

## FY2018 Gunma 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

### (2) Sediments

Rivers

Cs-134: ND - 65 Bq/kg (dry)

Cs-137: 0.92 - 660 Bq/kg (dry)

Lakes and reservoirs

Cs-134: ND - 250 Bq/kg (dry)

Cs-137: 18 - 2,600 Bq/kg (dry)

### (3) Surrounding Environment

#### (a) Soil

Rivers

Cs-134: ND - 670 Bq/kg (dry)

Cs-137: 1.2 - 6,800 Bq/kg (dry)

Lakes and reservoirs

Cs-134: ND - 450 Bq/kg (dry)

Cs-137: 14 - 5,500 Bq/kg (dry)

#### (b) Ambient dose rate

Rivers

0.04 - 0.12  $\mu$ Sv/h

Lakes and reservoirs

0.04 - 0.16  $\mu$ Sv/h

# Gunma 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	Cs-137					
R i v e r s	1	Tonegawa River	Hirose Bridge	Minakami Town	2018/5/28	Sunny	23.1	0.6	8.1	0.0	Light grayish yellow green	None	>100	3.2	2	1.5	<0.70	<0.92					
					2018/8/2	Sunny	28.8	0.2	21.4	0.0	Light grayish greenish yellow	None	>100	3.6	<1	0.5	<0.73	<0.80					
					2018/11/26	Sunny	10.2	0.3	10.8	0.0	Light grayish greenish yellow	None	>100	3.9	3	2.1	<0.80	<0.80					
					2019/1/8	Sunny	1.2	0.2	4.8	0.0	Light grayish greenish yellow	None	>100	3.6	2	1.2	<0.68	<0.80					
					2018/5/21	Sunny	26.8	0.3	8.9	0.0	Light grayish greenish yellow	None	>100	3.3	6	2.1	<0.74	<0.61					
					2018/6/13	Sunny	22.4	0.3	14.8	0.0	Light grayish yellow green	None	>100	3.8	<1	0.8	<0.77	<0.63					
		2	Tonegawa River	Tsukiyono Bridge	Minakami Town	2018/7/10	Sunny	28.5	0.3	19.2	0.0	Light grayish greenish yellow	None	>100	5.1	2	1.6	<0.63	<0.80				
						2018/8/23	Sunny	32.0	0.2	22.7	0.0	Light grayish greenish yellow	None	>100	5.4	1	0.9	<0.80	<0.84				
						2018/9/5	Sunny	27.2	0.3	21.6	0.0	Light grayish yellow green	None	92	4.6	5	2.8	<0.71	<0.70				
						2018/11/27	Sunny	10.8	0.2	10.6	0.0	Light grayish yellow green	None	>100	4.5	3	1.2	<0.69	<0.75				
						2019/1/8	Sunny	6.8	0.3	6.2	0.0	Light grayish yellow green	None	>100	4.4	1	0.8	<0.68	<0.69				
						2018/5/21	Sunny	26.2	0.3	18.3	0.0	Grayish greenish yellow	None	>100	11.4	<1	1.0	<0.76	<0.75				
	3	Akaya River	Kosode Bridge	Minakami Town	2018/8/23	Sunny	32.4	0.2	25.8	0.0	Light grayish greenish yellow	None	>100	13.8	2	1.9	<0.70	<0.75					
					2018/11/27	Sunny	11.2	0.2	10.8	0.0	Light grayish yellow green	None	>100	10.6	3	1.3	<0.86	<0.69					
					2019/1/8	Sunny	5.8	0.2	5.2	0.0	Light grayish greenish yellow	None	>100	11.3	4	1.8	<0.62	<0.69					
	4	Sakura River	In Oozaya Yachi	Kawaba Village	2018/5/10	Sunny	10.4	0.3	8.7	0.0	Light grayish yellow green	None	>100	5.2	1	0.5	<0.63	<0.63					
					2018/6/13	Sunny	22.2	0.2	14.2	0.0	Light grayish yellow green	None	>100	6.3	1	0.9	<0.78	<0.69					
					2018/7/10	Sunny	27.4	0.2	16.6	0.0	Light grayish yellow green	None	>100	6.2	2	0.8	<0.73	<0.63					
					2018/8/2	Sunny	32.2	0.2	19.2	0.0	Light grayish yellow green	None	>100	7.1	3	1.3	<0.80	<0.55					
					2018/9/5	Sunny	26.2	0.3	18.0	0.0	Light grayish greenish yellow	None	67	5.9	9	3.4	<0.90	<0.63					
					2018/11/27	Sunny	13.2	0.2	9.8	0.0	Light grayish yellow green	None	>100	6.8	<1	0.3	<0.60	<0.63					
					2019/1/10	Sunny	-0.8	0.2	2.2	0.0	Light grayish greenish yellow	None	>100	7.5	3	0.8	<0.66	<0.88					
					2018/5/30	Rain	16.7	0.3	11.4	0.0	Light grayish yellow green	None	>100	4.9	<1	0.4	<0.58	<0.75					
	5	Tonegawa River System	Tonegawa River Area	Katasashina River	Katasashina Village	2018/8/21	Cloudy	28.8	0.3	18.1	0.0	Light grayish yellow green	None	>100	5.0	1	1.2	<0.85	<0.80				
						2018/11/16	Sunny	7.4	0.3	6.0	0.0	Light grayish yellow green	None	>100	5.1	<1	0.3	<0.69	<0.92				
						2019/1/10	Cloudy	1.2	0.2	1.3	0.0	Light grayish yellow green	None	>100	6.1	<1	0.5	<0.80	<0.55				
						2018/5/30	Cloudy	17.2	0.5	14.1	0.0	Light grayish greenish yellow	None	>100	9.1	<1	0.3	<0.81	<0.78				
						2018/6/13	Sunny	23.6	0.3	19.1	0.0	Light grayish greenish yellow	None	>100	9.1	<1	0.6	<0.81	<0.75				
						2018/7/10	Sunny	28.8	0.3	21.2	0.0	Light grayish yellow green	None	>100	8.9	3	3.2	<0.51	<0.75				
						2018/8/21	Sunny	30.8	0.5	22.2	0.0	Light grayish greenish yellow	None	>100	8.6	<1	0.4	<0.66	<0.80				
						2018/9/5	Sunny	28.8	0.3	18.4	0.0	Light grayish greenish yellow	None	32	5.7	33	18	<0.67	<0.66				
						2018/11/16	Sunny	12.1	0.4	9.0	0.0	Light grayish yellow green	None	>100	10.3	<1	0.5	<0.61	<0.88				
						2019/1/10	Cloudy	3.1	0.3	2.0	0.0	Light grayish yellow green	None	>100	12.0	<1	0.4	<0.71	<0.69				
						6	Katasashina River	Tonemachitakatoya	Numata City	2018/5/21	Sunny	27.4	0.5	13.4	0.0	Light grayish yellow green	None	>100	8.5	2	1.3	<0.66	<0.80
										2018/6/13	Sunny	26.5	0.5	18.1	0.0	Light grayish yellow green	None	>100	11.2	7	2.5	<0.70	<0.69
	2018/7/10	Sunny	33.2	0.5	21.5					0.0	Grayish yellow green	None	62	10.3	9	4.8	<0.70	<0.75					
	2018/8/28	Cloudy	26.8	0.6	20.5					0.0	Grayish yellow green	None	>100	10.9	13	3.3	<0.73	<0.63					
	2018/9/10	Cloudy	28.2	0.5	18.6					0.0	Grayish yellow green	None	85	9.5	6	3.6	<0.59	<0.84					
	2018/11/17	Sunny	11.0	0.2	9.9					0.0	Grayish yellow green	None	>100	10.9	3	1.3	<0.79	<0.69					
	2019/1/10	Sunny	-1.2	0.5	2.8					0.0	Light grayish yellow green	None	>100	11.3	1	0.8	<0.81	<0.88					
	2018/5/24	Sunny	25.0	0.3	15.3					0.0	Light grayish yellow green	None	48	19.9	17	11	<0.70	<0.63					
	2018/8/29	Cloudy	28.3	0.3	17.7					0.0	Light grayish yellow green	None	45	24.2	19	11	<0.86	<0.63					
2018/11/20	Sunny	10.7	0.4	8.3	0.0					Light grayish yellow green	None	72	23.7	19	11	<0.77	<0.80						
7	Futae Bridge	Naganojima	Naganojima	2019/1/28	Sunny	5.6	0.4	2.3	0.0	Light grayish yellow green	None	45	26.0	19	13	<0.51	<0.69						
				2018/5/24	Sunny	24.7	0.2	16.1	0.0	Grayish yellow	None	>100	14.4	<1	0.5	<0.79	<0.55						
				2018/8/28	Sunny	25.5	0.3	20.3	0.0	Grayish yellow	None	>100	16.6	2	0.8	<0.79	<0.75						
				2018/11/20	Sunny	11.2	0.4	8.4	0.0	Light grayish greenish yellow	None	>100	15.3	<1	0.5	<0.73	<0.75						
8	Agatsuma River	Shinto Bridge	Naganohara Town	2019/1/28	Sunny	0.0	0.5	2.0	0.0	Grayish yellow	None	>100	56.6	1	2.1	<0.63	<0.69						

# Gunma River (Water) 2/5

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			
10	Agatsuma River	Downstream of Azuma Bridge	Higashi-Agatsuma Town	2018/5/22	Sunny	15.2	0.2	15.0	0.0	Light grayish yellow green	None	>100	23.3	3	2.2	<0.66	<0.66				
				2018/6/7	Sunny	27.1	0.2	21.3	0.0	Light grayish greenish yellow	None	>100	24.4	1	1.4	<0.86	<0.84				
				2018/7/9	Sunny	31.4	0.3	24.3	0.0	Grayish yellow green	None	52	22.1	10	6.1	<0.84	<0.63				
				2018/8/23	Sunny	32.0	0.2	26.7	0.0	Grayish yellow green	None	>100	21.5	4	1.6	<0.61	<0.80				
				2018/9/10	Cloudy	26.0	0.2	20.6	0.0	Grayish yellow green	None	66	24.0	9	6.6	<0.66	<0.88				
				2018/11/21	Sunny	9.8	0.2	7.5	0.0	Grayish yellow green	None	>100	19.0	<1	0.6	<0.77	<0.80				
	11	Nakuta River	Tonoda Bridge	Takayama Village	2019/1/15	Cloudy	3.4	0.2	2.8	0.0	Grayish yellow green	None	>100	38.5	3	3.5	<0.73	<0.63			
					2018/5/22	Sunny	26.5	0.3	19.3	0.0	Light grayish greenish yellow	None	>100	13.3	4	2.2	<0.57	<0.84			
					2018/8/23	Sunny	31.2	0.3	25.0	0.0	Grayish greenish yellow	None	>100	13.1	2	1.2	<0.72	<0.75			
					2018/11/21	Sunny	11.2	0.3	7.1	0.0	Grayish greenish yellow	None	>100	13.9	<1	0.6	<0.63	<0.84			
12	Agatsuma River	Agatsuma Bridge	Shibukawa City	2019/1/15	Cloudy	3.6	0.3	2.3	0.0	Grayish greenish yellow	None	>100	15.1	1	0.9	<0.77	<0.84				
				2018/5/21	Sunny	27.6	0.3	19.6	0.0	Light grayish yellow green	None	>100	21.1	1	1.3	<0.66	<0.61				
				2018/6/7	Sunny	29.4	0.4	24.0	0.0	Light grayish yellow green	None	>100	21.3	2	1.8	<0.81	<0.75				
				2018/7/9	Sunny	32.5	0.4	23.2	0.0	Light grayish yellow green	None	64	15.6	12	4.5	<0.84	<0.63				
				2018/8/28	Cloudy	27.4	0.2	24.1	0.0	Grayish yellow green	None	68	18.4	5	2.9	<0.68	<0.69				
				2018/9/10	Rain	28.2	0.3	21.2	0.0	Light grayish yellow green	None	72	17.2	7	3.6	<0.71	<0.55				
				2018/11/17	Sunny	14.2	0.2	11.1	0.0	Light grayish yellow green	None	>100	20.2	1	0.9	<0.63	<0.96				
				2019/1/15	Cloudy	3.8	0.4	4.9	0.0	Light grayish yellow green	None	>100	27.2	2	1.3	<0.74	<0.69				
				13	Tonegawa River	Taisho Bridge	Shibukawa City	2018/5/21	Sunny	22.5	0.5	11.0	0.0	Light grayish yellow green	None	>100	5.9	2	1.5	<0.61	<0.75
								2018/6/7	Sunny	30.2	0.4	14.4	0.0	Light grayish yellow green	None	>100	5.5	2	1.4	<0.81	<0.55
2018/7/9	Sunny	33.2	0.5					23.8	0.0	Light grayish yellow green	None	>100	11.7	3	1.8	<0.76	<0.80				
2018/8/28	Cloudy	27.4	0.3					21.9	0.0	Light grayish yellow green	None	>100	14.0	5	2.3	<0.71	<0.80				
2018/9/10	Rain	27.5	0.3					21.5	0.0	Light grayish yellow green	None	80	13.9	9	2.7	<0.87	<0.75				
2018/11/17	Sunny	15.5	0.3					12.7	0.0	Light grayish yellow green	None	>100	14.3	3	1.2	<0.59	<0.75				
14	Takizawa River	Shintakizawa Bridge	Shibukawa City/Yoshioka Town	2019/1/15	Cloudy	3.2	0.4	8.7	0.0	Light grayish yellow green	None	>100	10.9	2	0.9	<0.62	<0.86				
				2018/5/21	Sunny	19.7	0.1	16.1	0.0	Light grayish yellow green	None	>100	18.1	2	1.3	<0.84	<0.61				
				2018/8/28	Cloudy	26.1	0.2	24.1	0.0	Grayish yellow green	None	76	21.0	8	2.5	<0.69	<0.63				
				2018/11/17	Sunny	18.5	0.2	14.7	0.0	Light grayish yellow green	None	>100	30.7	2	1.1	<0.61	<0.80				
				2019/1/15	Cloudy	2.1	0.2	4.8	0.0	Light grayish yellow green	None	>100	35.6	25	5.4	<0.67	<0.80				
				2018/5/19	Sunny	23.3	0.7	12.7	0.0	Grayish yellow green	None	82	10.0	6	3.6	<0.73	<0.84				
15	Tonegawa River	Gunma-ohashi Bridge	Maebashi City	2018/8/6	Sunny	37.2	0.7	22.3	0.0	Light grayish yellow green	None	>100	17.4	6	3.7	<0.74	<0.75				
				2018/11/8	Cloudy	17.8	0.6	13.7	0.0	Light grayish yellow green	None	>100	15.9	5	4.4	<0.73	<0.92				
				2019/1/24	Sunny	5.8	0.7	4.3	0.0	Light grayish yellow green	None	>100	15.3	5	4.1	<0.71	<0.55				
				2018/5/15	Sunny	22.2	0.3	14.9	0.0	Light grayish yellow green	None	>100	10.9	4	2.6	<0.74	<0.69				
16	Fukushima Bridge	Tamamura Town	Tamamura Town	2018/8/6	Sunny	35.8	0.2	24.9	0.0	Light grayish yellow green	None	74	14.5	5	3.0	<0.67	<0.80				
				2018/11/21	Sunny	11.2	0.2	10.3	0.0	Light grayish yellow green	None	>100	18.2	8	4.5	<0.76	<0.80				
				2019/1/16	Sunny	7.8	0.2	4.7	0.0	Light grayish yellow green	None	>100	16.0	4	3.3	<0.83	<0.63				
				2018/5/25	Sunny	25.0	0.2	21.3	0.0	Light grayish yellow	None	>100	11.7	2	1.3	<0.79	<0.88				
				2018/8/28	Cloudy	25.3	0.2	19.5	0.0	Light grayish yellow	None	>100	11.9	4	1.9	<0.71	<0.63				
17	Nagai River	Kamigonda Bridge	Takasaki City	2018/11/9	Cloudy	14.3	0.2	13.0	0.0	Light grayish greenish yellow	None	>100	12.2	1	0.6	<0.75	<0.84				
				2019/1/28	Sunny	9.6	0.2	7.7	0.0	Light grayish yellow	None	>100	12.6	2	0.6	<0.61	<0.75				
				2018/5/25	Sunny	26.1	0.3	20.3	0.0	Light grayish yellow	None	>100	11.7	3	0.8	<0.61	<0.61				
18	Karasu River	Karasugawa Bridge	Takasaki City	2018/8/28	Cloudy	26.8	0.2	22.1	0.0	Light grayish yellow	None	>100	12.9	6	1.8	<0.67	<0.69				
				2018/11/9	Cloudy	14.1	0.3	13.4	0.0	Light grayish yellow green	None	>100	11.3	2	0.7	<0.92	<0.69				
				2019/1/28	Sunny	10.2	0.3	6.5	0.0	Light grayish yellow	None	>100	13.2	1	0.6	<0.81	<0.80				
				2018/5/18	Cloudy	24.6	0.4	18.5	0.0	Light grayish yellow green	None	>100	15.2	2	0.8	<0.68	<0.88				
19	Usui River	Nakase Bridge	Amaka City	2018/8/21	Sunny	29.2	0.3	23.5	0.0	Grayish yellow green	None	>100	15.8	1	0.7	<0.60	<0.84				
				2018/11/9	Cloudy	13.7	0.3	13.7	0.0	Light grayish yellow green	None	>100	17.5	<1	0.5	<0.81	<0.69				
				2019/1/23	Sunny	6.8	0.4	3.0	0.0	Light grayish yellow green	None	>100	18.4	1	0.9	<0.86	<0.87				

