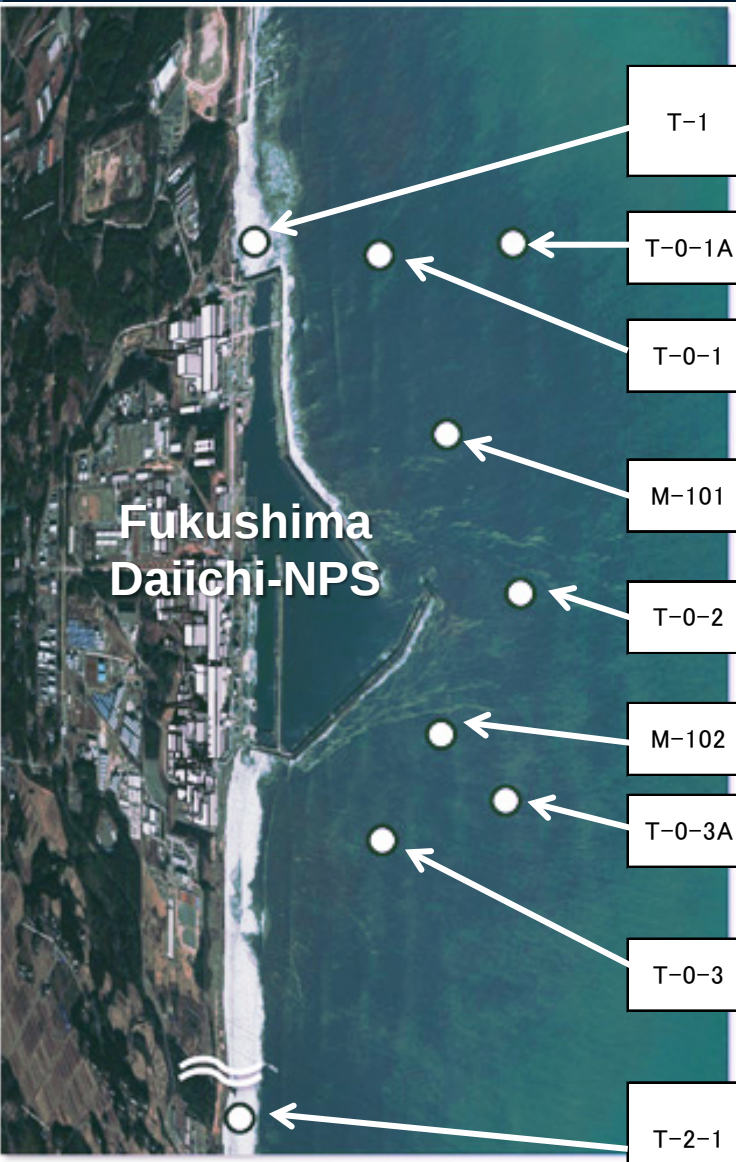


Sea Area Monitoring

March 18 , 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 β	H-3	Sr-90	total α	Pu-238	Pu-239+Pu-240
Sea water radioactivity (Bq/L): ND: under detection limits; Numbers in parentheses: detection limits Total β : including K-40									
T-1	2014/3/3	ND(0.52)	0.96	14	ND(1.6)				
	2014/1/13	ND(0.81)	ND(0.82)	11	ND(1.7)	0.13	ND(1.6)		
	2014/1/7	1.6	2.8					ND(5.6×10^{-6})	(5.7 ± 1.6) $\times 10^{-6}$
T-0-1A	2014/3/4	ND(0.92)	ND(0.59)	ND(16)	In progress				
	2014/2/26	ND(0.74)	ND(0.58)	ND(15)	ND(1.5)				
T-0-1	2014/3/4	ND(0.81)	ND(0.76)	ND(16)	In progress				
	2014/2/26	ND(0.66)	ND(0.53)	ND(15)	ND(1.5)				
M-101	2014/1/15	0.030	0.078		In progress	In progress			
	2013/11/21	0.030	0.075		0.14	0.023			
T-0-2	2014/3/4	ND(0.67)	ND(0.63)	ND(16)	In progress				
	2014/2/26	ND(0.78)	ND(0.72)	ND(15)	ND(1.5)				
M-102	2014/1/16	0.054	0.13		In progress	In progress			
	2013/11/22	0.066	0.16		0.32	0.066			
T-0-3A	2014/3/4	ND(0.58)	ND(0.53)	ND(16)	In progress				
	2014/2/26	ND(0.73)	ND(0.67)	ND(15)	ND(1.5)				
T-0-3	2014/3/4	ND(0.73)	ND(0.62)	ND(16)	In progress				
	2014/2/26	ND(0.68)	ND(0.73)	ND(15)	ND(1.5)				
T-2-1	2014/3/3	ND(0.74)	0.85	11	ND(1.6)				
	2014/1/13	ND(0.81)	ND(0.82)	15	ND(1.7)	0.023	ND(1.6)		
	2014/1/7	ND(0.96)	ND(0.64)	11				ND(5.8×10^{-6})	ND(6.0×10^{-6})

