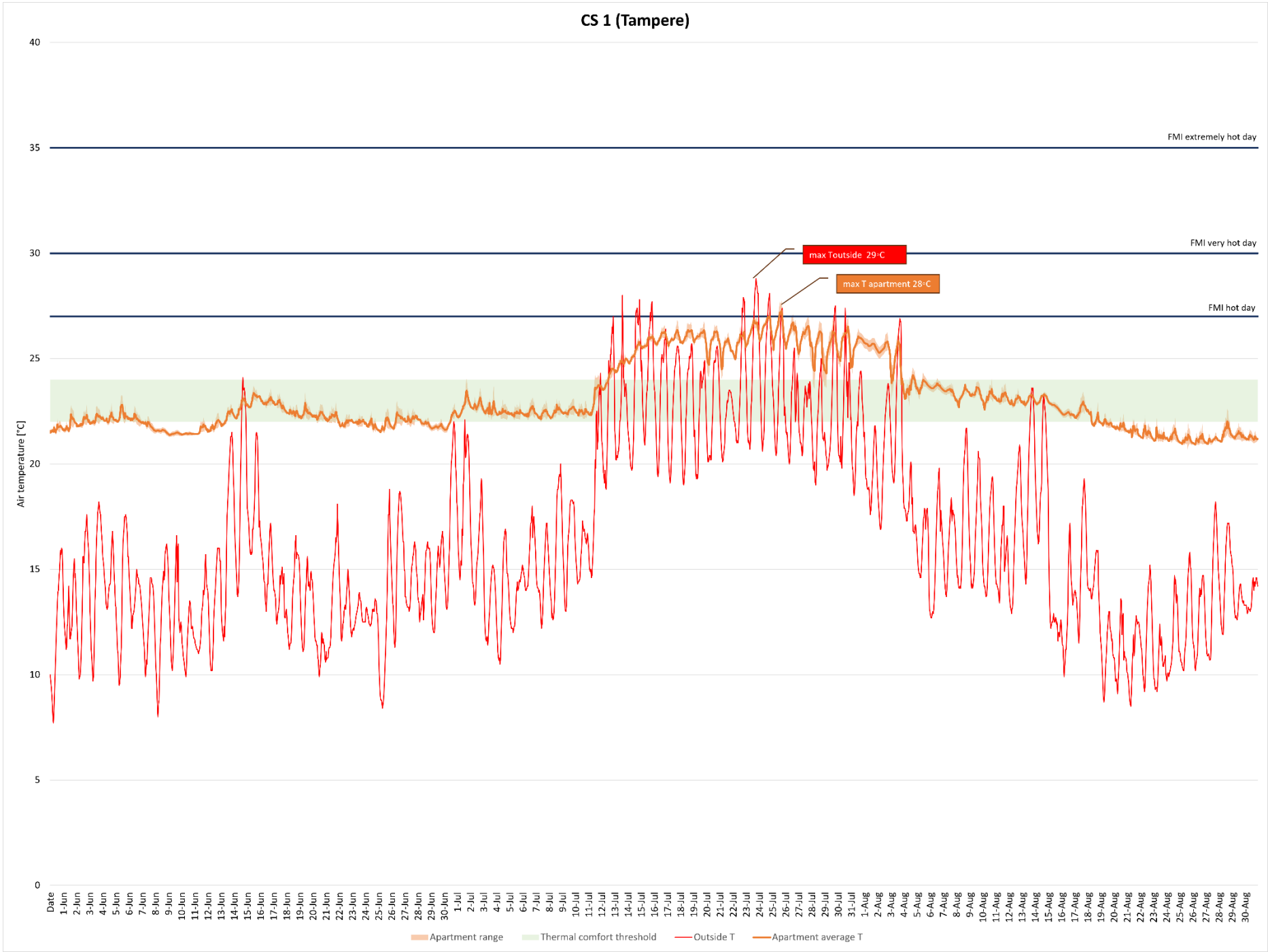
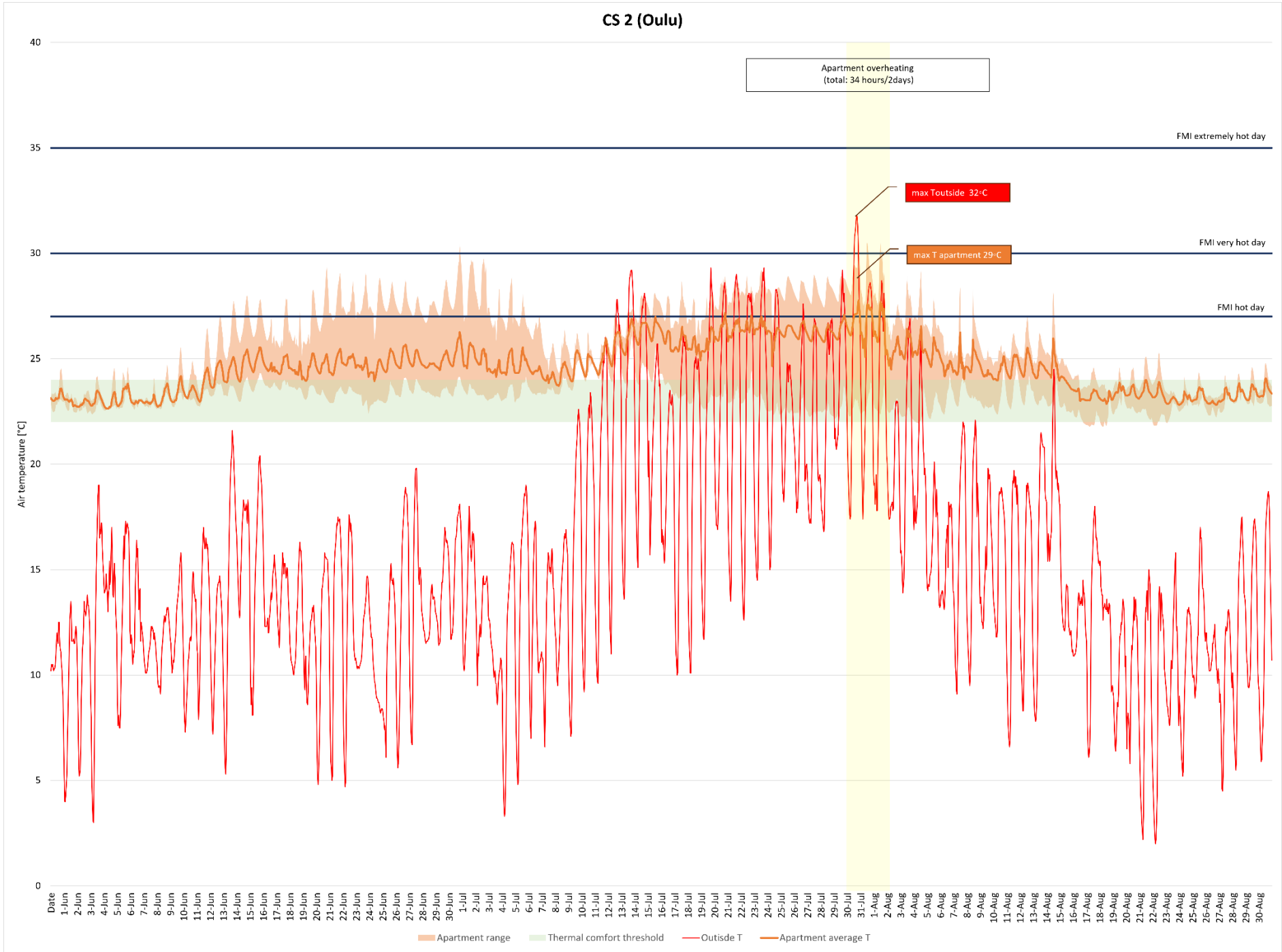
Jegard, L., Castaño-Rosa, R. & Pelsmakers, S. (2026). Summertime overheating in apartments with glazed balconies: a Finnish study. *Buildings & Cities.*

