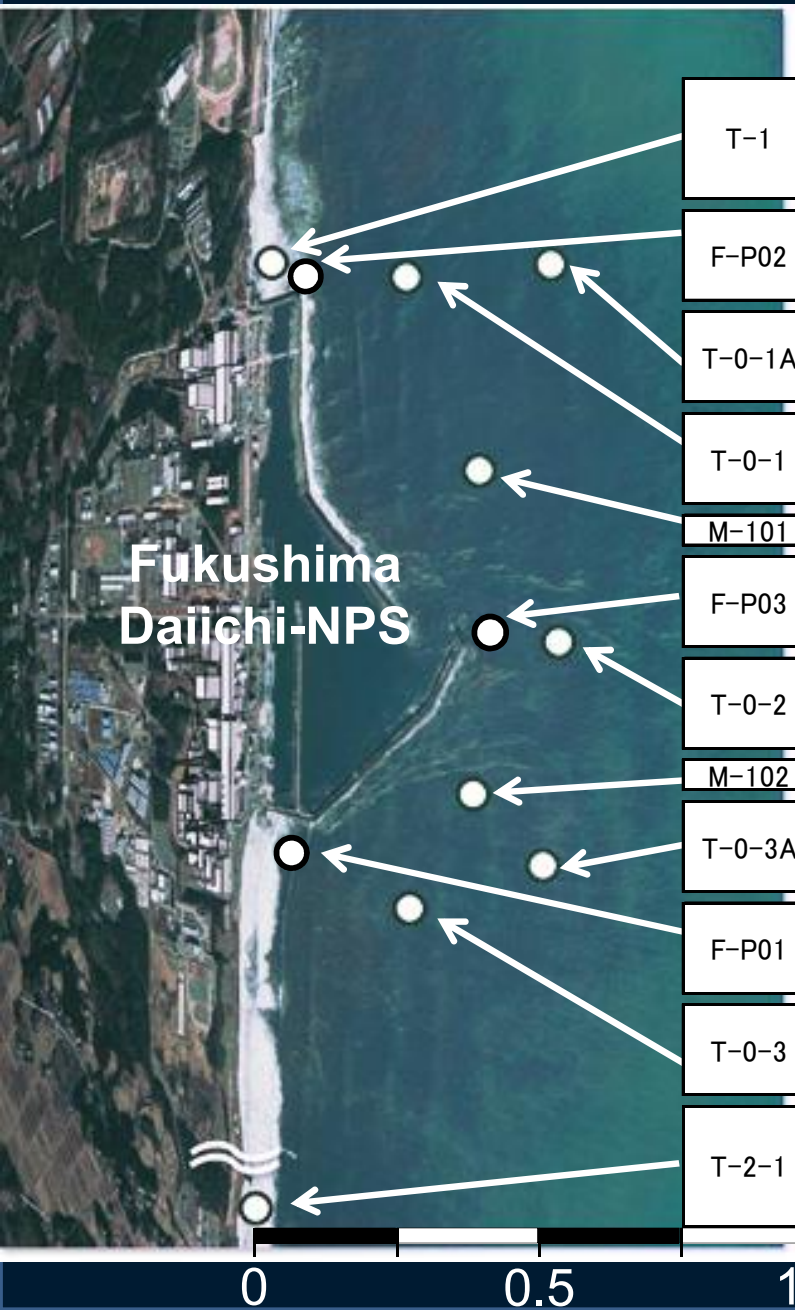


Sea Area Monitoring

May 19, 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	2015/5/4	ND(0.61)	ND(0.70)	12 ^{*1}	2.1				
	2015/4/27	ND(0.67)	ND(0.53)	17 ^{*1}	3.4				
	2015/3/3	ND(0.55)	ND(0.54)	11 ^{*1}	1.7	0.24	ND(2.0)		
	2014/10/21	ND(0.69)	ND(0.83)					ND(5.1 × 10 ⁻⁶)	(9.4 ± 2.2) × 10 ⁻⁶
F-P02	2015/3/3	ND(0.072)	0.094	0.06 ^{*2}	In progress	In progress		In progress	In progress
	2015/2/10	ND(0.069)	ND(0.054)	0.04 ^{*2}	ND(0.42)	0.008		In progress	In progress
	2015/1/14	ND(0.070)	0.069	0.05 ^{*2}	ND(0.44)	0.047		ND(7 × 10 ⁻⁶)	7 × 10 ⁻⁶
T-0-1A	2015/5/7	ND(0.77)	ND(0.62)	ND(17) ^{*1}	In progress				
	2015/4/27	ND(0.62)	ND(0.78)	ND(18) ^{*1}	ND(1.8)				
	2015/4/20	ND(0.52)	ND(0.69)	ND(17) ^{*1}	ND(1.8)				
T-0-1	2015/5/7	ND(0.74)	ND(0.70)	ND(17) ^{*1}	In progress				
	2015/4/27	ND(0.69)	ND(0.65)	ND(18) ^{*1}	ND(1.8)				
	2015/4/20	ND(0.62)	ND(0.63)	ND(17) ^{*1}	2.4				
M-101	2015/1/8	0.039	0.14		0.46	0.10			
F-P03	2015/3/3	0.079	0.23	0.14 ^{*2}	In progress	In progress		In progress	In progress
	2015/2/10	0.097	0.16	0.18 ^{*2}	0.59	0.47		In progress	In progress
