Overview of the results of the household CHR39 Couple, 30 - 64 years, with work 0

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

Energy Intensity: Random

Seed 3885

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

http://www.loadprofilegenerator.de

Rendering date:16.12.2016 09:28:10

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	26087.82	L
Electricity	3429.35	kWh
Warm Water	67735.07	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	71.28	L
Electricity	9.37	kWh
Warm Water	185.07	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	17.25	L/Min
Electricity	0.00	13838.02	Watt
Warm Water	0.00	15.00	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	13043.91	L
Electricity	1714.67	kWh

Warm Water	33867.53	L

Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	35.64	L
Electricity	4.68	kWh
Warm Water	92.53	L

Persons

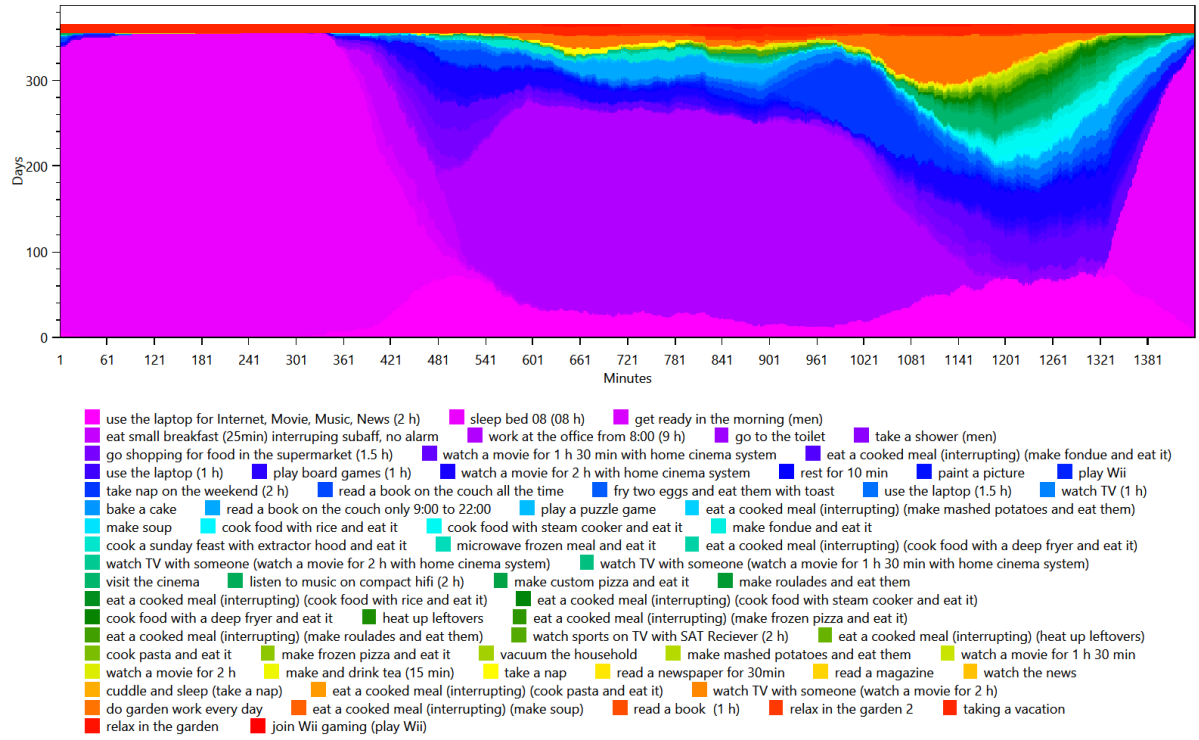
- HH0
    - CHR39 Normen (44/Male)(44/Male)
    - CHR39 Tina (38/Female)(38/Female)

Activity Frequency Charts

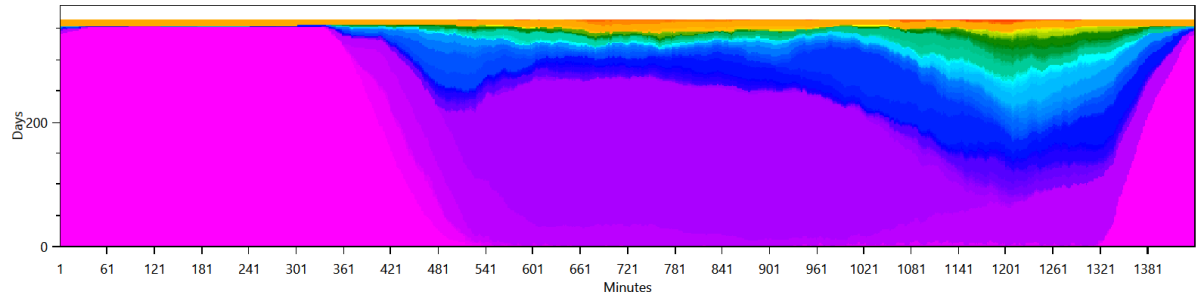
This is made from the files starting with: ActivityFrequenciesPerMinute

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 - CHR39 Normen (44 Male)



HH0 - CHR39 Tina (38 Female)



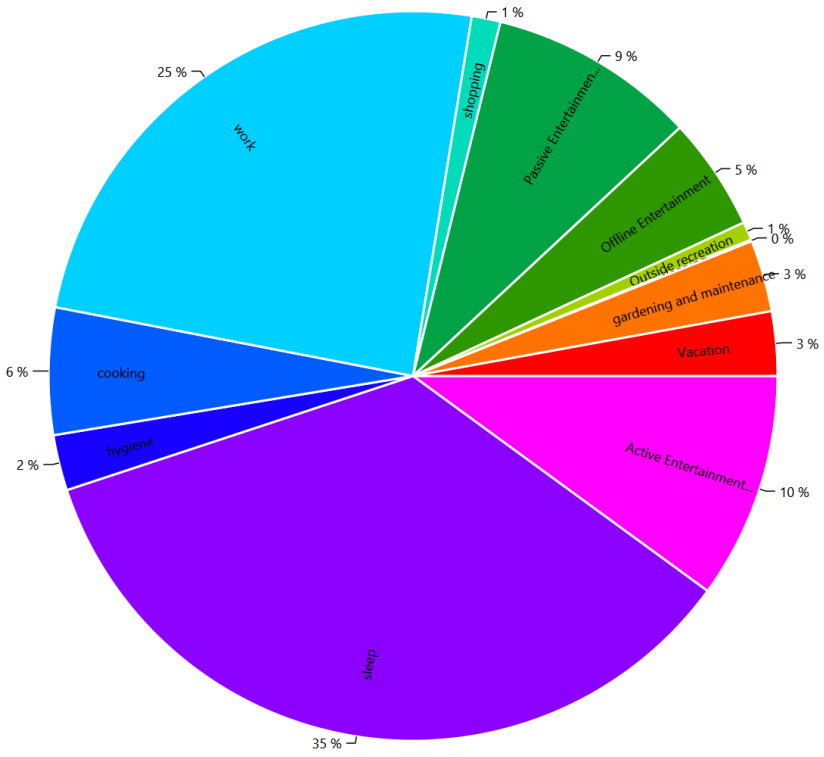
sleep bed 02 (08 h) get ready in the morning (women) go to the toilet eat small breakfast (25min) interruping subaff, no alarm
use the laptop for Internet, Movie, Music, News (2 h) work as teacher take a shower with hair washing (women) (5 min hair drying)
do laundry at 30°C (by variable) make fondue and eat it play board games (1 h) clean the bath
run the dryer with wet laundry, only below 15°C (by variable) watch TV with someone (watch a movie for 2 h with home cinema system)
watch a movie for 1 h 30 min with home cinema system play Wii paint a picture read a book on the couch only 9:00 to 22:00
take a shower without hair washing (women) take nap on the weekend (2 h) read a book on the couch all the time use the laptop (1.5 h)
sweep the floors use the laptop (1 h) make mashed potatoes and eat them watch a movie for 2 h with home cinema system
make frozen pizza and eat it cook food with steam cooker and eat it cook food with a deep fryer and eat it
take a shower with hair washing (women) (20 min hair drying) cook pasta and eat it play a puzzle game make soup
join watching a movie in the home cinema (watch a movie for 1 h 30 min with home cinema system) bake a cake do laundry at 60°C (by variable)
cook a sunday feast with extractor hood and eat it visit the cinema take a shower with electric air heater
eat a cooked meal (interrupting) (cook food with rice and eat it) listen to music on compact hifi (2 h) microwave frozen meal and eat it
fry two eggs and eat them with toast cook food with rice and eat it eat a cooked meal (interrupting) (cook food with a deep fryer and eat it) clean the windows
watch TV with someone (watch a movie for 1 h 30 min with home cinema system) make roulades and eat them make and drink tea (15 min) heat up leftovers
watch sports on TV with SAT Reciever (2 h) take a nap read a newspaper for 30min read a magazine watch the news
eat a cooked meal (interrupting) (cook food with steam cooker and eat it) make custom pizza and eat it eat a cooked meal (interrupting) (heat up leftovers)
eat a cooked meal (interrupting) (make roulades and eat them) watch TV with someone (watch a movie for 2 h) read a book (1 h) watch TV (1 h)
watch a movie for 2 h eat a cooked meal (interrupting) (make frozen pizza and eat it) eat a cooked meal (interrupting) (cook pasta and eat it)
relax in the garden 2 taking a vacation eat a cooked meal (interrupting) (make soup) relax in the garden cuddle and sleep (take a nap)
hang up laundry outside only above 15°C (by variable) eat a cooked meal (interrupting) (make mashed potatoes and eat them)
eat a cooked meal (interrupting) (make fondue and eat it) watch TV with someone (watch the news)
watch TV with someone (watch sports on TV with SAT Reciever (2 h)) join Wii gaming (play Wii)
join watching a movie in the home cinema (watch a movie for 2 h with home cinema system)

Activity Distribution per Person

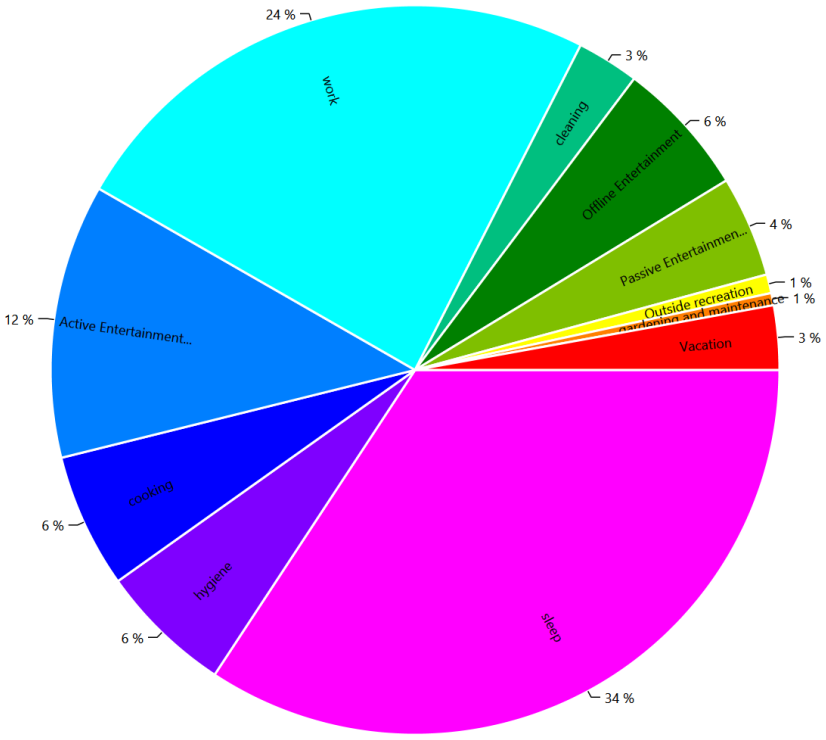
This is made from the files starting with: ActivityPercentage

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

HH0 - CHR39 Normen (44 Male)



HH0 - CHR39 Tina (38 Female)

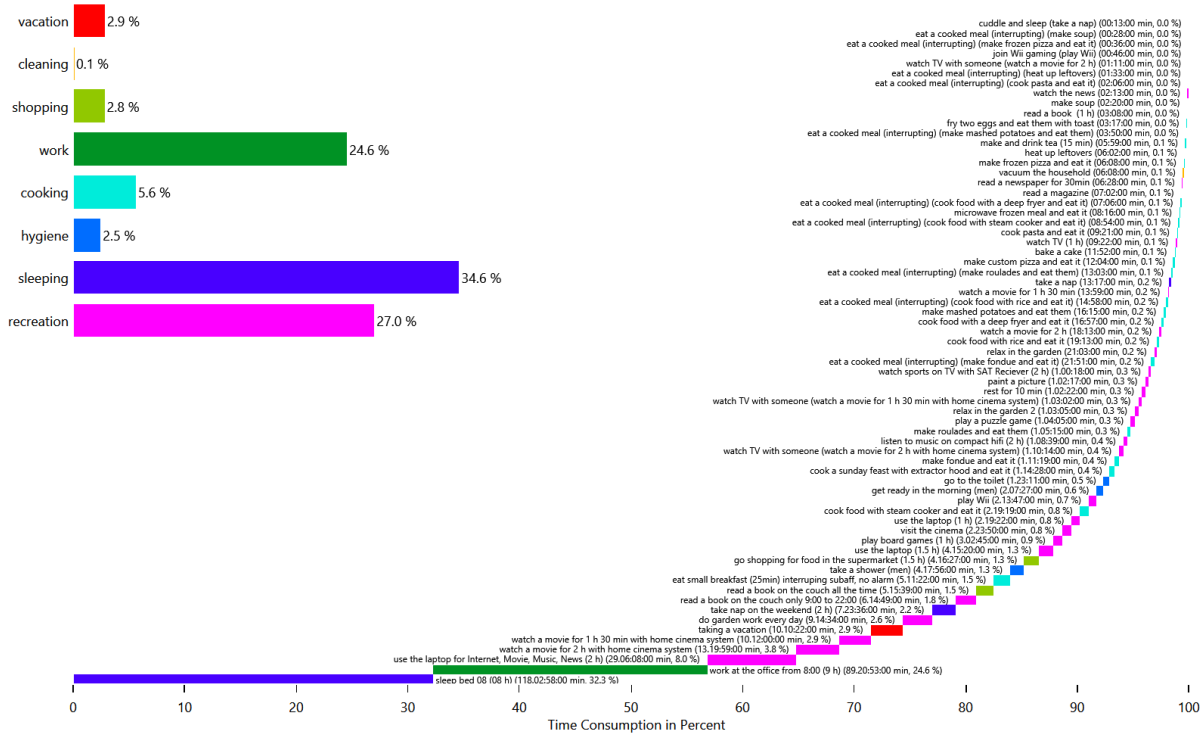


Time Use per Person per Affordance Per Person

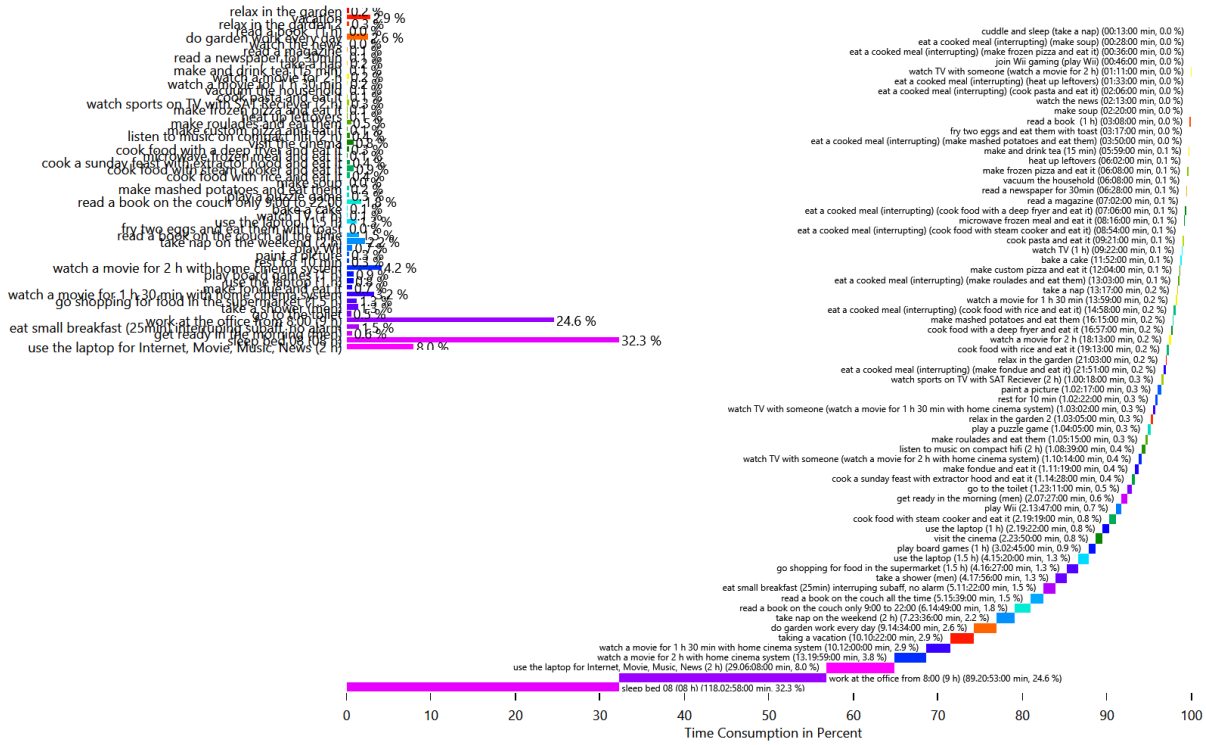
This is made from the files starting with: AffordanceTimeUse

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.

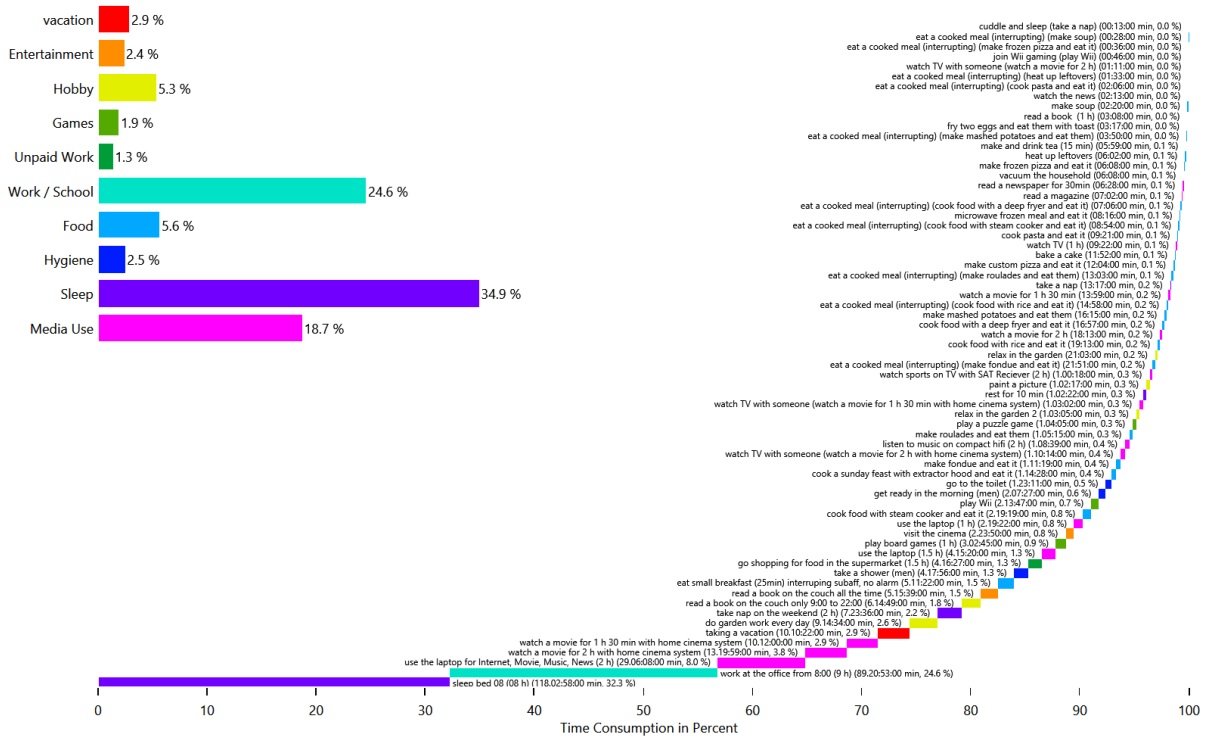
HH0 - CHR39 Normen (44 Male)



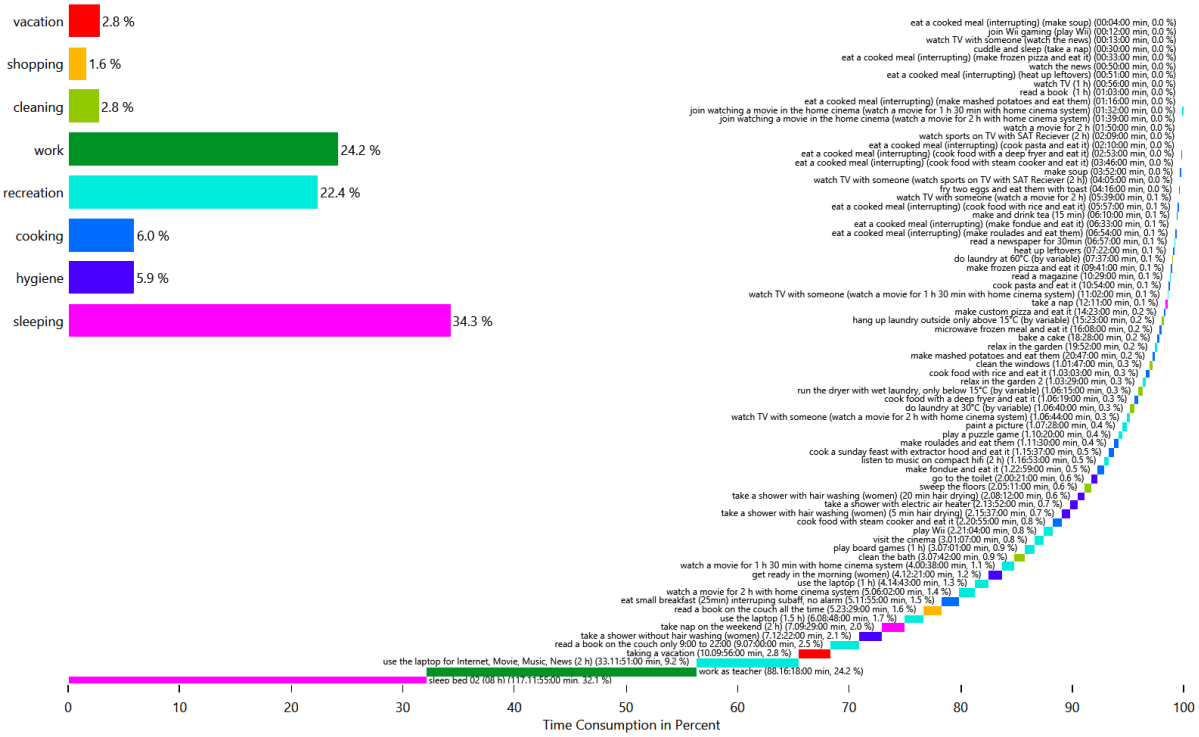
HH0 - CHR39 Normen (44 Male)



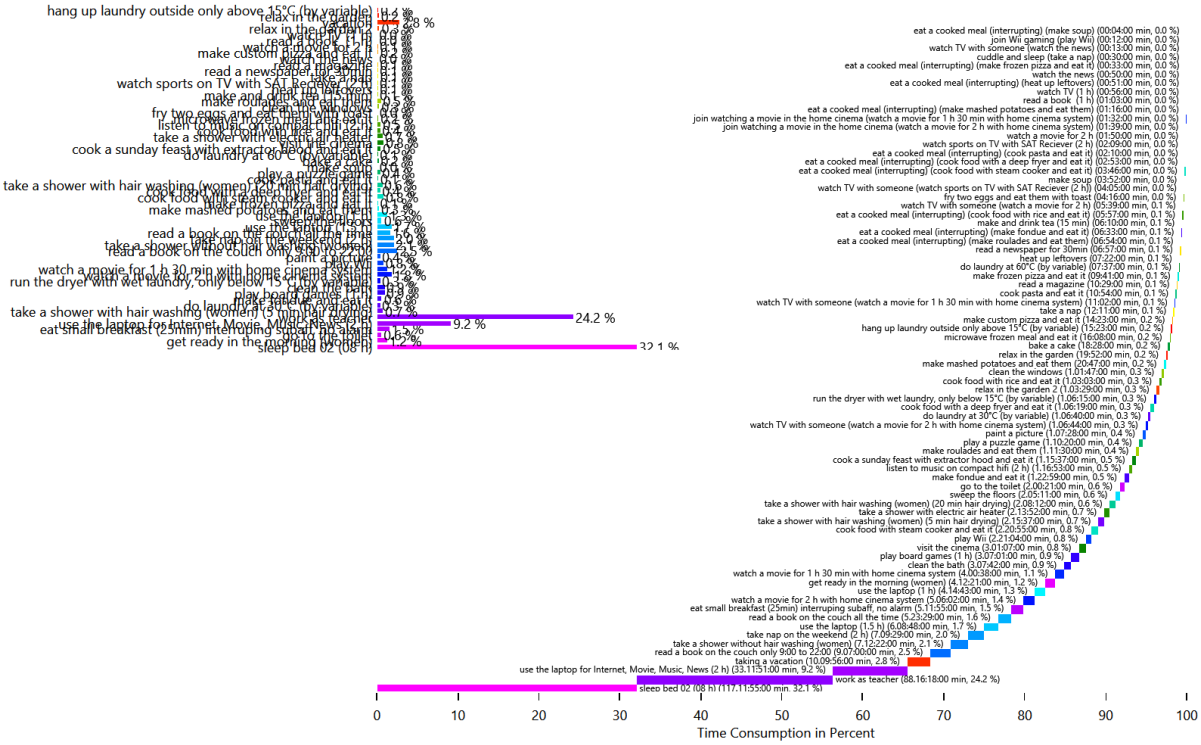
HH0 - CHR39 Normen (44 Male)



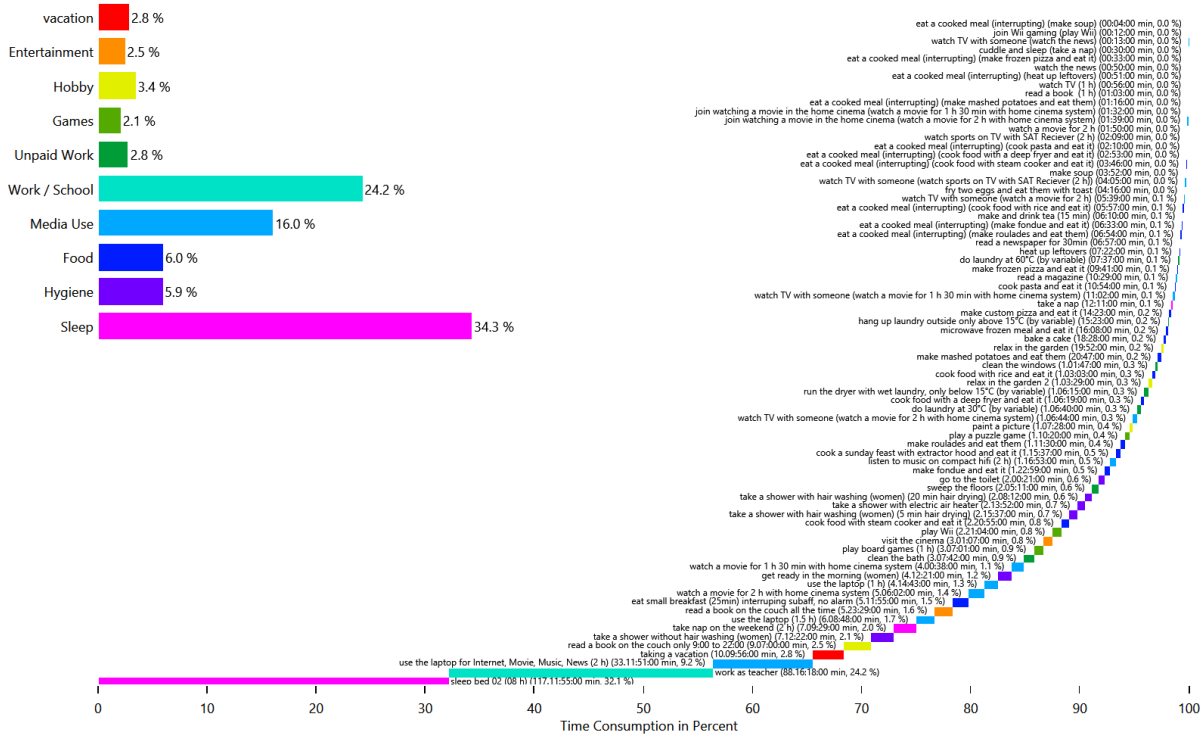
HH0 - CHR39 Tina (38 Female)



HH0 - CHR39 Tina (38 Female)



HH0 - CHR39 Tina (38 Female)

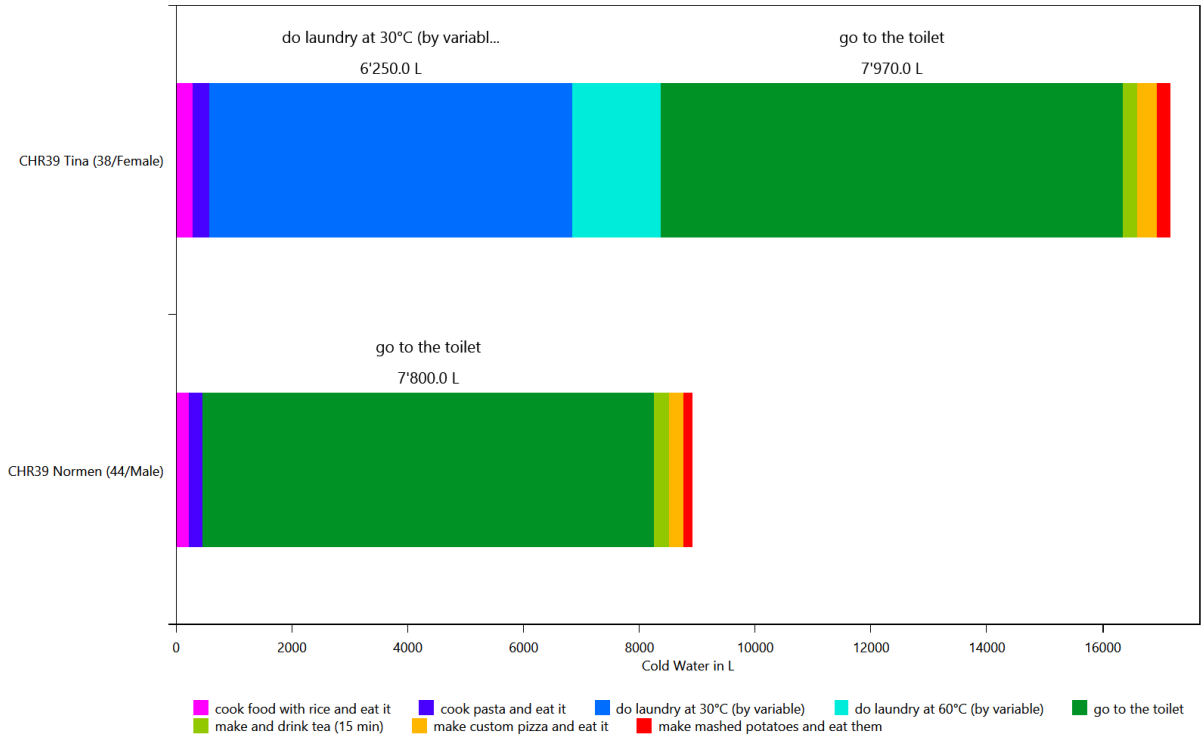


Energy use per person per affordance

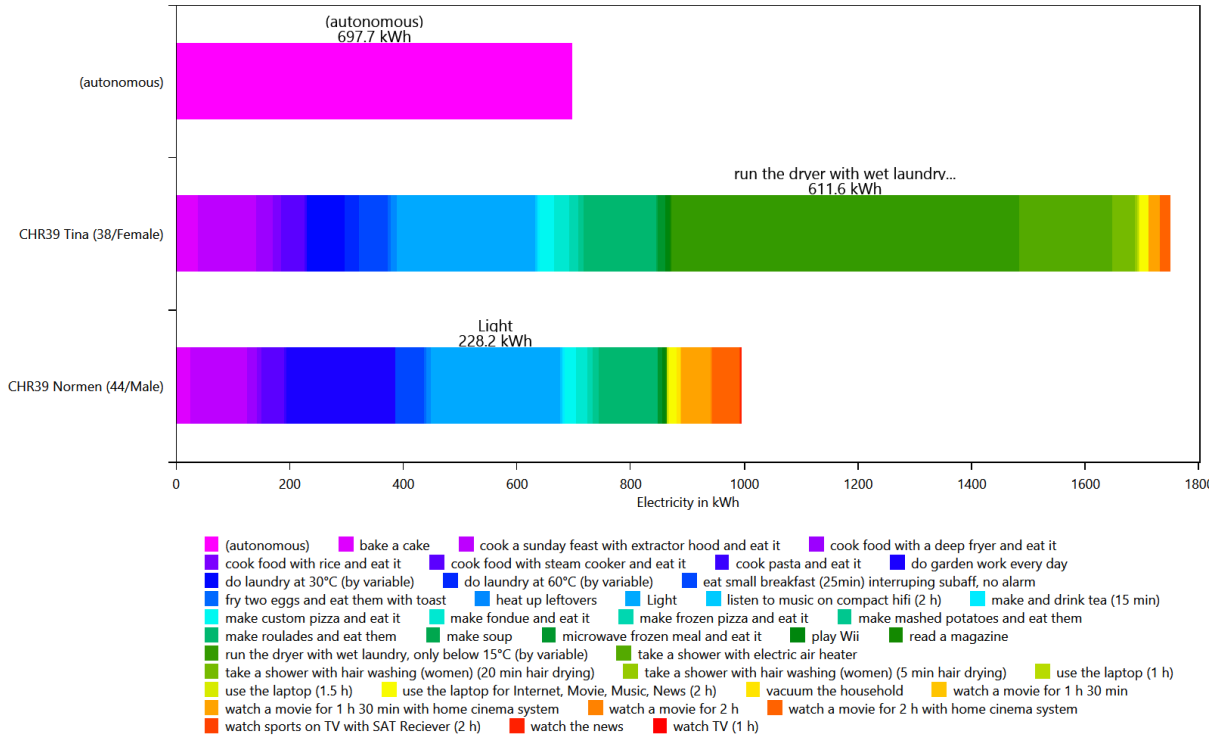
This is made from the files starting with: AffordanceEnergyUsePerPerson

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.

