Reference

Summary of Marine Soil Monitoring Result : Fukushima Daiichi Nuclear Power Station (June 2013)

	Place No.	Place of Sampling	Date of Sampling	Dry Soil Rate (%)	Cs-134 [Approx. 2years]	Cs-137 [Approx. 30 years]
Coast	T-1	North of Discharge Channel of 5-6U of 1F	2013/6/4 12:00 PM	77.0	290	620
	T-2-1	Around South Discharge Channel of 1F **1	2013/6/4 11:30 AM	77.2	170	350
	T-3	Around North Discharge Channel of 2F	2013/6/4 10:00 AM	79.0	39	81
	T-4-2	Around the South Side of Kitasakogawa **2	2013/6/4 7:35 AM	88.5	54	110
Within 20km Range of Fukushima Daiichi NPS	T-14	3km Offshore of Odaka Ward	2013/6/11 9:57 AM	83.9	14	32
	T-11	3km Offshore of Iwasawa Shore	2013/6/12 9:59 AM	73.3	59	120
	T-D1	3km Offshore of Ukedo River	2013/6/11 9:17 AM	72.7	110	220
	T-D5	3km Offshore of 1F	2013/6/11 8:44 AM	78.1	79	150
	T-D9	3km Offshore of 2F	2013/6/12 9:23 AM	74.8	28	59
	T-5	15km Offshore of 1F	2013/6/12 8:30 AM	75.9	200	400
	T-①	1km Offshore of Murakami, Odaka Ward	2013/6/3 9:07 AM	75.7	20	38
	T-②	2km Offshore of Murakam, Odaka Ward	2013/6/3 9:00 AM	74.8	19	32
	T-③	1km Offshore of Ukedo, Namie Town	2013/6/3 9:34 AM	70.6	110	210
	T-④	2km Offshore of Ukedo, Namie Town	2013/6/3 9:48 AM	80.2	40	75
	T-⑤	3km Offshore of Ukedo, Namie Town	2013/6/3 10:20 AM	68.9	390	800
	T-⑥	1km Offshore of Kumagawa, Okuma Town	2013/6/4 9:27 AM	73.7	73	160
	T-⑦	2km Offshore of Kumagawa, Okuma Town	2013/6/4 9:16 AM	75.4	46	82
	T-⑧	3km Offshore of Kumagawa, Okuma Town	2013/6/4 9:04 AM	72.0	280	560
	T-⑨	5km Offshore of Kumagawa, Okuma Town	2013/6/4 8:50 AM	71.3	240	460
	T-⑩	10km Offshore of Kumagawa, Okuma Town	2013/6/10 9:33 AM	72.0	110	220
	T-⑪	15km Offshore of Kumagawa, Okuma Town	2013/6/10 9:19 AM	70.5	81	160
	T-⑫	20km Offshore of Kumagawa, Okuma Town	2013/6/10 8:25 AM	62.5	88	190
	T-⑬	1km Offshore of Yamadahama, Naraha Town	2013/6/10 10:44 AM	74.7	74	150
	T-S1	Around 1km Offshore of Ota River	2013/6/6 4:48 AM	76.3	14	28
	T-S2	Around 3km Offshore of Odaka Ward	2013/6/6 5:12 AM	80.1	10	20
	T-S3	Around 3km Offshore of Ukedo River	2013/6/17 6:19 AM	84.1	10	19
	T-S4	Around 3km Offshore of 1F	2013/6/17 5:53 AM	77.5	74	150
	T-S5	Around 2km Offshore of Kido River	2013/6/14 6:37 AM	73.2	93	190
	T-S7	Around 2km Offshore of 2F **3	2013/6/14 6:13 AM	77.4	48	97
	T-S8	Around 4km Offshore of Kumagawa **4	2013/6/23 6:26 AM	76.5	37	84
	T-B1	Around 15km Offshore of Odaka Ward	2013/6/26 5:20 AM	83.5	12	28
	T-B2	Around 18km Offshore of Ukedo River	2013/6/26 4:50 AM	82.9	27	52
	T-B3	Around 10km Offshore of 1F	2013/6/9 5:35 AM	86.2	5	10
	T-B4	Around 10km Offshore of 2F	2013/6/9 6:18 AM	76.6	63	130

* Data of other nuclides is under evaluation.

* 1F: Fukushima Daiichi Nuclear Power Station, 2F: Fukushima Daini Nuclear Power Station

* The half-life of each nuclide is provided in parentheses.

**1 Place of Sampling was changed from "T-2" to "T-2-1" from November 2012.

**2 Place of Sampling was changed from "T-4-1" to "T-4-2" from April 2013.

**3 "T-S7" is added from May 2012.

**4 "T-S8" is added from July 2012.

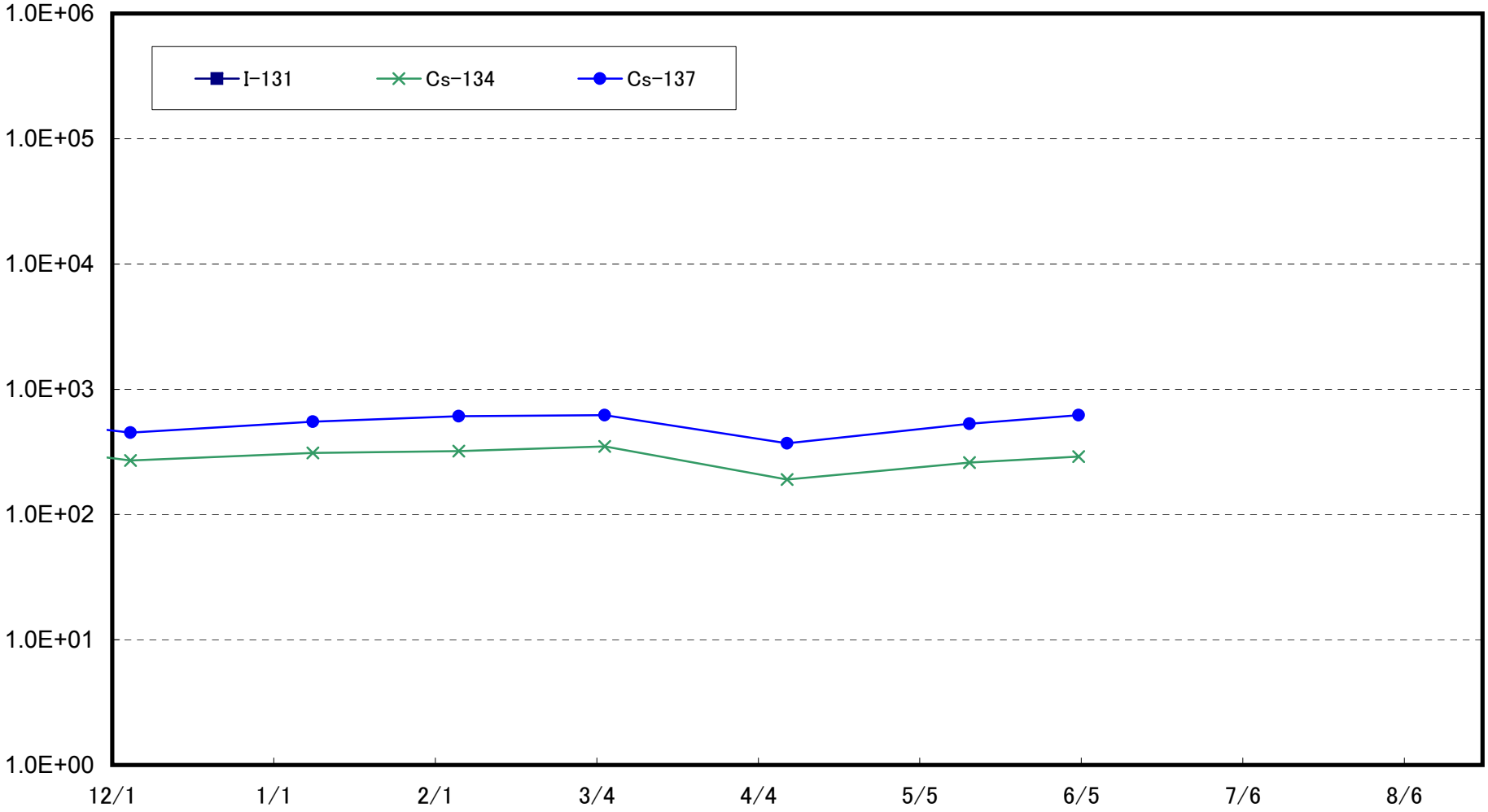
Nuclides Analysis Result of Radioactive Materials in the Marine Soil

Place of Sampling	1F, North of Unit 5-6 Discharge Channel	1F, Around South Discharge Channel
Date of Sampling	Mar 5, 2013	Mar 5, 2013
Detected Nuclides (Half-life)	Density of Sample (Unit: Bq/kg, Dry Soil)	
I-131 (Approx. 8 days)	ND	ND
Cs-134 (Approx. 2 years)	350	220
Cs-137 (Approx. 30 years)	620	360
Sr-89 (Approx. 51 days)	ND	ND
Sr-90 (Approx. 29 years)	1.4	ND
Range of Past Measurement Values in the Sea Area Near 1F and 2F (2001-2008): ND～0.17 Bq/kg, Dry Soil Source: “2009 Report on the Result of Radioactivity Measurement around Nuclear Power Plant (Fukushima Nuclear Power Station Coordinating Committee for Safety Technology)		

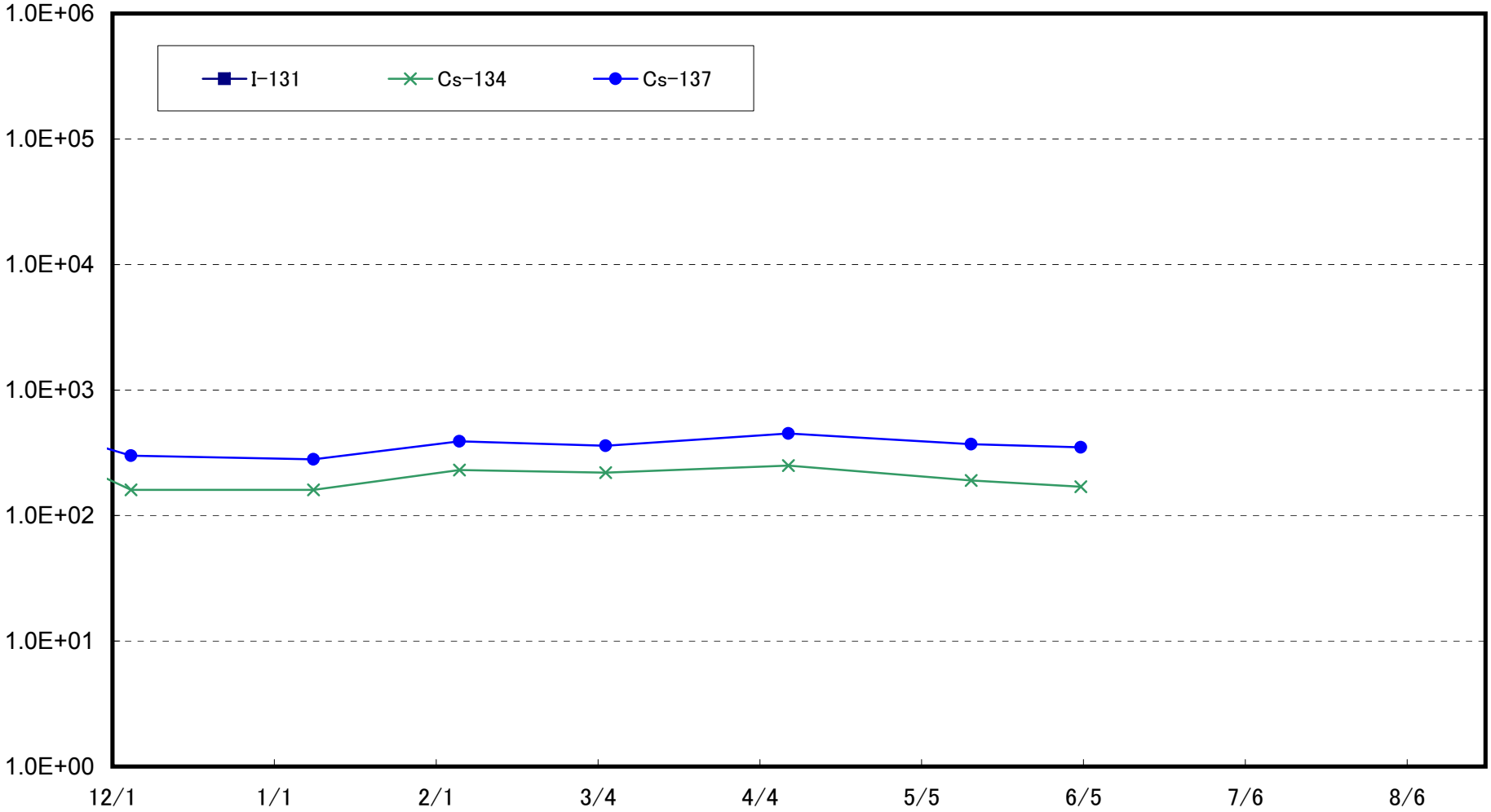
* Radioactivity Density "—" means "not applicable".
* Nuclide analysis results of I-131, Cs-134, Cs-137 were announced on May 17.
* When the measurement value is below the detection limit, "ND" is marked. The detection limits are as follows.
  I-131: Approx. 13Bq/kg, Dry Soil, Sr-89: Approx. 20Bq/kg, Dry Soil, Sr-90: Approx. 0.9Bq/kg, Dry Soil
  As the detection limit may vary depending on the detectors and sample properties, there are cases where nuclides below the detection limit are detected.
* Nuclides analysis of Sr-89 and Sr-90 were done by KAKEN Inc..

(Evaluation)
The densities of Sr-90 are higher than those of the range of past measurement values in the sea area near 1F and 2F. Therefore, there is a possibility that the higher densities originate from the accident this time.

Radioactivity Density of the Marine Soil at North Discharge Channel of Fukushima Daiichi NPS
(Around 5,6U Discharge Channel) (T-1) (Bq/kg, dry soil)

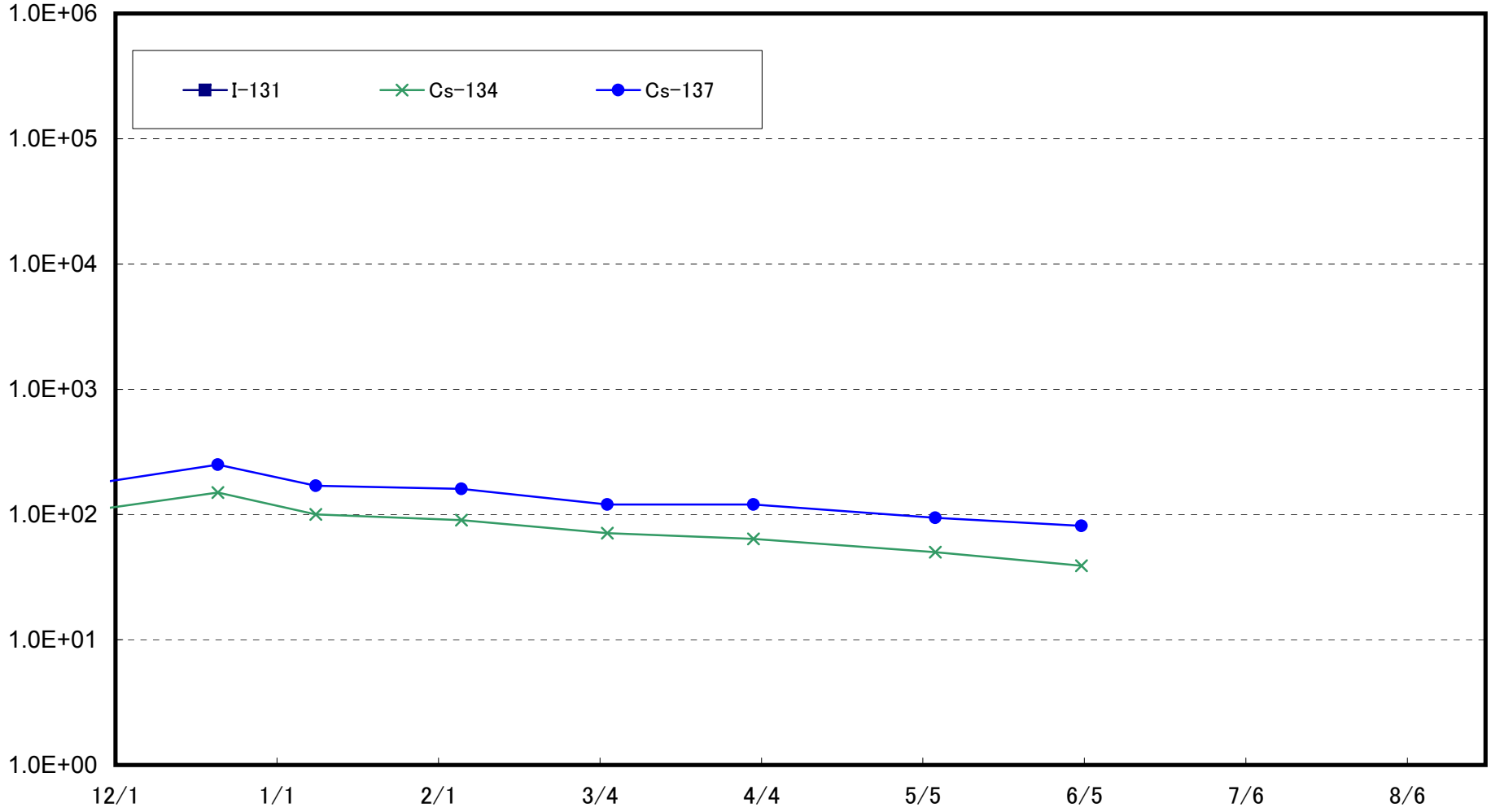


Radioactivity Density of the Marine Soil at South Discharge Channel of Fukushima Daiichi NPS
(T-2-1) (Bq/kg, dry soil)

