Results of Air Dose Rate Monitoring at Schools, etc. in Fukushima Prefecture (Part 4) and Trends Observed from Measurement Results

Attachment 1 shows a list of results of measurements of air dose rates of schools, etc. in Fukushima Prefecture, carried out on May 26 and June 2. There were no longer any schools, etc. with levels above 3.8μ Sv/h.

From April 14 to June 2, the Ministry of Education, Culture, Sports, Science and Technology conducted measurements at schools, etc. in Fukushima Prefecture with the cooperation of the Japan Atomic Energy Agency. Results for each school are shown as viewgraphs in Attachment 2. The viewgraphs show actual measurements at each school, and a theoretical decay curve based on soil analysis results as of April 14.

Analysis of measurement results indicates:

Decrease in for dose rates outdoors in schools (schoolyard, etc.) (according to a decay curve is seen), even though special soil removal countermeasures, etc. have not been taken.

There were large amounts of rainfall on May 29 through 30 in Fukushima during the measurement period, but certain changes in measurements were not seen after rainfall.

For schools, etc. where the surface soil of the schoolyard, etc. was removed, large decrease in air dose rates are obserned. As a result, in some schools, etc., values at concrete-covered sites and those of the soil in schoolyards have become almost the same or have even reversed.

With continuous radiation dose monitoring, we are working to understand trends of radiation dose.

Results of Dose Rate Measurement at Schools in Fukushima Pref. Surveyed on May 26, 2011

Attachment 1

						Monito	mad air d	ana rata	(C / b)				
	City	Name of school	Monitoring time	Average value		1	ored air d						
No.				outside the school building		Value at the place of concrete paving		Mean value in o Window side		Center		Notes	Weather
				1m	50cm	1m	50cm	1m	50cm	1m	50cm		
1	Koriyama City	Koriyama Dai-ni Junior High School	10:28	0.9	1.0	0.6	0.6	0.2	0.1	0.1	0.1		Fair
2	Koriyama City	St-paul Kindergarten	11:08	1.0	0.9	1.2	1.2	0.6	0.6	0.4	0.4		Cloudy
3	Koriyama City	Kaoru Elementary School	12:03	0.9	0.9	1.2	1.4	0.2	0.1	0.1	0.1		Cloudy
4	Koriyama City	Koriyama Dai-ichi Junior High School	13:24	0.8	0.8	1.1	1.3	0.2	0.2	0.1	0.1		Cloudy
5	Koriyama City	Koriyama Dai-san Junior High School	14:26	0.6	0.7	1.4	1.6	0.2	0.1	0.1	0.1		Cloudy
6	Motomiya City	Gohyakugawa Elementary School	11:53	0.5	0.5	1.2	1.4	0.2	0.2	0.1	0.1		Cloudy
7	Motomiya City	Motomiya Dai-yon Nursery	10:51	0.5	0.5	0.6	0.7	0.5	0.4	0.3	0.3		Fair
8	Motomiya City	Wada Kindergarten	13:30	0.6	0.6	1.1	1.0	0.5	0.4	0.4	0.4		Cloudy
9	Motomiya City	Wada Elementary School	13:53	0.6	0.6	1.2	1.3	0.2	0.2	0.1	0.1		Cloudy
10	Nihonmatsu City	Ishii Kindergarten	14:23	0.6	0.6	0.8	0.8	0.4	0.3	0.2	0.2		Cloudy
11	Nihonmatsu City	Ishii Elementary School	14:55	0.7	0.7	1.3	1.5	0.4	0.2	0.1	0.1		Cloudy
12	Nihonmatsu City	Takeshita Elementary School	11:42	0.5	0.5	0.4	0.4	0.2	0.2	0.1	0.1		Fair
13	Nihonmatsu City	Matsugaoka Nursery	13:00	0.7	0.6	0.7	0.7	0.4	0.3	0.2	0.2		Fair
14	Nihonmatsu City	Sugita Elementary School	11:01	0.6	0.6	0.6	0.5	0.3	0.2	0.1	0.1		Fair
15	Nihonmatsu City	Sugita Kindergarten	10:35	0.6	0.5	0.4	0.4	0.2	0.2	0.1	0.1		Fair
16	Nihonmatsu City	Nihonmatsu Dai-ni Junior High School	13:35	0.6	0.5	1.4	1.6	0.5	0.5	0.2	0.2		Cloudy
17	Nihonmatsu City	Obama Junior High School	14:17	0.6	0.5	1.1	1.3	0.5	0.4	0.2	0.1		Fair
18	Fukushima City	Shimogawasaki Elementary School	11:13	2.7	3.1	2.0	2.2	0.7	0.6	0.2	0.2		Fair
19	Fukushima City	Okubo Elementary School	12:02	2.2	2.4	1.4	1.6	0.2	0.2	0.2	0.1		Fair
20	Fukushima City	Nankoudai Elementary School	12:50	2.7	2.9	1.3	1.3	0.4	0.4	0.1	0.1		Fair
21	Fukushima City	Onami Elementary School	15:20	3.0	3.3	2.2	2.4	0.4	0.4	0.3	0.3		Cloudy
22	Date City	Oguni Elementary School	11:21	0.8	0.7	1.7	2.1	0.7	0.6	0.3	0.2		Cloudy
23	Soma City	Tamano Kindergarten	13:13	0.6	0.6	1.2	1.5	0.4	0.3	0.2	0.2		Cloudy
24	Soma City	Tamano Junior High School	13:58	0.9	0.8	2.0	2.1	0.4	0.3	0.2	0.2		Cloudy
25	Soma City	Tamano Elementary School	13:38	0.6	0.6	1.2	1.5	0.4	0.4	0.2	0.1		Cloudy
26	Fukushima City	Okayama Elementary School	11:03	2.7	2.9	1.5	1.1	0.3	0.2	0.2	0.2		Fair
27	Fukushima City	Seishin Saniku Nursery	11:37	1.8	1.8	1.8	1.8	0.6	0.5	0.3	0.2		Fair
28	Fukushima City	Saniku Kindergarten	12:00	2.2	2.0	1.6	1.7	0.7	0.6	0.5	0.4		Fair
29	Date City	Tominari Elementary School	13:24	0.8	0.7	1.8	2.0	0.4	0.2	0.2	0.2		Fair
30	Fukushima City	Fukushima Special School	15:08	2.2	2.4	0.8	0.8	0.4	0.2	0.2	0.2		Fair
31	Fukushima City	Oyama Nursery	14:17	1.8	2.1	0.8	0.9	0.6	0.4	0.2	0.2		Fair
32	Fukushima City	Oyama Elementary School	13:42	2.6	2.9	1.5	1.8	0.4	0.2	0.1	0.1		Fair
33	Fukushima City	Shinryo Junior High School	12:03	1.8	2.0	1.4	1.4	0.3	0.2	0.2	0.1		Fair
34	Fukushima City	Hirano Junior High School	11:20	1.9	2.2	0.8	0.9	0.3	0.3	0.1	0.1		Fair
35	Fukushima City	Fukushima Dai-ni Junior High School	14:59	2.4	2.8	1.1	1.1	0.5	0.3	0.1	0.1		Fair
	Fukushima	Fukushima University Attached	14:07	0.4	0.5	0.7	0.8	0.3	0.3	0.2	0.2		Fair

	City	Name of school											
			Monitoring time	-	e value	Value at	the place	Mean	value in	classroon		XX7 -1	
No.				outside the school building		of concrete paving		Window side		Center		Notes	Weather
				1m	50cm	1m	50cm	1m	50cm	1m	50cm		
37	Fukushima City	Fukushima University Attached Junior High School	15:50			1.0	1.2	0.6	0.4	0.1	0.1	Measurement outside the school building could not be conducted due to excavation	Fair
38	Fukushima City	Fukushima Seikei Junior High School	11:13	2.6	2.7	1.1	1.1	0.2	0.1	0.1	0.1		Fair
39	Fukushima City	Gakuyo Junior High School	12:20	1.9	2.1	0.9	1.1	0.2	0.1	0.1	0.1		Fair
40	Fukushima City	Fukushima Dai-ichi Junior High School	13:21	2.1	2.3	1.0	1.2	0.5	0.4	0.1	0.1		Fair
41	Fukushima City	Fukushima Dai-san Elementary School	13:44	2.8	3.2	1.5	1.4	0.3	0.2	0.2	0.2		Fair
42	Fukushima City	Fukushima Dai-ni Elementary School	15:01	2.6	2.9	1.6	1.5	0.4	0.2	0.2	0.2		Cloudy
43	Fukushima City	Sakura no Seibo Gakuin Kindergarten	14:16	2.4	2.8	2.2	2.6					Measurement inside classrooms could not be conducted due to repair work.	Fair
44	Fukushima City	Sakura no Seibo Gakuin Elementary School	14:26	2.2	2.5	1.3	1.3	0.6	0.3	0.2	0.1		Cloudy
45	Fukushima City	Fukushima University Attached Elementary School	15:28	2.5	2.8	1.5	1.7	0.4	0.2	0.1	0.1		Cloudy
46	Fukushima City	Fukushima Prefectural School for the Blind	16:06	2.1	2.5	0.7	0.8	0.4	0.3	0.2	0.2		Cloudy
47	Fukushima City	Watari Nursery	11:03	2.4	2.8	1.9	1.9	1.0	0.8	0.6	0.5		Fair
48	Fukushima City	Kodomo no Ie Soramame Nursery	11:28	0.9	0.8	1.1	1.1	0.9	0.8	0.7	0.6	Measurement was conducted in two classrooms only.	Fair
49	Fukushima City	Watari Junior High School	13:39	3.0	3.2	0.9	0.8	0.5	0.2	0.2	0.2	Measurement was conducted in one classroom only Measurement inside	Fair
50	Fukushima City	Watari Kindergarten	15:17	2.8	3.2	1.9	1.8					Measurement inside the classrooms could not be conducted due to all the doors being	Fair
51	Fukushima City	Sakura Nursery	12:02	2.1	2.3	1.1	1.2	0.2	0.2	0.1	0.1		Fair
52	Fukushima City	Watari Elementary School	16:45	2.8	3.0	1.7	2.1	0.3	0.2	0.2	0.1		Cloudy
53	Fukushima City	Toryo High School	12:12	2.5	2.8	1.3	1.4	0.3	0.2	0.2	0.1		Fair
54	Fukushima City	Seikei High School	11:46	2.6	2.7	1.5	1.5	0.2	0.1	0.1	0.1		Fair
55	Fukushima City	Tachibana High School	11:03	2.6	2.9	1.6	1.7	0.5	0.4	0.2	0.1		Fair
56	Date City	Ryouzen Kodomonomura Children's Center	12:25	3.2	3.4	2.9	3.0	0.7	0.6	0.5	0.5	Measurement was conducted in one classroom only.	Cloudy

As for day nursery, kindergarten and elementary school, the numerical value was judged from the point measured away from 50cm, considering children's height. As for junior high school, the numerical value was judged from the point measured away from 1m. *: The average value inside classroom is the arbitrary measurement result of 3 classrooms.

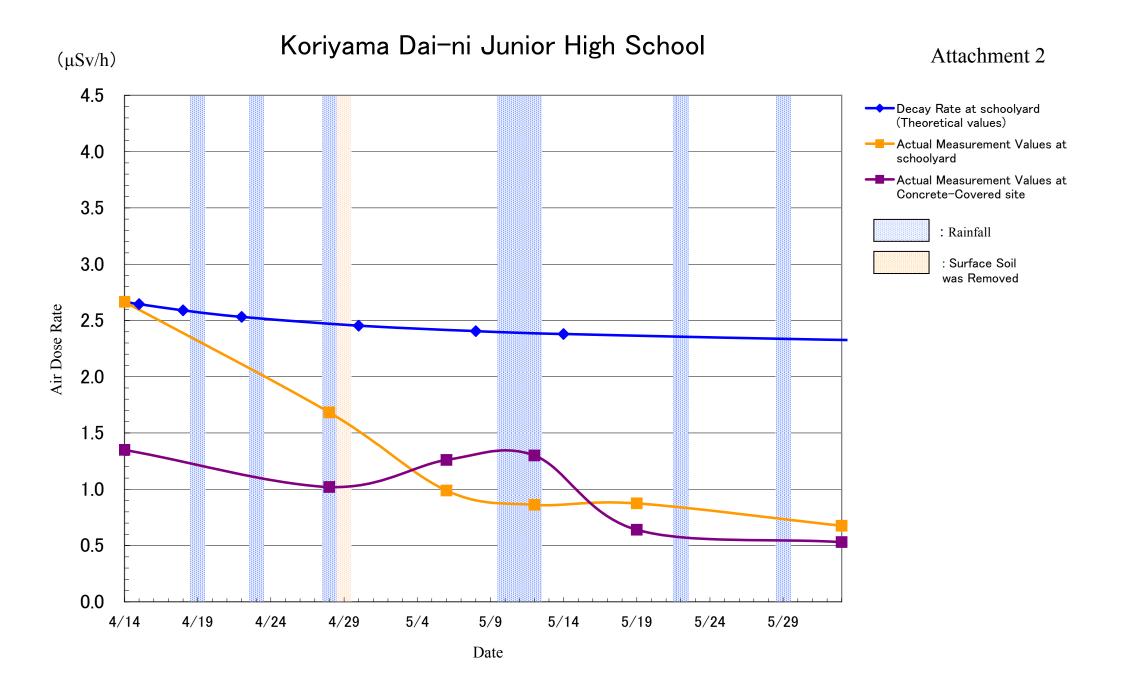
Results of Dose Rate Measurement at Schools in Fukushima Pref.