	2015/1/14	ND(0.070)	0.082	0.12 ^{*2}	ND(0.44)	0.052		ND(6 × 10 ⁻⁶)	ND(7 × 10 ⁻⁶)
T-0-2	2015/5/7	ND(0.82)	ND(0.67)	ND(17) ^{*1}	In progress				
	2015/4/27	ND(0.67)	ND(0.72)	ND(18) ^{*1}	ND(1.8)				
	2015/4/20	ND(0.61)	ND(0.76)	ND(17) ^{*1}	ND(1.8)				
M-102	2015/1/9	0.033	0.11		0.52	0.11			
T-0-3A	2015/5/7	ND(0.90)	ND(0.59)	ND(17) ^{*1}	In progress				
	2015/4/27	ND(0.67)	ND(0.68)	ND(18) ^{*1}	ND(1.8)				
	2015/4/20	ND(0.61)	ND(0.56)	ND(17) ^{*1}	ND(1.8)				
F-P01	2015/3/3	ND(0.068)	0.075	0.04 ^{*2}	In progress	In progress		In progress	In progress
	2015/2/10	ND(0.059)	0.070	0.06 ^{*2}	ND(0.43)	0.038		In progress	In progress
	2015/1/14	ND(0.059)	ND(0.051)	0.04 ^{*2}	ND(0.43)	0.008		ND(8 × 10 ⁻⁶)	ND(6 × 10 ⁻⁶)
T-0-3	2015/5/7	ND(0.68)	ND(0.64)	ND(17) ^{*1}	In progress				
	2015/4/27	ND(0.79)	ND(0.70)	ND(18) ^{*1}	ND(1.8)				
	2015/4/20	ND(0.54)	ND(0.62)	ND(17) ^{*1}	3.0				
T-2-1	2015/5/4	ND(0.71)	ND(0.74)	12 ^{*1}	ND(1.5)				
	2015/4/27	ND(0.77)	ND(0.63)	15 ^{*1}	ND(1.7)				
	2015/3/3	ND(0.70)	2.4	8.3 ^{*1}	ND(1.6)	0.012	ND(2.0)		
	2014/10/21	ND(0.81)	1.1	11 ^{*1}				ND(5.3 × 10 ⁻⁶)	(1.2 ± 0.25) × 10 ⁻⁵

