

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

Reference

(Data summarized on December 31)

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	Dec 30, 2011 08:45 am		Dec 30, 2011 08:25 am		Dec 30, 2011 07:55 am		Dec 30, 2011 07:35 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)	2.8	0.05	1.8	0.03	ND	-	ND	-	60
Cs-137 (about 30 years)	3.2	0.04	1.6	0.02	1.1	0.01	0.98	0.01	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. 0.69Bq/L, Cs-134: approx. 0.95Bq/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 December 31)

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)						
Time of Sampling	N/A		N/A		Dec 29, 2011 09:00 am	Dec 29, 2011 09:00 am		Dec 29, 2011 08:40 am	Dec 29, 2011 08:40 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	-	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)						
Time of Sampling	Dec 29, 2011 08:10 am		Dec 29, 2011 08:10 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/cm<sup>3</sup> to Bq/L.

\* Data of other nuclides are under evaluation.

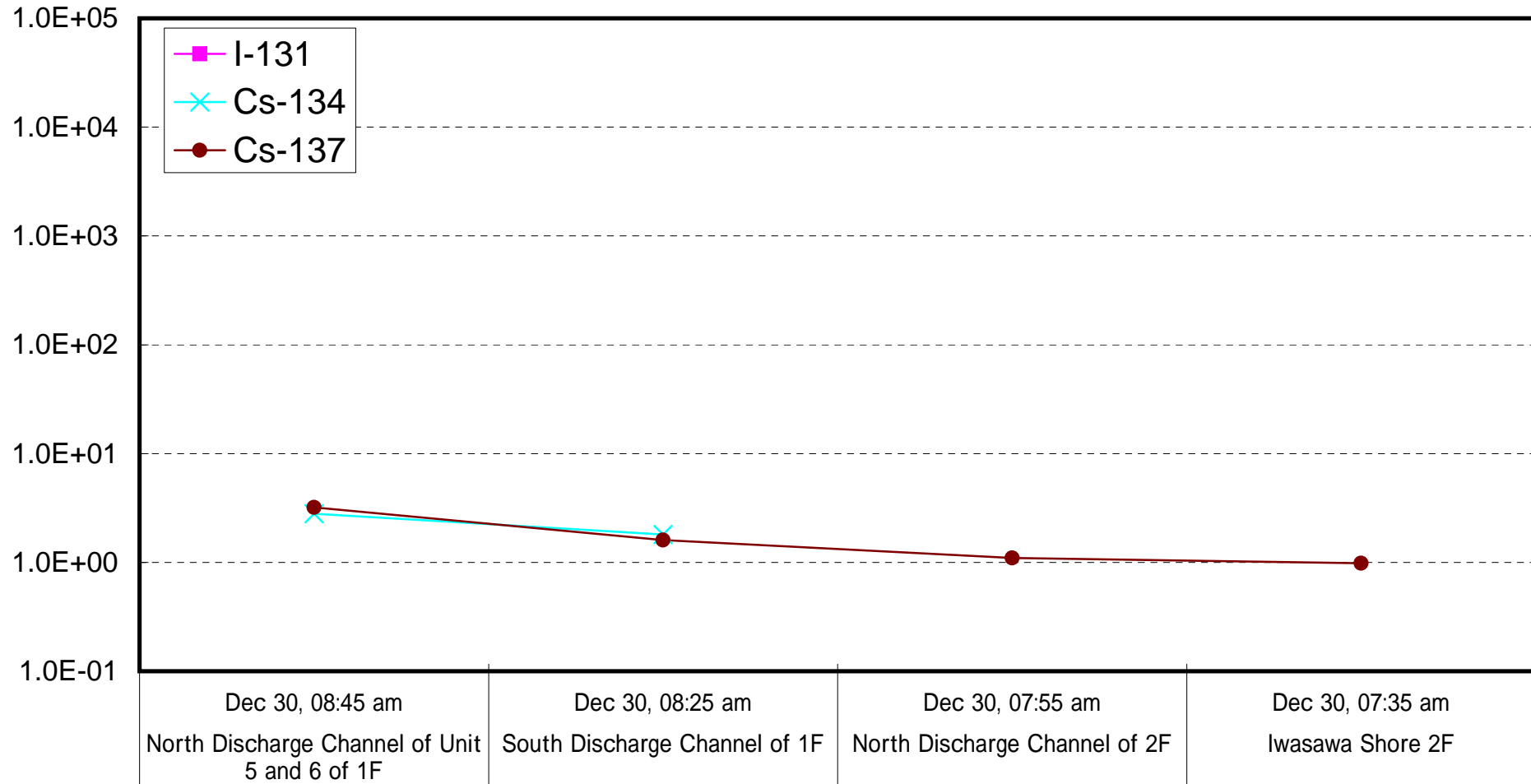
\* In the case that two or more kinds of nuclides exist, sum of each scaling factor to the density limit is compared with 1.