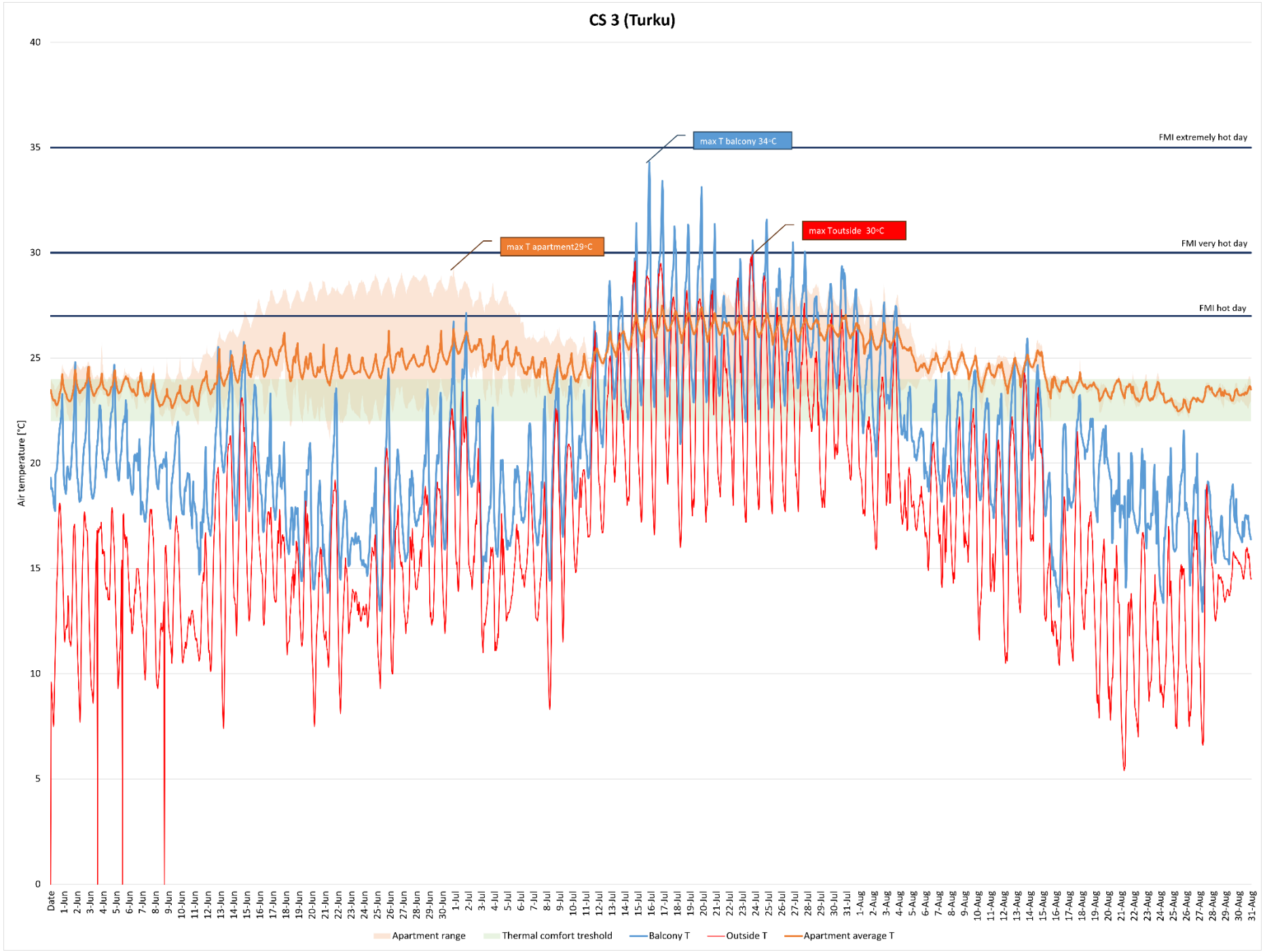
SUPPLEMENTAL DATA

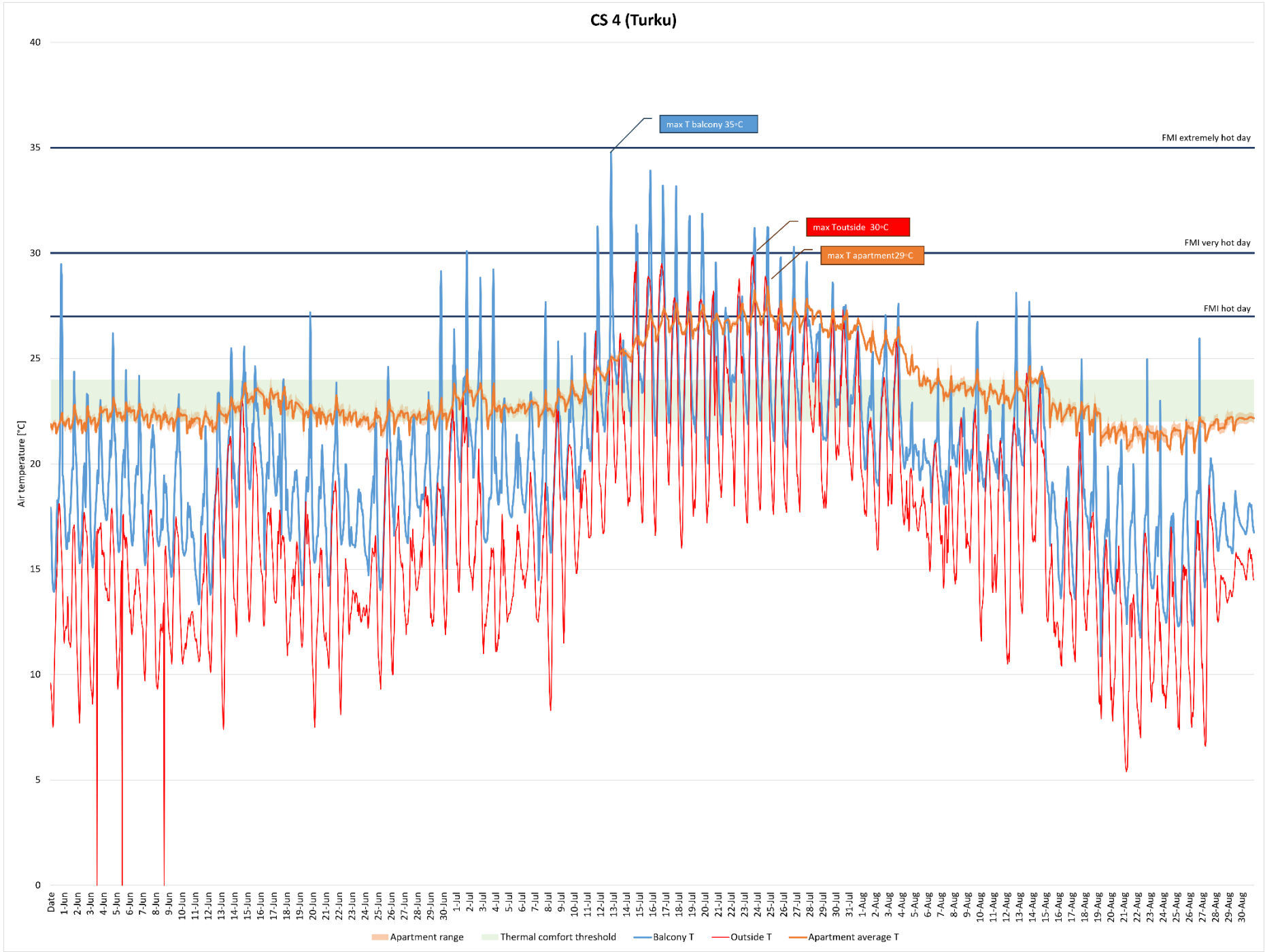
Appendix A:

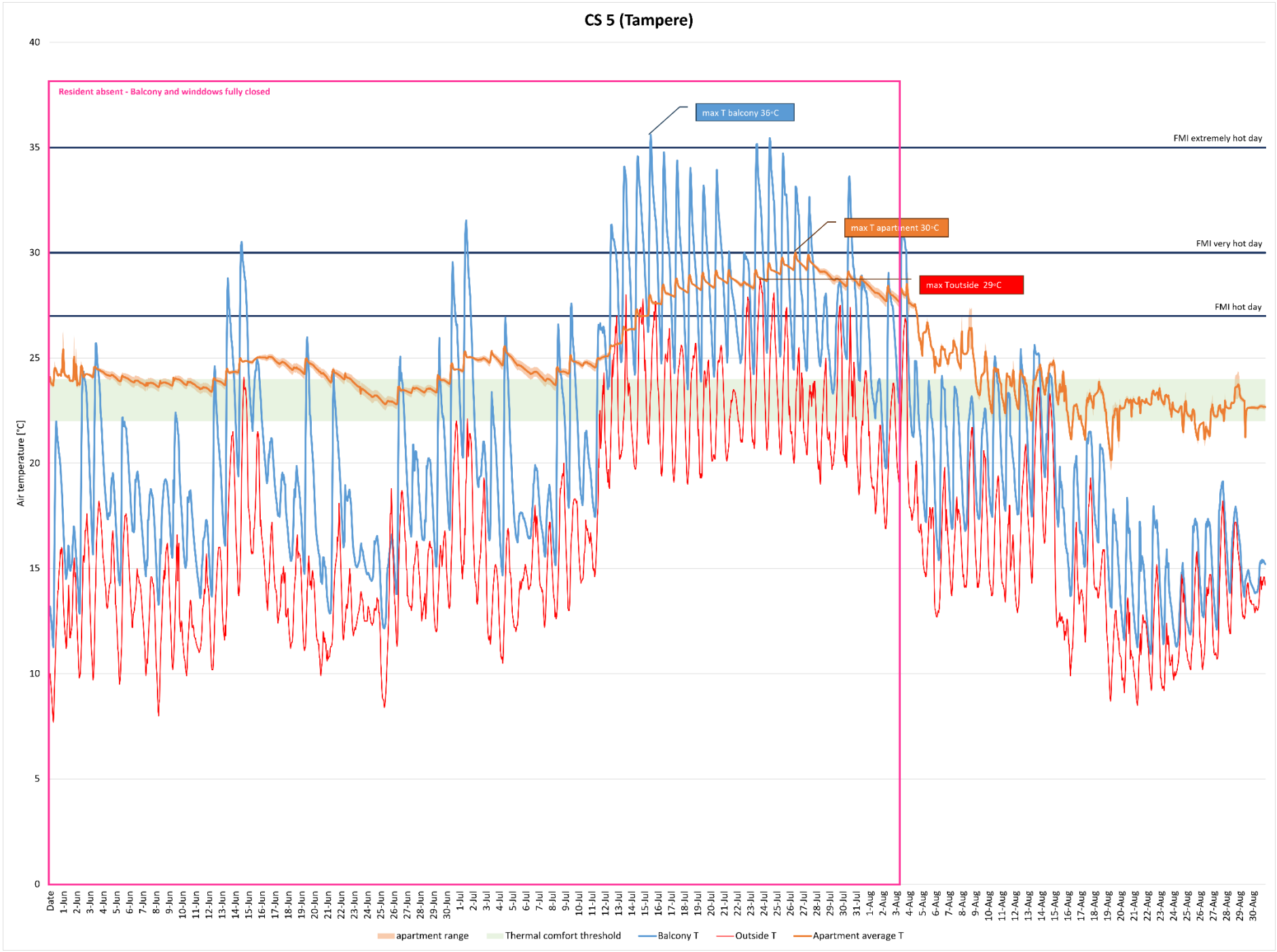
TEMPERATURE MEASUREMENTS OF CASE STUDY APARTMENTS

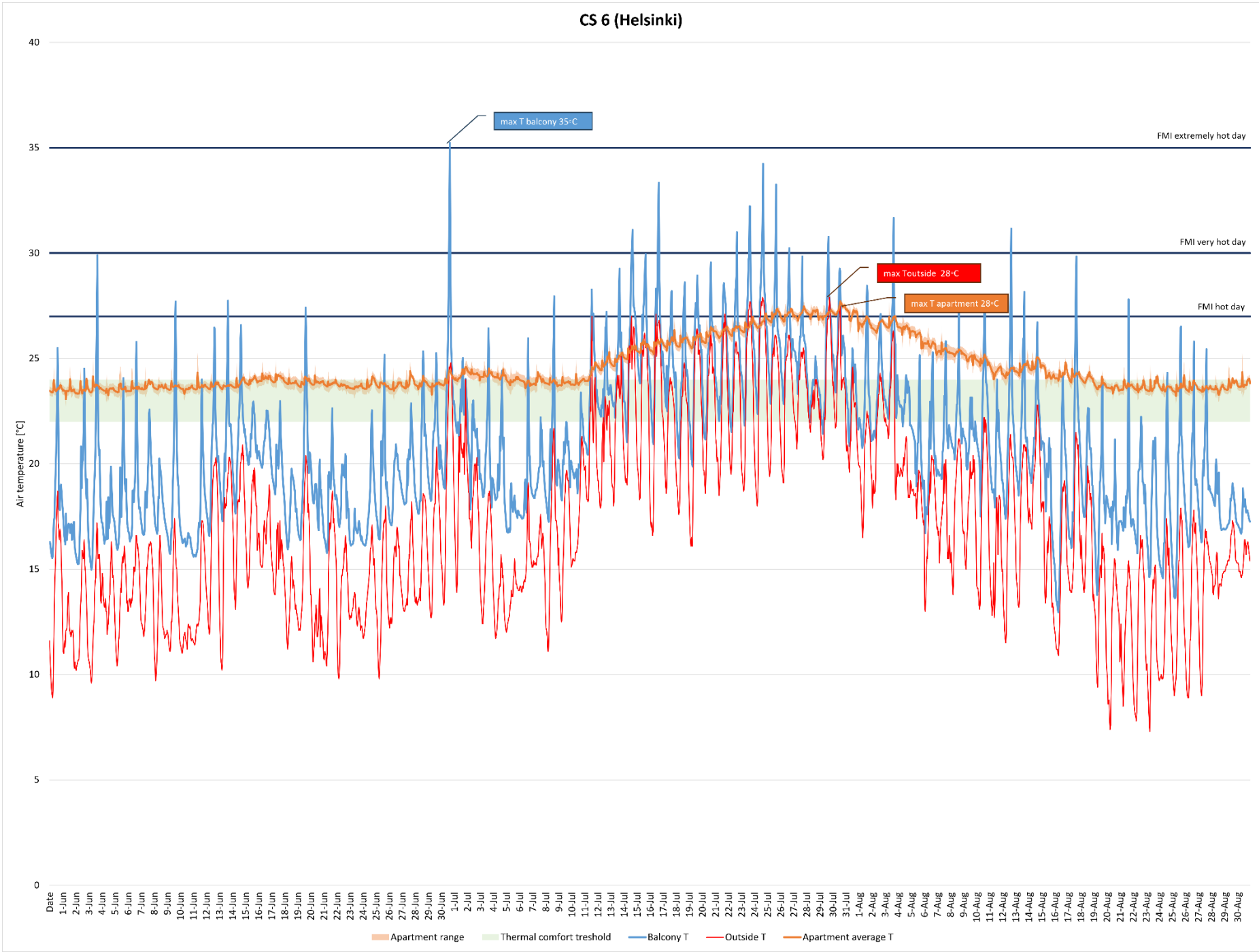

CS 1 (Tampere)
Air temperature [°C]
FMI extremely hot day
FMI very hot day
FMI hot day
max Toutside 29°C
max T apartment 28°C
Apartment range
Thermal comfort threshold
Outside T
Apartment average T

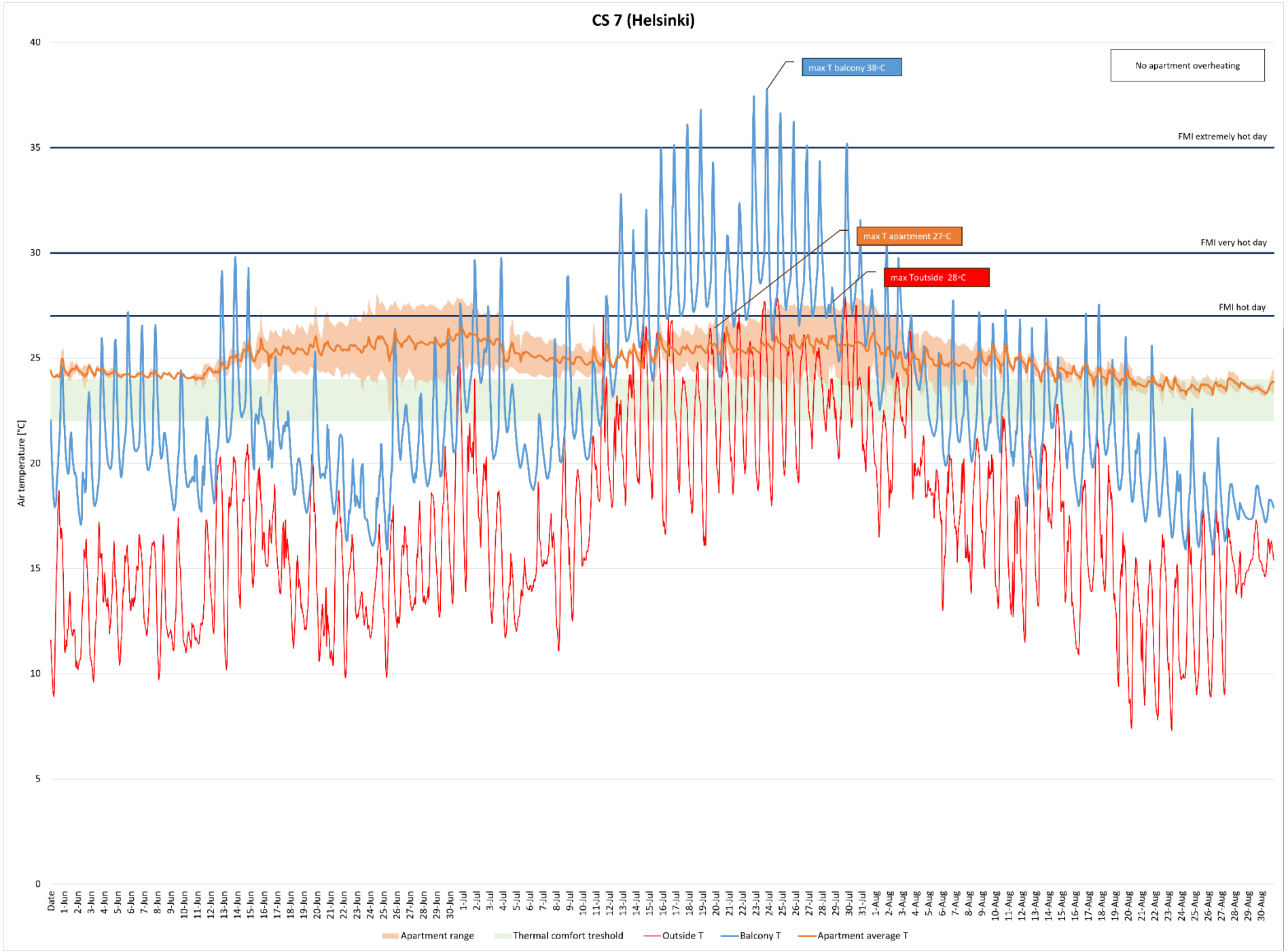

CS 2 (Oulu)
Apartment overheating
(total: 34 hours/2days)
FMI extremely hot day
FMI very hot day
FMI hot day
max Toutside 32◦C
max T apartment 29◦C
Air temperature [°C]
Apartment range
Thermal comfort threshold
Outisde T
Apartment average T

