

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

Reference

(Data summarized on March 14)

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 <sup>3</sup> ) (Density limit in the air to which radiation workers breathe in the section 4 of the appendix 2)
	Time of Sampling	March 13, 2012 7:00 ~ 12:00	March 13, 2012 9:14 ~ 9:24	Time of Sampling	March 13, 2012 9:14 ~ 9:24	Time of Sampling	
Detected Nuclides (Half-life)	density of sample ( Bq/cm <sup>3</sup> )	Scaling Factor ( / )	density of sample ( Bq/cm <sup>3</sup> )	Scaling Factor ( / )	density of sample ( Bq/cm <sup>3</sup> )	Scaling Factor ( / )	
I-131 (about 8 days)	ND	-	ND	-	/	/	1E-03
Cs-134 (about 2 years)	2.6E-07	0.00	ND	-	/	/	2E-03
Cs-137 (about 30 years)	2.6E-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 at the West Gate of Fukushima Daiichi are as follows:

Volatile: I-131: approx. 1E-7Bq/cm<sup>3</sup>, Cs-134: approx. 3E-7Bq/cm<sup>3</sup>, Cs-137: approx. 3E-7Bq/cm<sup>3</sup>      Particulate: I-131: approx. 7E-8Bq/cm<sup>3</sup>

Detection limits at MP-1 of Fukushima Daini are as follows:

Volatile: I-131: approx. 2E-6Bq/cm<sup>3</sup>, Cs-134: approx. 3E-6Bq/cm<sup>3</sup>, Cs-137: approx. 3E-6Bq/cm<sup>3</sup>      Particulate: I-131: approx. 9E-7Bq/cm<sup>3</sup>, Cs-134: approx. 2E-6Bq/cm<sup>3</sup>, Cs-137: approx. 1E-6Bq/cm<sup>3</sup>

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

Reference

(Data summarized on March 14)

Place of Sampling	Fukushima Daiichi MP-1		Fukushima Daiichi MP-3		Fukushima Daiichi MP-8		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	March 13, 2012 9:08 ~ 14:08		March 13, 2012 8:40 ~ 13:40		March 13, 2012 8:53 ~ 13:53		
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	-	ND	-	ND	-	1E-03
Cs-134 (about 2 years)	ND	-	ND	-	ND	-	2E-03
Cs-137 (about 30 years)	ND	-	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-7Bq/cm3, Cs-134: approx. 4E-7Bq/cm3, Cs-137: approx. 5E-7Bq/cm3

Particulate: I-131: approx. 1E-7Bq/cm3, Cs-134: approx. 2E-7Bq/cm3, Cs-137: approx. 3E-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/cm<sup>3</sup> )

Samples	Date of sampling	Pu-238	Pu-239+Pu-240
Volatile	February 27	N.D. [ $<6.5 \times 10^{-10}$ ]	N.D. [ $<6.5 \times 10^{-10}$ ]
Particulate		N.D. [ $<8.4 \times 10^{-10}$ ]	N.D. [ $<9.2 \times 10^{-10}$ ]

