

Nuclide Analysis Results of Radioactive Materials in Seawater <Coast>

Reference

(Data summarized on February 7)

Place of Sampling	North of Discharge Channel of 5-6u of 1F (approx. 30m north of 5-6u discharge channel)	Around South Discharge Channel of 1F (approx. 330m south of 1-4u Discharge Channel)	Around North Discharge Channel of 2F (Around 3,4u Discharge Channel) (approx. 10 km from 1F)	Around Iwasawa Shore of 2F (approx. 7 km south of 1,2u Discharge Channel) (approx. 16 km from 1F)					
Time of Sampling	Feb 06, 2012 08:30 am	Feb 06, 2012 08:15 am	Feb 06, 2012 08:25 am	Feb 06, 2012 08:05 am	Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)				
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)		Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)
I-131 (about 8 days)	ND	-	ND	-		ND	-	ND	-
Cs-134 (about 2 years)	4.5	0.08	1.2	0.02	1.1	0.02	0.96	0.02	60
Cs-137 (about 30 years)	5.7	0.06	2.0	0.02	1.7	0.02	ND	-	90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ to Bq/L.

* Data of other nuclides are under evaluation.

* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.73Bq/L, Cs-137: approx. 1.1Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Nuclide Analysis Results of Radioactive Materials in Seawater <Offshore>

Reference

(Data summarized on February 7)

Place of Sampling	15 km offshore of Minami-Souma City Upper Layer		15 km offshore of Minami-Souma City Lower Layer		15 km offshore of Ukedo-gawa Upper Layer		15 km offshore of Ukedo-gawa Lower Layer		15 km offshore of Fukushima Daiichi Upper Layer		15 km offshore of Fukushima Daiichi Lower Layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	N/A		N/A		Feb 05, 2012 09:30 am		Feb 05, 2012 09:30 am		Feb 05, 2012 09:00 am		Feb 05, 2012 09:00 am		
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	
I-131 (about 8 days)	-	-	-	-	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (about 2 years)	-	-	-	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (about 30 years)	-	-	-	-	ND	-	ND	-	ND	-	ND	-	90

Place of Sampling	15 km offshore of Fukushima Daini Upper Layer		15 km offshore of Fukushima Daini Lower Layer		15 km offshore of Iwasawa Shore Upper Layer		15 km offshore of Iwasawa Shore Lower Layer		15 km offshore of Hirono-town Upper Layer		15 km offshore of Hirono-town Lower Layer		Density limit by the announcement of Reactor Regulation (Bq/L) (the density limit in the water outside of surrounding monitored areas in the section 6 of the appendix 2)
	Feb 05, 2012 08:20 am		Feb 05, 2012 08:20 am		N/A		N/A		N/A		N/A		
Detected Nuclides (Half-life)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	Density of Sample (Bq/L)	Scaling Factor (/)	
I-131 (about 8 days)	ND	-	ND	-	-	-	-	-	-	-	-	-	40
Cs-134 (about 2 years)	ND	-	ND	-	-	-	-	-	-	-	-	-	60
Cs-137 (about 30 years)	ND	-	ND	-	-	-	-	-	-	-	-	-	90

* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm³ to Bq/L.

* Data of other nuclides are under evaluation.

* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.72Bq/L, Cs-134: approx. 0.88Bq/L, Cs-137: approx. 1.1Bq/L

Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

Result of Pu Analysis of Seawater

1. Place of Sampling :

North Discharge Channel of Unit 5 and 6 of Fukushima Daiichi Nuclear Power Station
Around South Discharge Channel of Fukushima Daiichi Nuclear Power Station
Upper Layer around approx. 15km offshore of Fukushima Daiichi Nuclear Power Station
Upper Layer around approx. 15km offshore of Fukushima Daini Nuclear Power Station

2. Analysis Institute : Japan Chemical Analysis Center

3. Result of Measurement :

(Unit : Bq/L)

Place of Sampling	Date	Pu-238	Pu-239, Pu-240
North Discharge Channel of Unit 5 and 6 of 1F	1/16	N.D. [$<5.5 \times 10^{-4}$]	N.D. [$<5.8 \times 10^{-4}$]
Around South Discharge Channel of 1F		N.D. [$<5.2 \times 10^{-4}$]	N.D. [$<4.7 \times 10^{-4}$]
Upper Layer around approx. 15km offshore of 1F	1/18	N.D. [$<5.0 \times 10^{-4}$]	N.D. [$<5.0 \times 10^{-4}$]
Upper Layer around approx. 15km offshore of 2F		N.D. [$<5.4 \times 10^{-4}$]	N.D. [$<4.9 \times 10^{-4}$]

