

## Nuclide Analysis Results of Radioactive Materials in Seawater <Coast>

Reference
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(Data summarized on January 27)

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 26 2012 08:40 am		Jan 26 2012 08:20 am		Jan 26 2012 08:20 am		Jan 26 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 ( / )	
I-131 (about 8 days)	ND	-	ND	-	ND	-	ND	-	40
Cs-134 (about 2 years)	ND	-	1.2	0.02	ND	-	ND	-	60
Cs-137 (about 30 years)	1.6	0.02	1.6	0.02	1.2	0.01	1.6	0.02	90

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> 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. 0.68Bq/L, Cs-134: approx. 0.96Bq/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 1/4>

Reference

(Data summarized on January 27)

Place of Sampling	15 km offshore of Minami-Souma CityUpper Layer		15 km offshore of Minami-Souma CityLower 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		② 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 25, 2012 (Not sampled)		Jan 25, 2012 (Not sampled)		N/A		N/A		N/A		N/A		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
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		② 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 25, 2012 (Not sampled)		Jan 25, 2012 (Not sampled)		Jan 25, 2012 (Not sampled)		Jan 25, 2012 (Not sampled)		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
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/cm<sup>3</sup> to Bq/L.

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

## Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 2/4>

Reference

(Data summarized on January 27)

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							
Time of Sampling	Jan 25, 2012 (Not sampled)	Jan 25, 2012 (Not sampled)	Jan 25, 2012 08:20 am	Jan 25, 2012 08:20 am	Jan 25, 2012 08:30 am	Jan 25, 2012 08:30 am							
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	② 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)
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	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									
Time of Sampling	Jan 25, 2012 08:55 am	Jan 25, 2012 08:55 am	Jan 25, 2012 08:55 am	Jan 25, 2012 08:55 am									
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	② 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)
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

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> 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. 0.88Bq/L, Cs-134: approx. 0.98Bq/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 samplings is canceled due to bad weather condition.

## Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 3/4>

Reference

(Data summarized on January 27)

Place of Sampling	3 km offshore of North of Iwaki Upper Layer		3 km offshore of North of Iwaki Lower Layer		3 km offshore of Natsui river Upper Layer		3 km offshore of Natsui river Lower Layer		3 km offshore of Onahama port Upper Layer		3 km offshore of Onahama port Lower Layer		② 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 25, 2012 06:35 am		Jan 25, 2012 06:35 am		Jan 25, 2012 07:00 am		Jan 25, 2012 07:00 am		N/A		N/A		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
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	3 km offshore of Ena Upper Layer		3 km offshore of Ena Lower Layer		3 km offshore of Numanouchi Upper Layer		3 km offshore of Numanouchi Lower Layer		3 km offshore of Toyoma Upper Layer		3 km offshore of Toyoma Lower Layer		② 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 25, 2012 07:15 am		Jan 25, 2012 07:15 am		Jan 25, 2012 07:30 am		Jan 25, 2012 07:30 am		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
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

\* Density by the announcement of Reactor Regulation is stated with an amount converted from Bq/cm<sup>3</sup> 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. 0.81Bq/L, Cs-134: approx. 0.92Bq/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 samplings is canceled due to bad weather condition.

## Nuclide Analysis Results of Radioactive Materials in Seawater <offshore 4/4>

Reference

(Data summarized on January 27)

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		② 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	N/A		N/A		N/A		N/A		N/A		N/A		
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
I-131 (about 8 days)	-	-	-	-	-	-	-	-	-	-	-	-	40
Cs-134 (about 2 years)	-	-	-	-	-	-	-	-	-	-	-	-	60
Cs-137 (about 30 years)	-	-	-	-	-	-	-	-	-	-	-	-	90

Place of Sampling	5km Offshore of Numanouchi Upper Layer		5km Offshore of Numanouchi Lower Layer										② 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 25, 2012 07:10 am		Jan 25, 2012 07:10 am										
Detected Nuclides (Half-life)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	①Density of Sample (Bq/L)	Scaling Factor (①/②)	
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/cm<sup>3</sup> 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.

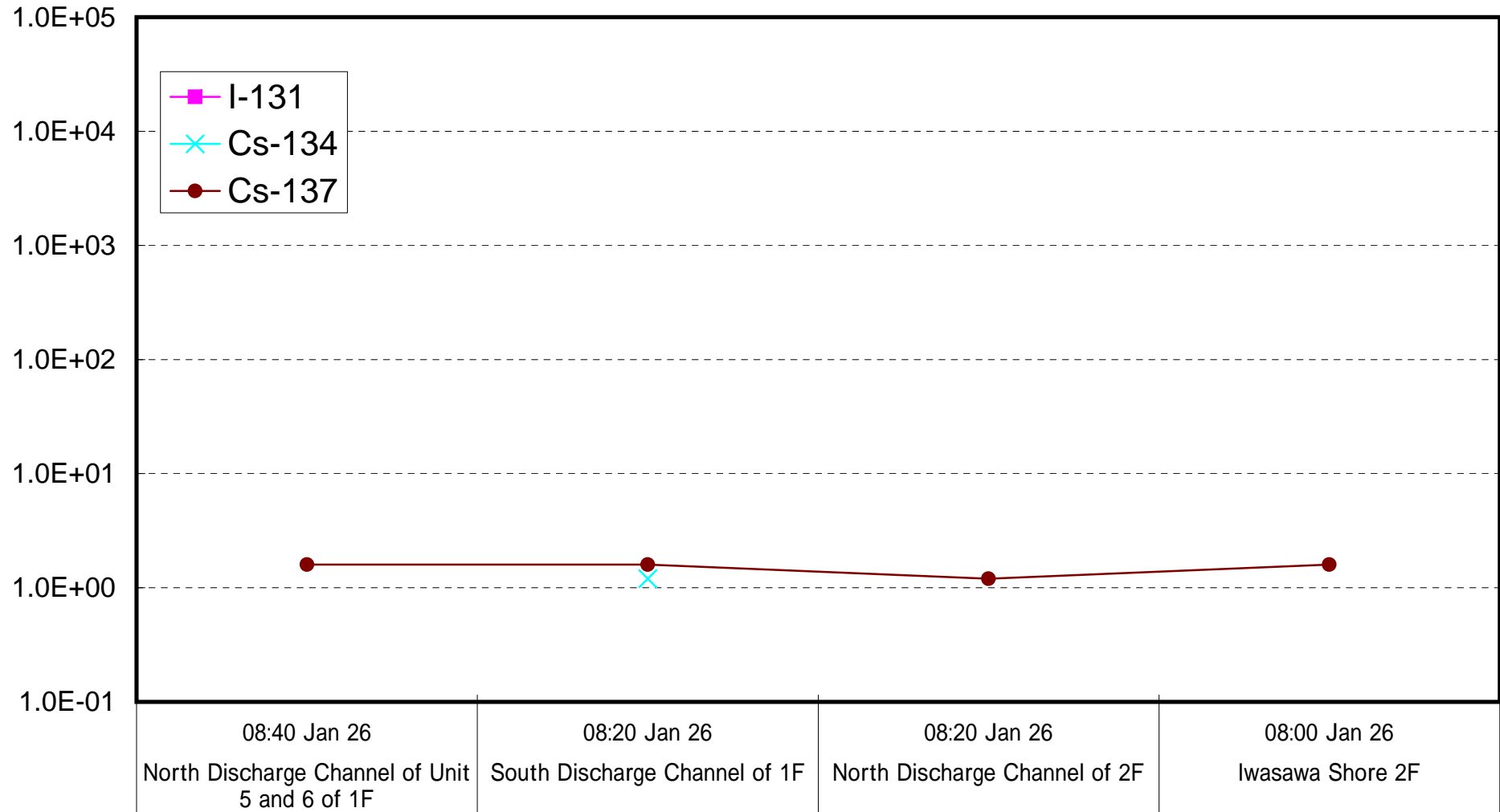
\* "ND" means the sampled data is below measurable limit.

I-131: approx. 0.66Bq/L, Cs-134: approx. 0.79Bq/L, Cs-137: approx. 1.0Bq/L

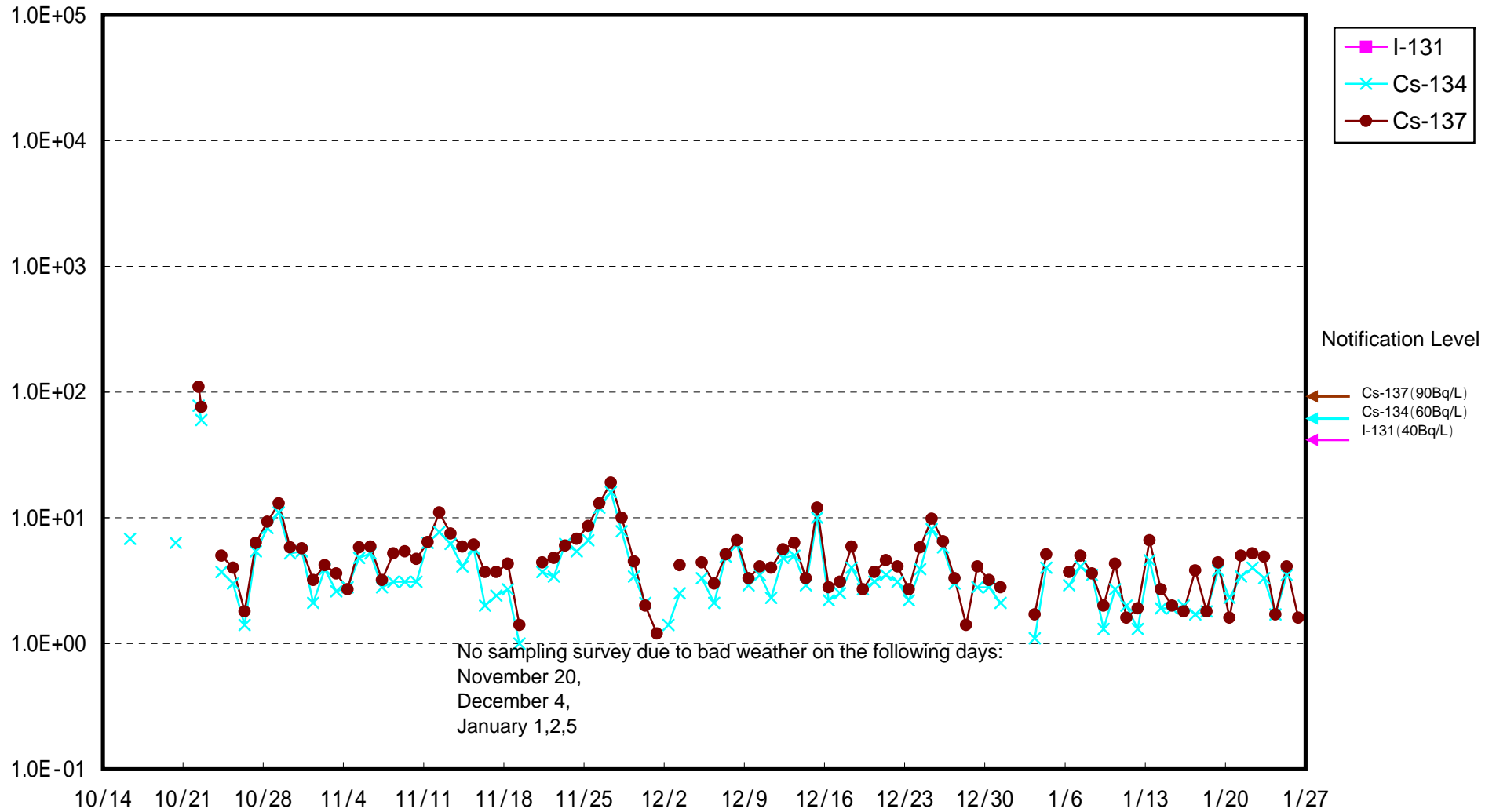
Please note that these nuclides are sometimes detected even when they are below the limits, contingent on the detector or samples.