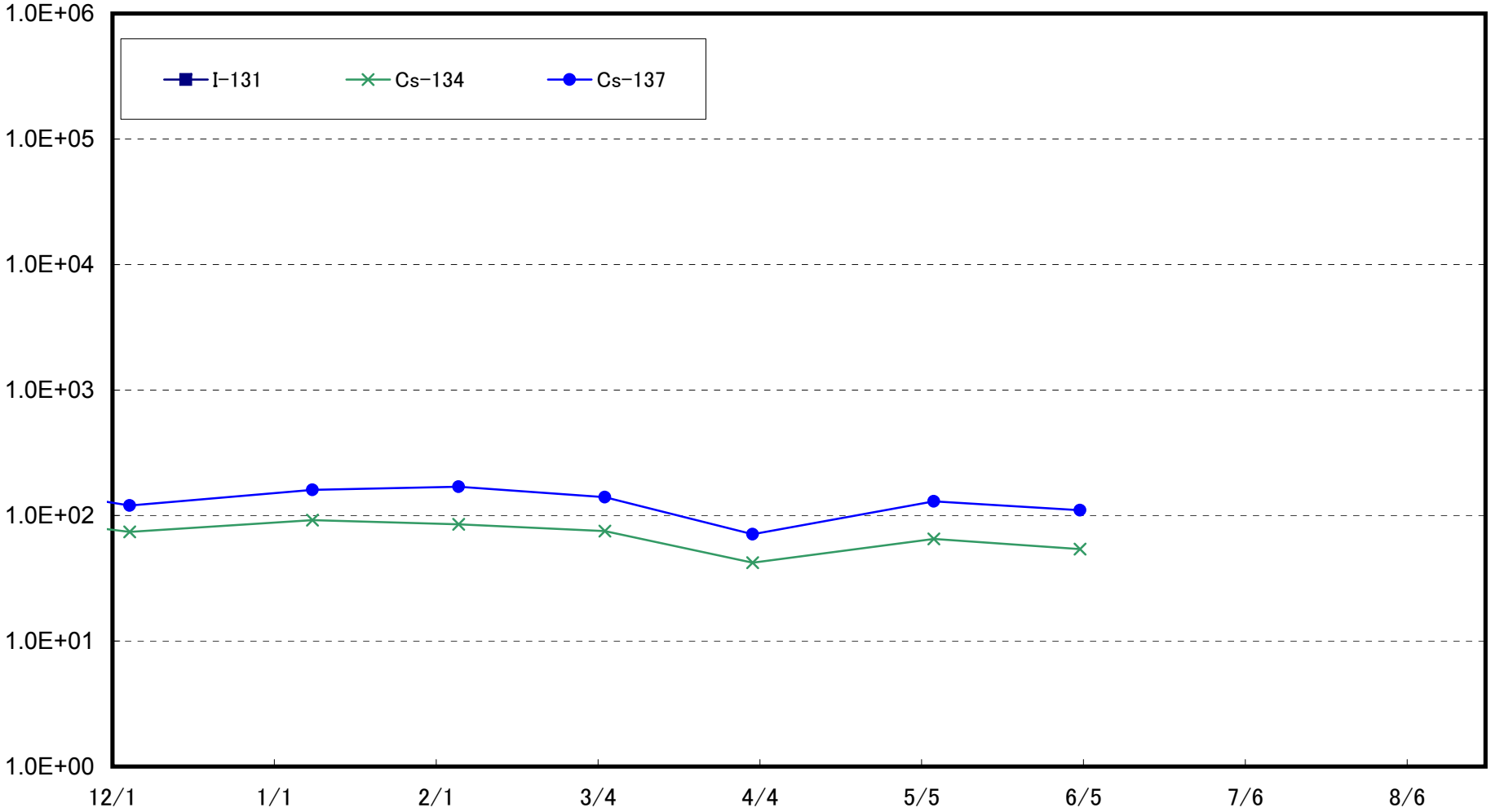


Sampling was conducted around the south discharge channel of Fukushima Daini NPS (appox. 330m south of Units 1-4 Discharge Channel) until November 25, 2013.

Radioactivity Density of the Marine Soil around North Discharge Channel of Fukushima Daini NPS
(T-3) (Bq/kg, dry soil)

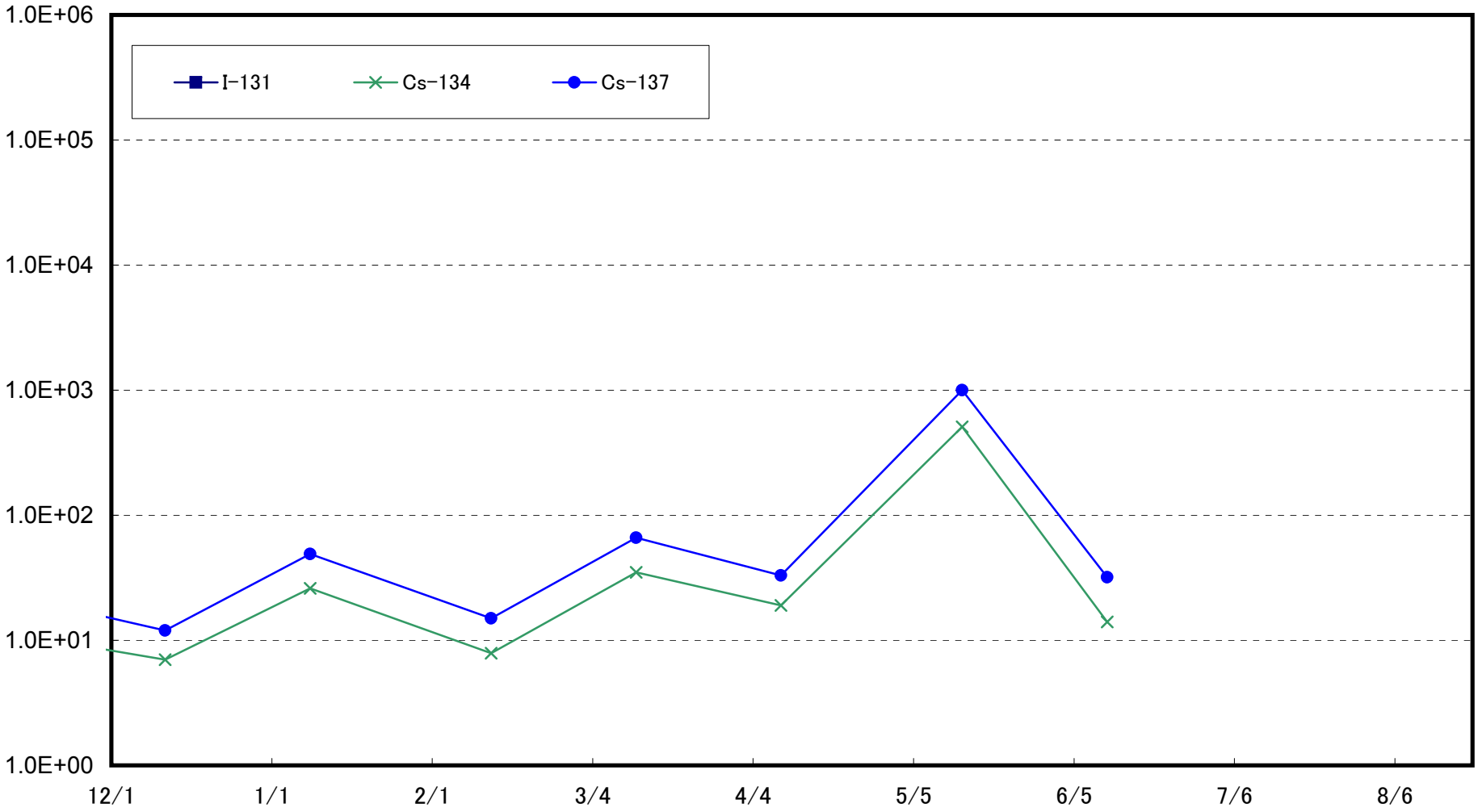


Radioactivity Density of the Marine Soil around the South Side of Kitasakogawa
(T-4-2) (Bq/kg, dry soil)

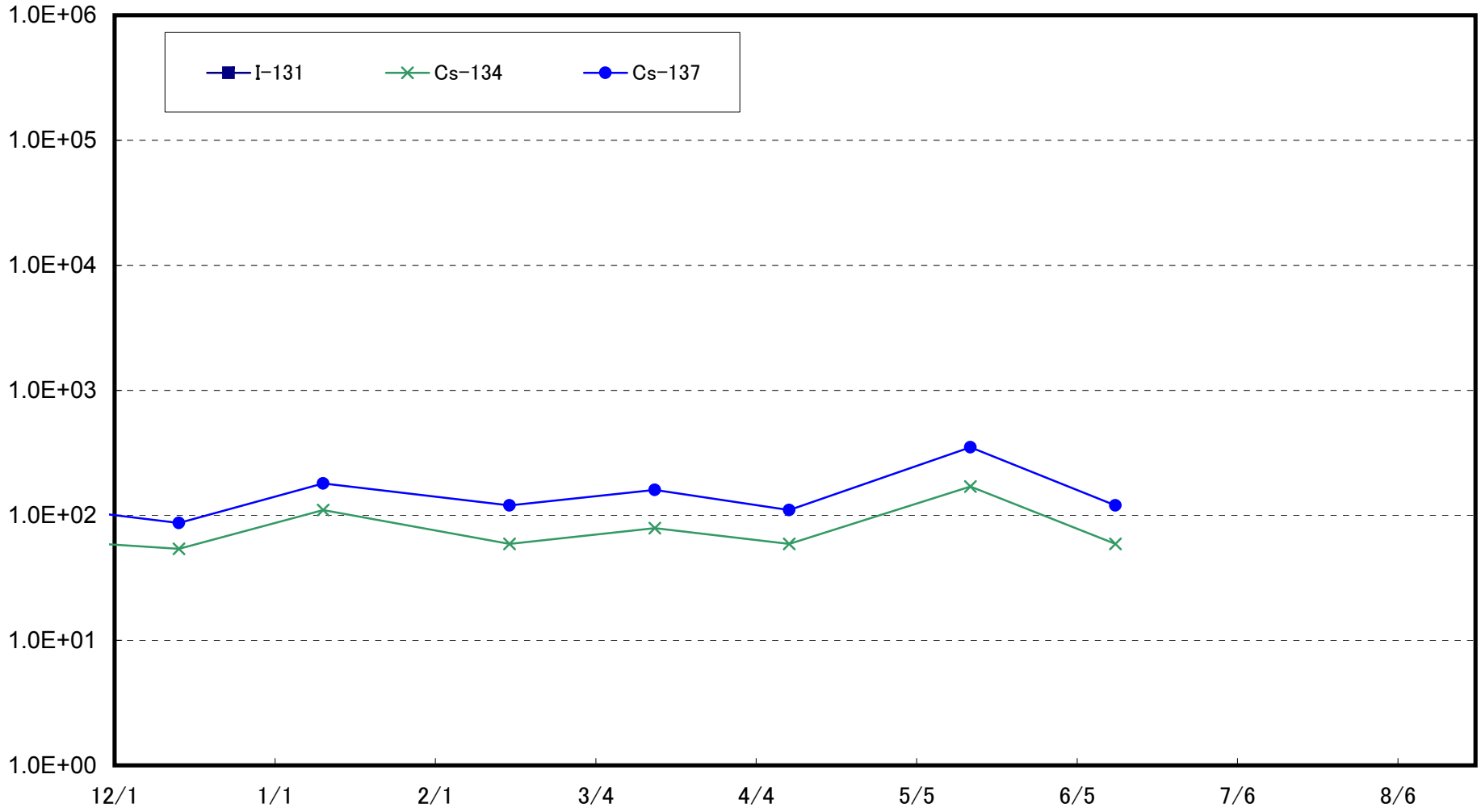


Sampling was conducted around the north of Asamigawa of Fukushima Daini NPS (appox. 12km south of Units 1-2 Discharge Channel) (approx. 24km of Fukushima Daiichi NPS) until March 21, 2013.

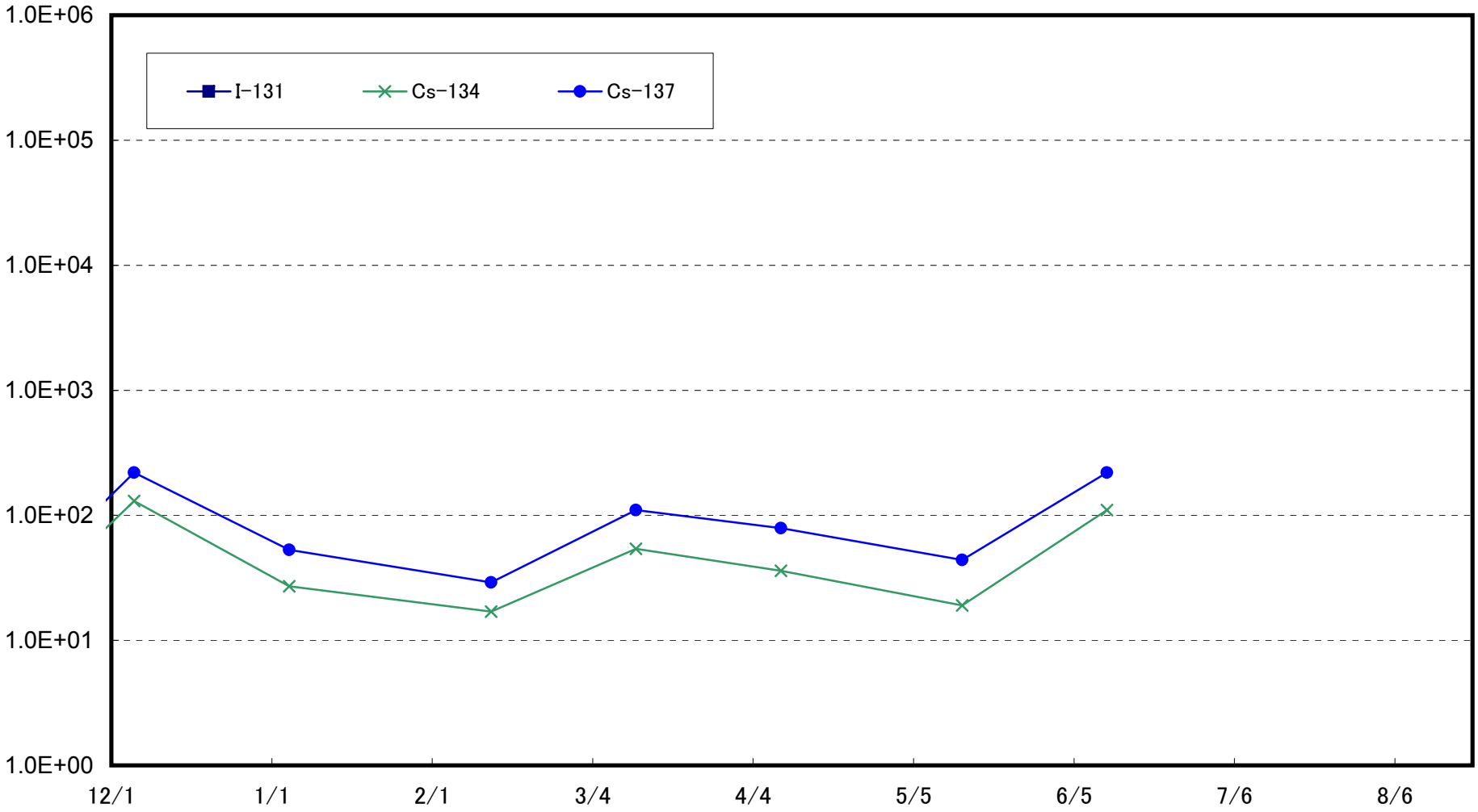
Radioactivity Density of the Marine Soil at Around 3km Offshore of Odaka Ward
(T-14) (Bq/kg , dry soil)



