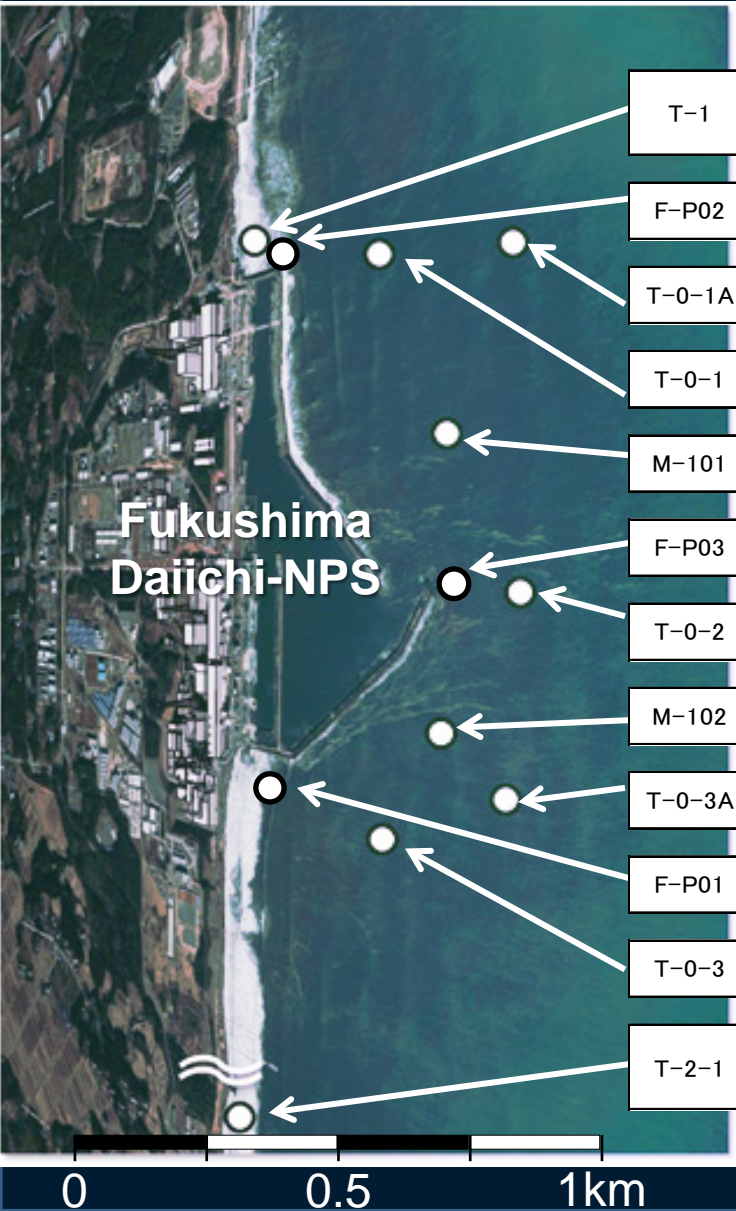


Sea Area Monitoring

September 02, 2014

Nuclear Regulation Authority (NRA), Japan

Sea area within 2km radius from the NPS



Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	Sr-90	total α	Pu-238	Pu-239+Pu-240
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Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits

*1: Total β : including K-40 *2: Total β : excluding K-40

T-1	2014/8/18	ND(0.76)	ND(0.62)	13 ^{*1}	ND(1.7)				
	2014/7/7	ND(0.62)	ND(0.57)	11 ^{*1}	ND(1.7)	0.067	ND(1.5)		
	2014/4/10	ND(0.85)	ND(0.82)					ND(5.6×10^{-6})	(9.4 ± 2.2) $\times 10^{-6}$
F-P02	2014/6/16	ND(0.066)	ND(0.050)	0.03 ^{*2}	ND(0.41)	In progress		In progress	In progress
	2014/4/14	ND(0.060)	ND(0.052)	0.04 ^{*2}	ND(0.41)	0.002		ND(6×10^{-6})	8×10^{-6}
T-0-1A	2014/8/18	ND(0.54)	ND(0.52)	ND(18) ^{*1}	In progress				
	2014/8/12	ND(0.66)	ND(0.58)	ND(16) ^{*1}	ND(1.7)				
T-0-1	2014/8/18	ND(0.66)	ND(0.83)	ND(18) ^{*1}	In progress				
	2014/8/12	ND(0.74)	ND(0.82)	ND(16) ^{*1}	ND(1.7)				
M-101	2014/6/17	0.012	0.039		0.12	In progress			
	2014/5/16	0.0037	0.0099		0.095	0.0010			
F-P03	2014/6/16	ND(0.080)	ND(0.071)	0.03 ^{*2}	ND(0.41)	In progress		In progress	In progress
	2014/4/14	ND(0.069)	ND(0.053)	0.03 ^{*2}	ND(0.41)	0.003		ND(9×10^{-6})	8×10^{-6}
T-0-2	2014/8/18	ND(0.61)	ND(0.57)	ND(18) ^{*1}	In progress				
	2014/8/12	ND(0.88)	ND(0.67)	ND(16) ^{*1}	ND(1.7)				
M-102	2014/6/16	0.021	0.057		0.15	In progress			
	2014/5/15	0.023	0.063		0.20	0.020			
T-0-3A	2014/8/18	ND(0.83)	ND(0.63)	ND(18) ^{*1}	In progress				
	2014/8/12	ND(0.65)	ND(0.56)	ND(16) ^{*1}	ND(1.7)				
F-P01	2014/6/16	ND(0.056)	0.074	0.04 ^{*2}	ND(0.41)	In progress		In progress	In progress
	2014/4/14	ND(0.065)	0.078	0.04 ^{*2}	ND(0.40)	0.006		ND(5×10^{-6})	6×10^{-6}
T-0-3	2014/8/18	ND(0.69)	ND(0.71)	ND(18) ^{*1}	In progress				
	2014/8/12	ND(0.64)	ND(0.50)	ND(16) ^{*1}	ND(1.7)				
T-2-1	2014/8/18	ND(0.54)	0.83	9.9 ^{*1}	ND(1.7)				
	2014/7/7	ND(0.74)	1.2	11 ^{*1}	ND(1.7)	ND(0.0088)	ND(1.5)		
	2014/4/10	ND(0.70)	ND(0.58)	9.0 ^{*1}				ND(5.6×10^{-6})	(3.1 ± 0.41) $\times 10^{-5}$

