

Overview of the results of the household CHR43 Single man with 1 child, with work 0

Calculation Time

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

Energy Intensity: Random

Seed 6390

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:28:51

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	30678.55	L
Electricity	2984.01	kWh
Warm Water	75430.00	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	83.82	L
Electricity	8.15	kWh
Warm Water	206.09	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	22.57	L/Min
Electricity	-25.30	11300.33	Watt
Warm Water	0.00	17.50	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	15339.27	L
Electricity	1492.00	kWh

Warm Water	37715.00	L
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Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	41.91	L
Electricity	4.08	kWh
Warm Water	103.05	L

Persons

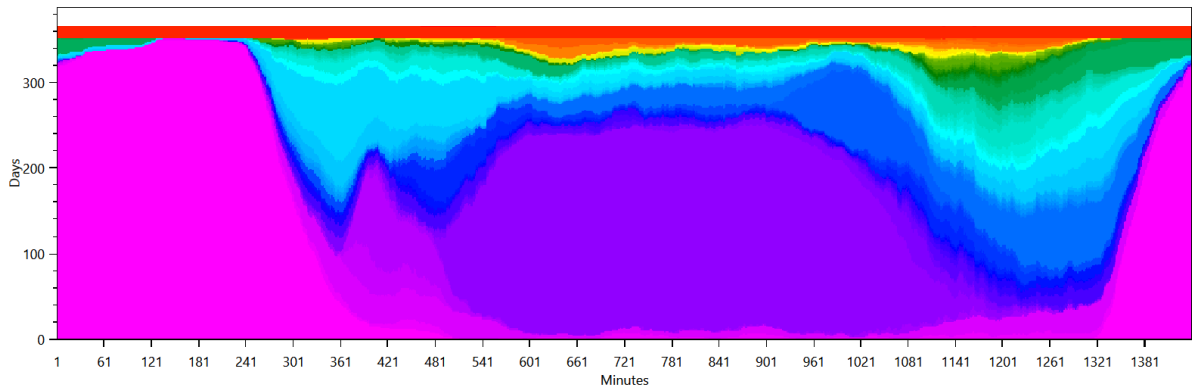
- HH0
 - CHR43 Lutz (43/Male)(43/Male)
 - CHR43 Maik (16/Male)(16/Male)

Activity Frequency Charts

This is made from the files starting with: ActivityFrequenciesPerMinute

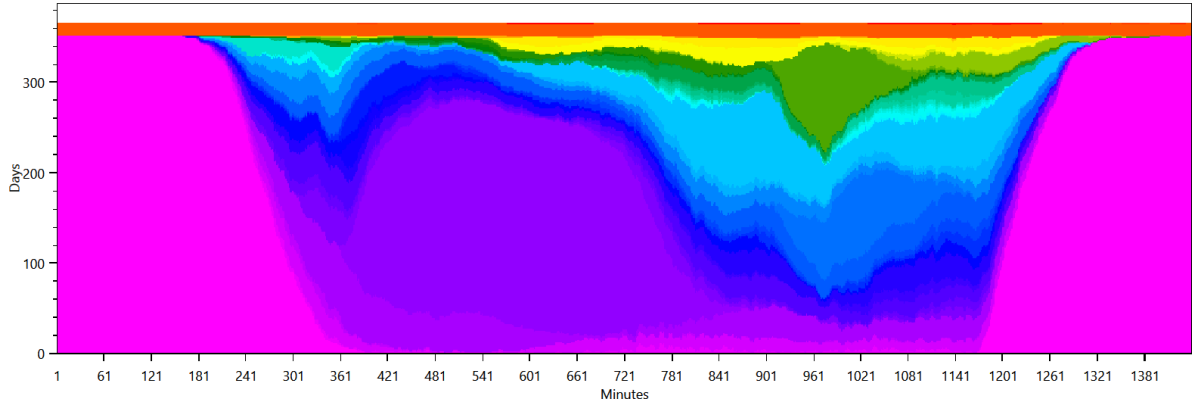
These charts show an ordered distribution of times of the activities of each person. This helps with judging quickly if a person is sleeping correctly and if they are going to work regularly.

HH0 - CHR43 Lutz (43 Male)



- sleep bed 01 (06 h)
- paint a picture
- watch a movie for 2 h with home cinema system
- get ready in the morning (men)
- eat small breakfast (25min) interrupting subaff, no alarm
- go to the toilet
- work as teacher
- take a shower (men)
- do laundry at 30°C (by variable)
- wash 4 dishes by hand
- use the computer (2 h)
- run the dryer with wet laundry (by variable)
- make roulades and eat them
- read a book (1 h)
- wash 5 dishes by hand
- use the computer with external HD (1 h)
- go shopping for food in the supermarket (1.5 h)
- clean the bath
- play board games (1 h)
- take nap on the weekend (2 h)
- read a book on the couch only 9:00 to 22:00
- make mashed potatoes and eat them
- use the computer (1 h)
- play a puzzle game
- wash 2 dishes by hand
- watch a movie for 1 h 30 min with home cinema system
- read a book on the couch all the time
- vacuum the household
- use the computer (1.5 h)
- make custom pizza and eat it
- use the computer for recreation (2 h)
- cook food with steam cooker and eat it
- wash 3 dishes by hand
- cook food with a deep fryer and eat it
- listen to music on compact hifi (2 h)
- do laundry at 60°C (by variable)
- cook a sunday feast with extractor hood and eat it
- go to a bar (4 h)
- make fondue and eat it
- cook pasta and eat it
- heat up leftovers
- fry two eggs and eat them with toast
- eat a cooked meal (interrupting) (make mashed potatoes and eat them)
- join watching a movie in the home cinema (watch a movie for 2 h with home cinema system)
- make soup
- wash 1 dishes by hand
- microwave frozen meal and eat it
- make frozen pizza and eat it
- join watching a movie in the home cinema (watch a movie for 1 h 30 min with home cinema system)
- cook food with rice and eat it
- eat a cooked meal (interrupting) (heat up leftovers)
- eat a cooked meal (interrupting) (make custom pizza and eat it)
- watch a movie for 2 h
- make and drink tea (15 min)
- take a nap
- read a newspaper for 30min
- watch sports on TV with SAT Reciever (2 h)
- read a magazine
- watch TV (1 h)
- eat a cooked meal (interrupting) (cook pasta and eat it)
- watch a movie for 1 h 30 min
- watch the news
- watch TV with someone (watch a movie for 1 h 30 min with home cinema system)
- relax in the garden 2
- eat a cooked meal (interrupting) (make fondue and eat it)
- relax in the garden
- eat a cooked meal (interrupting) (make frozen pizza and eat it)
- eat a cooked meal (interrupting) (cook food with rice and eat it)
- taking a vacation
- eat a cooked meal (interrupting) (make soup)
- watch TV with someone (watch a movie for 2 h with home cinema system)

HH0 - CHR43 Maik (16 Male)



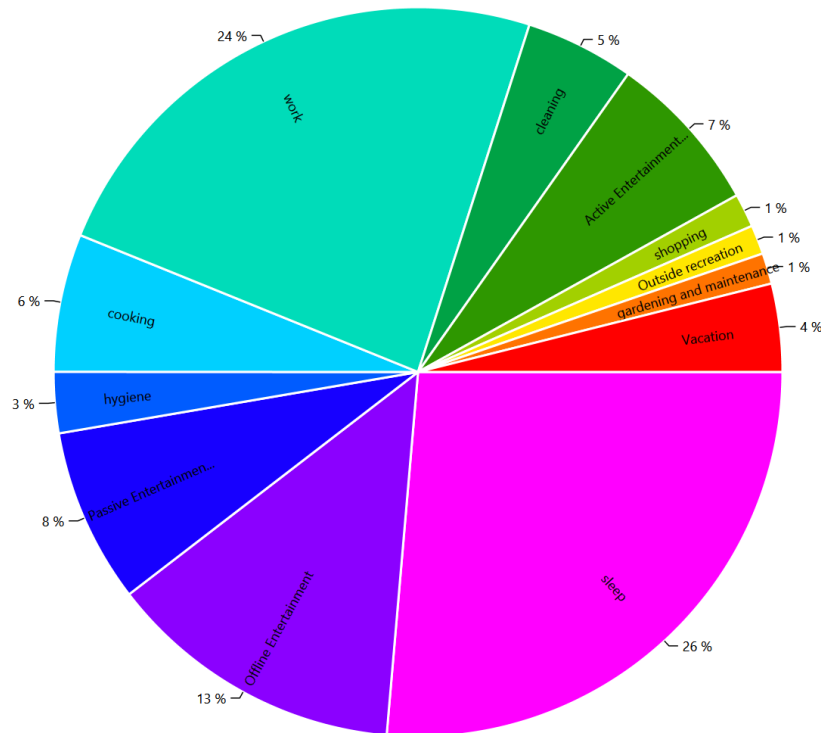
- sleep bed 03 (08 h) Child
- go to the toilet
- use the computer (1.5 h)
- fry two eggs and eat them with toast
- read a book on the couch all the time
- go to grammar school
- take a shower (men)
- play board games (1 h)
- use the computer (2 h)
- make mashed potatoes and eat them
- watch a movie for 1 h 30 min with home cinema system
- get ready in the morning (men)
- use the computer with external HD (1 h)
- eat small breakfast (25min) interrupting subaff. no alarm
- paint a picture
- play a puzzle game
- watch a movie for 2 h with home cinema system
- take nap on the weekend (2 h)
- use the computer for recreation (2 h)
- eat a cooked meal (interrupting) (make mashed potatoes and eat them)
- use the computer (1 h)
- read a book on the couch only 9:00 to 22:00
- watch TV with someone (watch a movie for 1 h 30 min with home cinema system)
- make frozen pizza and eat it
- cook food with rice and eat it
- cook pasta and eat it
- microwave frozen meal and eat it
- make soup
- make custom pizza and eat it
- make fondue and eat it
- make and drink tea (15 min)
- watch sports on TV with SAT Receiver (2 h)
- listen to music on compact hifi (2 h)
- take a nap
- read a newspaper for 30min
- read a magazine
- read a book (1 h)
- cook a sunday feast with extractor hood and eat it
- eat a cooked meal (interrupting) (make fondue and eat it)
- do homework
- join watching a movie in the home cinema (watch a movie for 2 h with home cinema system)
- watch TV with someone (watch a movie for 2 h with home cinema system)
- visit the cinema
- eat a cooked meal (interrupting) (cook food with steam cooker and eat it)
- eat a cooked meal (interrupting) (cook food with rice and eat it)
- heat up leftovers
- join watching a movie in the home cinema (watch a movie for 1 h 30 min with home cinema system)
- relax in the garden 2
- relax in the garden
- eat a cooked meal (interrupting) (cook pasta and eat it)
- eat a cooked meal (interrupting) (heat up leftovers)
- watch a movie for 1 h 30 min
- watch TV (1 h)
- eat a cooked meal (interrupting) (make soup)
- eat a cooked meal (interrupting) (make frozen pizza and eat it)
- taking a vacation
- eat a cooked meal (interrupting) (cook food with a deep fryer and eat it)
- eat a cooked meal (interrupting) (make roulades and eat them)
- eat a cooked meal (interrupting) (make custom pizza and eat it)
- watch a movie for 2 h

Activity Distribution per Person

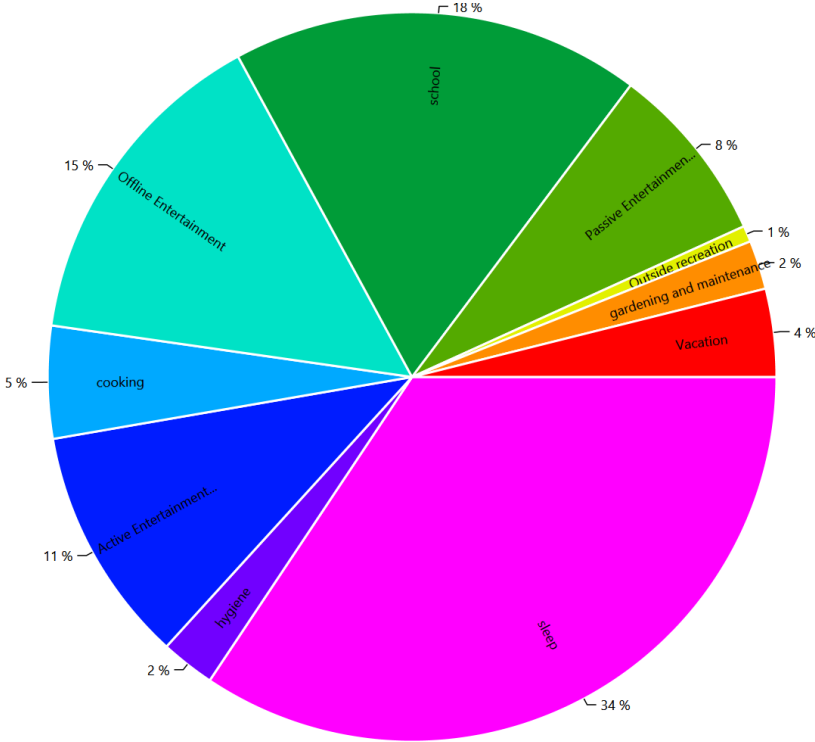
This is made from the files starting with: ActivityPercentage

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

HH0 - CHR43 Lutz (43 Male)



HH0 - CHR43 Maik (16 Male)

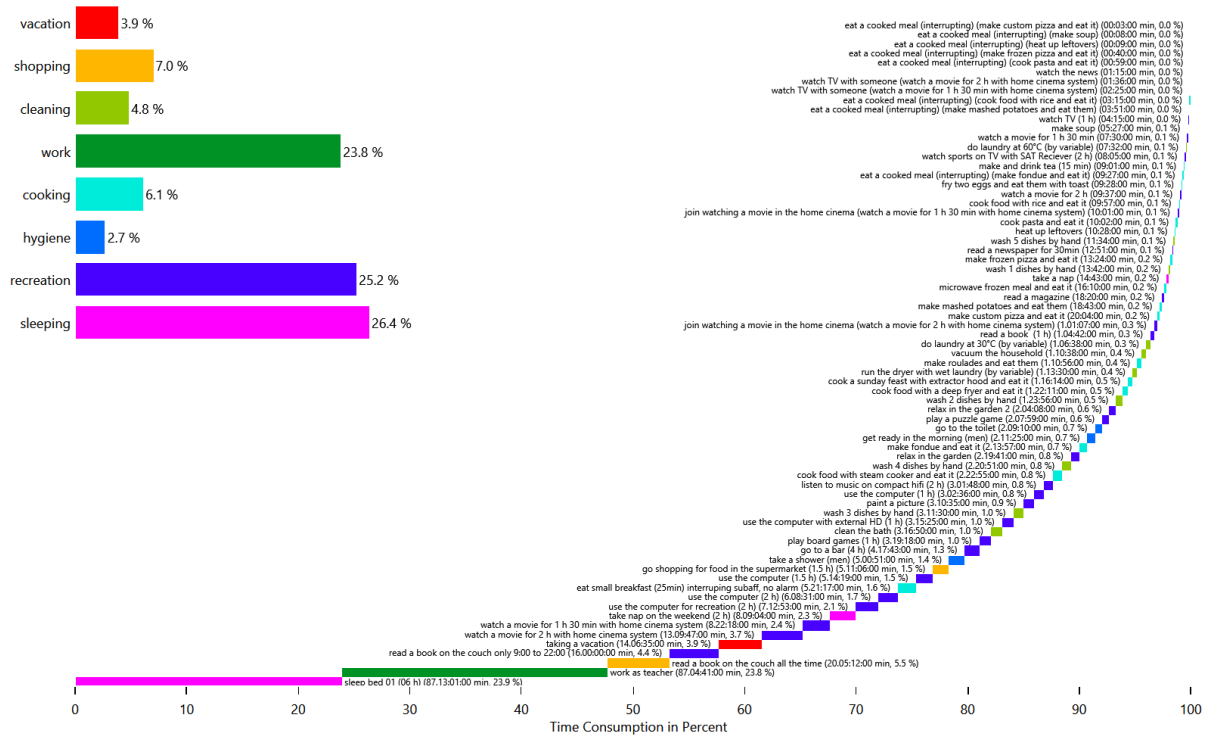


Time Use per Person per Affordance Per Person

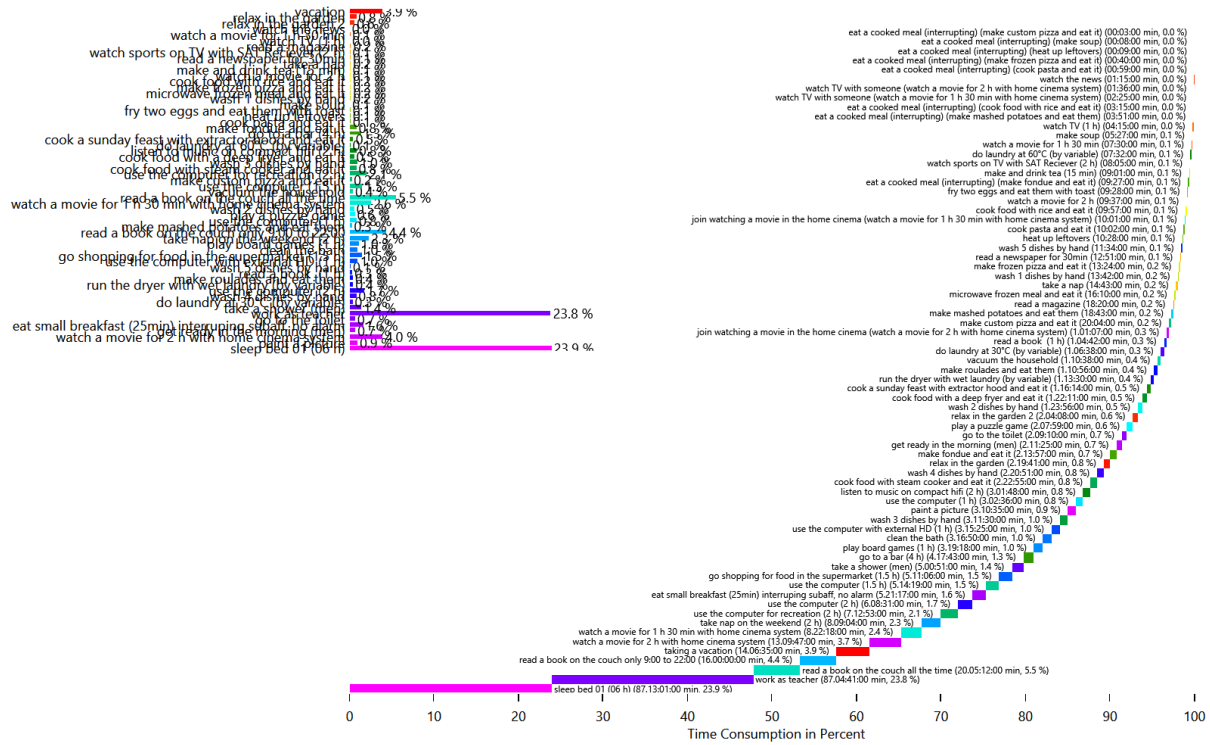
This is made from the files starting with: AffordanceTimeUse

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.

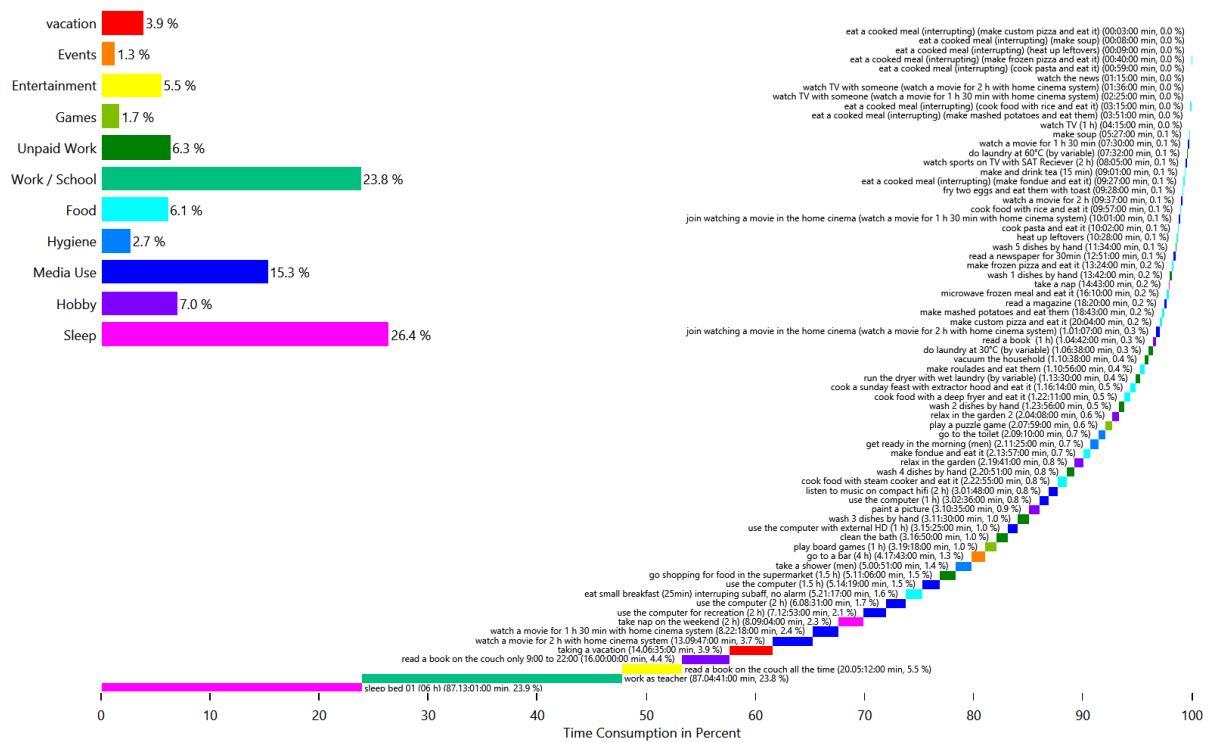
HH0 - CHR43 Lutz (43 Male)



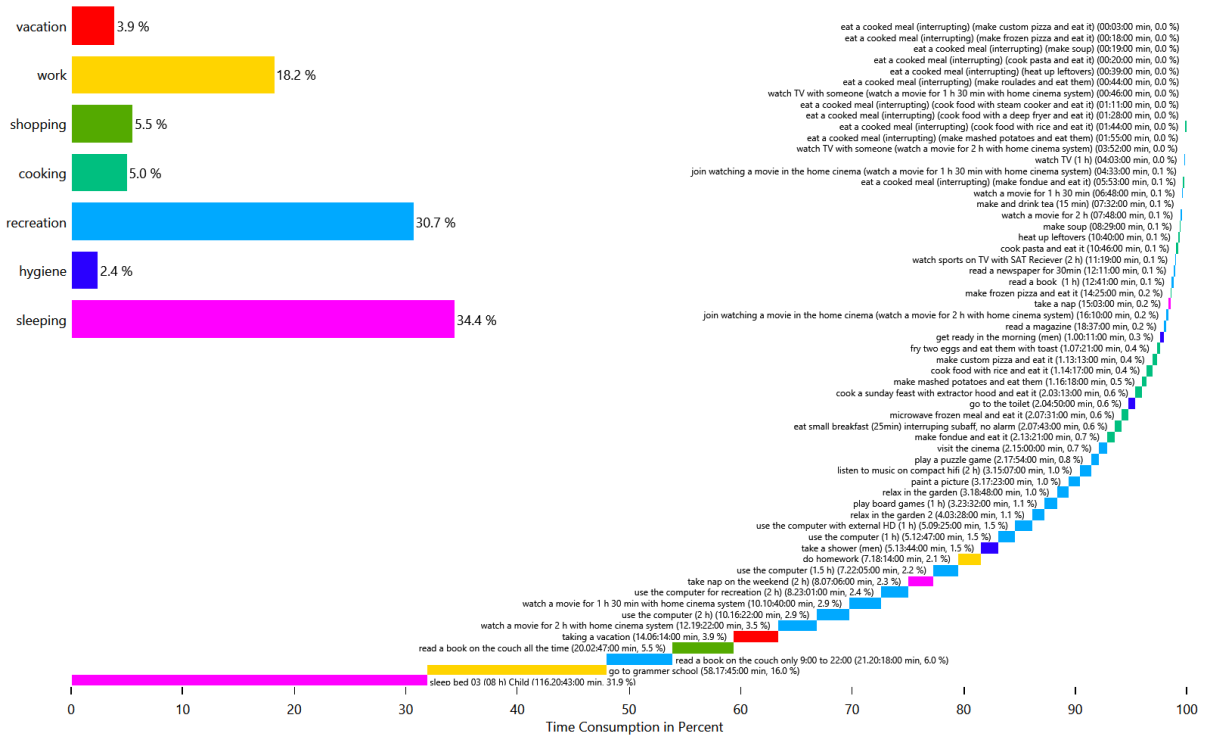
HH0 - CHR43 Lutz (43 Male)



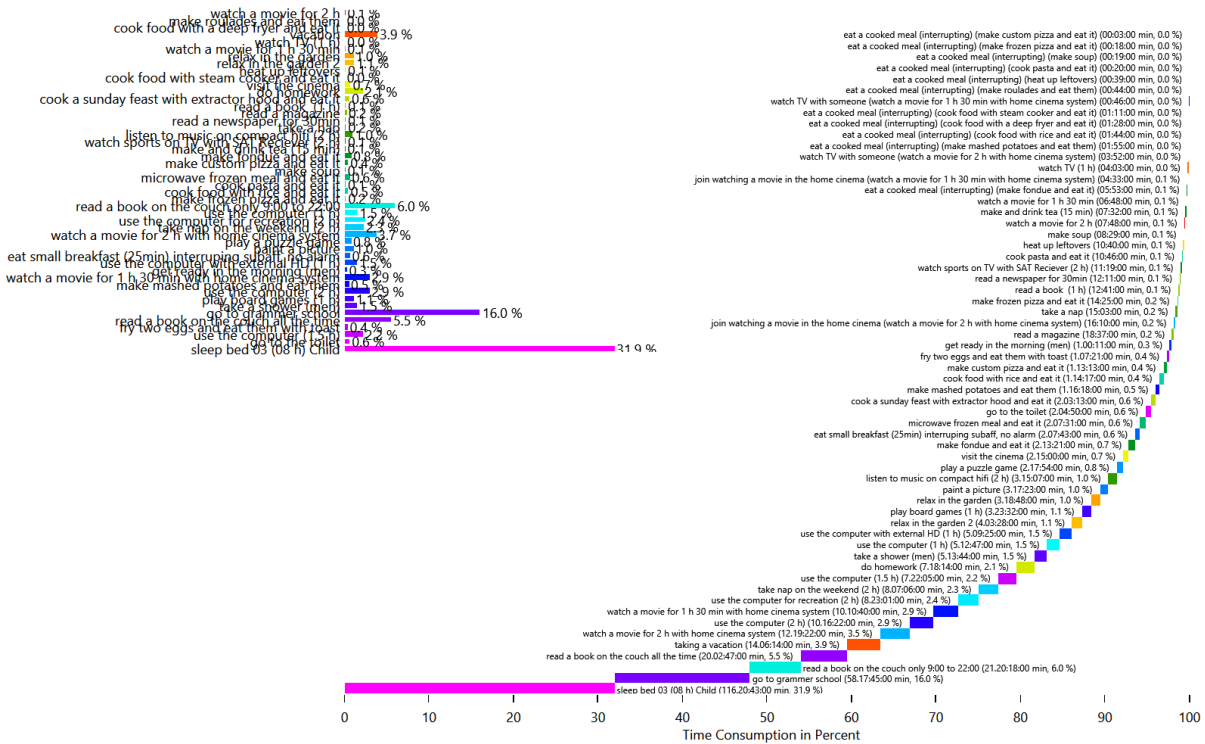
HH0 - CHR43 Lutz (43 Male)



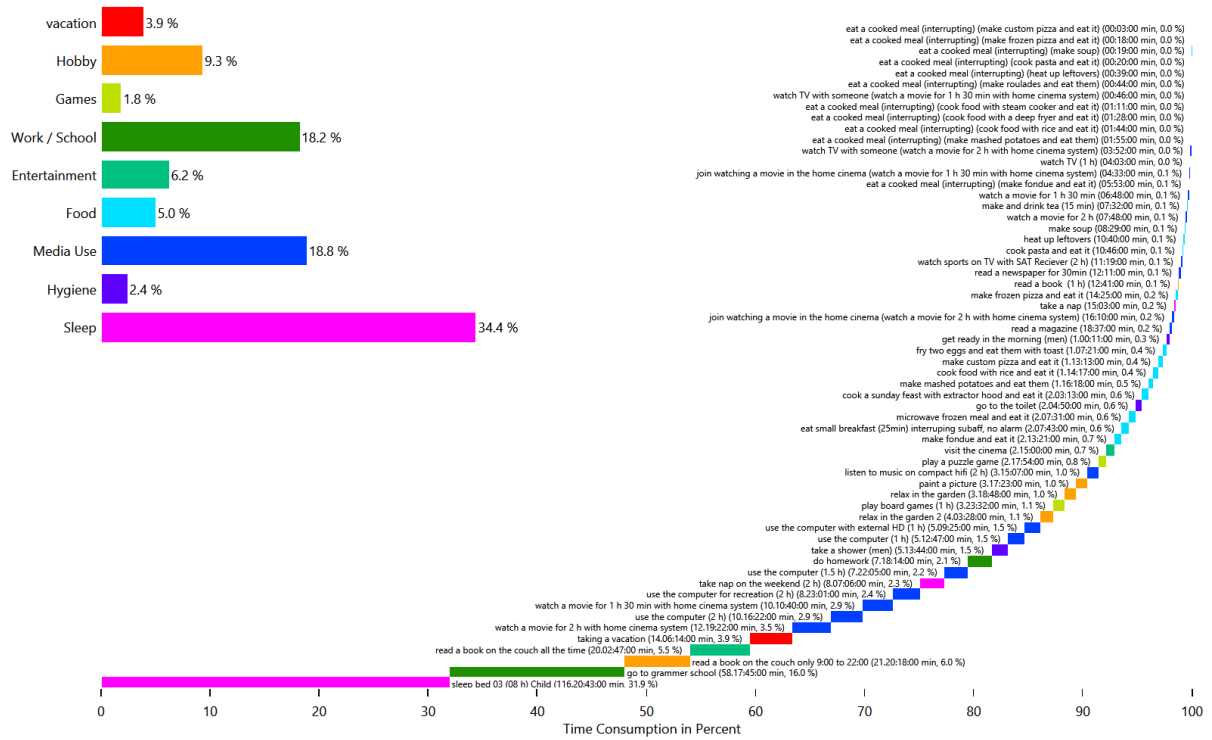
HH0 - CHR43 Maik (16 Male)



HH0 - CHR43 Maik (16 Male)



HH0 - CHR43 Maik (16 Male)

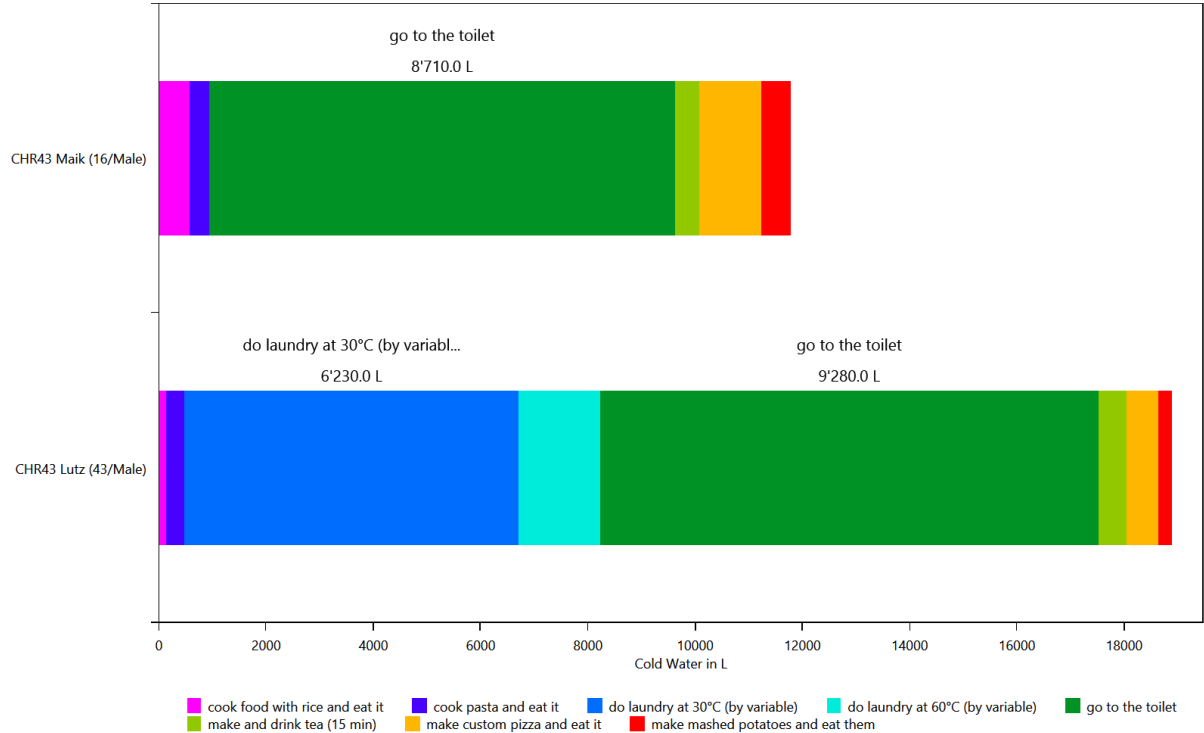


Energy use per person per affordance

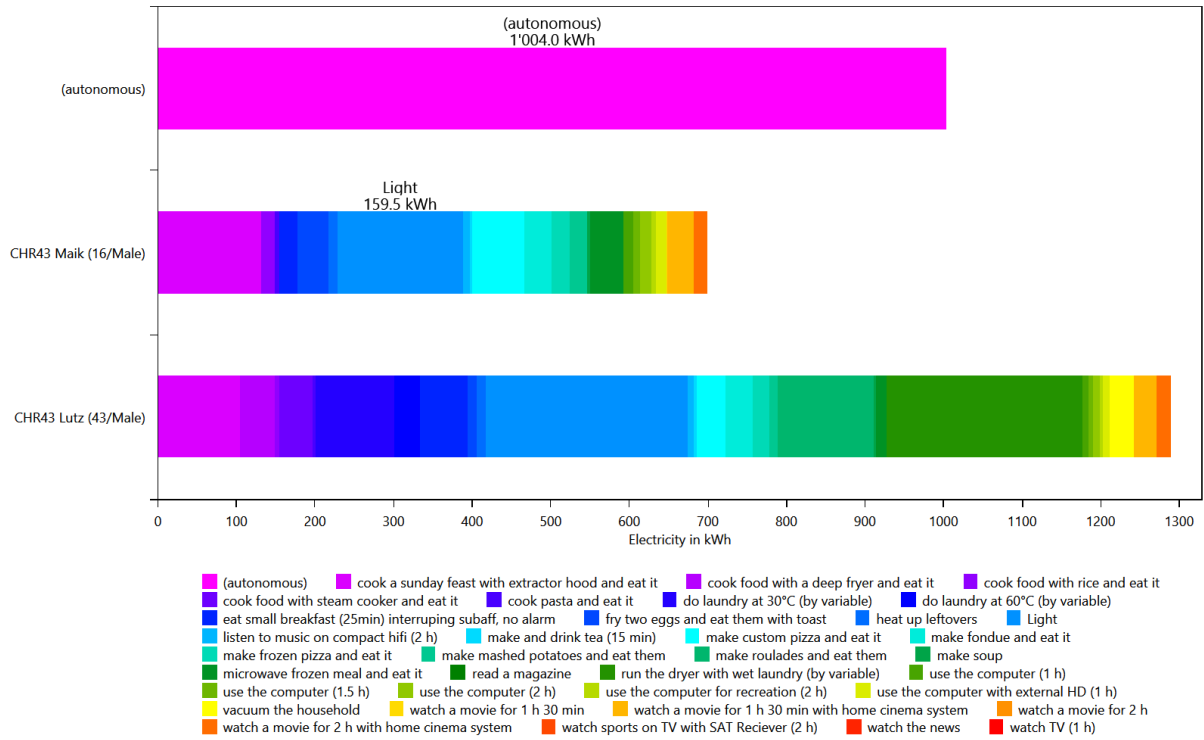
This is made from the files starting with: AffordanceEnergyUsePerPerson

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.