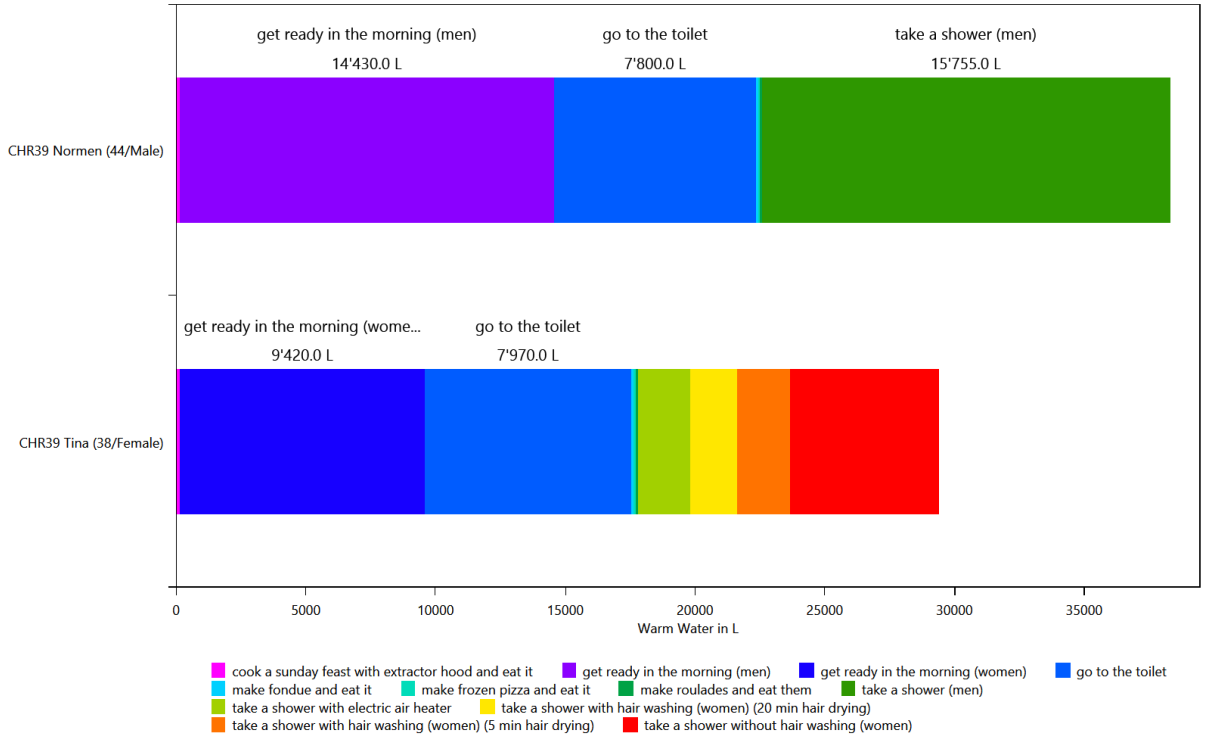
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

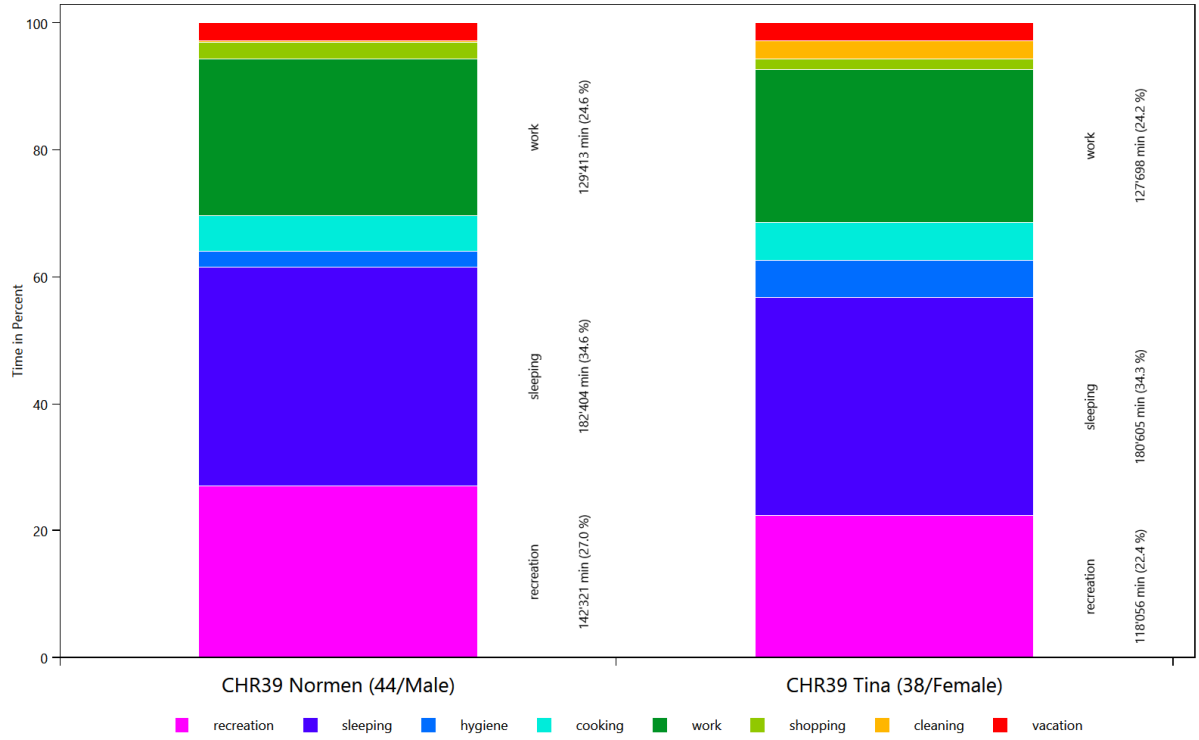


Time Use per Person Per Affordance according to different category definitions

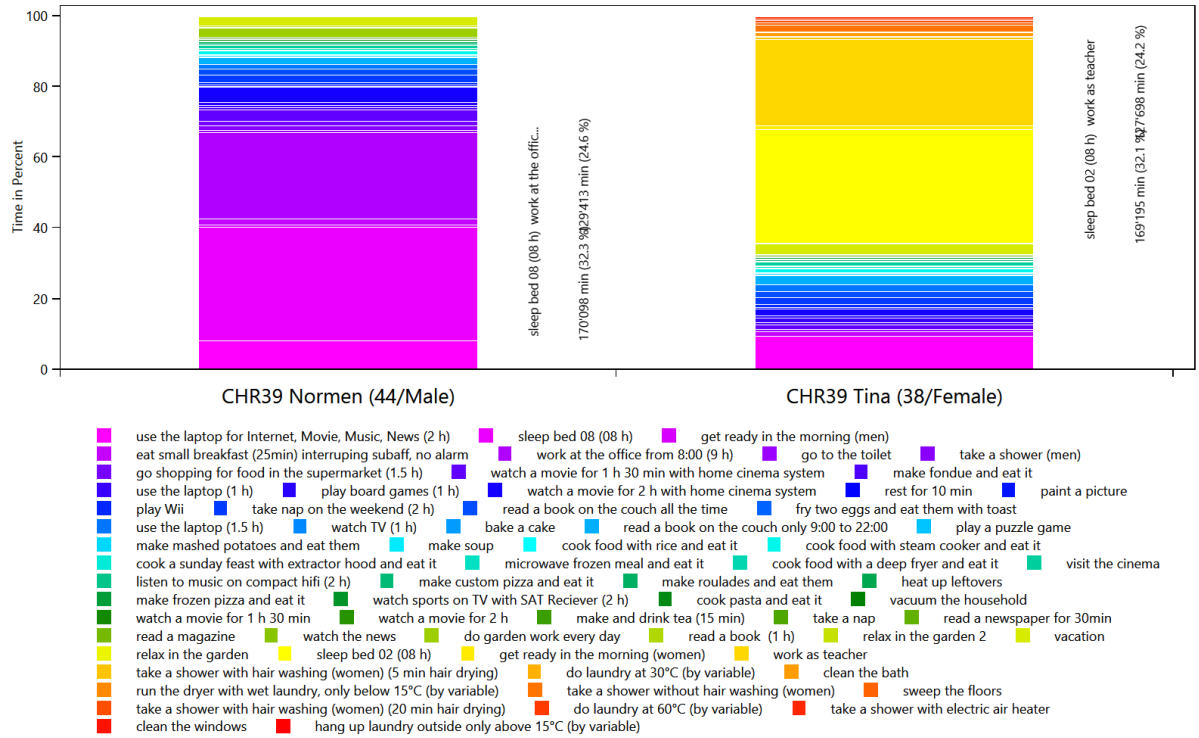
This is made from the files starting with: AffordanceTaggingSet

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.

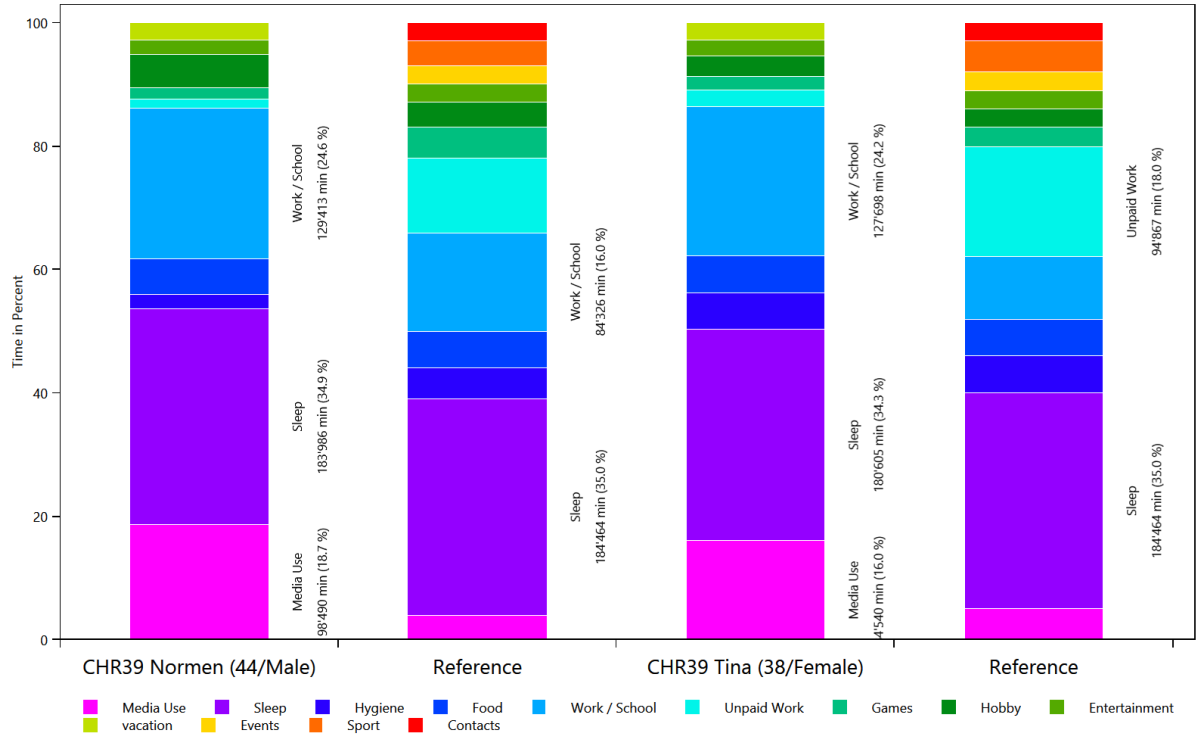
Basic Tagging - HH0



Tagging Set For Planning - HH0



Wo bleibt die Zeit - HH0

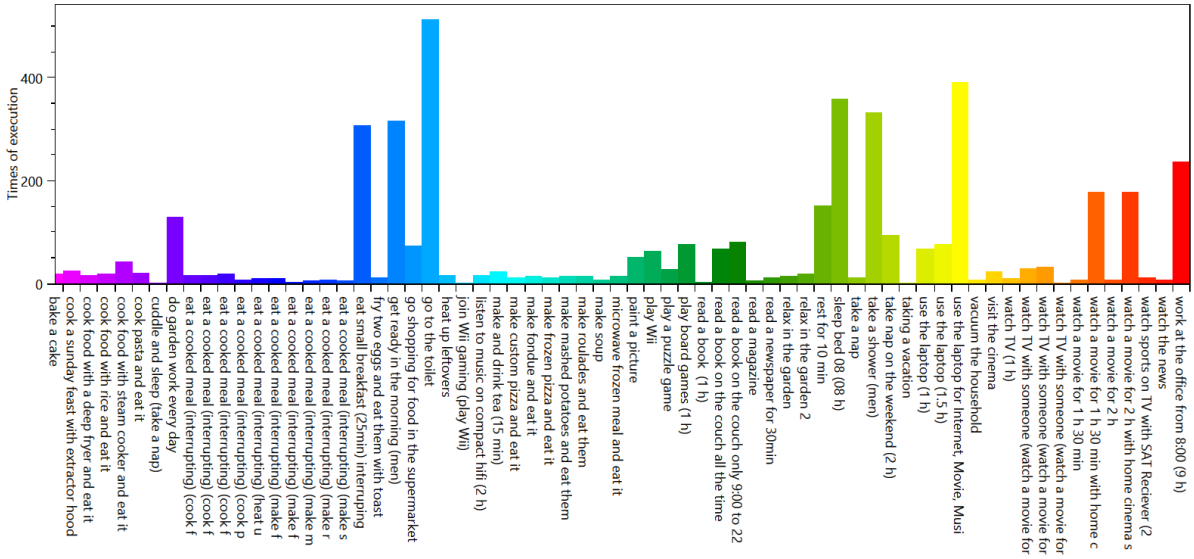


Overview of the actions of each member of the household

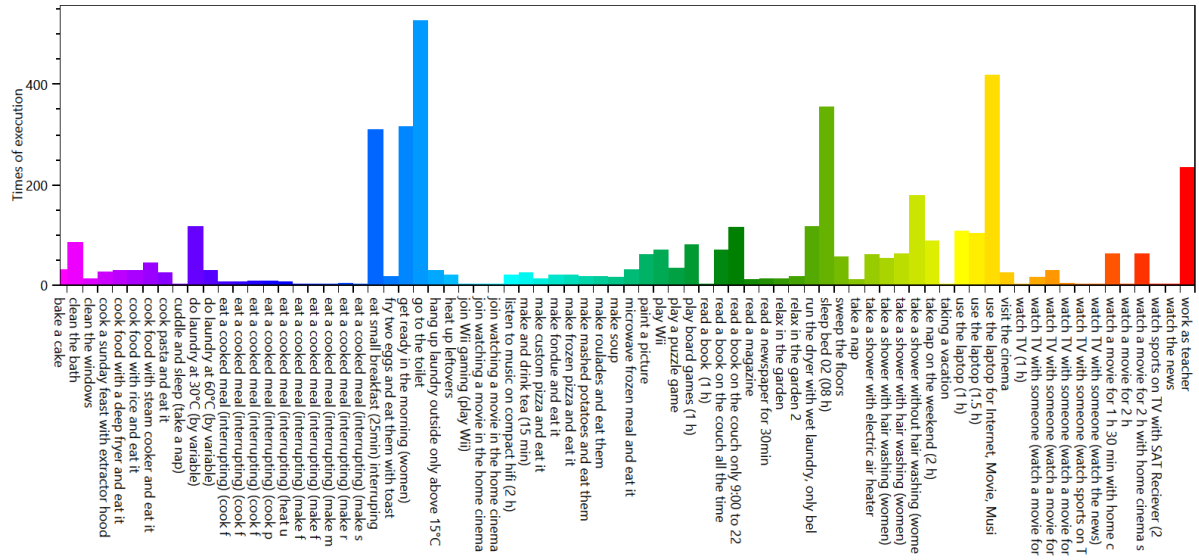
This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

HH0 - CHR39 Normen (44 Male)



HH0 - CHR39 Tina (38 Female)

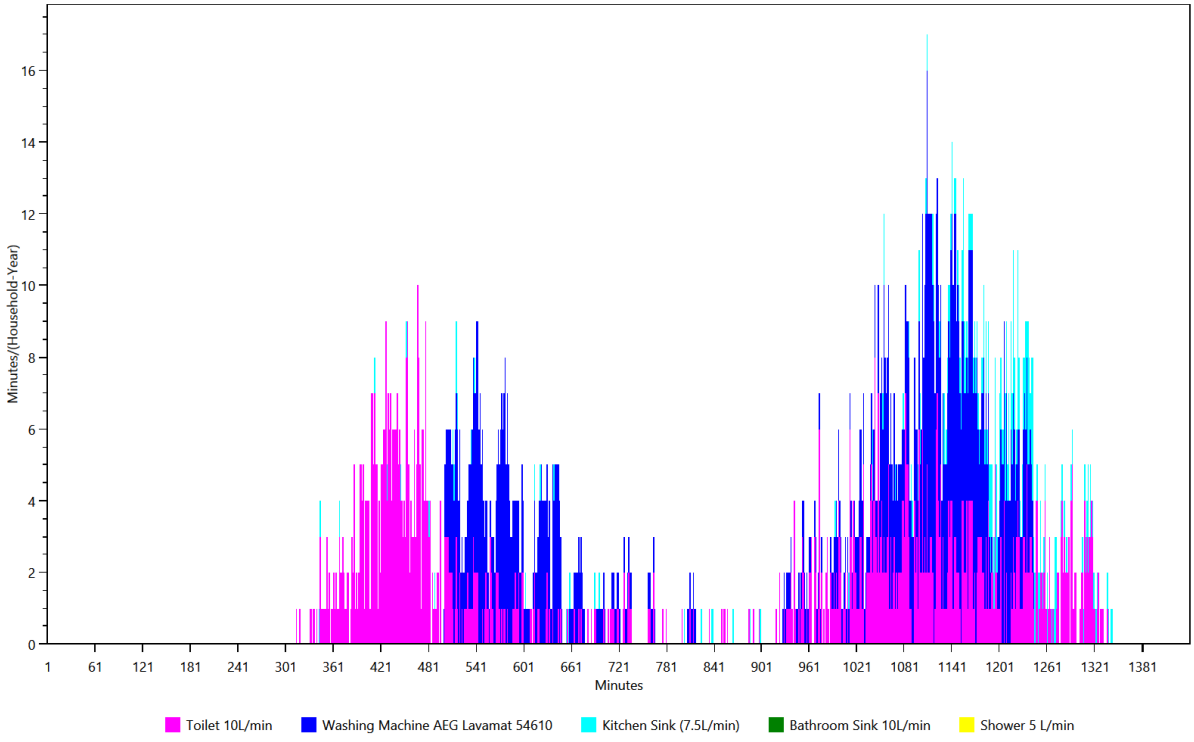


Overview of the time of the use per load type per device

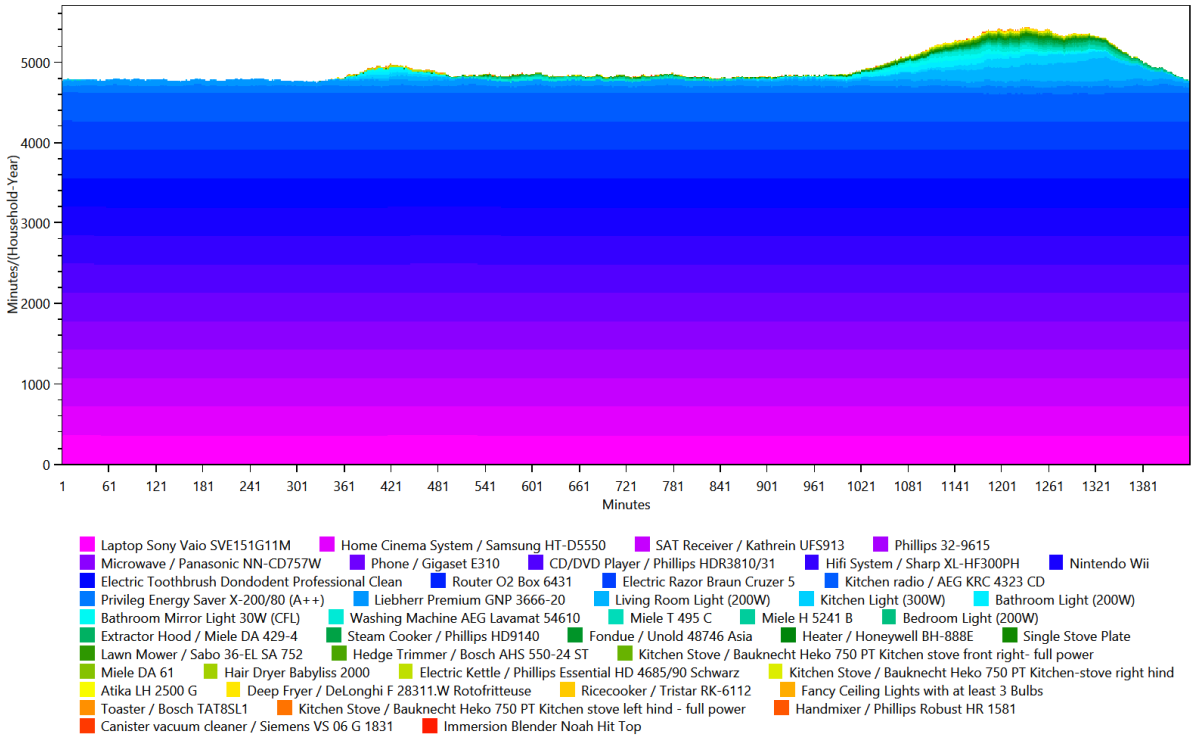
This is made from the files starting with: TimeOfUseEnergyProfiles

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

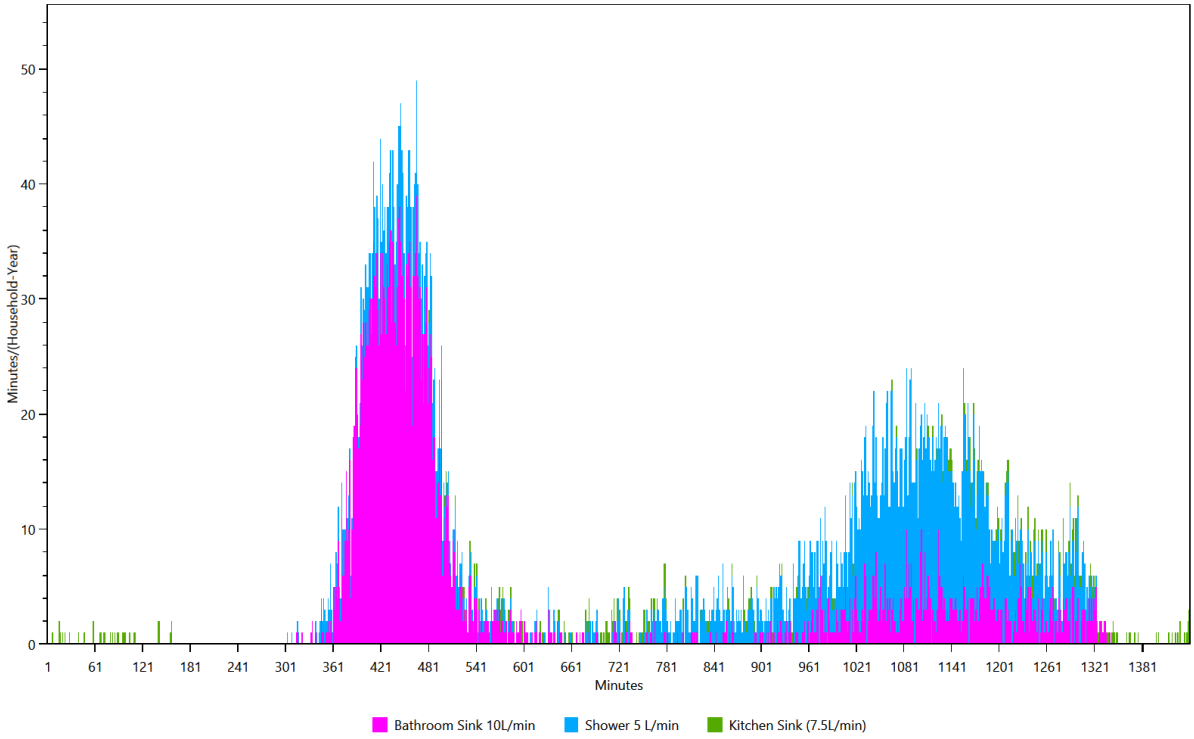
Cold Water



Electricity



Warm Water

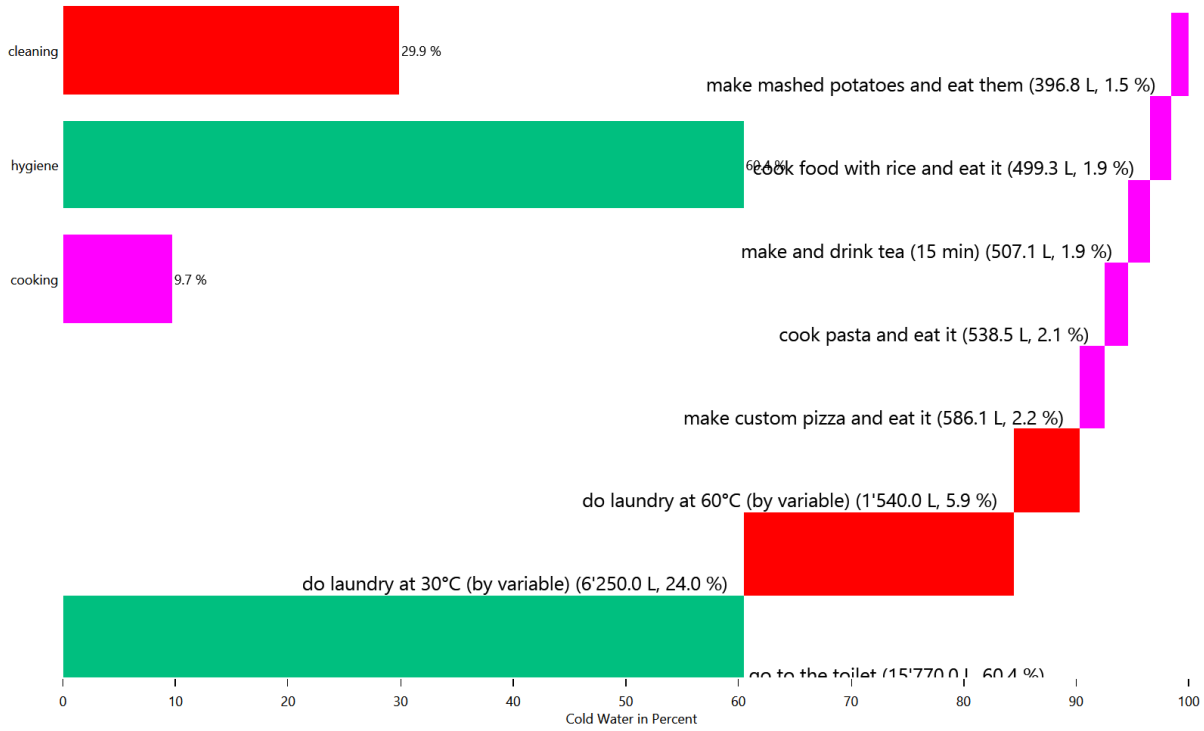


Energy/Resource use distribution per load type per affordance

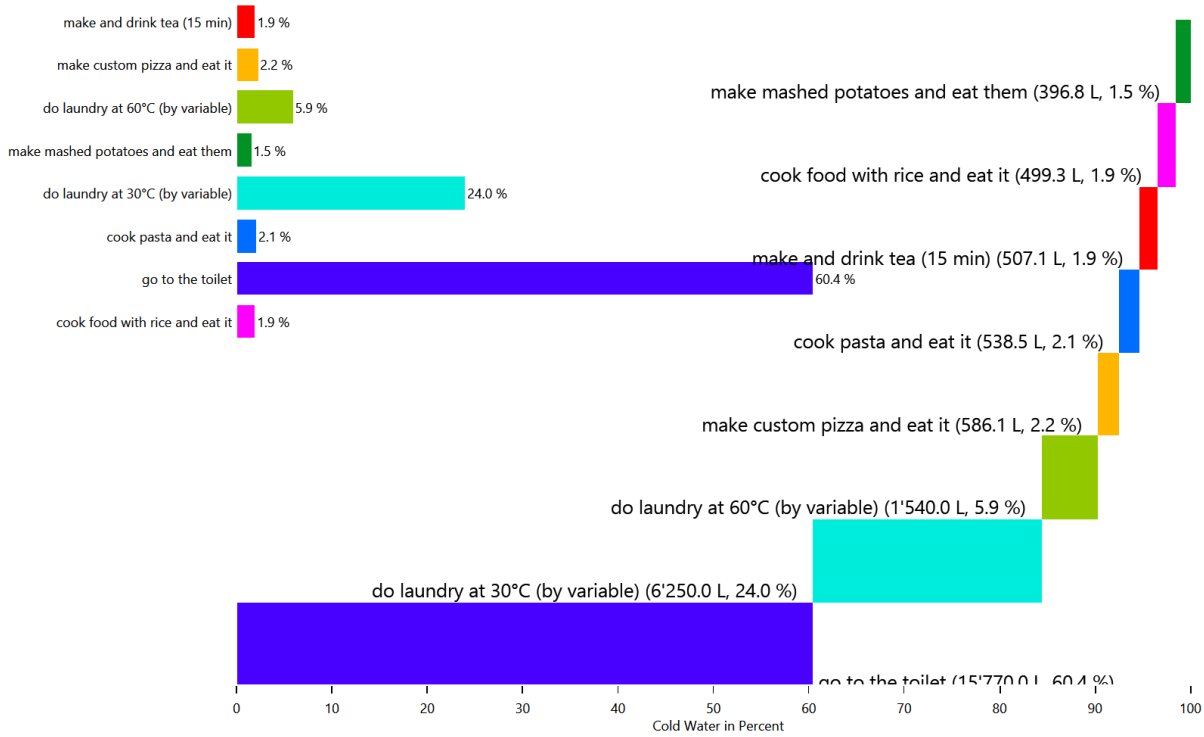
This is made from the files starting with: AffordanceEnergyUse

