

May 26, 2011

To the Nuclear Safety Commission

Nuclear Emergency Response Headquarters,
Ministry of Education, Culture, Sports, Science and Technology

Results of Air Dose Rate Monitoring at Schools and the like in Fukushima Prefecture

The results of air dose rate monitoring at schools and the like in Fukushima prefecture are as follows.

1. Results of Air Dose Rate Monitoring

The overall monitoring results, including the latest results obtained on May 12, 13, and 19, are as shown in Document 3-1. There were no longer any schools with levels above $3.8\mu\text{Sv/h}$ (Document 1-1).

2. Results Obtained from Integrating Dosimeters Distributed to School Staff Members

The average air dose rate per staff member during the period from May 9 to May 22 was $0.19\mu\text{Sv/h}$. The average annual air dose rate is estimated to be 0.31mSv , supposing radiation exposure to be 8 hours a day and for 200 days a year (Document 1-2).

3. Implementation of Monitoring using Simple Integrating Dosimeters (at sites other than the 55 schools, etc. already being monitored)

Simple integrating dosimeters (hereinafter, "dosimeters") are to be distributed to schools, etc. in Fukushima Prefecture (other than the 55 schools, etc. already in receipt of such equipment). Dosimeters are worn by teachers, etc. who represent the behavior of children, in order to monitor the radiation dose being received by children on an ongoing basis (Document 1-3).

4. Hearing from Experts on Daily Lives of Children Attending Schools and the Like in Fukushima Prefecture where Certain Levels of Radiation Dose are Detected

The Ministry of Education, Culture, Sports, Science and Technology has decided to hear opinions from experts with regard to radiological protection, as well as the daily lives, mental and physical health, and growth of children, for the purpose of reviewing matters from various viewpoints (Document 1-4).

5. Corrections of the Contents of the Documents Submitted to the Nuclear Safety Commission on May 12

Corrections of figures, etc. in the documents submitted to the Nuclear Safety Commission on May 12 (Document 1-5).

May 26, 2011

Ministry of Education, Culture, Sports, Science and Technology

Results of Air Dose Rate Monitoring at Schools, etc., in Fukushima Prefecture
(Part 3) and Trends of the Measurement Results

Attachment 1 shows a list of results of measurements of air dose rates in outdoor areas of schools, etc., in Fukushima Prefecture, executed on May 12 and 13. At the one school that exceeded 3.8 $\mu\text{Sv/h}$ until now, this measurement confirmed that the rate has fallen to below 3.8 $\mu\text{Sv/h}$. In both these measurement results and further measurements implemented on May 19, no facility was found to exceed 3.8 $\mu\text{Sv/h}$.

In order to confirm the likely impact of opening windows on the air dose rate, given the anticipated rise in temperatures over the coming weeks and months, comparative measurements were carried out on May 19 with the windows both open and closed. Results of these measurements are shown in Attachment 2. Measurements taken immediately after the opening and closing of windows showed no significant variation in data recorded when windows were opened compared to that recorded when they were closed, and as a result it is considered that the opening and closing of windows will have little impact on air dose rates.

Between April 14 and May 19, the Ministry of Education, Culture, Sports, Science and Technology obtained the cooperation of the Japan Atomic Energy Agency, and conducted measurements at schools, etc., in Fukushima Prefecture. Results for each school and kindergarten are shown as graphs in Attachment 3. The graphs 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 the following.

Decay in dose rates measured in outdoor areas of schools (such as the schoolyard) is seen basically according to the decay curve, even in cases where countermeasures such as surface soil removal have not been taken.

During the measurement period, rainfall was confirmed during the period from May 11 to 13 in Fukushima (at the Meteorological Agency measurement point). During this period, the air dose rate was seen to rise slightly at some schools.

A decrease in air dose rate was seen in schools, etc., where the surface soil of the schoolyard, etc. was removed. As a result of this, the disparity between values recorded in areas with laid concrete and those recorded in surface soil in schoolyards has virtually disappeared, while in some schools, etc., this disparity has been reversed.

We are working to understand the trends demonstrated through continued monitoring.

Survey period: May 12, 2011, May 13, 2011(Watari Junior High School only)

No.	Location	Name of school surveyed	Monitoring time	Monitored air dose rate (μSv/h)								Notes	Weather
				Average value outside the school building		Concrete-covered ground		Average value inside classroom, etc.*					
								Near-window		Center			
				1m	50cm	1m	50cm	1m	50cm	1m	50cm		
1	Koriyama City	Koriyama Second Junior High School	10:39	0.9	1.0	1.3	1.6	0.2	0.1	0.1	0.1		Rain
2	Koriyama City	Saint- Paul's Kindergarten	11:49	0.9	0.9	1.0	1.1	0.6	0.5	0.4	0.4		Cloudy
3	Koriyama City	Kaoru Elementary School, Koriyama	13:10	1.3	1.5	0.6	0.7	0.2	0.1	0.2	0.1		Cloudy
4	Koriyama City	Koriyama First Junior High School	14:27	1.3	1.4	1.1	1.2	0.3	0.1	0.2	0.1		Cloudy
5	Koriyama City	Koriyama Third Junior High School	15:21	0.8	1.0	1.7	2.2	0.2	0.1	0.1	0.1		Cloudy
6	Motomiya City	Gohyakugawa Elementary School, Motomiya	10:40	2.6	2.6	2.3	2.5	0.4	0.3	0.2	0.1		Cloudy
7	Motomiya City	Motomiya 4th Preschool	11:06	2.5	2.6	1.0	1.2	0.6	0.5	0.4	0.4		Cloudy
8	Motomiya City	Wada Kindergarten, Motomiya	11:50	2.7	2.9	1.1	1.1	0.7	0.6	0.5	0.5		Cloudy
9	Motomiya City	Wada Elementary School, Motomiya	12:08	2.7	2.9	1.9	2.0	-	-	-	-	Could not enter classroom	Cloudy
10	Nihonmatsu City	Ishii Kindergarten, Nihonmatsu	13:27	1.4	1.4	1.3	1.4	0.5	0.5	0.2	0.2		Cloudy
11	Nihonmatsu City	Ishii Elementary School, Nihonmatsu	12:58	2.7	2.9	1.7	1.9	0.4	0.2	0.2	0.1		Cloudy
12	Nihonmatsu City	Takeshita Elementary School, Nihonmatsu	11:47	2.4	2.6	0.9	0.9	0.4	0.2	0.2	0.1		Cloudy
13	Nihonmatsu City	Matsugaoka Preschool	12:18	2.2	2.5	1.0	1.1	0.4	0.3	0.2	0.2		Cloudy
14	Nihonmatsu City	Sugita Elementary School, Nihonmatsu	11:14	1.8	1.9	1.3	1.2	0.4	0.2	0.2	0.1		Cloudy
15	Nihonmatsu City	Sugita Kindergarten, Nihonmatsu	10:45	2.3	2.4	0.9	0.8	0.5	0.4	0.2	0.2		Cloudy
16	Nihonmatsu City	Nihonmatsu Second Junior High School	13:00	1.0	1.1	1.1	1.2	0.4	0.3	0.2	0.2		Cloudy
17	Nihonmatsu City	Obama Junior High School, Nihonmatsu	13:46	2.2	2.3	1.2	1.3	0.4	0.2	0.2	0.2		Cloudy
18	Fukushima City	Shimogawasaki Elementary School, Fukushima	11:39	3.0	3.3	2.2	2.4	0.6	0.5	0.2	0.2		Cloudy
19	Fukushima City	Okubo Elementary School, Fukushima	12:59	2.4	2.7	1.6	1.7	0.2	0.2	0.2	0.1		Cloudy
20	Fukushima City	Nankoudai Elementary School, Fukushima	13:49	3.0	3.4	1.8	2.2	0.3	0.2	0.1	0.1		Rain
21	Fukushima City	Onami Elementary School, Fukushima	11:45	3.0	3.4	2.0	2.1	0.6	0.5	0.3	0.3		Cloudy
22	Date City	Oguni Elementary School, Date	12:20	1.0	0.9	2.0	2.2	0.8	0.6	0.3	0.2		Cloudy
23	Soma City	Tamano kindergarten	14:04	2.8	3.0	1.9	2.0	0.6	0.5	0.2	0.2		Cloudy
24	Soma City	Tamano Junior High School	14:31	3.0	3.2	1.9	2.2	0.4	0.4	0.2	0.1		Cloudy
25	Soma City	Tamano Elementary School	14:04	2.8	3.0	1.9	2.0	0.7	0.6	0.2	0.2		Cloudy
26	Fukushima City	Okayama Elementary School, Fukushima	11:30	2.4	2.8	1.5	1.1	0.3	0.2	0.2	0.2		Cloudy
27	Fukushima City	Seishin Saniku Preschool	12:10	1.6	1.9	1.7	2.0	0.6	0.5	0.2	0.2		Cloudy
28	Fukushima City	Saniku Kindergarten	12:50	2.5	2.5	1.4	1.6	0.7	0.7	0.5	0.4		Cloudy
29	Date City	Tominari Elementary School, Date	14:10	0.7	0.7	1.6	1.7	0.4	0.2	0.2	0.2		Cloudy
30	Fukushima City	Fukushima Yogo Gakko, Fukushima	14:32	2.5	2.7	1.0	1.0	0.4	0.3	0.2	0.2		Cloudy
31	Fukushima City	Oyama Preschool	13:52	2.3	2.5	1.0	1.3	0.6	0.5	0.2	0.2		Cloudy
32	Fukushima City	Oyama Elementary School, Fukushima	13:13	3.1	3.3	1.8	2.1	0.3	0.2	0.2	0.1		Cloudy
33	Fukushima City	Shinryo Junior High School, Fukushima	12:23	2.1	2.2	1.5	1.4	0.4	0.2	0.2	0.1		Cloudy
34	Fukushima City	Hirano Junior High School, Fukushima	11:38	2.3	2.5	1.0	1.1	0.2	0.2	0.1	0.1		Cloudy
35	Fukushima City	Fukushima Second Junior High School	14:01	3.0	3.2	1.9	2.1	0.8	0.3	0.2	0.2		Cloudy
36	Fukushima City	Fukushima University Attached Kindergarten	13:04	2.8	3.1	0.9	1.0	0.7	0.6	0.3	0.3		Cloudy
37	Fukushima City	Fukushima University Attached Junior High School	13:30	2.8	2.9	1.4	1.4	0.6	0.2	0.2	0.2		Cloudy

No.	Location	Name of school surveyed	Monitoring time	Monitored air dose rate ($\mu\text{Sv/h}$)								Notes	Weather
				Average value outside the school building		Concrete-covered ground		Average value inside classroom, etc.*					
								Near-window		Center			
				1m	50cm	1m	50cm	1m	50cm	1m	50cm		
38	Fukushima City	Fukushima Seikei Junior High School	11:39	3.1	3.3	1.7	1.9	0.3	0.2	0.1	0.1		Cloudy
39	Fukushima City	Gakuyo Junior High School, Fukushima	14:46	2.2	2.3	1.0	1.1	0.3	0.1	0.1	0.1		Cloudy
40	Fukushima City	Fukushima First Junior High School	15:30	2.7	2.9	1.4	1.5	0.5	0.4	0.1	0.1		Cloudy
41	Fukushima City	Fukushima Third Elementary School	12:14	2.8	3.2	1.7	1.7	0.3	0.2	0.2	0.1		Cloudy
42	Fukushima City	Fukushima Second Elementary School	13:14	2.5	2.8	1.6	1.6	0.4	0.2	0.2	0.2		Cloudy
43	Fukushima City	Sakura no Seibo Gakuin Kindergarten	13:54	2.3	2.7	1.7	1.8	-	-	-	-	Could not enter classroom	Cloudy
44	Fukushima City	Sakura no Seibo Gakuin Elementary School	13:44	2.6	2.9	1.4	1.7	0.5	0.2	0.2	0.1		Cloudy
45	Fukushima City	Fukushima University Attached Elementary School	14:29	2.5	2.8	1.6	2.1	0.4	0.3	0.1	0.1		Cloudy
46	Fukushima City	Fukushima Kenritsu Mo-gakko	15:32	2.2	2.5	0.7	0.7	0.4	0.3	0.2	0.2		Rain
47	Fukushima City	Watari Kindergarten, Fukushima	11:19	2.6	2.9	1.7	1.7	0.8	0.8	0.6	0.5		Cloudy
48	Fukushima City	Kodomo no Ie Soramame	11:43	2.3	2.7	1.7	1.7	0.8	0.7	0.7	0.6	Average of 2 classrooms	Cloudy
49	Fukushima City	<u>Watari Junior High School, Fukushima (Measured on 5/12)</u>	12:03	3.4	3.8	1.1	1.1	0.4	0.2	0.2	0.2	Measured 1 classroom only	Cloudy
		<u>Watari Junior High School, Fukushima (Measured on 5/13)</u>	10:29	3.2	3.5	1.1	1.2	0.9	0.2	0.2	0.2	Measured 1 classroom only	Cloudy
50	Fukushima City	Watari Kindergarten, Fukushima	12:53	2.8	3.2	2.0	2.2	0.8	0.7	0.5	0.4		Cloudy
51	Fukushima City	Sakura Preschool	13:31	2.2	2.5	1.0	1.3	0.4	0.3	0.1	0.1	Measured 1 classroom only	Cloudy
52	Fukushima City	Watari Elementary School, Fukushima	14:00	2.8	3.1	1.8	2.1	0.3	0.2	0.2	0.1		Cloudy
53	Fukushima City	Toryo High School	11:28	2.8	3.0	1.3	1.3	0.3	0.2	0.2	0.1		Cloudy
54	Fukushima City	Seikei High School	11:39	3.1	3.3	1.6	1.7	0.2	0.1	0.1	0.1		Cloudy
55	Fukushima City	Tachibana High School	15:00	2.6	2.8	1.4	1.5	0.5	0.4	0.1	0.1		Cloudy
56	Date City	Ryuzen Kodomonomura Jidoukan	13:27	3.4	3.6	2.9	3.0	0.7	0.6	0.6	0.5	Measured inside museum	Cloudy

The air dose at 50 cm above ground was monitored outdoors in schools at nurseries, kindergartens

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

Underscoring of school names indicates the schools where it has been confirmed that measurements have fallen below 3.8 $\mu\text{Sv/h}$.

*: The average value inside classroom is the arbitrary measurement result of 3 classrooms.

Results of Survey for Schools, etc. in Fukushima Prefecture

Survey period: May 19, 2011

No.	Location	Name of school surveyed	Monitoring time	Monitored air dose rate ($\mu\text{Sv/h}$)								Notes	Weather
				Average value outside the school building		Concrete-covered ground		Average value inside classroom, etc.*					
				1m	50cm	1m	50cm	Near-window		Center			
								1m	50cm	1m	50cm		
1	Koriyama City	Koriyama Second Junior High School	10:40	0.9	0.9	0.6	0.6	0.2	0.1	0.1	0.1		Fair
2	Koriyama City	Saint- Paul's Kindergarten	12:08	0.9	0.8	1.2	1.2	0.6	0.6	0.4	0.3		Fair
3	Koriyama City	Kaoru Elementary School, Koriyama	13:20	1.1	1.1	0.8	1.0	0.2	0.1	0.1	0.1		Fair
4	Koriyama City	Koriyama First Junior High School	14:24	0.9	0.9	1.1	1.2	0.3	0.1	0.1	0.1		Fair
5	Koriyama City	Koriyama Third Junior High School	14:40	0.9	1.0	1.2	1.2	0.2	0.2	0.1	0.1		Fair
6	Motomiya City	Gohyakugawa Elementary School, Motomiya	10:43	1.9	2.1	1.4	1.6	0.3	0.2	0.2	0.2		Fair
7	Motomiya City	Motomiya 4th Preschool	11:34	2.4	2.7	1.4	1.5	0.7	0.6	0.5	0.4		Fair
8	Motomiya City	Wada Kindergarten, Motomiya	12:35	0.6	0.6	1.1	1.0	0.6	0.5	0.4	0.4		Fair
9	Motomiya City	Wada Elementary School, Motomiya	13:08	0.6	0.6	1.1	1.2	0.2	0.2	0.1	0.1	Measured classroom on 2nd floor	Fair
10	Nihonmatsu City	Ishii Kindergarten, Nihonmatsu	13:50	0.7	0.7	0.8	1.0	0.4	0.3	0.2	0.2		Fair
11	Nihonmatsu City	Ishii Elementary School, Nihonmatsu	14:35	0.8	0.7	1.4	1.6	0.4	0.2	0.2	0.2		Fair
12	Nihonmatsu City	Takeshita Elementary School, Nihonmatsu	12:13	2.3	2.5	0.6	0.6	0.4	0.2	0.2	0.1		Fair
13	Nihonmatsu City	Matsugaoka Preschool	13:09	1.8	2.1	1.0	1.2	0.4	0.4	0.2	0.2		Fair
14	Nihonmatsu City	Sugita Elementary School, Nihonmatsu	11:33	0.6	0.6	0.7	0.6	0.3	0.2	0.1	0.1		Fair
15	Nihonmatsu City	Sugita Kindergarten, Nihonmatsu	10:24	0.6	0.6	0.4	0.4	0.2	0.2	0.1	0.1		Fair
16	Nihonmatsu City	Nihonmatsu Second Junior High School	13:50	1.1	1.2	1.6	1.6	0.5	0.5	0.2	0.2		Fair
17	Nihonmatsu City	Obama Junior High School, Nihonmatsu	14:46	2.2	2.4	1.3	1.4	0.5	0.4	0.2	0.2		Fair
18	Fukushima City	Shimogawasaki Elementary School, Fukushima	11:34	2.8	3.2	2.2	2.2	0.7	0.7	0.3	0.2		Fair
19	Fukushima City	Okubo Elementary School, Fukushima	13:11	2.3	2.6	1.5	1.7	0.3	0.2	0.2	0.1		Fair
20	Fukushima City	Nankoudai Elementary School, Fukushima	14:21	2.8	3.1	1.4	1.4	0.4	0.3	0.1	0.1		Fair
21	Fukushima City	Onami Elementary School, Fukushima	11:30	2.9	3.4	2.2	2.4	0.4	0.3	0.3	0.3		Fair
22	Date City	Oguni Elementary School, Date	12:22	0.8	0.7	2.0	2.3	0.6	0.5	0.2	0.2		Fair
23	Soma City	Tamano kindergarten	13:44	2.6	3.0	1.7	1.8	0.5	0.4	0.2	0.2		Fair
24	Soma City	Tamano Junior High School	14:28	2.9	3.2	1.9	2.2	0.4	0.4	0.2	0.1		Fair
25	Soma City	Tamano Elementary School	14:14	2.6	3.0	1.7	1.8	0.5	0.5	0.2	0.2		Fair
26	Fukushima City	Okayama Elementary School, Fukushima	11:26	2.1	2.2	1.2	0.9	0.2	0.2	0.1	0.1		Fair
27	Fukushima City	Seishin Saniku Preschool	12:16	1.4	1.5	1.4	1.5	0.4	0.3	0.2	0.2		Fair
28	Fukushima City	Saniku Kindergarten	13:00	1.8	1.6	1.2	1.4	0.6	0.5	0.4	0.3		Fair
29	Date City	Tominari Elementary School, Date	14:22	0.6	0.6	1.5	1.6	0.2	0.2	0.2	0.2		Fair
30	Fukushima City	Fukushima Yogo Gakko, Fukushima	14:47	1.9	2.0	0.9	1.0	0.3	0.2	0.1	0.1		Fair
31	Fukushima City	Oyama Preschool	14:02	2.0	2.2	0.9	1.0	0.6	0.4	0.2	0.2		Fair
32	Fukushima City	Oyama Elementary School, Fukushima	13:22	2.9	3.1	1.8	2.0	0.4	0.2	0.1	0.1		Fair
33	Fukushima City	Shinryo Junior High School, Fukushima	12:21	1.9	2.1	1.6	1.5	0.3	0.1	0.1	0.1		Fair
34	Fukushima City	Hirano Junior High School, Fukushima	11:26	2.1	2.3	0.8	1.0	0.3	0.3	0.1	0.1		Fair
35	Fukushima City	Fukushima Second Junior High School	11:18	2.6	2.8	2.1	2.2	0.6	0.3	0.2	0.1		Fair

No.	Location	Name of school surveyed	Monitoring time	Monitored air dose rate ($\mu\text{Sv/h}$)								Notes	Weather
				Average value outside the school building		Concrete-covered ground		Average value inside classroom, etc.*					
				1m	50cm	1m	50cm	Near-window		Center			
								1m	50cm	1m	50cm		
36	Fukushima City	Fukushima University Attached Kindergarten	12:58	2.4	2.6	0.9	1.0	0.6	0.5	0.3	0.3		Fair
37	Fukushima City	Fukushima University Attached Junior High School	13:27	2.4	2.6	1.1	1.2	0.6	0.5	0.1	0.1		Fair
38	Fukushima City	Fukushima Seikei Junior High School	14:13	2.7	2.8	1.1	1.2	0.2	0.1	0.1	0.1		Fair
39	Fukushima City	Gakuyo Junior High School, Fukushima	15:32	2.0	2.1	0.9	1.1	0.3	0.1	0.1	0.1		Fair
40	Fukushima City	Fukushima First Junior High School	16:23	2.4	2.6	1.2	1.3	0.5	0.4	0.1	0.1		Fair
41	Fukushima City	Fukushima Third Elementary School	12:09	3.0	3.2	1.5	1.5	0.3	0.2	0.2	0.2		Fair
42	Fukushima City	Fukushima Second Elementary School	12:53	2.8	2.9	1.7	1.7	0.4	0.2	0.2	0.2		Fair
43	Fukushima City	Sakura no Seibo Gakuin Kindergarten	14:14	2.5	2.8	2.3	2.6	0.0	0.0	0.0	0.0	Could not enter classroom	Fair
44	Fukushima City	Sakura no Seibo Gakuin Elementary School	13:51	2.4	2.6	1.4	1.4	0.5	0.3	0.2	0.1		Fair
45	Fukushima City	Fukushima University attached Elementary School	14:37	2.6	2.8	1.5	1.7	0.3	0.3	0.1	0.1		Fair
46	Fukushima City	Fukushima Kenritsu Mo-gakko	16:03	2.2	2.5	0.9	0.9	0.4	0.3	0.2	0.2		Fair
47	Fukushima City	Watari Kindergarten, Fukushima	11:24	2.4	2.8	1.5	1.5	0.9	0.8	0.6	0.6		Fair
48	Fukushima City	Kodomo no Ie Soramame	12:07	0.8	0.8	1.2	1.1	0.9	0.8	0.7	0.5	Measured 2 classrooms only	Fair
49	Fukushima City	Watari Junior High School, Fukushima	12:43	2.9	3.1	0.9	0.9	0.6	0.5	0.2	0.2	Measured classroom and gymnasium	Fair
50	Fukushima City	Watari Kindergarten, Fukushima	14:03	2.8	3.0	1.7	1.8	0.9	0.7	0.6	0.5		Fair
51	Fukushima City	Sakura Preschool	14:53	2.1	2.2	1.2	1.3	0.3	0.2	0.1	0.1	Measured 2 classrooms only	Fair
52	Fukushima City	Watari Elementary School, Fukushima	15:28	2.8	2.7	2.0	1.9	0.2	0.1	0.1	0.1		Fair
53	Fukushima City	Toryo High School	11:20	2.7	2.8	1.3	1.3	0.3	0.2	0.2	0.2		Fair
54	Fukushima City	Seikei High School	14:54	2.7	2.8	1.5	1.6	0.2	0.1	0.1	0.1		Fair
55	Fukushima City	Tachibana High School	15:19	2.6	2.8	1.6	1.6	0.5	0.4	0.2	0.2		Fair
56	Date City	Ryouzen Kodomonomura Jidoukan	15:24	3.3	3.7	2.9	3.2	0.7	0.6	0.6	0.5	For inside building, measured inside museum	Fair

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

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

*: The average value inside classroom is the arbitrary measurement result of 3 classrooms.

Measurement Value Inside the School Building When the Window was Open/Closed

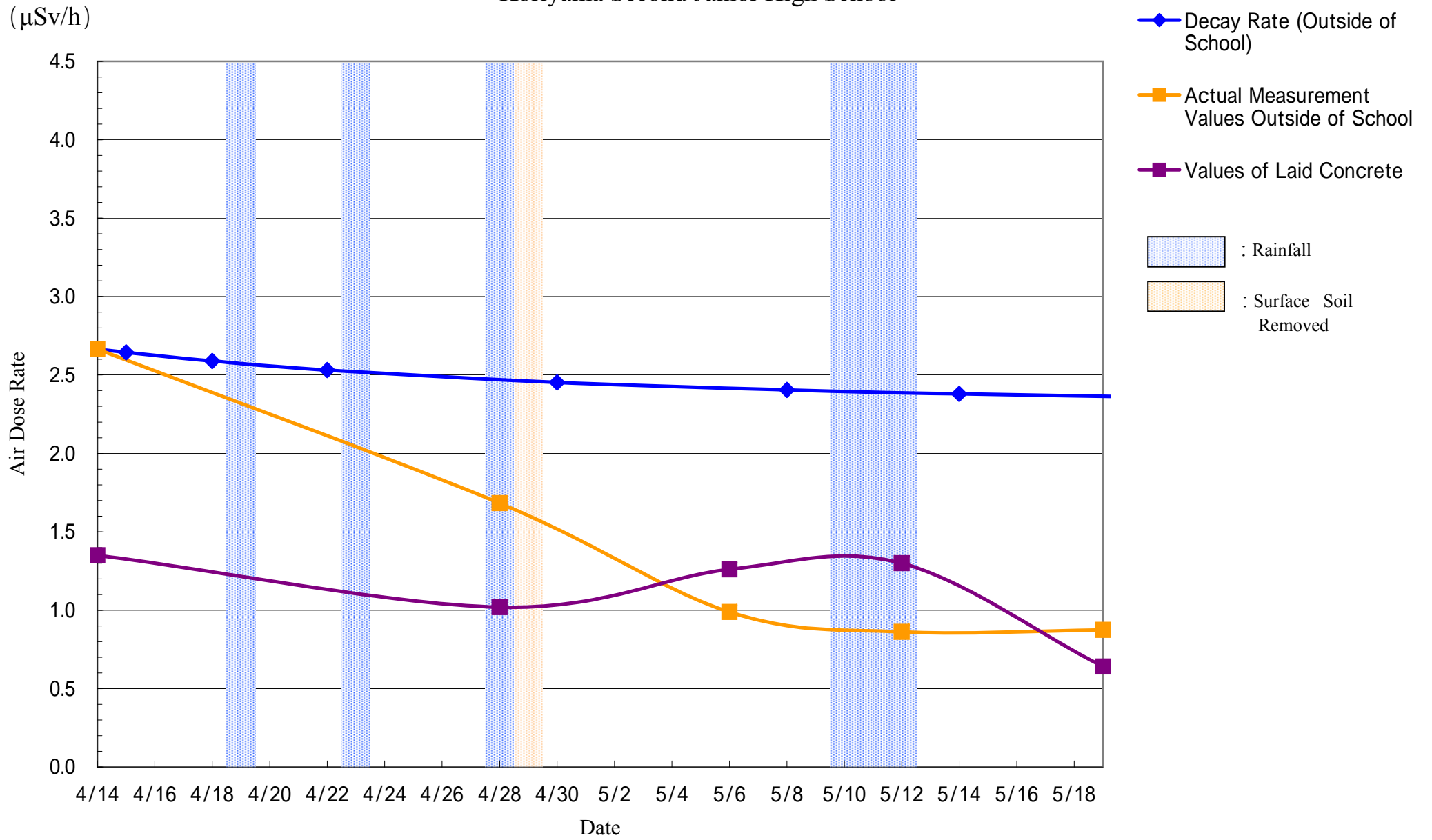
Survey date: May 19, 2011

No.	Location	Name of school surveyed	Average value inside the school building				Total average value inside the school building	
			Near-window		Classroom center		1m	50cm
			1m	50cm	1m	50cm		
6	Motomiya City	Gohyakugawa Elementary School, Motomiya	0.3	0.2	0.2	0.2	0.3	0.2
6	Motomiya City	Gohyakugawa Elementary School, Motomiya (Open window)	0.3	0.2	0.2	0.2	0.3	0.2
21	Fukushima City	Onami Elementary School, Fukushima	0.4	0.3	0.3	0.3	0.3	0.3
21	Fukushima City	Onami Elementary School, Fukushima (Open window)	0.4	0.3	0.3	0.3	0.4	0.3
32	Fukushima City	Oyama Elementary School, Fukushima	0.4	0.2	0.1	0.1	0.3	0.2
32	Fukushima City	Oyama Elementary School, Fukushima (Open window)	0.4	0.2	0.1	0.1	0.3	0.2
35	Fukushima City	Fukushima Second Junior High School <small>(note)</small>	0.6	0.4	0.2	0.1	0.4	0.3
35	Fukushima City	Fukushima Second Junior High School (Open window)	0.6	0.4	0.2	0.1	0.4	0.3
37	Fukushima City	Fukushima University Attached Junior High School	0.6	0.5	0.1	0.1	0.4	0.3
37	Fukushima City	Fukushima University Attached Junior High School (Open window)	0.6	0.5	0.2	0.1	0.4	0.3
46	Fukushima City	Fukushima Kenritsu Mo-gakko	0.4	0.3	0.2	0.2	0.3	0.3
46	Fukushima City	Fukushima Kenritsu Mo-gakko (Open window)	0.4	0.3	0.2	0.2	0.3	0.3
49	Fukushima City	Watari Junior High School, Fukushima	0.6	0.5	0.2	0.2	0.4	0.3
49	Fukushima City	Watari Junior High School, Fukushima (Open window)	0.7	0.5	0.2	0.2	0.5	0.3
50	Fukushima City	Watari Kindergarten, Fukushima	0.9	0.7	0.6	0.5	0.7	0.6
50	Fukushima City	Watari Kindergarten, Fukushima (Open window)	0.7	0.7	0.5	0.5	0.6	0.6
52	Fukushima City	Watari Elementary School, Fukushima	0.2	0.1	0.1	0.1	0.2	0.1
52	Fukushima City	Watari Elementary School, Fukushima (Open window)	0.3	0.2	0.1	0.1	0.2	0.1
55	Fukushima City	Tachibana High School	0.5	0.4	0.2	0.2	0.3	0.3
55	Fukushima City	Tachibana High School (Open window)	0.4	0.4	0.2	0.2	0.3	0.3

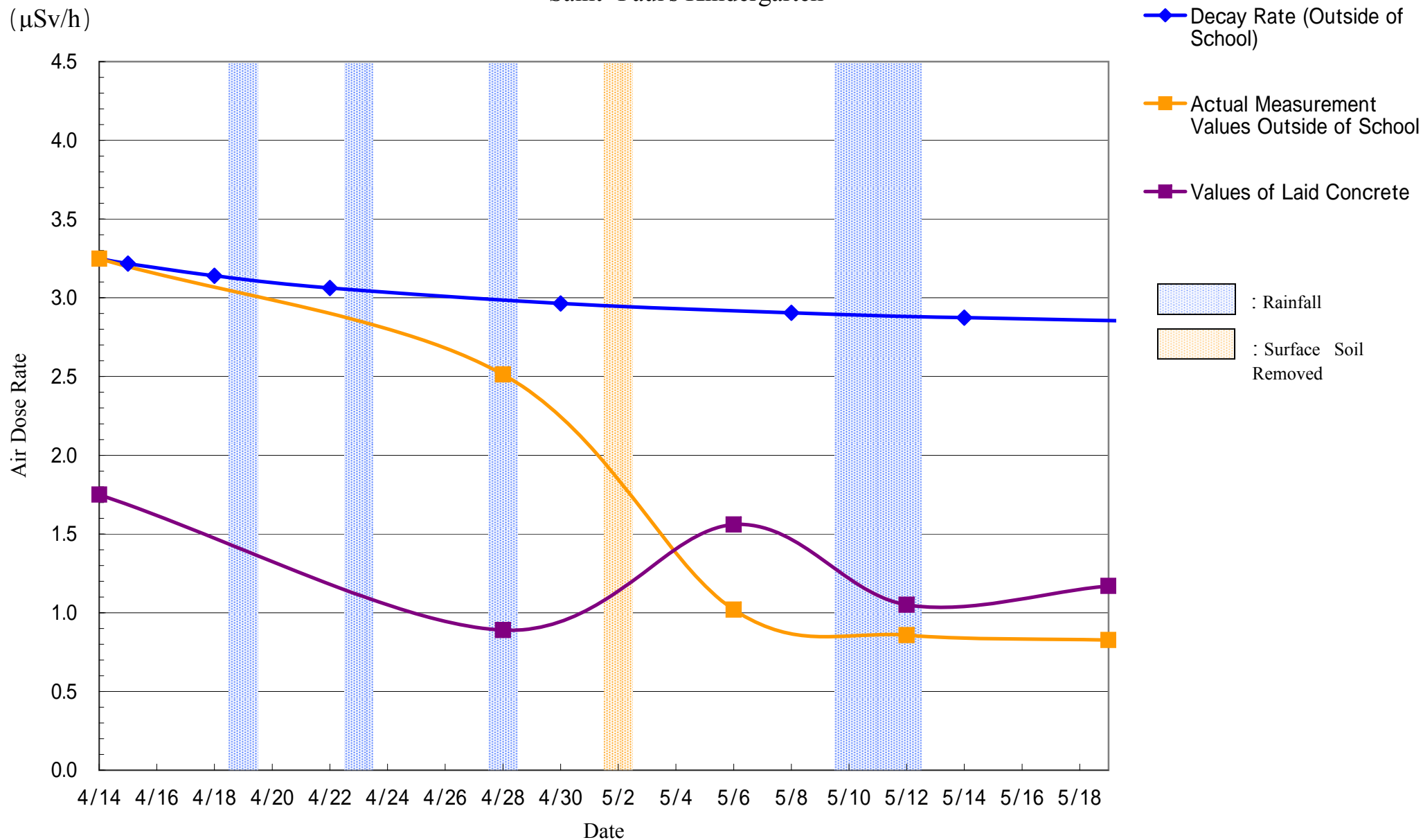
(Note) The data for closed windows is the data for the two classrooms where opening the window was possible, so the dose rate value is different from the value given in Report 1.

There was no time lapse between conducting measurement with closed windows and conducting measurements with open windows.

