

Sea Area Monitoring

May 26, 2015

Nuclear Regulation Authority (NRA), Japan

Sea area within 2km radius from the NPS

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

Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	Sr-90	total α	Pu-238	Pu-239+240
T-1	2015/5/11	ND(0.72)	ND(0.70)	11 ^{*1}	ND(1.6)				
	2015/4/8	ND(0.55)	ND(0.64)				ND(5.5 x 10 ⁻⁶)	ND(6.1 x 10 ⁻⁶)	
	2015/4/6	ND(0.69)	ND(0.67)	15 ^{*1}	2.2	0.030	ND(2.0)		
F-P02	2015/3/3	ND(0.072)	0.094	0.06 ^{*2}	In progress	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	In progress
	2015/1/14	ND(0.070)	0.069	0.05 ^{*2}	ND(0.44)	0.047	ND(7 x 10 ⁻⁶)	7 x 10 ⁻⁶	
T-0-1A	2015/5/11	ND(0.77)	ND(0.64)	ND(18) ^{*1}	In progress				
	2015/5/7	ND(0.77)	ND(0.62)	ND(17) ^{*1}	ND(1.5)				
T-0-1	2015/5/11	ND(0.77)	ND(0.60)	ND(18) ^{*1}	In progress				
	2015/5/7	ND(0.74)	ND(0.70)	ND(17) ^{*1}	ND(1.5)				
M-101	2015/1/8	0.039	0.14		0.46	0.10			
	2015/3/3	0.079	0.23	0.14 ^{*2}	In progress	In progress	In progress	In progress	In progress
F-P03	2015/2/10	0.097	0.16	0.18 ^{*2}	0.59	0.47	In progress	In progress	In progress
	2015/1/14	ND(0.070)	0.082	0.12 ^{*2}	ND(0.44)	0.052	ND(6 x 10 ⁻⁶)	ND(7 x 10 ⁻⁶)	
	2015/5/11	ND(0.64)	ND(0.52)	ND(18) ^{*1}	In progress				
T-0-2	2015/5/7	ND(0.82)	ND(0.67)	ND(17) ^{*1}	3.5				
	2015/1/9	0.033	0.11		0.52	0.11			
T-0-3A	2015/5/11	ND(0.80)	ND(0.58)	ND(18) ^{*1}	In progress				
	2015/5/7	ND(0.90)	ND(0.59)	ND(17) ^{*1}	1.7				
F-P01	2015/3/3	ND(0.068)	0.075	0.04 ^{*2}	In progress	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	In progress
	2015/1/14	ND(0.059)	ND(0.051)	0.04 ^{*2}	ND(0.43)	0.008	ND(8 x 10 ⁻⁶)	ND(6 x 10 ⁻⁶)	
T-0-3	2015/5/11	ND(0.81)	ND(0.49)	ND(18) ^{*1}	In progress				
	2015/5/7	ND(0.68)	ND(0.64)	ND(17) ^{*1}	ND(1.5)				
T-2-1	2015/5/11	ND(0.74)	ND(0.65)	9.5 ^{*1}	ND(1.6)				(9.7 ± 2.4) x 10 ⁻⁶
	2015/4/8	ND(0.66)	ND(0.60)	8.9 ^{*1}					
	2015/4/6	ND(0.70)	ND(0.62)	15 ^{*1}	2.0	ND(0.011)	ND(2.0)		