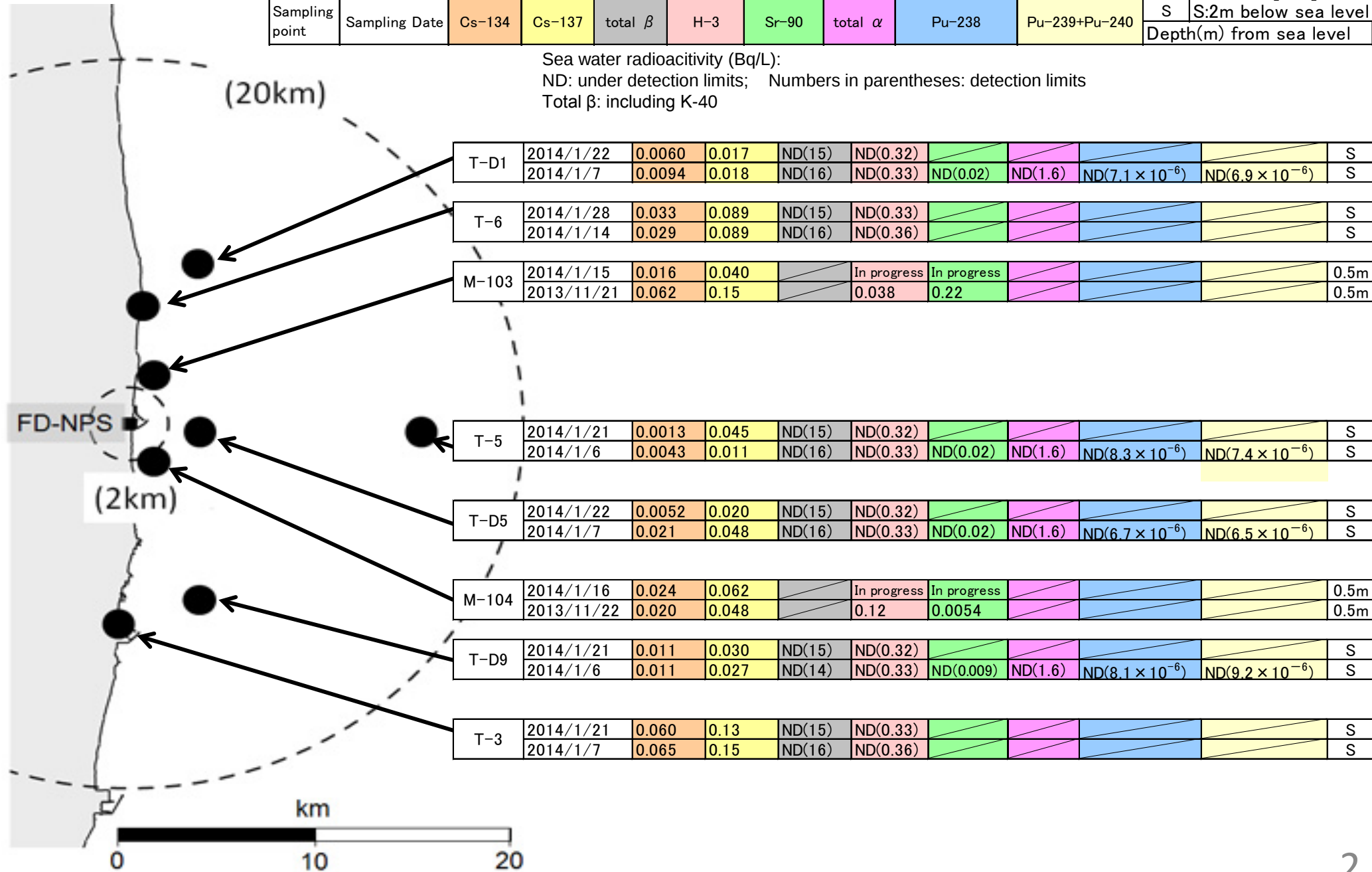
Sea area between 2-20km radius from the NPS (1)

Sampling point	Sampling Date	Cs-134	Cs-137	total β	H-3	Sr-90	total α	Pu-238	Pu-239+Pu-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

