

Overview of the results of the household CHR51 Couple over 65 years II 0

Calculation Time

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

Energy Intensity: Random

Seed 6215

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:31:08

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	29377.98	L
Electricity	2824.69	kWh
Warm Water	82937.79	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	80.27	L
Electricity	7.72	kWh
Warm Water	226.61	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	14.96	L/Min
Electricity	0.00	8896.71	Watt
Warm Water	0.00	20.00	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	14688.99	L
Electricity	1412.35	kWh

Warm Water	41468.90	L
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Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	40.13	L
Electricity	3.86	kWh
Warm Water	113.30	L

Persons

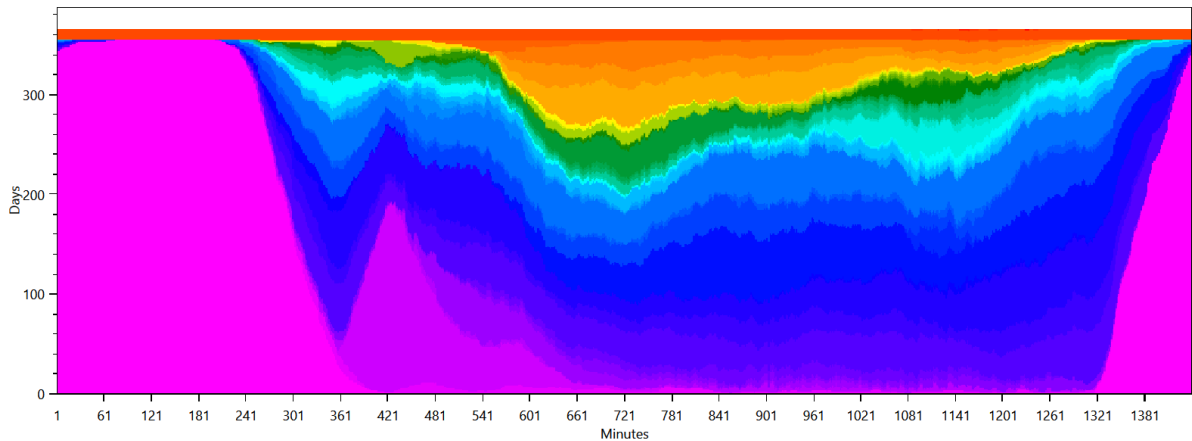
- HH0
 - CHR51 Gustav (69/Male)(69/Male)
 - CHR51 Maren (67/Female)(67/Female)

Activity Frequency Charts

This is made from the files starting with: ActivityFrequenciesPerMinute

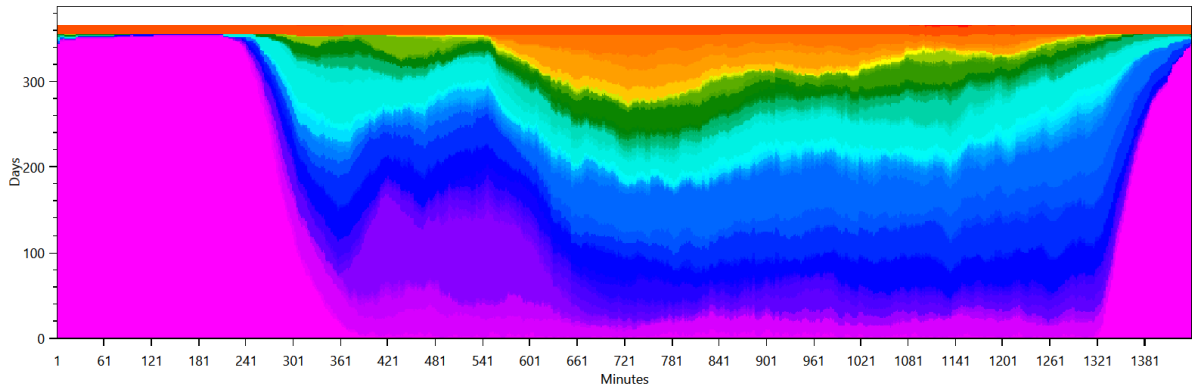
These charts show an ordered distribution of times of the activities of each person. This helps with judging quickly if a person is sleeping correctly and if they are going to work regularly.

HH0 - CHR51 Gustav (69 Male)



- sleep bed 01 (06 h)
- watch TV with someone (watch a movie for 1 h 30 min)
- eat breakfast (1 h)
- go to the toilet
- go shopping for food in the supermarket (1.5 h)
- play board games (1 h)
- clean the bath
- watch a movie for 2 h
- watch TV (1 h)
- read a book on the couch all the time
- fry two eggs and eat them with toast
- read a book on the couch only 9:00 to 22:00
- watch TV series on weekdays 18:00
- watch a movie for 1 h 30 min
- watch the news
- watch sports on TV with SAT Reciever (2 h)
- get ready in the morning (men)
- take a shower (men)
- watch a movie for 2 h with home cinema system
- cook pasta and eat it
- read a book (1 h)
- watch TV with someone (watch a movie for 2 h)
- go to a dancing class
- make soup
- watch TV with someone (watch TV (1 h))
- watch a movie for 1 h 30 min with home cinema system
- make frozen pizza and eat it
- watch TV with someone (watch sports on TV with SAT Reciever (2 h))
- watch TV with someone (watch a movie for 2 h with home cinema system)
- take a hike (4 h)
- watch TV with someone (iron and watch TV with Sat Reciever (1 h))
- dance together (go to a dancing class)
- watch TV with someone (watch a movie for 1 h 30 min with home cinema system)
- run the dishwasher (triggered)
- watch TV with someone (watch the news)
- heat up leftovers
- join watching a movie in the home cinema (watch a movie for 2 h with home cinema system)
- eat a cooked meal (interrupting) (eat breakfast (1 h))
- join hiking 4h (take a hike (4 h))
- join watching a movie in the home cinema (watch a movie for 1 h 30 min with home cinema system)
- read a newspaper for 30min
- make and drink tea (15 min)
- take a nap
- read a magazine
- take nap on the weekend (2 h)
- do garden work every day
- relax in the garden 2
- relax in the garden
- mow the lawn on saturday above 15°C
- taking a vacation
- eat a cooked meal (interrupting) (make frozen pizza and eat it)
- eat a cooked meal (interrupting) (cook pasta and eat it)
- eat a cooked meal (interrupting) (heat up leftovers)

HH0 - CHR51 Maren (67 Female)



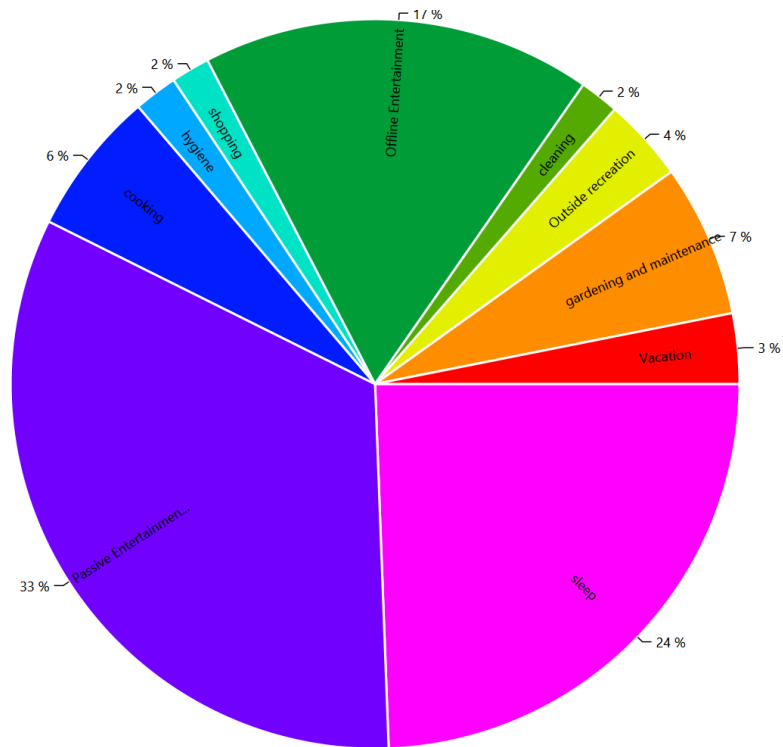
- sleep bed 02 (06 h) ■ go to the toilet ■ watch a movie for 1 h 30 min ■ get ready in the morning (women) ■ fry two eggs and eat them with toast
- play board games (1 h) ■ eat breakfast (1 h) ■ do laundry at 30°C (by variable) ■ watch TV (1 h) ■ take a shower without hair washing (women)
- watch TV with someone (watch a movie for 2 h) ■ hang up laundry outside ■ bake a cake ■ watch sports on TV with SAT Receiver (2 h) ■ watch the news
- read a book on the couch all the time ■ make frozen pizza and eat it ■ play digital piano (1 h) ■ read a book on the couch only 9:00 to 22:00
- watch a movie for 1 h 30 min with home cinema system ■ paint a picture ■ take a shower with hair washing (women) (5 min hair drying)
- run the dishwasher (triggered) ■ heat up leftovers ■ watch TV with someone (watch a movie for 1 h 30 min) ■ exercise for 30 min on the treadmill
- play a puzzle game ■ watch a movie for 2 h ■ watch TV with someone (watch sports on TV with SAT Receiver (2 h)) ■ vacuum the household
- dance together (go to a dancing class) ■ watch TV with someone (watch a movie for 1 h 30 min with home cinema system) ■ iron and watch TV with Sat Receiver (1 h)
- listen to music on compact hifi (2 h) ■ watch TV with someone (watch the news) ■ make soup
- watch TV with someone (watch a movie for 2 h with home cinema system) ■ cook pasta and eat it ■ watch a movie for 2 h with home cinema system
- join hiking 4h (take a hike (4 h)) ■ do laundry at 60°C (by variable) ■ go to a dancing class ■ take a shower with hair washing (women) (20 min hair drying)
- iron Clothes ■ eat a cooked meal (interrupting) (eat breakfast (1 h)) ■ watch TV with someone (watch TV (1 h)) ■ watch TV series on weekdays 18:00
- make and drink tea (15 min) ■ read a newspaper for 30min ■ take a nap ■ read a magazine ■ take nap on the weekend (2 h)
- eat a cooked meal (interrupting) (make soup) ■ watch TV with someone (watch TV series on weekdays 18:00) ■ take a hike (4 h)
- join watching a movie in the home cinema (watch a movie for 2 h with home cinema system) ■ relax in the garden 2 ■ do garden work every day
- relax in the garden ■ eat a cooked meal (interrupting) (heat up leftovers) ■ taking a vacation ■ read a book (1 h)
- eat a cooked meal (interrupting) (make frozen pizza and eat it) ■ eat a cooked meal (interrupting) (cook pasta and eat it)
- join watching a movie in the home cinema (watch a movie for 1 h 30 min with home cinema system)

Activity Distribution per Person

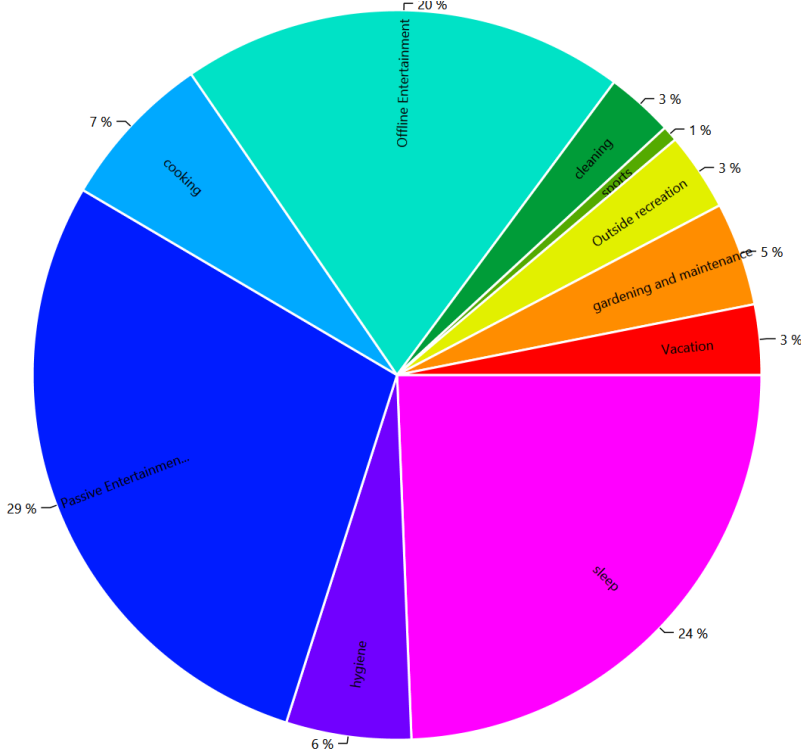
This is made from the files starting with: ActivityPercentage

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

HH0 - CHR51 Gustav (69 Male)



HH0 - CHR51 Maren (67 Female)

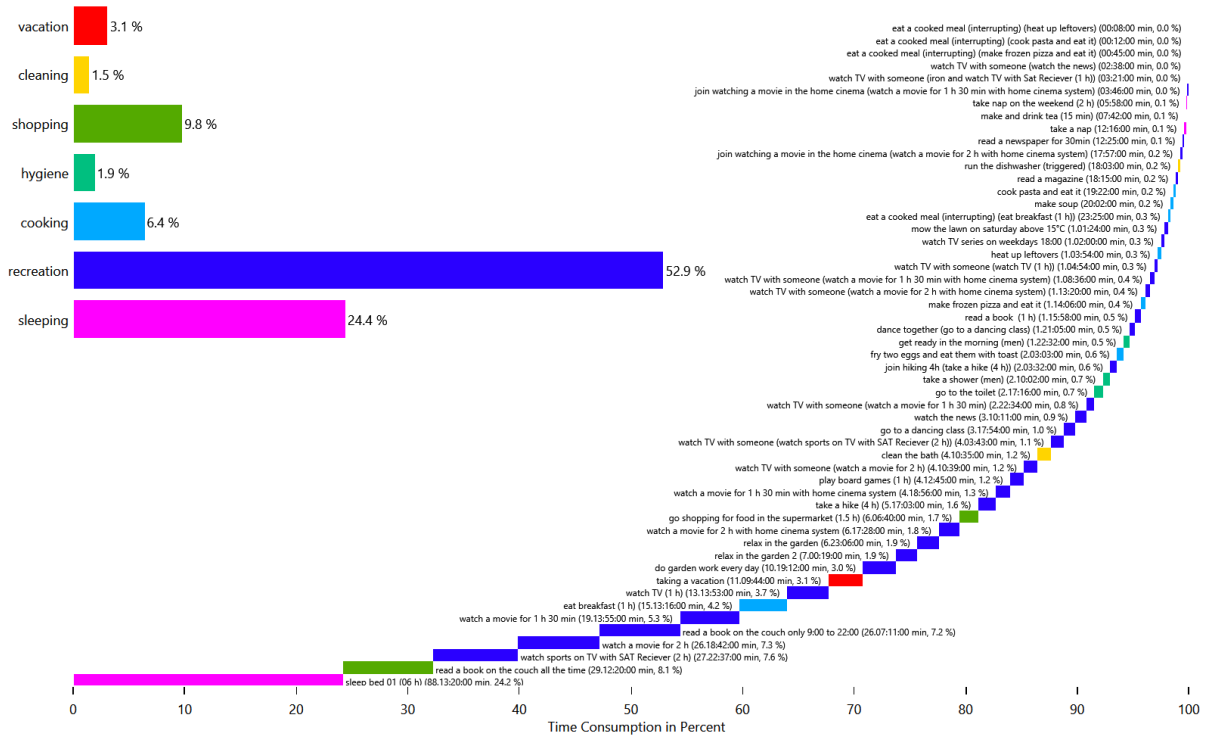


Time Use per Person per Affordance Per Person

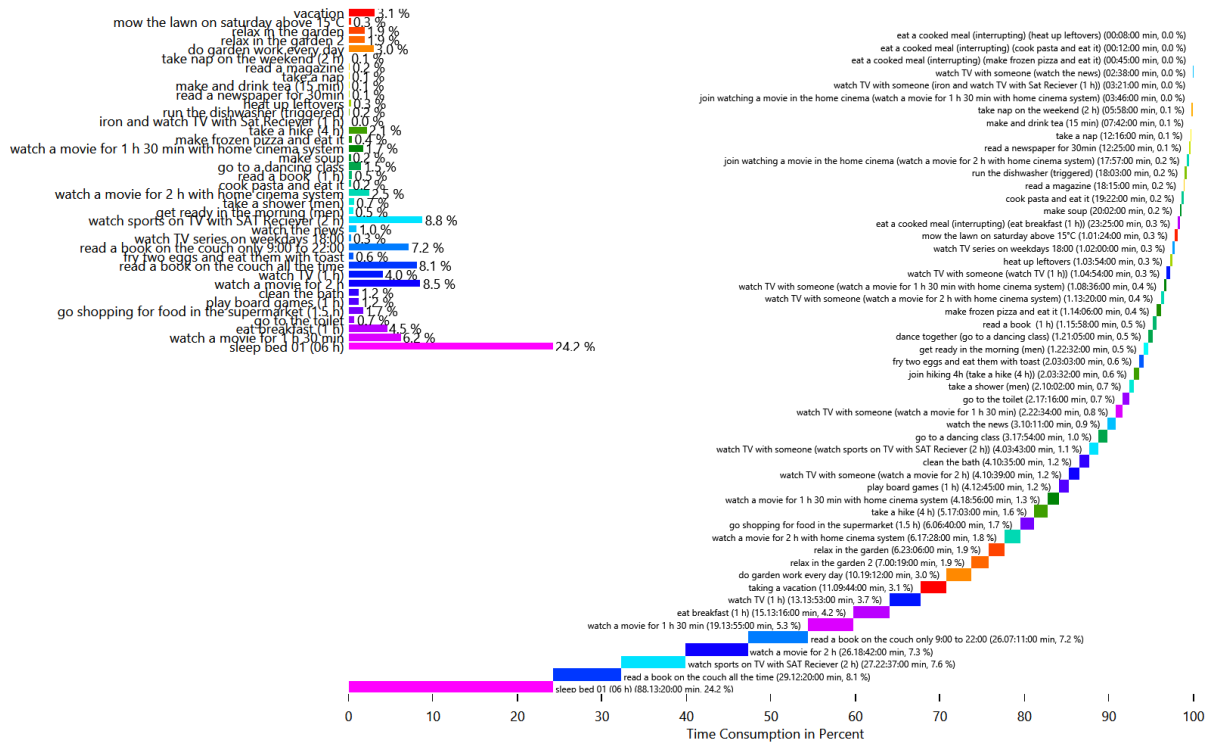
This is made from the files starting with: AffordanceTimeUse

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.

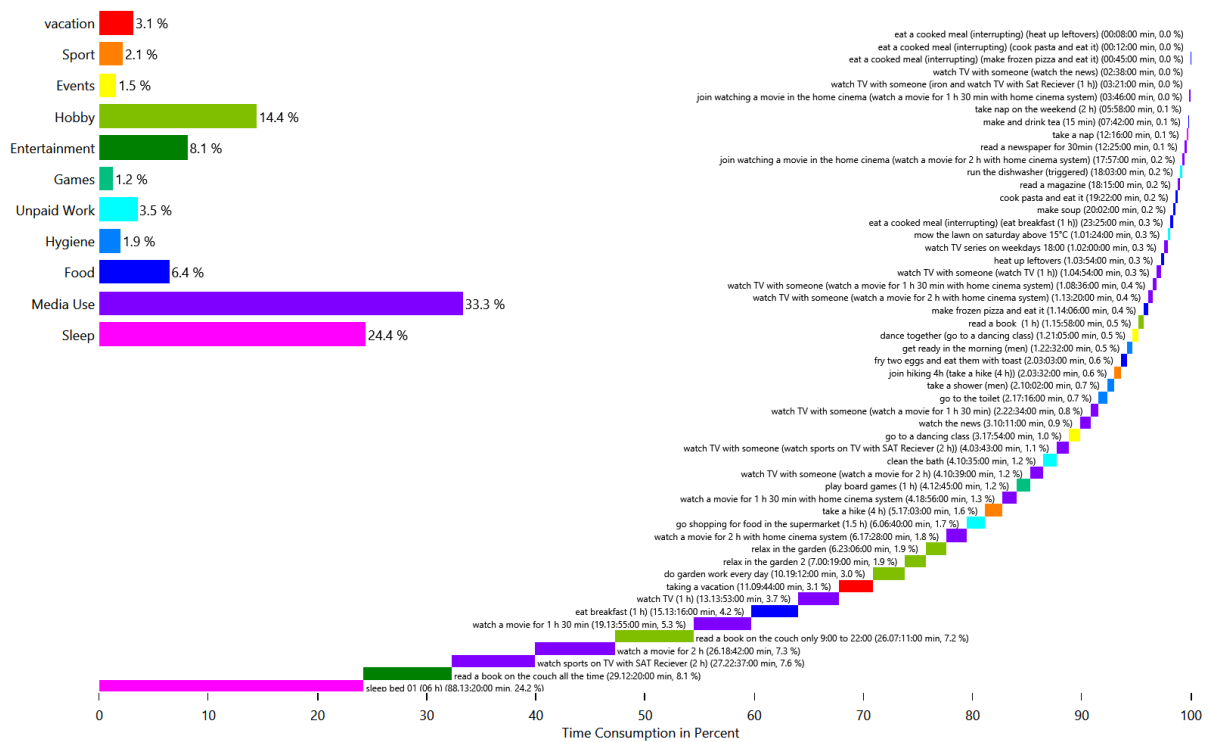
HH0 - CHR51 Gustav (69 Male)



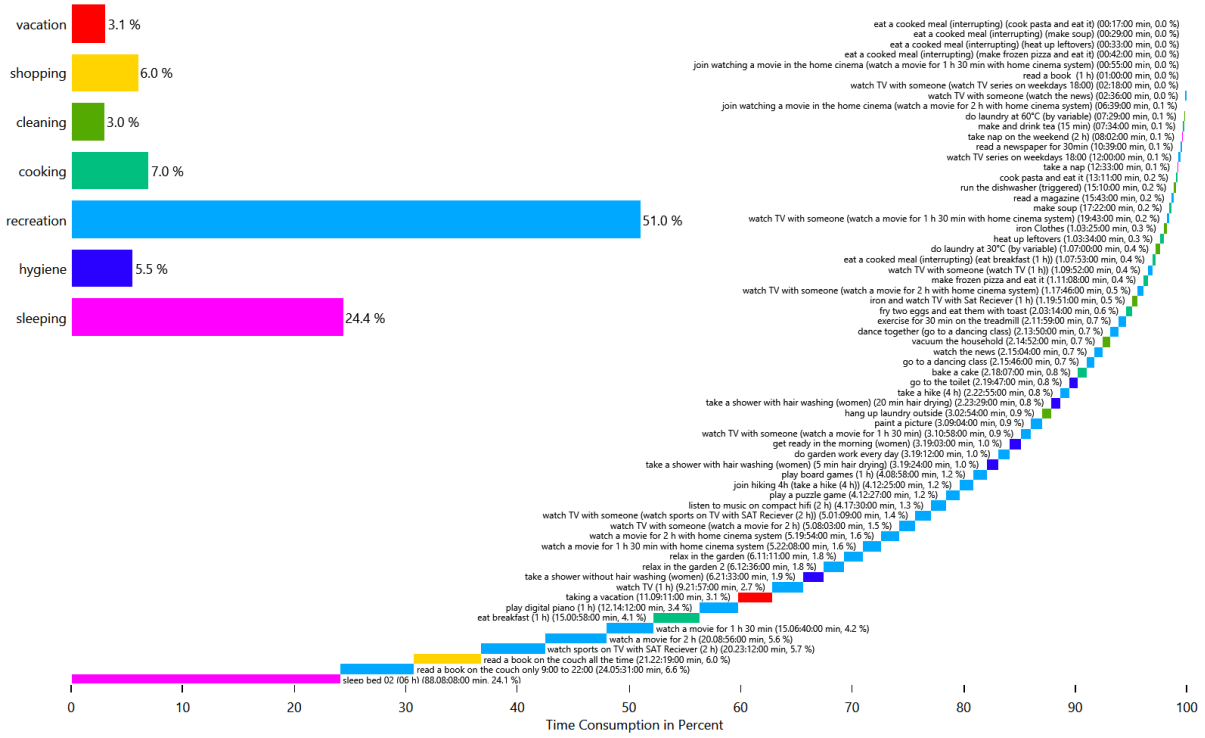
HH0 - CHR51 Gustav (69 Male)



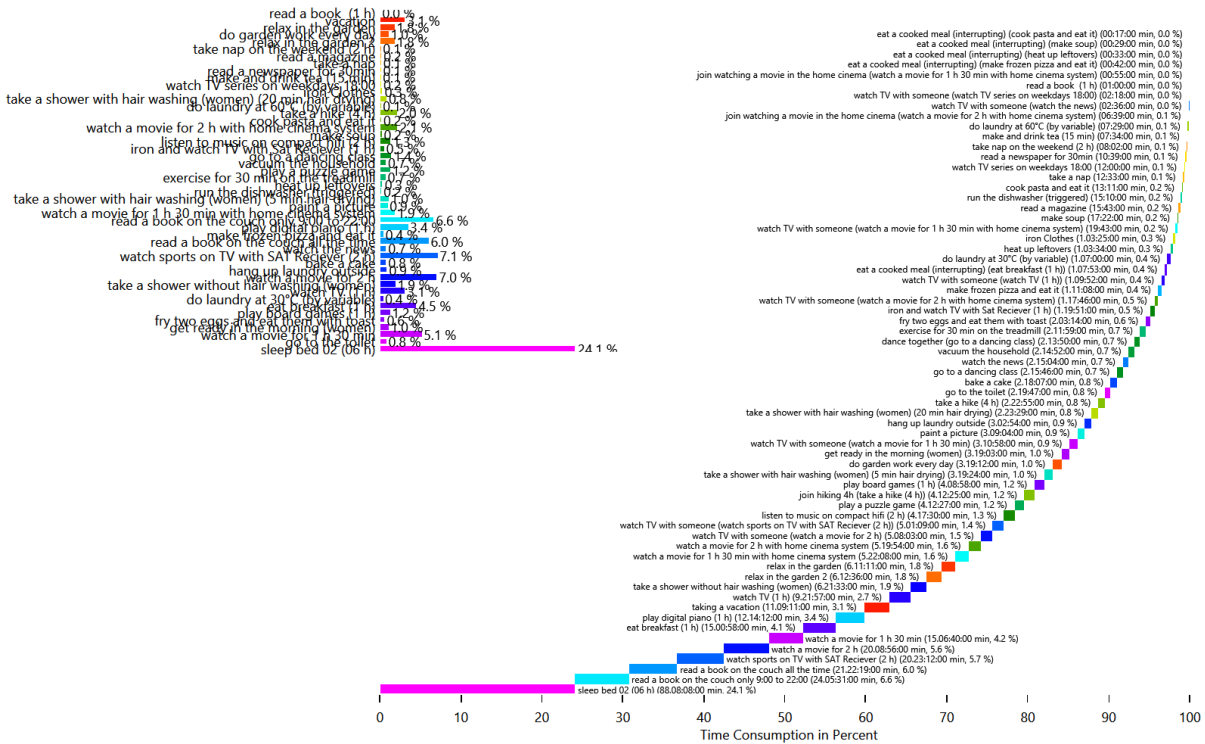
HH0 - CHR51 Gustav (69 Male)



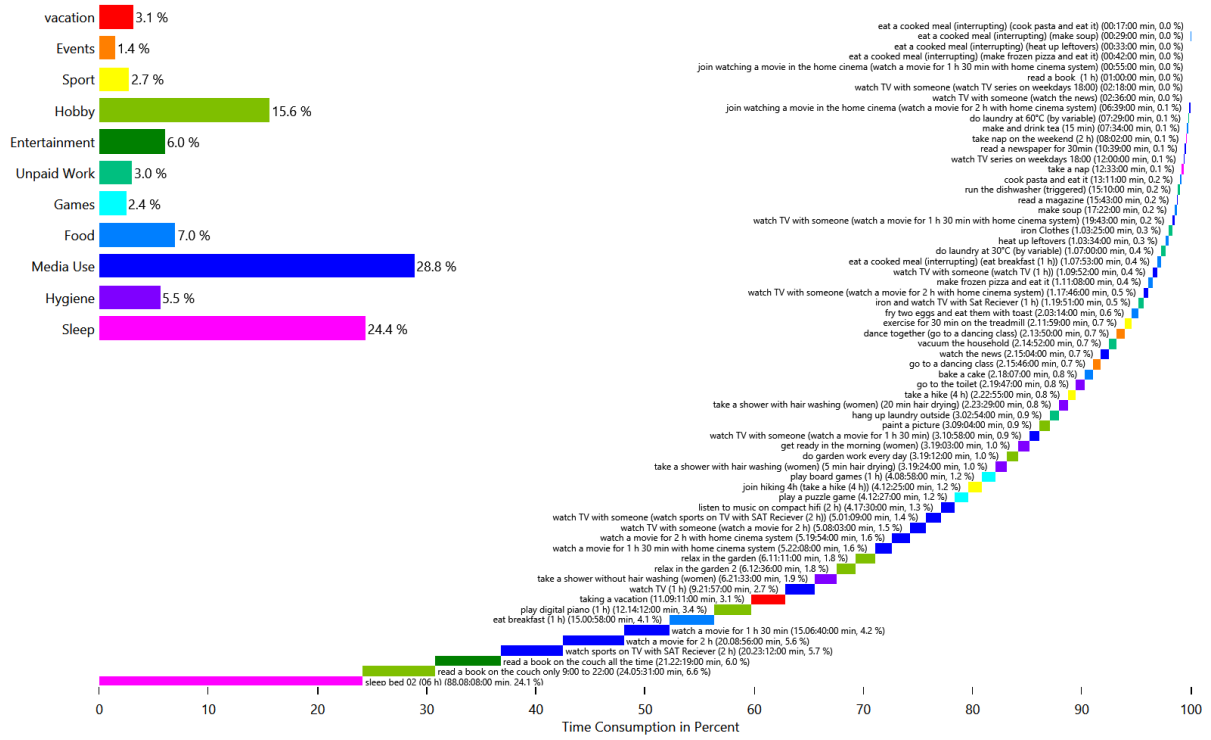
HH0 - CHR51 Maren (67 Female)



HH0 - CHR51 Maren (67 Female)



HH0 - CHR51 Maren (67 Female)

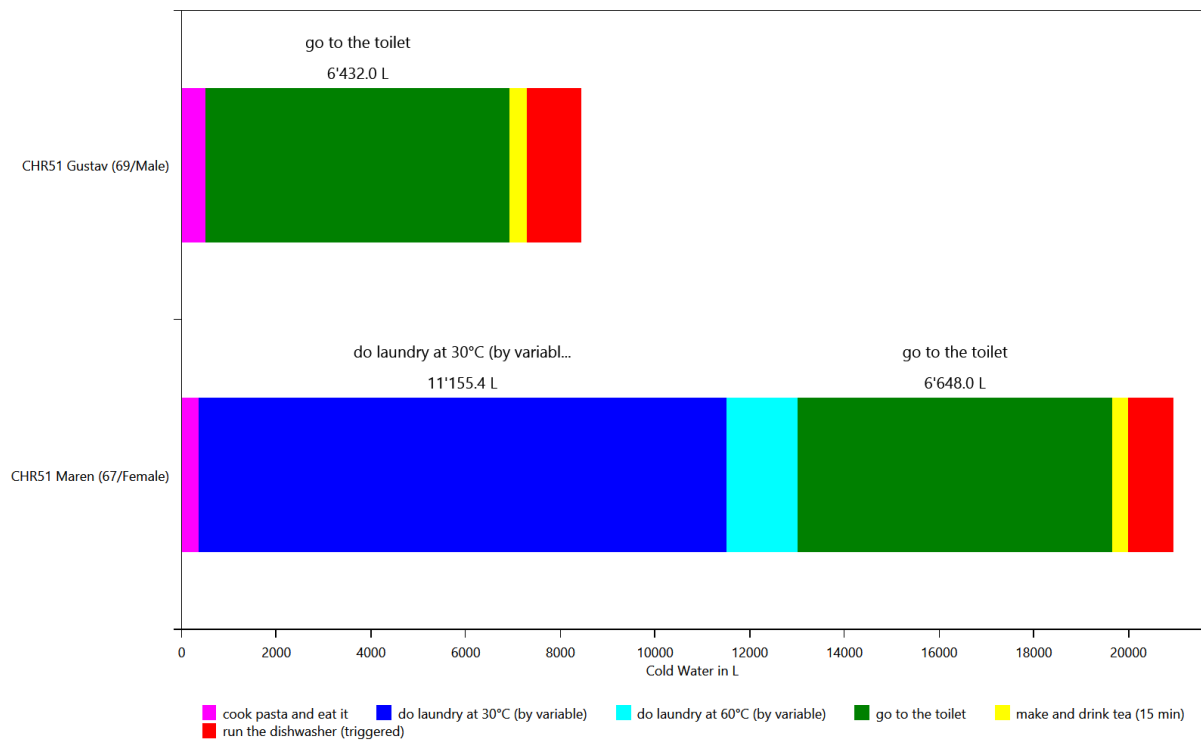


Energy use per person per affordance

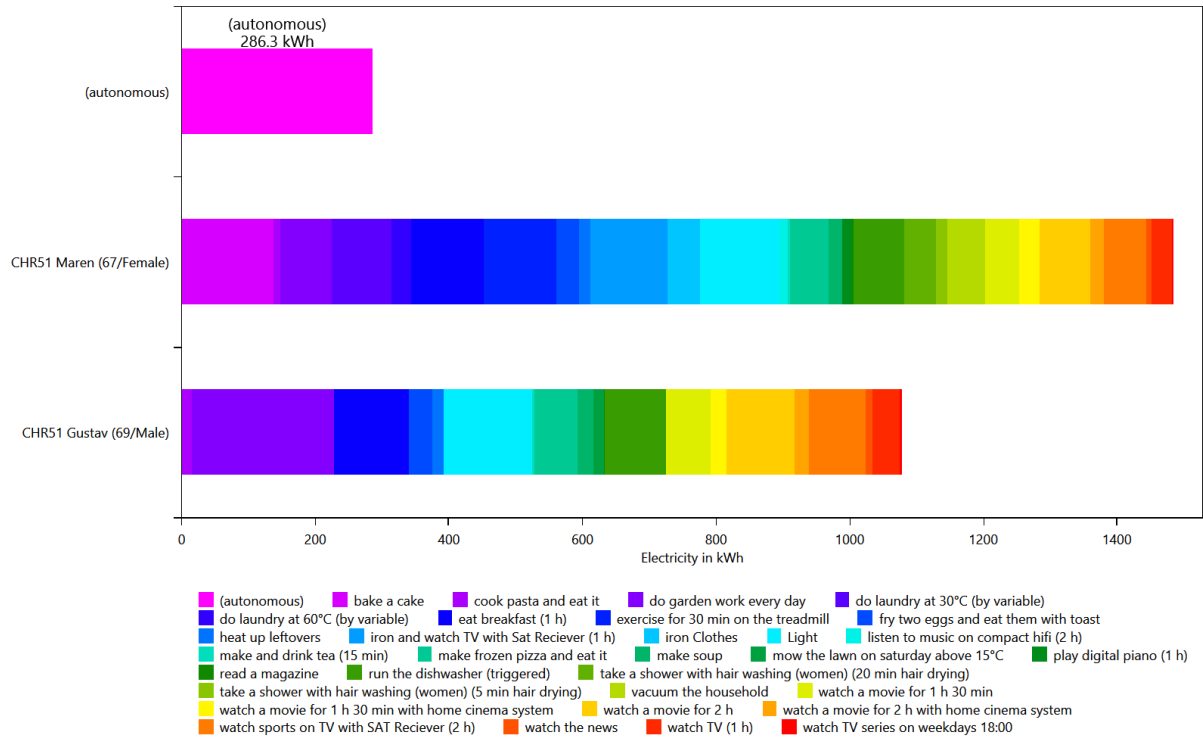
This is made from the files starting with: `AffordanceEnergyUsePerPerson`

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.

