

Nuclide analysis results of ocean soil < 1/2 >

Reference

(Data summarized on January 20)

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 ( 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 )	Iwasawa Seashoreoffshore 15km
Time of Sampling	Jan 18, 2012 8:45 AM	Jan 18, 2012 9:55 AM	Jan 18, 2012 2:30 PM	Jan 18, 2012 8:15 AM	Jan 18, 2012 11:15 AM
Detected Nuclides (Half-life)	Radioactivity density ( Bq/kg· moist soil)				
I-131 (about 8 days)	ND	ND	ND	ND	ND
Cs-134 (about 2 years)	1,200	1,400	170	250	210
Cs-137 (about 30 years)	1,600	1,800	220	330	270

\* Data of other nuclides are under evaluation.

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

I-131: approx. 12Bq/kg· moist soil )

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

(1 out of 6 point was not sampled due to bad weather)

Nuclide analysis results of ocean soil < 2/2 >

Reference

(Data summarized on January 20)

Place of Sampling	15 km offshore of Hirono-town				
Time of Sampling	Jan 18, 2012 (Not sampled)				
Detected Nuclides (Half-life)	Radioactivity density ( Bq/kg· moist soil)				
I-131 (about 8 days)	-				
Cs-134 (about 2 years)	-				
Cs-137 (about 30 years)	-				

(1 out of 6 points was not sampled due to bad weather)

## Plutonium Analysis Result in the ocean soil

### 1. Analysis result

( Unit : Bq/kg·Dry soil )

Sampling spot	Date of sampling/ Analyses organization	Pu-238	Pu-239,Pu-240
3km offshore of Ena	November 7 Japan Chemical Analysis Center	N.D. [ $<1.6 \times 10^{-2}$ ]	$(4.6 \pm 0.32) \times 10^{-1}$
3km offshore of Kotaka-ku	November 10 Japan Chemical Analysis Center	N.D. [ $<1.3 \times 10^{-2}$ ]	$(8.4 \pm 0.99) \times 10^{-2}$
15km offshore of Fukushima Daiichi	November 11 Japan Chemical Analysis Center	N.D. [ $<1.3 \times 10^{-2}$ ]	$(5.0 \pm 0.31) \times 10^{-1}$
15km offshore of Ukedo river		N.D. [ $<1.5 \times 10^{-2}$ ]	$(2.1 \pm 0.18) \times 10^{-1}$
North of discharge channel of unit 5/6 of Fukushima Daiichi	November 14 Japan Chemical Analysis Center	N.D. [ $<1.1 \times 10^{-2}$ ]	$(4.8 \pm 0.77) \times 10^{-2}$
South discharge channel of Fukushima Daiichi		N.D. [ $<1.4 \times 10^{-2}$ ]	$(6.5 \pm 0.94) \times 10^{-2}$
3km offshore of Iwasawa shore	November 18 Japan Chemical Analysis Center	N.D. [ $<1.7 \times 10^{-2}$ ]	$(4.7 \pm 0.33) \times 10^{-1}$
8km offshore of Iwasawa shore		$(1.9 \pm 0.53) \times 10^{-2}$	$(5.3 \pm 0.35) \times 10^{-1}$
5km offshore of Kashima	November 22 Japan Chemical Analysis Center	N.D. [ $<1.3 \times 10^{-2}$ ]	$(3.8 \pm 0.25) \times 10^{-1}$
Past analysis range in the sea around 1F and 2F (FY 1999 ~ FY 2008) <sup>1</sup>		-	$1.7 \times 10^{-1} \sim 5.6 \times 10^{-1}$
Past analysis range in Japan (FY 2006 ~ FY 2010) <sup>2</sup>		N.D. $\sim 6 \times 10^{-2}$	-

[ ] : Lower detection limit

1 : Source: 2009 Report on the Result of Radioactivity Measurement around Nuclear Power Plant (Fukushima Nuclear Power Station Coordinating Committee for Safety Technology)

2 : Source: Ministry of Education, Culture, Sports, Science and Technology "Environmental radiation data base"

<http://search.kankyo-hoshano.go.jp/servlet/search.top> , ( Reference 2012-01-18 ).

