

Nuclide Analysis Results of Radioactive Materials in Seawater <Coast>

Reference

(Data summarized on January 13)

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)	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)				
Time of Sampling	Jan 12, 2012 08:35 am	Jan 12, 2012 08:20 am	Jan 12, 2012 08:25 am	Jan 12, 2012 08:00 am					
Detected Nuclides (Half-life)	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)	1.3	0.02	0.95	0.02	ND	-	ND	-	60
Cs-137 (about 30 years)	1.9	0.02	1.8	0.02	1.1	0.01	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. 0.67Bq/L, Cs-134: approx. 0.91Bq/L, Cs-137: approx. 1.0Bq/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 1/3>

Reference

(Data summarized on January 13)

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)
	Jan 11, 2012 (Not sampled)		Jan 11, 2012 (Not sampled)		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)	-	-	-	-	-	-	-	-	-	-	-	-	40
Cs-134 (about 2 years)	-	-	-	-	-	-	-	-	-	-	-	-	60
Cs-137 (about 30 years)	-	-	-	-	-	-	-	-	-	-	-	-	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)
	N/A		N/A		Jan 11, 2012 (Not sampled)		Jan 11, 2012 (Not sampled)		Jan 11, 2012 (Not sampled)		Jan 11, 2012 (Not sampled)		
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)	-	-	-	-	-	-	-	-	-	-	-	-	40
Cs-134 (about 2 years)	-	-	-	-	-	-	-	-	-	-	-	-	60
Cs-137 (about 30 years)	-	-	-	-	-	-	-	-	-	-	-	-	90

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

A part of sampling is canceled due to bad weather condition.

Nuclide Analysis Results of Radioactive Materials in Seawater <Offshore 2/3>

Reference

(Data summarized on January 13)

Place of Sampling	3 km offshore of Haramachi Ward Upper Layer	3 km offshore of Haramachi Ward Lower Layer	3 km offshore of Odaka Ward Upper Layer	3 km offshore of Odaka Ward Lower Layer	3 km offshore of Iwasawa shore Upper Layer	3 km offshore of Iwasawa shore 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)						
Time of Sampling	Jan 11, 2012 (Not sampled)	Jan 11, 2012 (Not sampled)	Jan 11, 2012 (Not sampled)	Jan 11, 2012 (Not sampled)	Jan 11, 2012 08:00 am	Jan 11, 2012 08:00 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 (/)		
I-131 (about 8 days)	-	-	-	-	-	-	-	-	ND	-	ND	-	40
Cs-134 (about 2 years)	-	-	-	-	-	-	-	-	ND	-	ND	-	60
Cs-137 (about 30 years)	-	-	-	-	-	-	-	-	ND	-	ND	-	90

Place of Sampling	8 km offshore of Odaka Ward Upper Layer	8 km offshore of Odaka Ward Lower Layer	8 km offshore of Iwasawa shore Upper Layer	8 km offshore of Iwasawa shore 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)
Time of Sampling	Jan 11, 2012 (Not sampled)	Jan 11, 2012 (Not sampled)	Jan 11, 2012 (Not sampled)	Jan 11, 2012 (Not sampled)									
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)	-	-	-	-	-	-	-	-	-	-	-	-	40
Cs-134 (about 2 years)	-	-	-	-	-	-	-	-	-	-	-	-	60
Cs-137 (about 30 years)	-	-	-	-	-	-	-	-	-	-	-	-	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. 0.64Bq/L, Cs-134: approx. 0.93Bq/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.

A part of sampling is canceled due to bad weather condition.

Nuclide Analysis Results of Radioactive Materials in Seawater <Offshore 3/3>

Reference

(Data summarized on January 13)

Place of Sampling	3 km offshore of Souma City Upper Layer		3 km offshore of Souma City Lower Layer		5 km offshore of Souma City Upper Layer		5 km offshore of Souma City Lower Layer		5 km offshore of Kashima Upper Layer		5 km offshore of Kashima 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)
	Time of Sampling		Time of Sampling		Time of Sampling		Time of Sampling		Time of Sampling		Time of Sampling		
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	-	ND	-	ND	-	40
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	60
Cs-137 (about 30 years)	ND	-	ND	-	ND	-	ND	-	ND	-	ND	-	90

Place of Sampling	5km Offshore of Numanouchi Upper Layer		5km Offshore of Numanouchi 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)
	Time of Sampling		Time of Sampling		Time of Sampling		Time of Sampling		Time of Sampling		Time of Sampling		
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.

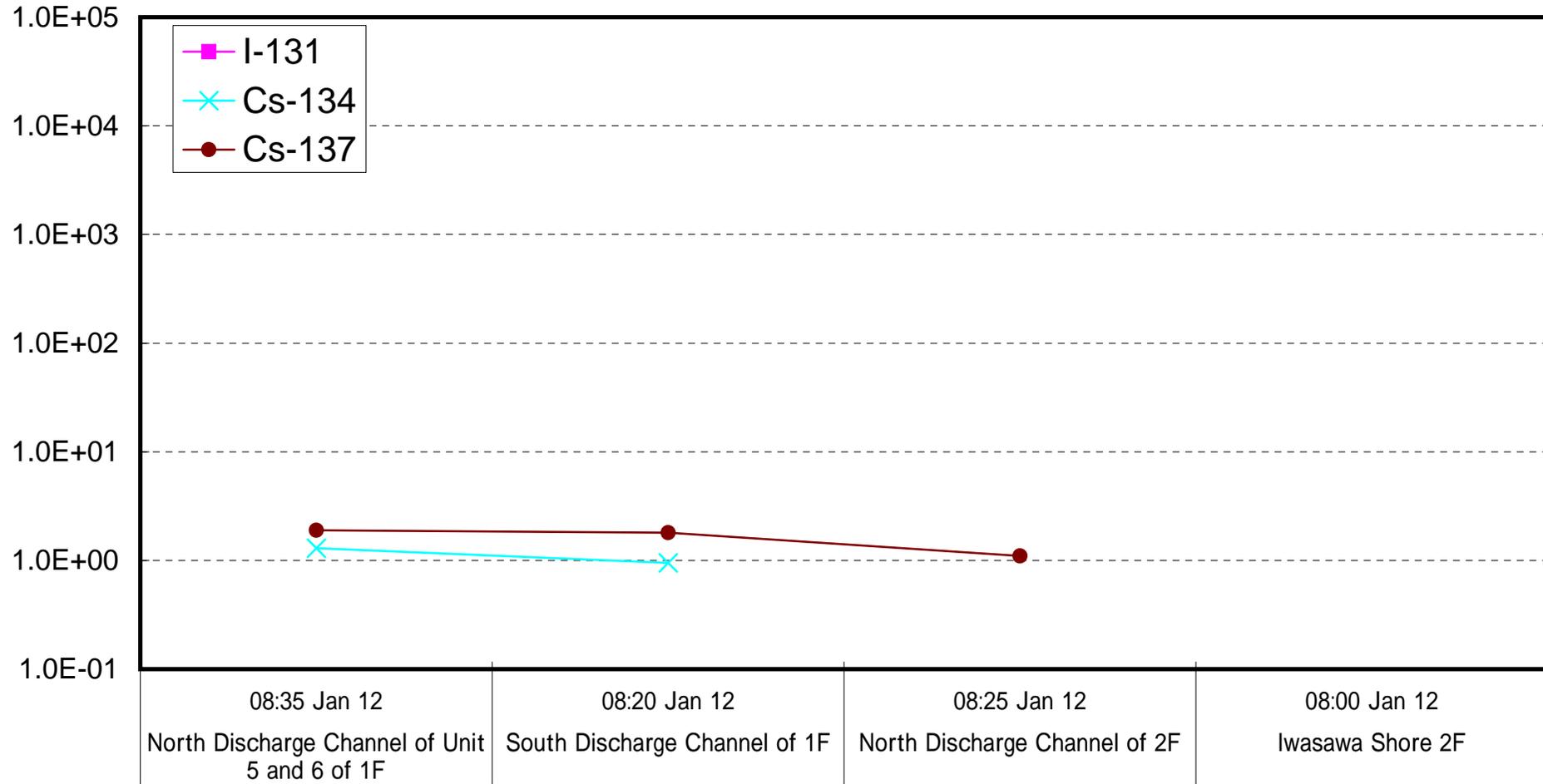
* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.69Bq/L, Cs-134: approx. 0.96Bq/L, Cs-137: approx. 1.0Bq/L