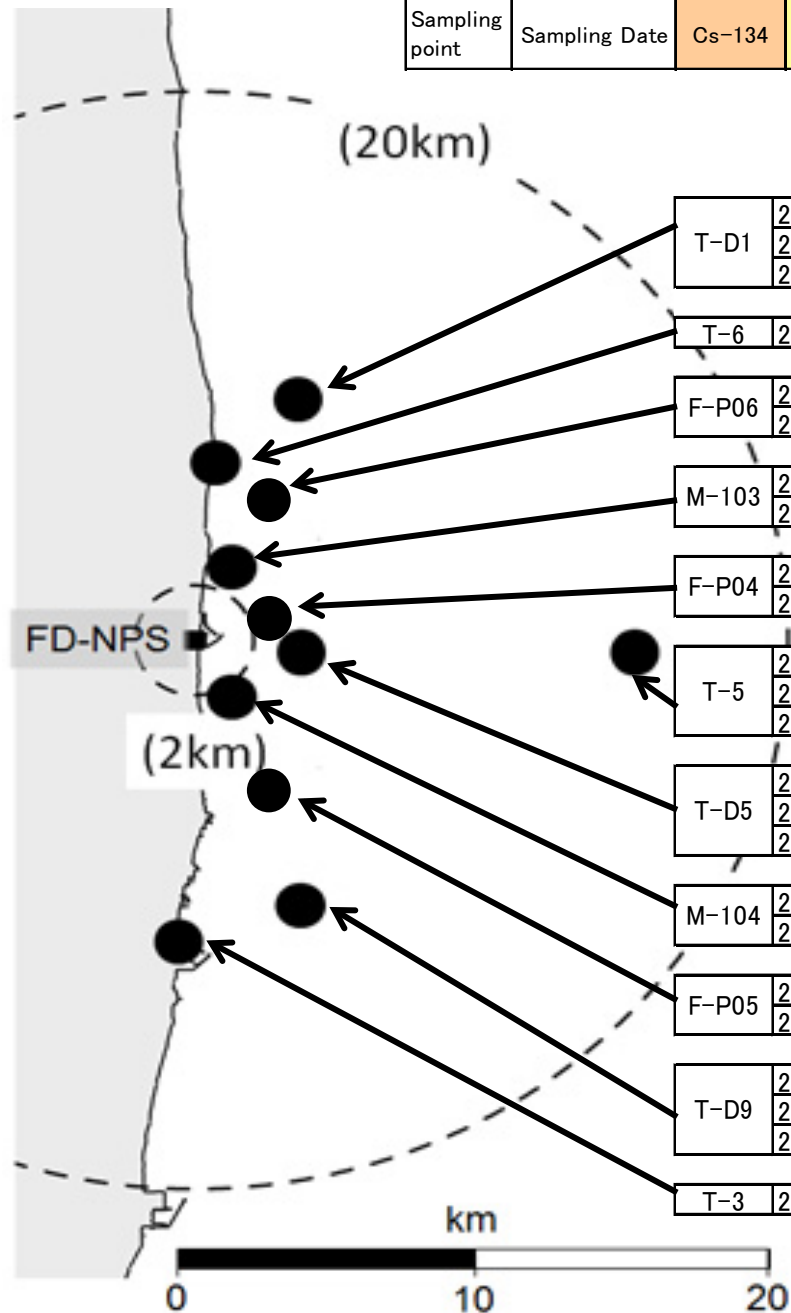
Sea area between 2-20km radius from the NPS (1)

Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	Sr-90	total α	Pu-238	Pu-239+Pu-240	S	S:2m below sea level
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Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits