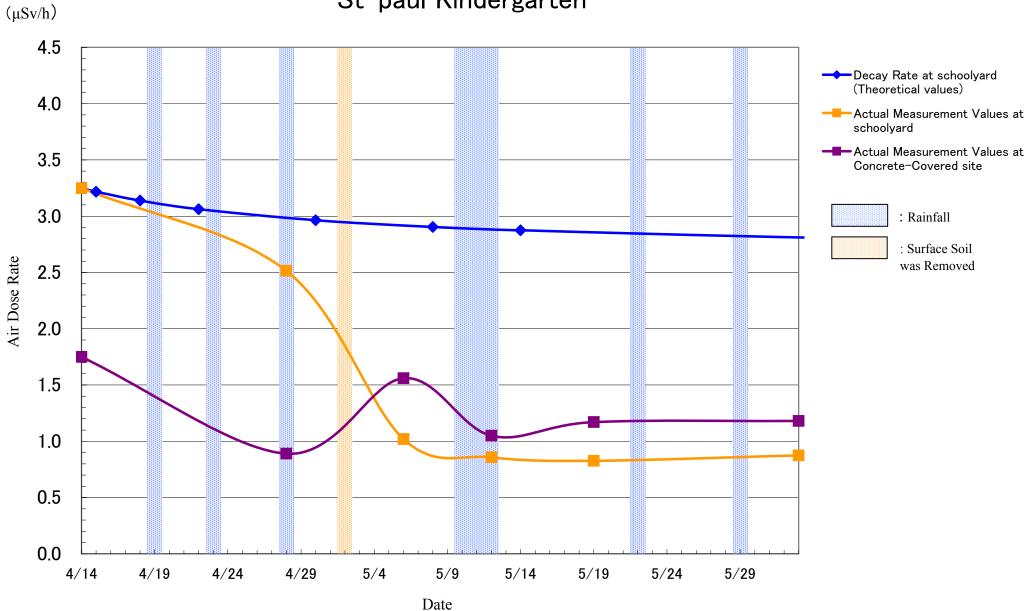
Surveyed on June 2, 2011

Π						Monito	ored air d	ose rate	(uSv/h)				
	City	Name of school	Monito	Averag	e value								
No.			ring time	outsic	le the building	Value at the place of concrete paving		Window side		classroom, etc.*		Notes	Weather
			unic	1m	50cm	1m	50cm	1m	50cm	1m	50cm		
1	Koriyama City	Koriyama Dai-ni Junior High School	10:21	0.7	0.7	0.5	0.5	0.1	0.1	0.1	0.1		Cloudy
2	Koriyama City	St-paul Kindergarten	11:10	1.0	0.9	1.1	1.2	0.6	0.5	0.4	0.4		Cloudy
3	Koriyama City	Kaoru Elementary School	11:53	0.8	0.8	1.0	1.3	0.2	0.1	0.1	0.1		Cloudy
4	Koriyama City	Koriyama Dai-ichi Junior High School	12:45	0.9	0.9	1.3	1.2	0.2	0.1	0.1	0.1		Cloudy
3	City	Koriyama Dai-san Junior High School	13:45	0.7	0.8	1.3	1.5	0.2	0.1	0.1	0.1		Rain
6	Motomiya City	Gohyakugawa Elementary School	10:33	0.5	0.4	1.4	1.4	0.2	0.1	0.1	0.1		Cloudy
7	Motomiya City	Motomiya Dai-yon Nursery	11:32	0.5	0.5	0.6	0.6	0.5	0.4	0.4	0.3		Cloudy
8	Motomiya City	wada Kindergarten	12:51	0.6	0.5	1.0	0.9	0.5	0.4	0.4	0.4		Cloudy
9	Motomiya City	Wada Elementary School	13:37	0.6	0.5	0.9	1.0	0.2	0.2	0.1	0.1		Cloudy
10	Nihonmat su City	Ishii Kindergarten	14:32	0.7	0.6	0.7	0.9	0.4	0.3	0.2	0.2		Cloudy
11	Nihonmat su City	Ishii Elementary School	15:22	0.7	0.7	1.4	1.5	0.4	0.2	0.2	0.1		Cloudy
12	Nihonmat su City	Takeshita Elementary School	10:48	0.4	0.4	0.4	0.4	0.2	0.1	0.1	0.1		Cloudy
13	Nihonmat su City	Matsugaoka Nursery	11:36	0.5	0.5	0.6	0.7	0.3	0.3	0.2	0.2		Cloudy
14	Nihonmat su City	Sugita Elementary School	13:15	0.5	0.5	0.7	0.6	0.3	0.2	0.1	0.1		Cloudy
15	Nihonmat su City	Sugita Kindergarten	13:51	0.5	0.5	0.4	0.4	0.2	0.2	0.1	0.1		Cloudy
16	Nihonmat su City	Nihonmatsu Dai-ni Junior High School	15:33	0.6	0.5	1.3	1.5	0.5	0.5	0.2	0.2		Cloudy
17	Nihonmat su City	Obama Junior High School	14:49	0.6	0.6	1.2	1.3	0.5	0.4	0.2	0.1		Cloudy
18	Fukushim a City	Shimogawasaki Elementary School	13:31	2.4	2.7	1.8	1.9	0.6	0.5	0.2	0.2		Cloudy
19	Fukushim a City	Okubo Elementary School	12:13	2.0	2.1	1.2	1.4	0.2	0.2	0.1	0.1		Cloudy
20	Fukushim a City	Nankoudai Elementary School	11:08	2.3	2.4	1.2	1.2	0.4	0.3	0.1	0.1		Cloudy
21	Fukushim a City	Onami Elementary School	11:15	2.8	3.1	2.1	2.3	0.5	0.3	0.3	0.2		Cloudy
22	Date City	Oguni Elementary School	12:10	0.7	0.7	1.9	2.2	0.8	0.7	0.2	0.2		Cloudy
23	Soma City	Tamano Kindergarten	14:12	0.6	0.6	1.3	1.6	0.5	0.4	0.2	0.2		Cloudy
24	Soma City	Tamano Junior High School	15:10	0.8	0.8	1.9	2.1	0.5	0.4	0.2	0.1		Cloudy
25	Soma City	Tamano Elementary School	14:45	0.6	0.6	1.3	1.6	0.5	0.4	0.2	0.2		Cloudy
26	Fukushim a City	Okayama Elementary School	11:10	0.9	0.9	0.6	0.6	0.2	0.1	0.1	0.1		Cloudy
27	Fukushim a City	Seishin Saniku Nursery	12:08	1.5	1.6	1.4	1.4	0.5	0.5	0.3	0.2		Cloudy
28	Fukushim a City	Saniku Kindergarten	12:47	1.9	1.7	1.3	1.5	0.6	0.5	0.4	0.3		Cloudy
29	Date City	Tominari Elementary School	13:50	0.6	0.6	1.5	1.5	0.3	0.2	0.2	0.2		Cloudy
30	Fukushim a City	Fukushima Special School	14:29	2.0	2.4	0.8	0.8	0.4	0.3	0.2	0.2		Cloudy
31	Fukushim a City	Oyama Nursery	13:42	0.4	0.4	0.8	1.0	0.3	0.2	0.1	0.1		Cloudy
32	Fukushim a City	Oyama Elementary School	12:57	2.7	3.1	1.3	1.5	0.3	0.2	0.1	0.1		Cloudy
33	Fukushim a City	Shinryo Junior High School	12:05	1.7	2.0	1.3	1.4	0.3	0.1	0.1	0.1		Cloudy
34	Fukushim a City	Hirano Junior High School	11:19	2.1	1.8	0.8	0.9	0.3	0.3	0.1	0.1		Cloudy

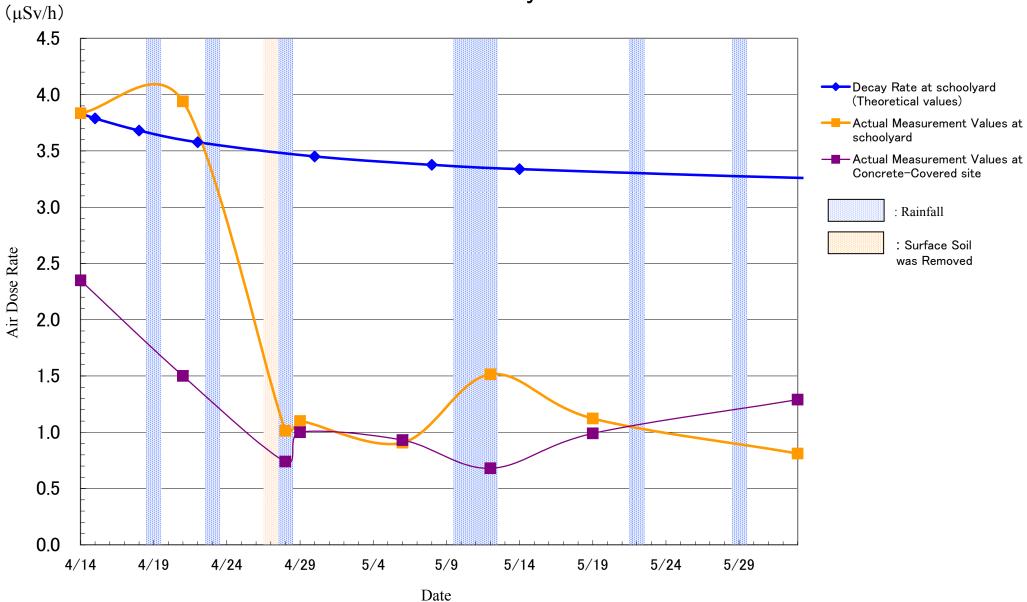
No.	City	Name of school	Monito ring time	Averag outsic		Value at		Mean	value in o	classroom, etc.*		Notes	Weather
				school l	ouilding		te paving		w side		nter		
				1m	50cm	1m	50cm	1m	50cm	1m	50cm		
35	Fukushim a City	Fukushima Dai-ni Junior High School	11:12	2.6	2.8	2.0	2.1	0.7	0.3	0.2	0.1		Cloudy
36	Fukushim a City	Fukushima University Attached Kindergarten	11:55	0.4	0.3	0.5	0.5	0.3	0.3	0.2	0.2		Cloudy
37	Fukushim a City	Fukushima University Attached Junior High School	12:26			1.0	1.2	0.2	0.1	0.1	0.1	Measurement outside the school building could not be conducted due to excavation.	Cloudy
38	Fukushim a City	Fukushima Seikei Junior High School	13:50	2.5	2.8	1.0	1.1	0.2	0.1	0.1	0.1		Cloudy
39	Fukushim a City	Gakuyo Junior High School	14:34	1.9	2.1	0.9	1.0	0.2	0.1	0.1	0.1		Fair
40	Fukushim a City	Fukushima Dai-ichi Junior High School	15:11	2.3	2.5	1.1	1.3	0.5	0.5	0.1	0.1		Cloudy
41	Fukushim a City	Fukushima Dai-san Elementary School	12:10	3.0	3.1	1.5	1.3	0.3	0.2	0.2	0.2		Cloudy
42	Fukushim a City	Fukushima Dai-ni Elementary School	14:00	2.5	2.7	1.6	1.5	0.4	0.2	0.2	0.2		Cloudy
43	Fukushim a City	Sakura no Seibo Gakuin Kindergarten	13:30	2.4	2.7	2.2	2.5					Measurement inside classrooms could not be conducted due to repair work.	Fair
44	Fukushim a City	Sakura no Seibo Gakuin Elementary School	13:15	2.3	2.5	1.2	1.2	0.6	0.2	0.2	0.1		Cloudy
45	Fukushim a City	Fukushima University Attached Elementary School	14:34	2.5	2.6	1.5	1.8	0.4	0.3	0.1	0.1		Cloudy
46	Fukushim a City	Fukushima Prefectural School for the Blind	15:51	2.2	2.4	0.8	0.8	0.4	0.3	0.2	0.2		Cloudy
47	Fukushim a City	Watari Nursery	11:00	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4		Cloudy
48	Fukushim a City	Kodomo no Ie Soramame Nursery	11:31	0.9	0.8	1.2	1.2	0.9	0.8	0.7	0.5	Measurement was conducted in two classrooms only.	Cloudy
49	Fukushim a City	Watari Junior High School	12:10	3.0	3.4	0.8	0.7	0.3	0.1	0.2	0.1		Cloudy
50	Fukushim a City	Watari Kindergarten	14:26	0.5	0.4	0.6	0.6	0.4	0.4	0.4	0.4		Cloudy
51	Fukushim a City	Sakura Nursery	13:34	2.2	2.4	1.2	1.3	0.2	0.3	0.1	0.1		Cloudy
52	Fukushim a City	Watari Elementary School	15:19	0.4	0.3	1.6	1.9	0.2	0.1	0.1	0.1		Cloudy
53	Fukushim a City	Toryo High School	11:12	2.5	2.5	1.3	1.2	0.3	0.2	0.2	0.2		Cloudy
54	Fukushim a City	Seikei High School	13:25	2.5	2.8	1.4	1.5	0.2	0.1	0.1	0.1		Fair
55	Fukushim a City	Tachibana High School	15:17	2.6	2.6	1.6	1.5	0.5	0.4	0.2	0.1		Cloudy
56	Date City	Ryouzen Kodomonomura Children's Center	16:26	3.2	3.5	3.0	3.2	0.7	0.5	0.6	0.5	Measurement was conducted in one classroom only.	Cloudy

As for day nursery, kindergarten and elementary school, the numerical value was judged from the point measured away from 50cm, considering children's height As for day nursery, kindergarten and elementary school, the numerical value was judged from the point measured away from 1m. *: The average value inside classroom is the arbitrary measurement result of 3 classrooms.



