

Overview of the results of the household CHR54 Retired Couple, no work 0

Calculation Time

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

Energy Intensity: Random

Seed 4949

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:32:17

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	25347.91	L
Electricity	2679.96	kWh
Warm Water	81330.00	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	69.26	L
Electricity	7.32	kWh
Warm Water	222.21	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	17.13	L/Min
Electricity	0.16	8220.57	Watt
Warm Water	0.00	22.50	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	12673.96	L
Electricity	1339.98	kWh

Warm Water	40665.00	L
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Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	34.63	L
Electricity	3.66	kWh
Warm Water	111.11	L

Persons

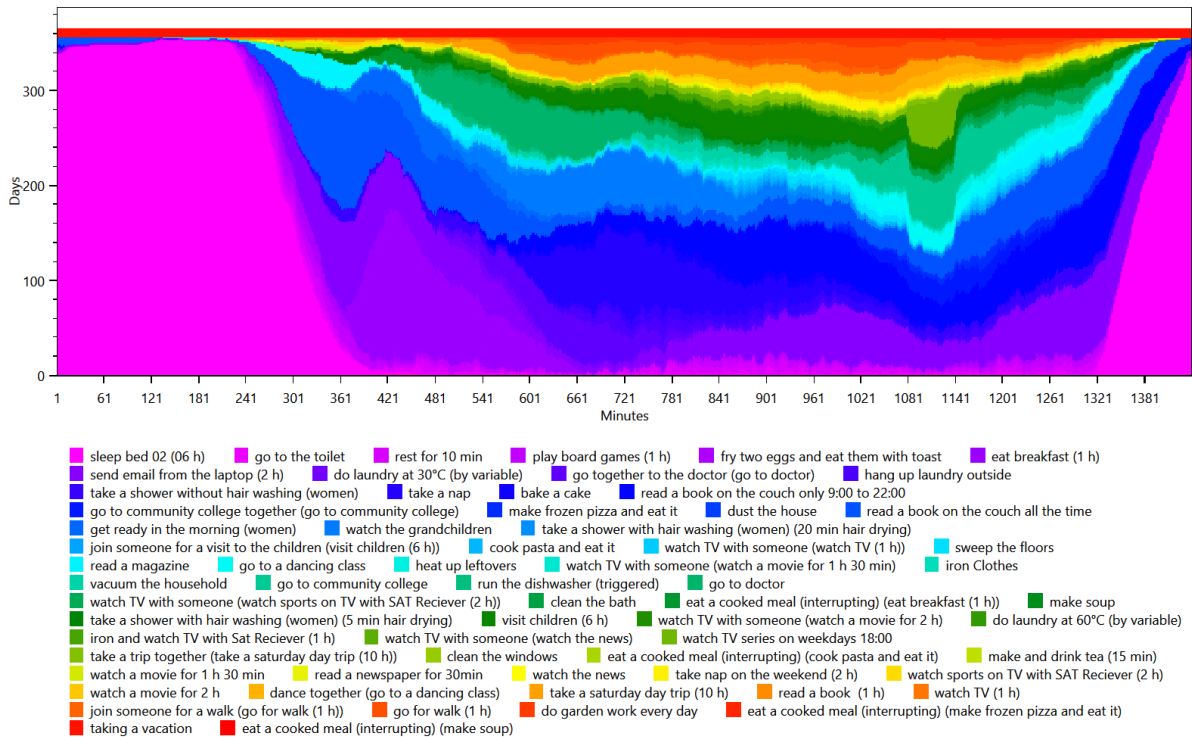
- HH0
 - CHR54 Emma (68/Female)(68/Female)
 - CHR54 Nils (71/Male)(71/Male)

Activity Frequency Charts

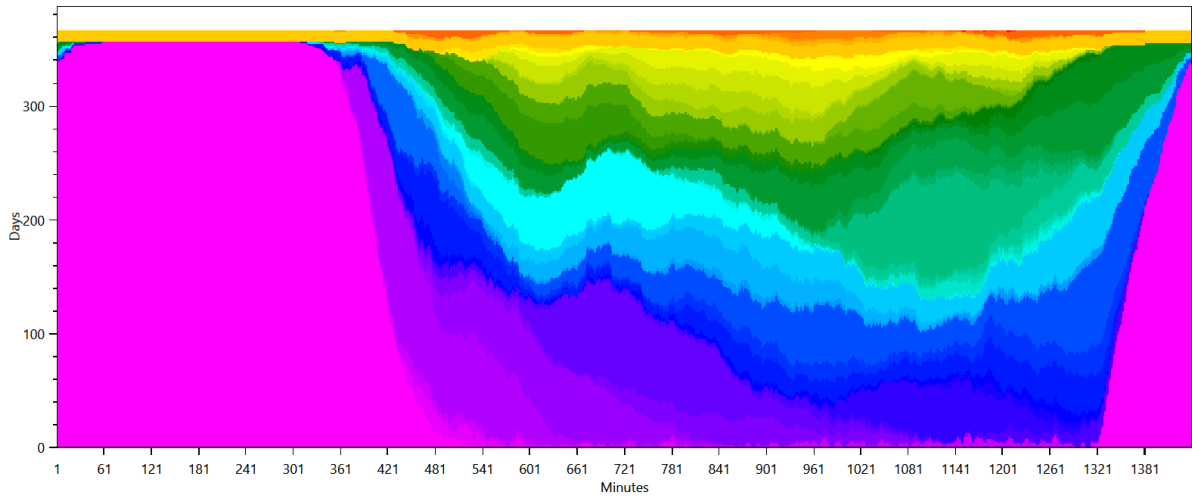
This is made from the files starting with: ActivityFrequenciesPerMinute

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 - CHR54 Emma (68 Female)



HH0 - CHR54 Nils (71 Male)



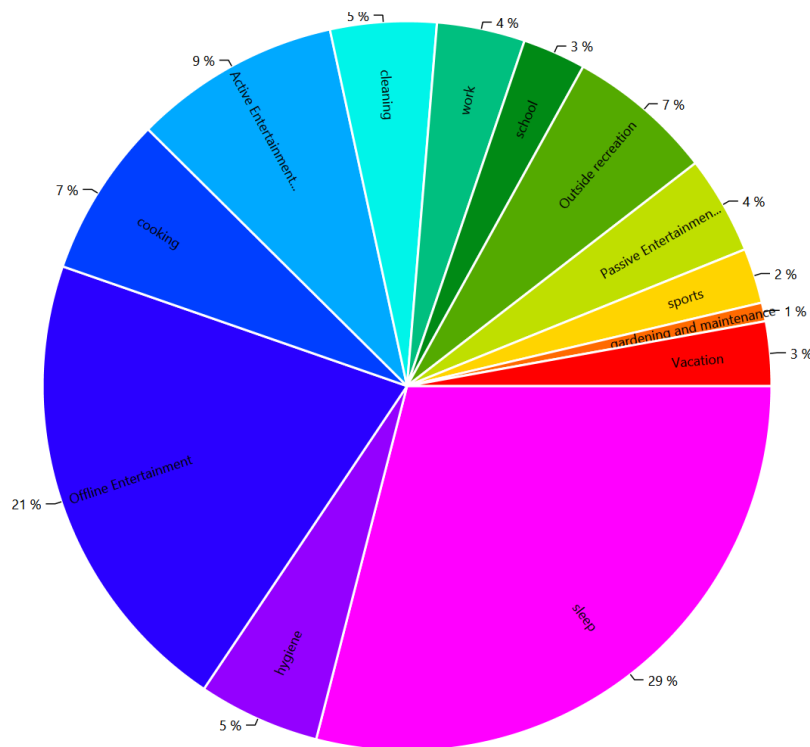
- sleep bed 08 (08 h)
- get ready in the morning (men)
- go to the toilet
- eat breakfast (1 h)
- go to doctor
- go shopping for food in the supermarket (1.5 h)
- take a nap
- play board games (1 h)
- go to community college
- heat up leftovers
- rest for 10 min
- read a newspaper for 30min
- watch TV (1 h)
- read a book on the couch only 9:00 to 22:00
- eat a cooked meal (interrupting) (eat breakfast (1 h))
- run the dishwasher (triggered)
- take a shower (men)
- visit children (6 h)
- watch sports on TV with SAT Receiver (2 h)
- shovel snow
- watch the grandchildren
- watch the news
- dance together (go to a dancing class)
- fry two eggs and eat them with toast
- watch a movie for 1 h 30 min
- do volunteer work
- make frozen pizza and eat it
- go to community college together (go to community college)
- read a book on the couch all the time
- watch a movie for 2 h
- make soup
- join someone for a visit to the children (visit children (6 h))
- go together to the doctor (go to doctor)
- take a saturday day trip (10 h)
- go to a dancing class
- cook pasta and eat it
- go for walk (1 h)
- do garden work every day
- relax in the garden 2
- relax in the garden
- join someone for a walk (go for walk (1 h))
- mow the lawn on saturday above 15°C
- taking a vacation
- take a trip together (take a saturday day trip (10 h))
- make and drink tea (15 min)
- take nap on the weekend (2 h)
- read a magazine
- eat a cooked meal (interrupting) (heat up leftovers)
- eat a cooked meal (interrupting) (make frozen pizza and eat it)
- eat a cooked meal (interrupting) (make soup)
- eat a cooked meal (interrupting) (cook pasta and eat it)

Activity Distribution per Person

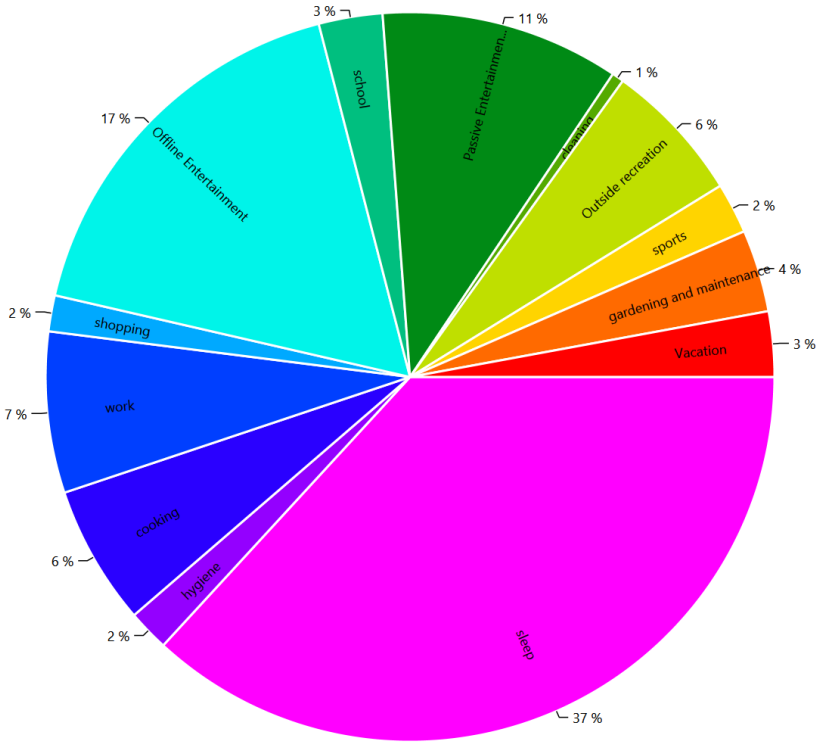
This is made from the files starting with: ActivityPercentage

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

HH0 - CHR54 Emma (68 Female)



HH0 - CHR54 Nils (71 Male)

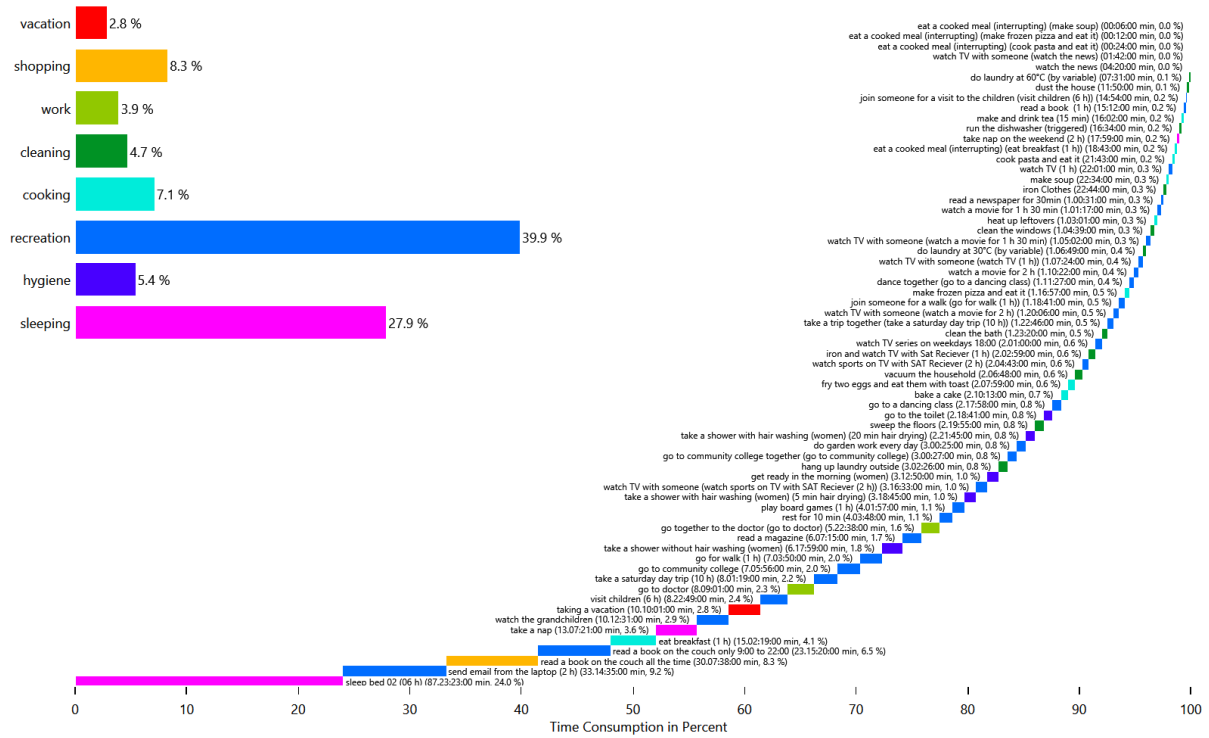


Time Use per Person per Affordance Per Person

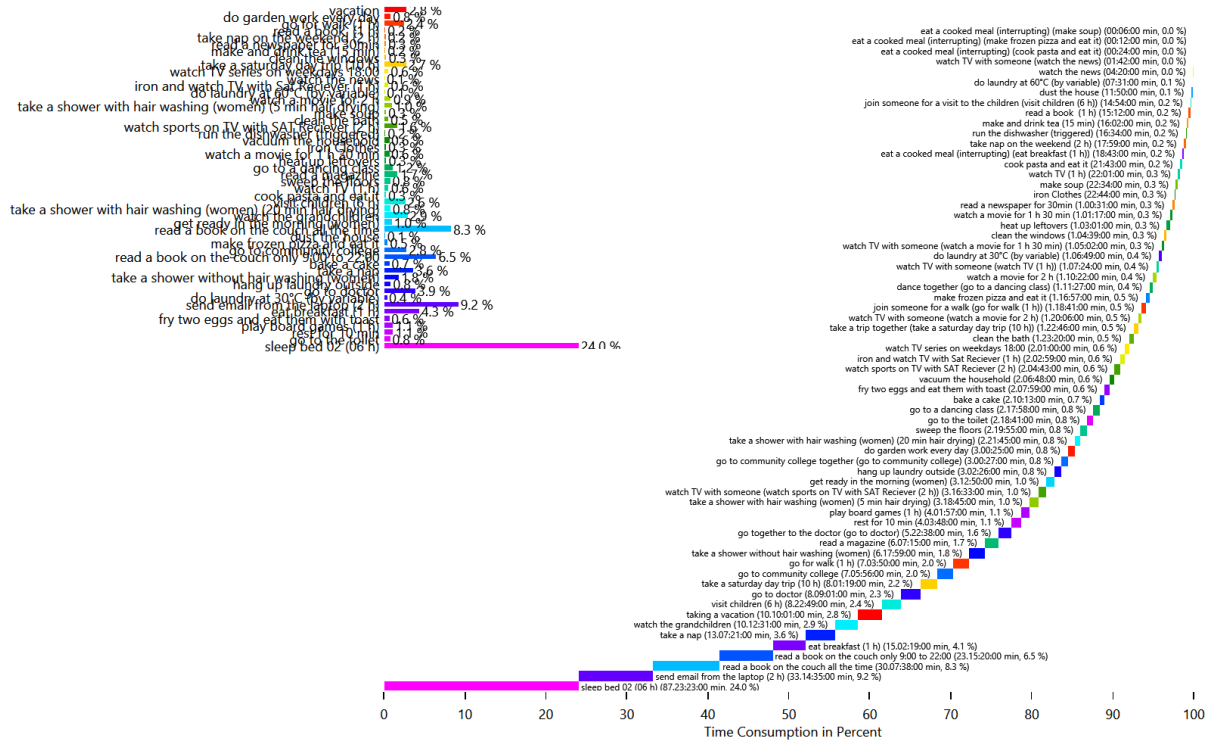
This is made from the files starting with: AffordanceTimeUse

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.

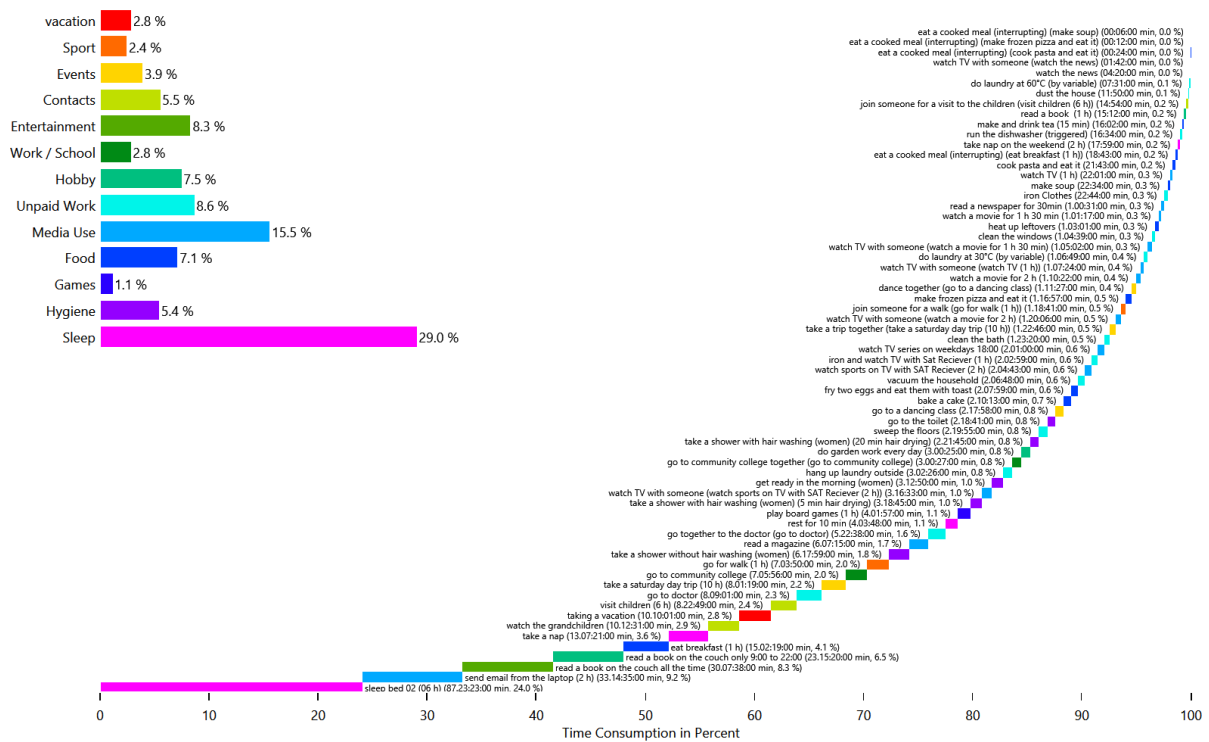
HH0 - CHR54 Emma (68 Female)



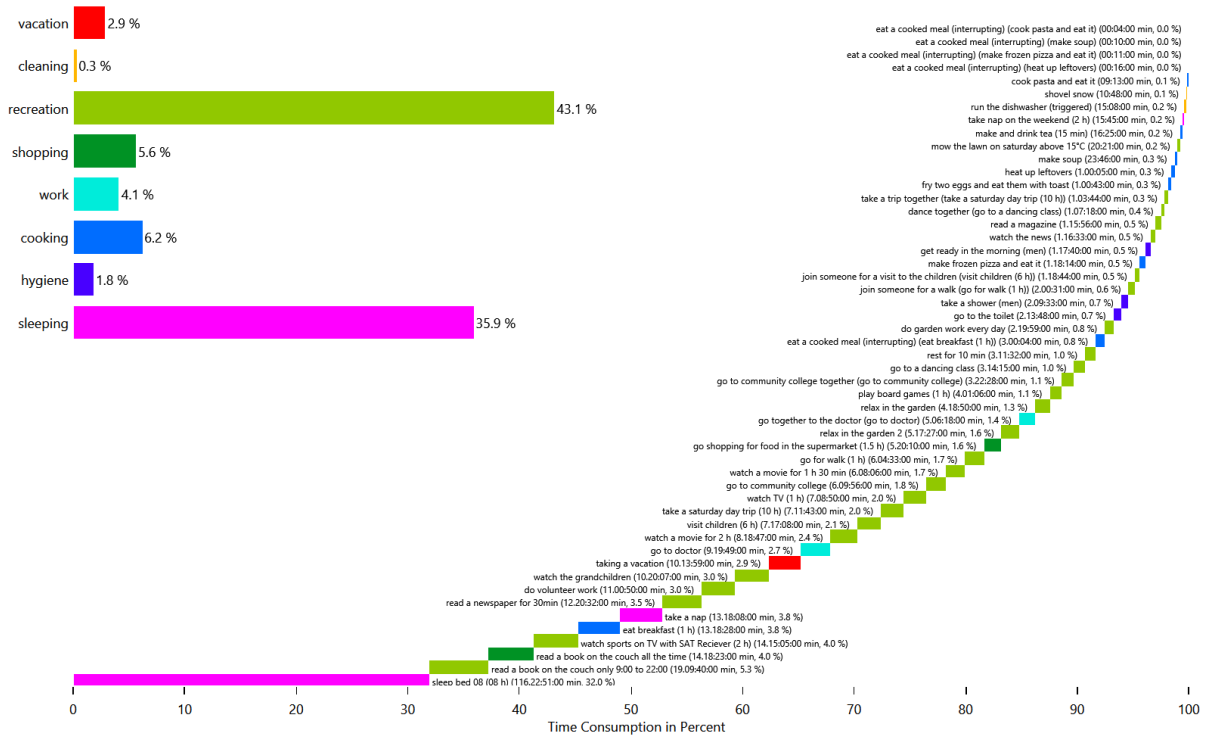
HH0 - CHR54 Emma (68 Female)



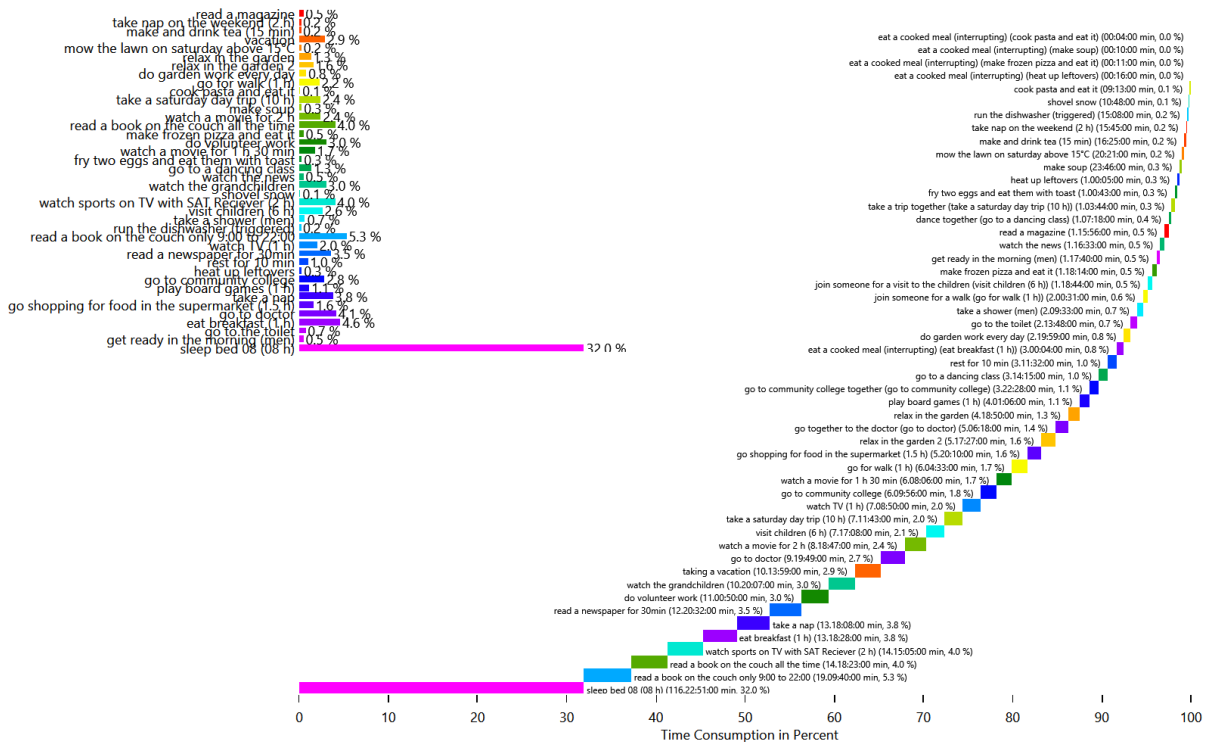
HH0 - CHR54 Emma (68 Female)



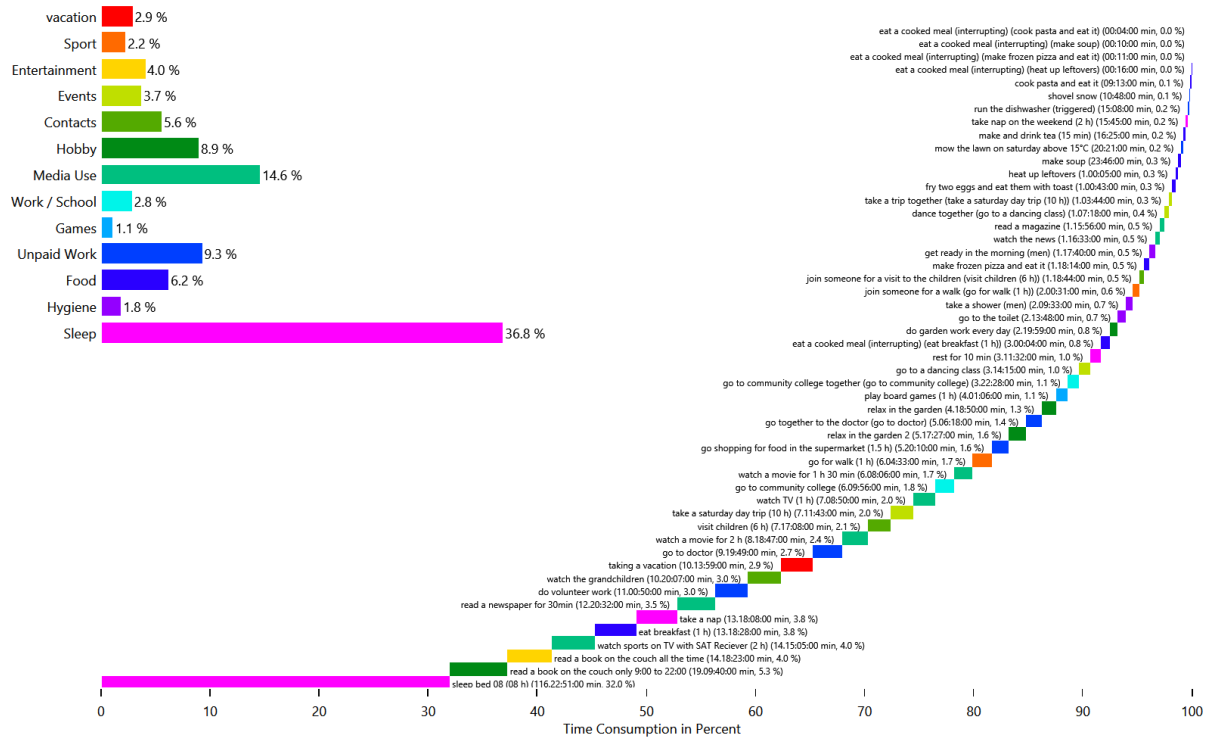
HH0 - CHR54 Nils (71 Male)



HH0 - CHR54 Nils (71 Male)



HH0 - CHR54 Nils (71 Male)

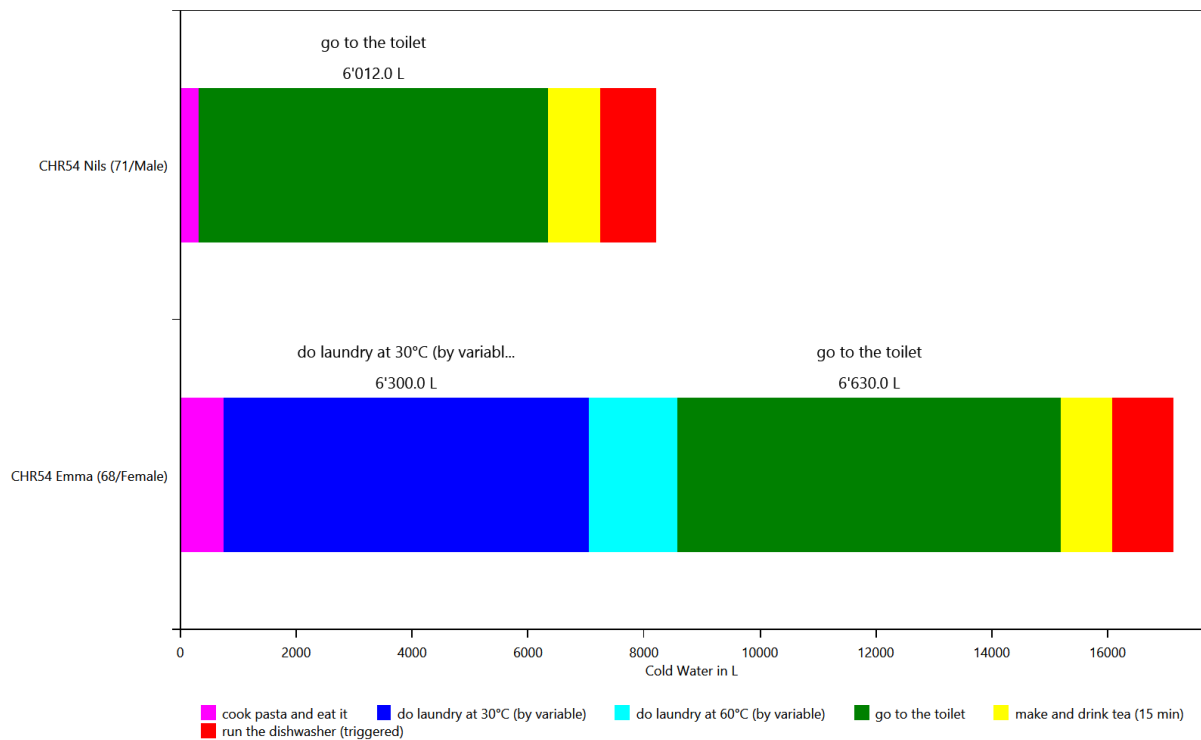


Energy use per person per affordance

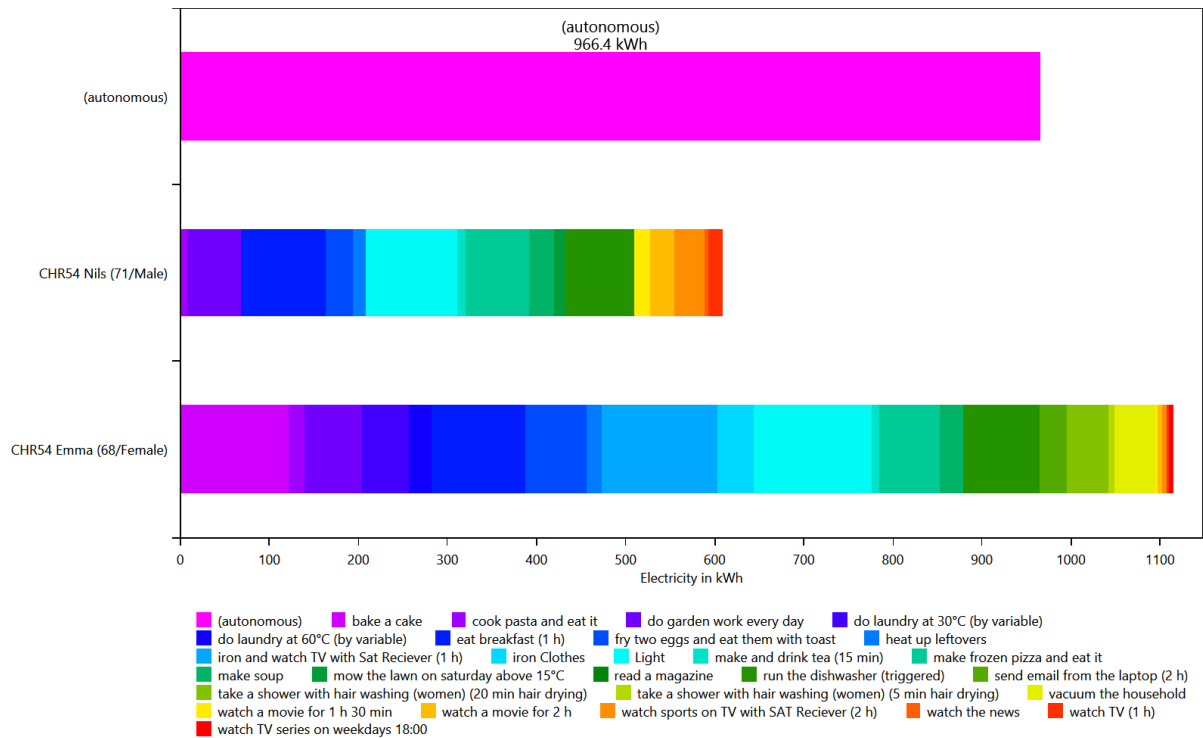
This is made from the files starting with: `AffordanceEnergyUsePerPerson`