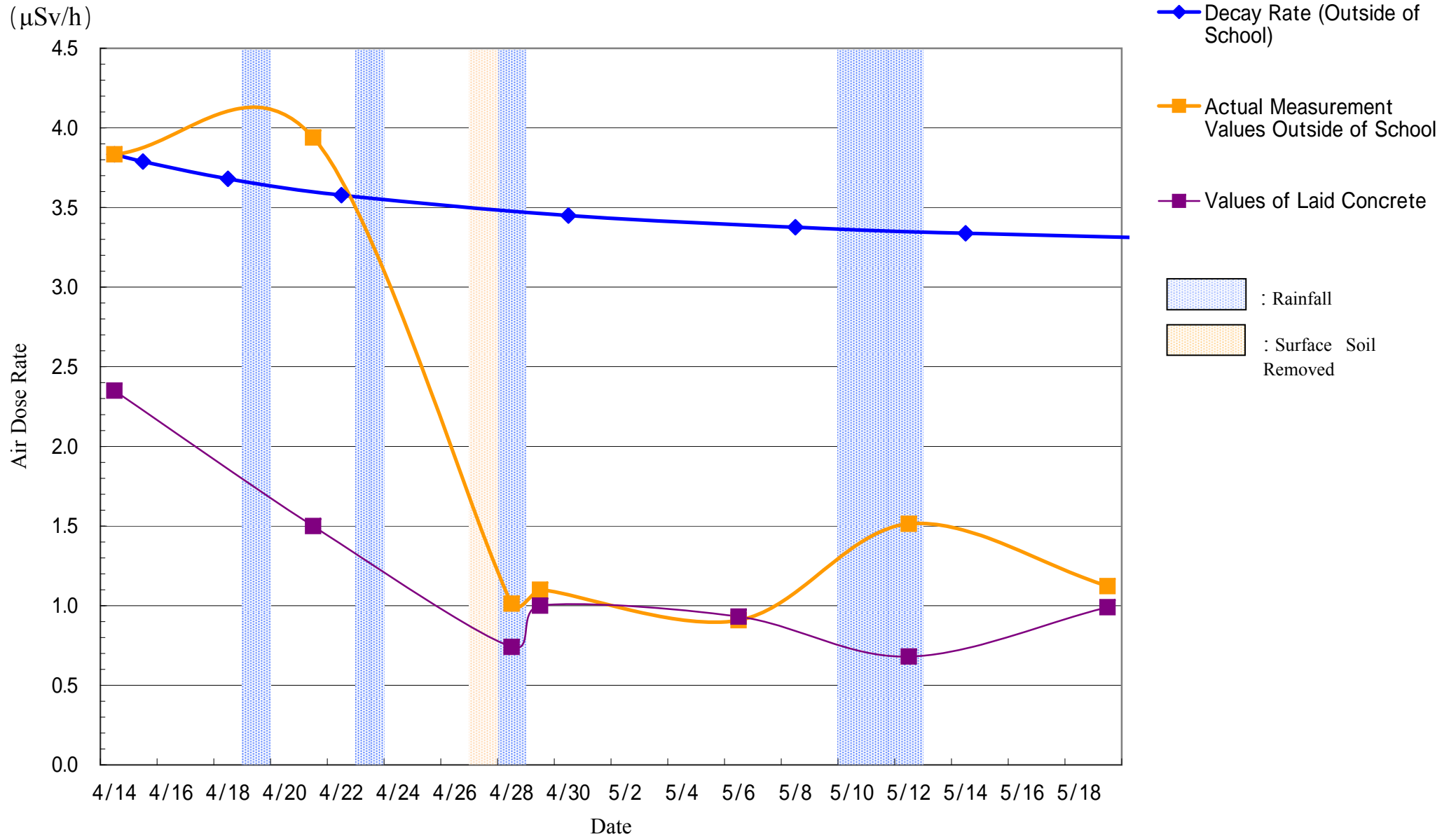
Koriyama Second Junior High School



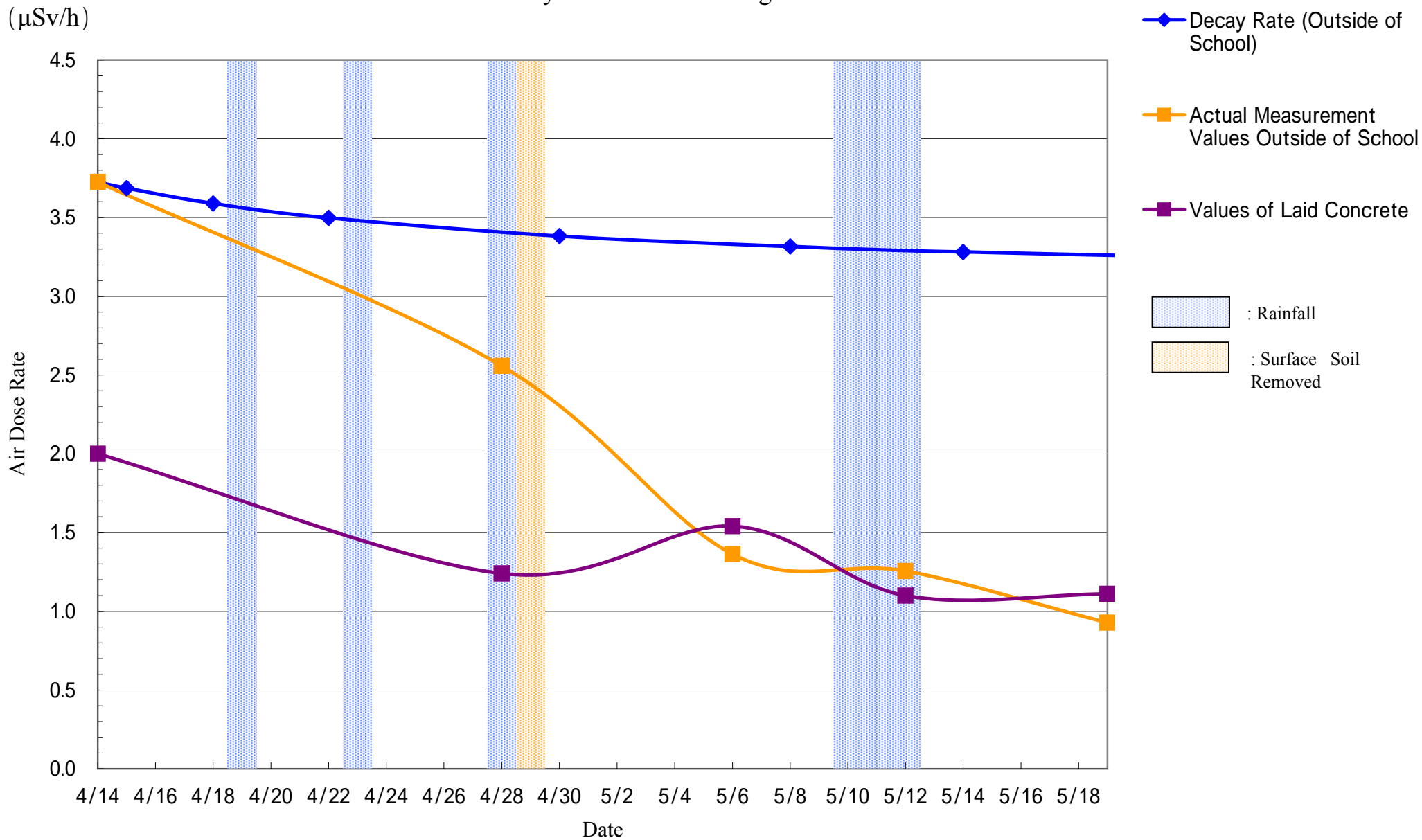
Saint- Paul's Kindergarten



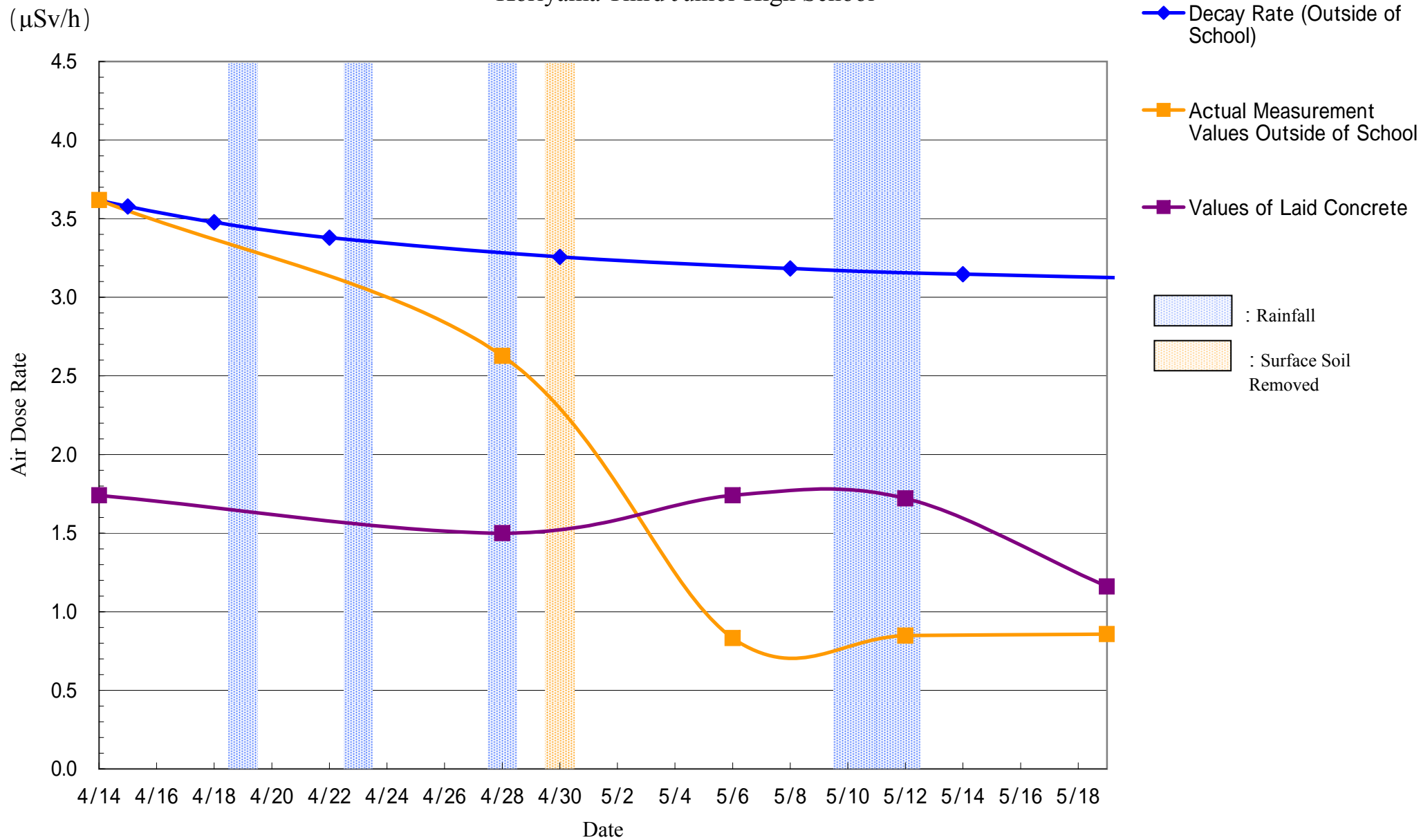
Kaoru Elementary School, Koriyama



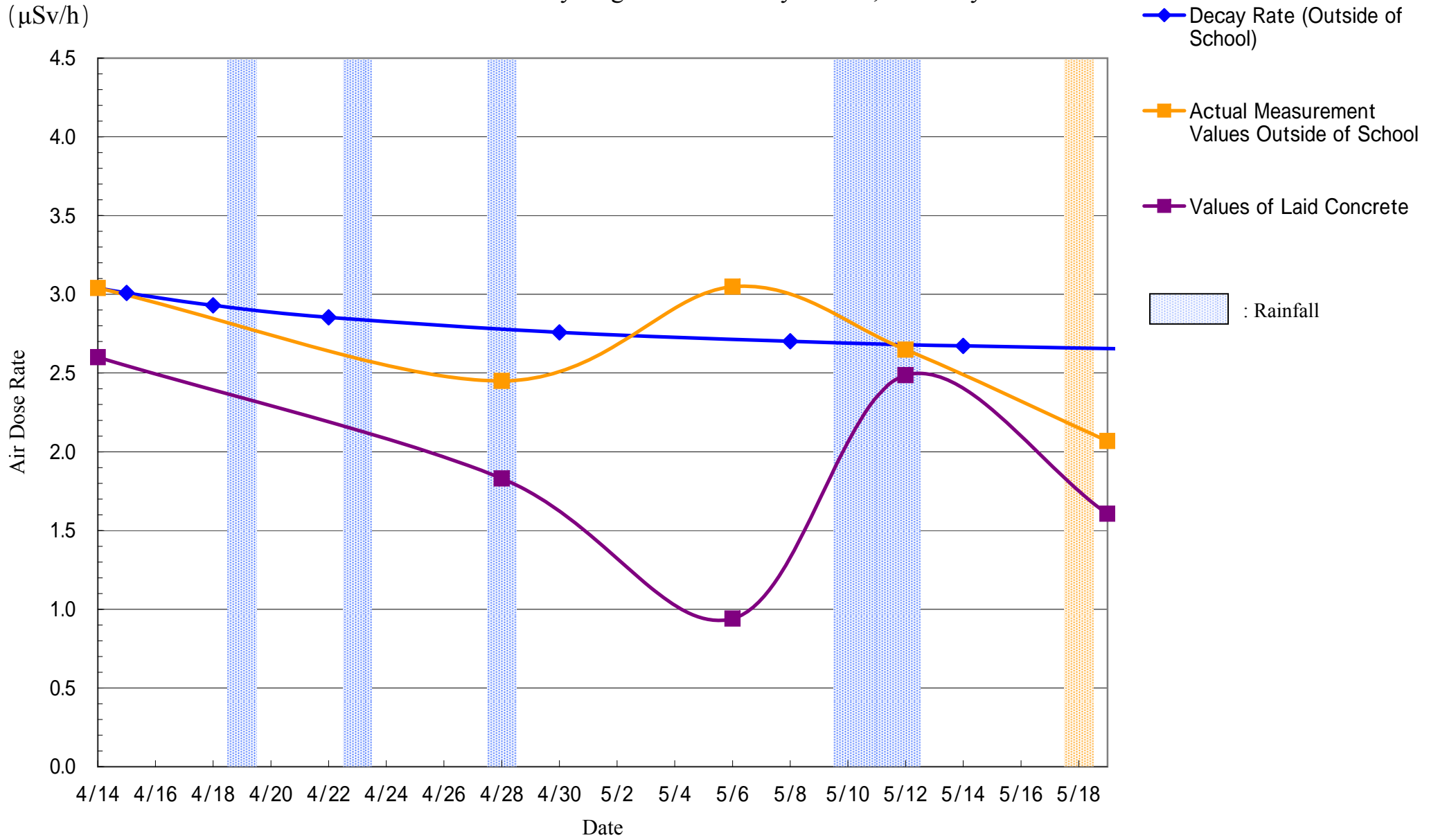
Koriyama First Junior High School



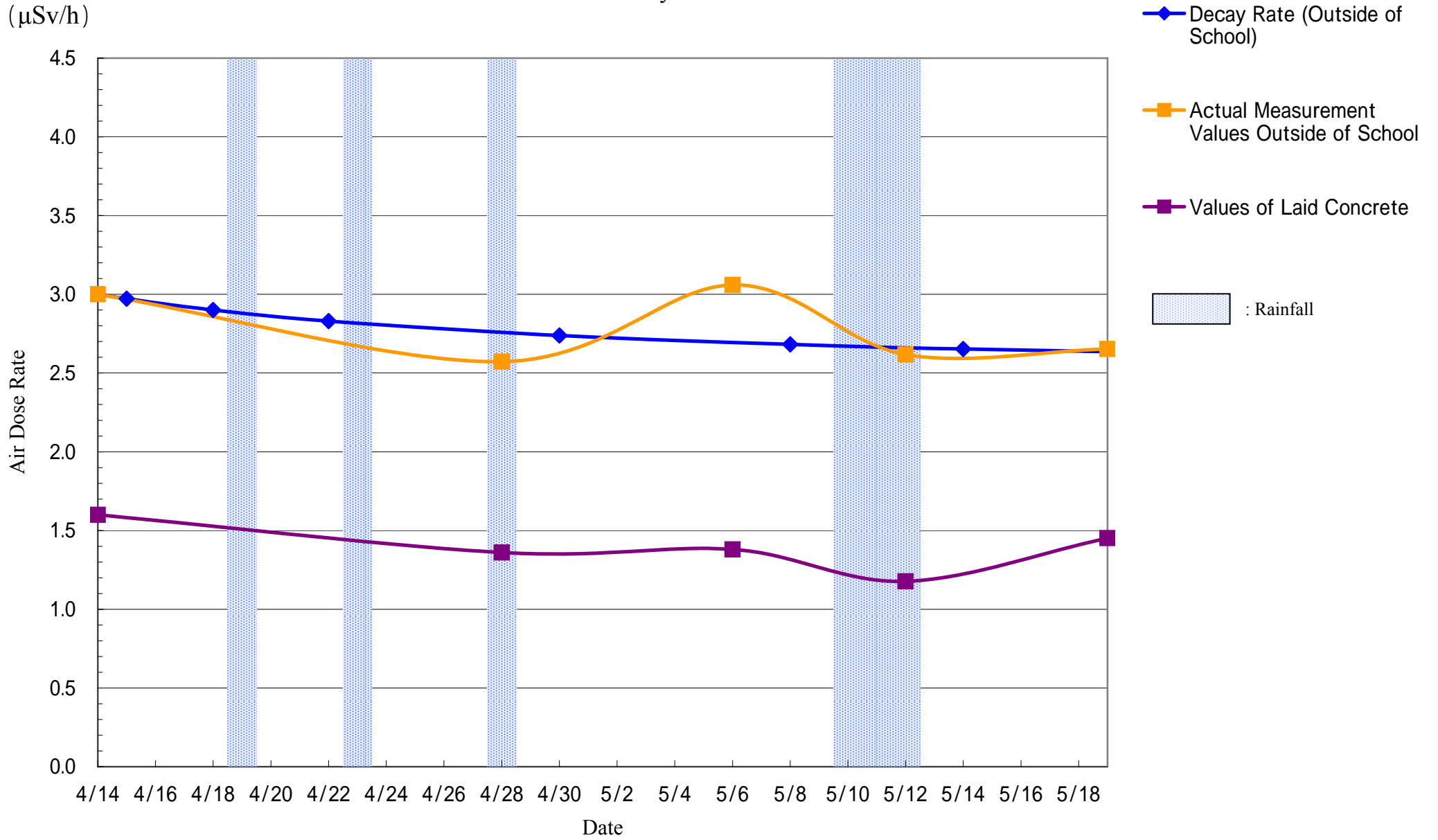
Koriyama Third Junior High School



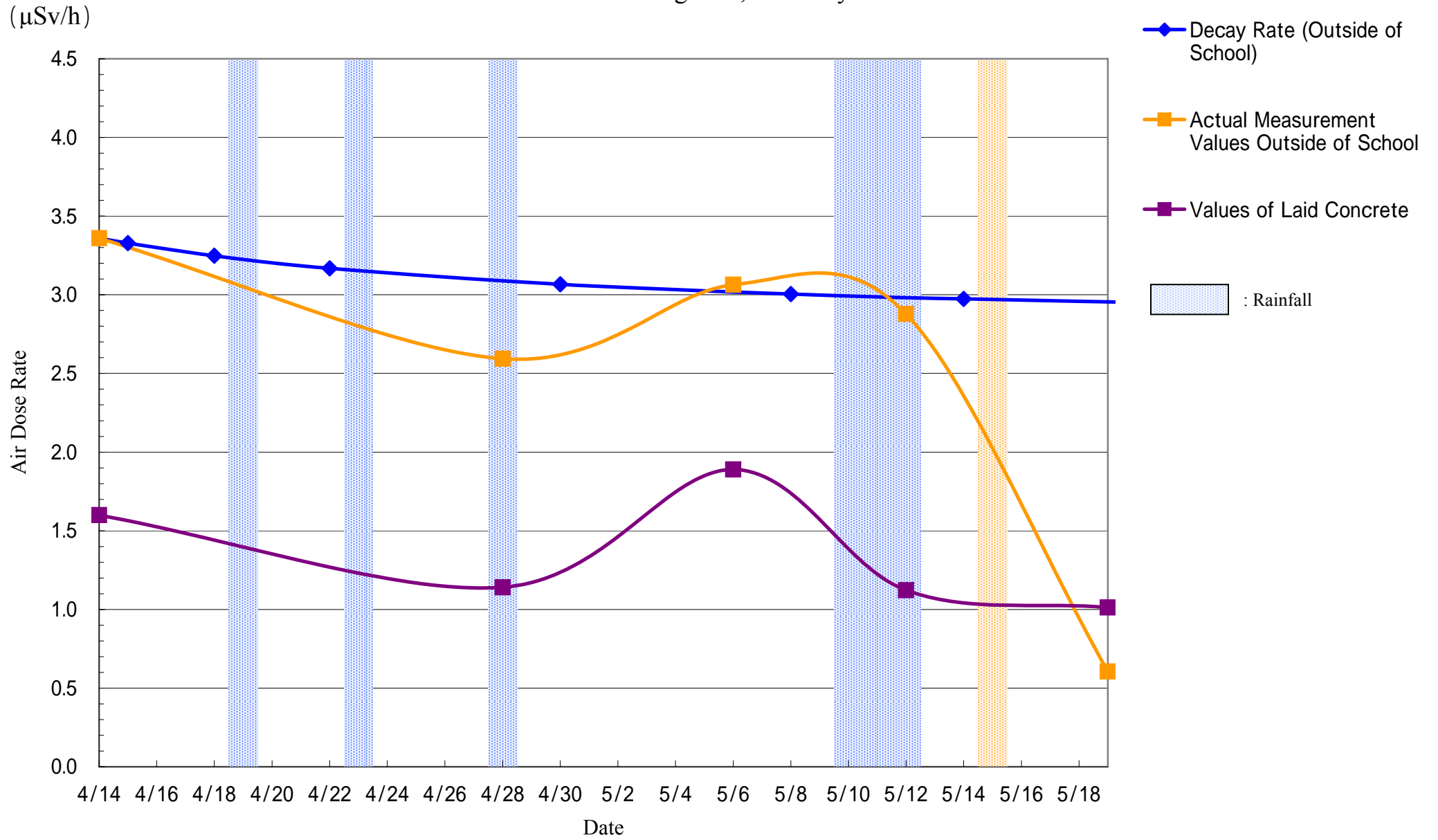
Gohyakugawa Elementary School, Motomiya



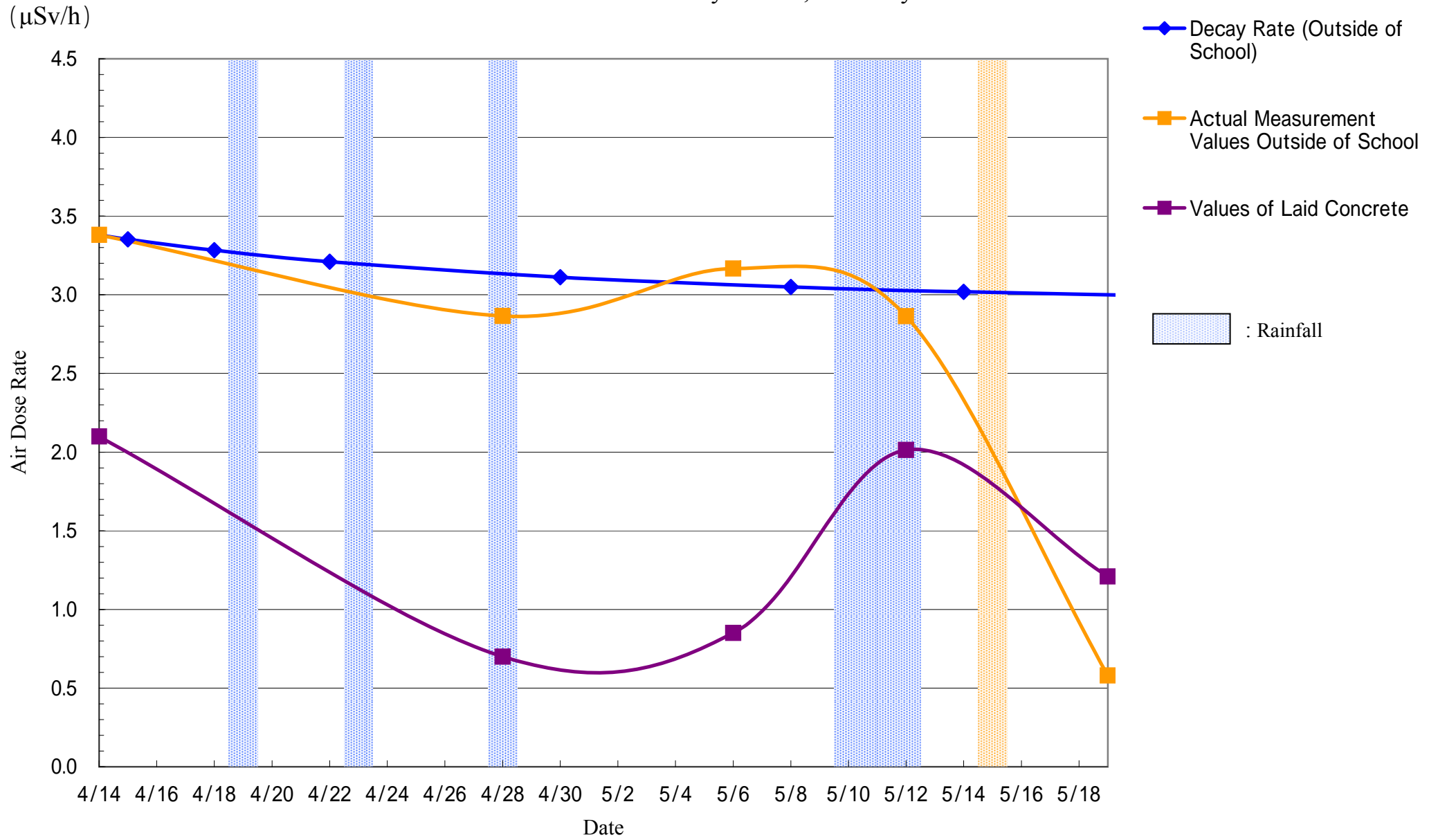
Motomiya 4th Preschool



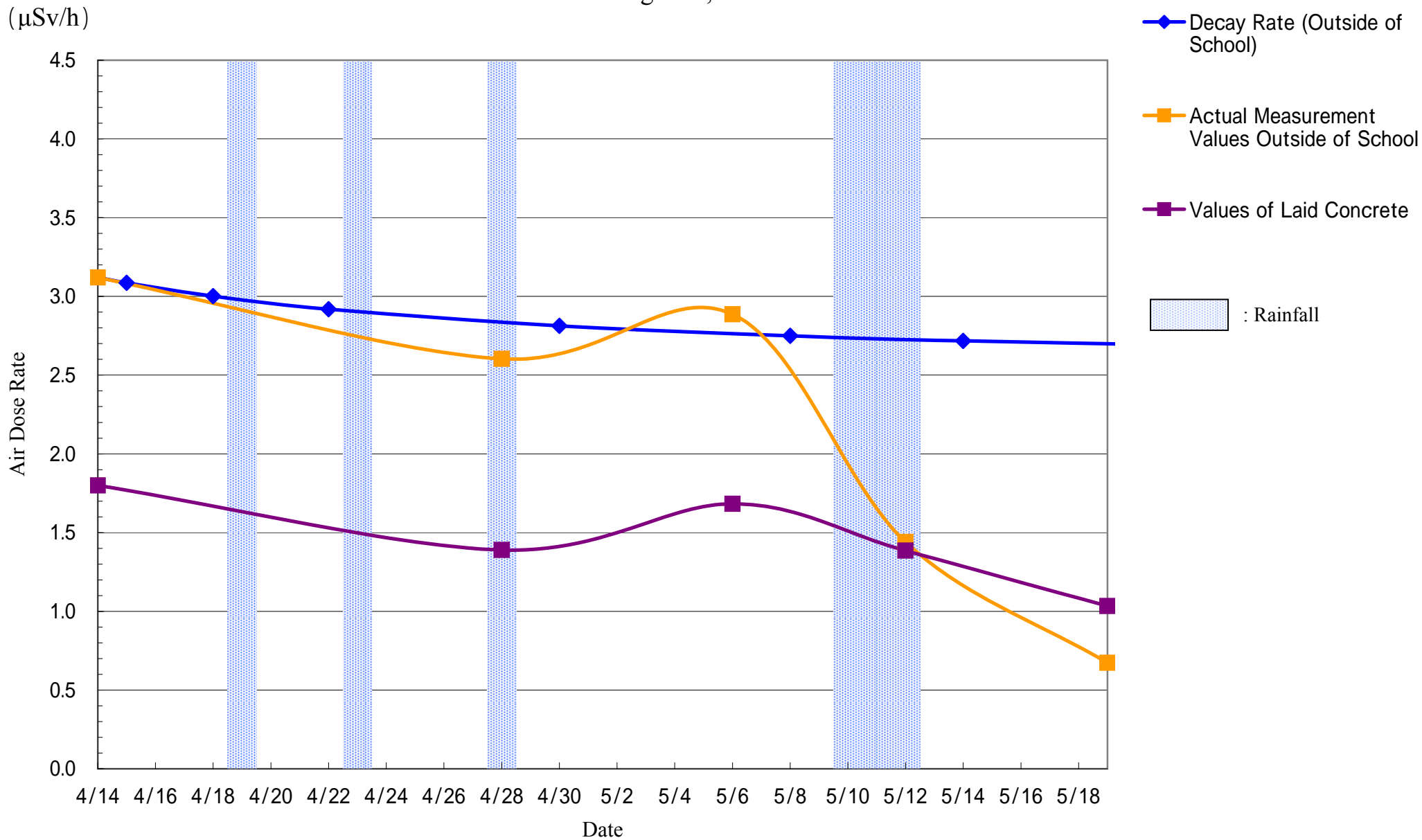
Wada Kindergarten, Motomiya



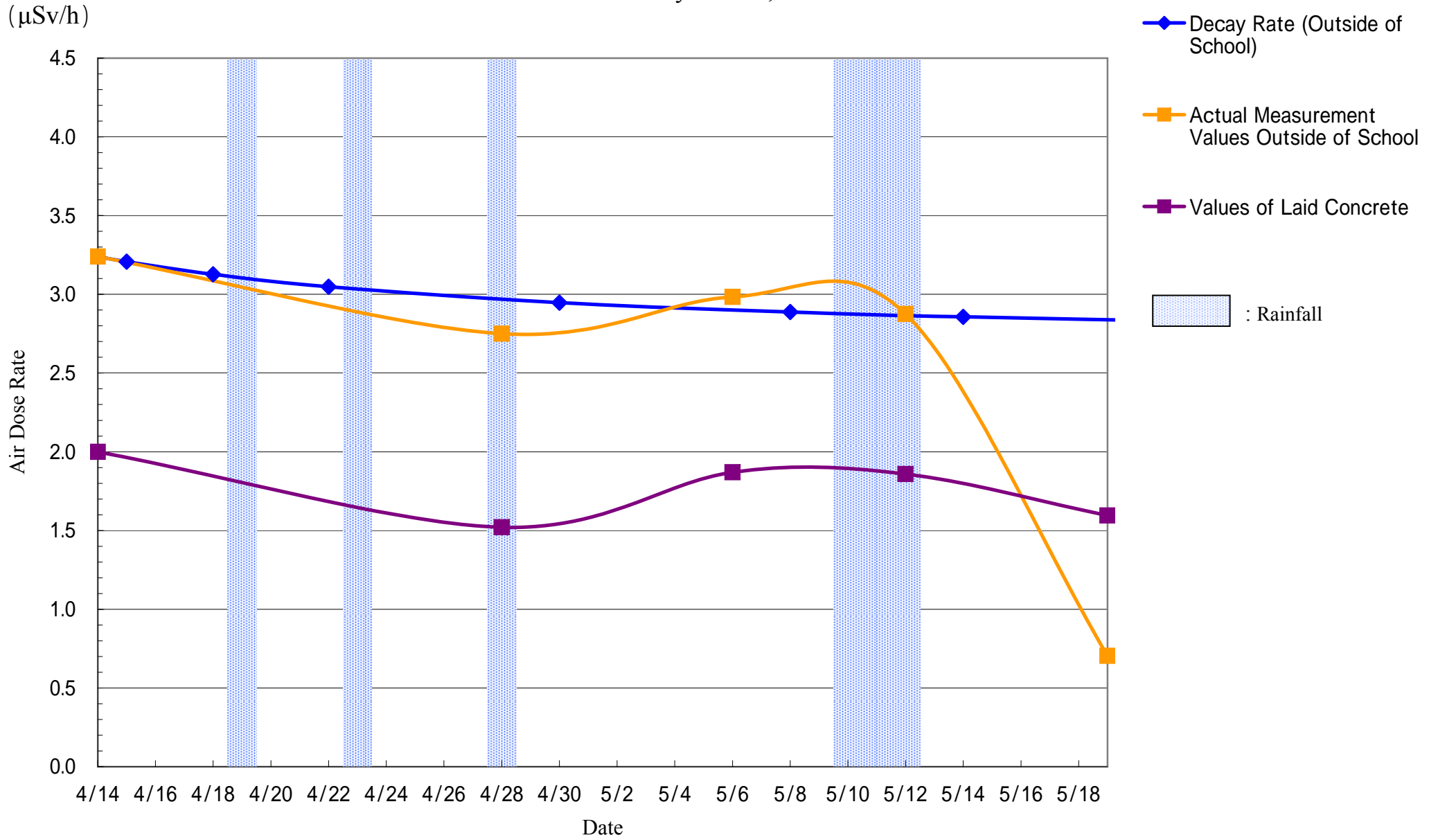
Wada Elementary School, Motomiya



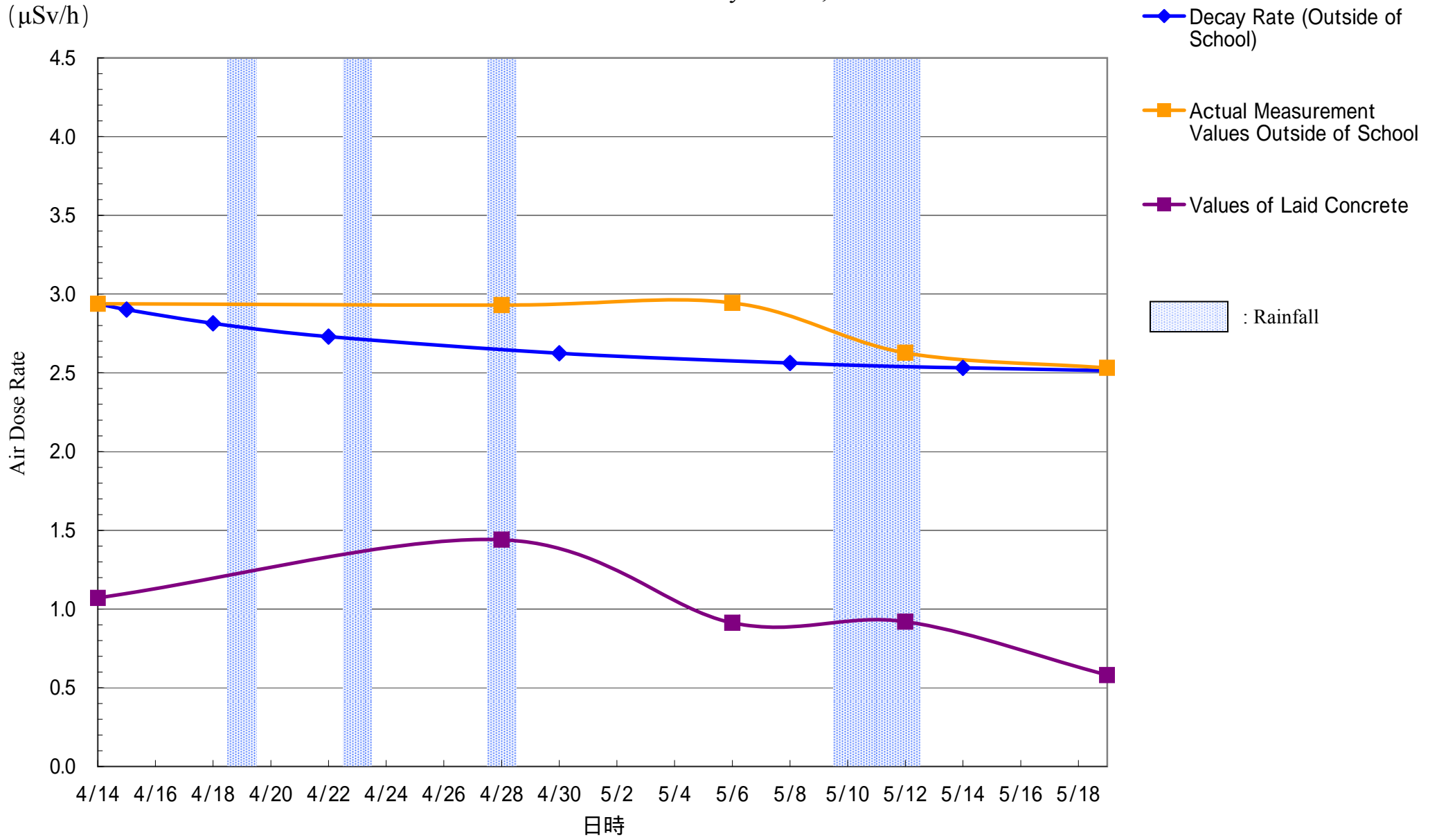
Ishii Kindergarten, Nihonmatsu



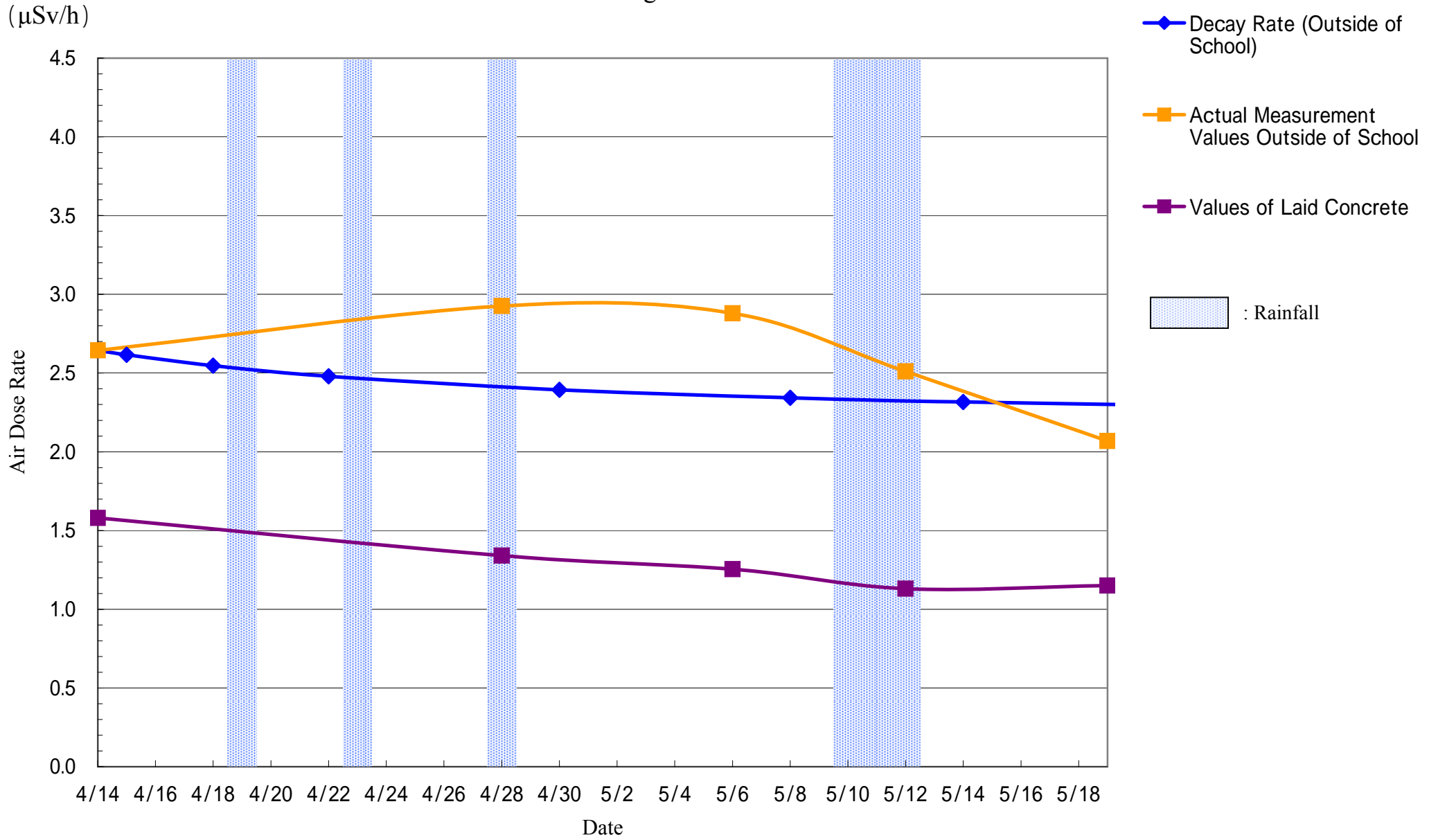
Ishii Elementary School, Nihonmatsu



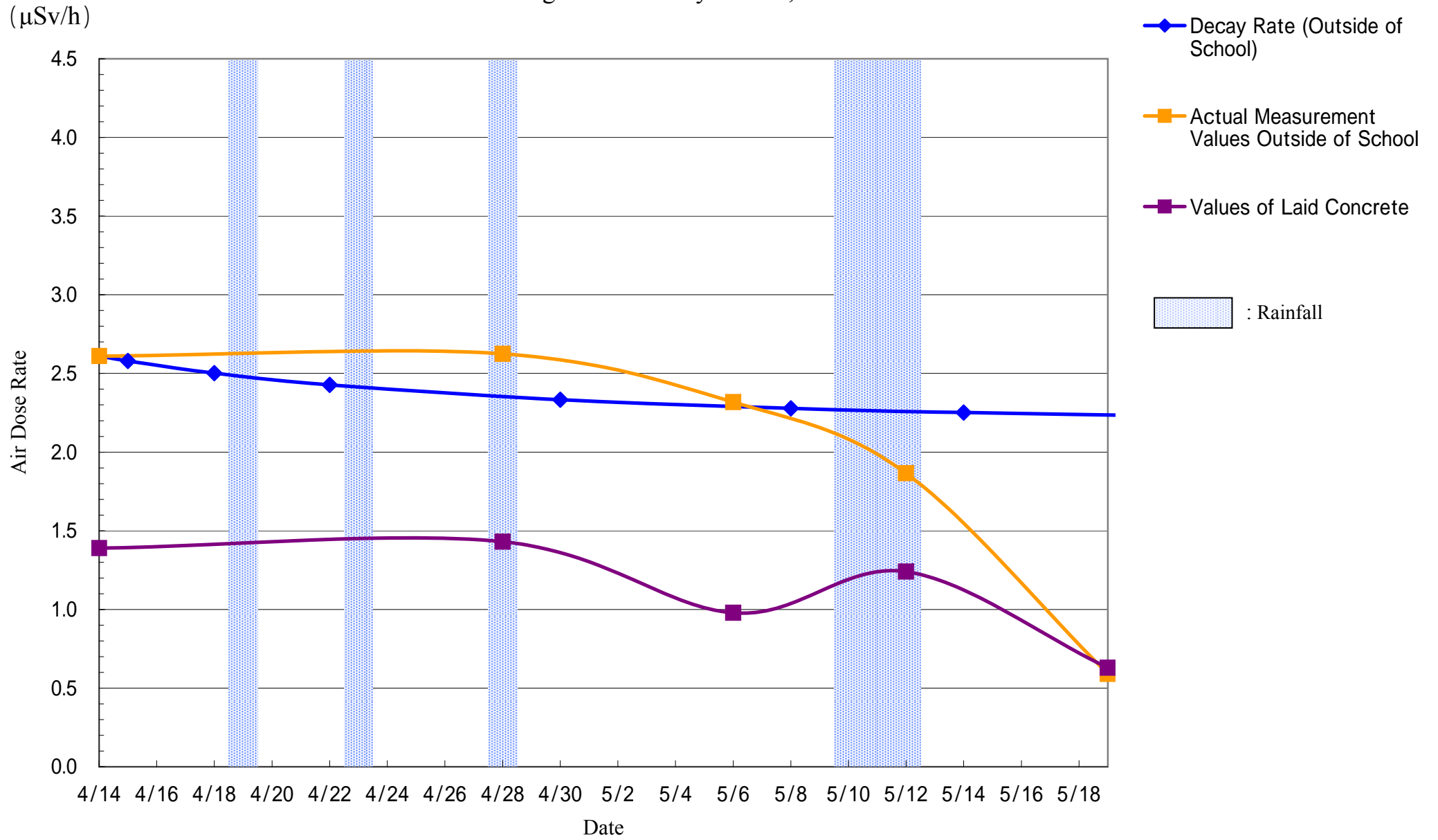
Takeshita Elementary School, Nihonmatsu



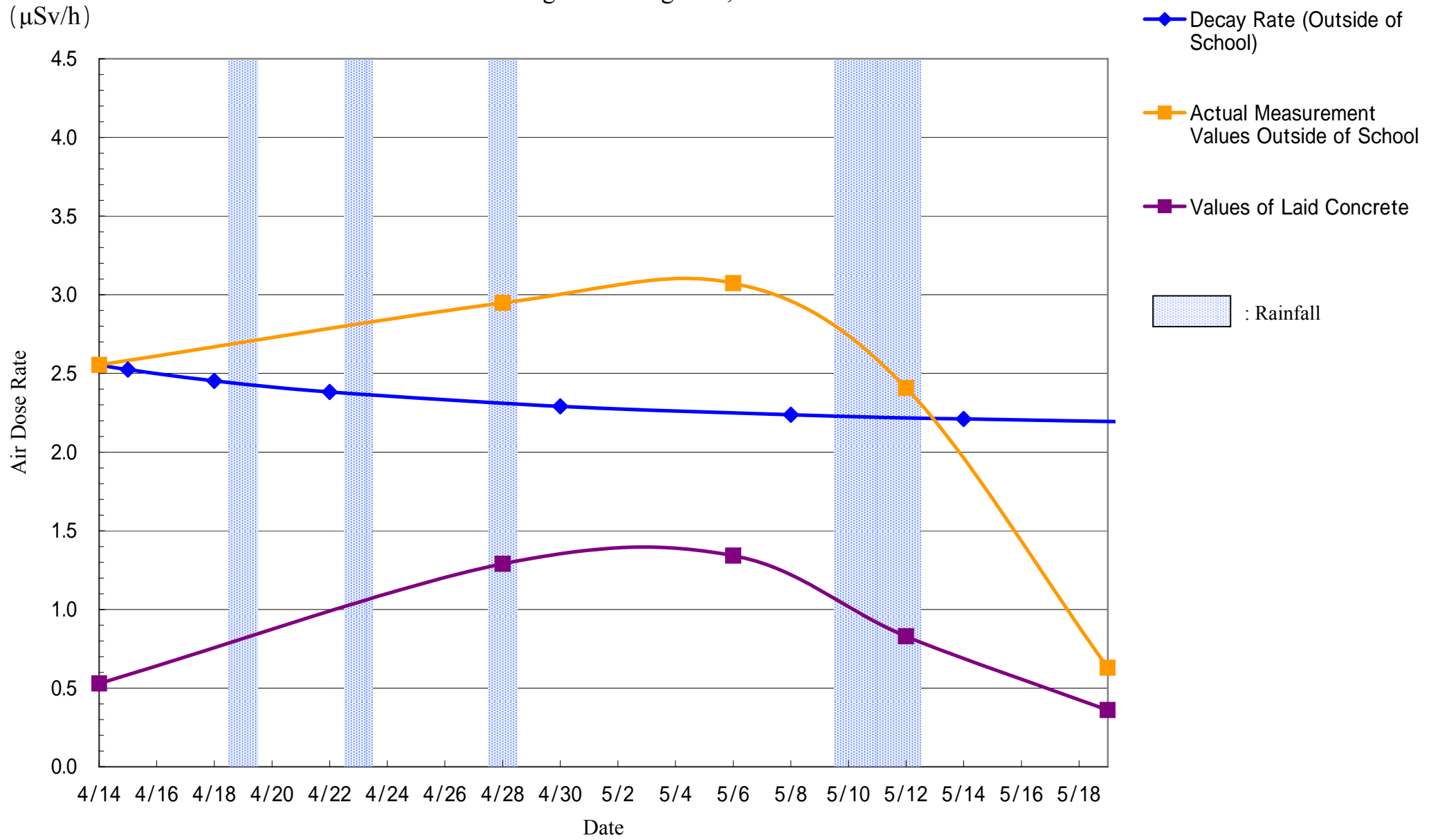
Matsugaoka Preschool



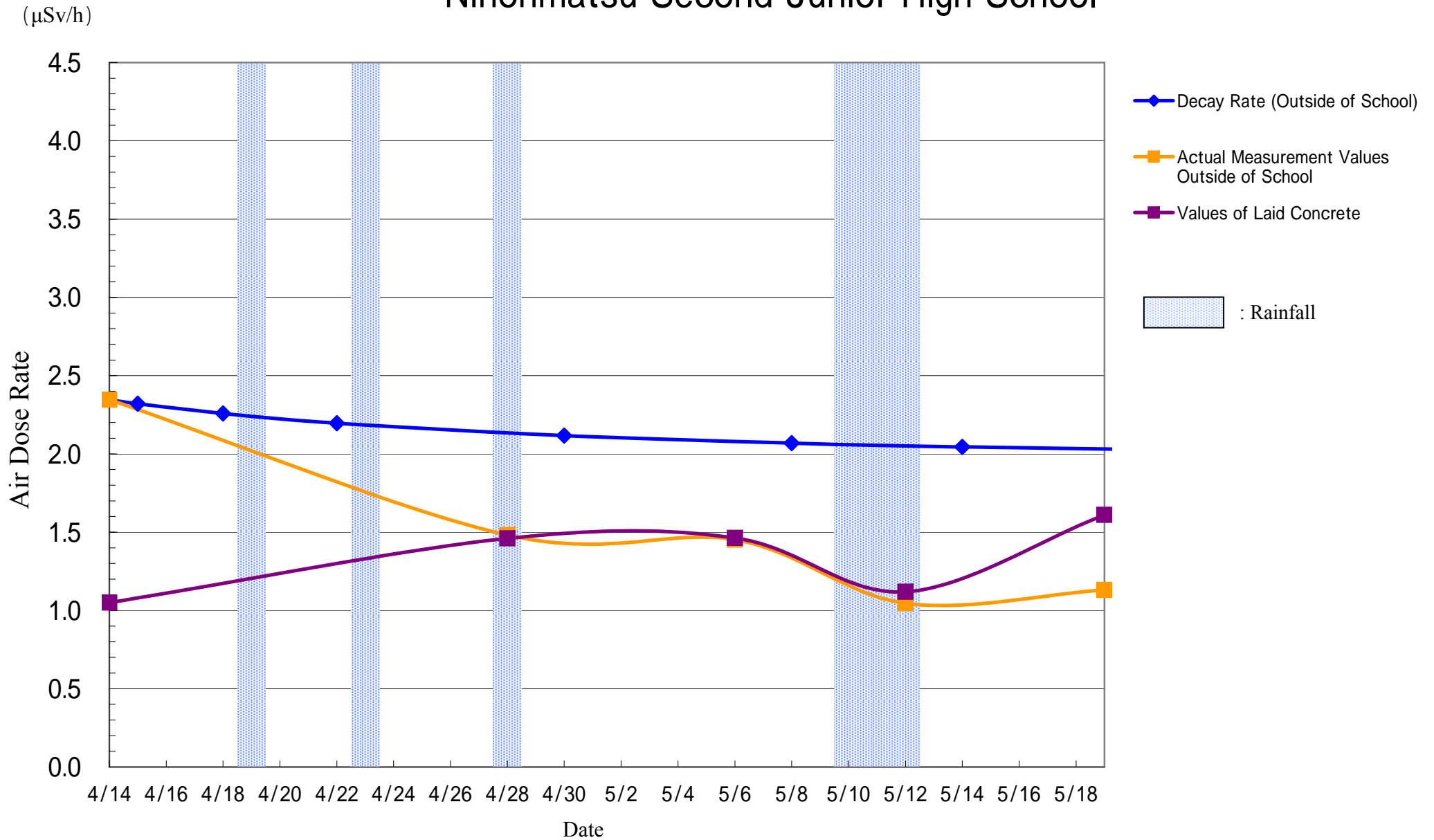
Sugita Elementary School, Nihonmatsu



Sugita Kindergarten, Nihonmatsu