Total β : including K-40

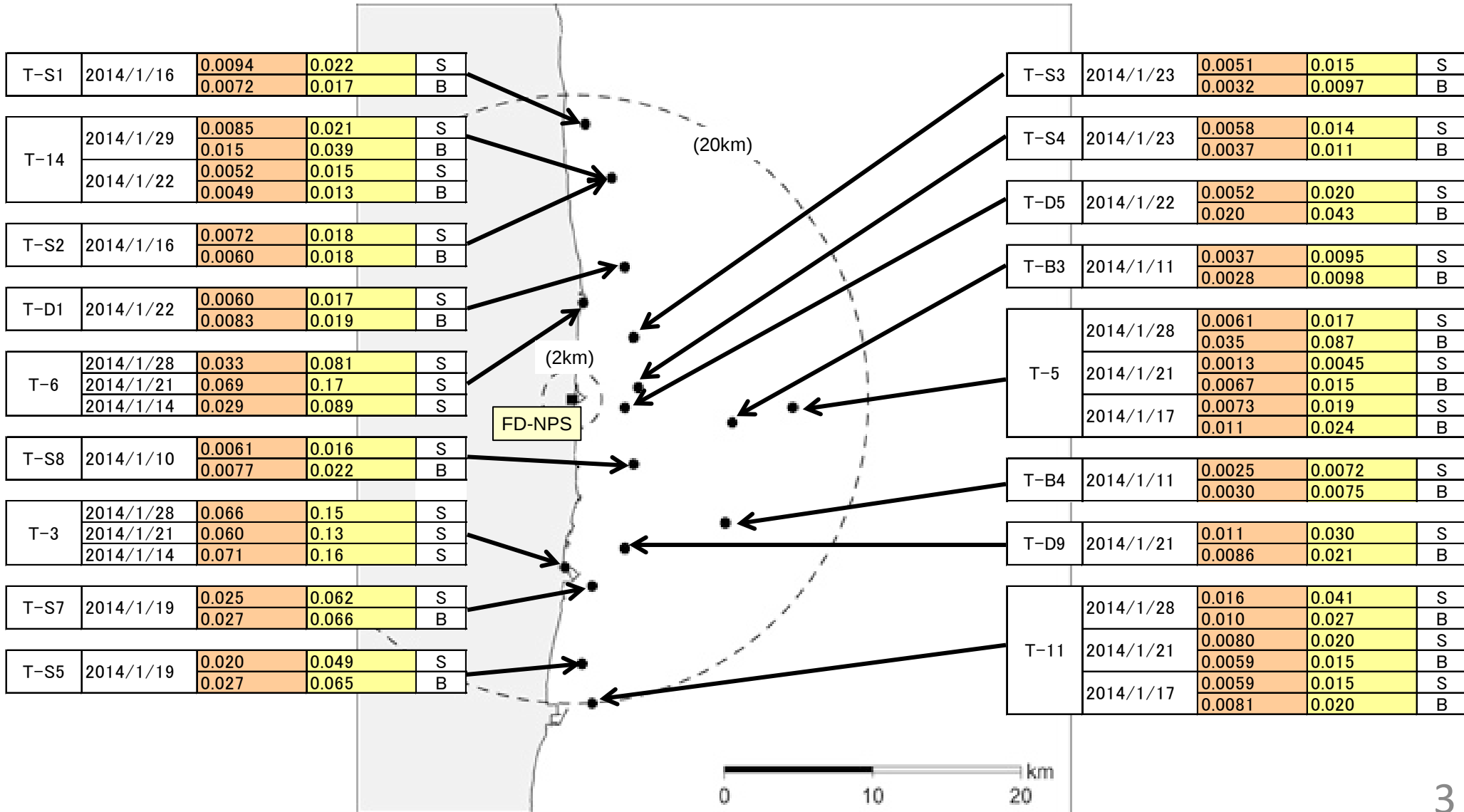


Sea area between 2-20km radius from the NPS (2)

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

Sea water radioactivity (Bq/L):

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



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	2014/1/10	0.037	0.089		S
		0.0067	0.019		B

T-13-1	2014/1/10	0.013	0.030		S
		0.015	0.036		B

T-7	2014/1/8	0.0026	0.0063		S
		0.0039	0.013		B

T-4	2014/1/28	0.049	0.12		S
	2014/1/21	0.035	0.094		S
	2014/1/14	0.039	0.089		S

T-12	2014/1/18	0.053	0.14		S
		0.0096	0.024		B

T-17-1	2014/1/18	0.015	0.038		S
		0.0089	0.024		B

M-C1	2013/11/7	0.0025	0.0066		1m
		0.0015	0.0045		51m

T-B1	2014/1/15	0.0060	0.016		S
		0.0050	0.015		B

M-D1	2013/11/8	0.0014	0.0030		1m
		ND(0.00065)	0.0021		50m
		0.00079	0.0026		118m

