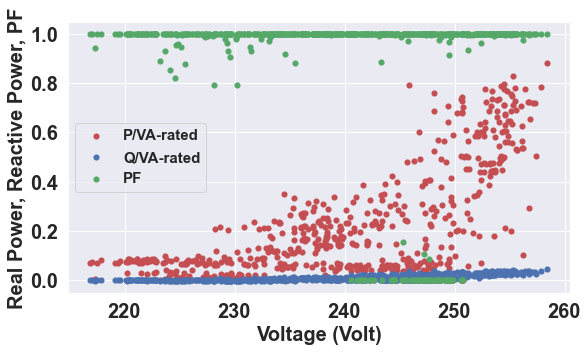
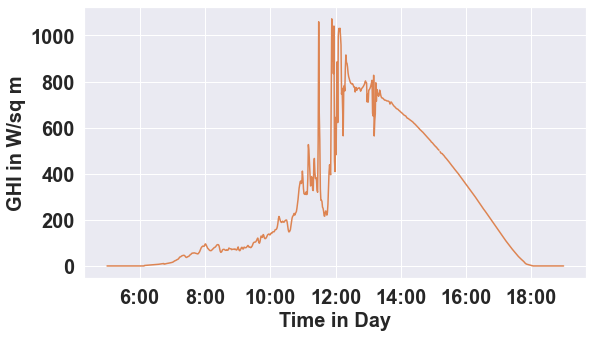
Solar Curtailment Project Progress Journal