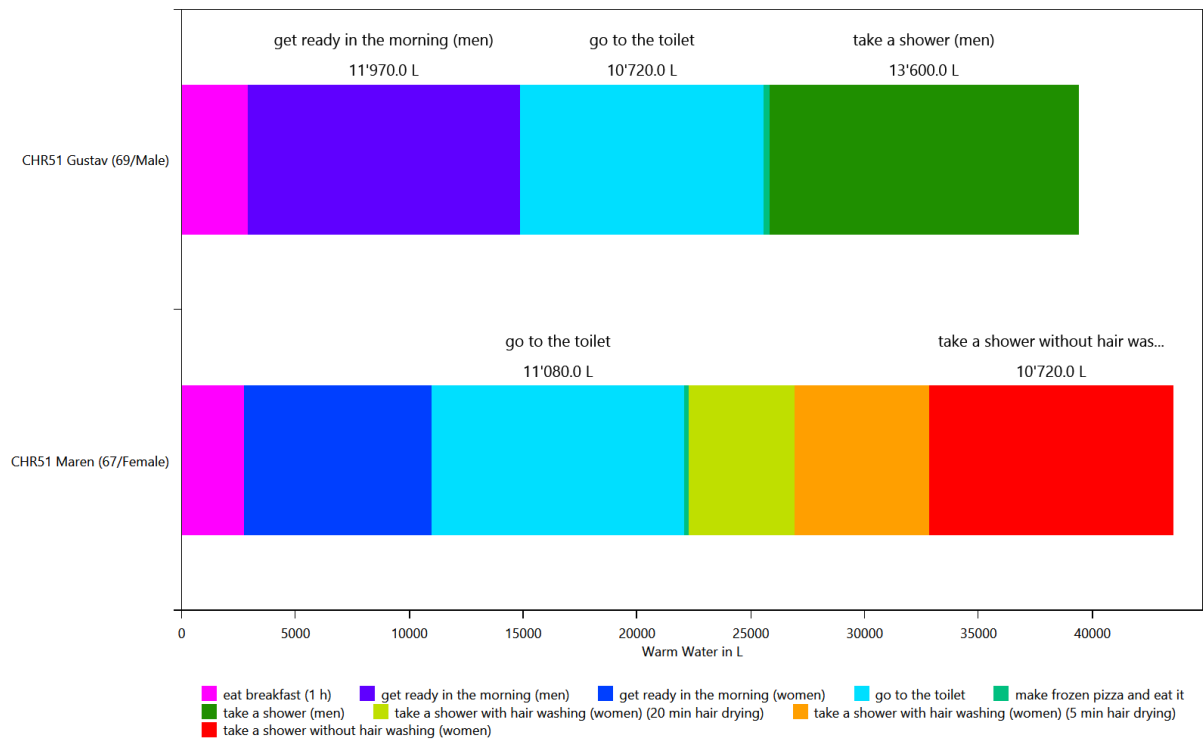
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

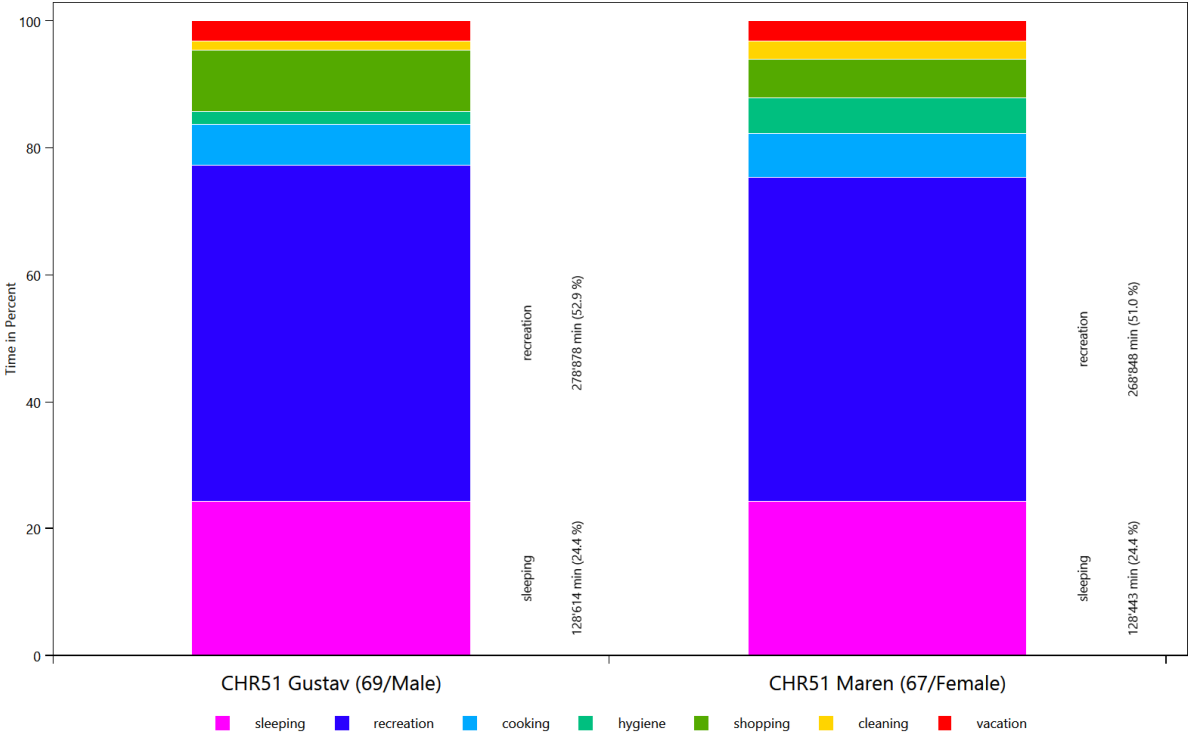


Time Use per Person Per Affordance according to different category definitions

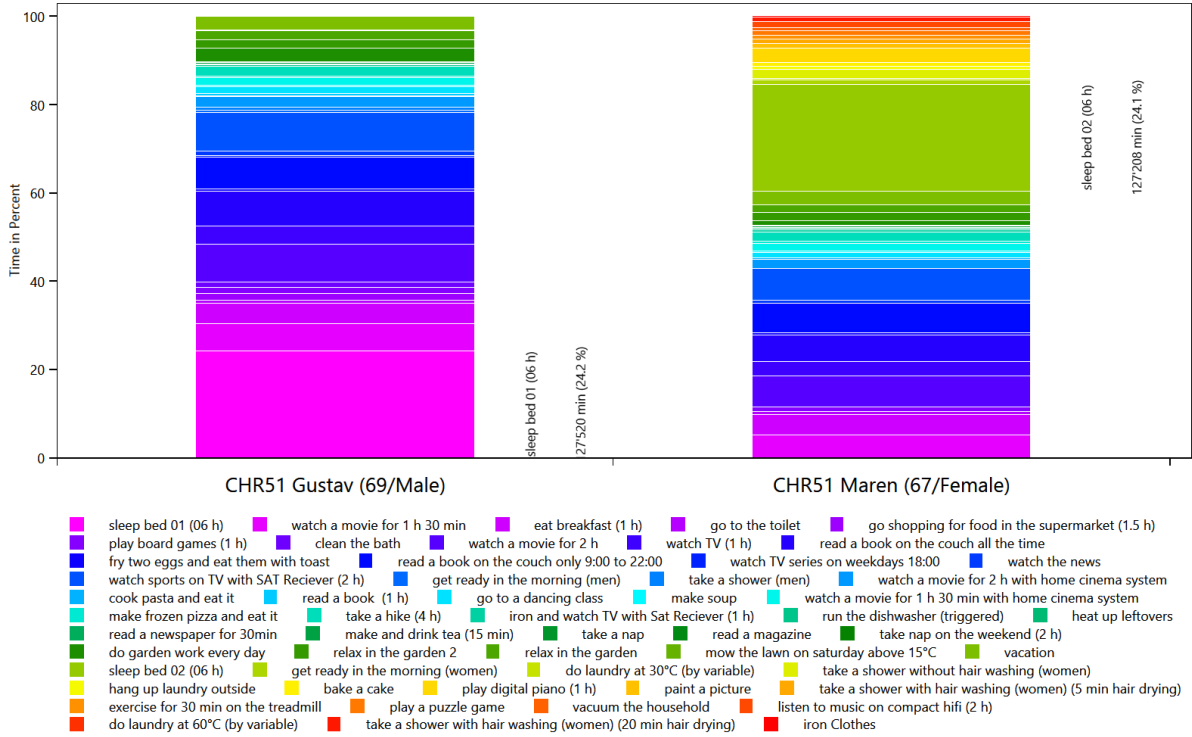
This is made from the files starting with: AffordanceTaggingSet

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.

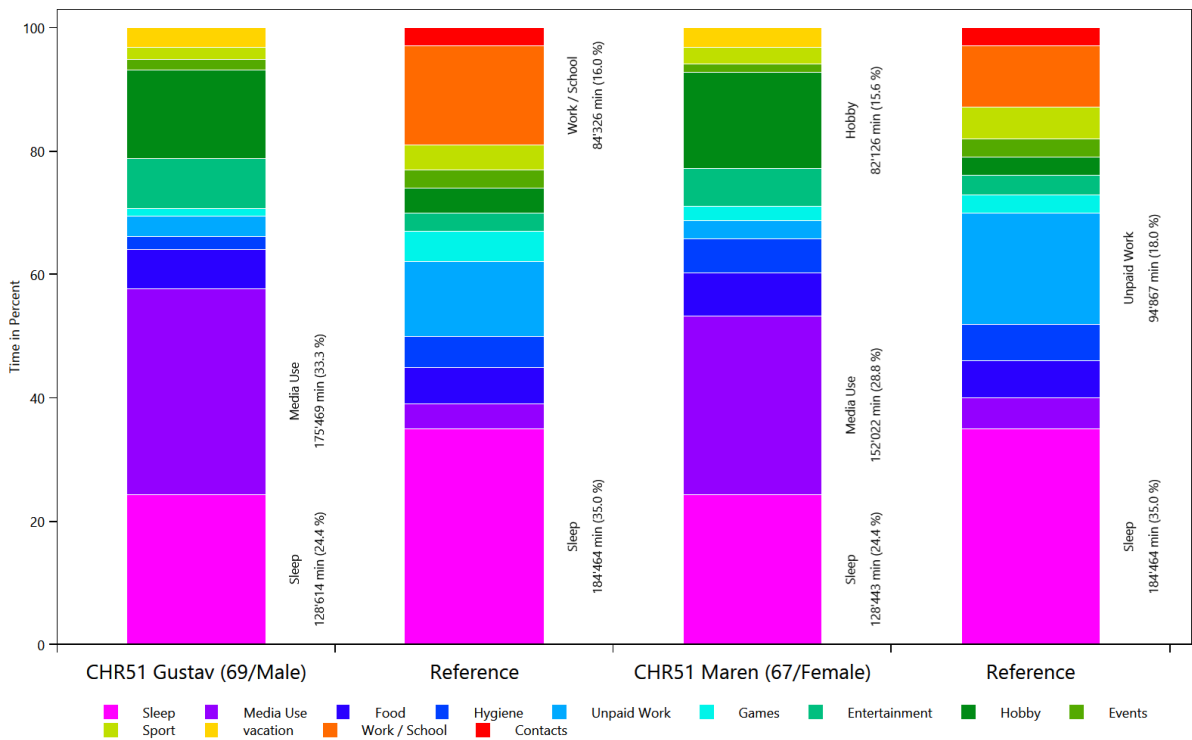
Basic Tagging - HH0



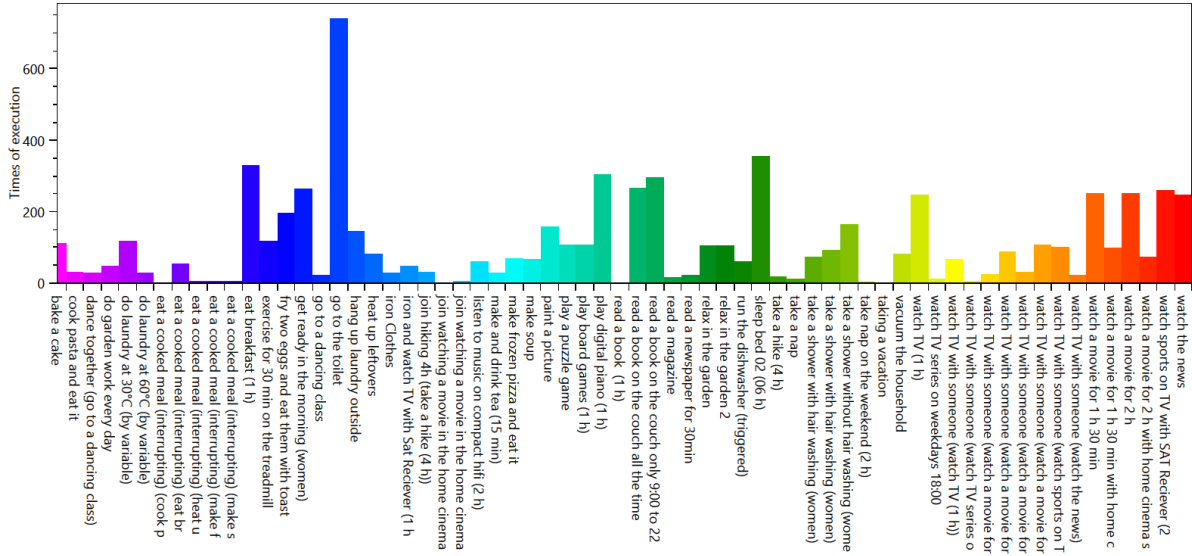
Tagging Set For Planning - HH0



Wo bleibt die Zeit - HH0



HH0 - CHR51 Maren (67 Female)

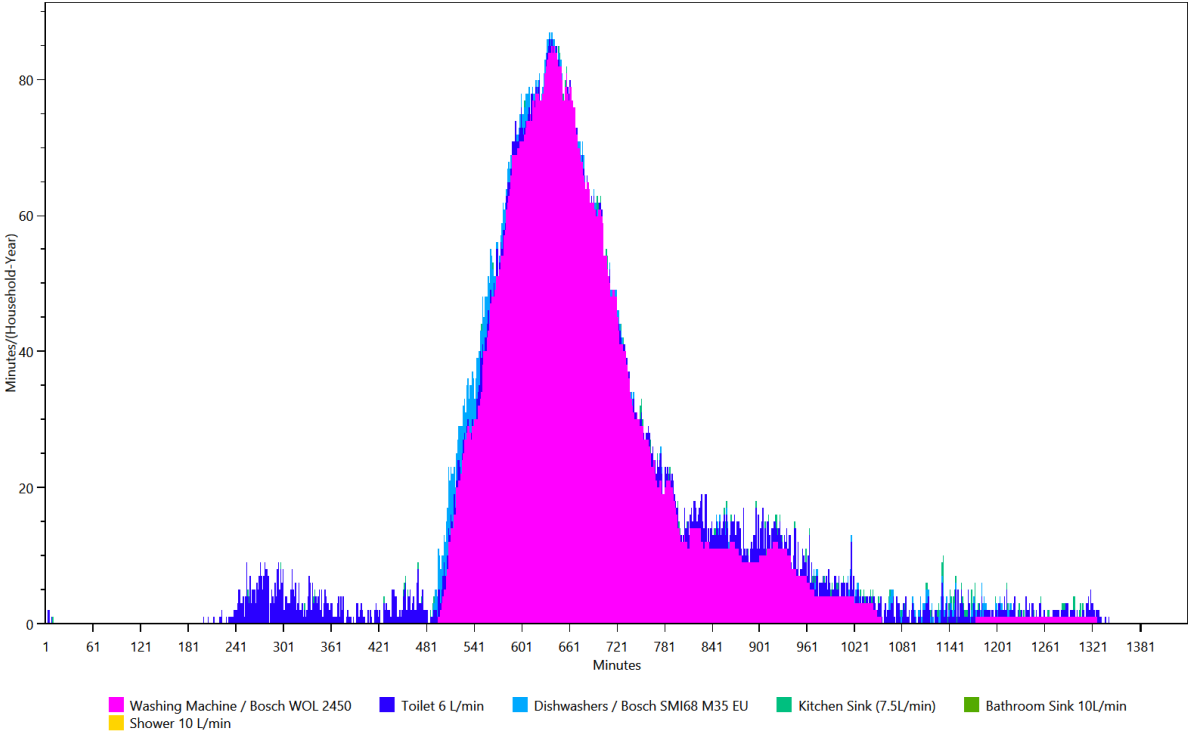


Overview of the time of the use per load type per device

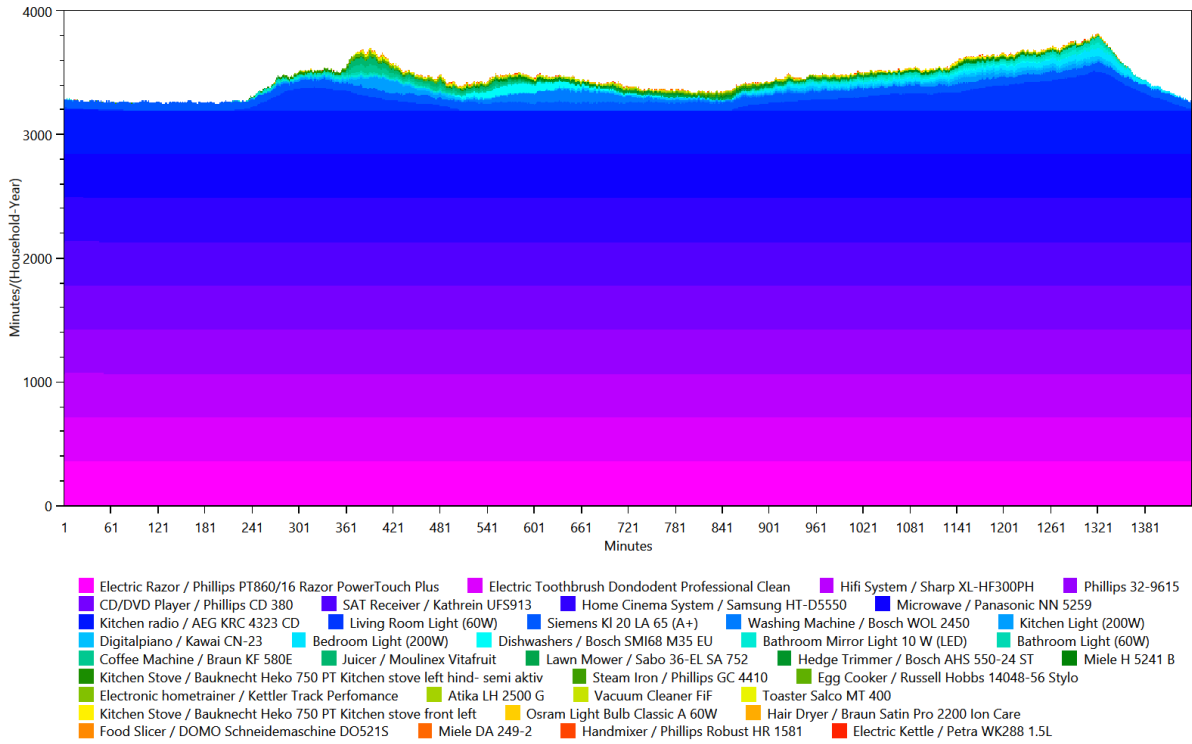
This is made from the files starting with: TimeOfUseEnergyProfiles

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

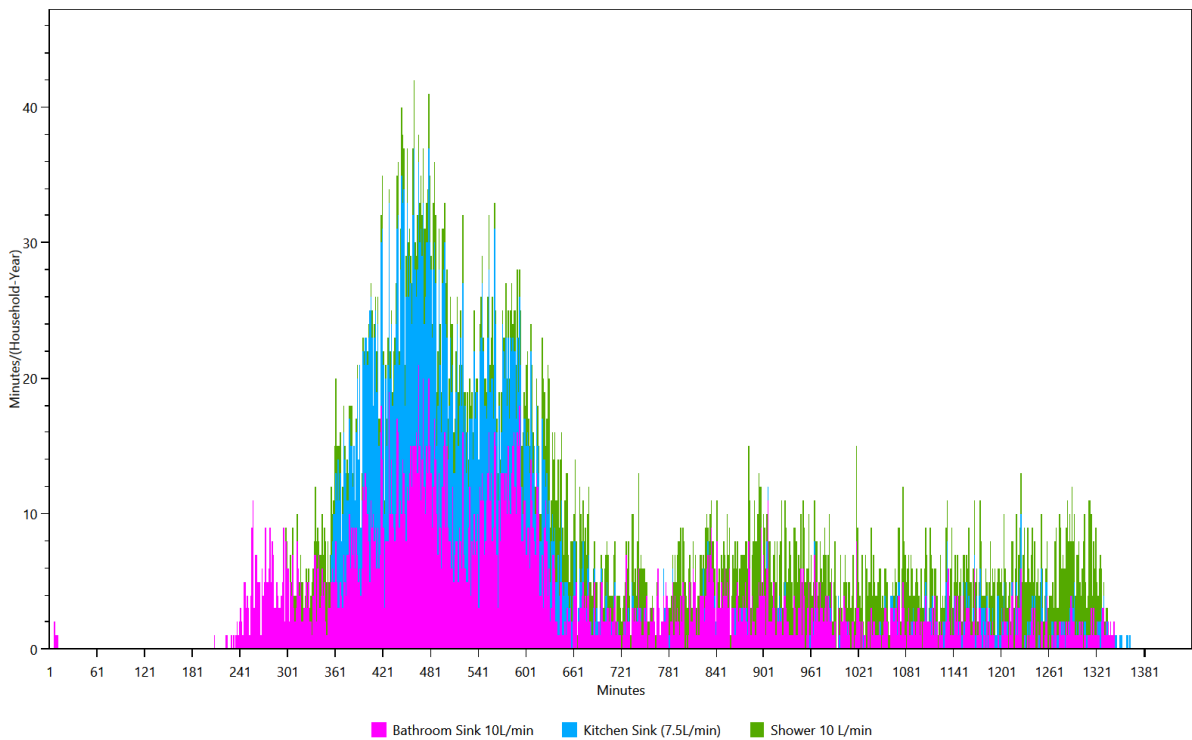
Cold Water



Electricity



Warm Water

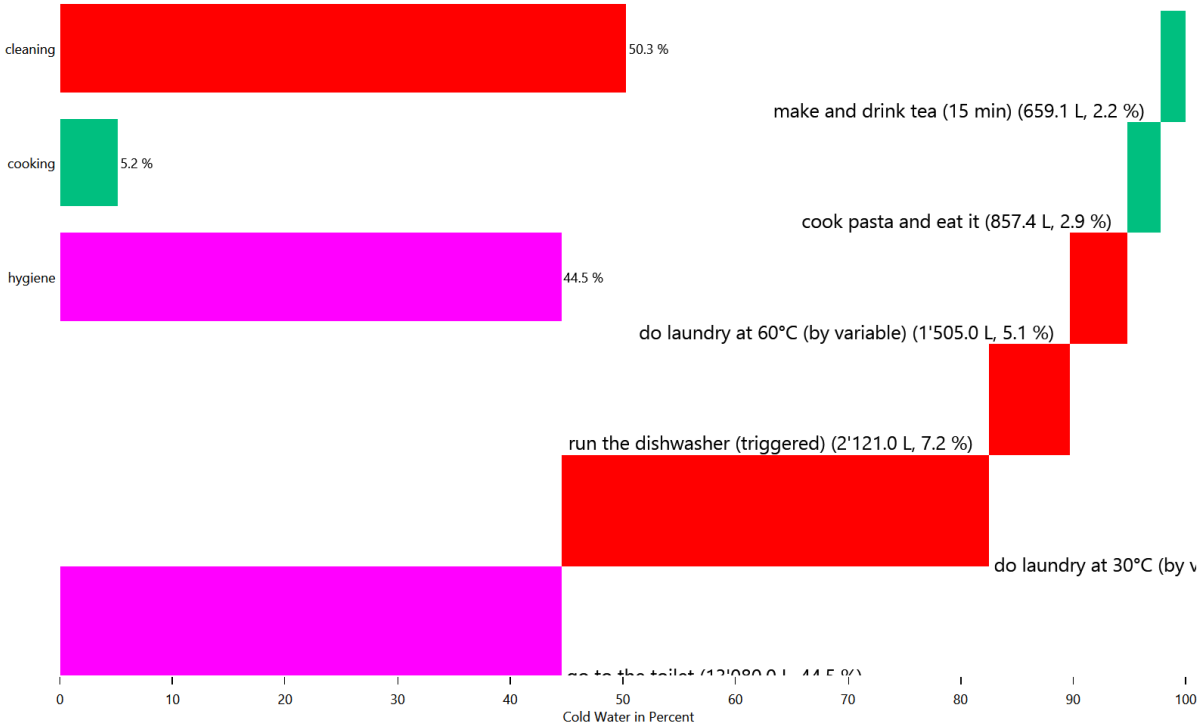


Energy/Resource use distribution per load type per affordance

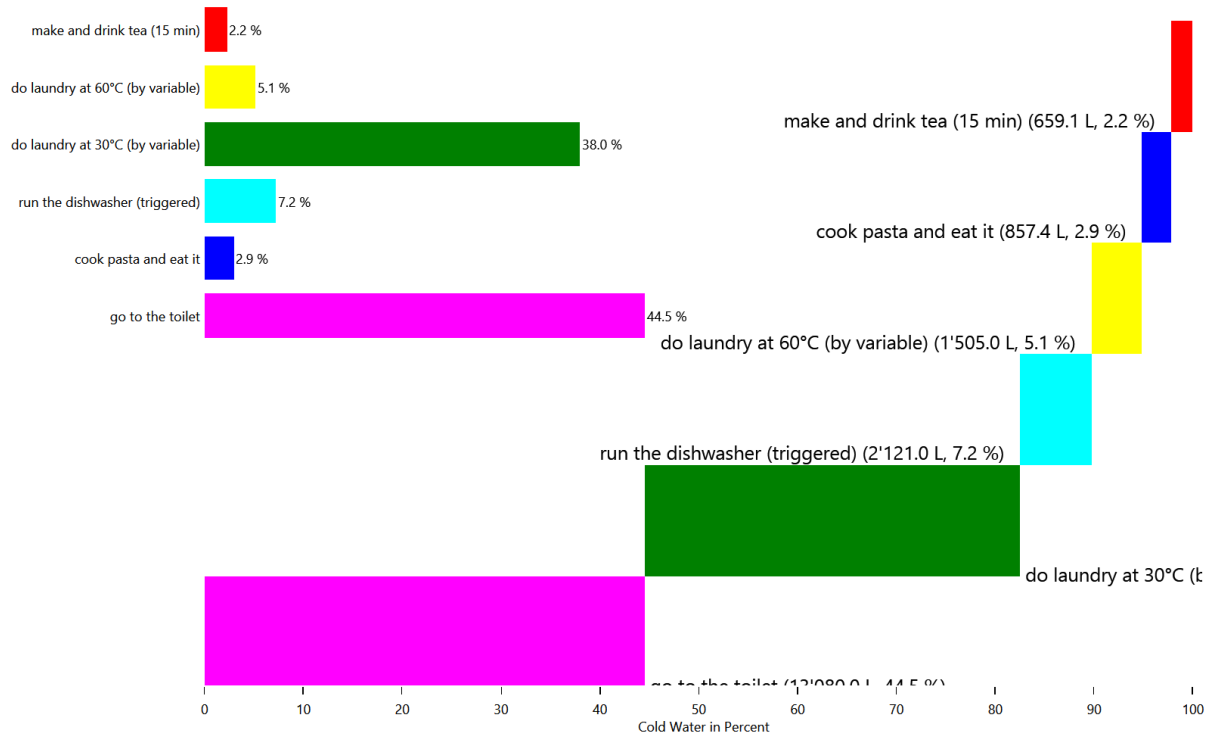
This is made from the files starting with: AffordanceEnergyUse

