0.08	Dark brown	Faint earth	Loamy	60	520	580	0.09			
				2018/11/13	Cloudy	15.5	Dark brown	Faint earth	Loamy	14	160	174	0.07	Blackish brown	Faint earth	Loamy	45	530	575	0.08			
8	Kujigawa River System	Kujigawa River	Iwai Bridge	Hitachiomiya City	2019/2/12	Sunny	5.7	Dark brown	Faint earth	Loamy	16	160	176	0.06	Blackish brown	Faint earth	Loamy	41	430	471	0.08		
					2018/5/8	Cloudy	14.0	Blackish brown	Faint earth	Loamy	50	490	540	0.06	Dark brown	Faint earth	Loamy	<5.1	32	32	0.06		
					2018/8/20	Cloudy	27.5	Blackish brown	Faint earth	Loamy	33	310	343	0.07	Dark brown	Faint earth	Loamy	<7.1	44	44	0.06		
					2018/11/12	Cloudy	19.0	Blackish brown	Faint earth	Loamy	27	280	307	0.07	Dark brown	Faint earth	Loamy	<4.7	28	28	0.06		
					2019/2/12	Sunny	8.5	Blackish brown	Faint earth	Loamy	15	150	165	0.06	Dark brown	Faint earth	Loamy	<6.4	31	31	0.05		
9	Sakaki Bridge	Hitachi City/ Tokai Village	Hitachiomiya City/ Shiroato Town	2018/5/26	Cloudy	20.2	Dark brown	Faint earth	Loamy	12	130	142	0.06	Blackish brown	Faint earth	Loamy	21	370	391	0.06			
				2018/8/3	Sunny	30.3	Dark brown	Faint earth	Loamy	7.9	69	76.9	0.07	Blackish brown	Faint earth	Loamy	41	440	481	0.08			
				2018/11/12	Cloudy	16.0	Dark brown	Faint earth	Loamy	7.9	91	98.9	0.07	Blackish brown	Faint earth	Loamy	38	420	458	0.07			
				2019/2/25	Sunny	18.5	Dark brown	Faint earth	Loamy	12	130	142	0.06	Blackish brown	Faint earth	Loamy	28	350	378	0.06			
				2019/2/25	Sunny	18.5	Dark brown	Faint earth	Loamy	12	130	142	0.06	Blackish brown	Faint earth	Loamy	28	350	378	0.06			
10	Nakagawa River System	Nakagawa River Area	Nakagawa River	Nakagawa-ohashi Bridge	Hitachiomiya City/ Shiroato Town	2018/5/26	Cloudy	20.2	Dark brown	Faint earth	Loamy	12	130	142	0.06	Blackish brown	Faint earth	Loamy	21	370	391	0.06	
						2018/8/3	Sunny	30.3	Dark brown	Faint earth	Loamy	7.9	69	76.9	0.07	Blackish brown	Faint earth	Loamy	41	440	481	0.08	
11				Shimokuni	Mito City	2018/11/12	Cloudy	16.0	Dark brown	Faint earth	Loamy	7.9	91	98.9	0.07	Blackish brown	Faint earth	Loamy	38	420	458	0.07	
						2019/2/25	Sunny	18.5	Dark brown	Faint earth	Loamy	12	130	142	0.06	Blackish brown	Faint earth	Loamy	28	350	378	0.06	



# Ibaraki River (Surrounding Environment) 3/5

No.	Location	Water area	Location	Municipality	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						
Cs-134	Cs-137	Total	Cs-134	Cs-137	Total																			
26	Kitaura River Area	Nagare River	Suhoi Bridge	Kashima City	2018/5/16	Sunny	28.5	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed				
					2018/8/1	Sunny	31.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed	
					2018/11/6	Cloudy	20.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.07	Soil not exposed
					2019/2/8	Cloudy	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.06	Soil not exposed
27	Sonobe River	Sonobeshin Bridge	Omitama City	2018/5/22	Sunny	27.6	Blackish brown	Faint earth	Loamy	34	380	414	0.07	Blackish brown	Faint earth	Loamy	38	440	478	0.07				
				2018/8/15	Sunny	28.0	Blackish brown	Faint earth	Loamy	24	250	274	0.06	Blackish brown	Faint earth	Loamy	62	610	672	0.06				
				2018/11/5	Cloudy	21.9	Blackish brown	Faint earth	Loamy	34	380	414	0.07	Blackish brown	Faint earth	Loamy	25	250	275	0.05				
				2019/2/6	Cloudy	7.8	Blackish brown	Faint earth	Loamy	41	420	461	0.07	Blackish brown	Faint earth	Loamy	35	390	425	0.06				
				2018/5/22	Sunny	28.8	Dull yellow orange	Faint earth	Loamy	75	720	795	0.07	Dull yellow orange	Faint earth	Loamy	36	340	376	0.09				
				2018/8/16	Sunny	30.3	Grayish yellowish brown	Faint earth	Loamy	55	590	645	0.08	Dark brown	Faint earth	Loamy	32	270	302	0.08				
28	Sanno River	Tokoro Bridge	Omitama City	2018/11/5	Cloudy	21.2	Blackish brown	Faint earth	Loamy	120	1,200	1,320	0.08	Dark brown	Faint earth	Loamy	32	400	432	0.08				
				2019/2/6	Cloudy	7.8	Dark brown	Faint earth	Loamy	36	420	456	0.08	Dark brown	Faint earth	Loamy	31	350	381	0.08				
				2018/5/22	Sunny	24.6	Dull yellowish brown	Faint earth	Loamy	86	820	906	0.08	Dull yellowish brown	Faint earth	Loamy	40	410	450	0.09				
				2018/8/16	Cloudy	28.0	Dark brown	Faint earth	Loamy	150	1,500	1,650	0.09	Blackish brown	Faint earth	Loamy	28	240	268	0.07				
				2018/11/5	Cloudy	21.9	Dull yellowish brown	Faint earth	Loamy	120	1,300	1,420	0.09	Blackish brown	Faint earth	Loamy	130	1,500	1,630	0.08				
				2019/2/6	Cloudy	9.0	Dull yellowish brown	Faint earth	Loamy	57	600	657	0.08	Blackish brown	Faint earth	Loamy	100	1,200	1,300	0.08				
29	Koise River	Heiwa Bridge	Ishioaka City	2018/5/22	Sunny	20.8	Dull yellowish brown	Faint earth	Loamy	28	270	298	0.06	Grayish yellowish brown	Faint earth	Loamy	12	110	122	0.07				
				2018/8/15	Sunny	29.9	Dark brown	Faint earth	Loamy	33	270	303	0.06	Blackish brown	Faint earth	Loamy	23	230	253	0.06				
				2018/11/8	Sunny	19.5	Dark brown	Faint earth	Loamy	26	260	286	0.06	Blackish brown	Faint earth	Loamy	31	330	361	0.05				
				2019/2/6	Cloudy	6.3	Dark brown	Faint earth	Loamy	27	320	347	0.06	Blackish brown	Faint earth	Loamy	39	380	419	0.06				
				2018/5/22	Sunny	23.0	Brown	Faint earth	Loamy	31	250	281	0.07	Dark brown	Faint earth	Loamy	51	500	551	0.07				
				2018/8/15	Sunny	33.5	Dark brown	Faint earth	Loamy	25	260	285	0.08	Dark brown	Faint earth	Loamy	49	450	499	0.07				
30	Kajinashi River	Kamishaku Bridge	Namegata City	2018/11/8	Sunny	20.2	Blackish brown	Faint earth	Loamy	26	300	326	0.07	Dark brown	Faint earth	Loamy	49	600	649	0.07				
				2019/2/6	Cloudy	5.0	Dark brown	Faint earth	Loamy	36	410	446	0.07	Dark brown	Faint earth	Loamy	46	530	576	0.08				
				2018/5/23	Cloudy	23.0	Dark brown	Faint earth	Loamy	37	390	427	0.07	Dark brown	Faint earth	Loamy	15	130	145	0.06				
				2018/8/15	Sunny	33.1	Blackish brown	Faint earth	Loamy	77	660	737	0.07	Blackish brown	Faint earth	Loamy	19	230	249	0.06				
				2018/11/8	Sunny	21.0	Blackish brown	Faint earth	Loamy	58	590	648	0.06	Blackish brown	Faint earth	Loamy	16	170	186	0.06				
				2019/2/5	Cloudy	7.2	Blackish brown	Faint earth	Loamy	41	490	531	0.06	Dark brown	Faint earth	Loamy	<10	110	110	0.06				
31	Hishiki River	Hishiki Bridge	Kasumigaura City	2018/5/23	Cloudy	18.8	Dark brown	Faint earth	Loamy	64	630	694	0.09	Dark brown	Faint earth	Loamy	25	210	235	0.06				
				2018/8/15	Sunny	31.2	Blackish brown	Faint earth	Loamy	83	820	903	0.08	Dark brown	Faint earth	Loamy	15	170	185	0.06				
				2018/11/5	Sunny	25.8	Dark brown	Faint earth	Loamy	83	900	983	0.08	Dark brown	Faint earth	Loamy	23	280	303	0.07				
				2019/2/5	Cloudy	8.0	Blackish brown	Faint earth	Loamy	73	900	973	0.08	Dark brown	Faint earth	Loamy	20	240	260	0.05				
				2018/5/16	Sunny	21.3	Dark brown	Faint earth	Loamy	66	670	736	0.07	Blackish brown	Faint earth	Loamy	56	610	666	0.08				
				2018/8/15	Sunny	31.8	Dark brown	Faint earth	Loamy	71	750	821	0.07	Dark brown	Faint earth	Loamy	68	680	748	0.08				
32	Tonegawa River System	Ichinose River	Kawanaka Bridge	Kasumigaura City	2018/11/5	Sunny	24.2	Dark brown	Faint earth	Loamy	78	910	988	0.07	Blackish brown	Faint earth	Loamy	72	910	982	0.07			
					2019/2/5	Cloudy	9.0	Dark brown	Faint earth	Loamy	81	960	1,041	0.07	Blackish brown	Faint earth	Loamy	63	720	783	0.07			
					2018/5/23	Cloudy	19.8	Dark brown	Faint earth	Loamy	11	91	102	0.06	Dull yellowish brown	Faint earth	Loamy	10	140	150	0.08			
					2018/8/16	Sunny	30.8	Dark brown	Faint earth	Loamy	9.1	110	119.1	0.06	Blackish brown	Faint earth	Loamy	9.5	110	119.5	0.09			
					2018/11/5	Sunny	21.0	Dark brown	Faint earth	Loamy	19	180	199	0.06	Dull yellowish brown	Faint earth	Loamy	<8.0	75	75	0.09			
					2019/2/5	Cloudy	11.0	Dull yellowish brown	Faint earth	Loamy	12	150	162	0.06	Dark brown	Faint earth	Loamy	<10	88	88	0.09			
33	Sakai River	Sakai Bridge/ National Route 354	Tsuchiura City	2018/5/16	Sunny	25.6	Grayish yellowish brown	Faint earth	Loamy	52	480	532	0.08	Blackish brown	Faint earth	Loamy	50	410	460	0.08				
				2018/8/15	Sunny	30.0	Dark brown	Faint earth	Loamy	34	410	444	0.08	Blackish brown	Faint earth	Loamy	45	450	495	0.08				
				2018/11/5	Sunny	20.5	Dark brown	Faint earth	Loamy	47	460	507	0.09	Blackish brown	Faint earth	Loamy	33	400	433	0.09				
				2019/2/5	Cloudy	9.0	Blackish brown	Faint earth	Loamy	32	390	422	0.08	Blackish brown	Faint earth	Loamy	35	370	405	0.07				
				2018/5/16	Sunny	25.4	Blackish brown	Faint earth	Loamy	75	780	855	0.09	Dark brown	Faint earth	Loamy	120	970	1,090	0.09				
				2018/8/14	Sunny	29.5	Blackish brown	Faint earth	Loamy	74	820	894	0.09	Blackish brown	Faint earth	Loamy	77	680	757	0.09				
34	Shinkawa River	Shinten Bridge	Tsuchiura City	2018/11/5	Sunny	21.2	Dark brown	Faint earth	Loamy	76	920	996	0.09	Dark brown	Faint earth	Loamy	97	1,200	1,297	0.10				
				2019/2/5	Cloudy	9.8	Blackish brown	Faint earth	Loamy	84	950	1,034	0.09	Blackish brown	Faint earth	Loamy	77	910	987	0.09				
				2018/5/16	Sunny	27.2	Dark brown	Faint earth	Loamy	61	720	781	0.08	Dark brown	Faint earth	Loamy	59	510	569	0.09				
				2018/8/14	Sunny	28.2	Dark brown	Faint earth	Loamy	62	650	712	0.09	Dark brown	Faint earth	Loamy	56	510	566	0.08				
				2018/11/6	Cloudy	20.8	Dark brown	Faint earth	Loamy	87	900	987	0.10	Dark brown	Faint earth	Loamy	60	760	820	0.10				
				2019/2/5	Cloudy	6.8	Dark brown	Faint earth	Loamy	40	480	520	0.09	Dark brown	Faint earth	Loamy	71	850	921	0.09				

