

**Plans of the Sea Area Monitoring Conducted by Tokyo Electric Power Company  
(FY 2014, Revision 00)**

1. Fukushima Prefecture Coast

Place of Sampling (Place No. T-)	Sampling	Analysis Items	Analysis Frequency	Detection Limit (Bq/L)*	Note
1F North Discharge Channel of 5-6 (1)	Seawater	Upper part (γ)	1/Day	(1) Upper part (γ): Cs-134, Cs-137, I-131 → 1(Bq/L)	(1) Upper part (γ), Lower part (γ): Nuclide analysis of γ in the seawater at upper layer and lower layer.
		Upper part (Pu)	1/6 Months		
		Upper part (α,β,H-3, Sr)	1/Month (Gross β, H-3:1/Week)		
	Upper part (Cs detail)	1/Week			
1F Around South Discharge Channel (2-1)	Seawater	Upper part (γ)	1/Day	(2) Upper part (Pu): Pu-238, Pu-239+Pu-240 → 0.00001(Bq/L)	(2) Upper part (Pu): Analysis of Pu-238, Pu-239+Pu240 at upper layer of the sea. Analysis of U-234, U-235, U-238, Am-241, Cm242 and Cm243+Cm244 will be conducted when Pu-238 is detected.
		Upper part (Pu)	1/6 Months		
		Upper part (α,β,H-3, Sr)	1/Month (Gross β: 1/Day, H-3: 1/Week)		
	Upper part (Cs detail)	1/Week			
Harbor Entrance (0)	Seawater	Upper part (γ)	1/Week	(3) Upper part (α, β, H-3, Sr), Upper part (β, H-3, Sr), Upper part (β, H-3): Gross α → 3 (Bq/L), Gross β → 20 (Bq/L), H-3 → 3 (Bq/L, however T-D1, D5, D9, 3, 5, 6 → 0.4 (Bq/L), Sr-90 → 0.01 (Bq/L)	(3) Upper part (α,β,H-3, Sr): Analysis of Gross α, Gross β, H-3 and Sr-90 at upper layer of the sea.
		Upper part (β,H-3, Sr)	1/Week (Sr-90: 1/Month)		
		Upper part (γ)	1/Week		
	Upper part (β,H-3)	1/Week			
1F North Breakwater North Side (Site North Offshore 0.5km) (0-1)	Seawater	Upper part (γ)	1/Week	(4) Upper part (Cs detail), Lower part (Cs detail): Cs-134, Cs-137 → 0.001 (Bq/L)	(5) Upper part (β,H-3): Analysis of Gross Band H-3 at upper layer of the sea.
		Upper part (β,H-3)	1/Week		
1F Harbor Entrance Northeast Side (0-1A)	Seawater	Upper part (γ)	1/Week	(5) Marine soil (γ, Pu, Sr), Marine soil (γ): Cs-134, Cs-137 → 1 (Bq/kg Dry soil), Sr-90 → 2 (Bq/kg Dry soil), Pu-238, P-239+Pu-240 → 0.03 (Bq/kg Dry soil)	(6) Upper part (Cs detail), Lower part (Cs detail): Detailed analysis of Cs by AMAP coagulation settling method in each seawater at upper and lower layers
		Upper part (β,H-3)	1/Week		
1F Harbor Entrance East Side (Around 1km Offshore) (0-2)	Seawater	Upper part (γ)	1/Week	(6) Fish (γ): Cs-134,Cs-137 → 10 (Bq/kg (Raw))	(7) Marine soil (γ, Pu, Sr): analysis of γ nuclide in Marine soil, Pu-238, Pu-239 + Pu240 analysis, if Pu-238 is detected, U-234, U-235, U-238, Am-241, Cm242 and Cm243 + Cm244 are also analyzed, Sr-90 analysis
		Upper part (β,H-3)	1/Week		
