

May 12, 2011

Ministry of Education, Culture, Sports, Science and Technology

Results of Air Dose Rate Monitoring at Schools and the like in Fukushima Prefecture
(Part 2) and Trends of the Measurement Results

Attachment 1 shows a list of results of measurements of air dose rates of schools and the like. in Fukushima Prefecture, executed on May 6 and 7. At two schools which exceeded 3.8 $\mu\text{Sv/h}$ until now, this measurements confirmed that they were below 3.8 $\mu\text{Sv/h}$, but one other school once again exceeded 3.8 $\mu\text{Sv/h}$. For these schools, the administrator of the school will consider an end to restrictions on outdoor activities, and the like. Also, one Children's Hall was newly added to the surveys this time and in the future, by request of the Ministry of Health, Labour and Welfare.

From April 14 to May 6, the Ministry of Education, Culture, Sports, Science and Technology obtained the cooperation of the Japan Atomic Energy Agency, and conducted measurements at schools, and the like. in Fukushima Prefecture. Results for each school are shown as graphs in Attachment 2. The graphs show actual measurements at each school, and a theoretical decay curve based on soil analysis results as of April 14.

Also, the schools, and the like. (excluding Children's Halls), places subject to measurement are marked on a map shown in Attachment 3.

Analysis of measurement results indicates the following.

Decay basically according to a decay curve is seen for dose rates at the out of the schools (such as schoolyard), even though such countermeasures as surface soil removal have not been taken. There were higher measurements of dose rates at some schools, so we have to continue to monitor results carefully.

Rainfall was confirmed three times in Fukushima City during the measurement period. There were large amounts of rainfall on April 19 and 23, but large changes in measurements in schoolyards were not seen soon after rainfall. The effects of the light rain on the 28th are unclear.

There were large variations in values of laid concrete, which is being measured for reference values. The measurement points are fixed locations in principle, so it is conjectured that this is possibly due to comparatively more radioactive surface soil dust from the schoolyard and the like settling on the concrete.

For the schools and the like. where the surface soil of the schoolyard, etc. was removed, large decreasing was seen in air dose rates.

By continued monitoring, we are working to understand trends.

List of Readings of Measurements of Air Dose Rates at Schools, etc. in Fukushima Prefecture

Monitoring Date: May 6, 2011

No.	Location	Name of Schools Surveyed	Monitoring Time	Air Dose Rates ($\mu\text{Sv} / \text{h}$)				Weather
				Average Values Outdoors in Schools		Values of Laid Concrete		
				1 m	50 cm	1 m	50 cm	
1	Koriyama city	Koriyama Second Junior High School	9:52	1.0	1.0	1.3	1.7	Fair
2	Koriyama city	Saint-Paul's Kindergarten	10:36	1.1	1.0	1.4	1.6	Fair
3	Koriyama city	Kaoru Elementary School	11:20	0.9	0.9	0.8	0.9	Fair
4	Koriyama city	Koriyama First Junior High School	12:01	1.4	1.5	1.5	1.7	Fair
5	Koriyama city	Koriyama Third Junior High School	12:40	0.8	0.8	1.7	2.0	Fair
6	Motomiya city	Gohyakugawa Elementary School	12:50	2.9	3.0	1.1	0.9	Fair
7	Motomiya city	Motomiya 4th day-care center	12:30	2.8	3.1	1.3	1.4	Fair
8	Motomiya city	Wada Kindergarten	12:03	2.9	3.1	1.9	1.9	Fair
9	Motomiya city	Wada Elementary School	11:43	2.9	3.2	1.0	0.9	Fair
10	Nihonmatsu city	Ishii Kindergarten	13:13	2.8	2.9	1.8	1.7	Fair
11	Nihonmatsu city	Ishii Elementary School	12:58	2.9	3.0	1.8	1.9	Fair
12	Nihonmatsu city	Takeshita Elementary School	10:55	2.8	2.9	0.9	0.9	Fair
13	Nihonmatsu city	Matsugaoka day-care center	11:18	2.6	2.9	1.2	1.3	Fair
14	Nihonmatsu city	Sugita Elementary School	10:20	2.2	2.3	1.0	1.0	Fair
15	Nihonmatsu city	Sugita Kindergarten	10:05	2.8	3.1	1.5	1.3	Fair
16	Nihonmatsu city	Nihonmatsu Second Junior High School	11:48	1.5	1.4	1.5	1.8	Fair
17	Nihonmatsu city	Obama Junior High School	12:20	2.9	3.0	1.6	1.6	Fair
18	Fukushima city	Shimogawasaki Elementary School	11:30	2.9	3.1	2.1	2.1	Fair
19	Fukushima city	Okubo Elementary School	11:05	2.3	2.4	1.5	1.6	Fair
20	Fukushima city	Nankoudai Elementary School	10:25	2.7	2.8	1.9	2.0	Fair
21	Fukushima city	Onami Elementary School, Fukushima	10:43	3.1	3.4	2.1	2.2	Fair
22	Date city	Oguni Elementary School	11:15	0.8	0.8	2.0	2.4	Fair/Cloudy
23	Soma city	Tamano Kindergarten	12:02	2.9	3.1	1.6	1.8	Fair
24	Soma city	Tamano Junior High School	12:26	3.0	3.2	2.1	2.4	Fair
25	Soma city	Tamano Elementary School	12:02	2.9	3.1	1.6	1.8	Fair
26	Fukushima city	Okayama Elementary School	10:42	2.6	2.8	1.5	1.2	Fair
27	Fukushima city	Seishin Saniku day-care center	11:01	1.7	1.8	1.7	2.0	Fair
28	Fukushima city	Saniku Kindergarten	11:23	2.1	2.1	1.6	1.7	Fair

No.	Location	Name of Schools Surveyed	Monitoring Time	Air Dose Rates ($\mu\text{Sv} / \text{h}$)				Weather
				Average Values Outdoors in Schools		Values of Laid Concrete		
				1 m	50 cm	1 m	50 cm	
29	Date city	Tominari Elementary School	12:38	0.7	0.7	1.8	1.7	Fair
30	Fukushima city	Fukushima Yogo Gakko	10:45	2.4	2.7	1.2	1.4	Fair
31	Fukushima city	Oyama day-care center	11:05	2.2	2.6	1.0	1.3	Fair
32	Fukushima city	Oyama Elementary School	11:33	3.0	3.3	1.7	1.9	Fair
33	Fukushima city	Shinryo Junior High School	11:55	2.2	2.4	0.9	0.9	Fair
34	Fukushima city	Hirano Junior High School	12:30	2.3	2.6	1.0	1.2	Fair
35	Fukushima city	Fukushima Second Junior High School	11:30	3.2	3.5	1.3	1.4	Fair
36	Fukushima city	Fukushima University attached Kindergarten	8:24	2.8	3.1	1.3	1.4	Cloudy
37	Fukushima city	Fukushima University attached Junior High School	8:48	2.8	3.2	1.4	1.5	Cloudy
38	Fukushima city	Fukushima Seikei Junior High School	12:06	3.0	3.2	1.7	2.0	Fair
39	Fukushima city	Gakuyo Junior High School	9:11	2.3	2.5	1.2	1.3	Fair
40	Fukushima city	Fukushima First Junior High School	8:22	2.8	3.1	1.7	1.7	Fair
41	Fukushima city	Fukushima Third Elementary School	11:00	3.1	3.3	1.7	1.6	Fair
42	Fukushima city	Fukushima Second Elementary School	9:16	2.7	3.0	1.4	1.4	Fair
43	Fukushima city	Sakura no Seibo Gakuin Kindergarten	9:42	2.4	2.9	1.8	2.1	Fair
44	Fukushima city	Sakura no Seibo Gakuin Elementary School	9:53	2.6	3.1	1.5	1.8	Fair
45	Fukushima city	Fukushima University attached Elementary School	10:32	2.6	3.0	1.8	2.1	Fair
46	Fukushima city	Fukushima Prefectural School for the Blind	9:49	2.3	2.6	0.9	1.0	Fair
47	Fukushima city	Watari day-care center	10:30	3.0	3.5	2.0	2.0	Fair
48	Fukushima city	Kodomo no Ie Soramame	10:55	2.5	3.0	1.9	2.0	Fair
49	Fukushima city	Watari Junior High School	11:20	<u>3.9</u>	4.3	1.6	1.6	Fair
50	Fukushima city	Watari Kindergarten	12:15	3.3	3.7	2.2	2.1	Fair
51	Fukushima city	Sakura day-care center	12:40	2.7	3.0	1.2	1.7	Fair
52	Fukushima city	Watari Elementary School	13:05	3.2	3.6	2.0	2.3	Fair
53	Fukushima city	Toryo High School	10:28	2.9	3.0	1.4	1.3	Fair
54	Fukushima city	Seikei High School	12:06	3.0	3.2	1.9	2.2	Fair
55	Fukushima city	Tachibana High School	11:07	2.7	3.1	1.5	1.7	Fair
56	Date city	Ryozen Kodomonomura Children's Center	12:55	3.5	3.7	2.8	3.0	Fair

The air dose at 50 cm above ground was monitored outdoors in schools at nurseries, kindergartens and elementary schools, in consideration of short height.

The air dose at 1 m above ground was monitored at junior high schools.

Encircled figures show that measurements this time exceeded $3.8 \mu\text{Sv/h}$. Underlined school names show where measurements this time confirmed that they were below $3.8 \mu\text{Sv/h}$.

List of Readings of Measurements of Air Dose Rates at Schools, etc. in Fukushima Prefecture

Monitoring Date: May 7, 2011

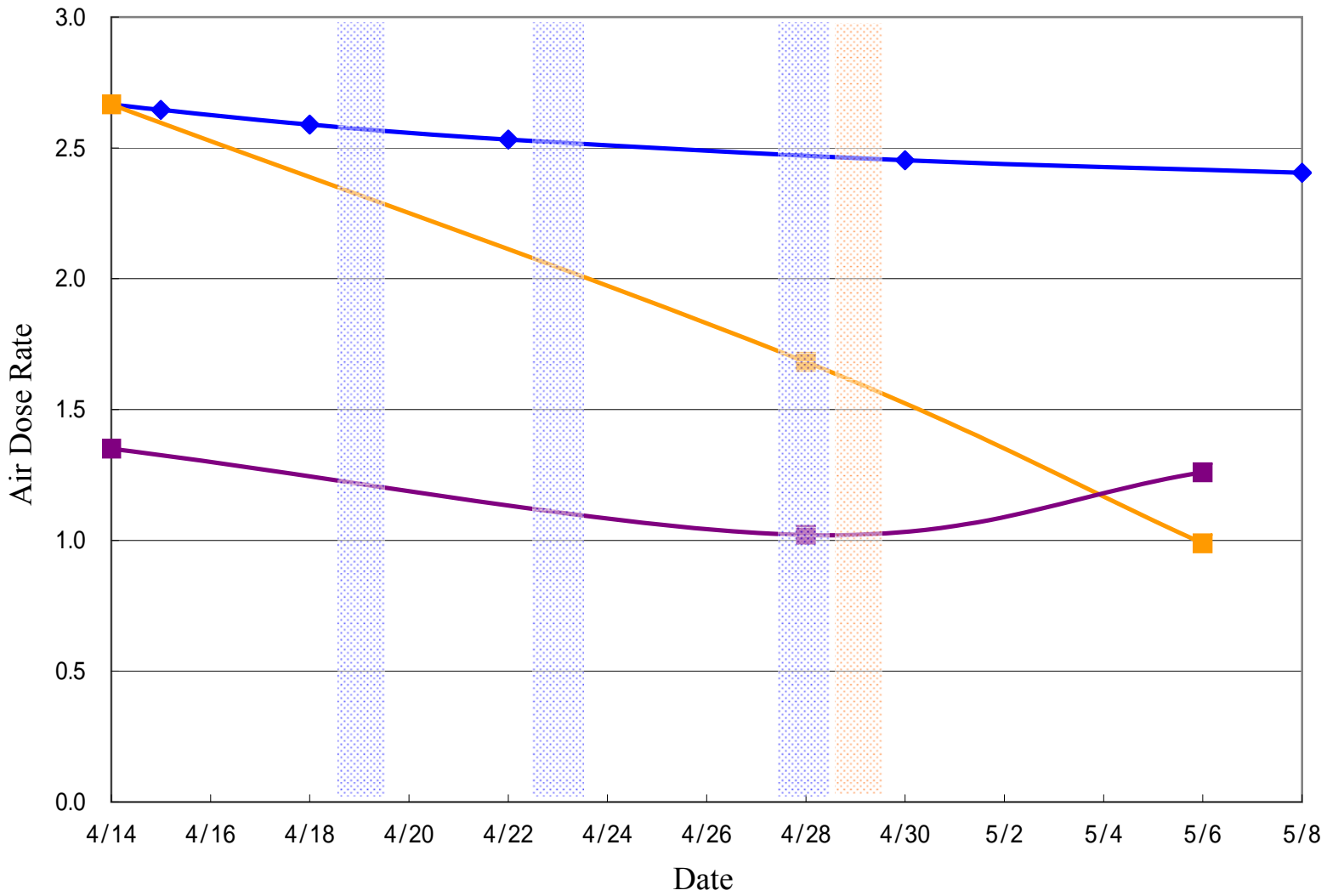
No.	Location	Name of Schools Surveyed	Monitoring Time	Air Dose Rates ($\mu\text{Sv/h}$)				Weather
				Average Values Outdoors in School		Values of Laid Concrete		
				1m	50cm	1m	50cm	
22	Date city	Oguni Elementary School	9:29	0.9	0.8	2.2	2.4	Cloudy
29	Date city	Tominari Elementary School	8:56	0.7	0.7	1.8	1.8	Cloudy
56	Date city	Ryozen Kodomonomura Children's Center	10:33	3.2	3.5	2.5	2.6	Cloudy

The air dose at 50 cm above ground was monitored outdoors in schools at nurseries, kindergartens and elementary schools, in consideration of short height.

The air dose at 1 m above ground was monitored at junior high schools.

Koriyama Second Junior High School

($\mu\text{Sv/h}$)

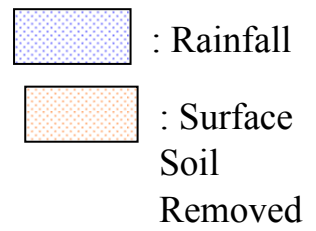
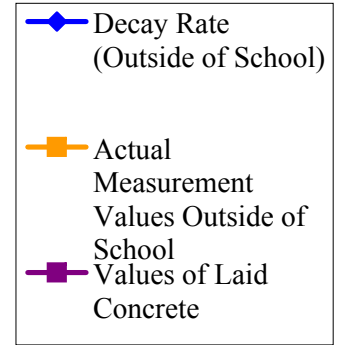
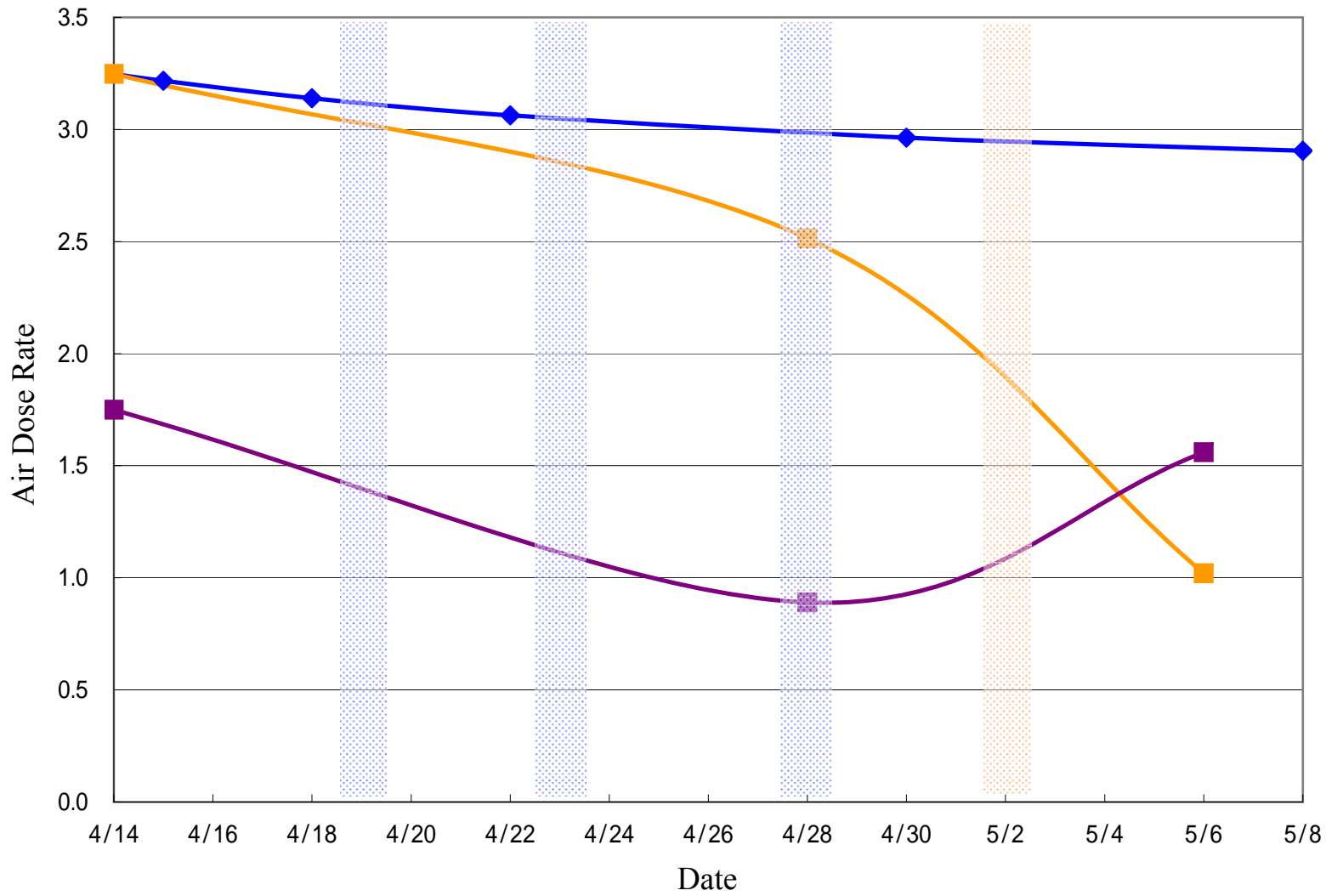


- ◆ Decay Rate (Outside of School)
- Actual Measurement Values Outside of School
- Values of Laid Concrete

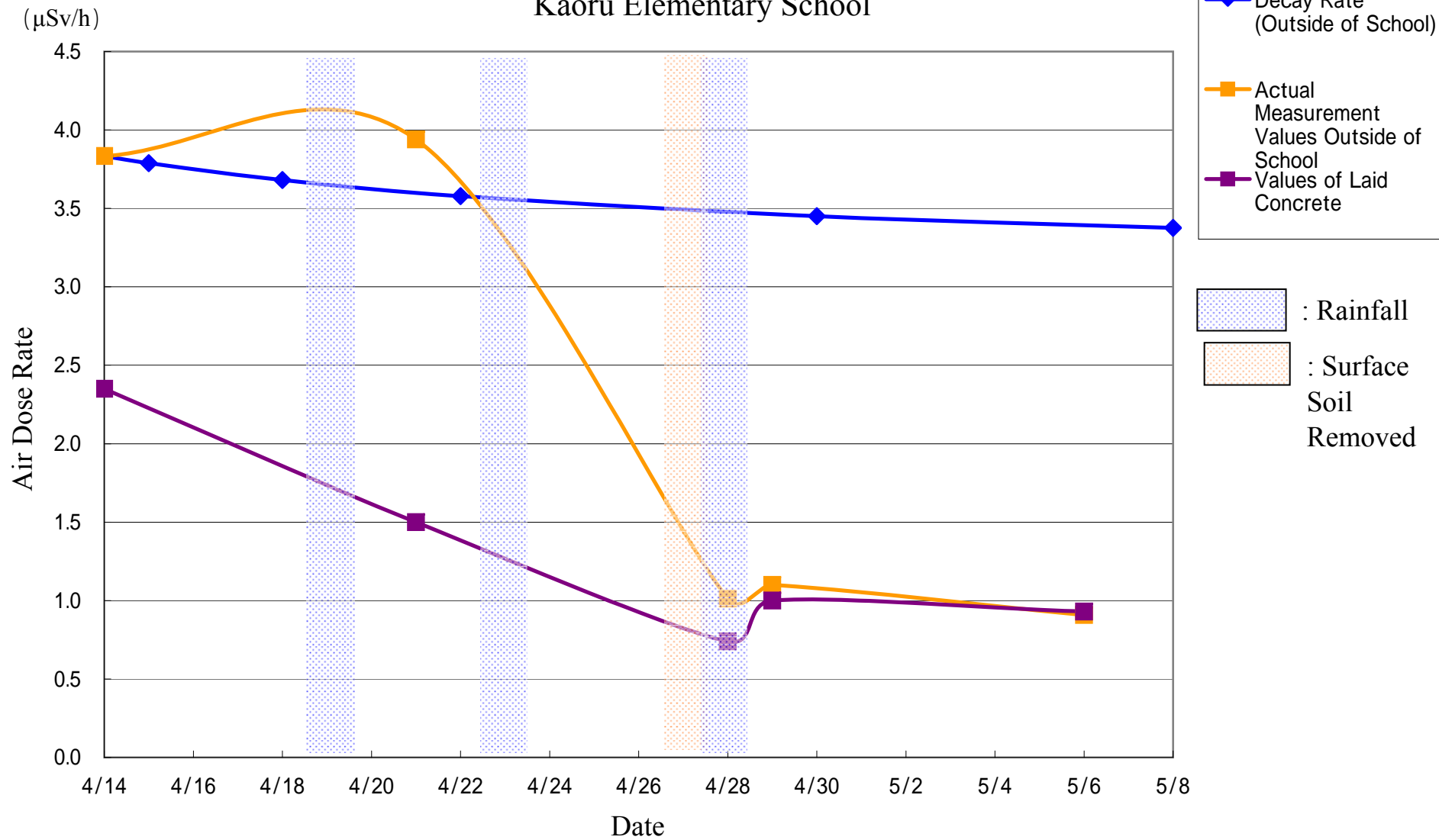
- ▨ : Rainfall
- ▨ : Surface Soil Removed

Saint- Paul's Kindergarten

($\mu\text{Sv/h}$)

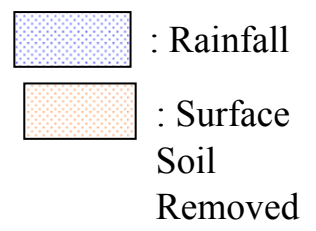
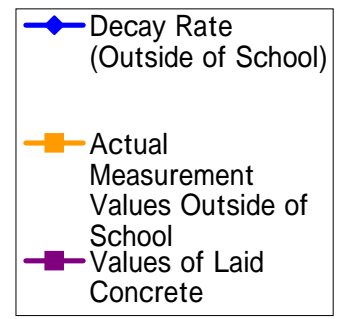
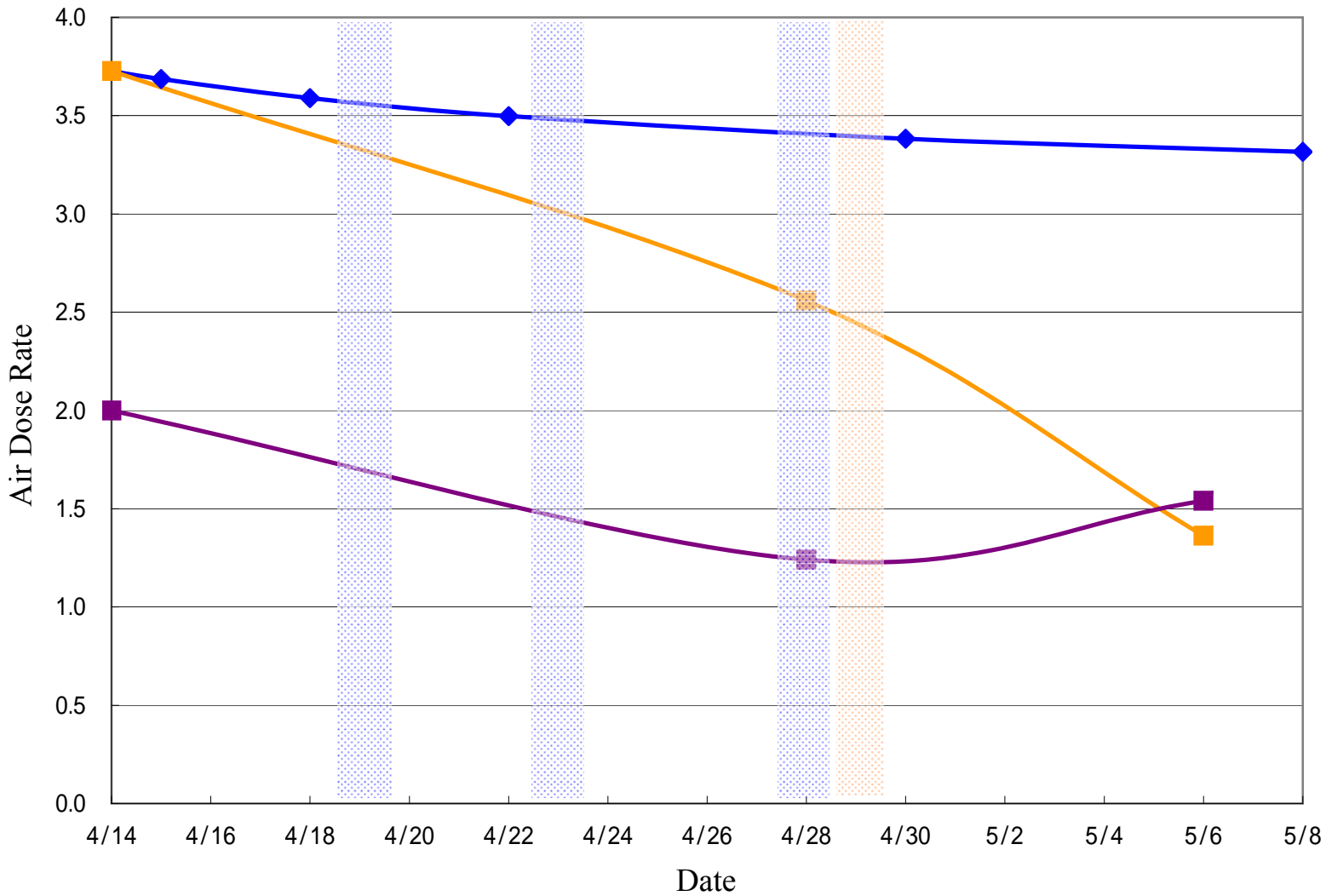


