

Scenario — PV

GEMINI-60-house-part-of-a-settlement China - K2 35.882, 76.513

Name	Slope °	Azimuth °	Wp	Wall d/h m	Face	Bifacial	Wp counted
Roof East	22	-90	19800	—	front	—	yes
Roof West	22	90	19800	—	front	—	yes
Terrace railing south	90	0	4620	5 / 4	front	—	yes
Terrace railing north	90	180	4620	5 / 4	front	—	yes
share central structure east part	8	-90	20460	—	front	—	yes
share central strucure west part	8	90	20460	—	front	—	yes
Total counted			89760				

Location: Sure nobody lives there; nobody will live there.

Database PVGIS-ERA5 2005-2023 loss 14 % azimuth 0 = south, 90 = west, -90 = east.

Price bands and charts use UTC+5 from longitude (15° per hour), not the political time zone.

Peak hour 2013-05-31 11:30 local (06:30 UTC) 81431 W 0.907 W/Wp of 89760 Wp.

Database gaps: 0 days with 0 yield while the sun reached the horizon at noon. 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 winter time, battery export is only the kWh that would not fit in the next 72 h.



Scenario — house, heat pump, battery
GEMINI-60-house-part-of-a-settlement China - K2 35.882, 76.513

Chapter	Parameter	Value
Building	Design out / in / heat	-10.0 °C / 20.0 °C / 1600.0 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	200.0 L tank 42.0 °C 8-18 h
	Water out of the pipe Q1-Q4	1 °C 1 °C 1 °C 1 °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 5 6
	kW -10/0/10 @ 50 °C	3.5 4.5 5
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	44.0 kW / 44.0 kW
	Max export	44.0 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

Records 1-10 — contribution of each PV
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PV	2013-05-31 06:30	2021-04-27 06:30	2018-04-29 06:30	2005-04-19 06:30	2023-05-10 06:30	2013-05-16 06:30	2023-04-24 06:30	2015-05-03 06:30	2021-04-24 06:30	2023-05-11 06:30
Roof East	19574	19408	19408	19378	19352	19208	19304	19197	19282	19294
Roof West	18519	18202	18225	18032	18277	18277	18057	18160	18041	18240
Terrace railing south	1778	2466	2394	2714	2087	2208	2544	2437	2539	2067
Terrace railing north	426	247	225	235	258	693	236	571	215	262
share central structure east part	20762	20591	20604	20525	20567	20316	20470	20312	20447	20499
share central strucure west part	20371	20144	20165	20026	20169	19970	20007	19927	19987	20109
Watt at record	81431	81057	81021	80910	80710	80672	80617	80604	80512	80472
Percent of installed peak	90.7	90.3	90.3	90.1	89.9	89.9	89.8	89.8	89.7	89.7

Hours at or above a share of the record
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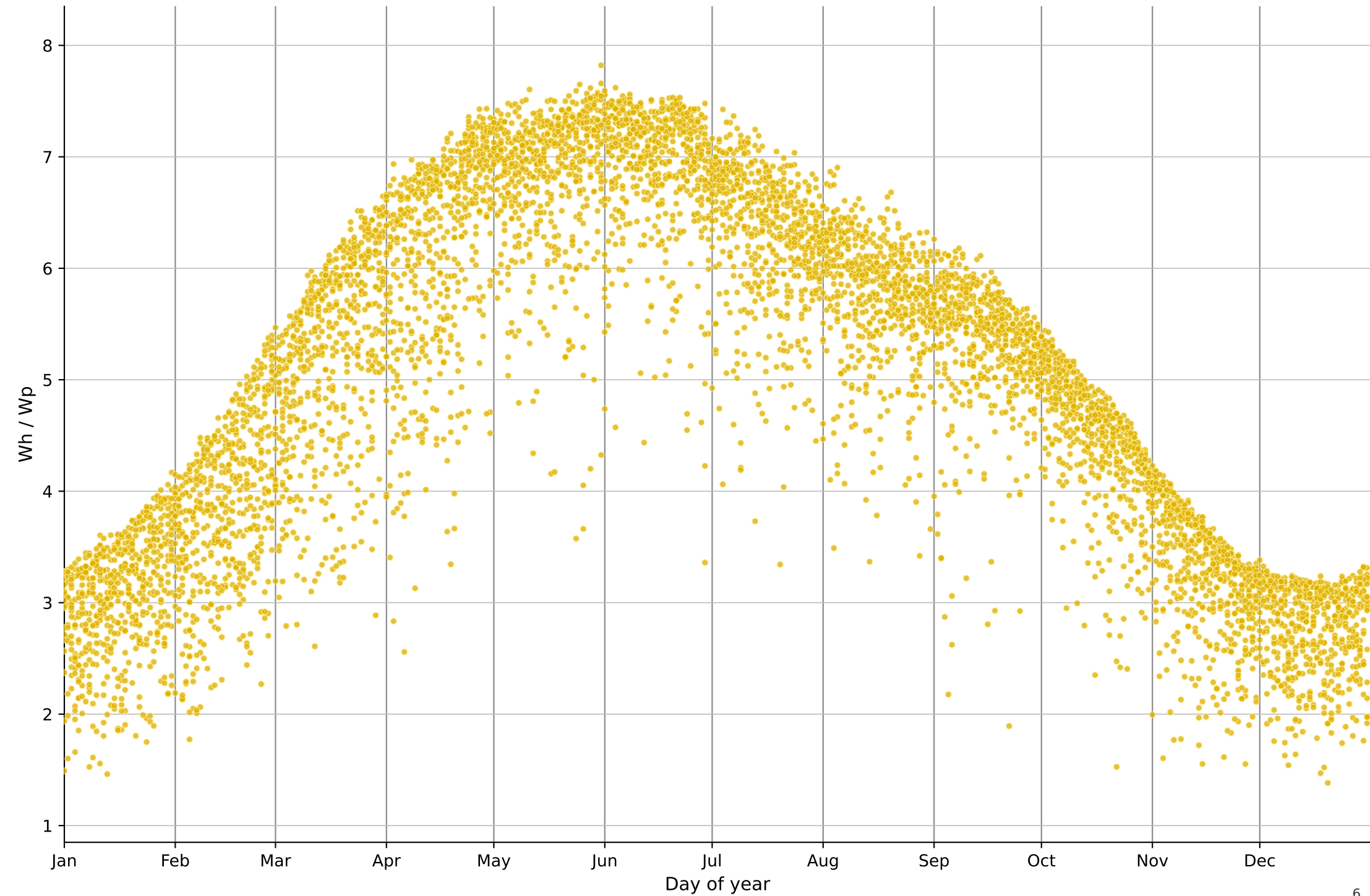
Of the record	Hours	Watts
98 %	40	79803 W
96 %	279	78174 W
94 %	970	76545 W
92 %	2013	74917 W
90 %	3171	73288 W

Records of each photovoltaic field
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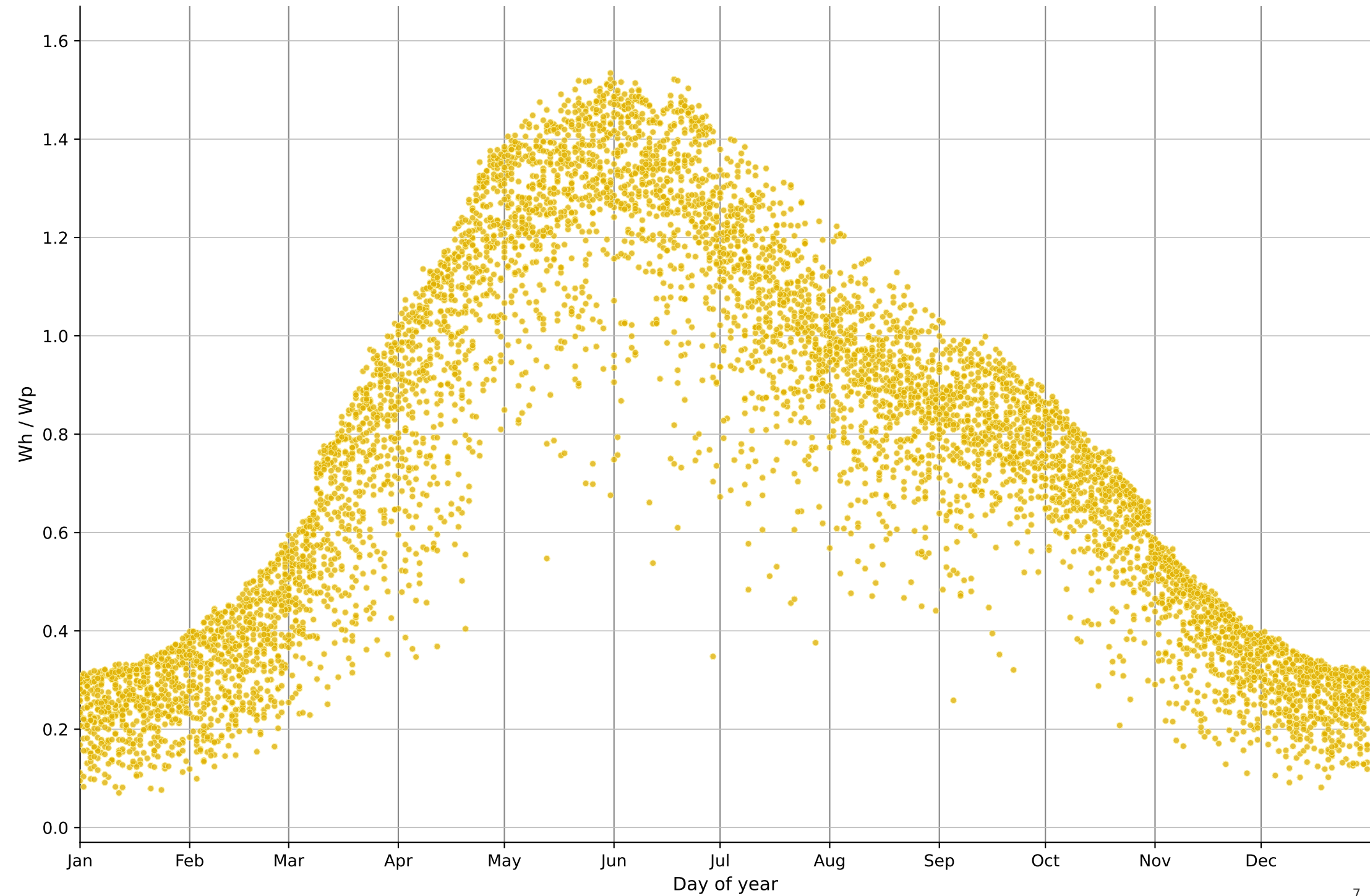
PV	Date	Watts	%	h ≥98%	h ≥96%	h ≥94%	h ≥92%	h ≥90%
Roof East	2018-04-29 05:30	20451	103.3	32	209	618	1372	2497
Roof West	2023-05-10 08:30	19920	100.6	38	251	861	1768	2817
Terrace railing south	2013-02-08 07:30	4578	99.1	2	18	59	129	249
Terrace railing north	2006-04-11 06:30	1468	31.8	1	2	5	9	20
share central structure east part	2013-05-31 06:30	20762	101.5	29	240	830	1796	2986
share central strucure west part	2013-05-31 07:30	20658	101.0	17	159	690	1691	2854