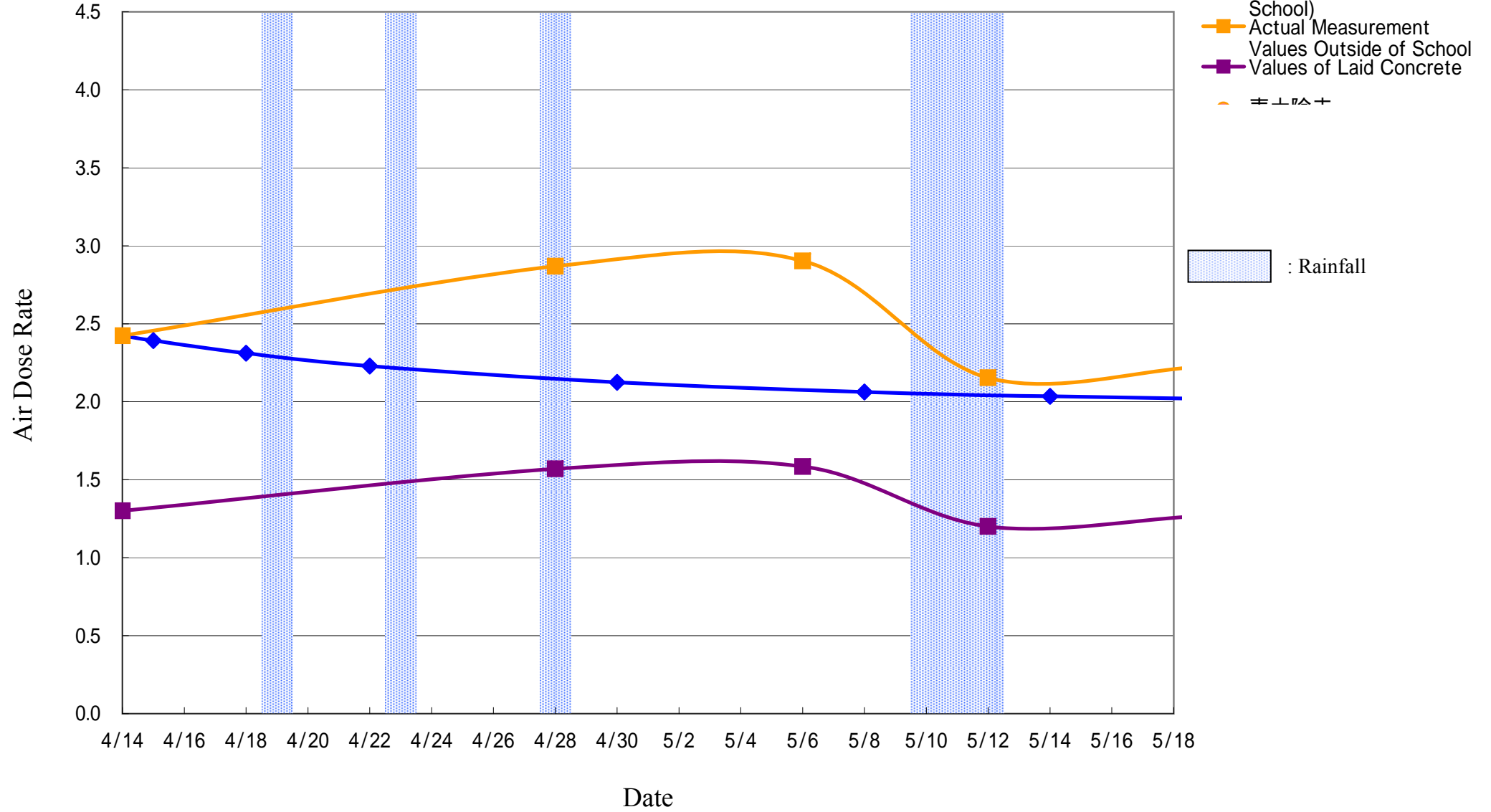


Nihonmatsu Second Junior High School



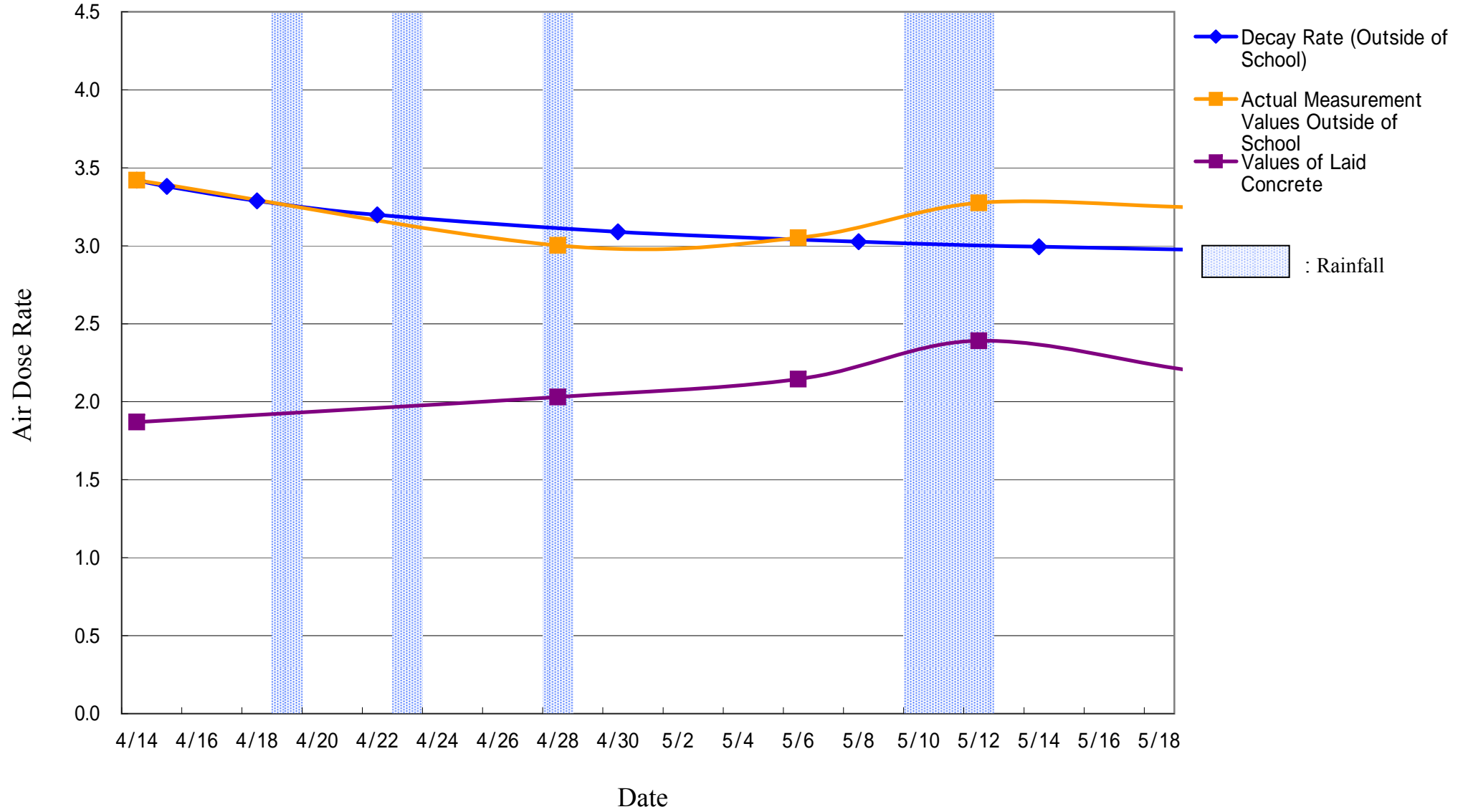
Obama Junior High School, Nihonmatsu

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

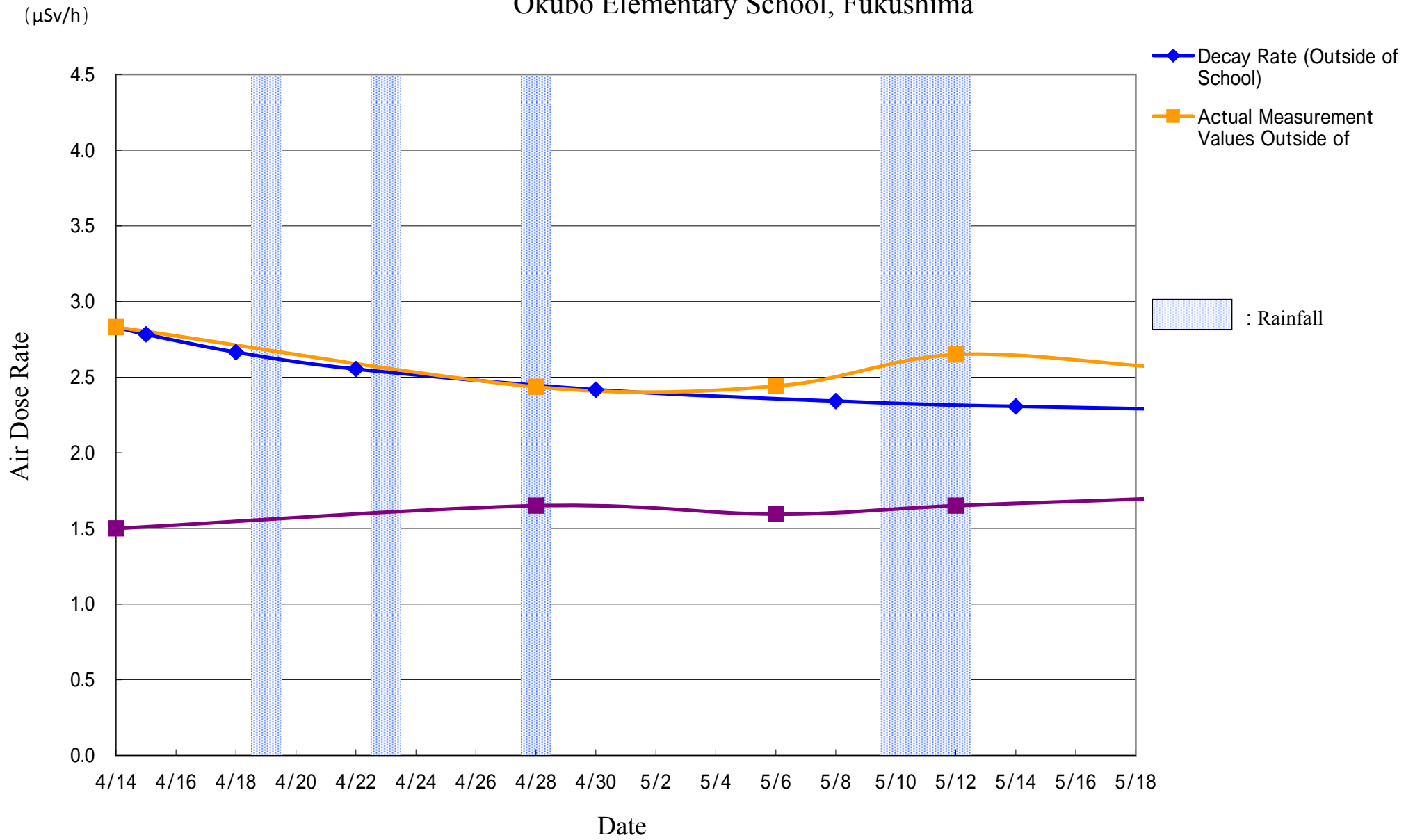


Shimogawasaki Elementary School, Fukushima

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

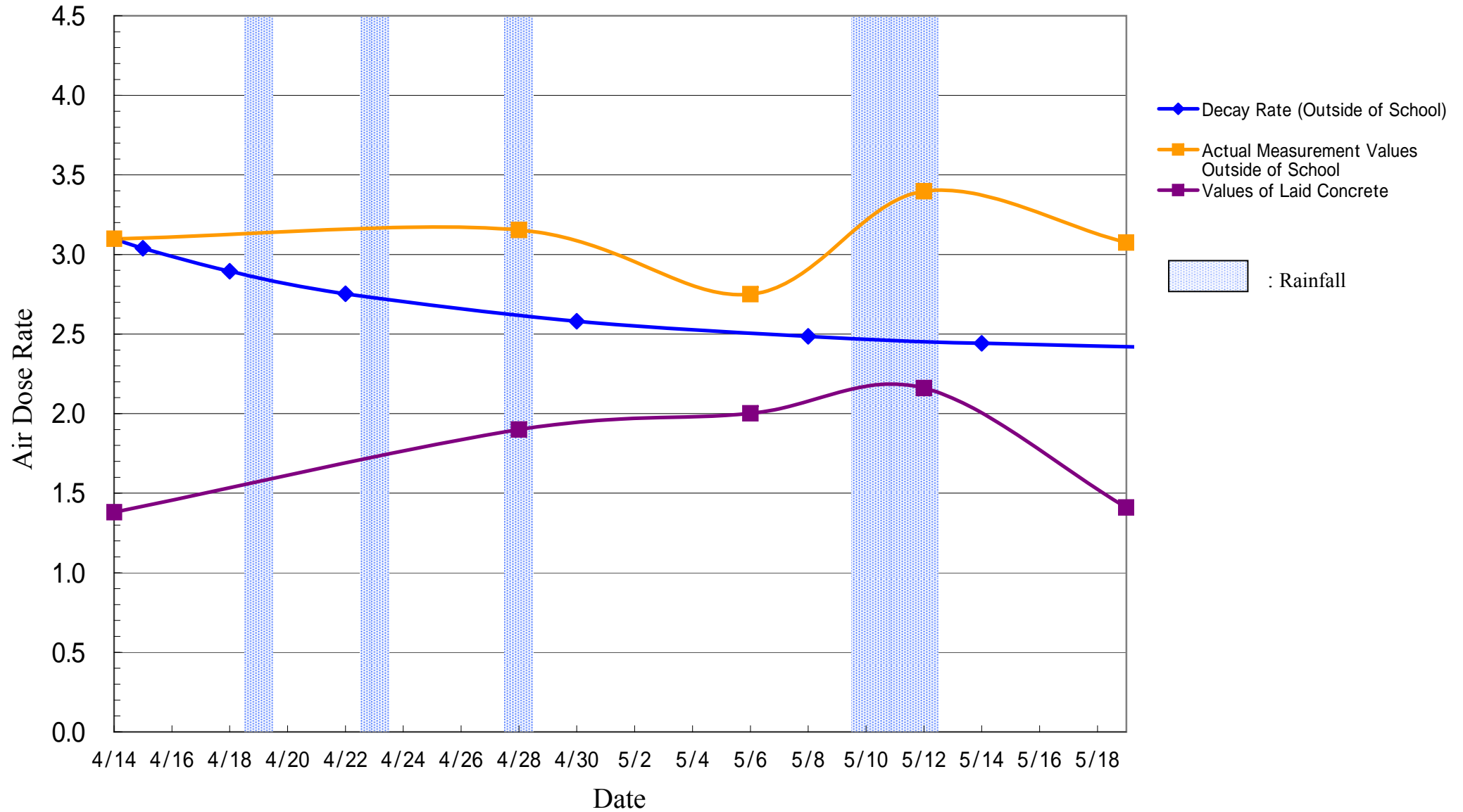


Okubo Elementary School, Fukushima



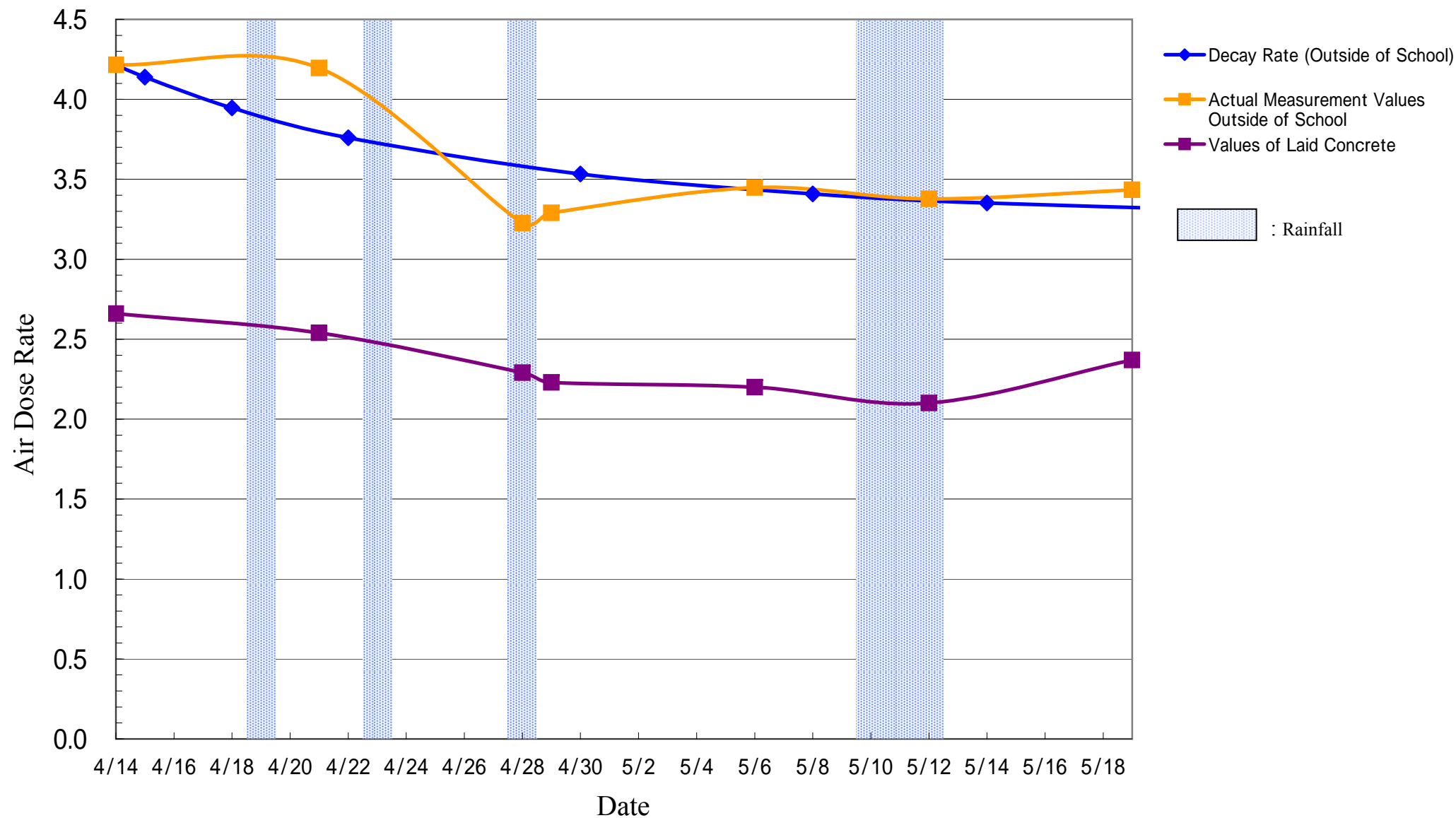
Nankoudai Elementary School, Fukushima

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



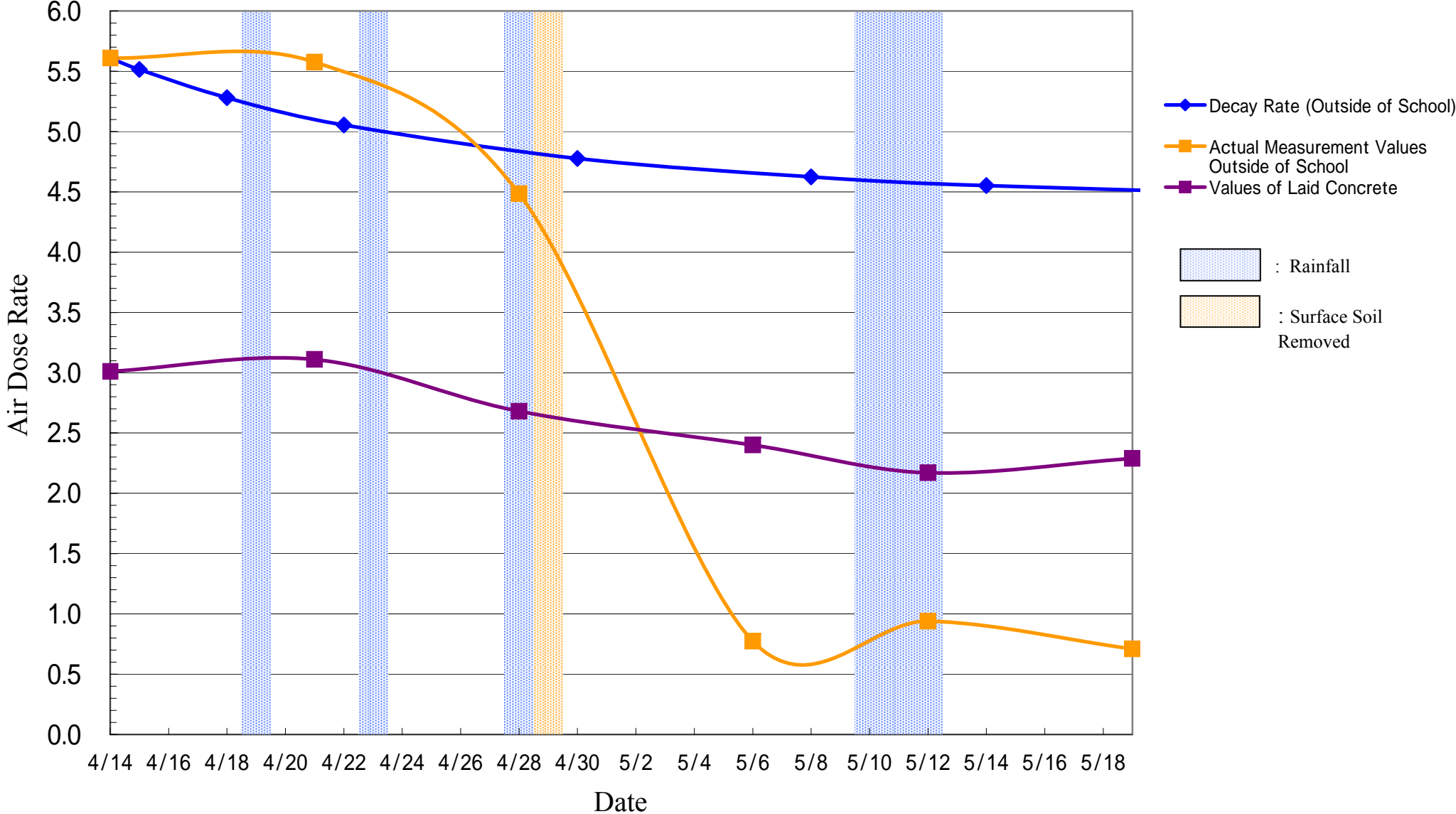
Onami Elementary School, Fukushima

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



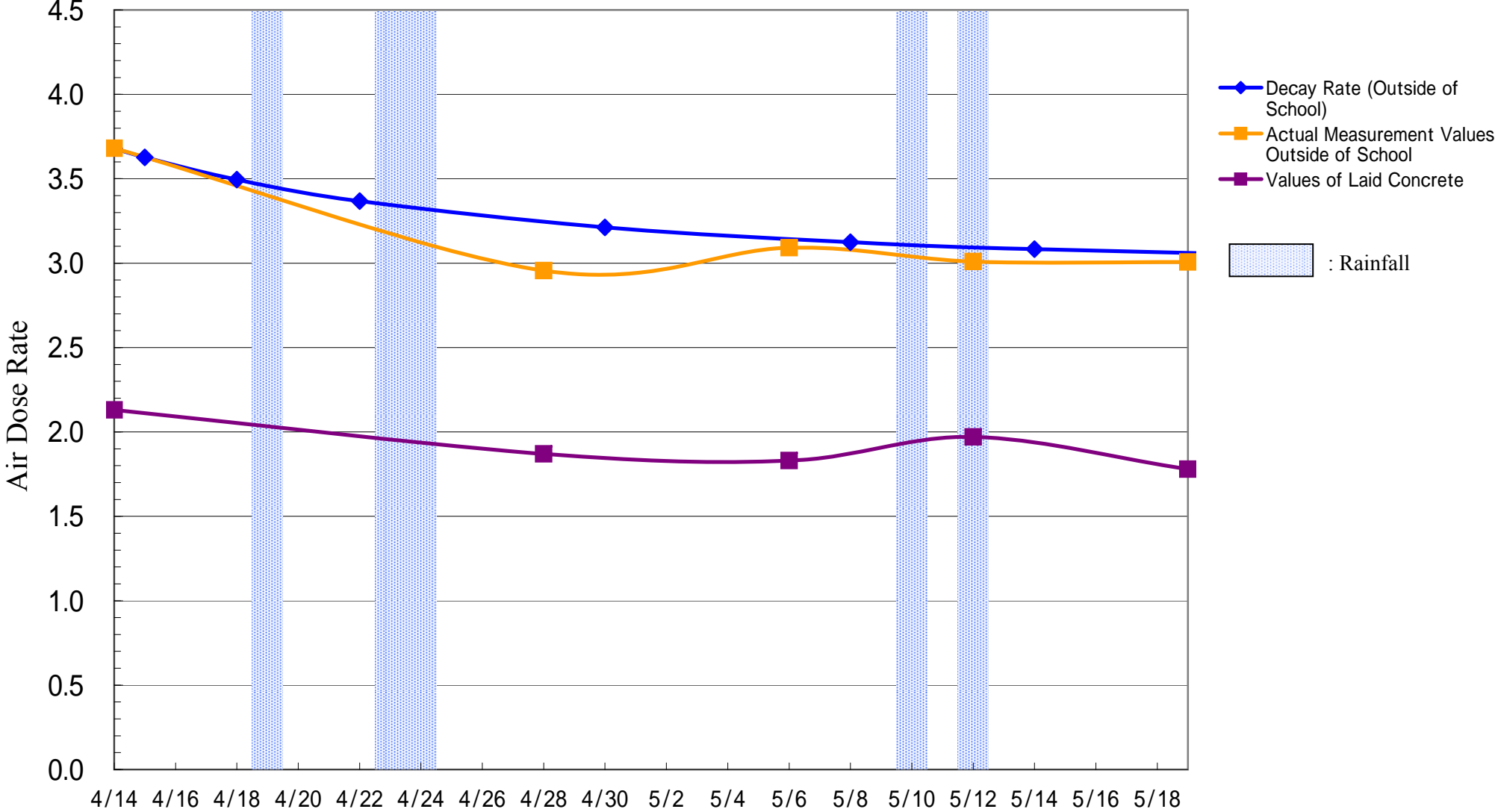
Oguni Elementary School, Date

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



Tamano kindergarten

(μ Sv/h)

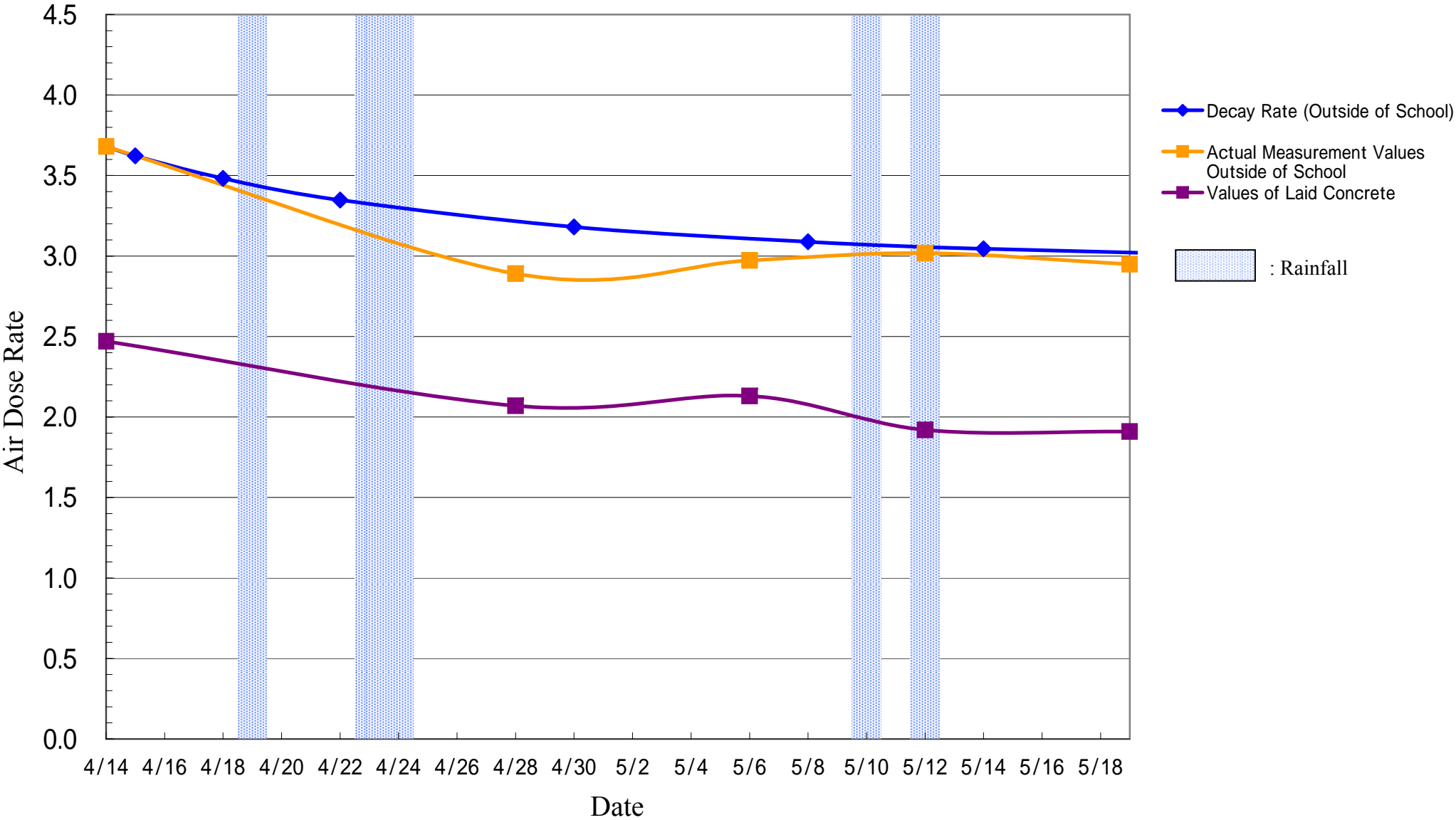


*Used the same value as Tamano elementary school for calculation, as the same school field is used

Date

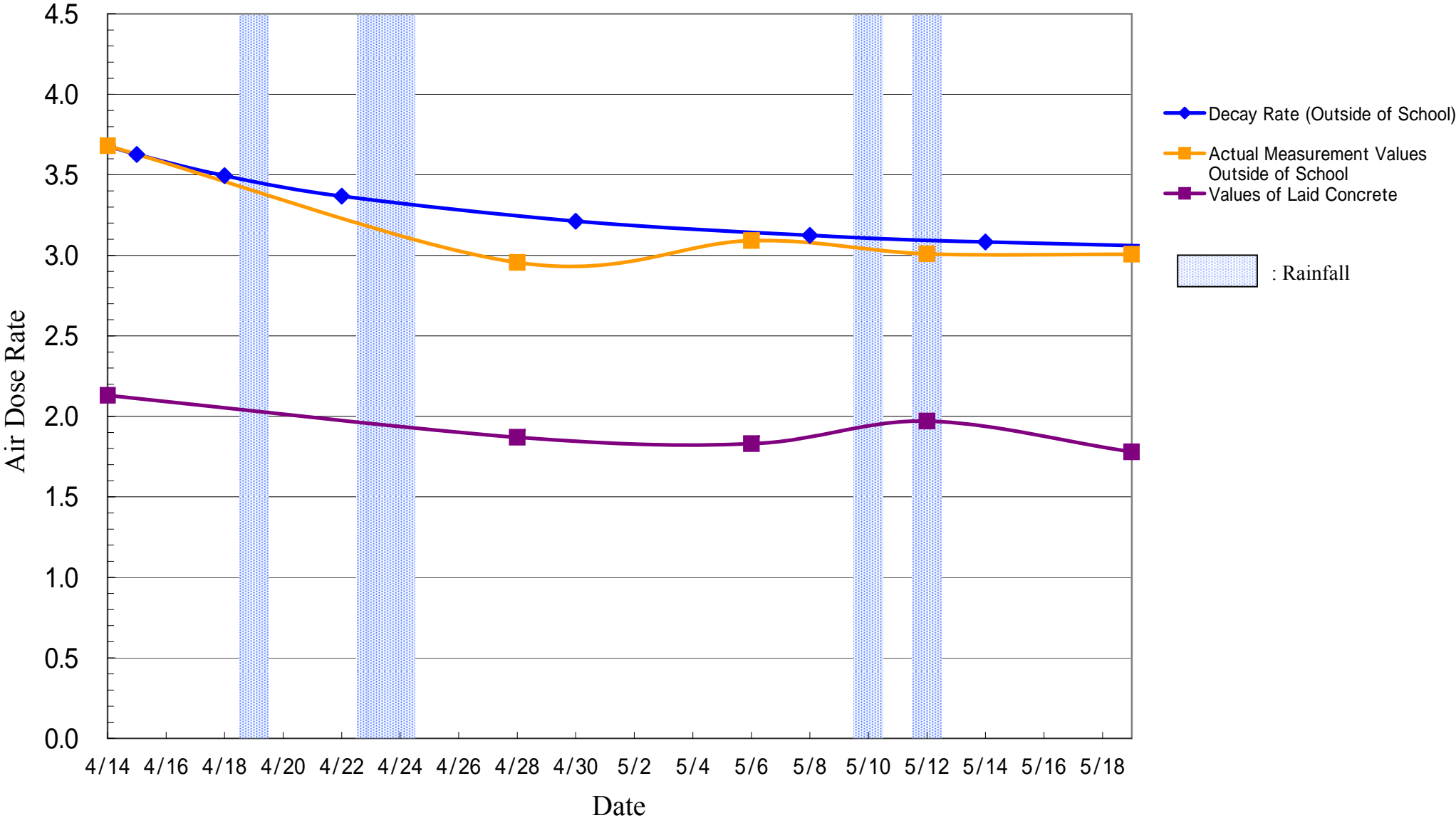
Tamano Junior High School

(μ Sv/h)



