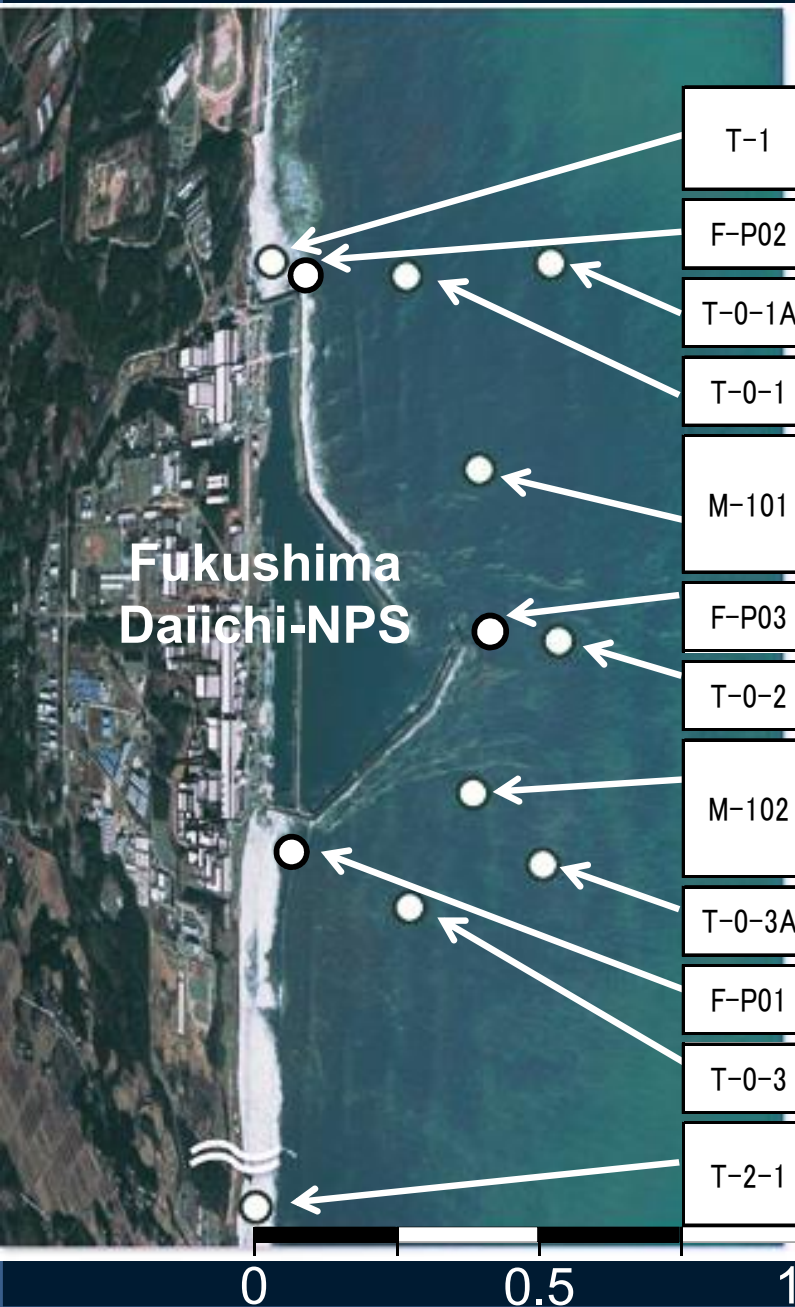


Sea Area Monitoring

June 30, 2015

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+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	2015/6/17	ND(0.61)	ND(0.57)	15 ^{*1}	ND(1.7)				
	2015/5/4	ND(0.61)	ND(0.70)	12 ^{*1}	2.1	0.33	ND(2.0)		
	2015/4/8	ND(0.55)	ND(0.64)					ND(5.5×10^{-6})	ND(6.1×10^{-6})
F-P02	2015/4/22	ND(0.070)	ND(0.057)	0.02 ^{*2}	ND(0.43)	In progress		In progress	In progress
	2015/3/3	ND(0.072)	0.094	0.06 ^{*2}	ND(0.43)	0.041		ND(7×10^{-6})	1.1×10^{-5}
T-0-1A	2015/6/15	ND(0.80)	ND(0.73)	24 ^{*1}	In progress				
	2015/6/8	ND(0.68)	ND(0.58)	ND(16) ^{*1}	ND(1.7)				
T-0-1	2015/6/15	ND(0.76)	ND(0.65)	17 ^{*1}	In progress				
	2015/6/8	ND(0.69)	ND(0.60)	ND(16) ^{*1}	ND(1.7)				
M-101	2015/4/28	0.0067	0.025		0.17	In progress			
	2015/3/5	0.072	0.26		0.92	In progress			
	2015/2/4	0.010	0.039		0.063	In progress			
	2015/1/8	0.039	0.14		0.46	0.10			
F-P03	2015/4/22	ND(0.062)	ND(0.051)	0.02 ^{*2}	ND(0.44)	In progress		In progress	In progress