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

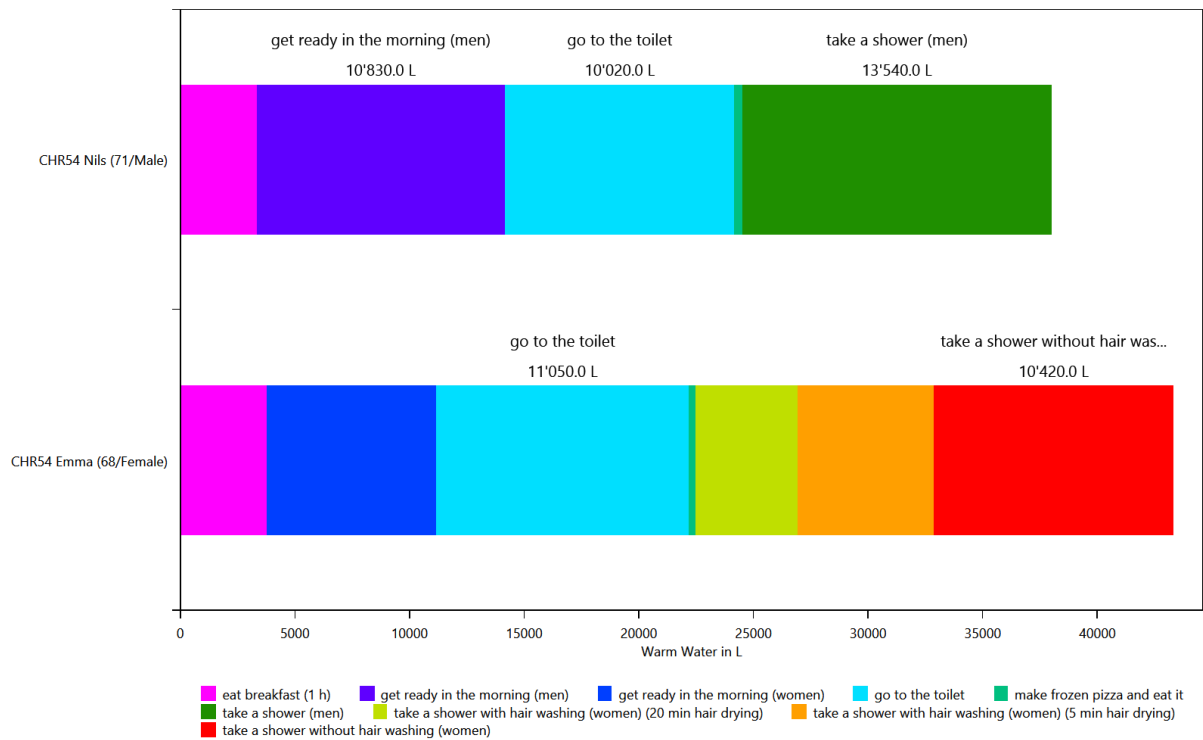
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

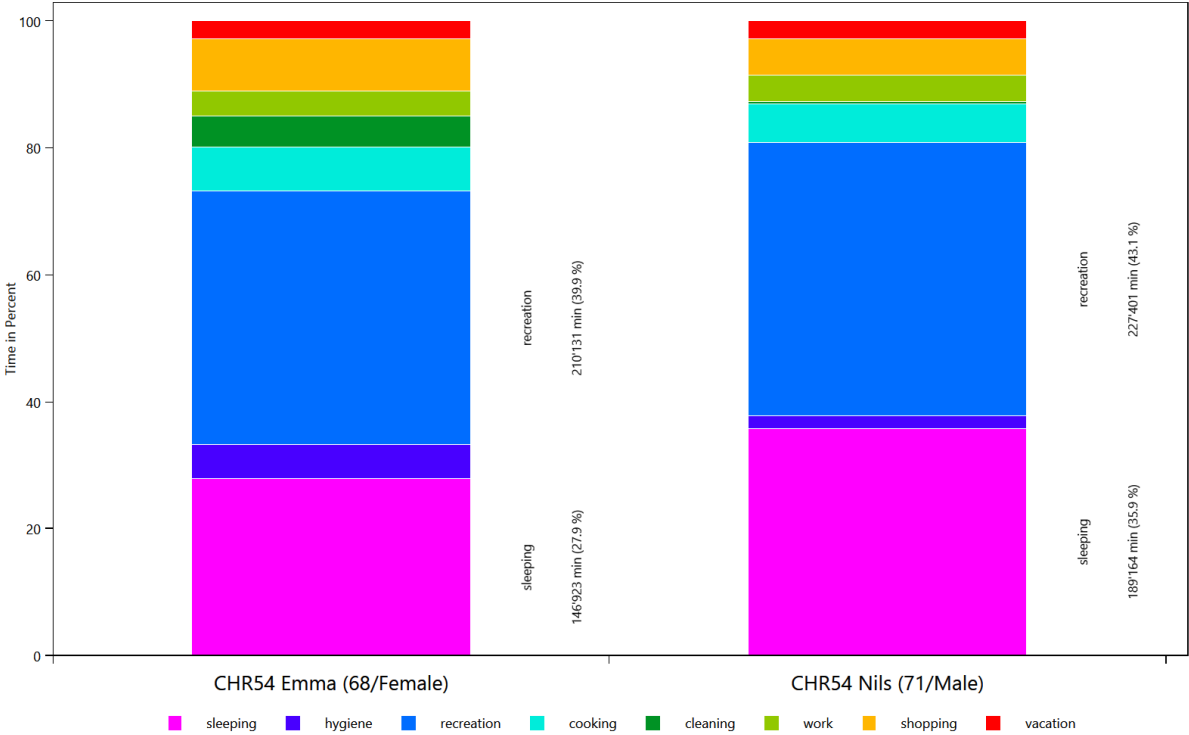


Time Use per Person Per Affordance according to different category definitions

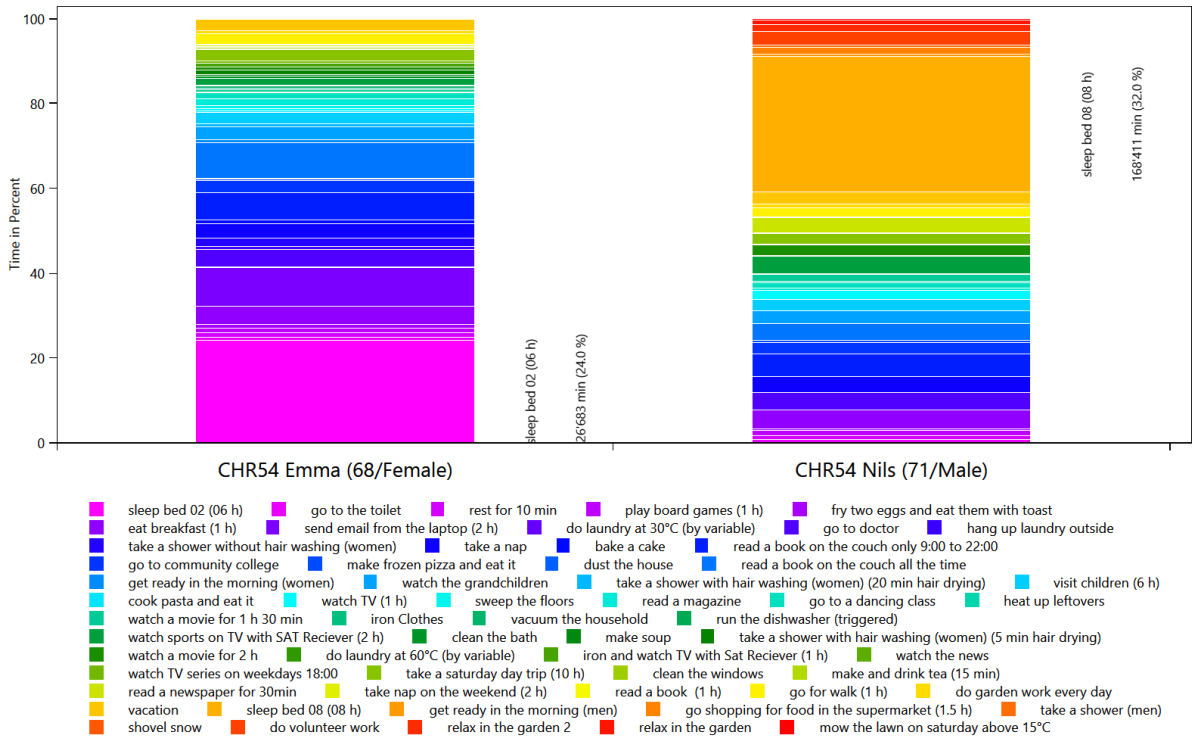
This is made from the files starting with: AffordanceTaggingSet

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.

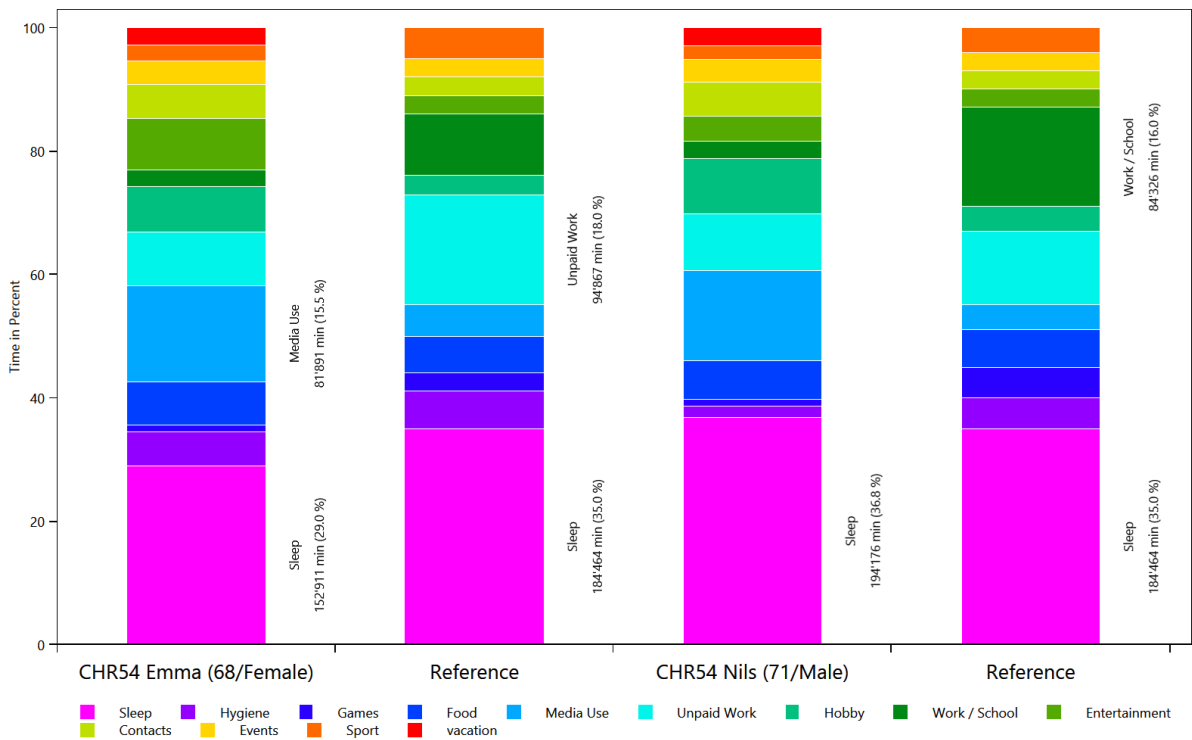
Basic Tagging - HH0



Tagging Set For Planning - HH0



Wo bleibt die Zeit - HH0

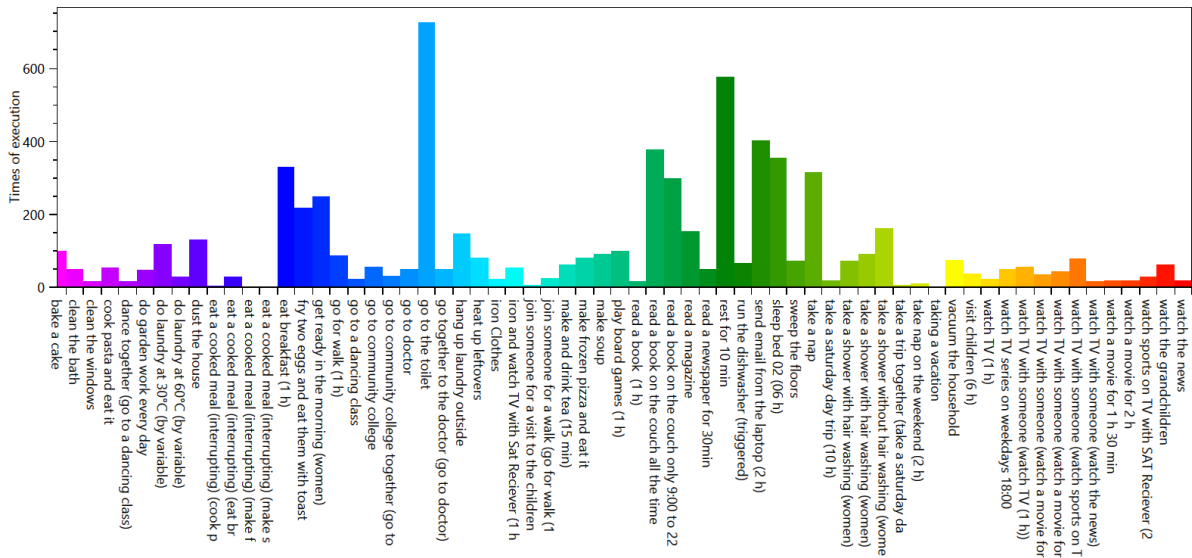


Overview of the actions of each member of the household

This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

HH0 - CHR54 Emma (68 Female)

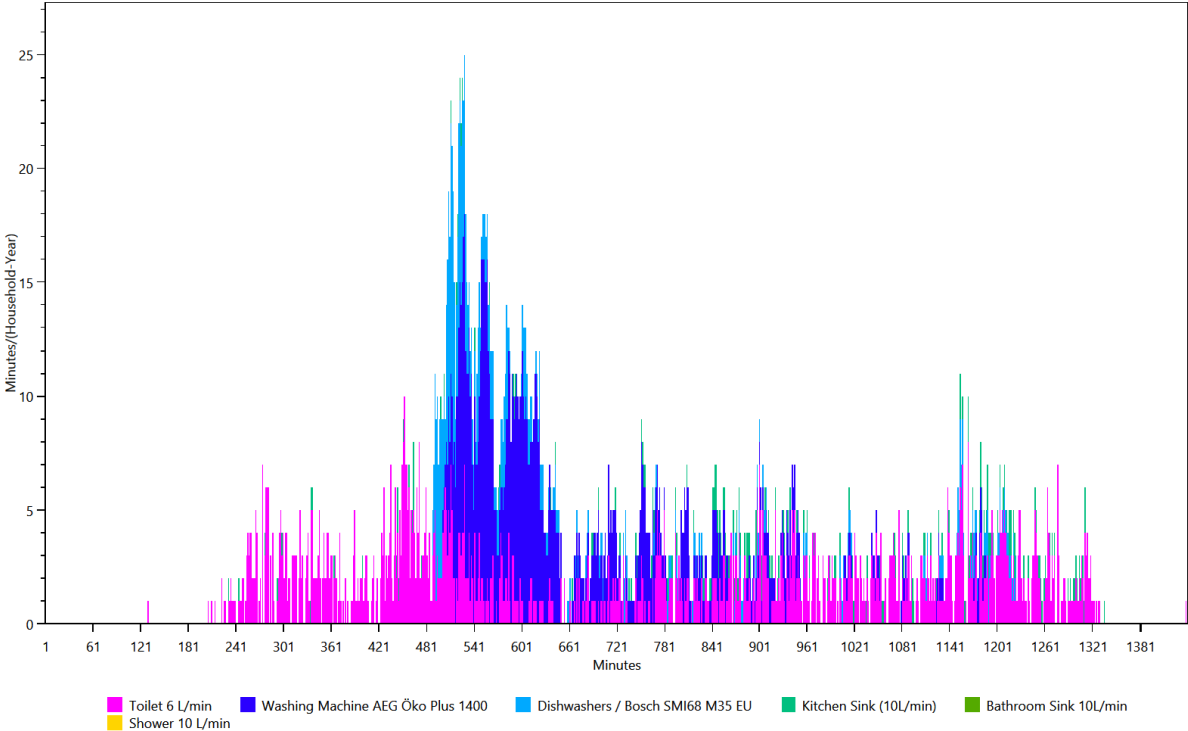


Overview of the time of the use per load type per device

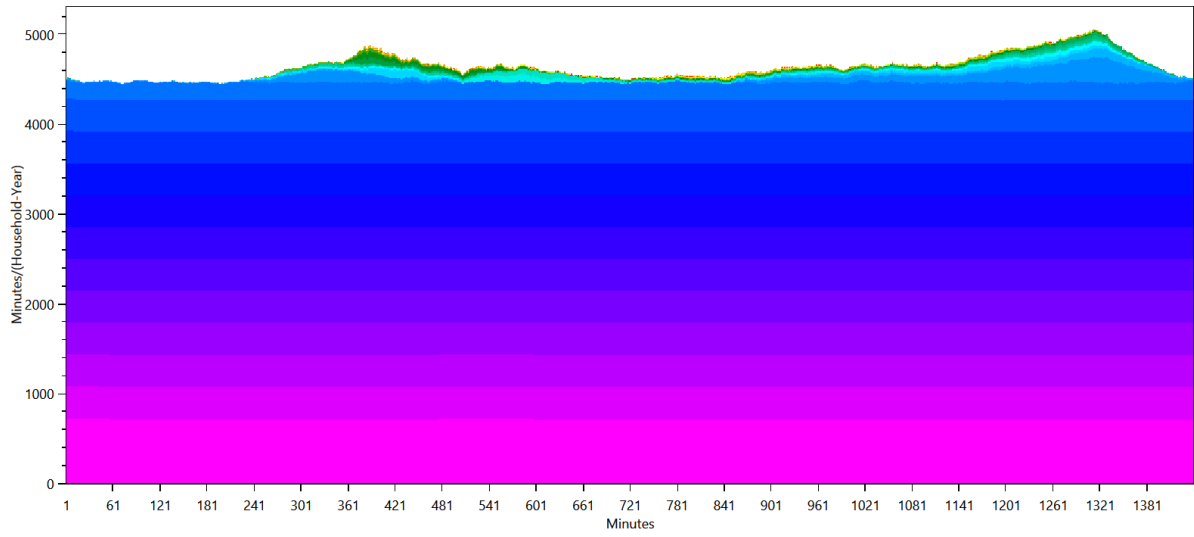
This is made from the files starting with: TimeOfUseEnergyProfiles

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

Cold Water

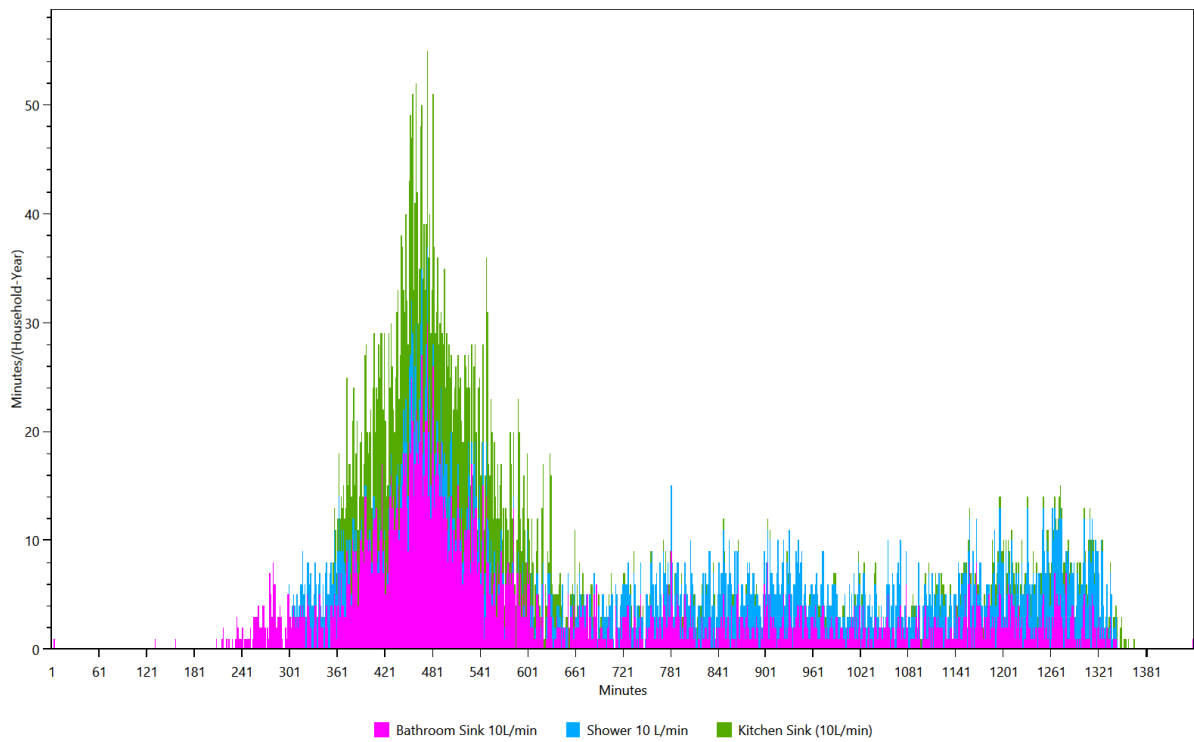


Electricity



- SAT Receiver / Kathrein UFS913
- Electric Toothbrush Dondodent Professional Clean
- TV / Phillips Goya 9770 VT
- Yamaha RX-V667
- Microwave / Panasonic NN 5259
- Router / AVM FRITZ! Box Fon WLAN 7390
- Electric Razor / Phillips PT860/16 Razor PowerTouch Plus
- CD/DVD Player / Phillips CD 380
- Grundig 70cm CRT
- Laptop Lenovo Thinkpad x220
- Kitchen radio / AEG KRC 4323 CD
- Siemens Fridge from 1987 (unknown type)
- Living Room Light (100W)
- Bedroom Light (20W)
- Kitchen Light (60W)
- Bathroom Light (100W)
- Dishwashers / Bosch SM168 M35 EU
- Washing Machine AEG Öko Plus 1400
- LED Lamp Globe E 14 Ambient 3W matt
- Bathroom Mirror Light 30W (CFL)
- Children Room Light (200W)
- Coffee Machine / Braun KF 580E
- Juicer / Moulinex Vitafruit
- Oven / AEG B 33512-5-M
- Steam Iron / Phillips GC 4410
- Egg Cooker / Russell Hobbs 14048-56 Stylo
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind - full power
- Lawn Mower / Sabo 36-EL SA 752
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove front left
- Hedge Trimmer / Bosch AHS 550-24 ST
- Canister Vacuum Cleaner / Siemens Z6.0 VSZ61260
- Hair Dryer Babyliss 2000
- Toaster / Tefal Vario
- Atika LH 2500 G
- Food Slicer / DOMO Schneidemaschine DOS21S
- Extractor Hood / Miele DA 429-4
- Handmixer / Phillips Robust HR 1581
- Electric Kettle / Phillips Essential HD 4685/90 Schwarz

Warm Water

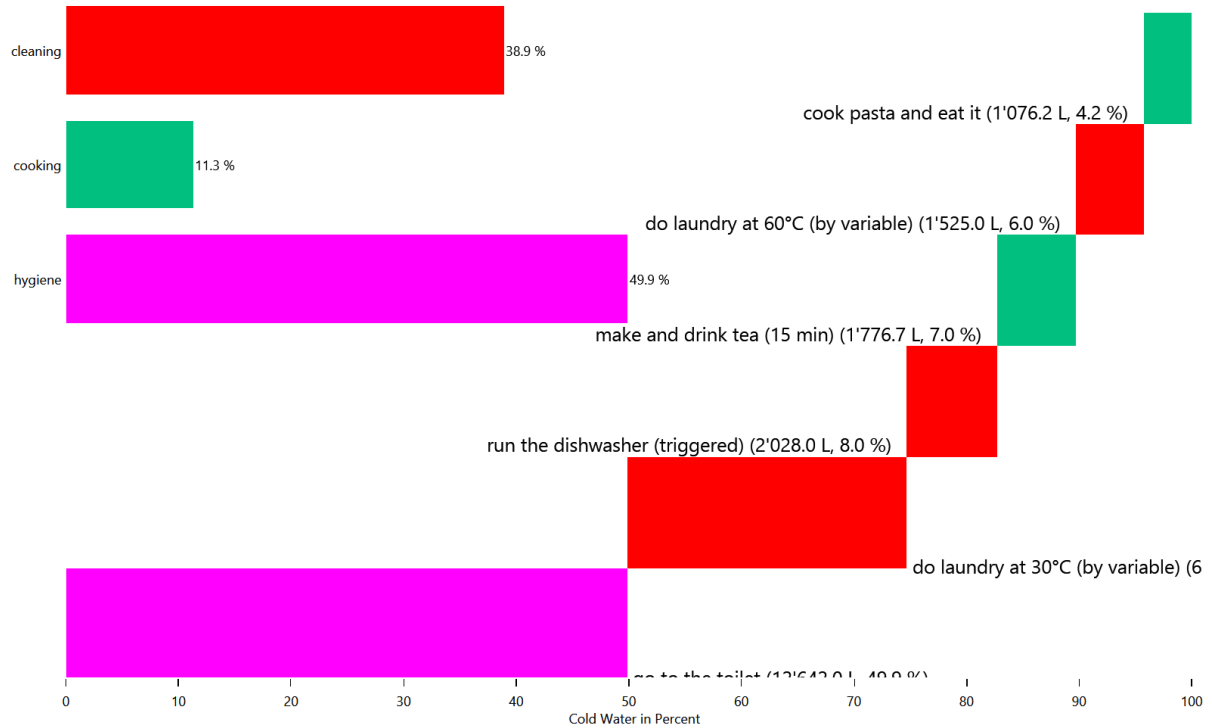


Energy/Resource use distribution per load type per affordance

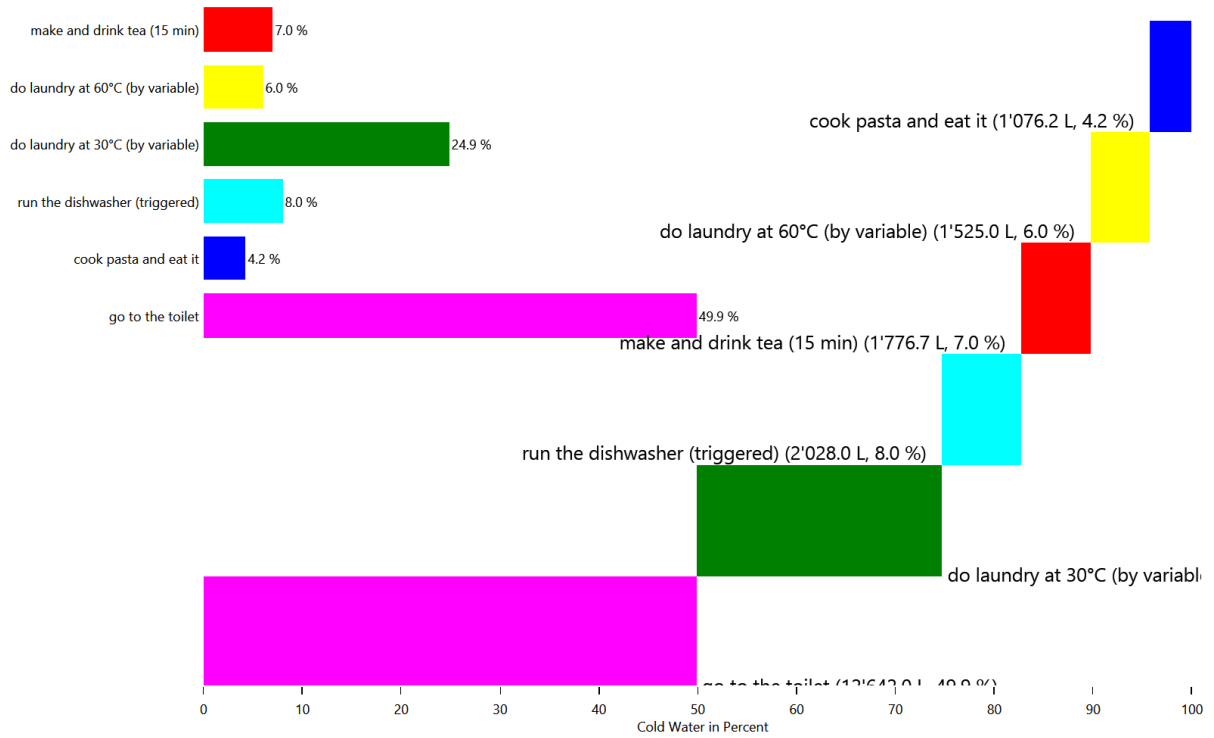
This is made from the files starting with: **AffordanceEnergyUse**