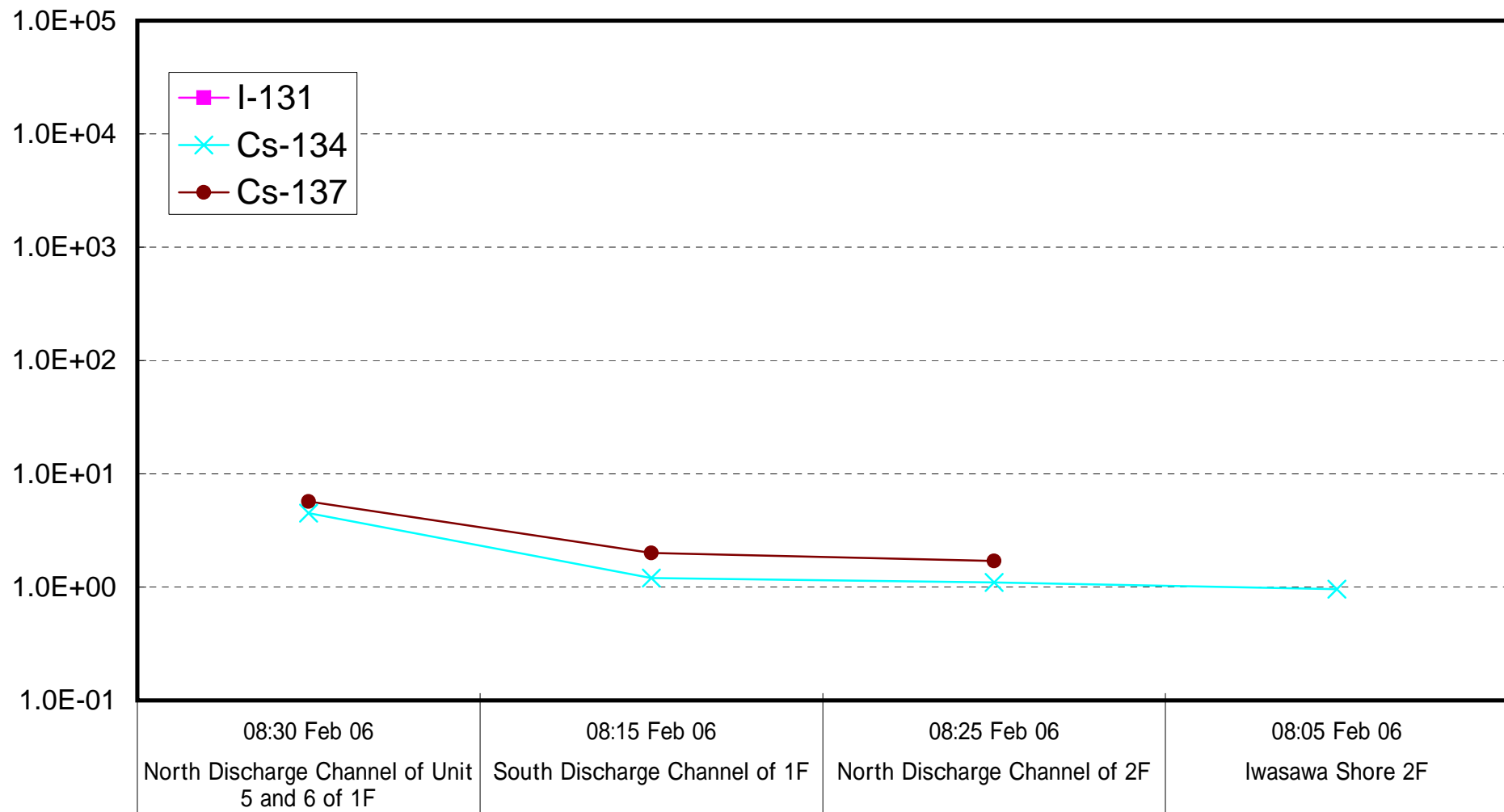
The value inside [] means detection limit.

4. Evaluation:

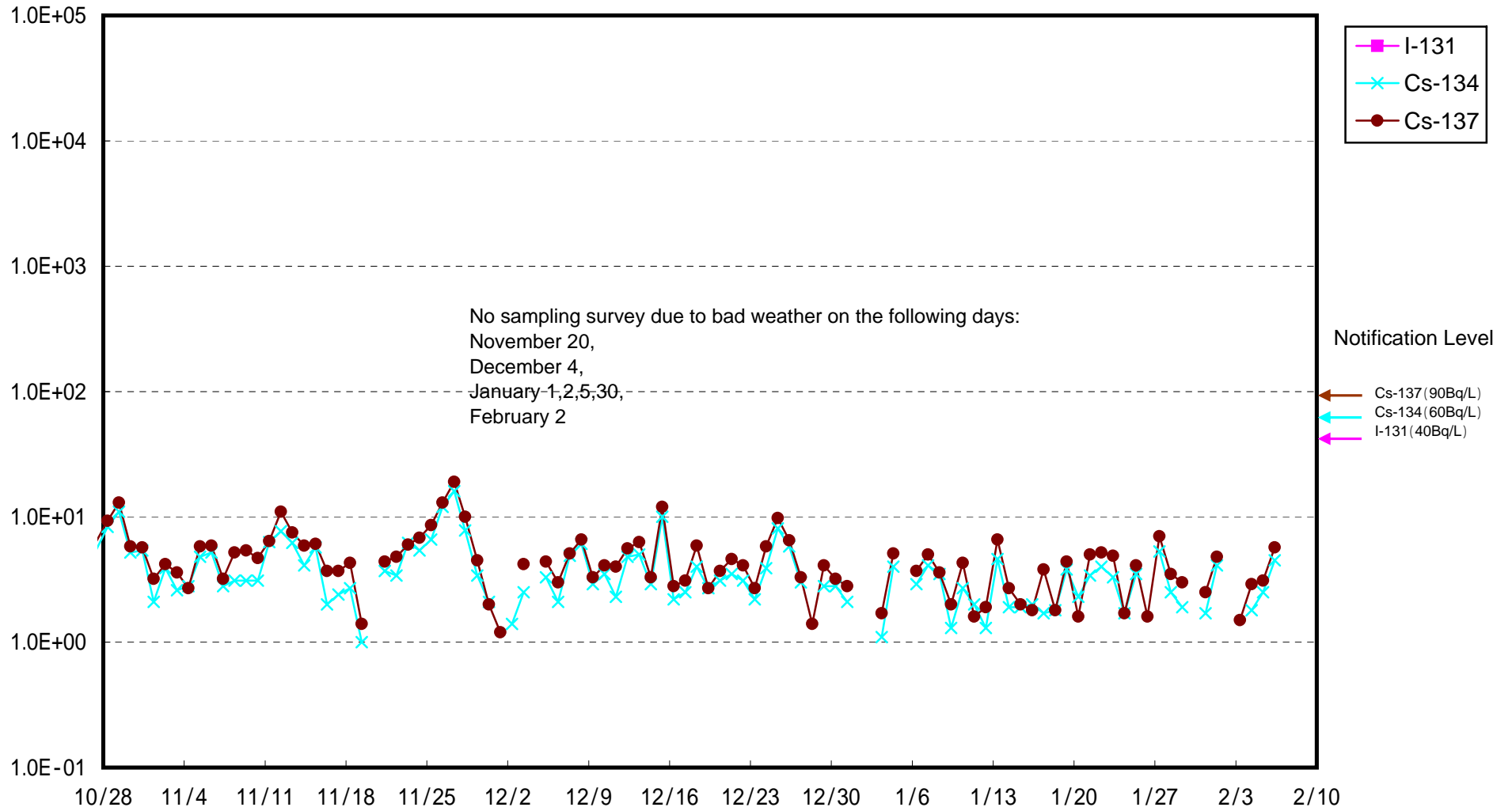
Pu-238, Pu-239, Pu-240 were not detected in the sample collected this time