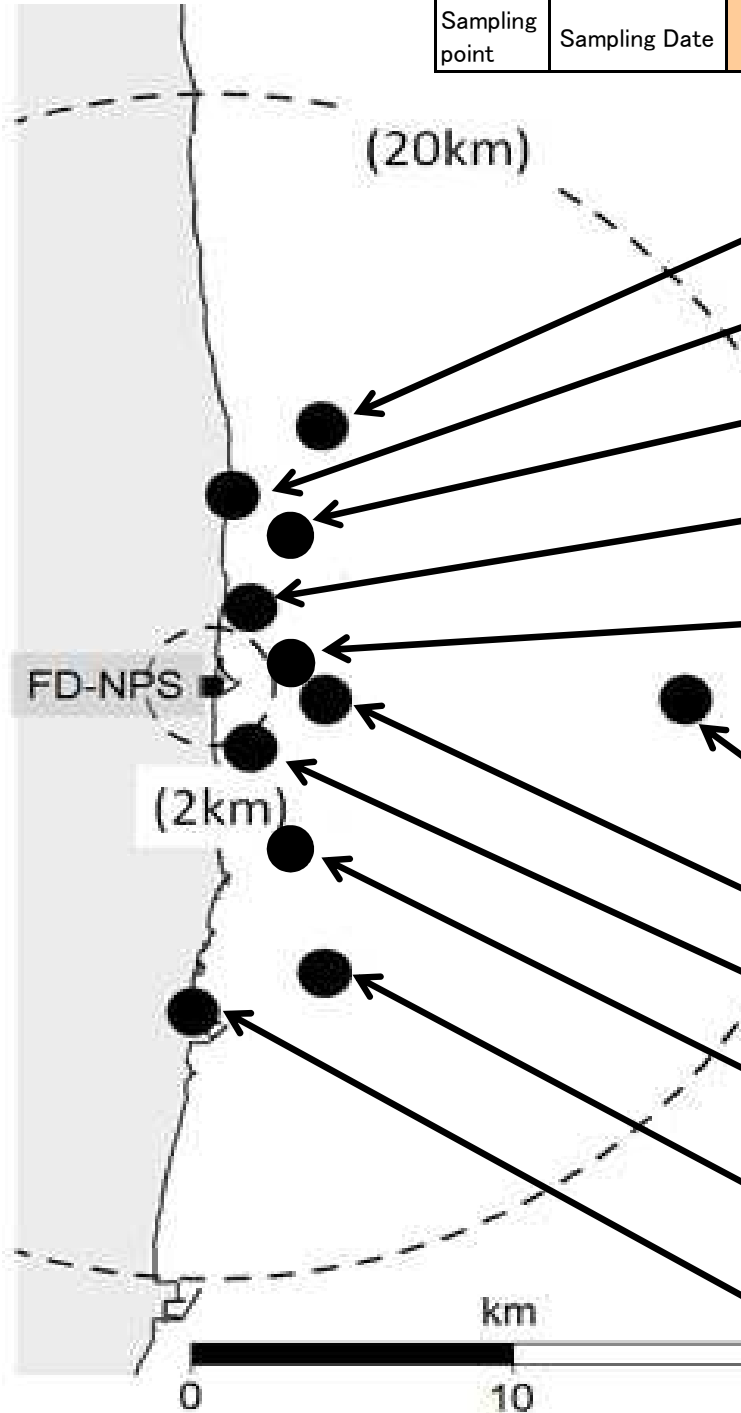
Sea area between 2-20km radius from the NPS (1)

Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	Sr-90	total α	Pu-238	Pu-239+240	S	S:2m below sea level Depth(m) from 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	2015/3/16	0.0093	0.035	ND(17) ^{*1}	0.87						S
	2015/3/3	0.0078	0.025	ND(17) ^{*1}	ND(0.34)	ND(0.0070)	ND(1.6)				S
	2014/10/8	0.022	0.070						ND(6.2 × 10 ⁻⁶)	(5.5 ± 1.7) × 10 ⁻⁶	S
T-6	2015/3/17	0.015	0.065	ND(16) ^{*1}	ND(0.32)						S
F-P06	2015/3/3	ND(0.059)	ND(0.057)	0.03 ^{*2}	In progress	In progress					S
	2015/2/10	ND(0.057)	ND(0.061)	0.03 ^{*2}	ND(0.43)	0.001					S
	2015/1/14	ND(0.058)	ND(0.049)	0.03 ^{*2}	ND(0.44)	0.004			ND(9 × 10 ⁻⁶)	ND(7 × 10 ⁻⁶)	S
M-103	2015/1/8	0.0044	0.015		0.083	0.0039					0.5m
F-P04	2015/3/3	ND(0.064)	ND(0.052)	0.03 ^{*2}	In progress	In progress					S
	2015/2/10	ND(0.081)	ND(0.062)	0.04 ^{*2}	ND(0.43)	0.001					S
	2015/1/14	ND(0.074)	ND(0.065)	0.04 ^{*2}	ND(0.44)	0.005			ND(7 × 10 ⁻⁶)	9 × 10 ⁻⁶	S
T-5	2015/3/16	0.0016	0.0081	ND(17) ^{*1}	ND(0.35)						S
	2015/3/3	ND(0.0013)	0.0030	ND(17) ^{*1}	0.43	ND(0.0071)	ND(1.6)				S
	2014/10/18	ND(0.0013)	0.0026						ND(5.4 × 10 ⁻⁶)	(6.6 ± 1.8) × 10 ⁻⁶	S
T-D5	2015/3/16	0.0057	0.021	ND(17) ^{*1}	0.61						S
	2015/3/3	0.0021	0.0094	ND(17) ^{*1}	0.34	ND(0.0092)	ND(1.6)				S
	2014/10/8	0.024	0.067						ND(6.1 × 10 ⁻⁶)	(8.4 ± 2.2) × 10 ⁻⁶	S
M-104	2015/1/9	0.019	0.070		0.24	0.042					0.5m
F-P05	2015/3/3	ND(0.096)	ND(0.053)	0.04 ^{*2}	In progress	In progress					S
	2015/2/10	ND(0.062)	ND(0.052)	0.04 ^{*2}	ND(0.43)	0.002					S
	2015/1/14	ND(0.061)	ND(0.060)	0.04 ^{*2}	ND(0.44)	0.004			ND(8 × 10 ⁻⁶)	ND(6 × 10 ⁻⁶)	S
T-D9	2015/3/16	0.0046	0.014	ND(17) ^{*1}	0.55						S
	2015/3/3	0.0046	0.015	ND(17) ^{*1}	ND(0.34)	ND(0.0088)	ND(1.6)				S
	2014/10/18	0.012	0.036						ND(4.8 × 10 ⁻⁶)	(5.0 ± 1.6) × 10 ⁻⁶	S
T-3	2015/3/17	0.010	0.035	ND(17) ^{*1}	ND(0.30)						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
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Sea water radioactivity (Bq/L):