# Gunma 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	
R i v e r s	Tonegawa River System	Usui River	Hanataka Bridge	Takasaki City	2018/5/16	Sunny	31.4	0.2	23.1	0.0	Grayish yellow green	None	85	32.0	4	2.1	<-0.72	<-0.63	
					2018/8/28	Cloudy	28.2	0.1	26.2	0.0	Dark grayish yellow green	None	>100	45.6	6	2.2	<-0.95	<-0.88	
		21	Kabura River	Tadakawa Bridge	Shimonita Town	2018/11/8	Sunny	17.0	1.0	16.8	0.0	Grayish yellow green	None	>100	43.2	2	1.3	<-0.90	<-0.80
						2019/1/23	Sunny	10.8	0.3	5.0	0.0	Dark grayish yellow green	None	>100	76.2	2	0.9	<-0.77	<-0.80
						2018/5/18	Cloudy	27.3	0.5	19.4	0.0	Light grayish yellow green	None	>100	20.2	1	0.9	<-0.54	<-0.69
						2018/8/21	Sunny	30.3	0.5	21.7	0.0	Light grayish yellow green	None	>100	20.2	11	2.4	<-0.66	<-0.75
		22	Kabura River	Kaburagawa Bridge	Takasaki City/Fujioka City	2018/11/8	Cloudy	16.2	0.4	15.0	0.0	Light grayish yellow green	None	>100	28.0	<1	0.6	<-0.72	<-0.75
						2019/1/23	Sunny	5.7	0.4	2.9	0.0	Light grayish yellow	None	>100	39.2	1	0.7	<-0.63	<-0.69
						2018/5/16	Sunny	33.4	0.5	23.2	0.0	Light grayish yellow green	None	>100	24.3	3	1.5	<-0.68	<-0.80
						2018/8/22	Sunny	37.4	0.5	29.2	0.0	Grayish yellow green	None	>100	25.6	6	1.9	<-0.84	<-0.75
		23	Ogawa River	Kinzan Bridge	Kanra Town	2018/11/21	Sunny	17.0	0.2	11.9	0.0	Light grayish yellow green	None	>100	34.7	2	1.3	<-0.74	<-0.84
						2019/1/16	Sunny	9.1	0.2	3.3	0.0	Light grayish yellow green	None	>100	39.5	2	1.3	<-0.74	<-0.69
						2018/5/17	Sunny	31.4	0.3	20.4	0.0	Light grayish yellow green	None	>100	18.4	2	0.9	<-0.72	<-0.69
						2018/8/21	Sunny	29.1	0.2	21.5	0.0	Light grayish yellow green	None	>100	15.8	2	0.8	<-0.68	<-0.69
24	Namnoku River	Ozawa Bridge	Namnoku Village	2018/11/8	Sunny	16.2	0.3	15.0	0.0	Light grayish yellow green	None	>100	19.1	<1	0.3	<-0.68	<-0.75		
				2019/1/23	Sunny	1.2	0.2	4.5	0.0	Light grayish yellow green	None	>100	20.4	1	0.3	<-0.69	<-0.84		
				2018/5/17	Sunny	23.4	0.4	15.6	0.0	Light grayish yellow green	None	>100	13.7	<1	0.4	<-0.60	<-0.69		
				2018/8/21	Sunny	29.1	0.3	22.5	0.0	Light grayish yellow green	None	>100	15.6	<1	0.4	<-0.67	<-0.88		
25	Someya River	Yakushi Bridge	Shinto Village	2018/11/8	Cloudy	14.4	0.2	13.4	0.0	Light grayish yellow green	None	>100	20.6	<1	0.3	<-0.61	<-0.69		
				2019/1/23	Sunny	2.1	0.2	2.0	0.0	Grayish yellow green	None	>100	29.1	1	0.5	<-0.69	<-0.80		
				2018/5/21	Cloudy	19.4	0.1	15.0	0.0	Light grayish yellow green	None	>100	24.2	2	1.2	<-0.97	<-0.84		
				2018/8/28	Cloudy	25.4	0.1	23.5	0.0	Light grayish greenish yellow	None	>100	20.9	7	2.4	<-0.68	<-0.75		
26	Inogawa River	Kamakura Bridge	Takasaki City	2018/11/15	Sunny	14.5	0.2	12.5	0.0	Grayish greenish yellow	None	>100	27.3	3	1.3	<-0.68	<-0.55		
				2019/1/30	Sunny	5.0	0.2	3.0	0.0	Grayish greenish yellow	None	>100	32.8	4	1.9	<-0.83	<-0.63		
				2018/5/15	Sunny	24.2	0.3	18.1	0.0	Light grayish yellow green	None	>100	30.0	6	2.1	<-0.90	<-0.80		
				2018/8/28	Sunny	26.3	0.1	24.7	0.0	Grayish greenish yellow	None	>100	24.5	9	3.8	<-0.61	<-0.69		
27	Karasu River	Iwakura Bridge	Takasaki City/Tamamura Town	2018/11/21	Sunny	12.0	0.1	11.7	0.0	Grayish greenish yellow	None	>100	45.2	3	1.1	<-0.69	<-0.88		
				2019/1/16	Sunny	8.6	0.1	7.9	0.0	Grayish greenish yellow	None	>100	46.0	7	2.9	<-0.66	<-0.69		
				2018/5/15	Sunny	25.1	0.3	22.6	0.0	Light grayish yellow	None	96	37.6	4	2.8	<-0.81	<-0.84		
				2018/8/28	Cloudy	25.5	0.2	25.2	0.0	Light grayish yellow	None	40	35.6	8	3.9	<-0.74	<-0.63		
28	Kanna River	Shinkaname Bridge	Ueno Village	2018/11/21	Sunny	13.0	0.2	13.4	0.0	Light grayish yellow	None	39	35.8	14	6.6	<-0.80	<-0.75		
				2019/1/16	Sunny	8.8	0.2	7.4	0.0	Light grayish yellow	None	85	38.2	7	3.7	<-0.58	<-0.86		
29	Kanna River	Morito Bridge	Kanma Town	2018/5/17	Sunny	25.1	0.5	14.0	0.0	Light grayish yellow green	None	>100	11.2	1	1.2	<-0.60	<-0.75		
				2018/11/8	Cloudy	13.9	0.3	12.3	0.0	Light grayish yellow green	None	>100	15.9	<1	0.2	<-0.51	<-0.84		
30	Kanna River	Tobukyo Bridge	Fujioka City/Kamisato Town	2018/5/17	Sunny	25.9	0.4	16.0	0.0	Light grayish yellow green	None	>100	12.6	2	1.5	<-0.54	<-0.80		
				2018/11/8	Cloudy	13.9	0.4	12.8	0.0	Light grayish yellow green	None	>100	17.2	<1	0.2	<-0.84	<-0.48		
		Kannagawa Bridge	Kamisato Town	2018/5/15	Sunny	28.6	0.2	18.1	0.0	Light grayish yellow green	None	>100	15.9	3	1.8	<-0.82	<-0.80		
				2018/11/21	Sunny	17.5	0.2	14.7	0.0	Light grayish yellow green	None	>100	18.5	3	2.3	<-0.85	<-0.84		
32	Tonegawa River Area	Tonegawa River	Bando-ohashi Bridge	Horjo City	2018/5/15	Sunny	26.8	0.5	17.5	0.0	Light grayish yellow green	None	>100	16.3	3	2.5	<-0.73	<-0.69	
					2018/11/21	Sunny	14.5	0.3	13.4	0.0	Light grayish yellow green	None	>100	20.1	3	1.6	<-0.87	<-0.63	
					2018/5/14	Sunny	25.4	0.5	15.8	0.0	Light grayish greenish yellow	None	55	17.5	14	5.7	<-0.84	<-0.88	
					2018/8/16	Sunny	30.2	0.5	24.5	0.0	Light grayish yellow green	None	42	21.7	15	8.5	<-0.63	<-0.70	
31	Tonegawa River Area	Tonegawa River	Bando-ohashi Bridge	Horjo City	2018/11/9	Cloudy	16.2	0.5	15.9	0.0	Light grayish yellow green	None	>100	28.3	3	2.2	<-0.78	<-0.80	
					2019/1/11	Sunny	10.7	0.5	6.6	0.0	Light grayish yellow green	None	>100	23.5	6	3.1	<-0.69	<-0.88	

