

# Sea Area Monitoring

July 08, 2014

Nuclear Regulation Authority (NRA), Japan

# Sea area within 2km radius from the NPS

**Fukushima Daiichi-NPS**

Sampling point	Sampling Date	Cs-134	Cs-137	total $\beta$	H-3	Sr-90	total $\alpha$	Pu-238	Pu-239+Pu-240
Sea water radioactivity (Bq/L):									
ND: under detection limits; Numbers in parentheses: detection limits									
*1:Total $\beta$ : including K-40    *2:Total $\beta$ : excluding K-40									
T-1	2014/6/23	ND(0.69)	ND(0.72)	14 <sup>*1</sup>	ND(1.8)				
	2014/5/12	ND(0.77)	0.97	11 <sup>*1</sup>	8.7	1.2	ND(1.5)		
	2014/4/10	ND(0.85)	ND(0.82)						ND(5.6 × 10 <sup>-6</sup> ) (9.4 ± 2.2) × 10 <sup>-6</sup>
F-P02	2014/5/19	ND(0.062)	ND(0.049)	0.03 <sup>*2</sup>	ND(0.42)	In progress		In progress	In progress
	2014/4/14	ND(0.060)	ND(0.052)	0.04 <sup>*2</sup>	ND(0.41)	0.002		ND(6 × 10 <sup>-6</sup> )	8 × 10 <sup>-6</sup>
T-0-1A	2014/6/24	ND(0.62)	ND(0.58)	ND(17) <sup>*1</sup>	In progress				
	2014/6/17	ND(0.79)	ND(0.53)	ND(17) <sup>*1</sup>	ND(1.9)				
T-0-1	2014/6/24	ND(0.71)	ND(0.68)	ND(17) <sup>*1</sup>	In progress				
	2014/6/17	ND(0.68)	ND(0.53)	ND(17) <sup>*1</sup>	ND(1.9)				
M-101	2014/3/5	0.064	0.17		0.42	In progress			
	2014/2/22	0.15	0.39		0.16	In progress			
	2014/1/15	0.030	0.078		0.17	0.022			
F-P03	2014/5/19	ND(0.063)	ND(0.055)	0.05 <sup>*2</sup>	ND(0.41)	In progress		In progress	In progress
	2014/4/14	ND(0.069)	ND(0.053)	0.03 <sup>*2</sup>	ND(0.41)	0.003		ND(9 × 10 <sup>-6</sup> )	8 × 10 <sup>-6</sup>
T-0-2	2014/6/24	ND(0.75)	ND(0.70)	ND(17) <sup>*1</sup>	In progress				
	2014/6/17	ND(0.67)	ND(0.52)	ND(17) <sup>*1</sup>	ND(1.9)				
M-102	2014/3/4	0.055	0.15		0,19	In progress			
	2014/2/21	0.12	0.33		0.21	In progress			
	2014/1/16	0.054	0.13		0.47	0.063			
T-0-3A	2014/6/24	ND(0.58)	ND(0.66)	ND(17) <sup>*1</sup>	In progress				
	2014/6/17	ND(0.83)	ND(0.78)	ND(17) <sup>*1</sup>	ND(1.9)				
F-P01	2014/5/19	ND(0.056)	0.094	0.05 <sup>*2</sup>	ND(0.42)	In progress		In progress	In progress
	2014/4/14	ND(0.065)	0.078	0.04 <sup>*2</sup>	ND(0.40)	0.006		ND(5 × 10 <sup>-6</sup> )	6 × 10 <sup>-6</sup>
T-0-3	2014/6/24	ND(0.96)	ND(0.58)	ND(17) <sup>*1</sup>	In progress				
	2014/6/17	ND(0.55)	ND(0.58)	ND(17) <sup>*1</sup>	ND(1.9)				
T-2-1	2014/6/23	ND(0.56)	ND(0.58)	9.7 <sup>*1</sup>	ND(1.8)				
	2014/5/12	ND(0.53)	ND(0.69)	13 <sup>*1</sup>	4.3	0.018	ND(1.5)		
	2014/4/10	ND(0.70)	ND(0.58)	9.0 <sup>*1</sup>				ND(5.6 × 10 <sup>-6</sup> )	(3.1 ± 0.41) × 10 <sup>-5</sup>