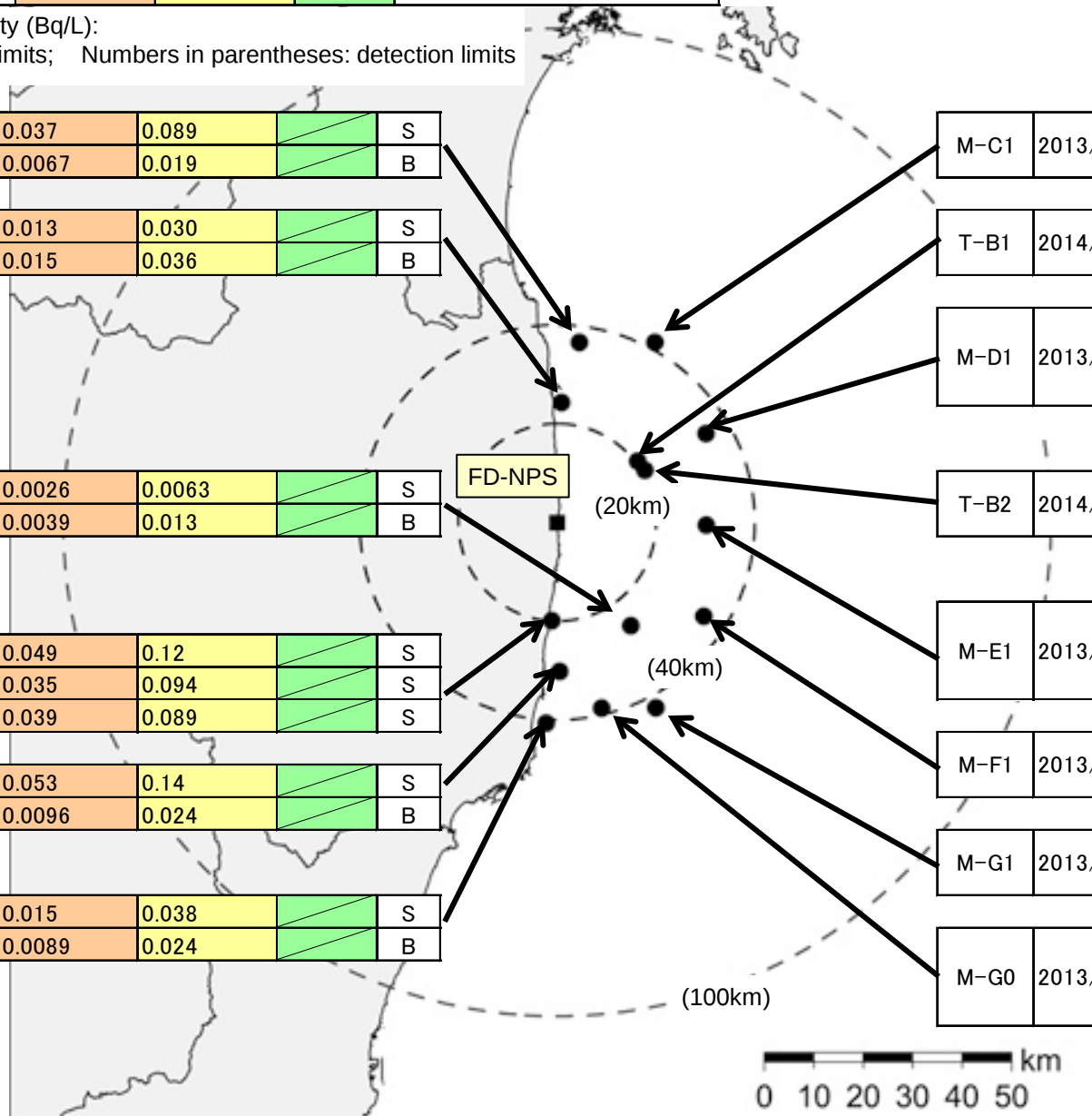
T-B2	2014/1/15	0.0085	0.019		S
		0.0020	0.0061		B

M-E1	2013/11/9	0.00062	0.0030		1m
		0.00073	0.0026		50m
		0.0010	0.0035		125m

M-F1	2013/11/9	0.0041	0.010		1m
		ND(0.00080)	0.0021		130m

M-G1	2013/11/15	0.00066	0.0028		1m
		ND(0.00077)	0.0027		123m

M-G0	2013/11/19	ND(0.00081)	0.0021		1m
		ND(0.00065)	0.0023		50m
		0.0016	0.0037		100m



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

Sampling point	Sampling Date	Cs-134	Cs-137	Total β *	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	2014/1/19	In progress	In progress	0.021	In progress	In progress	1m
		ND(0.00067)	0.0017	0.023	0.10	0.0011	1m
	2013/11/7	ND(0.00068)	0.0015				50m
		ND(0.00058)	0.0021				123m
	2013/8/23	ND(0.00071)	0.0017		0.12	0.0010	1m