# Ibaraki River (Surrounding Environment) 4/5

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				Cs-134	Cs-137	Total								
R i v e r s	39	Kasumigaura River Area	Onogawa River	Okuhara-obashi Bridge	Ryugasaki City/ Ushiku City	2018/5/16	Sunny	25.2	Grayish yellowish brown	Faint earth	Loamy	<8.6	20	20	0.08	Grayish yellowish brown	Faint earth	Loamy	8.3	79	87.3	0.09
						2018/8/14	Sunny	32.4	Blackish brown	Faint earth	Loamy	23	180	203	0.07	Blackish brown	Faint earth	Loamy	8.8	100	108.8	0.08
						2018/11/6	Cloudy	20.7	Blackish brown	Faint earth	Loamy	<7.4	27	27	0.08	Blackish brown	Faint earth	Loamy	<11	55	55	0.09
						2019/2/5	Cloudy	6.2	Blackish brown	Faint earth	Loamy	<6.1	13	13	0.07	Grayish yellowish brown	Faint earth	Loamy	<7.9	28	28	0.08
						2018/5/16	Sunny	23.4	Dark brown	Faint earth	Loamy	13	140	153	0.06	Dark brown	Faint earth	Loamy	66	550	616	0.07
	40	Shintone River	Shintone Bridge	Inashiki City	2018/8/1	Sunny	35.2	Dark brown	Faint earth	Loamy	11	110	121	0.06	Dark brown	Faint earth	Loamy	57	610	667	0.06	
					2018/11/6	Cloudy	23.0	Dark brown	Faint earth	Sandy	13	150	163	0.06	Blackish brown	Faint earth	Loamy	56	700	756	0.07	
					2019/2/8	Cloudy	6.0	Dark brown	Faint earth	Sandy	<9.3	120	120	0.05	Blackish brown	Faint earth	Loamy	80	920	1,000	0.07	
					2018/5/16	Sunny	28.2	Dark brown	Faint earth	Loamy	24	250	274	0.06	Dull yellowish brown	Faint earth	Loamy	12	93	105	0.06	
					2018/8/1	Sunny	34.1	Dark brown	Faint earth	Loamy	18	180	198	0.06	Dark brown	Faint earth	Loamy	20	210	230	0.07	
	41	Hitachitonogawa River Area	Yorokoshi River	Horinouchi Bridge	Itako City	2018/11/6	Cloudy	19.5	Blackish brown	Faint earth	Loamy	20	250	270	0.06	Blackish brown	Faint earth	Loamy	<6.8	48	48	0.06
						2019/2/8	Cloudy	7.0	Dark brown	Faint earth	Loamy	22	260	282	0.06	Dark brown	Faint earth	Loamy	17	160	177	0.05
						2018/5/16	Sunny	24.0	Brown	Faint earth	Loamy	<6.2	62	62	0.06	Brown	Faint earth	Sandy	8.9	120	128.9	0.05
						2018/8/1	Sunny	36.0	Dull yellowish brown	Faint earth	Loamy	<7.3	59	59	0.05	Brown	Faint earth	Loamy	10	130	140	0.05
						2018/11/7	Cloudy	19.8	Dull yellowish brown	Faint earth	Loamy	<8.6	45	45	0.05	Blackish brown	Faint earth	Loamy	<9.1	88	88	0.05
	42	Mackawa River	Ayame Bridge	Chikusei City	2019/2/7	Cloudy	13.7	Dull yellowish brown	Faint earth	Loamy	<7.3	38	38	0.05	Dark brown	Faint earth	Sandy	9.7	100	109.7	0.04	
					2018/5/14	Sunny	24.2	Blackish brown	Faint earth	Loamy	12	96	108	0.05	Dark brown	Faint earth	Loamy	<8.8	25	25	0.05	
					2018/8/27	Sunny	33.0	Blackish brown	Faint earth	Loamy	7.4	81	88.4	0.07	Dark brown	Faint earth	Loamy	<9.2	42	42	0.07	
					2018/11/20	Sunny	12.8	Blackish brown	Faint earth	Loamy	<9.3	66	66	0.07	Dark brown	Faint earth	Loamy	<9.8	60	60	0.06	
					2019/2/1	Sunny	8.5	Blackish brown	Faint earth	Loamy	17	170	187	0.06	Dark brown	Faint earth	Loamy	<9.1	72	72	0.06	
	44	Kinugawa River Area	Kinugawa River	Kawashima Bridge	Chikusei City	2018/5/11	Sunny	16.3	Blackish brown	Faint earth	Loamy	15	100	115	0.08	Grayish yellowish brown	Faint earth	Sandy	<6.7	29	29	0.07
						2018/8/28	Cloudy	30.3	Dark brown	Faint earth	Loamy	68	790	858	0.08	Grayish yellowish brown	Faint earth	Sandy	<8.1	29	29	0.08
						2018/11/20	Cloudy	14.0	Blackish brown	Faint earth	Loamy	49	580	629	0.07	Grayish yellowish brown	Faint earth	Sandy	<9.4	58	58	0.07
						2019/2/1	Sunny	2.3	Blackish brown	Faint earth	Loamy	59	640	699	0.07	Grayish yellowish brown	Faint earth	Loamy	<8.9	40	40	0.06
						2018/5/14	Sunny	23.4	Dark brown	Faint earth	Loamy	<9.8	94	94	0.06	Dark brown	Faint earth	Loamy	<8.5	39	39	0.05
	45	Tagawa River	Tagawa Bridge	Chikusei City	2018/8/27	Sunny	28.2	Dark brown	Faint earth	Loamy	13	160	173	0.05	Blackish brown	Faint earth	Loamy	<7.4	31	31	0.07	
					2018/11/20	Sunny	14.5	Dark brown	Faint earth	Loamy	11	140	151	0.06	Dark brown	Faint earth	Loamy	<7.9	33	33	0.06	
					2019/2/1	Sunny	6.5	Dark brown	Faint earth	Loamy	<8.8	76	76	0.05	Dark brown	Faint earth	Loamy	<7.8	45	45	0.07	
					2018/5/14	Sunny	19.3	Dark brown	Faint earth	Loamy	<9.0	49	49	0.06	Dark brown	Faint earth	Loamy	<12	120	120	0.06	
					2018/9/12	Cloudy	23.0	Dark brown	Faint earth	Loamy	19	160	179	0.05	Blackish brown	Faint earth	Loamy	11	130	141	0.06	
	46	Kokai River	Kuroko Bridge	Chikusei City	2018/11/20	Cloudy	15.0	Dark brown	Faint earth	Loamy	19	220	239	0.07	Dark brown	Faint earth	Loamy	11	130	141	0.06	
					2019/2/1	Sunny	7.2	Dark brown	Faint earth	Loamy	14	140	154	0.06	Dark brown	Faint earth	Loamy	<13	93	93	0.05	
					2018/5/15	Sunny	27.2	Dark brown	Faint earth	Loamy	63	690	753	0.07	Dark brown	Faint earth	Loamy	21	240	261	0.06	
					2018/8/28	Cloudy	29.2	Blackish brown	Faint earth	Loamy	110	1,100	1,210	0.08	Blackish brown	Faint earth	Loamy	31	390	421	0.07	
					2018/11/21	Sunny	18.5	Dark brown	Faint earth	Loamy	79	920	999	0.07	Blackish brown	Faint earth	Loamy	34	410	444	0.08	
	47	Fumimaki Bridge	Toride City	2019/2/15	Cloudy	3.1	Blackish brown	Faint earth	Loamy	67	800	867	0.06	Dark brown	Faint earth	Loamy	30	350	380	0.06		
				2018/5/16	Sunny	26.2	Dark brown	Faint earth	Loamy	51	490	541	0.07	Dark brown	Faint earth	Loamy	55	560	615	0.08		
				2018/8/27	Sunny	32.2	Dark brown	Faint earth	Loamy	58	630	688	0.08	Dark brown	Faint earth	Loamy	61	650	711	0.08		
				2018/11/21	Cloudy	14.0	Dark brown	Faint earth	Loamy	72	700	772	0.08	Dark brown	Faint earth	Loamy	35	360	395	0.09		
				2019/2/14	Sunny	8.8	Dark brown	Faint earth	Loamy	40	470	510	0.06	Dark brown	Faint earth	Loamy	77	840	917	0.08		
	48	Yatagawa River	Maruyama Bridge	Tsukuba City	2018/5/15	Sunny	24.7	Blackish brown	Faint earth	Loamy	<6.4	27	27	0.05	Blackish brown	Faint earth	Loamy	<9.3	69	69	0.06	
					2018/8/27	Sunny	35.0	Grayish yellowish brown	Faint earth	Loamy	<7.4	31	31	0.05	Grayish yellowish brown	Faint earth	Loamy	8.7	64	72.7	0.06	
					2018/11/21	Sunny	13.0	Blackish brown	Faint earth	Loamy	<9.1	14	14	0.05	Black	Faint earth	Loamy	<11	58	58	0.06	
					2018/5/14	Sunny	8.2	Blackish brown	Faint earth	Loamy	<9.6	48	48	0.05	Blackish brown	Faint earth	Loamy	<12	79	79	0.05	
					2018/8/27	Sunny	28.0	Blackish brown	Faint earth	Loamy	66	660	726	0.09	Dark brown	Faint earth	Loamy	45	470	515	0.10	
	49	Nishiyata River	Sakaimatsu Bridge	2018/8/27	Sunny	28.0	Blackish brown	Faint earth	Loamy	45	600	645	0.08	Grayish yellowish brown	Faint earth	Loamy	71	730	801	0.11		
				2018/11/21	Cloudy	15.5	Blackish brown	Faint earth	Loamy	61	670	731	0.08	Dark brown	Faint earth	Loamy	59	700	759	0.09		
				2019/2/15	Cloudy	2.7	Blackish brown	Faint earth	Loamy	61	600	661	0.07	Dark brown	Faint earth	Loamy	61	730	791	0.08		
	50	Inari River	Oguki Bridge	2018/5/15	Sunny	28.0	Blackish brown	Faint earth	Loamy	66	660	726	0.09	Dark brown	Faint earth	Loamy	45	470	515	0.10		
				2018/8/27	Sunny	28.0	Blackish brown	Faint earth	Loamy	45	600	645	0.08	Grayish yellowish brown	Faint earth	Loamy	71	730	801	0.11		
2018/11/21				Cloudy	15.5	Blackish brown	Faint earth	Loamy	61	670	731	0.08	Dark brown	Faint earth	Loamy	59	700	759	0.09			
2019/2/15	Cloudy	2.7	Blackish brown	Faint earth	Loamy	61	600	661	0.07	Dark brown	Faint earth	Loamy	61	730	791	0.08						