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

Sampling point	Sampling Date	Cs-134	Cs-137	total $\beta$	H-3	Sr-90	total $\alpha$	Pu-238	Pu-239+Pu-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  $\beta$ : including K-40 \*2:Total  $\beta$ : excluding K-40

(20km)

T-D1	2014/5/7	0.0061	0.015	ND(16)*1	0.34	ND(0.01)	ND(1.5)	ND	ND	S
	2014/4/1	0.0027	0.0086	ND(17)*1	ND(0.30)	ND(0.009)	ND(1.9)	ND(5.3 × 10 <sup>-6</sup> )	(5.7 + 1.7) × 10 <sup>-6</sup>	S

T-6	2014/5/6	0.039	0.096	ND(17)*1	0.72	ND	ND	ND	ND	S
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F-P06	2014/5/12	ND(0.058)	0.056	0.04*2	ND(0.41)	In progress	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	ND(7 × 10 <sup>-6</sup> )	7 × 10 <sup>-6</sup>	S

M-103	2014/3/5	0.045	0.12	ND	0.28	In progress	In progress	In progress	In progress	0.5m
	2014/2/22	0.035	0.087	ND	0.098	In progress	ND	ND	ND	ND

F-P04	2014/5/12	ND(0.062)	ND(0.055)	0.03*2	ND(0.41)	In progress	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	ND(7 × 10 <sup>-6</sup> )	7 × 10 <sup>-6</sup>	S

FD-NPS

(2km)

T-5	2014/5/8	0.0013	0.0047	ND(16)*1	ND(0.33)	ND(0.01)	ND(1.5)	ND	ND	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 <sup>-6</sup> )	(8.3 + 2.1) × 10 <sup>-6</sup>	S

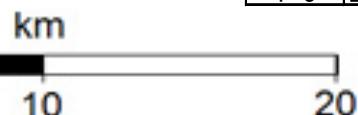
T-D5	2014/5/7	0.010	0.027	ND(16)*1	ND(0.33)	ND(0.01)	ND(1.5)	ND	ND	S
	2014/4/1	0.0058	0.012	ND(17)*1	ND(0.30)	ND(0.009)	ND(1.9)	ND(5.2 × 10 <sup>-6</sup> )	ND(4.5 × 10 <sup>-6</sup> )	S

M-104	2014/3/4	0.028	0.073	ND	0.11	In progress	In progress	In progress	In progress	0.5m
	2014/2/21	0.043	0.11	ND	0.18	In progress	ND	ND	ND	ND

F-P05	2014/5/12	ND(0.056)	ND(0.060)	0.03*2	ND(0.42)	In progress	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	ND(6 × 10 <sup>-6</sup> )	6 × 10 <sup>-6</sup>	S

T-D9	2014/5/8	0.010	0.025	ND(16)*1	ND(0.33)	ND(0.008)	ND(1.5)	ND	ND	S
	2014/4/2	0.0041	0.010	ND(16)*1	ND(0.30)	ND(0.008)	ND(1.9)	ND(4.7 × 10 <sup>-6</sup> )	ND(4.5 × 10 <sup>-6</sup> )	S