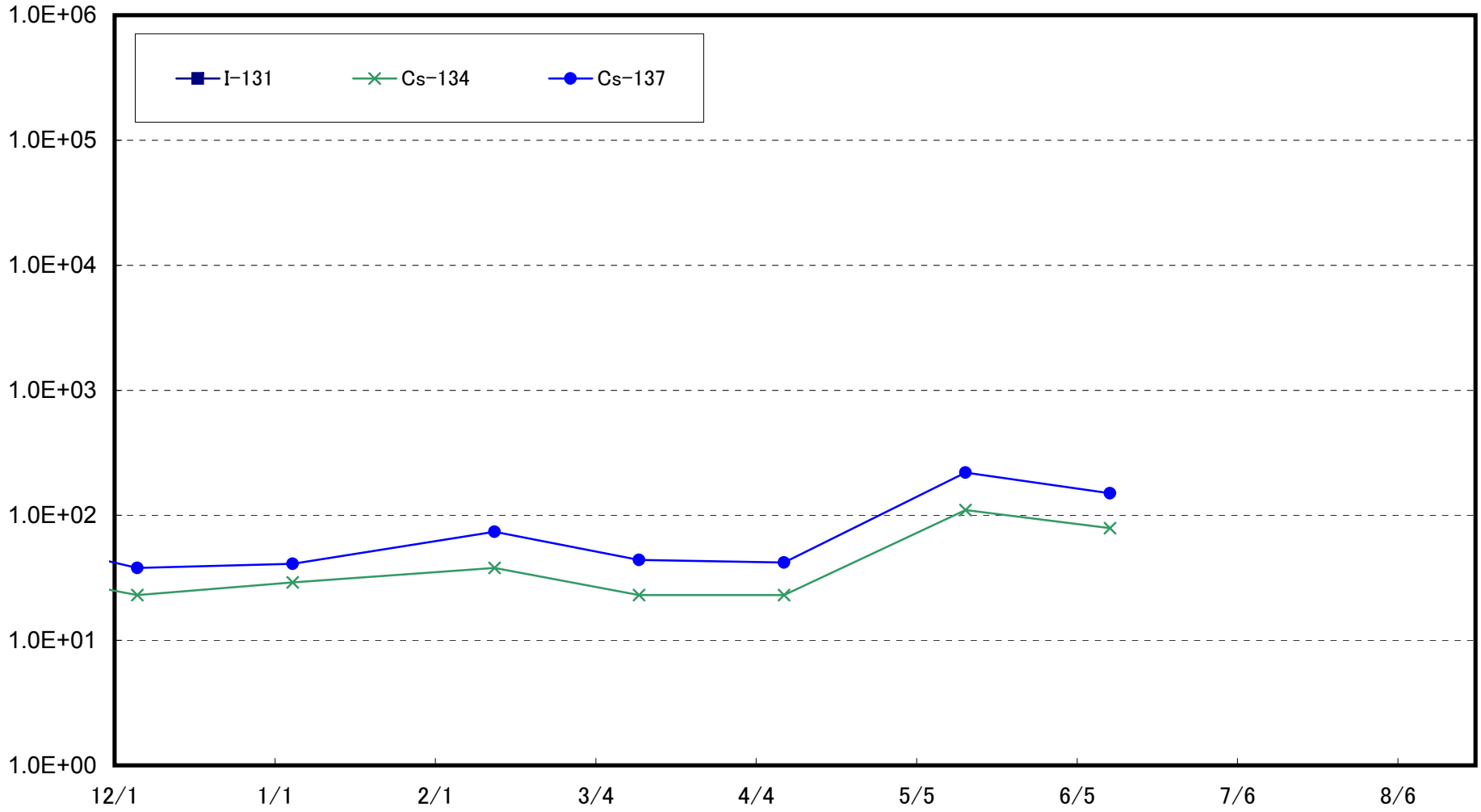
Radioactivity Density of the Marine Soil at 3km Offshore of Iwasawa Shore
(T-11) (Bq/kg, dry soil)



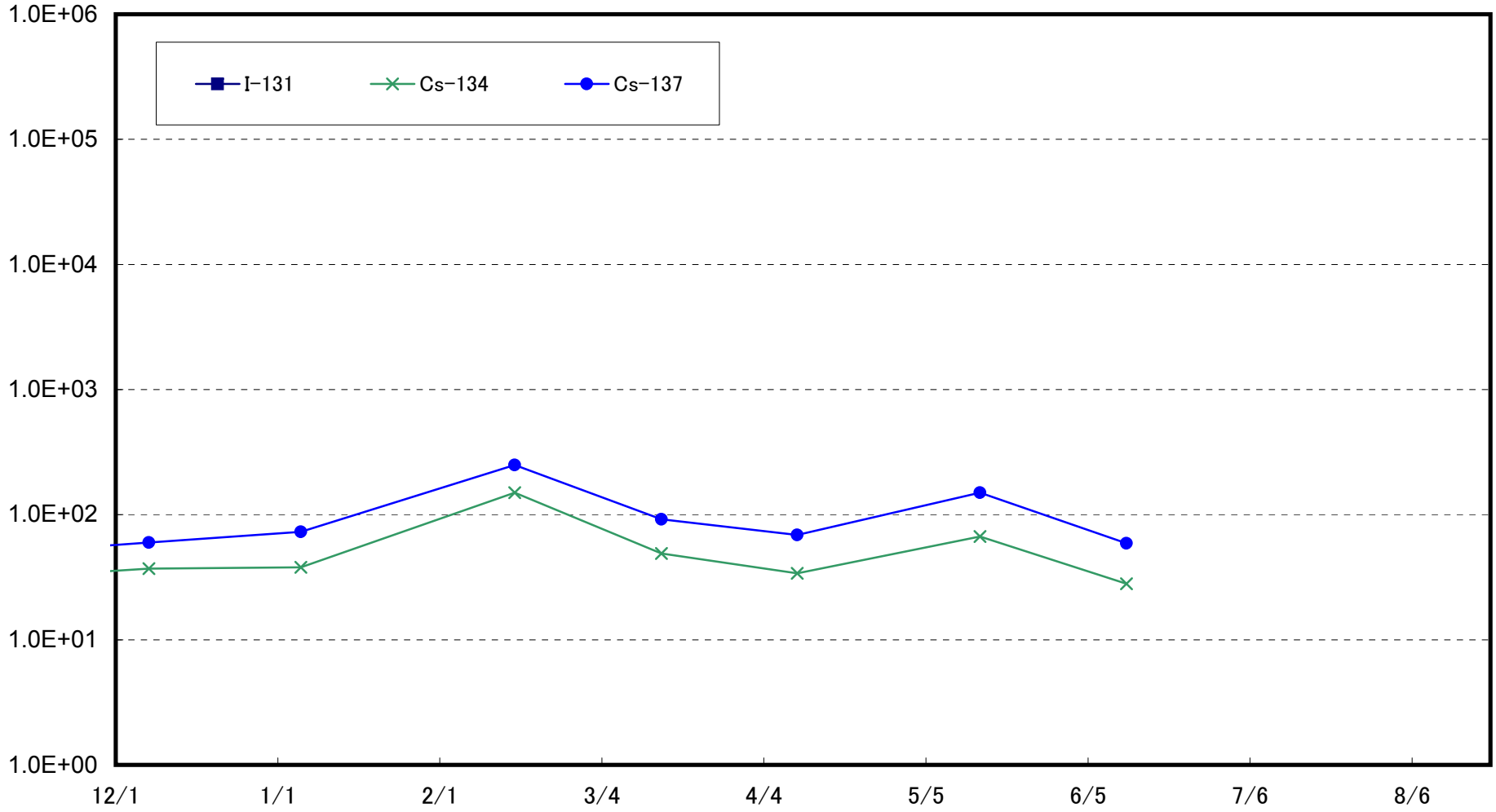
Radioactivity Density of the Marine Soil at 3km Offshore of Ukedo River
(T-D1) (Bq/kg, dry soil)



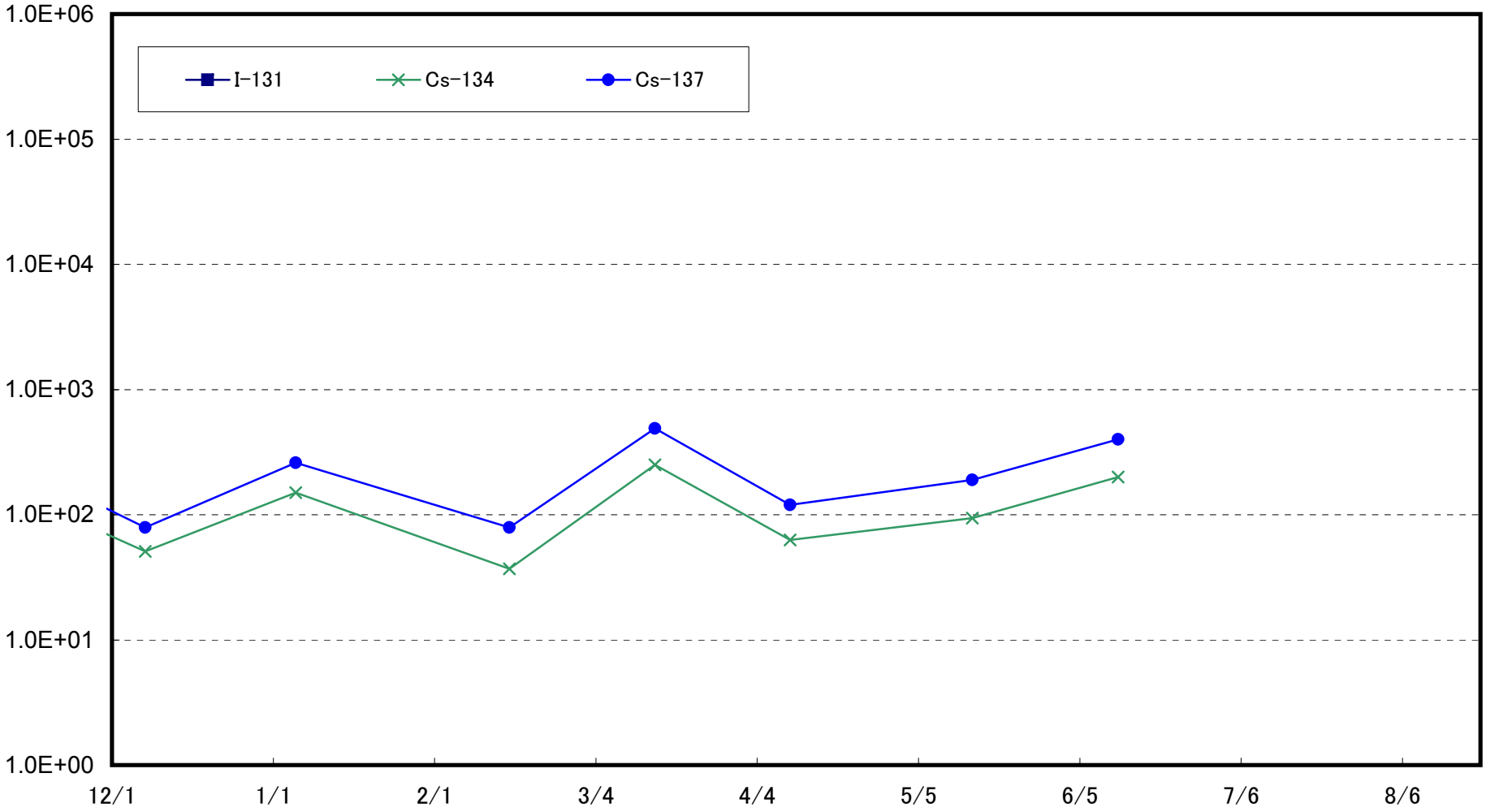
Radioactivity Density of the Marine Soil at 3km Offshore of Fukushima Daiichi NPS
(T-D5) (Bq/kg , dry soil)



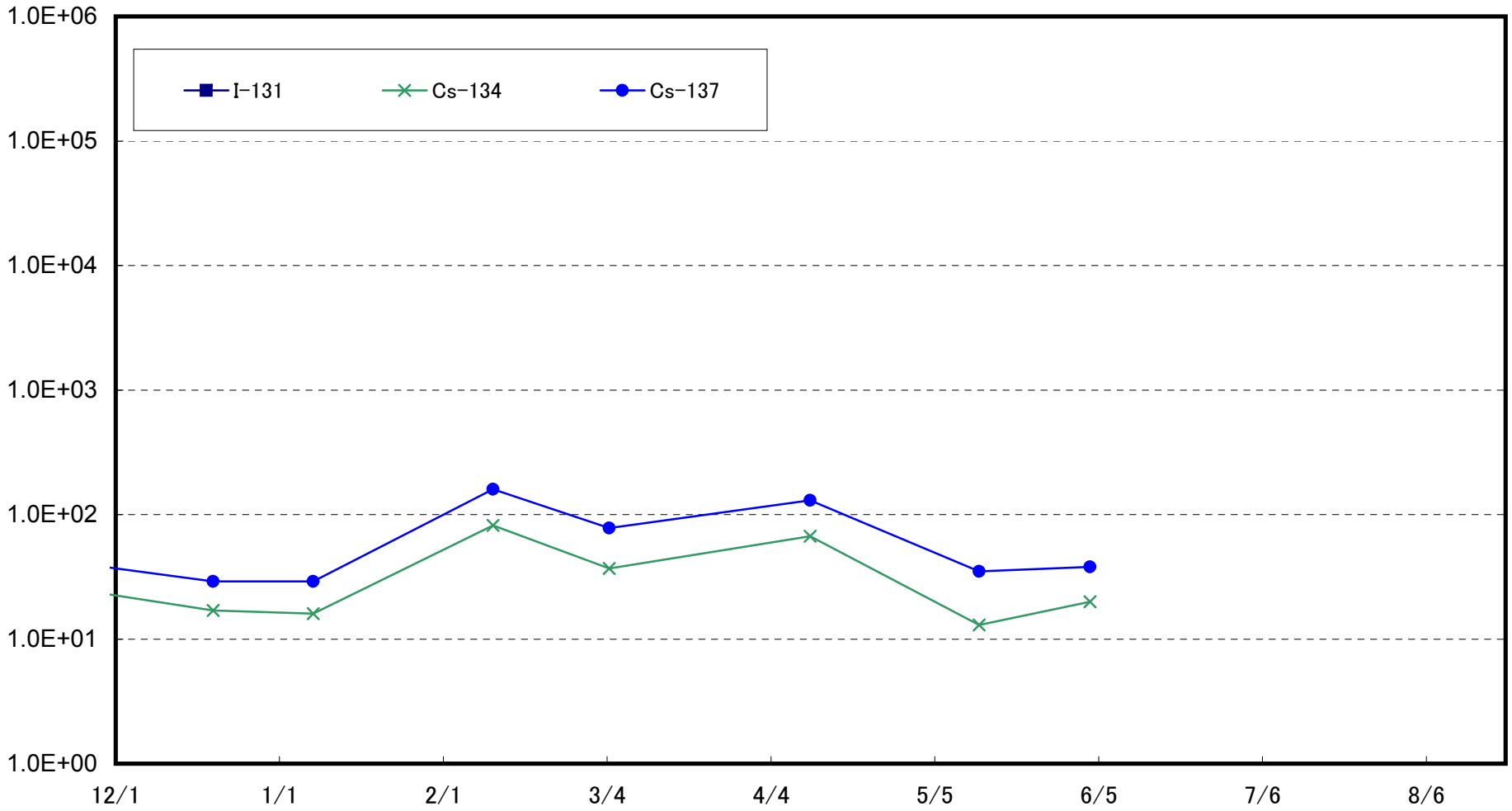
Radioactivity Density of the Marine Soil at 3km Offshore of Fukushima Daini NPS
(T-D9) (Bq/kg, dry soil)