# Ibaraki River (Surrounding Environment) 5/5

R i v e r s	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	Air Dose (µSv/h)														
51	Tonegawa River System	Tonegawa River Area	Tonegawa River	Kurihashi Bridge	Koga City	2018/5/14	Sunny	18.5	Blackish brown	Faint earth	Loamy	<8.2	33	33	0.06	Dark brown	Faint earth	Loamy	15	110	125	0.05				
						2018/8/28	Cloudy	31.0	Blackish brown	Faint earth	Loamy	9.7	110	119.7	0.09	Dark brown	Faint earth	Loamy	6.7	85	91.7	0.06				
						2018/11/20	Sunny	13.0	Blackish brown	Faint earth	Loamy	13	130	143	0.08	Dark brown	Faint earth	Loamy	<10	24	24	0.05				
						2019/2/1	Sunny	4.2	Blackish brown	Faint earth	Loamy	13	160	173	0.07	Dark brown	Faint earth	Loamy	<9.6	69	69	0.06				
						2018/5/23	Cloudy	19.3	Blackish brown	Faint earth	Loamy	50	400	450	0.07	Grayish yellowish brown	Faint earth	Loamy	<6.7	43	43	0.06				
				52	Tonegawa River System	Tonegawa River Area	Tonegawa River	Fukawa	Tone Town	2018/8/28	Cloudy	31.5	Dark brown	Faint earth	Loamy	60	630	690	0.10	Grayish yellowish brown	Faint earth	Loamy	<5.0	34	34	0.07
										2018/11/21	Sunny	16.5	Blackish brown	Faint earth	Loamy	54	530	584	0.09	Blackish brown	Faint earth	Loamy	<7.8	48	48	0.06
										2019/2/15	Cloudy	5.0	Blackish brown	Faint earth	Loamy	47	520	567	0.08	Blackish brown	Faint earth	Loamy	<9.3	54	54	0.05
										2018/5/16	Sunny	28.6	Dark brown	Faint earth	Loamy	11	120	131	0.05	Dull yellowish brown	Faint earth	Loamy	<7.8	43	43	0.05
										2018/8/1	Sunny	33.3	Dull yellowish brown	Faint earth	Loamy	12	150	162	0.05	Grayish yellowish brown	Faint earth	Loamy	<6.4	26	26	0.05
53	Tonegawa River System	Tonegawa River Area	Tonegawa River	Sawara	Inashiki City	2018/11/6	Cloudy	22.1	Dark brown	Faint earth	Loamy	14	130	144	0.05	Dull yellowish brown	Faint earth	Loamy	<5.7	22	22	0.04				
						2019/2/8	Cloudy	7.0	Dark brown	Faint earth	Loamy	13	130	143	0.04	Dark brown	Faint earth	Loamy	<8.7	23	23	0.05				



# Ibaraki Lakes and Reservoirs (Water) 1/4

No.	Location		Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks	
	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)	Cs-134	Cs-137		
54	Hiroura	Surface layer	2018/5/13	Cloudy	18.4	2.2	17.9	0.5	Dark grayish yellow green	None	0.7	686	12	13	<0.65	<0.69		
		Deep layer					18.4	1.2	-	None		693	11	12	<0.69	<0.88		
		Surface layer	2018/8/1	Sunny	32.6	2.5	31.3	0.5	Grayish yellow green	None		1,450	6	6.8	<0.68	<0.84		
		Deep layer					30.6	1.5	-	None		1,780	8	7.1	<0.87	<0.63		
		Surface layer	2018/11/1	Sunny	17.5	2.5	17.1	0.5	Grayish yellow green	None	1.1	490	6	6.6	<0.66	<0.63		
		Deep layer					17.2	1.5	-	None		497	8	7.1	<0.90	<0.69		
	Himma	Miyamae	Surface layer	2019/2/18	Sunny	6.8	2.4	6.4	0.5	Grayish yellow	None	0.7	2,680	5	9.7	<0.54	<0.75	
			Deep layer					6.2	1.4	-	None		2,680	7	11	<0.73	<0.88	
			Surface layer	2018/5/13	Cloudy	19.5	2.8	18.8	0.5	Dark grayish yellow	None	0.8	703	8	9.4	<0.47	<0.80	
			Deep layer					18.7	1.8	-	None		804	15	15	<0.58	<0.69	
			Surface layer	2018/8/1	Sunny	32.5	3.0	32.1	0.5	Grayish yellow green	None	0.7	1,380	6	6.4	<0.83	<0.61	
			Deep layer					31.4	2.0	-	None		1,720	7	6.6	<0.61	<0.66	
56	Oyazawa	Surface layer	2018/11/1	Sunny	17.5	3.0	16.7	0.5	Grayish yellow	None	0.7	401	8	8.1	<0.84	<0.84		
		Deep layer					16.7	2.0	-	None		457	9	8.7	<0.84	<0.88		
		Surface layer	2019/2/18	Sunny	7.0	2.8	6.2	0.5	Grayish yellow	None	0.7	2,650	5	7.2	<0.78	<0.63		
		Deep layer					6.5	1.8	-	None		2,690	6	9.5	<0.88	<0.69		
		Surface layer	2018/5/13	Cloudy	17.8	2.0	19.2	0.5	Dark grayish yellow	None	0.6	572	15	15	<0.67	<0.75		
		Deep layer					19.3	1.0	-	None		662	13	14	<0.60	<0.69		
	Center	Center	Surface layer	2018/8/1	Sunny	32.0	2.1	31.8	0.5	Grayish yellow green	None	0.7	1,340	9	8.7	<0.89	<0.69	
			Deep layer					31.5	1.1	-	None		1,700	11	11	<0.58	<0.75	
			Surface layer	2018/11/1	Sunny	17.5	2.1	17.7	0.5	Grayish yellow	None	0.5	477	11	11	<0.78	<0.84	
			Deep layer					17.5	1.1	-	None		505	11	12	<0.65	<0.75	
			Surface layer	2019/2/18	Sunny	7.0	1.9	7.0	0.5	Grayish yellow	None	0.6	2,540	6	8.4	<0.60	<0.87	
			Deep layer					-	-	-	-		-	-	-	-	-	Unable to collect samples from the deep layer due to shallow water
57	Offshore of Tamatsukuri	Surface layer	2018/5/17	Sunny	20.3	6.4	22.0	0.5	Grayish yellow	None	0.4	29.0	15	12	<0.73	<0.70		
		Deep layer					19.3	5.4	-	None		27.5	21	17	<0.83	<0.55		
		Surface layer	2018/8/2	Sunny	30.1	6.3	35.0	0.5	Light grayish greenish yellow	None	0.7	31.5	7	4.7	<0.78	<0.84		
		Deep layer					29.5	5.3	-	None		31.0	30	24	<0.74	<0.69		
		Surface layer	2018/11/7	Cloudy	16.2	6.5	16.7	0.5	Grayish greenish yellow	None	1.0	30.5	12	11	<0.68	<0.84		
		Deep layer					16.7	5.5	-	None		30.5	13	11	<0.92	<0.92		
	Lake Kasumigaura	Offshore of Kakeuma	Surface layer	2019/2/7	Cloudy	5.2	7.0	5.7	0.5	Grayish greenish yellow	None	0.8	32.9	9	8.4	<0.74	<0.80	
			Deep layer					5.6	6.0	-	None		33.1	12	10	<0.74	<0.84	
			Surface layer	2018/5/17	Sunny	23.7	1.9	21.1	0.5	Light grayish yellow	None	0.5	26.6	61	33	<0.73	<0.88	
			Deep layer					-	-	-	-		-	-	-	-	-	Unable to collect samples from the deep layer due to shallow water
			Surface layer	2018/8/2	Sunny	32.8	1.8	35.0	0.5	Light grayish greenish yellow	None	0.5	30.6	11	9.2	<0.70	<0.80	
			Deep layer					-	-	-	-		-	-	-	-	-	Unable to collect samples from the deep layer due to shallow water
59	Center	Surface layer	2018/11/7	Cloudy	16.5	1.9	18.0	0.5	Grayish yellow	None	0.6	28.6	30	24	<0.79	<0.84		
		Deep layer					-	-	-	-		-	-	-	-	-	Unable to collect samples from the deep layer due to shallow water	
		Surface layer	2019/2/7	Cloudy	4.0	2.1	5.7	0.5	Grayish greenish yellow	None	1.0	32.8	10	9.0	<0.72	<0.89		
		Deep layer					5.4	1.1	-	None		32.8	10	9.9	<0.63	<0.86		
		Surface layer	2018/5/17	Cloudy	20.3	6.0	20.6	0.5	Light grayish yellow	None	0.4	30.2	16	15	<0.84	<0.75		
		Deep layer					20.5	5.0	-	None		30.2	22	15	<0.96	<0.84		
	Center	Center	Surface layer	2018/8/2	Sunny	29.2	6.0	35.0	0.5	Light grayish greenish yellow	None	0.7	34.5	8	5.9	<0.42	<0.40	
			Deep layer					29.5	5.0	-	None		33.2	18	12	<0.56	<0.55	
			Surface layer	2018/11/7	Cloudy	16.0	6.1	16.8	0.5	Grayish yellow green	None	0.8	31.3	14	11	<0.60	<0.80	
			Deep layer					16.8	5.1	-	None		31.4	14	11	<0.54	<0.63	
			Surface layer	2019/2/7	Cloudy	2.5	6.3	5.6	0.5	Dark grayish greenish yellow	None	1.0	33.0	9	8.0	<0.88	<0.75	
			Deep layer					5.3	5.3	-	None		33.2	9	7.6	<0.74	<0.87	