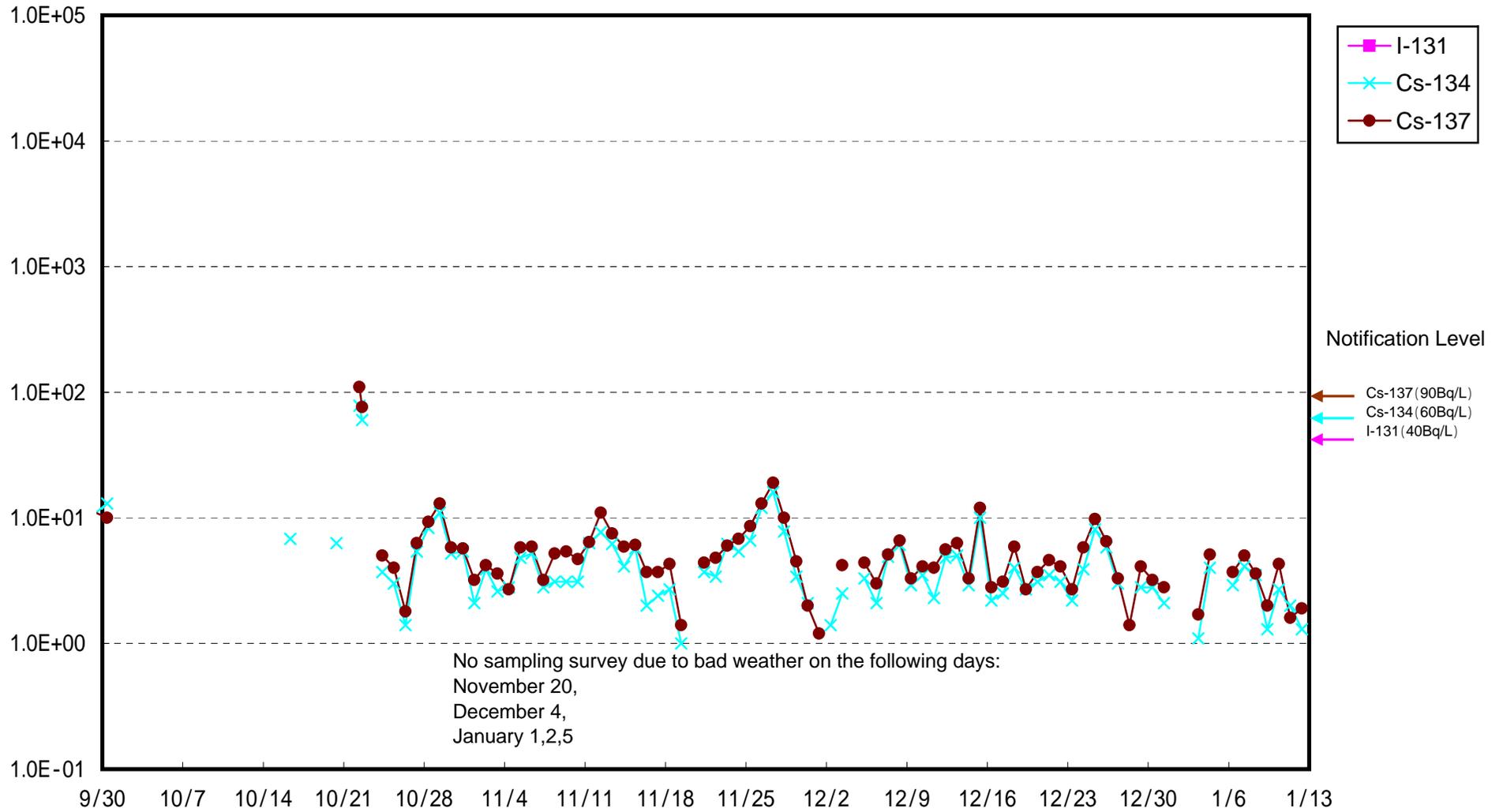
Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

A part of samplings is canceled due to bad weather condition.

