

## FY2013 Miyagi Prefecture Survey Results

### [Survey Results]

#### (1) Water

##### Rivers

Cs-134: ND

Cs-137: ND - 0.47 Bq/L

##### Lakes and reservoirs

Radioactive cesium (Cs-134, Cs-137): Not detectable at any location

##### Coastal areas

Radioactive cesium (Cs-134, Cs-137): Not detectable at any location

#### (2) Sediments

##### Rivers

Cs-134: ND - 750 Bq/kg (dry)

Cs-137: ND - 1,700 Bq/kg (dry)

##### Lakes and reservoirs

Cs-134: 7.6 - 1,300 Bq/kg (dry)

Cs-137: 18 - 2,900 Bq/kg (dry)

##### Coastal areas

Cs-134: ND - 640 Bq/kg (dry)

Cs-137: ND - 1,400 Bq/kg (dry)

#### (3) Surrounding Environment

##### (a) Soil

##### Rivers

Cs-134: ND - 1,600 Bq/kg (dry)

Cs-137: ND - 3,100 Bq/kg (dry)

##### Lakes and reservoirs

Cs-134: 13 - 900 Bq/kg (dry)

Cs-137: 29 - 2,100 Bq/kg (dry)

##### (b) Ambient dose rate

##### Rivers

0.03 - 0.47  $\mu$ Sv/h

##### Lakes and reservoirs

0.03 - 0.32  $\mu$ Sv/h





# Miyagi River (Water) 3/4

No.	Location			Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
	Water area	Location	Municipality					General items							Activity concentration(Bq/L)			
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium Cs-134	Cs-137	
27	Nanakita River System	Umeda River	Fukuda Bridge	Sendai City	2013/5/9	Sunny	19.0	0.2	21.0	0.0	Light grayish reddish yellow	Medium rottenness	10	41.3	44	60	<0.59	<0.77
					2013/8/6	Cloudy	27.0	1.4	23.0	0.0	Light grayish reddish yellow	None	37	18.9	18	9.5	<0.48	<0.59
					2013/11/21	Cloudy	10.5	1.5	8.7	0.0	Light grayish yellow green	None	82	646.0	3	4.5	<0.61	<0.59
					2014/1/6	Sunny	6.0	0.3	2.7	0.0	Yellowish light gray	None	94	399.0	3	2.5	<0.55	<0.62
					2013/5/8	Sunny	12.0	2.1	13.0	0.0	Reddish yellowish pale gray	None	42	4,240.0	14	10	<0.63	<0.69
	28	Nanakita River	Takasago Bridge	Sendai City	2013/8/6	Cloudy	29.5	2.5	25.0	0.0	Light grayish yellow	None	61	357.0	6	5.3	<0.50	<0.58
					2013/11/21	Cloudy	12.5	0.5	12.0	0.0	Yellowish reddish light gray	None	89	1,856.0	4	3.3	<0.59	<0.62
					2014/1/6	Sunny	3.5	0.3	8.1	0.0	Grayish yellow green	None	57	3,420.0	7	3.5	<0.75	<0.68
					2013/5/8	Sunny	15.0	1.0	13.5	0.0	Yellow yellowish faint gray	None	61	4,540.0	13	4.6	<0.78	<0.69
					2013/8/5	Cloudy	23.5	0.2	23.4	0.0	Reddish yellowish pale gray	Faint seaweed	40	141.1	11	7.7	<0.79	<0.63
29	Natori River	Yuriage-ohashi Bridge	Sendai City/Natori City	2013/11/5	Sunny	18.0	2.0	15.2	0.0	Yellow yellowish pale gray	None	>100	847.0	2	1.6	<0.45	<0.58	
				2014/1/8	Cloudy	7.5	0.3	5.5	0.0	Light grayish yellow green	None	>100	869.0	4	2.2	<0.59	<0.72	
				2013/5/8	Sunny	10.0	0.3	11.1	0.0	Greenish yellowish pale gray	None	49	10.6	6	8.5	<0.72	<0.64	
				2013/7/30	Cloudy	23.0	0.4	17.1	0.0	Greenish yellowish white	None	>100	7.0	<1	1.5	<0.54	<0.55	
				2013/11/5	Sunny	13.0	0.3	11.5	0.0	Greenish yellowish white	None	>100	9.1	<1	0.3	<0.63	<0.67	
	30	Natori River System	Yakushi Bridge	Natori City	2014/1/8	Cloudy	5.0	0.2	3.3	0.0	Light grayish yellow green	None	>100	11.0	<1	0.3	<0.45	<0.72
					2013/5/8	Sunny	13.5	0.4	13.5	0.0	Reddish yellowish pale gray	Faint grass	34	13.5	17	14	<0.62	<0.58
					2013/8/5	Cloudy	27.5	1.0	22.8	0.0	Light grayish reddish yellow	faint sewage	47	13.2	21	8.1	<0.62	<0.53
					2013/11/5	Sunny	17.0	0.4	13.1	0.0	Yellow reddish faint gray	faint sewage	>100	14.1	4	2.9	<0.58	<0.60
					2014/1/8	Cloudy	10.0	0.3	3.7	0.0	Light grayish reddish yellow	None	>100	18.0	2	2.1	<0.65	<0.51
31	Masuda River	Koyama Bridge	Natori City	2013/5/7	Cloudy	11.5	2.0	13.8	0.0	Light grayish yellow	None	30	500.0	15	15	<0.62	<0.52	
				2013/8/5	Cloudy	26.0	0.5	22.6	0.0	Light grayish reddish yellow	faint sewage	26	26.2	28	14	<0.58	<0.60	
				2013/11/5	Sunny	18.0	1.2	14.0	0.0	Light grayish yellow	Faint swamp	70	333.0	4	5.8	<0.58	<0.49	
				2014/1/8	Cloudy	8.0	1.1	5.3	0.0	Grayish yellow green	None	82	540.0	5	3.4	<0.73	<0.63	
				2013/4/24	Sunny	18.6	0.7	10.3	0.0	Grayish yellow green	None	58	17.4	8	6.2	<0.55	<0.69	
32	Bishamon Bridge	Natori City	Natori City	2013/6/14	Sunny	24.0	0.6	23.0	0.0	Yellowish pale gray	None	58	21.7	7	4.9	<0.55	<0.78	
				2013/6/28	Cloudy	19.8	0.9	19.8	0.0	Light grayish yellow	None	65	16.8	16	9.1	<0.62	<0.55	
				2013/7/17	Cloudy	20.5	2.0	22.7	0.0	Reddish yellowish pale gray	None	40	16.8	11	6.7	<0.79	<0.78	
				2013/8/19	Sunny	33.0	0.7	27.5	0.0	Yellow greenish gray	None	92	18.6	5	2.0	<0.67	<0.65	
				2013/10/8	Sunny	27.0	1.5	20.5	0.0	Light grayish yellow green	None	>100	18.6	4	1.8	<0.50	<0.52	
	33	Abukuma River System	Abukuma River	Marumori Town	2013/12/9	Sunny	8.6	1.0	7.1	0.0	Grayish green	None	>100	17.3	2	1.4	<0.59	<0.71
					2014/1/20	Sunny	4.0	1.5	4.1	0.0	Grayish green	None	>100	20.9	3	1.8	<0.61	<0.65
					2014/2/10	Sunny	4.0	0.5	3.4	0.0	Grayish yellow green	None	99	20.6	5	2.4	<0.51	<0.66
					2013/4/24	Sunny	16.5	0.6	11.7	0.0	Yellow-greenish light gray	None	62	17.2	8	6.7	<0.72	<0.73
					2013/6/14	Cloudy	23.0	1.7	23.9	0.0	Reddish yellowish pale gray	None	73	20.9	9	5.3	<0.60	<0.74
34	Marumori Bridge	Marumori Town	Marumori Town	2013/6/28	Cloudy	19.3	0.6	21.0	0.0	Light grayish yellow green	None	53	17.7	17	8.2	<0.96	0.47	
				2013/7/16	Sunny	28.5	1.0	26.0	0.0	Light grayish reddish yellow	Faint swamp	29	15.4	18	12	<0.55	<0.51	
				2013/8/19	Sunny	34.0	1.3	28.8	0.0	Greenish yellowish pale gray	None	72	18.8	5	2.8	<0.63	<0.55	
				2013/10/8	Sunny	27.5	1.2	22.3	0.0	Yellow greenish pale gray	None	>100	18.8	2	1.5	<0.54	<0.47	
				2013/12/9	Sunny	14.5	1.5	8.4	0.0	Light grayish yellow green	None	>100	17.9	2	1.5	<0.45	<0.55	
	34	Marumori Bridge	Marumori Town	Marumori Town	2014/1/20	Sunny	8.0	0.5	5.6	0.0	Grayish green	None	>100	21.6	2	1.5	<0.65	<0.68
					2014/2/10	Sunny	5.5	0.2	4.1	0.0	Light grayish yellow green	None	>100	19.4	3	2.2	<0.61	<0.66