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

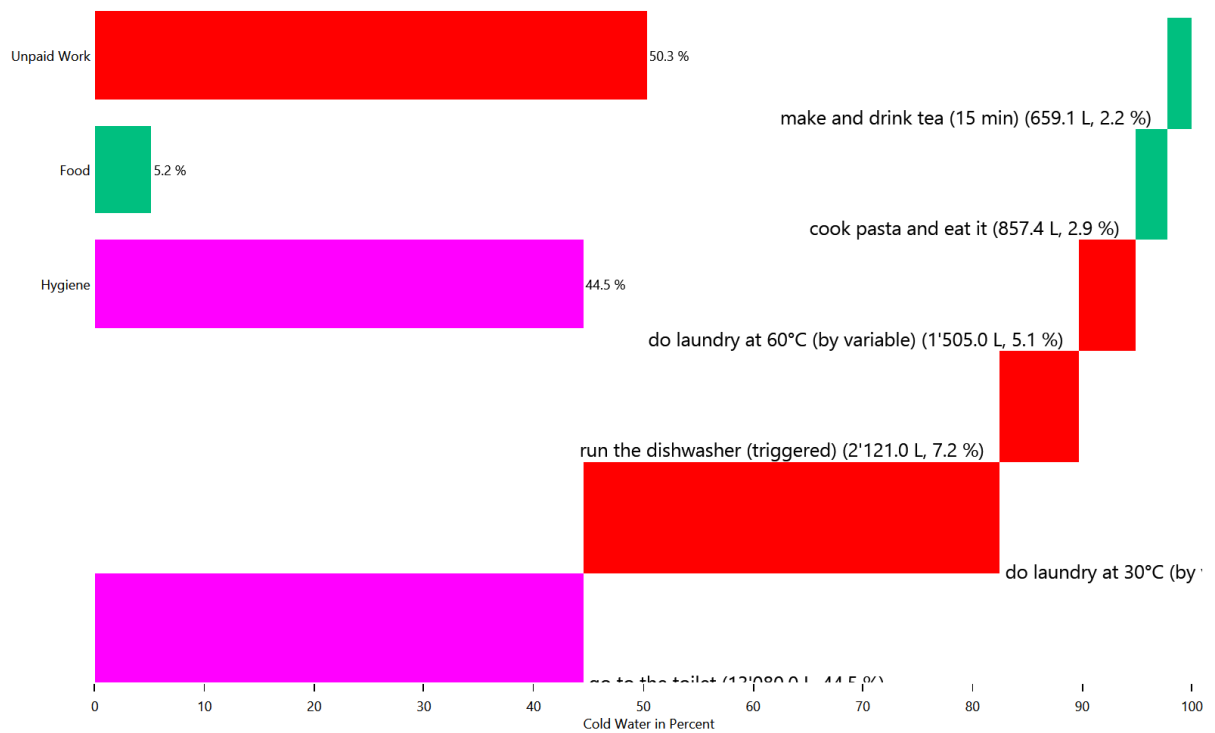
HH0 - Cold Water



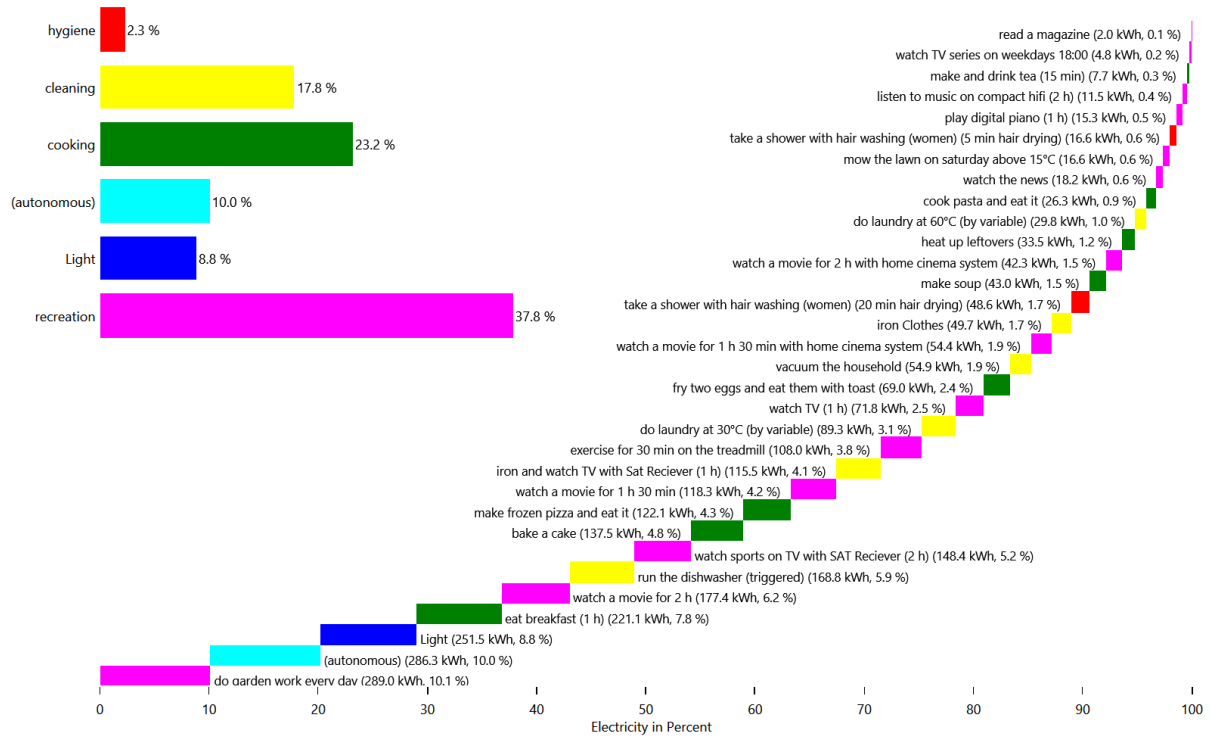
HH0 - Cold Water



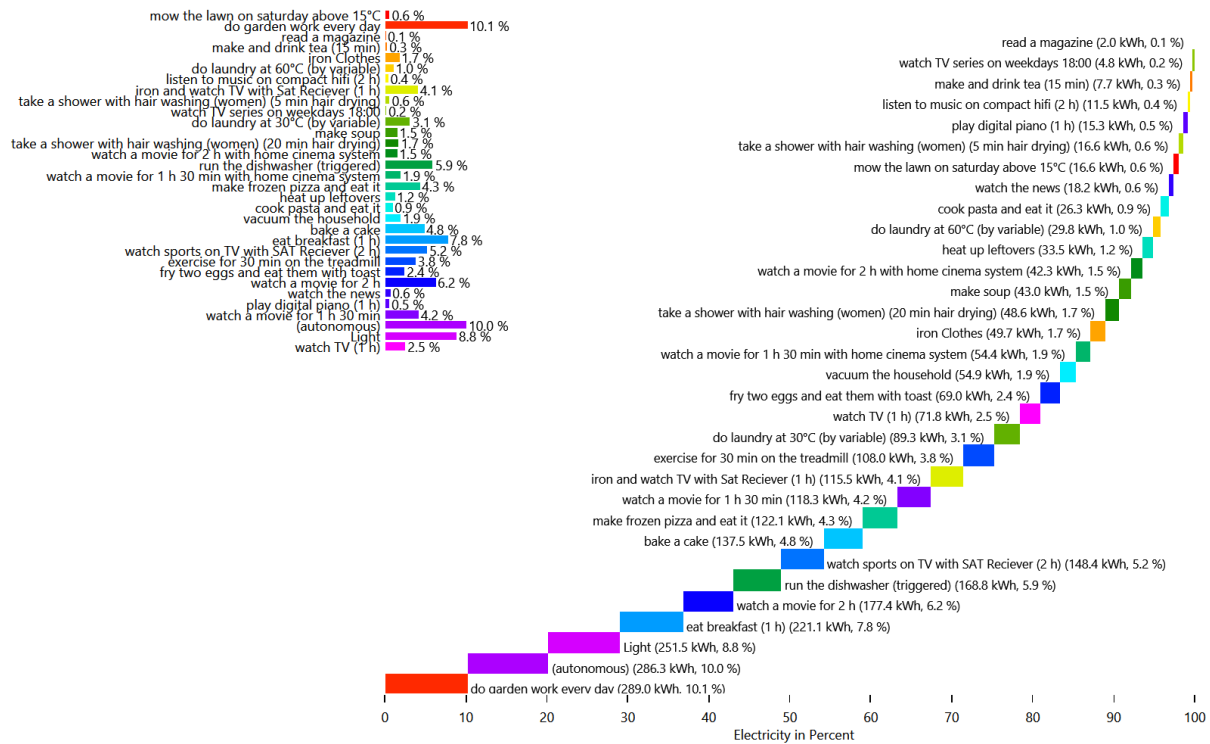
HH0 - Cold Water



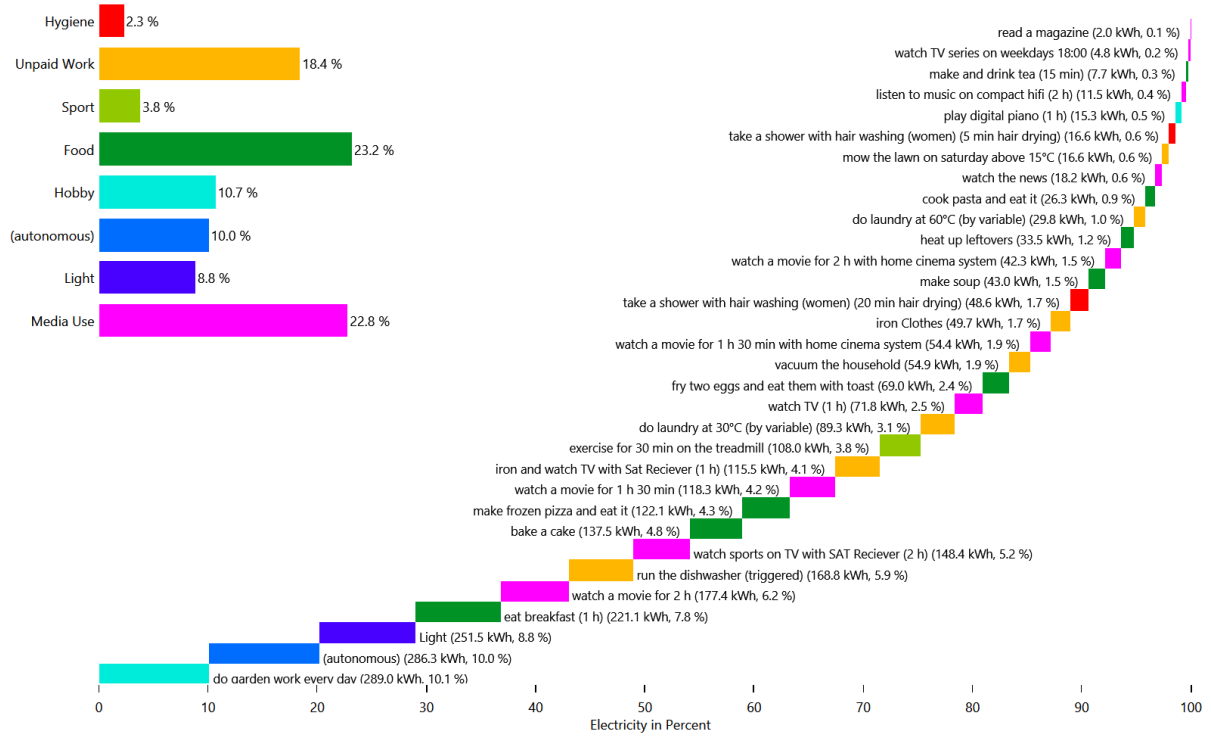
HH0 - Electricity



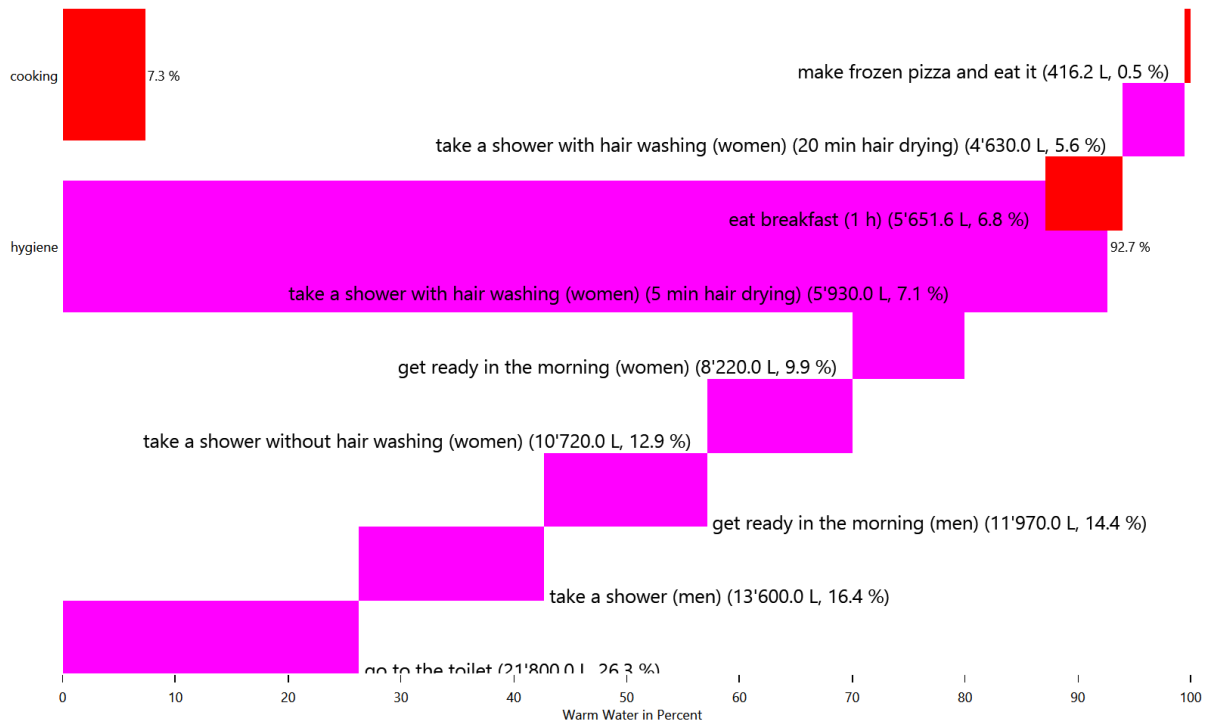
HH0 - Electricity



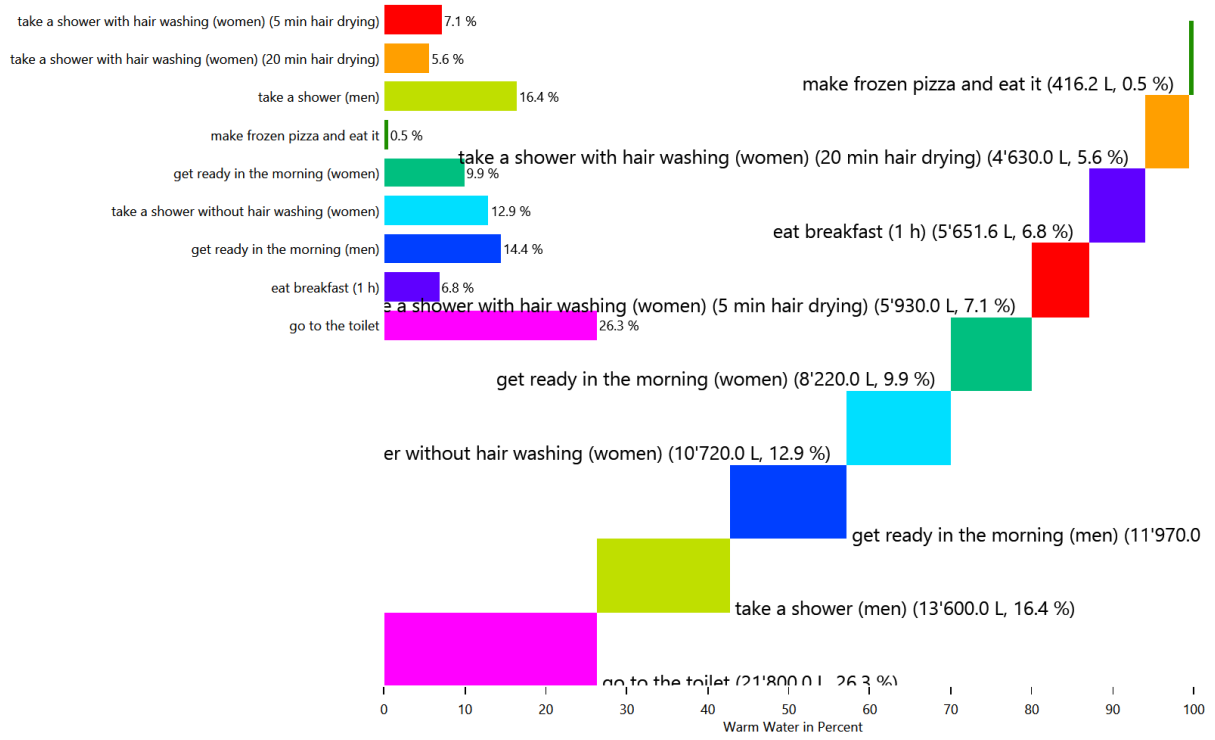
HHO - Electricity



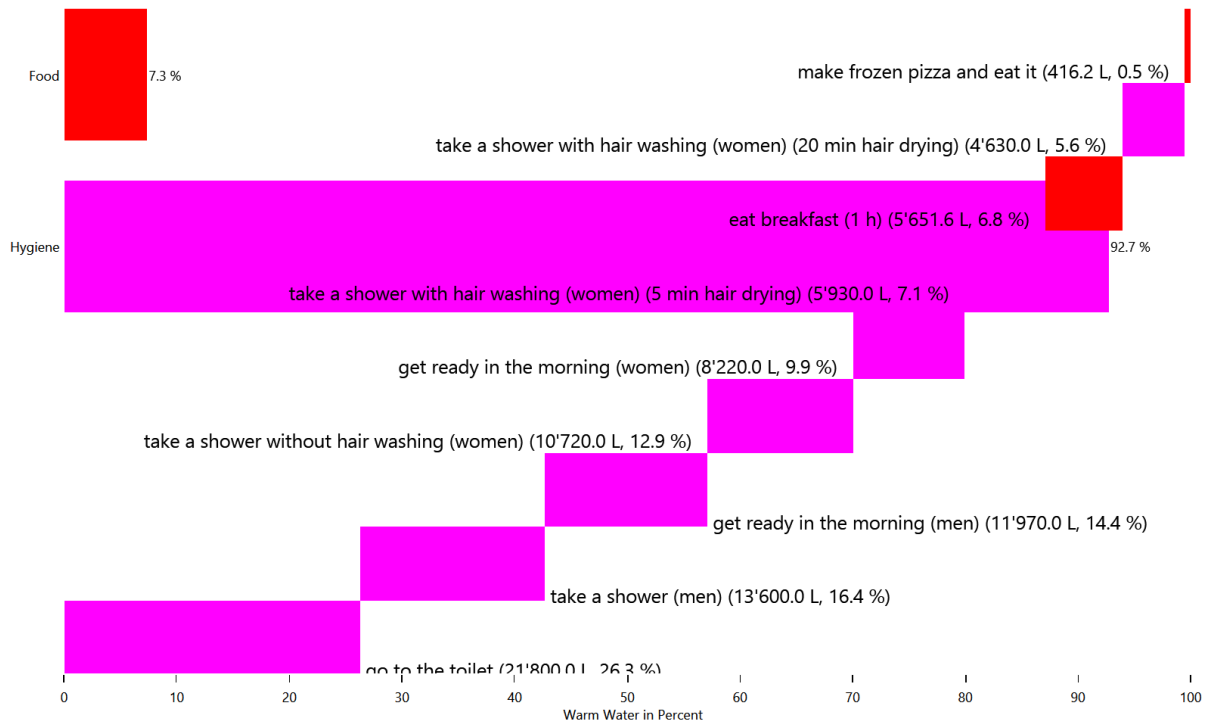
HHO - Warm Water



HH0 - Warm Water



HH0 - Warm Water

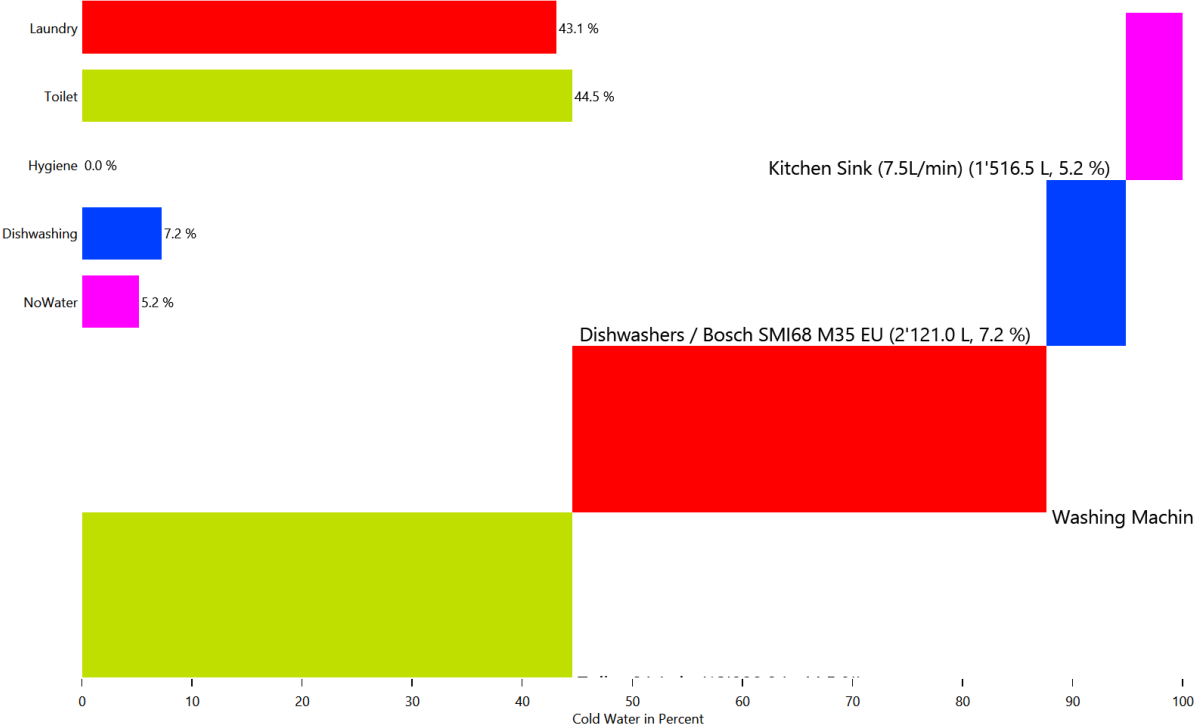


Energy use for each load type for each device

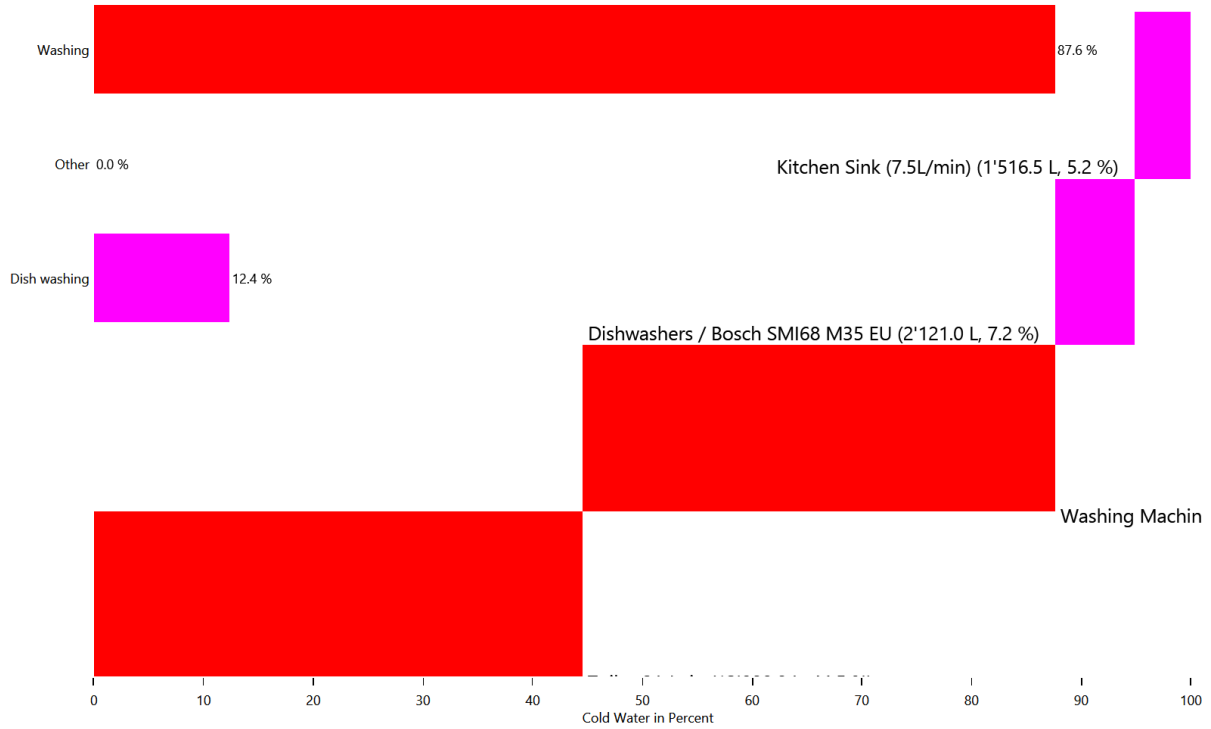
This is made from the files starting with: DeviceSums