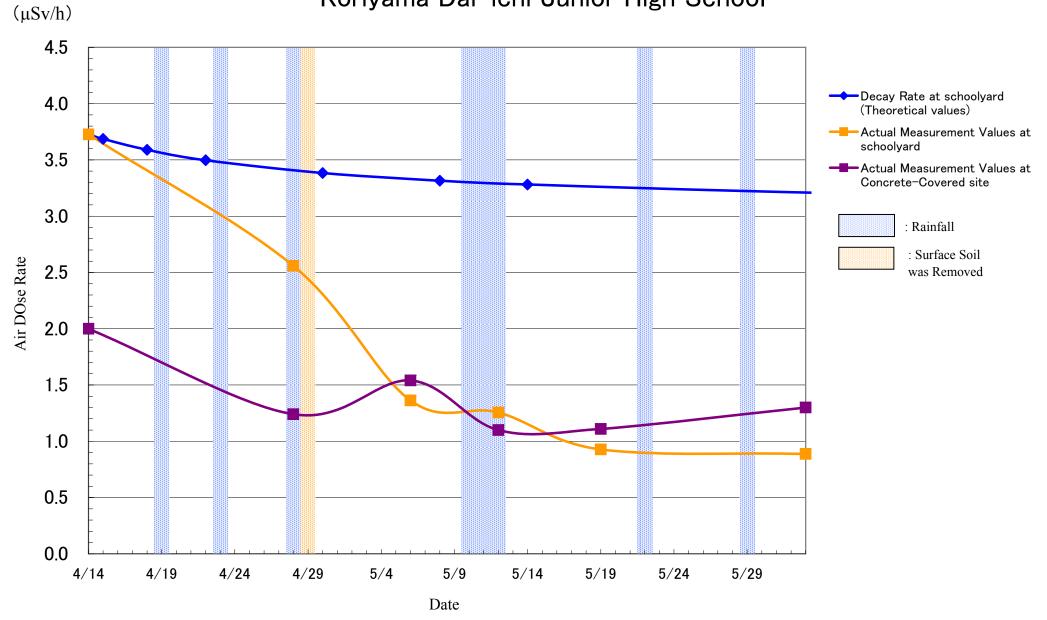


St-paul Kindergarten

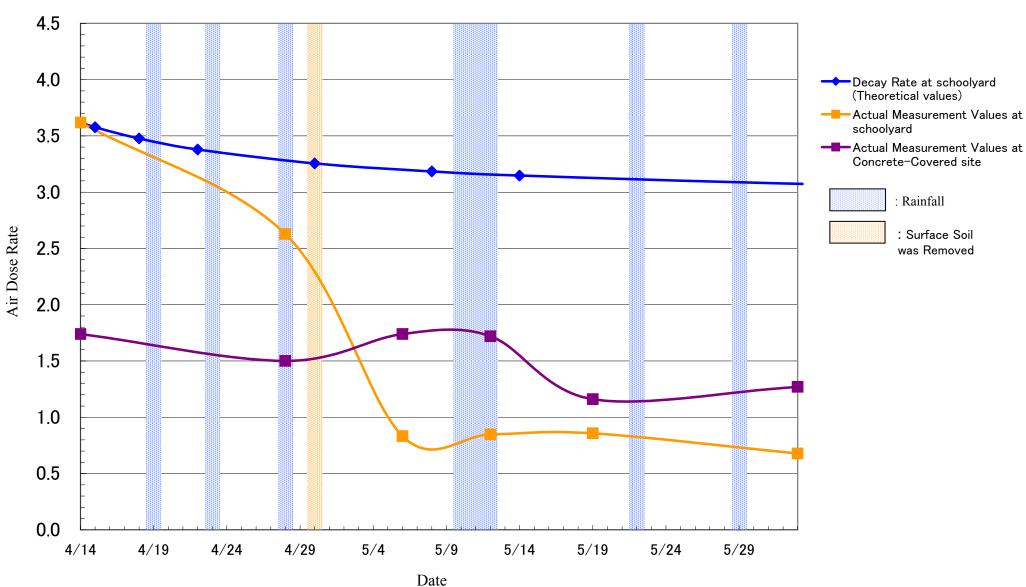


Kaoru Elementary School

Koriyama Dai-ichi Junior High School

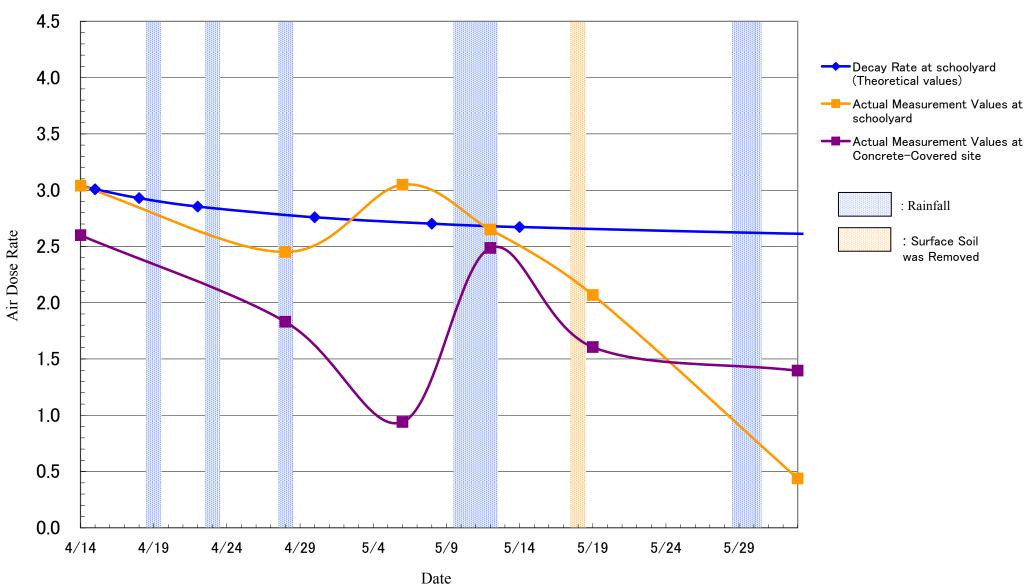


Koriyama Dai-san Junior High School

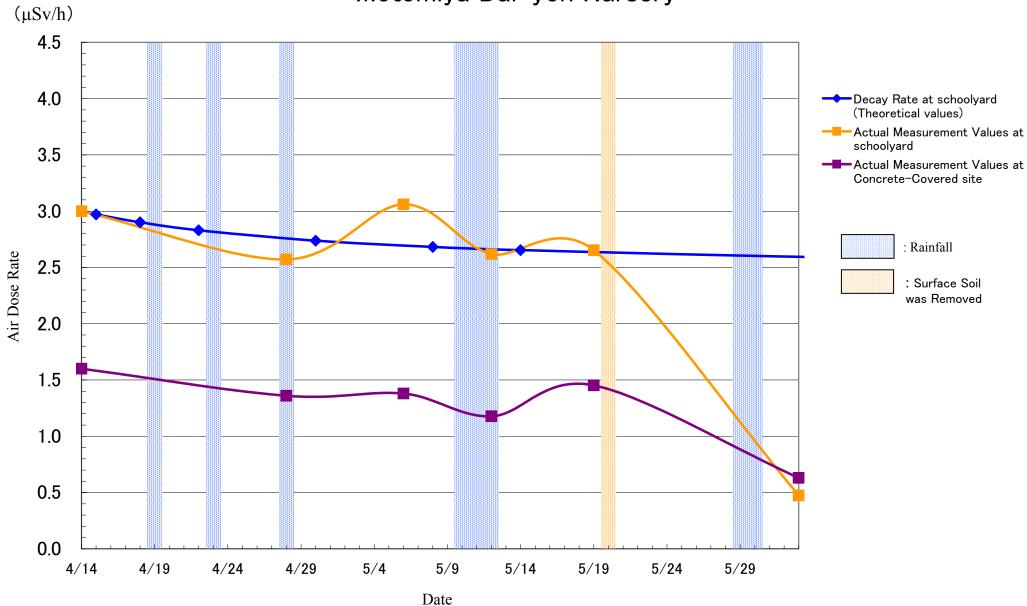


 $(\mu Sv/h)$

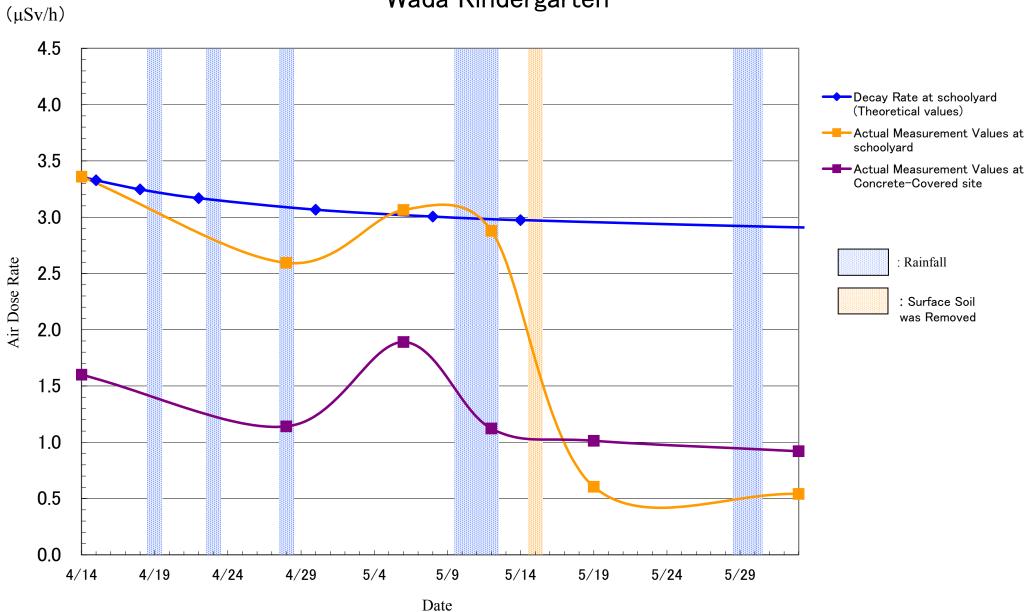
Gohyakugawa Elementary School



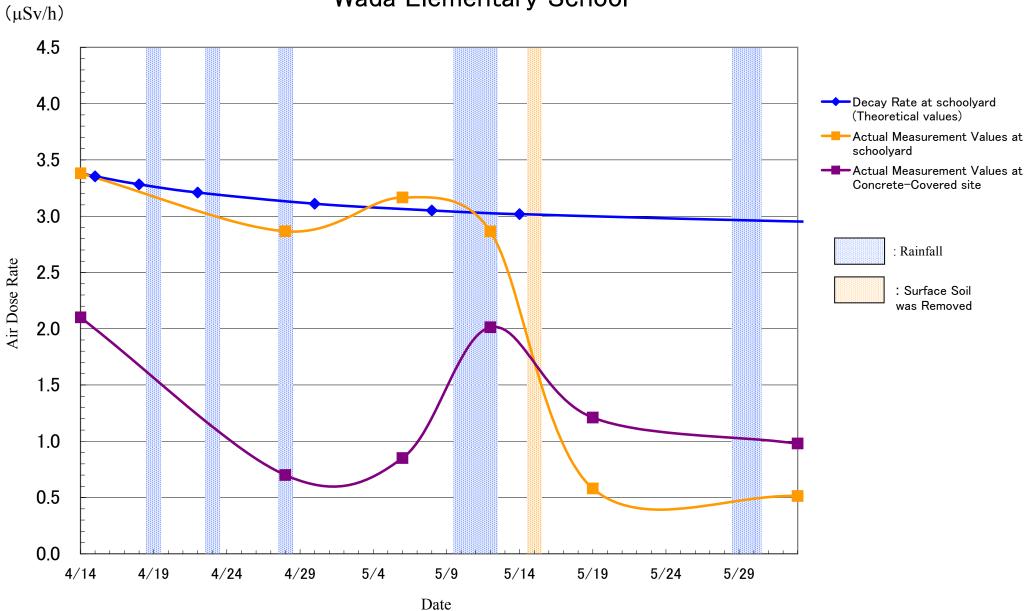
 $(\mu Sv/h)$



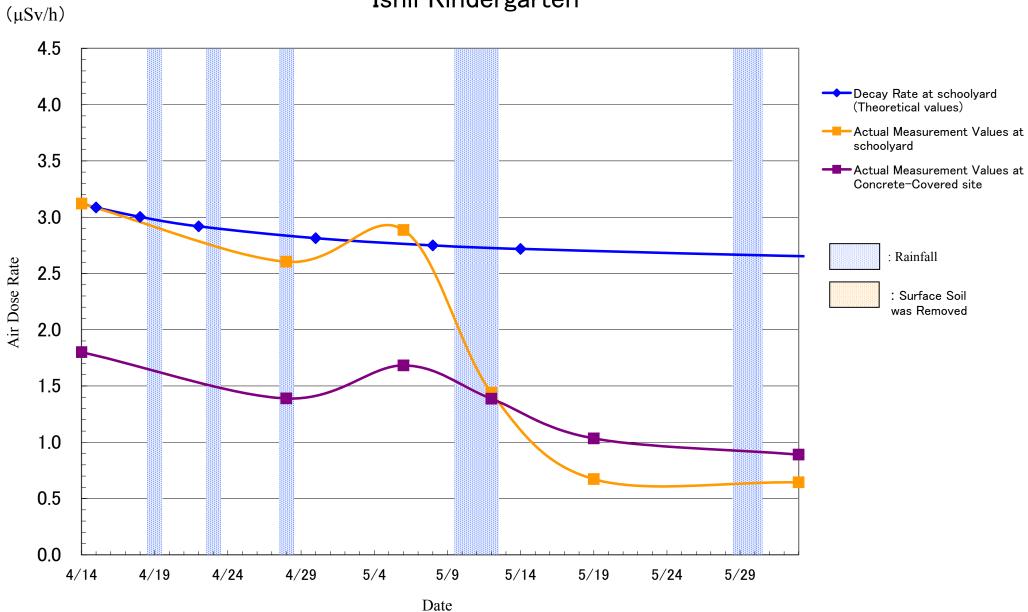
Motomiya Dai-yon Nursery



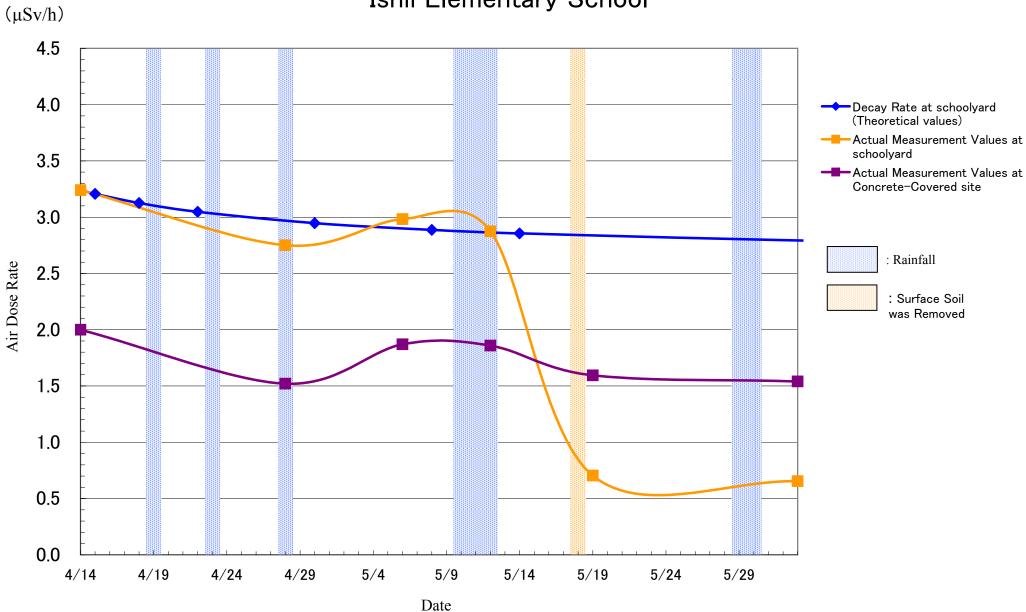
Wada Kindergarten



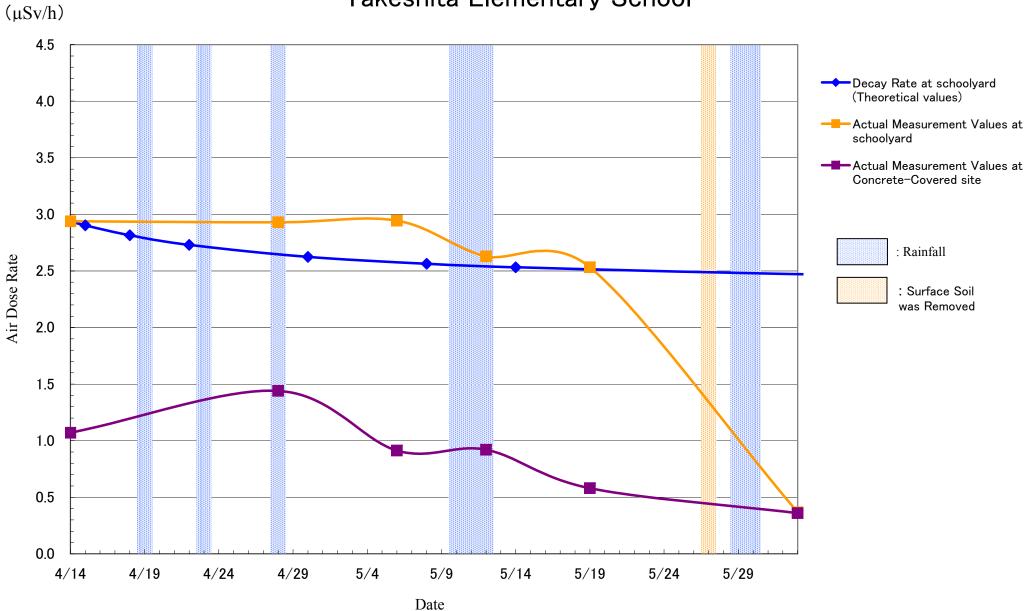
Wada Elementary School



