

# Status of Marine Monitoring

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November 12, 2013

# Sea Area Monitoring

November 05, 2013

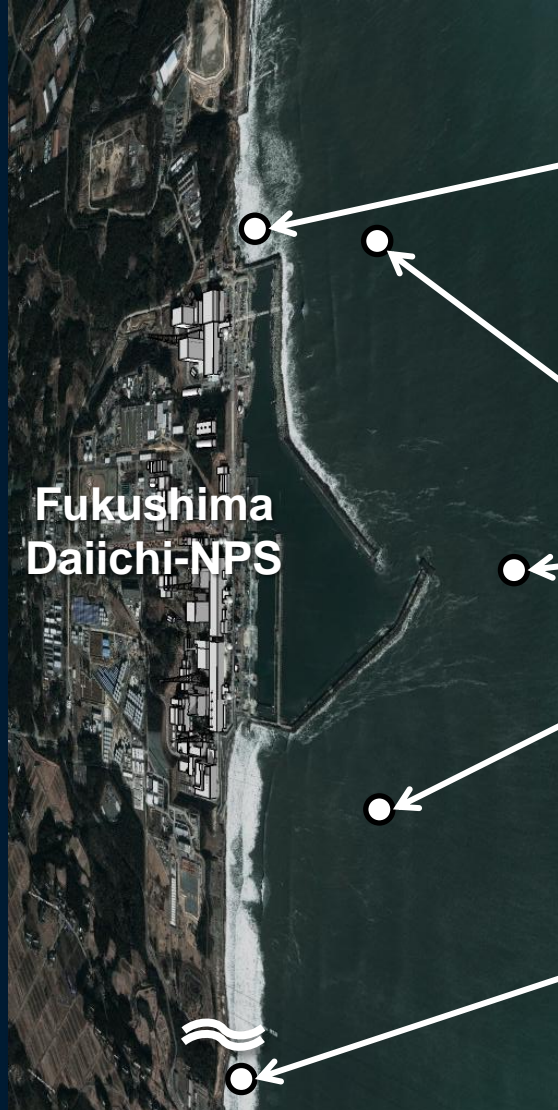
Nuclear Regulation Authority (NRA), Japan

# 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



Fukushima Daiichi-NPS

T-1	2013/10/21	ND (1.3)	ND (1.3)	ND (16)	ND (1.7)	/	/	/	/
	2013/09/23	ND (1.2)	ND (1.4)	ND (17)	ND (1.8)	In progress	ND (0.13)	/	/
	2013/08/12	ND (1.2)	1.4	ND (19)	4.7	In progress	ND (0.12)	/	/
	2013/08/06	ND (1.4)	1.7	/	/	/	/	ND( $6.6 \times 10^{-6}$ )	$(7.5 \pm 2.1) \times 10^{-6}$