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

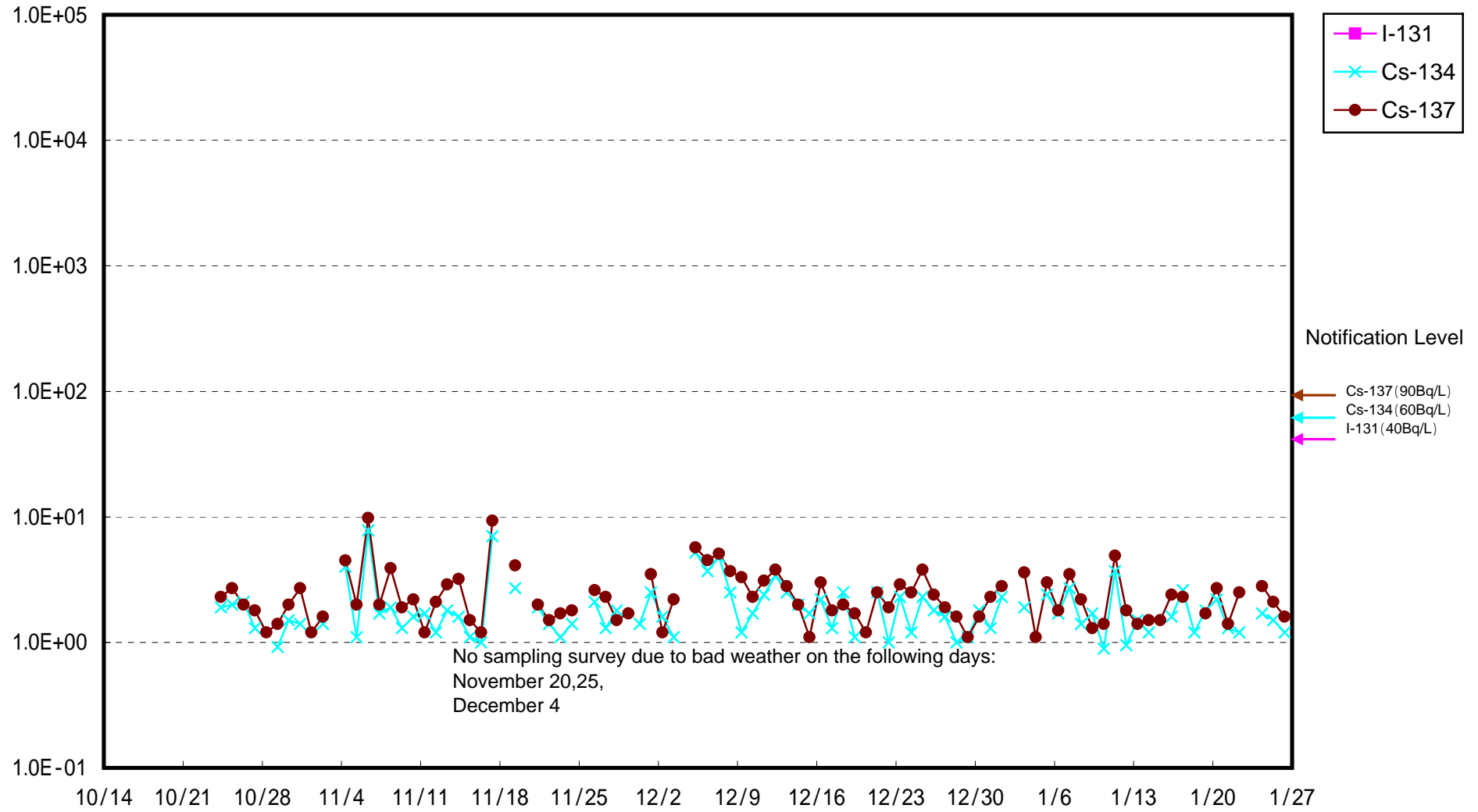
# Radioactivity Density of Seawater (Bq/L)



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

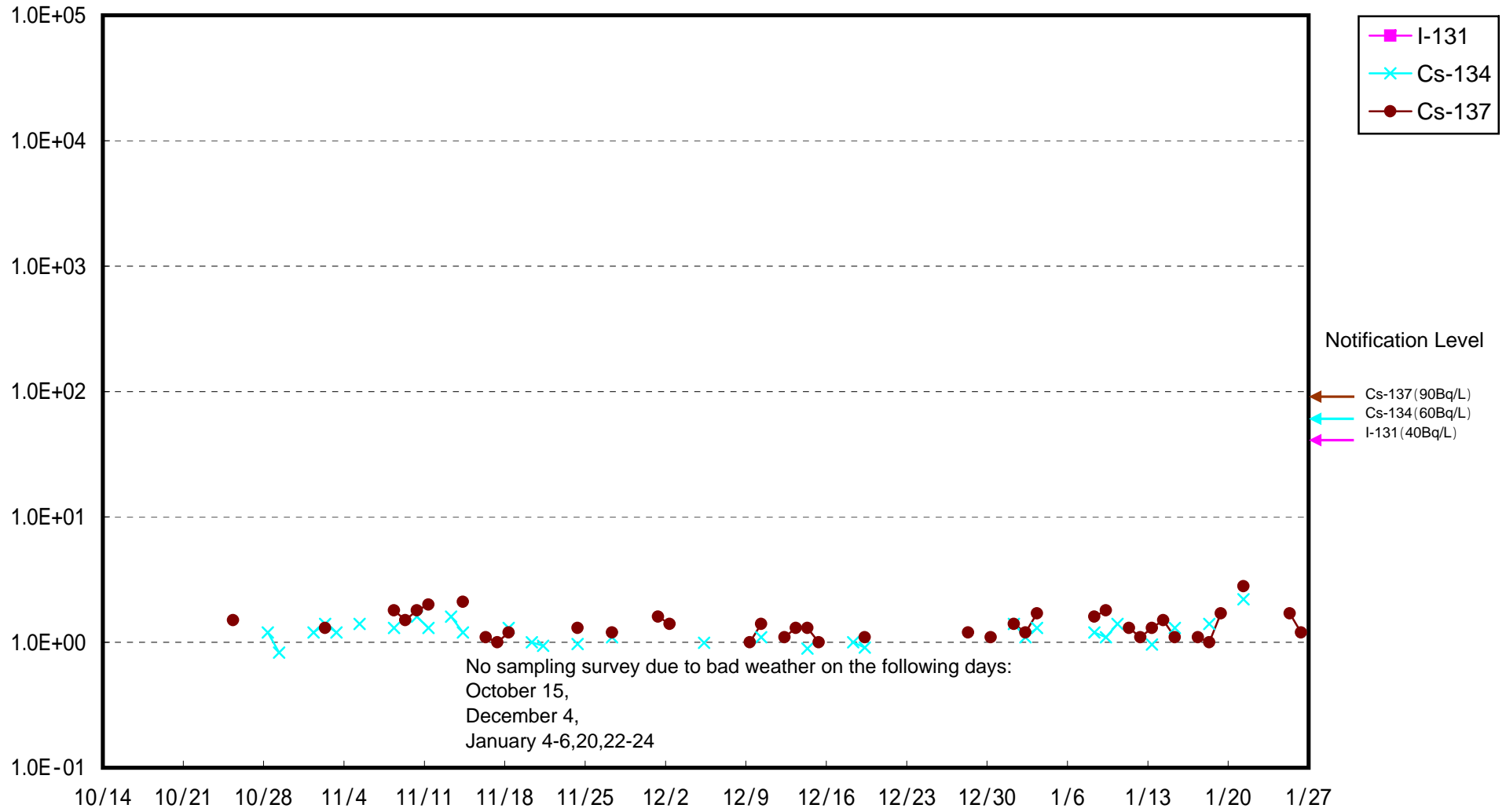


Radioactivity Density of Seawater at South Discharge Channel of 1F (Bq/L)