End

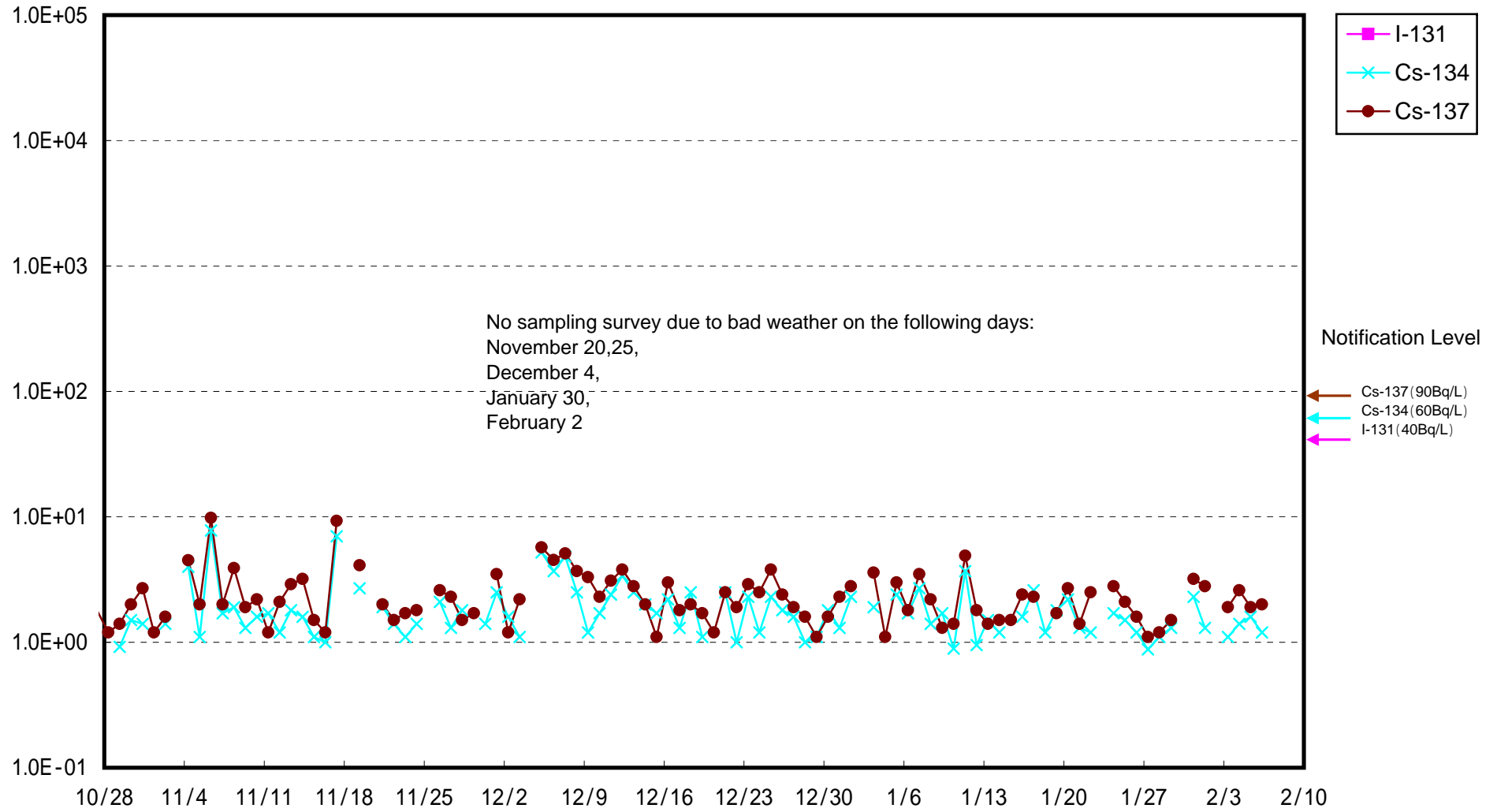
Radioactivity Density of Seawater (Bq/L)



