

Nuclide Analysis Results of Radioactive Materials in the Air
at the Sites of Fukushima Nuclear Power Stations <1/2>

Reference

(Data summarized on January 13)

Place of Sampling	West Gate of Fukushima Daiichi NPS		MP-1 of Fukushima Daini (Reference)		/		Density limit by the announcement of Reactor Regulation (Bq/cm ³) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
Time of Sampling	12-Jan-12 7:00 ~ 12:00		12-Jan-12 9:26 ~ 9:36		/		
Detected Nuclides (Half-life)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	
I-131 (about 8 days)	ND	-	ND	-	/		1E-03
Cs-134 (about 2 years)	ND	-	ND	-	/		2E-03
Cs-137 (about 30 years)	6.5E-07	0.00	ND	-	/		3E-03

* The value of radioactivity density is the sum of the value of volatile nuclide's density and the value of particulate nuclide's density.

O.OE - O means O.O x 10-O

Data of other nuclides are under examination.

* 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.

Detection limits of 3 nuclides on the West Gate of Fukushima Daiichi are as follows:

Volatile: I-131: approx. 1E-7Bq/cm³, Cs-134: approx. 3E-7Bq/cm³ Particulate: I-131: approx. 6E-8Bq/cm³, Cs-134: approx. 2E-7Bq/cm³

Detection limits of 3 nuclides on MP-1 of Fukushima Daini are as follows:

Volatile: I-131: approx. 2E-6Bq/cm³, Cs-134: approx. 4E-6Bq/cm³, Cs-137: approx. 3E-6Bq/cm³ Particulate: I-131: approx. 9E-7Bq/cm³, Cs-134: approx. 1E-6Bq/cm³, Cs-137: approx. 2E-6Bq/cm³

Nuclide Analysis Results of Radioactive Materials in the Air
at the Sites of Fukushima Nuclear Power Stations <2/2>

Reference

(Data summarized on January 13)

Place of Sampling	Fukushima Daiichi Unit 1 North Side Slope	Fukushima Daiichi Unit 1 and 2 West Side Slope	Fukushima Daiichi Unit 3 and 4 West Side Slope	Density limit by the announcement of Reactor Regulation (Bq/cm ³) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)			
Time of Sampling	12-Jan-12 10:04 ~ 15:04	12-Jan-12 9:44 ~ 14:44	12-Jan-12 9:47 ~ 14:47				
Detected Nuclides (Half-life)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	density of sample (Bq/cm ³)	Scaling Factor (/)	
I-131 (about 8 days)	ND	-	ND	-	ND	-	1E-03
Cs-134 (about 2 years)	ND	-	ND	-	2.4E-06	0.00	2E-03
Cs-137 (about 30 years)	7.6E-06	0.00	ND	-	ND	-	3E-03

* The value of radioactivity density is the sum of the value of volatile nuclide's density and the value of particulate nuclide's density.

O.OE - O means O.O x 10-O

Data of other nuclides are under examination.

* 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.

The followings show the detection limits. Volatile: I-131: approx. 2E-6Bq/cm³, Cs-134: approx. 4E-6Bq/cm³, Cs-137: approx. 5E-6Bq/cm³

Particulate: I-131: approx. 1E-6Bq/cm³, Cs-134: approx. 2E-6Bq/cm³, Cs-137: approx. 3E-6Bq/cm³

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 the Air
at the seaside of the sites of Fukushima Nuclear Power Stations

Reference

(Data summarized on January 13)

Place of Sampling	Fukushima Daiichi Unit 1 -4 Sea Side						Density limit by the announcement of Reactor Regulation (Bq/cm3) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
Time of Sampling	12-Jan-12 9:58 ~ 14:58						
Detected Nuclides (Half-life)	density of sample (Bq/cm3)	Scaling Factor (/)	density of sample (Bq/cm3)	Scaling Factor (/)	density of sample (Bq/cm3)	Scaling Factor (/)	
I-131 (about 8 days)	ND	-					
Cs-134 (about 2 years)	4.7E-07	0.00					2E-03
Cs-137 (about 30 years)	6.6E-07	0.00					3E-03

* The value of radioactivity density is the sum of the value of volatile nuclide's density and the value of particulate nuclide's density.

O.OE - O means O.O x 10-O

Data of other nuclides are under examination.