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.

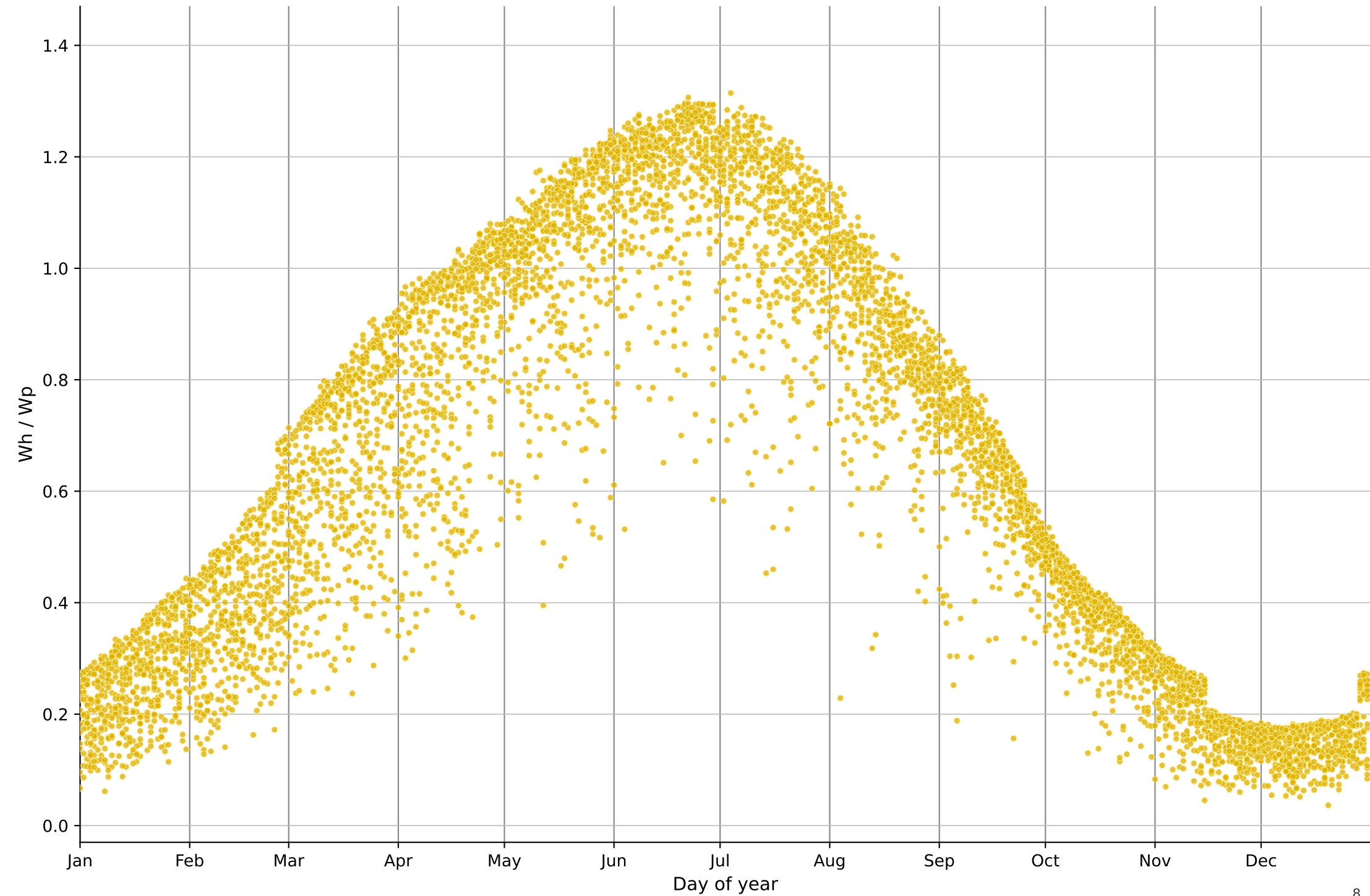
Yield distribution for each day — Wh / Wp of all PV together
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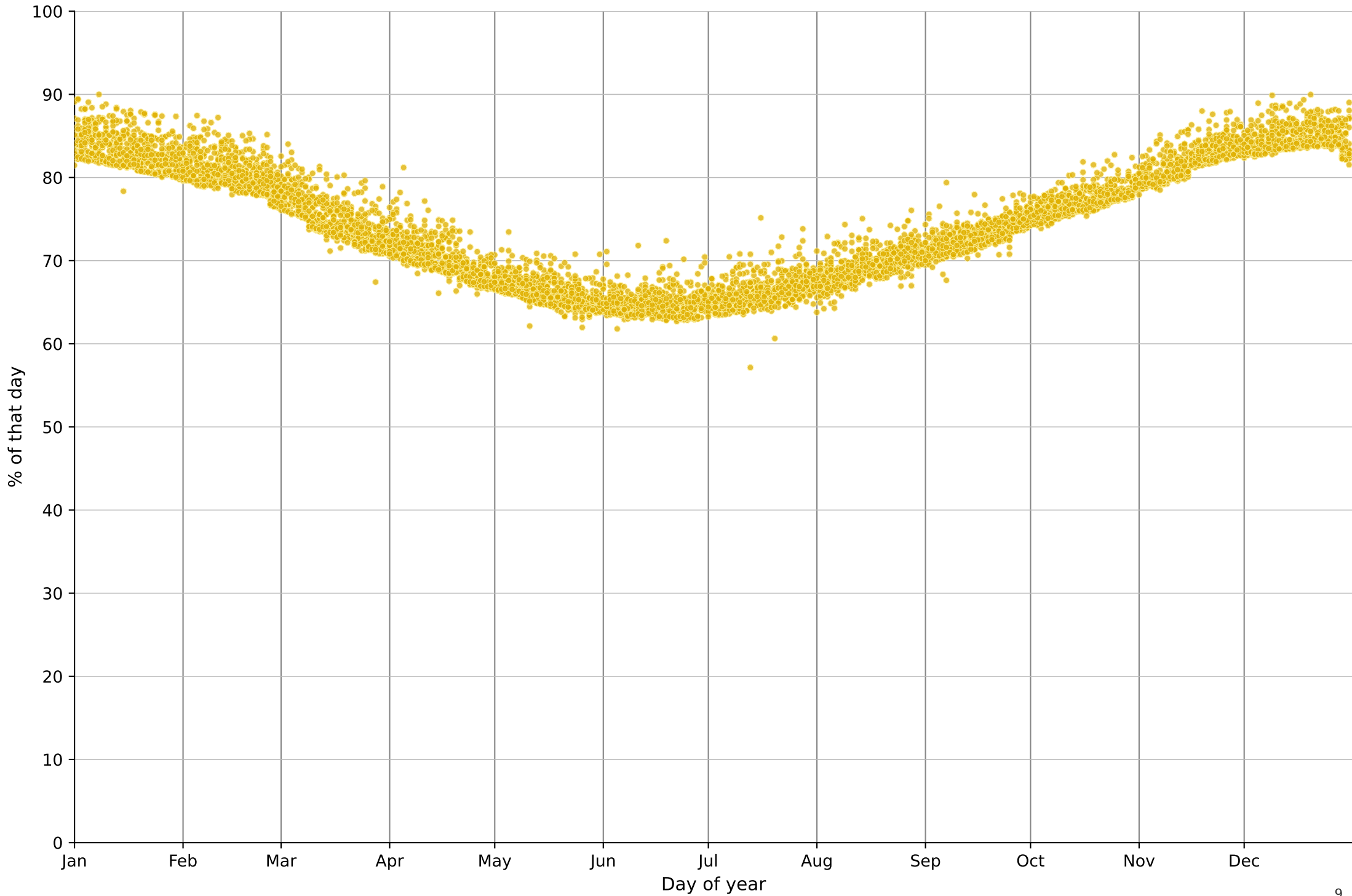
Yield distribution for each day — Wh / Wp of all PV together — 00:00-09:00
China - K2 35.882, 76.513