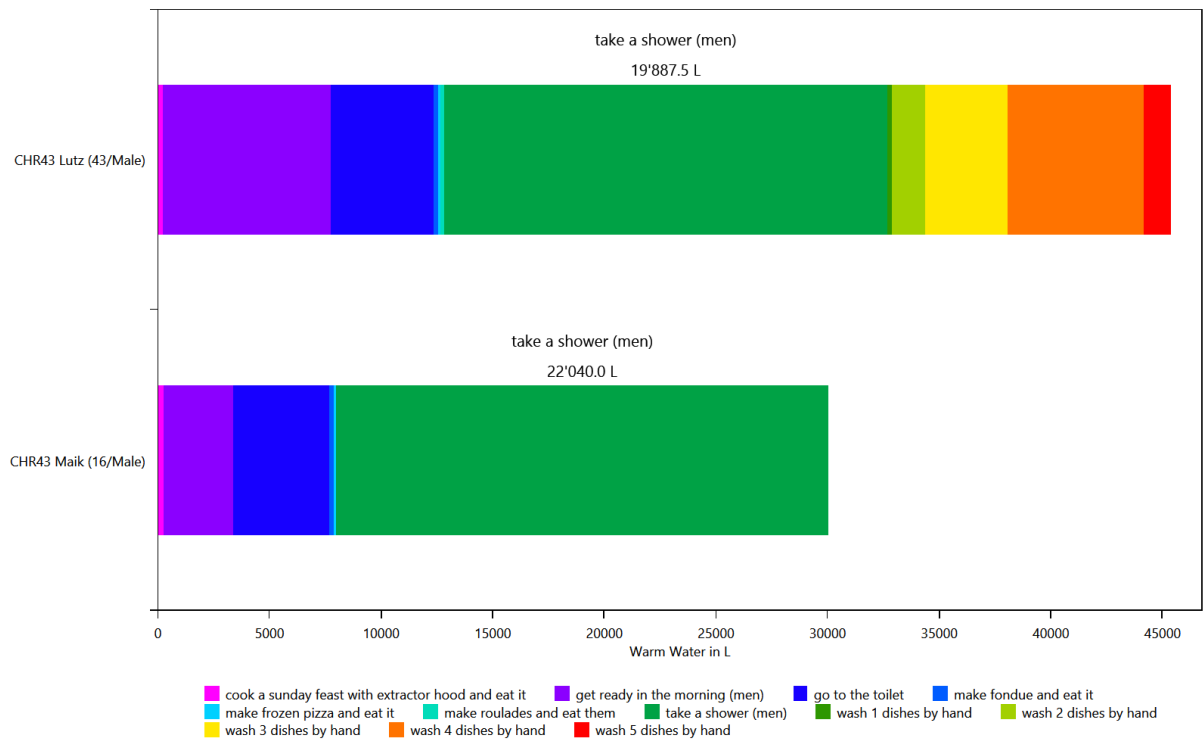
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

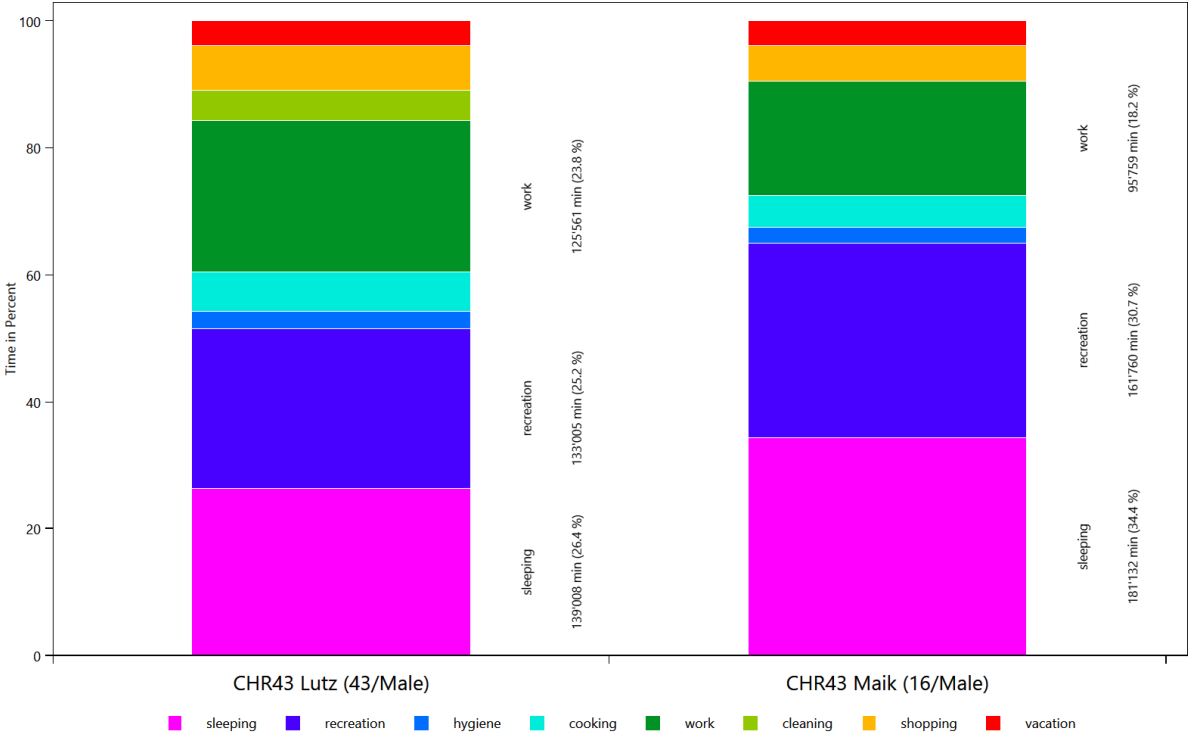


Time Use per Person Per Affordance according to different category definitions

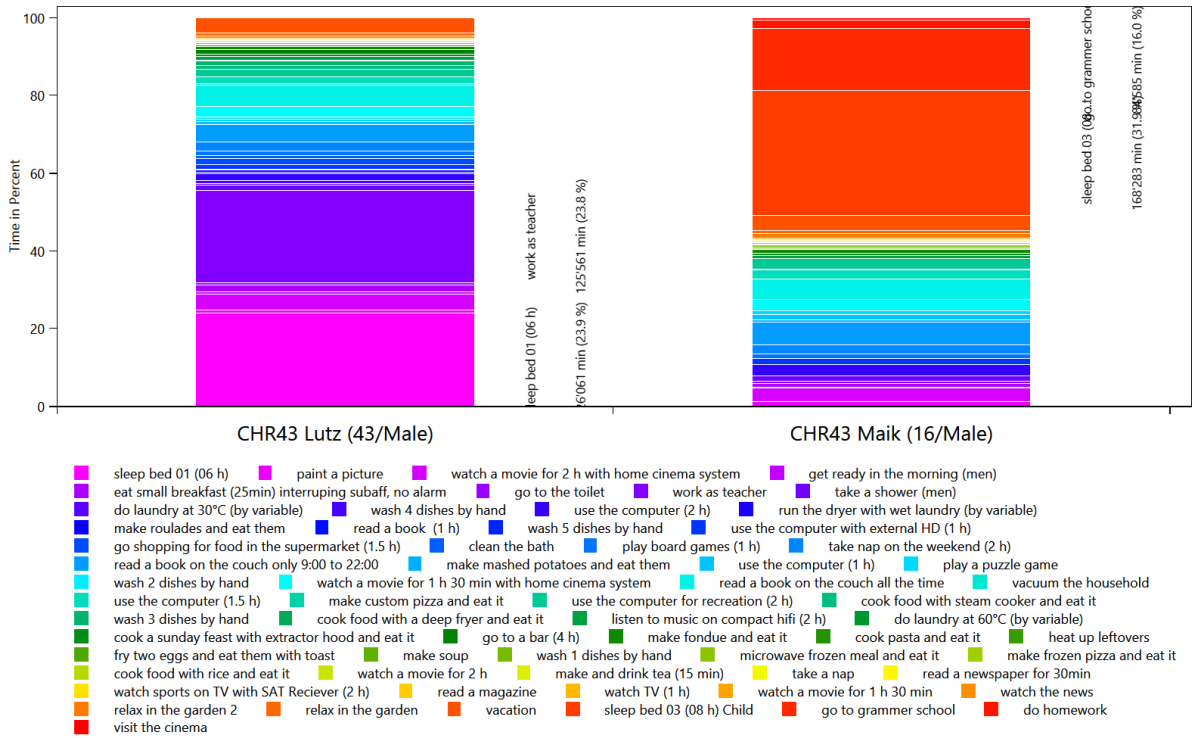
This is made from the files starting with: AffordanceTaggingSet

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.

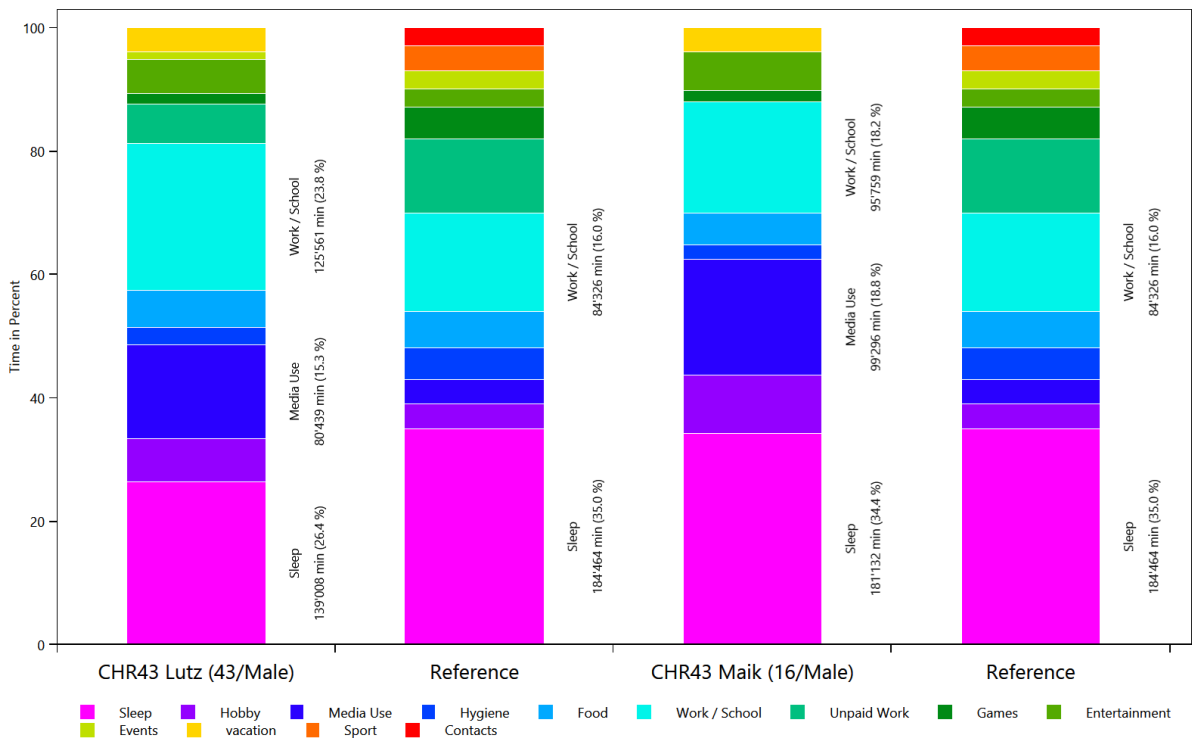
Basic Tagging - HH0



Tagging Set For Planning - HH0



Wo bleibt die Zeit - HH0

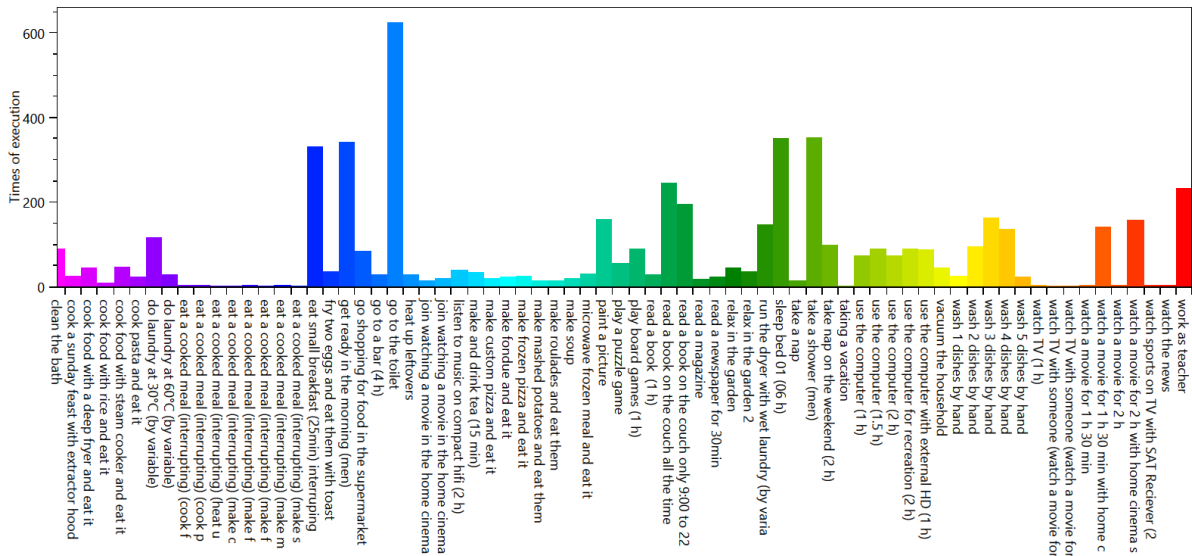


Overview of the actions of each member of the household

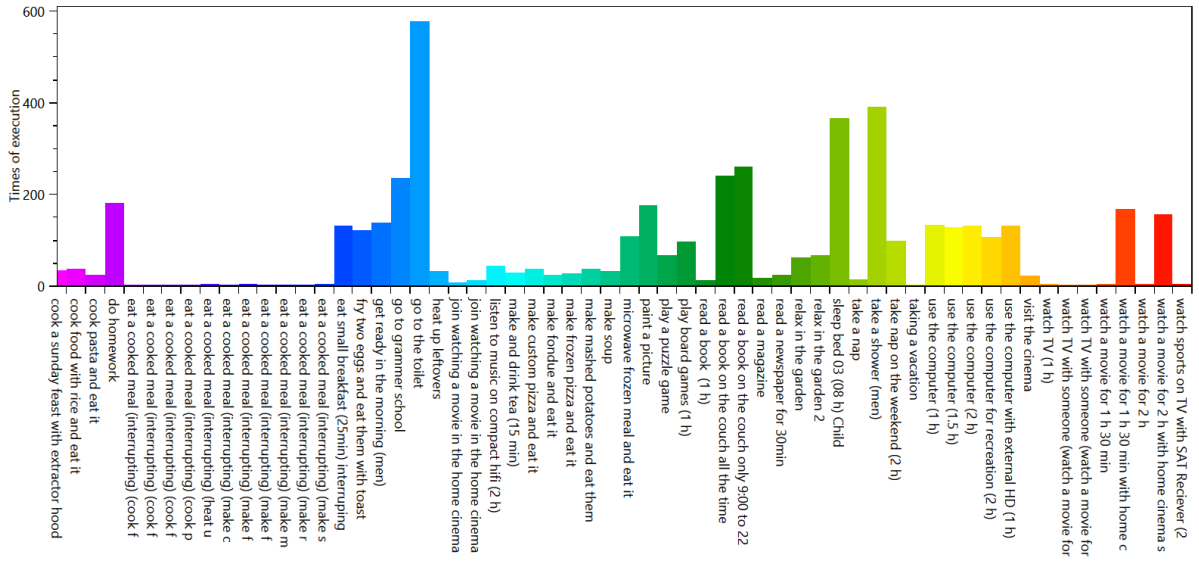
This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

HH0 - CHR43 Lutz (43 Male)



HH0 - CHR43 Maik (16 Male)

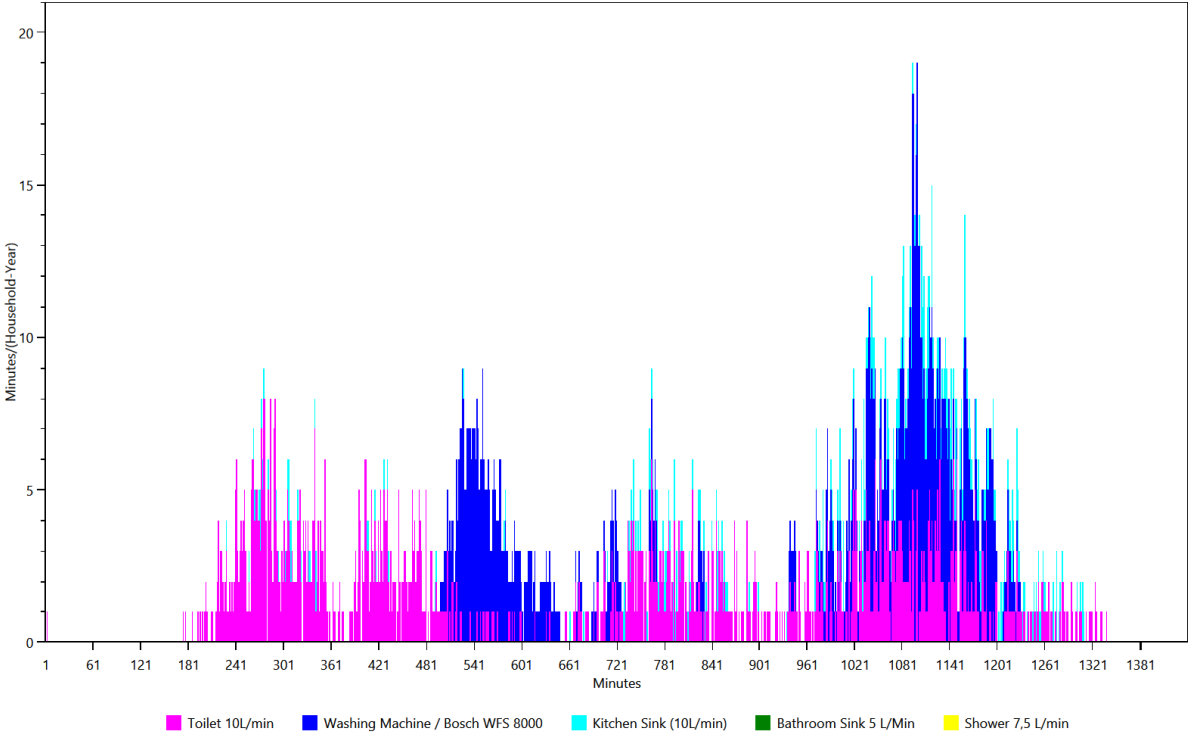


Overview of the time of the use per load type per device

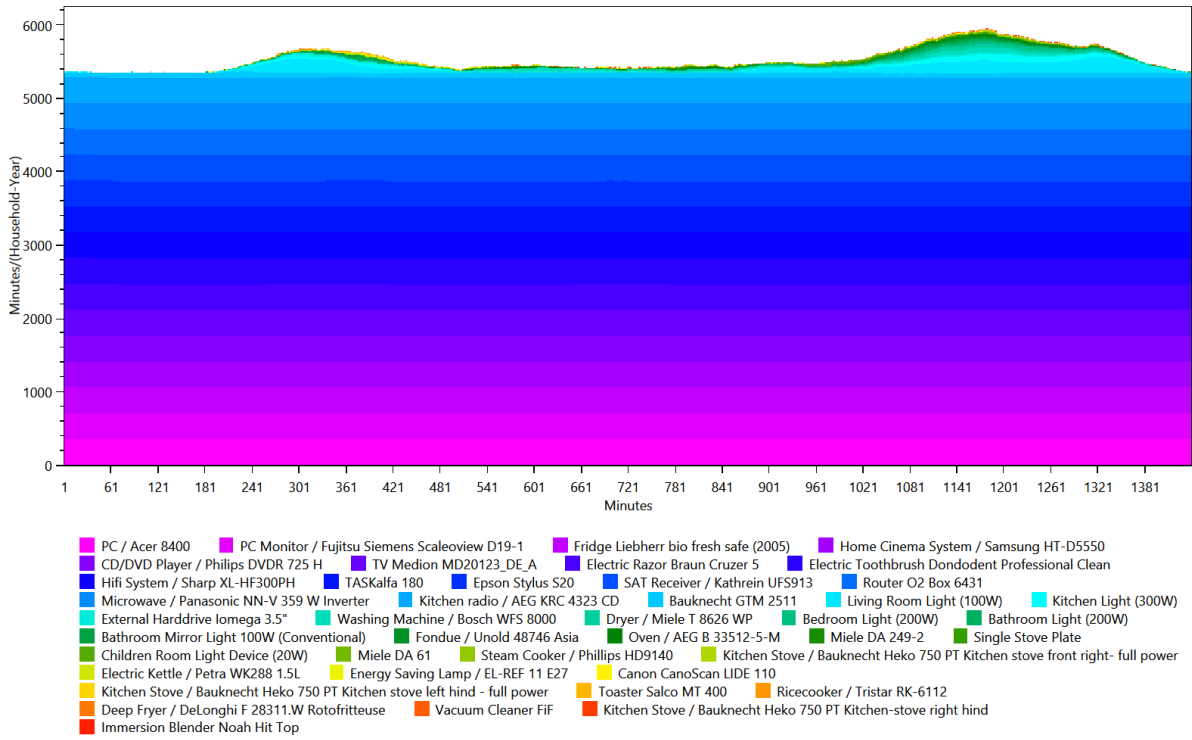
This is made from the files starting with: TimeOfUseEnergyProfiles

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

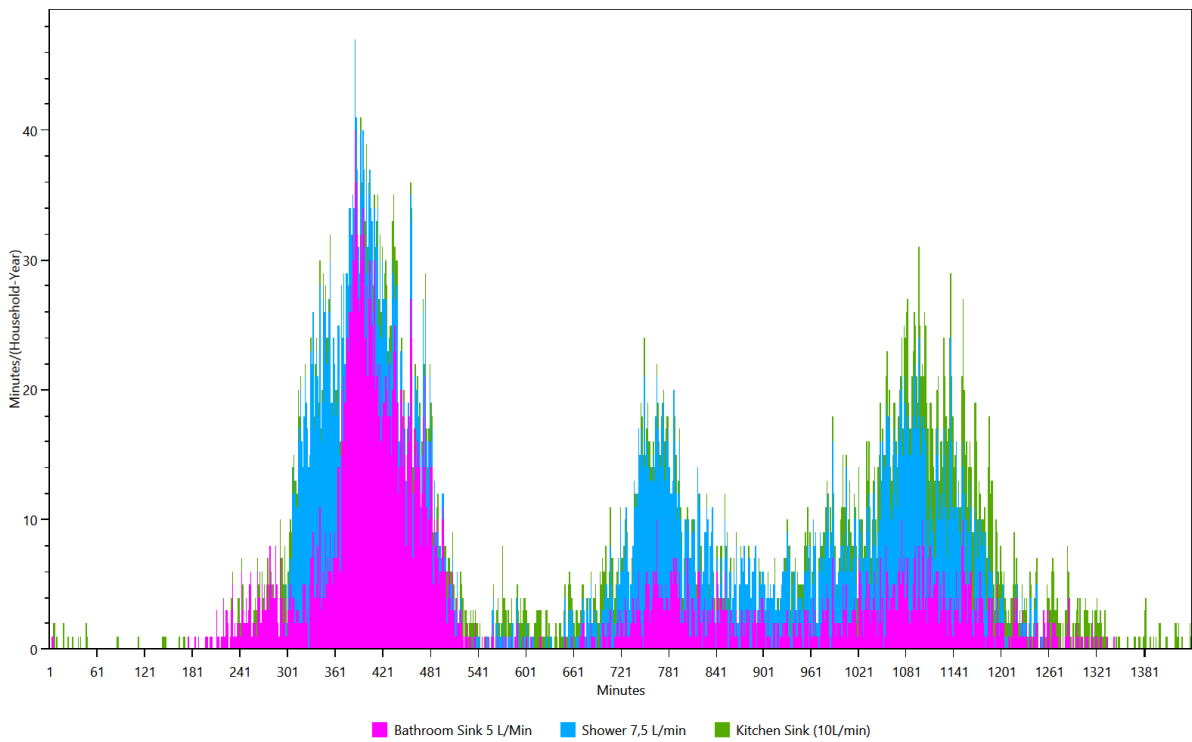
Cold Water



Electricity



Warm Water

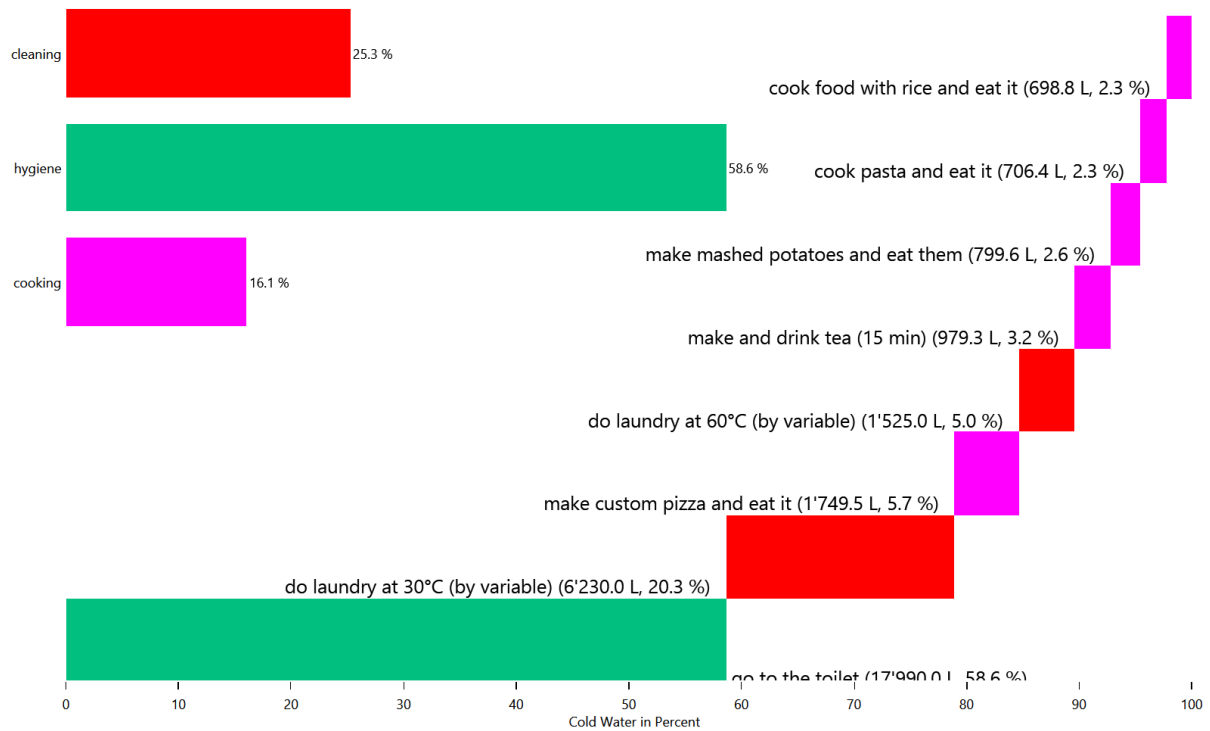


Energy/Resource use distribution per load type per affordance

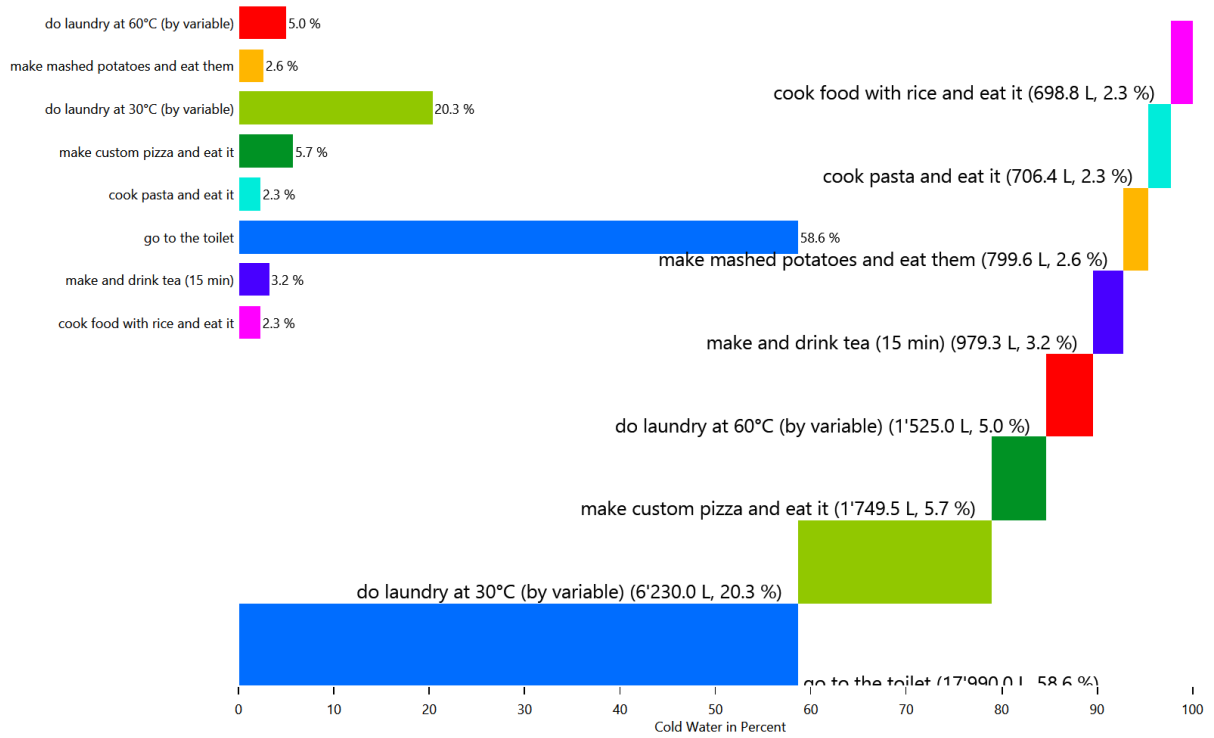
This is made from the files starting with: **AffordanceEnergyUse**