	2015/3/3	0.079	0.23	0.14 ^{*2}	1.4	0.23		ND(6×10^{-6})	ND(8×10^{-6})
T-0-2	2015/6/15	ND(0.70)	ND(0.52)	20 ^{*1}	In progress				
	2015/6/8	ND(0.67)	ND(0.57)	ND(16) ^{*1}	ND(1.7)				
M-102	2015/4/27	0.013	0.047		0.12	In progress			
	2015/3/6	0.022	0.077		0.21	In progress			
	2015/2/5	0.016	0.052		0.17	In progress			
	2015/1/9	0.033	0.11		0.52	0.11			
T-0-3A	2015/6/15	ND(0.79)	ND(0.68)	16 ^{*1}	In progress				
	2015/6/8	ND(0.63)	ND(0.75)	ND(16) ^{*1}	ND(1.7)				
F-P01	2015/4/22	ND(0.068)	ND(0.050)	0.02 ^{*2}	ND(0.44)	In progress		In progress	In progress
	2015/3/3	ND(0.068)	0.075	0.04 ^{*2}	ND(0.43)	0.004		ND(6×10^{-6})	ND(6×10^{-6})
T-0-3	2015/6/15	ND(0.66)	ND(0.76)	ND(16) ^{*1}	In progress				
	2015/6/8	ND(0.54)	ND(0.80)	20 ^{*1}	ND(1.7)				
T-2-1	2015/6/17	ND(0.79)	ND(0.68)	9.0 ^{*1}	ND(1.7)				
	2015/5/4	ND(0.71)	ND(0.74)	12 ^{*1}	ND(1.5)	ND(0.011)	ND(2.0)		
	2015/4/8	ND(0.66)	ND(0.60)	8.9 ^{*1}				ND(6.9×10^{-6})	(9.7 ± 2.4) $\times 10^{-6}$

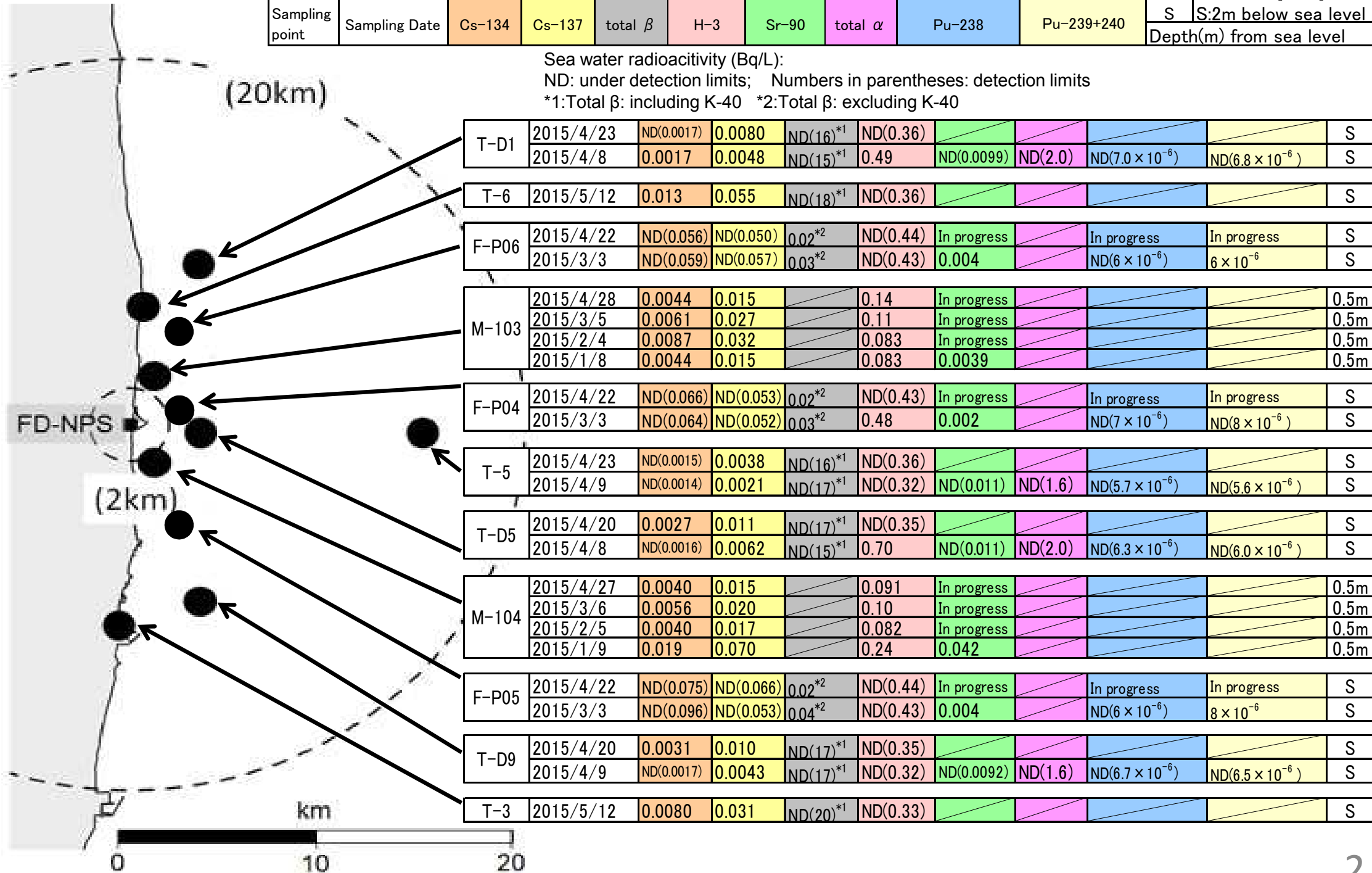
Sea area between 2-20km radius from the NPS (1)

Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	Sr-90	total α	Pu-238	Pu-239+240	S	S:2m below sea level
											Depth(m) from sea level

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



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
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Sea water radioactivity (Bq/L):

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

T-S1	2015/4/23	0.0022	0.0076	S
		0.0023	0.0067	B

T-14	2015/5/11	0.0024	0.0066	S
		0.0015	0.0080	B
	2015/5/7	0.0018	0.0075	S
		0.0042	0.018	B

T-D1	2015/5/11	0.0022	0.0086	S
		0.0028	0.0092	B
	2015/5/7	0.0032	0.0097	S
		ND(0.0019)	0.0067	B

T-6	2015/5/12	0.013	0.055	S
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T-S8	2015/5/10	0.0020	0.0084	S
		0.0015	0.0073	B

T-3	2015/5/12	0.0080	0.031	S
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T-S7	2015/5/14	0.0034	0.013	S
		0.0028	0.012	B

T-S5	2015/5/14	ND(0.0014)	0.0088	S
		0.0025	0.013	B

T-S3	2015/4/8	0.0018	0.0064	S
		0.0015	0.0098	B

T-S4	2015/4/8	ND(0.0013)	0.0060	S
		0.0030	0.012	B

T-D5	2015/5/11	ND(0.0017)	0.0056	S
		0.0020	0.0090	B
	2015/5/7	0.0042	0.012	S
		ND(0.0019)	0.0062	B

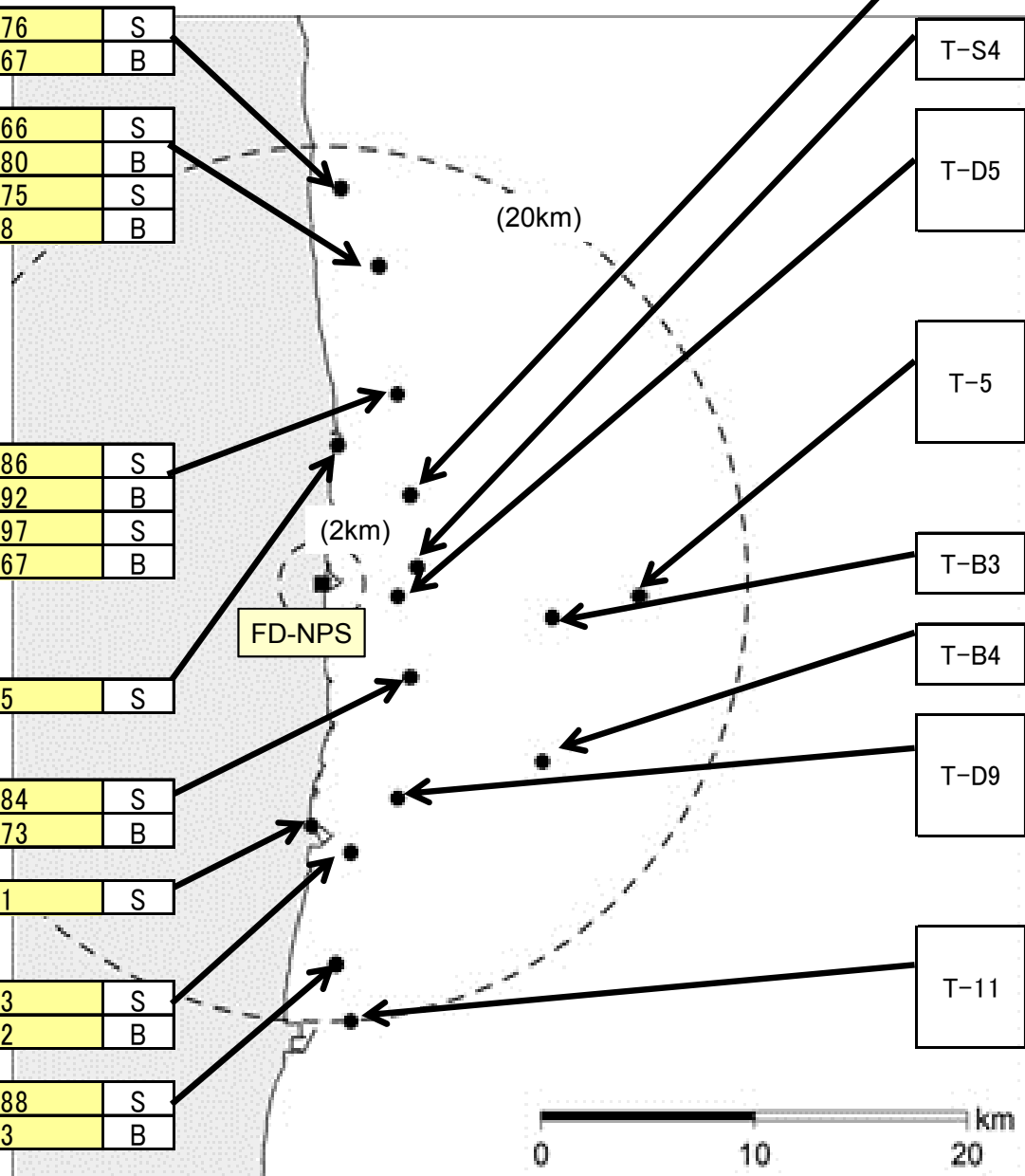
T-5	2015/5/11	ND(0.0019)	0.0038	S
		ND(0.0018)	0.0044	B
	2015/5/7	ND(0.0018)	0.0048	S
		ND(0.0018)	0.0054	B