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

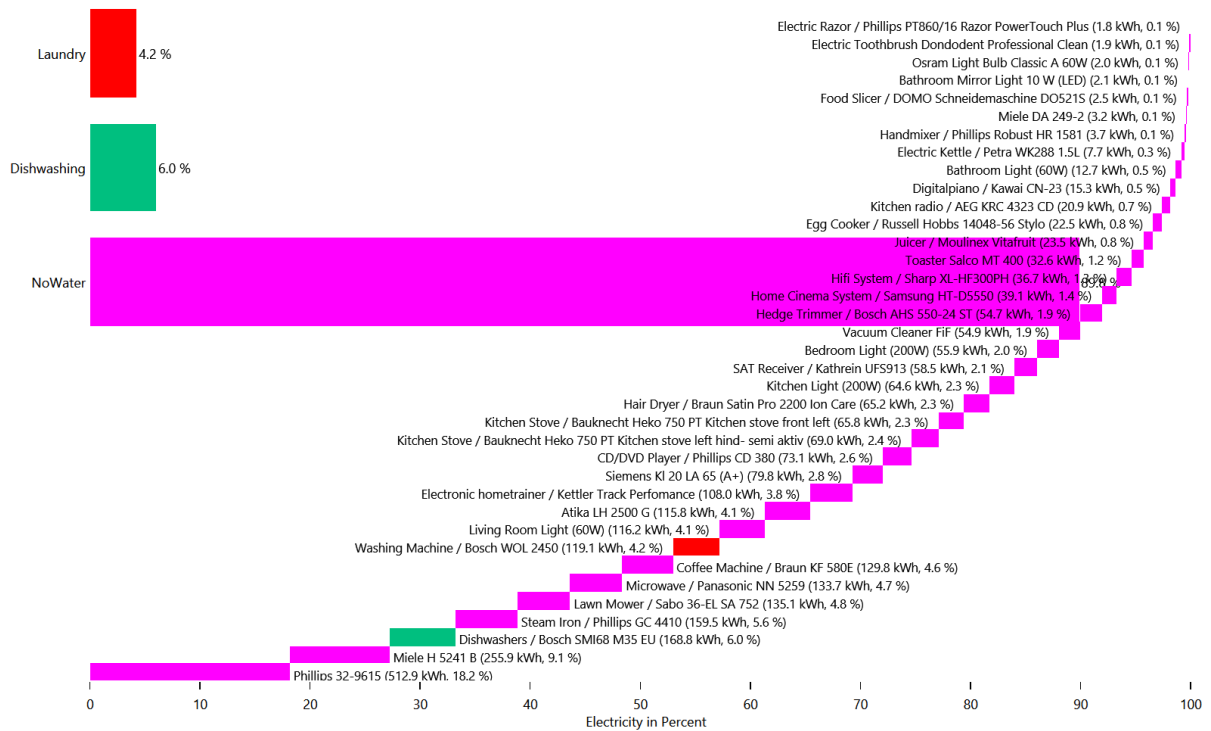
Cold Water



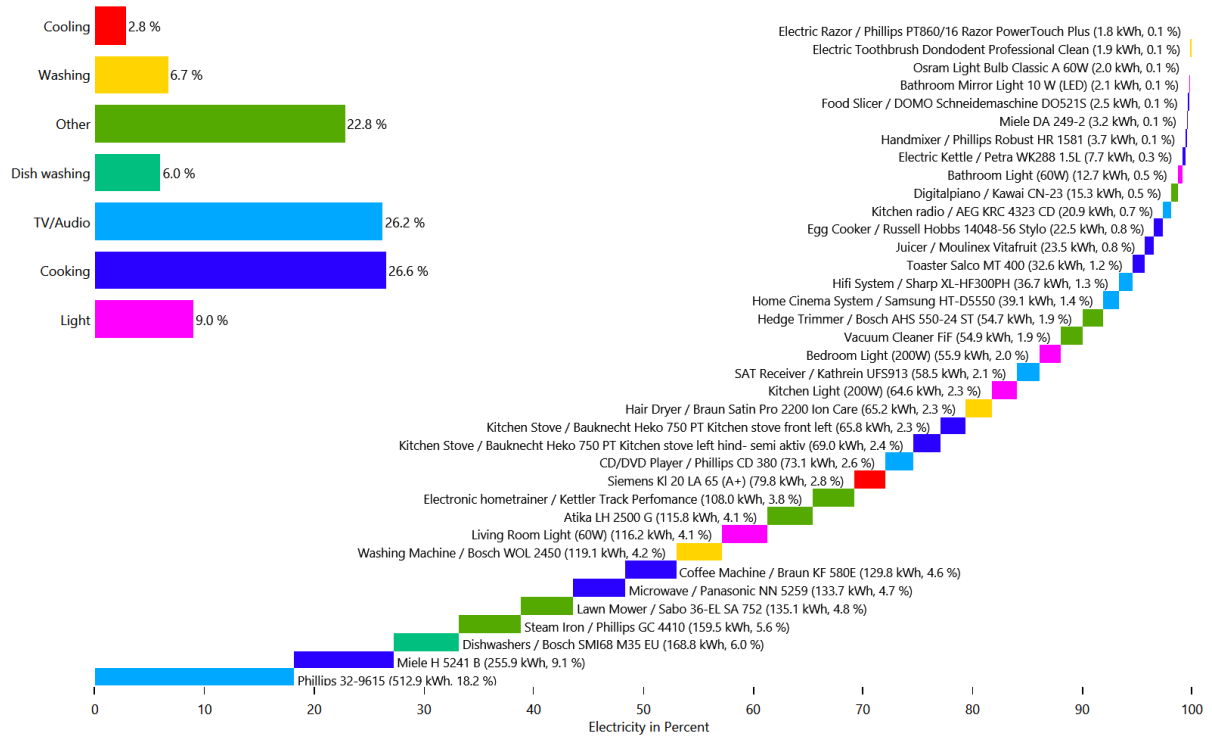
Cold Water



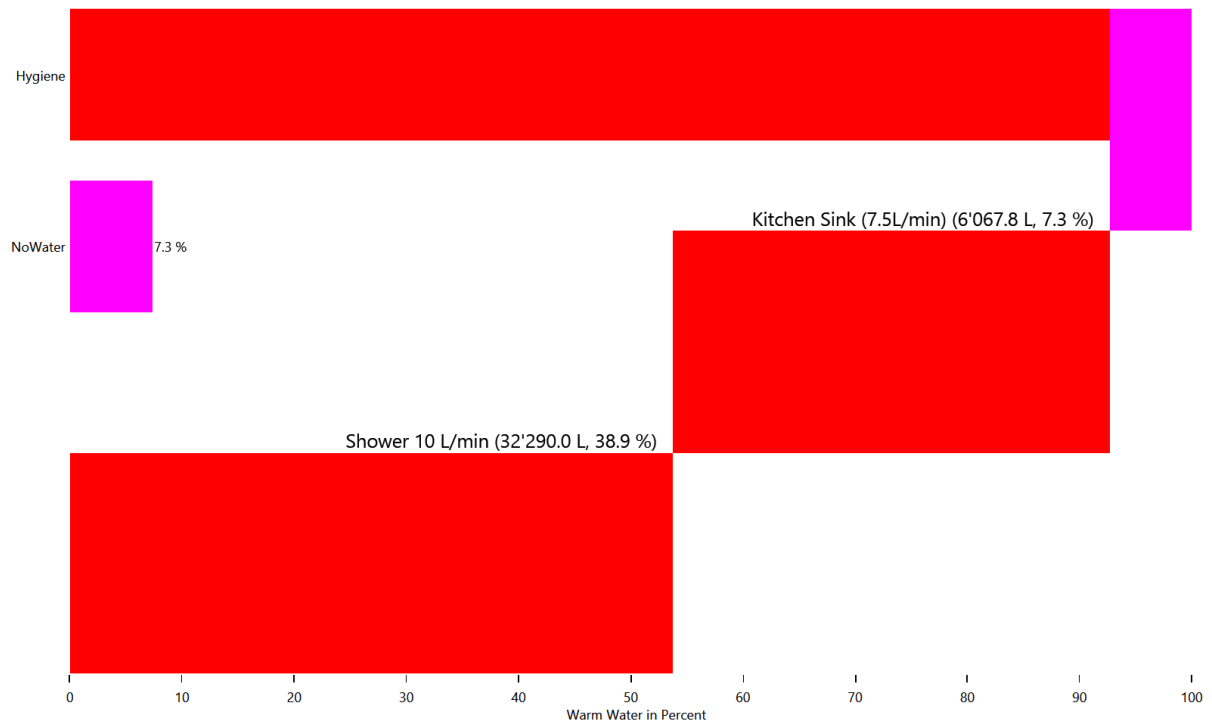
Electricity



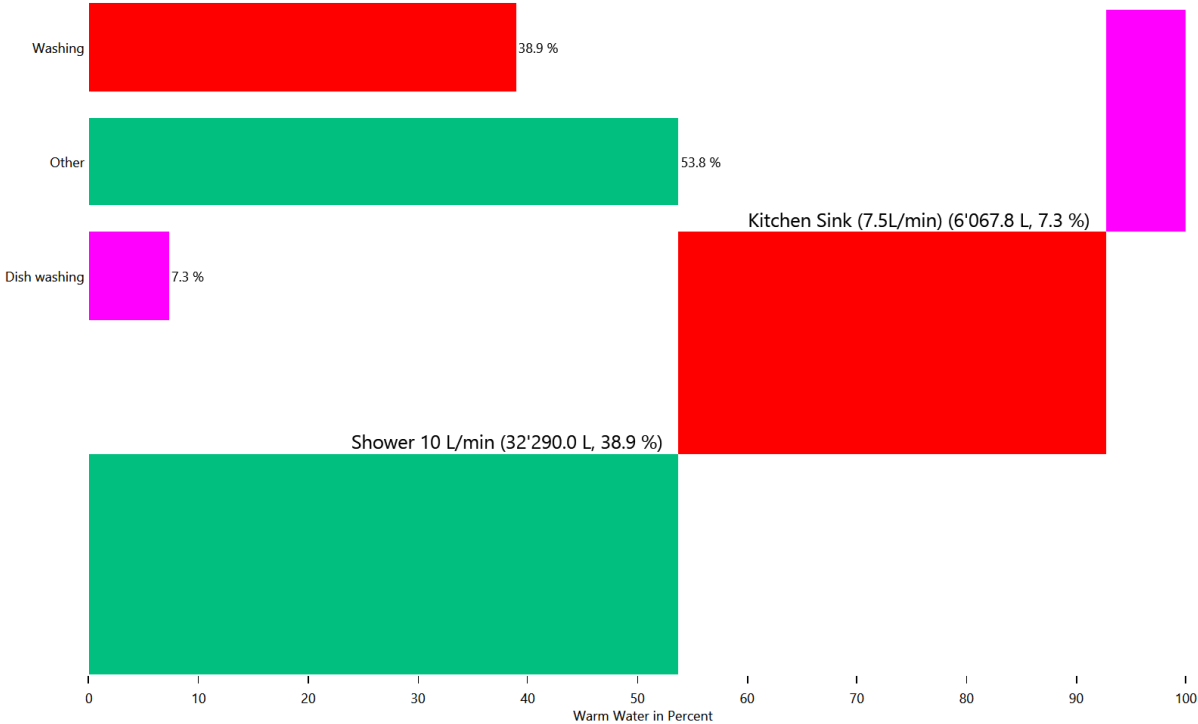
Electricity



Warm Water



Warm Water

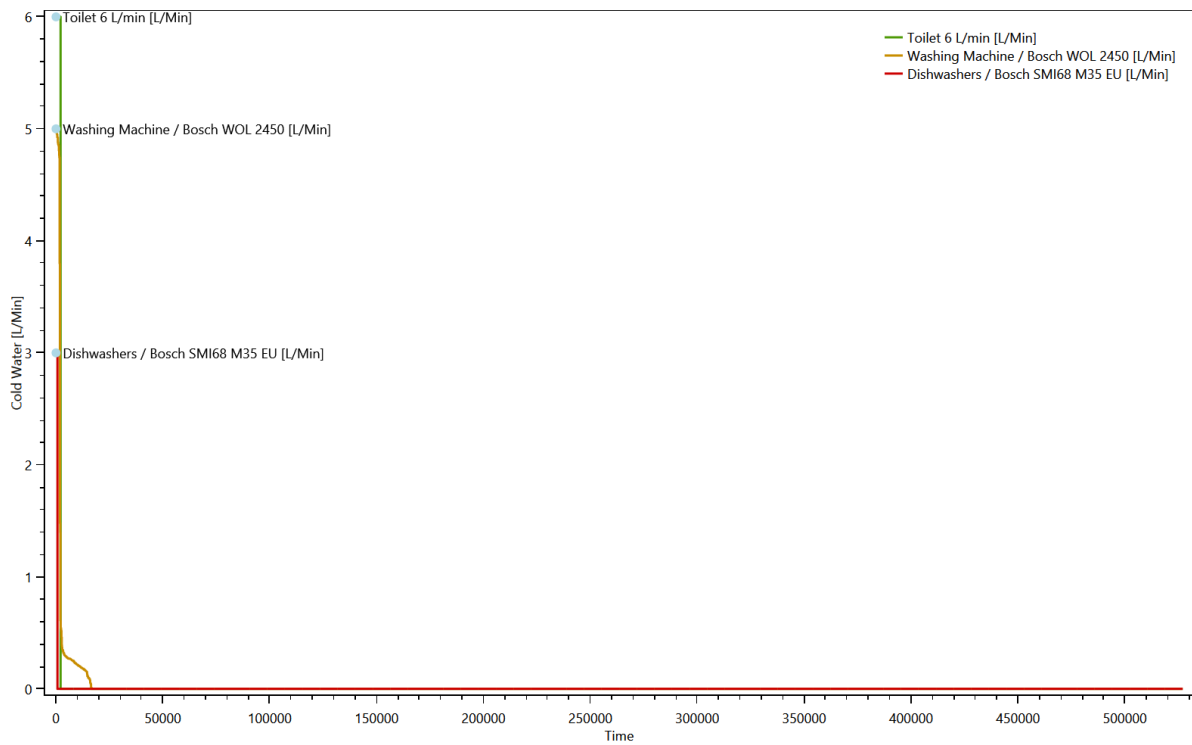


Duration curve for each device for each load type

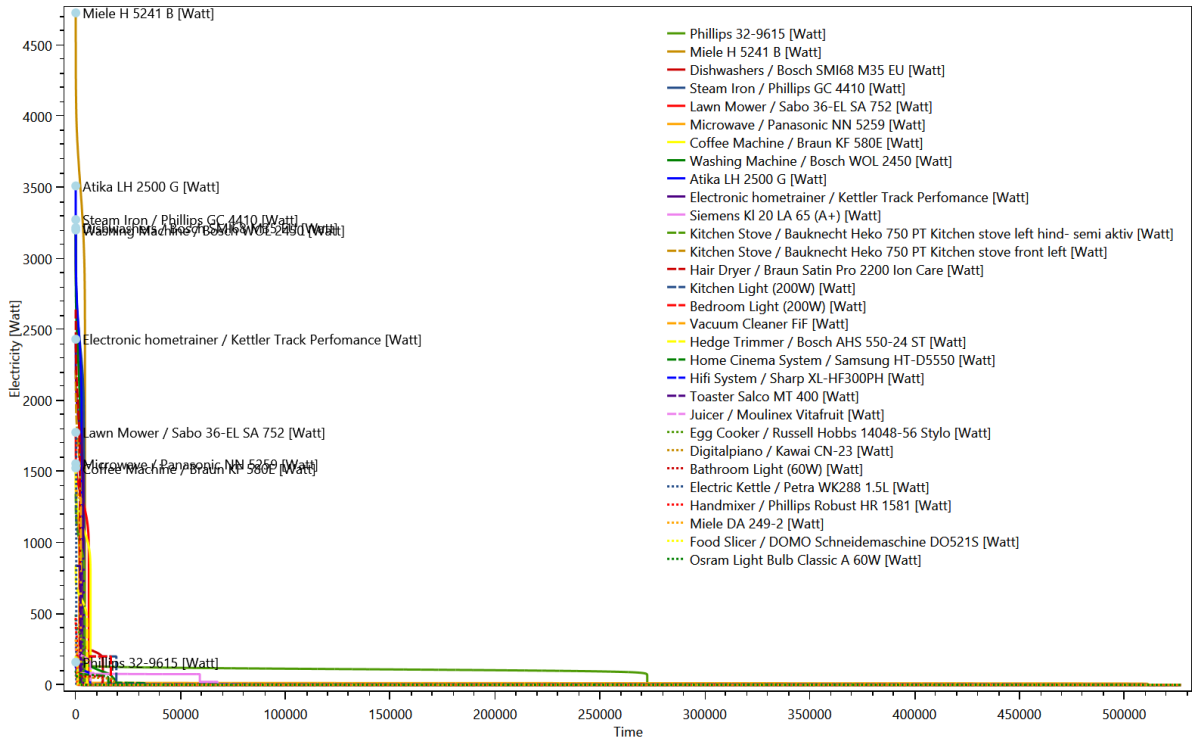
This is made from the files starting with: DeviceDurationCurves

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

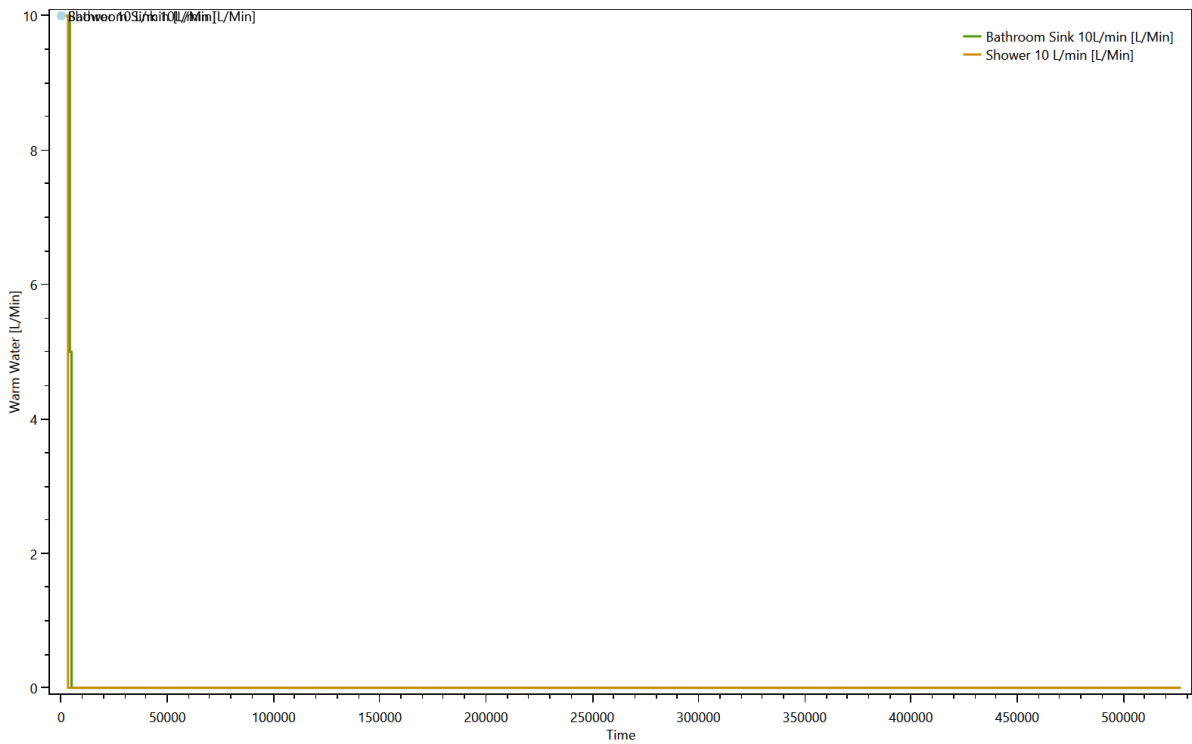
Cold Water



Electricity



Warm Water

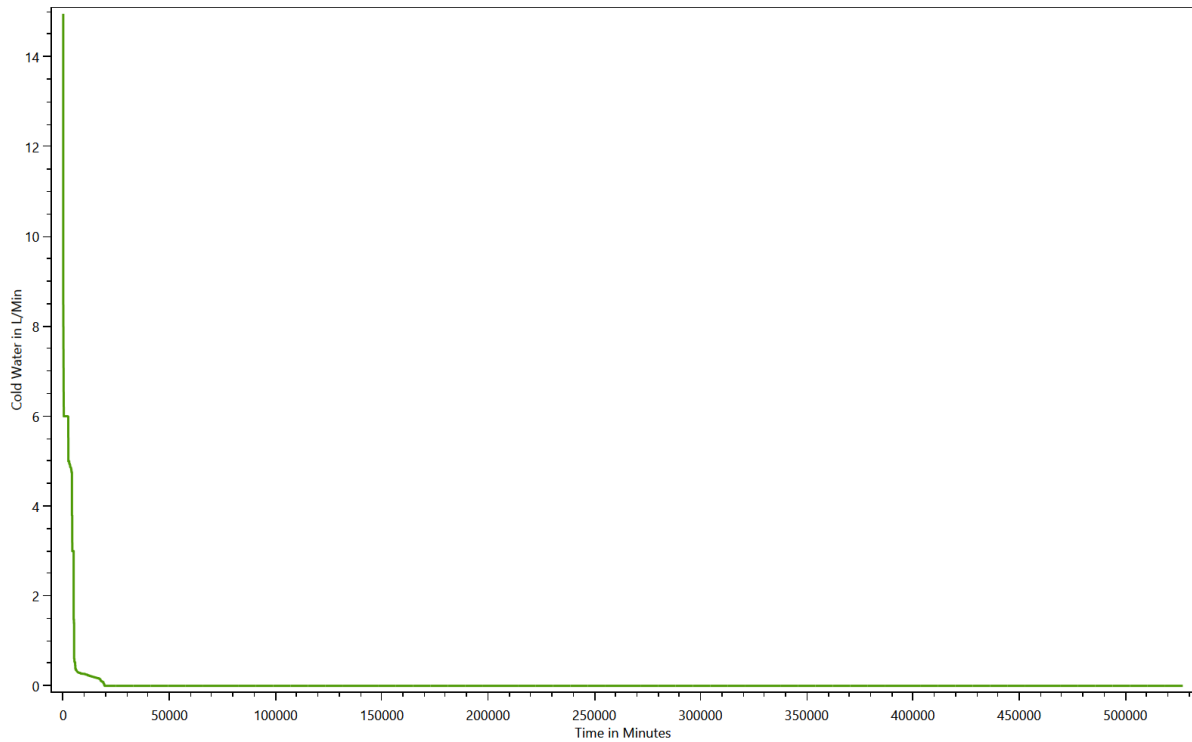


Duration curve for each load type

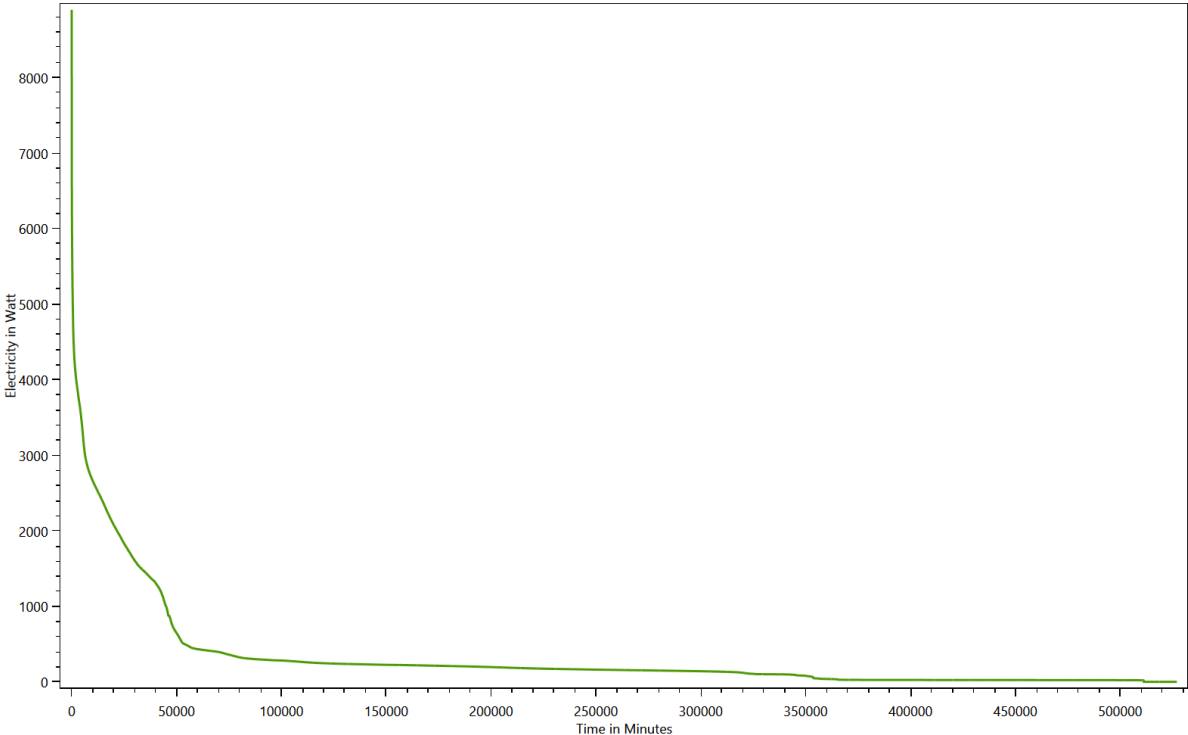
This is made from the files starting with: DurationCurve

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

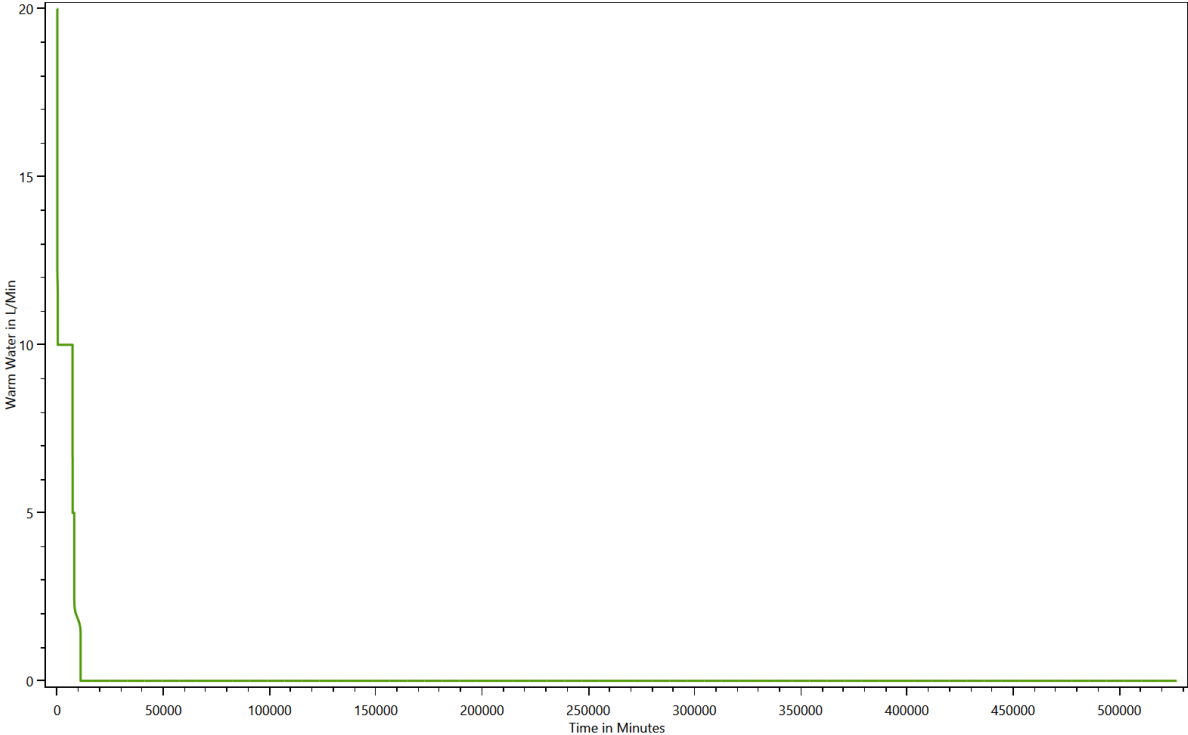
Cold Water



Electricity



Warm Water

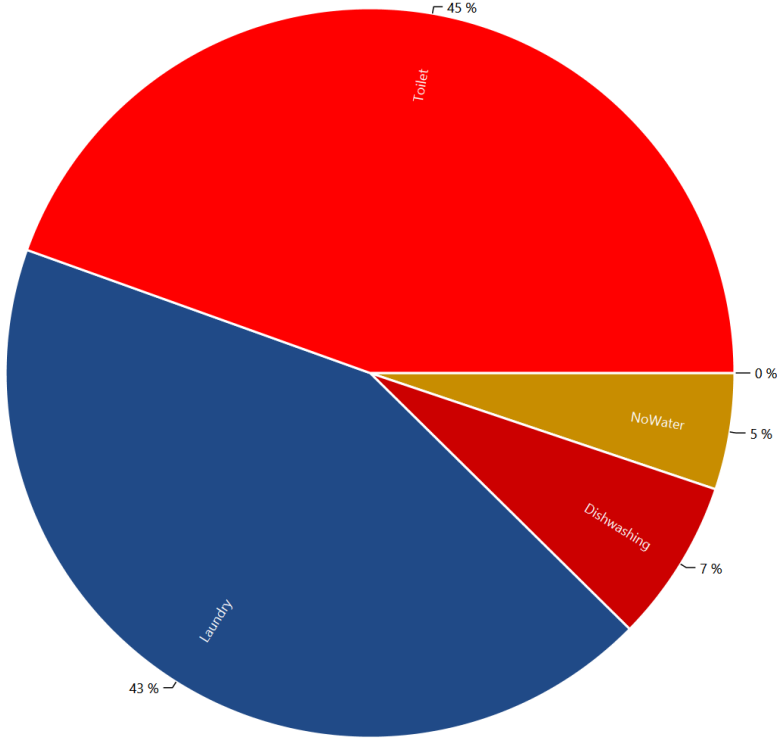


Grouped energy use for each load type for each device

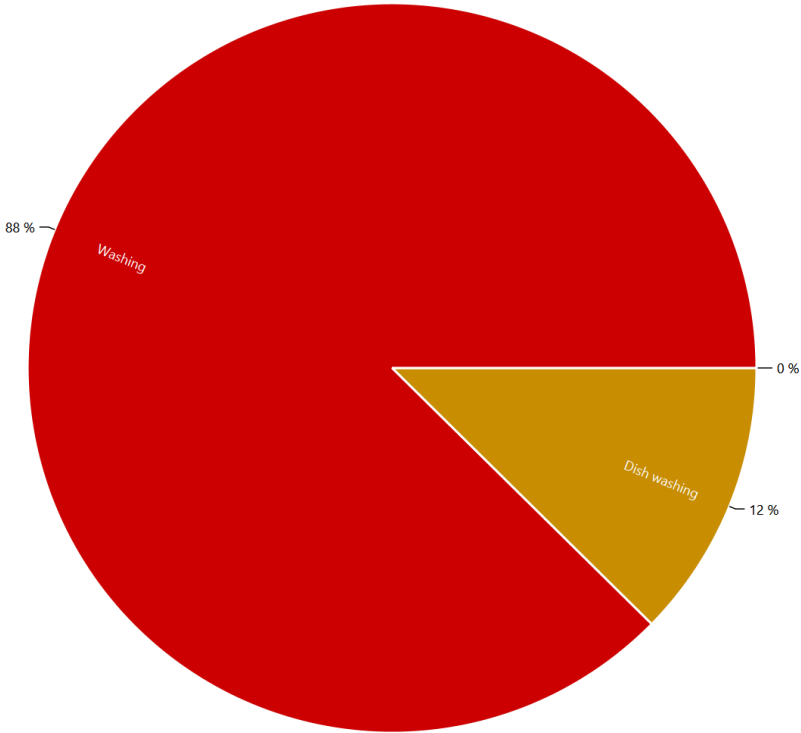
This is made from the files starting with: DeviceTaggingSet

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

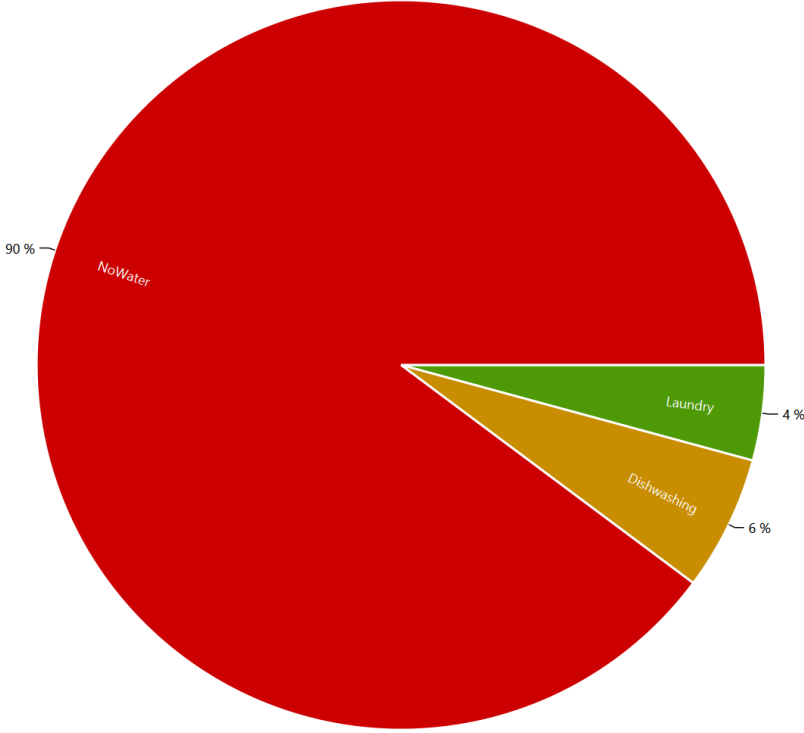
HH0 - Destatis Water Usage Statistics - Cold Water



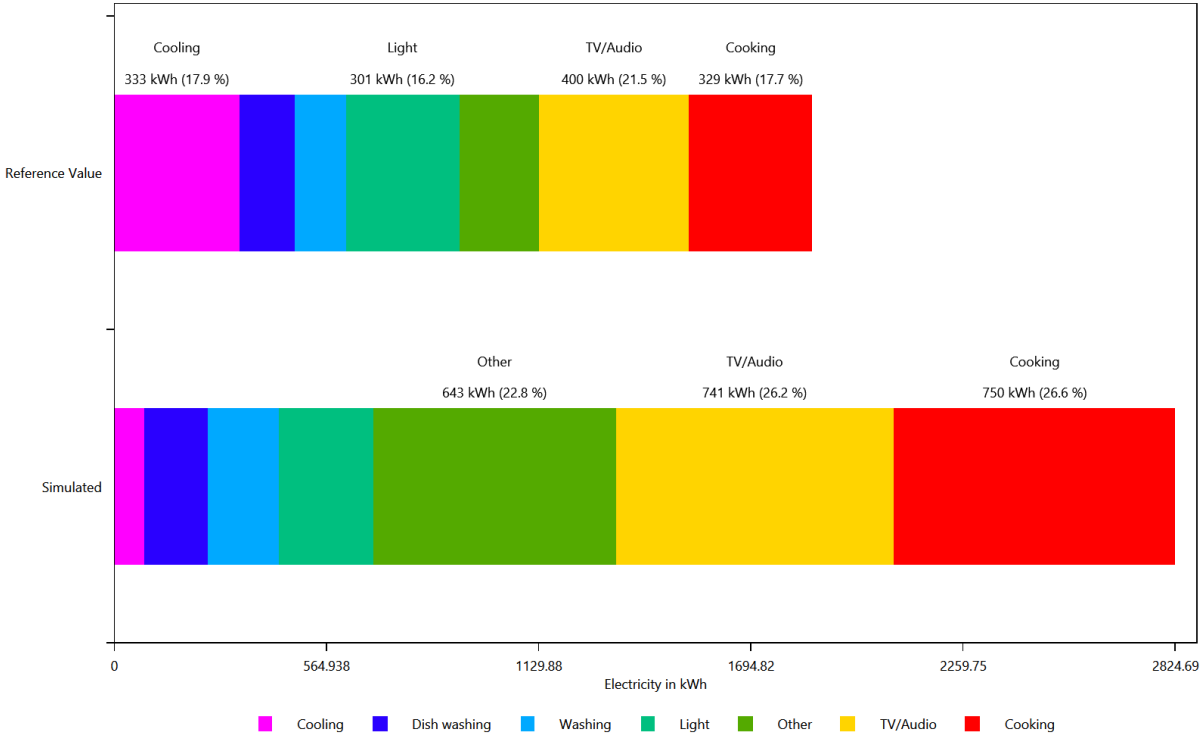
HH0 - Energieagentur - Cold Water



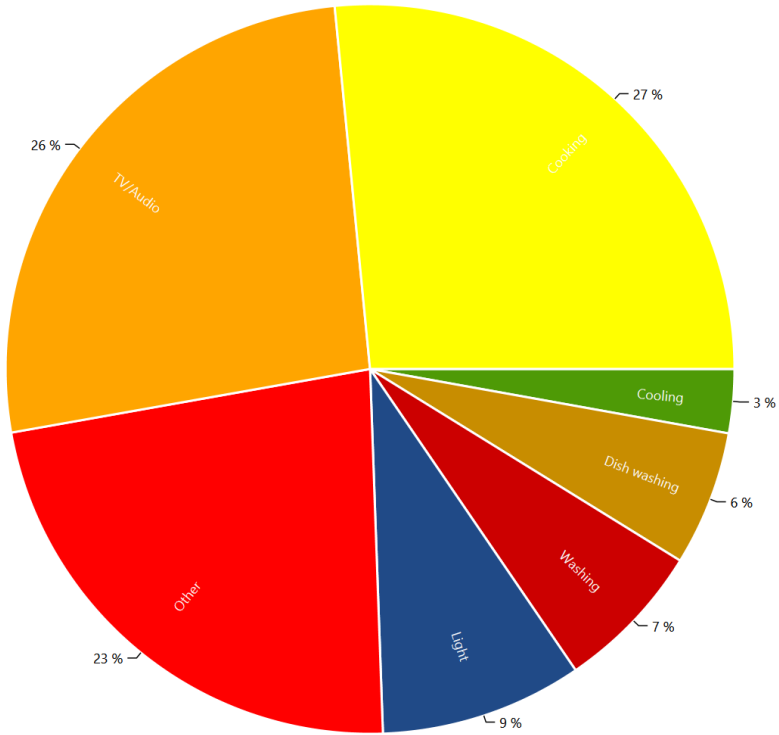
HH0 - Destatis Water Usage Statistics - Electricity