T-22	2014/1/10	0.0043	0.014				S
		0.0082	0.024				B

M-D3	2014/1/22	In progress	In progress	0.021	In progress	In progress	1m
		ND(0.00066)	0.0020	0.031	0.10	0.0010	1m
	2013/11/8	ND(0.00068)	0.0021				100m
		ND(0.00062)	0.0020				208m
	2013/8/23	ND(0.00095)	0.0016		0.11	0.0011	1m

M-F3	2014/1/22	In progress	In progress	0.027	In progress	In progress	1m
		ND(0.00078)	0.0019	0.036	0.074	0.0011	1m
	2013/11/20	0.00054	0.0024				100m
		0.00064	0.0018				224m
	2013/8/21	ND(0.00079)	0.0022		0.11	0.0011	1m

T-18	2014/1/8	0.0063	0.017				S
		0.0072	0.018				B

T-20	2014/1/18	0.013	0.031				S
		0.014	0.033				B

T-M10	2014/1/8	0.0039	0.0099				S
		0.0044	0.013				B

M-E3	2014/1/22	In progress	In progress	0.030	In progress	In progress	1m
		0.00054	0.0024	0.028	0.075	0.0010	1m
	2013/11/24	ND(0.00062)	0.0020				100m
		ND(0.00076)	0.0014				224m
	2013/8/23	ND(0.00077)	0.0020		0.21	0.0011	1m

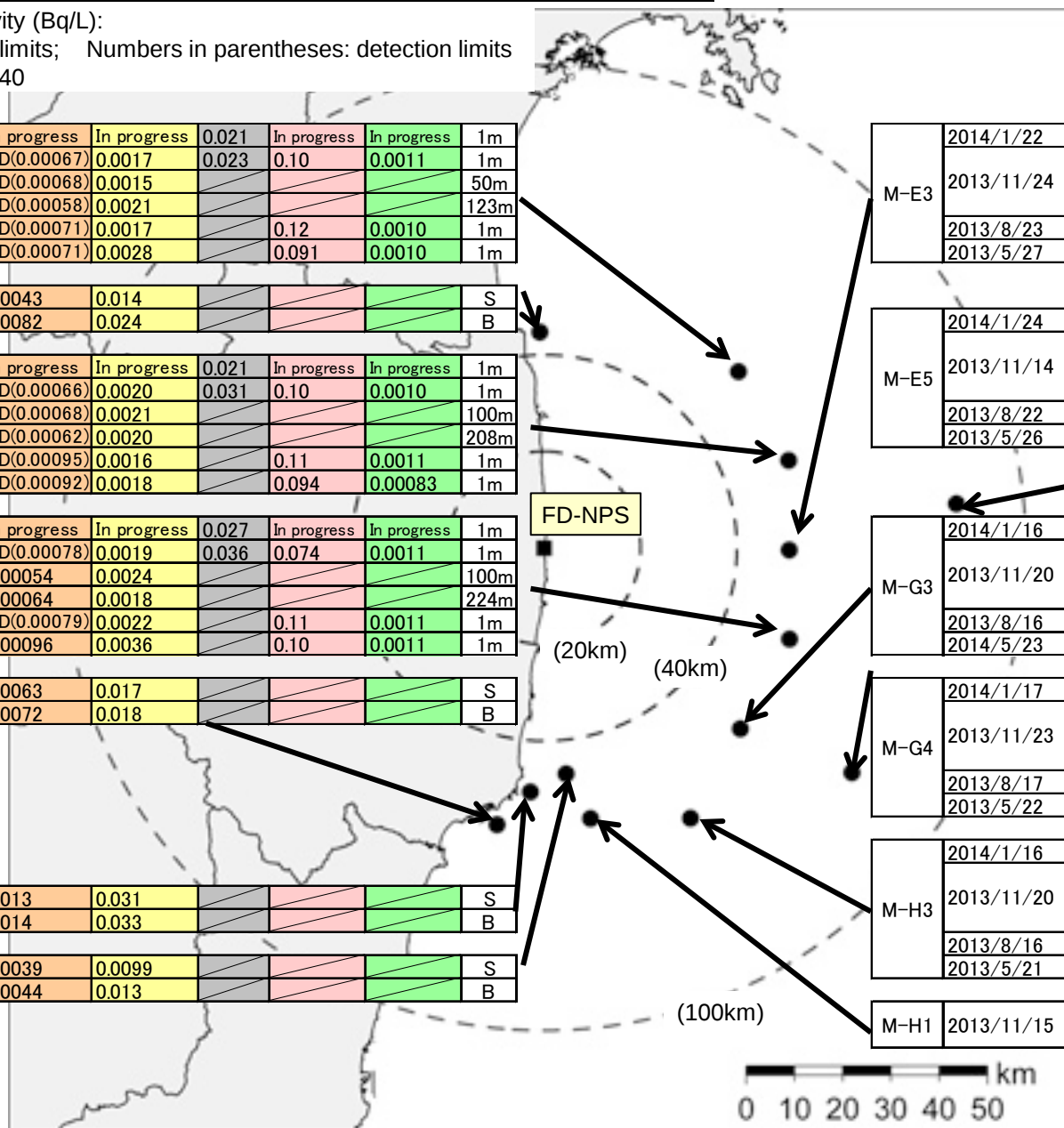
M-E5	2014/1/24	In progress	In progress	0.031	In progress	In progress	1m
		ND(0.00062)	0.0023	0.024	0.066	0.0013	1m
	2013/11/14	ND(0.00066)	0.0021				100m
		ND(0.00063)	0.00093				518m
	2013/8/22	ND(0.00075)	0.0019		0.099	0.00099	1m