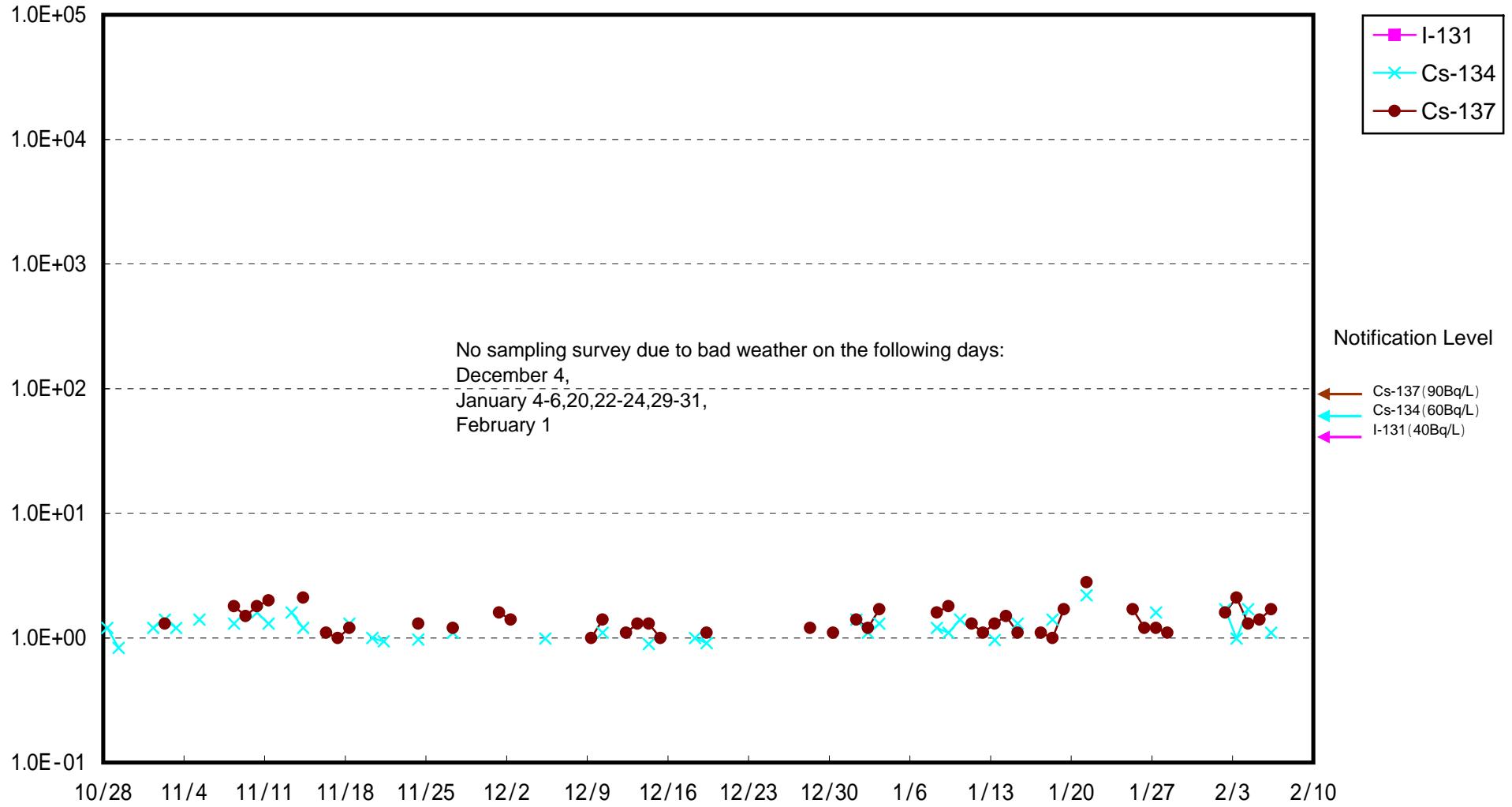
Radioactivity Density of Seawater at North of 1F5-6 Discharge Channel (Bq/L)



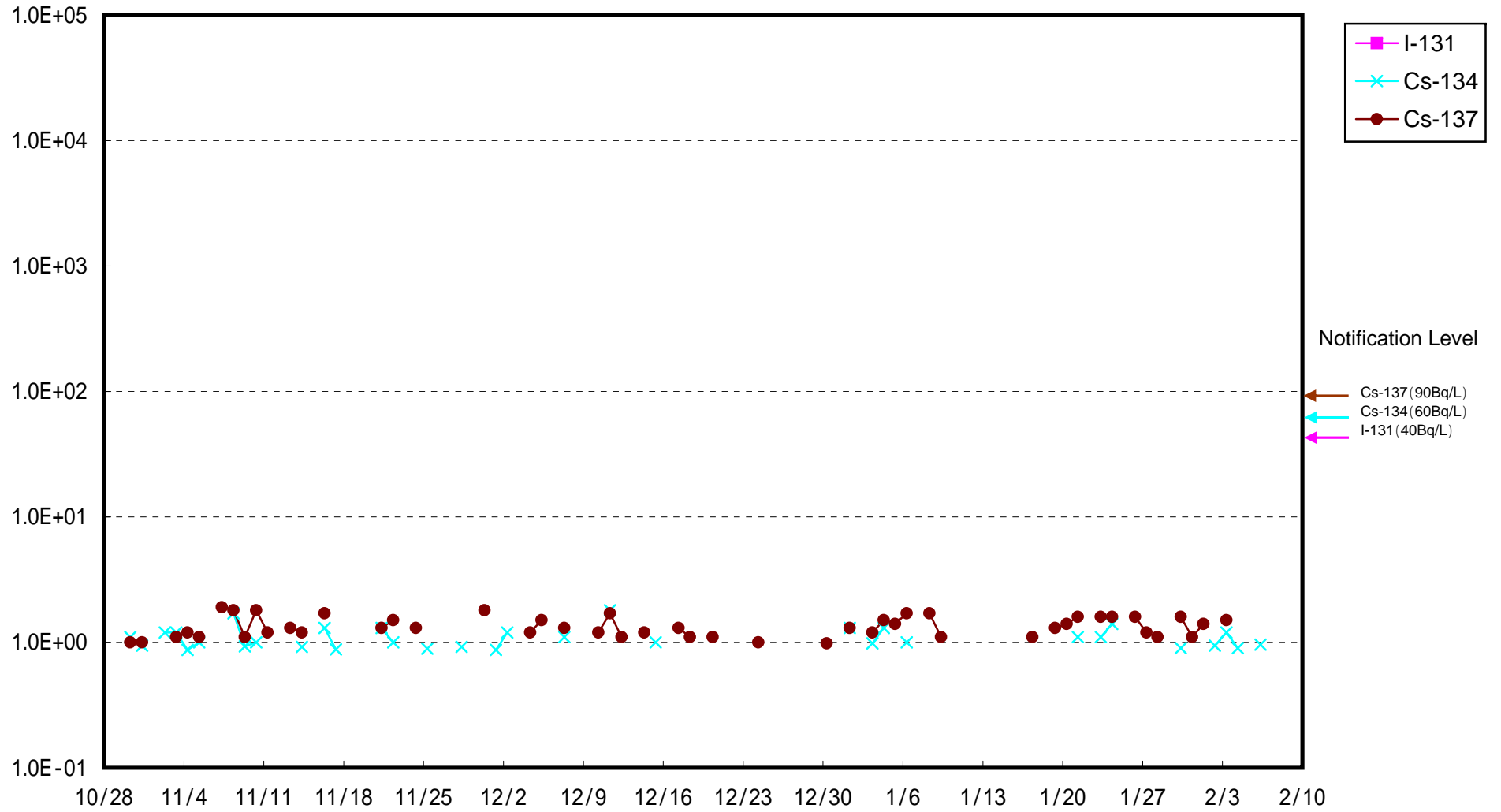
Radioactivity Density of Seawater at South Discharge Channel of 1F (Bq/L)