T-0-1	2013/10/18	ND (0.81)	ND (0.64)	ND (16)	ND(1.8)	/	/	/	/
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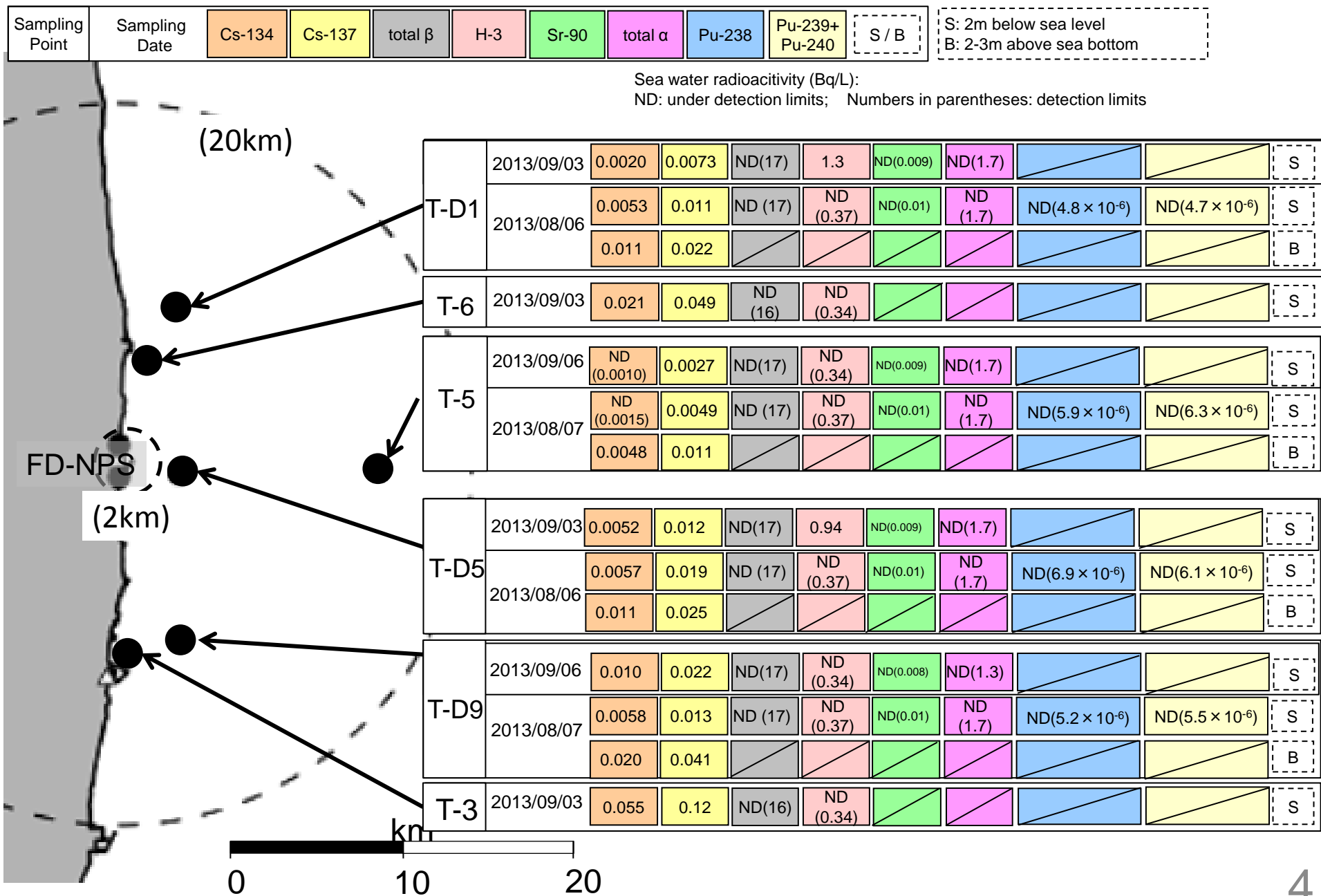
T-0-2	2013/10/18	ND (1.2)	1.6	ND (16)	2.9	/	/	/	/
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T-0-3	2013/10/18	ND (0.70)	ND (0.76)	ND (16)	ND(1.8)	/	/	/	/