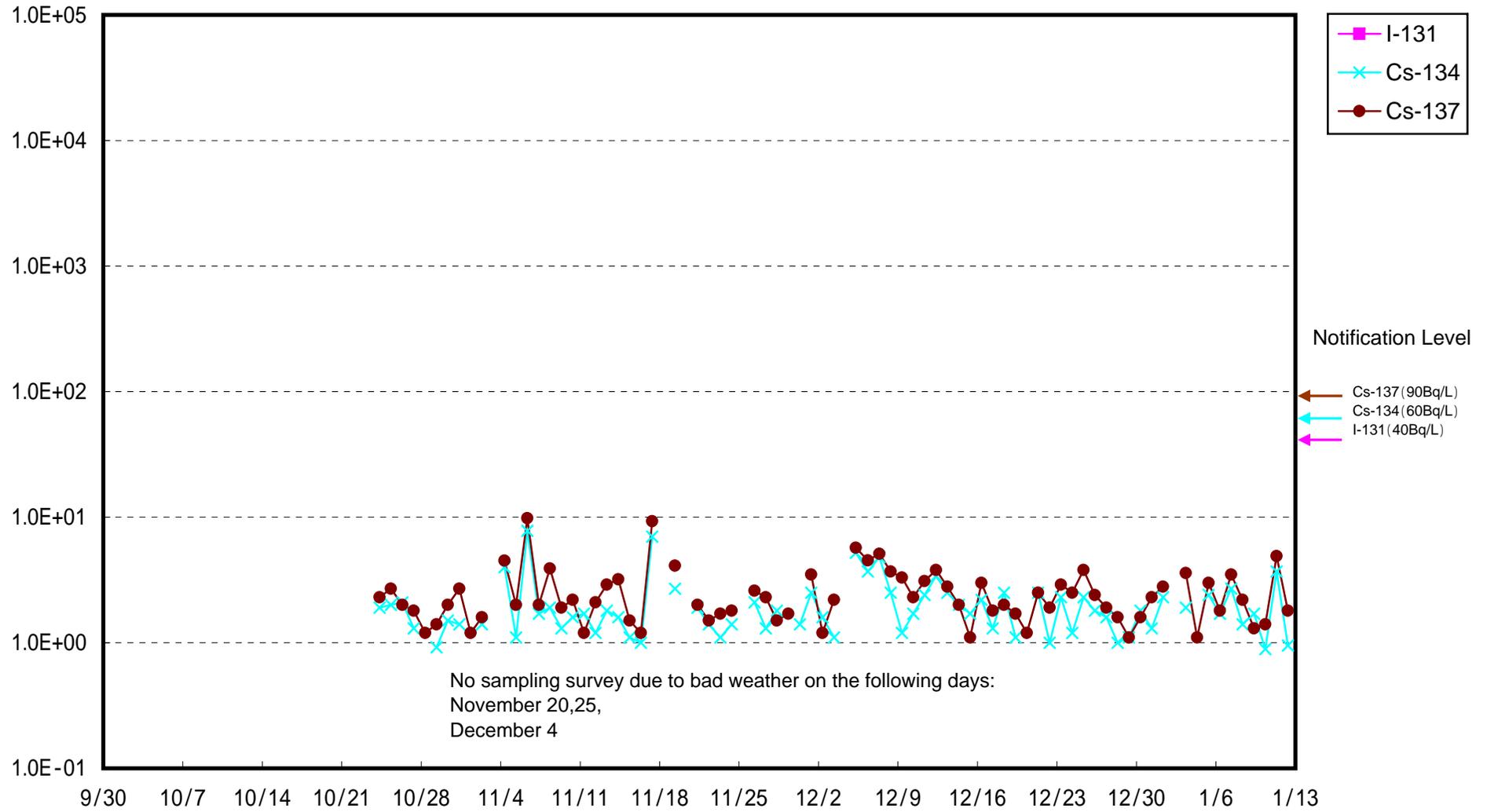
Radioactivity Density of Seawater (Bq/L)



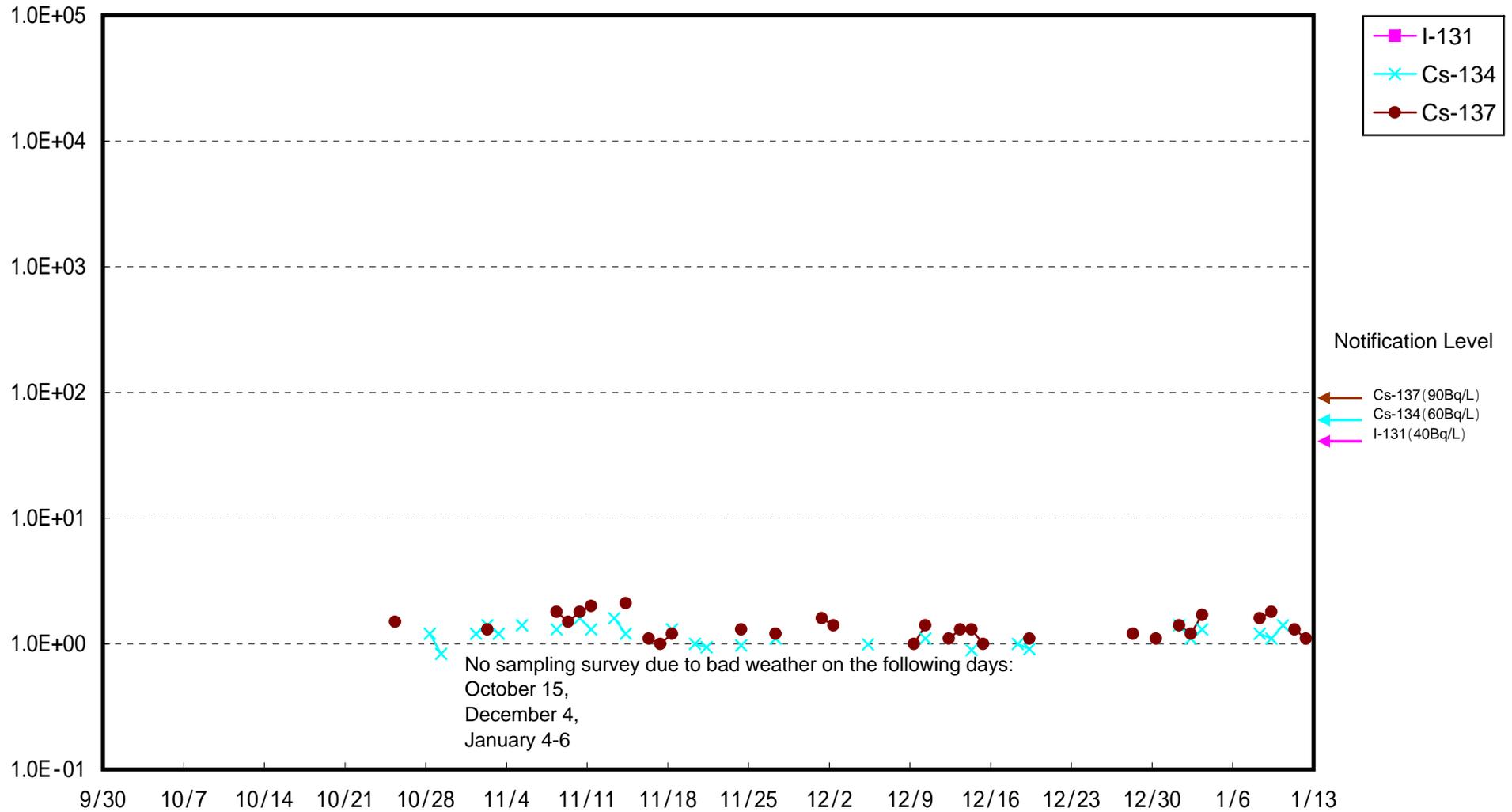
Radioactivity Density of Seawater at North of 1F5-6 Discharge Channel (Bq/L)