# Miyagi River (Water) 4/4

No.	Location			Sampling Date	Weather	Air temperature (C)	Water depth (m)	Water								Activity concentration(Bq/L)		Remarks	
	Water area	Location	Municipality					Water temperature (C)	Sampling depth (m)	Color	Odor	Transparency (cm)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium			
																Cs-134	Cs-137		
35	Abukuma River	Higashine Bridge	Kakuda City	2013/4/23	Sunny	16.0	0.4	11.6	0.0	Grayish yellow red	None	87	17.5	10	7.4	<0.59	<-0.73		
				2013/6/28	Cloudy	19.0	1.5	21.5	0.0	Light grayish yellow	None	41	17.5	16	8.3	<0.87	<-0.71		
				2013/8/19	Sunny	34.0	0.7	31.3	0.0	Light grayish greenish yellow	None	50	17.9	8	6.1	<0.63	<-0.67		
				2013/10/8	Sunny	27.5	1.2	23.7	0.0	Light grayish yellow green	None	>100	18.6	3	2.0	<0.56	<-0.59		
				2013/12/9	Sunny	12.0	1.0	8.8	0.0	Light grayish yellow green	None	>100	18.7	2	1.7	<0.61	<-0.73		
				2014/1/20	Sunny	10.0	1.0	5.3	0.0	Grayish yellow green	None	>100	20.5	2	1.6	<0.61	<-0.62		
	36	Shiroishi River	Before the confluence with Kawaharakozawa (Sunaoishi Bridge)	Shiroishi City	2013/4/25	Sunny	17.9	2.5	10.0	0.0	Bluish white	None	>100	3.9	3	3.8	<0.75	<-0.64	
					2013/7/29	Cloudy	24.0	1.5	19.6	0.0	Light grayish yellow green	None	78	6.5	4	4.0	<0.76	<-0.65	
					2013/11/1	Cloudy	16.5	2.8	14.3	0.0	Light grayish yellow green	Faint swamp	>100	6.7	2	1.8	<0.51	<-0.62	
					2014/1/7	Sunny	2.0	1.0	2.9	0.0	Grayish yellow green	None	>100	8.4	1	1.3	<0.63	<-0.59	
					2013/4/25	Sunny	17.6	1.8	17.6	0.0	Very pale yellow green	None	98	14.7	8	4.5	<0.80	<-0.77	
	37	Saikawa River	Etsubo Bridge	Shiroishi City	2013/7/29	Cloudy	24.0	1.7	21.6	0.0	Light grayish yellow	None	60	12.7	7	5.4	<0.48	<-0.42	
					2013/11/1	Cloudy	17.5	1.4	13.9	0.0	Light grayish yellow green	None	>100	12.6	2	1.8	<0.61	<-0.59	
					2014/1/7	Sunny	8.0	1.5	3.7	0.0	Light grayish yellow green	None	>100	27.5	1	1.0	<0.55	<-0.66	
					2013/4/26	Cloudy	19.0	0.9	11.7	0.0	Yellow greenish white	None	>100	8.5	2	1.5	<0.56	<-0.64	
	38	Matsukawa River	Miya-ohashi Bridge	Zao Town	2013/7/29	Cloudy	25.5	0.3	19.7	0.0	Light grayish yellow	None	81	14.2	5	3.0	<0.54	<-0.60	
					2013/11/1	Cloudy	18.0	0.3	13.6	0.0	Greenish yellowish white	None	>100	15.4	<1	1.0	<0.50	<-0.63	
					2014/1/7	Sunny	8.0	0.2	5.4	0.0	Light grayish yellow green	None	>100	22.7	<1	0.9	<0.62	<-0.58	
					2013/5/7	Cloudy	15.0	0.4	14.5	0.0	Yellow-greenish light gray	None	27	21.4	22	28	<0.71	<-0.52	
	39	Arakawa River	Niragami Bridge	Muta Town Ogorawa Town	2013/8/5	Cloudy	28.0	0.3	23.1	0.0	Light grayish reddish yellow	Faint swamp	35	16.3	16	8.6	<0.68	<-0.72	
					2013/11/1	Cloudy	18.0	0.4	14.1	0.0	Yellowish pale gray	Faint swamp	91	17.6	4	2.4	<0.54	<-0.52	
2014/1/7					Sunny	12.0	0.5	3.8	0.0	Yellow greenish pale gray	None	90	24.5	4	3.1	<0.73	<-0.78		
2013/5/7					Cloudy	12.5	2.0	14.5	0.0	Yellow greenish pale gray	None	58	14.6	7	5.9	<0.69	<-0.69		
2013/8/5					Cloudy	29.5	0.5	21.8	0.0	Light grayish yellow	None	70	12.9	8	4.2	<0.67	<-0.61		
40	Shiroishi River	Shirahata Bridge	Shibata Town	2013/11/1	Cloudy	16.0	1.0	14.3	0.0	Yellow greenish pale gray	None	>100	12.7	3	1.6	<0.56	<-0.45		
				2014/1/7	Sunny	14.5	1.0	5.1	0.0	Light grayish yellow green	None	>100	15.8	2	1.1	<0.61	<-0.66		
				2013/4/23	Sunny	17.5	0.3	11.6	0.0	Grayish yellow	None	87	14.2	6	4.3	<0.72	<-0.44		
				2013/6/28	Cloudy	17.5	0.8	21.5	0.0	Light grayish reddish yellow	Faint swamp	85	16.1	5	4.6	<0.55	<-0.65		
				2013/8/20	Light rain	26.5	0.8	26.1	0.0	Reddish yellowish pale gray	None	82	21.3	3	3.4	<0.54	<-0.49		
41	Tsukinoki-ohashi Bridge	Kakuda City / Shibata Town	2013/10/7	Sunny	24.0	0.7	21.2	0.0	Reddish yellowish white	Faint swamp	>100	16.4	1	2.4	<0.54	<-0.52			
			2013/12/10	Cloudy	8.0	0.5	7.4	0.0	Light grayish yellowish green	None	>100	18.7	3	1.0	<0.66	<-0.62			
			2014/1/21	Sunny	10.0	0.5	5.9	0.0	Light grayish yellow green	None	>100	16.3	2	1.2	<0.68	<-0.72			
			2013/4/23	Sunny	22.0	0.5	10.2	0.0	Grayish reddish yellow	None	62	16.8	10	7.2	<0.75	<-0.52			
			2013/6/14	Cloudy	20.5	1.1	22.4	0.0	Light grayish greenish yellow	None	49	20.1	6	6.2	<0.73	<-0.59			
			2013/6/27	Cloudy	19.5	0.7	24.3	0.0	Yellowish pale gray	None	50	16.9	13	9.6	<0.41	<-0.51			
			2013/7/16	Sunny	28.0	1.5	24.8	0.0	Reddish yellowish pale gray	None	46	16.6	10	7.6	<0.41	<-0.55			
	42	Abukuma River	Abukuma-ohashi Bridge (Iwanuma)	Iwanuma City/Watari Town	2013/8/20	Light rain	26.0	0.8	27.7	0.0	Light grayish yellow	None	42	22.2	5	5.9	<0.60	<-0.78	
					2013/10/7	Sunny	24.0	0.8	20.8	0.0	Greenish pale gray	None	50	17.8	6	4.0	<0.42	<-0.63	
					2013/12/10	Cloudy	9.0	1.5	7.1	0.0	Grayish yellowish green	None	>100	23.3	2	1.4	<0.63	<-0.42	
					2014/1/21	Sunny	3.5	2.0	4.8	0.0	Grayish yellow green	None	>100	18.0	2	1.5	<0.59	<-0.72	
					2014/2/10	Sunny	8.0	0.3	1.9	0.0	Grayish yellow green	None	>100	17.6	2	2.1	<0.56	<-0.62	
					2013/4/23	Sunny	24.0	0.7	11.7	0.0	Grayish reddish yellow	None	65	51.4	6	6.1	<0.59	<-0.58	
					2013/6/28	Cloudy	19.0	1.5	23.0	0.0	Light grayish yellow	Faint chlorine	71	411.0	7	5.6	<0.56	<-0.51	
43	Offshore of Abukuma River Estuary (Watari-ohashi Bridge)			2013/8/20	Cloudy	25.0	0.7	27.8	0.0	Yellowish pale gray	None	39	549.0	11	7.1	<0.60	<-0.59		
				2013/10/7	Cloudy	22.0	1.0	19.8	0.0	Yellowish pale gray	None	>100	506.0	1	2.5	<0.73	<-0.53		
				2013/12/10	Cloudy	7.5	0.5	7.7	0.0	Grayish bluish green	None	>100	636.0	2	1.3	<0.60	<-0.49		
				2014/1/21	Sunny	6.0	2.0	5.3	0.0	Grayish yellow green	None	>100	978.0	2	1.3	<0.61	<-0.63		















