

## FY2017 Tokyo Metropolis Survey Results

[Outline of results]

### (1) Water

Rivers

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 - 19 Bq/kg (dry)

Cs-137: 36 - 180 Bq/kg (dry)

Coastal areas

Cs-134: ND - 37 Bq/kg (dry)

Cs-137: 43 - 270 Bq/kg (dry)

### (3) Surrounding Environment

#### (a) Soil

Rivers

Cs-134: 35 - 130 Bq/kg (dry)

Cs-137: 270 - 920 Bq/kg (dry)

#### (b) Ambient dose rate

Rivers

0.04 - 0.09  $\mu$ Sv/h

# Tokyo River (Water) 1/1

	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)	Cs-134	Cs-137	
Rivers	50	Arakawa River System	Arakawa River Lower Reaches	Kasai Bridge	Koto City/Edogawa City	2017/5/9	Cloudy	20.3	1.3	21.8	0.0	Light grayish yellow	None	27	726	18	12	<0.81	<0.84
						2017/8/10	Cloudy	25.6	1.7	27.2	0.0	Dark grayish greenish yellow	None	53	768	10	5.5	<0.72	<0.69
						2017/11/16	Sunny	13.8	1.5	14.4	0.0	Grayish greenish yellow	None	34	1,630	11	6.3	<0.68	<0.55
						2018/1/24	Sunny	6.0	1.8	9.9	0.0	Grayish yellow green	None	20	3,410	26	26	<0.76	<0.84
	51		Sumida River	Ryogoku Bridge	Chuo City/Sumida City	2017/5/9	Cloudy	22.8	3.1	19.5	0.0	Light grayish greenish yellow	None	44	1,810	9	3.3	<0.81	<0.69
						2017/8/10	Cloudy	28.0	1.7	27.9	0.0	Dark grayish yellow green	None	56	707	5	1.4	<0.59	<0.55
						2017/11/16	Sunny	15.4	2.5	17.0	0.0	Dark grayish yellow green	None	59	1,540	3	1.2	<0.60	<0.75
						2018/1/24	Sunny	8.5	2.9	10.3	0.0	Dark grayish yellow green	None	66	2,510	3	3.1	<0.78	<0.69

# Tokyo River (Sediment) 1/1

R i v e r s	Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																Remarks				
	No.	Water area	Location	Municipality					Sediment temperature (°C)	Sample length (cm)	Color	Odor	General items										Sediment content (%)	Density (g/cm <sup>3</sup> )		Property	Activity concentration [Bq/kg(dry)]		
													Grain size distribution(%)														Radioactive cesium		
													Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand	Silt	Clay	Cs-134	Cs-137					Total		
50	Arakawa River System	Arakawa River Lower Reaches	Kasai Bridge	Koto City/Edogawa City	2017/5/9	Cloudy	20.3	1.3	20.5	10	Olive black	None	0.0	0.0	0.0	0.2	0.3	0.7	82.4	16.4	37.0	2.608	Silt	<14	140	154			
					2017/8/10	Cloudy	25.6	1.7	28.1	6	Olive black	Faint sewage	0.0	1.2	6.0	2.0	5.2	5.3	56.6	23.6	38.8	2.582	Silt	19	170	189			
					2017/11/16	Sunny	13.8	1.5	14.0	6	Olive black	Faint sewage	0.4	11.6	2.9	3.1	3.9	3.7	50.1	24.2	36.5	2.654	Silt	19	180	199			
					2018/1/24	Sunny	6.0	1.8	10.3	10	Olive black	None	0.0	0.0	0.5	0.3	0.4	1.2	82.0	15.5	35.0	2.600	Silt	<16	110	110			
	51	Sumida River	Ryogoku Bridge	Chuo City/Sumida City	2017/5/9	Cloudy	22.8	3.1	20.2	5	Black	Faint sewage	0.0	0.0	0.0	2.7	24.1	46.2	15.1	11.9	61.8	2.704	Sand/silt	<6.6	36	36			
					2017/8/10	Cloudy	28.0	1.7	28.5	3	Black	Faint hydrogen sulfide	0.0	8.7	6.1	2.0	19.9	43.0	8.7	11.7	50.5	2.632	Silt/sand	6.0	38	44.0			
					2017/11/16	Sunny	15.4	2.5	17.4	7	Black	Medium hydrogen sulfide	0.0	1.0	0.7	1.5	15.6	44.1	22.5	14.8	43.5	2.676	Silt/sand	<10	80	80			
					2018/1/24	Sunny	8.3	2.9	11.3	8	Black	Medium hydrogen sulfide	0.0	0.8	1.1	1.8	7.5	24.1	49.6	15.3	37.5	2.575	Silt/sand	<13	100	100			