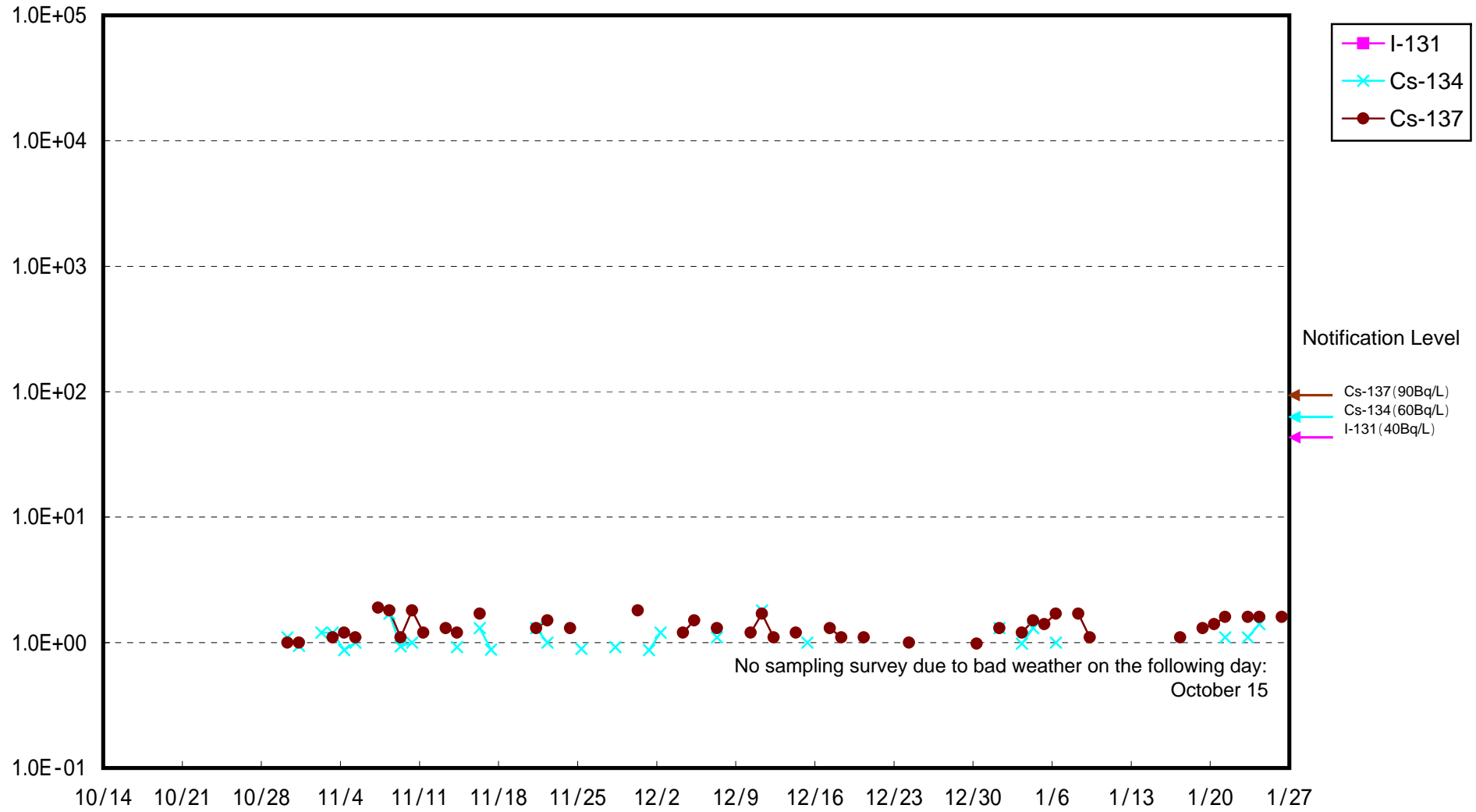




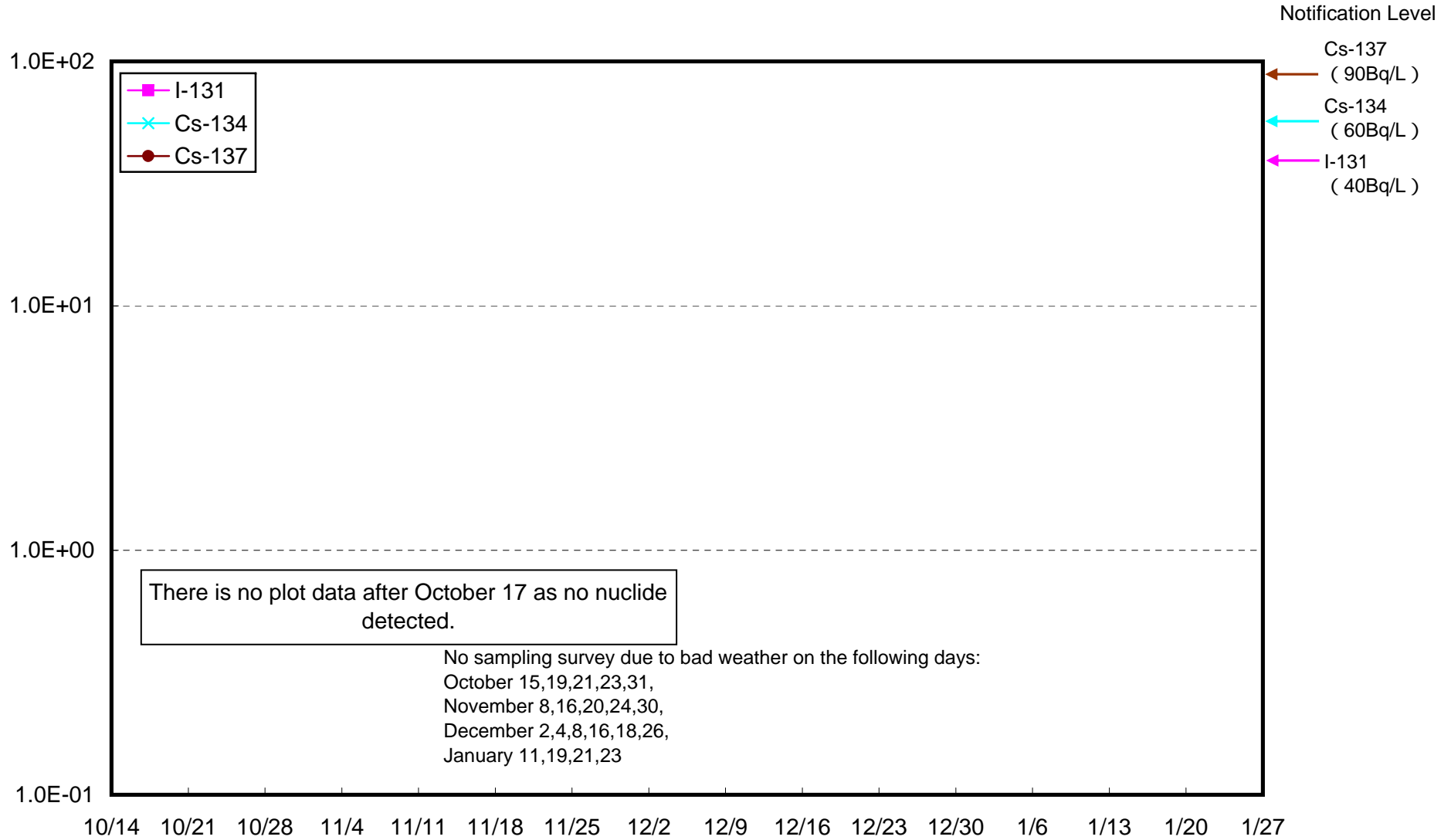
Radioactivity Density of Seawater at North Discharge Channel of 2F (Bq/L)



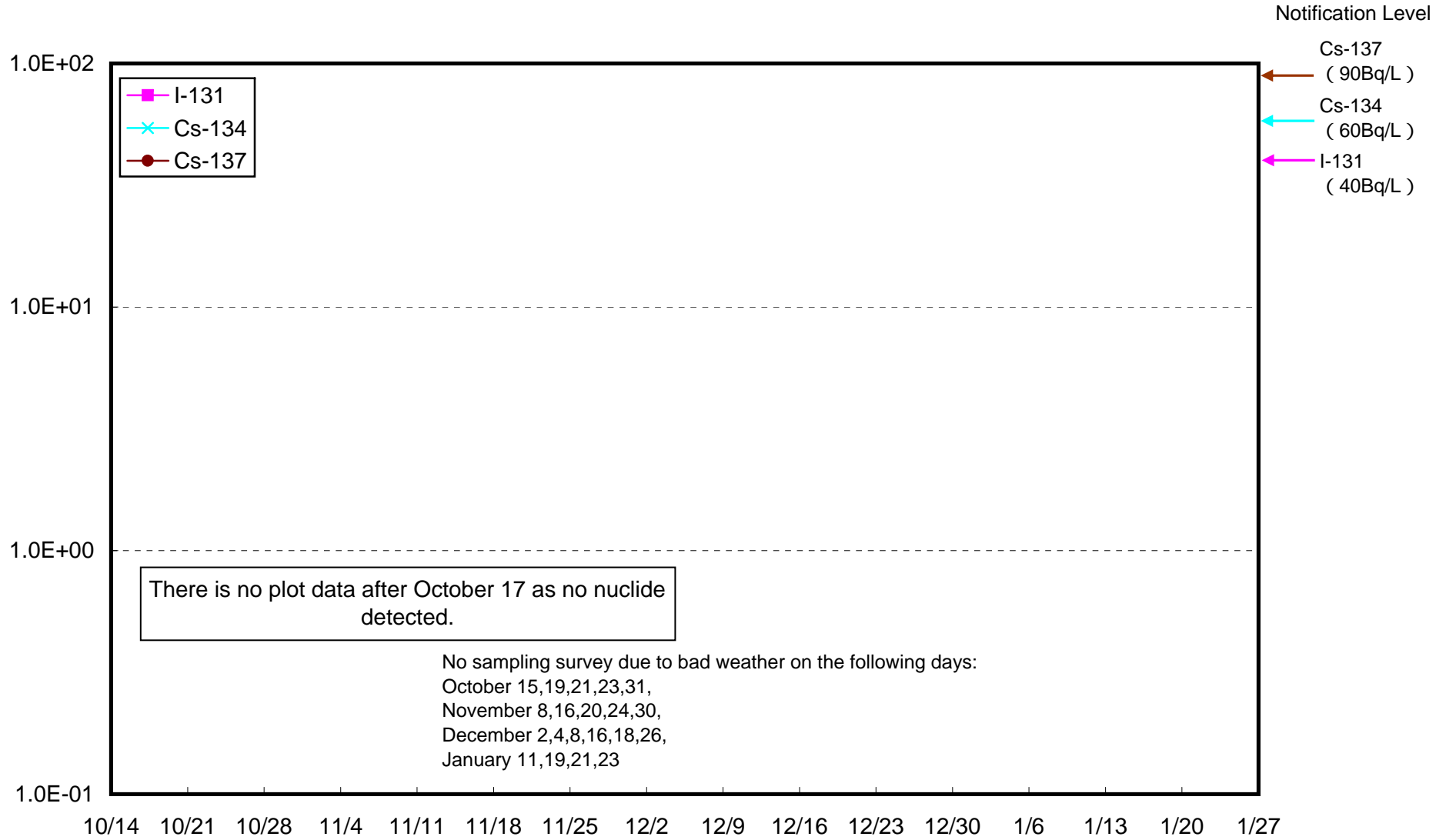
Radioactivity Density of Seawater at Iwasawa Shore 2F (Bq/L)