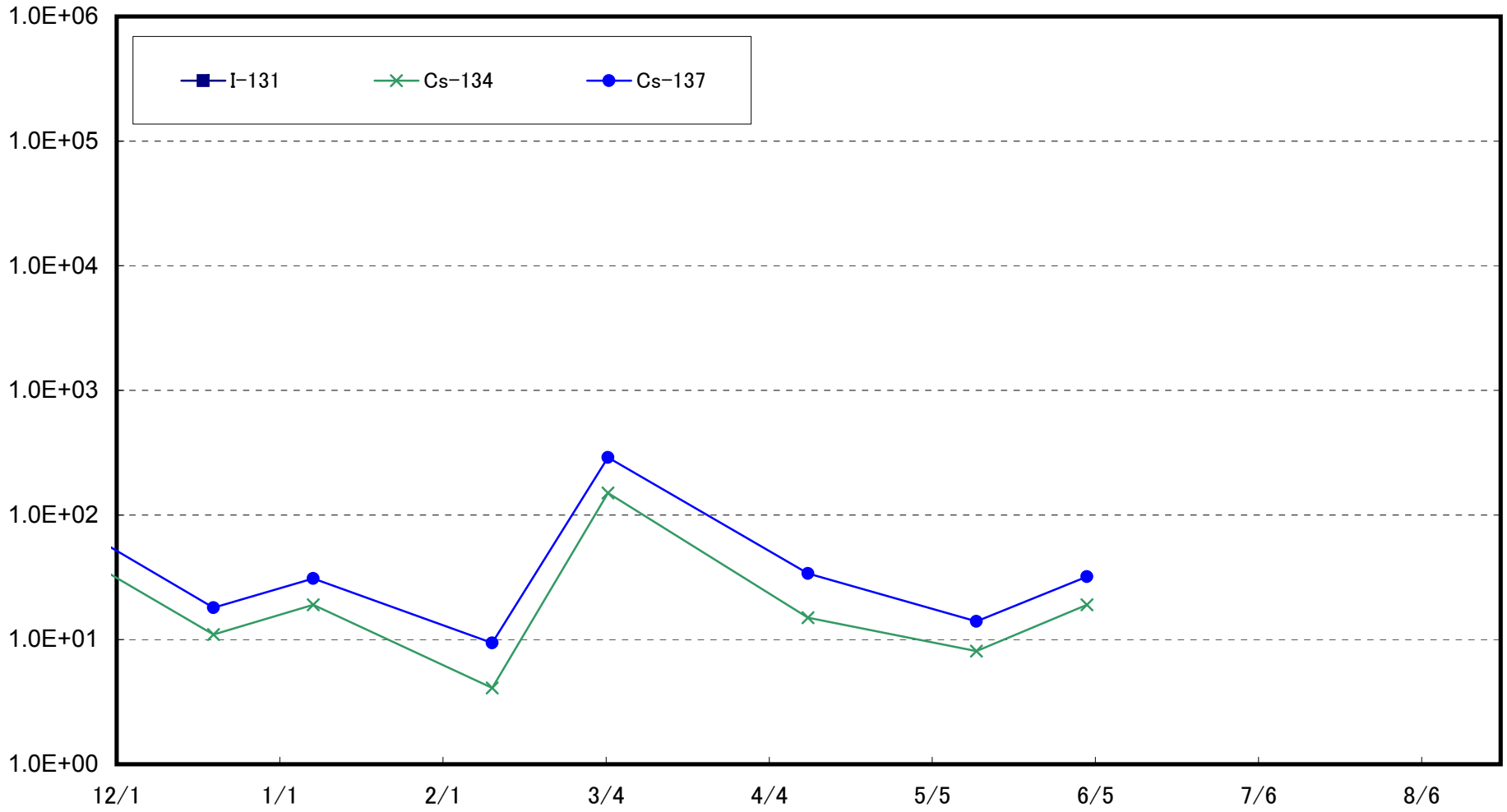
Radioactivity Density of the Marine Soil at 15km Offshore of Fukushima Daiichi NPS
(T-5) (Bq/kg, dry soil)



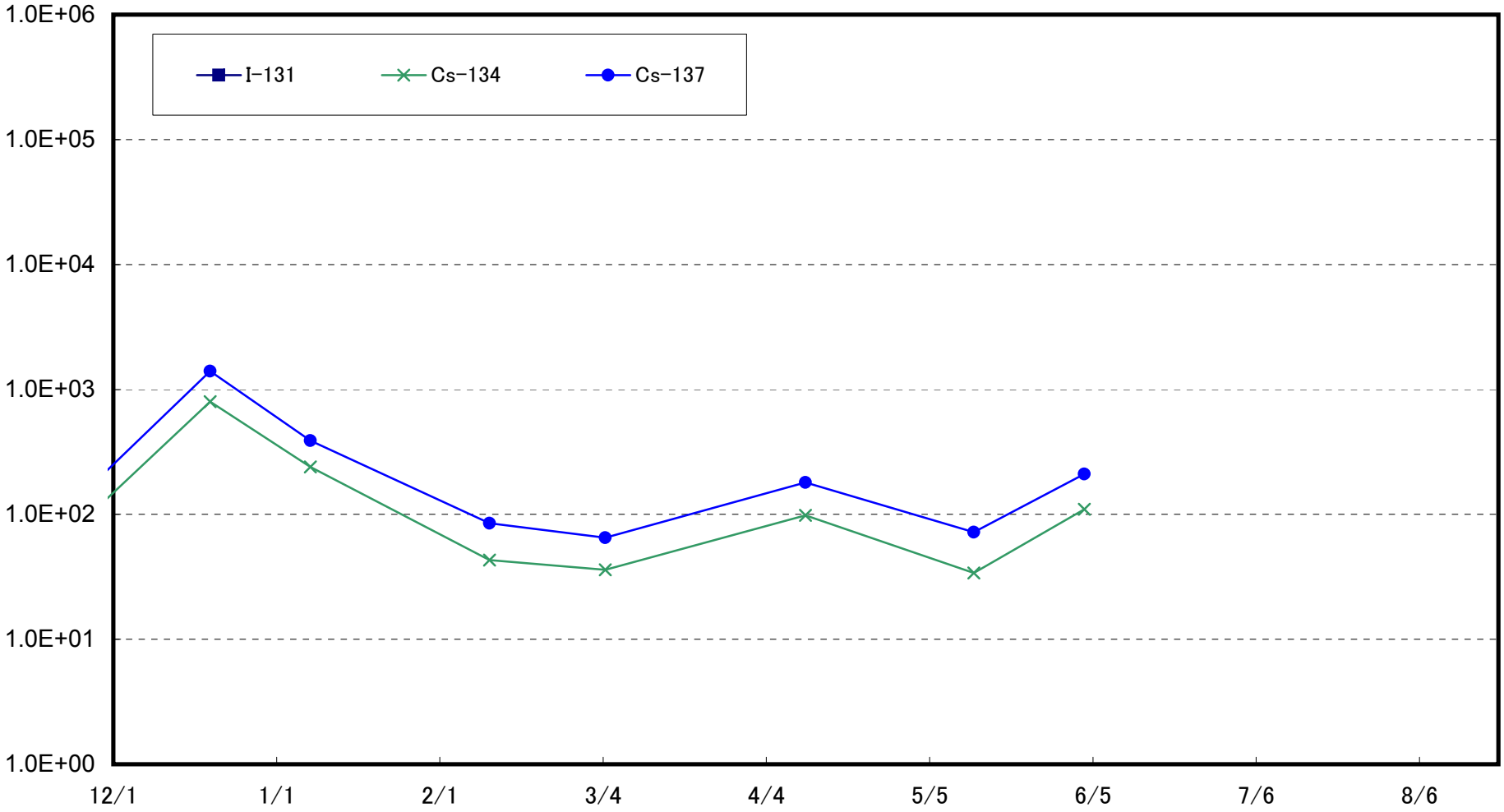
Radioactivity Density of the Marine Soil at 1km Offshore of Murakami, Odaka Ward (T-①) (Bq/kg (dry soil)



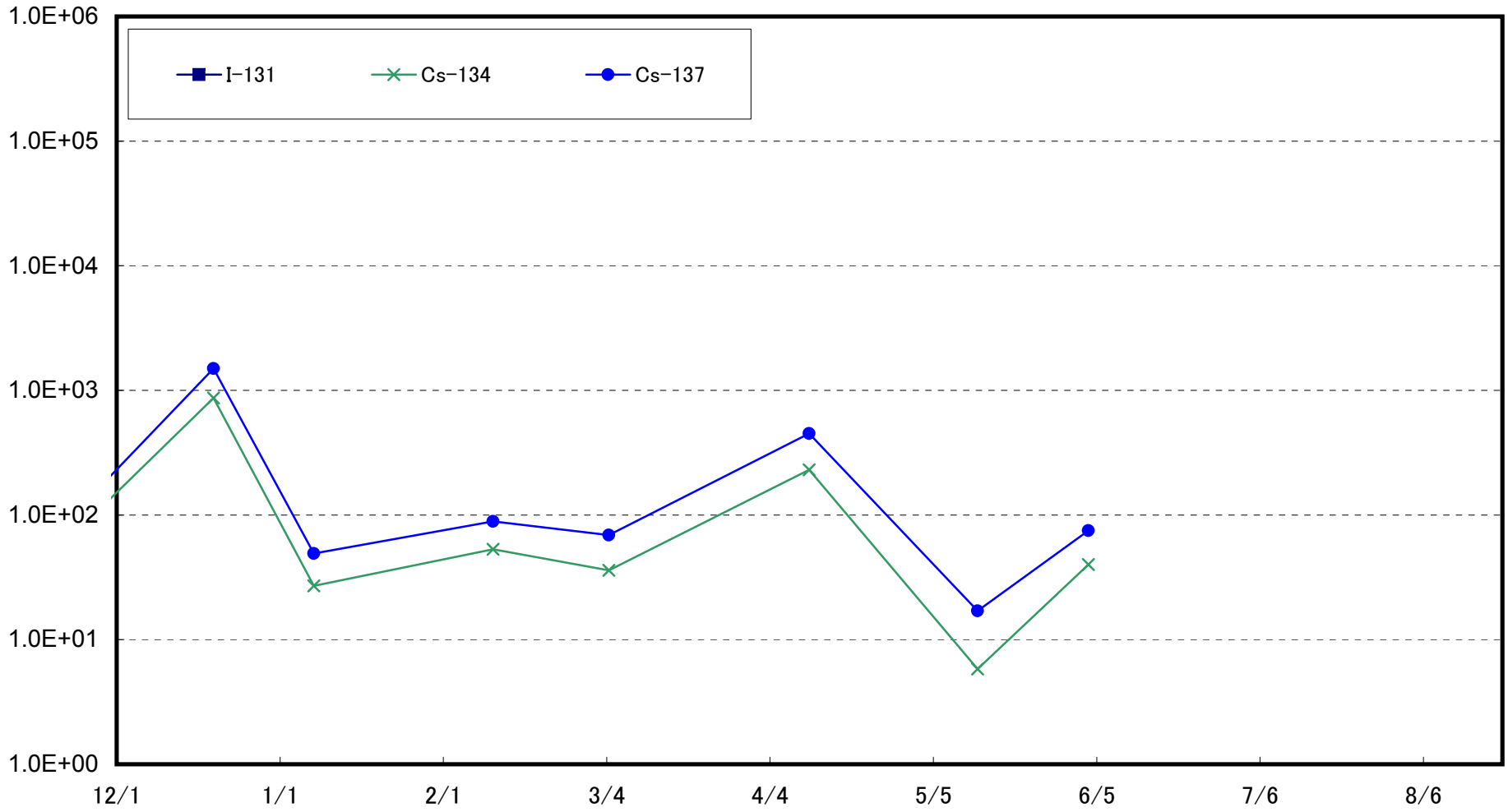
Radioactivity Density of the Marine Soil at 2km Offshore of Murakami, Odaka Ward (T-②) (Bq/kg (dry soil)



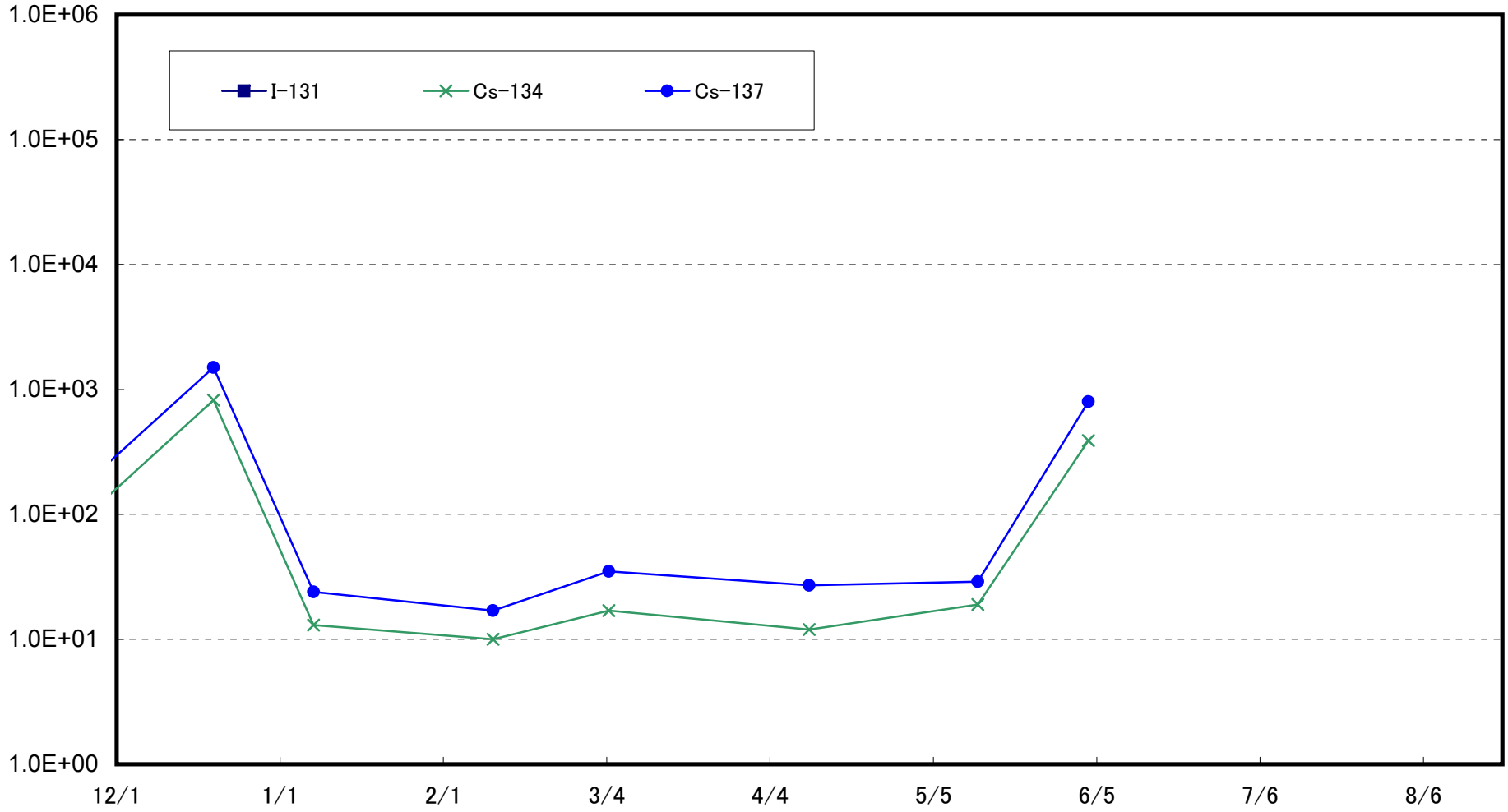
Radioactivity Density of the Marine Soil at 1km Offshore of Ukedo, Namie Town (T-③) (Bq/kg (dry soil)



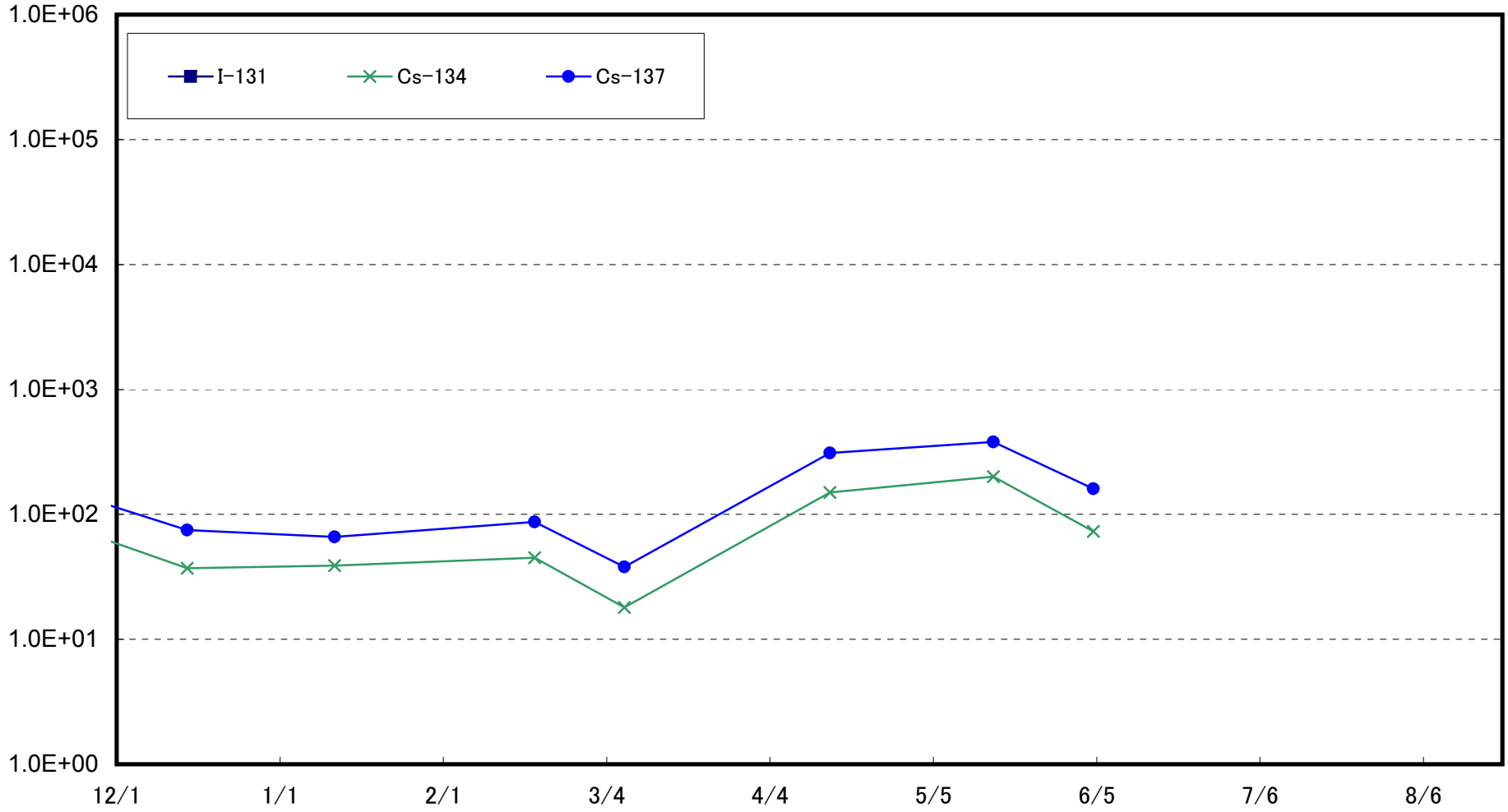
Radioactivity Density of the Marine Soil at 2km Offshore of Ukedo, Namie Town (T-④) (Bq/kg (dry soil)



