

◀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°	2015/10/21	8:37	8:46	12.1	12.4	Sand with sediment	10YR3/3	None	0.31	>50	
C-2	37.7718°	140.7290°		9:27	9:35	11.1	11.5	Sediment with sand	2.5Y3/1	None	0.40	>50	
C-3	37.7792°	140.8040°		10:54	-	-	13.5	-	-	-	-	0.58	>50
C-4	37.7687°	140.8443°		11:42	7.1	-	14.7	14.8	Sand	2.5Y4/2	None	0.44	>50
C-5	37.7646°	140.8603°		13:51	7.2	-	15.1	15.0	Sand	2.5Y4/4	None	0.38	>50
C-6	37.7764°	140.8877°		14:36	7.2	-	14.4	14.2	Sand	2.5Y4/2	None	0.45	>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°	2015/10/21	8:37	6.9	<0.5	10.6	10.1	0.06	0.7	<1	1.2	0.0037	0.012	-	
C-2	37.7718°	140.7290°		9:27	7.0	<0.5	2.9	8.8	0.05	1.3	<1	1.2	0.0070	0.028	-	
C-3	37.7792°	140.8040°		10:54	7.1	<0.5	1.7	9.8	0.05	0.7	<1	0.8	0.0052	0.018	-	
C-4	37.7687°	140.8443°		11:42	7.1	<0.5	1.5	11.0	8.2	0.05	0.6	<1	0.2	0.0028	0.012	0.00093
C-5	37.7646°	140.8603°		13:51	7.2	<0.5	1.7	10.3	8.3	0.05	0.7	<1	0.3	0.0034	0.012	-
C-6	37.7764°	140.8877°		14:36	7.2	<0.5	1.7	10.6	9.1	0.05	0.8	<1	0.2	0.0025	0.0090	-

< 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/cm ³)	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°	2015/10/21	8:46	7.3	384	26.2	3.2	2.3	2.769	20.8	49.0	25.8	3.8	0.4	0.2	1.2	9.5	88	380	-
C-2	37.7718°	140.7290°		9:35	6.9	107	45.6	11.0	20.1	2.638	12.0	13.4	15.4	13.1	17.4	28.7	0.11	9.5	35	170	-
C-4	37.7687°	140.8443°		11:52	7.4	297	19.3	1.3	1.0	2.700	17.8	31.2	43.8	6.0	0.6	0.6	0.83	9.5	81	300	0.47
C-5	37.7646°	140.8603°		13:56	7.6	312	16.0	1.2	1.8	2.690	8.7	37.4	51.9	1.2	0.3	0.5	0.81	4.8	54	230	-
C-6	37.7764°	140.8877°		14:42	7.5	322	20.2	1.4	0.9	2.711	11.0	34.9	47.7	5.0	0.6	0.8	0.79	9.5	54	260	-

< 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 sit	Cs-134	Cs-137							
C-6	-	37.7764°	140.8877°	2015/10/22	Phycophyta	-	-	-	-	Riverbed Deposits (include algae)	-	0.031	-	-	52	180	-							
										Arthropod	Insecta	Megaloptera	Corydidae	<i>Protohermes grandis</i>	Protohermes grandis	24	0.0082	Larva	-	-	N.D.(4.5)	11	-	
										Arthropoda	Malacostraca	Decapoda	Atyidae	<i>Paratya improvisa</i>	Freshwater shrimp	197	0.047	Imago	-	-	7.9	19	-	
										Arthropod	Malacostraca	Decapoda	Grapsidae	<i>Eriocheir japonica</i>	Japanese mitten crab	31	0.087	Imago	-	-	5.1	30	-	
										Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Tribolodon hakonensis</i>	Japanese dace	5	0.019	Immature fish (1-year-old)	-	-	4.9	15	-	
										Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Oryzias latipes</i>	Zacco platypus	14	0.057	Immature fish/Mature fish (1-year-old)	-	-	3.9	17	-	
										Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	<i>Candidia tenuinotus</i>	Dark chub	13	0.077	Mature fish (2-year-old)	-	-	2.4	13	-	
										Vertebrata	Osteichthyes	Perciformes	Gobiidae	<i>Rhinogobius nagevayae</i>	R. sp. CB	48	0.14	Immature fish	-	-	4.7	19	-	
										Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.13	-	-	-	-	12	54	-

*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.