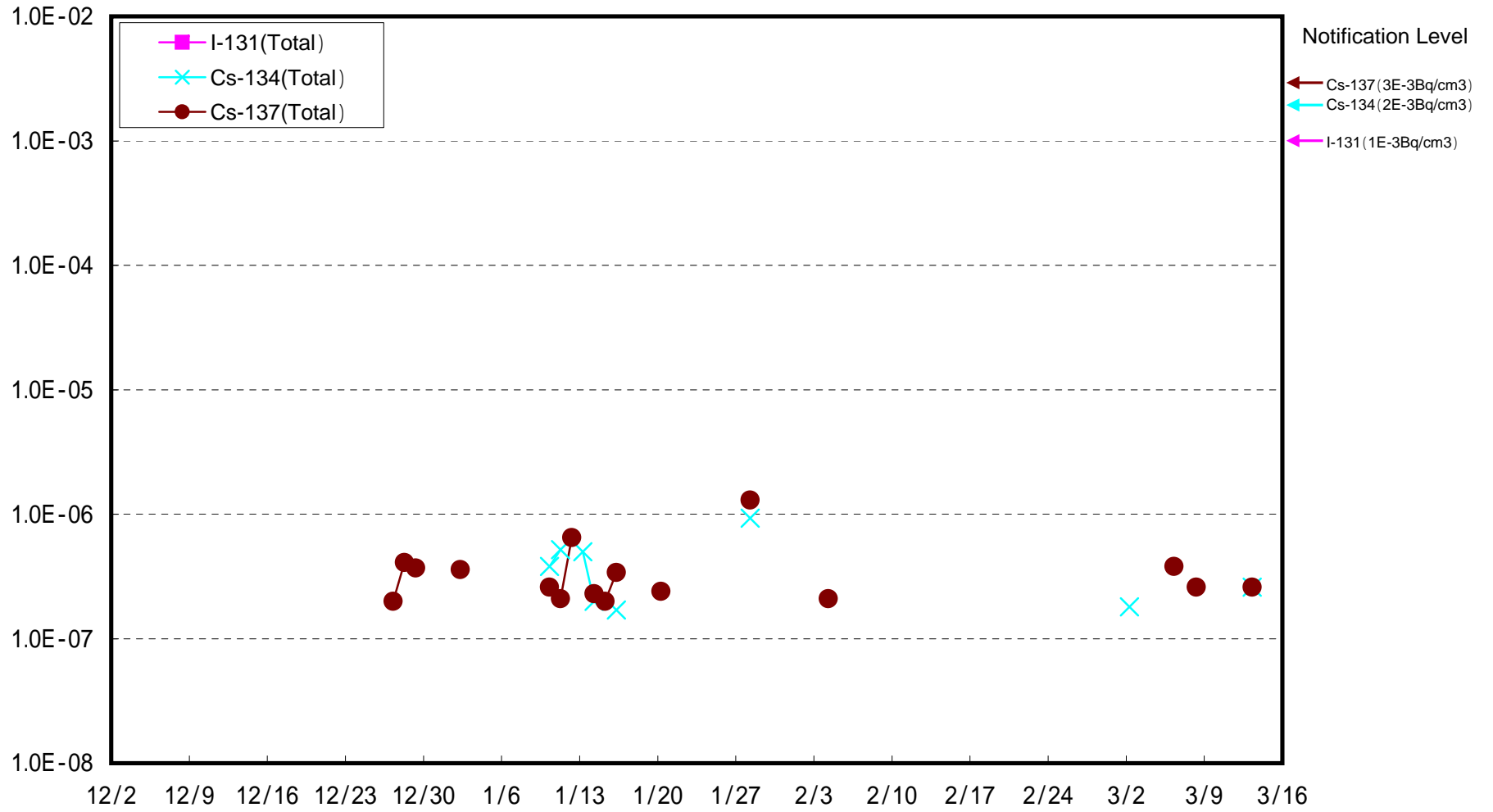
[ ] indicates the detection limit

4. Evaluation:

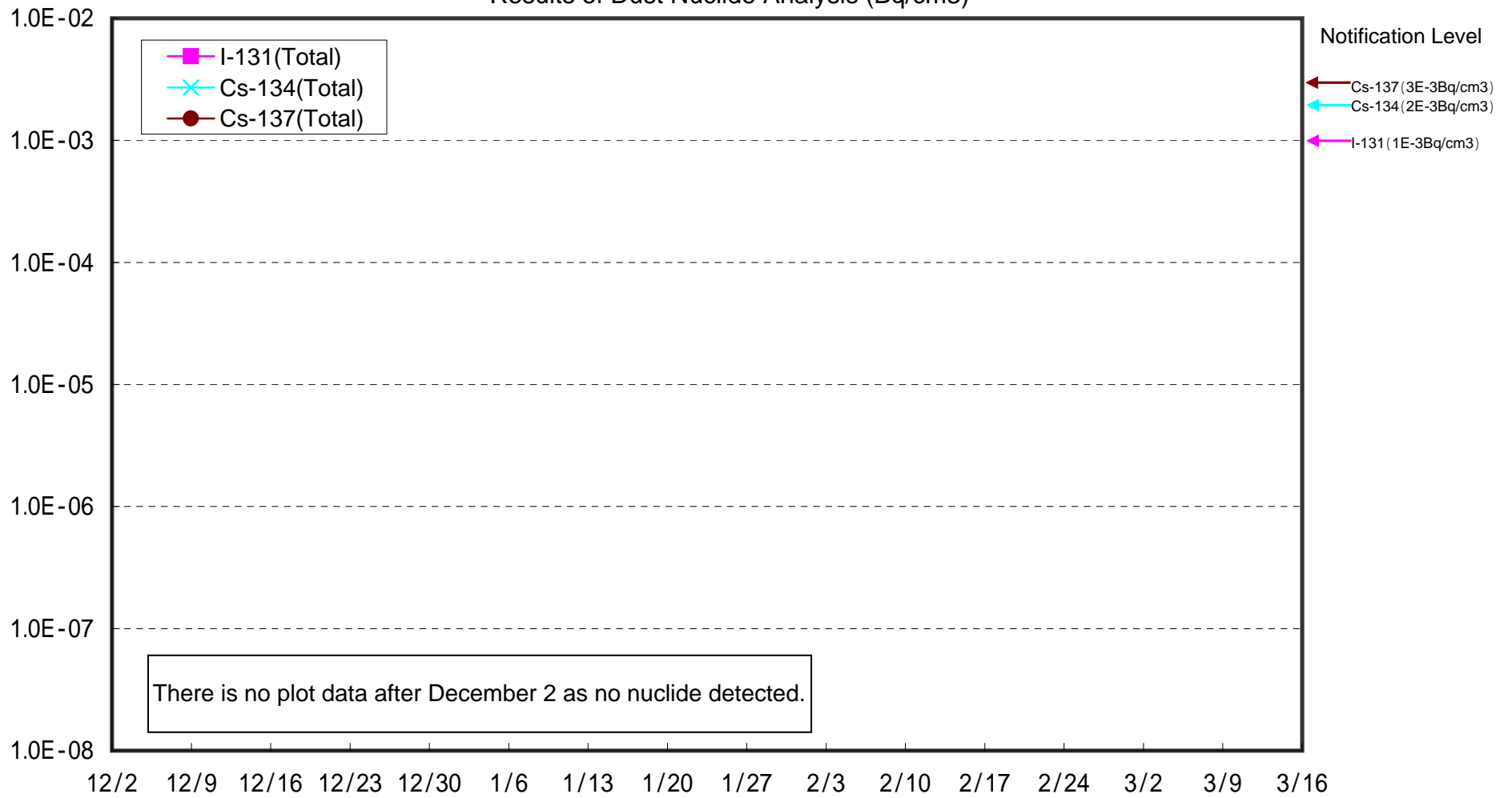
No Pu-238 and Pu-239+Pu-240 were detected from samples this time.