Fukushima
Daiichi-NPS



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

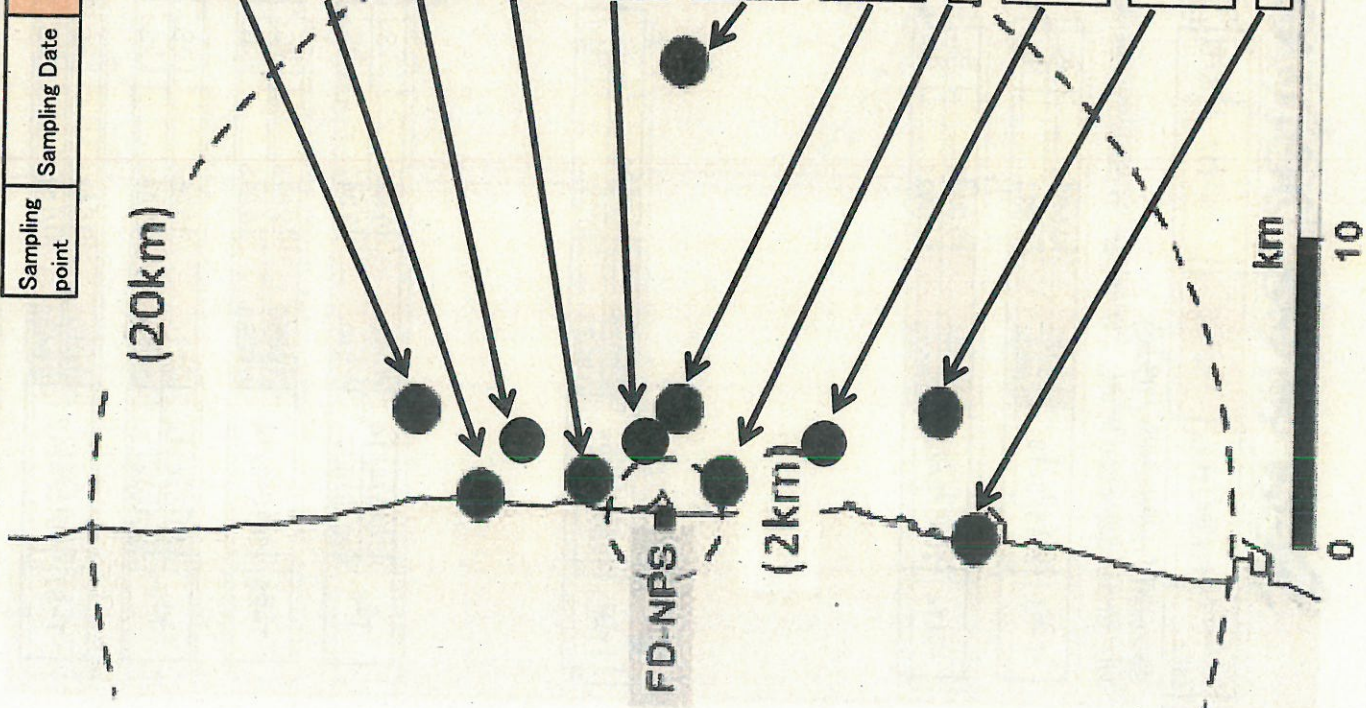
Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	SI-90	total α	Pu-238	Pu-239+240	S	S:2m below sea level
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Sea water radioactivity (Bq/L):

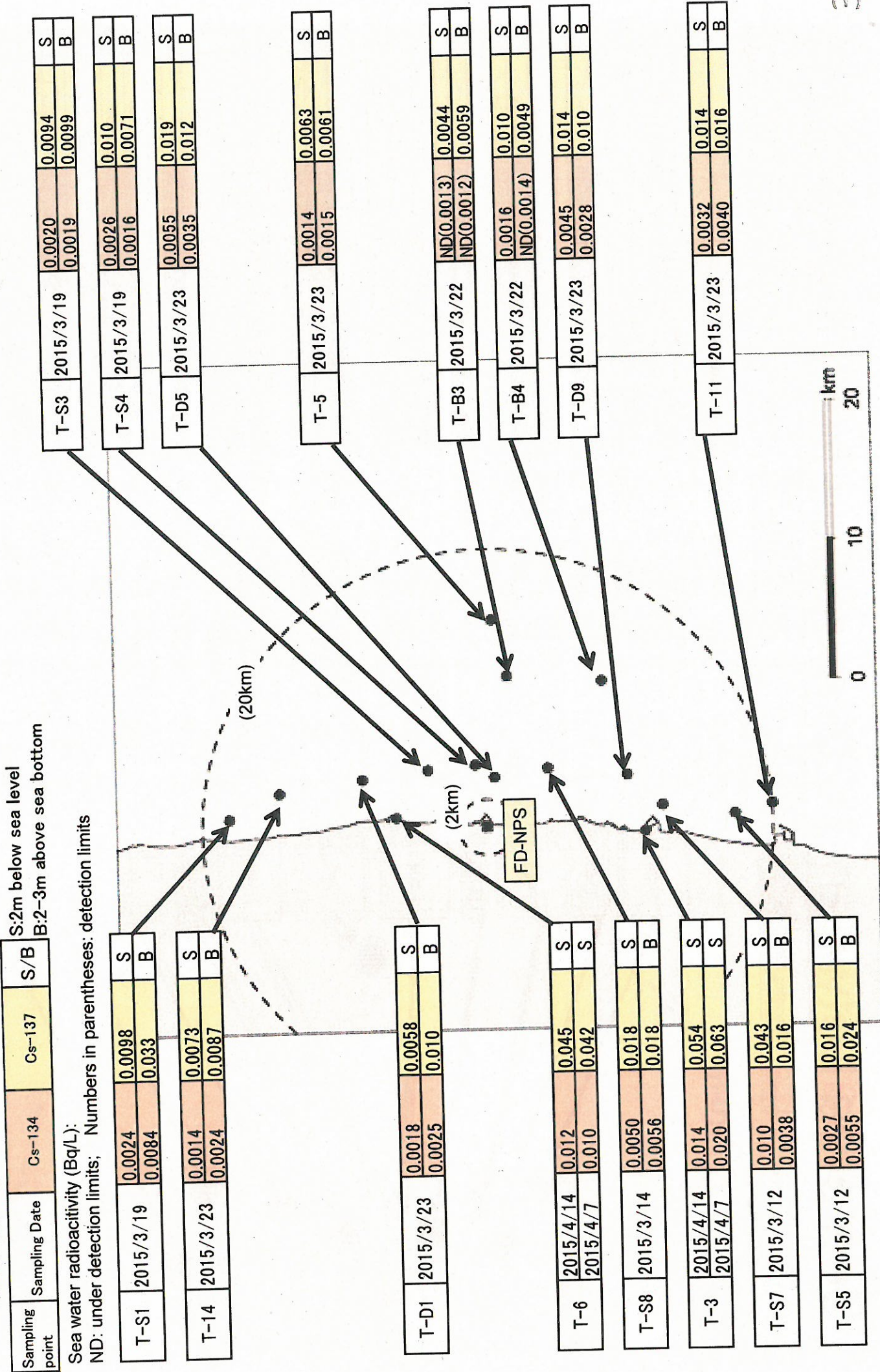
ND: under detection limits; Numbers in parentheses: detection limits