T-3	2014/5/7	0.022	0.071	ND(17)*1	ND(0.27)	ND	ND	ND	ND	S
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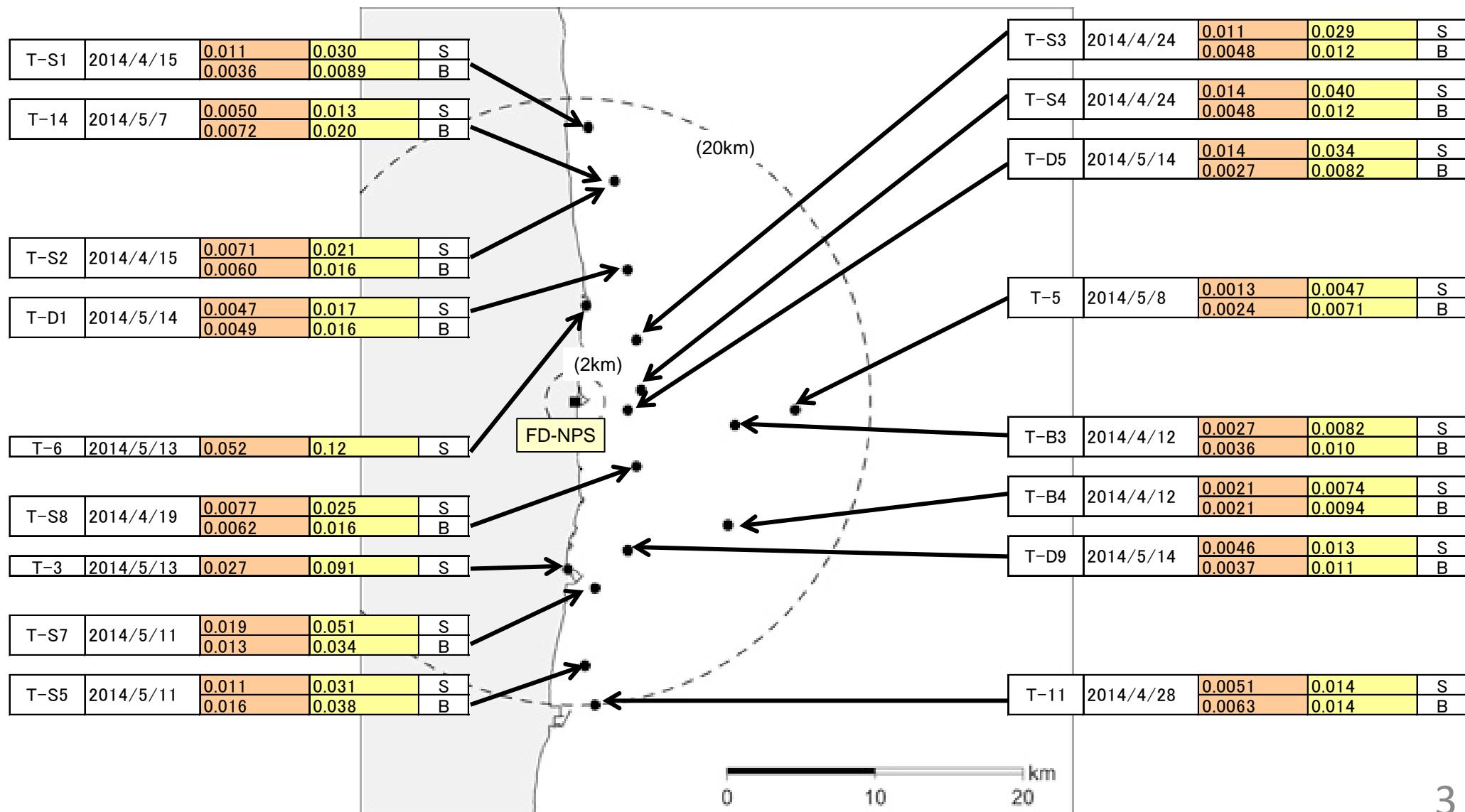