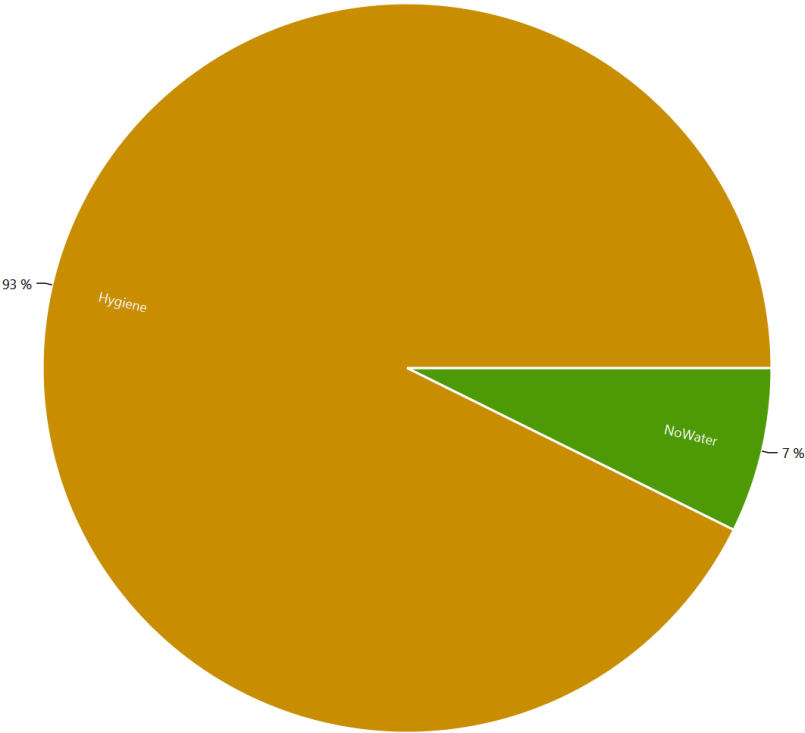
HH0 - Energieagentur - Electricity



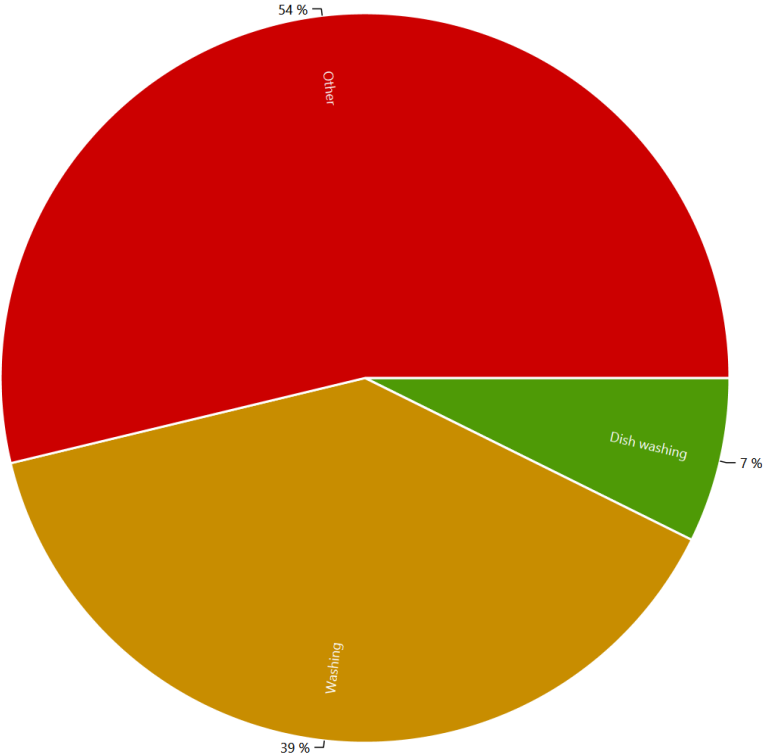
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

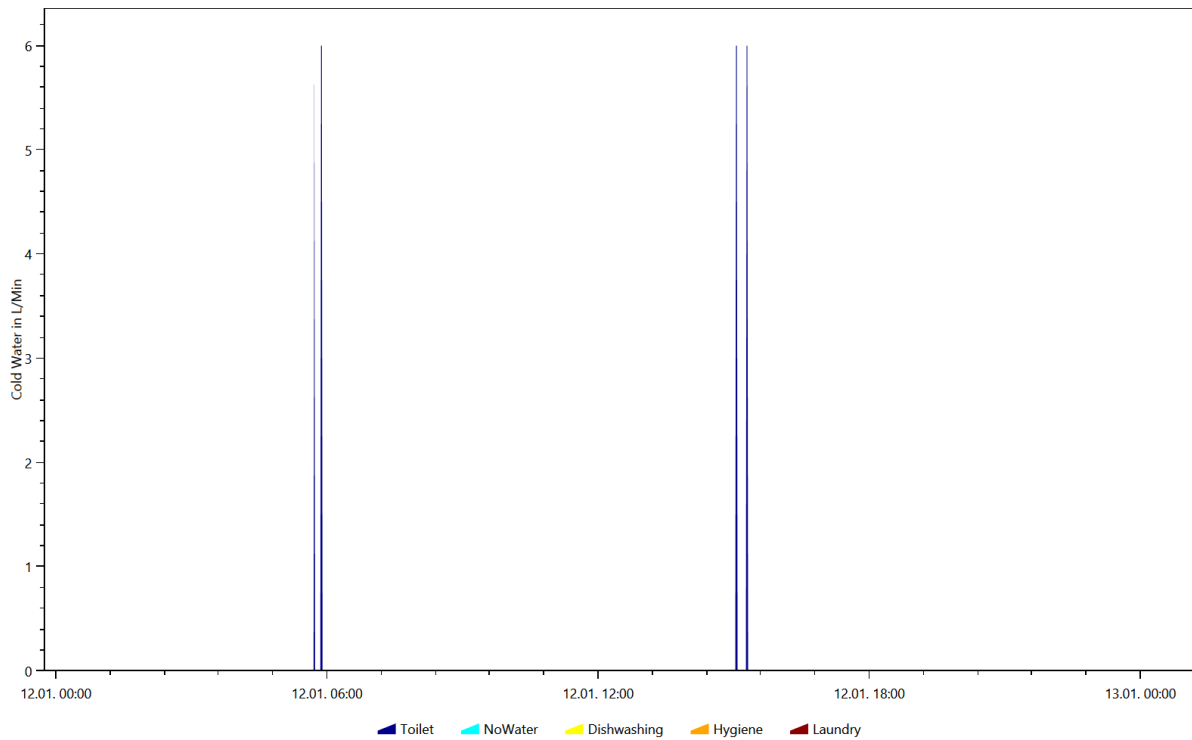


Example of the device profiles for each load type

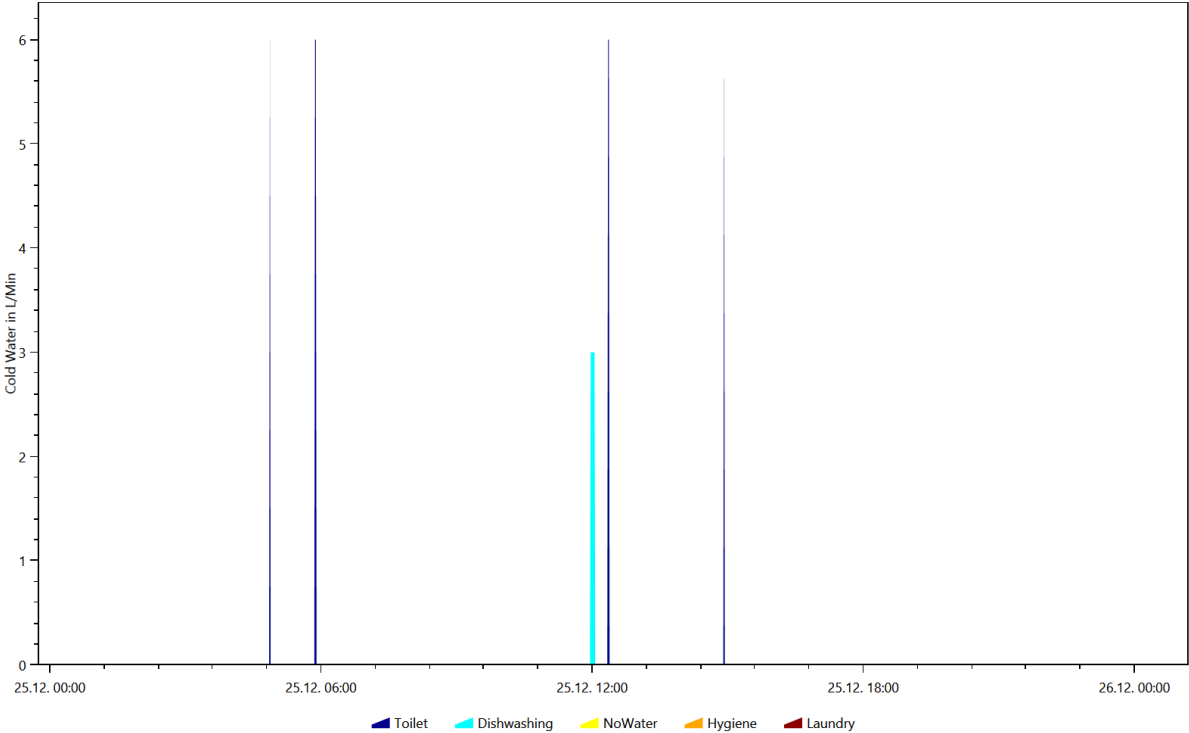
This is made from the files starting with: DeviceProfiles

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

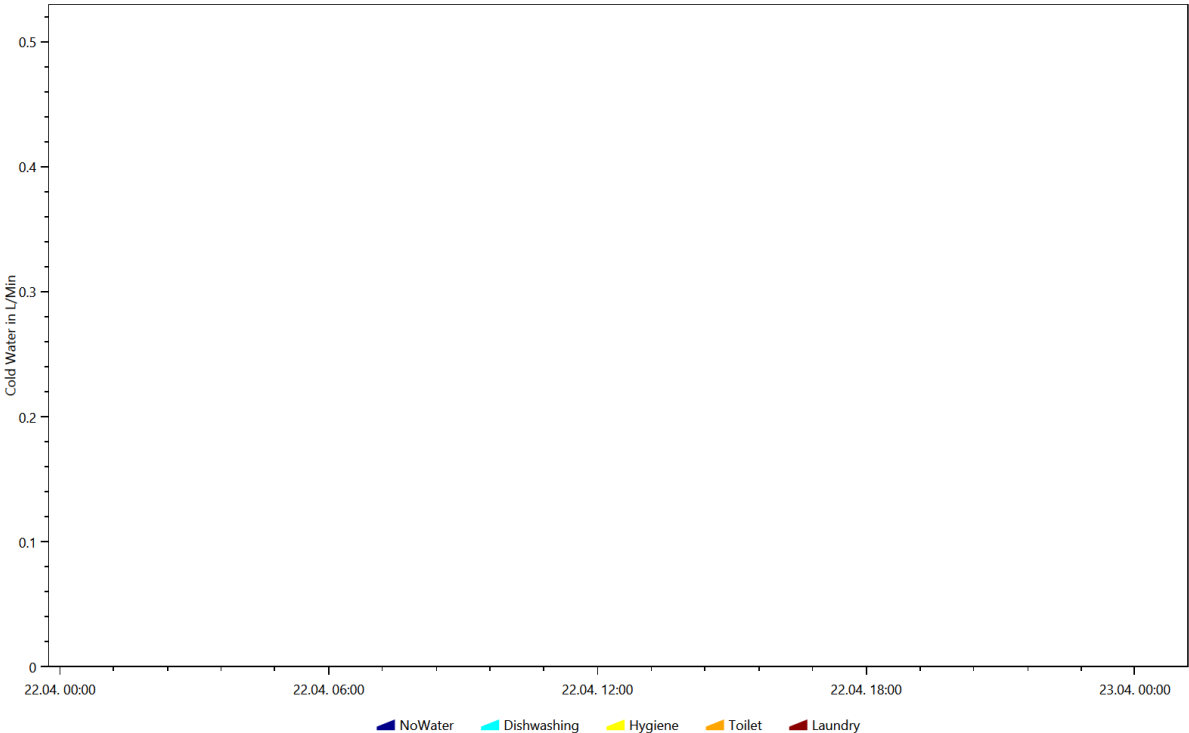
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.12



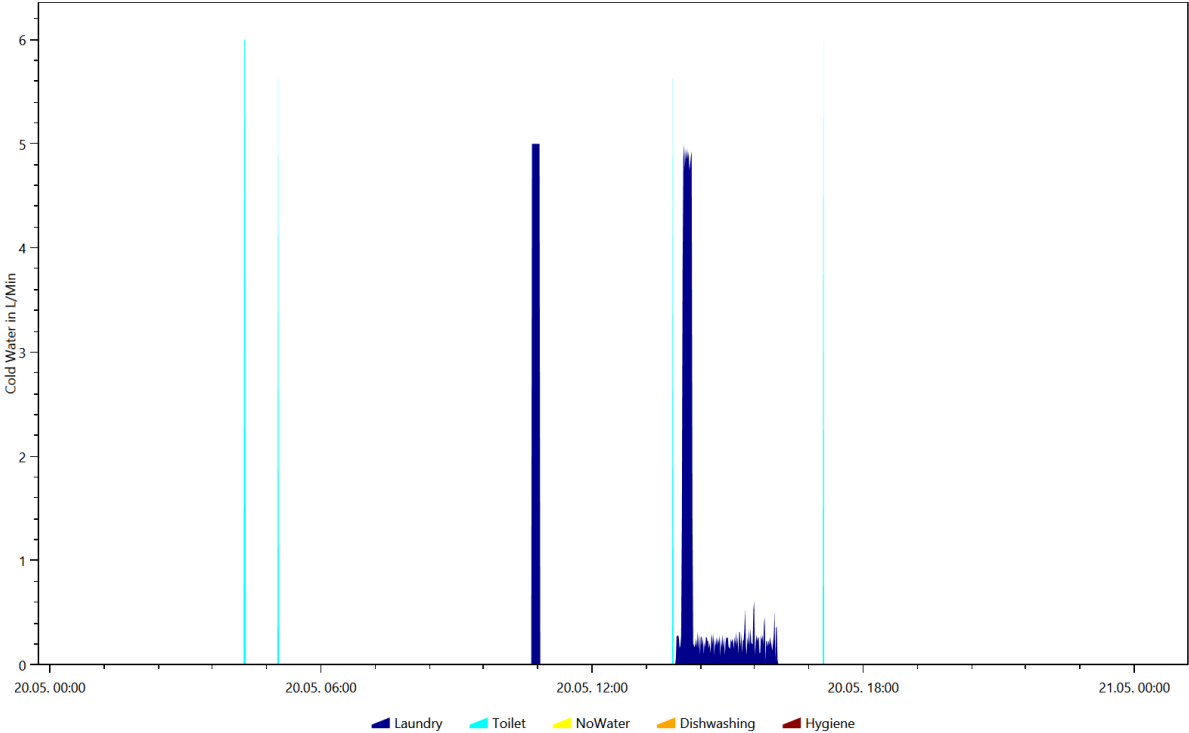
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.25



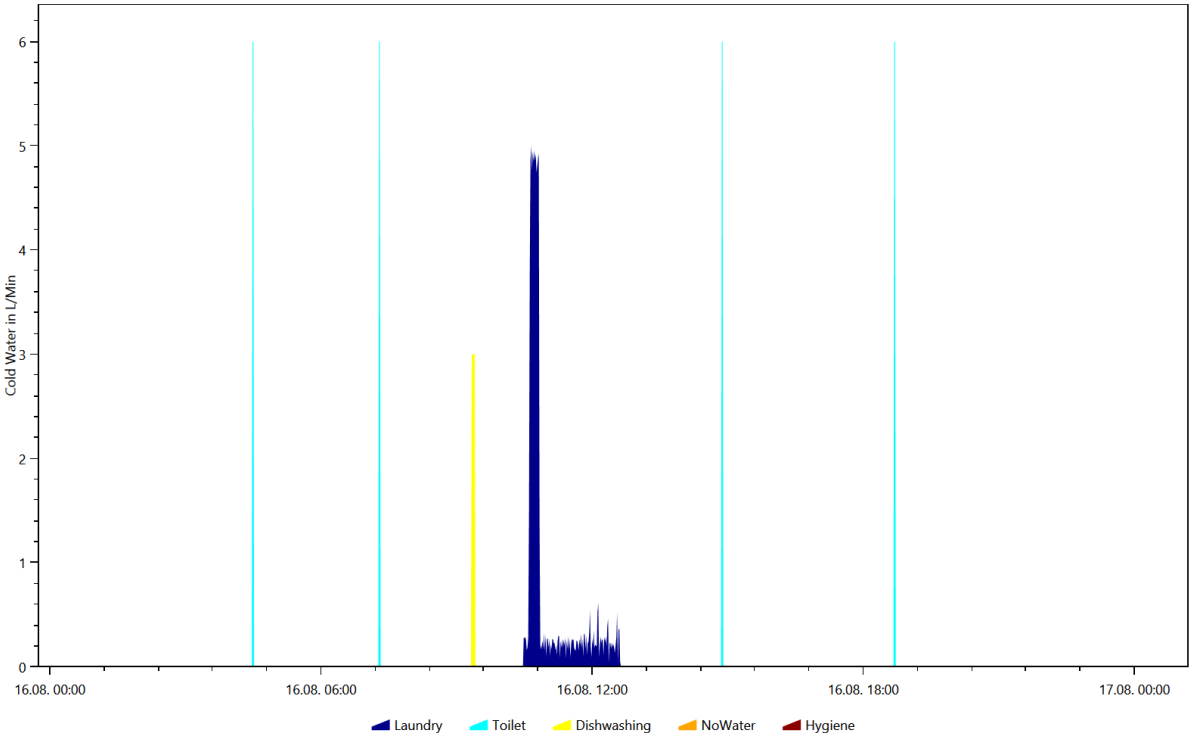
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.22



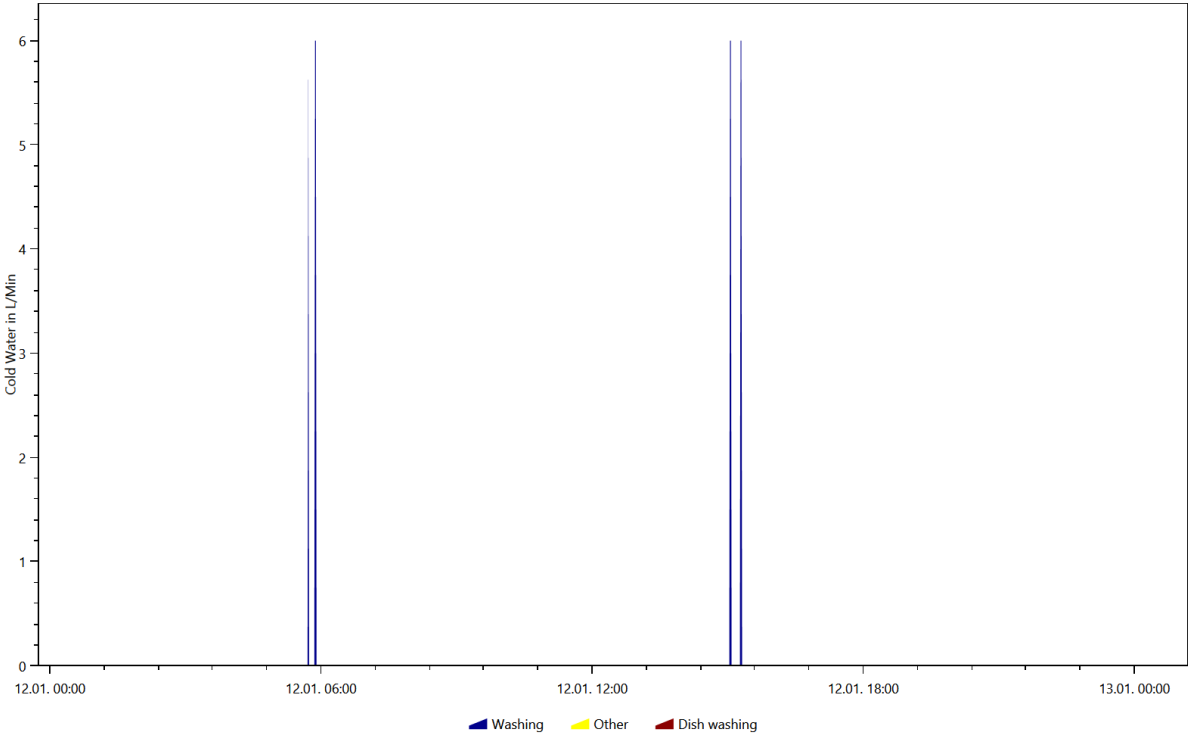
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.20



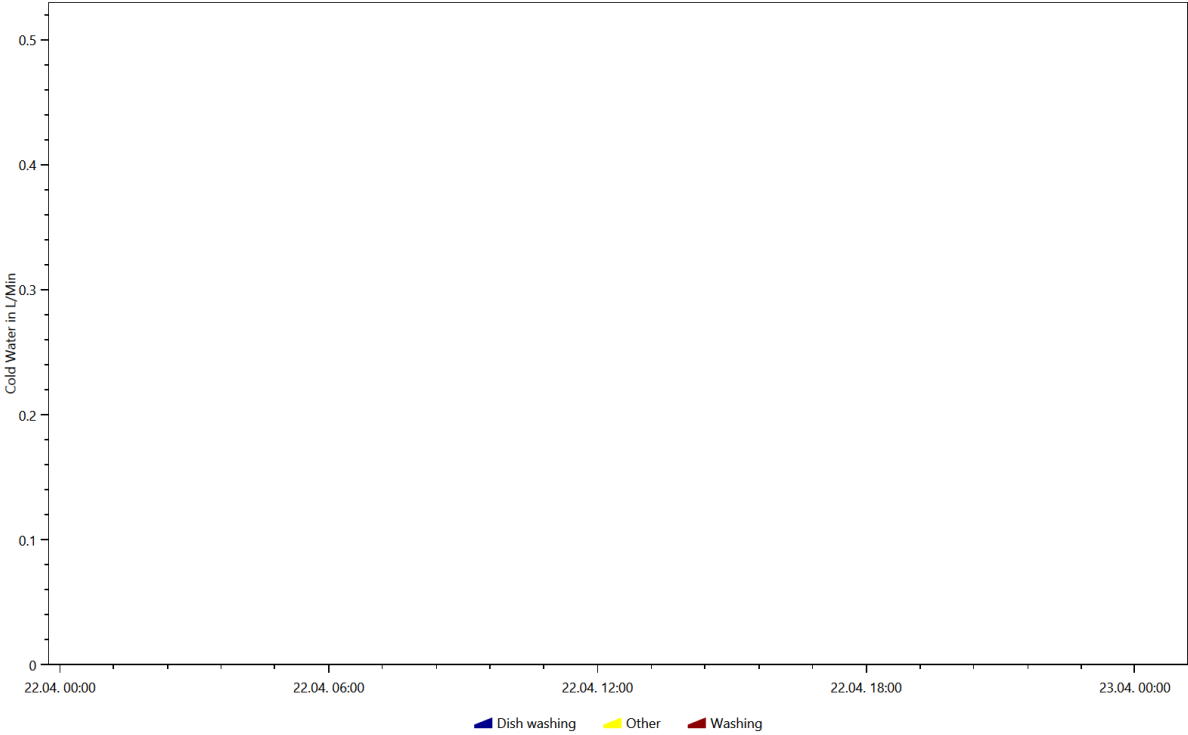
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.16



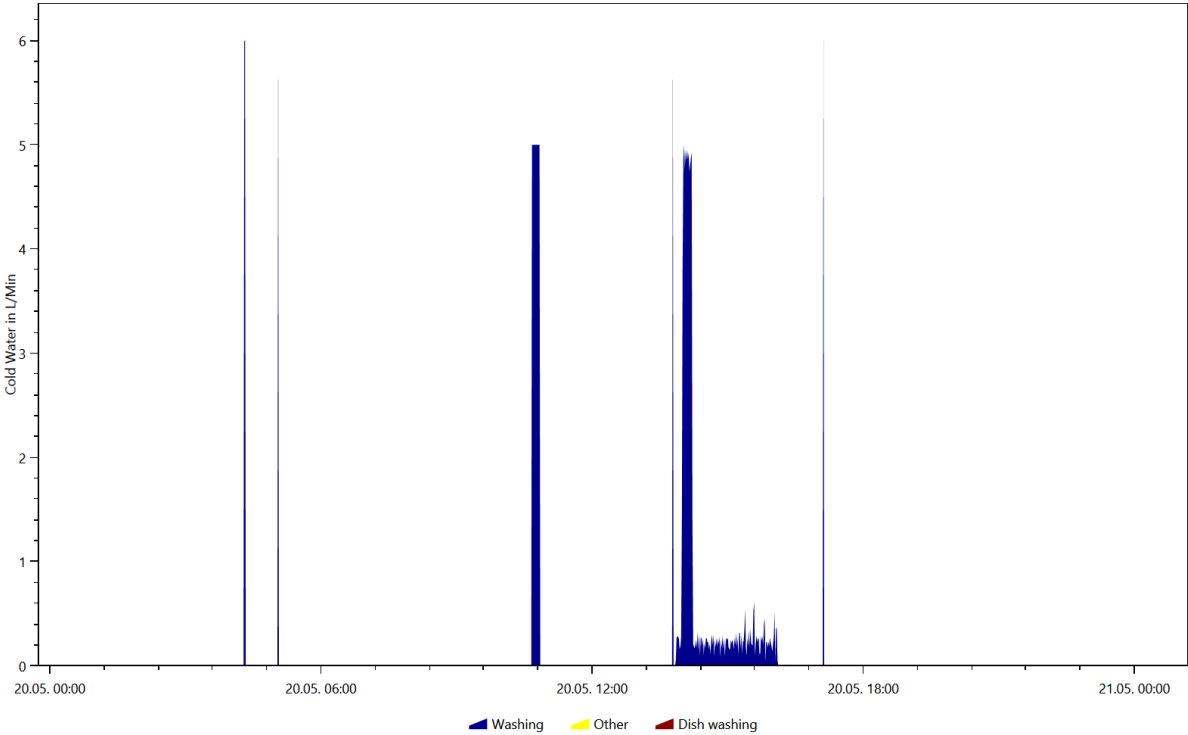
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.12



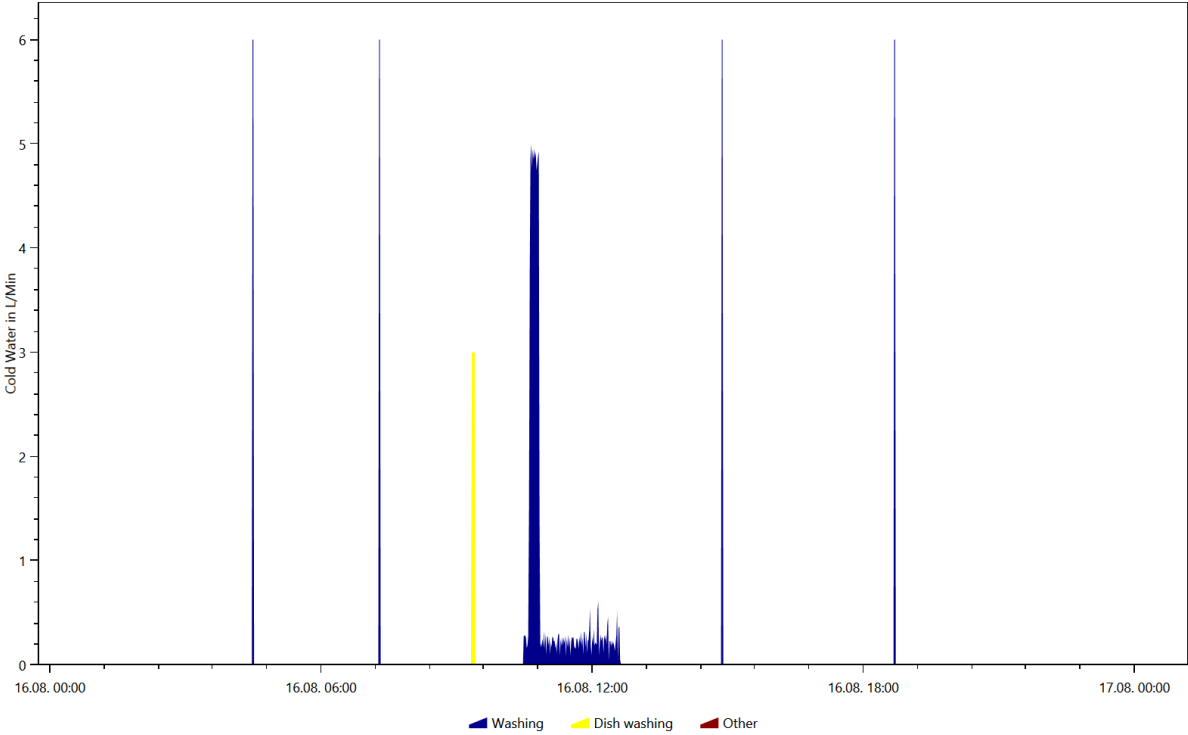
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.22