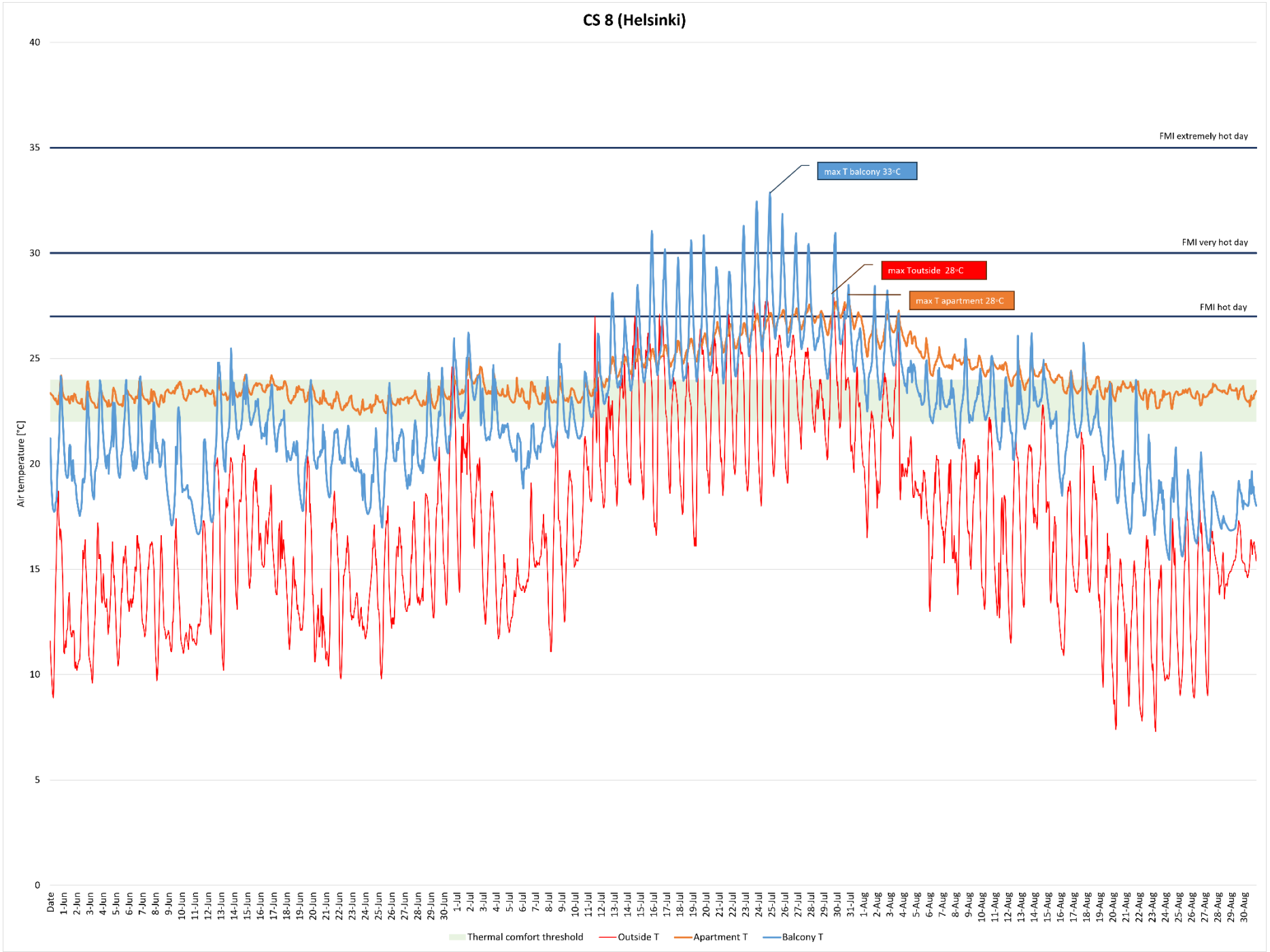

CS 3 (Turku)
max T balcony 34°C
max T apartment29°C
max Toutside 30°C
FMI extremely hot day
FMI very hot day
FMI hot day
Air temperature [°C]
Apartment range
Thermal comfort treshold
Balcony T
Outside T
Apartment average T

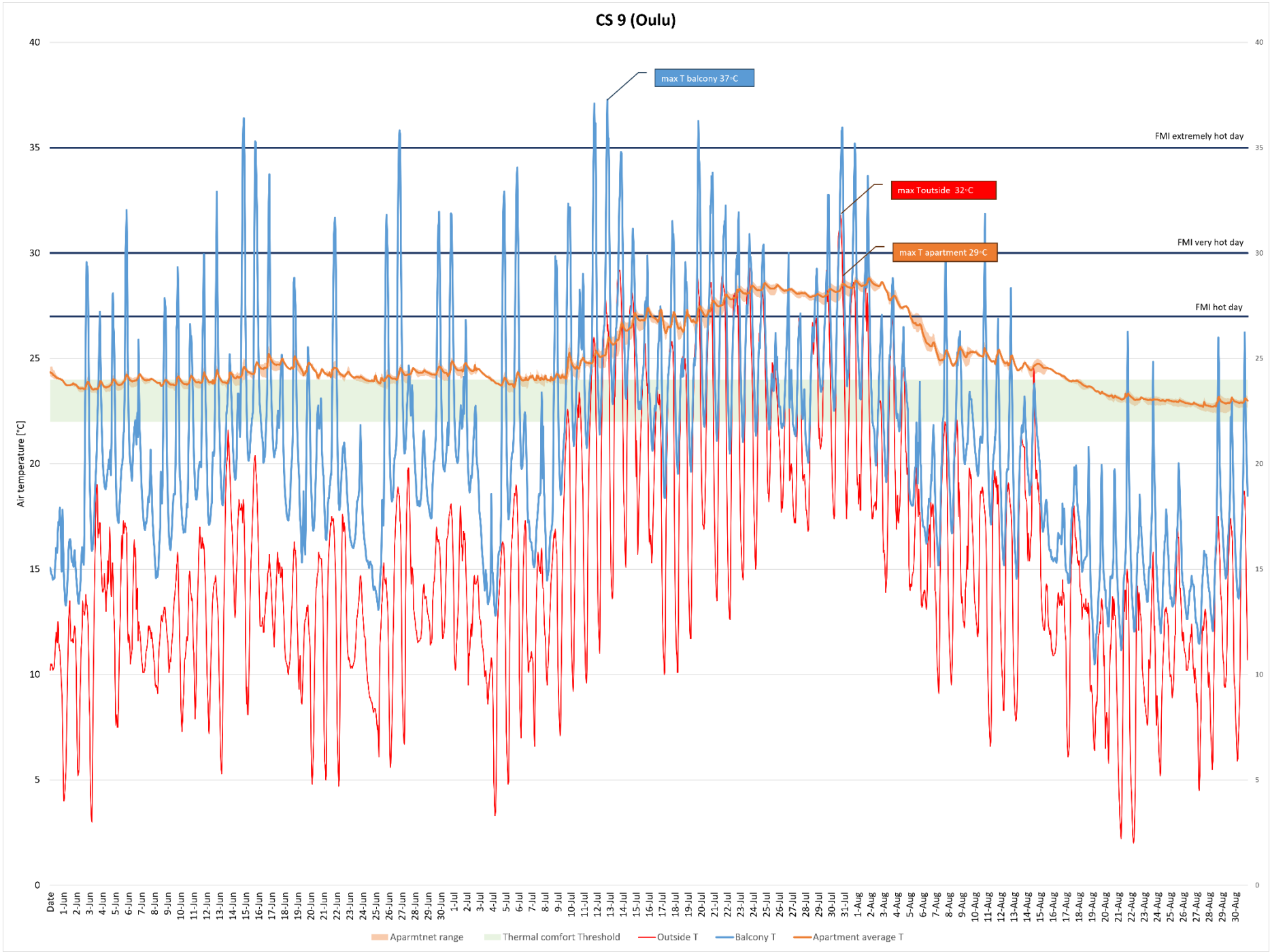

CS 4 (Turku)
max T balcony 35°C
max Toutside 30°C
max T apartment29°C
FMI extremely hot day
FMI very hot day
FMI hot day
Air temperature [°C]
Apartment range
Thermal comfort threshold
Balcony T
Outside T
Apartment average T