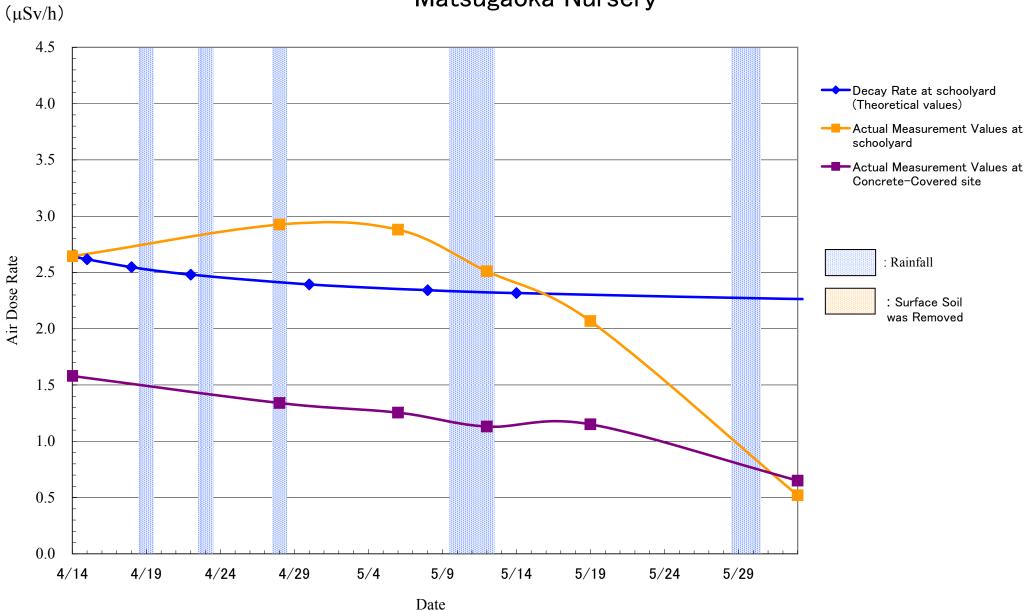
Ishii Kindergarten



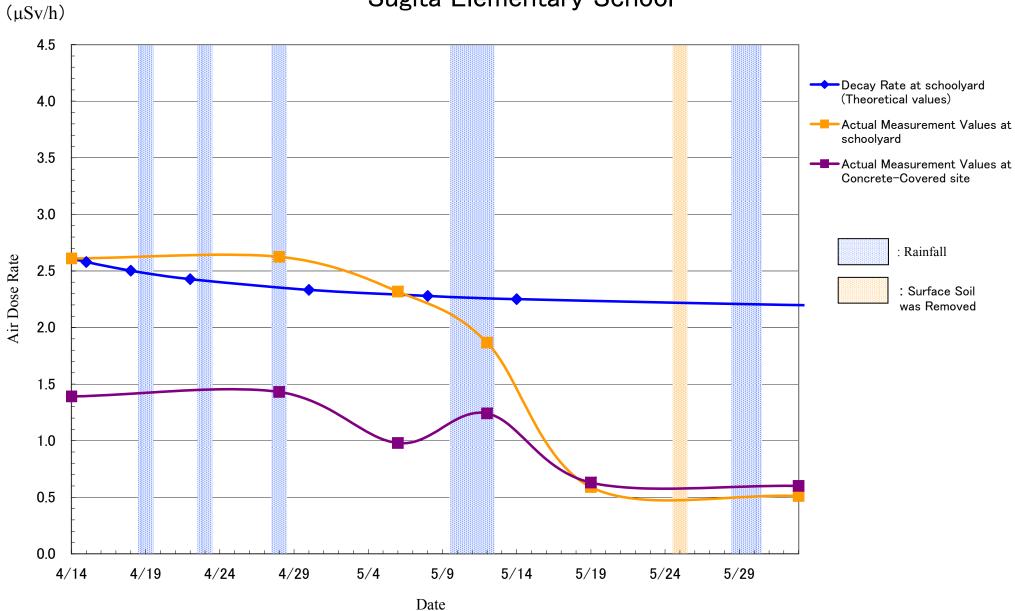
Ishii Elementary School



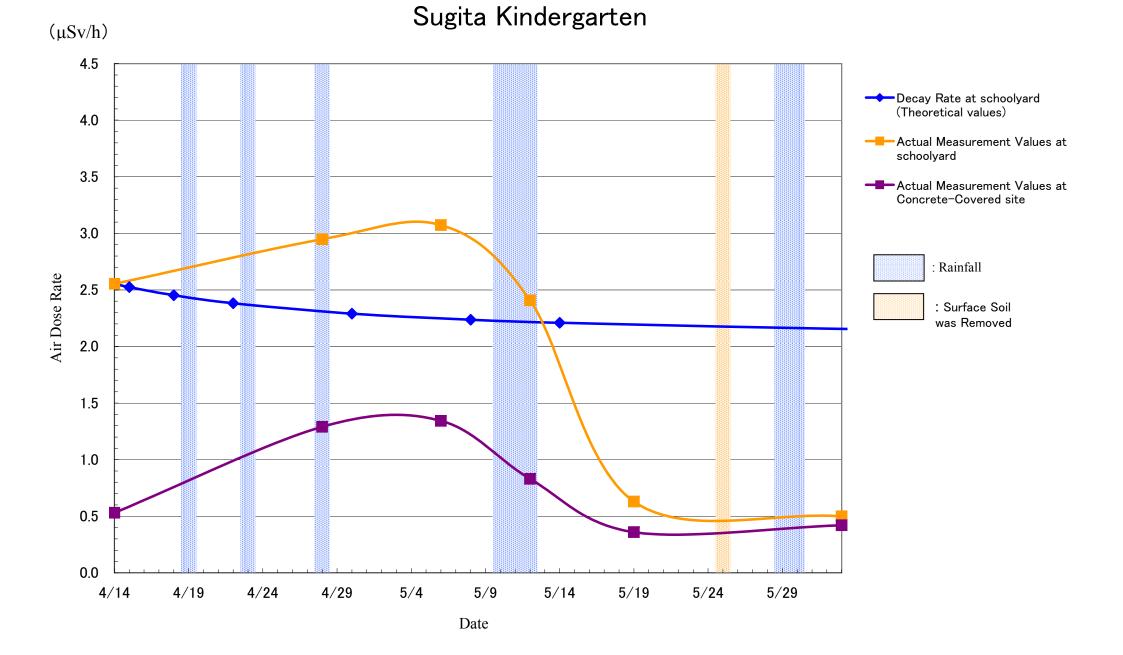
Takeshita Elementary School

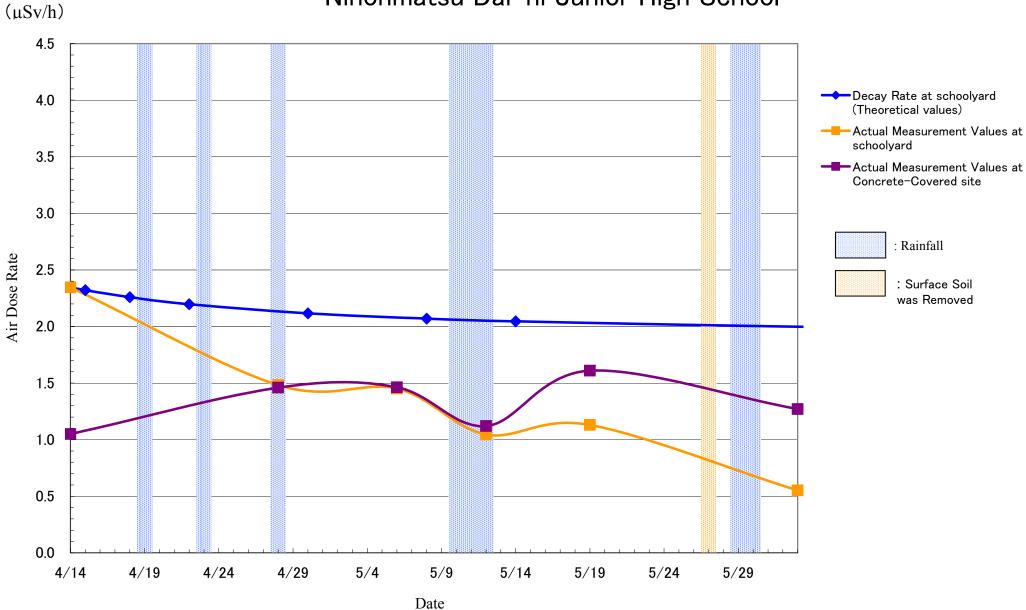


Matsugaoka Nursery

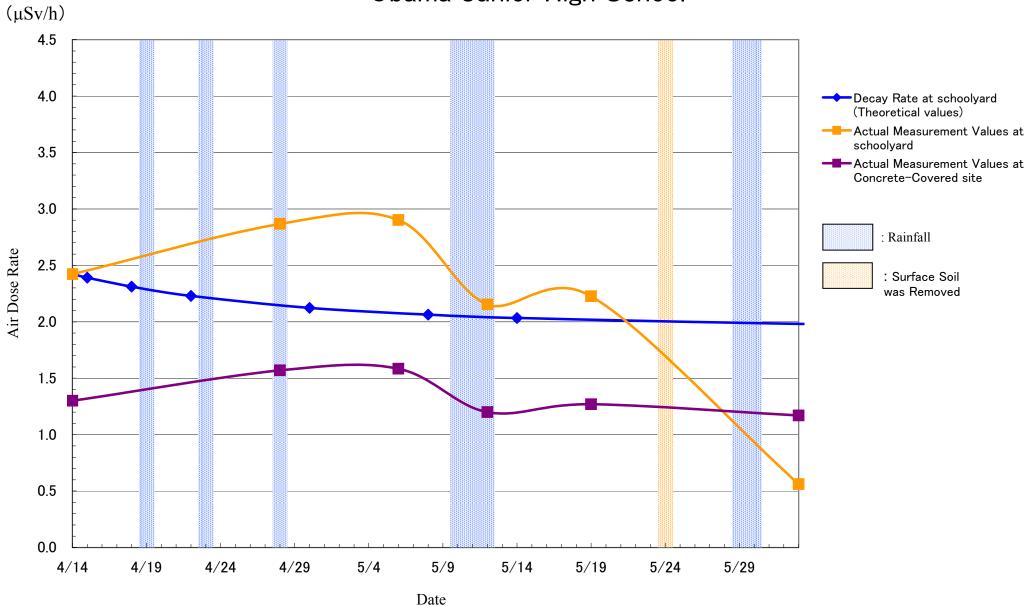


Sugita Elementary School

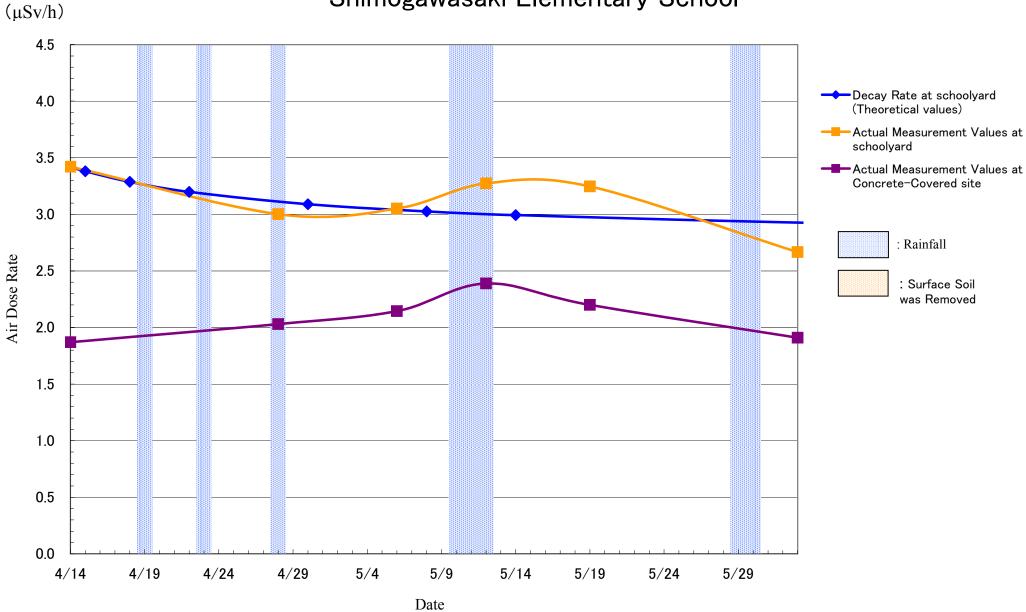




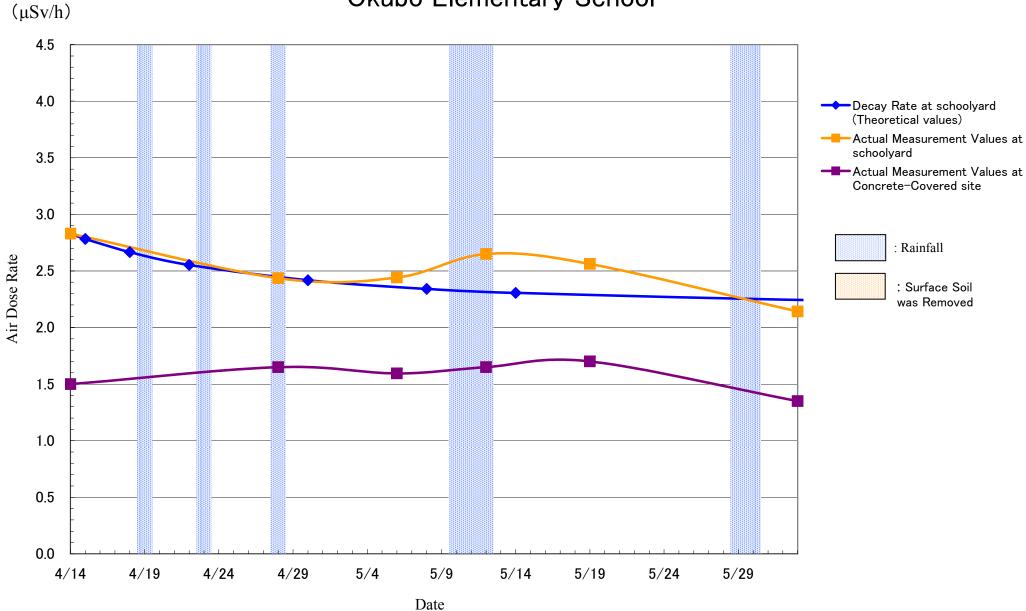
Nihonmatsu Dai-ni Junior High School



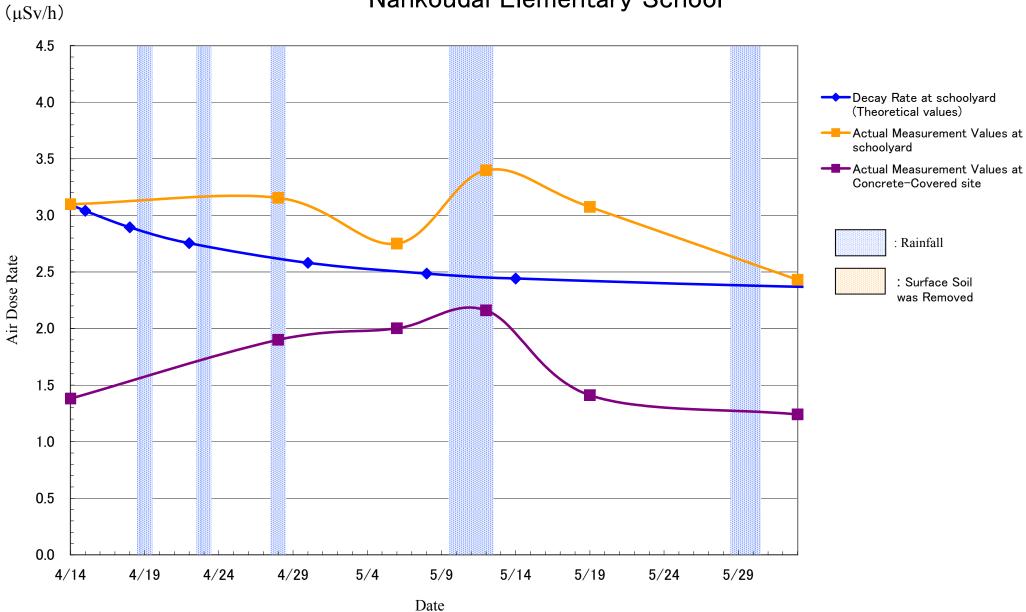
Obama Junior High School



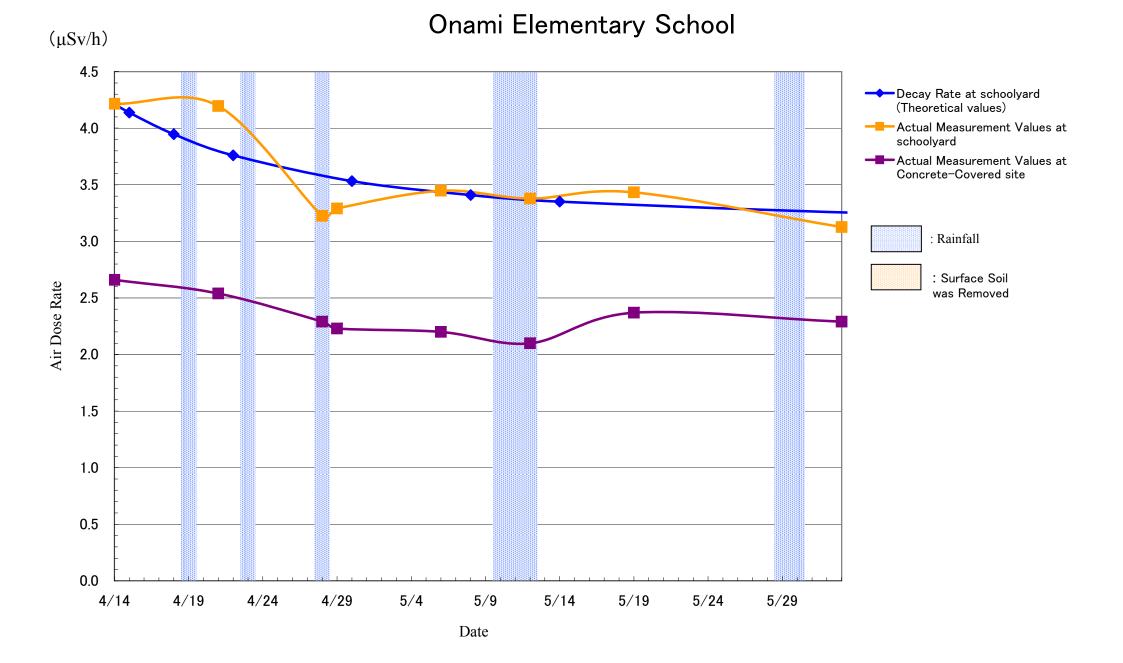
Shimogawasaki Elementary School

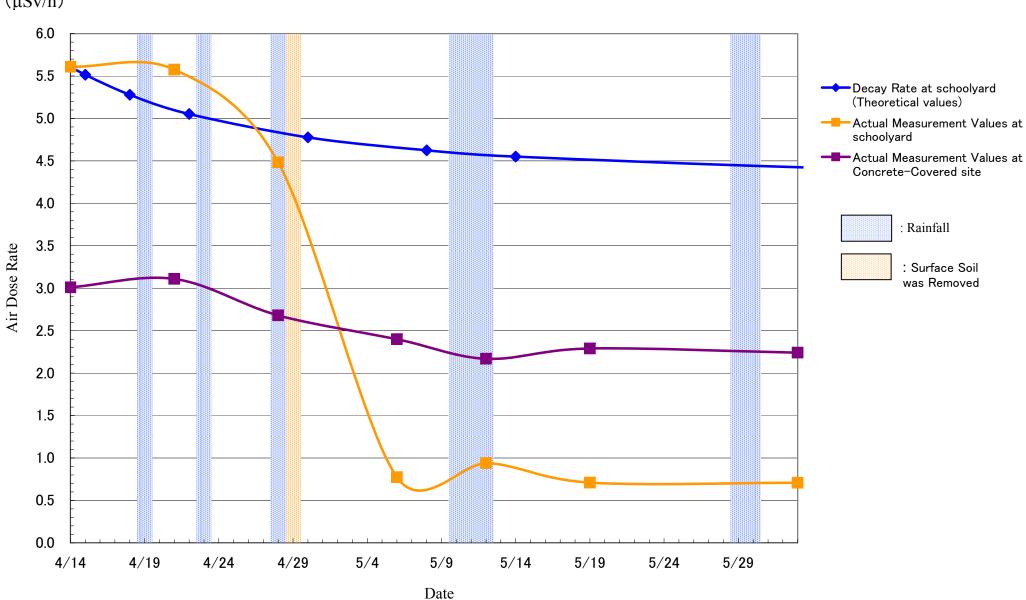


