

Overview of the results of the household CHR38 Single man, 30 - 64 years, without work 0

Calculation Time
Freitag, 1. Januar 2016 - Sonntag, 1. Januar 2017

Energy Intensity: Random

Seed 4011

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:23:06

Table of Contents

- Totals..... 3
- Persons..... 5
- Activity Frequency Charts..... 6
- Activity Distribution per Person.....7
- Time Use per Person per Affordance Per Person..... 8
- Energy use per person per affordance..... 10
- Time Use per Person Per Affordance according to different category definitions..... 12
- Overview of the actions of each member of the household..... 14
- Overview of the time of the use per load type per device.....15
- Energy/Resource use distribution per load type per affordance..... 17
- Energy use for each load type for each device.....22
- Duration curve for each device for each load type..... 26
- Duration curve for each load type..... 28
- Grouped energy use for each load type for each device..... 30
- Example of the device profiles for each load type..... 34
- Overview of the time and power of the use per load type per device..... 48
- Energy use per load type during different seasons, split by weekday/saturday/sunday..... 50
- Location Distribution per Person..... 52
- Actions.csv..... 53
- Sum Profiles..... 54
- Time Profiles..... 58
- Variables..... 59

Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	17007.63	L
Electricity	1644.77	kWh
Warm Water	29975.32	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	46.47	L
Electricity	4.49	kWh
Warm Water	81.90	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	15.00	L/Min
Electricity	-276.73	5622.14	Watt
Warm Water	0.00	11.11	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	17007.63	L
Electricity	1644.77	kWh

Warm Water	29975.32	L
------------	----------	---

Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	46.47	L
Electricity	4.49	kWh
Warm Water	81.90	L

Persons

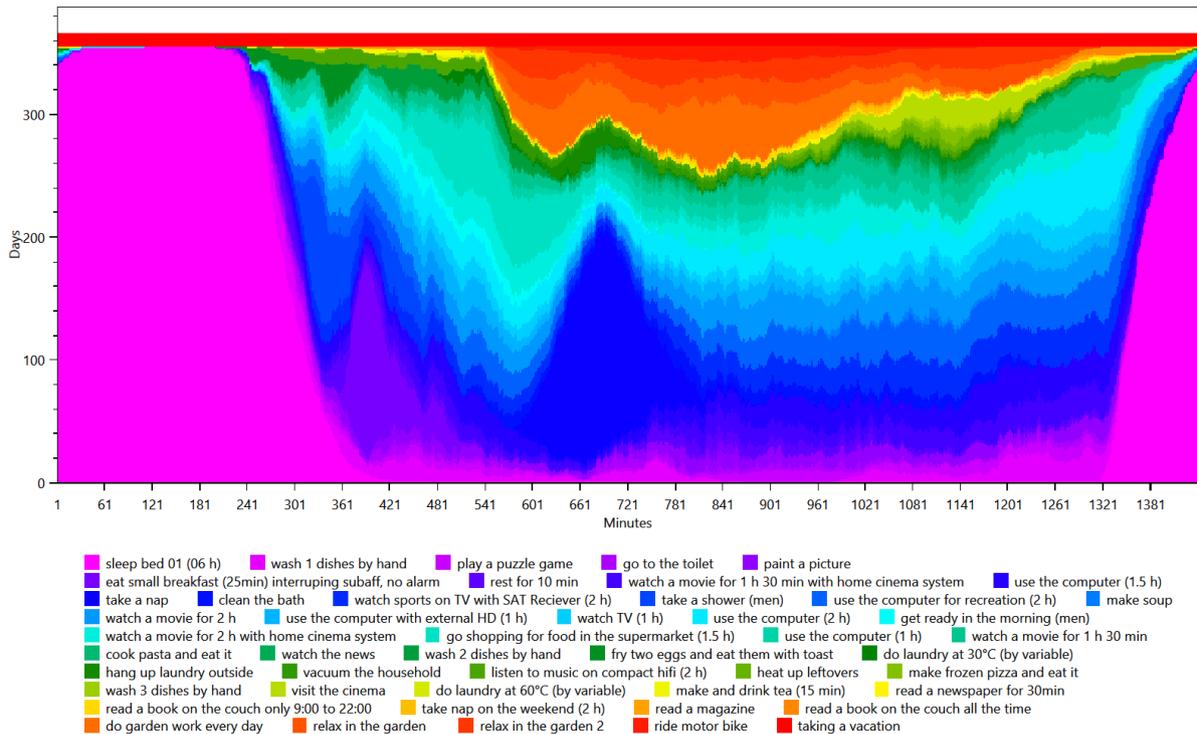
- HH0
 - CHR38 David (55/Male)(55/Male)

Activity Frequency Charts

This is made from the files starting with: ActivityFrequenciesPerMinute

These charts show an ordered distribution of times of the activities of each person. This helps with judging quickly if a person is sleeping correctly and if they are going to work regularly.

HH0 - CHR38 David (55 Male)

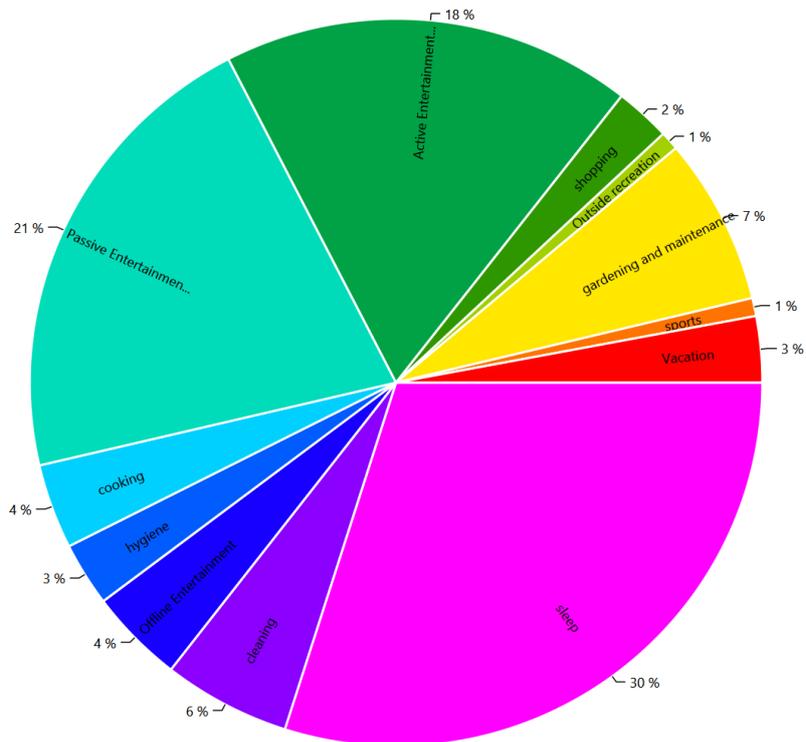


Activity Distribution per Person

This is made from the files starting with: ActivityPercentage

This shows the distribution of the activities, grouped by the affordance AffordanceToCategories.

HH0 - CHR38 David (55 Male)

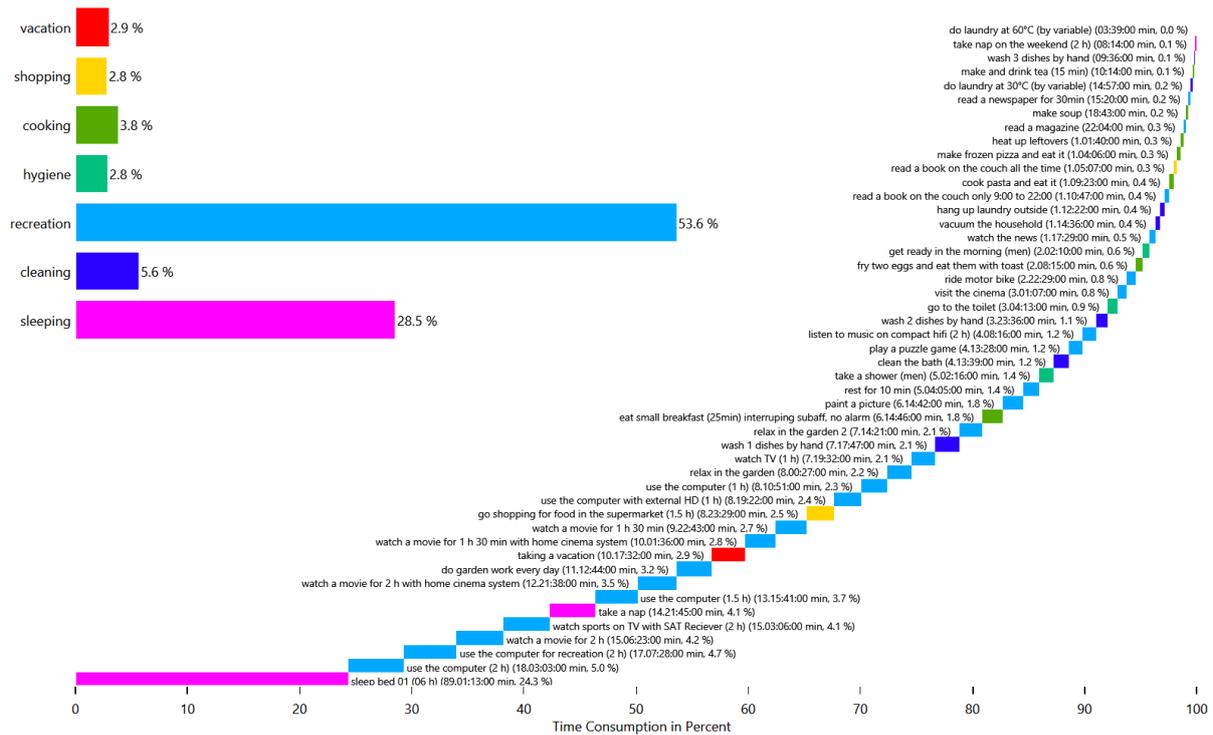


Time Use per Person per Affordance Per Person

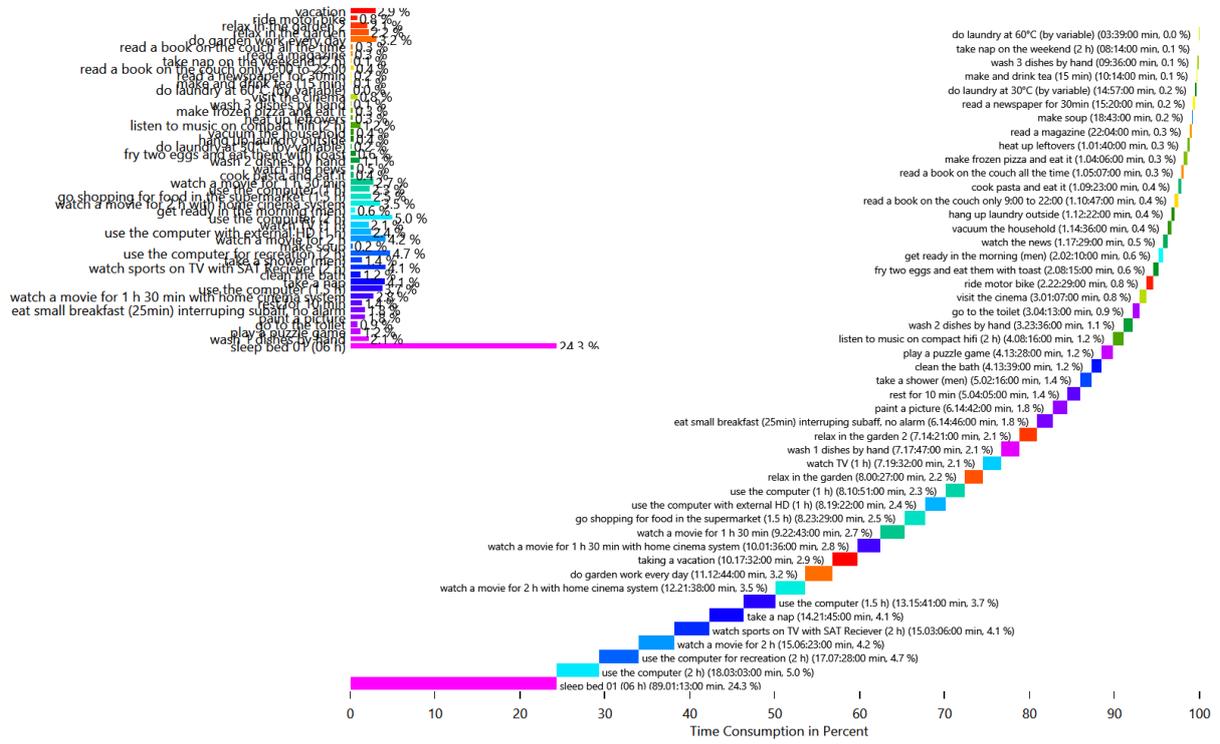
This is made from the files starting with: AffordanceTimeUse

These charts show how the people in the household use their time. This shows the individual affordances to help find problems in the household definition.

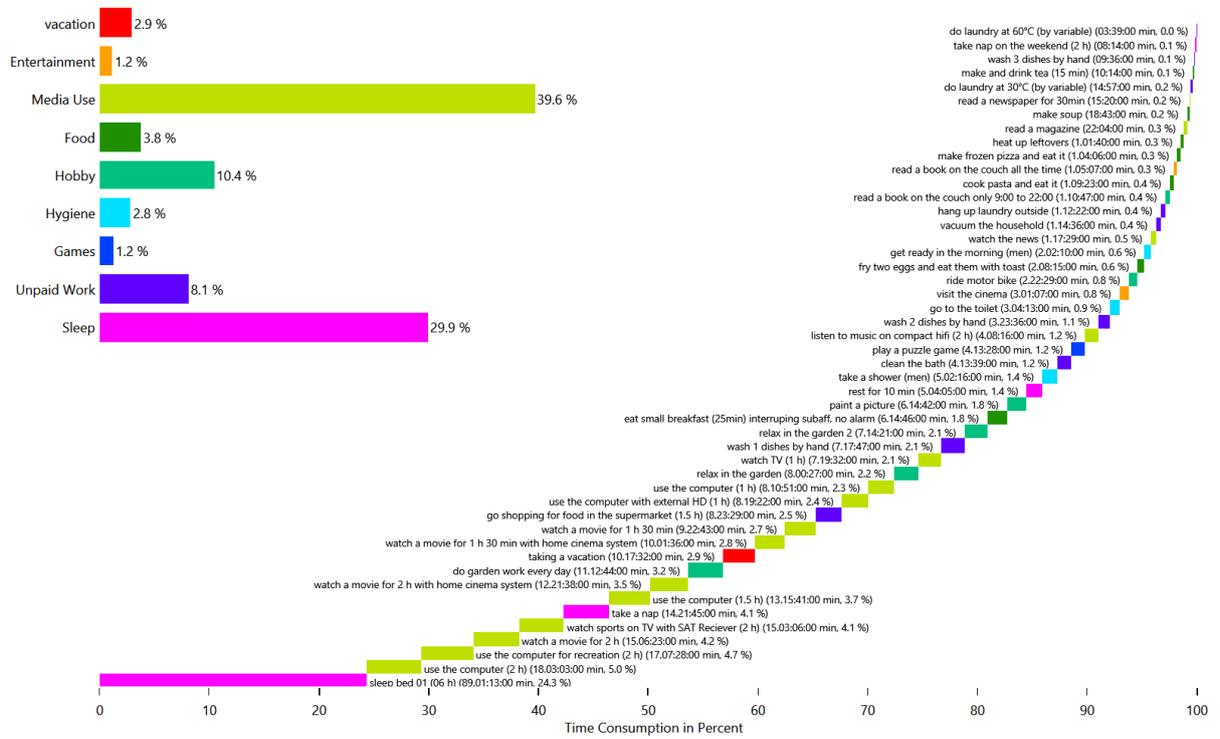
HH0 - CHR38 David (55 Male)



HH0 - CHR38 David (55 Male)



HH0 - CHR38 David (55 Male)

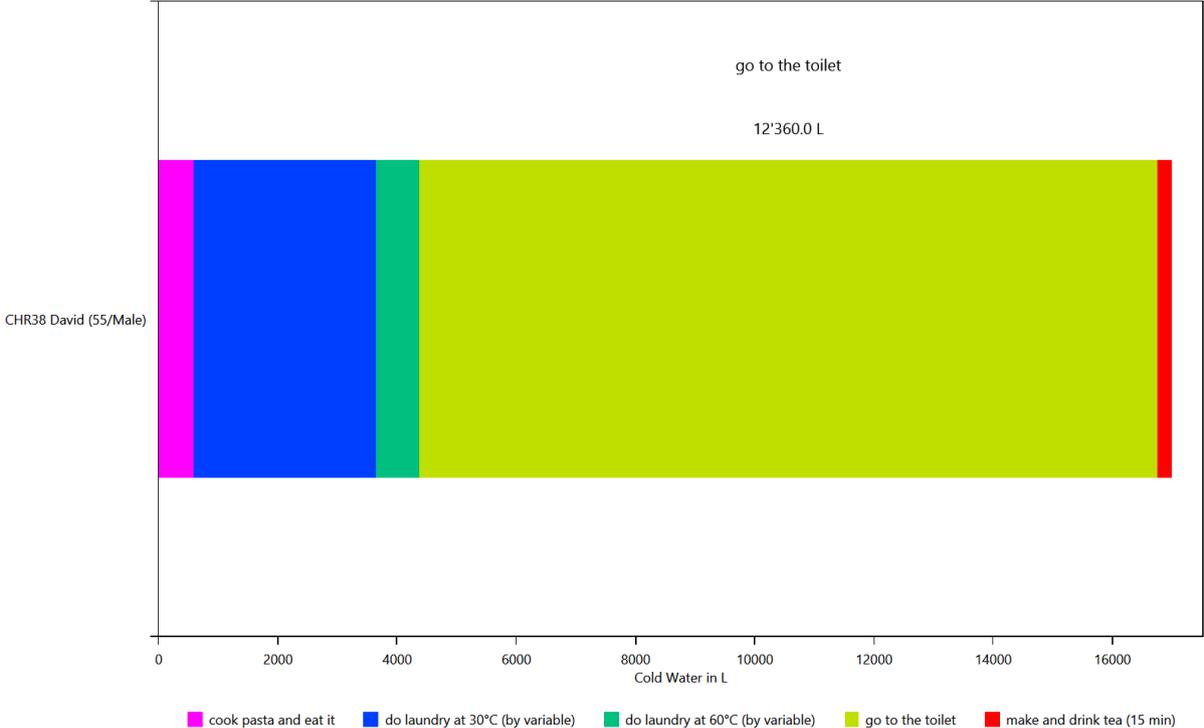


Energy use per person per affordance

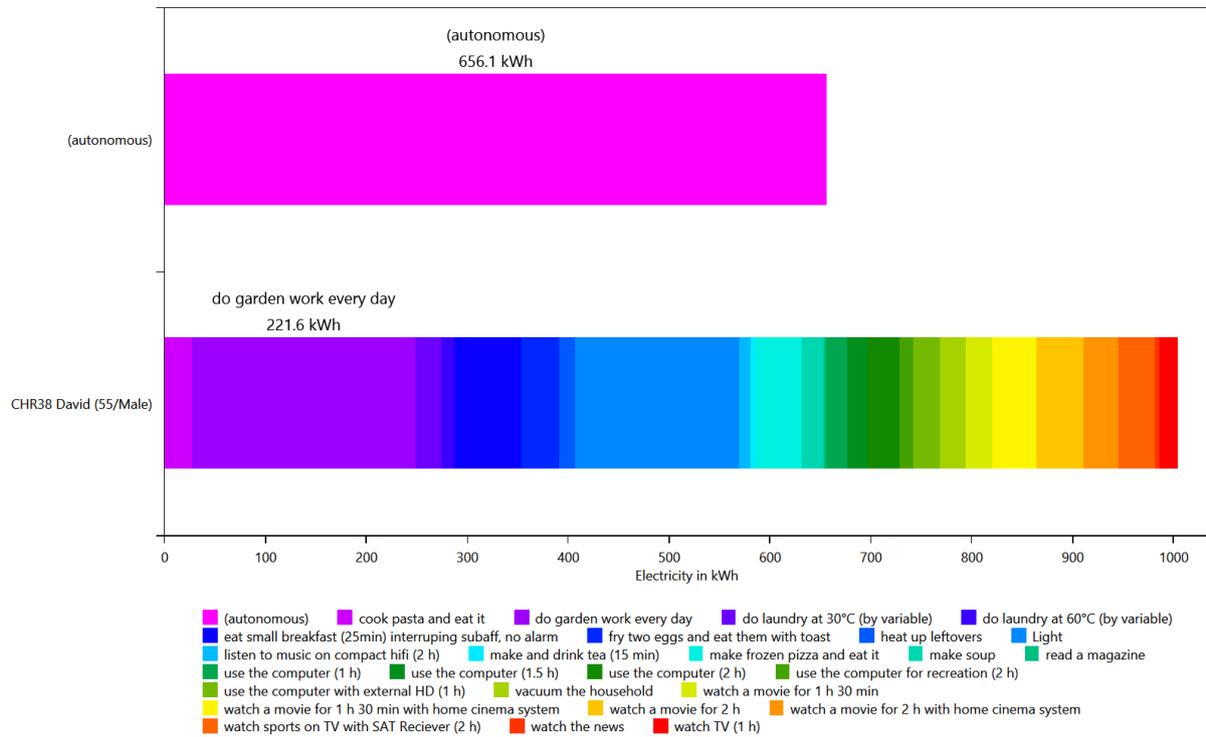
This is made from the files starting with: `AffordanceEnergyUsePerPerson`

This shows the distribution of the energy/ressource use to each affordance by load type and by person. This helps with figuring out if a person is using too much electricity.

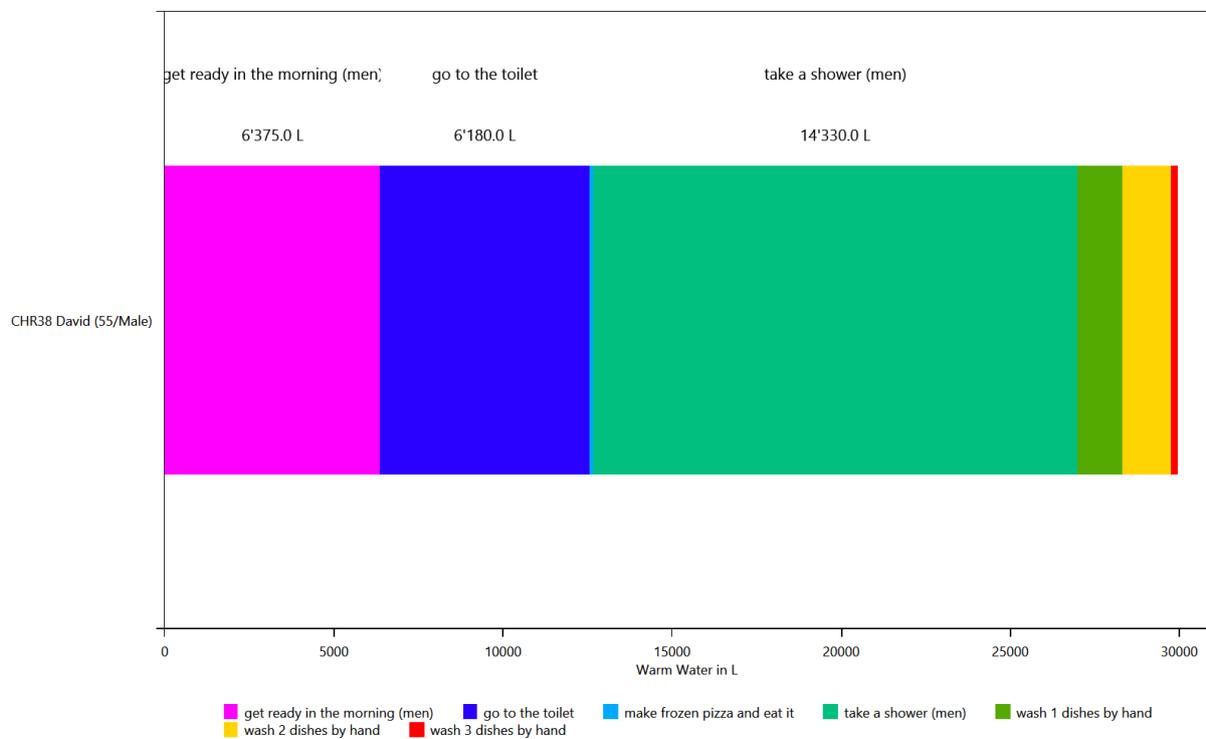
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

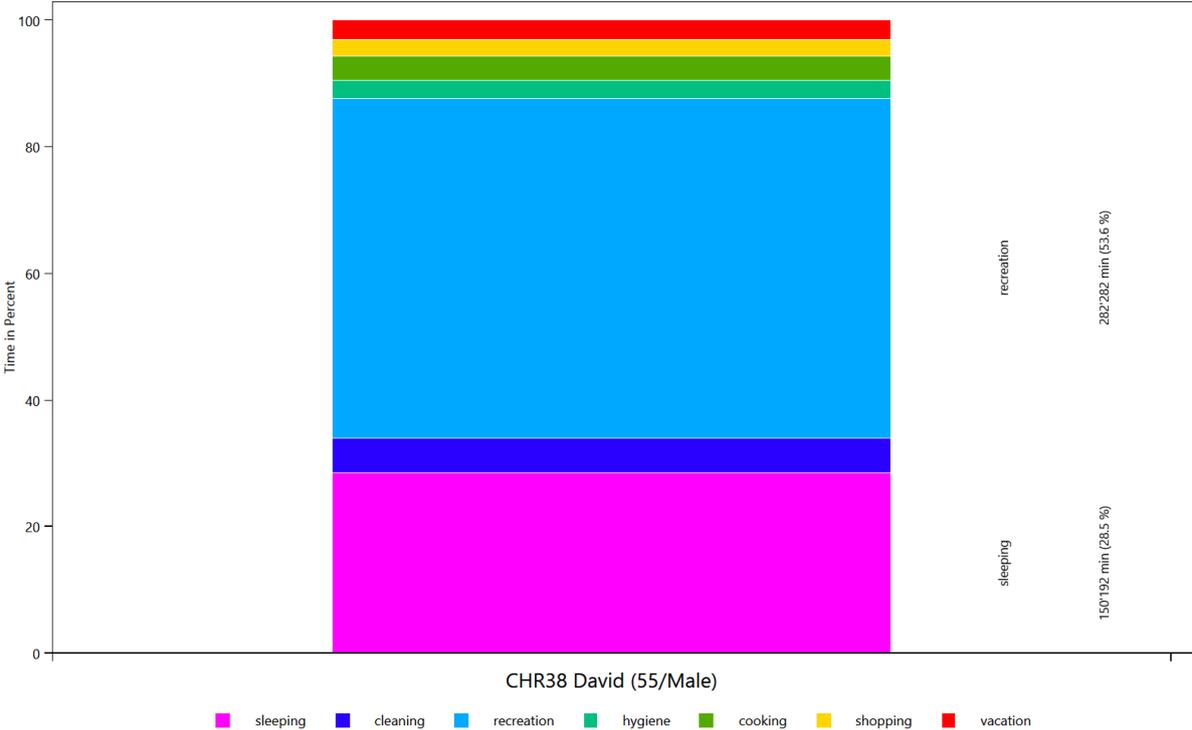


Time Use per Person Per Affordance according to different category definitions

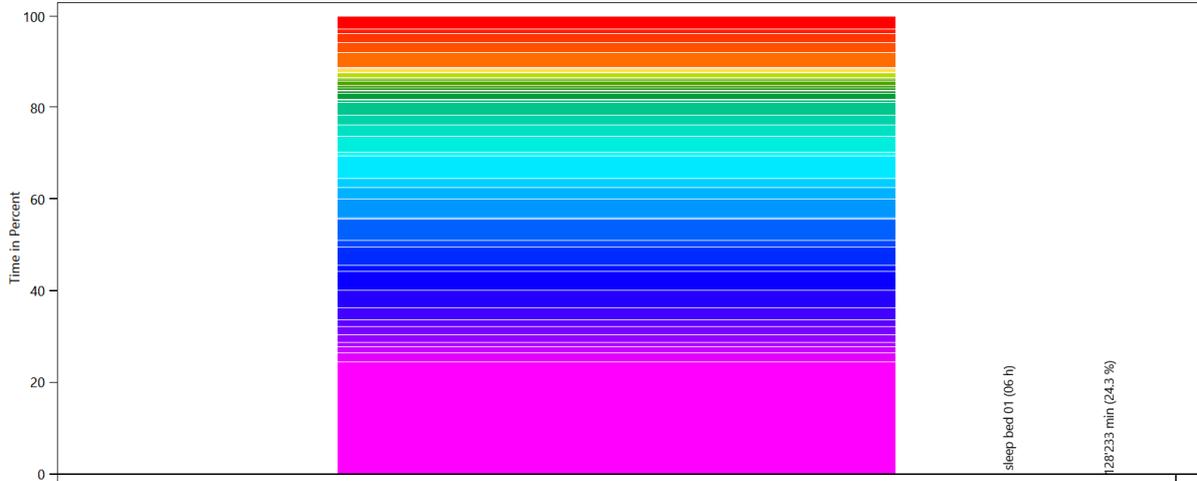
This is made from the files starting with: AffordanceTaggingSet

These charts show how the people in the household use their time. To help with analysis, the activities can be grouped by various criteria. This is done with the affordance tagging sets in the LPG.