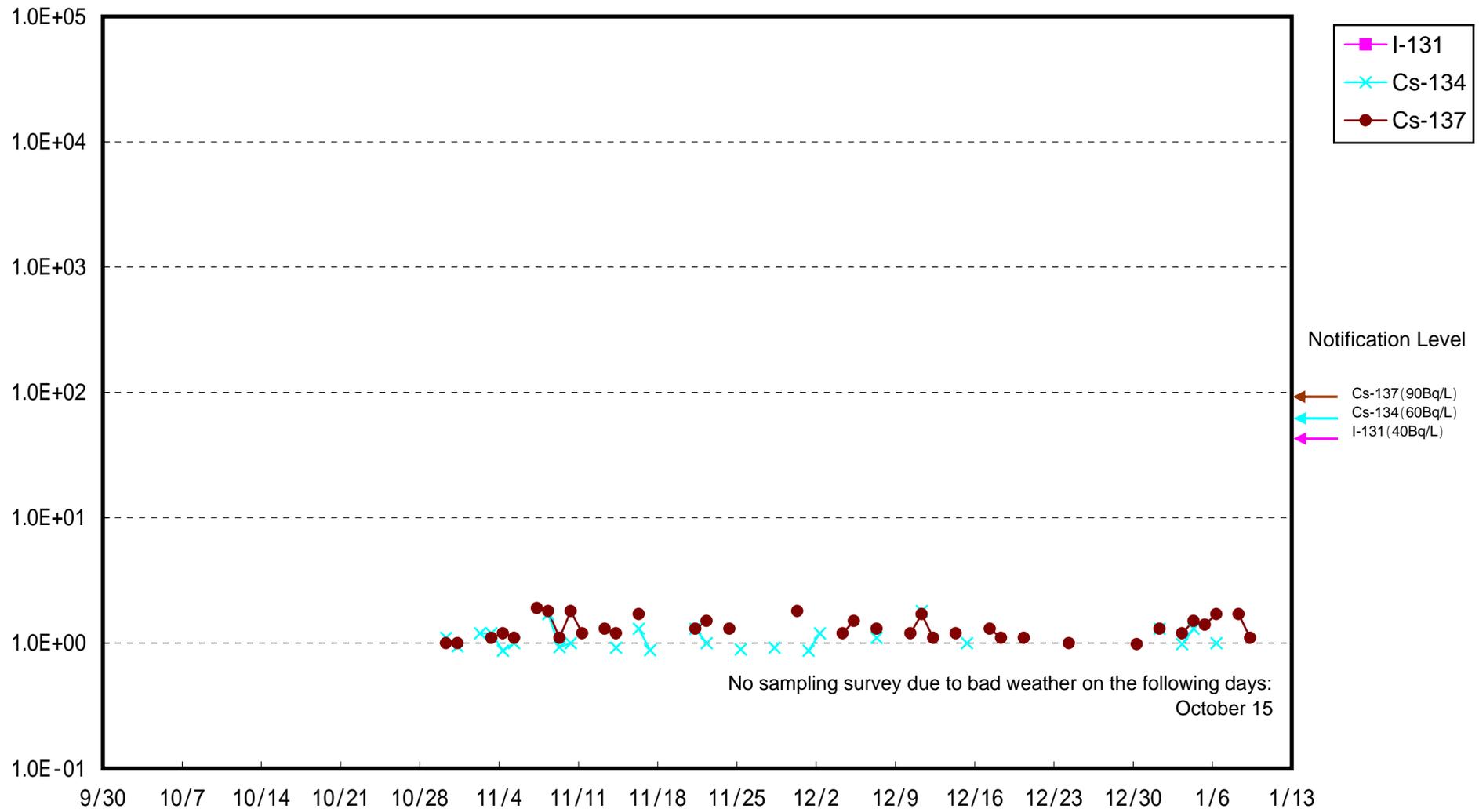
Radioactivity Density of Seawater at South Discharge Channel of 1F (Bq/L)



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

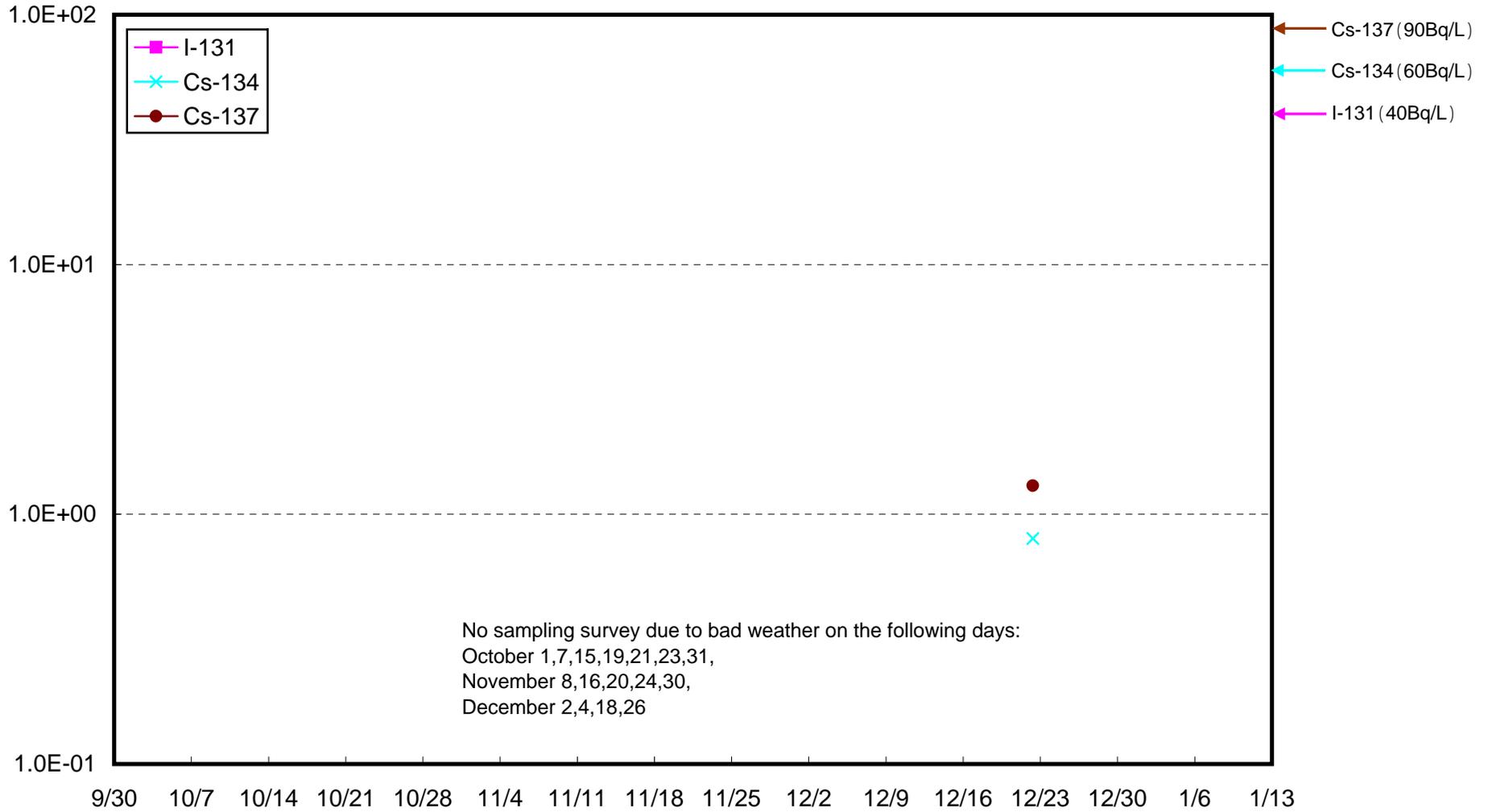


Radioactivity Density of Seawater at Iwasawa Shore 2F (Bq/L)



