

HISTORIC SIMULATION REPORT

# California

## Workspace

**Site location**

California (34.06, -118.24) · UTC

**Battery**

10 (10 kWh)

**Inverter**

Fox ESS H1-5.0-E (5 kW)

**Solar Arrays**

solar10 (Jinko Tiger Neo 54HL4R 445W, 10 panels, 4.5 kW)

**Load profile**

household load 2800 (2,800 kWh/yr)

**Heat pump**

Valiant (space 725 kWh · hot water 614 kWh)

**Tariff**

fixed  
import: 0.28 · export: 0.12 · daily standing: 0.60

### Summary

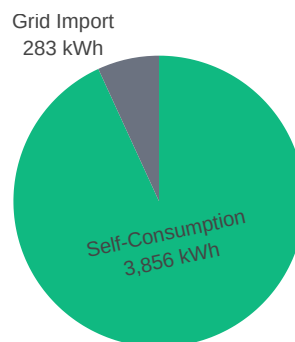
☀️ Solar Generated	<b>6,644 kWh</b>	(6,644 (utilised) + 0 (clipped))
⚡ Load Consumed	<b>4,139 kWh</b>	<b>1,159 GBP</b> (cost without solar)
🔥 Space heating (heat pump)	<b>725 kWh</b>	
🔥 Hot water (heat pump)	<b>614 kWh</b>	
🔌 Grid Import	<b>283 kWh</b>	<b>79 GBP</b>
🔌 Grid Export	<b>2,714 kWh</b>	<b>326 GBP</b>
<b>\$ Total benefit from solar &amp; battery</b>	<b>1,405 GBP</b>	
<b>\$ New electricity bill</b>	<b>-27 GBP</b>	(79 (import) - 326 (export) + 219 (standing))

### Self-Consumption

Share of load met from PV and batteries vs grid import.

# 93.2%

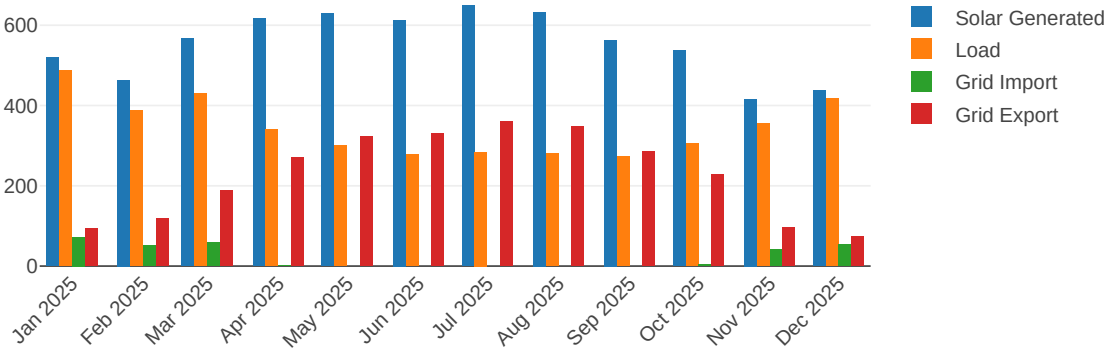
Spring: 94.4% Summer: 100.0%  
Autumn: 95.1% Winter: 86.3%



# Yearly Summary

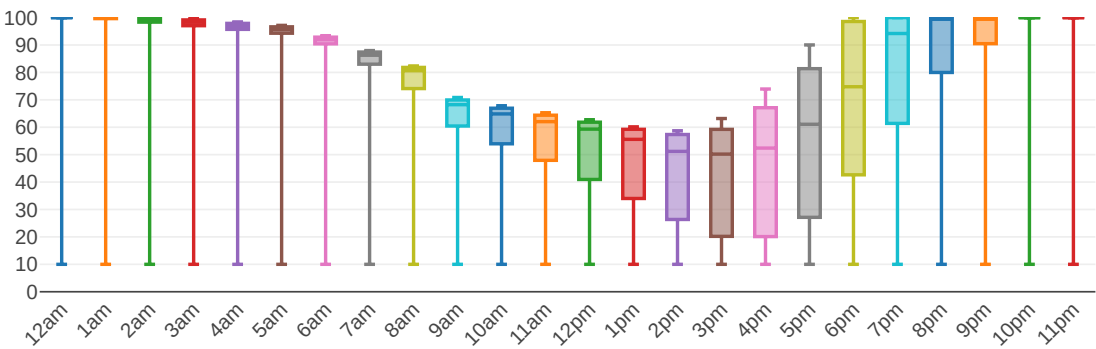
## Monthly Energy Totals

Energy flows by month: solar, load, grid import, grid export.