End

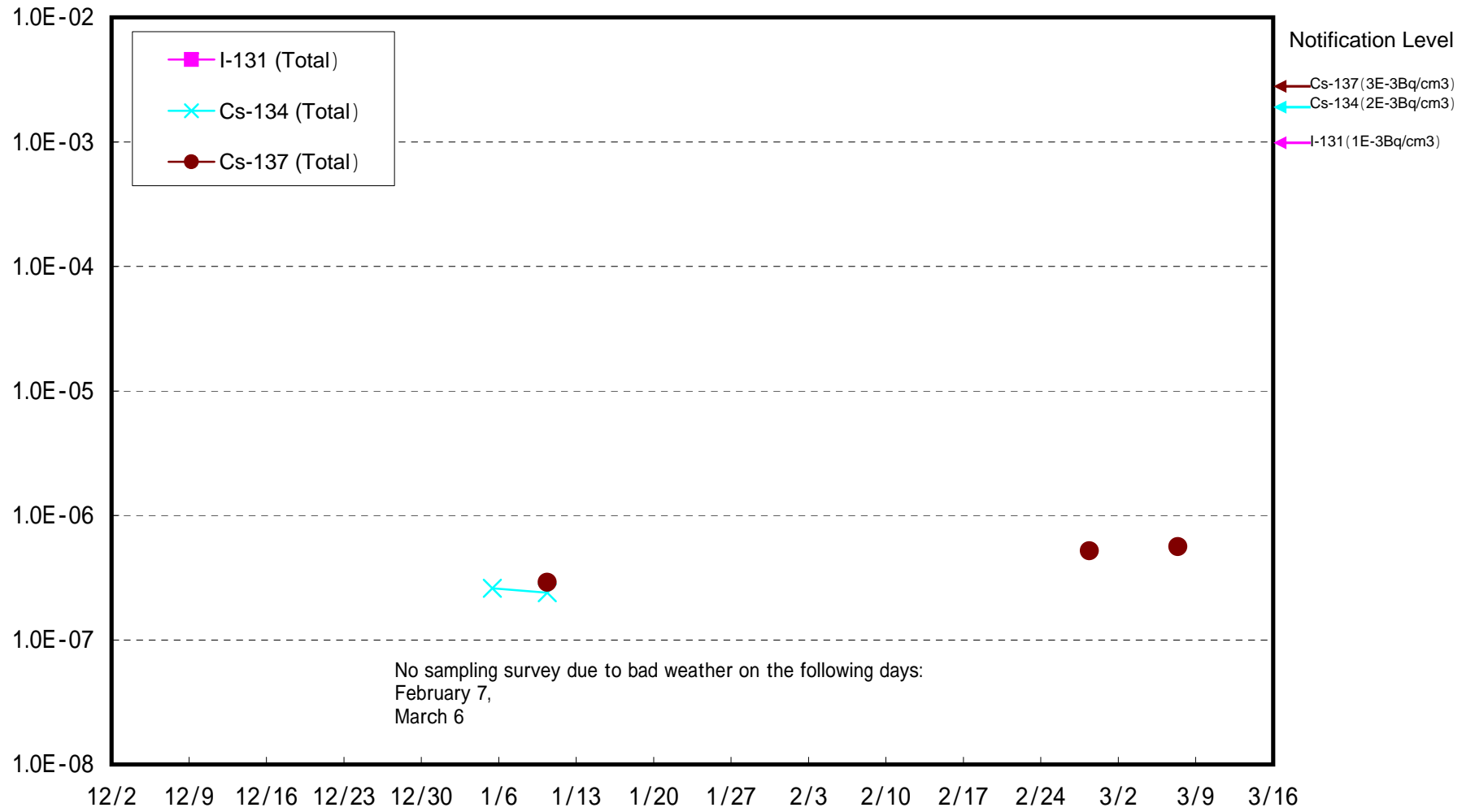
West Gate of Fukushima Daiichi Nuclear Power Station  
Results of Dust Nuclide Analysis (Bq/cm<sup>3</sup>)