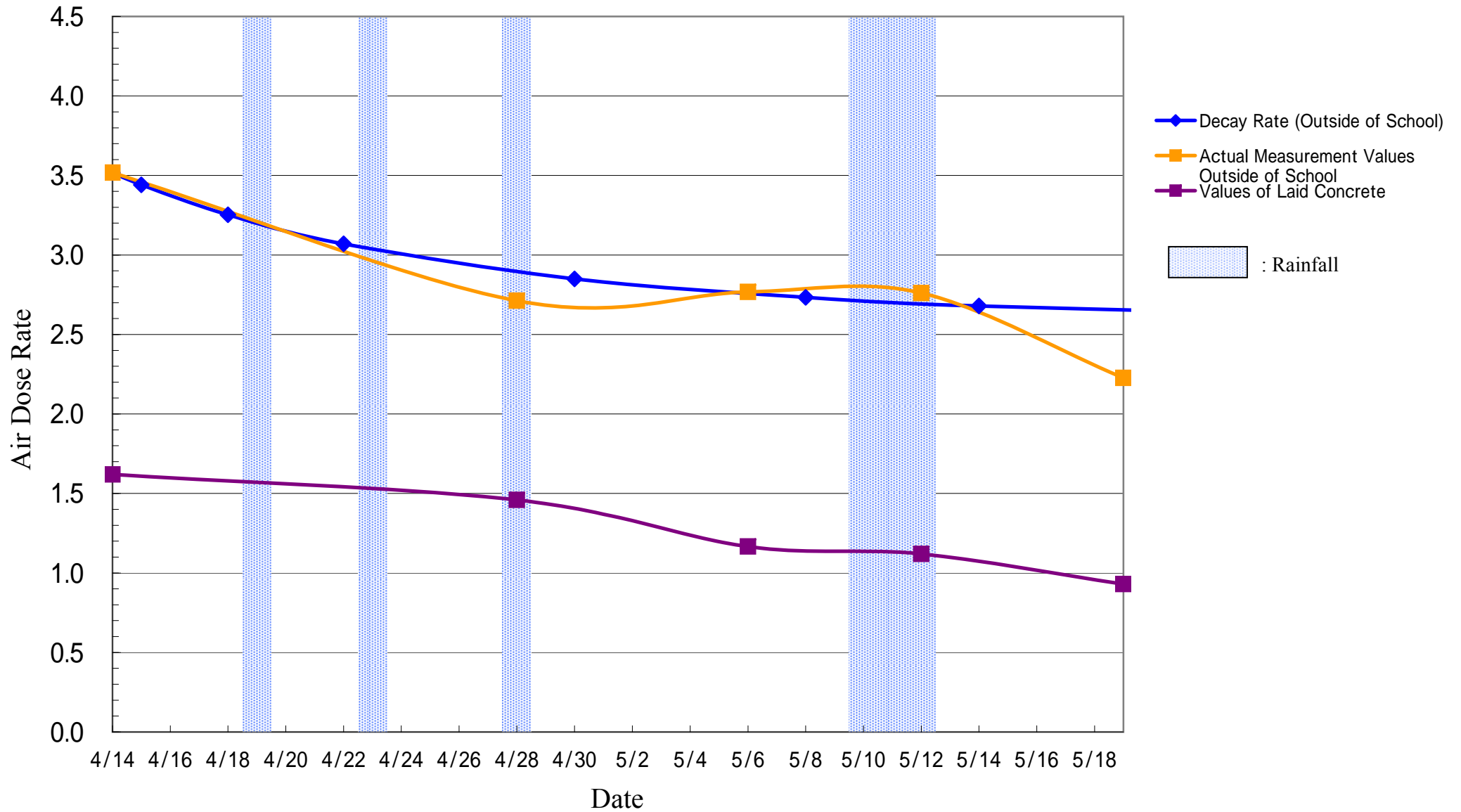
Tamano Elementary School

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



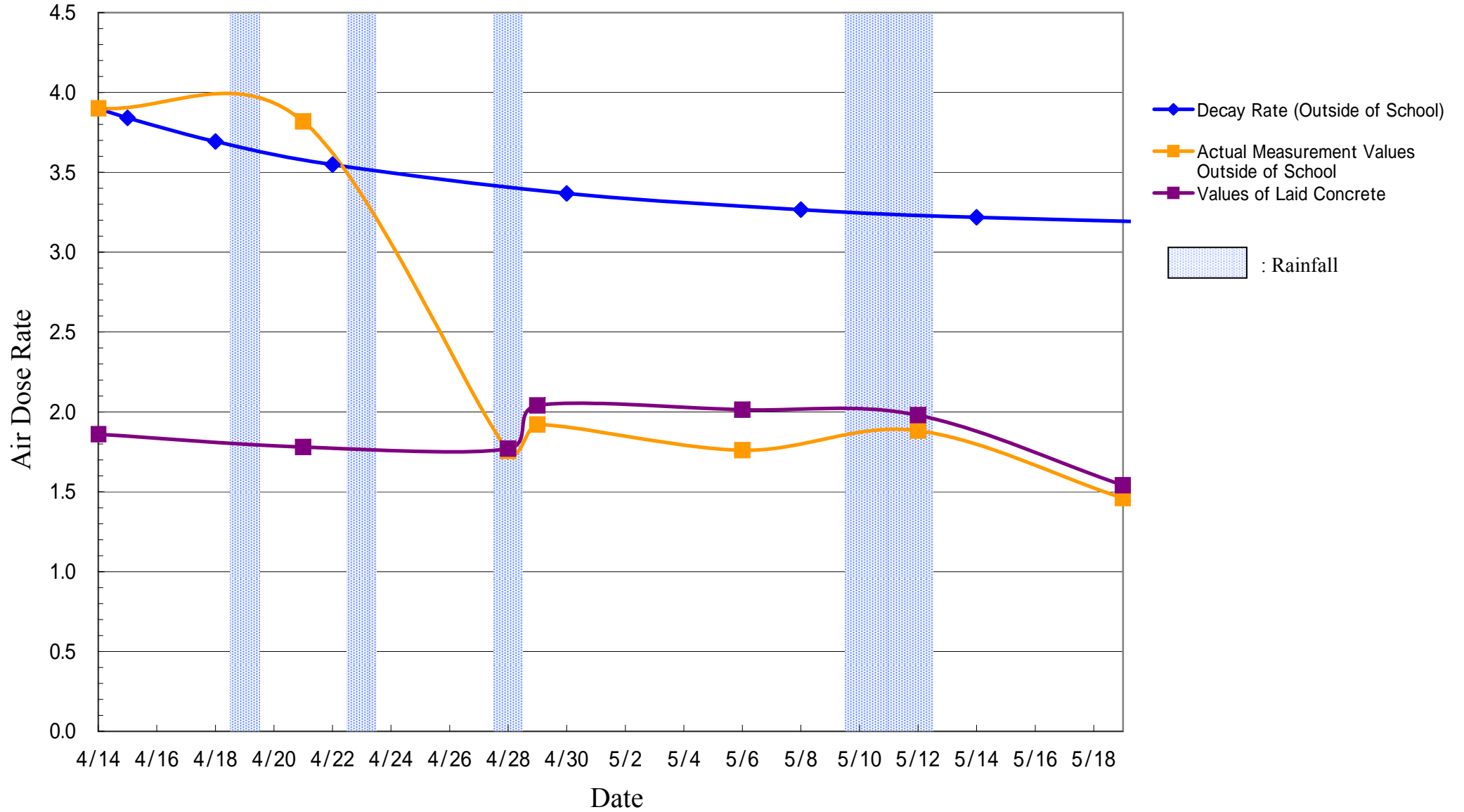
Okayama Elementary School, Fukushima

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



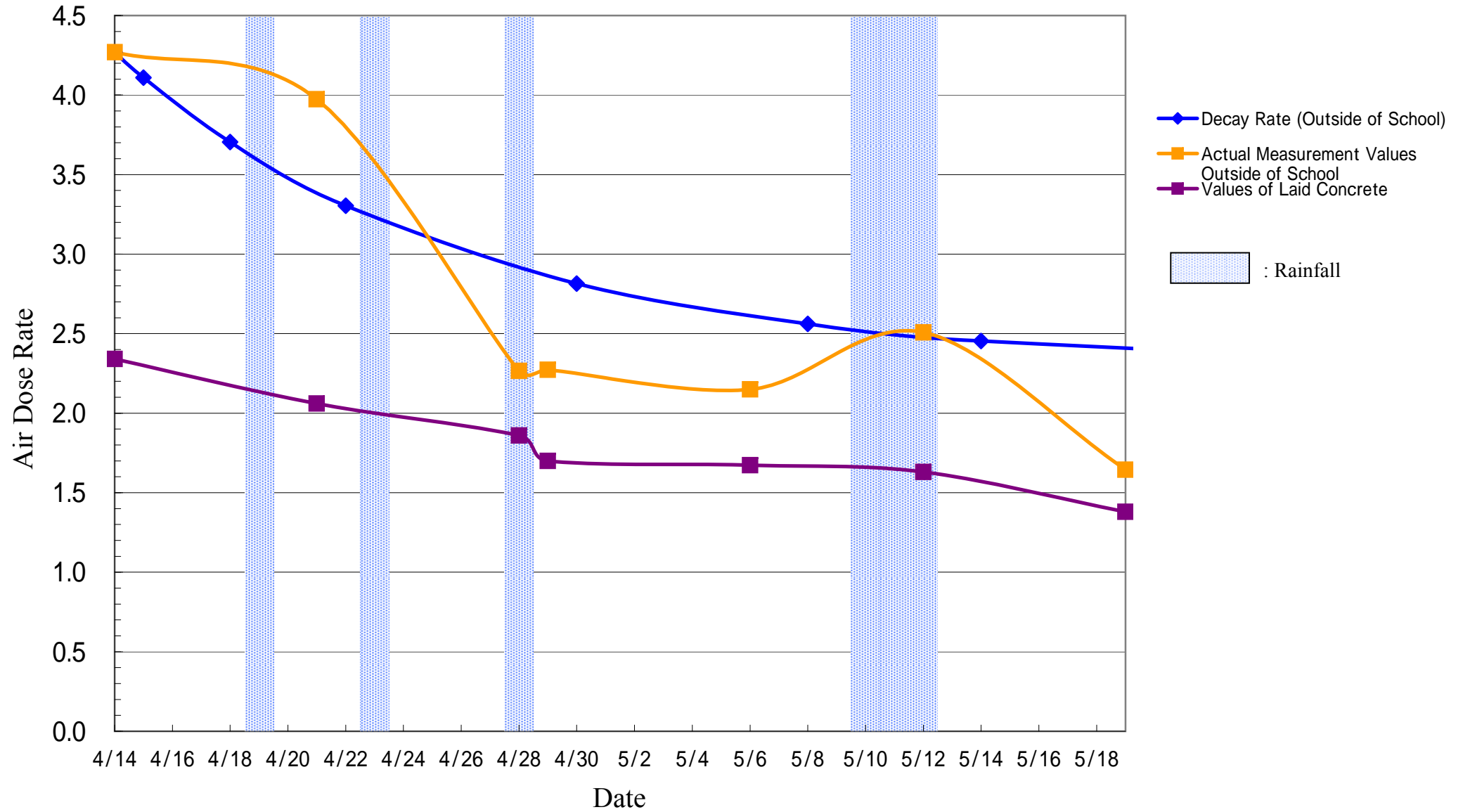
Seishin Saniku Preschool

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



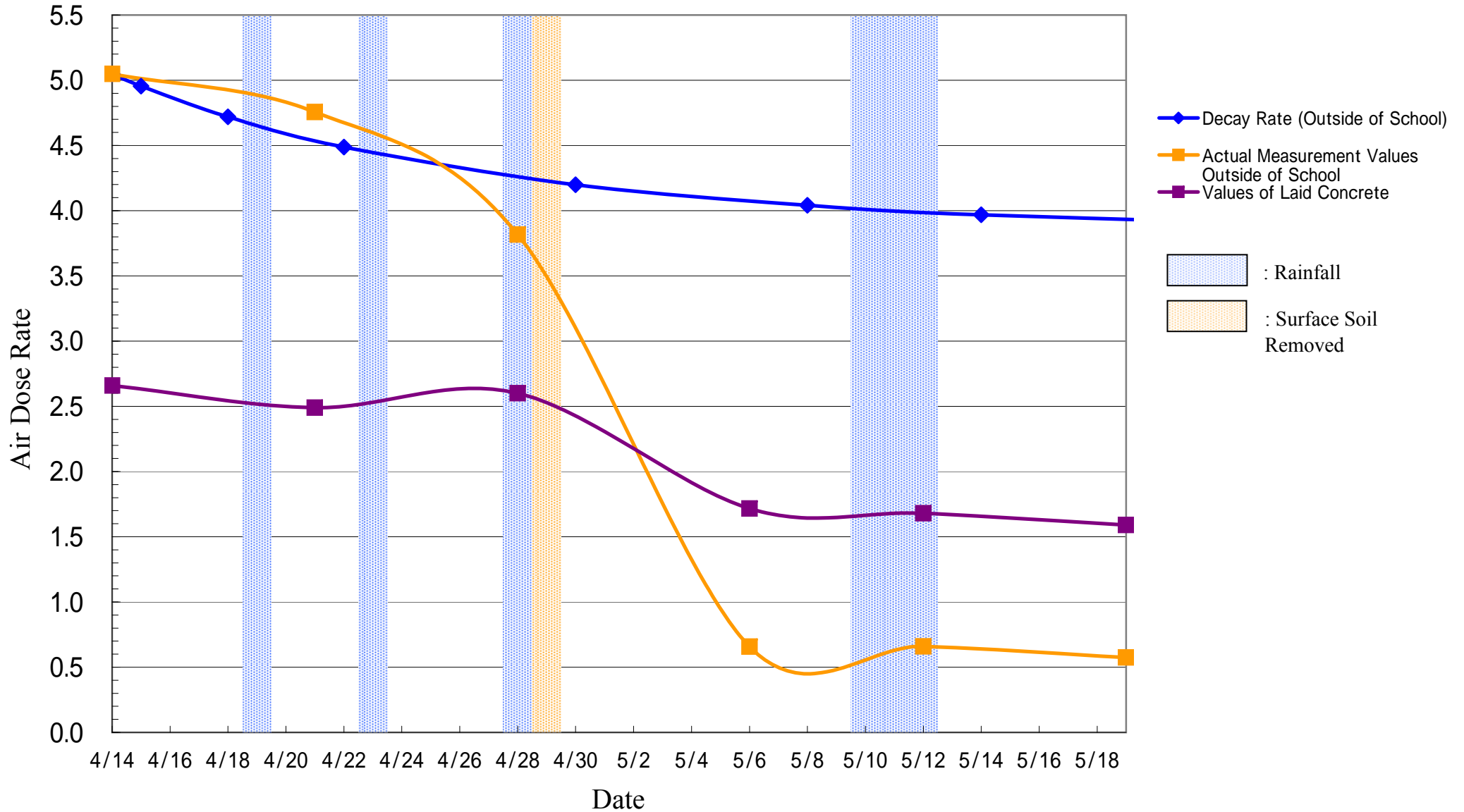
Saniku Kindergarten

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



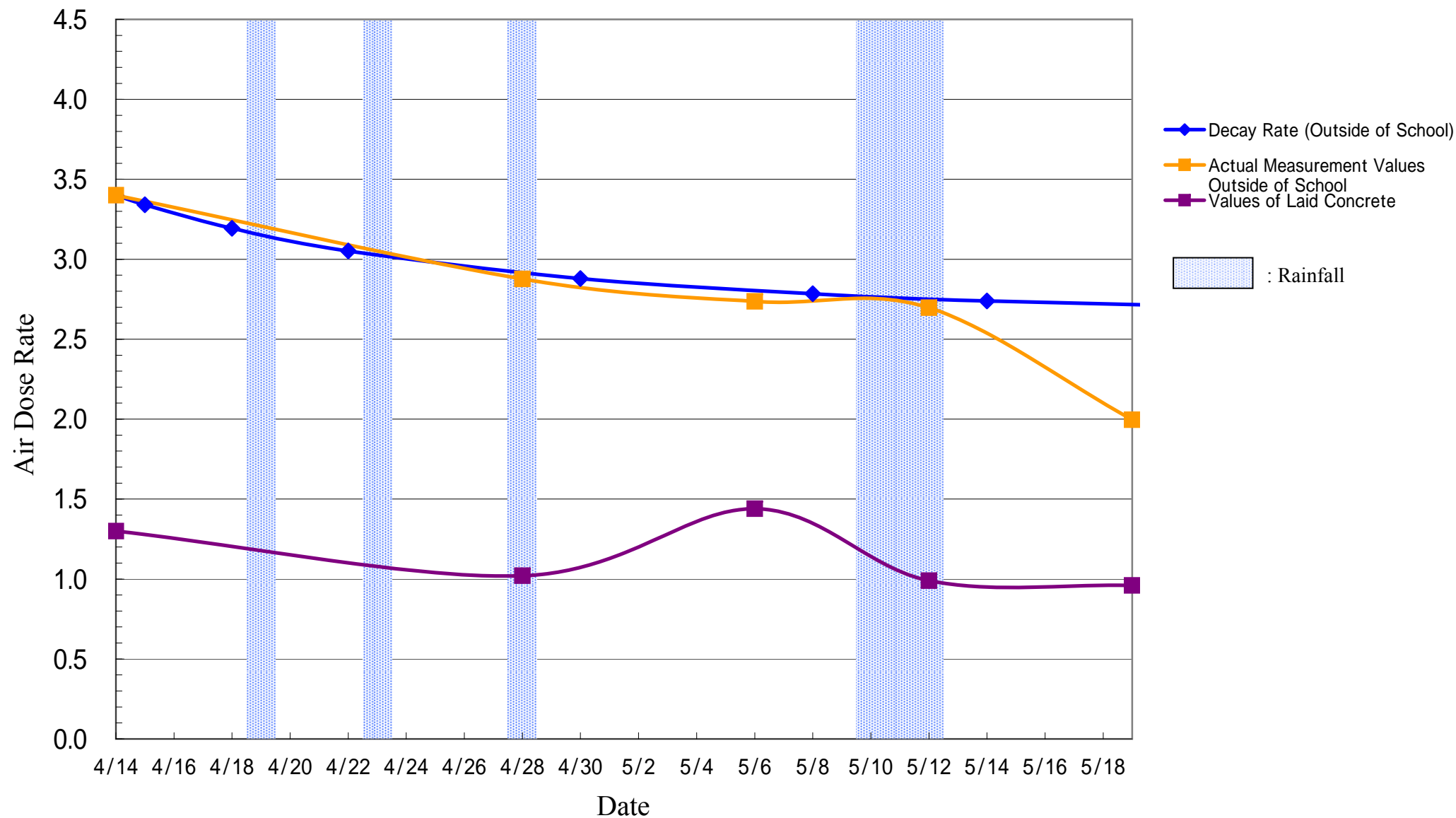
Tominari Elementary School, Date

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



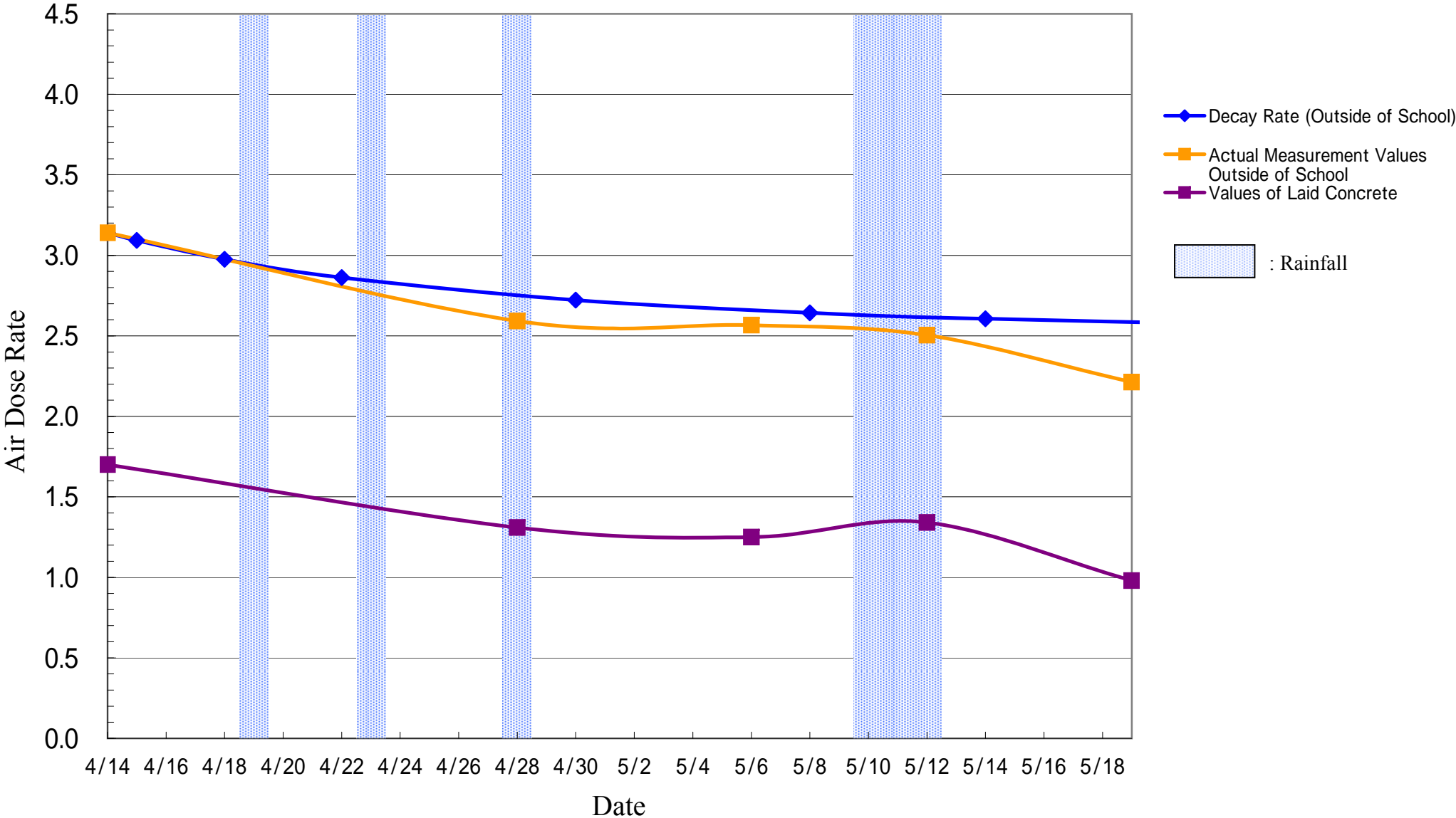
Fukushima yogo gakko, Fukushima

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



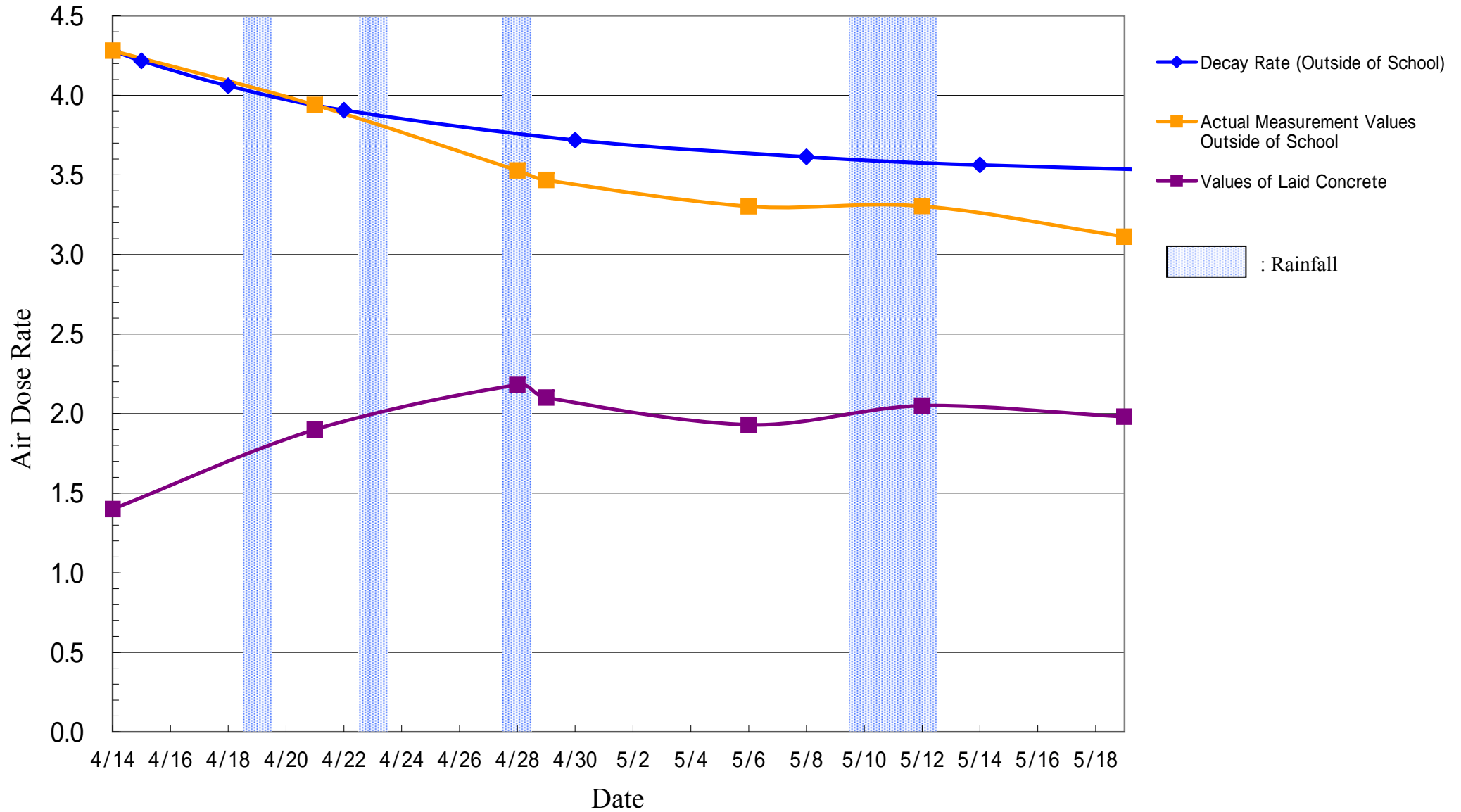
Oyama Preschool

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



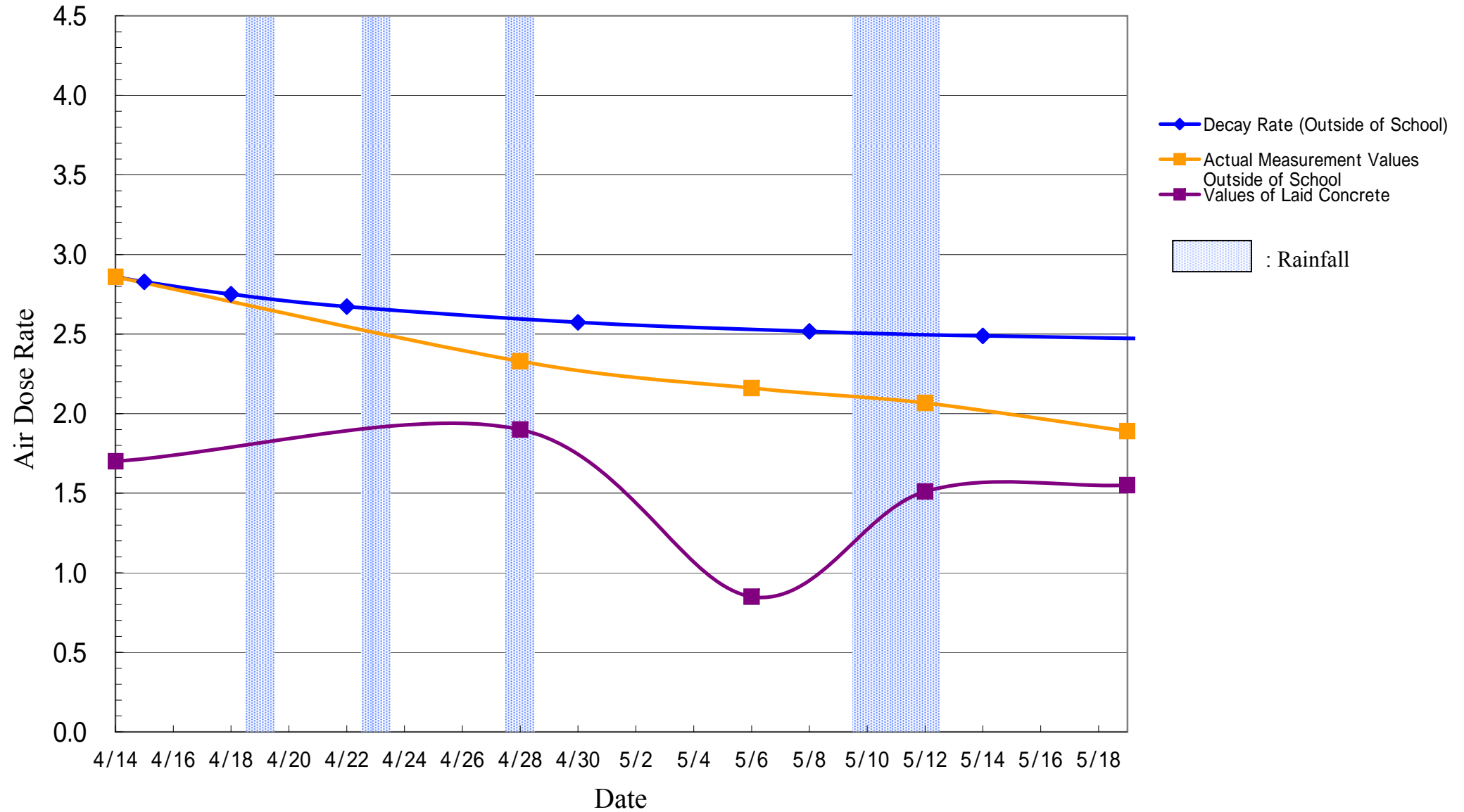
Oyama Elementary School

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



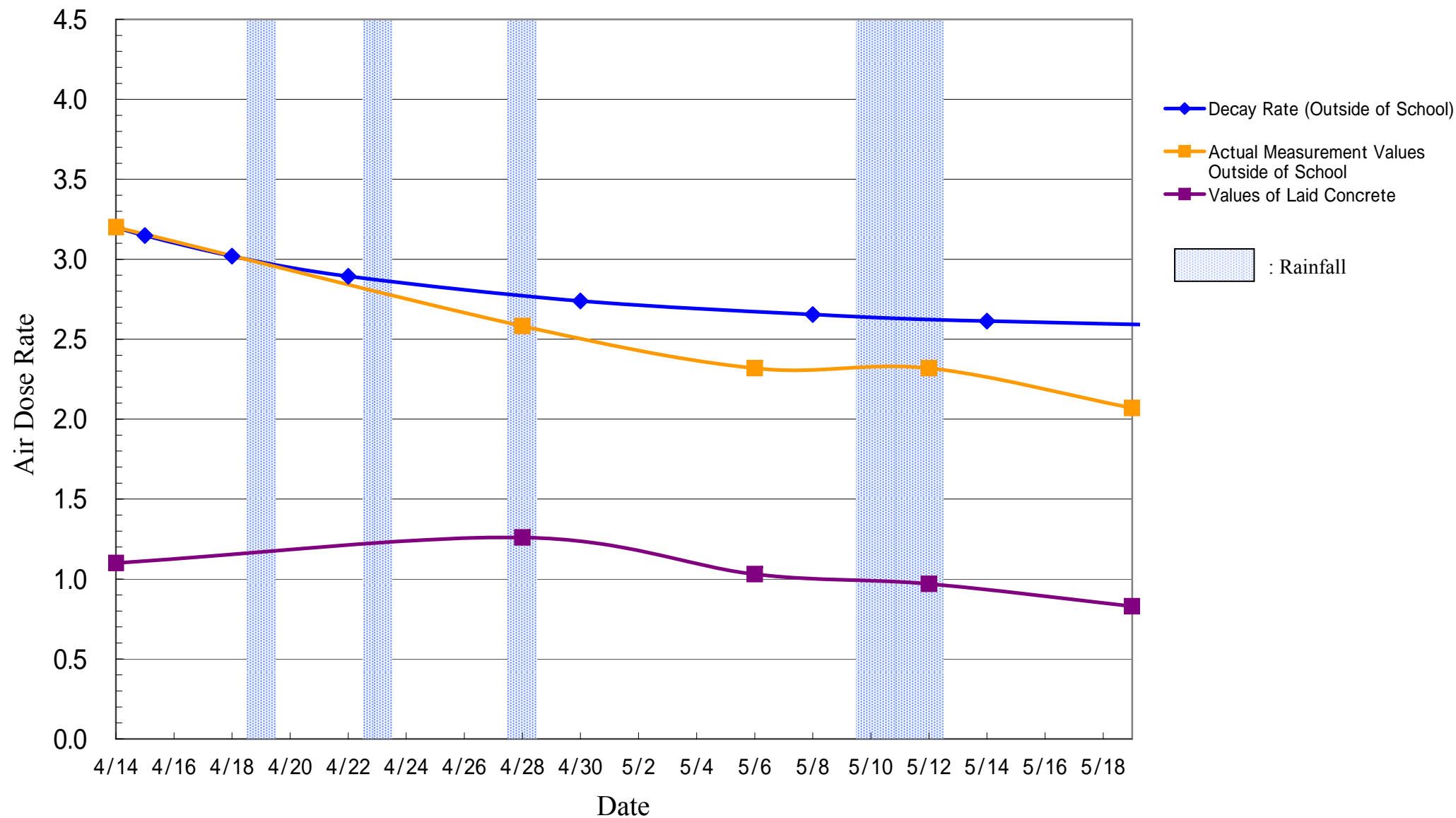
Shinryo Junior High School

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



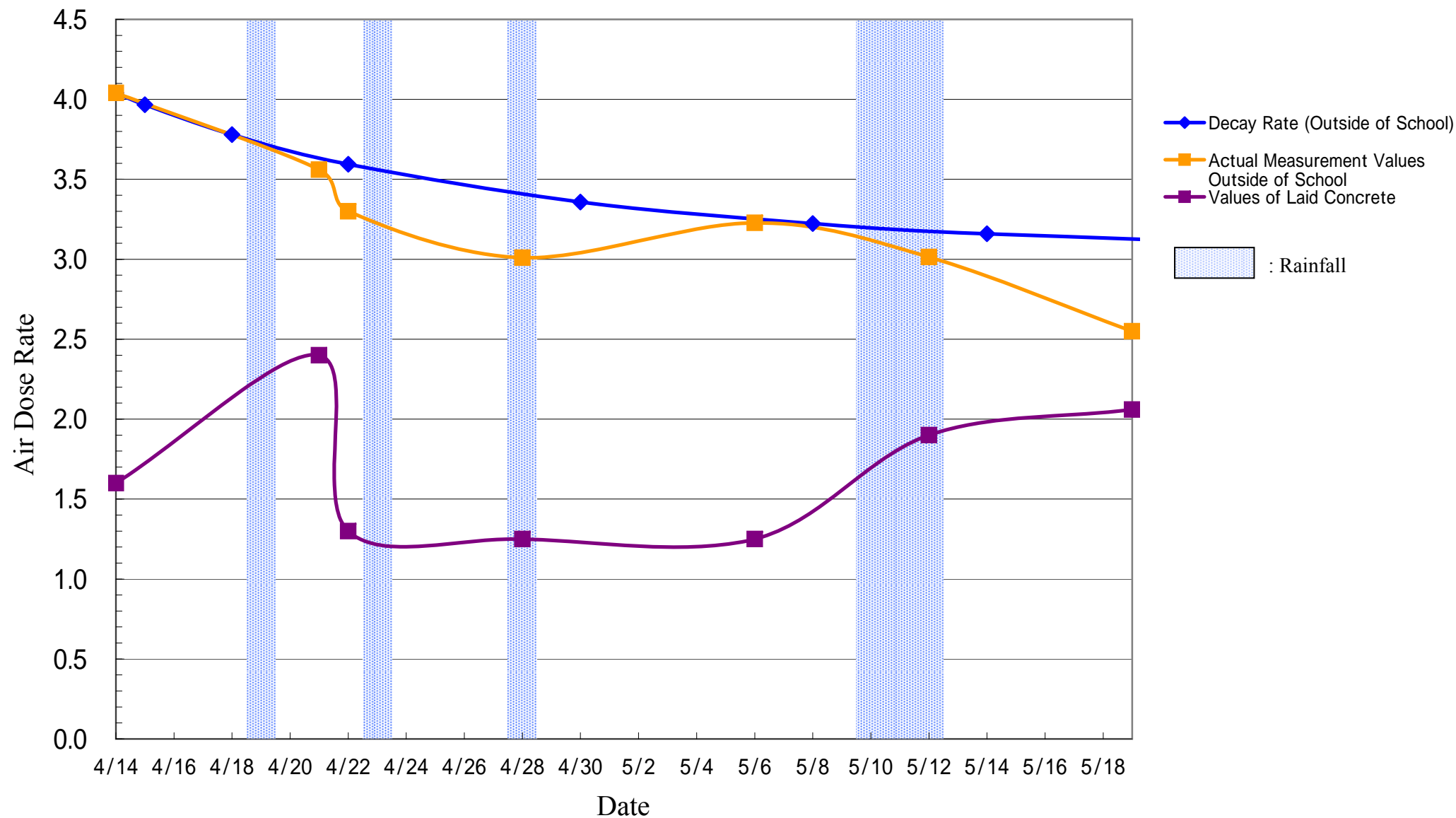
Hirano Junior High School, Fukushima

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



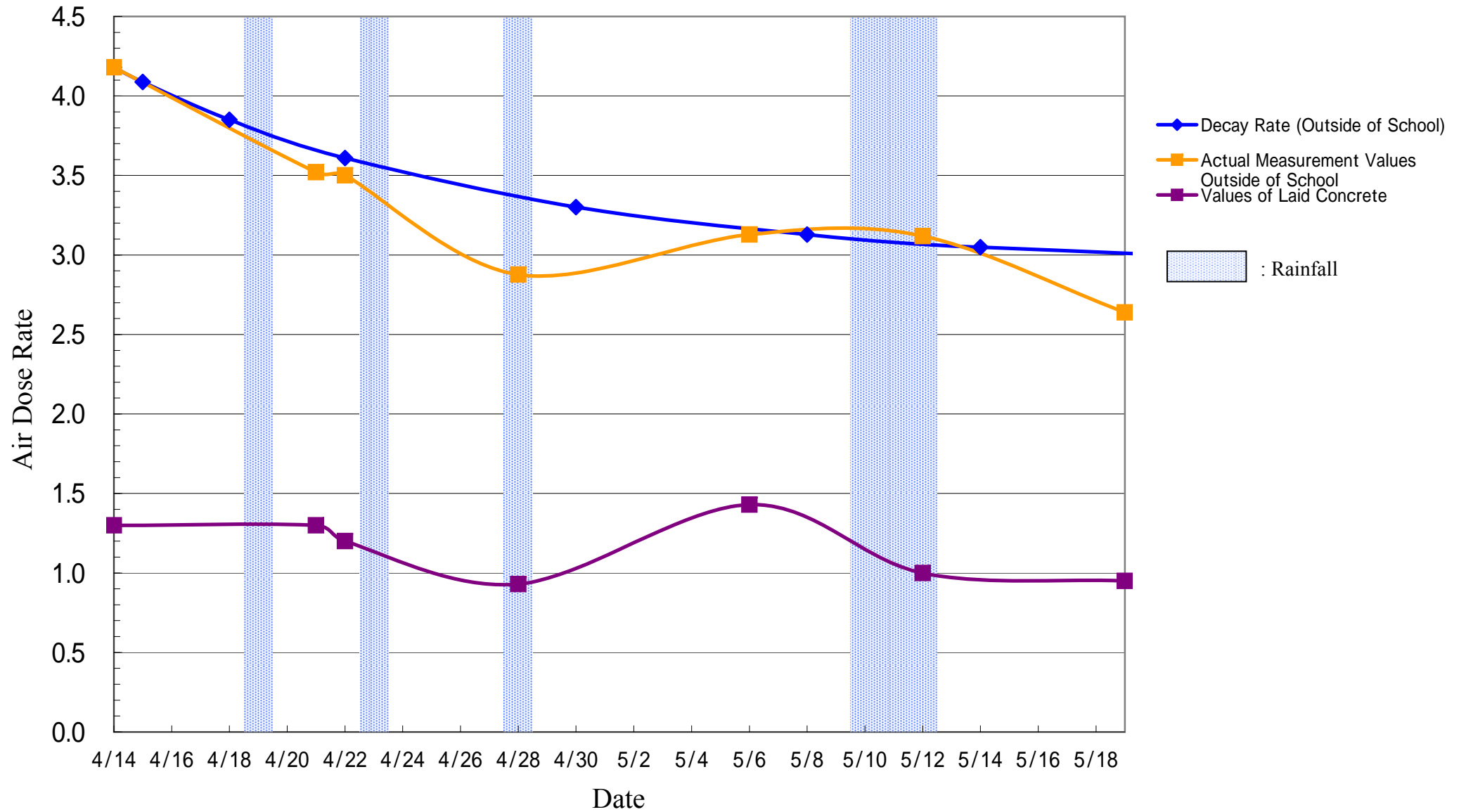
Fukushima Second Junior High School

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



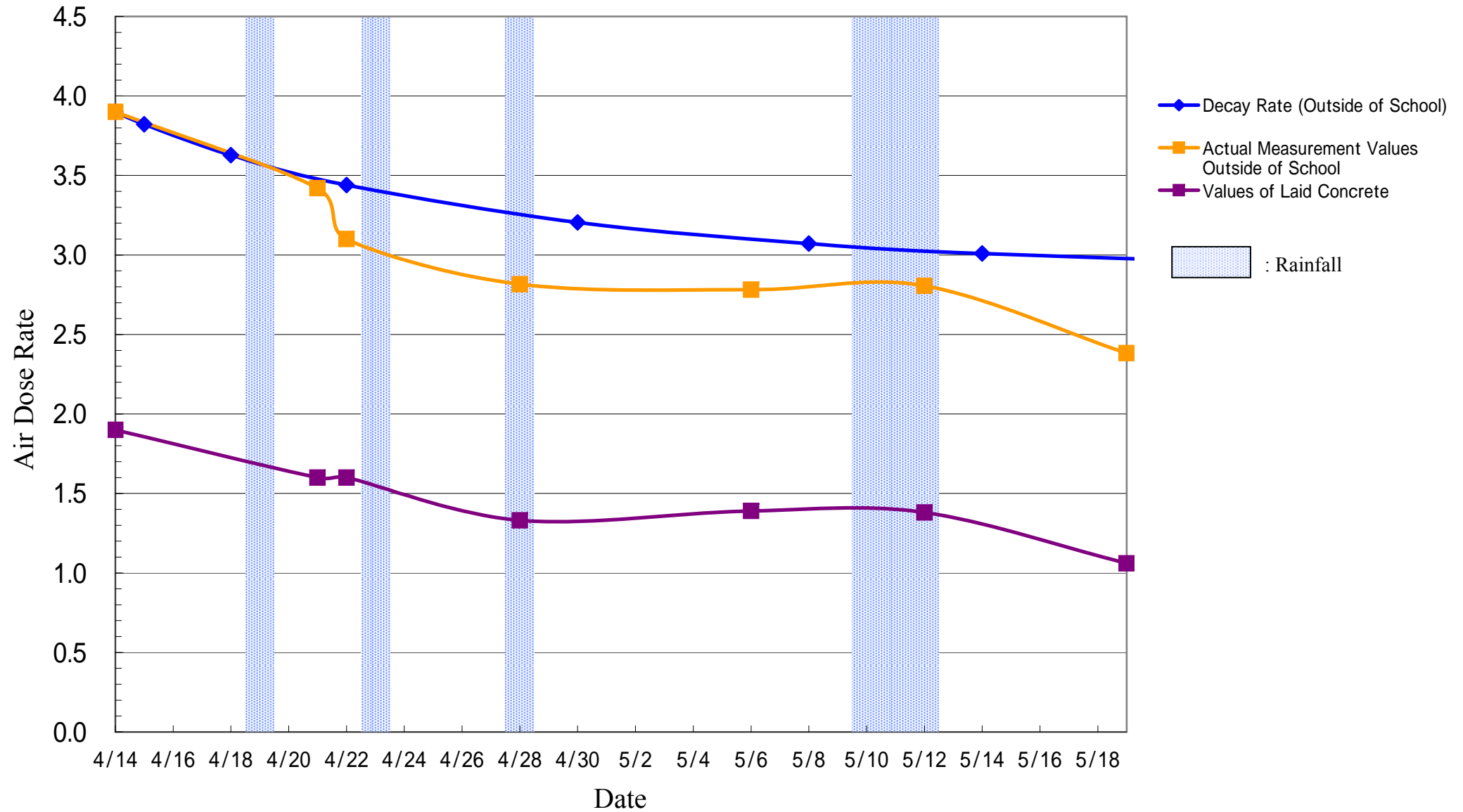
Fukushima University attached Kindergarten

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



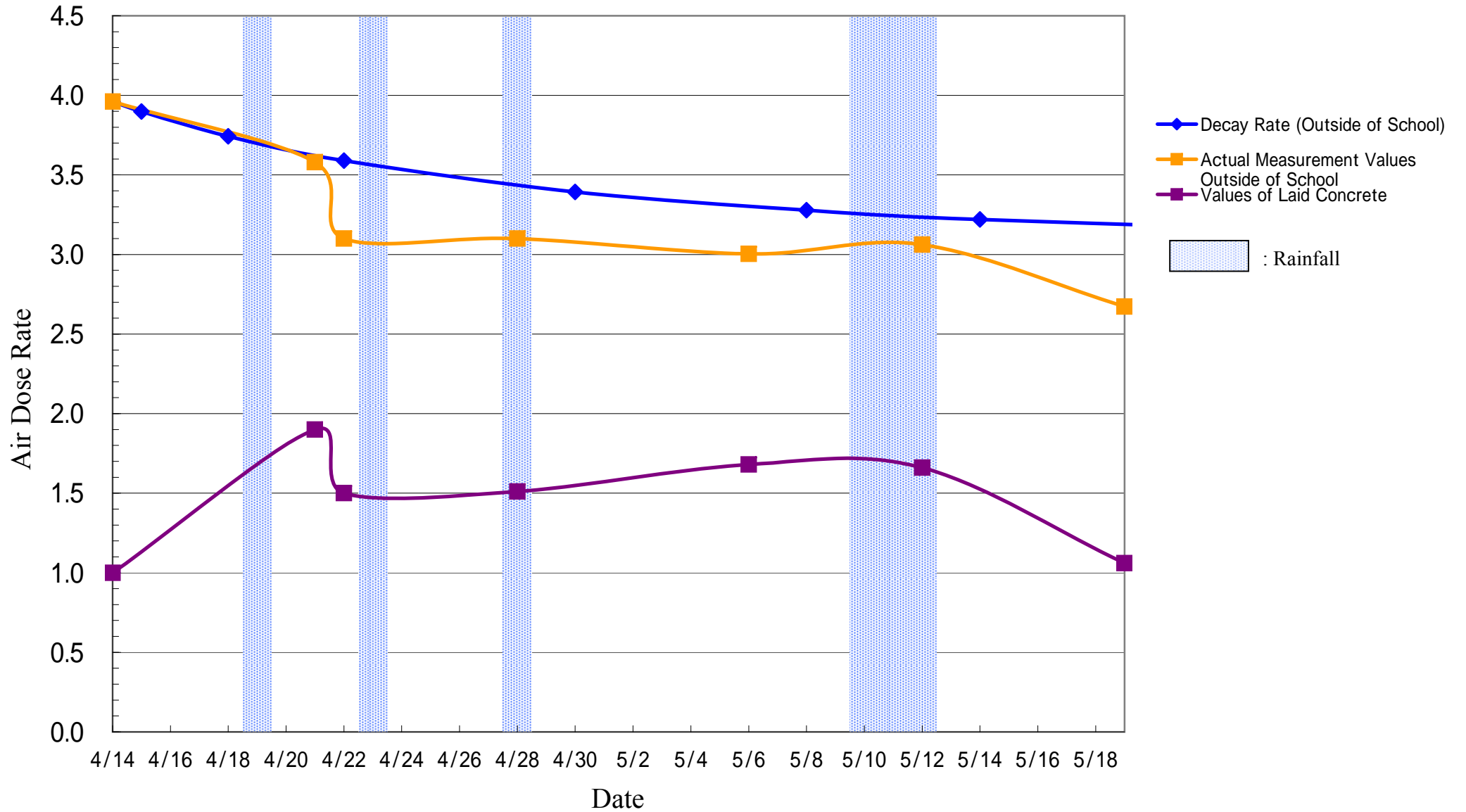
Fukushima University attached junior high school