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

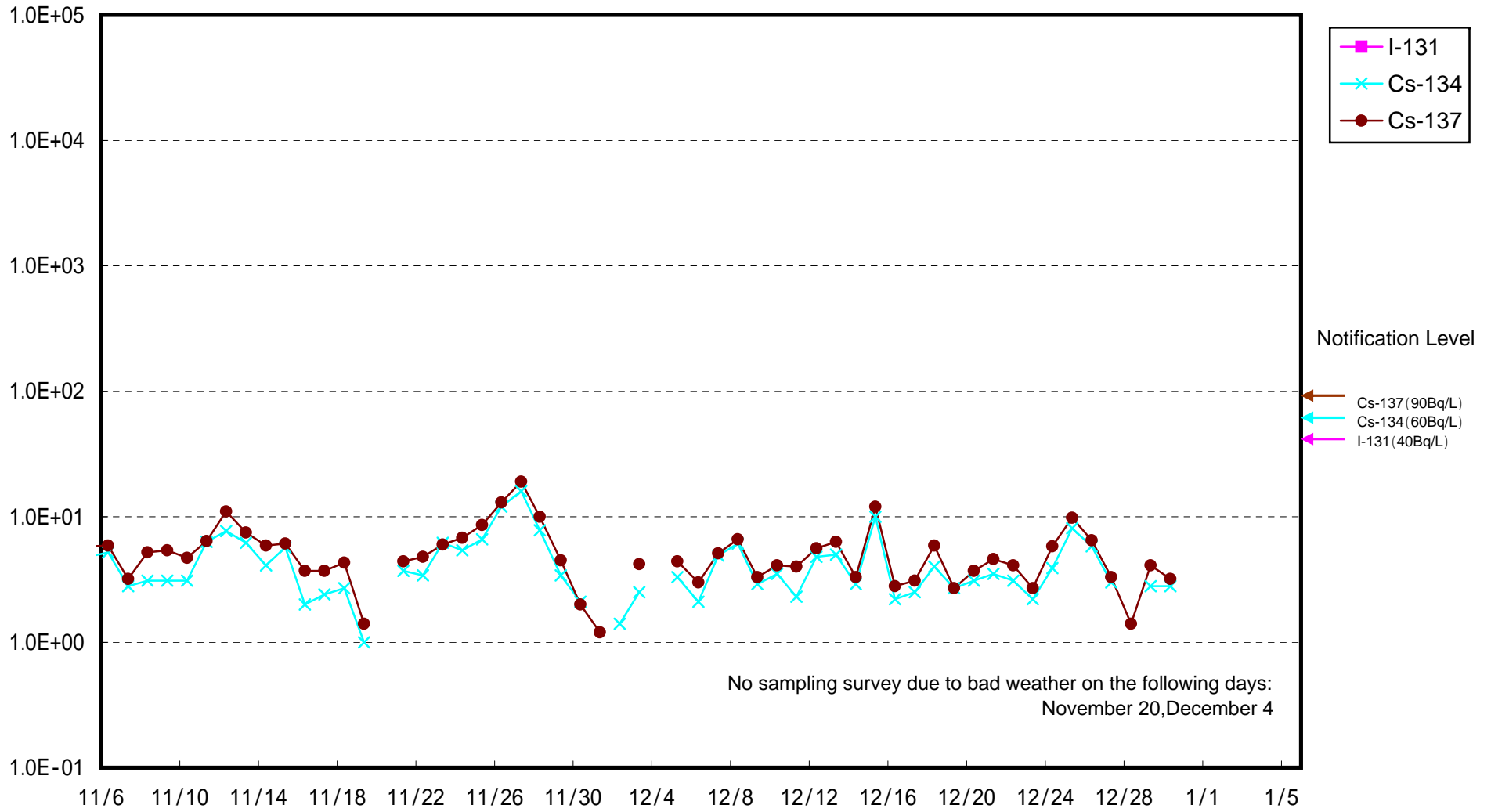
I-131: approx. 0.63Bq/L, Cs-134: approx. 0.87Bq/L, Cs-137: approx. 1.0Bq/L