Radioactivity Density of Seawater at North Discharge Channel of 2F (Bq/L)

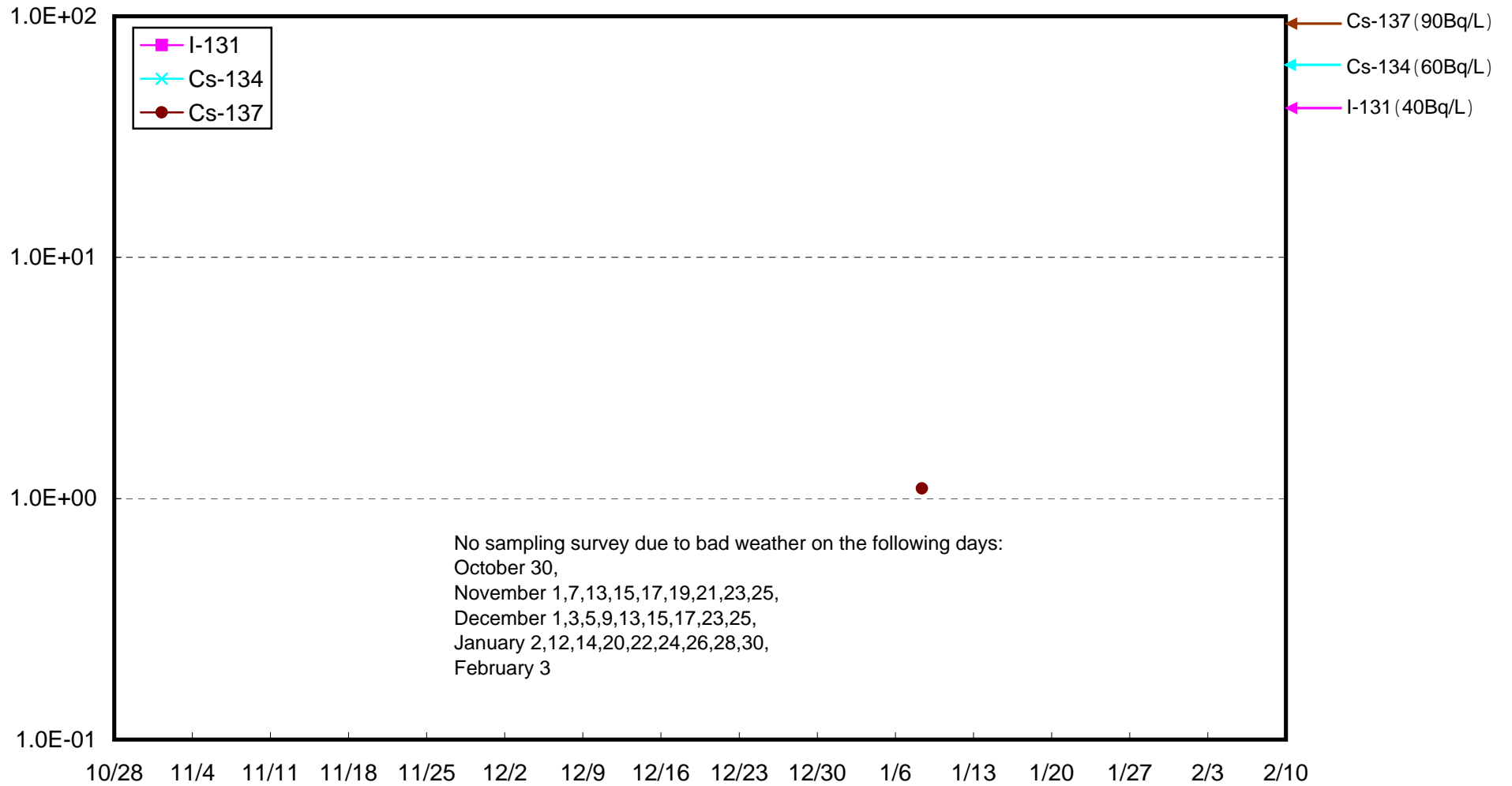


Radioactivity Density of Seawater at Iwasawa Shore 2F (Bq/L)