T-B3	2015/4/24	ND(0.0016)	0.0033	S
		ND(0.0014)	0.0041	B

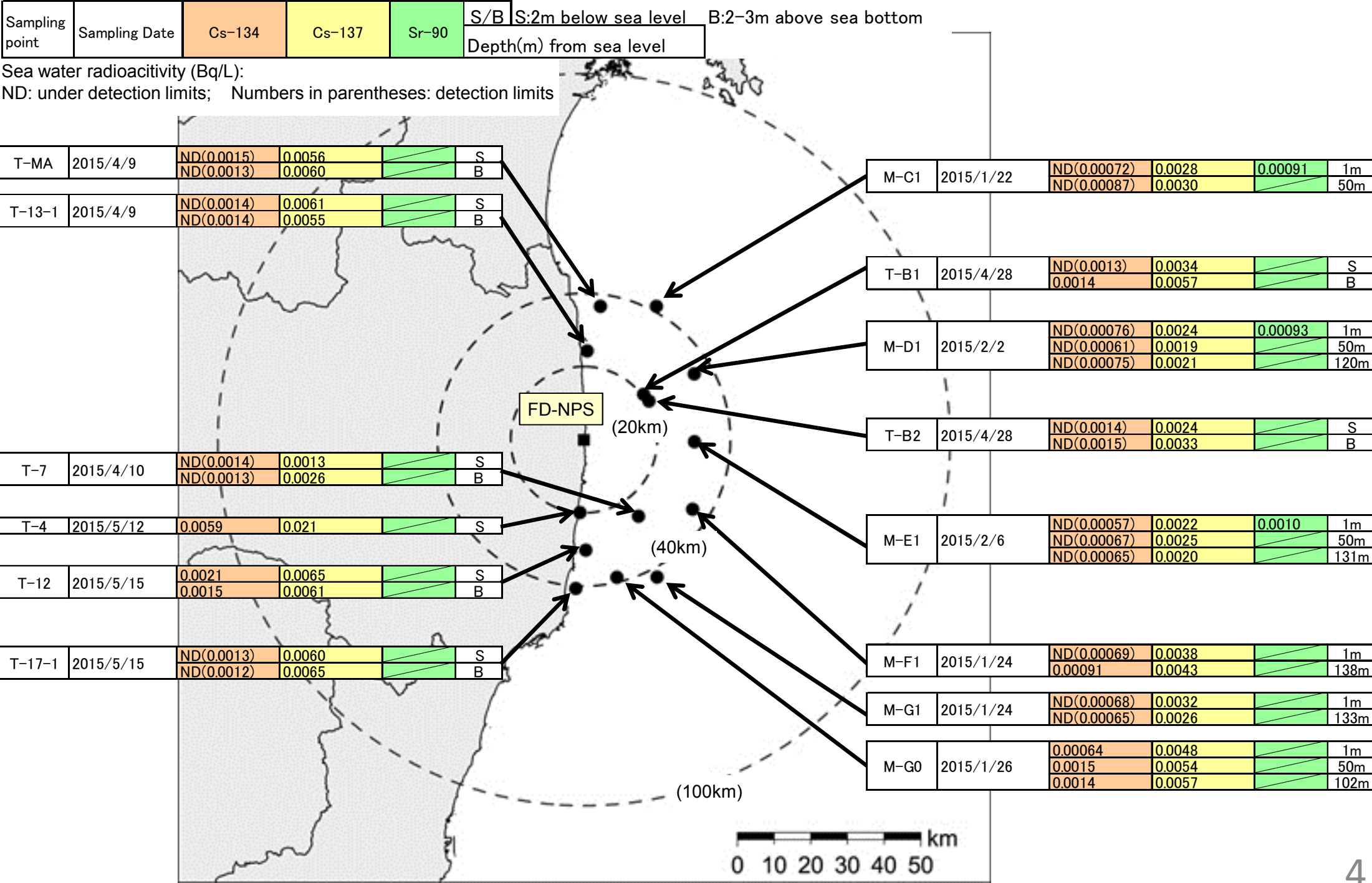
T-B4	2015/4/24	0.0013	0.0048	S
		ND(0.0013)	0.0032	B

