

Overview of the results of the household CHR28 Single man under 30 years without work 0

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

Energy Intensity: Random

Seed 5050

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:16:50

Table of Contents

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

Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	11016.10	L
Electricity	2036.28	kWh
Warm Water	25376.37	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	30.10	L
Electricity	5.56	kWh
Warm Water	69.33	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	6.33	L/Min
Electricity	-137.13	4897.45	Watt
Warm Water	0.00	12.50	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	11016.10	L
Electricity	2036.28	kWh

Warm Water	25376.37	L
------------	----------	---

Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	30.10	L
Electricity	5.56	kWh
Warm Water	69.33	L

Persons

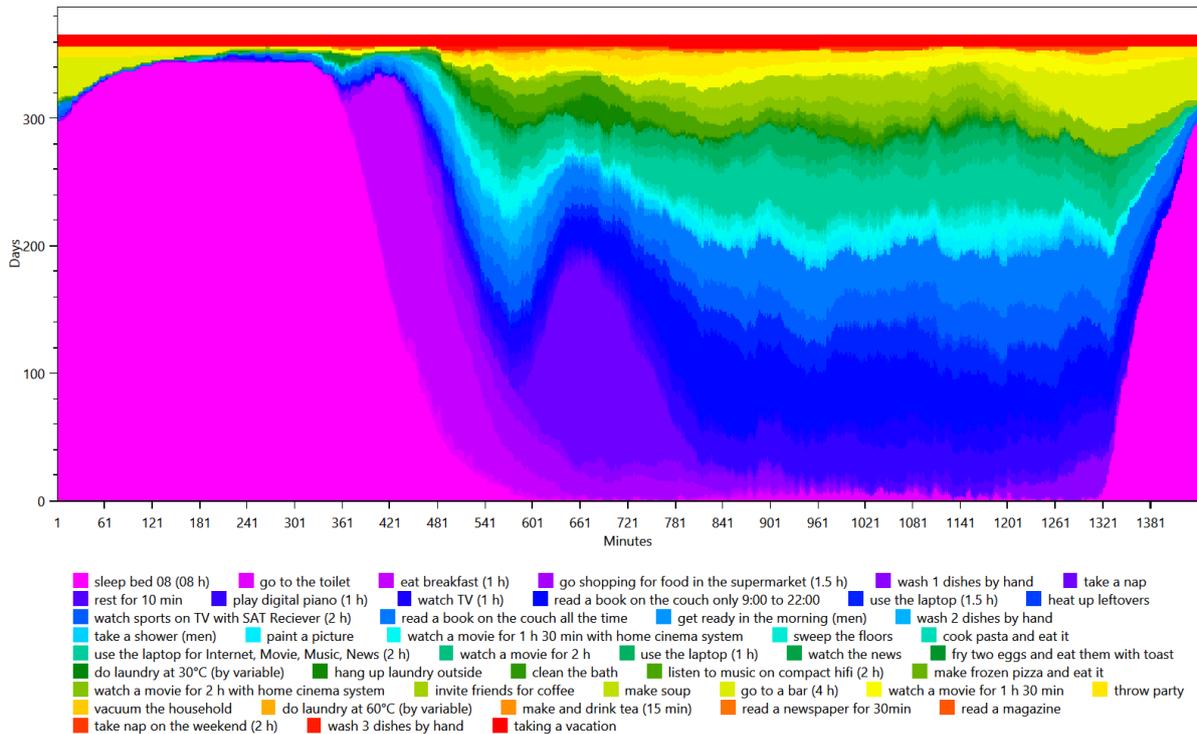
- HH0
 - CHR28 Patrick (24/Male)(24/Male)

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 - CHR28 Patrick (24 Male)