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

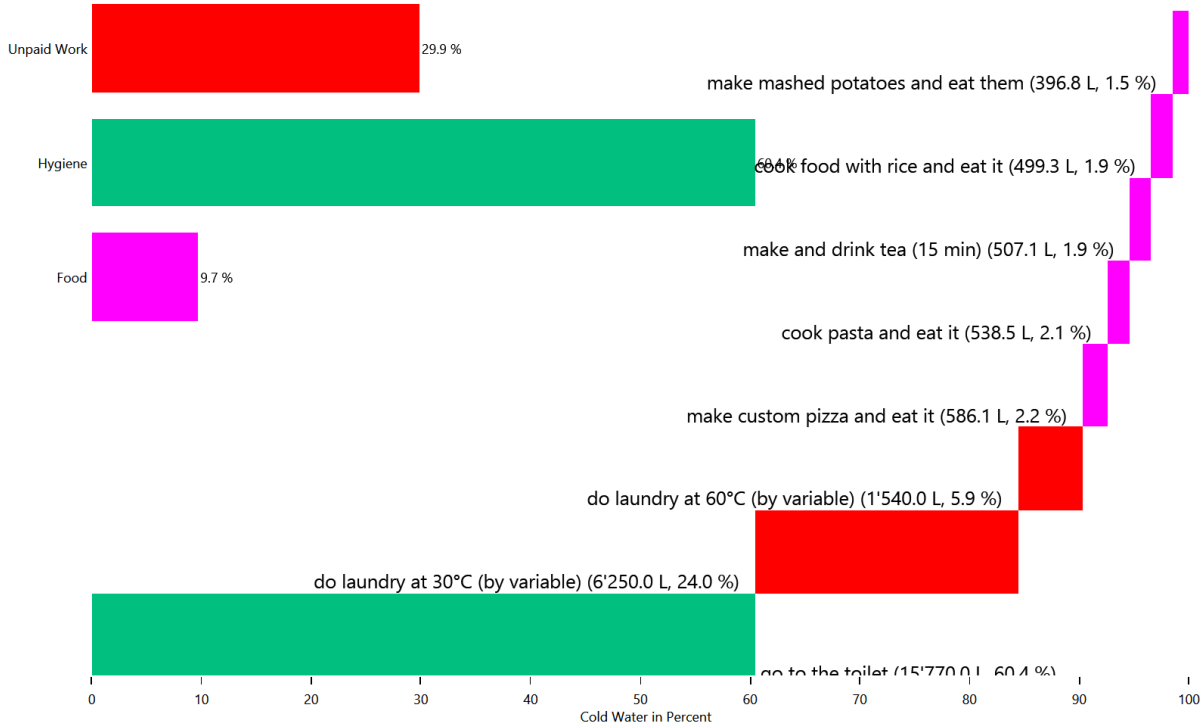
HH0 - Cold Water



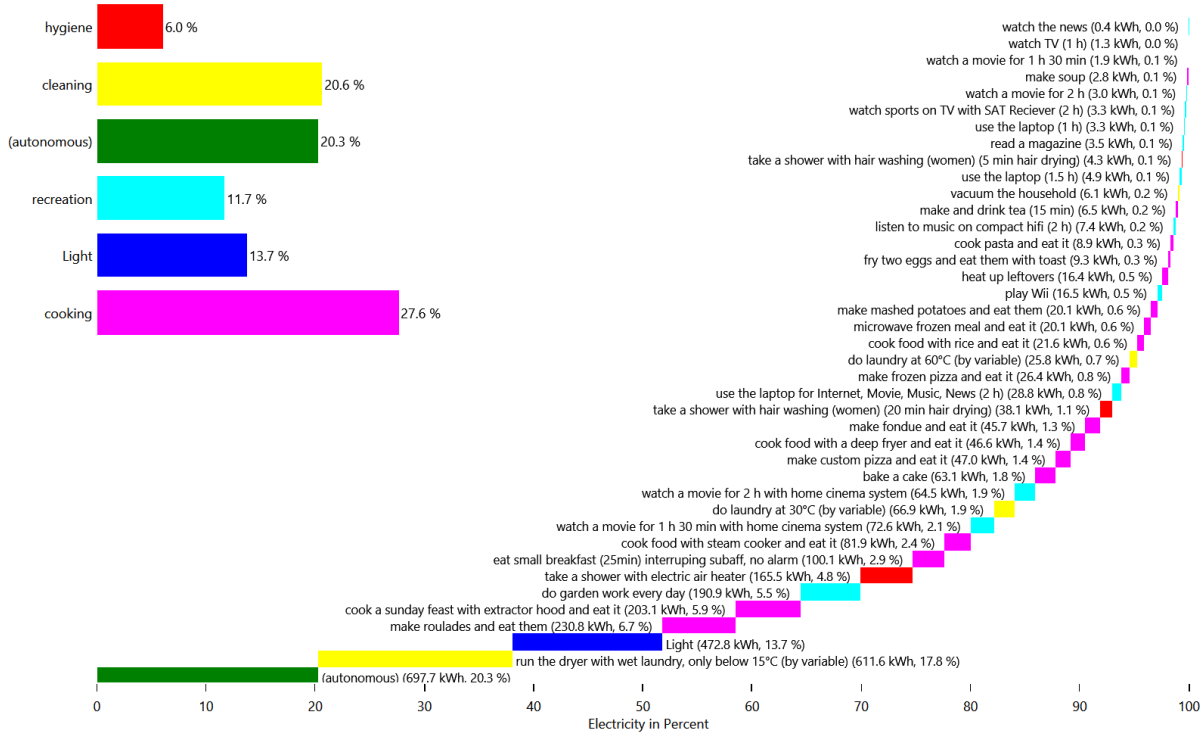
HH0 - Cold Water



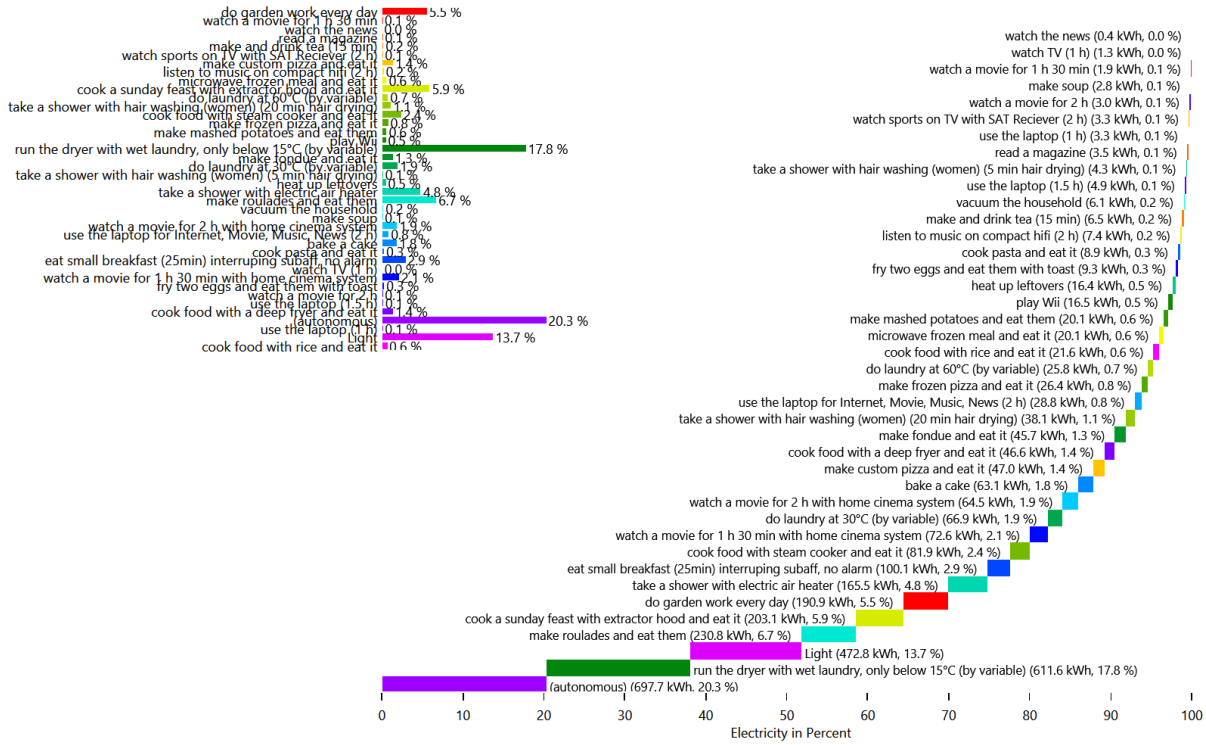
HH0 - Cold Water



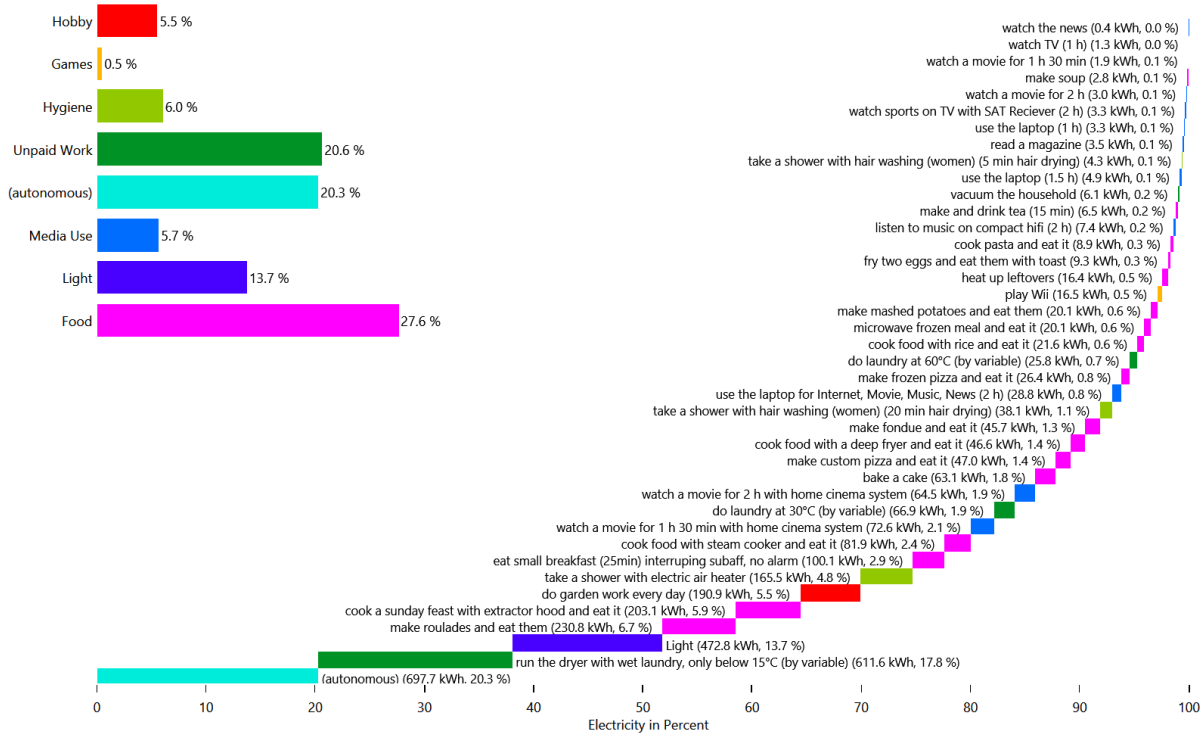
HH0 - Electricity



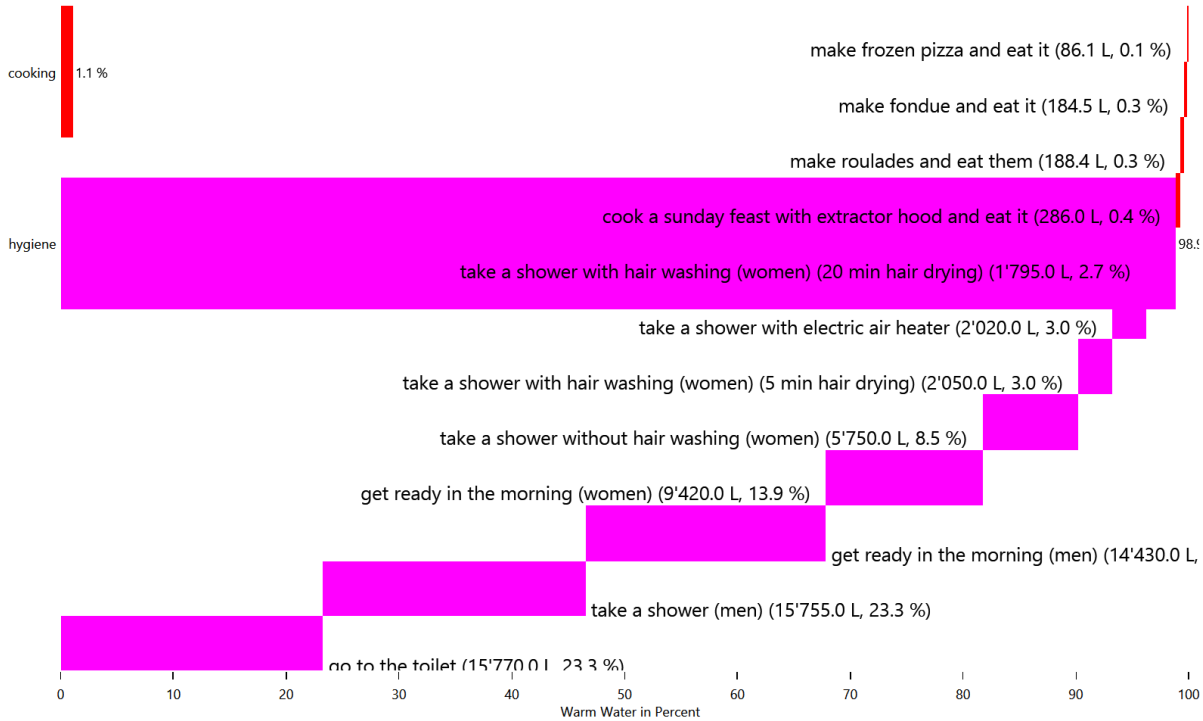
HH0 - Electricity



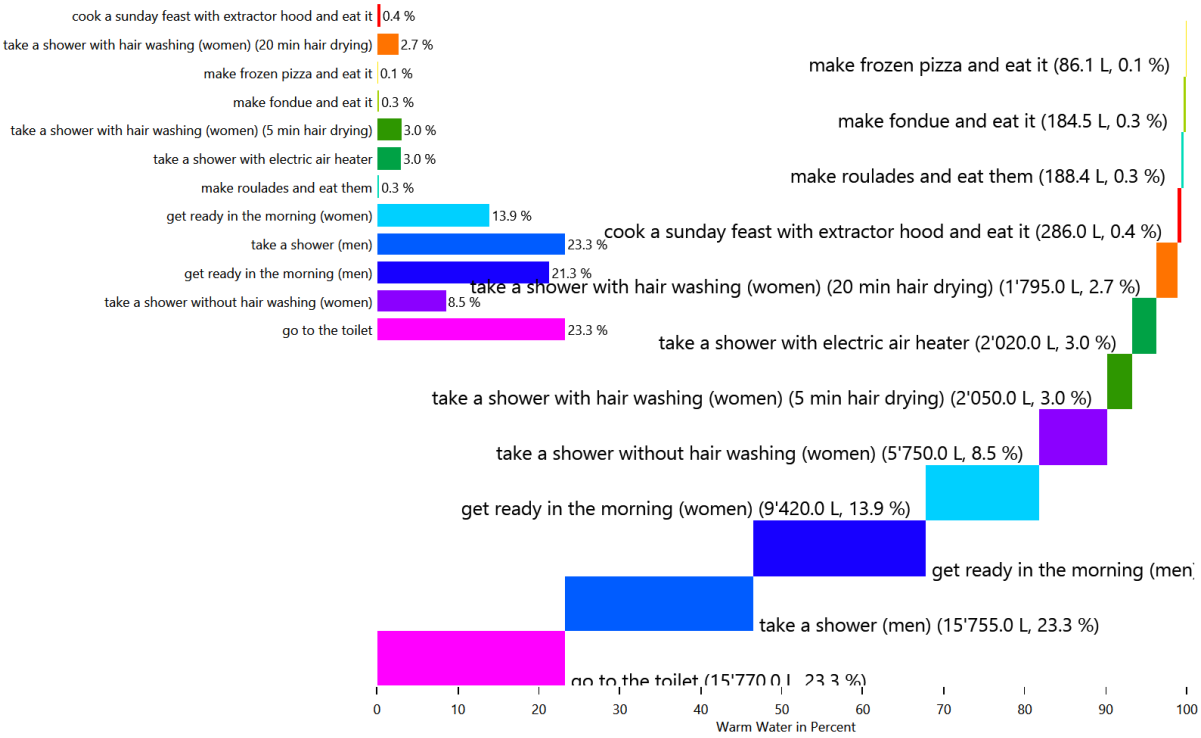
HH0 - Electricity



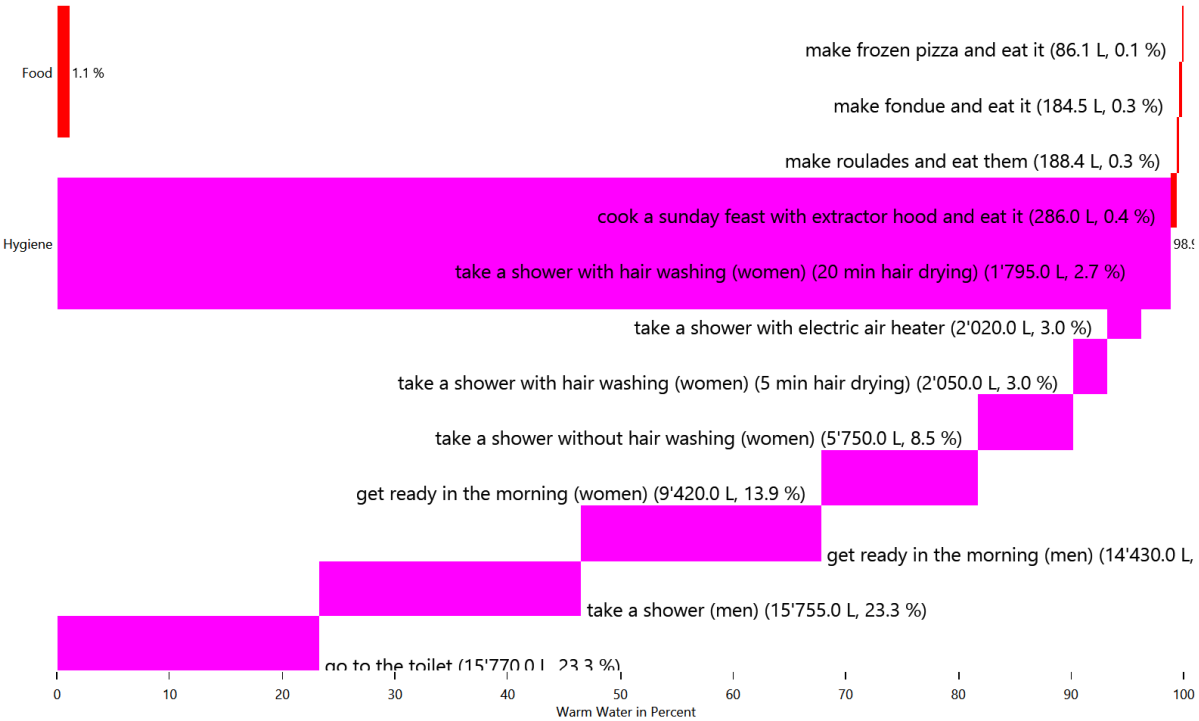
HH0 - Warm Water



HH0 - Warm Water



HH0 - Warm Water

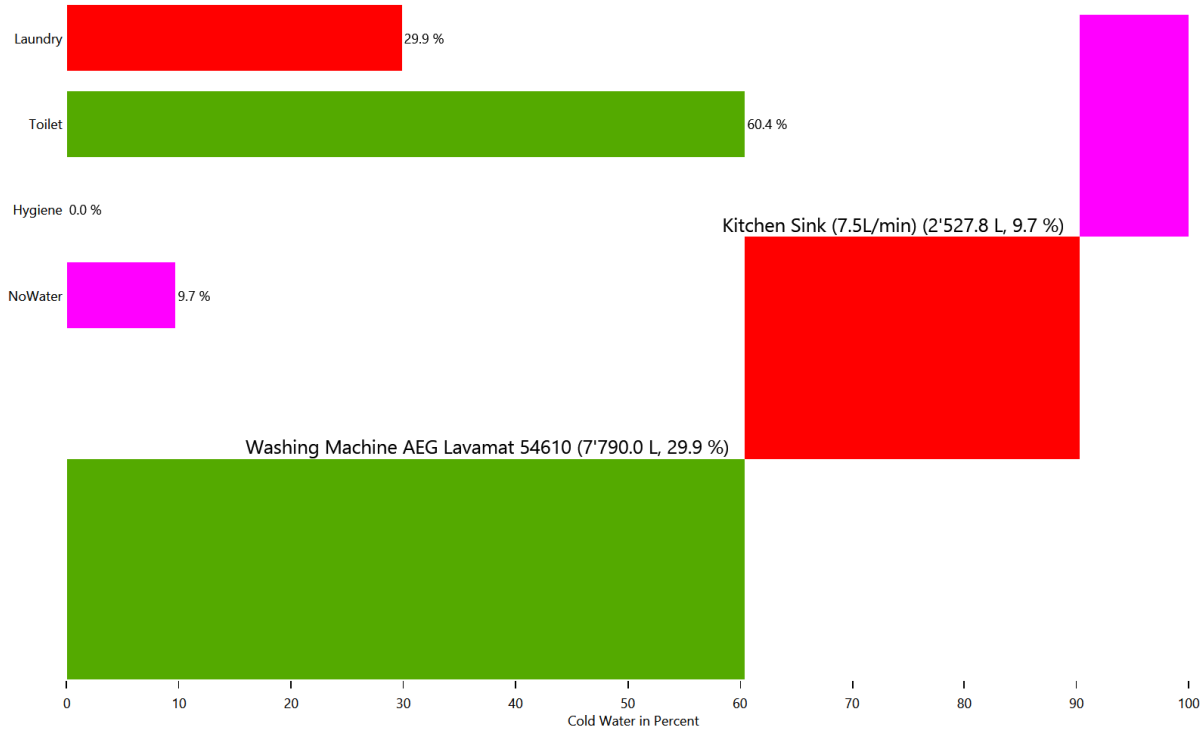


Energy use for each load type for each device

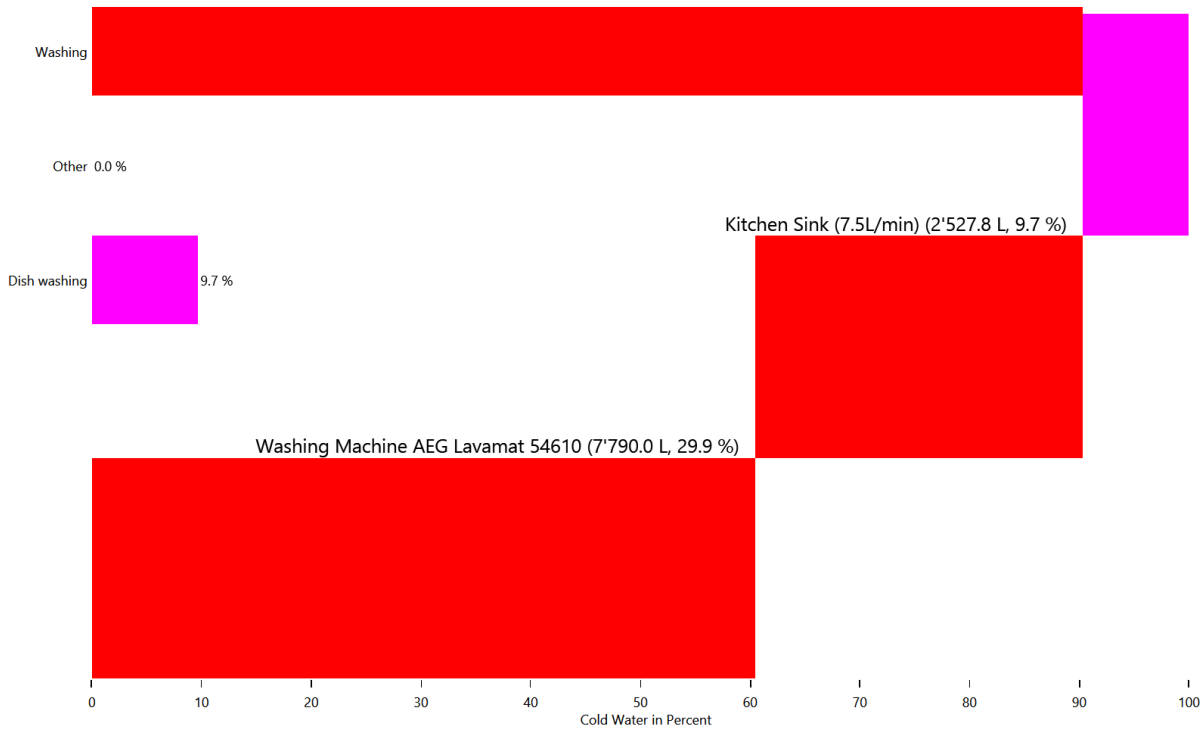
This is made from the files starting with: DeviceSums