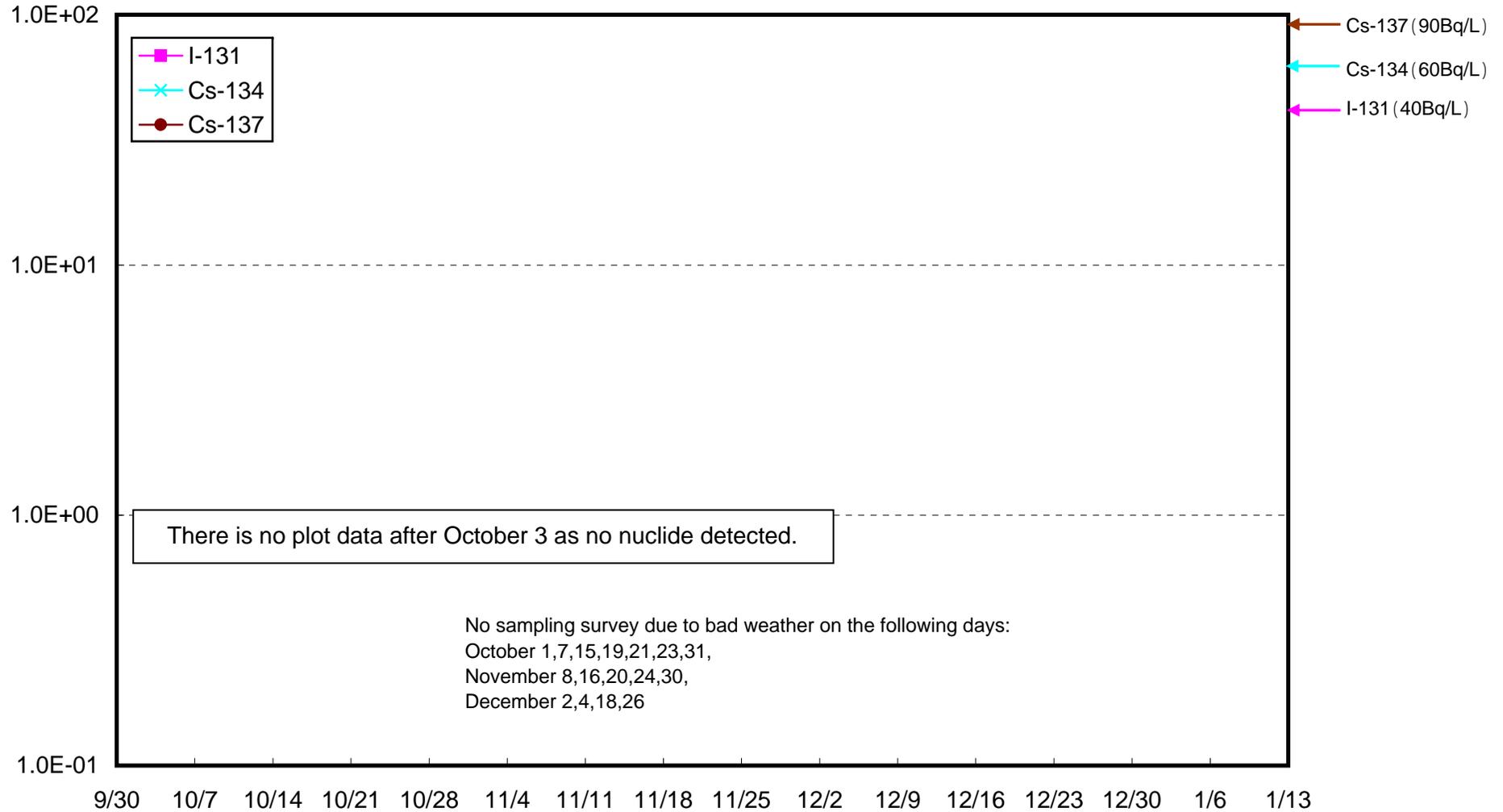
Radioactivity Density of Seawater 3km Offshore of Iwasawa Shore Upper Layer (Bq/L)

Notification Level

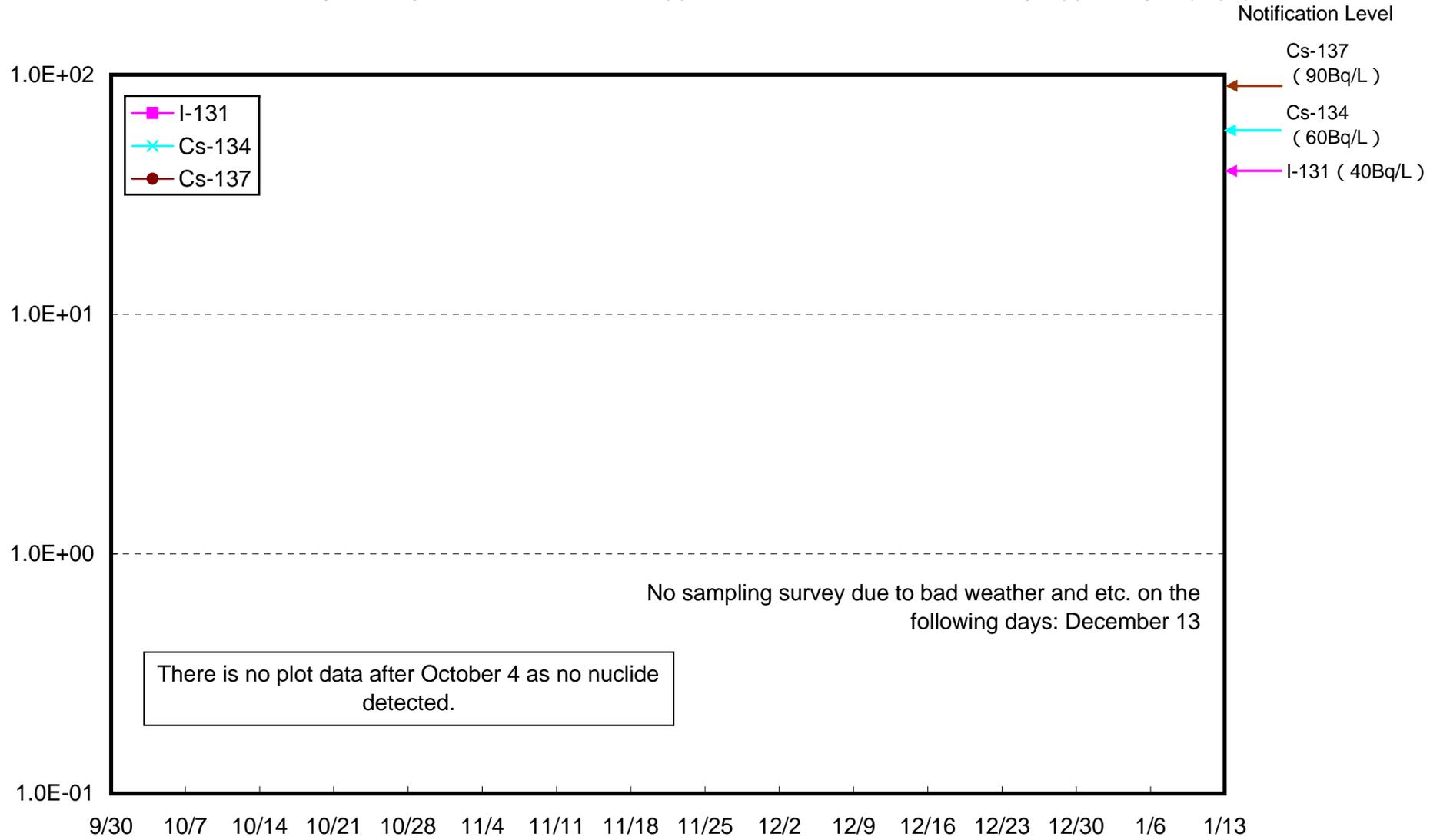


Radioactivity Density of Seawater 3km Offshore of Iwasawa Shore Lower Layer (Bq/L)