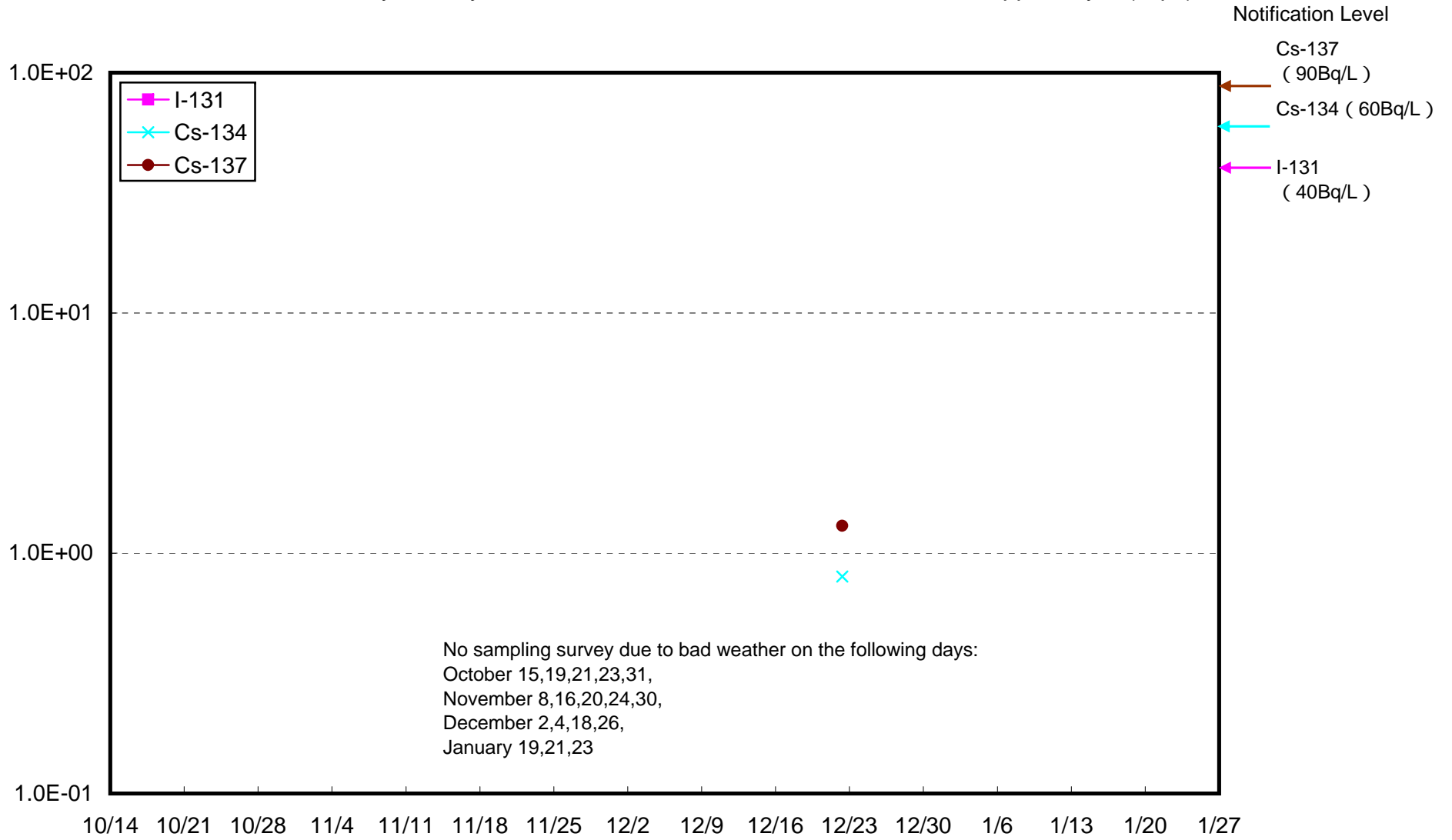
# Radioactivity Density of Seawater 3km Offshore of Odaka Ward Upper Layer (Bq/L)



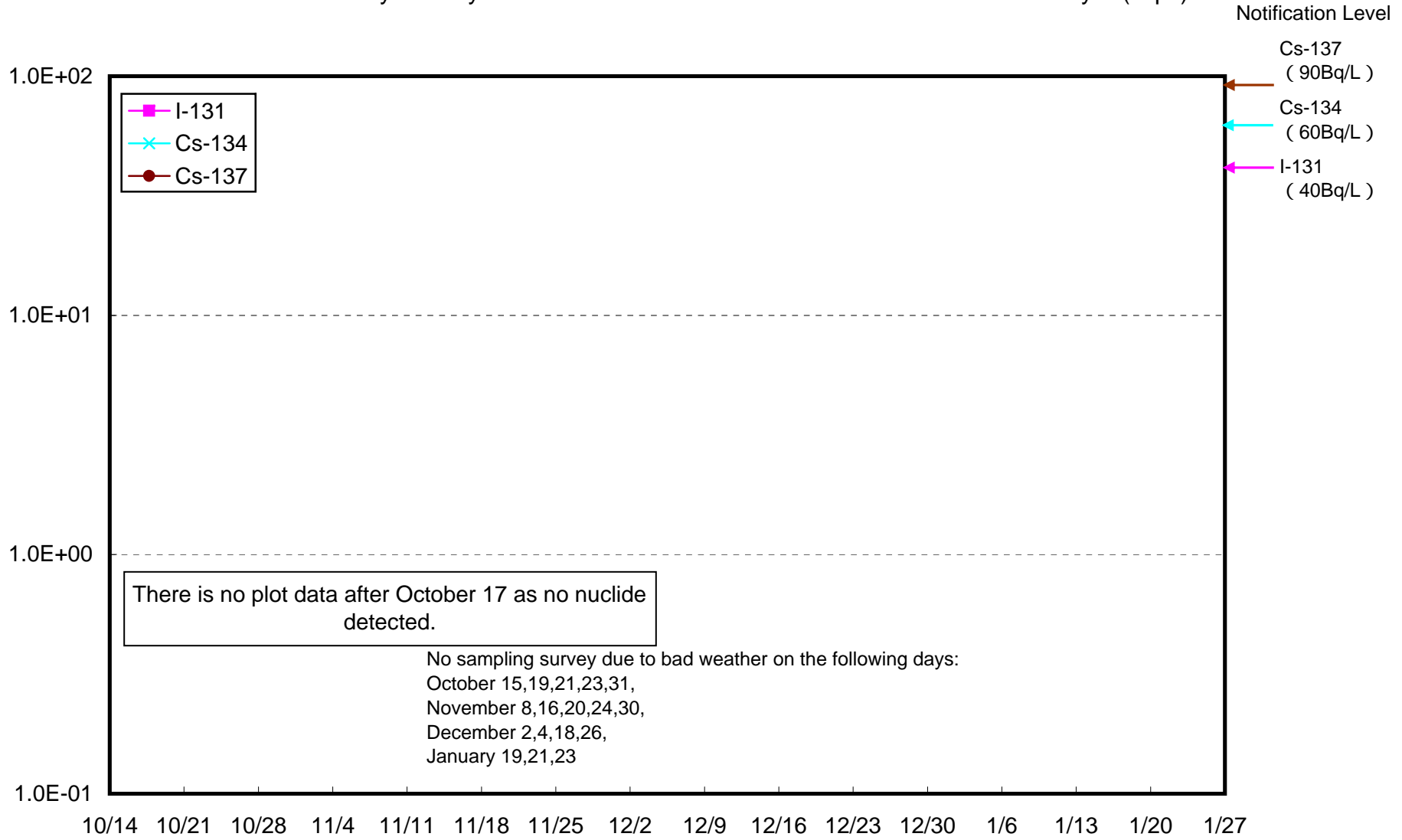
### Radioactivity Density of Seawater 3km Offshore of Odaka Ward Lower Layer (Bq/L)



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

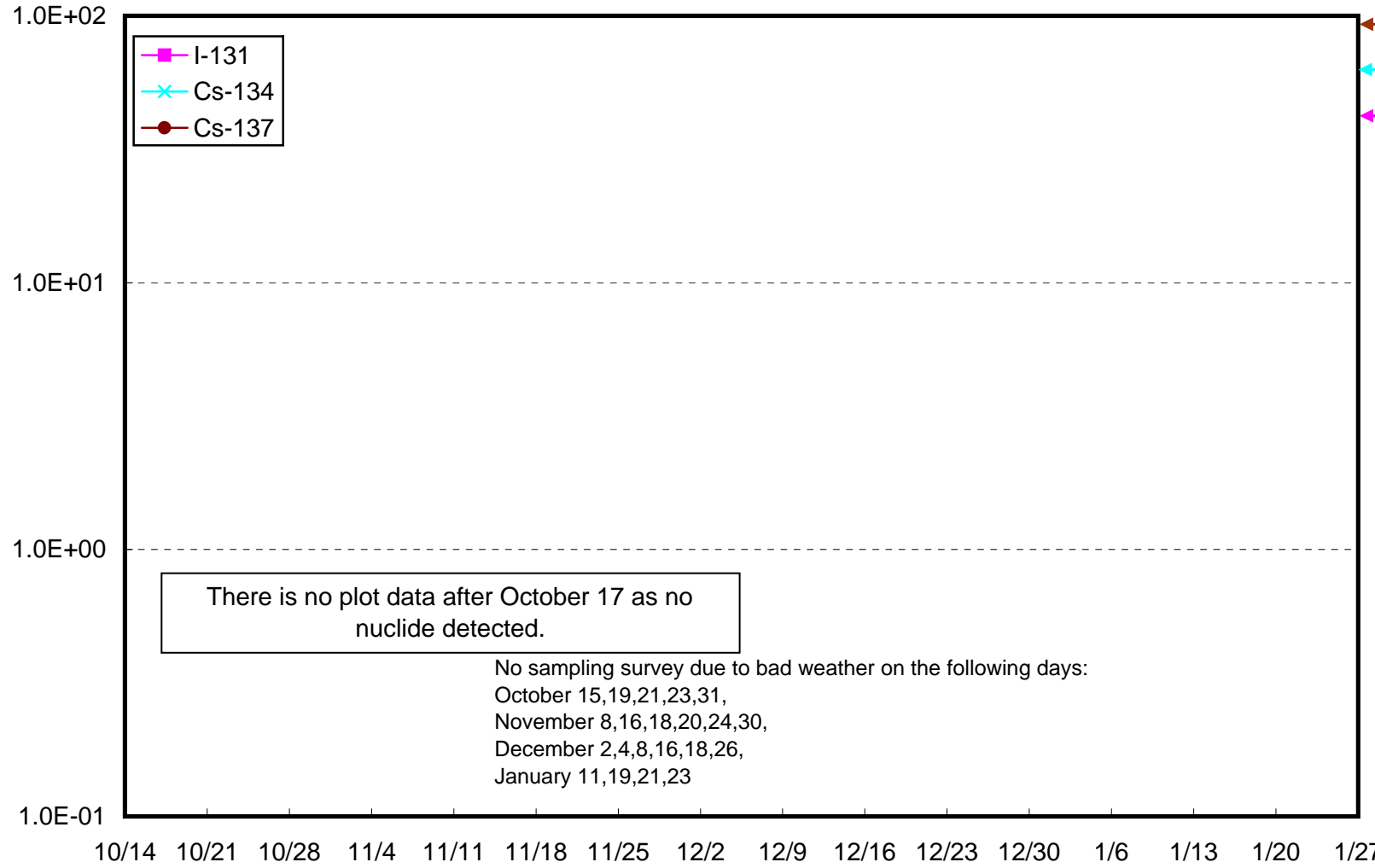


Radioactivity Density of Seawater 3km Offshore of Iwasawa Shore Lower Layer (Bq/L)