1F South Breakwater South Side (Site South Offshore 0.5km) (0-3)	Seawater	Upper part (γ)	1/Week	(8) Marine soil (γ): Nuclide analysis of γ in the marine soil.	(9) Fish(γ): Nuclide analysis of γ in the fish and shellfish.
		Upper part (β,H-3)	1/Week		
1F Harbor Entrance Southeast Side (0-3A)	Seawater	Upper part (γ)	1/Week	(10) Sr-90 will be conducted when the density of f	
		Upper part (β,H-3)	1/Week		
2F Around North Discharge Channel (3)	Seawater	Upper part (Cs detail)	1/Week		
		Upper part (β,H-3)	2/Month		
2F Around Iwasawa Shore (4)	Marine soil	Upper part (Cs detail)	1/Week		
		Marine soil (γ)	1/Month		
Ukedo Port South Side (6)	Seawater	Upper part (Cs detail)	1/Week		
		Upper part (β,H-3)	2/Month		
3km Offshore of Odaka Ward (14)	Seawater	Upper part (Cs detail)	1/Week		
		Lower part (Cs detail)	1/Week		
3km Offshore of Ukedo River (D1)	Marine soil	Marine soil (γ)	1/Month		
		Upper part (α,β,H-3,Sr,Pu)	Gross α, Sr: 1/Month, Gross β, H-3: 2/Month, Pu: 1/6 Months		
Around 3km Offshore of 1F (D5)	Seawater	Upper part (Cs detail)	1/Week		
		Lower part (Cs detail)	1/Week		
Around 3km Offshore of 2F (D9)	Seawater	Upper part (α,β,H-3,Sr,Pu)	Gross α, Sr: 1/Month, Gross β, H-3: 2/Month, Pu: 1/6 Months		
		Marine soil (γ)	1/Month		
Around 15km Offshore of 1F (5)	Seawater	Upper part (Cs detail)	1/Week		
		Lower part (Cs detail)	1/Week		
3km Offshore of Iwasawa Shore (11)	Marine soil	Upper part (α,β,H-3,Sr,Pu)	Gross α, Sr: 1/Month, Gross β, H-3: 2/Month, Pu: 1/6 Months		
		Marine soil (γ)	1/Month		
1km Offshore of Murakami, Odaka Ward (①) 2km Offshore of Murakami, Odaka Ward (②) 1km Offshore of Ukedo, Namie Town (③) 2km Offshore of Ukedo, Namie Town (④) 3km Offshore of Ukedo, Namie Town (⑤) 1km Offshore of Kumagawa, Okuma Town (⑥) 2km Offshore of Kumagawa, Okuma Town (⑦) 3km Offshore of Kumagawa, Okuma Town (⑧) 5km Offshore of Kumagawa, Okuma Town (⑨) 10km Offshore of Kumagawa, Okuma Town (⑩) 15km Offshore of Kumagawa, Okuma Town (⑪) 20km Offshore of Kumagawa, Okuma Town (⑫) 1km Offshore of Yamadahama, Naraha Town (⑬)	Marine soil	Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
		Marine soil (γ)	1/Month		
1km Offshore of Nida River (13-1)	Seawater	Upper part (Cs detail)	1/Month		
		Lower part (Cs detail)	1/Month		
15km Offshore of Iwasawa Shore (7)	Marine soil	Marine soil (γ)	1/2 Months		
		Marine soil (γ)	1/2 Months		
3km Offshore of Onahama Port (18)	Seawater	Upper part (Cs detail)	1/Month		
		Lower part (Cs detail)	1/Month		
5km Offshore of Numanouchi (M10)	Marine soil	Marine soil (γ)	1/2 Months		
		Marine soil (γ)	1/2 Months		