# Gunma 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
33	Akagishirakawa River	In Shimohosoi Town		2018/5/19	Sunny	24.5	0.3	19.0	0.0	Light grayish yellow green	None	35	19.5	19	9.4	<0.56	<0.70	
				2018/8/6	Sunny	34.7	0.3	26.8	0.0	Light grayish yellow green	None	63	19.3	11	2.5	<0.70	<0.69	
34	Momonoki River	Utsuboi Bridge	Maebashi City	2018/11/8	Cloudy	17.2	0.3	15.1	0.0	Light grayish yellow green	None	>100	26.1	6	2.0	<0.86	<0.75	
				2019/1/8	Sunny	6.0	0.3	4.3	0.0	Light grayish yellow green	None	>100	24.4	2	0.9	<0.83	<0.63	
				2018/5/19	Sunny	26.4	0.2	18.5	0.0	Light grayish yellow green	None	38	15.0	15	7.6	<0.82	<0.80	
				2018/8/6	Sunny	34.5	0.3	22.9	0.0	Light grayish yellow green	None	75	22.0	6	3.1	<0.73	<0.63	
35	Arato River	Okuhara Bridge		2018/11/8	Cloudy	17.3	0.3	15.1	0.0	Light grayish yellow green	None	>100	21.1	5	3.6	<0.87	<0.84	
				2019/1/24	Sunny	8.2	0.2	3.5	0.0	Light grayish yellow green	None	>100	21.4	3	2.0	<0.71	<0.84	
				2018/5/19	Sunny	26.3	0.3	22.9	0.0	Grayish yellow	None	35	29.3	65	14	<0.74	<0.48	
				2018/8/6	Sunny	33.2	0.2	24.5	0.0	Light grayish yellow green	None	54	23.3	7	3.0	<0.72	<0.75	
36	Kasukawa River	Hozumi Bridge		2018/11/8	Cloudy	18.1	0.2	16.0	0.0	Light grayish yellow green	None	>100	27.0	3	2.0	<0.66	<0.92	
				2019/1/24	Sunny	8.2	0.2	4.5	0.0	Light grayish yellow green	None	>100	27.8	8	3.6	<0.67	<0.69	
				2018/5/14	Sunny	23.1	0.4	19.9	0.0	Light grayish greenish yellow	None	37	26.4	22	10	<0.82	<0.55	
				2018/8/16	Cloudy	29.8	0.5	26.5	0.0	Grayish yellow green	None	82	26.5	8	3.2	<0.77	<0.75	
37	Hirose River	Nakajima Bridge	Iesak City	2018/11/8	Sunny	20.2	0.5	18.6	0.0	Light grayish yellow green	None	>100	35.8	13	8.5	<0.78	<0.69	
				2019/1/24	Sunny	9.6	0.4	7.3	0.0	Grayish yellow green	None	>100	39.0	7	3.4	<0.87	<0.75	
				2018/5/14	Sunny	24.2	0.4	20.8	0.0	Light grayish greenish yellow	None	38	22.8	10	5.3	<0.67	<0.63	
				2018/8/16	Cloudy	31.0	0.4	24.9	0.0	Light grayish greenish yellow	None	35	23.7	29	6.0	<0.52	<0.82	
38	Hayakawa River	Hayakawa Bridge		2018/11/9	Cloudy	15.2	0.4	16.9	0.0	Light grayish yellow green	None	>100	31.0	6	3.0	<0.58	<0.55	
				2019/1/11	Sunny	11.0	0.4	5.8	0.0	Light grayish yellow green	None	>100	32.2	8	3.5	<0.74	<0.84	
				2018/5/19	Sunny	26.7	0.4	22.2	0.0	Grayish yellow green	None	64	15.7	11	4.5	<0.60	<0.80	
				2018/8/6	Sunny	32.2	0.2	27.0	0.0	Light grayish yellow green	None	>100	31.2	1	1.1	<0.80	<0.75	
39	Tonegawa River System	Maejima Bridge	Ota City	2018/11/8	Cloudy	20.4	0.2	17.2	0.0	Light grayish yellow green	None	>100	24.0	2	1.3	<0.74	<0.75	
				2019/1/24	Sunny	8.4	0.2	7.7	0.0	Light grayish yellow green	None	48	18.1	21	7.7	<0.77	<0.69	
				2018/5/14	Sunny	26.8	0.3	21.0	0.0	Grayish greenish yellow	None	52	21.4	12	5.5	<0.69	<0.70	
				2018/8/16	Cloudy	31.2	0.3	27.1	0.0	Grayish greenish yellow	None	54	31.1	17	4.9	<0.69	<0.70	
40	Tonegawa River	Tone-ozeki Weir	Chiyoda Town/Gyoda City	2018/11/9	Rain	16.4	0.3	17.4	0.0	Grayish greenish yellow	None	>100	40.3	4	1.3	<0.75	<0.75	
				2019/1/11	Sunny	11.1	0.3	6.4	0.0	Grayish greenish yellow	None	75	40.6	8	3.8	<0.80	<0.69	
				2018/5/14	Sunny	27.0	0.6	17.6	0.0	Grayish yellow	None	23	16.4	63	18	<0.63	<0.96	
				2018/6/7	Sunny	31.5	0.4	25.1	0.0	Grayish yellow	None	60	16.3	9	6.0	<0.81	<0.75	
				2018/7/9	Sunny	29.6	0.5	22.2	0.0	Grayish greenish yellow	None	56	19.5	9	5.8	<0.65	<0.92	
				2018/8/16	Sunny	33.8	0.5	27.6	0.0	Grayish greenish yellow	None	33	22.4	15	9.3	<0.80	<0.63	
				2018/9/5	Sunny	33.8	0.5	26.0	0.0	Grayish yellow	None	32	22.5	13	10	<0.69	<0.69	
				2018/11/9	Cloudy	17.1	0.5	16.2	0.0	Grayish greenish yellow	None	96	27.1	11	3.8	<0.63	<0.63	
41	Koguro River	Kayano Bridge		2019/1/11	Sunny	11.3	0.5	5.3	0.0	Light grayish yellow green	None	38	24.5	20	8.1	<0.74	<0.69	
				2018/5/10	Sunny	14.2	0.4	10.5	0.0	Light grayish yellow green	None	>100	6.7	1	0.3	<0.67	<0.63	
				2018/6/8	Sunny	23.8	0.4	15.0	0.0	Light grayish yellow	None	>100	8.4	1	0.7	<0.76	<0.88	
				2018/7/5	Rain	22.5	0.2	16.1	0.0	Grayish yellow green	None	>100	8.3	16	2.2	<0.94	<0.75	
				2018/8/2	Sunny	30.2	0.3	19.0	0.0	Light grayish greenish yellow	None	>100	7.8	1	0.7	<0.83	<0.69	
				2018/9/11	Sunny	20.0	0.3	16.4	0.0	Grayish yellow green	None	>100	7.3	3	0.8	<0.62	<0.88	
				2018/11/23	Sunny	8.5	0.2	8.2	0.0	Grayish yellow green	None	>100	7.9	<1	0.3	<0.69	<0.88	
				2019/1/7	Sunny	3.0	0.3	2.9	0.0	Grayish yellow green	None	>100	7.8	<1	0.2	<0.66	<0.84	
42	Watarase River Area	Takatsudo	Kiryu City	2018/5/11	Sunny	23.2	0.7	14.0	0.0	Light grayish yellow green	None	>100	9.4	<1	0.7	<0.61	<0.61	
				2018/8/27	Sunny	35.5	0.3	20.8	0.0	Grayish greenish yellow	None	56	8.1	4	4.3	<0.77	<0.88	
				2018/11/13	Cloudy	15.7	0.5	14.3	0.0	Light grayish yellow green	None	>100	9.9	1	1.0	<0.87	<0.75	
				2019/1/7	Sunny	9.2	0.1	7.3	0.0	Light grayish yellow green	None	>100	11.8	1	0.6	<0.66	<0.69	
43	Watarase River	Intake for Akaiwayosui water channel		2018/5/11	Sunny	24.2	0.4	15.2	0.0	Grayish yellow green	None	>100	9.7	1	0.8	<0.70	<0.63	
				2018/6/8	Sunny	27.5	0.2	17.3	0.0	Light grayish greenish yellow	None	>100	11.6	2	1.4	<0.63	<0.55	
				2018/7/5	Rain	27.0	0.3	18.8	0.0	Light grayish greenish yellow	None	>100	10.7	1	0.9	<0.82	<0.80	
				2018/8/27	Sunny	35.4	0.3	21.9	0.0	Light grayish greenish yellow	None	68	8.3	5	4.3	<0.84	<0.84	
				2018/9/11	Cloudy	24.5	0.3	19.8	0.0	Light grayish greenish yellow	None	>100	8.7	5	6.4	<0.66	<0.69	
2018/11/13	Cloudy	16.1	0.3	14.4	0.0	Grayish yellow green	None	>100	10.3	2	0.9	<0.68	<0.69					

# Gunma River (Water) 5/5

Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water								Remarks	
No.	Water area	Location	Municipality					General items						Activity concentration(Bq/L)			
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)		Radioactive cesium Cs-134
				2019/1/11	Sunny	7.8	0.2	5.2	0.0	Light grayish greenish yellow	None	>100	12.5	1	0.6	<0.75	<0.75

# Gunma River (Water) 6/5

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	44	Tonegawa River System	Watarase River Area	Tatara River	Ejiri Bridge	Oura Town	2018/5/14	Sunny	27.2	0.7	19.8	0.0	Grayish greenish yellow	None	65	18.1	6	3.0	<0.83	<0.61
							2018/8/30	Sunny	32.8	1.1	27.6	0.0	Dark grayish greenish yellow	None	72	19.3	12	5.3	<0.68	<0.80
							2018/11/13	Cloudy	16.4	0.2	17.3	0.0	Light grayish yellow	None	>100	36.3	8	3.6	<0.58	<0.88
							2019/1/18	Sunny	6.0	0.2	4.4	0.0	Light grayish yellow	None	>100	43.3	8	6.8	<0.84	<0.75
	45	Tonegawa River System	Watarase River Area	Kiryu River	Kannon Bridge	Kiryu City	2018/5/11	Sunny	18.7	0.6	14.8	0.0	Grayish yellow green	None	>100	7.7	3	1.3	<0.80	<0.75
							2018/8/27	Sunny	30.2	0.5	26.2	0.0	Light grayish yellow green	None	82	10.7	2	0.5	<0.86	<0.69
							2018/11/13	Sunny	14.7	0.3	13.3	0.0	Light grayish yellow green	None	>100	8.3	<1	0.3	<0.69	<0.69
							2019/1/7	Sunny	9.5	0.2	5.1	0.0	Light grayish yellow green	None	>100	8.2	<1	0.6	<0.77	<0.80
	46	Tonegawa River System	Watarase River Area	Kiryu River	Sakai Bridge	Kiryu City/Ashikaga City	2018/5/11	Sunny	26.3	0.4	19.2	0.0	Grayish yellow green	None	>100	8.5	6	2.1	<0.58	<0.80
							2018/8/27	Sunny	37.2	0.3	27.1	0.0	Light grayish greenish yellow	None	>100	7.7	5	1.9	<0.74	<0.75
							2018/11/13	Cloudy	16.2	0.3	14.9	0.0	Light grayish yellow green	None	>100	10.4	1	0.5	<0.72	<0.80
							2019/1/18	Sunny	7.0	0.2	5.3	0.0	Light grayish greenish yellow	None	>100	11.8	<1	0.7	<0.86	<0.75
	47	Tonegawa River System	Watarase River Area	Tsurunda River	Lake Jomma	Tatebayashi City	2018/5/14	Sunny	21.4	1.0	19.9	0.0	Grayish yellow green	None	52	22.3	11	10	<0.75	<0.80
							2018/8/30	Sunny	28.1	0.8	27.5	0.0	Grayish yellow green	None	62	33.4	7	5.9	<0.77	<0.63
							2018/1/9	Cloudy	17.3	0.8	17.8	0.0	Grayish yellow green	None	35	42.4	9	8.7	<0.70	<0.84
							2019/1/18	Sunny	6.0	0.6	7.1	0.0	Grayish yellow green	None	25	54.1	22	15	<0.55	<0.80
	48	Tonegawa River System	Watarase River Area	Yatagawa River	Togoda Bridge	Meiwa Town /Itakura Town	2018/5/14	Sunny	19.1	1.2	18.1	0.0	Grayish yellow green	None	58	26.7	28	11	<0.80	<0.69
							2018/8/30	Sunny	28.3	1.2	26.5	0.0	Dark grayish yellow green	None	64	36.2	14	5.3	<0.71	<0.75
							2018/1/9	Cloudy	16.1	1.0	18.3	0.0	Grayish yellow green	None	81	60.4	9	5.1	<0.54	<0.84
							2019/1/18	Sunny	6.0	0.6	4.8	0.0	Dark grayish yellow green	None	>100	103	6	3.8	<0.58	<0.80







