Scenario — PV
Just an apartment Austria - Salzburg 47.783, 13.067

Name	Slope °	Azimuth °	Wp	Wall d/h m	Face	Bifacial	Wp counted
Terrace railing	90	-12	3,000	—	front	—	yes
Total counted			3,000				

Location: The apartment example. I lived there from 1978 to 1995. Small only one room apartment in the highest floor. Heat and DHW delivered by a central system. So in the example is heat demand 0 and 0 DHW liters because they are both not created by the own electric system. The pin location is a rounding error. The real location is house 43 at the south facing facade.
Database PVGIS-SARAH3 2005–2023 loss 14 % azimuth 0 = south, 90 = west, −90 = east.
Price bands and charts use UTC+1 from longitude (15° per hour), not the political time zone.
Peak hour 2006-01-13 11:10 local (10:10 UTC) 2,710 W 0.903 W/Wp of 3,000 Wp.
Database gaps: 10 days with 0 yield while the sun reached the horizon at noon. 2008-01-23, 2008-03-01, 2008-03-06, 2008-05-17, 2008-05-18, 2009-04-18, 2009-04-19, 2009-08-15, 2009-08-16, 2016-10-16. Yield charts skip them. The simulation uses the lowest-yield day of that month.
Sell when the export price is above 0. At 0 cent export PV yield only, not the battery. Do not sell when the earning is negative. At 15:00 import/export scheduling.

Scenario — house, heat pump, battery
Just an apartment Austria - Salzburg 47.783, 13.067

Chapter	Parameter	Value
Building	Design out / in / heat	-10.0 °C / 20.0 °C / 0 W
	Heat on / cool on / ground	22.0 °C / 25.0 °C / 10.0 °C
	Curve / flow min / max	0.4 / 25.0 °C / 55.0 °C
	Thermal mass of the house	25.0 kWh/K
	Household only	4.0 kWh/day
DHW	Litres at 40 °C / tank	0 L tank 42.0 °C 8–18 h
	Water out of the pipe Q1–Q4	8 °C 10 °C 12 °C 10 °C
Heat pump	Source	air and ground
	COP −10/0/10 @ 35 °C	2.4 3.4 4.5
	COP −10/0/10 @ 50 °C	1.9 2.6 3.3
	kW −10/0/10 @ 35 °C	4.0 5.0 6.0
	kW −10/0/10 @ 50 °C	3.5 4.5 5.0
Battery	kWh / C-rate / SOC min–max–start	16.0 kWh C 0.5 5 / 95 / 50 %
	Nameplate	16 cells 314 Ah LFP
	Charge / discharge η	95 % / 90 %
Grid	Inverter / grid connection	4.0 kW / 4.0 kW
	Max export	4.0 kW
	Import cap Jan–Jun kW	Jan 2 Feb 2 Mar 2 Apr 2 May 2 Jun 2
	Import cap Jul–Dec kW	Jul 2 Aug 2 Sep 2 Oct 2 Nov 2 Dec 2
Cars	Lunch DC / night AC	0.0 kWh @ 30.0 kW night 10.0 kWh @ 4.0 kW

Clock is winter time UTC+1. Emergency import is an hour above the monthly kW cap.

Records 1–10 contribution of each PV
Austria - Salzburg 47.783, 13.067

PV	2006-01-13 10:10	2006-01-24 10:10	2006-01-15 10:10	2006-01-23 10:10	2008-12-28 10:10	2012-02-06 10:10	2008-12-30 10:10	2006-01-16 10:10	2018-02-25 10:10	2011-01-04 10:10
Terrace railing	2,710	2,701	2,699	2,662	2,660	2,658	2,647	2,645	2,644	2,631
Watt at record	2,710	2,701	2,699	2,662	2,660	2,658	2,647	2,645	2,644	2,631
Percent of installed peak	90.3	90.0	90.0	88.7	88.7	88.6	88.2	88.2	88.1	87.7

Values are watts at that hour. Date and time are UTC. Record 2,710 W (90.3 % of 3,000 Wp).

Hours at or above a share of the record
Austria - Salzburg 47.783, 13.067

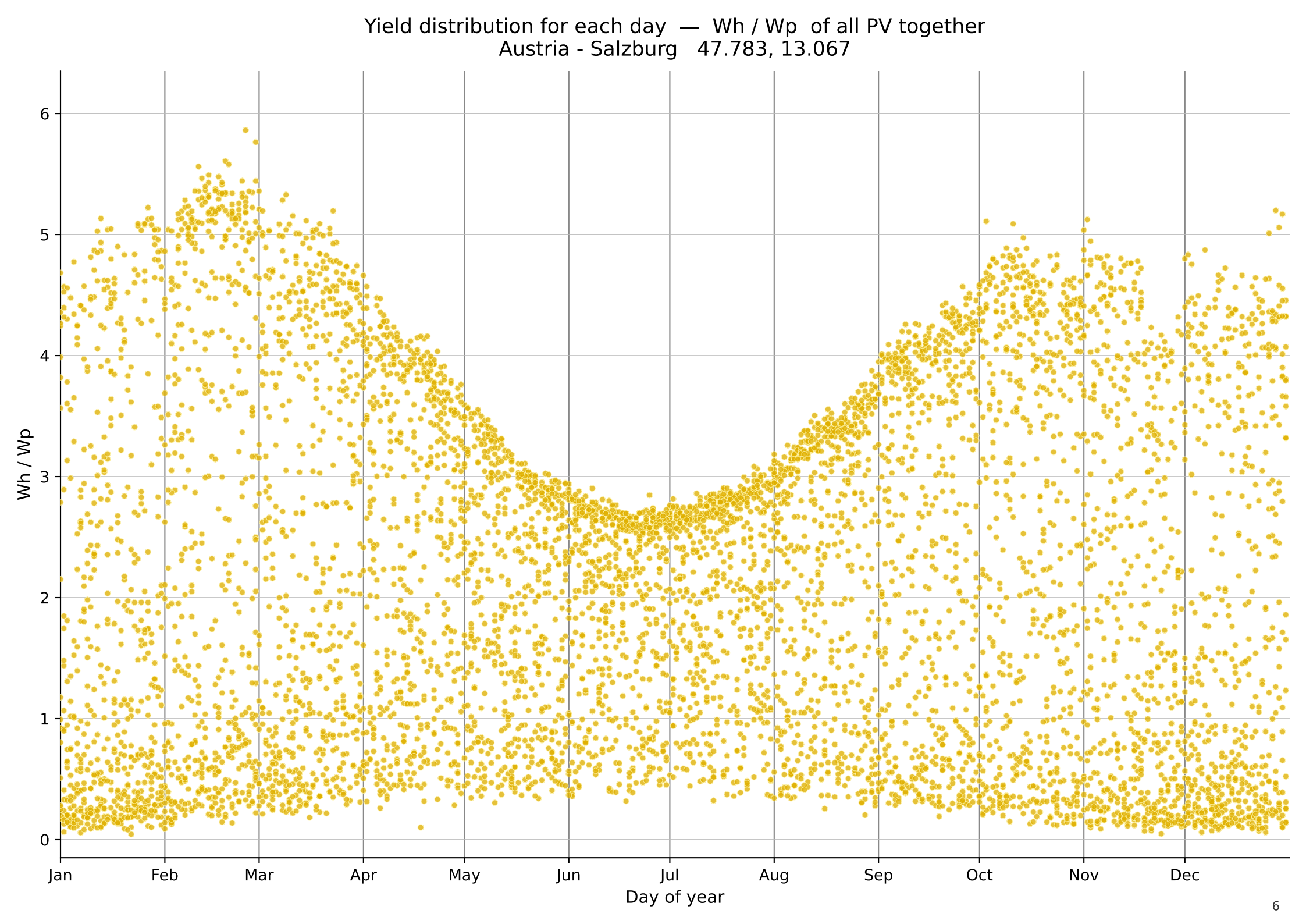
Of the record	Hours	Watts
98 %	6	2,655 W
96 %	18	2,601 W
94 %	44	2,547 W
92 %	85	2,493 W
90 %	156	2,439 W