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

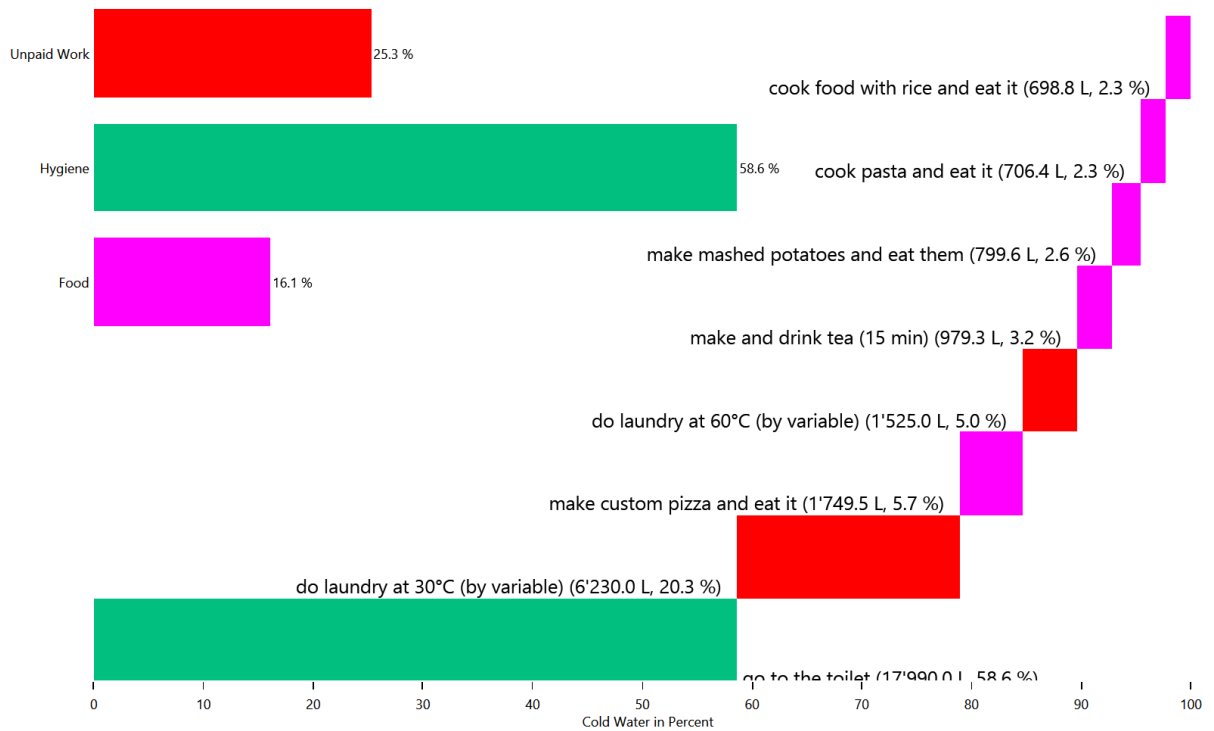
HH0 - Cold Water



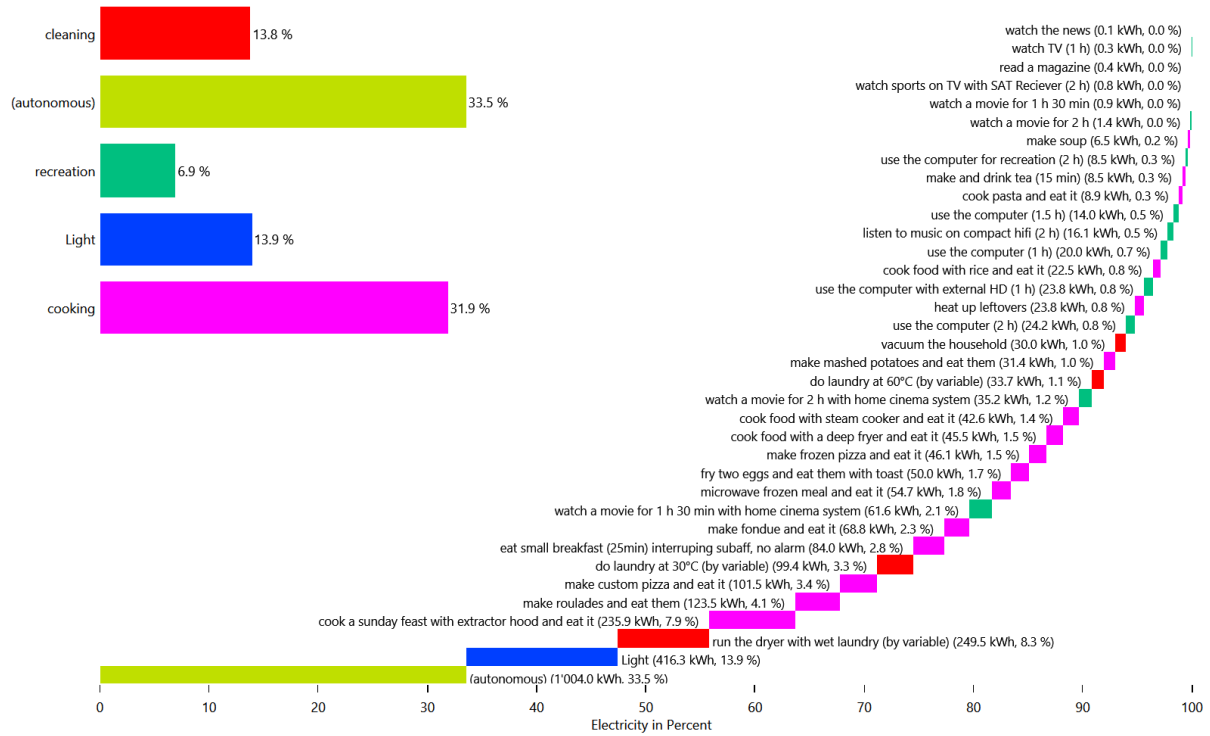
HH0 - Cold Water



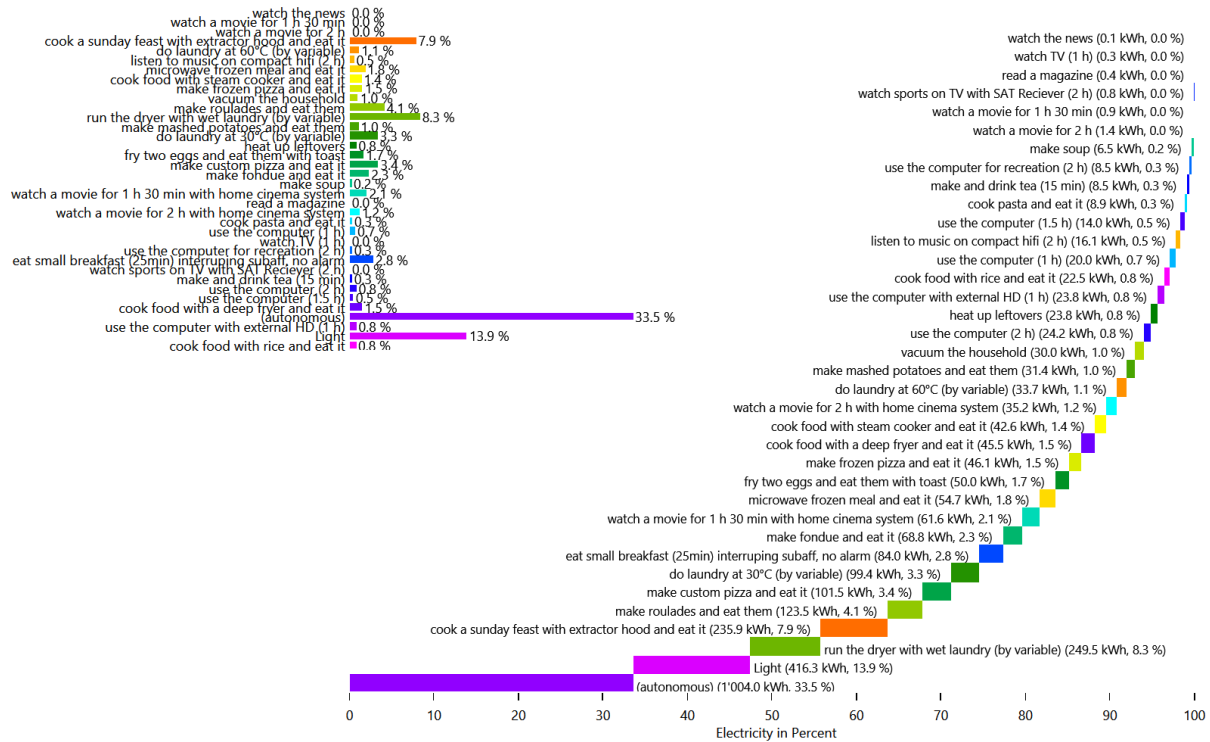
HH0 - Cold Water



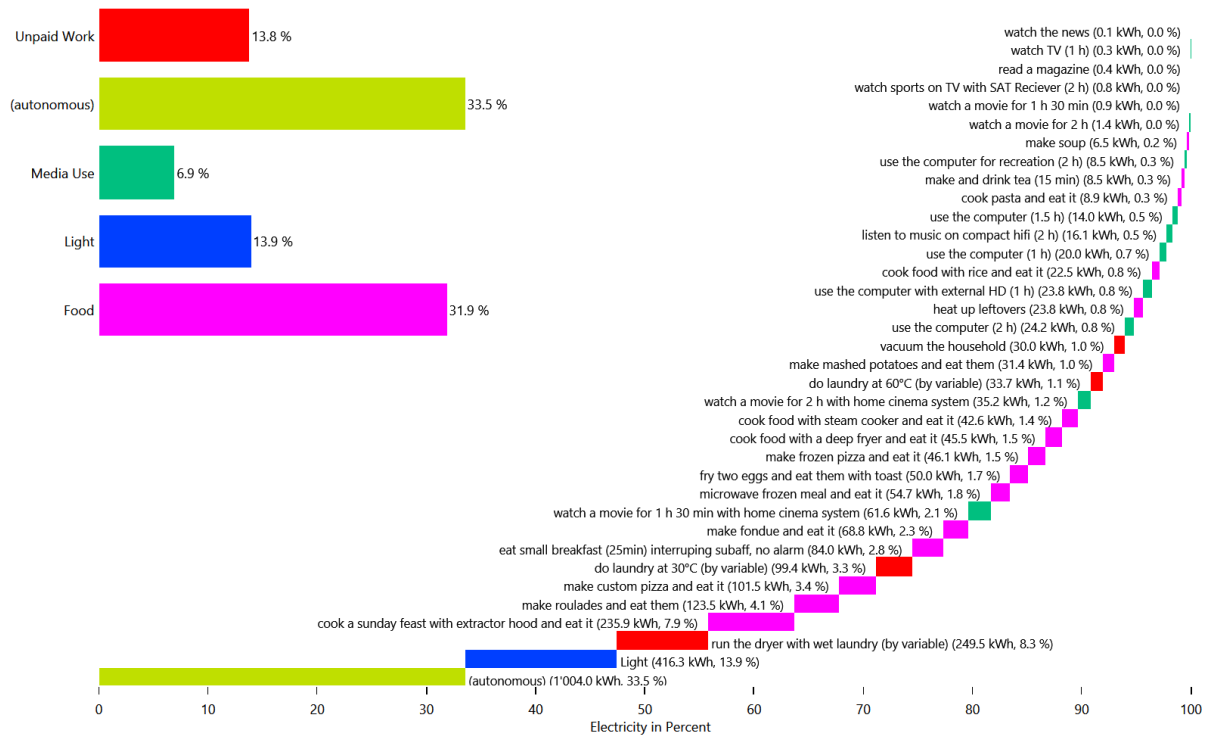
HH0 - Electricity



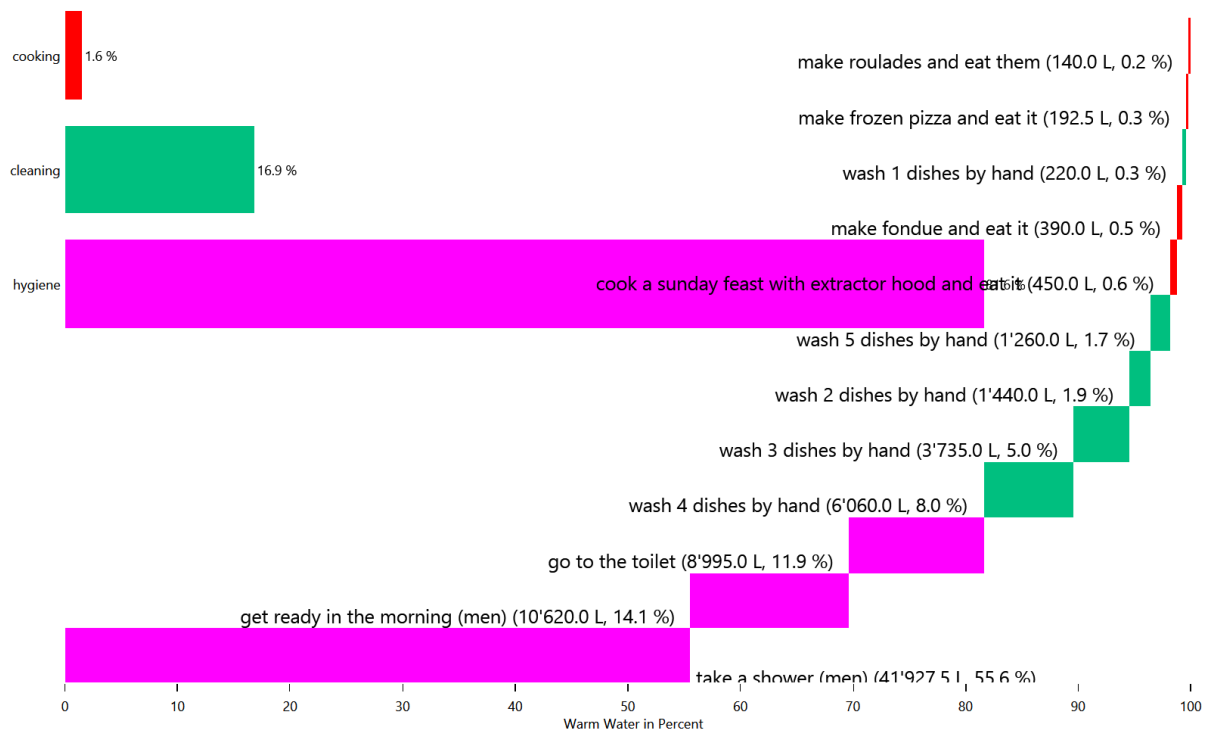
HH0 - Electricity



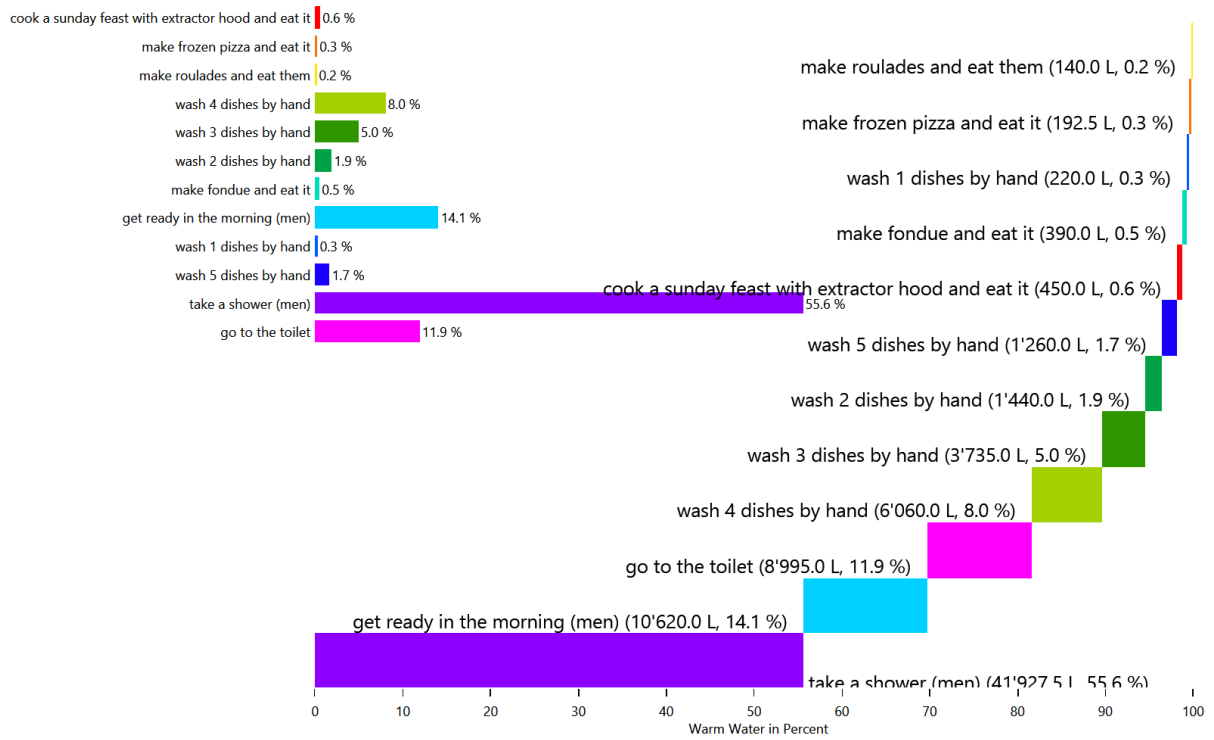
HH0 - Electricity



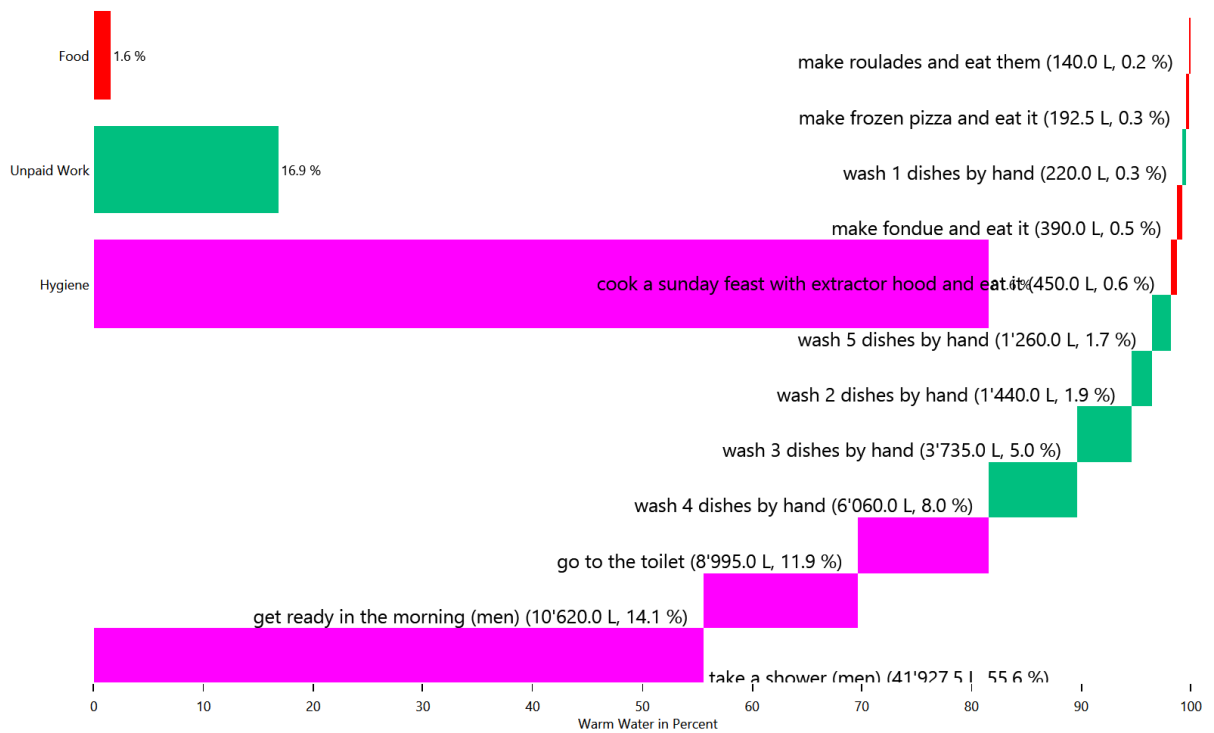
HH0 - Warm Water



HH0 - Warm Water



HH0 - Warm Water

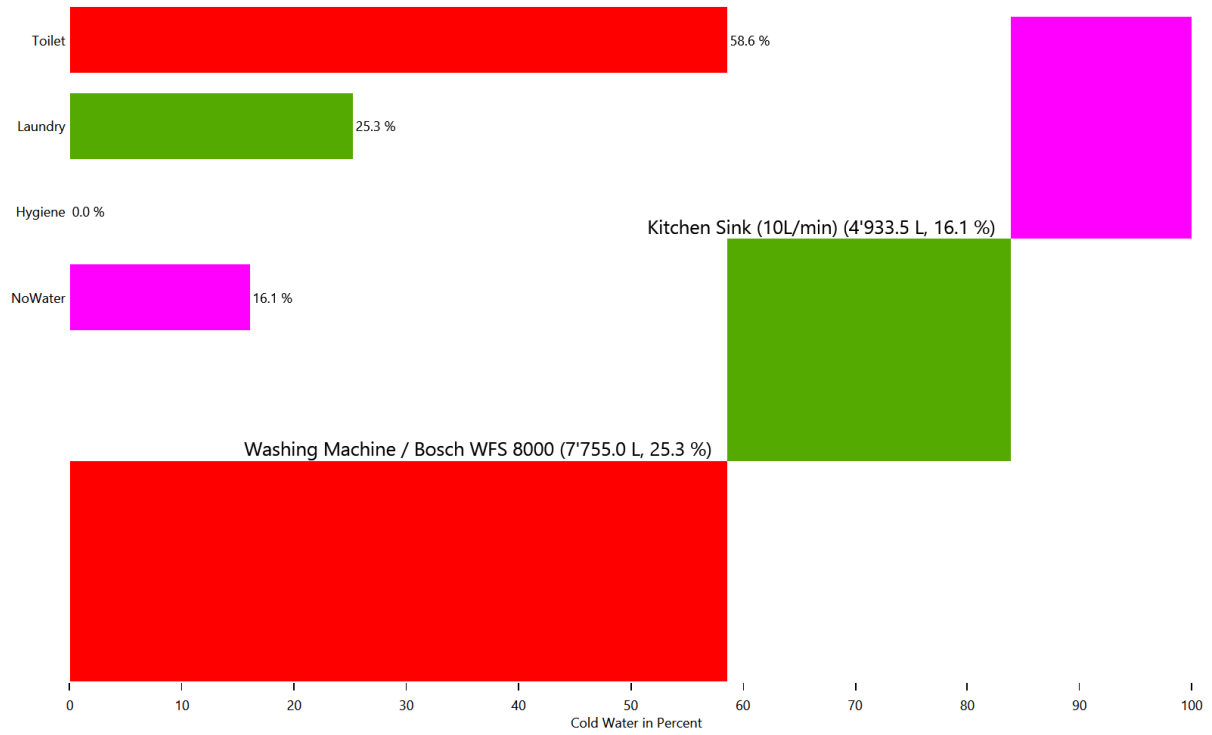


Energy use for each load type for each device

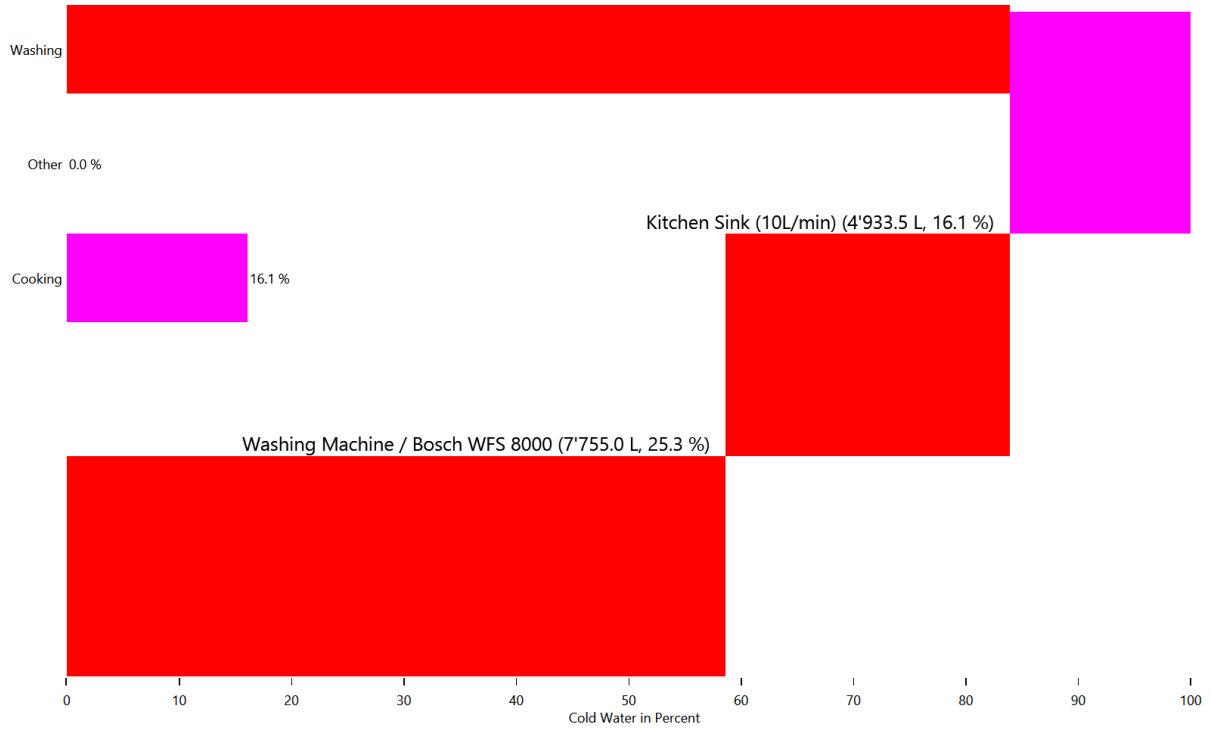
This is made from the files starting with: DeviceSums