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

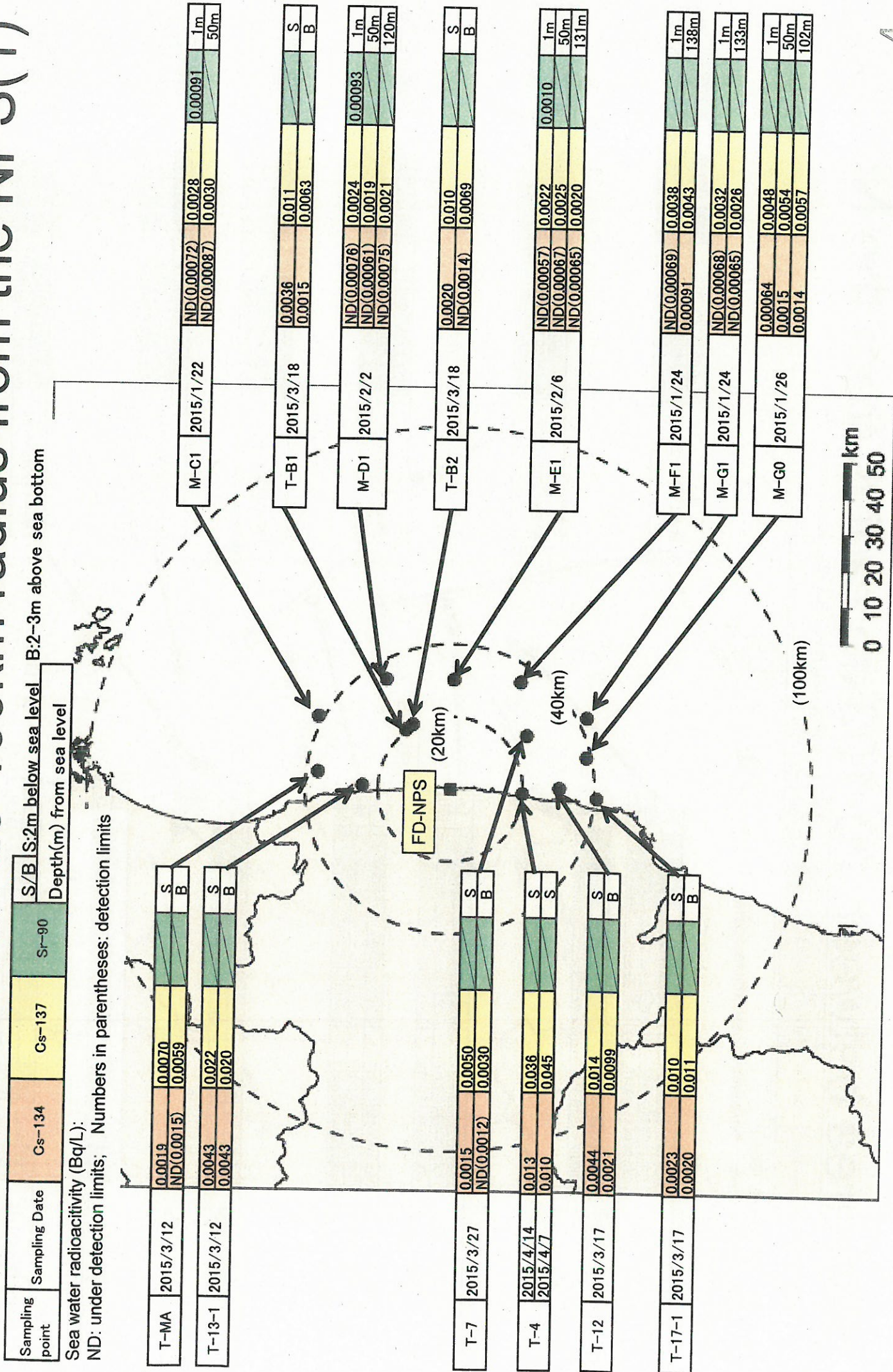
T-D1	2015/4/8	In progress	In progress	In progress	In progress	In progress	In progress	In progress	In progress	ND(7.0 x 10 ⁻⁶)	ND(6.8 x 10 ⁻⁶)	S
	2015/3/16	0.0093	0.035	ND(17) ^{*1}	0.87							S
	2015/3/3	0.0078	0.025	ND(17) ^{*1}	ND(0.34)	ND(0.0070)	ND(1.6)					S
T-6	2015/4/7	0.010	0.042	ND(17) ^{*1}	0.49							S
	2015/3/3	ND(0.059)	ND(0.057)	0.03 ^{*2}	In progress	In progress	In progress	In progress	In progress	In progress	In progress	S
F-P06	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						S
	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	In progress	In progress	In progress	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						S
T-5	2015/4/9	In progress	In progress	In progress	In progress	In progress	In progress	In progress	In progress	ND(5.7 x 10 ⁻⁶)	ND(5.6 x 10 ⁻⁶)	S
	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
T-D5	2015/4/8	In progress	In progress	In progress	In progress	In progress	In progress	In progress	In progress	ND(6.3 x 10 ⁻⁶)	ND(6.0 x 10 ⁻⁶)	S
	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
M-104	2015/1/9	0.019	0.070	0.24	0.042							0.5m
	2015/3/3	ND(0.096)	ND(0.053)	0.04 ^{*2}	In progress	In progress	In progress	In progress	In progress	In progress	In progress	S
F-P05	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						S
	2015/4/9	In progress	In progress	In progress	In progress	In progress	In progress	In progress	In progress	ND(6.7 x 10 ⁻⁶)	ND(6.5 x 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
	2015/4/7	0.020	0.063	ND(16) ^{*1}	ND(0.32)							S