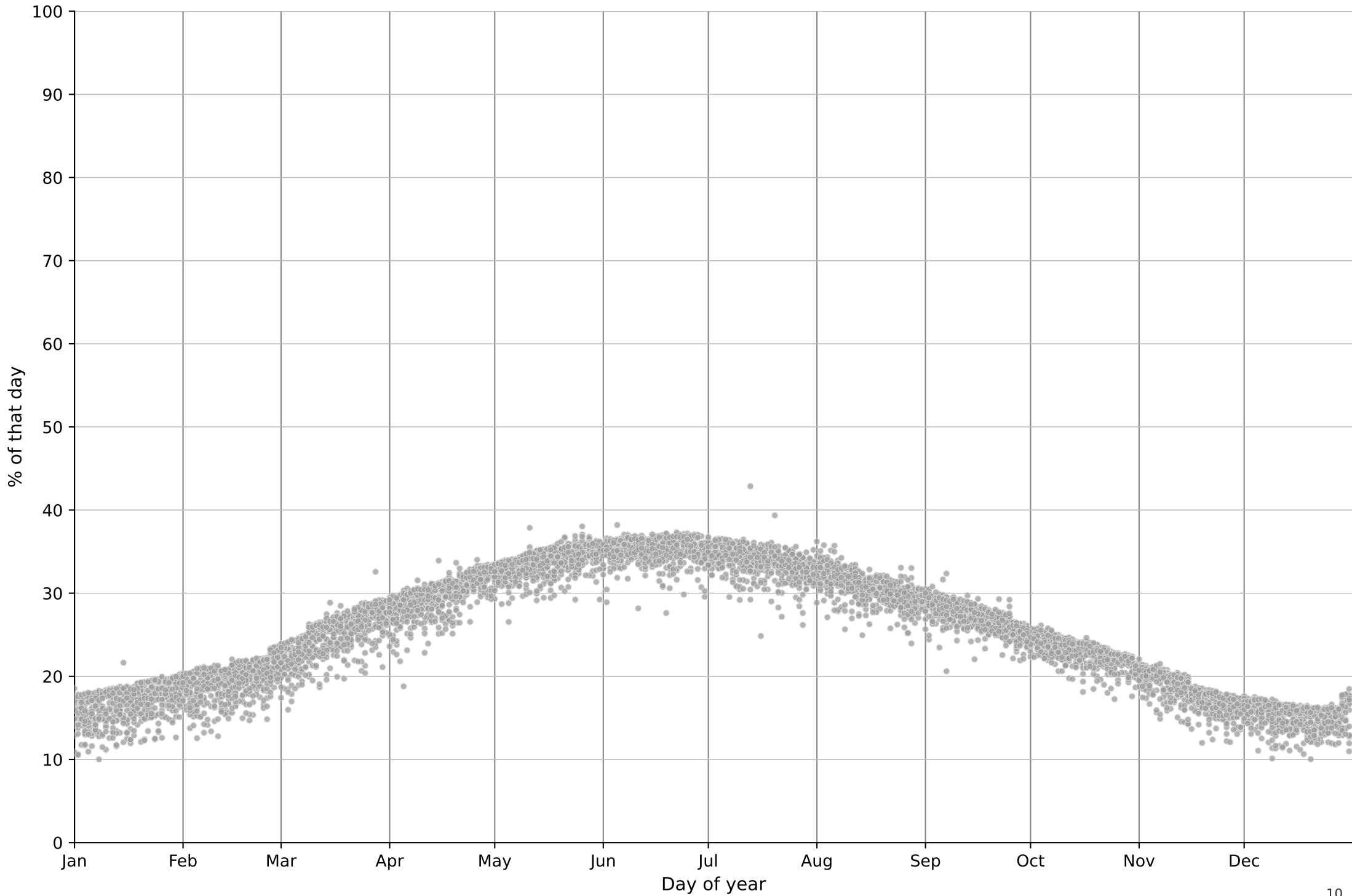
Yield distribution for each day — Wh / Wp of all PV together — 15:00-23:59
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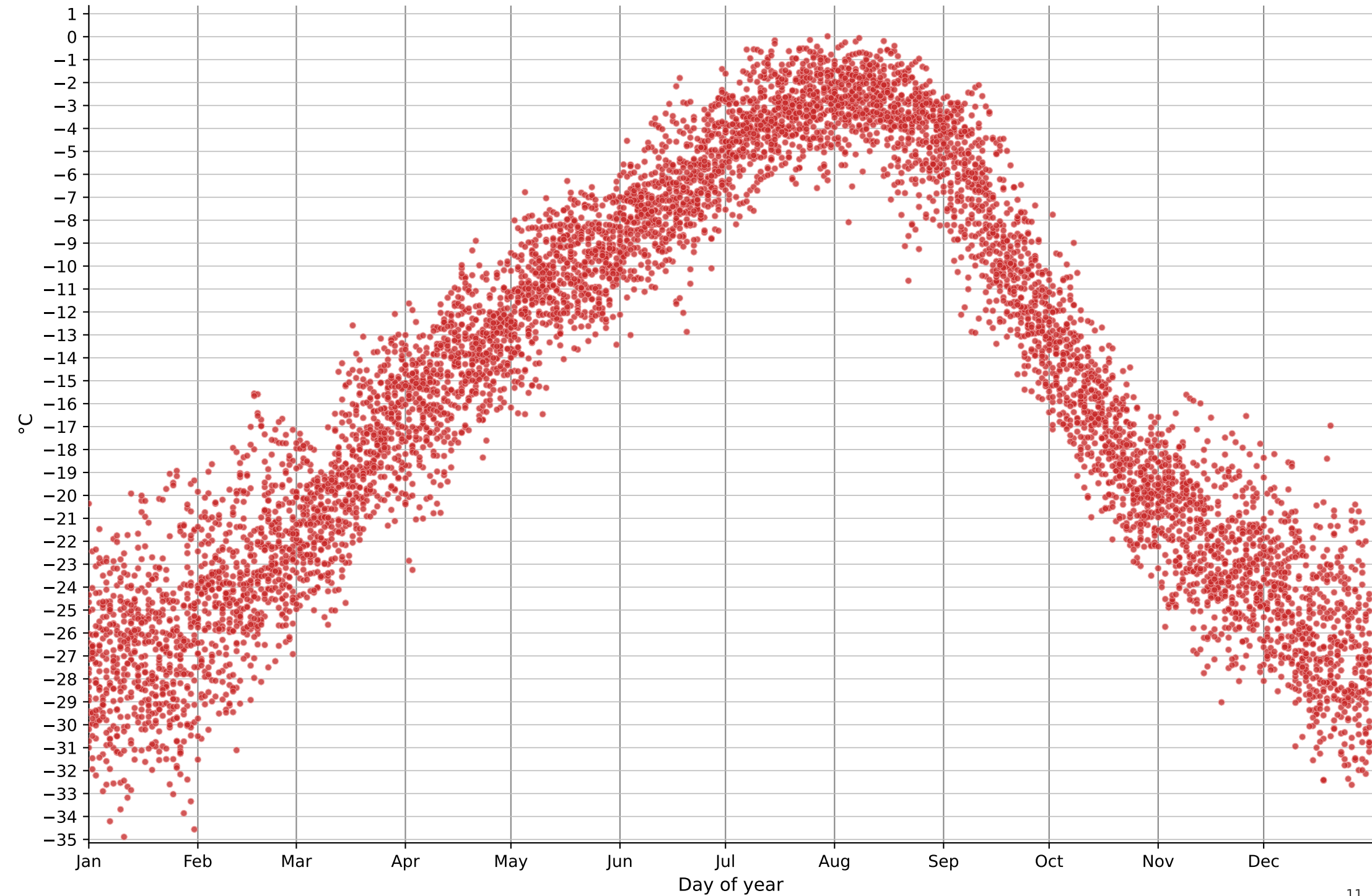
Share of the day's yield in 09:00-15:00 winter time
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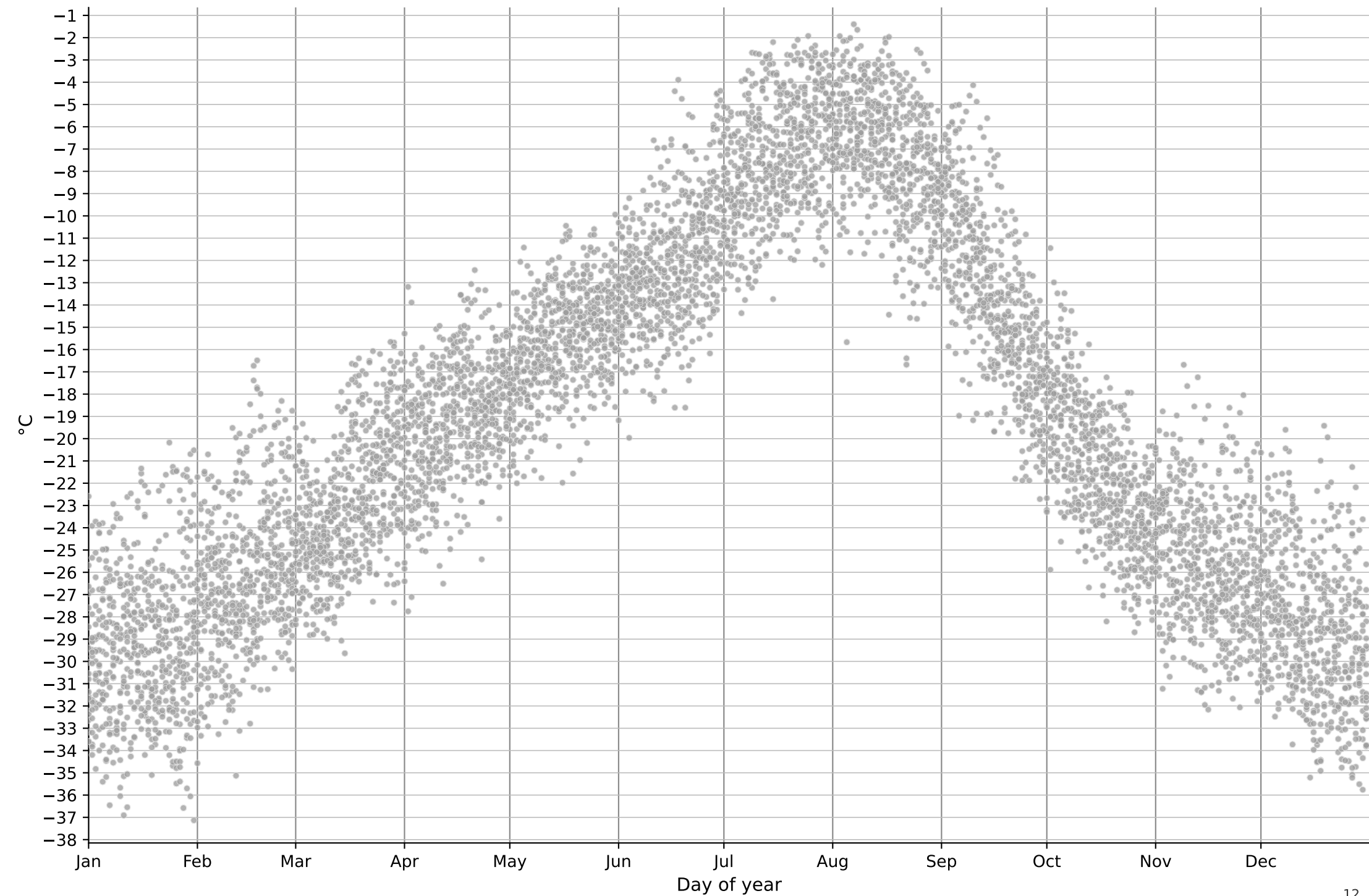
Share of the day's yield outside 09:00-15:00 winter time
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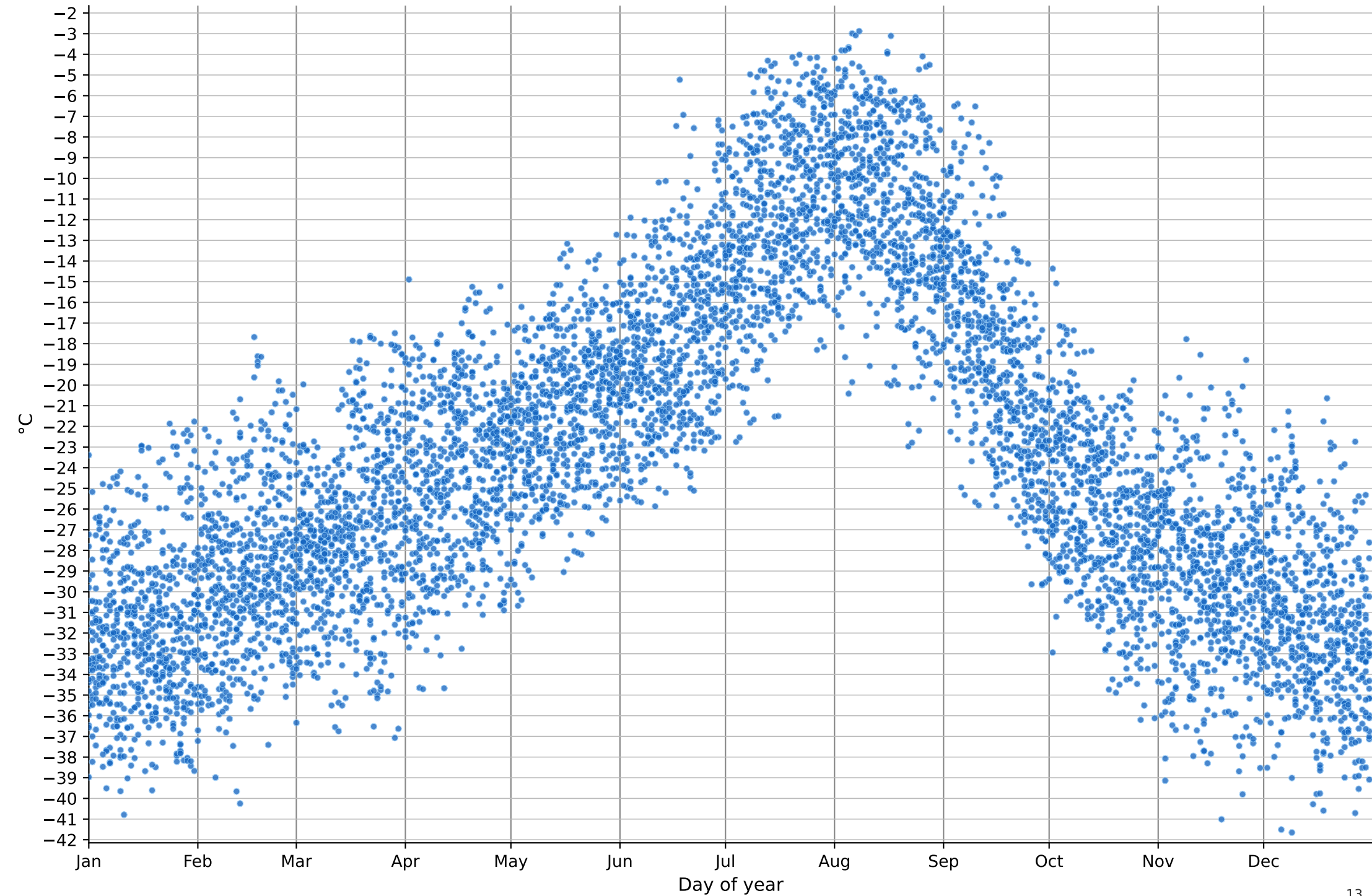
Highest temperature of each day
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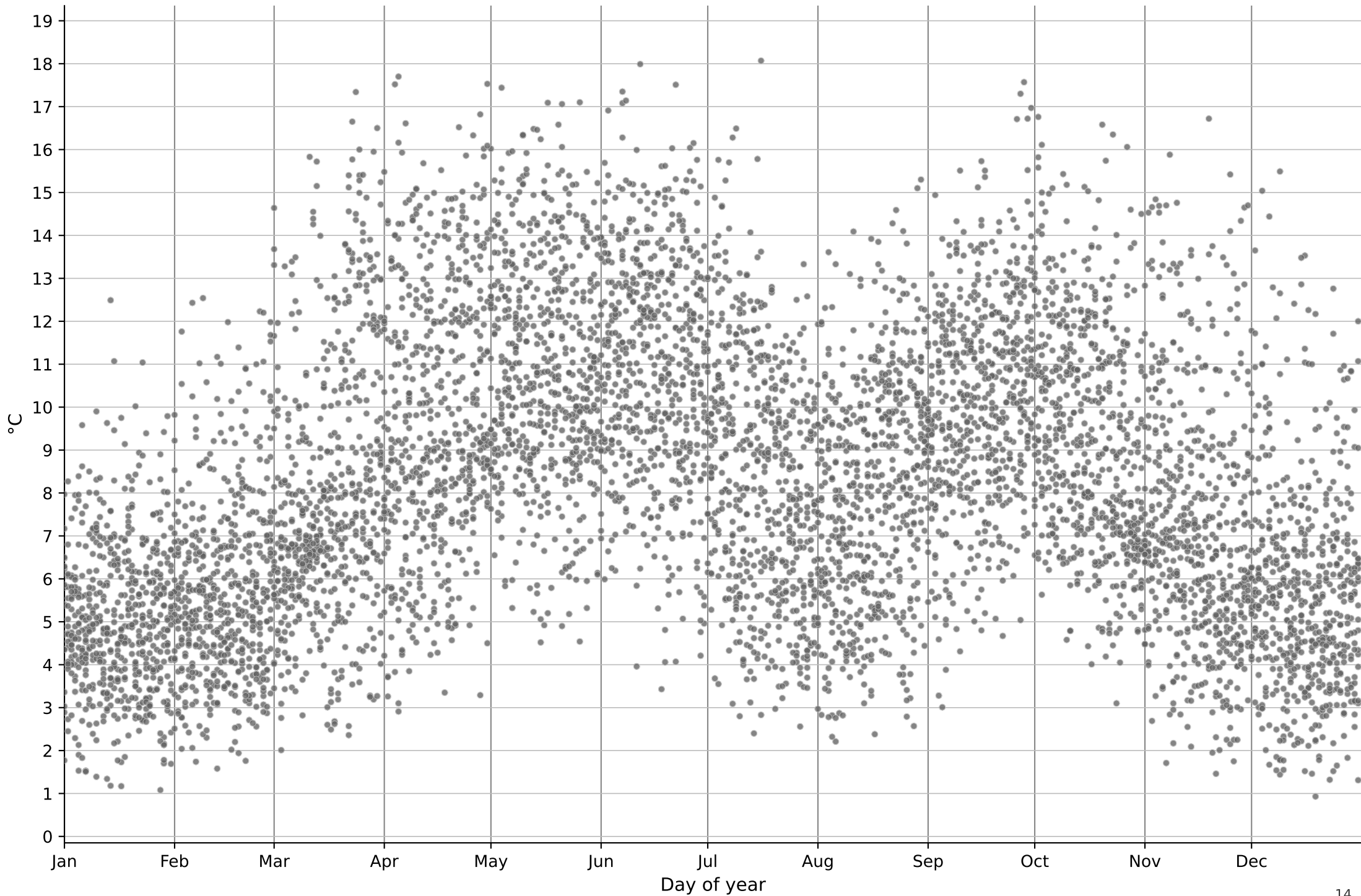
Average temperature of each day
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Lowest temperature of each day
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Difference between highest and lowest temperature of each day
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Monthly and yearly specific yield (kWh/kWp = Wh/Wp)
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Month / year		Roof East 22°/-90° 19800 Wp	Roof West 22°/-90° 19800 Wp	Terrace railing south 90°/0° 4620 Wp	Terrace railing north 90°/180° 4620 Wp	Share central structure east 8°/-90° 20460 Wp	Share central structure west 8°/90° 20460 Wp	All together
January	Maximum	114.57	110.56	17.61	17.61	113.05	111.58	101.98
	average	105.08	101.89	14.79	14.79	104.03	102.85	94.33
	minimum	90.04	87.95	10.86	10.86	89.86	89.12	81.86
February	Maximum	134.51	130.95	60.27	24.80	136.03	134.55	123.98
	average	117.68	113.99	54.04	18.51	118.99	117.45	108.73
	minimum	105.35	101.78	44.98	13.59	107.28	106.39	98.99
March	Maximum	187.87	183.02	119.09	28.51	190.22	188.12	175.14
	average	172.20	167.88	109.85	24.10	174.59	172.75	161.09