*1: Total β : including K-40 *2: Total β : excluding K-40

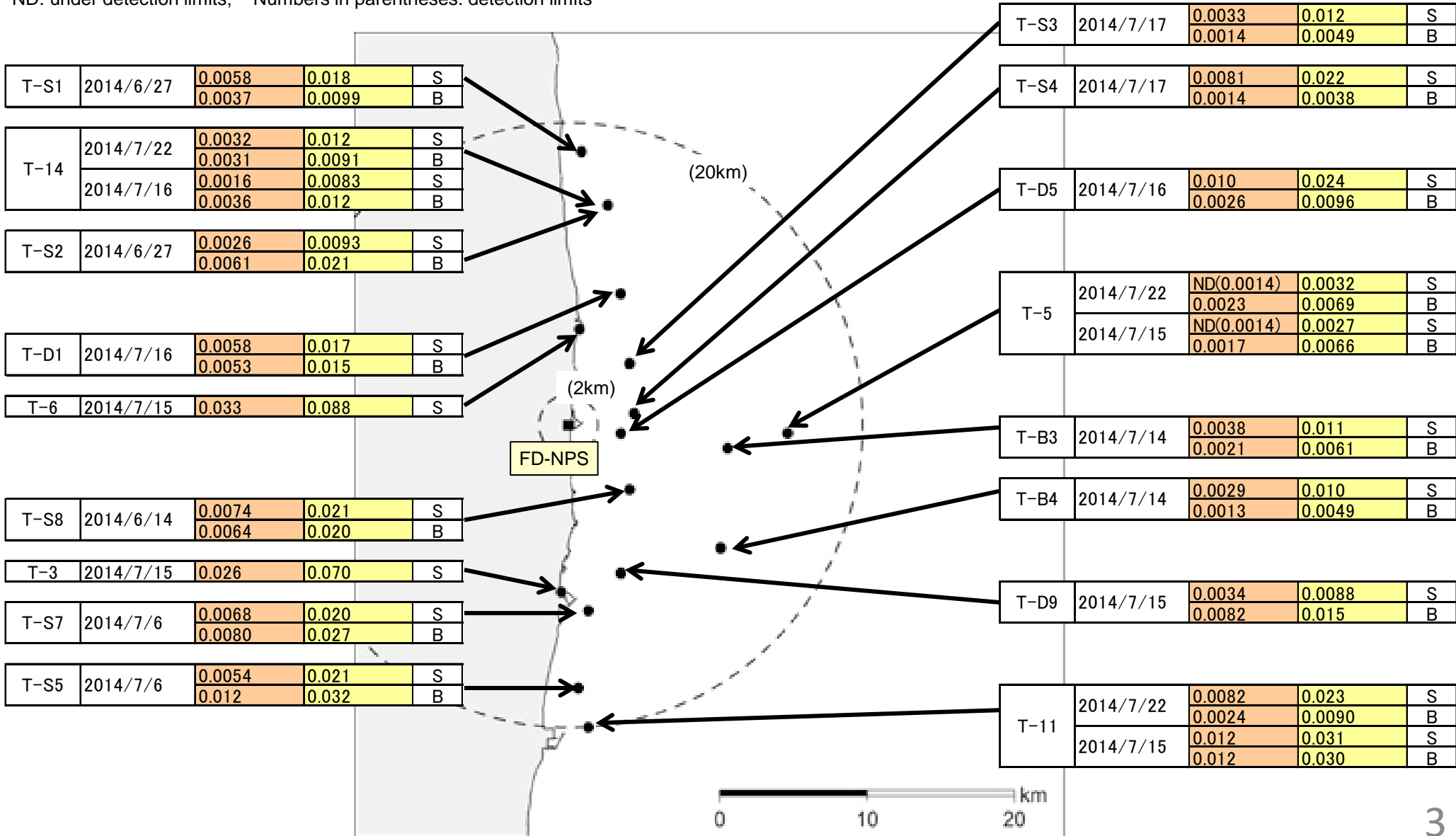


T-D1	2014/7/16	0.0058	0.017	ND(17) ^{*1}	ND(0.30)					S
	2014/7/2	0.0022	0.0082	ND(18) ^{*1}	0.36	ND(0.009)	ND(1.9)			S
	2014/4/1	0.0027	0.0086	ND(17) ^{*1}	ND(0.30)	ND(0.009)	ND(1.9)	ND(5.3 × 10 ⁻⁶)	(5.7 ± 1.7) × 10 ⁻⁶	S
T-6	2014/7/15	0.033	0.088	ND(18) ^{*1}	0.36					S
F-P06	2014/6/16	ND(0.055)	ND(0.055)	0.03 ^{*2}	ND(0.40)	In progress		In progress	In progress	S
	2014/4/14	ND(0.058)	ND(0.047)	0.03 ^{*2}	ND(0.41)	0.001		ND(7 × 10 ⁻⁶)	7 × 10 ⁻⁶	S
M-103	2014/6/17	0.010	0.033		0.13	In progress				0.5m
	2014/5/16	0.0034	0.011		0.086	0.0012				0.5m
F-P04	2014/6/16	ND(0.074)	ND(0.053)	0.03 ^{*2}	ND(0.41)	In progress		In progress	In progress	S
	2014/4/14	ND(0.072)	ND(0.051)	0.03 ^{*2}	ND(0.41)	0.002		ND(7 × 10 ⁻⁶)	7 × 10 ⁻⁶	S
T-5	2014/7/15	ND(0.0014)	0.0027	ND(17) ^{*1}	0.38					S
	2014/7/1	0.0015	0.0063	ND(18) ^{*1}	0.34	ND(0.009)	ND(1.9)			S
	2014/4/2	ND(0.0014)	0.0044	ND(17) ^{*1}	ND(0.30)	ND(0.009)	ND(1.9)	ND(5.5 × 10 ⁻⁶)	(8.3 ± 2.1) × 10 ⁻⁶	S
T-D5	2014/7/16	0.010	0.024	ND(17) ^{*1}	ND(0.30)					S
	2014/7/2	0.0061	0.017	ND(18) ^{*1}	ND(0.32)	ND(0.009)	ND(1.9)			S
	2014/4/1	0.0058	0.012	ND(17) ^{*1}	ND(0.30)	ND(0.009)	ND(1.9)	ND(5.2 × 10 ⁻⁶)	ND(4.5 × 10 ⁻⁶)	S
M-104	2014/6/16	0.029	0.081		0.19	In progress				0.5m
	2014/5/15	0.0050	0.015		0.059	0.0024				0.5m
F-P05	2014/6/16	ND(0.060)	ND(0.076)	0.03 ^{*2}	ND(0.41)	In progress		In progress	In progress	S
	2014/4/14	ND(0.058)	ND(0.060)	0.03 ^{*2}	ND(0.41)	0.002		ND(6 × 10 ⁻⁶)	6 × 10 ⁻⁶	S
T-D9	2014/7/15	0.0034	0.0088	ND(15) ^{*1}	0.38					S
	2014/7/1	0.0089	0.026	ND(16) ^{*1}	0.35	ND(0.009)	ND(1.9)			S
	2014/4/2	0.0041	0.010	ND(16) ^{*1}	ND(0.30)	ND(0.008)	ND(1.9)	ND(4.7 × 10 ⁻⁶)	ND(4.5 × 10 ⁻⁶)	S
T-3	2014/7/15	0.026	0.070	ND(18) ^{*1}	0.32					S

Sea area between 2-20km radius from the NPS (2)

Sampling point	Sampling Date	Cs-134	Cs-137	S/B
		S:2m below sea level		
		B:2-3m above sea bottom		

