Scenario — PV
GEMINI-60-house-part-of-a-settlement Greek - Corfu 39.748, 19.660

Name	Slope °	Azimuth °	Wp	Wall d/h m	Face	Bifacial	Wp counted
Roof East	22	-90	19,800	—	front	—	yes
Roof West	22	90	19,800	—	front	—	yes
Terrace railing south	90	0	4,620	5 / 4	front	—	yes
Terrace railing north	90	180	4,620	5 / 4	front	—	yes
share central structure east part	8	-90	20,460	—	front	—	yes
share central strucure west part	8	90	20,460	—	front	—	yes
Total counted			89,760				

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 2020-05-26 12:10 local (11:10 UTC) 65,676 W 0.732 W/Wp of 89,760 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
GEMINI-60-house-part-of-a-settlement Greek - Corfu 39.748, 19.660

Chapter	Parameter	Value
Building	Design out / in / heat	-10.0 °C / 20.0 °C / 1,600 W
	Heat on / cool on / ground	22.0 °C / 25.0 °C / 10.0 °C
	Curve / flow min / max	0.3 / 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	200 L tank 42.0 °C 8–18 h
	Water out of the pipe Q1–Q4	12 °C 16 °C 22 °C 16 °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	257.2 kWh C 0.5 5 / 95 / 50 %
	Nameplate	—
	Charge / discharge η	95 % / 90 %
Grid	Inverter / grid connection	54.0 kW / 27.0 kW
	Max export	27.0 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 @ 100.0 kW night 10.0 kWh @ 11.0 kW

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

Records 1–10 contribution of each PV
Greek - Corfu 39.748, 19.660

PV	2020-05-26 11:10	2013-05-14 11:10	2016-05-25 10:10	2016-04-26 11:10	2021-06-01 10:10	2021-06-14 11:10	2010-05-09 10:10	2020-05-26 10:10	2010-05-09 11:10	2016-05-25 11:10
Roof East	14,534	14,316	15,794	14,164	15,771	14,478	15,654	15,667	14,139	14,255
Roof West	16,046	15,906	14,484	15,742	14,455	15,784	14,305	14,374	15,710	15,728
Terrace railing south	1,619	1,793	1,635	2,227	1,558	1,447	1,911	1,615	1,901	1,624
Terrace railing north	166	149	180	229	201	189	205	185	206	198
share central structure east part	16,371	16,173	16,726	15,982	16,688	16,227	16,565	16,588	15,955	16,039
share central strucure west part	16,940	16,772	16,233	16,578	16,193	16,720	16,056	16,101	16,547	16,594
Watt at record	65,676	65,109	65,052	64,923	64,866	64,845	64,696	64,529	64,457	64,438
Percent of installed peak	73.2	72.5	72.5	72.3	72.3	72.2	72.1	71.9	71.8	71.8

Values are watts at that hour. Date and time are UTC. Record 65,676 W (73.2 % of 89,760 Wp).

Hours at or above a share of the record
Greek - Corfu 39.748, 19.660

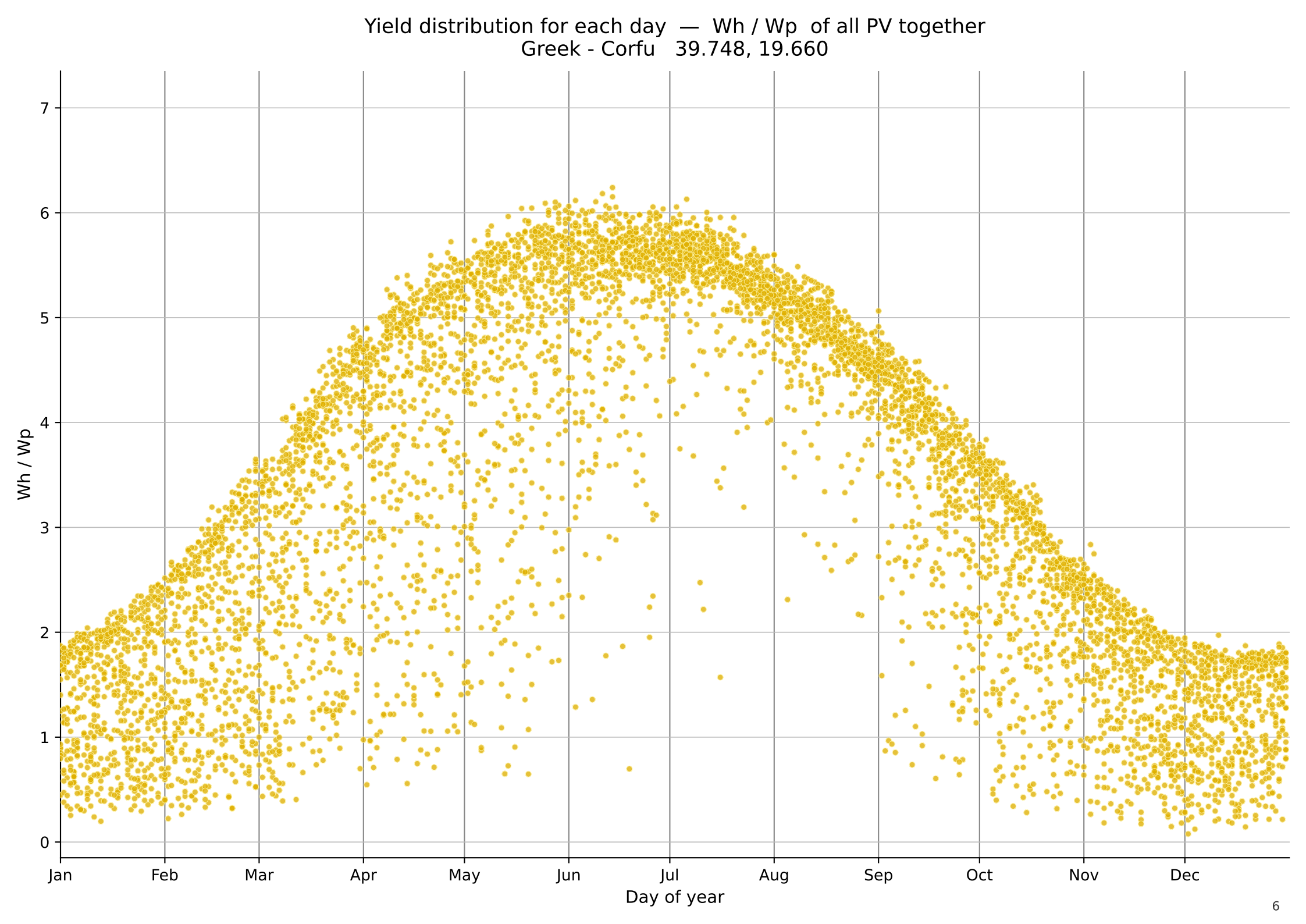
Of the record	Hours	Watts
98 %	11	64,363 W
96 %	88	63,049 W
94 %	331	61,736 W
92 %	813	60,422 W
90 %	1,718	59,109 W

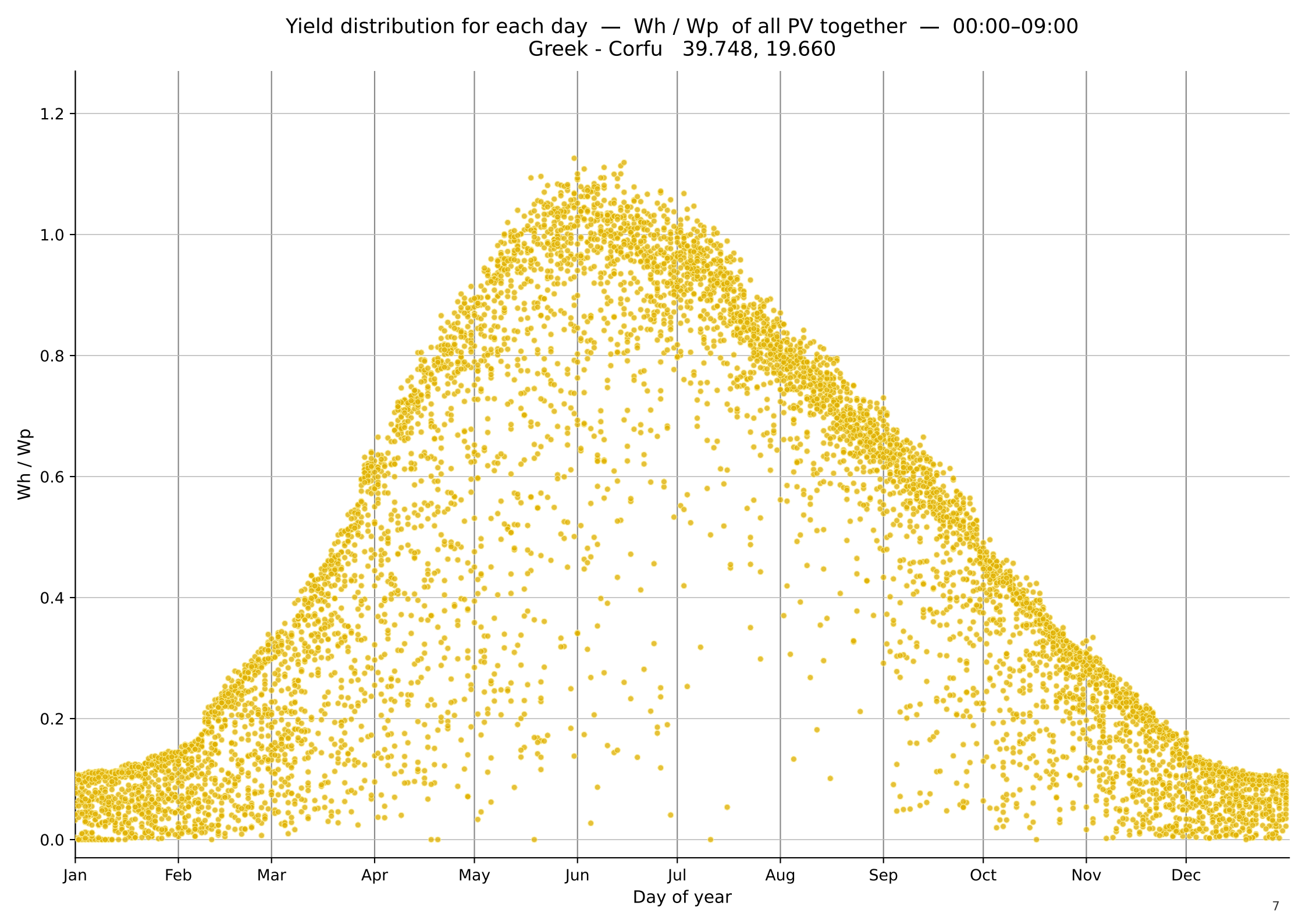
Record hour = 65,676 W combined.