	minimum	161.36	157.57	103.84	18.59	163.83	162.11	151.43
April	Maximum	206.47	207.85	111.75	33.54	213.97	214.75	196.09
	average	196.38	194.44	107.55	29.67	202.07	201.52	185.27
	minimum	186.15	183.23	102.32	24.09	191.06	190.14	175.36
May	Maximum	231.44	233.51	88.86	45.55	240.18	240.74	218.06
	average	223.97	226.50	85.01	41.23	232.38	233.28	212.01
	minimum	210.62	213.86	79.93	34.25	218.78	220.06	200.26
June	Maximum	225.60	231.65	71.02	45.30	235.46	237.67	214.23
	average	217.49	224.94	68.09	41.96	227.47	230.30	207.60
	minimum	209.11	215.30	63.38	37.04	219.98	221.30	200.62
July	Maximum	211.71	224.46	78.09	46.85	222.63	228.15	204.88
	average	202.87	212.45	75.81	44.67	212.75	216.69	195.70
	minimum	188.74	199.78	73.91	42.36	198.82	203.60	183.74
August	Maximum	197.06	202.61	98.19	38.64	205.68	208.10	189.05
	average	183.94	191.34	95.12	36.04	192.59	195.72	178.05
	minimum	175.73	181.26	92.83	31.49	183.56	185.91	169.83
September	Maximum	173.10	176.70	114.01	27.45	178.98	180.03	165.75
	average	165.79	169.88	109.81	23.80	171.98	173.68	159.71
	minimum	152.82	159.10	102.40	20.35	159.17	161.76	148.64
October	Maximum	153.60	152.65	91.42	19.54	156.12	156.04	144.32
	average	147.65	146.97	88.21	17.19	150.20	150.21	138.89
	minimum	137.93	138.79	82.71	13.22	141.00	141.55	130.70
November	Maximum	120.06	117.14	19.94	16.95	120.85	119.34	108.32
	average	108.21	105.86	15.71	12.65	109.28	108.12	98.23
	minimum	93.69	92.70	12.33	8.89	95.27	94.81	86.34
December	Maximum	103.55	97.51	13.94	13.94	101.79	99.67	91.33
	average	96.93	92.06	11.80	11.80	95.64	93.95	86.12
	minimum	87.66	83.65	9.47	9.47	86.89	85.47	78.51
All years	Maximum	1966.0	1977.9	854.5	333.6	2020.4	2025.9	1851.5
	average	1938.2	1948.2	835.8	316.4	1992.0	1996.5	1825.7
	minimum	1892.4	1911.6	817.5	303.2	1948.5	1956.8	1789.8