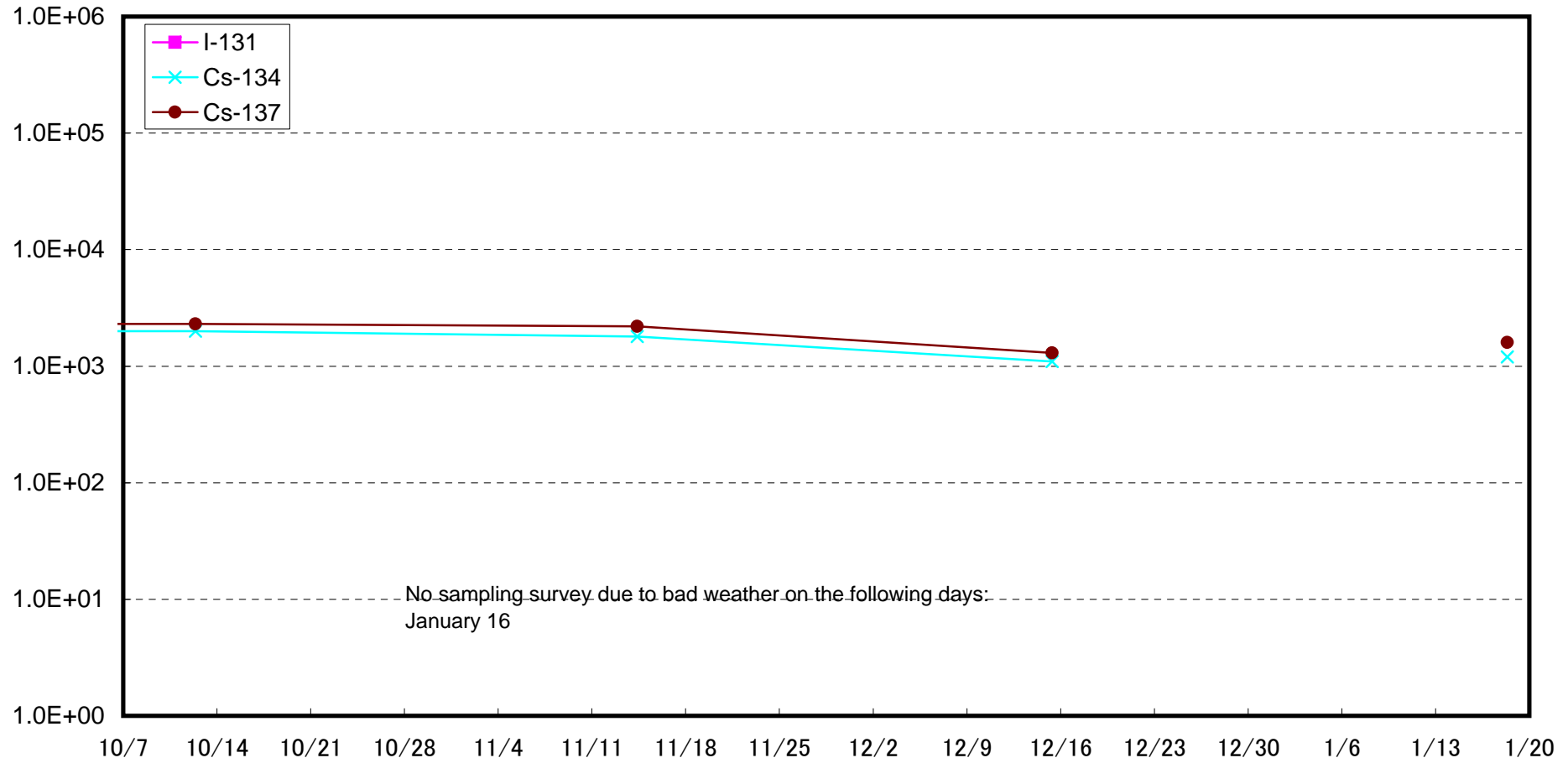
### 2. Evaluation

Detected density of Pu-239 and 240 from November 7 to 22 are within the range of past analysis in the sea around Fukushima Daiichi Nuclear Power Station and Fukushima Daini