# Miyagi River (Surrounding Environment) 3/4

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment (Soil, Air dose)										Remarks							
No.	Water area	Location	Municipality				Left bank					Right bank												
							Color	Odor	Property	Activity concentration (Bq/kgdry)			Air Dose (µSv/h)	Color	Odor	Property		Activity concentration (Bq/kgdry)						
Rivers	27	Nanakita River System	Umeda River	Fukushi Bridge	Sendai City	2013/5/9	Sunny	19.0	Dim yellowish brown	Faint grass	Sandy	93	210	303	0.09	Dark brown	Faint grass	Sandy	46	99	145	0.08		
						2013/8/6	Cloudy	27.0	Dim yellowish brown	Faint seaweed	Sandy	96	210	306	0.07	Brown	Faint grass	Loamy	380	910	1,290	0.08		
						2013/11/21	Cloudy	10.5	Dim yellowish brown	faint earth	Sandy	92	220	312	0.08	Dark grayish yellow	faint earth	Sandy	11	30	41	0.06		
		28	Nanakita River	Takasago Bridge	Sendai City	2014/1/6	Sunny	6.0	Olive brown	faint earth	Loamy	19	62	81	0.08	Blackish brown	faint earth	Loamy	68	170	238	0.06		
						2013/5/8	Sunny	12.0	Dim yellowish brown	faint earth	Sandy	73	140	213	0.06	Dark grayish yellow	None	Sandy	290	600	890	0.08		
						2013/8/6	Cloudy	29.5	Dim yellowish brown	Faint grass	Loamy	30	67	97	0.04	Brown	Faint grass	Sandy	71	170	241	0.04		
	2013/11/21					Cloudy	12.5	Dim yellowish brown	Faint grass	Loamy	53	140	193	0.05	Dark grayish yellow	faint earth	Sandy	150	380	530	0.06			
	2014/1/6					Sunny	3.5	Dark grayish yellow	faint earth	Sandy	17	37	54	0.05	Dark grayish yellow	faint earth	Loamy	100	240	340	0.07			
	2013/5/8					Sunny	15.0	Dark grayish yellow	faint earth	Loamy	94	190	284	0.06	Brownish gray	faint earth	Loamy	180	330	510	0.08			
	29	Natori River	Yuriage-obashi Bridge	Sendai City/Natori City	2013/8/5	Cloudy	23.5	Brown	Faint grass	Sandy	59	120	179	0.06	Grayish brown	Faint grass	Clay-loamy	260	600	860	0.08			
					2013/11/5	Sunny	18.0	Brown	Faint grass	Loamy	18	42	60	0.04	Dim yellowish brown	faint earth	Loamy	120	300	420	0.08			
					2014/1/8	Cloudy	7.5	Dark brown	Faint grass	Loamy	89	31	399	0.04	Blackish brown	Faint grass	Loamy	82	210	292	0.07			
					2013/5/8	Sunny	10.0	Dim yellowish brown	faint earth	Loamy	180	380	560	0.09	Dim yellowish brown	Faint grass	Loamy	150	270	420	0.10			
					2013/7/30	Cloudy	23.0	Brown	Faint grass	Loamy	140	310	450	0.07	Dim yellowish brown	Faint grass	Loamy	230	480	710	0.07			
					2013/11/5	Sunny	13.0	Brown	Faint grass	Loamy	230	550	780	0.08	Brown	faint earth	Loamy	130	330	460	0.09			
	30	Natori River System	Yakushi Bridge	Natori City	2014/1/8	Cloudy	5.0	Dark brown	faint earth	Loamy	210	490	700	0.07	Dark brown	faint earth	Loamy	120	330	450	0.08			
					2013/5/8	Sunny	13.5	Dark grayish yellow	Faint grass	Loamy	1,100	2,200	3,300	0.17	Dim yellowish brown	Faint drain	Loamy	1,000	2,000	3,000	0.15			
					2013/8/5	Cloudy	27.5	Brown	Medium grass	Loamy	310	710	1,020	0.08	Dark grayish yellow	Faint grass	Loamy	510	1,200	1,710	0.08			
					2013/11/5	Sunny	17.0	Brown	faint earth	Loamy	450	1,100	1,550	0.10	Dim yellowish brown	Faint grass	Loamy	510	1,300	1,810	0.11			
					2014/1/8	Cloudy	10.0	Blackish brown	Faint grass	Loamy	320	790	1,110	0.09	Blackish brown	Faint grass	Loamy	430	1,100	1,530	0.13			
					2013/5/7	Cloudy	11.5	Dark grayish yellow	faint earth	Loamy	200	410	610	0.08	Dim yellowish brown	faint earth	Loamy	120	240	360	0.09			
	31	Masuda River	Koyama Bridge	Natori City	2013/8/5	Cloudy	26.0	Dim yellowish brown	Faint grass	Loamy	150	360	510	0.06	Dark grayish yellow	Faint grass	Loamy	150	330	480	0.07			
					2013/11/5	Sunny	18.0	Brown	Faint grass	Loamy	200	440	640	0.07	Brown	Faint grass	Loamy	170	420	590	0.08			
					2014/1/8	Cloudy	8.0	Brown	Faint grass	Loamy	68	180	248	0.07	Blackish brown	Faint grass	Loamy	130	360	490	0.08			
					2013/4/24	Sunny	18.6	Brown	None	Sandy	320	630	950	0.31	Blackish brown	None	Loamy	510	1,000	1,510	0.30			
					2013/6/14	Sunny	24.0	Dim yellowish brown	Faint grass	Loamy	1,600	3,100	4,700	0.25	Dim yellowish brown	faint earth	Sandy	130	280	410	0.15			
					2013/6/28	Cloudy	19.8	Dark grayish yellow	None	Loamy	960	2,000	2,960	0.29	Dark brown	None	Loamy	370	790	1,160	0.28			
32	Bishamon Bridge	Natori City	2013/7/17	Cloudy	20.5	Dim brown	Faint grass	Sandy	310	670	980	0.38	Dim brown	Medium grass	Loamy	490	1,000	1,490	0.29					
			2013/8/19	Sunny	33.0	Yellowish brown	Faint grass	Sandy	430	930	1,360	0.28	Yellowish brown	Faint grass	Sandy	710	1,500	2,210	0.25					
			2013/10/8	Sunny	27.0	Yellowish brown	Faint grass	Sandy	560	1,300	1,860	0.28	Brown	Faint grass	Sandy	350	810	1,160	0.26					
			2013/12/9	Sunny	8.6	Brown	Faint grass	Sandy	390	910	1,300	0.23	Brown	Faint grass	Loamy	420	1,100	1,520	0.24					
			2014/1/20	Sunny	4.0	Yellowish brown	faint earth	Loamy	360	970	1,330	0.32	Dark grayish yellow	faint earth	Loamy	310	750	1,060	0.24					
			2014/2/10	Sunny	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Unable to collect samples due to snow on the ground	
33	Abukuma River System	Abukuma River	Hadaniwa Bridge	Marumori Town	2013/4/24	Sunny	16.5	Dim yellowish brown	None	Loamy	110	230	340	0.12	Dim yellowish brown	None	Loamy	120	260	380	0.13			
					2013/6/14	Cloudy	23.0	Dim yellowish brown	faint earth	Loamy	380	770	1,150	0.20	Dim yellowish brown	Faint grass	Sandy	190	430	620	0.11			
					2013/6/28	Cloudy	19.3	Dim yellowish brown	None	Sandy	70	150	220	0.11	Dim yellowish brown	None	Sandy	210	440	650	0.09			
					2013/7/16	Sunny	28.5	Dim yellowish brown	Faint grass	Loamy	280	640	920	0.24	Dim yellowish brown	Faint grass	Loamy	50	120	170	0.10			
					2013/8/19	Sunny	34.0	Yellowish brown	Faint grass	Sandy	240	560	800	0.17	Yellowish brown	Faint grass	Sandy	160	340	500	0.12			
					2013/10/8	Sunny	27.5	Yellowish brown	Faint grass	Sandy	330	790	1,120	0.22	Olive black	Faint grass	Loamy	63	160	223	0.11			
34	Marumori Bridge	Marumori Bridge	Marumori Town	2013/12/9	Sunny	14.5	Brown	Faint grass	Loamy	310	700	1,010	0.19	Dim yellowish brown	faint earth	Loamy	58	150	208	0.10				
				2014/1/20	Sunny	8.0	Dim yellowish brown	Faint grass	Loamy	190	450	640	0.23	Brown	faint earth	Loamy	56	100	136	0.08				
				2014/2/10	Sunny	5.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	Unable to collect samples due to snow on the ground