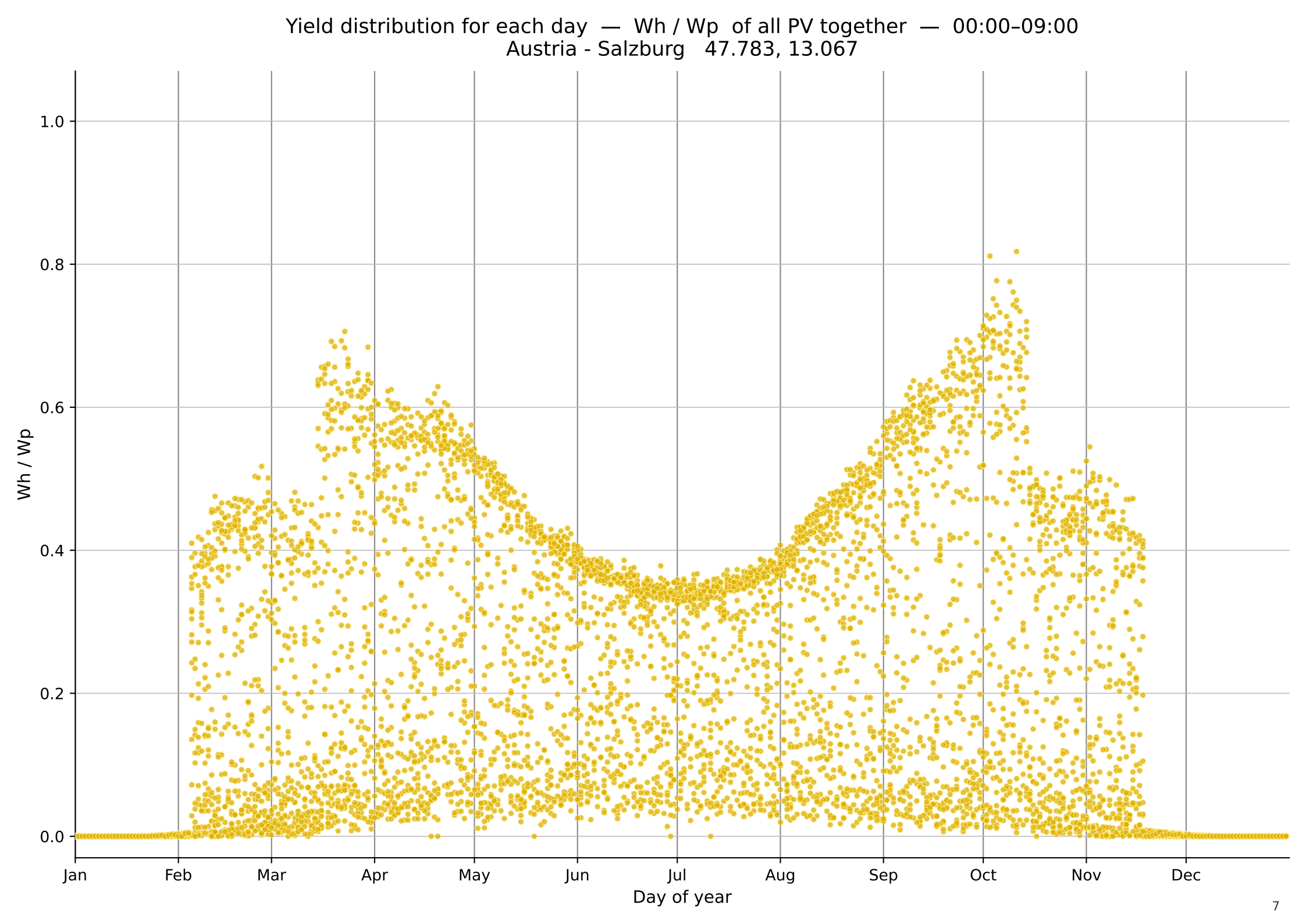
Record hour = 2,710 W combined.

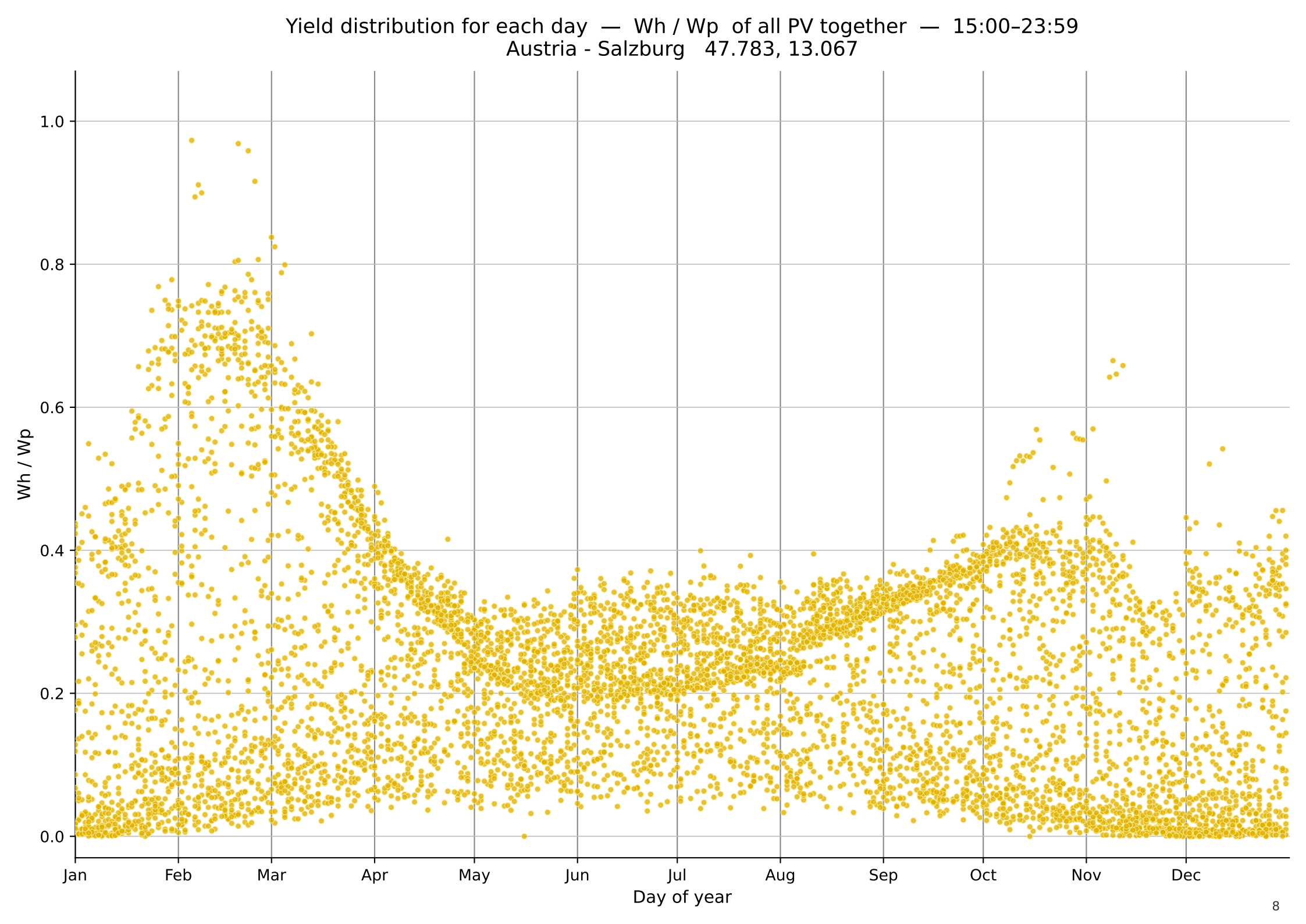
Records of each photovoltaic field
Austria - Salzburg 47.783, 13.067

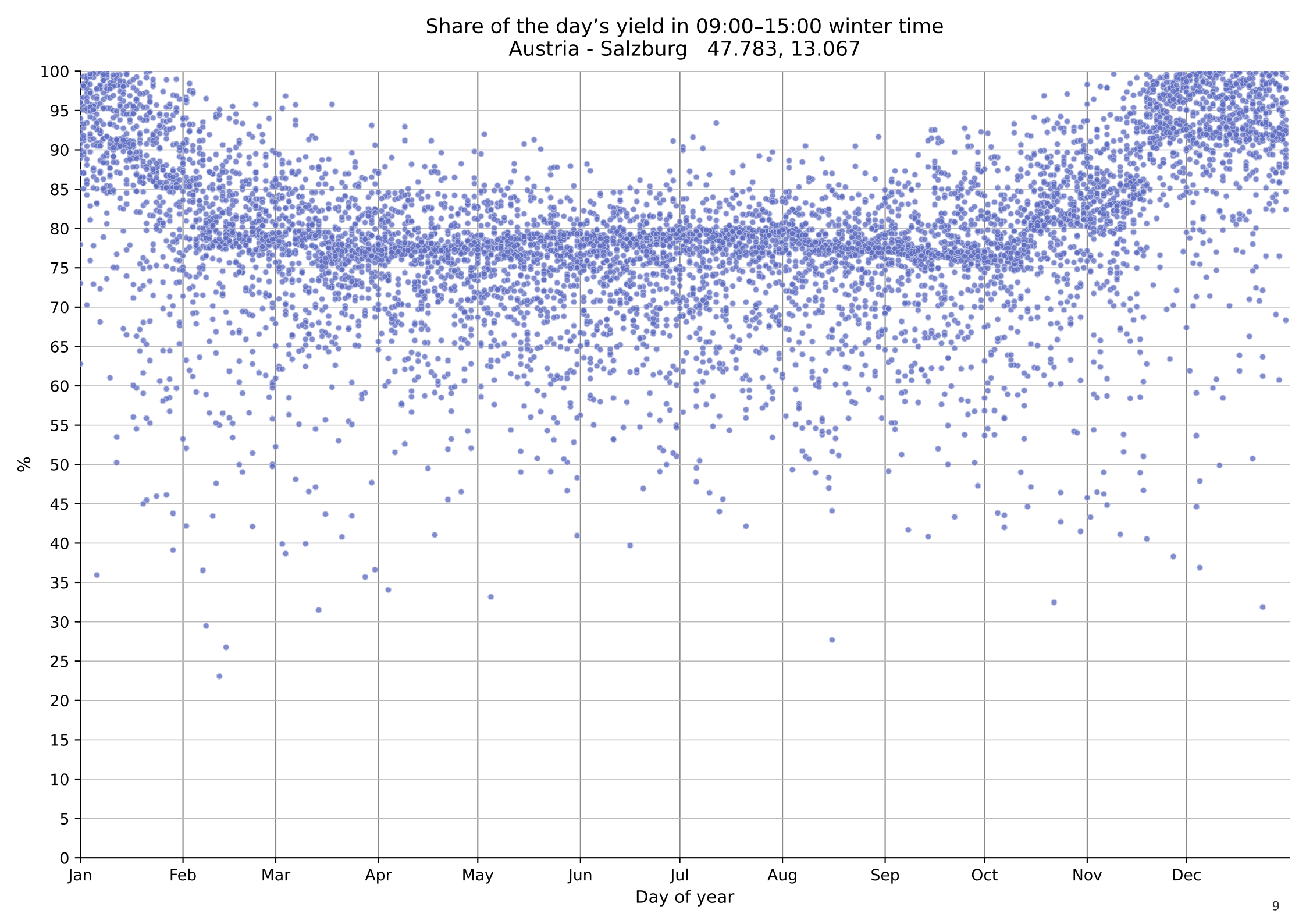
PV	Date	Watts	%	h ≥98%	h ≥96%	h ≥94%	h ≥92%	h ≥90%
Terrace railing	2006-01-13 10:10	2,710	90.3	6	18	44	85	156