# Tokyo River (Surrounding Environment) 1/1

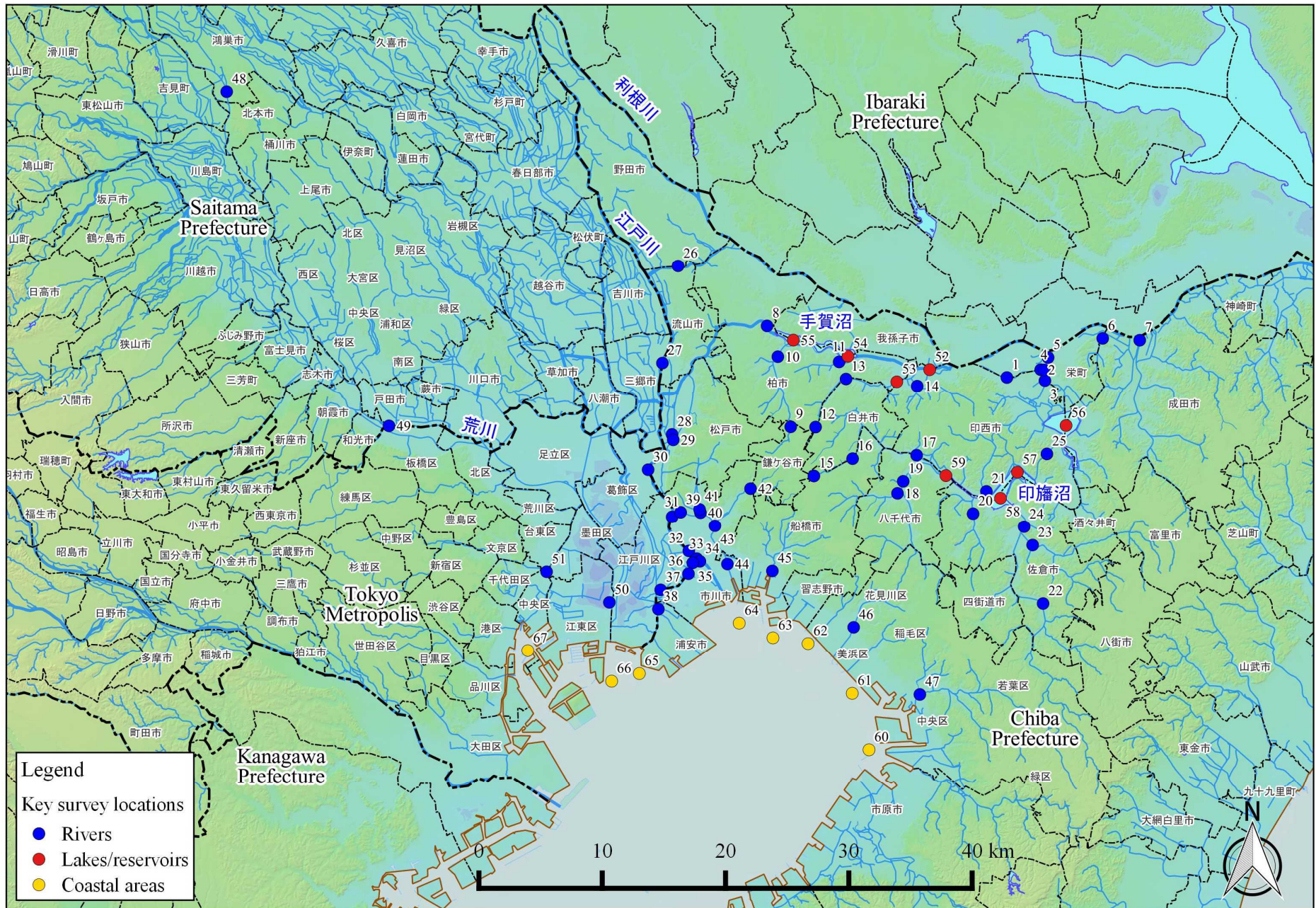
Location					Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)											Remarks						
								Left bank				Right bank													
No.	Water area		Location	Municipality				Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)	Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)				
											Radioactive cesium							Radioactive cesium							
											Cs-134	Cs-137	Total					Cs-134	Cs-137	Total					
R i v e r s	50	Arakawa River System	Arakawa River Lower Reaches	Kasai Bridge	Koto City/Edogawa City	2017/5/9	Cloudy	20.3	Grayish yellowish brown	Faint earth	Loamy	79	530	609	0.06	Grayish yellowish brown	Faint earth	Loamy	42	320	362	0.09			
						2017/8/10	Cloudy	25.6	Dull yellowish brown	Faint earth	Loamy	130	920	1,050	0.07	Dark brown	Faint earth	Loamy	37	330	367	0.09			
						2017/11/16	Sunny	13.8	Dark brown	Faint earth	Loamy	76	660	736	0.07	Dark brown	Faint earth	Loamy	38	270	308	0.08			
						2018/1/24	Sunny	6.0	Dark brown	Faint earth	Loamy	70	720	790	0.06	Dark brown	Faint earth	Loamy	35	360	395	0.07			
	51	Sumida River	Ryogoku Bridge	Chuo City /Sumida City	2017/5/9	Cloudy	22.8	-	-	-	-	-	-	0.05	-	-	-	-	-	-	-	0.04	Soil not exposed		
					2017/8/10	Cloudy	28.0	-	-	-	-	-	-	-	-	0.06	-	-	-	-	-	-	-	0.04	Soil not exposed
					2017/11/16	Sunny	15.4	-	-	-	-	-	-	-	-	0.07	-	-	-	-	-	-	-	0.05	Soil not exposed
					2018/1/24	Sunny	8.5	-	-	-	-	-	-	-	-	0.07	-	-	-	-	-	-	-	0.05	Soil not exposed