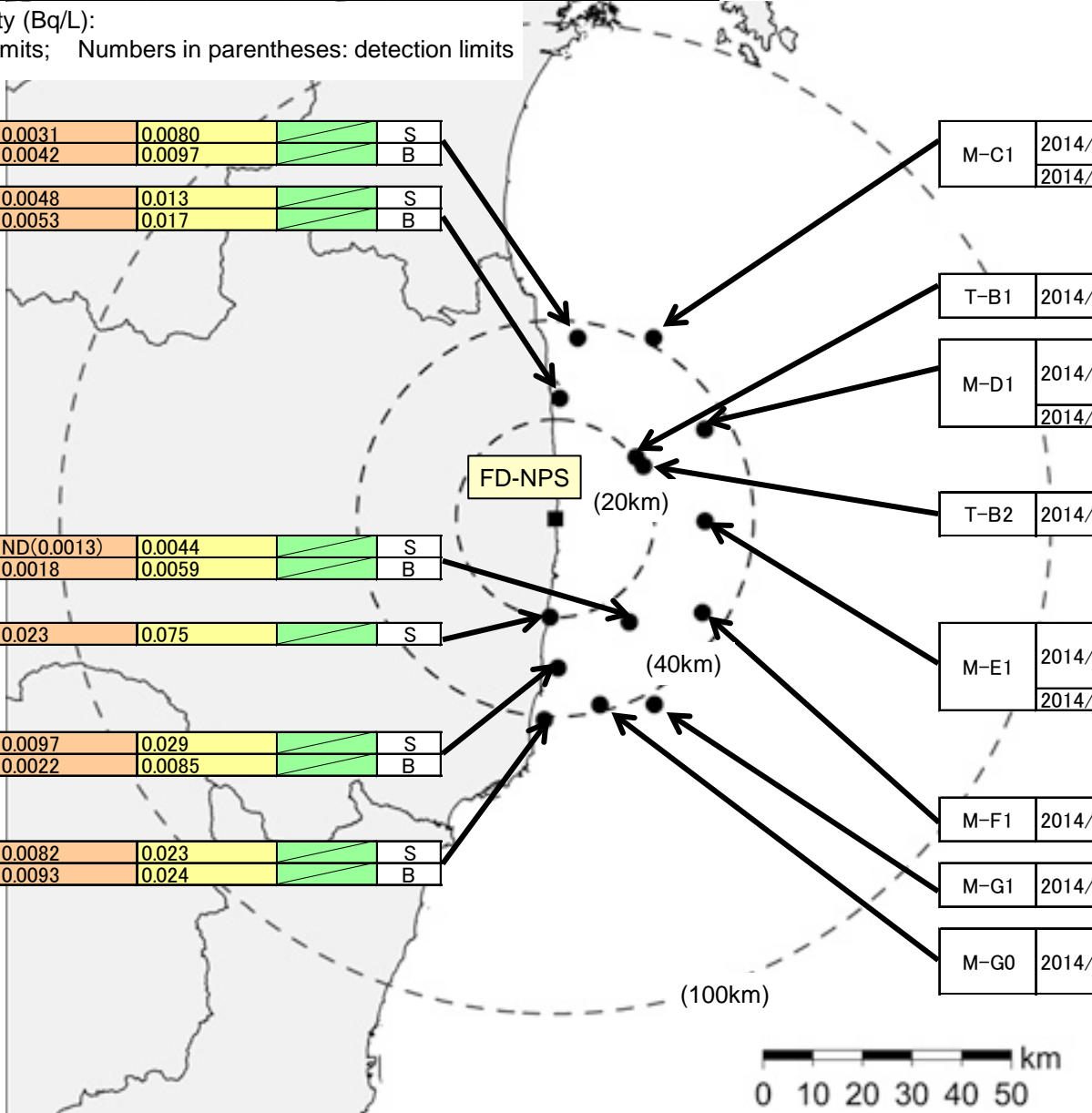
Sea water radioactivity (Bq/L):
 ND: under detection limits; Numbers in parentheses: detection limits



Sea area between 20-100km radius from the NPS(1)

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S/B	
					S:2m below sea level	B:2-3m above sea bottom
Depth(m) from sea level						

Sea water radioactivity (Bq/L):
 ND: under detection limits; Numbers in parentheses: detection limits



T-MA	2014/6/11	0.0031	0.0080		S
		0.0042	0.0097		B
T-13-1	2014/6/11	0.0048	0.013		S
		0.0053	0.017		B

M-C1	2014/5/13	0.0013	0.0039		1m
		0.0015	0.0050		46m
	2014/1/26	0.00096	0.0034	0.00090	1m

T-B1	2014/6/25	0.0031	0.011		S
		0.0030	0.010		B

M-D1	2014/5/20	0.0017	0.0048		1m
		0.0016	0.0051		50m
		ND(0.00056)	0.0023		116m
	2014/1/23	0.00094	0.0033	0.00085	1m

T-B2	2014/6/25	0.0049	0.015		S
		0.0093	0.029		B

T-7	2014/7/15	ND(0.0013)	0.0044		S
		0.0018	0.0059		B

M-E1	2014/5/17	0.0012	0.0046		1m
		0.00096	0.0036		50m
		ND(0.00059)	0.0020		125m
	2014/1/23	ND(0.00059)	0.0027	0.00081	1m

T-4	2014/7/15	0.023	0.075		S
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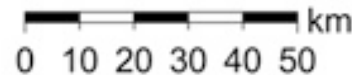
T-12	2014/7/5	0.0097	0.029		S
		0.0022	0.0085		B

M-F1	2014/5/17	0.0016	0.0049		1m
		ND(0.00068)	0.0020		133m

T-17-1	2014/7/5	0.0082	0.023		S
		0.0093	0.024		B

M-G1	2014/5/24	ND(0.00055)	0.0015		1m
		ND(0.00065)	0.0019		129m

M-G0	2014/5/24	ND(0.00055)	0.0017		1m
		ND(0.00064)	0.0028		50m
		0.00068	0.0036		93m



Sea area between 20-100km radius from the NPS(2)

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	S/B
							S:2m below sea level B:2-3m above sea bottom
							Depth(m) from sea level