# Ibaraki Lakes and Reservoirs (Water)3/4

L 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							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)	Cs-134	Cs-137
66	Mizunuma Dam	Center	Surface layer	2018/5/10	Cloudy	14.7	19.1	12.9	0.5	Grayish yellow green	None	1.7	5.8	1	1.3	<0.63	<0.69	
			Deep layer					7.2	18.1	-	None		6.2	2	1.9	<0.88	<0.92	
			Surface layer	2018/8/22	Sunny	30.0	12.7	22.6	0.5	Dark grayish yellow green	None	2.0	6.0	1	0.9	<0.80	<0.80	
			Deep layer					18.4	11.7	-	None		6.1	2	1.5	<0.54	<0.69	
			Surface layer	2018/11/15	Sunny	10.8	15.1	12.0	0.5	Dark grayish yellow green	None	2.3	6.5	1	1.6	<0.64	<0.74	
			Deep layer					11.1	14.1	-	None		6.8	4	3.5	<0.42	<0.74	
	Surface layer	2019/2/14	Sunny	3.0	16.3	2.7	0.5	Grayish yellow green	None	4.2	7.1	<1	1.1	<0.64	<0.60			
	Deep layer					2.8	15.3	-	None		7.1	<1	1.1	<0.77	<0.47			
	67	Koyama Dam	Center	Surface layer	2018/5/25	Cloudy	26.8	15.0	19.8	0.5	Grayish yellow green	None	2.0	7.6	1	1.8	<0.62	<0.63
				Deep layer					8.0	14.0	-	None		8.2	2	2.7	<0.57	<0.69
				Surface layer	2018/8/22	Sunny	33.0	15.8	24.4	0.5	Dark grayish greenish yellow	None	3.0	7.1	<1	1.0	<0.80	<0.75
				Deep layer					8.0	14.8	-	None		8.8	3	5.5	<0.63	<0.84
				Surface layer	2018/11/15	Sunny	14.0	15.3	12.7	0.5	Dark grayish greenish yellow	None	2.5	8.1	1	1.3	<0.61	<0.80
				Deep layer					10.3	14.3	-	Faint hydrogen sulfide		7.6	6	6.3	<0.87	<0.84
				Surface layer	2019/2/14	Sunny	2.8	16.1	3.7	0.5	Dark grayish yellow green	None	2.5	8.8	2	2.8	<0.49	<0.66
				Deep layer					3.7	15.1	-	None		8.8	2	2.8	<0.56	<0.66
	68	Hananuki Dam	Center	Surface layer	2018/5/9	Cloudy	12.3	20.5	13.8	0.5	Dark grayish yellow green	None	2.5	6.1	3	2.8	<0.84	<0.84
				Deep layer					6.4	19.5	-	None		7.0	2	2.4	<0.70	<0.80
				Surface layer	2018/8/21	Sunny	30.0	19.7	23.0	0.5	Dark grayish yellow green	None	3.5	6.6	1	1.2	<0.74	<0.92
				Deep layer					8.7	18.7	-	Faint hydrogen sulfide		11.3	14	12	<0.65	<0.84
				Surface layer	2018/11/15	Sunny	15.0	20.9	14.3	0.5	Dark grayish yellow	None	2.4	7.0	3	3.0	<0.65	<0.88
				Deep layer					10.1	19.9	-	Faint sewage		15.9	17	15	<0.75	<0.75
				Surface layer	2019/2/13	Cloudy	3.0	24.0	3.5	0.5	Dark grayish yellow green	None	3.4	7.7	1	1.8	<0.63	<0.63
				Deep layer					3.6	23.0	-	None		8.0	1	1.8	<0.58	<0.80
69	Iyauo Dam	Center	Surface layer	2018/5/10	Cloudy	14.0	25.7	13.1	0.5	Grayish yellow green	None	1.3	8.4	3	3.7	<0.76	<0.92	
			Deep layer					6.9	24.7	-	None		9.0	3	3.6	<0.81	<0.69	
			Surface layer	2018/8/21	Sunny	30.8	21.0	21.3	0.5	Dark grayish yellow green	None	2.1	9.0	1	1.2	<0.65	<0.88	
			Deep layer					9.3	20.0	-	Faint hydrogen sulfide		10.7	27	26	<0.59	<0.80	
			Surface layer	2018/11/13	Cloudy	15.0	22.7	14.3	0.5	Dark grayish yellow green	None	2.2	10.3	2	2.0	<0.60	<0.63	
			Deep layer					8.1	21.7	-	Faint hydrogen sulfide		12.9	19	22	<0.51	<0.84	
			Surface layer	2019/2/13	Cloudy	6.0	26.0	3.5	0.5	Dark grayish yellow	None	4.2	12.1	1	1.5	<0.81	<0.80	
			Deep layer					3.6	25.0	-	None		12.3	2	2.6	<0.70	<0.80	
70	Ryujin Dam	Center	Surface layer	2018/5/9	Cloudy	13.0	23.3	14.8	0.5	Dark grayish reddish yellow	None	1.2	6.1	3	2.9	<0.73	<0.75	
			Deep layer					5.7	22.3	-	None		8.7	4	2.5	<0.76	<0.84	
			Surface layer	2018/8/20	Cloudy	26.5	17.5	23.8	0.5	Grayish yellow green	None	1.4	8.2	2	2.1	<0.74	<0.69	
			Deep layer					9.4	16.5	-	Faint hydrogen sulfide		12.6	12	10	<0.69	<0.75	
			Surface layer	2018/11/13	Sunny	16.2	18.0	15.2	0.5	Grayish yellow	None	1.9	8.2	3	3.5	<0.73	<0.69	
			Deep layer					15.1	17.0	-	None		8.4	4	4.1	<0.70	<0.75	
			Surface layer	2019/2/12	Sunny	8.5	18.6	2.8	0.5	Dark grayish yellow green	None	2.8	9.5	1	1.6	<0.76	<0.88	
			Deep layer					3.9	17.6	-	None		9.8	2	2.3	<0.65	<0.75	

# Ibaraki Lakes and Reservoirs (Water) 4/4

	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	71	Fujiigawa Dam	Center	Surface layer	2018/5/8	Cloudy	13.8	13.2	17.6	0.5	Grayish yellow green	None	2.4	10.3	1	1.6	<0.80	<0.92
				Deep layer					11.4	12.2	-	None		12.7	7	4.4	<0.74	<0.69
				Surface layer	2018/8/3	Cloudy	30.8	10.0	28.6	0.5	Dark grayish yellow green	None	2.5	12.3	1	0.8	<0.60	<0.84
				Deep layer					23.5	9.0	-	None		13.4	5	5.9	<0.76	<0.80
				Surface layer	2018/11/12	Cloudy	18.0	11.3	15.3	0.5	Grayish yellow green	None	2.0	13.8	1	1.8	<0.66	<0.63
				Deep layer					13.7	10.3	-	None		15.3	2	2.2	<0.59	<0.88
				Surface layer	2019/2/25	Cloudy	15.5	14.1	7.3	0.5	Dark grayish yellow green	None	3.7	17.1	<1	1.4	<0.74	<0.80
				Deep layer					5.0	13.1	-	None		27.0	1	1.2	<0.86	<0.80
	72	Iida Dam	Center	Surface layer	2018/5/8	Cloudy	15.0	14.5	18.3	0.5	Grayish greenish yellow	None	6.5	8.9	<1	0.7	<0.69	<0.66
				Deep layer					7.5	13.5	-	None		9.3	1	1.1	<0.86	<0.74
				Surface layer	2018/8/3	Sunny	32.0	17.0	30.0	0.5	Dark grayish yellow green	None	3.0	8.7	<1	0.9	<0.55	<0.61
				Deep layer					9.2	16.0	-	Faint hydrogen sulfide		16.4	28	29	<0.65	<0.66
				Surface layer	2018/11/12	Cloudy	19.0	13.1	16.5	0.5	Grayish greenish yellow	None	6.7	8.2	<1	0.7	<0.65	<0.92
				Deep layer					10.4	12.1	-	None		11.4	9	10	<0.67	<0.75
Surface layer				2019/2/25	Sunny	14.8	12.1	7.9	0.5	Dark grayish greenish yellow	None	3.3	9.0	1	1.9	<0.68	<0.69	
Deep layer								5.3	11.1	-	None		9.1	<1	1.9	<0.70	<0.80	