Highest combined yield hour: 2013-05-31 06:30 UTC 81431.3 W (0.907 W/Wp) of 89760 Wp installed. Use this hour to size battery charge power.

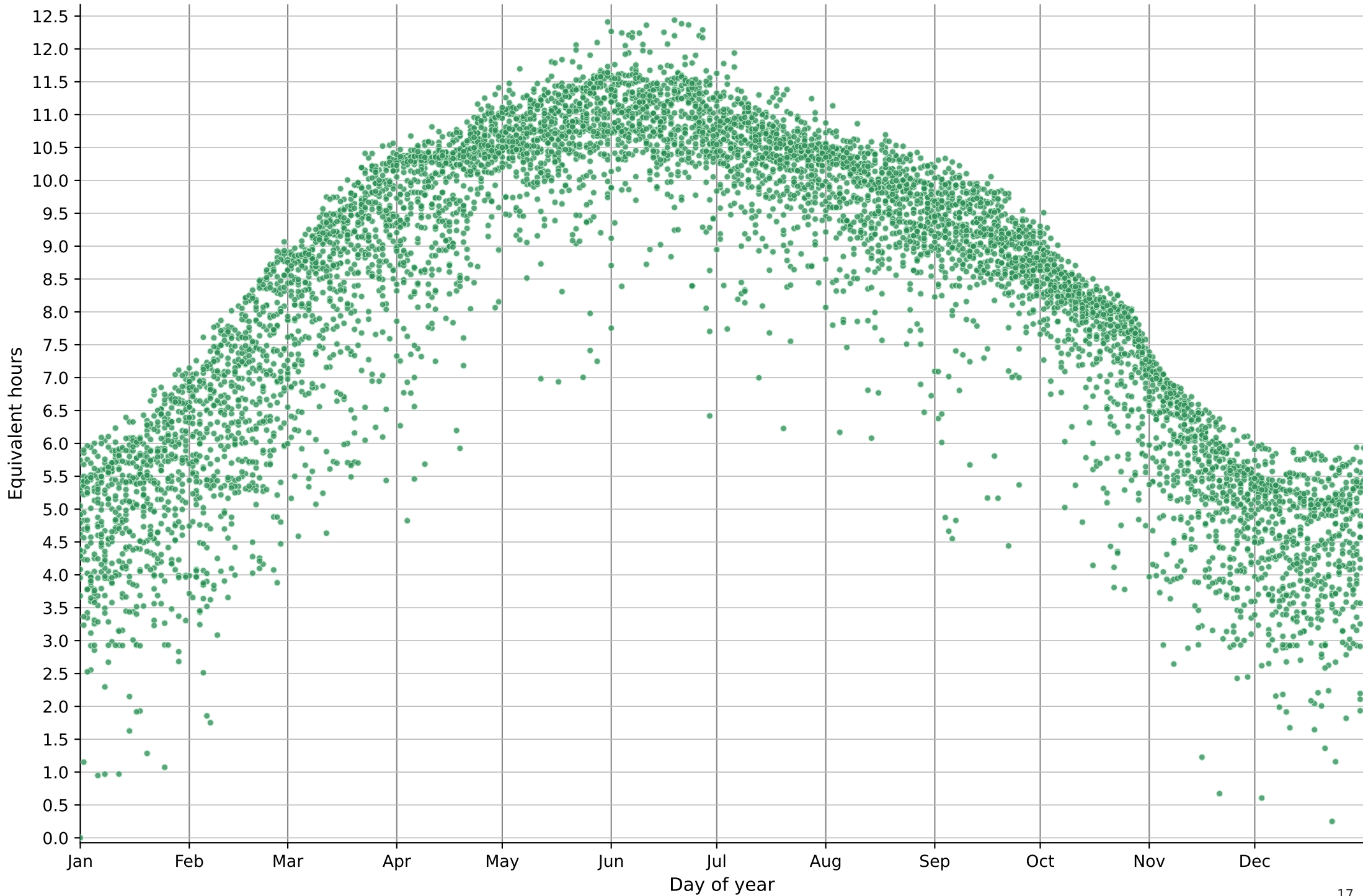
Monthly and yearly total yield (kWh)
China - K2 35.882, 76.513