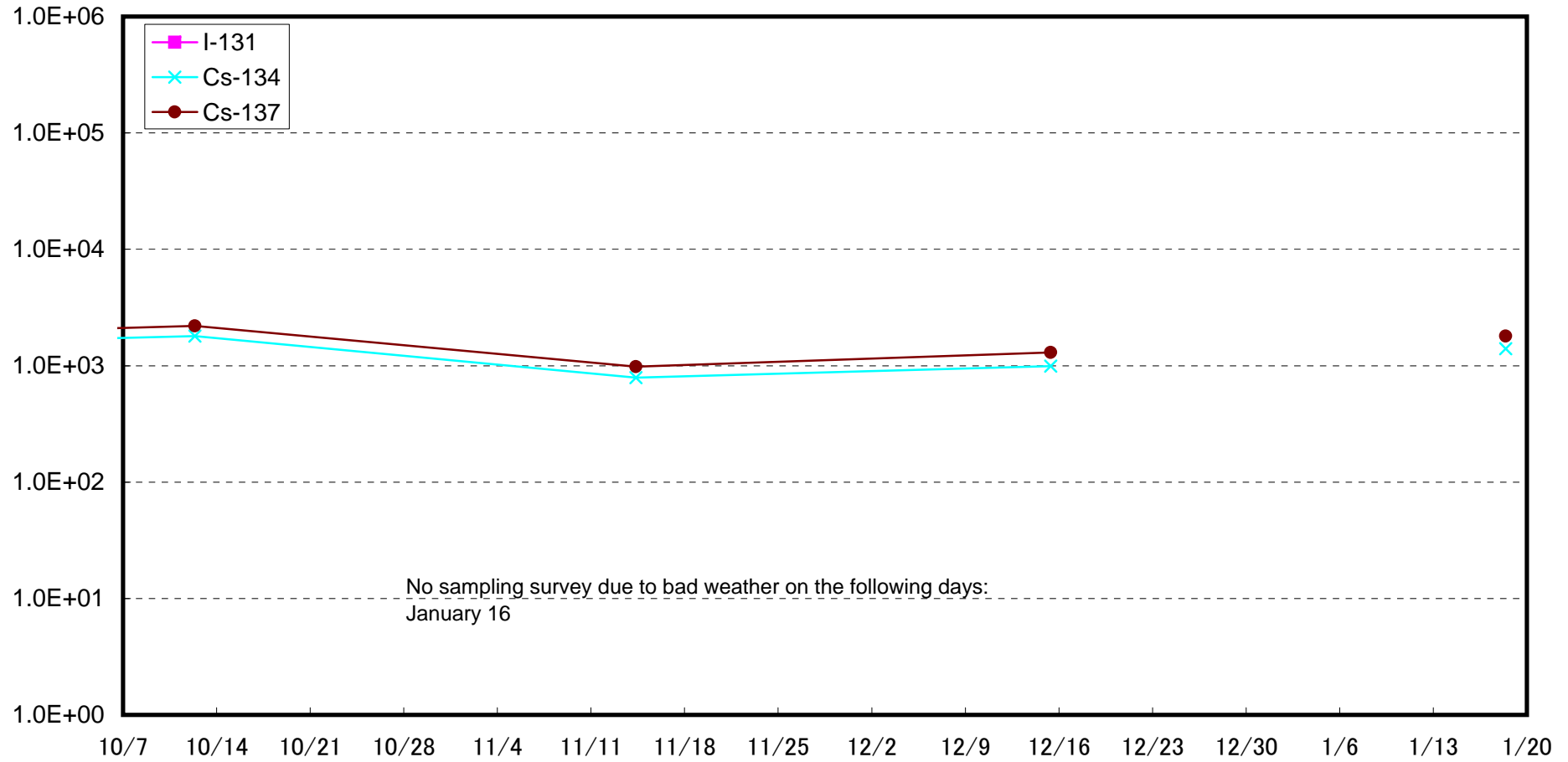
Nuclear Power Station. And detected density of Pu-238 at 8km off shore of Iwasawa shore are within the range of past analysis in Japan and the activity ratio (Pu-238/Pu-239,240) of 0.036 is within the similar level of fallouts detected in Japan at the past nuclear test in the atmosphere.