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

T-S1	2015/3/19	0.0024	0.0098	S
		0.0084	0.033	B

T-14	2015/3/23	0.0014	0.0073	S
		0.0024	0.0087	B

T-D1	2015/3/23	0.0018	0.0058	S
		0.0025	0.010	B

T-6	2015/3/31	0.018	0.061	S
	2015/3/24	0.0095	0.044	S

T-S8	2015/3/14	0.0050	0.018	S
		0.0056	0.018	B

T-3	2015/3/31	0.015	0.040	S
	2015/3/24	0.016	0.046	S

T-S7	2015/3/12	0.010	0.043	S
		0.0038	0.016	B

T-S5	2015/3/12	0.0027	0.016	S
		0.0055	0.024	B

T-S3	2015/3/19	0.0020	0.0094	S
		0.0019	0.0099	B

T-S4	2015/3/19	0.0026	0.010	S
		0.0016	0.0071	B

T-D5	2015/3/23	0.0055	0.019	S
		0.0035	0.012	B

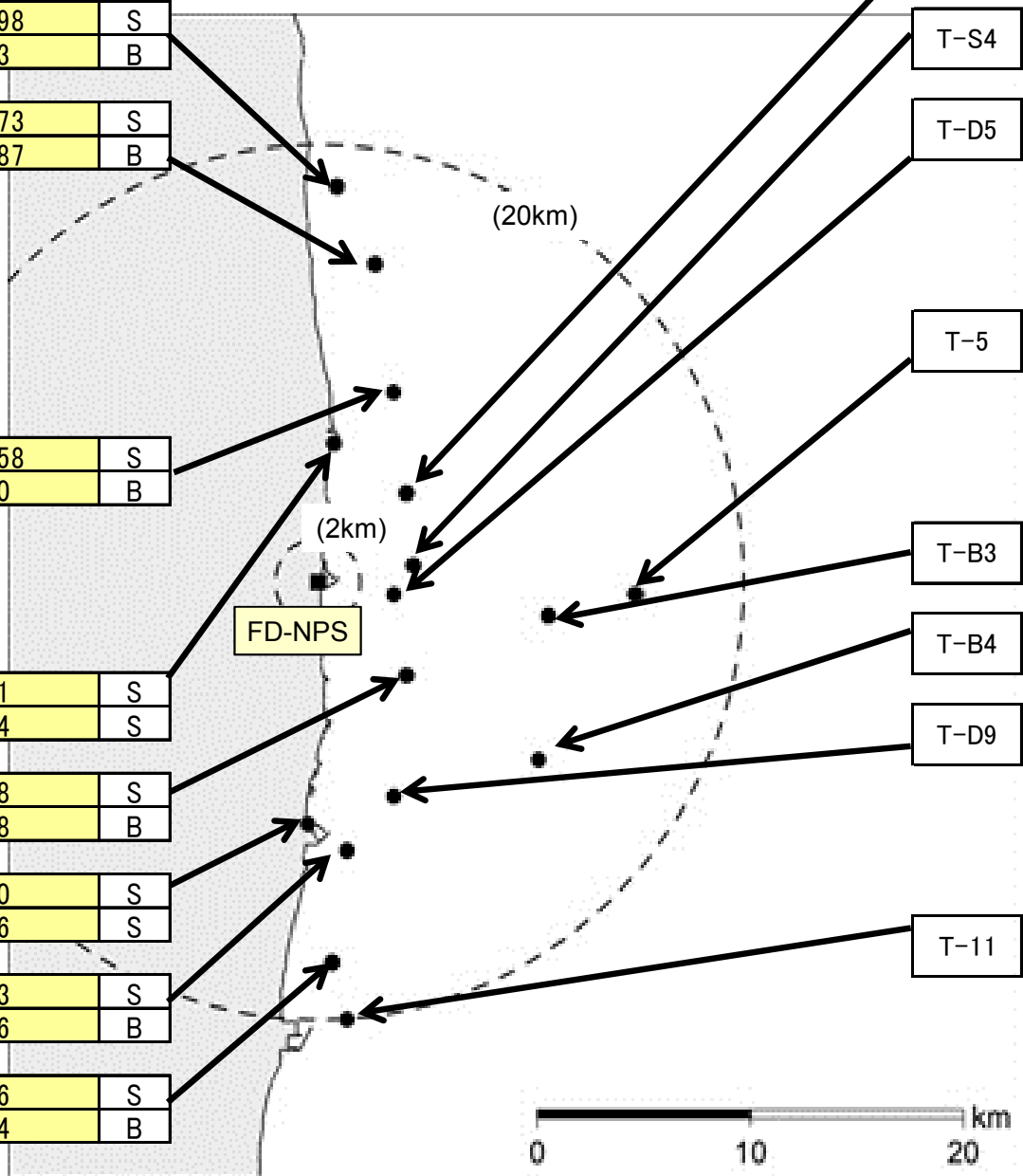
T-5	2015/3/23	0.0014	0.0063	S
		0.0015	0.0061	B