Okubo Elementary School



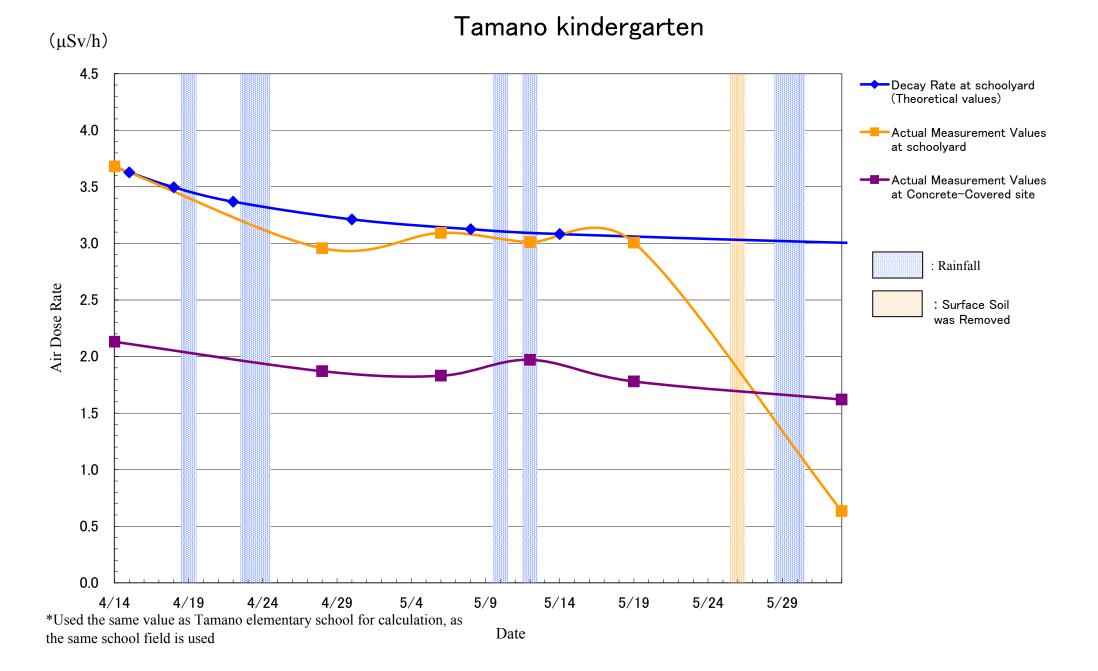
Nankoudai Elementary School

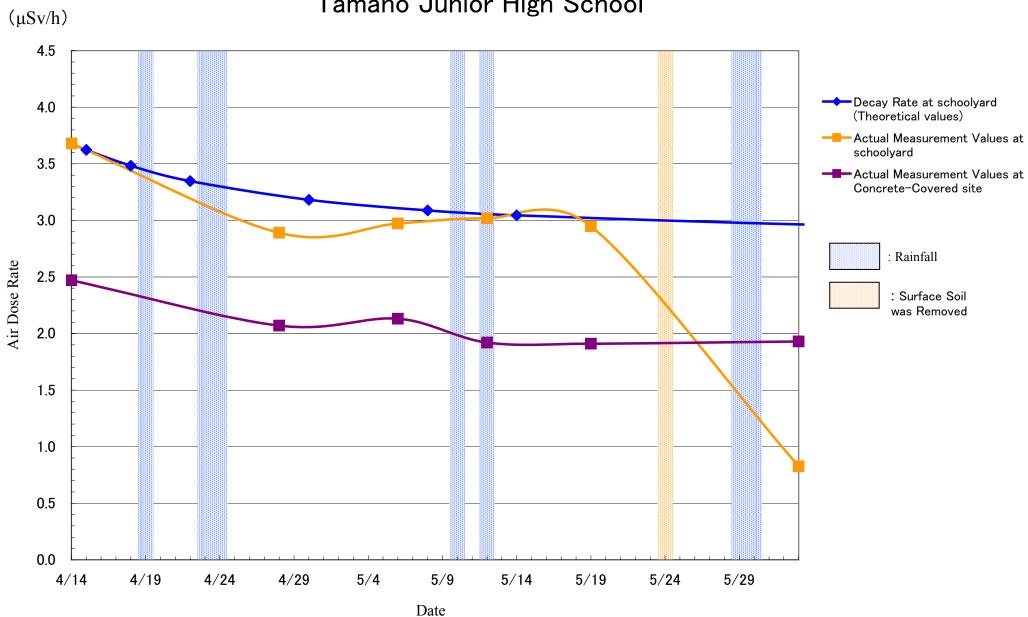




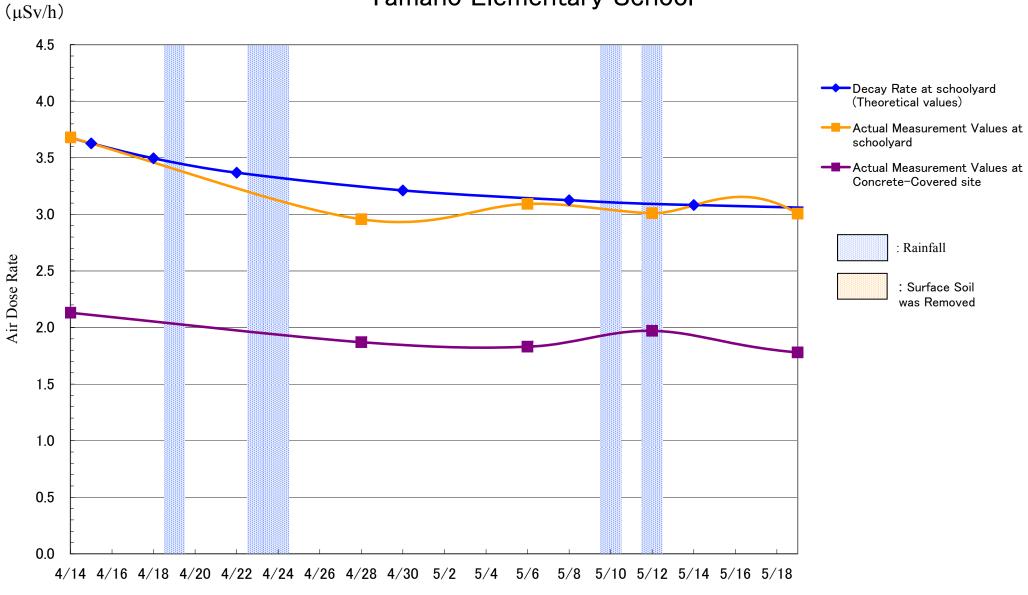
Oguni Elementary School

 $(\mu Sv/h)$



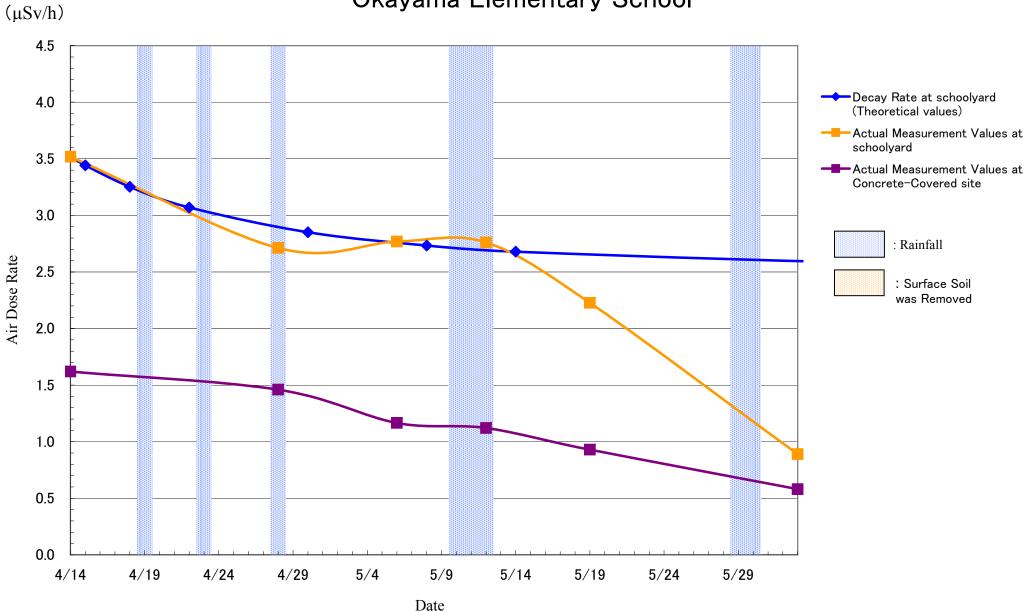


Tamano Junior High School

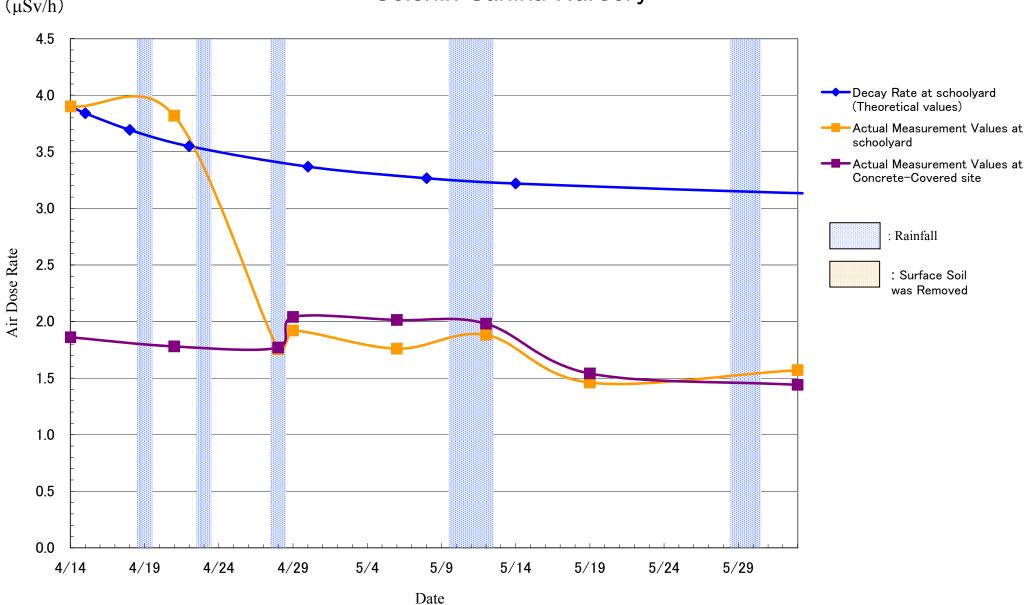


Tamano Elementary School

Date

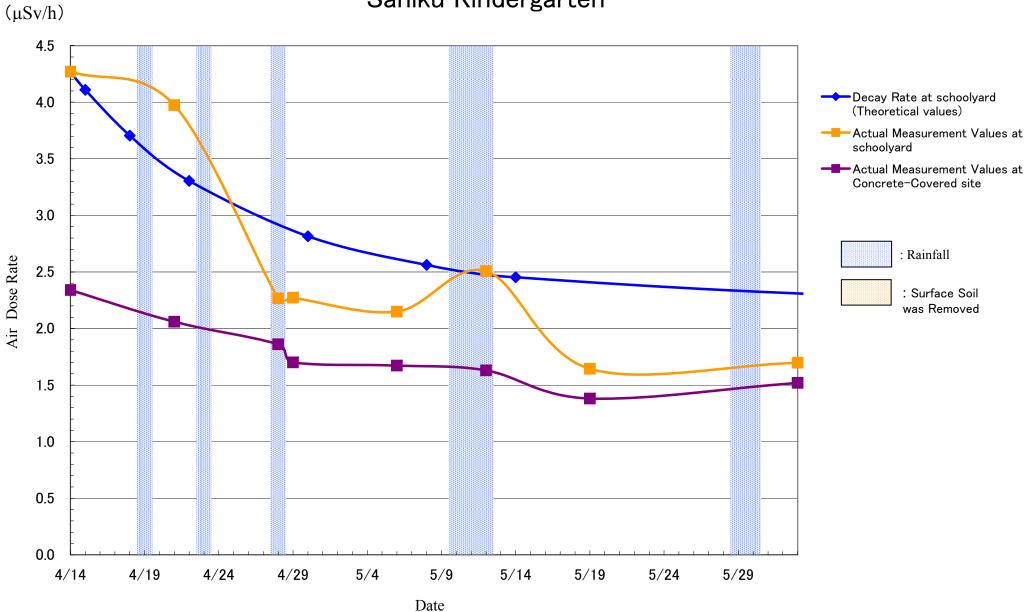


Okayama Elementary School

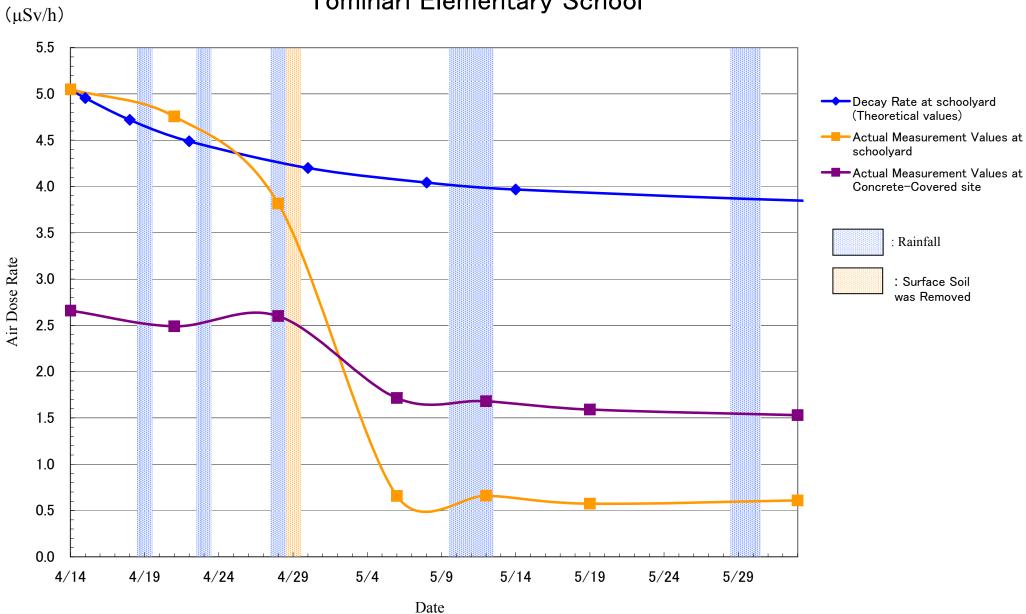


Seishin Saniku Nursery

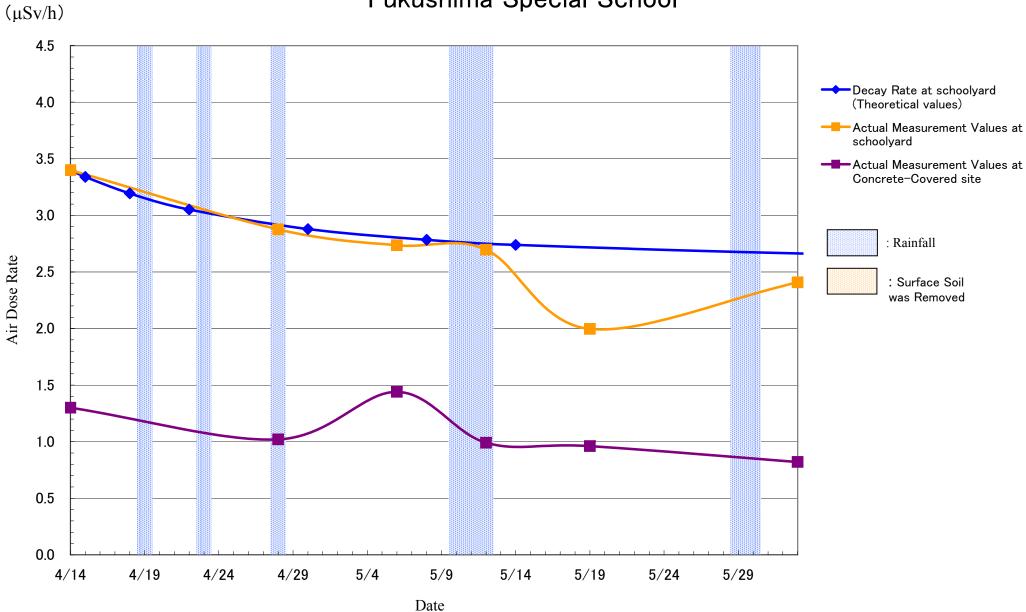
 $(\mu Sv/h)$



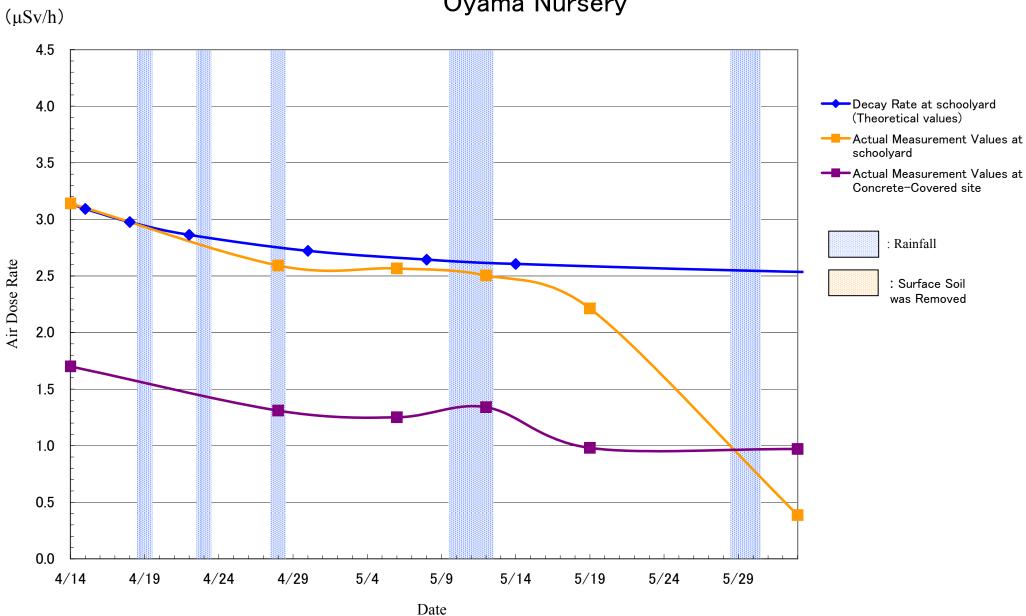
Saniku Kindergarten



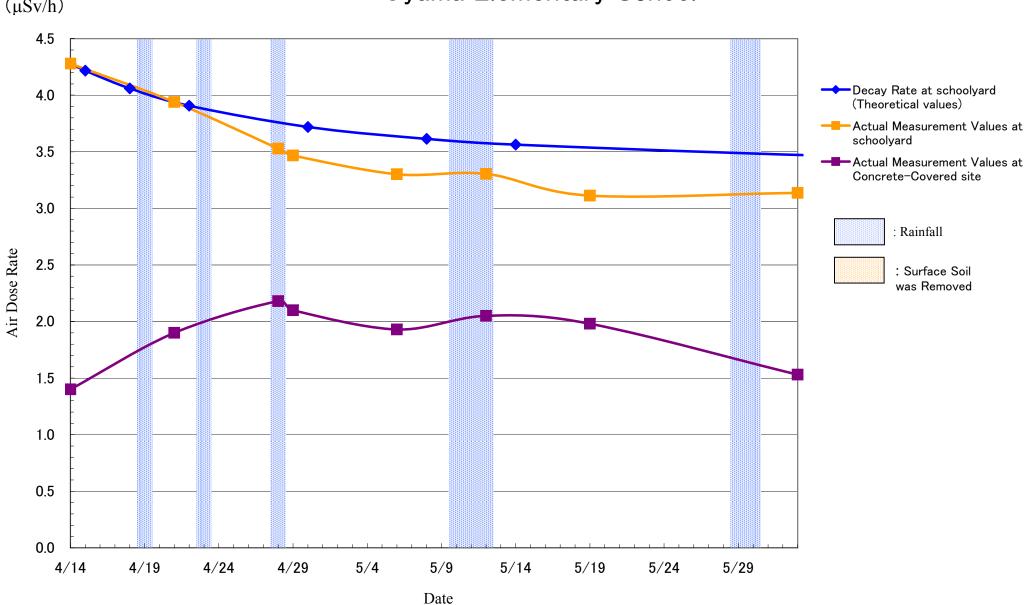