# Miyagi Lakes and Reservoirs (Water) 1/3

Location					Surface layer/Deep layer	Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks		
No.	Water area	Location	Municipality	General items						Activity concentration(Bq/L)												
				Water temperature (°C)						Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium					
				Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Electrical conductivity (mS/m)	SS (mg/L)	Turbidity (FNU)	Cs-134	Cs-137									
Lakes and Reservoirs	44	Kurikoma Dam	Dam site	Kurihara City	Surface layer	2013/6/7	Cloudy	21.0	20.8	21.0	0.5	Light grayish greenish yellow	None	2.0	9.0	4	3.2	<0.53	<0.44			
					Deep layer	-	-	14.9	19.8	-	None	-	10.3	5	4.2	<0.56	<0.58					
					Surface layer	2013/8/26	Sunny	31.0	8.0	23.6	0.5	Light grayish reddish yellow	None	0.6	14.5	16	27	<0.79	<0.78			
					Deep layer	-	-	22.4	7.0	-	None	-	14.6	11	43	<0.65	<0.62					
					Surface layer	2013/10/29	Sunny	15.0	10.4	13.0	0.5	Light grayish reddish yellow	Faint swamp	0.4	7.6	34	40	<0.51	<0.42			
					Deep layer	-	-	12.4	9.4	-	-	Faint swamp	-	8.4	26	37	<0.63	<0.42				
		45	Hanayama Dam	Dam site	Kurihara City	Surface layer	2013/11/2	Cloudy	11.0	12.1	7.1	0.5	Light grayish yellow green	None	0.9	14.7	8	7.6	<0.42	<0.62		
						Deep layer	-	-	6.6	11.1	-	None	-	14.8	7	10	<0.54	<0.52				
						Surface layer	2013/6/7	Cloudy	22.0	21.0	20.8	0.5	Yellowish pale gray	None	1.9	6.2	4	3.3	<0.65	<0.55		
						Deep layer	-	-	8.9	20.0	-	None	-	6.7	13	20	<0.63	<0.65				
						Surface layer	2013/8/22	Cloudy	28.0	16.5	27.1	0.5	Greenish yellowish pale gray	None	1.5	8.4	2	2.6	<0.38	<0.78		
						Deep layer	-	-	10.1	15.5	-	None	-	7.2	27	36	<0.67	<0.63				
	46		Kitakami River System	Narugo Dam	Dam site	Osaki City	Surface layer	2013/10/29	Sunny	15.5	25.5	13.7	0.5	Light grayish reddish yellow	Faint swamp	0.4	8.1	31	50	<0.39	<0.62	
							Deep layer	-	-	12.7	24.5	-	Faint swamp	-	7.4	37	110	<0.43	<0.47			
							Surface layer	2013/12/2	Sunny	9.5	22.9	8.6	0.5	Light grayish yellow green	None	0.6	8.9	11	15	<0.51	<0.78	
							Deep layer	-	-	8.3	21.9	-	None	-	8.7	12	15	<0.69	<0.55			
							Surface layer	2013/6/20	Sunny	25.5	56.4	21.9	0.5	Light grayish yellow green	None	4.0	11.2	<1	1.5	<0.40	<0.42	
							Deep layer	-	-	9.1	55.4	-	None	-	6.7	24	41	<0.59	<0.44			
		47	Lake Izunuma	Lake exit	Tome City	Surface layer	2013/8/30	Cloudy	26.0	47.9	19.9	0.5	Grayish yellow green	None	1.2	12.1	5	5.2	<0.50	<0.52		
						Deep layer	-	-	11.7	46.9	-	None	-	6.8	15	34	<0.51	<0.42				
						Surface layer	2013/10/24	Cloudy	13.0	54.3	14.1	0.5	Grayish yellow green	None	1.1	10.9	7	3.4	<0.58	<0.63		
						Deep layer	-	-	8.7	53.3	-	None	-	7.7	20	23	<0.54	<0.52				
						Surface layer	2013/12/16	Sunny	1.5	58.0	6.8	0.5	Grayish yellow green	None	1.0	9.7	7	6.6	<0.69	<0.62		
						Deep layer	-	-	7.0	57.0	-	None	-	9.0	11	9.8	<0.56	<0.59				
	48		Lake Naganuma	Lake exit	Tome City	Surface layer	2013/6/5	Cloudy	25.5	1.0	21.7	0.0	Light grayish reddish yellow	Medium sewage	0.4	19.4	31	31	<0.62	<0.58	Collected only from the surface layer due to shallow water	
						Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-			
						Surface layer	2013/10/25	Cloudy	17.0	1.2	15.4	0.0	Light grayish reddish yellow	None	0.8	13.4	23	12	<0.52	<0.55	Collected only from the surface layer due to shallow water	
						Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-			
						Surface layer	2013/6/5	Cloudy	24.0	1.3	22.7	0.0	Light grayish reddish yellow	Faint swamp	>1.3	17.8	3	3.0	<0.63	<0.65	Collected only from the surface layer due to shallow water	
						Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-			
		49	Shakunosawanenike Pond	Pond exit	Kurihara City	Surface layer	2013/8/21	Sunny	27.0	1.5	27.4	0.0	Yellow reddish faint gray	Faint swamp	1.0	16.5	2	2.2	<0.50	<0.62	Collected only from the surface layer due to shallow water	
						Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-			
						Surface layer	2013/10/17	Sunny	19.0	2.0	17.3	0.0	Reddish yellowish pale gray	None	>2.0	15.4	3	1.8	<0.79	<0.65	Collected only from the surface layer due to shallow water	
						Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-			
						Surface layer	2013/12/17	Sunny	8.0	2.8	4.4	0.5	Light grayish yellow	None	1.6	18.3	5	4.2	<0.64	<0.56		
						Deep layer	-	-	4.5	1.8	-	None	-	18.5	5	4.1	<0.47	<0.74				
	50		Naruse River System	Futatsuishi Dam	Dam site	Kamii Town	Surface layer	2013/6/5	Sunny	29.0	1.5	26.5	0.0	Yellowish pale gray	Faint swamp	>1.5	11.2	3	3.2	<0.54	<0.55	Collected only from the surface layer due to shallow water
							Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-		
							Surface layer	2013/8/20	Cloudy	25.5	0.7	28.6	0.0	Yellow reddish faint gray	None	>0.7	10.7	2	1.9	<0.45	<0.55	Collected only from the surface layer due to shallow water
							Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-		
							Surface layer	2013/10/15	Cloudy	19.0	0.4	19.6	0.0	Reddish yellowish pale gray	None	>0.4	10.2	2	2.0	<0.52	<0.55	Collected only from the surface layer due to shallow water
							Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-		
		50	Naruse River System	Futatsuishi Dam	Dam site	Kamii Town	Surface layer	2013/12/11	Sunny	9.0	1.0	7.9	0.0	Grayish reddish yellow	None	0.9	14.7	3	2.3	<0.64	<0.62	Collected only from the surface layer due to shallow water
							Deep layer	-	-	-	-	-	-	-	-	-	-	-	-	-		
							Surface layer	2013/6/6	Sunny	26.0	45.9	20.2	0.5	Greenish yellowish white	None	5.5	6.1	<1	0.7	<0.78	<0.83	
							Deep layer	-	-	7.4	44.9	-	None	-	7.6	1	1.1	<0.62	<0.80			
							Surface layer	2013/8/22	Sunny	31.0	48.8	26.4	0.5	Greenish yellowish pale gray	None	3.0	6.3	2	1.1	<0.54	<0.49	
							Deep layer	-	-	6.8	47.8	-	None	-	6.7	2	1.2	<0.51	<0.55			
50	Naruse River System	Futatsuishi Dam	Dam site	Kamii Town	Surface layer	2013/10/10	Sunny	25.0	41.5	20.2	0.5	Light grayish yellow green	None	4.0	6.6	2	1.1	<0.63	<0.58			
					Deep layer	-	-	6.2	40.5	-	None	-	7.2	2	0.9	<0.69	<0.69					
					Surface layer	2013/12/5	Sunny	10.0	42.8	9.5	0.5	Bluish greenish dark gray	None	4.7	6.5	<1	0.3	<0.63	<0.63			
					Deep layer	-	-	7.4	41.8	-	None	-	7.1	<1	0.6	<0.65	<0.62					