M-G3	2014/1/16	In progress	In progress	0.021	In progress	In progress	1m
		ND(0.00060)	0.0023	0.029	0.080	0.0010	1m
	2013/11/20	ND(0.00086)	0.0026				100m
		0.00083	0.0026				199m
	2013/8/16	ND(0.00056)	0.0020		0.080	0.0012	1m

M-G4	2014/1/17	In progress	In progress	0.023	In progress	In progress	1m
		ND(0.00070)	0.0019	0.033	0.074	0.0012	1m
	2013/11/23	ND(0.00065)	0.0019				100m
		ND(0.00074)	0.00082				640m
	2013/8/17	0.00044	0.0018		0.070	0.00092	1m

M-H3	2014/1/16	In progress	In progress	0.025	In progress	In progress	1m
		0.0012	0.0029	0.025	0.097	0.0012	1m
	2013/11/20	ND(0.00090)	0.0034				100m
		ND(0.00063)	0.0027				210m
	2013/8/16	ND(0.00085)	0.0025		0.13	0.0013	1m

M-H1	2013/11/15	0.0013	0.0045				1m
		0.0012	0.0035				123m



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

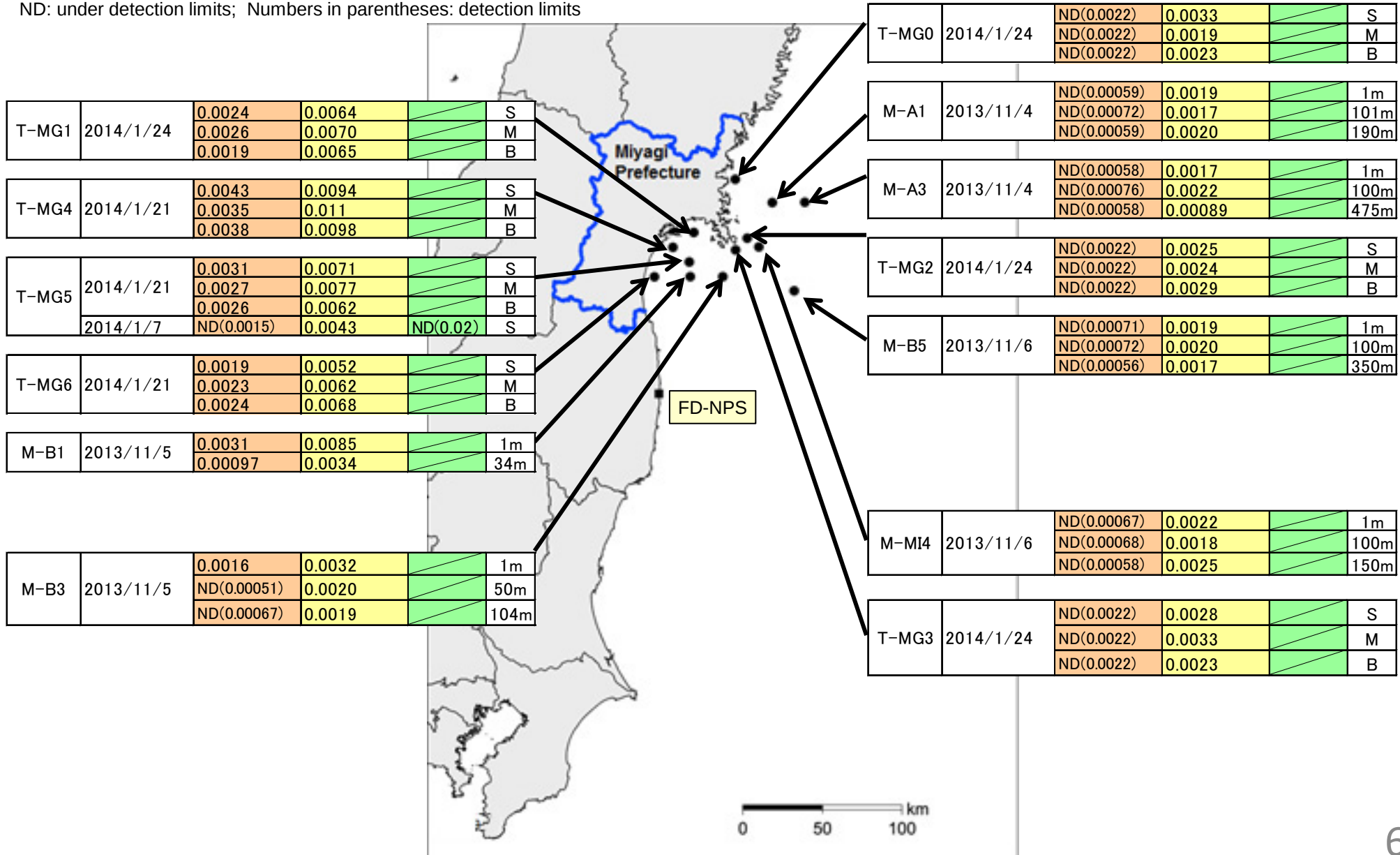
y (Bq/L):