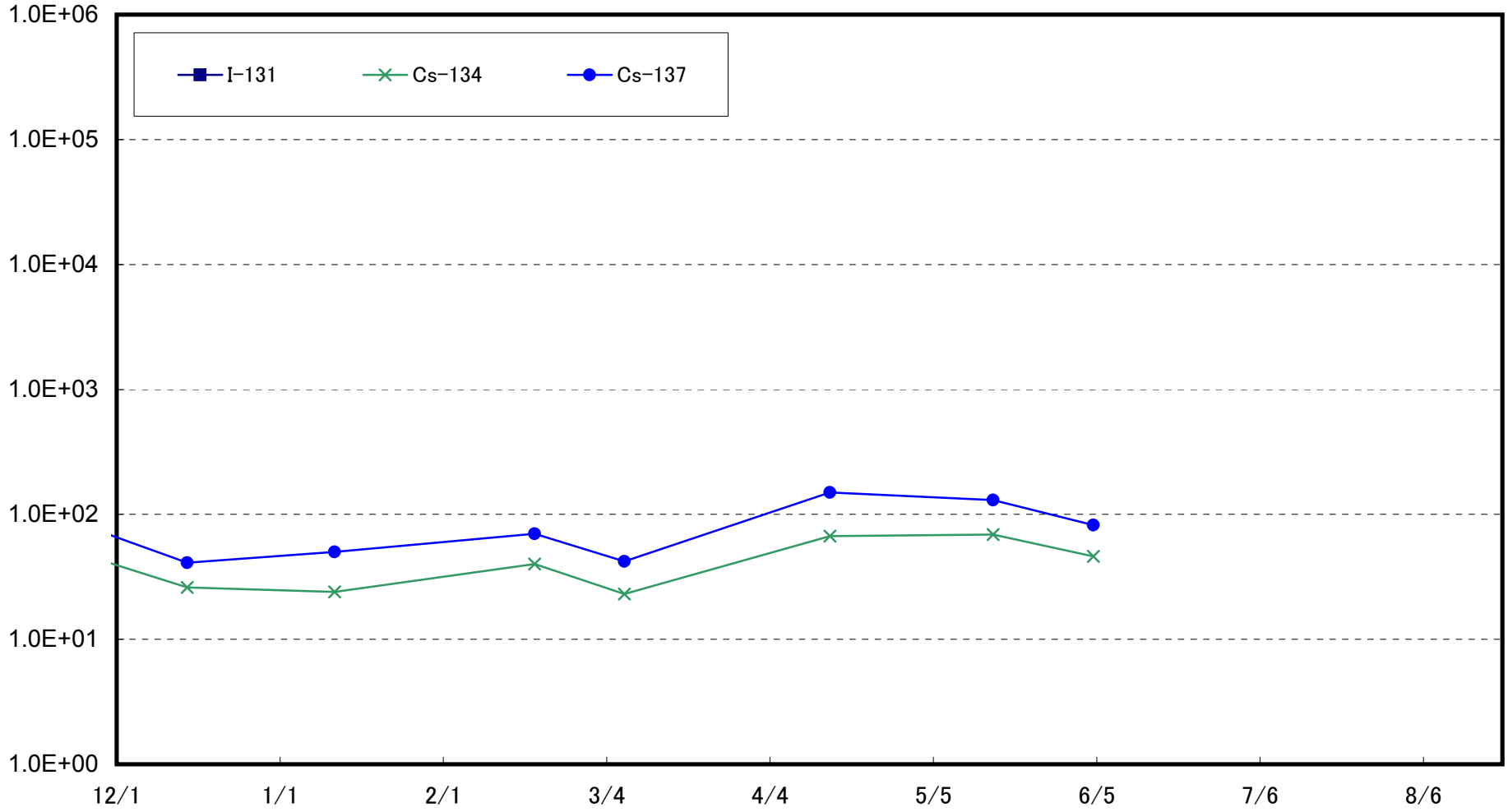
Radioactivity Density of the Marine Soil at 3km Offshore of Ukedo, Namie Town (T-⑤) (Bq/kg (dry soil)



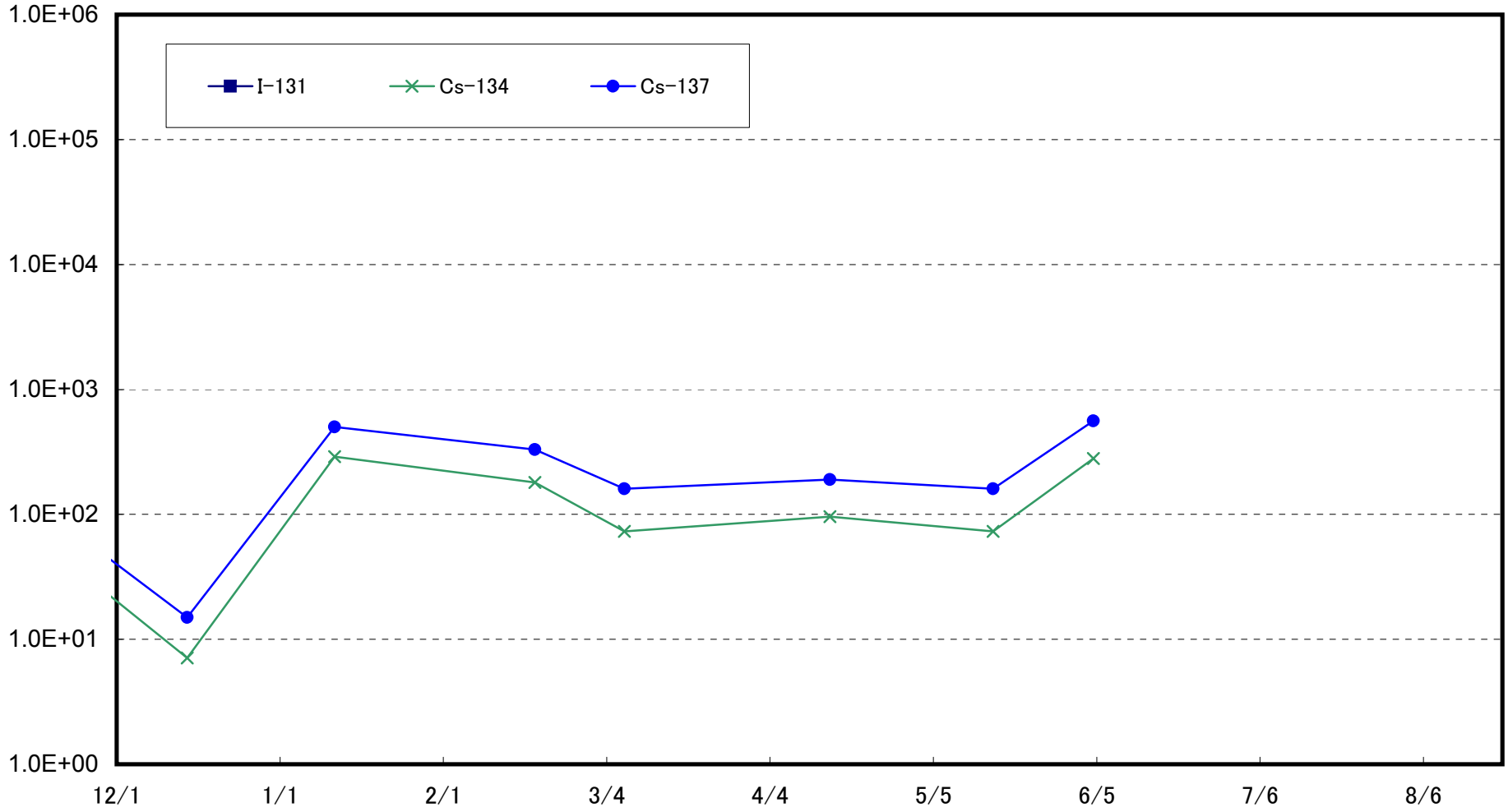
Radioactivity Density of the Marine Soil at 1km Offshore of Kumagawa, Okuma Town (T-⑥) (Bq/kg (dry soil)



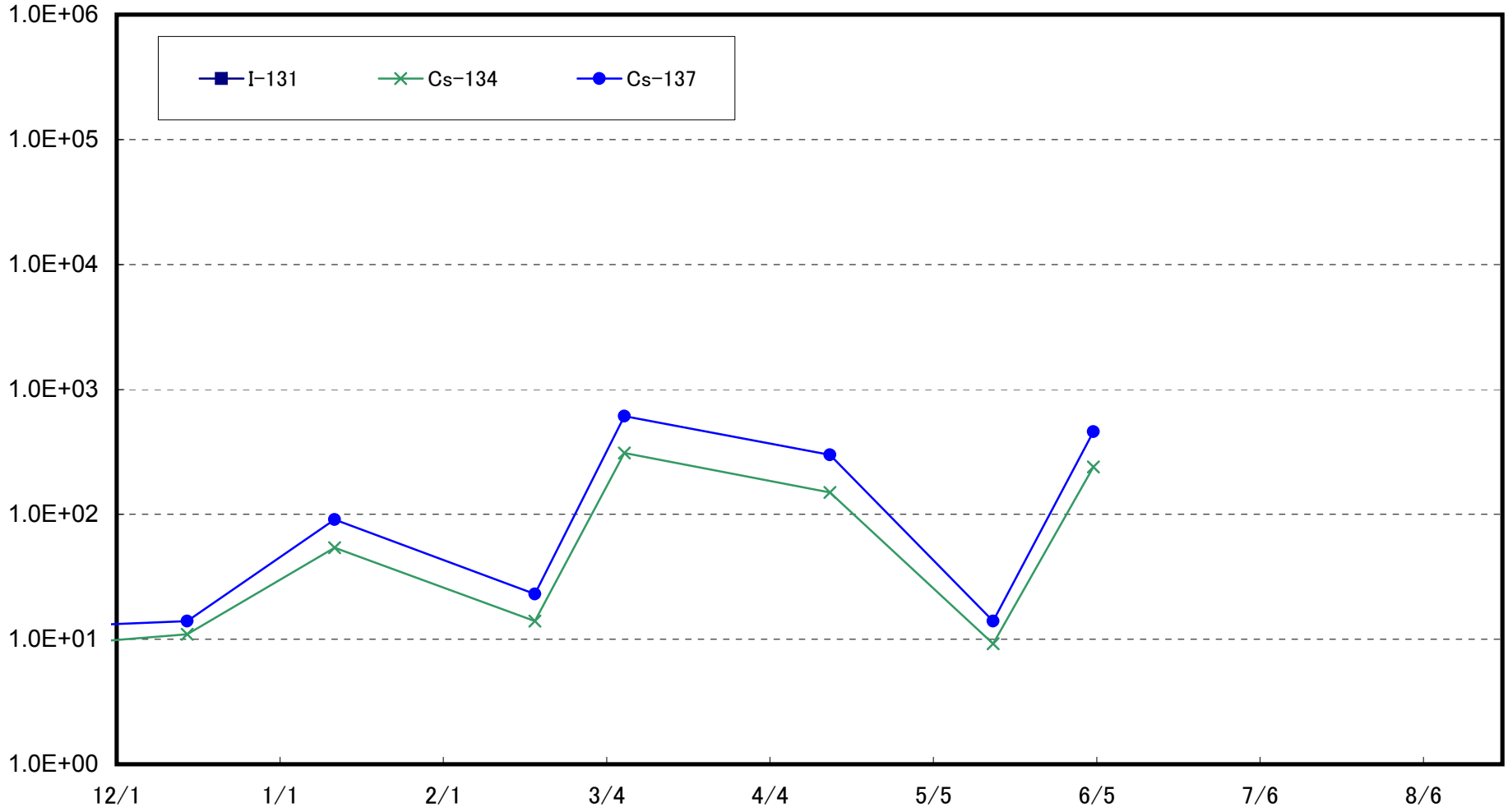
Radioactivity Density of the Marine Soil at 2km Offshore of Kumagawa, Okuma Town (T-⑦) (Bq/kg (dry soil)



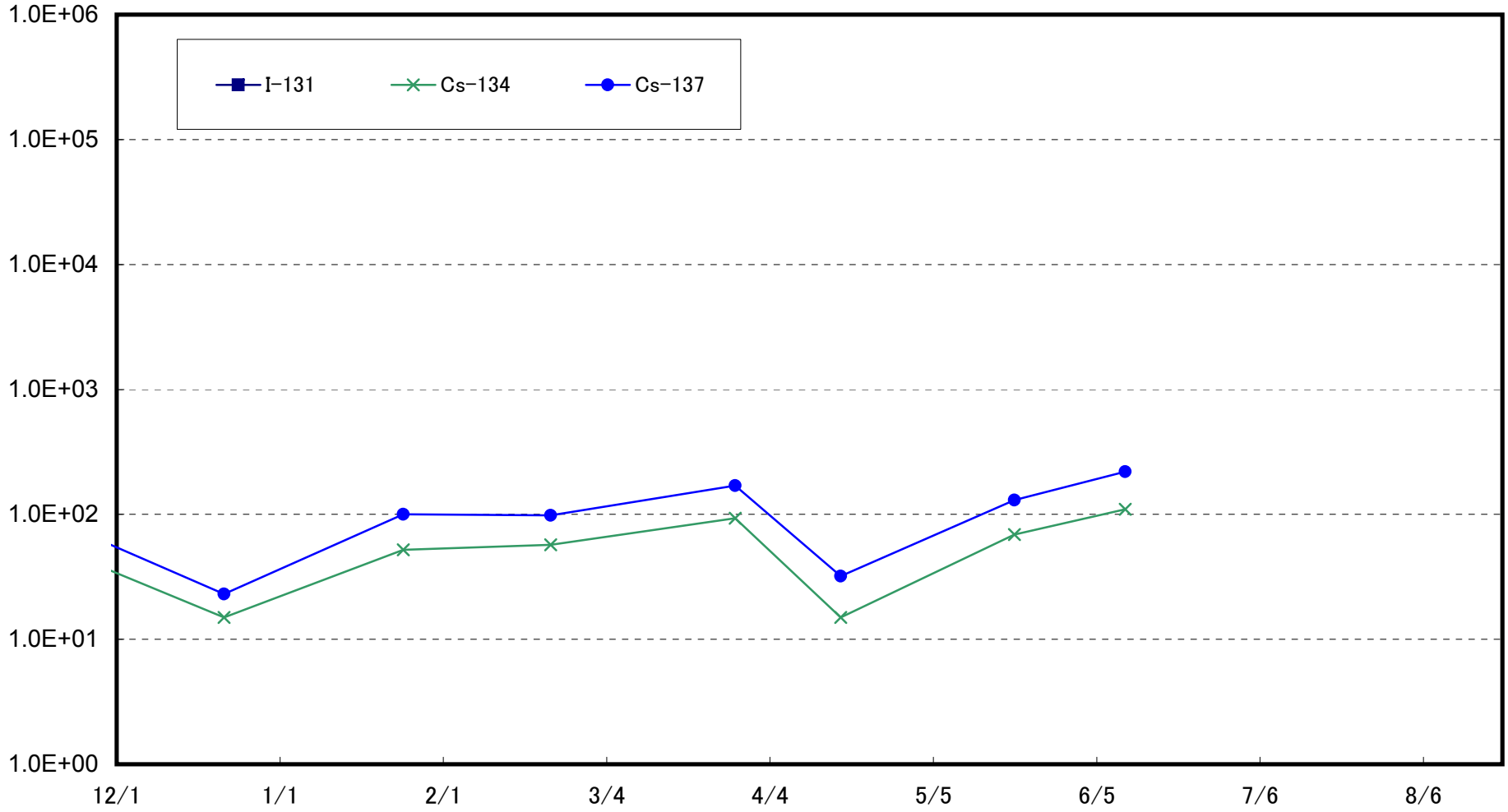
Radioactivity Density of the Marine Soil at 3km Offshore of Kumagawa, Okuma Town (T-⑧) (Bq/kg (dry soil)