# Miyagi Lakes and Reservoirs (Sediment)2/2

Location					Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Sediment																	Remarks		
No.	Water area	Location	Municipality	General items										Activity concentration [Bq/kg(dry)]														
				Sediment temperature (°C)					Sample length (cm)	Color	Odor	Grain size distribution(%)					Sediment content (%)	Density (g/cm <sup>3</sup> )	Property	Radioactive cesium								
												Coarse gravel	Medium gravel	Fine gravel	Coarse sand	Medium sand				Fine sand	Silt	Clay	Cs-134	Cs-137	Total			
58	Lake Amanama	Lake exit	Sendai City	2013/6/10	Sunny	28.5	0.4	26.0	3	Dark greenish gray	Faint rottenness	0.0	3.9	6.7	17.7	50.8	18.4	0.7	1.8	72.6	2.609	Sand/silt	930	2,000	2,930			
				2013/8/1	Cloudy	25.0	0.3	21.0	10	Faint hydrogen sulfide	Medium rottenness	0.0	1.5	9.6	21.4	45.2	19.5	1.2	1.6	81.5	2.635	Silt	680	1,500	2,180			
				2013/10/3	Cloudy	23.5	0.6	21.0	6	Black	Medium rottenness	0.0	0.4	9.0	17.9	43.8	23.1	4.3	1.7	38.5	2.576	Silt	390	830	1,220			
				2013/12/24	Sunny	14.0	1.0	9.0	10	Black	faint sewage	0.0	1.0	10.8	18.5	36.1	15.9	9.7	8.1	57.7	2.546	Silt	450	1,100	1,550			
	59	Natori River System	Kamufusa Dam	Dam site	Kawasaki Town	2013/6/18	Cloudy	24.0	2.6	12.0	10	Faint hydrogen sulfide	faint sewage	0.0	0.0	0.0	0.1	0.5	28.9	70.5	27.4	2.437	Clay	190	430	620		
						2013/9/3	Cloudy	23.0	25.1	20.0	7	Gray	faint sewage	0.0	0.0	0.1	0.0	0.2	0.3	20.2	79.3	24.7	2.512	Silt	220	470	690	
						2013/10/28	Sunny	17.0	30.1	13.5	10	Gray	faint sewage	0.0	0.0	0.0	0.1	0.3	0.2	18.2	81.2	25.0	2.456	Silt/clay	170	420	590	
						2013/12/13	Sunny	9.0	17.9	7.0	10	Olive brown	Faint swamp	0.0	0.0	0.2	0.1	0.3	0.5	26.5	72.5	27.4	2.482	Silt	150	300	450	
		60	Natori River System	Tatumizu Dam	Dam site	Natori City	2013/6/10	Sunny	24.0	1.2	24.0	3	Brownish gray	Faint swamp	0.0	11.7	16.9	18.2	25.2	20.9	2.4	4.8	70.5	2.641	Sand/silt	96	230	326
							2013/10/3	Cloudy	23.0	1.2	22.0	7	Grayish brown	Faint swamp	0.0	5.5	20.3	19.2	25.7	17.5	7.1	4.8	63.8	2.650	Sand/silt	88	200	288
							2013/6/17	Cloudy	21.0	0.3	22.0	3	Grayish olive	Faint swamp	0.0	5.9	5.8	4.2	6.0	6.7	27.9	43.6	46.2	2.499	Clay	150	280	430
							2013/10/4	Cloudy	18.0	0.5	20.0	6	Grayish olive	Faint swamp	0.0	7.2	32.9	24.2	25.3	9.4	0.1	1.1	80.7	2.709	Sand/gravel	24	68	92
61	Murata Dam	Dam site	Murata Town	2013/6/17	Cloudy	23.5	2.0	21.5	3	Dim yellowish brown	Faint swamp	0.0	0.0	0.1	0.5	16.7	30.9	17.5	34.3	49.3	2.619	Sand/silt	200	420	620			
				2013/8/2	Cloudy	19.5	0.8	19.0	10	Brown	faint earth	0.0	4.5	27.1	18.7	16.5	12.4	11.0	9.8	78.7	2.690	Sand	250	540	790			
				2013/10/4	Cloudy	16.0	0.5	18.0	6	Dim brown	None	0.0	0.0	0.4	2.8	42.2	29.3	6.9	18.5	64.3	2.690	Sand	110	270	380			
				2013/12/6	Sunny	10.0	0.3	8.0	10	Brownish gray	Faint swamp	0.0	1.7	15.1	17.9	32.8	25.3	2.6	4.6	73.9	2.779	Sand/silt	87	210	297			
62	Abukuma River System	Kawarago Dam	Dam site	Shiroishi City	2013/6/19	Cloudy	24.2	42.9	11.0	10	Gray	faint sewage	39.8	10.6	0.7	1.7	3.6	2.8	12.2	28.6	36.1	2.527	Clay	390	920	1,310		
					2013/9/2	Cloudy	23.0	32.4	14.0	7	Faint hydrogen sulfide	faint sewage	0.0	1.8	1.1	0.5	1.0	11.0	28.6	56.1	32.5	2.576	Silt	550	1,200	1,750		
					2013/10/23	Cloudy	13.1	37.3	11.2	10	Faint hydrogen sulfide	Faint swamp	0.0	0.0	0.0	0.0	0.1	0.9	23.5	75.4	32.5	2.577	Silt	430	970	1,400		
					2013/12/13	Sunny	11.0	41.7	8.0	10	Grayish olive	faint sewage	0.0	0.4	0.0	0.0	0.6	5.7	25.1	68.5	30.6	2.560	Silt	450	1,100	1,550		
	63	Shichikayaku Dam	Dam site	Shichikashuku Town	2013/6/17	Cloudy	29.0	1.1	26.0	3	Brown	Faint swamp	0.0	17.9	16.9	5.5	6.8	6.4	16.5	30.0	49.2	2.300	Silt	110	230	340		
					2013/8/2	Cloudy	20.0	0.5	22.0	8	Dark brown	Faint swamp	0.0	6.1	41.3	24.7	18.2	1.8	4.4	3.5	74.5	2.617	Sand/silt	71	160	231		
					2013/10/4	Cloudy	20.0	0.2	22.5	6	Dark grayish yellow	faint sewage	0.0	1.4	9.0	7.1	15.1	14.1	18.9	34.6	24.8	2.343	Silt	430	950	1,380		
					2013/12/6	Cloudy	12.0	0.2	9.1	10	Blackish brown	faint sewage	0.0	0.4	0.3	1.9	25.2	29.1	16.9	26.2	43.3	2.527	Sand/silt	1,300	2,900	4,200		
64	Lake Bagyunuma	Lake exit	Shiroishi City	2013/6/17	Cloudy	29.0	1.1	26.0	3	Brown	Faint swamp	0.0	17.9	16.9	5.5	6.8	6.4	16.5	30.0	49.2	2.300	Silt	110	230	340			
				2013/8/2	Cloudy	20.0	0.5	22.0	8	Dark brown	Faint swamp	0.0	6.1	41.3	24.7	18.2	1.8	4.4	3.5	74.5	2.617	Sand/silt	71	160	231			
				2013/10/4	Cloudy	20.0	0.2	22.5	6	Dark grayish yellow	faint sewage	0.0	1.4	9.0	7.1	15.1	14.1	18.9	34.6	24.8	2.343	Silt	430	950	1,380			
				2013/12/6	Cloudy	12.0	0.2	9.1	10	Blackish brown	faint sewage	0.0	0.4	0.3	1.9	25.2	29.1	16.9	26.2	43.3	2.527	Sand/silt	1,300	2,900	4,200			