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



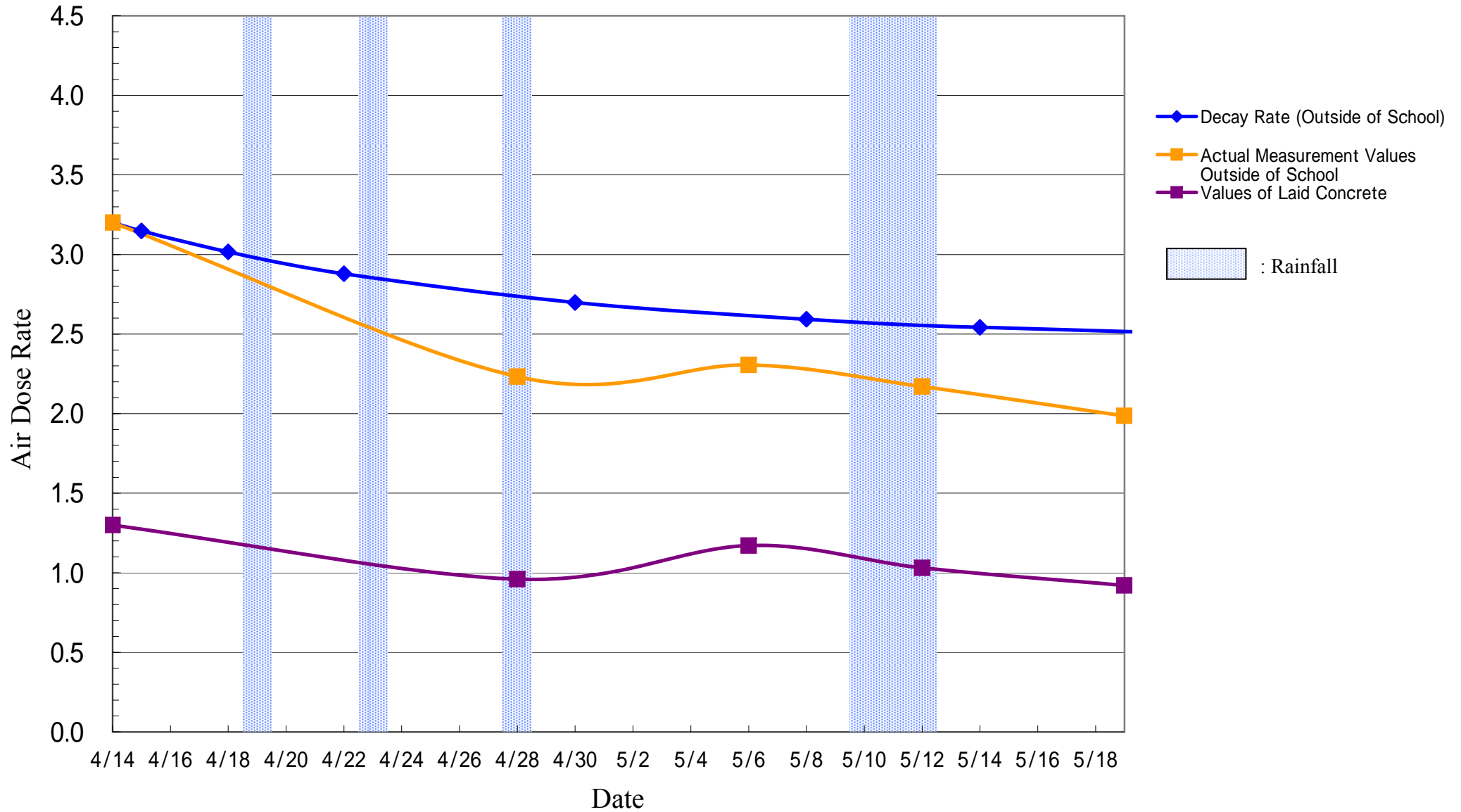
Fukushima Seikei Junior High School

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



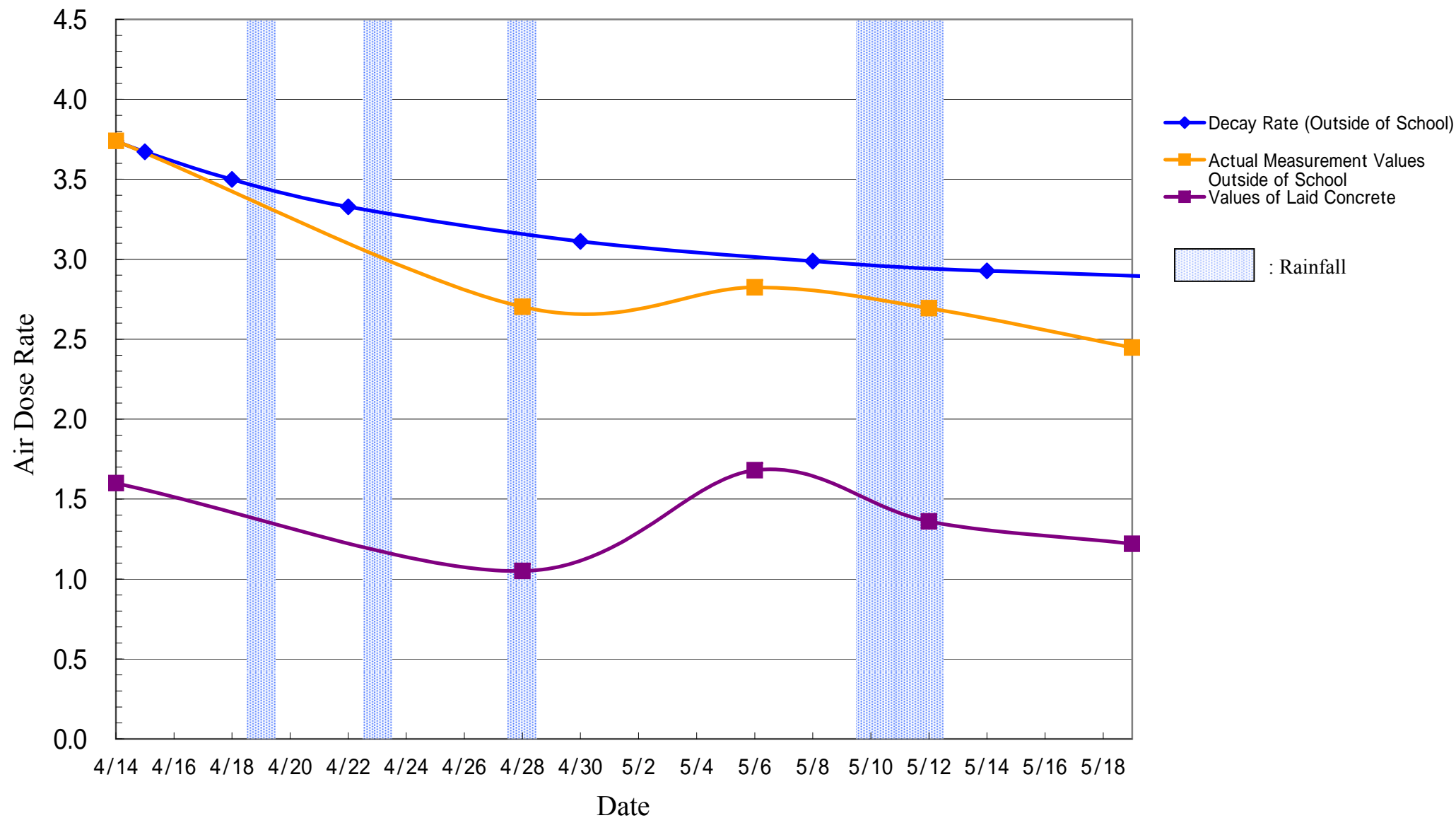
Gakuyo Junior High School, Fukushima

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



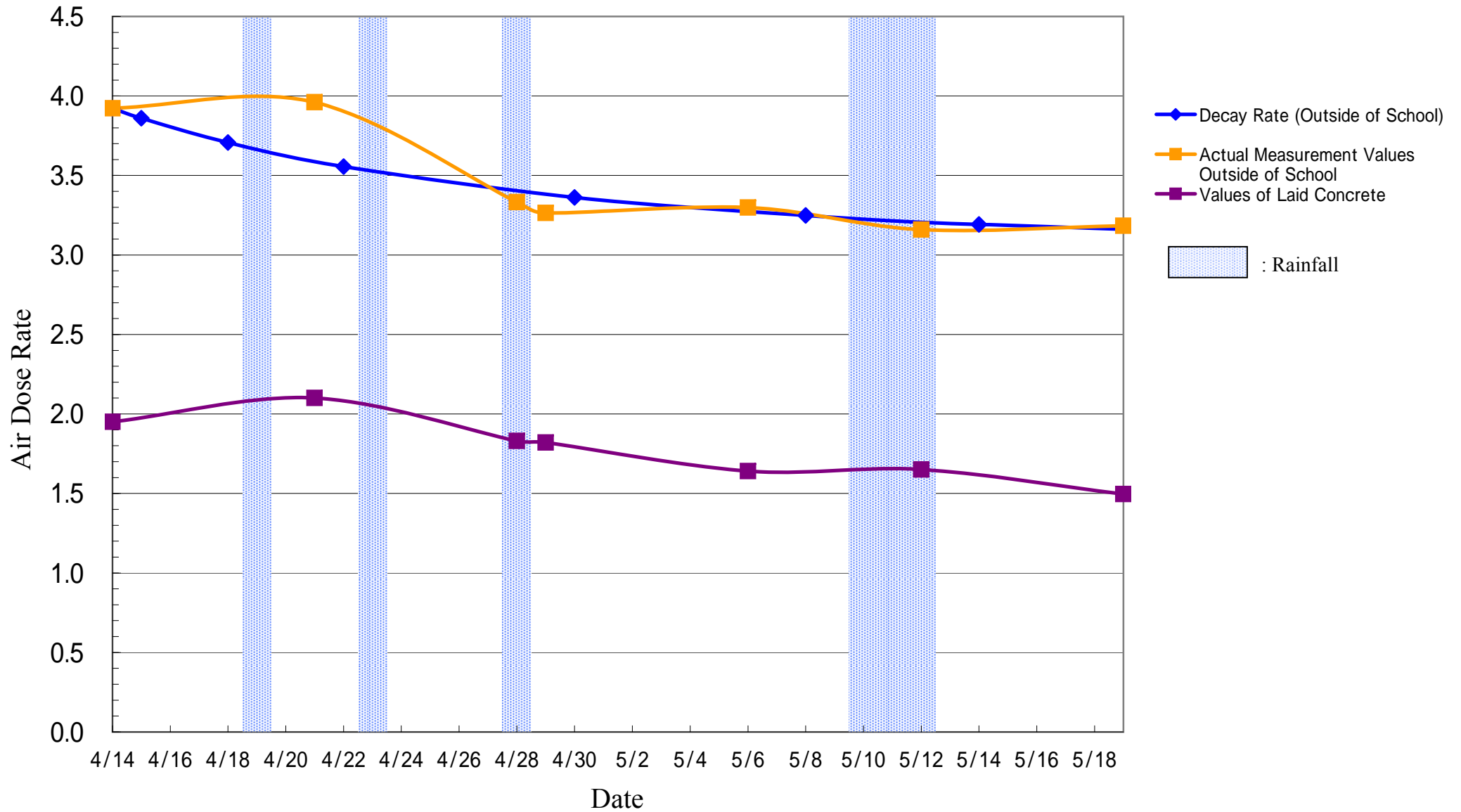
Fukushima First Junior High School

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



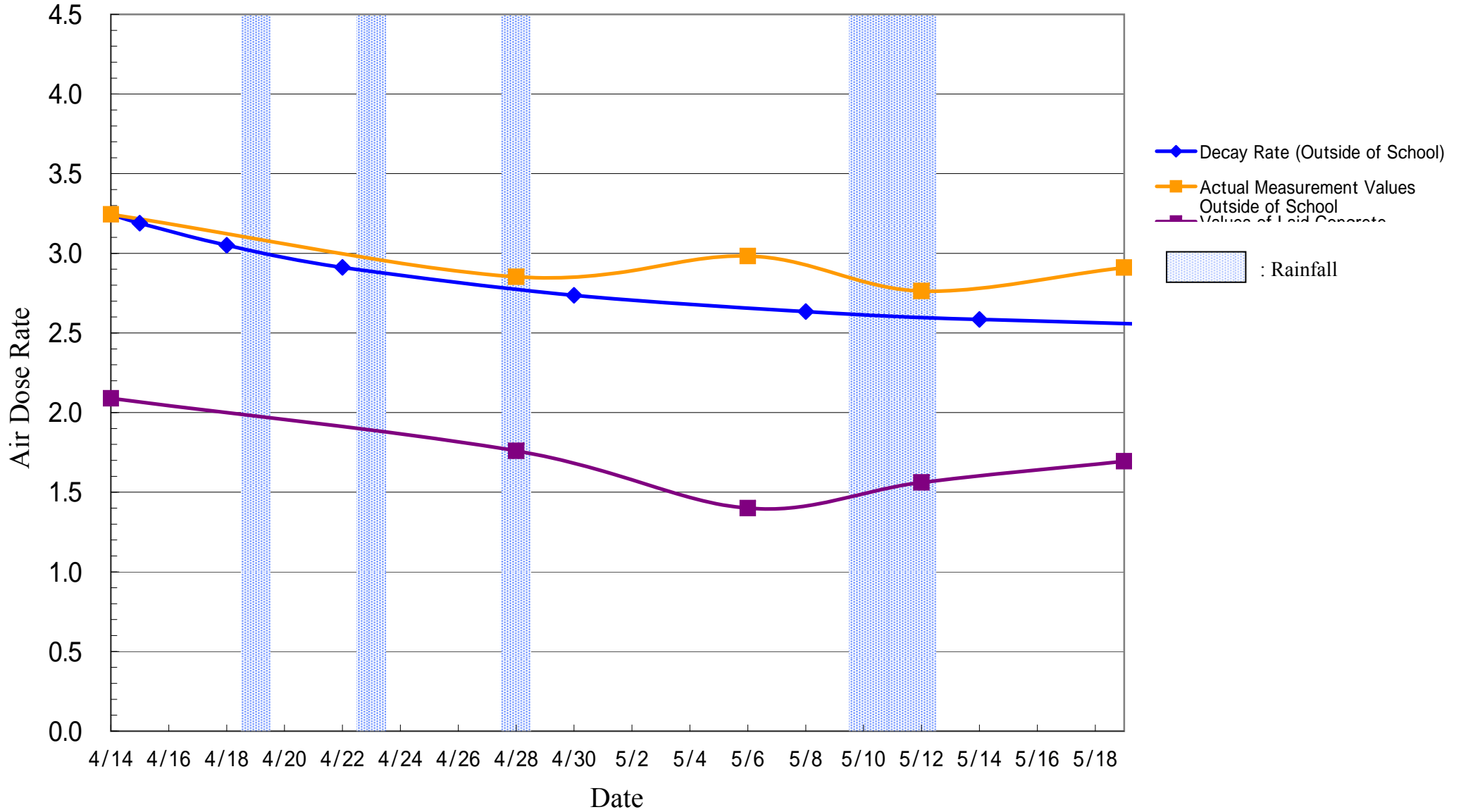
Fukushima Third Elementary School

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



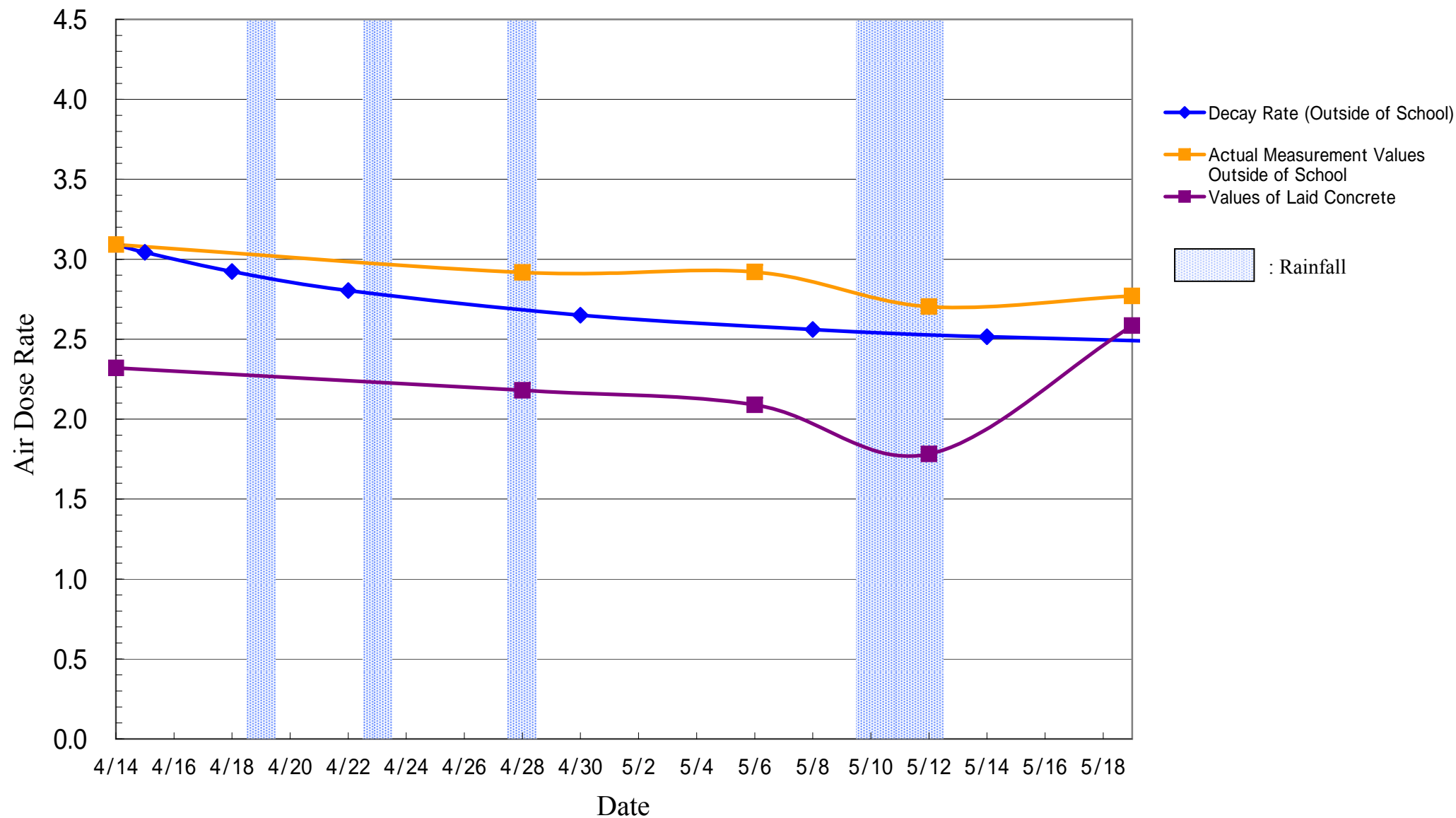
Fukushima Second Elementary School

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



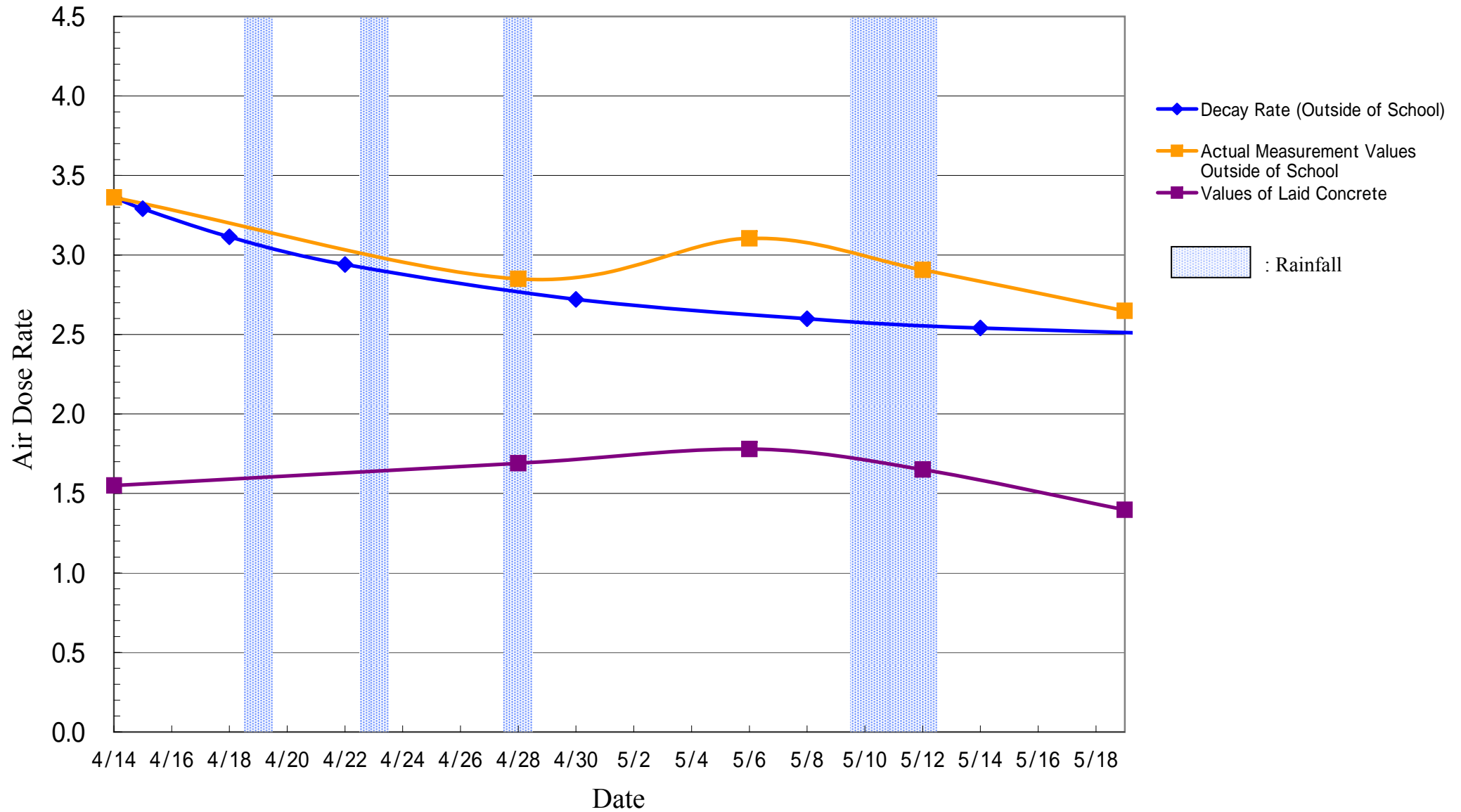
Sakura no Seibo Gakuin Kindergarden

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



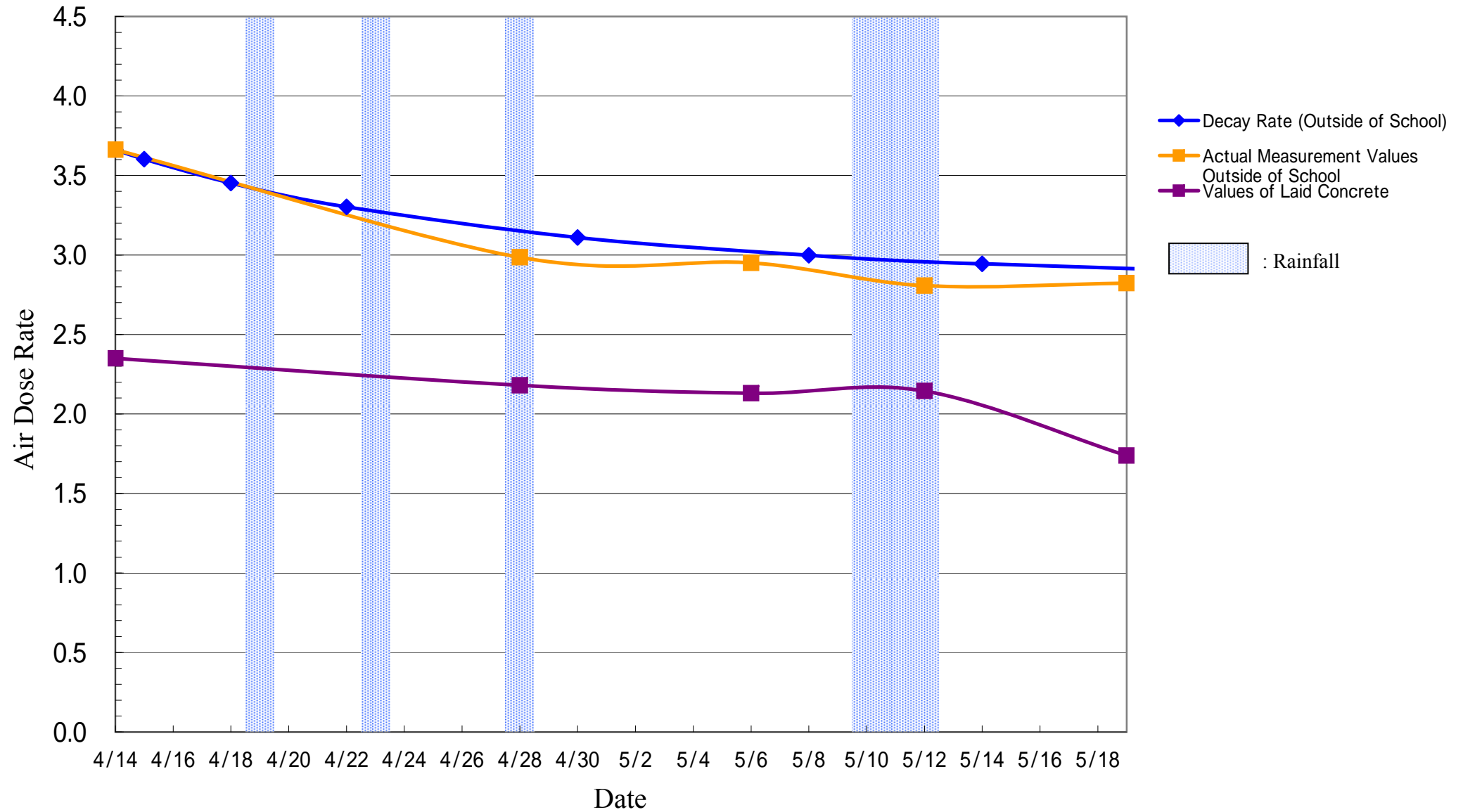
Sakura no Seibo Gakuin Elementary School

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



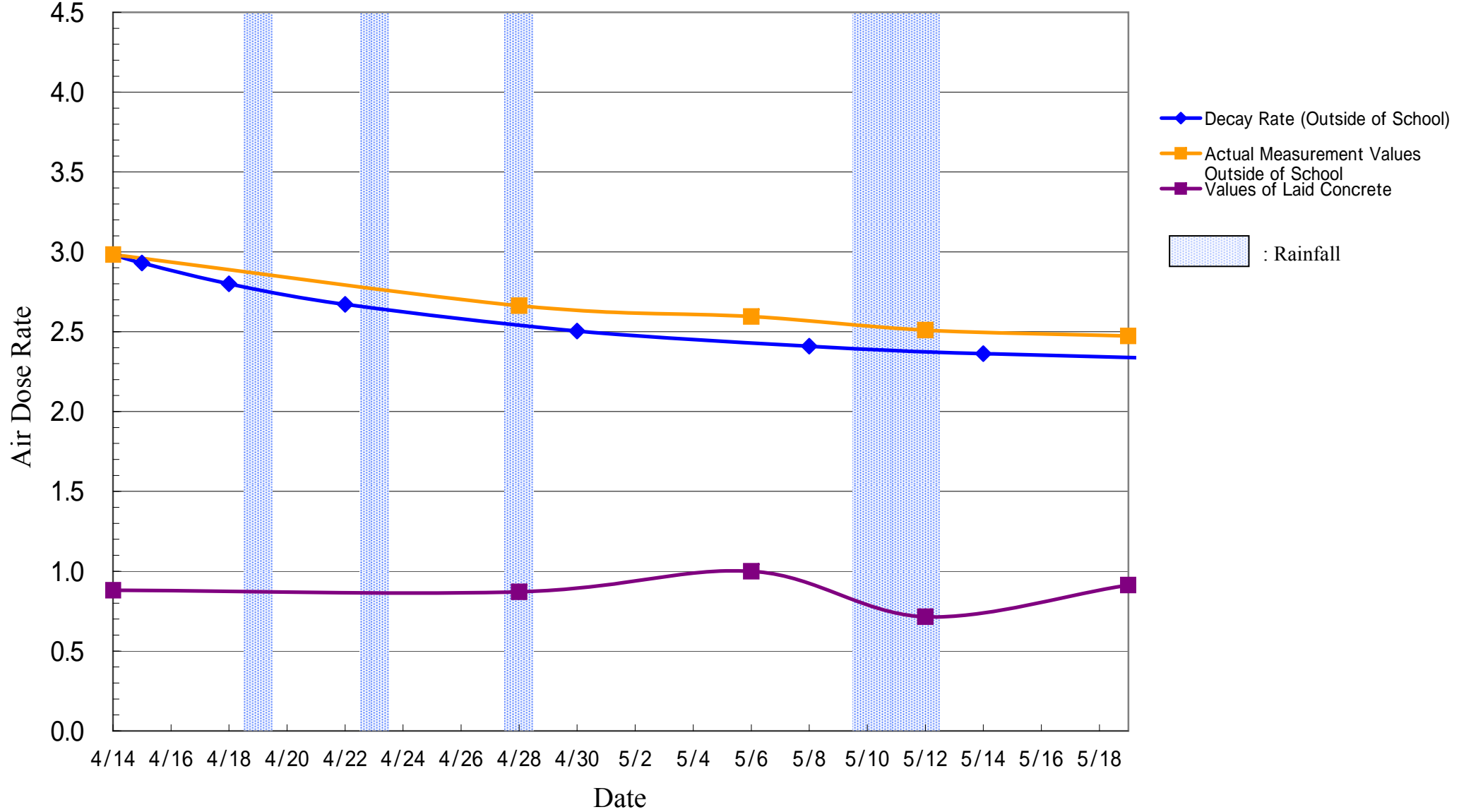
Fukushima University attached Elementary School

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

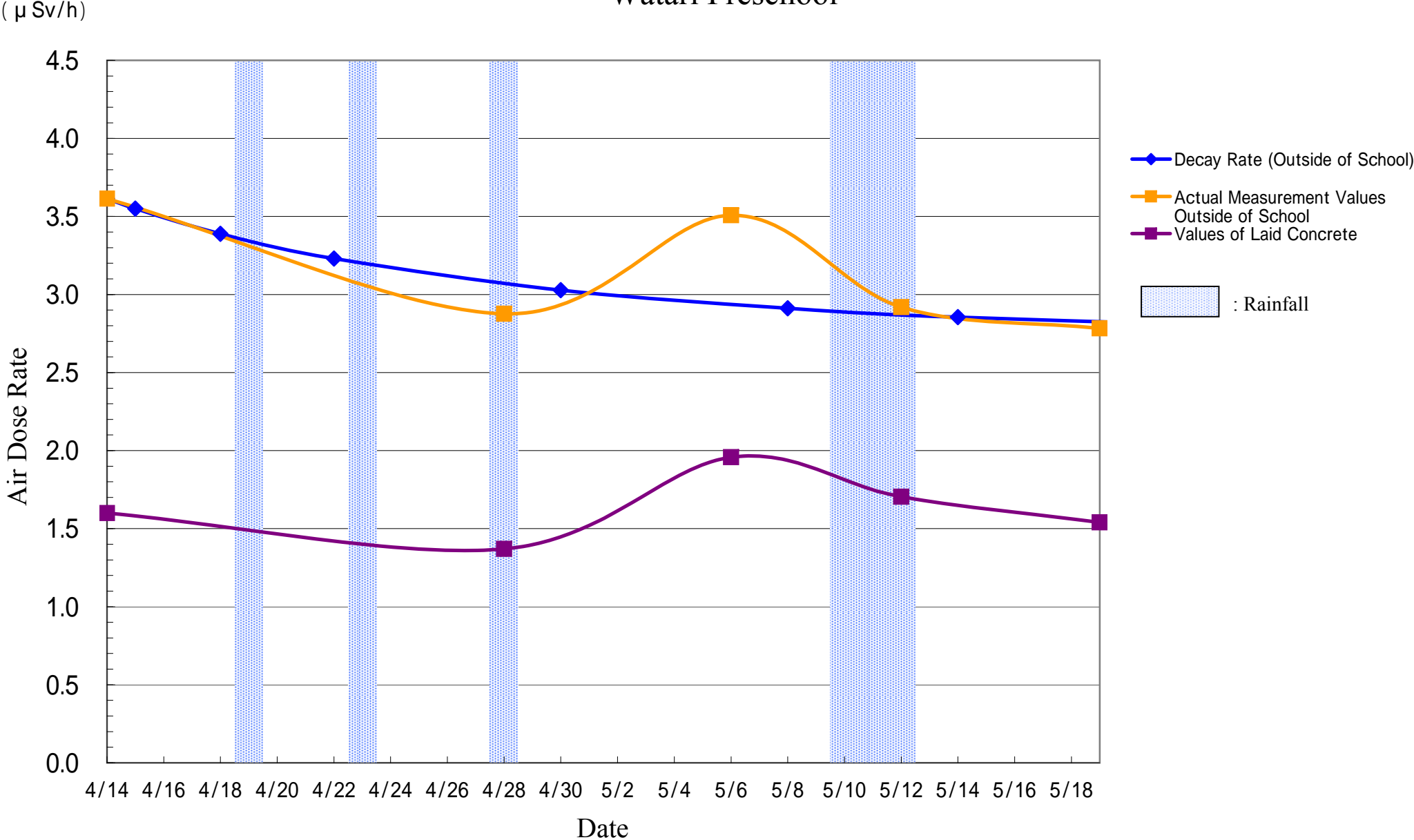


Fukushima Kenritsu Mo-gakko

(μ Sv/h)