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



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



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

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

Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
T-MA	2015/3/12	0.0019	0.0070		S	1m
		ND(0.0015)	0.0059		B	50m
T-13-1	2015/3/12	0.0043	0.022		S	1m
		0.0043	0.020		B	50m

Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
T-7	2015/3/27	0.0015	0.0050		S	1m
		ND(0.0012)	0.0030		B	50m
T-4	2015/4/14	0.013	0.036		S	1m
	2015/4/7	0.010	0.045		S	50m
T-12	2015/3/17	0.0044	0.014		S	1m
		0.0021	0.0099		B	50m

Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
T-17-1	2015/3/17	0.0023	0.010		S	1m
		0.0020	0.011		B	50m

Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
M-C1	2015/1/22	ND(0.00072)	0.0028		S	1m
		ND(0.00087)	0.0030		B	50m
T-B1	2015/3/18	0.0036	0.011		S	1m
		0.0015	0.0063		B	50m

Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
M-D1	2015/2/2	ND(0.00076)	0.0024		S	1m
		ND(0.00061)	0.0019		S	50m
T-B2	2015/3/18	0.0020	0.010		S	1m
		ND(0.0014)	0.0069		B	50m

Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
M-E1	2015/2/6	ND(0.00057)	0.0022		S	1m
		ND(0.00067)	0.0025		S	50m
M-F1	2015/1/24	ND(0.00065)	0.0020		S	131m
		ND(0.00065)	0.0020		S	131m