**Plans of the Sea Area Monitoring Conducted by Tokyo Electric Power Company  
(FY 2014, Revision 00)**

1. Fukushima Prefecture Coast

Place of Sampling (Place No. T-)	Sampling	Analysis Items	Analysis Frequency	Detection Limit (Bq/L)*	Note
3km Offshore of North of Iwaki City (12)	Seawater	Upper part (Cs detail) Lower part (Cs detail)	1/Month		
	Marine soil	Marine soil (y)	1/2 Months		
1km Offshore of Natsui River (17-1)	Seawater	Upper part (Cs detail) Lower part (Cs detail)	1/Month		
	Marine soil	Marine soil (y)	1/2 Months		
3km Offshore of Toyoma (20)	Seawater	Upper part (Cs detail) Lower part (Cs detail)	1/Month		
	Marine soil	Marine soil (y)	1/2 Months		
3km Offshore of Soma (22)	Seawater	Upper part (Cs detail) Lower part (Cs detail)	1/Month		
	Marine soil	Marine soil (y)	1/2 Months		
5km Offshore of Kashima (MA)	Seawater	Upper part (Cs detail) Lower part (Cs detail)	1/Month		
	Marine soil	Marine soil (y)	1/2 Months		
Around 1km Offshore of Ota River (S1)	Fish and shellfish	Fish (y)	1/Month		
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 3km Offshore of Odaka Ward (S2)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 3km Offshore of Ukedo River (S3)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 3km Offshore of 1F (S4)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 2km Offshore of Kido River (S5)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 2km Offshore of 2F (S7)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 4km Offshore of Kumagawa (S8)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 15km Offshore of Odaka Ward (B1)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 18km Offshore of Ukedo River (B2)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 10km Offshore of 1F (B3)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			
Around 10km Offshore of 2F (B4)	Fish and shellfish	Fish (y)			
	Seawater	Upper part (Cs detail) Lower part (Cs detail)			
	Marine soil	Marine soil (y)			

2. Miyagi Prefecture Coast

Place of Sampling (Place No. T-)	Sampling	Analysis Items	Analysis Frequency	Detection Limit (Bq/L)*	Note	
Offshore of Minamisanriku (MG0)	Seawater	Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)	2/Month	(1) Upper part (Cs detail), Middle part (Cs detail), Lower part (Cs detail): Cs-134, Cs-137 -> 0.001 (Bq/L)  (2) Upper part (Sr): Sr-90 > 0.01 (Bq/L)	(1) Upper part (Cs detail), Middle part (Cs detail), Lower part (Cs detail): Detailed analysis of Cs by AMAP coagulation settling method in each seawater at upper, medium and lower layers  (2) Upper part (Sr): Analysis of Sr-90 in the seawater at upper layer.	
Ishinomaki Bay (MG1)		Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				
Offshore of Kinkasan East (MG2)		Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				
Offshore of Kinkasan South (MG3)		Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				
Offshore of Shichigahama (MG4)		Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				
Central Area of Sendai Bay (MG5)		Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				
Offshore of Abukuma River (MG6)		Upper part (Sr) Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				1/2 Months
		Upper part (Cs detail) Middle part (Cs detail) Lower part (Cs detail)				2/Month

3. Ibaraki Prefecture Coast

Place of Sampling (Place No. T-)	Sampling	Analysis Items	Analysis Frequency	Detection Limit (Bq/L)*	Note	
3km Offshore of Isohara Shore (Z)	Seawater	Upper part (y) Lower part (y)	1/Month	(1) Upper part (y), Lower part (y): Cs-134, Cs-137 -> 1 (Bq/L)  (2) Upper part (Sr): Sr-90 > 0.01 (Bq/L)	(1) Upper part (y), Lower part (y): Nuclide analysis of y in the seawater at upper layer and lower layer.  (2) Upper part (Sr): Analysis of Sr-90 in the seawater at upper layer.	
3km Offshore of Takadokobama Shore (A)		Upper part (y) Lower part (y)				
3km Offshore of Kujihama Shore (B)		Upper part (y) Lower part (y)				
3km Offshore of Oarai Shore (C)		Upper part (y) Lower part (y)				
		Upper part (Sr)				1/2 Months
		Upper part (y) Lower part (y)				1/Month
3km Offshore of Hirai Shore (D)		Upper part (y) Lower part (y)	1/Month			
3km Offshore of Hasaki Shore (E)		Upper part (y) Lower part (y)				

\* Detection limit is the target

Sampling Locations of the Sea Area Monitoring Conducted by Tokyo Electric Power Company  
(FY 2014, Revision 00)