Sea water radioactivity (Bq/L):
 ND: under detection limits; Numbers in parentheses: detection limits
 *Total β : excluding K-40

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-C3	2014/5/13	0.0017	0.0063	0.024	0.11	In progress	1m
		0.00071	0.0023				50m
	2014/1/19	ND(0.00061)	0.0015				124m
	2014/1/19	0.00086	0.0024	0.021	0.045	0.0011	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
T-22	2014/6/11	0.0051	0.013				S
		0.0055	0.017				B

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-D3	2014/5/16	0.0017	0.0061	0.018	0.080	In progress	1m
		ND(0.00061)	0.0020				100m
	2014/1/22	ND(0.00061)	0.0014				210m
	2014/1/22	ND(0.00064)	0.0025	0.021	0.073	0.00099	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-F3	2014/5/18	0.0016	0.0048	0.027	0.089	In progress	1m
		ND(0.00057)	0.0015				100m
	2014/1/22	ND(0.00066)	0.0015				222m
	2014/1/22	ND(0.00058)	0.0020	0.027	0.066	0.0011	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
T-18	2014/7/15	0.0020	0.0075				S
		0.0025	0.010				B

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
T-20	2014/7/5	0.0023	0.010				S
		0.0039	0.012				B

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
T-M10	2014/7/15	0.0032	0.0081				S
		ND(0.0013)	0.0035				B

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-E3	2014/5/18	0.0015	0.0038	0.024	0.10	In progress	1m
		ND(0.00064)	0.0019				100m
	2014/1/22	ND(0.00064)	0.0014				218m
	2014/1/22	ND(0.00055)	0.0018	0.030	0.056	0.00099	1m

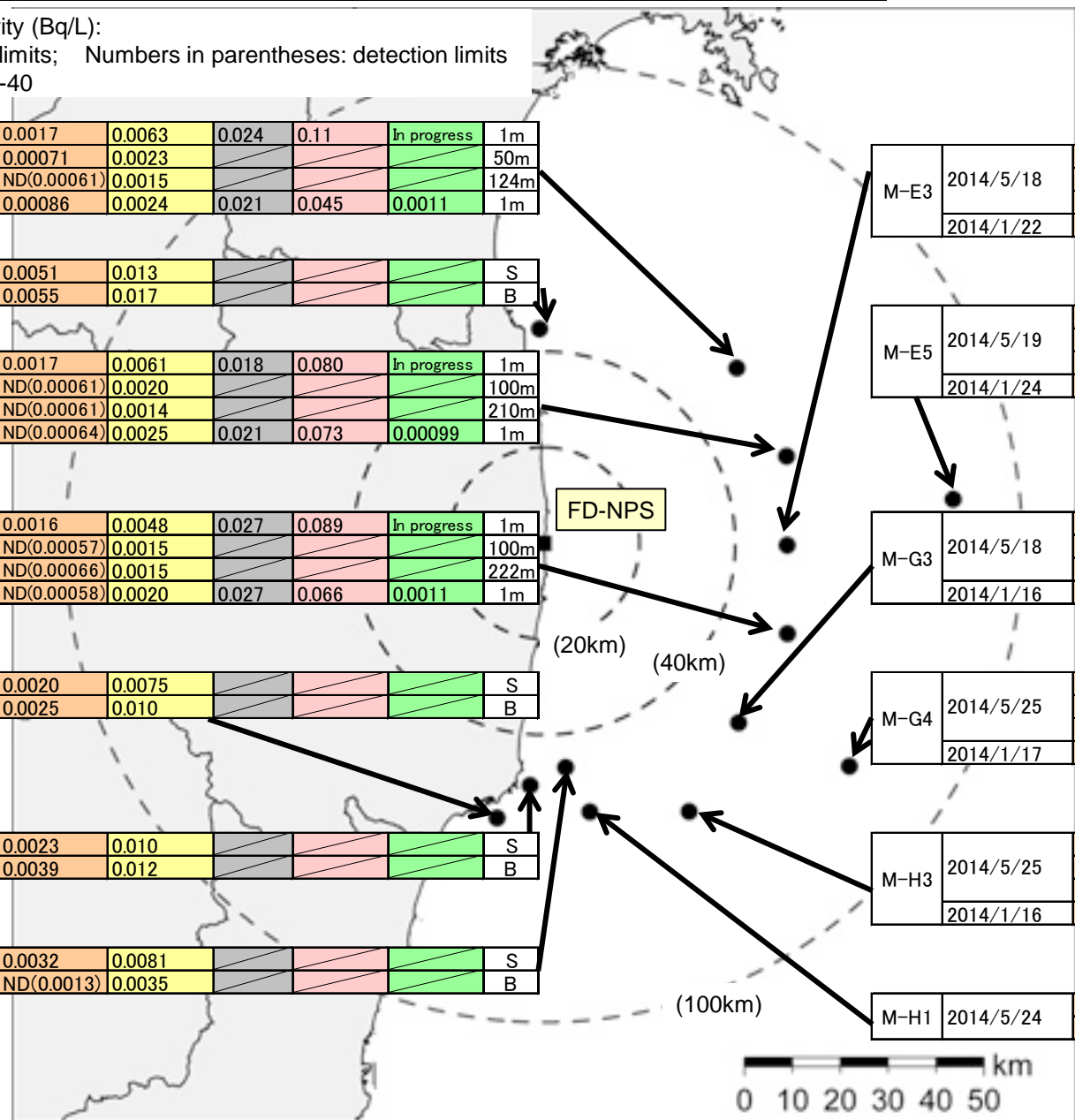
Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-E5	2014/5/19	ND(0.00059)	0.0015	0.021	0.076	In progress	1m
		ND(0.00056)	0.0018				100m
	2014/1/24	ND(0.00075)	0.00062				522m
	2014/1/24	ND(0.00071)	0.0024	0.031	0.055	0.0011	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-G3	2014/5/18	0.0011	0.0029	0.027	0.076	In progress	1m
		ND(0.00056)	0.0016				100m
	2014/1/16	ND(0.00064)	0.0016				196m
	2014/1/16	ND(0.00071)	0.0017	0.021	0.097	0.0011	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-G4	2014/5/25	ND(0.00063)	0.0028	0.024	0.059	In progress	1m
		ND(0.00059)	0.0016				100m
	2014/1/17	ND(0.00080)	0.00057				645m
	2014/1/17	ND(0.00063)	0.0019	0.023	0.063	0.0010	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-H3	2014/5/25	ND(0.00060)	0.0021	0.020	0.084	In progress	1m
		ND(0.00056)	0.0017				100m
	2014/1/16	ND(0.00053)	0.0017				214m
	2014/1/16	ND(0.00087)	0.0018	0.025	0.077	0.0010	1m