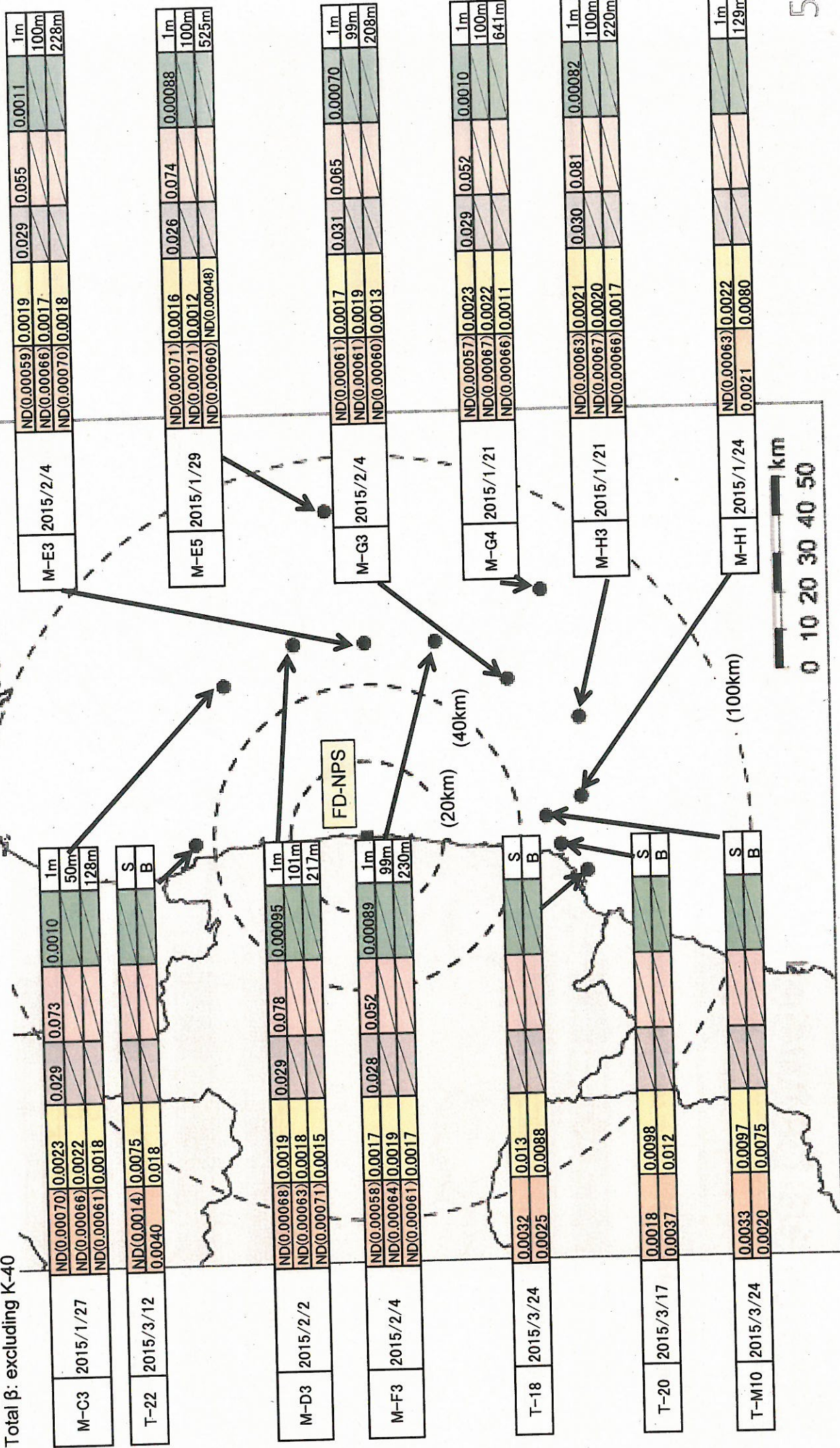
Point	Date	Cs-134 (S/B)	Cs-137 (S/B)	Sr-90 (S/B)	S/B (S/B)	Depth (m)
M-G1	2015/1/24	ND(0.00068)	0.0032		S	1m
		ND(0.00065)	0.0026		S	133m
M-G0	2015/1/26	0.0064	0.0048		S	1m
		0.0015	0.0054		S	50m
M-G0	2015/1/26	0.0014	0.0057		S	102m
		0.0014	0.0057		S	102m

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
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Sea water radioactivity (Bq/L):

ND: under detection limits; Numbers in parentheses: detection limits
 *Total β: excluding K-40