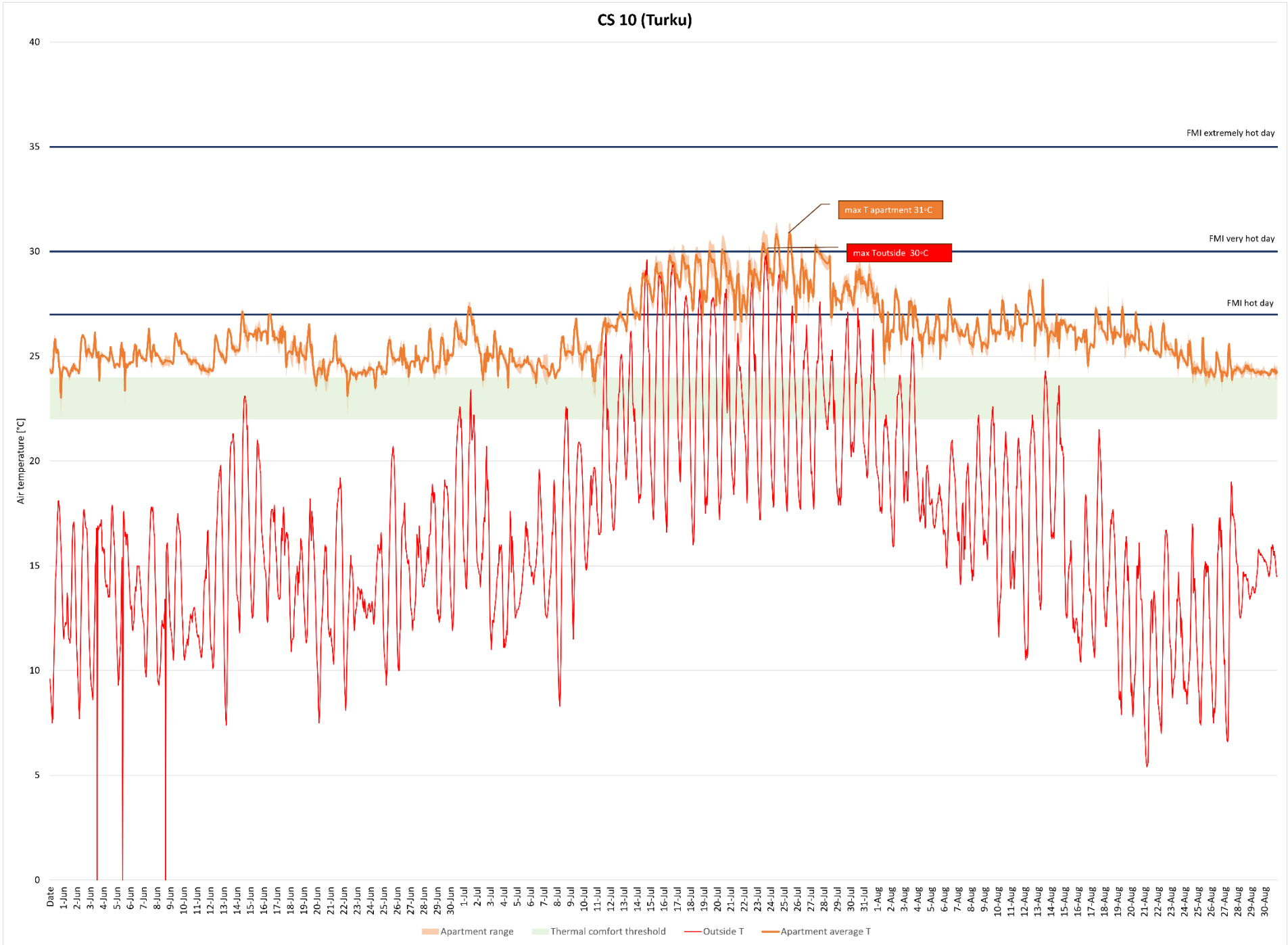

CS 5 (Tampere)
Resident absent - Balcony and winddows fully closed
max T balcony 36°C
max T apartment 30°C
max Toutside 29°C
FMI extremely hot day
FMI very hot day
FMI hot day
Air temperature [°C]
Date
apartment range
Thermal comfort threshold
Balcony T
Outside T
Apartment average T


CS 6 (Helsinki)
max T balcony 35°C
FMI extremely hot day
FMI very hot day
max Toutside 28°C
max T apartment 28°C
FMI hot day
Air temperature [°C]
Apartment range
Thermal comfort treshold
Balcony T
Outside T
Apartment average T


CS 7 (Helsinki)
max T balcony 38°C
No apartment overheating
FMI extremely hot day
max T apartment 27°C
FMI very hot day
max Toutside 28°C
FMI hot day
Air temperature [°C]
Date
Apartment range
Thermal comfort treshold
Outside T
Balcony T
Apartment average T


CS 8 (Helsinki)
FMI extremely hot day
FMI very hot day
FMI hot day
max T balcony 33°C
max Toutside 28°C
max T apartment 28°C
Air temperature [°C]
Date
Thermal comfort threshold
Outside T
Apartment T
Balcony T


CS 9 (Oulu)
max T balcony 37°C
max Toutside 32°C
max T apartment 29°C
FMI extremely hot day
FMI very hot day
FMI hot day
Air temperature [°C]
Date
Aparmtnet range
Thermal comfort Threshold
Outside T
Balcony T
Apartment average T


CS 10 (Turku)
FMI extremely hot day
FMI very hot day
FMI hot day
max T apartment 31°C
max Toutside 30°C
Air temperature [°C]
Apartment range
Thermal comfort threshold
Outside T
Apartment average T

Appendix B:

OUTDOOR TEMPERATURES FOR CASE STUDY SITES

(data from the nearest FMI weather station)

	Daily average Tampere	Max Tampere	HD,VHD, EHD	Daily average Turku	Max Turku	HD,VHD, EHD	Daily average Helsinki	Max Helsinki	HD,VHD, EHD	Daily average Oulu	Max Oulu	HD,VHD, EHD
1-Jun	12.9	18.1		13.4	18.8		13.9	19.5		10.1	13.5	
2-Jun	12.5	16.9		13.1	17.4		11.7	15.9		10.2	13.8	
3-Jun	14	20.2		13.4	18.5		12.9	16.9		10.7	14.4	
4-Jun	15.5	20.6		14.4	17.8		13.4	17.6		13.2	20.1	
5-Jun	14.2	19		14.4	18.3		13.7	16.6		13.6	17.3	
6-Jun	14.3	19.8		14.3	18.4		13.3	16.5		13.7	17.6	
7-Jun	13.9	17.4		13.5	15.8		14.5	17.1		12.6	16.9	
8-Jun	12.9	18.1		14.1	18.5		13.9	16.9		11.2	12.8	
9-Jun	12.9	18.3		12.6	16.3		12.6	17.2		11.7	13.6	
10-Jun	13.6	18.9		13.7	18.1		13.4	18		12.3	16.3	
11-Jun	12	15.1		12	13.2		11.7	12.8		11.6	15.3	
12-Jun	13.1	16.8		13	16.9		14.2	17.9		13.6	17.4	
13-Jun	14.3	19		15.3	20.2		16.4	20.9		11.5	15.1	
14-Jun	16.6	23.6		16	21.7		16.8	20.6		15.5	22.2	
15-Jun	19.2	26.6		18.1	23.8		17.5	21.3		15.8	18.8	
16-Jun	18.5	23.3		16.9	21.4		17.2	20.8		15.4	20.7	
17-Jun	15.2	18.6		15.4	18.3		16.4	19.2		13.3	18.6	
18-Jun	13.4	17.4		15.2	18.6		15.5	18.1		13.8	16.6	
19-Jun	14.3	18.6		14.1	16.5		13.3	16.2		12.6	16.7	
20-Jun	13.3	18.7		14.2	18.6		16	20.9		10.8	15.2	
21-Jun	10	14.1		12.5	16.7		11.9	17.2		12.1	16.5	
22-Jun	13.9	18.6		15	20		14.7	19.6		13.5	18.2	
23-Jun	11.9	16.2		12.6	16.5		13.7	16.9		12.3	18.1	
24-Jun	12.9	14.8		13.1	14.2		12.9	14.3		12.3	15.1	
25-Jun	12.7	15		14.2	17		14.3	17.8		9.3	14.3	
26-Jun	12.7	19.1		15.3	21.2		13.8	18.4		11.6	15.9	
27-Jun	14.9	21.7		14.6	18.3		14.9	17.5		13.5	19.3	
28-Jun	14.7	18.7		14.5	17.4		15	18.9		14.3	20.3	
29-Jun	14.8	18.4		16.1	19.2		15.6	19.4		12.6	14.7	
30-Jun	15.3	18.5		15.9	19.8		16.6	21.6		14.4	17.9	
1-Jul	18.1	24.2		18.2	23.4		19.6	25.4		15	18.5	
2-Jul	18.8	25.2		18.8	24.3		19.4	24.3		14.7	19.4	
3-Jul	15.6	21.1		16	20.9		17.7	23.6		12.9	15.8	
4-Jul	13.4	18.4		13.7	17		15.6	19.2		10	14.2	

Appendix B:

OUTDOOR TEMPERATURES FOR CASE STUDY SITES

(data from the nearest FMI weather station)