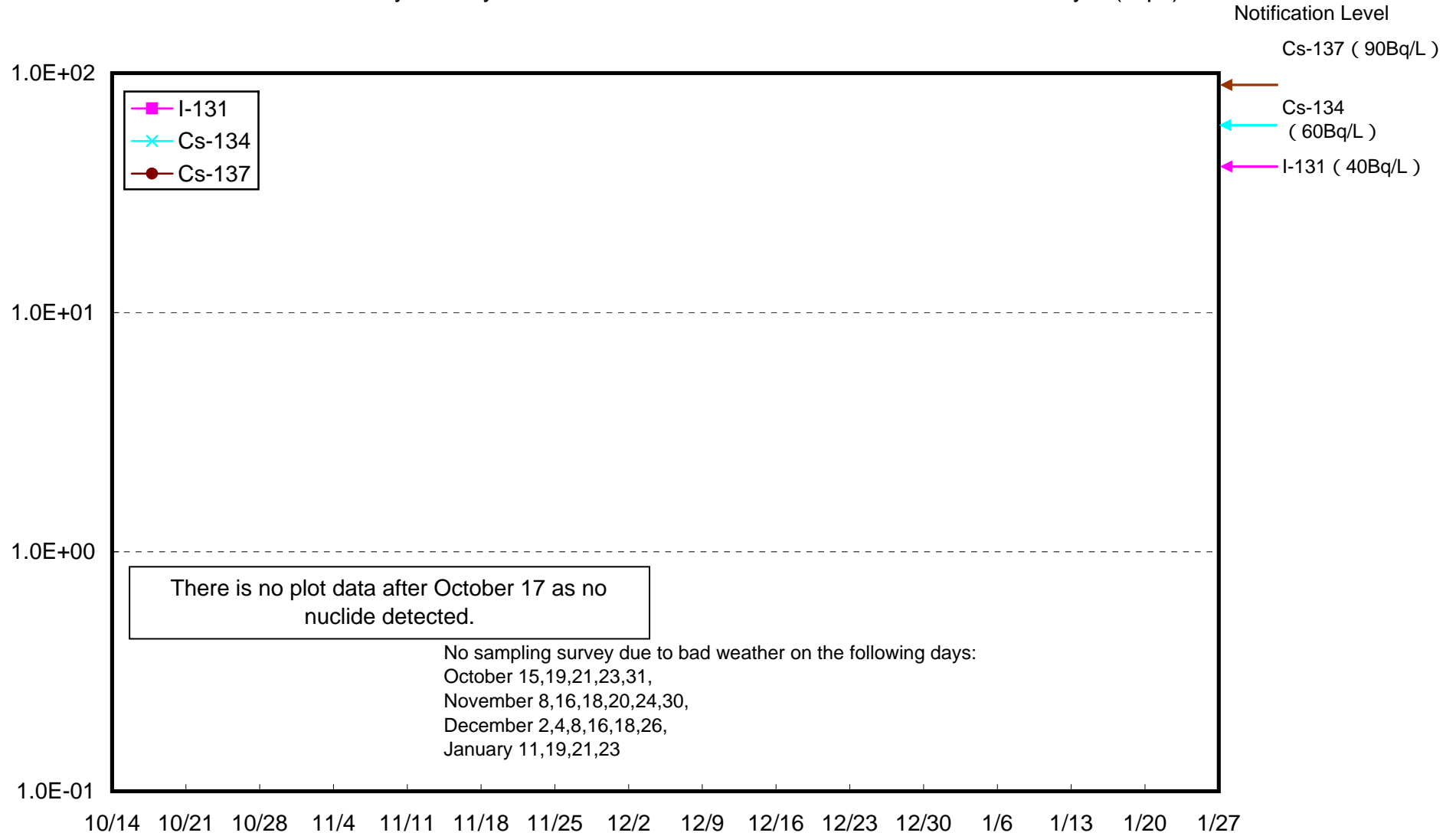


# Radioactivity Density of Seawater 8km Offshore of Odaka Ward Upper Layer (Bq/L)

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

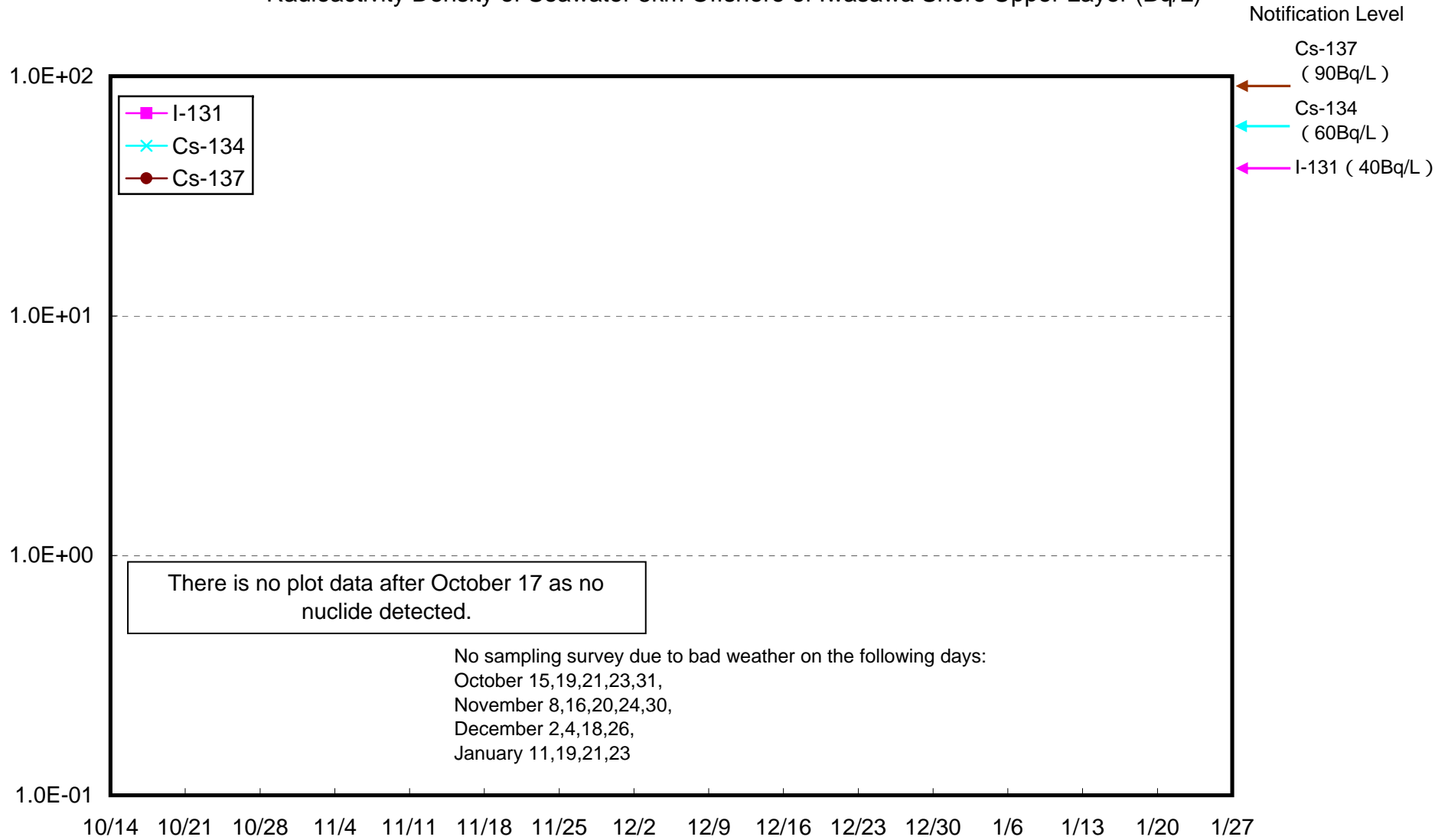


Radioactivity Density of Seawater 8km Offshore of Odaka Ward Lower Layer (Bq/L)





Radioactivity Density of Seawater 8km Offshore of Iwasawa Shore Upper Layer (Bq/L)



Radioactivity Density of Seawater 8km Offshore of Iwasawa Shore Lower Layer (Bq/L)

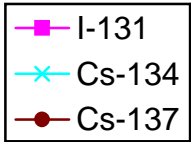
Notification Level

Cs-137  
( 90Bq/L )

Cs-134  
( 60Bq/L )

I-131 ( 40Bq/L )

1.0E+02



1.0E+01

1.0E+00

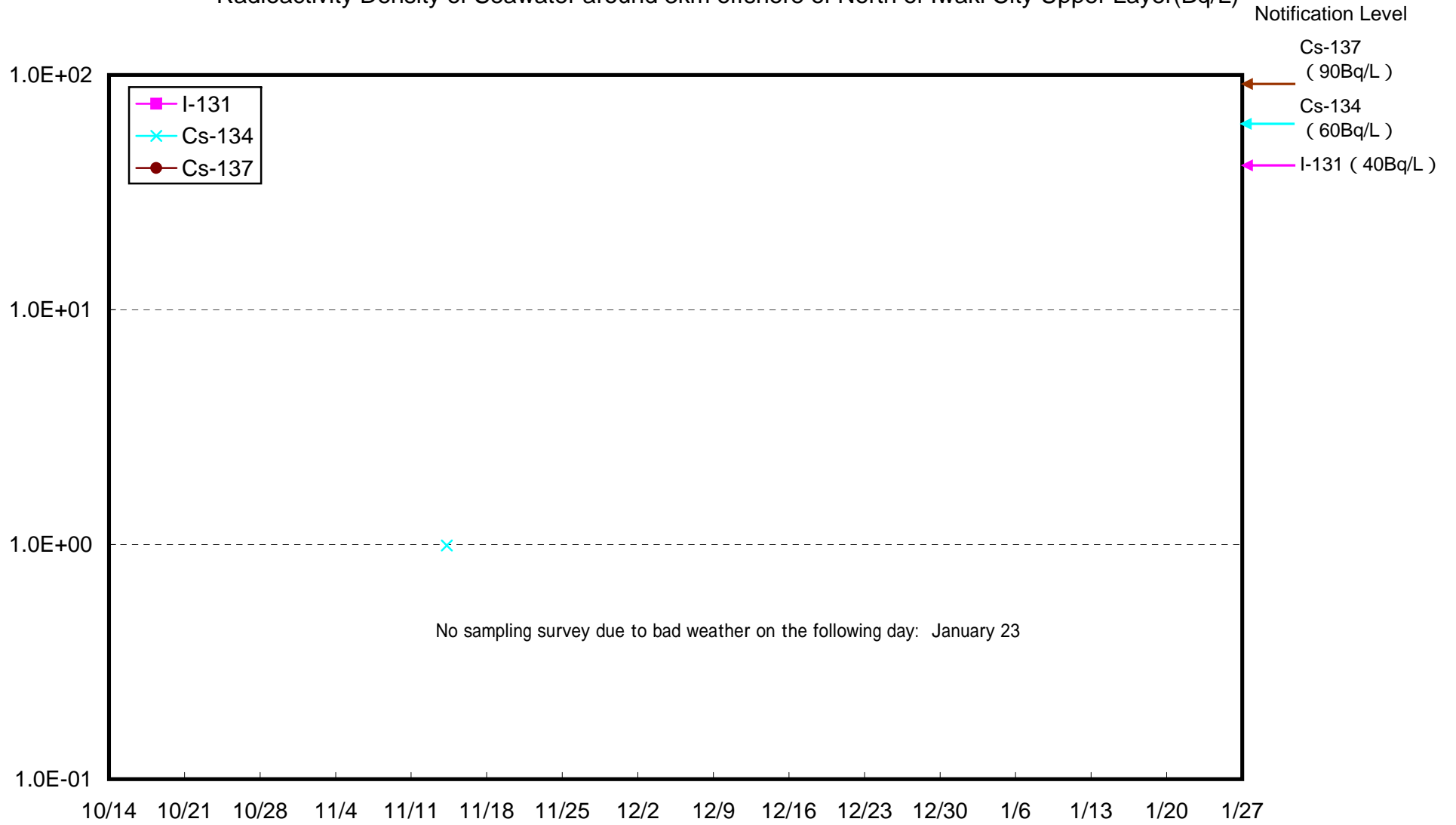
There is no plot data after October 17 as no nuclide detected.