T-B3	2015/3/22	ND(0.0013)	0.0044	S
		ND(0.0012)	0.0059	B

T-B4	2015/3/22	0.0016	0.010	S
		ND(0.0014)	0.0049	B

T-D9	2015/3/23	0.0045	0.014	S
		0.0028	0.010	B

T-11	2015/3/23	0.0032	0.014	S
		0.0040	0.016	B



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	2015/3/12	0.0019 ND(0.0015)	0.0070 0.0059		S B
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T-13-1	2015/3/12	0.0043 0.0043	0.022 0.020		S B
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T-7	2015/3/27	0.0015 ND(0.0012)	0.0050 0.0030		S B
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T-4	2015/3/31	0.0093	0.041		S
	2015/3/24	0.012	0.043		S

T-12	2015/3/17	0.0044 0.0021	0.014 0.0099		S B
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T-17-1	2015/3/17	0.0023	0.010		S
		0.0020	0.011		B

M-C1	2015/1/22	ND(0.00072)	0.0028	0.00091	1m
		ND(0.00087)	0.0030		50m

T-B1	2015/3/18	0.0036	0.011		S
		0.0015	0.0063		B

M-D1	2015/2/2	ND(0.00076)	0.0024	0.00093	1m
		ND(0.00061)	0.0019		50m
		ND(0.00075)	0.0021		120m

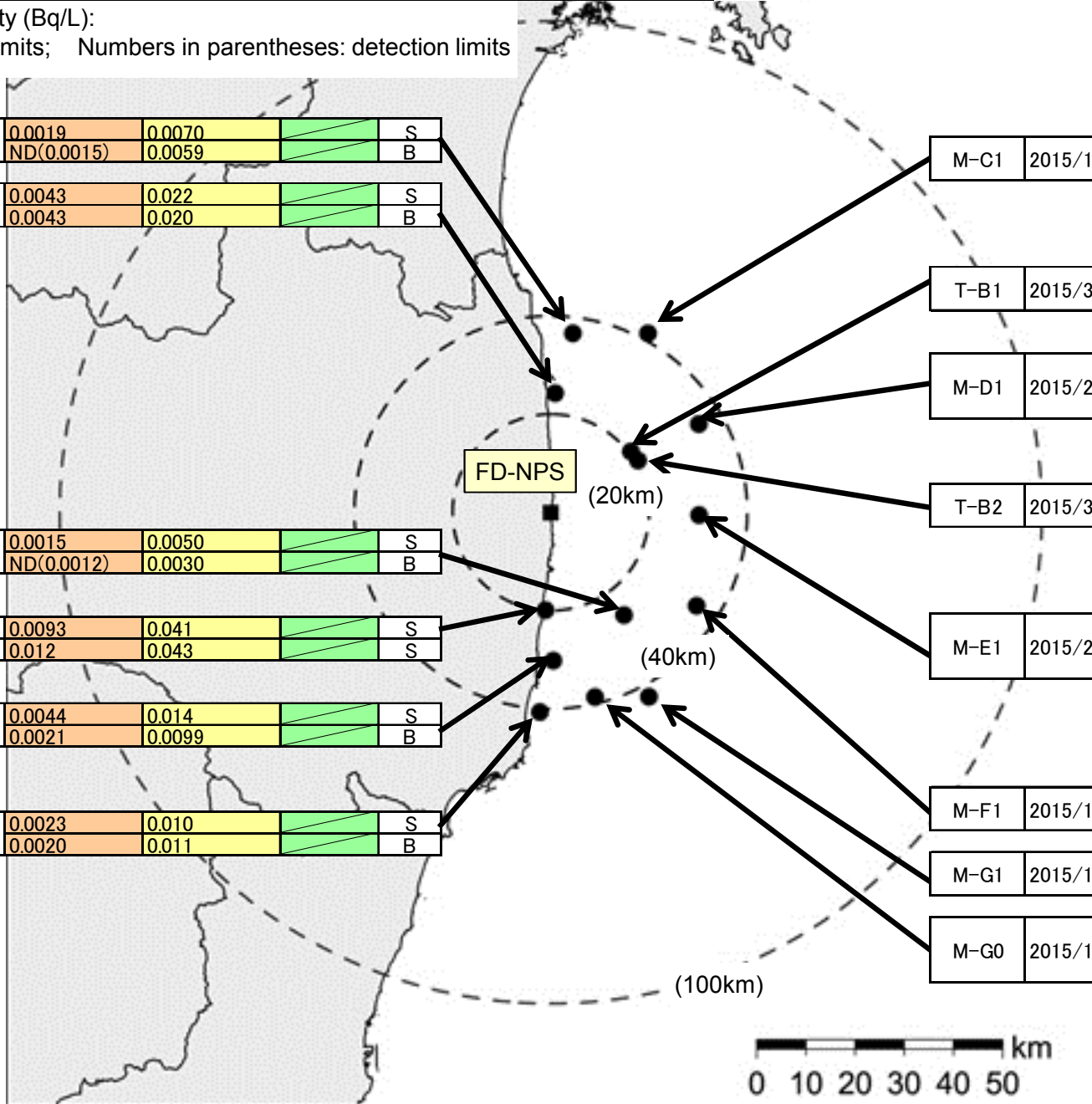
T-B2	2015/3/18	0.0020	0.010		S
		ND(0.0014)	0.0069		B