Tominari Elementary School



Fukushima Special School

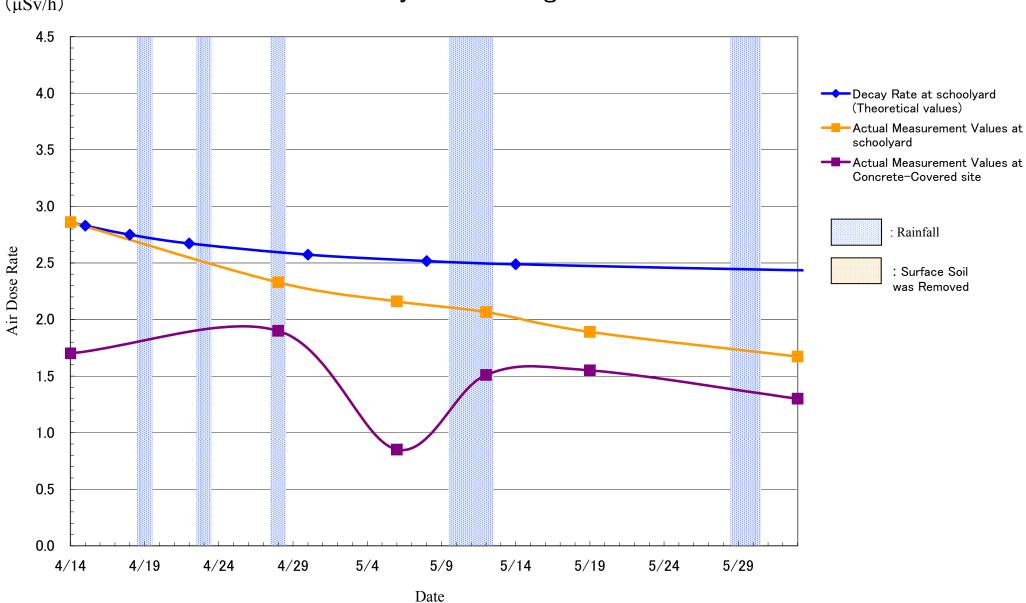


Oyama Nursery



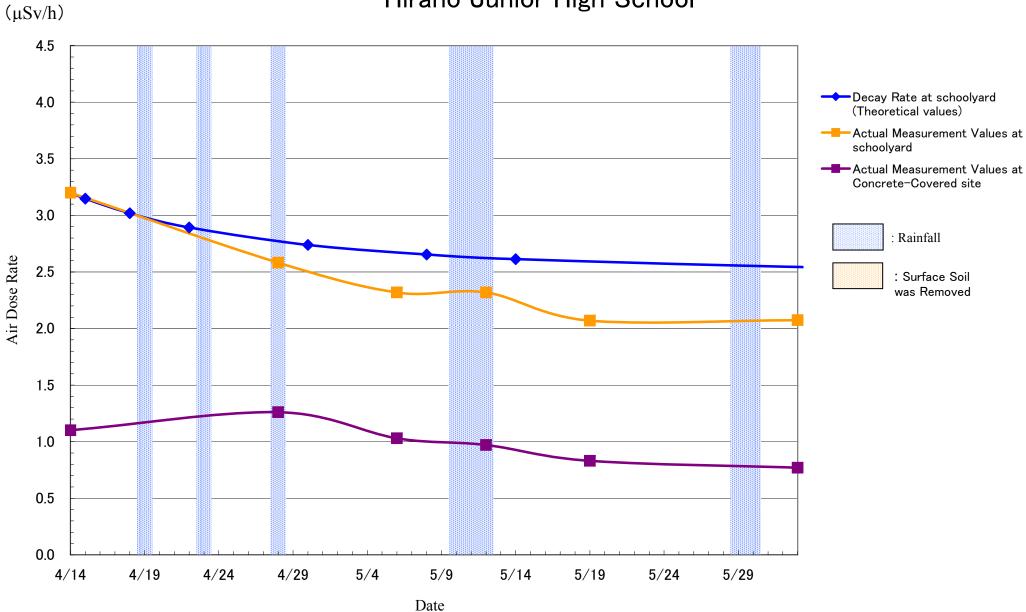
Oyama Elementary School

 $(\mu Sv/h)$



Shinryo Junior High School

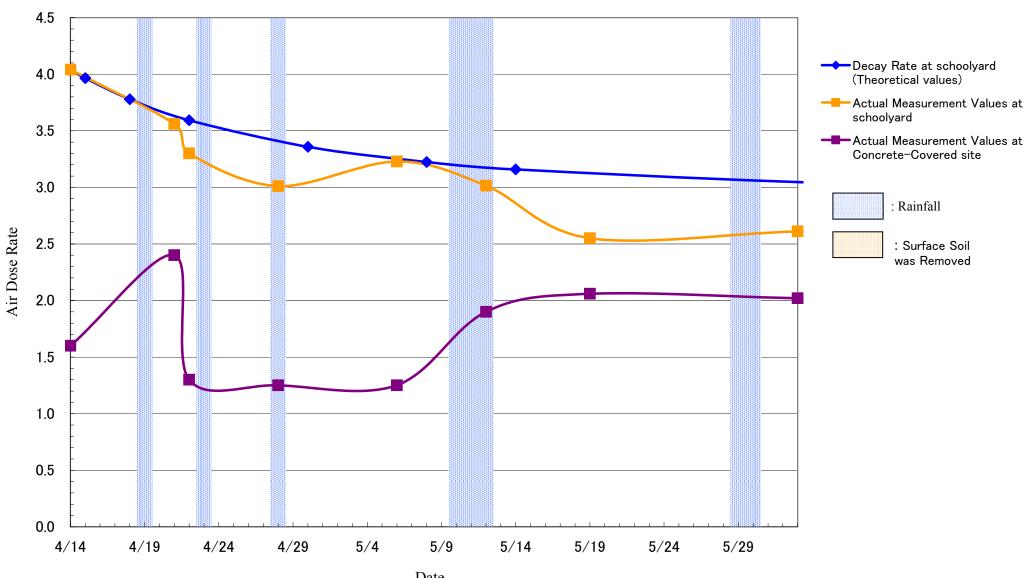
 $(\mu Sv/h)$



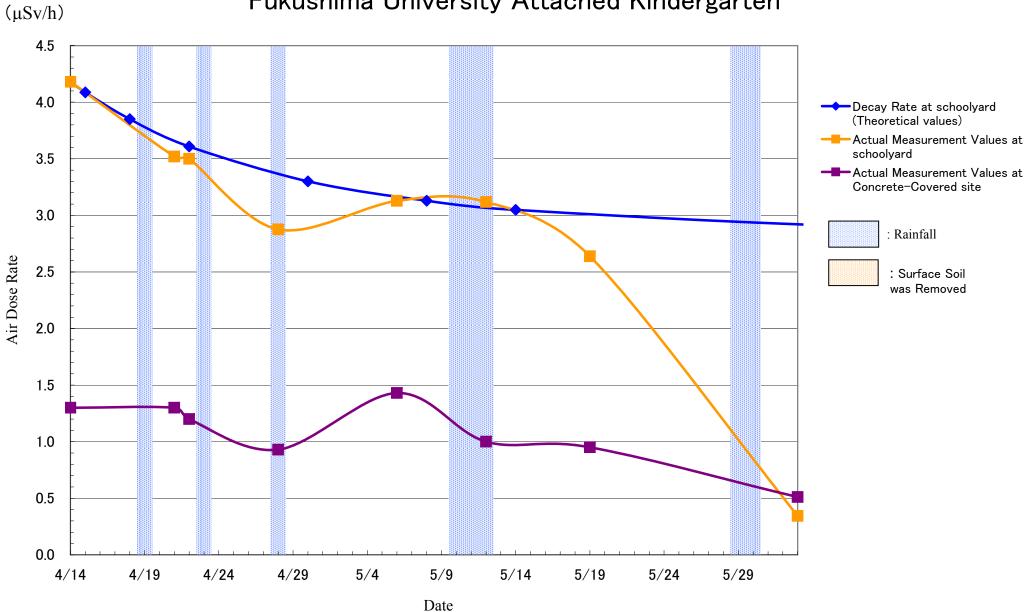
Hirano Junior High School

Fukushima Dai-ni Junior High School

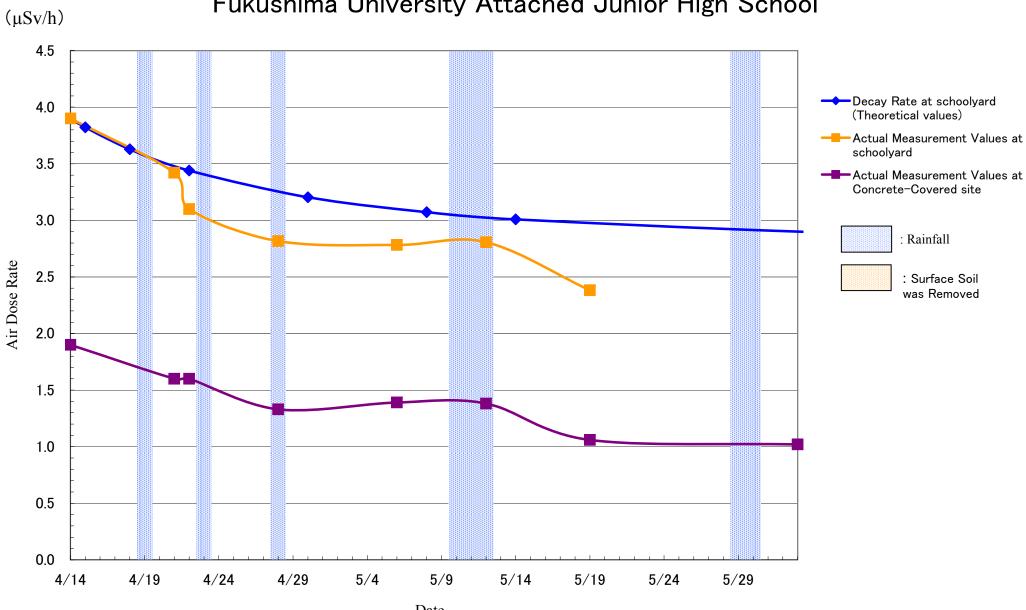
 $(\mu Sv/h)$



Date



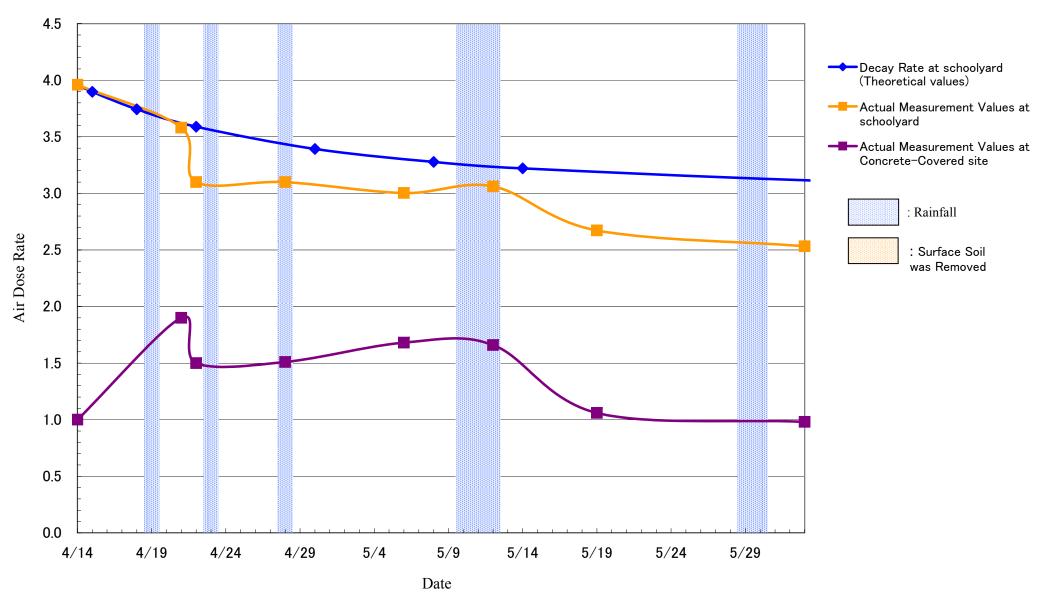
Fukushima University Attached Kindergarten



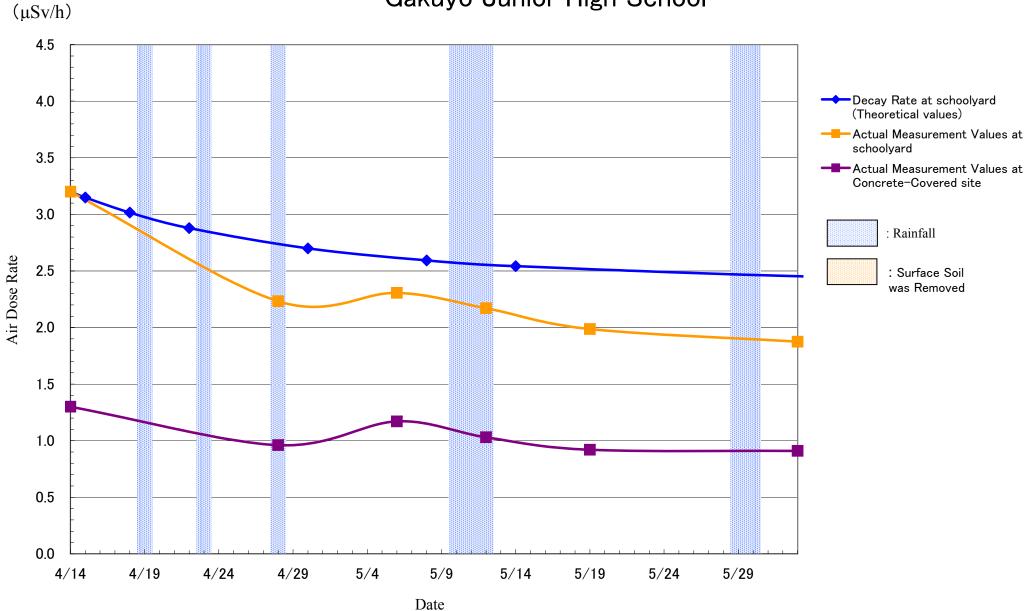
Fukushima University Attached Junior High School