Basic Tagging - HH0



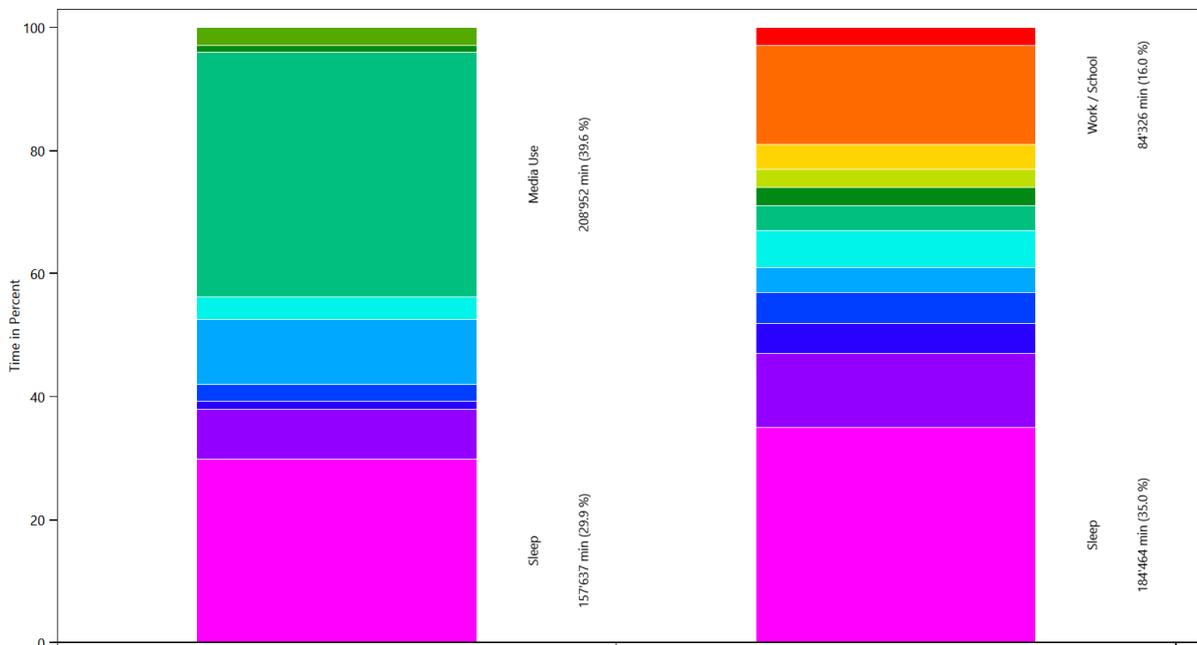
Tagging Set For Planning - HH0



CHR38 David (55/Male)

- sleep bed 01 (06 h)
- wash 1 dishes by hand
- play a puzzle game
- go to the toilet
- paint a picture
- eat small breakfast (25min) interrupting subaff, no alarm
- rest for 10 min
- watch a movie for 1 h 30 min with home cinema system
- use the computer (1.5 h)
- take a nap
- clean the bath
- watch sports on TV with SAT Receiver (2 h)
- take a shower (men)
- use the computer for recreation (2 h)
- make soup
- watch a movie for 2 h
- use the computer with external HD (1 h)
- watch TV (1 h)
- use the computer (2 h)
- get ready in the morning (men)
- watch a movie for 2 h with home cinema system
- go shopping for food in the supermarket (1.5 h)
- use the computer (1 h)
- watch a movie for 1 h 30 min
- cook pasta and eat it
- watch the news
- wash 2 dishes by hand
- fry two eggs and eat them with toast
- do laundry at 30°C (by variable)
- hang up laundry outside
- vacuum the household
- listen to music on compact hifi (2 h)
- heat up leftovers
- make frozen pizza and eat it
- wash 3 dishes by hand
- visit the cinema
- do laundry at 60°C (by variable)
- make and drink tea (15 min)
- read a newspaper for 30min
- read a book on the couch only 9:00 to 22:00
- take nap on the weekend (2 h)
- read a magazine
- read a book on the couch all the time
- do garden work every day
- relax in the garden
- relax in the garden 2
- ride motor bike
- vacation

Wo bleibt die Zeit - HH0



CHR38 David (55/Male)

Reference

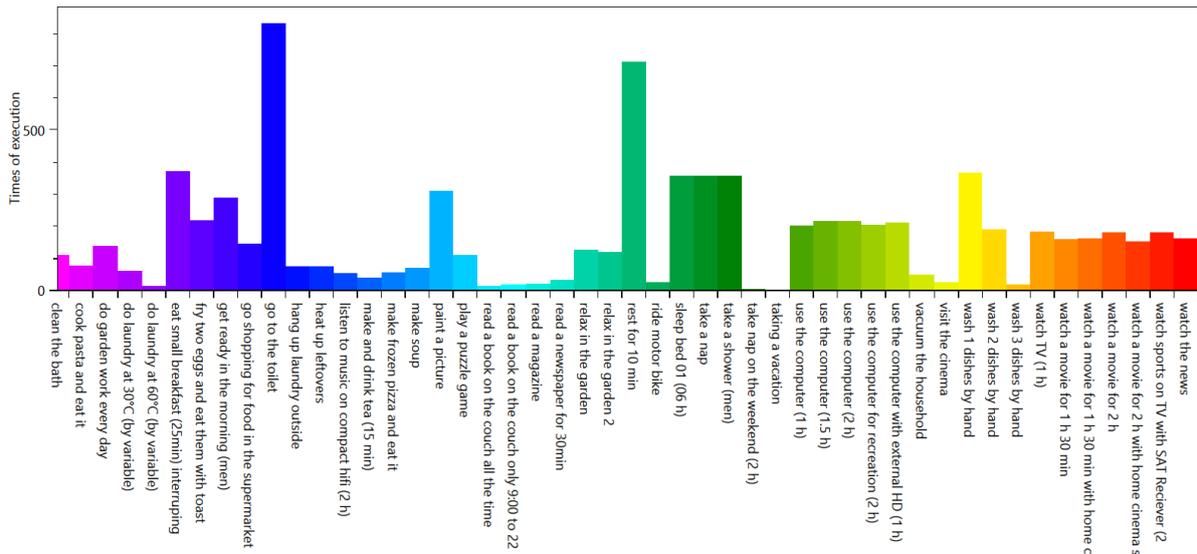
- Sleep
- Unpaid Work
- Games
- Hygiene
- Hobby
- Food
- Media Use
- Entertainment
- vacation
- Events
- Sport
- Work / School
- Contacts

Overview of the actions of each member of the household

This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

HH0 - CHR38 David (55 Male)

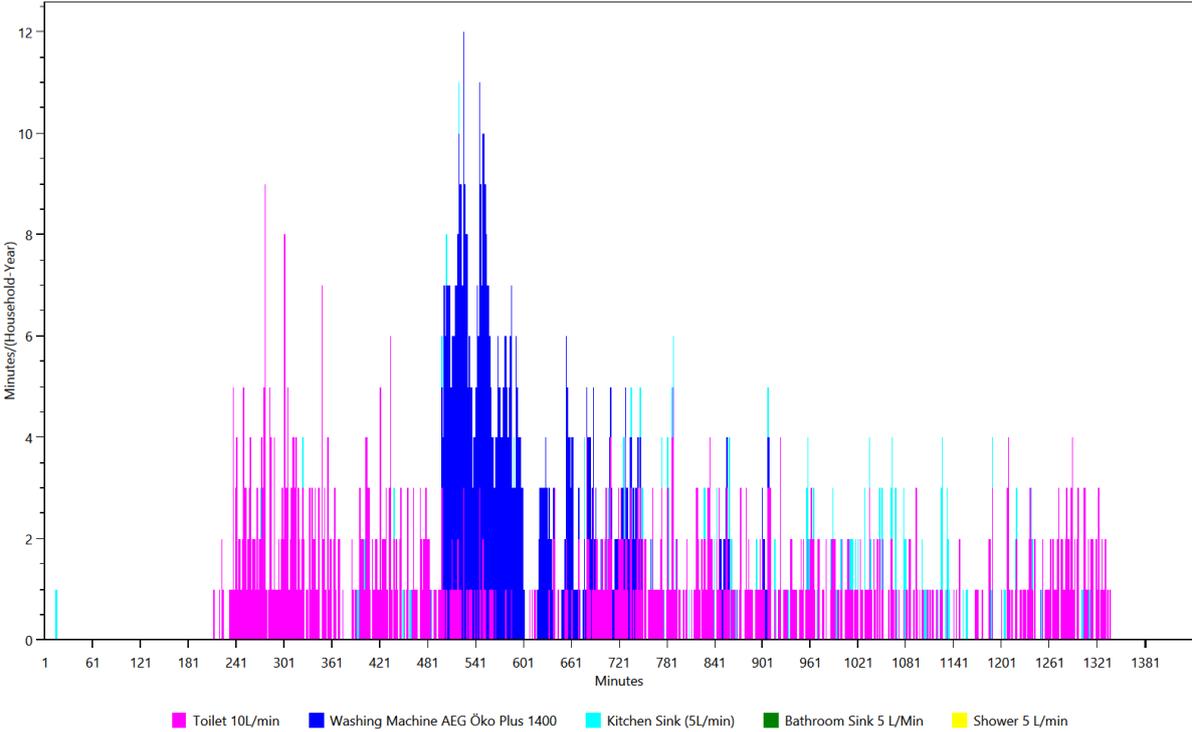


Overview of the time of the use per load type per device

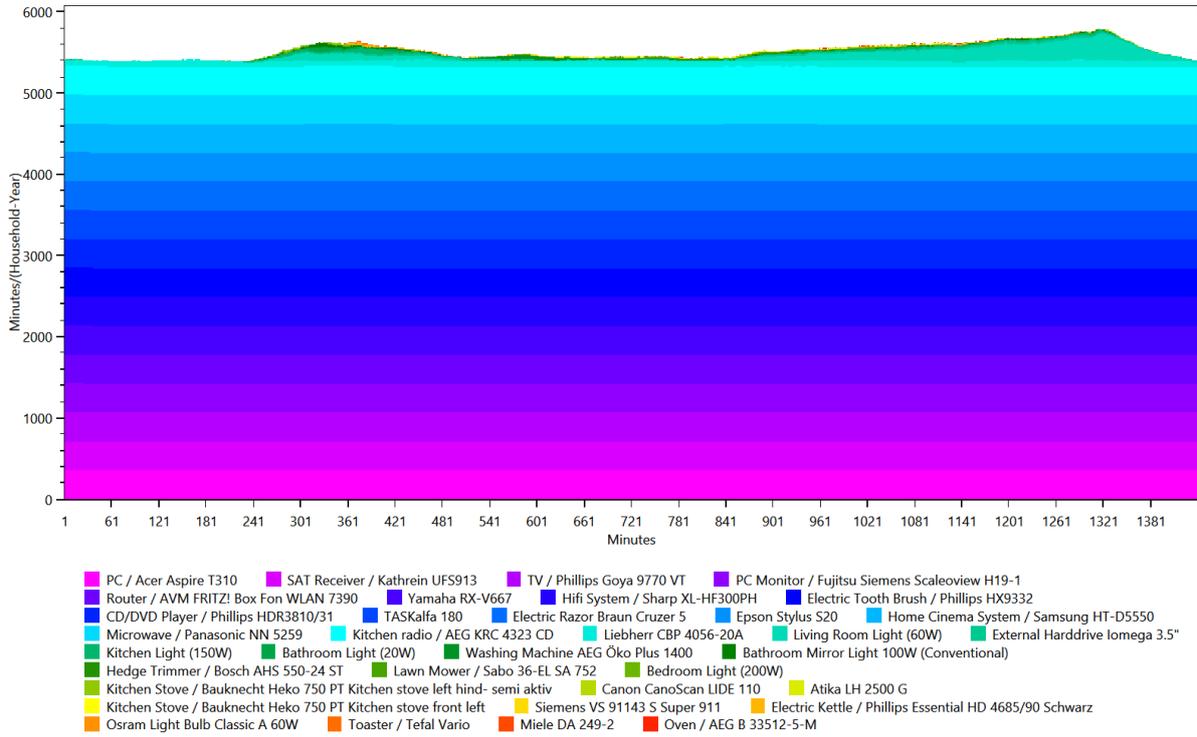
This is made from the files starting with: TimeOfUseEnergyProfiles

The time of use energy profiles shows when each device was used.

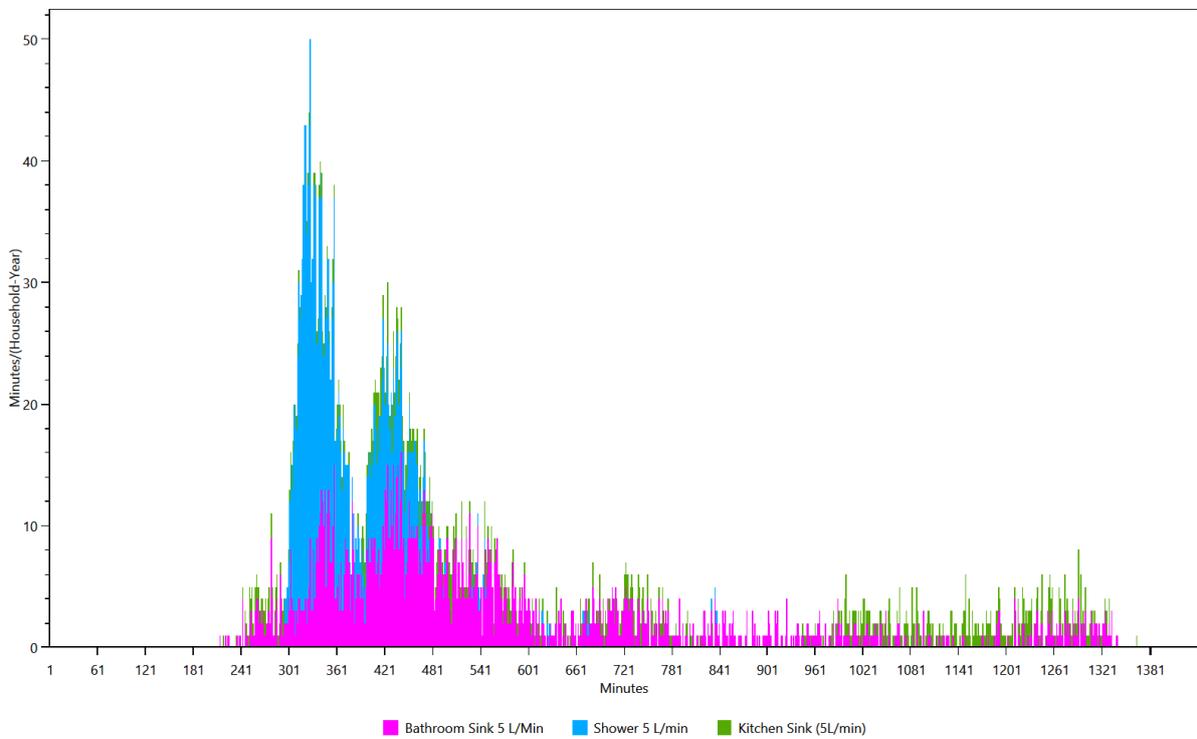
Cold Water



Electricity



Warm Water

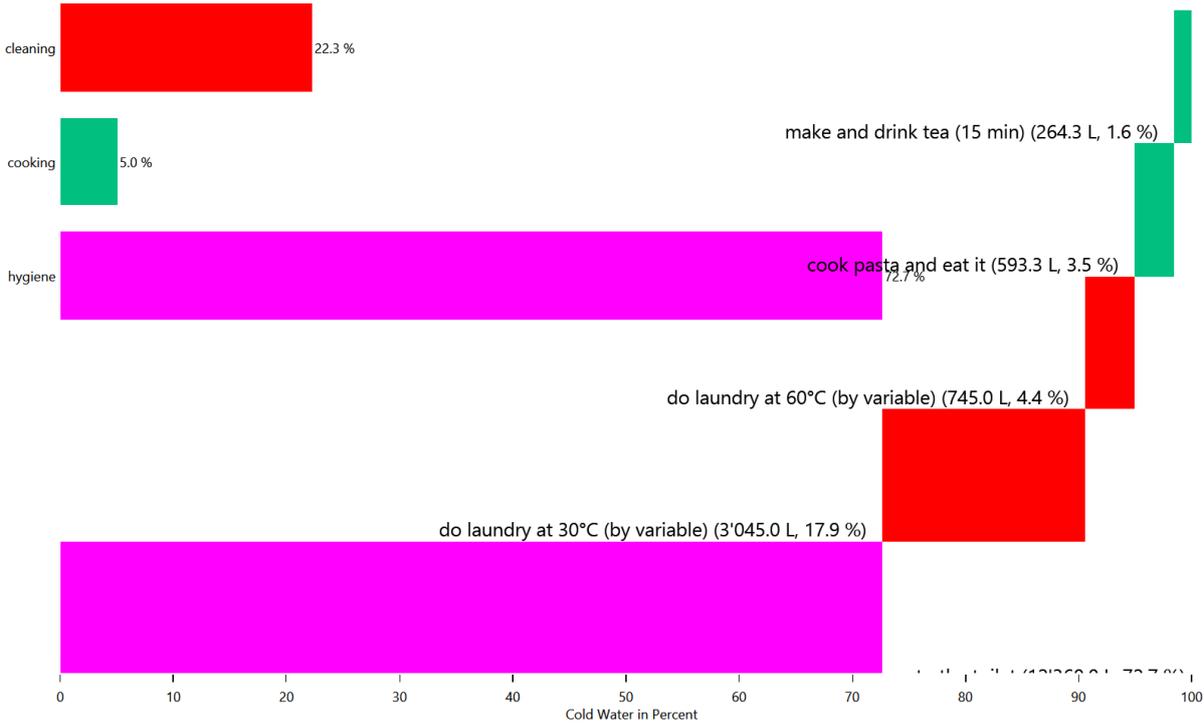


Energy/Resource use distribution per load type per affordance

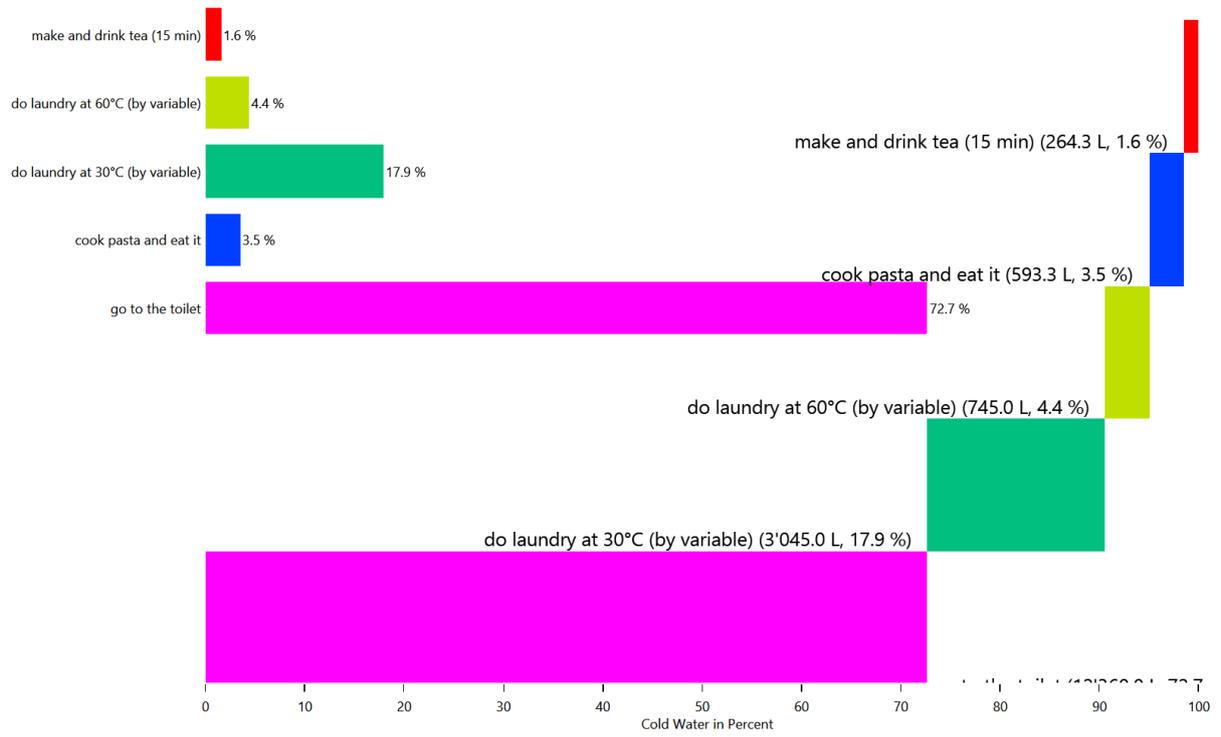
This is made from the files starting with: AffordanceEnergyUse

This shows the distribution of the energy/ressource use to each affordance by load type.