# 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 <sup>3</sup> )	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 a n d R e s e r v o i r s	54	Hiroura	2018/5/13	Cloudy	18.4	2.2	16.2	7	Olive black	None	0.0	0.3	0.7	0.4	1.7	10.4	64.0	22.6	43.8	2.654	Silt	<11	71	71				
			2018/8/1	Sunny	32.6	2.5	28.3	5	Olive black	Faint sewage	0.0	0.8	0.5	0.5	1.7	10.8	62.6	23.1	42.8	2.592	Silt	9.9	71	80.9				
			2018/11/1	Sunny	17.5	2.5	18.8	10	Olive black	Faint sewage	0.0	0.4	1.2	0.5	2.3	14.0	61.3	20.2	42.5	2.624	Silt	<12	60	60				
			2019/2/18	Sunny	6.8	2.4	9.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.6	2.0	10.0	66.1	21.4	46.0	2.637	Silt	<13	58	58				
	55	Hinuma	Miyamae	2018/5/13	Cloudy	19.5	2.8	16.1	10	Olive black	Medium hydrogen sulfide	0.0	0.0	0.0	0.5	4.7	54.3	40.6	22.5	2.588	Silt	<29	160	160				
				2018/8/1	Sunny	32.5	3.0	26.0	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.9	5.3	54.4	39.4	22.9	2.549	Silt	<22	130	130			
				2018/11/1	Sunny	17.5	3.0	19.0	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	1.0	5.4	55.8	37.8	24.7	2.580	Silt	<14	26	26			
				2019/2/18	Sunny	7.0	2.8	10.0	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.6	4.9	48.9	45.6	23.3	2.590	Silt	<32	78	78			
	56		Oyazawa	2018/5/13	Cloudy	17.8	2.0	17.0	10	Olive black	None	0.0	0.0	0.0	0.0	0.3	3.7	52.4	43.7	30.9	2.534	Silt	26	260	286			
				2018/8/1	Sunny	32.0	2.1	28.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.4	3.3	64.0	32.3	31.7	2.490	Silt	31	410	441			
				2018/11/1	Sunny	17.5	2.1	19.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.3	4.5	66.0	29.2	32.2	2.519	Silt	19	230	249			
				2019/2/18	Sunny	7.0	1.9	9.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.2	3.6	59.2	37.0	65.5	2.534	Silt	9.1	110	119.1			
	57		Offshore of Tamatsukuri	2018/5/17	Sunny	20.3	6.4	22.4	7	Olive black	Faint swamp	0.0	0.0	0.0	0.0	1.1	62.9	36.0	17.0	2.402	Silt	46	270	316				
				2018/8/2	Sunny	30.1	6.3	28.0	7	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.0	61.2	37.7	17.2	2.357	Silt	<34	310	310				
				2018/11/7	Cloudy	16.2	6.5	17.5	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.2	47.5	51.2	19.3	2.452	Silt	<35	310	310				
				2019/2/7	Cloudy	5.2	7.0	7.0	5	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.1	62.6	36.3	16.8	2.454	Silt	<36	430	430				
	58		Offshore of Kakecuma	2018/5/17	Sunny	23.7	1.9	19.5	3	Blackish brown	None	0.0	0.2	1.3	0.3	41.1	52.1	2.0	2.9	75.8	2.726	Sand	7.4	80	87.4			
				2018/8/2	Sunny	32.8	1.8	30.7	3	Dark olive brown	None	0.0	3.1	4.6	0.6	33.6	51.7	3.7	2.7	74.3	2.688	Sand	10	97	107			
				2018/11/7	Cloudy	16.5	1.9	17.5	3	Blackish brown	None	0.0	0.2	0.7	0.9	35.9	50.5	6.5	5.4	74.8	2.740	Sand	12	120	132			
				2019/2/7	Cloudy	4.0	2.1	6.0	2	Blackish brown	None	0.0	2.3	3.3	0.4	37.3	49.5	2.2	5.1	74.9	2.728	Sand	6.9	74	80.9			
	59		Lake Kasumigaura	2018/5/17	Cloudy	20.3	6.0	19.6	8	Olive black	None	0.0	0.0	0.0	0.0	0.1	0.3	28.7	70.9	14.2	2.395	Silt	<44	360	360			
2018/8/2				Sunny	29.2	6.0	26.7	6	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.1	0.2	56.6	43.1	14.6	2.312	Silt	<42	410	410				
2018/11/7				Cloudy	16.0	6.1	18.8	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	0.3	58.8	40.9	16.0	2.419	Silt	<31	240	240				
2019/2/7				Cloudy	2.5	6.3	6.8	8	Olive black	Faint sewage	0.0	0.0	0.0	0.1	0.1	0.3	61.8	37.8	15.2	2.411	Silt	<38	360	360				
60		Offshore of Aso	2018/5/17	Cloudy	20.5	2.1	19.6	3	Blackish brown	None	0.0	0.0	0.0	0.1	2.2	92.1	2.6	3.1	75.8	2.704	Sand	7.3	77	84.3				
			2018/8/2	Sunny	30.5	2.0	28.8	4	Blackish brown	Faint sewage	0.0	0.0	0.0	0.1	2.2	93.7	2.0	2.0	71.0	2.673	Sand	8.6	80	88.6				
			2018/11/7	Cloudy	16.0	2.2	17.9	3	Olive black	None	0.0	0.2	0.1	0.1	3.1	90.7	2.0	3.8	74.1	2.730	Sand	<6.1	76	76				
			2019/2/7	Sunny	3.0	2.5	6.5	3	Olive black	None	0.0	0.0	0.0	0.1	0.8	94.3	1.0	3.8	73.1	2.730	Sand	<5.5	70	70				
61		Offshore of Kamaya	2018/5/17	Sunny	21.9	6.2	18.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.2	0.9	36.0	62.8	13.5	2.321	Silt	<48	260	260				
			2018/8/2	Sunny	30.8	6.3	27.1	7	Olive black	Faint algae	0.0	0.0	0.0	0.0	0.1	0.5	55.8	43.6	12.7	2.278	Silt	<40	260	260				
			2018/11/7	Cloudy	15.5	6.6	18.3	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	0.6	45.5	53.8	14.0	2.362	Silt	<49	200	200				
			2019/2/7	Cloudy	9.0	6.8	7.5	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.1	0.7	59.1	40.2	13.4	2.372	Silt	<47	260	260				
62		Jingu Bridge	2018/5/17	Cloudy	23.3	2.6	20.1	4	Olive black	Faint swamp	0.0	0.2	0.8	1.8	15.5	68.5	5.3	8.0	61.6	2.649	Sand/silt	8.1	75	83.1				
			2018/8/2	Sunny	30.5	2.7	27.5	4	Olive black	Faint sewage	0.0	0.0	0.0	0.1	4.6	68.7	19.7	7.0	56.8	2.585	Sand/silt	<9.4	62	62				
			2018/11/7	Cloudy	15.5	2.5	18.0	5	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	2.7	75.9	8.6	12.7	54.4	2.670	Sand/silt	8.9	87	95.9				
			2019/2/7	Cloudy	11.0	2.8	8.0	4	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.4	71.8	17.8	9.0	61.6	2.675	Silt/sand	<7.2	73	73				
63		Lake Sotonsakaura	2018/5/17	Sunny	23.7	2.2	21.8	4	Dark olive brown	None	0.0	0.0	0.0	0.1	2.5	86.0	4.5	7.0	70.6	2.661	Sand/silt	<5.7	46	46				
			2018/8/2	Sunny	28.0	2.5	28.3	4	Olive black	Faint swamp	0.0	0.4	0.1	0.1	4.0	82.5	6.7	6.3	69.2	2.617	Sand	<5.9	38	38				
			2018/11/7	Cloudy	15.5	4.3	17.5	4	Olive black	None	0.0	0.0	0.0	0.0	3.3	87.3	4.0	5.4	74.1	2.677	Sand/silt	<6.1	46	46				
			2019/2/7	Cloudy	9.8	3.4	7.5	3	Olive black	None	0.0	0.0	0.0	0.1	0.4	81.5	7.3	10.7	75.5	2.718	Sand/silt	<5.6	36	36				
64		Hitachitone River	2018/5/17	Sunny	23.5	4.9	20.5	5	Olive black	None	0.0	0.0	0.0	0.1	7.9	88.1	1.0	2.9	73.7	2.705	Sand	6.5	60	66.5				
			2018/8/2	Sunny	29.6	4.8	28.0	4	Olive black	Faint sewage	0.0	0.0	0.0	0.7	13.7	81.7	1.0	2.9	72.3	2.694	Sand	<5.8	49	49				
			2018/11/7	Cloudy	15.8	4.9	18.0	4	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	2.2	33.8	60.1	1.0	2.9	77.0	2.742	Sand	<5.5	43	43				
			2019/2/7	Cloudy	11.5	5.2	7.5	4	Olive black	Faint sewage	0.0	0.1	0.2	1.1	13.4	79.4	1.1	4.9	73.4	2.720	Sand	<5.6	43	43				
65		Lake Ushikumama	2018/5/15	Sunny	24.3	1.7	18.6	7	Olive black	Faint swamp	0.0	0.0	0.0	0.1	2.2	7.9	52.9	36.9	22.7	2.413	Silt	45	550	595				
			2018/8/28	Sunny	27.0	1.3	29.5	10	Olive black	Faint sewage	0.0	0.0	0.0	0.1	2.3	6.9	69.2	21.6	68.2	2.431	Silt	16	150	166				
			2018/11/21	Sunny	9.8	1.5	14.2	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.2	8.6	68.8	21.5	22.0	2.443	Silt	52	520	572				
			2019/2/15	Cloudy	1.8	1.4	6.0	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	2.0	5.7	50.9	41.4	21.6	2.416	Silt	51	530	581				