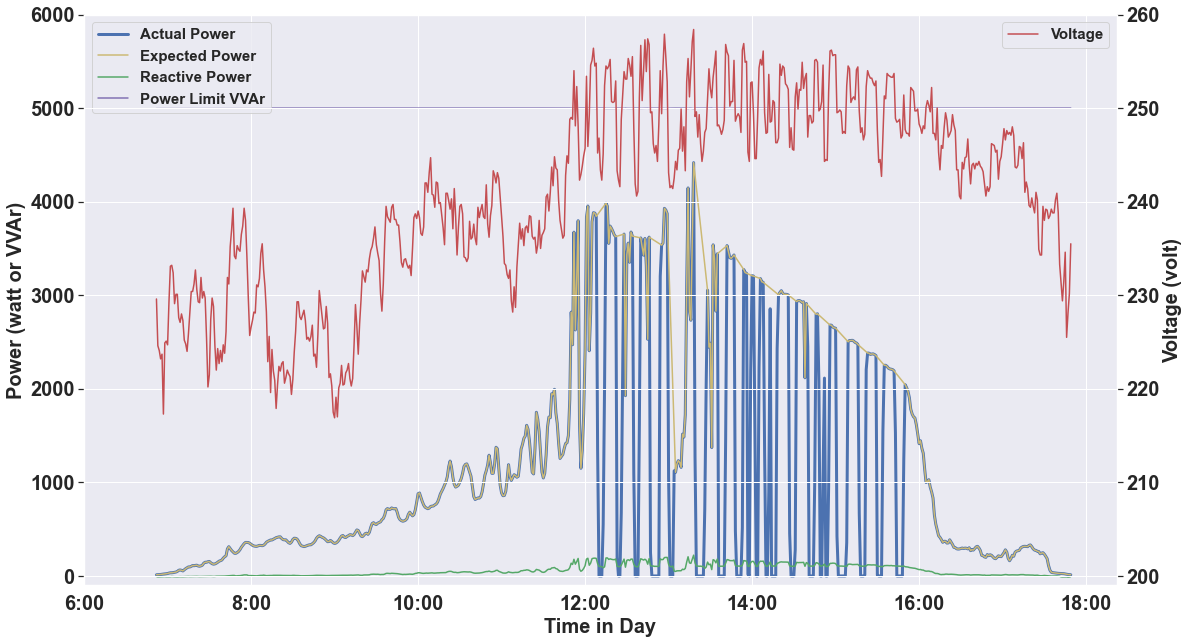
# 13/09/2022

# Result on Tripping – non clear sky day (sample 1)

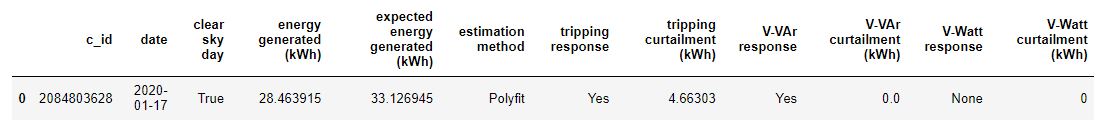
Graphical user interface, application, website

