Latitude

Longitude

Time Zone

Module Tilt

Start Date

End Date

Calculate

Latitude

Time Zone

Start Date

Time Zone

Time zone that the location is in

tude

Module Tilt

End Date

Calculate

Latitude

Longitude

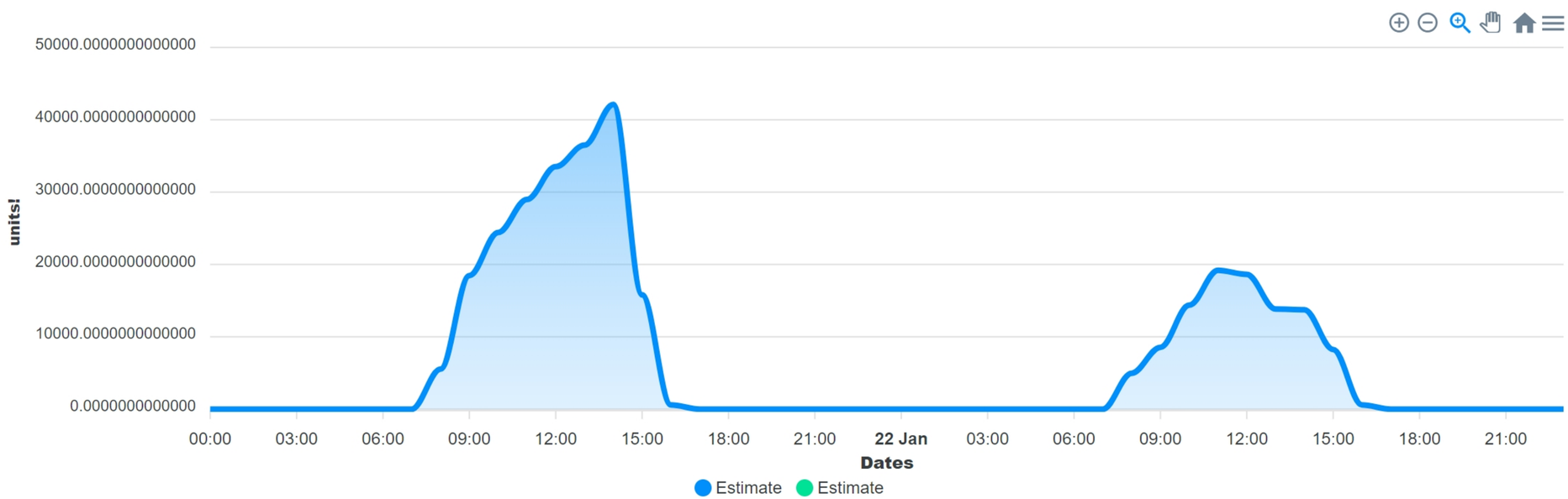
Time Zone

Module Tilt

Start Date

End Date

Calculate



Time Zone

Time zone that the location is in

Latitude

tude

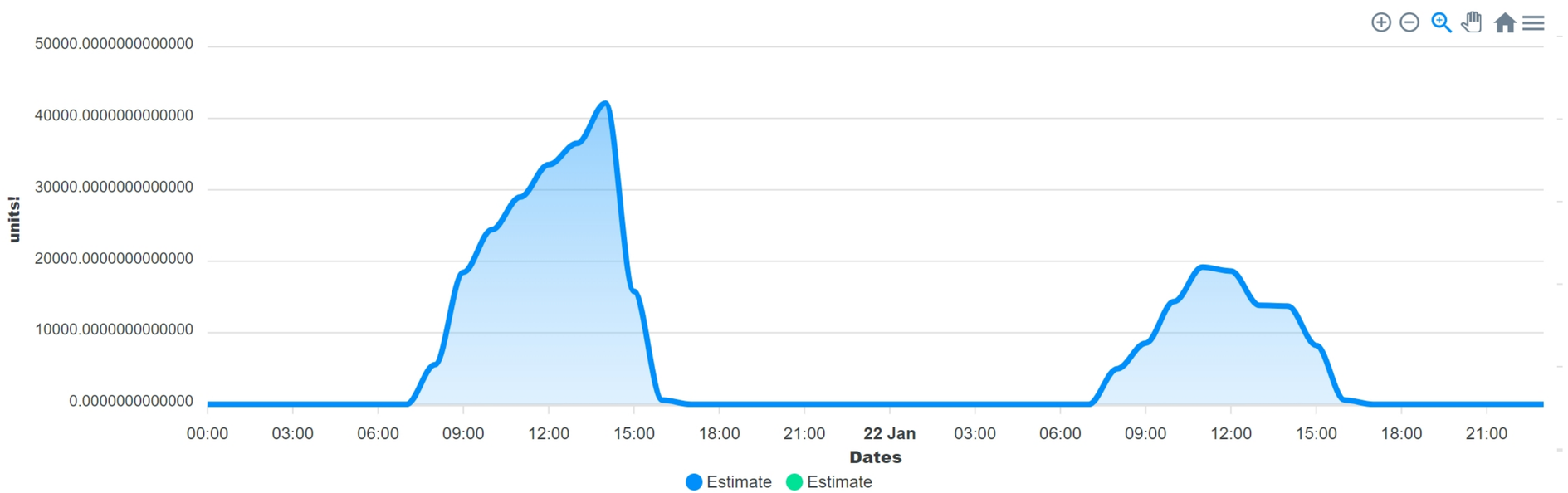
Time Zone

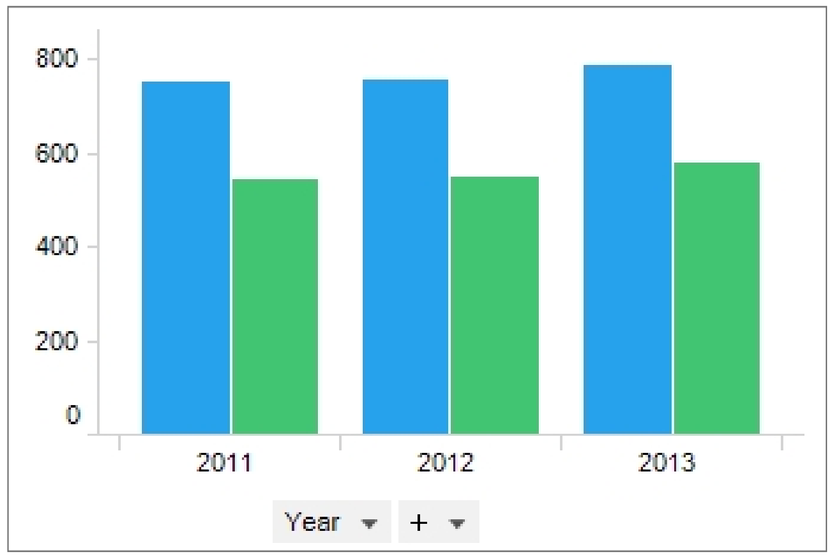
Module Tilt

Start Date

End Date

Calculate