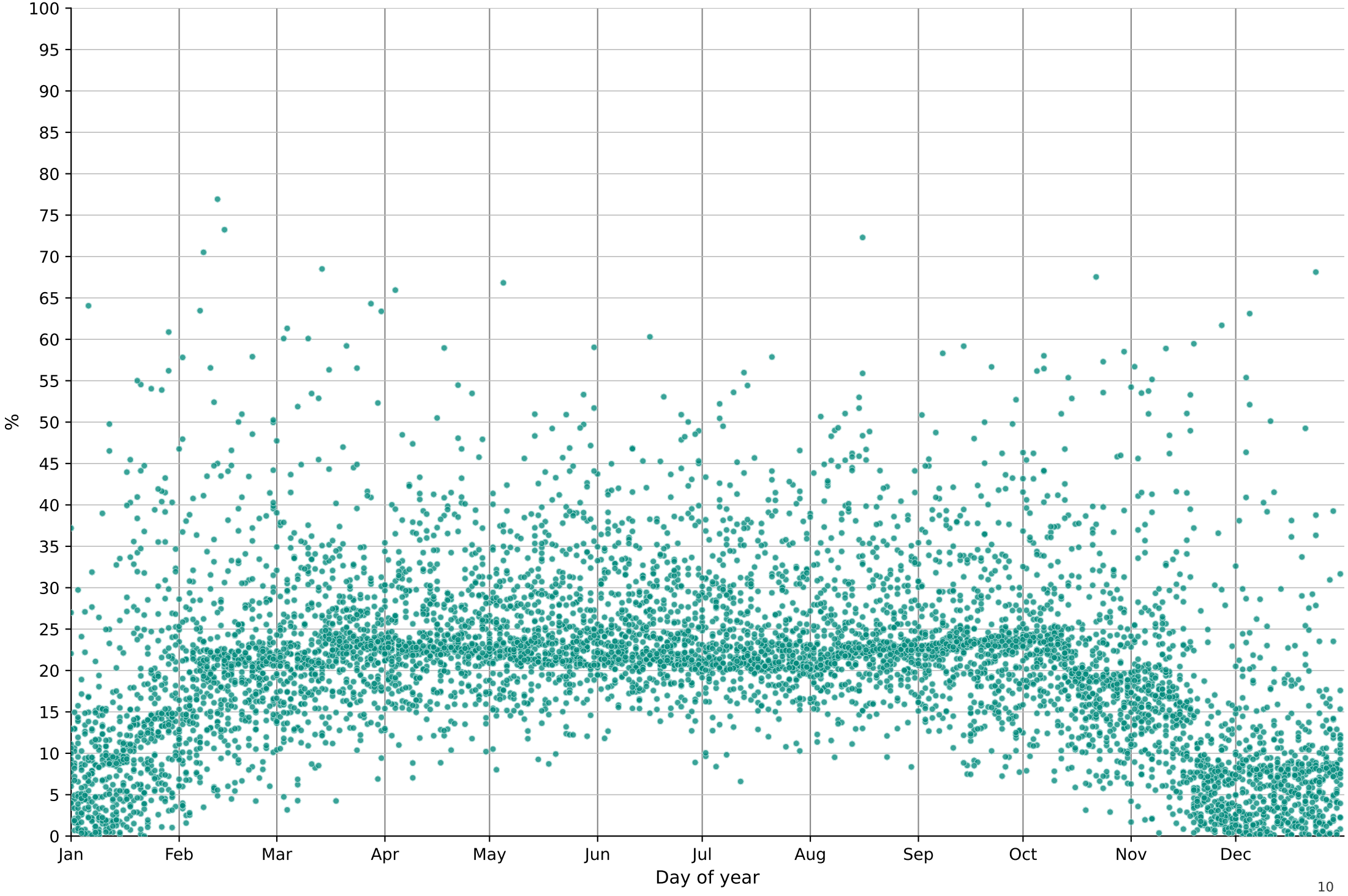
Watts is the highest hour of that field. % is of its own Wp. Hours are the count of hours at or above that share of its own record. Use this to size the MPPT or the inverter for that field.

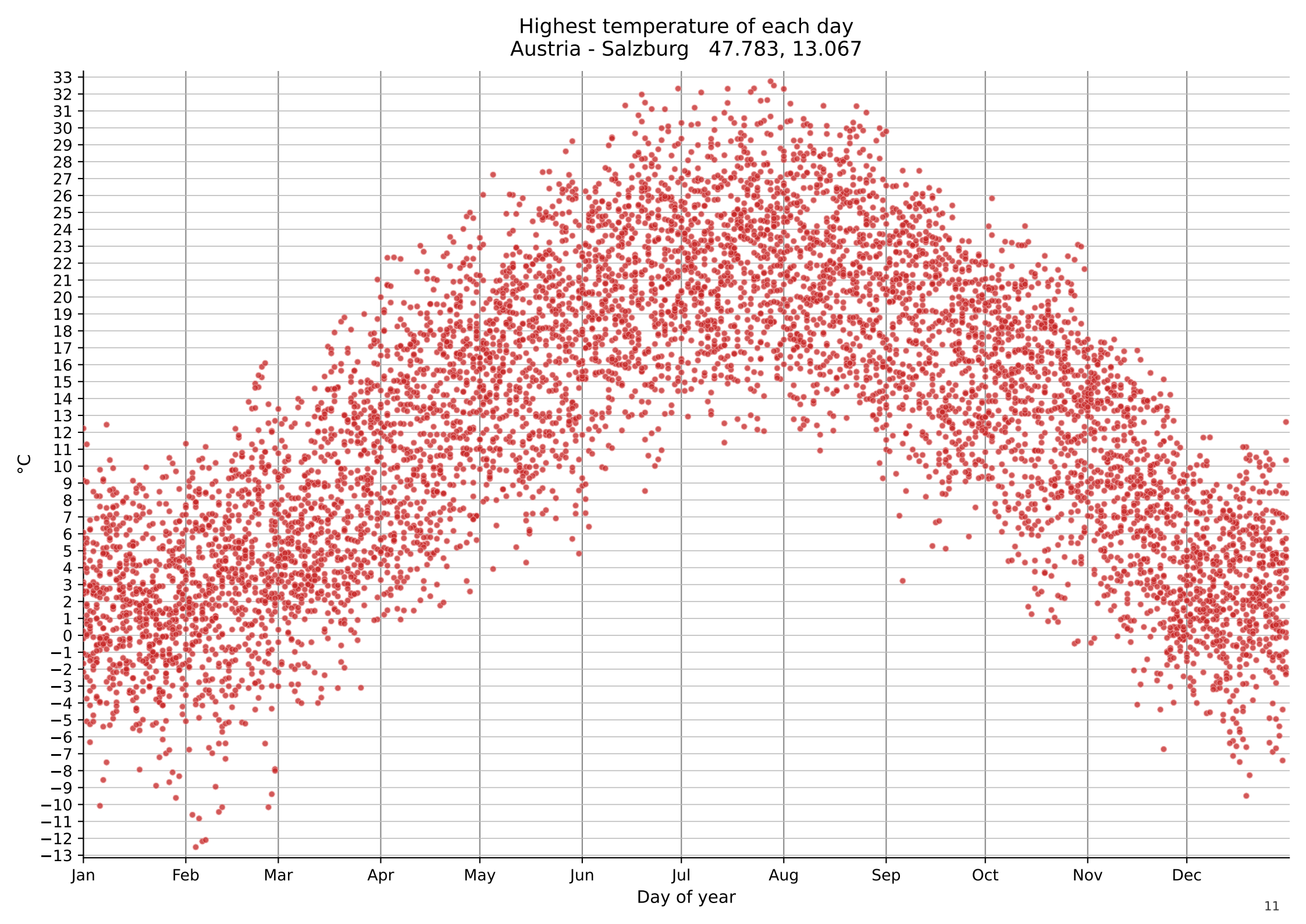

Yield distribution for each day — Wh / Wp of all PV together
Austria - Salzburg 47.783, 13.067
Wh / Wp
0
1
2
3
4
5
6
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