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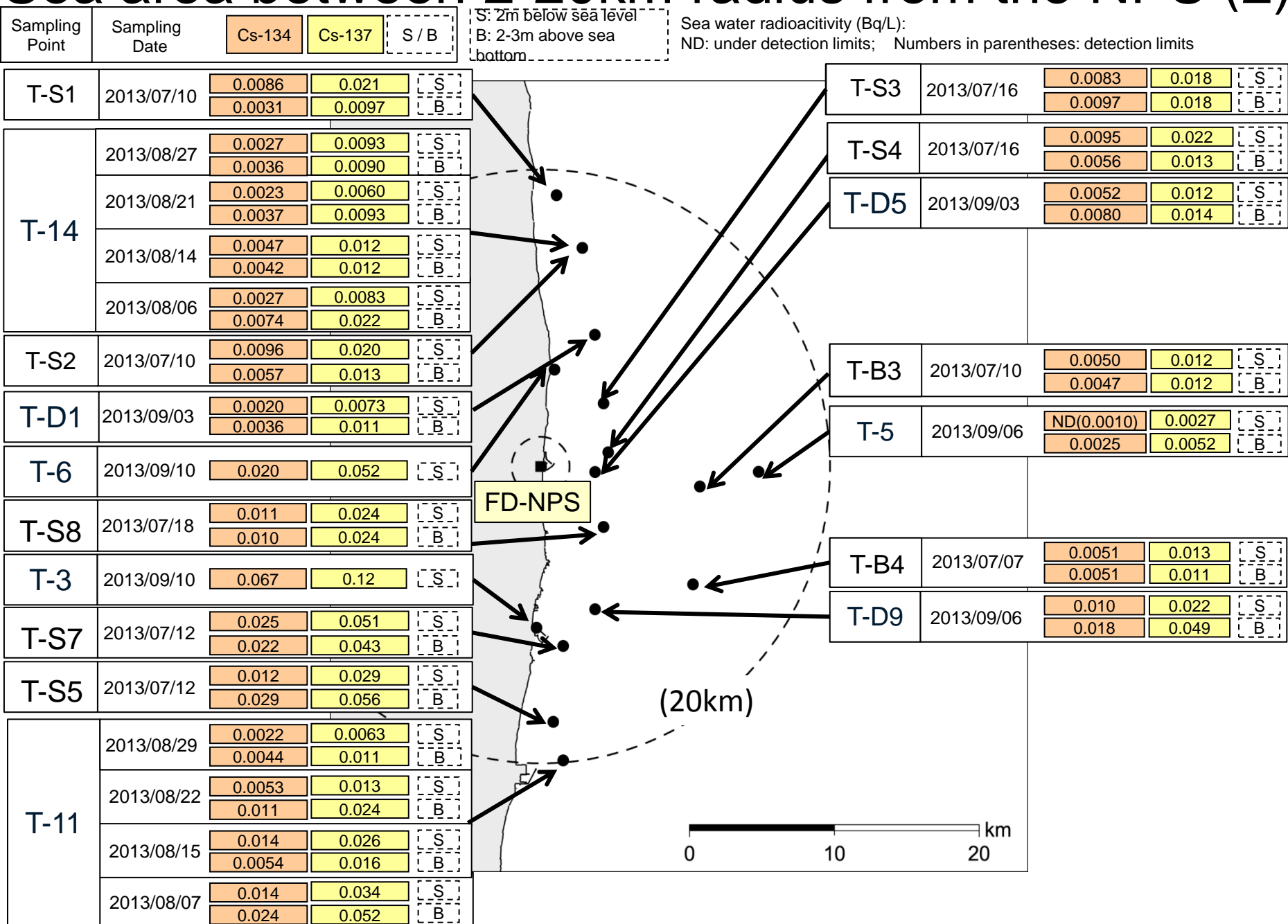
T-2-1	2013/10/21	ND (1.3)	ND(1.3)	ND (17)	ND(1.7)	/	/	/	/
	2013/09/23	ND (1.2)	ND(1.4)	ND (17)	ND(1.8)	In progress	ND (0.13)	/	/
	2013/08/12	ND (1.2)	ND(1.4)	ND (19)	ND(2.9)	In progress	ND (0.12)	/	/
	2013/08/06	ND (1.4)	ND(1.3)	ND(21)	/	/	/	ND( $7.6 \times 10^{-6}$ )	$(1.1 \pm 0.29) \times 10^{-5}$