# Miyagi Lakes and Reservoirs (Surrounding Environment) 1/2

Location					Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)							Remarks
								Soil					Air Dose (μSv/h)		
								General items							
								Color	Odor	Property	Activity concentration [Bq/kg(dry)]				
Radioactive cesium															
No.	Water area	Location		Municipality							Radioactive cesium				
											Cs-134	Cs-137	Total		
Lakes and Reservoirs	Kitakami River System	Kurikoma Dam	Dam site	Kurihara City	2013/6/7	Cloudy	21.0	Brown	Faint grass	Sandy	360	760	1,120	0.14	
					2013/8/26	Sunny	31.0	Brown	faint earth	Loamy	230	500	730	0.15	
					2013/10/29	Sunny	15.0	Dim yellowish brown	faint earth	Loamy	370	830	1,200	0.11	
					2013/12/2	Cloudy	11.0	Dim yellowish brown	faint earth	Loamy	180	420	600	0.12	
					2013/6/7	Cloudy	22.0	Dim brown	Faint grass	Loamy	430	920	1,350	0.19	
					2013/8/22	Cloudy	28.0	Dim yellowish orange	Faint grass	Loamy	570	1,300	1,870	0.19	
		Hanayama Dam	Dam site	Kurihara City	2013/10/29	Sunny	15.5	Dark grayish yellow	Faint grass	Loamy	470	1,100	1,570	0.15	
					2013/12/2	Sunny	9.5	Blackish brown	faint earth	Loamy	400	940	1,340	0.18	
					2013/6/20	Sunny	25.5	Dark grayish yellow	Strong grass	Loamy	150	330	480	0.10	
					2013/8/30	Cloudy	26.0	Brown	faint earth	Loamy	140	320	460	0.08	
					2013/10/24	Cloudy	13.0	Brown	faint earth	Loamy	75	170	245	0.08	
					2013/12/16	Sunny	1.5	-	-	-	-	-	-	-	Unable to collect samples due to snow on the ground
	Naruse River System	Lake Izunuma	Lake exit	Tome City	2013/6/5	Cloudy	25.5	Olive brown	Faint grass	Sandy	45	120	165	0.05	
					2013/10/25	Cloudy	17.0	Brown	Faint grass	Loamy	13	29	42	0.05	
					2013/6/5	Cloudy	24.0	Dim yellowish brown	Faint grass	Sandy	73	150	223	0.07	
					2013/8/21	Sunny	27.0	Dim yellowish brown	None	Loamy	73	170	243	0.06	
		Lake Naganuma	Lake exit	Tome City	2013/10/17	Sunny	19.0	Dark grayish yellow	Faint grass	Loamy	84	210	294	0.05	
					2013/12/17	Sunny	8.0	Dark brown	Medium grass	Loamy	44	130	174	0.04	
					2013/6/5	Sunny	29.0	Dim brown	Faint grass	Loamy	59	150	209	0.07	
					2013/8/20	Cloudy	25.5	Light brown	Faint grass	Loamy	87	170	257	0.04	
Shukunosawatameike Pond	Pond exit	Kurihara City	2013/10/15	Cloudy	19.0	Brown	faint earth	Loamy	71	190	261	0.06			
			2013/12/11	Sunny	9.0	Brown	Faint grass	Loamy	60	170	230	0.06			
			2013/6/6	Sunny	26.0	Light brown	Faint compost	Loamy	18	35	53	0.08			
			2013/8/22	Sunny	31.0	Dim yellowish orange	faint earth	Loamy	19	49	68	0.06			
			2013/10/10	Sunny	25.0	Dim yellowish brown	Faint grass	Loamy	75	210	285	0.06			
			2013/12/5	Sunny	10.0	Brown	faint earth	Loamy	36	89	125	0.06			
			2013/6/20	Sunny	24.5	Dark grayish yellow	Medium grass	Loamy	63	140	203	0.06			
			2013/8/30	Sunny	25.5	Dim yellowish brown	Faint grass	Loamy	59	110	169	0.06			
Naruse River System	Urushizawa Dam	Dam site	Kami Town	2013/10/24	Light rain	12.0	Dark brown	Faint grass	Loamy	120	240	360	0.06		
				2013/12/19	Cloudy	1.2	-	-	-	-	-	-	Unable to collect samples due to snow on the ground		
				2013/6/6	Cloudy	27.0	Brown	Faint grass	Sandy	120	230	350	0.06		
				2013/8/7	Sunny	29.5	Dark grayish yellow	Faint grass	Loamy	110	230	340	0.03		
				2013/10/9	Sunny	28.0	Dim yellowish brown	Faint grass	Loamy	280	590	870	0.05		
Naruse River System	Miyatoko Dam	Dam site	Taiwa Town	2013/12/3	Sunny	10.0	Dark grayish yellow	Faint grass	Loamy	160	390	550	0.06		
				2013/6/6	Cloudy	25.0	Grayish brown	Faint grass	Clay-loamy	100	230	330	0.06		
				2013/10/9	Cloudy	26.0	Dark grayish yellow	Faint grass	Loamy	130	300	430	0.06		

## Miyagi Lakes and Reservoirs (Surrounding Environment) 2/2

Location				Sampling Date	Weather	Air temperature (°C)	Surrounding Environment(Soil,Air dose)						Remarks		
							Soil			Air Dose (μSv/h)					
No.	Water area	Location	Municipality				General items								
							Color	Odor	Property	Activity concentration [Bq/kg(dry)]			Air Dose (μSv/h)		
										Radioactive cesium					
			Cs-134	Cs-137	Total										
54	Sunaoshi River System	Sonoseki Dam	Rifu Town	2013/6/10	Cloudy	25.0	Reddish brown	Faint grass	Sandy	110	200	310	0.07		
				2013/8/7	Sunny	31.0	Brown	Faint grass	Loamy	92	220	312	0.06		
				2013/10/9	Cloudy	23.5	Brown	Faint grass	Loamy	84	200	284	0.07		
				2013/12/4	Sunny	9.0	Dim yellowish brown	Faint grass	Loamy	74	180	254	0.07		
55	Nanakita River System	Nanakita Dam	Dam site	Sendai City	2013/6/11	Cloudy	20.0	Brown	Faint grass	Loamy	54	140	194	0.06	
					2013/8/8	Cloudy	30.5	Blackish brown	Faint grass	Loamy	210	420	630	0.06	
					2013/10/15	Cloudy	17.5	Brown	Faint compost	Loamy	250	600	850	0.05	
					2013/12/3	Sunny	9.0	Brown	faint earth	Loamy	20	46	66	0.05	
56	Marutazawatameike Pond	Pond exit	Sendai City	2013/6/10	Sunny	27.5	Brown	Faint grass	Sandy	140	280	420	0.05		
				2013/8/1	Cloudy	22.5	Grayish brown	Faint grass	Loamy	120	260	380	0.05		
				2013/10/3	Cloudy	24.5	Dark brown	Faint compost	Loamy	220	510	730	0.05		
				2013/12/4	Sunny	9.5	Dark brown	Faint grass	Loamy	150	360	510	0.04		
57	Natori River System	Okura Dam	Dam site	Sendai City	2013/6/11	Cloudy	19.5	Dim yellowish brown	Faint grass	Sandy	59	130	189	0.04	Collected from the lakeside
					2013/8/8	Cloudy	32.0	Grayish olive	Faint compost	Loamy	64	170	234	0.03	
					2013/10/15	Cloudy	18.5	Dark brown	Faint grass	Loamy	43	110	153	0.04	
					2013/12/3	Sunny	11.0	Blackish brown	faint earth	Loamy	84	180	264	0.04	
58	Lake Amanuma	Lake exit	Sendai City	2013/6/10	Sunny	28.5	Dim yellowish brown	Faint grass	Sandy	190	370	560	0.08		
				2013/8/1	Cloudy	23.0	Dim yellowish brown	Faint grass	Loamy	170	380	550	0.08		
				2013/10/3	Cloudy	23.5	Dim yellowish brown	faint earth	Sandy	75	160	235	0.08		
				2013/12/4	Sunny	14.0	Dark grayish yellow	Faint grass	Sandy	140	390	530	0.08		
59	Natori River System	Kamafusa Dam	Dam site	Kawasaki Town	2013/6/18	Cloudy	24.0	Dark grayish yellow	Medium grass	Loamy	200	410	610	0.05	
					2013/9/3	Cloudy	23.0	Dim yellowish brown	Faint grass	Loamy	140	320	460	0.05	
					2013/10/28	Sunny	17.0	Dark brown	Faint grass	Loamy	100	240	340	0.05	
					2013/12/13	Sunny	9.0	Blackish brown	Faint grass	Loamy	130	310	440	0.06	
60		Tarumizu Dam	Dam site	Natori City	2013/6/10	Sunny	24.0	Dim yellowish brown	Faint grass	Sandy	120	270	390	0.07	
					2013/10/3	Cloudy	23.0	Brown	faint earth	Loamy	120	300	420	0.09	
61		Murata Dam	Dam site	Murata Town	2013/6/17	Cloudy	21.0	Dark grayish yellow	Faint grass	Loamy	110	230	340	0.08	
					2013/10/4	Cloudy	18.0	Brown	Faint compost	Loamy	240	540	780	0.07	
62	Abukuma River System	Kawarago Dam	Dam site	Shiroishi City	2013/6/17	Cloudy	23.5	Brown	Medium grass	Loamy	110	200	310	0.12	
					2013/8/2	Cloudy	19.5	Dim yellowish brown	Faint grass	Loamy	92	200	292	0.09	
					2013/10/4	Cloudy	16.0	Brown	Faint grass	Loamy	180	440	620	0.11	
					2013/12/6	Sunny	10.0	Dim yellowish brown	Faint grass	Loamy	160	410	570	0.12	
63		Shichikashuku Dam	Dam site	Shichikashuku Town	2013/6/19	Cloudy	24.2	Brown	Faint grass	Loamy	200	460	660	0.21	
					2013/9/2	Cloudy	23.0	Yellowish brown	Faint grass	Loamy	240	540	780	0.20	
					2013/10/23	Cloudy	13.1	Olive black	None	Loamy	270	640	910	0.18	
					2013/12/13	Sunny	11.0	Blackish brown	Faint grass	Loamy	390	930	1,320	0.19	
64	Lake Bagyunuma	Lake exit	Shiroishi City	2013/6/17	Cloudy	29.0	Dark grayish yellow	Faint grass	Loamy	650	1,300	1,950	0.31		
				2013/8/2	Cloudy	20.0	Olive brown	Faint grass	Loamy	860	1,800	2,660	0.21		
				2013/10/4	Cloudy	20.0	Dark grayish yellow	Faint grass	Loamy	900	2,100	3,000	0.30		
				2013/12/6	Cloudy	12.0	Dark grayish yellow	faint earth	Loamy	570	1,400	1,970	0.32		