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

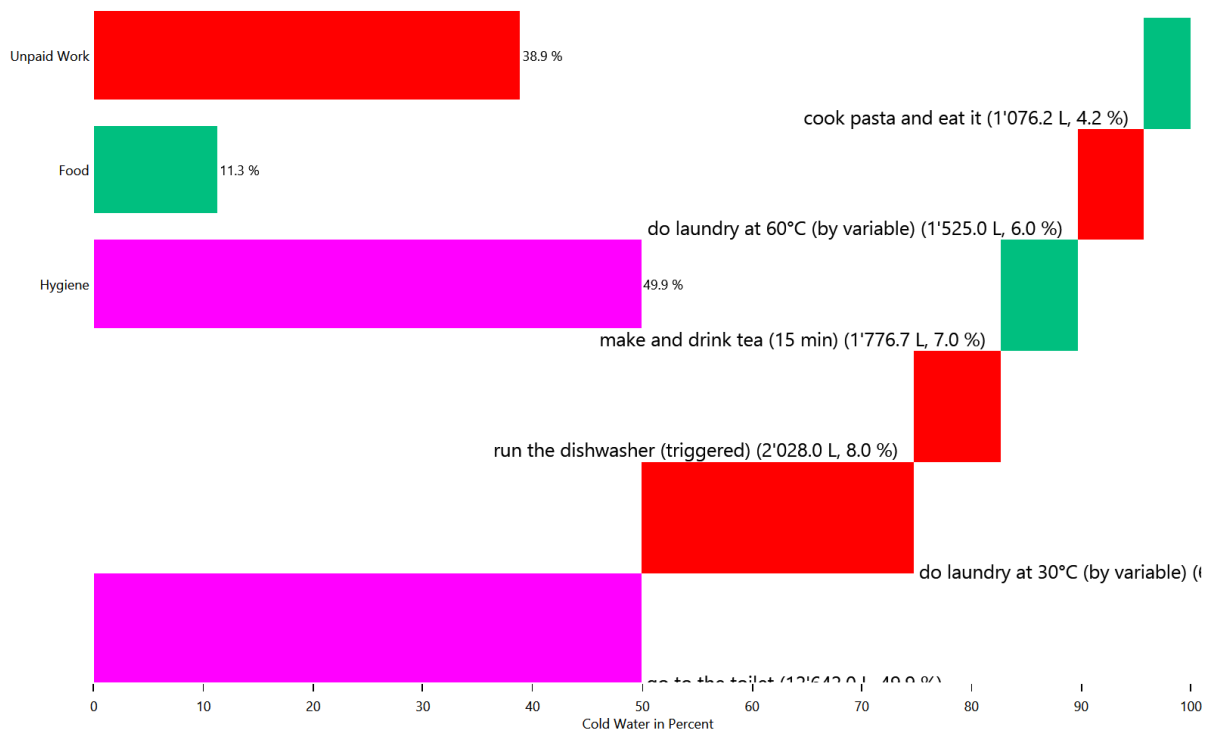
HH0 - Cold Water



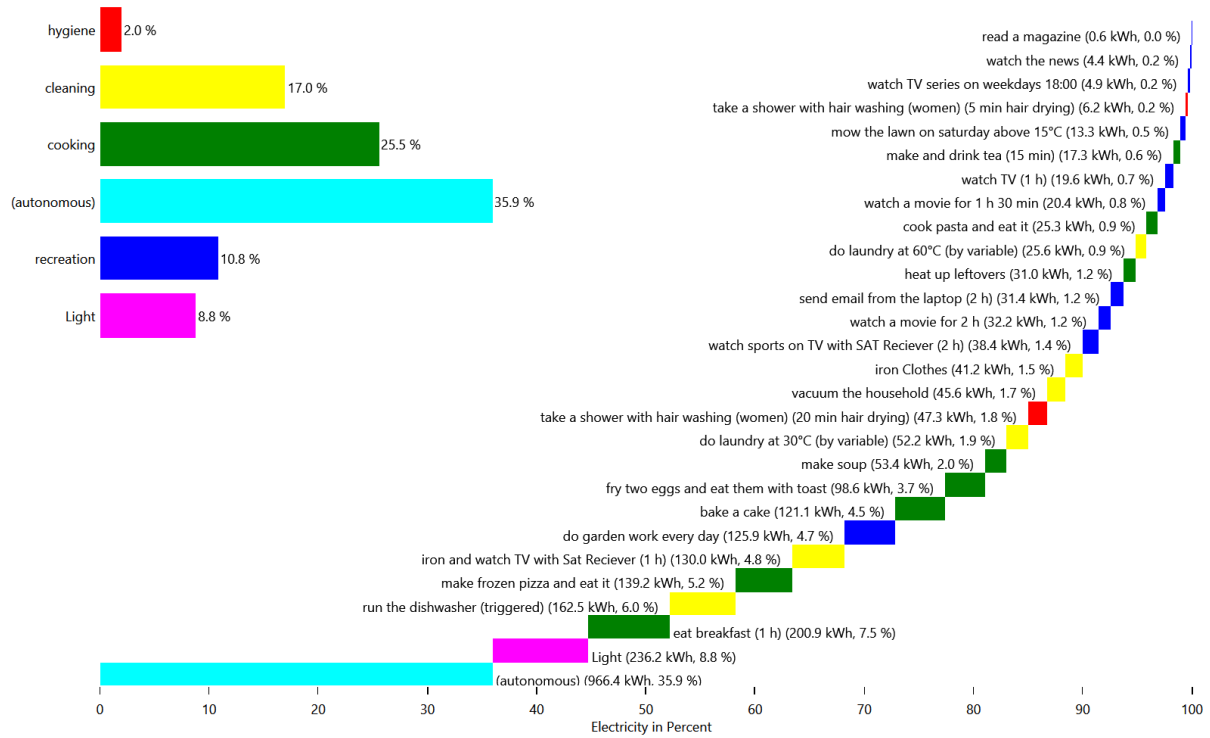
HH0 - Cold Water



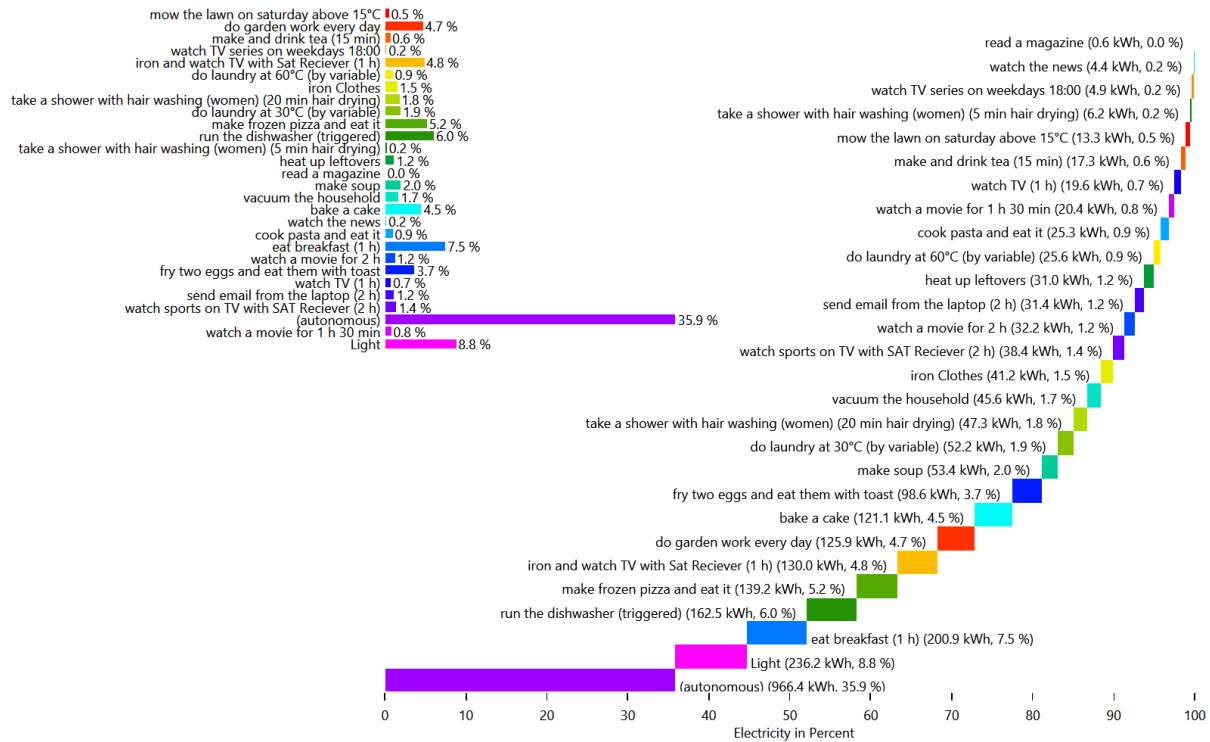
HH0 - Cold Water



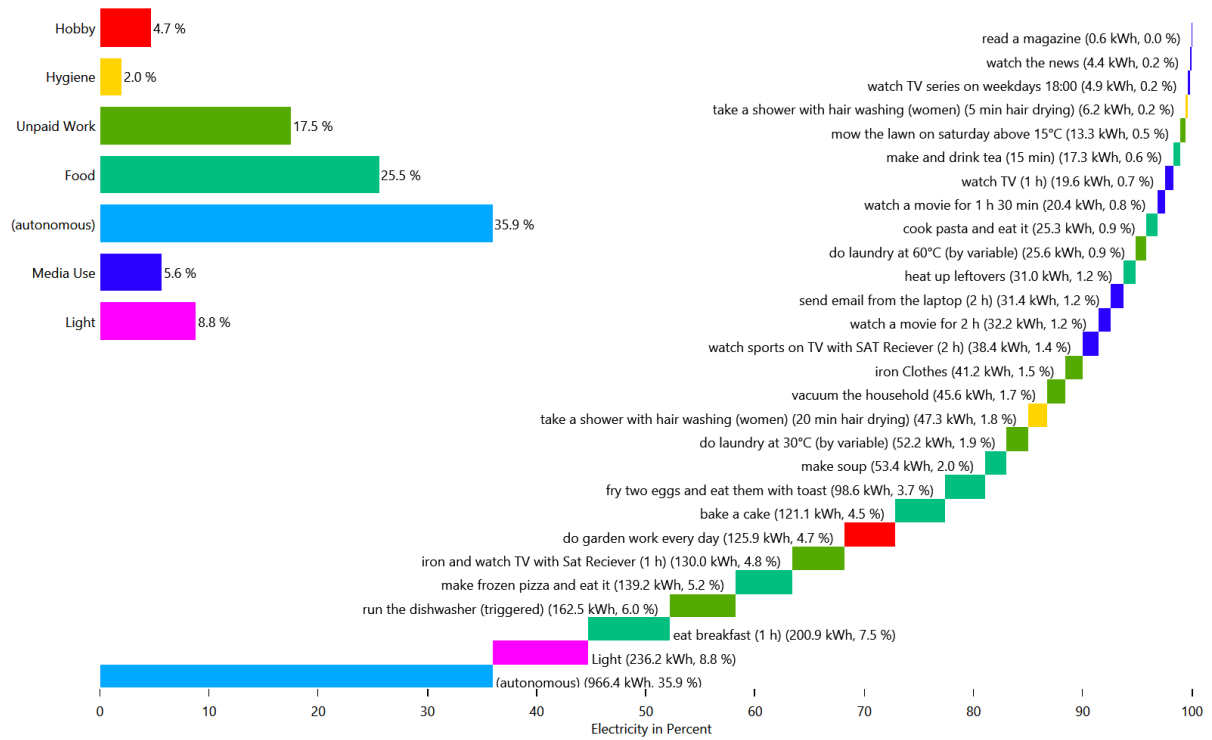
HH0 - Electricity



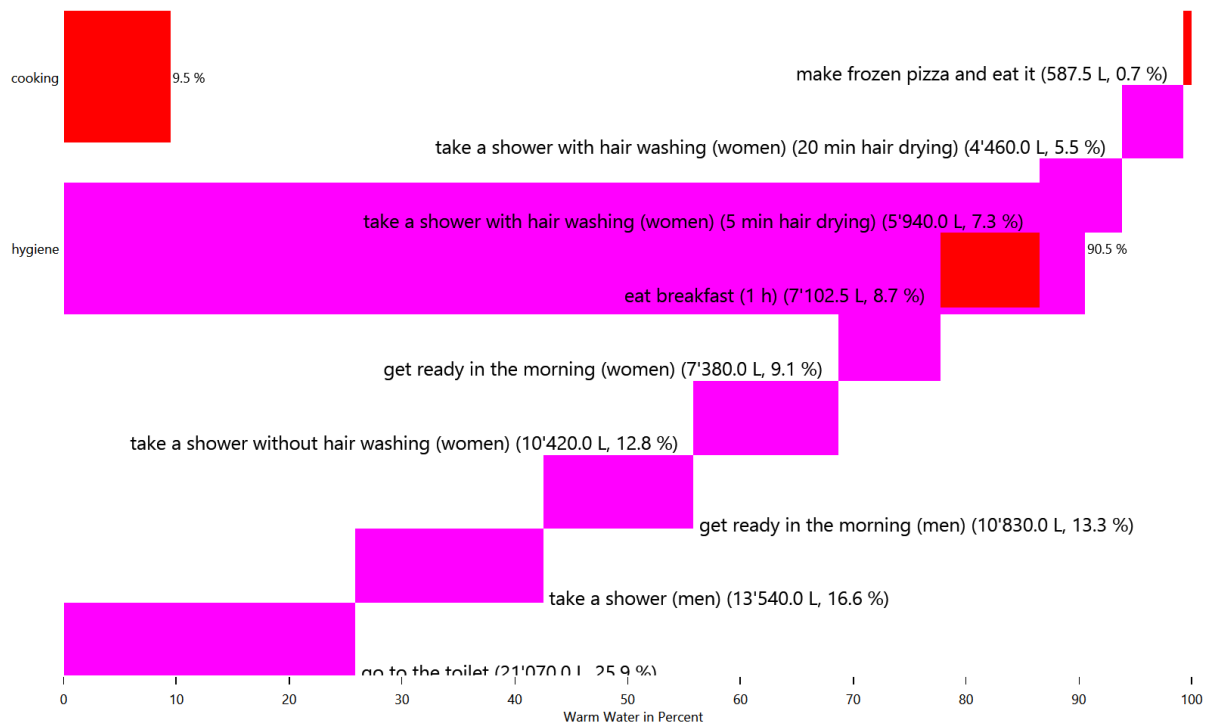
HH0 - Electricity



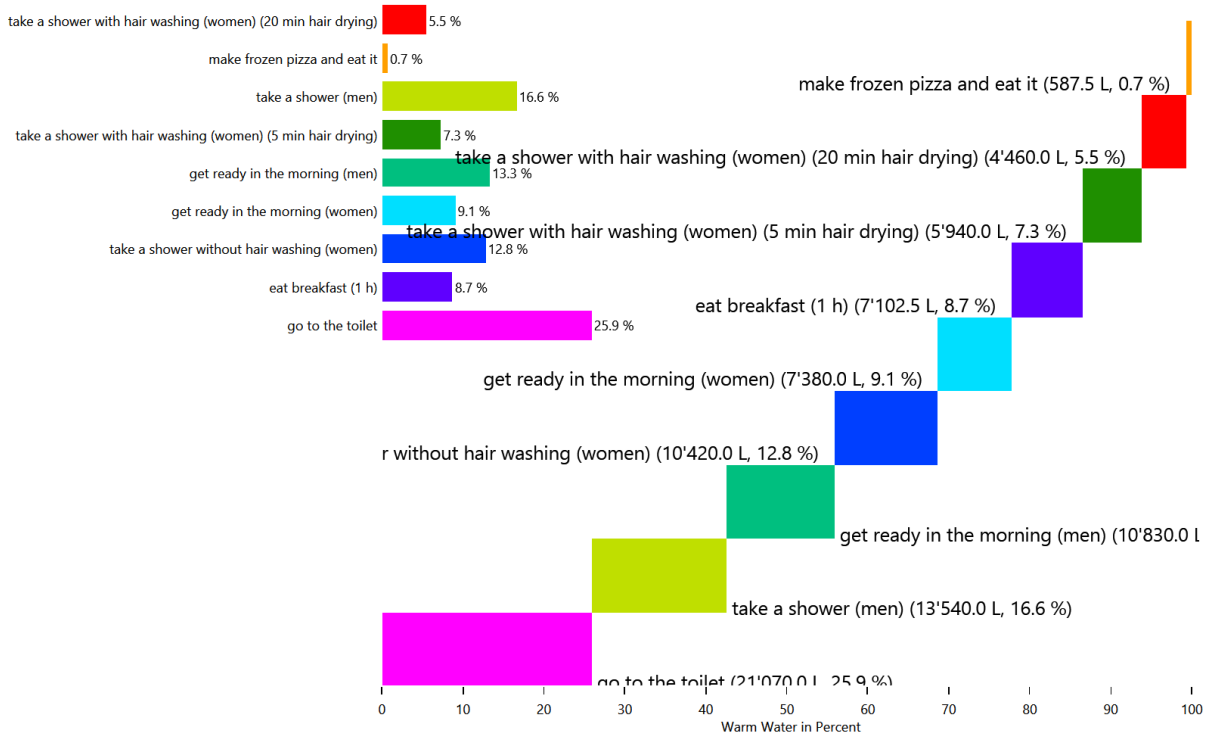
HH0 - Electricity



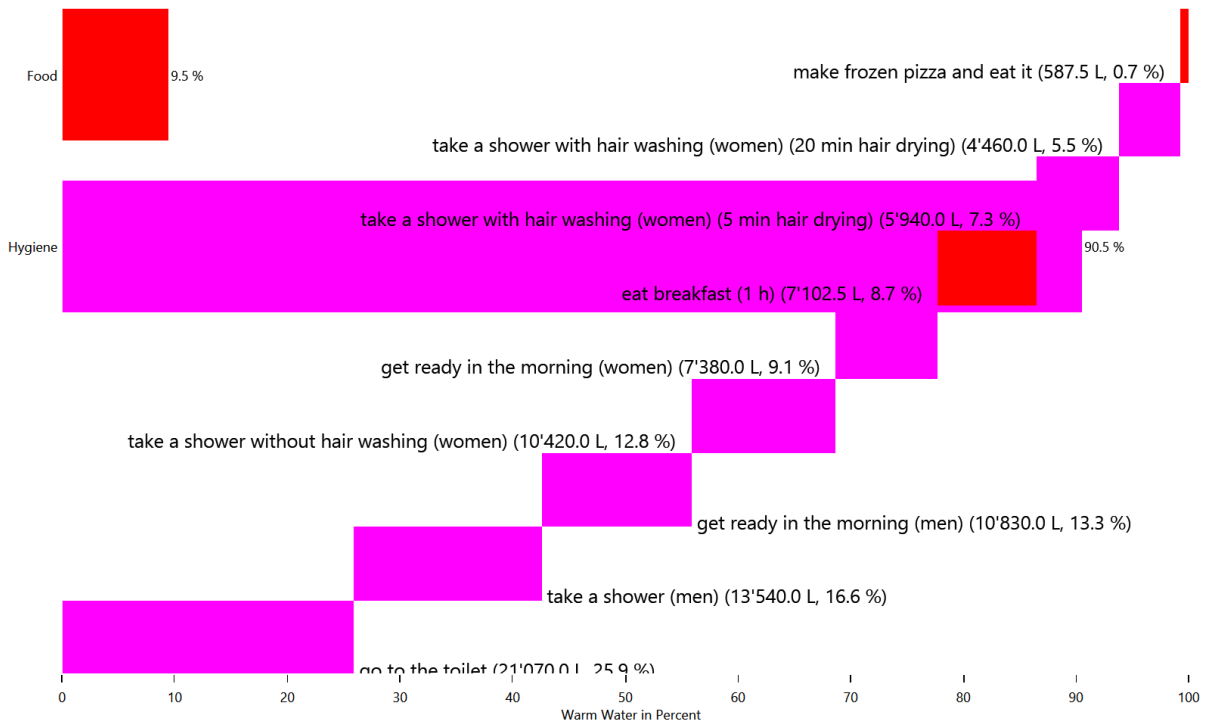
HH0 - Warm Water



HH0 - Warm Water



HH0 - Warm Water

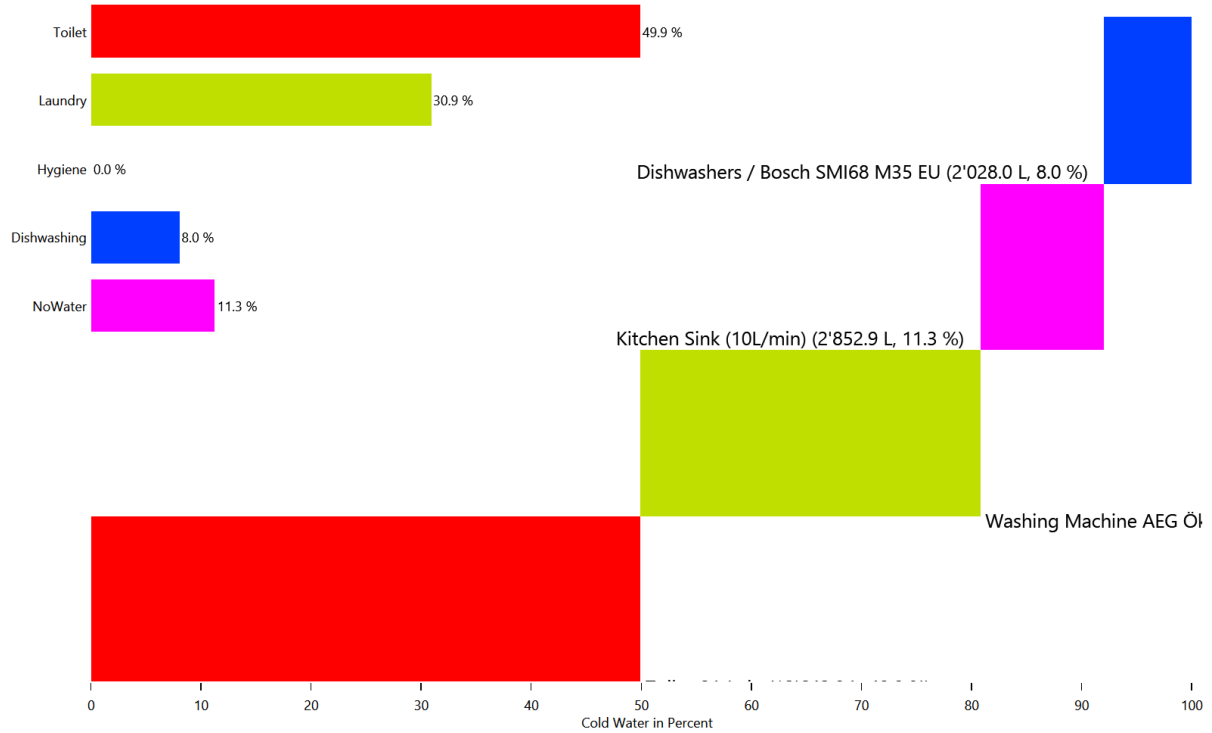


Energy use for each load type for each device

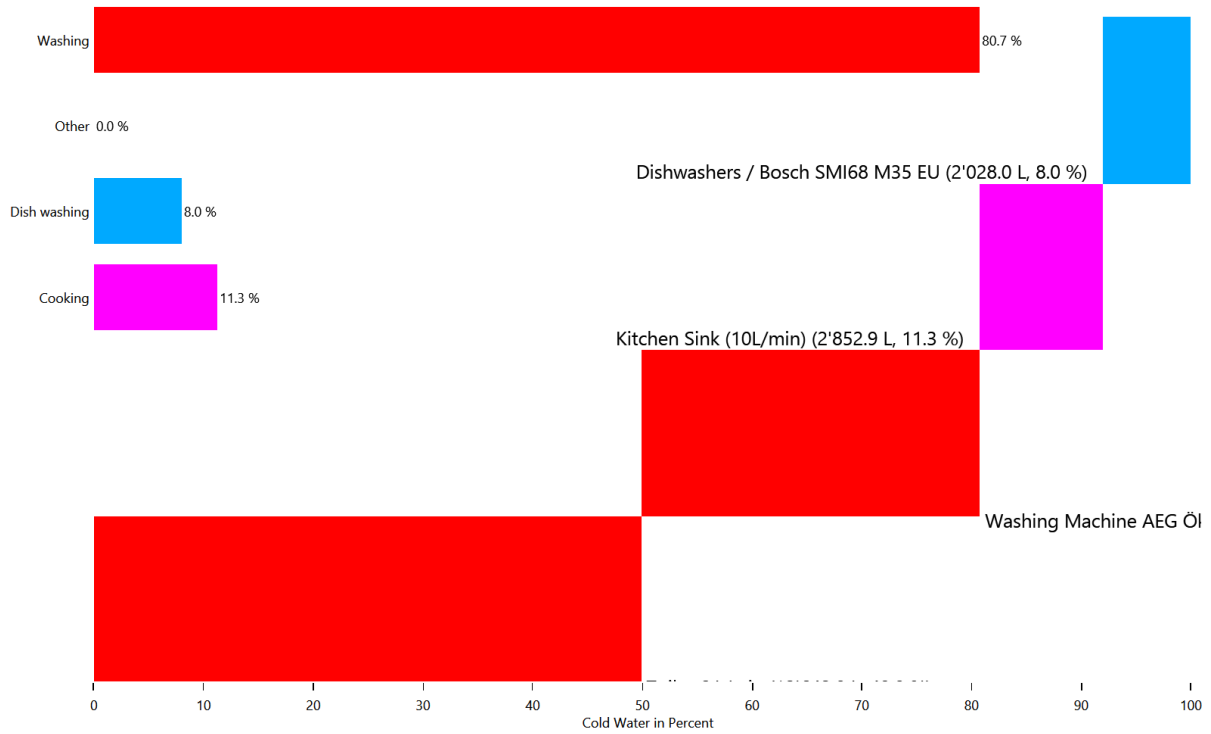
This is made from the files starting with: DeviceSums

