

○Results of Radioactive Material Monitoring of Aquatic Organisms (Location C along the Uda River)

< Location C along the Uda River: Samples collected >

Locations	General items		Radioactive materials			
	Water	Sediment	Water(Cs)	Water(Sr)	Sediment(Cs)	Sediment(Sr)
C-1	○	○	○	-	○	-
C-2	○	○	○	-	○	-
C-3	○	-	○	-	-	-
C-4	○	○	○	○	○	○
C-5	○	○	○	-	○	-
C-6	○	○	○	-	○	-

< Location C along the Uda River: Site measurement item >

Locations	Latitude and longitude of the location		Survey date and time			Water	Sediment			Other		
	Scheduled latitude	Scheduled longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth(m)	Transparency(cm)
C-1	37.7953°	140.7459°	2015/8/19	8:24	8:33	20.7	20.4	Sand with sediment	2.5Y3/2	Roots a little	0.34	>50
C-2	37.7718°	140.7290°		9:10	9:22	21.1	19.1	Sediment with sand	2.5Y3/3	Plant	0.23	>50
C-3	37.7792°	140.8040°		10:18	-	21.6	-	-	-	-	0.29	>50
C-4	37.7687°	140.8443°		11:25	11:25	22.3	22.4	Sand	2.5Y4/4	Pebbles	0.19	>50
C-5	37.7646°	140.8603°		12:58	13:08	23.8	23.8	Sand with sediment	2.5Y4/2	Plant pieces a little	0.53	>50
C-6	37.7764°	140.8877°		13:48	13:56	22.8	22.6	Sand	2.5Y4/2	Plant pieces a little	0.40	>50

< Location C along the Uda River: General survey items/Analysis of radioactive materials Water >

Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electrical conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Scheduled latitude	Scheduled longitude	Date	Time (water)												
C-1	37.7953°	140.7459°	2015/8/19	8:24	7.6	<0.5	2.2	8.9	12.3	0.07	0.8	2	1.3	0.0099	0.041	-
C-2	37.7718°	140.7290°		9:10	7.6	0.5	5.2	8.6	11.5	0.06	2.8	3	3.1	0.014	0.057	-
C-3	37.7792°	140.8040°		10:18	7.7	0.8	4.4	8.7	10.0	0.06	2.0	5	4.6	0.032	0.13	-
C-4	37.7687°	140.8443°		11:12	7.8	<0.5	3.3	9.4	10.2	0.06	1.6	2	2.6	0.014	0.054	0.00078
C-5	37.7646°	140.8603°		12:58	7.9	0.6	3.1	9.0	10.7	0.06	1.5	2	2.4	0.011	0.040	-
C-6	37.7764°	140.8877°		13:48	7.9	0.6	3.0	9.1	12.2	0.07	1.5	1	1.5	0.0063	0.023	-

< Location C along the Uda River: General survey items/Analysis of radioactive materials Sediment >

Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential EN.H.E (mV)	Water content (%)	IL (%)	TOC (mg/g-dry)	Soil particle density (g/cm3)	Grain size distribution								Cs-134 (Bq/kg-dry)	Cs-137 (Bq/kg-dry)	Sr-90 (Bq/kg-dry)
	Scheduled latitude	Scheduled longitude	Date	Time (sediment)							Gravel (2-75mm) (%)	Coarse sand (0.85-2mm) (%)	Medium sand (0.25-0.85mm) (%)	Fine sand (0.075-0.25mm) (%)	Silt (0.005-0.0075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter	Maximum grain diameter			
C-1	37.7953°	140.7459°	2015/8/19	8:33	7.0	257	29.5	5.2	5.4	2.801	7.2	23.2	46.1	18.6	2.1	2.8	0.49	9.5	210	850	-
C-2	37.7718°	140.7290°		9:22	6.9	52	59.1	12.0	28.2	2.701	1.1	2.2	19.0	16.4	25.7	35.6	0.024	9.5	430	1600	-
C-4	37.7687°	140.8443°		11:25	7.2	281	12.9	1.4	2.2	2.740	47.2	30.9	19.2	2.1	0.3	0.3	1.9	19	130	510	0.36
C-5	37.7646°	140.8603°		13:08	7.0	175	22.9	2.2	4.5	2.724	25.0	25.2	29.5	8.7	4.9	6.7	0.86	19	180	680	-
C-6	37.7764°	140.8877°		13:56	7.2	230	19.7	2.3	2.2	2.751	15.3	25.7	48.2	8.9	0.6	1.3	4.8	0.69	63	230	-