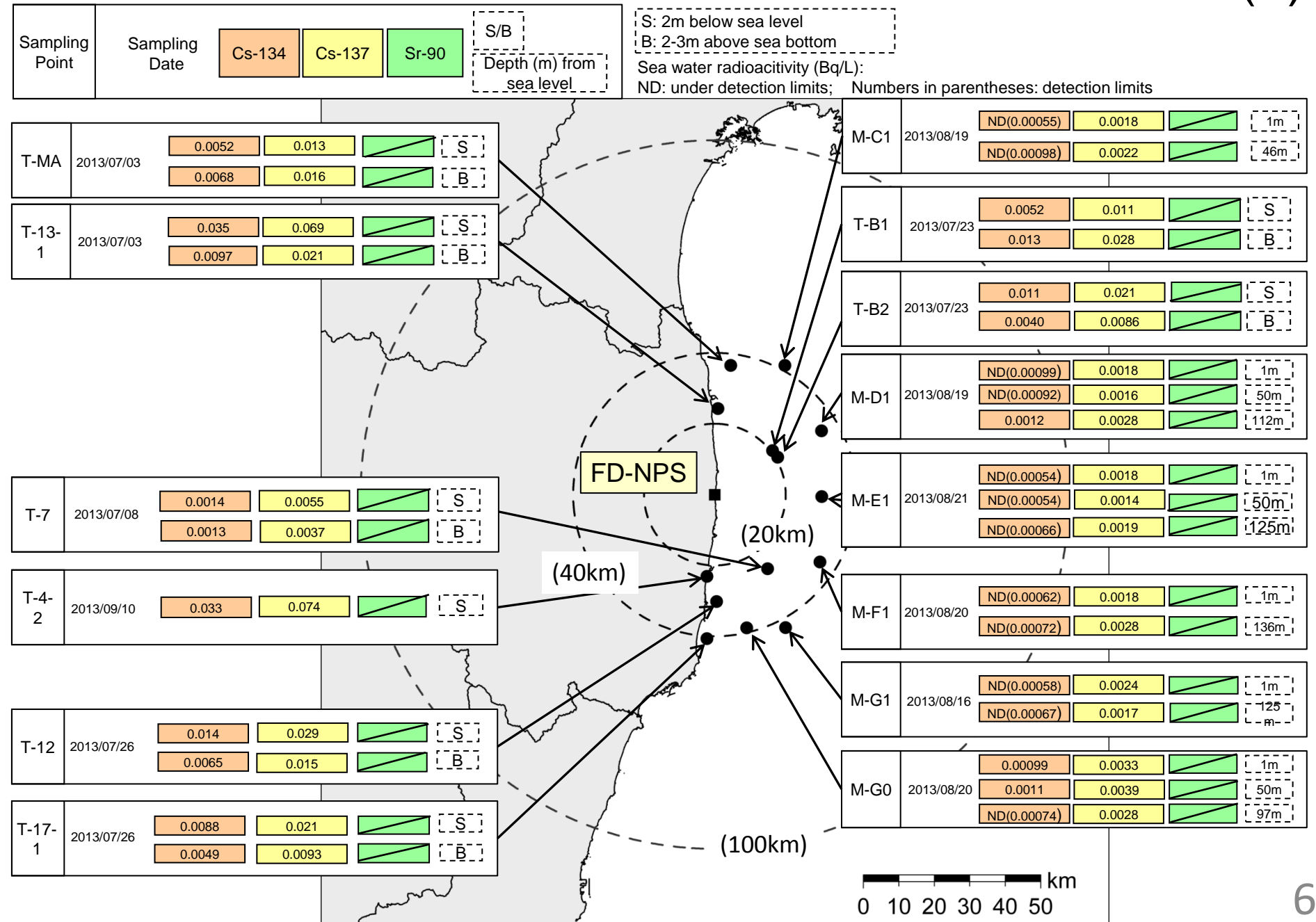
# Sea area between 2-20km radius from the NPS (1)