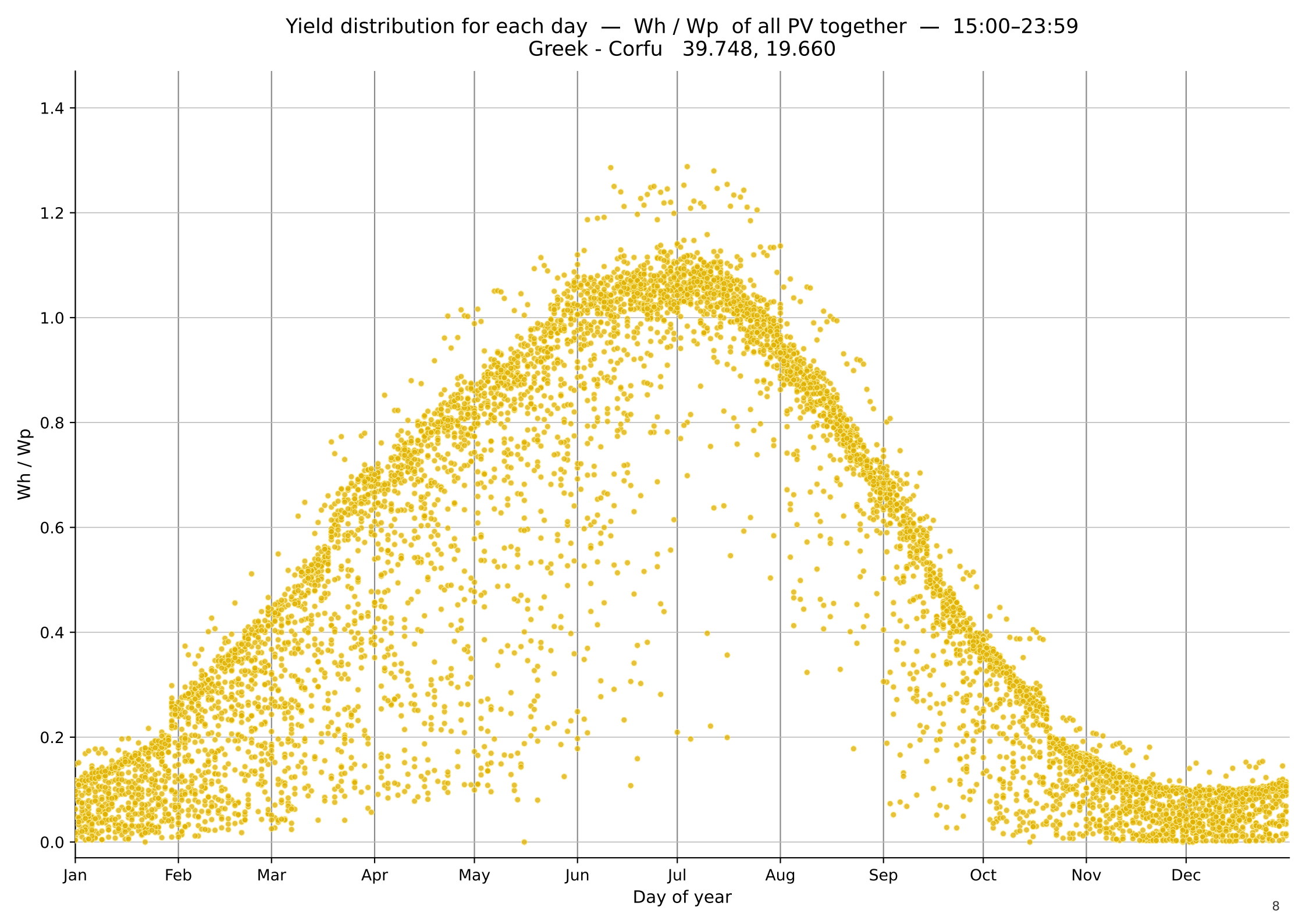
Records of each photovoltaic field
Greek - Corfu 39.748, 19.660

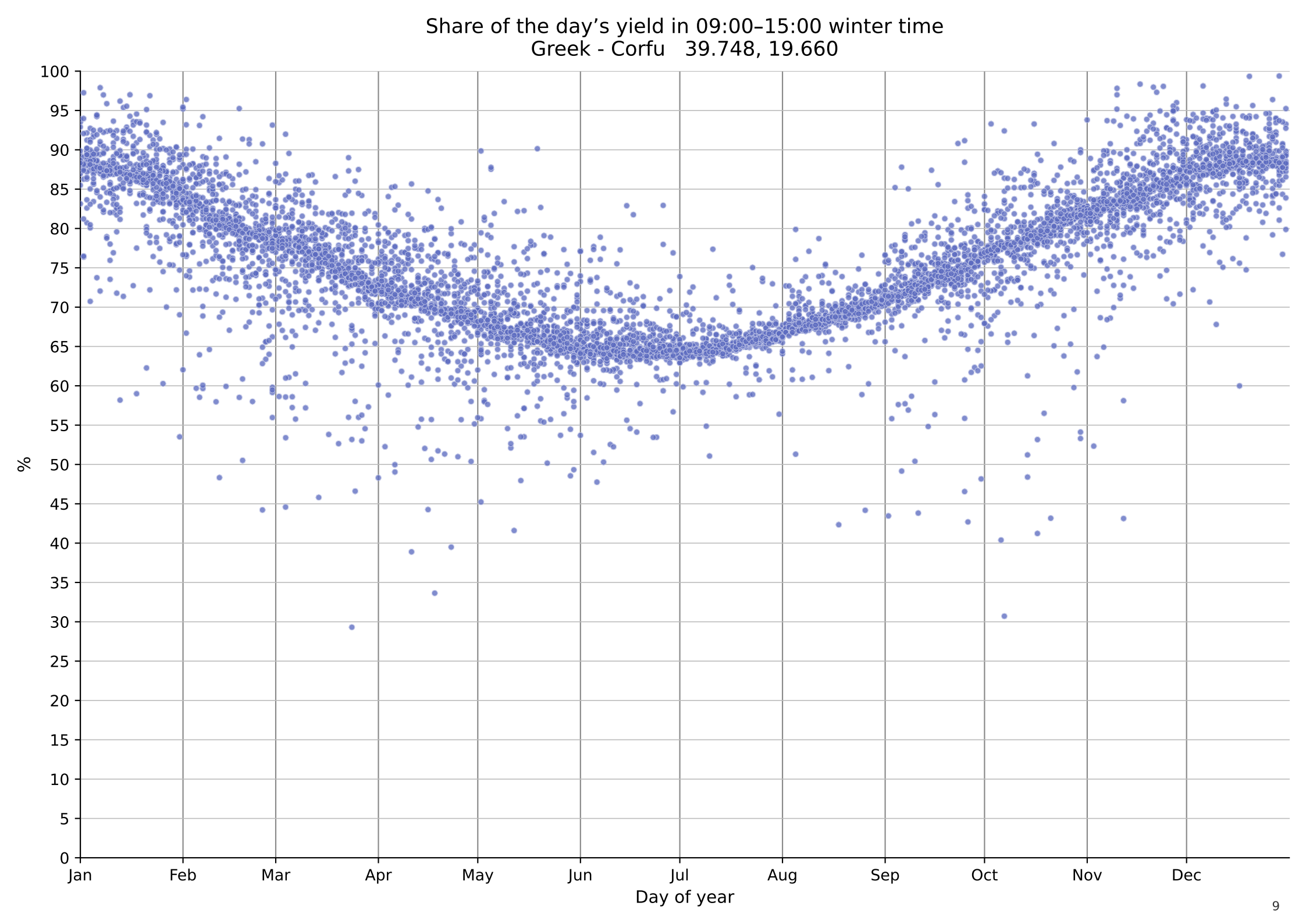
PV	Date	Watts	%	h ≥98%	h ≥96%	h ≥94%	h ≥92%	h ≥90%
Roof East	2021-06-01 09:10	16,382	82.7	11	49	181	485	1065
Roof West	2020-05-26 12:10	16,775	84.7	3	24	102	321	783
Terrace railing south	2012-02-28 11:10	3,523	76.3	1	6	19	36	66
Terrace railing north	2005-06-11 16:10	801	17.3	4	10	39	101	204
share central structure east part	2016-05-25 10:10	16,726	81.8	14	81	289	729	1570
share central strucure west part	2020-05-26 11:10	16,940	82.8	5	45	183	554	1273