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

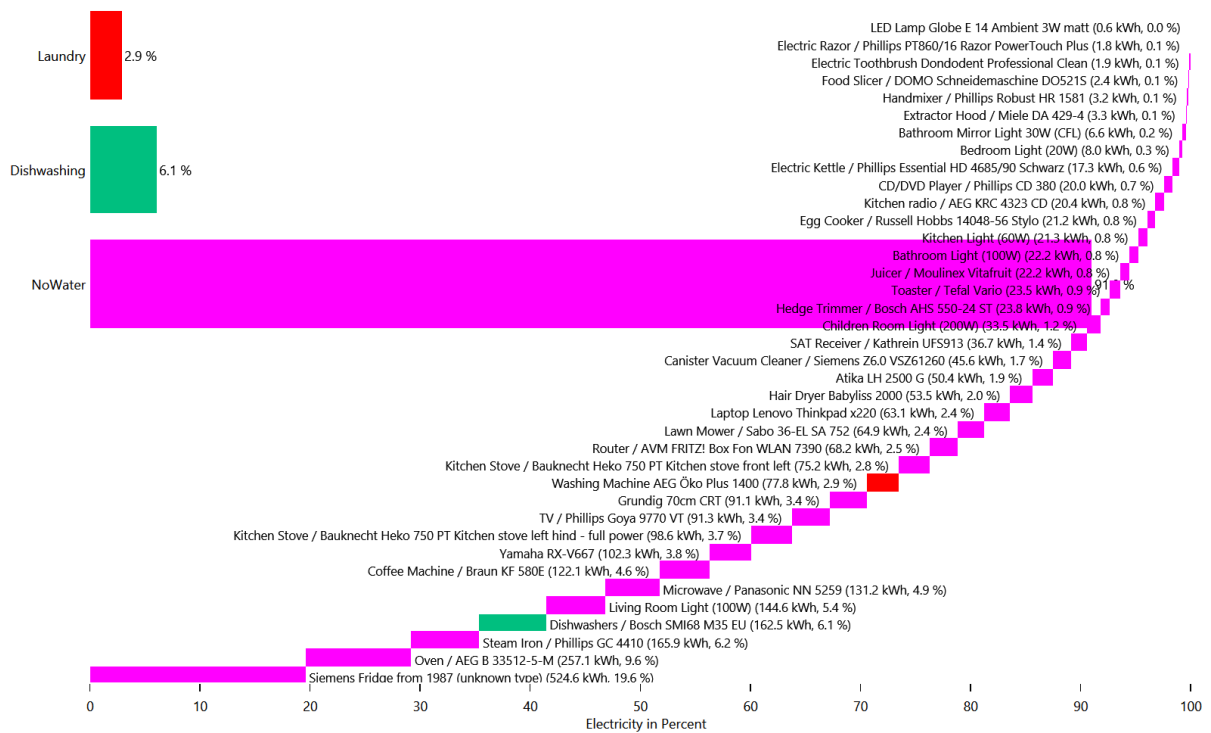
Cold Water



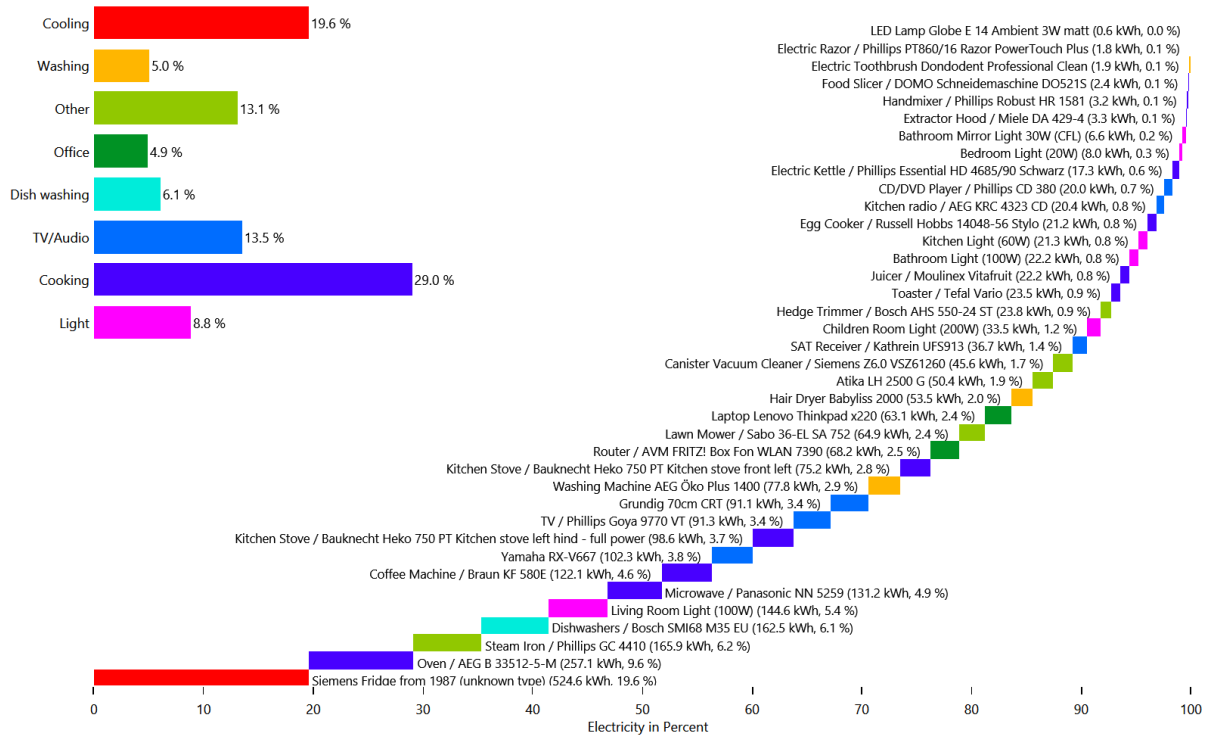
Cold Water



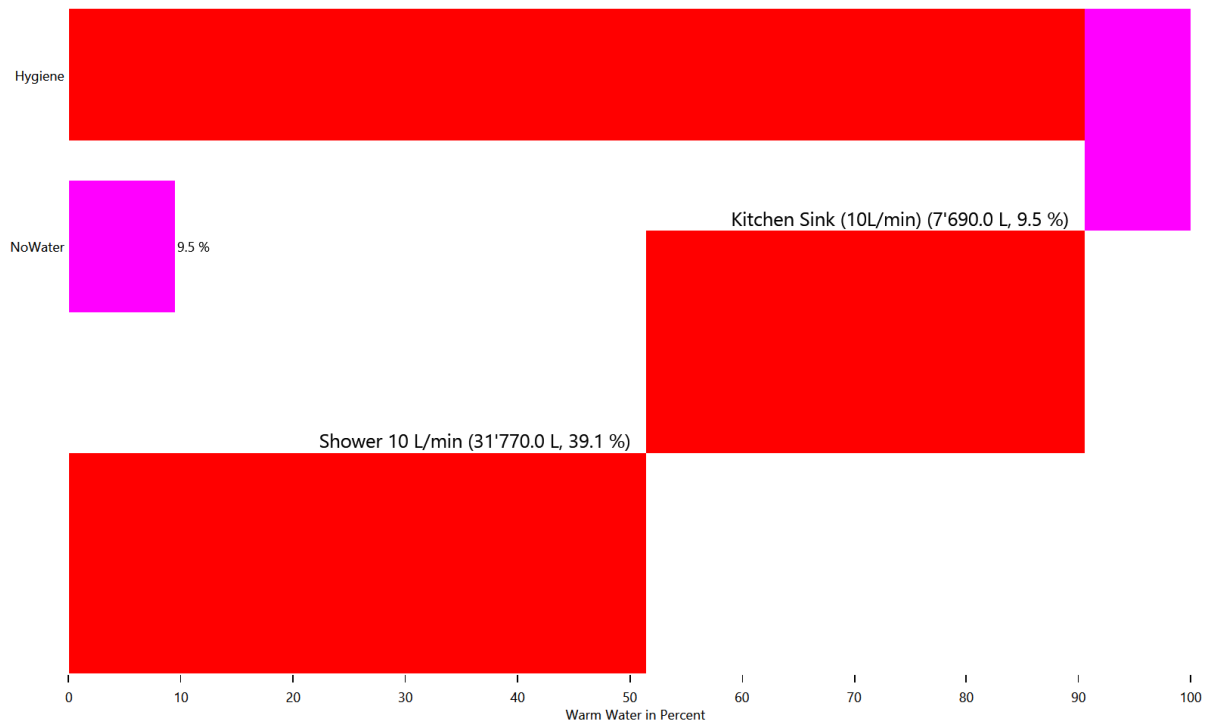
Electricity



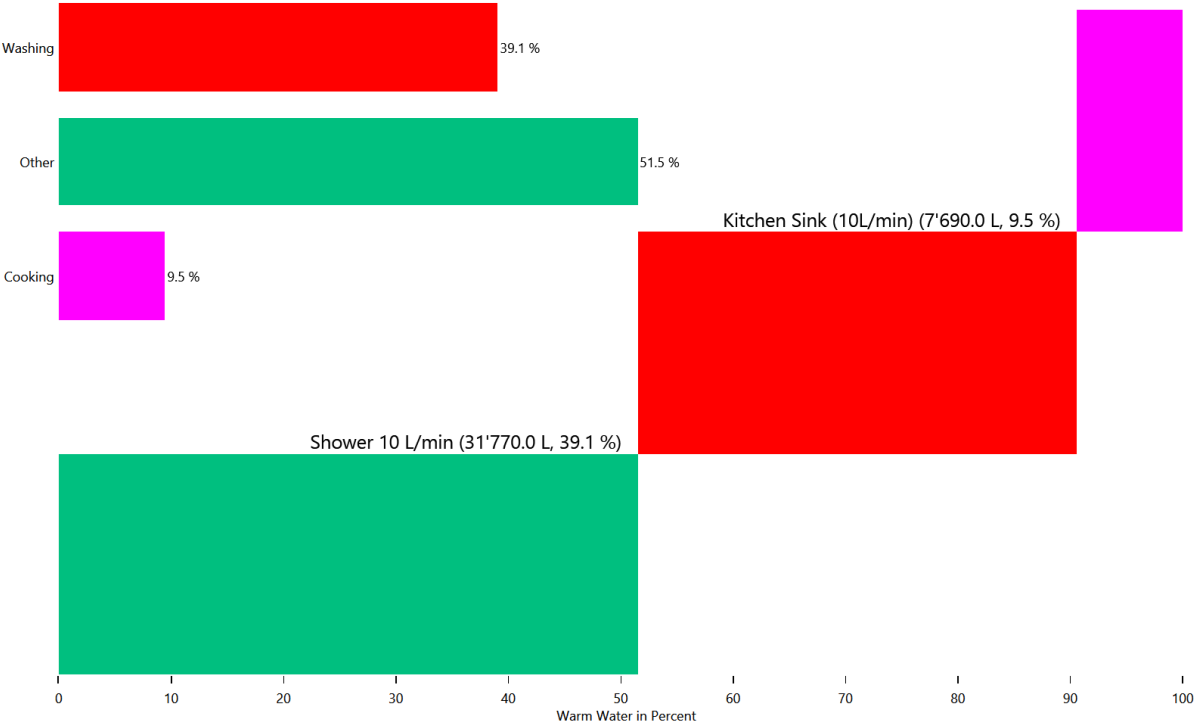
Electricity



Warm Water



Warm Water

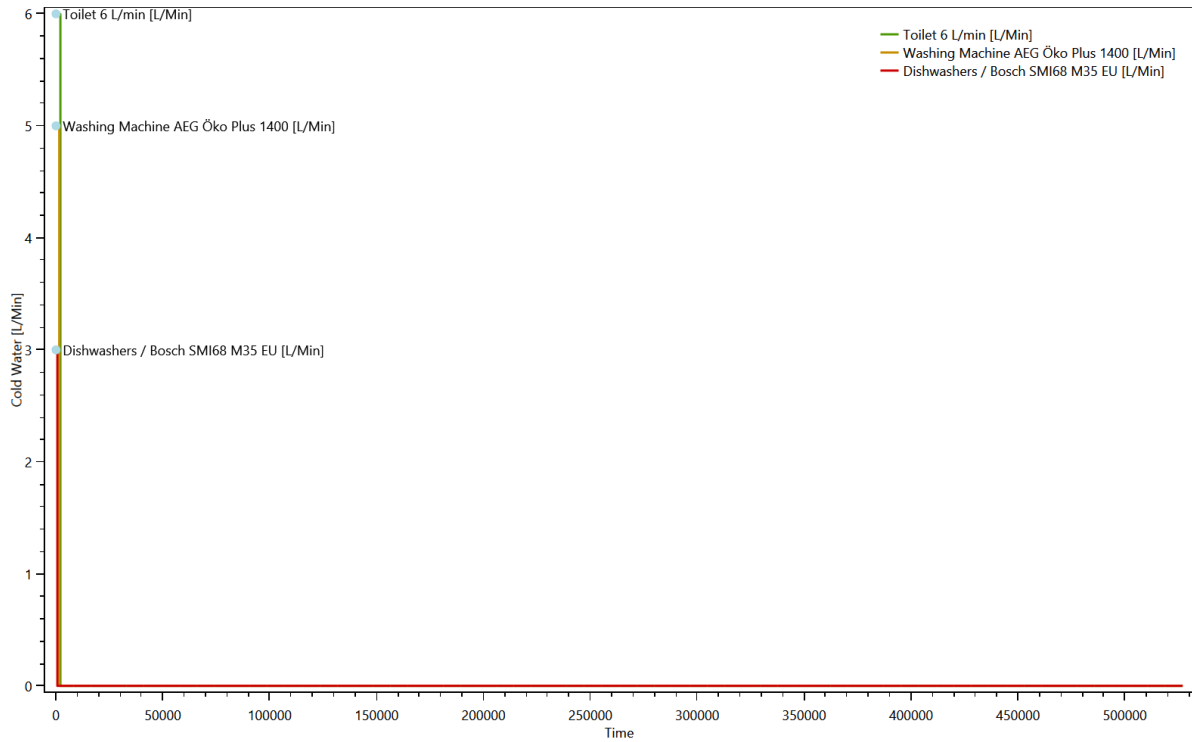


Duration curve for each device for each load type

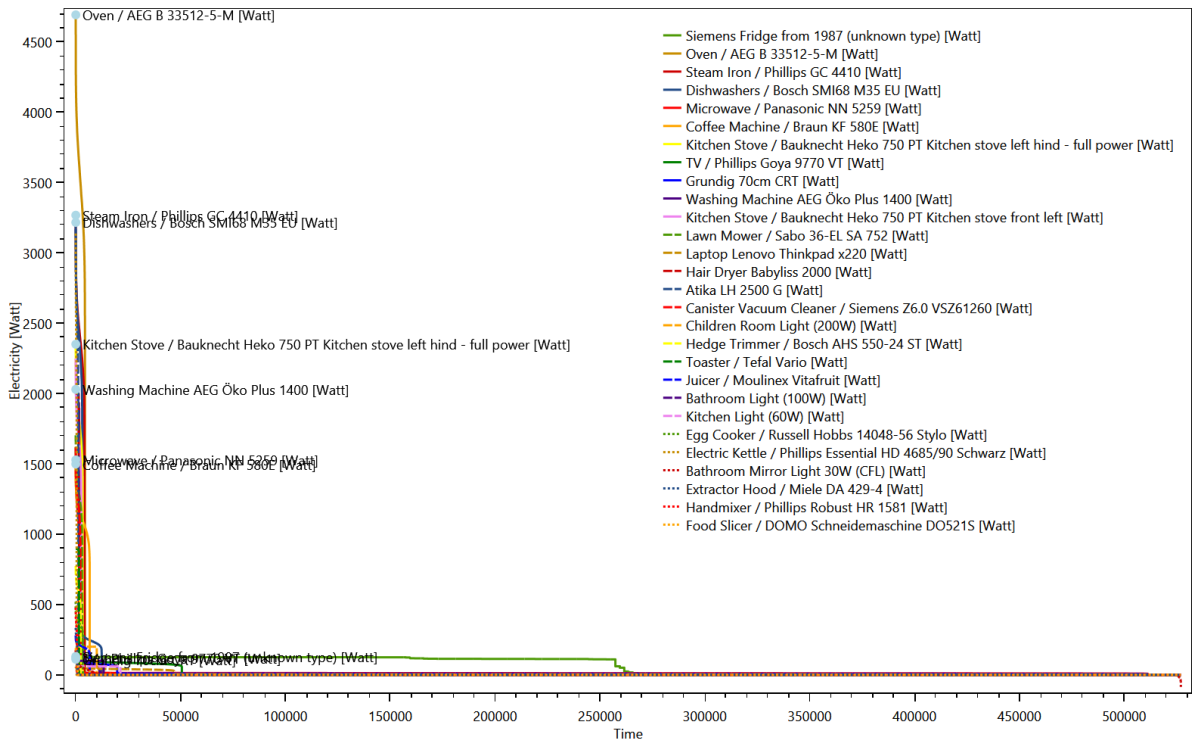
This is made from the files starting with: DeviceDurationCurves

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

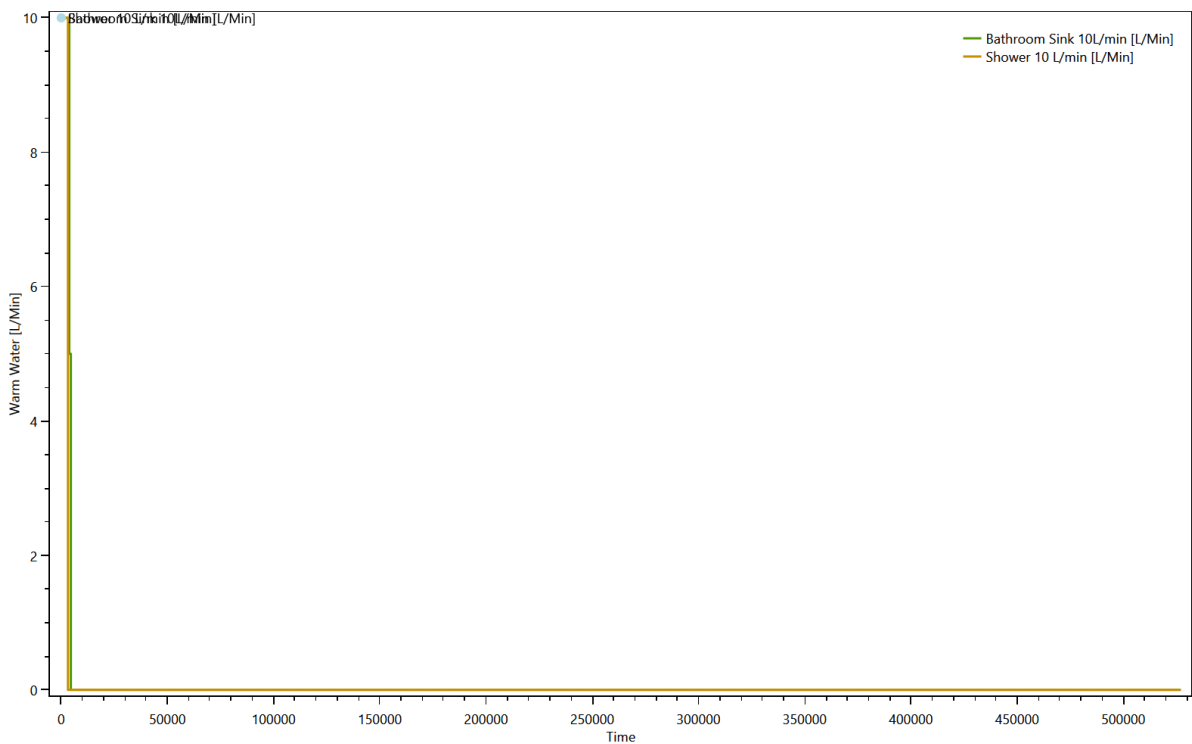
Cold Water



Electricity



Warm Water

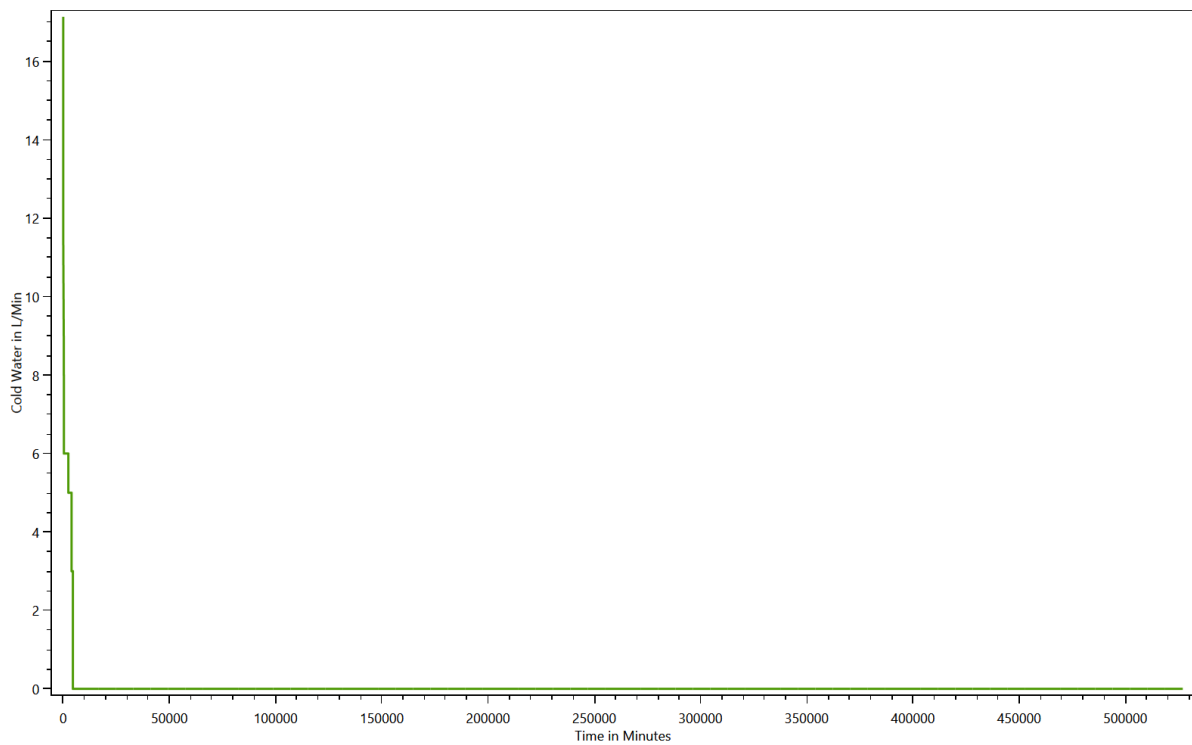


Duration curve for each load type

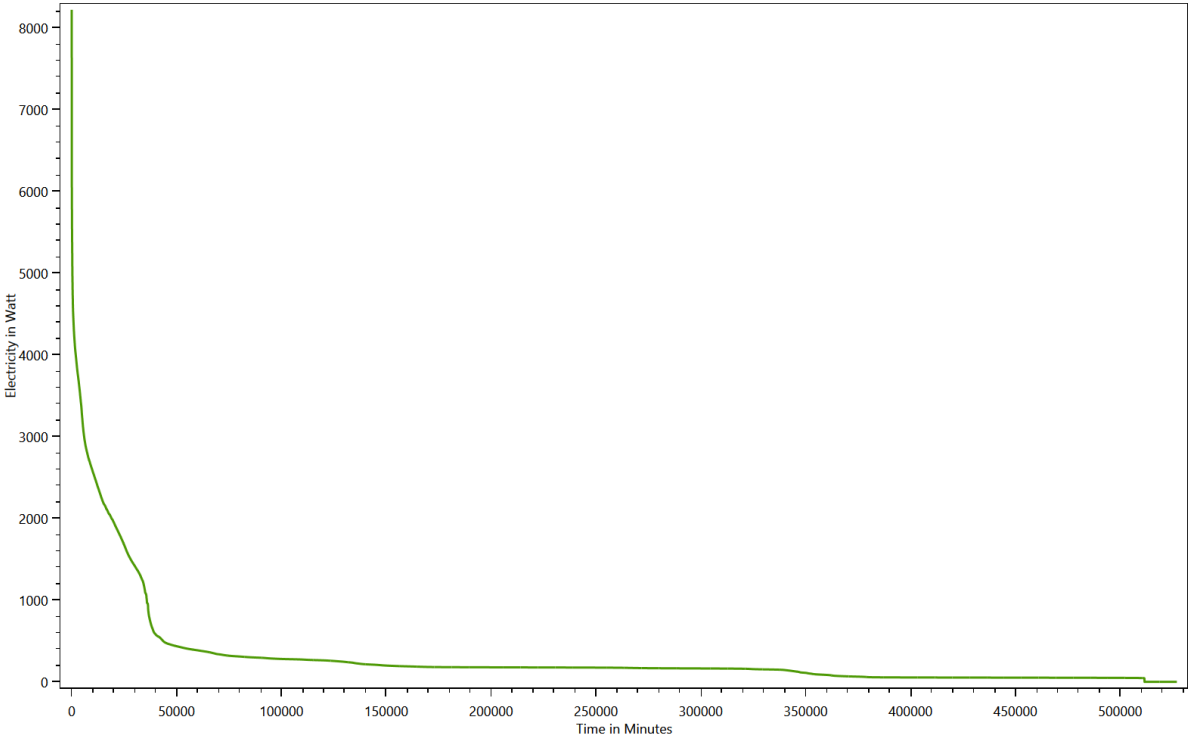
This is made from the files starting with: DurationCurve

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

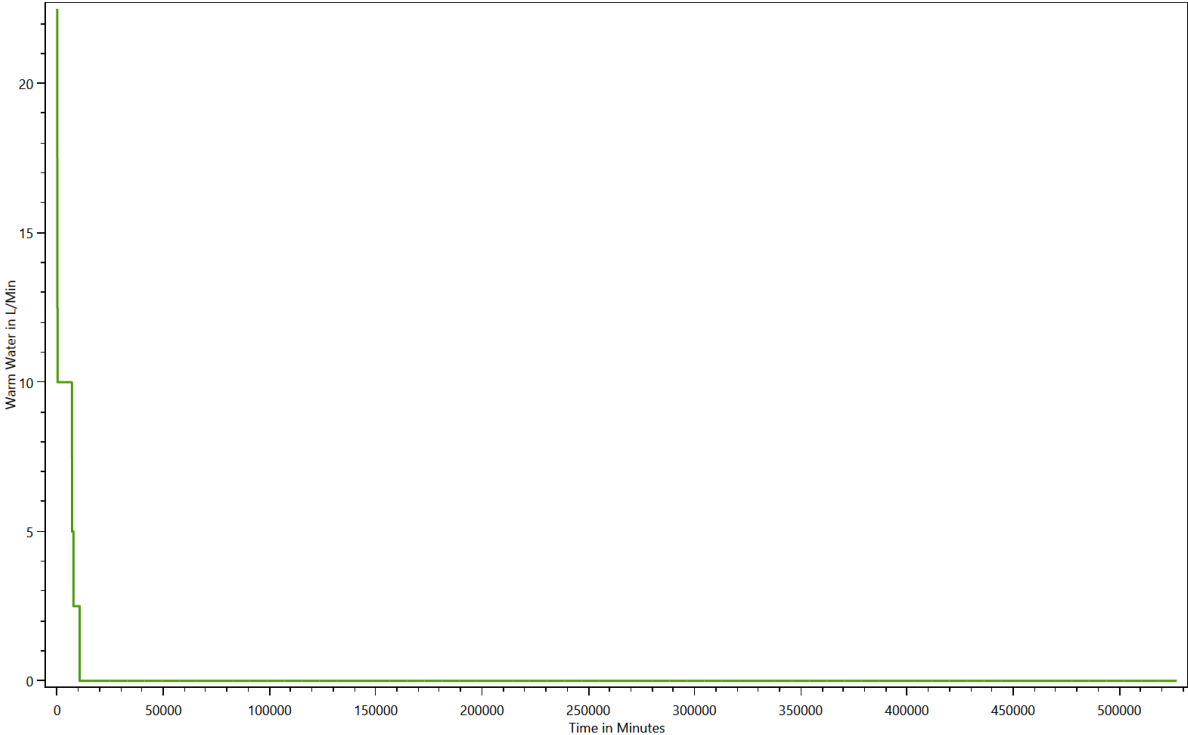
Cold Water



Electricity



Warm Water

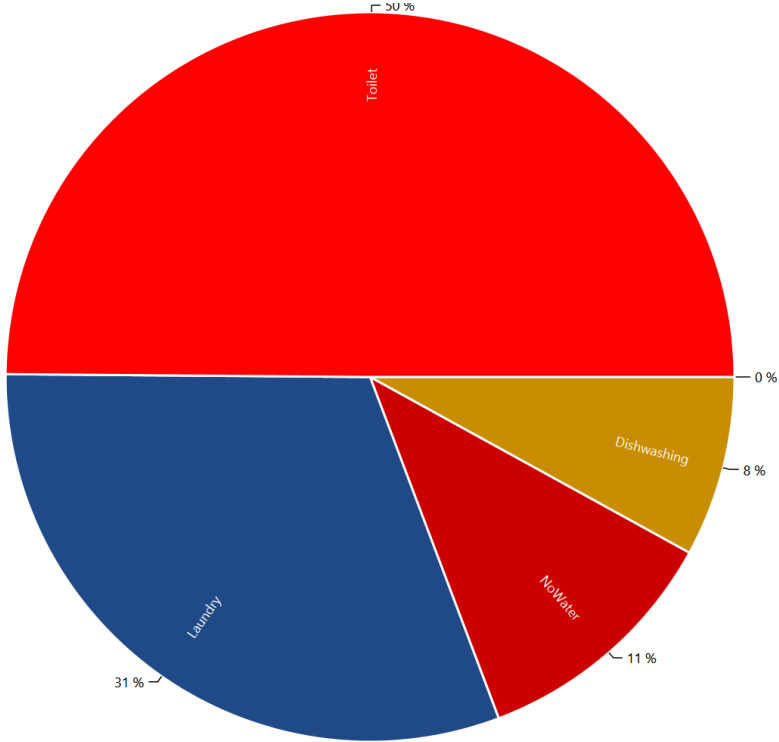


Grouped energy use for each load type for each device

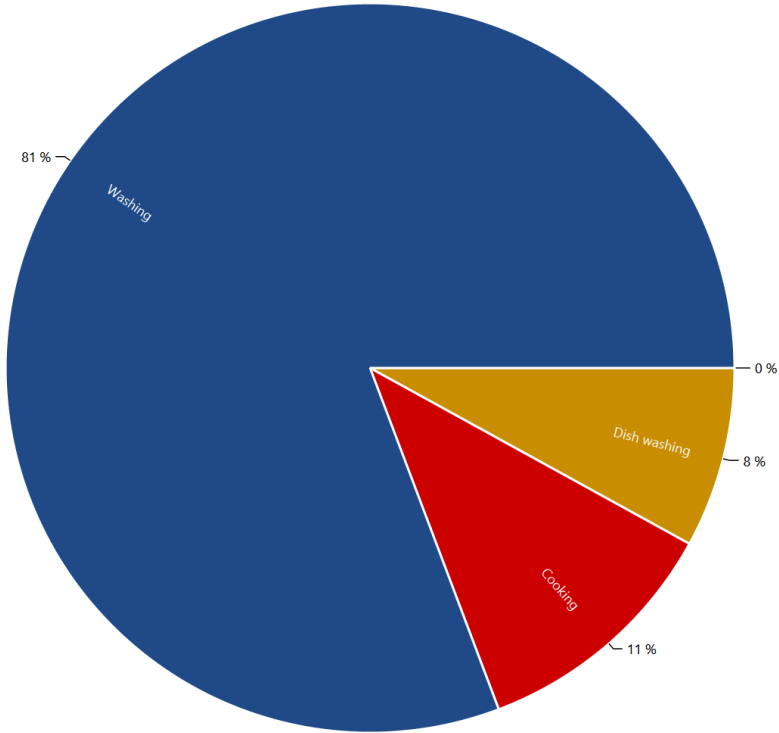
This is made from the files starting with: DeviceTaggingSet

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

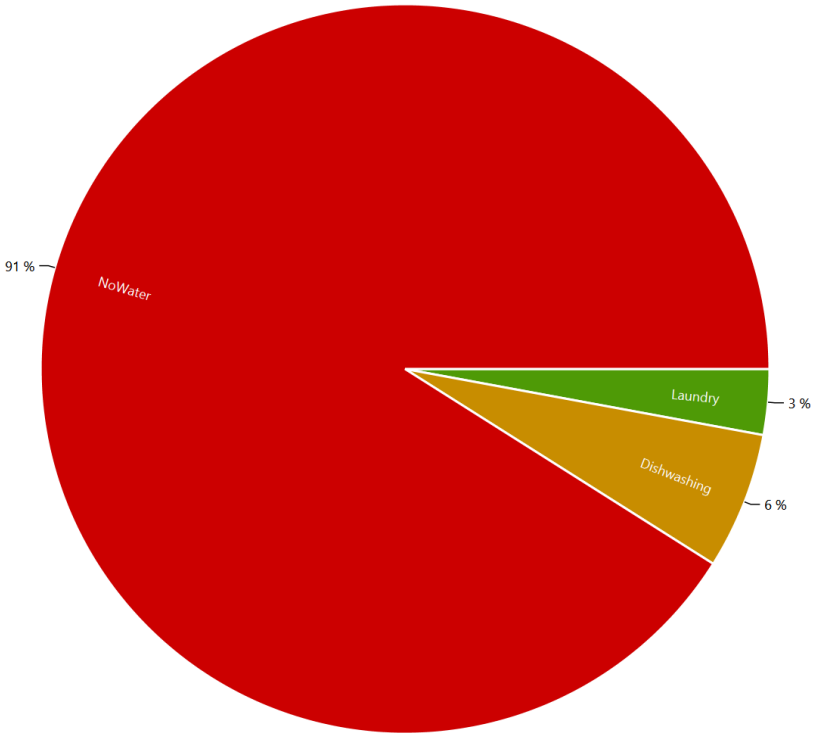
HH0 - Destatis Water Usage Statistics - Cold Water



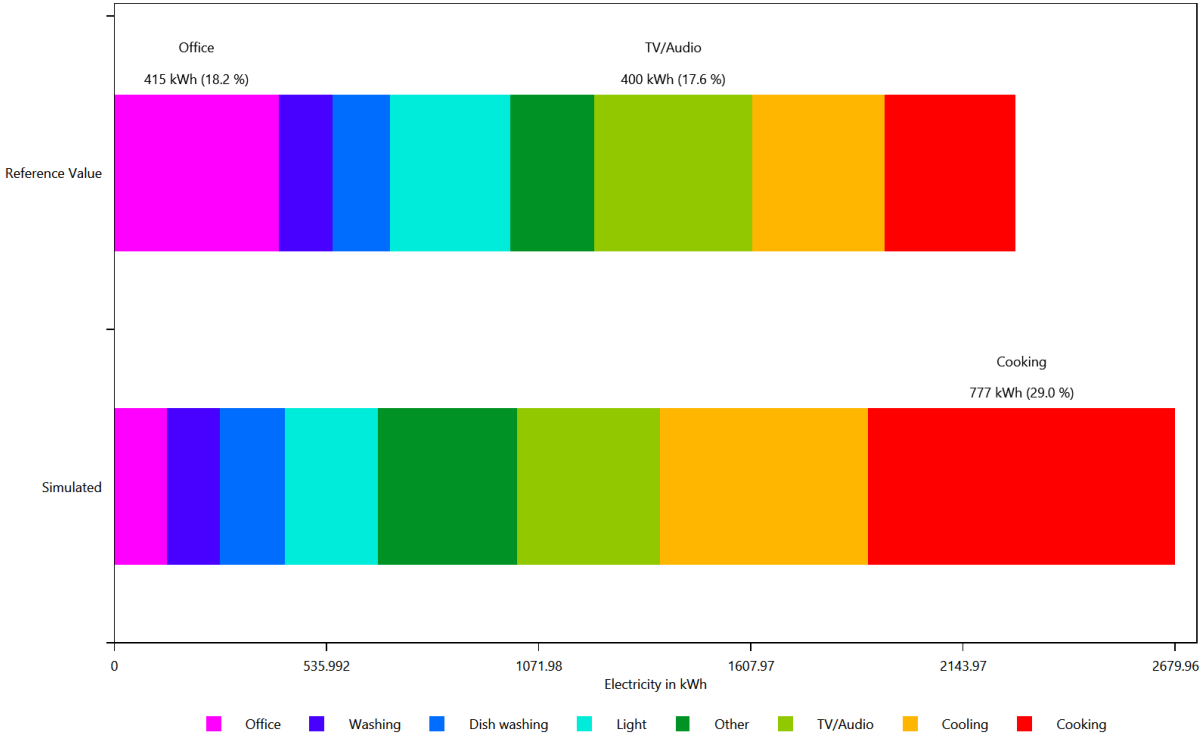
HH0 - Energieagentur - Cold Water



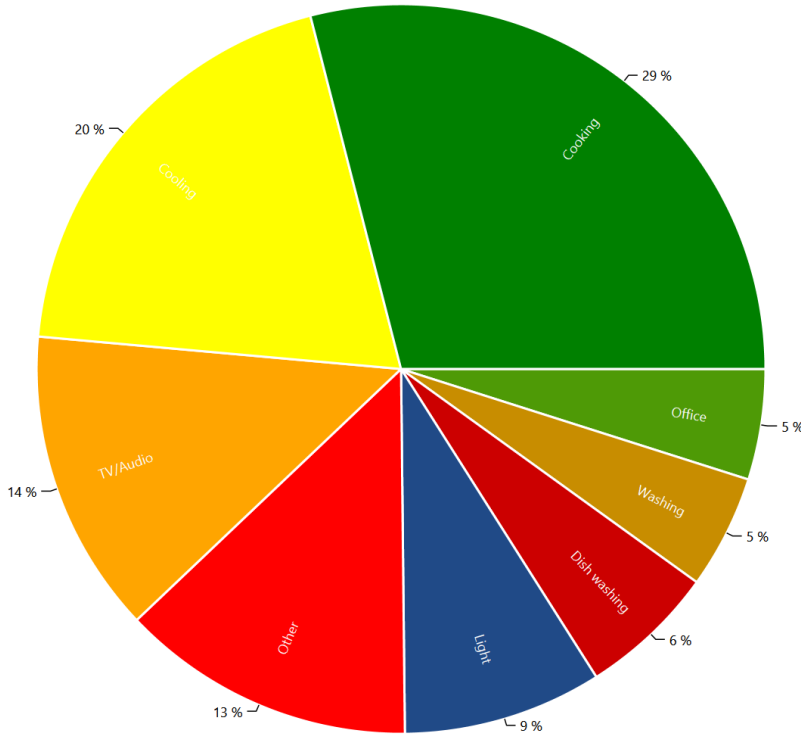
HH0 - Destatis Water Usage Statistics - Electricity



