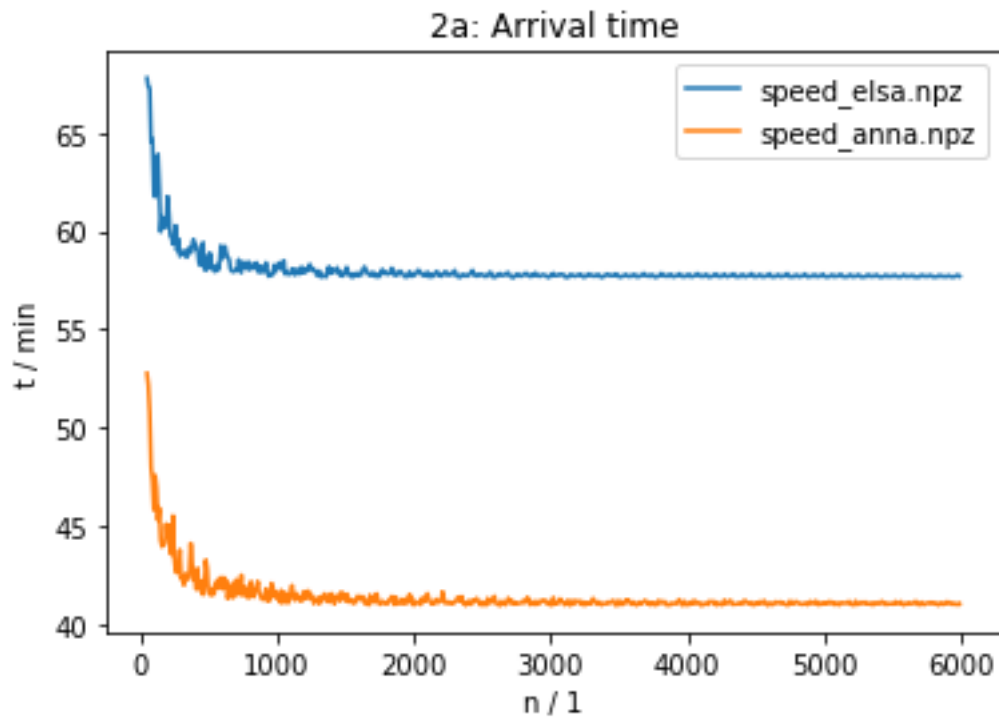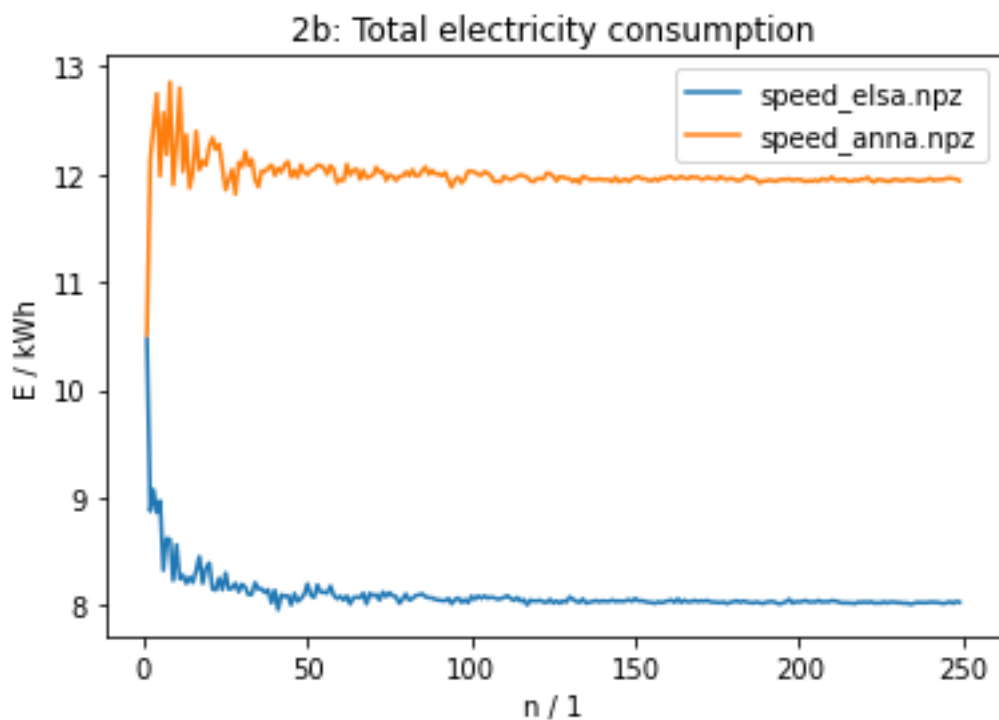# Part 2, Integration
a: Arrival time:

As you can see in the plot the time doesn't really change 2000 subintervals. The times are:
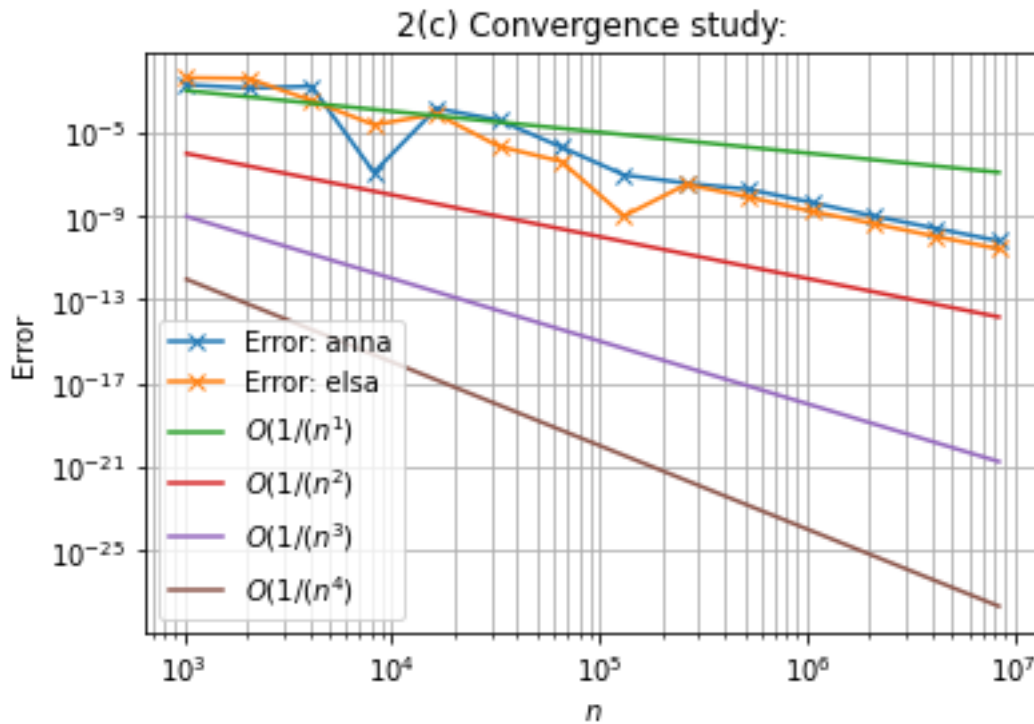
- Anna: 41 min
- Elsa: 58 min

c: total electricity consumption:

The plot shows that after n = 200 the total Energy Consumption doesn't really change. The Energy consumption is:

- Elsa: 8.0 kWh
- Anna: 11.9 kWh

c: Convergence study

For n >= 10^6 the Errors are parallel to the line 1/n². That means for a big enough n the Error get smaller by n² what matches with the theory.

References:

- "The Hitchhiker's Guide to the Galaxy" by Douglas Adams

Written by Tim Selliger