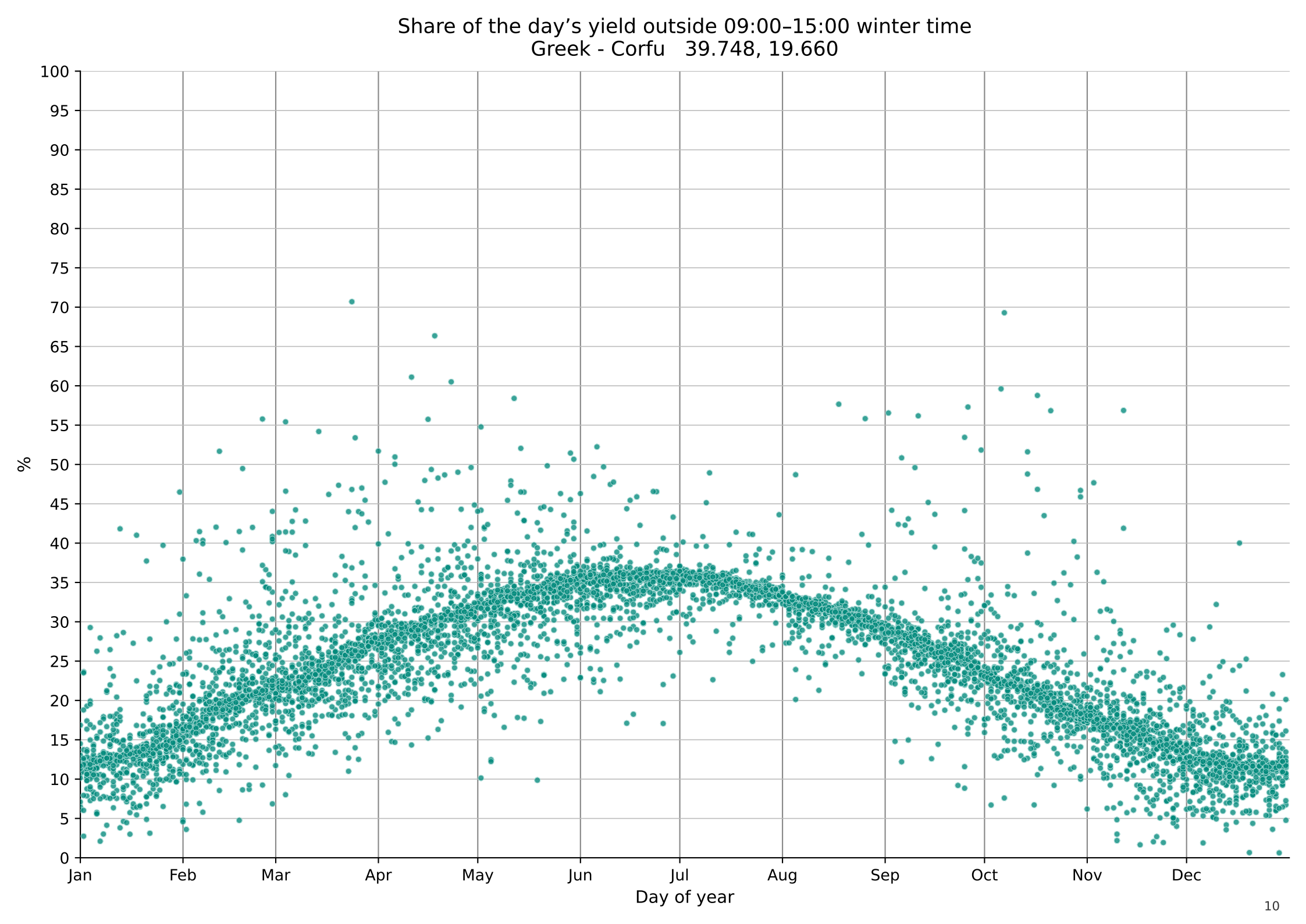
Watts is the highest hour of that field. % is of its own Wp. Hours are the count of hours at or above that share of its own record. Use this to size the MPPT or the inverter for that field.

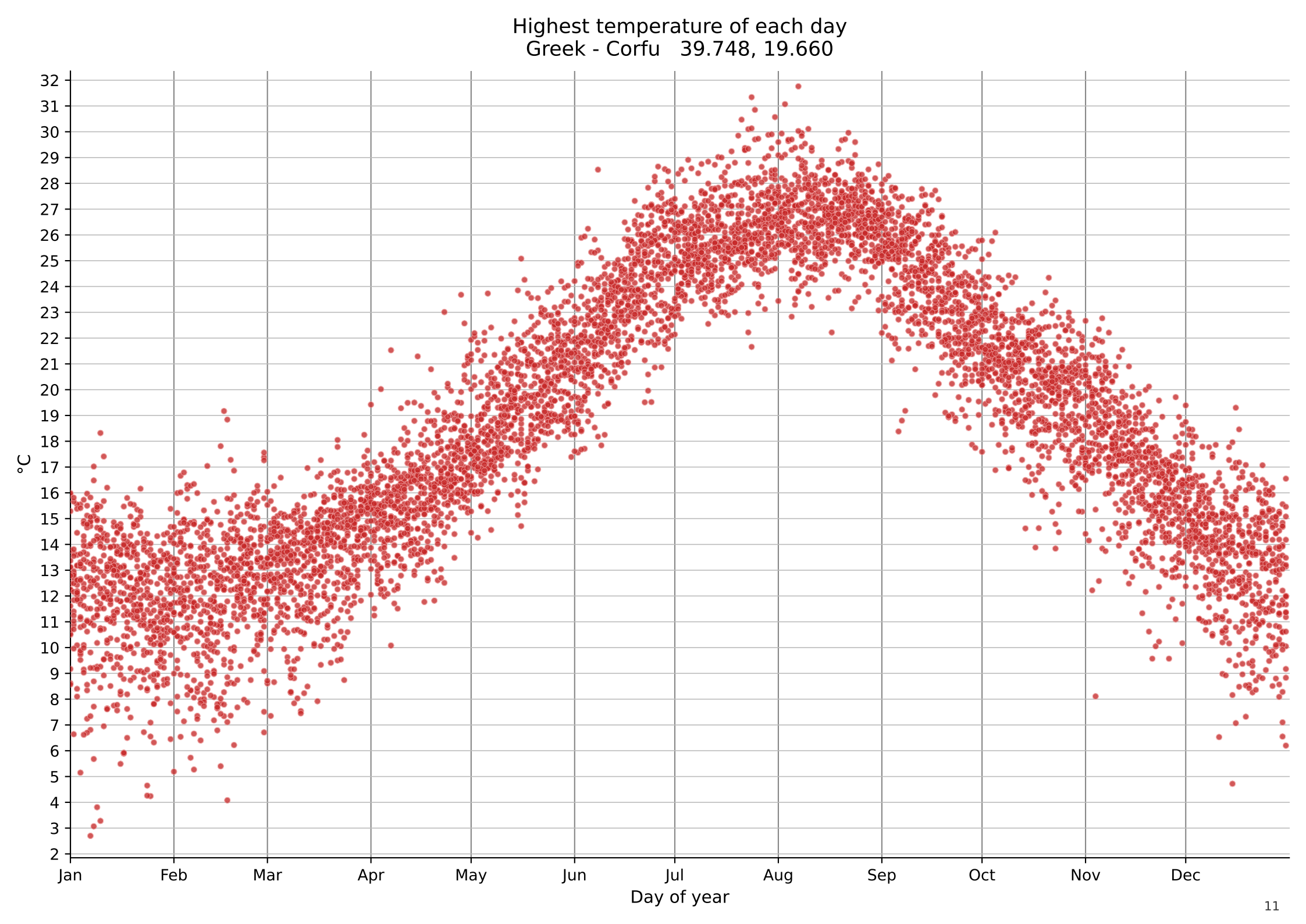

Yield distribution for each day — Wh / Wp of all PV together
Greek - Corfu 39.748, 19.660
Wh / Wp
0
1
2
3
4
5
6
7
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

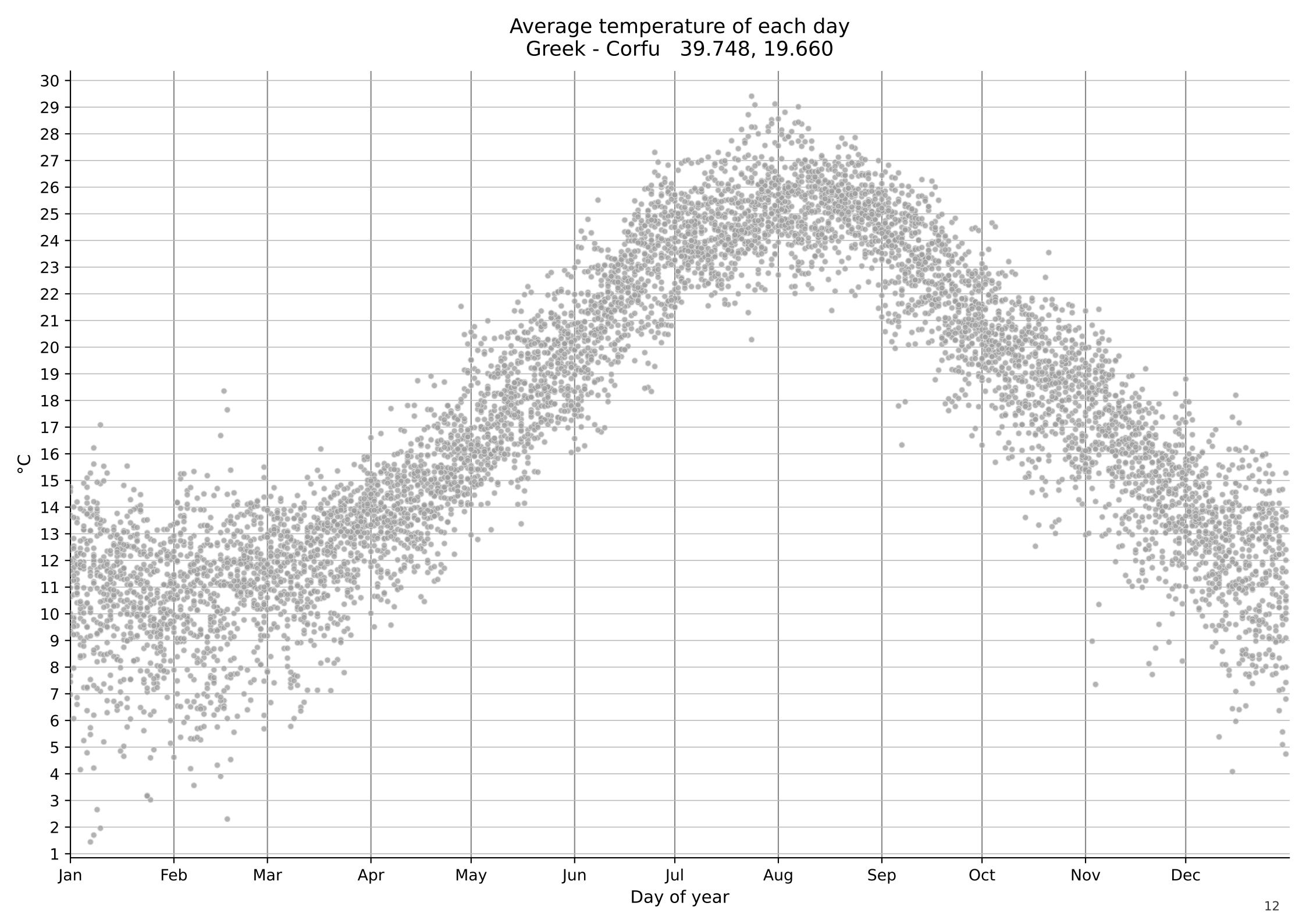

Yield distribution for each day — Wh / Wp of all PV together — 00:00–09:00
Greek - Corfu 39.748, 19.660
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Wh / Wp
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