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

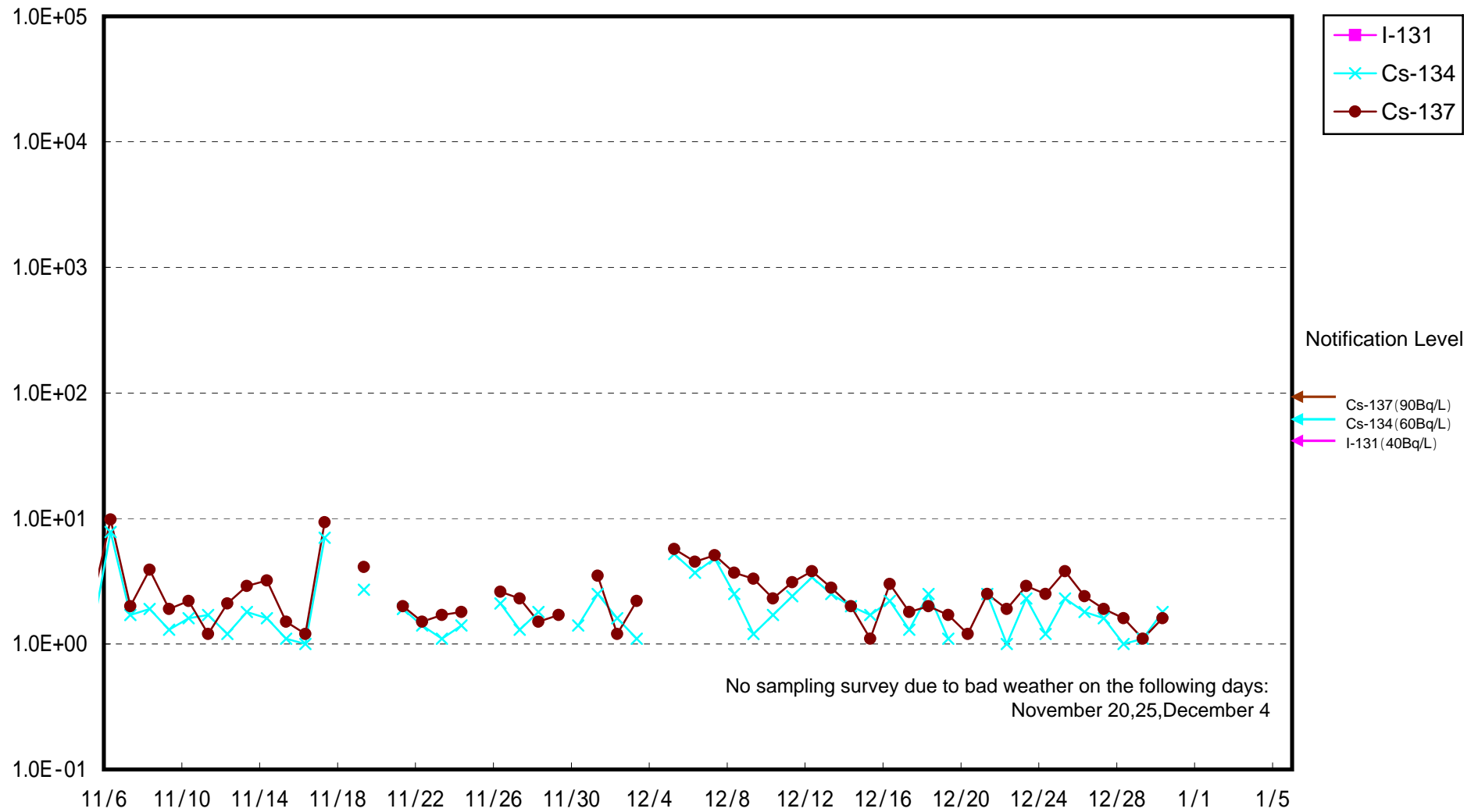
# Radioactivity Density of Seawater (Bq/L)



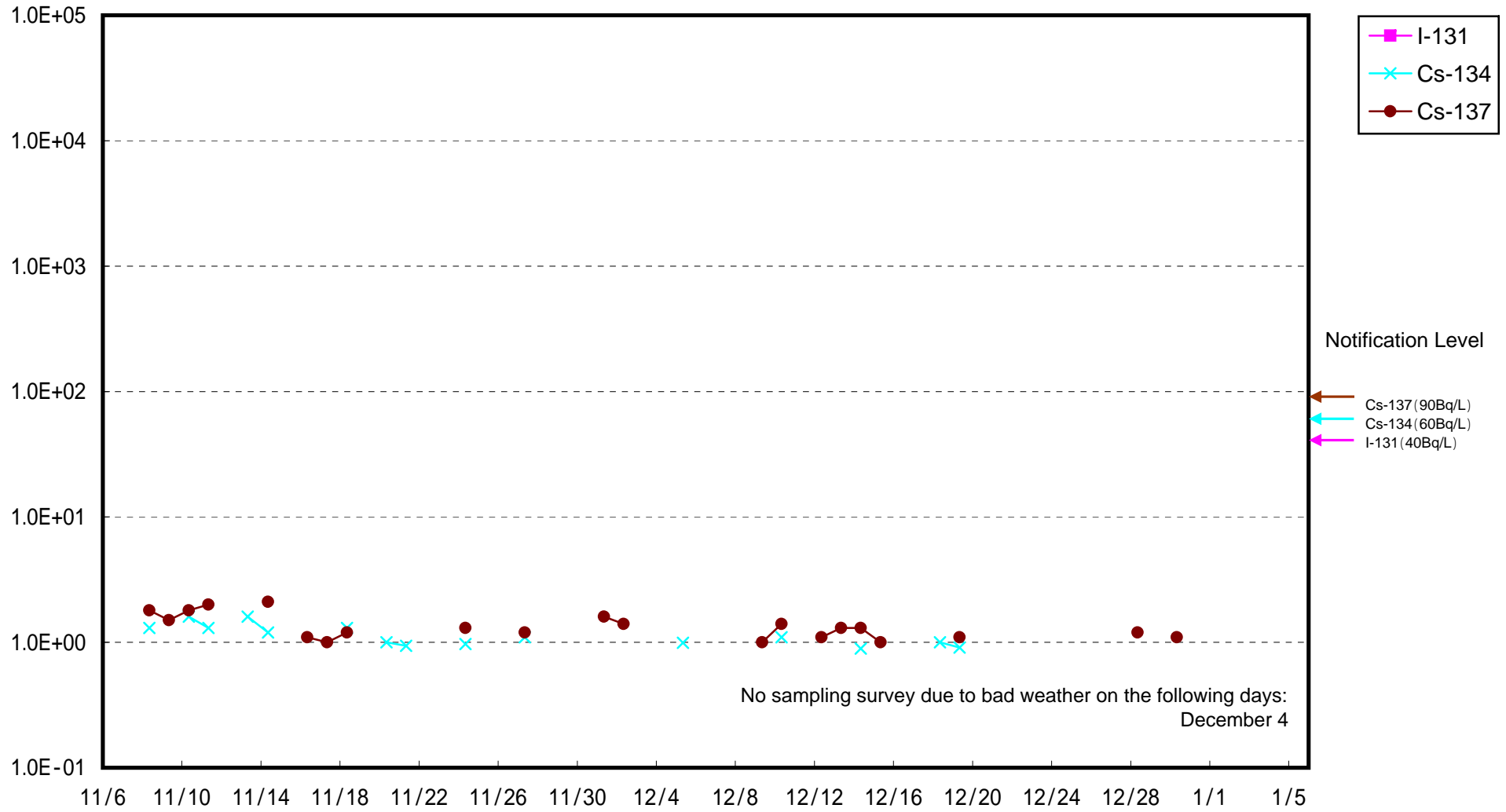
Radioactivity Density of Seawater at North of 1F5-6 Discharge Channel (Bq/L)