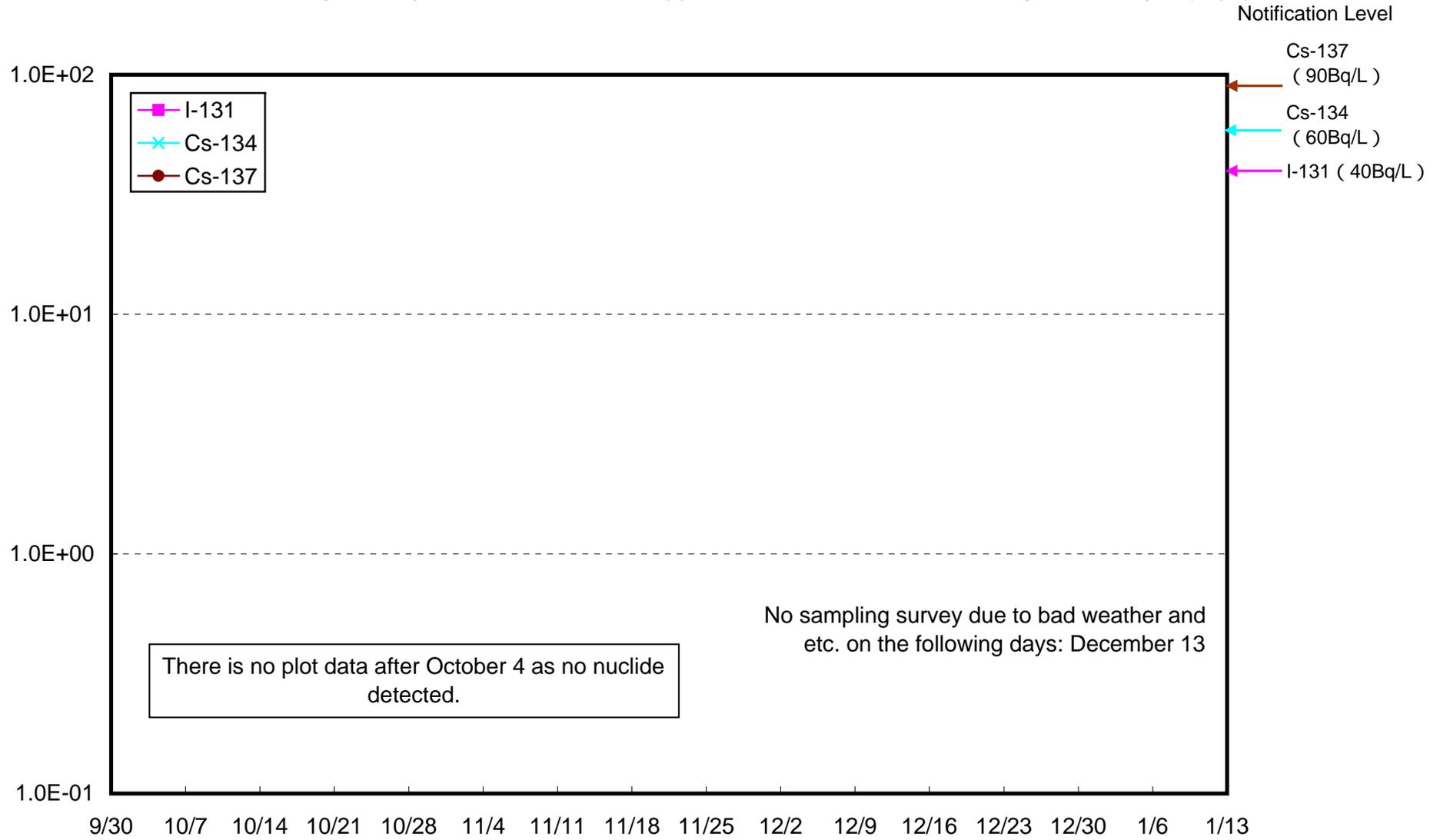
Notification Level



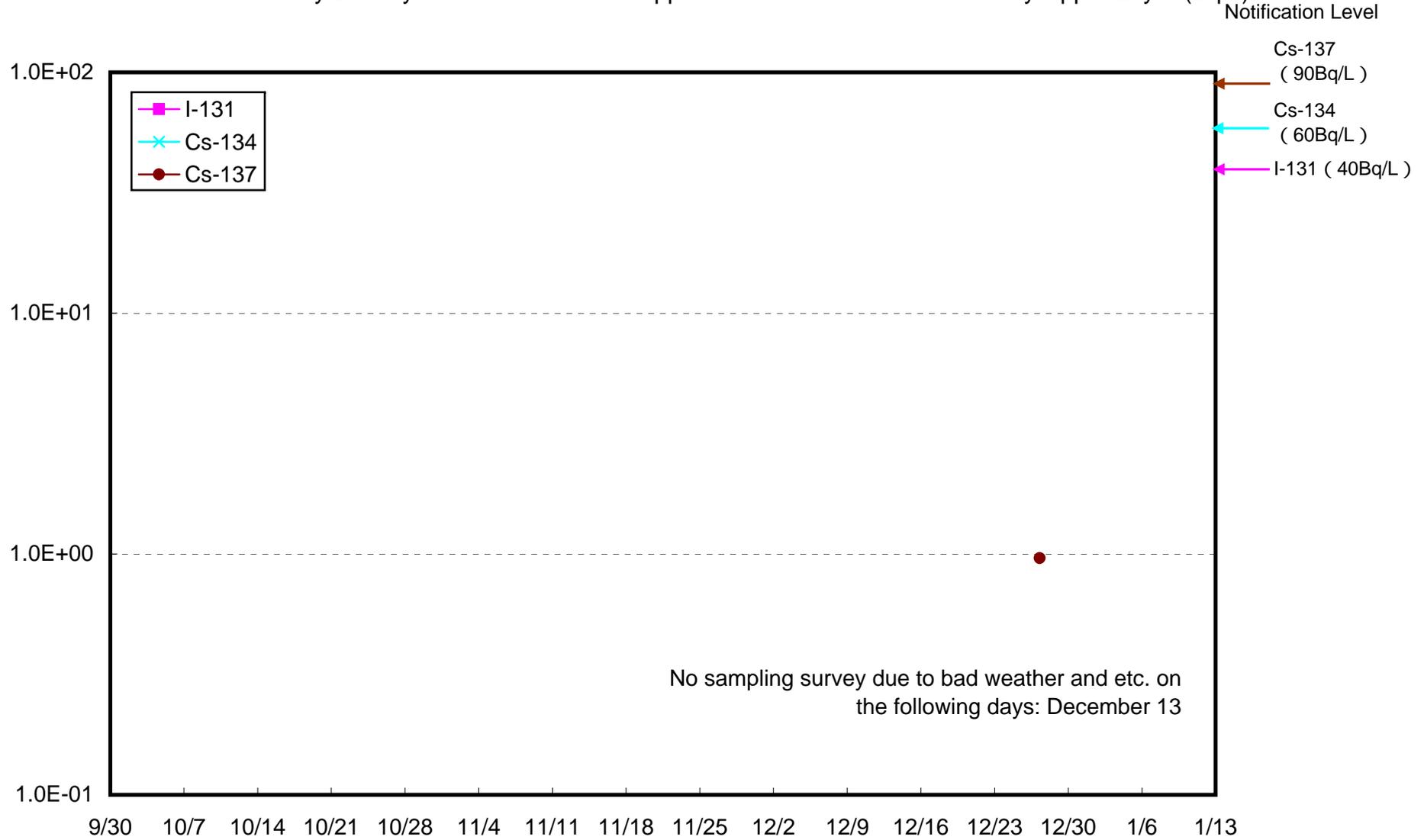
Radioactivity Density of Seawater around approx. 3 km offshore of Soma City Upper Layer (Bq/L)