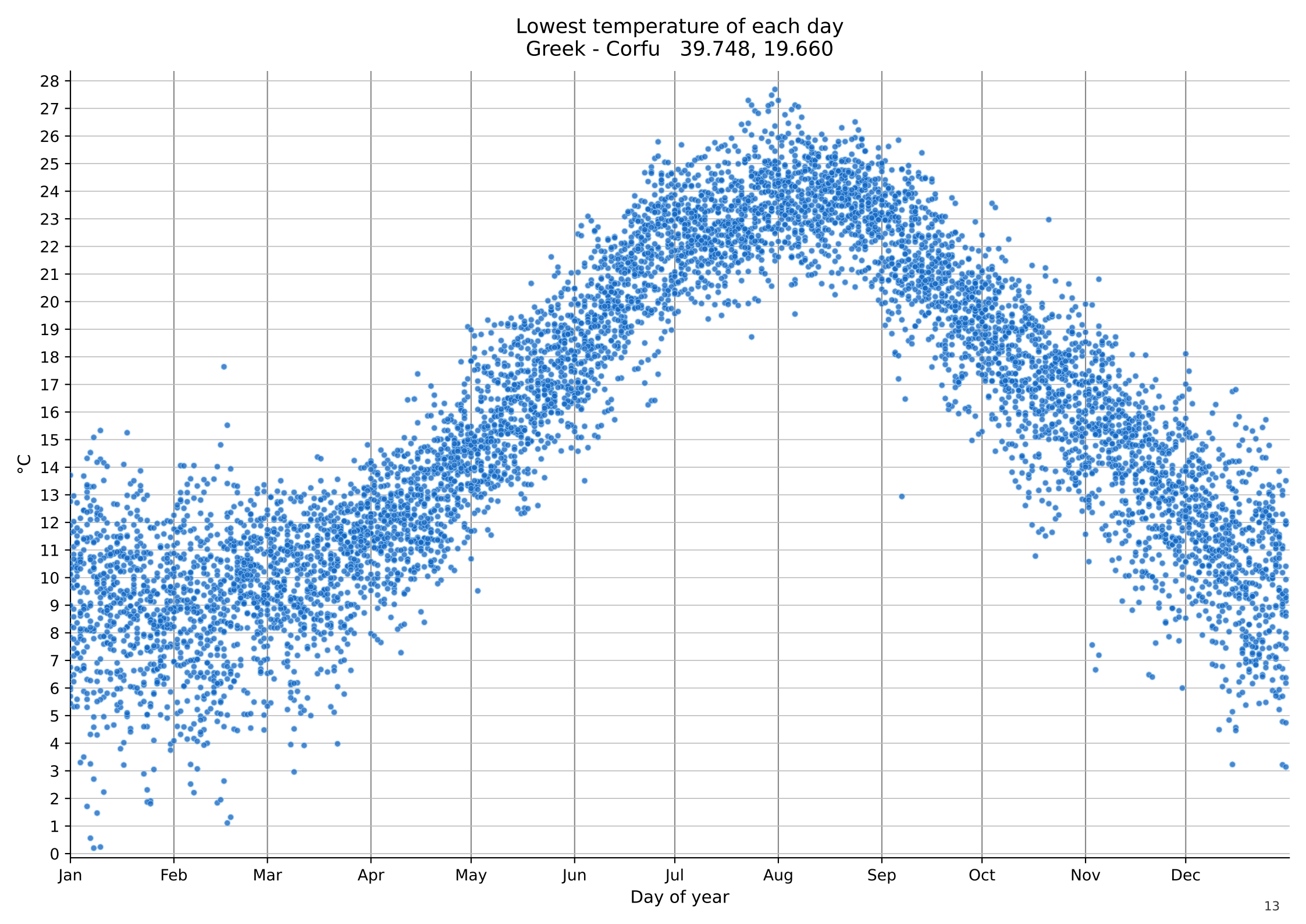

Yield distribution for each day — Wh / Wp of all PV together — 15:00–23:59
Greek - Corfu 39.748, 19.660
Wh / Wp
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

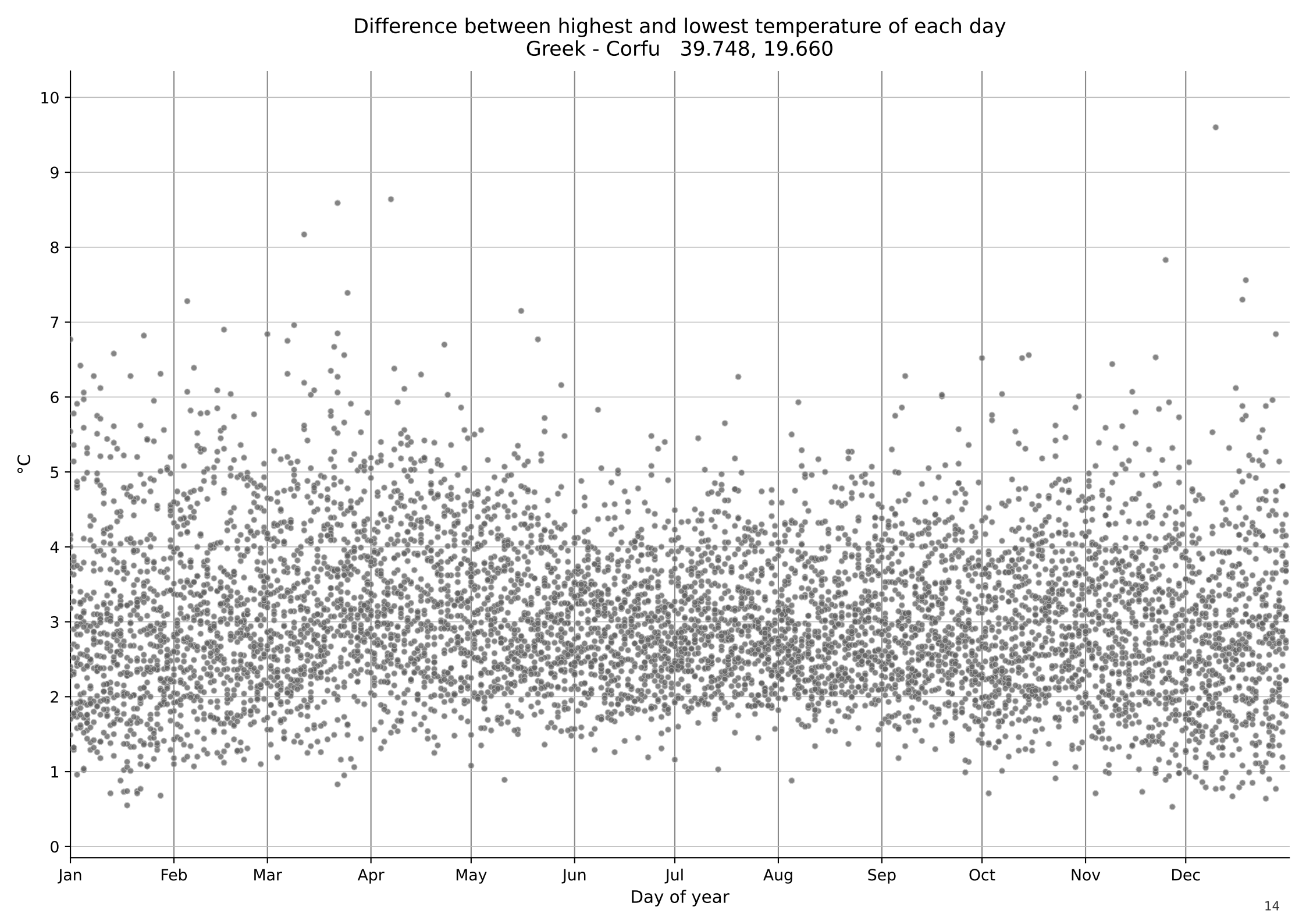

Share of the day’s yield in 09:00–15:00 winter time
Greek - Corfu 39.748, 19.660
%
100
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
20
15
10
5
0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Share of the day’s yield outside 09:00–15:00 winter time
Greek - Corfu 39.748, 19.660
%
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


Highest temperature of each day
Greek - Corfu 39.748, 19.660
°C
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
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Average temperature of each day
Greek - Corfu 39.748, 19.660
°C
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
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Lowest temperature of each day
Greek - Corfu 39.748, 19.660
°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


Difference between highest and lowest temperature of each day
Greek - Corfu 39.748, 19.660
°C
0
1
2
3
4
5
6
7
8
9
10
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year