# Gunma River (Sediment) 3/5

No.	Location					Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Activity concentration [Bq/kg(dry)]			Remarks
	Water area	Location	Municipality	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					
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt				Clay								
R i v e r	Tonegawa River System	Karasu River Area	Usui River	Hanataka Bridge	Takasaki City	2018/5/16	Sunny	31.4	0.2	23.4	5	Dark brown	Faint sewage	0.0	1.0	1.2	4.4	53.7	30.8	4.7	4.3	73.7	2.762	Sand	<4.8	19	19			
						2018/8/28	Cloudy	28.2	0.1	26.0	5	Dark brown	Faint sewage	0.0	29.2	21.2	16.8	26.3	4.2	1.5	1.0	72.3	2.761	Sand/gravel	<5.9	12	12			
						2018/1/8	Sunny	17.0	1.0	16.3	3	Brownish gray	None	0.0	2.8	9.1	16.1	55.3	10.4	2.8	3.6	73.1	2.733	Sand/gravel	<5.2	15	15			
			21	Kabura River	Tadakawa Bridge	Shimonita Town	2019/1/23	Sunny	10.8	0.3	4.7	5	Olive black	None	0.0	9.9	6.0	8.7	49.7	20.2	2.0	3.5	76.9	2.913	Sand/gravel	<4.0	12	12		
							2018/5/18	Cloudy	27.3	0.5	19.3	3	Brownish gray	None	0.0	21.9	36.4	31.6	9.2	0.1	0.0	0.8	84.2	2.692	Sand/gravel	<3.6	4.0	4.0		
							2018/8/21	Sunny	30.3	0.5	22.2	5	Brownish gray	None	0.0	13.6	29.2	41.5	14.4	0.2	0.0	1.1	78.5	2.657	Sand	<3.2	4.9	4.9		
							2018/1/8	Cloudy	16.2	0.4	14.7	5	Brownish gray	None	0.0	27.5	26.0	24.5	19.2	1.0	0.7	1.1	78.3	2.705	Sand/gravel	<3.5	5.1	5.1		
							2019/1/23	Sunny	5.7	0.4	3.1	6	Dark olive	None	0.0	24.4	34.1	25.8	13.1	0.9	0.1	1.6	83.2	2.709	Sand/gravel	<3.4	5.7	5.7		
							2018/5/16	Sunny	33.4	0.5	23.8	5	Grayish olive	Faint sewage	3.1	1.3	1.3	1.4	18.7	53.6	12.4	8.2	57.7	2.675	Silt/sand	<7.8	21	21		
			22	Kabungawa Bridge	Takasaki/Fujioka City	2018/8/22	Sunny	37.4	0.5	29.6	5	Brownish gray	None	0.0	13.6	9.9	4.5	12.0	29.0	20.2	10.8	63.3	2.592	Silt	16	180	196			
						2018/1/21	Sunny	17.0	0.2	12.7	5	Gray	None	0.0	12.5	10.6	9.4	18.2	31.3	11.3	6.7	64.3	2.686	Sand	<4.8	66	66			
						2019/1/16	Sunny	9.1	0.2	4.2	4	Grayish olive	None	0.0	17.3	17.6	9.8	19.2	28.4	3.2	4.5	77.6	2.686	Sand/gravel	<5.8	73	73			
			23	Ogawa River	Kinzan Bridge	Kanna Town	2018/5/17	Sunny	31.4	0.3	20.2	3	Brownish gray	None	0.0	18.3	34.1	26.3	15.8	2.6	0.8	2.0	85.5	2.734	Sand/gravel	<4.4	5.4	5.4		
							2018/8/21	Sunny	29.1	0.2	22.1	5	Brownish gray	None	0.0	0.5	5.0	28.9	52.2	6.5	2.5	4.6	75.3	2.699	Sand	<5.0	17	17		
							2018/1/8	Sunny	16.2	0.3	14.6	5	Brownish gray	None	0.0	33.5	30.7	23.5	10.0	0.2	0.2	1.9	83.4	2.714	Sand/gravel	<4.3	8.7	8.7		
			24	Namoku River	Ozawa Bridge	Nannoku Village	2019/1/23	Sunny	1.2	0.2	5.2	6	Grayish olive	None	0.0	26.9	28.4	27.9	12.3	1.1	0.9	2.6	77.8	2.766	Gravel/sand	<4.7	5.6	5.6		
							2018/5/17	Sunny	23.4	0.4	15.4	3	Brownish gray	None	0.0	21.7	27.3	17.2	25.7	5.9	0.6	1.5	79.8	2.742	Sand/gravel	<5.1	8.1	8.1		
							2018/8/21	Sunny	29.1	0.3	22.9	3	Brownish gray	None	0.0	25.9	18.3	13.3	29.9	10.0	1.2	1.3	75.7	2.718	Sand/gravel	<4.6	13	13		
							2018/1/8	Cloudy	14.4	0.2	13.2	5	Brownish gray	None	0.0	1.3	3.5	11.1	71.5	8.9	0.0	3.7	74.3	2.691	Sand	<5.4	11	11		
							2019/1/23	Sunny	2.1	0.2	1.8	6	Grayish olive	None	3.1	68.9	21.0	5.4	1.2	0.1	0.0	0.3	83.4	2.720	Gravel/sand	<4.8	5.4	5.4		
							2018/5/21	Cloudy	19.4	0.1	15.8	6	Blackish brown	None	0.0	37.5	22.8	11.6	22.7	2.9	1.1	1.4	76.1	2.999	Gravel/sand	<4.1	17	17		
			25	Someya River	Yakushi Bridge	Shinto Village	2018/8/28	Cloudy	25.4	0.1	23.6	5	Blackish brown	None	0.0	37.2	20.7	19.0	20.7	1.5	0.2	0.8	77.3	2.905	Gravel/sand	<4.7	12	12		
							2018/1/15	Sunny	14.5	0.2	12.3	5	Blackish brown	None	0.0	20.5	20.5	20.8	31.3	3.1	1.1	2.7	79.3	2.919	Sand/gravel	<3.7	10	10		
							2019/1/30	Sunny	5.0	0.2	3.6	5	Blackish brown	None	0.0	14.4	14.5	18.3	39.8	8.3	1.4	3.3	78.5	2.930	Sand/gravel	<4.8	14	14		
			26	Inogawa River	Kamakura Bridge	Takasaki City	2018/5/15	Sunny	24.2	0.3	18.1	5	Dull yellowish brown	None	0.0	37.3	20.4	12.0	25.5	3.6	0.1	1.2	79.3	2.905	Gravel/sand	<4.3	9.1	9.1		
							2018/8/28	Sunny	26.3	0.1	24.9	5	Dull yellowish brown	None	3.5	55.0	14.6	8.5	15.4	2.0	0.3	0.8	81.4	2.885	Gravel/sand	<3.9	6.6	6.6		
							2018/1/21	Sunny	12.0	0.1	11.6	5	Dark brown	None	2.4	46.0	12.9	8.2	22.4	6.2	0.5	1.4	80.1	2.941	Sand/gravel	<3.5	10	10		
			27	Karasu River	Iwakura Bridge	Takasaki City/Tamauzuna Town	2019/1/16	Sunny	8.6	0.1	7.9	5	Dull yellowish brown	None	2.8	53.1	15.8	6.5	14.7	5.7	0.3	1.1	76.6	2.882	Gravel/sand	<2.6	5.2	5.2		
							2018/5/15	Sunny	25.1	0.3	22.0	4	Blackish brown	None	0.0	33.7	25.8	20.5	17.4	1.8	0.0	0.8	81.4	2.795	Gravel/sand	<3.2	4.5	4.5		
							2018/8/28	Cloudy	25.5	0.2	25.0	4	Blackish brown	None	23.5	21.9	10.1	10.2	22.7	8.2	1.6	1.7	77.9	2.796	Sand/gravel	<4.4	14	14		
			28	Kama River	Shinkaname Bridge	Ueno Village	2018/1/21	Sunny	13.0	0.2	13.9	5	Grayish yellowish brown	None	0.0	5.7	3.7	5.1	11.1	6.3	45.4	22.7	32.0	2.555	Silt	<18	130	130		
							2019/1/16	Sunny	8.8	0.2	8.1	5	Blackish brown	None	0.0	2.4	4.4	16.9	62.4	4.9	2.8	6.3	71.6	2.795	Sand/silt	<5.9	20	20		
2018/5/17	Sunny	25.1					0.5	11.1	5	Brownish gray	None	0.0	42.2	29.9	20.7	6.3	0.4	0.0	0.5	84.3	2.706	Sand/gravel	<3.0	4.2	4.2					
29	Morito Bridge	Kanna Town	2018/1/8	Cloudy	13.9	0.3	12.1	5	Brownish gray	None	0.0	7.6	13.3	26.1	48.2	2.5	0.1	2.3	78.8	2.706	Sand	<3.4	5.5	5.5						
			2018/5/17	Sunny	25.9	0.4	16.0	3	Brownish gray	None	0.0	0.0	0.3	15.2	70.3	12.0	0.2	2.0	74.9	2.705	Sand	<6.3	9.8	9.8						
			2018/1/8	Cloudy	13.9	0.4	12.4	3	Brownish gray	None	5.0	41.4	23.7	10.4	13.0	5.3	0.3	0.9	83.0	2.717	Gravel/sand	<0.44	2.8	2.8						
30	Tobukyo Bridge	Fujioka City/Kamisato Town	2018/5/15	Sunny	28.6	0.2	19.2	6	Olive black	None	2.3	32.5	27.1	19.9	14.1	3.4	0.0	0.8	86.2	2.720	Gravel/sand	<0.50	0.94	0.94						
			2018/1/21	Sunny	17.5	0.2	14.8	5	Olive black	None	0.0	33.6	39.3	20.3	4.2	1.4	0.3	0.8	84.1	2.729	Gravel/sand	<0.62	0.92	0.92						
			2018/5/15	Sunny	26.8	0.5	21.0	4	Dark olive	None	0.0	15.0	16.6	22.9	37.5	6.0	0.7	1.3	80.7	2.749	Sand/gravel	<2.8	4.0	4.0						
31	Kannagawa Bridge	Kamisato Town	2018/1/21	Sunny	14.5	0.3	13.5	5	Grayish olive	None	0.0	37.8	32.0	16.0	12.7	0.4	0.6	0.6	80.9	2.716	Sand/gravel	<0.50	2.4	2.4						
			2018/5/14	Sunny	25.4	0.5	17.5	5	Dark grayish yellow	None	0.0	32.2	23.7	16.2	23.4	3.3	0.0	1.3	79.4	2.805	Gravel/sand	<4.1	5.3	5.3						
			2018/8/16	Sunny	30.2	0.5	24.9	5	Dark olive	None	0.0	24.8	16.9	10.5	37.0	9.1	0.0	1.7	80.5	2.824	Sand/gravel	<3.0	3.2	3.2						
32	Tonegawa River Area	Tonegawa River	Bando-obashi Bridge	Honjo City	2018/1/9	Cloudy	16.2	0.5	16.8	5	Olive black	None	0.0	39.8	15.2	12.4	25.2	4.9	0.5	2.1	82.8	2.796	Sand/gravel	<4.2	5.1	5.1				
					2019/1/11	Sunny	10.7	0.5	6.4	5	Dark olive	None	11.1	41.7	10.4	7.5	21.2	6.4	0.4	1.4	80.7	2.812	Sand/gravel	<3.9	4.3	4.3				



# Gunma River (Sediment) 5/5

R i v e r s	Location					Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks
	No.	Water area		Location	Municipality					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	Total		
45	Kamon Bridge	Kiryu City	Kiryu River	2018/5/11	Sunny	18.7	0.6		14.4	3	Dull yellowish brown	None	0.0	2.1	4.8	7.8	49.4	31.5	1.9	2.6	74.2	2.943	Sand	<5.3	36	36	
				2018/8/27	Sunny	30.2	0.5	25.4	4	Dark brown	None	0.0	55.3	23.2	13.8	6.2	0.5	0.4	0.4	75.9	2.650	Gravel/sand	<5.6	46	46		
				2018/11/13	Sunny	14.7	0.3	13.0	3	Dull yellowish brown	None	4.4	21.1	19.1	21.6	28.8	2.9	1.1	1.0	78.1	2.873	Sand/gravel	<4.8	45	45		
				2019/1/7	Sunny	9.3	0.2	5.4	5	Dark brown	None	0.0	34.0	30.1	6.9	17.5	7.5	1.9	2.1	77.8	2.714	Sand/gravel	<5.1	41	41		
				2018/5/11	Sunny	26.3	0.4	18.9	3	Brownish gray	None	2.2	33.8	15.3	11.4	15.2	9.0	8.0	5.2	70.1	2.734	Gravel/sand	<4.5	13	13		
				2018/8/27	Sunny	37.2	0.3	27.4	4	Blackish brown	None	0.0	70.7	21.3	6.1	1.5	0.2	0.0	0.3	88.4	2.625	Gravel/sand	<5.6	7.9	7.9		
	46	Sakai Bridge	Kiryu City/Ashikaga City	Kiryu River	2018/11/13	Cloudy	16.2	0.3	14.7	3	Brownish gray	None	0.0	28.3	19.9	17.4	28.5	2.8	1.4	1.7	75.7	2.729	Sand/gravel	4.8	47	51.8	
					2019/1/18	Sunny	7.0	0.2	7.3	5	Blackish brown	None	3.0	23.7	28.6	24.7	16.7	1.7	0.0	1.7	80.5	2.764	Gravel/sand	<4.7	24	24	
					2018/5/14	Sunny	21.4	1.0	18.9	8	Olive black	Faint sewage	2.4	8.7	0.4	0.9	4.0	11.3	41.1	31.1	29.6	2.376	Silt	<19	91	91	
					2018/8/30	Sunny	28.1	0.8	25.7	10	Olive black	None	0.0	0.0	0.0	0.4	1.8	13.5	53.3	31.0	21.3	2.308	Silt	64	620	684	
					2018/11/9	Cloudy	17.3	0.8	18.3	10	Olive black	None	0.0	0.2	2.0	0.3	0.9	7.1	48.5	41.2	18.8	2.381	Silt	65	660	725	
					2019/1/18	Sunny	6.0	0.6	8.9	10	Olive black	None	0.0	0.3	0.4	0.3	2.3	10.5	41.9	44.3	21.4	2.377	Silt	51	590	641	
47	Lake Jonima	Tatebayashi City	Tsunoda River	2018/5/14	Sunny	19.1	1.2	18.8	6	Olive black	Faint sewage	0.0	0.0	0.0	0.3	35.3	41.1	10.7	12.7	48.2	2.719	Silt	<7.8	55	55		
				2018/8/30	Sunny	28.3	1.2	27.4	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.0	7.9	54.2	36.9	17.7	2.323	Silt	<27	130	130		
				2018/11/9	Cloudy	16.1	1.0	18.5	10	Olive black	None	0.0	0.0	0.0	2.1	22.8	21.6	31.4	22.1	32.8	2.616	Silt	<18	79	79		
				2019/1/18	Sunny	6.0	0.6	8.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.5	12.2	21.4	36.7	29.2	32.4	2.587	Silt	<18	90	90		
				2018/5/14	Sunny	19.1	1.2	18.8	6	Olive black	Faint sewage	0.0	0.0	0.0	0.3	35.3	41.1	10.7	12.7	48.2	2.719	Silt	<7.8	55	55		
				2018/8/30	Sunny	28.3	1.2	27.4	10	Olive black	Faint sewage	0.0	0.0	0.0	0.0	1.0	7.9	54.2	36.9	17.7	2.323	Silt	<27	130	130		
48	Togoda Bridge	Meiwa Town /Itakura Town	Yatagawa River	2018/11/9	Cloudy	16.1	1.0	18.5	10	Olive black	None	0.0	0.0	0.0	2.1	22.8	21.6	31.4	22.1	32.8	2.616	Silt	<18	79	79		
				2019/1/18	Sunny	6.0	0.6	8.0	10	Olive black	Faint sewage	0.0	0.0	0.0	0.5	12.2	21.4	36.7	29.2	32.4	2.587	Silt	<18	90	90		