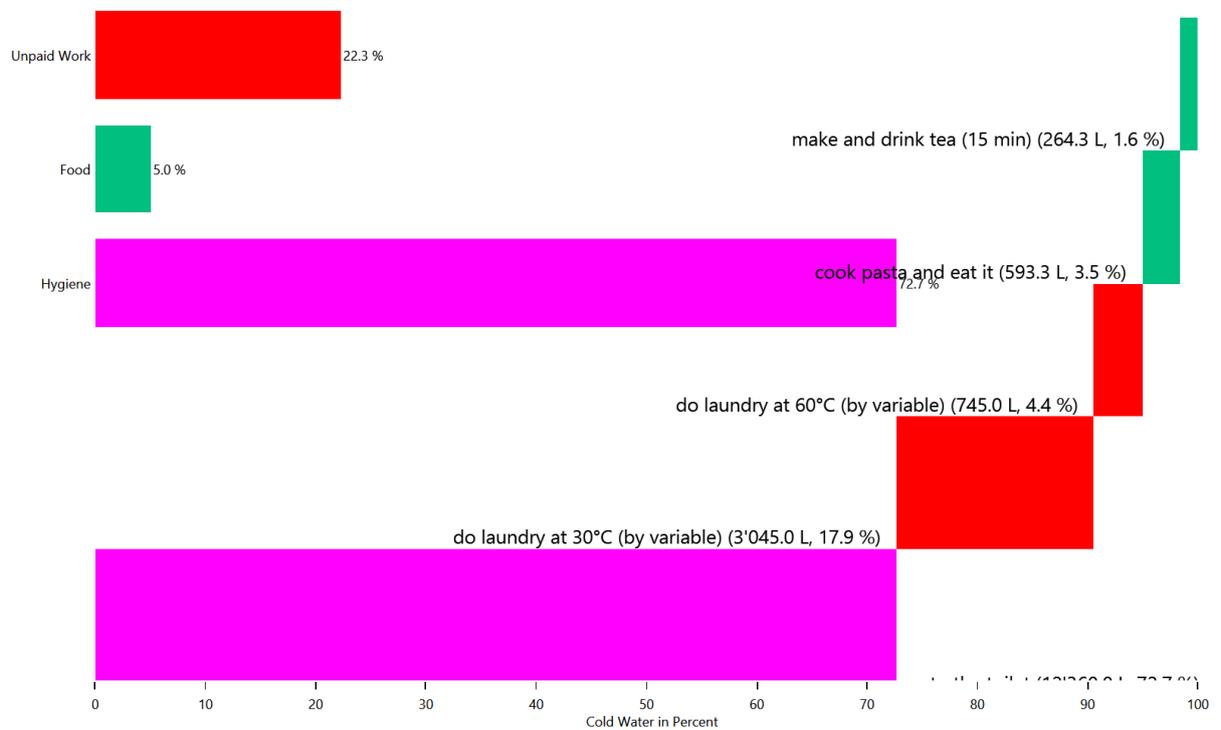
HH0 - Cold Water



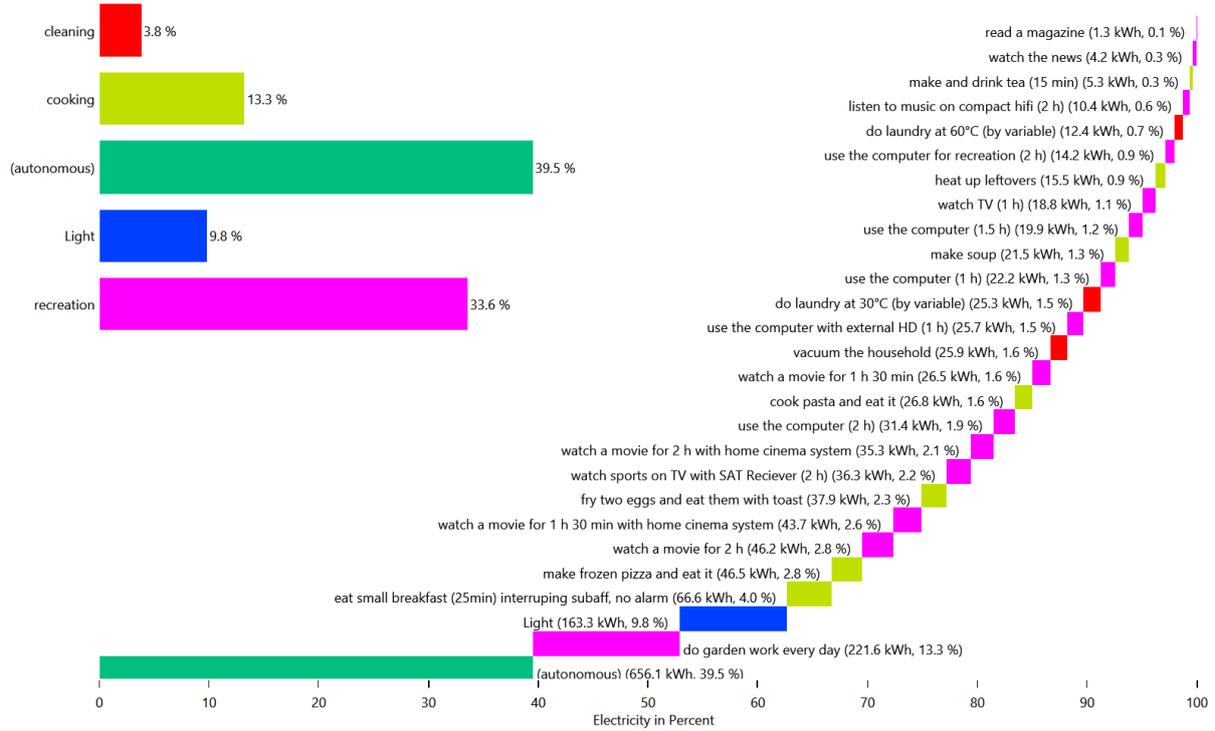
HH0 - Cold Water



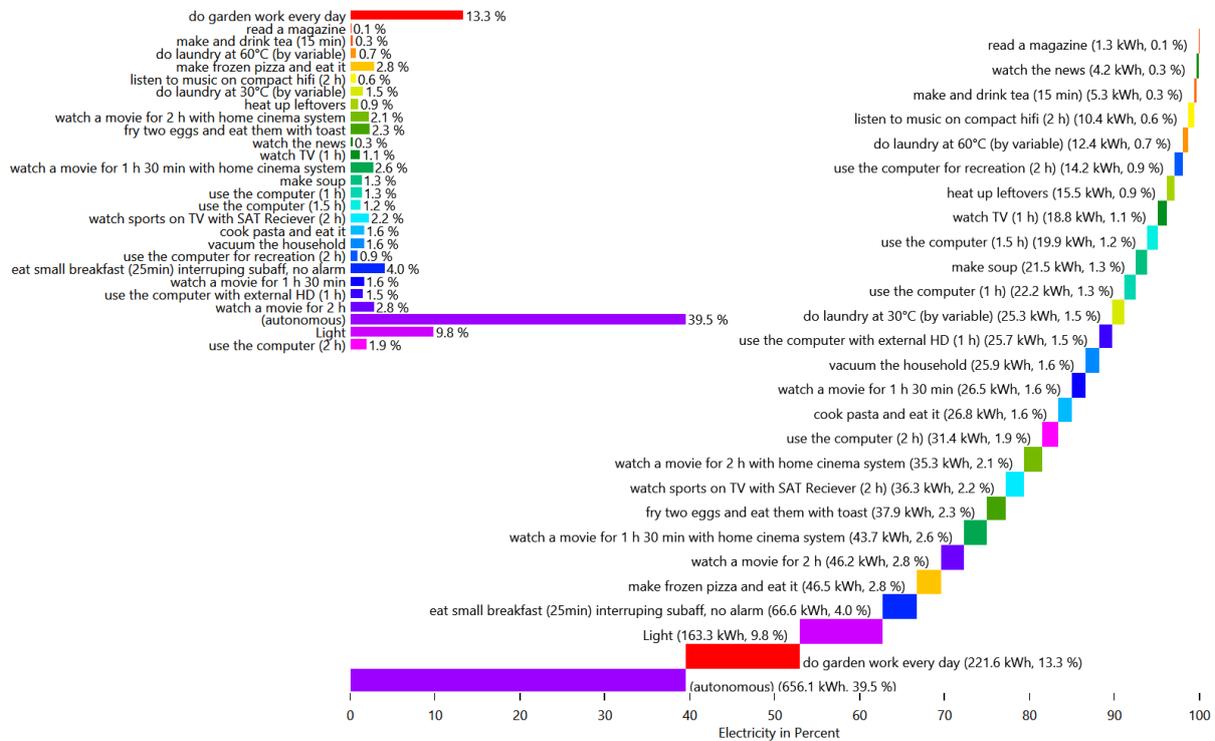
HH0 - Cold Water



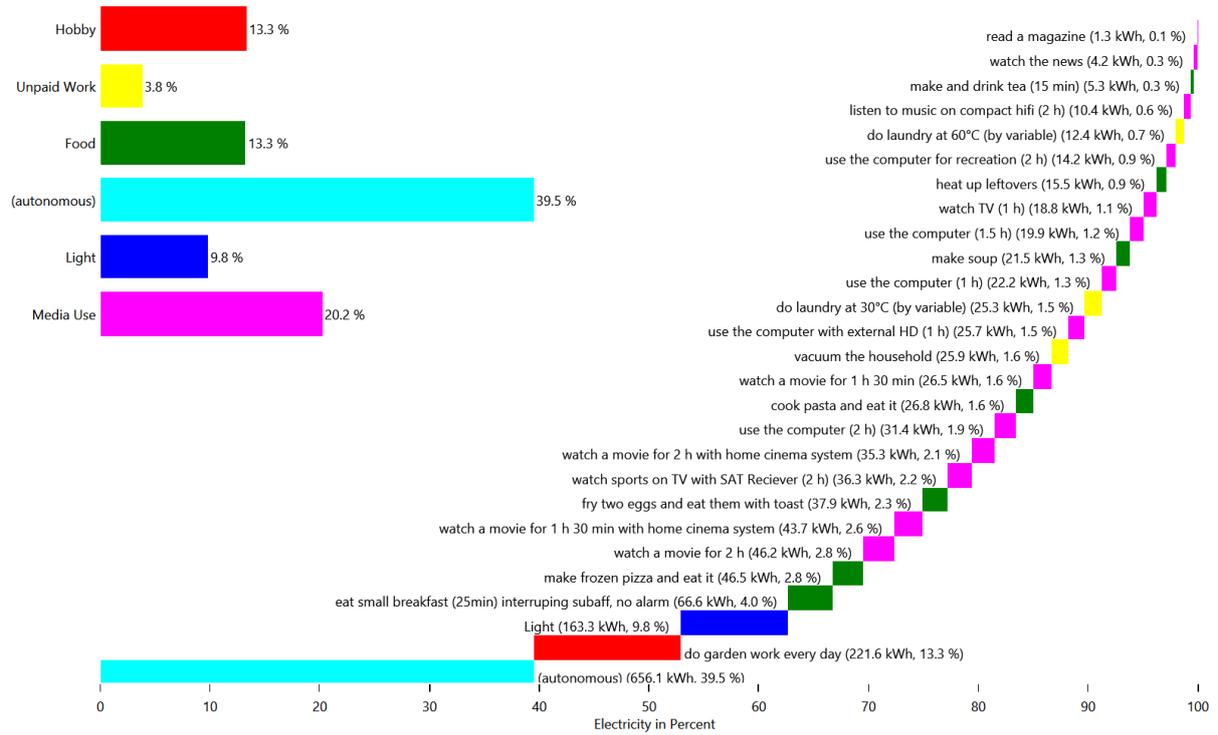
HH0 - Electricity



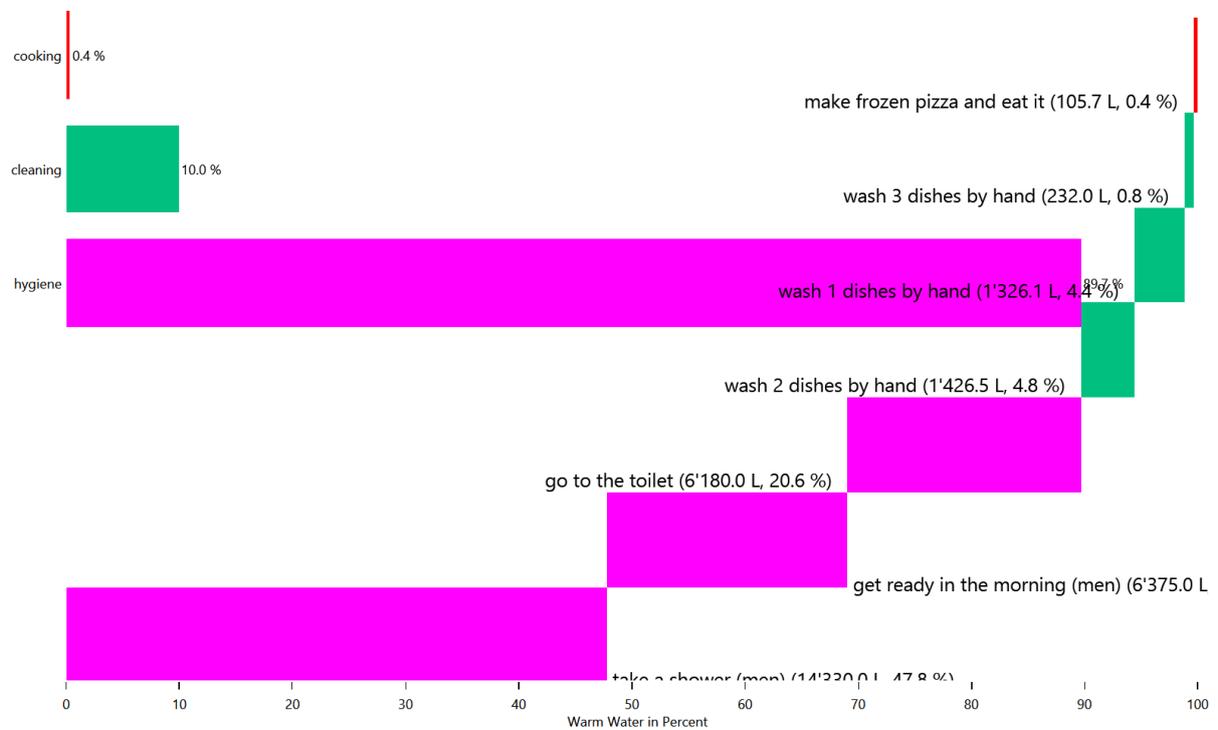
HH0 - Electricity



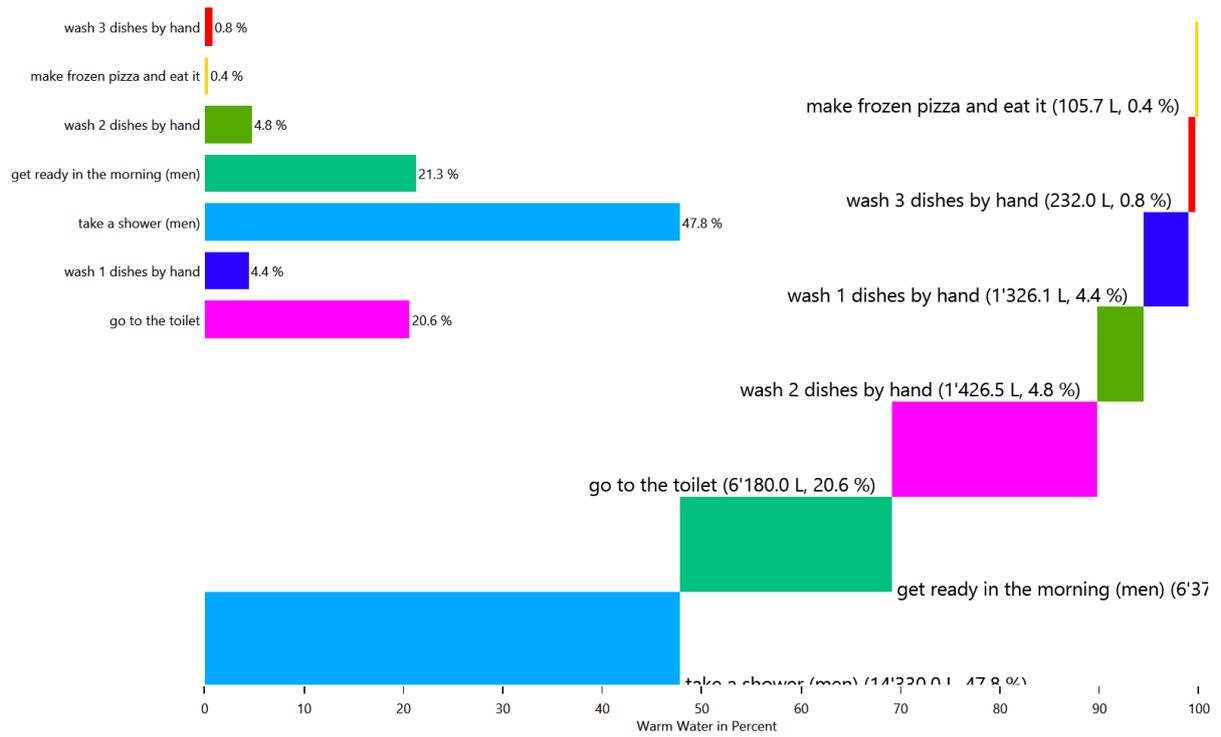
HHO - Electricity



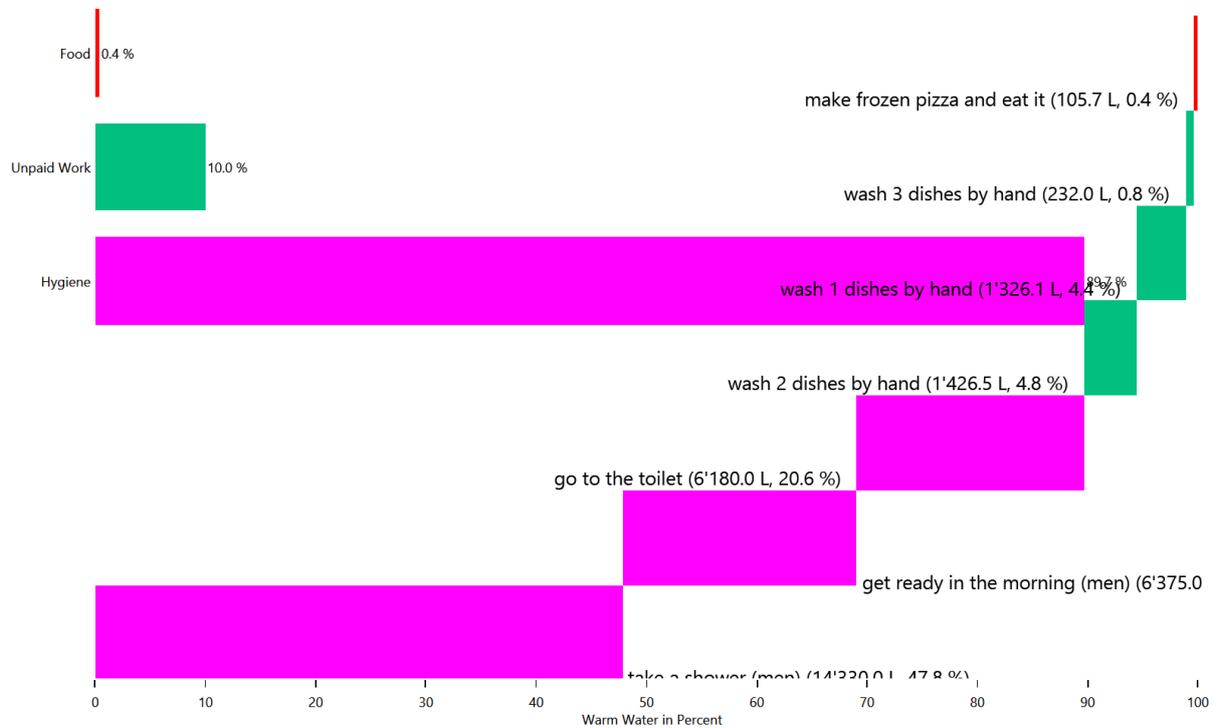
HHO - Warm Water



HH0 - Warm Water



HH0 - Warm Water

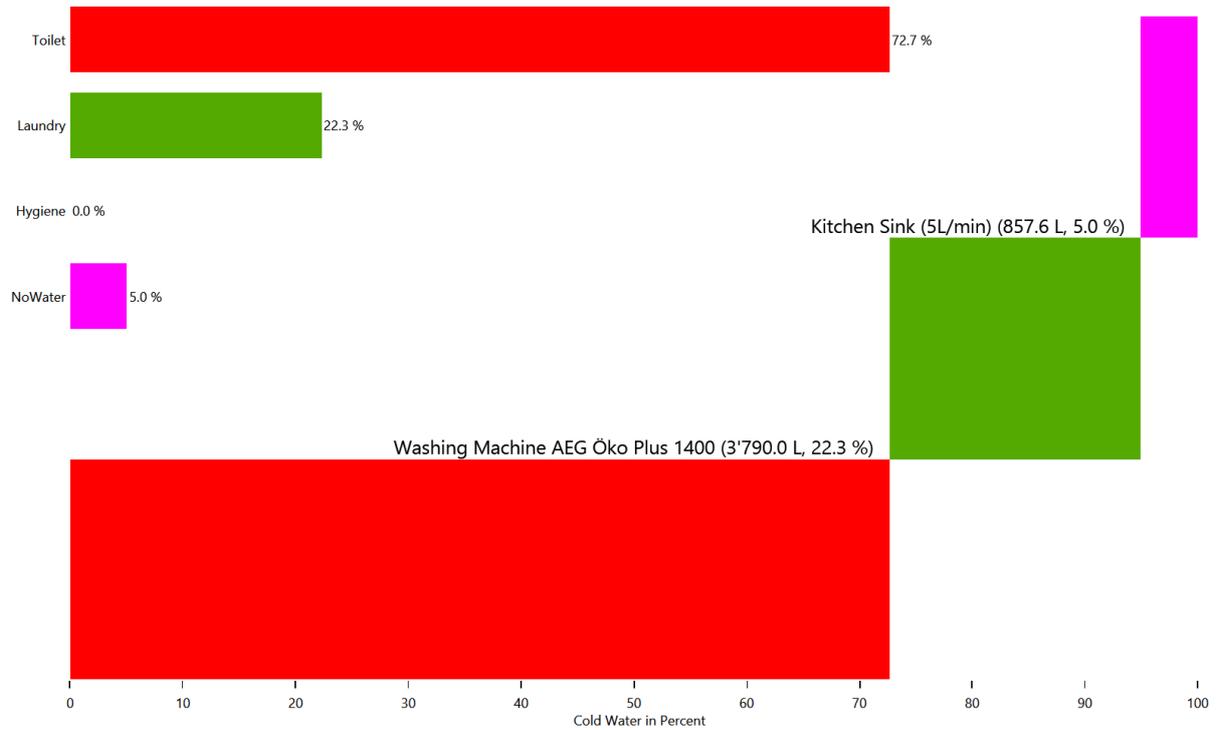


Energy use for each load type for each device

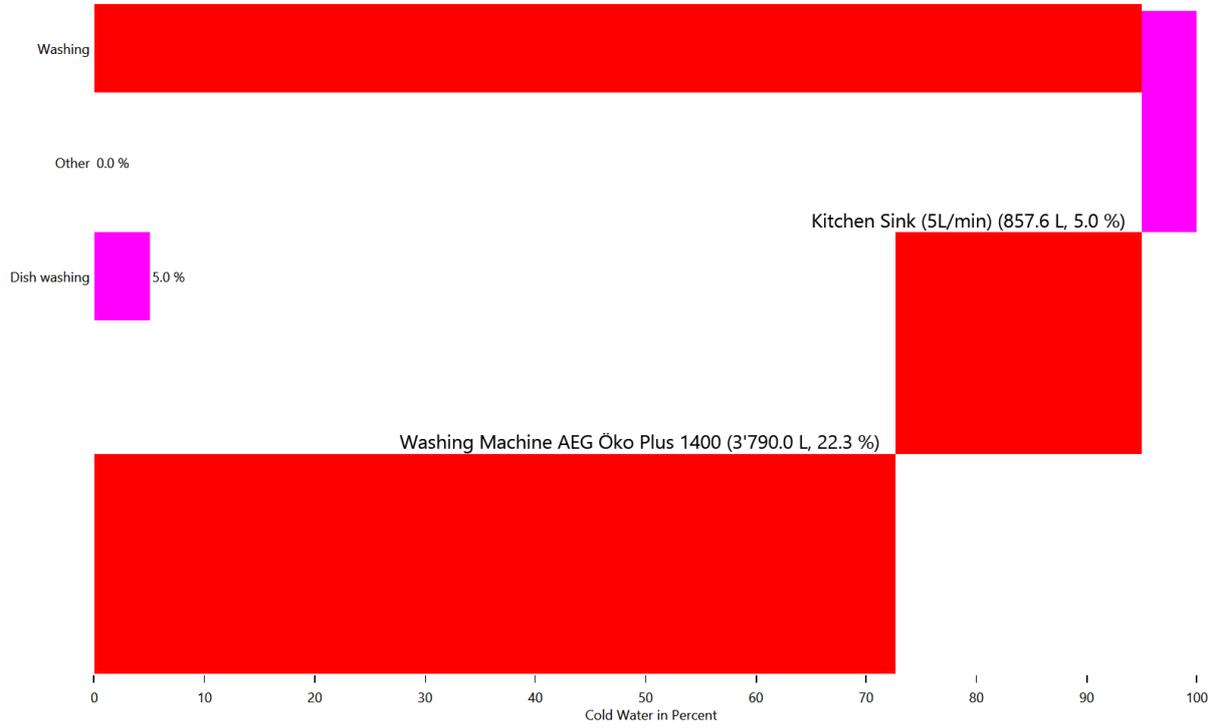
This is made from the files starting with: DeviceSums

These pie charts show the energy use for each individual device in each load type.

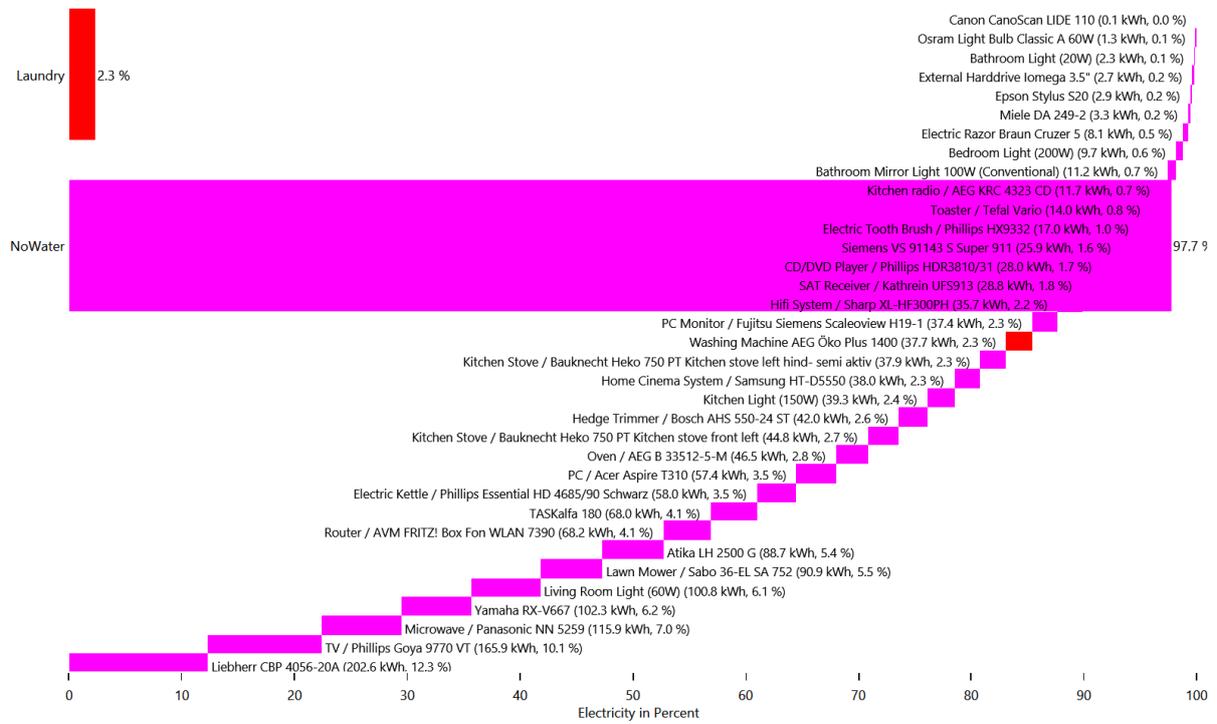
Cold Water



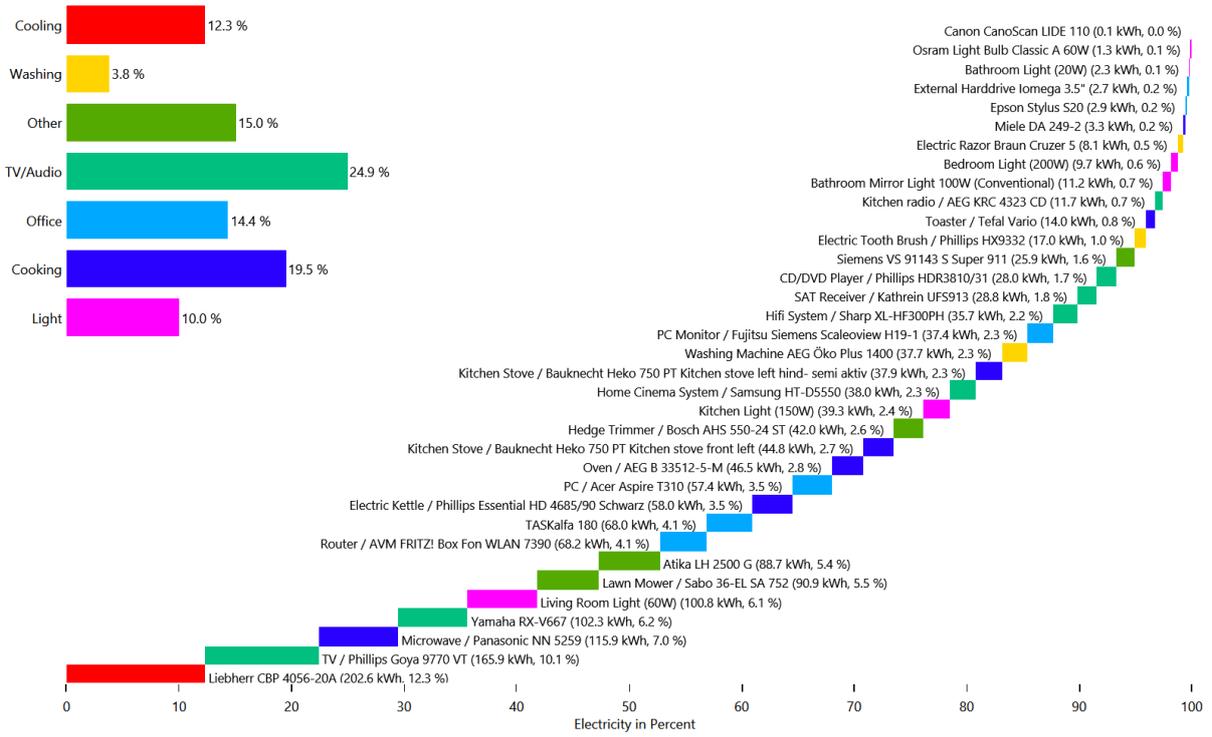
Cold Water



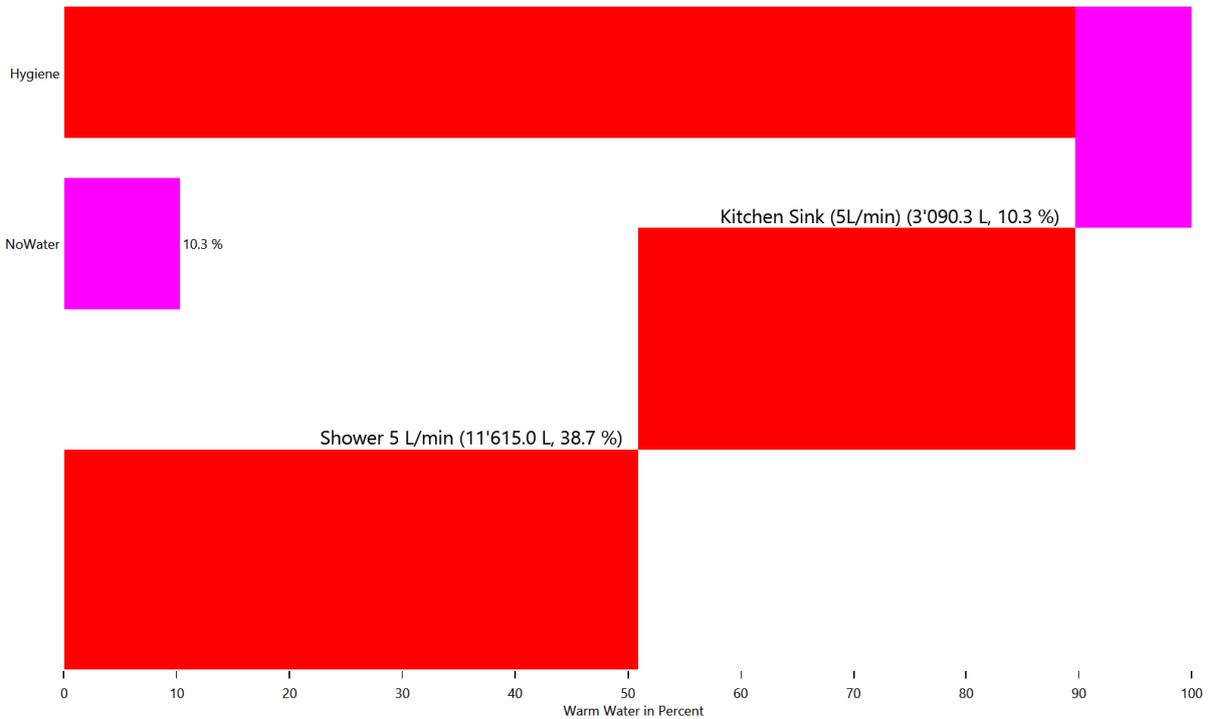
Electricity



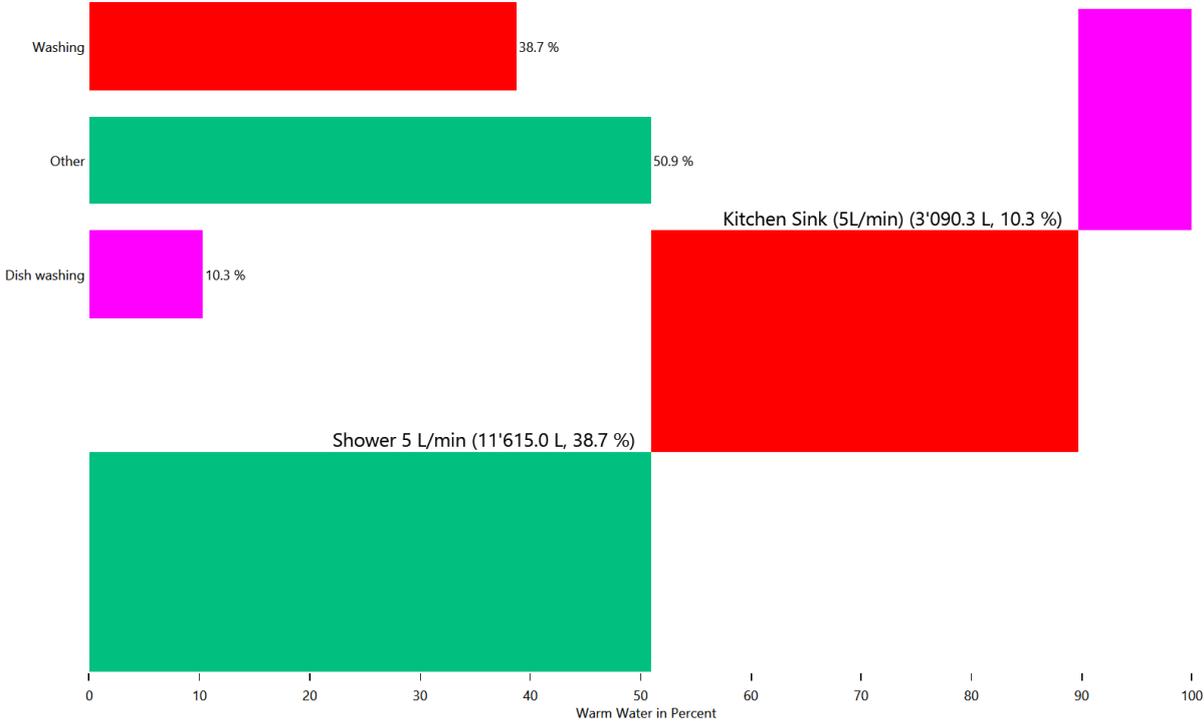
Electricity



Warm Water



Warm Water

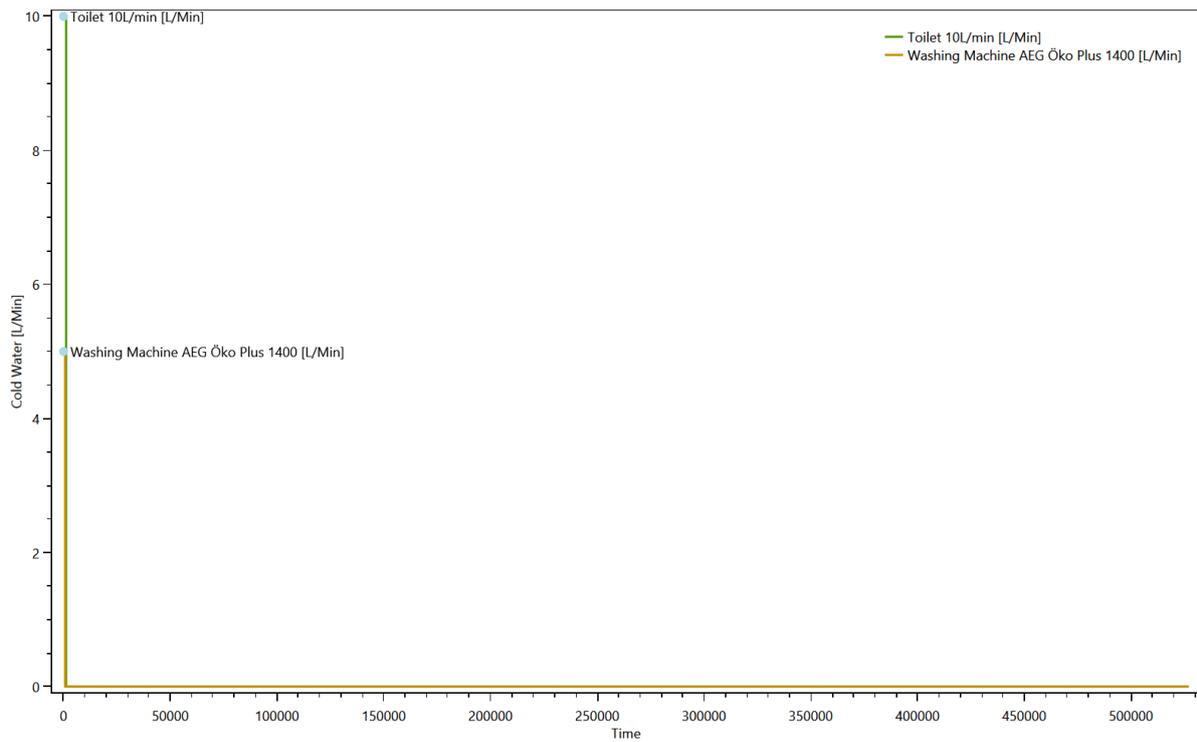


Duration curve for each device for each load type

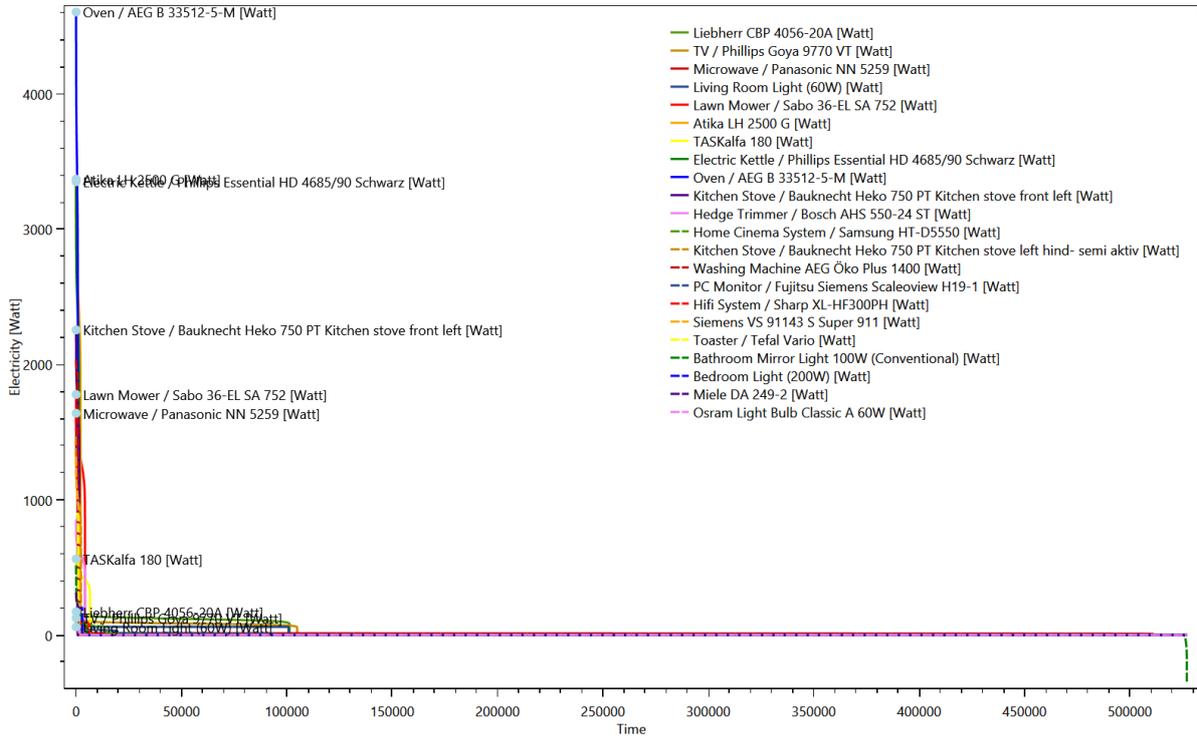
This is made from the files starting with: DeviceDurationCurves

The device duration curve show the duration curve of each device to give an overview of the power consumption.