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

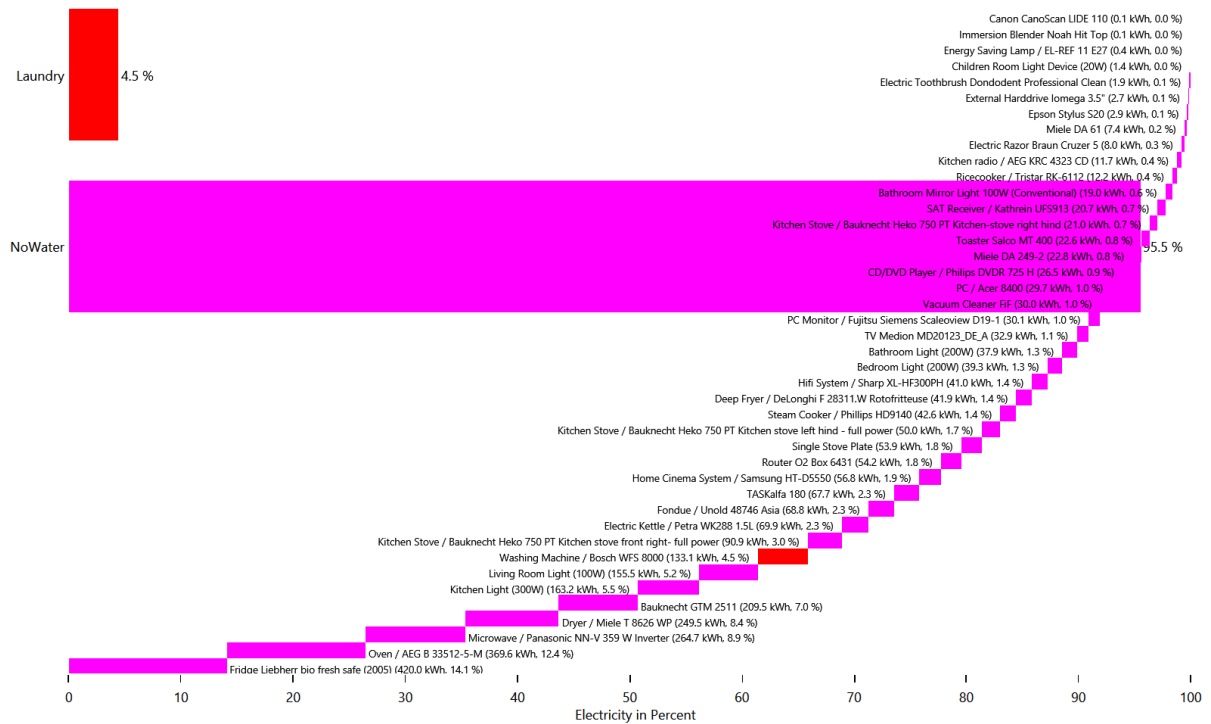
Cold Water



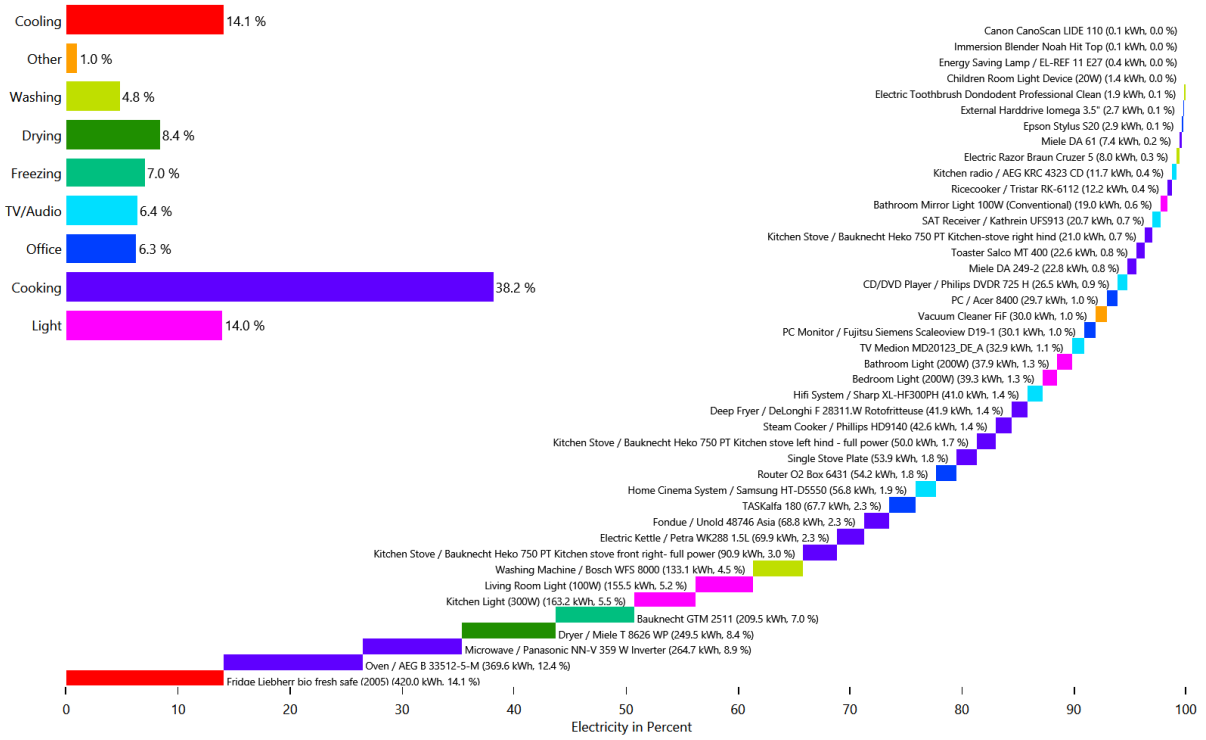
Cold Water



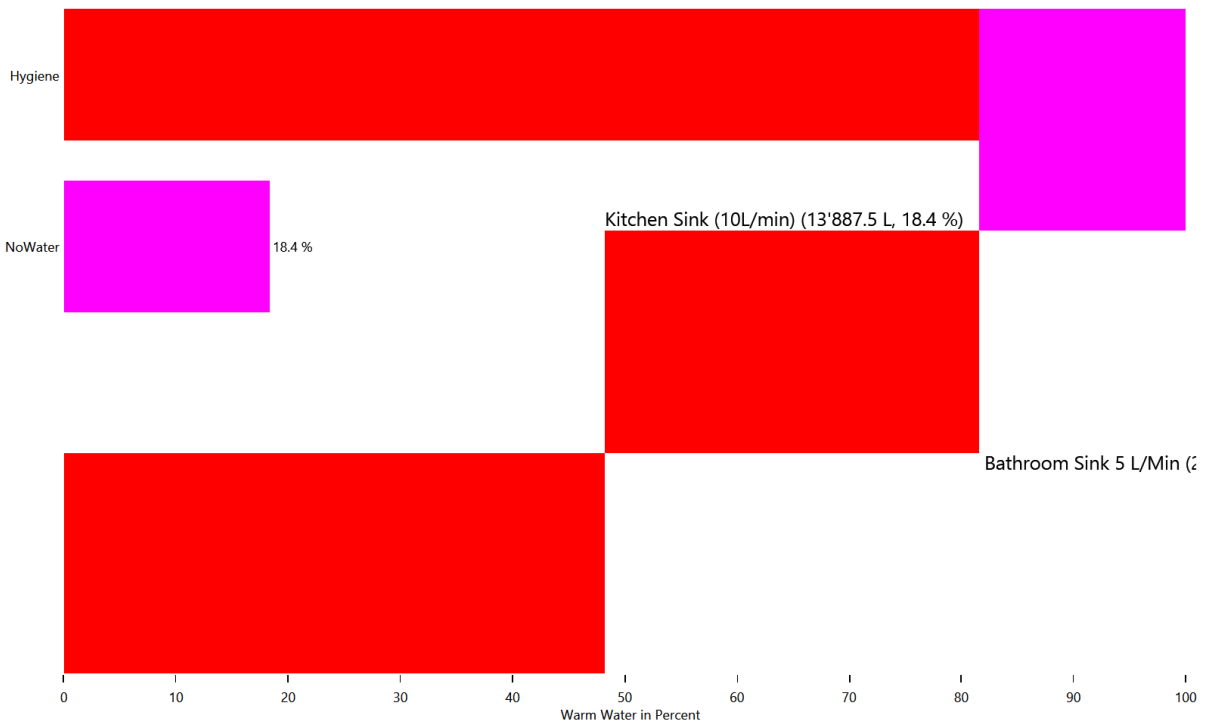
Electricity



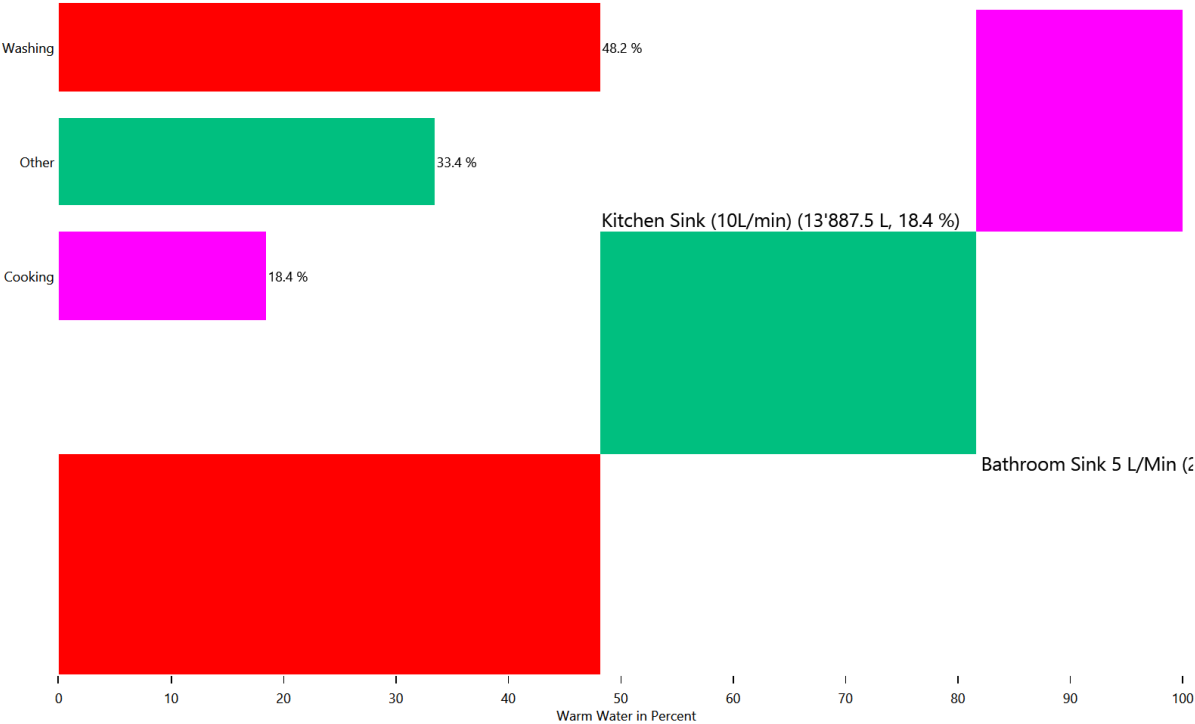
Electricity



Warm Water



Warm Water

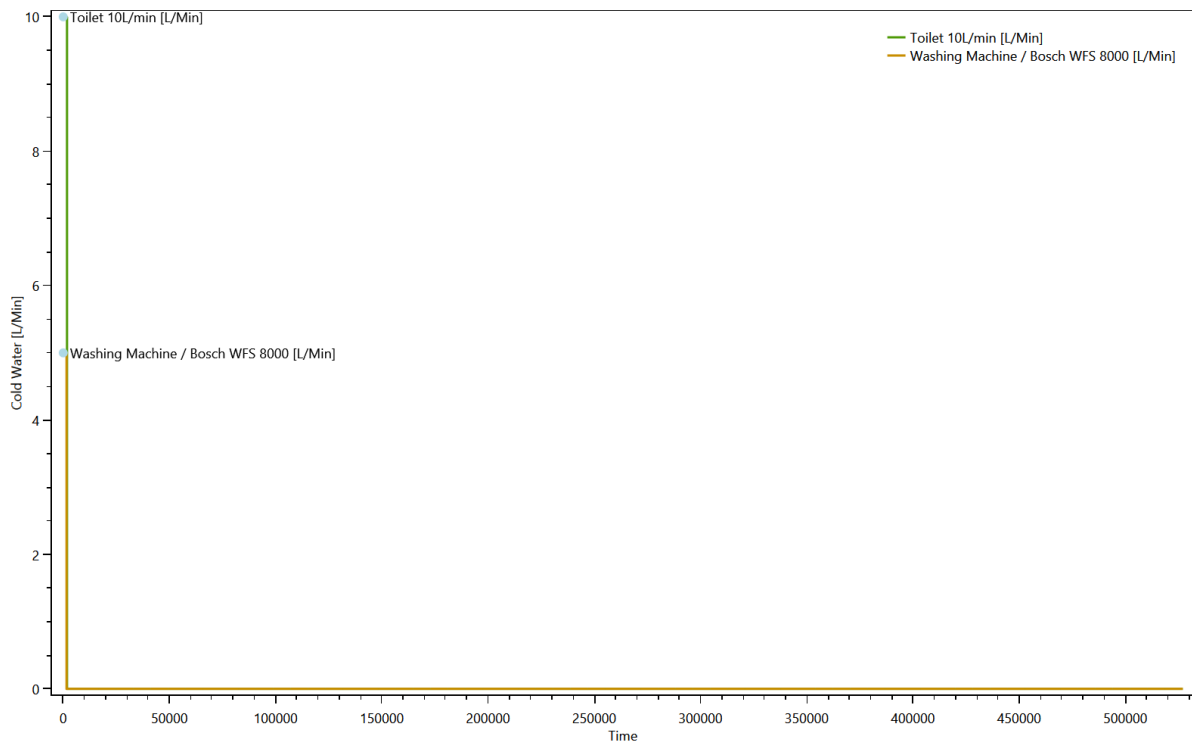


Duration curve for each device for each load type

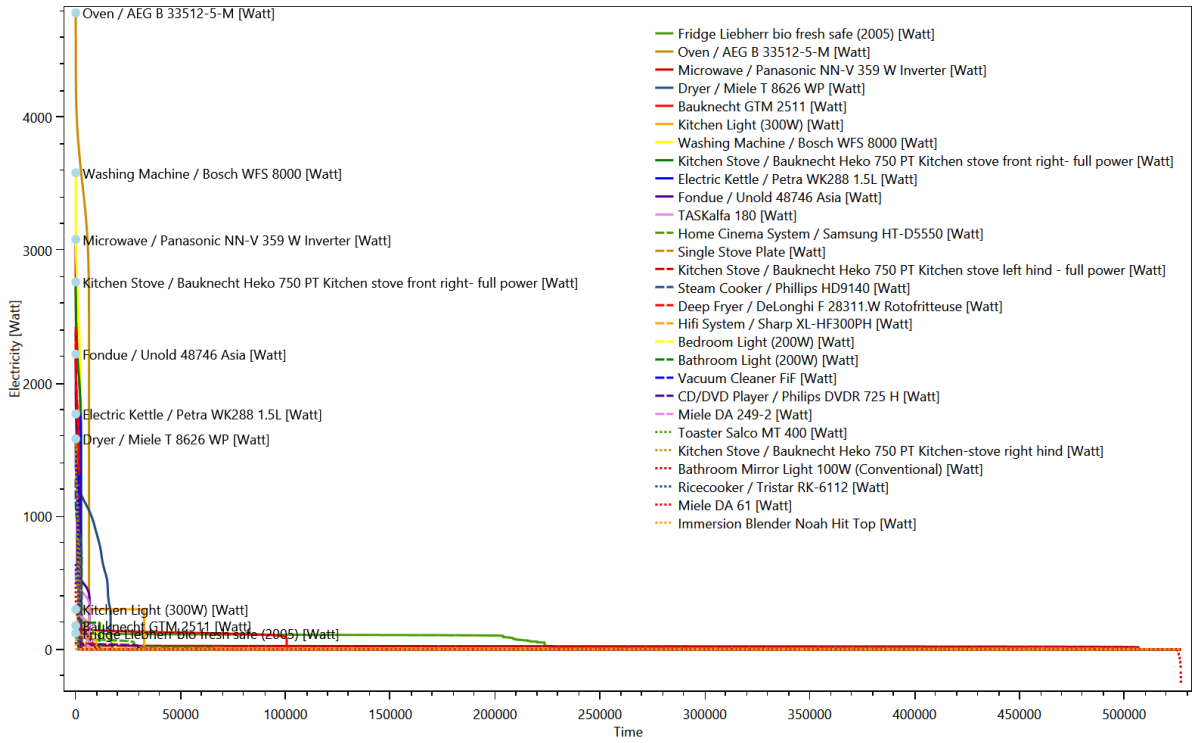
This is made from the files starting with: DeviceDurationCurves

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

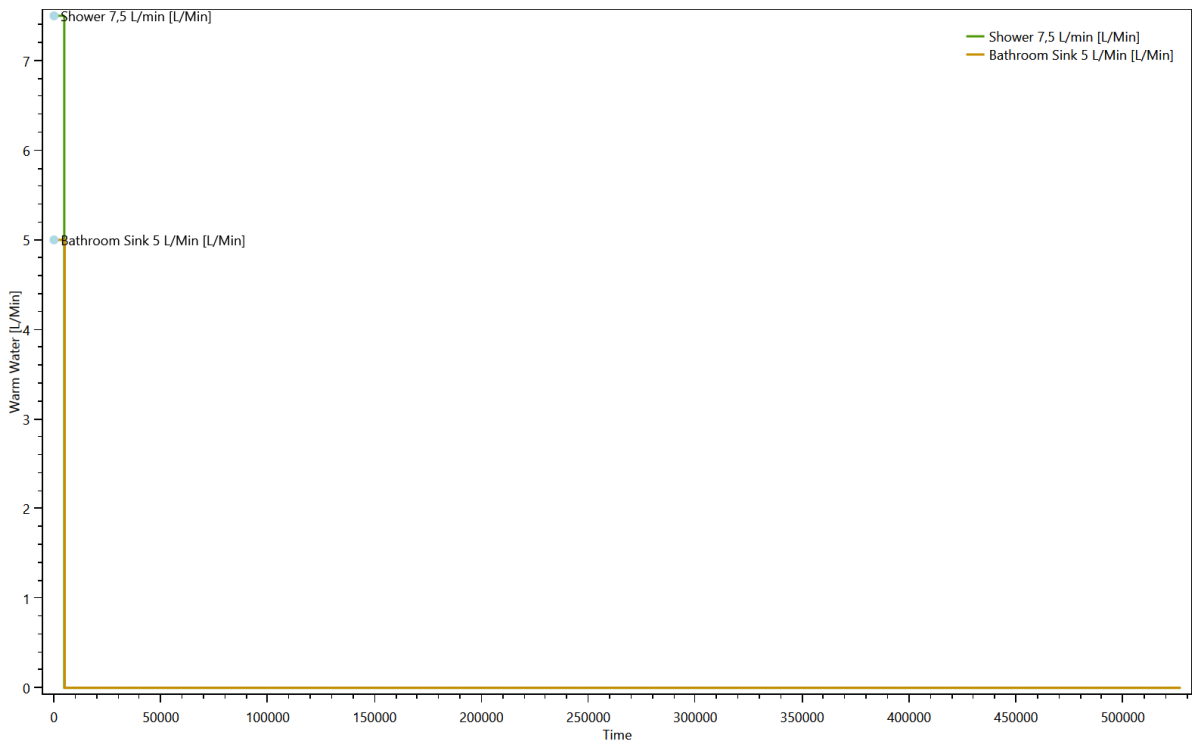
Cold Water



Electricity



Warm Water

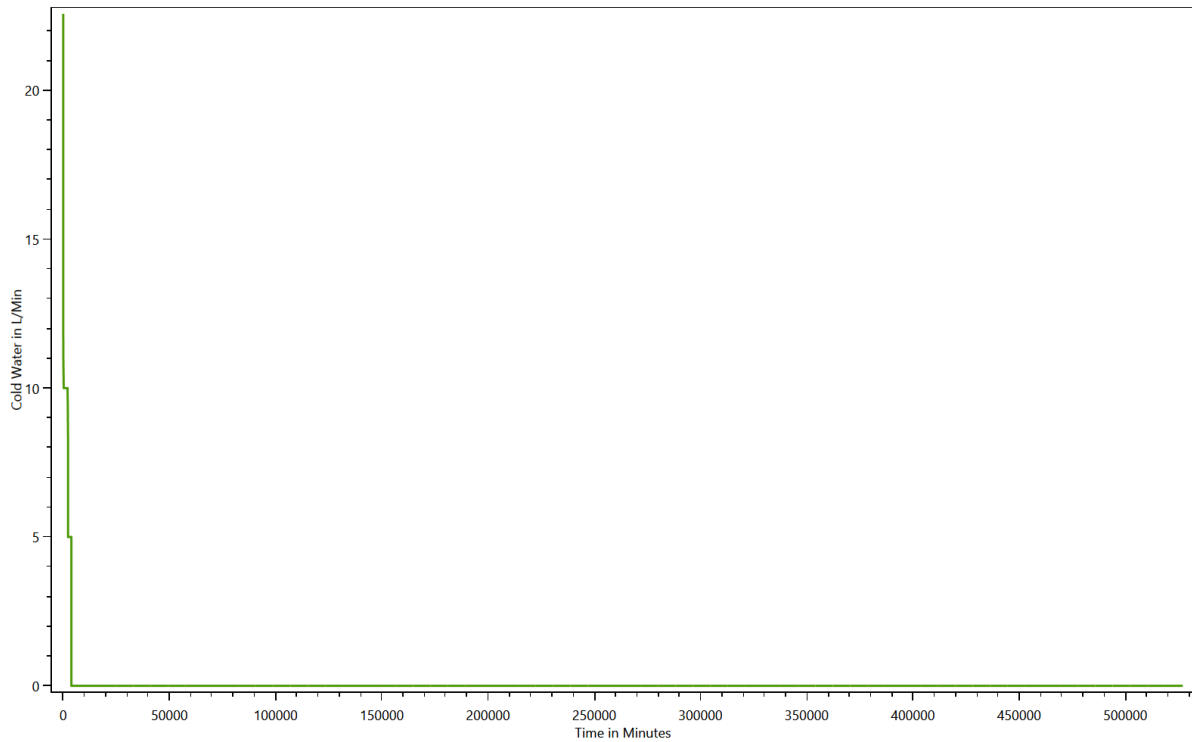


Duration curve for each load type

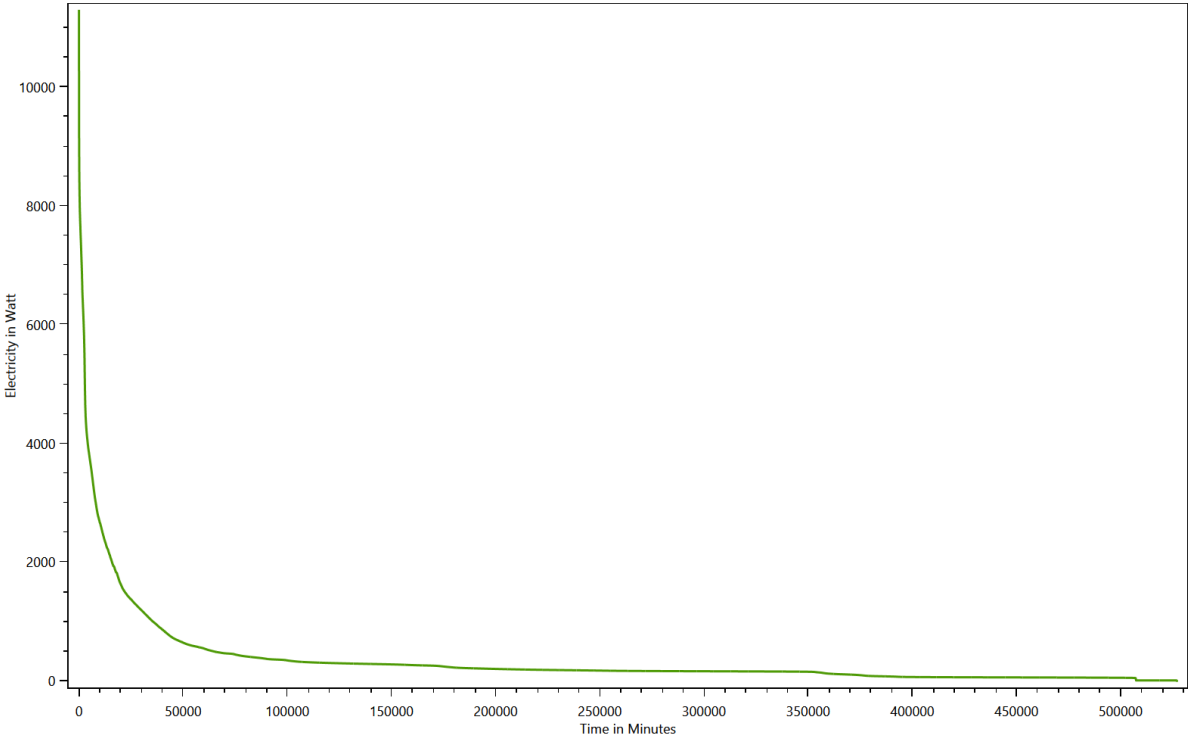
This is made from the files starting with: **DurationCurve**

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

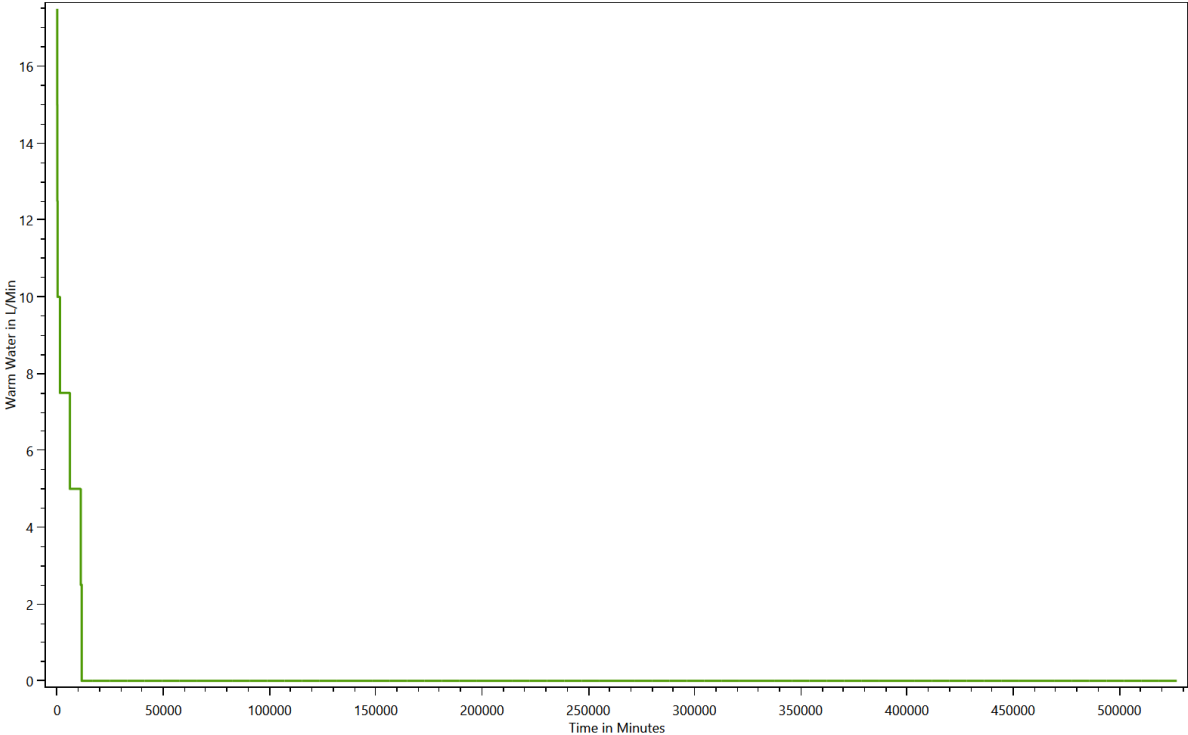
Cold Water



Electricity



Warm Water

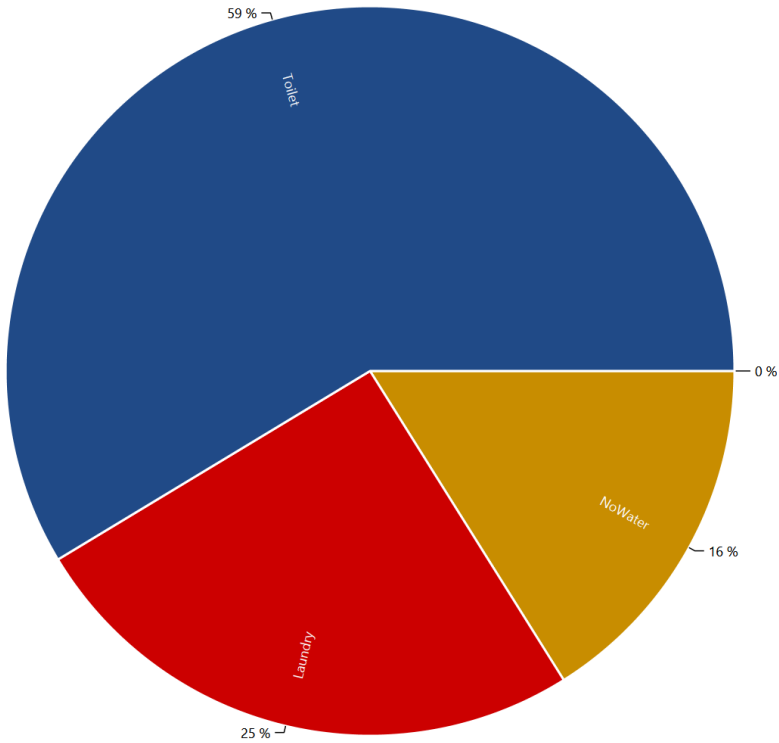


Grouped energy use for each load type for each device

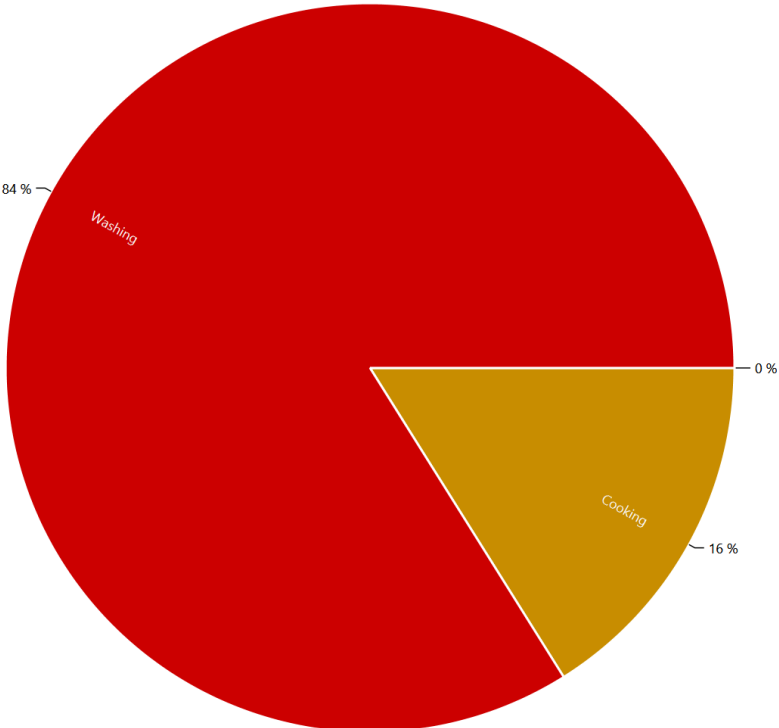
This is made from the files starting with: DeviceTaggingSet

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

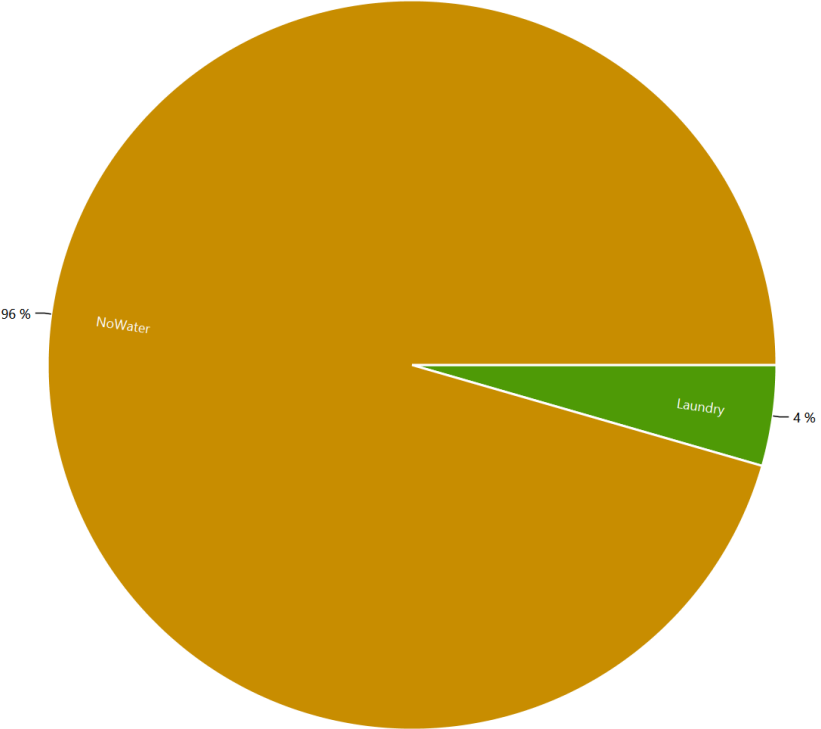
HH0 - Destatis Water Usage Statistics - Cold Water