Place of Sampling		Place No.	Latitude (North Latitude)	Longitude (East Longitude)		
Coast	North of Discharge Channel of 5-6 Units of 1F	T-1	37°25' 52"	141°02' 04"		
	Around South Discharge Channel of 1F	T-2* 3	37°24' 55"	141°02' 02"		
		T-2-1* 3	37°24' 22"	141°02' 01"		
	1F Harbor Entrance *5	T-0	37°25' 24"	141°02' 29"		
	1F North Breakwater North Side (Site North Offshore 0.5km) *5	T-0-1	37°25' 50"	141°02' 25"		
	1F Harbor Entrance Northeast Side *6	T-0-1A	37°25' 50"	141°02' 48"		
	1F Harbor Entrance East Side (1km Offshore of 1F) *5	T-0-2	37°25' 24"	141°02' 48"		
	1F South Breakwater South Side (Site South Offshore 0.5km) *5	T-0-3	37°24' 58"	141°02' 25"		
	1F Harbor Entrance Southeast Side *6	T-0-3A	37°24' 58"	141°02' 48"		
	Around North Discharge Channel of 2F	T-3	37°19' 20"	141°01' 35"		
	2F Around Iwasawa Shore *2, *7	T-4	37°14' 30"	141°00' 50"		
	Around the North Side of Asamigawa *2, *4	T-4-1	37°12' 37"	141°00' 20"		
	Around the South Side of Kitasakogawa *4, *7	T-4-2	37°12' 51"	141°00' 25"		
Within 20km Range of Fukushima Daiichi NPS	South Side of Ukedo Port *5	T-6	37°28' 44"	141°02' 26"		
	3km Offshore of Odaka Ward	T-14	37°33' 10"	141°3' 45"		
	3km Offshore of Iwasawa Shore	T-11	37°14' 30"	141°2' 50"		
	3km Offshore of Ukedo River	T-D1	37°30' 00"	141°4' 20"		
	3km Offshore of 1F	T-D5	37°25' 00"	141°4' 20"		
	3km Offshore of 2F	T-D9	37°20' 00"	141°4' 20"		
	15km Offshore of 1F	T-5	37°25' 00"	141°12' 00"		
	1km Offshore of Murakami, Odaka Ward	T-①	37°33' 6"	141°2' 30"		
	2km Offshore of Murakami, Odaka Ward	T-②	37°33' 6"	141°3' 00"		
	1km Offshore of Ukedo, Namie Town	T-③	37°27' 30"	141°2' 30"		
	2km Offshore of Ukedo, Namie Town	T-④	37°27' 30"	141°3' 00"		
	3km Offshore of Ukedo, Namie Town	T-⑤	37°27' 30"	141°3' 30"		
	1km Offshore of Kumagawa, Okuma Town	T-⑥	37°23' 00"	141°2' 30"		
	2km Offshore of Kumagawa, Okuma Town	T-⑦	37°23' 00"	141°3' 00"		
	3km Offshore of Kumagawa, Okuma Town	T-⑧	37°23' 00"	141°3' 30"		
	5km Offshore of Kumagawa, Okuma Town	T-⑨	37°23' 00"	141°5' 30"		
	10km Offshore of Kumagawa, Okuma Town	T-⑩	37°23' 00"	141°10' 00"		
	15km Offshore of Kumagawa, Okuma Town	T-⑪	37°23' 00"	141°12' 00"		
	20km Offshore of Kumagawa, Okuma Town	T-⑫	37°23' 00"	141°15' 00"		