Kaoru Elementary School

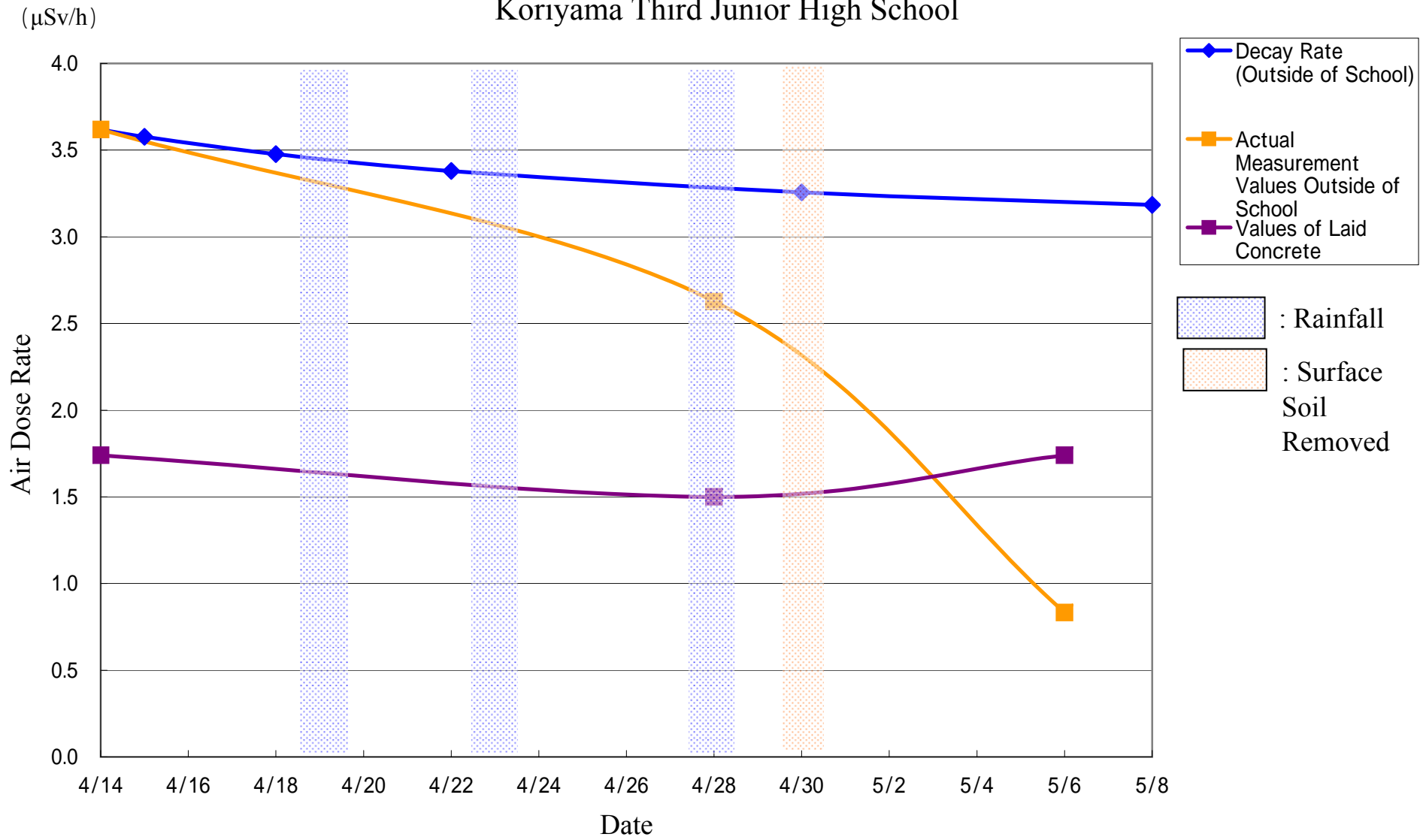


Koriyama First Junior High School

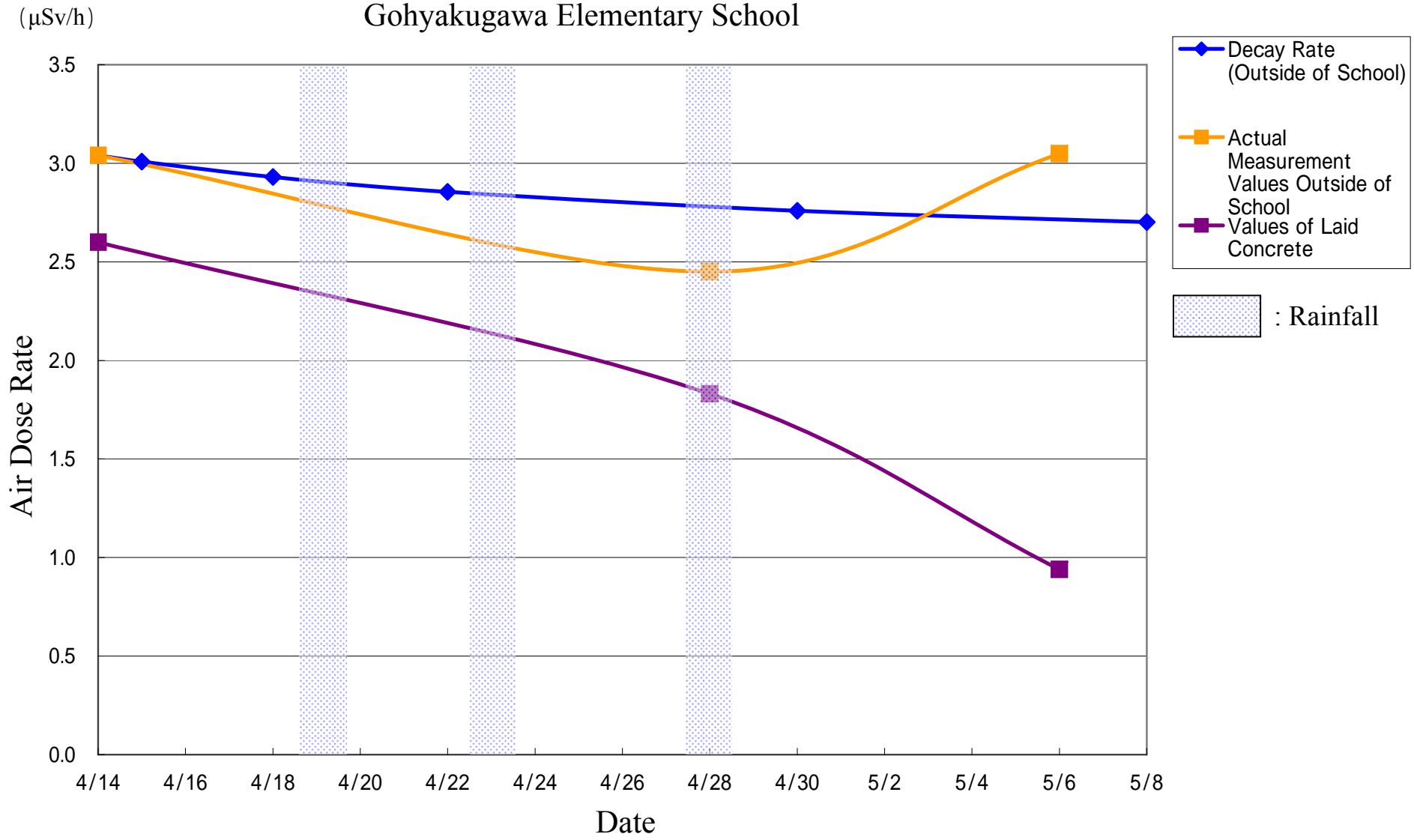
($\mu\text{Sv/h}$)



Koriyama Third Junior High School

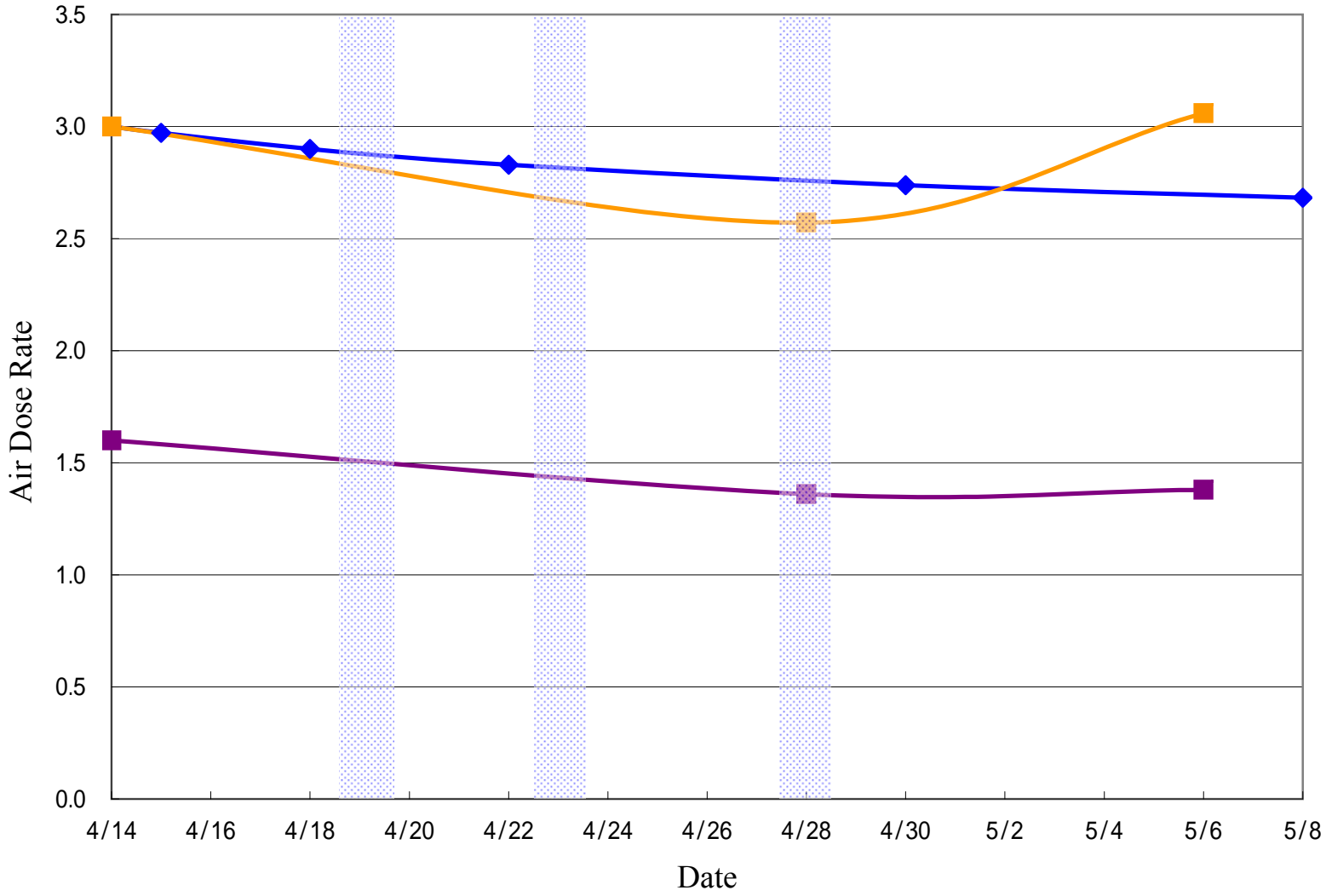


Gohyakugawa Elementary School



Motomiya 4th Preschool

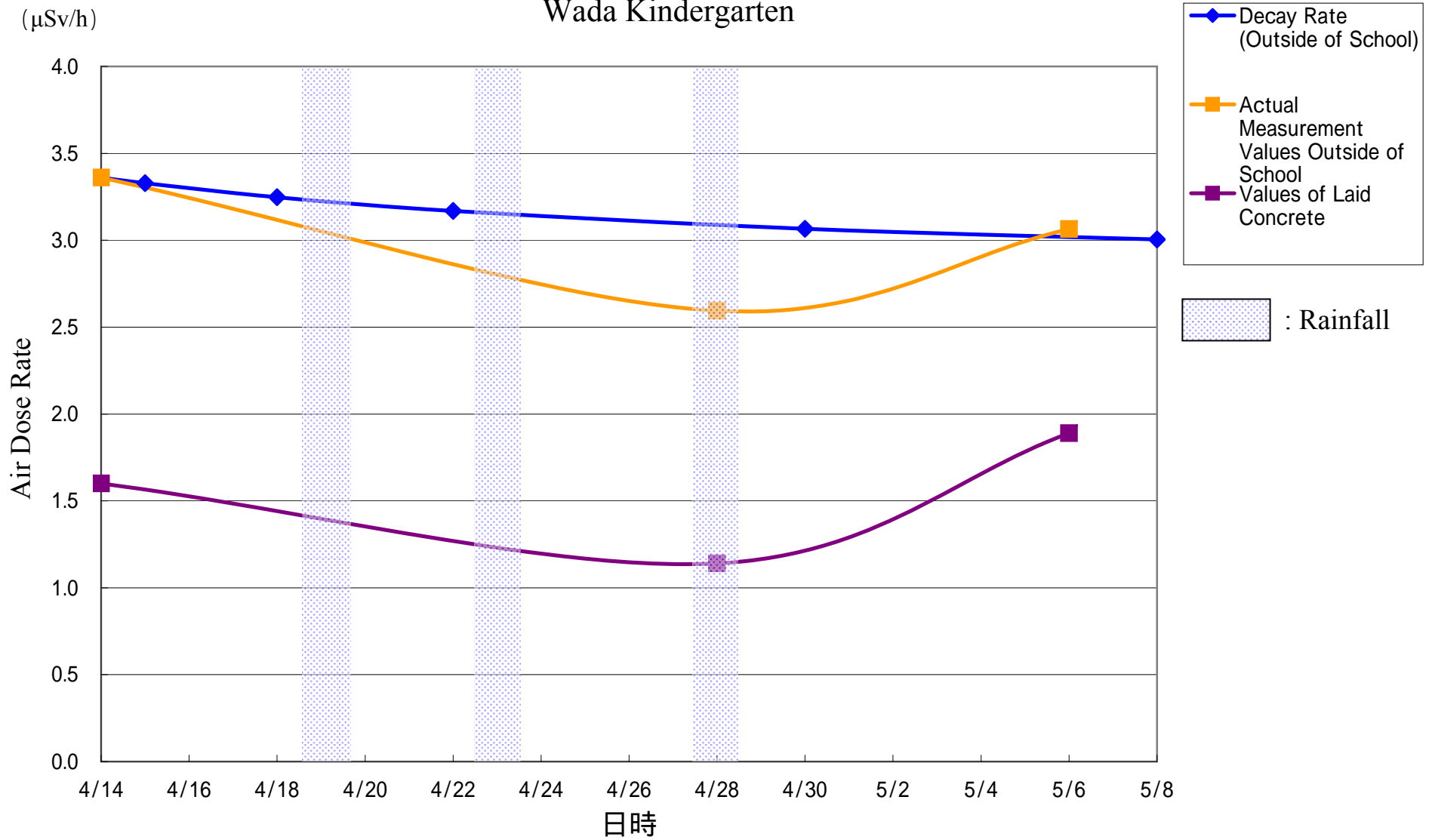
($\mu\text{Sv/h}$)



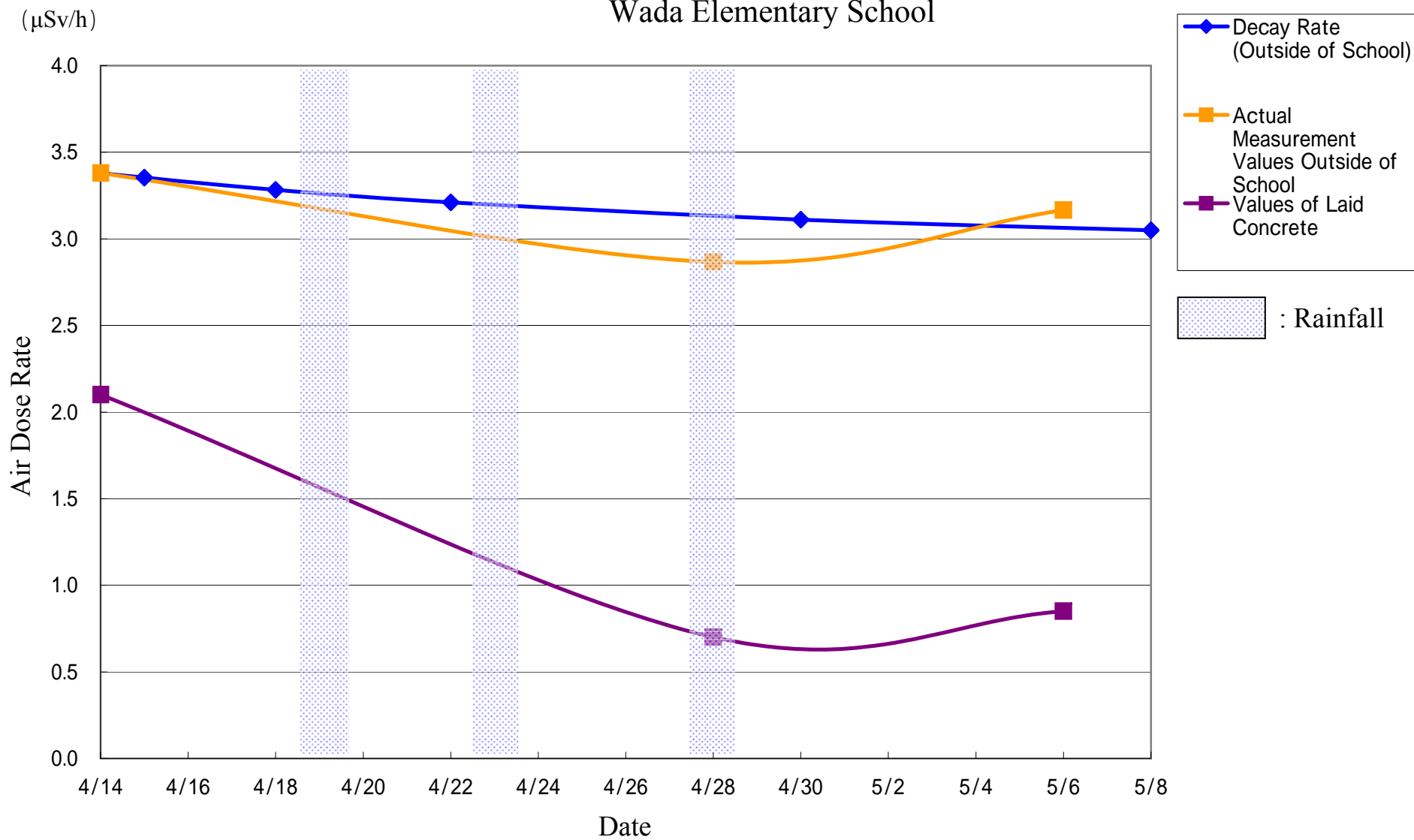
- ◆ Decay Rate (Outside of School)
- Actual Measurement Values Outside of School
- Values of Laid Concrete