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	H-3	Sr-90	Depth(m)
M-H1	2014/5/24	0.0016	0.0049				1m
		ND(0.00059)	0.0020				121m



Sea area along and off the coast of Miyagi Prefecture

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S/M/B
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S:2m below sea level

M:between 2m below sea level and 2-3m above sea bottom

B:2-3m above sea bottom

Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits

T-MG1	2014/7/1	0.0027	0.0068		S
		ND(0.0015)	0.0038		M
		ND(0.0015)	0.0018		B

T-MG4	2014/7/1	0.0020	0.0080		S
		ND(0.0016)	0.0035		M
		ND(0.0016)	0.0033		B

T-MG5	2014/7/1	ND(0.0016)	0.0044	ND(0.009)	S
		ND(0.0016)	0.0025		M
		ND(0.0016)	0.0045		B

T-MG6	2014/7/1	0.0026	0.0094		S
		ND(0.0016)	0.0050		M
		0.0027	0.0077		B

M-B1	2014/5/13	0.0023	0.0083		1m
		0.0021	0.0067		36m

M-B3	2014/5/14	0.0014	0.0060	In progress	1m
		0.0017	0.0054		50m
		0.0030	0.0094		105m
	2014/1/24	ND(0.00099)	0.0021	0.0012	1m

T-MG0	2014/7/1	ND(0.0015)	0.0020		S
		ND(0.0015)	0.0014		M
		ND(0.0015)	0.0012		B

M-A1	2014/5/15	ND(0.00066)	0.0017		1m
		ND(0.00068)	0.0017		100m
		ND(0.00059)	0.0019		194m

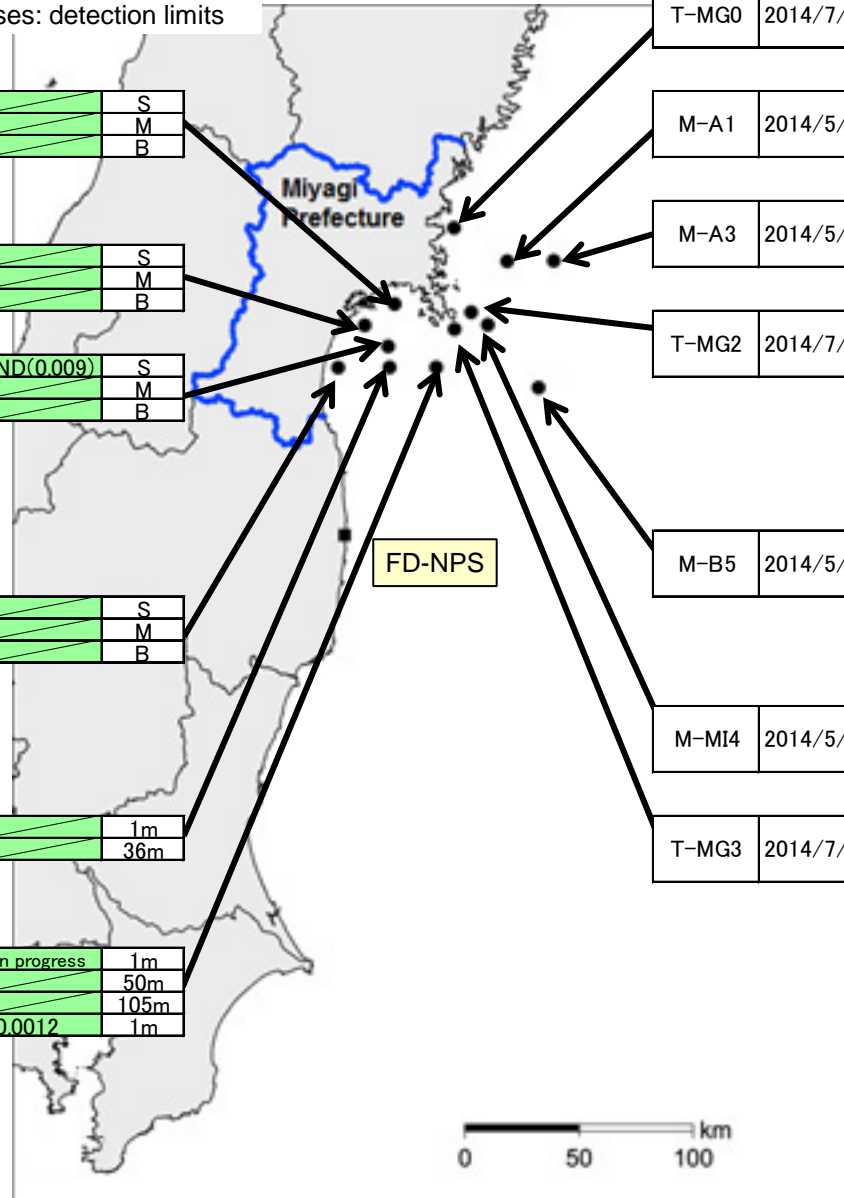
M-A3	2014/5/15	ND(0.00073)	0.0019		1m
		ND(0.00061)	0.0013		100m
		ND(0.00059)	0.00086		476m

T-MG2	2014/7/1	ND(0.0015)	0.0018		S
		ND(0.0015)	0.0013		M
		ND(0.0015)	0.0019		B

M-B5	2014/5/16	ND(0.00056)	0.0013		1m
		ND(0.00054)	0.0016		100m
		ND(0.00074)	0.0015		348m

M-MI4	2014/5/15	ND(0.00078)	0.0015		1m
		ND(0.00059)	0.0017		100m
		ND(0.00056)	0.0016		145m

T-MG3	2014/7/1	ND(0.0015)	0.0027		S
		ND(0.0015)	0.0013		M
		ND(0.0015)	0.0019		B



Sea area along and off the coast of Ibaraki Pref. and Chiba Pref.