	1km Offshore of Yamadahama, Naraha Town	T-⑬	37°14' 18"	141°1' 30"		
	Around 1km Offshore of Ota River	T-S1	37°35' 05"	141°2' 32"		
	Around 3km Offshore of Odaka Ward	T-S2	37°33' 10"	141°3' 45"		
	Around 3km Offshore of Ukedo River	T-S3	37°27' 30"	141°04' 44"		
	Around 3km Offshore of 1F	T-S4	37°25' 43"	141°04' 57"		
	Around 2km Offshore of Kido River	T-S5	37°15' 54"	141°02' 22"		
	Around 2km Offshore of 2F <sup>1</sup>	T-S7	37°18' 40"	141°02' 50"		
	Around 4km Offshore of Kumagawa <sup>1</sup>	T-S8	37°23' 00"	141°04' 44"		
	Around 15km Offshore of Odaka Ward	T-B1	37°32' 00"	141°13' 00"		
	Around 18km Offshore of Ukedo River	T-B2	37°31' 00"	141°14' 00"		
	Around 10km Offshore of 1F	T-B3	37°24' 28"	141°09' 15"		
	Around 10km Offshore of 2F	T-B4	37°20' 54"	141°08' 55"		
	Within 30km Range of Fukushima Daiichi NPS	1km Offshore of Nida River	T-13-1	37°38' 27"	141°02' 33"	
		15km Offshore of Iwasawa Shore	T-7	37°14' 00"	141°12' 00"	
	Out of 30km Range of Fukushima Daiichi NPS	Offshore of Fukushima Prefecture	3km Offshore of Onahama Port	T-18	36°54' 20"	140°55' 20"
			3km offshore of North of Iwaki City	T-12	37°09' 00"	141°2' 15"
			1km Offshore of Natsui River	T-17-1	37°03' 20"	141°00' 25"
			3km Offshore of Toyoma	T-20	36°58' 00"	141°00' 00"
			3km Offshore of Soma	T-22	37°49' 28"	141°1' 21"
		Offshore of Ibaraki Prefecture	5km Offshore of Kashima	T-MA	37°45' 00"	141°5' 00"
			5km Offshore of Numanouchi	T-M10	37°00' 00"	141°5' 00"
			3km Offshore of Isohara Shore	T-Z	36°47' 30"	140°47' 21"
			3km Offshore of Takadokobama Shore	T-A	36°42' 50"	140°45' 50"
			3km Offshore of Kujihama Shore	T-B	36°30' 23"	140°39' 56"
Offshore of Miyagi Prefecture		3km Offshore of Oarai Shore	T-C	36°17' 59"	140°36' 14"	
		3km Offshore of Hirai Shore	T-D	35°59' 15"	140°42' 08"	
		3km Offshore of Hasaki Shore	T-E	35°47' 46"	140°50' 14"	
		Offshore of Minamisanriku	T-MG0	38°38' 00"	141°35' 00"	
Offshore of Miyagi Prefecture		Ishinomaki Bay	T-MG1	38°20' 00"	141°17' 00"	
		Offshore of Kinkasan East	T-MG2	38°18' 00"	141°40' 00"	
		Offshore of Kinkasan South	T-MG3	38°14' 00"	141°35' 00"	
		Offshore of Shichigahama	T-MG4	38°15' 00"	141°08' 00"	
	Central Area of Sendai Bay	T-MG5	38°10' 00"	141°15' 00"		
	Offshore of Abukuma River	T-MG6	38°05' 00"	141°00' 00"		