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

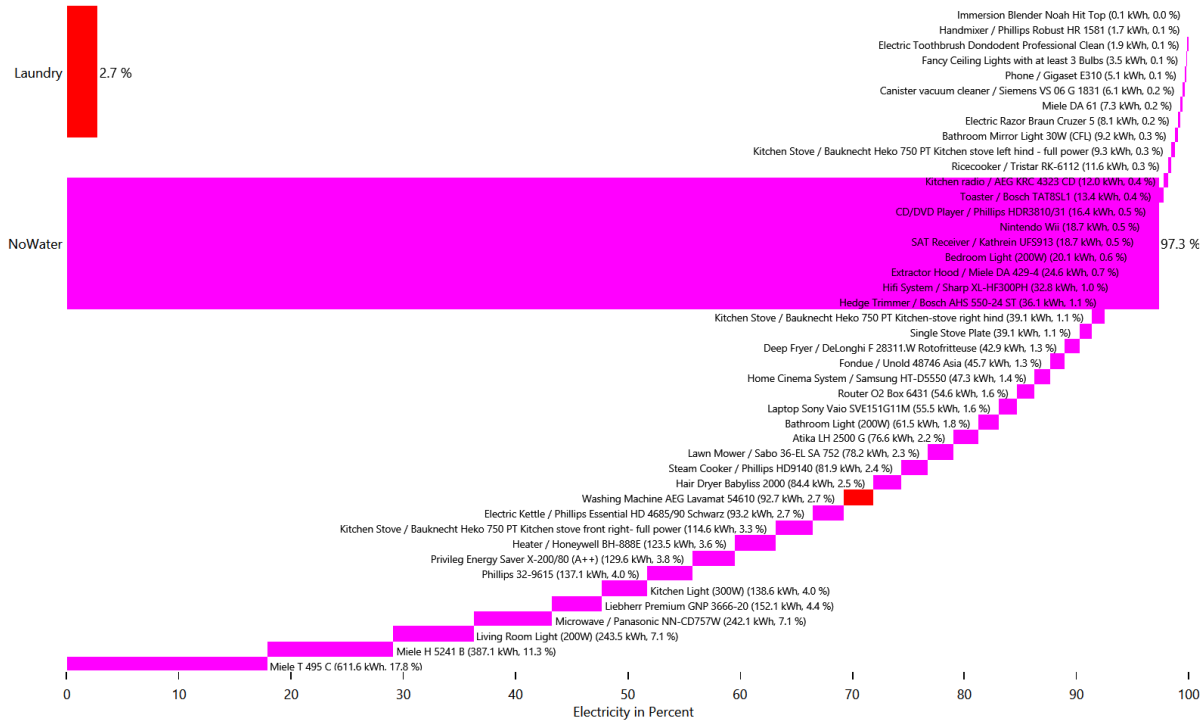
Cold Water



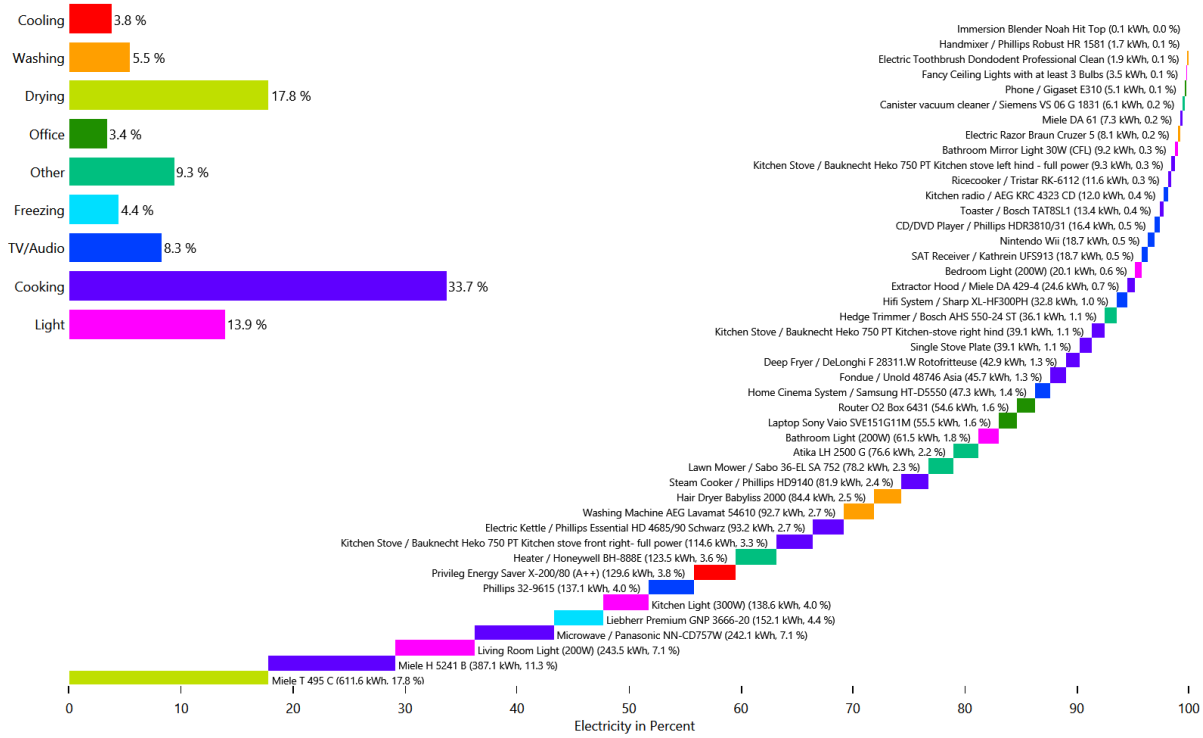
Cold Water



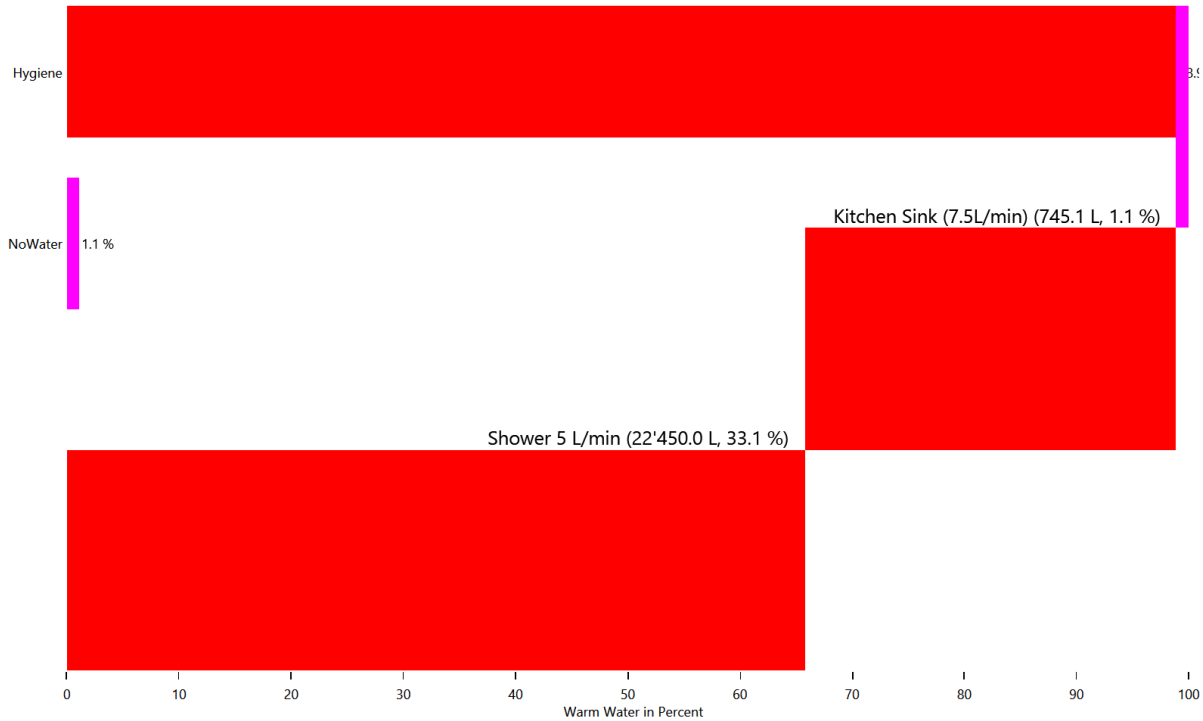
Electricity



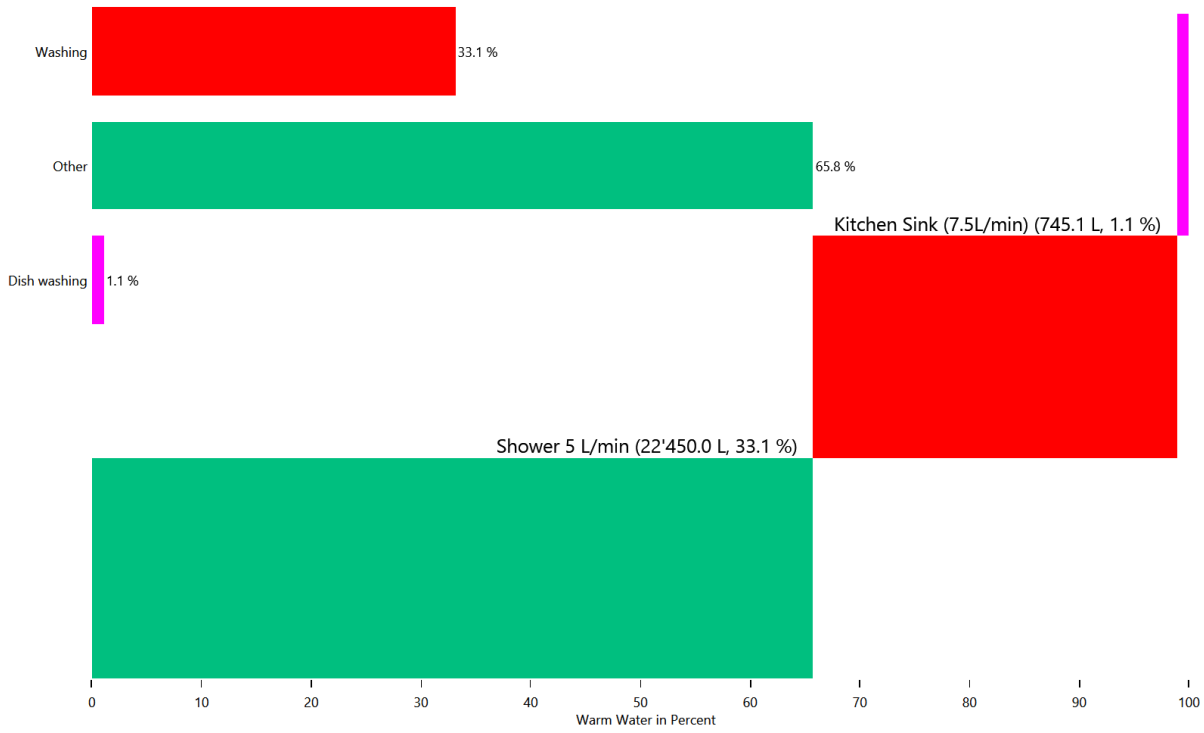
Electricity



Warm Water



Warm Water

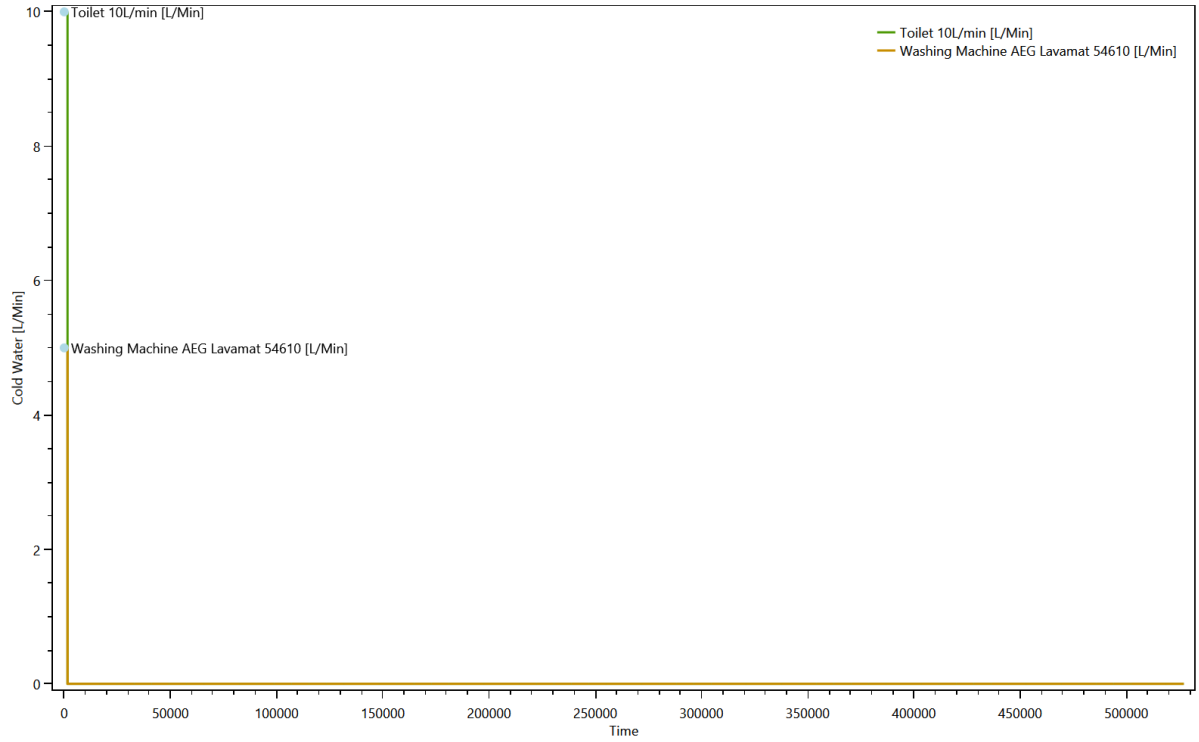

Washing
33.1 %
Other
65.8 %
Dish washing
1.1 %
Kitchen Sink (7.5L/min) (745.1 L, 1.1 %)
Shower 5 L/min (22'450.0 L, 33.1 %)
0
10
20
30
40
50
60
70
80
90
100
Warm Water in Percent

Duration curve for each device for each load type

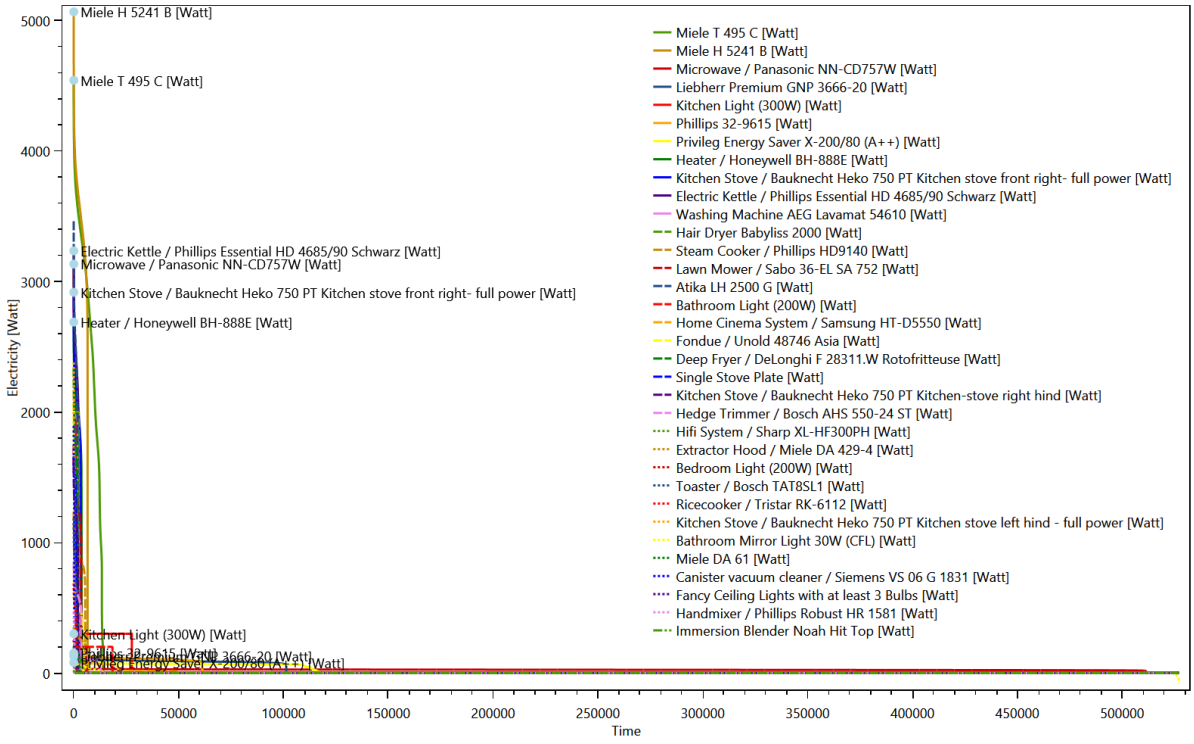
This is made from the files starting with: DeviceDurationCurves

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

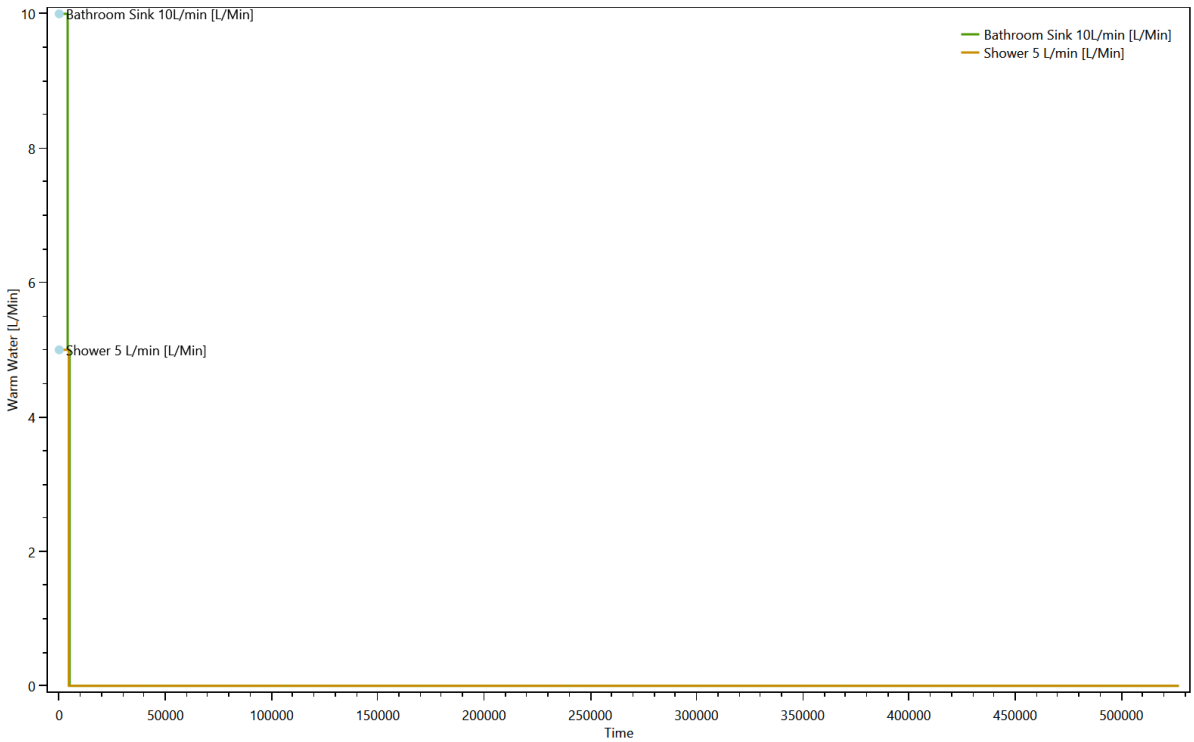
Cold Water



Electricity



Warm Water

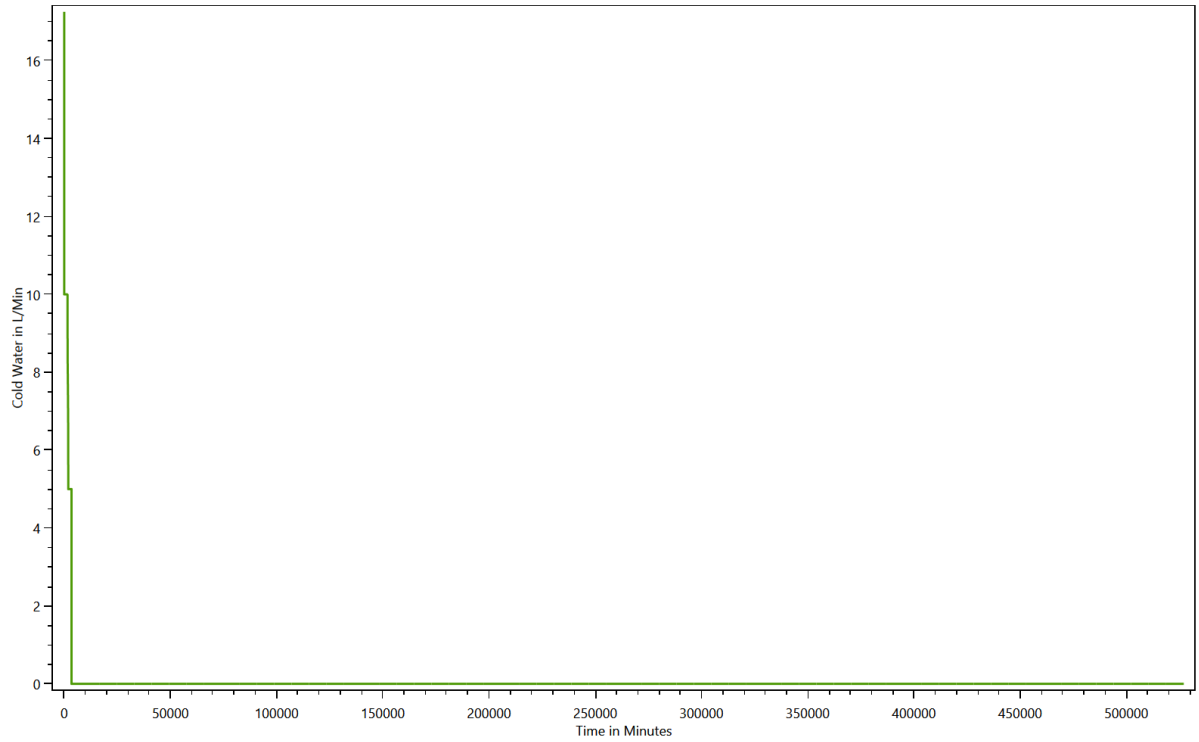


Duration curve for each load type

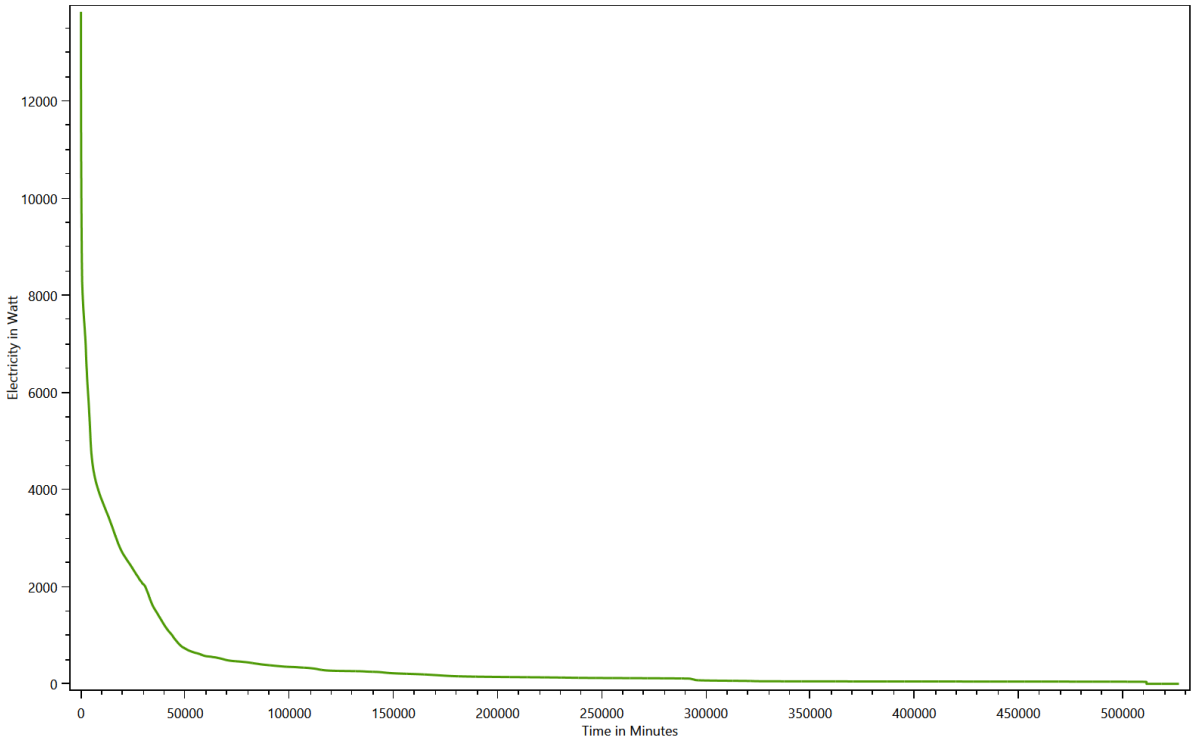
This is made from the files starting with: DurationCurve

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

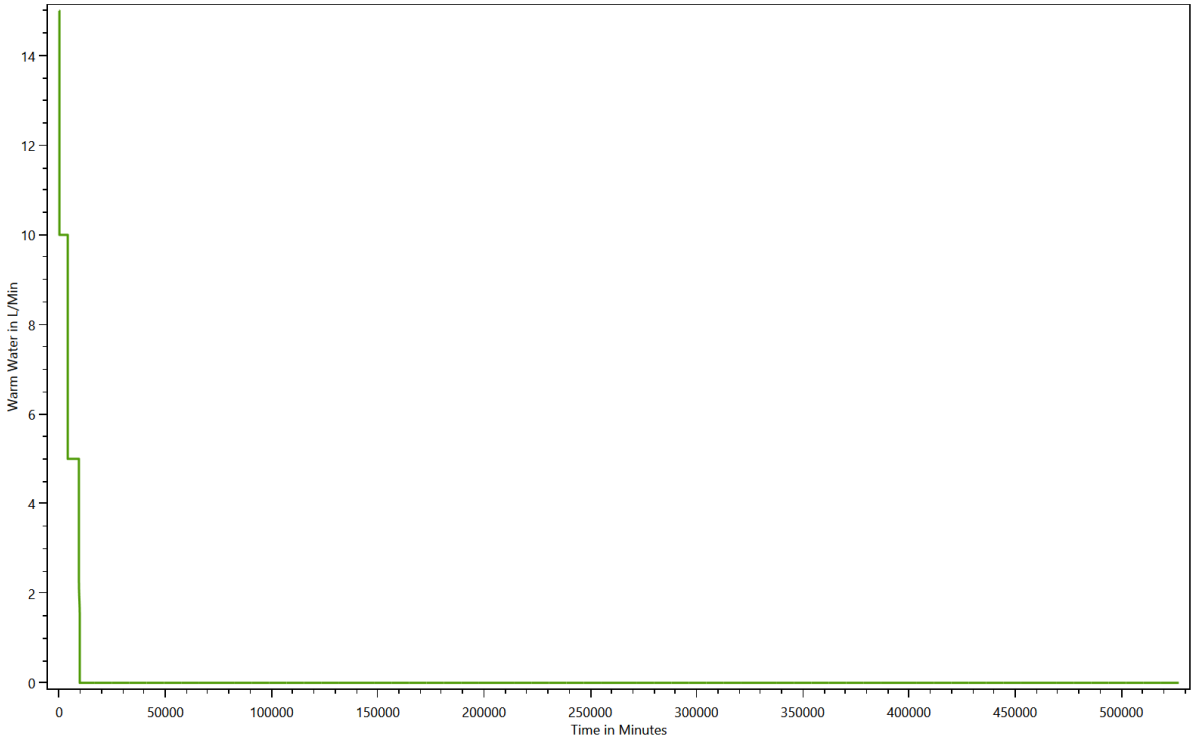
Cold Water



Electricity



Warm Water

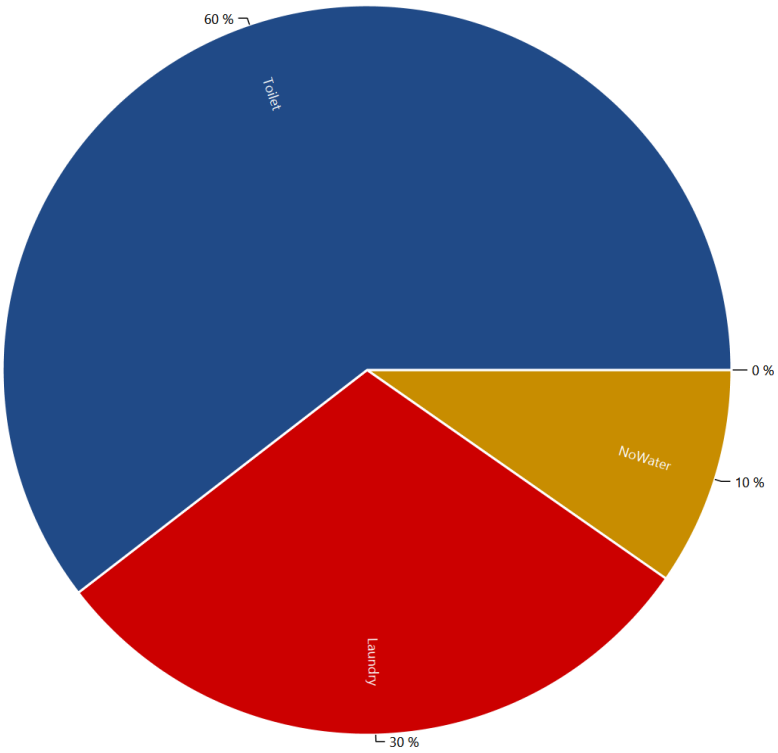


Grouped energy use for each load type for each device

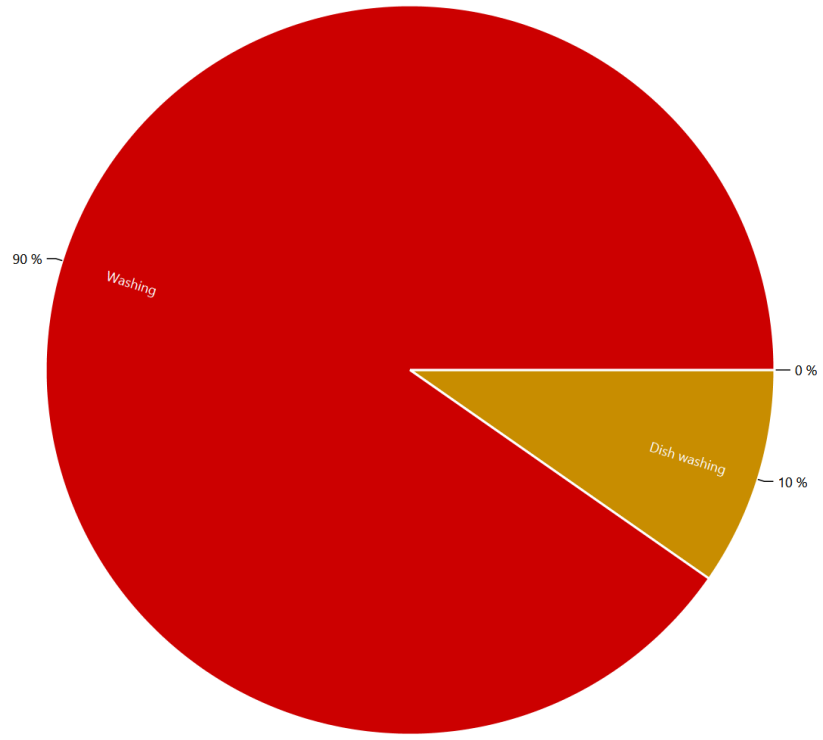
This is made from the files starting with: DeviceTaggingSet

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

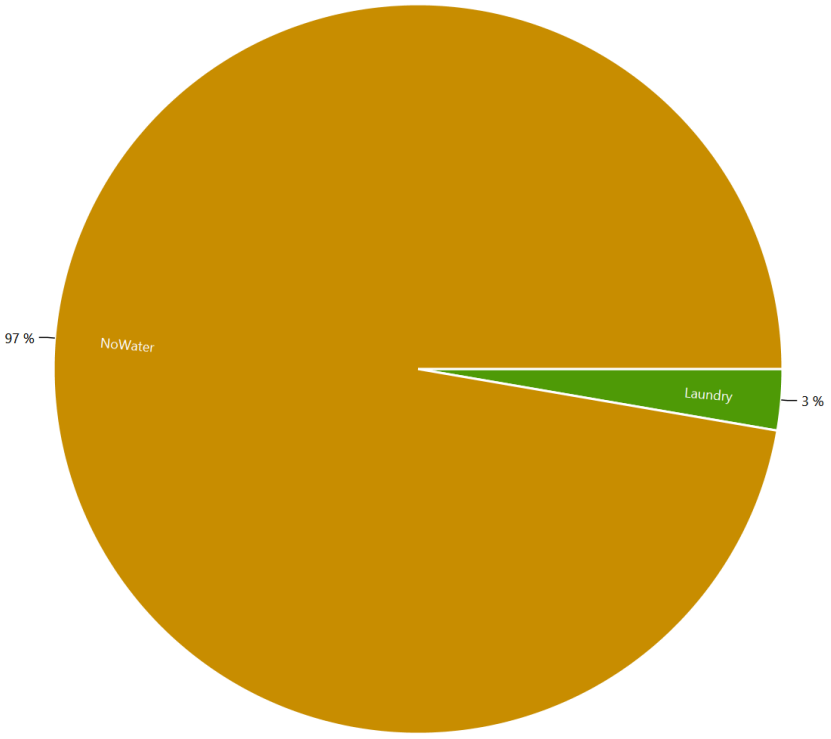
HH0 - Destatis Water Usage Statistics - Cold Water



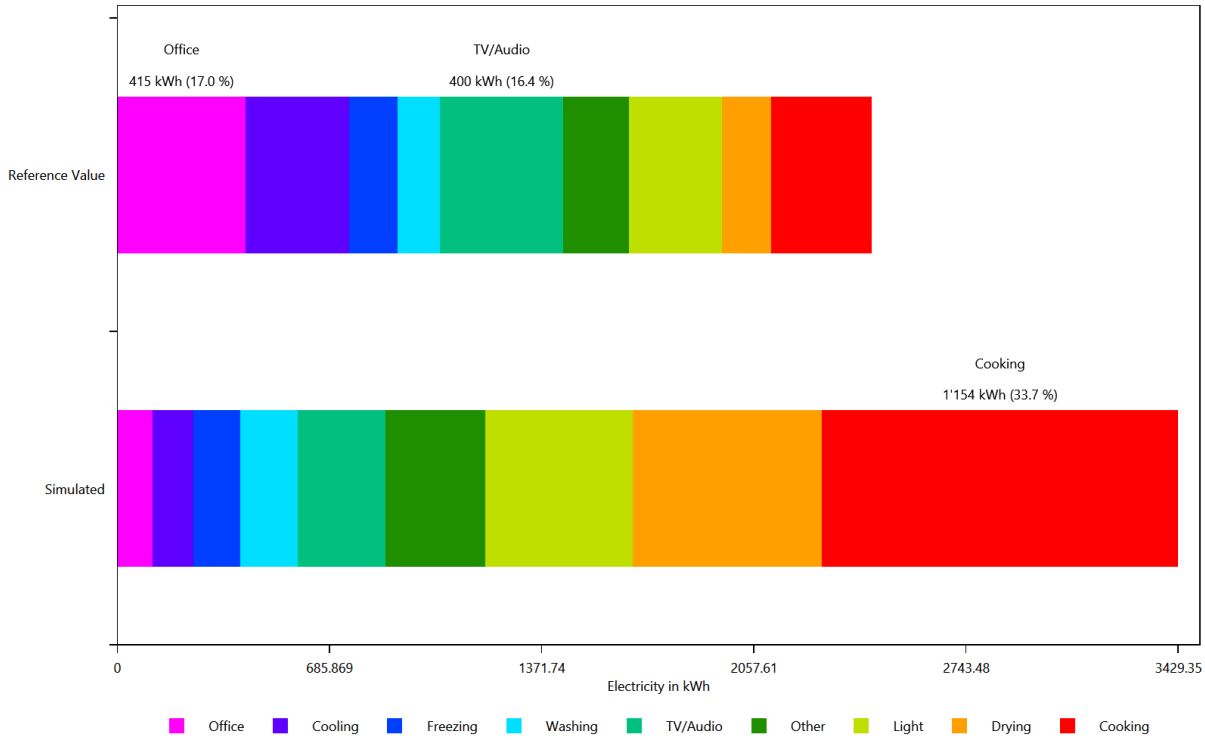
HH0 - Energieagentur - Cold Water



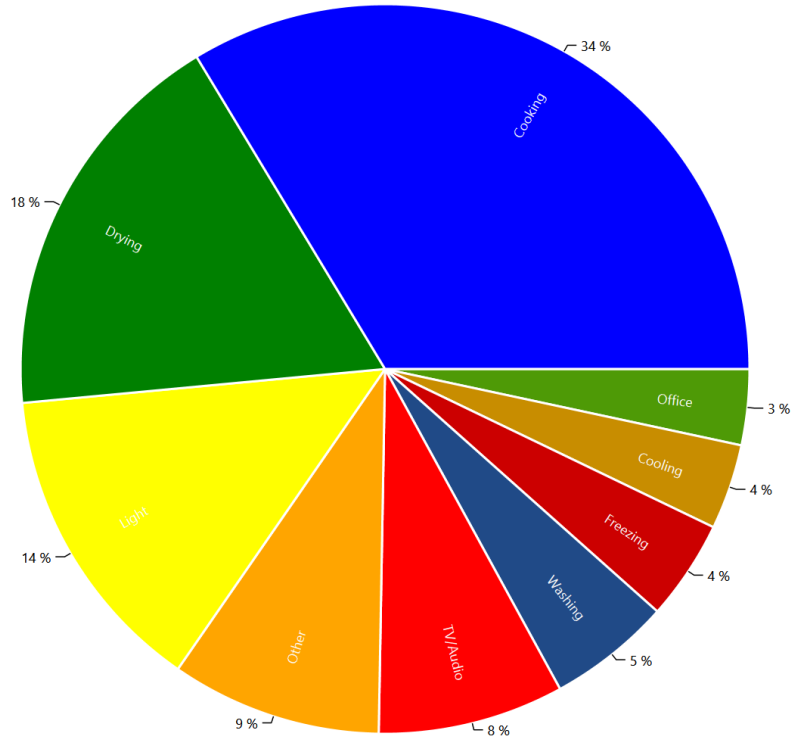
HH0 - Destatis Water Usage Statistics - Electricity