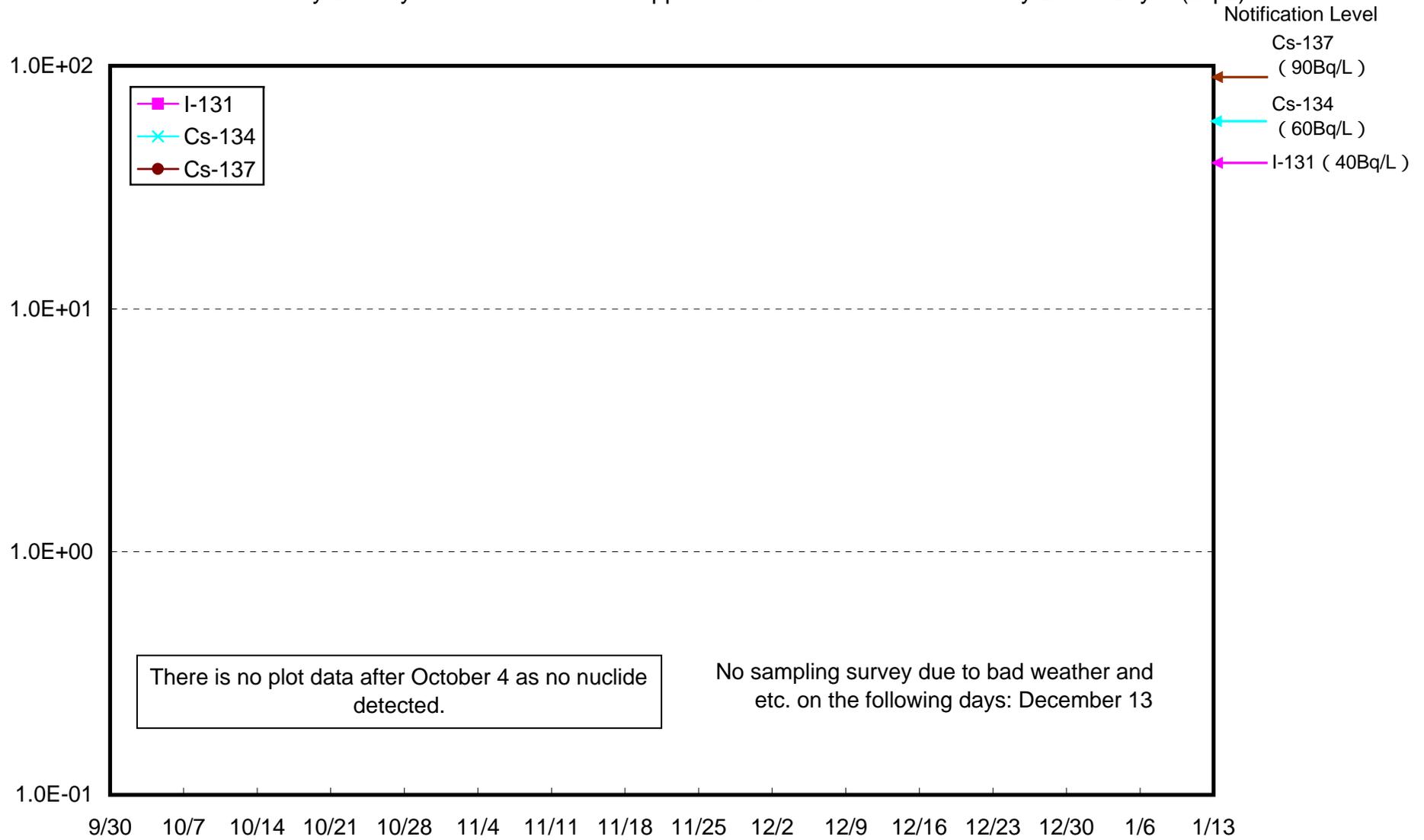
Radioactivity Density of Seawater around approx. 3 km offshore of Soma City Lower Layer (Bq/L)