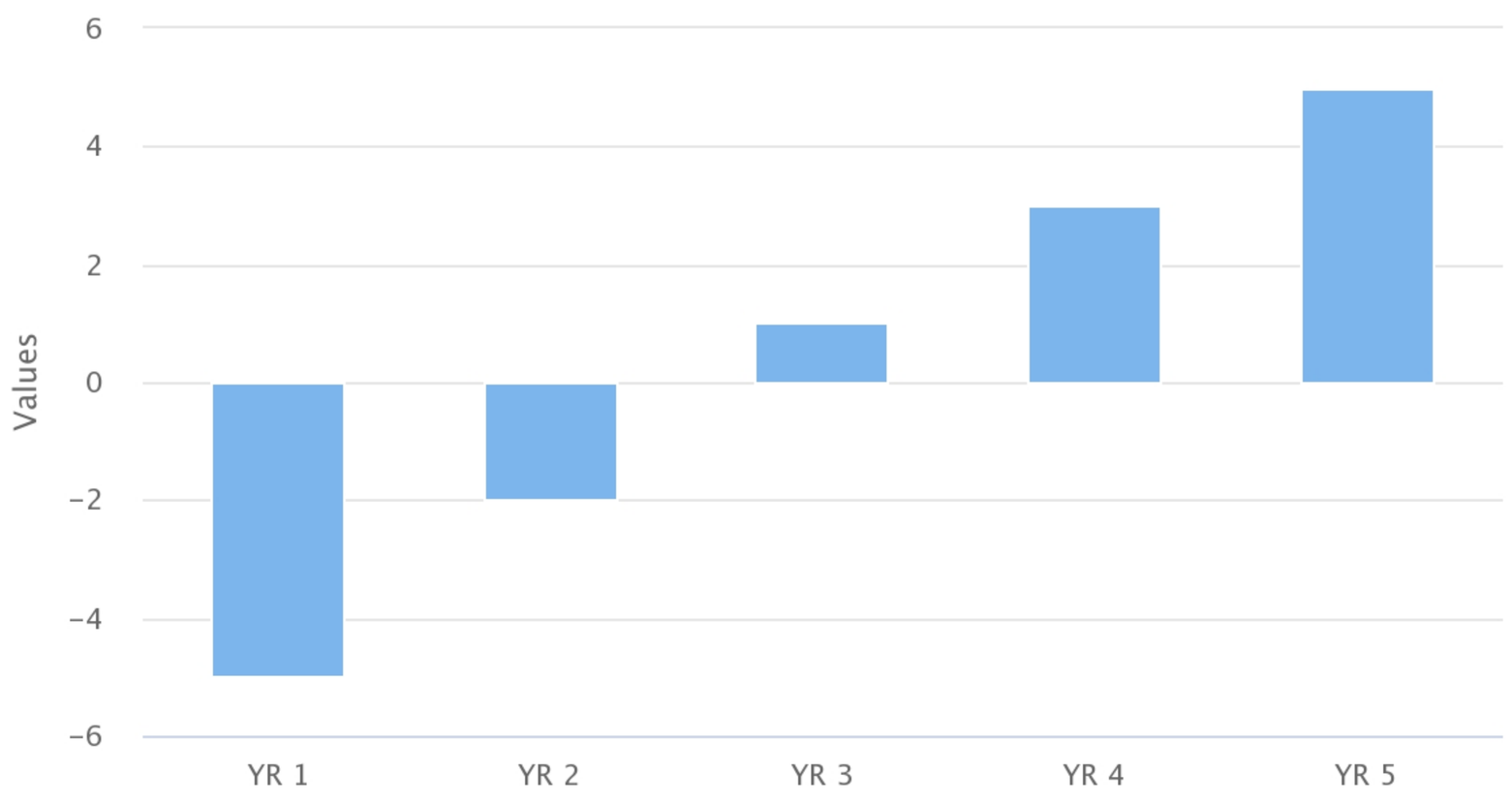
kWh Generated:

78,000 kWh / year

Return on Investment:

$250,000.00

Amount of Panels	Panel Angle	Panel Type
183	50.5	A



SolarSize Application

A tool that utilizes building energy consumption metrics and solar intensity data to calculate accurate ROIs on solar power generation. This tool will allow customers to see how different photovoltaic (PV) systems match up to their requirements, so they can make informed decisions.

SolarSize Team

Tristan Brown-Hannibal
- Data representation
- Server/web management
- Back-End Design

Karlee Fidek
- Documentation
- GitHub/Wiki Management
- Front-End Design

Kaden Goski
- Data Processing/Management
- Vlog Editor

General
ROI
Solar Model

Return on Investment Calculation

$$\frac{\text{Total Savings}}{\text{Total Cost}} \times 100$$

Cash Flows Considered

- Capital Cost
- Interest Costs
- Maintenance Costs
- Annual Savings
- Rebates/Grants

Solar Data API

POWER
Prediction Of Worldwide Energy Resources

Irradiance Values

The model considers both direct and diffuse irradiance components.