Lakes and Reservoirs

# Miyagi Coastal (Water) 1/2

Location		Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks		
						General items				Activity concentration(Bq/L)								
No.	Water area					Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Salinity (‰)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium				
														Cs-134	Cs-137			
Coastal areas	65 Kesenuma Bay (B)	Offshore of Hachigasaki	Surface layer	2013/7/23	Cloudy	19.4	17.9	18.4	0.5	Grayish yellow green	None	4.5	20.6	<1	1.0	<0.59	<0.58	
			Deep layer					15.3	16.9	-	None			29.0	<1	1.0	<0.62	<0.63
			Surface layer	2013/8/13	Sunny	27.9	17.2	21.0	0.5	Dark grayish yellow green	None	2.3	28.9	3	3.9	<0.58	<0.76	
		Deep layer					18.8	16.2	-	None			30.4	2	1.0	<0.65	<0.72	
		Surface layer	2013/11/13	Sunny	5.9	18.6	14.8	0.5	Dark grayish yellowish green	None	4.5	29.0	2	1.0	<0.69	<0.71		
		Deep layer					15.0	17.6	-	None			29.4	3	1.6	<0.76	<0.85	
	66 Kesenuma Bay (C)	Offshore of Oshimakita	Surface layer	2013/7/23	Cloudy	19.6	37.3	18.2	0.5	Dark grayish yellow green	None	3.5	20.9	<1	1.7	<0.56	<0.66	
			Deep layer					15.4	36.3	-	None		29.3	<1	1.0	<0.55	<0.68	
			Surface layer	2013/8/13	Sunny	28.0	41.0	22.9	0.5	Dark grayish yellow green	None	2.5	27.8	3	3.2	<0.46	<0.61	
		Deep layer					17.3	40.0	-	None		30.7	16	5.3	<0.59	<0.56		
		Surface layer	2013/11/13	Sunny	6.2	40.8	14.6	0.5	Dark grayish yellowish green	None	5.5	28.7	1	0.9	<0.45	<0.65		
		Deep layer					15.1	39.8	-	None		29.5	4	1.3	<0.59	<0.65		
	67 Offshore of Tsuyagawa River Estuary	Offshore of Tsuyagawa River Estuary	Surface layer	2013/7/23	Cloudy	21.7	12.2	19.4	0.5	Grayish yellow green	None	4.5	26.0	3	1.3	<0.63	<0.59	
			Deep layer					18.0	11.2	-	None		28.5	<1	1.1	<0.69	<0.61	
			Surface layer	2013/11/13	Sunny	6.5	12.5	14.6	0.5	Grayish yellowish green	None	5.4	29.2	2	0.8	<0.66	<0.62	
		Deep layer					14.5	11.5	-	None		29.4	2	1.0	<0.65	<0.52		
		Surface layer	2013/5/23	Sunny	23.5	18.0	12.0	0.0	Grayish bluish green	None	4.5	30.0	2	1.6	<0.58	<0.80		
		Deep layer					11.3	17.0	-	None		33.8	<1	0.5	<0.52	<0.60		
	68 All other neighboring sea areas	Oppa Bay (Jyusanhama Beach)	Surface layer	2013/8/20	Cloudy	24.9	18.0	22.9	0.5	Grayish yellow green	None	2.0	28.6	2	3.4	<0.87	<0.70	
			Deep layer					20.4	17.0	-	None		30.7	2	0.9	<0.56	<0.62	
			Surface layer	2013/11/5	Sunny	17.1	18.5	15.5	0.5	Grayish yellow green	None	3.2	17.9	3	2.2	<0.60	<0.55	
		Deep layer					17.0	17.5	-	None		29.6	2	0.7	<0.56	<0.52		
		Surface layer	2014/2/7	Sunny	-0.2	19.2	5.3	0.5	Grayish yellow green	None	1.9	16.6	3	2.9	<0.56	<0.55		
		Deep layer					8.1	18.2	-	None		31.0	5	3.4	<0.62	<0.58		
	69 Neighboring sea area of Ishinomaki (C)	Lake Mangokuura , M-6 (center)	Surface layer	2013/5/24	Sunny	20.0	4.0	17.4	0.0	Light grayish green	None	3.0	32.8	2	1.6	<0.61	<0.57	
			Deep layer					14.6	3.0	-	None		32.6	3	2.0	<0.63	<0.63	
			Surface layer	2013/8/13	Sunny	26.8	3.8	28.3	0.5	Grayish yellow green	None	2.9	28.6	<1	1.2	<0.64	<0.60	
		Deep layer					27.6	2.8	-	None		28.7	2	1.3	<0.58	<0.54		
		Surface layer	2013/11/6	Sunny	17.3	3.8	15.9	0.5	Grayish yellow green	None	2.7	28.0	3	2.6	<0.55	<0.58		
		Deep layer					16.1	2.8	-	None		28.0	2	2.3	<0.58	<0.62		
70 Neighboring sea area of Ishinomaki (B-3)	Offshore of Kitakami River Estuary	Surface layer	2013/7/26	Cloudy	22.9	6.5	20.5	0.5	Grayish yellow	None	1.5	10.6	4	5.8	<0.63	<0.74		
		Deep layer					20.3	5.5	-	None		22.9	2	2.0	<0.66	<0.62		
		Surface layer	2013/8/19	Sunny	27.1	6.8	26.1	0.5	Light grayish yellow	None	0.8	12.1	23	6.0	<0.73	<0.65		
	Deep layer					25.5	5.8	-	None		26.4	8	2.0	<0.56	<0.68			
	Surface layer	2013/11/14	Sunny	4.6	6.9	13.1	0.5	Grayish yellowish green	None	2.0	21.4	4	3.0	<0.51	<0.71			
	Deep layer					14.6	5.9	-	None		29.4	2	3.6	<0.76	<0.57			
71 Neighboring sea area of Ishinomaki (C)	Offshore of Naruse	Surface layer	2014/2/25	Sunny	-0.2	7.1	5.7	0.5	Grayish yellow green	None	3.6	18.8	4	2.2	<0.65	<0.55		
		Deep layer					6.8	6.1	-	None		30.1	5	2.7	<0.69	<0.62		
		Surface layer	2013/7/26	Light rain	21.5	14.0	21.9	0.5	Dark grayish yellow green	None	2.8	22.7	3	3.8	<0.50	<0.49		
	Deep layer					21.5	13.0	-	None		29.4	<1	0.9	<0.60	<0.70			
	Surface layer	2013/8/19	Sunny	28.1	13.5	27.4	0.5	Grayish yellow green	None	2.2	19.9	4	4.7	<0.50	<0.63			
	Deep layer					21.0	12.5	-	None		27.9	1	0.8	<0.76	<0.70			
			Surface layer	2013/11/14	Sunny	9.8	13.8	14.1	0.5	Grayish yellowish green	None	2.8	26.9	2	3.7	<0.64	<0.57	
			Deep layer					15.3	12.8	-	None		29.2	2	2.9	<0.61	<0.71	
			Surface layer	2014/2/25	Sunny	0.6	14.8	5.5	0.5	Grayish yellow green	None	6.0	28.3	2	1.1	<0.56	<0.52	
Deep layer					6.7	13.8	-	None		30.8	4	2.9	<0.51	<0.62				