## SOC Distribution by Hour

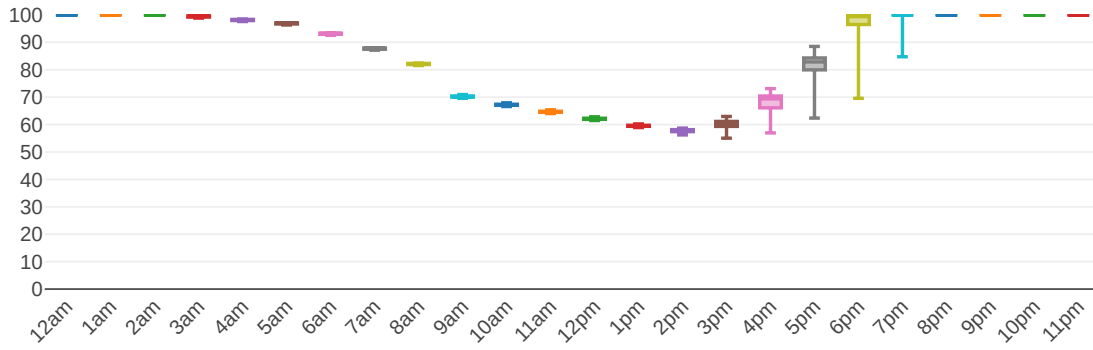
Spread of battery charge levels by hour (box plot).



# Summer Monthly Summary

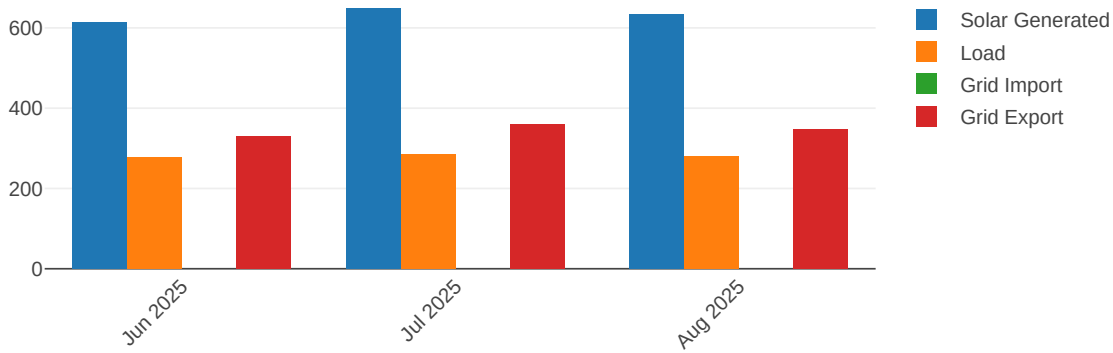
## Summer SOC Distribution by Hour

Spread of battery charge levels by hour for June, July, August.



## Summer Energy Totals by Month

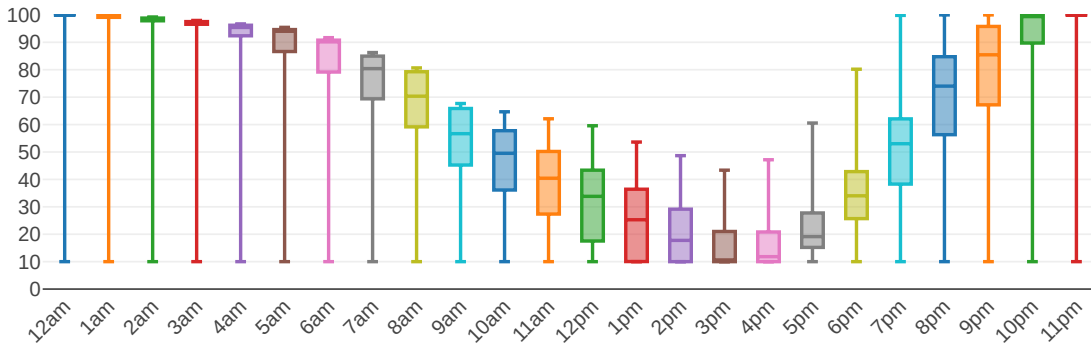
Energy flows for June, July, August: solar, load, grid import, grid export.



# Winter Monthly Summary

## Winter SOC Distribution by Hour

Spread of battery charge levels by hour for December, January, February.