M-E1	2015/2/6	ND(0.00057)	0.0022	0.0010	1m
		ND(0.00067)	0.0025		50m
		ND(0.00065)	0.0020		131m

M-F1	2015/1/24	ND(0.00069)	0.0038		1m
		0.00091	0.0043		138m

M-G1	2015/1/24	ND(0.00068)	0.0032		1m
		ND(0.00065)	0.0026		133m

M-G0	2015/1/26	0.00064	0.0048		1m
		0.0015	0.0054		50m
		0.0014	0.0057		102m



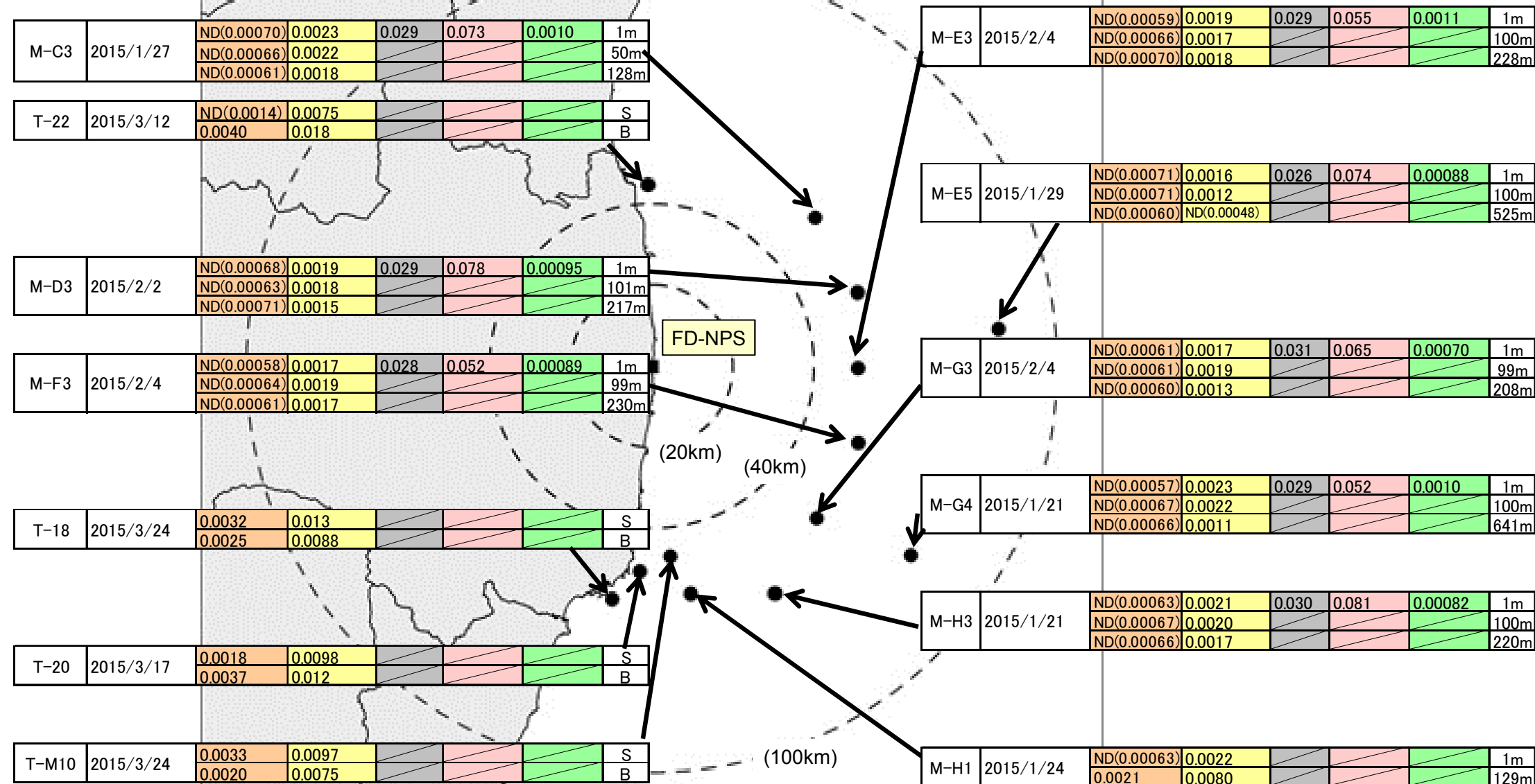
Sea area between 20-100km radius from the NPS(2)