* 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.

The followings show the detection limits. Volatile: I-131: approx. 1E-7Bq/cm3, Cs-134: approx. 4E-7Bq/cm3, Cs-137: approx. 5E-7Bq/cm3

Particulate: I-131: approx. 1E-7Bq/cm3

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

Result of the Pu analysis in the atmosphere at Fukushima Daiichi Nuclear Power Station

1. Sampling location: West gate, Fukushima Daiichi NPS
2. Institution conducting the analysis : Japan Chemical Analysis Center
3. Result of the analysis :

(Unit : Bq/cm³)

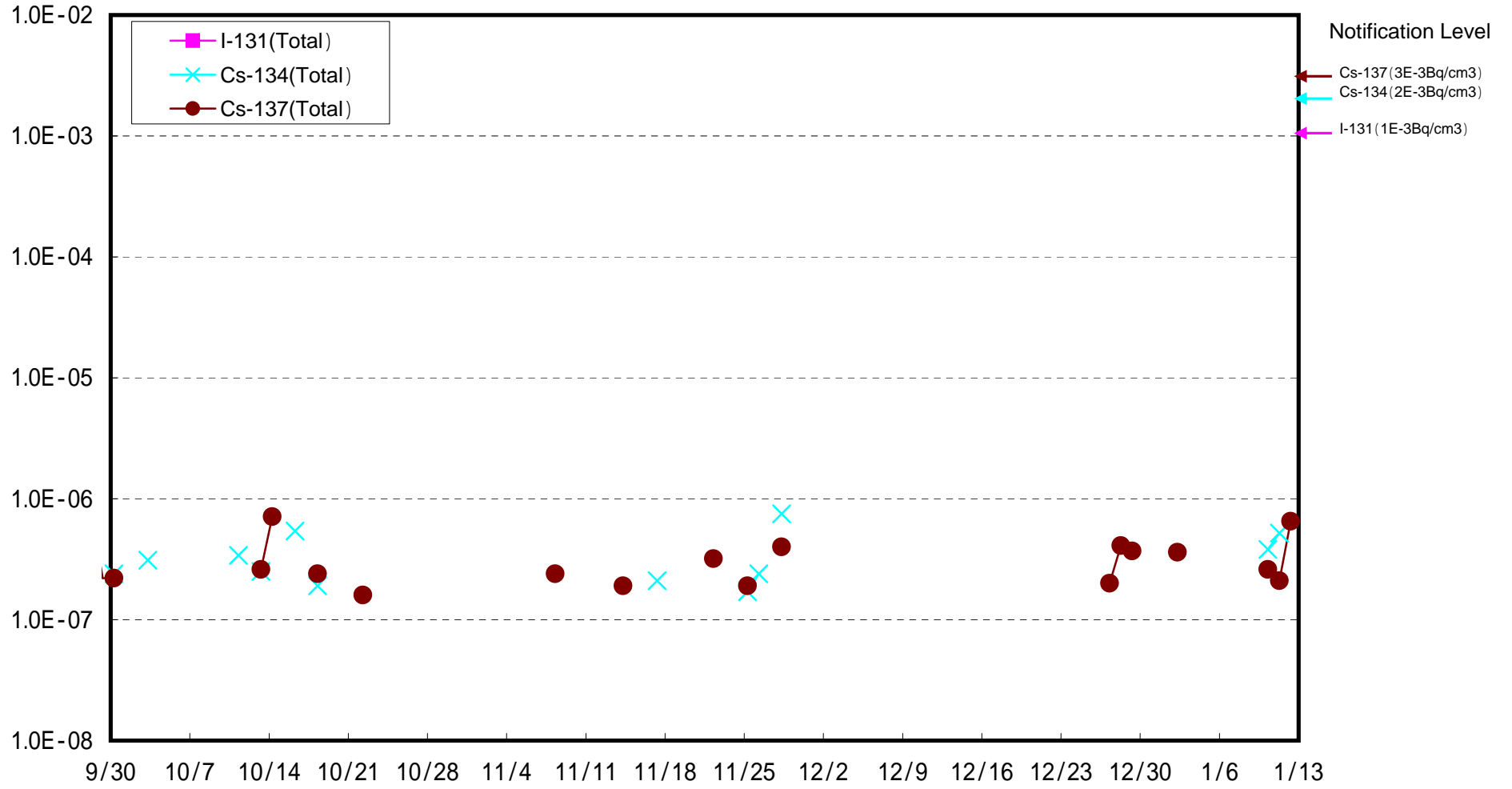
Samples	Date of sampling	Pu-238	Pu-239,Pu-240
Volatile	12/26	N.D. [$<6.0 \times 10^{-10}$]	N.D. [$<6.0 \times 10^{-10}$]
Particulate		N.D. [$<5.5 \times 10^{-10}$]	N.D. [$<5.8 \times 10^{-10}$]