# Gunma 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)				
										Radioactive cesium							Radioactive cesium								
Cs-134	Cs-137	Total	Cs-134	Cs-137	Total																				
R i v e r s	Tonegawa River System	Tonegawa River Area	Hirose Bridge	Minakami Town	2018/5/28	Sunny	23.1	Dull yellowish brown	Faint earth	Loamy	<6.2	72	72	0.09	Dull yellowish brown	Faint earth	Loamy	19	170	189	0.08				
					2018/8/2	Sunny	28.8	Dull yellow orange	None	Loamy	<5.0	46	46	0.09	Dull yellow orange	None	Loamy	14	160	174	0.07				
					2018/11/26	Sunny	10.2	Brown	Faint earth	Loamy	<8.2	51	51	0.07	Dark brown	Faint earth	Loamy	12	150	162	0.06				
					2019/1/8	Sunny	1.2	-	-	-	-	-	-	0.04	Dark brown	None	Loamy	17	180	197	0.04	(Left bank) Unable to collect samples due to snow on the ground			
					2018/5/21	Sunny	26.8	Blackish brown	Faint earth	Loamy	15	190	205	0.06	Blackish brown	Faint earth	Loamy	31	320	351	0.06				
					2018/6/13	Sunny	22.4	Blackish brown	Faint earth	Loamy	23	240	263	0.07	Blackish brown	Faint earth	Loamy	100	850	950	0.07				
					2018/7/10	Sunny	28.5	Blackish brown	Faint earth	Loamy	12	130	142	0.06	Blackish brown	Faint earth	Loamy	72	770	842	0.06				
					2018/8/23	Sunny	32.0	Grayish yellowish brown	Faint earth	Loamy	19	210	229	0.06	Dull yellowish brown	Faint earth	Loamy	56	660	716	0.05				
					2018/9/5	Sunny	27.2	Grayish yellowish brown	Faint earth	Loamy	22	220	242	0.06	Blackish brown	Faint earth	Loamy	58	600	658	0.06				
					2018/11/27	Sunny	10.8	Grayish yellowish brown	Faint earth	Loamy	19	190	209	0.07	Dark brown	Faint earth	Loamy	50	590	640	0.06				
			2	Tonegawa River	Tsukiyono Bridge	Minakami Town	2019/1/8	Sunny	6.8	Grayish yellowish brown	Faint earth	Loamy	19	180	199	0.06	Blackish brown	Faint earth	Loamy	94	990	1,084	0.06		
							2018/5/21	Sunny	26.2	Dark brown	Faint earth	Loamy	8.7	76	84.7	0.06	Blackish brown	Faint earth	Loamy	11	150	161	0.05		
							2018/8/23	Sunny	32.4	Blackish brown	Faint earth	Loamy	10	94	104	0.05	Grayish yellowish brown	Faint earth	Loamy	14	160	174	0.05		
							2018/11/27	Sunny	11.2	Dull yellowish brown	Faint earth	Loamy	<6.8	70	70	0.06	Dull yellowish brown	Faint earth	Loamy	20	180	200	0.06		
			3	Akaya River	Kosode Bridge	Minakami Town	2019/1/8	Sunny	5.8	Blackish brown	Faint earth	Loamy	13	140	153	0.04	Grayish yellowish brown	Faint earth	Loamy	10	120	130	0.04		
							2018/5/10	Sunny	10.4	Blackish brown	Faint earth	Loamy	62	720	782	0.06	Dark brown	Faint earth	Loamy	420	4,300	4,720	0.04		
							2018/6/13	Sunny	22.2	Blackish brown	Faint earth	Loamy	600	5,800	6,400	0.12	Blackish brown	Faint earth	Loamy	460	4,500	4,960	0.10		
							2018/7/10	Sunny	27.4	Blackish brown	Faint earth	Loamy	670	6,800	7,470	0.10	Blackish brown	Faint earth	Loamy	97	1,200	1,297	0.10		
			4	Sakura River	In Oozaya Yachi	Kawaba Village	2018/8/2	Sunny	32.2	Blackish brown	Faint earth	Loamy	180	2,100	2,280	0.09	Blackish brown	Faint earth	Loamy	76	860	936	0.09		
							2018/9/5	Sunny	26.2	Blackish brown	Faint earth	Loamy	270	3,100	3,370	0.10	Blackish brown	Faint earth	Loamy	98	1,100	1,198	0.09		
							2018/11/27	Sunny	13.2	Blackish brown	Faint earth	Loamy	100	1,100	1,200	0.09	Blackish brown	Faint earth	Loamy	79	1,000	1,079	0.09		
							2019/1/10	Sunny	-0.8	-	-	-	-	-	-	0.08	-	-	-	-	-	-	-	0.08	Unable to collect samples due to snow on the ground
							2018/5/30	Rain	16.7	Brown	Faint earth	Loamy	20	260	280	0.06	Dull yellowish brown	Faint earth	Loamy	96	940	1,036	0.06		
							2018/8/21	Cloudy	28.8	Dark brown	Faint earth	Loamy	12	92	104	0.05	Dark brown	Faint earth	Loamy	33	250	283	0.06		
							2018/11/16	Sunny	7.4	Dull yellowish brown	None	Loamy	13	140	153	0.06	Dark brown	None	Loamy	47	590	637	0.06		
							2019/1/10	Cloudy	1.2	-	-	-	-	-	-	0.04	-	-	-	-	-	-	-	0.04	Unable to collect samples due to snow on the ground
			5	Katashina River	Tonemachitakatoya	Numata City	2018/5/30	Cloudy	17.2	Grayish yellowish brown	Faint earth	Sandy	<6.7	9.7	9.7	0.06	Grayish yellowish brown	Faint earth	Loamy	<10	71	71	0.06		
							2018/6/13	Sunny	23.6	Grayish yellowish brown	None	Sandy	<5.1	6.7	6.7	0.05	Grayish yellowish brown	Faint earth	Loamy	<7.8	58	58	0.07		
2018/7/10	Sunny	28.8					Brownish gray	None	Sandy	<5.5	8.7	8.7	0.05	Blackish brown	Faint earth	Loamy	100	1,100	1,200	0.06	(Right bank) Collection point moved due to disappearance of access route				
2018/8/21	Sunny	30.8					Brownish gray	None	Sandy	<7.7	14	14	0.05	Blackish brown	Faint earth	Loamy	110	960	1,070	0.06					
2018/9/5	Sunny	28.8					Grayish yellow	None	Sandy	<9.7	7.9	7.9	0.05	Blackish brown	Faint earth	Loamy	84	800	884	0.06					
2018/11/16	Sunny	12.1					Brownish gray	None	Sandy	<8.5	17	17	0.05	Dull yellowish brown	None	Loamy	53	510	563	0.06					
2019/1/10	Cloudy	3.1					Dull yellowish brown	None	Sandy	<6.8	9.5	9.5	0.05	Dark brown	Faint earth	Loamy	120	1,600	1,720	0.06					
2018/5/21	Sunny	27.4					Dull yellowish brown	Faint earth	Loamy	66	560	626	0.05	Dark brown	Faint earth	Loamy	41	390	431	0.05					
2018/6/13	Sunny	26.5					Blackish brown	Faint earth	Loamy	91	830	921	0.05	Blackish brown	Faint earth	Loamy	36	320	356	0.06					
2018/7/10	Sunny	33.2					Blackish brown	Faint earth	Loamy	85	810	895	0.04	Blackish brown	Faint earth	Loamy	39	340	379	0.05					
6	Futae Bridge			2018/8/28	Cloudy	26.8	Blackish brown	Faint earth	Loamy	60	670	730	0.04	Blackish brown	None	Loamy	34	400	434	0.05					
				2018/9/10	Cloudy	28.2	Dark brown	Faint earth	Loamy	30	370	400	0.05	Dull yellow orange	None	Loamy	7.3	85	92.3	0.06					
				2018/11/17	Sunny	11.0	Dark brown	Faint earth	Loamy	49	610	659	0.04	Dark brown	Faint earth	Loamy	15	190	205	0.06					
				2019/1/10	Sunny	-1.2	Blackish brown	Faint earth	Loamy	53	570	623	0.05	Dull yellowish brown	None	Loamy	<8.0	80	80	0.05					
				2018/5/24	Sunny	25.0	Blackish brown	Faint earth	Loamy	34	380	414	0.04	Blackish brown	Faint earth	Loamy	15	180	195	0.04					
7	Agatsuma River	Shinto Bridge	Naganohara Town	2018/8/29	Cloudy	28.3	Blackish brown	Faint earth	Loamy	46	470	516	0.04	Blackish brown	Faint earth	Loamy	<6.2	31	31	0.05					
				2018/11/20	Sunny	10.7	Blackish brown	Faint earth	Loamy	50	610	660	0.04	Blackish brown	Faint earth	Loamy	20	230	250	0.04					
				2019/1/28	Sunny	5.6	Blackish brown	Faint earth	Loamy	53	520	573	0.04	Blackish brown	Faint earth	Loamy	11	120	131	0.04					
8	Shirasuna River	Shuttatsu Bridge	Nakanajo Town	2018/5/24	Sunny	24.7	Blackish brown	Faint earth	Loamy	7.0	63	70.0	0.04	Blackish brown	Faint earth	Loamy	42	440	482	0.04					
				2018/8/28	Sunny	25.5	Blackish brown	Faint earth	Loamy	320	3,700	4,020	0.05	Blackish brown	Faint earth	Loamy	210	2,200	2,410	0.04					
				2018/11/20	Sunny	11.2	Blackish brown	Faint earth	Loamy	31	320	351	0.04	Blackish brown	Faint earth	Loamy	59	680	739	0.04					
9				2019/1/28	Sunny	0.0	Blackish brown	Faint earth	Loamy	67	700	767	0.04	Blackish brown	Faint earth	Loamy	130	1,600	1,730	0.04					

# Gunma River (Surrounding Environment) 2/5

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)]			Air Dose (μSv/h)		
											Radioactive cesium							Radioactive cesium					
			Cs-134	Cs-137	Total				Cs-134	Cs-137	Total												
10	Agatsuma River	Downstream of Azuma Bridge	Higashi-Agatsuma Town	2018/5/22	Sunny	15.2	Grayish yellow	None	Sandy	<3.6	6.4	6.4	0.04	Blackish brown	Faint earth	Loamy	69	580	649	0.04			
				2018/6/7	Sunny	27.1	Grayish yellowish brown	None	Sandy	<4.9	7.6	7.6	0.04	Blackish brown	Faint earth	Loamy	38	380	418	0.05			
				2018/7/9	Sunny	31.4	Grayish yellowish brown	None	Sandy	<5.1	10	10	0.04	Blackish brown	Faint earth	Loamy	58	570	628	0.04			
				2018/8/23	Sunny	32.0	Grayish yellowish brown	None	Sandy	<5.8	6.3	6.3	0.04	Dark brown	Faint earth	Loamy	11	120	131	0.04			
				2018/9/10	Cloudy	26.0	Grayish yellowish brown	None	Sandy	<6.3	14	14	0.04	Dark brown	Faint earth	Loamy	17	190	207	0.05			
				2018/11/21	Sunny	9.8	Grayish yellowish brown	None	Sandy	<3.5	4.7	4.7	0.04	Dark brown	Faint earth	Loamy	54	550	604	0.04			
	11	Nakuta River	Tonoda Bridge	Takayama Village	2019/1/15	Cloudy	3.4	Dark grayish yellow	None	Sandy	<4.2	6.3	6.3	0.04	Dark brown	Faint earth	Loamy	20	250	270	0.04		
					2018/5/22	Sunny	26.5	Blackish brown	Faint earth	Loamy	28	300	328	0.04	Dark brown	Faint earth	Loamy	19	100	119	0.04		
					2018/8/23	Sunny	31.2	Dull yellowish brown	Faint earth	Loamy	31	270	301	0.04	Brown	Faint earth	Loamy	13	98	111	0.04		
	12	Agatsuma River	Agatsuma Bridge	Shibukawa City	2018/11/21	Sunny	11.2	Dull yellowish brown	Faint earth	Loamy	13	140	153	0.04	Brown	Faint earth	Loamy	15	150	165	0.04		
					2019/1/15	Cloudy	3.6	Dull yellowish brown	Faint earth	Loamy	10	140	150	0.04	Brown	Faint earth	Loamy	<10	120	120	0.04		
					2018/5/21	Sunny	27.6	Blackish brown	Faint earth	Loamy	54	470	524	0.04	Blackish brown	Faint earth	Loamy	58	600	658	0.04		
					2018/6/7	Sunny	29.4	Blackish brown	Faint earth	Loamy	40	520	560	0.04	Blackish brown	Faint earth	Loamy	70	730	800	0.04		
					2018/7/9	Sunny	32.5	Blackish brown	Faint earth	Loamy	100	1,100	1,200	0.04	Blackish brown	Faint earth	Loamy	110	1,100	1,210	0.04		
					2018/8/28	Cloudy	27.4	Blackish brown	Faint earth	Loamy	78	720	798	0.04	Blackish brown	None	Loamy	140	1,400	1,540	0.04		
		13	Tonegawa River	Taisho Bridge	Shibukawa City	2018/9/10	Rain	28.2	Dark brown	Faint earth	Loamy	31	380	411	0.04	Blackish brown	Faint earth	Loamy	120	1,300	1,420	0.04	
						2018/11/17	Sunny	14.2	Dark brown	Faint earth	Loamy	35	390	425	0.04	Blackish brown	Faint earth	Loamy	110	1,200	1,310	0.04	
						2019/1/15	Cloudy	3.8	Brown	Faint earth	Loamy	66	730	796	0.04	Blackish brown	Faint earth	Loamy	81	890	971	0.04	
						2018/5/21	Sunny	22.5	Dull yellowish brown	Faint earth	Loamy	26	370	396	0.04	Grayish yellowish brown	Faint earth	Loamy	60	550	610	0.04	
						2018/6/7	Sunny	30.2	Dull yellowish brown	None	Loamy	21	290	311	0.04	Dull yellow orange	Faint earth	Loamy	38	490	528	0.05	
						2018/7/9	Sunny	33.2	Dark brown	Faint earth	Loamy	35	380	415	0.04	Dark brown	Faint earth	Loamy	160	1,700	1,860	0.04	
	14	Takizawa River	Shintakizawa Bridge	Shubukawa City/Yoshioka Town	2018/8/28	Cloudy	27.4	Dark brown	None	Loamy	33	360	393	0.04	Blackish brown	Faint earth	Loamy	290	2,900	3,190	0.04		
					2018/9/10	Rain	27.5	Blackish brown	Faint earth	Loamy	43	470	513	0.04	Blackish brown	Faint earth	Loamy	280	3,000	3,280	0.04		
					2018/11/17	Sunny	15.5	Dull yellowish brown	Faint earth	Loamy	41	470	511	0.04	Dark brown	Faint earth	Loamy	250	3,000	3,250	0.04		
					2019/1/15	Cloudy	3.2	Dull yellowish brown	None	Loamy	44	560	604	0.04	Dull yellowish brown	None	Loamy	310	3,700	4,010	0.04		
					2018/5/21	Sunny	19.7	Dull yellowish brown	Faint earth	Loamy	6.6	74	80.6	0.04	Brown	Faint earth	Loamy	<8.9	68	68	0.04		
					2018/8/28	Cloudy	26.1	Dull yellowish brown	Faint earth	Loamy	20	180	200	0.04	Dull yellowish brown	Faint earth	Loamy	13	140	153	0.04		
	15	Tonegawa River	Gunma-ohashi Bridge	Maebashi City	2018/11/17	Sunny	18.5	Dull yellowish brown	Faint earth	Loamy	6.3	58	64.3	0.04	Dull yellowish brown	Faint earth	Loamy	11	130	141	0.04		
					2019/1/15	Cloudy	2.1	Dull yellowish brown	Faint earth	Loamy	20	240	260	0.04	Dull yellowish brown	Faint earth	Loamy	10	100	110	0.04		
					2018/5/19	Sunny	23.3	Dull yellowish brown	Faint earth	Loamy	<11	42	42	0.04	Dark brown	Faint earth	Loamy	23	260	283	0.04		
16			Fukushima Bridge	Tamamura Town	2018/8/6	Sunny	37.2	Light yellowish brown	Faint earth	Loamy	<14	44	44	0.04	Dull yellowish brown	None	Loamy	15	140	155	0.04		
					2018/11/8	Cloudy	17.8	Light yellowish brown	Faint earth	Loamy	<8.4	28	28	0.04	Dull yellowish brown	Faint earth	Loamy	<6.3	92	92	0.04		
					2019/1/24	Sunny	5.8	Dull yellowish brown	None	Loamy	<8.0	45	45	0.04	Dull yellowish brown	None	Loamy	<7.8	57	57	0.04		
17	Nagai River	Kamigonda Bridge	Takasaki City	2018/5/15	Sunny	22.2	Dark brown	Faint earth	Loamy	<7.2	37	37	0.05	Blackish brown	Faint earth	Loamy	<9.7	67	67	0.05			
				2018/8/6	Sunny	35.8	Dull yellow orange	Faint earth	Loamy	5.9	74	79.9	0.04	Dull yellow orange	None	Loamy	<6.9	68	68	0.04			
				2018/11/21	Sunny	11.2	Dull yellowish brown	Faint earth	Loamy	<5.9	60	60	0.04	Dark brown	None	Loamy	<9.0	53	53	0.04			
				2019/1/16	Sunny	7.8	Dull yellowish brown	Faint earth	Loamy	<7.8	46	46	0.04	Dull yellow orange	None	Loamy	<8.2	49	49	0.04			
				2018/5/25	Sunny	25.0	Blackish brown	Faint earth	Loamy	56	610	666	0.05	Blackish brown	Faint earth	Loamy	40	520	560	0.05			
				2018/8/28	Cloudy	25.3	Blackish brown	Faint earth	Loamy	30	360	390	0.05	Blackish brown	Faint earth	Loamy	54	620	674	0.05			
18	Karasu River	Karasugawa Bridge	Takasaki City	2018/11/9	Cloudy	14.3	Blackish brown	None	Loamy	85	960	1,045	0.04	Blackish brown	None	Loamy	64	630	694	0.05			
				2019/1/28	Sunny	9.6	Blackish brown	Faint earth	Loamy	82	960	1,042	0.05	Blackish brown	Faint earth	Loamy	55	620	675	0.05			
				2018/5/25	Sunny	26.1	Dull yellowish brown	Faint earth	Loamy	27	310	337	0.04	Brown	Faint earth	Loamy	48	540	588	0.05			
				2018/8/28	Cloudy	26.8	Blackish brown	Faint earth	Loamy	12	150	162	0.04	Dull yellowish brown	Faint earth	Loamy	19	210	229	0.05			
				2018/11/9	Cloudy	14.1	Blackish brown	None	Loamy	47	450	497	0.04	Blackish brown	None	Loamy	29	340	369	0.06			
				2019/1/28	Sunny	10.2	Blackish brown	Faint earth	Loamy	<7.2	22	22	0.04	Brown	Faint earth	Loamy	16	190	206	0.04			
19	Usui River	Nakase Bridge	Annaka City	2018/5/18	Cloudy	24.6	Dull yellow orange	None	Loamy	38	260	298	0.05	Blackish brown	None	Loamy	57	610	667	0.05			
				2018/8/21	Sunny	29.2	Dull yellowish brown	None	Loamy	31	340	371	0.05	Grayish yellowish brown	None	Loamy	27	270	297	0.06			
				2018/11/9	Cloudy	13.7	Brown	None	Loamy	28	290	318	0.05	Dull yellowish brown	None	Loamy	<5.7	50	50	0.06			
				2019/1/23	Sunny	6.8	Dark brown	None	Loamy	37	450	487	0.06	Brown	Faint earth	Loamy	7.7	94	101.7	0.06			