T-D9	2015/5/11	ND(0.0019)	0.0038	S
		0.0040	0.014	B
	2015/5/7	0.0035	0.014	S
		ND(0.0019)	0.0057	B

T-11	2015/5/11	ND(0.0013)	0.0049	S
		0.0041	0.014	B
	2015/5/7	0.0019	0.0099	S
		0.0015	0.0075	B



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



4

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

M-C3	2015/5/11	In progress	In progress	0.026	In progress	In progress	1m
		ND(0.00070)	0.0023	0.029	0.073	0.0010	1m
	2015/1/27	ND(0.00066)	0.0022				50m
		ND(0.00061)	0.0018				128m

T-22	2015/4/9	ND(0.0014)	0.0051				S
		0.0019	0.0062				B

M-D3	2015/5/16	In progress	In progress	0.026	In progress	In progress	1m
		ND(0.00068)	0.0019	0.029	0.078	0.00095	1m
	2015/2/2	ND(0.00063)	0.0018				101m
		ND(0.00071)	0.0015				217m

M-F3	2015/5/17	In progress	In progress	0.023	In progress	In progress	1m
		ND(0.00058)	0.0017	0.028	0.052	0.00089	1m
	2015/2/4	ND(0.00064)	0.0019				99m
		ND(0.00061)	0.0017				230m

T-18	2015/5/12	ND(0.0013)	0.0056				S
		0.0017	0.0087				B

T-20	2015/5/15	0.0015	0.0085				S
		0.0019	0.0070				B

T-M10	2015/5/12	ND(0.0013)	0.0042				S
		ND(0.0014)	0.0043				B

FD-NPS

(20km)

(40km)

(100km)



M-E3	2015/5/16	In progress	In progress	0.024	In progress	In progress	1m
		ND(0.00059)	0.0019	0.029	0.055	0.0011	1m
	2015/2/4	ND(0.00066)	0.0017				100m
		ND(0.00070)	0.0018				228m

M-E5	2015/5/23	In progress	In progress	0.024	In progress	In progress	1m
		ND(0.00071)	0.0016	0.026	0.074	0.00088	1m
	2015/1/29	ND(0.00071)	0.0012				100m
		ND(0.00060)	ND(0.00048)				525m

M-G3	2015/5/17	In progress	In progress	0.025	In progress	In progress	1m
		ND(0.00061)	0.0017	0.031	0.065	0.00070	1m
	2015/2/4	ND(0.00061)	0.0019				99m
		ND(0.00060)	0.0013				208m

M-G4	2015/5/17	In progress	In progress	0.027	In progress	In progress	1m
		ND(0.00057)	0.0023	0.029	0.052	0.0010	1m
	2015/1/21	ND(0.00067)	0.0022				100m
		ND(0.00066)	0.0011				641m

M-H3	2015/5/18	In progress	In progress	0.028	In progress	In progress	1m
		ND(0.00063)	0.0021	0.030	0.081	0.00082	1m
	2015/1/21	ND(0.00067)	0.0020				100m
		ND(0.00066)	0.0017				220m

M-H1	2015/1/24	ND(0.00063)	0.0022				1m
		0.0021	0.0080				129m

Sea area along and off the coast of Miyagi Prefecture

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S/M/B
					Depth(m) from sea level

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	2015/5/7	0.0016	0.0049		S
		ND(0.0014)	0.0042		M
		ND(0.0015)	0.0039		B