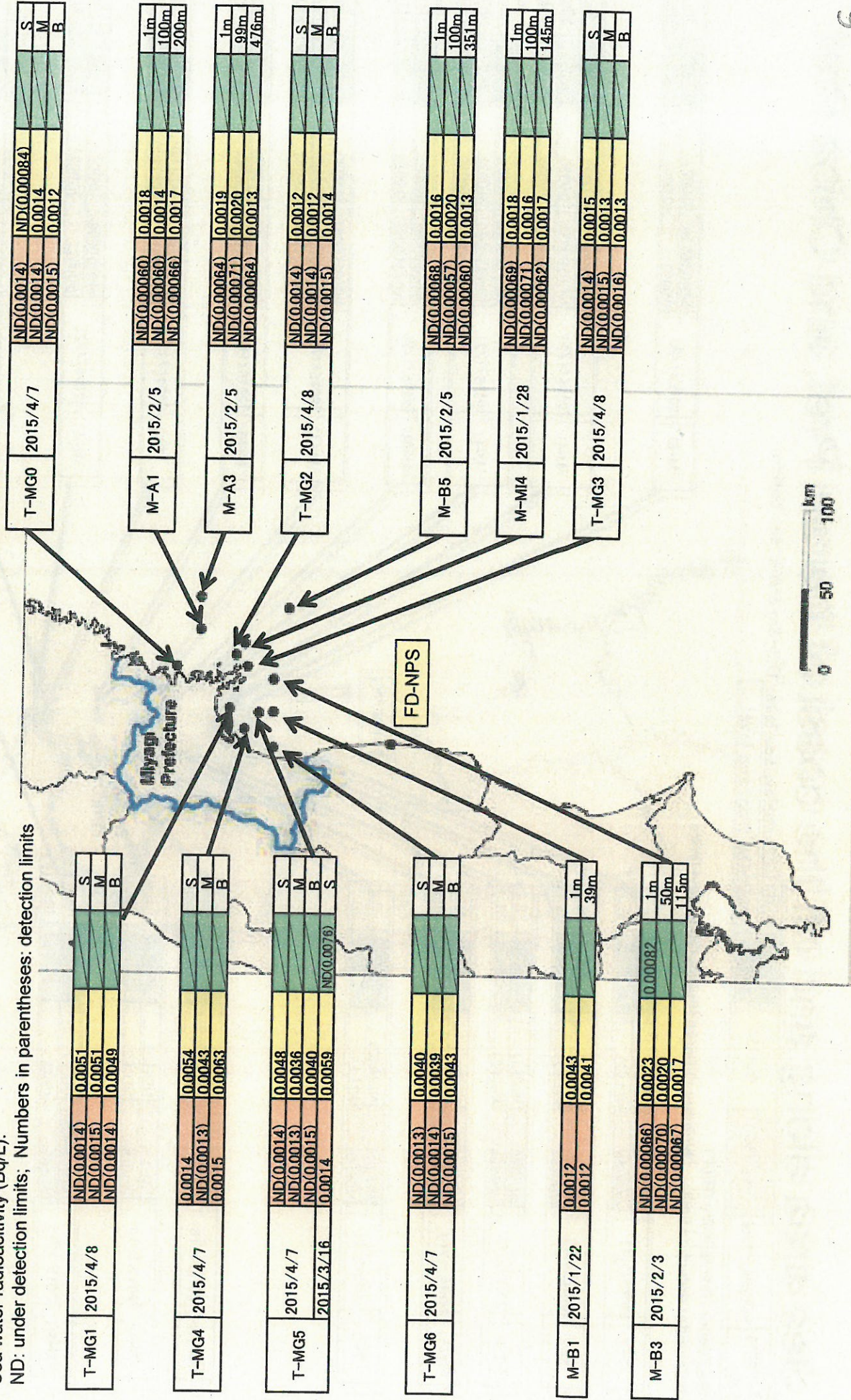


Sea area along and off the coast of Miyagi Prefecture

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

Sea water radioactivity (Bq/L):

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



S:2m below sea level

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

B:2-3m above sea bottom

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG0	2015/4/7	ND(0.0014)	ND(0.0014)	ND(0.00084)			S
		ND(0.0014)	ND(0.0014)	0.0014			M
		ND(0.0015)	0.0012				B

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
M-A1	2015/2/5	ND(0.00060)	ND(0.00060)	0.0018			1m
		ND(0.00060)	ND(0.00060)	0.0014			100m
		ND(0.00066)	0.0017				200m

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
M-A3	2015/2/5	ND(0.00064)	ND(0.00064)	0.0019			1m
		ND(0.00071)	0.0020				99m
		ND(0.00064)	0.0013				476m

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG2	2015/4/8	ND(0.0014)	ND(0.0014)	0.0012			S
		ND(0.0014)	0.0012				M
		ND(0.0015)	0.0014				B

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
M-B5	2015/2/5	ND(0.00068)	ND(0.00068)	0.0016			1m
		ND(0.00057)	0.0020				100m
		ND(0.00060)	0.0013				351m

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
M-MI4	2015/1/28	ND(0.00069)	ND(0.00069)	0.0018			1m
		ND(0.00071)	0.0016				100m
		ND(0.00062)	0.0017				145m