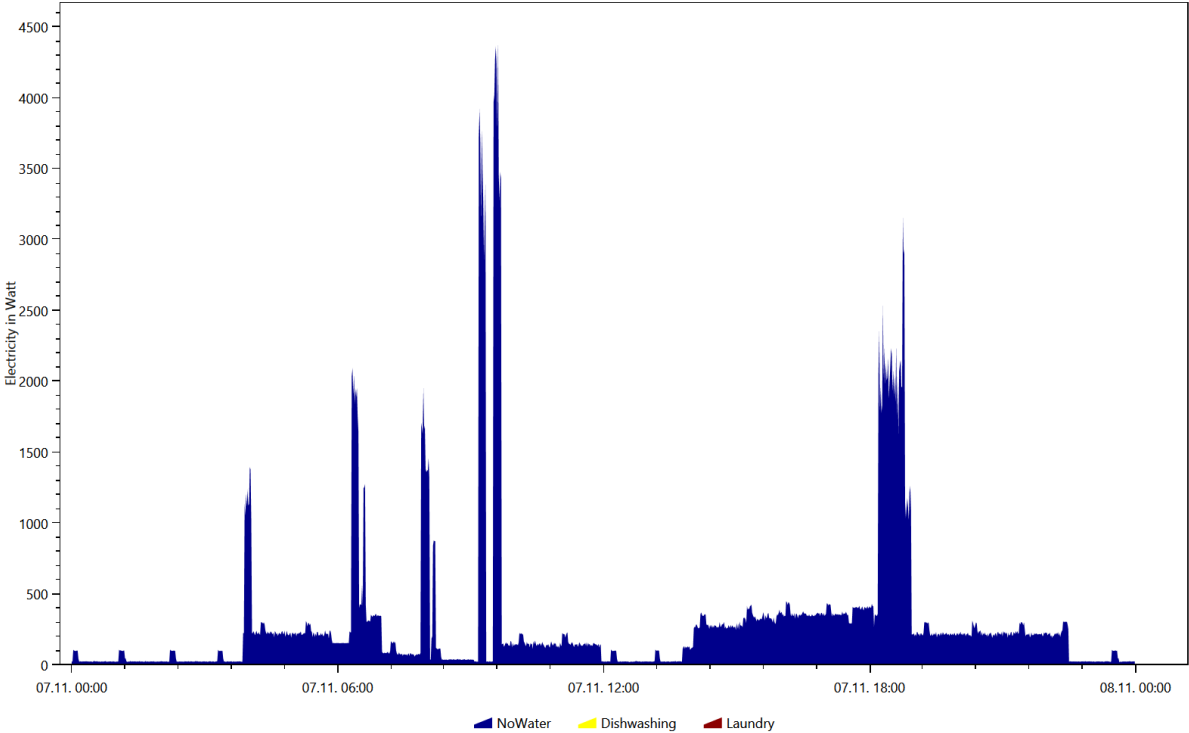
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.20



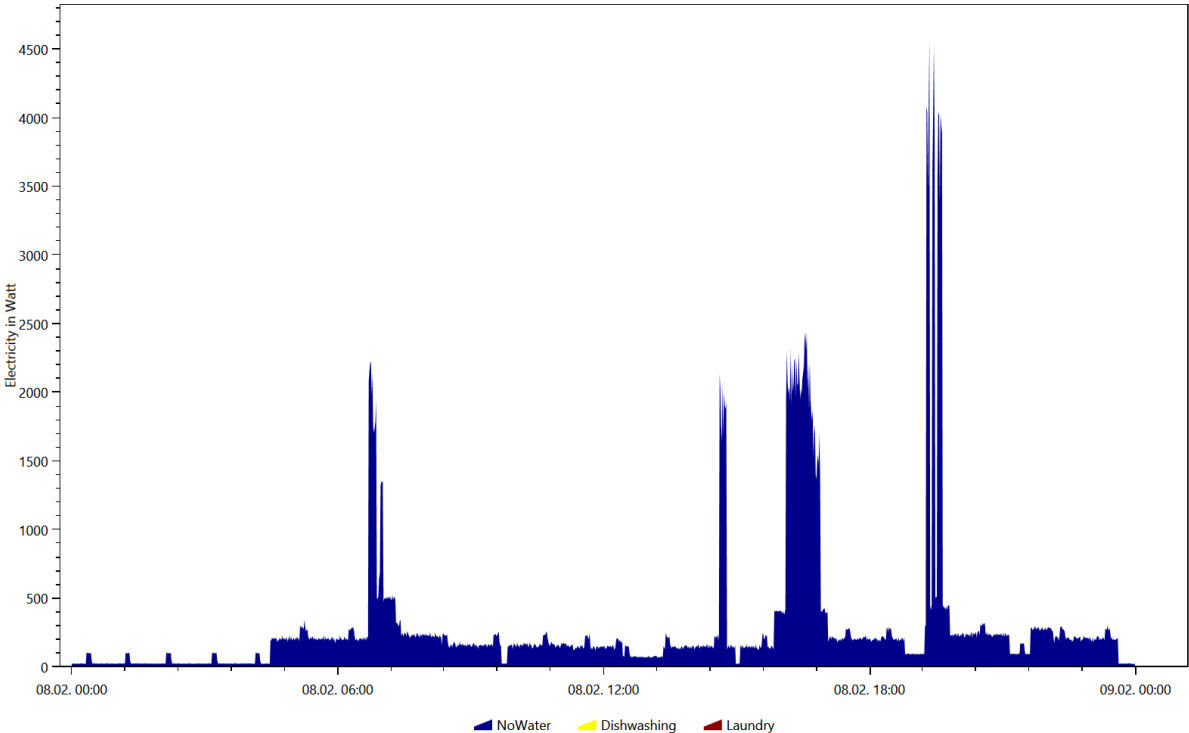
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.16



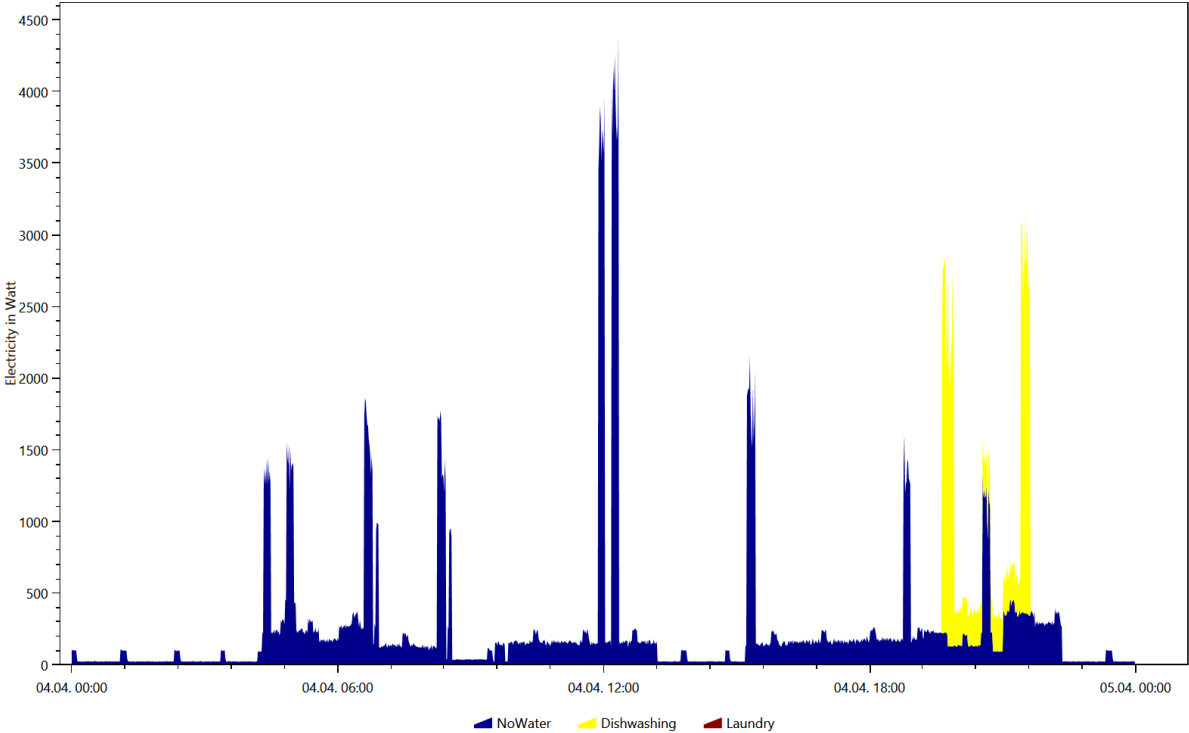
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.7



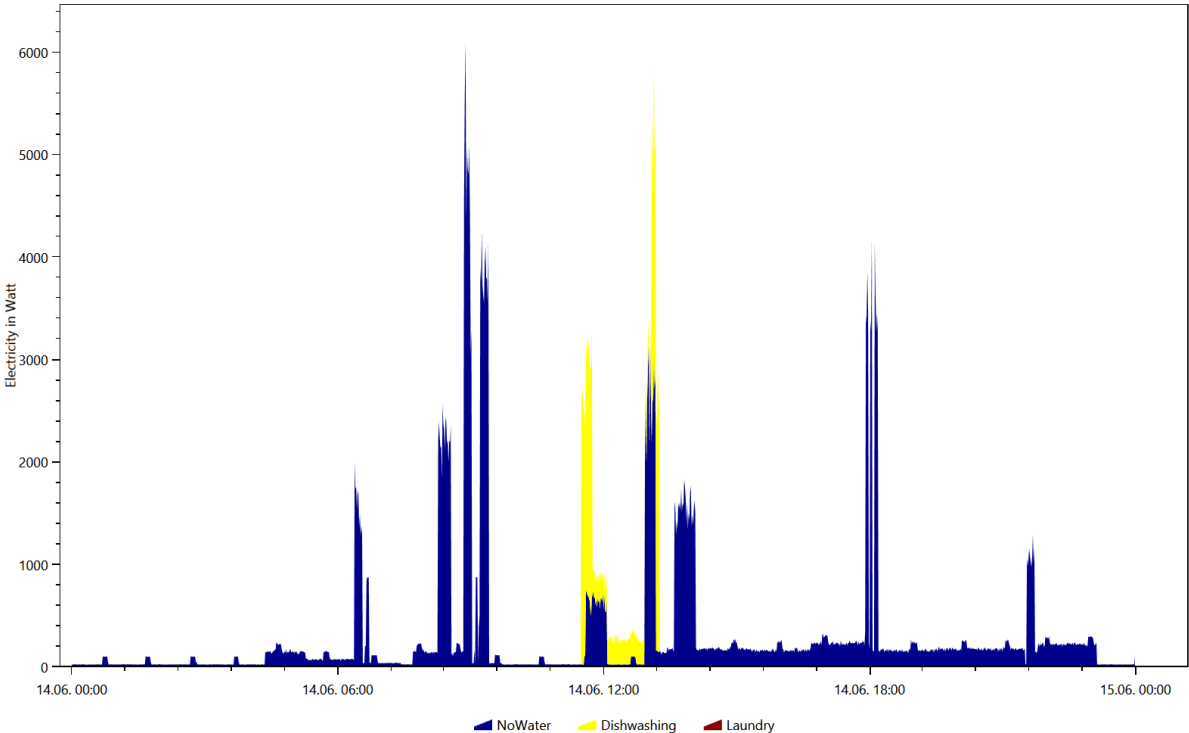
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.8



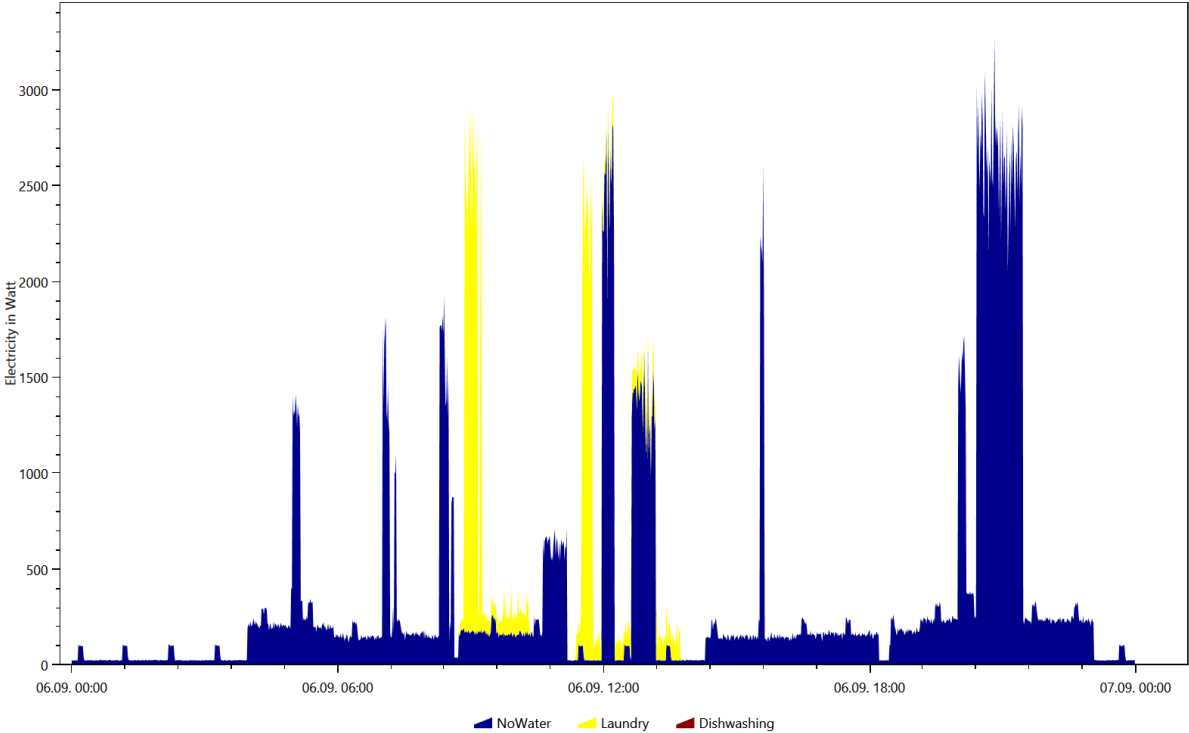
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.4



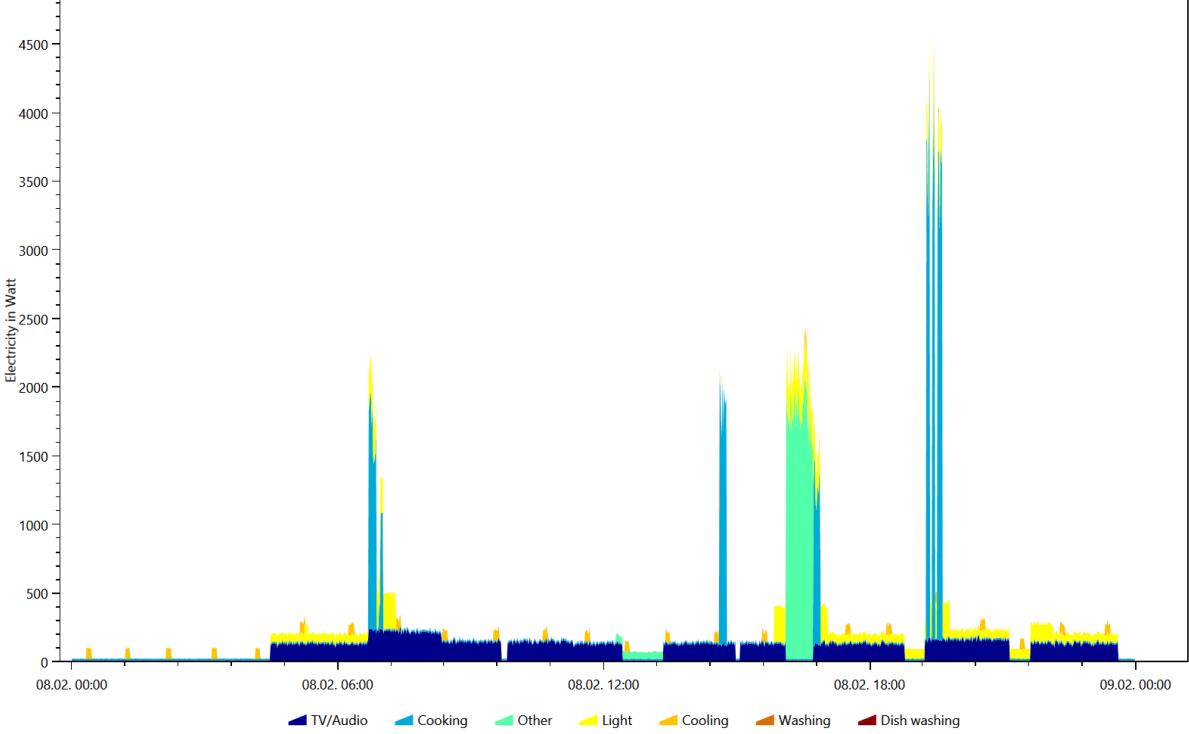
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.14



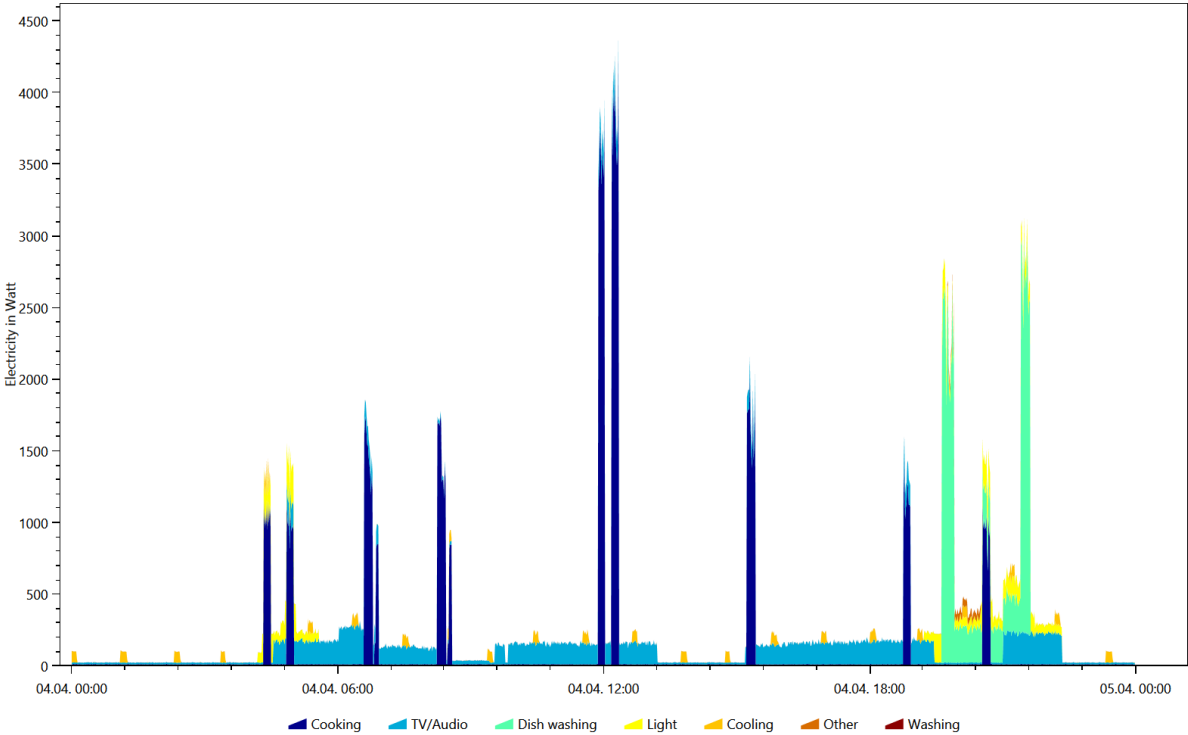
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.6



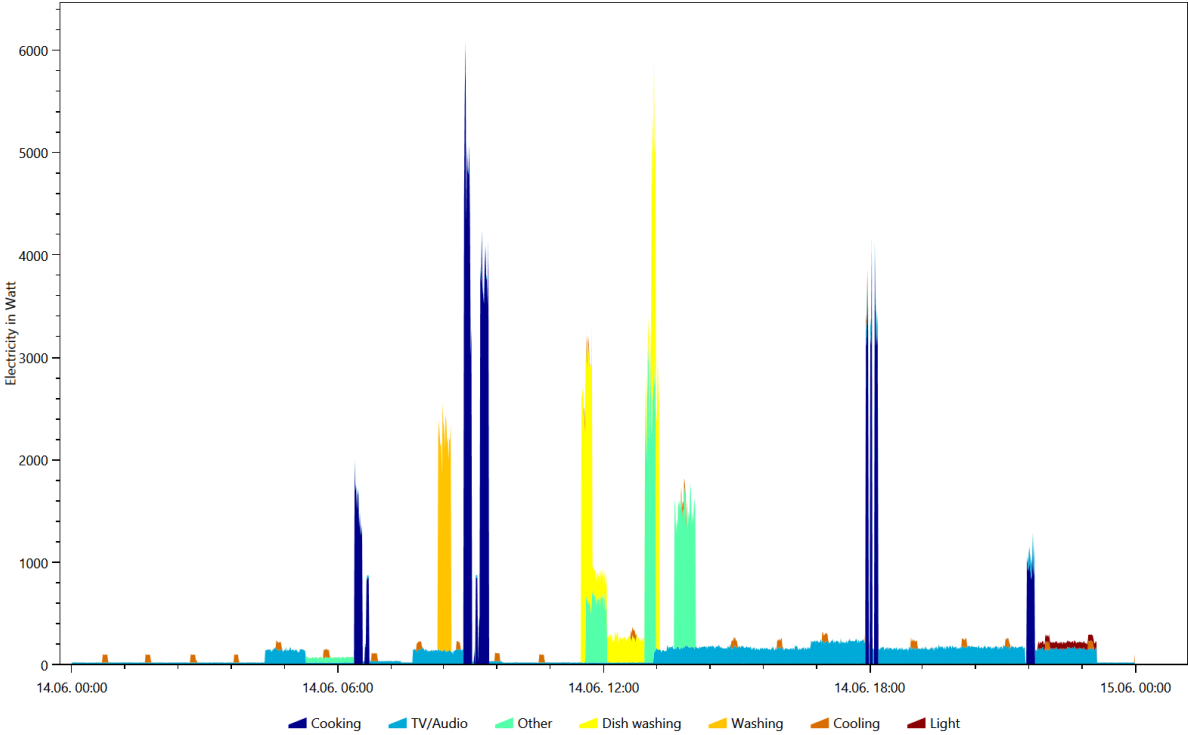
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.8



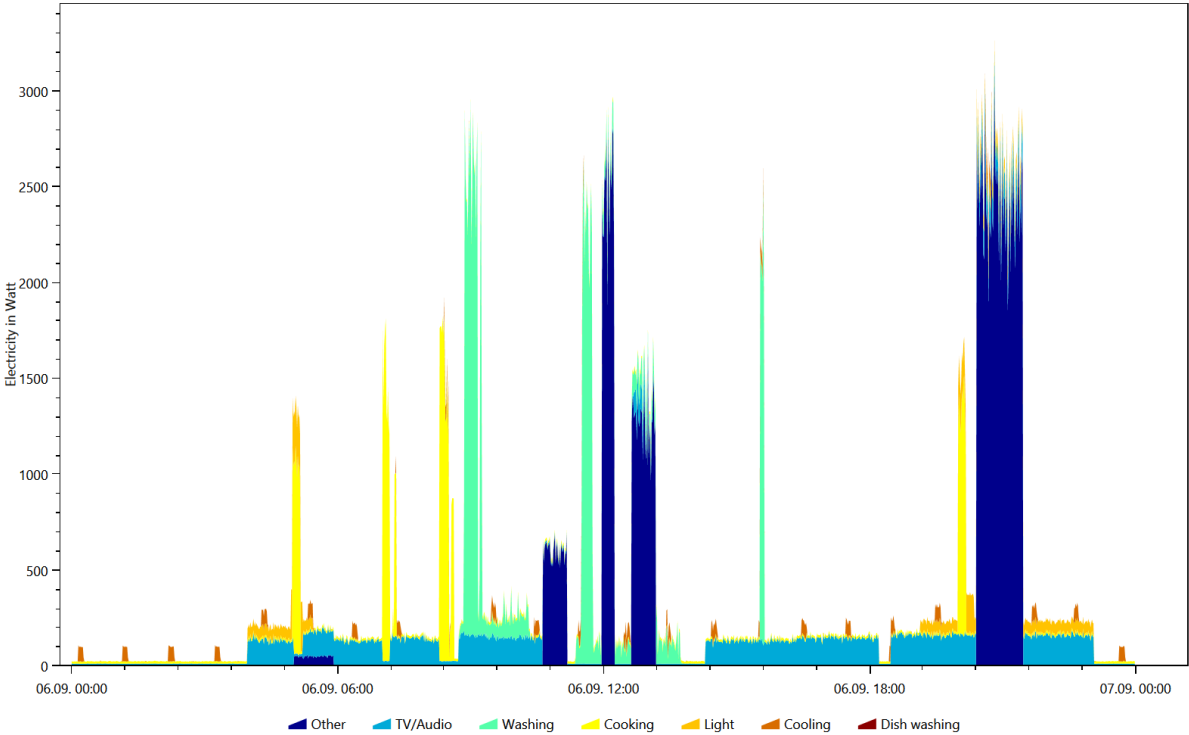
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.4



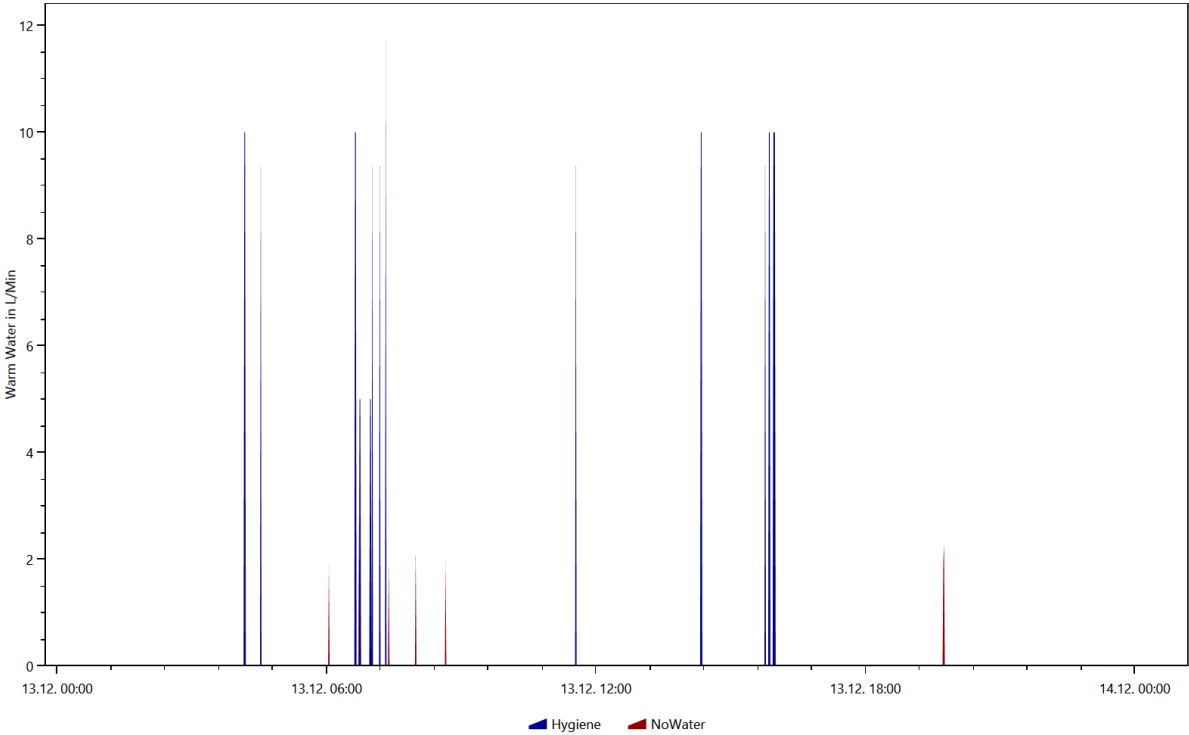
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.14



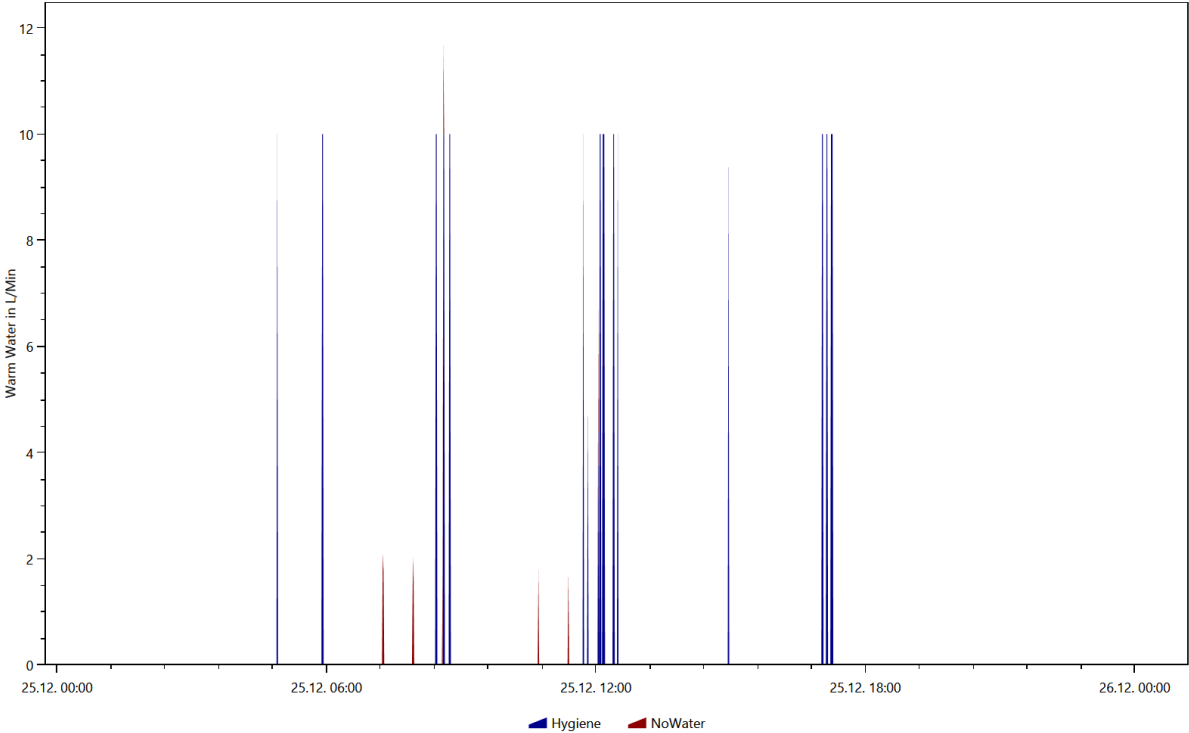
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.6