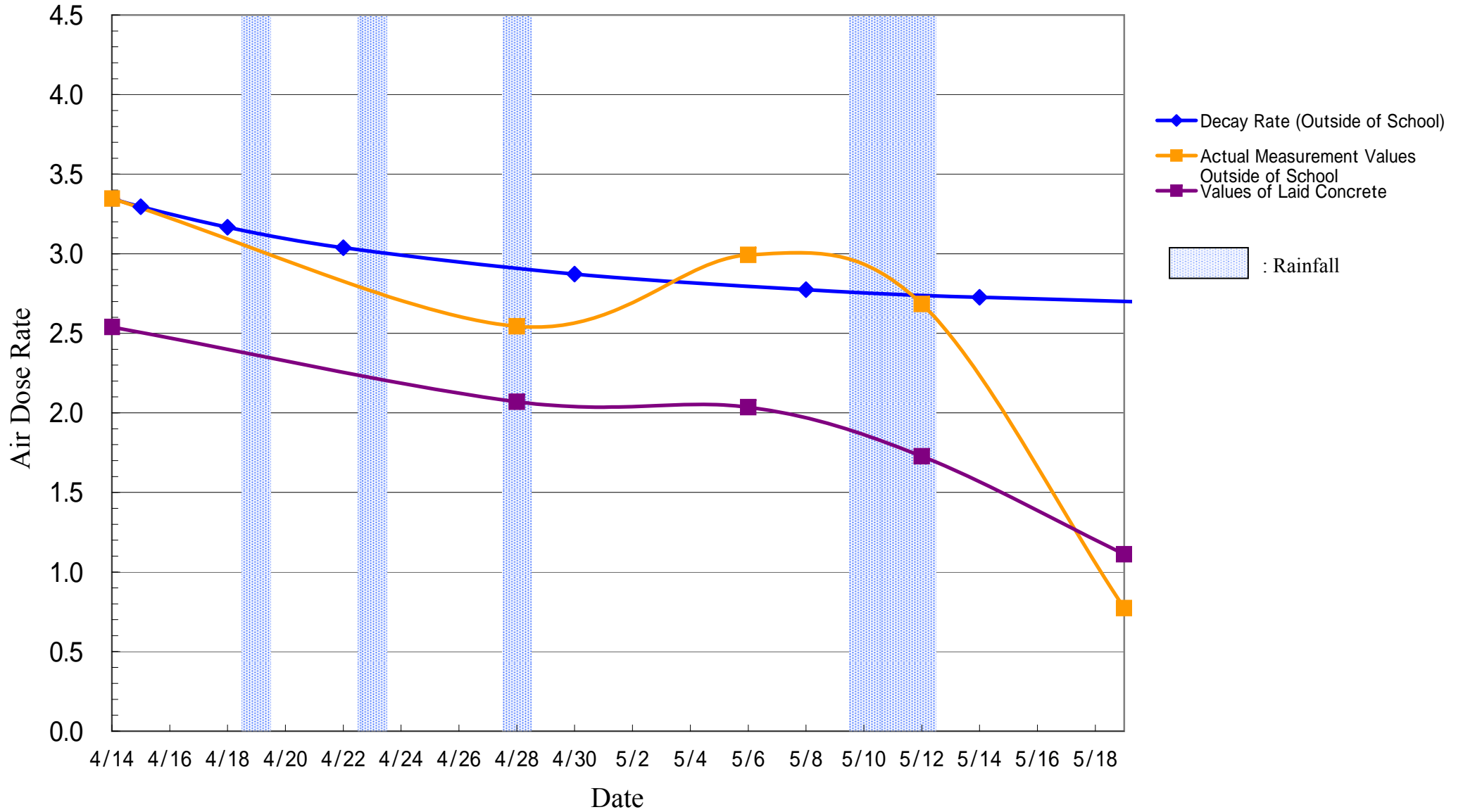


Watari Preschool



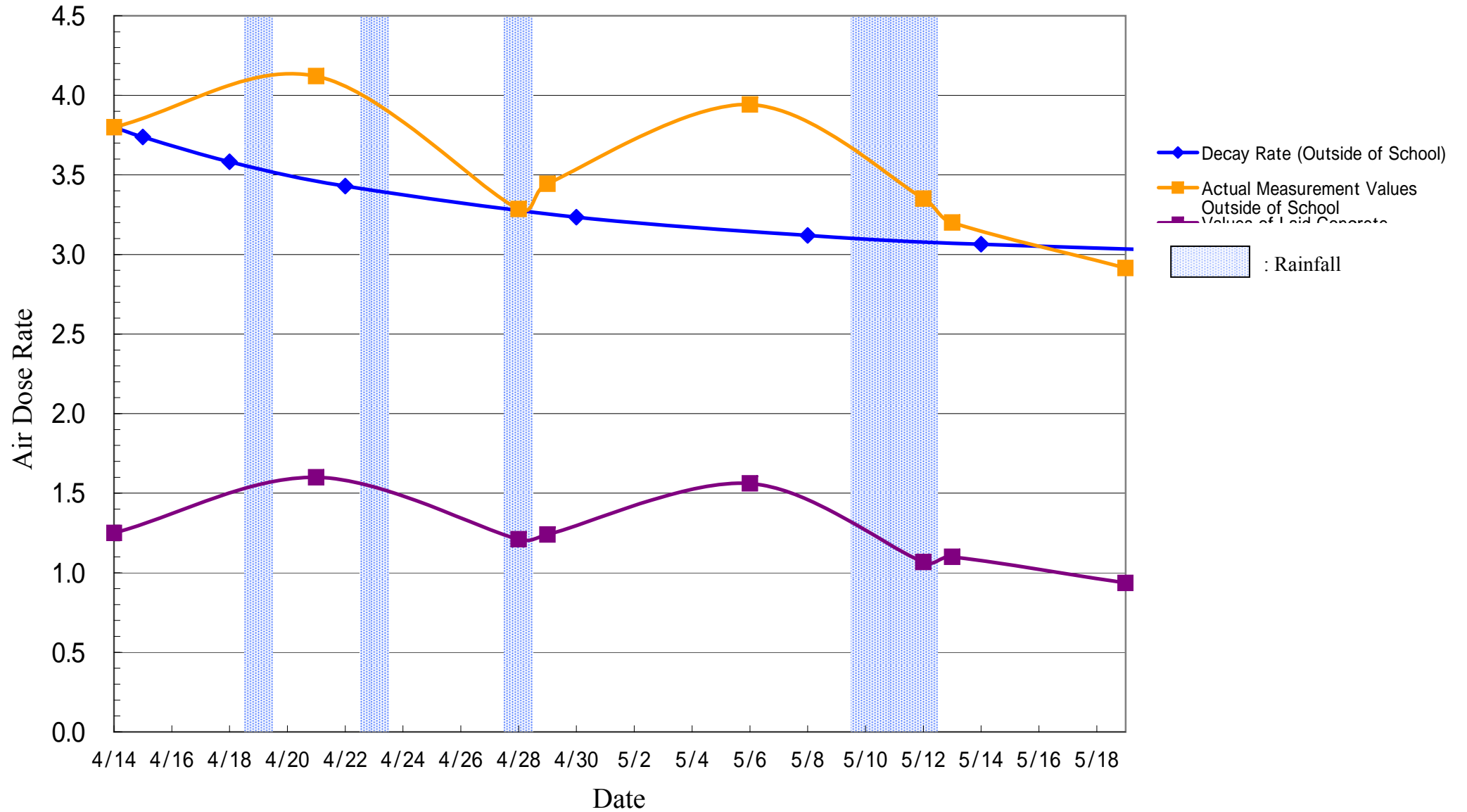
Kodomo no Ie Soramame

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



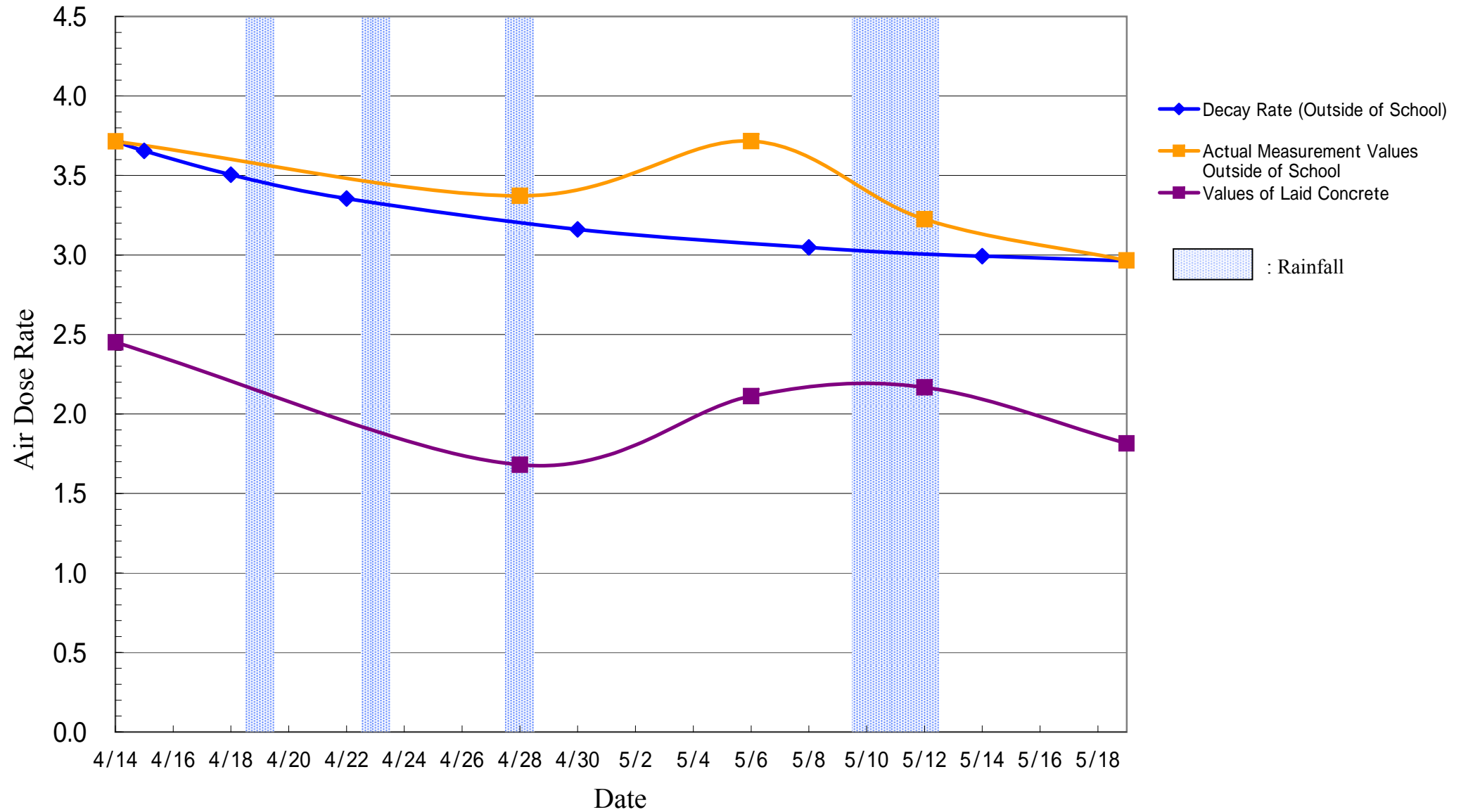
Watari Junior High School, Fukushima

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



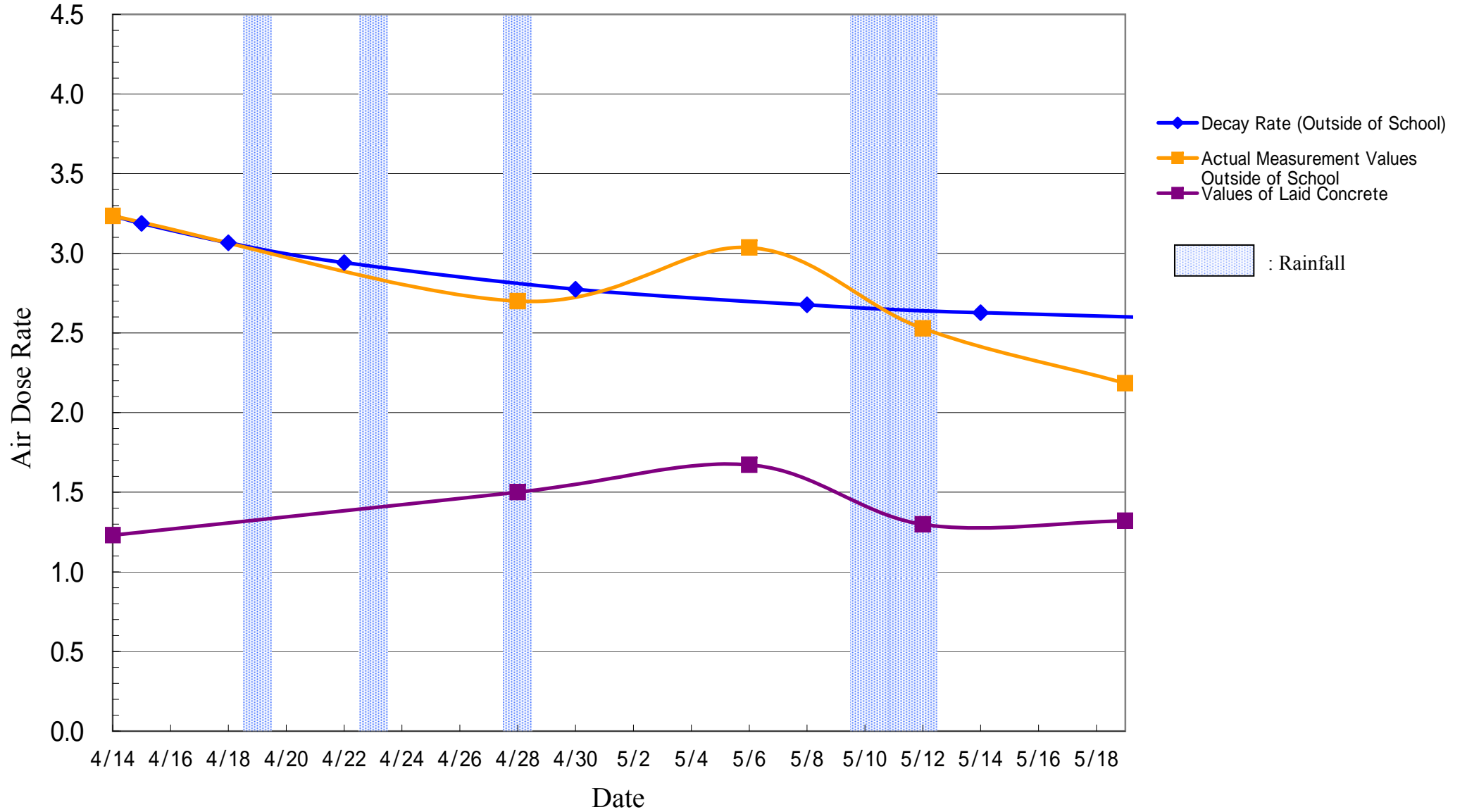
Watari Kindergarten, Fukushima

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



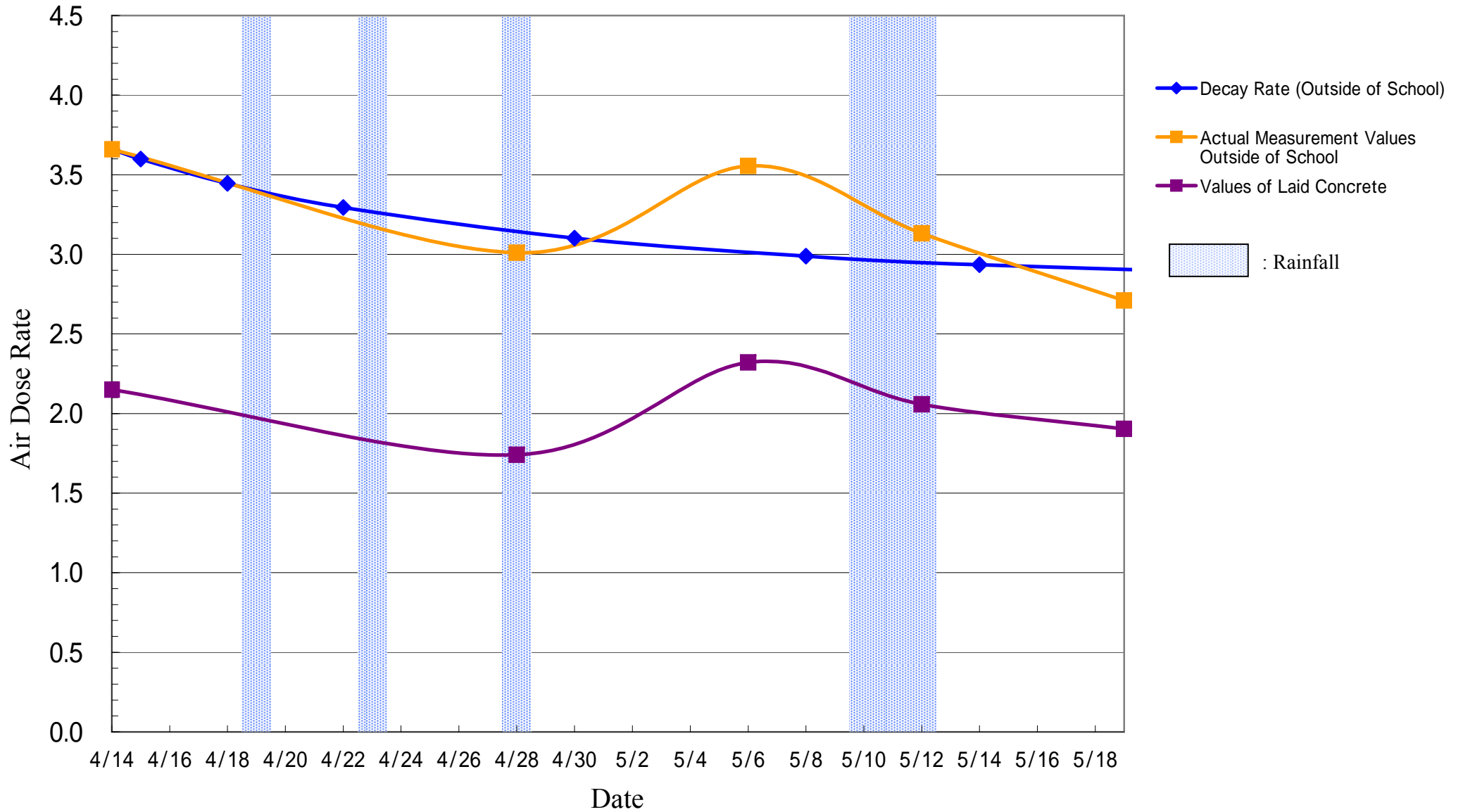
Sakura Preschool

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



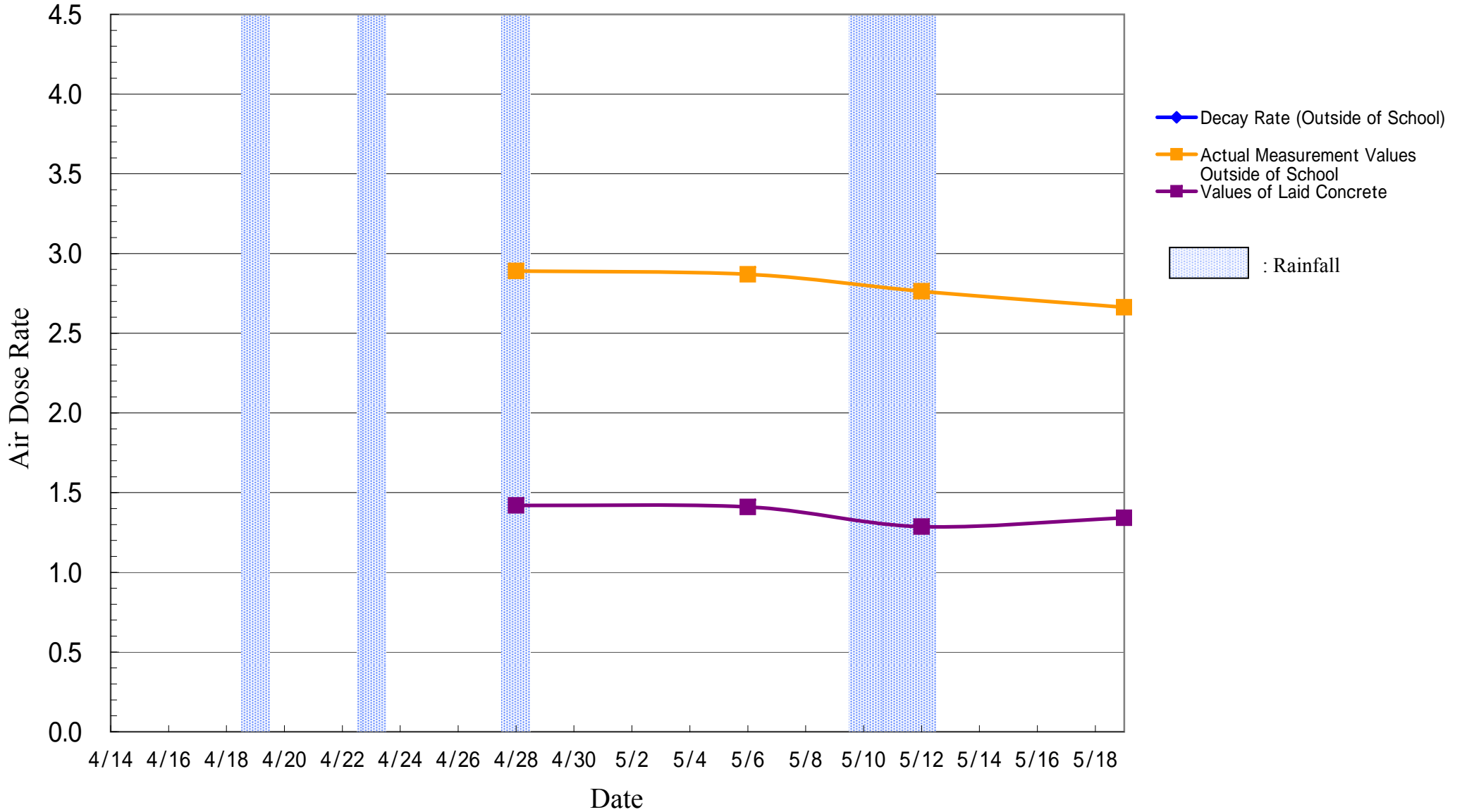
Watari Elementary School

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



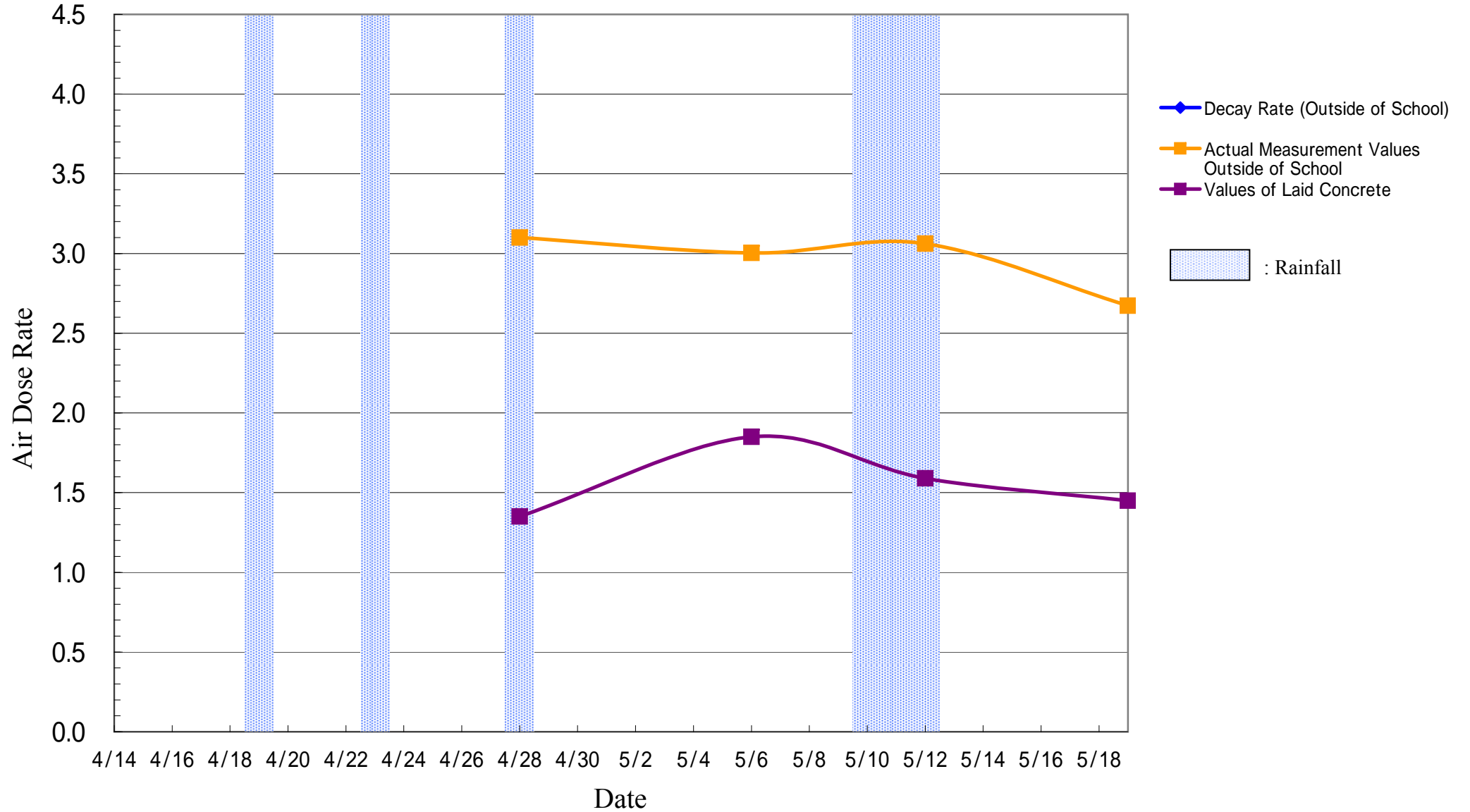
Toryo High School

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



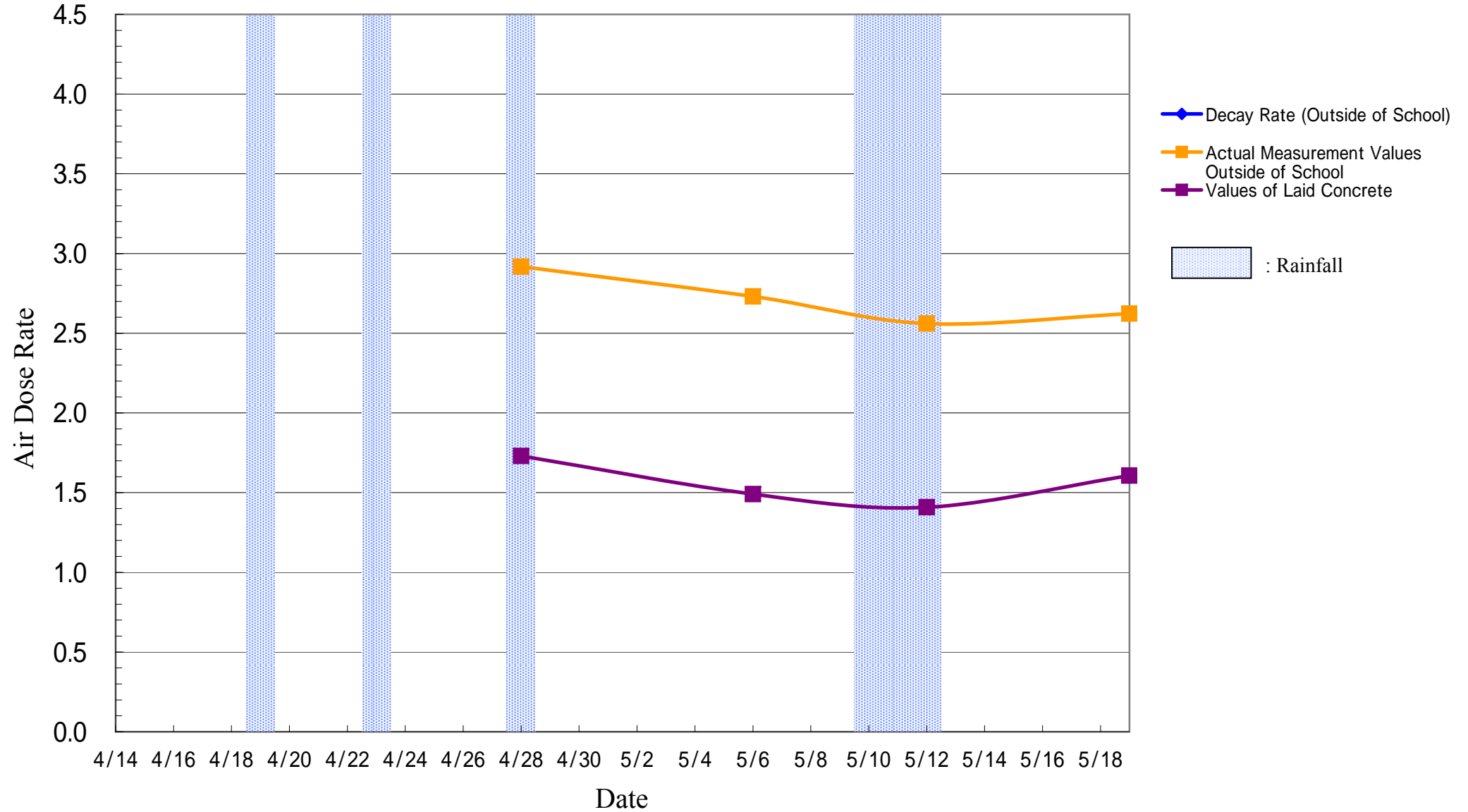
Seikei High School

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



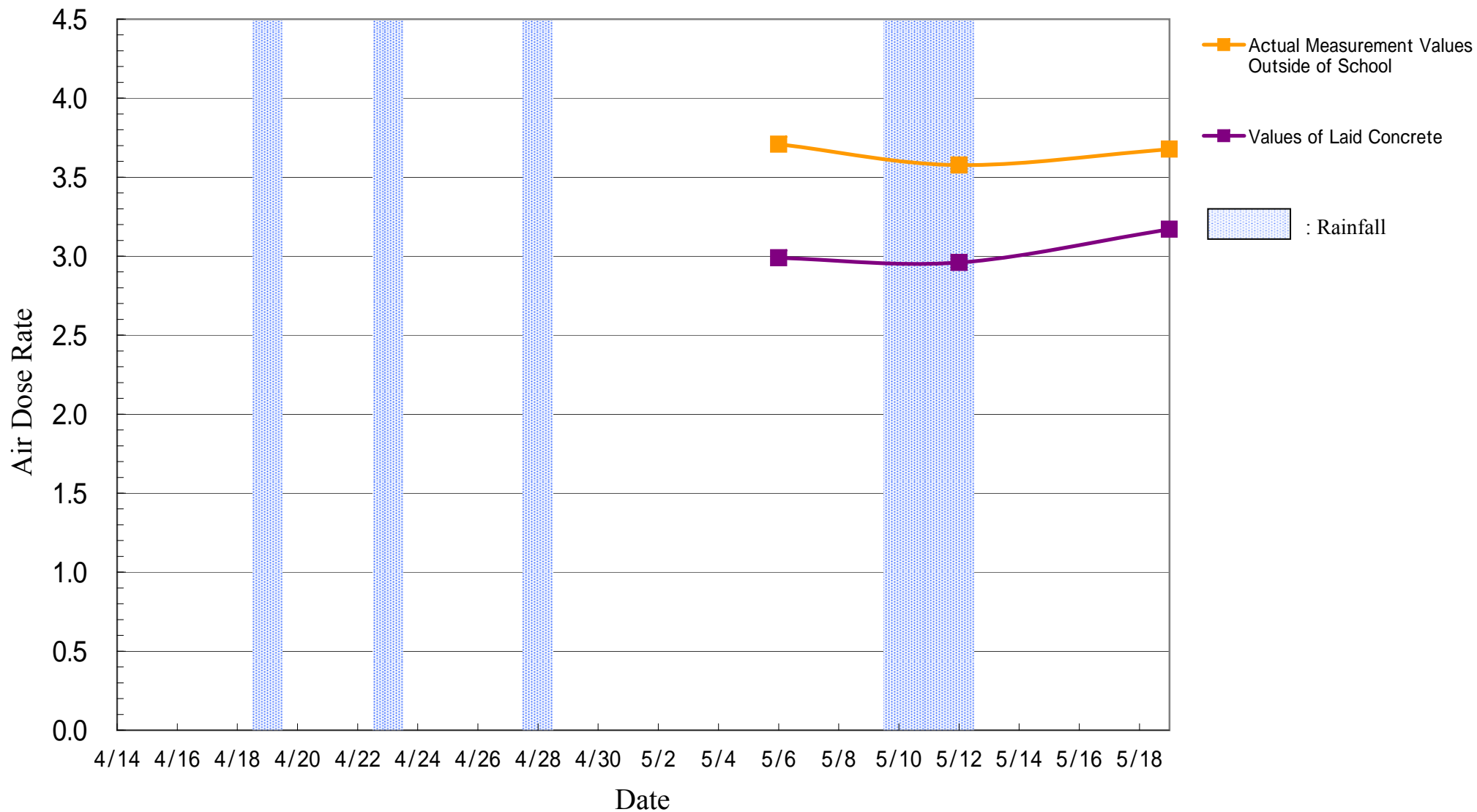
Tachibana High School

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



Ryouzen Kodomonomura Jidoukan

(μ Sv/h)



May 26, 2011

Ministry of Education, Culture, Sports, Science and Technology

Results of Monitoring by Simple Integrated Dosimeters (Summary)

1. Measurement results between Monday May 9 and Sunday May 15, 2011

- Measurement results showed integrated doses (average per hour) of between $0\mu\text{Sv}/\text{hour}$ and $0.70\mu\text{Sv}/\text{hour}$, with an overall school average of $0.19\mu\text{Sv}/\text{hour}$. Assuming time at school to be eight hours per day, for 200 days per year, this results in an annual average of approximately 0.31mSv (approximately 0 to 1.12mSv).
- Based on the decision of school Principals, etc., outdoor activities such as exercise and club activities are being restricted to approximately one to two hours at 16 schools and kindergartens. In addition to this, there are currently no outdoor activities at 39 schools and kindergartens.

[Integrated dose estimate in schools (Annual)]

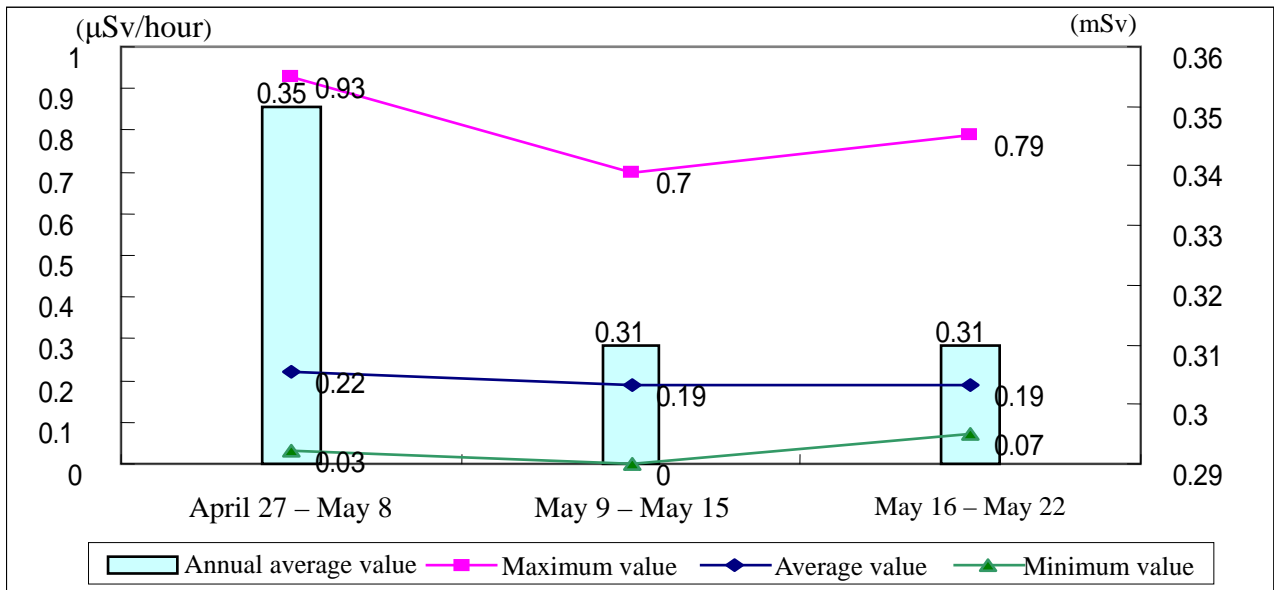
- Less than 0.5mSv : 48 schools
- Between 0.5 and less than 1mSv : 5 schools
- 1mSv or more: 2 schools

2. Measurement results between Monday May 16 and Sunday May 22, 2011

- Measurement results showed integrated doses (average) of between $0.07\mu\text{Sv}/\text{hour}$ and $0.79\mu\text{Sv}/\text{hour}$, with an overall school average of $0.19\mu\text{Sv}/\text{hour}$. If time at school is assumed to be eight hours per day, for 200 days per year, this results in an annual average of approximately 0.31mSv (approximately 0.11 to 1.26mSv).
- On the decision of school Principals, etc., outdoor activities such as exercise and club activities are being restricted to approximately one to two hours at 22 schools and kindergartens. In addition to this, there are currently no outdoor activities at 33 schools and kindergartens.

- Less than 0.5mSv : 48 schools
- Between 0.5 and less than 1mSv : 6 schools
- 1mSv or more: 1 schools

3. Transitions in integrated dose



Results of Monitoring by Simple Integrated Dosimeter for Schools, etc. in Fukushima Prefecture

Survey period: May 9 (Mon) - May 15 (Sun), 2011

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time Average integrated dose (μ Sv/hour)			
1	Koriyama City	Koriyama Second Junior High School	Integrated dose(μ Sv)	1	0	1	1	1	-	-	4	0.1	0.9	Some outdoor activity conducted
			Accumulated time (hour)	10:00	10:00	9:00	9:00	10:00	-	-	48:00			
			Radiation (μ Sv / hour)	0.10	0.00	0.11	0.11	0.10	-	-	-			
			Weather	Fair	Cloudy	Partial rain	Partial rain	Cloudy	-	-	0.08			
2	Koriyama City	Saint- Paul's Kindergarten	Integrated dose(μ Sv)	1	1	2	1	1	-	-	6	0.6	0.8	No outdoor activity
			Accumulated time (hour)	5:00	5:00	5:00	5:00	5:00	-	-	25:00			
			Radiation (μ Sv / hour)	0.20	0.20	0.40	0.20	0.20	-	-	0.24			
			Weather	Fair	Rain	Rain	Cloudy	Cloudy	-	-	-			
3	Koriyama City	Kaoru Elementary School, Koriyama	Integrated dose(μ Sv)	1	2	0	1	1	-	-	5	0.1	1.1	No outdoor activity
			Accumulated time (hour)	8:25	9:10	7:40	7:00	7:10	-	-	39:25			
			Radiation (μ Sv / hour)	0.12	0.22	0.00	0.14	0.14	-	-	0.13			
			Weather	Cloudy	Cloudy	Partial rain	Partial rain	Fair	-	-	-			
4	Koriyama City	Koriyama First Junior High School	Integrated dose(μ Sv)	1	1	0	0	1	-	-	3	0.1	0.9	Some outdoor activity conducted
			Accumulated time (hour)	8:10	9:45	9:12	8:50	10:18	-	-	46:15			
			Radiation (μ Sv / hour)	0.12	0.10	0.00	0.00	0.10	-	-	0.06			
			Weather	Fair	Cloudy	Partial rain	Partial rain	Fair	-	-	-			
5	Koriyama City	Koriyama Third Junior High School	Integrated dose(μ Sv)	1	0	1	1	1	-	-	4	0.2	0.9	Some outdoor activity conducted
			Accumulated time (hour)	6:10	7:05	6:40	6:35	6:55	-	-	33:25			
			Radiation (μ Sv / hour)	0.16	0.00	0.15	0.15	0.14	-	-	-			
			Weather	Fair	Rain	Rain	Cloudy	Fair	-	-	0.12			
6	Motomiya City	Gohyakugawa Elementary School, Motomiya	Integrated dose(μ Sv)	2	0	0	1	1	-	-	4	0.2	2.1	No outdoor activity
			Accumulated time (hour)	9:15	8:55	8:50	9:00	7:30	-	-	43:30			
			Radiation (μ Sv / hour)	0.22	0.00	0.00	0.11	0.13	-	-	0.09			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	-	-	-			
7	Motomiya City	Motomiya 4th Preschool	Integrated dose(μ Sv)	4	6	3	3	3	-	-	19	0.6	2.7	No outdoor activity
			Accumulated time (hour)	12:00	12:00	12:00	11:50	12:00	-	-	59:50			
			Radiation (μ Sv / hour)	0.33	0.50	0.25	0.25	0.25	-	-	0.32			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	-	-	-			
8	Motomiya City	Wada Kindergarten, Motomiya	Integrated dose(μ Sv)	2	2	2	2	2	-	-	10	0.5	0.6	No outdoor activity
			Accumulated time (hour)	5:15	5:15	5:15	5:15	5:15	-	-	26:15			
			Radiation (μ Sv / hour)	0.38	0.38	0.38	0.38	0.38	-	-	0.38			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	-	-	-			
9	Motomiya City	Wada Elementary School, Motomiya	Integrated dose(μ Sv)	8	4	4	6	3	-	-	25	0.2	0.6	No outdoor activity
			Accumulated time (hour)	8:00	8:00	8:00	8:00	7:00	-	-	39:00			
			Radiation (μ Sv / hour)	1.00	0.50	0.50	0.75	0.43	-	-	0.64			
			Weather	Fair	Partial rain	Cloudy	Cloudy	Cloudy	-	-	-			
10	Nihonmatsu City	Ishii Kindergarten, Nihonmatsu	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.3	0.7	No outdoor activity
			Accumulated time (hour)	6:00	6:00	6:00	6:00	6:00	-	-	30:00			
			Radiation (μ Sv / hour)	0.17	0.17	0.17	0.17	0.17	-	-	0.17			
			Weather	Fair	Fair	Cloudy	Cloudy	Cloudy	-	-	-			
11	Nihonmatsu City	Ishii Elementary School, Nihonmatsu	Integrated dose(μ Sv)	0	0	1	1	1	-	-	3	0.2	0.7	No outdoor activity
			Accumulated time (hour)	7:10	8:20	8:10	7:35	7:35	-	-	38:50			
			Radiation (μ Sv / hour)	0.00	0.00	0.12	0.13	0.13	-	-	0.08			
			Weather	Cloudy	Partial rain	Partial rain	Partial rain	Cloudy	-	-	-			
12	Nihonmatsu City	Takeshita Elementary School, Nihonmatsu	Integrated dose(μ Sv)	1	1	-	-	1	-	-	3	0.2	2.5	No outdoor activity May 11: Not measured May 12: Unable to
			Accumulated time (hour)	8:50	8:50	-	-	8:50	-	-	26:30			
			Radiation (μ Sv / hour)	0.11	0.11	-	-	0.11	-	-	0.11			

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
			Weather	Fair	Cloudy	-	-	Fair	-	-	0.11			measure
13	Nihonmatsu City	Matsugaoka Preschool	Integrated dose(μ Sv)	1	2	1	2	1	2	-	9	0.4	2.1	No outdoor activity
			Accumulated time (hour)	11:37	11:50	12:20	12:01	12:05	10:55	-	70:48			
			Radiation (μ Sv / hour)	0.09	0.17	0.08	0.17	0.08	0.18	-	0.13			
			Weather	Cloudy	Cloudy	Partial rain	Cloudy	Fair	Fair	-				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
14	Nihonmatsu City	Sugita Elementary School, Nihonmatsu	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	0.6	No outdoor activity
			Accumulated time (hour)	8:00	8:30	8:10	8:30	7:40	-	-	40:50			
			Radiation (μ Sv / hour)	0.13	0.12	0.12	0.12	0.13	-	-	0.12			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-				
15	Nihonmatsu City	Sugita Kindergarten, Nihonmatsu	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	0.6	No outdoor activity
			Accumulated time (hour)	5:45	5:45	5:50	5:50	5:45	-	-	28:55			
			Radiation (μ Sv / hour)	0.17	0.17	0.17	0.17	0.17	-	-	0.17			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	-	-				
16	Nihonmatsu City	Nihonmatsu Second Junior High School	Integrated dose(μ Sv)	3	2	2	2	3	-	-	12	0.5	1.1	No outdoor activity
			Accumulated time (hour)	10:15	10:25	10:30	10:35	10:20	-	-	52:05			
			Radiation (μ Sv / hour)	0.29	0.19	0.19	0.19	0.29	-	-	0.23			
			Weather	Fair	Rain	Cloudy	Rain	Cloudy	-	-				
17	Nihonmatsu City	Obama Junior High School, Nihonmatsu	Integrated dose(μ Sv)	1	2	2	2	1	-	-	8	0.4	2.2	No outdoor activity
			Accumulated time (hour)	11:00	10:55	9:50	10:10	9:20	-	-	51:15			
			Radiation (μ Sv / hour)	0.09	0.18	0.20	0.20	0.11	-	-	0.16			
			Weather	Fair	Cloudy	Partial rain	Cloudy	Fair	-	-				
18	Fukushima City	Shimogawasaki Elementary School, Fukushima	Integrated dose(μ Sv)	1	2	1	1	1	-	-	6	0.7	3.2	No outdoor activity
			Accumulated time (hour)	8:15	8:15	7:15	8:15	7:15	-	-	39:15			
			Radiation (μ Sv / hour)	0.12	0.24	0.14	0.12	0.14	-	-	0.15			
			Weather	Fair	Cloudy	Cloudy	Partial rain	Cloudy	-	-				
19	Fukushima City	Okubo Elementary School, Fukushima	Integrated dose(μ Sv)	0	0	0	0	0	-	-	0	0.2	2.6	Some outdoor activity conducted
			Accumulated time (hour)	7:20	7:50	7:20	7:50	7:20	-	-	37:40			
			Radiation (μ Sv / hour)	0.00	0.00	0.00	0.00	0.00	-	-	0.00			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-				
20	Fukushima City	Nankoudai Elementary School, Fukushima	Integrated dose(μ Sv)	1	1	0	1	1	-	-	4	0.3	3.1	No outdoor activity
			Accumulated time (hour)	8:05	7:35	7:35	8:05	7:35	-	-	38:55			
			Radiation (μ Sv / hour)	0.12	0.13	0.00	0.12	0.13	-	-	0.10			
			Weather	Fair	Cloudy	Partial rain	Partial rain	Cloudy	-	-				
21	Fukushima City	Onami Elementary School, Fukushima	Integrated dose(μ Sv)	1	1	5	6	1	-	-	14	0.3	3.4	No outdoor activity
			Accumulated time (hour)	7:25	8:15	8:00	7:50	7:05	-	-	38:35			
			Radiation (μ Sv / hour)	0.13	0.12	0.63	0.77	0.14	-	-	0.36			
			Weather	Fair	Cloudy	Partial rain	Partial rain	Fair	-	-				
22	Date City	Oguni Elementary School, Date	Integrated dose(μ Sv)	2	2	1	1	1	-	1	8	0.5	0.7	No outdoor activity May 15: Sports Day (indoors)
			Accumulated time (hour)	8:15	8:10	7:25	7:25	8:10	-	7:10	46:35			
			Radiation (μ Sv / hour)	0.24	0.24	0.13	0.13	0.12	-	0.14	0.17			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	Fair				
23	Soma City	Tamano Kindergarten	Integrated dose(μ Sv)	2	1	2	1	2	-	-	8	0.4	3.0	Some outdoor activity conducted
			Accumulated time (hour)	5:30	5:35	6:08	5:33	5:30	-	-	28:16			
			Radiation (μ Sv / hour)	0.36	0.18	0.33	0.18	0.36	-	-	0.28			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-				
24	Soma City	Tamano Junior High School	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.4	2.9	Some outdoor activity conducted
			Accumulated time (hour)	9:00	9:00	8:45	8:55	8:40	-	-	44:20			
			Radiation (μ Sv / hour)	0.11	0.11	0.11	0.11	0.12	-	-	0.11			
			Weather	Cloudy	Cloudy	Rain	Partial rain	Fair	-	-				
25	Soma City	Tamano Elementary School	Integrated dose(μ Sv)	2	2	3	4	2	-	-	13	0.5	3.0	Some outdoor activity conducted
			Accumulated time (hour)	8:25	9:00	8:40	9:00	8:25	-	-	43:30			
			Radiation (μ Sv / hour)	0.24	0.22	0.35	0.44	0.24	-	-	0.30			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-				
26	Fukushima City	Okayama Elementary School, Fukushima	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	2.2	No outdoor activity
			Accumulated time (hour)	7:50	7:50	7:40	7:50	7:50	-	-	39:00			
			Radiation (μ Sv / hour)	0.13	0.13	0.13	0.13	0.13	-	-	0.13			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	-	-				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
27	Fukushima City	Seishin Saniku Preschool	Integrated dose(μ Sv)	9	2	1	2	23	1	-	38	0.3	1.5	No outdoor activity activity on 5/13 was confirmed, but reason for high dose rate is unknown
			Accumulated time (hour)	9:00	9:00	9:00	9:00	9:00	9:00	-	54:00			
			Radiation (μ Sv / hour)	1.00	0.22	0.11	0.22	2.56	0.11	-	0.70			
			Weather	Fair	Fair	Partial rain	Partial rain	Fair	Fair	-				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
28	Fukushima City	Saniku Kindergarten	Integrated dose(μ Sv)	2	3	1	1	0	-	-	7	0.5	1.6	No outdoor activity
			Accumulated time (hour)	5:30	5:30	3:00	5:30	5:30	-	-	25:00			
			Radiation (μ Sv / hour)	0.36	0.55	0.33	0.18	0.00	-	-	0.28			
			Weather	Fair	Fair	Fair	Cloudy	Fair	-	-	-			
29	Date City	Tominari Elementary School, Date	Integrated dose(μ Sv)	2	1	1	1	1	-	1	7	0.2	0.6	No outdoor activity May 15: Parents Day (Sunday)
			Accumulated time (hour)	7:20	7:20	7:20	7:20	7:20	-	7:20	44:00			
			Radiation (μ Sv / hour)	0.27	0.14	0.14	0.14	0.14	-	0.14	0.16			
			Weather	Fair	Partial rain	Cloudy	Cloudy	Fair	-	Fair	-			
30	Fukushima City	Fukushima Yogo Gakko, Fukushima	Integrated dose(μ Sv)	1	0	1	1	1	-	-	4	0.2	2.0	No outdoor activity
			Accumulated time (hour)	6:15	6:20	6:40	6:20	6:25	-	-	32:00			
			Radiation (μ Sv / hour)	0.16	0.00	0.15	0.16	0.16	-	-	0.13			
			Weather	Fair	Cloudy	Partial rain	Cloudy	Fair	-	-	-			
31	Fukushima City	Oyama Preschool	Integrated dose(μ Sv)	1	1	1	1	1	1	-	6	0.4	2.2	No outdoor activity
			Accumulated time (hour)	8:45	8:45	8:45	8:45	8:45	8:45	-	52:30			
			Radiation (μ Sv / hour)	0.11	0.11	0.11	0.11	0.11	0.11	-	0.11			
			Weather	Fair	Fair	Rain	Partial rain	Fair	Fair	-	-			
32	Fukushima City	Oyama Elementary School, Fukushima	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	3.1	No outdoor activity
			Accumulated time (hour)	8:00	8:00	8:00	8:00	8:00	-	-	40:00			
			Radiation (μ Sv / hour)	0.13	0.13	0.13	0.13	0.13	-	-	0.13			
			Weather	Fair	Fair	Cloudy	Partial rain	Cloudy	-	-	-			
33	Fukushima City	Shinryo Junior High School, Fukushima	Integrated dose(μ Sv)	1	1	3	4	1	-	-	10	0.1	1.9	Some outdoor activity conducted
			Accumulated time (hour)	10:45	10:05	10:40	10:35	9:40	-	-	51:45			
			Radiation (μ Sv / hour)	0.09	0.10	0.28	0.38	0.10	-	-	0.19			
			Weather	Fair	Rain	Cloudy	Rain	Fair	-	-	-			
34	Fukushima City	Hirano Junior High School, Fukushima	Integrated dose(μ Sv)	3	1	3	3	3	-	-	13	0.3	2.1	Some outdoor activity conducted
			Accumulated time (hour)	10:20	10:00	11:00	9:00	10:30	-	-	50:50			
			Radiation (μ Sv / hour)	0.29	0.10	0.27	0.33	0.29	-	-	0.26			
			Weather	Fair	Cloudy	Cloudy	Rain	Cloudy	-	-	-			
35	Fukushima City	Fukushima Second Junior High School	Integrated dose(μ Sv)	6	4	2	3	1	-	-	16	0.3	2.6	Some outdoor activity conducted
			Accumulated time (hour)	11:00	11:00	11:00	11:00	10:30	-	-	54:30			
			Radiation (μ Sv / hour)	0.55	0.36	0.18	0.27	0.10	-	-	0.29			
			Weather	Fair	Cloudy	Partial rain	Rain	Cloudy	-	-	-			
36	Fukushima City	Fukushima University Attached Kindergarten	Integrated dose(μ Sv)	1	1	1	1	0	-	-	4	0.5	2.6	No outdoor activity May 14: Kindergarten open for graduation ceremony
			Accumulated time (hour)	3:30	2:36	4:00	4:00	4:00	3:30	-	21:36			
			Radiation (μ Sv / hour)	0.29	0.38	0.25	0.25	0.00	0.00	-	0.19			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	Fair	-	-			
37	Fukushima City	Fukushima University Attached Junior High School	Integrated dose(μ Sv)	2	3	2	1	4	-	-	12	0.5	2.4	Some outdoor activity conducted
			Accumulated time (hour)	12:00	11:45	12:00	12:00	12:00	-	-	59:45			
			Radiation (μ Sv / hour)	0.17	0.26	0.17	0.08	0.33	-	-	0.20			
			Weather	Fair	Partial rain	Cloudy	Rain	Fair	-	-	-			
38	Fukushima City	Fukushima Seikei Junior High School	Integrated dose(μ Sv)	1	1	1	1	1	1	-	6	0.1	2.7	No outdoor activity
			Accumulated time (hour)	10:50	11:10	11:00	11:20	11:10	7:30	-	63:00			
			Radiation (μ Sv / hour)	0.09	0.09	0.09	0.09	0.09	0.13	-	0.10			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	Fair	-	-			
39	Fukushima City	Gakuyo Junior High School, Fukushima	Integrated dose(μ Sv)	3	1	1	1	1	-	-	7	0.1	2.0	Some outdoor activity conducted
			Accumulated time (hour)	10:30	10:35	10:45	10:55	10:55	-	-	53:40			
			Radiation (μ Sv / hour)	0.29	0.09	0.09	0.09	0.09	-	-	0.13			
			Weather	Fair	Fair	Rain	Cloudy	Fair	-	-	-			
40	Fukushima City	Fukushima First Junior High School	Integrated dose(μ Sv)	2	3	1	1	3	-	-	10	0.4	2.4	Some outdoor activity conducted
			Accumulated time (hour)	10:00	9:30	10:00	10:00	10:20	-	-	49:50			
			Radiation (μ Sv / hour)	0.20	0.32	0.10	0.10	0.29	-	-	0.20			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-	-			