Monthly and yearly specific yield (kWh/kWp = Wh/Wp)
Greek - Corfu 39.748, 19.660

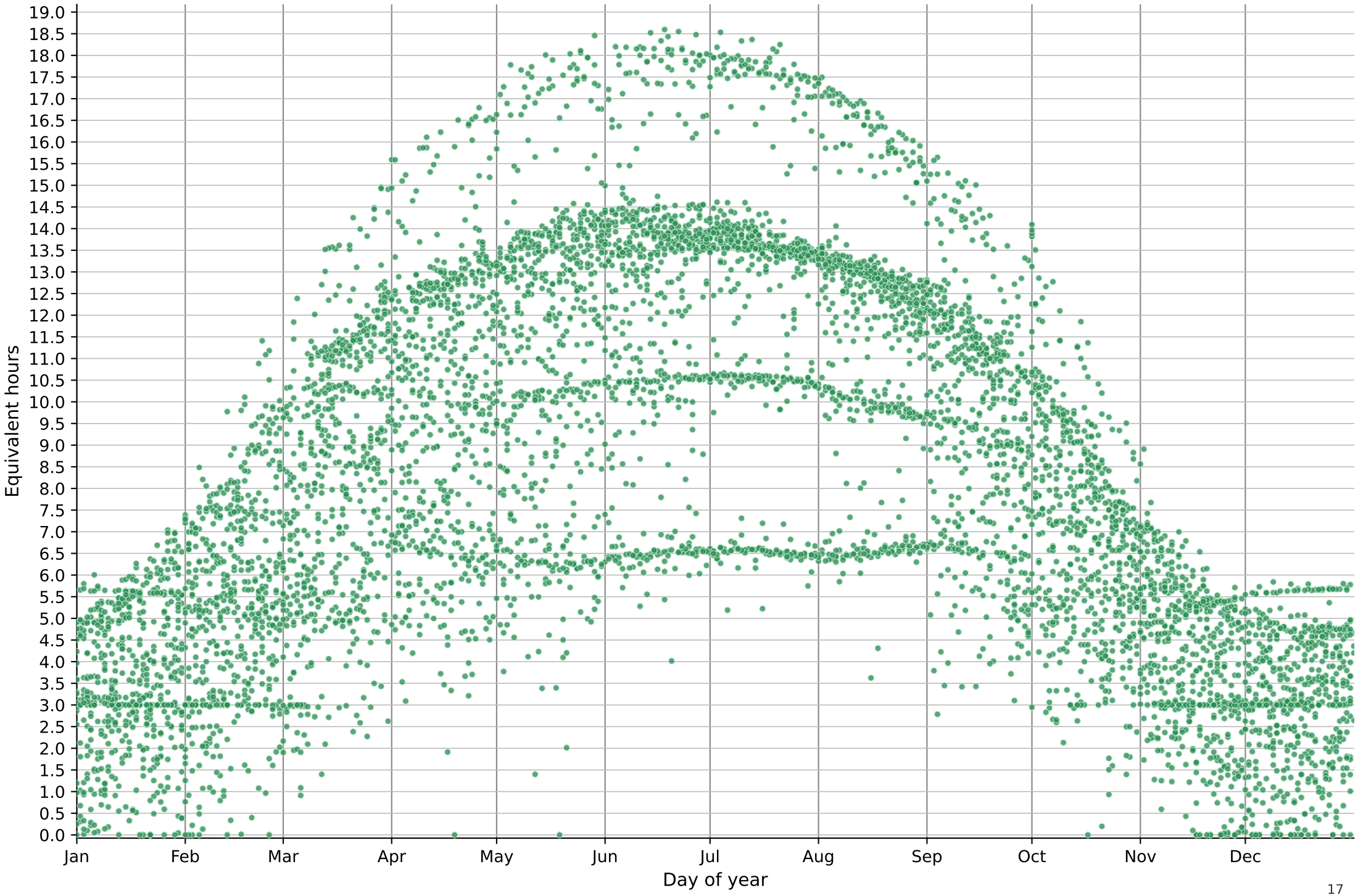
Month / year		Roof East 22°/-90° 19,800 Wp	Roof West 22°/90° 19,800 Wp	Terrace railing south 90°/0° 4,620 Wp	Terrace railing north 90°/180° 4,620 Wp	share central structure east 8°/-90° 20,460 Wp	share central strucure west p 8°/90° 20,460 Wp	All together
January	Maximum	58.08	56.33	9.64	9.64	57.99	57.39	52.18
	average	48.30	45.25	7.70	7.70	48.16	46.87	43.09
	minimum	33.72	30.44	6.61	6.61	33.24	31.89	29.75
February	Maximum	75.29	72.95	21.57	11.31	75.53	74.41	68.05
	average	59.15	58.32	16.24	10.39	59.79	59.51	54.48
	minimum	47.10	47.17	11.57	9.02	48.79	48.61	44.69
March	Maximum	119.54	118.18	74.87	18.23	122.64	122.14	112.83
	average	96.59	96.94	60.10	16.30	99.48	99.72	92.03
	minimum	79.38	81.37	49.52	14.40	82.43	83.52	76.82
April	Maximum	142.17	145.57	86.20	23.30	148.55	149.96	136.94
	average	124.04	126.85	74.73	20.65	129.29	130.46	119.46
	minimum	107.05	103.89	64.65	18.53	109.69	108.58	100.70
May	Maximum	170.12	171.61	69.85	28.96	177.49	178.26	161.42
	average	152.39	154.38	64.63	26.39	159.06	159.89	145.05
	minimum	129.90	130.91	56.27	23.47	135.05	135.37	123.45
June	Maximum	179.32	181.57	57.19	28.29	186.78	187.74	169.11
	average	166.62	170.15	55.55	26.37	174.04	175.61	158.20
	minimum	152.10	155.54	53.70	24.33	159.05	160.55	144.90
July	Maximum	178.86	184.53	62.36	24.87	187.11	189.70	170.21
	average	175.17	179.57	61.21	22.87	183.31	185.40	166.62
	minimum	165.04	172.86	59.55	22.14	176.55	178.76	161.08
August	Maximum	160.43	163.15	83.28	19.79	168.06	169.33	153.40
	average	153.99	156.04	80.48	17.83	161.10	162.00	147.10
	minimum	142.61	143.09	74.33	16.32	148.55	148.66	135.57
September	Maximum	123.11	122.01	78.87	17.01	126.66	126.17	116.42
	average	112.91	113.87	72.31	15.00	116.69	117.10	107.81
	minimum	101.52	106.40	64.75	12.95	106.31	108.21	98.97
October	Maximum	94.43	93.07	42.77	14.82	96.57	96.06	88.00
	average	81.25	80.36	36.93	12.35	83.11	82.81	76.00
	minimum	67.71	61.96	28.36	11.10	67.75	65.45	61.17
November	Maximum	64.09	61.00	9.56	9.56	63.82	62.66	57.32
	average	51.57	49.01	8.79	8.79	51.46	50.48	46.33
	minimum	44.93	42.79	7.82	7.82	45.25	44.88	41.09
December	Maximum	54.44	54.95	7.99	7.99	54.86	55.16	49.88
	average	42.15	40.77	7.17	7.17	42.13	41.57	38.11
	minimum	30.36	28.27	6.42	6.42	30.10	29.21	27.18
All years	Maximum	1,315.3	1,316.3	574.5	202.1	1,355.2	1,357.8	1,236.1
	average	1,264.1	1,271.5	545.8	191.8	1,307.6	1,311.4	1,194.3
	minimum	1,180.7	1,218.0	525.8	186.2	1,256.4	1,259.6	1,149.5

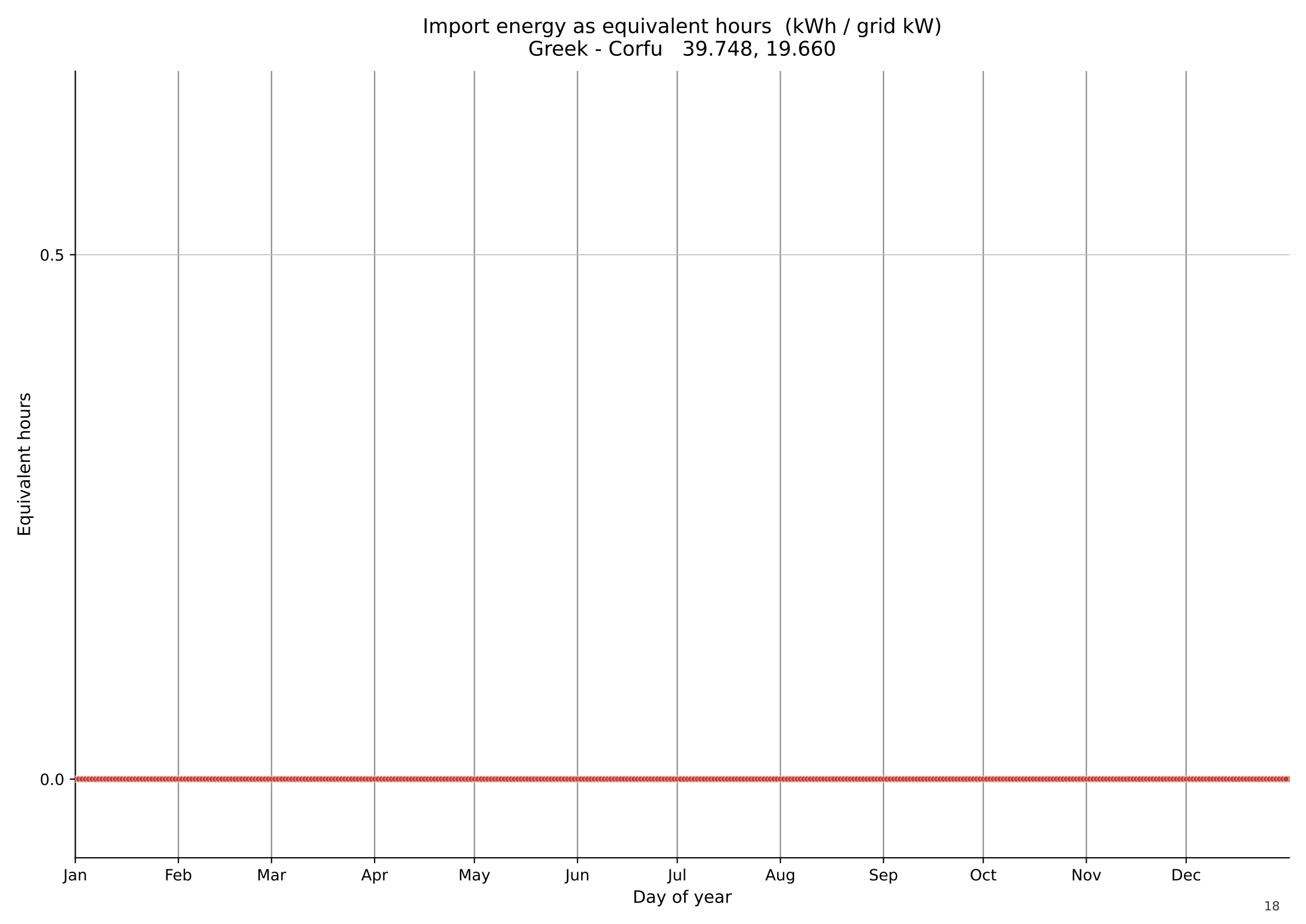
Highest combined yield hour: 2020-05-26 11:10 UTC 65,676.4 W (0.732 W/Wp) of 89,760 Wp installed. Use this hour to size battery charge power.