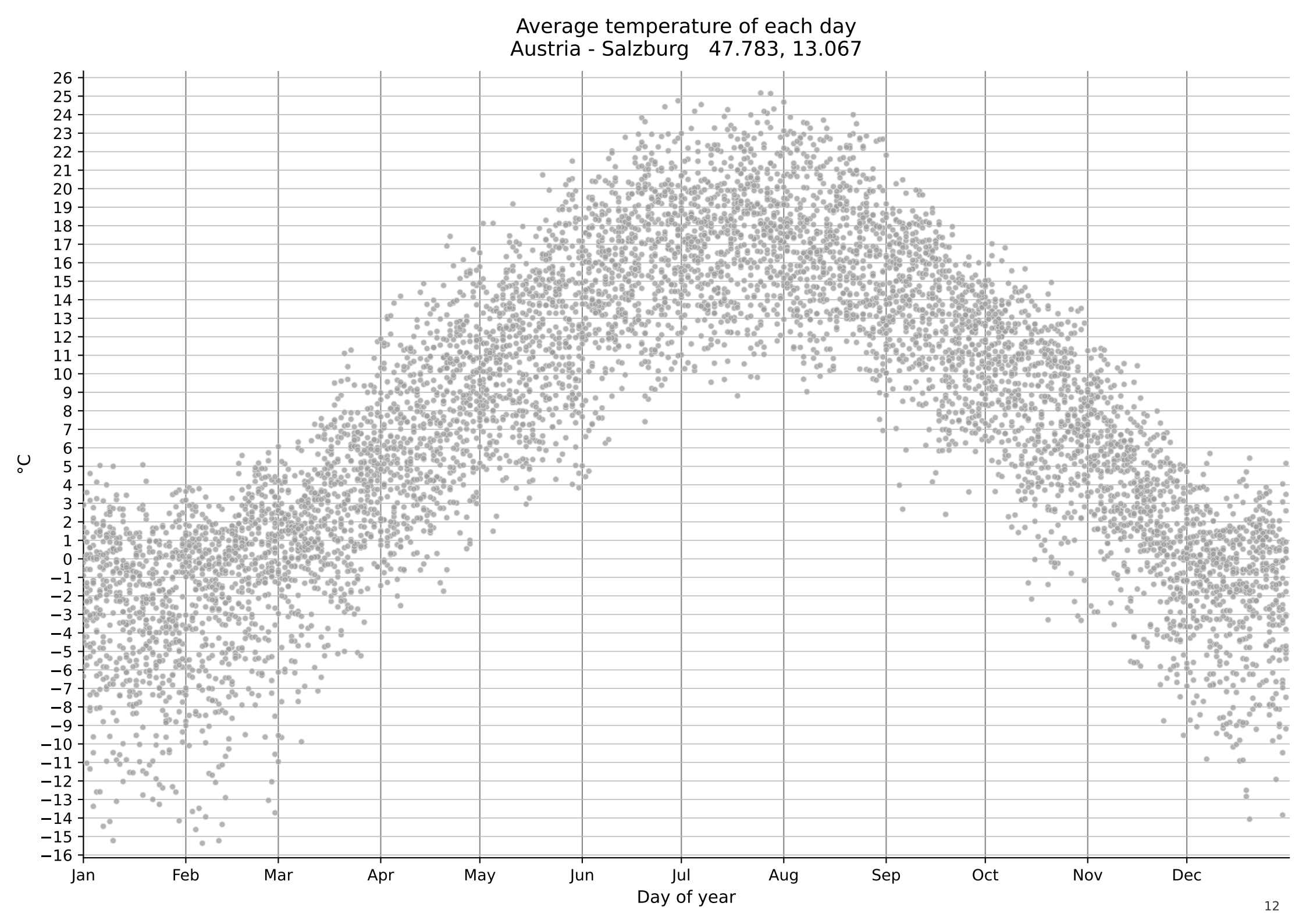

Yield distribution for each day — Wh / Wp of all PV together — 00:00–09:00
Austria - Salzburg 47.783, 13.067
1.0
0.8
0.6
0.4
0.2
0.0
Wh / Wp
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

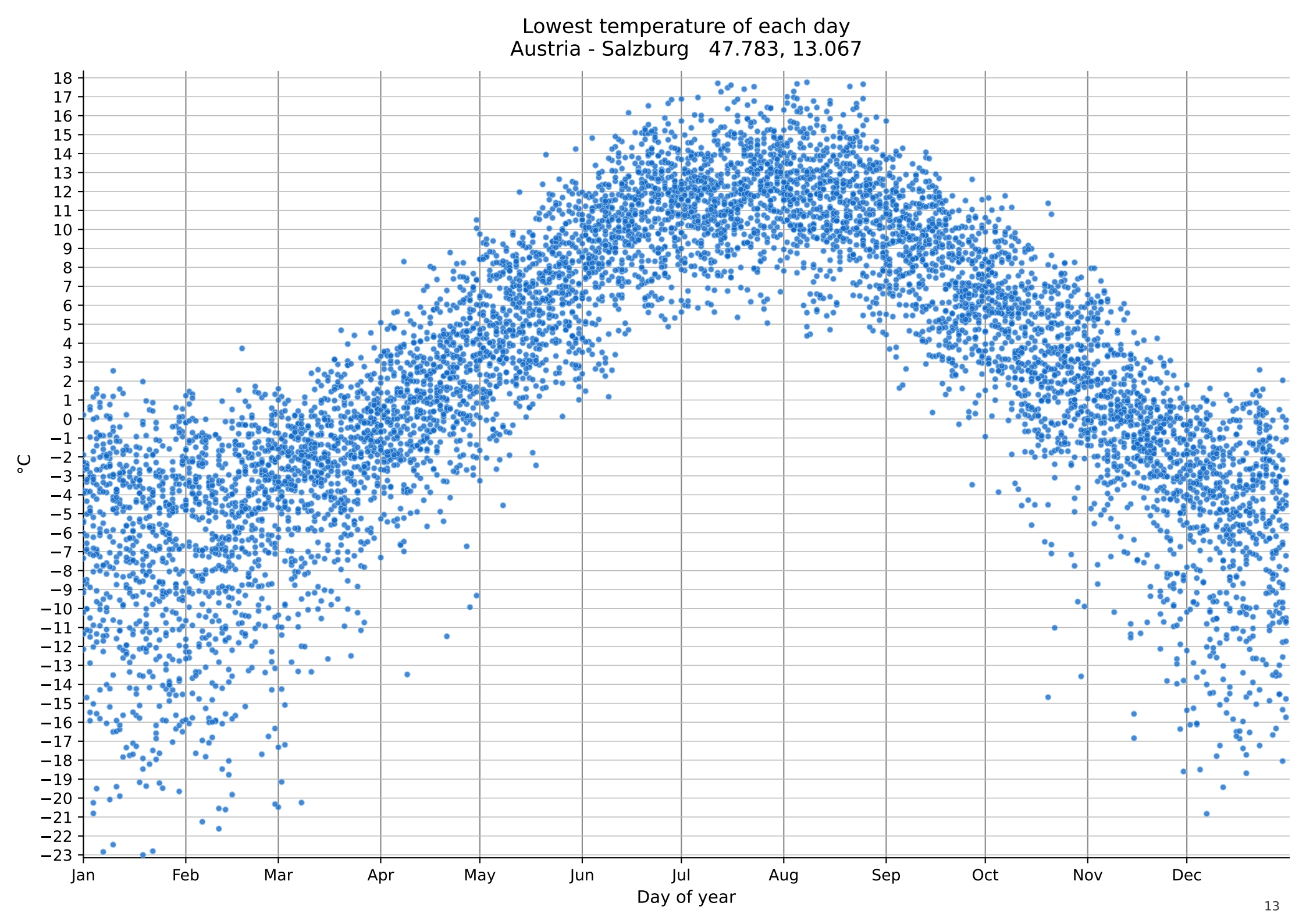

Yield distribution for each day — Wh / Wp of all PV together — 15:00–23:59
Austria - Salzburg 47.783, 13.067
1.0
0.8
0.6
0.4
0.2
0.0
Wh / Wp
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

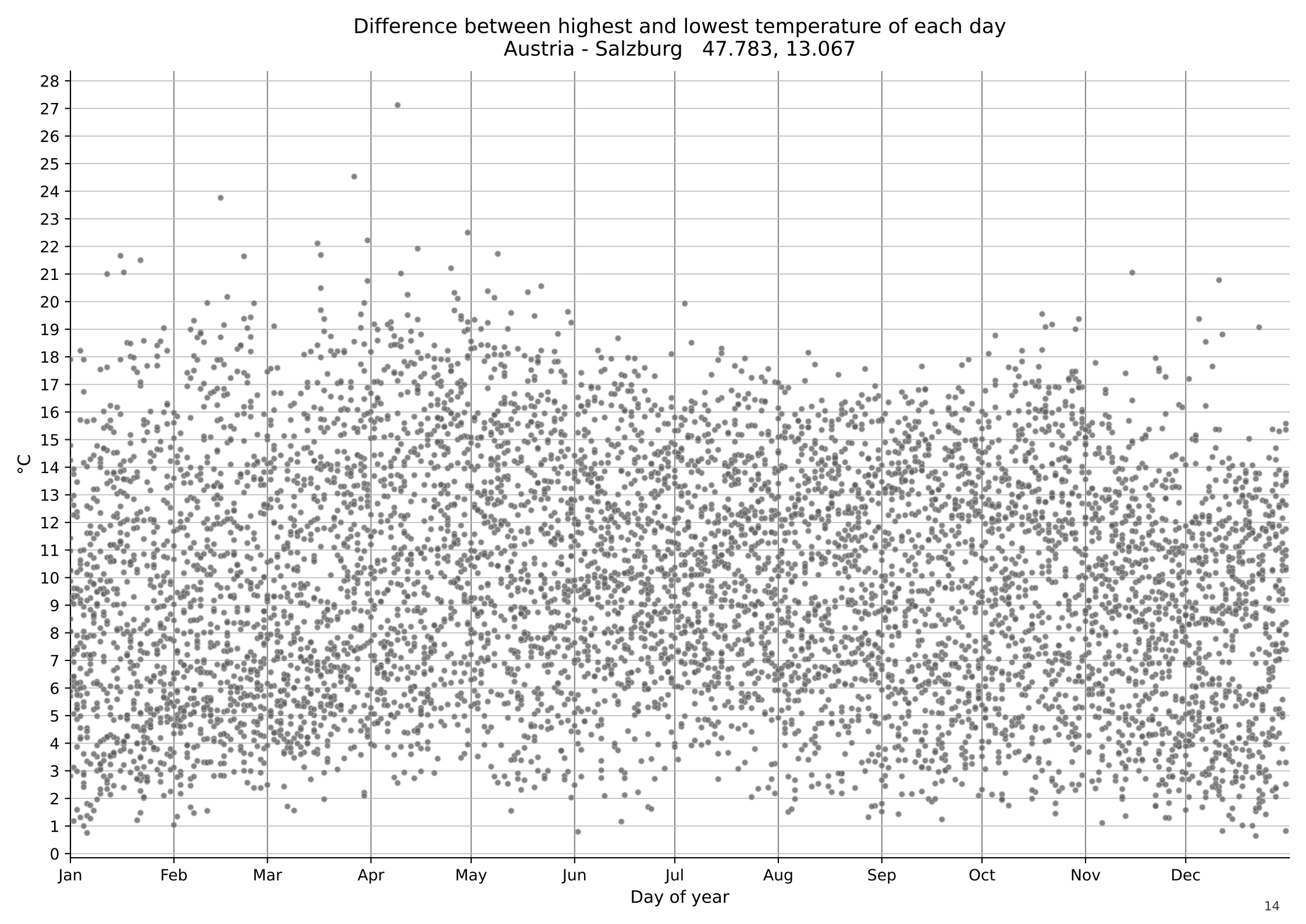

Share of the day’s yield in 09:00–15:00 winter time
Austria - Salzburg 47.783, 13.067
%
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Share of the day’s yield outside 09:00–15:00 winter time
Austria - Salzburg 47.783, 13.067
%
Day of year
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
0
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
100