▨ : Rainfall

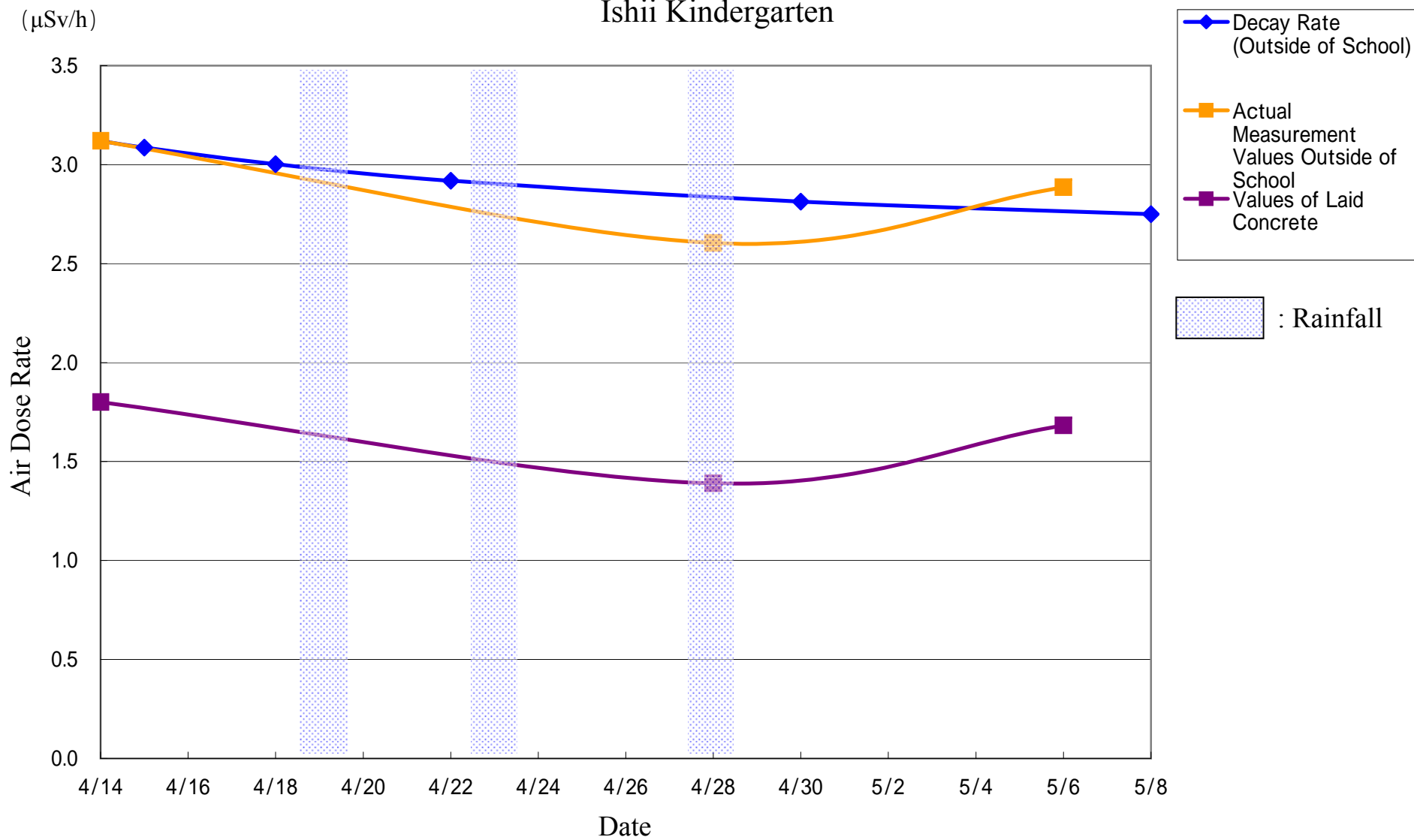
Wada Kindergarten



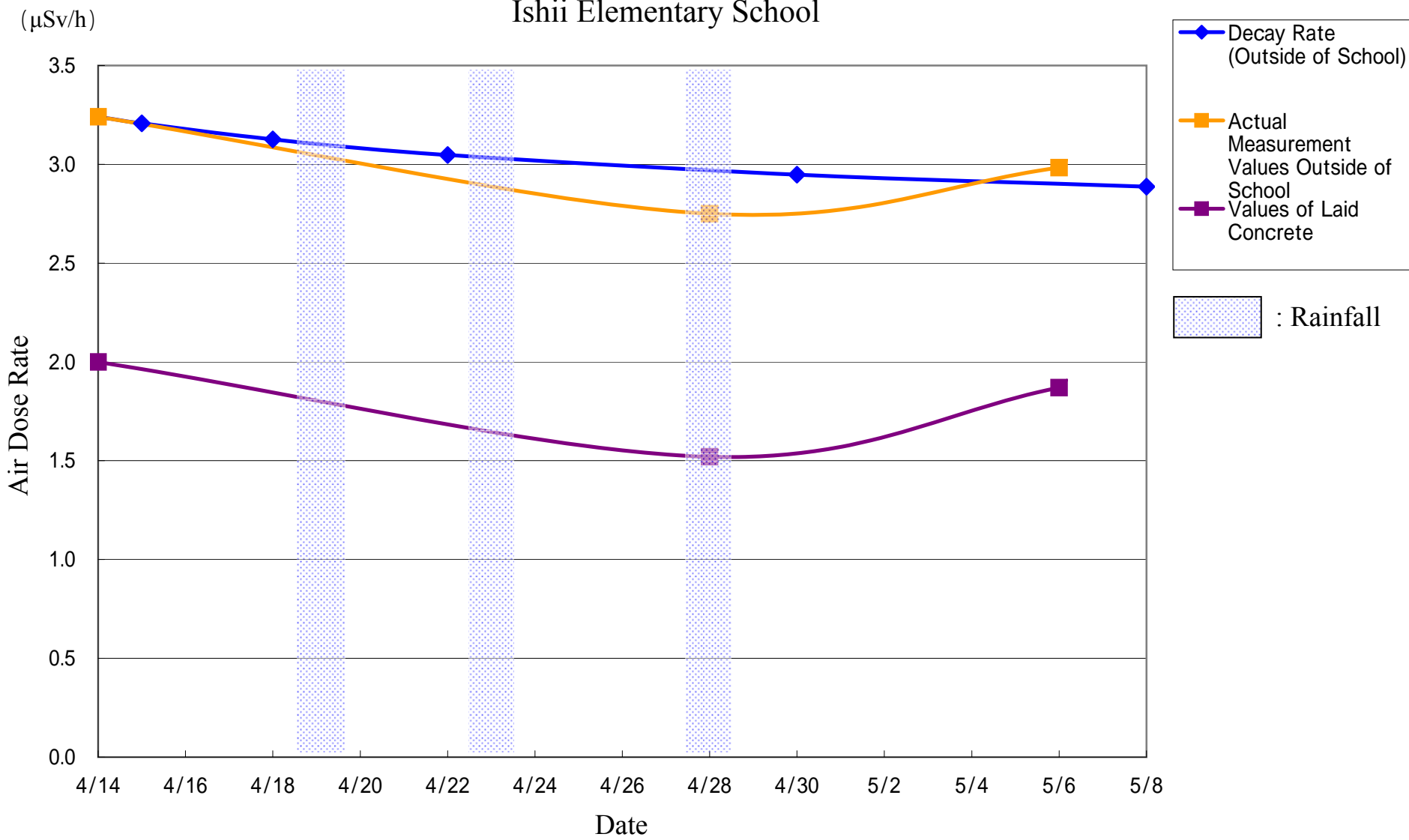
Wada Elementary School



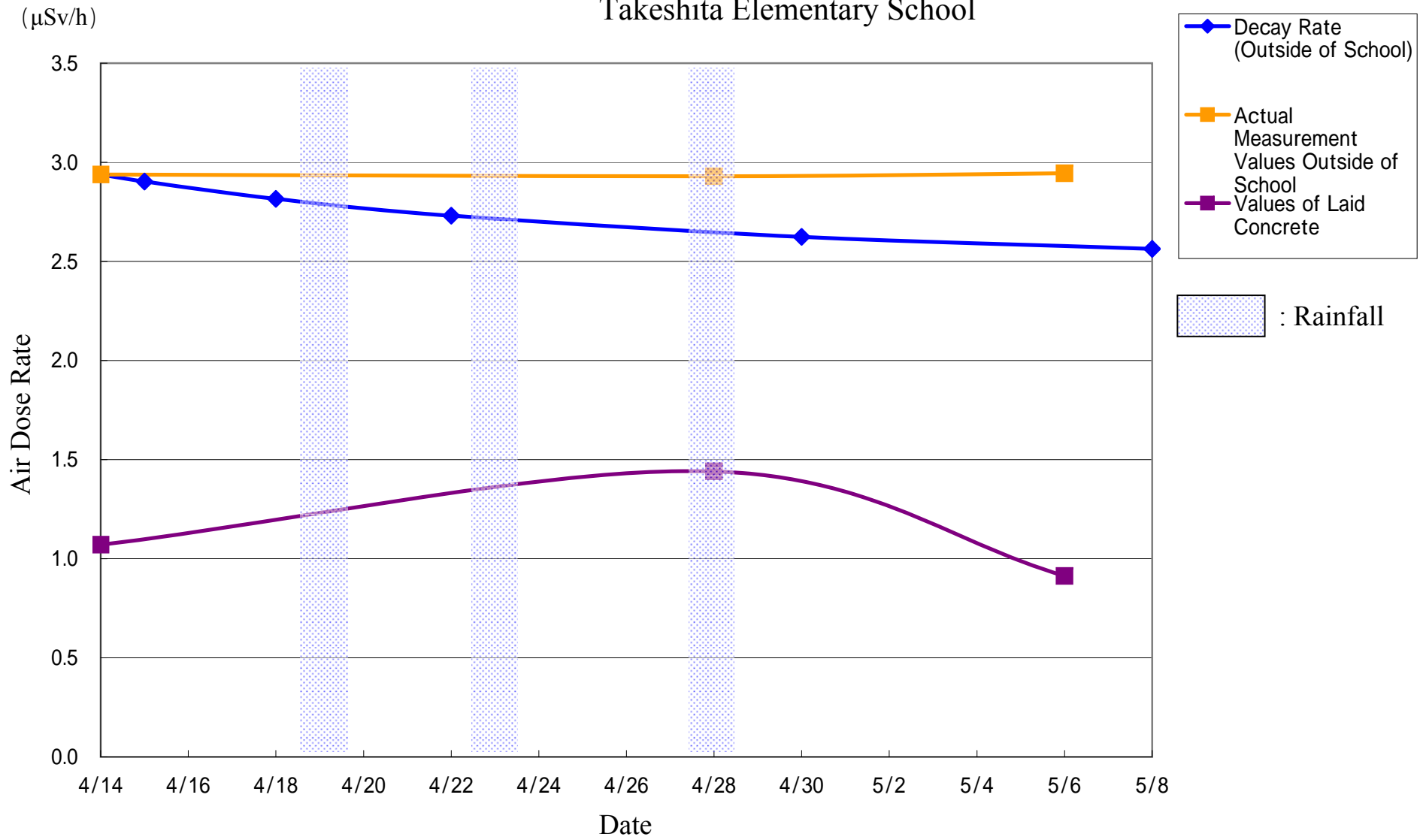
Ishii Kindergarten



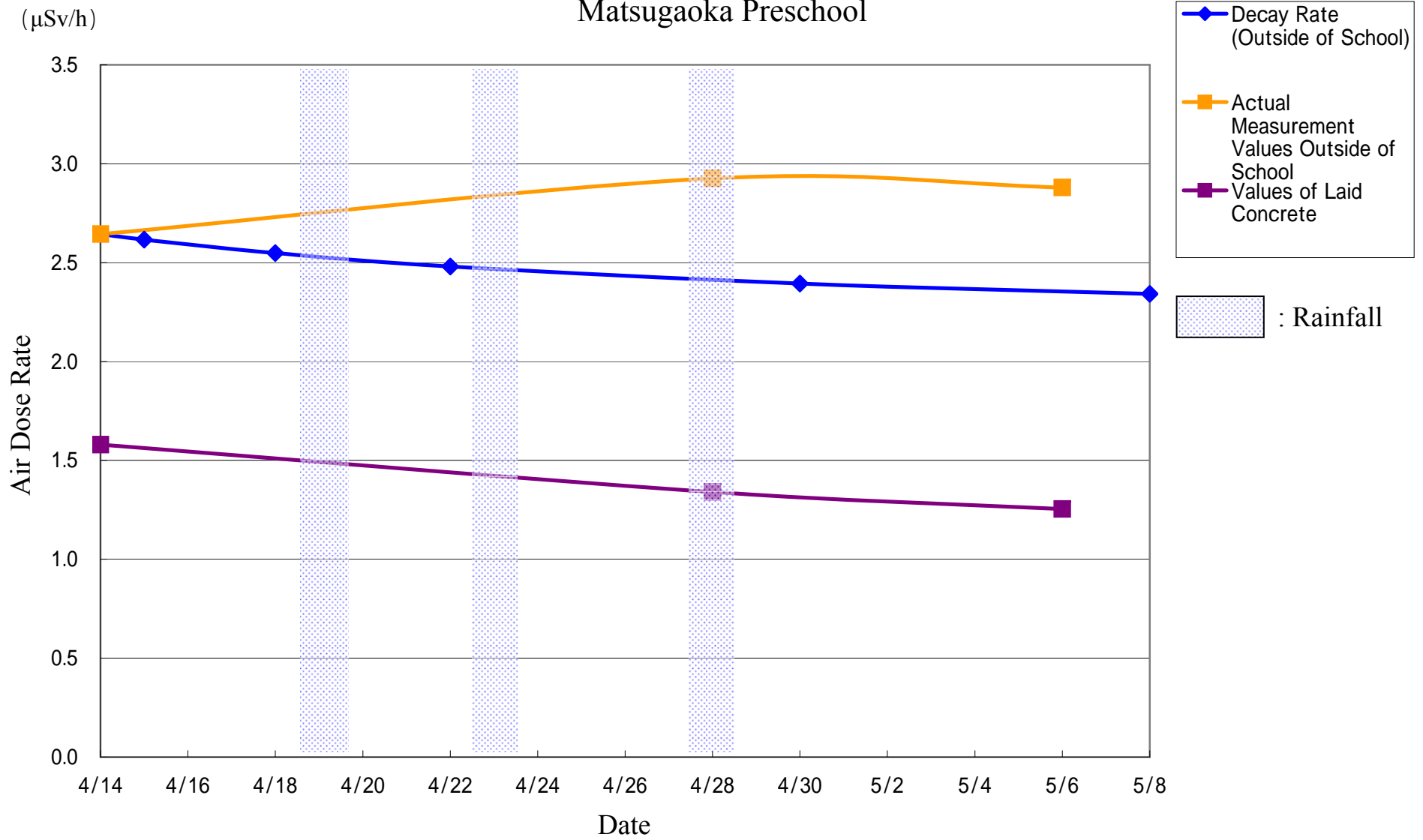
Ishii Elementary School



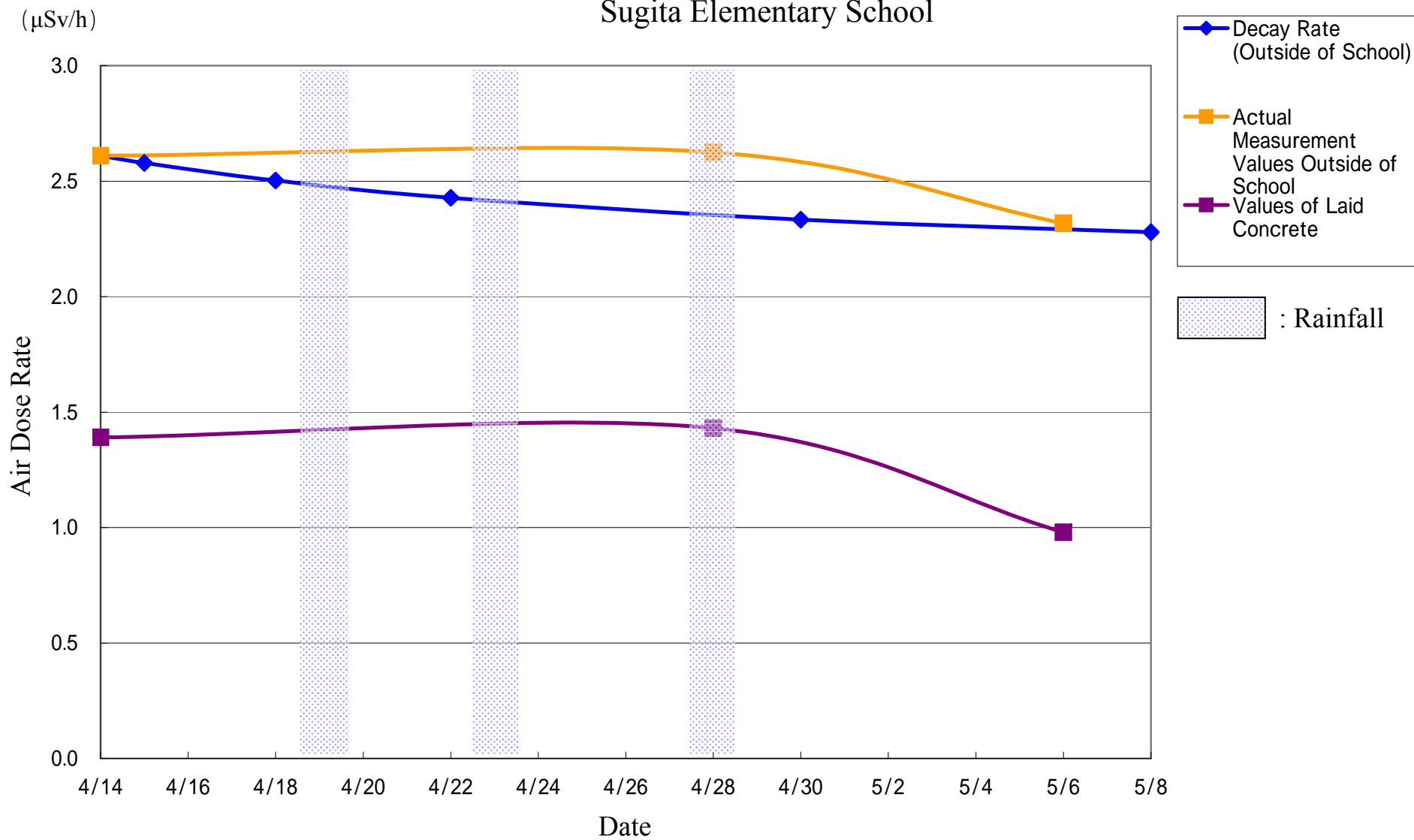
Takeshita Elementary School



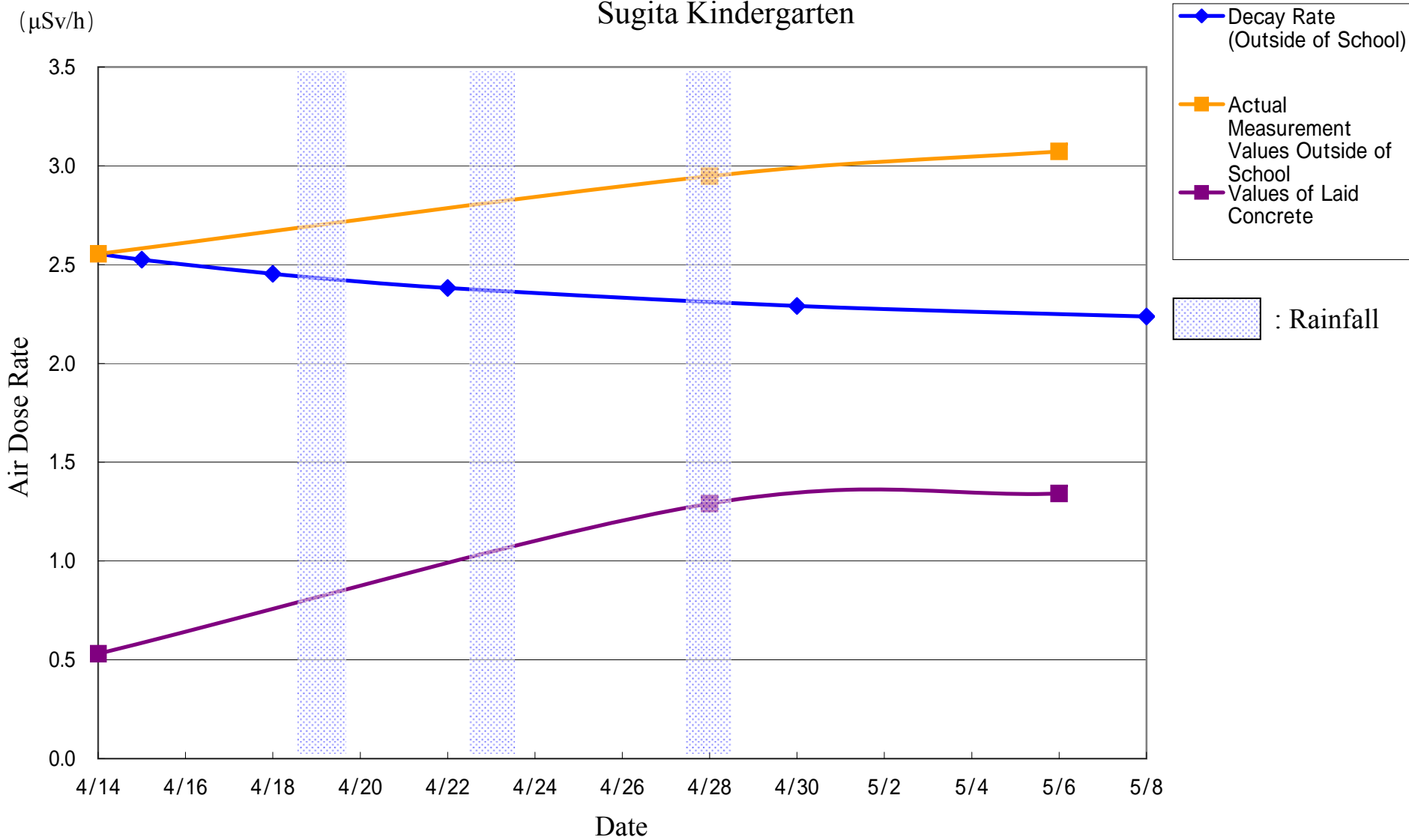
Matsugaoka Preschool



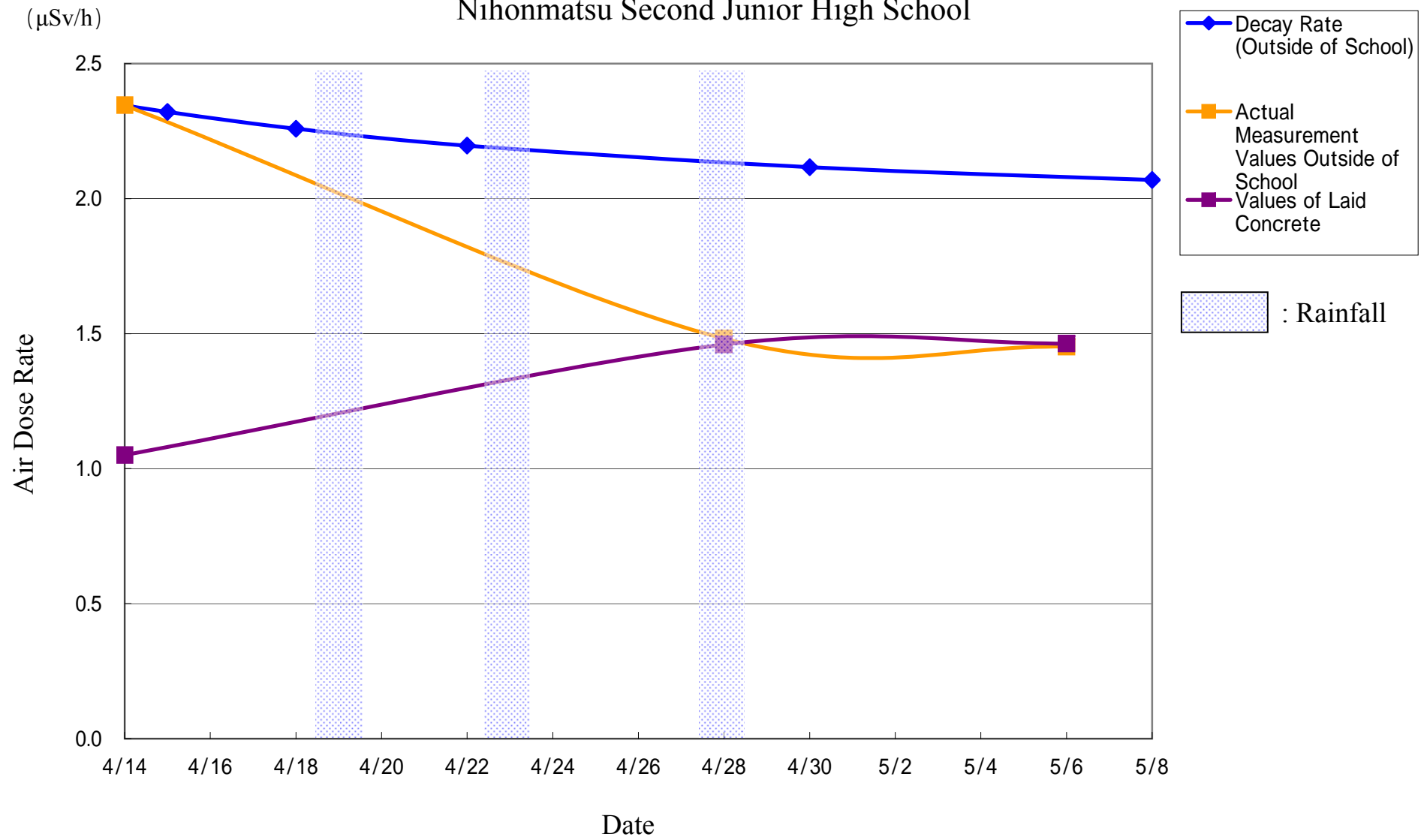
Sugita Elementary School



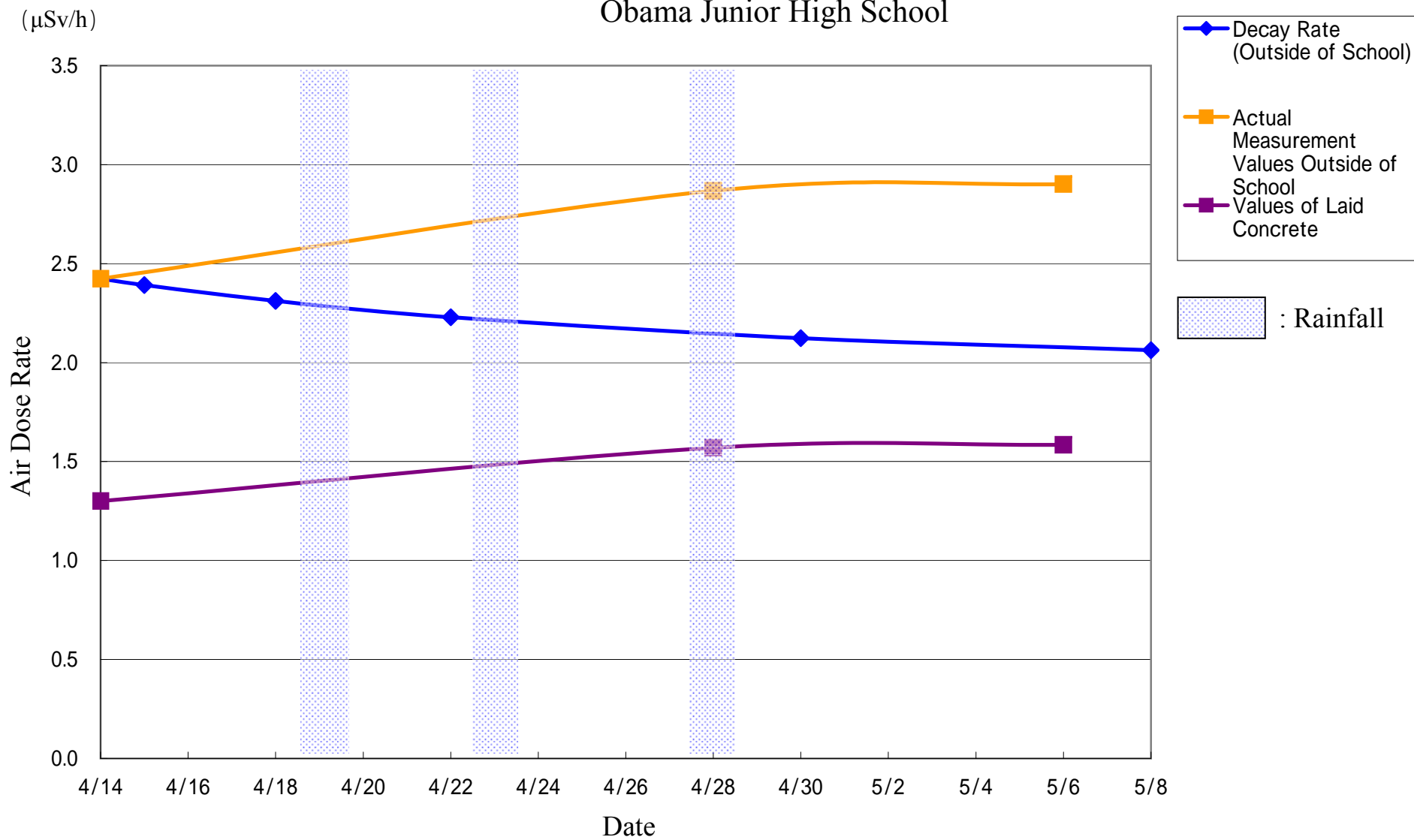