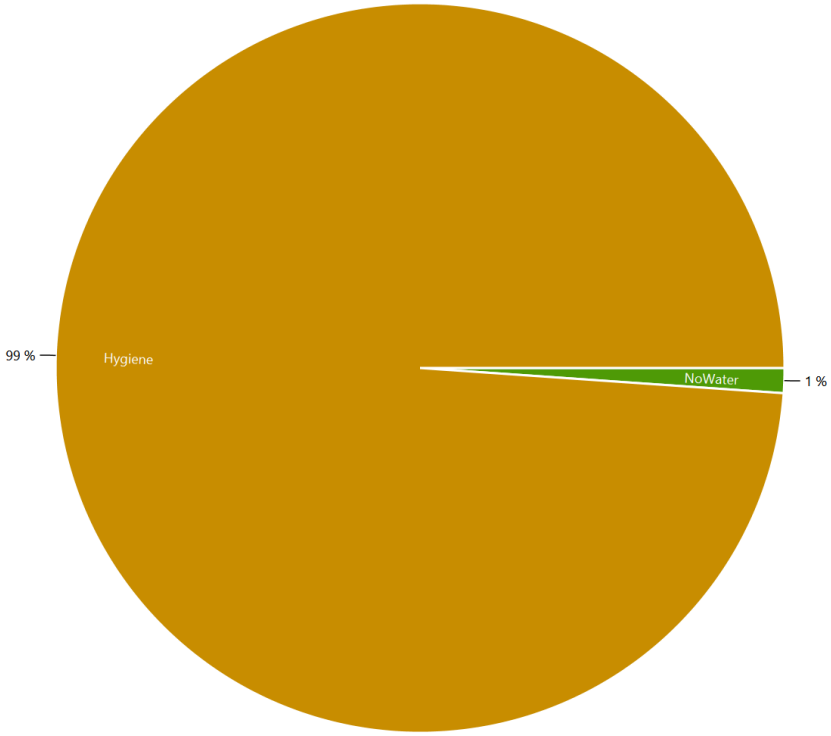
HH0 - Energieagentur - Electricity



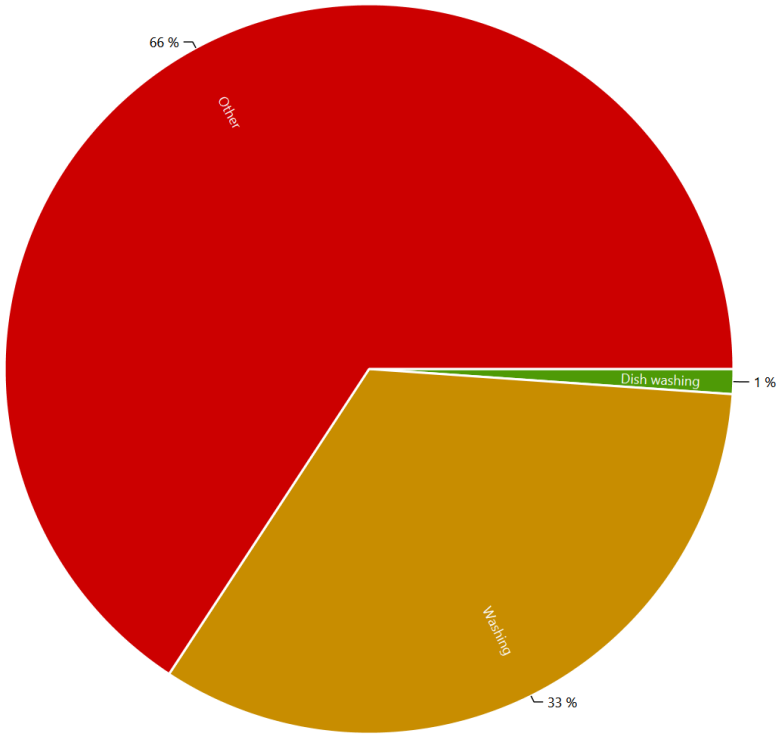
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

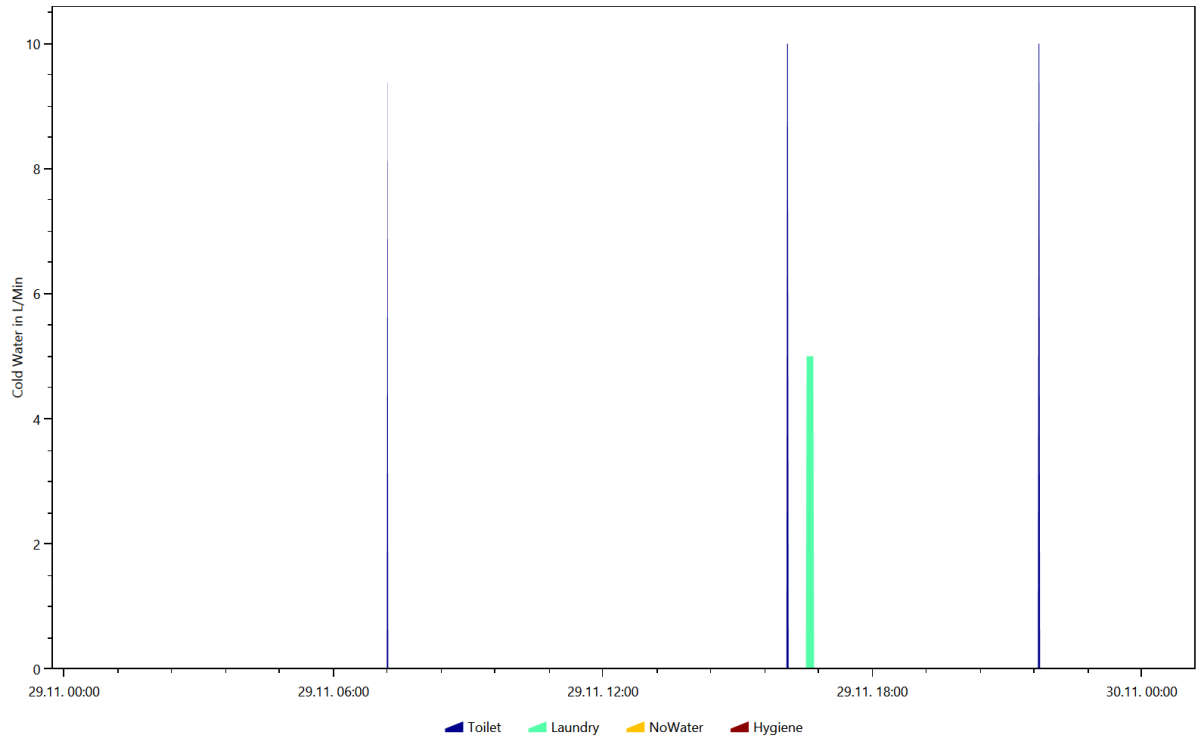


Example of the device profiles for each load type

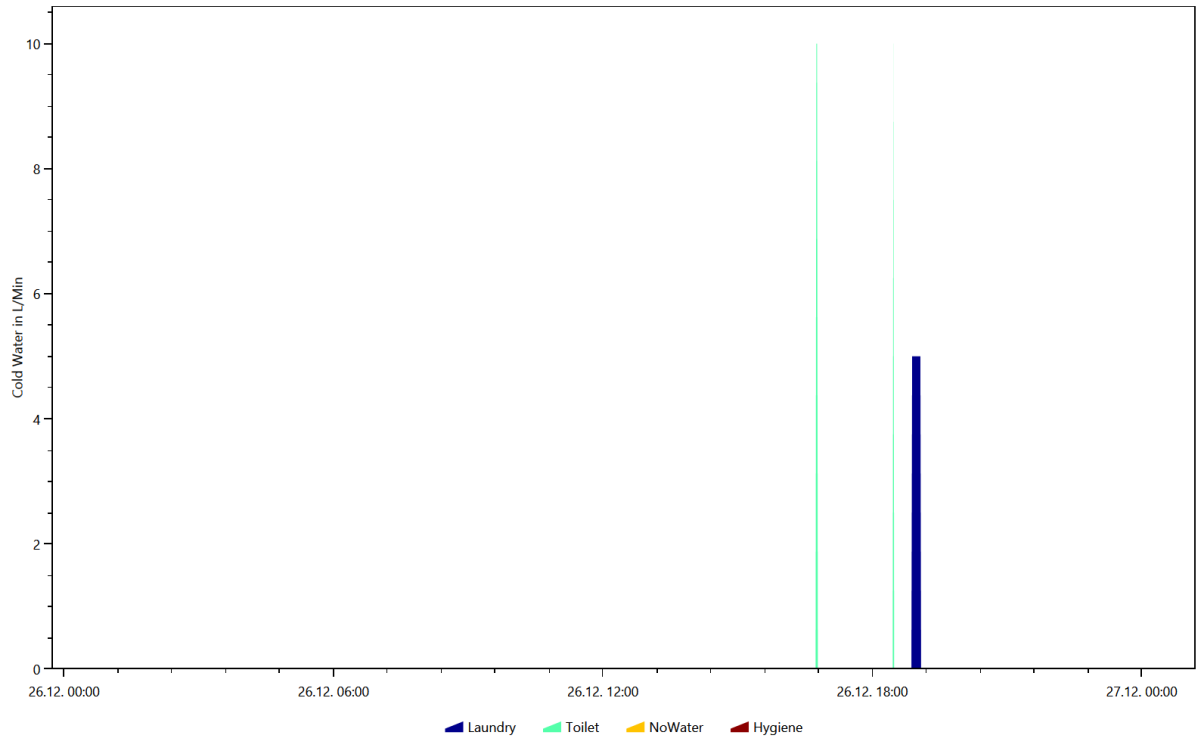
This is made from the files starting with: DeviceProfiles

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

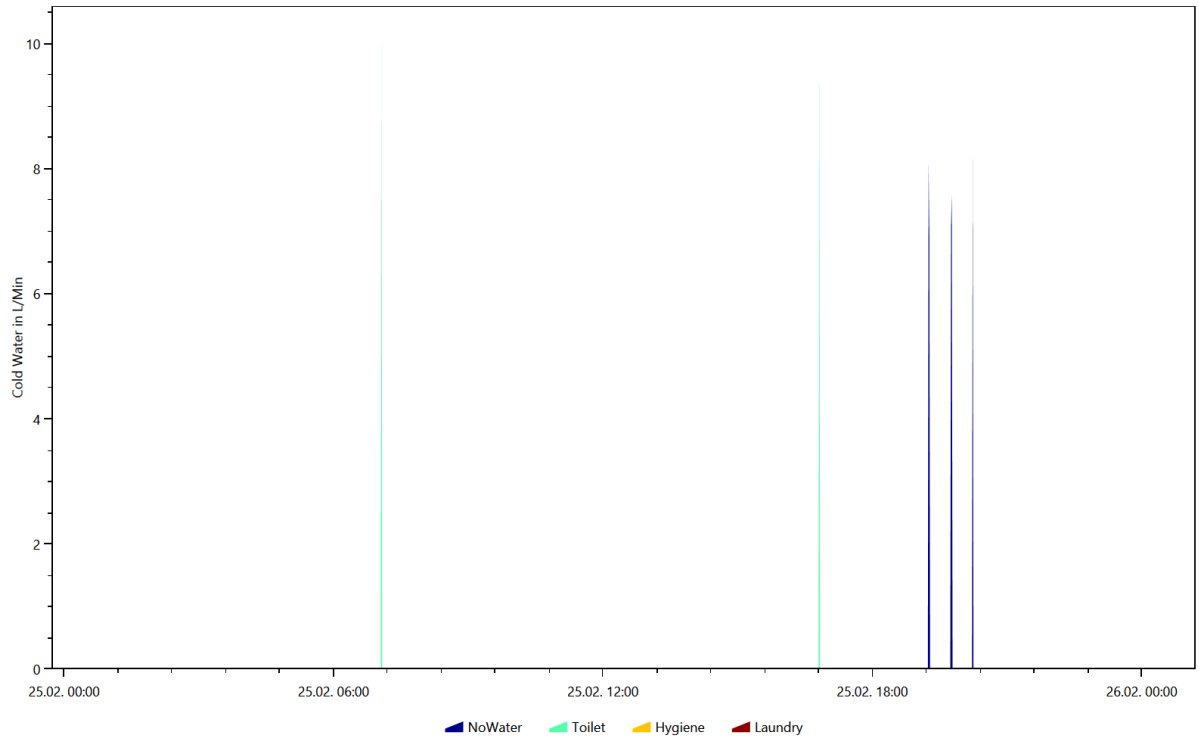
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.29



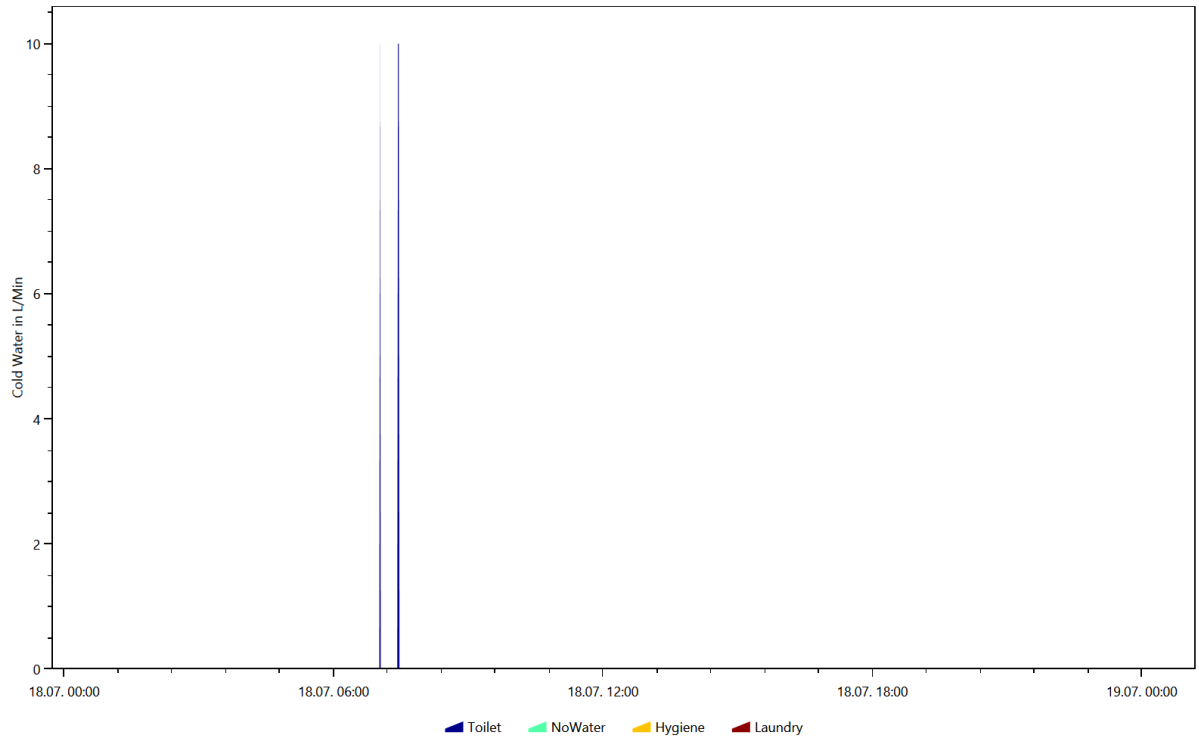
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.26



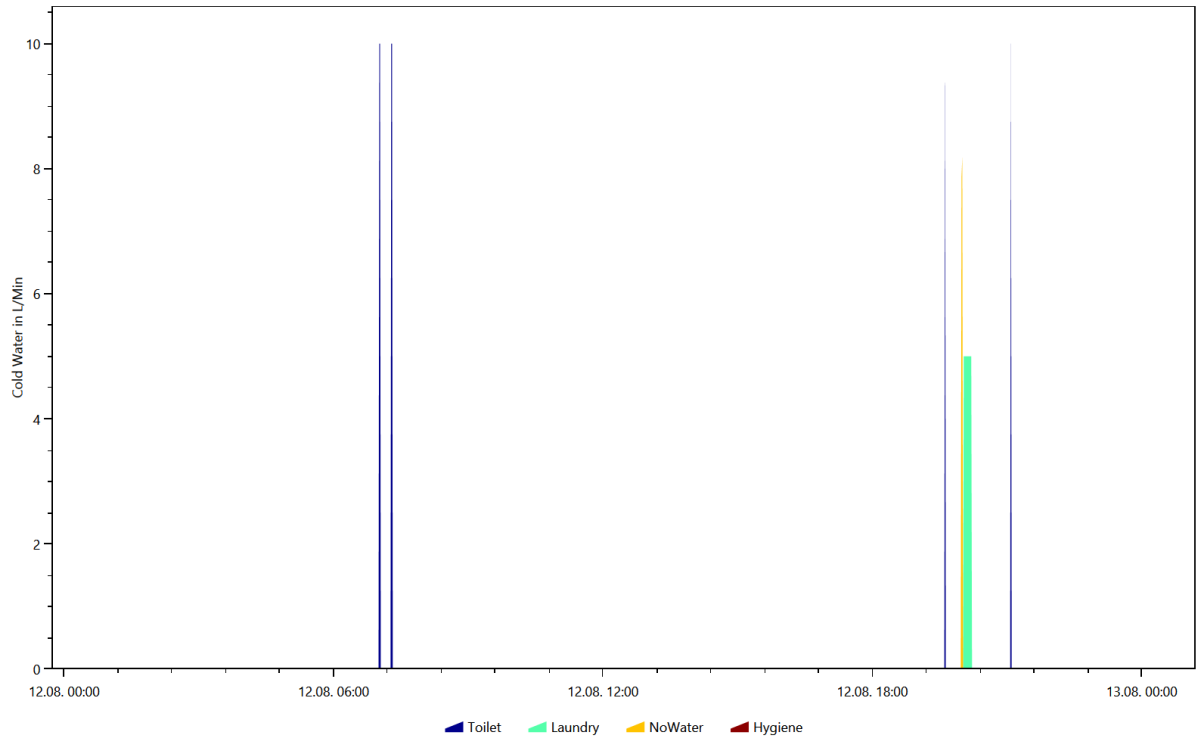
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.25



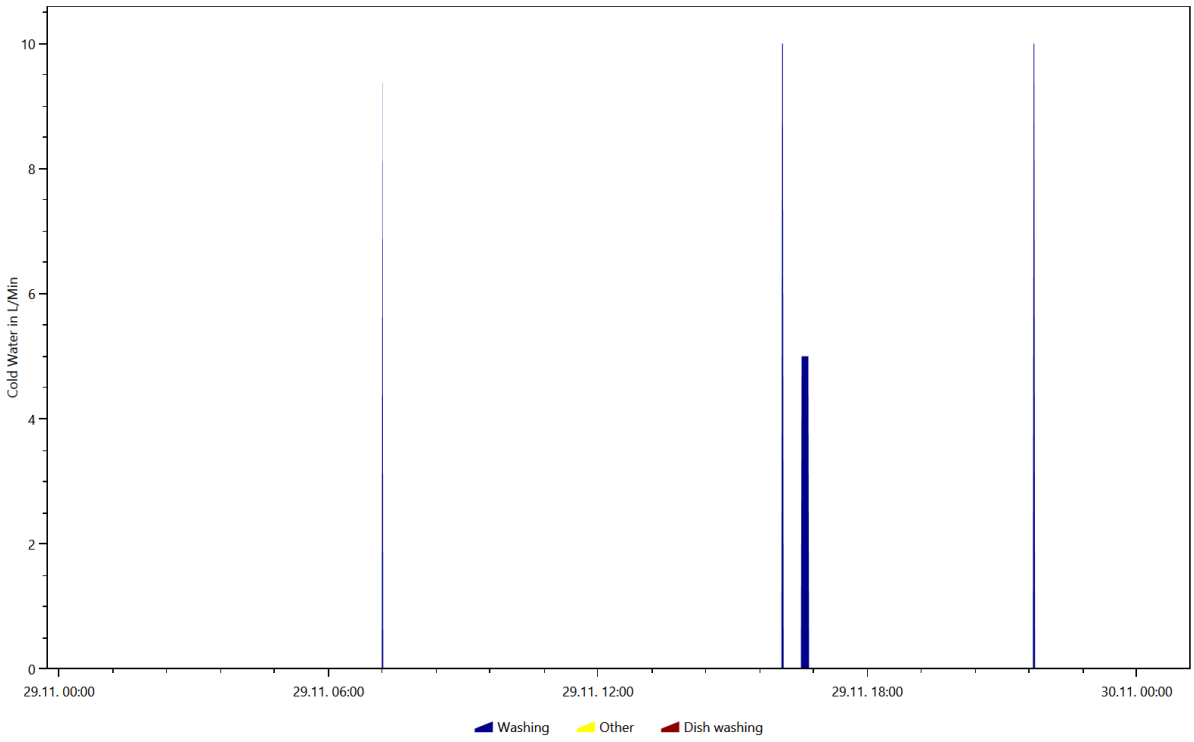
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.18



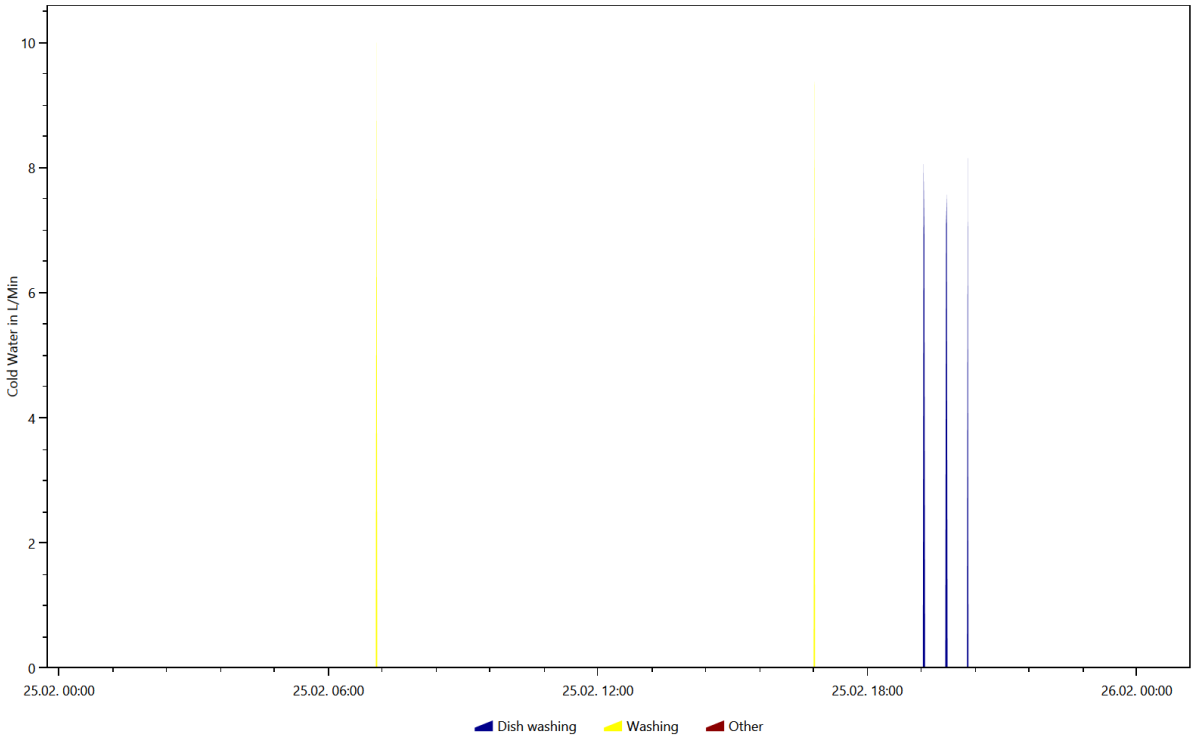
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.12



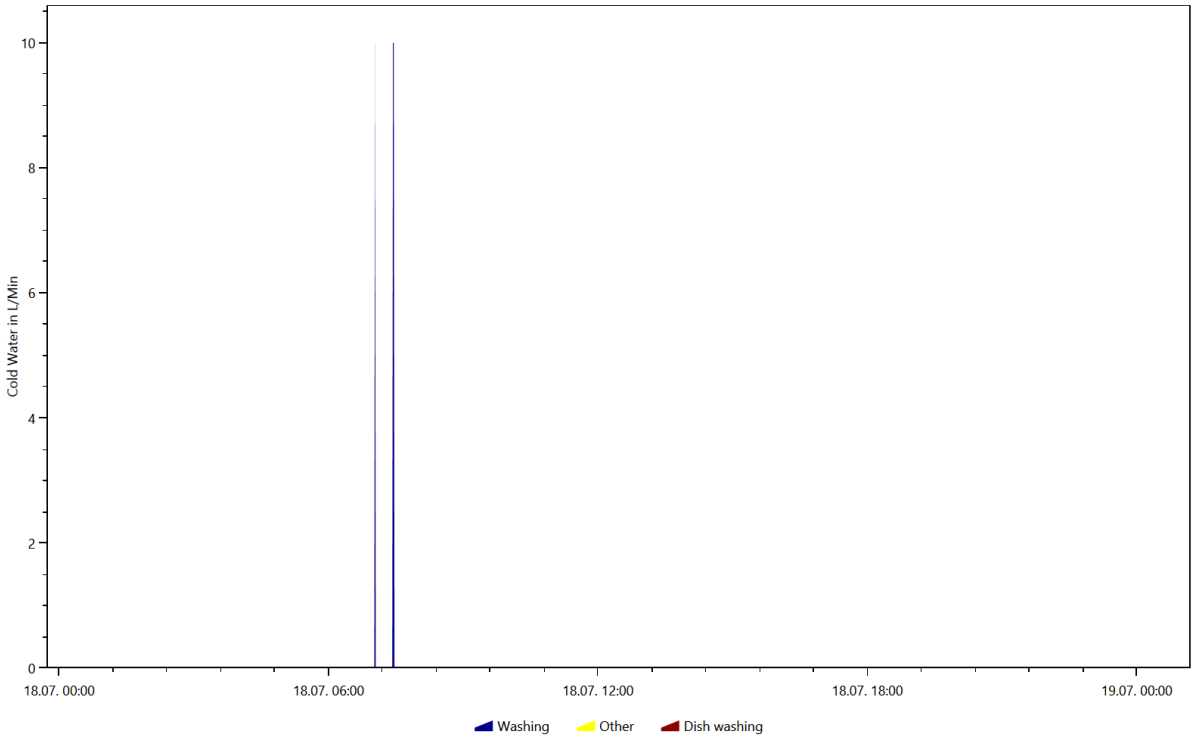
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.11.29



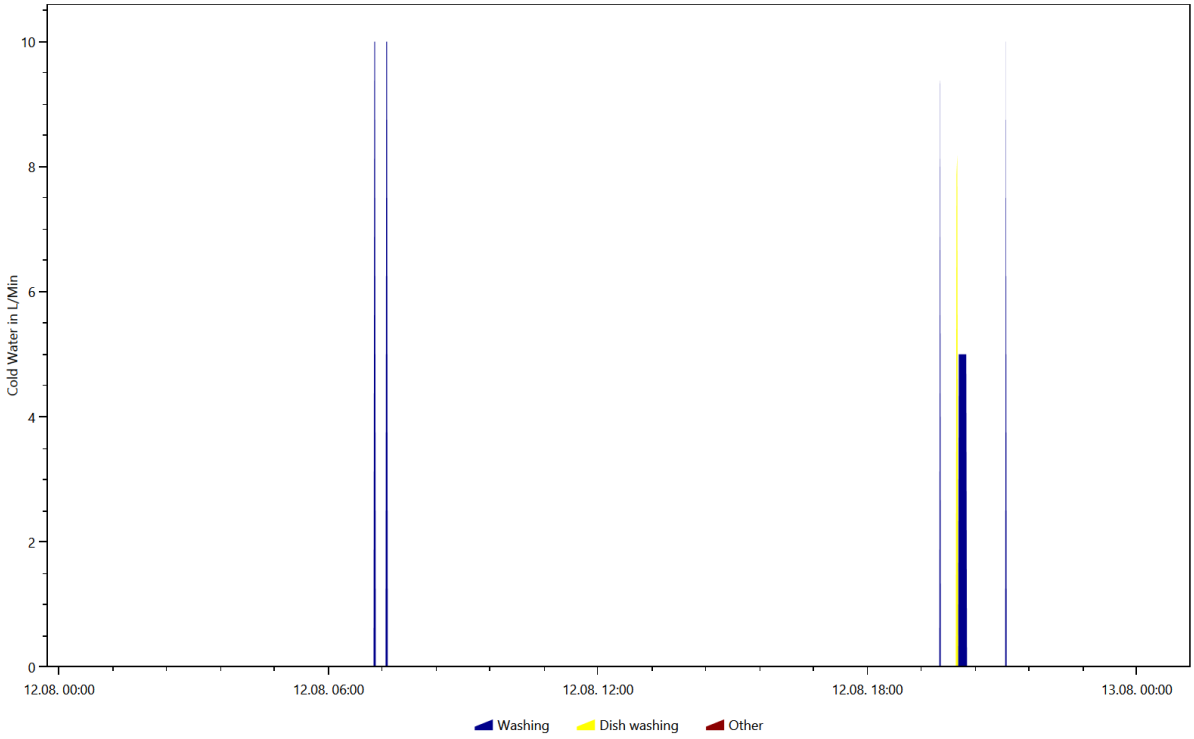
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.25



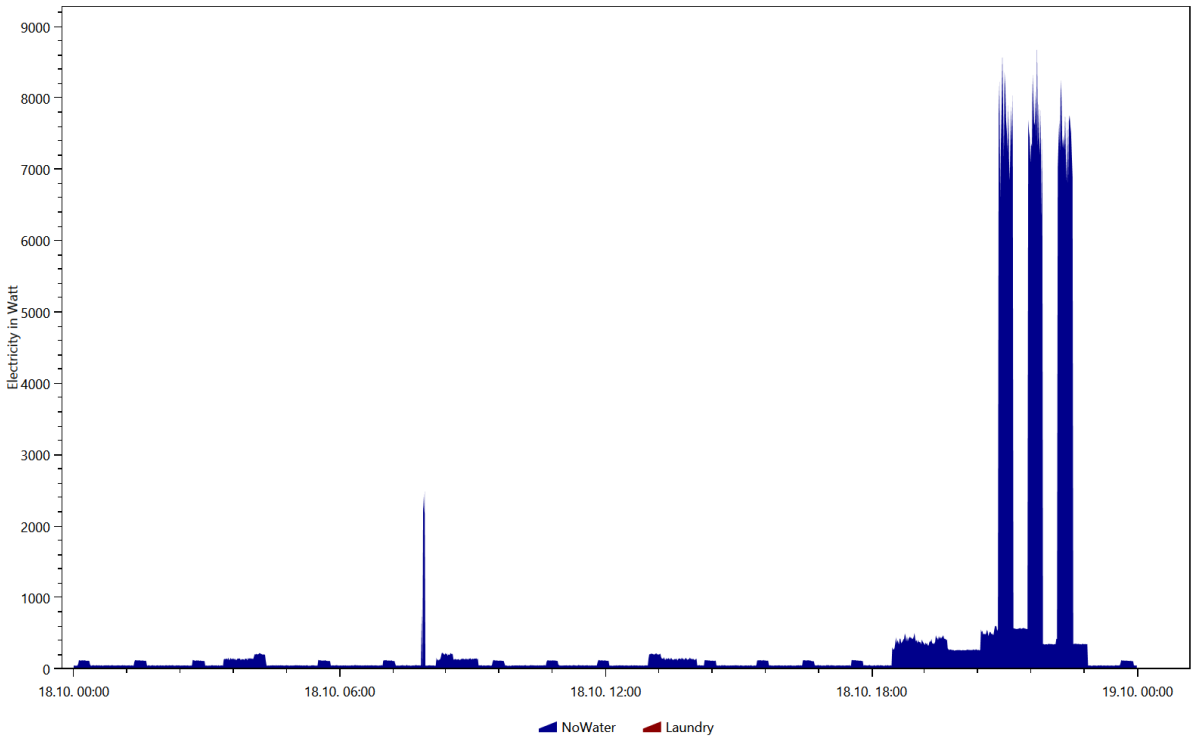
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.18