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



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	2014/2/18	ND(1.2)	ND(1.3)		S
		ND(1.2)	ND(1.3)		B

T-A	2014/2/18	ND(1.2)	ND(1.3)		S
		ND(1.2)	ND(1.3)		B

T-B	2014/2/20	ND(1.2)	ND(1.3)		S
		ND(1.2)	ND(1.3)		B

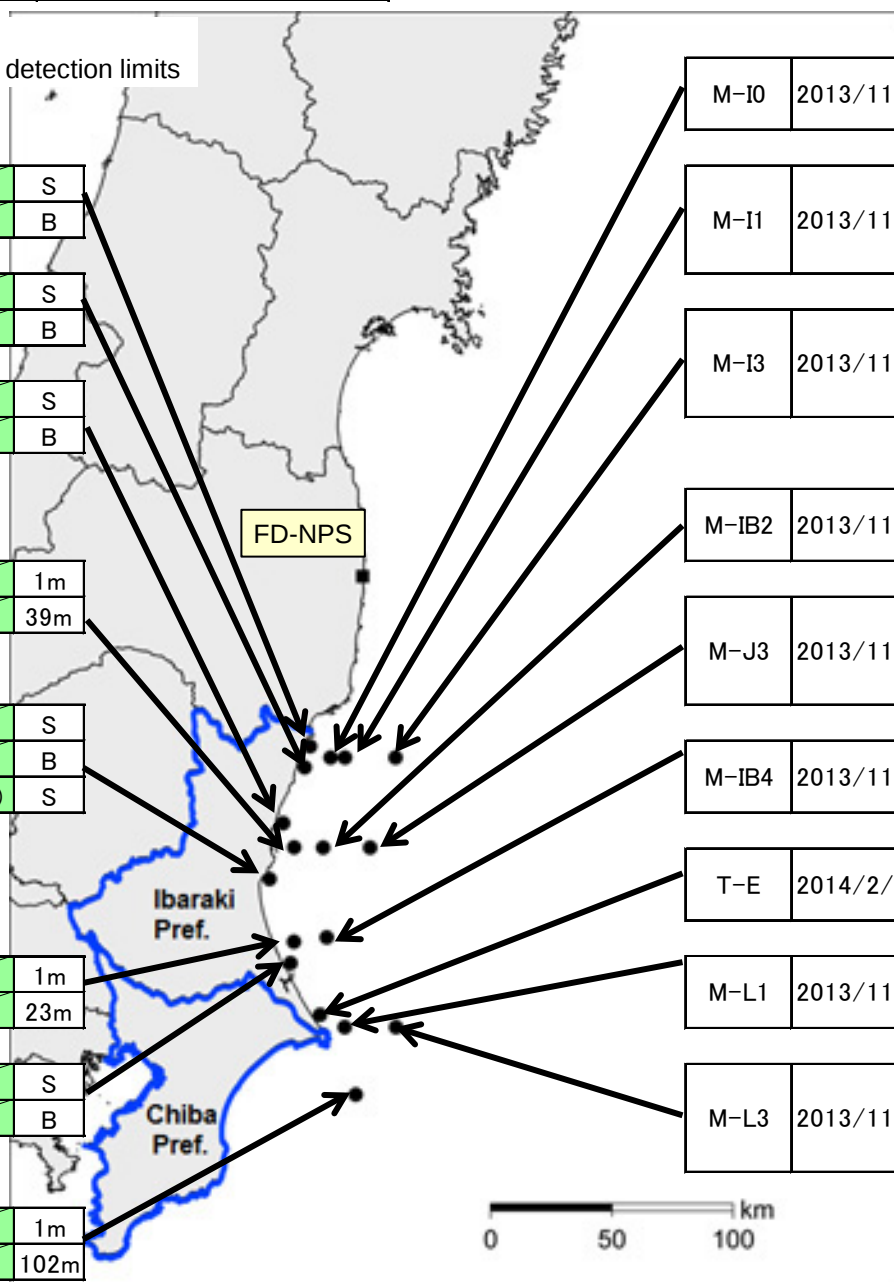
M-J1	2013/11/18	0.00085	0.0029		1m
		ND(0.00087)	0.0026		39m