Sugita Kindergarten



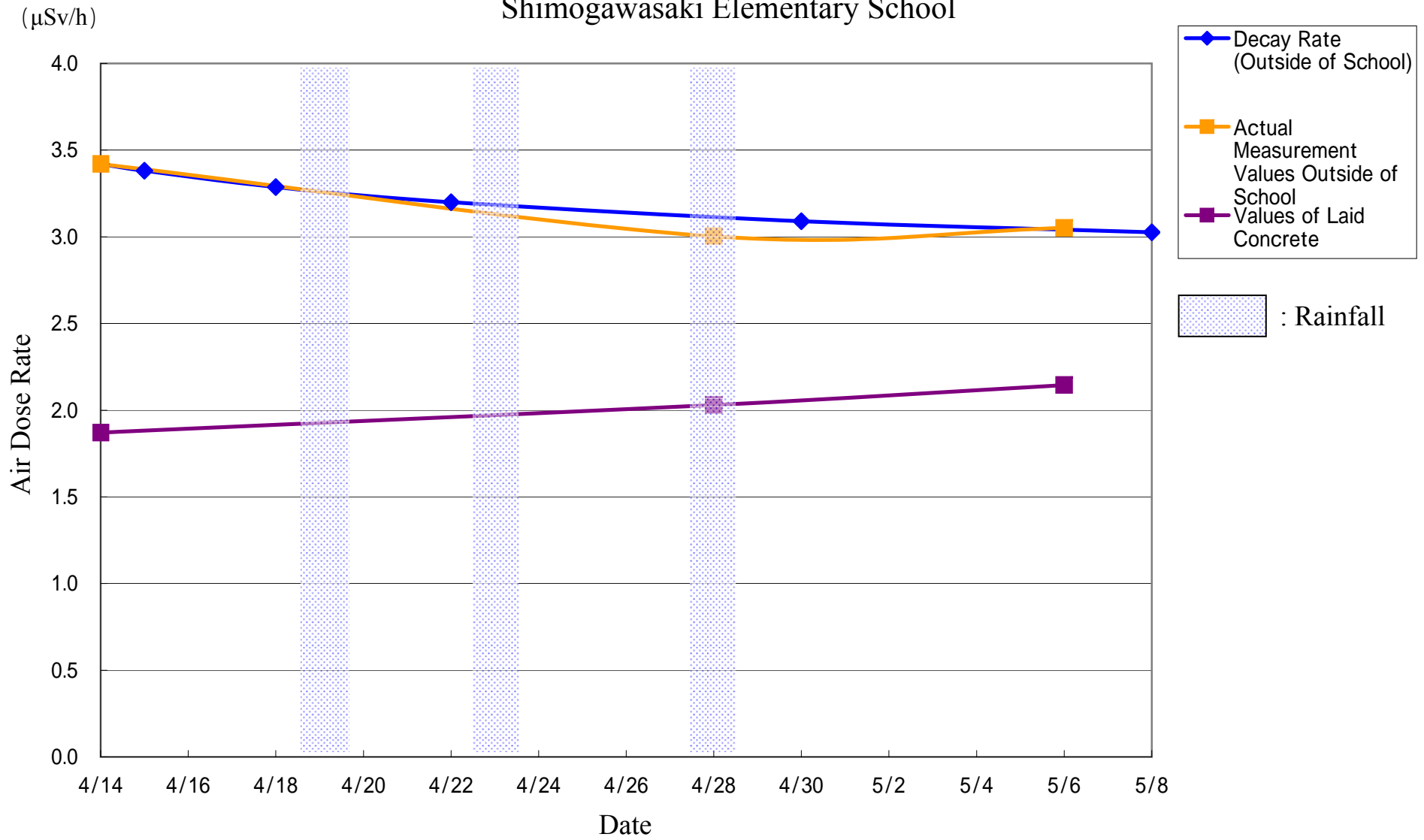
Nihonmatsu Second Junior High School



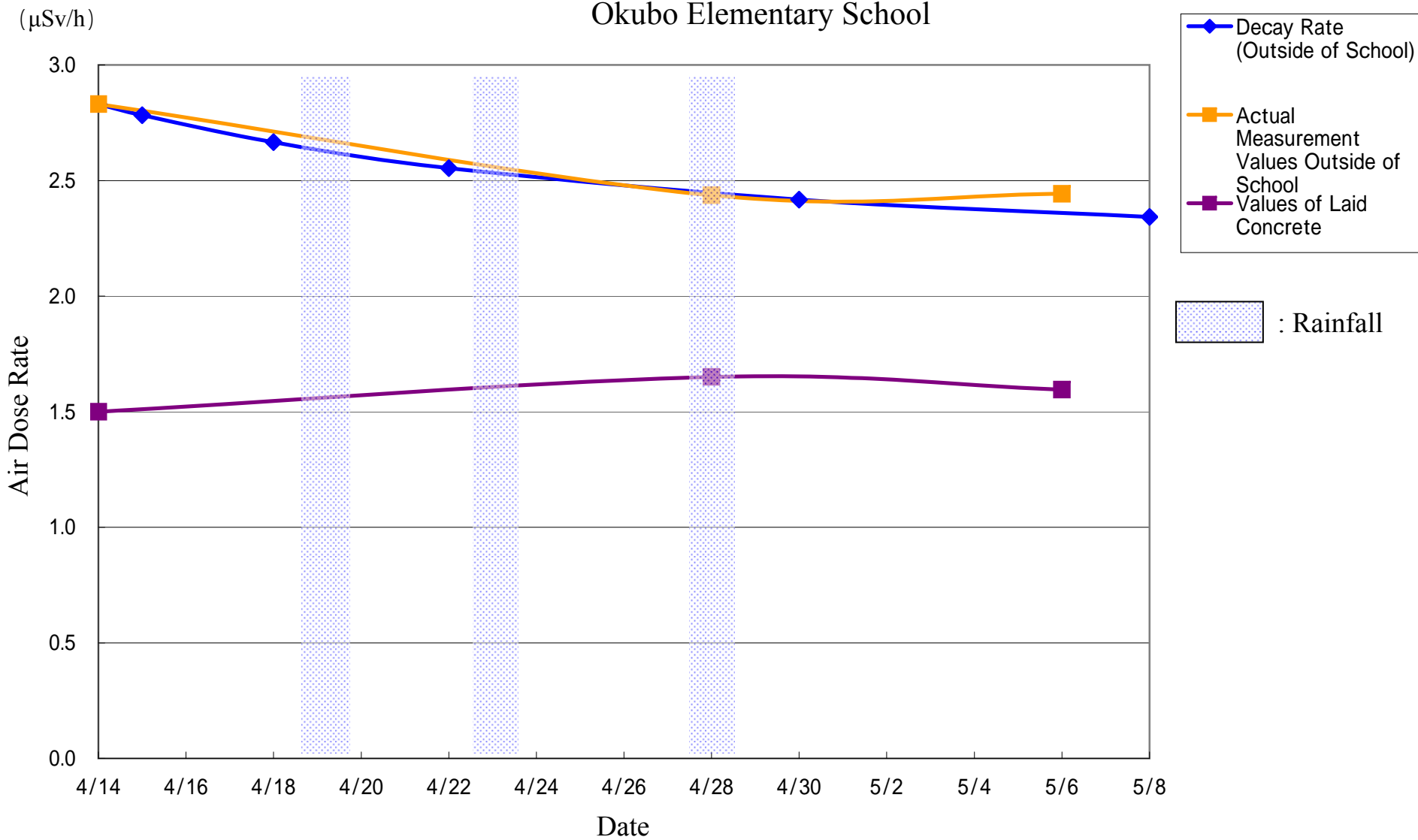
Obama Junior High School



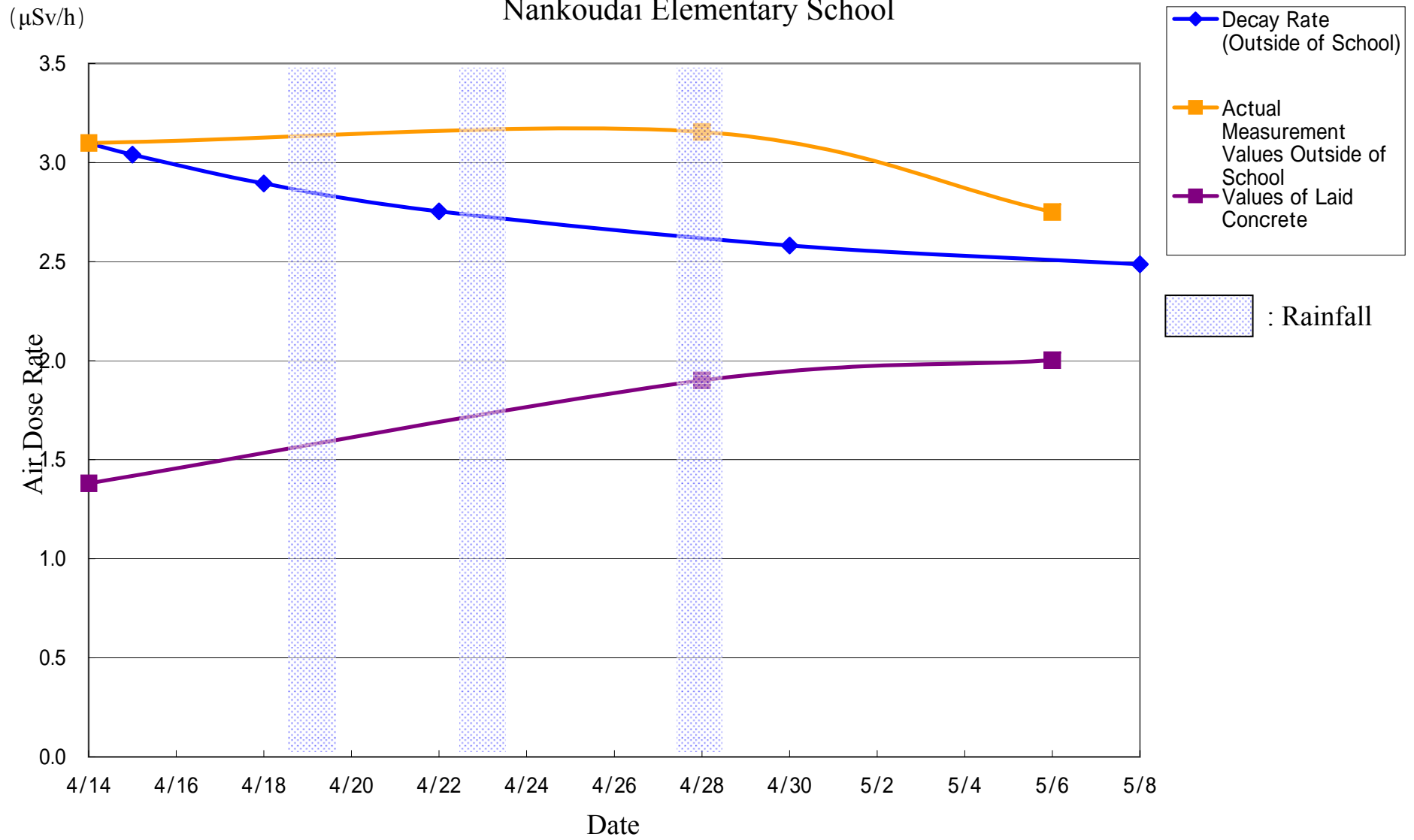
Shimogawasaki Elementary School



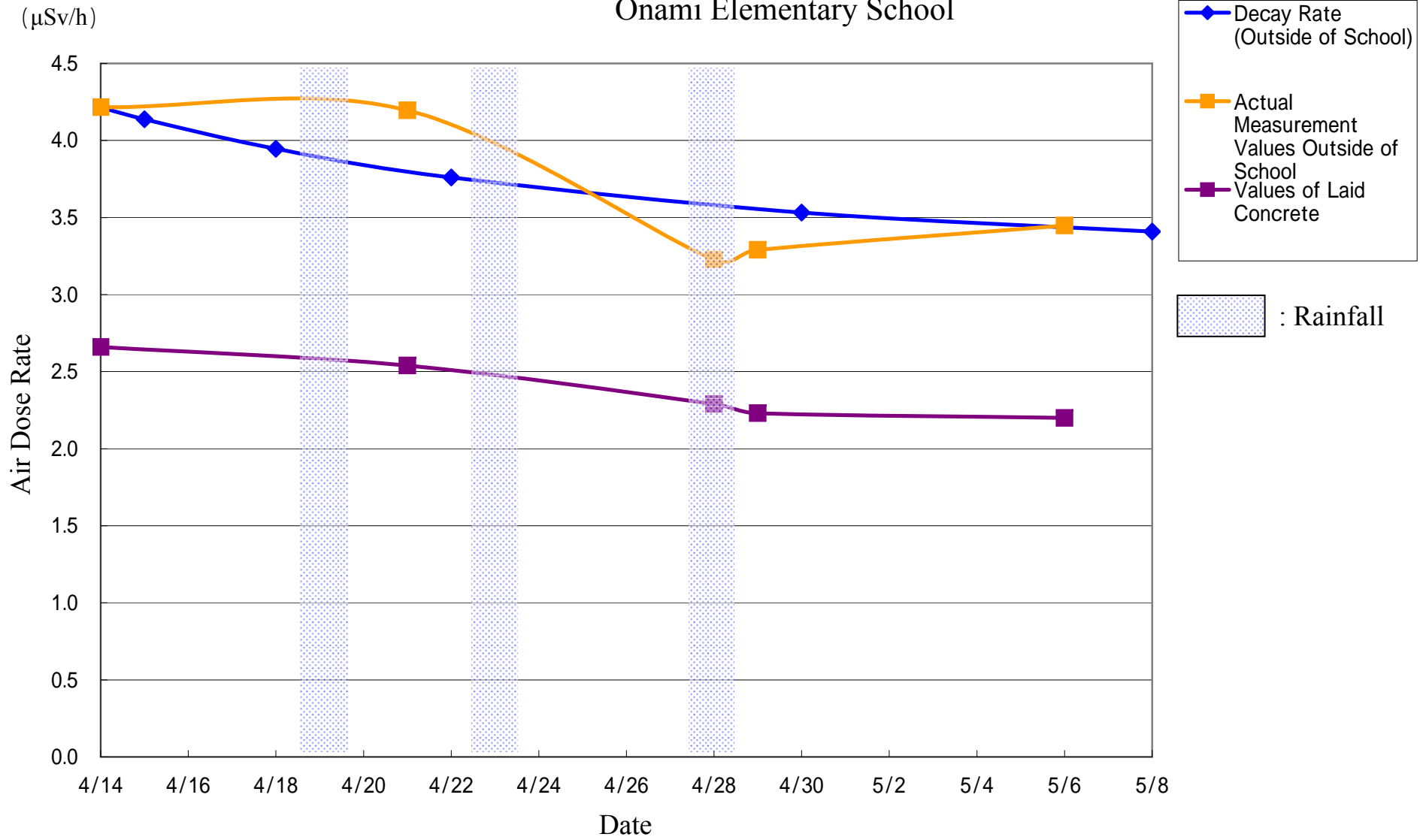
Okubo Elementary School



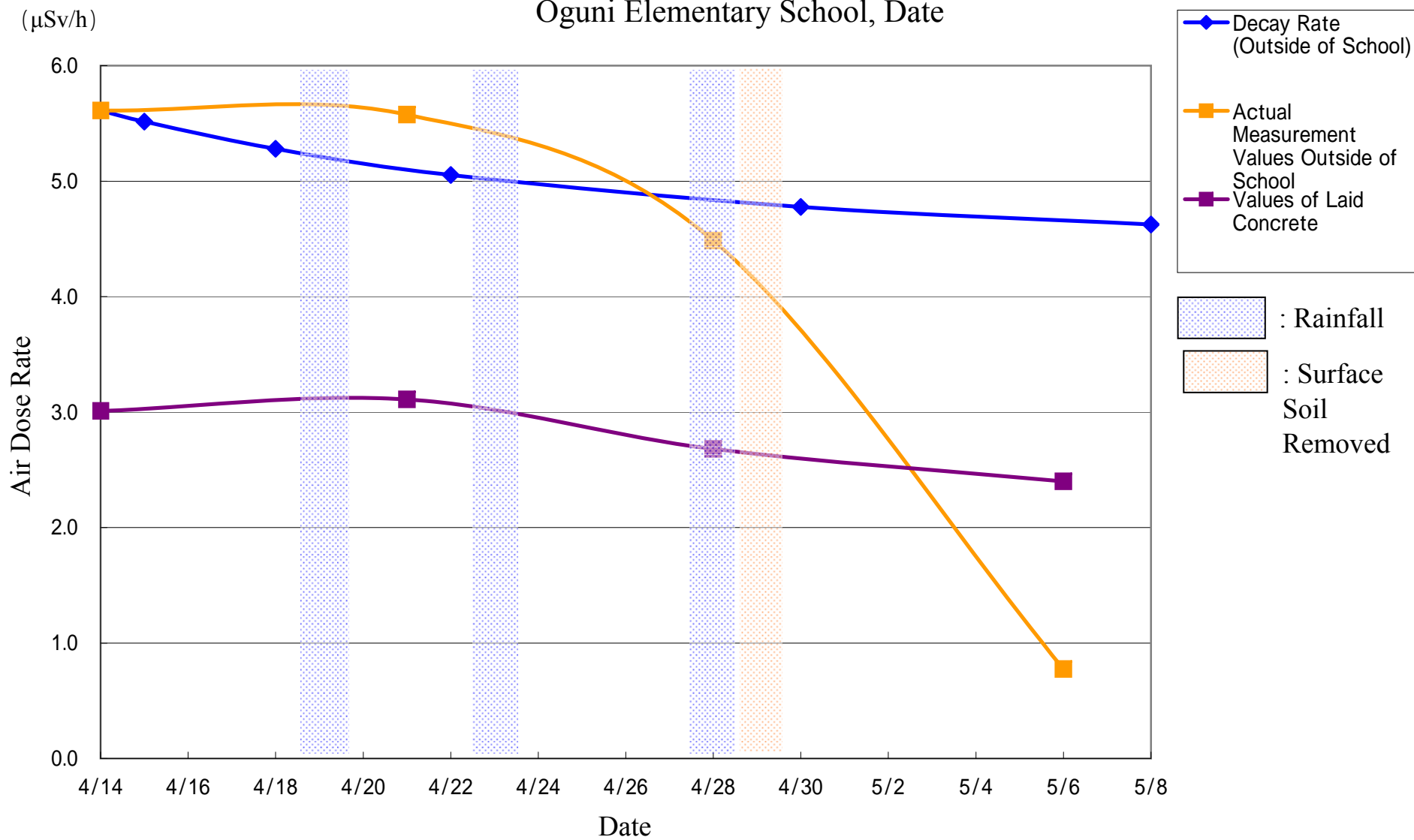
Nankoudai Elementary School



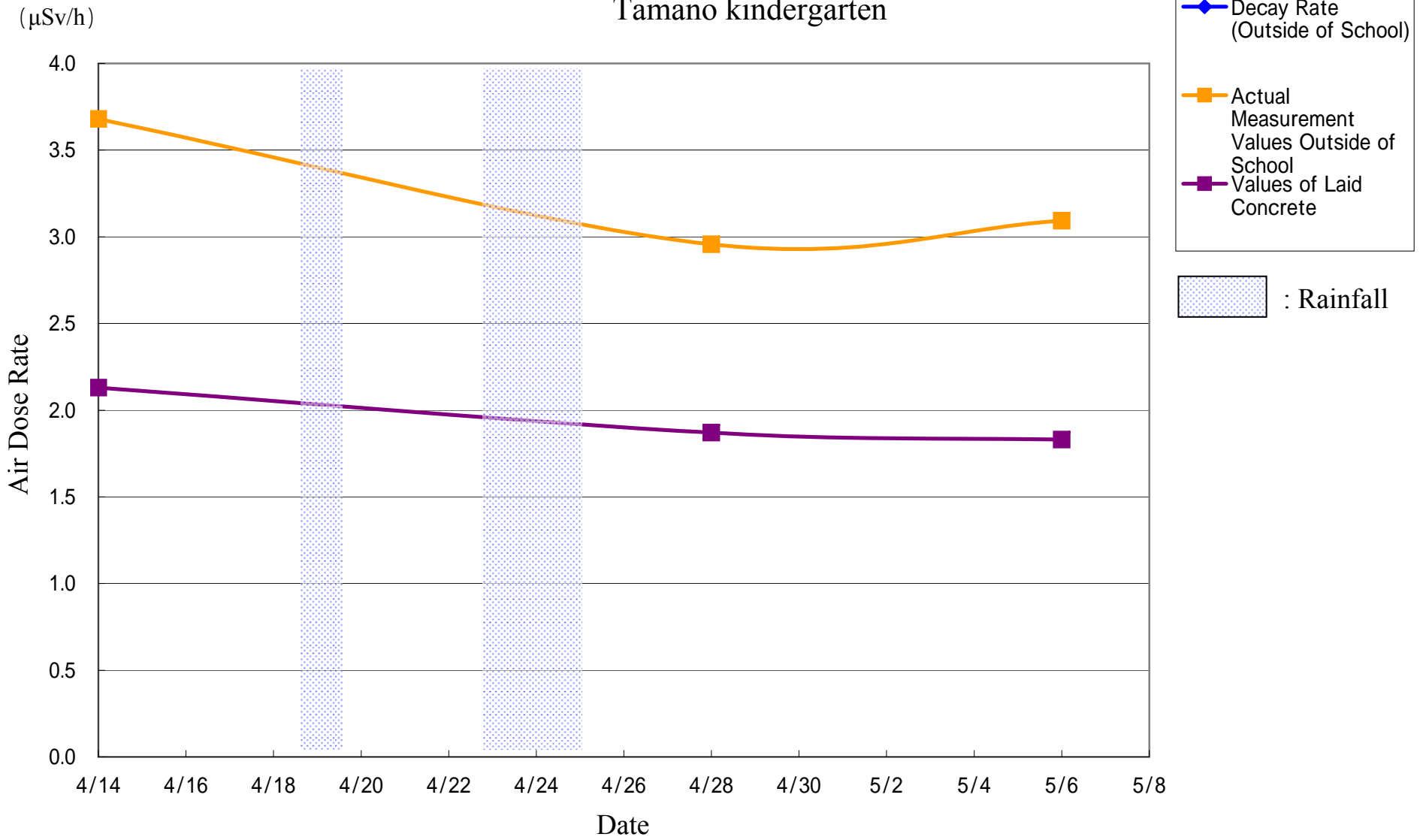
Onami Elementary School



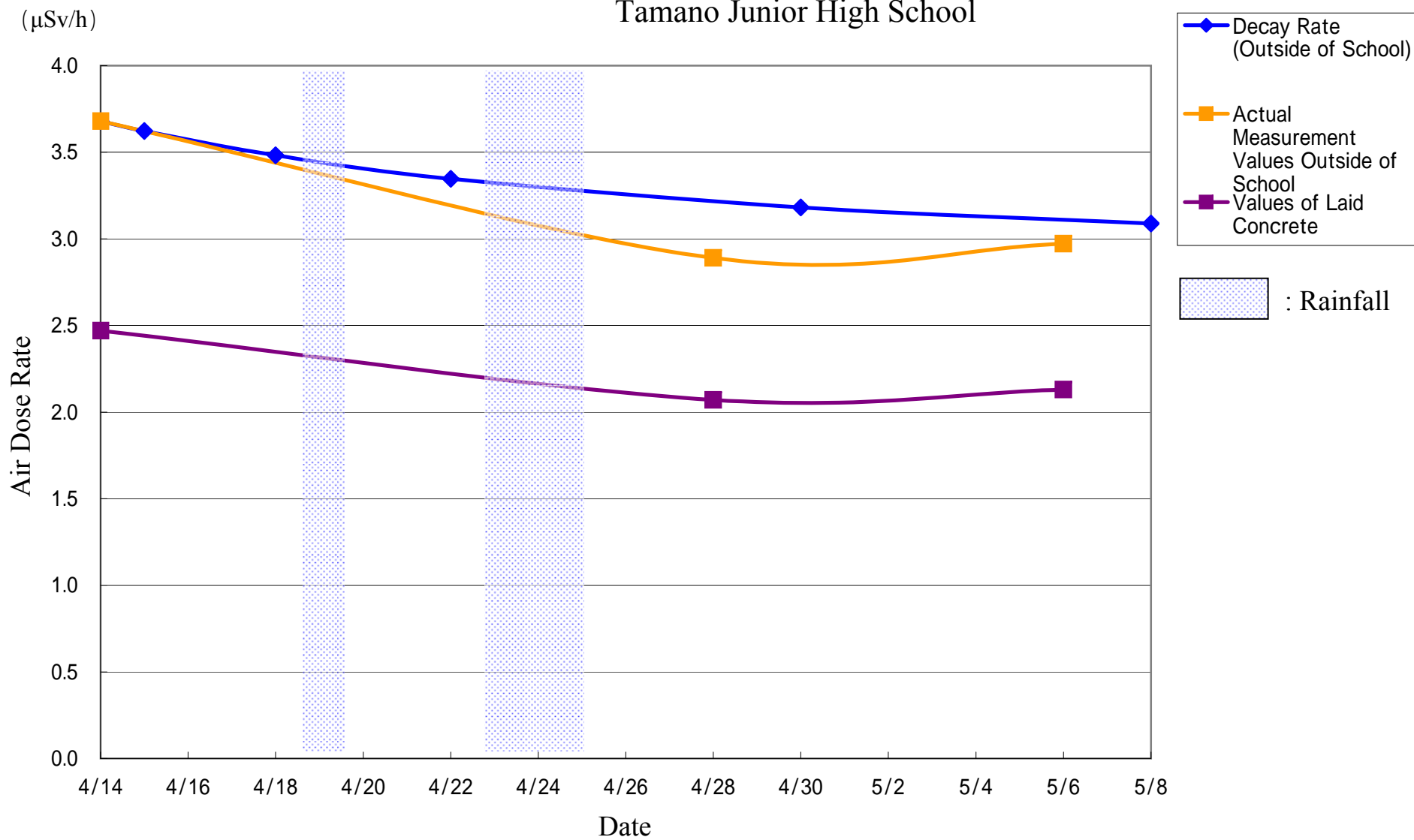
Oguni Elementary School, Date