# Sea area between 2-20km radius from the NPS (2)

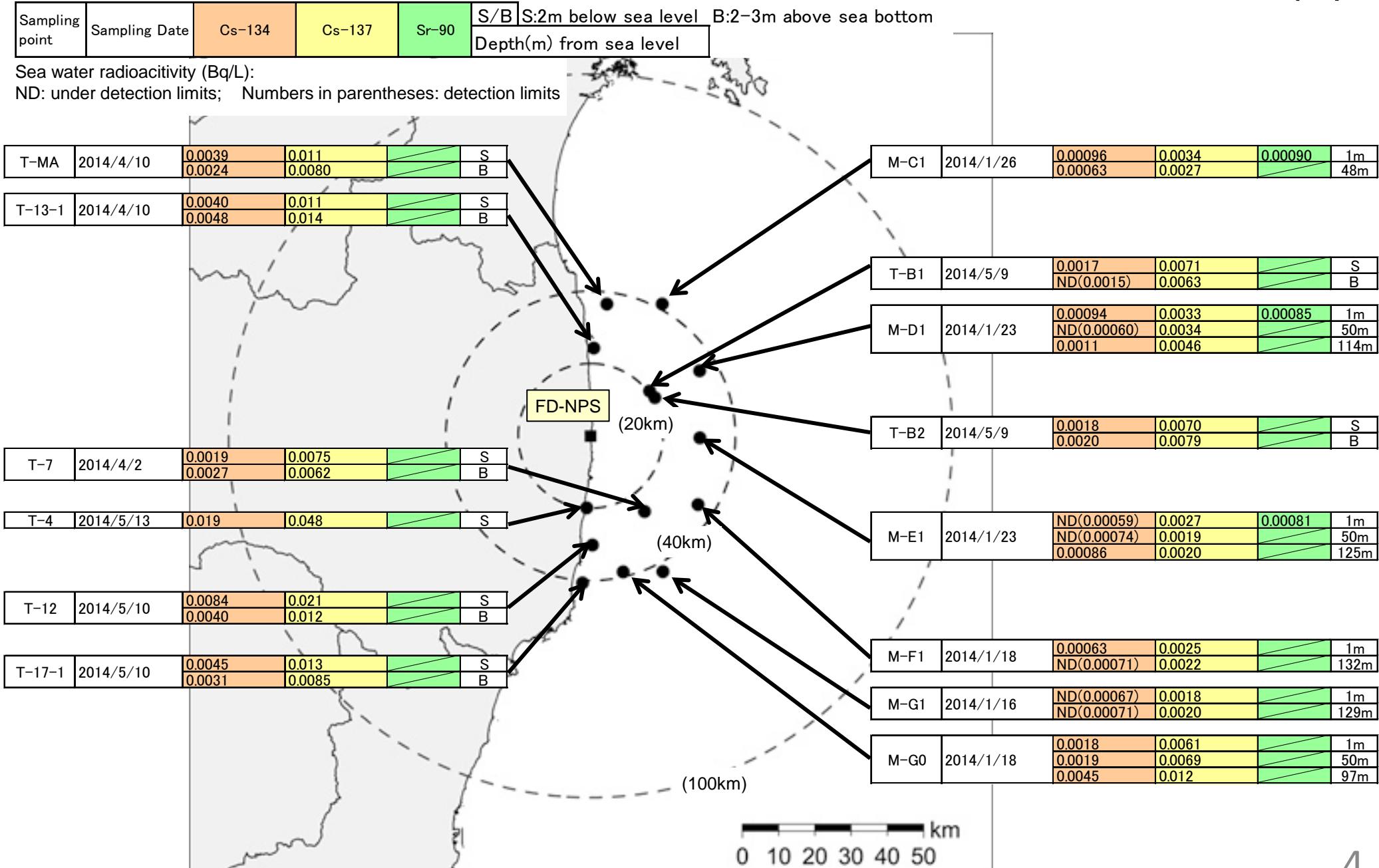
Sampling point	Sampling Date	Cs-134	Cs-137	S/B	
S:2m below sea level B:2-3m above sea bottom					

Sea water radioactivity (Bq/L):