T-MG4	2015/5/7	ND(0.0014)	0.0049		S
		ND(0.0014)	0.0045		M
		ND(0.0014)	0.0061		B

T-MG5	2015/5/7	ND(0.0014)	0.0053	ND(0.0078)	S
		ND(0.0016)	0.0056		M
		ND(0.0015)	0.0027		B

T-MG6	2015/5/7	ND(0.0014)	0.0048		S
		ND(0.0013)	0.0051		M
		ND(0.0014)	0.0049		B

M-B1	2015/1/22	0.0012	0.0043		1m
		0.0012	0.0041		39m

M-B3	2015/2/3	ND(0.00066)	0.0023	0.00082	1m
		ND(0.00070)	0.0020		50m
		ND(0.00067)	0.0017		115m

T-MG0	2015/5/7	ND(0.0014)	0.0016		S
		ND(0.0014)	0.00099		M
		ND(0.0015)	0.0013		B

M-A1	2015/2/5	ND(0.00060)	0.0018		1m
		ND(0.00060)	0.0014		100m
		ND(0.00066)	0.0017		200m

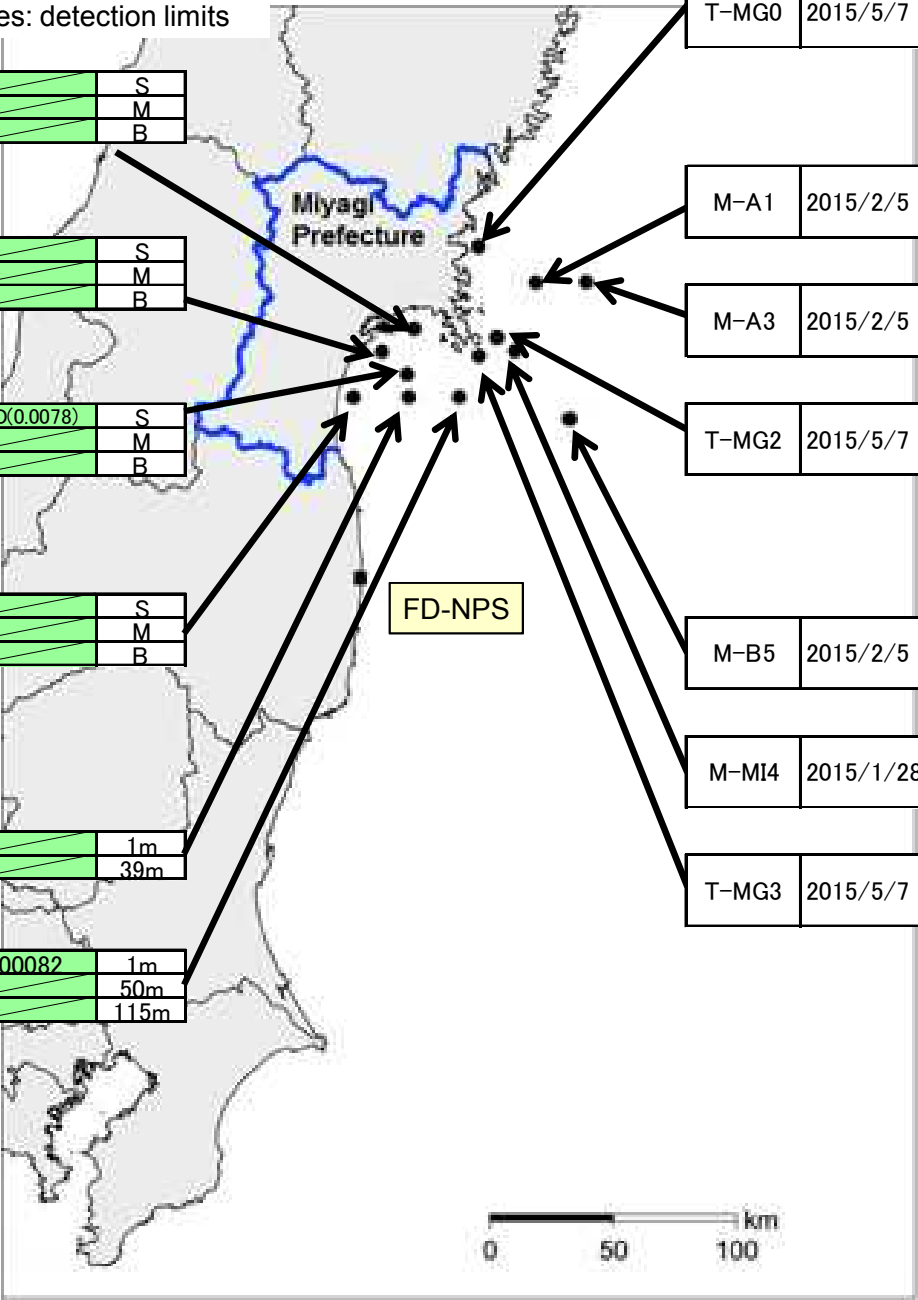
M-A3	2015/2/5	ND(0.00064)	0.0019		1m
		ND(0.00071)	0.0020		99m
		ND(0.00064)	0.0013		476m