No sampling survey due to bad weather on the following days:  
October 15,19,21,23,31,  
November 8,16,20,24,30,  
December 2,4,18,26,  
January 11,19,21,23

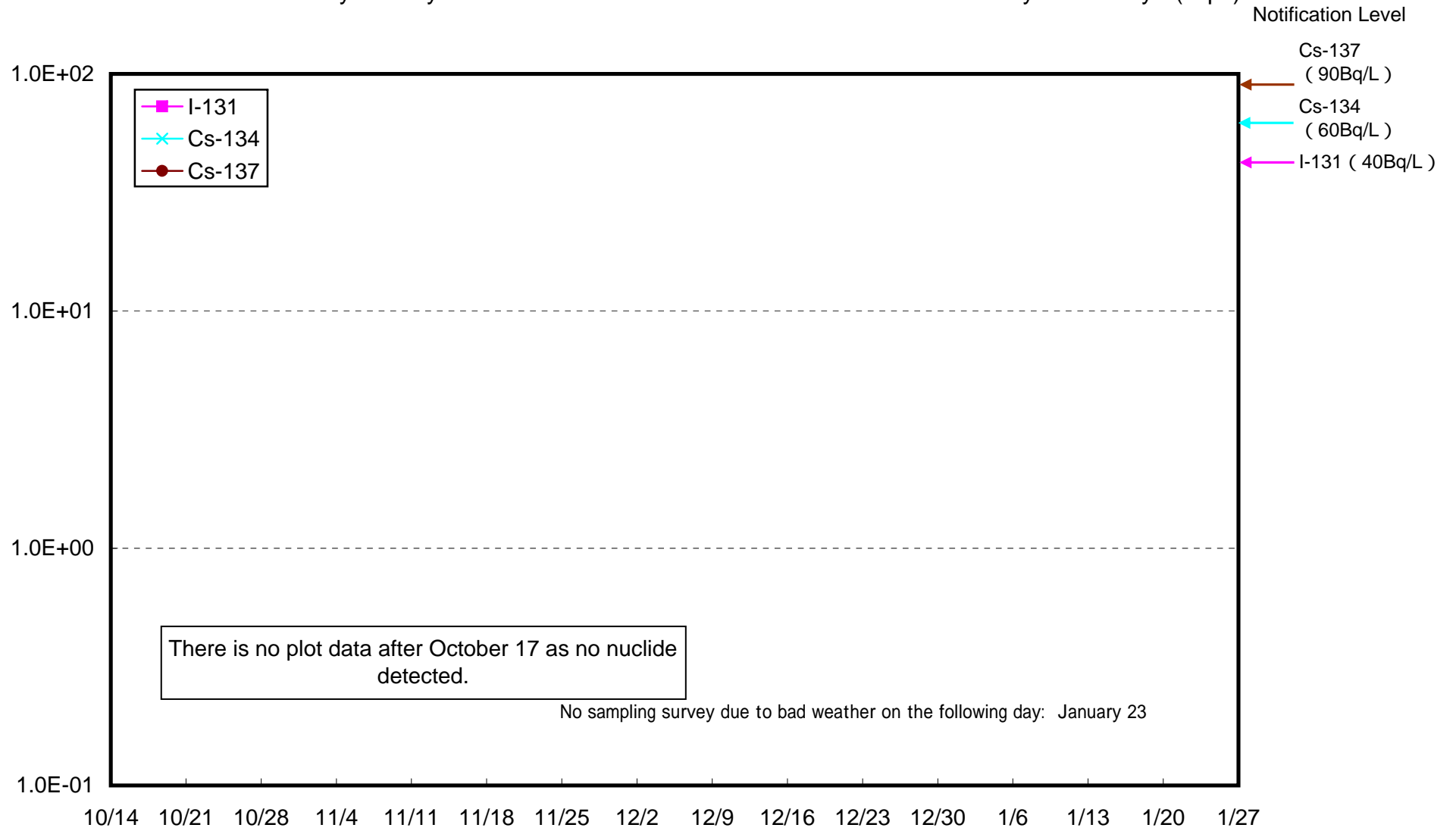
1.0E-01

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 1/20 1/27

Radioactivity Density of Seawater around 3km offshore of North of Iwaki City Upper Layer(Bq/L)



Radioactivity Density of Seawater around 3km offshore of North of Iwaki City Lower Layer(Bq/L)



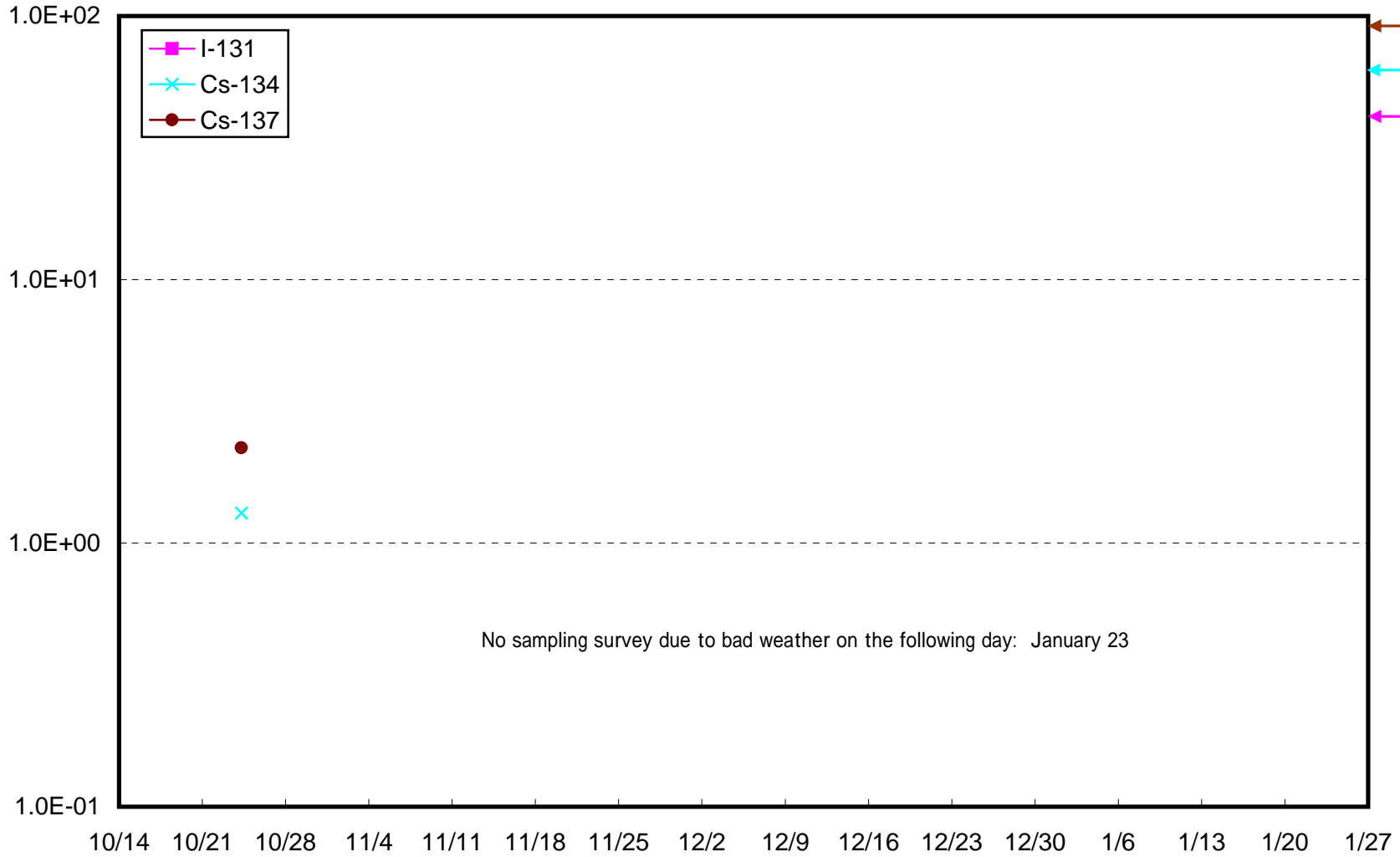
Radioactivity Density of Seawater around 3km offshore of Natsui River Upper Layer(Bq/L)