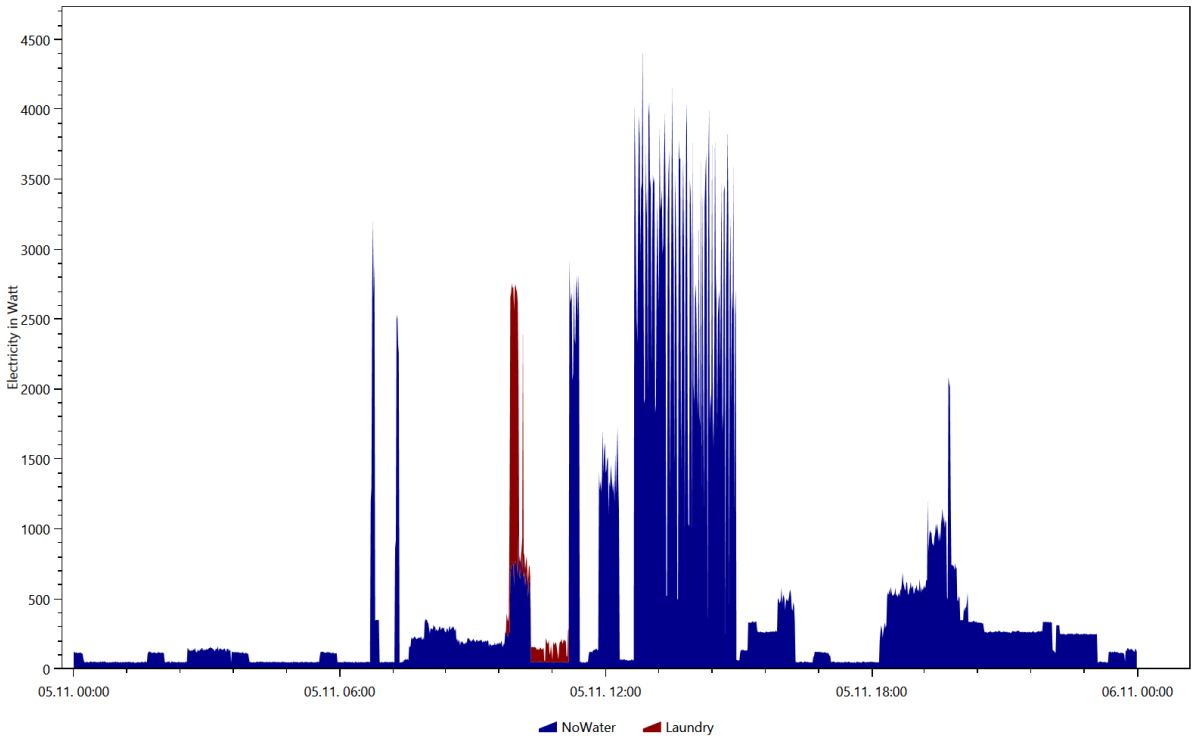
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.12



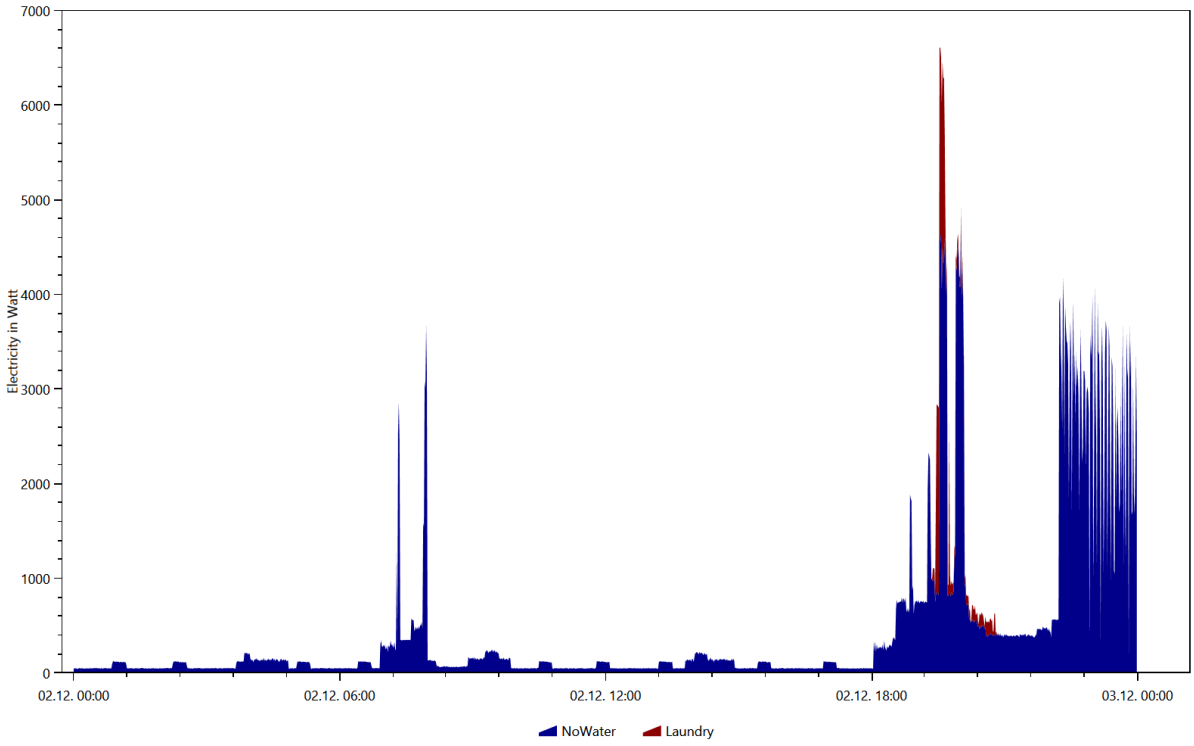
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.18



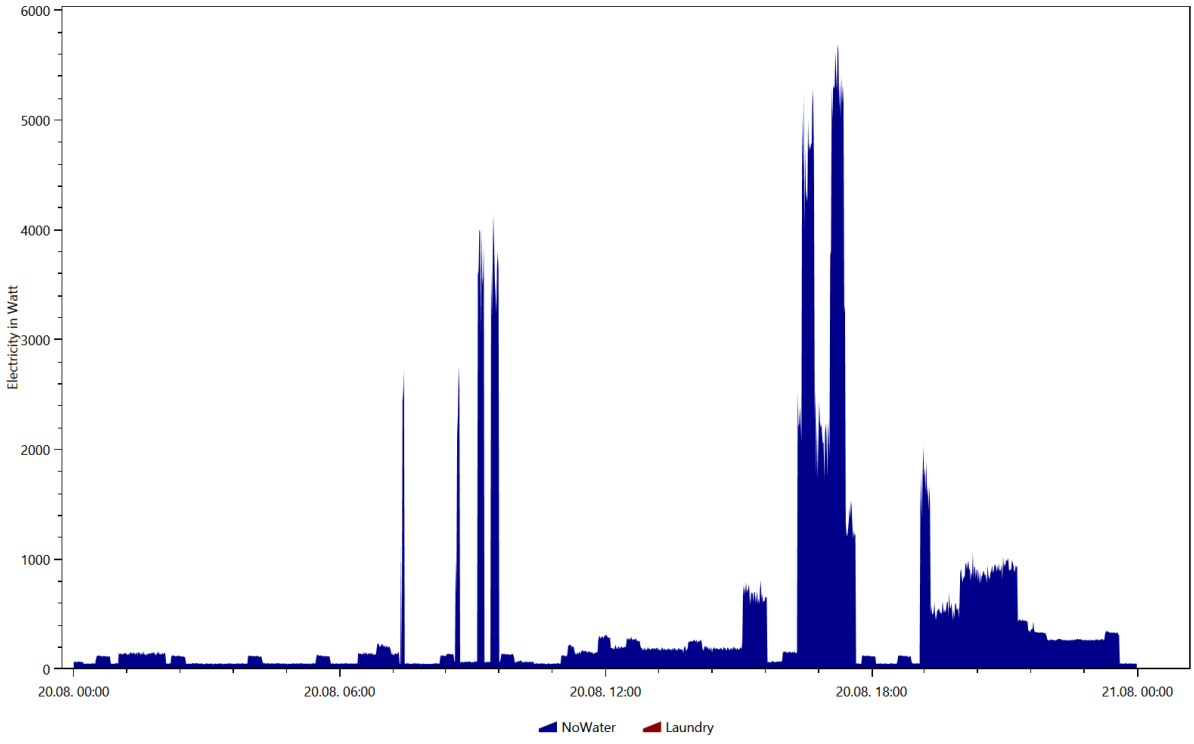
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.5



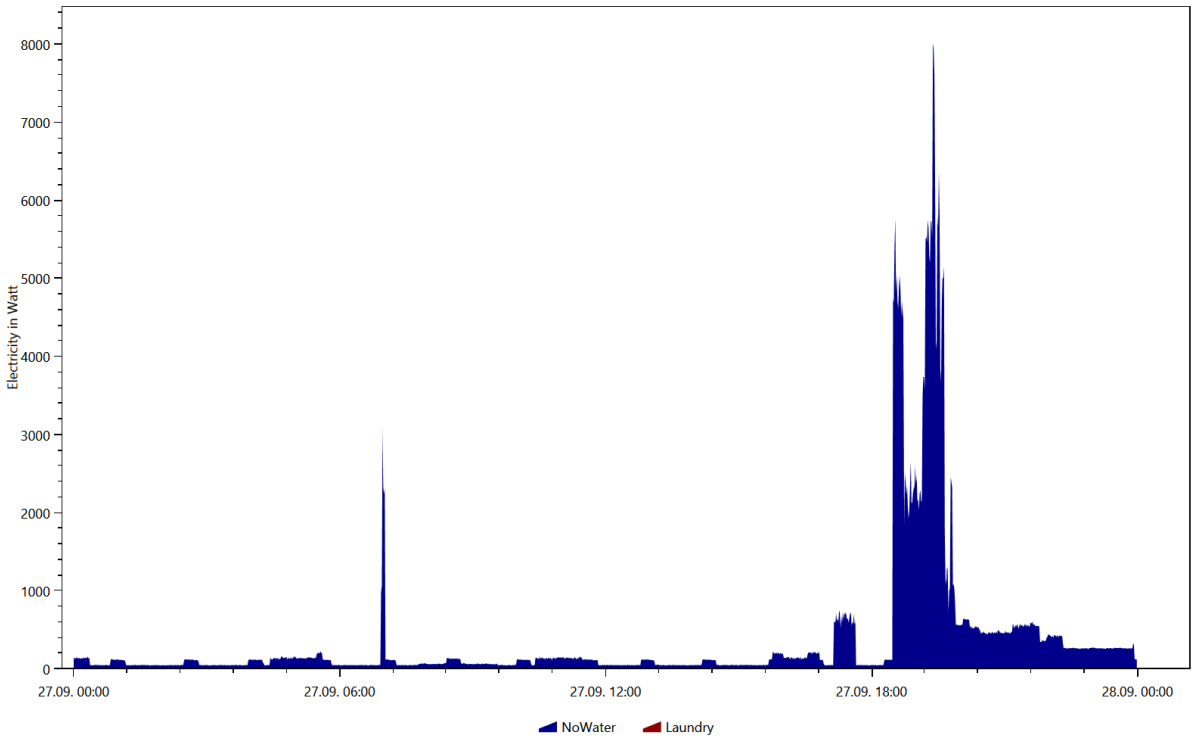
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.2



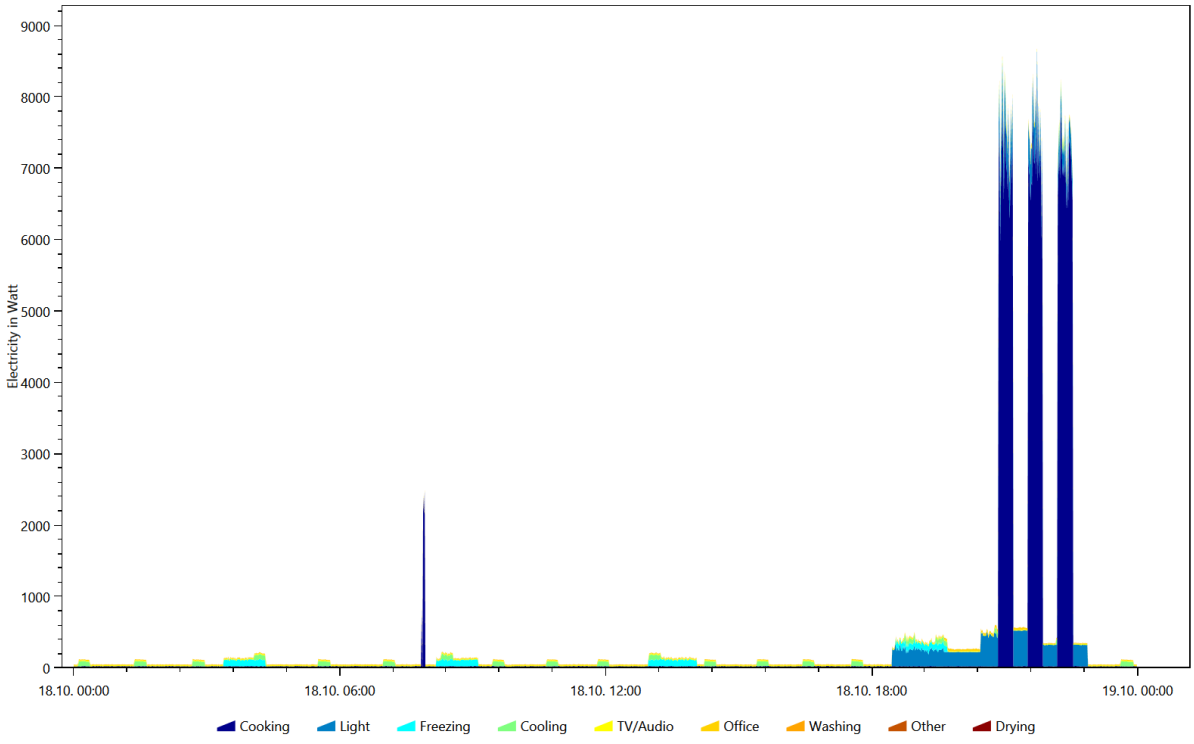
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.20



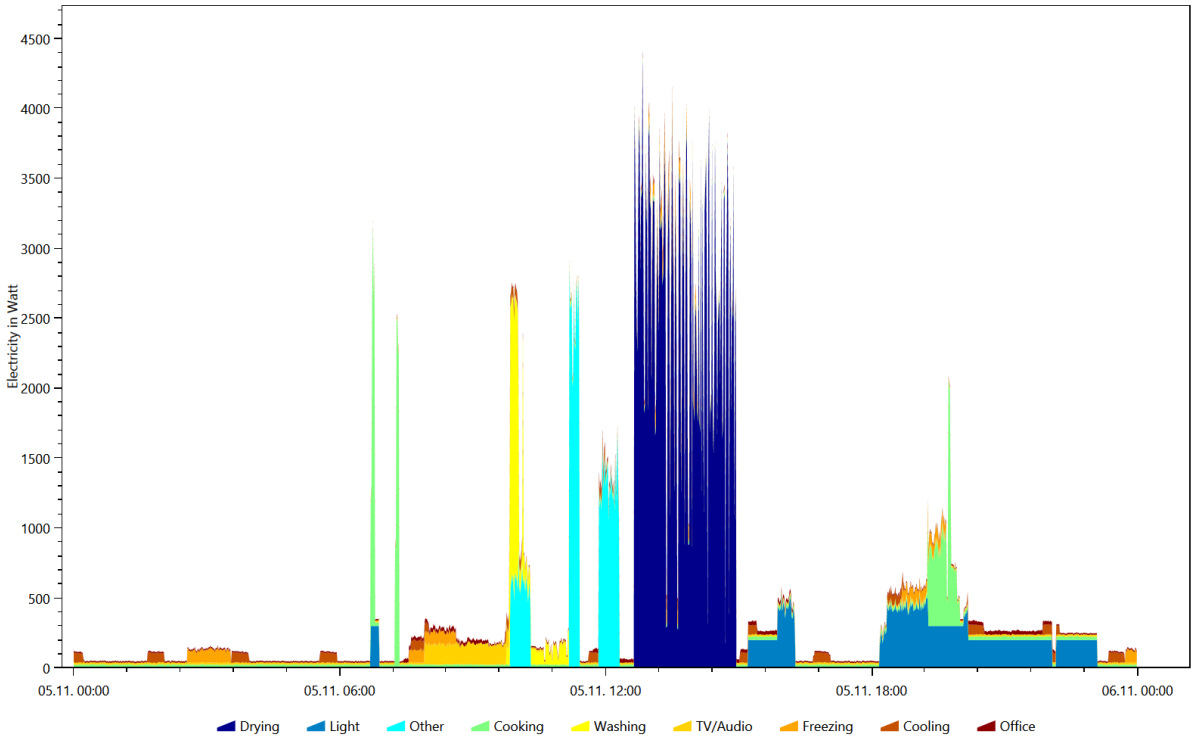
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.27



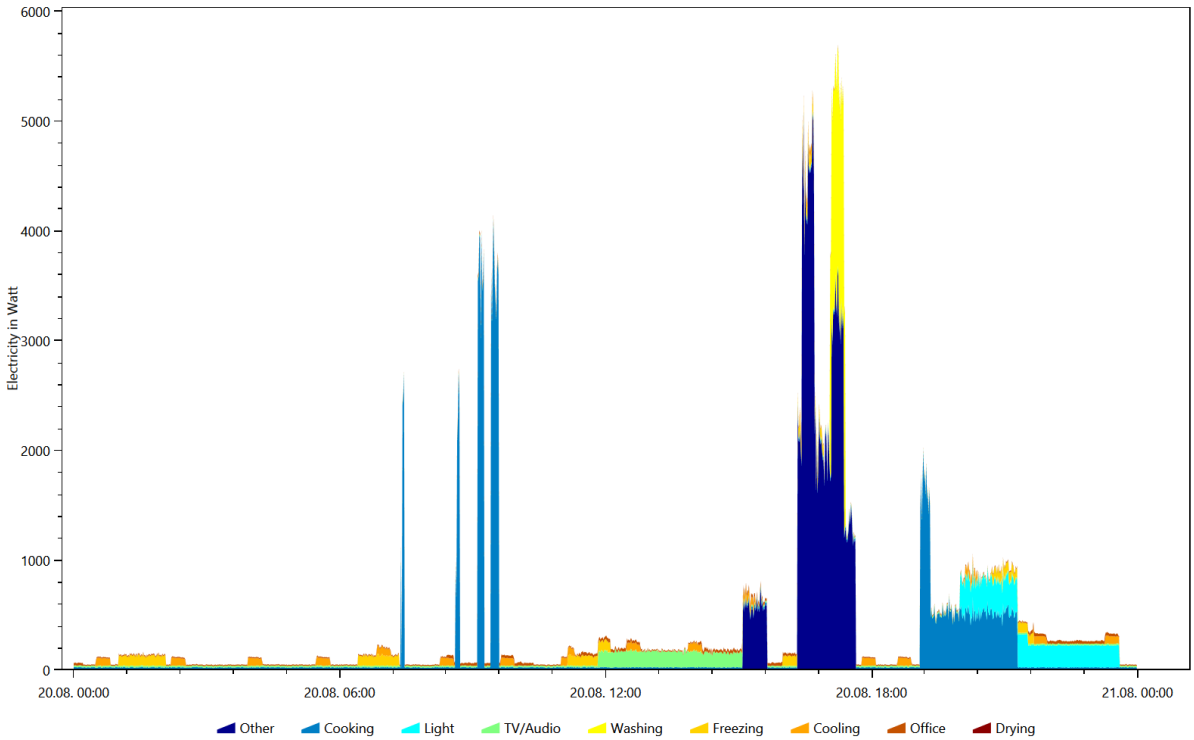
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.18



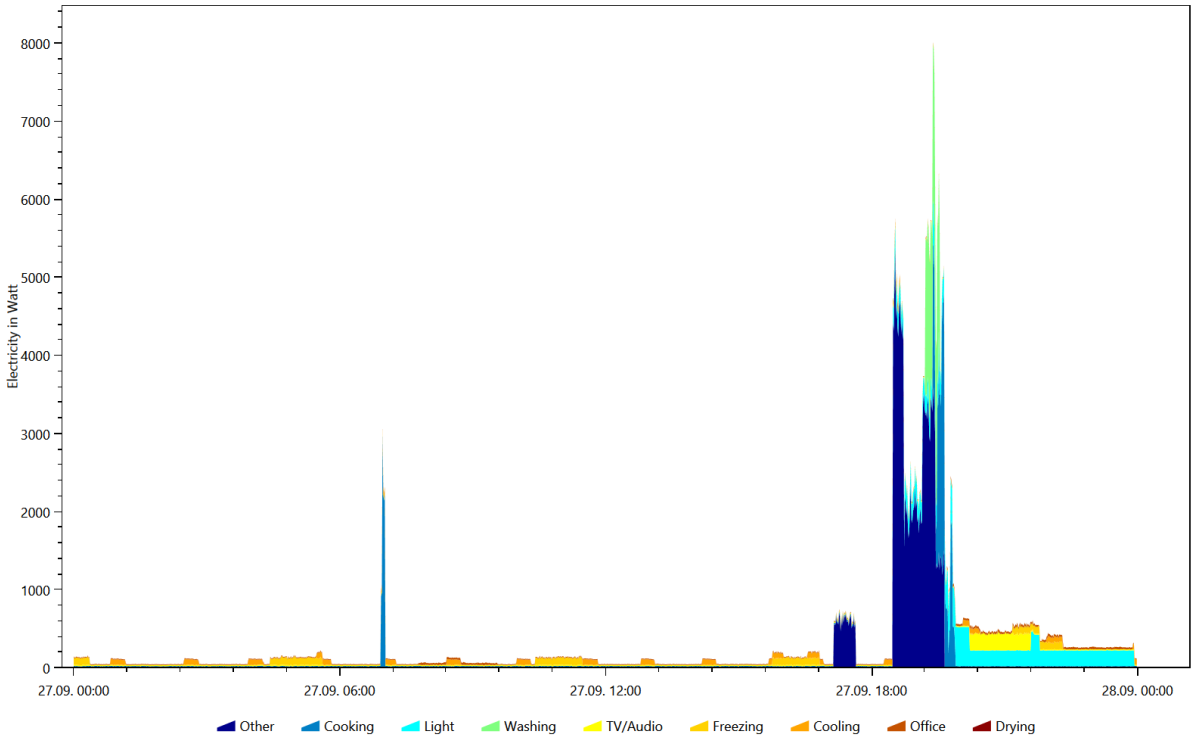
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.11.5



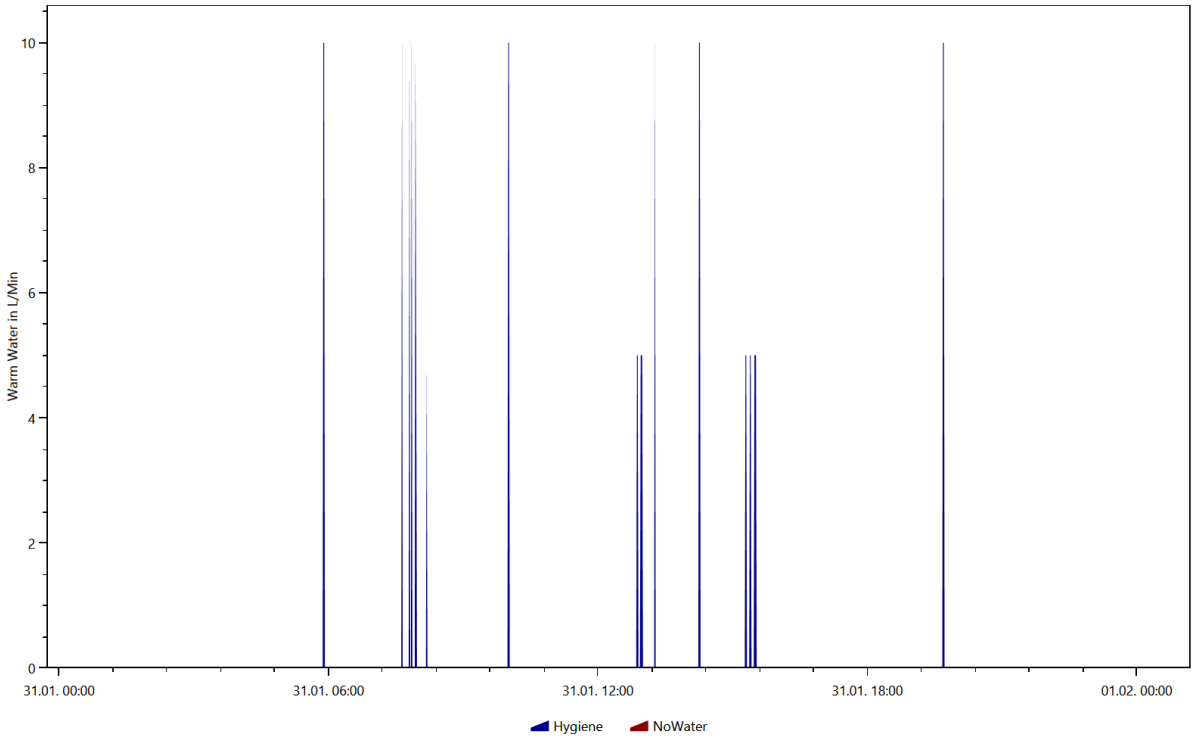
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.20



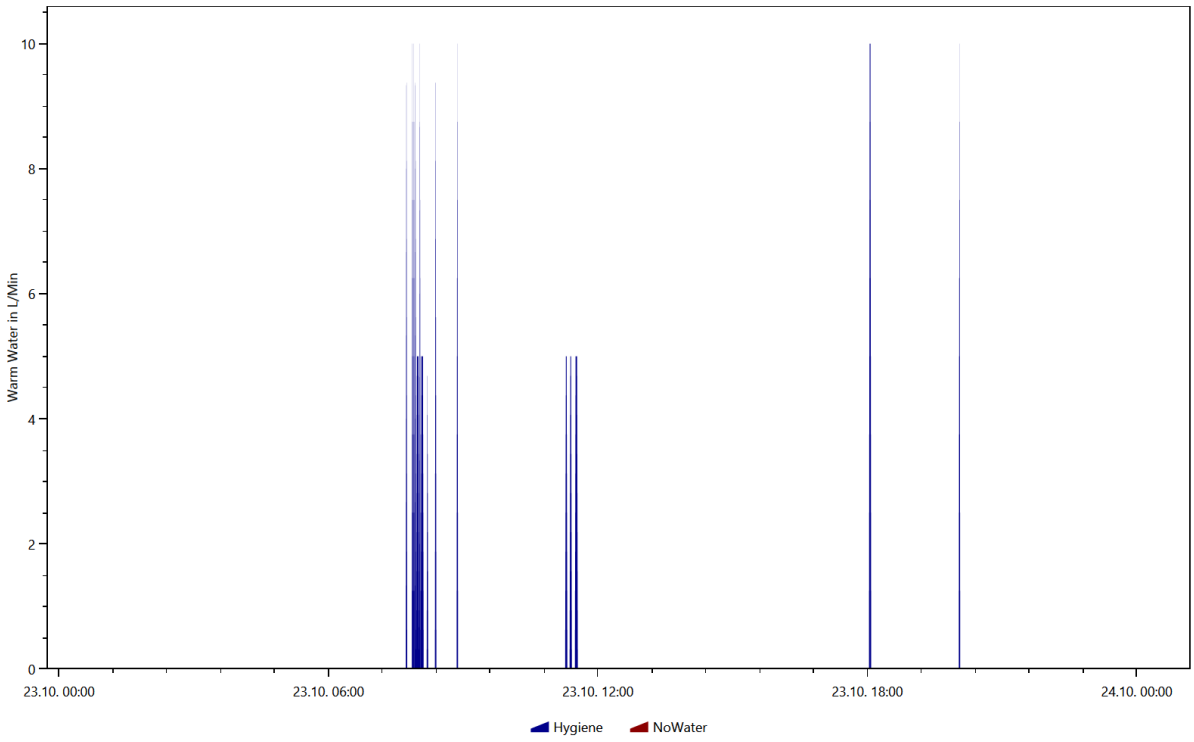
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.27



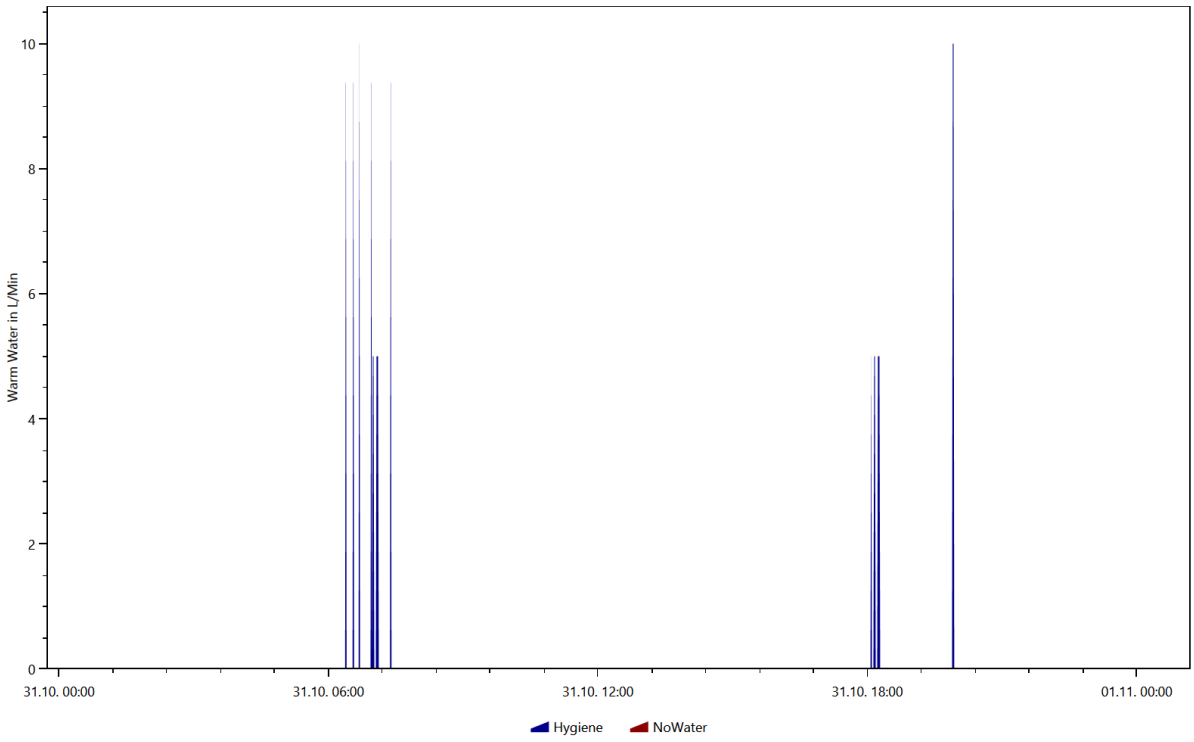
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.31