T-MG2	2015/5/7	ND(0.0013)	0.0019		S
		ND(0.0014)	0.0019		M
		ND(0.0014)	0.0017		B

M-B5	2015/2/5	ND(0.00068)	0.0016		1m
		ND(0.00057)	0.0020		100m
		ND(0.00060)	0.0013		351m

M-MI4	2015/1/28	ND(0.00069)	0.0018		1m
		ND(0.00071)	0.0016		100m
		ND(0.00062)	0.0017		145m

T-MG3	2015/5/7	ND(0.0011)	0.0029		S
		ND(0.0013)	0.0013		M
		ND(0.0016)	0.0016		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	2015/5/18	ND(1.1)	ND(1.1)		S
		ND(0.92)	ND(1.2)		B

T-A	2015/5/18	ND(0.77)	ND(1.0)		S
		ND(0.98)	ND(1.2)		B

T-B	2015/5/20	ND(0.94)	ND(1.1)		S
		ND(0.96)	ND(1.2)		B

M-J1	2015/1/19	ND(0.00060)	0.0028	0.0012	1m
		ND(0.00071)	0.0036		37m

T-C	2015/5/19	ND(0.94)	ND(1.2)	ND(0.0069)	S
		ND(0.82)	ND(1.2)		B

M-K1	2015/1/18	ND(0.00074)	0.0029		1m
		0.00089	0.0029		29m

T-D	2015/5/20	ND(1.2)	ND(1.1)		S
		ND(0.99)	ND(1.2)		B

M-M1	2015/1/25	ND(0.00080)	0.0027		1m
		0.00078	0.0033		106m

M-I0	2015/1/20	ND(0.00070)	0.0027	0.00096	1m
		0.0012	0.0043		67m

M-I1	2015/1/20	ND(0.00074)	0.0028		1m
		ND(0.00084)	0.0030		50m
		ND(0.00082)	0.0038		93m

M-I3	2015/1/21	ND(0.00061)	0.0025		1m
		ND(0.00069)	0.0022		100m
		ND(0.00061)	0.0019		175m

M-IB2	2015/1/20	ND(0.00061)	0.0025		1m
		ND(0.00063)	0.0026		111m

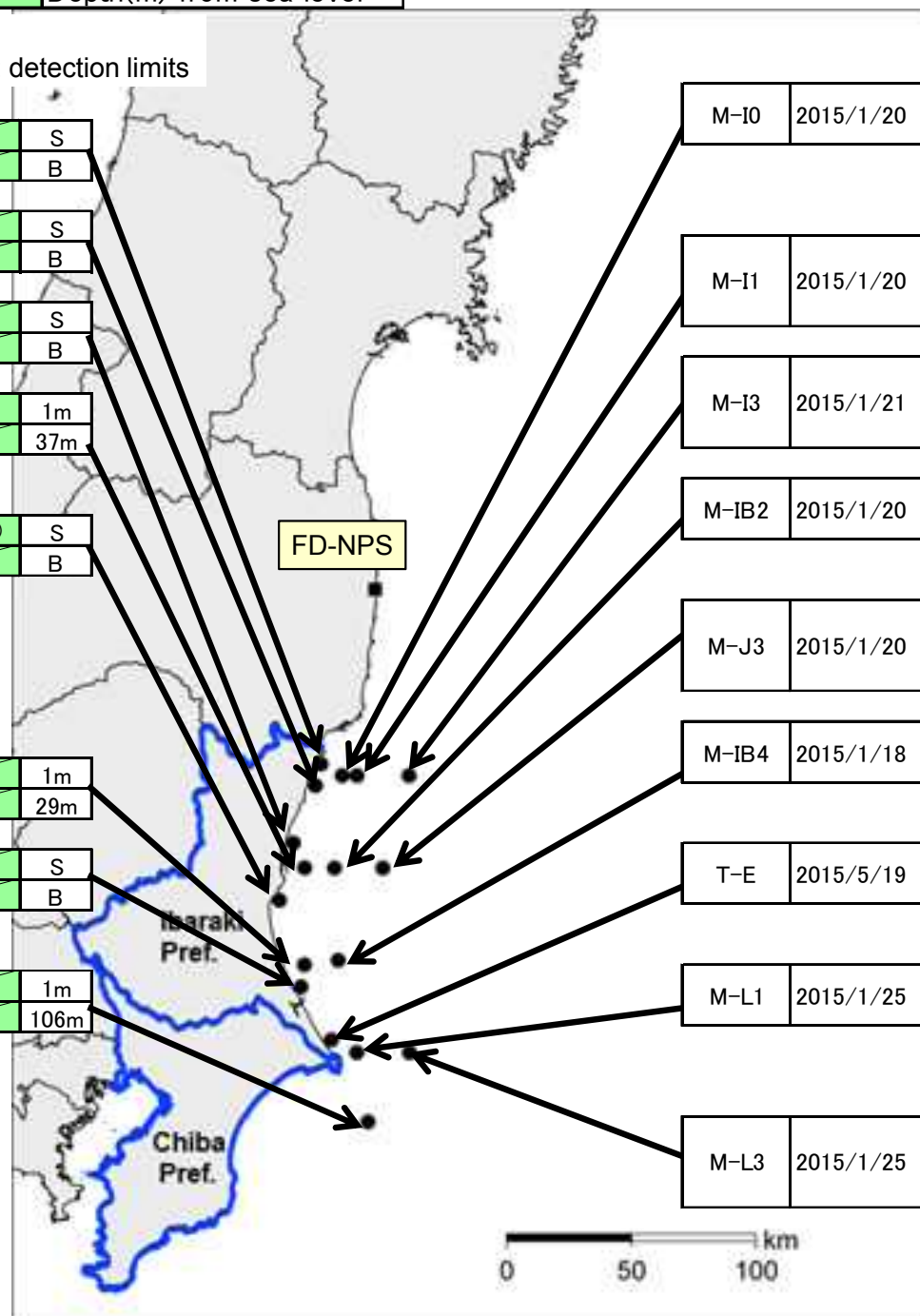
M-J3	2015/1/20	ND(0.00061)	0.0030		1m
		ND(0.00061)	0.0028		100m
		ND(0.00060)	0.00081		550m