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG3	2015/4/8	ND(0.0014)	ND(0.0014)	0.0015			S
		ND(0.0015)	0.0013				M
		ND(0.0016)	0.0013				B

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG1	2015/4/8	ND(0.0014)	0.0051				S
		ND(0.0015)	0.0051				M
		ND(0.0014)	0.0049				B

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG4	2015/4/7	0.0014	0.0054				S
		ND(0.0013)	0.0043				M
		0.0015	0.0063				B

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG5	2015/4/7	ND(0.0014)	0.0048				S
		ND(0.0013)	0.0036				M
		ND(0.0015)	0.0040				B
	2015/3/16	0.0014	0.0059	ND(0.0076)			S

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
T-MG6	2015/4/7	ND(0.0013)	0.0040				S
		ND(0.0014)	0.0039				M
		ND(0.0015)	0.0043				B

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
M-B1	2015/1/22	0.0012	0.0043				1m
		0.0012	0.0041				39m

Sampling point	Sampling Date	Cs-134	Cs-137	Sr-90	S	M	B
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

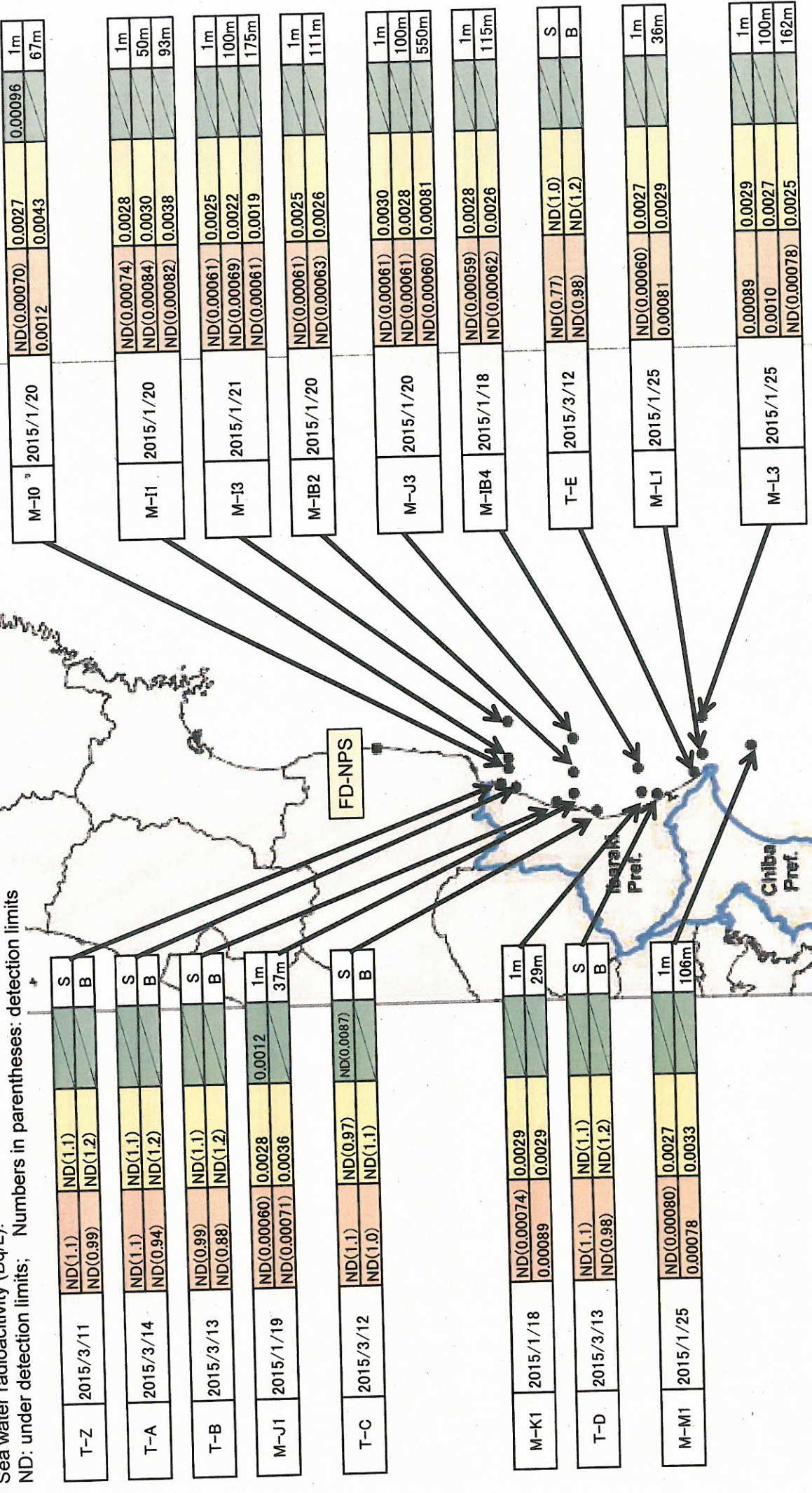


Sea area along and off the coast of Ibaraki Pref. and Chiba Pref.