5-Jul	13.2	19.2		13.9	18.2		13.3	16.4		11.7	17.2	
6-Jul	13.8	15.2		15.1	17.5		14.1	16		14.1	19.3	
7-Jul	15.9	19.7		16.1	20.1		15.3	19.9		12.1	17.6	
8-Jul	14.4	18.6		14.7	19.5		15.6	18.3		13.1	16.4	
9-Jul	15.7	21.7		16.9	23		16.5	22.4		13.3	17.2	
10-Jul	15.6	20.6		17.9	21.7		16.4	20.5		16.5	23.1	
11-Jul	16.1	19.3		17.7	19.9		18	21.6		17.8	24.3	
12-Jul	21.9	28	HD	20.7	27.7	HD	21.2	28.4	HD	19.9	26.2	
13-Jul	24.4	28.8	VHD	21	25.5		20.7	24		21.9	28.2	HD
14-Jul	22.9	29.7	HD	22	27	HD	22.1	25.9		23.5	29.5	HD
15-Jul	24.5	30.1	VHD	23.6	30.1	HD	23.1	27.9	HD	23.5	28.4	HD
16-Jul	23.9	29.1	HD	24	29.6	VHD	22.5	26.6		21.3	26.5	
17-Jul	22.7	28.7	HD	24.8	29.8	VHD	22.9	27.8	HD	19.5	24.2	
18-Jul	21	26.7		23.8	28.3	HD	21.5	24.9		19.9	26.6	
19-Jul	21.3	27.3	HD	22.6	28.6	HD	21.3	25.3		19.9	25.7	
20-Jul	21.1	27.1	HD	23.4	29.1	HD	22.5	27.1	HD	22.2	30	HD
21-Jul	21.7	27.2	HD	22.9	29.2	HD	22.7	26.7		22.6	29.2	HD
22-Jul	20.9	24.6		22.4	26.8		22.7	27.3	HD	22.9	29.5	HD
23-Jul	23	29.1	HD	23.6	29.6	HD	22.8	26.2		22.4	28.8	HD
24-Jul	23.3	30.8	HD	24.2	30.9	HD	23.6	28	HD	22.9	29.6	HD
25-Jul	23	30.3	HD	23.6	29.3	HD	24.2	28.4	VHD	23.2	28.8	HD
26-Jul	22.4	29.3	HD	22.5	27.8	HD	23.3	26.5		22.1	25.6	
27-Jul	20.8	28.2	HD	22.2	26.8		23.4	26.7		21.2	28.2	HD
28-Jul	21.8	26.4		23.1	28.1	HD	23.8	26		21.3	27.9	HD
29-Jul	22.2	26.7		22.2	25.9		22.9	24.8		22.9	27.4	HD
30-Jul	22.4	29.1	HD	22.3	27.3	HD	24.1	28.1	VHD	24.6	29.6	HD
31-Jul	23.5	29.3	HD	23.4	28	HD	23.8	28.1	HD	25.8	32.3	HD
1-Aug	21.8	25.9		21.9	26.9		21.6	25.1		23.9	29	HD
2-Aug	18.9	24		19.7	22.6		20	22.7		23.6	29.1	HD
3-Aug	19.9	24.9		20.6	24.5		22.1	24.7		19.2	23.8	
4-Aug	22.6	29.3	HD	21.8	26.5		22.4	26.6		20.6	27.3	HD
5-Aug	18.1	22.4		18.3	20.9		19.6	22.1		20	27.3	HD
6-Aug	16	20.8		17.7	19.4		18.4	20.2		15.6	21.2	
7-Aug	15.5	22		18.2	21.5		17.7	21		15.7	18.7	
8-Aug	15.8	20.7		17	20.3		17.1	20.8		16.4	22.5	
9-Aug	16.8	23.4		18.3	22.8		18.1	21.6		16.4	23.1	
10-Aug	16.7	21.7		18.3	23		18	20.8		15.7	20.4	
11-Aug	16.1	21.3		16.8	22		17.8	22.8		15.5	19.6	
12-Aug	14.4	20.6		16.9	21.7		15.3	19.4		14.6	19.9	
13-Aug	15.1	21.8		17.3	23.1		17.1	21.9		14.2	20	
14-Aug	18.2	24.7		19.1	24.8		17.9	21.4		16.4	22.3	

Appendix B:

OUTDOOR TEMPERATURES FOR CASE STUDY SITES

(data from the nearest FMI weather station)

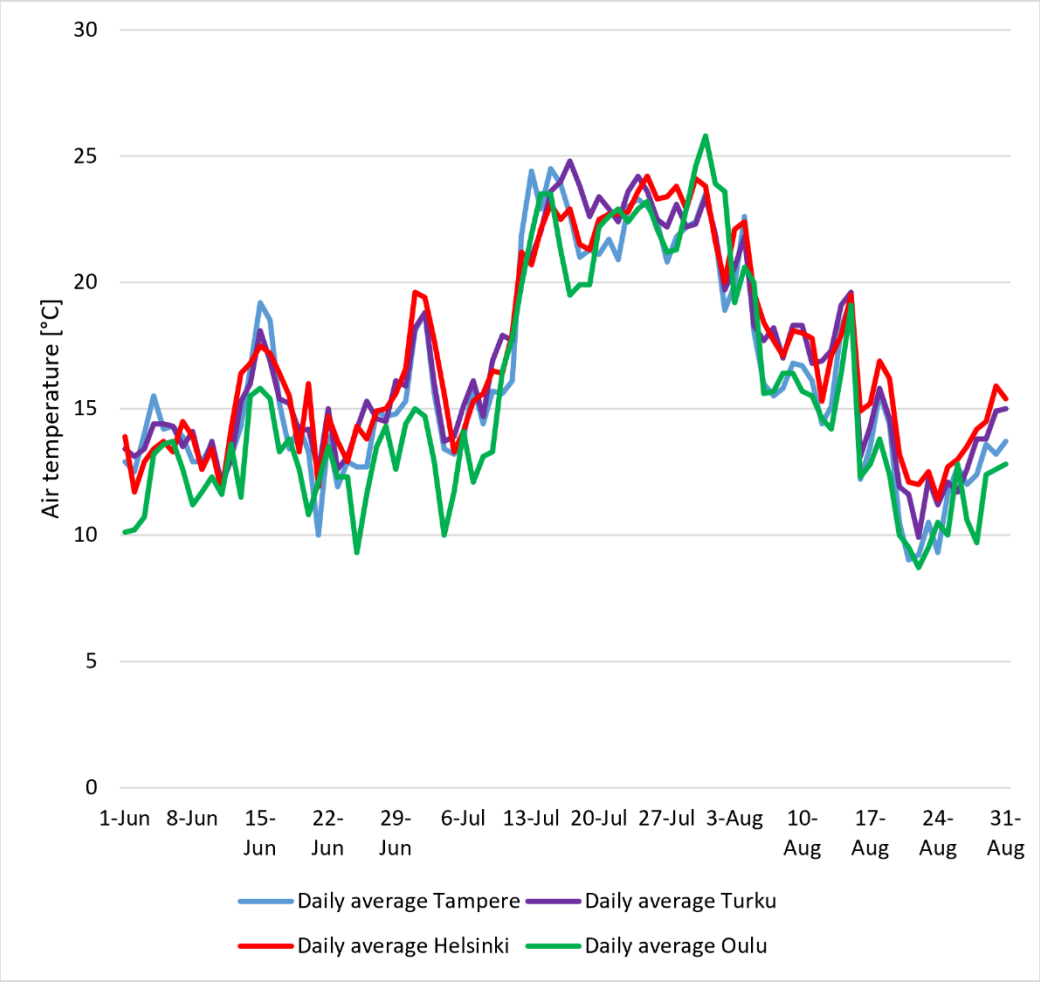
15-Aug	19.3	25.3	19.6	24	19.5	23.5	19.1	25.1
16-Aug	12.2	20.7	13.1	20.5	14.9	20.2	12.3	19
17-Aug	13.5	18.9	14.3	19	15.2	20.4	12.8	15.1
18-Aug	15.6	20.6	15.8	22.1	16.9	21.7	13.8	18.7
19-Aug	14.4	17.7	14.6	18.1	16.2	20.4	12.4	16.1
20-Aug	10.5	15.5	11.9	16.9	13.2	17.5	10	14.3
21-Aug	9	14.7	11.6	17.2	12.1	16	9.5	14.6
22-Aug	9.2	13.9	9.9	14.1	12	16.2	8.7	15.7
23-Aug	10.5	16.7	12.2	17.6	12.5	17	9.5	15.4
24-Aug	9.3	13.7	11.2	16.3	11.4	15.9	10.5	16.8
25-Aug	11.6	16.8	12.1	17.7	12.7	19	10	13.7
26-Aug	12.7	16.7	11.7	16.2	13	18.3	12.8	17.9
27-Aug	12	16	12.6	18.3	13.5	18.3	10.6	12.8
28-Aug	12.4	19.9	13.8	19.9	14.2	17.7	9.7	13.3
29-Aug	13.6	18	13.8	15.3	14.5	15.8	12.4	17.9
30-Aug	13.2	15.7	14.9	15.9	15.9	17.5	12.6	18.2
31-Aug	13.7	14.9	15	16.4	15.4	16.7	12.8	19.1
average	16.29		16.94		17.11		15.45	
	30.80		30.90		28.40		32.30	

Total 'hot day' Tampere	15	Total 'hot day' Turku	14	Total 'hot day' Helsinki	7	Total 'hot day' Oulu	18
Total 'very hot day' Tampere	2	Total 'very hot day' Turku	2	Total 'very hot day' Helsinki	2	Total 'very hot day' Oulu	0

Appendix B:

OUTDOOR TEMPERATURES FOR CASE STUDY SITES

(data from the nearest FMI weather station)



HD: hot day
VHD: very hot day
EHD: extremely hot day

Appendix C:

INTERVIEW QUESTIONS AND RESPONSES (excerpts)

This supplemental data provides interview questions, as well as selected interview and balcony diary excerpts related to the findings discussed in the main text. As described, the paper focuses on overheating and thermal comfort related findings.

Interview questions:

This study focused mainly on answers to the questions:

(1) How comfortable do you find your balcony during different seasons?
(2) Do you use any specific items to enhance comfort on your balcony (e.g. shades, fans, heaters, blankets, etc.)?
(3) How does the temperature on your balcony affect your use of it?
(4) How does your balcony affect the temperature of the adjacent living space?

Interview and balcony diary excerpts:

BD= balcony door

CS1 -Resident is a retired woman.

"My apartment has been cool every summer. This is probably due, above all, to the orientation of the windows."

"[...] quite often I can have the balcony door open."