Month / year		Roof East 22°/-90° 19800 Wp	Roof West 22°/-90° 19800 Wp	Terrace railing south 90°/0° 4620 Wp	Terrace railing north 90°/180° 4620 Wp	Share central structure east 8°/-90° 20460 Wp	Share central structure west 8°/90° 20460 Wp	All together
January	Maximum	2268.5	2189.1	81.3	81.3	2313.0	2283.0	9153.9
	average	2080.5	2017.4	68.3	68.3	2128.5	2104.3	8467.4
	minimum	1782.9	1741.4	50.2	50.2	1838.5	1823.4	7348.0
February	Maximum	2663.3	2592.9	278.4	114.6	2783.2	2752.8	11128.2
	average	2330.0	2257.1	249.6	85.5	2434.5	2402.9	9759.7
	minimum	2086.0	2015.2	207.8	62.8	2195.0	2176.8	8885.3
March	Maximum	3719.8	3623.7	550.2	131.7	3891.9	3849.0	15720.5
	average	3409.6	3324.0	507.5	111.3	3572.0	3534.5	14459.0
	minimum	3194.9	3119.9	479.7	85.9	3351.9	3316.8	13592.0
April	Maximum	4088.0	4115.5	516.3	155.0	4377.9	4393.9	17601.4
	average	3888.4	3849.8	496.9	137.1	4134.4	4123.2	16629.7
	minimum	3685.7	3627.9	472.7	111.3	3909.1	3890.3	15740.5
May	Maximum	4582.6	4623.4	410.5	210.4	4914.1	4925.6	19573.3
	average	4434.5	4484.6	392.7	190.5	4754.4	4773.0	19029.7
	minimum	4170.3	4234.4	369.3	158.2	4476.1	4502.5	17975.1
June	Maximum	4466.9	4586.6	328.1	209.3	4817.5	4862.7	19229.2
	average	4306.3	4453.9	314.6	193.9	4653.9	4711.9	18634.5
	minimum	4140.4	4262.9	292.8	171.1	4500.8	4527.9	18007.5
July	Maximum	4191.9	4444.3	360.8	216.5	4555.0	4668.0	18390.2
	average	4016.9	4206.6	350.3	206.4	4352.9	4433.5	17566.4
	minimum	3737.0	3955.7	341.5	195.7	4067.9	4165.7	16492.3
August	Maximum	3901.8	4011.7	453.6	178.5	4208.2	4257.7	16969.4
	average	3642.0	3788.5	439.4	166.5	3940.5	4004.5	15981.4
	minimum	3479.4	3589.0	428.9	145.5	3755.6	3803.6	15243.9
September	Maximum	3427.4	3498.6	526.7	126.8	3661.9	3683.5	14878.2
	average	3282.7	3363.6	507.3	110.0	3518.7	3553.4	14335.8
	minimum	3025.8	3150.2	473.1	94.0	3256.6	3309.7	13342.2
October	Maximum	3041.3	3022.4	422.4	90.3	3194.2	3192.6	12953.8
	average	2923.5	2910.0	407.5	79.4	3073.1	3073.3	12466.9
	minimum	2731.1	2748.0	382.1	61.1	2884.8	2896.2	11732.0
November	Maximum	2377.1	2319.4	92.1	78.3	2472.5	2441.6	9722.7
	average	2142.5	2095.9	72.6	58.4	2235.8	2212.1	8817.4
	minimum	1855.1	1835.5	57.0	41.1	1949.1	1939.8	7750.0
December	Maximum	2050.2	1930.6	64.4	64.4	2082.7	2039.3	8198.0
	average	1919.2	1822.8	54.5	54.5	1956.8	1922.2	7730.0
	minimum	1735.7	1656.3	43.7	43.7	1777.7	1748.7	7047.1
All years	Maximum	38927	39162	3948	1541	41338	41451	166193
	average	38376	38574	3861	1462	40756	40849	163878
	minimum	37470	37849	3777	1401	39867	40036	160654

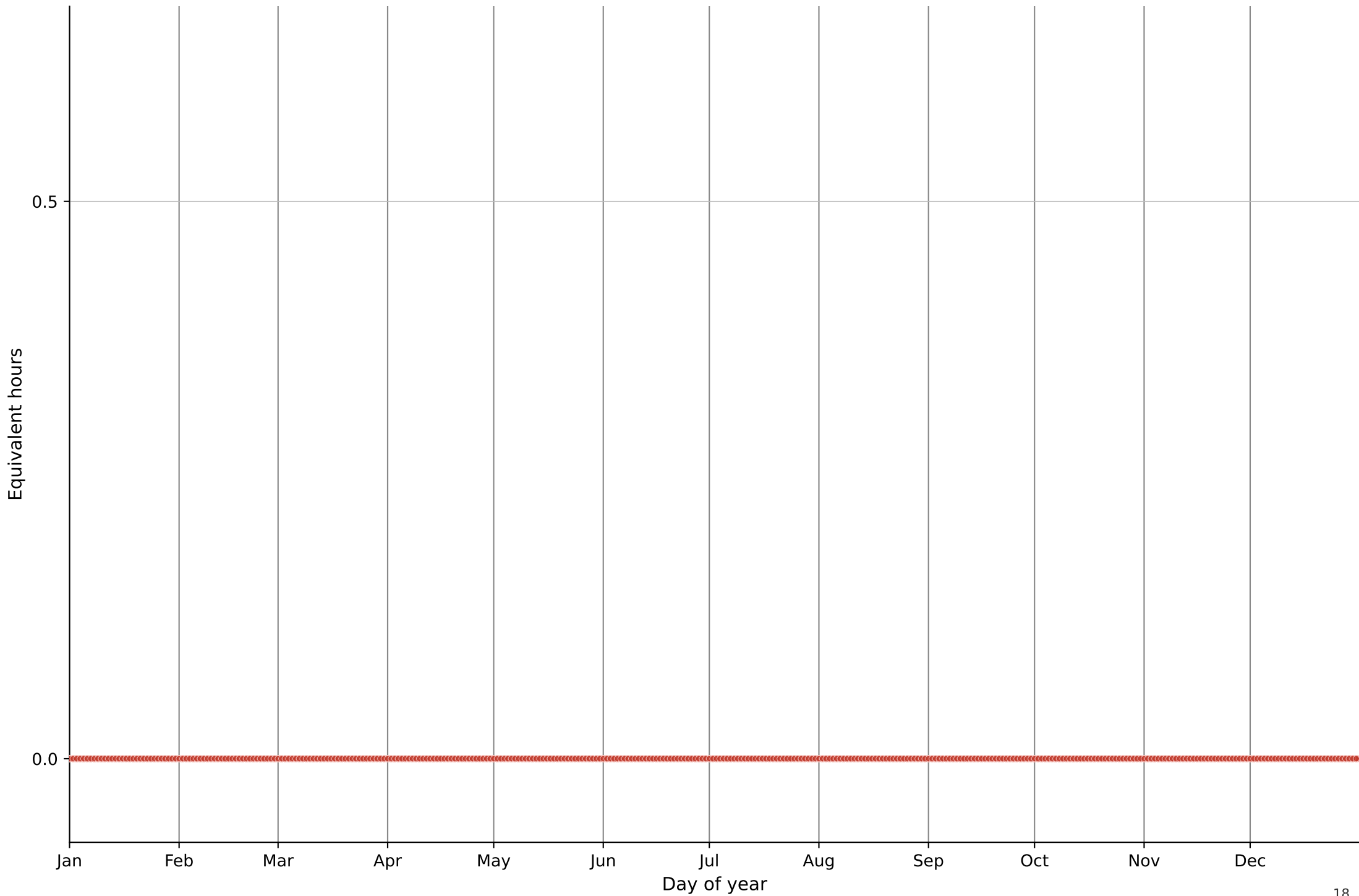
Highest combined yield hour: 2013-05-31 06:30 UTC 81431.3 W (0.907 W/Wp) of 89760 Wp installed. Use this hour to size battery charge power.

Export energy as equivalent hours (kWh / grid kW)

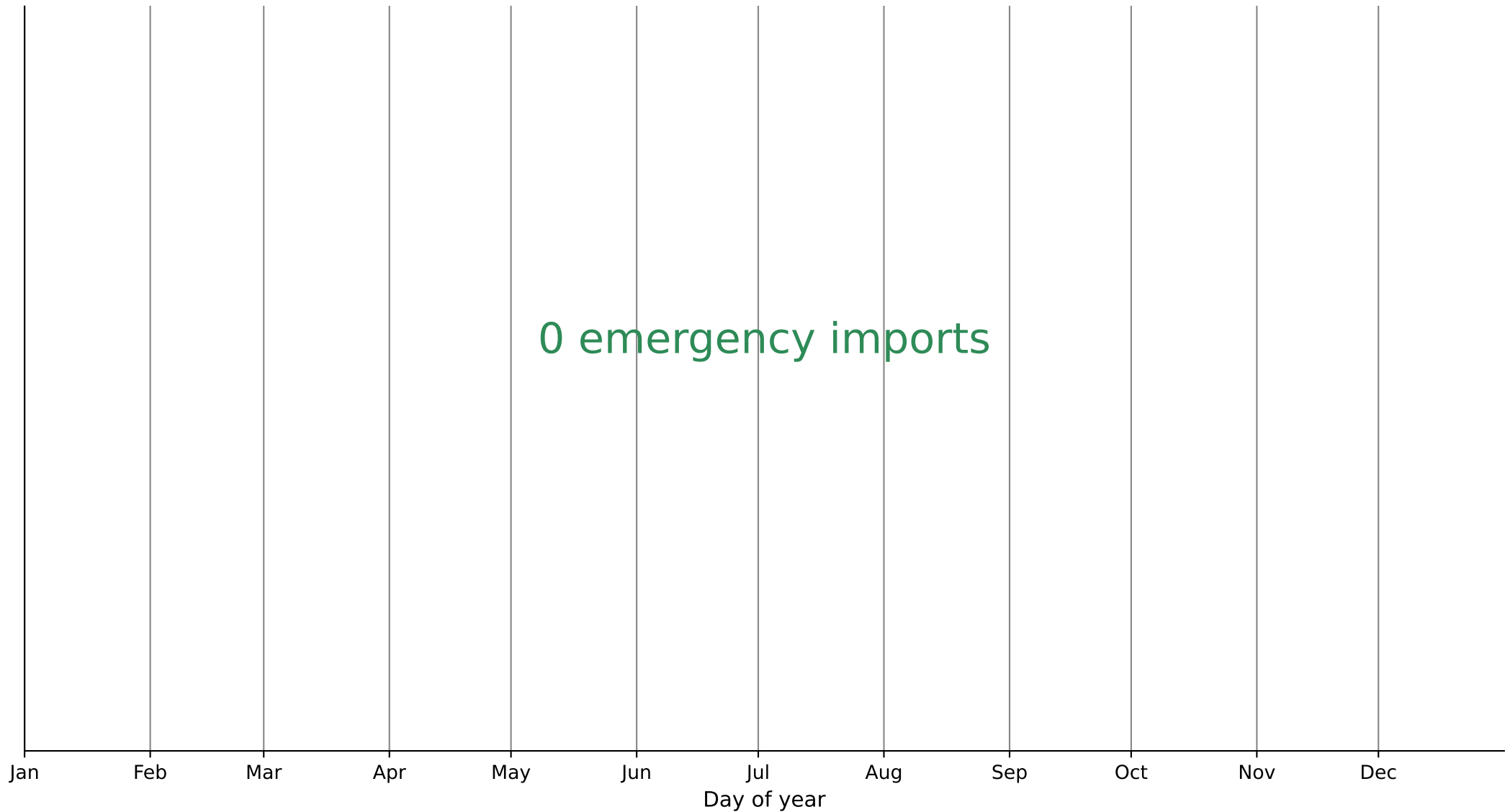
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Import energy as equivalent hours (kWh / grid kW)
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Emergency import hours: 0 days with an emergency: 0
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Emergency = this hour's grid import is above 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
China - K2 35.882, 76.513