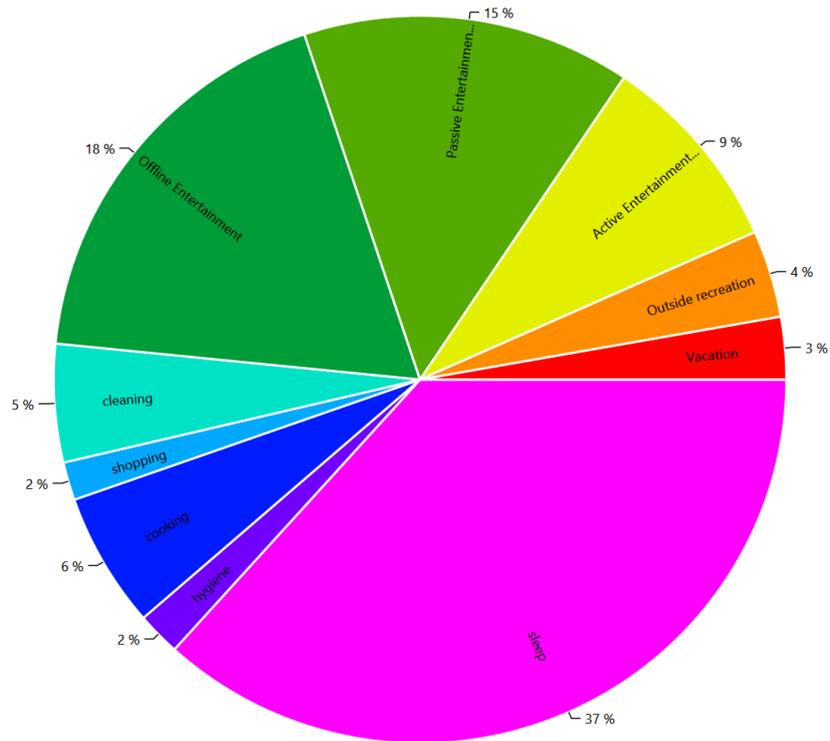


Activity Distribution per Person

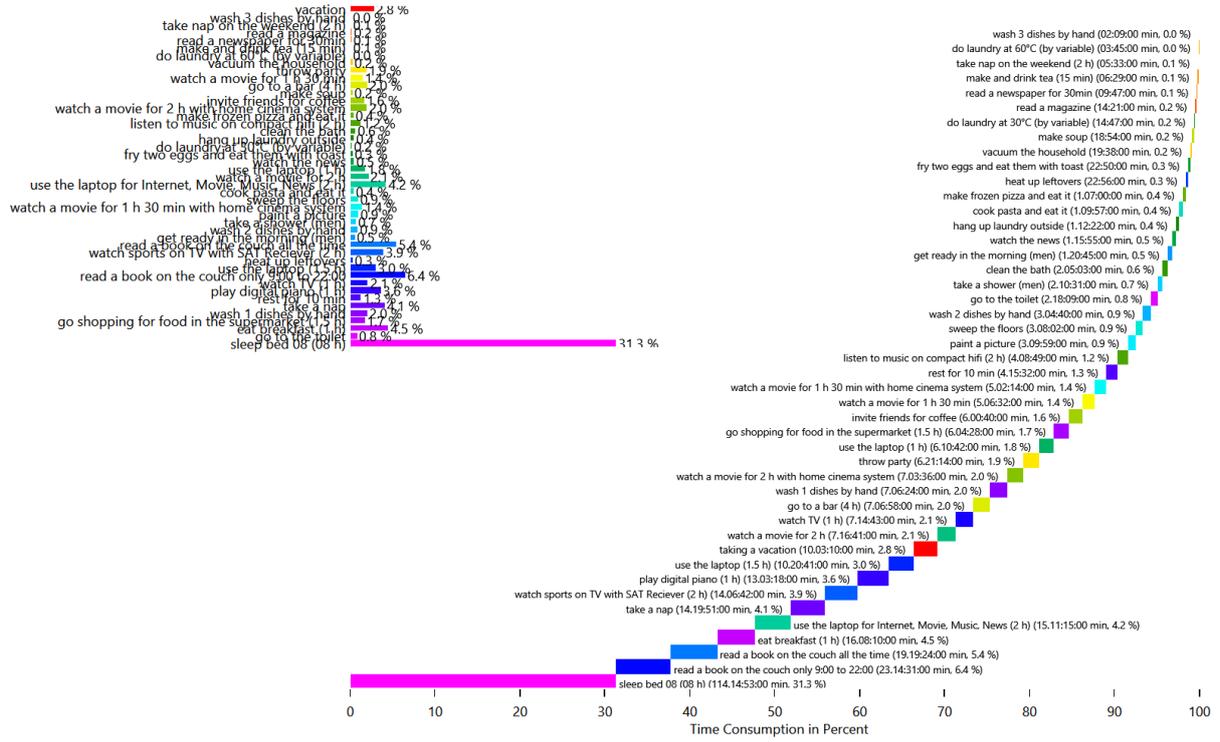
This is made from the files starting with: ActivityPercentage