End

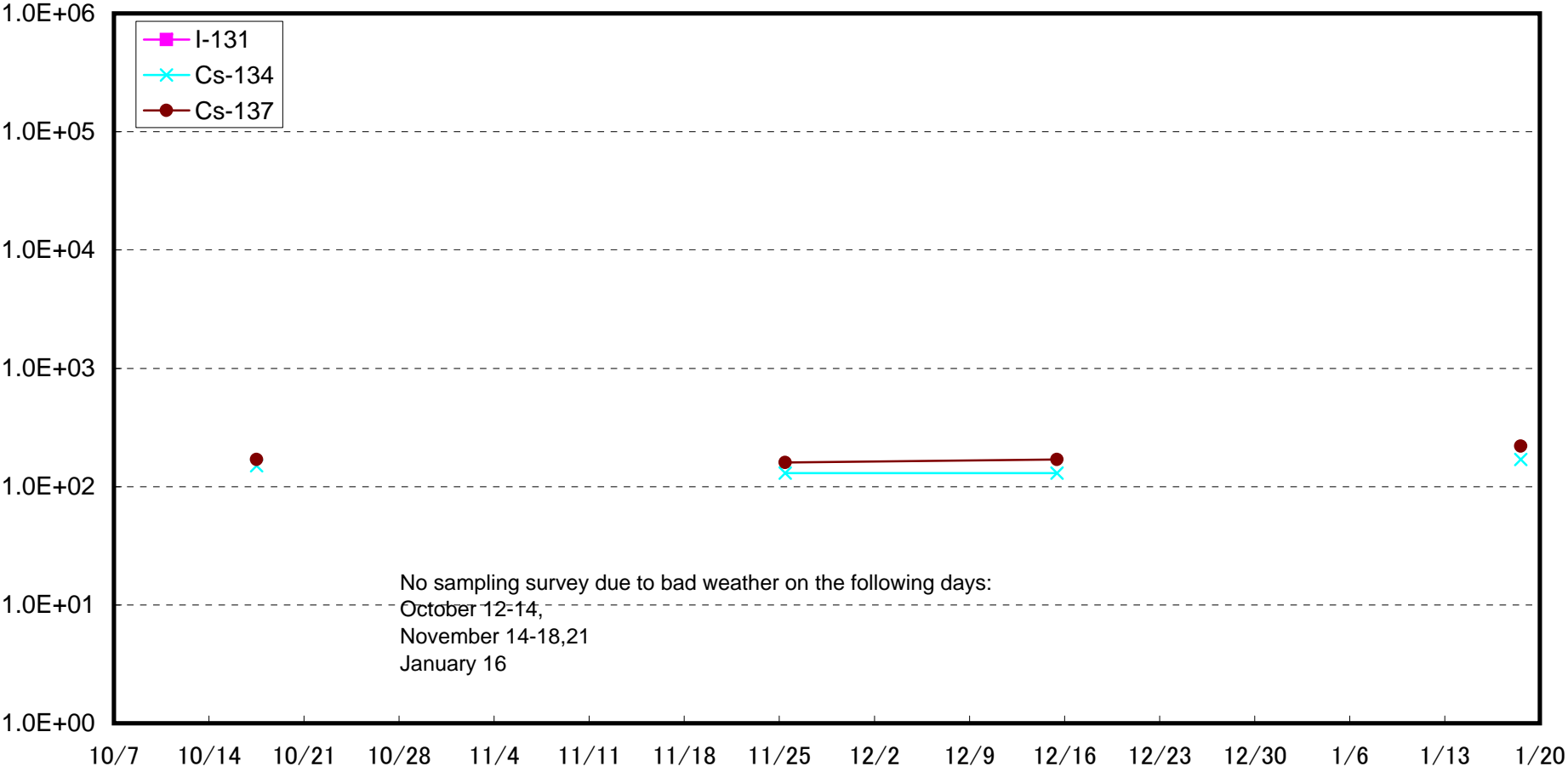
# Radioactivity Density of Ocean Soil around North of Discharge Channel of 5-6u of 1F (Bq/kg (moist soil))