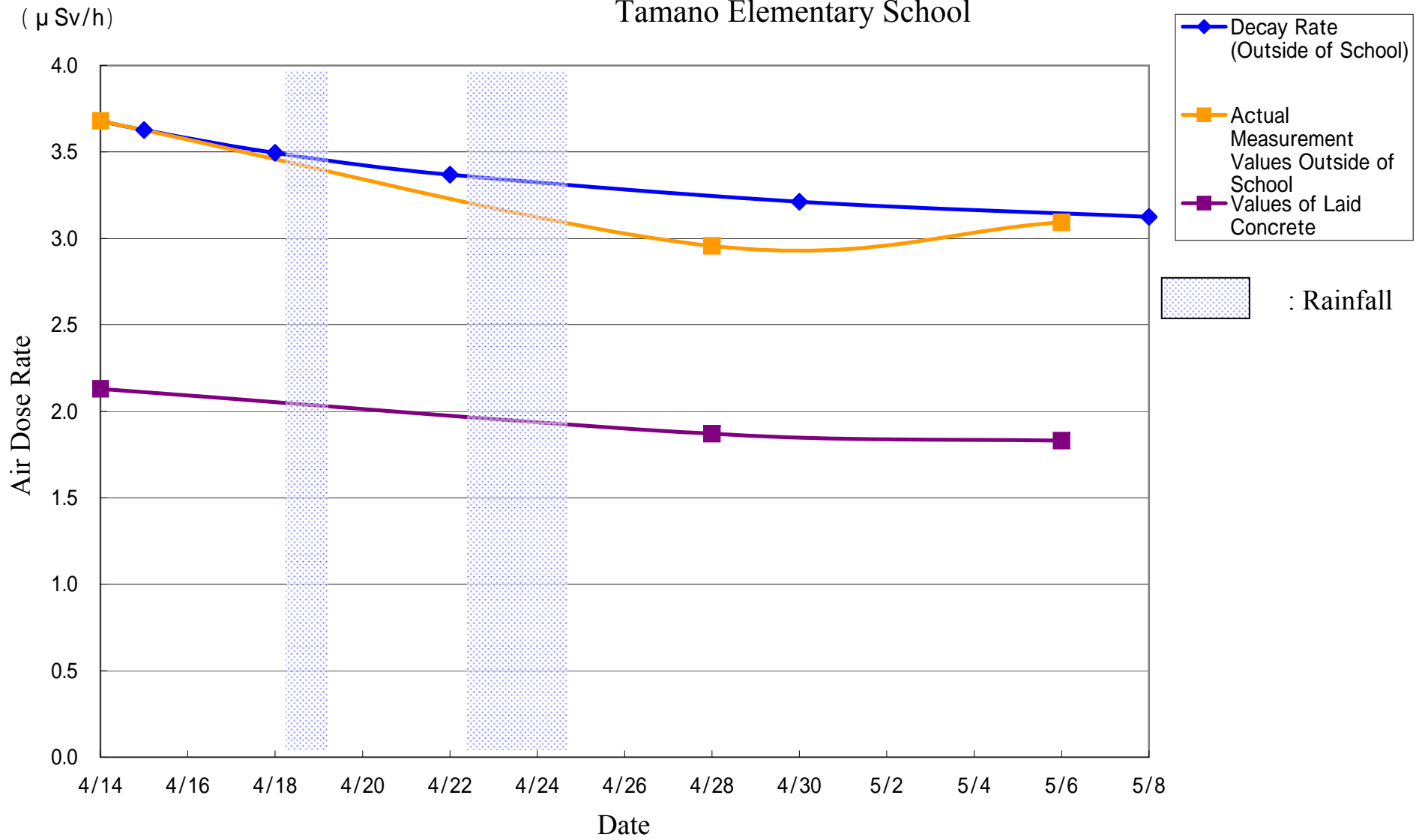
Tamano kindergarten



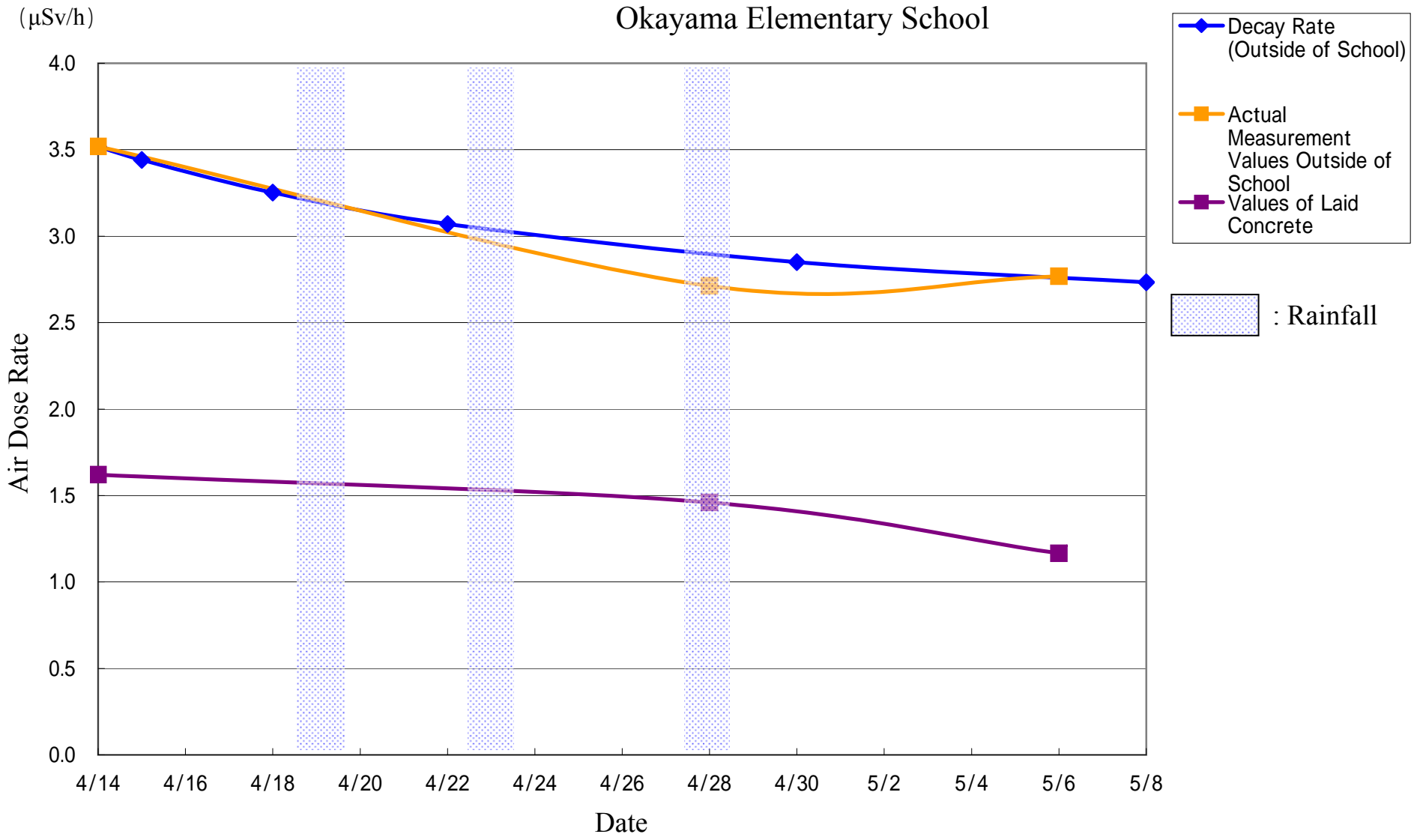
Tamano Junior High School



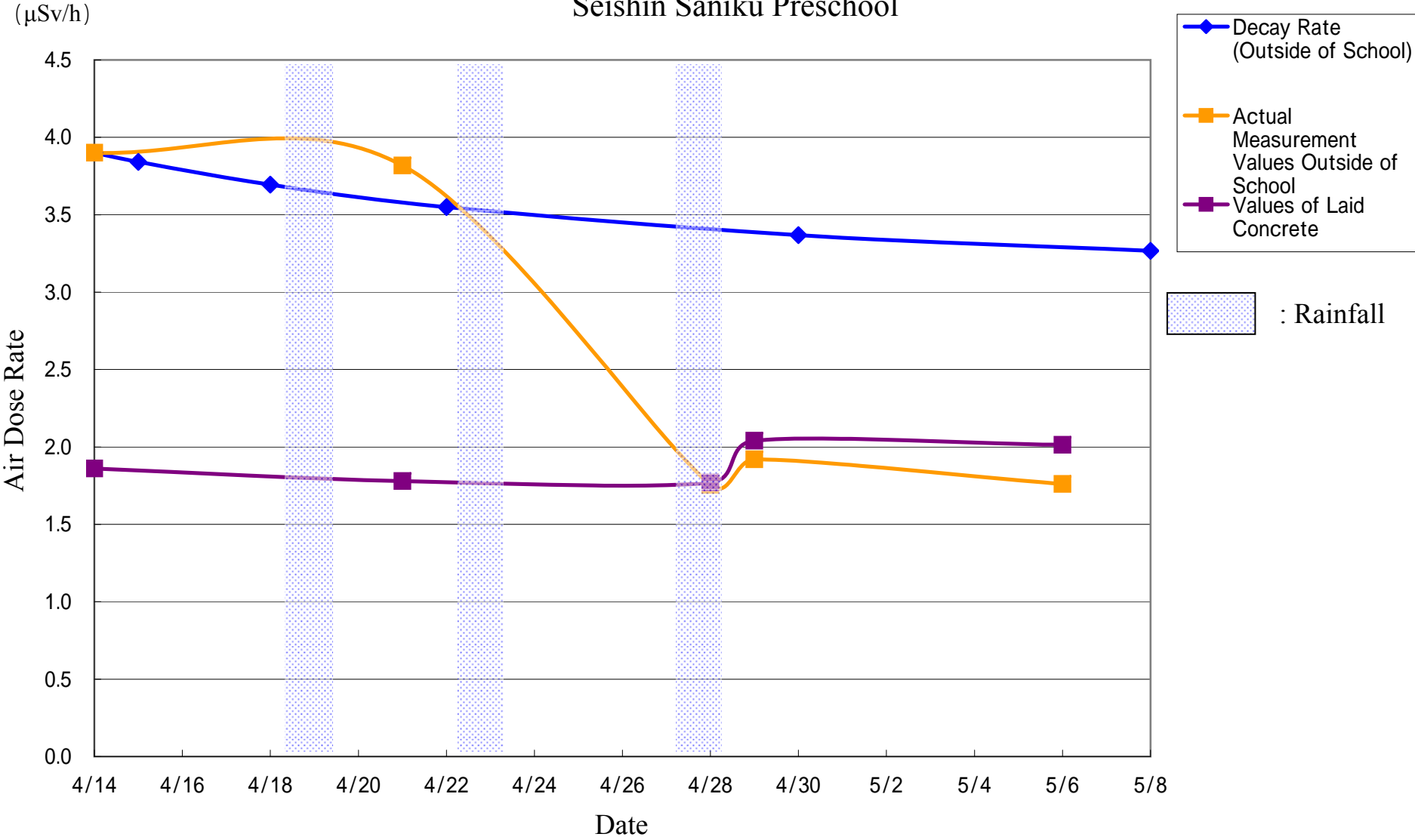
Tamano Elementary School



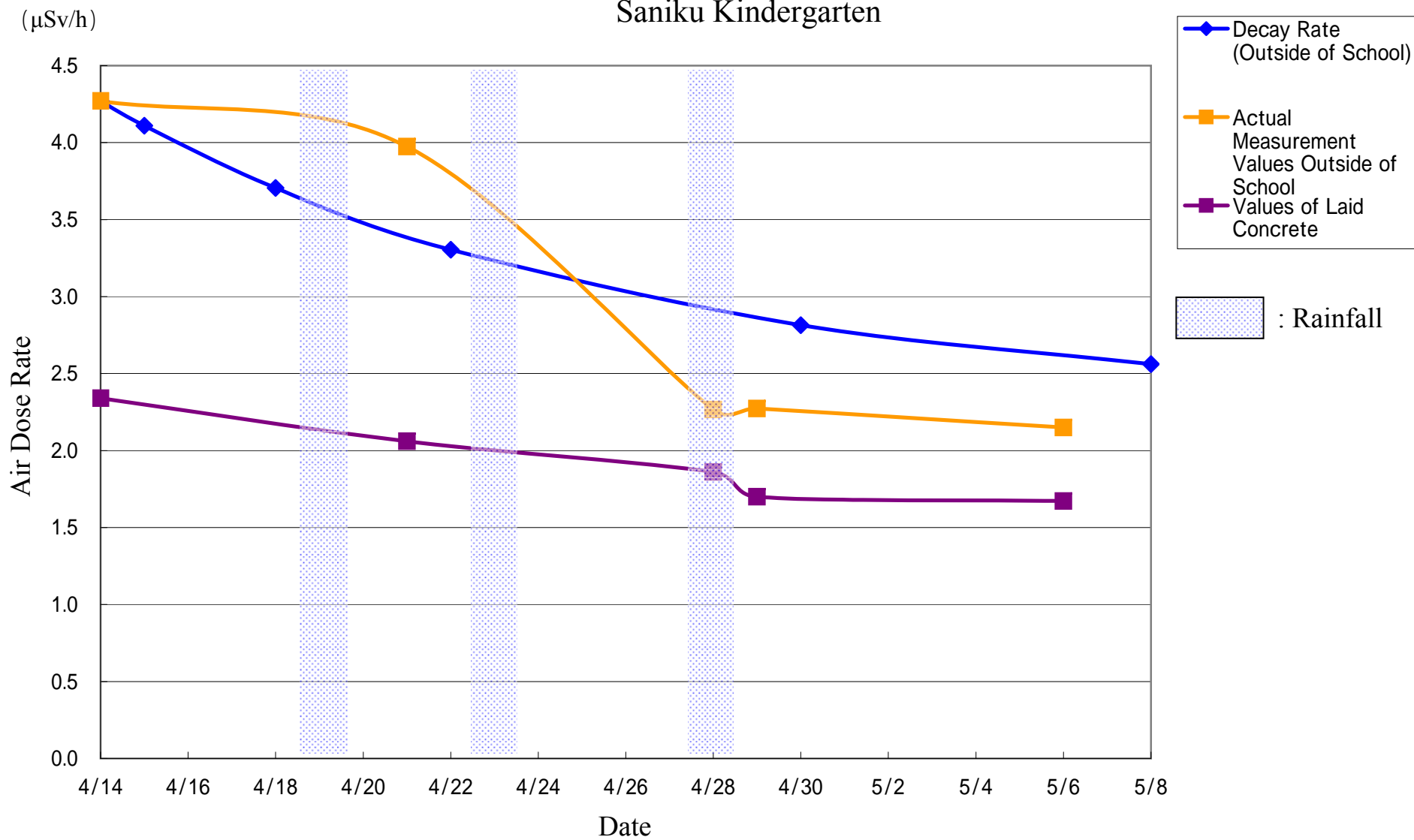
Okayama Elementary School



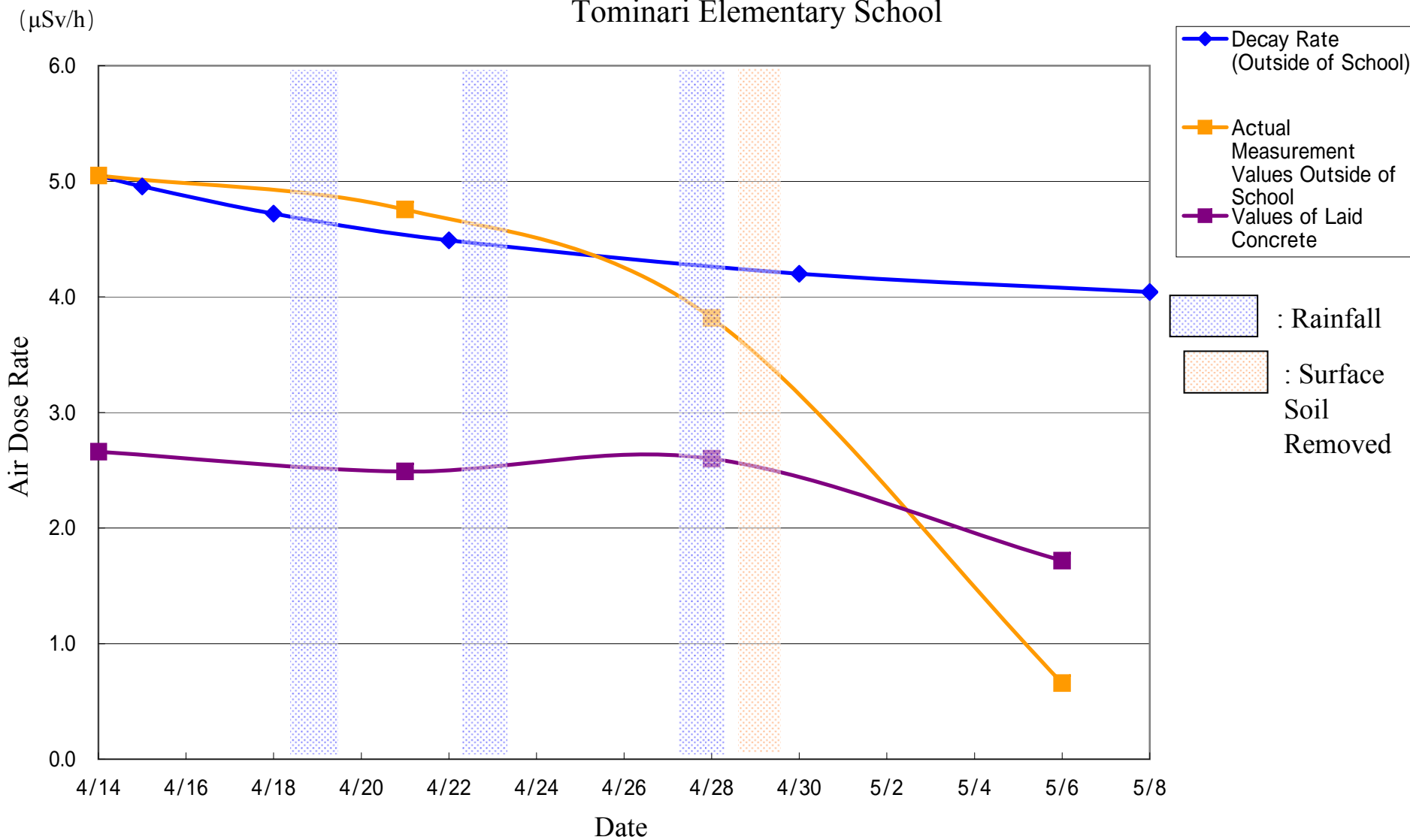
Seishin Saniku Preschool



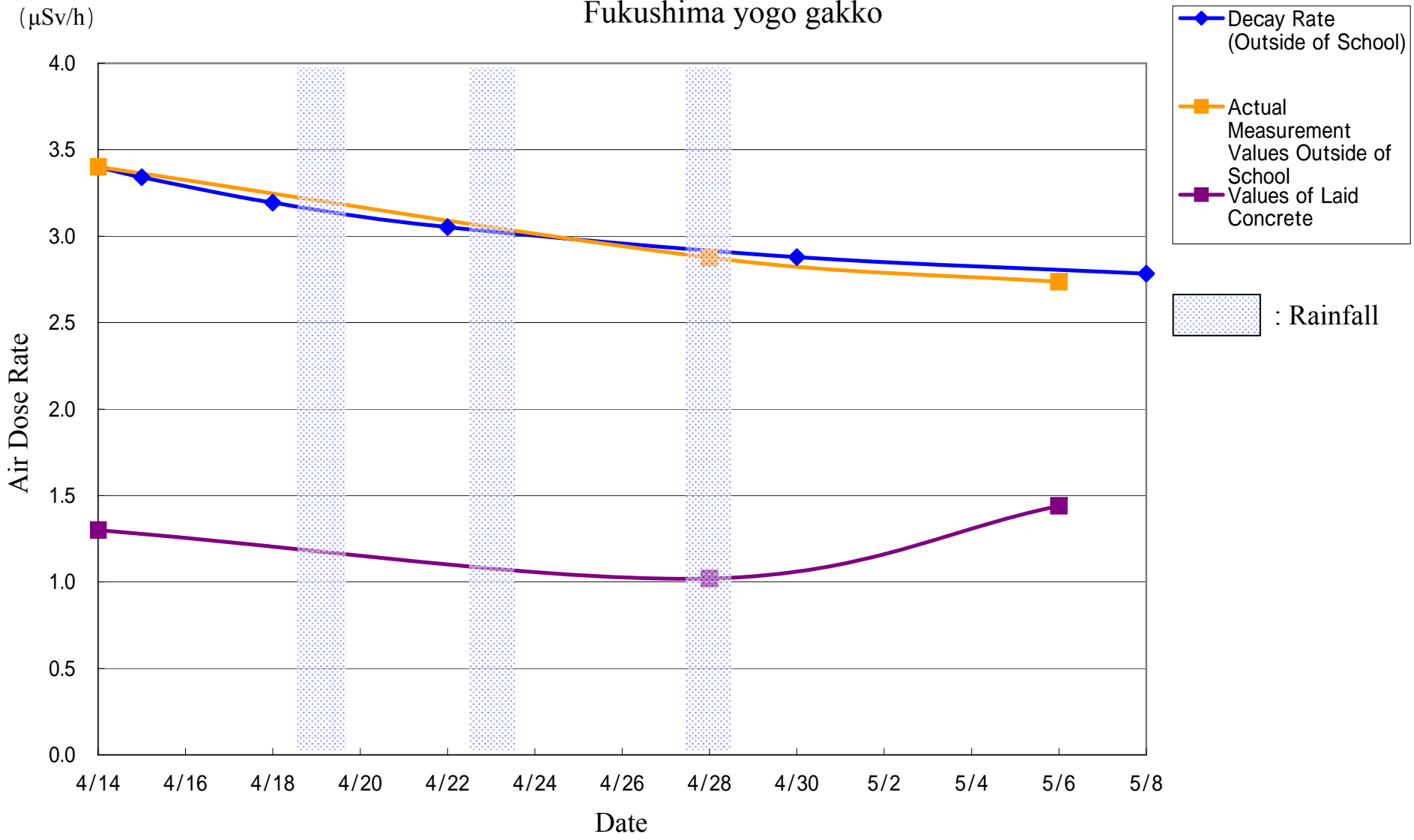
Saniku Kindergarten



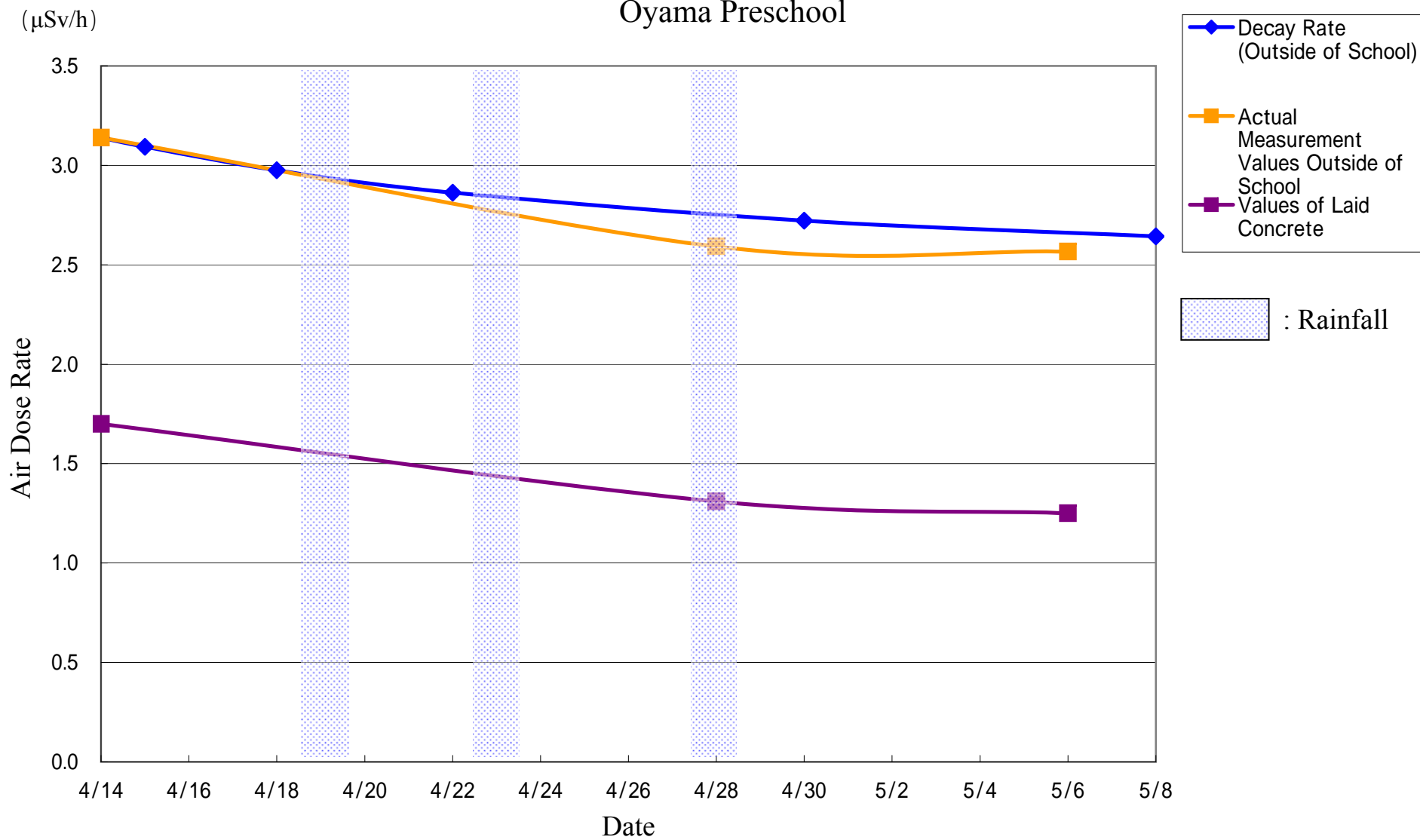
Tominari Elementary School



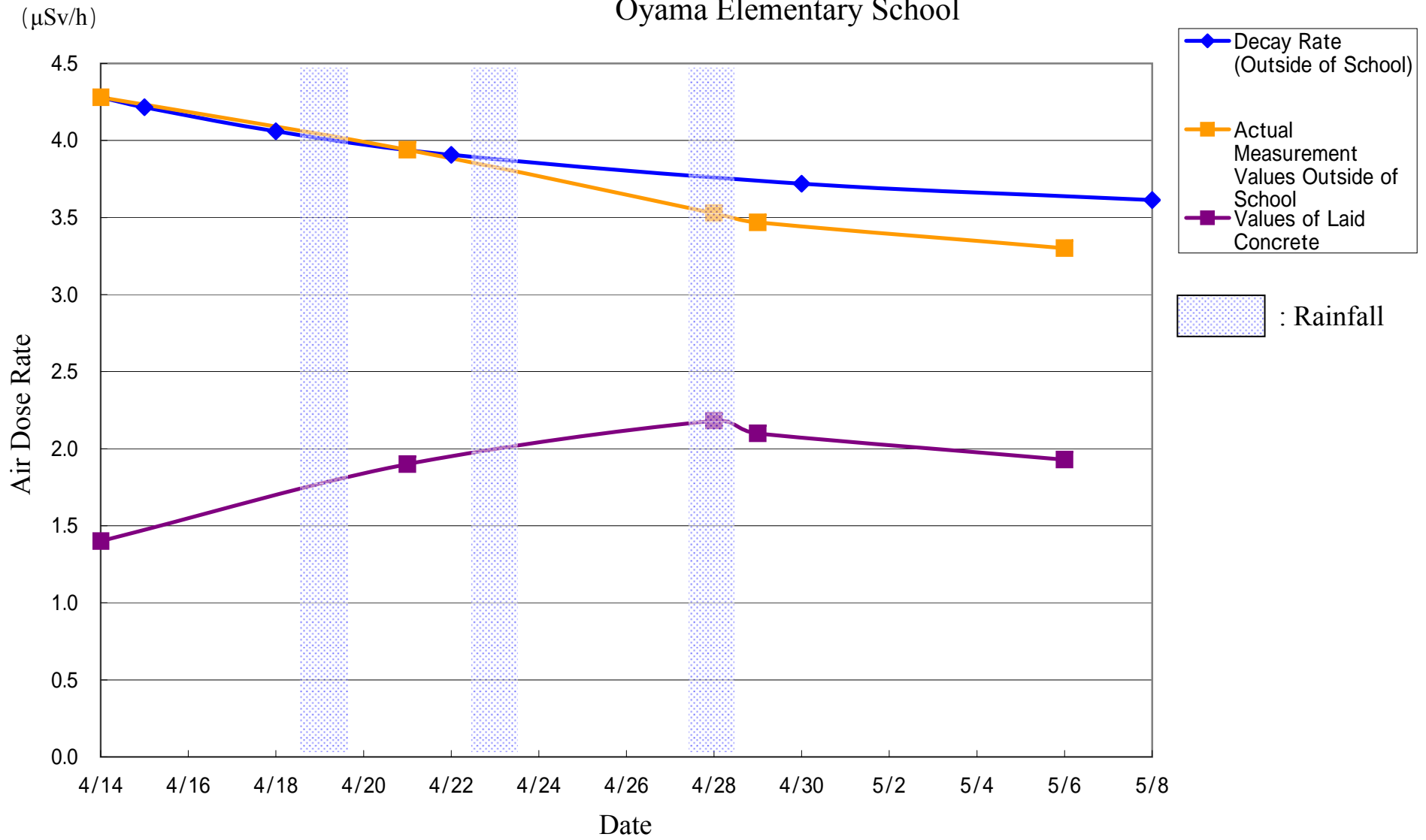
Fukushima yogo gakko