## Winter Energy Totals by Month

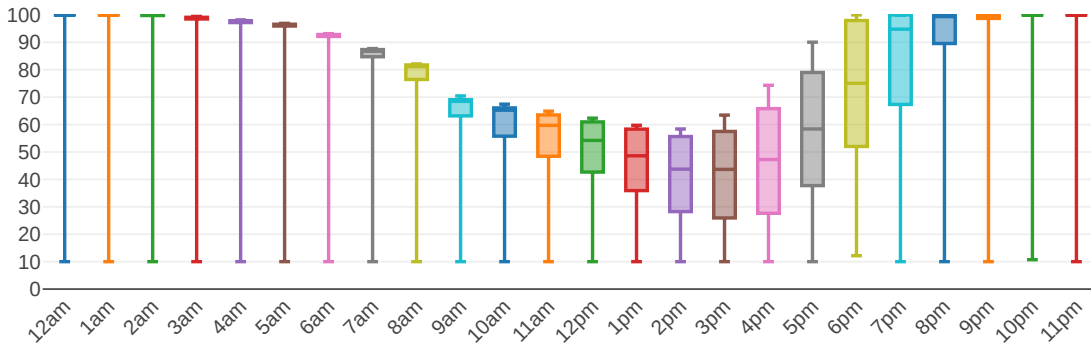
Energy flows for December, January, February: solar, load, grid import, grid export.



# Spring Monthly Summary

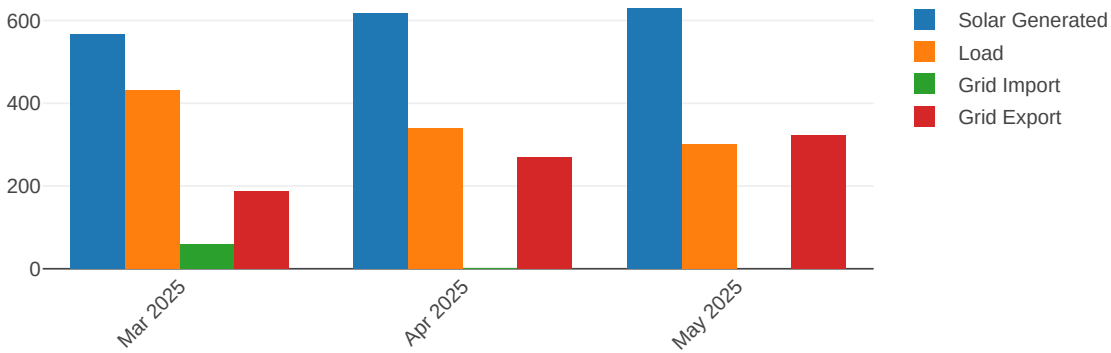
## Spring SOC Distribution by Hour

Spread of battery charge levels by hour for March, April, May.



## Spring Energy Totals by Month

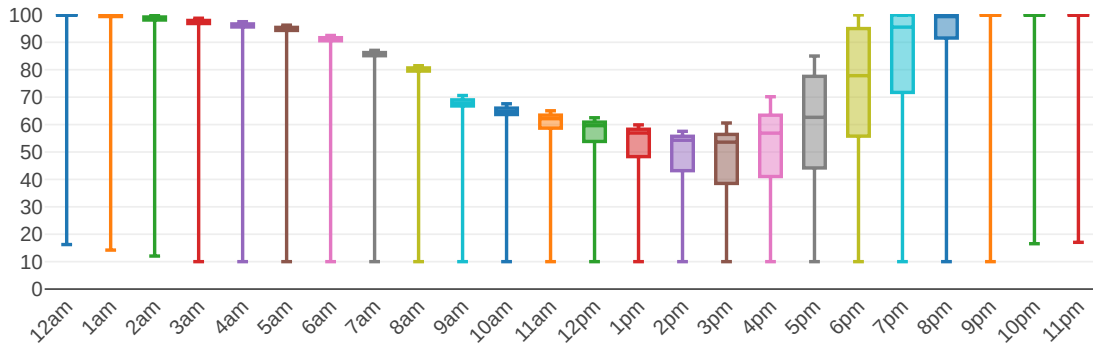
Energy flows for March, April, May: solar, load, grid import, grid export.



# Autumn Monthly Summary

## Autumn SOC Distribution by Hour

Spread of battery charge levels by hour for September, October, November.



## Autumn Energy Totals by Month

Energy flows for September, October, November: solar, load, grid import, grid export.