"[...] then if it's a really hot day, then I want the glasses [balcony door + balcony glazing] to be closed and the curtains to be closed, because then the sun doesn't heat my indoor air so much here." When asking when the sun shines on the balcony, she explains "after 15 or 16 and right until 21 the sun shines, but it's not so hot sun anymore. Then I can close everything [balcony door + balcony glazing]."

"[...] the balcony is clearly warmer in the sunlight. But since it's only the afternoon sun, it's not that hot sun."

"I sometimes open, usually just one pane. If I air the carpets, then I open more but otherwise just one and not often. Glazing doesn't affect my use of my balcony much. I don't go there much because I don't have much to do there not because it is too hot or too cold."

"The balcony door has been left open at irregular intervals at night and kept closed during the day. Similarly, the sliding glass doors [balcony glazing] are usually kept closed during the day."

CS2 -Residents are a retired/working couple.

Here the residents refer to both CS2 and CS9: “The apartments do not have air conditioning. During the summer heat, both apartments feel hot. This becomes immediately apparent if the outside temperature rises above 25°C.”

“When the sun shines on the balcony we might have to keep the glazing open because it raises the temperature also in the bedroom.”

“It’s so hot this balcony that we can only look at it from the inside in the summer, so we are the for the bare minimum amount of time if at all.”

“In the morning, the balcony is opened first after the night “, 2nd resident mentions “We come inside in a hurry [if it’s too hot].”

“The sun is shining and it's always 50 degrees.” And when later asked if there is a seasonal difference, the resident replies: “more in the summer”.

CS3 -Resident is a working woman.

“In the summer it’s so hot, I don’t go there. Only in the beginning of summer, I sit there in the morning to drink my coffee.”

“During the whole summer, I have one glass open and I replace it with a mesh panel so that the cat can’t fall down.”

“The balcony door is open the whole summer, when the temperature is above 24°C. When it’s hot [heatwave] and the sun shines in this direction, the I close the balcony door. Then so much heat comes inside that the apartment starts to heat up that it must be closed. “

“If it wasn’t for the cat; it would be more open all summer then it wouldn’t be so hot.”

CS4 -Resident is a working woman.

“In the summer, when the sun is shining, the apartment gets too hot from the afternoon until late at night. So, I have to keep the blinds and blackout curtains closed in front of the windows, especially in the bedroom, and keep the blinds closed in the living room as well. The balcony door also has to stay closed to keep the heat out. At night, I have to sleep with a fan cooling the room, and generally whenever I sleep. Working three shifts and the summer heat in the apartment aren’t a good combination.”

“It’s a shame that a house this new doesn’t have air conditioning. There’s only mechanical ventilation for two hours.”

“I can ventilate the apartment by keeping the balcony doors open and the living room window open. The street traffic is somewhat disruptive, as is the dust it kicks up.

“I have the balcony door open all the time when I am home myself.”

“I like the glazing as it is. I can open it; I can close it.”

Balcony diary

Date	Glazing opening	Activity on balcony	Other comments
1.6	1 piece open 1h	Breakfast	BD open 3h BD open 4h
2.6	5 pieces open 4h	Breakfast; sunbathe	BD open 14h

3.6	2 pieces open 2h 4 pieces open 4h	Breakfast; lunch; sunbathe	BD open 14h
4.6	1 piece open 3h 1 piece open 3h	Breakfast; lunch	BD open 13h
5.6	1 piece open 1/2h	Breakfast; sunbathe	BD open 15h
6.6	1 piece open 1 1/2h	Breakfast; lunch; sunbathe	BD open 13h
7.6	1 piece open 2h	Breakfast; lunch	BD open 12h
8.6	2 pieces open 6h	Breakfast; lunch; coffee with guest	BD open 15h
9.6	1 piece open 1h 1 piece open 1 1/2h		BD open 2h BD open 2h
10.6	1 piece open 2h 1 piece open 1h		BD open 12h
11.6	1 piece open 2h 1 piece open 1 1/2h		BD open 4h BD open 2h30min
12.6	1 piece open 1/2h		BD open 3h BD open 2h
13.6	1 piece open 2h 2 pieces open 1/2h	Breakfast; lunch; sunbathe	BD open 16h
14.6	2 pieces open 2h 1 piece open 6h	Breakfast; sunbathe	BD open 16h
15.6	3 pieces open 5h 4 piece open 5h	Breakfast; lunch; sunbathe	BD open 16h
16.6	3 pieces open 1h 1 piece open 1 1/2h 3 pieces open 1 1/2h	Breakfast; lunch	BD open 9h
17.6	2 pieces open 1h 1 piece open 3 1/2h 2 pieces open 6 1/2h	Breakfast; lunch; sunbathe	BD open 15h
18.6	2 pieces open 1 1/2h 3 piece open 1 1/2h	Breakfast; lunch; sunbathe	BD open 5h
19.6	2 pieces open 45min 1 piece open 1h	Breakfast	BD open 5h
20.6	2 pieces open 1h 1 piece open 1h	Breakfast; sunbathe	BD open 4,5h
21.6	2 pieces open 2h	Breakfast	BD open 12h
22.6	2 pieces open 6 1/2h	Breakfast; sunbathe	BD open 13h
23.6	1 piece open 1h 1 piece open 2h	Breakfast; lunch	BD open 11h
24.6	1 piece open 1 1/2h	Breakfast	BD open 10h
25.6	2 pieces open 1/2h 2 pieces open 1/2h		BD open 14h
26.6	1 piece open 1/2h 3 pieces open 1/2h	Breakfast; sunbathe	BD open 16h
27.6	1 piece open 1/2h 2 pieces open 1h		BD open 15h
28.6	2 pieces open 2h	Breakfast	BD open 15h
29.6	2 pieces open 2h 3 pieces open 3h	Sunbathe	BD open 16h

30.6	1 piece open 3h 3 pieces open 1h	Breakfast	BD open 14h
1.7	1 piece open 1/2h 3 pieces open 1/2h	Lunch; sunbathe	BD open 16h
2.7	3 pieces open 3/4h 3 pieces open 3h	Breakfast	BD open 16h
3.7	3 pieces open 1h		BD open 1h
4.7	1 piece open 3h 3 pieces open 3h	Breakfast	BD open 17.5h
5.7	2 pieces open 2 1/2h	Breakfast	BD open 13h
6.7	3 pieces open 1h 2 pieces open 2h		BD open 16h
7.7	2 pieces open 2h		BD open 16h
8.7	2 pieces open 1h	Sunbathe; dinner	BD open 15,5h
9.7	3 pieces open 5h 1 piece open 6h	Breakfast; sunbathe	BD open 11h
10.7	3 pieces open 1h 1 piece open 1h	Breakfast	BD open 17h
11.7	3 pieces open 15h	Breakfast; lunch; sunbathe	BD open 15h
12.7	3 pieces open 7h	Breakfast	BD open 8h
13.7	5 pieces open 4h	Breakfast	BD open 13h
14.7	3 pieces open 6h 6 pieces open 5h	Breakfast; lunch; sunbathe	BD open 13h
15.7	4 pieces open 6h 6 pieces open 10h	Breakfast; lunch	BD open 16h
16.7	6 pieces open 15h	Breakfast; lunch; sunbathe	BD open 11h
17.7	6 pieces open 24h	Lunch; sunbathe	BD open 16.5h
18.7	6 pieces open 24h	Lunch; sunbathe	BD open 24h
19.7	6 pieces open 24h	Breakfast; lunch; sunbathe	BD open 24h
20.7	6 pieces open 24h	Breakfast; lunch; sunbathe	BD open 24h
21.7	6 pieces open 24h	Breakfast	BD open 24h
22.7	6 pieces open 24h	Breakfast	BD open 24h
23.7	6 pieces open 24h	Breakfast; lunch; sunbathe	BD open 24h
24.7	4 pieces open 9h 6 pieces open 15h	Lunch; sunbathe	BD open 24h
25.7	6 pieces open 24h	Lunch; sunbathe	BD open 24h
26.7	6 pieces open 2h 3 pieces open 6h 6 pieces open 16h	Breakfast; sunbathe; dinner	BD open 24h
27.7	6 pieces open 24h	Breakfast; lunch; sunbathe	BD open 24h
28.7	4 pieces open 10h 6 pieces open 14h	Lunch	BD open 24h
29.7	2 pieces open 9h 4 pieces open 5h	Breakfast	BD open 24h