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



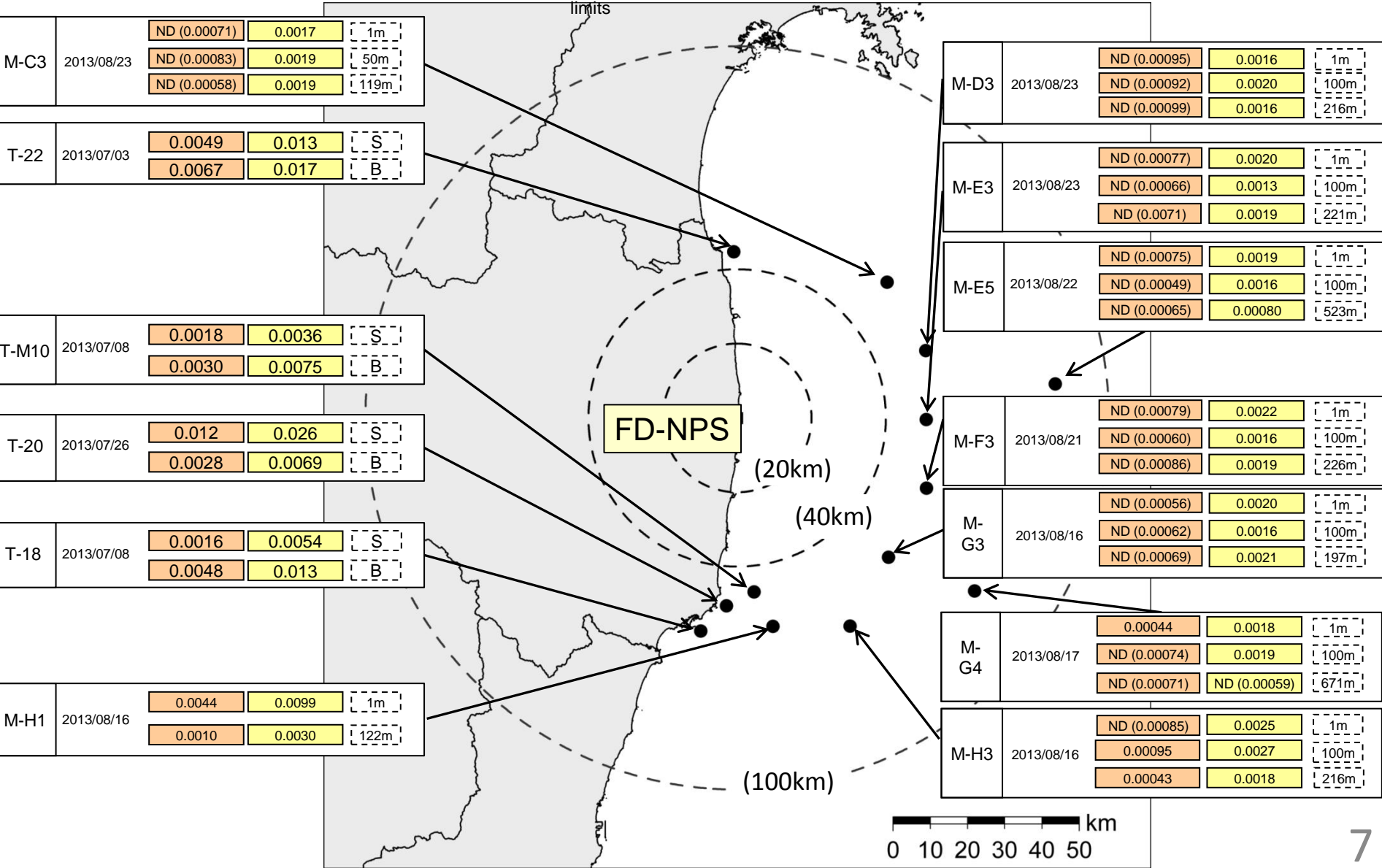
# Sea area between 20-100km radius from the NPS(1)