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export to grid													
month Maximum	7515	9325	12632	13521	14877	14688	14461	13657	12208	10859	8137	6528	133820
month average	6842	8167	11789	13001	14581	14391	14068	13166	11844	10542	7307	6136	131833
month minimum	5892	7365	11165	12466	14044	14154	13497	12718	11162	9960	6324	5522	130007
day Maximum	313.0	398.9	464.9	502.0	546.0	547.3	525.2	489.9	454.7	418.3	325.2	262.9	547.3
day average	220.7	289.5	380.3	433.4	470.4	479.7	453.8	424.7	394.8	340.1	243.6	197.9	361.0
day minimum	0.0	77.1	201.8	212.2	305.2	282.4	274.0	267.5	195.4	166.2	29.6	11.0	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	1166	996	975	886	869	807	792	795	835	952	1010	1127	10899
month average	1077	909	944	865	852	788	765	763	802	924	955	1054	10699
month minimum	990	839	916	839	831	757	742	742	780	894	906	982	10520
day Maximum	45.9	42.2	35.2	33.3	30.1	29.1	27.0	27.8	30.2	34.8	38.4	43.5	45.9
day average	34.7	32.2	30.5	28.8	27.5	26.3	24.7	24.6	26.7	29.8	31.8	34.0	29.3
day minimum	20.7	27.7	27.4	26.3	25.4	23.7	23.1	22.9	23.7	25.9	27.8	28.9	20.7

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
China - K2 35.882, 76.513

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export													
month Maximum	1231	1322	1546	1297	1306	1268	1341	1363	1313	1476	1257	1127	15502
month average	1152	1213	1516	1276	1283	1253	1311	1338	1294	1438	1176	1078	15326
month minimum	1064	1147	1459	1238	1253	1218	1276	1301	1260	1394	1050	994	15138
day Maximum	55.4	58.9	60.3	56.9	55.6	54.6	55.3	55.4	54.4	57.4	53.9	54.4	60.3
day average	37.2	43.0	48.9	42.5	41.4	41.8	42.3	43.2	43.1	46.4	39.2	34.8	42.0
day minimum	0.0	9.2	24.1	23.6	23.0	23.7	23.1	24.0	22.4	19.9	3.5	1.3	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	1231	1322	1546	1297	1306	1268	1341	1363	1313	1476	1257	1127	15502
month average	1152	1213	1516	1276	1283	1253	1311	1338	1294	1438	1176	1078	15326
month minimum	1064	1147	1459	1238	1253	1218	1276	1301	1260	1394	1050	994	15138
day Maximum	55.4	58.9	60.3	56.9	55.6	54.6	55.3	55.4	54.4	57.4	53.9	54.4	60.3
day average	37.2	43.0	48.9	42.5	41.4	41.8	42.3	43.2	43.1	46.4	39.2	34.8	42.0
day minimum	0.0	9.2	24.1	23.6	23.0	23.7	23.1	24.0	22.4	19.9	3.5	1.3	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
China - K2 35.882, 76.513

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Export total													
month Maximum	7515	9325	12632	13521	14877	14688	14461	13657	12208	10859	8137	6528	133820
month average	6842	8167	11789	13001	14581	14391	14068	13166	11844	10542	7307	6136	131833
month minimum	5892	7365	11165	12466	14044	14154	13497	12718	11162	9960	6324	5522	130007
day Maximum	313.0	398.9	464.9	502.0	546.0	547.3	525.2	489.9	454.7	418.3	325.2	262.9	547.3
day average	220.7	289.5	380.3	433.4	470.4	479.7	453.8	424.7	394.8	340.1	243.6	197.9	361.0
day minimum	0.0	77.1	201.8	212.2	305.2	282.4	274.0	267.5	195.4	166.2	29.6	11.0	0.0
Export during high price hours													
month Maximum	5696	5712	6221	5199	4796	4503	5207	5590	5822	6310	5731	5432	64588
month average	5462	5408	6042	5044	4595	4377	4908	5381	5567	6174	5531	5237	63727
month minimum	5092	5153	5836	4879	4474	4229	4789	5181	5443	5966	5154	4930	62728
day Maximum	252.0	243.7	230.6	219.2	203.3	214.0	216.4	221.4	218.9	227.8	245.2	247.2	252.0
day average	176.2	191.7	194.9	168.1	148.2	145.9	158.3	173.6	185.6	199.2	184.4	169.0	174.5
day minimum	0.0	77.1	160.2	141.6	133.1	130.3	137.7	146.2	140.0	128.4	29.6	11.0	0.0
Export during medium price hours													
month Maximum	704	1130	2401	3545	4451	4590	4277	3470	2208	1196	553	379	26806
month average	576	904	1940	3129	4198	4400	3992	3110	2022	1067	434	300	26073
month minimum	379	722	1656	2816	3829	4194	3603	2744	1649	876	318	194	25042
day Maximum	36.8	61.4	119.9	171.4	196.3	202.8	197.2	170.1	113.9	86.2	27.0	22.0	202.8
day average	18.6	32.0	62.6	104.3	135.4	146.7	128.8	100.3	67.4	34.4	14.5	9.7	71.4
day minimum	0.0	0.0	4.3	3.2	31.5	50.5	28.5	19.2	0.0	0.0	0.0	0.0	0.0
Export during low price hours													
month Maximum	1130	2483	4395	5117	5975	5853	5395	5006	4529	3598	1853	846	43114
month average	803	1855	3806	4828	5789	5614	5167	4676	4255	3301	1342	598	42033
month minimum	375	1381	3308	4474	5419	5434	4687	4384	3691	2839	852	319	40989
day Maximum	82.3	129.6	172.6	204.0	216.3	216.4	200.7	182.4	173.0	155.5	90.3	58.2	216.4
day average	25.9	65.7	122.8	160.9	186.7	187.1	166.7	150.8	141.8	106.5	44.7	19.3	115.1
day minimum	0.0	0.0	0.0	0.0	35.7	0.0	18.1	17.5	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
China - K2 35.882, 76.513

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Heating													
month Maximum	661	523	470	397	364	318	287	289	346	447	521	621	4932
month average	572	449	439	376	346	299	260	257	313	419	466	549	4745
month minimum	484	382	411	350	326	268	237	237	291	388	417	477	4557
day Maximum	29.6	25.9	18.9	17.0	13.8	12.8	10.7	11.5	13.9	18.5	22.1	27.2	29.6
day average	18.4	15.9	14.2	12.5	11.2	10.0	8.4	8.3	10.4	13.5	15.5	17.7	13.0
day minimum	4.4	11.4	11.1	10.0	9.1	7.4	6.8	6.6	7.4	9.6	11.5	12.6	4.4
Cooling													
month Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
month average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
month minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
day Maximum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
day average	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
day minimum	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
DHW													
month Maximum	71	67	71	69	71	69	71	71	69	71	69	71	843
month average	71	65	71	69	71	69	71	71	69	71	69	71	841
month minimum	71	64	71	69	71	69	71	71	69	71	69	71	840
day Maximum	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
day average	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
day minimum	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Direct electric													
month Maximum	134	57	12	2	0	0	0	0	0	6	43	102	242
month average	67	17	4	1	0	0	0	0	0	2	14	51	156
month minimum	7	1	0	0	0	0	0	0	0	0	2	9	50
day Maximum	12.2	8.7	2.6	1.5	0.1	0.0	0.0	0.0	0.0	2.9	5.3	9.9	12.2
day average	2.2	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.6	0.4
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