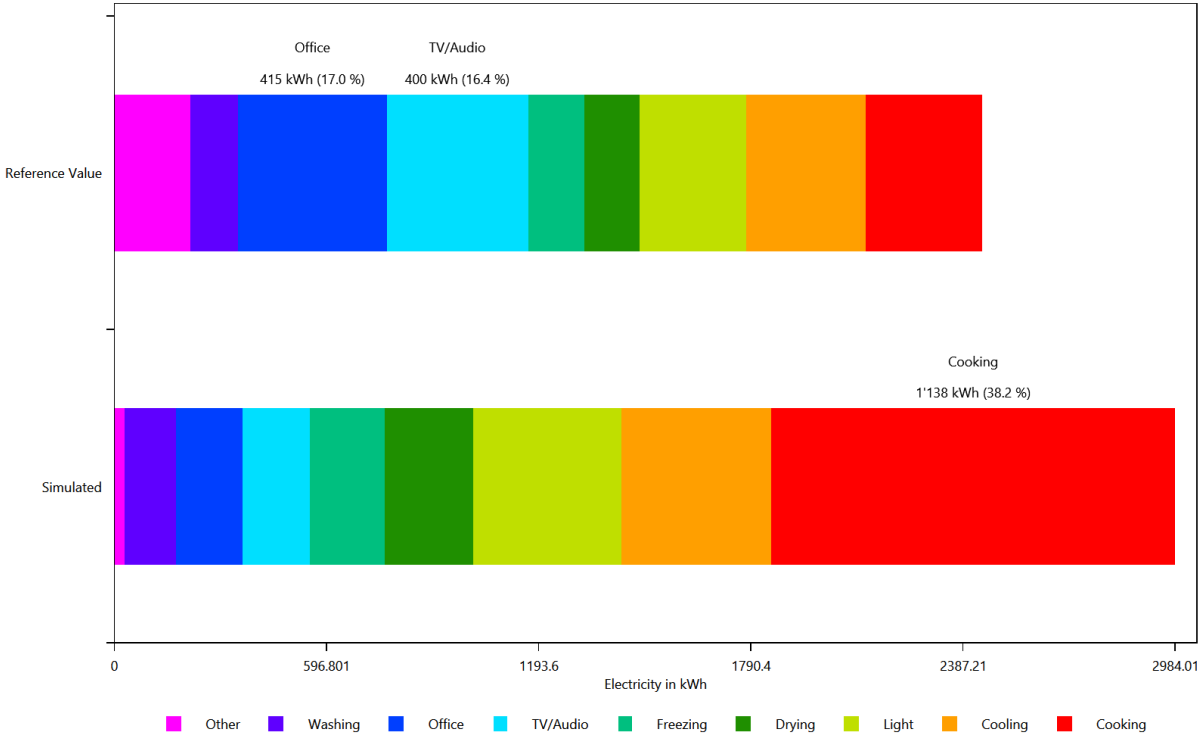
HH0 - Energieagentur - Cold Water



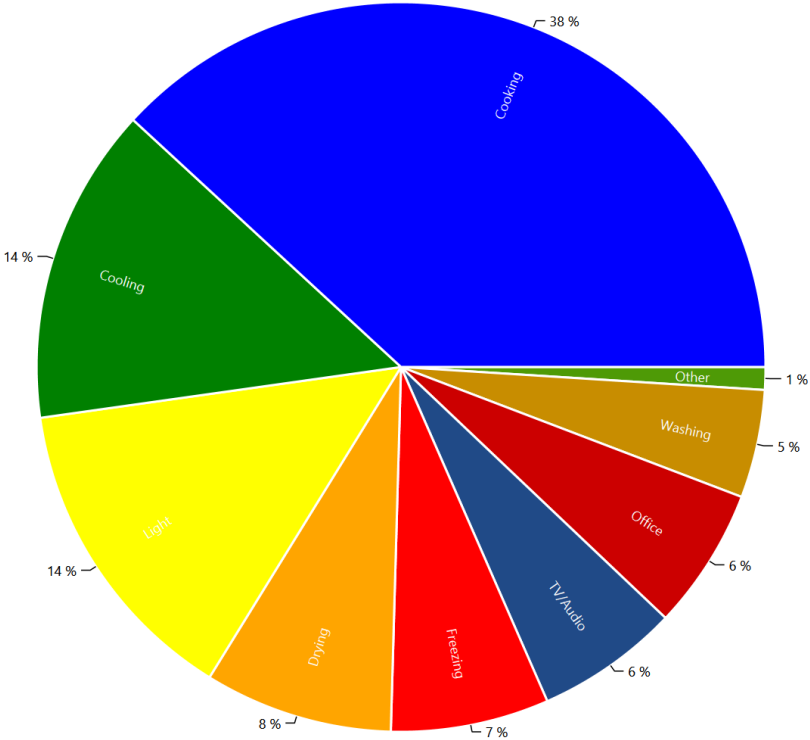
HH0 - Destatis Water Usage Statistics - Electricity



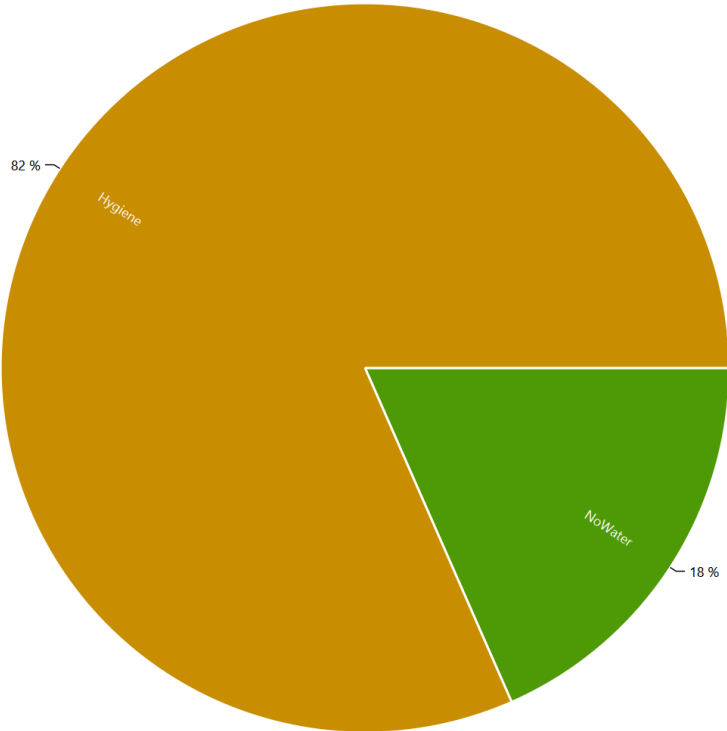
HH0 - Energieagentur - Electricity



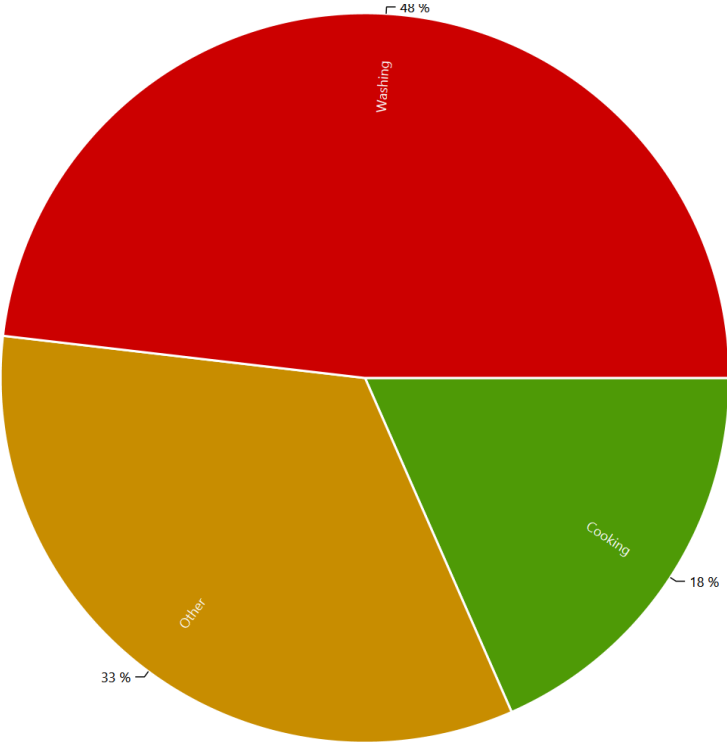
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

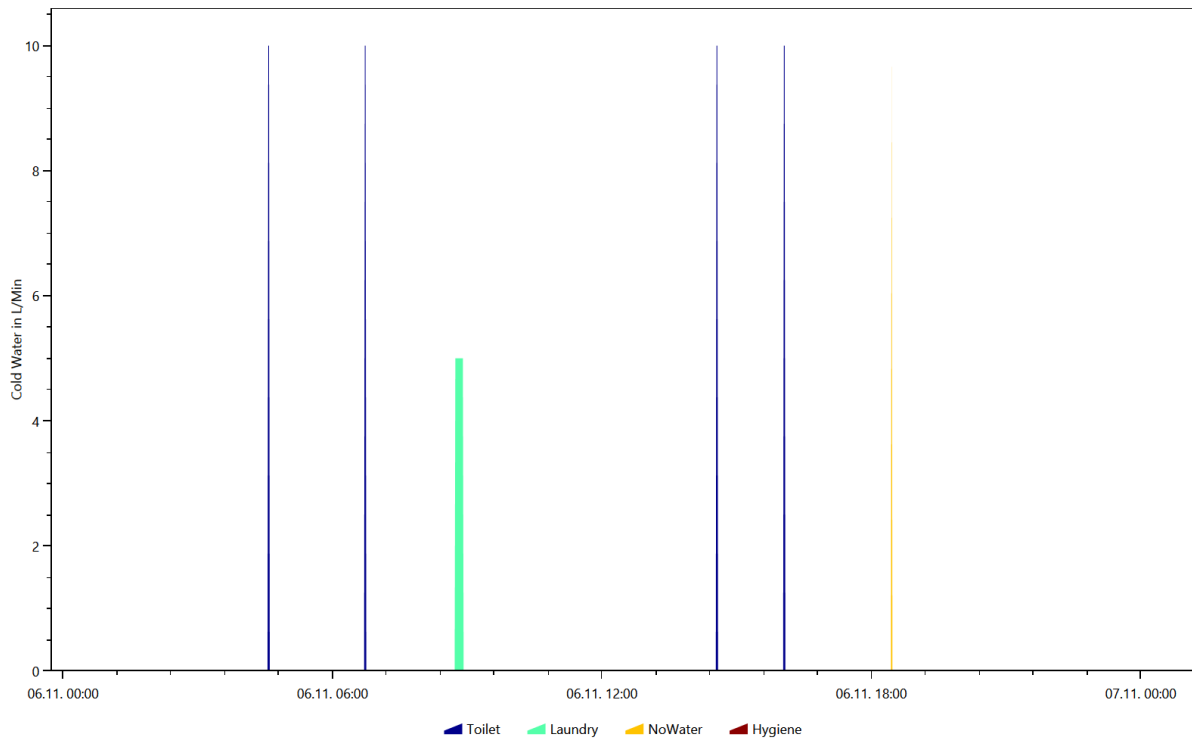


Example of the device profiles for each load type

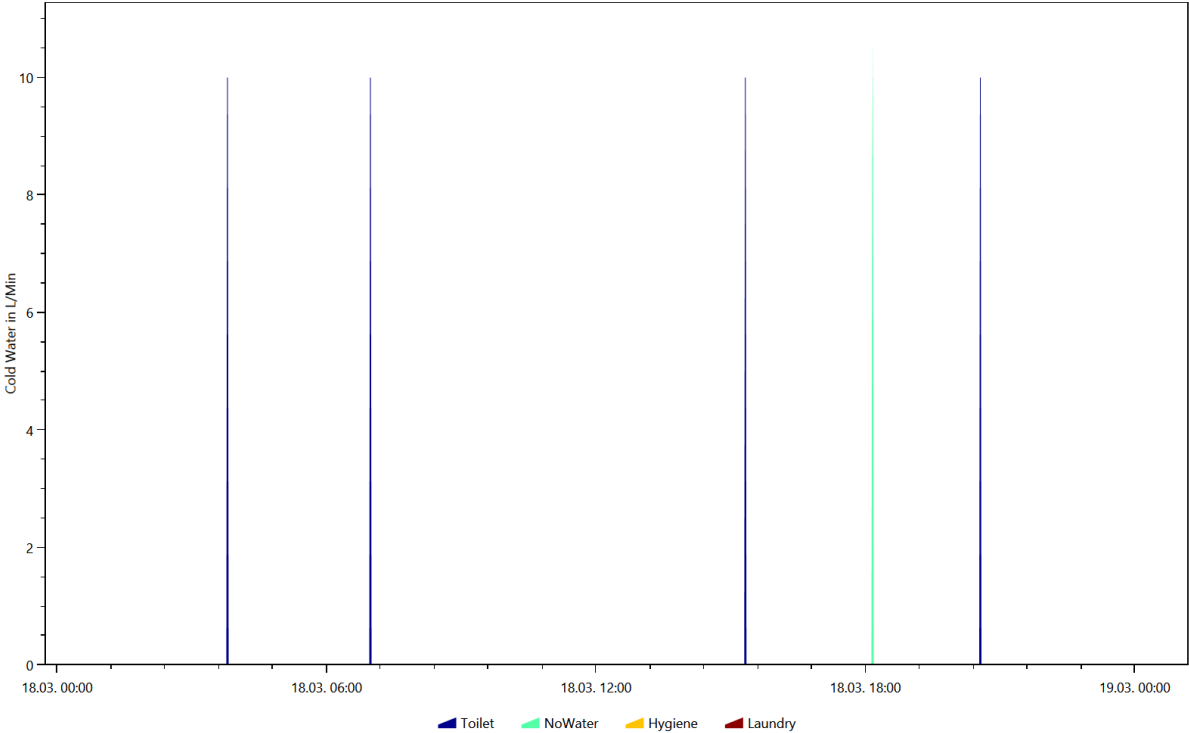
This is made from the files starting with: DeviceProfiles

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

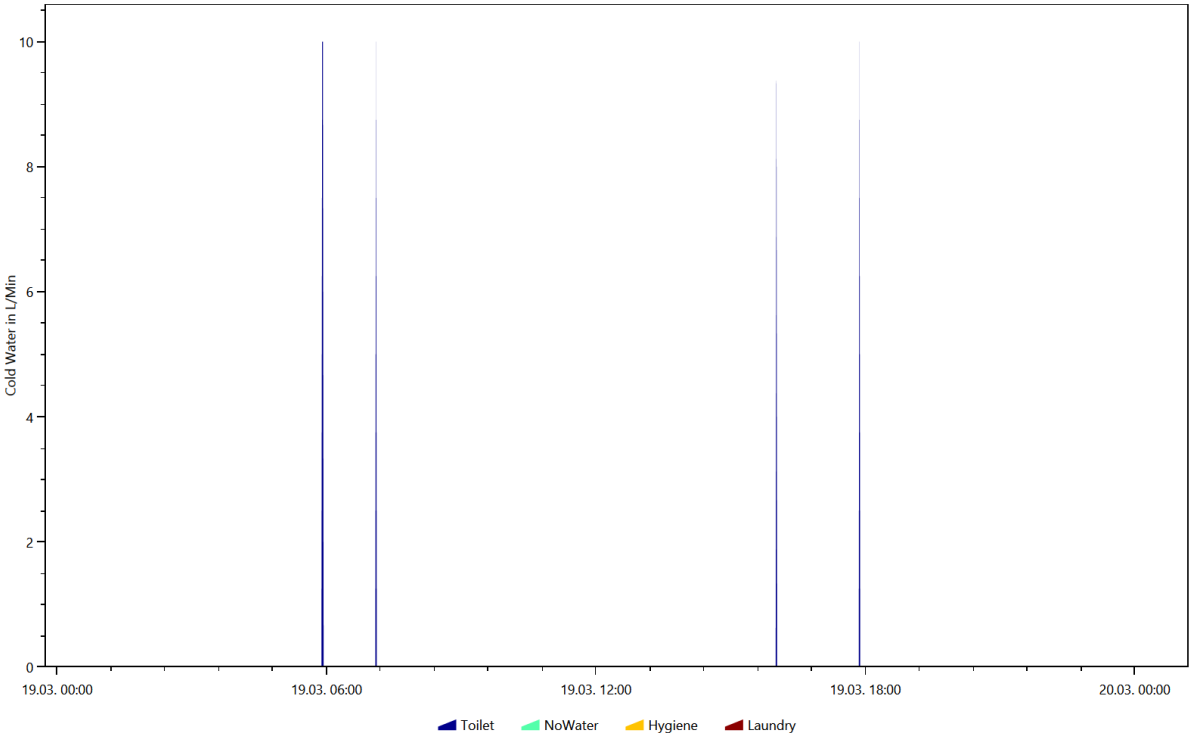
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.6



Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.18



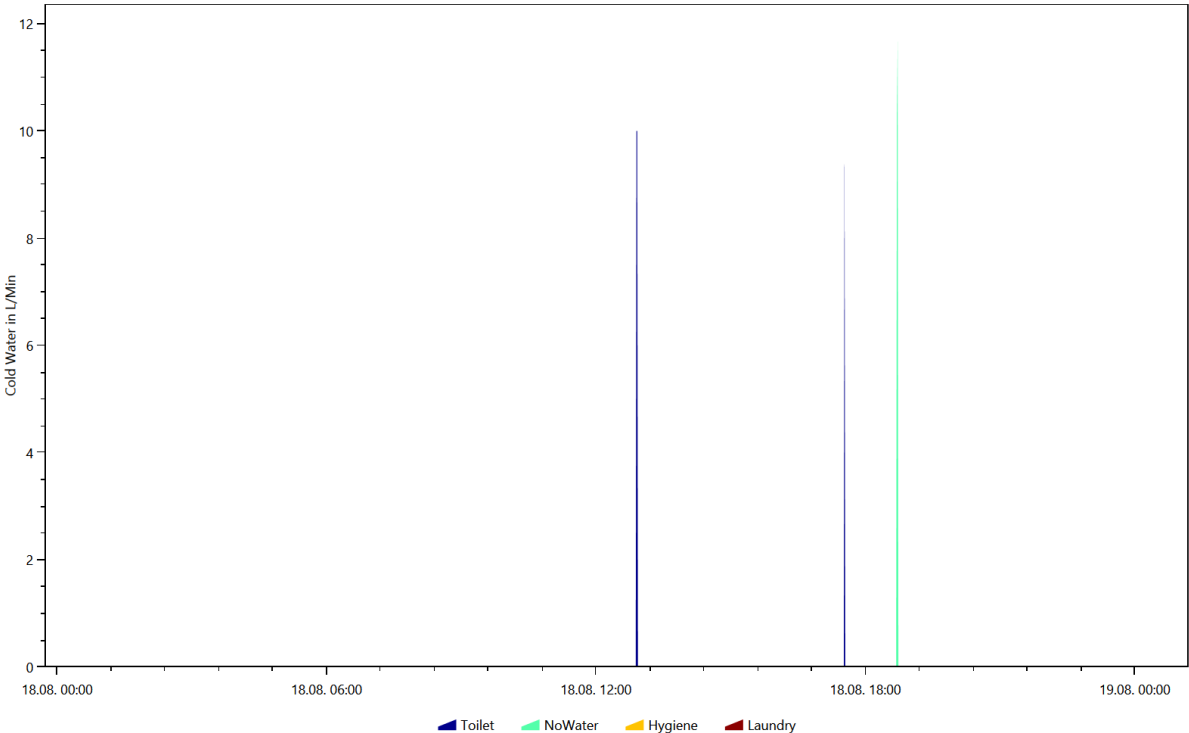
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.19



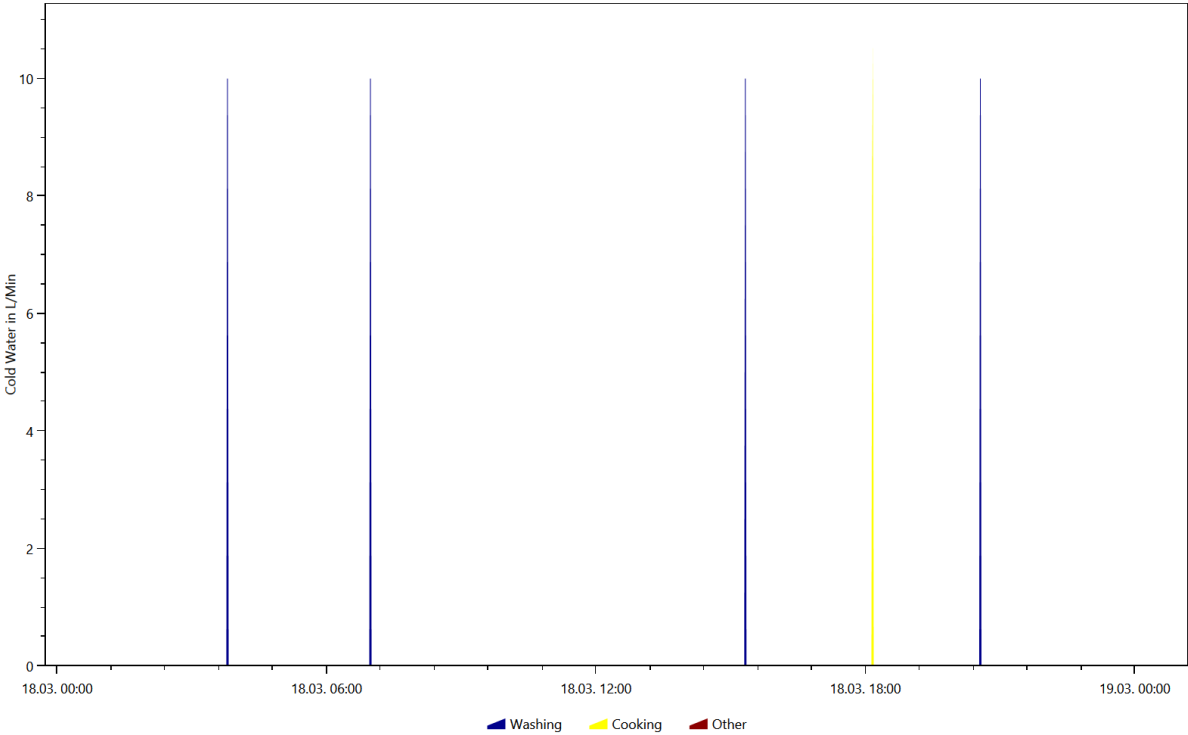
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.6



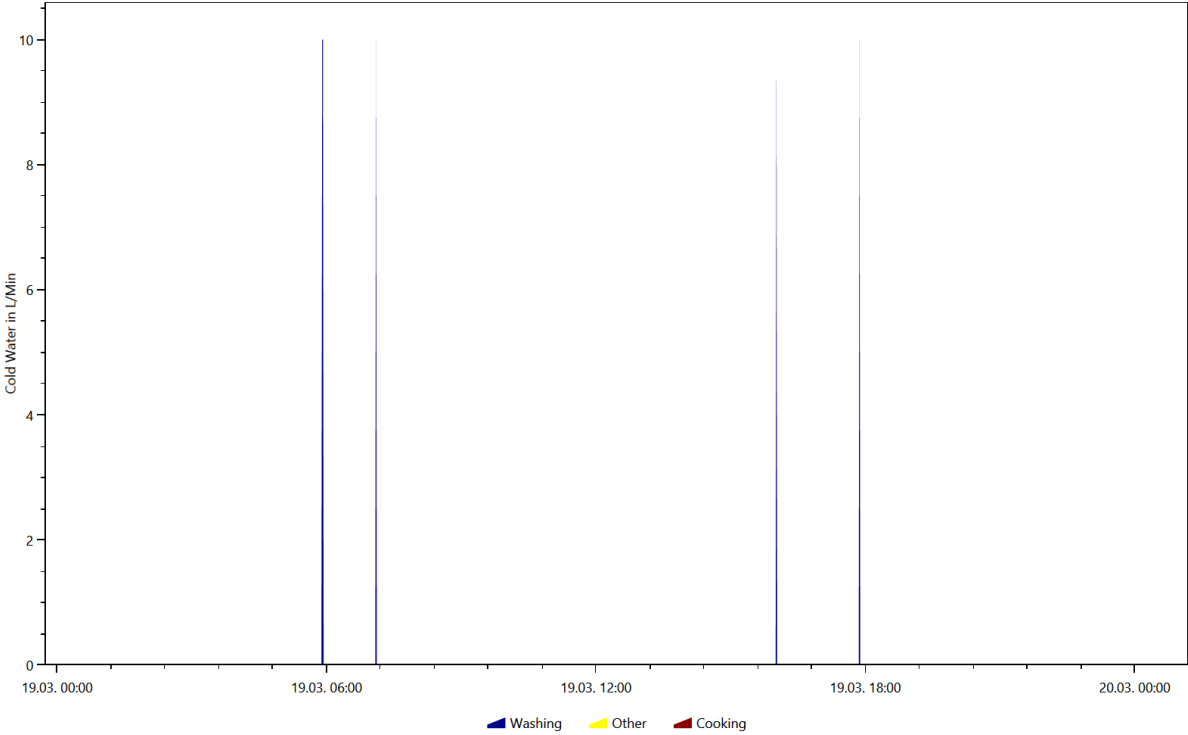
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.18



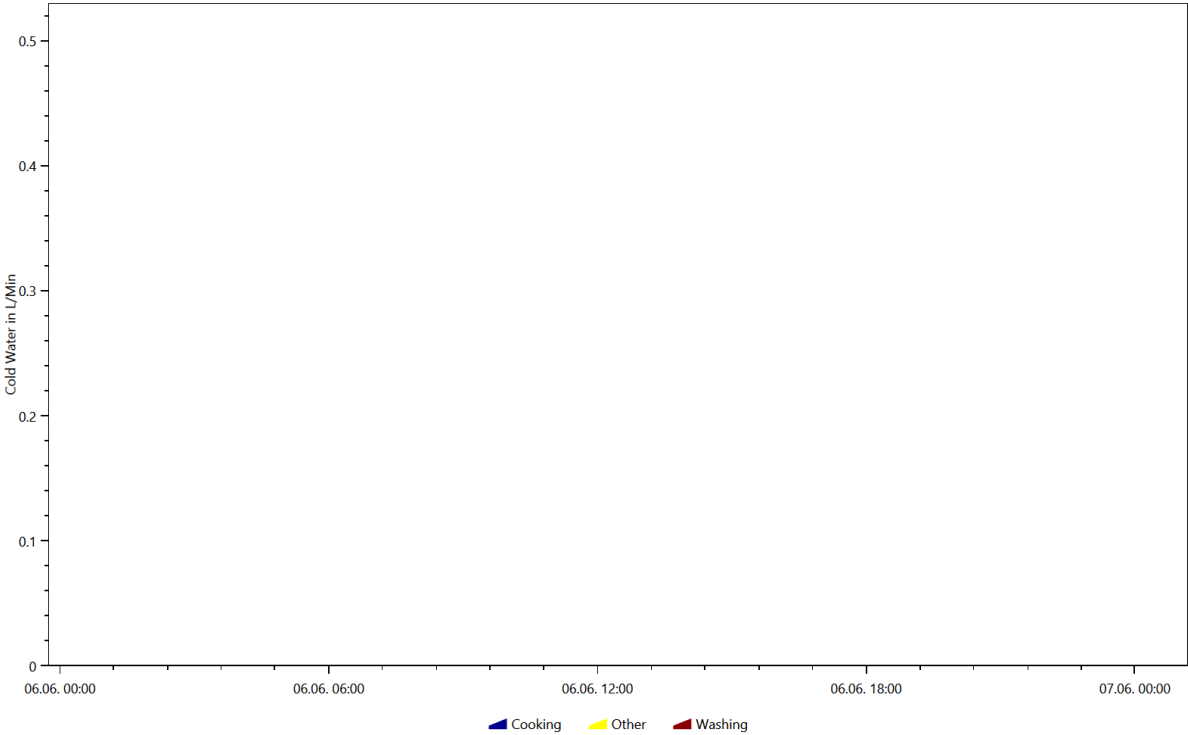
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.18



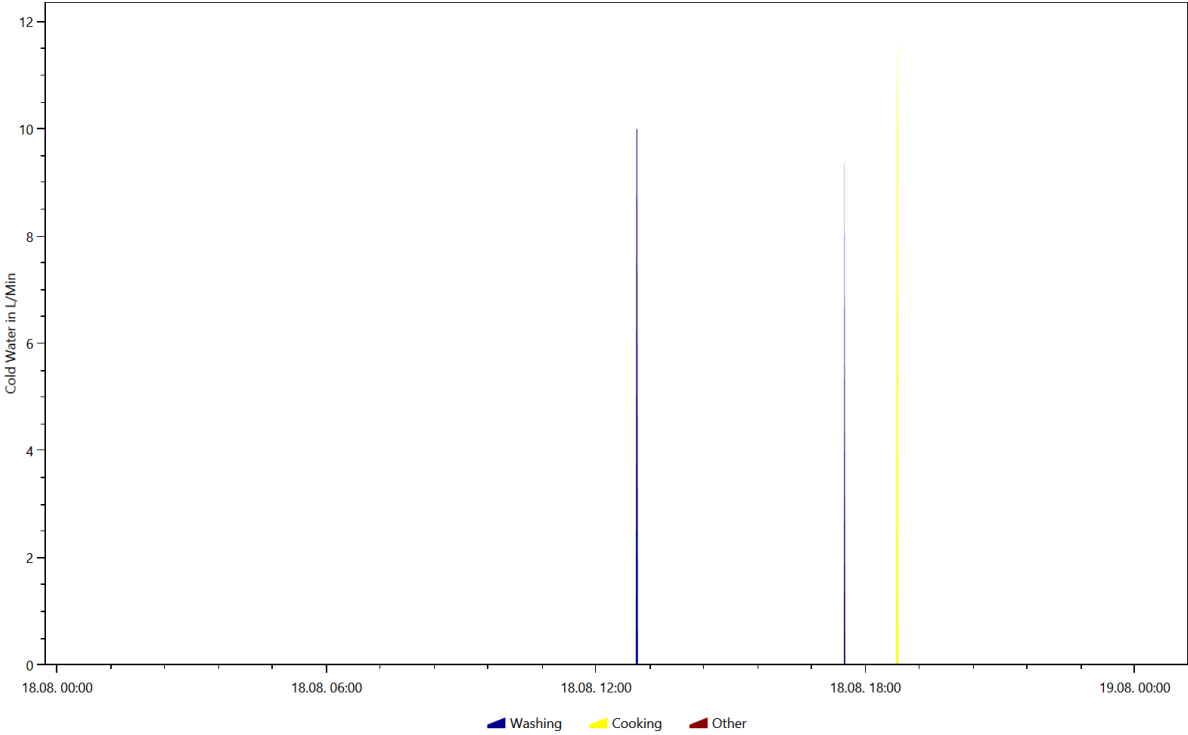
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.19