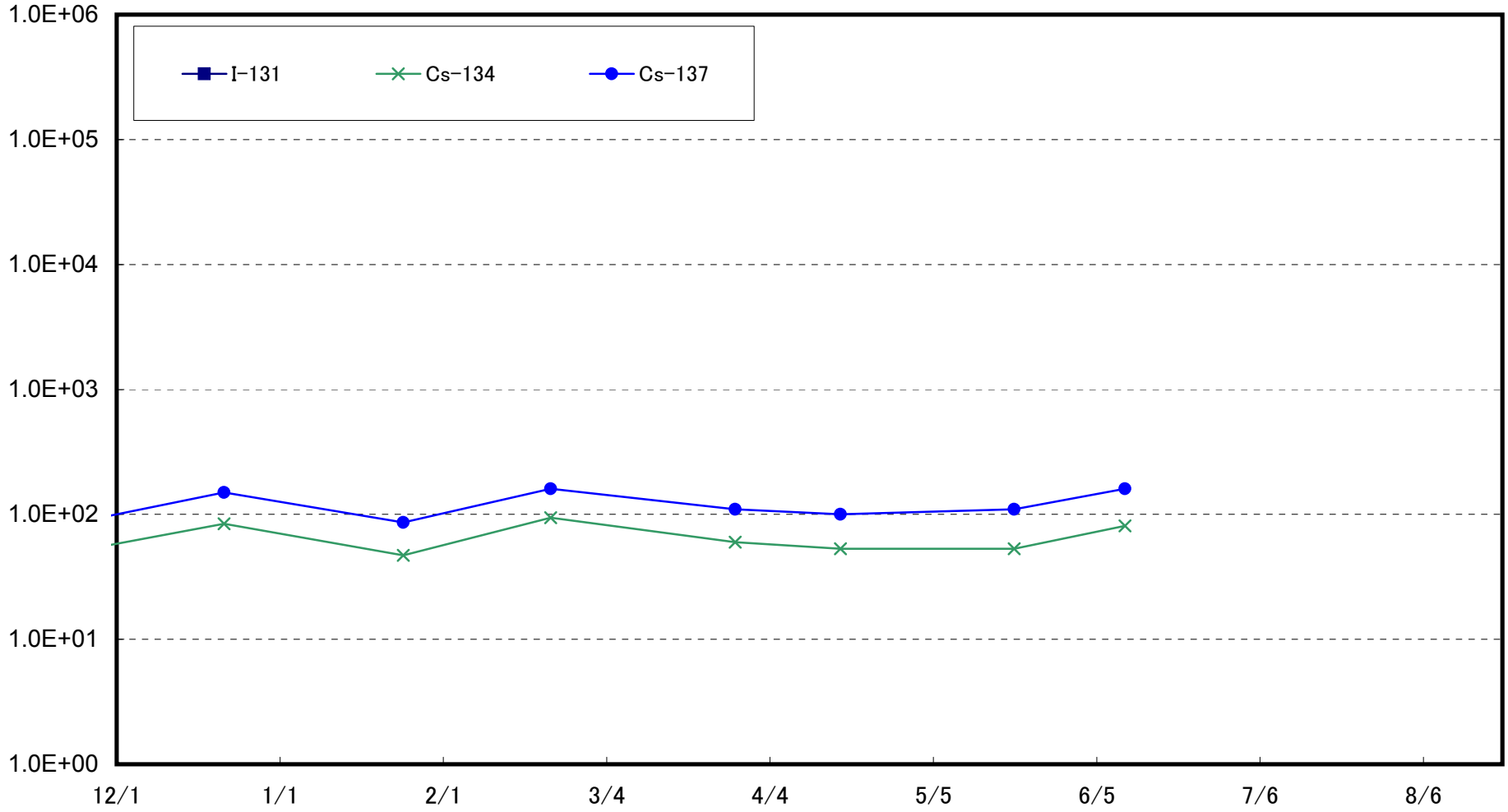
Radioactivity Density of the Marine Soil at 5km Offshore of Kumagawa, Okuma Town (T-⑨) (Bq/kg (dry soil)



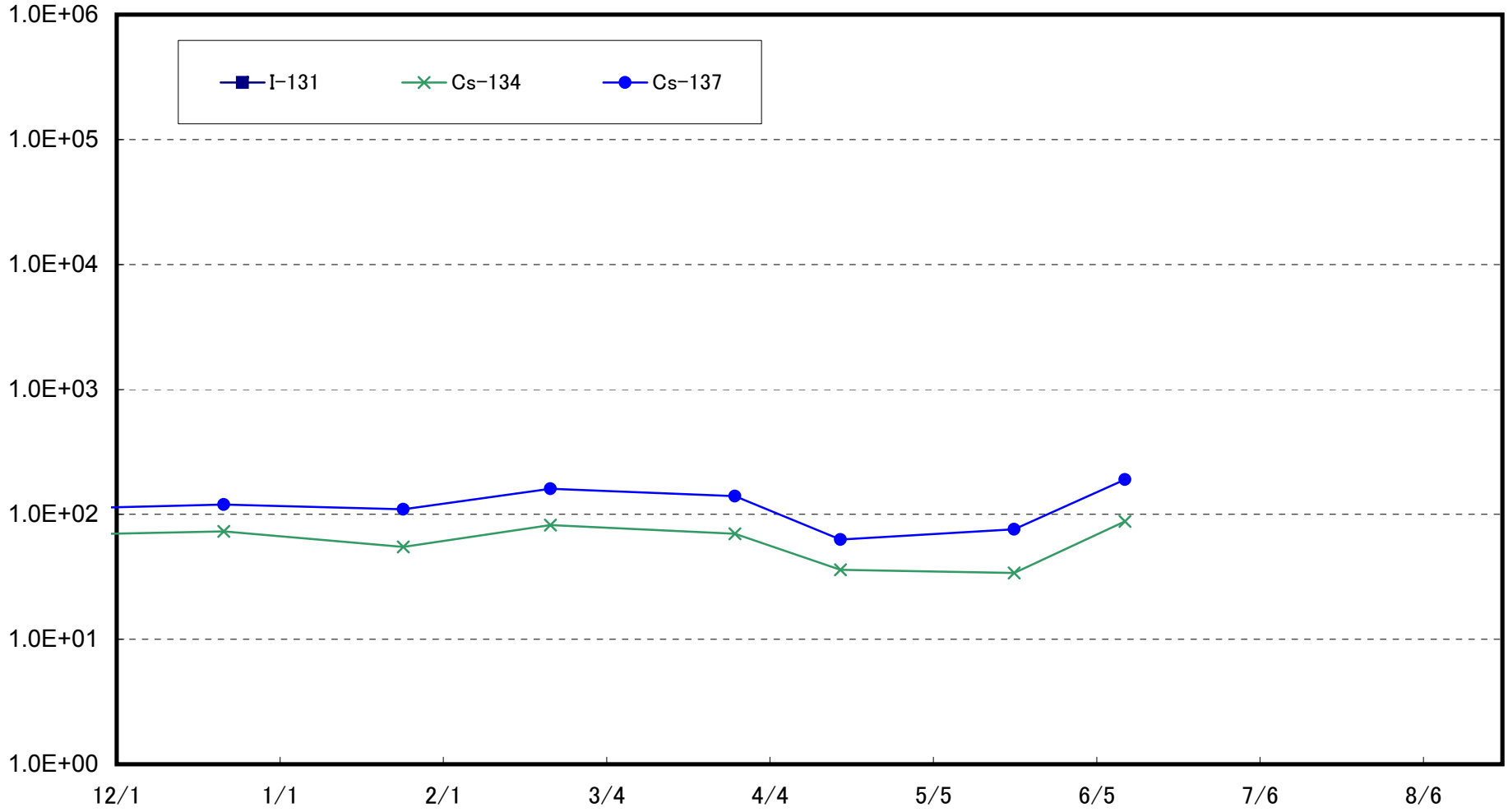
Radioactivity Density of the Marine Soil at 10km Offshore of Kumagawa, Okuma Town (T-⑩) (Bq/kg (dry soil)



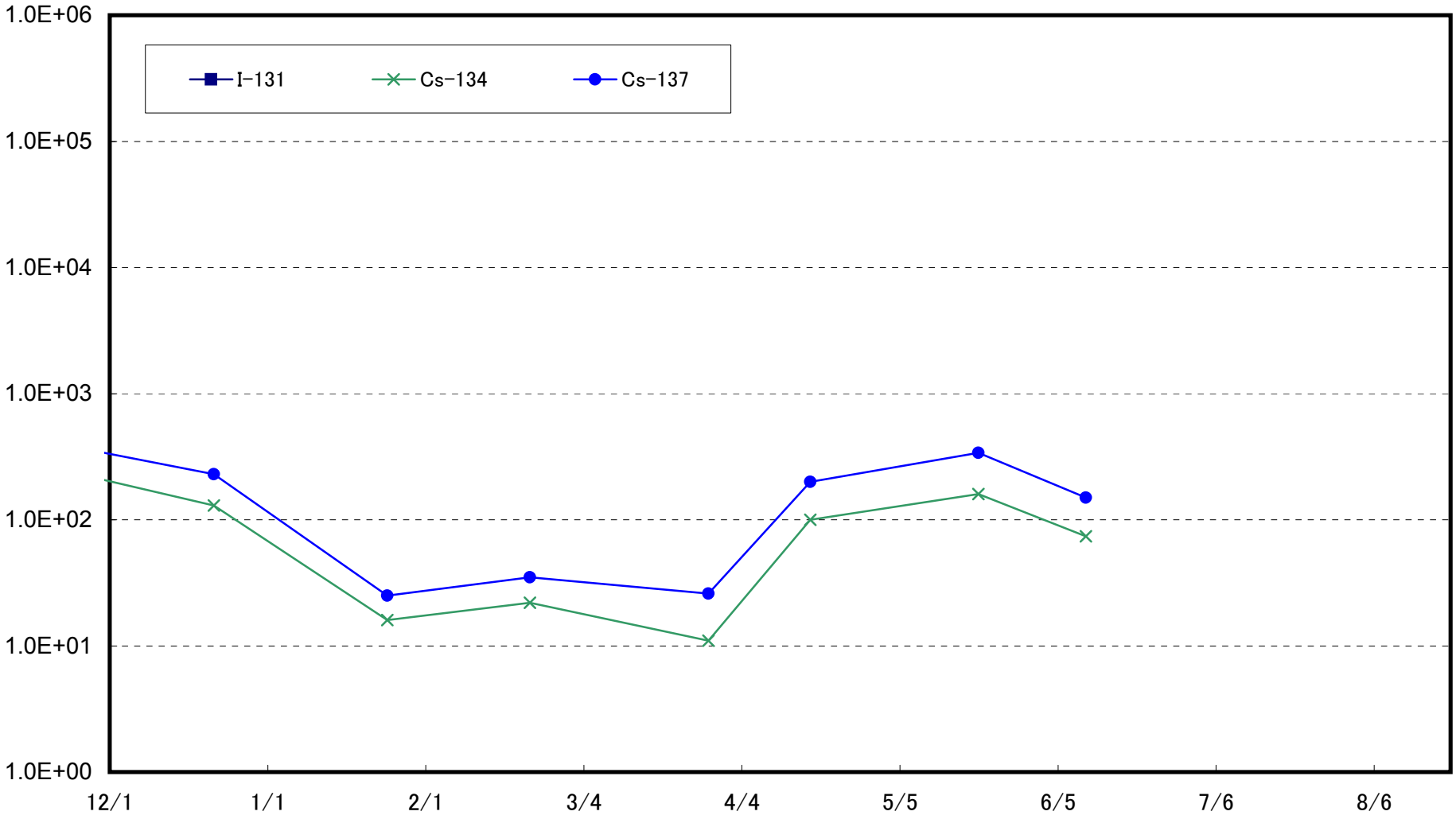
Radioactivity Density of the Marine Soil at 15km Offshore of Kumagawa, Okuma Town (T-⑪) (Bq/kg (dry soil)



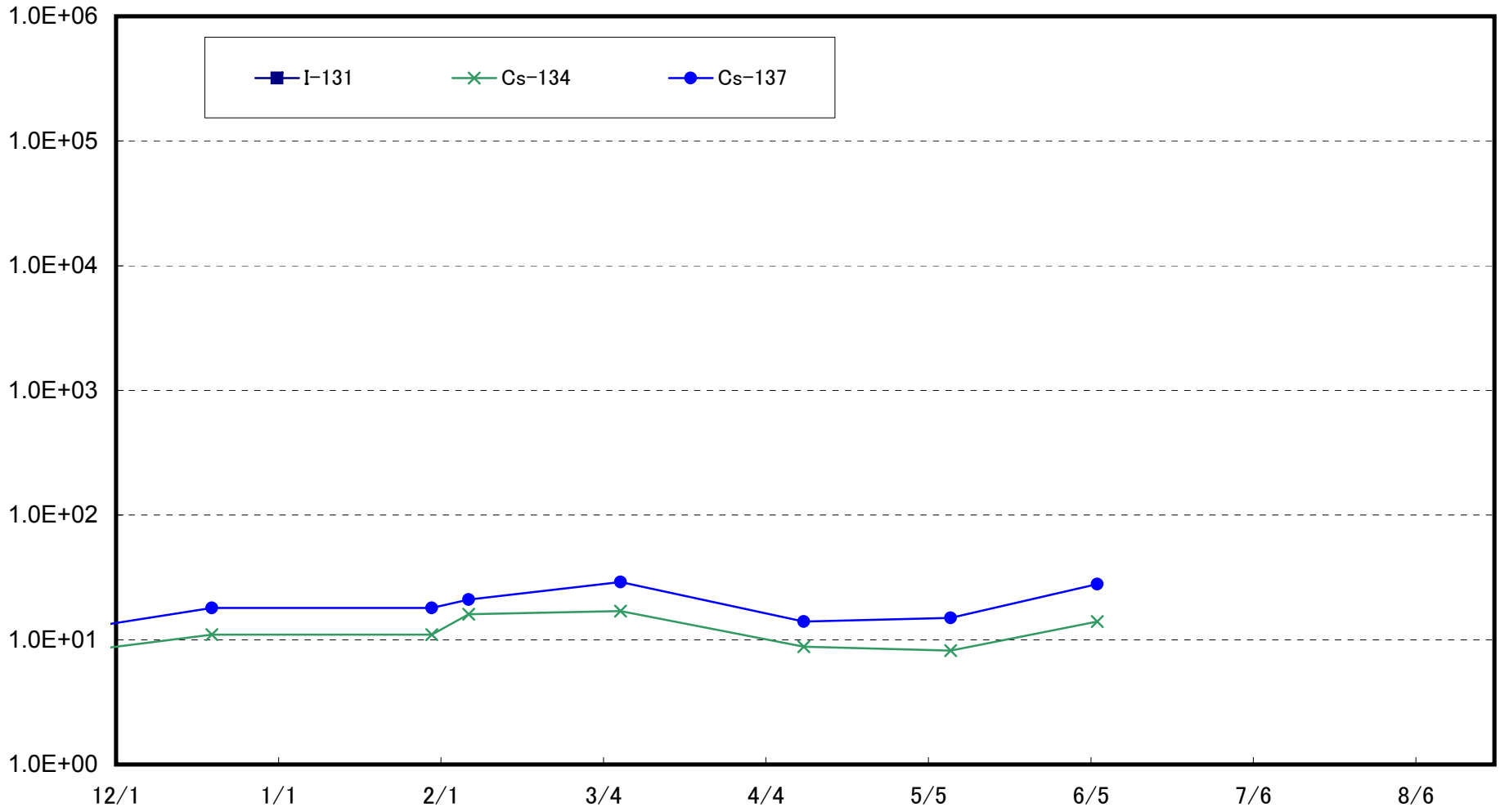
Radioactivity Density of the Marine Soil at 20km Offshore of Kumagawa, Okuma Town (T-⑫) (Bq/kg (dry soil)