Date

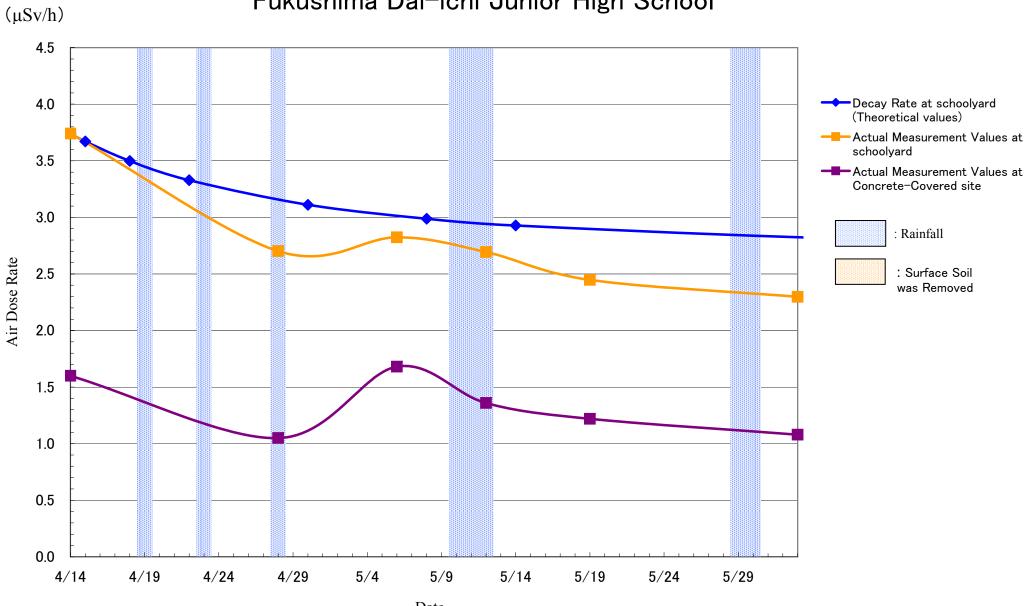
Fukushima Seikei Junior High School



 $(\mu Sv/h)$

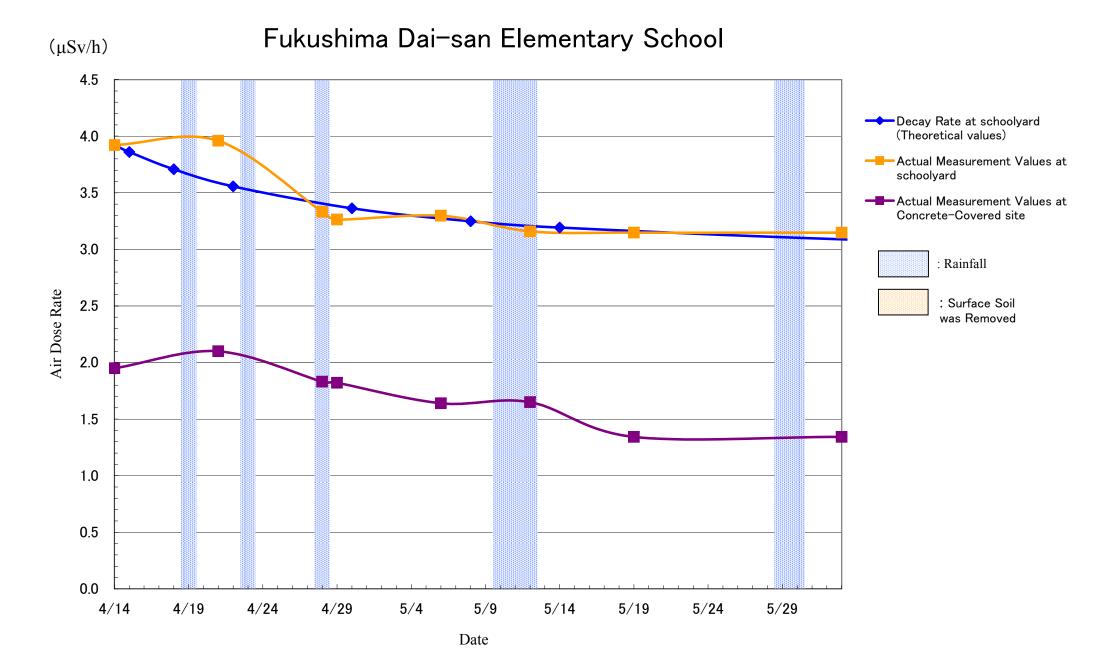


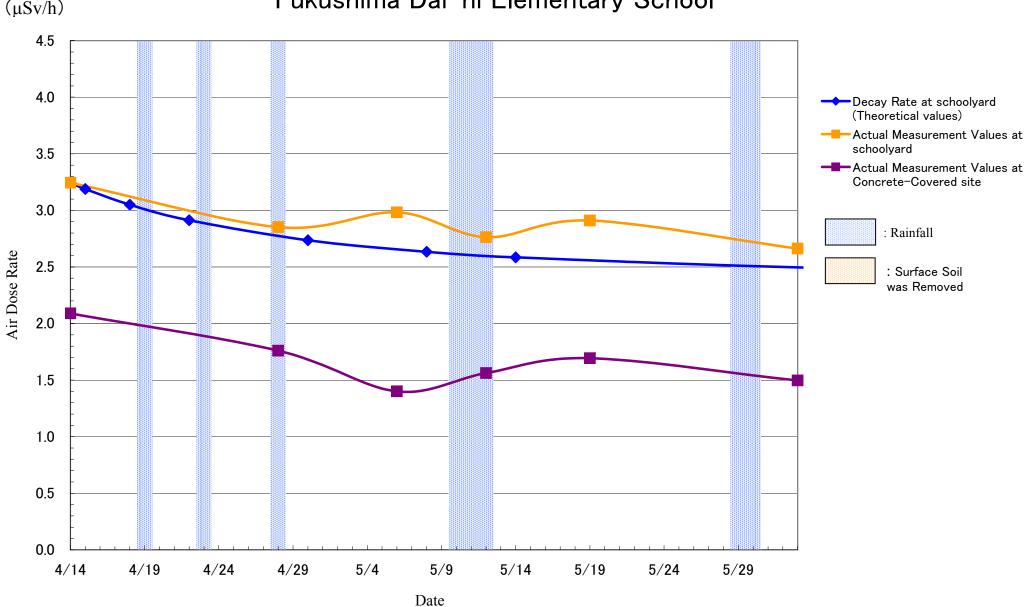
Gakuyo Junior High School



Fukushima Dai-ichi Junior High School

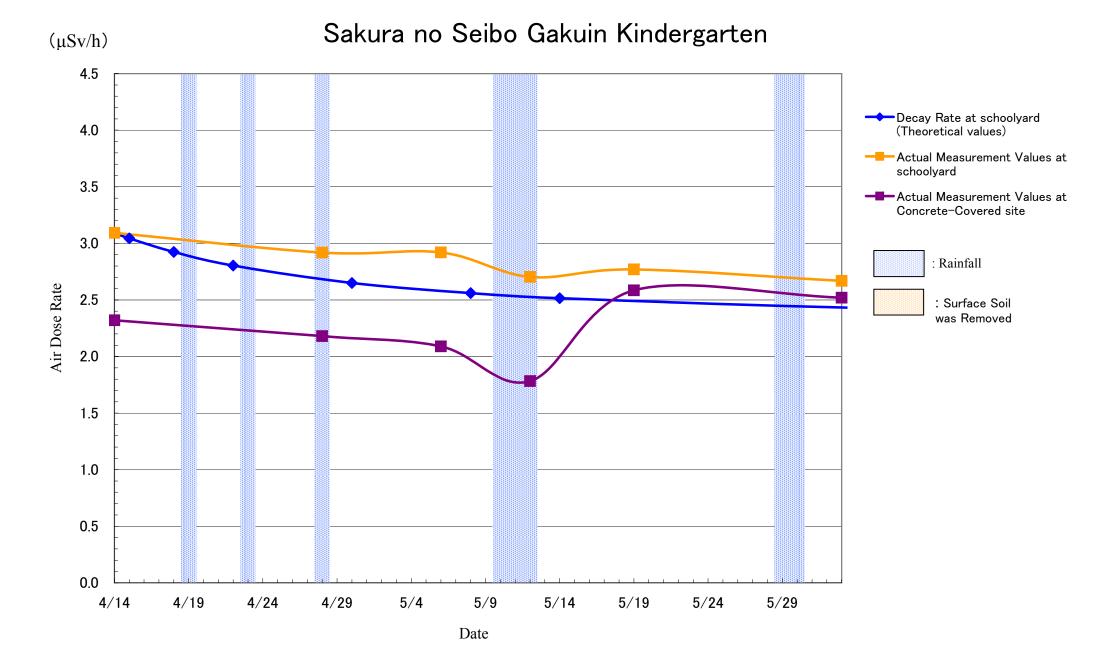
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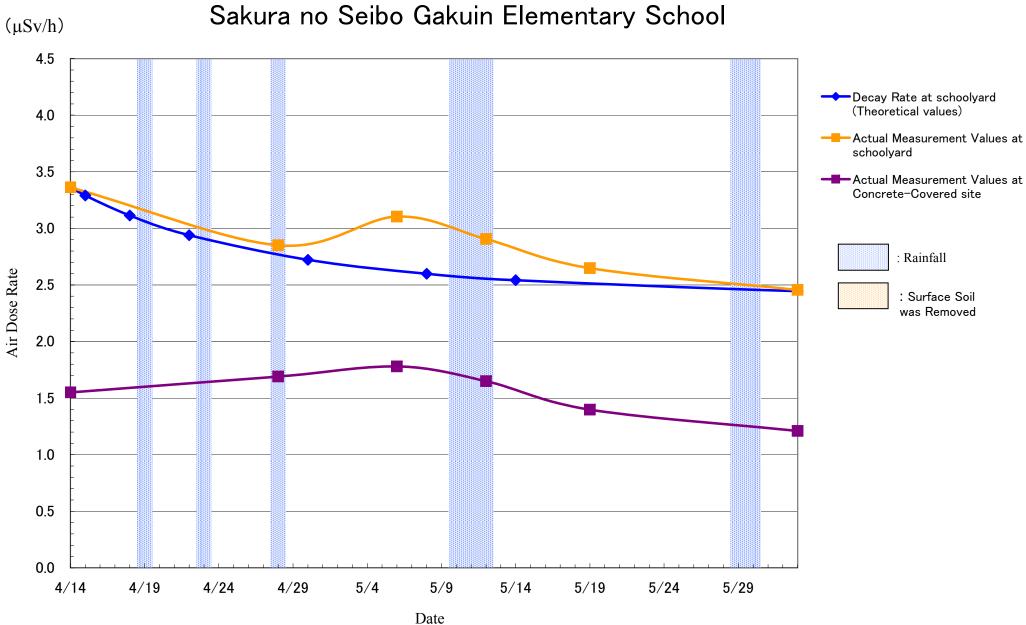


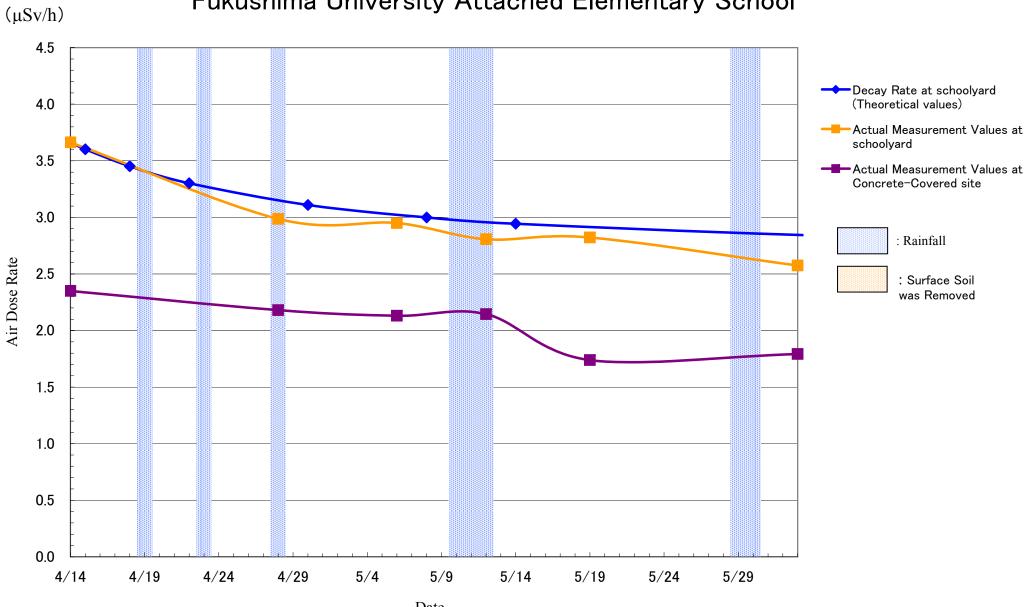


Fukushima Dai-ni Elementary School

 $(\mu Sv/h)$

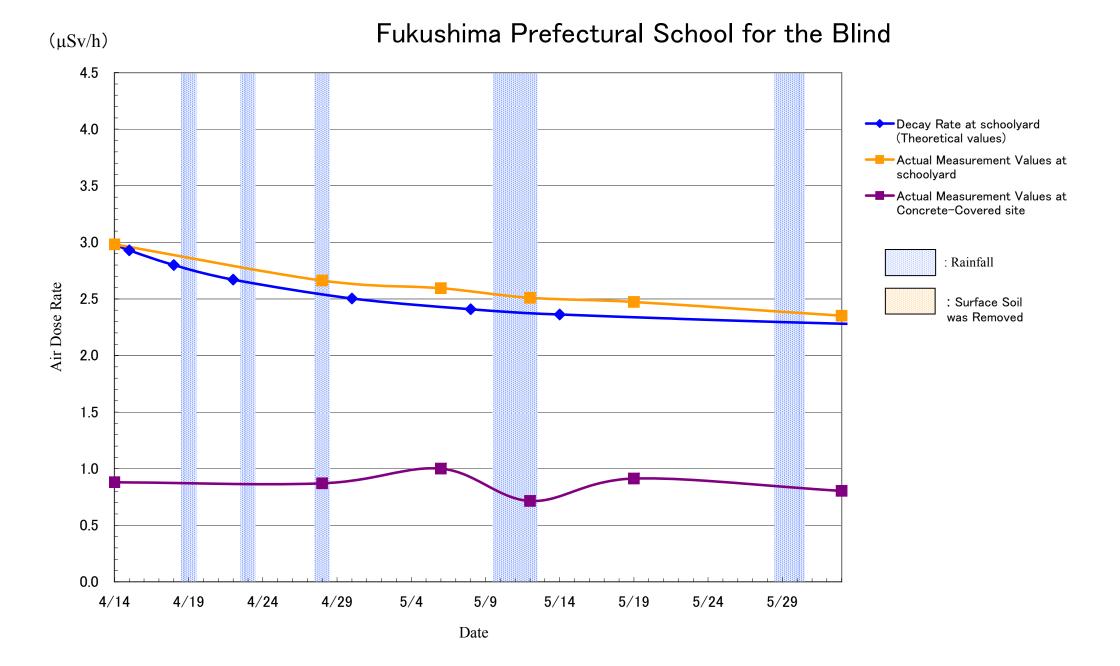






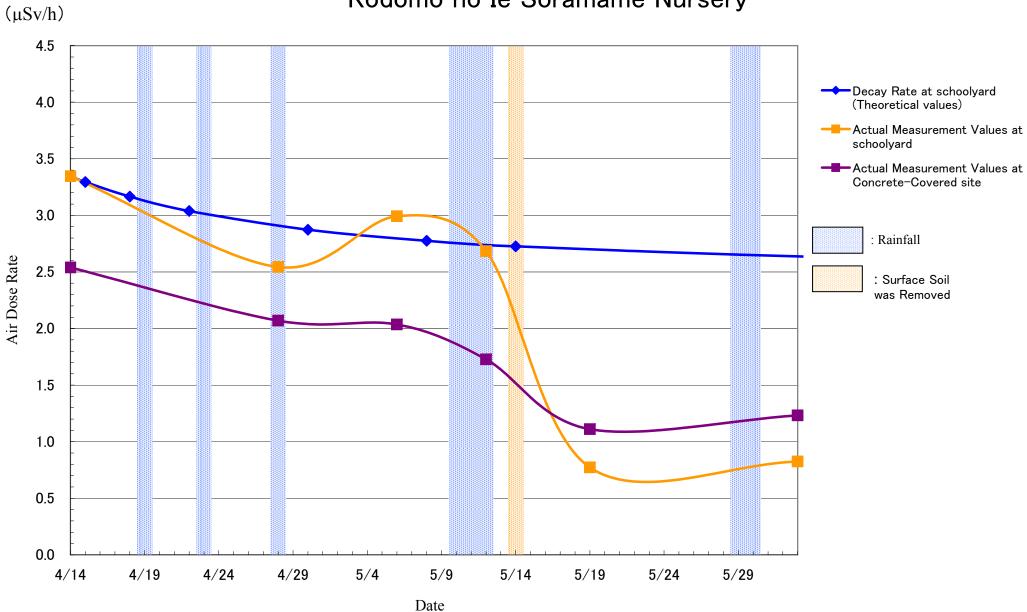
Fukushima University Attached Elementary School