[] indicates the detection limit

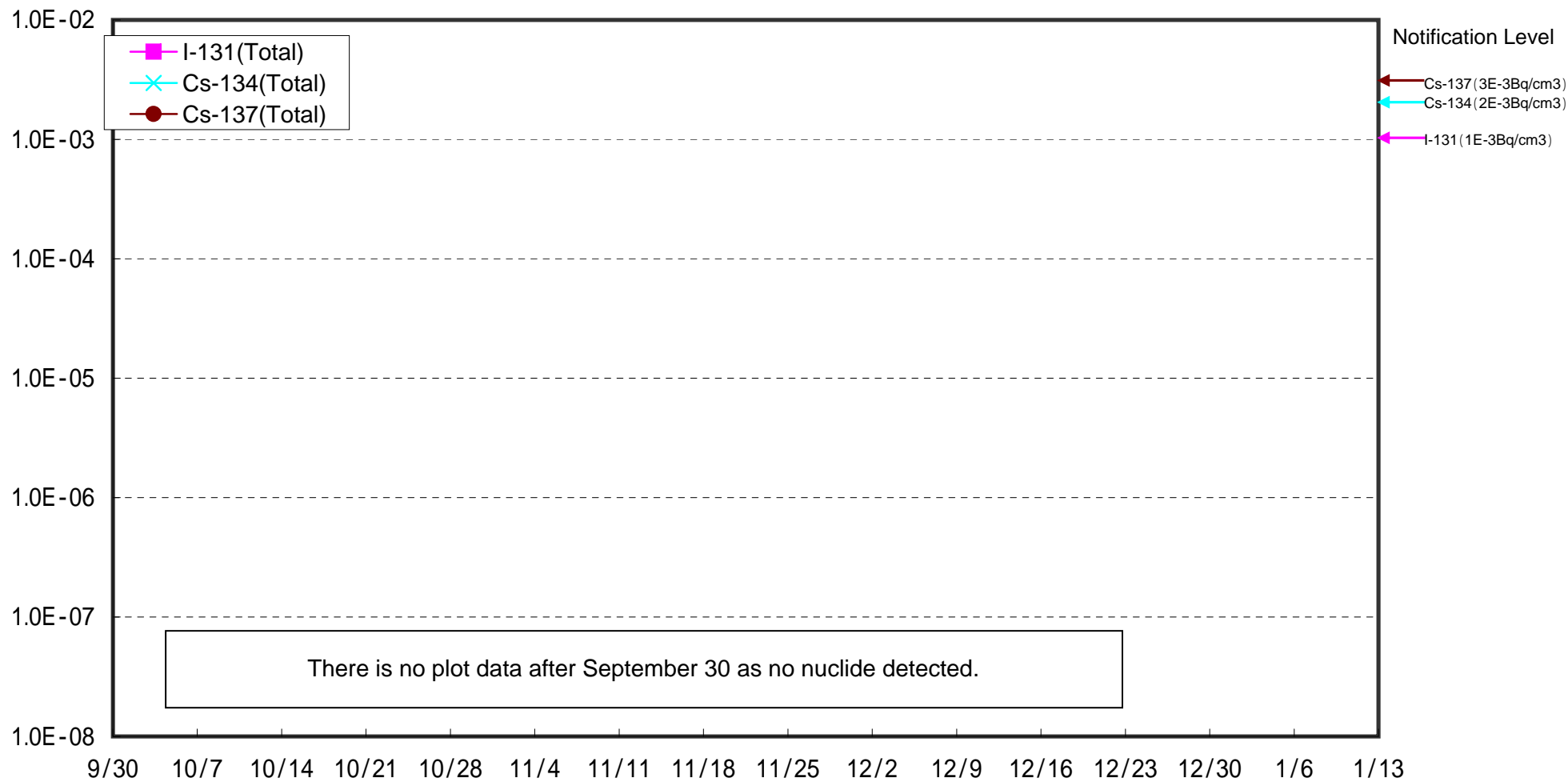
4. Evaluation:

No Pu-238,Pu-239,Pu-240 was detected from samples this time.