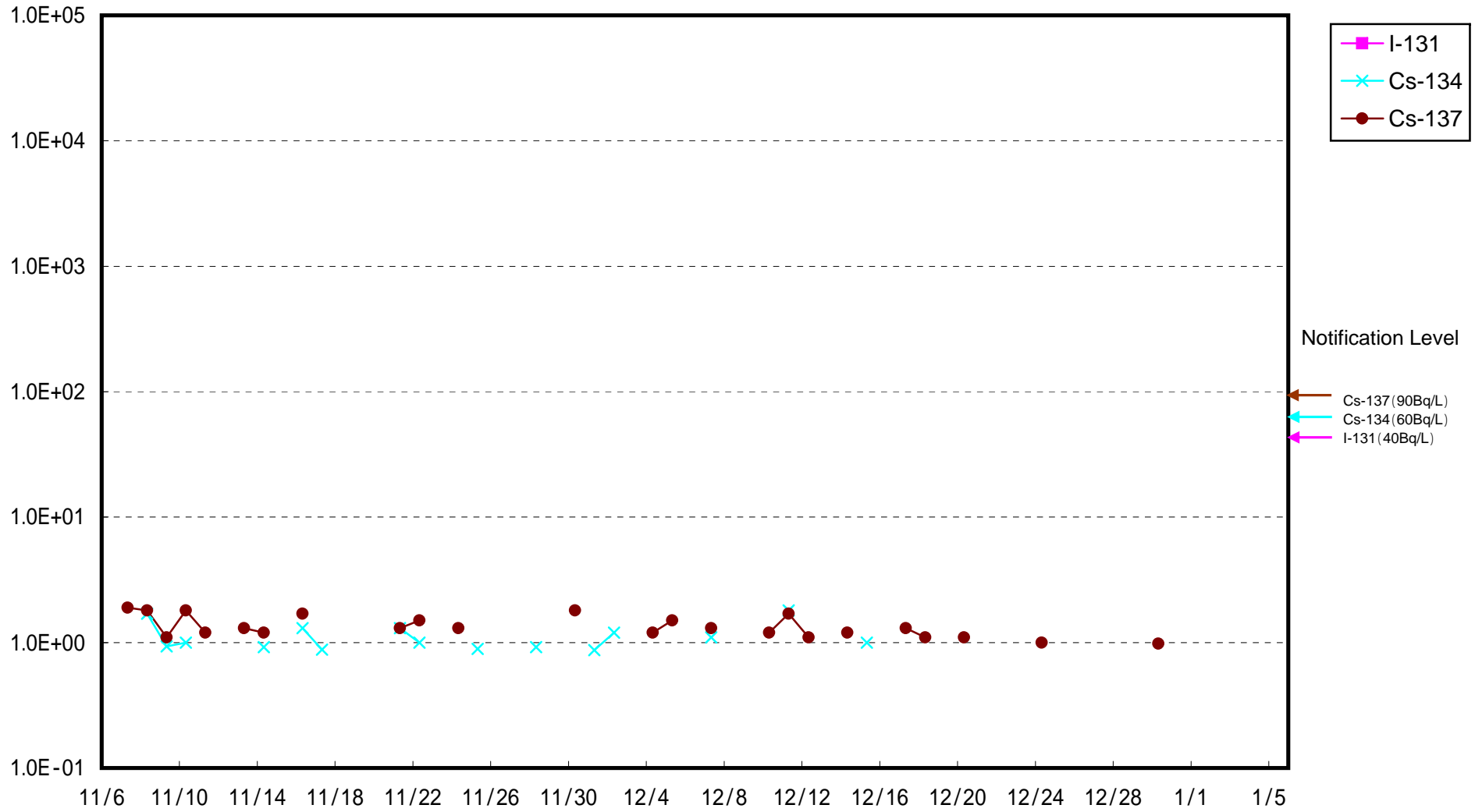
Radioactivity Density of Seawater at South Discharge Channel of 1F (Bq/L)