# Tokyo Coastal (Water) 1/1

No.	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
	Water area	General items								Activity concentration (Bq/L)								
		Water temperature (°C)	Sampling depth (m)					Color	Odor	Secchi disk depth (m)	Salinity (‰)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium				
Cs-134	Cs-137																	
65	Approx. 1 km offshore of Kyu-Edogawa River Estuary	Offshore of Kyu-Edogawa River Estuary	Surface layer	2017/5/25	Cloudy	23.7	5.0	21.7	0.5	Grayish greenish yellow	None	1.4	24.5	6	2.7	<0.98	<0.88	
			Deep layer					21.3	4.0	-	None		27.0	5	2.5	<0.74	<0.75	
			Surface layer	2017/6/12	Cloudy	23.2	4.6	22.1	0.5	Grayish yellow	None	1.4	25.3	9	5.4	<0.71	<0.80	
			Deep layer					21.2	3.6	-	None		28.0	5	2.8	<0.57	<0.75	
			Surface layer	2017/7/27	Cloudy	26.1	6.4	25.8	0.5	Grayish greenish yellow	None	1.2	12.2	22	12	<0.62	<0.69	
			Deep layer					26.4	5.4	-	None		26.6	6	3.7	<0.69	<0.75	
			Surface layer	2017/8/10	Cloudy	27.5	5.8	24.7	0.5	Light grayish yellow	None	0.2	7.6	290	150	<0.59	<0.75	
			Deep layer					27.7	4.8	-	None		25.6	63	28	<0.80	<0.69	
			Surface layer	2017/9/8	Sunny	25.8	5.4	24.6	0.5	Grayish yellow green	None	2.2	22.3	3	1.1	<0.88	<0.69	
			Deep layer					24.2	4.4	-	None		25.6	3	0.5	<0.71	<0.55	
			Surface layer	2017/11/27	Cloudy	13.8	6.5	14.5	0.5	Grayish yellow green	None	1.8	23.6	8	6.5	<0.76	<0.63	
			Deep layer					15.5	5.5	-	None		27.1	5	4.2	<0.78	<0.80	
			Surface layer	2018/2/5	Sunny	6.7	5.3	9.7	0.5	Dark grayish green	None	3.0	30.1	3	2.1	<0.66	<0.55	
			Deep layer					9.6	4.3	-	None		31.4	3	2.3	<0.63	<0.66	
			Surface layer	2017/5/25	Cloudy	23.5	5.0	21.9	0.5	Light grayish yellow	None	1.0	18.0	11	4.7	<0.63	<0.84	
			Deep layer					21.2	4.0	-	None		27.1	5	2.0	<0.63	<0.75	
			Surface layer	2017/6/12	Cloudy	22.5	4.4	22.0	0.5	Grayish greenish yellow	None	1.0	18.2	14	7.3	<0.91	<0.84	
			Deep layer					21.5	3.4	-	None		26.7	10	6.1	<0.67	<0.80	
Surface layer	2017/7/27	Cloudy	27.1	5.3	26.5	0.5	Grayish yellow green	None	1.6	15.5	5	3.0	<0.62	<0.63				
Deep layer					26.5	4.3	-	None		26.1	3	1.8	<0.68	<0.80				
Surface layer	2017/8/10	Cloudy	26.6	5.3	28.4	0.5	Grayish yellow green	None	1.1	9.5	7	4.4	<0.91	<0.88				
Deep layer					27.8	4.3	-	None		24.3	6	3.8	<0.75	<0.75				
Surface layer	2017/9/8	Sunny	25.8	4.5	24.7	0.5	Grayish yellow green	None	1.4	13.6	7	1.9	<0.82	<0.88				
Deep layer					23.6	3.5	-	None		25.1	4	0.9	<0.88	<0.88				
Surface layer	2017/11/27	Cloudy	13.5	5.3	14.7	0.5	Grayish yellow green	None	1.8	25.5	4	3.4	<0.92	<0.80				
Deep layer					15.0	4.3	-	None		27.5	23	13	<0.51	<0.84				
Surface layer	2018/2/5	Sunny	7.0	5.0	8.9	0.5	Grayish yellow green	None	1.5	22.2	6	4.8	<0.74	<0.80				
Deep layer					9.2	4.0	-	None		28.9	11	7.4	<0.70	<0.74				
Surface layer	2017/5/25	Cloudy	24.2	10.8	22.5	0.5	Light grayish yellow	None	1.4	20.1	3	1.8	<0.63	<0.99				
Deep layer					17.8	9.8	-	None		29.5	3	2.2	<0.70	<0.74				
Surface layer	2017/8/10	Cloudy	26.9	10.6	27.4	0.5	Dark grayish yellow green	None	2.2	17.3	1	1.3	<0.60	<0.61				
Deep layer					24.4	9.6	-	None		28.7	1	0.6	<0.60	<0.66				
Surface layer	2017/11/27	Cloudy	13.5	11.2	15.6	0.5	Dark grayish yellow green	None	4.0	25.0	1	0.8	<0.80	<0.88				
Deep layer					16.7	10.2	-	None		30.4	2	2.1	<0.68	<0.75				
Surface layer	2018/2/1	Rain	5.0	11.1	9.1	0.5	Dark grayish yellow green	None	3.3	28.6	2	1.9	<0.70	<0.98				
Deep layer					9.5	10.1	-	None		30.5	4	3.4	<0.94	<0.75				