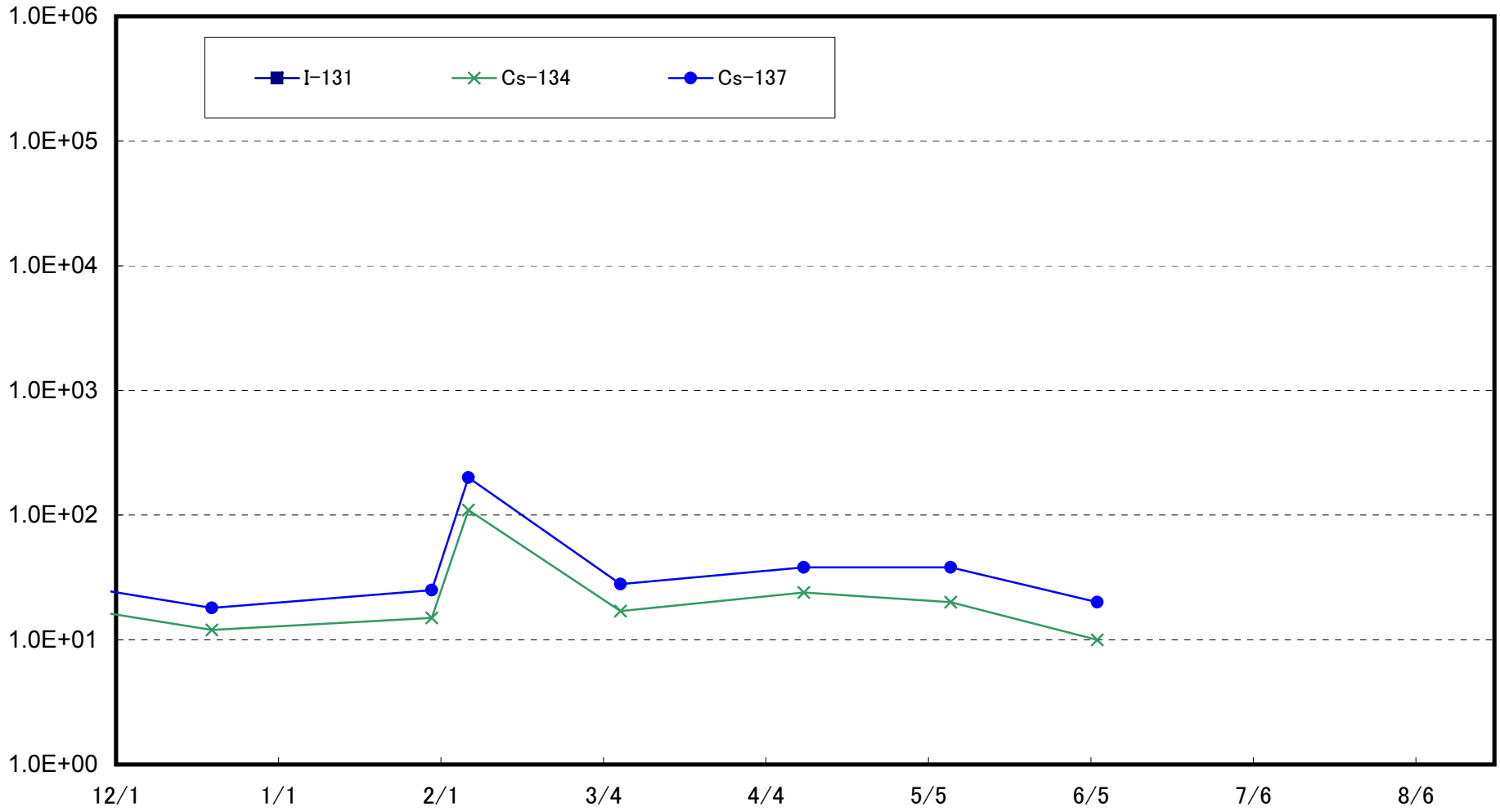
Radioactivity Density of the Marine Soil at 1km Offshore of Yamadahama, Naraha Town (T-⑬) (Bq/kg (dry soil)



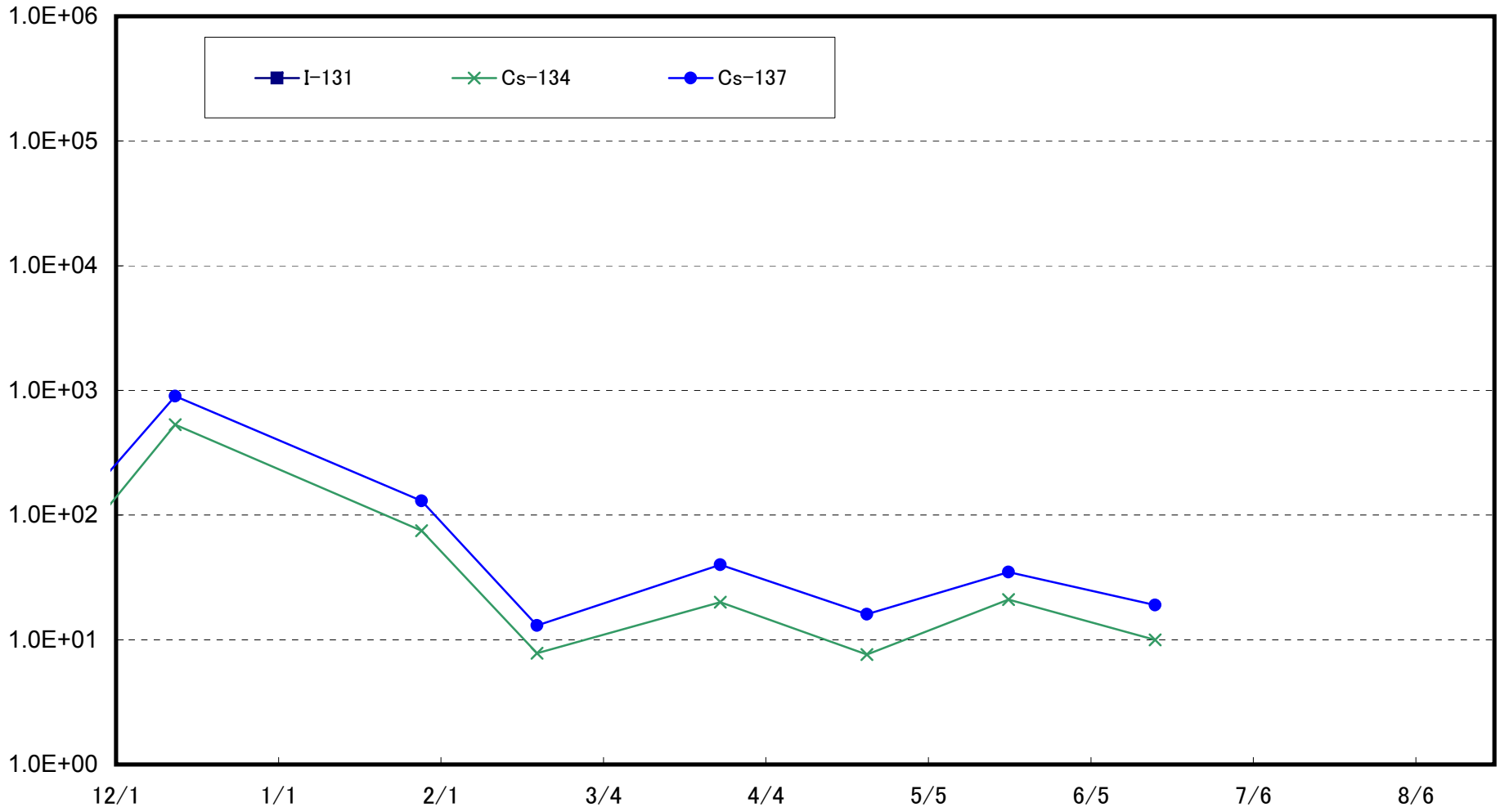
Radioactivity Density of the Marine Soil at Around 1km Offshore of Ota River (T-S1) (Bq/kg (dry soil)



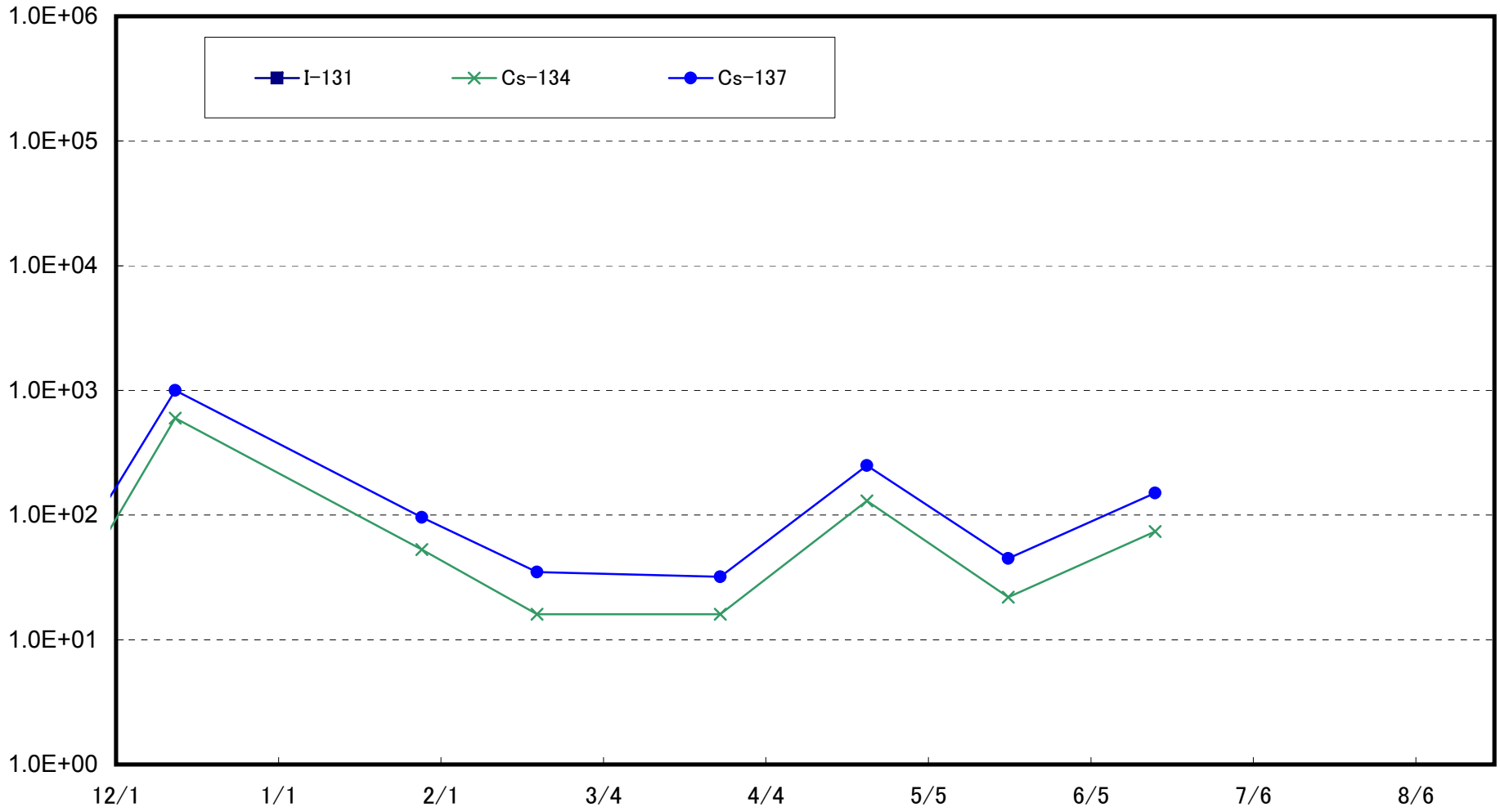
Radioactivity Density of the Marine Soil at Around 3km Offshore of Odaka Ward (T-S2) (Bq/kg (dry soil)



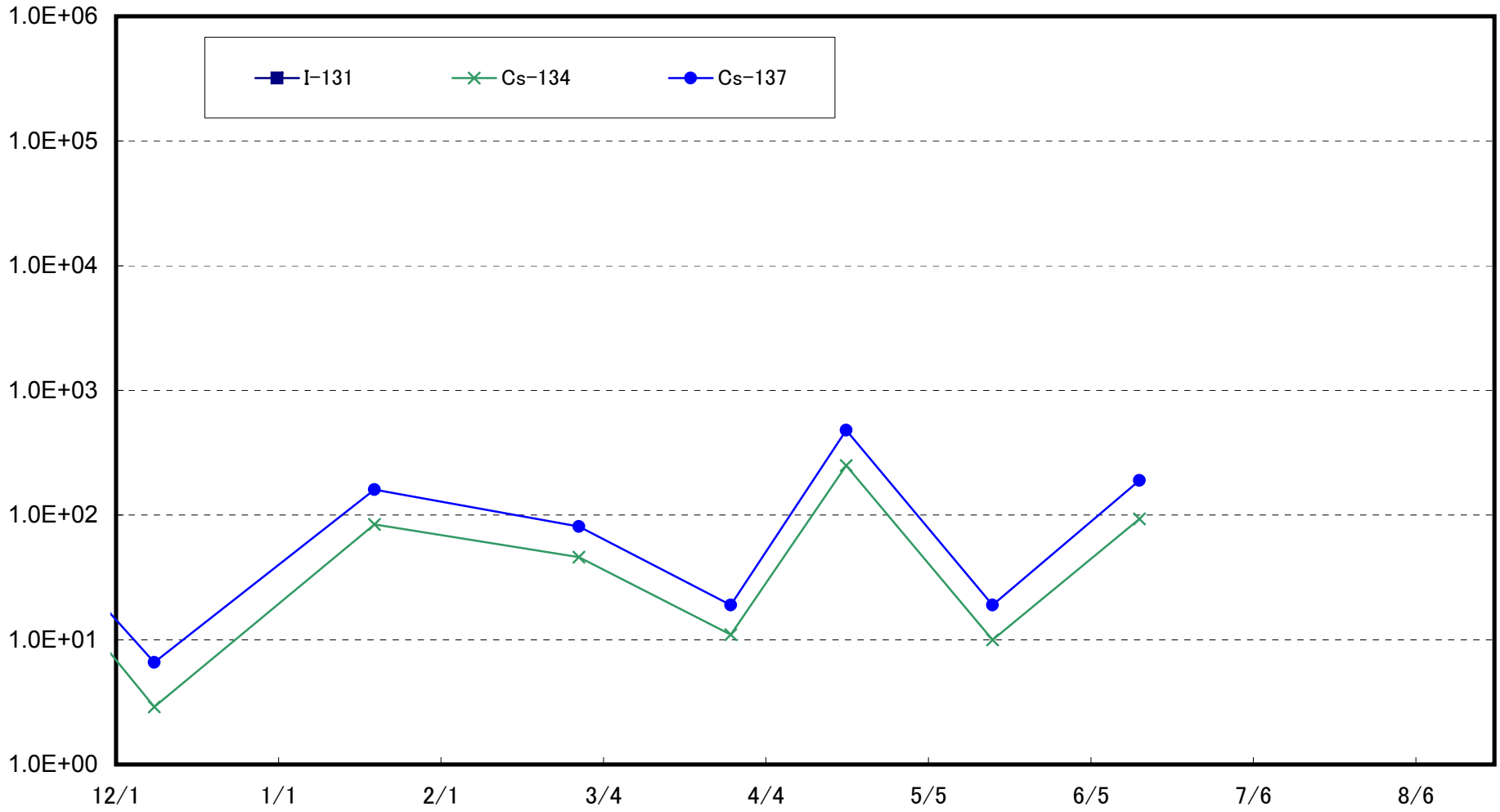
Radioactivity Density of the Marine Soil at Around 3km Offshore of Ukedo River (T-S3) (Bq/kg (dry soil)



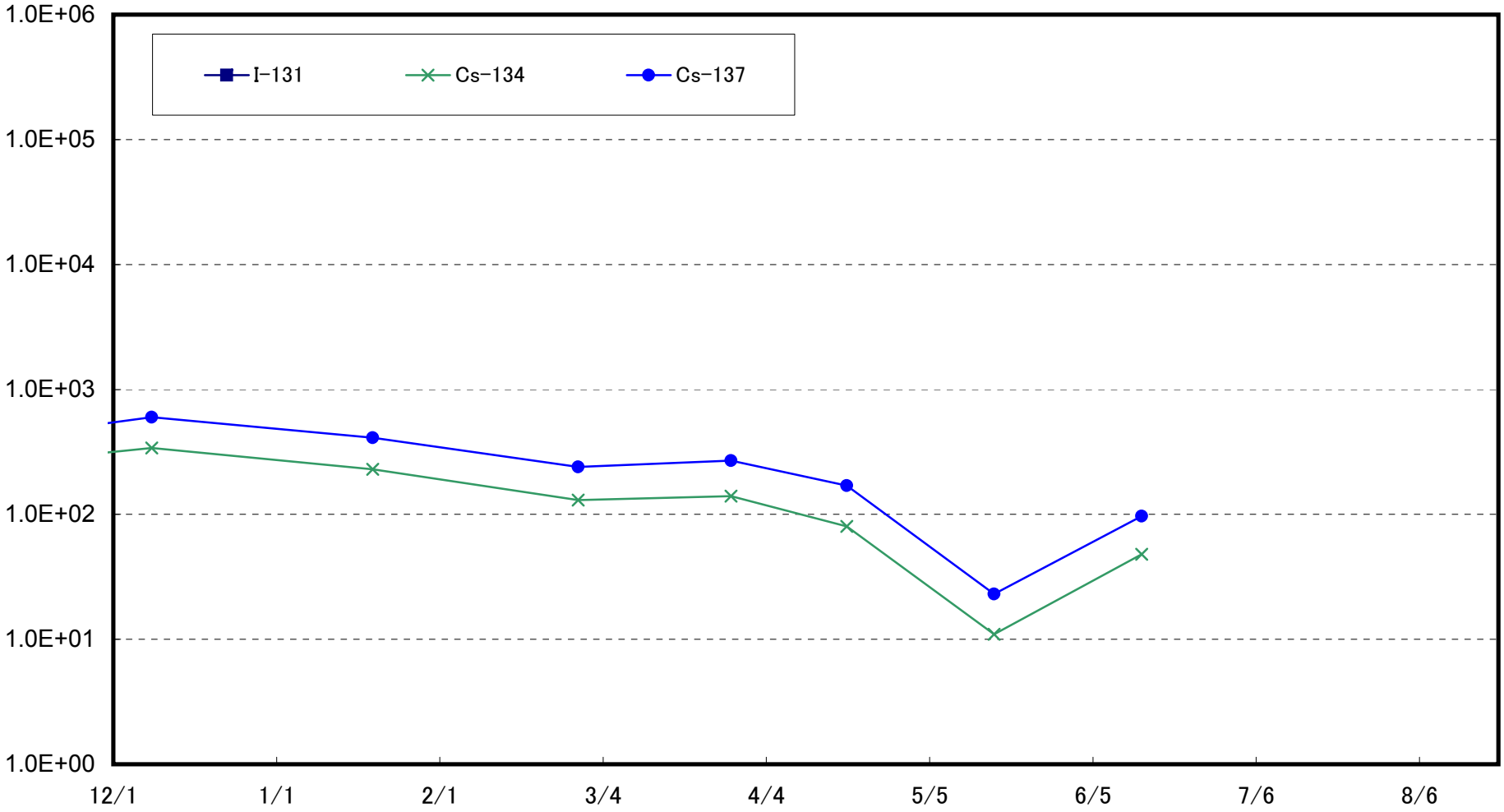
Radioactivity Density of the Marine Soil at Around 3km Offshore of 1F (T-S4) (Bq/kg (dry soil)