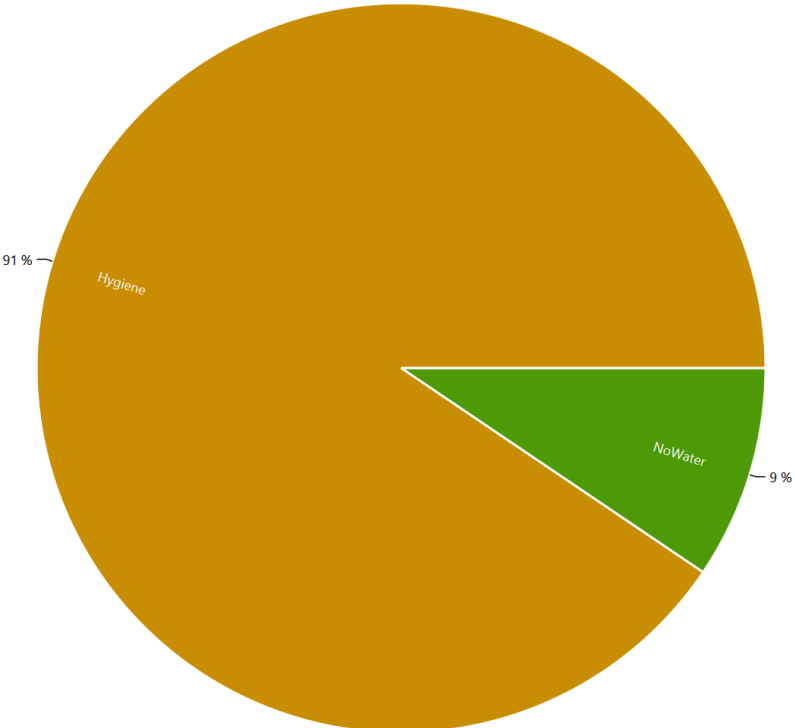
HH0 - Energieagentur - Electricity



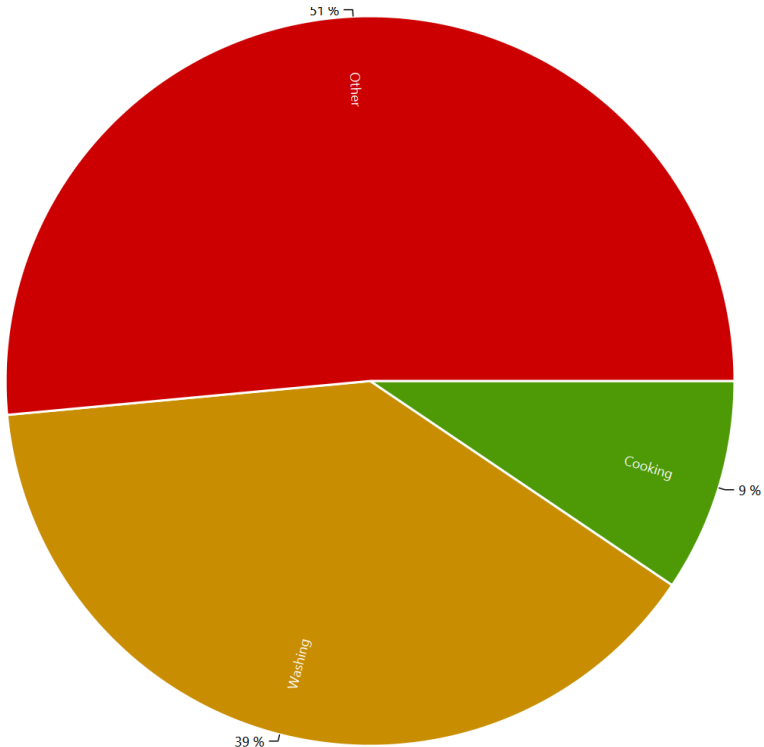
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

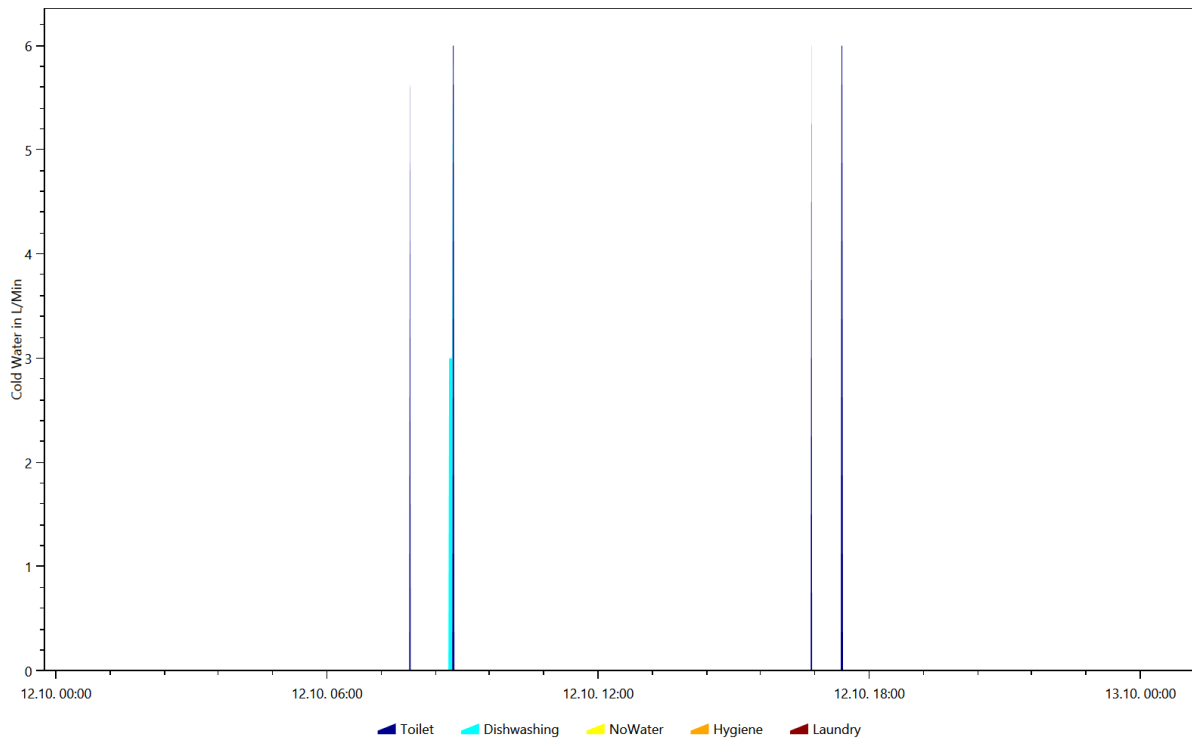


Example of the device profiles for each load type

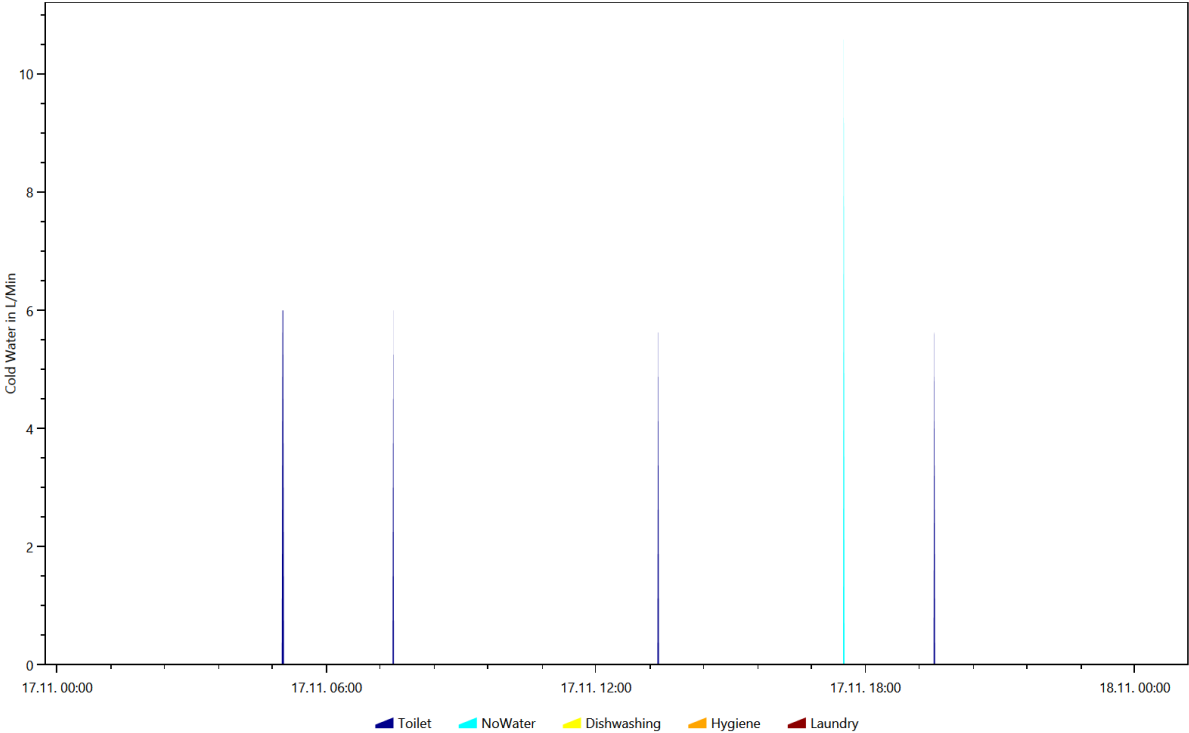
This is made from the files starting with: DeviceProfiles

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

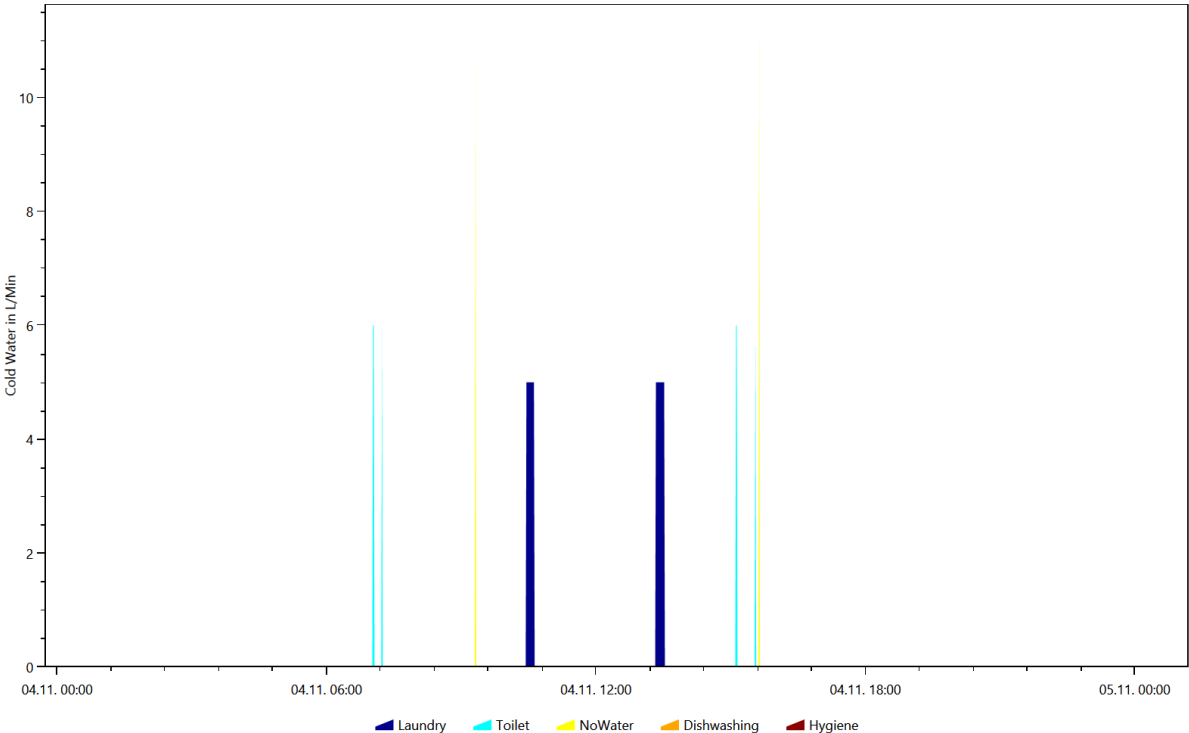
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.12



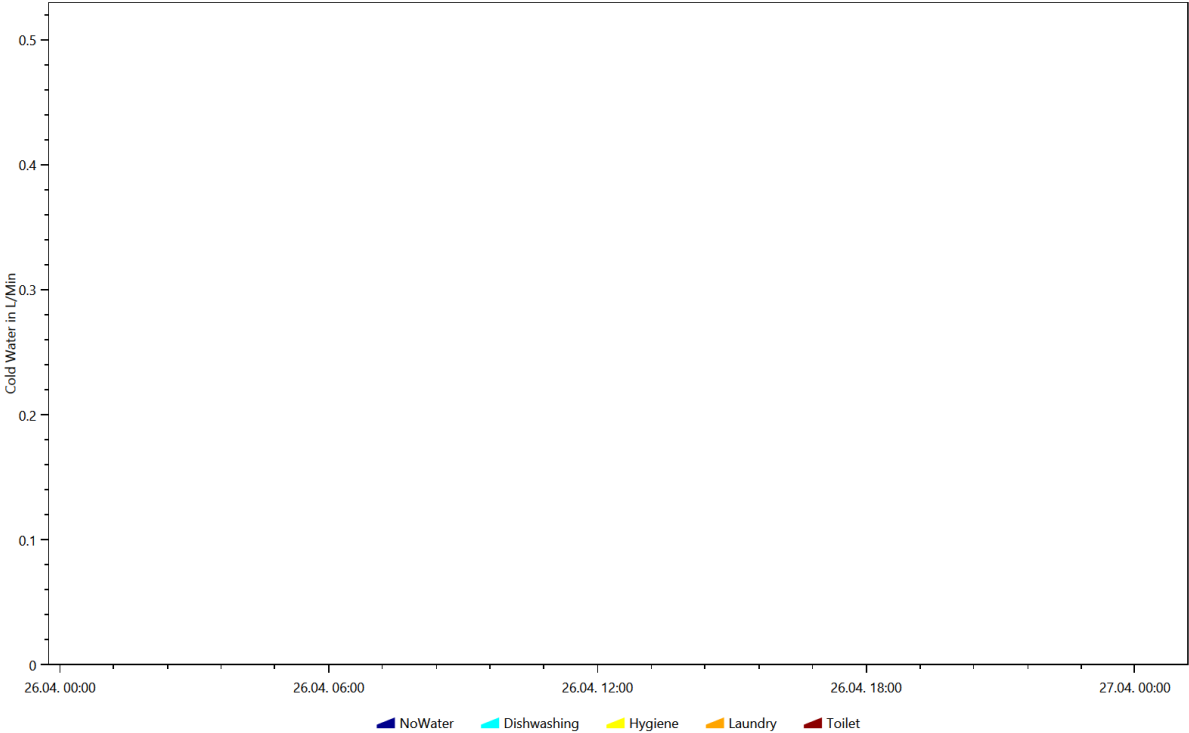
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.17



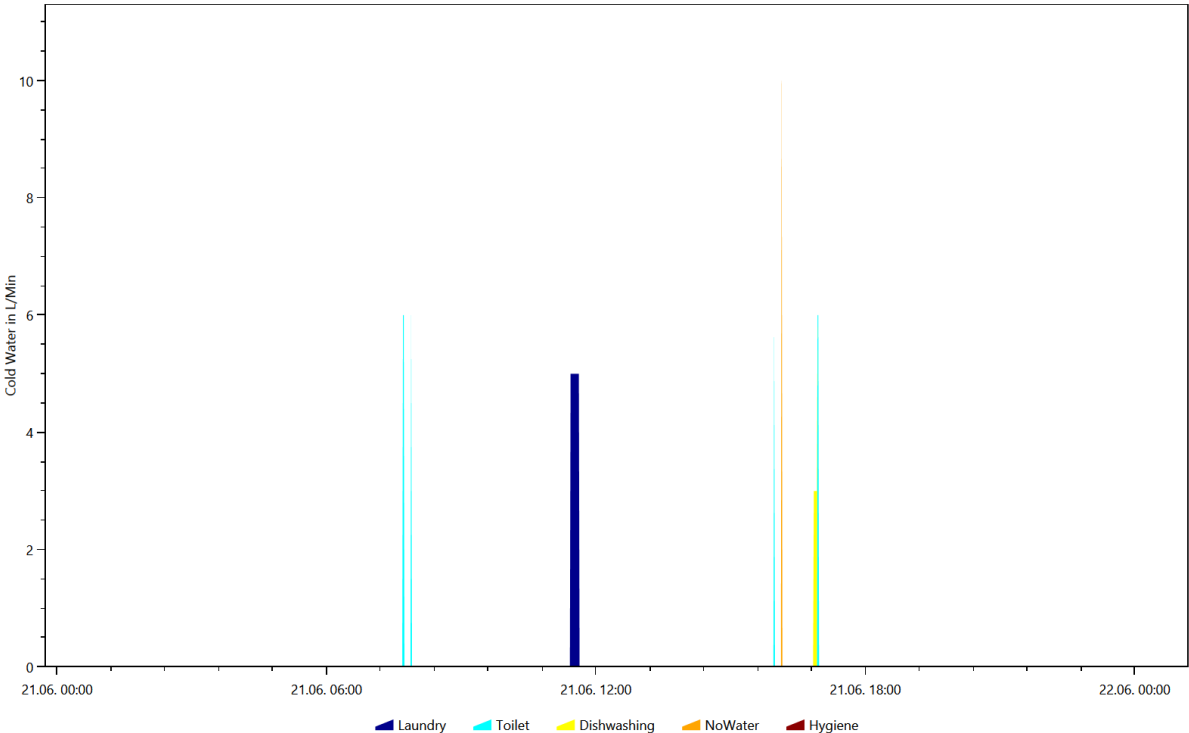
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.4



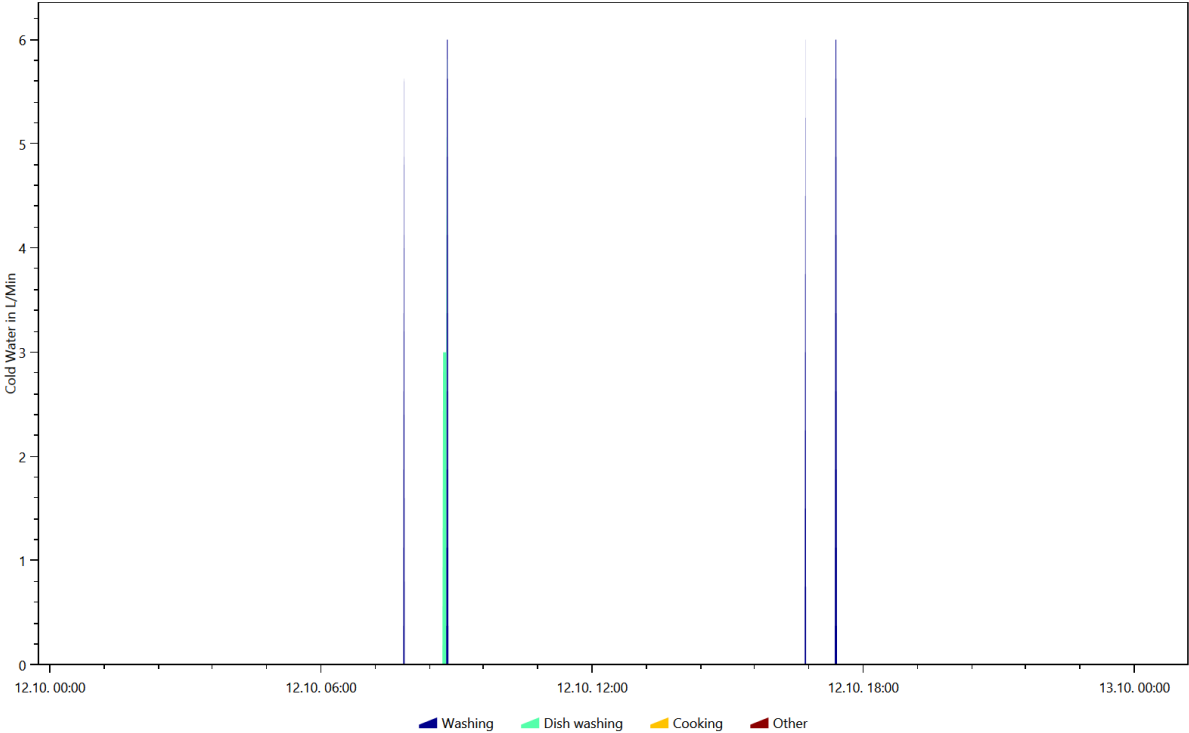
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.26



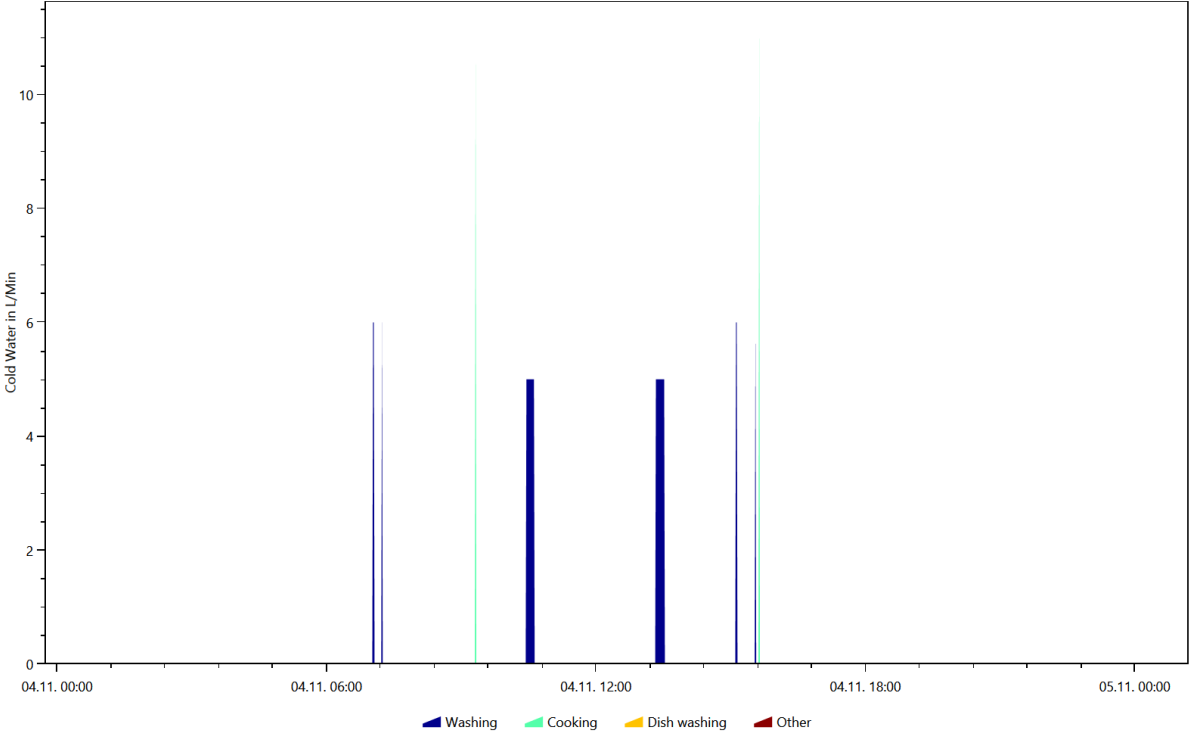
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.21



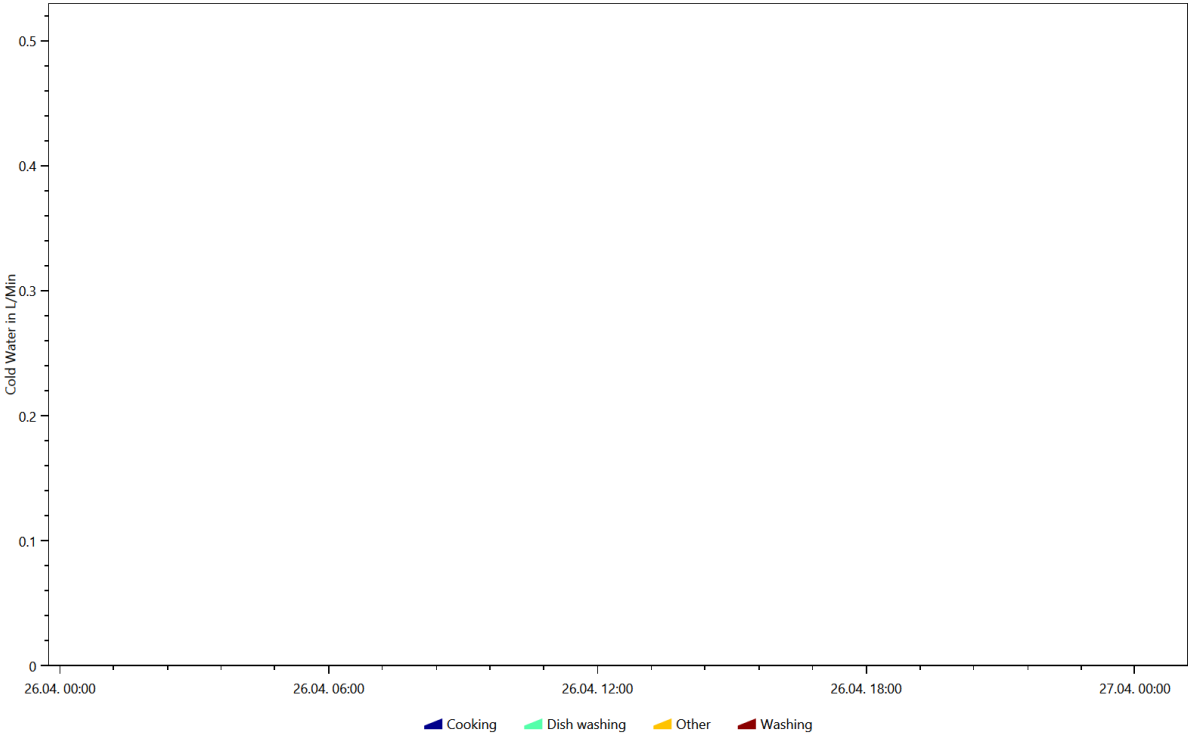
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.12



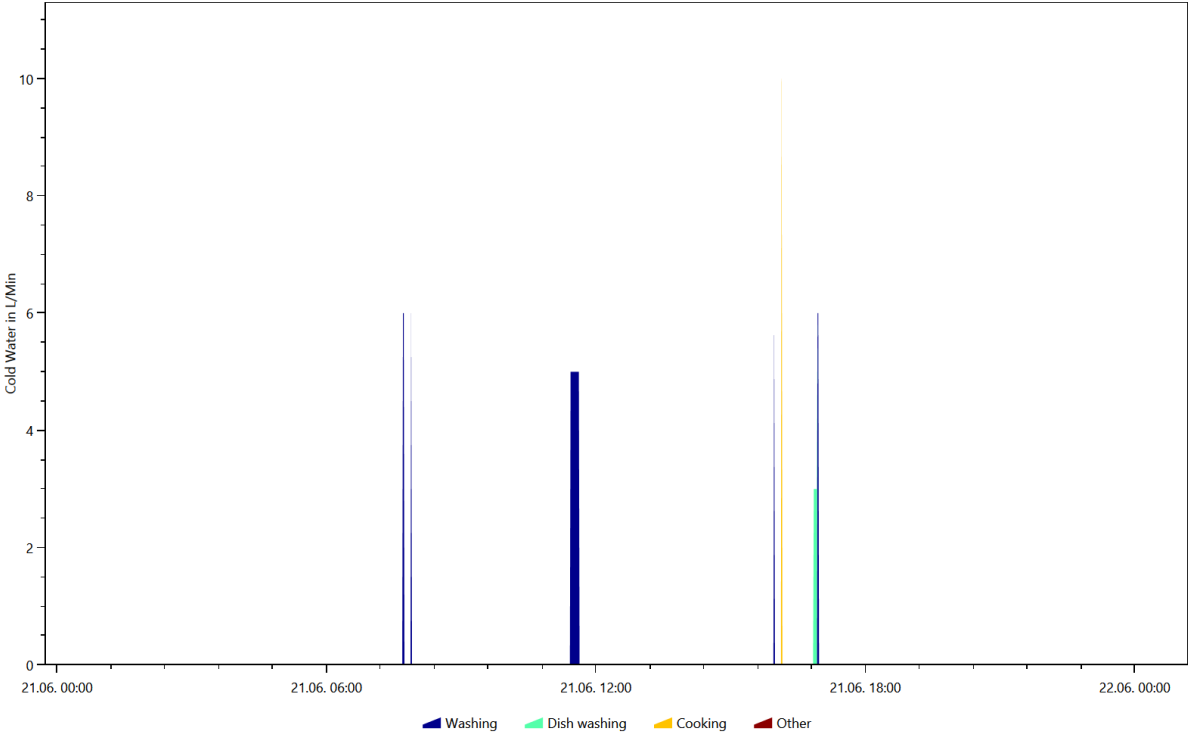
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.11.4