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

Sampling Point	Sampling Date	Cs-134	Cs-137	S/B	Depth (m) from sea level
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S: 2m below sea level  
 B: 2-3m above sea bottom  
 Sea water radioactivity (Bq/L):  
 ND: under detection limits; Numbers in parentheses: detection



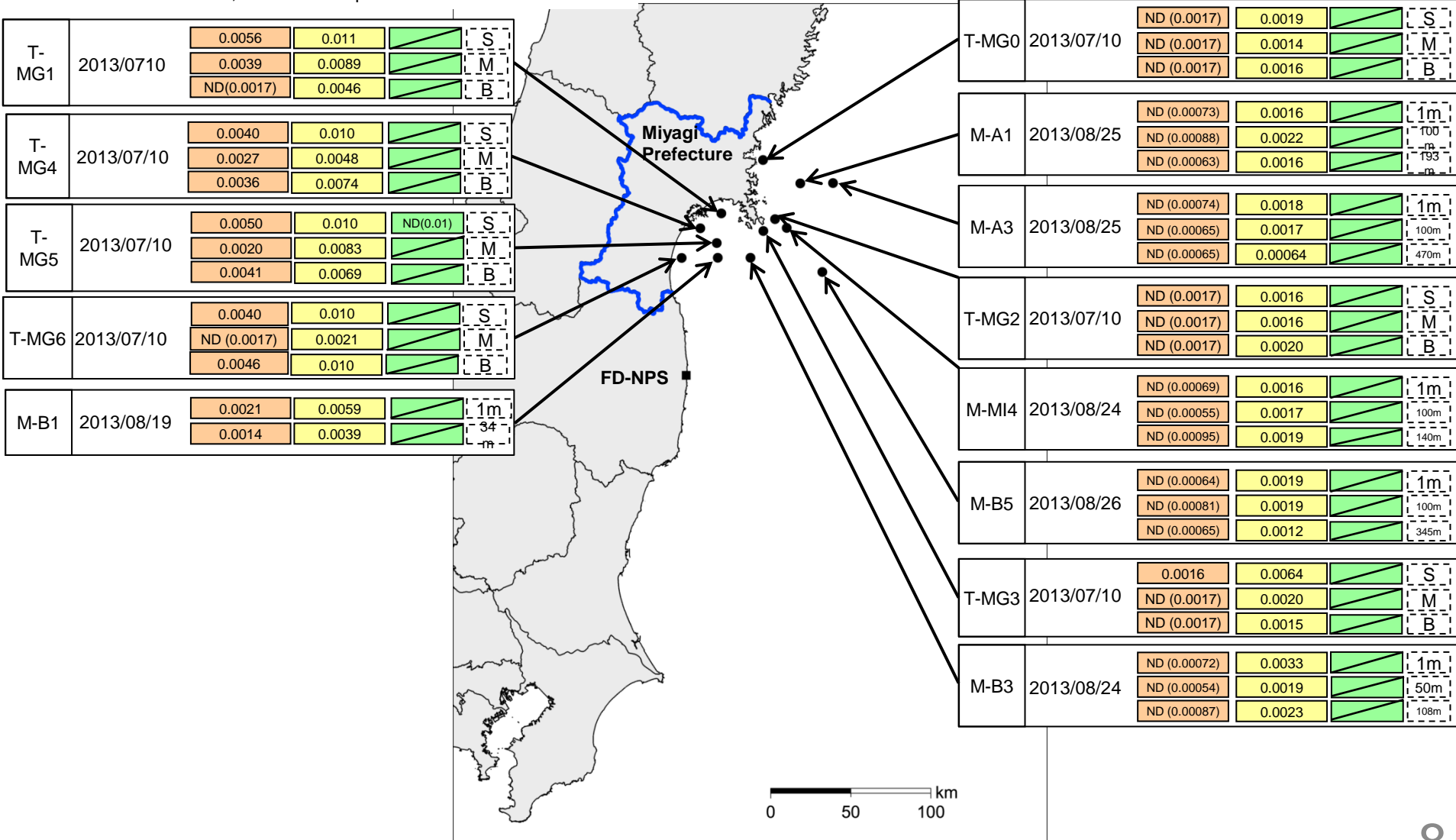
# Sea area along and off the coast of Miyagi Prefecture