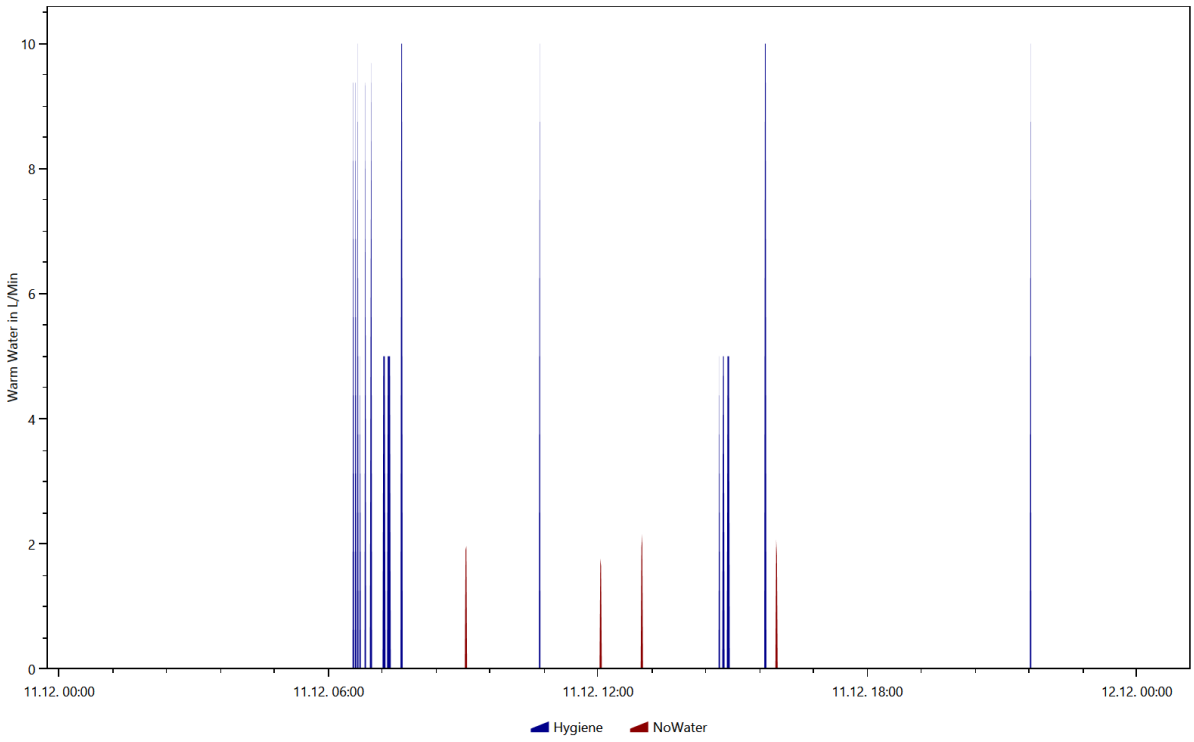
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.23



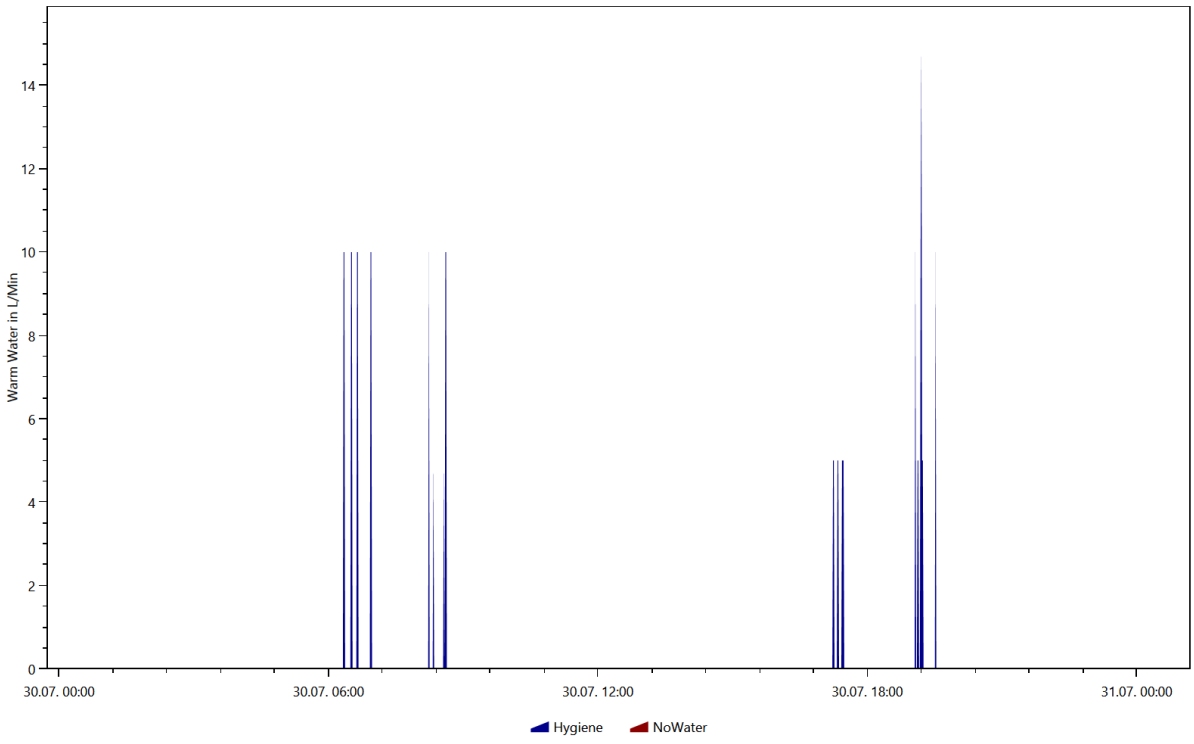
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.31



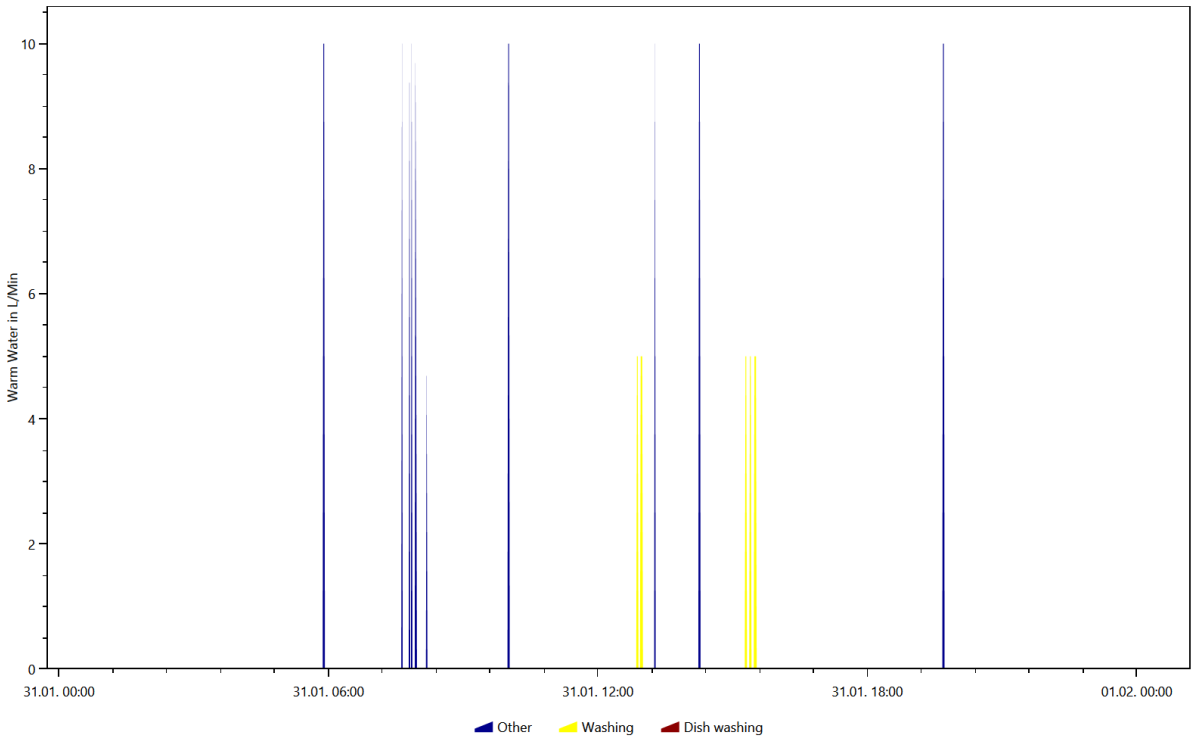
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.11



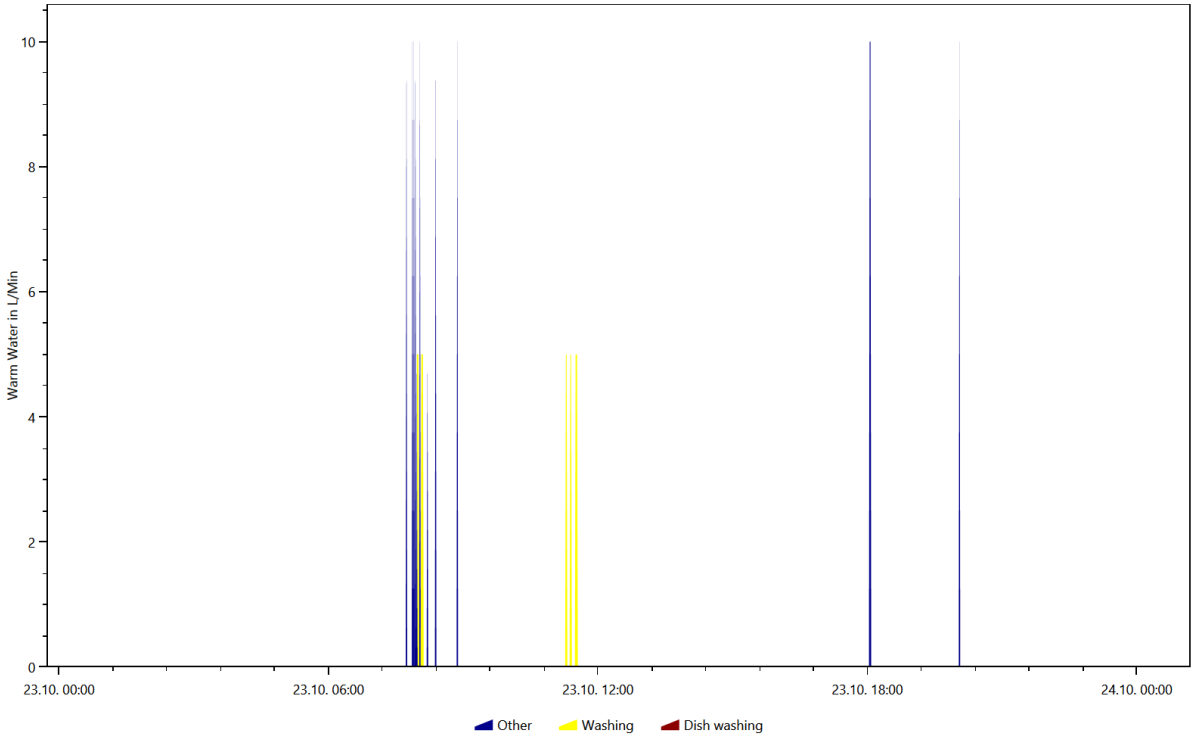
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.30



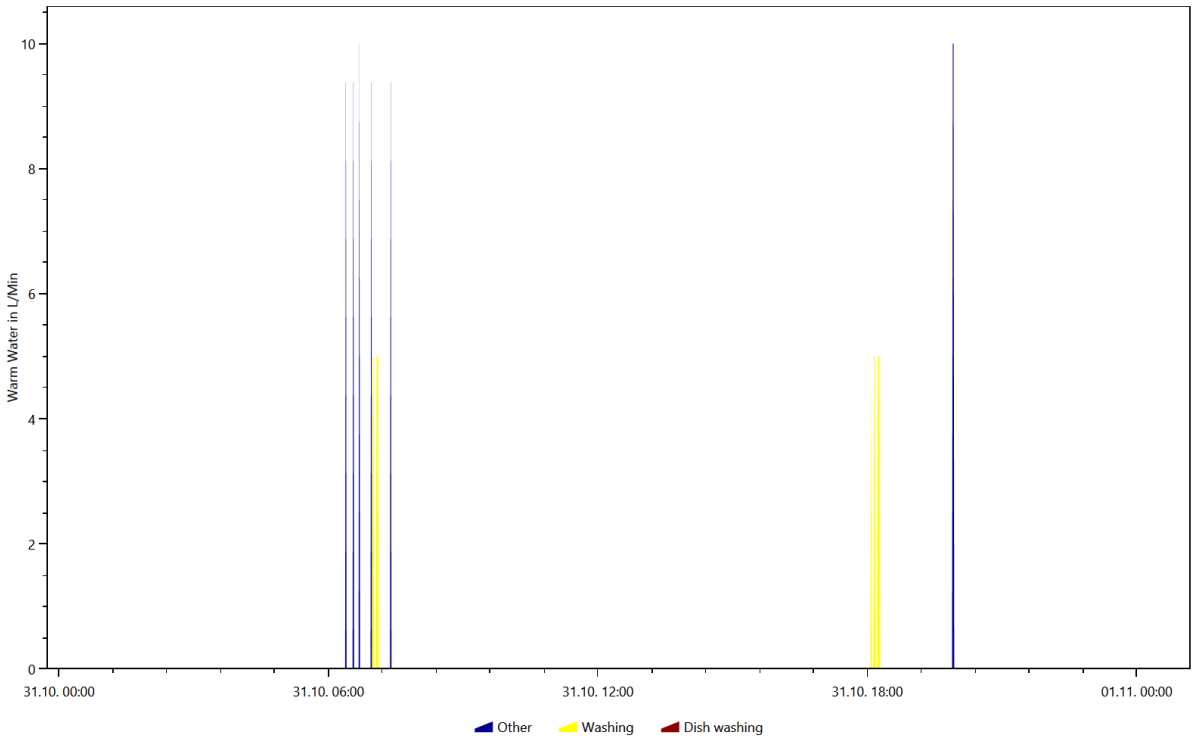
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.31



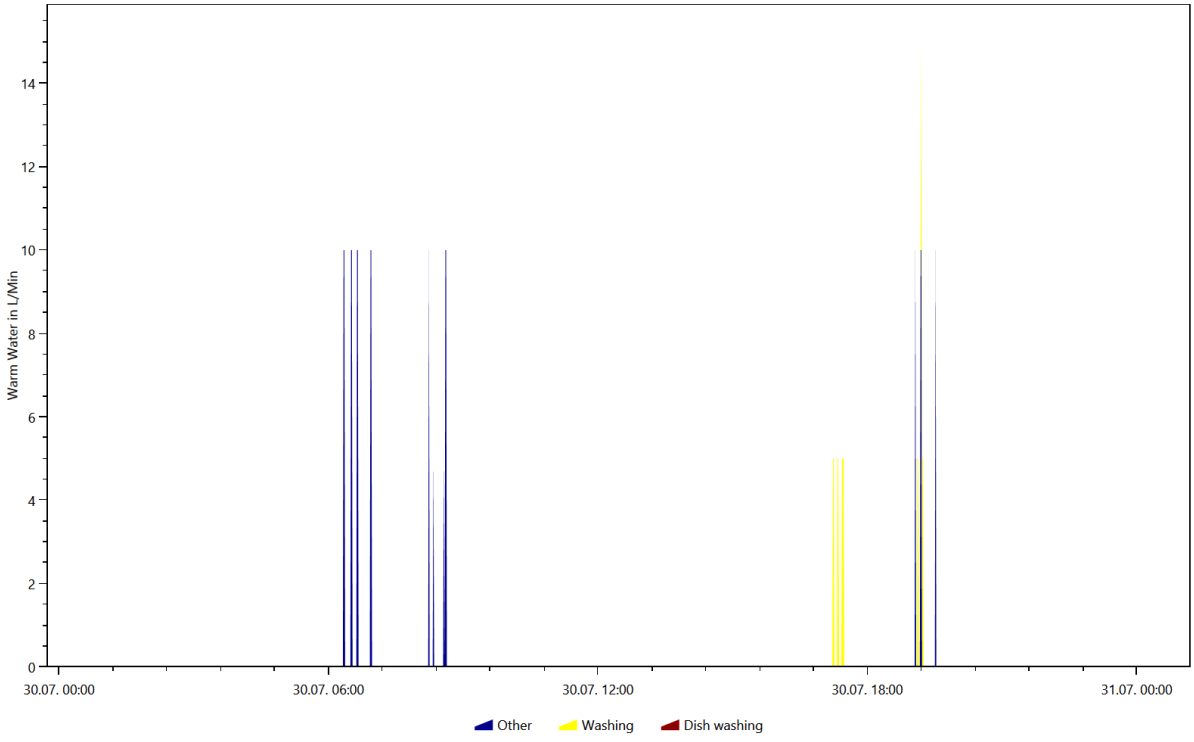
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.23



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.31



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.30

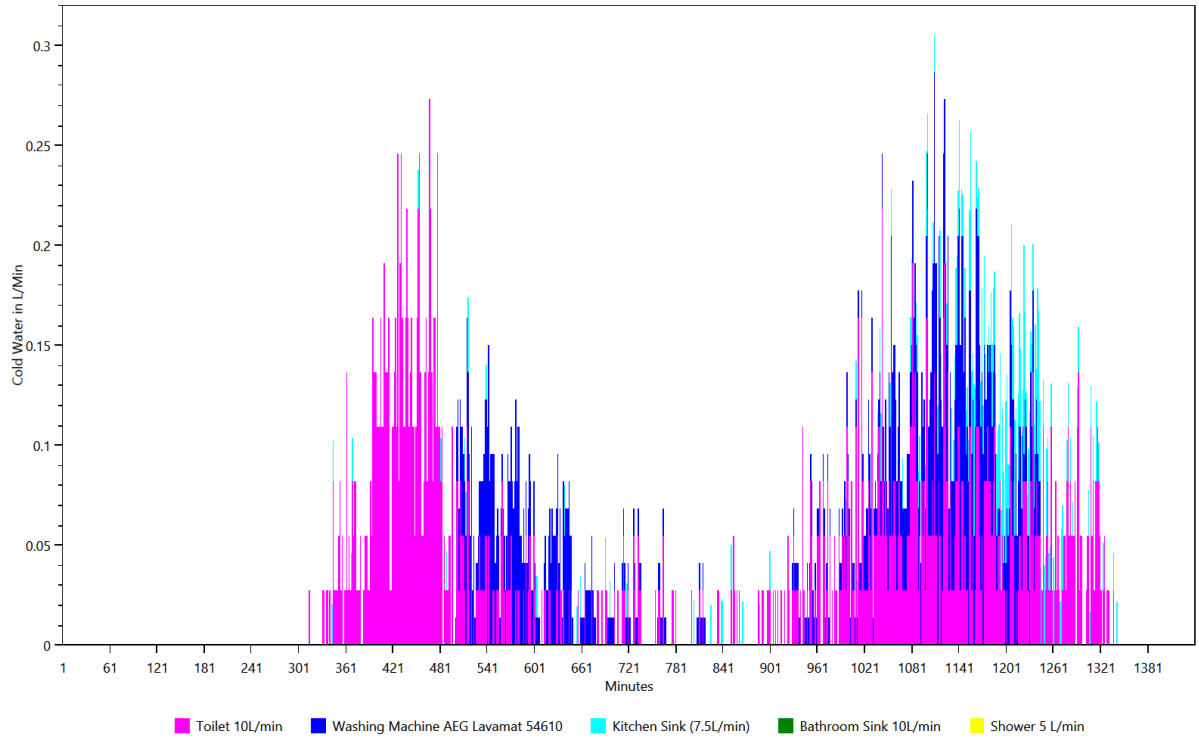


Overview of the time and power of the use per load type per device

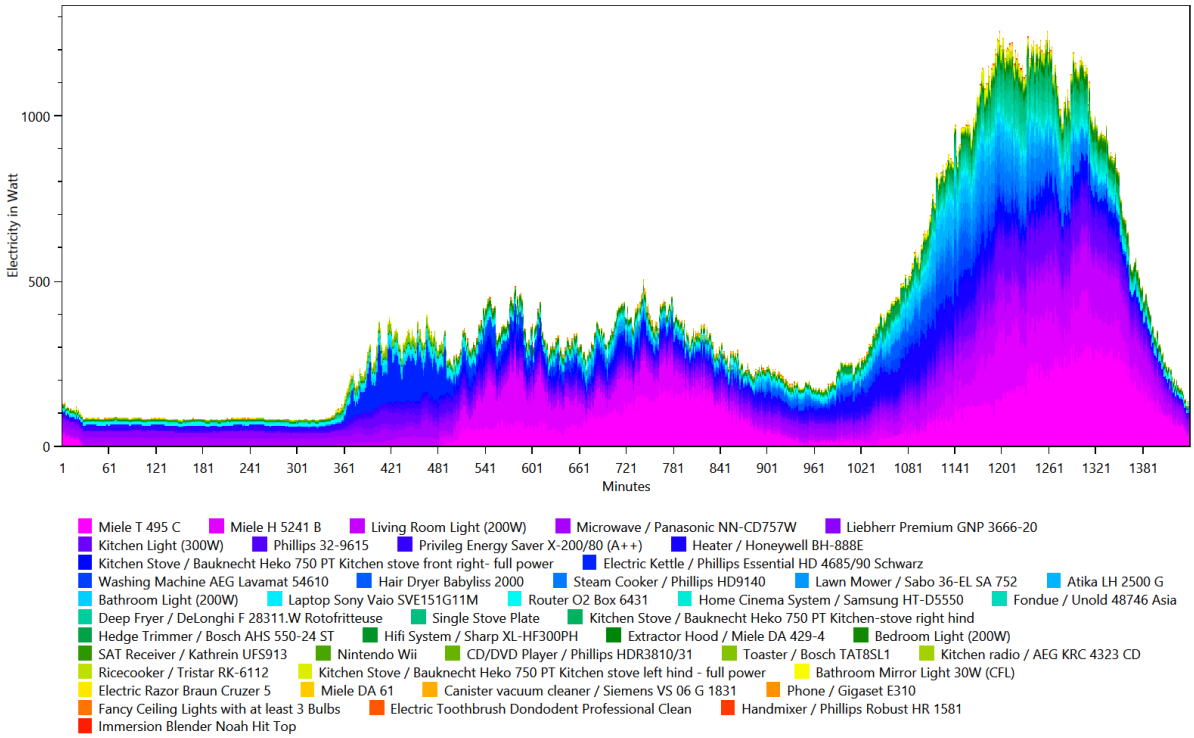
This is made from the files starting with: TimeOfUseEnergyProfiles

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

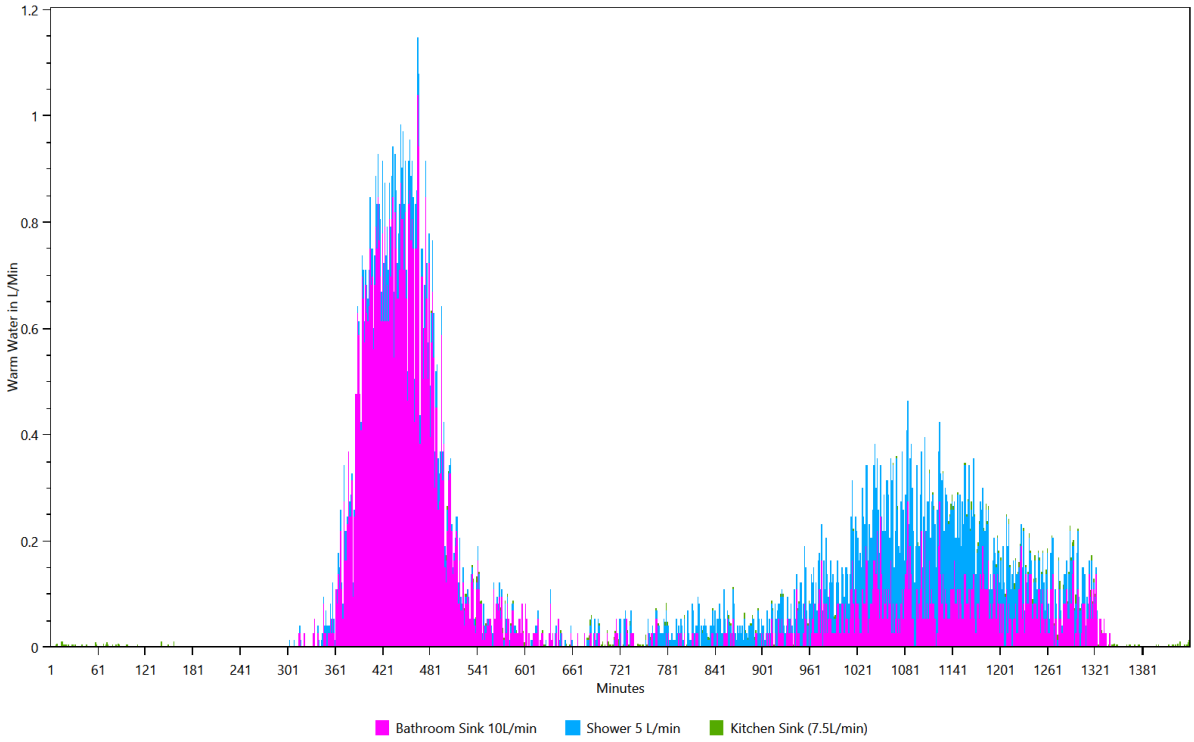
Cold Water



Electricity



Warm Water

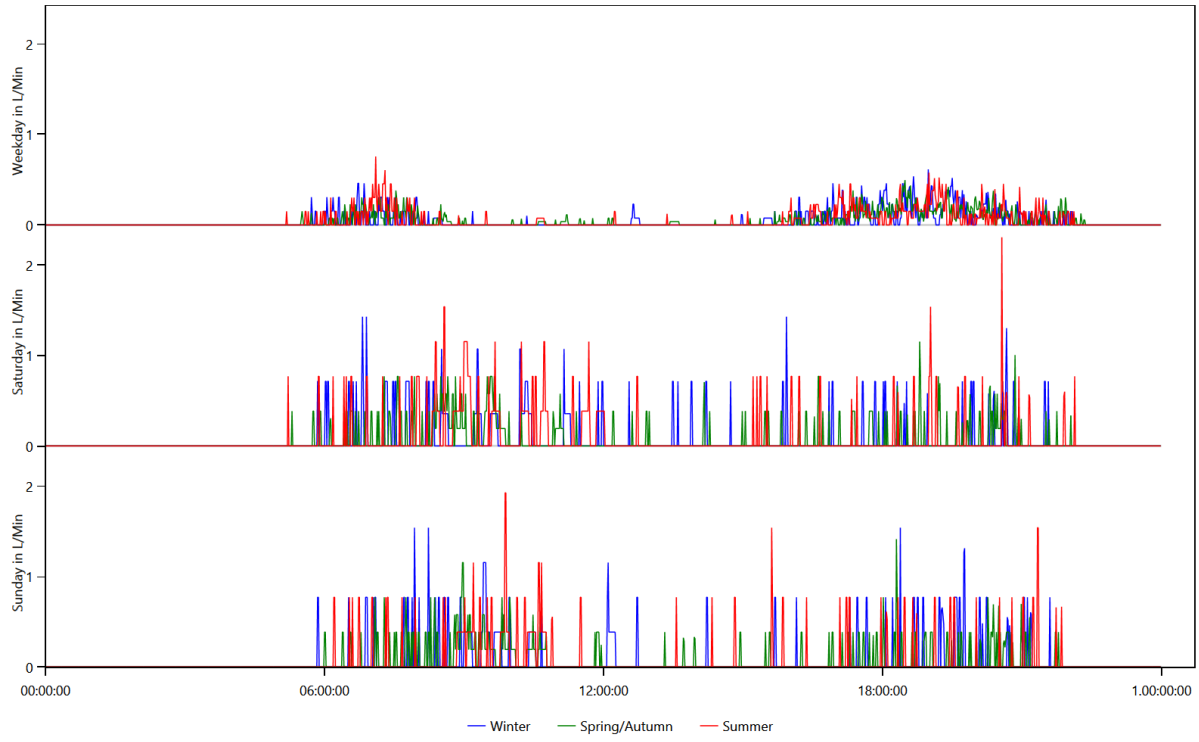


Energy use per load type during different seasons, split by weekday/saturday/sunday

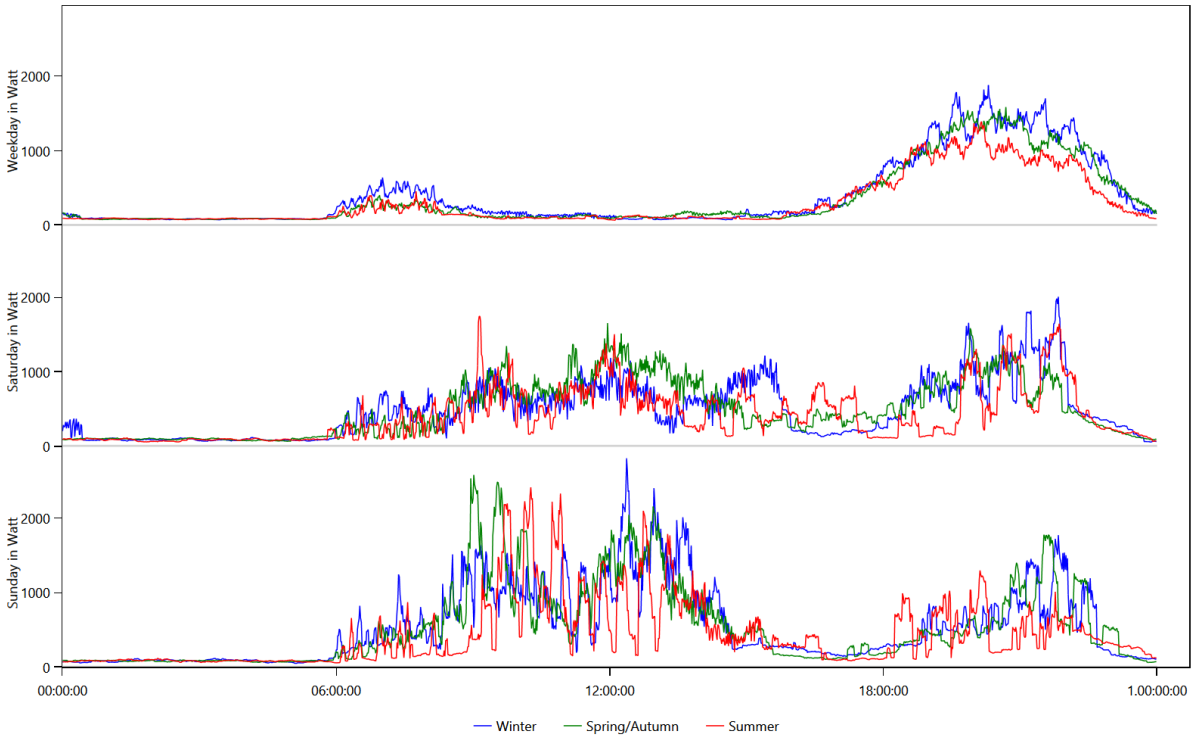
This is made from the files starting with: WeekdayProfiles