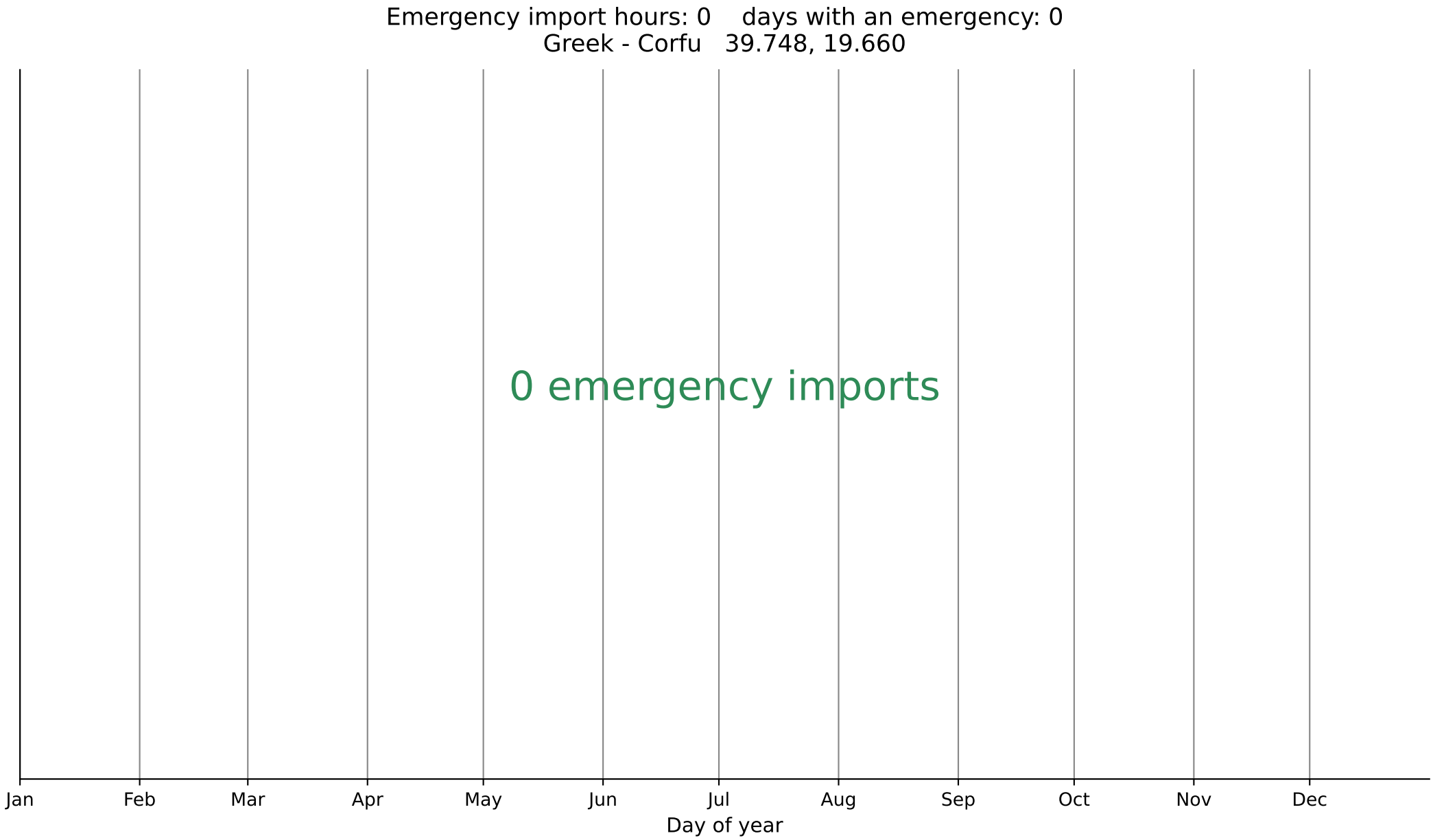
Monthly and yearly total yield (kWh)
Greek - Corfu 39.748, 19.660

Month / year		Roof East 22°/-90° 19,800 Wp	Roof West 22°/90° 19,800 Wp	Terrace railing south 90°/0° 4,620 Wp	Terrace railing north 90°/180° 4,620 Wp	share central structure east 8°/-90° 20,460 Wp	share central strucure west p 8°/90° 20,460 Wp	All together
January	Maximum	1,150.00	1,115.33	44.55	44.55	1,186.57	1,174.27	4,684.05
	average	956.35	896.02	35.57	35.57	985.35	958.87	3,867.74
	minimum	667.61	602.76	30.53	30.53	680.03	652.52	2,670.18
February	Maximum	1,490.73	1,444.48	99.64	52.25	1,545.34	1,522.50	6,108.08
	average	1,171.16	1,154.72	75.03	48.02	1,223.36	1,217.67	4,889.96
	minimum	932.52	933.87	53.48	41.69	998.34	994.48	4,011.67
March	Maximum	2,366.92	2,340.05	345.89	84.20	2,509.13	2,498.97	10,127.49
	average	1,912.45	1,919.39	277.64	75.33	2,035.43	2,040.24	8,260.49
	minimum	1,571.77	1,611.18	228.80	66.53	1,686.59	1,708.82	6,895.39
April	Maximum	2,814.91	2,882.30	398.23	107.64	3,039.41	3,068.11	12,291.49
	average	2,455.98	2,511.55	345.27	95.39	2,645.24	2,669.16	10,722.59
	minimum	2,119.59	2,057.10	298.67	85.60	2,244.18	2,221.46	9,038.65
May	Maximum	3,368.36	3,397.92	322.71	133.79	3,631.53	3,647.29	14,489.25
	average	3,017.29	3,056.72	298.59	121.94	3,254.29	3,271.25	13,020.08
	minimum	2,571.95	2,592.09	259.97	108.43	2,763.18	2,769.69	11,080.85
June	Maximum	3,550.49	3,595.11	264.21	130.71	3,821.59	3,841.13	15,179.10
	average	3,299.05	3,369.01	256.64	121.81	3,560.86	3,593.05	14,200.43
	minimum	3,011.59	3,079.66	248.08	112.40	3,254.24	3,284.94	13,006.17
July	Maximum	3,541.36	3,653.62	288.12	114.88	3,828.29	3,881.17	15,277.61
	average	3,468.44	3,555.57	282.80	105.66	3,750.52	3,793.26	14,956.24
	minimum	3,267.86	3,422.56	275.14	102.30	3,612.15	3,657.43	14,458.43
August	Maximum	3,176.47	3,230.44	384.75	91.42	3,438.48	3,464.50	13,768.92
	average	3,049.07	3,089.62	371.83	82.35	3,296.07	3,314.56	13,203.50
	minimum	2,823.59	2,833.09	343.43	75.38	3,039.40	3,041.54	12,169.19
September	Maximum	2,437.59	2,415.70	364.38	78.58	2,591.36	2,581.43	10,450.31
	average	2,235.68	2,254.53	334.06	69.30	2,387.38	2,395.86	9,676.82
	minimum	2,010.01	2,106.64	299.16	59.84	2,175.02	2,214.07	8,883.49
October	Maximum	1,869.78	1,842.80	197.59	68.46	1,975.79	1,965.35	7,898.52
	average	1,608.68	1,591.08	170.60	57.08	1,700.39	1,694.21	6,822.04
	minimum	1,340.73	1,226.84	131.03	51.29	1,386.23	1,339.08	5,490.89
November	Maximum	1,268.93	1,207.79	44.19	44.19	1,305.69	1,281.98	5,144.69
	average	1,021.07	970.33	40.59	40.59	1,052.86	1,032.80	4,158.26
	minimum	889.61	847.30	36.15	36.15	925.79	918.31	3,688.09
December	Maximum	1,077.93	1,088.10	36.92	36.92	1,122.35	1,128.51	4,477.07
	average	834.60	807.21	33.14	33.14	861.95	850.44	3,420.47
	minimum	601.21	559.74	29.64	29.64	615.91	597.74	2,439.24
All years	Maximum	26,042.2	26,063.2	2,654.2	933.6	27,727.6	27,780.2	110,954.6
	average	25,029.8	25,175.7	2,521.8	886.2	26,753.7	26,831.4	107,198.6
	minimum	23,377.2	24,117.1	2,429.1	860.2	25,705.3	25,771.7	103,182.4

Highest combined yield hour: 2020-05-26 11:10 UTC 65,676.4 W (0.732 W/Wp) of 89,760 Wp installed. Use this hour to size battery charge power.


Export energy as equivalent hours (kWh / grid kW)
Greek - Corfu 39.748, 19.660
Equivalent hours
19.0
18.5
18.0
17.5
17.0
16.5
16.0
15.5
15.0
14.5
14.0
13.5
13.0
12.5
12.0
11.5
11.0
10.5
10.0
9.5
9.0
8.5
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year


Import energy as equivalent hours (kWh / grid kW)
Greek - Corfu 39.748, 19.660
0.5
0.0
Equivalent hours
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
Sep
Oct
Nov
Dec
Day of year



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
Greek - Corfu 39.748, 19.660

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export to grid													
month Maximum	3,670	5,161	8,410	9,162	10,333	10,464	10,843	10,105	8,122	6,828	4,142	3,573	84,003
month average	2,995	4,055	6,865	8,038	9,412	10,012	10,522	9,872	7,750	5,852	3,243	2,602	81,219
month minimum	1,918	3,239	5,625	7,105	8,359	9,302	10,313	9,337	7,328	4,618	2,837	1,736	77,590
day Maximum	190.0	308.1	421.0	453.4	498.3	502.1	500.4	472.3	422.4	380.5	240.5	157.7	502.1
day average	96.6	143.7	221.5	267.9	303.6	333.7	339.4	318.5	258.3	188.8	108.1	83.9	222.4
day minimum	0.0	0.0	24.6	0.0	0.0	108.4	140.2	97.9	75.2	0.0	0.0	0.0	0.0
Import from grid													
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
Total energy used for house													
month Maximum	607	560	586	530	516	474	476	488	463	500	526	575	6,171
month average	581	528	565	519	506	466	469	474	453	489	505	557	6,112
month minimum	563	511	552	506	490	457	461	464	447	469	491	532	6,040
day Maximum	21.5	21.2	20.3	21.6	21.0	20.7	20.4	19.2	19.2	17.9	19.6	20.5	21.6
day average	18.8	18.7	18.2	17.3	16.3	15.5	15.1	15.3	15.1	15.8	16.8	18.0	16.7
day minimum	15.6	16.2	16.9	15.1	15.1	15.1	14.8	14.8	14.8	15.1	15.2	15.9	14.8