# Gunma River (Surrounding Environment) 3/5

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)				
										Radioactive cesium							Radioactive cesium							
			Cs-134	Cs-137	Total				Cs-134	Cs-137	Total													
R i v e r s	Tonegawa River System	Karasu River Area	Usui River	Hamataka Bridge	Takasaki City	2018/5/16	Sunny	31.4	Dark brown	Faint earth	Loamy	14	160	174	0.04	Dark brown	Faint earth	Loamy	30	230	260	0.04		
						2018/8/28	Cloudy	28.2	Dull yellowish brown	Faint earth	Loamy	<7.9	64	64	0.04	Dark brown	Faint earth	Loamy	29	270	299	0.04		
						2018/1/18	Sunny	17.0	Dark brown	None	Loamy	16	190	206	0.04	Blackish brown	None	Loamy	31	320	351	0.04		
			21	Kabura River	Tadakawa Bridge	Shimonita Town	2019/1/23	Sunny	10.8	Dull yellowish brown	None	Loamy	20	200	220	0.04	Dark brown	None	Loamy	20	220	240	0.04	
							2018/5/18	Cloudy	27.3	Dull yellowish brown	None	Loamy	28	290	318	0.05	Grayish yellowish brown	None	Sandy	<8.4	15	15	0.05	
							2018/8/21	Sunny	30.3	Dull yellowish brown	None	Loamy	17	140	157	0.05	Dull yellowish brown	None	Loamy	36	350	386	0.06	
							2018/1/18	Cloudy	16.2	Dull yellowish brown	None	Loamy	27	290	317	0.05	Grayish yellowish brown	None	Loamy	18	210	228	0.06	
							2019/1/23	Sunny	5.7	Dull yellowish brown	None	Loamy	20	230	250	0.05	Yellowish brown	None	Loamy	54	540	594	0.06	
			22	Kabura River	Kaburagawa Bridge	Takasaki City/Fujioka City	2018/5/16	Sunny	33.4	Dull yellowish brown	Faint earth	Loamy	9.1	99	108.1	0.04	Dark brown	Faint earth	Loamy	<6.6	41	41	0.04	
							2018/8/22	Sunny	37.4	Dull yellowish brown	None	Loamy	6.3	68	74.3	0.04	Brown	None	Loamy	<5.5	27	27	0.04	
							2018/11/21	Sunny	17.0	Dull yellowish brown	Faint earth	Loamy	14	150	164	0.04	Dull yellowish brown	Faint earth	Loamy	<8.5	20	20	0.04	
			23	Ogawa River	Kinzan Bridge	Karra Town	2019/1/16	Sunny	9.1	Dull yellowish brown	None	Loamy	9.5	95	104.5	0.04	Dull yellowish brown	None	Loamy	<7.2	51	51	0.04	
							2018/5/17	Sunny	31.4	Blackish brown	None	Loamy	<9.1	75	75	0.05	Dull yellowish brown	None	Loamy	38	290	328	0.05	
							2018/8/21	Sunny	29.1	Blackish brown	Faint earth	Loamy	<8.3	63	63	0.04	Blackish brown	Faint earth	Loamy	17	230	247	0.04	
			24	Nanmoku River	Ozawa Bridge	Nanmoku Village	2018/1/18	Sunny	16.2	Dark brown	None	Loamy	<7.1	61	61	0.04	Dark brown	None	Loamy	21	250	271	0.04	
							2019/1/23	Sunny	1.2	Brown	None	Loamy	<6.5	56	56	0.04	Dull yellowish brown	None	Loamy	22	260	282	0.04	
							2018/5/17	Sunny	23.4	Dull yellow orange	None	Loamy	38	390	428	0.04	Dark brown	None	Loamy	120	1300	1,420	0.05	
							2018/8/21	Sunny	29.1	Brown	None	Loamy	18	210	228	0.04	Dull yellowish brown	None	Loamy	43	490	533	0.05	
							2018/1/18	Cloudy	14.4	Dull yellowish brown	None	Loamy	18	220	238	0.04	Blackish brown	None	Loamy	23	260	283	0.05	
			25	Someya River	Yakushi Bridge	Shinto Village	2019/1/23	Sunny	2.1	Yellowish brown	None	Loamy	27	280	307	0.04	Grayish yellowish brown	Faint earth	Loamy	18	200	218	0.04	
2018/5/21	Cloudy	19.4					Dark brown	Faint earth	Loamy	9.8	110	119.8	0.04	Blackish brown	Faint earth	Loamy	<6.3	61	61	0.04				
2018/8/28	Cloudy	25.4					Blackish brown	Faint earth	Loamy	13	140	153	0.04	Blackish brown	Faint earth	Loamy	18	170	188	0.04				
2018/11/15	Sunny	14.5					Dull yellowish brown	None	Loamy	<7.8	65	65	0.04	Brown	None	Loamy	<5.3	32	32	0.04				
2019/1/30	Sunny	5.0					Grayish yellowish brown	None	Loamy	14	140	154	0.04	Dull yellowish brown	None	Loamy	6.8	80	86.8	0.04				
26	Inogawa River	Kamakura Bridge	Takasaki City	2018/5/15	Sunny	24.2	Dark brown	Faint earth	Loamy	<9.7	50	50	0.04	Blackish brown	Faint earth	Loamy	10	95	105	0.05				
				2018/8/28	Sunny	26.3	Dark brown	Faint earth	Loamy	<5.9	33	33	0.04	Blackish brown	Faint earth	Loamy	11	110	121	0.05				
				2018/11/21	Sunny	12.0	Grayish yellowish brown	Faint earth	Loamy	7.6	90	97.6	0.04	Blackish brown	Faint earth	Loamy	17	170	187	0.04				
27	Karasu River	Iwakura Bridge	Takasaki City/Tamamura Town	2019/1/16	Sunny	8.6	Dull yellow orange	None	Loamy	<5.2	31	31	0.04	Dark grayish yellow	None	Loamy	9.8	100	109.8	0.05				
				2018/5/15	Sunny	25.1	Dark brown	Faint earth	Loamy	8.1	86	94.1	0.04	Dark brown	Faint earth	Loamy	<6.3	39	39	0.04				
				2018/8/28	Cloudy	25.5	Brown	Faint earth	Loamy	<4.1	19	19	0.04	Dull yellowish brown	Faint earth	Loamy	11	140	151	0.04				
				2018/11/21	Sunny	13.0	Dull yellowish brown	None	Loamy	9.7	120	129.7	0.04	Brown	Faint earth	Loamy	12	110	122	0.04				
				2019/1/16	Sunny	8.8	Dark grayish yellow	None	Loamy	17	190	207	0.04	Dull yellowish brown	None	Loamy	<7.8	72	72	0.04				
28	Shinkaname Bridge	Ueno Village	2018/5/17	Sunny	25.1	Dull yellowish brown	None	Loamy	74	740	814	0.06	Blackish brown	None	Loamy	81	730	811	0.07					
			2018/1/18	Cloudy	13.9	Dull yellowish brown	None	Loamy	28	330	358	0.06	Dull yellowish brown	None	Loamy	44	540	584	0.05					
29	Morito Bridge	Kanna Town	2018/5/17	Sunny	25.9	Grayish yellowish brown	None	Loamy	16	160	176	0.05	Brownish gray	None	Sandy	<6.5	12	12	0.05					
			2018/1/18	Cloudy	13.9	Dull yellowish brown	None	Loamy	19	200	219	0.05	Brownish gray	None	Sandy	<5.0	9.9	9.9	0.05					
30	Tobukyo Bridge	Fujioka City/Kamisato Town	2018/5/15	Sunny	28.6	Blackish brown	Faint earth	Loamy	24	200	224	0.05	Blackish brown	Faint earth	Loamy	10	95	105	0.05					
			2018/11/21	Sunny	17.5	Dark brown	Faint earth	Loamy	15	180	195	0.05	Olive black	Faint earth	Loamy	<8.9	80	80	0.04					
31	Kannagawa Bridge	Kamisato Town	2018/5/15	Sunny	26.8	Blackish brown	Faint earth	Loamy	10	56	66	0.04	Blackish brown	Faint earth	Loamy	<5.9	41	41	0.05					
			2018/11/21	Sunny	14.5	Brownish gray	None	Loamy	<0.90	1.2	1.2	0.04	Dull yellowish brown	Faint earth	Loamy	<9.6	69	69	0.04					
32	Tonegawa River Area	Tonegawa River	Bando-obashi Bridge	Honjo City	2018/5/14	Sunny	25.4	Dark brown	Faint earth	Loamy	<7.5	63	63	0.04	Dark brown	Faint earth	Loamy	<9.1	52	52	0.04			
					2018/8/16	Sunny	30.2	Brown	Faint earth	Loamy	7.6	70	77.6	0.04	Dark brown	Faint earth	Loamy	11	85	96	0.05			
					2018/11/9	Cloudy	16.2	Dull yellowish brown	Faint earth	Loamy	<8.6	75	75	0.04	Dark brown	Faint earth	Loamy	<7.6	41	41	0.04			
					2019/1/11	Sunny	10.7	Brown	Faint earth	Loamy	11	110	121	0.04	Dark brown	Faint earth	Loamy	<9.5	74	74	0.04			





# Gunma 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)]				Air Dose (μSv/h)
												Radioactive cesium							Radioactive cesium				
Cs-134	Cs-137	Total	Cs-134	Cs-137	Total																		
45	Tonegawa River System	Watarase River Area	Kiryu River	Kannon Bridge	Kiryu City	2018/5/11	Sunny	18.7	Grayish yellowish brown	None	Loamy	18	200	218	0.04	Blackish brown	None	Loamy	<7.8	17	17	0.04	
						2018/8/27	Sunny	30.2	Blackish brown	Faint earth	Loamy	16	190	206	0.05	Grayish yellowish brown	Faint earth	Loamy	<11	67	67	0.04	
						2018/11/13	Sunny	14.7	Blackish brown	None	Loamy	12	140	152	0.05	Blackish brown	None	Loamy	<10	10	10	0.05	
				2019/1/7	Sunny	9.5	Blackish brown	Faint earth	Loamy	21	210	231	0.05	Dark brown	Faint earth	Loamy	<11	21	21	0.05			
				2018/5/11	Sunny	26.3	Dull yellowish brown	None	Loamy	<7.1	24	24	0.05	Brown	None	Loamy	<7.4	76	76	0.04			
				2018/8/27	Sunny	37.2	Dull yellowish brown	Faint earth	Loamy	<7.9	16	16	0.04	Dull yellowish brown	Faint earth	Loamy	<7.0	61	61	0.04			
	46	Tonegawa River System	Watarase River Area	Kiryu River	Sakai Bridge	Kiryu City/Ashikaga City	2018/11/13	Cloudy	16.2	Brown	None	Loamy	<5.8	34	34	0.04	Dull yellowish brown	None	Loamy	<5.6	33	33	0.04
							2019/1/18	Sunny	7.0	Brown	None	Loamy	<6.1	46	46	0.04	Brownish gray	None	Loamy	<5.2	11	11	0.05
							2018/5/14	Sunny	21.4	Dark brown	Faint earth	Loamy	14	140	154	0.04	Blackish brown	Faint earth	Loamy	18	150	168	0.04
					2018/8/30	Sunny	28.1	Dark brown	Faint earth	Loamy	9.5	110	119.5	0.04	Dark brown	Faint earth	Loamy	15	160	175	0.04		
					2018/1/18	Sunny	6.0	Dark brown	None	Loamy	28	280	308	0.04	Dark brown	None	Loamy	33	320	353	0.04		
					2018/5/14	Sunny	19.1	Blackish brown	Faint earth	Loamy	<5.9	72	72	0.04	Dark brown	Faint earth	Loamy	<9.7	57	57	0.04		
47	Tonegawa River System	Watarase River Area	Tsuruuda River	Lake Jomama	Tatebayashi City	2018/8/30	Sunny	28.3	Blackish brown	Faint earth	Loamy	9.1	100	109.1	0.04	Dark brown	Faint earth	Loamy	9.5	120	129.5	0.04	
						2018/11/9	Cloudy	17.3	Dull yellowish brown	Faint earth	Loamy	<8.6	120	120	0.04	Blackish brown	Faint earth	Loamy	38	440	478	0.04	
						2018/5/14	Sunny	6.0	Dark brown	None	Loamy	28	280	308	0.04	Dark brown	None	Loamy	33	320	353	0.04	
						2018/5/14	Sunny	19.1	Blackish brown	Faint earth	Loamy	<5.9	72	72	0.04	Dark brown	Faint earth	Loamy	<9.7	57	57	0.04	
48	Tonegawa River System	Watarase River Area	Yatagawa River	Togoda Bridge	Meiwa Town /Itakura Town	2018/8/30	Sunny	28.3	Blackish brown	Faint earth	Loamy	9.1	100	109.1	0.04	Dark brown	Faint earth	Loamy	9.5	120	129.5	0.04	
						2018/11/9	Cloudy	16.1	Dull yellowish brown	Faint earth	Loamy	<10	64	64	0.04	Dull yellowish brown	Faint earth	Loamy	<8.6	58	58	0.05	
						2019/1/18	Sunny	6.0	Brownish gray	None	Sandy	12	140	152	0.04	Dark brown	None	Loamy	<9.1	79	79	0.04	