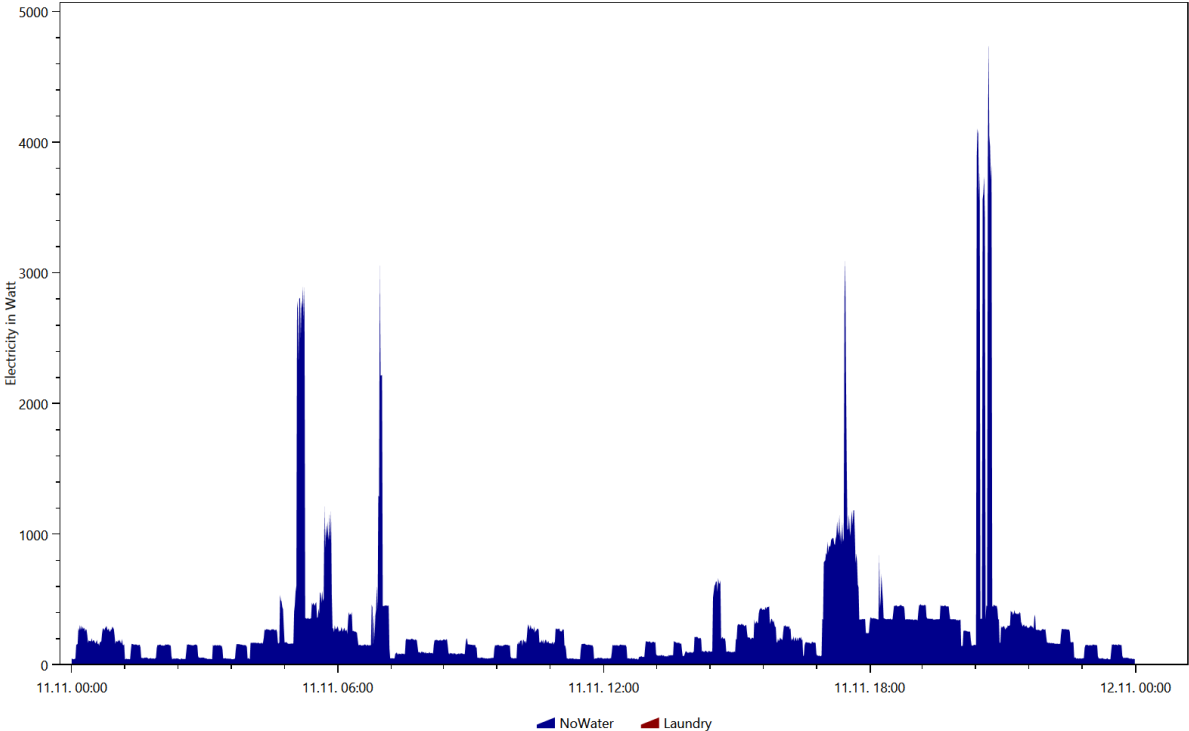
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.6



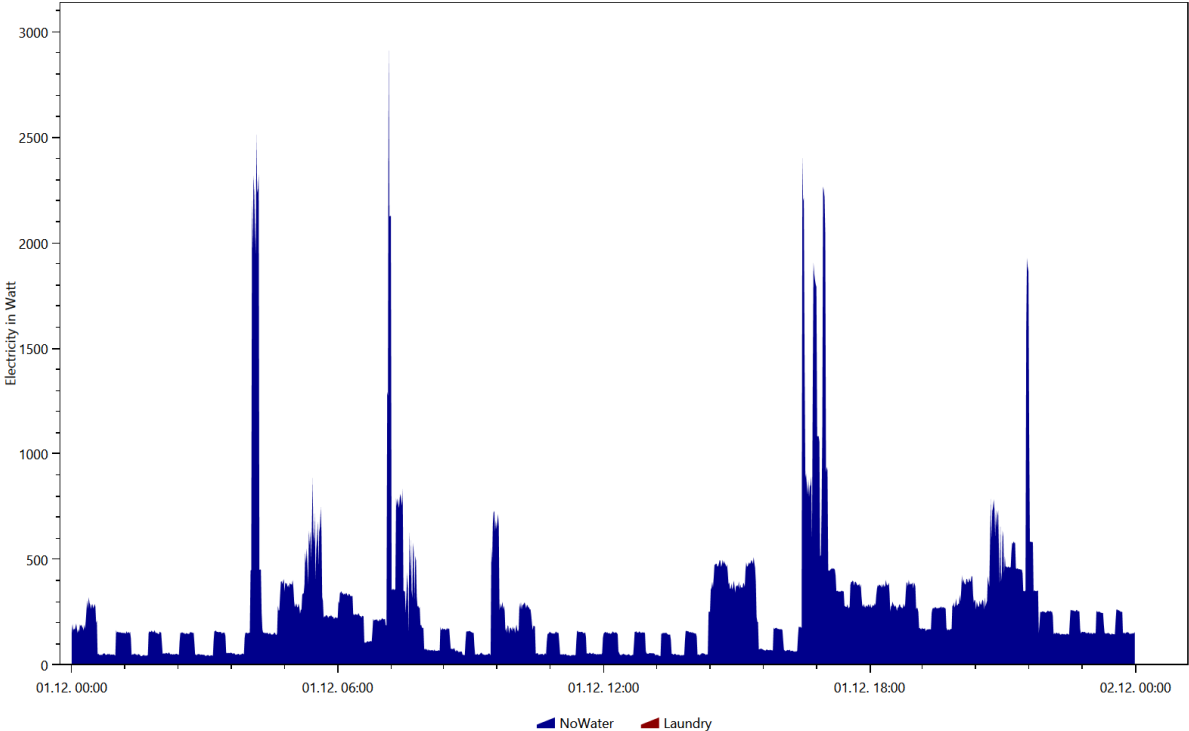
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.18



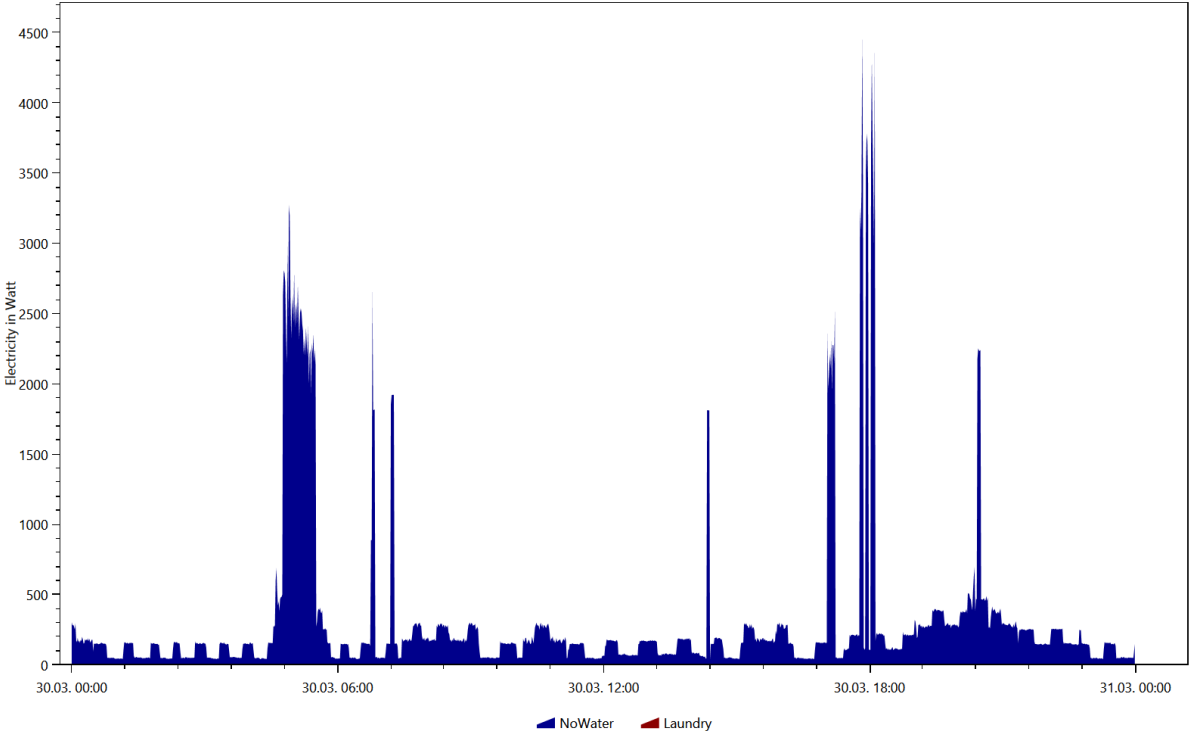
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.11



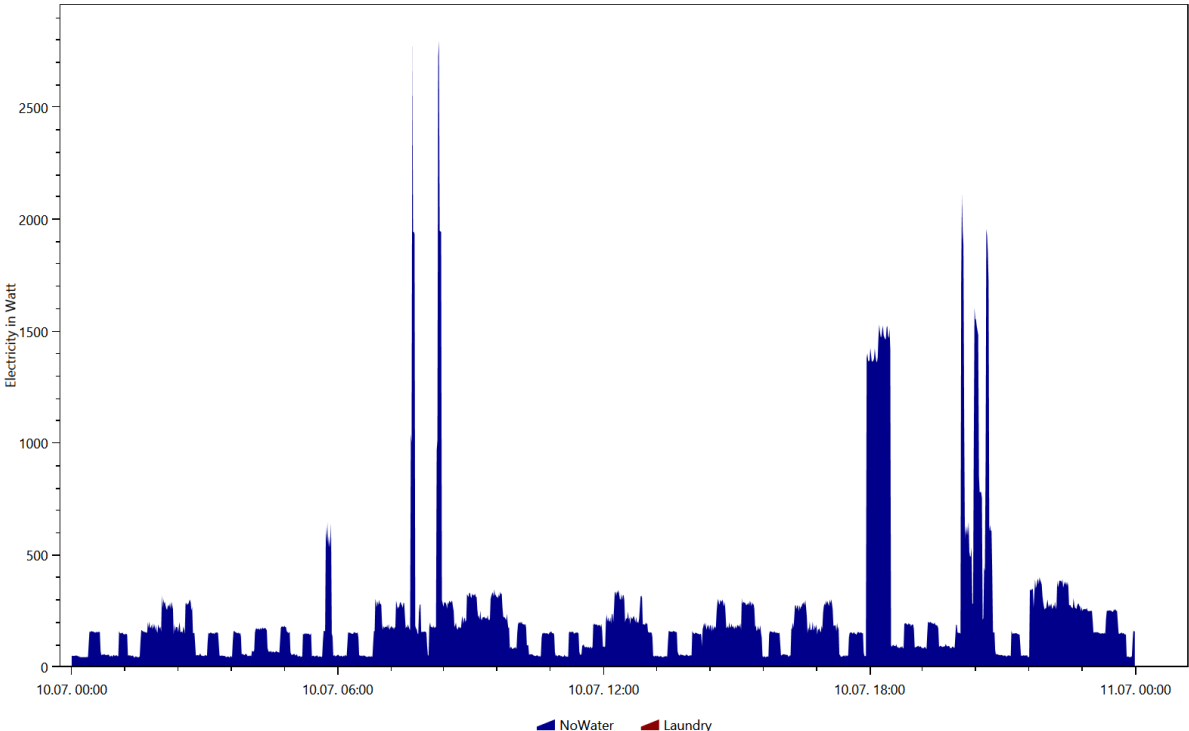
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.1



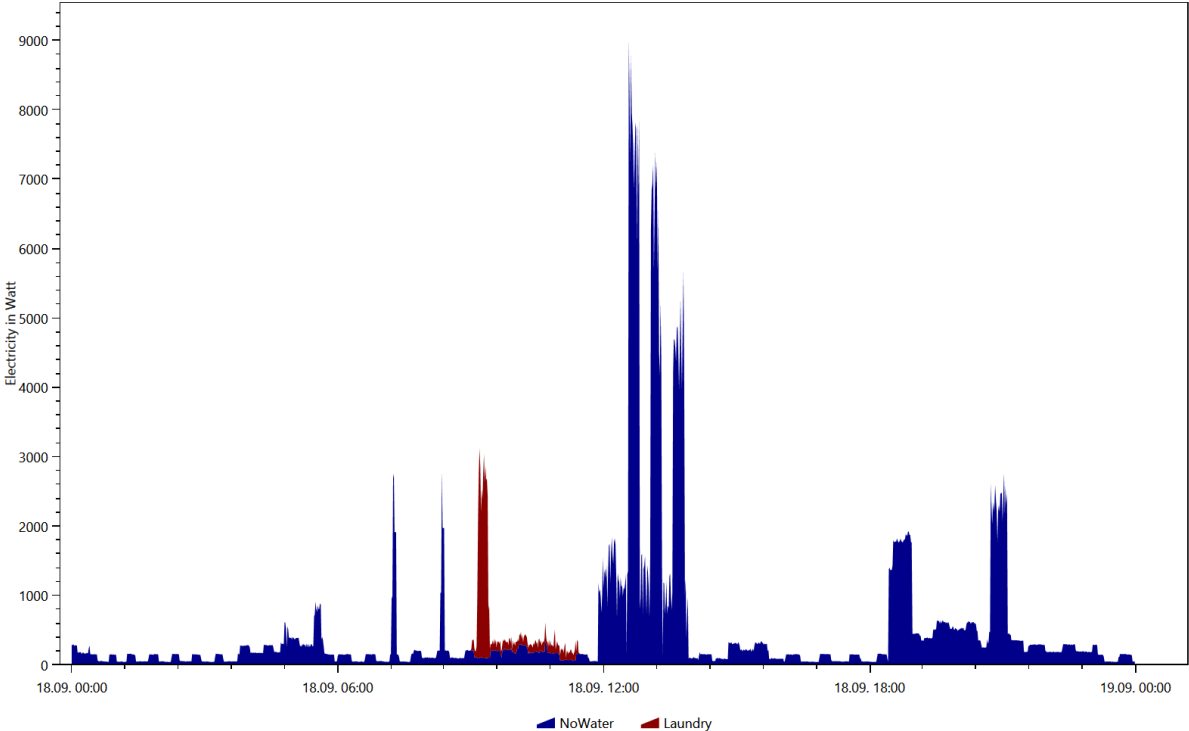
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.30



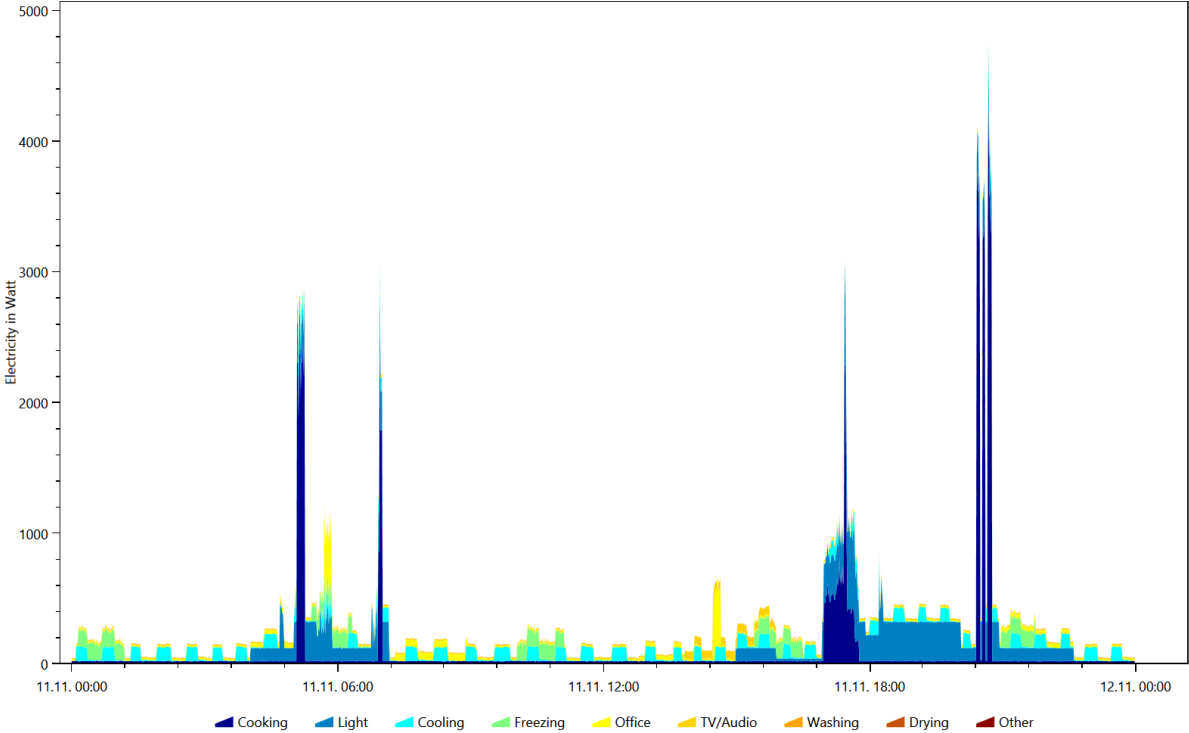
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.10



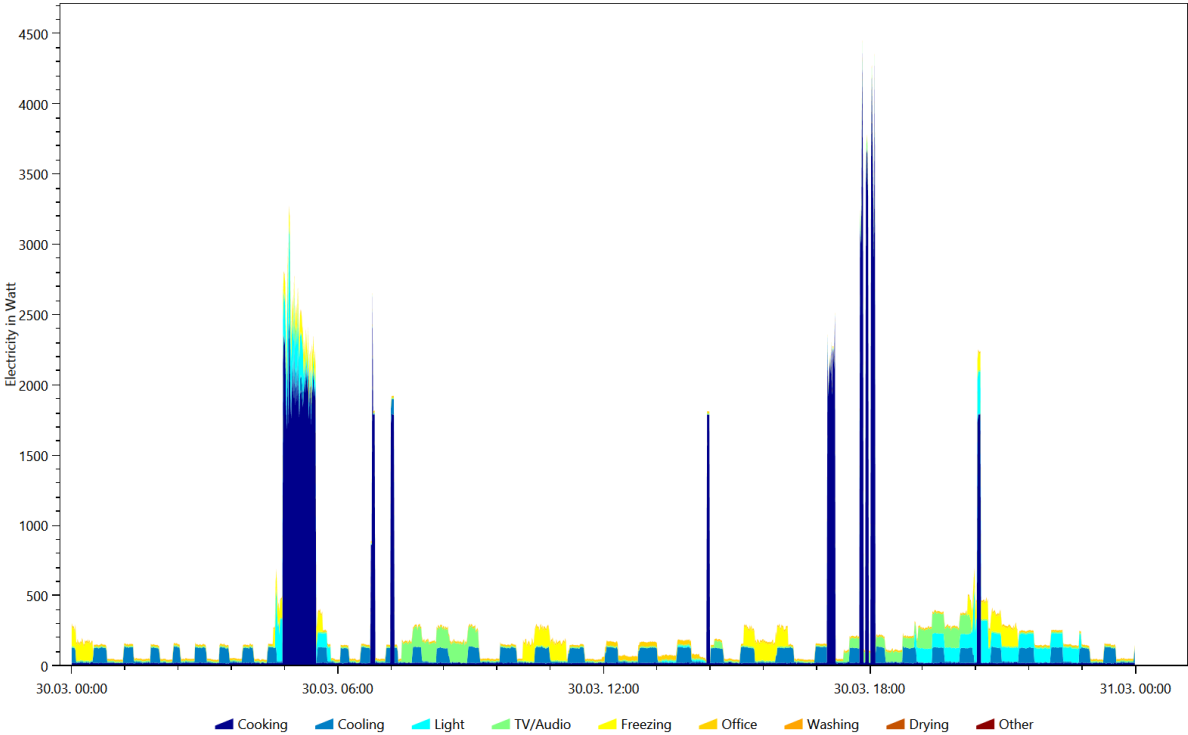
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.18



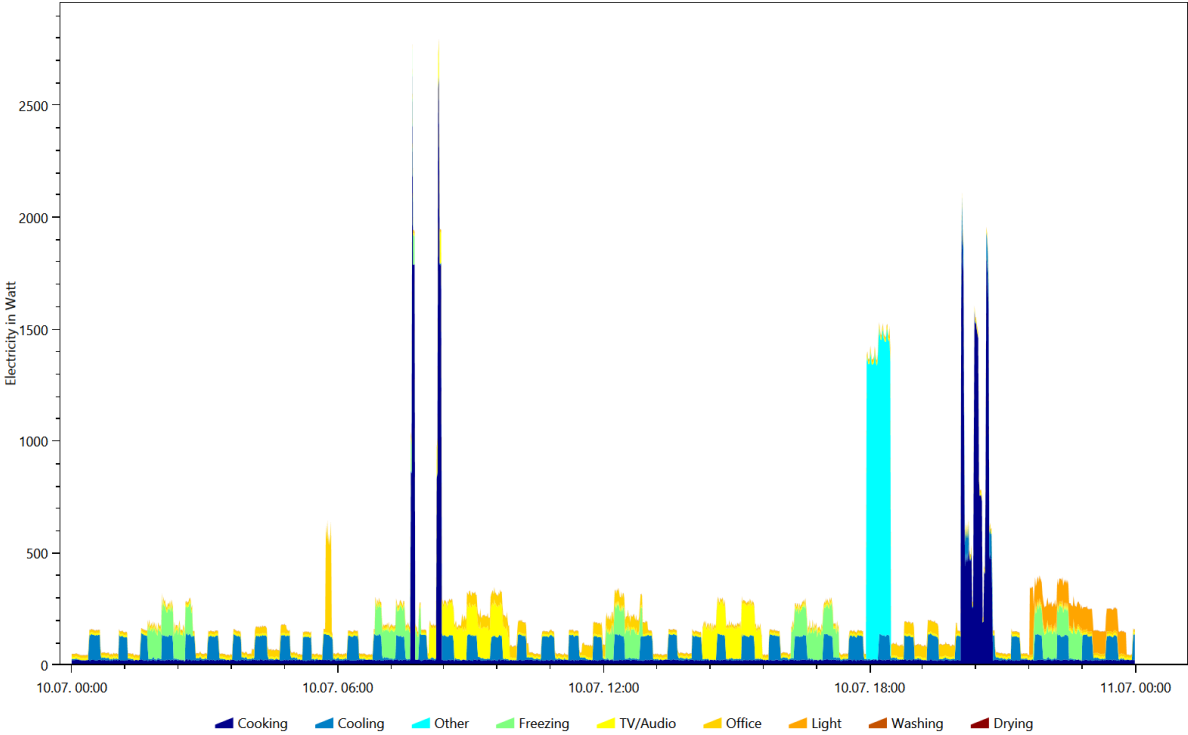
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.11.11



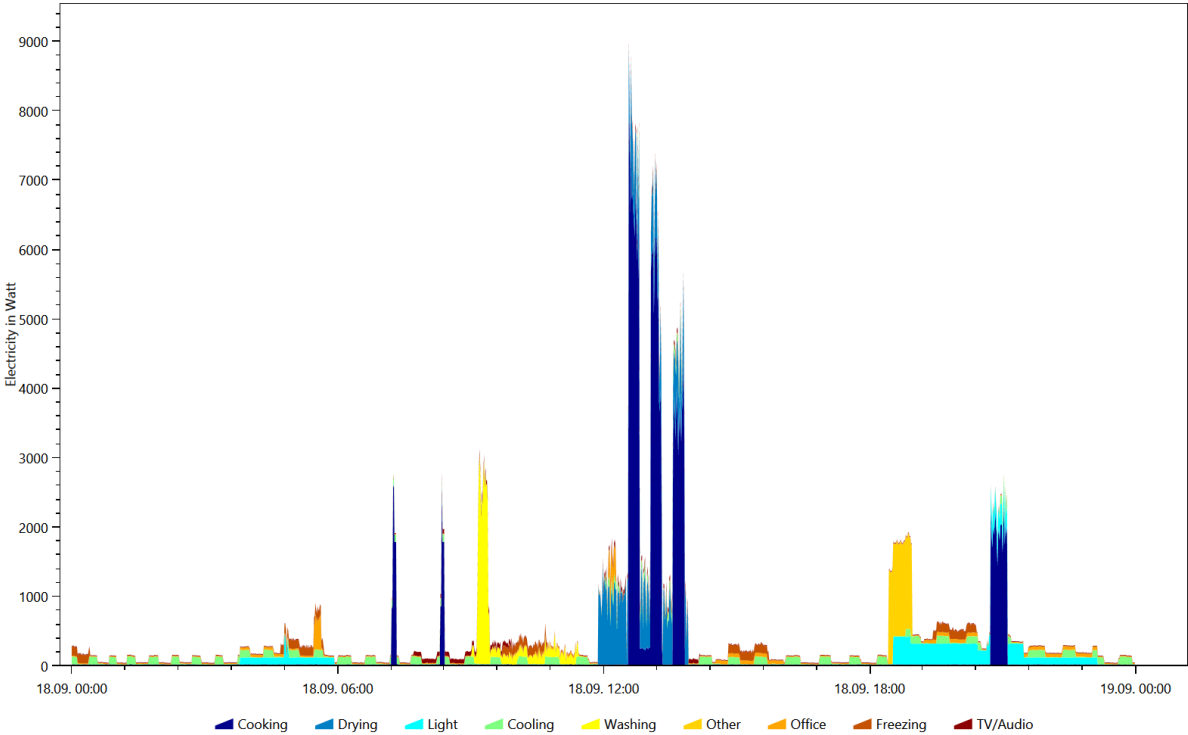
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.30



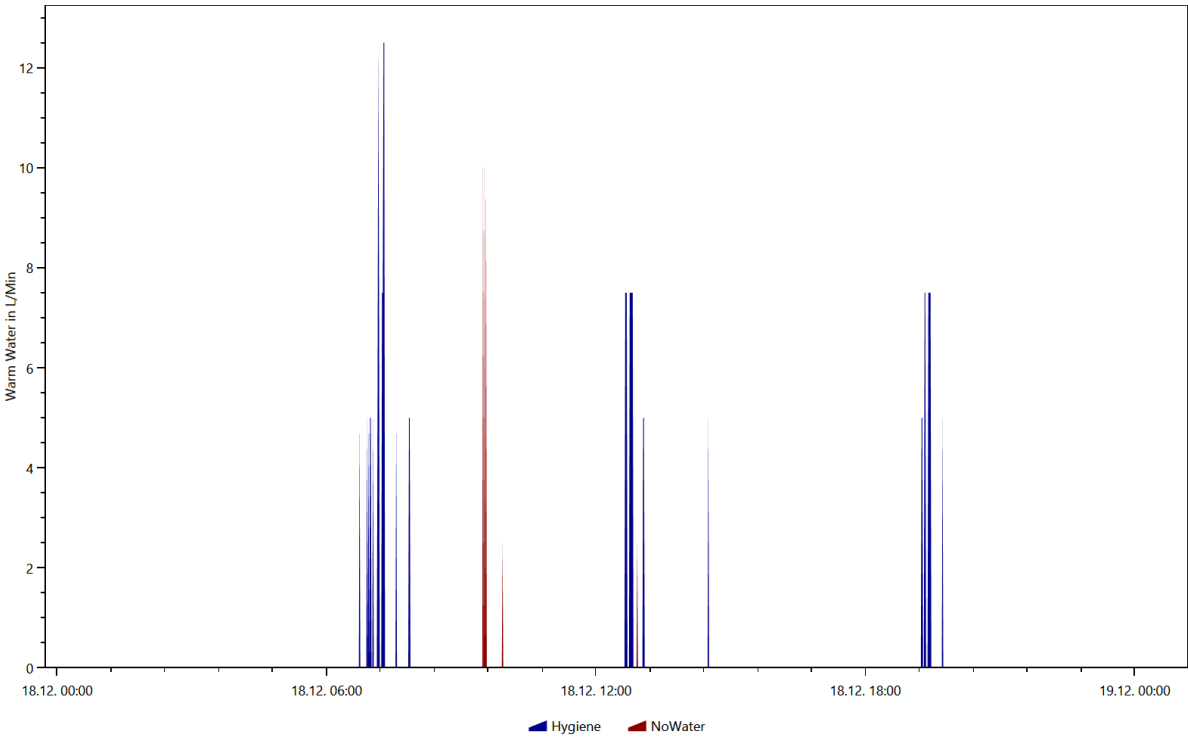
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.10



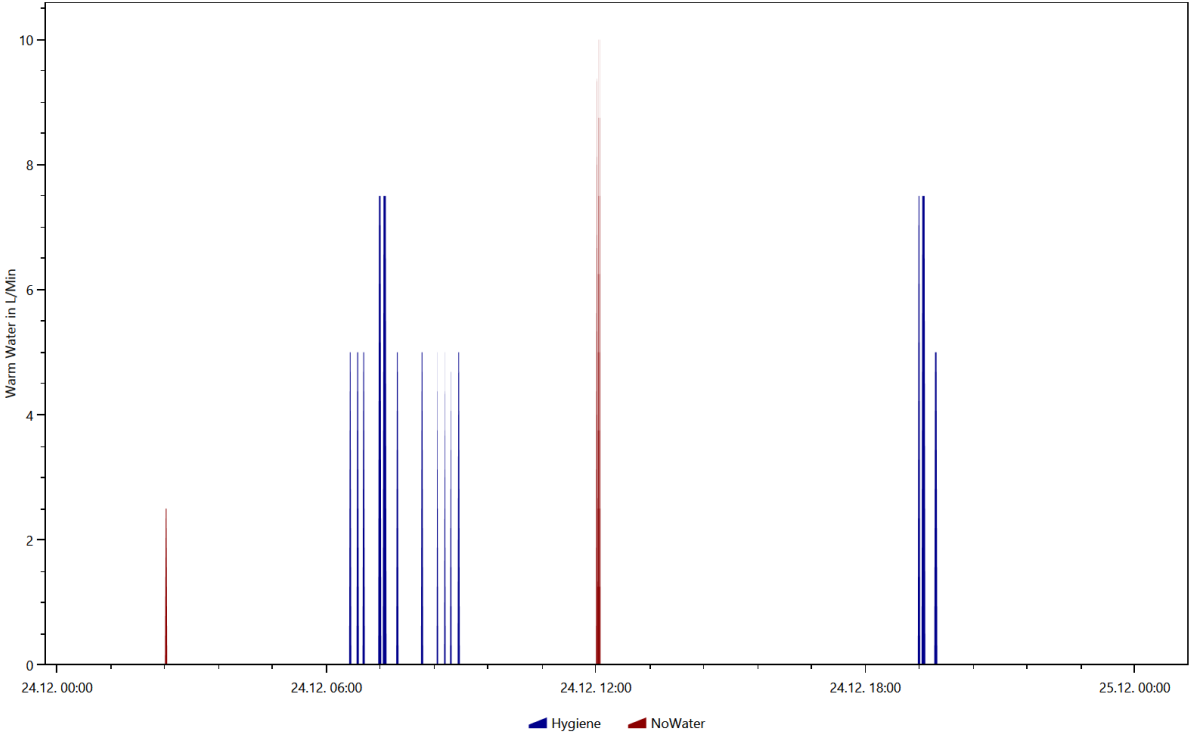
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.18



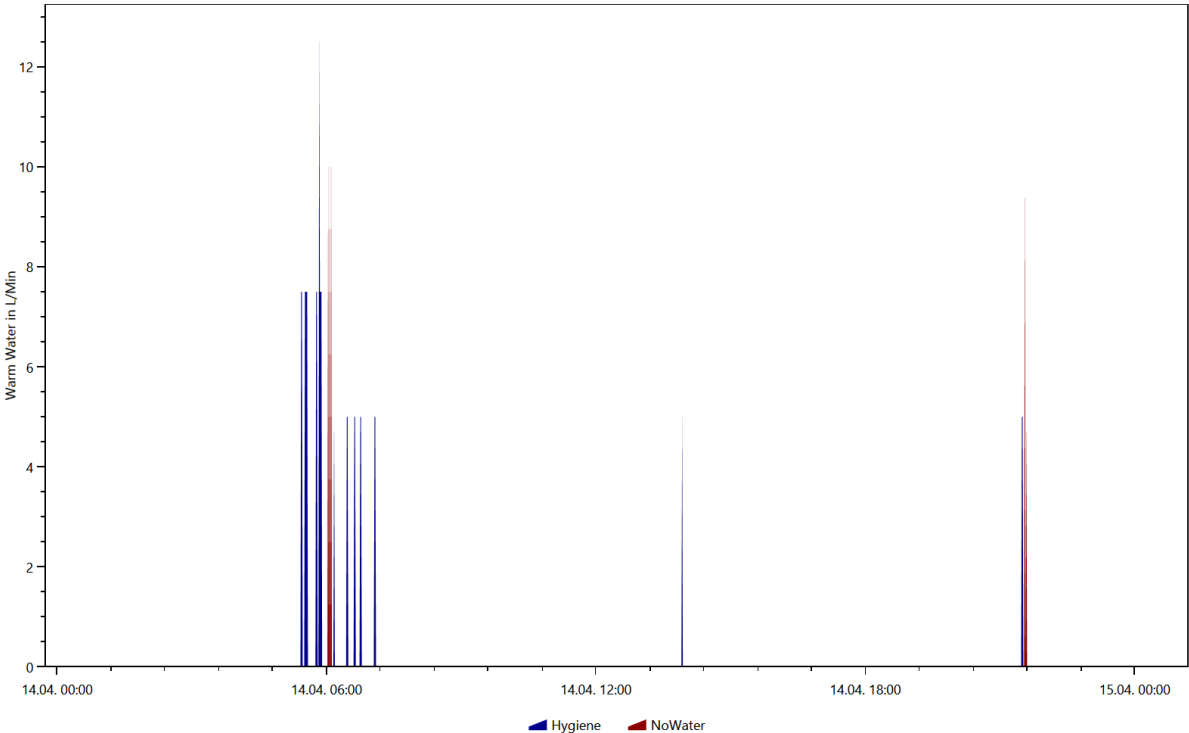
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.18