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



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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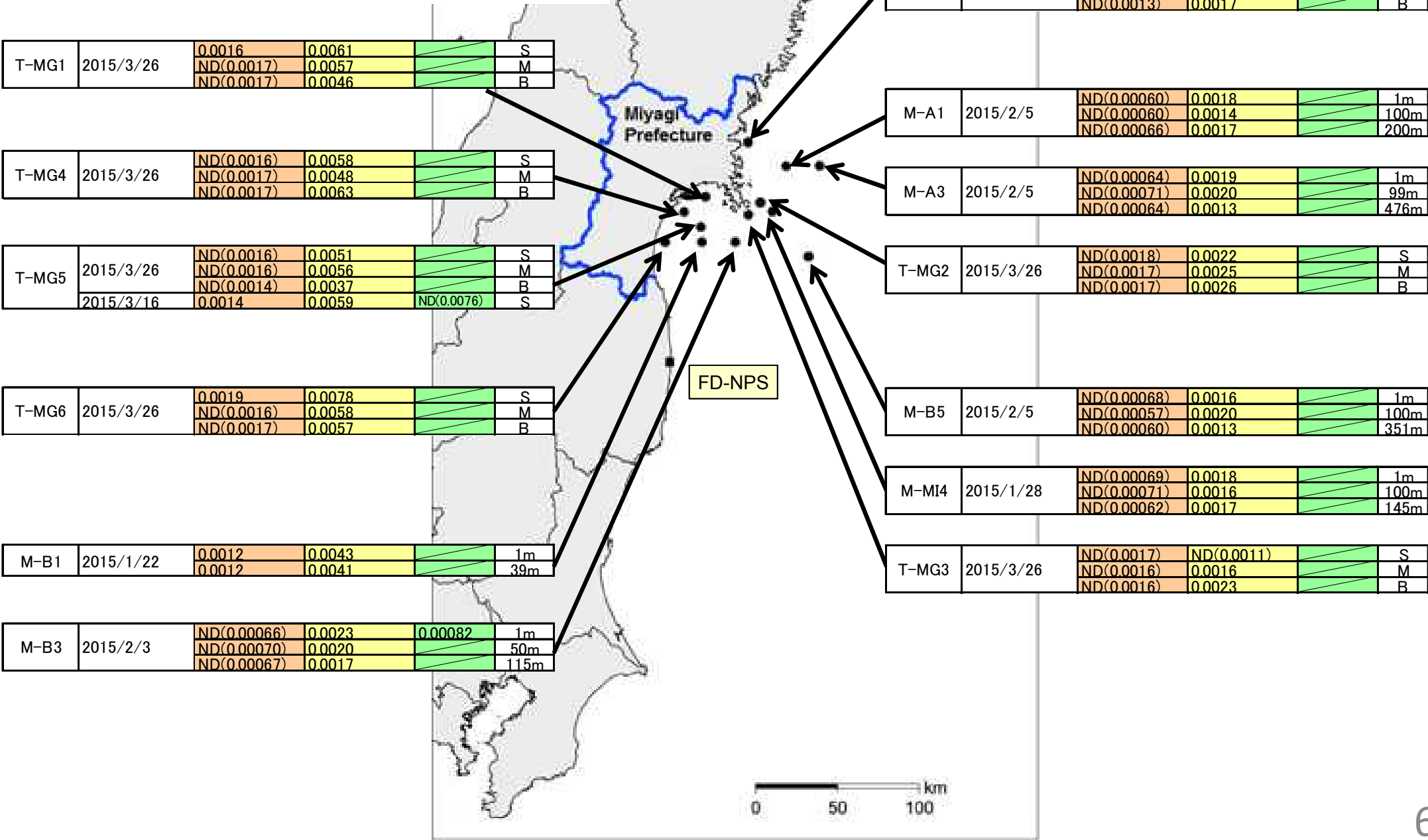
S:2m below sea level