# Ibaraki Lakes and Reservoirs (Sediment) 2/2

L a k e s  R e s e r v o i r s	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 <sup>3</sup> )	Property	Radioactive cesium				
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt				Clay	Cs-134	Cs-137		Total
66	Mizunuma Dam	Center	2018/5/10	Cloudy	14.7	19.1	6.5	8	Blackish brown	Faint sewage	0.0	0.0	0.0	0.0	0.2	2.7	61.1	36.1	16.8	2.268	Silt	200	1,500	1,700		
			2018/8/22	Sunny	30.0	12.7	17.0	7	Blackish brown	Faint sewage	0.0	0.0	0.0	0.0	0.0	1.5	47.0	51.5	12.6	2.170	Silt	130	1,800	1,930		
			2018/11/15	Sunny	10.8	15.1	11.5	10	Blackish brown	Faint sewage	0.0	0.0	0.0	0.1	0.3	1.7	47.4	50.5	13.8	2.286	Silt	170	1,700	1,870		
			2019/2/14	Sunny	3.0	16.3	4.0	7	Blackish brown	Faint sewage	0.0	0.0	0.0	0.3	0.6	2.8	57.0	39.4	15.6	2.232	Silt	190	2,000	2,190		
	67	Koyama Dam	Center	2018/5/25	Cloudy	26.8	15.0	8.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.2	1.7	44.3	53.8	24.3	2.560	Silt	190	1,400	1,590	
				2018/8/22	Sunny	33.0	15.8	8.3	10	Olive black	Faint sewage	0.0	0.0	0.0	0.1	0.3	6.6	47.9	45.2	24.0	2.409	Silt	53	510	563	
				2018/11/15	Sunny	14.0	15.3	7.3	10	Olive black	None	0.0	0.0	0.0	0.0	0.4	3.2	44.9	51.4	21.5	2.554	Silt	57	560	617	
				2019/2/14	Sunny	2.8	16.1	4.3	8	Olive black	Faint sewage	0.0	0.9	2.1	2.3	1.9	4.4	44.9	43.5	27.5	2.529	Silt	54	670	724	
	68	Hanamaki Dam	Center	2018/5/9	Cloudy	12.3	20.5	6.0	10	Blackish brown	Faint sewage	0.0	0.0	0.0	0.8	1.3	1.3	42.0	54.7	18.9	2.392	Silt	58	530	588	
				2018/8/21	Sunny	30.0	19.7	8.2	8	Blackish brown	Faint rottenness	0.0	0.0	0.0	0.2	0.2	0.4	36.6	62.6	13.1	2.220	Silt	<50	560	560	
				2018/11/15	Sunny	15.0	20.9	9.0	10	Blackish brown	Faint sewage	0.0	0.0	0.0	0.1	0.3	0.7	41.3	57.7	13.6	2.314	Silt	<45	530	530	
				2019/2/13	Cloudy	3.0	24.0	4.2	10	Blackish brown	None	0.0	0.0	0.0	0.2	0.2	0.5	36.2	62.8	13.8	2.214	Silt	79	890	969	
	69	Jyau Dam	Center	2018/5/10	Cloudy	14.0	25.7	7.5	7	Black	Faint sewage	0.0	0.0	0.0	0.2	0.2	0.5	45.0	54.1	22.6	2.447	Silt	<26	290	290	
				2018/8/21	Sunny	30.8	21.0	9.0	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.0	0.3	38.6	61.1	18.5	2.418	Silt	89	880	969	
				2018/11/13	Cloudy	15.0	22.7	8.5	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.0	0.2	27.5	72.3	20.7	2.445	Silt	66	650	716	
				2019/2/13	Cloudy	6.0	26.0	4.5	10	Black	Faint sewage	0.0	0.0	0.0	0.0	0.0	0.0	26.9	73.0	20.6	2.410	Silt	51	570	621	
	70	Ryujin Dam	Center	2018/5/9	Cloudy	13.0	23.3	6.3	8	Black	Faint sewage	0.0	0.0	0.0	0.3	0.2	41.9	57.3	18.7	2.365	Silt	<31	230	230		
				2018/8/20	Cloudy	26.5	17.5	9.0	3	Blackish brown	Faint sewage	0.0	5.0	1.7	2.3	2.1	35.7	51.1	18.1	2.254	Silt	<30	260	260		
				2018/11/13	Sunny	16.2	18.0	9.8	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	1.1	42.3	56.5	17.0	2.338	Silt	<37	290	290	
				2019/2/12	Sunny	8.5	18.6	4.2	10	Olive black	Faint sewage	0.0	0.0	0.0	0.4	0.9	2.7	46.3	49.7	19.8	2.278	Silt	40	450	490	
71	Fujigawa Dam	Center	2018/5/8	Cloudy	13.8	13.2	11.8	4	Black	Faint sewage	0.0	0.0	0.0	0.3	0.5	1.0	43.8	54.5	23.7	2.440	Silt	26	220	246		
			2018/8/3	Cloudy	30.8	10.0	23.0	4	Black	Faint sewage	0.0	0.0	0.0	0.0	0.2	3.2	51.5	45.0	26.0	2.439	Silt	26	230	256		
			2018/11/12	Cloudy	18.0	11.3	14.2	5	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.3	2.5	49.5	47.7	23.4	2.407	Silt	<27	250	250		
			2019/2/25	Cloudy	15.5	14.1	6.0	5	Blackish brown	Faint sewage	0.0	0.0	0.0	0.0	0.1	1.6	51.1	47.1	22.4	2.435	Silt	<23	250	250		
72	Iida Dam	Center	2018/5/8	Cloudy	15.0	14.5	7.5	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.5	2.9	53.2	43.3	19.4	2.432	Silt	63	540	603		
			2018/8/3	Sunny	32.0	17.0	9.0	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.1	0.4	53.7	45.7	18.1	2.438	Silt	<35	69	69		
			2018/11/12	Cloudy	19.0	13.1	8.8	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.0	0.4	33.4	66.2	17.9	2.391	Silt	<38	290	290		
			2019/2/25	Sunny	14.8	12.1	7.0	10	Black	Faint hydrogen sulfide	0.0	1.4	1.1	0.7	2.2	3.5	40.3	50.8	16.4	2.425	Silt	<41	310	310		

# Ibaraki Lakes and Reservoirs (Surrounding Environment) 1/2

No.	Location		Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)							Remarks		
						Soil				Air Dose (μSv/h)					
	General items					Activity concentration [Bq/kg(dry)]									
	Color	Odor					Property	Radioactive cesium							
Cs-134			Cs-137	Total											
54		Hiroura	2018/5/13	Cloudy	18.4	Dark brown	Faint earth	Loamy	79	700	779	0.08			
			2018/8/1	Sunny	32.6	Dark brown	Faint earth	Loamy	52	450	502	0.09			
			2018/11/1	Sunny	17.5	Dark brown	Faint earth	Loamy	<9.3	30	30	0.09			
55	Hinuma	Miyamae	2019/2/18	Sunny	6.8	Dark brown	Faint earth	Loamy	46	570	616	0.08			
			2018/5/13	Cloudy	19.5	Dark brown	Faint earth	Loamy	<9.8	42	42	0.06			
			2018/8/1	Sunny	32.5	Dark brown	Faint earth	Loamy	<8.7	25	25	0.06			
56		Oyazawa	2018/11/1	Sunny	17.5	Dark brown	Faint earth	Loamy	<9.0	35	35	0.05			
			2019/2/18	Sunny	7.0	Dark brown	Faint earth	Loamy	<9.0	16	16	0.05			
			2018/5/13	Cloudy	17.8	-	-	-	-	-	-	-	-	No sampling soil location	
57		Offshore of Tamatsukuri	2018/8/1	Sunny	32.0	-	-	-	-	-	-	-	-	No sampling soil location	
			2018/11/1	Sunny	17.5	-	-	-	-	-	-	-	-	-	No sampling soil location
			2019/2/18	Sunny	7.0	-	-	-	-	-	-	-	-	-	No sampling soil location
58	Lake Kasumigaura	Offshore of Kakeuma	2018/5/17	Sunny	20.3	Yellowish gray	Faint earth	Sandy	<5.6	28	28	0.06			
			2018/8/2	Sunny	30.1	Gray	Faint earth	Sandy	<5.3	24	24	0.06			
			2018/11/7	Cloudy	16.2	Blackish brown	Faint earth	Sandy	<5.5	21	21	0.06			
59		Center	2019/2/7	Cloudy	5.2	Yellowish gray	Faint earth	Sandy	<4.6	22	22	0.06			
			2018/5/17	Sunny	23.7	Olive brown	Faint earth	Sandy	<6.1	60	60	0.06			
			2018/8/2	Sunny	32.8	Dark grayish yellow	Faint earth	Sandy	<6.4	64	64	0.07			
60		Offshore of Aso	2018/11/7	Cloudy	16.5	Dark olive brown	Faint earth	Sandy	<6.0	46	46	0.07			
			2019/2/7	Cloudy	4.0	Blackish brown	Faint earth	Sandy	<6.5	53	53	0.06			
			2018/5/17	Cloudy	20.3	-	-	-	-	-	-	-	-	No sampling soil location	
61	Lake Kitaura	Offshore of Kamaya	2018/8/2	Sunny	29.2	-	-	-	-	-	-	-	-	No sampling soil location	
			2018/11/7	Cloudy	16.0	-	-	-	-	-	-	-	-	No sampling soil location	
			2019/2/7	Cloudy	2.5	-	-	-	-	-	-	-	-	No sampling soil location	
62		Jingu Bridge	2018/5/17	Cloudy	20.5	Olive brown	Faint earth	Sandy	32	300	332	0.07			
			2018/8/2	Sunny	30.5	Yellowish gray	Faint earth	Sandy	5.6	88	93.6	0.07			
			2018/11/7	Cloudy	16.0	Dark olive brown	Faint earth	Sandy	21	220	241	0.07			
63	Hitachitone River	Lake Sotonasakaura	2019/2/7	Sunny	3.0	Blackish brown	Faint earth	Sandy	22	240	262	0.07			
			2018/5/17	Sunny	21.9	Blackish brown	Faint earth	Sandy	41	340	381	0.06			
			2018/8/2	Sunny	30.8	Blackish brown	Faint earth	Loamy	39	320	359	0.07			
64		Ikisu	2018/11/7	Cloudy	15.5	Blackish brown	Faint earth	Loamy	43	410	453	0.07			
			2019/2/7	Cloudy	9.0	Blackish brown	Faint earth	Loamy	92	1,100	1,192	0.06			
			2018/5/17	Cloudy	23.3	Dull yellowish brown	Faint earth	Sandy	5.2	29	34.2	0.05			
65	Lake Ushikunuma	Center of Lake Ushikunuma	2018/8/2	Sunny	30.5	Grayish yellowish brown	Faint earth	Sandy	<5.0	16	16	0.04			
			2018/11/7	Cloudy	15.5	Dull yellowish brown	Faint earth	Sandy	<5.4	31	31	0.04			
			2019/2/7	Cloudy	11.0	Grayish yellowish brown	Faint earth	Sandy	<4.7	17	17	0.04			
65		Center of Lake Ushikunuma	2018/5/17	Sunny	23.7	Dark brown	Faint earth	Loamy	8.5	72	80.5	0.05			
			2018/8/2	Sunny	28.0	Blackish brown	Faint earth	Loamy	<7.2	78	78	0.04			
			2018/11/7	Cloudy	15.5	Dark brown	Faint earth	Loamy	<7.4	79	79	0.04			
65		Center of Lake Ushikunuma	2019/2/7	Cloudy	9.8	Blackish brown	Faint earth	Loamy	<7.9	78	78	0.04			
			2018/5/17	Sunny	23.5	Dark brown	Faint earth	Loamy	14	130	144	0.05			
			2018/8/2	Sunny	29.6	Blackish brown	Faint earth	Loamy	8.2	93	101.2	0.04			
65		Center of Lake Ushikunuma	2018/11/7	Cloudy	15.8	Blackish brown	Faint earth	Loamy	8.5	100	108.5	0.05			
			2019/2/7	Cloudy	11.5	Blackish brown	Faint earth	Loamy	<9.8	100	100	0.05			
			2018/5/15	Sunny	24.3	Dark brown	Faint earth	Loamy	18	140	158	0.06			
65		Center of Lake Ushikunuma	2018/8/28	Sunny	27.0	Dull yellowish brown	Faint earth	Loamy	64	630	694	0.07			
			2018/11/21	Sunny	9.8	Dark brown	Faint earth	Loamy	17	170	187	0.06			
			2019/2/15	Cloudy	1.8	Dark brown	Faint earth	Loamy	16	200	216	0.06			