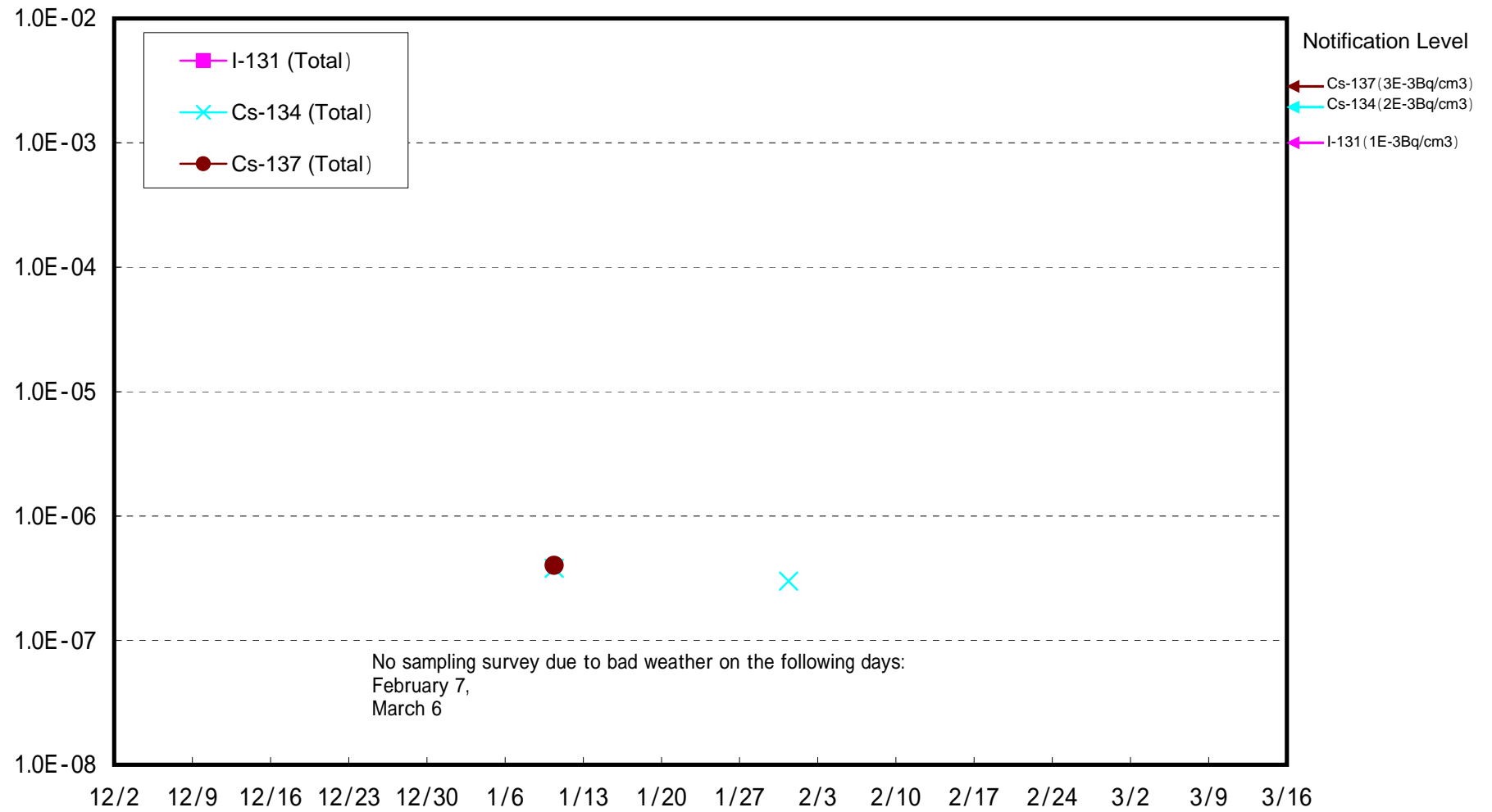
(Reference) Fukushima Daini MP-1  
Results of Dust Nuclide Analysis (Bq/cm<sup>3</sup>)



Fukushima Daiichi MP-1 Results of dust nuclides analyses (Bq/cm<sup>3</sup>)



### Fukushima Daiichi MP-3 Results of dust nuclides analyses (Bq/cm3)



### Fukushima Daiichi MP-8 Results of dust nuclides analyses (Bq/cm<sup>3</sup>)