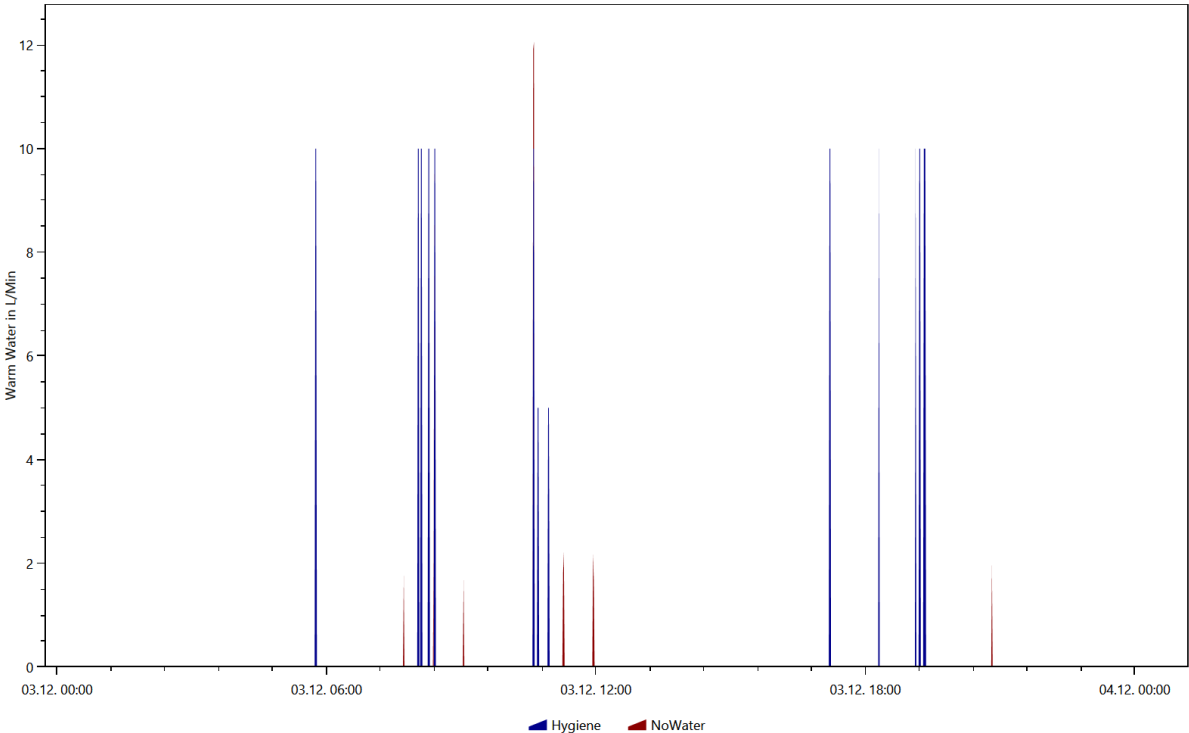
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.13



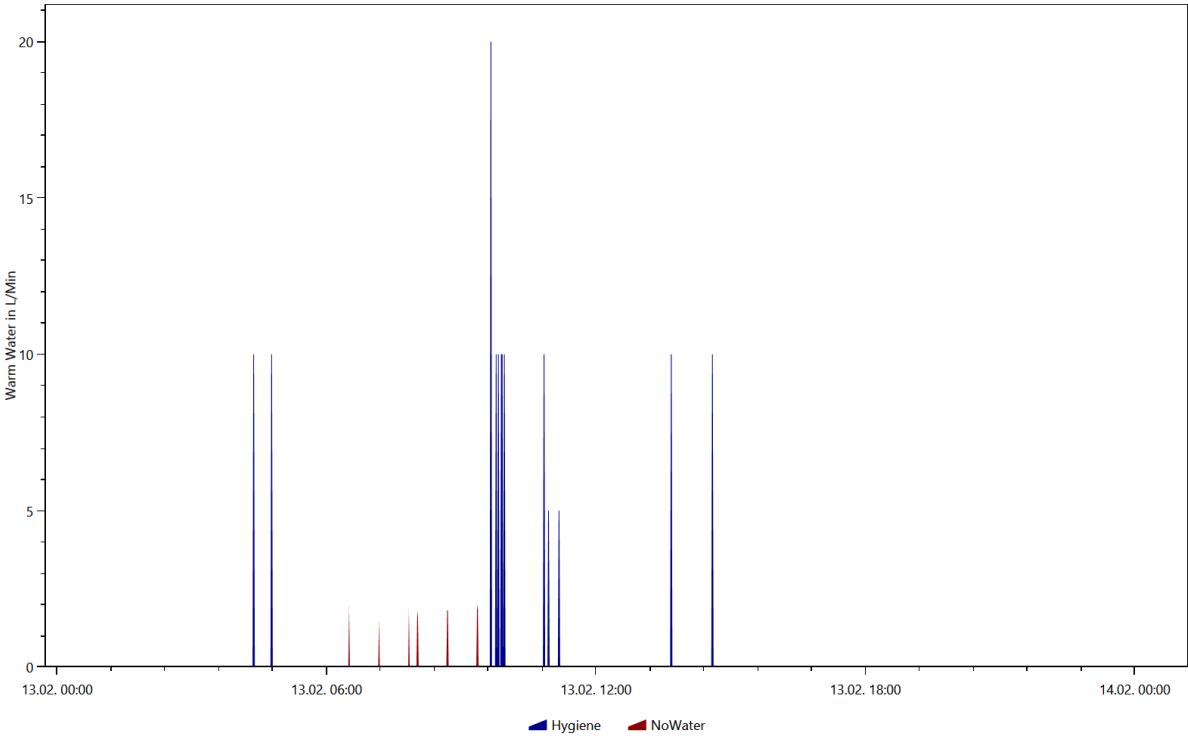
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.25



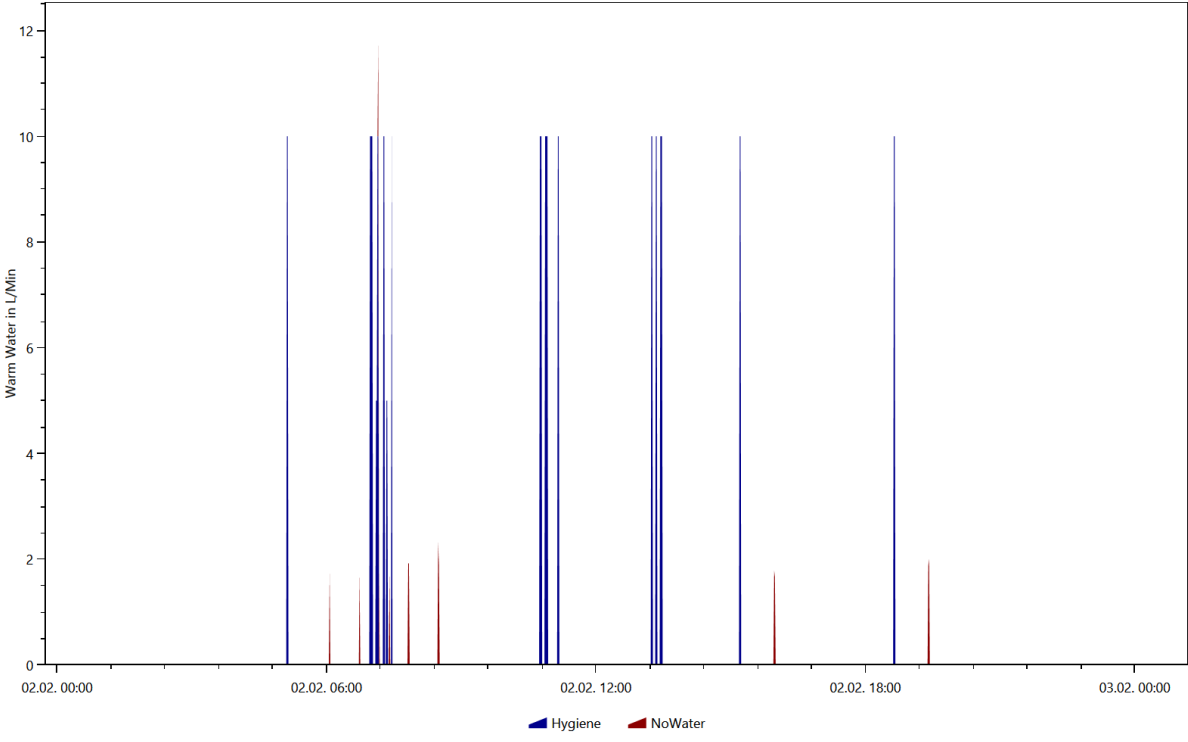
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.3



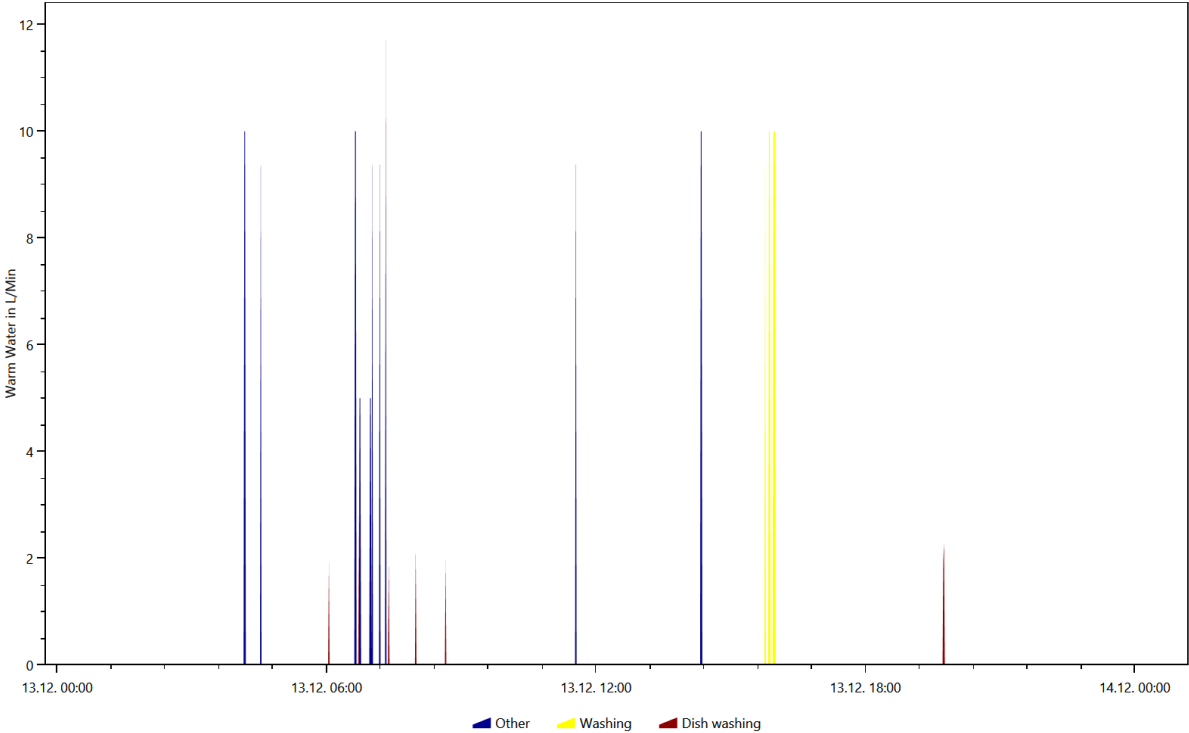
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.13



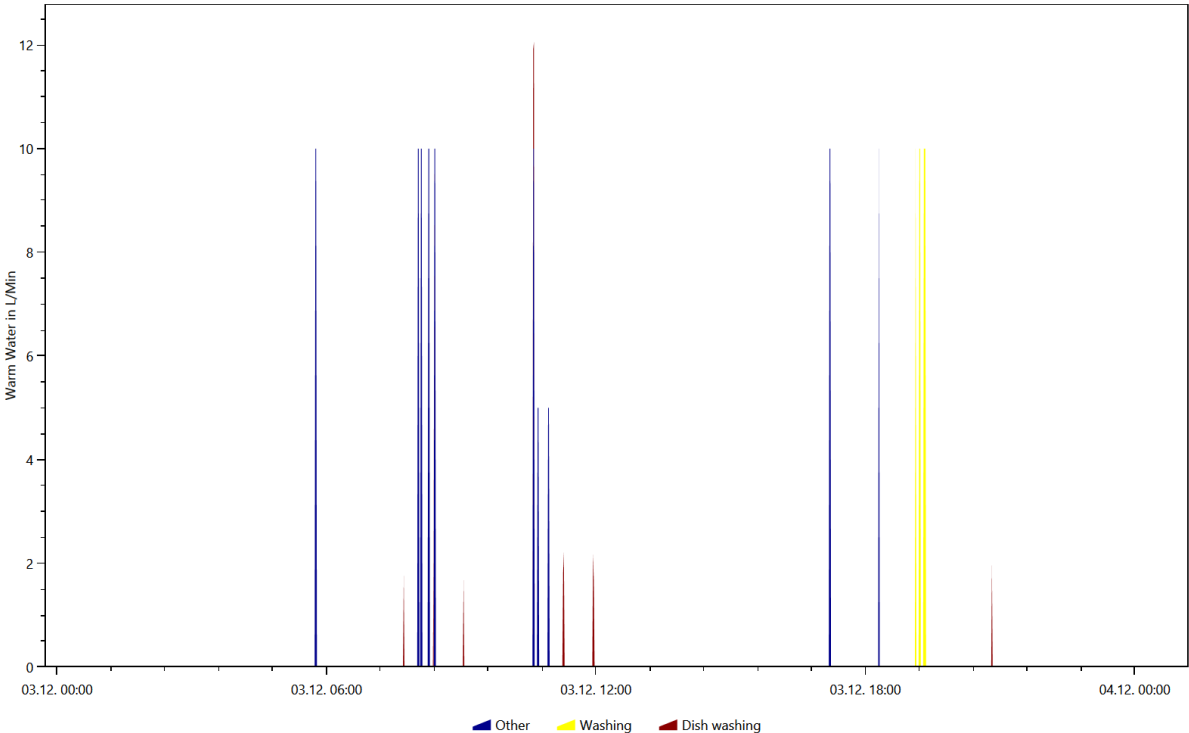
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.2



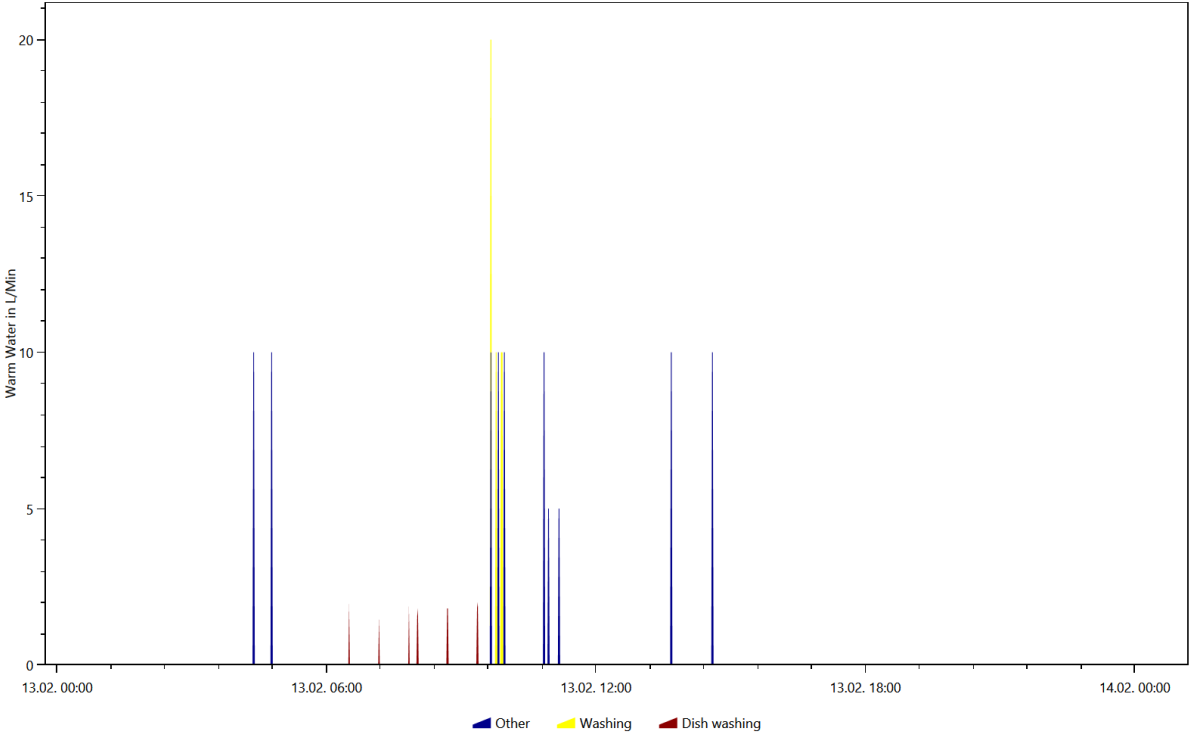
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.13



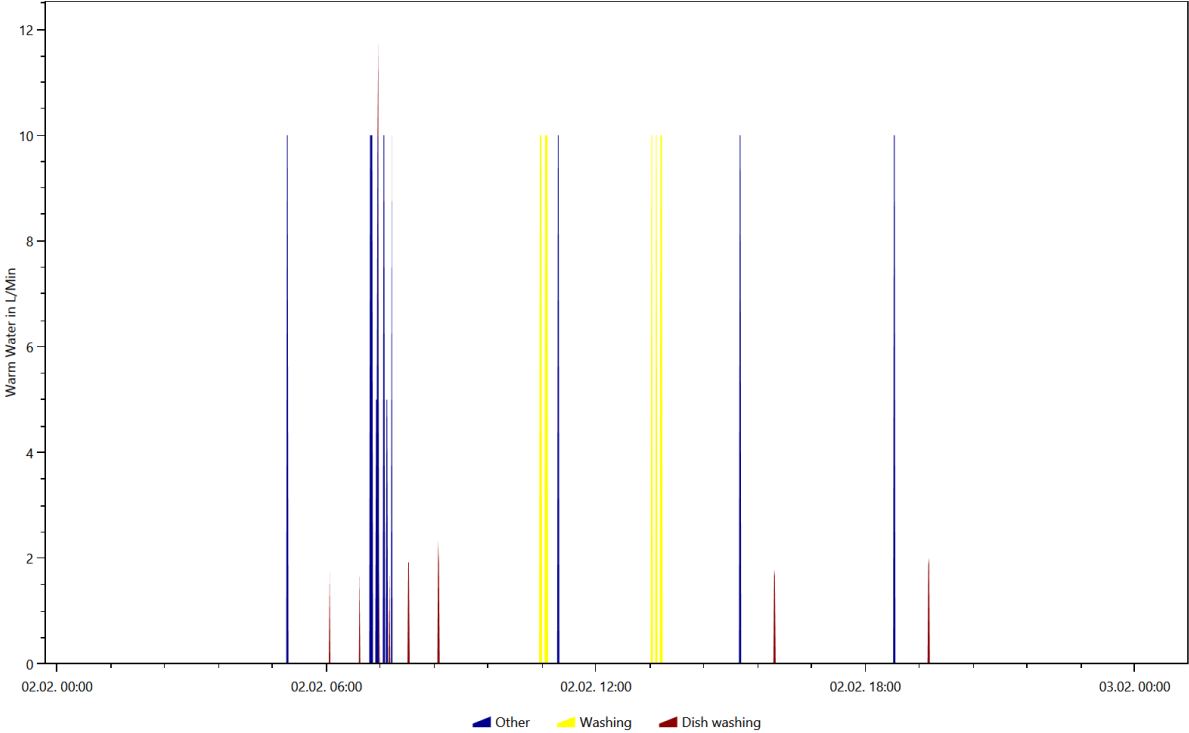
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.3



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.13



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.2

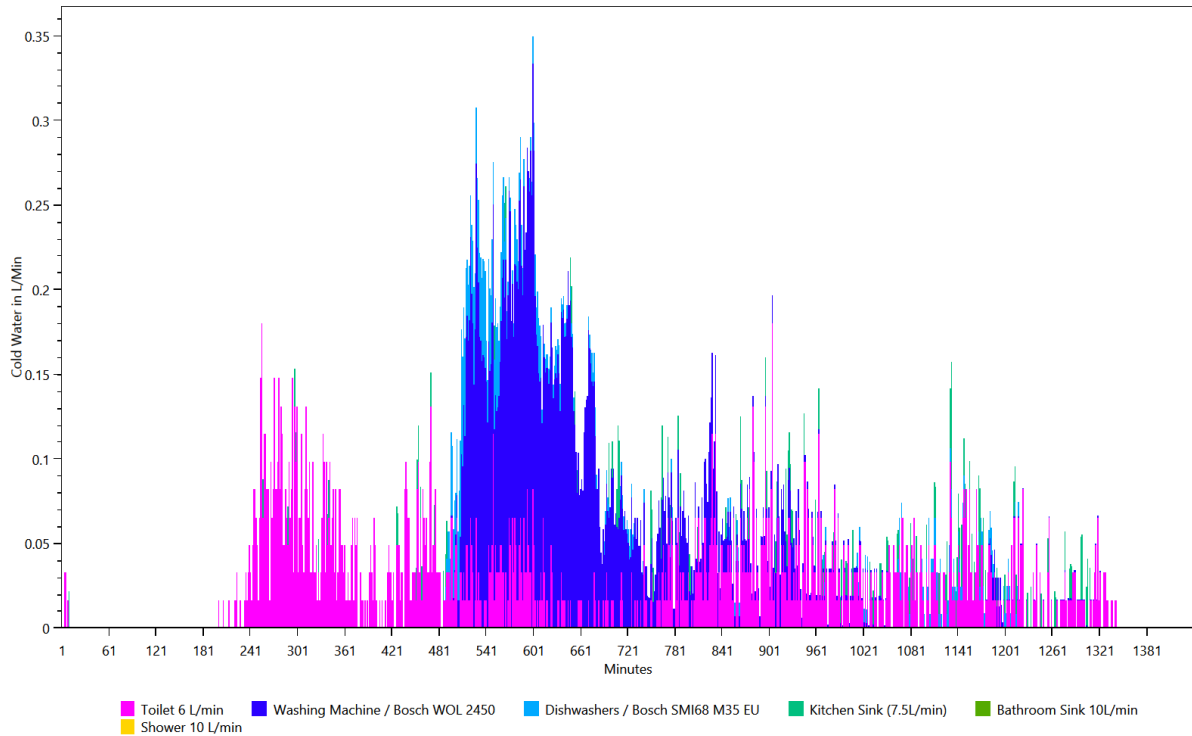


Overview of the time and power of the use per load type per device

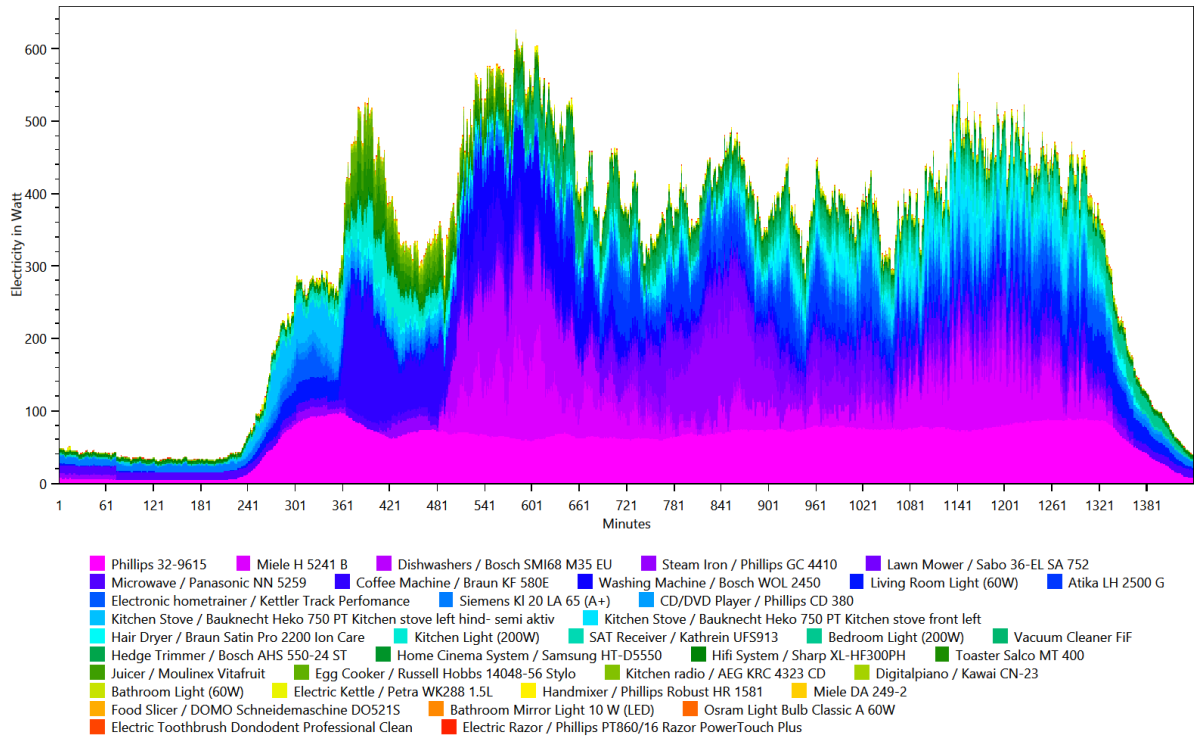
This is made from the files starting with: **TimeOfUseEnergyProfiles**

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

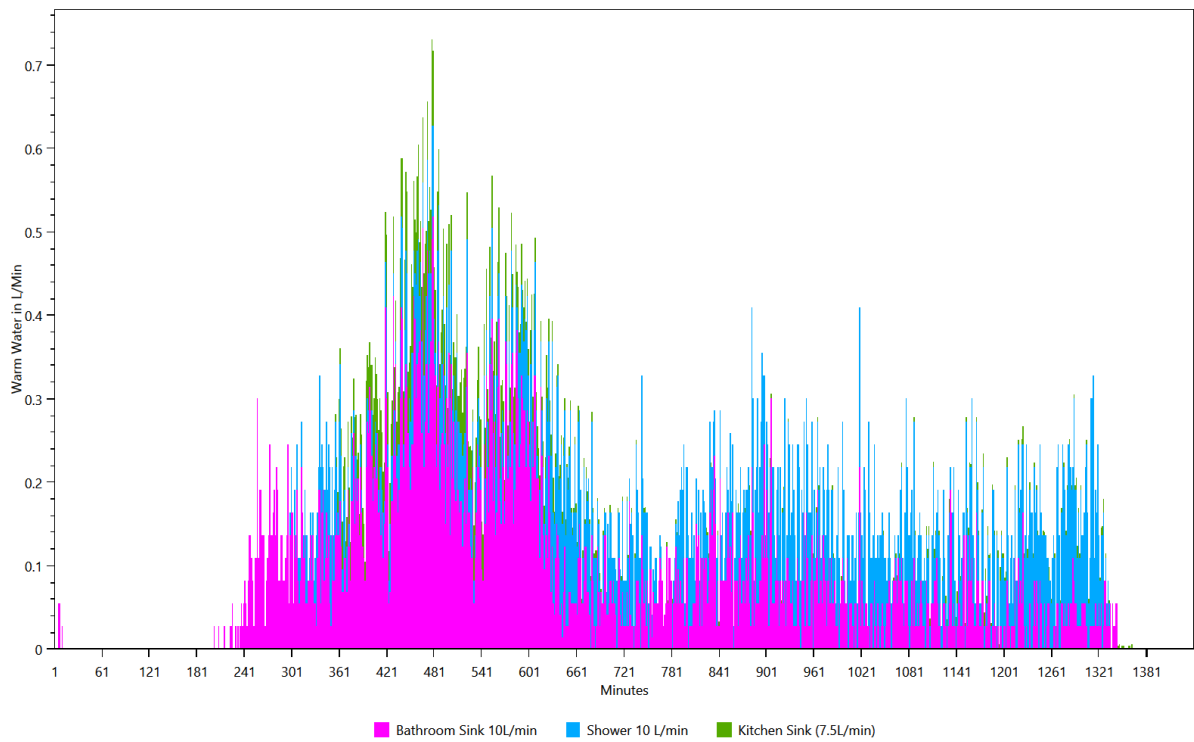
Cold Water



Electricity



Warm Water

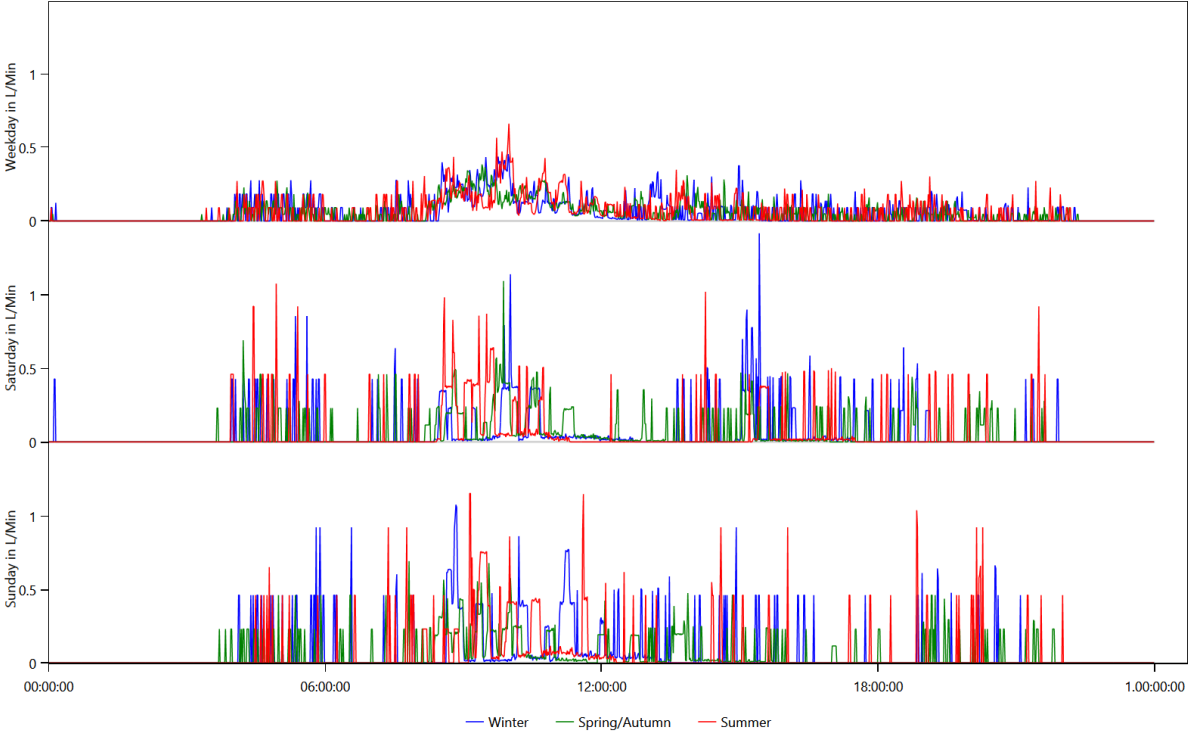


Energy use per load type during different seasons, split by weekday/saturday/sunday

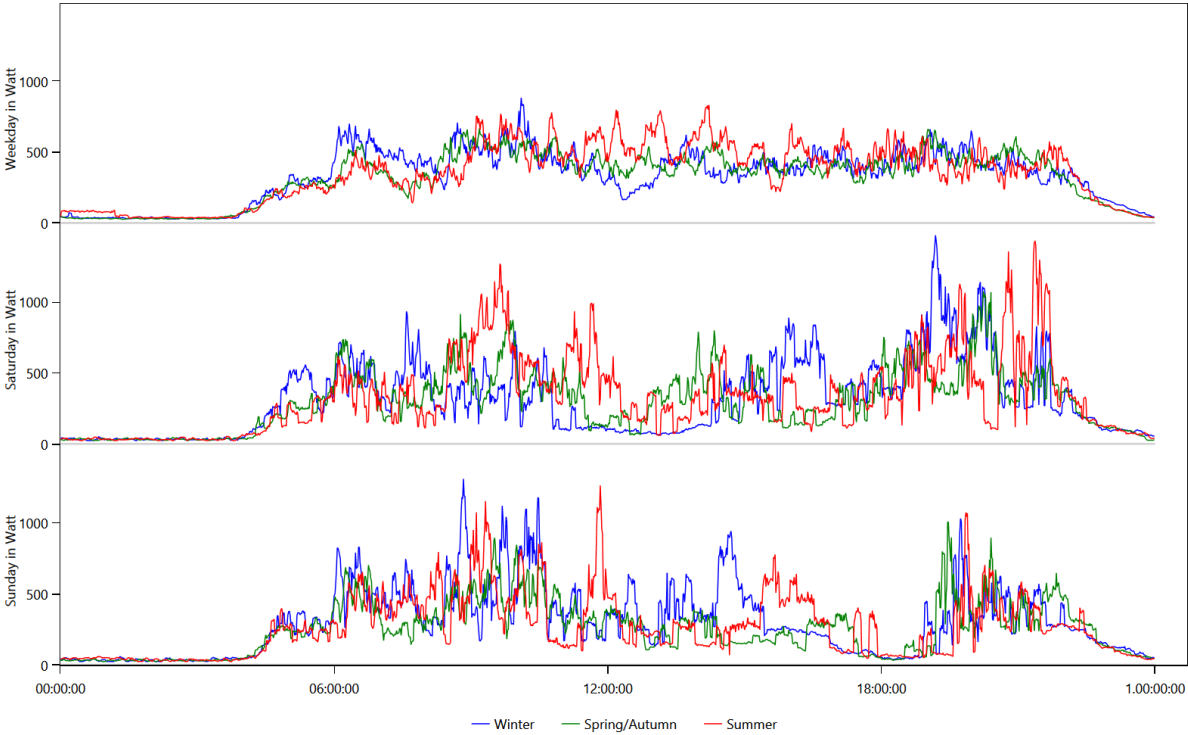
This is made from the files starting with: WeekdayProfiles