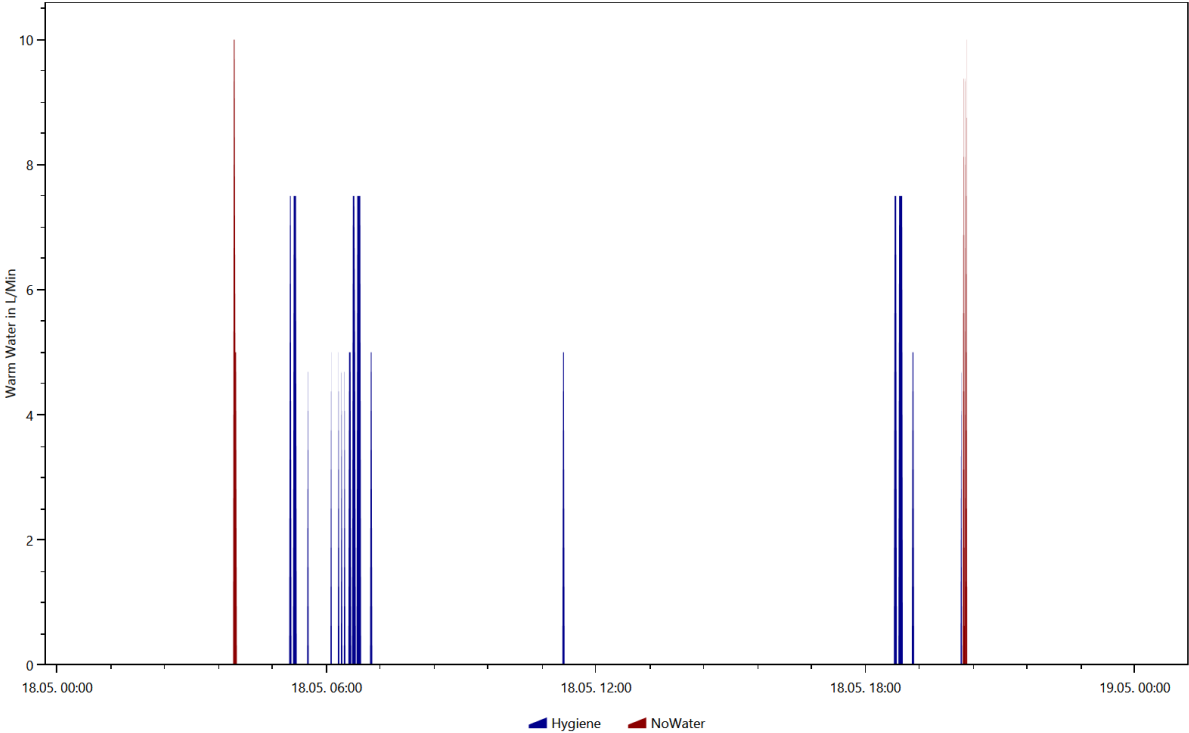
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.24



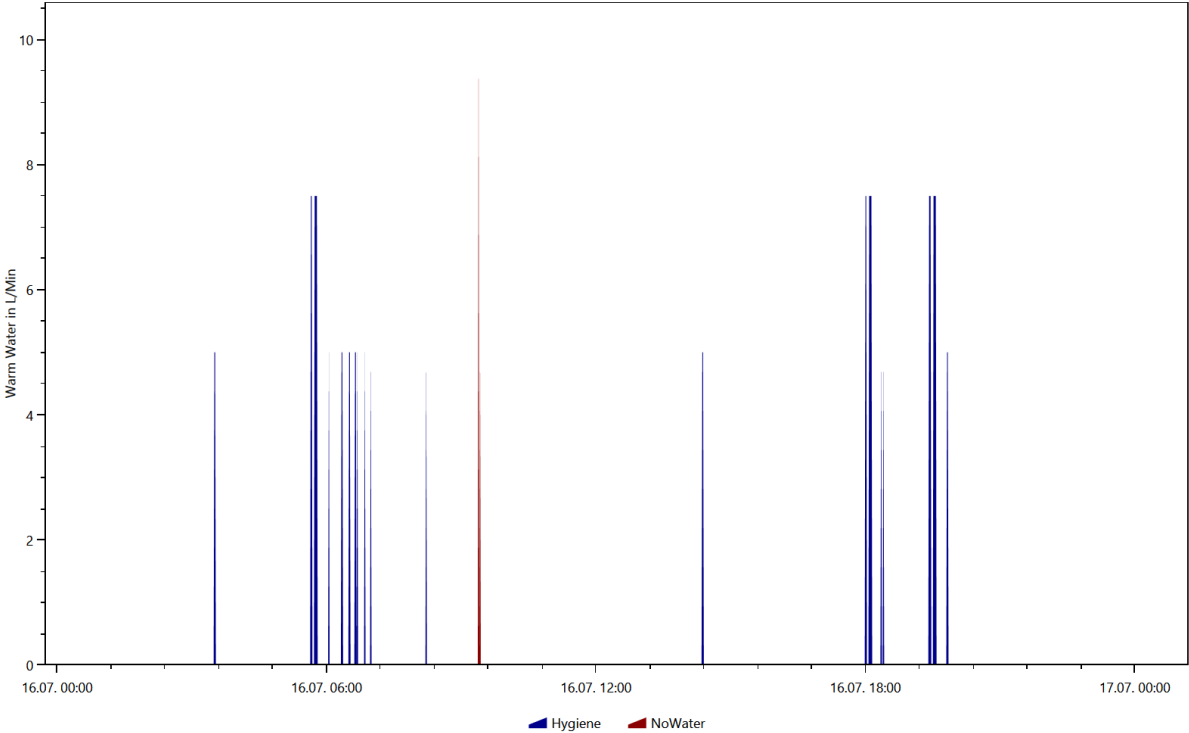
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.14



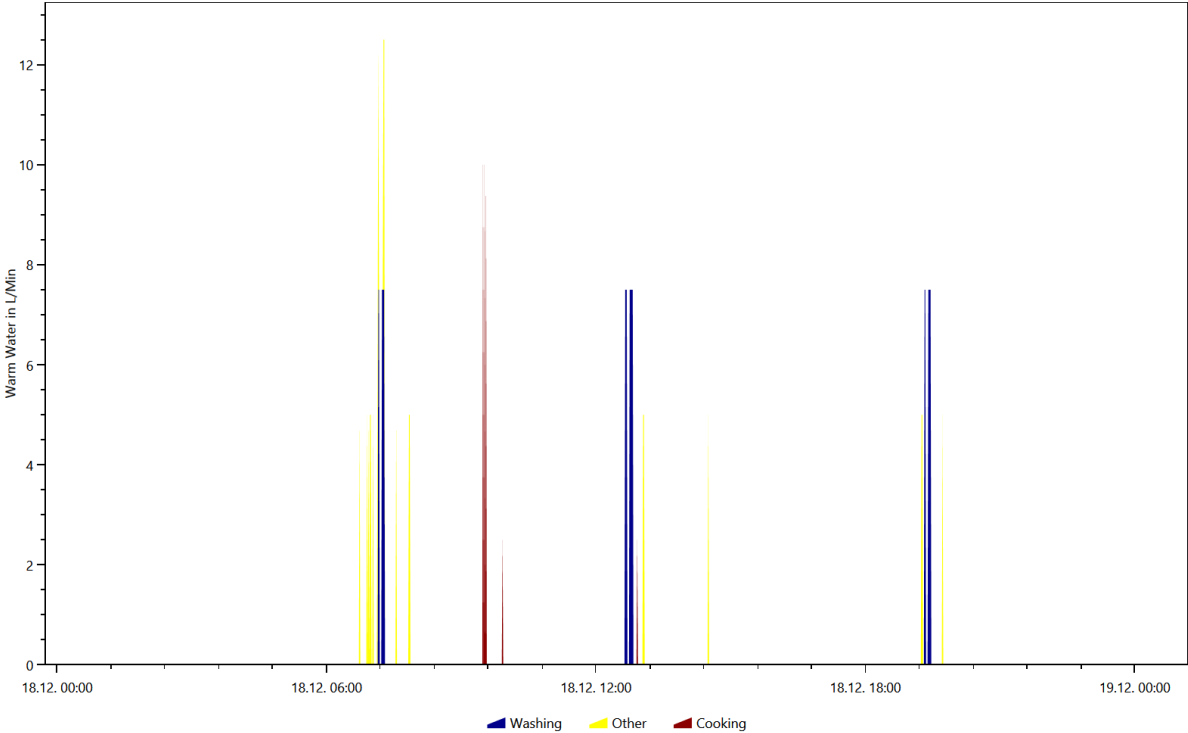
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.18



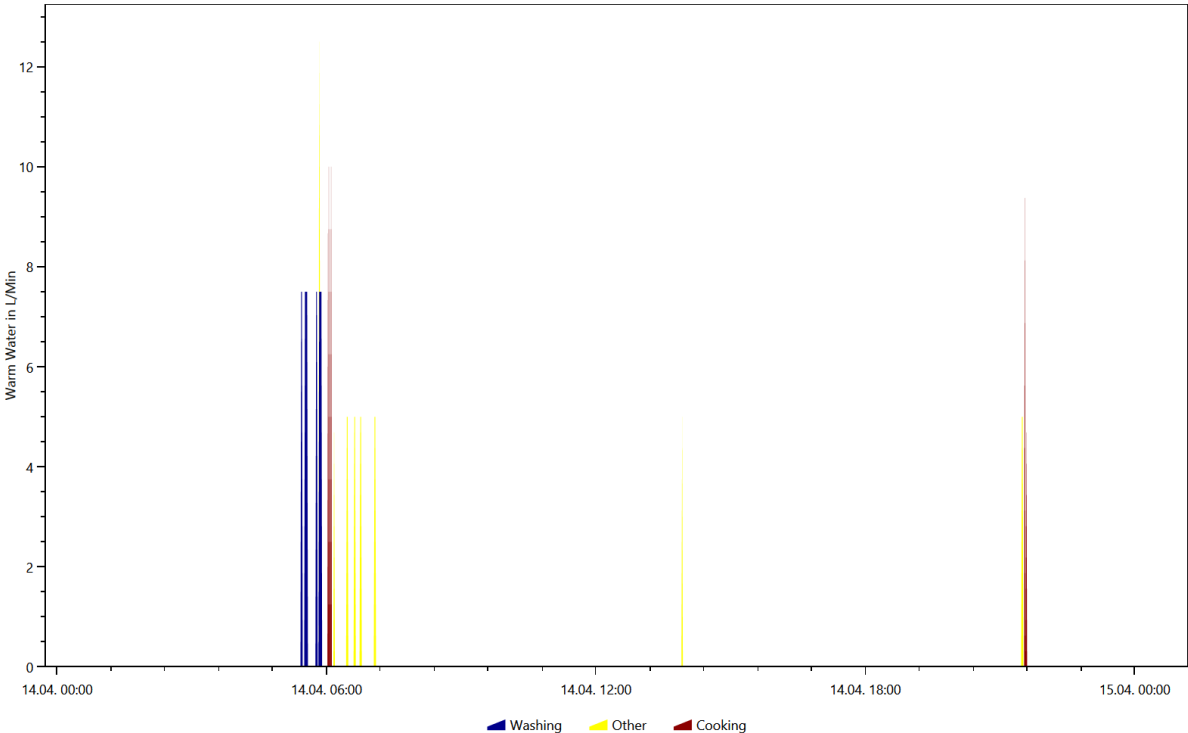
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.16



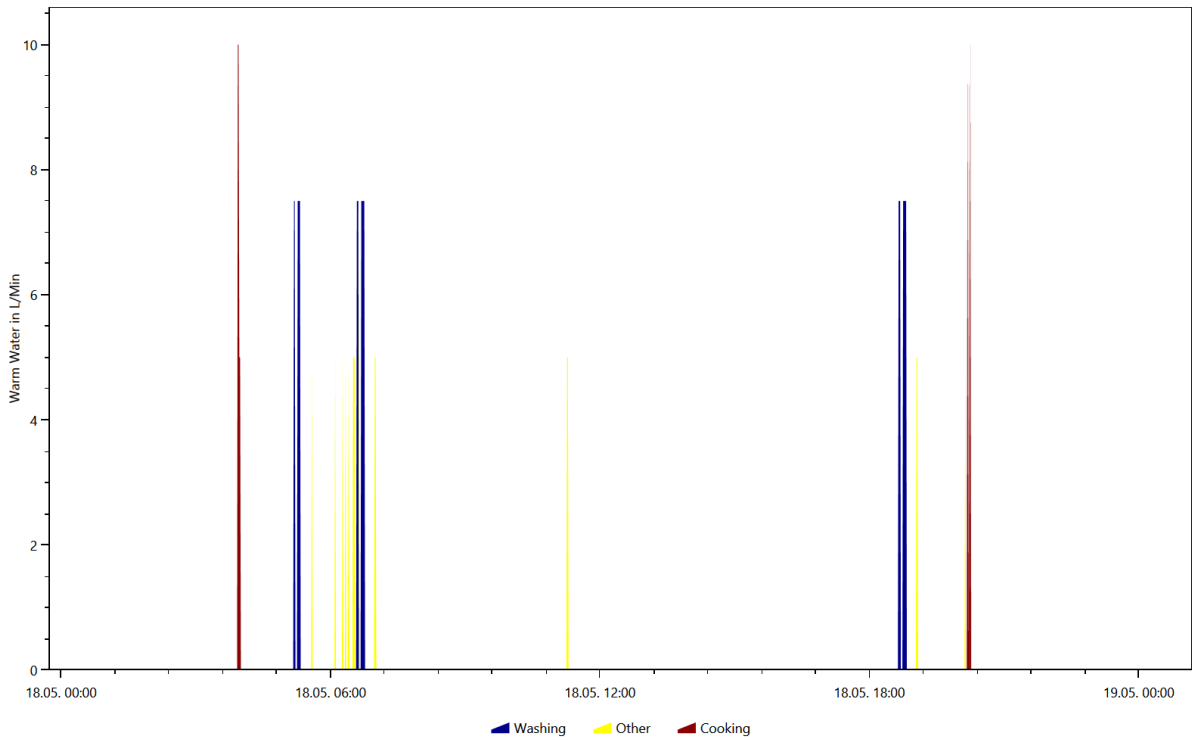
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.18



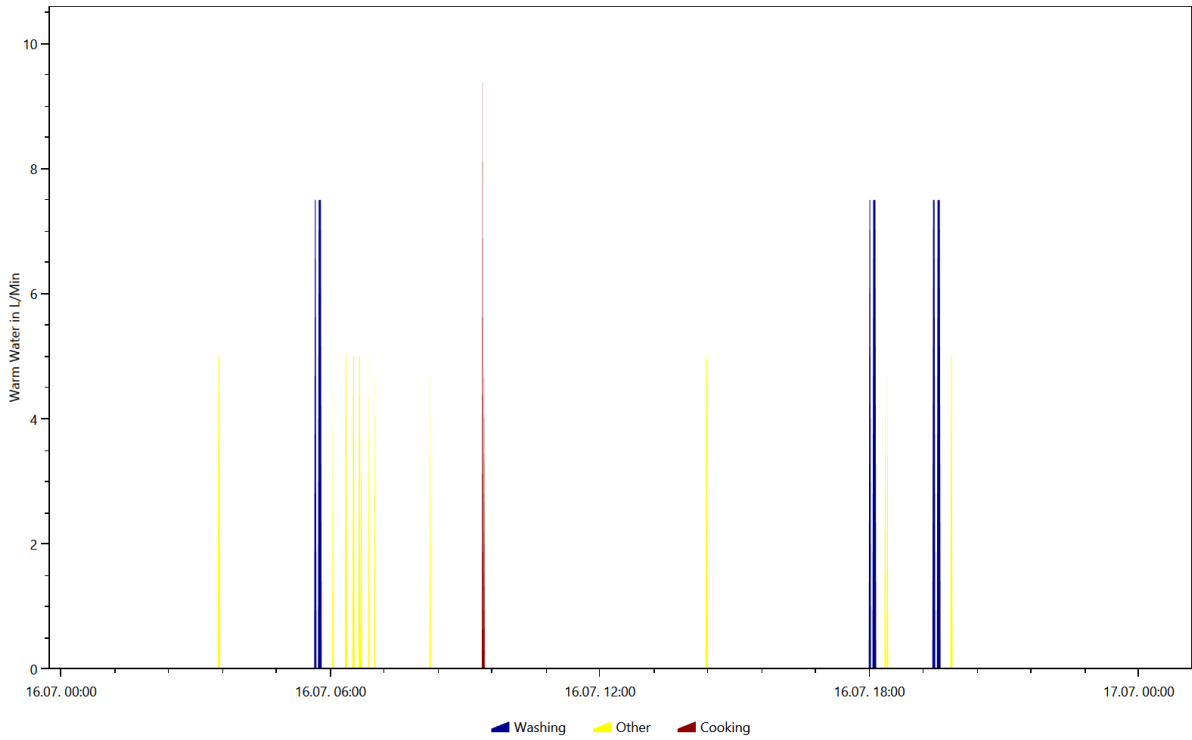
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.14



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.18



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.16

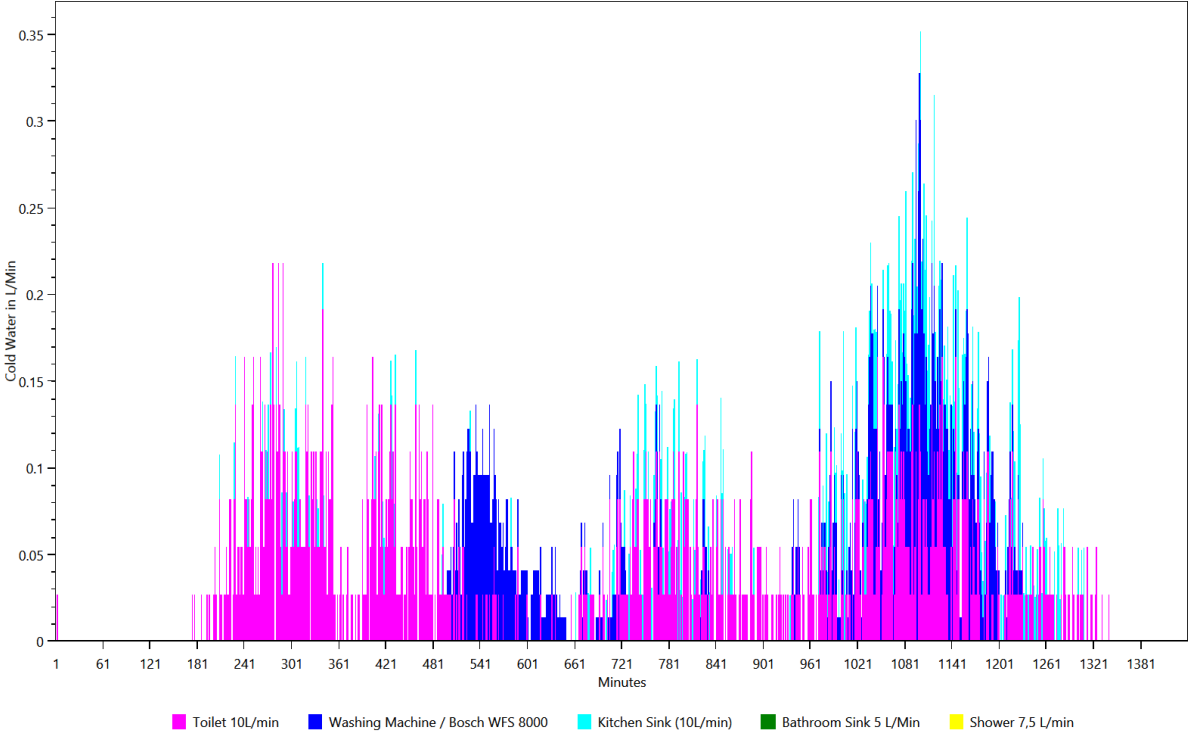


Overview of the time and power of the use per load type per device

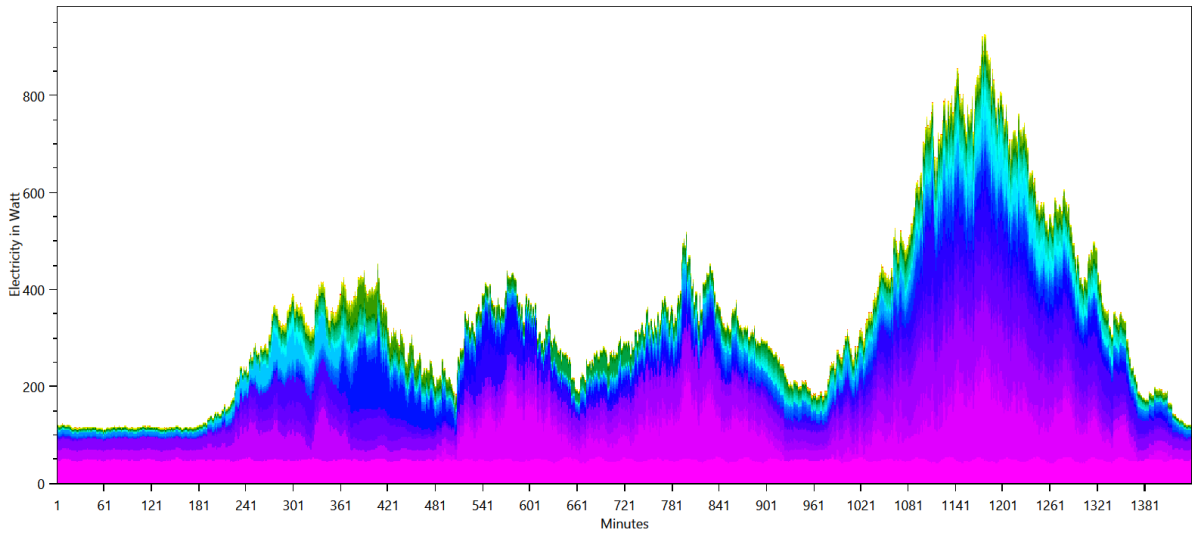
This is made from the files starting with: TimeOfUseEnergyProfiles

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

Cold Water

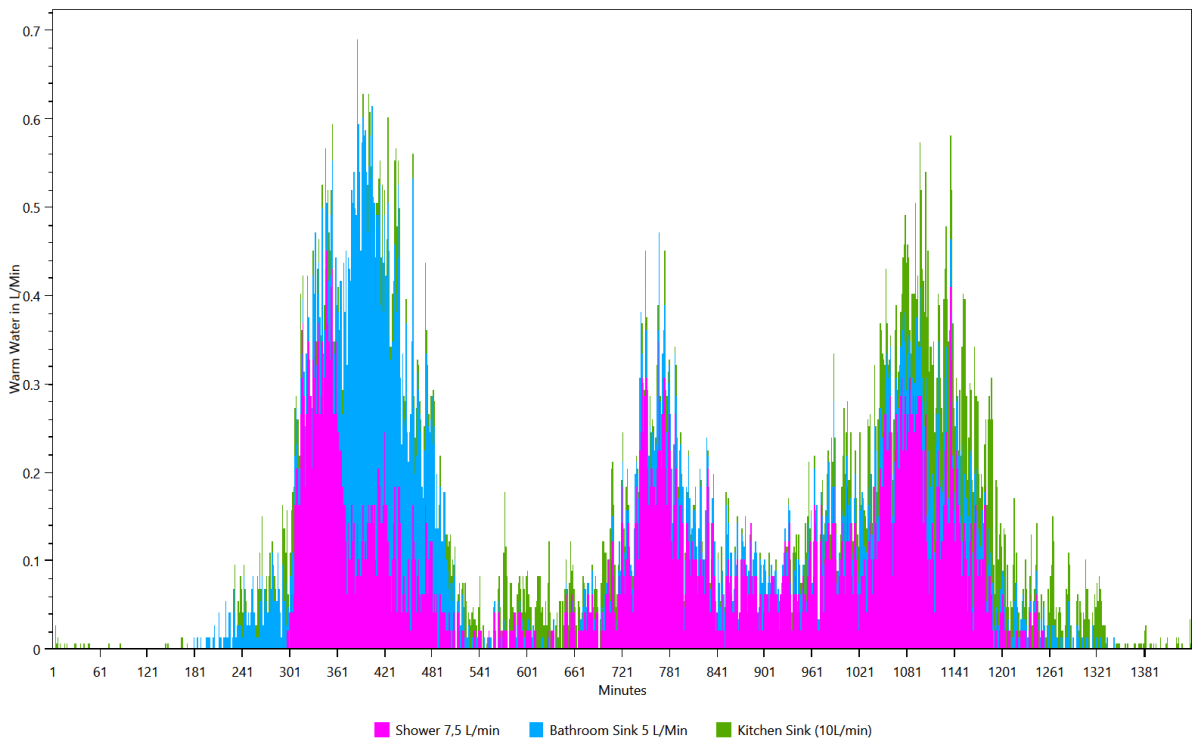


Electricity



- Fridge Liebherr bio fresh safe (2005)
- Oven / AEG B 33512-5-M
- Microwave / Panasonic NN-V 359 W Inverter
- Dryer / Miele T 8626 WP
- Bauknecht GTM 2511
- Kitchen Light (300W)
- Living Room Light (100W)
- Washing Machine / Bosch WFS 8000
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove front right- full power
- Electric Kettle / Petra WK288 1.5L
- Fondue / Unold 48746 Asia
- TASKalfa 180
- Home Cinema System / Samsung HT-D5550
- Router O2 Box 6431
- Single Stove Plate
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind - full power
- Steam Cooker / Phillips HD9140
- Deep Fryer / DeLonghi F 28311.W Rotofritteuse
- Hifi System / Sharp XL-HF300PH
- Bedroom Light (200W)
- Bathroom Light (200W)
- TV Medion MD20123_DE_A
- PC Monitor / Fujitsu Siemens Scaleoview D19-1
- Vacuum Cleaner Fif
- PC / Acer 8400
- CD/DVD Player / Philips DVDR 725 H
- Miele DA 249-2
- Toaster Salco MT 400
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen-stove right hind
- SAT Receiver / Kathrein UFS913
- Bathroom Mirror Light 100W (Conventional)
- Ricecooker / Tristar RK-6112
- Kitchen radio / AEG KRC 4323 CD
- Electric Razor Braun Cruzer 5
- Miele DA 61
- Epson Stylus S20
- External Harddrive Iomega 3.5"
- Electric Toothbrush Dondodent Professional Clean
- Children Room Light Device (20W)
- Energy Saving Lamp / EL-REF 11 E27
- Immersion Blender Noah Hit Top
- Canon CanoScan LIDE 110

Warm Water



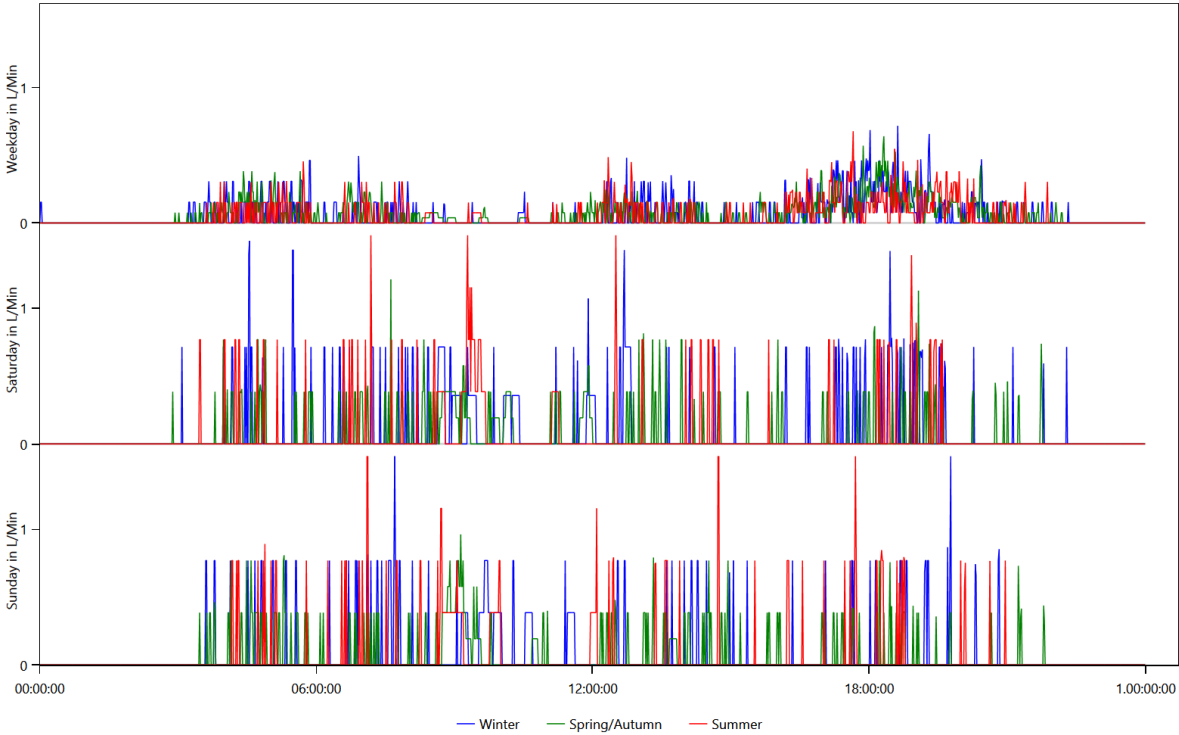
- Shower 7,5 L/min
- Bathroom Sink 5 L/Min
- Kitchen Sink (10L/min)

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

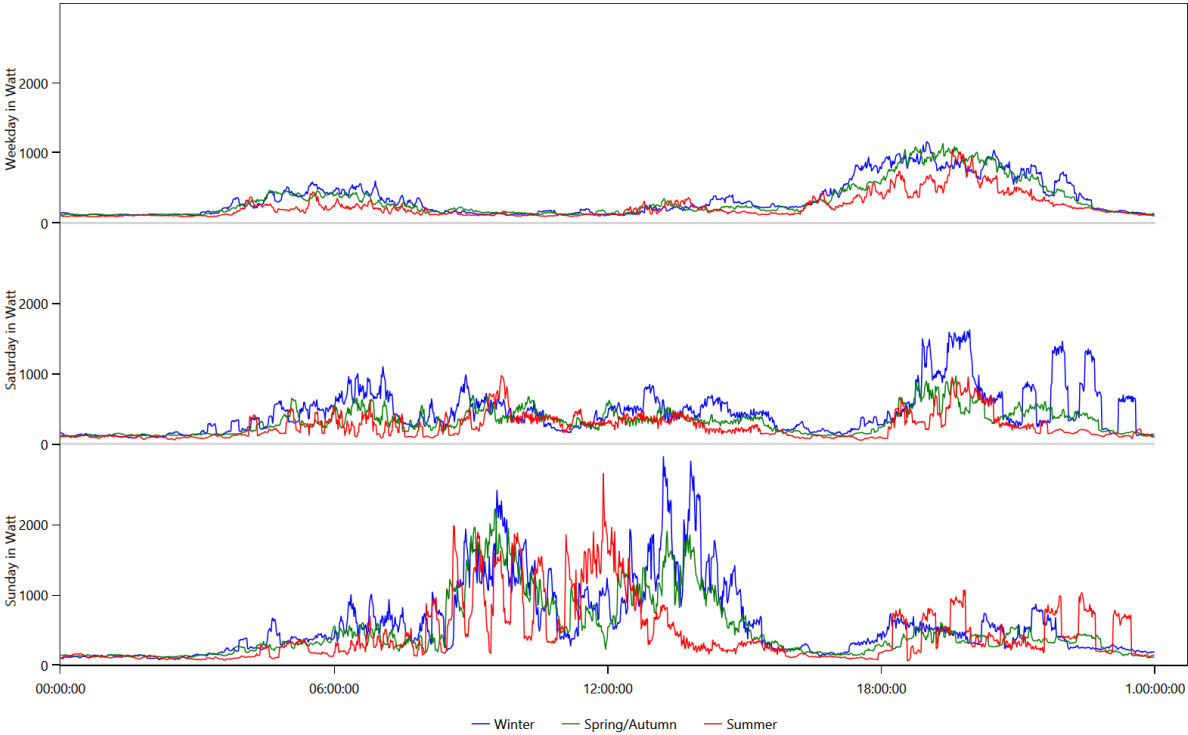
This is made from the files starting with: WeekdayProfiles