Gunma Lakes and Reservoirs (Water) 2/4

No.	Water area	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water								Remarks					
		Location	Municipality	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				
55	Lake Akaya (Aimata Dam)	Center	Minakami Town	Surface layer	2018/5/28	Cloudy	17.2	46.4	18.0	0.5	Grayish yellow green	None	13.4	7.2	1	0.9	<0.61	<0.63				
				Deep layer					7.1										45.4	-	None	5.3
				Surface layer	2018/8/2	Sunny	27.8	26.5	27.5	0.5	Light grayish yellow green	None	1.9	10.4	2	2.5	<0.49	<0.48				
				Deep layer					8.9										25.5	-	None	5.7
				Surface layer	2018/10/16	Cloudy	14.2	47.0	16.8	0.5	Grayish yellow green	None	2.4	6.5	2	1.5	<0.76	<0.84				
				Deep layer					8.8										46.0	-	None	7.6
				Surface layer	2018/12/3	Cloudy	8.2	37.8	11.5	0.5	Light grayish yellow green	None	3.8	7.7	2	1.9	<0.61	<0.75				
				Deep layer					8.6										36.8	-	None	8.6
				56	Tonegawa River Area	Center	Numata City	Surface layer	2018/5/11	Sunny	21.0	40.7	16.1	0.5	Dark grayish yellow green	None	3.5	6.6	<1	1.0	<0.68	<0.75
								Deep layer					10.2									
								Surface layer	2018/8/3	Sunny	31.4	24.9	24.5	0.5	Light grayish yellowish green	None	1.7	8.9	1	2.0	<0.65	<0.88
								Deep layer					20.0									
								Surface layer	2018/10/10	Cloudy	20.9	39.7	18.7	0.5	Yellowish gray	None	0.8	6.7	27	41	<0.68	<0.75
								Deep layer					13.9									
Surface layer	2018/12/4	Sunny	11.2					34.0	9.1	0.5	Light grayish yellow green	None	3.2	9.5	1	1.3	<0.69	<0.66				
Deep layer									8.2										33.0	-	None	11.0
57	Lake Akagionuma	Center	Maebashi City					Surface layer	2018/5/11	Sunny	13.8	17.5	12.8	0.5	Grayish greenish yellow	None	3.5	4.7	1	1.5	<0.72	<0.75
								Deep layer					7.5									
				Surface layer	2018/8/2	Cloudy	26.3	16.4	24.8	0.5	Dark grayish yellow green	None	4.0	4.8	1	1.6	<0.61	<0.61				
				Deep layer					10.0										15.4	-	Faint rottenness	6.7
				Surface layer	2018/10/3	Sunny	15.2	17.0	16.8	0.5	Grayish yellow green	None	3.4	4.5	2	2.0	<0.85	<0.75				
				Deep layer					10.4										16.0	-	Faint hydrogen sulfide	7.8
				Surface layer	2018/11/14	Sunny	7.7	15.5	11.0	0.5	Grayish yellow green	None	4.5	4.7	2	2.0	<0.58	<0.84				
				Deep layer					10.3										14.5	-	None	4.9
				58	Lake Okushima (Shimagawa Dam)	Center	Nakanajo Town	Surface layer	2018/5/25	Sunny	23.2	45.2	13.9	0.5	Light grayish blue green	None	15.3	9.4	1	0.9	<0.66	<0.80
								Deep layer					5.5									
Surface layer	2018/8/23	Sunny	24.6					31.2	20.1	0.5	Light grayish blue green	None	6.0	9.2	<1	0.9	<0.80	<0.69				
Deep layer									7.5										30.2	-	None	12.0
Surface layer	2018/10/5	Cloudy	16.7					31.0	15.4	0.5	Dark grayish bluish green	None	3.8	5.9	1	1.3	<0.70	<0.63				
Deep layer									7.6										30.0	-	None	13.2
Surface layer	2018/12/7	Sunny	10.0					45.0	8.6	0.5	Light grayish blue green	None	15.0	12.5	2	0.9	<0.88	<0.63				
Deep layer									8.0										44.0	-	None	12.4
Surface layer	2018/5/22	Sunny	17.3					7.6	14.4	0.5	Dark grayish bluish green	None	5.5	14.3	<1	1.1	<0.50	<0.74				
Deep layer									13.0										6.6	-	None	14.9
Surface layer	2018/8/23	Sunny	29.3	7.1	22.2	0.5	Dark grayish bluish green	None	3.0	16.4	3	1.5	<0.65	<0.96								
Deep layer					19.4										6.1	-	None	16.2	2	1.3	<0.54	<0.80
Surface layer	2018/10/5	Cloudy	17.8	8.5	15.2	0.5	Dark grayish bluish green	None	2.8	9.2	1	0.8	<0.79	<0.75								
Deep layer					14.7										7.5	-	None	9.6	1	0.9	<0.68	<0.84
Surface layer	2018/12/7	Cloudy	12.5	7.5	10.9	0.5	Light grayish blue green	None	4.0	31.1	1	0.8	<0.76	<0.80								
Deep layer					10.1										6.5	-	None	26.0	3	1.3	<0.83	<0.66
60	Lake Tashiro (Kazawa Dam)	Center	Tsumagoi Village	Surface layer	2018/5/24	Sunny	20.6	1.9	15.9	0.5	Dark grayish greenish yellow	None	1.4	8.2	4	3.0	<0.65	<0.84				
				Deep layer					-										-	-	-	-
				Surface layer	2018/8/29	Sunny	22.5	1.5	22.0	0.5	Dark grayish greenish yellow	None	0.9	8.4	8	4.5	<0.71	<0.54				
				Deep layer					-										-	-	-	-
				Surface layer	2018/10/4	Cloudy	16.3	3.0	15.9	0.5	Dark grayish greenish yellow	None	1.3	8.5	3	3.0	<0.70	<0.69				
				Deep layer					14.3										2.0	-	None	8.9
				Surface layer	2018/11/20	Sunny	5.8	2.5	7.8	0.5	Grayish greenish yellow	None	1.6	9.3	4	2.9	<0.59	<0.84				
Deep layer	7.8	1.5	-	None					9.2										4	3.1	<0.69	<0.69

Gunma Lakes and Reservoirs (Water)3/4

No.	Water area	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water								Remarks			
		Location	Municipality	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		
61	Lake Haruna	Center	Takasaki City	Surface layer	2018/5/16	Sunny	25.2	14.5	18.0	0.5	Grayish yellow green	None	2.5	8.9	1	1.2	<0.62	<0.75		
				Deep layer																
				Surface layer	2018/8/28	Cloudy	20.4	14.2	24.0	0.5	Grayish yellow green	None	4.8	9.2	2	2.1	<0.75	<0.75		
				Deep layer																
				Surface layer	2018/10/5	Cloudy	14.2	14.5	8.9	13.2	-	None	5.6	10.5	4	6.2	<0.62	<0.75		
				Deep layer																
				Surface layer	2018/11/15	Sunny	10.3	14.8	17.7	0.5	Dark grayish yellow green	None	3.2	9.1	<1	0.7	<0.61	<0.80		
62	Lake Kirizumi (Kirizumi Dam)	Center	Annaka City	Surface layer	2018/5/18	Cloudy	21.7	23.0	11.2	13.5	-	None	5.2	10.6	<1	0.4	<0.65	<0.69		
				Deep layer																
				Surface layer	2018/8/21	Sunny	25.7	13.5	20.3	0.5	Dark grayish yellow green	None	3.7	9.5	1	1.6	<0.80	<0.96		
				Deep layer																
				Surface layer	2018/10/12	Cloudy	15.2	13.3	13.9	12.5	-	None	2.7	12.1	13	5.4	<0.66	<0.63		
				Deep layer																
				Surface layer	2018/12/14	Sunny	4.0	6.5	15.7	0.5	Dark grayish yellow green	None	0.8	9.1	<1	1.4	<0.76	<0.88		
63	Lake Usuiiko (Sakamoto Dam)	Center	Annaka City	Surface layer	2018/5/18	Cloudy	21.2	13.0	18.6	0.5	Dark grayish yellow green	None	4.7	10.6	<1	0.4	<0.65	<0.69		
				Deep layer																
				Surface layer	2018/8/21	Sunny	26.2	12.0	10.5	22.0	-	None	3.7	11.1	3	2.1	<0.68	<0.75		
				Deep layer																
				Surface layer	2018/10/12	Cloudy	15.1	12.0	20.1	0.5	Grayish yellow green	None	2.2	9.9	<1	0.9	<0.82	<0.75		
				Deep layer																
				Surface layer	2018/12/14	Sunny	3.7	12.0	11.2	11.0	-	None	4.2	15.3	17	7.4	<0.68	<0.69		
64	Karasu River Area	Center	Shimonita Town	Surface layer	2018/5/18	Cloudy	25.5	33.0	15.9	0.5	Grayish yellow green	None	2.4	9.8	<1	1.4	<0.80	<0.89		
				Deep layer																
				Surface layer	2018/8/21	Sunny	28.3	23.0	11.0	11.0	-	Faint hydrogen sulfide	2.7	14.5	3	4.3	<0.72	<0.75		
				Deep layer																
				Surface layer	2018/10/12	Sunny	19.8	20.0	6.9	0.5	Light grayish yellow green	None	2.4	12.4	2	3.6	<0.73	<0.70		
				Deep layer																
				Surface layer	2018/12/14	Sunny	6.9	25.0	6.7	11.0	-	None	2.7	12.4	2	3.6	<0.86	<0.55		
65	Lake Oshio (Oshio Dam)	Center	Tomioka City	Surface layer	2018/5/17	Sunny	30.7	18.0	20.2	0.5	Dark grayish yellow green	None	2.7	23.2	<1	0.7	<0.73	<0.80		
				Deep layer																
				Surface layer	2018/8/22	Sunny	34.5	13.0	6.1	32.0	-	None	2.7	29.1	2	2.4	<0.63	<0.80		
				Deep layer																
				Surface layer	2018/10/11	Cloudy	20.2	16.0	23.7	0.5	Grayish yellow green	None	2.9	16.3	2	1.8	<0.68	<0.63		
				Deep layer																
				Surface layer	2018/12/13	Sunny	5.1	18.0	17.2	22.0	-	None	2.4	22.4	34	31	<0.68	<0.96		
66	Lake Kanna (Shimokubo Dam)	Center	Fujioka City/ Kamikawa Town	Surface layer	2018/5/17	Sunny	27.7	92.0	17.7	0.5	Grayish yellow green	None	2.9	19.3	2	2.7	<0.78	<0.80		
				Deep layer																
				Surface layer	2018/8/22	Sunny	30.4	55.0	10.2	0.5	Light grayish greenish yellow	None	2.4	17.9	4	4.9	<0.72	<0.69		
				Deep layer																
				Surface layer	2018/10/11	Cloudy	19.9	92.0	10.0	24.0	-	None	2.4	29.9	3	2.8	<0.59	<0.69		
				Deep layer																
				Surface layer	2018/12/13	Sunny	7.3	95.0	19.5	0.5	Dark grayish yellow green	None	4.2	19.2	<1	0.9	<0.59	<0.75		
67	Lake Hebikami (Shiozawa Dam)	Center	Kanna Town	Surface layer	2018/5/17	Cloudy	26.1	15.0	25.4	0.5	Grayish yellow green	None	3.7	21.9	2	2.3	<0.78	<0.88		
				Deep layer																
				Surface layer	2018/8/22	Sunny	31.3	7.5	22.7	12.0	-	None	2.7	15.3	3	1.9	<0.84	<0.80		
				Deep layer																
				Surface layer	2018/10/11	Cloudy	18.6	7.5	25.4	0.5	Grayish yellow green	None	3.5	16.1	<1	0.7	<0.80	<0.88		
				Deep layer																
				Surface layer	2018/12/13	Sunny	7.2	14.5	18.7	15.0	-	None	3.7	15.0	3	1.9	<0.54	<0.69		







# Gunma Lakes and Reservoirs (Surrounding Environment) 1/3

No.	Water area	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										
L a k e s a n d R e s e r v o i r s	Tonegawa River Area	Lake Okutone (Yagisawa Dam)	Center	Minakami Town	2018/5/29	Sunny	20.8	Dull yellowish brown	Faint earth	Loamy	50	430	480	0.12	
					2018/8/3	Sunny	27.2	Brown	Faint earth	Loamy	61	680	741	0.11	
					2018/10/17	Cloudy	10.2	Brown	Faint earth	Loamy	16	150	166	0.09	
					2018/11/26	Cloudy	6.1	Brown	Faint earth	Loamy	18	180	198	0.11	
		2018/5/28	Sunny		24.7	Olive brown	Faint earth	Loamy	21	240	261	0.16			
		2018/8/2	Cloudy		28.0	Olive brown	None	Loamy	150	1,600	1,750	0.14			
		2018/10/16	Cloudy		17.0	Olive brown	Faint earth	Loamy	93	1,000	1,093	0.13			
		2018/11/26	Cloudy		9.0	Olive brown	None	Loamy	12	130	142	0.14			
		2018/5/29	Sunny		20.9	Dark brown	Faint earth	Loamy	55	700	755	0.13			
		2018/8/3	Sunny		28.2	Dull yellowish brown	Faint earth	Loamy	73	660	733	0.12			
		2018/10/17	Sunny		13.4	Dull yellowish brown	Faint earth	Loamy	59	720	779	0.11			
		2018/11/26	Cloudy		9.3	Dull yellowish brown	Faint earth	Loamy	20	190	210	0.12			
	52	Lake Marunuma (Marunuma Dam)	Center	Katashina Village	2018/5/30	Cloudy	13.8	Dull yellowish brown	Faint earth	Loamy	16	160	176	0.07	
					2018/8/21	Sunny	20.1	Olive brown	Faint earth	Loamy	15	150	165	0.08	
					2018/10/3	Sunny	16.3	Brownish gray	None	Sandy	<7.7	83	83	0.07	
					2018/11/14	Sunny	2.0	Blackish brown	None	Loamy	9.0	100	109.0	0.07	
					2018/5/28	Sunny	22.8	Dull yellowish brown	None	Loamy	28	360	388	0.06	
					2018/8/2	Sunny	28.2	Dark brown	Faint earth	Loamy	45	380	425	0.05	
	53	Lake Fujiwara (Fujiwara Dam)	Center	Minakami Town	2018/10/16	Cloudy	16.1	Dark brown	Faint earth	Loamy	63	720	783	0.04	
					2018/12/3	Cloudy	8.4	Brown	Faint earth	Loamy	64	730	794	0.05	
					2018/5/11	Sunny	9.1	Dull yellowish brown	Faint earth	Loamy	130	1,200	1,330	0.12	
					2018/8/3	Sunny	22.4	Dull yellowish brown	Faint earth	Loamy	110	1,200	1,310	0.11	
	54	Lake Tanbara (Tanbara Dam)	Center	Numata City	2018/10/10	Cloudy	19.2	Dark brown	Faint earth	Loamy	130	1,500	1,630	0.14	
					2018/11/16	Sunny	8.2	Brown	None	Loamy	34	420	454	0.11	
2018/5/28					Cloudy	17.2	Blackish brown	None	Loamy	59	780	839	0.06		
2018/8/2					Sunny	27.8	Dull yellowish brown	None	Loamy	62	700	762	0.06		
55	Lake Akaya (Aimata Dam)	Center	Minakami Town	2018/10/16	Cloudy	14.2	Blackish brown	Faint earth	Loamy	55	620	675	0.05		
				2018/12/3	Cloudy	8.2	Dull yellowish brown	None	Loamy	33	340	373	0.07		
				2018/5/11	Sunny	21.0	Blackish brown	Faint earth	Loamy	63	760	823	0.07		
				2018/8/3	Sunny	31.4	Blackish brown	Faint earth	Loamy	91	800	891	0.06		
56	Lake Sonohara (Sonohara Dam)	Center	Numata City	2018/10/10	Cloudy	20.9	Blackish brown	Faint earth	Loamy	54	530	584	0.07		
				2018/12/4	Sunny	11.2	Blackish brown	Faint earth	Loamy	<9.9	100	100	0.07		
				2018/5/11	Sunny	13.8	Dark brown	None	Loamy	35	380	415	0.05		
				2018/8/2	Cloudy	26.3	Dark brown	Faint earth	Loamy	56	520	576	0.04		
57	Lake Akagionuma	Center	Maebashi City	2018/10/3	Sunny	15.2	Grayish yellowish brown	None	Loamy	56	710	766	0.05		
				2018/11/14	Sunny	7.7	Dull yellowish brown	None	Loamy	39	460	499	0.04		