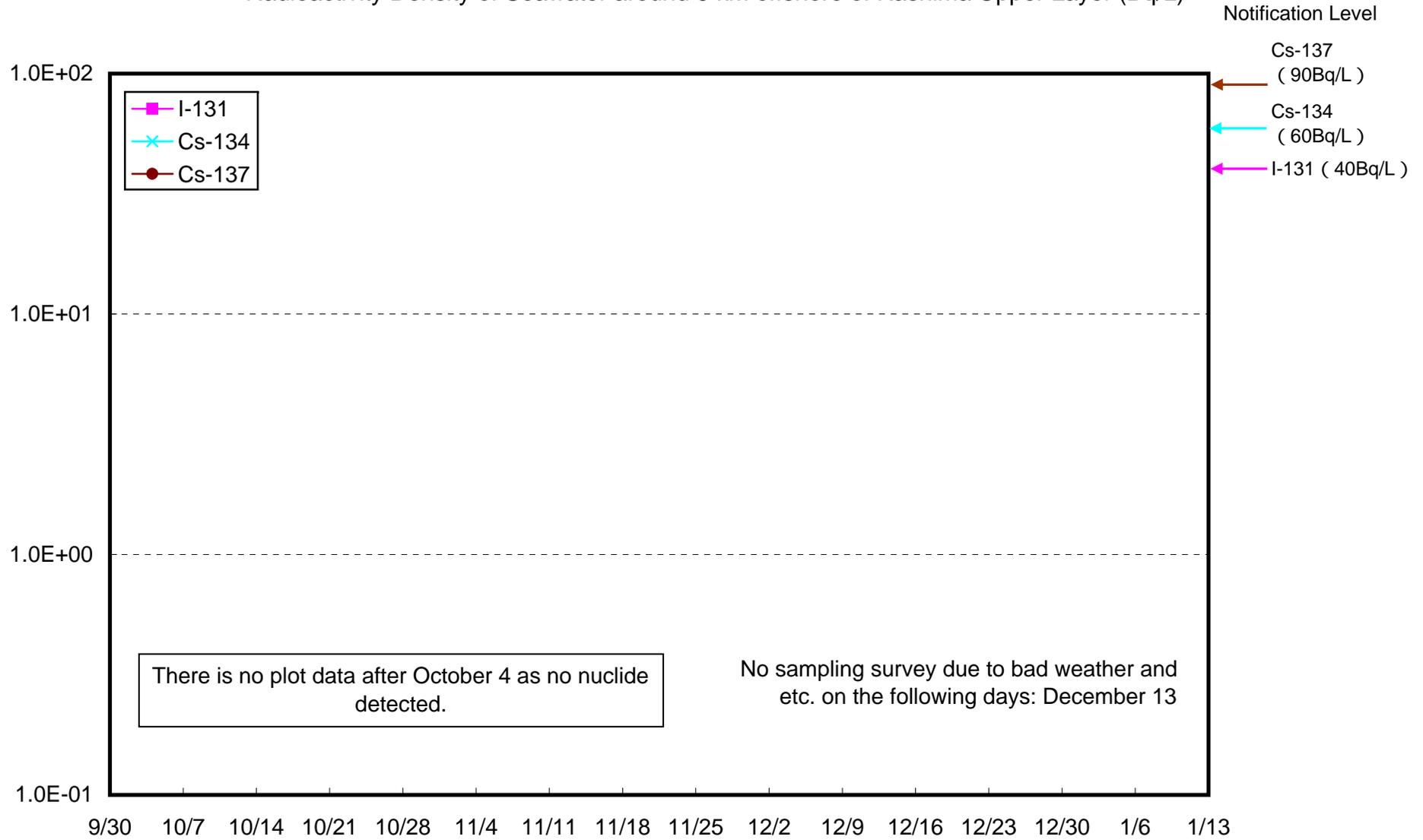
Radioactivity Density of Seawater around approx. 5 km offshore of Souma City Upper Layer (Bq/L)



Radioactivity Density of Seawater around approx. 5 km offshore of Souma City Lower Layer (Bq/L)



Radioactivity Density of Seawater around 5 km offshore of Kashima Upper Layer (Bq/L)



Radioactivity Density of Seawater around 5 km offshore of Kashima Lower Layer (Bq/L)

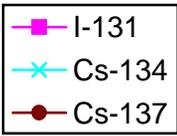
Notification Level

Cs-137
(90Bq/L)

Cs-134
(60Bq/L)

I-131 (40Bq/L)

1.0E+02



1.0E+01

1.0E+00

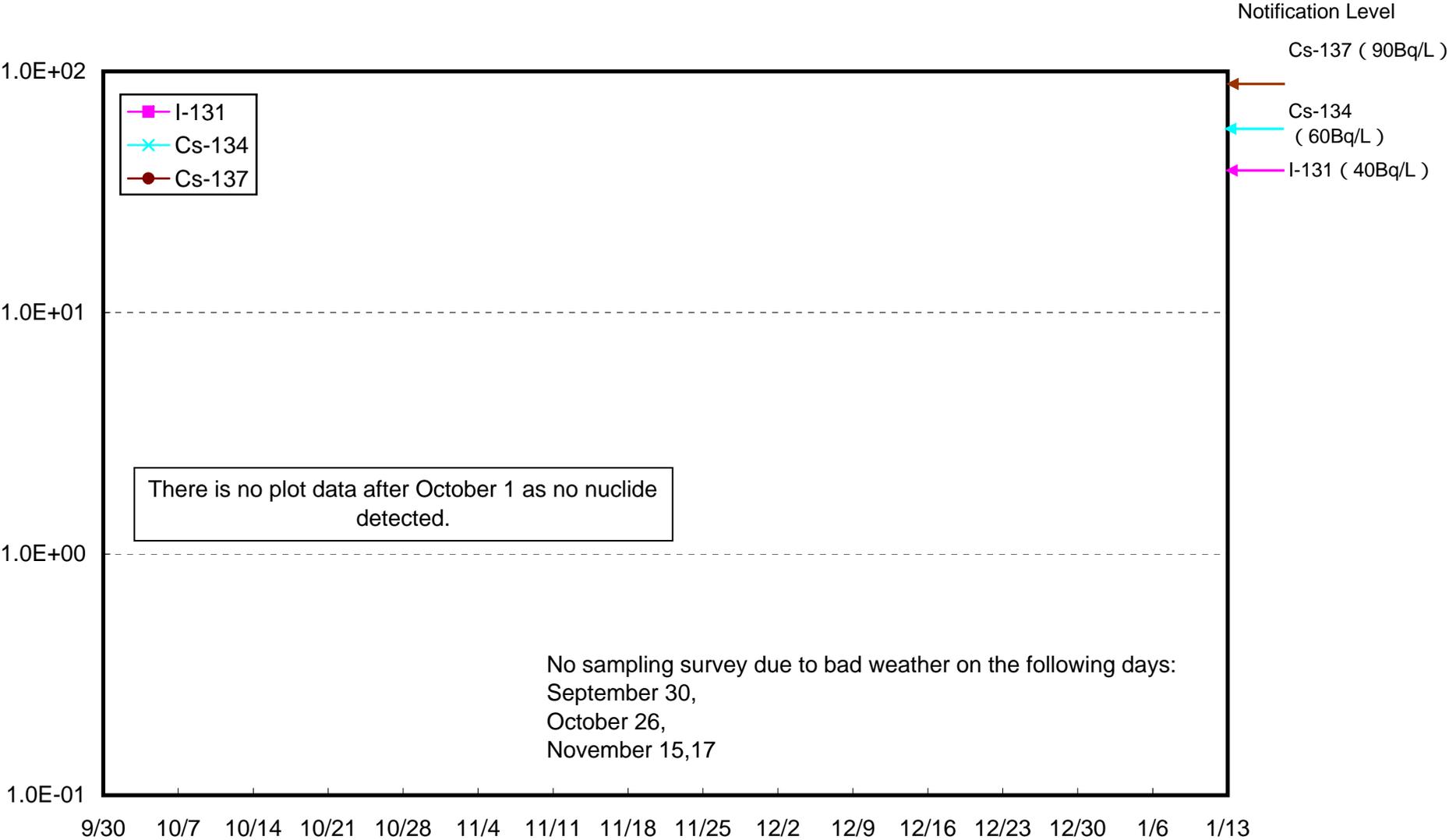
1.0E-01

There is no plot data after October 4 as no nuclide detected.

No sampling survey due to bad weather and etc. on the following days: December 13

9/30 10/7 10/14 10/21 10/28 11/4 11/11 11/18 11/25 12/2 12/9 12/16 12/23 12/30 1/6 1/13

Radioactivity Density of Seawater 5km Offshore of Numanouchi Upper Layer (Bq/L)



Radioactivity Density of Seawater 5km Offshore of Numanouchi Lower Layer (Bq/L)