< Location C along the Uda River: Analysis items Aquatic organisms >

Location	Sampling point	Latitude and longitude of the location		Sampling Date	Division	Class	Order	Family	Species name	English name	Population	Sample weight (kg-wet)	Note			Radioactive cesium(Bq/kg-wet)		Sr-90 (Bq/kg-wet)				
		Latitude	Longitude										Growth stage	Stomach contents	Measurement site	Cs-134	Cs-137					
C-6	-	37.7764°	140.8877°	2015/8/19	Phycophyta	-	-	-	-	Riverbed Deposits (include algae)	-	0.063	-	-	-	49	200	-				
					Arthropod	Insecta	Odonata	Corduliidae	<i>Macromia amphigena amphigena</i>	Macromia amphigena	31	0.011	Larva (dragonfly larv)	-	-	-	-	-	-	-	-	
					Arthropod	Insecta	Odonata	Gomphidae	<i>Nihonogomphus viridis</i>	Nihonogomphus viridis												
					Arthropod	Insecta	Odonata	Gomphidae	<i>Meligomphus viridicostus</i>	Onychogomphus viridicostus												
					Arthropod	Insecta	Odonata	Gomphidae	<i>Sieboldius albardae</i>	Sieboldius albardae												
					Arthropod	Insecta	Odonata	Gomphidae	-	Davidius												
					Arthropod	Insecta	Odonata	Gomphidae	<i>Asiagomphus melaenops</i>	Asiagomphus melaenops												
					Arthropod	Insecta	Trichoptera	Stenopsychidae	<i>Stenopsyche marmorata</i>	Stenopsyche marmorata	76	0.024	Larva	-	-	-	5.5	18	-			
					Arthropoda	Malacostraca	Decapoda	Abidae	<i>Paratya improvisa</i>	Freshwater shrimp	286	0.027	Imago	-	-	-	5.2	19	-			
					Arthropod	Malacostraca	Decapoda	Grapsidae	<i>Eriocheir japonica</i>	Japanese mitten crab	5	0.12	Imago	-	-	-	4.1	15	-			
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.041	Mature fish (2-year-old)	-	-	-	4.2	16	-			
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia temminckii</i>	Dark chub	57	0.39	Mature fish (3-year-old)	-	-	-	1.9	7.9	-			
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagoyae</i>	R. sp. CB	11	0.029	Mature fish	-	-	-	7.5	23	-			
									Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.20	-	-	-	4.8	19	-

*1: Organisms were collected in or around the targeted water areas.

*2: When multiple types of aquatic organisms were collected, a sample was prepared by mixing them.

*3: For a sample made of multiple types of aquatic organisms, the name of the dominant one largest in number is underlined.

*4: Basically, measurement was conducted for all organism samples. Viscera (stomach and bowels) were removed for the measurement when possible so that undigested food and sediments, etc. in the digestive system would be excluded.

*5: A statement in red in the "Growth stage" column shows the age assessed based on squama or otolith.

*6: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh).

*7: River bottom materials (incl. algae) are algae, etc. that were scratched off stones with a brush, etc. and may include very fine particles such as inorganic silt and clay.

*8: N.D. means to be below the detection limit and figures in parentheses show the detection limit.

*9: Activity concentrations include counting errors, but the details are omitted here.