\* 1F: Fukushima Daiichi Nuclear Power Station, 2F: Fukushima Daini Nuclear Power Station

\*1 Place No. "T-S6" was changed to "T-S7" in May 2012. "T-S8" was added in July 2012.

\*2 "T-4-1" was newly set to substitute for "T-4" in October 2012 as the road to access "T-4" has been closed since mid-September 2012.

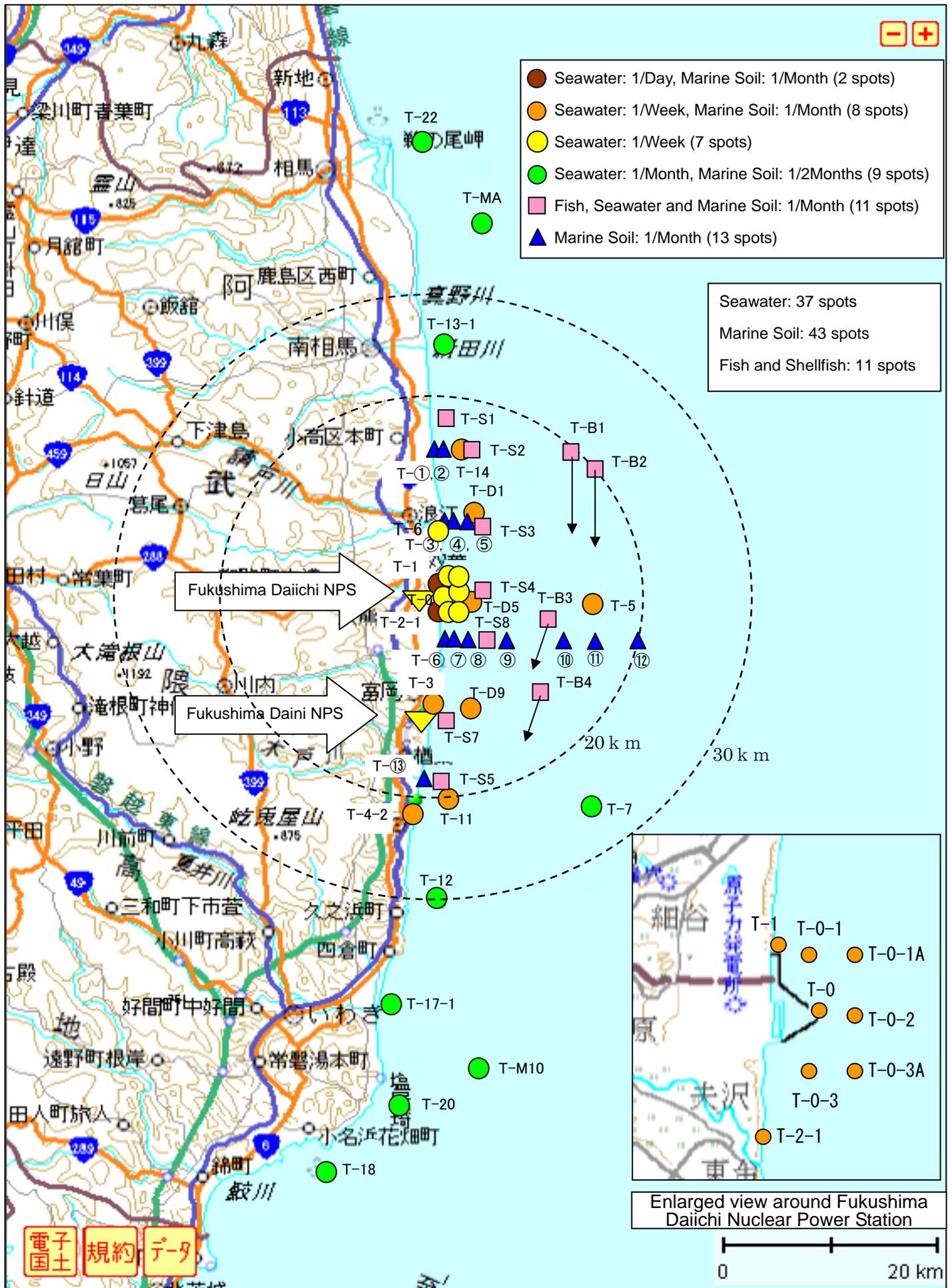
\*3 "T-2-1" was newly set to substitute for "T-2", since it is impossible to conduct marine soil (sand) sampling due to erosion.

\*4 "T-4-2" was newly set to substitute for "T-4-1" in March 2013 as the road to access "T-4-1" has been closed since mid-March 2013.