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S/B	S:2m below sea level B:2-3m above sea bottom	
					Depth(m) from sea level		

Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits

T-Z	2014/7/7	ND(1.2)	ND(1.3)	S	1m
		ND(1.2)	ND(1.3)		

T-A	2014/7/7	ND(1.2)	ND(1.3)	S	1m
		ND(1.2)	ND(1.3)		

T-B	2014/7/7	ND(1.2)	ND(1.3)	S	1m
		ND(1.2)	ND(1.3)		

M-J1	2014/5/27	0.0015	0.0053	In progress	1m
		0.0015	0.0045		39m
	2014/1/13	0.0027	0.0076	0.00079	1m

T-C	2014/7/8	ND(1.2)	ND(1.3)	ND(0.009)	S	1m
		ND(1.2)	ND(1.3)		B	3m

M-K1	2014/5/27	0.00084	0.0035	S	1m
		0.0012	0.0040		

T-D	2014/7/7	ND(1.2)	ND(1.3)	S	1m
		ND(1.2)	ND(1.3)		

M-M1	2014/5/29	ND(0.00074)	0.0025	S	1m
		ND(0.00057)	0.0029		

M-I0	2014/5/26	0.0015	0.0054	S	1m
		0.0014	0.0046		

M-I1	2014/5/26	0.0015	0.0056	S	1m	
		0.0027	0.0062			50m
		0.00070	0.0034			89m

M-I3	2014/5/26	ND(0.00079)	0.0022	S	1m	
		ND(0.00059)	0.0017			100m
		ND(0.00074)	0.0019			170m

M-IB2	2014/5/27	0.0019	0.0076	In progress	1m
	2014/1/12	ND(0.00075)	0.0025		104m
		0.00092	0.0029	0.0011	1m

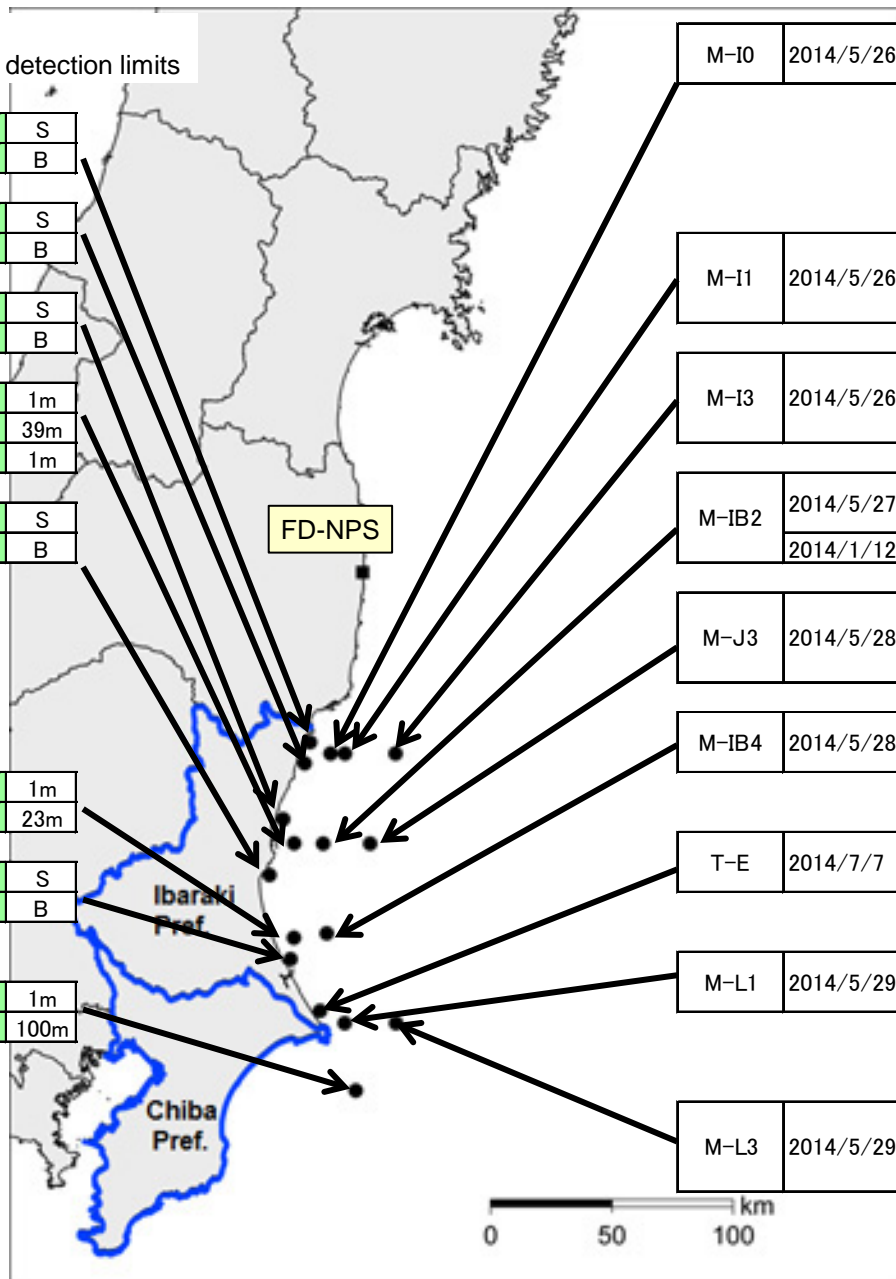
M-J3	2014/5/28	0.00084	0.0032	S	1m	
		ND(0.00061)	0.0015			100m
		ND(0.00054)	0.00055			548m