S/B S:2m below sea level B:2-3m above sea bottom

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

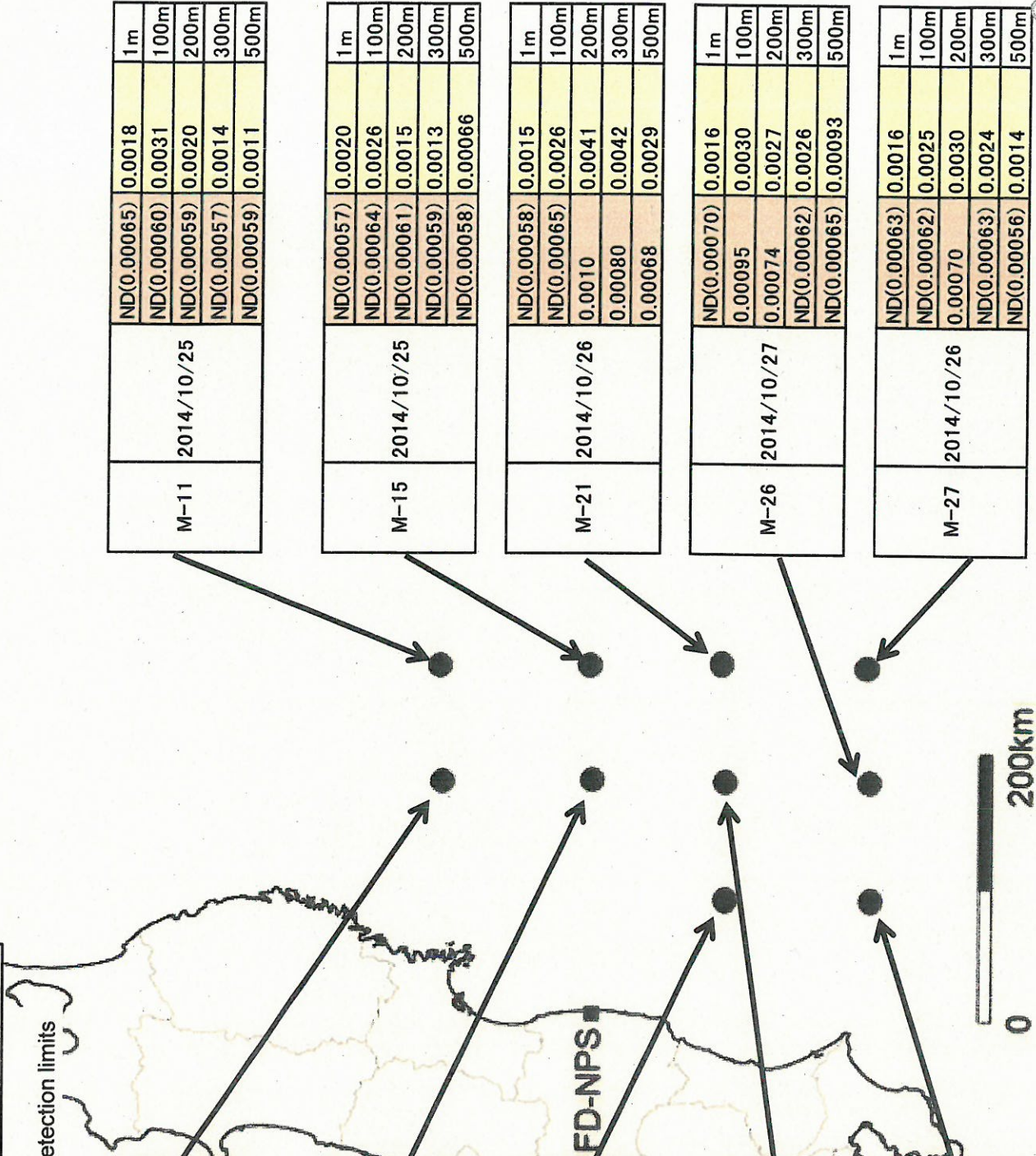
M-11	2014/10/25	ND(0.00065)	0.0018	1m
		ND(0.00060)	0.0031	100m
		ND(0.00059)	0.0020	200m
		ND(0.00057)	0.0014	300m
		ND(0.00059)	0.0011	500m

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



200km

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