# Tokyo Coastal (Sediment) 1/1

C o a s t a l  a r e a s	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																Remarks							
	No.	Water area						General items										Sediment content (%)			Density (g/cm <sup>3</sup> )	Property	Activity concentration [Bq/kg(dry)]								
								Sediment temperature (°C)	Sample length (cm)	Color	Odor	Grain size distribution(%)						Coarse gravel	Medium gravel	Fine gravel			Coarse sand		Medium sand	Fine sand	Silt	Clay	Cs-134	Radioactive cesium	
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand	Fine sand													Silt	Clay
65	Approx. 1 km offshore of Kyu-Edogawa River Estuary	Offshore of Kyu-Edogawa River Estuary	2017/5/25	Cloudy	23.7	5.0	20.7	6	Olive black	None	0.0	0.0	0.0	0.0	0.4	10.4	66.0	23.1	43.8	2.587	Silt	32	220	252							
			2017/6/12	Cloudy	23.2	4.6	21.6	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.3	2.7	76.2	20.8	37.4	2.581	Silt	37	270	307							
			2017/7/27	Cloudy	26.1	6.4	26.5	8	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.3	5.4	71.4	22.8	41.5	2.629	Silt	28	140	168							
			2017/8/10	Cloudy	27.5	5.8	25.7	5	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.3	3.5	69.1	27.1	36.3	2.537	Silt	23	240	263							
			2017/9/8	Sunny	25.8	5.4	21.8	10	Black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	4.8	75.0	20.1	38.3	2.570	Silt	21	170	191							
			2017/11/27	Cloudy	13.8	6.5	15.2	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	3.6	83.9	12.4	36.8	2.617	Silt	22	190	212							
			2018/2/5	Sunny	6.7	5.3	9.3	10	Olive black	None	0.0	0.0	0.0	0.1	0.3	6.3	74.1	19.3	39.5	2.537	Silt	17	140	157							
			2017/5/25	Cloudy	23.5	5.0	20.1	7	Olive black	None	0.0	0.0	0.0	0.1	0.3	0.9	72.0	26.7	42.6	2.608	Silt	25	150	175							
			2017/6/12	Cloudy	22.5	4.4	21.7	9	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	0.4	79.1	20.4	40.9	2.618	Silt	20	120	140							
			2017/7/27	Cloudy	27.1	5.3	26.9	4	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.2	0.7	69.9	29.2	42.4	2.661	Silt	13	140	153							
2017/8/10	Cloudy	26.6	5.3	25.2	6	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	0.4	76.7	22.8	42.3	2.574	Silt	20	160	180										
2017/9/8	Sunny	25.8	4.5	22.5	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.0	0.0	0.5	73.2	26.3	41.2	2.601	Silt	21	130	151										
2017/11/27	Cloudy	13.5	5.3	15.5	10	Olive black	Faint hydrogen sulfide	0.0	0.0	0.0	0.1	0.0	0.3	85.4	14.2	36.2	2.607	Silt	13	100	113										
2018/2/5	Sunny	7.0	5.0	9.2	7	Olive black	None	0.0	0.0	0.0	0.0	0.1	0.5	81.7	17.7	38.1	2.582	Silt	<14	100	100										
2017/5/25	Cloudy	24.2	10.8	16.8	10	Olive black	Medium hydrogen sulfide	0.0	0.0	0.0	0.1	0.4	1.6	76.2	21.7	24.4	2.601	Silt	4.3	45	49.3										
2017/8/10	Cloudy	26.9	10.6	25.0	10	Olive black	Medium hydrogen sulfide	0.0	0.0	0.0	0.3	0.4	2.6	72.3	24.4	25.7	2.578	Silt	5.7	43	48.7										
2017/11/27	Cloudy	13.5	11.2	18.0	10	Olive black	Medium hydrogen sulfide	0.0	0.0	0.0	0.0	0.1	0.9	56.7	42.3	21.0	2.581	Silt	<10	46	46										
2018/2/1	Rain	5.0	11.1	11.2	10	Olive black	Medium hydrogen sulfide	0.0	0.0	0.0	0.0	0.3	2.5	67.3	29.9	24.3	2.621	Silt	<22	62	62										



Survey Locations (Chiba,Saitama,Tokyo Prefectures)