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

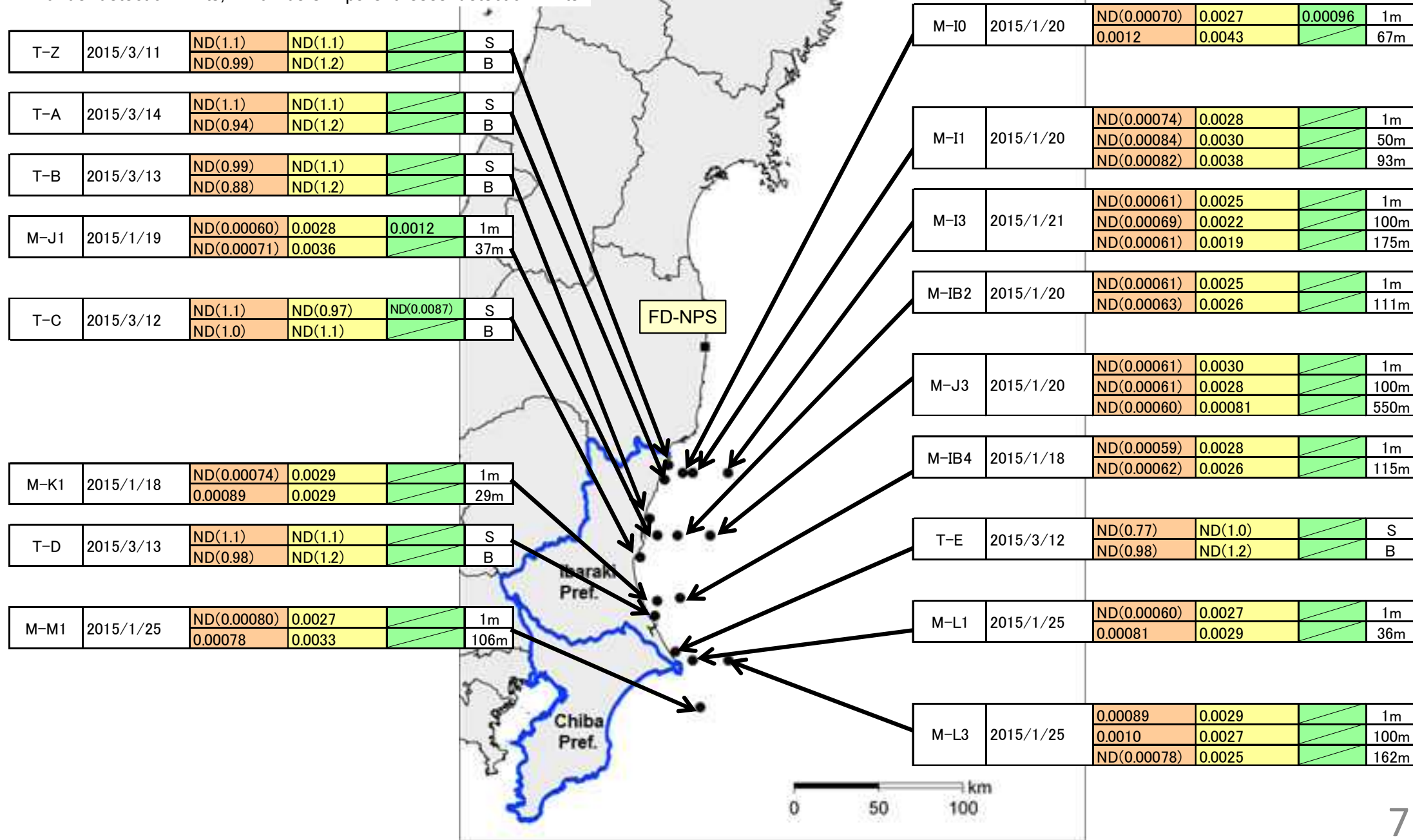


Sea area along and off the coast of Ibaraki Pref. and Chiba Pref.

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



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-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-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-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-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-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-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-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-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-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