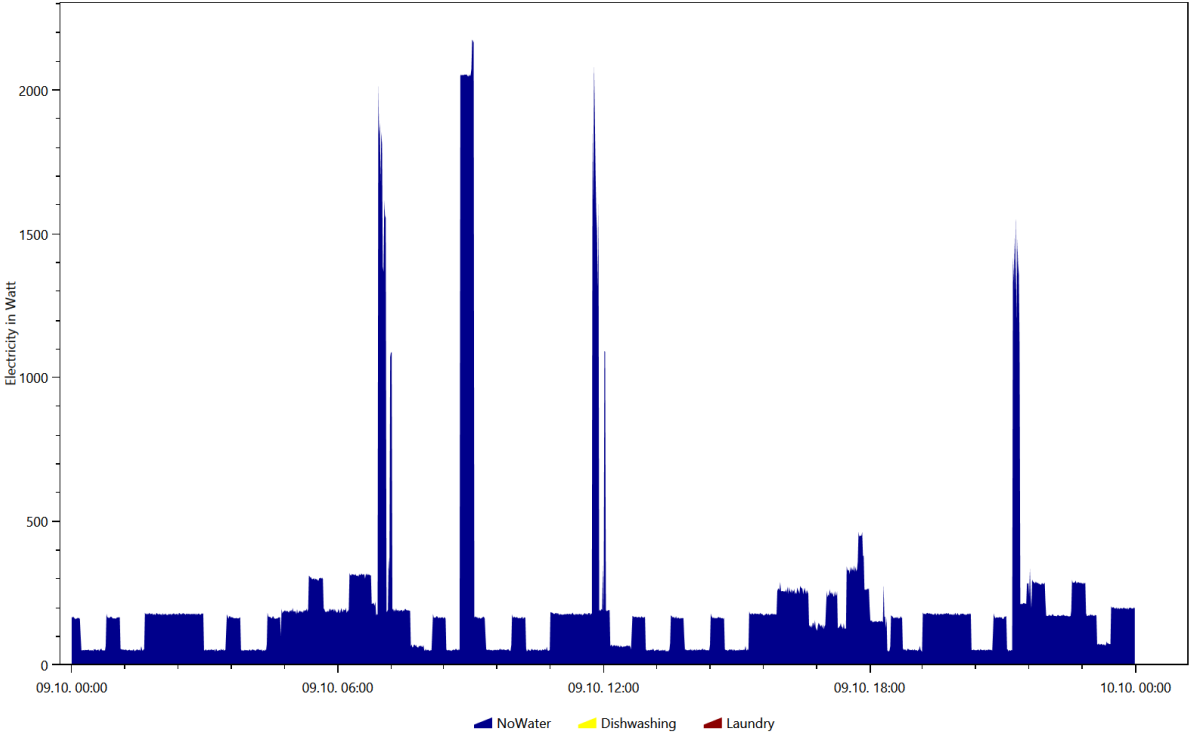
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.26



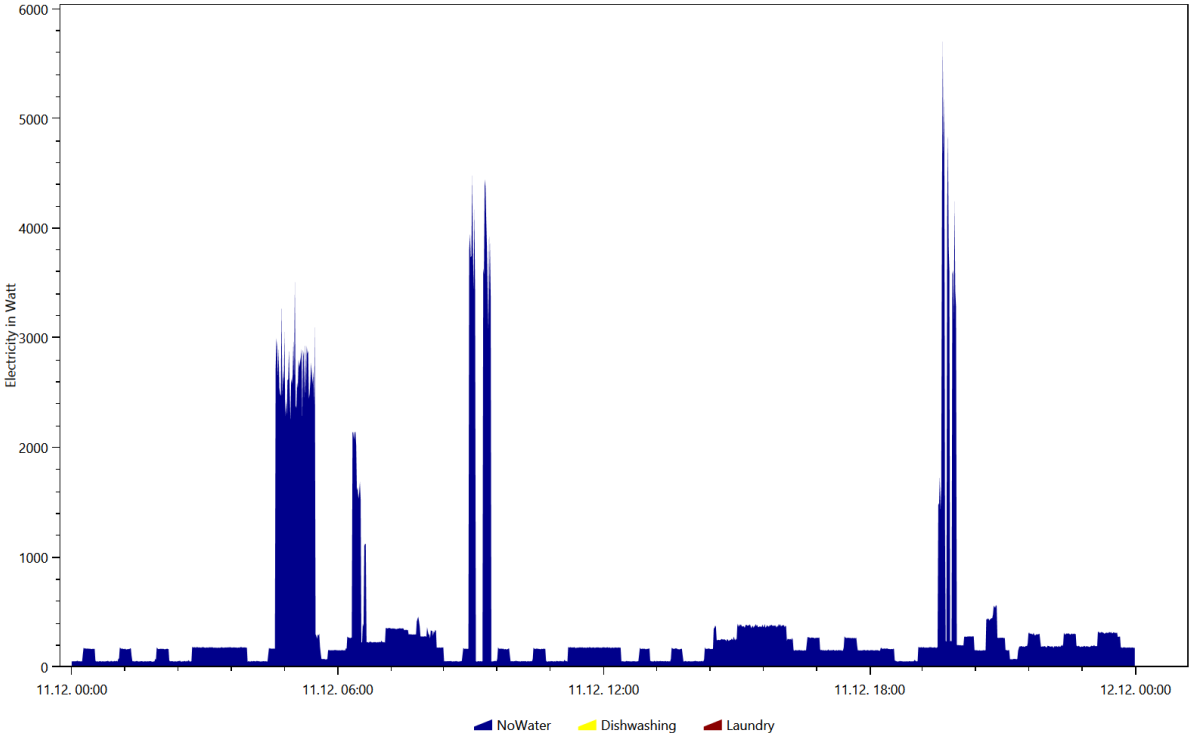
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.21



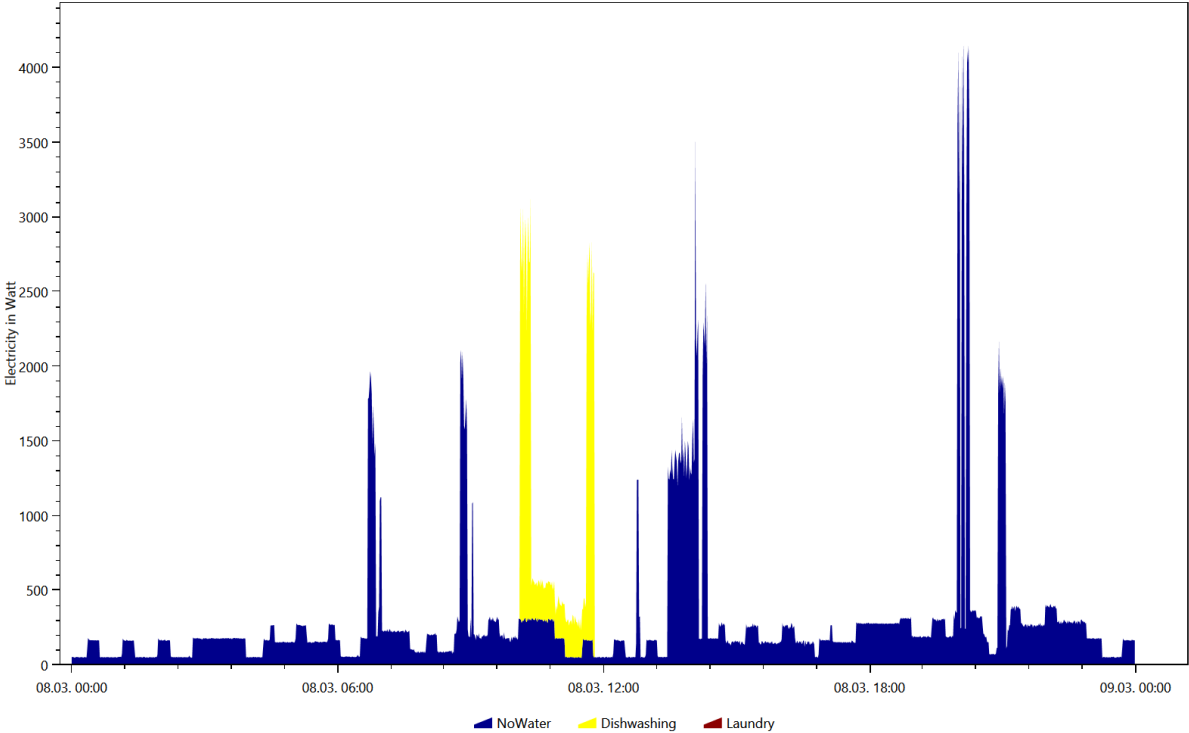
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.9



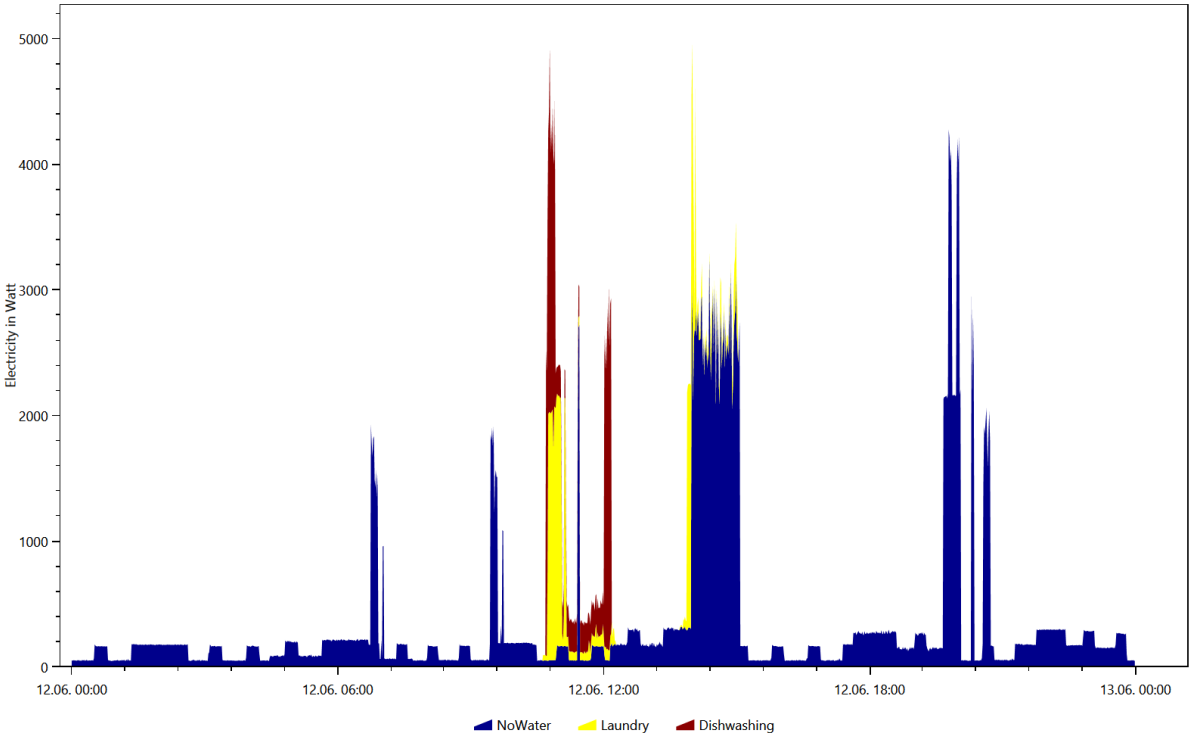
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.11



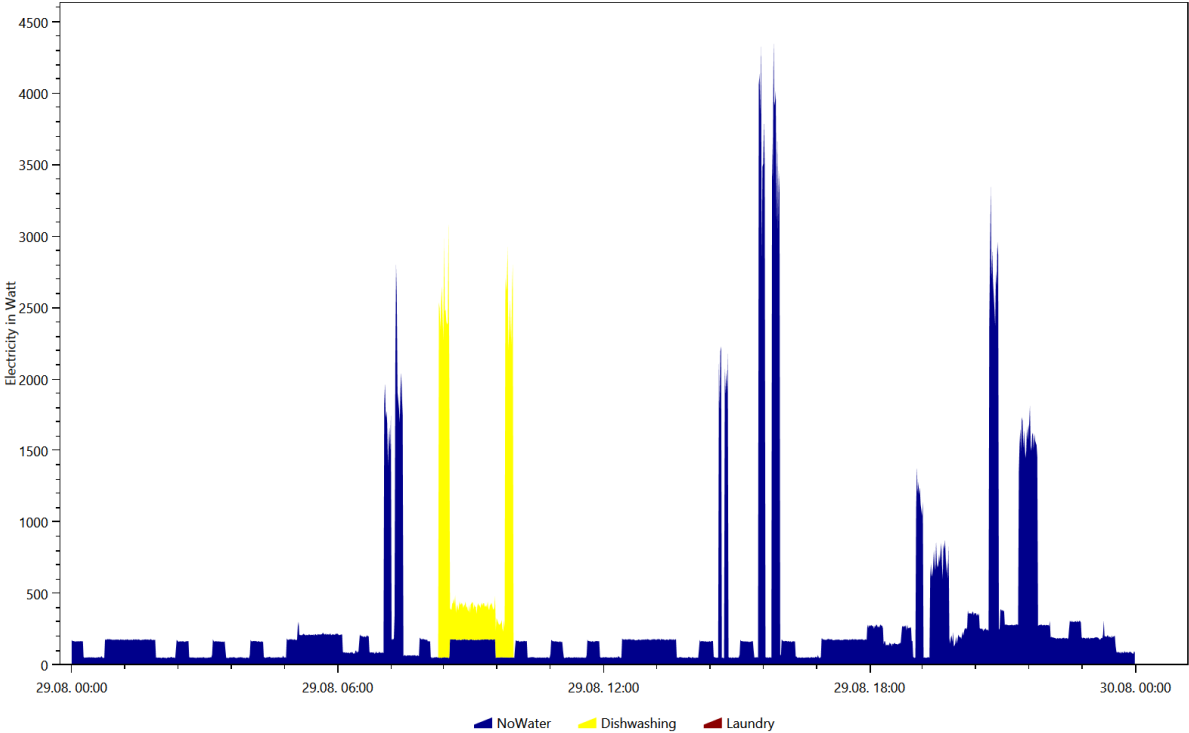
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.8



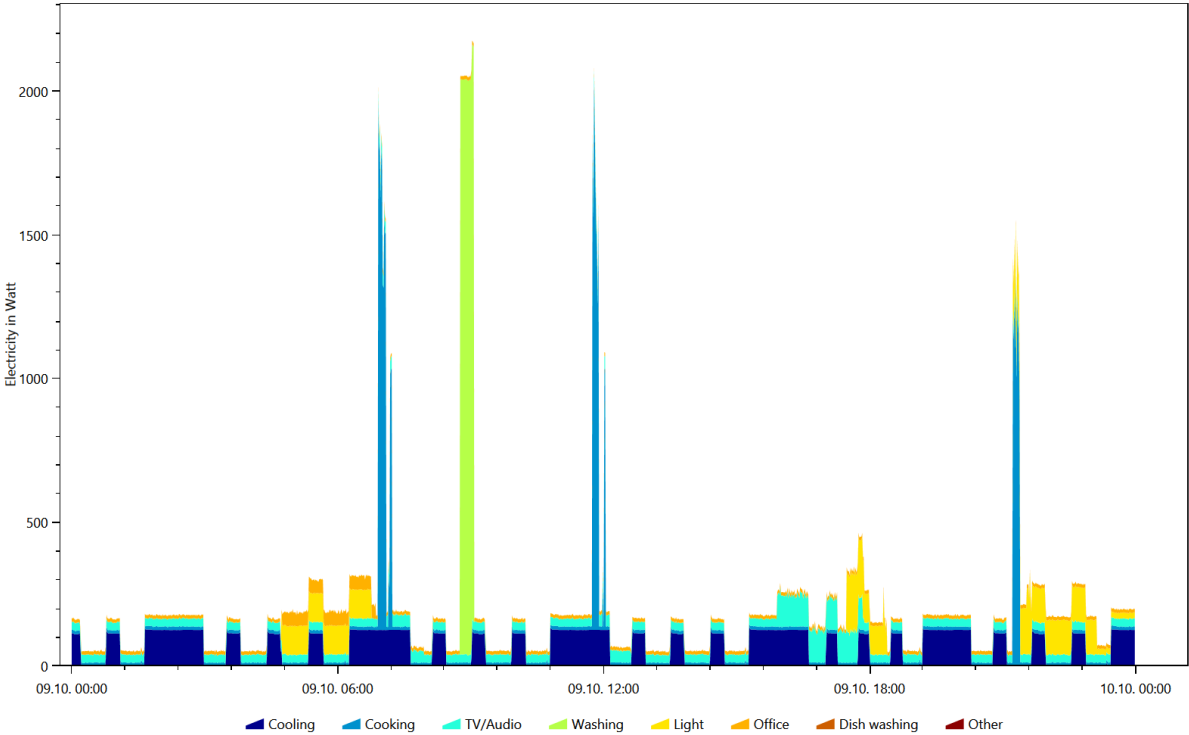
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.12



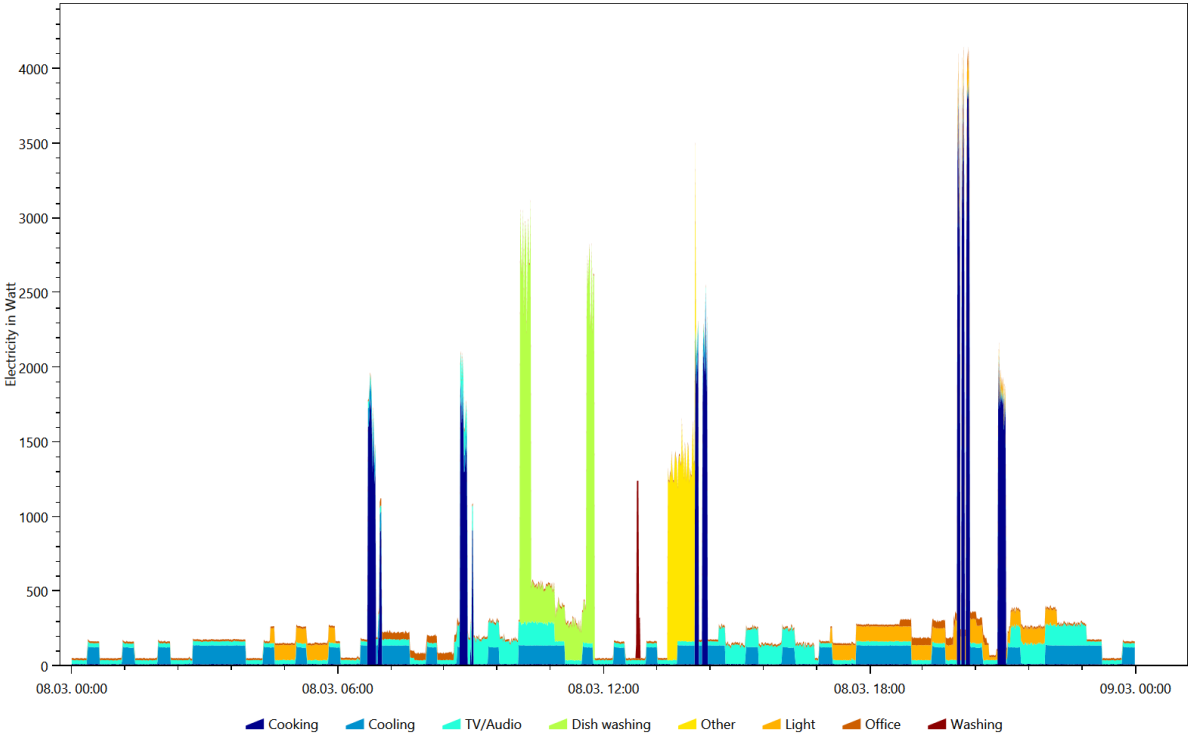
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.29



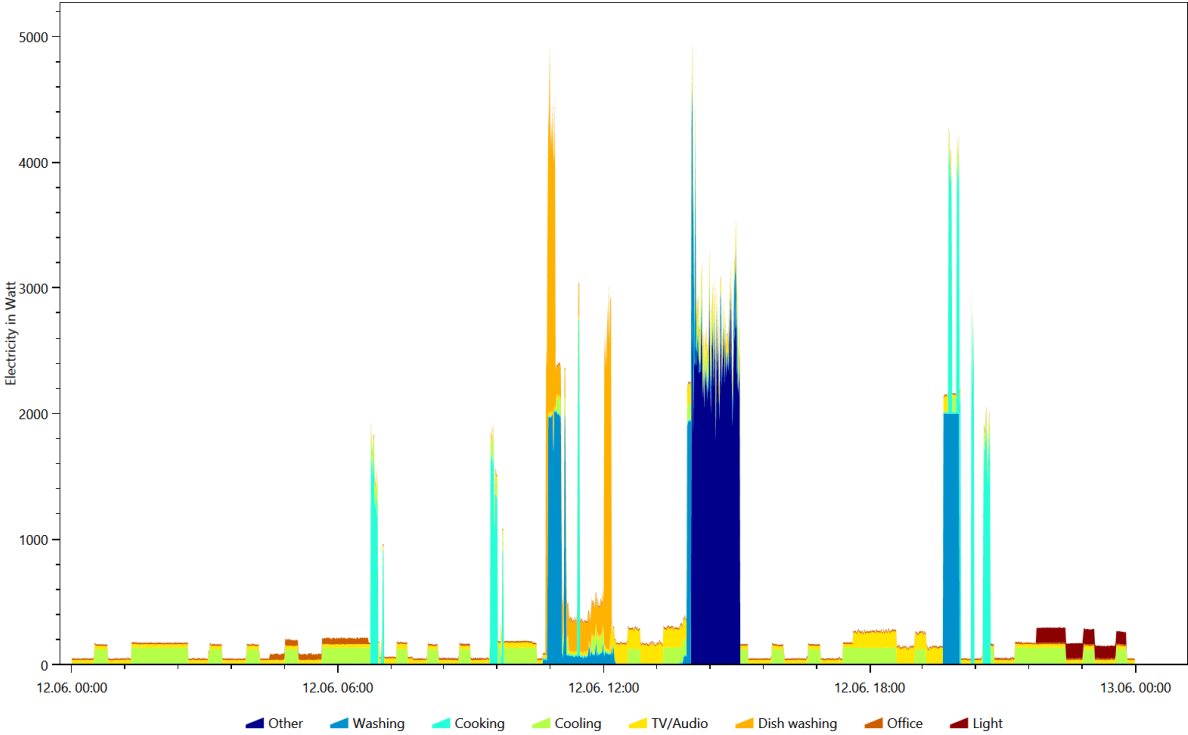
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.9



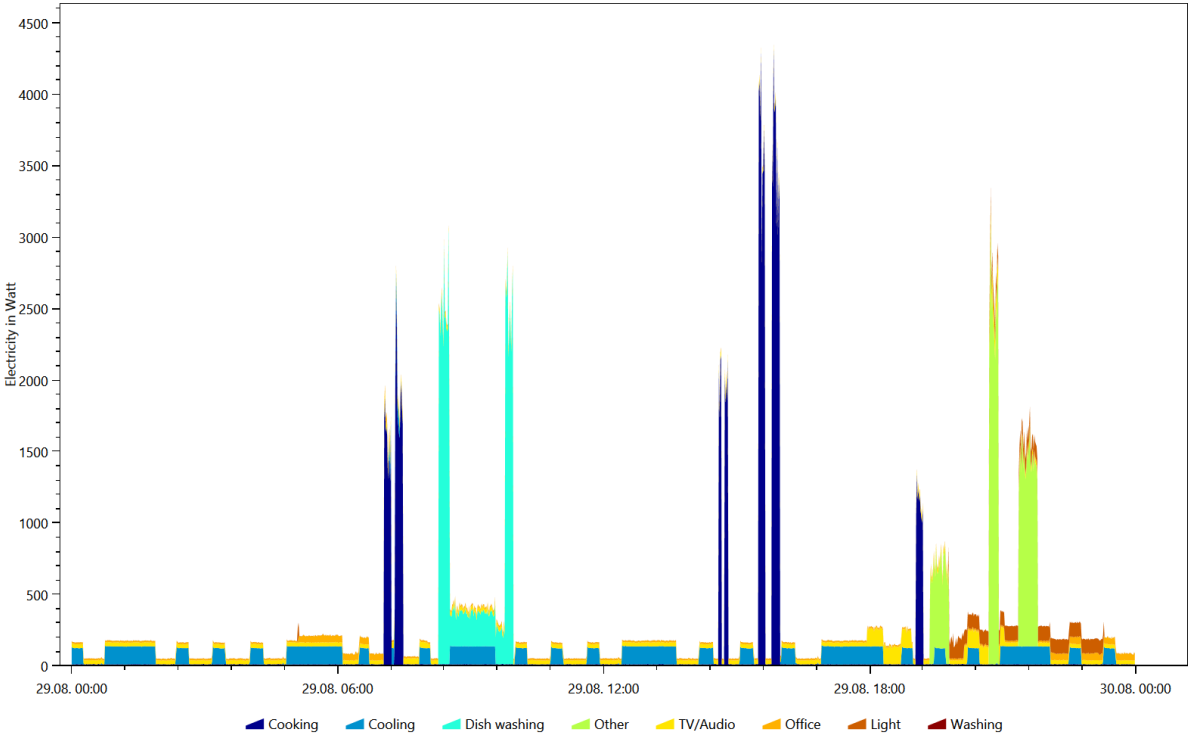
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.8



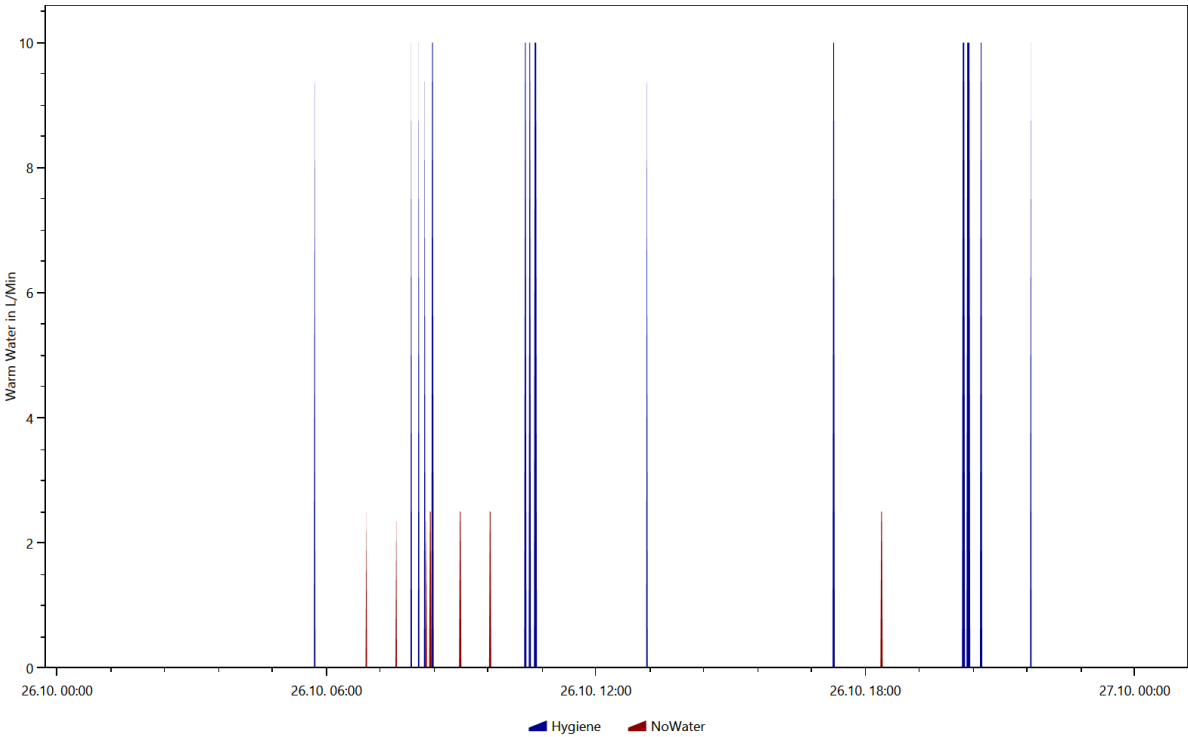
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.12



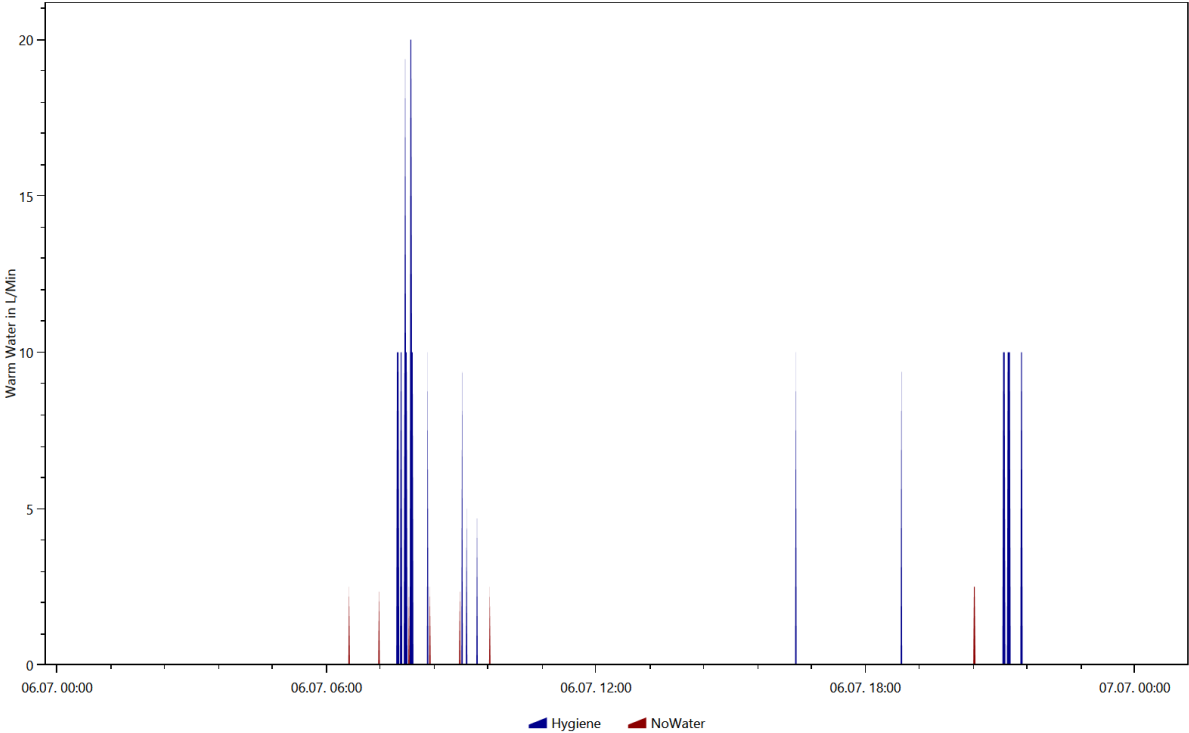
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.29



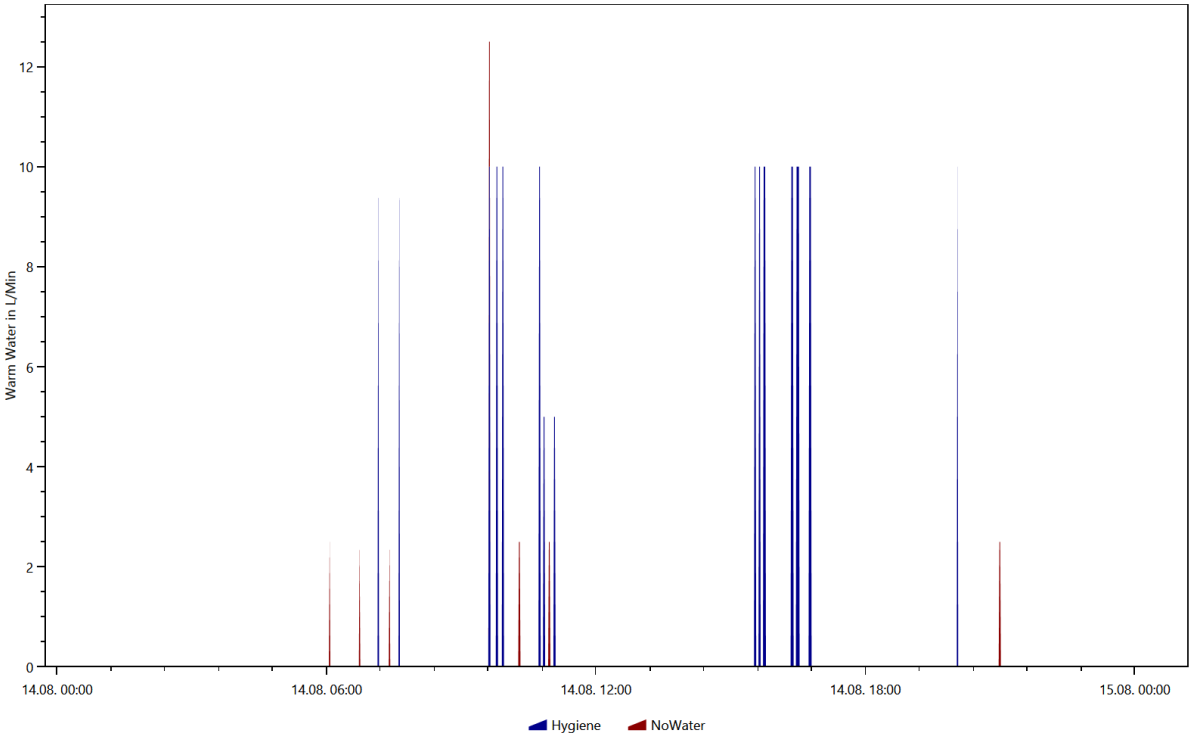
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.26