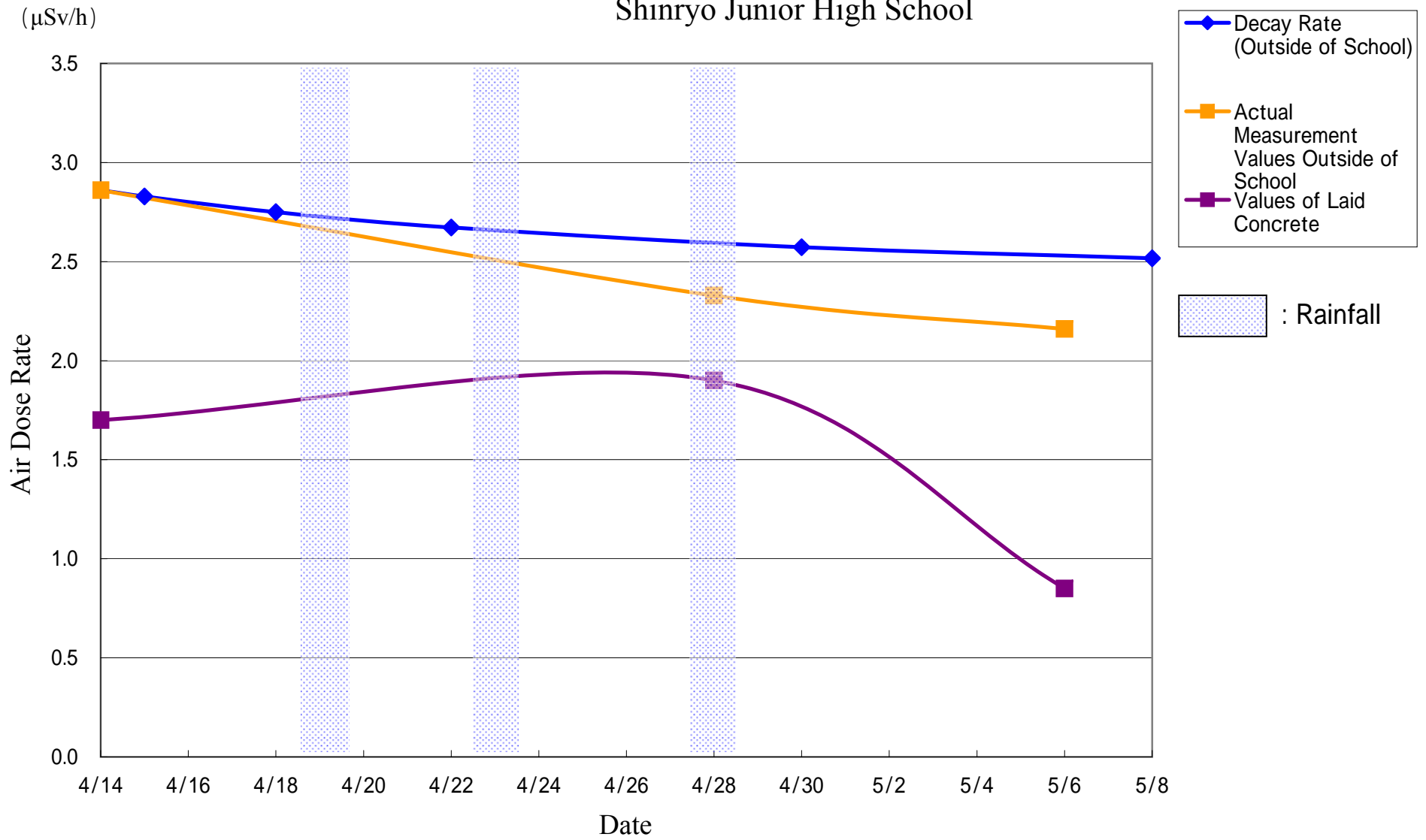
Oyama Preschool



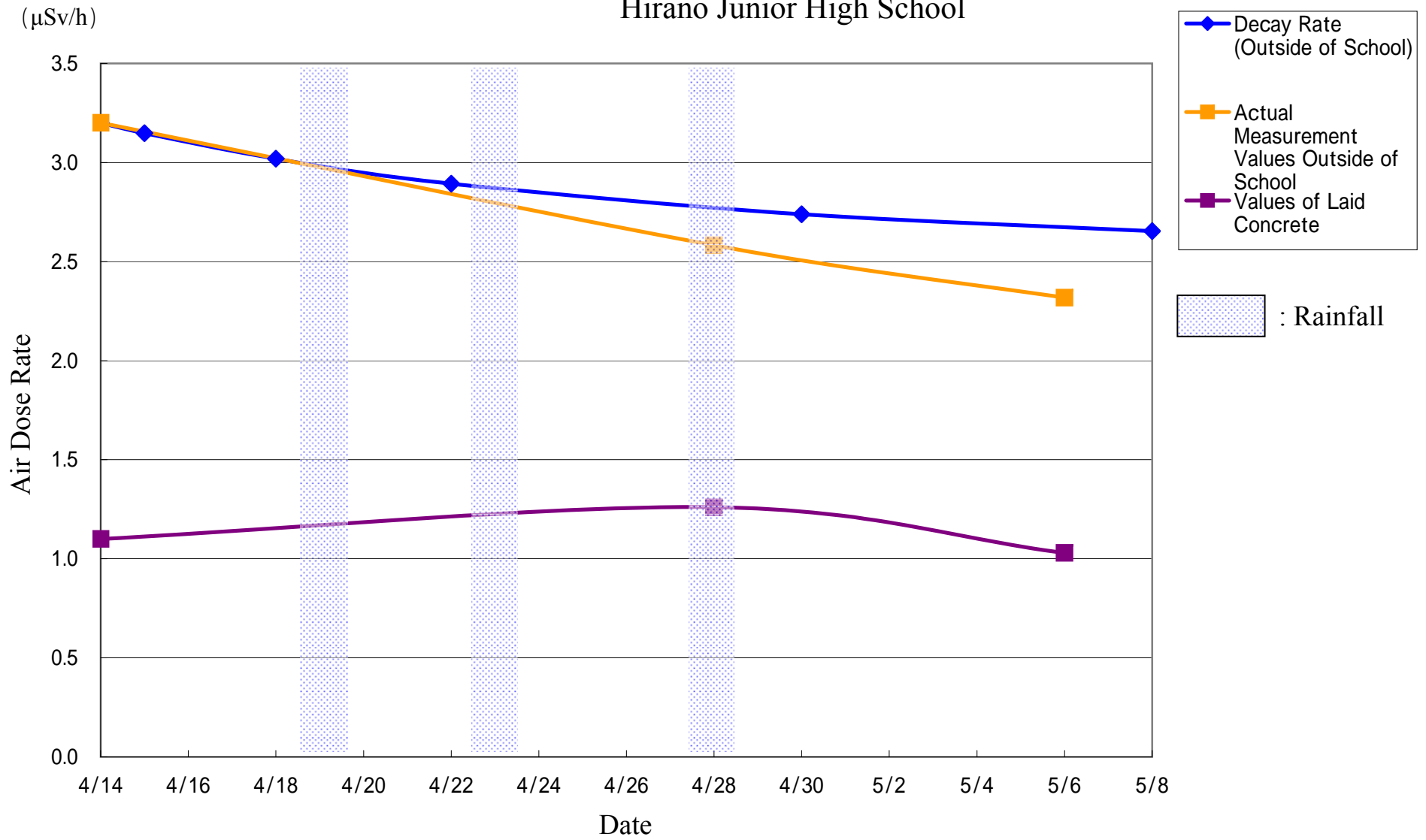
Oyama Elementary School



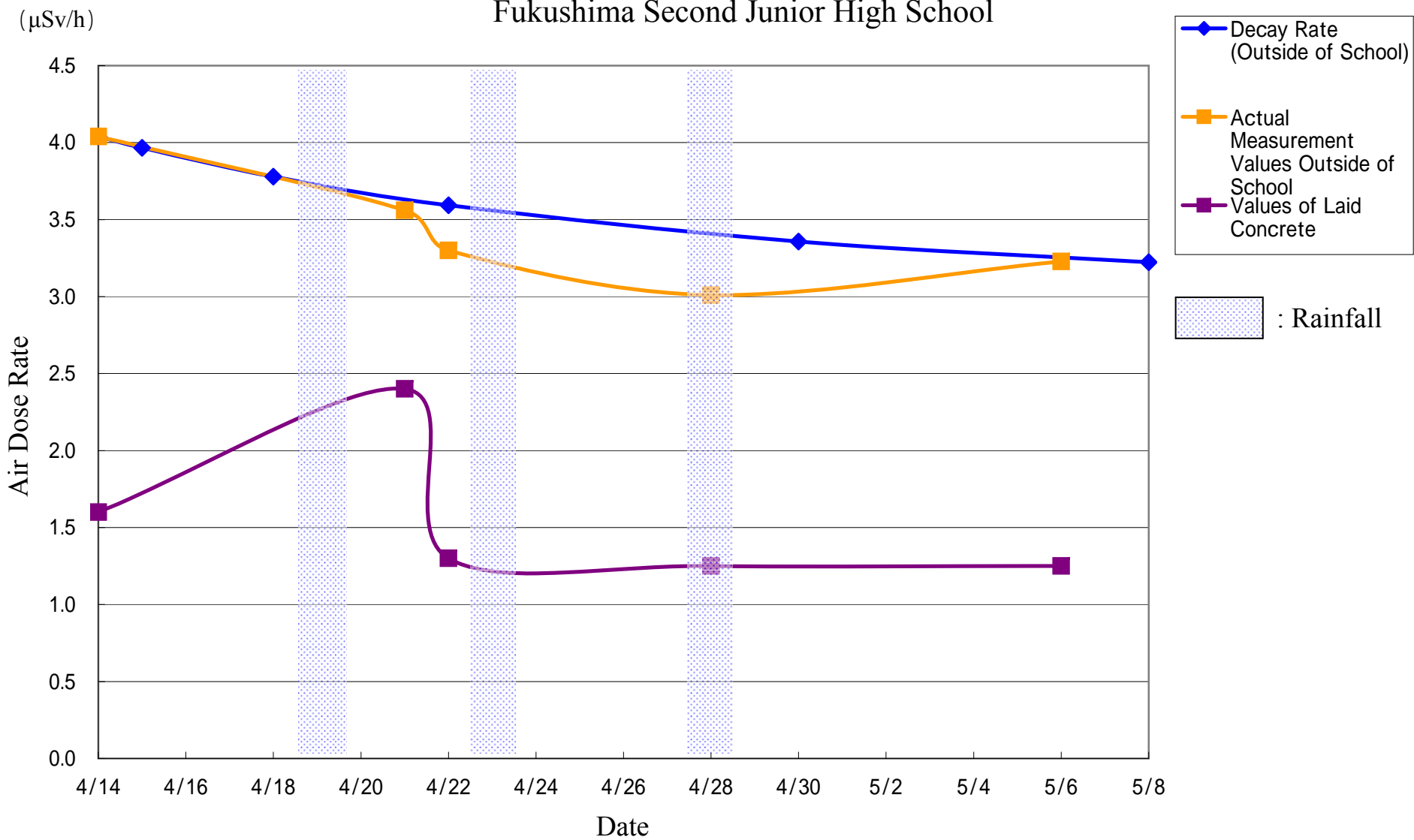
Shinryo Junior High School



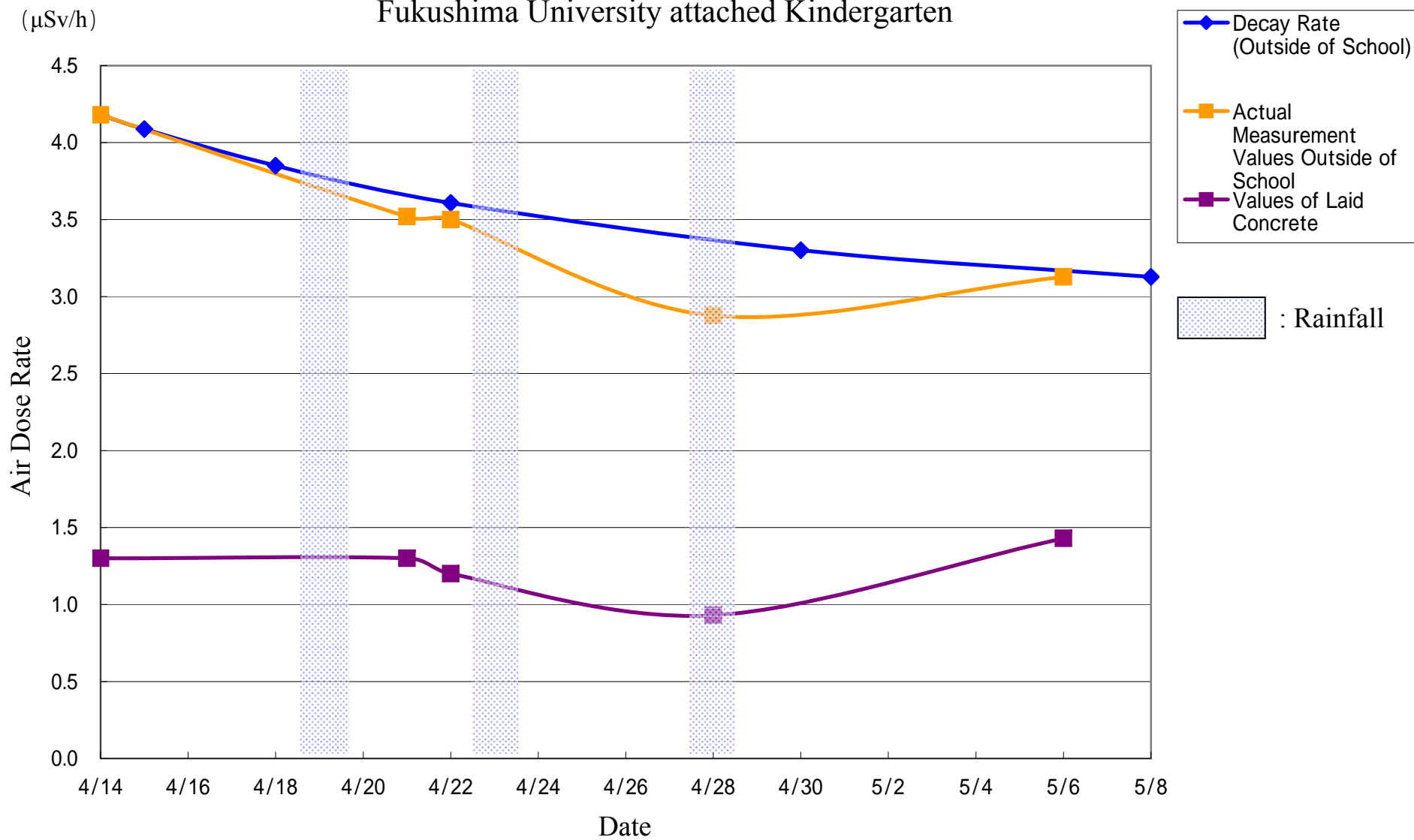
Hirano Junior High School



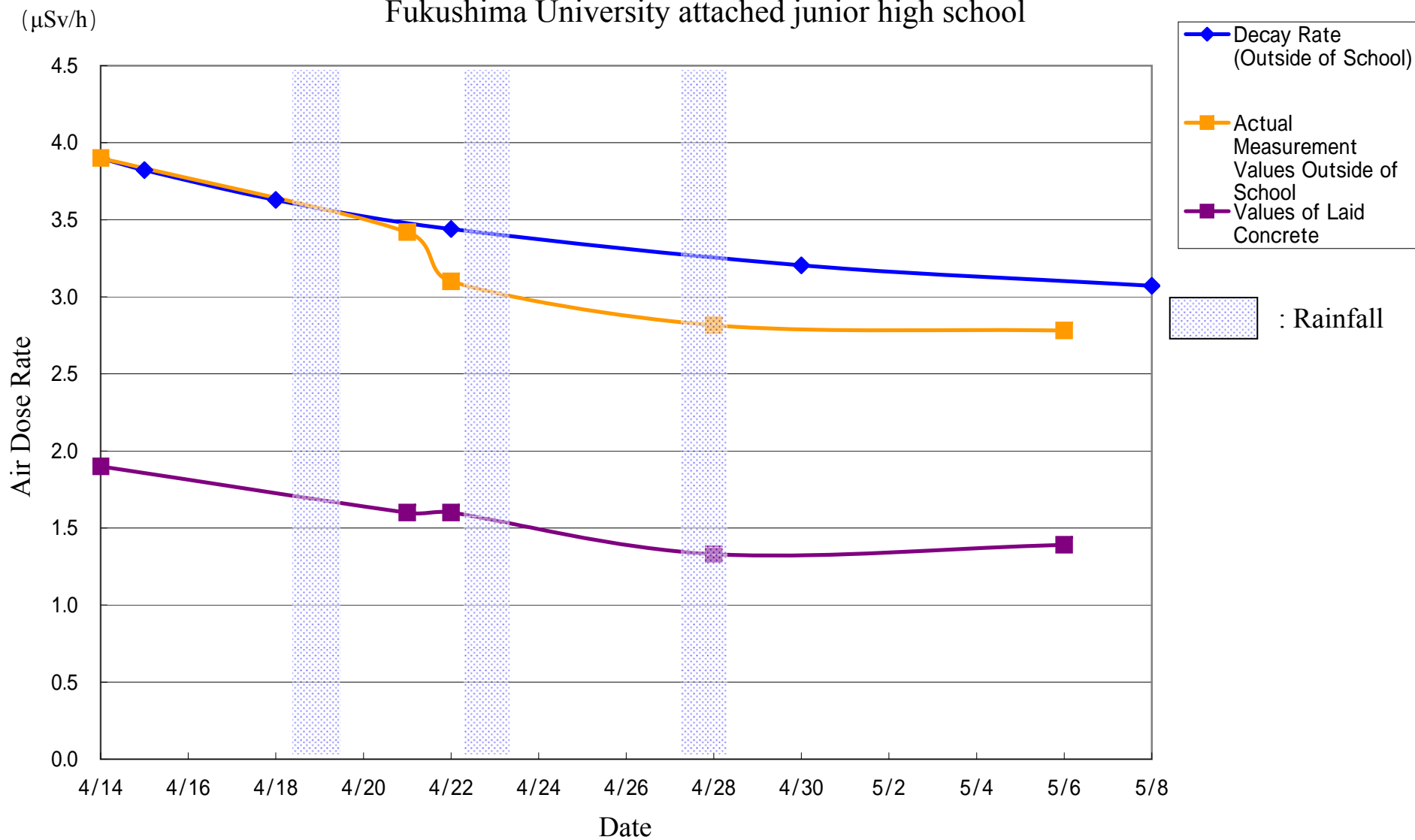
Fukushima Second Junior High School



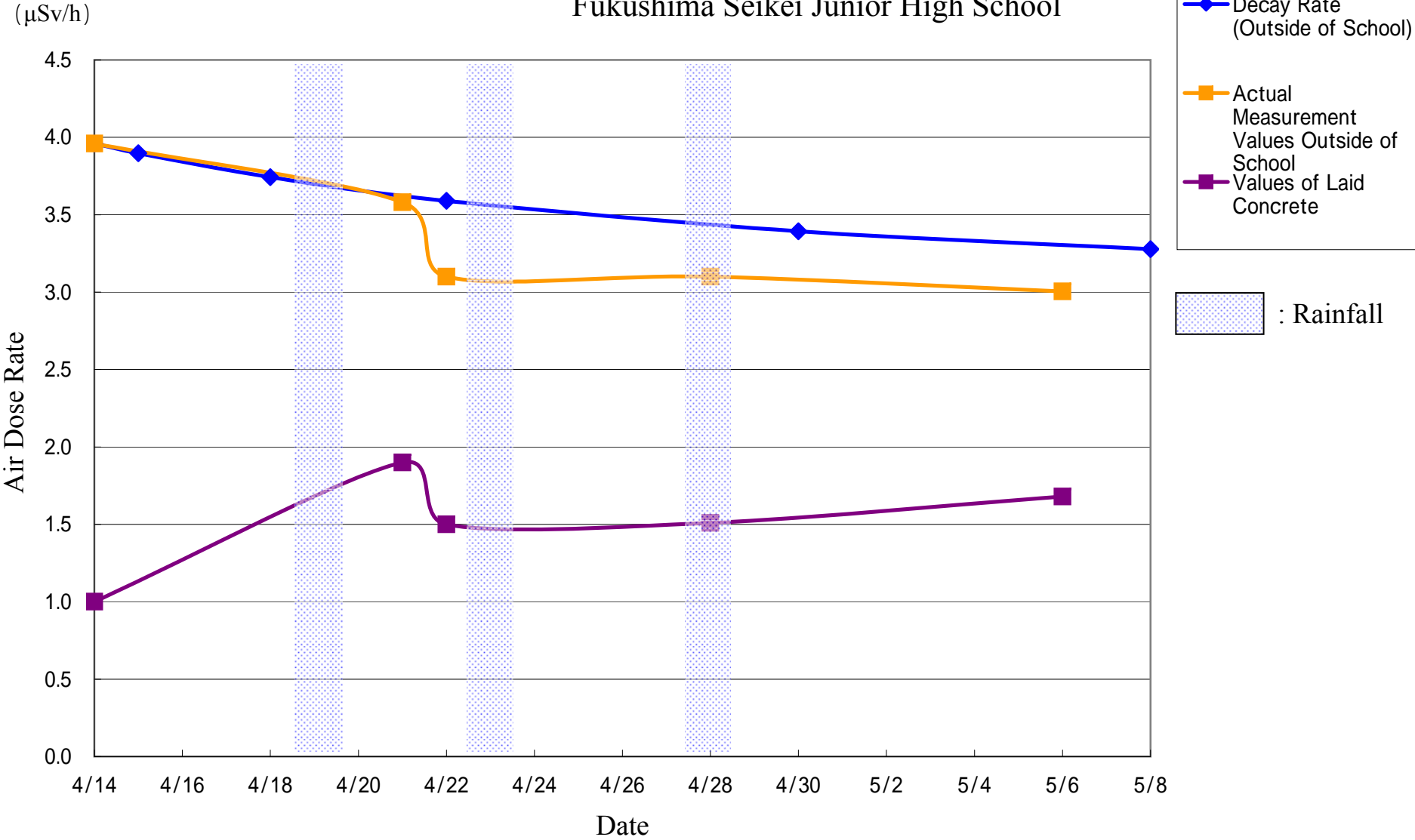
Fukushima University attached Kindergarten



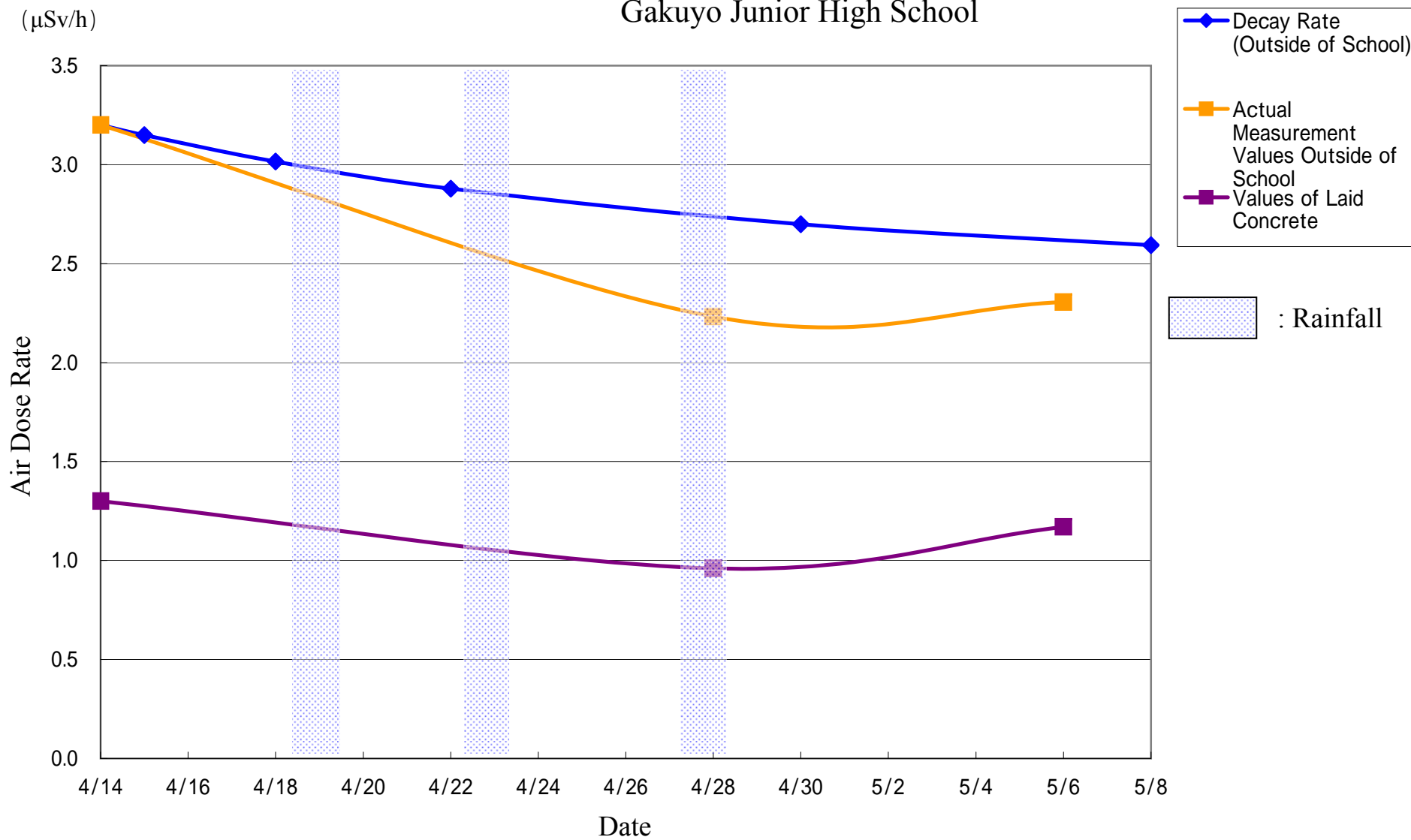
Fukushima University attached junior high school