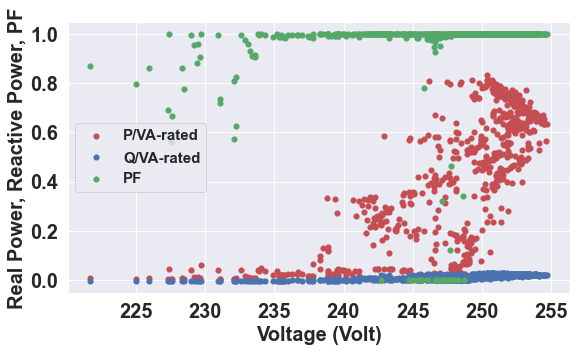
Description automatically generated

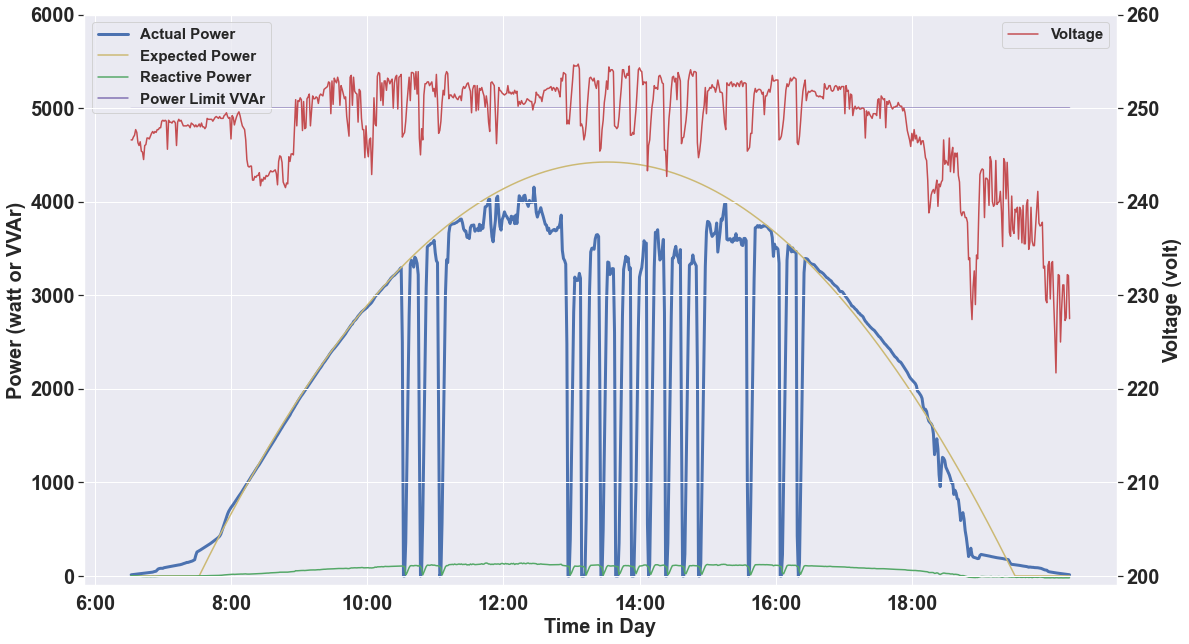




# Result on Tripping – clear sky day (sample 11)



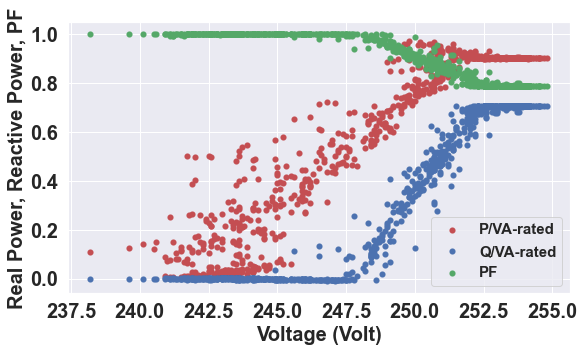


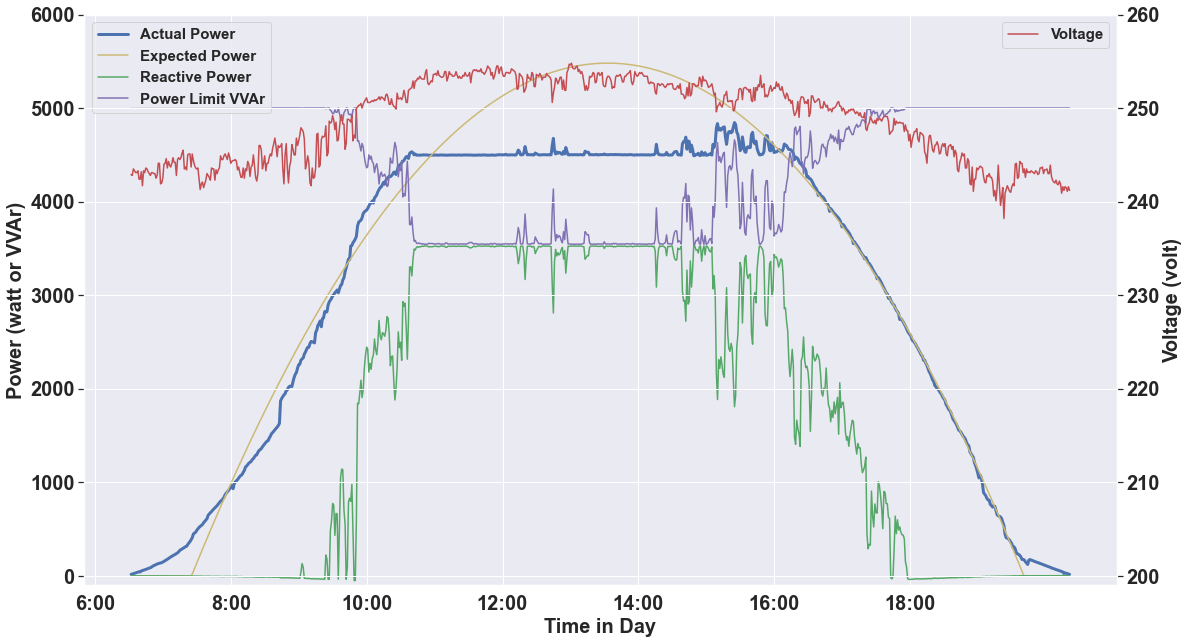


# Result on VVAr (sample 14)

Graphical user interface, application, Word

Description automatically generated

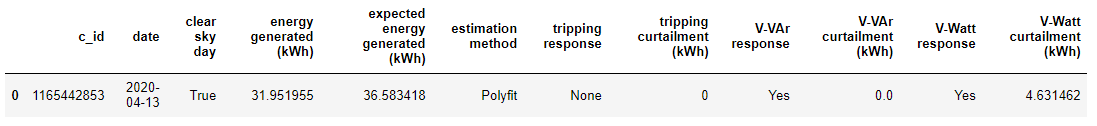
 