Highest temperature of each day
Austria - Salzburg 47.783, 13.067
°C
33
32
31
30
29
28
27
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
−1
−2
−3
−4
−5
−6
−7
−8
−9
−10
−11
−12
−13
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Average temperature of each day
Austria - Salzburg 47.783, 13.067
°C
26
25
24
23
22
21
20
19
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
−1
−2
−3
−4
−5
−6
−7
−8
−9
−10
−11
−12
−13
−14
−15
−16
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Lowest temperature of each day
Austria - Salzburg 47.783, 13.067
°C
18
17
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1
0
−1
−2
−3
−4
−5
−6
−7
−8
−9
−10
−11
−12
−13
−14
−15
−16
−17
−18
−19
−20
−21
−22
−23
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Difference between highest and lowest temperature of each day
Austria - Salzburg 47.783, 13.067
°C
0
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

Monthly and yearly specific yield (kWh/kWp = Wh/Wp)
Austria - Salzburg 47.783, 13.067

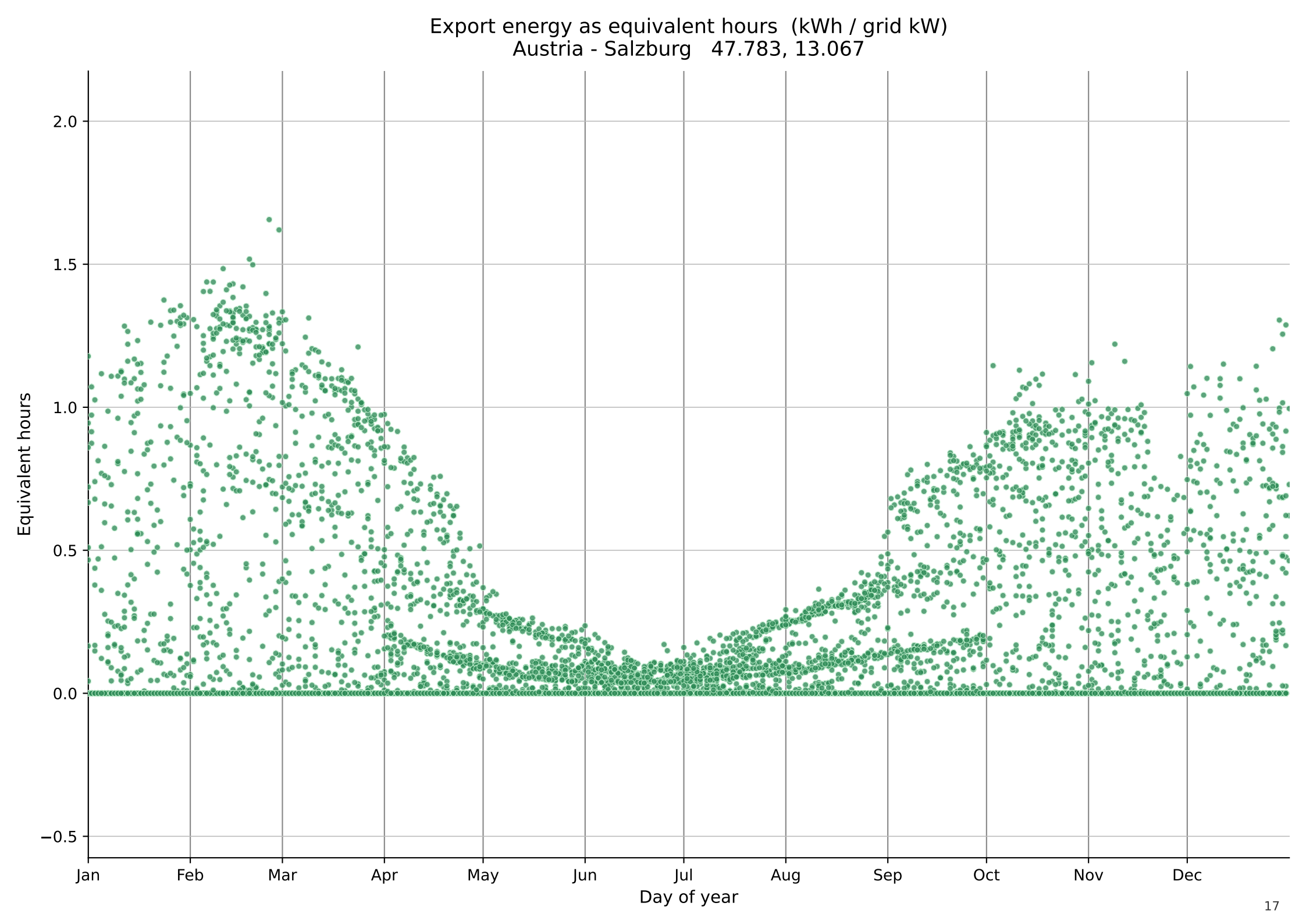
Month / year		Terrace railing 90°/-12° 3,000 Wp	All together
January	Maximum	98.49	98.49
	average	53.85	53.85
	minimum	29.81	29.81
February	Maximum	96.47	96.47
	average	73.95	73.95
	minimum	49.63	49.63
March	Maximum	123.09	123.09
	average	76.42	76.42
	minimum	48.32	48.32
April	Maximum	102.33	102.33
	average	73.21	73.21
	minimum	52.16	52.16
May	Maximum	74.57	74.57
	average	61.94	61.94
	minimum	41.32	41.32
June	Maximum	71.26	71.26
	average	58.59	58.59
	minimum	45.48	45.48
July	Maximum	75.84	75.84
	average	63.19	63.19
	minimum	53.13	53.13
August	Maximum	81.95	81.95
	average	70.05	70.05
	minimum	52.68	52.68
September	Maximum	95.70	95.70
	average	73.84	73.84
	minimum	54.98	54.98
October	Maximum	107.44	107.44
	average	78.21	78.21
	minimum	49.10	49.10
November	Maximum	100.84	100.84
	average	57.87	57.87
	minimum	28.81	28.81
December	Maximum	99.51	99.51
	average	55.87	55.87
	minimum	34.89	34.89
All years	Maximum	895.8	895.8
	average	797.0	797.0
	minimum	731.8	731.8

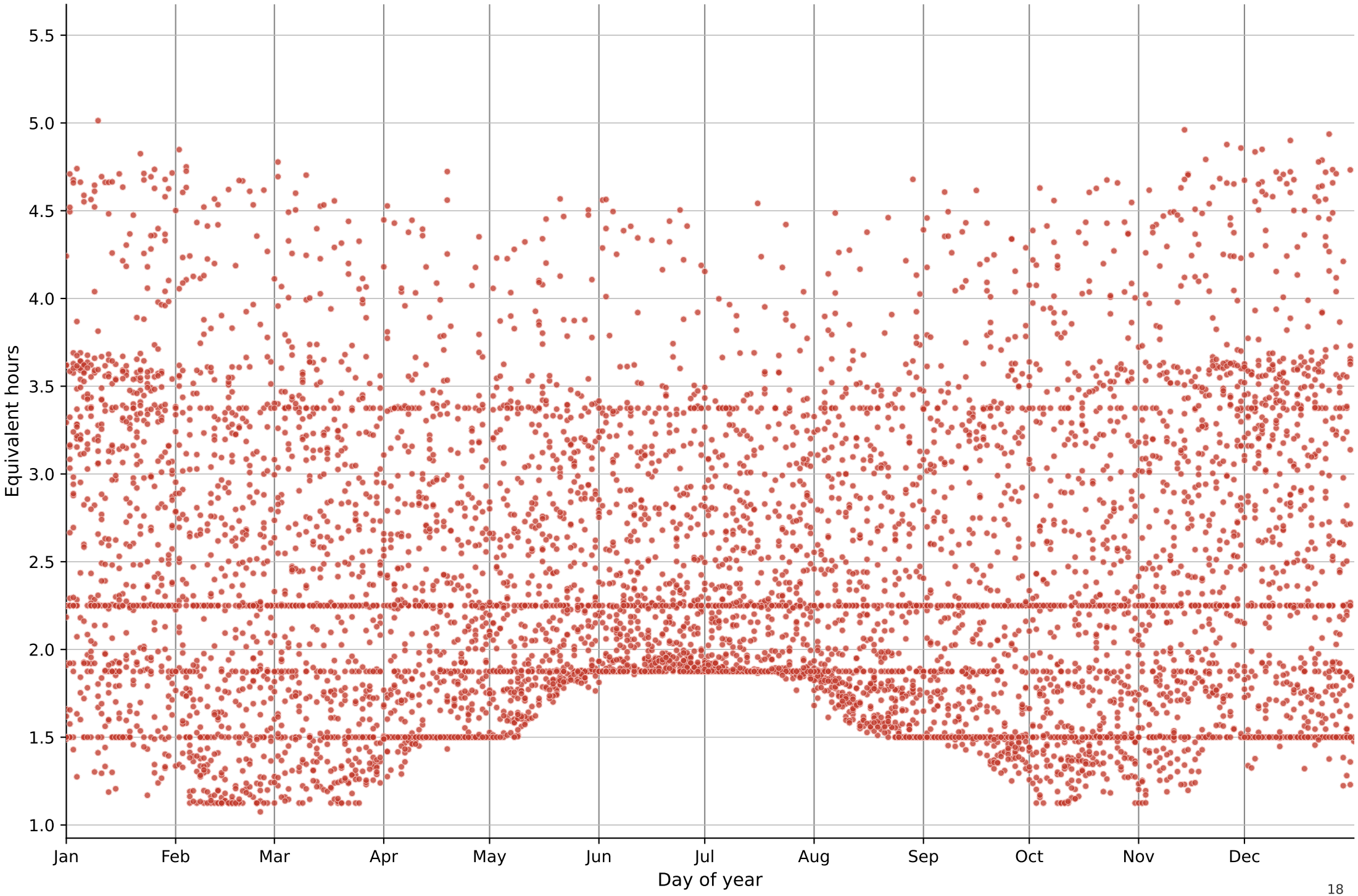
Highest combined yield hour: 2006-01-13 10:10 UTC 2,709.6 W (0.903 W/Wp) of 3,000 Wp installed. Use this hour to size battery charge power.