T-C	2014/2/20	ND(1.2)	ND(1.3)		S
		ND(1.2)	ND(1.3)		B
	2014/1/22	ND(1.2)	ND(1.3)	ND(0.02)	S

M-K1	2013/11/18	0.0040	0.010		1m
		0.0043	0.010		23m

T-D	2014/2/19	ND(1.2)	ND(1.3)		S
		ND(1.2)	ND(1.3)		B

M-M1	2013/11/22	ND(0.00060)	0.0024		1m
		0.00095	0.0023		102m



M-I0	2013/11/11	ND(0.00064)	0.0033		1m
		ND(0.00062)	0.0034		63m

M-I1	2013/11/11	0.0012	0.0036		1m
		ND(0.00071)	0.003		50m
		0.0011	0.004		89m

M-I3	2013/11/19	0.0018	0.0053		1m
		0.00080	0.0027		100m
		ND(0.00067)	0.0029		170m

M-IB2	2013/11/18	ND(0.00070)	0.0024		1m
		0.00079	0.0026		104m

M-J3	2013/11/21	0.00063	0.003		1m
		ND(0.00068)	0.0026		100m
		ND(0.00060)	0.00089		558m

M-IB4	2013/11/18	ND(0.00061)	0.0024		1m
		0.0012	0.0032		110m

T-E	2014/2/19	ND(1.2)	ND(1.3)		S
		ND(1.2)	ND(1.3)		B

M-L1	2013/11/22	0.00085	0.0028		1m
		ND(0.00070)	0.0032		36m

M-L3	2013/11/22	ND(0.00084)	0.0024		1m
		0.00082	0.0029		100m
		0.00061	0.0029		155m

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	2013/10/19	ND(0.00080)	0.0026	1m
		ND(0.00079)	0.0029	100m
		ND(0.00056)	0.0018	200m
		ND(0.00064)	0.0012	300m
		ND(0.00071)	0.00080	500m

M-14	2013/10/28	ND(0.00078)	0.0025	1m
		ND(0.00069)	0.0018	100m
		ND(0.00058)	0.0016	200m
		ND(0.00058)	0.0016	300m
		ND(0.00065)	0.00091	500m

M-19	2013/10/30	ND(0.00082)	0.0018	1m
		ND(0.00069)	0.0025	100m
		ND(0.00058)	0.0021	200m
		ND(0.00069)	0.0015	300m
		ND(0.00066)	0.00093	500m

M-20	2013/10/30	ND(0.00060)	0.0017	1m
		ND(0.00071)	0.0022	100m
		0.0014	0.0050	200m
		ND(0.00089)	0.0038	300m
		ND(0.00060)	0.0014	500m

M-25	2013/10/31	ND(0.00080)	0.0014	1m
		ND(0.00065)	0.0019	100m
		0.00084	0.0034	200m
		0.0025	0.0068	300m
		ND(0.00057)	0.0022	500m

M-11	2013/10/19	ND(0.00064)	0.0022	1m
		0.0020	0.0061	100m
		0.00071	0.0029	200m
		ND(0.00077)	0.0025	300m
		ND(0.00054)	0.0013	500m

M-15	2013/10/29	ND(0.00069)	0.0019	1m
		0.00091	0.0018	100m
		ND(0.00070)	0.0019	200m
		ND(0.00050)	0.0018	300m
		ND(0.00057)	0.00065	500m

M-21	2013/10/29	ND(0.00083)	0.0017	1m
		ND(0.00060)	0.0015	100m
		0.00097	0.0039	200m
		0.00078	0.0028	300m
		ND(0.00072)	0.0011	500m

M-26	2013/10/31	ND(0.00085)	0.0024	1m
		ND(0.00068)	0.0026	100m
		0.0012	0.0038	200m
		0.0022	0.0061	300m
		ND(0.00081)	0.0034	500m

M-27	2013/11/1	ND(0.00068)	0.0021	1m
		ND(0.00060)	0.0016	100m
		0.00083	0.0029	200m
		0.0015	0.0047	300m
		0.0011	0.0038	500m