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



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



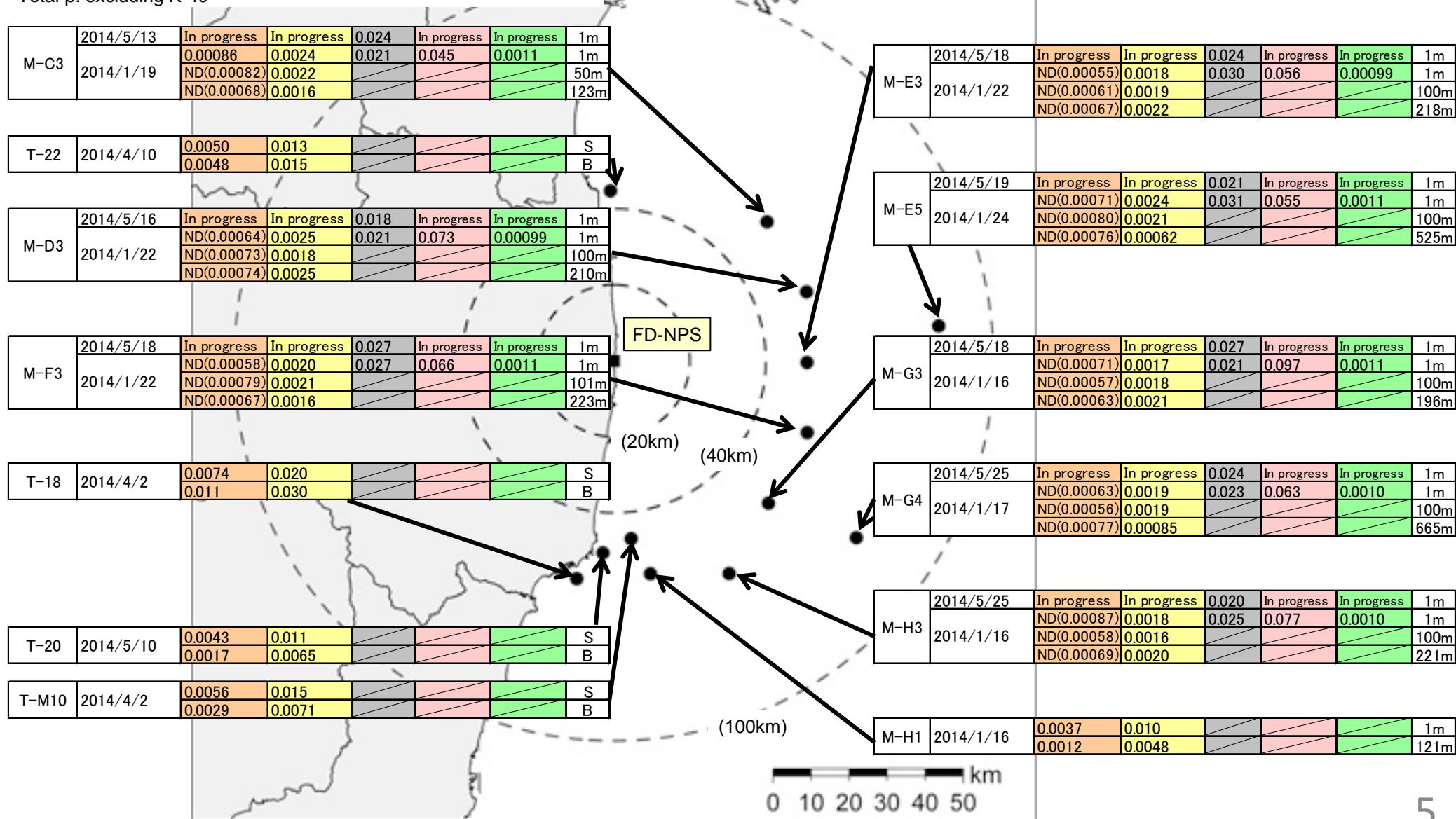
# Sea area between 20-100km radius from the NPS(2)

Sampling point	Sampling Date	Cs-134	Cs-137	Total $\beta^*$	H-3	Sr-90	S/B	Depth(m) from sea level
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  $\beta$ : 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			

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	2014/5/20	0.0032 0.0035 0.0028	0.011 0.011 0.0069	S M B
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T-MG4	2014/5/20	0.0027 0.0025 0.0023	0.0083 0.0097 0.0086	S M B
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T-MG5	2014/5/20	0.0022 0.0023 0.0023	0.0075 0.0073 0.0071	S M B
	2014/5/8	0.0021	0.0068	ND(0.011) S