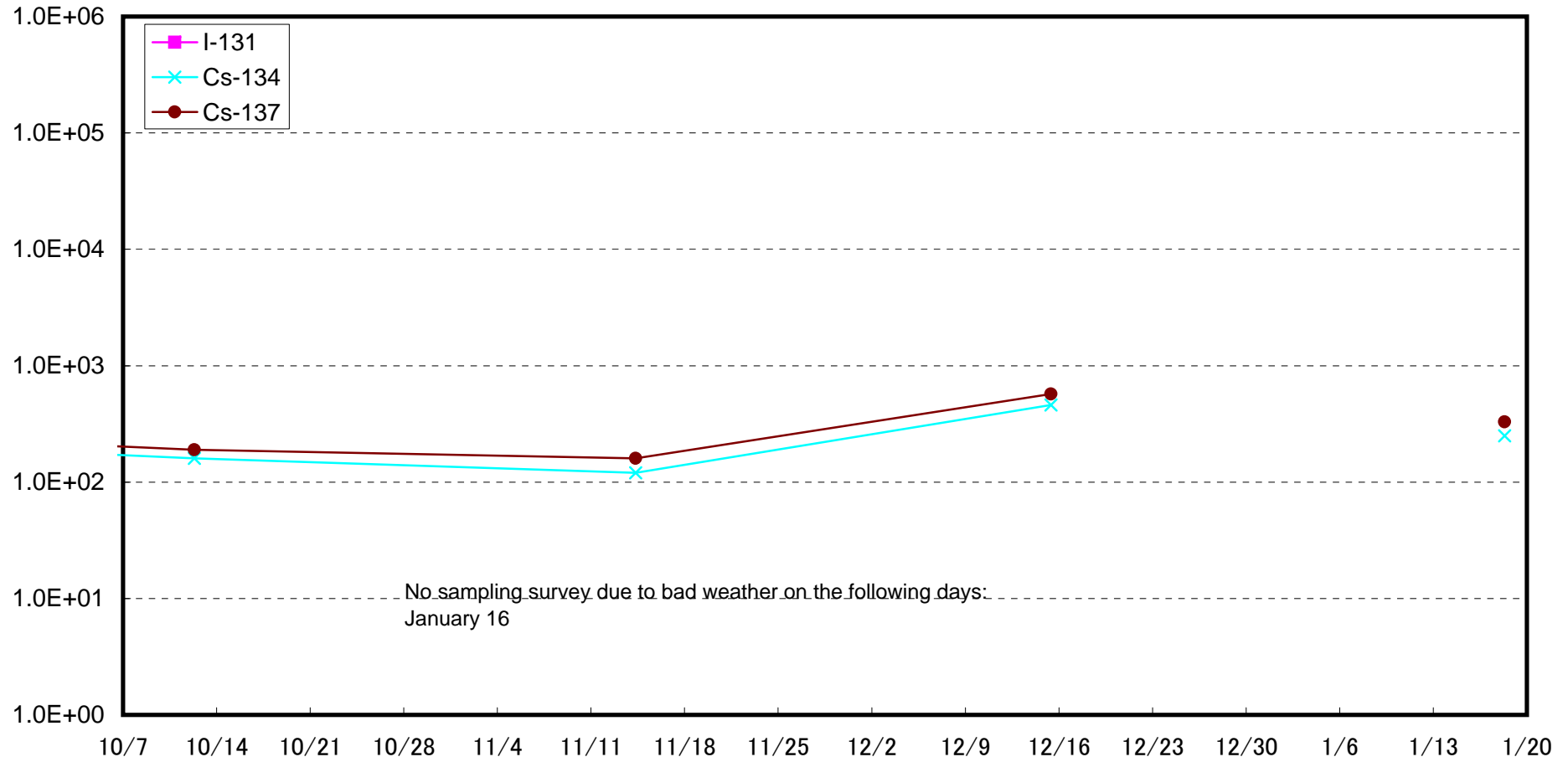
# Radioactivity Density of Ocean Soil around South Discharge Channel of 1F (Bq/kg (moist soil))



# Radioactivity Density of Ocean Soil around North Discharge Channel of 2F (Bq/kg (moist soil))



# Radioactivity Density of Ocean Soil around Iwasawa shore of 2F (Bq/kg (moist soil))





# Radioactivity Density of Ocean Soil 15km Offshore of Iwasawa Shore (Bq/kg)

