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

＜Location C along the Uda River: Samples collected＞

Items	General items		Radioactive materials			
Locations	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＞

Items	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
Locations	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°	2015/12/2	08:00	08:06	5.2	5.0	Sand	10YR4/3	None	0.35	>50
C-2	37.7718°	140.7290°		08:45	08:51	3.3	3.6	Sediment with sand	2.5Y3/2	None	0.36	>50
C-3	37.7792°	140.8040°		09:40	-	5.9	-	-	-	-	0.60	>50
C-4	37.7687°	140.8443°		10:20	10:32	6.7	6.7	Sand	2.5Y5/4	None	0.42	>50
C-5	37.7646°	140.8603°		12:12	12:17	7.3	7.4	Sand	2.5Y4/2	None	0.50	>50
C-6	37.7764°	140.8877°		12:57	13:03	7.0	7.1	Sand	2.5Y4/2	None	0.59	>50

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

Items	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)
Locations	Scheduled latitude	Scheduled longitude	Date	Time (water)												
C-1	37.7953°	140.7459°	2015/12/2	8:00	7.3	0.6	1.3	12.3	9.1	0.05	0.6	<1	0.4	0.0025	0.012	-
C-2	37.7718°	140.7290°		8:45	7.2	<0.5	2.7	12.4	8.2	0.05	1.2	<1	0.8	0.0053	0.022	-
C-3	37.7792°	140.8040°		9:40	7.5	0.6	1.8	12.0	8.5	0.05	0.8	2	1.3	0.0065	0.026	-
C-4	37.7687°	140.8443°		10:20	7.5	<0.5	1.5	12.5	8.1	0.05	0.6	<1	0.2	0.0023	0.0094	0.0013
C-5	37.7646°	140.8603°		12:12	7.6	<0.5	1.4	12.0	8.4	0.05	0.7	<1	0.3	0.0017	0.0082	-
C-6	37.7764°	140.8877°		12:57	7.6	<0.5	1.7	12.2	9.3	0.05	0.8	<1	0.3	0.0016	0.0060	-

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

Items	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)
Locations	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°	2015/12/2	8:06	6.9	301	31.3	3.8	3.8	2.692	26.7	37.5	21.1	8.2	2.8	3.7	1.2	4.8	94	410	-
C-2	37.7718°	140.7290°		8:51	6.7	119	30.9	4.7	7.5	2.678	34.3	24.2	17.8	8.9	6.2	8.6	1.3	9.5	37	200	-
C-4	37.7687°	140.8443°		10:32	7.2	271	16.9	1.0	0.9	2.668	27.9	27.3	38.3	6.0	0.3	0.2	1.0	9.5	58	260	0.44
C-5	37.7646°	140.8603°		12:17	7.2	343	15.0	0.9	0.7	2.687	21.5	40.2	35.8	2.2	0.1	0.2	1.1	9.5	32	170	-
C-6	37.7764°	140.8877°		13:03	7.1	413	23.0	1.4	1.4	2.690	22.6	21.7	49.0	5.5	0.7	0.5	0.75	9.5	52	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 site	Cs-134	Cs-137	
C-6	-	37.7764°	140.8877°	2015/12/3	Phycophyta	-	-	-	-	Riverbed Deposits (include algae)	-	0.003	-	-	-	5.0	22	-
					Arthropoda	Insecta	Plecoptera	Perlidae	*Kamimuria tibialis*	Kamimura tibialis	53	0.0038	Larva	-	-	N.D.(9.1)	N.D.(8.6)	-
					Arthropod	Insecta	Trichoptera	Stenopsychidae	*Stenopsyche marmorata*	Stenopsyche marmorata	29	0.0051	Larva	-	-	9.0	35	-
					Arthropod	Insecta	Odonata	Gomphidae	*Melligomphus viridicostus*	Onychogomphus viridicostus	23	0.0086	Larva (dragonfly larva)	-	-	N.D.(6.0)	13	-
					Arthropod	Insecta	Odonata	Cordulegastridae	*Anotogaster sieboldii*	Anotogester sieboldii								
					Arthropod	Insecta	Odonata	Gomphidae	*Sieboldius albardae*	Sieboldius albardae								
					Arthropod	Insecta	Odonata	Corduliidae	*Macromia amphigena amphigena*	Macromia amphigena								
					Arthropod	Insecta	Odonata	Gomphidae	-	Davidius								
					Arthropod	Insecta	Odonata	Gomphidae	*Sinogomphus flavolimbatus*	Sinogomphus flavolimbatus								
					Arthropod	Insecta	Odonata	Aeshnidae	*Planaeschna milnei*	Planaeschna milnei								
					Arthropod	Insecta	Megaloptera	Corydalidae	*Protohermes grandis*	Protohermes grandis	17	0.011	Larva	-	-	N.D.(5.7)	N.D.(4.9)	-
					Arthropoda	Malacostraca	Decapoda	Atyidae	*Paratya improvisa*	Freshwater shrimp	93	0.020	Imago	-	-	3.5	13	-
					Arthropod	Malacostraca	Decapoda	Grapsidae	*Eriocheir japonica*	Japanese mitten crab	14	0.054	Imago	-	-	4.7	14	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Opsariichthys platypus*	Zacco platypus	11	0.053	Immature fish/Mature fish (1-year-old)	Amorphous residue	Viscera removed	2.9	13	-
					Vertebrata	Osteichthyes	Cypriniformes	Cyprinidae	*Candidia temminckii*	Dark chub	248	0.11	Immature fish (0-year-old)	-	-	1.4	6.9	-
					Vertebrata	Osteichthyes	Perciformes	Gobiidae	*Rhinogobius nagoyae*	R. sp. CB	15	0.035	Mature fish	Amorphous residue	Viscera removed	4.7	19	-
					Vertebrata	Amphibia	Anura	Ranidae	*Rana ornativentris*	Montane brown frog	1	0.024	Imago	-	-	45	220	-
					Particulate Organic Matter	-	-	-	-	Bottom fallen leaves	-	0.23	-	-	-	9.7	33	-

*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.