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
Greek - Corfu 39.748, 19.660

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export													
month Maximum	734	844	1,060	922	966	966	985	1,020	939	969	756	703	10,045
month average	575	693	933	869	925	923	964	964	884	879	607	514	9,729
month minimum	365	579	803	831	876	879	939	932	854	722	519	335	9,216
day Maximum	36.5	43.4	47.4	45.7	46.5	47.8	48.1	45.9	43.2	46.9	36.5	34.7	48.1
day average	18.5	24.6	30.1	29.0	29.8	30.8	31.1	31.1	29.5	28.4	20.2	16.6	26.6
day minimum	0.0	0.0	3.0	0.0	0.0	13.0	13.7	10.4	7.4	0.0	0.0	0.0	0.0
Import													
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
Peak grid fee													
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
Import incl. peak fee													
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
Balance													
month Maximum	734	844	1,060	922	966	966	985	1,020	939	969	756	703	10,045
month average	575	693	933	869	925	923	964	964	884	879	607	514	9,729
month minimum	365	579	803	831	876	879	939	932	854	722	519	335	9,216
day Maximum	36.5	43.4	47.4	45.7	46.5	47.8	48.1	45.9	43.2	46.9	36.5	34.7	48.1
day average	18.5	24.6	30.1	29.0	29.8	30.8	31.1	31.1	29.5	28.4	20.2	16.6	26.6
day minimum	0.0	0.0	3.0	0.0	0.0	13.0	13.7	10.4	7.4	0.0	0.0	0.0	0.0

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
Greek - Corfu 39.748, 19.660

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export total													
month Maximum	3,670	5,161	8,410	9,162	10,333	10,464	10,843	10,105	8,122	6,828	4,142	3,573	84,003
month average	2,995	4,055	6,865	8,038	9,412	10,012	10,522	9,872	7,750	5,852	3,243	2,602	81,219
month minimum	1,918	3,239	5,625	7,105	8,359	9,302	10,313	9,337	7,328	4,618	2,837	1,736	77,590
day Maximum	190.0	308.1	421.0	453.4	498.3	502.1	500.4	472.3	422.4	380.5	240.5	157.7	502.1
day average	96.6	143.7	221.5	267.9	303.6	333.7	339.4	318.5	258.3	188.8	108.1	83.9	222.4
day minimum	0.0	0.0	24.6	0.0	0.0	108.4	140.2	97.9	75.2	0.0	0.0	0.0	0.0
Export during high price hours													
month Maximum	3,584	3,791	3,665	3,285	3,155	2,808	2,934	3,274	3,530	3,830	3,694	3,567	37,860
month average	2,914	3,179	3,490	3,068	2,933	2,682	2,779	3,016	3,264	3,634	2,999	2,593	36,552
month minimum	1,886	2,745	3,399	2,934	2,797	2,570	2,709	2,949	3,169	3,314	2,549	1,728	34,495
day Maximum	159.9	161.1	158.5	151.5	158.9	153.6	151.2	142.1	154.0	153.9	157.5	157.7	161.1
day average	94.0	112.7	112.6	102.3	94.6	89.4	89.7	97.3	108.8	117.2	100.0	83.7	100.1
day minimum	0.0	0.0	24.6	0.0	0.0	66.2	71.4	70.9	54.5	0.0	0.0	0.0	0.0
Export during medium price hours													
month Maximum	243	1,409	3,629	4,722	5,673	5,920	6,156	5,386	3,941	2,704	629	27	37,368
month average	80	827	2,611	3,906	4,941	5,568	5,956	5,252	3,601	1,964	244	9	34,960
month minimum	12	273	1,702	3,192	4,053	5,116	5,767	4,822	3,208	1,152	8	1	32,993
day Maximum	42.1	156.6	248.4	279.4	306.8	313.5	313.4	300.9	251.0	218.9	126.0	5.2	313.5
day average	2.6	29.3	84.2	130.2	159.4	185.6	192.1	169.4	120.0	63.3	8.1	0.3	95.7
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	40.1	27.0	0.0	0.0	0.0	0.0	0.0
Export during low price hours													
month Maximum	0	145	1,195	1,407	1,862	1,999	1,956	1,773	1,068	389	0	0	10,477
month average	0	48	764	1,064	1,538	1,762	1,787	1,604	885	254	0	0	9,706
month minimum	0	0	479	635	1,151	1,389	1,565	1,391	596	89	0	0	8,194
day Maximum	0.0	40.6	81.0	99.9	108.0	108.0	108.0	84.1	81.0	54.0	0.0	0.0	108.0
day average	0.0	1.7	24.6	35.5	49.6	58.7	57.6	51.7	29.5	8.2	0.0	0.0	26.6
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
Greek - Corfu 39.748, 19.660

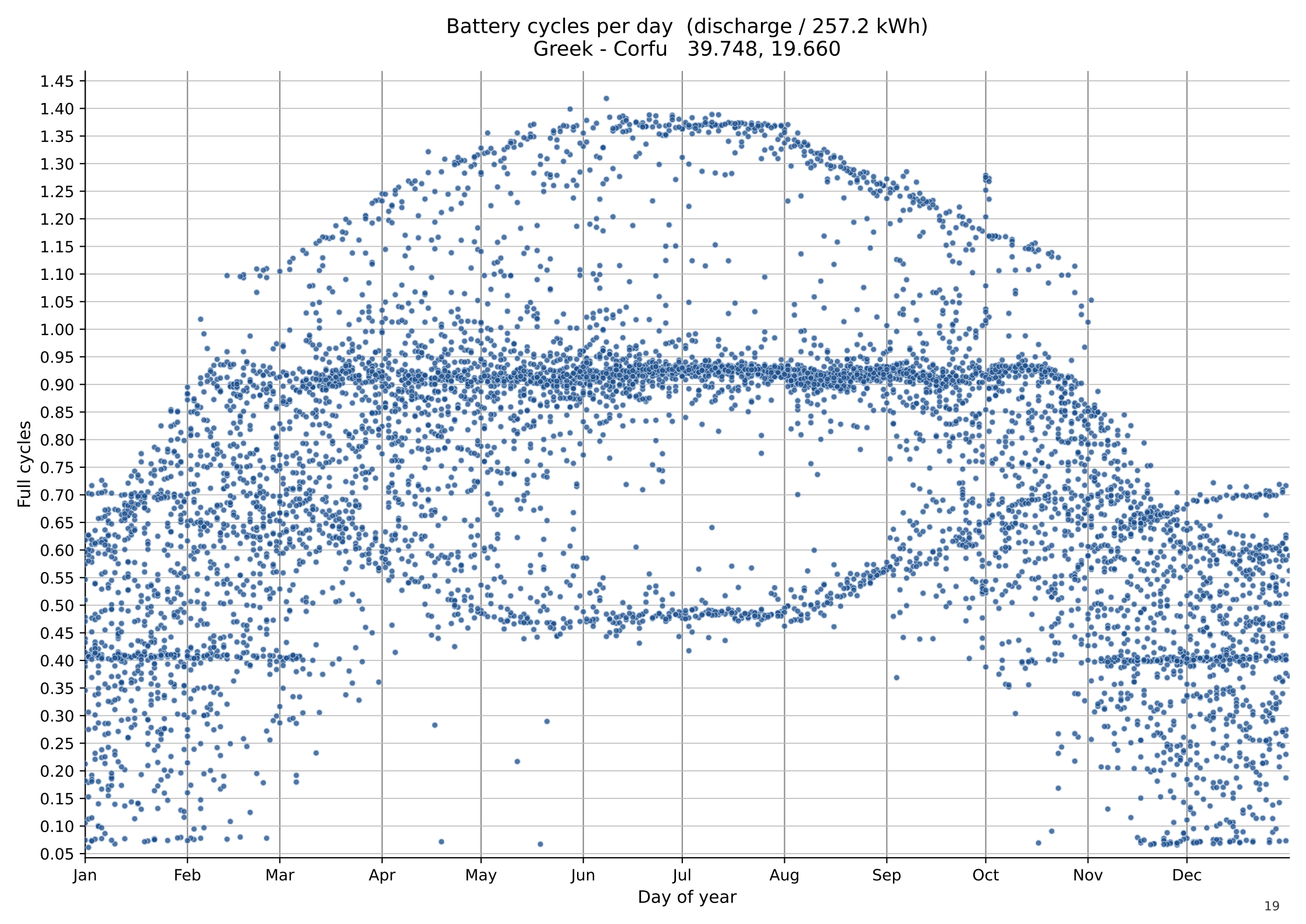
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Heating													
month Maximum	122	107	103	71	44	18	3	3	14	29	67	99	597
month average	98	88	83	61	35	12	1	0	5	19	48	82	531
month minimum	81	65	71	50	21	3	0	0	0	1	35	59	470
day Maximum	5.8	5.6	4.6	6.3	5.8	5.5	2.3	1.0	3.8	2.5	4.2	5.1	6.3
day average	3.2	3.1	2.7	2.0	1.1	0.4	0.0	0.0	0.2	0.6	1.6	2.6	1.5
day minimum	0.0	0.9	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.0
Cooling													
month Maximum	0	0	0	0	0	6	17	30	13	0	0	0	50
month average	0	0	0	0	0	1	9	15	4	0	0	0	30
month minimum	0	0	0	0	0	0	2	2	0	0	0	0	11
day Maximum	0.0	0.0	0.0	0.0	0.0	3.5	5.7	4.4	4.4	0.0	0.0	0.0	5.7
day average	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.1	0.0	0.0	0.0	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
DHW													
month Maximum	51	47	50	39	38	34	25	25	25	37	39	43	444
month average	49	45	48	38	36	33	25	25	24	36	37	41	438
month minimum	48	43	47	36	35	32	24	24	24	34	36	39	432
day Maximum	1.7	1.7	1.7	1.4	1.3	1.2	0.8	0.8	0.9	1.3	1.4	1.4	1.7
day average	1.6	1.6	1.5	1.3	1.2	1.1	0.8	0.8	0.8	1.2	1.2	1.3	1.2
day minimum	1.4	1.4	1.4	1.1	1.1	1.1	0.8	0.8	0.8	1.1	1.1	1.2	0.8
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