Date

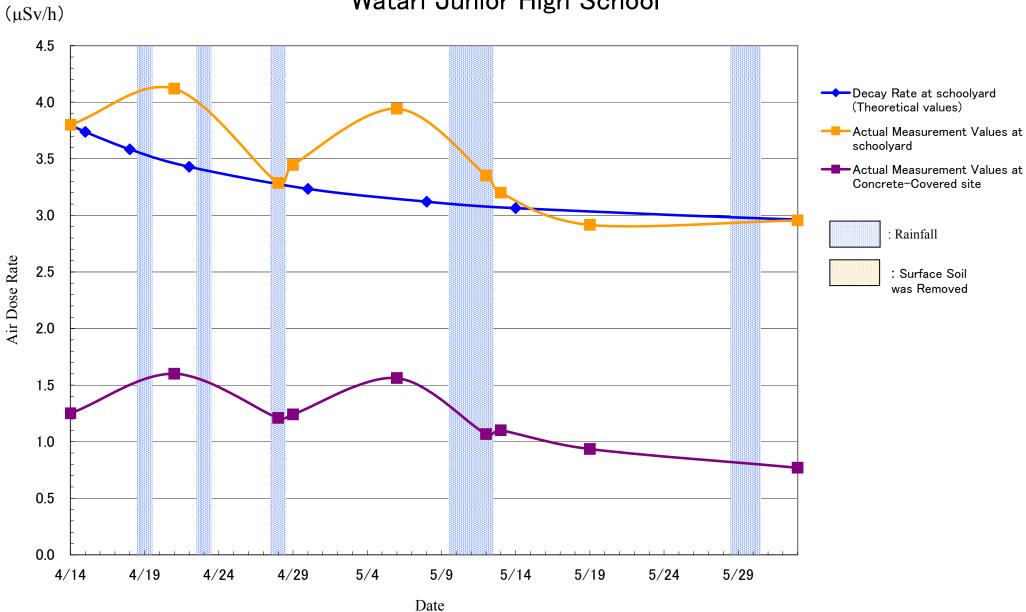


$(\mu Sv/h)$ 4.5 ---- Decay Rate at schoolyard (Theoretical values) 4.0 -----Actual Measurement Values at schoolyard 3.5 ----Actual Measurement Values at Concrete-Covered site 3.0 : Rainfall Air Dose Rate 2.5 : Surface Soil was Removed 2.0 1.5 1.0 0.5 0.0 4/14 4/19 4/24 4/29 5/4 5/9 5/19 5/24 5/29 5/14 Date

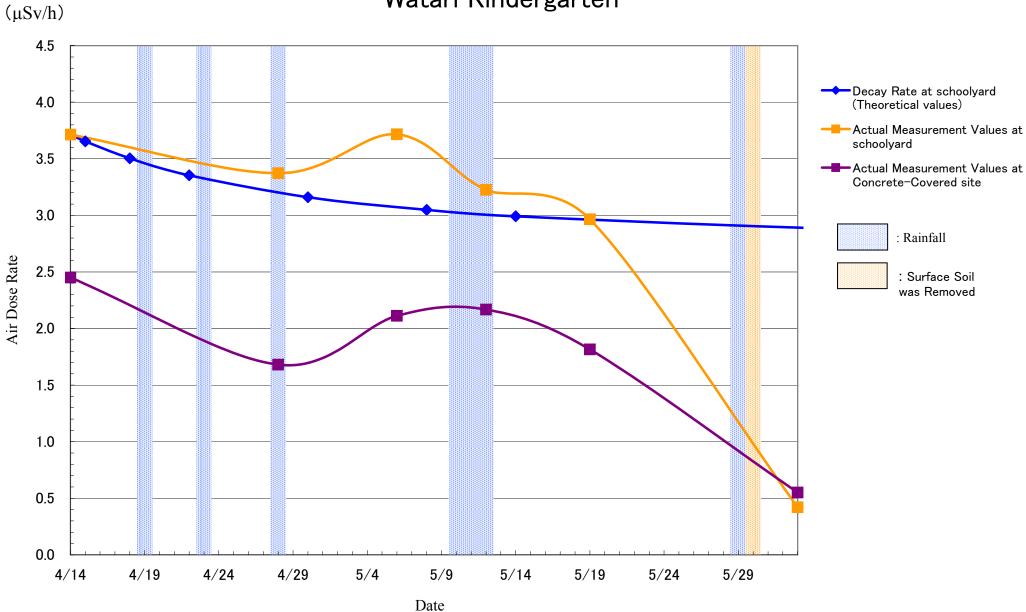
Watari Nursery



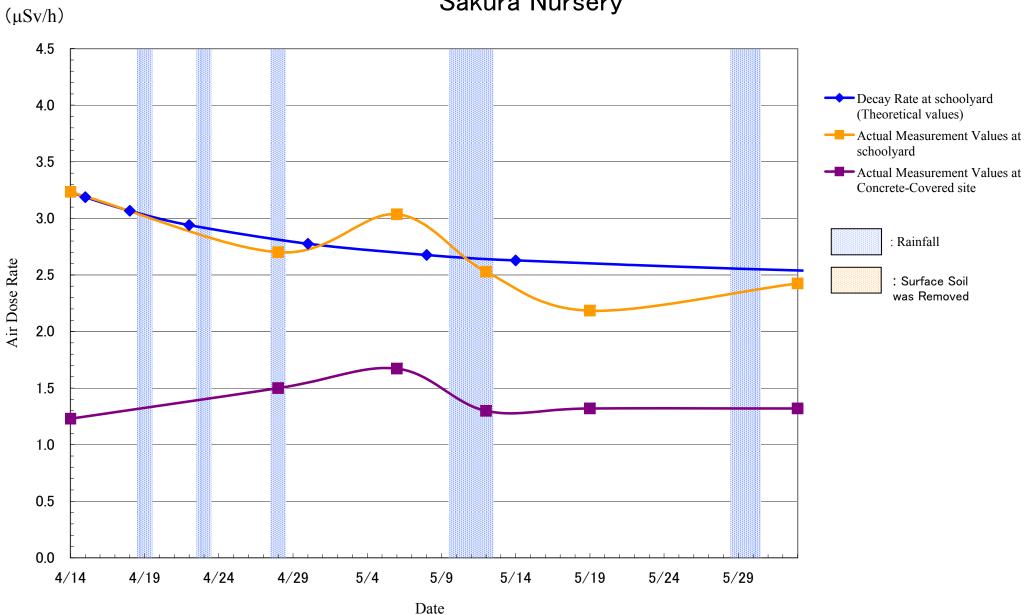
Kodomo no le Soramame Nursery



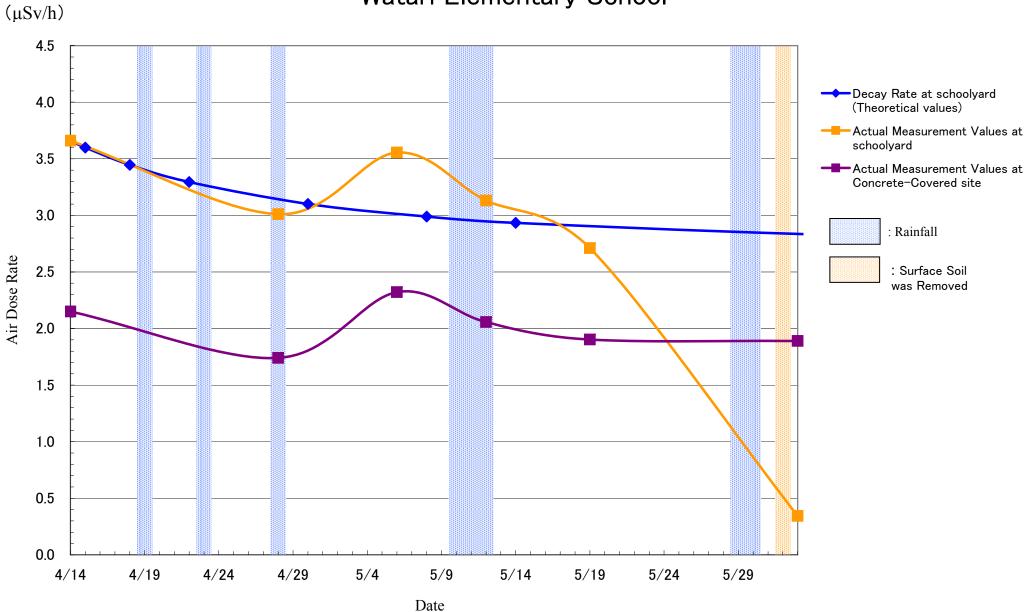
Watari Junior High School



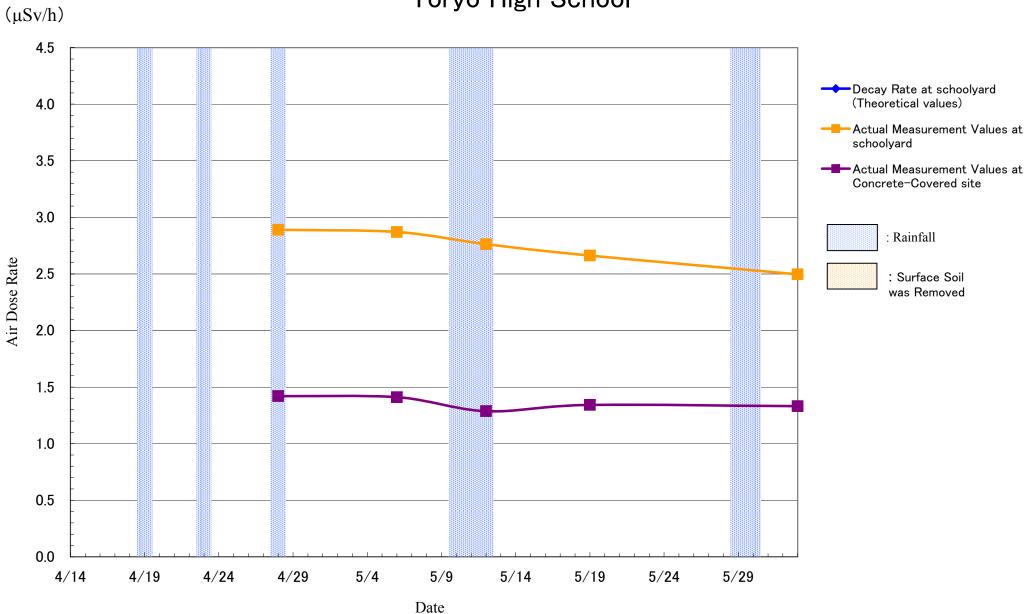
Watari Kindergarten



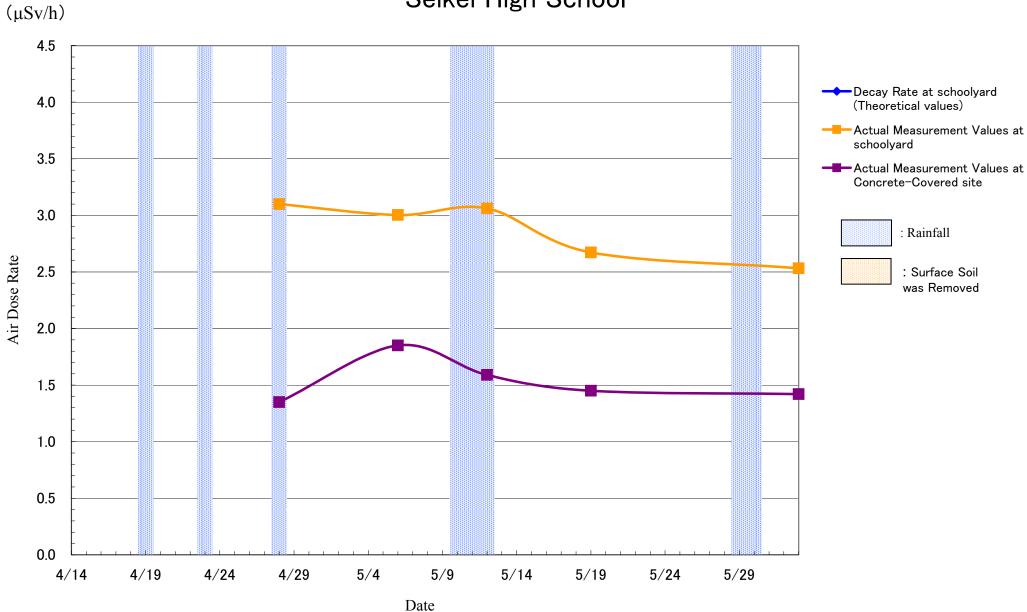
Sakura Nursery



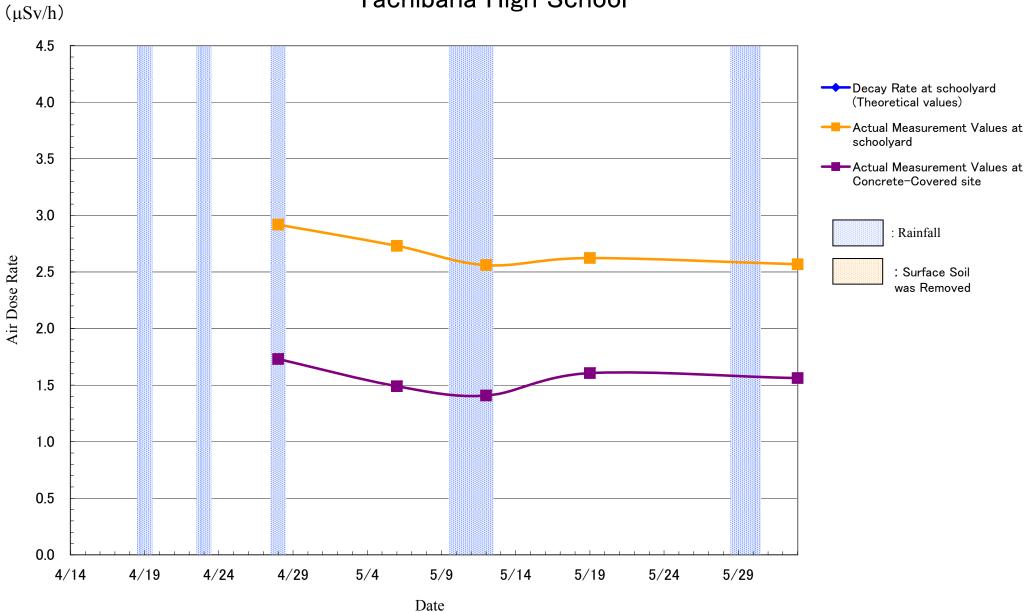
Watari Elementary School



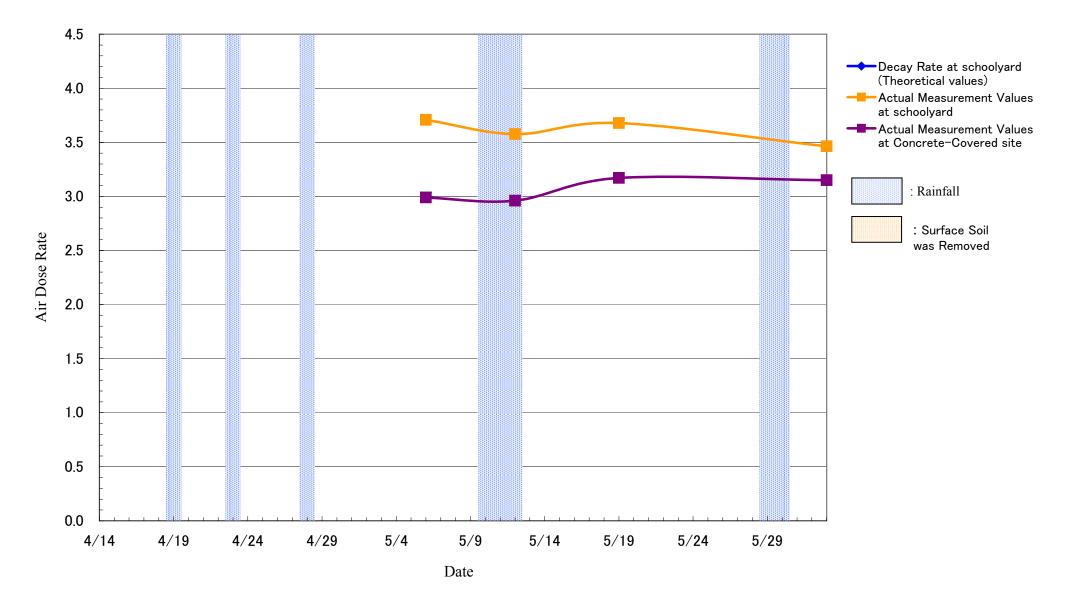
Toryo High School



Seikei High School



Tachibana High School



(µSv/h)