Notification Level

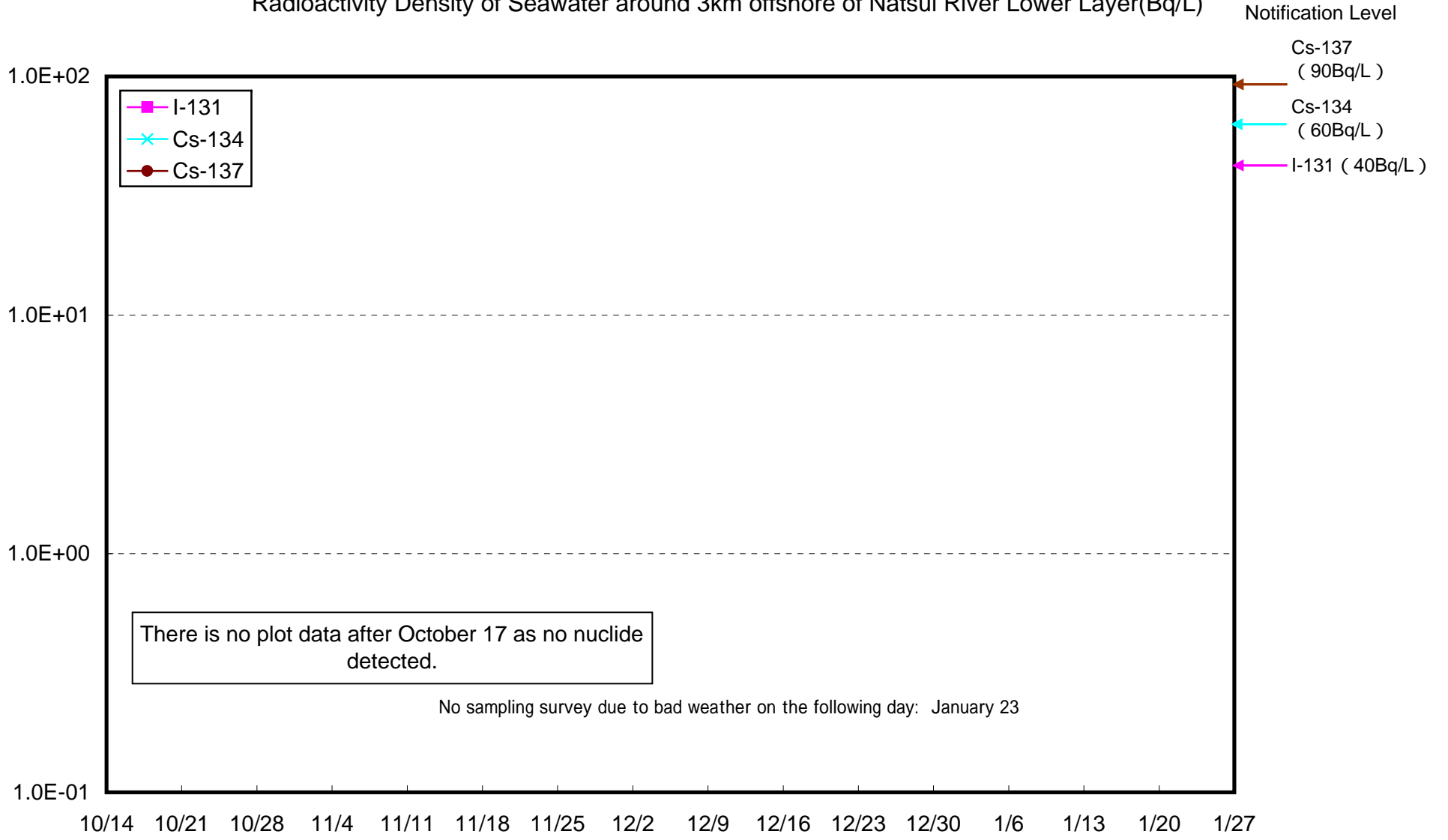
Cs-137  
( 90Bq/L )

Cs-134  
( 60Bq/L )

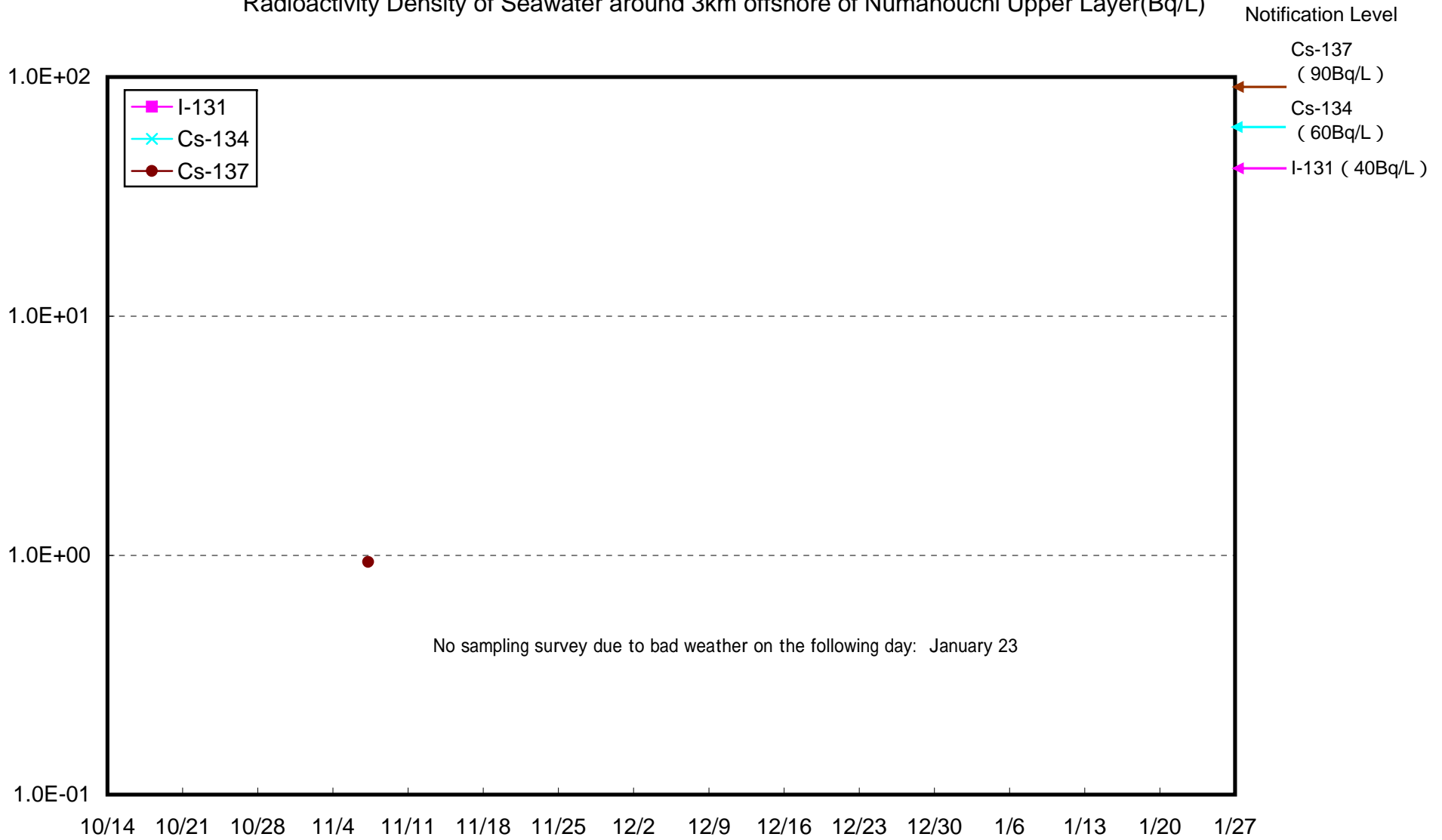
I-131 ( 40Bq/L )



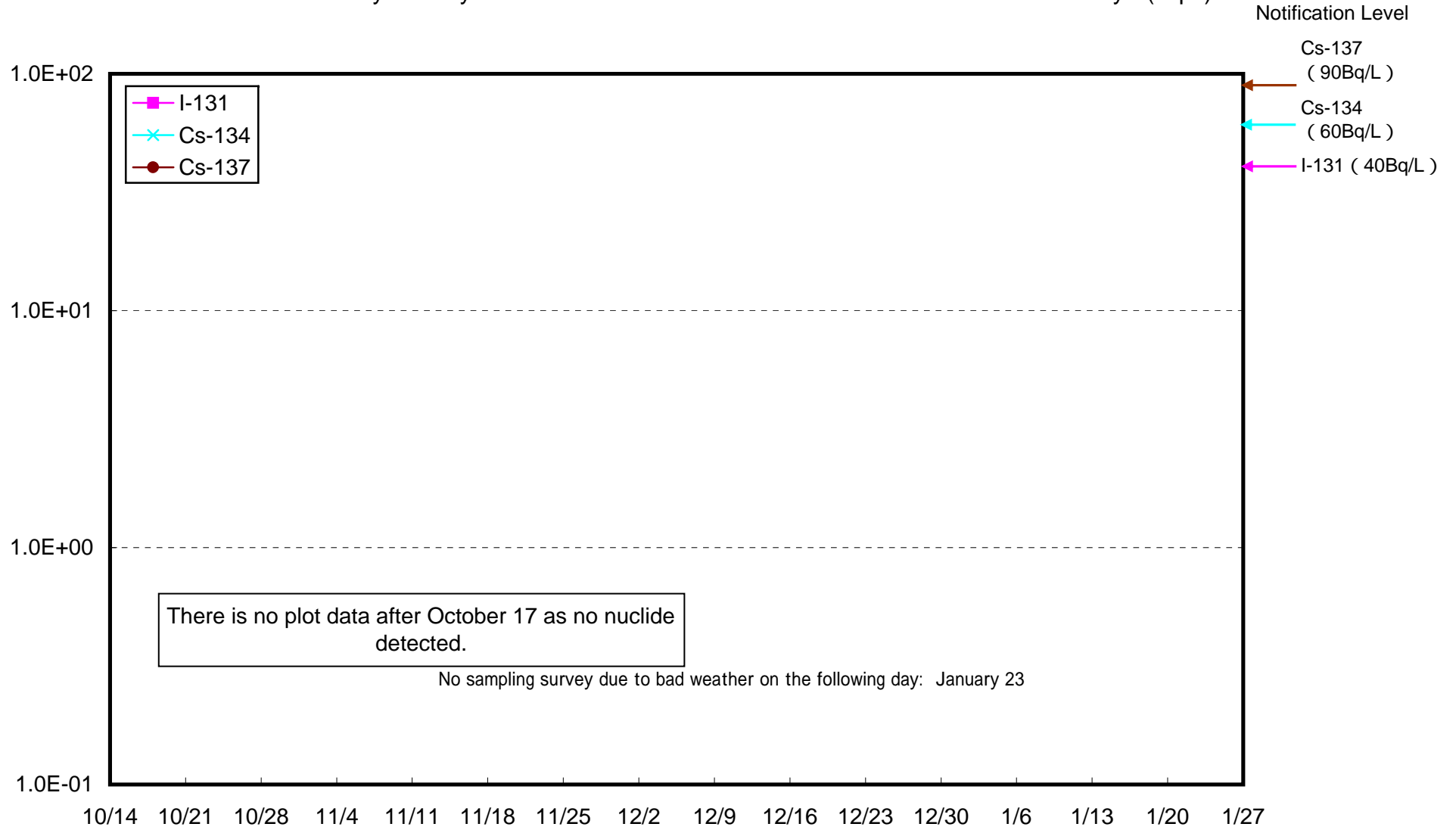
Radioactivity Density of Seawater around 3km offshore of Natsui River Lower Layer(Bq/L)



Radioactivity Density of Seawater around 3km offshore of Numanouchi Upper Layer(Bq/L)