Monthly and yearly total yield (kWh)
Austria - Salzburg 47.783, 13.067

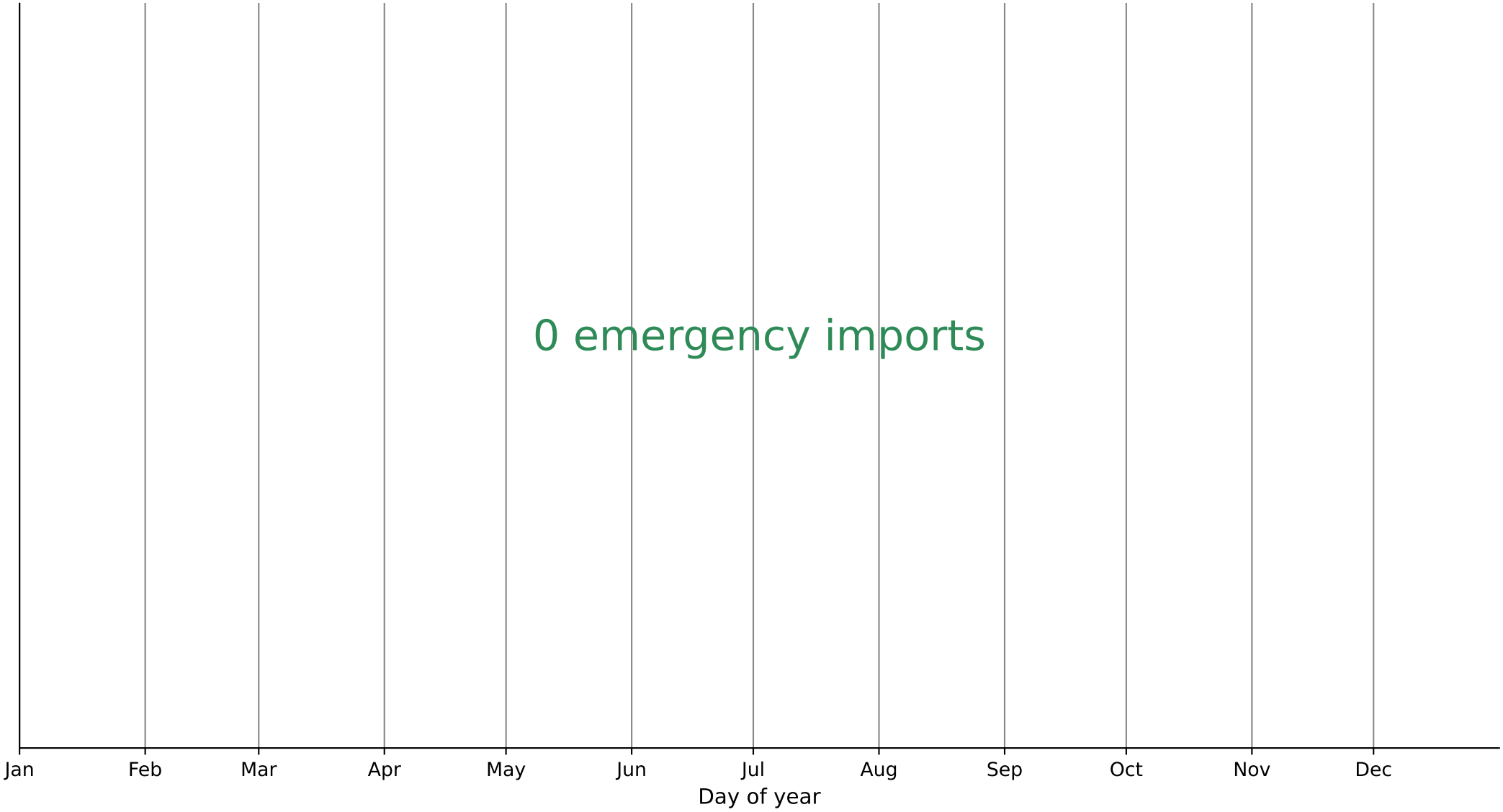
Month / year		Terrace railing 90°/-12° 3,000 Wp	All together
January	Maximum	295.46	295.46
	average	161.56	161.56
	minimum	89.44	89.44
February	Maximum	289.41	289.41
	average	221.85	221.85
	minimum	148.89	148.89
March	Maximum	369.28	369.28
	average	229.27	229.27
	minimum	144.96	144.96
April	Maximum	306.99	306.99
	average	219.62	219.62
	minimum	156.47	156.47
May	Maximum	223.70	223.70
	average	185.83	185.83
	minimum	123.96	123.96
June	Maximum	213.78	213.78
	average	175.76	175.76
	minimum	136.43	136.43
July	Maximum	227.52	227.52
	average	189.57	189.57
	minimum	159.40	159.40
August	Maximum	245.86	245.86
	average	210.16	210.16
	minimum	158.04	158.04
September	Maximum	287.11	287.11
	average	221.53	221.53
	minimum	164.95	164.95
October	Maximum	322.31	322.31
	average	234.63	234.63
	minimum	147.29	147.29
November	Maximum	302.52	302.52
	average	173.61	173.61
	minimum	86.44	86.44
December	Maximum	298.54	298.54
	average	167.61	167.61
	minimum	104.66	104.66
All years	Maximum	2,687.5	2,687.5
	average	2,391.0	2,391.0
	minimum	2,195.4	2,195.4

Highest combined yield hour: 2006-01-13 10:10 UTC 2,709.6 W (0.903 W/Wp) of 3,000 Wp installed. Use this hour to size battery charge power.


Export energy as equivalent hours (kWh / grid kW)
Austria - Salzburg 47.783, 13.067
Equivalent hours
2.0
1.5
1.0
0.5
0.0
−0.5
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Import energy as equivalent hours (kWh / grid kW)
Austria - Salzburg 47.783, 13.067
Equivalent hours
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

Emergency import hours: 0 days with an emergency: 0
Austria - Salzburg 47.783, 13.067



Emergency = this hour’s grid import is above the month’s max import kW. 2 kW means up to 48 kWh in 24 hours. More than 2 kW in an hour is the higher grid fee.
Import inside that cap is not an emergency. Preferred cheap hours are 00:00–06:00 and 09:00–15:00 winter time.

Energy in kWh
Austria - Salzburg 47.783, 13.067

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export to grid													
month Maximum	69	79	96	46	14	8	12	22	44	77	60	64	397
month average	27	51	43	23	9	5	7	16	26	41	24	27	300
month minimum	5	21	17	8	2	3	5	8	15	18	7	8	233
day Maximum	5.5	6.6	5.3	3.9	1.5	0.9	1.0	2.2	3.4	4.6	4.9	5.2	6.6
day average	0.9	1.8	1.4	0.8	0.3	0.2	0.2	0.5	0.9	1.3	0.8	0.9	0.8
day minimum	0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
Import from grid													
month Maximum	389	314	350	320	346	328	323	326	309	344	377	373	3,664
month average	339	261	289	270	299	291	295	283	271	282	308	334	3,522
month minimum	253	217	195	208	264	254	259	254	223	235	217	242	3,327
day Maximum	20.1	19.4	19.1	18.9	18.3	18.3	18.2	18.7	18.5	18.7	19.8	19.7	20.1
day average	10.9	9.3	9.3	9.0	9.6	9.7	9.5	9.1	9.0	9.1	10.3	10.8	9.6
day minimum	4.7	4.3	4.5	5.1	6.0	7.3	7.1	6.0	5.0	4.5	4.5	4.9	4.3
Total energy used for house													
month Maximum	434	406	434	420	434	420	434	434	420	434	420	434	5,124
month average	434	395	434	420	434	420	434	434	420	434	420	434	5,113
month minimum	434	392	434	420	434	420	434	434	420	434	420	434	5,110
day Maximum	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
day average	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0
day minimum	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0	14.0

Month rows: kWh in that month. Day rows: best / average / worst day.
Total energy used for house = household + car + heating + cooling + DHW + direct electric.
PV not exported and not marked wasted is still in the battery, or could not leave because the grid was already full. It is not house use.

