

Results of Radioactive Material Monitoring of Aquatic Organisms (Location K off the mouth of the Abukuma River)

<Location K off the mouth of the Abukuma River: Samples collected>

Items Locations	General items		Radioactive materials			
	Water	Sediment	Water (Cs)	Water (Sr)	Sediment (Cs)	Sediment (Sr)
K-3	○	○	○	○	○	○

<Location K off the mouth of the Abukuma River: Site measurement item>

Items Locations	Latitude and longitude of the location		Survey date and time			Water	Sediment				Other	
	Latitude	Longitude	Date	Time (water)	Time (sediment)	Water temperature (degrees C)	Sediment temperature (degrees C)	Property	Color	Contaminants	Water depth (m)	Secchi disk depth (m)
K-3(Surface layer)	38.0458°	140.9518°	2018/8/22	09:01	09:21	24.9	19.8	Silt with sand	5Y3/2	None	20.5	5.0
K-3(Bottom layer)				08:28		20.1						

<Location K off the mouth of the Abukuma River: General survey items/Analysis of radioactive materials Water>

Items Locations	Latitude and longitude of the location		Survey date and time		pH	BOD (mg/L)	COD (mg/L)	DO (mg/L)	Electric conductivity (mS/m)	Salinity	TOC (mg/L)	SS (mg/L)	Turbidity (FNU)	Cs-134 (Bq/L)	Cs-137 (Bq/L)	Sr-90 (Bq/L)
	Latitude	Longitude	Date	Time (water)												
K-3(Surface layer)	38.0458°	140.9518°	2018/8/22	09:01	8.1	1.2	3.2	8.2	4240	25.50	1.5	3	2.2	N.D.(0.0017)	0.0068	-
K-3(Bottom layer)				08:28	7.9	0.8	2.0	6.0	5030	33.78	1.1	5	3.6	N.D.(0.0015)	0.016	0.00082

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

<Location K off the mouth of the Abukuma River: General survey items/Analysis of radioactive materials Sediment>

Items Locations	Latitude and longitude of the location		Survey date and time		pH	Redox potential E _h (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)
	Latitude	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 (0.005-0.075mm) (%)	Clay (Less than 0.005mm) (%)	Median grain diameter (mm)	Maximum grain diameter (mm)			
K-3	38.0458°	140.9518°	2018/8/22	09:21	7.7	273	34.3	4.8	7.6	2.703	0.0	0.2	0.2	32.2	54.7	12.7	0.058	4.8	22	230	N.D.(0.12)

Note) N.D. means to be below the detection limit and figures in parentheses show the detection limit.

<Location K off the mouth of the Abukuma River: Analysis items Aquatic organisms>

Locations	Sampling point	Latitude and longitude of the location		Sampling date	Division	Class	Order	Family	Scientific 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	Total	Cs-134	Cs-137	
Surrounding water area off the mouth of the Abukuma River	Sea area in front of the Abukuma River Estuary	—	—	2018/8/28	Mollusca	Cephalopoda	Decapodiformes	Loliginidae	<i>Loliotus japonica</i>	Japanese squid	70	0.39	Juvenile	-	-	N.D.	N.D.(0.34)	N.D.(0.34)	-
					Vertebrata	Osteichthyes	Pleuroctiformes	Pleuronectidae	<i>Pleuronectes herzensteini</i>	Yellow striped flounder	1	0.35	Mature fish	Empty stomach	Viscera removed	0.44	N.D.(0.43)	0.44	-
					Vertebrata	Osteichthyes	Pleuroctiformes	Paralichthyidae	<i>Paralichthys olivaceus</i>	Bastard halibut	2	2.8	Immature fish, Mature fish	Empty stomach	Viscera removed	0.45	N.D.(0.31)	0.45	N.D.(0.018)
					Vertebrata	Osteichthyes	Perciformes	Sparidae	<i>Evmnis japonica</i>	Crimson sea-bream	1	0.32	Immature fish	Empty stomach	Viscera removed	0.42	N.D.(0.28)	0.42	-

*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 English name of the dominant one largest in number is underlined.

*4: Basically, measurement was conducted for all organisms 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: Plankton (suspended algae) is the residue remaining after the filtration of lake water or seawater with a plankton net (40µm-mesh).

*6: 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.

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

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