30.7	4 pieces open 9h 5 pieces open 15h	Breakfast; lunch	BD open 24h
31.7	5 pieces open 9h 4 pieces open 15h	Breakfast; lunch	BD open 24h
1.8	1 piece open 11h 4 pieces open 13h	Breakfast; lunch	BD open 24h
2.8	2 pieces open 18h 4 pieces open 6h	Breakfast; sunbathe	BD open 24h
3.8	4 pieces open 24h	Breakfast	BD open 24h
4.8	4 pieces open 22h 2 pieces open 2h	Breakfast	BD open 24h
5.8	2 pieces open 8h 4 pieces open 4h 1 piece open 12h	Breakfast	BD open 24h
6.8	3 pieces open 12h 2 pieces open 12h	Breakfast	BD open 24h
7.8	2 pieces open 8h 4 pieces open 7h 1 piece open 3h		BD open 24h
8.8	1 piece open 6h 2 pieces open 6h 1 piece open 2h		BD open 24h
9.8	3 pieces open 4h 4 pieces open 3h 2 pieces open 9h	Breakfast	BD open 24h
10.8	4 pieces open 2h 1 piece open 10h 2 pieces open 2h	Breakfast	BD open 24h
11.8	2 pieces open 12h 1 piece open 3h	Breakfast	BD open 24h
12.8	3 pieces open 8h 2 pieces open 6h 1 piece open 4h	Breakfast	BD open 24h
13.8	1 piece open 14h 4 pieces open 3h		BD open 24h
14.8	2 pieces open 13h 4 pieces open 3h		BD open 24h
15.8	4 pieces open 6h 1 piece open 9h	Breakfast	BD open 24h
16.8	3 pieces open 1h 1 piece open 3h	Breakfast	BD open 23h
17.8	1 piece open 6h		BD open 18h
18.8	2 pieces open 1h 1 piece open 13h	Breakfast	BD open 16h
19.8	2 pieces open 2h 1 piece open 9h	Breakfast	BD open 13h
20.8	2 pieces open 3h 1 piece open 2h		BD open 16h
21.8	1 piece open 2.5h 1 piece open 1h	Breakfast	BD open 14h
22.8	1 piece open 1h		BD open 11h

23.8	3 pieces open 3h		BD open 7h
24.8	2 pieces open 1h		BD open 3h
25.8	1 piece open 1h		BD open 6h
26.8	1 piece open 4h		BD open 12h
27.8	1 piece open 4h		BD open 10h
28.8	1 piece open 3h		BD open 15h
29.8	1 piece open 3h		BD open 14h
30.8	1 piece open 1h		BD open 4h
31.8	-	-	-

CS5 -Resident a working woman.

"During summer I find my balcony quite comfortable, I usually use it throughout the day until night, to have breakfast, lunch, or just have a drink, meet my friends or read. In the morning to be able to use it I usually have at least one glass panel open [through the night] because otherwise it gets quite hot in the morning due to its orientation."

"I don't use any specific item [shading, fan, etc.], mostly because I'm renting and I'm not sure how to install for example shades on the glass, though I have to admit I never really looked at how it would be possible to do so. I mostly just have one panel opened to get some air and that's it. I often have the balcony door to the living room opened too to bring some air in, since with the Finnish windows it's difficult otherwise to ventilate."

"[...] I never really had any experience where my balcony was too hot for me to use, since if it's the case i just ventilate and it's okay. However, since I refuse to have a portable heating system in the balcony I don't really use it from late October until spring. In summer 2025 I wasn't there during the heatwave (end of July – beginning of August) so I cannot testify about how it felt to have this heat on the balcony. But when I came back, early august, the apartment was so hot, including the living room that I had to let the balcony open to bring some air for at least the whole night and day after. I didn't use the balcony the day I came back because it was still too hot."

"I'm not sure how the balcony itself impact the space adjacent to it. I know that because of the orientation my apartment can get hot in the mornings, several times I woke up in my bed because I was too hot. In contrast, I have not so much issues in the afternoons and evenings. When it gets to hot I usually sleep with my bedroom door and window open, as well as with the balcony door (and one glass panel) opened. This is a way for me to ventilate and make sure that I'm not woken up in the morning due to the heat."

"I don't really mind but sometimes my partner does not want to use the balcony much or let the door and glass panel opened due to privacy because our balcony is at the 2nd floor looking at the parking and it's quite easy for our neighbours to see us or hear us. I also don't use the curtains in my living room/kitchen much. I have to use my balcony (door) for ventilation because the windows don't really open much. I'm glad to have the balcony even if it's just as a way to ventilate the apartment."

"Yes [the apartment is too hot] definitely, especially in the morning it has been uncomfortable and sometimes difficult to sleep through the 'morning-night' because of this."

Balcony diary

Date	Glazing opening	Activity on balcony	Other comments
1.6-3.8	Everything closed	Resident absent	
4.8-7.8	2 pieces opened + balcony door open day/night		To ventilate because apt too hot
8.8-25.8	1 piece opened day/night + balcony door in the morning	Eating, reading in the evening	
25.8-27.8	3 pieces opened day/night		
28.8-31.8	No information		

CS6 -Resident is a retired woman.

“It gets hot in the summer when the outside temperature reaches 28 degrees. It’s usually almost the same inside, too. I turn on the air purifier. It circulates the air, which makes it feel cooler. I close the blinds so the sun doesn’t shine in, or I open the windows a bit to create a draft, which I don’t like.”

“Often in the morning I just open the door. It’s hot there [the balcony], I don’t like it. I can’t be there [the balcony].”

“It is hot yes. I put my plants to grow there in the summer”.

“The sun comes in from that side about 4hours. It’s enough. It’s good that it’s not more.”

“[…temperature is] really high, yes, even if I open a lot. I can be easily 30°C. I keep doors [glazing] open. But generally, when it’s open and there is the curtains, it’s nice to be there.”

Balcony diary

Date	Glazing opening	Activity on balcony	Other comments
19.6-2.7		Breakfast; watering plants; coffee	(often)
3.7	1 piece open on both sides	Breakfast; watering plants	
4.7-23.7	1 piece open on both sides	Afternoon coffee	Roll down blinds down most of the time to prevent glare
24.7-31.7	1 piece open on both sides	Breakfast (often); tee moment	
1.8-31.8	1 piece open on both sides	Breakfast	Tomatoes are growing well

CS7 -Resident is a retired couple.

“The sun never shines too much in the afternoon, so it’s never too hot sunshine.”

“It’s never too hot because then we can put the glazing to the side. But we have never experienced it because we are never here in the summer.”

Balcony diary

Date	Glazing opening	Activity on balcony	Other comments
1.6	1 piece open for several hours		BD open
11.6			BD open
12.6			BD open
13.6			BD open
15.6	1 piece open evening + nighttime		BD open
16.6	2 pieces open during the day	Airing of clothing	BD open
17.6	1 ½ pieces open for several hours	Airing of clothing	BD open
23.6	1 ½ pieces open for whole day	Airing of clothing	
23-28.6			BD open
15-16.7	2 pieces open 24/24		BD open
20.7	2 pieces open evening + nighttime	Plant care	
21.7	2 pieces open during the day	Morning coffee + reading	
24.7	2 pieces open evening + nighttime		
25.7-2.8	2 pieces open during the day		
3.8	1 piece open 24/24	Sitting in the evening	BD open during the night
4.8	1 piece open 24/24		BD open whole day
5-10.8	1 piece open 24/24		
11.8-14.8	1 piece open 24/24		
15.8	2 pieces open 24/24	Sitting in the evening	BD open
26.8	1 piece open 14-20		
27.8			BD open ½ day

CS8 -Resident is a retired woman.

“As a result of the long heat wave, the temperature in my apartment has temporarily risen to 27°C, which has felt too hot. Otherwise, it has not been too hot. Our house's air conditioning system [meaning ventilation system, no air conditioning in the building] has a feature that cools the incoming air by a maximum of 2°C during the summer. I have roller blinds on my balcony, which block some of the heat from the sun's rays. I use them in the afternoons when the sun shines directly on the balcony [from 4 p.m.]. I also open the balcony windows. Fortunately, my balcony faces northwest, which means the sun only shines directly in the late afternoon.”

“The sun shines more in the spring and summer and it can then be difficult to be on the balcony. It’s hot then but I have these curtains. And I open the glazing as well; it must be ventilated. “

Balcony diary

Date	Glazing opening	Activity on balcony	Other comments
2.6	1 piece open for about 2h	Breakfast; planting	BD open

3.6	1-2 pieces open for about 3h (evening)	Breakfast; watering plants	BD open
4-7.6	All open	Breakfast; watering plants; lunch with guests	BD open
8.6	1-2 pieces open all day	Breakfast; watering plants	
9.6-31.8	All closed		Resident absent

CS9 -Residents are a retired/working couple.

Here the residents refer to both CS2 and CS9: “The apartments do not have air conditioning. During the summer heat, both apartments feel hot. This becomes immediately apparent if the outside temperature rises above 25°C.”

The owners of CS9 are the same as CS2. It is a second apartment, in another building in the same city. In the initial interview [done for CS2] they compare it to their other balcony: “The other apartment [CS9] is a more functional balcony.”

And “It's like a workplace for me, so it's a three-room apartment, but there's a gorgeous balcony with a river view and it's big enough. It's partly inside the building and partly outside and then it's glazed on all 3 sides.”

“The balcony of apartment was used quite a lot during the summer of 2025. It was especially in heavy use on weekends. Even in July, we were often at that apartment and on the balcony. The balcony glazing was partially open throughout the summer, from Midsummer until around the end of August. During the July heatwave, the entire glazing was open.”

CS10 -Residents are a working couple.

”The apartment was way too hot in the summer; the temperature was close to thirty degrees. Working blinds would have helped but installing them wasn’t allowed in a rental apartment. There wasn’t really any good way to ventilate the place since you couldn’t create a draft in the apartment. In addition, the noise from the neighbour’s children was really disruptive in the summer, which further limited our ability to keep the windows open.”

“This apartment is really hot in summer anyway”

“You can’t ventilate”.

“[...] the balcony is like it's in extra hot weather.”

“The sun shines quite a lot here. It's insanely hot there sometimes, at least if you have the glass [balcony glazing] closed.”

”In the summer it’s too hot to be there or bring guests outside to the balcony.