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											Total time				
												Average integrated dose (μ Sv/hour)			
Weather				Fair	Cloudy	Partial rain	Rain	Fair	-	-	0.20				
41	Fukushima City	Fukushima Third Elementary School	Integrated dose(μ Sv)	1	2	1	1	1	-	-	6	0.2	3.2	No outdoor activity	
			Accumulated time (hour)	8:10	8:10	7:40	8:10	7:40	-	-	39:50				
			Radiation (μ Sv / hour)	0.12	0.24	0.13	0.12	0.13	-	-					
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-	0.15				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
42	Fukushima City	Fukushima Second Elementary School	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	2.9	No outdoor activity
			Accumulated time (hour)	8:35	8:40	7:35	8:30	7:35	-	-	40:55			
			Radiation (μ Sv / hour)	0.12	0.12	0.13	0.12	0.13	-	-	0.12			
			Weather	Fair	Cloudy	Cloudy	Partial rain	Fair	-	-				
43	Fukushima City	Sakura no Seibo Gakuin Kindergarten	Integrated dose(μ Sv)	1	0	0	1	0	-	-	2	Could not enter classroom	2.8	No outdoor activity
			Accumulated time (hour)	6:40	5:50	4:10	6:40	6:30	-	-	29:50			
			Radiation (μ Sv / hour)	0.15	0.00	0.00	0.15	0.00	-	-	0.07			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Fair	-	-				
44	Fukushima City	Sakura no Seibo Gakuin Elementary School	Integrated dose(μ Sv)	1	0	1	1	1	-	-	4	0.3	2.6	No outdoor activity
			Accumulated time (hour)	8:00	8:00	6:15	8:00	8:15	-	-	38:30			
			Radiation (μ Sv / hour)	0.13	0.00	0.16	0.13	0.12	-	-	0.10			
			Weather	Fair	Fair	Cloudy	Cloudy	Cloudy	-	-				
45	Fukushima City	Fukushima University attached Elementary School	Integrated dose(μ Sv)	1	1	1	1	2	-	-	6	0.3	2.8	No outdoor activity
			Accumulated time (hour)	8:00	8:00	8:00	8:00	8:00	-	-	40:00			
			Radiation (μ Sv / hour)	0.13	0.13	0.13	0.13	0.25	-	-	0.15			
			Weather	Fair	Cloudy	Cloudy	Partial rain	Partial rain	-	-				
46	Fukushima City	Fukushima Kenritsu Mo-gakko	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.3	2.5	Some outdoor activity conducted
			Accumulated time (hour)	7:10	7:20	6:55	6:55	7:10	-	-	35:30			
			Radiation (μ Sv / hour)	0.14	0.14	0.14	0.14	0.14	-	-	0.14			
			Weather	Fair	Partial rain	Partial rain	Cloudy	Cloudy	-	-				
47	Fukushima City	Watari Kindergarten, Fukushima	Integrated dose(μ Sv)	3	2	3	2	4	3	-	17	0.8	2.8	No outdoor activity
			Accumulated time (hour)	8:30	8:30	8:30	8:30	8:30	8:30	-	51:00			
			Radiation (μ Sv / hour)	0.35	0.24	0.35	0.24	0.47	0.35	-	0.33			
			Weather	Fair	Fair	Rain	Rain	Fair	Fair	-				
48	Fukushima City	Kodomo no Ie Soramame	Integrated dose(μ Sv)	4	2	2	2	3	-	-	13	0.8	0.8	No outdoor activity
			Accumulated time (hour)	5:00	5:30	5:30	5:30	5:00	-	-	26:30			
			Radiation (μ Sv / hour)	0.80	0.36	0.36	0.36	0.60	-	-	0.49			
			Weather	Fair	Fair	Rain	Rain	Fair	-	-				
49	Fukushima City	Watari Junior High School, Fukushima	Integrated dose(μ Sv)	1	2	2	2	2	-	-	9	0.5	2.9	No outdoor activity
			Accumulated time (hour)	9:00	9:30	10:00	10:00	9:00	-	-	47:30			
			Radiation (μ Sv / hour)	0.11	0.21	0.20	0.20	0.22	-	-	0.19			
			Weather	Fair	Fair	Partial rain	Rain	Fair	-	-				
50	Fukushima City	Watari Kindergarten, Fukushima	Integrated dose(μ Sv)	2	2	0	2	2	-	-	8	0.7	3.0	No outdoor activity
			Accumulated time (hour)	5:58	6:14	3:50	5:52	6:08	-	-	28:02			
			Radiation (μ Sv / hour)	0.34	0.32	0.00	0.34	0.33	-	-	0.29			
			Weather	Fair	Cloudy	Rain	Rain	Cloudy	-	-				
51	Fukushima City	Sakura Preschool	Integrated dose(μ Sv)	1	1	2	1	0	0	-	5	0.2	2.2	No outdoor activity
			Accumulated time (hour)	9:00	9:25	6:30	11:35	9:30	8:15	-	54:15			
			Radiation (μ Sv / hour)	0.11	0.11	0.31	0.09	0.00	0.00	-	0.09			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	Cloudy	-				
52	Fukushima City	Watari Elementary School, Fukushima	Integrated dose(μ Sv)	1	1	0	0	1	-	-	3	0.1	2.7	No outdoor activity
			Accumulated time (hour)	7:30	9:20	8:50	8:50	5:50	-	-	40:20			
			Radiation (μ Sv / hour)	0.13	0.11	0.00	0.00	0.17	-	-	0.07			
			Weather	Fair	Cloudy	Rain	Rain	Fair	-	-				
53	Fukushima City	Toryo High School	Integrated dose(μ Sv)	1	2	1	1	1	-	-	6	0.2	2.7	No outdoor activity
			Accumulated time (hour)	7:00	7:15	7:15	7:25	7:15	-	-	36:10			
			Radiation (μ Sv / hour)	0.14	0.28	0.14	0.13	0.14	-	-	0.17			
			Weather	Fair	Fair	Cloudy	Cloudy	Fair	-	-				
54	Fukushima City	Seikei High School	Integrated dose(μ Sv)	4	2	2	3	5	-	-	16	0.1	2.7	Some outdoor activity conducted
			Accumulated time (hour)	12:00	11:20	12:10	12:10	12:00	-	-	59:40			
			Radiation (μ Sv / hour)	0.33	0.18	0.16	0.25	0.42	-	-	0.27			
			Weather	Fair	Cloudy	Cloudy	Cloudy	Cloudy	-	-				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
55	Fukushima City	Tachibana High School	Integrated dose(μ Sv)	1	-	2	2	2	-	-	7	0.4	2.6	Some outdoor activity conducted May 10: School Foundation Day
			Accumulated time (hour)	12:00	-	12:00	12:00	12:00	-	-	48:00			
			Radiation (μ Sv / hour)	0.08	-	0.17	0.17	0.17	-	-	0.15			
			Weather	Fair	-	Partial rain	Rain	Fair	-	-	-			
										Total Avg.	0.19	0.3	2.1	

Results of Monitoring by Simple Integrated Dosimeter for Schools, etc. in Fukushima Prefecture

Survey period: May 16 (Mon) - May 22 (Sun), 2011

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * Outdoor activity record of person conducting the measurement * School events, etc.
											Total time Average integrated dose (μ Sv/hour)			
1	Koriyama City	Koriyama Second Junior High School	Integrated dose (μ Sv)	1	1	1	1	0	-	-	4	0.1	0.9	Some outdoor activity conducted No outdoor activity record for person conducting the measurement
			Accumulated time (hour)	9:20	9:00	10:00	9:00	9:30	-	-	46:50			
			Radiation (μ Sv / hour)	0.11	0.11	0.10	0.11	0.00	-	-	0.09			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
2	Koriyama City	Saint- Paul's Kindergarten	Integrated dose (μ Sv)	1	1	1	2	1	-	-	6	0.6	0.8	No outdoor activity
			Accumulated time (hour)	5:00	5:00	5:00	5:00	5:00	-	-	25:00			
			Radiation (μ Sv / hour)	0.20	0.20	0.20	0.40	0.20	-	-	0.24			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
3	Koriyama City	Kaoru Elementary School, Koriyama	Integrated dose (μ Sv)	1	1	0	1	1	-	-	4	0.1	1.1	No outdoor activity
			Accumulated time (hour)	8:25	6:40	7:40	8:25	8:40	-	-	39:50			
			Radiation (μ Sv / hour)	0.12	0.15	0.00	0.12	0.12	-	-	0.10			
			Weather	Cloudy	Cloudy	Fair	Fair	Fair	-	-				
4	Koriyama City	Koriyama First Junior High School	Integrated dose (μ Sv)	1	2	4	1	1	-	-	9	0.1	0.9	Some outdoor activity conducted Outdoor activity total: 55 min 5/17: Evacuation training
			Accumulated time (hour)	10:53	7:57	11:40	8:40	8:56	-	-	48:06			
			Radiation (μ Sv / hour)	0.09	0.25	0.34	0.12	0.11	-	-	0.19			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
5	Koriyama City	Koriyama Third Junior High School	Integrated dose (μ Sv)	1	1	1	1	1	-	-	5	0.2	0.9	Some outdoor activity conducted Outdoor activity total: 11 hrs
			Accumulated time (hour)	6:50	7:35	7:25	6:05	7:30	-	-	35:25			
			Radiation (μ Sv / hour)	0.15	0.13	0.13	0.16	0.13	-	-	0.14			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
6	Motomiya City	Gohyakugawa Elementary School, Motomiya	Integrated dose (μ Sv)	2	1	0	1	1	-	-	5	0.2	2.1	Some outdoor activity conducted Outdoor activity total: 1hr 15 min
			Accumulated time (hour)	9:20	9:20	7:40	7:15	5:00	-	-	38:35			
			Radiation (μ Sv / hour)	0.21	0.11	0.00	0.14	0.20	-	-	0.13			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
7	Motomiya City	Motomiya 4th Preschool	Integrated dose (μ Sv)	3	4	4	4	3	-	-	18	0.6	2.7	No outdoor activity 5/20-5/21: Preschool field topsoil removed
			Accumulated time (hour)	12:05	12:05	12:00	12:00	12:00	-	-	60:10			
			Radiation (μ Sv / hour)	0.25	0.33	0.33	0.33	0.25	-	-	0.30			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
8	Motomiya City	Wada Kindergarten, Motomiya	Integrated dose (μ Sv)	2	2	2	1	2	-	-	9	0.5	0.6	Some outdoor activity conducted Outdoor activity total: 50 min
			Accumulated time (hour)	5:15	5:15	5:15	5:15	5:15	-	-	26:15			
			Radiation (μ Sv / hour)	0.38	0.38	0.38	0.19	0.38	-	-	0.34			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
9	Motomiya City	Wada Elementary School, Motomiya	Integrated dose (μ Sv)	2	2	2	2	2	-	-	10	0.2	0.6	Some outdoor activity conducted Outdoor activity total: 1 hr 40 min
			Accumulated time (hour)	8:00	8:00	8:00	8:00	8:00	-	-	40:00			
			Radiation (μ Sv / hour)	0.25	0.25	0.25	0.25	0.25	-	-	0.25			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
10	Nihonmatsu City	Ishii Kindergarten, Nihonmatsu	Integrated dose (μ Sv)	0	0	1	1	0	-	-	2	0.3	0.7	No outdoor activity
			Accumulated time (hour)	6:00	6:00	6:00	6:00	6:00	-	-	30:00			
			Radiation (μ Sv / hour)	0.00	0.00	0.17	0.17	0.00	-	-	0.07			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
11	Nihonmatsu City	Ishii Elementary School, Nihonmatsu	Integrated dose (μ Sv)	1	1	2	1	1	-	-	6	0.2	0.7	No outdoor activity
			Accumulated time (hour)	8:00	7:40	8:20	8:10	7:10	-	-	39:20			
			Radiation (μ Sv / hour)	0.13	0.13	0.24	0.12	0.14	-	-	0.15			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
12	Nihonmatsu City	Takeshita Elementary School, Nihonmatsu	Integrated dose (μ Sv)	1	1	1	1	1	-	-	5	0.2	2.5	No outdoor activity
			Accumulated time (hour)	8:50	8:50	8:50	8:50	8:50	-	-	44:10			
			Radiation (μ Sv / hour)	0.11	0.11	0.11	0.11	0.11	-	-	0.11			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * Outdoor activity record of person conducting the measurement * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
14	Nihonmatsu City	Sugita Elementary School, Nihonmatsu	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	0.6	No outdoor activity
			Accumulated time (hour)	7:50	7:50	8:20	8:20	7:50	-	-	40:10			
			Radiation (μ Sv / hour)	0.13	0.13	0.12	0.12	0.13	-	-	0.12			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
15	Nihonmatsu City	Sugita Kindergarten, Nihonmatsu	Integrated dose(μ Sv)	1	0	1	1	0	-	-	3	0.2	0.6	No outdoor activity
			Accumulated time (hour)	5:55	6:00	6:00	6:00	5:55	-	-	29:50			
			Radiation (μ Sv / hour)	0.17	0.00	0.17	0.17	0.00	-	-	0.10			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
16	Nihonmatsu City	Nihonmatsu Second Junior High School	Integrated dose(μ Sv)	2	2	4	3	1	-	-	12	0.5	1.1	Some outdoor activity conducted Outdoor activity total: 8 hrs
			Accumulated time (hour)	10:25	10:30	10:35	10:35	10:30	-	-	52:35			
			Radiation (μ Sv / hour)	0.19	0.19	0.38	0.28	0.10	-	-	0.23			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
17	Nihonmatsu City	Obama Junior High School, Nihonmatsu	Integrated dose(μ Sv)	2	1	1	1	2	-	-	7	0.4	2.2	No outdoor activity
			Accumulated time (hour)	10:45	10:50	9:25	11:00	10:20	-	-	52:20			
			Radiation (μ Sv / hour)	0.19	0.09	0.11	0.09	0.19	-	-	0.13			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
18	Fukushima City	Shimogawasaki Elementary School, Fukushima	Integrated dose(μ Sv)	2	1	1	1	1	-	-	6	0.7	3.2	No outdoor activity
			Accumulated time (hour)	8:15	8:15	7:15	8:15	7:15	-	-	39:15			
			Radiation (μ Sv / hour)	0.24	0.12	0.14	0.12	0.14	-	-	0.15			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
19	Fukushima City	Okubo Elementary School, Fukushima	Integrated dose(μ Sv)	1	0	1	1	1	-	-	4	0.2	2.6	Some outdoor activity conducted No outdoor activity record for person conducting the measurement
			Accumulated time (hour)	7:20	7:50	8:05	7:50	7:20	-	-	38:25			
			Radiation (μ Sv / hour)	0.14	0.00	0.12	0.13	0.14	-	-	0.10			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
20	Fukushima City	Nankoudai Elementary School, Fukushima	Integrated dose(μ Sv)	0	1	1	1	0	-	-	3	0.3	3.1	No outdoor activity
			Accumulated time (hour)	8:00	7:36	7:49	8:04	7:28	-	-	38:57			
			Radiation (μ Sv / hour)	0.00	0.13	0.13	0.12	0.00	-	-	0.08			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
21	Fukushima City	Onami Elementary School, Fukushima	Integrated dose(μ Sv)	25	1	1	1	3	-	-	31	0.3	3.4	No outdoor activity 5/16: Possibility of malfunction due to placement of electronic devices in close proximity
			Accumulated time (hour)	7:25	8:15	8:15	8:15	7:15	-	-	39:25			
			Radiation (μ Sv / hour)	3.37	0.12	0.12	0.12	0.41	-	-	0.79			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
22	Date City	Oguni Elementary School, Date	Integrated dose(μ Sv)	-	1	1	1	1	-	-	4	0.5	0.7	No outdoor activity 5/16: Substitute Holiday
			Accumulated time (hour)	-	7:30	8:15	8:10	7:50	-	-	31:45			
			Radiation (μ Sv / hour)	-	0.13	0.12	0.12	0.13	-	-	0.13			
			Weather	-	Cloudy	Fair	Fair	Fair	-	-				
23	Soma City	Tamano kindergarten	Integrated dose(μ Sv)	2	1	2	2	1	-	-	8	0.4	3.0	Some outdoor activity conducted No outdoor activity record for person conducting the measurement
			Accumulated time (hour)	5:35	5:25	5:35	5:30	5:30	-	-	27:35			
			Radiation (μ Sv / hour)	0.36	0.18	0.36	0.36	0.18	-	-	0.29			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
24	Soma City	Tamano Junior High School	Integrated dose(μ Sv)	1	2	1	2	1	-	-	7	0.4	2.9	Some outdoor activity conducted No outdoor activity record for person conducting the measurement
			Accumulated time (hour)	11:40	10:35	10:30	10:30	8:20	-	-	51:35			
			Radiation (μ Sv / hour)	0.09	0.19	0.10	0.19	0.12	-	-	0.14			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
25	Soma City	Tamano Elementary School	Integrated dose(μ Sv)	2	2	3	2	2	-	-	11	0.5	3.0	Some outdoor activity conducted No outdoor activity record for person conducting the measurement
			Accumulated time (hour)	8:40	9:10	8:40	8:40	8:10	-	-	43:20			
			Radiation (μ Sv / hour)	0.23	0.22	0.35	0.23	0.24	-	-	0.25			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
26	Fukushima	Okayama Elementary School,	Integrated dose(μ Sv)	0	1	0	1	1	-	-	3	0.2	0.2	No outdoor activity
			Accumulated time (hour)	8:00	7:30	7:55	7:55	7:50	-	-	39:10			

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * Outdoor activity record of person conducting the measurement * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
28	Fukushima City	Saniku Kindergarten	Integrated dose(μ Sv)	1	1	1	2	1	1	-	7	0.5	1.6	No outdoor activity
			Accumulated time (hour)	5:30	5:30	3:00	5:30	5:30	3:00	-	28:00			
			Radiation (μ Sv / hour)	0.18	0.18	0.33	0.36	0.18	0.33	-	0.25			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
29	Date City	Tominari Elementary School, Date	Integrated dose(μ Sv)	-	1	1	1	1	-	-	4	0.2	0.6	No outdoor activity 5/16: Substitute Holiday
			Accumulated time (hour)	-	7:20	7:20	7:20	7:20	-	-	29:20			
			Radiation (μ Sv / hour)	-	0.14	0.14	0.14	0.14	-	-	0.14			
			Weather	-	Cloudy	Fair	Fair	Fair	-	-				
30	Fukushima City	Fukushima Yogo Gakko, Fukushima	Integrated dose(μ Sv)	1	1	1	1	1	0	-	5	0.2	2.0	No outdoor activity 5/21: Sports Day (indoors)
			Accumulated time (hour)	6:55	6:15	6:25	5:10	5:35	2:20	-	32:40			
			Radiation (μ Sv / hour)	0.14	0.16	0.16	0.19	0.18	0.00	-	0.15			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
31	Fukushima City	Oyama Preschool	Integrated dose(μ Sv)	1	1	1	1	1	1	-	6	0.4	2.2	No outdoor activity
			Accumulated time (hour)	9:00	9:00	9:00	9:00	9:00	9:00	-	54:00			
			Radiation (μ Sv / hour)	0.11	0.11	0.11	0.11	0.11	0.11	-	0.11			
			Weather	Fair	Cloudy	Fair	Fair	Fair	Fair	-				
32	Fukushima City	Oyama Elementary School, Fukushima	Integrated dose(μ Sv)	0	1	1	1	1	-	-	4	0.2	3.1	No outdoor activity
			Accumulated time (hour)	8:00	8:00	8:00	8:00	8:00	-	-	40:00			
			Radiation (μ Sv / hour)	0.00	0.13	0.13	0.13	0.13	-	-	0.10			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
33	Fukushima City	Shinryo Junior High School, Fukushima	Integrated dose(μ Sv)	1	2	1	1	2	-	-	7	0.1	1.9	Some outdoor activity conducted Outdoor activity total: 4 hrs
			Accumulated time (hour)	10:30	10:05	9:10	9:05	10:32	-	-	49:22			
			Radiation (μ Sv / hour)	0.10	0.20	0.11	0.11	0.19	-	-	0.14			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
34	Fukushima City	Hirano Junior High School, Fukushima	Integrated dose(μ Sv)	1	1	2	2	0	-	-	6	0.3	2.1	Some outdoor activity conducted Outdoor activity total: 3 hrs
			Accumulated time (hour)	8:50	11:00	9:00	10:30	9:00	-	-	48:20			
			Radiation (μ Sv / hour)	0.11	0.09	0.22	0.19	0.00	-	-	0.12			
			Weather	Fair	Cloudy	Cloudy	Fair	Fair	-	-				
35	Fukushima City	Fukushima Second Junior High School	Integrated dose(μ Sv)	5	6	4	6	1	-	-	22	0.3	2.6	Some outdoor activity conducted Outdoor activity total: 8 hrs
			Accumulated time (hour)	11:00	11:00	11:00	11:00	9:55	-	-	53:55			
			Radiation (μ Sv / hour)	0.45	0.55	0.36	0.55	0.10	-	-	0.41			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
36	Fukushima City	Fukushima University attached Kindergarten	Integrated dose(μ Sv)	-	1	1	0	0	-	-	2	0.5	2.6	No outdoor activity 5/16: Substitute Holiday
			Accumulated time (hour)	-	5:50	3:40	5:45	6:00	-	-	21:15			
			Radiation (μ Sv / hour)	-	0.17	0.27	0.00	0.00	-	-	0.09			
			Weather	-	Cloudy	Fair	Fair	Fair	-	-				
37	Fukushima City	Fukushima University attached junior high school	Integrated dose(μ Sv)	3	1	5	4	6	-	-	19	0.5	2.4	Some outdoor activity conducted Outdoor activity total: 8 hrs 30 min
			Accumulated time (hour)	11:40	11:40	11:40	11:50	11:45	-	-	58:35			
			Radiation (μ Sv / hour)	0.26	0.09	0.43	0.34	0.51	-	-	0.32			
			Weather	Fair	Partial rain	Fair	Fair	Fair	-	-				
38	Fukushima City	Fukushima Seikei Junior High School	Integrated dose(μ Sv)	1	1	2	1	1	1	-	7	0.1	2.7	No outdoor activity
			Accumulated time (hour)	11:00	11:10	9:10	8:30	11:00	4:30	-	55:20			
			Radiation (μ Sv / hour)	0.09	0.09	0.22	0.12	0.09	0.22	-	0.13			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
39	Fukushima City	Gakuyo Junior High School, Fukushima	Integrated dose(μ Sv)	0	1	3	0	4	-	-	8	0.1	2.0	Some outdoor activity conducted Outdoor activity total: 4 hrs
			Accumulated time (hour)	8:30	10:40	10:55	10:45	10:50	-	-	51:40			
			Radiation (μ Sv / hour)	0.00	0.09	0.27	0.00	0.37	-	-	0.15			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
40	Fukushima City	Fukushima First Junior High School	Integrated dose(μ Sv)	1	1	1	3	1	-	-	7	0.4	2.4	Some outdoor activity conducted Outdoor activity total: 1 hr 30 min
			Accumulated time (hour)	7:30	8:30	10:00	9:30	10:00	-	-	45:30			
			Radiation (μ Sv / hour)	0.13	0.12	0.10	0.32	0.10	-	-	0.15			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
41	Fukushima	Fukushima Third Elementary School	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	3.2	No outdoor activity
			Accumulated time (hour)	8:10	8:10	7:45	8:10	7:45	-	-	40:00			

No.	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * Outdoor activity record of person conducting the measurement * School events, etc.
											Total time			
											Average integrated dose (μ Sv/hour)			
	City	Tokushima Third Elementary School	Radiation (μ Sv / hour)	0.12	0.12	0.13	0.12	0.13	-	-	0.13	0.12	0.12	NO outdoor activity
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * Outdoor activity record of person conducting the measurement * School events, etc.
											Total time			
											Average integrated dose			
											(μ Sv/hour)			
42	Fukushima City	Fukushima Second Elementary School	Integrated dose(μ Sv)	1	1	1	1	1	-	-	5	0.2	2.9	No outdoor activity
			Accumulated time (hour)	8:30	8:35	7:35	8:35	7:35	-	-	40:50			
			Radiation (μ Sv / hour)	0.12	0.12	0.13	0.12	0.13	-	-	0.12			
			Weather	Cloudy	Cloudy	Fair	Fair	Fair	-	-				
43	Fukushima City	Sakura no Seibo Gakuin Kindergarten	Integrated dose(μ Sv)	1	0	0	0	1	1	-	3	Could not enter classroom	2.8	No outdoor activity
			Accumulated time (hour)	6:30	6:05	4:35	6:30	6:30	4:50	-	35:00			
			Radiation (μ Sv / hour)	0.15	0.00	0.00	0.00	0.15	0.21	-	0.09			
			Weather	Fair	Cloudy	Fair	Fair	Fair	Cloudy	-				
44	Fukushima City	Sakura no Seibo Gakuin Elementary School	Integrated dose(μ Sv)	0	1	1	0	3	1	-	6	0.3	2.6	No outdoor activity
			Accumulated time (hour)	8:00	8:00	6:30	8:00	8:30	4:30	-	43:30			
			Radiation (μ Sv / hour)	0.00	0.13	0.15	0.00	0.35	0.22	-	0.14			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
45	Fukushima City	Fukushima University attached Elementary School	Integrated dose(μ Sv)	2	1	1	2	2	-	-	8	0.3	2.8	No outdoor activity
			Accumulated time (hour)	8:00	8:00	8:00	8:00	8:00	-	-	40:00			
			Radiation (μ Sv / hour)	0.25	0.13	0.13	0.25	0.25	-	-	0.20			
			Weather	Fair	Fair	Partial rain	Fair	Fair	-	-				
46	Fukushima City	Fukushima Kenritsu Mo-gakko	Integrated dose(μ Sv)	1	1	1	1	0	-	-	4	0.3	2.5	conducted No outdoor activity record for person conducting the measurement
			Accumulated time (hour)	7:15	7:15	7:05	7:20	7:00	-	-	35:55			
			Radiation (μ Sv / hour)	0.14	0.14	0.14	0.14	0.00	-	-	0.11			
			Weather	Fair	Cloudy	Fair	Fair	Cloudy	-	-				
47	Fukushima City	Watari Kindergarten, Fukushima	Integrated dose(μ Sv)	4	4	3	3	3	2	-	19	0.8	2.8	No outdoor activity
			Accumulated time (hour)	8:30	8:30	8:30	8:30	8:30	8:30	-	51:00			
			Radiation (μ Sv / hour)	0.47	0.47	0.35	0.35	0.35	0.24	-	0.37			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
48	Fukushima City	Kodomo no Ie Soramame	Integrated dose(μ Sv)	2	2	4	2	2	-	-	12	0.8	0.8	5/16: Some outdoor activity conducted Outdoor activity total: 2 hrs 30 min 5/14: Preschool field topsoil removed
			Accumulated time (hour)	5:00	5:00	5:00	5:00	5:00	-	-	25:00			
			Radiation (μ Sv / hour)	0.40	0.40	0.80	0.40	0.40	-	-	0.48			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
49	Fukushima City	Watari Junior High School, Fukushima	Integrated dose(μ Sv)	2	2	1	1	2	-	-	8	0.5	2.9	No outdoor activity
			Accumulated time (hour)	9:30	10:00	9:30	10:00	10:00	-	-	49:00			
			Radiation (μ Sv / hour)	0.21	0.20	0.11	0.10	0.20	-	-	0.16			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
50	Fukushima City	Watari Kindergarten, Fukushima	Integrated dose(μ Sv)	2	2	1	3	2	-	-	10	0.7	3.0	No outdoor activity
			Accumulated time (hour)	6:24	5:50	3:25	6:12	6:14	-	-	28:05			
			Radiation (μ Sv / hour)	0.31	0.34	0.29	0.48	0.32	-	-	0.36			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
51	Fukushima City	Sakura Preschool	Integrated dose(μ Sv)	3	1	0	1	2	-	-	7	0.2	2.2	Some outdoor activity conducted Outdoor activity total: 1 hr
			Accumulated time (hour)	8:30	8:05	9:00	8:45	8:30	-	-	42:50			
			Radiation (μ Sv / hour)	0.35	0.12	0.00	0.11	0.24	-	-	0.16			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
52	Fukushima City	Watari Elementary School, Fukushima	Integrated dose(μ Sv)	0	1	1	1	0	-	-	3	0.1	2.7	No outdoor activity
			Accumulated time (hour)	7:20	8:00	7:30	9:00	6:55	-	-	38:45			
			Radiation (μ Sv / hour)	0.00	0.13	0.13	0.11	0.00	-	-	0.08			
			Weather	Fair	Fair	Fair	Fair	Fair	-	-				
53	Fukushima City	Toryo High School	Integrated dose(μ Sv)	1	1	1	1	0	2	-	6	0.2	2.7	No outdoor activity
			Accumulated time (hour)	7:15	7:15	7:15	5:10	4:15	5:45	-	36:55			
			Radiation (μ Sv / hour)	0.14	0.14	0.14	0.19	0.00	0.35	-	0.16			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
54	Fukushima City	Seikei High School	Integrated dose(μ Sv)	1	1	2	4	7	3	-	18	0.1	2.7	Some outdoor activity conducted Outdoor activity total: 5 hrs
			Accumulated time (hour)	12:00	10:00	10:00	10:00	12:00	9:00	-	63:00			
			Radiation (μ Sv / hour)	0.08	0.10	0.20	0.40	0.58	0.33	-	0.29			
			Weather	Fair	Fair	Fair	Fair	Fair	Fair	-				
			Integrated dose(μ Sv)	1	2	2	1	2	-	-	8			conducted

№	Location	Name of school surveyed	Item	May 9 (Mon)	May 10 (Tue)	May 11 (Wed)	May 12 (Thu)	May 13 (Fri)	May 14 (Sat)	May 15 (Sun)	Total dose	May 19 inside school bldg. air dose rate (50cm for window side 50cm) (μ Sv/hour)	May 19 outside school bldg. air dose rate (50cm for preschool/kindergarten/ elementary, 1m for JHS/HS) (μ Sv/hour)	Notes * Outdoor activity restriction situation of each school * Outdoor activity record of person conducting the measurement * School events, etc.
											Total time			
											Average integrated dose (μ Sv/hour)			
55	Fukushima City	Tachibana High School	Accumulated time (hour)	12:00	12:00	12:00	12:00	12:00	-	-	60:00	0.4	2.6	No outdoor activity record for person conducting the measurement
			Radiation (μ Sv / hour)	0.08	0.17	0.17	0.08	0.17	-	-	0.13			
			Weather	Fair	Cloudy	Fair	Fair	Fair	-	-				
			Total Avg.								0.19			

May 26, 2011
Ministry of Education, Culture, Sports, Science and Technology

Implementation of Monitoring using Simple Integrated Dosimeters (at sites other than the 55 schools, etc. already being monitored)

Objective/Summary

Simple integrated dosimeters (hereinafter, “dosimeters”) are to be distributed to schools, etc. in Fukushima Prefecture (other than the 55 schools, etc. already in receipt of such equipment). Dosimeters are worn by teachers, etc. who represent the behavior of child students, in order to monitor the radiation dose being received by child students on an ongoing basis.

Specific Details

- In principle, one dosimeter will be distributed to all schools, etc. (other than the 55 schools, etc. already in receipt of such equipment).
- As in the 55 schools, etc., already implementing monitoring, a teacher who represents the behavior of child students should wear the dosimeter, and read the integrated dose at the time at which classes begin, and then the time at which classes end, each day (the dosimeter may be worn by different teachers on different days). The reading and time at which the reading was taken should be recorded on the recording sheet and stored.
- The Prefectural Board of Education will report the following to the Ministry of Education, Culture, Sports, Science and Technology once per month:
 - 1) The integrated dose per hour ($\mu\text{Sv}/\text{hour}$, average during the month in question) at each school, etc.
 - 2) The average, maximum and minimum integrated dose per hour ($\mu\text{Sv}/\text{hour}$) during the month in question in each city, town and village
 - 3) The results of monitoring from the 10 schools with the highest average integrated dose per hour ($\mu\text{Sv}/\text{hour}$) values recorded during activities in the month in question
- The Ministry of Education, Culture, Sports, Science and Technology will use the data specified in 1) above to create a map, which will be submitted to the Nuclear Safety Commission, and published, along with data from items 2) and 3) above on a monthly basis.
- Data collection is to be done by the Board of Education of each city, town, and village, in regard to the schools, etc. located within their jurisdictional area.
- Furthermore, in response to any such request from the Ministry of Education, Culture, Sports, Science and Technology, the Prefectural Board of Education will hand over monitoring results stored at the individual schools.
- The measurement period covered is until the end of summer vacation (roughly late August).
- In the interest of ensuring the peace of mind of parents and guardians, schools, etc., are permitted to publish the results of their own monitoring.

Anticipated Distribution of Dosimeters

In principle, dosimeters are to be distributed to all schools, etc. within Fukushima Prefecture, including those in areas with low levels of air dose, given the fact that school principals, etc. are currently restricting outdoor activities through their own decisions, and also to promote peace of mind within each school, etc.

- Public schools: Total 1048 schools (of which 38 have already received dosimeters) → distribution to 1010 schools and kindergartens.
199 kindergartens, 495 elementary schools, 237 junior high schools, 95 high schools, 22 special needs schools
- National schools: Total 4 schools (of which three have already received dosimeters) → distribution to one school
1 kindergarten, 1 elementary school, 1 junior high school, 1 special needs school
- Private schools: Total 176 schools (of which seven have already received dosimeters) → distribution to 169 schools and kindergartens.
147 kindergartens, 3 elementary schools, 7 junior high schools, 18 high schools
- Nurseries: Total 571 nurseries (of which seven have already received dosimeters) → distribution to 564 nurseries
344 registered nurseries, 220 non-registered nurseries
- Vocational high schools, etc.: Total 18 schools (of which none have already received dosimeters) → distribution to 18 schools
17 vocational schools, one miscellaneous school

Total: 1,762

*Due to delivery restrictions, dosimeters will be distributed to the 220 non-registered nurseries in approximately 1-2 weeks.

May 26, 2011
Ministry of Education, Culture, Sports Science and Technology

Hearing from Experts on Daily Lives of Children Attending Schools and the Like in Fukushima
Prefecture where Certain Levels of Radiation Dose are Detected

The results of air dose rate monitoring at schools and the like in Fukushima prefecture are as follows.

1. Purpose

On April 19, 2011, the Nuclear Emergency Response Headquarters compiled the interim policy regarding decisions on whether to utilize school buildings and outdoor areas within Fukushima Prefecture, referring to advice from the Nuclear Safety Commission.

In order to deepen proper understanding of this interim policy, and for reference in assessing more specifically the meaning of “rationally” stipulated in the principle of rationally making radiation doses “as low as reasonably achievable (ALARA)” in accordance with the current case, it is necessary to review and ascertain, from various viewpoints, matters concerning radiological protection, as well as the daily lives, mental and physical health, and growth of children, and to provide scientific and general information to schools and families in an easy-to-understand manner. Therefore, we have decided to hear opinions widely from experts on radiological protection, mental and physical health of children, education and the like.

2. Themes of the Hearing

(1) Basic ideas on school use and daily lives under the concept of ALARA based on the recommendation of the International Commission on Radiological Protection (ICRP)

(2) Preferable manners of school life and out-of-school activities under current circumstances

(3) Others

3. Experts to be heard (examples)

- Experts on radiological protection
- Experts on child psychiatry and school health
- Experts on school club activities
- Experts on outdoor activities
- Experts on public health
- Experts on medical institutions
- Experts on risk communication, etc.

4. Future Schedule

Once in two weeks from the end of May

*To be conducted by dividing into several groups

**36th Meeting of Nuclear
Safety Commission of Japan
Document No. 1 - 5**

May 26, 2011

**Ministry of Education, Culture, Sports,
Science and Technology**

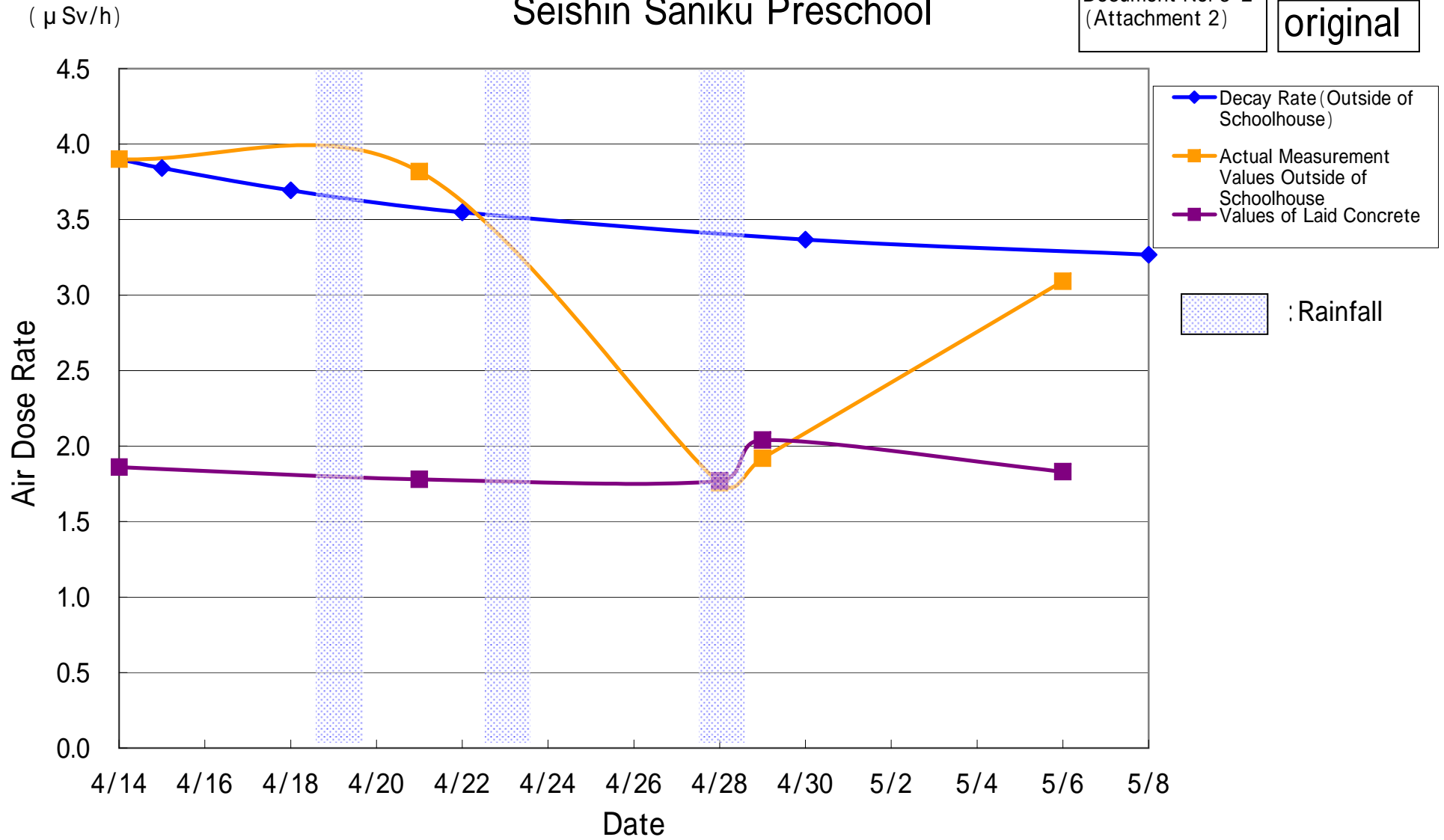
**Correction of the Documents submitted for Nuclear Safety
Commission of Japan on May 12.**

**Some errors were found in the Document No. 3-2 (attachment 2),
Document No. 3-3 and Document No. 3-5 submitted for 31st Meeting
of Nuclear Safety Commission of Japan. The corrected documents are
attached herewith.**

Seishin Saniku Preschool

Document No. 3-2
(Attachment 2)

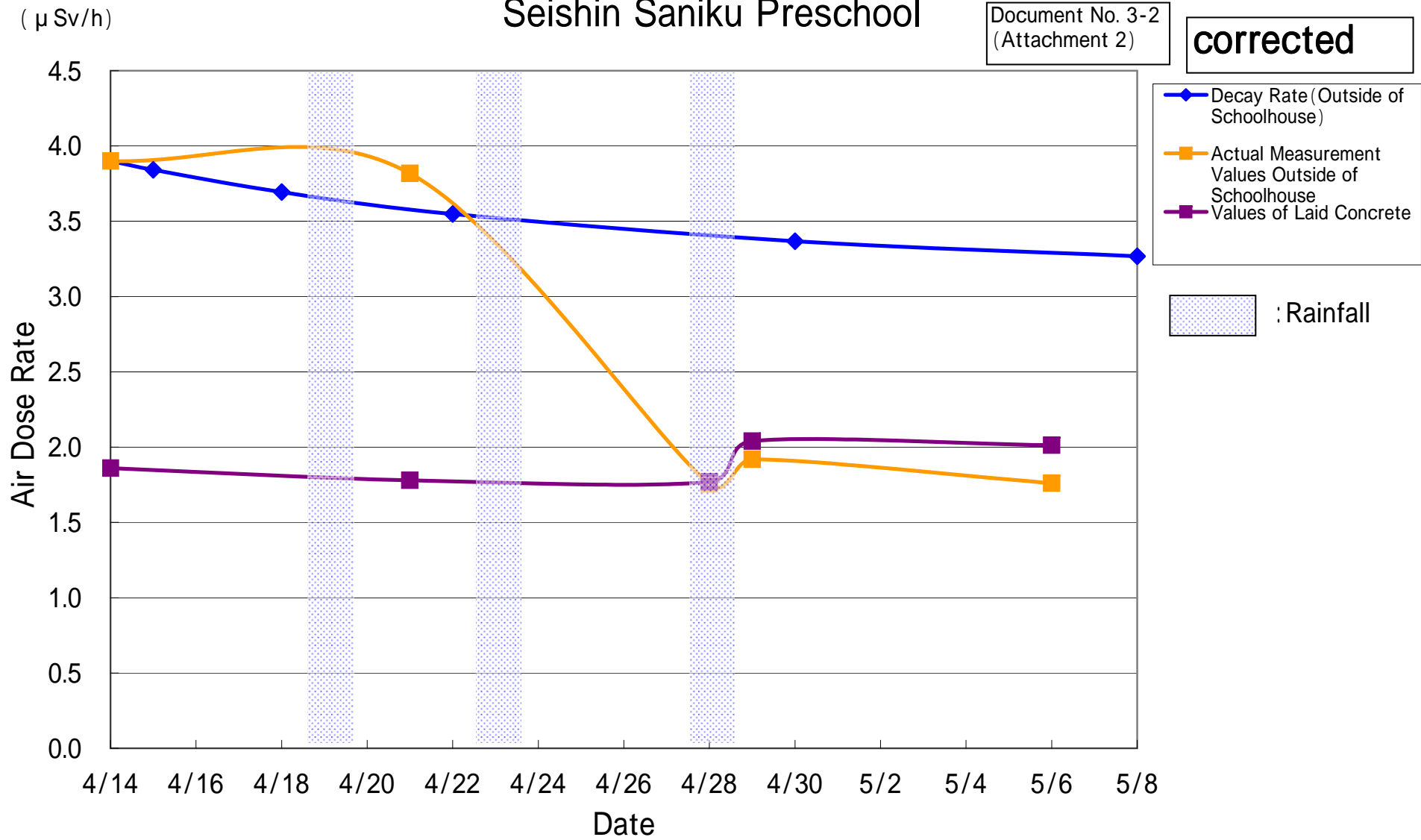
original



Seishin Saniku Preschool

Document No. 3-2
(Attachment 2)

corrected



May 12, 2011

Ministry of Education, Culture, Sports, Science and Technology

Results of Monitoring by Simple Integrating Dosimeters (Summary)

1. Measurement Method

Simple integrating dosimeters (hereinafter referred to as, “dosimeters”) were distributed to schools and the like. (55 schools and day-care centers) in Fukushima Prefecture, and dosimeters are worn by teachers and the like. who would represent the conduct of child students. These are used to check whether radiation received by child students is continually held to a low level.

