

Results of Radiostrontium Analysis of Sediment (2011)

For those locations where levels of radioactive cesium in sediment were comparatively high in the first survey carried out in each prefecture, the level of radiostrontium in sediment was measured.

The results showed that the concentration of strontium-90 (Sr-90) was in the range of 0.4–6.8Bq/kg.

*Sr-90 levels measured nationwide before the accident (soil samples): 0.20–14Bq/kg (dry)
(Source: FY2009 Environmental Radiation Level Monitoring Results Data
(August 2011, Japan Chemical Analysis Center))

Moreover, levels of strontium-89 (Sr-89) were also measured for reference purposes and were found to be below the detection limit (2Bq/kg) at all locations (figures for Sr-89 are reference values only, as it was not possible to obtain a standard source).

Results of Radiostrontium Analysis of Sediment

Prefecture	Name of the water body	Specimen sampling date	(rereleased) Mud sampling depth	(rereleased) Mud content (%)	(rereleased) Property	Sediment				
						Radioactive cesium (rereleased)		Radiostrontium		
						Cs-134 Bq/kg-dry	Cs-137 Bq/kg-dry	Sr-90 Bq/kg-dry	Sr-89*1 Bq/kg-dry	
Miyagi	Rivers	49 Nanakitagawa River, Takasagobashi Bridge	2011/10/14	5	54.0	Silt with sand	5,000	6,100	1.1	ND ²
		77 Abukumagawa River, Abukumaohashi Bridge	2011/10/8	5	81.0	Sand	44	47	0.4	ND ²
	Lakes	97 Shichikashuku Dam	2011/10/6	10	34.1	Silt	960	1,200	1.6	ND ²
Fukushima	Rivers	7 Manogawa River, Majimabashi Bridge	2011/9/16	10	30.1	Silt	13,000	15,000	3.0	ND ²
		14 Otagawa River, Masudabashi Bridge	2011/9/16	5	47.3	Silt with sand	27,000	33,000	4.1	ND ²
		69 Gohyakugawa River, Kamisekishitabashi Bridge	2011/9/16	5	46.1	Silt	10,000	12,000	3.3	ND ²
		71 Abukumagawa River, Takadabashi Bridge	2011/9/15	10	43.9	Silt	14,000	16,000	3.4	ND ²
		81 Matsukawa River, Before the confluence with Abukumagawa River	2011/9/17	5	79.8	Sand with gravel	7,000	8,200	1.2	ND ²
		85 Abukumagawa River, Taishobashi Bridge	2011/9/17	5	61.7	Sand with gravel	6,400	7,800	1.8	ND ²
		101 Kyuyukawa River, Awanomiyabashi Bridge	2011/9/28	5	40.0	Silt	5,900	7,100	1.9	ND ²
	Lakes	116 Matsugabo Dam (Utagawako Lake)	2011/9/28	10	27.6	Silt	10,000	12,000	4.2	ND ²
		119 Takanokura Dam Reservoir	2011/9/16	5	58.3	Gravel/sand with silt	10,000	12,000	3.3	ND ²
124 Kido Dam		2011/9/27	5	34.5	Silt with sand	5,400	6,000	6.8	ND ²	
Ibaraki	Rivers	30 Nakagawa River, Shimokunii	2011/9/12	10	36.7	Silt with sand	2,500	3,000	1.6	ND ²
	Lakes	99 Kasumigaura Lake, center of the lake	2011/9/12	12	16.6	Silt	81	140	3.3	ND ²
		105 Ushikunuma Lake	2011/10/5	10	19.9	Silt	850	990	0.7	ND ²
Tochigi	Rivers	39 Itanagawa River, tributary	2011/10/9	3	61.0	Sand	2,200	2,700	1.3	ND ²
	Lakes	110 Ikari Dam	2011/10/18	10	34.8	Silt	1,900	2,500	1.3	ND ²
Gunma	Rivers	44 Kogurogawa River, Kayanobashi Bridge	2011/12/7	5	77.6	Sand with gravel	140	200	0.7	ND ²
	Lakes	54 Fujiwara Dam	2011/12/1	10	31.0	Silt	2,000	2,600	2.0	ND ²
Chiba	Rivers	8 Ohorigawa River Kitakashiwabashi Bridge	2011/11/1	3	77.6	Sand with gravel	4,300	5,400	1.1	ND ²
	Lakes	45 Tegnuma Lake Nedoshita	2011/11/1	5	29.0	Silt	1,500	1,800	1.4	ND ²

*1: Values for Sr-89 are given as reference due to unavailability of standard radiation source.

*2: ND (Lower Detection Limit 2Bq/kg-dry)