# Miyagi Coastal (Water) 2/2

Location				Sampling Date	Weather	Air temperature (°C)	Water depth (m)	Water										Remarks
No.	Water area		Surface layer					General items						Activity concentration(Bq/L)				
								Water temperature (°C)	Sampling depth (m)	Color	Odor	Secchi disk depth (m)	Salinity (‰)	SS (mg/L)	Turbidity (FNU)	Radioactive cesium		
			Deep layer										Cs-134	Cs-137				
Coastal areas	72	Matsushima Bay (B)	Nishihama Beach	Surface layer	2013/6/11	Cloudy	19.1	12.6	20.2	0.5	Dark grayish bluish green	None	2.1	29.5	4	3.9	<0.51	<0.68
				16.8					11.6	-	None	30.8		4	4.2	<0.59	<0.62	
				Surface layer	2013/8/21	Sunny	28.0	12.4	24.7	0.5	Dark grayish yellow green	None	1.5	26.2	7	4.4	<0.60	<0.59
				22.6					11.4	-	None	27.4		18	7.0	<0.63	<0.86	
				Surface layer	2013/11/12	Cloudy	7.0	13.2	11.6	0.5	Dark grayish yellowish green	None	2.0	28.1	6	2.7	<0.64	<0.71
				12.3					12.2	-	None	29.0		10	5.6	<0.51	<0.52	
	Surface layer	2014/2/21	Light snow	2.0	11.9	4.1	0.5	Grayish yellow green	None	1.5	28.3	8	5.4	<0.70	<0.49			
	4.2					10.9	-	None	28.8		13	7.8	<0.71	<0.55				
	73	Neighboring sea area of Sendai Port (A)	Naiko Inner Port, 4-Nai	Surface layer	2013/6/11	Cloudy	22.3	15.3	19.8	0.5	Dark grayish yellow green	None	2.0	29.1	3	5.0	<0.61	<0.62
				13.3					14.3	-	None	31.5		3	3.0	<0.51	<0.52	
				Surface layer	2013/8/21	Sunny	28.1	16.3	24.8	0.5	Dark grayish yellow green	None	2.5	24.4	3	2.6	<0.63	<0.65
				20.6					15.3	-	None	29.0		3	1.5	<0.73	<0.74	
				Surface layer	2013/11/12	Sunny	6.1	17.2	16.5	0.5	Grayish yellow green	None	2.8	29.1	4	3.0	<0.68	<0.58
				15.9					16.2	-	None	29.3		4	4.4	<0.73	<0.63	
	Surface layer	2014/2/21	Sunny	2.2	16.9	6.1	0.5	Grayish yellow green	None	2.0	29.2	1	2.6	<0.57	<0.55			
	5.7					15.9	-	None	29.7		7	5.3	<0.60	<0.60				
	74	Neighboring sea area of Sendai Port (B)	Gamo-3	Surface layer	2013/6/11	Cloudy	18.3	15.8	19.8	0.5	Dark grayish bluish green	None	1.5	26.6	4	7.6	<0.48	<0.62
				10.6					14.8	-	None	31.0		7	7.5	<0.71	<0.62	
				Surface layer	2013/8/21	Sunny	27.2	15.2	23.9	0.5	Dark blue green	None	2.5	24.6	4	2.5	<0.51	<0.52
				20.6					14.2	-	None	28.5		2	1.3	<0.61	<0.68	
				Surface layer	2013/11/12	Cloudy	7.1	15.4	16.2	0.5	Grayish yellow green	None	1.8	28.9	5	3.9	<0.65	<0.84
				16.5					14.4	-	None	29.6		7	6.1	<0.55	<0.52	
	Surface layer	2014/2/21	Sunny	1.0	15.7	5.5	0.5	Grayish yellow green	None	1.8	28.7	3	2.7	<0.64	<0.60			
	5.9					14.7	-	None	29.5		13	13	<0.65	<0.58				
75	All other neighboring sea areas	Ido-5	Surface layer	2013/6/11	Cloudy	19.5	13.4	20.1	0.5	Dark grayish bluish green	None	3.5	25.4	3	4.0	<0.61	<0.68	
			11.8					12.4	-	None	31.2		3	1.3	<0.48	<0.58		
			Surface layer	2013/8/21	Sunny	28.4	15.2	24.7	0.5	Grayish greenish yellow	None	3.0	16.1	4	2.4	<0.63	<0.73	
			21.5					14.2	-	None	29.6		3	0.8	<0.69	<0.56		
			Surface layer	2013/11/12	Cloudy	7.2	13.9	14.6	0.5	Dark grayish yellow green	None	2.3	27.7	3	2.3	<0.62	<0.68	
			15.0					12.9	-	None	28.3		7	5.6	<0.59	<0.68		
Surface layer	2014/2/21	Sunny	2.1	14.1	5.5	0.5	Grayish yellow green	None	2.8	29.2	<1	2.0	<0.51	<0.55				
5.8					13.1	-	None	29.6		6	4.6	<0.50	<0.58					
Surface layer	2013/6/24	Sunny	22.7	9.1	21.3	0.5	Grayish yellow green	None	4.6	24.2	2	3.0	<0.46	<0.53				
20.7					8.1	-	None	27.3		3	1.0	<0.60	<0.60					
76	Offshore of Abukuma River Estuary	Offshore of Abukuma River Estuary	Surface layer	2013/7/2	Sunny	24.8	8.8	21.0	0.5	Grayish yellow green	None	5.1	25.9	1	1.4	<0.50	<0.35	
			17.5					7.8	-	None	30.3		1	1.3	<0.54	<0.72		
			Surface layer	2013/7/17	Cloudy	19.5	9.3	22.2	0.5	Grayish yellow green	None	2.8	21.1	3	3.2	<0.56	<0.65	
			21.7					8.3	-	None	27.4		2	1.7	<0.60	<0.70		
			Surface layer	2013/8/20	Light rain	24.0	10.2	24.0	0.5	Grayish yellow green	None	4.0	26.5	2	1.4	<0.52	<0.65	
			22.0					9.2	-	None	29.1		4	2.2	<0.60	<0.82		
			Surface layer	2013/9/30	Sunny	22.4	10.0	22.2	0.5	Grayish yellow green	None	7.0	28.3	6	0.6	<0.52	<0.67	
			22.1					9.0	-	None	28.2		2	0.8	<0.56	<0.59		
			Surface layer	2013/10/29	Cloudy	13.0	11.0	18.4	0.5	Grayish yellow green	None	2.0	24.3	6	3.0	<0.69	<0.47	
			19.1					10.0	-	None	27.6		2	1.6	<0.59	<0.62		
			Surface layer	2013/12/18	Cloudy	5.0	8.9	10.4	0.5	Grayish yellowish green	None	3.7	26.9	3	2.0	<0.64	<0.67	
			11.2					7.9	-	None	27.4		4	2.9	<0.64	<0.71		
			Surface layer	2014/1/14	Sunny	-0.8	9.9	6.6	0.5	Dark grayish bluish green	None	6.2	19.9	3	1.3	<0.67	<0.45	
			8.9					8.9	-	None	29.6		3	0.7	<0.48	<0.61		
Surface layer	2014/2/4	Cloudy	0.6	10.2	7.5	0.5	Dark grayish blue green	None	4.7	27.8	2	0.8	<0.48	<0.62				
7.5					9.2	-	None	27.8		2	1.2	<0.69	<0.56					



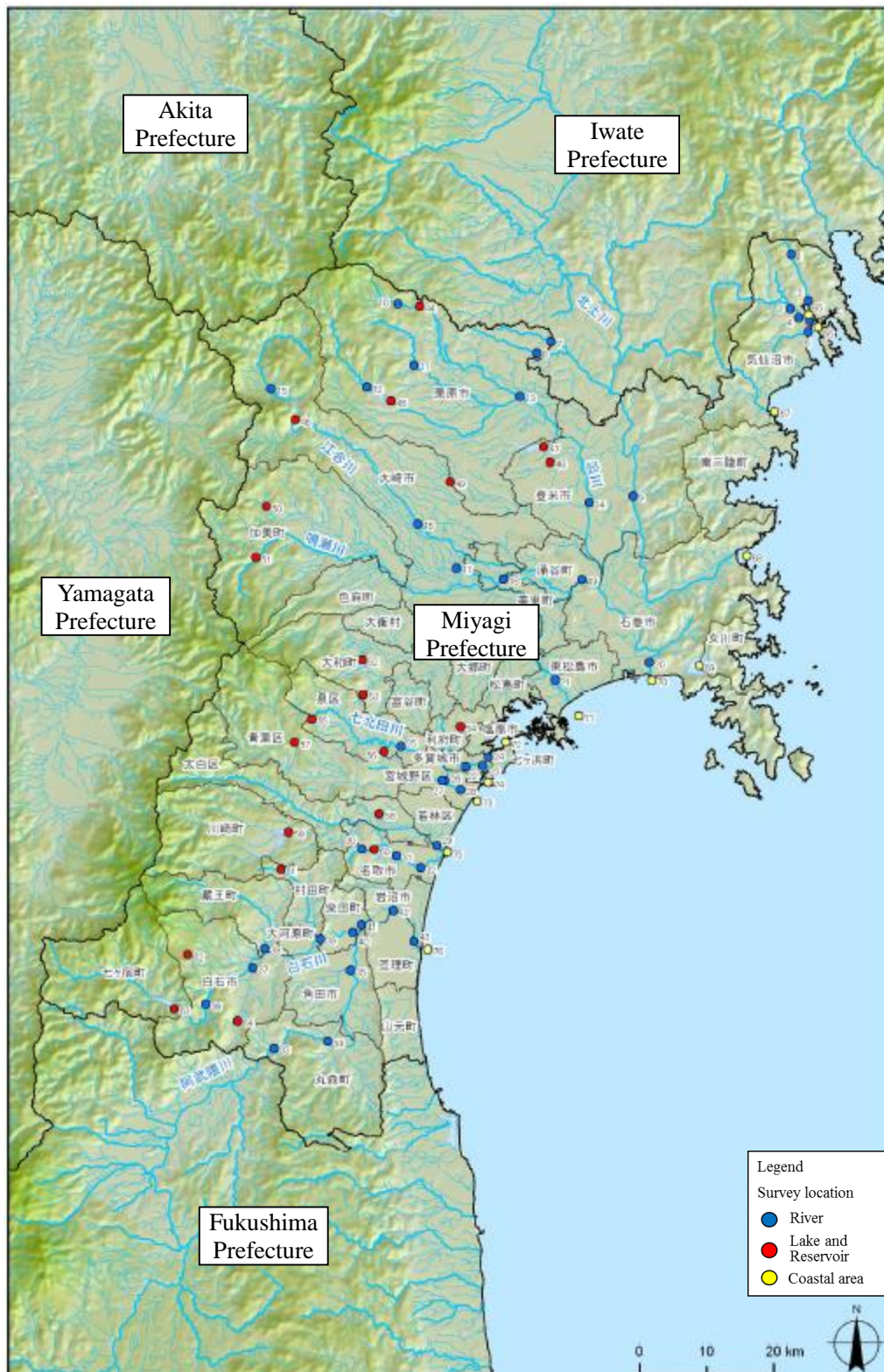


Figure 3.5.3 Survey Locations (Miyagi Prefecture)