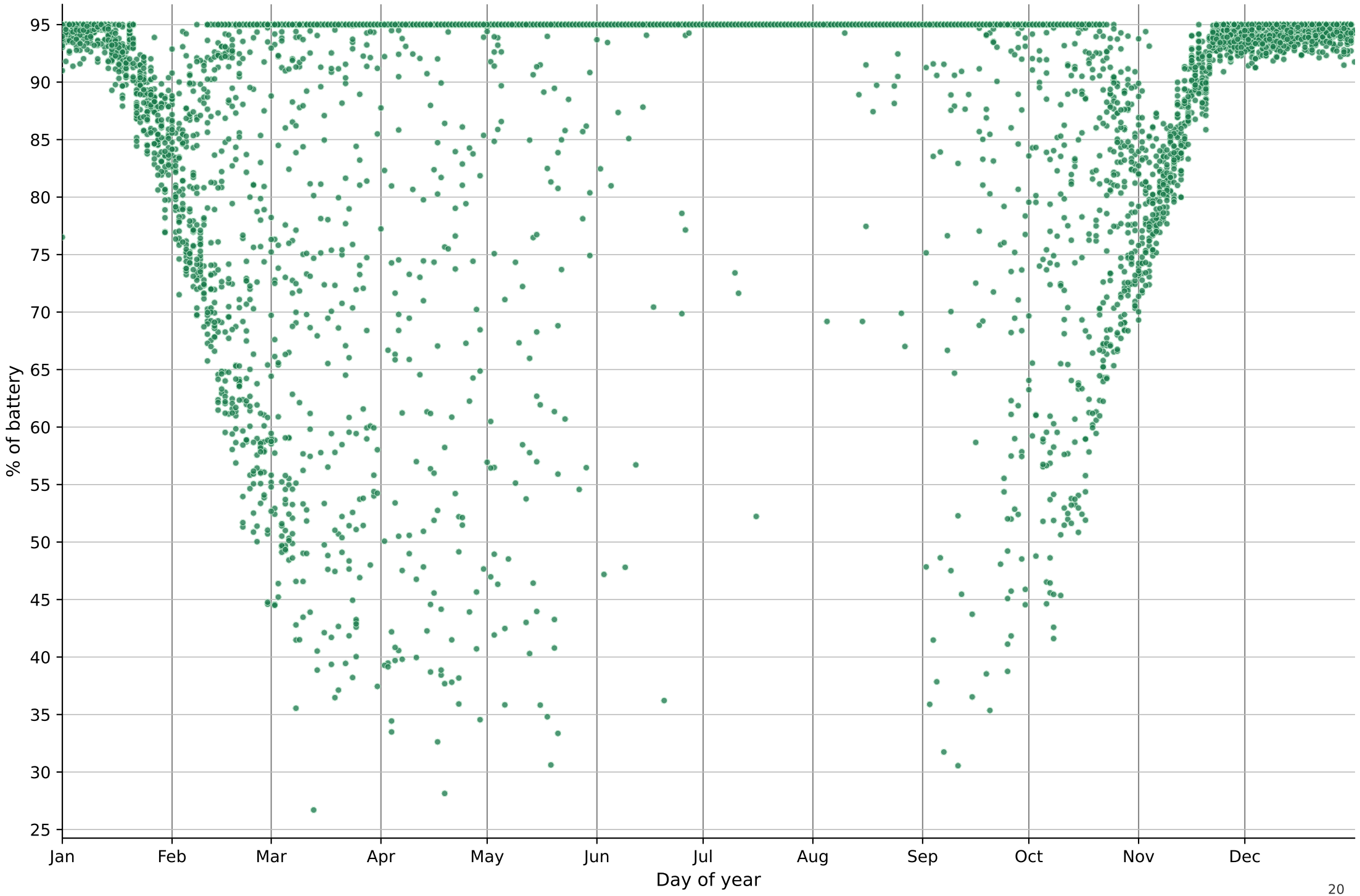
Heating, cooling and DHW are electricity. Direct electric is the part the heat pump could not cover.

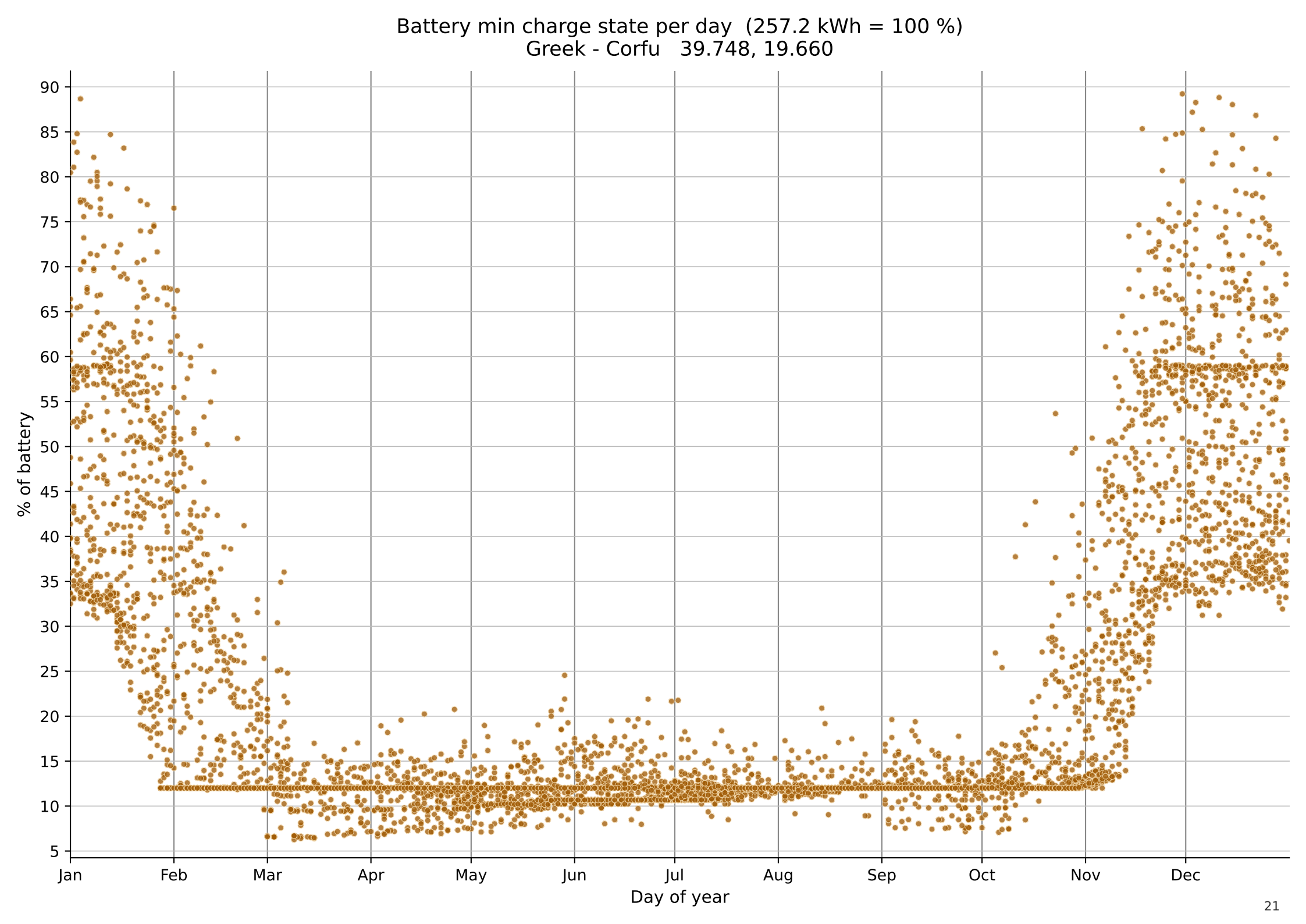
Battery
Greek - Corfu 39.748, 19.660

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Wasted													
month Maximum	0	25	563	2,202	3,148	3,668	3,531	2,635	1,257	30	0	0	15,201
month average	0	4	349	1,640	2,532	3,152	3,361	2,290	869	19	0	0	14,216
month minimum	0	0	168	940	1,625	2,668	3,042	1,753	443	4	0	0	13,114
day Maximum	0.0	9.5	60.8	189.0	219.4	231.7	212.4	186.6	127.7	19.8	0.0	0.0	231.7
day average	0.0	0.1	11.3	54.7	81.7	105.1	108.4	73.9	29.0	0.6	0.0	0.0	38.9
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	17	23	27	27	29	28	29	29	27	27	19	17	280
month average	15	18	24	26	27	28	29	28	26	24	15	13	272
month minimum	10	15	21	24	26	27	28	28	24	20	14	9	259
day Maximum	0.9	1.1	1.2	1.3	1.4	1.4	1.4	1.4	1.3	1.3	1.1	0.7	1.4
day average	0.5	0.6	0.8	0.9	0.9	0.9	0.9	0.9	0.9	0.8	0.5	0.4	0.7
day minimum	0.1	0.1	0.2	0.1	0.1	0.4	0.4	0.5	0.4	0.1	0.1	0.1	0.1
Charge C													
month Maximum	0	0	0	0	0	0	0	0	0	0	0	0	2
month average	0	0	0	0	0	0	0	0	0	0	0	0	2
month minimum	0	0	0	0	0	0	0	0	0	0	0	0	2
day Maximum	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.2
day average	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
day minimum	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	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	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.0	0.0	0.0

Wasted = PV left when the export price is negative and the battery is full. Full cycles = discharge kWh / 257.2 kWh. Battery export only into hours whose export price is above 0, highest price first. At 0 cent on


Battery cycles per day (discharge / 257.2 kWh)
Greek - Corfu 39.748, 19.660
Full cycles
1.45
1.40
1.35
1.30
1.25
1.20
1.15
1.10
1.05
1.00
0.95
0.90
0.85
0.80
0.75
0.70
0.65
0.60
0.55
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
Jan
Feb
Mar
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Dec
Day of year


Battery max charge state per day (257.2 kWh = 100 %)
Greek - Corfu 39.748, 19.660
% of battery
95
90
85
80
75
70
65
60
55
50
45
40
35
30
25
Jan
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Day of year


Battery min charge state per day (257.2 kWh = 100 %)
Greek - Corfu 39.748, 19.660
% of battery
90
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65
60
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