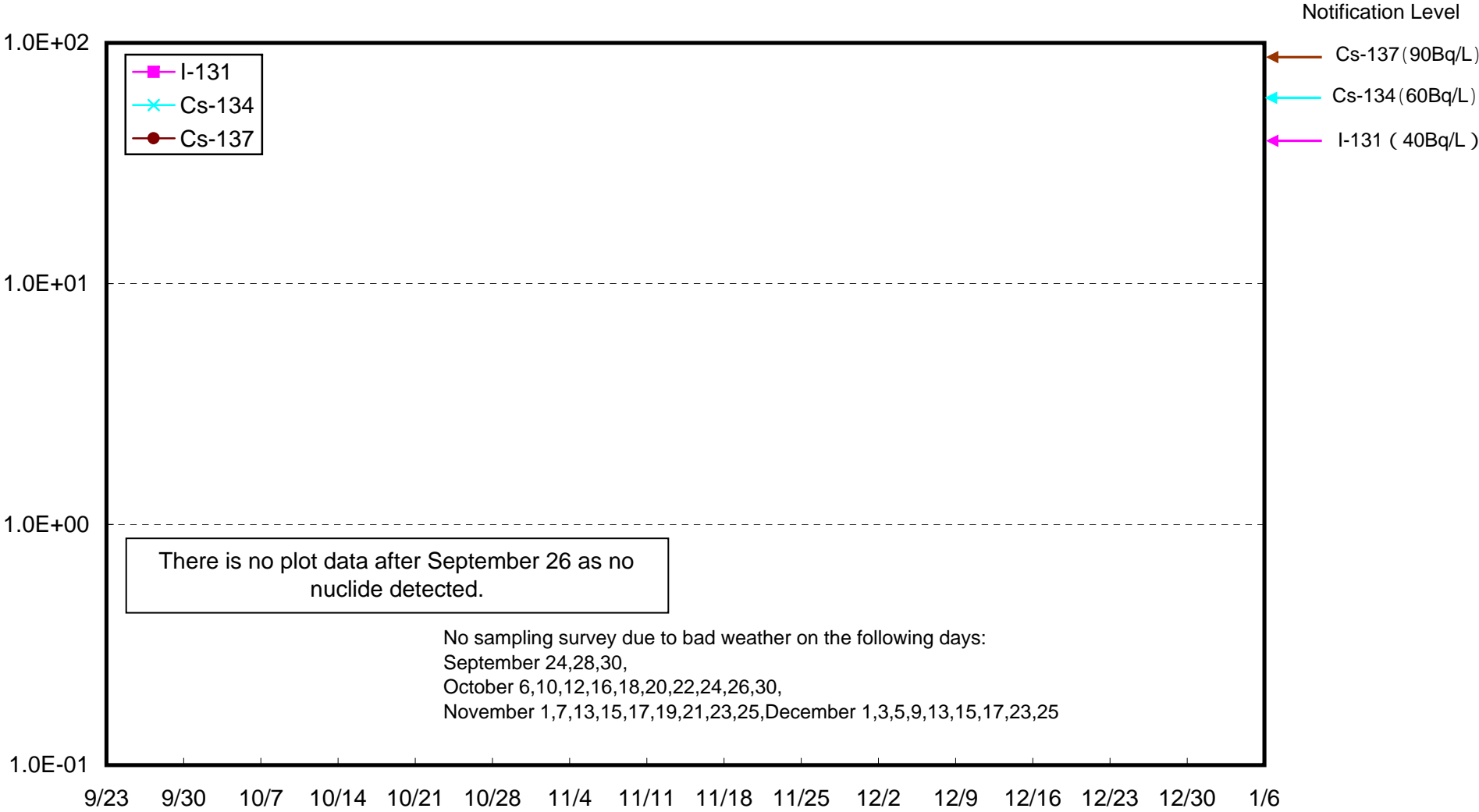
Radioactivity Density of Seawater at North Discharge Channel of 2F (Bq/L)