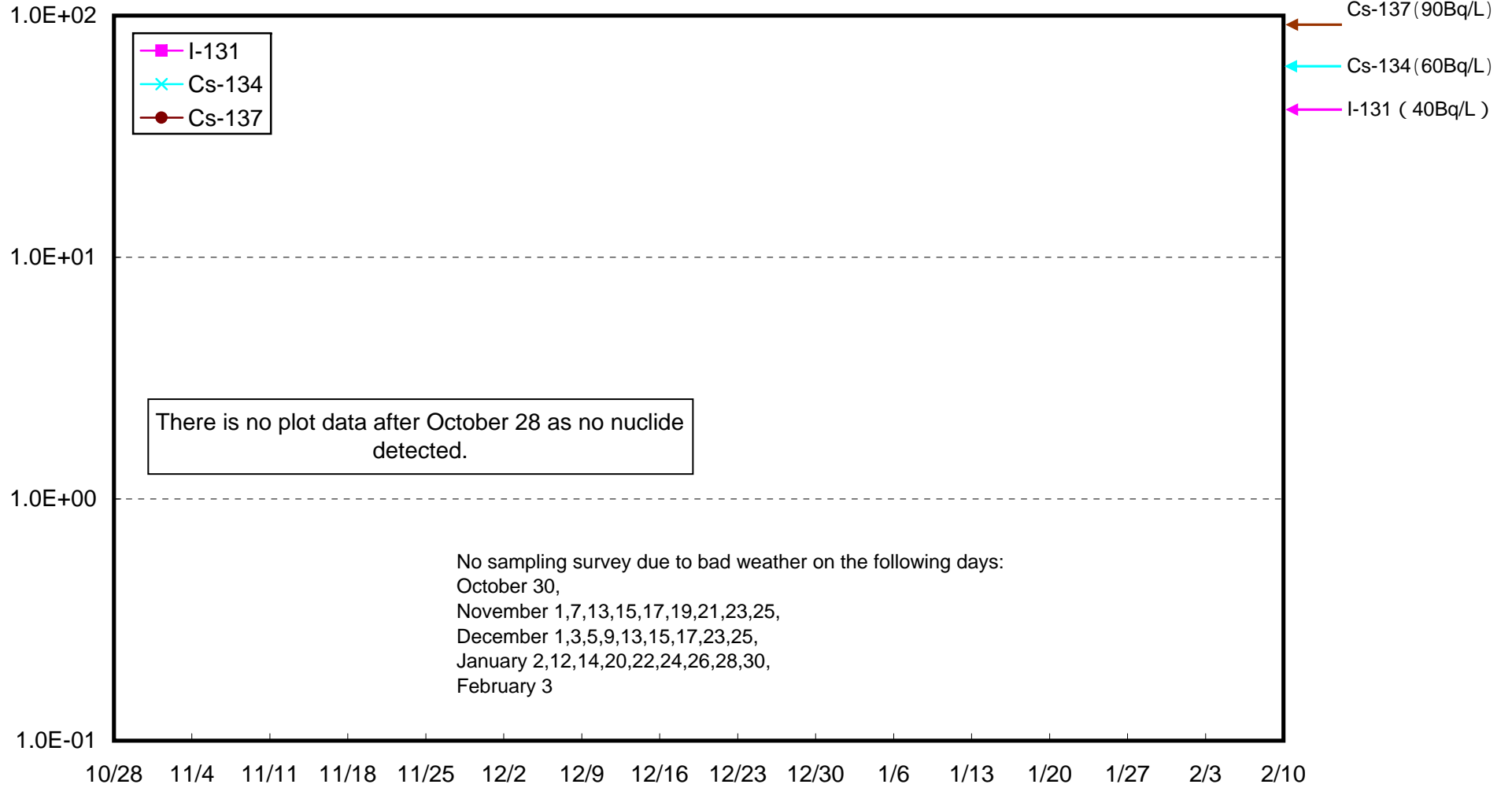
Radioactivity Density of Seawater (upper layer) around approx. 15 km offshore of Ukedo river (Bq/L)