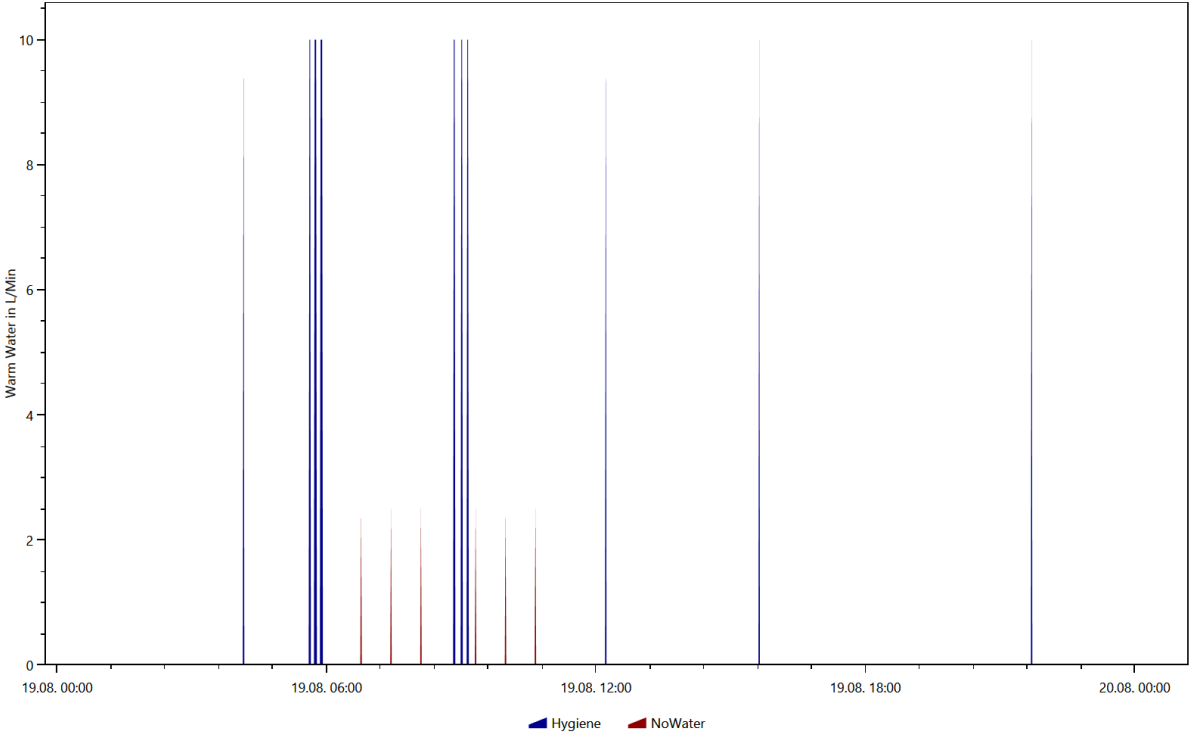
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.6



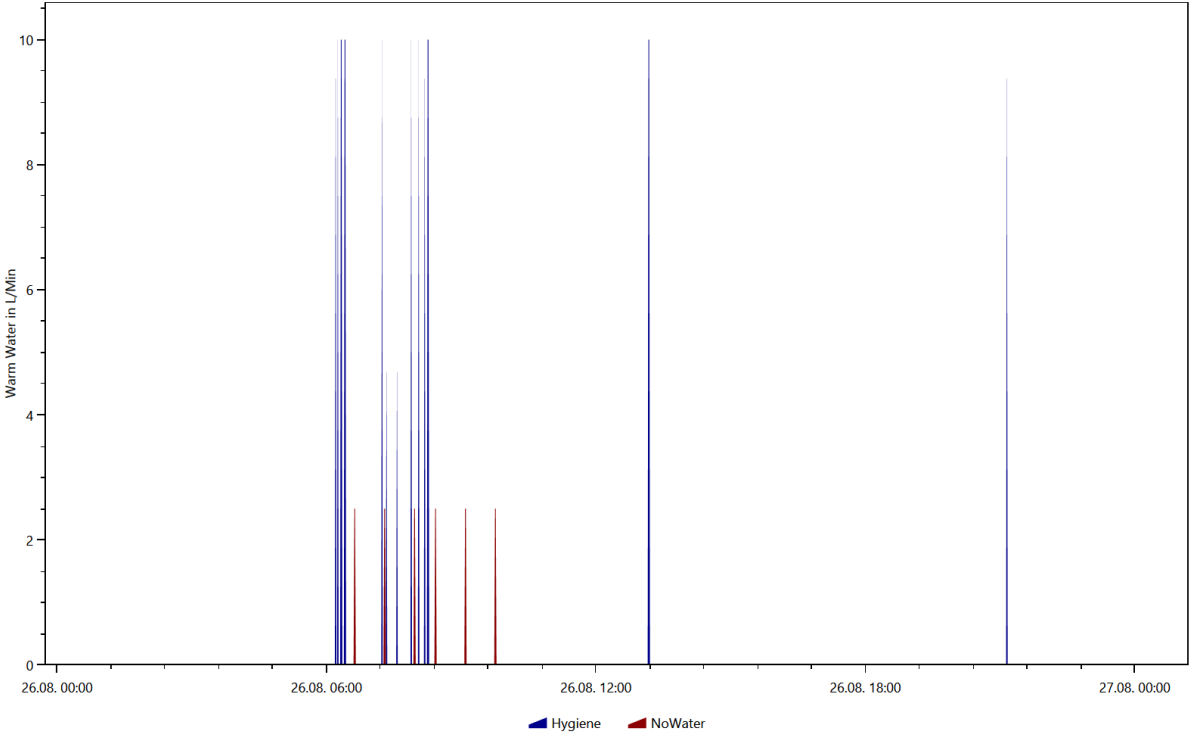
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.14



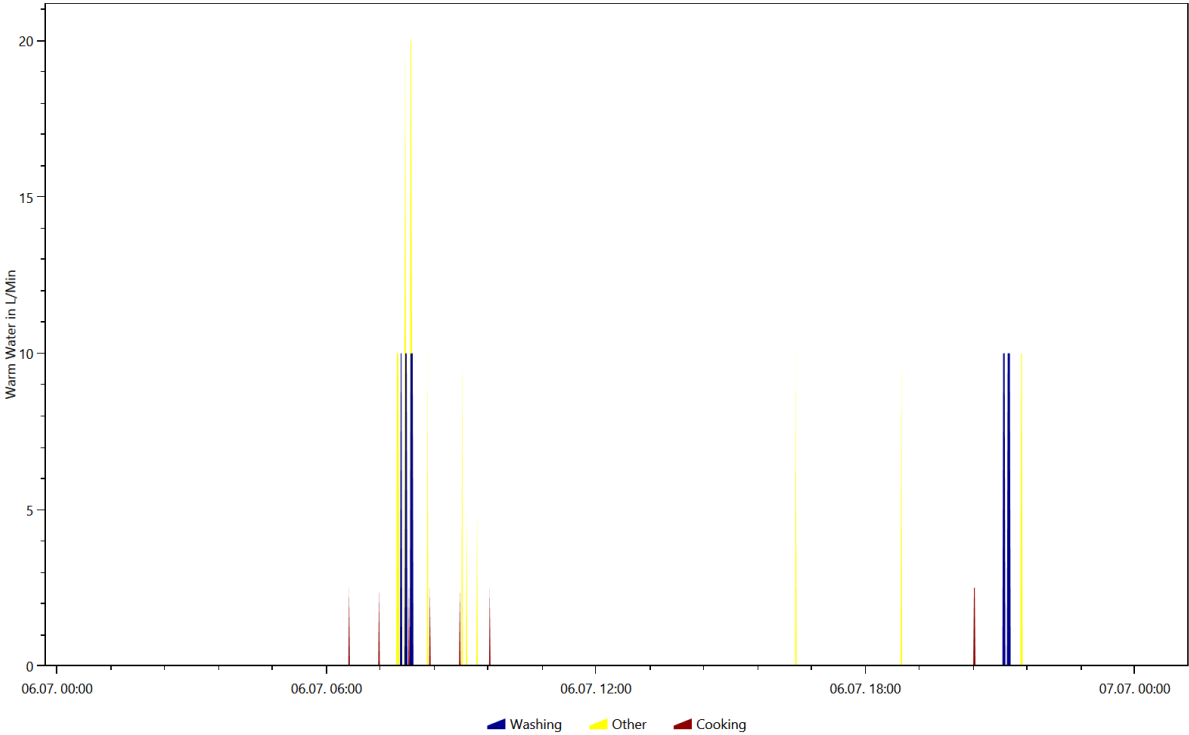
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.19



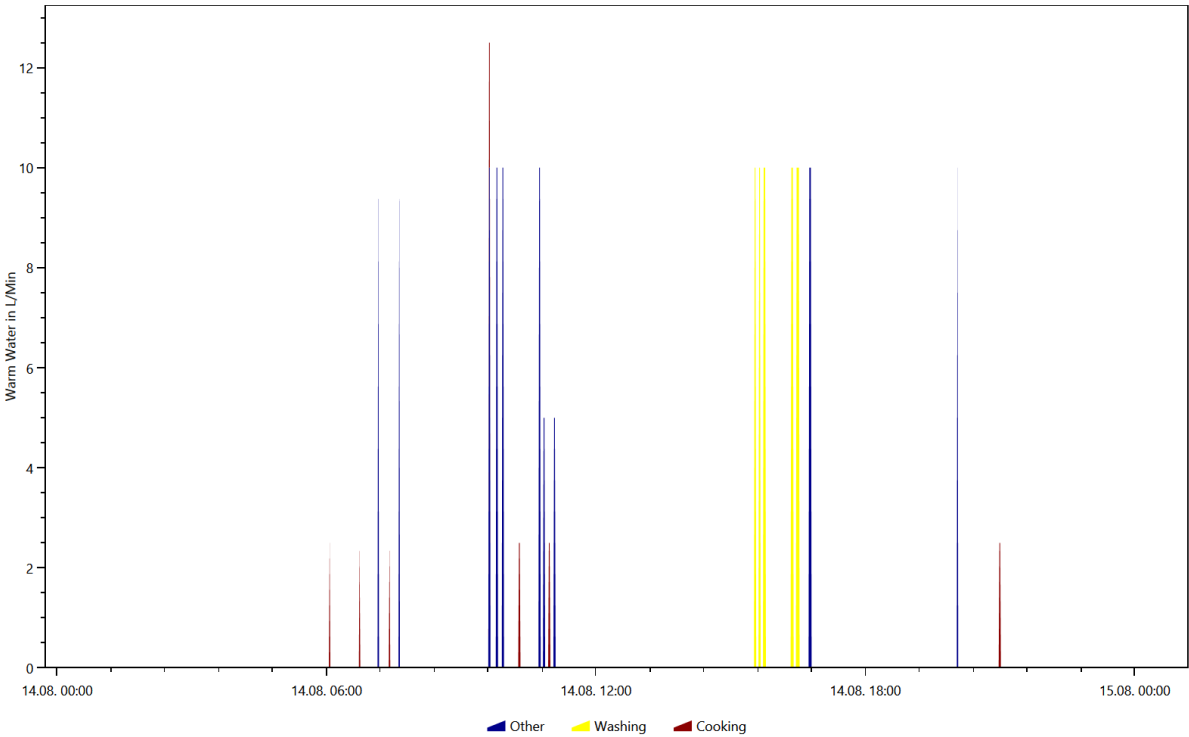
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.26



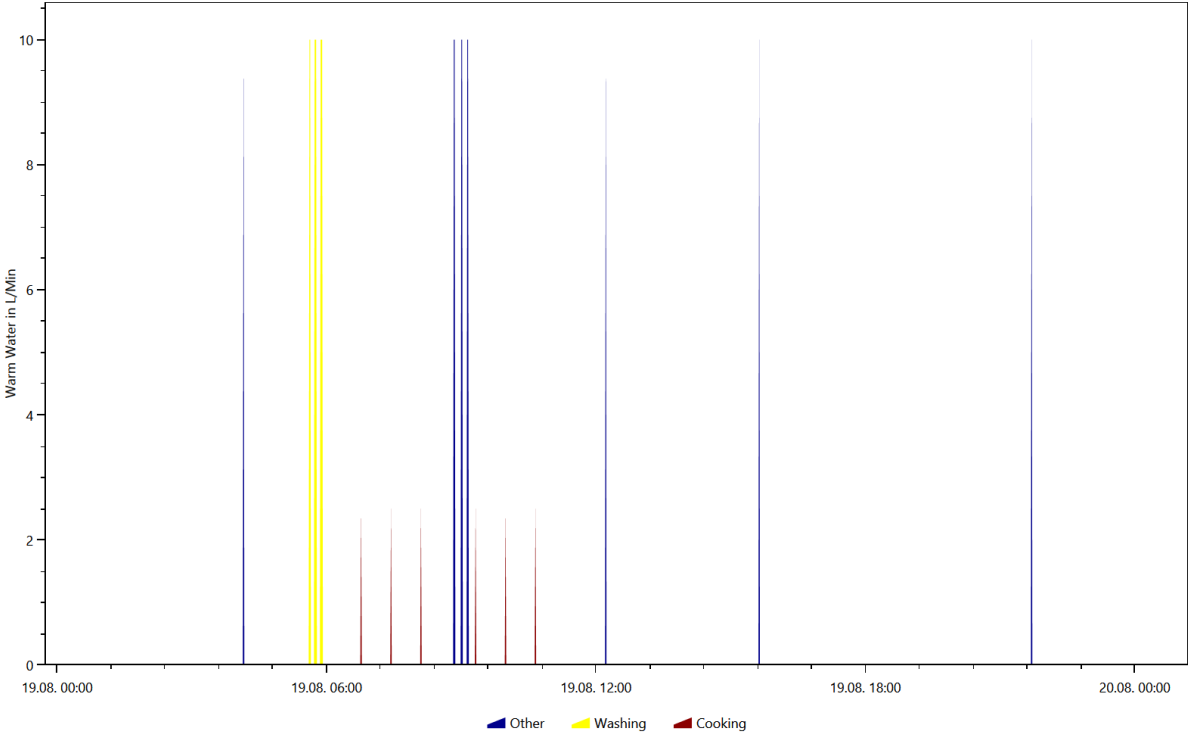
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.6



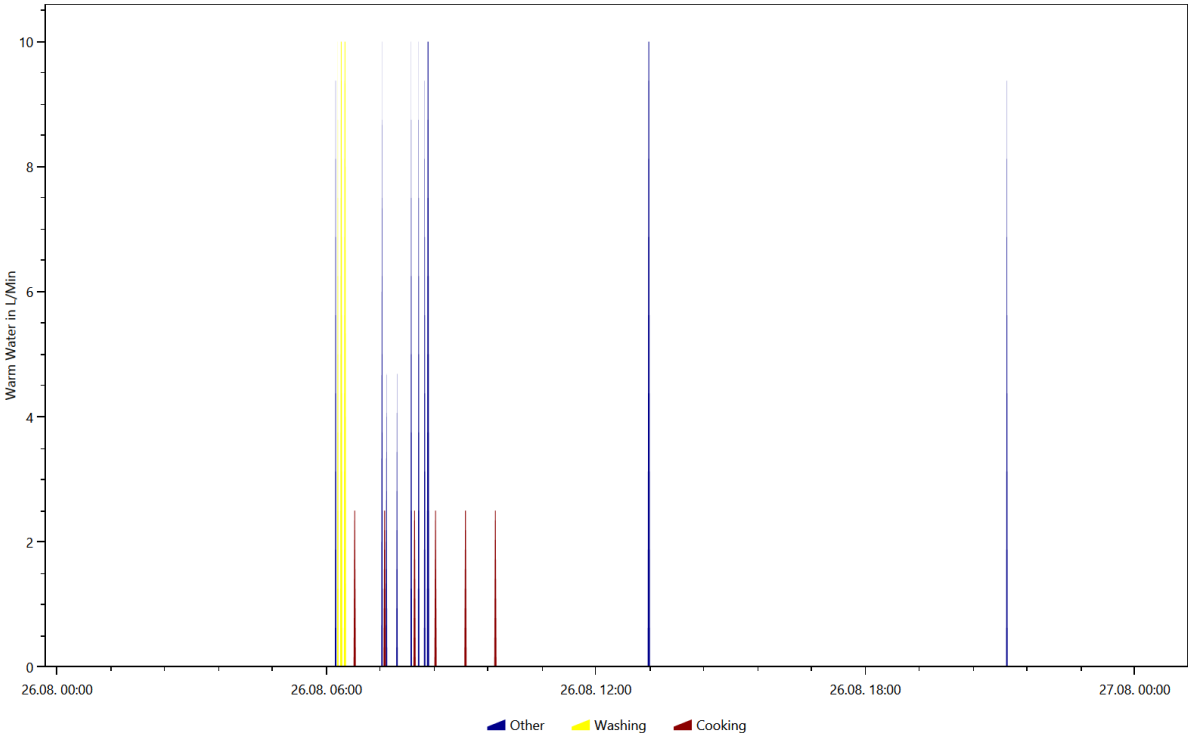
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.14



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.19



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.26

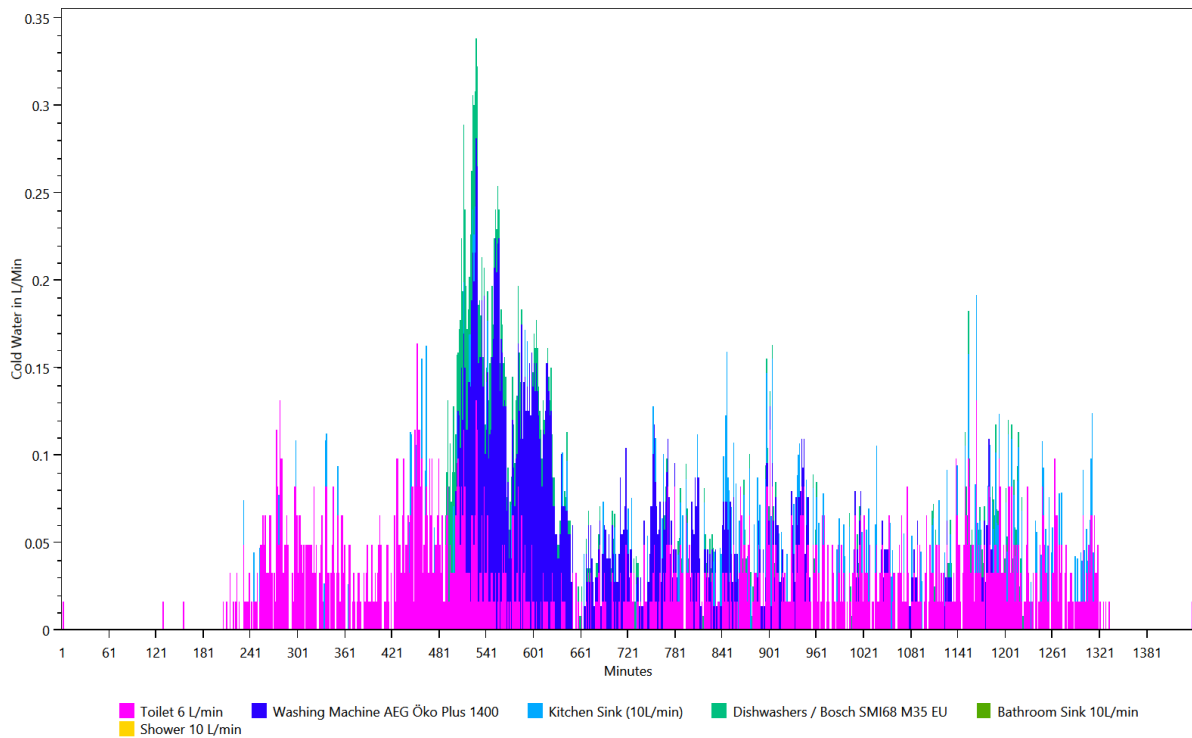


Overview of the time and power of the use per load type per device

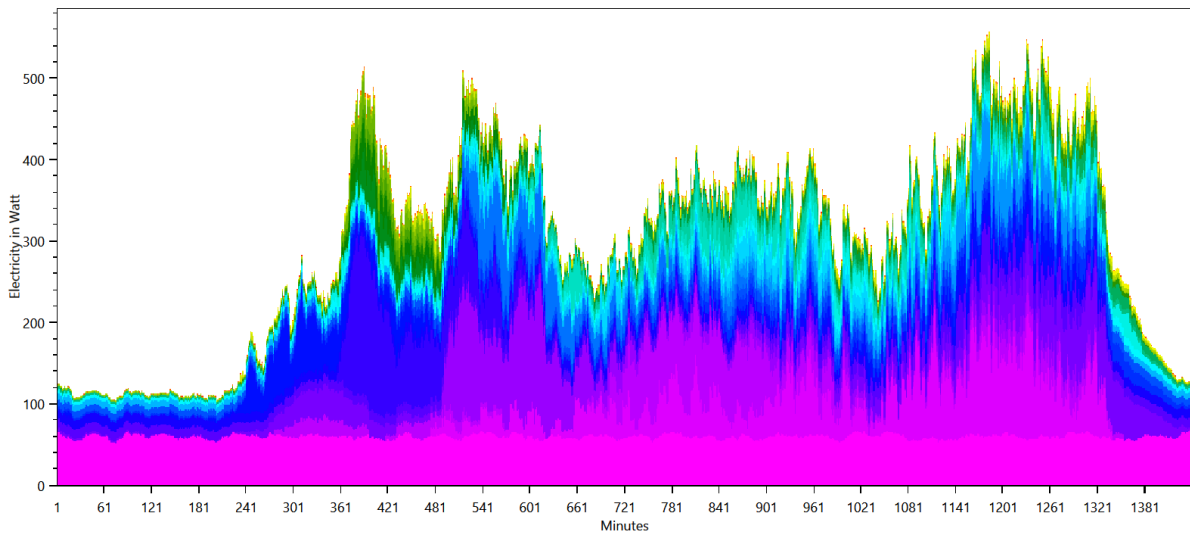
This is made from the files starting with: **TimeOfUseEnergyProfiles**

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

Cold Water

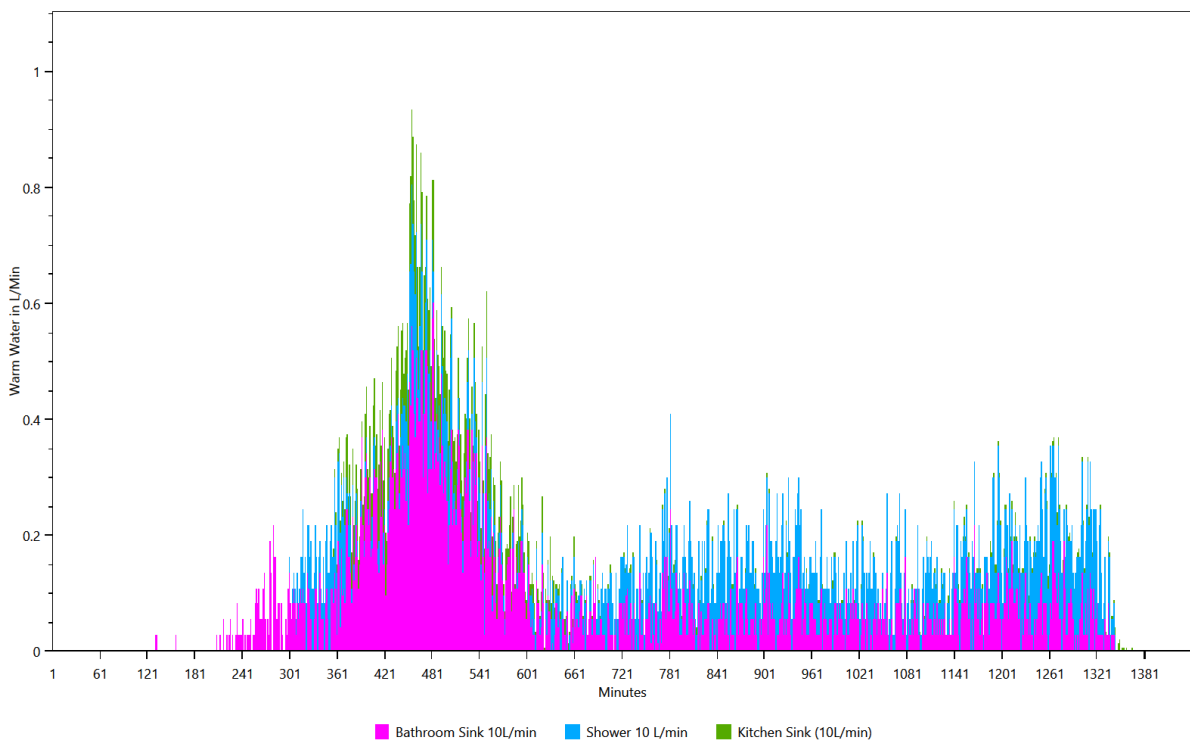


Electricity



- Siemens Fridge from 1987 (unknown type)
- Oven / AEG B 33512-5-M
- Steam Iron / Phillips GC 4410
- Dishwashers / Bosch SM168 M35 EU
- Living Room Light (100W)
- Microwave / Panasonic NN 5259
- Coffee Machine / Braun KF 580E
- Yamaha RX-V667
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind - full power
- TV / Phillips Goya 9770 VT
- Grundig 70cm CRT
- Washing Machine AEG Öko Plus 1400
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove front left
- Router / AVM FRITZ! Box Fon WLAN 7390
- Lawn Mower / Sabo 36-EL SA 752
- Laptop Lenovo Thinkpad x220
- Hair Dryer Babyliiss 2000
- Atika LH 2500 G
- Canister Vacuum Cleaner / Siemens Z6.0 VSZ61260
- SAT Receiver / Kathrein UFS913
- Children Room Light (200W)
- Hedge Trimmer / Bosch AHS 550-24 ST
- Toaster / Tefal Vario
- Juicer / Moulinex Vitafruit
- Bathroom Light (100W)
- Kitchen Light (60W)
- Egg Cooker / Russell Hobbs 14048-56 Stylo
- Kitchen radio / AEG KRC 4323 CD
- CD/DVD Player / Phillips CD 380
- Electric Kettle / Phillips Essential HD 4685/90 Schwarz
- Bedroom Light (20W)
- Bathroom Mirror Light 30W (CFL)
- Extractor Hood / Miele DA 429-4
- Handmixer / Phillips Robust HR 1581
- Food Slicer / DOMO Schneidemaschine DO521S
- Electric Toothbrush Dondodent Professional Clean
- Electric Razor / Phillips PT860/16 Razor PowerTouch Plus
- LED Lamp Globe E 14 Ambient 3W matt

Warm Water



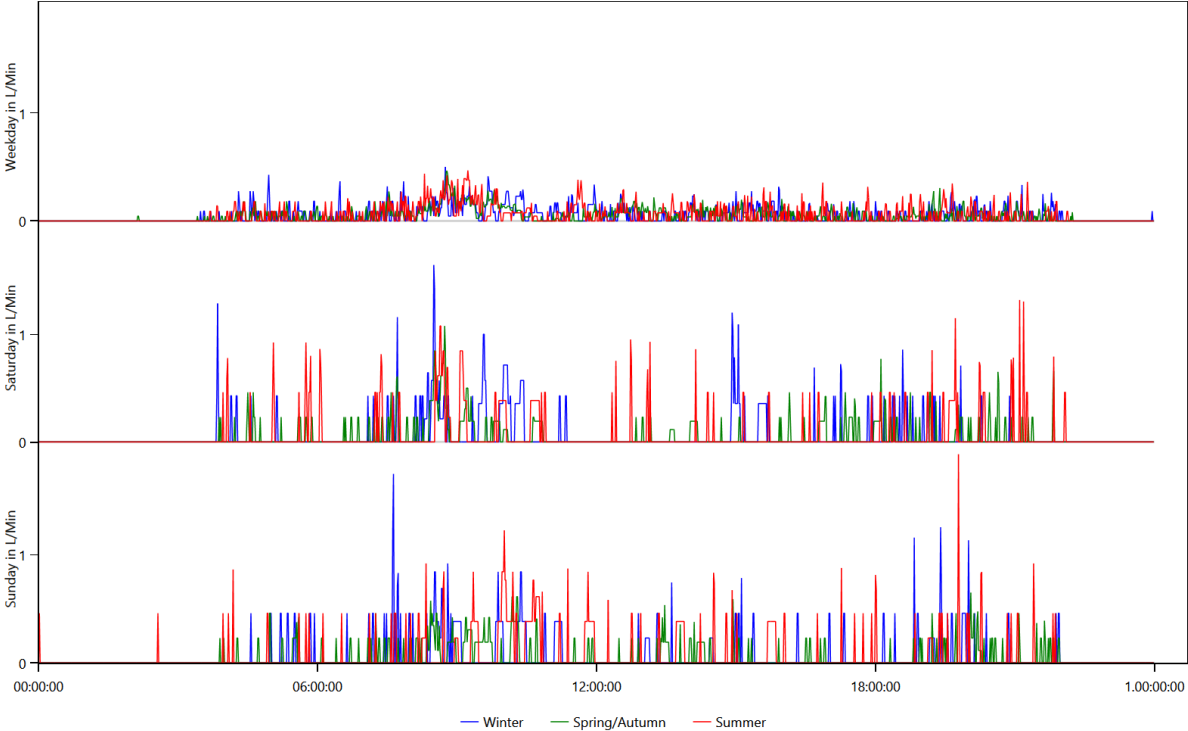
- Bathroom Sink 10L/min
- Shower 10 L/min
- Kitchen Sink (10L/min)

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

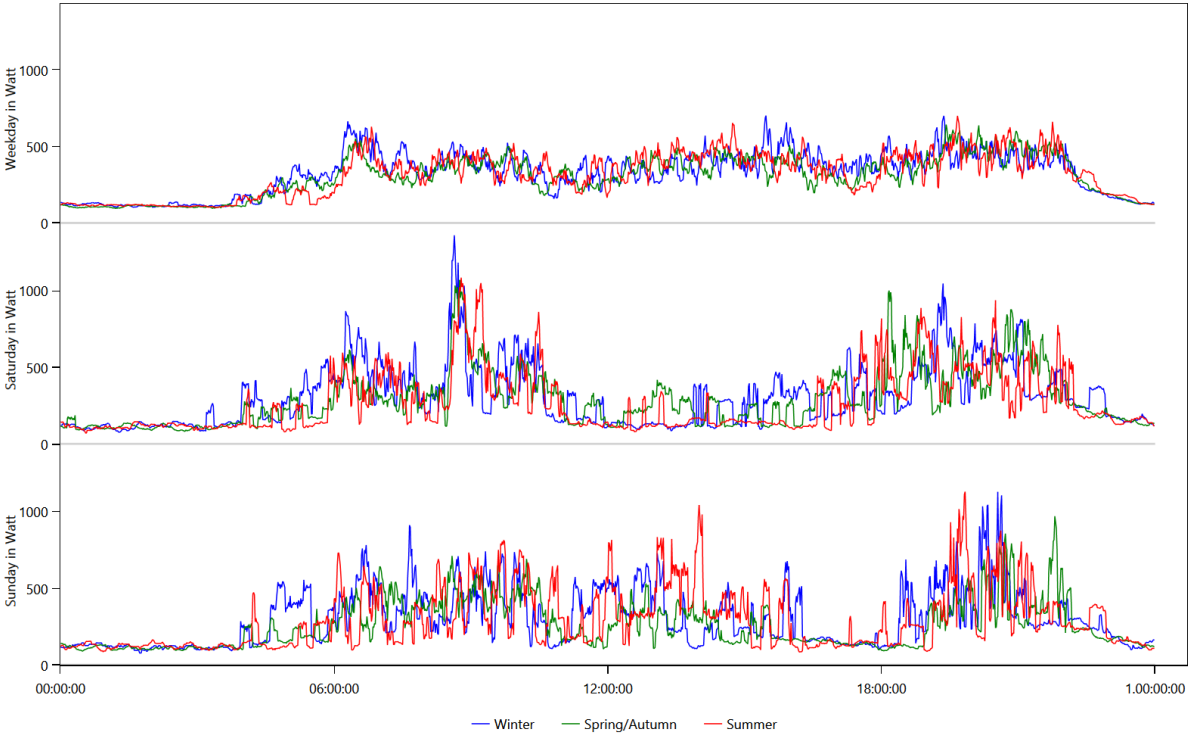
This is made from the files starting with: WeekdayProfiles