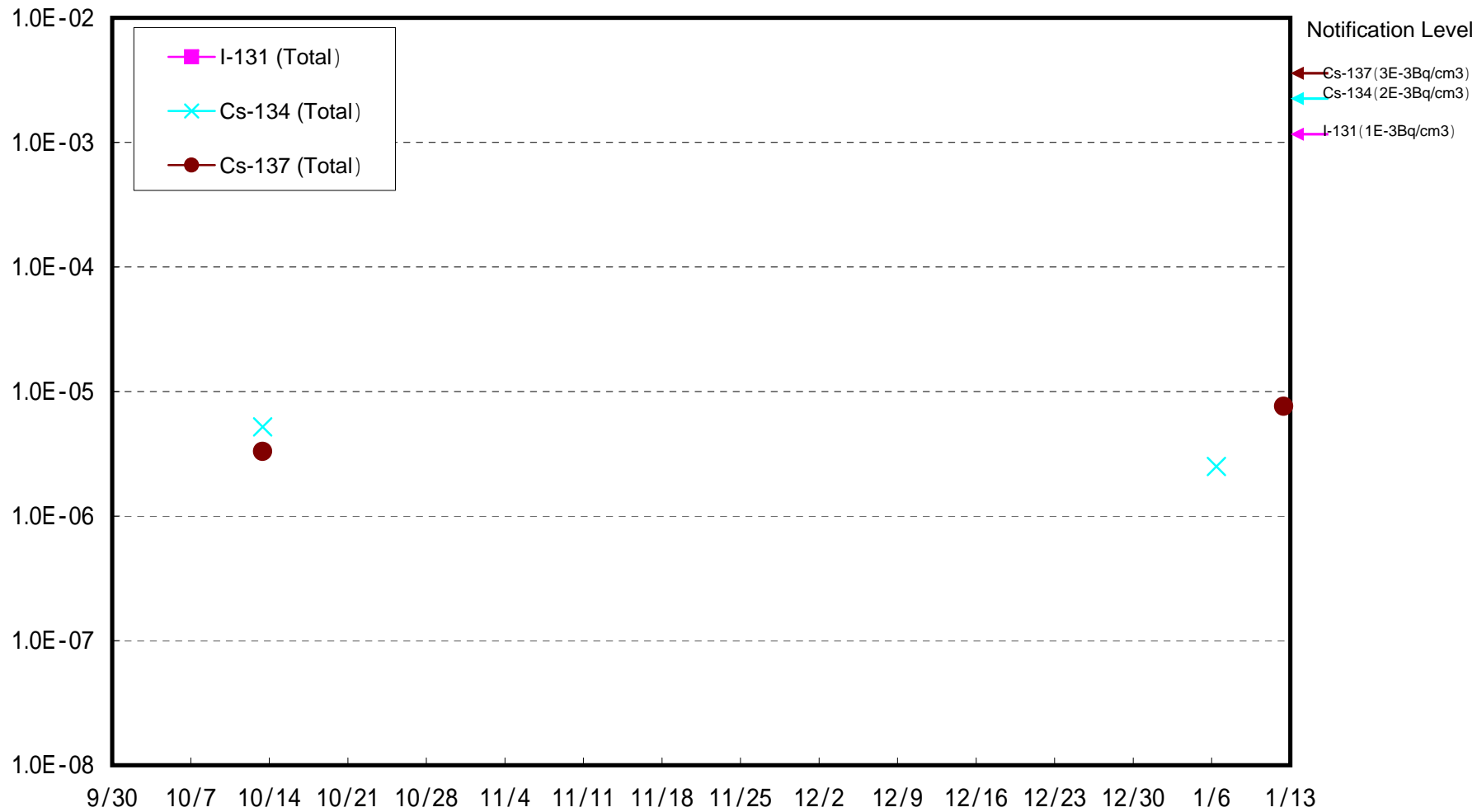
West Gate of Fukushima Daiichi Nuclear Power Station
Results of Dust Nuclide Analysis (Bq/cm³)