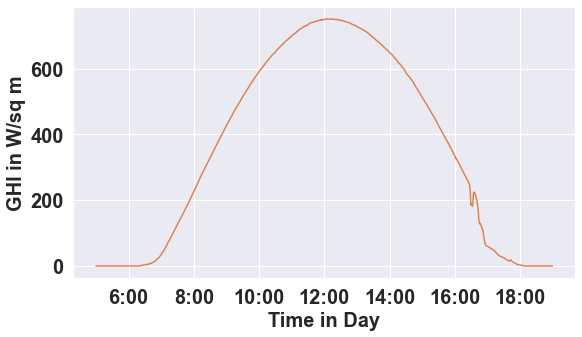
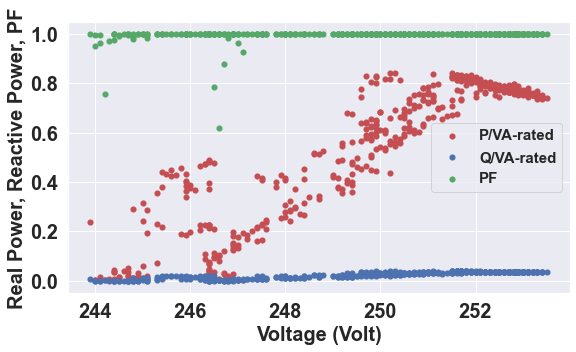


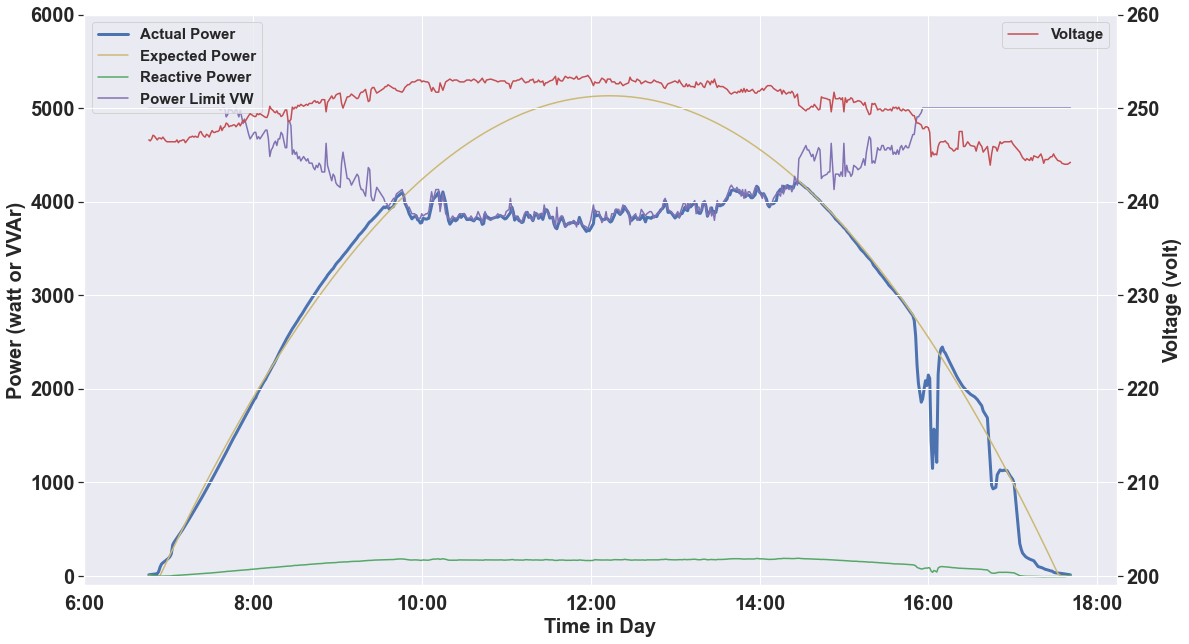
## There are two issues:

1. In the reactive power scatter plot, the Q/VA should have been negative. Problem with polarity correction?
2. In the power and voltage plot, the power limit vvar is below the actual power value. Probably the actual VA limit of the inverter is higher than the ac capacity of the inverter?