Notification Level



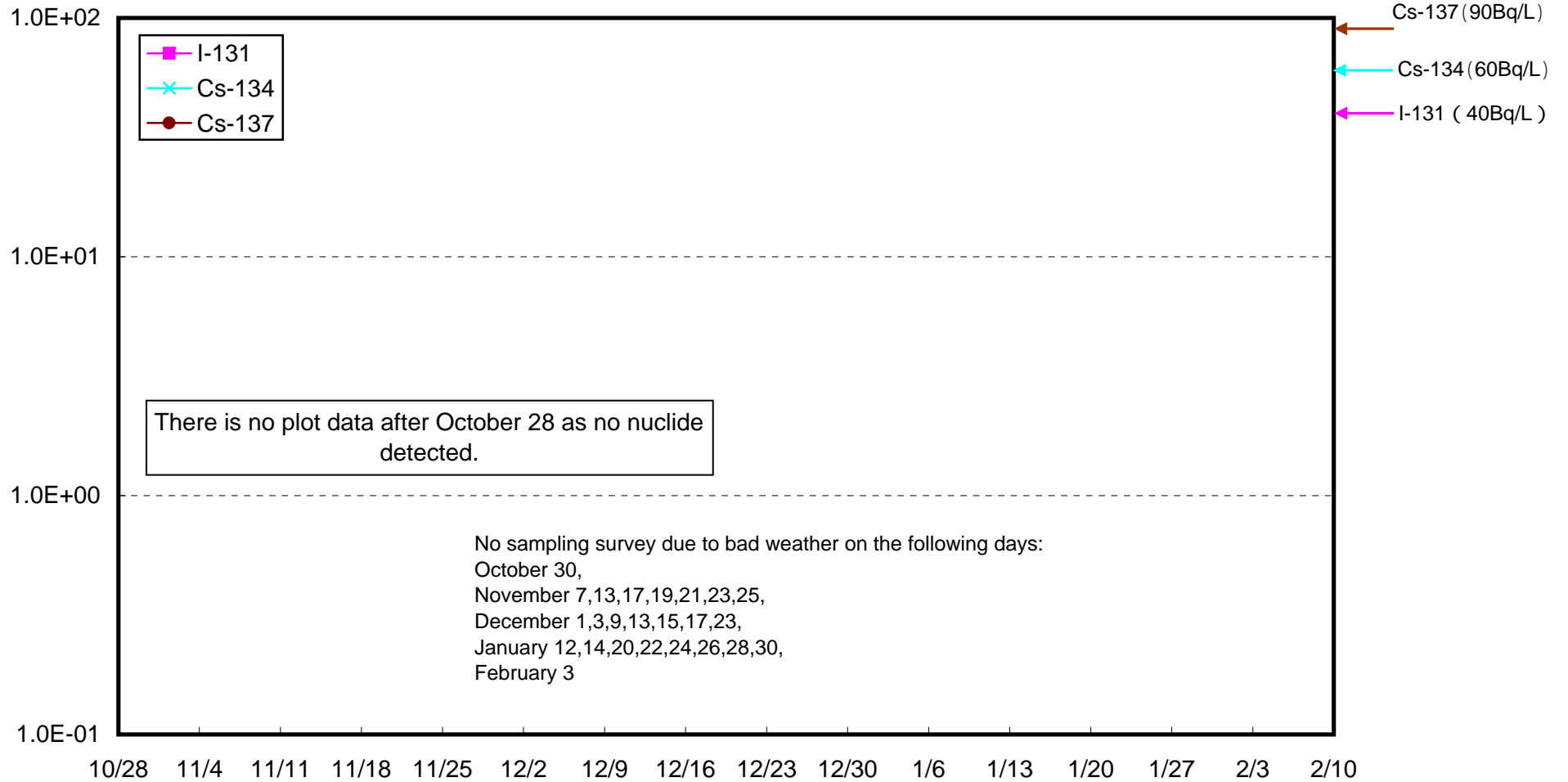
Radioactivity Density of Seawater (lower layer) around approx. 15 km offshore of Ukedo river (Bq/L)

Notification Level



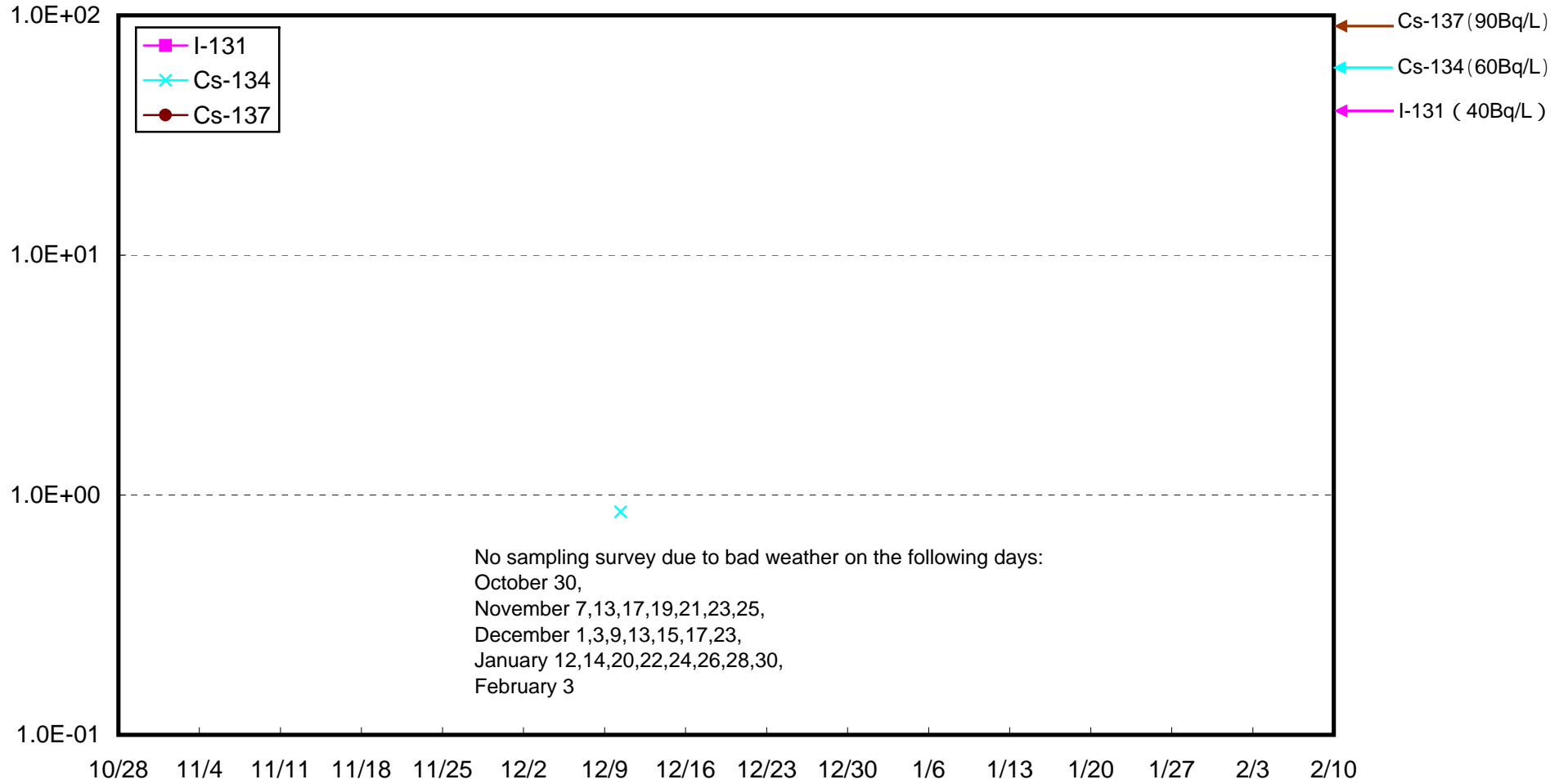
Radioactivity Density of Seawater (upper layer) around approx. 15 km offshore of Fukushima Daiichi NPS
(Bq/L)