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

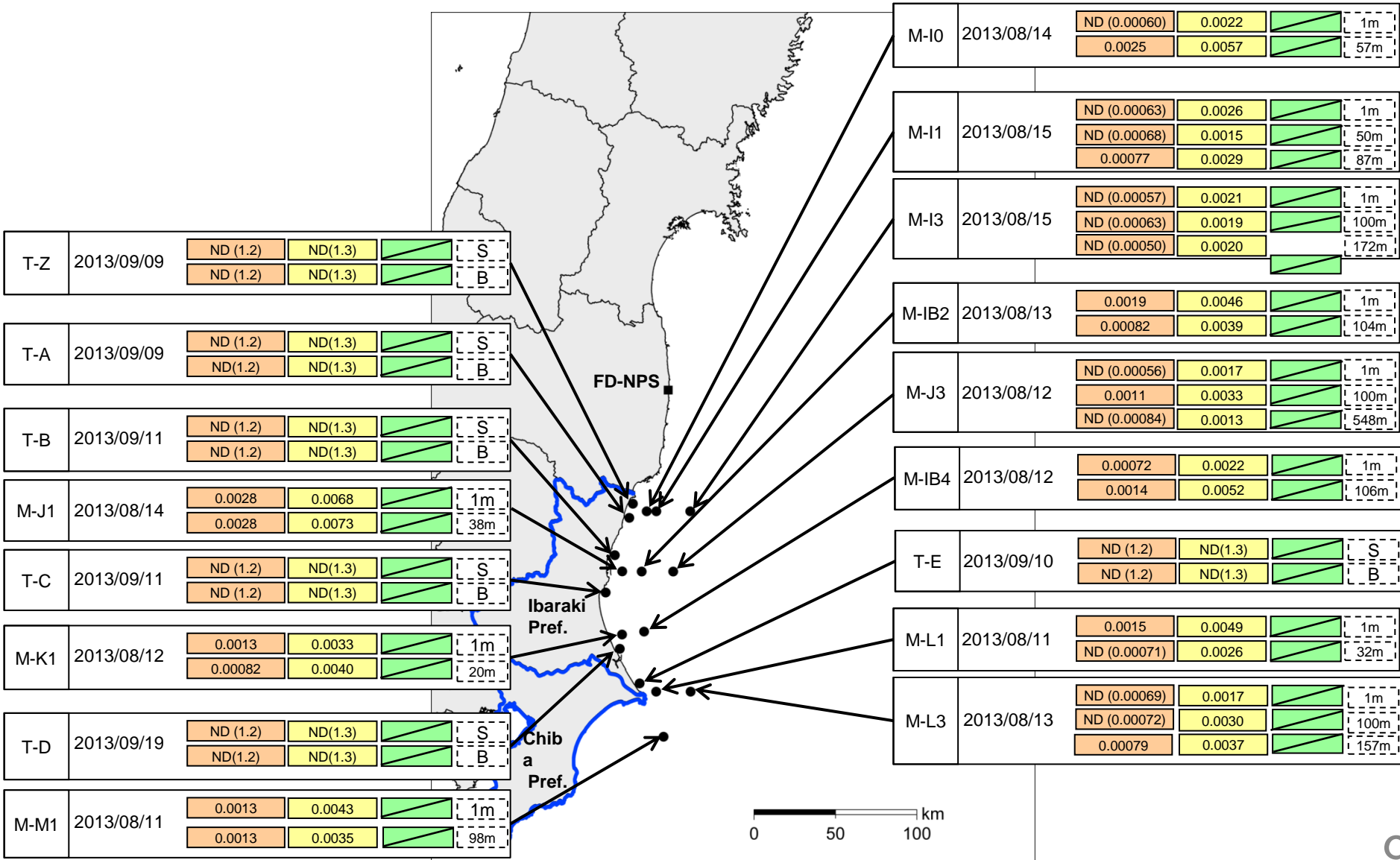




# Sea area along and off the coast of Ibaraki Pref. and Chiba Pref.

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



# 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

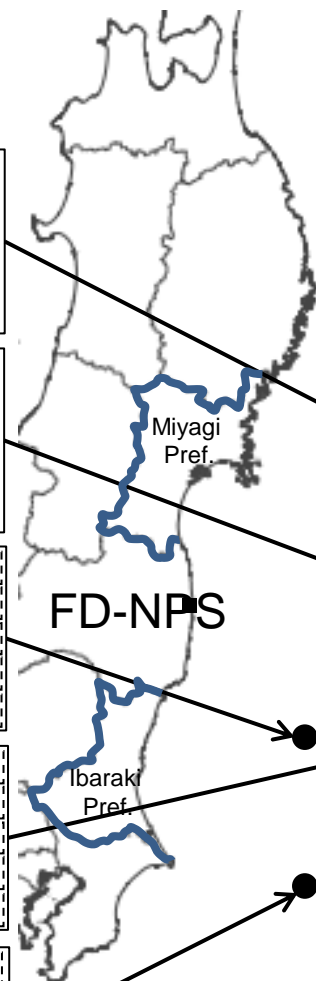
M-10	2013/05/19	0.0011	0.0029	1m
		ND (0.00068)	0.0021	100m
		ND (0.00064)	0.0022	200m
		ND (0.00065)	0.0019	300m
		ND (0.00061)	0.00091	500m

M-14	2013/05/18	ND (0.00079)	0.0026	1m
		ND (0.00074)	0.0021	100m
		ND (0.00074)	0.0015	200m
		ND (0.00066)	0.0015	300m
		ND (0.00068)	0.00090	500m

M-19	2013/05/17	0.0010	0.0028	1m
		ND (0.00061)	0.0014	100m
		ND (0.00059)	0.0017	200m
		ND (0.00069)	0.0014	300m
		ND (0.00059)	0.0010	500m

M-20	2013/05/18	ND (0.00082)	0.0025	1m
		ND (0.00095)	0.0019	100m
		ND (0.00092)	0.0018	200m
		ND (0.00096)	0.0014	300m
		ND (0.00084)	0.00080	500m

M-25	2013/05/14	ND (0.0010)	0.0016	1m
		ND (0.00092)	0.0022	100m
		0.0020	0.0044	200m
		ND (0.00094)	0.0031	300m
		ND (0.00087)	0.0012	500m



M-11	2013/05/16	ND (0.00096)	0.0025	1m
		ND (0.00095)	0.0023	100m
		0.0010	0.0018	200m
		ND (0.00092)	0.00095	300m
		ND (0.00097)	0.00068	500m