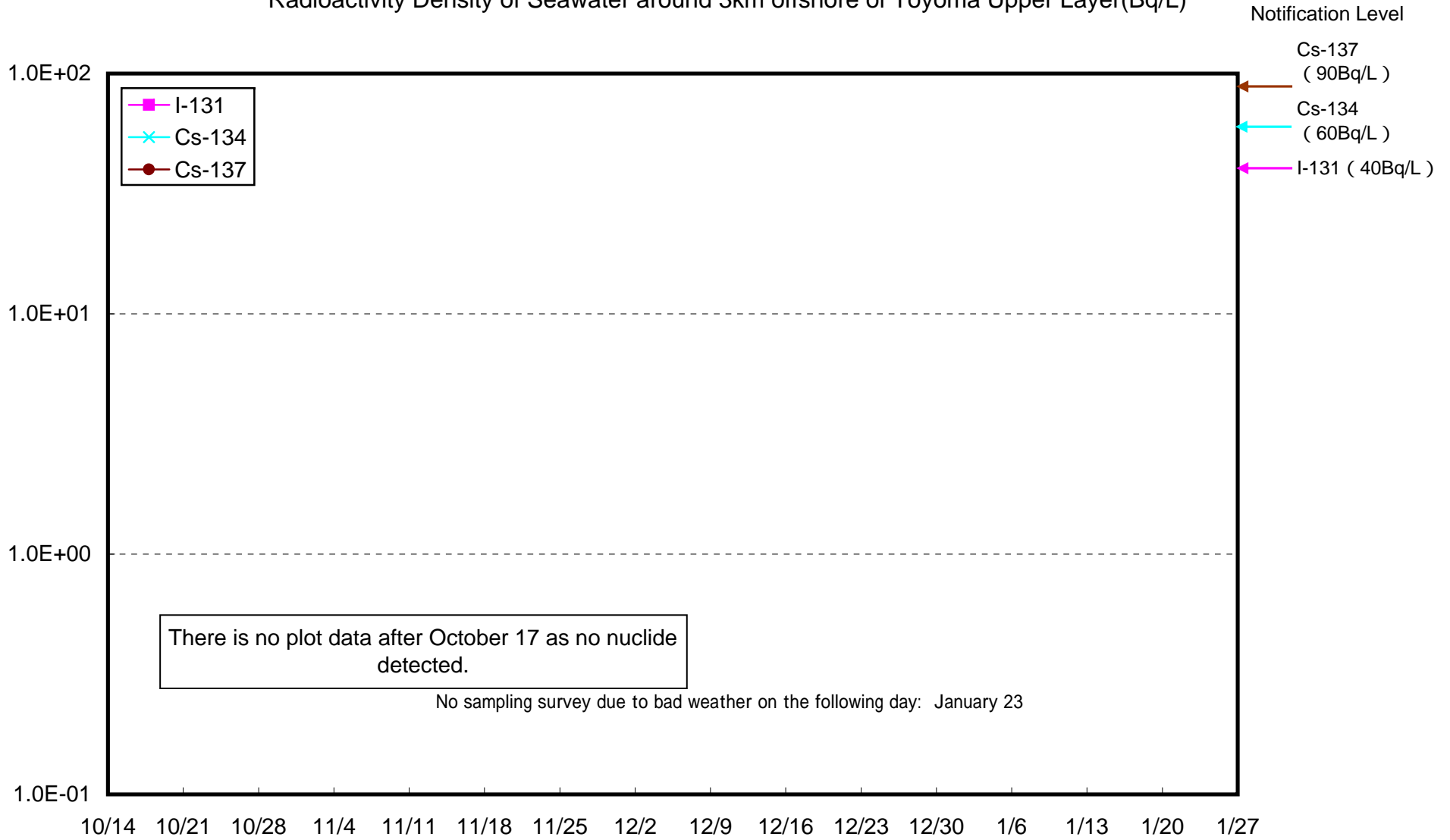


Radioactivity Density of Seawater around 3km offshore of Numanouchi Lower Layer(Bq/L)

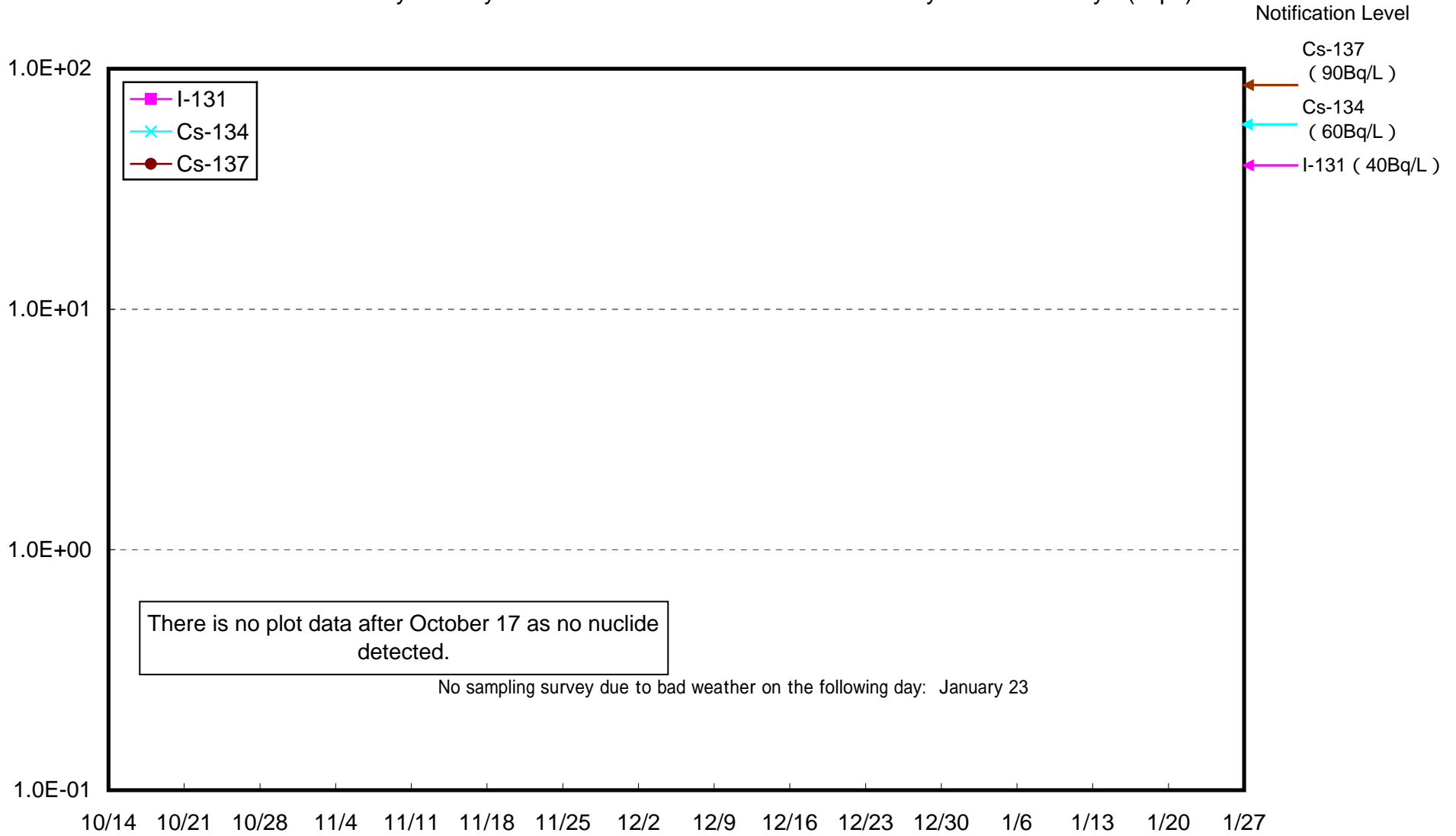




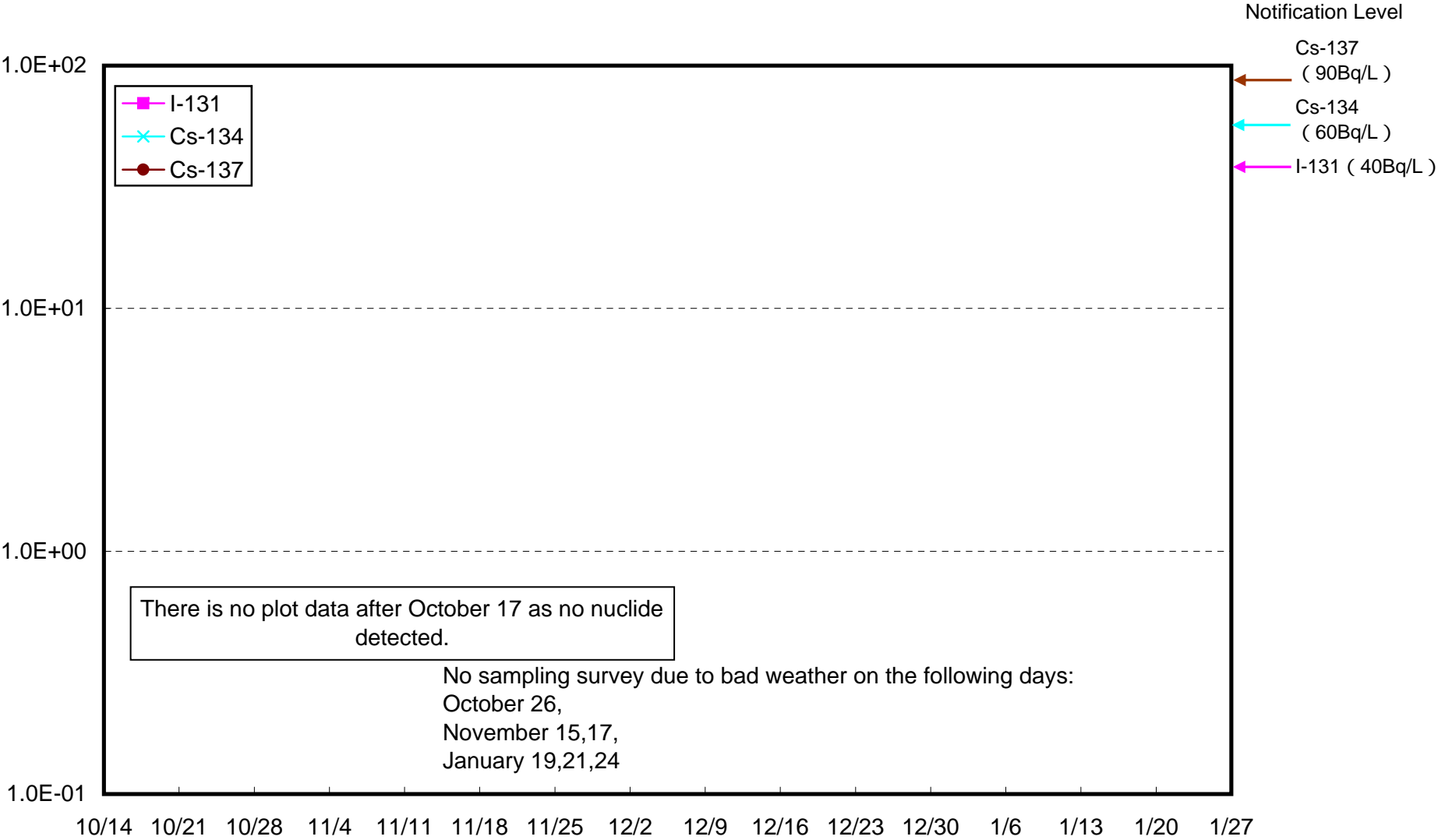
# Radioactivity Density of Seawater around 3km offshore of Toyoma Upper Layer(Bq/L)



# Radioactivity Density of Seawater around 3km offshore of Toyoma Lower Layer(Bq/L)



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



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