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

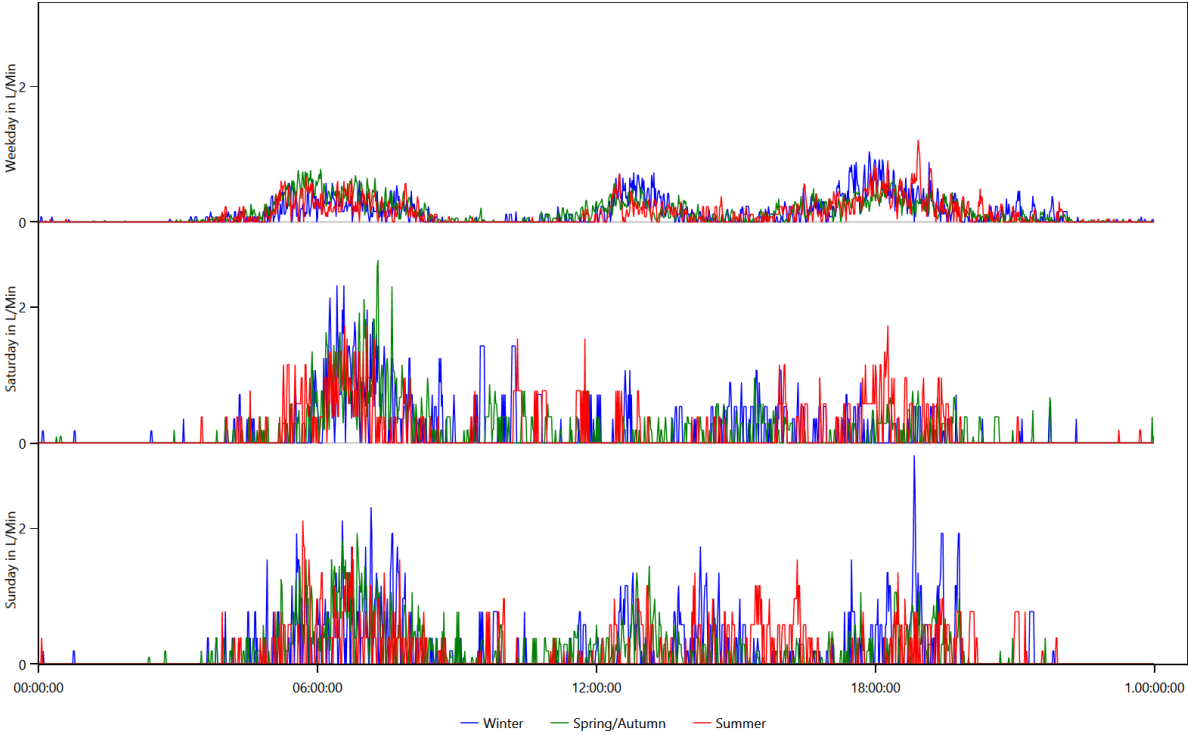
Cold Water



Electricity



Warm Water

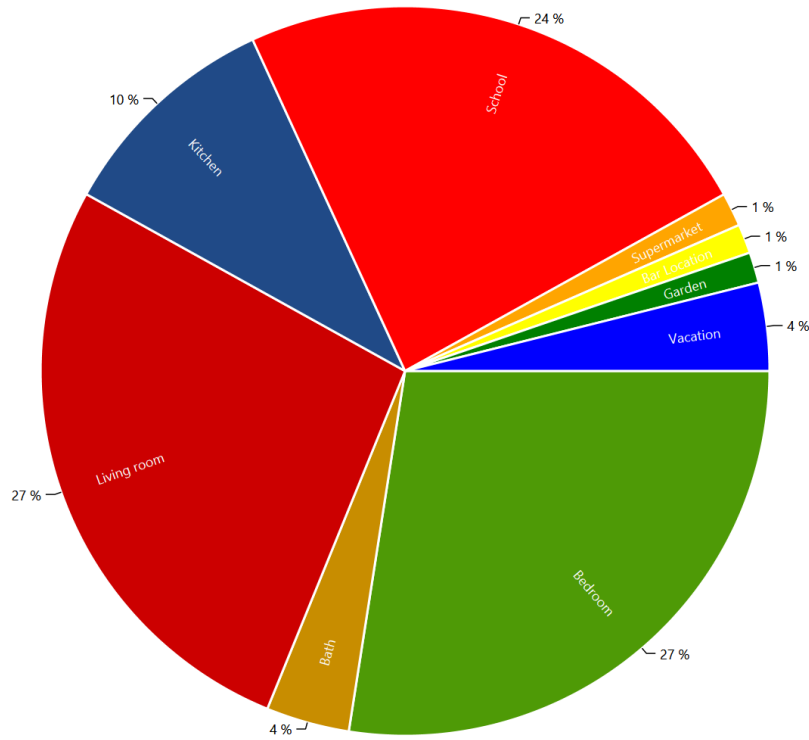


Location Distribution per Person

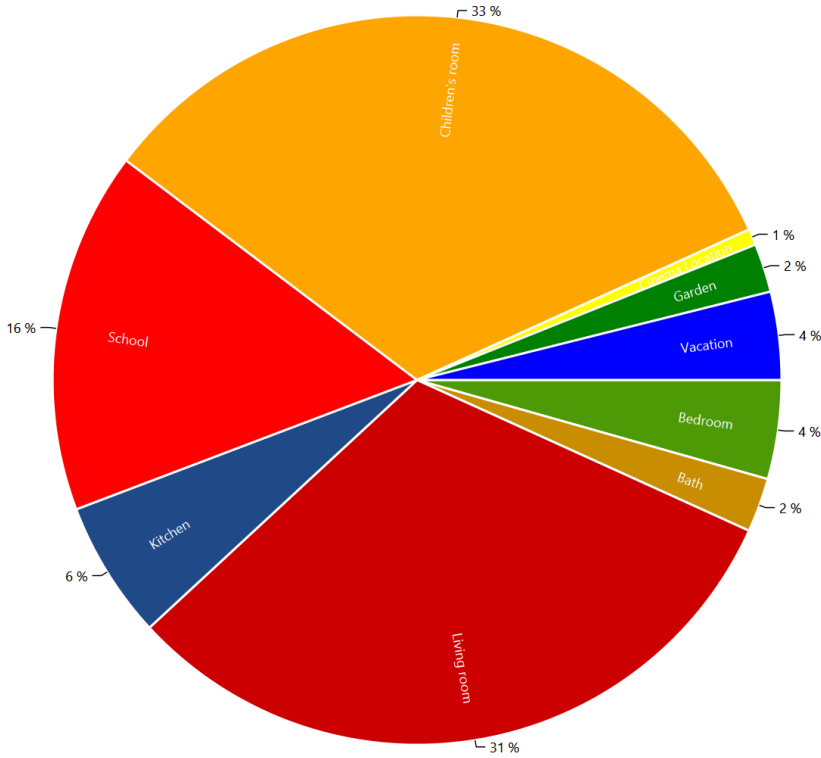
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR43 Lutz (43 Male)



CHR43 Maik (16 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

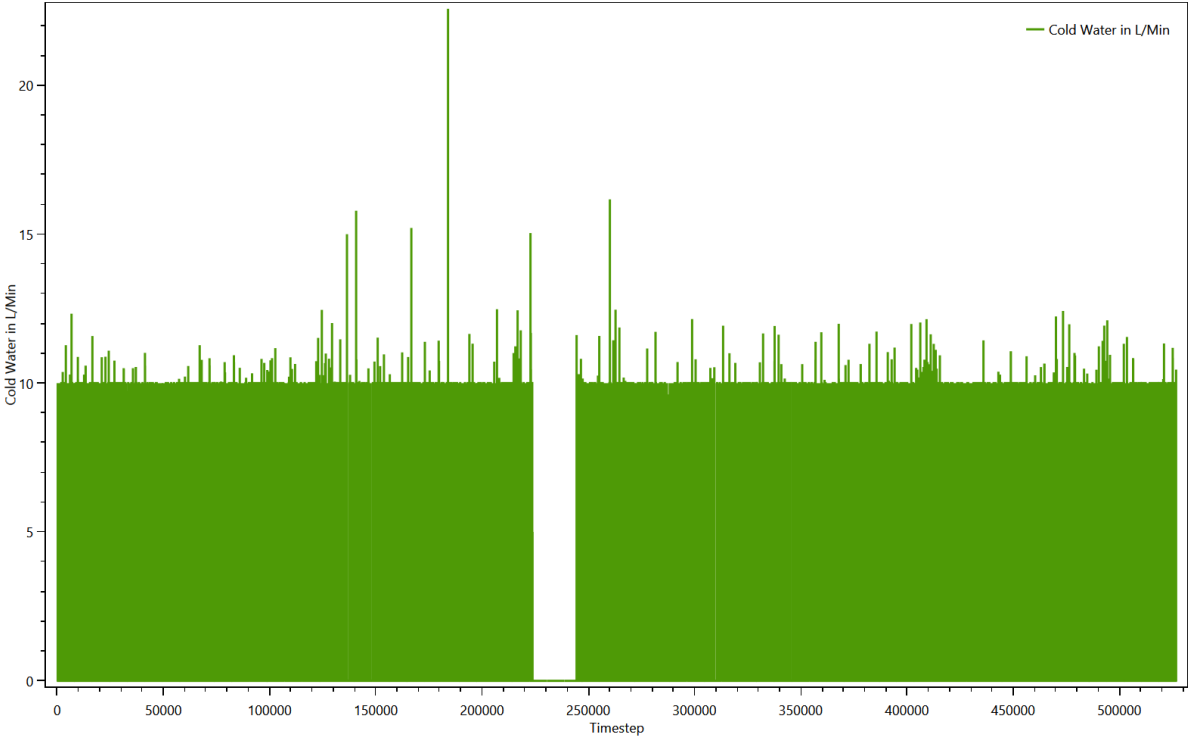
```
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR43 Lutz (43/Male);sleep bed 01 (06 h);sleep;False;
0;01.01.2016 00:00;CHR43 Maik (16/Male);sleep bed 03 (08 h) Child;sleep;False;
232;01.01.2016 03:52;CHR43 Maik (16/Male);go to the toilet;hygiene;False;
236;01.01.2016 03:56;CHR43 Maik (16/Male);use the computer (1.5 h);Active Entertainment (Computer,
Internet etc.);False;
278;01.01.2016 04:38;CHR43 Lutz (43/Male);paint a picture ;Offline Entertainment;False;
307;01.01.2016 05:07;CHR43 Lutz (43/Male);watch a movie for 2 h with home cinema system;Passive
Entertainment (TV etc.);False;
333;01.01.2016 05:33;CHR43 Maik (16/Male);fry two eggs and eat them with toast;cooking;False;
349;01.01.2016 05:49;CHR43 Maik (16/Male);read a book on the couch all the time;Offline
Entertainment;False;
446;01.01.2016 07:26;CHR43 Lutz (43/Male);get ready in the morning (men);hygiene;False;
457;01.01.2016 07:37;CHR43 Lutz (43/Male);eat small breakfast (25min) interrupting subaff, no
alarm;cooking;False;
479;01.01.2016 07:59;CHR43 Maik (16/Male);go to grammer school ;school;False;
486;01.01.2016 08:06;CHR43 Lutz (43/Male);go to the toilet;hygiene;False;
491;01.01.2016 08:11;CHR43 Lutz (43/Male);work as teacher ;work;False;
865;01.01.2016 14:25;CHR43 Maik (16/Male);take a shower (men);hygiene;False;
885;01.01.2016 14:45;CHR43 Maik (16/Male);play board games (1 h);Offline Entertainment;False;
944;01.01.2016 15:44;CHR43 Maik (16/Male);use the computer (2 h);Active Entertainment (Computer, Internet
etc.);False;
1004;01.01.2016 16:44;CHR43 Lutz (43/Male);take a shower (men);hygiene;False;
1028;01.01.2016 17:08;CHR43 Lutz (43/Male);do laundry at 30°C (by variable);cleaning;False;
1044;01.01.2016 17:24;CHR43 Lutz (43/Male);wash 4 dishes by hand;cleaning;False;
```

Sum Profiles

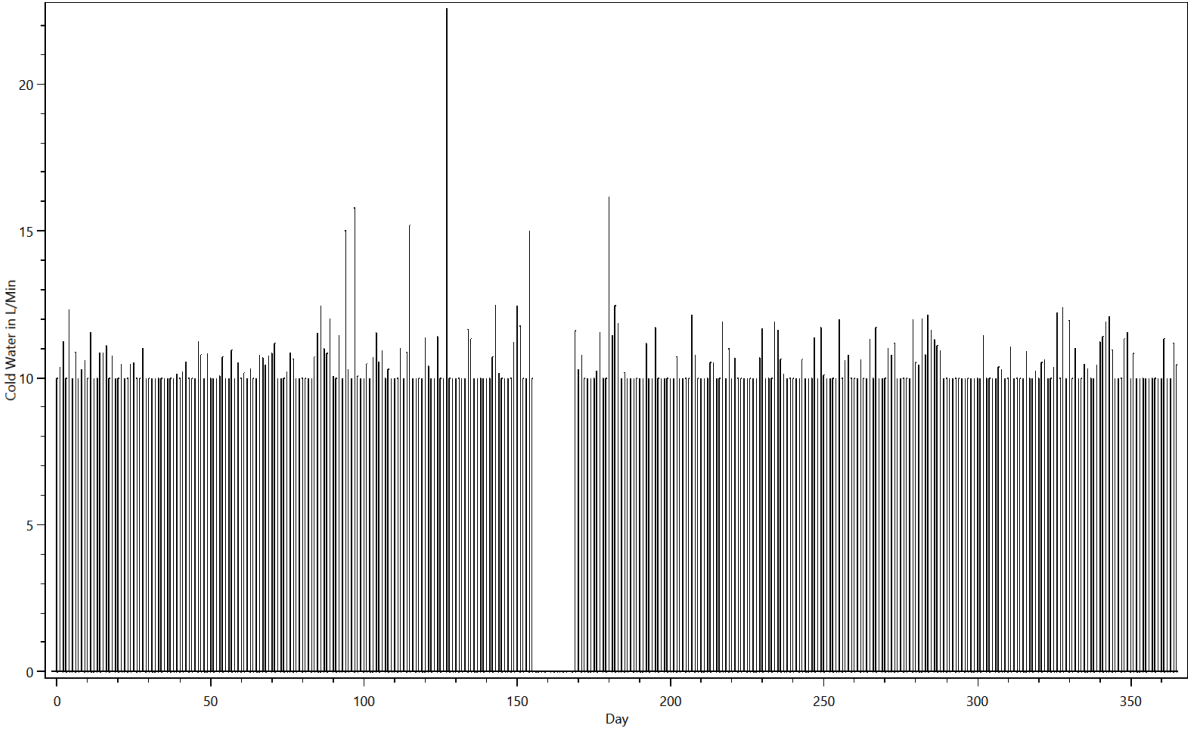
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

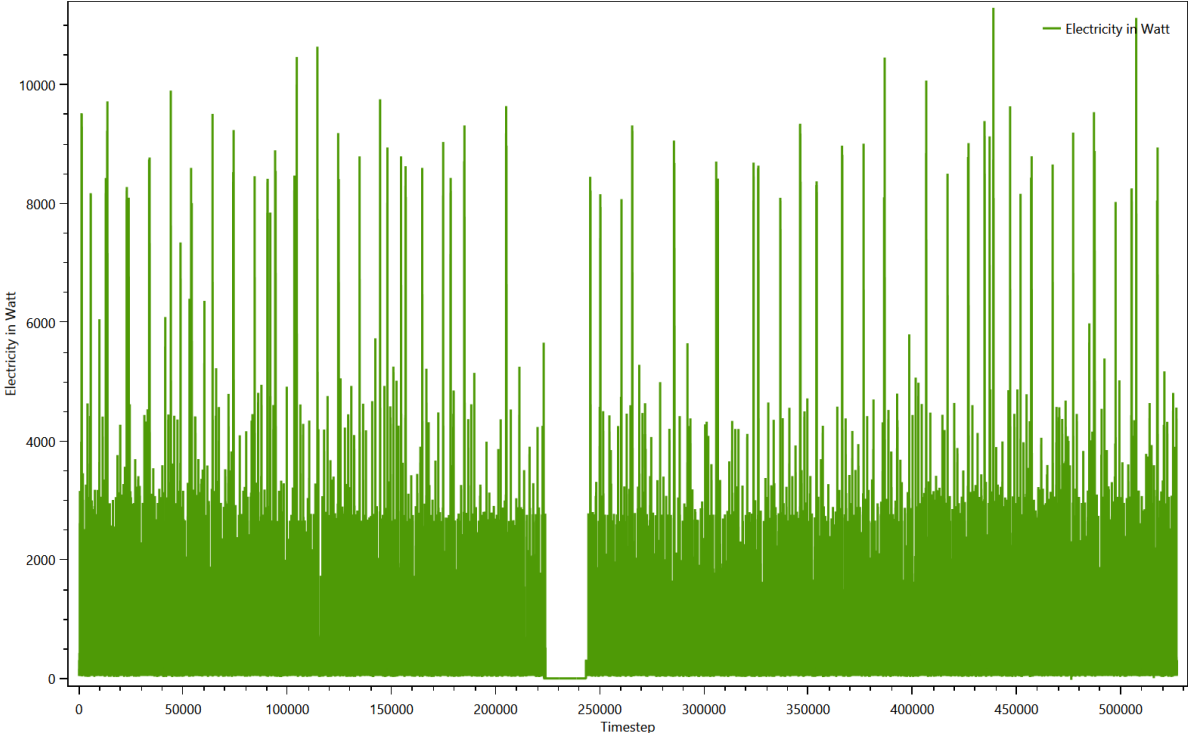
[Summed up curve for Cold Water from SumProfiles.Cold Water.png](#)



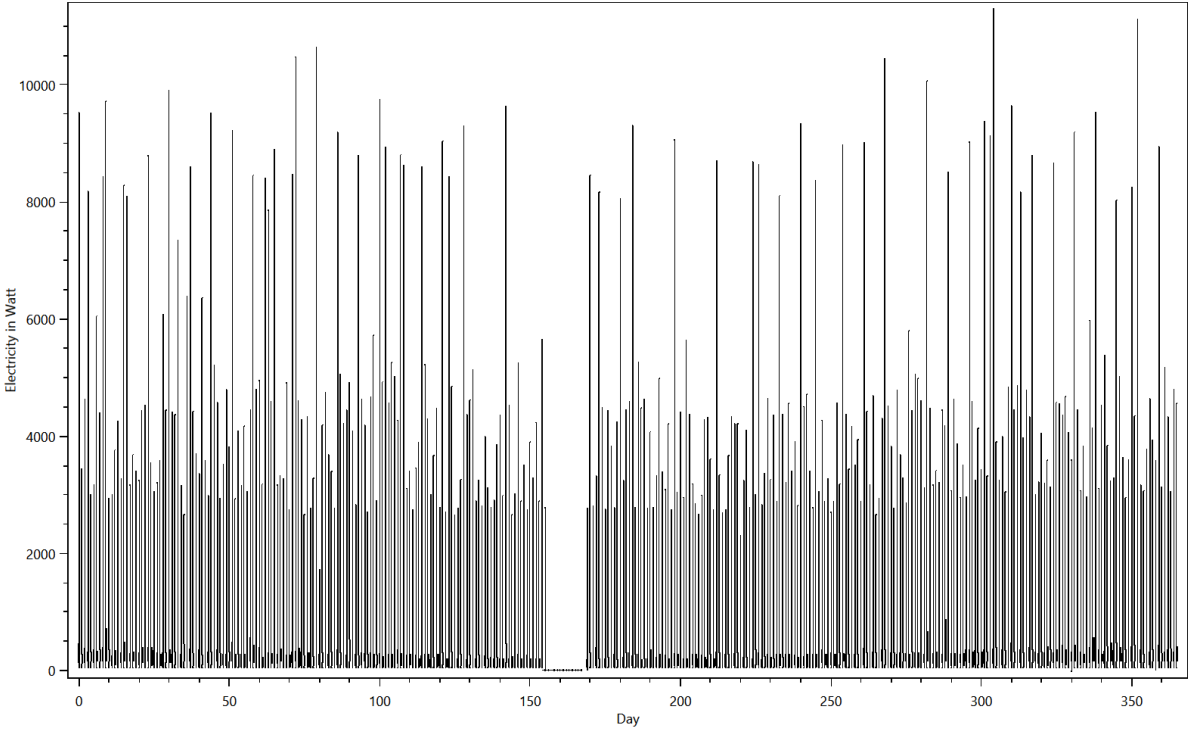
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



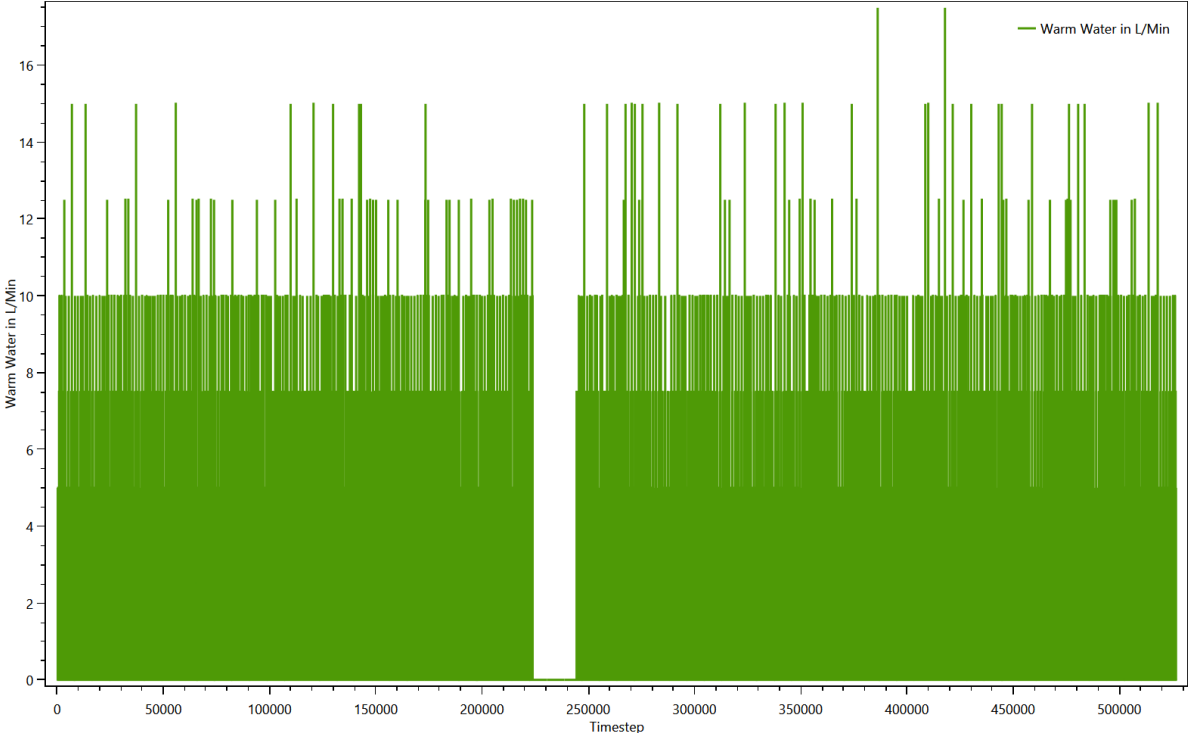
Summed up curve for Electricity from SumProfiles.Electricity.png



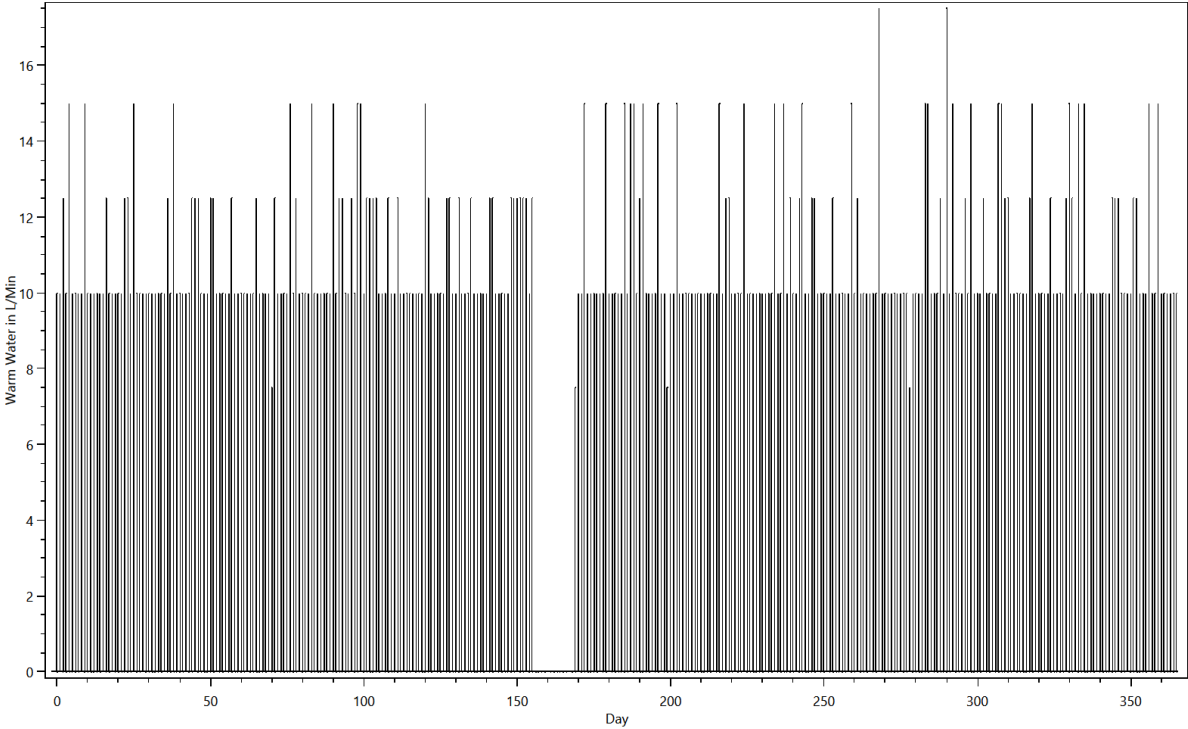
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR43 Single man with 1 child, with work 0.txt

Device;Load Type;Profile;Number of Activations

Bar;None;04 h 0 min 100% [Synthetic];29

Bathroom Light (200W);Electricity;Bath - light [Synthetic for Light Device];961

Bathroom Mirror Light 100W (Conventional);Electricity;Bath - light [Synthetic for Light Device];961

Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];3409

Bauknecht GTM 2511;Electricity;0 h 01 min 100% [Synthetic];140

Bauknecht GTM 2511;Electricity;05 h 0 min Fridge, 1h 100%, 4h 0% [Synthetic];1702

Bed 1;None;06 h 0 min 100% [Synthetic];352

Bed 3 (Children);None;08 h 0 min 100% [Synthetic];355

Bedroom Light (200W);Electricity;Bedroom - light [Synthetic for Light Device];122

Board Games;None;01 h 0 min 100% [Synthetic];186

Book;None;01 h 0 min 100% [Synthetic];40

CD/DVD Player / Philips DVDR 725 H;Electricity;01 h 30 min 100% [Synthetic];323

CD/DVD Player / Philips DVDR 725 H;Electricity;02 h 0 min 100% [Synthetic];9

CD/DVD Player / Philips DVDR 725 H;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8452

Canon CanoScan LIDE 110;Electricity;0 h 10 min 100% [Synthetic];209

Children Room Light Device (20W);Electricity;Children's room - light [Synthetic for Light Device];74

Cinema;None;03 h 0 min 100 % [Synthetic];21

Cleanser;None;01 h 0 min 100% [Synthetic];89

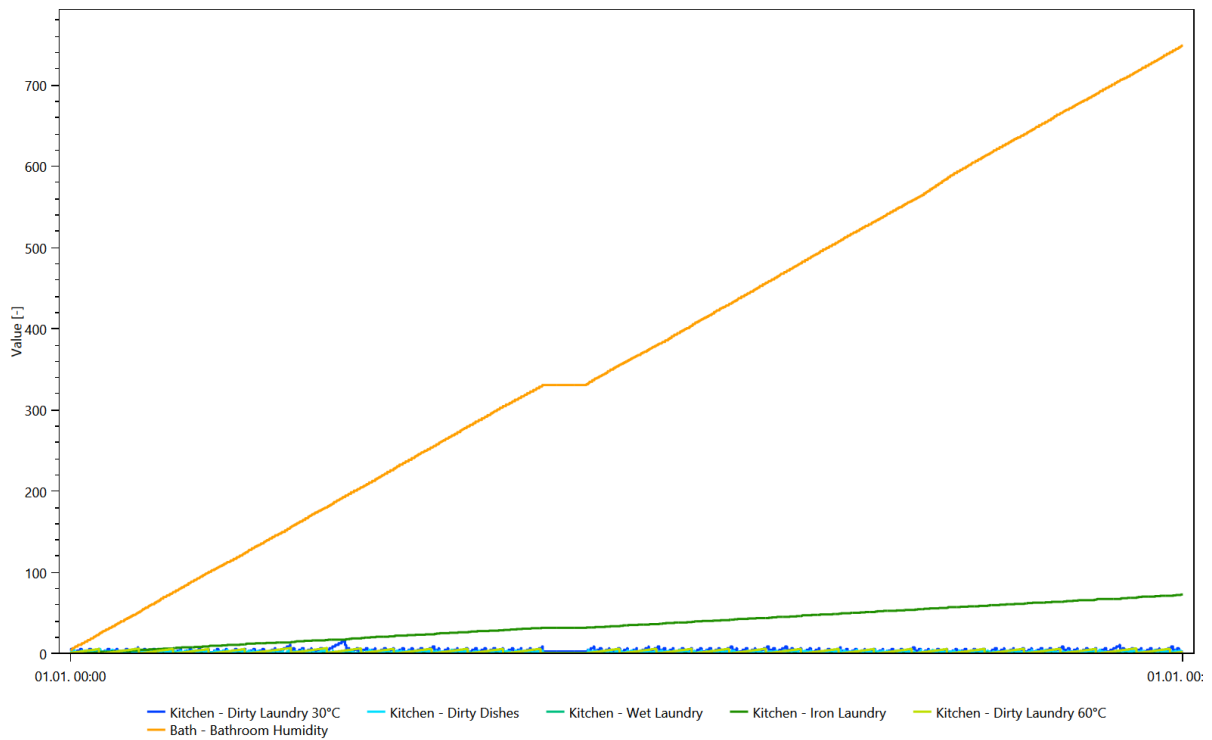
Couch;None;01 h 0 min 100% [Synthetic];31

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