M-IB4	2014/5/28	0.0017	0.0055	S	1m
		0.0012	0.0039		

T-E	2014/7/7	ND(1.2)	ND(1.3)	S	1m
		ND(1.2)	ND(1.3)		

M-L1	2014/5/29	ND(0.00062)	0.0030	S	1m
		0.00080	0.0032		

M-L3	2014/5/29	0.00062	0.0026	S	1m	
		ND(0.00064)	0.0027			100m
		ND(0.00063)	0.0027			154m



Open sea off the coast of Eastern Japan

Sampling point	Sampling Date	Cs-134	Cs-137	Depth(m) from sea level
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Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits

M-10	2013/10/19	ND(0.00080)	0.0026	1m
		ND(0.00079)	0.0029	100m
		ND(0.00056)	0.0018	200m
		ND(0.00064)	0.0012	300m
		ND(0.00071)	0.00080	500m

M-14	2013/10/28	ND(0.00078)	0.0025	1m
		ND(0.00069)	0.0018	100m
		ND(0.00058)	0.0016	200m
		ND(0.00058)	0.0016	300m
		ND(0.00065)	0.00091	500m

M-19	2013/10/30	ND(0.00082)	0.0018	1m
		ND(0.00069)	0.0025	100m
		ND(0.00058)	0.0021	200m
		ND(0.00069)	0.0015	300m
		ND(0.00066)	0.00093	500m

M-20	2013/10/30	ND(0.00060)	0.0017	1m
		ND(0.00071)	0.0022	100m
		0.0014	0.0050	200m
		ND(0.00089)	0.0038	300m
		ND(0.00060)	0.0014	500m

M-25	2013/10/31	ND(0.00080)	0.0014	1m
		ND(0.00065)	0.0019	100m
		0.00084	0.0034	200m
		0.0025	0.0068	300m
		ND(0.00057)	0.0022	500m

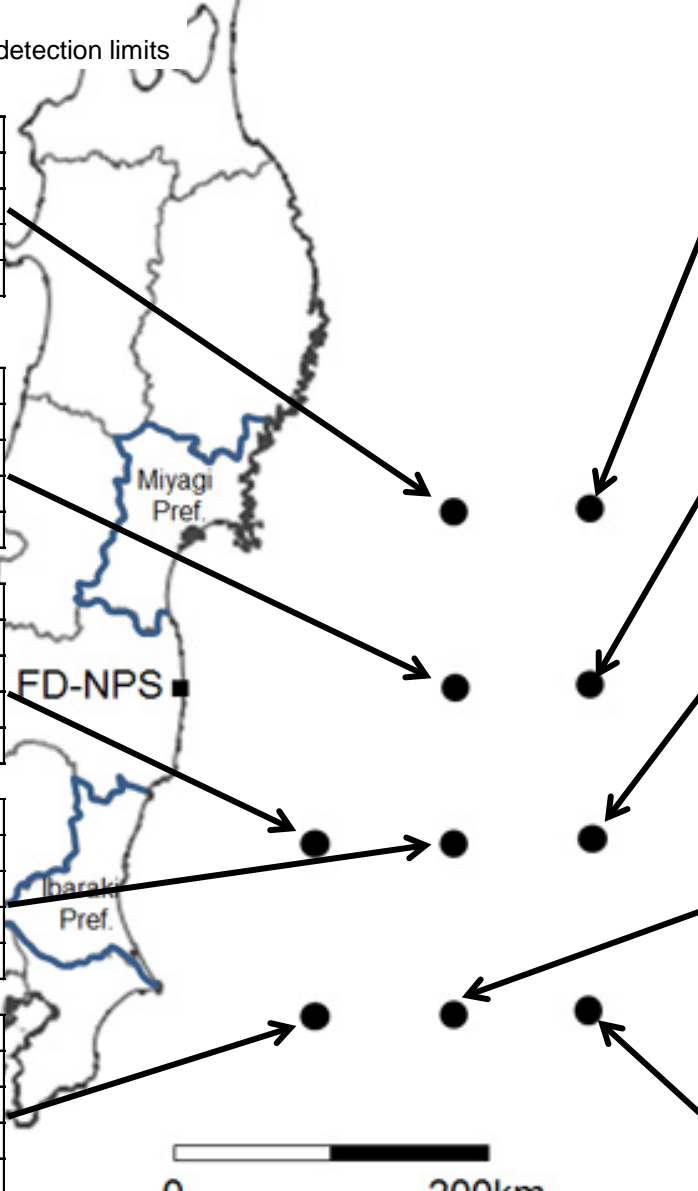
M-11	2013/10/19	ND(0.00064)	0.0022	1m
		0.0020	0.0061	100m
		0.00071	0.0029	200m
		ND(0.00077)	0.0025	300m
		ND(0.00054)	0.0013	500m

M-15	2013/10/29	ND(0.00069)	0.0019	1m
		0.00091	0.0018	100m
		ND(0.00070)	0.0019	200m
		ND(0.00050)	0.0018	300m
		ND(0.00057)	0.00065	500m

M-21	2013/10/29	ND(0.00083)	0.0017	1m
		ND(0.00060)	0.0015	100m
		0.00097	0.0039	200m
		0.00078	0.0028	300m
		ND(0.00072)	0.0011	500m

M-26	2013/10/31	ND(0.00085)	0.0024	1m
		ND(0.00068)	0.0026	100m
		0.0012	0.0038	200m
		0.0022	0.0061	300m
		ND(0.00081)	0.0034	500m

M-27	2013/11/1	ND(0.00068)	0.0021	1m
		ND(0.00060)	0.0016	100m
		0.00083	0.0029	200m
		0.0015	0.0047	300m
		0.0011	0.0038	500m



0 200km