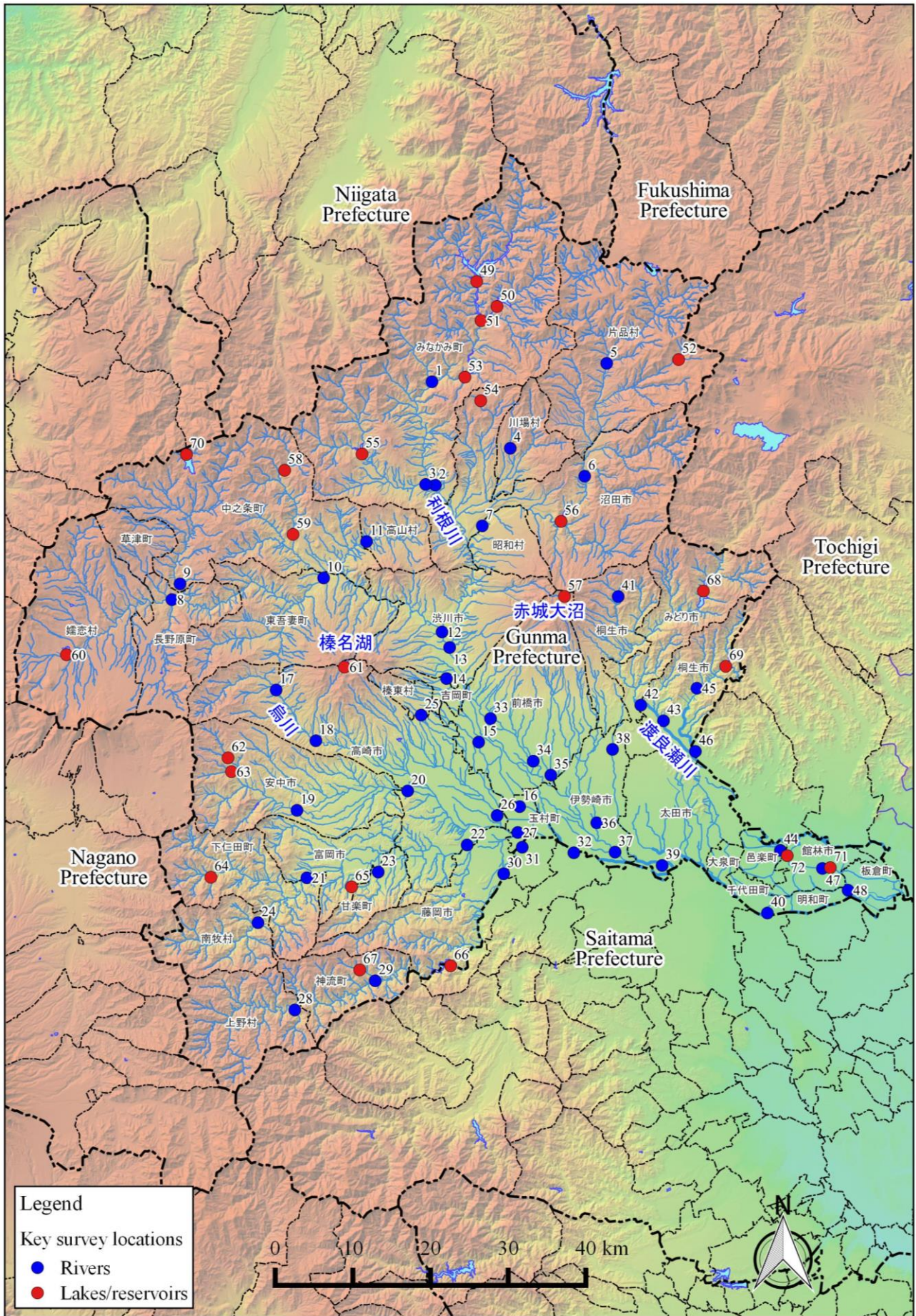


# Gunma Lakes and Reservoirs (Surrounding Environment) 2/3

No.	Water area	Location			Municipality	Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)						Remarks
									Soil			Air Dose (μSv/h)			
									General items						
									Color	Odor	Property		Activity concentration [Bq/kg(dry)]		
Radioactive cesium															
			Cs-134	Cs-137	Total										
L a k e s  a n d  R e s e r v o i r s	58	Agatsuma River Area	Lake Okushima (Shimagawa Dam)	Center	Nakanojo Town	2018/5/25	Sunny	23.2	Dark brown	Faint earth	Loamy	160	1,700	1,860	0.10
						2018/8/23	Sunny	24.6	Dull yellowish brown	Faint earth	Loamy	240	2,500	2,740	0.09
						2018/10/5	Cloudy	16.7	Blackish brown	Faint earth	Loamy	390	4,000	4,390	0.09
			2018/12/7	Sunny		10.0	Blackish brown	Faint earth	Loamy	450	5,500	5,950	0.09		
			2018/5/22	Sunny		17.3	Blackish brown	Faint earth	Loamy	60	530	590	0.06		
			2018/8/23	Sunny		29.3	Dark brown	Faint earth	Loamy	21	270	291	0.06		
	59	Lake Shimako (Nakanojo Dam)	Center	Tsumagoi Village	2018/10/5	Cloudy	17.8	Dark brown	Faint earth	Loamy	50	590	640	0.06	
					2018/12/7	Cloudy	12.5	Brown	Faint earth	Loamy	47	590	637	0.06	
					2018/5/24	Sunny	20.6	Blackish brown	Faint earth	Loamy	27	240	267	0.05	
	60	Lake Tashiro (Kazawa Dam)	Center	Tsumagoi Village	2018/8/29	Sunny	22.5	Dull yellowish brown	Faint earth	Loamy	36	430	466	0.05	
					2018/10/4	Cloudy	16.3	Dark brown	Faint earth	Loamy	44	500	544	0.05	
					2018/11/20	Sunny	5.8	Dark brown	Faint earth	Loamy	46	440	486	0.05	
61	Lake Haruna	Center	Takasaki City	2018/5/16	Sunny	25.2	Blackish brown	Faint earth	Loamy	190	1,900	2,090	0.10		
				2018/8/28	Cloudy	20.4	Blackish brown	Faint earth	Loamy	140	1,400	1,540	0.10		
				2018/10/5	Cloudy	14.2	Blackish brown	Faint earth	Loamy	180	2,200	2,380	0.10		
				2018/11/15	Sunny	10.3	Blackish brown	Faint earth	Loamy	120	1,300	1,420	0.09		
				2018/5/18	Cloudy	21.7	Brown	None	Loamy	150	1,600	1,750	0.05		
62	Lake Kirizumi (Kirizumi Dam)	Center	Annaka City	2018/8/21	Sunny	25.7	Brown	None	Loamy	62	710	772	0.05		
				2018/10/12	Cloudy	15.2	Brown	None	Loamy	61	710	771	0.04		
				2018/12/14	Sunny	4.0	Dull yellowish brown	None	Loamy	67	850	917	0.05		
				2018/5/18	Cloudy	21.2	Grayish yellowish brown	None	Loamy	42	440	482	0.05		
63	Lake Usaiko (Sakamoto Dam)	Center	Annaka City	2018/8/21	Sunny	26.2	Dark brown	None	Loamy	120	1,600	1,720	0.05		
				2018/10/12	Cloudy	15.1	Blackish brown	Faint earth	Loamy	56	550	606	0.05		
				2018/12/14	Sunny	3.7	Dark brown	None	Loamy	83	920	1,003	0.05		
64	Lake Arafune (Dodairagawa Dam)	Center	Shimonita Town	2018/5/18	Cloudy	25.5	Dull yellowish brown	None	Loamy	39	490	529	0.05		
				2018/8/21	Sunny	28.3	Grayish yellowish brown	None	Loamy	34	320	354	0.05		
				2018/10/12	Sunny	19.8	Grayish yellowish brown	None	Loamy	46	550	596	0.05		
				2018/12/14	Sunny	6.9	Dull yellowish brown	None	Loamy	15	170	185	0.04		
65	Lake Oshio (Oshio Dam)	Center	Tomioka City	2018/5/17	Sunny	30.7	Dull yellowish brown	None	Loamy	25	230	255	0.06		
				2018/8/22	Sunny	34.5	Dull yellowish brown	None	Loamy	45	480	525	0.05		
				2018/10/11	Cloudy	20.2	Dull yellowish brown	None	Loamy	48	550	598	0.06		
				2018/12/13	Sunny	5.1	Dark brown	None	Loamy	44	520	564	0.06		

# Gunma Lakes and Reservoirs (Surrounding Environment) 3/3

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)	Surrounding Environment(Soil,Air dose)						Remarks	
	No.	Water area	Location					Municipality	Soil			Air Dose (μSv/h)			
									General items						
									Color	Odor	Property		Activity concentration [Bq/kg(dry)]		
Radioactive cesium															
						Cs-134	Cs-137	Total							
66	Karasu River Area	Lake Kanna (Shimokubo Dam)	Center	Fujioka City/Kamikawa Town	2018/5/17	Sunny	27.7	Dark brown	None	Loamy	12	120	132	0.04	
					2018/8/22	Sunny	30.4	Blackish brown	None	Loamy	35	460	495	0.04	
					2018/10/11	Cloudy	19.9	Grayish yellowish brown	None	Loamy	7.5	94	101.5	0.04	
					2018/12/13	Sunny	7.3	Dark brown	None	Loamy	8.6	98	106.6	0.04	
	67	Lake Hebikami (Shiozawa Dam)	Center	Kanna Town	2018/5/17	Cloudy	26.1	Dull yellowish brown	None	Loamy	15	130	145	0.06	
					2018/8/22	Sunny	31.3	Dull yellowish brown	None	Loamy	18	220	238	0.05	
					2018/10/11	Cloudy	18.6	Dull yellowish brown	None	Loamy	9.8	120	129.8	0.05	
					2018/12/13	Sunny	7.2	Brownish gray	None	Loamy	8.9	96	104.9	0.05	
	68	Watarase River Area	Lake Kusaki (Kusaki Dam)	Center	Midori City	2018/5/10	Sunny	15.2	Blackish brown	Faint earth	Loamy	35	390	425	0.06
						2018/8/2	Sunny	29.2	Blackish brown	Faint earth	Loamy	64	740	804	0.06
						2018/10/5	Cloudy	17.1	Blackish brown	Faint earth	Loamy	84	900	984	0.06
						2018/12/3	Cloudy	10.7	Grayish yellowish brown	None	Loamy	63	740	803	0.06
69	Lake Umeda (Kiryugawa Dam)	Center	Kiryu City	2018/5/11	Sunny	14.2	Grayish yellowish brown	None	Loamy	12	130	142	0.05		
				2018/8/27	Sunny	28.4	Brown	Faint earth	Loamy	22	240	262	0.04		
				2018/10/5	Cloudy	25.3	Brown	Faint earth	Loamy	<9.5	95	95	0.04		
				2018/12/4	Sunny	15.8	Brown	Faint earth	Loamy	<12	14	14	0.05		
70	Nakatsu River Area	Lake Nozori (Nozori Dam)	Center	Nakanojo Town	2018/5/24	Sunny	13.5	Dull yellowish brown	Faint earth	Loamy	55	600	655	0.06	
					2018/8/29	Cloudy	20.2	Dull yellowish brown	Faint earth	Loamy	27	300	327	0.06	
					2018/10/4	Cloudy	13.6	Brown	Faint earth	Loamy	37	520	557	0.05	
					2018/11/20	Sunny	2.2	Dull yellowish brown	Faint earth	Loamy	27	340	367	0.04	
71	Watarase River Area	Lake Jonuma	Center	Tatebayashi City	2018/5/14	Sunny	22.6	Dull yellowish brown	Faint earth	Loamy	13	82	95	0.04	
					2018/8/30	Sunny	29.8	Blackish brown	Faint earth	Loamy	<8.5	59	59	0.04	
					2018/10/3	Sunny	24.2	Blackish brown	Faint earth	Loamy	12	140	152	0.04	
					2018/12/6	Cloudy	11.0	Brown	Faint earth	Loamy	40	430	470	0.04	
72	Lake Tataranuma	Center	Tatebayashi City	2018/5/16	Sunny	30.6	Dull yellowish brown	Faint earth	Loamy	<7.8	28	28	0.04		
				2018/8/30	Sunny	32.1	Dull yellowish brown	Faint earth	Loamy	<5.8	14	14	0.04		
				2018/10/3	Sunny	21.1	Dull yellowish brown	Faint earth	Loamy	<7.9	15	15	0.04		
				2018/12/6	Cloudy	11.2	Brown	None	Loamy	<6.6	63	63	0.05		



Survey Locations (Gunma Prefecture)