T-MG6	2014/5/20	0.0019 0.0021 0.0025	0.0086 0.0068 0.0092	S M B
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M-B1	2014/1/26	0.0027 0.0013	0.0078 0.0049	1m 37m
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M-B3	2014/1/24	ND(0.00099) ND(0.00069) ND(0.00092)	0.0021 0.0030 0.0024	0.0012 50m 108m
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T-MG0	2014/5/20	ND(0.0017) ND(0.0017) ND(0.0017)	0.0018 0.0014 0.0020	S M B
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M-A1	2014/1/28	ND(0.00069) ND(0.00071) ND(0.00080)	0.0020 0.0020 0.0020	1m 100m 195m
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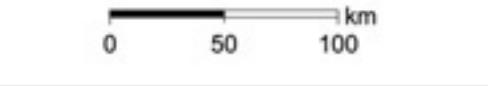
M-A3	2014/1/25	ND(0.00081) ND(0.00093) ND(0.00078)	0.0029 0.0014 0.00092	1m 100m 476m
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T-MG2	2014/5/20	ND(0.0017) ND(0.0017) ND(0.0017)	0.0017 0.0021 0.0028	S M B
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M-B5	2014/1/25	ND(0.00068) ND(0.00054) ND(0.00066)	0.0019 0.0017 0.0016	1m 100m 349m
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M-MI4	2014/1/27	ND(0.00067) ND(0.00054) ND(0.00067)	0.0020 0.0017 0.0021	1m 100m 144m
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T-MG3	2014/5/20	ND(0.0017) ND(0.0017) ND(0.0017)	0.0014 0.0014 0.0016	S M B
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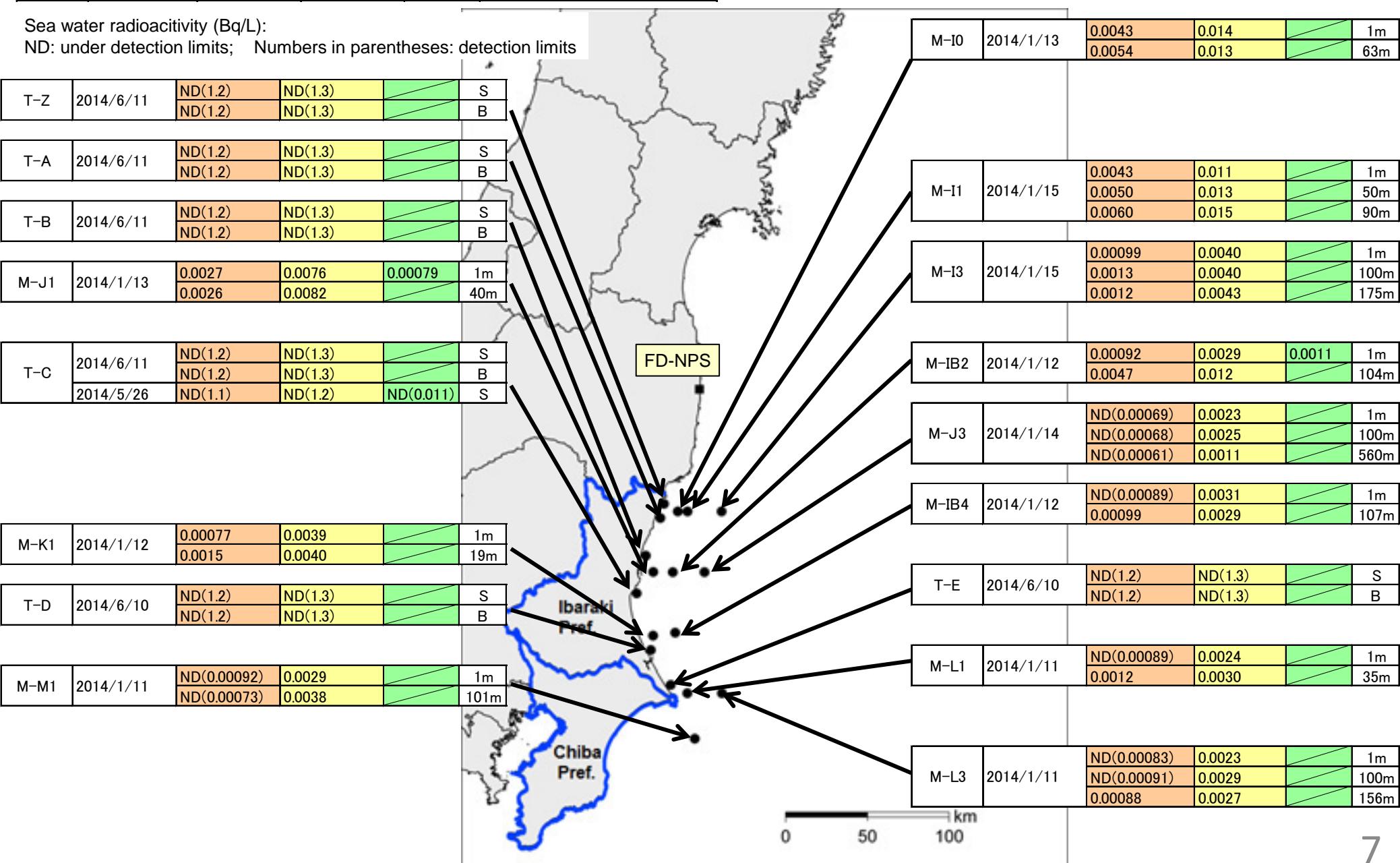


# Sea area along and off the coast of Ibaraki Pref. and Chiba Pref.

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



# 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