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

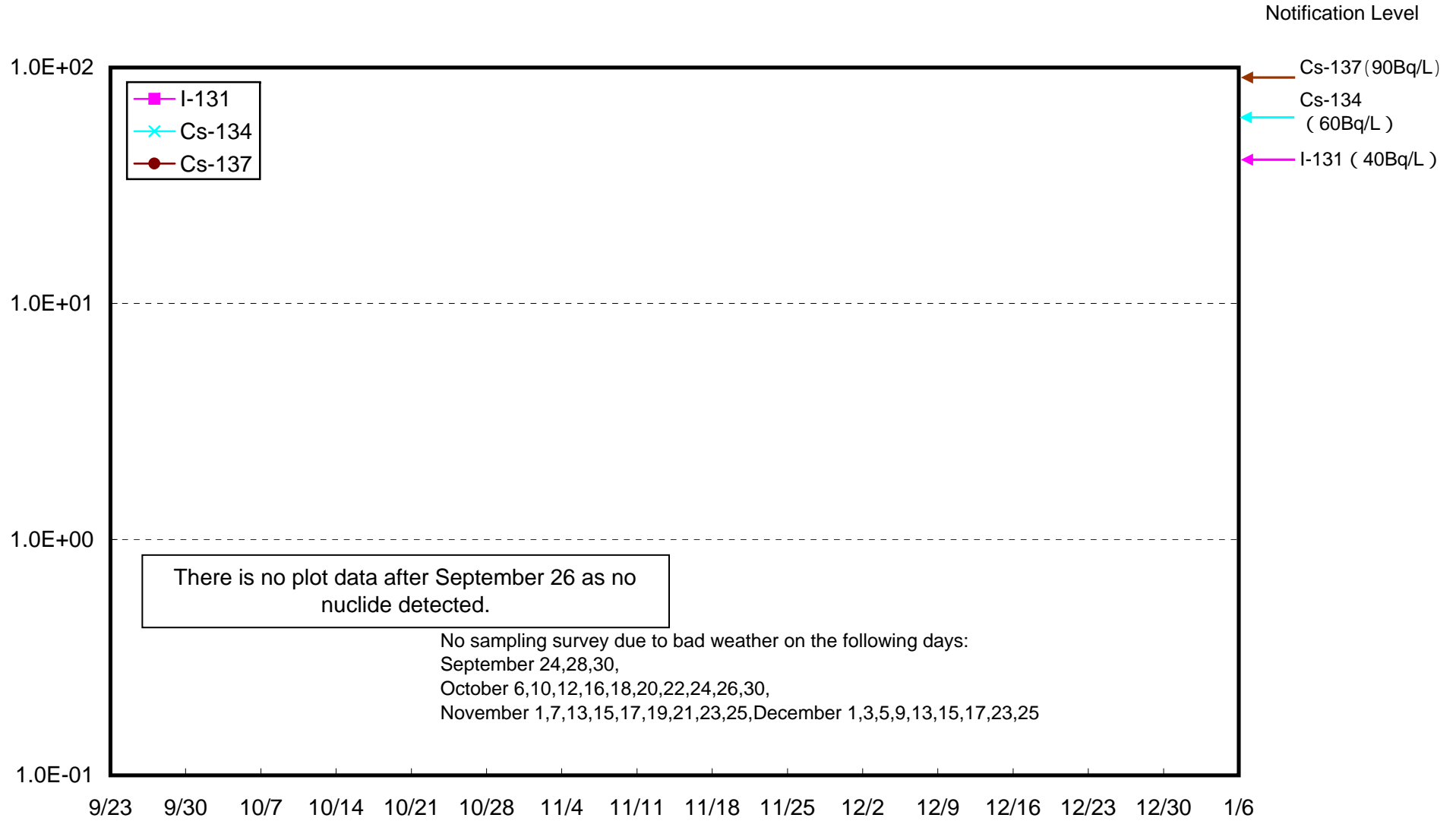


Radioactivity Density of Seawater (upper layer) around approx. 15 km offshore of Ukedo river (Bq/L)