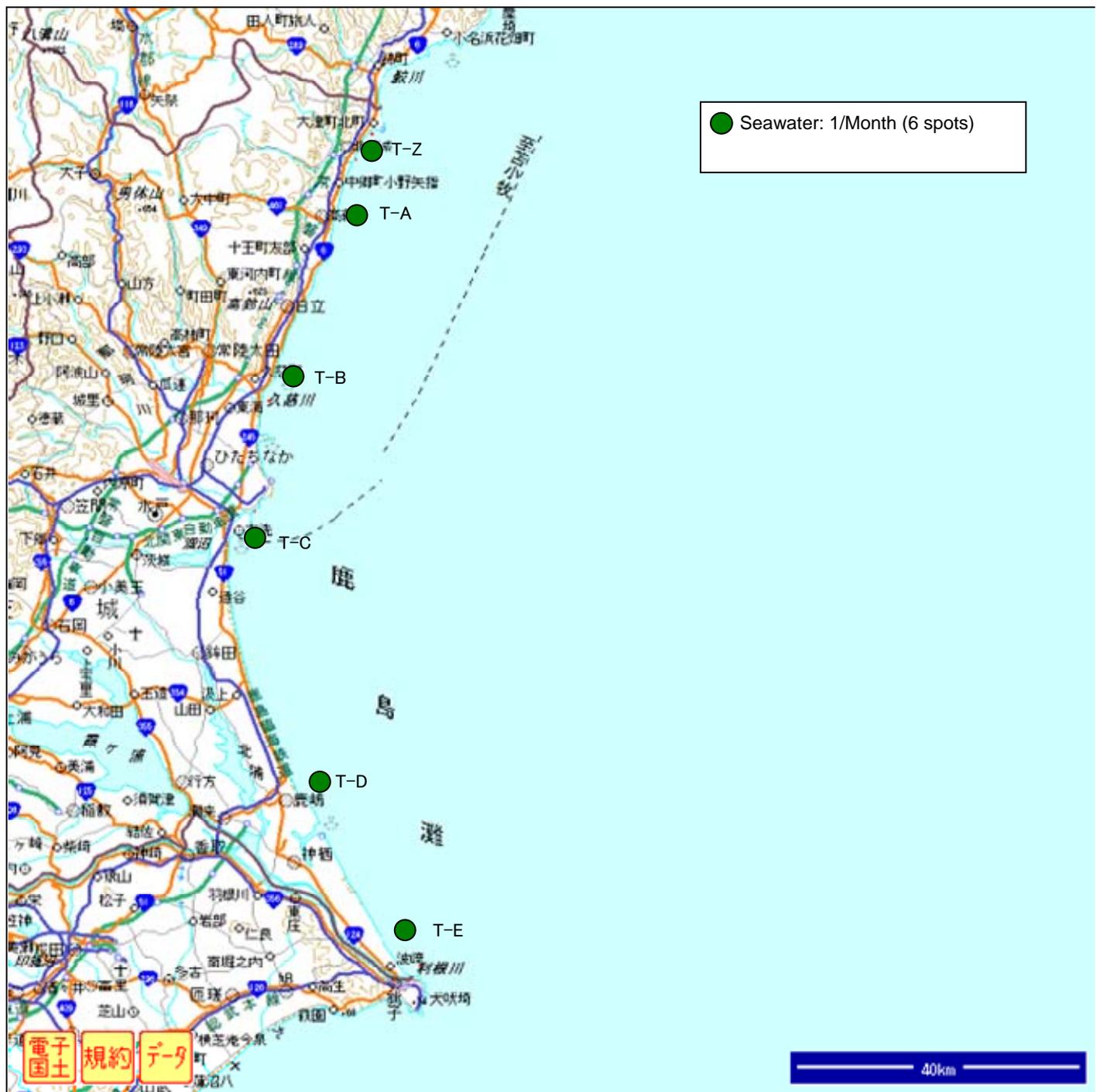
\*5 Measurement place added (from August 2013)

\*6 Measurement place added (from November 2013)

\*7 Due to construction of the access way to "T-4-2", changed to "T-4" with which recovery of the access way was completed.



**Figure 1. Sampling Locations (Seawater, etc.)  
(Fukushima Prefecture Coast, April 2014)**



**Figure 2. Sampling Locations (Seawater, etc.)**  
**(Ibaraki Prefecture Coast, April 2014)**



**Figure 3. Sampling Locations (Seawater, etc.)  
(Miyagi Prefecture Coast, April 2014)**