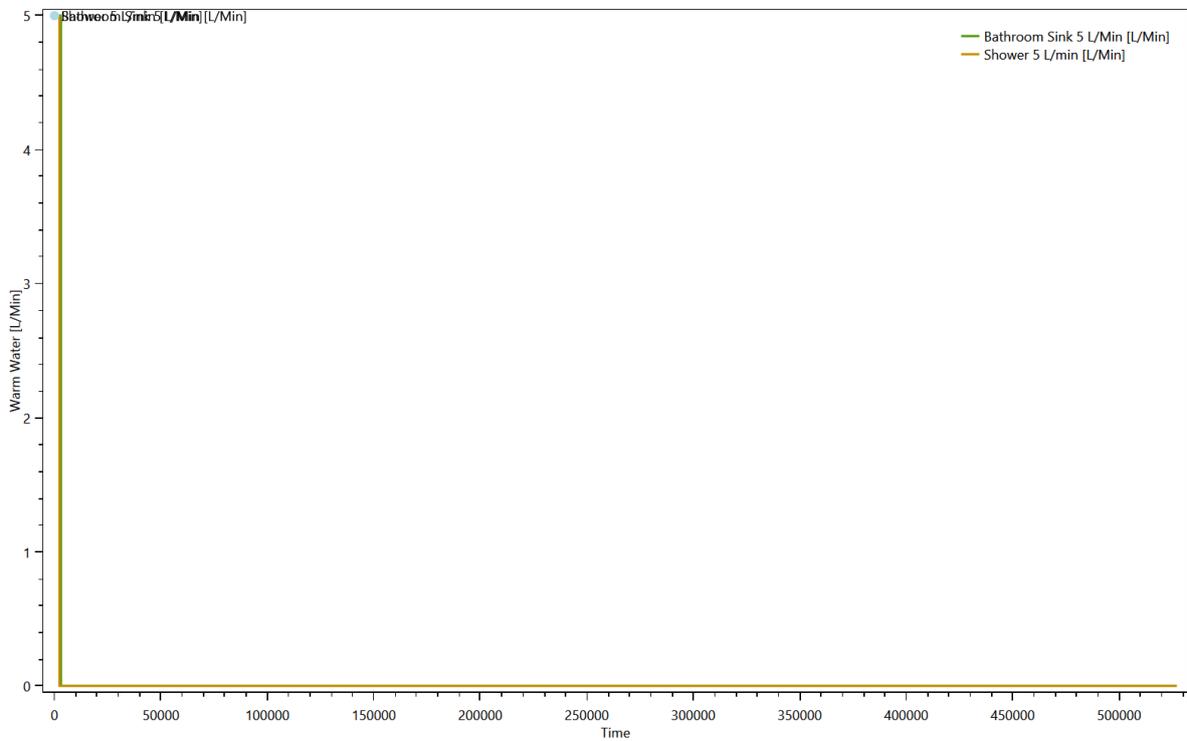
Cold Water



Electricity



Warm Water

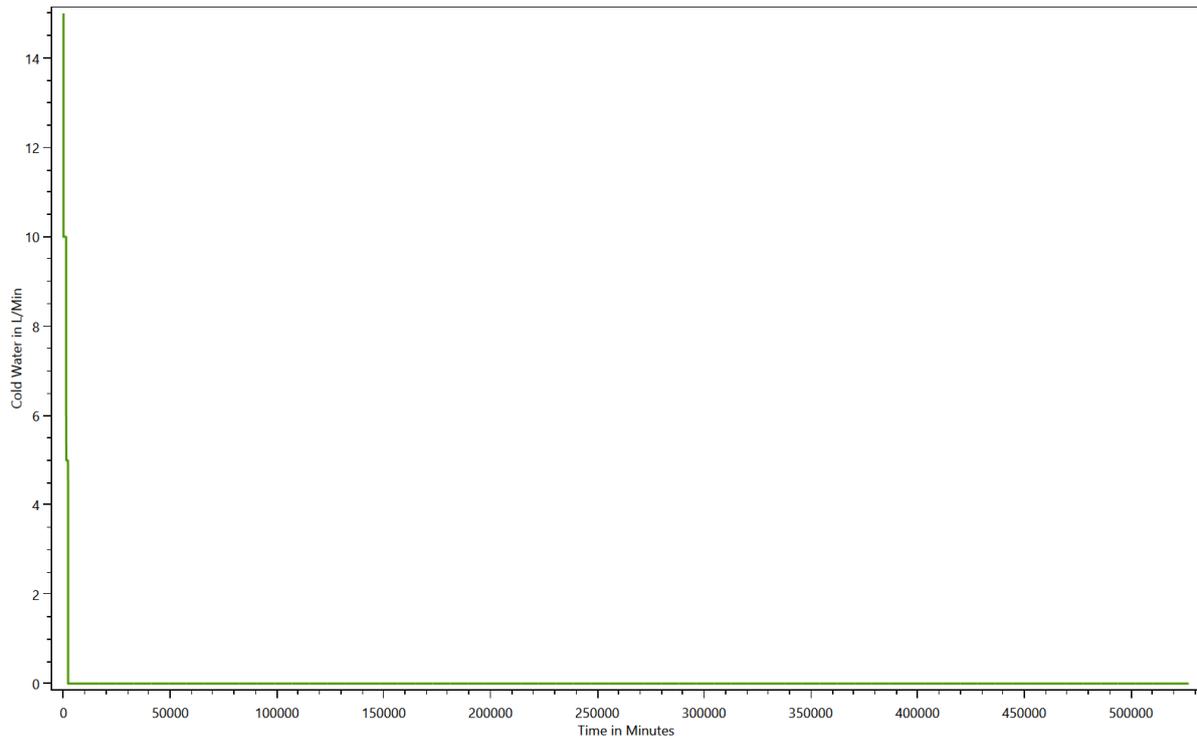


Duration curve for each load type

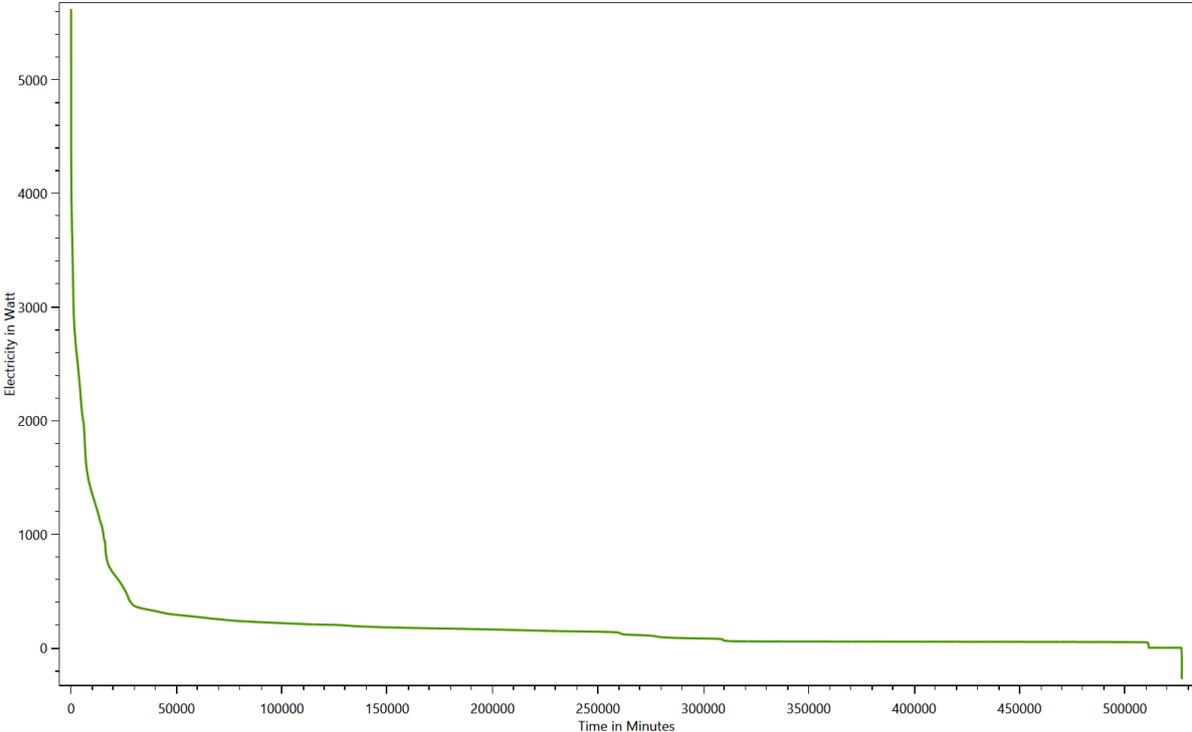
This is made from the files starting with: **DurationCurve**

The duration curve show the duration curve for the entire household to give an overview of the power consumption.

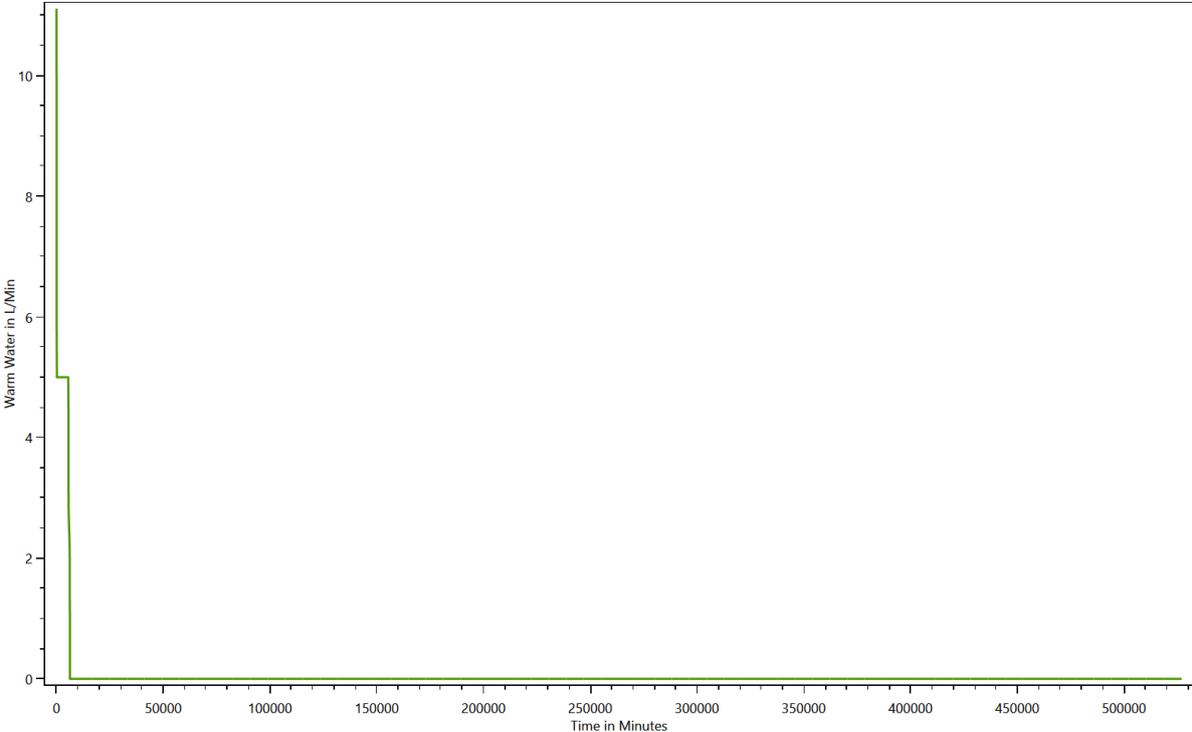
Cold Water



Electricity



Warm Water

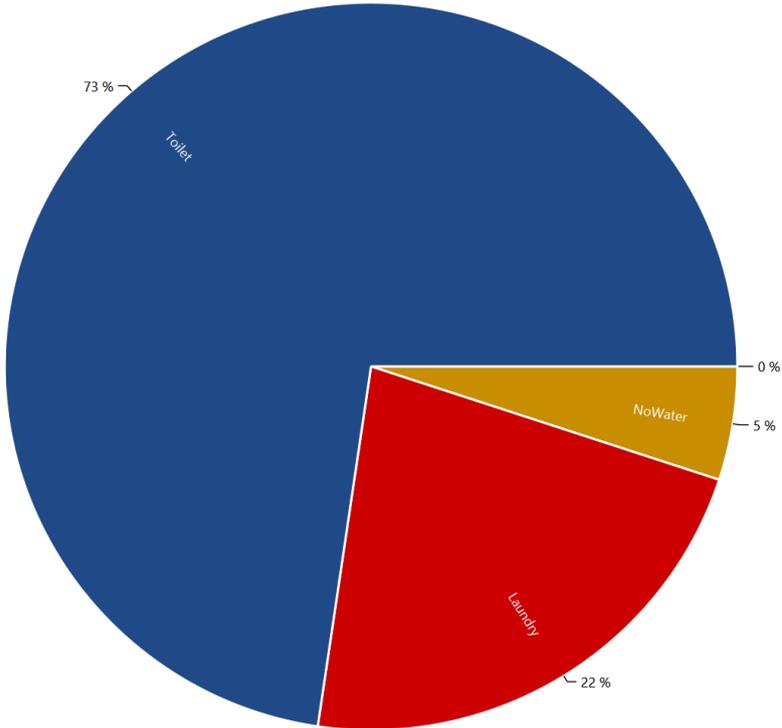


Grouped energy use for each load type for each device

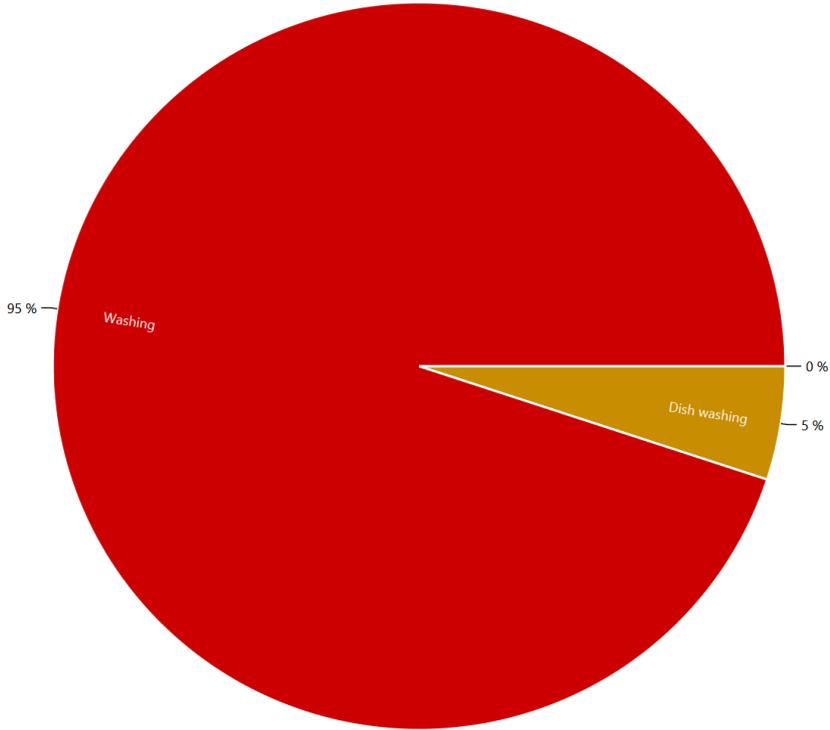
This is made from the files starting with: DeviceTaggingSet

The devices in the LPG can be grouped with various criteria by the device tagging sets. These charts show the results.

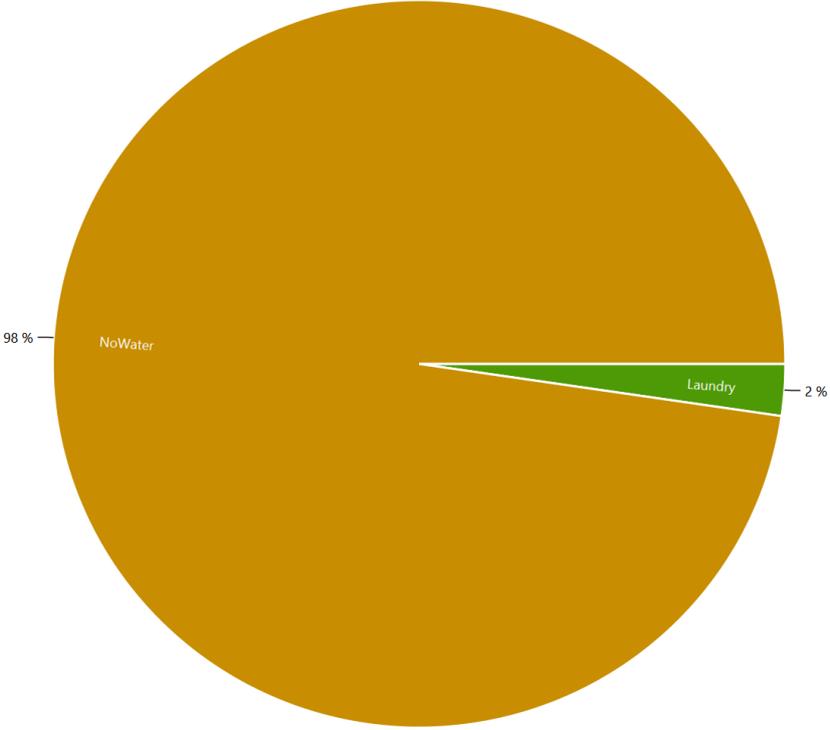
HH0 - Destatis Water Usage Statistics - Cold Water



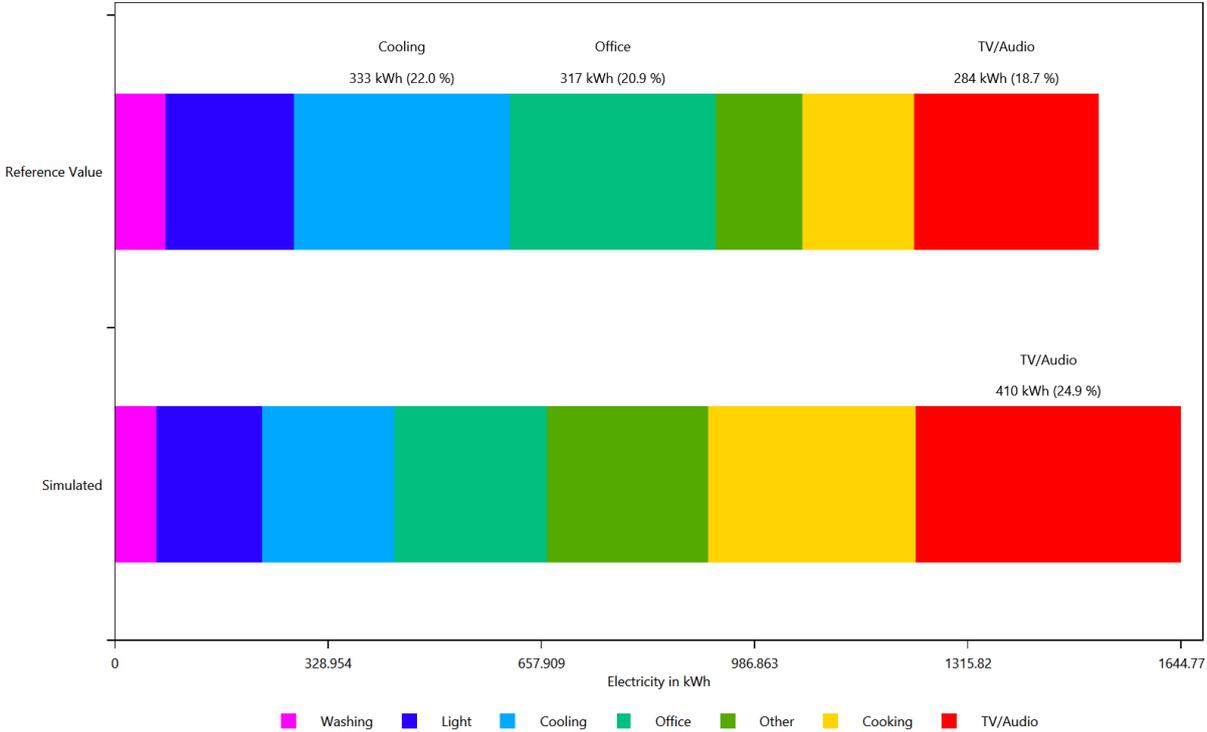
HH0 - Energieagentur - Cold Water



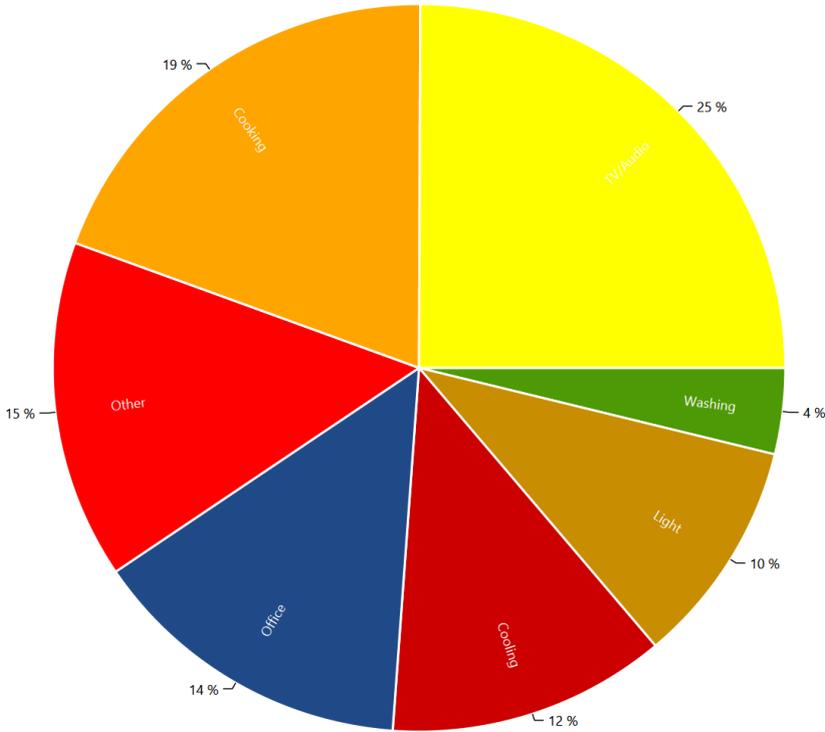
HH0 - Destatis Water Usage Statistics - Electricity



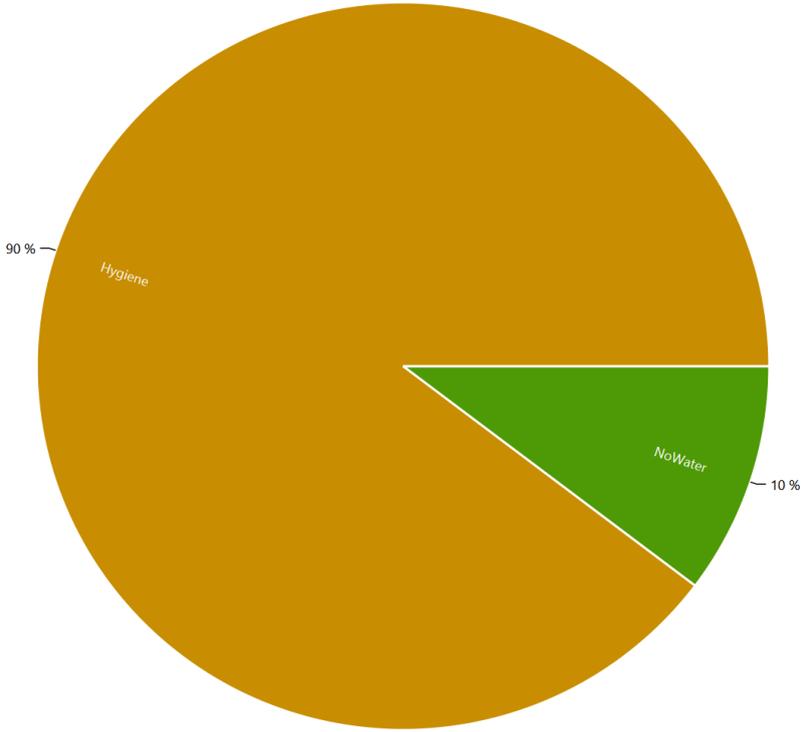
HH0 - Energieagentur - Electricity



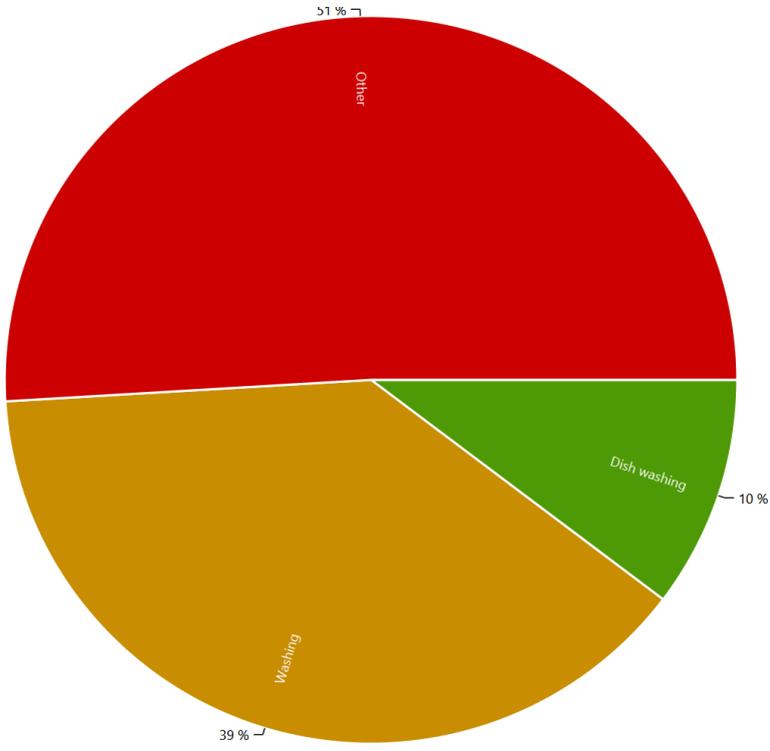
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