Notification Level

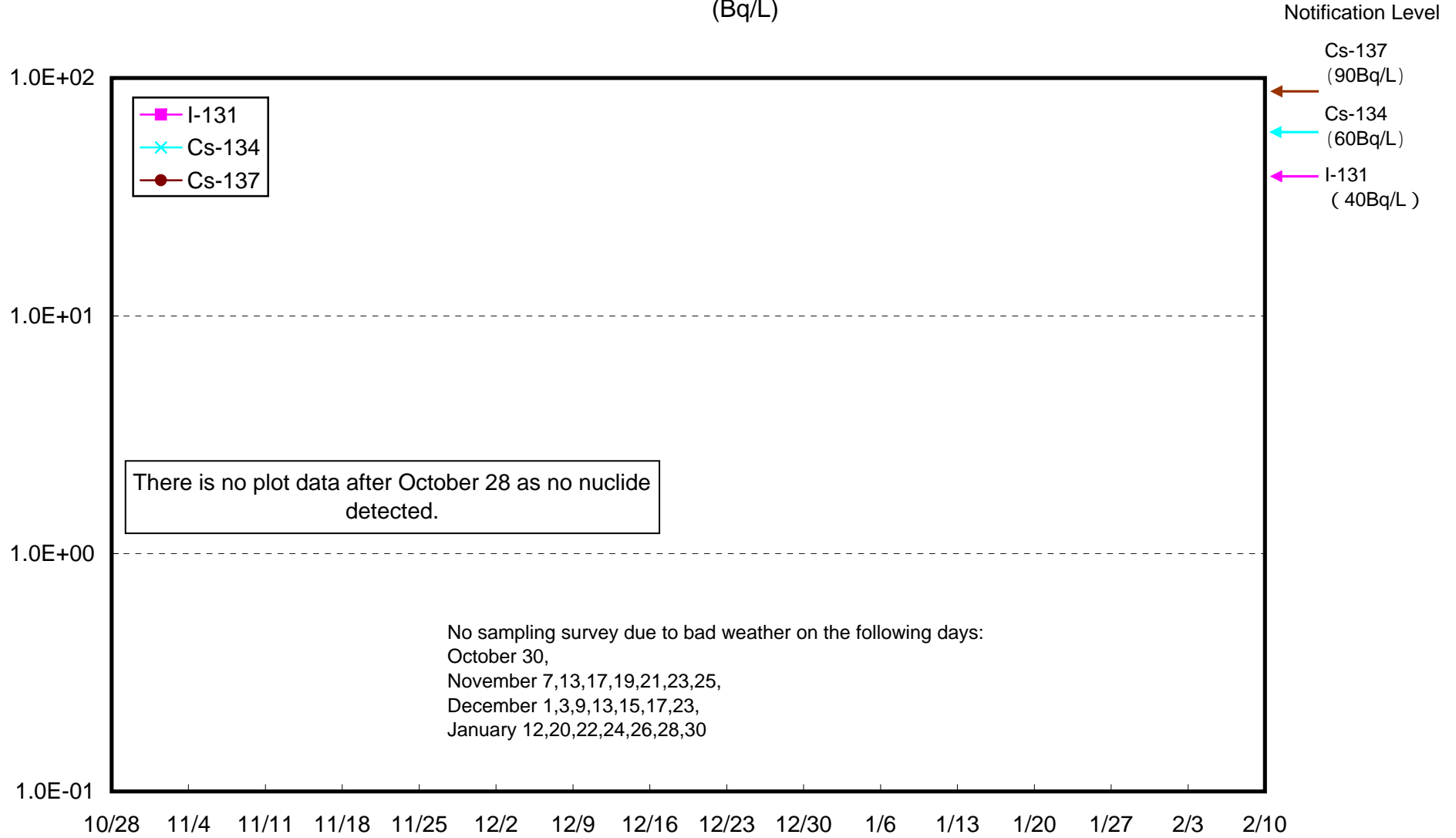


Radioactivity Density of Seawater (lower layer) around approx. 15 km offshore of Fukushima Daiichi NPS
(Bq/L)

Notification Level



Radioactivity Density of Seawater (upper layer) around approx. 15 km offshore of Fukushima Daini NPS
(Bq/L)



Radioactivity Density of Seawater (lower layer) around approx. 15 km offshore of Fukushima Daini NPS
(Bq/L)

Notification Level

Cs-137
(90Bq/L)
Cs-134
(60Bq/L)
I-131
(40Bq/L)