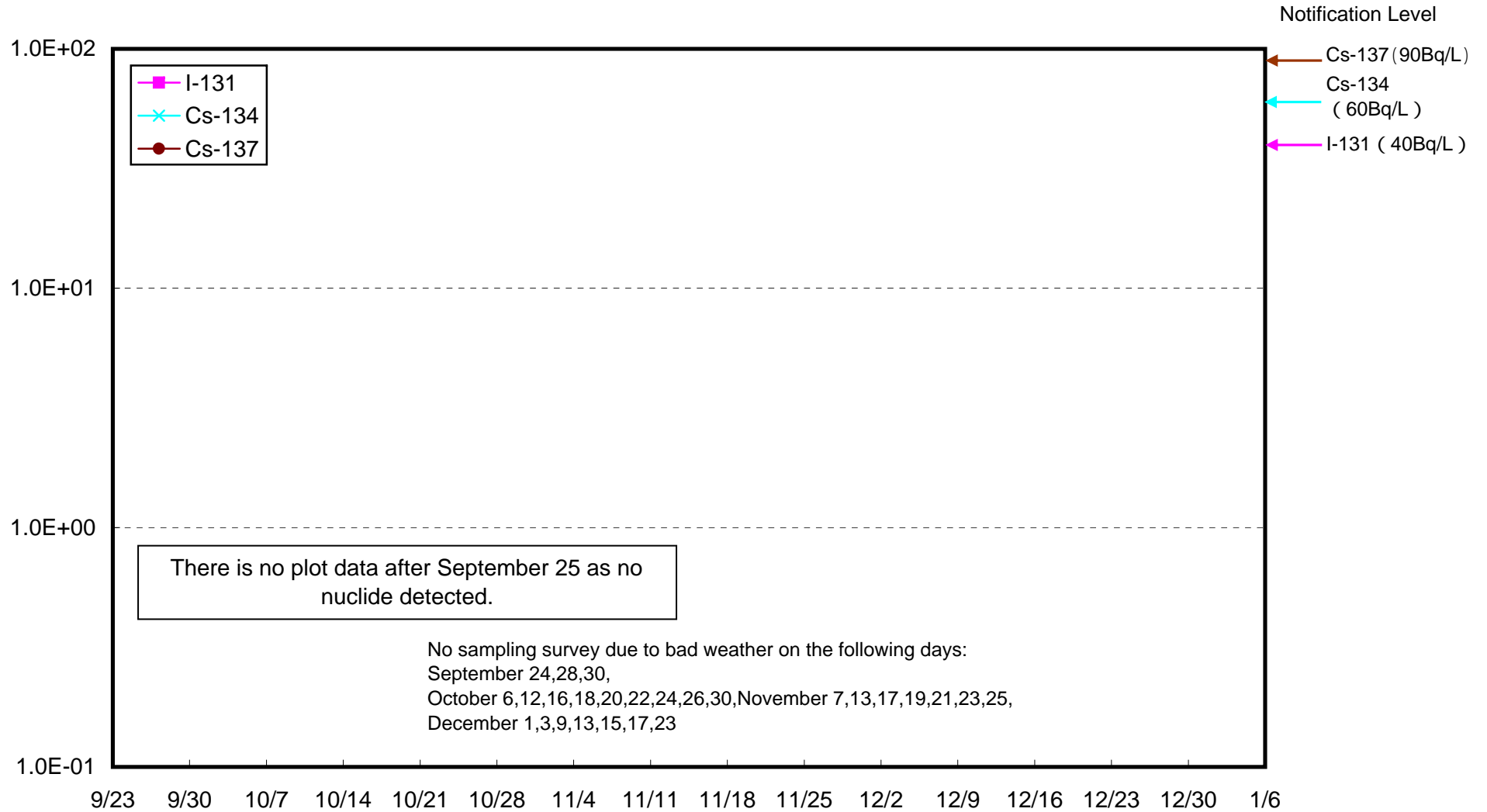




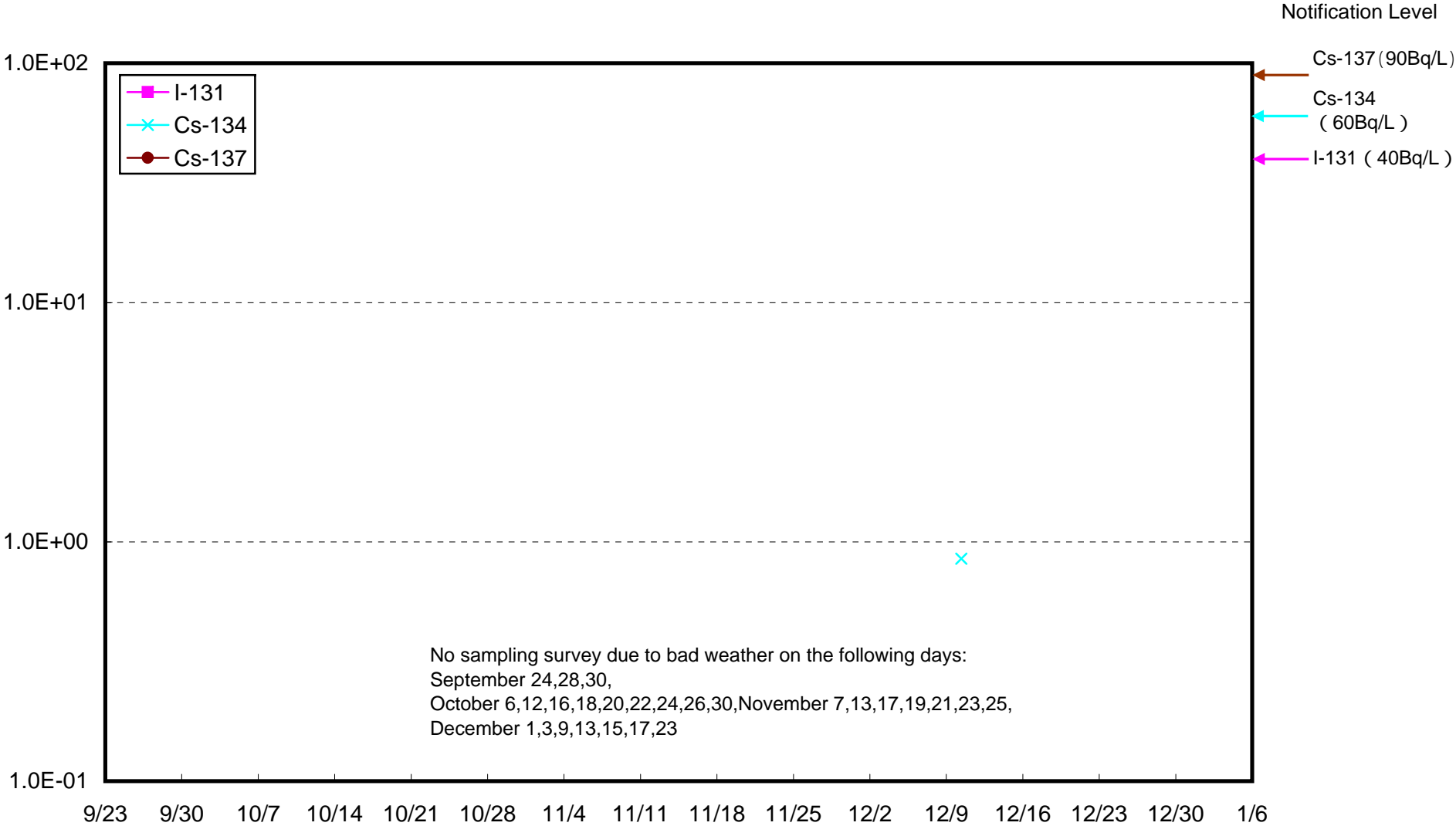
Radioactivity Density of Seawater (lower layer) around approx. 15 km offshore of Ukedo river (Bq/L)