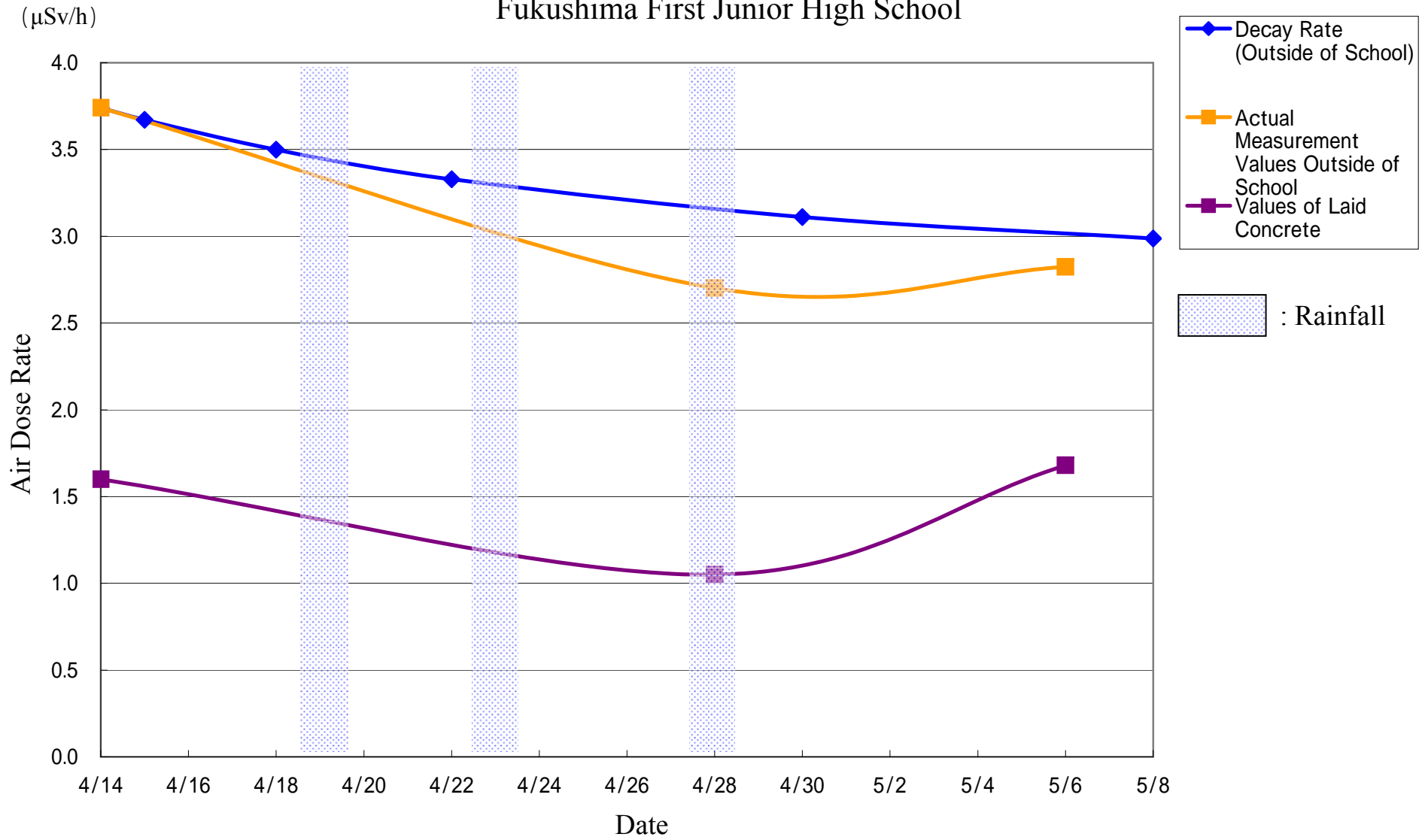
Fukushima Seikei Junior High School



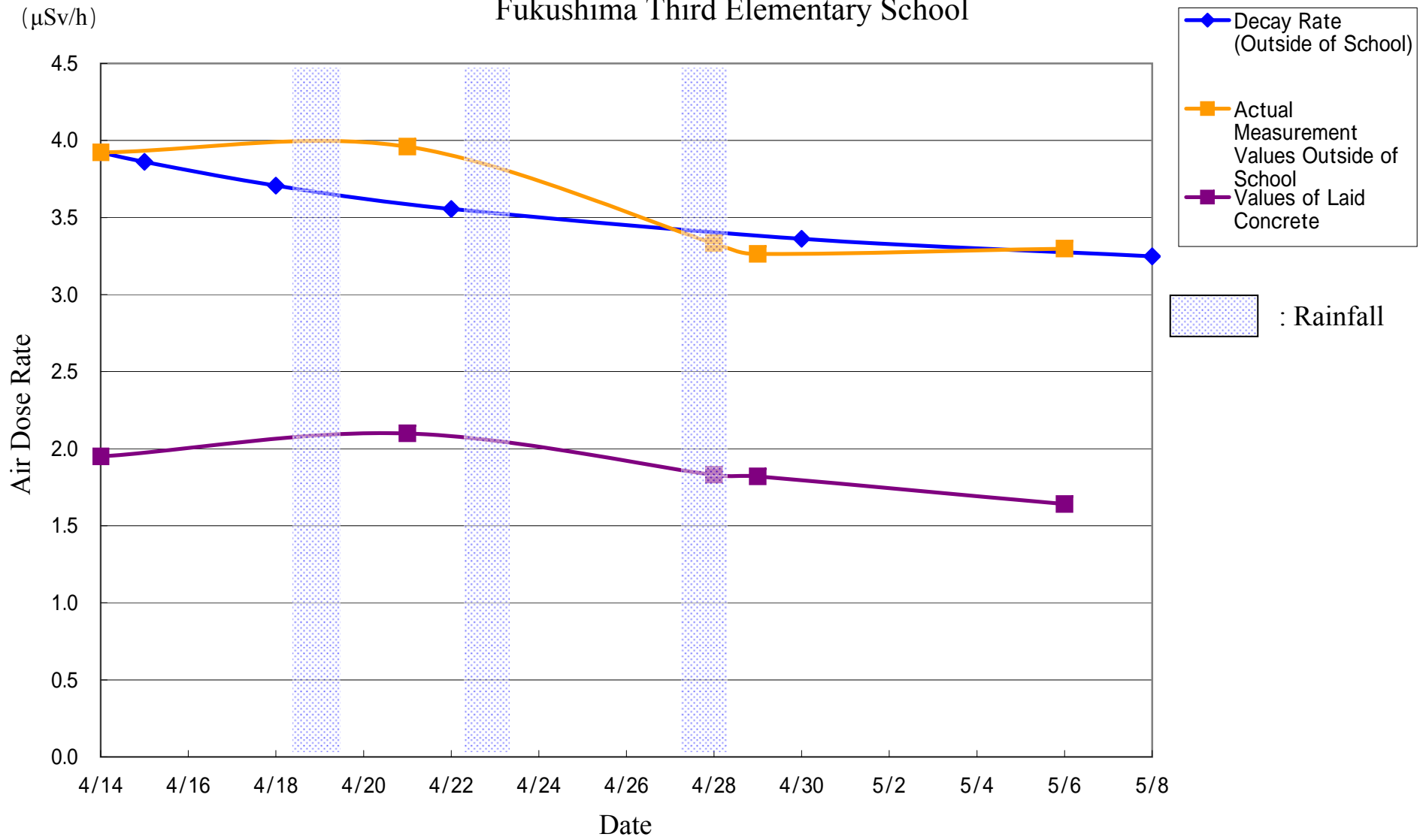
Gakuyo Junior High School



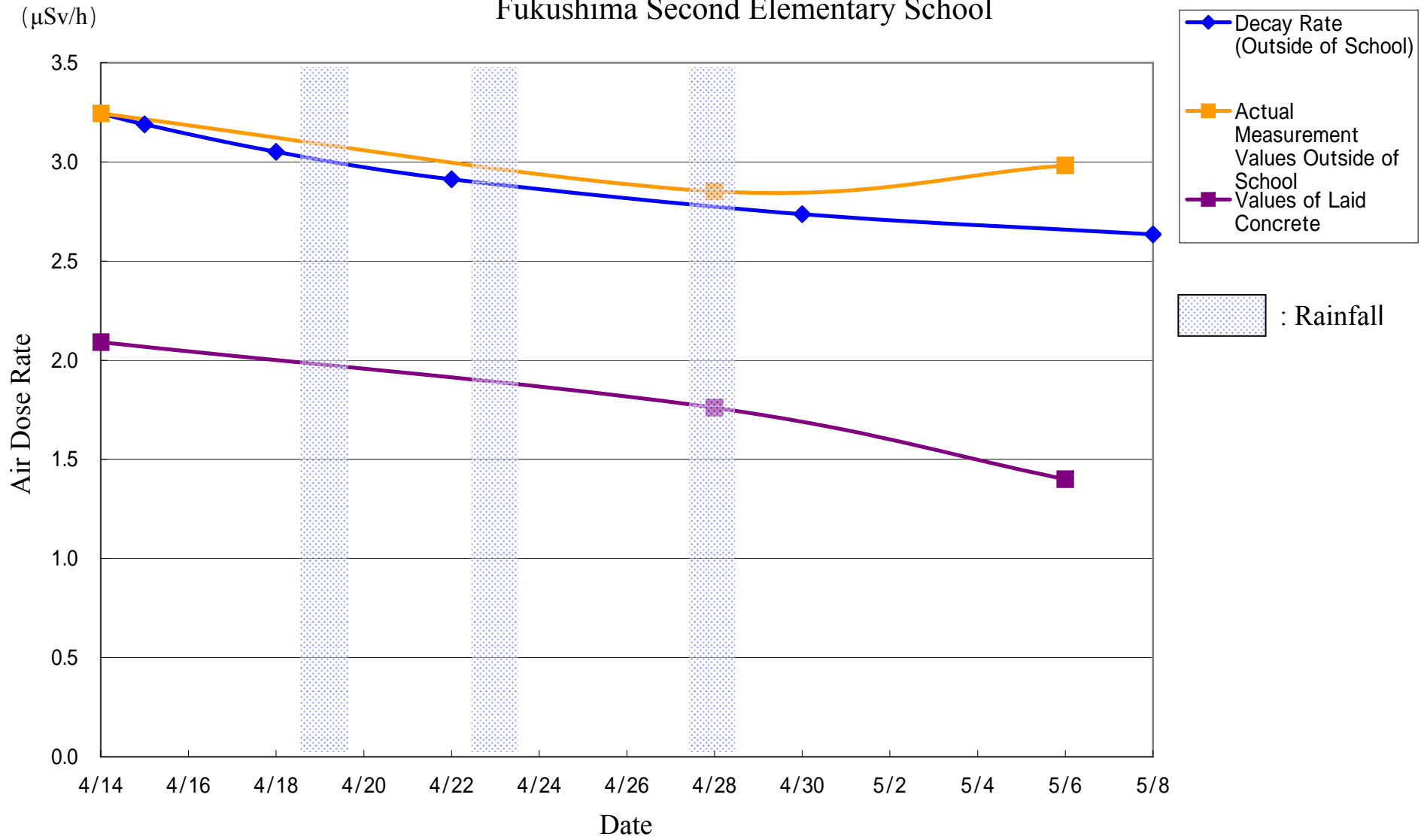
Fukushima First Junior High School



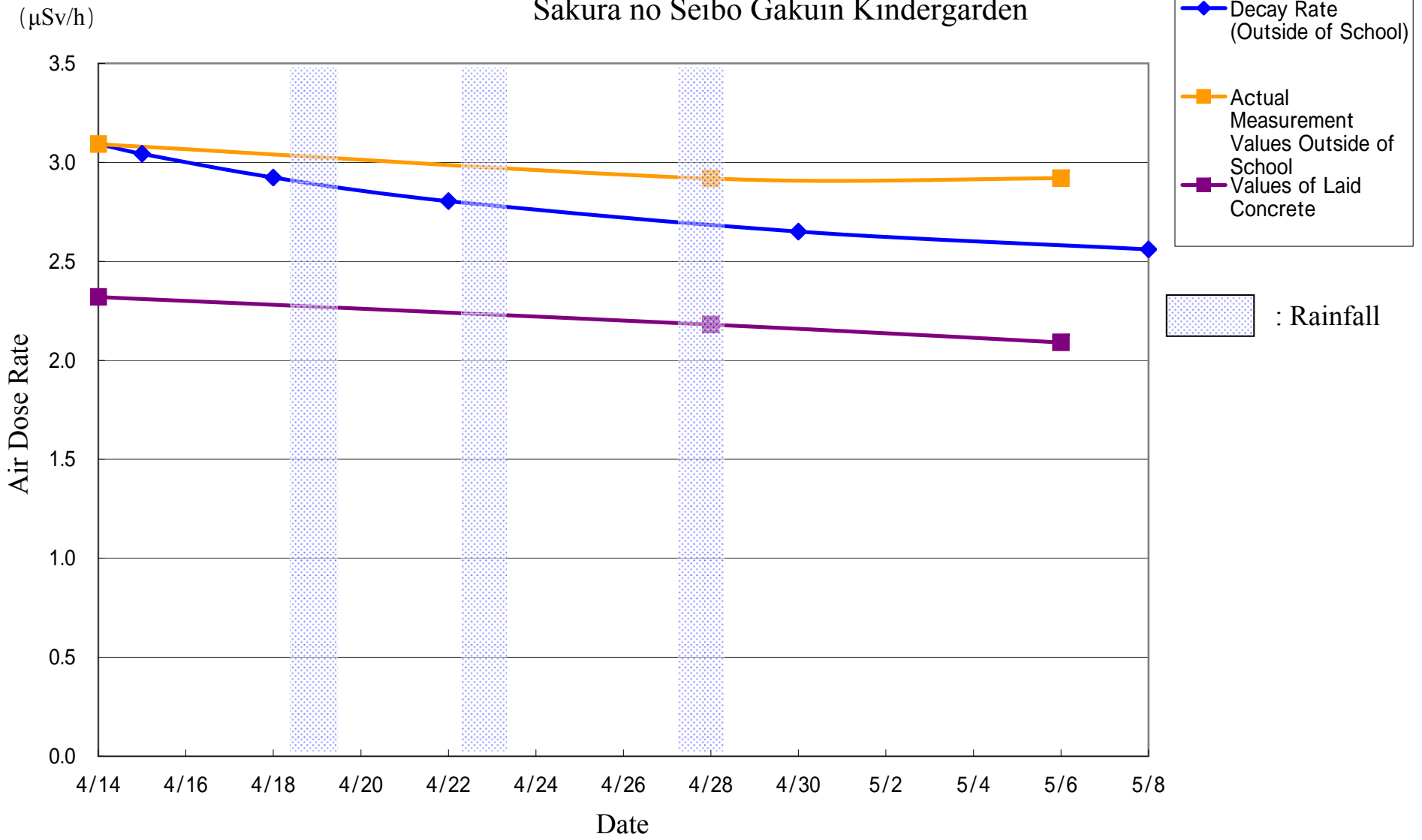
Fukushima Third Elementary School



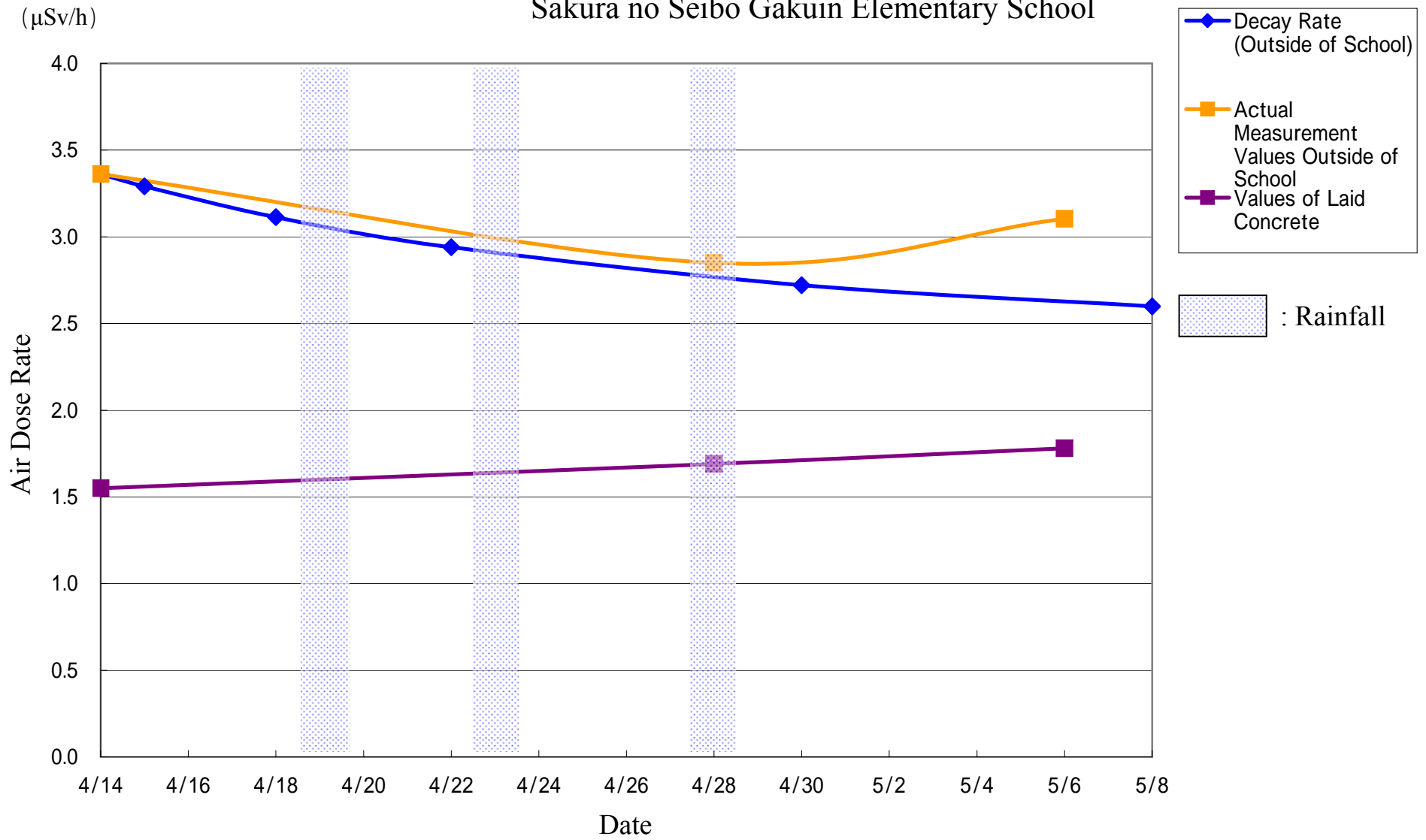
Fukushima Second Elementary School



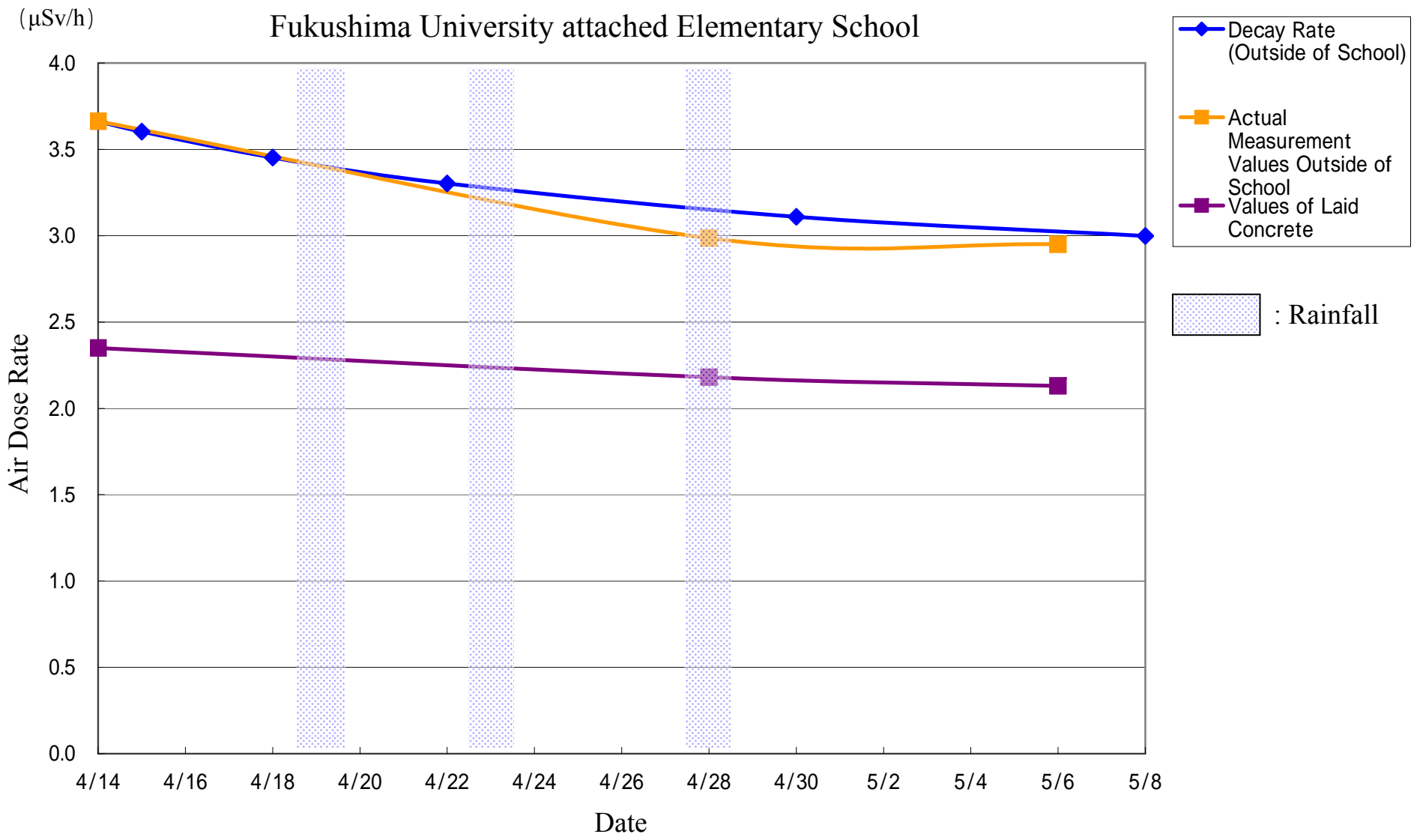
Sakura no Seibo Gakuin Kindergarden



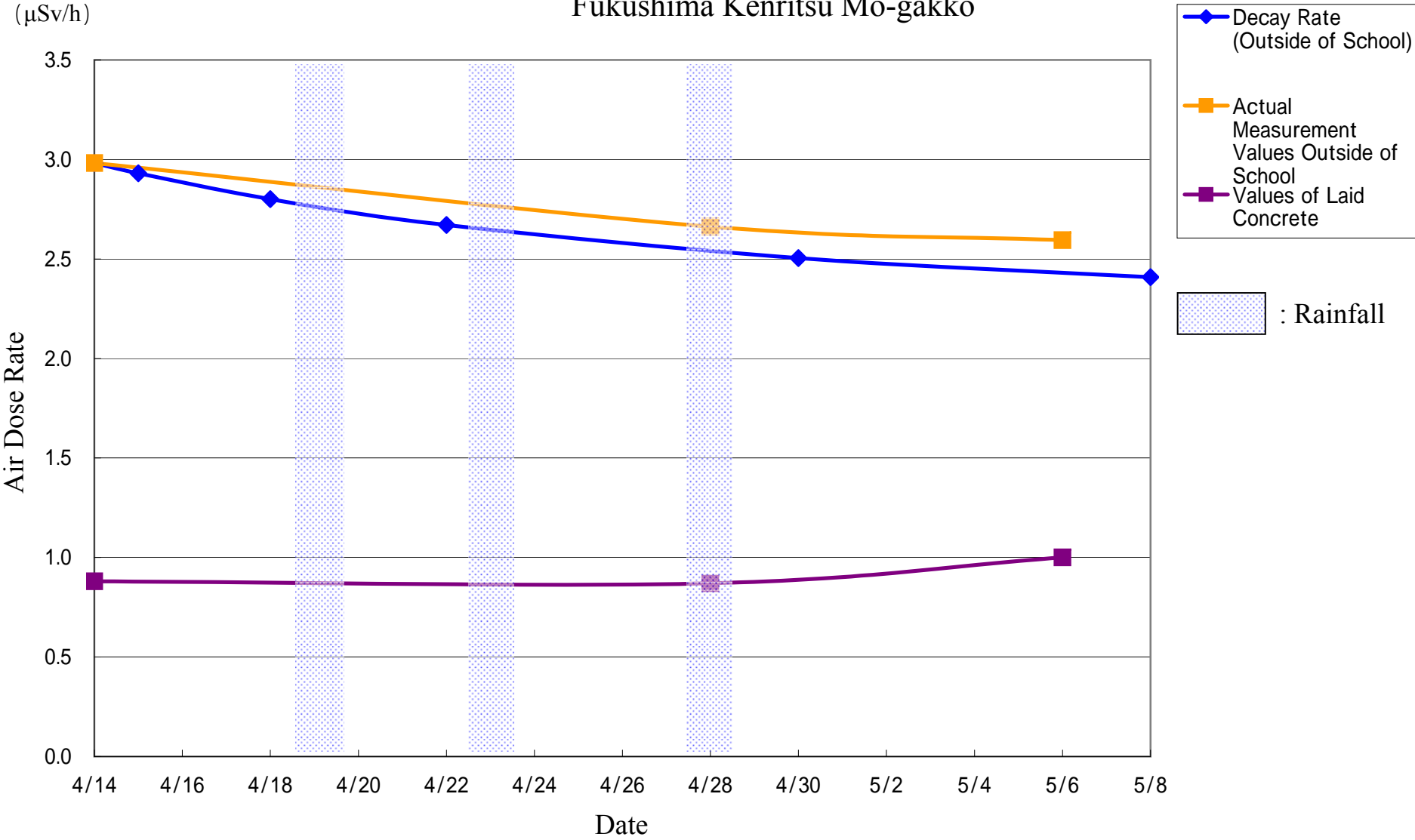
Sakura no Seibo Gakuin Elementary School



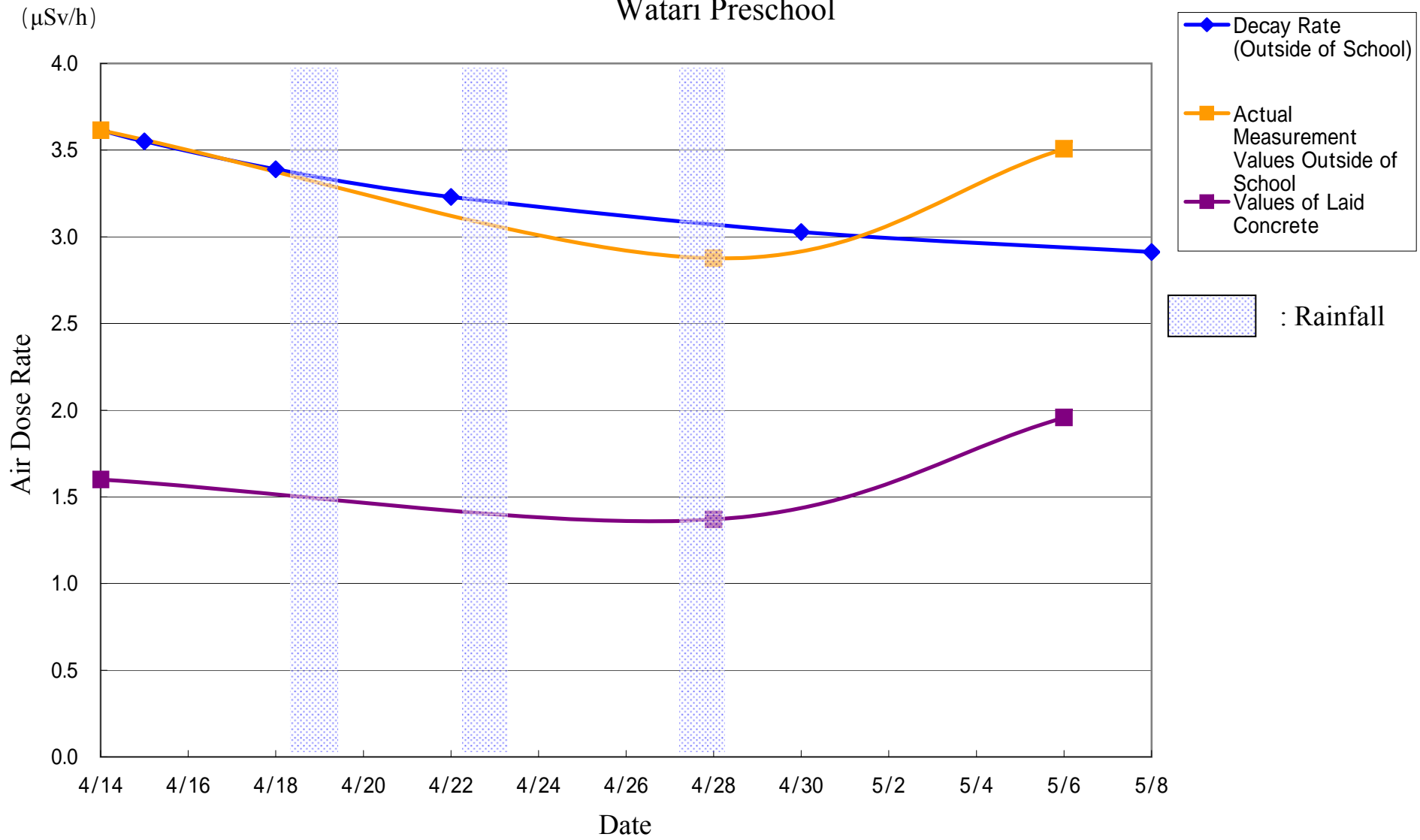
Fukushima University attached Elementary School