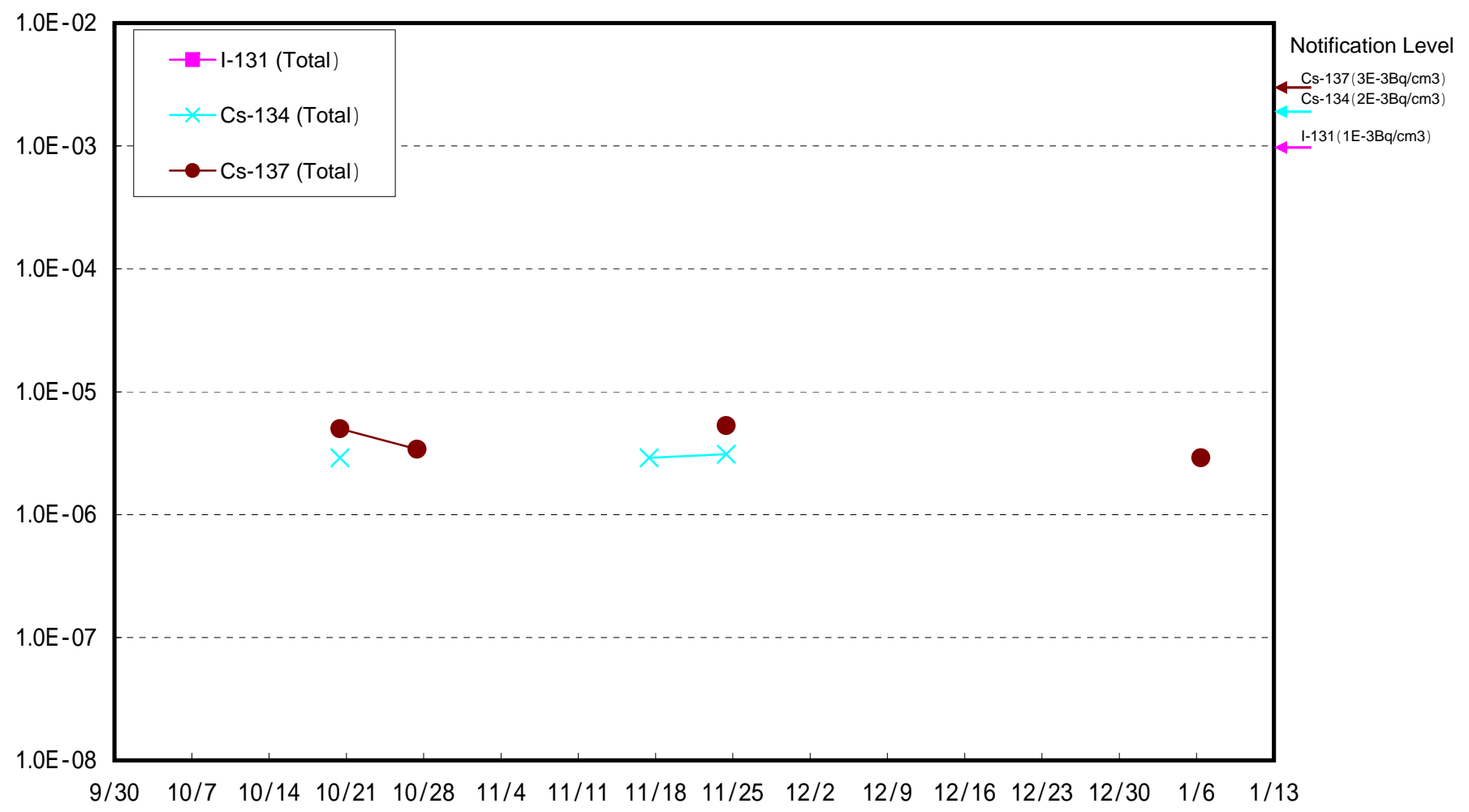
(Reference) Fukushima Daini MP-1
Results of Dust Nuclide Analysis (Bq/cm³)