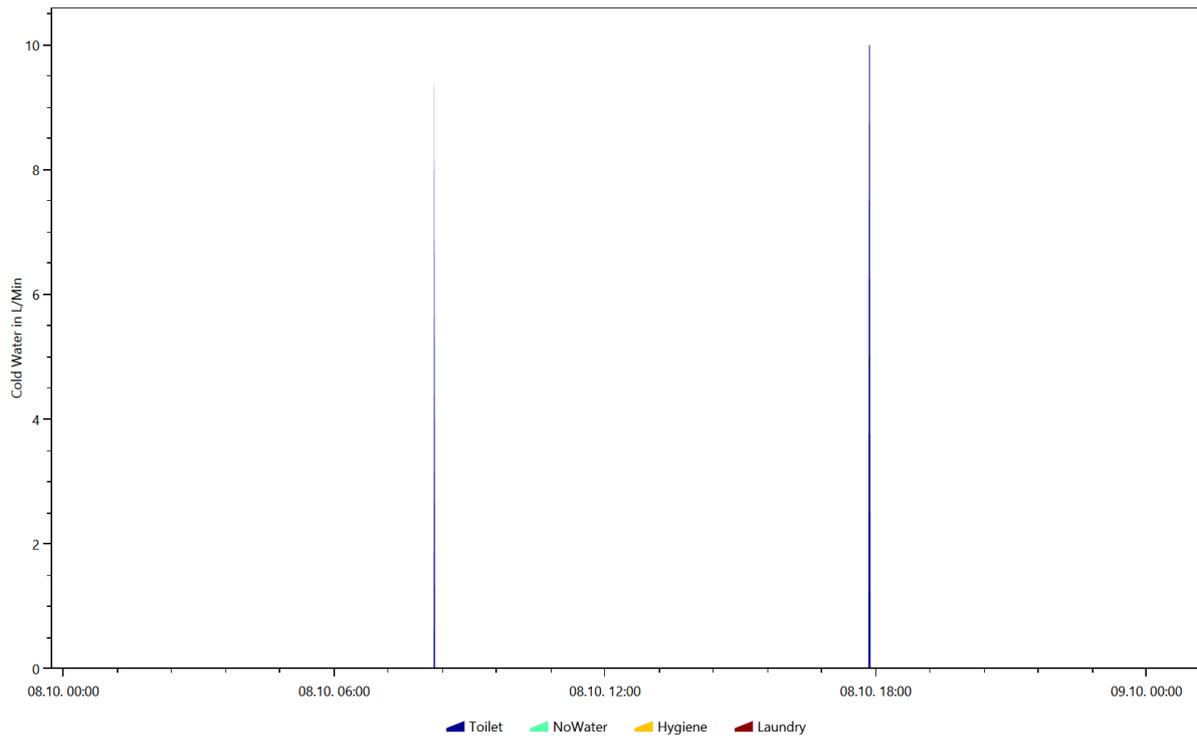


Example of the device profiles for each load type

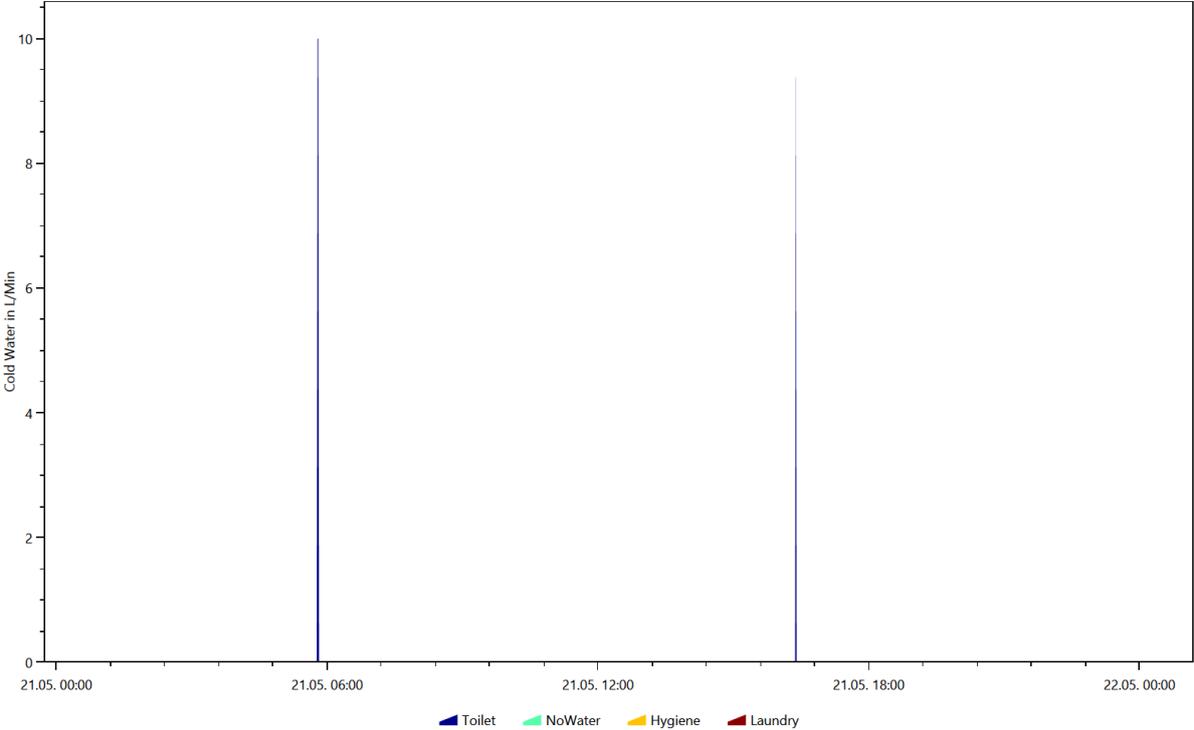
This is made from the files starting with: DeviceProfiles

The device profile files are the reason for the LPG. They show the power consumption of each device.

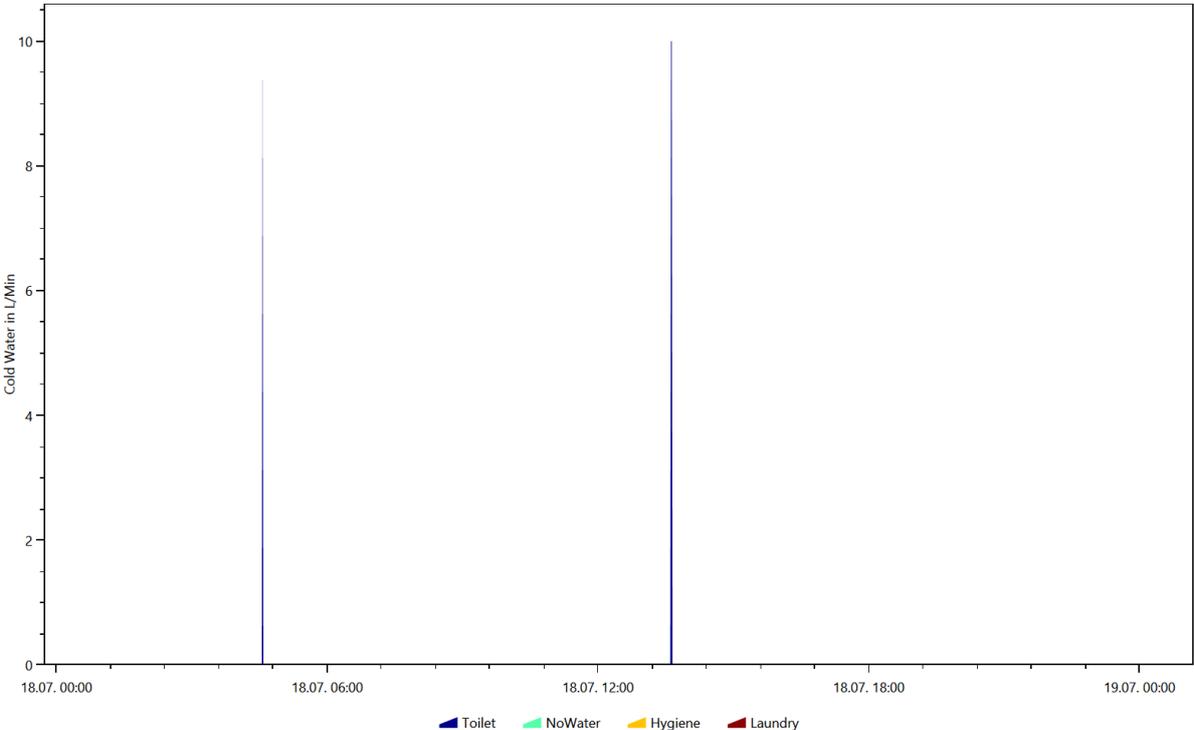
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.8



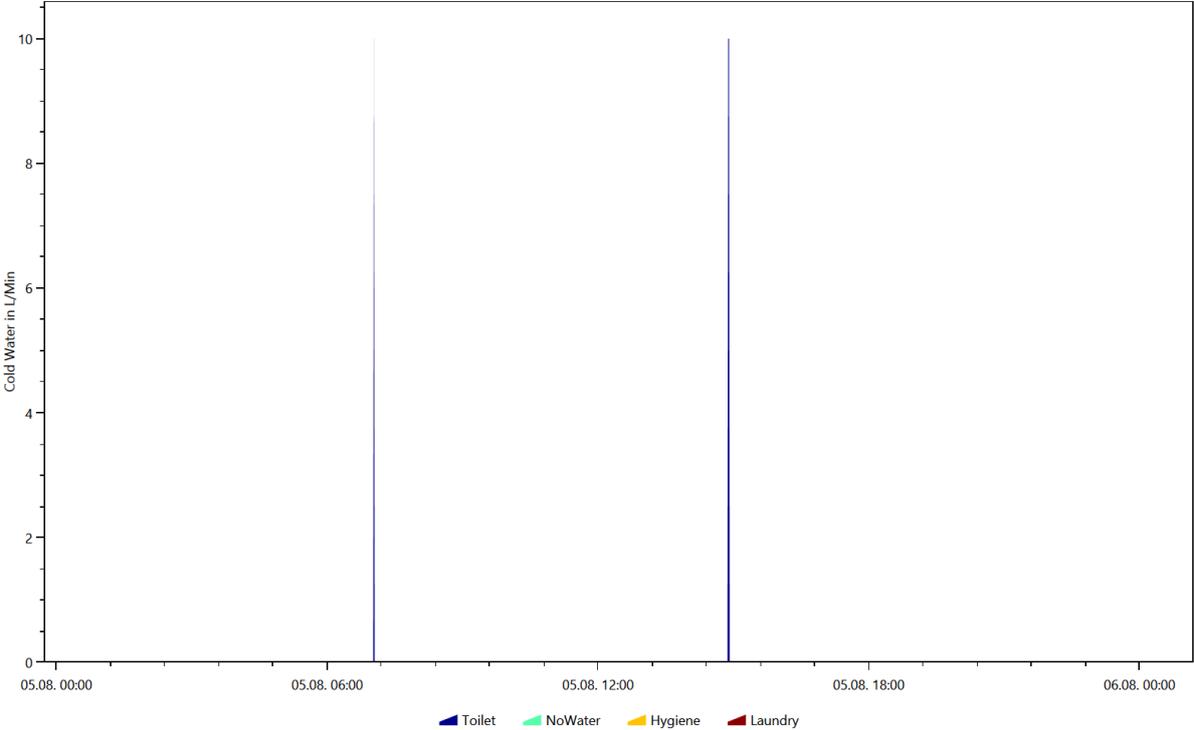
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.21



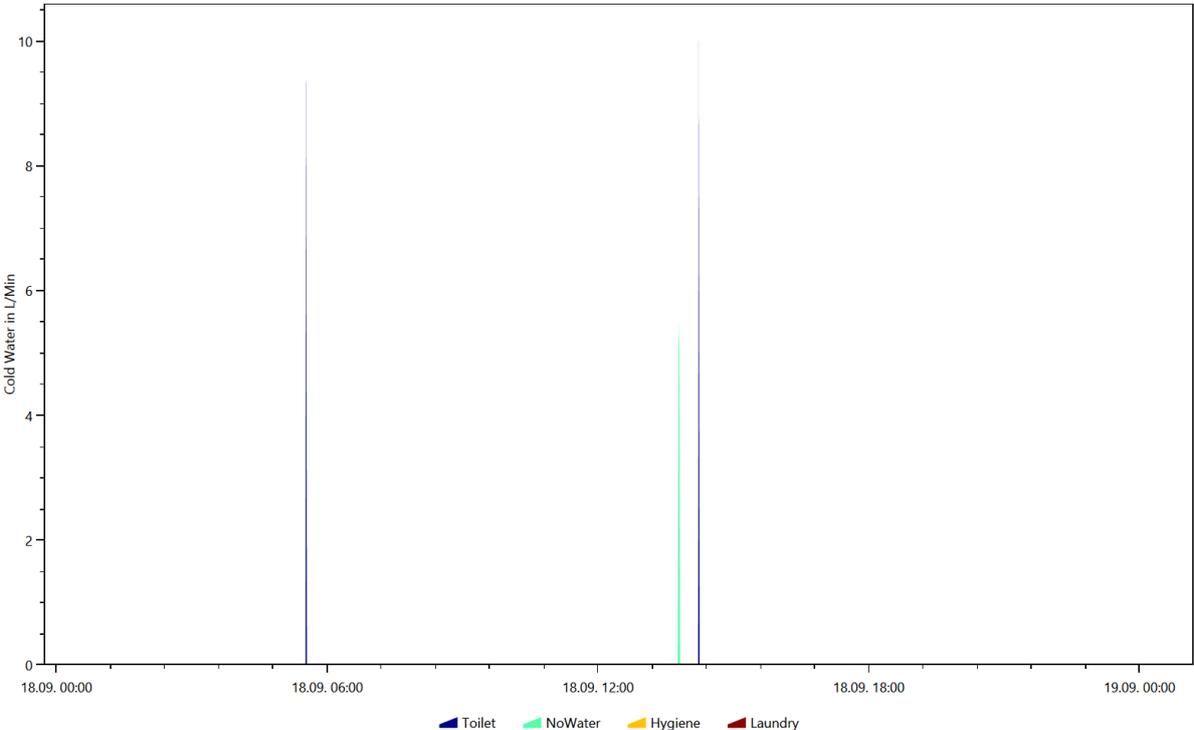
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.18



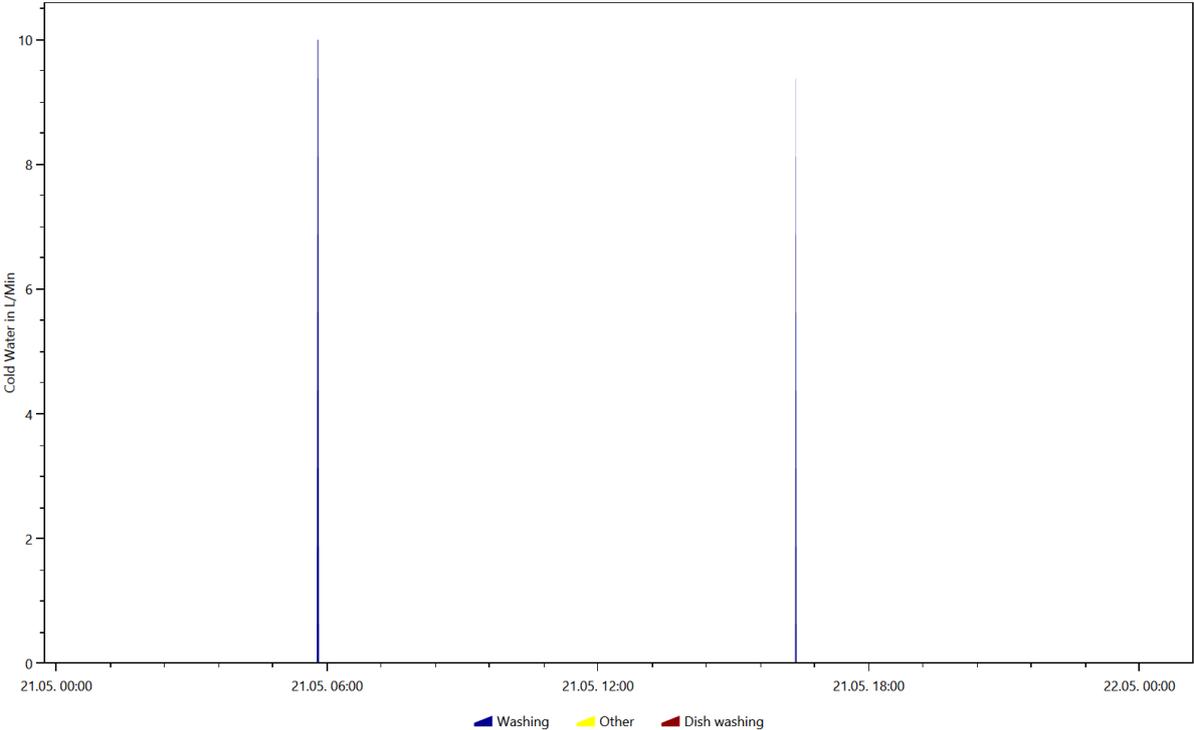
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.5



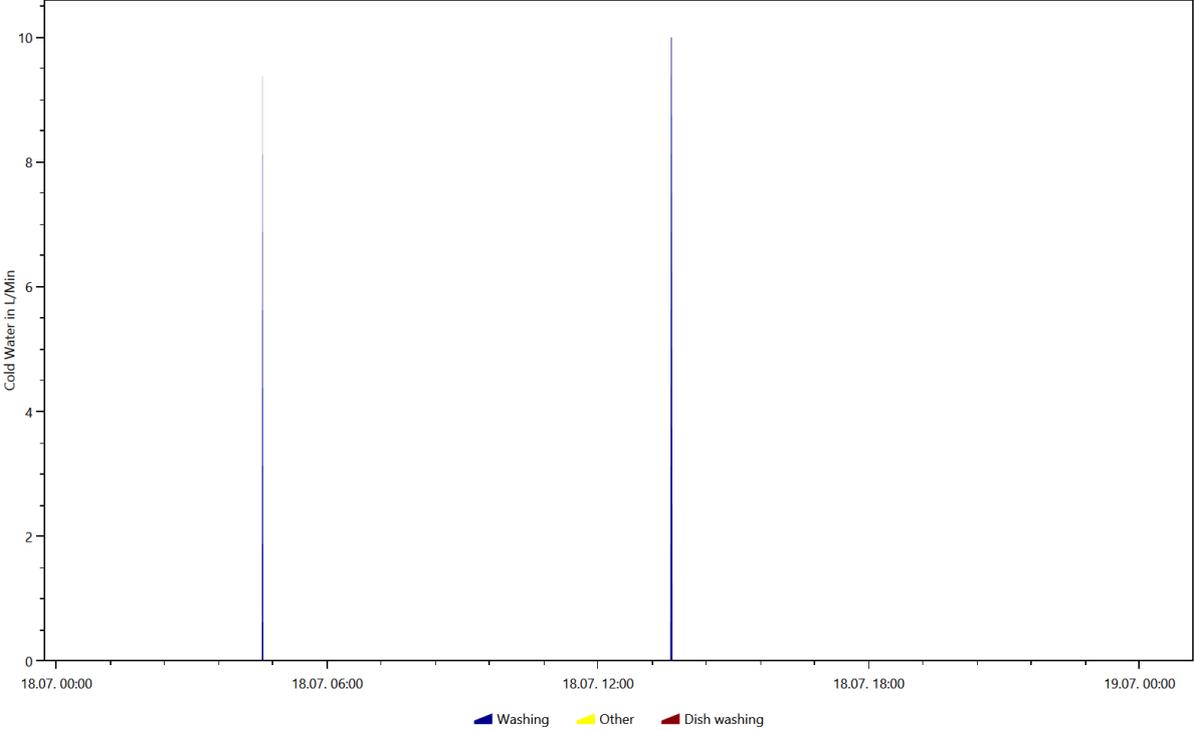
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.18



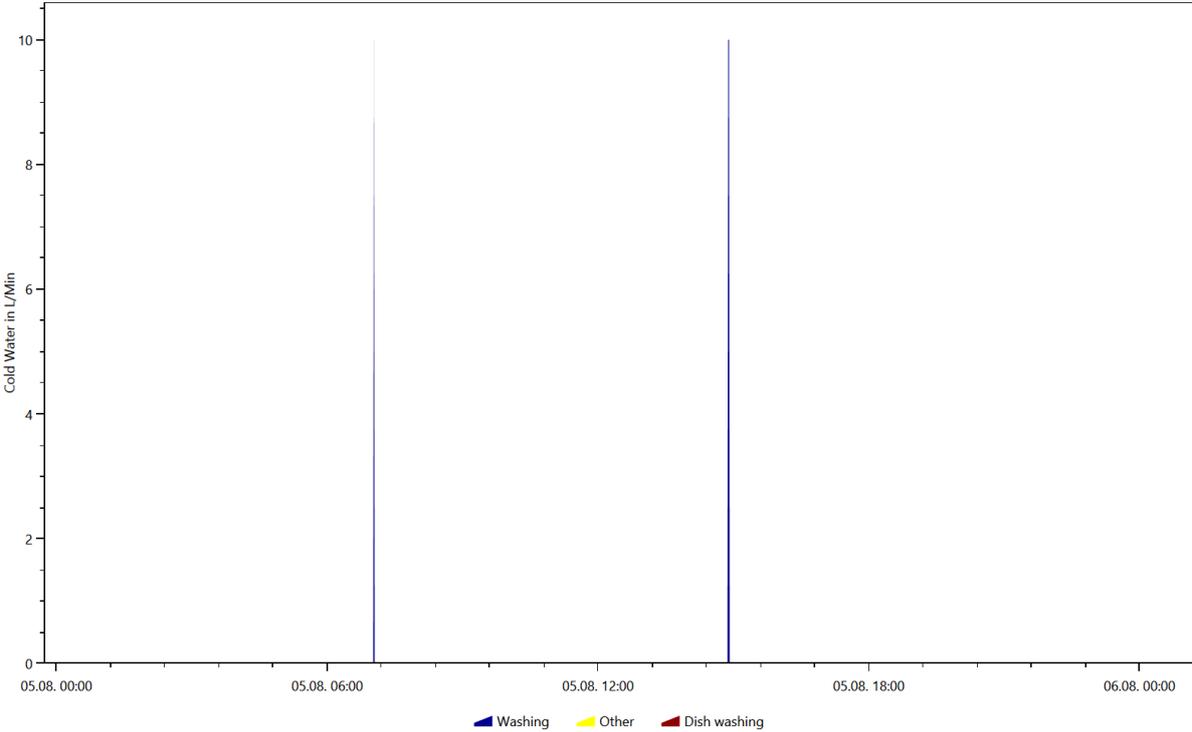
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.21



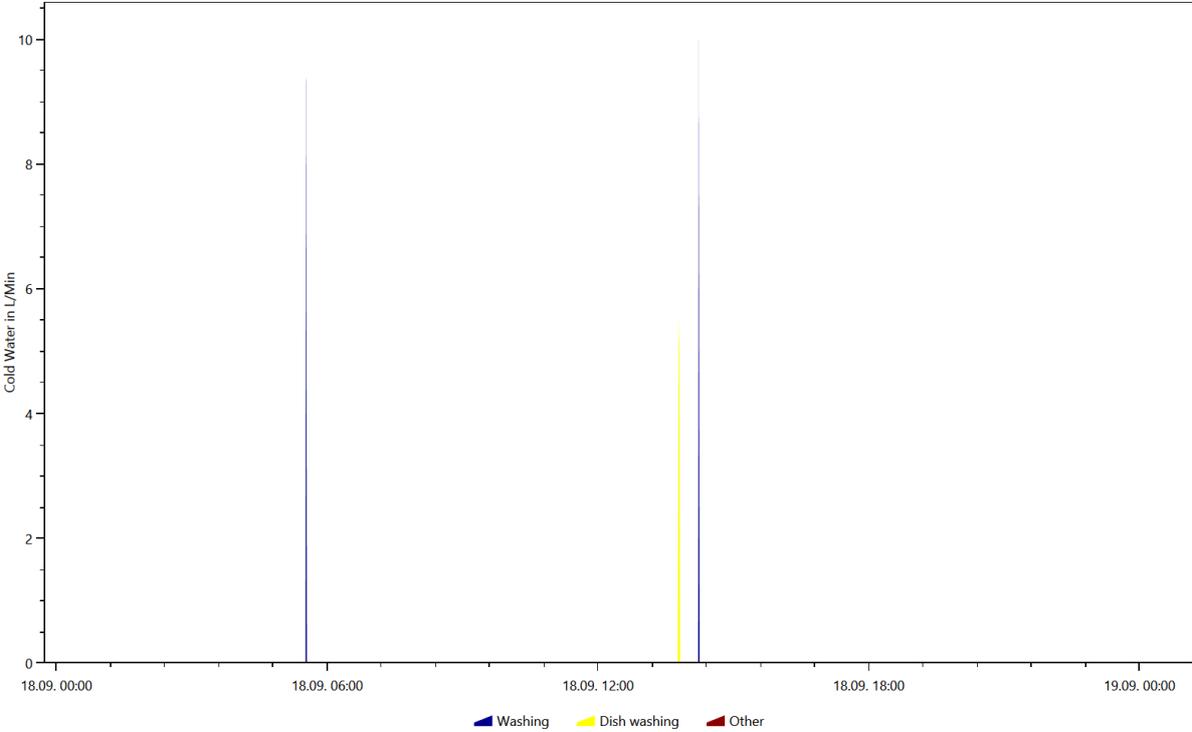
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.18



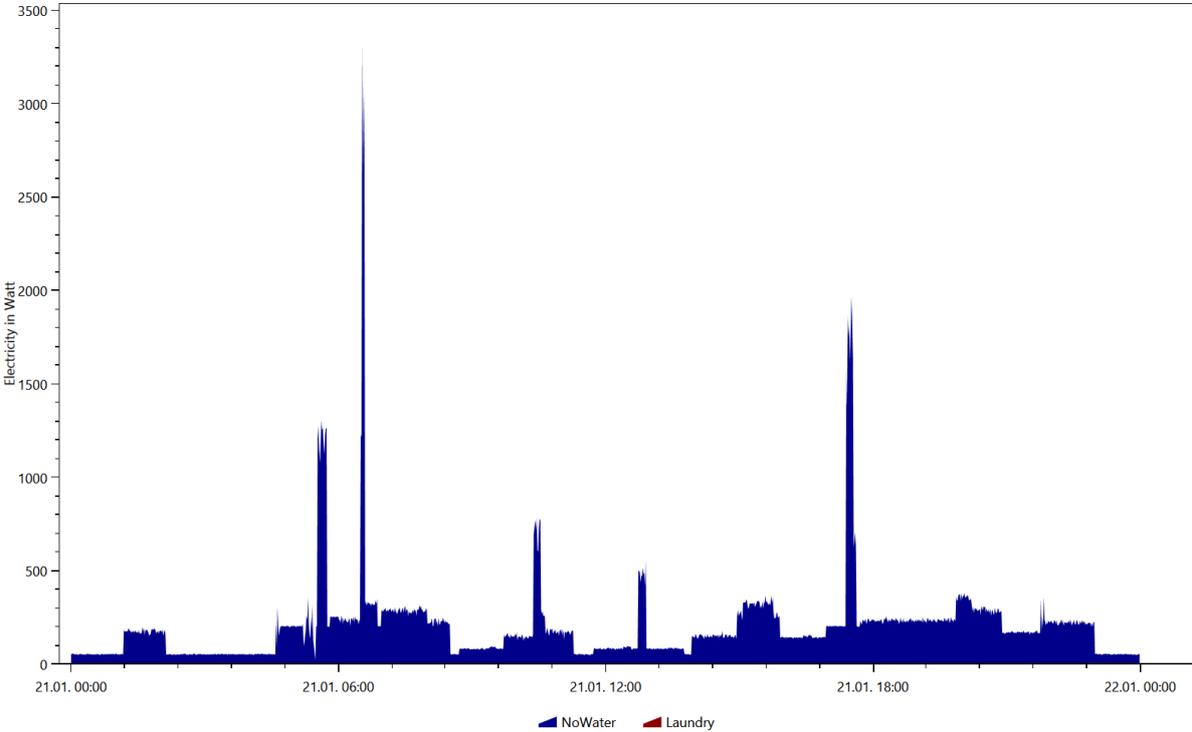
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.5



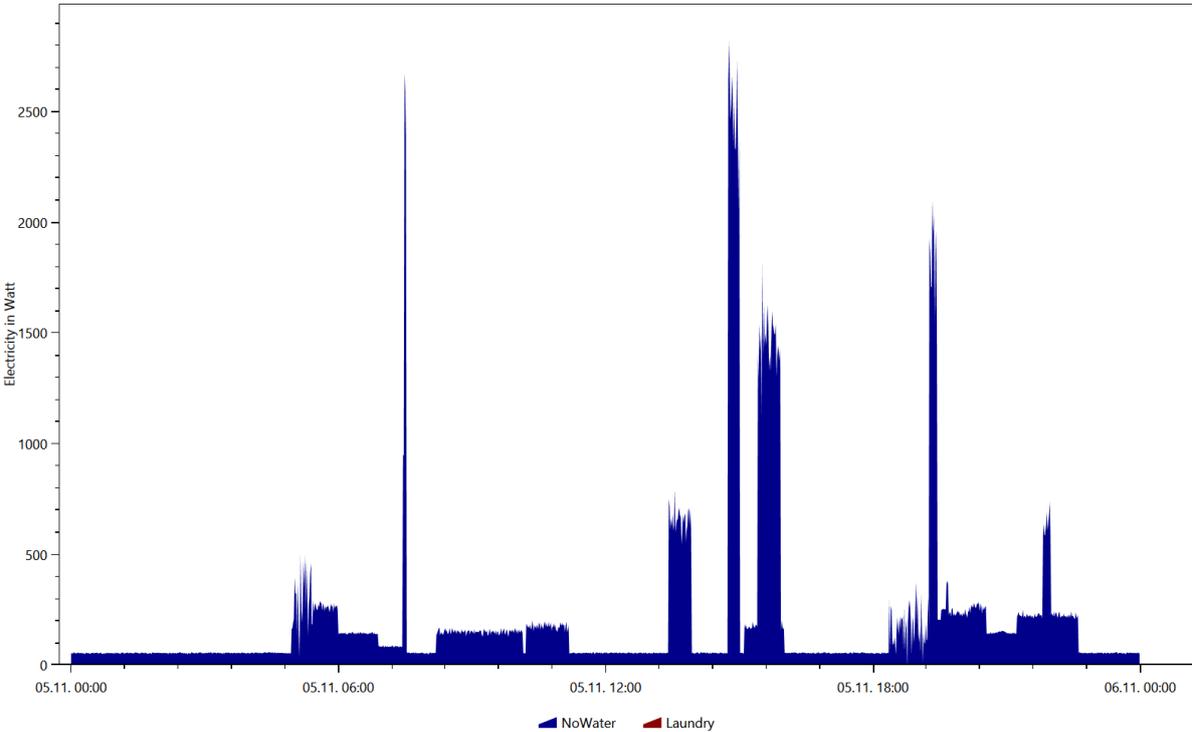
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.18