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

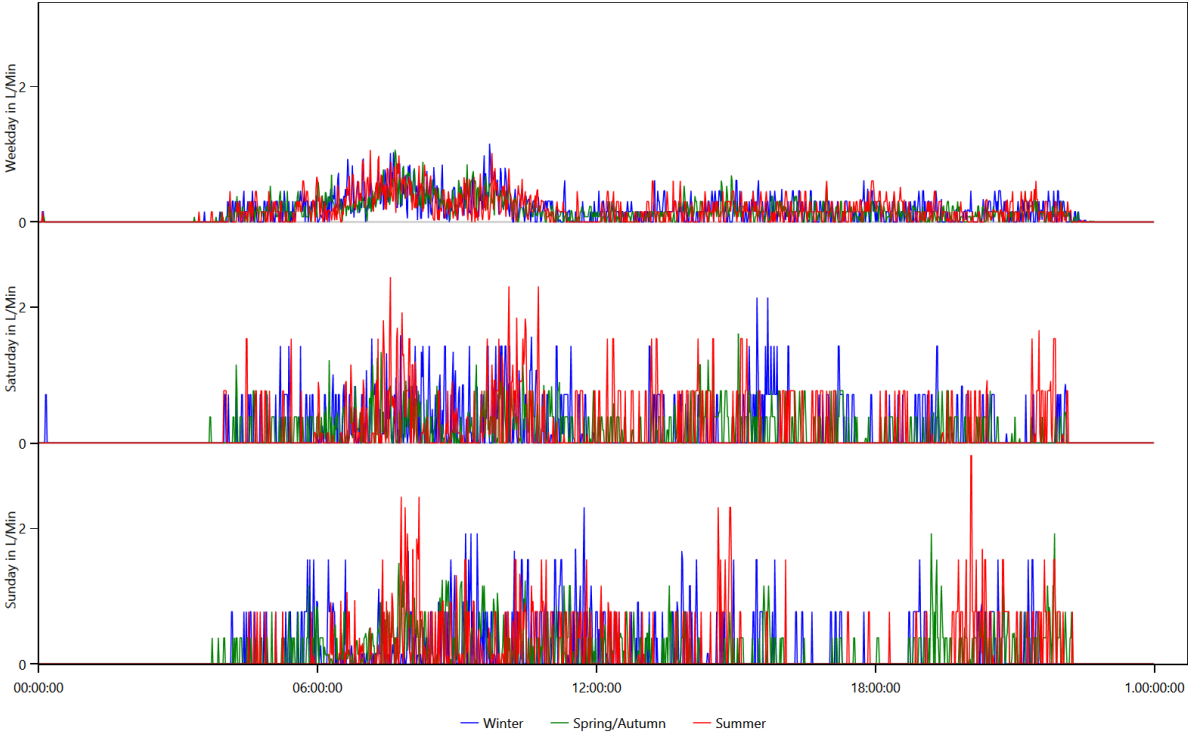
Cold Water



Electricity



Warm Water

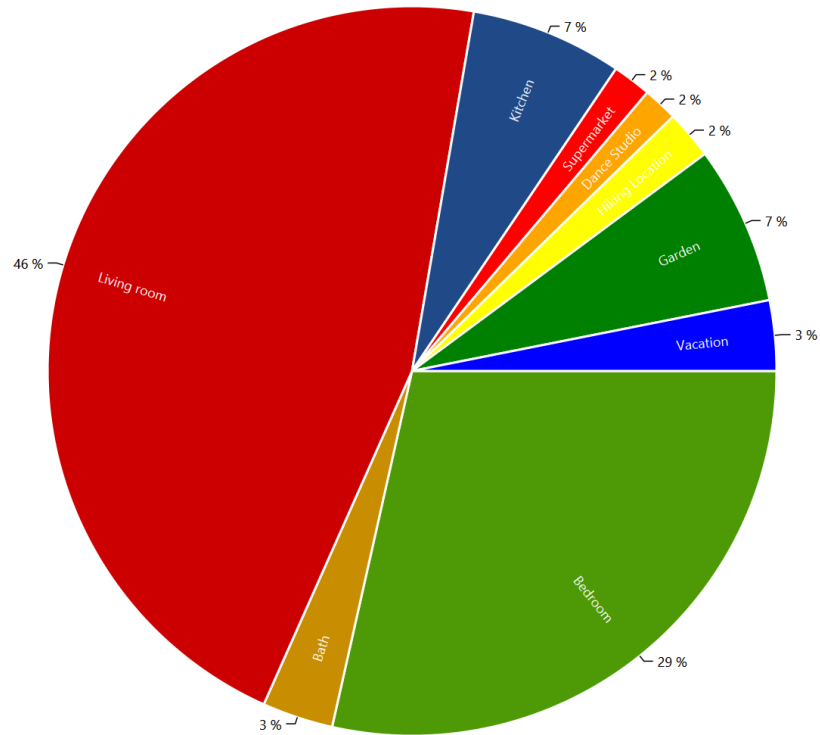


Location Distribution per Person

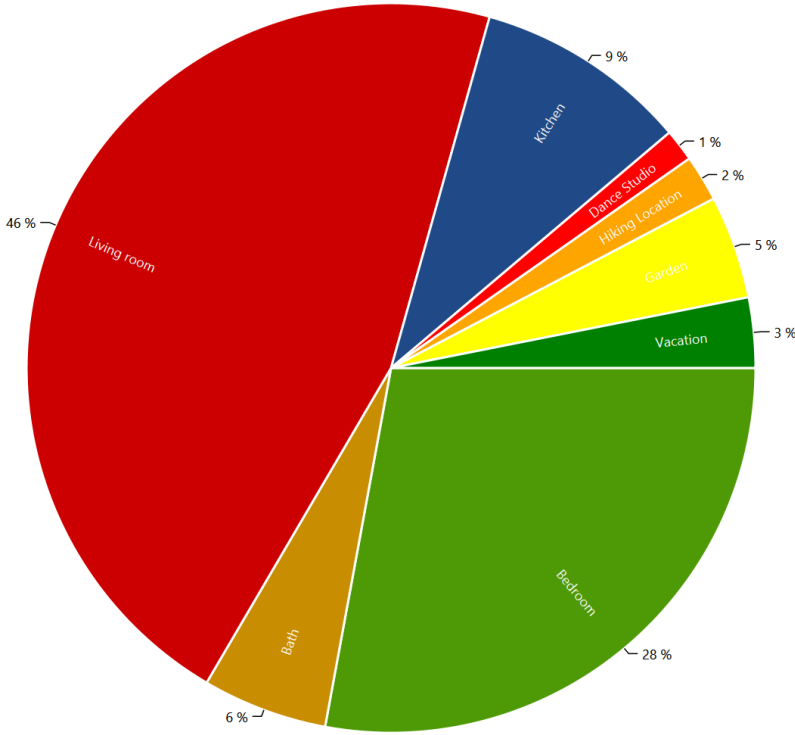
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR51 Gustav (69 Male)



CHR51 Maren (67 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

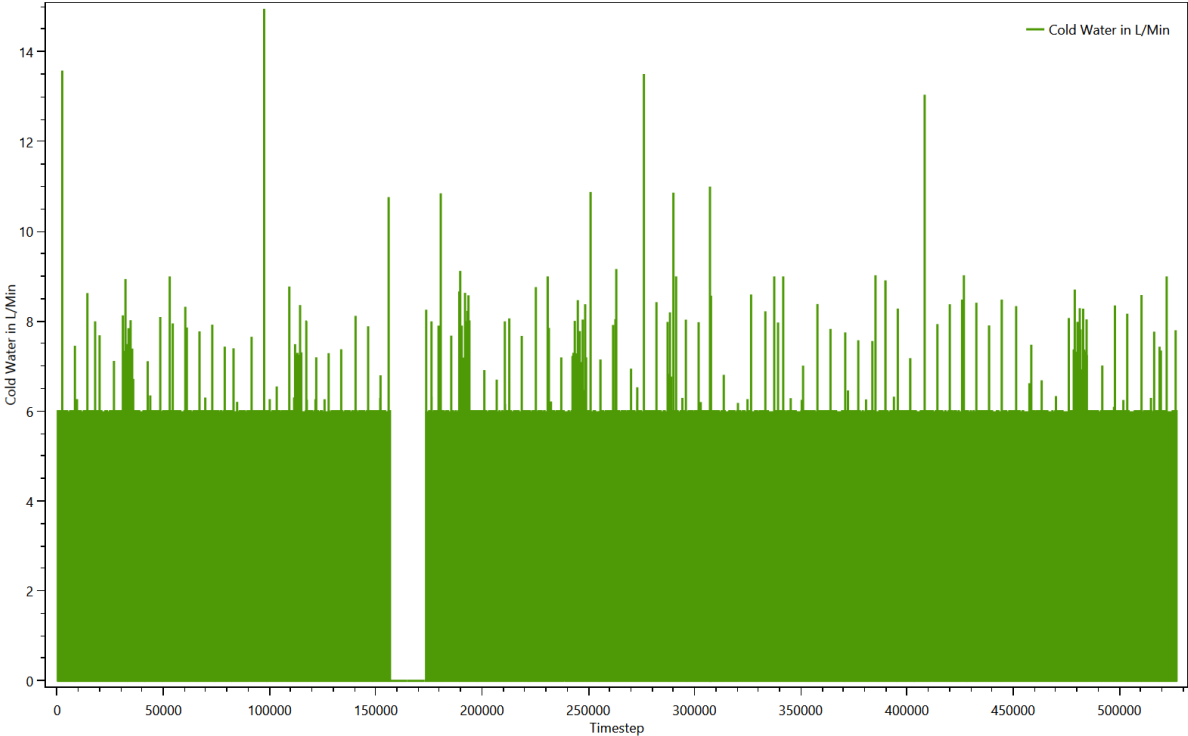
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR51 Gustav (69/Male);sleep bed 01 (06 h);sleep;False;
0;01.01.2016 00:00;CHR51 Maren (67/Female);sleep bed 02 (06 h);sleep;False;
289;01.01.2016 04:49;CHR51 Maren (67/Female);go to the toilet;hygiene;False;
296;01.01.2016 04:56;CHR51 Maren (67/Female);watch a movie for 1 h 30 min;Passive Entertainment (TV etc.);False;
324;01.01.2016 05:24;CHR51 Gustav (69/Male);watch TV with someone (watch a movie for 1 h 30 min);Passive Entertainment (TV etc.);False;
379;01.01.2016 06:19;CHR51 Gustav (69/Male);eat breakfast (1 h);cooking;False;
379;01.01.2016 06:19;CHR51 Maren (67/Female);get ready in the morning (women);hygiene;False;
402;01.01.2016 06:42;CHR51 Maren (67/Female);fry two eggs and eat them with toast;cooking;False;
420;01.01.2016 07:00;CHR51 Maren (67/Female);play board games (1 h);Offline Entertainment;False;
441;01.01.2016 07:21;CHR51 Gustav (69/Male);go to the toilet;hygiene;False;
447;01.01.2016 07:27;CHR51 Gustav (69/Male);go shopping for food in the supermarket (1.5 h);shopping;False;
491;01.01.2016 08:11;CHR51 Maren (67/Female);eat breakfast (1 h);cooking;False;
541;01.01.2016 09:01;CHR51 Gustav (69/Male);play board games (1 h);Offline Entertainment;False;
553;01.01.2016 09:13;CHR51 Maren (67/Female);do laundry at 30°C (by variable);cleaning;False;
569;01.01.2016 09:29;CHR51 Maren (67/Female);watch TV (1 h);Passive Entertainment (TV etc.);False;
609;01.01.2016 10:09;CHR51 Gustav (69/Male);clean the bath;cleaning;False;
623;01.01.2016 10:23;CHR51 Maren (67/Female);take a shower without hair washing (women);hygiene;False;
668;01.01.2016 11:08;CHR51 Gustav (69/Male);watch a movie for 2 h;Passive Entertainment (TV etc.);False;
692;01.01.2016 11:32;CHR51 Maren (67/Female);watch TV with someone (watch a movie for 2 h);Passive Entertainment (TV etc.);False;

Sum Profiles

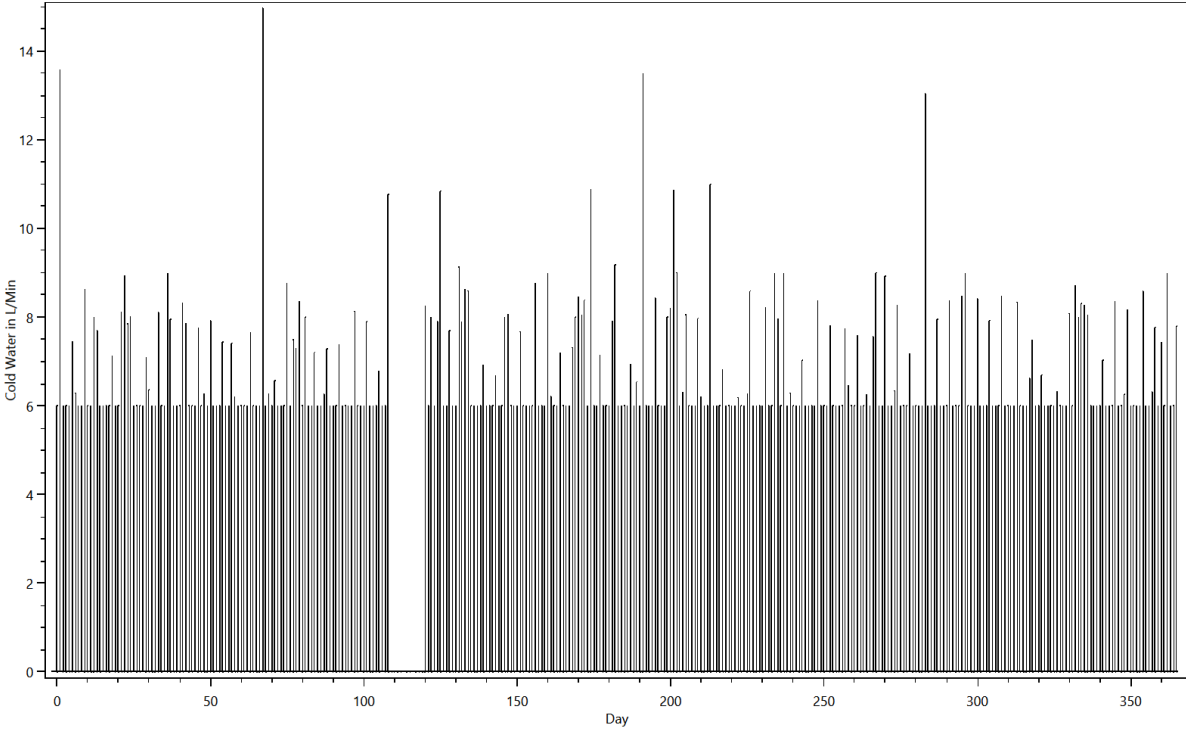
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

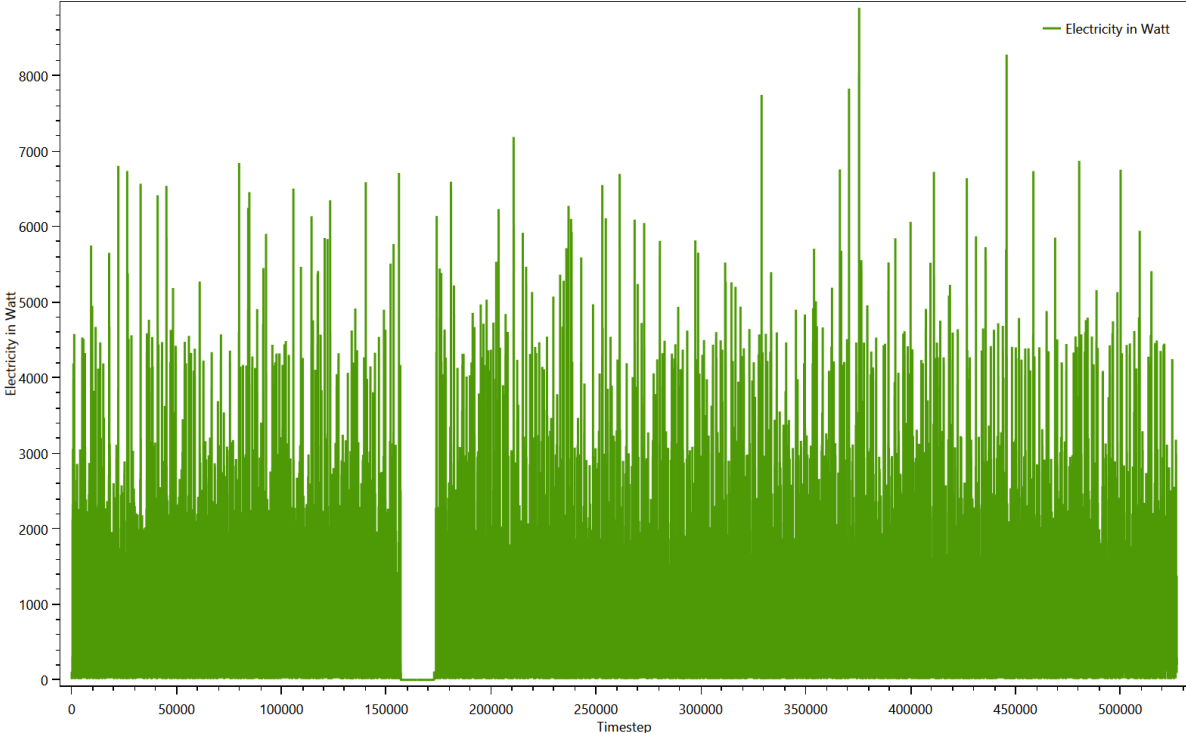
[Summed up curve for Cold Water from SumProfiles.Cold Water.png](#)



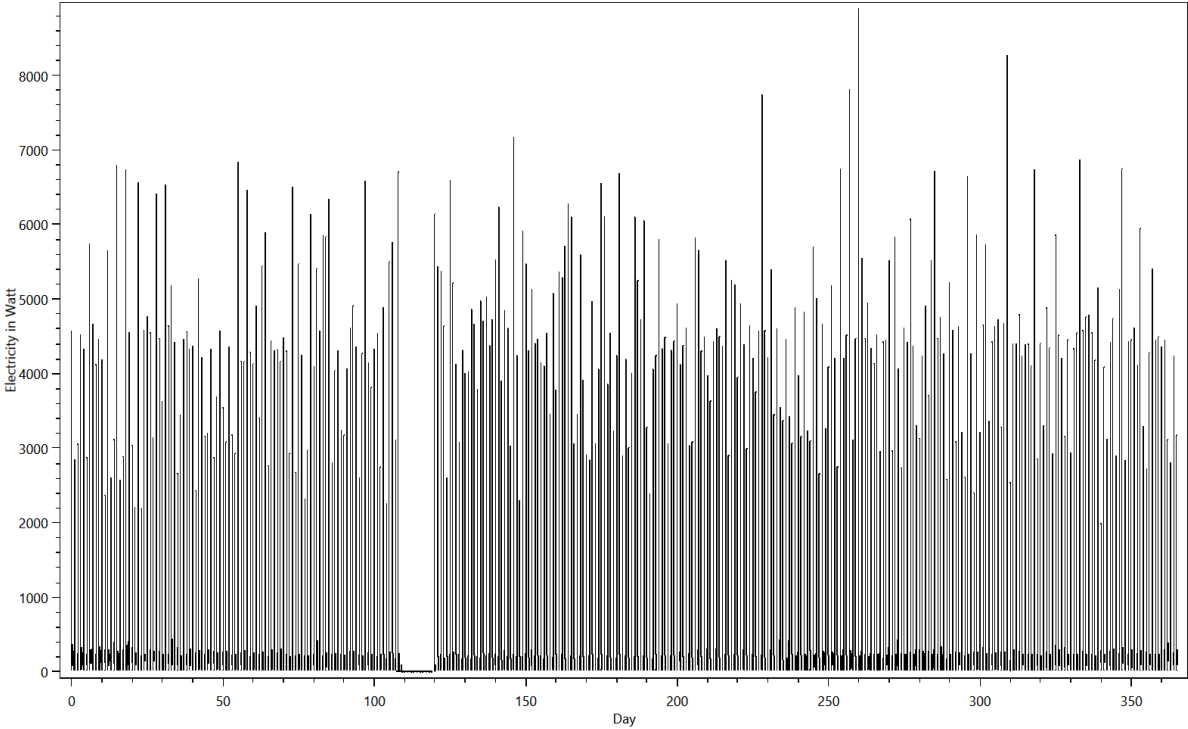
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



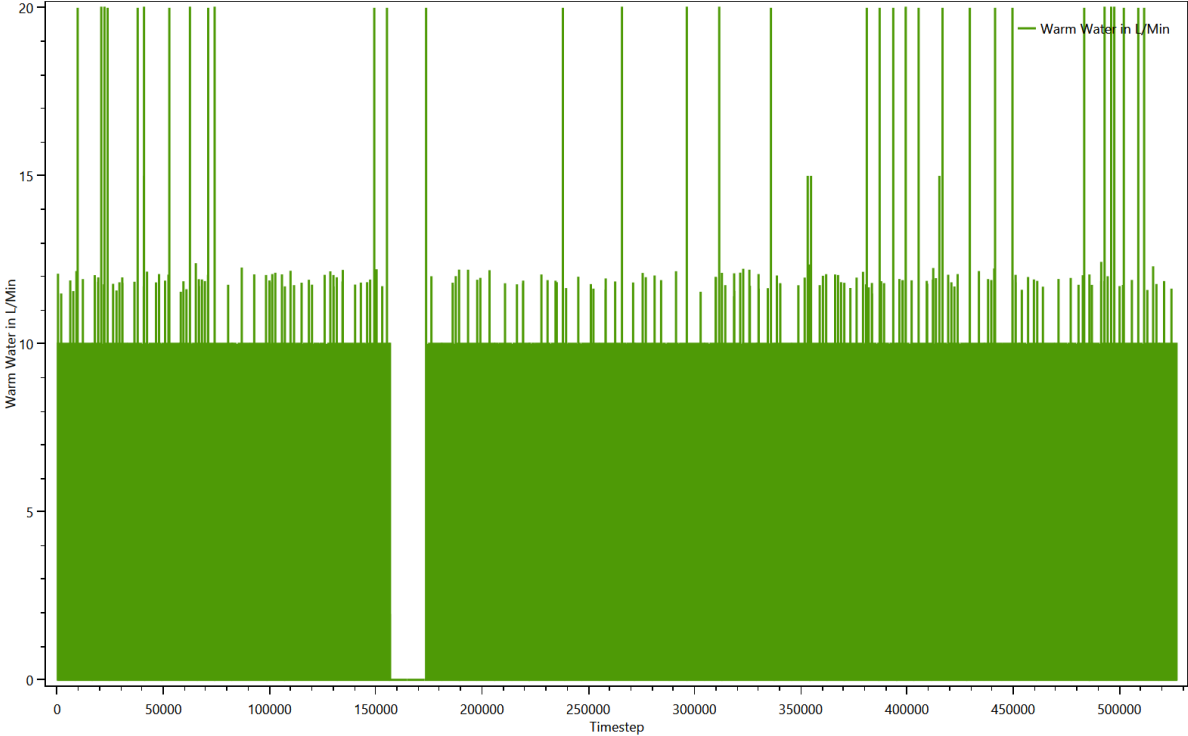
Summed up curve for Electricity from SumProfiles.Electricity.png



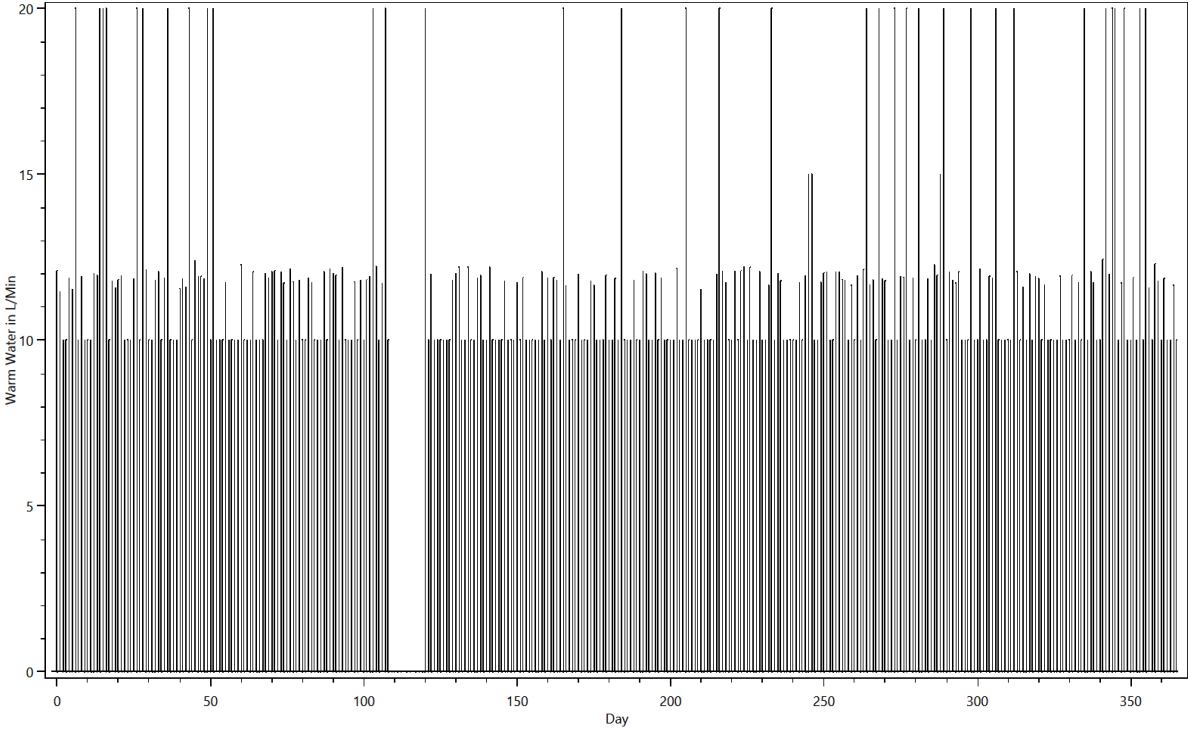
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR51 Couple over 65 years II 0.txt

Device;Load Type;Profile;Number of Activations

Atika LH 2500 G;Electricity;0 h 15 min 100% [Synthetic];181

Bathroom Light (60W);Electricity;Bath - light [Synthetic for Light Device];853

Bathroom Mirror Light 10 W (LED);Electricity;Bath - light [Synthetic for Light Device];853

Bathroom Sink 10L/min;Warm Water;0 h 01 min 100% [Synthetic];2707

Bathroom Sink 10L/min;Warm Water;0 h 01 min 50% [Synthetic];532

Bed 1;None;06 h 0 min 100% [Synthetic];357

Bed 2;None;06 h 0 min 100% [Synthetic];356

Bedroom Light (200W);Electricity;Bedroom - light [Synthetic for Light Device];169

Board Games;None;01 h 0 min 100% [Synthetic];215

Book;None;01 h 0 min 100% [Synthetic];42

CD/DVD Player / Phillips CD 380;Electricity;01 h 30 min 100% [Synthetic];739

CD/DVD Player / Phillips CD 380;Electricity;02 h 0 min 100% [Synthetic];576

CD/DVD Player / Phillips CD 380;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8526

Cleanser;None;01 h 0 min 100% [Synthetic];109

Cloth Drying Rack;None;0 h 20 min 100% [Synthetic];147

Coffee Machine / Braun KF 580E;Electricity;0 h 10 min 100% [Synthetic];678

Couch;None;01 h 0 min 100% [Synthetic];25

Couch;None;02 h 0 min 100% [Synthetic];1253

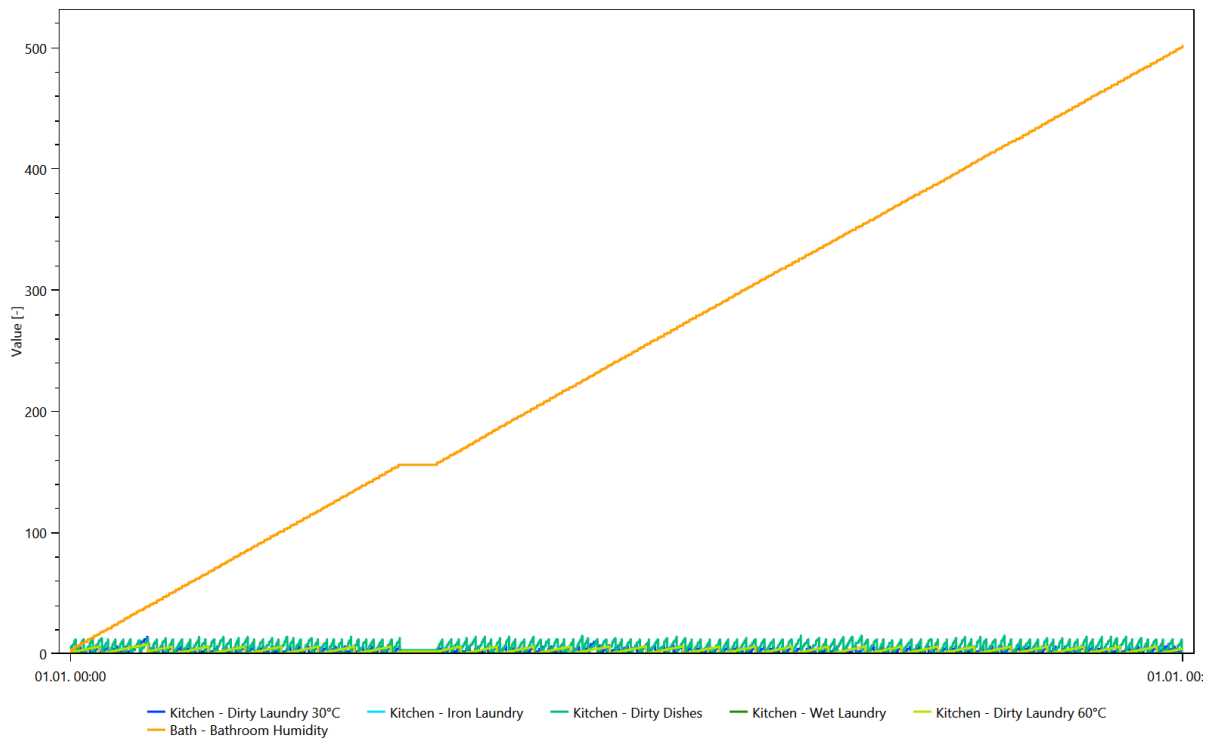
Dancing Shoes;None;03 h 0 min 100 % [Synthetic];51

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