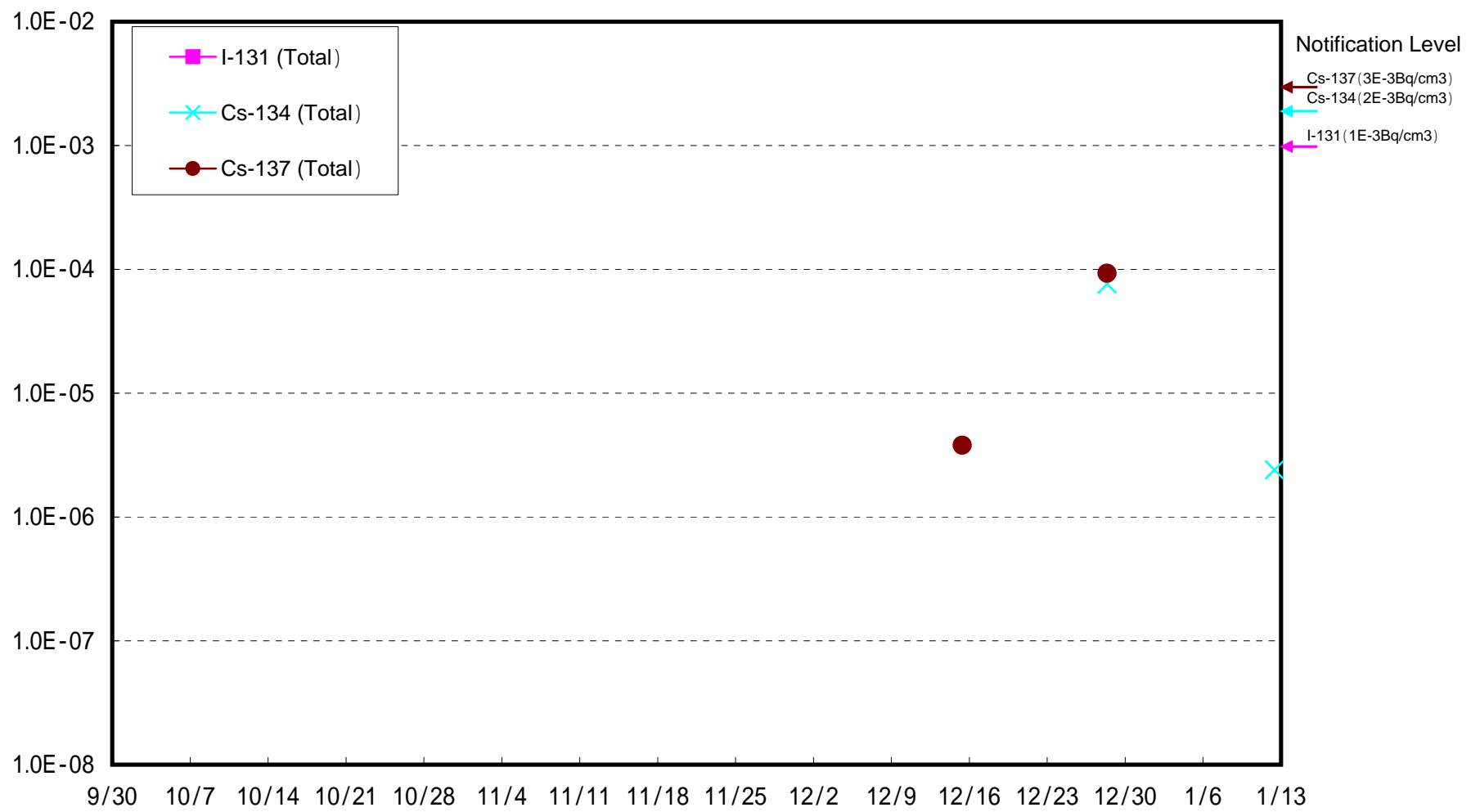
Fukushima Daiichi Unit 1 North Side Slope
Results of Dust Nuclide Analysis (Bq/cm³)



Fukushima Daiichi Unit 1 and Unit 2 West Side Slope
 Results of Dust Nuclide Analysis (Bq/cm3)



Fukushima Daiichi Unit 3 and Unit 4 West Side Slope
Results of Dust Nuclide Analysis (Bq/cm³)



Fukushima Daiichi Unit 1 -4 Sea Side
Results of Dust Nuclide Analysis (Bq/cm³)