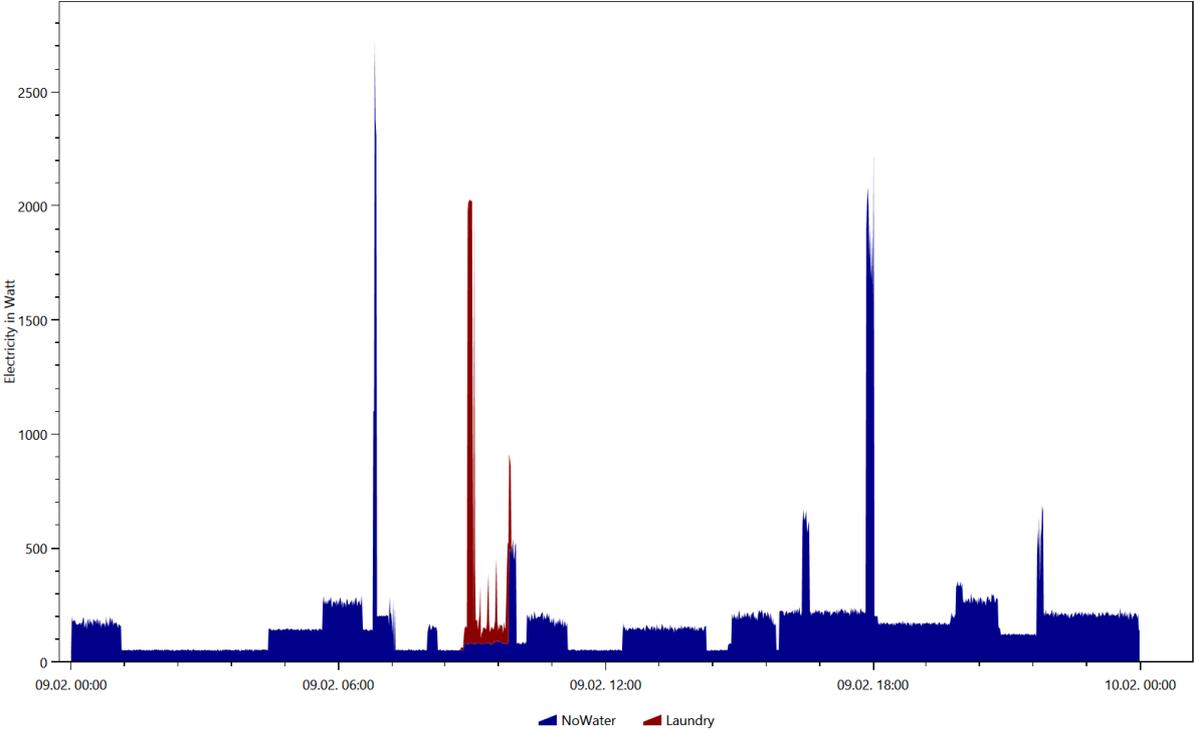
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.21



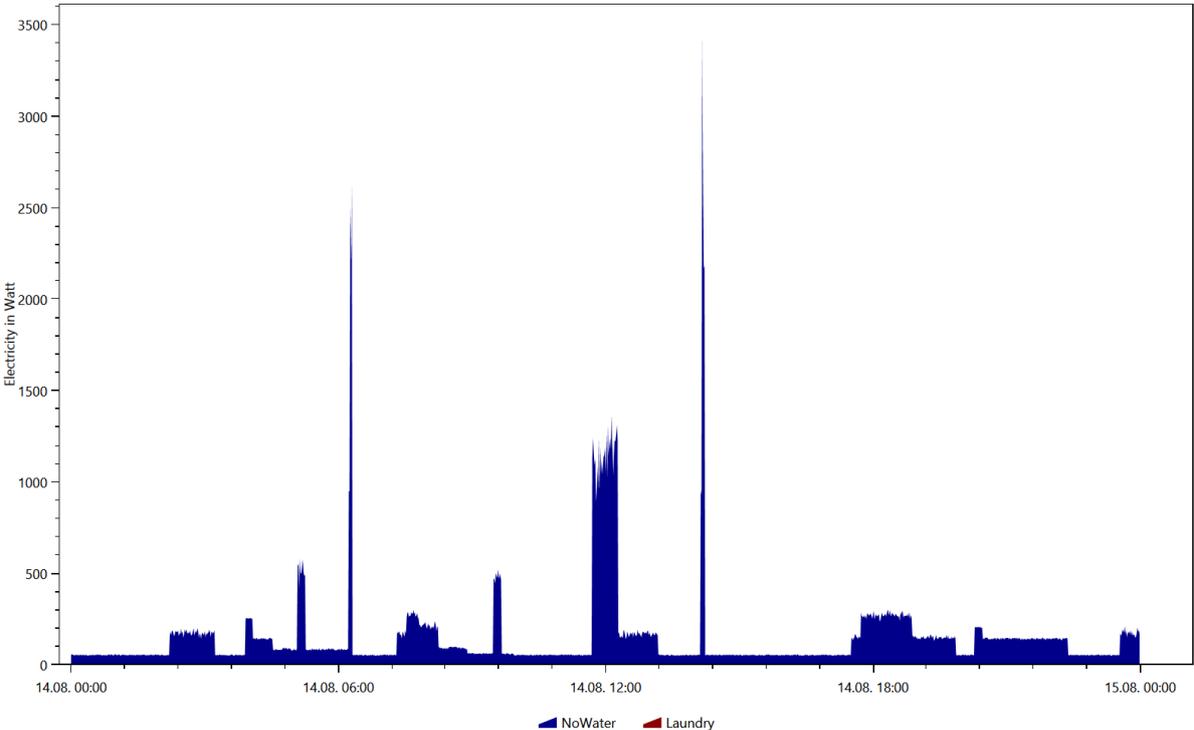
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.5



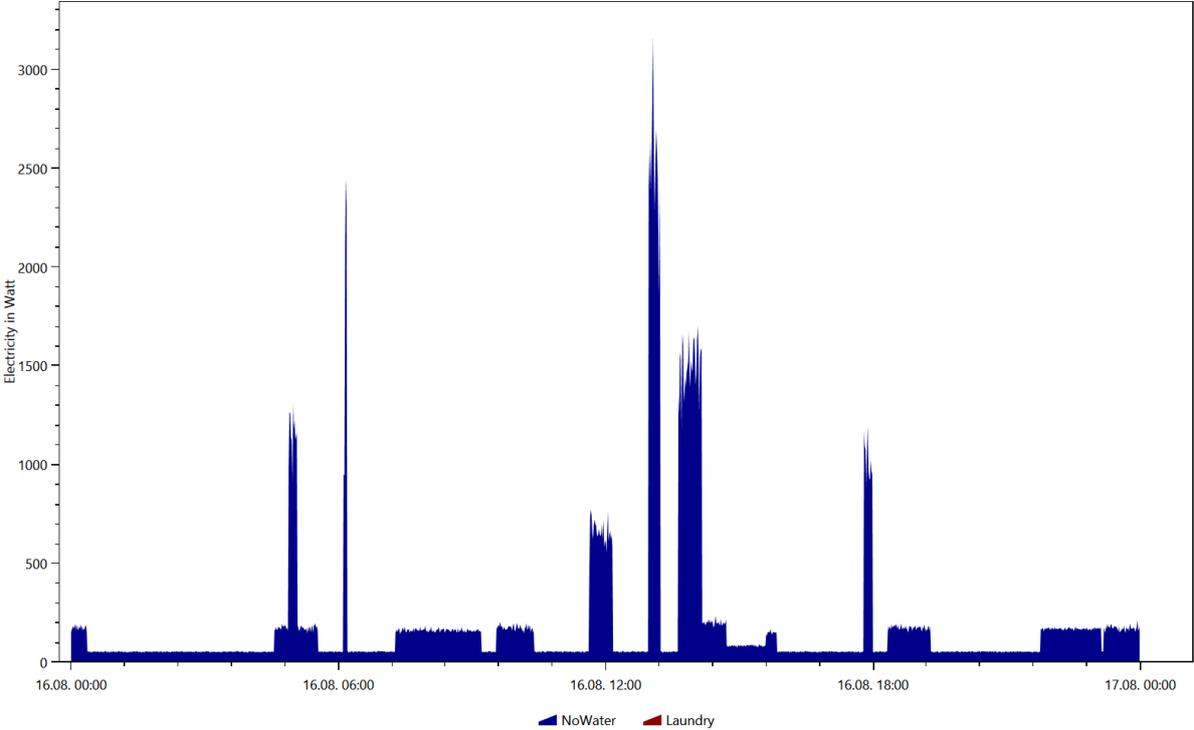
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.9



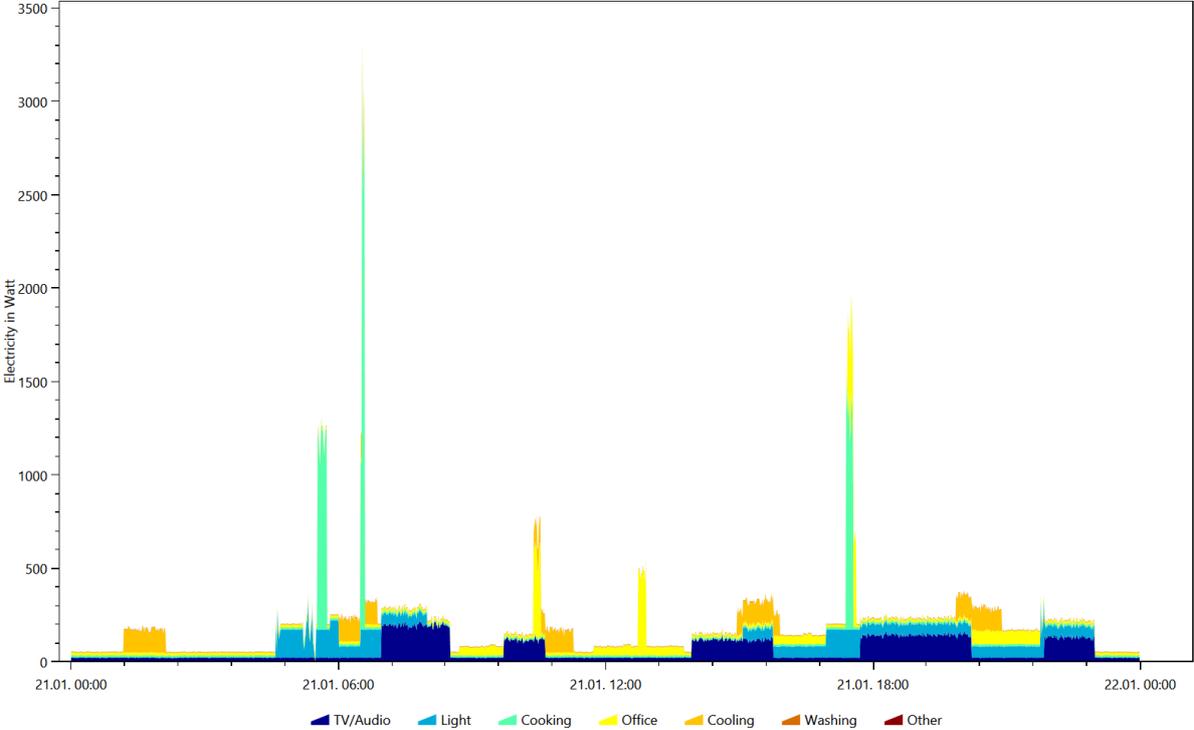
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.14



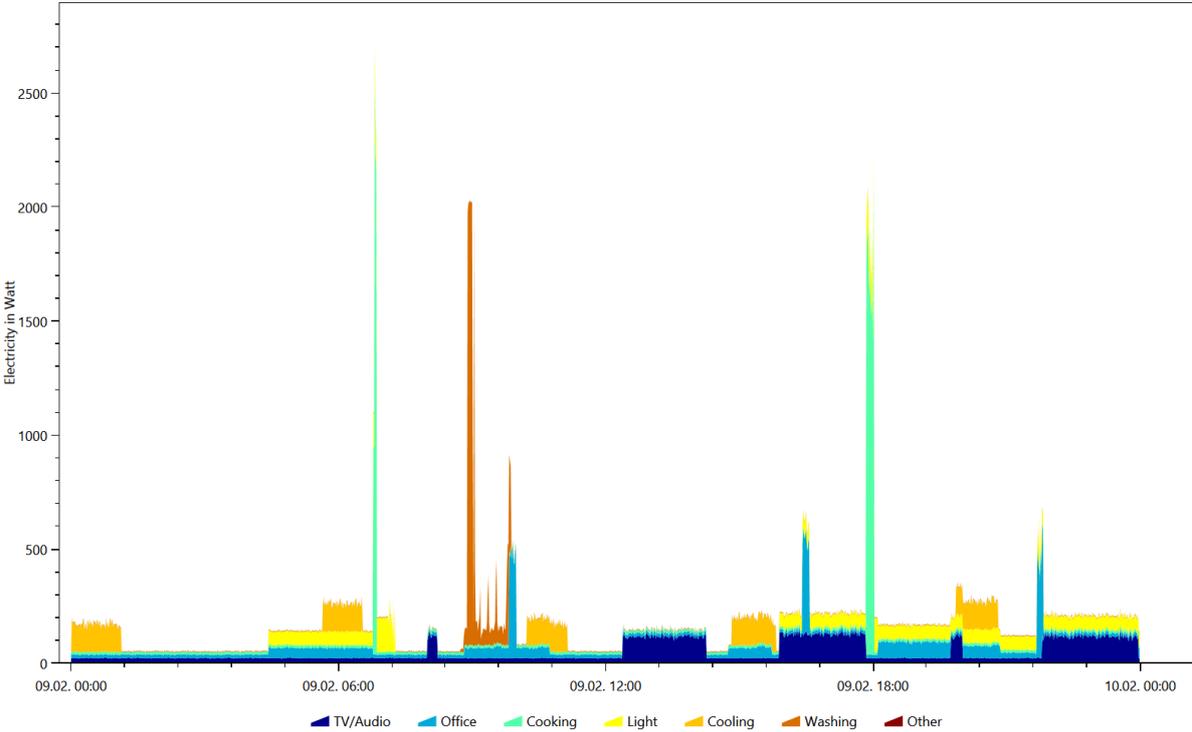
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.16



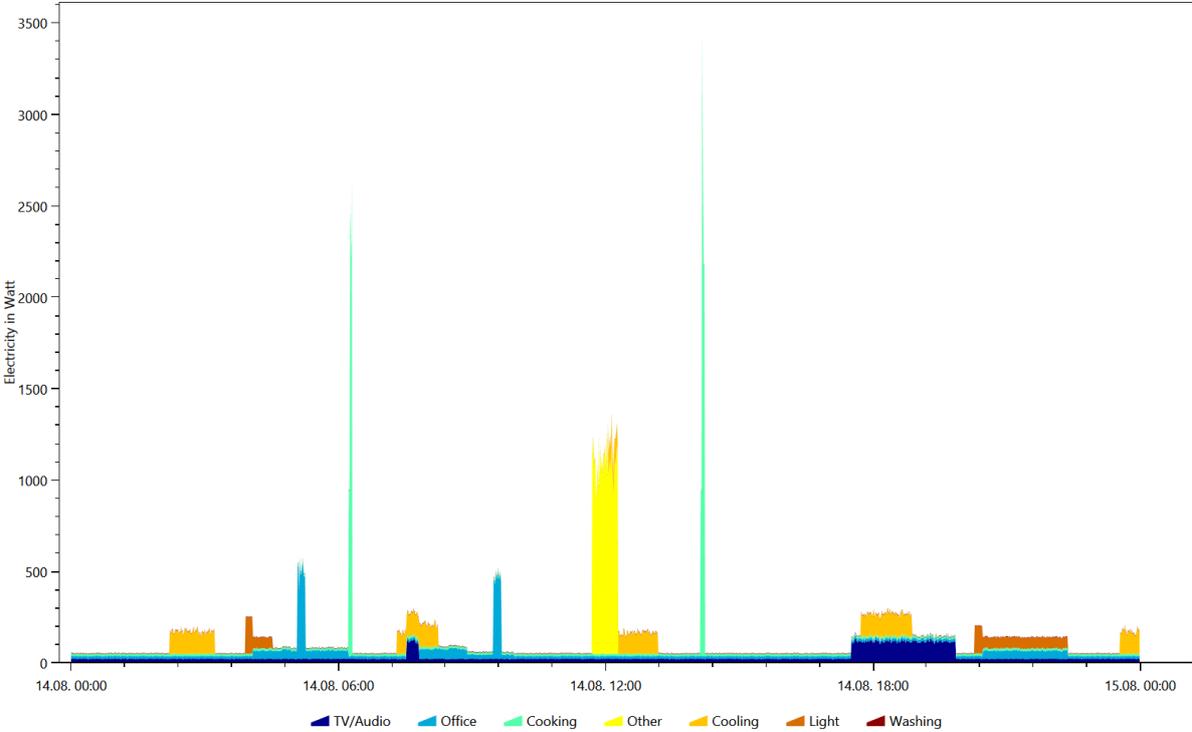
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.21



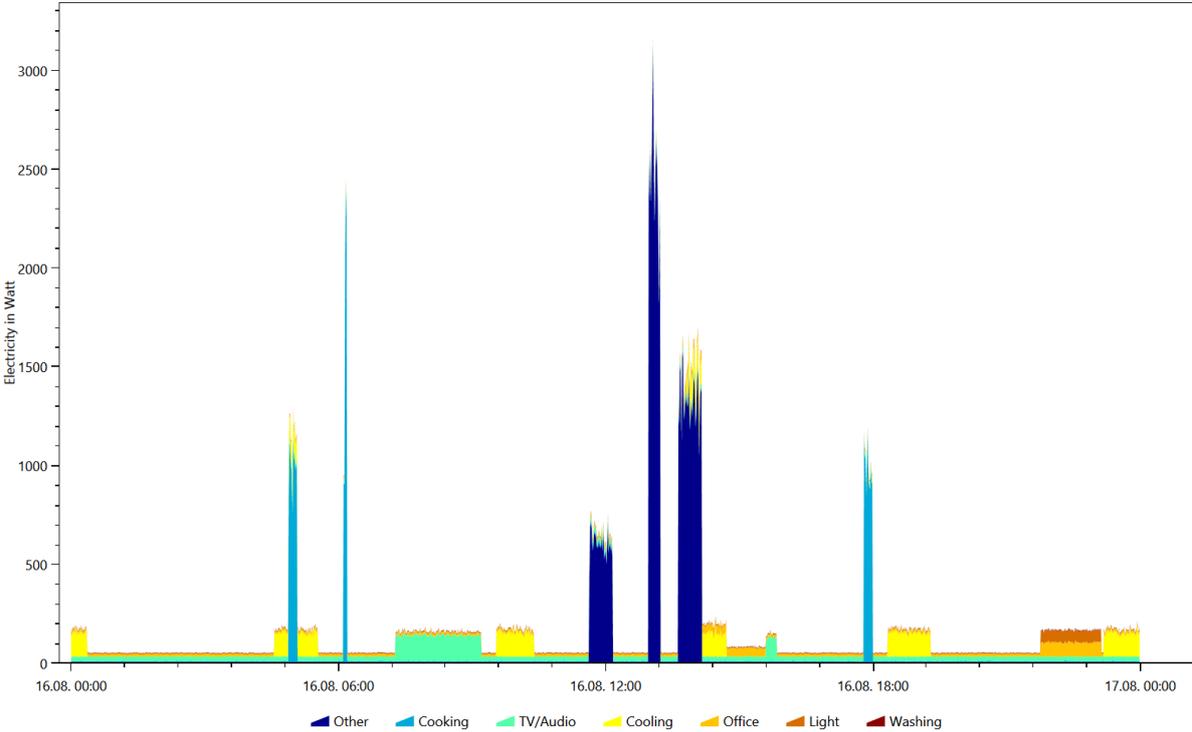
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.9



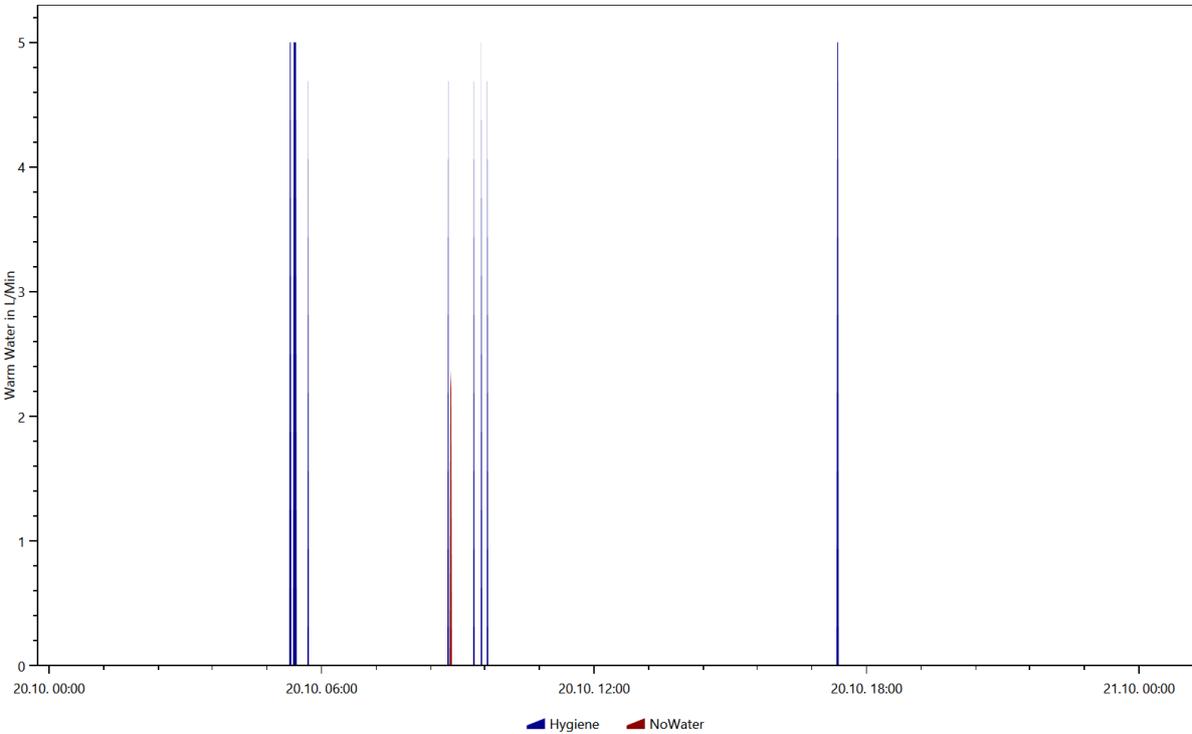
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.14



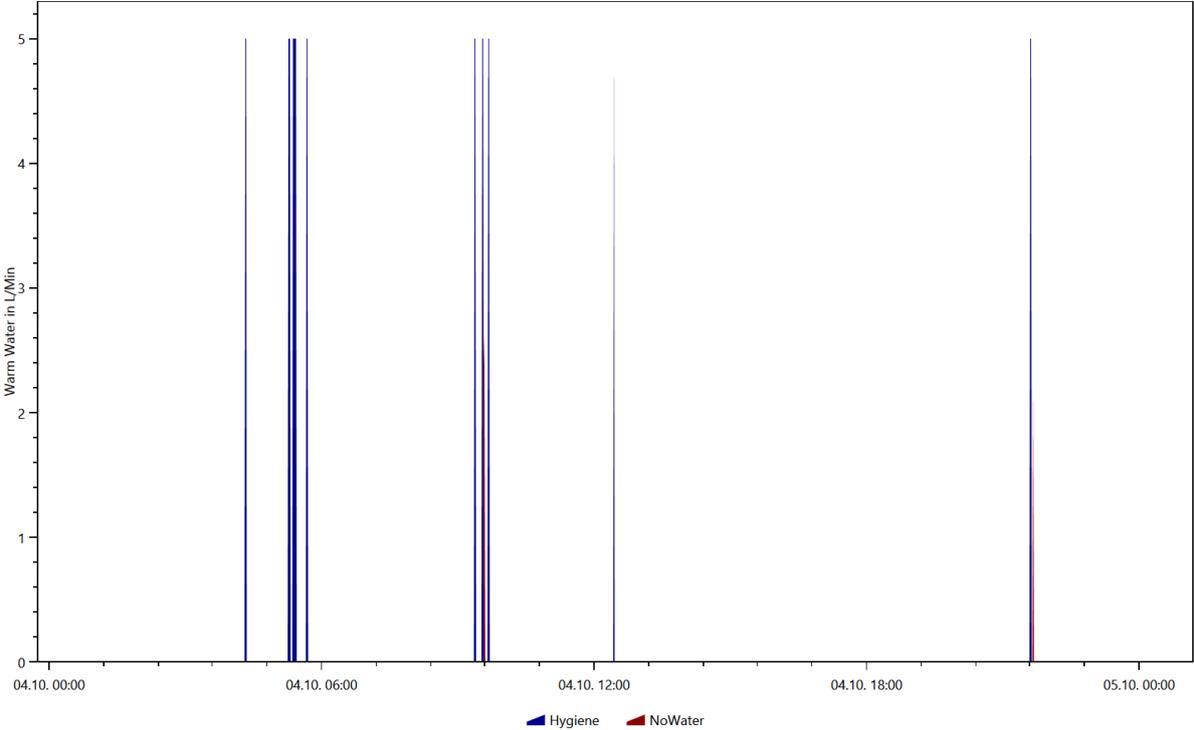
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.16



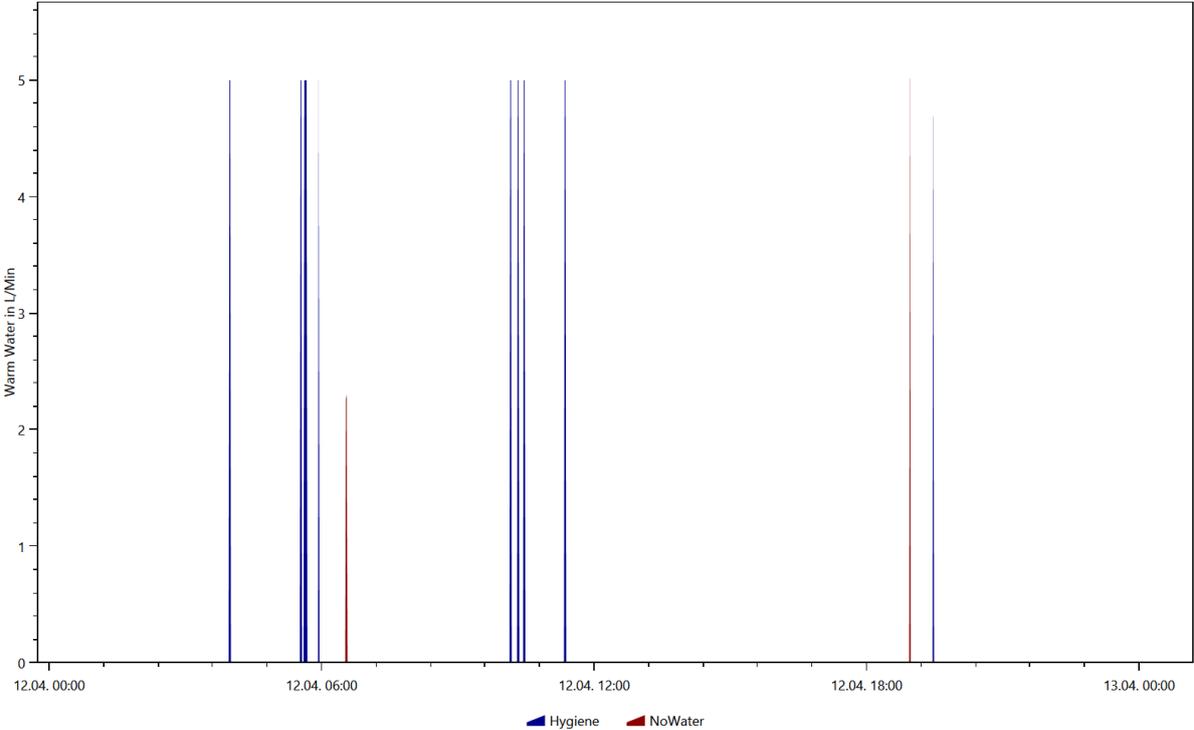
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.20