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

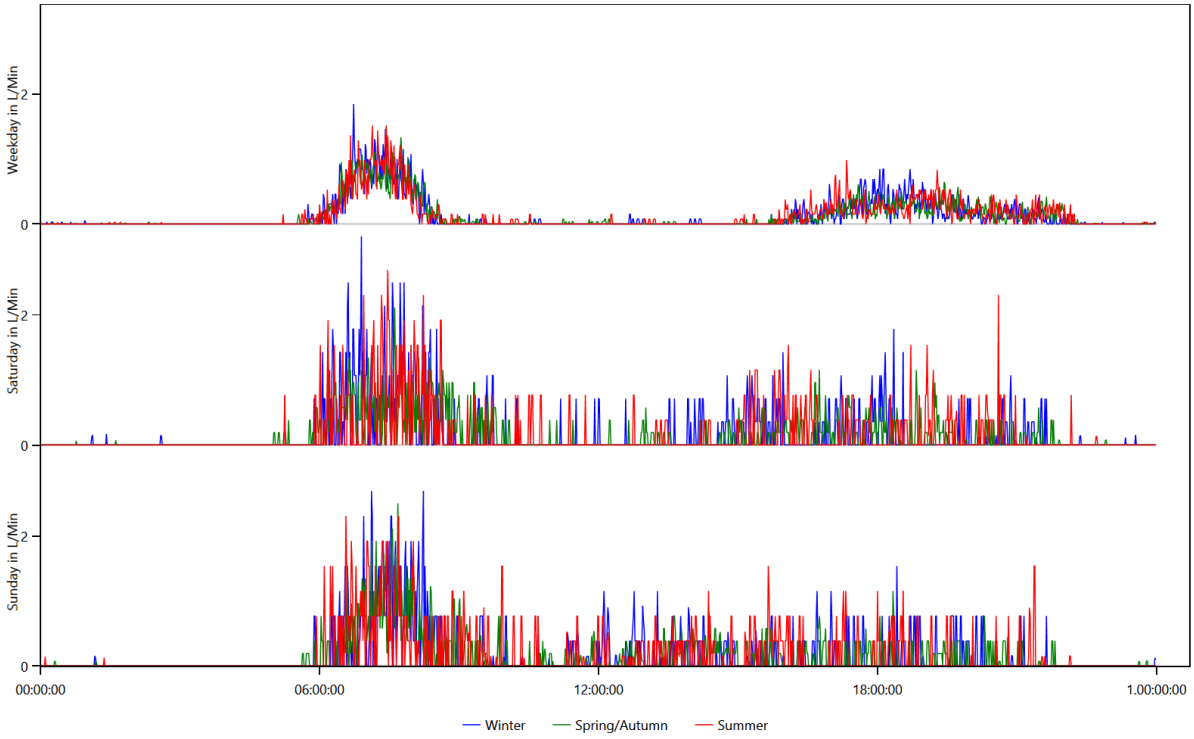
Cold Water



Electricity



Warm Water

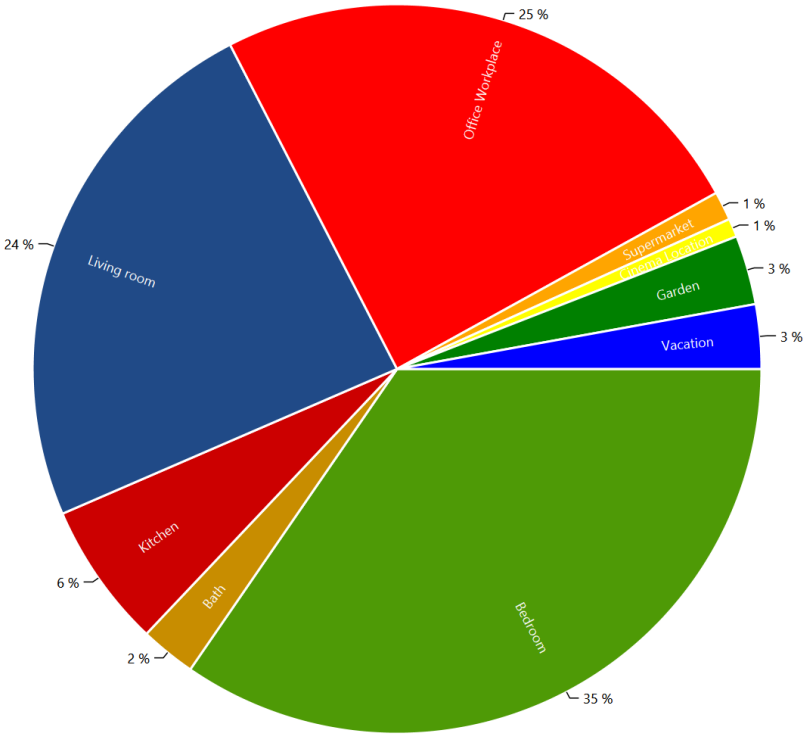


Location Distribution per Person

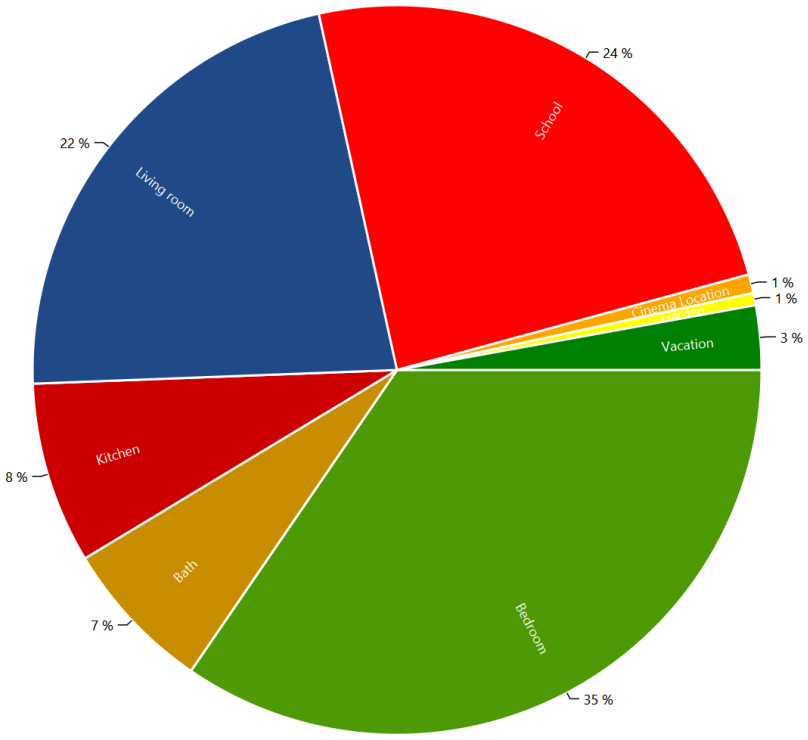
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR39 Normen (44 Male)



CHR39 Tina (38 Female)



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

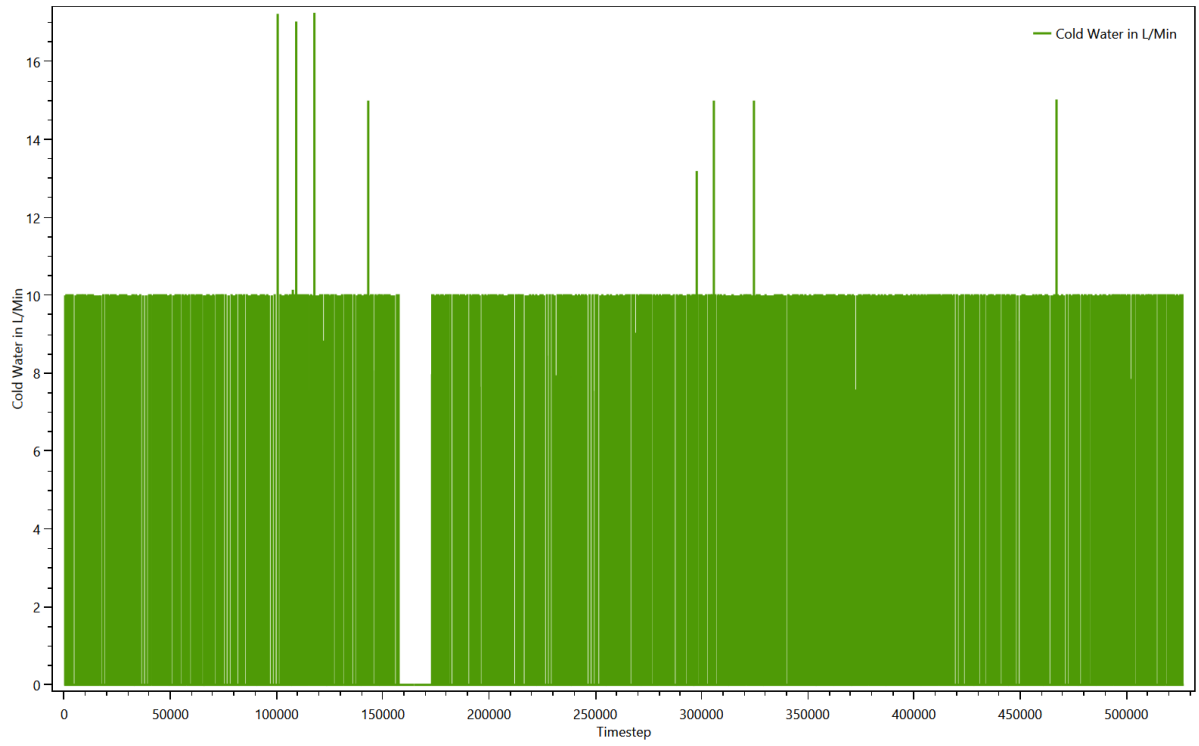
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR39 Normen (44/Male);use the laptop for Internet, Movie, Music, News (2 h);Active Entertainment (Computer, Internet etc);False;
0;01.01.2016 00:00;CHR39 Tina (38/Female);sleep bed 02 (08 h);sleep;False;
19;01.01.2016 00:19;CHR39 Normen (44/Male);sleep bed 08 (08 h);sleep;False;
429;01.01.2016 07:09;CHR39 Tina (38/Female);get ready in the morning (women);hygiene;False;
450;01.01.2016 07:30;CHR39 Tina (38/Female);go to the toilet;hygiene;False;
454;01.01.2016 07:34;CHR39 Tina (38/Female);eat small breakfast (25min) interruping subaff, no alarm;cooking;False;
476;01.01.2016 07:56;CHR39 Tina (38/Female);use the laptop for Internet, Movie, Music, News (2 h);Active Entertainment (Computer, Internet etc);False;
482;01.01.2016 08:02;CHR39 Normen (44/Male);get ready in the morning (men);hygiene;False;
493;01.01.2016 08:13;CHR39 Normen (44/Male);eat small breakfast (25min) interruping subaff, no alarm;cooking;False;
516;01.01.2016 08:36;CHR39 Normen (44/Male);work at the office from 8:00 (9 h);work;False;
583;01.01.2016 09:43;CHR39 Tina (38/Female);work as teacher ;work;False;
1045;01.01.2016 17:25;CHR39 Normen (44/Male);go to the toilet;hygiene;False;
1051;01.01.2016 17:31;CHR39 Normen (44/Male);take a shower (men);hygiene;False;
1071;01.01.2016 17:51;CHR39 Normen (44/Male);go shopping for food in the supermarket (1.5 h);shopping;False;
1122;01.01.2016 18:42;CHR39 Tina (38/Female);take a shower with hair washing (women) (5 min hair drying);hygiene;False;
1146;01.01.2016 19:06;CHR39 Normen (44/Male);watch a movie for 1 h 30 min with home cinema system;Passive Entertainment (TV etc.);False;
1185;01.01.2016 19:45;CHR39 Tina (38/Female);go to the toilet;hygiene;False;
1190;01.01.2016 19:50;CHR39 Tina (38/Female);do laundry at 30°C (by variable);cleaning;False;
1206;01.01.2016 20:06;CHR39 Tina (38/Female);make fondue and eat it;cooking;False;

Sum Profiles

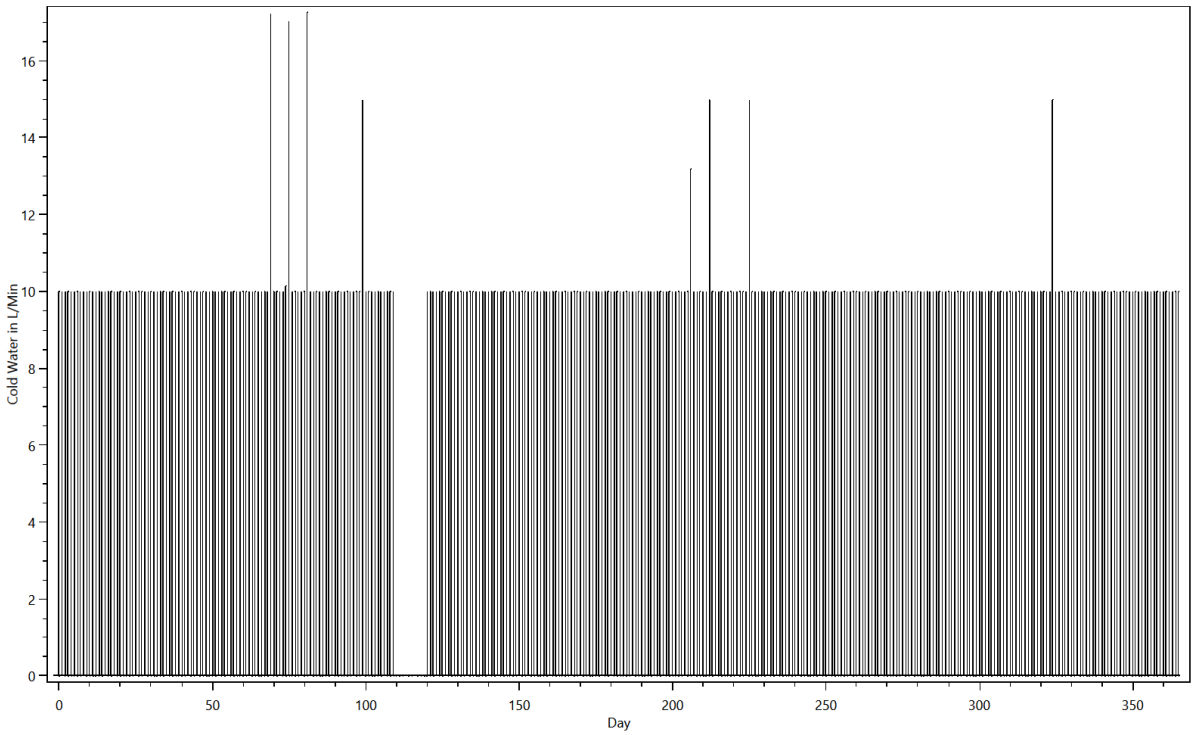
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

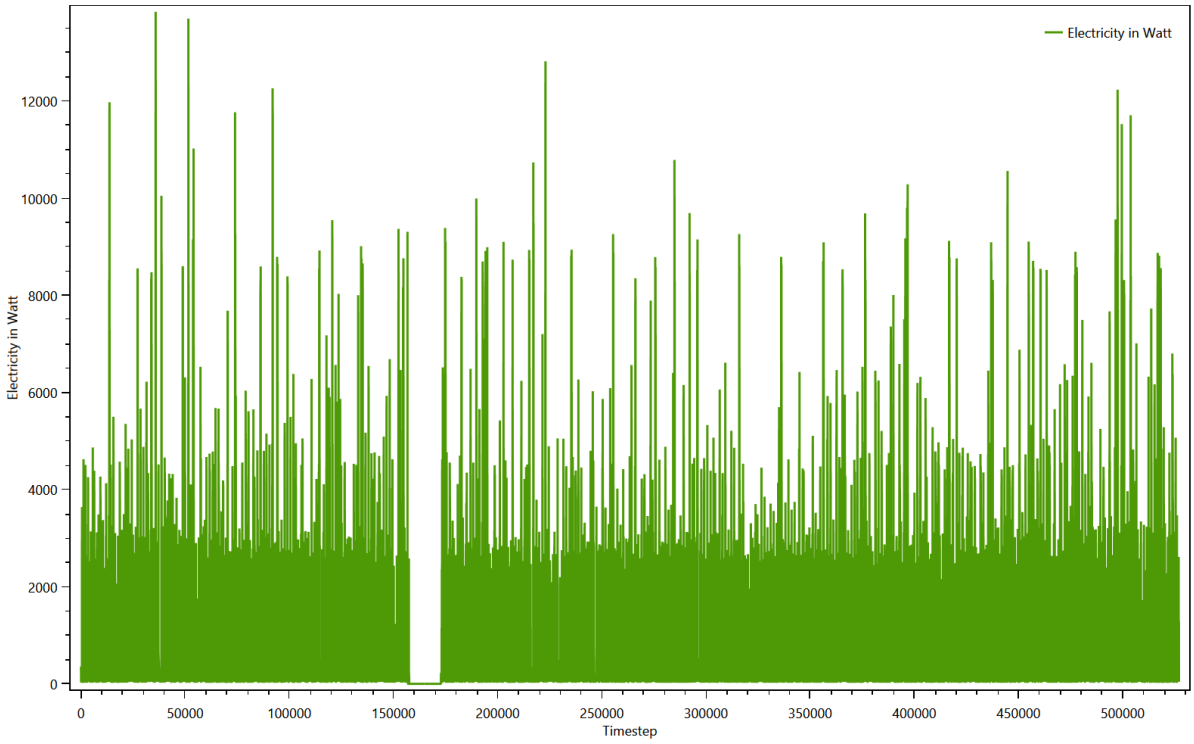
Summed up curve for Cold Water from SumProfiles.Cold Water.png



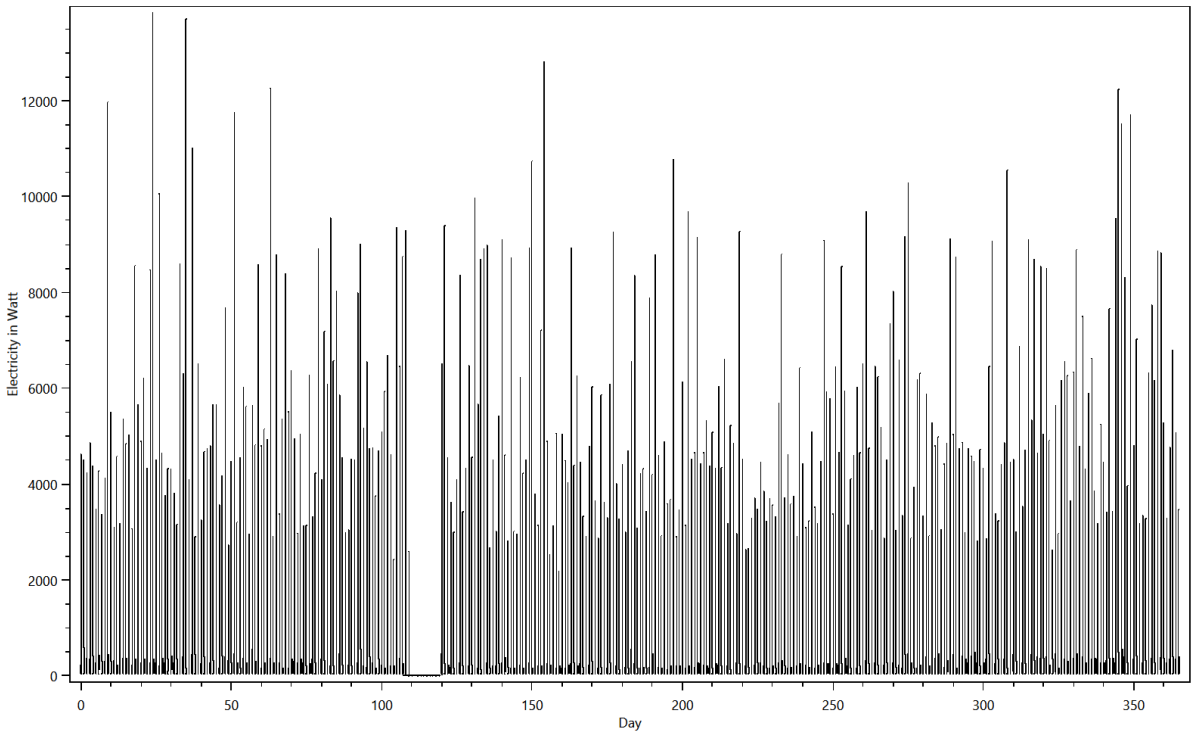
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax..png



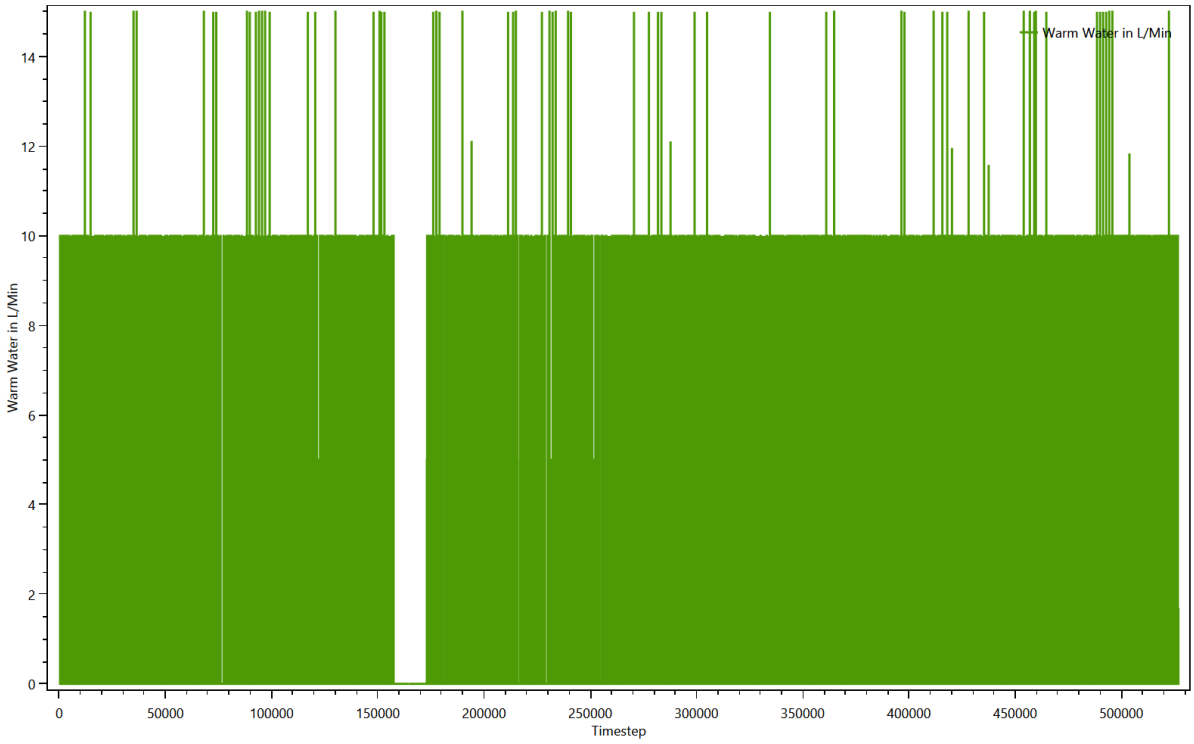
Summed up curve for Electricity from SumProfiles.Electricity.png



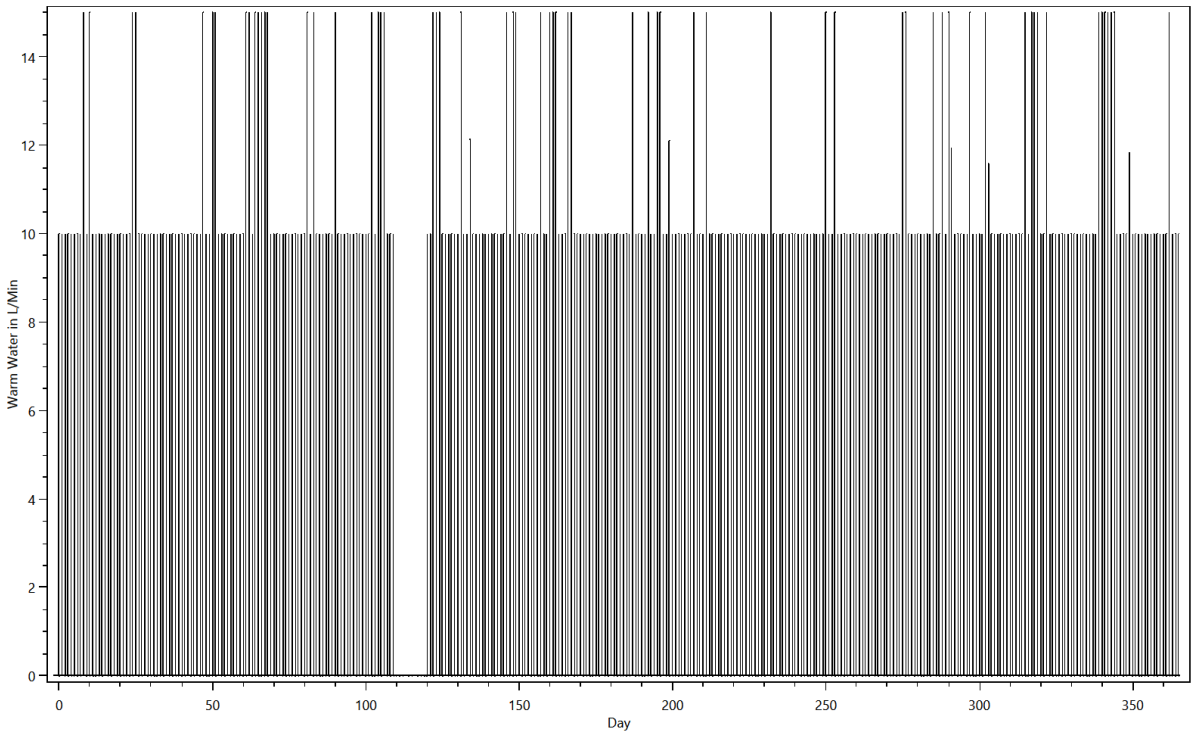
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR39 Couple, 30 - 64 years, with work 0.txt

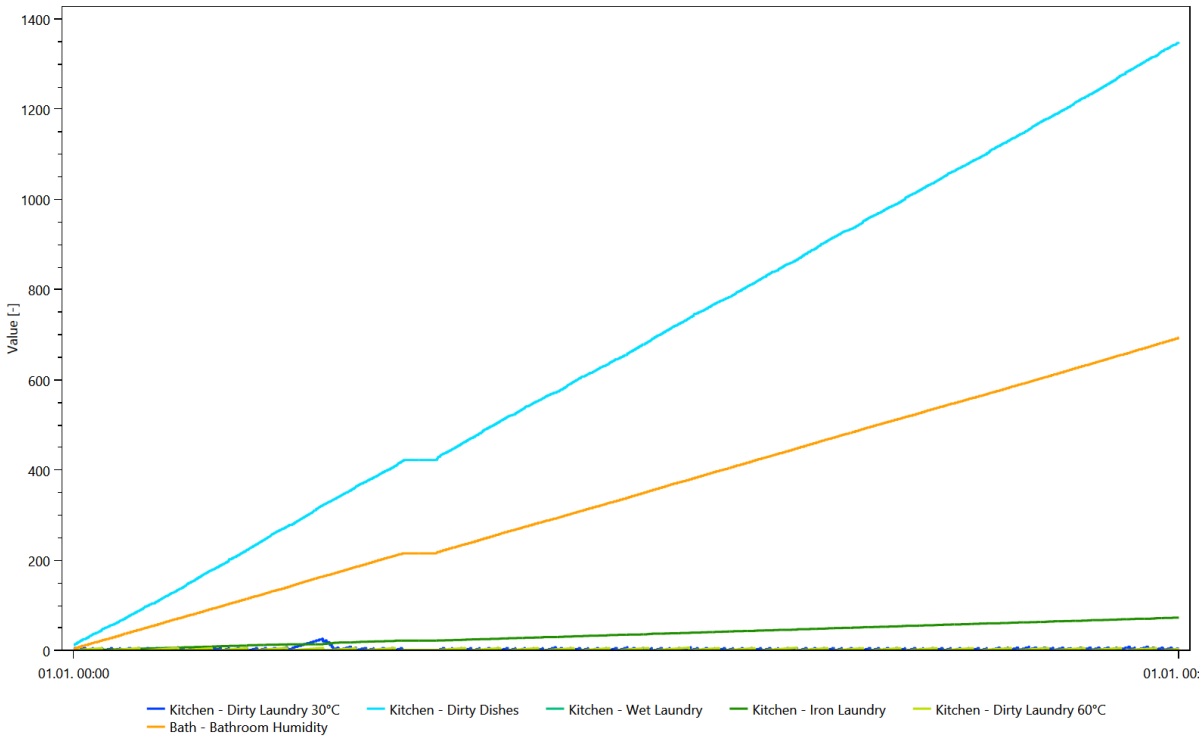
Device;Load Type;Profile;Number of Activations
Atika LH 2500 G;Electricity;0 h 15 min 100% [Synthetic];118
Bathroom Light (200W);Electricity;Bath - light [Synthetic for Light Device];914
Bathroom Mirror Light 30W (CFL);Electricity;Bath - light [Synthetic for Light Device];914
Bathroom Sink 10L/min;Warm Water;0 h 01 min 100% [Synthetic];2655
Bathroom Sink 10L/min;Warm Water;0 h 01 min 50% [Synthetic];636
Bed 2;None;08 h 0 min 100% [Synthetic];356
Bed 8;None;08 h 0 min 100% [Synthetic];357
Bedroom Light (200W);Electricity;Bedroom - light [Synthetic for Light Device];110
Board Games;None;01 h 0 min 100% [Synthetic];155
Book;None;01 h 0 min 100% [Synthetic];4
CD/DVD Player / Phillips HDR3810/31;Electricity;01 h 30 min 100% [Synthetic];246
CD/DVD Player / Phillips HDR3810/31;Electricity;02 h 0 min 100% [Synthetic];11
CD/DVD Player / Phillips HDR3810/31;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8509
Canister vacuum cleaner / Siemens VS 06 G 1831;Electricity;0 h 30 min 100% [Synthetic];9
Chair;None;0 h 10 min 100% [Synthetic];152
Cinema;None;03 h 0 min 100 % [Synthetic];49
Cleanser;None;01 h 0 min 100% [Synthetic];83
Cloth Drying Rack;None;0 h 20 min 100% [Synthetic];30
Couch;None;01 h 0 min 100% [Synthetic];25

Variables

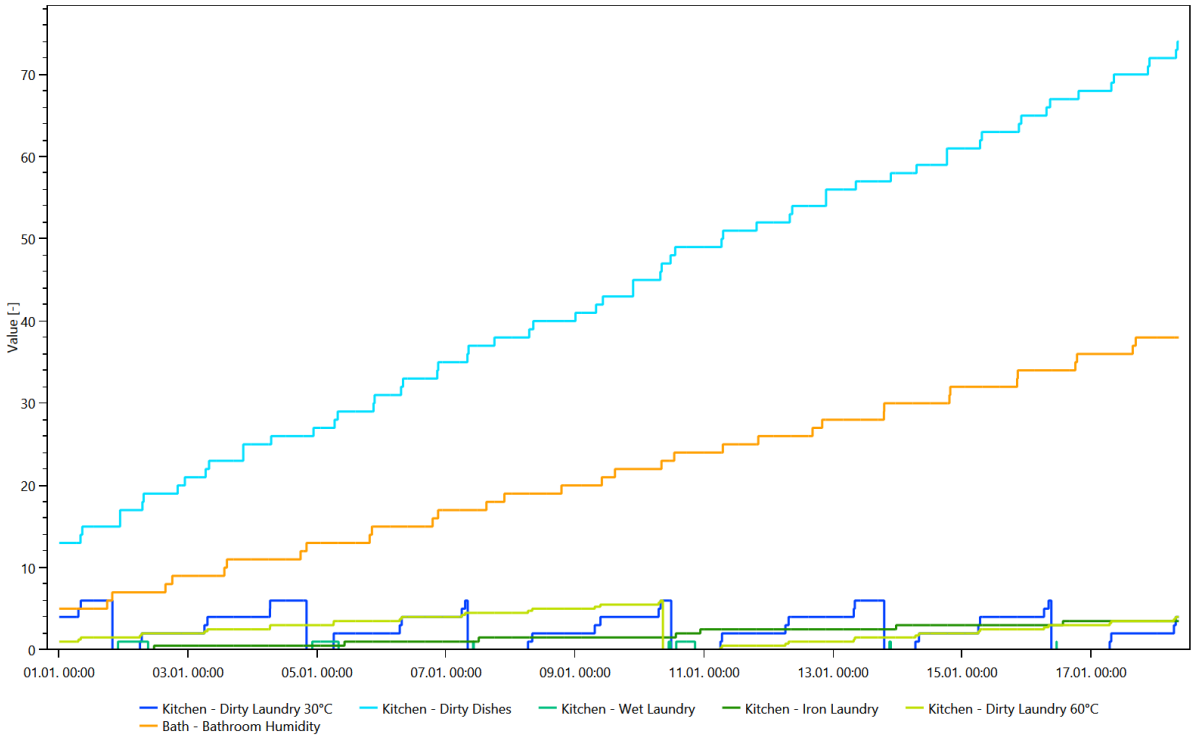
This is made from the files starting with: Variablelogfile

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


Value [-]
0
10
20
30
40
50
60
70
01.01. 00:00
03.01. 00:00
05.01. 00:00
07.01. 00:00
09.01. 00:00
11.01. 00:00
13.01. 00:00
15.01. 00:00
17.01. 00:00
Kitchen - Dirty Laundry 30°C
Kitchen - Dirty Dishes
Kitchen - Wet Laundry
Kitchen - Iron Laundry
Kitchen - Dirty Laundry 60°C
Bath - Bathroom Humidity