# Ibaraki Lakes and Reservoirs (Surrounding Environment) 2/2

L a k e s  R e s e r v o i r s	Location		Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)						Remarks	
						Soil					Air Dose (μSv/h)		
	General items												
	No.	Water area				Location	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			
Radioactive cesium													
						Cs-134	Cs-137	Total					
66	Mizunuma Dam	Center	2018/5/10	Cloudy	14.7	Blackish brown	Faint earth	Loamy	49	360	409	0.09	
			2018/8/22	Sunny	30.0	Blackish brown	Faint earth	Loamy	25	250	275	0.11	
			2018/11/15	Sunny	10.8	Blackish brown	Faint earth	Loamy	22	270	292	0.10	
			2019/2/14	Sunny	3.0	Blackish brown	Faint earth	Loamy	24	240	264	0.09	
	67	Koyama Dam	Center	2018/5/25	Cloudy	26.8	Dull yellowish brown	Faint earth	Loamy	31	340	371	0.07
				2018/8/22	Sunny	33.0	Dull yellowish brown	Faint earth	Loamy	28	350	378	0.09
				2018/11/15	Sunny	14.0	Dull yellowish brown	Faint earth	Sandy	31	360	391	0.08
				2019/2/14	Sunny	2.8	Dull yellowish brown	Faint earth	Loamy	25	300	325	0.07
	68	Hananuki Dam	Center	2018/5/9	Cloudy	12.3	Dull yellowish brown	Faint earth	Loamy	110	1,100	1,210	0.09
				2018/8/21	Sunny	30.0	Dull yellowish brown	Faint earth	Loamy	78	880	958	0.11
				2018/11/15	Sunny	15.0	Dull yellowish brown	Faint earth	Loamy	88	1,100	1,188	0.11
	69	Jyuou Dam	Center	2019/2/13	Cloudy	3.0	Dull yellowish brown	Faint earth	Loamy	67	790	857	0.09
2018/5/10				Cloudy	14.0	Blackish brown	Faint earth	Loamy	120	1,100	1,220	0.08	
2018/8/21				Sunny	30.8	Blackish brown	Faint earth	Loamy	180	1,800	1,980	0.08	
2018/11/13				Cloudy	15.0	Dark brown	Faint earth	Loamy	84	1,000	1,084	0.07	
70	Ryujin Dam	Center	2019/2/13	Cloudy	6.0	Blackish brown	Faint earth	Loamy	130	1,400	1,530	0.07	
			2018/5/9	Cloudy	13.0	Dark brown	Faint earth	Loamy	23	200	223	0.07	
			2018/8/20	Cloudy	26.5	Dark brown	Faint earth	Loamy	12	110	122	0.07	
			2018/11/13	Sunny	16.2	Blackish brown	Faint earth	Loamy	16	170	186	0.08	
71	Fujigawa Dam	Center	2019/2/12	Sunny	8.5	Dark brown	Faint earth	Loamy	12	150	162	0.07	
			2018/5/8	Cloudy	13.8	Black	Faint earth	Loamy	37	410	447	0.10	
			2018/8/3	Cloudy	30.8	Black	Faint earth	Loamy	60	720	780	0.12	
			2018/11/12	Cloudy	18.0	Black	Faint earth	Loamy	66	630	696	0.11	
72	Iida Dam	Center	2019/2/25	Cloudy	15.5	Black	Faint earth	Loamy	38	490	528	0.10	
			2018/5/8	Cloudy	15.0	Dark brown	Faint earth	Loamy	61	630	691	0.07	
			2018/8/3	Sunny	32.0	Dark brown	Faint earth	Loamy	62	480	542	0.08	
			2018/11/12	Cloudy	19.0	Dark brown	Faint earth	Loamy	40	450	490	0.08	
			2019/2/25	Sunny	14.8	Dark brown	Faint earth	Loamy	51	580	631	0.06	