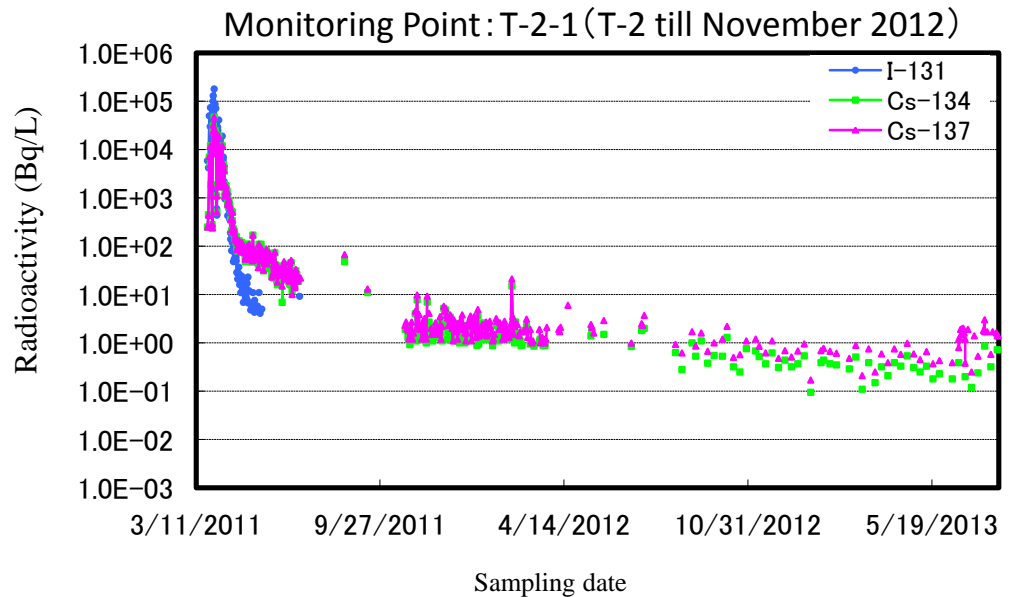
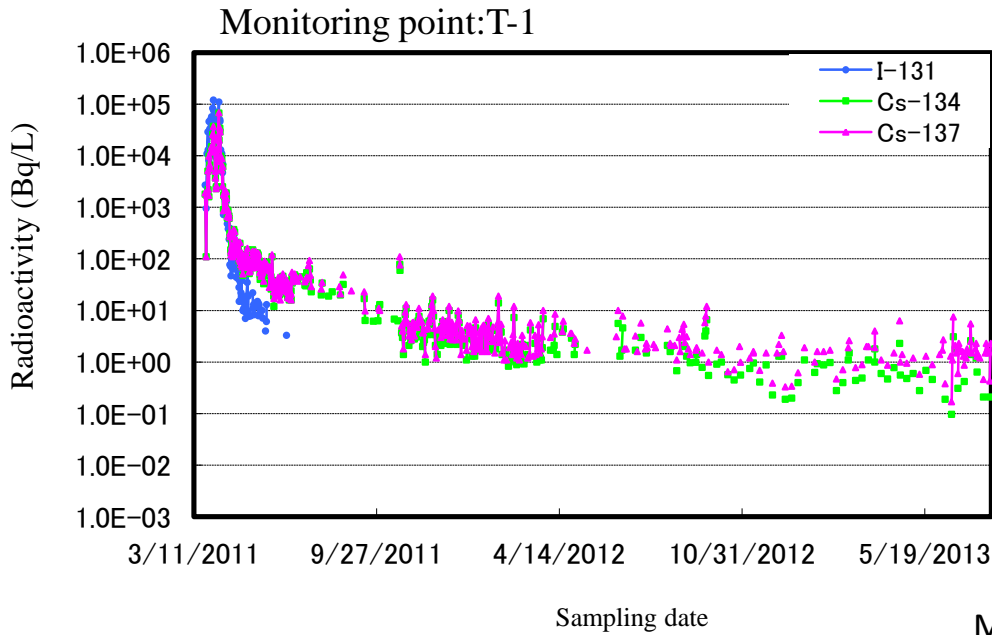
M-15	2013/05/16	ND (0.00095)	0.0023	1m
		ND (0.00088)	0.0018	100m
		ND (0.00097)	0.0020	200m
		ND (0.00096)	0.0016	300m
		ND (0.00085)	0.00084	500m

M-21	2013/05/15	ND (0.00068)	0.0019	1m
		ND (0.00069)	0.0026	100m
		0.0026	0.0056	200m
		0.0013	0.0043	300m
		ND (0.00064)	0.0015	500m

M-26	2013/05/14	ND (0.00069)	0.0020	1m
		ND (0.00065)	0.0025	100m
		0.0011	0.0036	200m
		0.0011	0.0034	300m
		ND (0.00085)	0.0015	500m

M-27	2013/05/15	ND (0.00094)	0.0022	1m
		ND (0.00096)	0.0030	100m
		0.0012	0.0044	200m
		ND (0.0010)	0.0027	300m
		ND (0.00089)	0.0021	500m

# Trend of radioactive concentration in sea water



# TOPICS :

## Cooperation in Marine Monitoring with IAEA

- In October, IAEA-DG Amano and NRA Chairman Tanaka agreed that NRA and IAEA cooperate in sea area monitoring in Japan.



(Photo by IAEA)

- IAEA Experts from Marine Environment Laboratories in Monaco visit Japan from 6 to 12 Nov. And observe sea water sampling and analysis lab in Fukushima. (7 and 8 Nov.)