# Result on VWatt (sample 4)





# Result on Incomplete Dataset (sample 5)



The tool will judge the dataset is incomplete only if there are less than 1000 rows in the data. The data should be more than that because the data resolution is either 60 or 5 seconds in SolA dataset.

# Polyfit with Constrain Idea Testing

When we implement the polyfit with constrain into a clear sky day without curtailment, it seems we get overestimating:

With constrain:

Chart, line chart

Description automatically generated

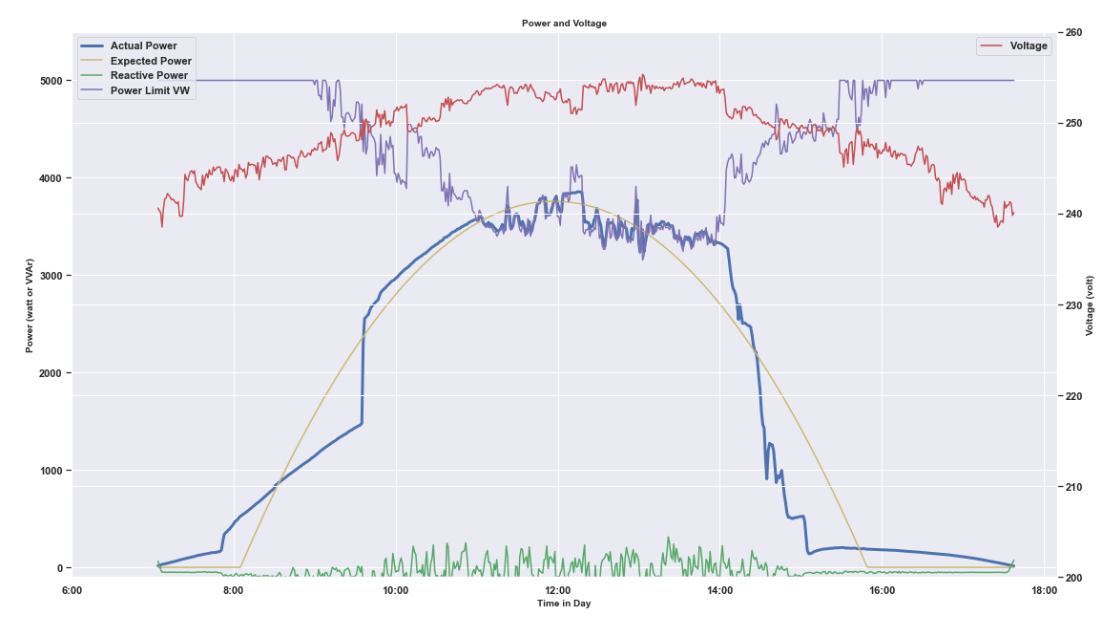
Without:

Chart, line chart

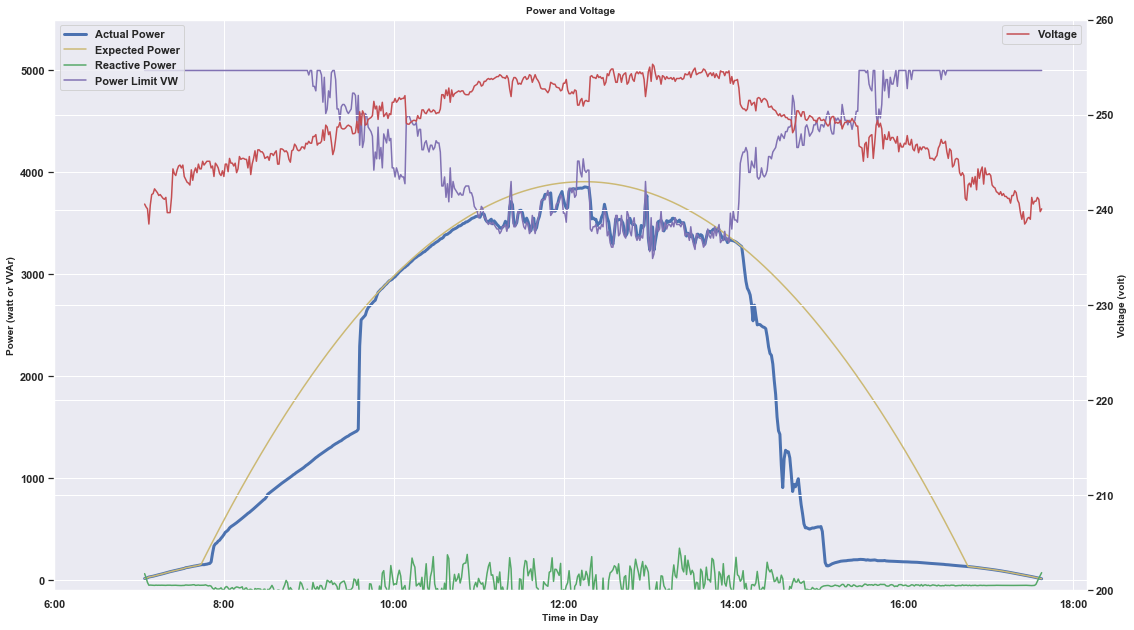
Description automatically generated

Should we give up on this? Or should we still think to optimize it since VWatt calculation is inaccurate and sometime it is underestimating, eg in sample 3:

Without constrain:

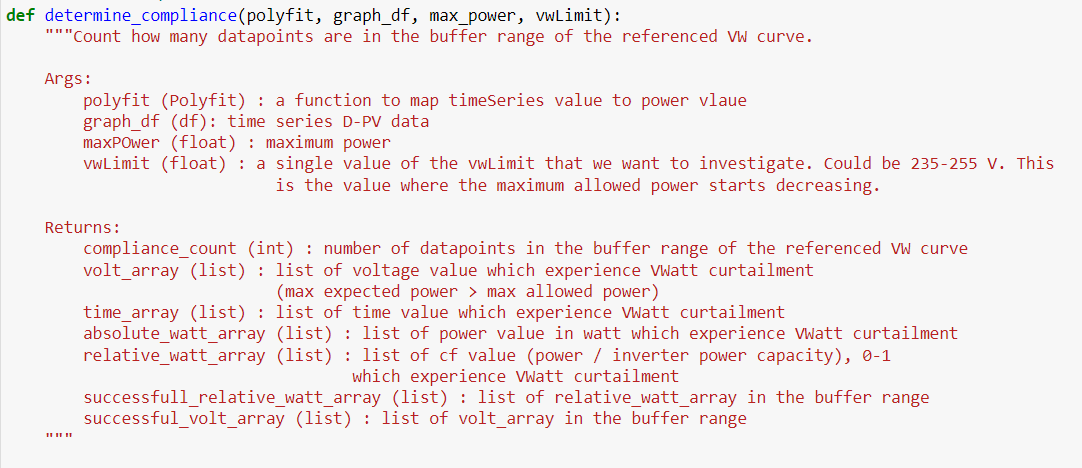


With constrain:



Documentation

* Function and class docstring are done



* Naming convention edit is done:
  + Function, variable: lower\_case
  + Constant: UPPER\_CASE
  + Class: CamelCase
* Readme is done : https://github.com/mssamhan31/Solar-Curtailment
  + About
  + Getting started
  + Tool use demonstration: Screen capture of input, & output
  + High Level Explanation of How The Algorithm Works
  + Tool Limination & notes
  + Some Related Articles and Papers
  + Contributing
  + Project Partners
  + Authors
  + License
  + Contact
* Dataset information is done : https://github.com/mssamhan31/Solar-Curtailment/blob/main/documentations/solar%20curtailment%20dataset%20information.docx