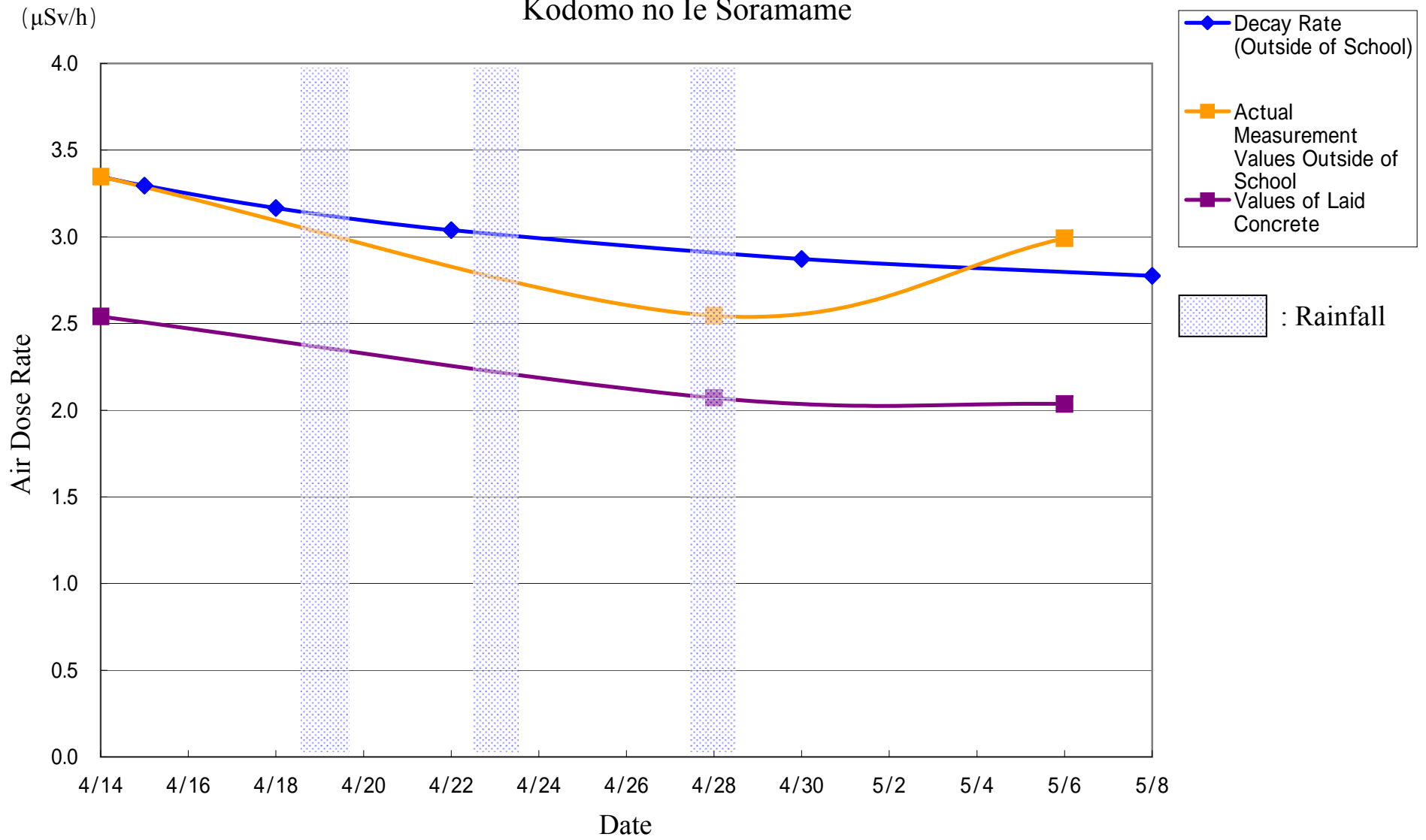
Fukushima Kenritsu Mo-gakko



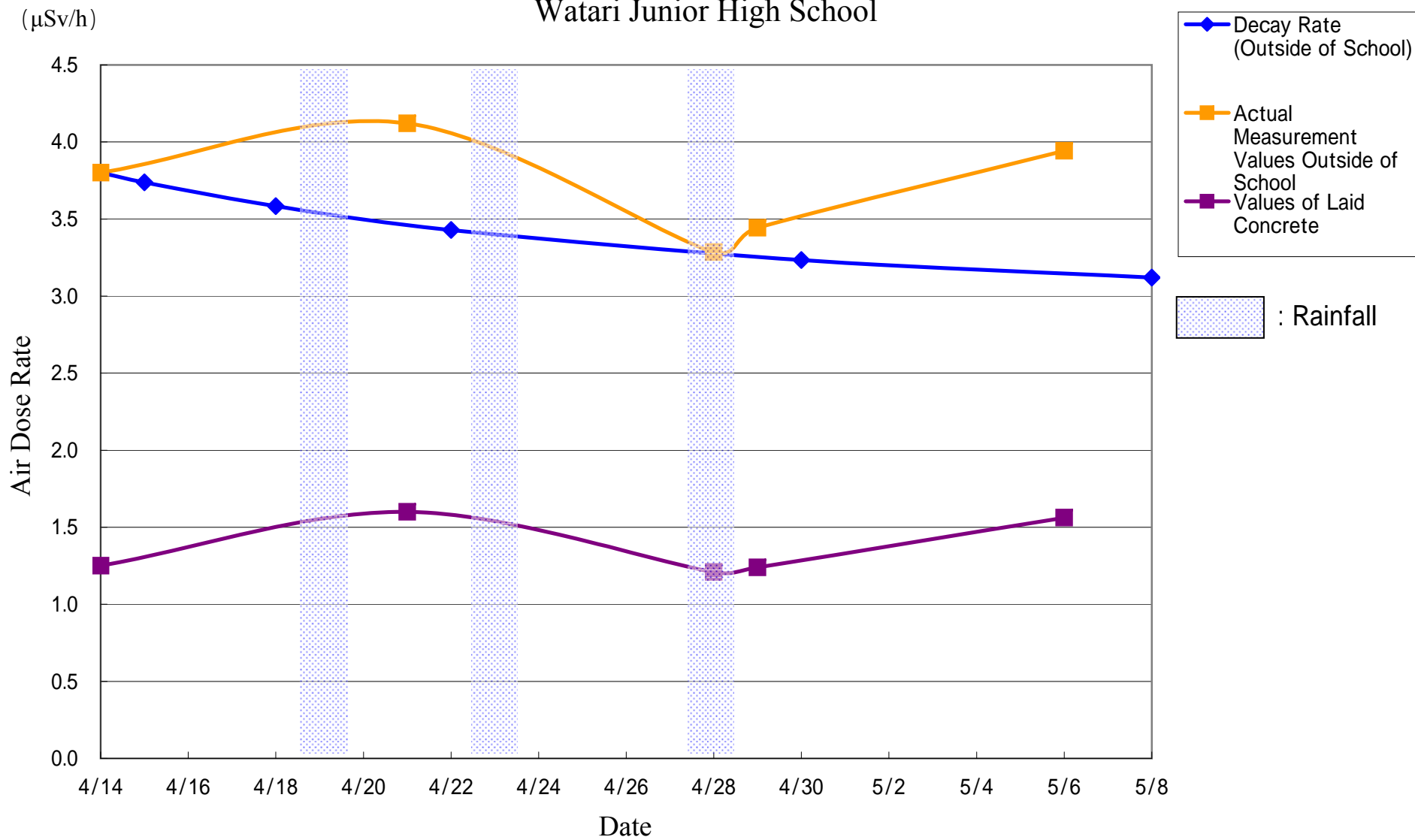
Watari Preschool



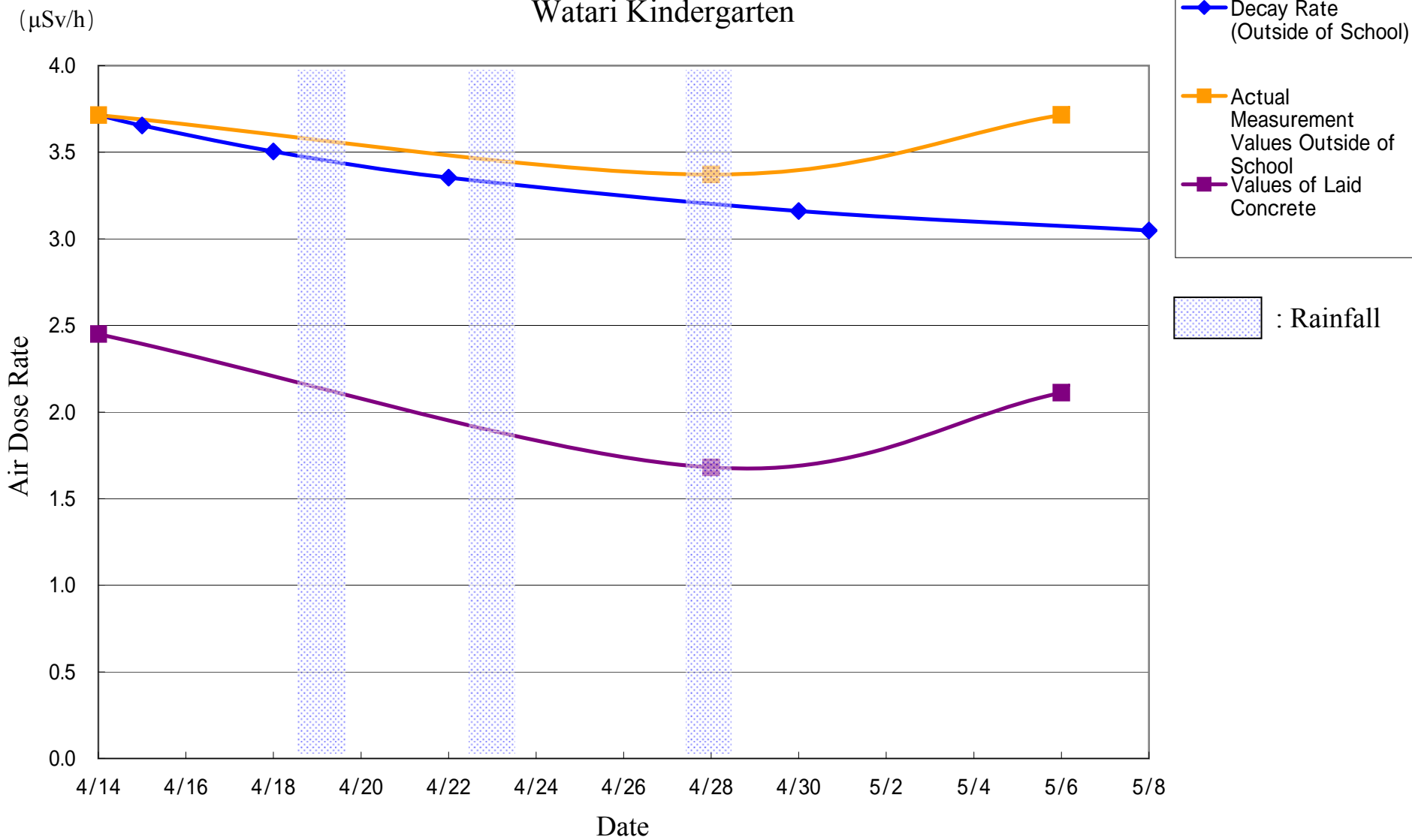
Kodomo no Ie Soramame



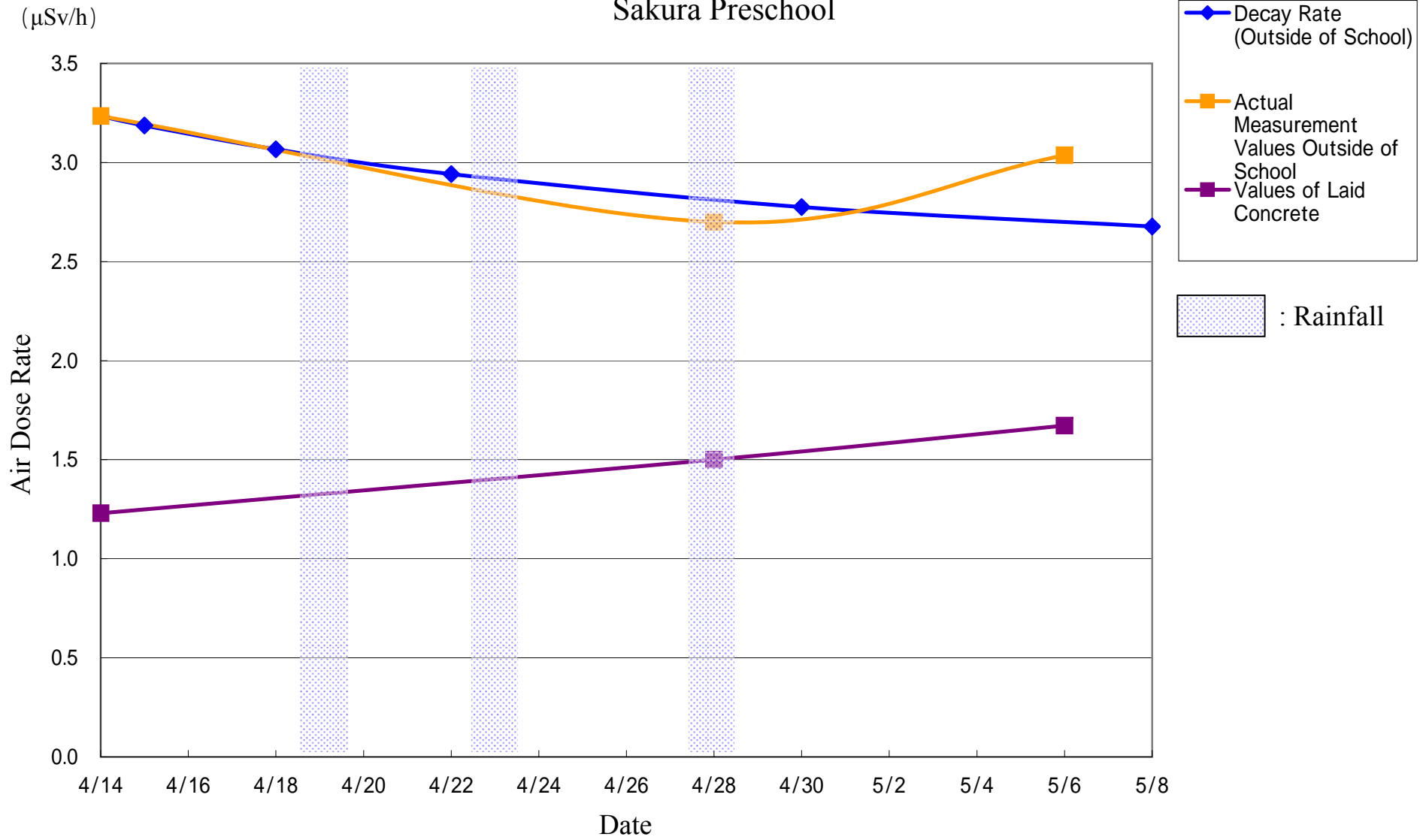
Watari Junior High School



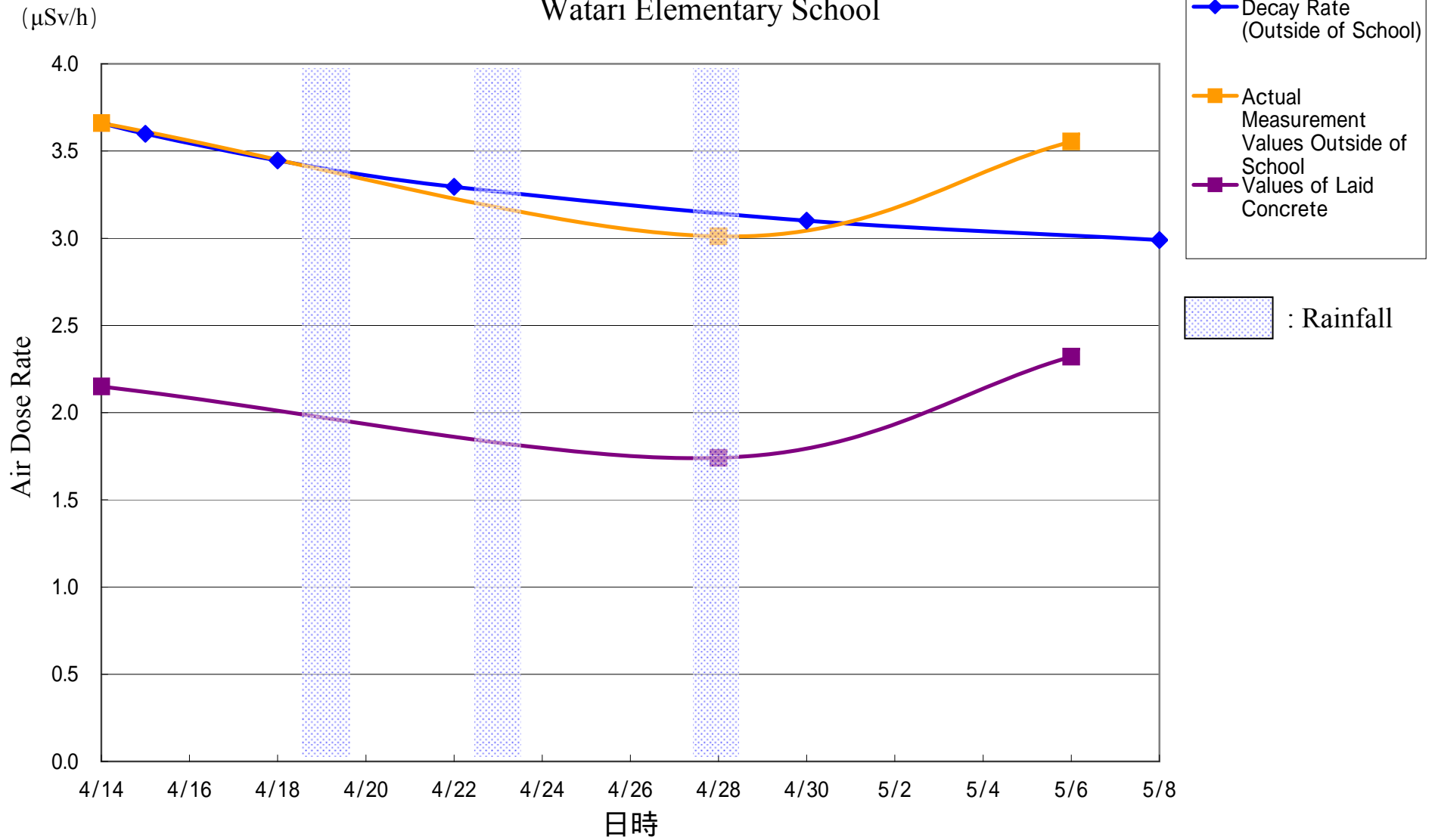
Watari Kindergarten



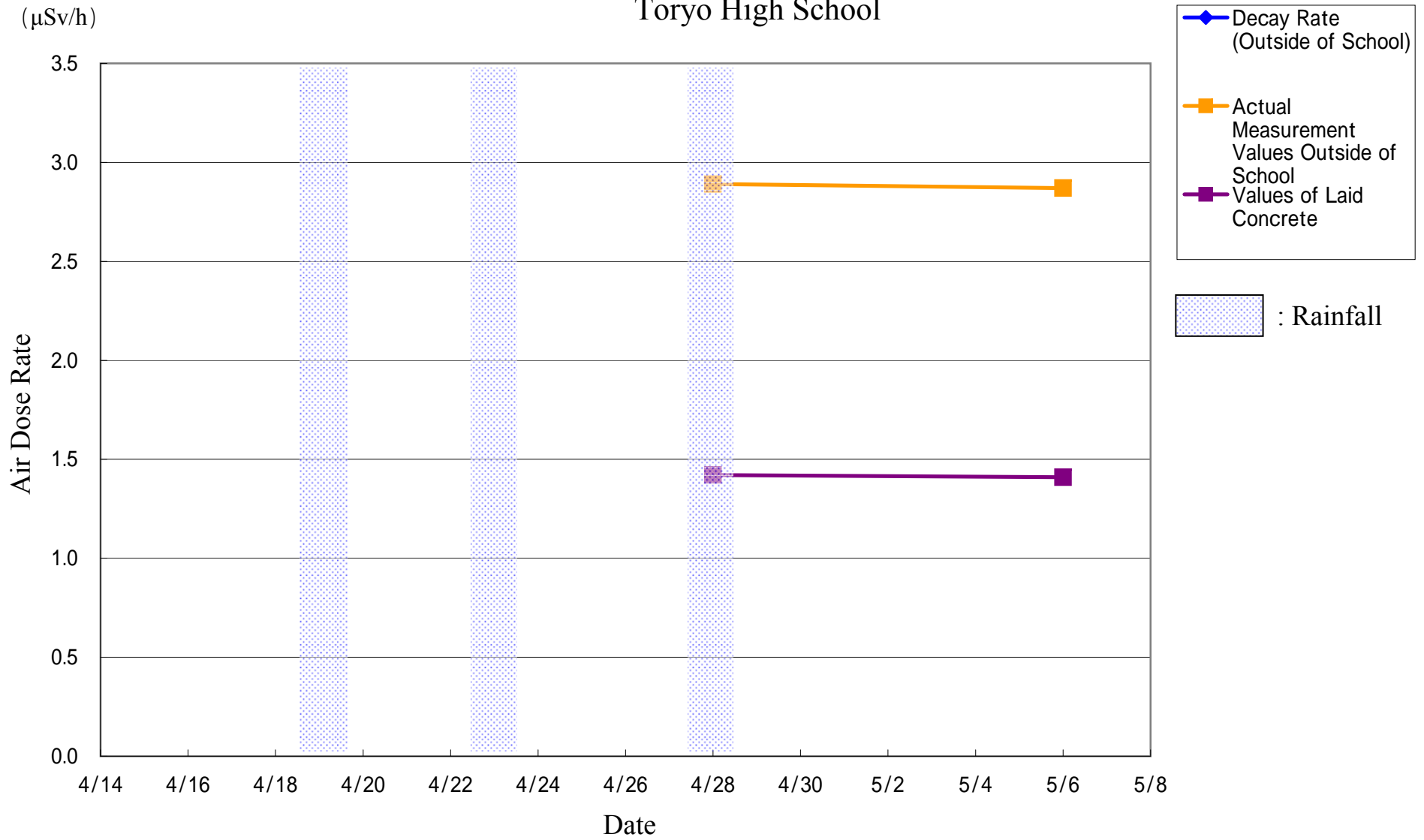
Sakura Preschool



Watari Elementary School

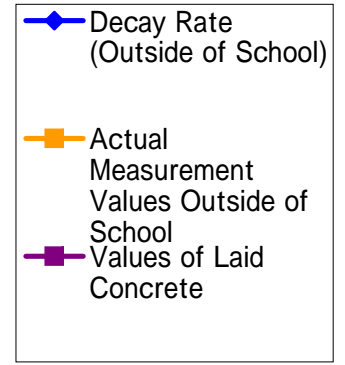
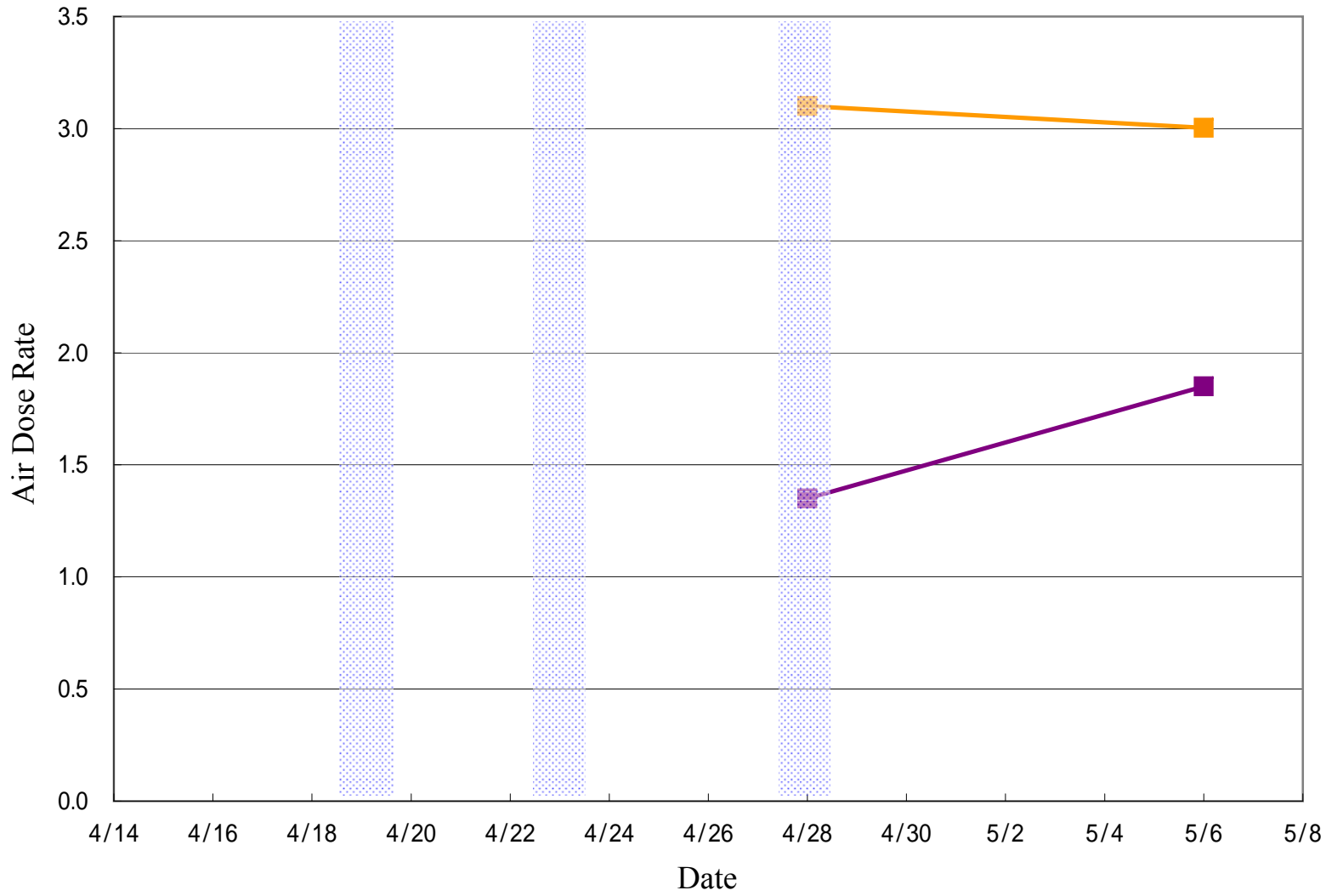


Toryo High School



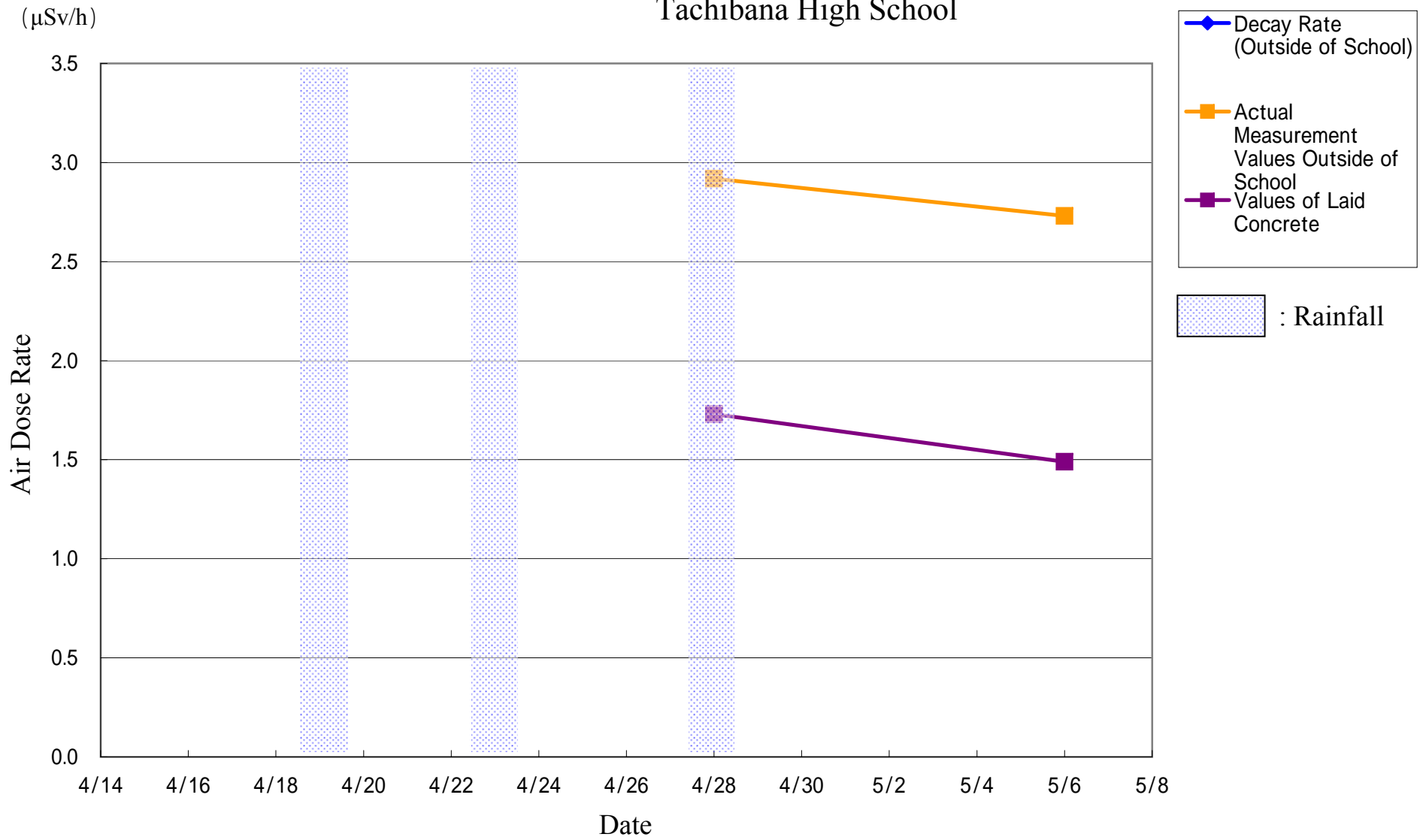
Seikei High School

($\mu\text{Sv/h}$)

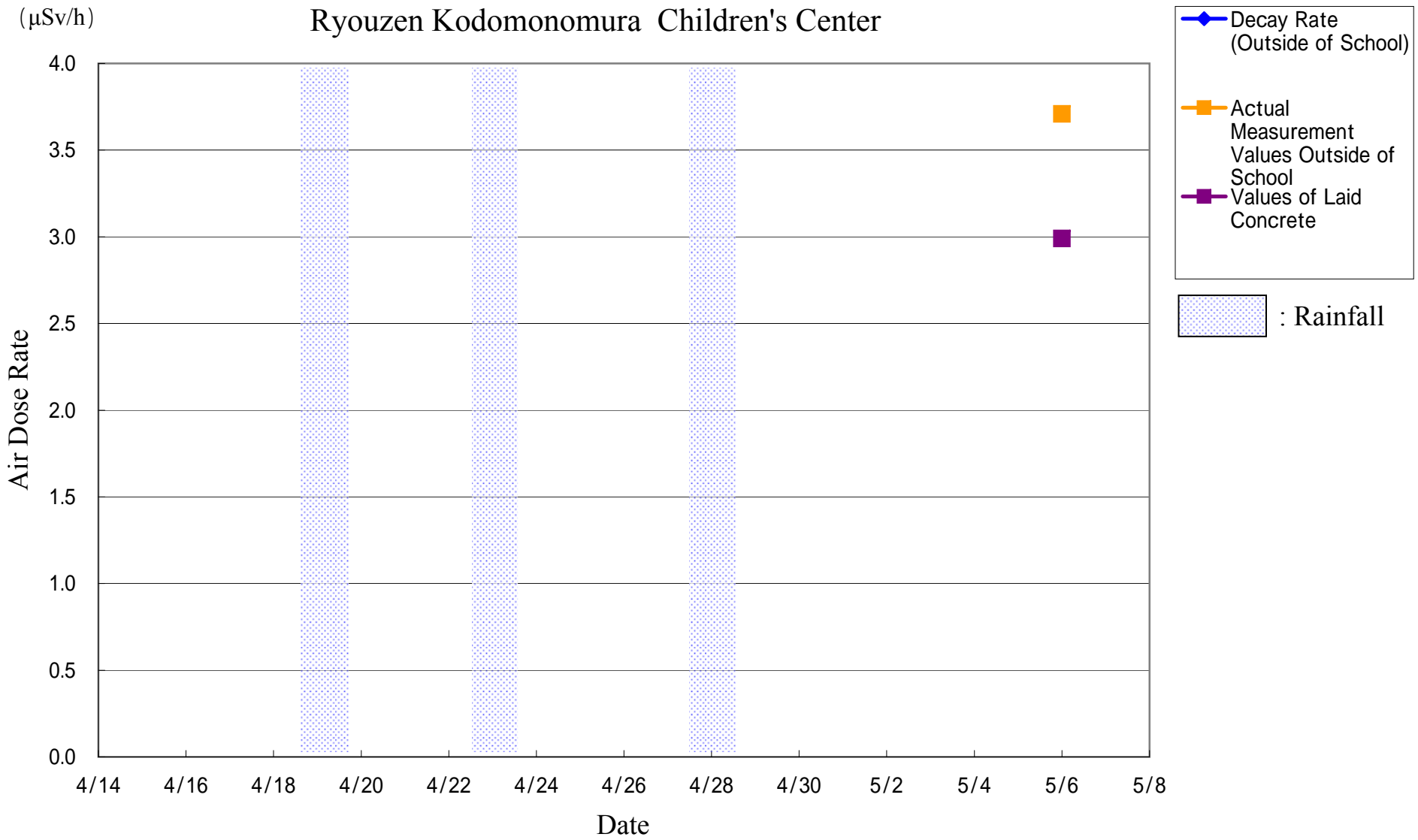


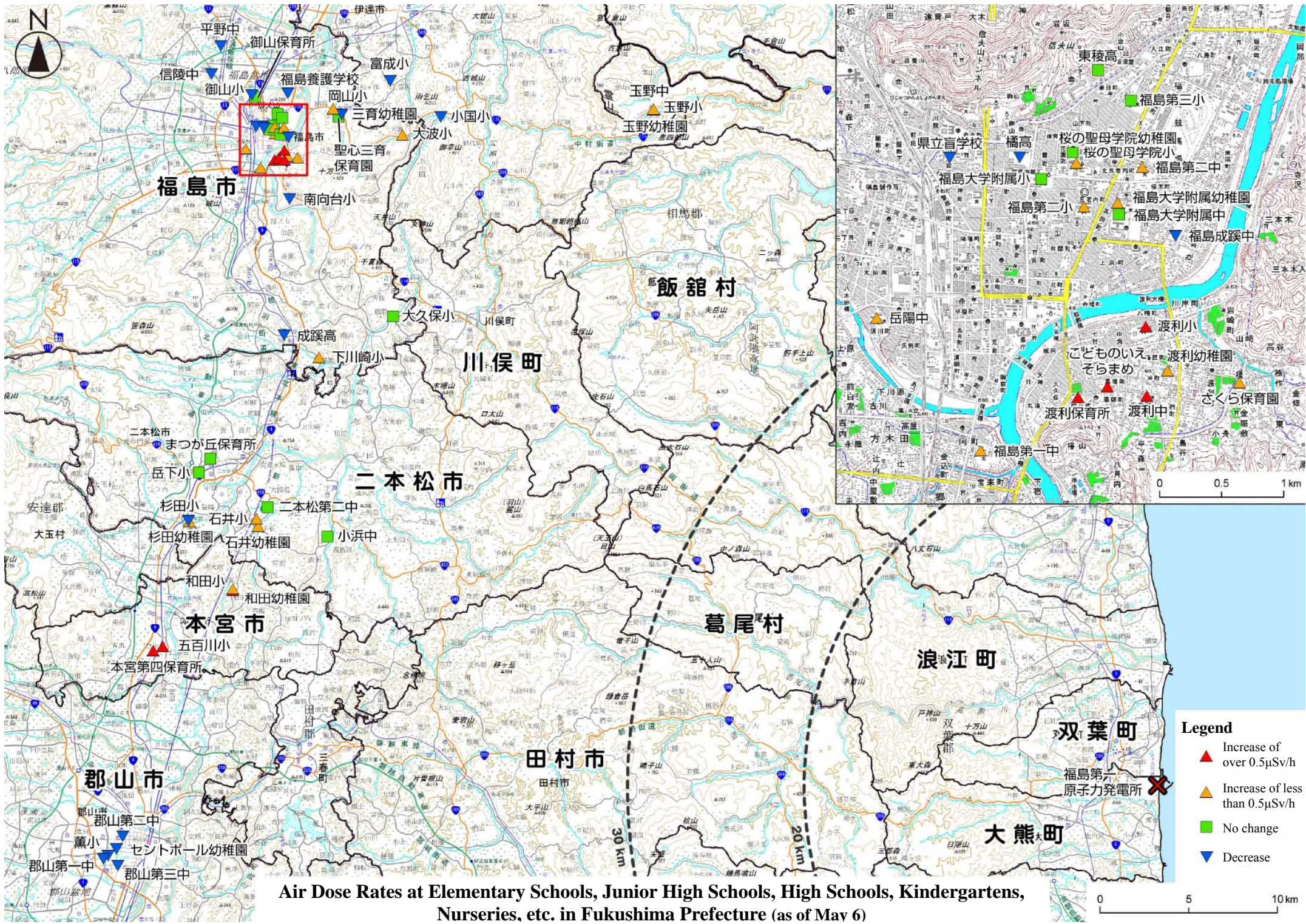
▨ : Rainfall

Tachibana High School



Ryouzen Kodomonomura Children's Center





Air Dose Rates at Elementary Schools, Junior High Schools, High Schools, Kindergartens, Nurseries, etc. in Fukushima Prefecture (as of May 6)

- Legend**
- ▲ Increase of over 0.5μSv/h
 - ▲ Increase of less than 0.5μSv/h
 - No change
 - ▼ Decrease