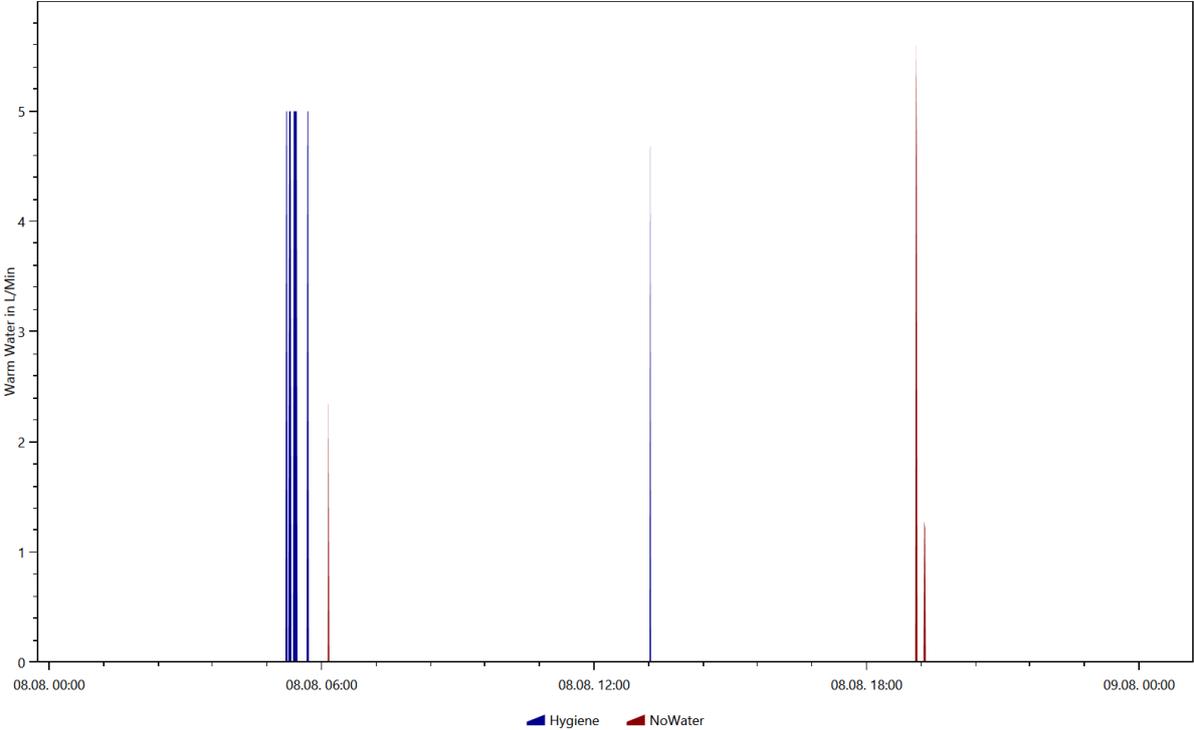
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.4



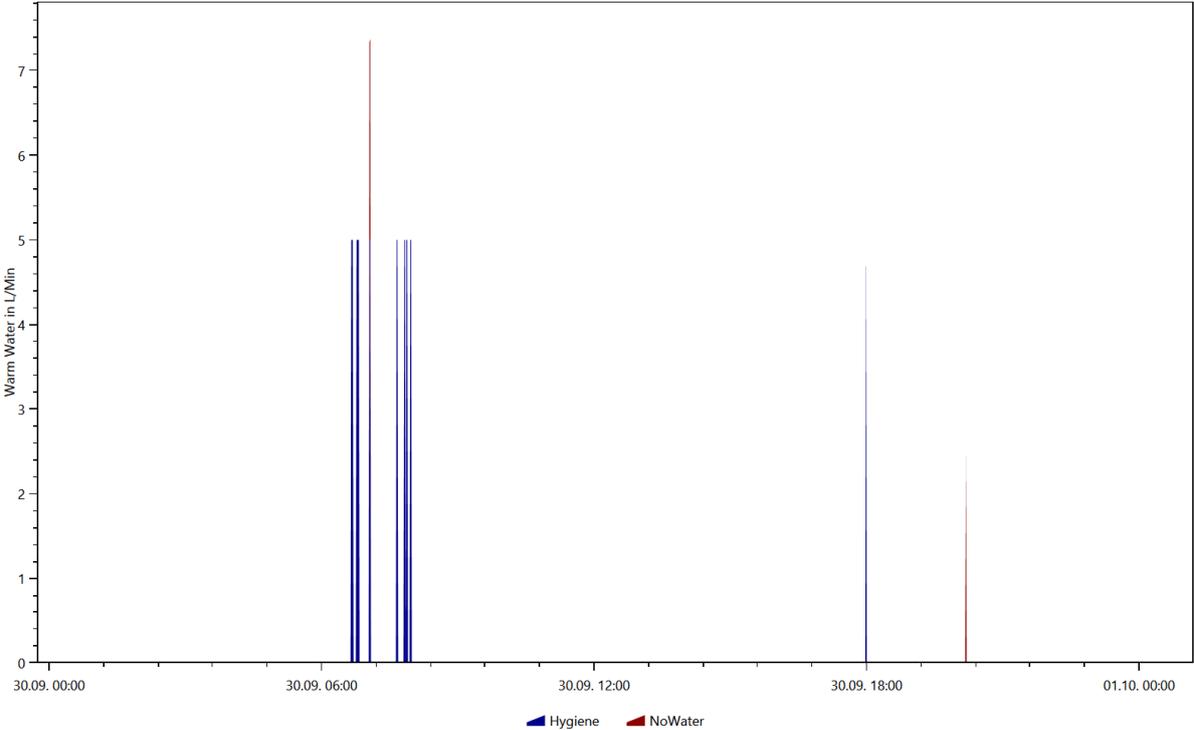
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.12



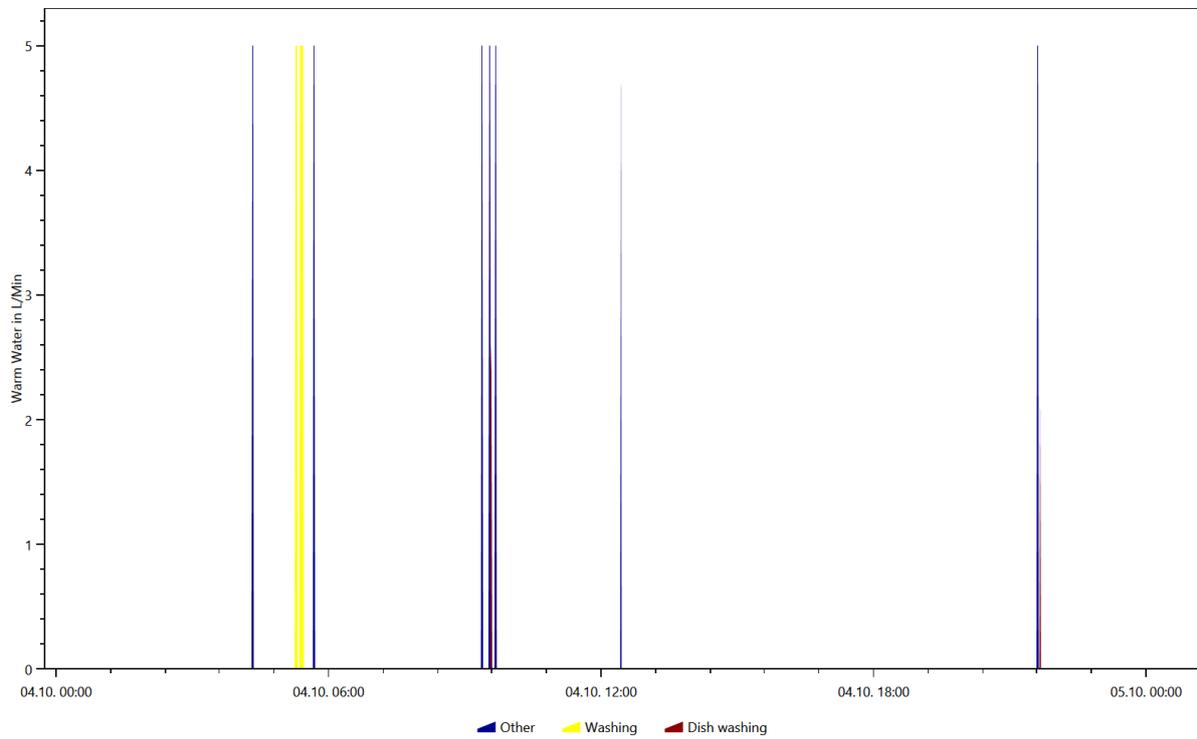
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.8



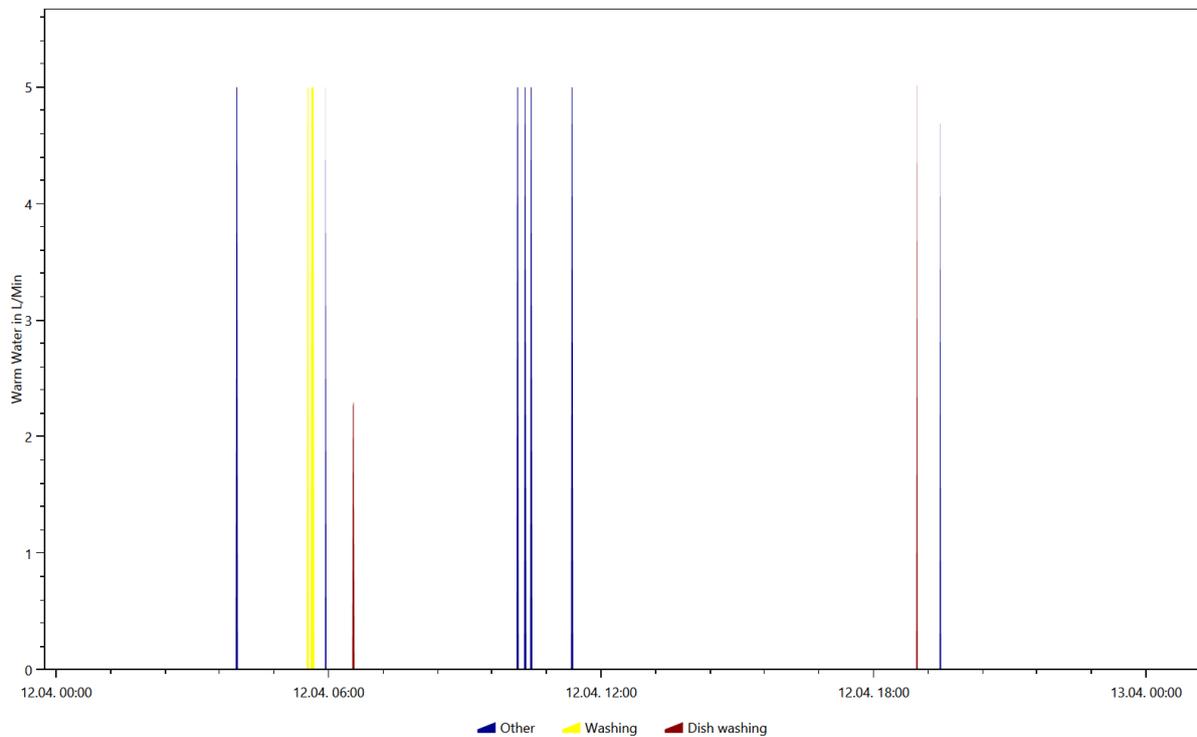
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.30



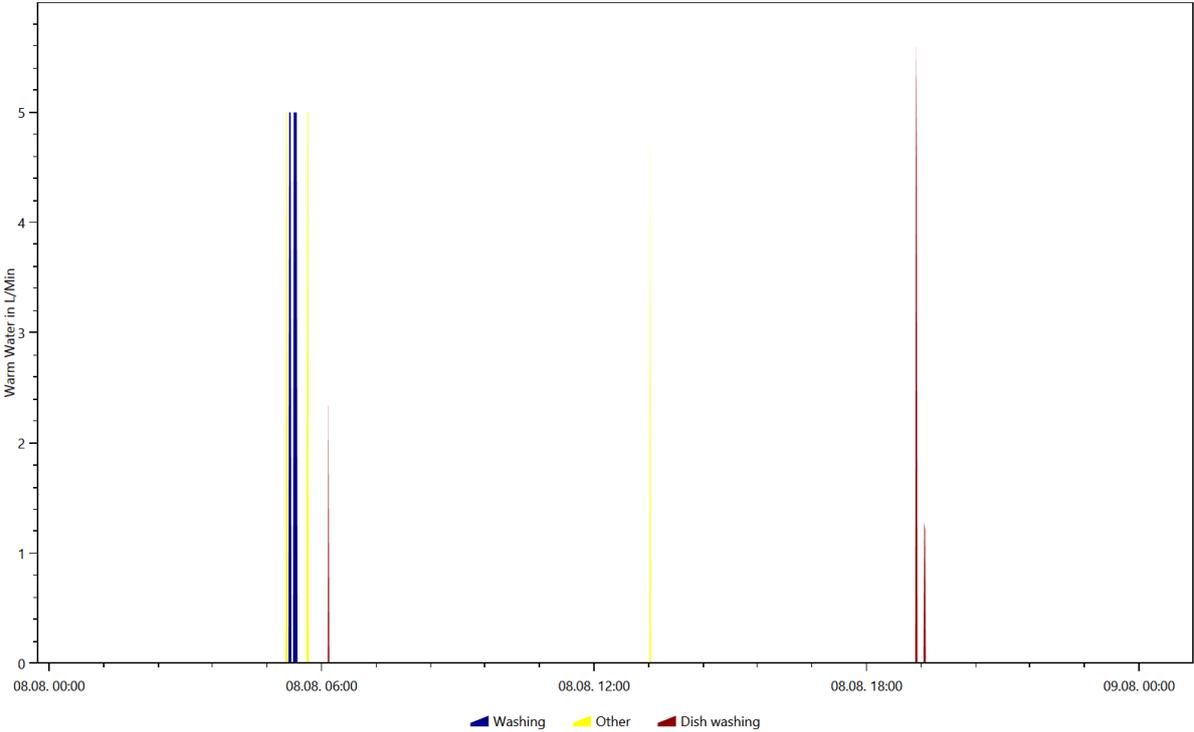
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.4



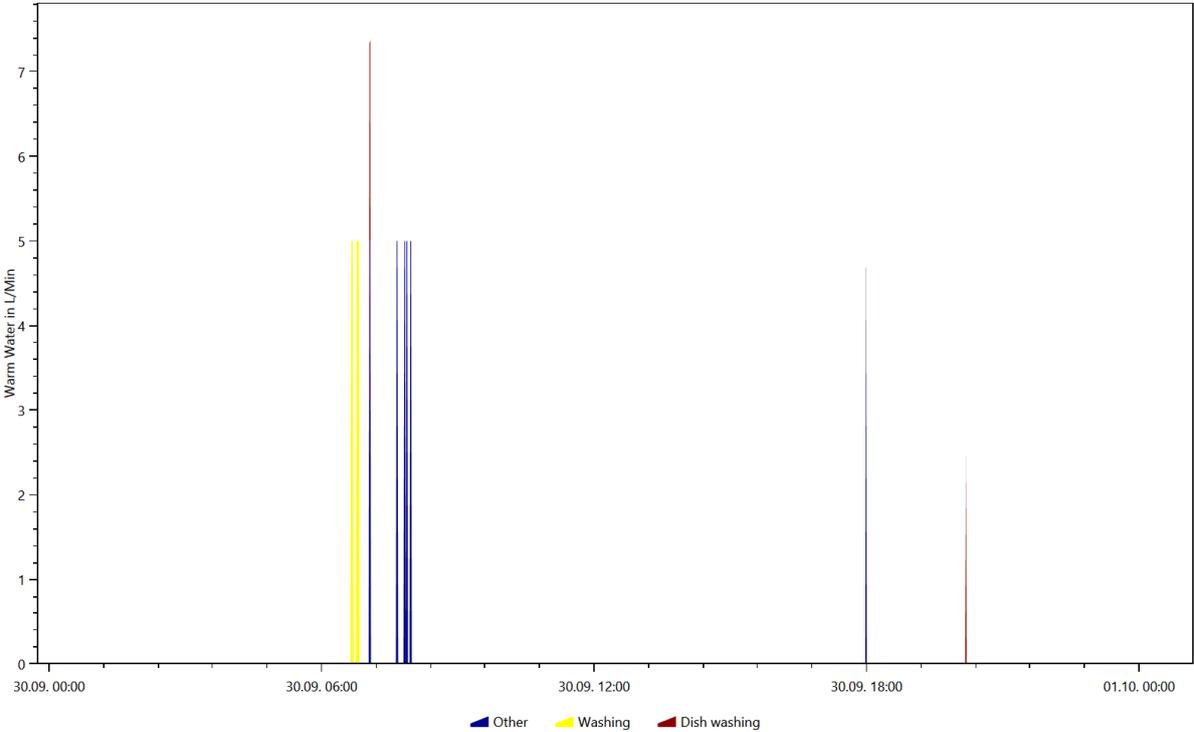
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.12



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.8



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.30

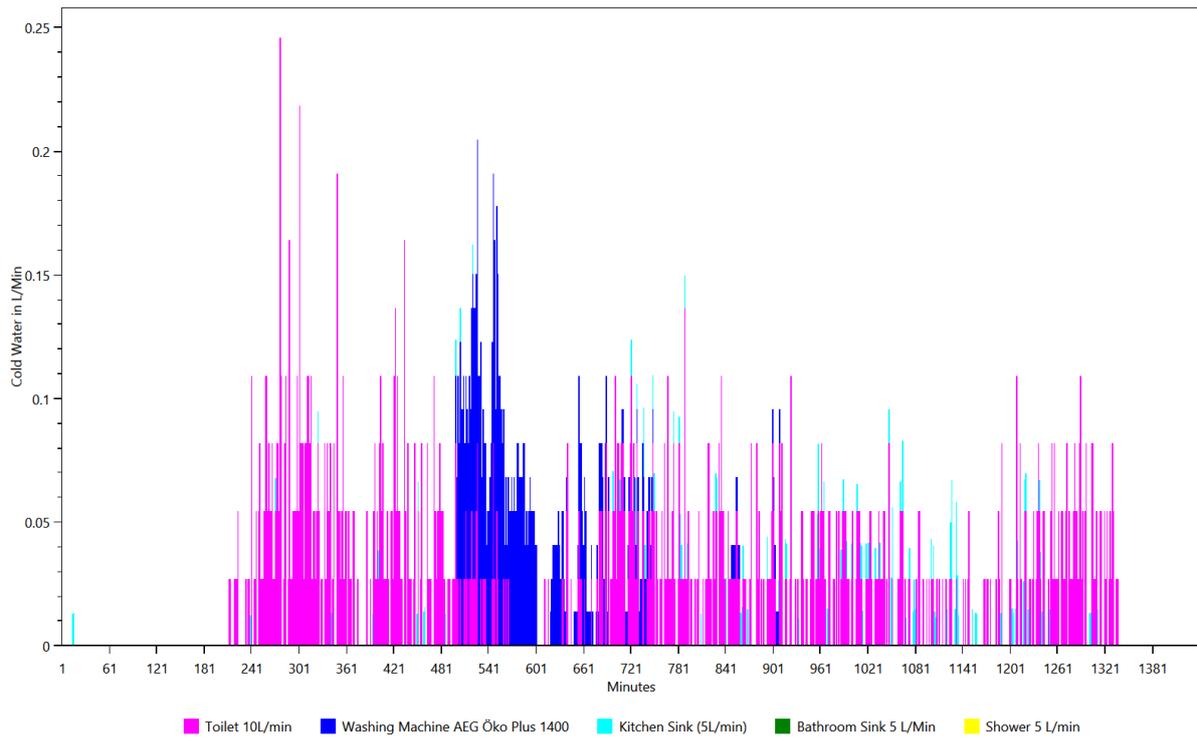


Overview of the time and power of the use per load type per device

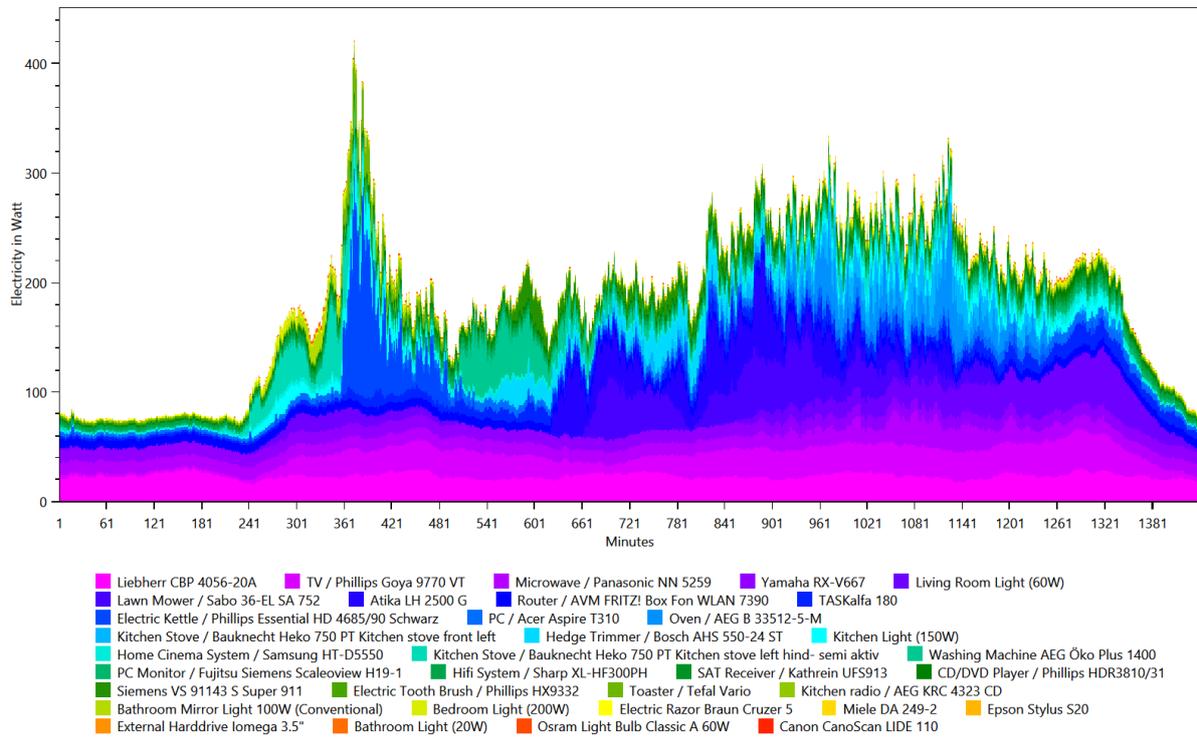
This is made from the files starting with: **TimeOfUseEnergyProfiles**

The time of use energy profiles show when each device was used and how much power it used.

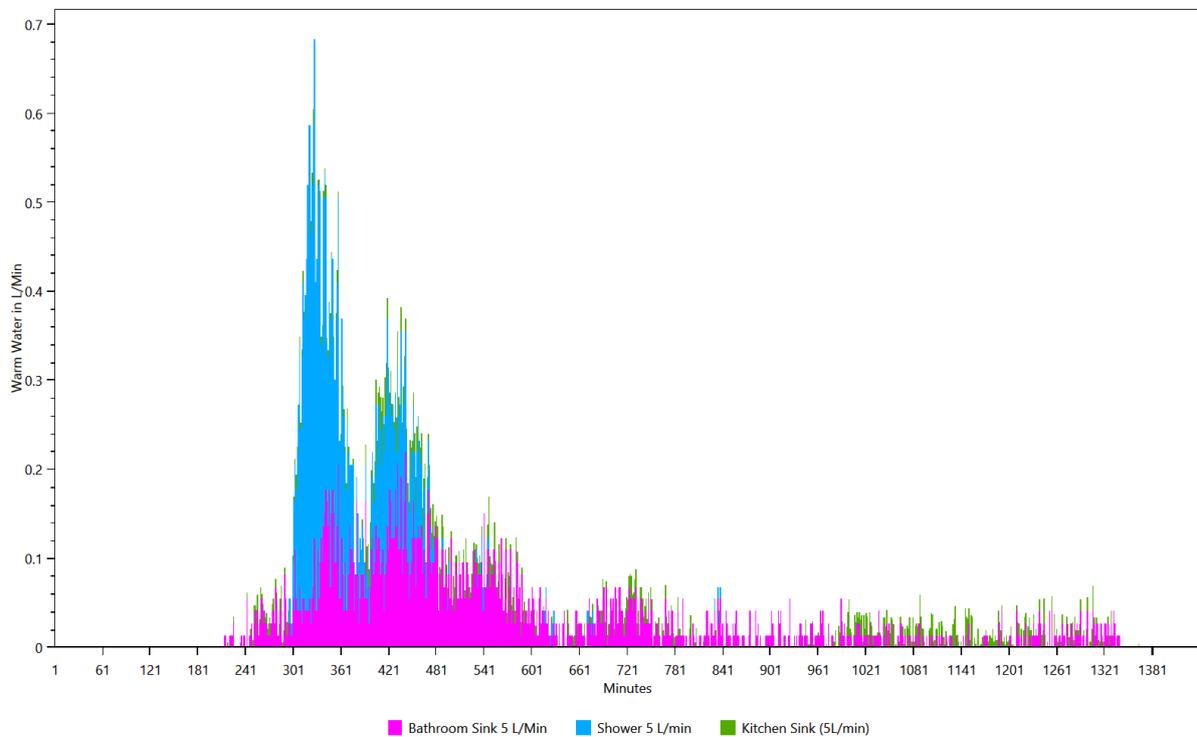
Cold Water



Electricity



Warm Water

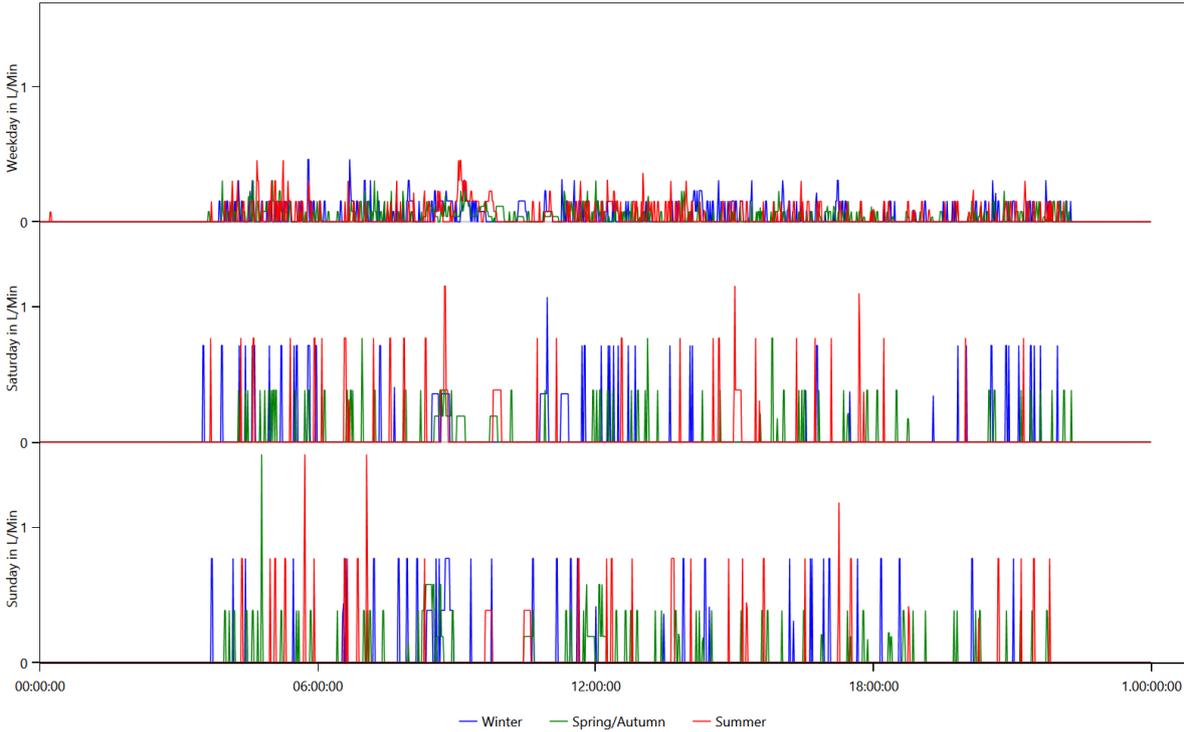


Energy use per load type during different seasons, split by weekday/saturday/sunday

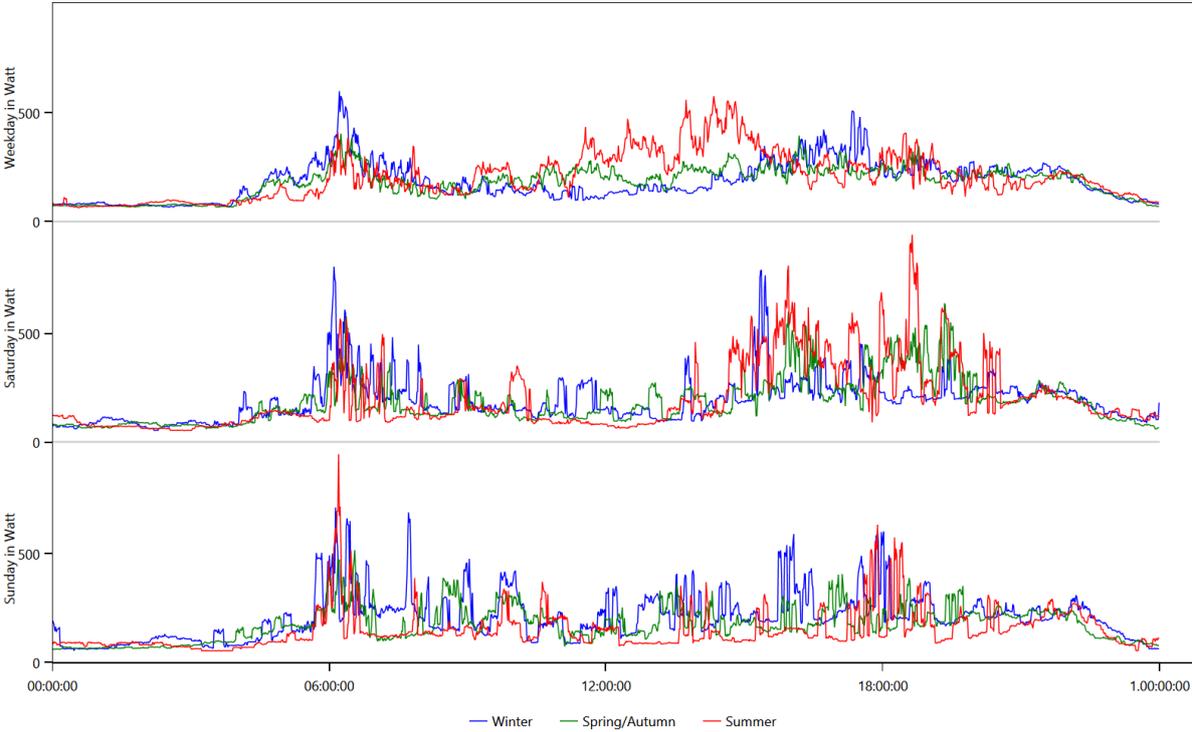
This is made from the files starting with: WeekdayProfiles

This graph shows for each load type the average power consumption per day grouped by season and weekday/saturday/sunday.