- Measurement Period

The measurement will be conducted until the end of summer vacation (roughly late August).

- Measurement Details

Dosimeter values are measured twice daily, once when the students go to school and once when they return home. These are used to measure integral dose per hour in activities of the school and the like. (During the summer vacation, the measurement will be conducted when teachers and the like. go to work and return home, for reference in monitoring).

2. Measurement Results

- From April 27 to May 8, 2011, at 54 schools and day-care centers (excluding the kindergarten which was closed), monitoring by dosimeter was conducted.
- Measurement results showed integral doses (average) of 0.03 $\mu\text{Sv}/\text{hour}$ to 0.93 $\mu\text{Sv}/\text{hour}$. The overall average was 0.22 $\mu\text{Sv}/\text{hour}$.
If the sojourn time at school is assumed to be eight hours per day, for 200 days per year, an annual average will be approximately 0.35 mSv (approximately 0.05 to 1.49 mSv).
- By decision of the school Principal and the like., outdoor activities such as exercise and club activities are being restricted to about approximately one to two hours at 13 schools and day-care centers. There are no outdoor activities at 41 schools and day-care centers.

(Reference: Survey Subjects Breakdown)

- For the schools and the like. where dose rates of at least $3.7 \mu\text{Sv}/\text{hour}$ were measured in a survey by Fukushima Prefecture (April 5 to 7), those schools, and the like. were resurveyed on April 14 by the Ministry of Education, Culture, Sports, Science and Technology: 52 schools and day-care centers
- High schools where at least $3.8 \mu\text{Sv}/\text{hour}$ was measured in the environmental radiation monitoring and mesh survey (April 12 to 15) done by the Ministry of Education, Culture, Sports, Science and Technology and Fukushima Prefecture: 3 schools

Results of Monitoring by Simple Integrated Dosimeter for Schools, etc. in Fukushima Prefecture

Survey period: April 27 (Wed) - May 8 (Sun), 2011

№	Location	Name of school surveyed	Item	April 27 (Wed)	April 28 (Thu)	April 29 (Fri)	April 30 (Sat)	May 1 (Sun)	May 2 (Mon)	May 3 (Tue)	May 4 (Wed)	May 5 (Thu)	May 6 (Fri)	May 7 (Sat)	May 8 (Sun)	Total dose	April 14 inside school bldg. Air dose rate (Window side 50cm)	April 28 outside school bldg. Air dose rate (50cm for preschool/kindergarten/elementary, 1m for JHS/HS) (μ Sv/hour)	Notes
																Average integrated dose (μ Sv/hour)			
1	Koriyama City	Koriyama Second Junior High School	Integrated dose(μ Sv)	0	1	-	-	-	1	-	-	-	0	-	-	2	0.2	1.7	No outdoor activity
			Accumulated time(hour)	9:00	9:10	-	-	-	10:00	-	-	-	10:00	-	-	38:10			
			Radiation (μ Sv / hour)	0.00	0.11	-	-	-	0.10	-	-	-	0.00	-	-	0.05			
			Weather	Sunny	Cloudy	-	-	-	Sunny	-	-	-	Cloudy	-	-				
2	Koriyama City	Saint- Paul's Kindergarten	Integrated dose(μ Sv)	2	2	-	-	2	-	-	-	2	-	-	7	0.6	2.5	No outdoor activity	
			Accumulated time(hour)	5:30	5:00	-	-	-	5:00	-	-	-	5:00	-	-				20:30
			Radiation (μ Sv / hour)	0.36	0.40	-	-	-	0.20	-	-	-	0.40	-	-				0.34
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
3	Koriyama City	Kaoru Elementary School	Integrated dose(μ Sv)	1	1	-	-	1	-	-	-	0	-	-	3	0.2	1.0	No outdoor activity	
			Accumulated time(hour)	7:30	7:10	-	-	-	7:40	-	-	-	7:40	-	-				30:00
			Radiation (μ Sv / hour)	0.13	0.14	-	-	-	0.13	-	-	-	0.00	-	-				0.10
			Weather	Sunny	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
4	Koriyama City	Koriyama First Junior High School	Integrated dose(μ Sv)	1	1	-	-	1	-	-	-	1	-	-	4	0.3	2.6	No outdoor activity	
			Accumulated time(hour)	7:40	10:30	-	-	-	9:00	-	-	-	9:42	-	-				36:52
			Radiation (μ Sv / hour)	0.13	0.10	-	-	-	0.11	-	-	-	0.10	-	-				0.11
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
5	Koriyama City	Koriyama Third Junior High School	Integrated dose(μ Sv)	1	1	-	-	0	-	-	-	0	-	-	2	0.4	2.6	No outdoor activity	
			Accumulated time(hour)	6:45	5:55	-	-	-	6:20	-	-	-	6:25	-	-				25:25
			Radiation (μ Sv / hour)	0.15	0.17	-	-	-	0.00	-	-	-	0.00	-	-				0.08
			Weather	Sunny	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
6	Motomiya City	Gohyakugawa Elementary School	Integrated dose(μ Sv)	1	1	-	-	1	-	-	-	3	-	-	6	0.2	2.5	Partial outdoor activity conducted	
			Accumulated time(hour)	7:30	7:30	-	-	-	7:20	-	-	-	8:20	-	-				30:40
			Radiation (μ Sv / hour)	0.13	0.13	-	-	-	0.14	-	-	-	0.36	-	-				0.20
			Weather	Cloudy	Sunny	-	-	-	Cloudy	-	-	-	Sunny	-	-				
7	Motomiya City	Motomiya 4th day-care center	Integrated dose(μ Sv)	4	4	-	-	4	-	-	-	4	-	-	16	0.6	2.6	No outdoor activity	
			Accumulated time(hour)	11:55	12:05	-	-	-	12:05	-	-	-	11:50	-	-				47:55
			Radiation (μ Sv / hour)	0.34	0.33	-	-	-	0.33	-	-	-	0.34	-	-				0.33
			Weather	Cloudy	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
8	Motomiya City	Wada Kindergarten	Integrated dose(μ Sv)	2	2	-	-	2	-	-	-	2	-	-	8	0.8	2.6	No outdoor activity	
			Accumulated time(hour)	5:15	5:15	-	-	-	5:15	-	-	-	5:15	-	-				21:00
			Radiation (μ Sv / hour)	0.38	0.38	-	-	-	0.38	-	-	-	0.38	-	-				0.38
			Weather	Sunny	Sunny	-	-	-	Cloudy	-	-	-	Sunny	-	-				
9	Motomiya City	Wada Elementary School	Integrated dose(μ Sv)	10	8	-	-	5	-	-	-	6	-	-	29	0.5	2.9	Partial outdoor activity conducted	
			Accumulated time(hour)	8:00	8:00	-	-	-	7:20	-	-	-	8:00	-	-				31:20
			Radiation (μ Sv / hour)	1.25	1.00	-	-	-	0.68	-	-	-	0.75	-	-				0.93
			Weather	Cloudy	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
10	Nihonmats u City	Ishii Kindergarten	Integrated dose(μ Sv)	1	0	-	-	1	-	-	-	1	-	-	3	0.5	2.6	No outdoor activity	
			Accumulated time(hour)	3:45	3:45	-	-	-	4:00	-	-	-	6:00	-	-				17:30
			Radiation (μ Sv / hour)	0.27	0.00	-	-	-	0.25	-	-	-	0.17	-	-				0.17
			Weather	Sunny	Sunny	-	-	-	Cloudy	-	-	-	Sunny	-	-				
11	Nihonmats u City	Ishii Elementary School	Integrated dose(μ Sv)	1	0	-	-	1	-	-	-	1	-	-	3	0.2	2.8	No outdoor activity	
			Accumulated time(hour)	8:20	7:20	-	-	-	7:20	-	-	-	7:20	-	-				30:20
			Radiation (μ Sv / hour)	0.12	0.00	-	-	-	0.14	-	-	-	0.14	-	-				0.10
			Weather	Cloudy	Sunny	-	-	-	Cloudy	-	-	-	Sunny	-	-				
12	Nihonmats u City	Takeshita Elementary School	Integrated dose(μ Sv)	1	1	-	-	1	-	-	-	1	-	-	4	0.2	2.9	No outdoor activity	
			Accumulated time(hour)	8:50	8:50	-	-	-	8:50	-	-	-	9:20	-	-				35:50
			Radiation (μ Sv / hour)	0.11	0.11	-	-	-	0.11	-	-	-	0.11	-	-				0.11
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
13	Nihonmats u City	Matsugaoka day-care center	Integrated dose(μ Sv)	2	2	-	2	-	2	-	-	2	2	-	12	0.2	2.9	No outdoor activity Open as usual on April 30, May 7	
			Accumulated time(hour)	11:50	11:50	-	11:15	-	11:35	-	-	-	11:30	11:00	-				69:00
			Radiation (μ Sv / hour)	0.17	0.17	-	0.18	-	0.17	-	-	-	0.17	0.18	-				0.17
			Weather	Sunny	Sunny	-	Cloudy	-	Cloudy	-	-	-	Sunny	Intermittent rain	-				

№	Location	Name of school surveyed	Item	April 27 (Wed)	April 28 (Thu)	April 29 (Fri)	April 30 (Sat)	May 1 (Sun)	May 2 (Mon)	May 3 (Tue)	May 4 (Wed)	May 5 (Thu)	May 6 (Fri)	May 7 (Sat)	May 8 (Sun)	Total dose	April 14 inside school bldg. Air dose rate (Window side 50cm)	April 28 outside school bldg. Air dose rate (50cm for preschool/Kindergarten/elementary, 1m for JHS/HS) (µSv/hour)	Notes
																Total time Average integrated dose (µSv/hour)			
14	Nihonmatsu City	Sugita Elementary School	Integrated dose(µSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.2	2.6	No outdoor activity
			Accumulated time(hour)	7:30	8:40	-	-	-	8:10	-	-	-	8:00	-	-	32:20			
			Radiation (µSv / hour)	0.13	0.12	-	-	-	0.12	-	-	-	0.13	-	-	0.12			
			Weather	Cloudy	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
15	Nihonmatsu City	Sugita Kindergarten	Integrated dose(µSv)	1	0	-	-	-	1	-	-	-	1	-	-	3	0.5	2.9	No outdoor activity
			Accumulated time(hour)	3:25	3:25	-	-	-	3:40	-	-	-	5:45	-	-	16:15			
			Radiation (µSv / hour)	0.29	0.00	-	-	-	0.27	-	-	-	0.17	-	-	0.18			
			Weather	Cloudy	Sunny	-	-	-	Cloudy	-	-	-	Sunny	-	-				
16	Nihonmatsu City	Nihonmatsu Second Junior High School	Integrated dose(µSv)	2	2	-	1	-	-	-	-	-	4	-	-	9	0.1	1.5	No outdoor activity April 30: school day May 2: substitute holiday
			Accumulated time(hour)	10:25	10:25	-	7:15	-	-	-	-	-	10:05	-	-	38:10			
			Radiation (µSv / hour)	0.19	0.19	-	0.14	-	-	-	-	-	0.40	-	-	0.24			
			Weather	Sunny	Sunny	-	Cloudy	-	-	-	-	-	Cloudy	-	-				
17	Nihonmatsu City	Obama Junior High School	Integrated dose(µSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.1	2.9	No outdoor activity
			Accumulated time(hour)	8:55	10:35	-	-	-	10:55	-	-	-	11:00	-	-	41:25			
			Radiation (µSv / hour)	0.11	0.09	-	-	-	0.09	-	-	-	0.09	-	-	0.10			
			Weather	Sunny	Sunny	-	-	-	Cloudy	-	-	-	Sunny	-	-				
18	Fukushima City	Shimogawasaki Elementary School	Integrated dose(µSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.7	3.0	No outdoor activity
			Accumulated time(hour)	6:55	6:35	-	-	-	8:15	-	-	-	7:15	-	-	29:00			
			Radiation (µSv / hour)	0.14	0.15	-	-	-	0.12	-	-	-	0.14	-	-	0.14			
			Weather	Sunny	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
19	Fukushima City	Okubo Elementary School	Integrated dose(µSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.2	2.4	Partial outdoor activity conducted
			Accumulated time(hour)	7:15	7:50	-	-	-	7:20	-	-	-	7:20	-	-	29:45			
			Radiation (µSv / hour)	0.14	0.13	-	-	-	0.14	-	-	-	0.14	-	-	0.13			
			Weather	Sunny	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
20	Fukushima City	Nankoudai Elementary School	Integrated dose(µSv)	1	1	-	-	-	1	-	-	-	0	-	-	3	0.3	3.2	No outdoor activity
			Accumulated time(hour)	7:35	8:05	-	-	-	8:22	-	-	-	7:35	-	-	31:37			
			Radiation (µSv / hour)	0.13	0.12	-	-	-	0.12	-	-	-	0.00	-	-	0.09			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Cloudy	-	-				
21	Fukushima City	Onami Elementary School	Integrated dose(µSv)	1	2	-	-	-	4	-	-	-	1	-	-	8	0.2	3.2	No outdoor activity
			Accumulated time(hour)	8:10	8:10	-	-	-	7:25	-	-	-	7:25	-	-	31:10			
			Radiation (µSv / hour)	0.12	0.24	-	-	-	0.54	-	-	-	0.13	-	-	0.26			
			Weather	Cloudy	Cloudy	-	-	-	Cloudy	-	-	-	Cloudy	-	-				
22	Date City	Oguni Elementary School	Integrated dose(µSv)	2	2	-	-	-	2	-	-	-	2	-	-	8	0.2	4.5	No outdoor activity
			Accumulated time(hour)	7:30	7:30	-	-	-	8:25	-	-	-	8:30	-	-	31:55			
			Radiation (µSv / hour)	0.27	0.27	-	-	-	0.24	-	-	-	0.24	-	-	0.25			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
23	Soma City	Tamano kindergarten	Integrated dose(µSv)	1	1	-	-	-	2	-	-	-	2	-	-	6	0.2	3.0	No outdoor activity
			Accumulated time(hour)	5:35	5:35	-	-	-	5:35	-	-	-	5:35	-	-	22:20			
			Radiation (µSv / hour)	0.18	0.18	-	-	-	0.36	-	-	-	0.36	-	-	0.27			
			Weather	Sunny	Sunny	-	-	-	Cloudy	-	-	-	Cloudy	-	-				
24	Soma City	Tamano Junior High School	Integrated dose(µSv)	1	2	-	-	-	2	-	-	-	1	-	-	6	0.1	2.9	No outdoor activity
			Accumulated time(hour)	8:40	9:00	-	-	-	8:50	-	-	-	8:40	-	-	35:10			
			Radiation (µSv / hour)	0.12	0.22	-	-	-	0.23	-	-	-	0.12	-	-	0.17			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
25	Soma City	Tamano Elementary School	Integrated dose(µSv)	3	3	-	-	-	3	-	-	-	2	-	-	11	0.3	3.0	No outdoor activity
			Accumulated time(hour)	7:30	8:05	-	-	-	9:00	-	-	-	8:30	-	-	33:05			
			Radiation (µSv / hour)	0.40	0.37	-	-	-	0.33	-	-	-	0.24	-	-	0.33			
			Weather	Sunny	Sunny	-	-	-	Cloudy	-	-	-	Cloudy	-	-				
26	Fukushima City	Okayama Elementary School	Integrated dose(µSv)	1	0	-	-	-	0	-	-	-	0	-	-	1	0.2	2.7	No outdoor activity
			Accumulated time(hour)	7:35	7:20	-	-	-	7:06	-	-	-	7:10	-	-	29:11			
			Radiation (µSv / hour)	0.13	0.00	-	-	-	0.00	-	-	-	0.00	-	-	0.03			
			Weather	Sunny	Cloudy	-	-	-	Cloudy	-	-	-	Sunny	-	-				
27	Fukushima City	Seishin Saniku day-care center	Integrated dose(µSv)	1	1	-	1	-	1	-	-	-	1	1	-	6	0.5	1.8	No outdoor activity Open as usual on April 30, May 7
			Accumulated time(hour)	9:00	9:00	-	9:00	-	9:00	-	-	-	9:00	9:00	-	54:00			
			Radiation (µSv / hour)	0.11	0.11	-	0.11	-	0.11	-	-	-	0.11	0.11	-	0.11			
			Weather	Sunny	Sunny	-	Intermittent rain	-	Sunny	-	-	-	Cloudy	Cloudy	-				

№	Location	Name of school surveyed	Item	April 27 (Wed)	April 28 (Thu)	April 29 (Fri)	April 30 (Sat)	May 1 (Sun)	May 2 (Mon)	May 3 (Tue)	May 4 (Wed)	May 5 (Thu)	May 6 (Fri)	May 7 (Sat)	May 8 (Sun)	Total dose	April 14 inside school bldg.	April 28 outside school bldg.	Notes
																Total time Average integrated dose (μSv/hour)	Air dose rate (Window side 50cm)	Air dose rate (50cm for preschool/Kindergarten/elementary, 1m for JHS/HS) (μSv/hour)	
28	Fukushima City	Saniku Kindergarten	Integrated dose(μSv)	1	2	-	-	-	3	-	-	-	3	-	-	9	0.8	2.3	No outdoor activity
			Accumulated time(hour)	3:00	5:30	-	-	-	5:30	-	-	-	5:30	-	-	19:30			
			Radiation (μSv / hour)	0.33	0.36	-	-	-	0.55	-	-	-	0.55	-	-	0.46			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
29	Date City	Tominari Elementary School	Integrated dose(μSv)	1	2	-	-	-	0	-	-	-	1	-	-	4	0.2	3.8	No outdoor activity
			Accumulated time(hour)	7:20	7:20	-	-	-	7:20	-	-	-	7:20	-	-	29:20			
			Radiation (μSv / hour)	0.14	0.27	-	-	-	0.00	-	-	-	0.14	-	-	0.14			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
30	Fukushima City	Fukushima yogo gakko	Integrated dose(μSv)	1.00	1.00	-	-	-	1.00	-	-	-	1.00	-	-	4.00	0.3	2.9	No outdoor activity
			Accumulated time(hour)	6:30	6:00	-	-	-	6:25	-	-	-	6:15	-	-	25:10			
			Radiation (μSv / hour)	0.15	0.17	-	-	-	0.16	-	-	-	0.16	-	-	0.16			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				
31	Fukushima City	Oyama day-care center	Integrated dose(μSv)	2	1	-	-	-	1	-	-	-	1	-	-	5	0.6	2.6	No outdoor activity
			Accumulated time(hour)	8:45	8:45	-	-	-	8:45	-	-	-	8:45	-	-	35:00			
			Radiation (μSv / hour)	0.23	0.11	-	-	-	0.11	-	-	-	0.11	-	-	0.14			
			Weather	Sunny	Cloudy	-	-	-	Sunny	-	-	-	Sunny	-	-				
32	Fukushima City	Oyama Elementary School	Integrated dose(μSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.2	3.5	No outdoor activity
			Accumulated time(hour)	8:00	8:00	-	-	-	8:00	-	-	-	8:00	-	-	32:00			
			Radiation (μSv / hour)	0.13	0.13	-	-	-	0.13	-	-	-	0.13	-	-	0.13			
			Weather	Sunny	Cloudy	-	-	-	Cloudy	-	-	-	Cloudy	-	-				
33	Fukushima City	Shinryo Junior High School	Integrated dose(μSv)	2	2	-	-	-	7	-	-	-	12	-	-	23	0.3	2.3	Partial outdoor activity conducted
			Accumulated time(hour)	10:45	10:40	-	-	-	10:55	-	-	-	10:45	-	-	43:05			
			Radiation (μSv / hour)	0.19	0.19	-	-	-	0.64	-	-	-	1.12	-	-	0.53			
			Weather	Sunny	Cloudy	-	-	-	Sunny	-	-	-	Cloudy	-	-				
34	Fukushima City	Hirano Junior High School	Integrated dose(μSv)	1	1	-	-	-	2	-	-	-	2	-	-	6	0.2	2.6	Partial outdoor activity conducted
			Accumulated time(hour)	10:00	10:10	-	-	-	10:00	-	-	-	10:30	-	-	40:40			
			Radiation (μSv / hour)	0.10	0.10	-	-	-	0.20	-	-	-	0.19	-	-	0.15			
			Weather	Sunny	Intermittent rain	-	-	-	Sunny	-	-	-	Sunny	-	-				
35	Fukushima City	Fukushima Second Junior High School	Integrated dose(μSv)	2	3	3	4	-	-	5	6	5	4	5	-	37	0.4	3.0	Partial outdoor activity conducted April 29: school day May 2: substitute holiday April 30, May 3,4,5,7 Club activities
			Accumulated time(hour)	10:05	10:50	9:20	2:30	-	-	3:00	3:00	3:00	11:30	6:45	-	60:00			
			Radiation (μSv / hour)	0.20	0.28	0.32	1.60	-	-	1.67	2.00	1.67	0.35	0.74	-	0.62			
			Weather	Cloudy	Sunny	Sunny	Sunny	-	-	Sunny	Sunny	Sunny	Sunny	Cloudy	-				
36	Fukushima City	Fukushima University attached Kindergarten	Integrated dose(μSv)	-	-	-	-	-	-	-	-	-	-	-	-	-	0.6	2.9	Preschool/Kindergarten closed until May 8 No outdoor activity
			Accumulated time(hour)	-	-	-	-	-	-	-	-	-	-	-	-				
			Radiation (μSv / hour)	-	-	-	-	-	-	-	-	-	-	-	-				
			Weather	-	-	-	-	-	-	-	-	-	-	-	-				
37	Fukushima City	Fukushima University attached junior high school	Integrated dose(μSv)	2	1	-	-	-	4	-	-	-	4	-	-	11	0.2	2.8	Partial outdoor activity conducted
			Accumulated time(hour)	12:00	11:00	-	-	-	11:45	-	-	-	11:45	-	-	46:30			
			Radiation (μSv / hour)	0.17	0.09	-	-	-	0.34	-	-	-	0.34	-	-	0.24			
			Weather	Cloudy	Intermittent rain	-	-	-	Sunny	-	-	-	Sunny	-	-				
38	Fukushima City	Fukushima Seikei Junior High School	Integrated dose(μSv)	1	1	-	-	-	-	-	-	-	1	0	-	3	0.2	3.1	No outdoor activity April 30: adjustment day May 2: substitute holiday May 7: normal school day
			Accumulated time(hour)	10:50	11:05	-	-	-	-	-	-	-	7:40	7:05	-	36:40			
			Radiation (μSv / hour)	0.09	0.09	-	-	-	-	-	-	-	0.13	0.00	-	0.08			
			Weather	Cloudy	Intermittent rain	-	-	-	-	-	-	-	Cloudy	Sunny	-				
39	Fukushima City	Gakuyo Junior High School	Integrated dose(μSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.1	2.2	Partial outdoor activity conducted
			Accumulated time(hour)	9:40	9:20	-	-	-	11:00	-	-	-	10:30	-	-	40:30			
			Radiation (μSv / hour)	0.10	0.11	-	-	-	0.09	-	-	-	0.10	-	-	0.10			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Cloudy	-	-				
40	Fukushima City	Fukushima First Junior High School	Integrated dose(μSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.1	2.7	Partial outdoor activity conducted
			Accumulated time(hour)	7:10	7:00	-	-	-	10:00	-	-	-	10:00	-	-	34:10			
			Radiation (μSv / hour)	0.14	0.14	-	-	-	0.10	-	-	-	0.10	-	-	0.12			
			Weather	Cloudy	Cloudy	-	-	-	Sunny	-	-	-	Cloudy	-	-				
41	Fukushima City	Fukushima Third Elementary School	Integrated dose(μSv)	1	0	-	-	-	1	-	-	-	1	-	-	3	0.2	3.3	No outdoor activity
			Accumulated time(hour)	7:50	7:50	-	-	-	8:20	-	-	-	7:40	-	-	31:40			
			Radiation (μSv / hour)	0.13	0.00	-	-	-	0.12	-	-	-	0.13	-	-	0.09			
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Sunny	-	-				

№	Location	Name of school surveyed	Item	April 27 (Wed)	April 28 (Thu)	April 29 (Fri)	April 30 (Sat)	May 1 (Sun)	May 2 (Mon)	May 3 (Tue)	May 4 (Wed)	May 5 (Thu)	May 6 (Fri)	May 7 (Sat)	May 8 (Sun)	Total dose		April 14 inside school bldg. Air dose rate (Window side 50cm)	April 28 outside school bldg. Air dose rate (50cm for preschool/Kindergarten/elementary, 1m for JHS/HS) (μSv/hour)	Notes
																Total time	Average integrated dose (μSv/hour)			
42	Fukushima City	Fukushima Second Elementary School	Integrated dose(μSv)	1	1	-	-	-	1	-	-	-	1	-	-	4	0.2	2.9	No outdoor activity	
			Accumulated time(hour)	7:40	8:40	-	-	-	7:25	-	-	-	6:40	-	-	30:25				
			Radiation (μSv / hour)	0.13	0.12	-	-	-	0.13	-	-	-	0.15	-	-	0.13				
			Weather	Sunny	Cloudy	-	-	-	Sunny	-	-	-	Sunny	-	-					
43	Fukushima City	Sakura no Seibo Gakuin Kindergarden	Integrated dose(μSv)	1	1	-	-	-	-	-	-	-	1	1	4	No entry	2.9	No outdoor activity May 2: holiday May 7: normal school day		
			Accumulated time(hour)	5:00	4:10	-	-	-	-	-	-	6:00	4:40	-	19:50					
			Radiation (μSv / hour)	0.20	0.24	-	-	-	-	-	-	0.17	0.21	-	0.20					
			Weather	Sunny	Sunny	-	-	-	-	-	-	Sunny	Cloudy	-	-					
44	Fukushima City	Sakura no Seibo Gakuin Elementary School	Integrated dose(μSv)	1	1	-	-	-	-	-	-	-	1	1	4	0.3	2.9	No outdoor activity May 2: holiday May 7: normal school day		
			Accumulated time(hour)	8:00	8:00	-	-	-	-	-	-	8:00	4:30	-	28:30					
			Radiation (μSv / hour)	0.13	0.13	-	-	-	-	-	-	0.13	0.22	-	0.14					
			Weather	Sunny	Sunny	-	-	-	-	-	-	Sunny	Sunny	-	-					
45	Fukushima City	Fukushima University attached Elementary School	Integrated dose(μSv)	1	1	-	-	-	1	-	-	-	-	-	3	0.3	3.0	No outdoor activity May 6: holiday		
			Accumulated time(hour)	8:00	9:00	-	-	-	9:00	-	-	-	-	-	26:00					
			Radiation (μSv / hour)	0.13	0.11	-	-	-	0.11	-	-	-	-	-	0.12					
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	-	-	-					
46	Fukushima City	Fukushima Kenritsu Mo-gakko	Integrated dose(μSv)	2	1	1	-	-	-	-	-	-	-	-	4	0.3	2.7	No outdoor activity April 30: adjustment day May 2: substitute holiday May 6: normal school day		
			Accumulated time(hour)	7:15	7:05	6:50	-	-	-	-	-	-	-	-	21:10					
			Radiation (μSv / hour)	0.28	0.14	0.15	-	-	-	-	-	-	-	-	0.19					
			Weather	Cloudy	Cloudy	Sunny	-	-	-	-	-	-	-	-	-					
47	Fukushima City	Watari day-care center	Integrated dose(μSv)	3	3	-	3	-	3	-	-	-	3	4	19	1.0	2.9	No outdoor activity April 30, May 7 open as usual		
			Accumulated time(hour)	8:30	8:30	-	8:30	-	8:30	-	-	-	8:30	8:30	51:00					
			Radiation (μSv / hour)	0.35	0.35	-	0.35	-	0.35	-	-	-	0.35	0.47	0.37					
			Weather	Sunny	Cloudy	-	Sunny	-	Sunny	-	-	-	Cloudy	Cloudy	-					
48	Fukushima City	Kodomo no Ie Soramame	Integrated dose(μSv)	2	3	-	-	-	4	-	-	-	4	-	13	1.0	2.5	No outdoor activity		
			Accumulated time(hour)	5:30	5:15	-	-	-	5:00	-	-	-	5:00	-	20:45					
			Radiation (μSv / hour)	0.36	0.57	-	-	-	0.80	-	-	-	0.80	-	0.63					
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Cloudy	-	-					
49	Fukushima City	Watari Junior High School	Integrated dose(μSv)	1	1	1	-	-	-	-	-	-	0	-	3	0.2	3.3	No outdoor activity April 29: normal school day May 2: substitute holiday		
			Accumulated time(hour)	9:00	10:00	10:00	-	-	-	-	-	-	9:00	-	38:00					
			Radiation (μSv / hour)	0.11	0.10	0.10	-	-	-	-	-	-	0.00	-	0.08					
			Weather	Sunny	Sunny	Sunny	-	-	-	-	-	-	Sunny	-	-					
50	Fukushima City	Watari Kindergarten	Integrated dose(μSv)	2	2	-	-	-	2	-	-	-	2	-	8	0.8	3.4	No outdoor activity		
			Accumulated time(hour)	3:30	6:13	-	-	-	5:43	-	-	-	5:47	-	21:13					
			Radiation (μSv / hour)	0.57	0.32	-	-	-	0.35	-	-	-	0.35	-	0.38					
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Cloudy	-	-					
51	Fukushima City	Sakura day-care center	Integrated dose(μSv)	2	0	-	-	-	1	-	-	-	1	0	4	0.6	2.7	No outdoor activity April 30, May 7: open as usual April 30: no measurement conducted		
			Accumulated time(hour)	8:25	8:40	-	-	-	8:45	-	-	-	8:45	2:25	37:00					
			Radiation (μSv / hour)	0.24	0.00	-	-	-	0.11	-	-	-	0.11	0.00	0.11					
			Weather	Sunny	Cloudy	-	-	-	Sunny	-	-	-	Cloudy	Cloudy	-					
52	Fukushima City	Watari Elementary School	Integrated dose(μSv)	1	1	-	-	-	0	-	-	-	1	-	3	0.5	3.0	Partial outdoor activity conducted		
			Accumulated time(hour)	8:05	8:50	-	-	-	7:00	-	-	-	7:45	-	31:40					
			Radiation (μSv / hour)	0.12	0.11	-	-	-	0.00	-	-	-	0.13	-	0.09					
			Weather	Sunny	Sunny	-	-	-	Sunny	-	-	-	Cloudy	-	-					
53	Fukushima City	Toryo High School	Integrated dose(μSv)	3	2	-	-	-	-	-	-	-	2	2	9	-	2.9	No outdoor activity May 2: substitute holiday May 7: normal school day		
			Accumulated time(hour)	9:55	9:45	-	-	-	-	-	-	-	9:45	7:15	36:40					
			Radiation (μSv / hour)	0.30	0.21	-	-	-	-	-	-	-	0.21	0.28	0.25					
			Weather	Sunny	Sunny	-	-	-	-	-	-	-	Sunny	Sunny	-					
54	Fukushima City	Seikei High School	Integrated dose(μSv)	3	3	-	-	-	-	-	-	-	-	-	6	-	3.1	Partial outdoor activity conducted May 2, 6: substitute holiday		
			Accumulated time(hour)	11:00	12:00	-	-	-	-	-	-	-	-	-	23:00					
			Radiation (μSv / hour)	0.27	0.25	-	-	-	-	-	-	-	-	-	0.26					
			Weather	Sunny	Sunny	-	-	-	-	-	-	-	-	-	-					
55	Fukushima City	Tachibana High School	Integrated dose(μSv)	2	1	1	-	-	2	-	-	-	-	-	6	-	2.9	Partial outdoor activity conducted April 29: normal school day May 6: substitute holiday		
			Accumulated time(hour)	12:30	12:30	12:00	-	-	12:00	-	-	-	-	-	49:00					
			Radiation (μSv / hour)	0.16	0.08	0.08	-	-	0.17	-	-	-	-	-	0.12					
			Weather	Sunny	Sunny	Sunny	-	-	Sunny	-	-	-	-	-	-					
Overall average																0.22	0.36	2.79		

May 12, 2011

Ministry of Education, Culture, Sports, Science and Technology

Trial Calculation of Actual Integrated Exposure Dose of Students, under assumption of a Living Patterns of Students of Schools, etc. with 3.8 μ Sv/hr Air Dose Rates in Schoolyard, etc.

1. Outline

In the “Interim Policy in Deciding on Use of School Buildings and Schoolyards, etc. at Schools, etc. in Fukushima Prefecture,” (outdoors 3.8 μ Sv/hr \times 8hrs + indoors 1.52 μ Sv/hr \times 16hrs) \times 365 days results in 20mSv. Therefore, a schoolyard air dose rate of 3.8 μ Sv/hr was set as the limit value for school use. However, this means that if a student, etc. is in the schoolyard or playground (hereinafter, referred to as “schoolyard”) for eight hours every day, and stays 16 hours in a wood building for one year, then it reaches 20mSv. One does not imagine that students, etc. actually have this kind of living pattern.

That is, actually,

- Compared to schoolyards, air dose rates in the surroundings are lower
- Conduct patterns of child students, etc. on school days differ from 8 hours outdoors, 16 hours indoors
- Schools have concrete construction, which has a strong shielding effect

Therefore, values which take into account these points are integral doses which students actually receive as estimated from living patterns of students, etc. We estimated the integral dose by also taking these points into account.

2. Assumptions

Air Dose Rates of Schoolyards and Surroundings

First, at 13 schools which exceeded 3.8 μ Sv/hr in the MEXT’s survey (April 14), air dose rates of the surroundings were 39% below the level in schoolyards on average. Therefore, this value is used.

Conduct Patterns of Students, etc.

(1) 34 Days from the Accident Date until Schools Opened (April 14)

For places where the air dose rate is 3.8 μ Sv/hr, according to the estimation methods when creating the integral dose estimate map (8 hours outdoors, 16 hours indoors, etc.), this is estimated as 2.56 mSv. During this period, schools were closed, so this part corresponds to the non-school related portion.

(2) School Weekdays: 200 days

Assume for the school related portion: one hour going to and from school, two hours outdoors in schoolyard, etc., five hours in concrete construction school buildings. For the non-school related portion: three hours outdoors, 13 hours indoors.

(3.8 \times 0.61 \times 1 hour): Going to and from school

School portion

(3.8 \times 2 hours): Schoolyard, etc.

$(3.8 \times 0.1 \times 5 \text{ hours})$: In school buildings (concrete building)

$(3.8 \times 0.61 \times 3 \text{ hours})$: Outdoors

Non-school portion

$(3.8 \times 0.61 \times 0.4 \times 13 \text{ hours})$: Indoors (wooden building)

(3) School Holidays: 131 days (165 - 34 days)

As the non-school related portion, assume 8 hours outdoors, 16 hours indoors.

$(3.8 \times 0.61 \times 8 \text{ hours})$: Outdoors

Non-school portion

$(3.8 \times 0.61 \times 0.4 \times 16 \text{ hours})$: Indoors (wood building)

Here, regarding the portion since April 15, the average decay rate shall be considered 0.705, based on soil analysis results of 13 schools which exceeded $3.8\mu\text{Sv/hr}$ in the MEXT's survey (April 14).

3. Results, etc.

Based on the above assumptions, the integral dose in the one year period after the accident occurred, received by students, etc. at schools with a schoolyard air dose rate of $3.8\mu\text{Sv/hr}$ is

9.99 mSv [of this, school related portion 1.67 mSv (approximately 17% of total)]
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That is, even at schools with $3.8\mu\text{Sv/hr}$ which is the limit value for placing restrictions on schoolyard use by the "Interim Policy" the integral dose which students, etc. actually receive is 10 mSv (approximately half of 20 mSv).

Also, approximately 17% of the integral dose is contributed by the school related portion. To reduce the total exposure of students, etc., efforts to reduce exposure in school lives are also important, but this alone has limits. Efforts to reduce exposure outside the school life portion are very important.

The Annual Integrated Dose Rate of Schools with an Air Dose Rate of 3.8 μ Sv/h in the School Field on April 14 (Image)

corrected

Dose amount the children will receive (μ Sv/h)

Up to 4/14 (when school was closed)

Outside building: 8hrs
Inside building: 16hrs

After 4/14 (when school opened)

* School day(200 days)
Commuting to school: 1hr,
School field: 2 hrs
Inside school building: 5hrs
Outside building: 3hrs,
Inside building: 13hrs
* Holiday(131 days)
Outside building: 8hrs,
Inside building: 16hrs

Logic behind 3.8 μ Sv/h

$$3.8 \mu \text{ Sv/h} * (8\text{hrs} + 16\text{hrs} * 0.4) * 365\text{days} = 20\text{mSv/year}$$

8 hrs in school field

16 hrs inside building (wooden)

1 year

$$2.56 + 7.43 = 9.99\text{mSv}$$

(A)

(B)

(Shaded section)

Rectangle : 20mSv

Compared to the period during which the school was closed, the amount of dose received by children since the school opened is 58% lower.

Decay evaluated by nuclide analysis (Decay rate: around 0.7)

7.43mSv

(B)

2.56mSv

(A)

Dotted line indicates estimates for when school is open, and not when school is closed

Air Dose Rate 3.8 μ Sv/h
School field 8hrs
Inside building (wooden) : 16 hrs

When spending 1 year in the above condition

3/11

4/14

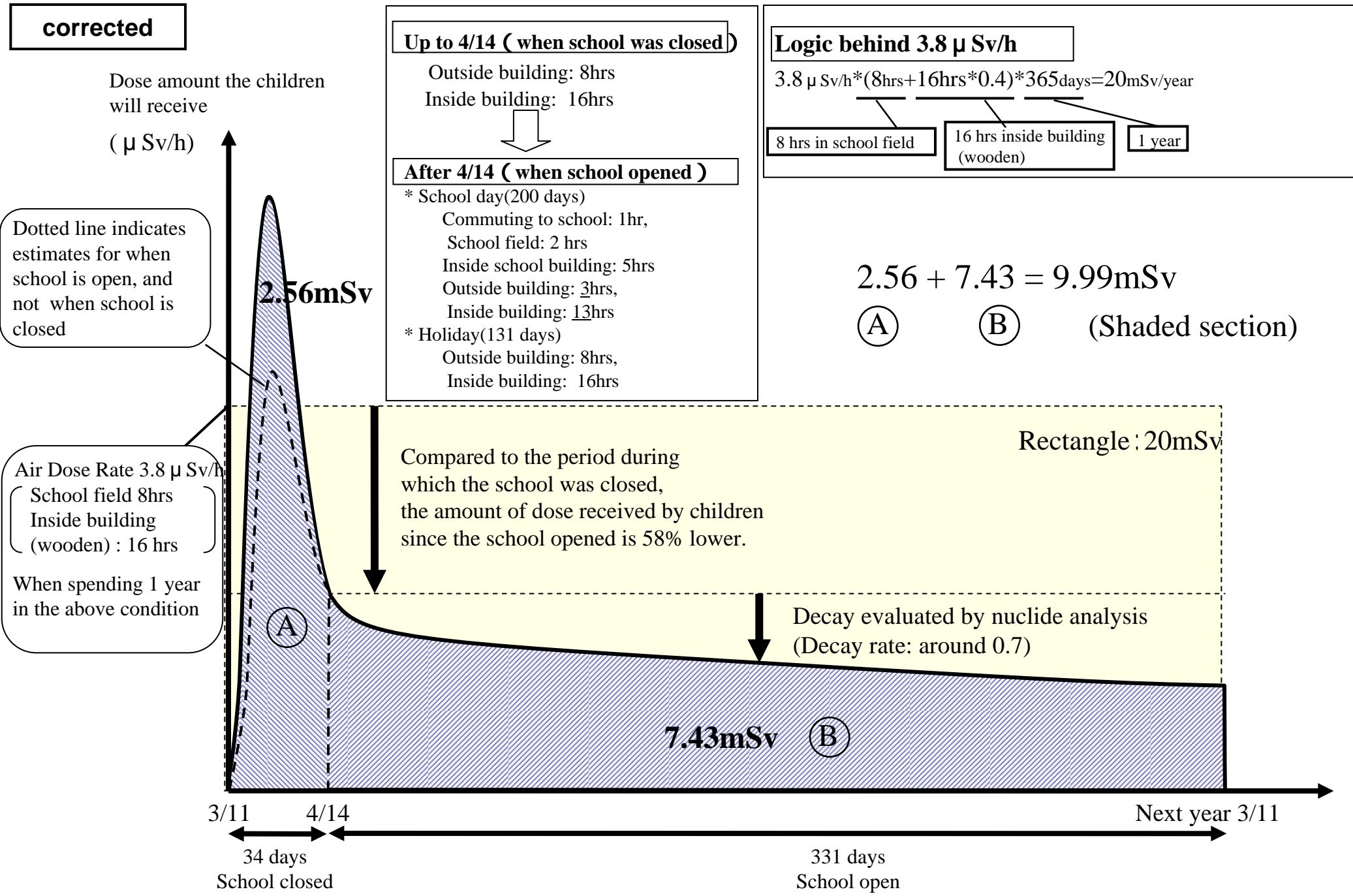
Next year 3/11

34 days

School closed

331 days

School open



The Annual Integrated Dose Rate of Schools with an Air Dose Rate of 3.8 μ Sv/h in the School Field on April 14 (Image)

original

Dose amount the children will receive

(μ Sv/h)

Up to 4/14 (when school was closed)

Outside building: 8hrs
Inside building: 16hrs

After 4/14 (when school opened)

* School day(200 days)
Commuting to school: 1hr,
School field: 2 hrs
Inside school building: 5hrs
Outside building: 2hrs,
Inside building: 14hrs
* Holiday(131 days)
Outside building: 8hrs,
Inside building: 16hrs

Logic behind 3.8 μ Sv/h

$$3.8 \mu \text{ Sv/h} * (8\text{hrs} + 16\text{hrs} * 0.4) * 365\text{days} = 20\text{mSv/year}$$

8 hrs in school field

16 hrs inside building (wooden)

1 year

$$2.56 + 7.43 = 9.99\text{mSv}$$

(A)

(B)

(Shaded section)

Dotted line indicates estimates for when school is open, and not when school is closed

2.56mSv

Air Dose Rate 3.8 μ Sv/h
School field 8hrs
Inside building (wooden) : 16 hrs

When spending 1 year in the above condition

Compared to the period during which the school was closed, the amount of dose received by children since the school opened is 58% lower.

Rectangle : 20mSv

Decay evaluated by nuclide analysis (Decay rate: around 0.7)

7.43mSv

(B)

3/11

4/14

Next year 3/11

34 days
School closed

331 days
School open