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

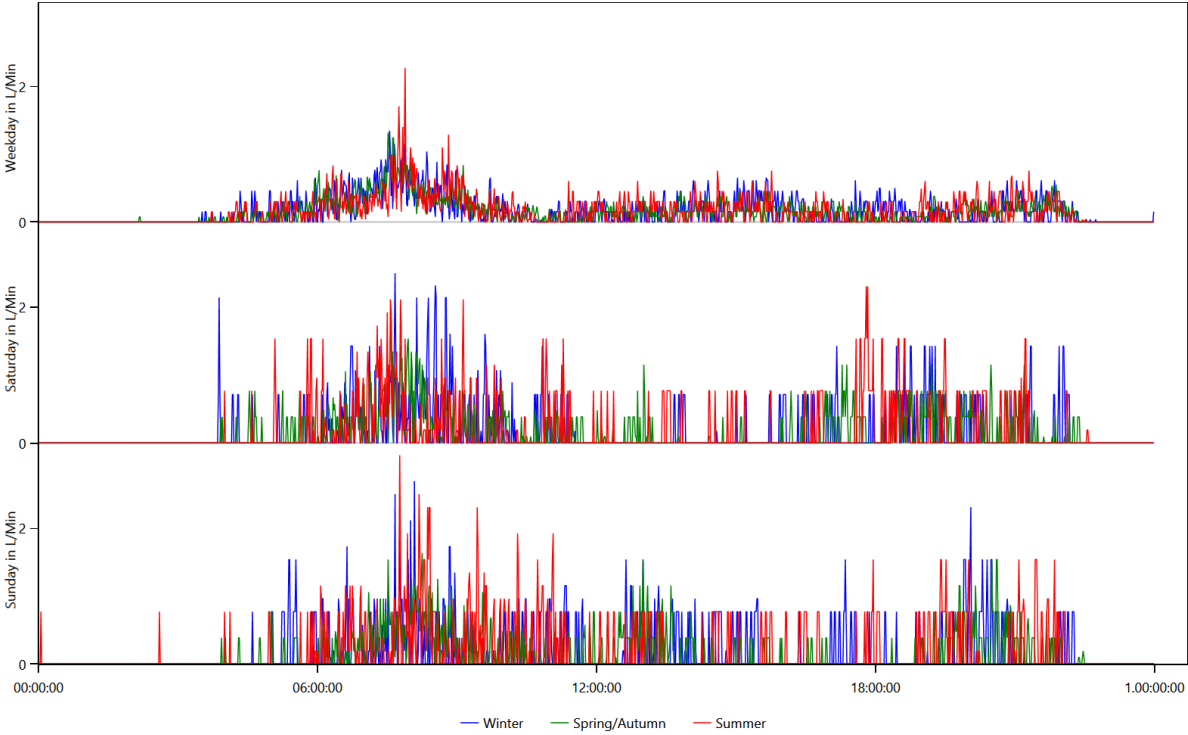
Cold Water



Electricity



Warm Water

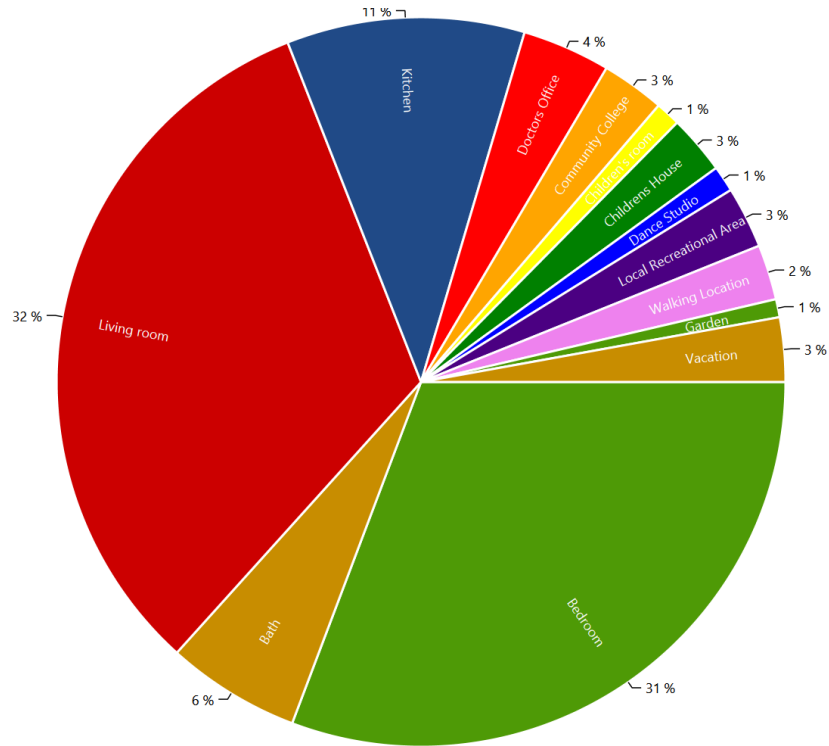


Location Distribution per Person

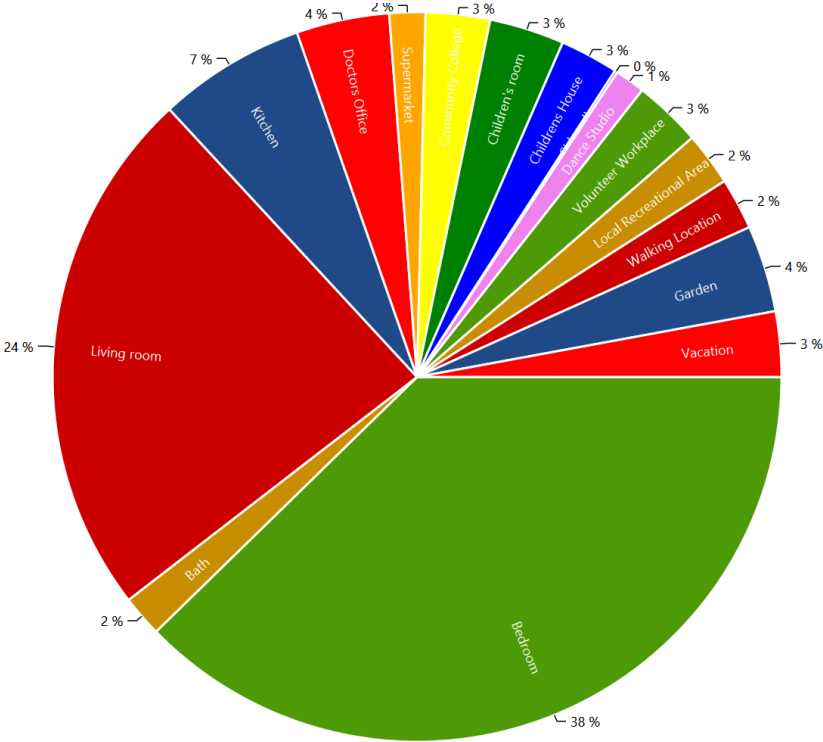
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR54 Emma (68 Female)



CHR54 Nils (71 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

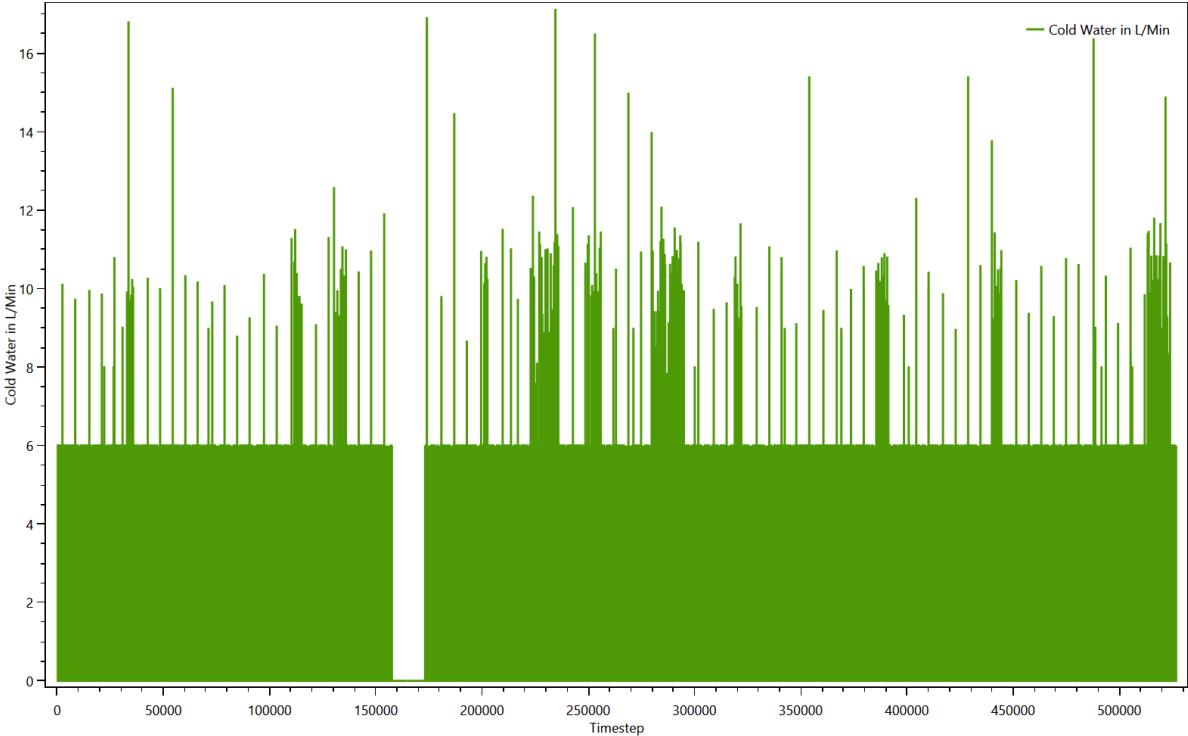
```
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR54 Emma (68/Female);sleep bed 02 (06 h);sleep;False;
0;01.01.2016 00:00;CHR54 Nils (71/Male);sleep bed 08 (08 h);sleep;False;
296;01.01.2016 04:56;CHR54 Emma (68/Female);go to the toilet;hygiene;False;
303;01.01.2016 05:03;CHR54 Emma (68/Female);rest for 10 min;sleep;False;
313;01.01.2016 05:13;CHR54 Emma (68/Female);play board games (1 h);Offline Entertainment;False;
370;01.01.2016 06:10;CHR54 Emma (68/Female);fry two eggs and eat them with toast;cooking;False;
384;01.01.2016 06:24;CHR54 Emma (68/Female);eat breakfast (1 h);cooking;False;
446;01.01.2016 07:26;CHR54 Nils (71/Male);get ready in the morning (men);hygiene;False;
447;01.01.2016 07:27;CHR54 Emma (68/Female);send email from the laptop (2 h);Active Entertainment
(Computer, Internet etc);False;
456;01.01.2016 07:36;CHR54 Nils (71/Male);go to the toilet;hygiene;False;
462;01.01.2016 07:42;CHR54 Nils (71/Male);eat breakfast (1 h);cooking;False;
518;01.01.2016 08:38;CHR54 Nils (71/Male);go to doctor;work;False;
557;01.01.2016 09:17;CHR54 Emma (68/Female);do laundry at 30°C (by variable);cleaning;False;
571;01.01.2016 09:31;CHR54 Emma (68/Female);go together to the doctor (go to doctor);work;False;
755;01.01.2016 12:35;CHR54 Emma (68/Female);hang up laundry outside;cleaning;False;
755;01.01.2016 12:35;CHR54 Nils (71/Male);go shopping for food in the supermarket (1.5 h);shopping;False;
783;01.01.2016 13:03;CHR54 Emma (68/Female);take a shower without hair washing (women);hygiene;False;
851;01.01.2016 14:11;CHR54 Emma (68/Female);go to the toilet;hygiene;False;
853;01.01.2016 14:13;CHR54 Nils (71/Male);take a nap;sleep;False;
```

Sum Profiles

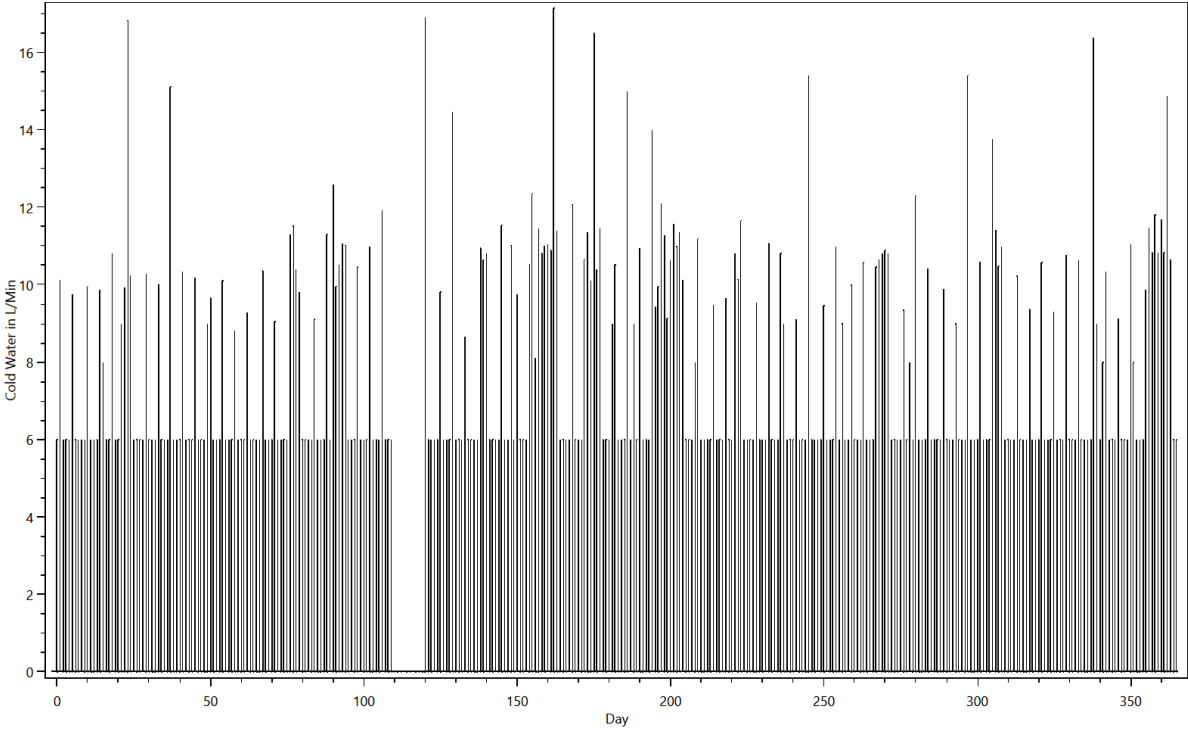
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

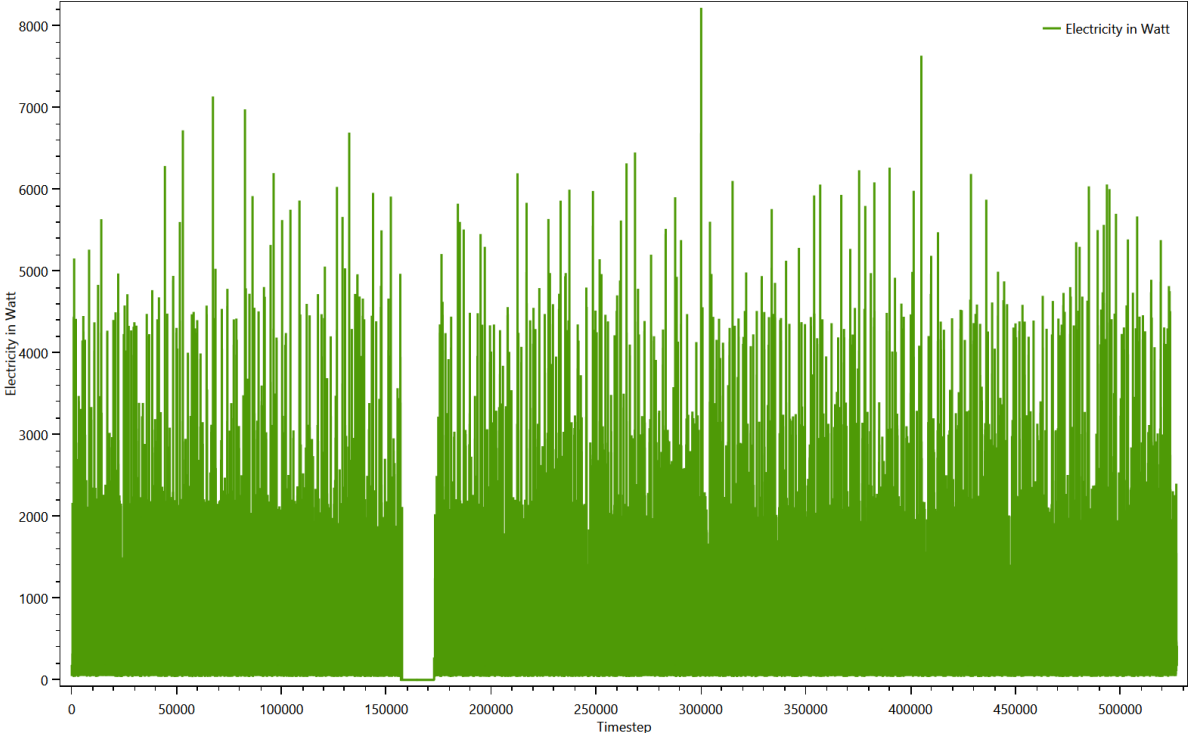
Summed up curve for Cold Water from SumProfiles.Cold Water.png



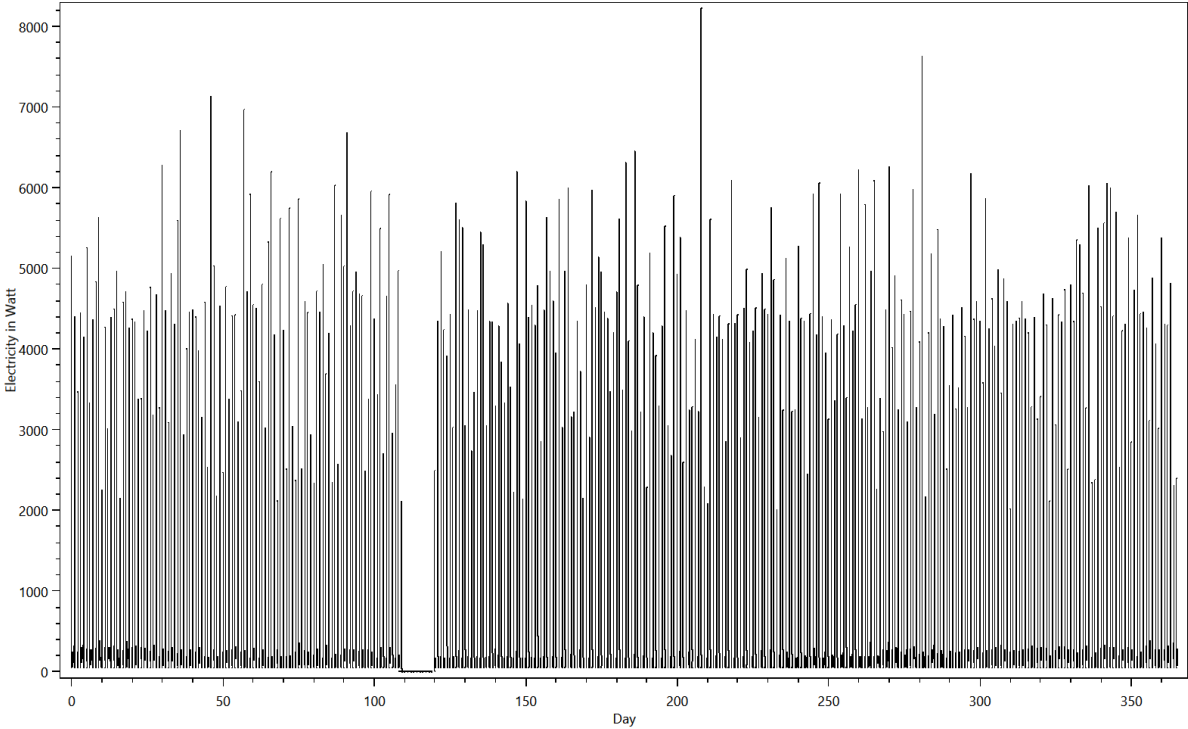
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



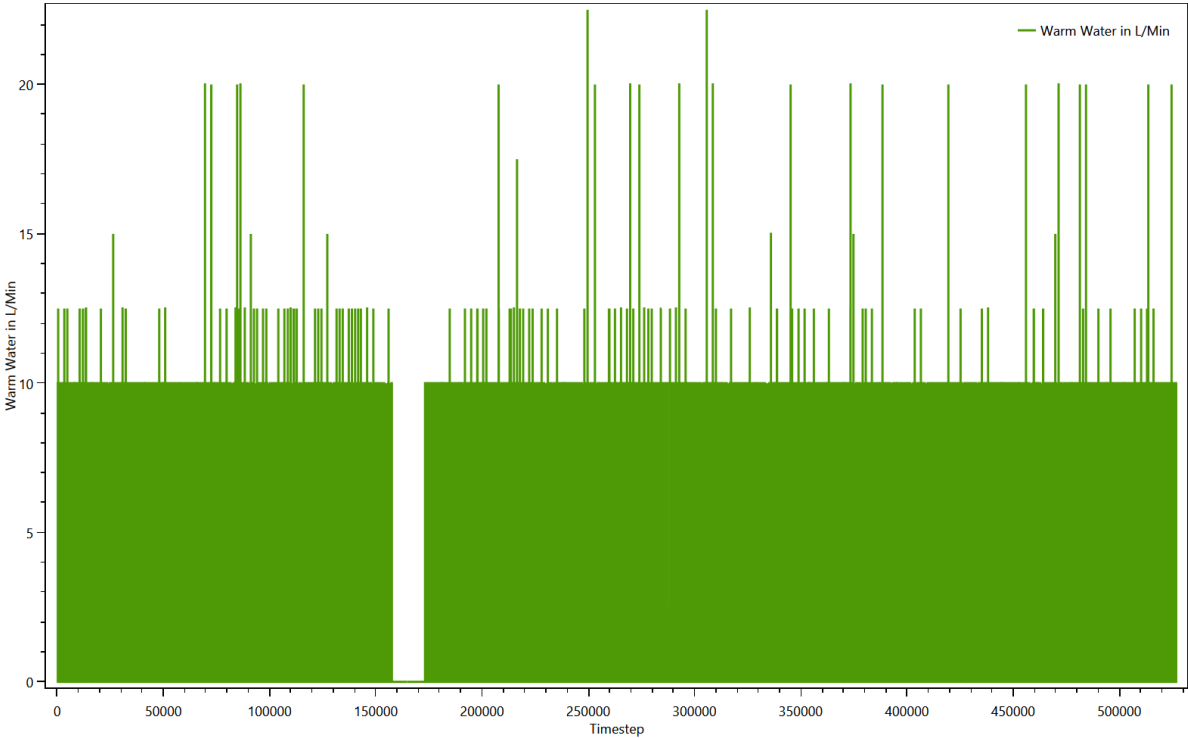
Summed up curve for Electricity from SumProfiles.Electricity.png



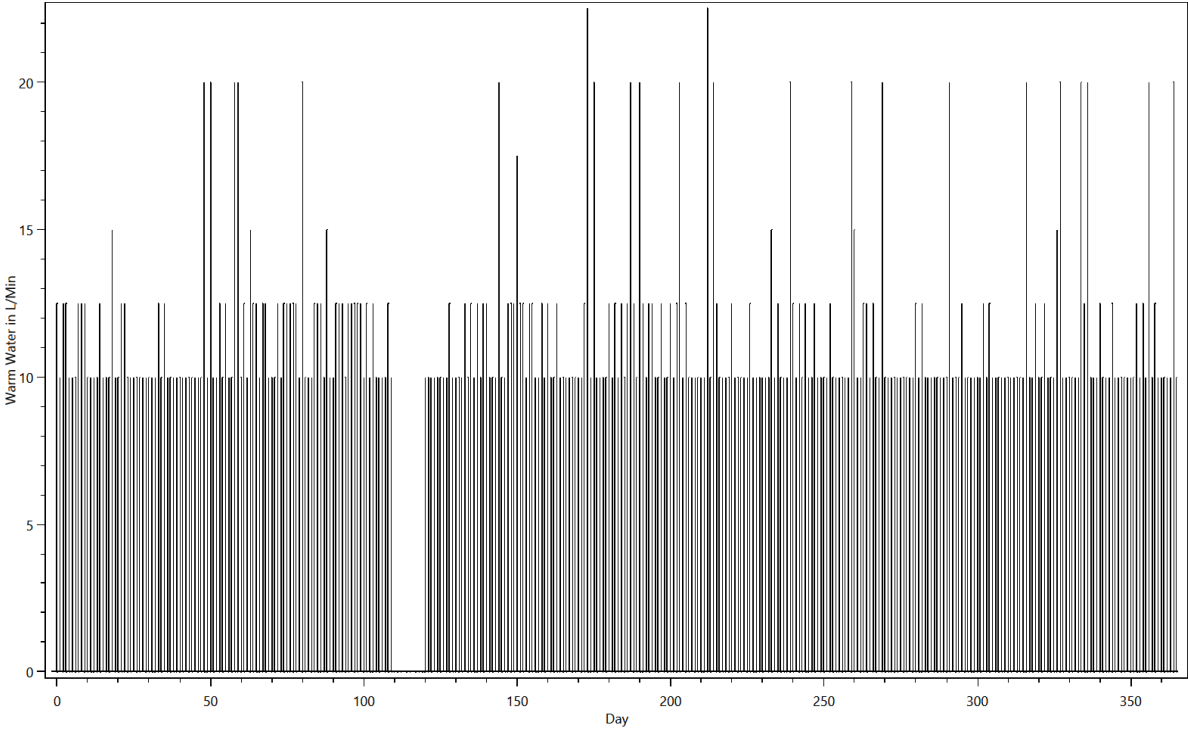
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR54 Retired Couple, no work 0.txt

Device;Load Type;Profile;Number of Activations

Atika LH 2500 G;Electricity;0 h 15 min 100% [Synthetic];79

Bathroom Light (100W);Electricity;Bath - light [Synthetic for Light Device];799

Bathroom Mirror Light 30W (CFL);Electricity;Bath - light [Synthetic for Light Device];799

Bathroom Sink 10L/min;Warm Water;0 h 01 min 100% [Synthetic];2549

Bathroom Sink 10L/min;Warm Water;0 h 01 min 50% [Synthetic];500

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

Bed 8;None;08 h 0 min 100% [Synthetic];359

Bedroom Light (20W);Electricity;Bedroom - light [Synthetic for Light Device];606

Board Games;None;01 h 0 min 100% [Synthetic];196

Book;None;01 h 0 min 100% [Synthetic];15

CD/DVD Player / Phillips CD 380;Electricity;01 h 30 min 100% [Synthetic];122

CD/DVD Player / Phillips CD 380;Electricity;02 h 0 min 100% [Synthetic];127

CD/DVD Player / Phillips CD 380;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8538

Canister Vacuum Cleaner / Siemens Z6.0 VSZ61260;Electricity;0 h 30 min 100% [Synthetic];77

Chair;None;0 h 10 min 100% [Synthetic];1075

Children;None;06 h 0 min 100% [Synthetic];67

Children Room Light (200W);Electricity;Children's room - light [Synthetic for Light Device];161

Cleanser;None;01 h 0 min 100% [Synthetic];50

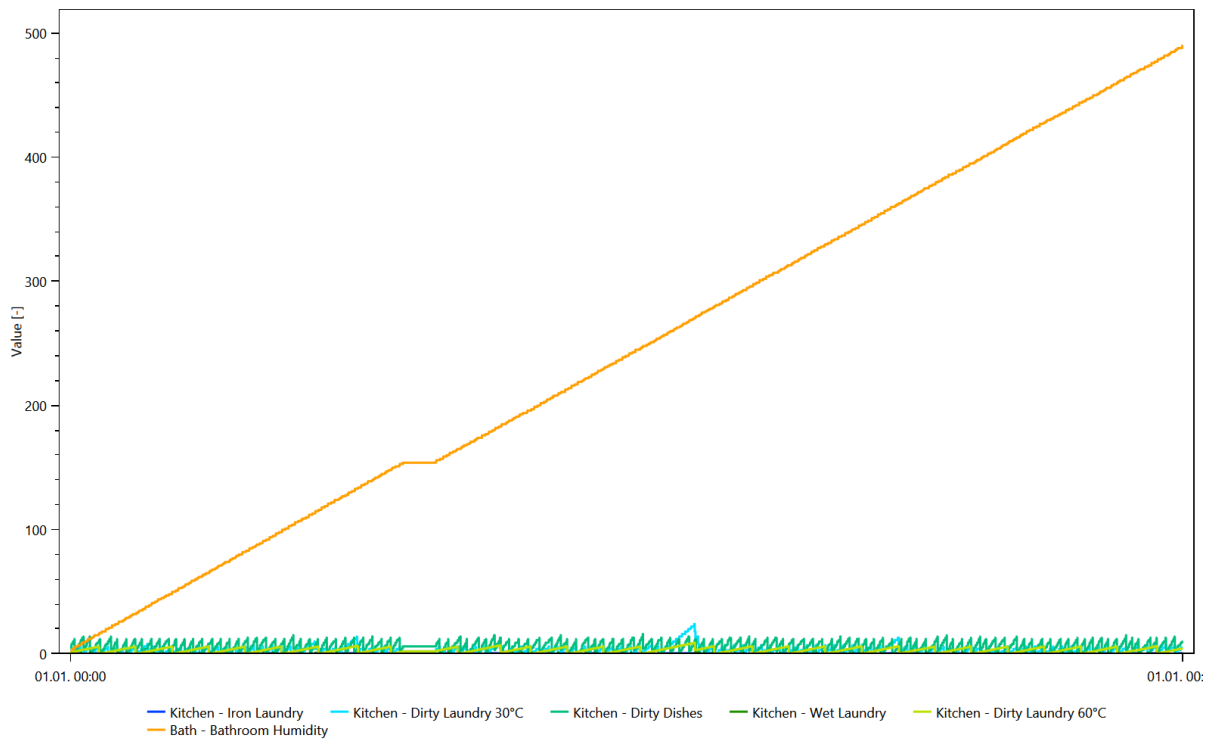
Cloth Drying Rack;None;0 h 20 min 100% [Synthetic];147

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