M-IB4	2015/1/18	ND(0.00059)	0.0028		1m
		ND(0.00062)	0.0026		115m

T-E	2015/5/19	ND(0.99)	ND(1.2)		S
		ND(0.96)	ND(1.2)		B

M-L1	2015/1/25	ND(0.00060)	0.0027		1m
		0.00081	0.0029		36m

M-L3	2015/1/25	0.00089	0.0029		1m
		0.0010	0.0027		100m
		ND(0.00078)	0.0025		162m



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	2014/10/22	ND(0.00073)	0.0018	1m
		ND(0.00061)	0.0017	103m
		ND(0.00065)	0.0013	200m
		ND(0.00066)	0.0010	301m
		ND(0.00061)	0.00060	498m

M-14	2014/10/24	ND(0.00065)	0.0023	1m
		0.00064	0.0028	100m
		ND(0.00061)	0.0017	200m
		ND(0.00071)	0.0012	300m
		ND(0.00067)	0.00073	500m

M-19	2014/10/28	ND(0.00058)	0.0018	1m
		ND(0.00052)	0.0027	100m
		0.0013	0.0045	200m
		ND(0.00063)	0.0034	300m
		ND(0.00055)	0.0017	500m

M-20	2014/10/29	ND(0.00066)	0.0016	1m
		ND(0.00062)	0.0027	100m
		0.0016	0.0046	200m
		ND(0.00078)	0.0045	300m
		ND(0.00069)	0.0014	500m

M-25	2014/10/27	ND(0.00061)	0.0016	1m
		ND(0.00056)	0.0029	100m
		ND(0.00058)	0.0029	200m
		ND(0.00071)	0.0021	300m
		ND(0.00056)	0.00083	500m

M-11	2014/10/25	ND(0.00065)	0.0018	1m
		ND(0.00060)	0.0031	100m
		ND(0.00059)	0.0020	200m
		ND(0.00057)	0.0014	300m
		ND(0.00059)	0.0011	500m

M-15	2014/10/25	ND(0.00057)	0.0020	1m
		ND(0.00064)	0.0026	100m
		ND(0.00061)	0.0015	200m
		ND(0.00059)	0.0013	300m
		ND(0.00058)	0.00066	500m

M-21	2014/10/26	ND(0.00058)	0.0015	1m
		ND(0.00065)	0.0026	100m
		0.0010	0.0041	200m
		0.00080	0.0042	300m
		0.00068	0.0029	500m

M-26	2014/10/27	ND(0.00070)	0.0016	1m
		0.00095	0.0030	100m
		0.00074	0.0027	200m
		ND(0.00062)	0.0026	300m
		ND(0.00065)	0.00093	500m

M-27	2014/10/26	ND(0.00063)	0.0016	1m
		ND(0.00062)	0.0025	100m
		0.00070	0.0030	200m
		ND(0.00063)	0.0024	300m
		ND(0.00056)	0.0014	500m