Energy by price
Austria - Salzburg 47.783, 13.067

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export													
month Maximum	4	5	6	2	1	0	1	1	2	5	4	4	23
month average	2	3	3	1	0	0	0	1	1	2	1	2	17
month minimum	0	1	1	0	0	0	0	0	1	1	0	1	13
day Maximum	0.4	0.4	0.4	0.2	0.1	0.0	0.0	0.1	0.1	0.3	0.3	0.3	0.4
day average	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0
day minimum	0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
Import													
month Maximum	97	77	85	59	64	60	58	60	57	84	93	92	772
month average	83	63	69	47	53	51	51	50	48	67	74	81	738
month minimum	60	51	46	35	45	42	42	43	37	55	51	57	686
day Maximum	5.1	5.1	5.0	4.1	4.1	4.1	4.0	4.2	4.2	4.9	5.2	5.2	5.2
day average	2.7	2.2	2.2	1.6	1.7	1.7	1.7	1.6	1.6	2.2	2.5	2.6	2.0
day minimum	1.0	0.9	0.9	0.6	0.7	0.9	0.9	0.7	0.6	1.0	0.9	1.0	0.6
Peak grid fee													
month Maximum	9	9	9	9	9	9	9	9	9	9	9	9	114
month average	9	9	9	9	9	9	9	9	9	9	9	9	114
month minimum	9	9	9	9	9	9	9	9	9	9	9	9	114
day Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Import incl. peak fee													
month Maximum	107	87	95	68	73	69	67	69	66	93	102	102	885
month average	92	72	79	57	62	60	61	59	58	77	84	91	852
month minimum	70	61	56	44	54	51	52	53	47	64	61	66	800
day Maximum	5.1	5.1	5.0	4.1	4.1	4.1	4.0	4.2	4.2	4.9	5.2	5.2	5.2
day average	2.7	2.2	2.2	1.6	1.7	1.7	1.7	1.6	1.6	2.2	2.5	2.6	2.0
day minimum	1.0	0.9	0.9	0.6	0.7	0.9	0.9	0.7	0.6	1.0	0.9	1.0	0.6
Balance													
month Maximum	-66	-56	-50	-42	-54	-51	-51	-52	-45	-60	-57	-63	-780
month average	-90	-69	-76	-56	-62	-60	-60	-59	-57	-75	-82	-89	-835
month minimum	-106	-85	-94	-68	-73	-69	-67	-69	-65	-93	-102	-101	-872
day Maximum	-0.8	-0.6	-0.7	-0.6	-0.7	-0.9	-0.9	-0.7	-0.6	-0.8	-0.8	-0.8	-0.6
day average	-2.6	-2.1	-2.1	-1.5	-1.7	-1.7	-1.6	-1.6	-1.6	-2.1	-2.4	-2.6	-2.0
day minimum	-5.1	-5.1	-5.0	-4.1	-4.1	-4.1	-4.0	-4.2	-4.2	-4.9	-5.2	-5.2	-5.2

Currency in Your units. Import and export use the cent/kWh of that hour. Peak fee 6.33 / kW / month is the highest import hour of the month (hourly stand-in for the 15-minute peak) and is added to that month's
Sell only when export is above 0. At 0 cent, export PV yield only, not the battery. Do not sell when the earning is negative.

Export in kWh during price hours
Austria - Salzburg 47.783, 13.067

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export total													
month Maximum	69	79	96	46	14	8	12	22	44	77	60	64	397
month average	27	51	43	23	9	5	7	16	26	41	24	27	300
month minimum	5	21	17	8	2	3	5	8	15	18	7	8	233
day Maximum	5.5	6.6	5.3	3.9	1.5	0.9	1.0	2.2	3.4	4.6	4.9	5.2	6.6
day average	0.9	1.8	1.4	0.8	0.3	0.2	0.2	0.5	0.9	1.3	0.8	0.9	0.8
day minimum	0.0	0.0	-0.0	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
Export during high price hours													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	1
month average	0	0	0	-0	0	0	0	0	0	0	0	0	0
month minimum	0	-0	-0	-0	-0	-0	-0	-0	-0	0	0	0	0
day Maximum	0.0	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2
day average	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day minimum	0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	-0.0	0.0	0.0	0.0	-0.0
Export during medium price hours													
month Maximum	23	27	29	14	7	5	7	10	14	25	15	16	140
month average	10	19	15	9	4	4	5	8	10	11	7	8	110
month minimum	3	10	6	5	2	3	3	5	5	4	2	2	90
day Maximum	2.0	2.6	1.9	1.0	0.5	0.4	0.5	0.6	0.9	1.4	1.6	1.5	2.6
day average	0.3	0.7	0.5	0.3	0.1	0.1	0.2	0.3	0.3	0.4	0.2	0.2	0.3
day minimum	0.0	0.0	0.0	0.0	-0.0	-0.0	-0.0	0.0	-0.0	0.0	0.0	-0.0	-0.0
Export during low price hours													
month Maximum	45	52	67	32	8	2	5	12	31	52	46	48	261
month average	17	32	28	14	4	1	3	8	17	30	18	19	190
month minimum	2	11	10	3	1	0	1	2	8	13	4	5	143
day Maximum	3.9	4.7	4.0	2.9	1.1	0.6	0.7	1.6	2.6	3.6	3.5	4.0	4.7
day average	0.5	1.1	0.9	0.5	0.1	0.0	0.1	0.3	0.6	1.0	0.6	0.6	0.5
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.0	0.0	0.0	-0.0

kWh exported while that price band was active. Not the money. Winter time. High 06:00–09:00 and 17:00–20:00, sold first. Low 09:00–15:00, sold last. Medium is the rest.

Heat pump
Austria - Salzburg 47.783, 13.067

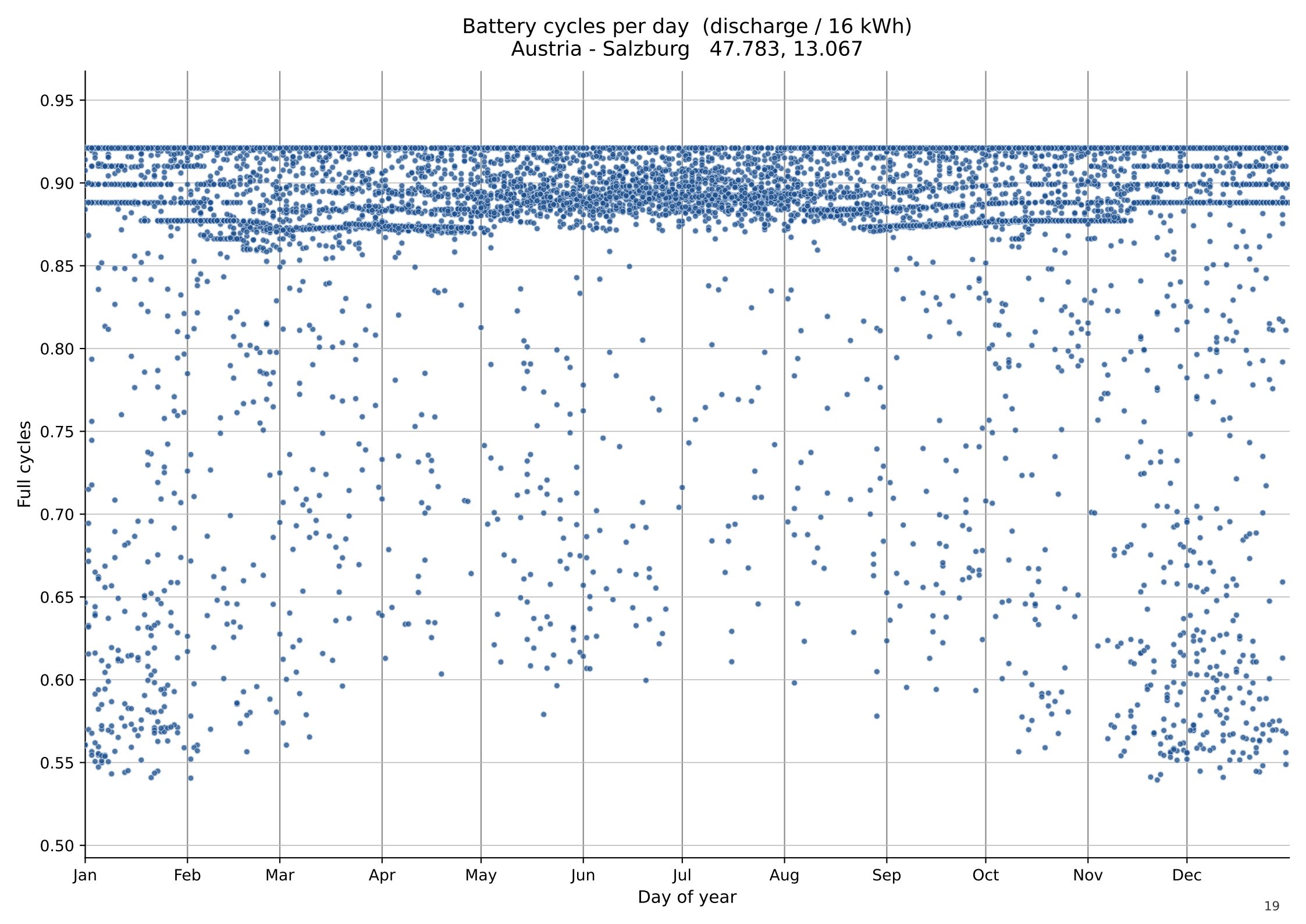
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Heating													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
month average	0	0	0	0	0	0	0	0	0	0	0	0	0
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	0
day Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cooling													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
month average	0	0	0	0	0	0	0	0	0	0	0	0	0
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	0
day Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
DHW													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
month average	0	0	0	0	0	0	0	0	0	0	0	0	0
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	0
day Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Direct electric													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	0
month average	0	0	0	0	0	0	0	0	0	0	0	0	0
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	0
day Maximum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day average	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