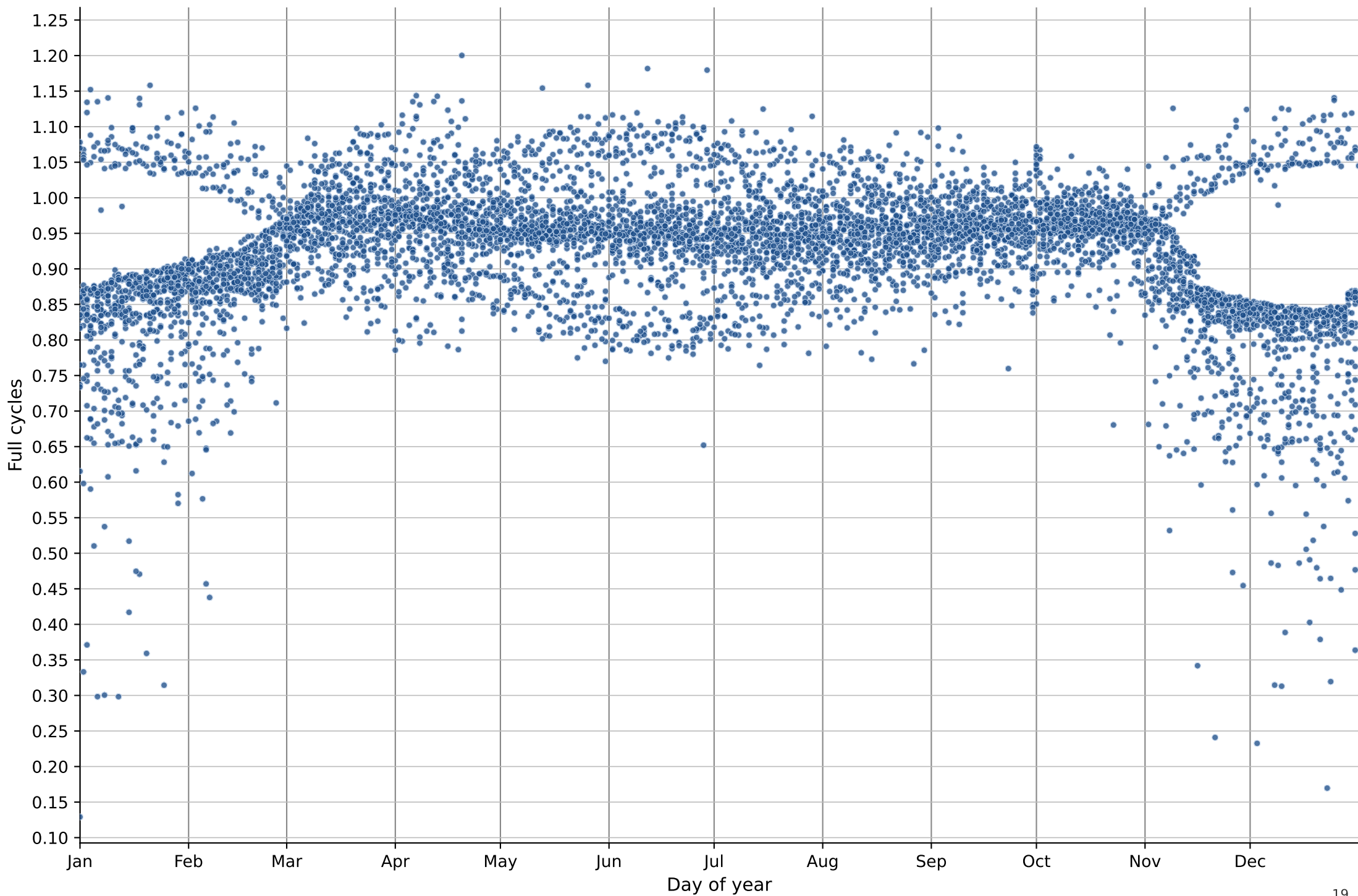
Heating, cooling and DHW are electricity. Direct electric is the part the heat pump could not cover.

Battery
China - K2 35.882, 76.513

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	All
Wasted													
month Maximum	7	299	1505	2656	3211	3159	2564	1887	1260	522	12	0	15422
month average	0	147	1116	2173	2969	2848	2107	1430	1076	375	4	0	14246
month minimum	0	60	829	1744	2490	2478	1621	1163	796	244	0	0	13024
day Maximum	6.6	39.8	96.0	127.2	141.6	123.4	117.5	103.5	67.0	41.6	3.0	0.0	141.6
day average	0.0	5.2	36.0	72.4	95.8	94.9	68.0	46.1	35.9	12.1	0.1	0.0	39.0
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	27.41	26.77	30.20	29.05	29.77	28.62	29.53	29.63	28.77	30.04	27.10	26.05	339.81
month average	26.38	25.39	29.97	28.96	29.59	28.47	29.34	29.51	28.66	29.81	26.14	25.41	337.62
month minimum	24.85	24.30	29.81	28.74	29.44	28.28	29.21	29.40	28.39	29.43	24.53	23.96	334.66
day Maximum	1.16	1.13	1.10	1.20	1.16	1.18	1.12	1.09	1.10	1.07	1.13	1.14	1.20
day average	0.85	0.90	0.97	0.97	0.95	0.95	0.95	0.95	0.96	0.96	0.87	0.82	0.92
day minimum	0.13	0.44	0.81	0.79	0.77	0.65	0.76	0.77	0.76	0.68	0.24	0.17	0.13
Charge C													
month Maximum	0.22	0.27	0.28	0.29	0.29	0.27	0.27	0.27	0.26	0.25	0.23	0.19	3.01
month average	0.21	0.26	0.27	0.28	0.27	0.26	0.26	0.26	0.26	0.25	0.23	0.18	2.98
month minimum	0.20	0.24	0.27	0.28	0.26	0.26	0.25	0.24	0.25	0.24	0.21	0.18	2.95
day Maximum	0.22	0.27	0.28	0.29	0.29	0.27	0.27	0.27	0.26	0.25	0.23	0.19	0.29
day average	0.18	0.22	0.25	0.26	0.25	0.24	0.24	0.24	0.24	0.23	0.19	0.17	0.22
day minimum	0.10	0.12	0.16	0.16	0.17	0.17	0.13	0.15	0.10	0.13	0.12	0.09	0.09
Discharge C													
month Maximum	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.16
month average	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.16
month minimum	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	2.16
day Maximum	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
day average	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18
day minimum	0.01	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.18	0.13	0.05	0.01

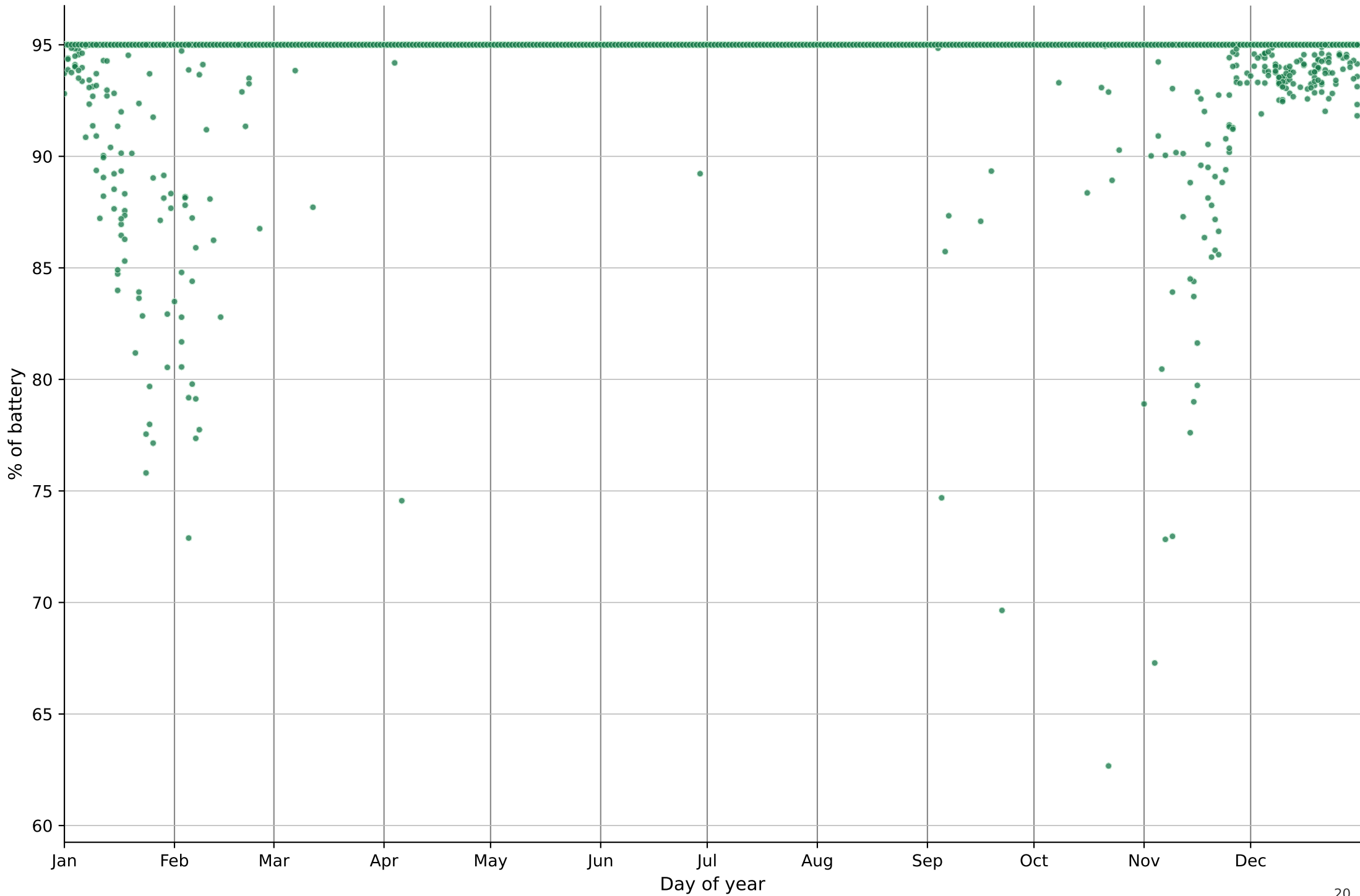
Wasted = PV left when the export price is negative and the battery is full. Full cycles = discharge kWh / 257.2 kWh. Battery export only into hours whose export price is above 0, highest price first. At 0 cent on

Battery cycles per day (discharge / 257.2 kWh)
China - K2 35.882, 76.513



Battery max charge state per day (257.2 kWh = 100 %)

China - K2 35.882, 76.513



Battery min charge state per day (257.2 kWh = 100 %)
China - K2 35.882, 76.513