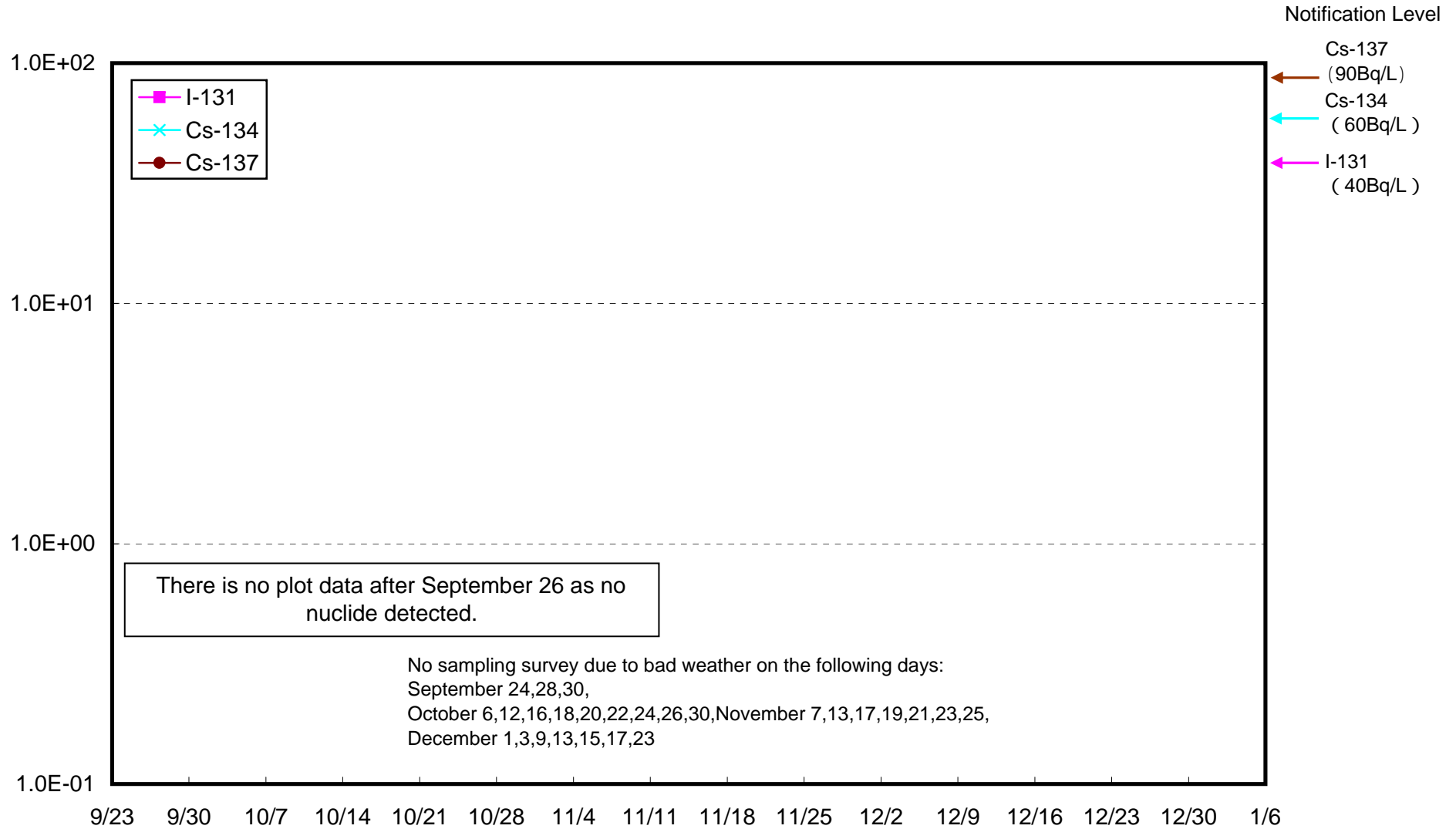
Radioactivity Density of Seawater (upper layer) around approx. 15 km offshore of Fukushima Daiichi NPS (Bq/L)



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



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)