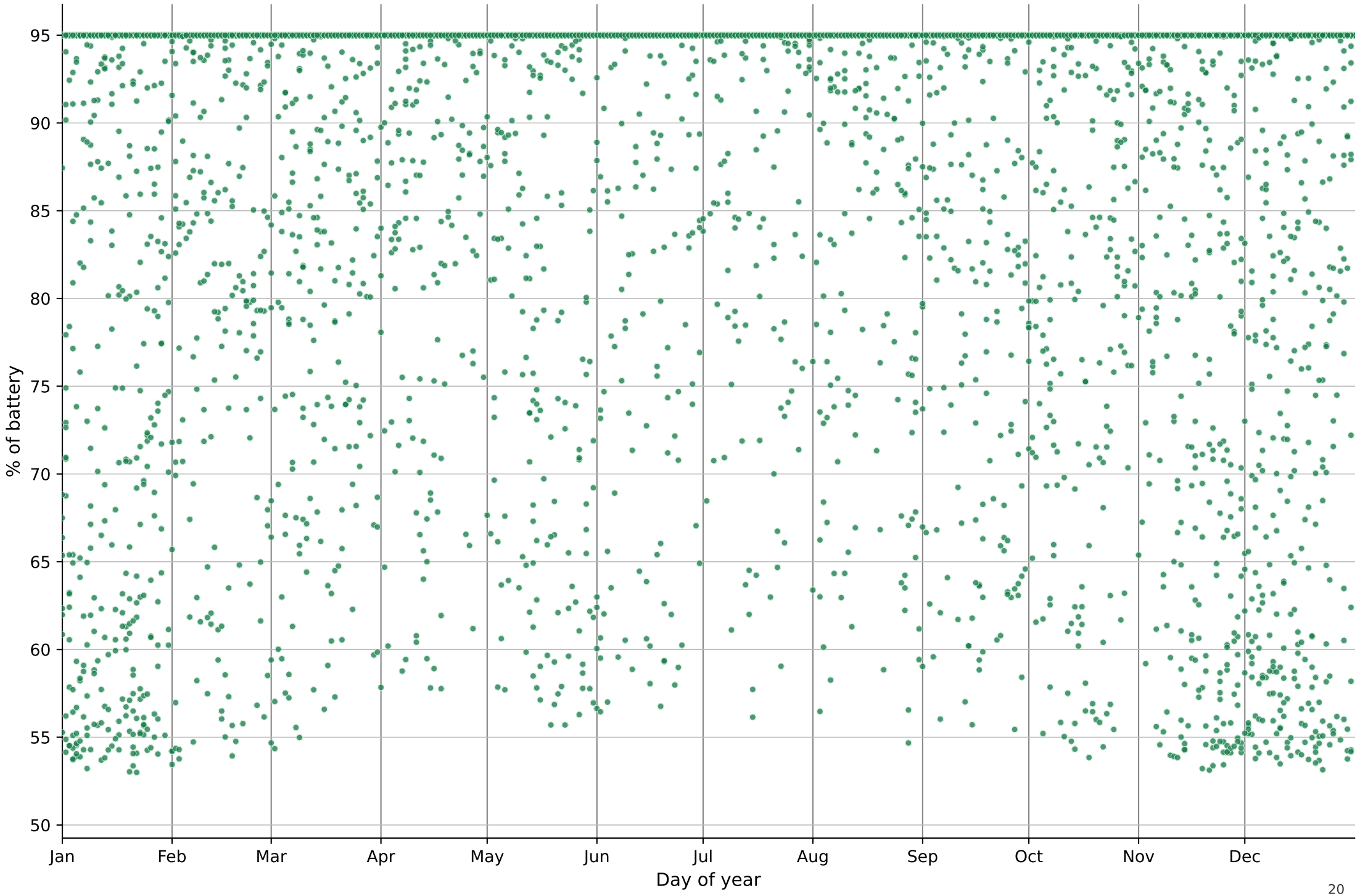
Heating, cooling and DHW are electricity. Direct electric is the part the heat pump could not cover.

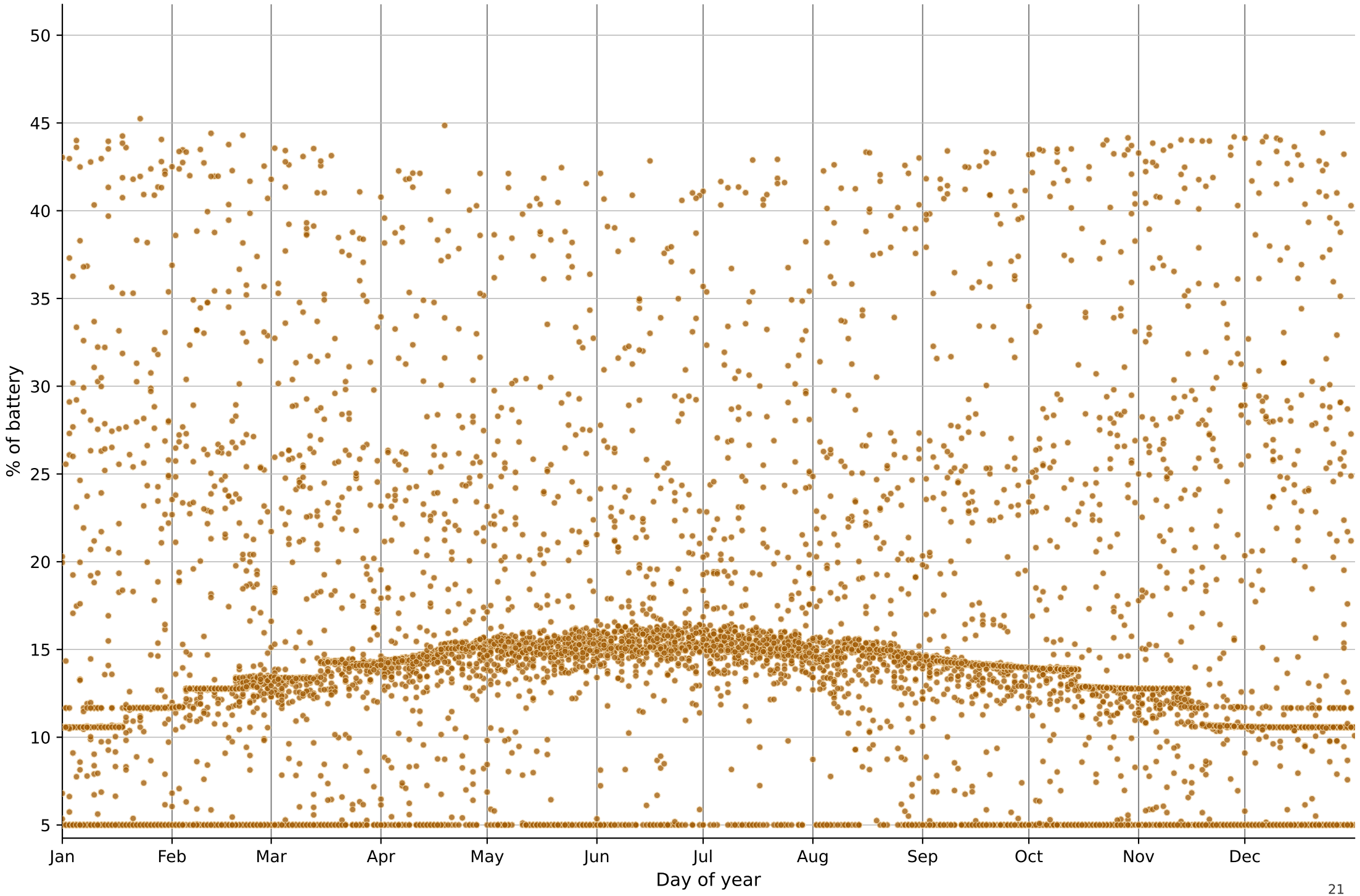
Battery
Austria - Salzburg 47.783, 13.067

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Wasted													
month Maximum	0	0	0	11	3	1	3	5	14	0	0	0	28
month average	0	0	0	6	2	0	1	3	6	0	0	0	18
month minimum	0	0	0	1	0	0	0	1	0	0	0	0	7
day Maximum	0.0	0.0	0.0	2.9	0.8	0.5	0.7	1.4	2.6	0.0	0.0	0.0	2.9
day average	0.0	0.0	0.0	0.2	0.1	0.0	0.0	0.1	0.2	0.0	0.0	0.0	0.0
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Full cycles													
month Maximum	28	26	28	27	28	27	28	28	27	28	27	28	323
month average	25	24	27	26	27	26	28	27	26	27	25	26	316
month minimum	22	23	26	26	25	25	27	27	25	26	23	23	310
day Maximum	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
day average	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.8	0.9
day minimum	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5
Charge C													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	1
month average	0	0	0	0	0	0	0	0	0	0	0	0	1
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	1
day Maximum	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2
day average	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Discharge C													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	1
month average	0	0	0	0	0	0	0	0	0	0	0	0	1
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	1
day Maximum	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
day average	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
day minimum	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Wasted = PV left when the export price is negative and the battery is full. Full cycles = discharge kWh / 16 kWh. Battery export only into hours whose export price is above 0, highest price first. At 0 cent only P


Battery cycles per day (discharge / 16 kWh)
Austria - Salzburg 47.783, 13.067
Full cycles
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Battery max charge state per day (16 kWh = 100 %)
Austria - Salzburg 47.783, 13.067
% of battery
95
90
85
80
75
70
65
60
55
50
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Battery min charge state per day (16 kWh = 100 %)
Austria - Salzburg 47.783, 13.067
% of battery
50
45
40
35
30
25
20
15
10
5
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year