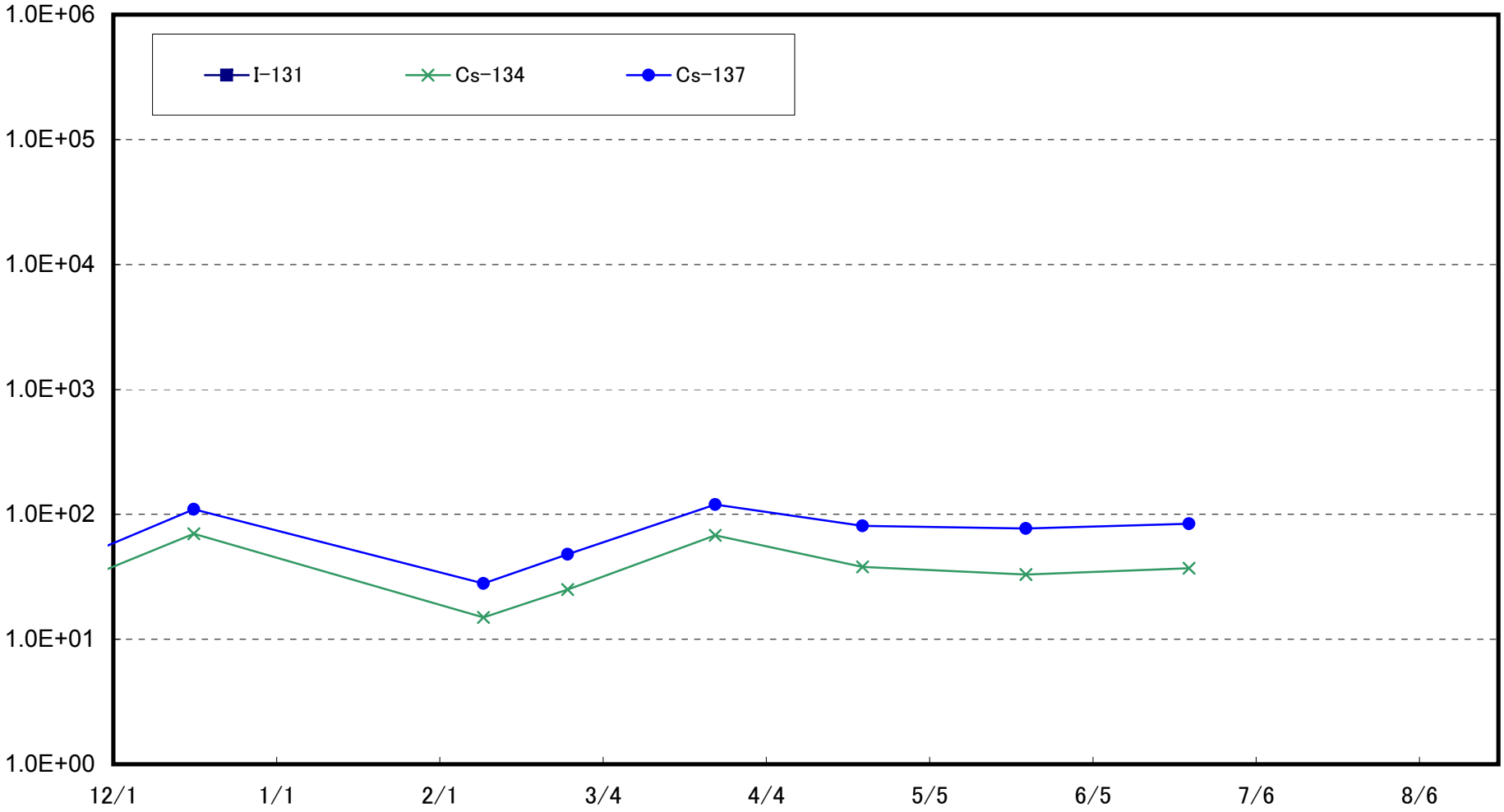
Radioactivity Density of the Marine Soil Around 2km Offshore of Kido River (T-S5) (Bq/kg (dry soil)



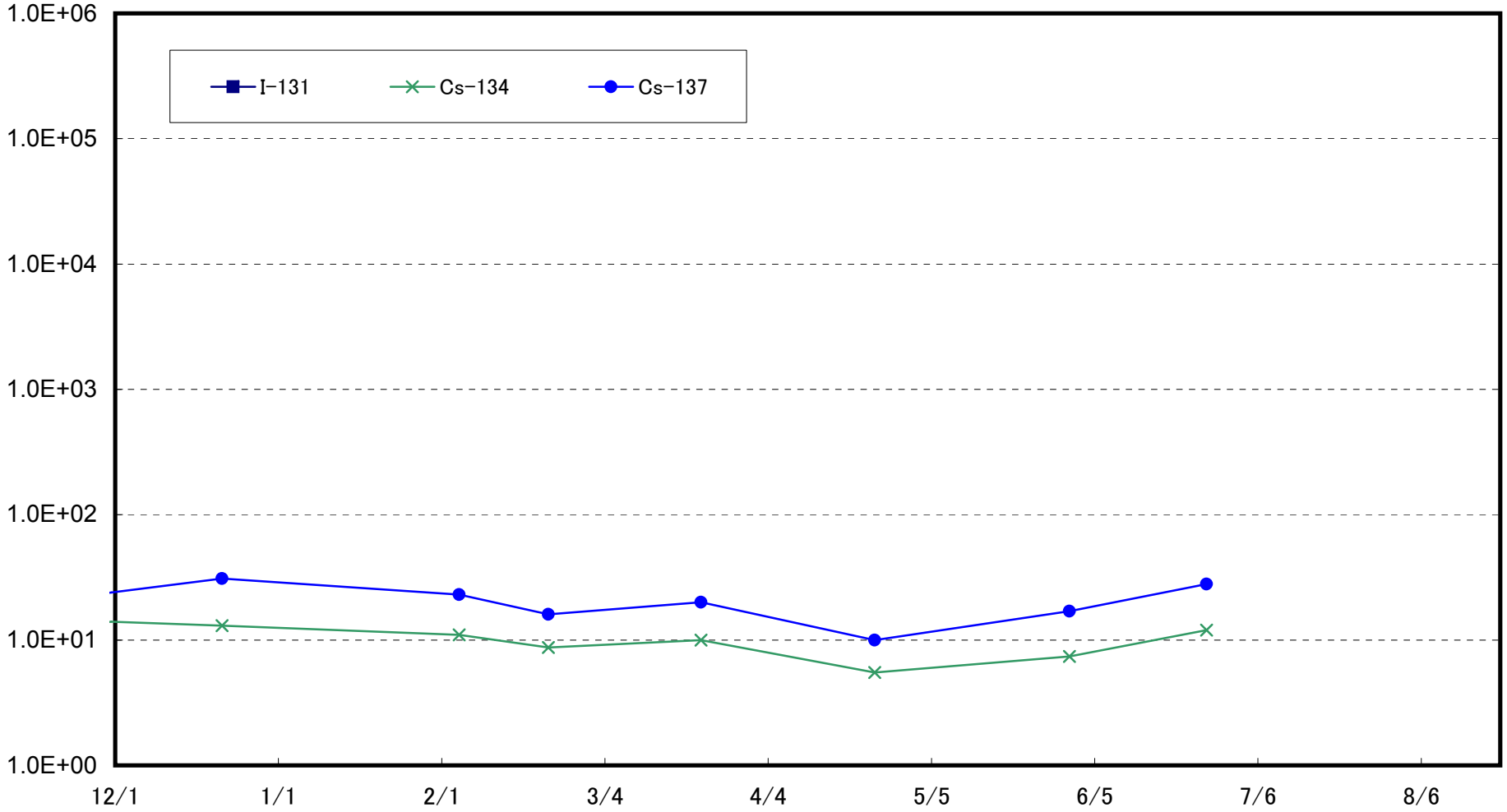
Radioactivity Density of the Marine Soil at Around 2km Offshore of 2F (T-S7) (Bq/kg (dry soil)



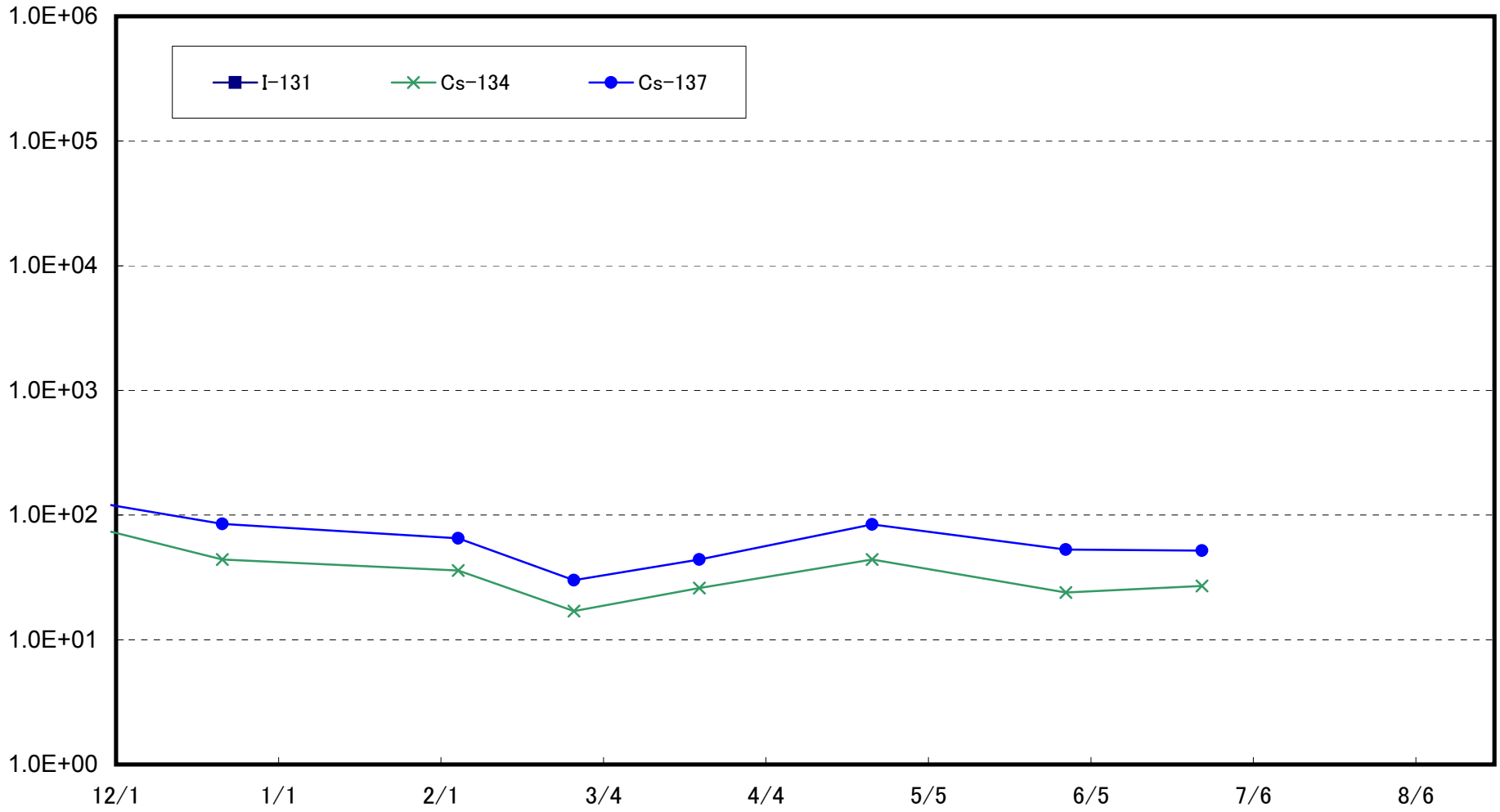
Radioactivity Density of the Marine Soil at Around 4km Offshore of Kumagawa (T-S8) (Bq/kg (dry soil)



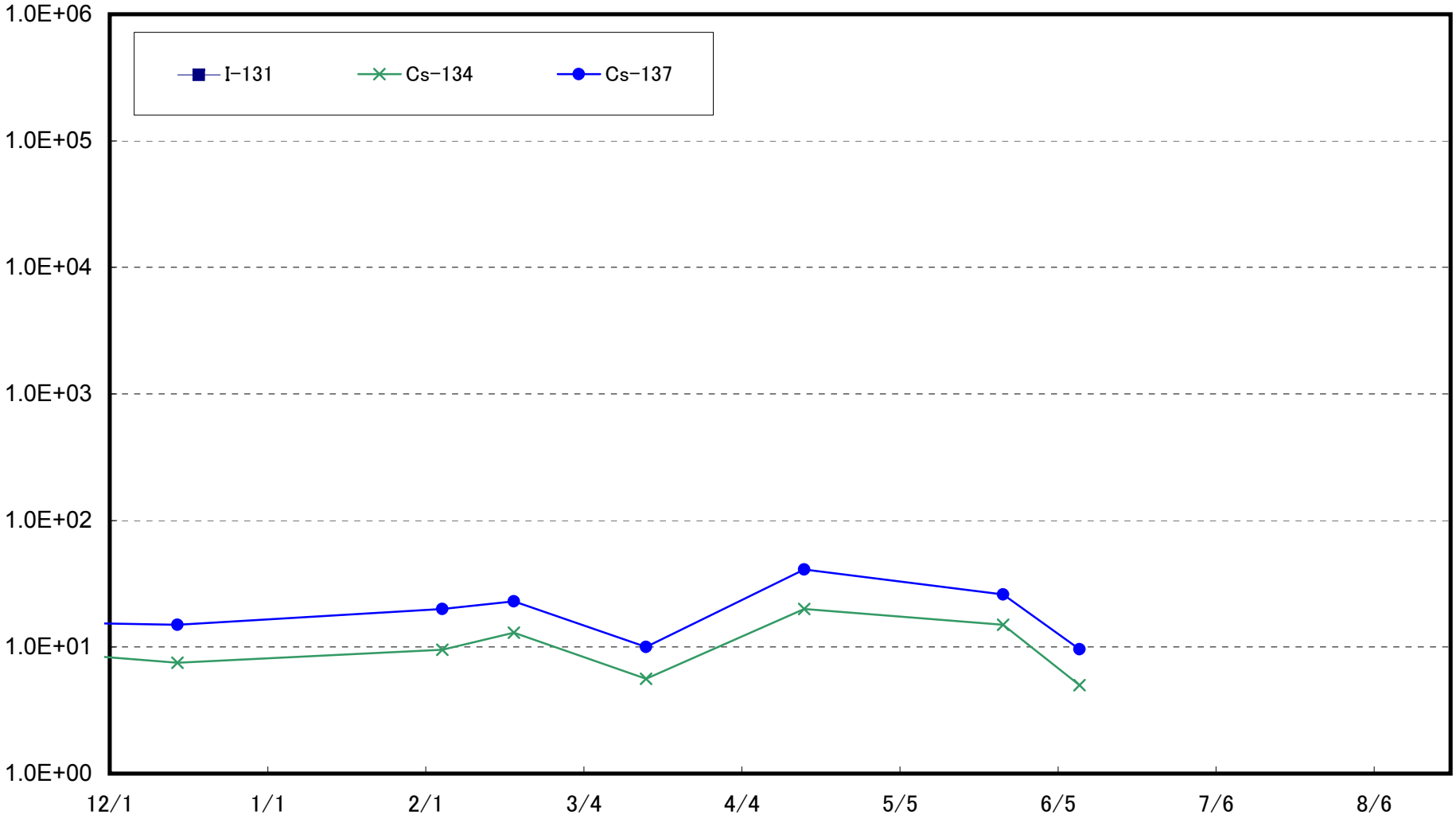
Radioactivity Density of the Marine Soil at Around 15km Offshore of Odaka Ward (T-B1) (Bq/kg (dry soil)



Radioactivity Density of the Marine Soil at Around 18km Offshore of Ukedo River (T-B2) (Bq/kg (dry soil)



Radioactivity Density of the Marine Soil Around 10km Offshore of Fukushima Daiichi NPS (T-B3) (Bq/kg (dry soil)



Radioactivity Density of the Marine Soil Around 10km Offshore of Fukushima Daini NPS (T-B4) (Bq/kg (dry soil)