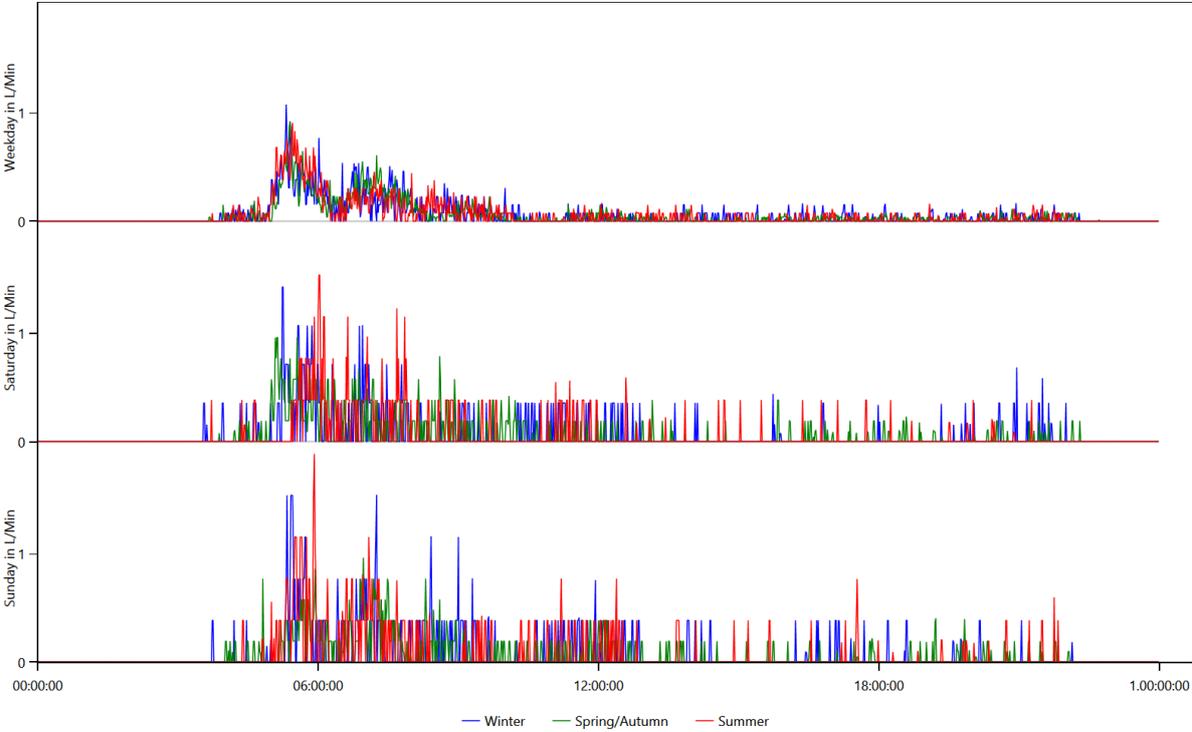
Cold Water



Electricity



Warm Water

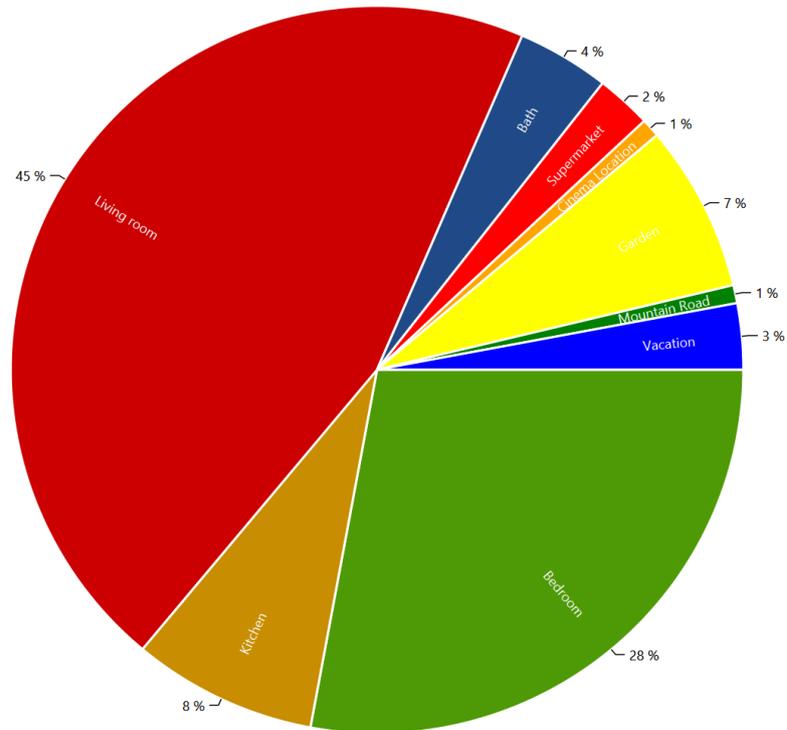


Location Distribution per Person

This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR38 David (55 Male)



Actions.csv

This is made from the files starting with: Actions

These files show the actions of each person in the household. The content looks like this:

Actions.HH0.csv

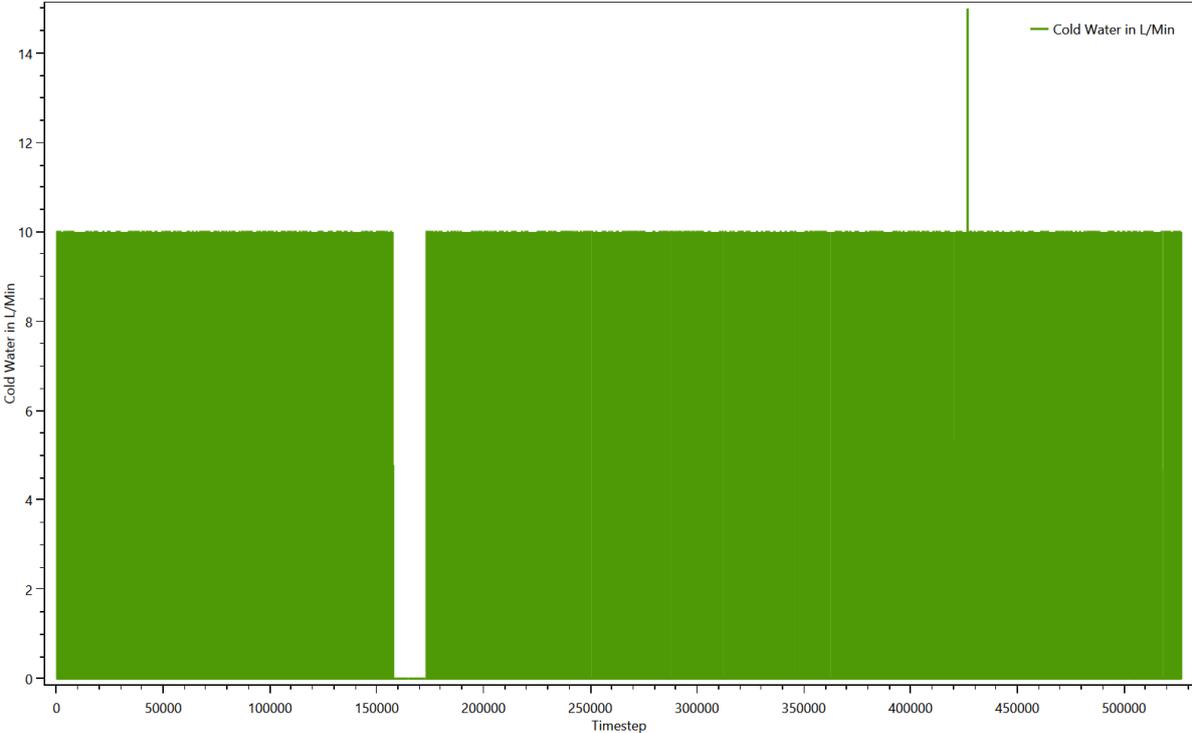
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR38 David (55/Male);sleep bed 01 (06 h);sleep;False;
262;01.01.2016 04:22;CHR38 David (55/Male);wash 1 dishes by hand;cleaning;False;
287;01.01.2016 04:47;CHR38 David (55/Male);play a puzzle game;Offline Entertainment;False;
347;01.01.2016 05:47;CHR38 David (55/Male);go to the toilet;hygiene;False;
353;01.01.2016 05:53;CHR38 David (55/Male);paint a picture ;Offline Entertainment;False;
388;01.01.2016 06:28;CHR38 David (55/Male);eat small breakfast (25min) interrupting subaff, no
alarm;cooking;False;
412;01.01.2016 06:52;CHR38 David (55/Male);rest for 10 min;sleep;False;
421;01.01.2016 07:01;CHR38 David (55/Male);watch a movie for 1 h 30 min with home cinema system;Passive
Entertainment (TV etc.);False;
497;01.01.2016 08:17;CHR38 David (55/Male);use the computer (1.5 h);Active Entertainment (Computer,
Internet etc.);False;
597;01.01.2016 09:57;CHR38 David (55/Male);take a nap;sleep;False;
659;01.01.2016 10:59;CHR38 David (55/Male);clean the bath;cleaning;False;
722;01.01.2016 12:02;CHR38 David (55/Male);watch sports on TV with SAT Reciever (2 h);Passive
Entertainment (TV etc.);False;
829;01.01.2016 13:49;CHR38 David (55/Male);take a shower (men);hygiene;False;
847;01.01.2016 14:07;CHR38 David (55/Male);go to the toilet;hygiene;False;
853;01.01.2016 14:13;CHR38 David (55/Male);use the computer for recreation (2 h);Active Entertainment
(Computer, Internet etc.);False;
970;01.01.2016 16:10;CHR38 David (55/Male);rest for 10 min;sleep;False;
979;01.01.2016 16:19;CHR38 David (55/Male);make soup;cooking;False;
996;01.01.2016 16:36;CHR38 David (55/Male);wash 1 dishes by hand;cleaning;False;
1032;01.01.2016 17:12;CHR38 David (55/Male);watch a movie for 2 h;Passive Entertainment (TV etc.);False;

Sum Profiles

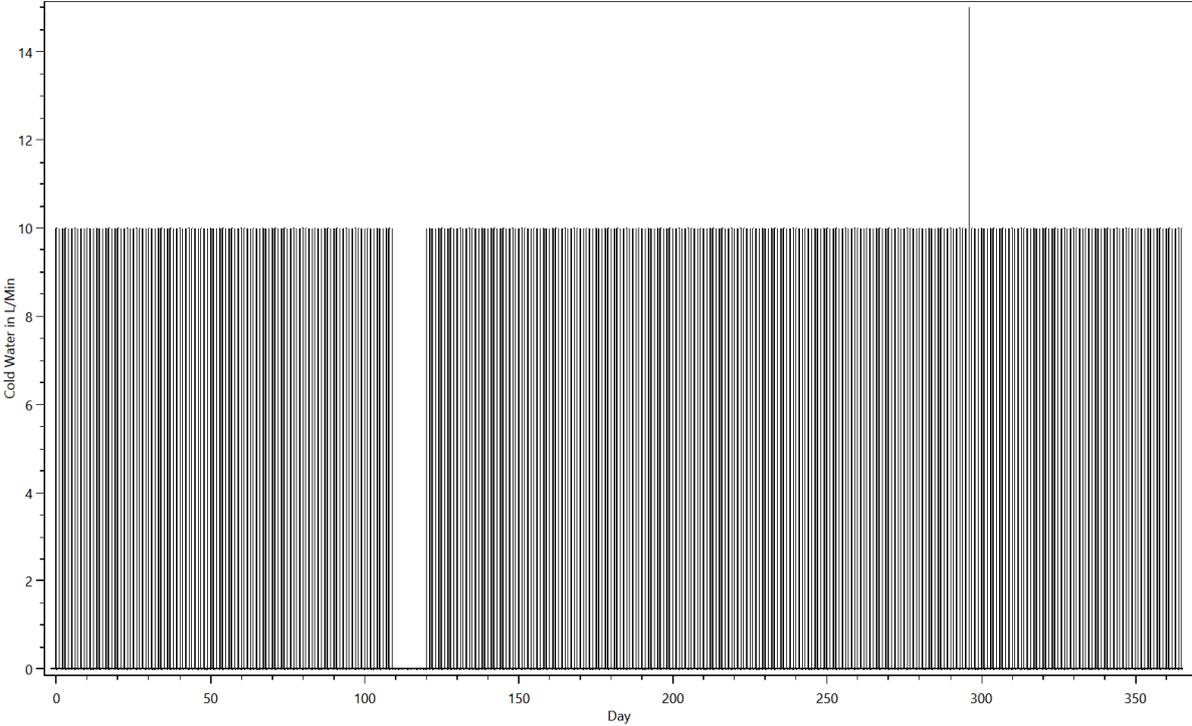
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

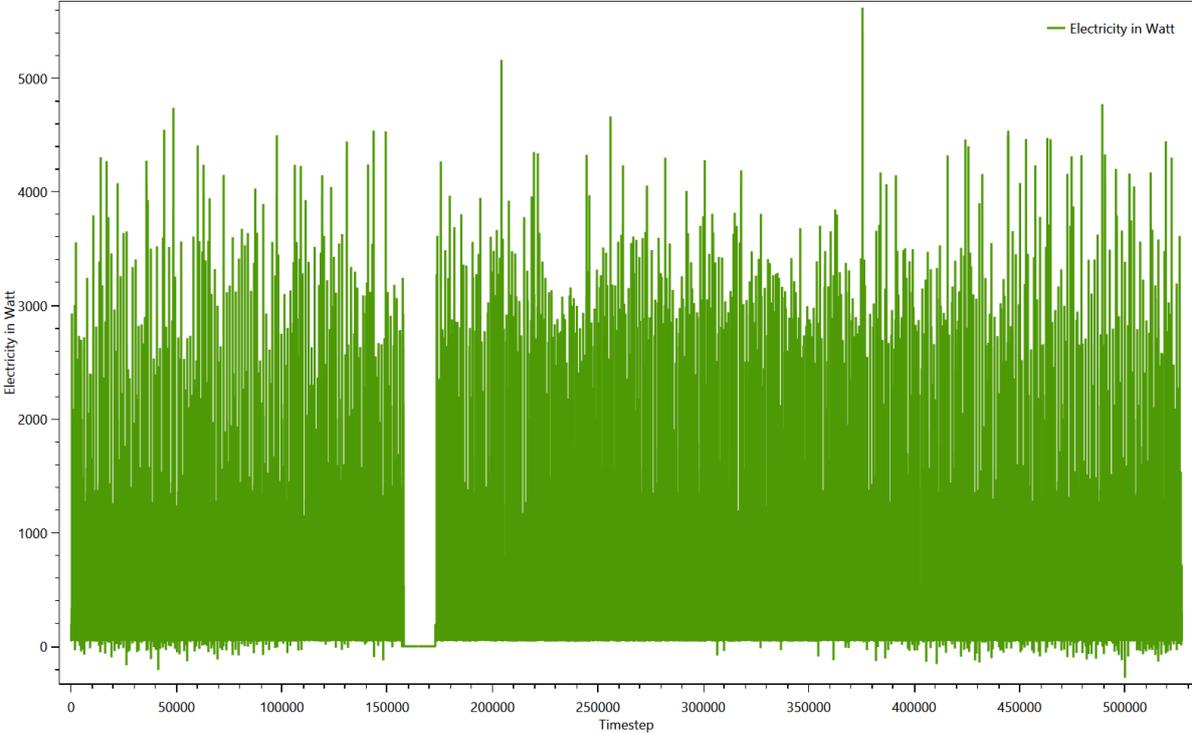
Summed up curve for Cold Water from SumProfiles.Cold Water.png



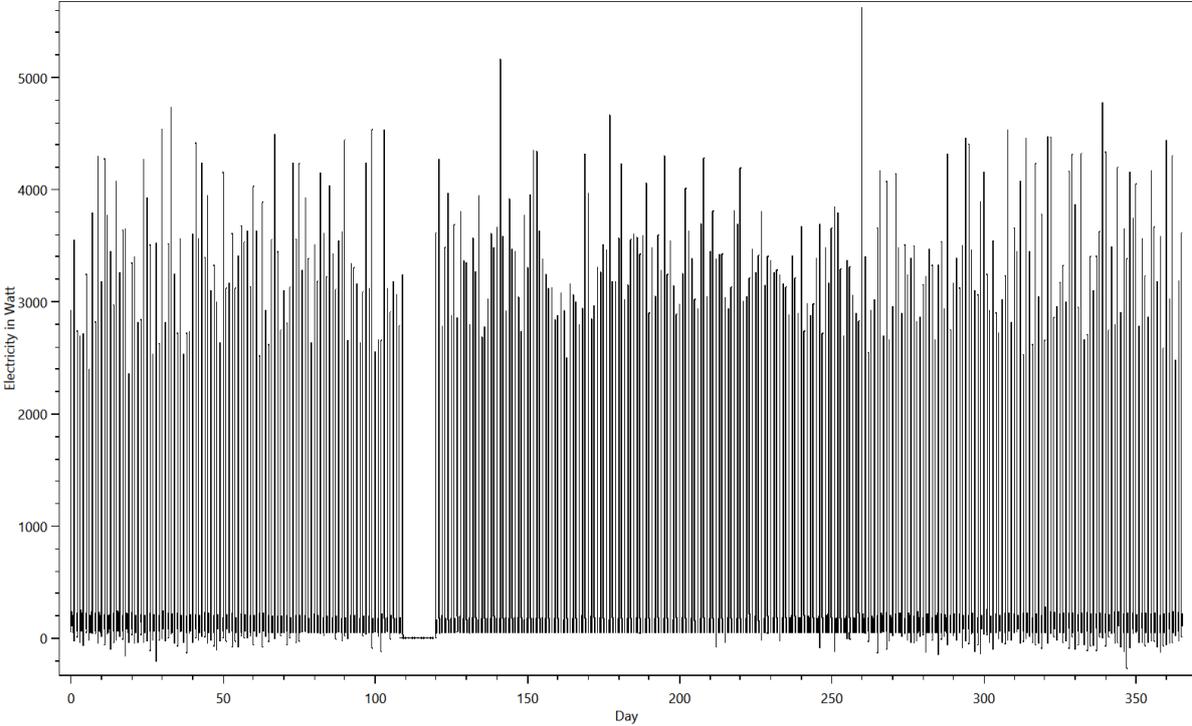
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax..png



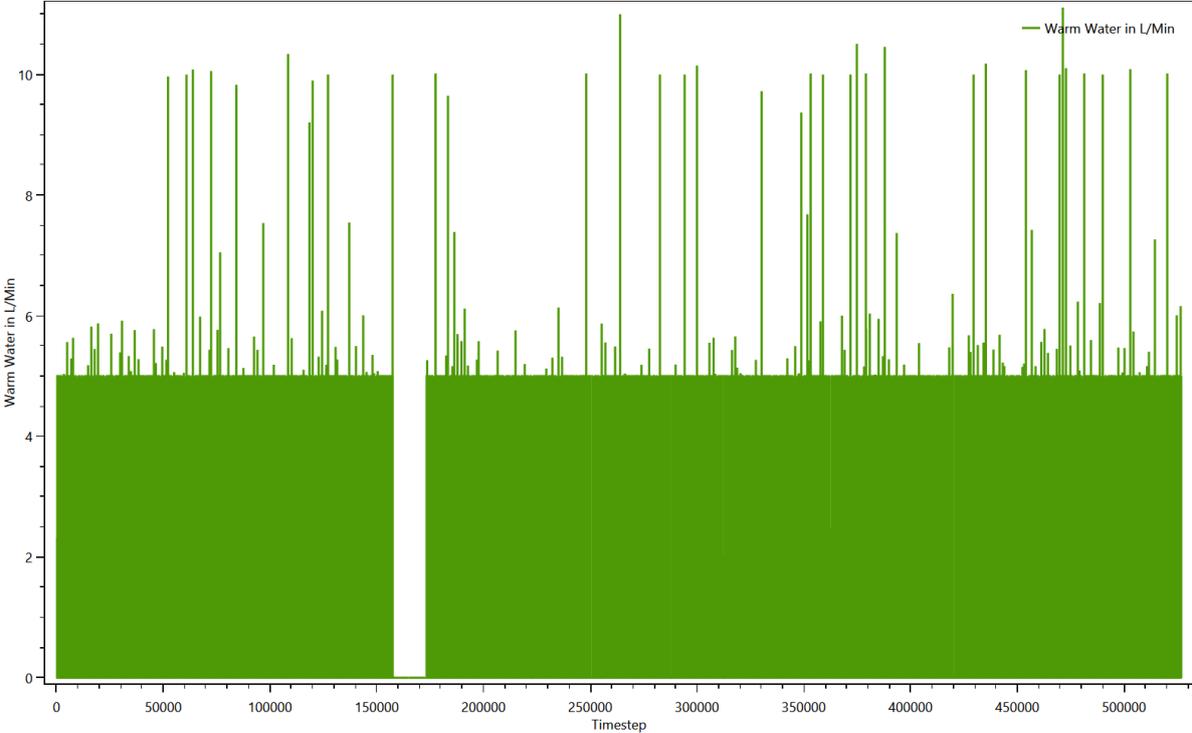
Summed up curve for Electricity from SumProfiles.Electricity.png



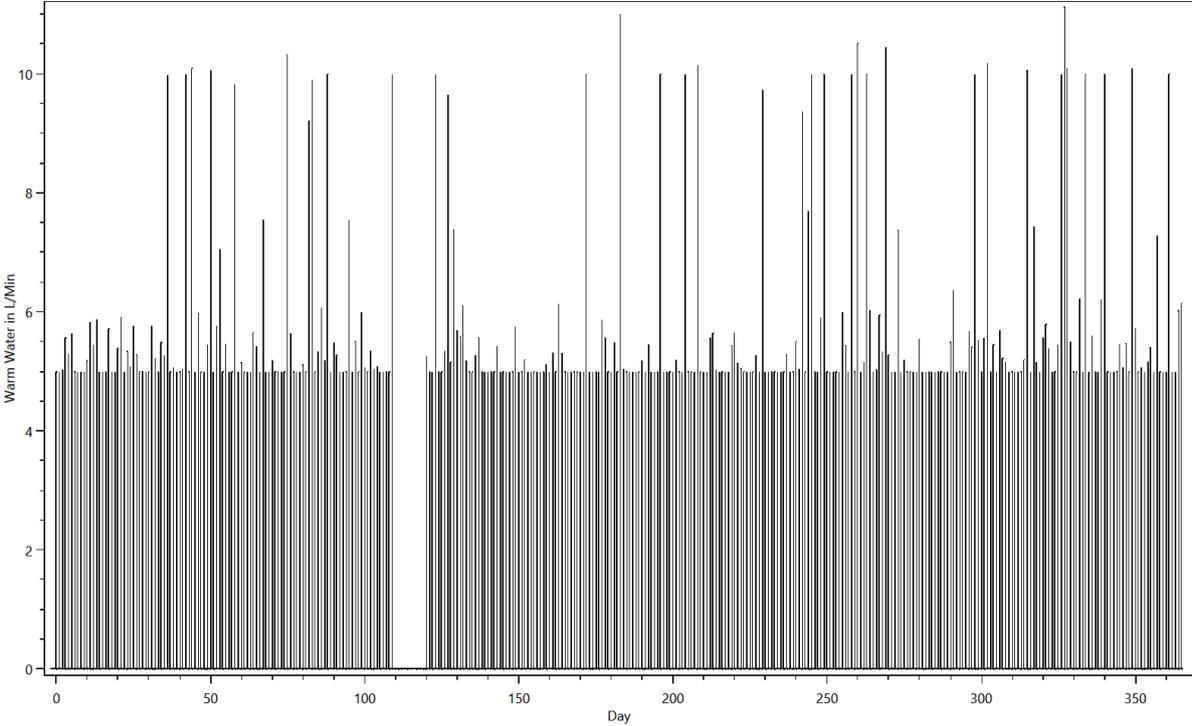
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



Summed up curve for Warm Water from SumProfiles.Warm Water.png



Summed up curve for Warm WaterMinMax from SumProfiles.Warm WaterMinMax..png



Time Profiles

This is made from the files starting with: Time Profiles

These files show which time profiles were used for each device and how often. The content looks like this:

TimeProfiles.HH0.CHR38 Single man, 30 - 64 years, without work 0.txt

Device;Load Type;Profile;Number of Activations

Atika LH 2500 G;Electricity;0 h 15 min 100% [Synthetic];139

Bathroom Light (20W);Electricity;Bath - light [Synthetic for Light Device];569

Bathroom Mirror Light 100W (Conventional);Electricity;Bath - light [Synthetic for Light Device];569

Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];2071

Bed 1;None;06 h 0 min 100% [Synthetic];358

Bedroom Light (200W);Electricity;Bedroom - light [Synthetic for Light Device];273

CD/DVD Player / Phillips HDR3810/31;Electricity;01 h 30 min 100% [Synthetic];324

CD/DVD Player / Phillips HDR3810/31;Electricity;02 h 0 min 100% [Synthetic];183

CD/DVD Player / Phillips HDR3810/31;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8528

Canon CanoScan LIDE 110;Electricity;0 h 10 min 100% [Synthetic];219

Chair;None;0 h 10 min 100% [Synthetic];720

Cinema;None;03 h 0 min 100 % [Synthetic];24

Cleanser;None;01 h 0 min 100% [Synthetic];110

Cloth Drying Rack;None;0 h 20 min 100% [Synthetic];73

Couch;None;01 h 0 min 100% [Synthetic];358

Couch;None;02 h 0 min 100% [Synthetic];36

Desk 2;None;0 h 30 min 100% [Synthetic];312

Electric Kettle / Phillips Essential HD 4685/90 Schwarz;Electricity;0 h 03 min 100% [Synthetic];415

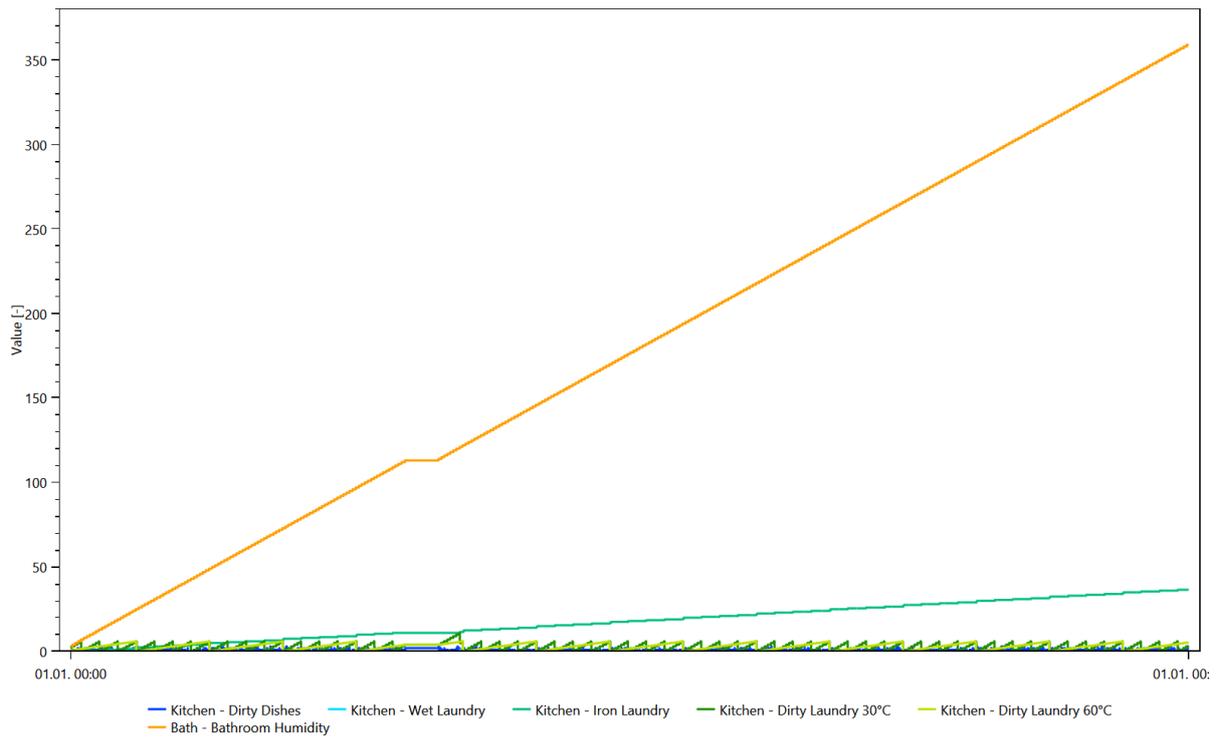
Electric Razor Braun Cruzer 5;Electricity;Profile for Electric Razor Braun Cruzer 5 Electricity [Measurement by ZSW (1min)];6479

Variables

This is made from the files starting with: Variablelogfile

The variables are used to keep track of things like dirty laundry, dirty dishes and the amount of laundry to iron. They are used to ensure that for example the dishwasher is only turned on if there are sufficient dirty dishes. One chart shows the first 25000 timesteps of the contents of all variables, the other shows the entire time span.

Variables



Variables