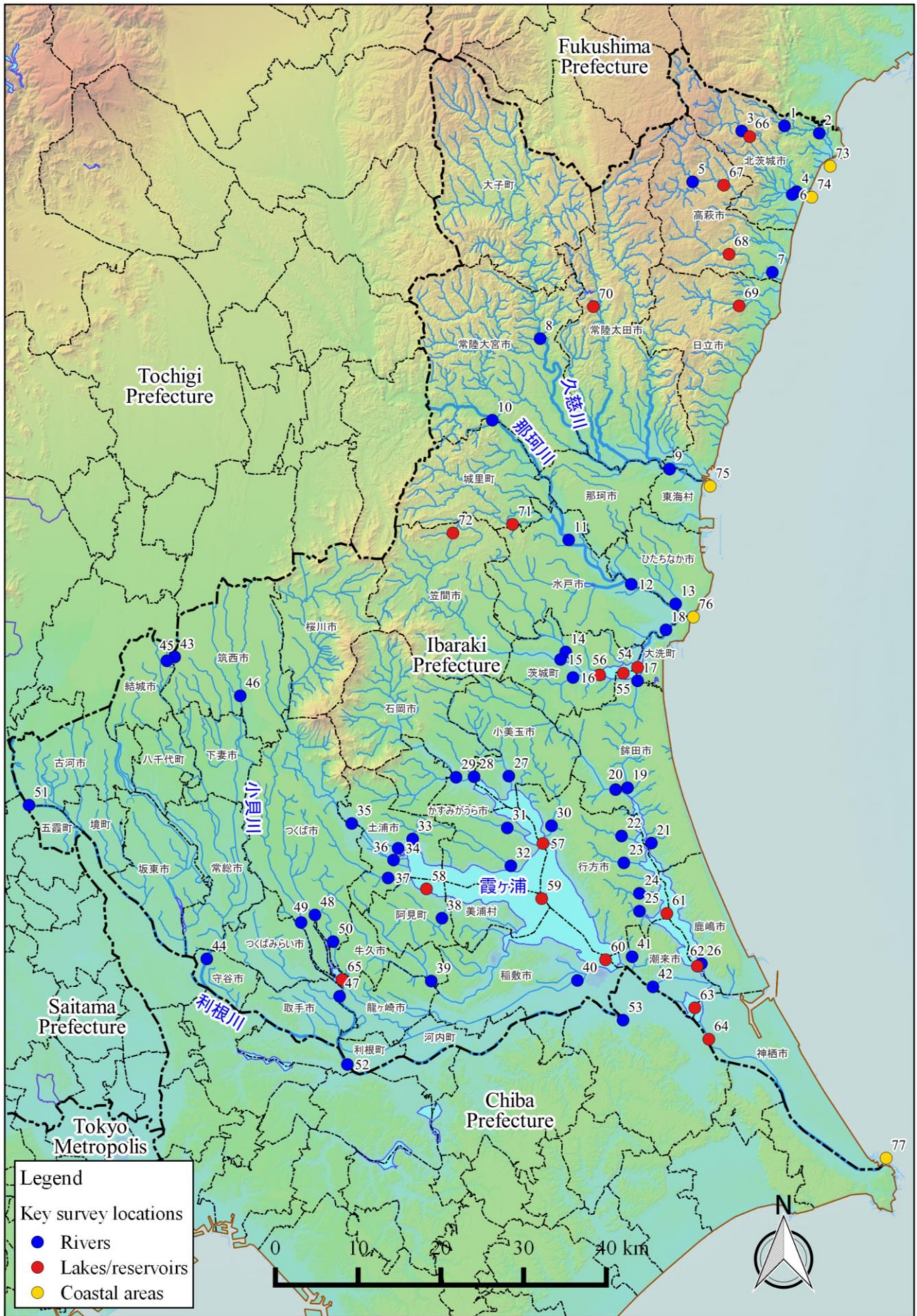
# Ibaraki Coastal (Water)1/1

No.	Location		Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
							General items					Activity concentration(Bq/L)					
	Water area						Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Salinity (‰)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium		
										Cs-134	Cs-137						
73	Offshore of Satone River Estuary	Surface layer	2018/5/11	Sunny	22.0	12.5	15.5	0.5	Dark grayish green	None	2.5	31.1	2	1.2	<0.71	<0.96	
		Deep layer					15.5	11.5	-	None		31.1	2	1.0	<0.71	<0.75	
		Surface layer	2018/8/2	Cloudy	31.3	12.0	26.6	0.5	Dark grayish yellowish green	None	5.0	30.4	1	0.9	<0.49	<0.70	
		Deep layer					22.1	11.0	-	None		31.4	3	1.5	<0.69	<0.55	
		Surface layer	2018/11/2	Sunny	17.5	11.9	18.5	0.5	Dark grayish yellow green	None	3.0	30.9	2	0.9	<0.72	<0.75	
		Deep layer					18.0	10.9	-	None		31.1	4	1.9	<0.67	<0.69	
	Surface layer	2019/2/19	Cloudy	12.2	13.2	11.3	0.5	Dark grayish yellow green	None	5.0	32.2	2	0.5	<0.80	<0.69		
	Deep layer					11.2	12.2	-	None		32.3	2	1.0	<0.85	<0.80		
	74	Offshore of Okita River Estuary	Surface layer	2018/6/5	Sunny	24.7	11.2	20.9	0.5	Dark grayish green	None	5.0	29.9	<1	0.3	<0.66	<0.69
			Deep layer					20.6	10.2	-	None		30.8	<1	0.2	<0.70	<0.88
			Surface layer	2018/8/2	Cloudy	30.3	10.9	25.5	0.5	Dark grayish yellow green	None	5.0	29.8	1	0.8	<0.54	<0.75
			Deep layer					23.3	9.9	-	None		31.7	<1	0.5	<0.72	<0.63
Surface layer			2018/11/2	Sunny	17.5	11.0	18.8	0.5	Dark grayish yellow green	None	4.5	31.0	<1	0.5	<0.72	<0.75	
Deep layer							18.7	10.0	-	None		31.2	1	0.6	<0.83	<0.75	
Surface layer			2019/2/19	Cloudy	11.5	10.8	11.3	0.5	Dark grayish yellow green	None	5.0	31.1	3	1.9	<0.81	<0.88	
Deep layer							11.3	9.8	-	None		32.2	3	1.2	<0.63	<0.69	
75	Offshore of Momiya River/Kujigawa River Estuaries	Surface layer	2018/5/11	Sunny	21.2	10.1	15.0	0.5	Grayish yellow green	None	3.0	20.8	5	3.0	<0.61	<0.61	
		Deep layer					15.2	9.1	-	None		31.8	2	1.0	<0.73	<0.55	
		Surface layer	2018/8/2	Sunny	32.2	9.9	25.9	0.5	Dark grayish yellow green	None	3.0	24.5	1	1.3	<0.73	<0.55	
		Deep layer					22.2	8.9	-	None		31.1	2	1.3	<0.83	<0.61	
		Surface layer	2018/11/2	Sunny	18.0	10.1	19.9	0.5	Dark grayish yellow green	None	4.0	30.6	1	0.8	<0.74	<0.75	
		Deep layer					20.0	9.1	-	None		31.1	3	1.9	<0.75	<0.69	
		Surface layer	2019/2/19	Cloudy	11.5	10.0	11.4	0.5	Dark grayish yellow green	None	4.5	31.0	2	1.2	<0.70	<0.84	
		Deep layer					11.6	9.0	-	None		32.1	2	1.1	<0.81	<0.75	
76	Neighboring water body of Ken-o Offshore of Nakagawa River	Surface layer	2018/5/11	Sunny	21.0	6.0	15.0	0.5	Grayish yellow green	None	1.0	12.2	9	5.4	<0.57	<0.88	
		Deep layer					15.6	5.0	-	None		28.0	8	3.2	<0.58	<0.88	
		Surface layer	2018/8/2	Sunny	32.2	6.0	26.2	0.5	Grayish yellow green	None	2.0	19.3	3	2.5	<0.74	<0.80	
		Deep layer					23.5	5.0	-	None		31.4	7	3.6	<0.51	<0.84	
		Surface layer	2018/11/2	Sunny	18.5	5.8	17.1	0.5	Dark grayish yellow green	None	3.0	7.2	2	2.6	<0.83	<0.84	
		Deep layer					19.8	4.8	-	None		31.0	3	1.9	<0.60	<0.55	
		Surface layer	2019/2/19	Cloudy	9.5	6.2	10.7	0.5	Dark grayish yellow green	None	2.0	28.5	3	1.8	<0.80	<0.80	
		Deep layer					10.8	5.2	-	None		30.3	3	1.6	<0.76	<0.69	
77	Offshore of Tonegawa River Estuary	Surface layer	2018/6/7	Cloudy	21.0	8.3	20.9	0.5	Dark grayish yellow green	None	2.0	17.6	3	2.5	<0.55	<0.61	
		Deep layer					19.6	7.3	-	None		31.4	1	0.5	<0.80	<0.66	
		Surface layer	2018/8/30	Sunny	30.5	7.5	27.3	0.5	Grayish yellow green	None	1.5	9.6	4	3.5	<0.66	<0.88	
		Deep layer					24.7	6.5	-	None		30.1	4	1.6	<0.67	<0.80	
		Surface layer	2018/11/27	Sunny	17.2	8.0	17.2	0.5	Grayish yellow green	None	4.5	25.2	1	1.6	<0.80	<0.70	
		Deep layer					18.6	7.0	-	None		31.0	5	2.8	<0.73	<0.78	
		Surface layer	2019/2/25	Rain	12.5	8.5	12.2	0.5	Dark grayish yellow green	None	4.5	28.8	3	1.6	<0.60	<0.66	
		Deep layer					12.8	7.5	-	None		32.8	7	2.1	<0.73	<0.70	

C o a s t a l a r e a s

# Ibaraki Coastal (Sediment) 1/1

Location		Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																Activity concentration [Bq/kg(dry)]			Remarks
No.	Water area					Sediment temperature (°C)	Sample length (cm)	Color	Odor	Grain size distribution(%)						Sediment content (%)	Density (g/cm <sup>3</sup> )	Property	Radioactive cesium						
										Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand				Silt	Clay	Cs-134	Cs-137	Total		
C o a s t a l	73	Offshore of Satone River Estuary	2018/5/11	Sunny	22.0	12.5	15.4	10	Olive black	Faint hydrocarbon odors	0.0	0.0	0.0	0.0	3.1	23.3	57.8	15.9	47.9	2.566	Silt/sand	20	150	170	
			2018/8/2	Cloudy	31.3	12.0	24.6	8	Olive black	None	0.0	0.0	0.0	0.4	25.4	67.6	2.6	3.9	74.4	2.714	Sand	<5.7	5.9	5.9	
			2018/11/2	Sunny	17.5	11.9	19.0	3	Olive black	None	0.0	0.0	0.0	0.2	3.1	52.1	38.2	6.5	64.8	2.592	Sand	<7.5	28	28	
			2019/2/19	Cloudy	12.2	13.2	11.8	5	Olive black	None	0.0	0.1	0.3	0.2	9.0	59.3	22.6	8.5	31.4	2.602	Sand	<12	55	55	
			2018/6/5	Sunny	24.7	11.2	18.0	9	Olive black	None	0.0	0.0	0.0	0.3	12.3	70.7	14.8	2.0	75.0	2.775	Sand	<5.1	9.5	9.5	
			2018/8/2	Cloudy	30.3	10.9	24.8	4	Olive black	None	0.0	0.0	0.1	0.2	25.7	66.4	4.3	3.3	79.8	2.914	Sand	<3.3	3.6	3.6	
	74	Offshore of Okita River Estuary	2018/11/2	Sunny	17.5	11.0	19.0	5	Olive black	None	0.0	0.0	0.0	0.1	18.5	69.7	5.8	6.0	75.6	2.701	Sand	<3.7	4.8	4.8	
			2019/2/19	Cloudy	11.5	10.8	11.5	4	Olive black	None	0.0	0.0	0.0	0.3	17.8	65.4	10.6	5.9	76.6	2.761	Sand/silt	<4.5	8.1	8.1	
			2018/5/11	Sunny	21.2	10.1	17.0	5	Olive black	None	0.0	0.0	0.0	0.1	2.1	61.5	33.4	3.0	71.3	2.707	Sand	<6.3	11	11	
			2018/8/2	Sunny	32.2	9.9	23.5	8	Olive black	None	0.0	0.0	0.1	0.0	4.5	73.5	18.2	3.8	70.7	2.678	Sand	<6.1	8.7	8.7	
			2018/11/2	Sunny	18.0	10.1	20.2	8	Olive black	None	0.0	0.0	0.0	0.1	9.6	78.7	6.7	5.0	76.0	2.690	Sand	<3.5	6.2	6.2	
			2019/2/19	Cloudy	11.5	10.0	12.0	6	Olive black	Faint sewage	0.0	0.0	0.0	0.0	0.9	54.6	29.1	15.4	47.1	2.621	Sand/silt	<8.5	43	43	
76	Neighboring water body of Ken-o Offshore of Nakagawa River	2018/5/11	Sunny	21.0	6.0	15.5	8	Olive black	None	0.0	0.0	0.0	0.6	60.3	36.1	0.1	2.9	74.0	2.737	Sand	<3.1	4.4	4.4		
		2018/8/2	Sunny	32.2	6.0	24.2	10	Olive black	None	0.0	0.0	0.0	0.0	4.7	83.0	7.0	5.3	73.4	2.696	Sand	<4.6	7.1	7.1		
		2018/11/2	Sunny	18.5	5.8	20.8	5	Olive black	None	0.0	0.0	1.0	1.8	7.8	62.2	22.4	2.1	2.8	79.5	2.687	Sand	<2.7	3.3	3.3	
		2019/2/19	Cloudy	9.5	6.2	12.0	10	Olive black	None	0.0	0.0	0.0	0.0	35.1	60.8	1.2	2.9	74.9	2.726	Sand	<0.56	4.1	4.1		
		2018/6/7	Cloudy	21.0	8.3	19.2	3	Olive black	None	0.0	0.0	0.0	0.0	1.1	75.8	19.1	4.0	71.6	2.689	Sand	<2.2	2.1	2.1		
		2018/8/30	Sunny	30.5	7.5	25.2	3	Olive black	None	0.0	0.0	0.0	0.1	1.0	86.1	9.9	3.0	89.0	2.657	Sand	<0.63	1.5	1.5		
77	Offshore of Tonegawa River Estuary	2018/11/27	Sunny	17.2	8.0	19.0	3	Olive black	None	0.0	0.0	0.0	0.0	0.8	89.2	5.0	4.9	73.7	2.737	Sand	<0.52	1.3	1.3		
		2019/2/25	Rain	12.5	8.5	12.0	3	Olive black	None	0.0	0.0	0.0	0.0	0.3	91.6	2.3	5.8	71.5	2.687	Sand	<0.55	1.0	1.0		



Survey Locations (Ibaraki Prefecture)