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

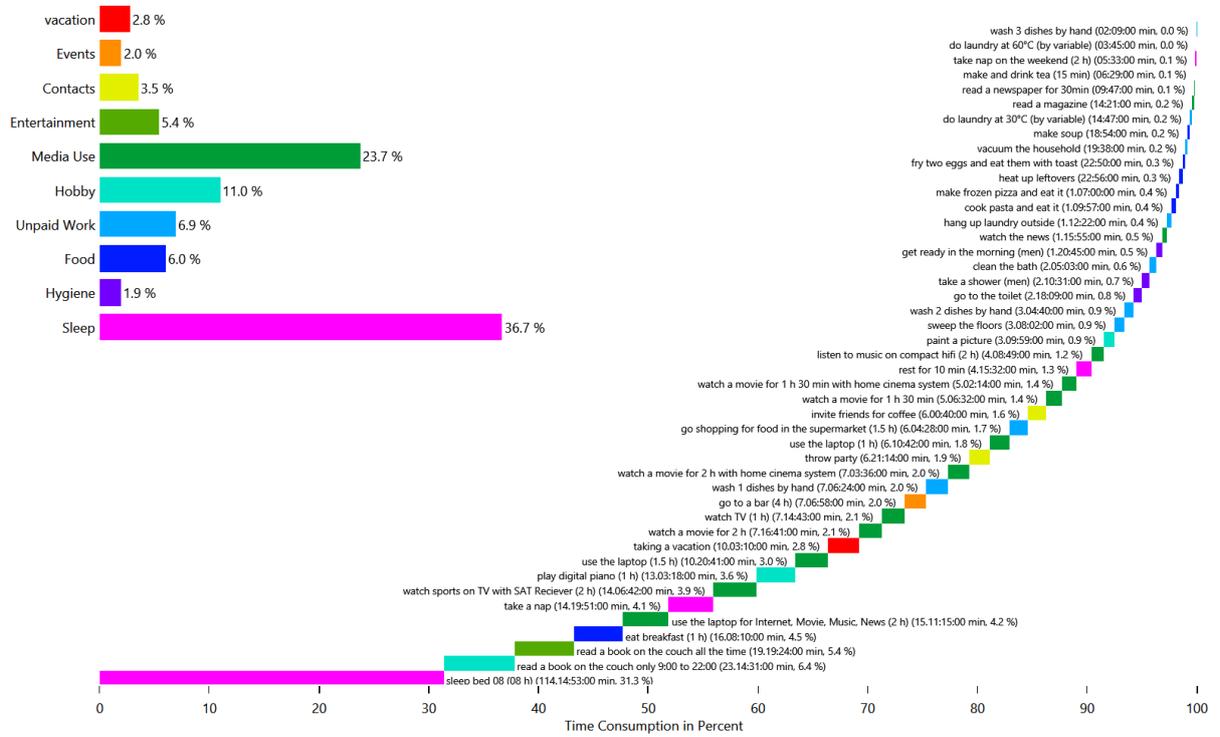
HH0 - CHR28 Patrick (24 Male)



HH0 - CHR28 Patrick (24 Male)



HH0 - CHR28 Patrick (24 Male)

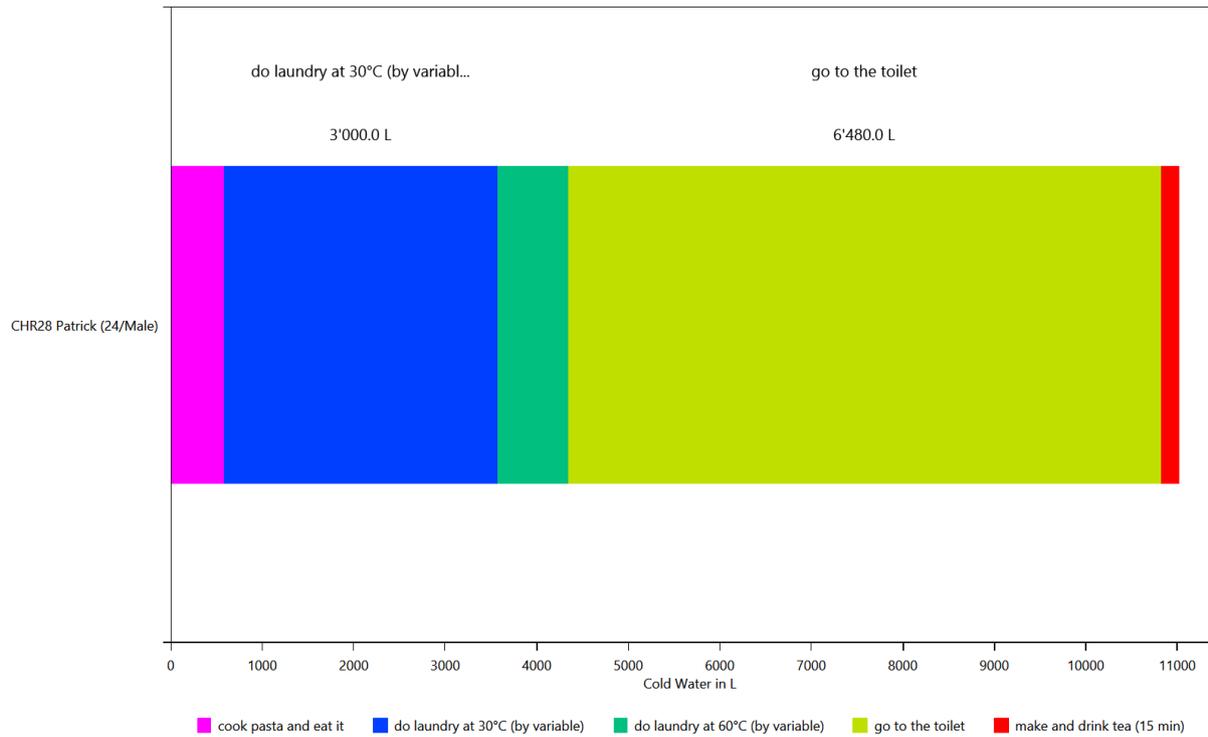


Energy use per person per affordance

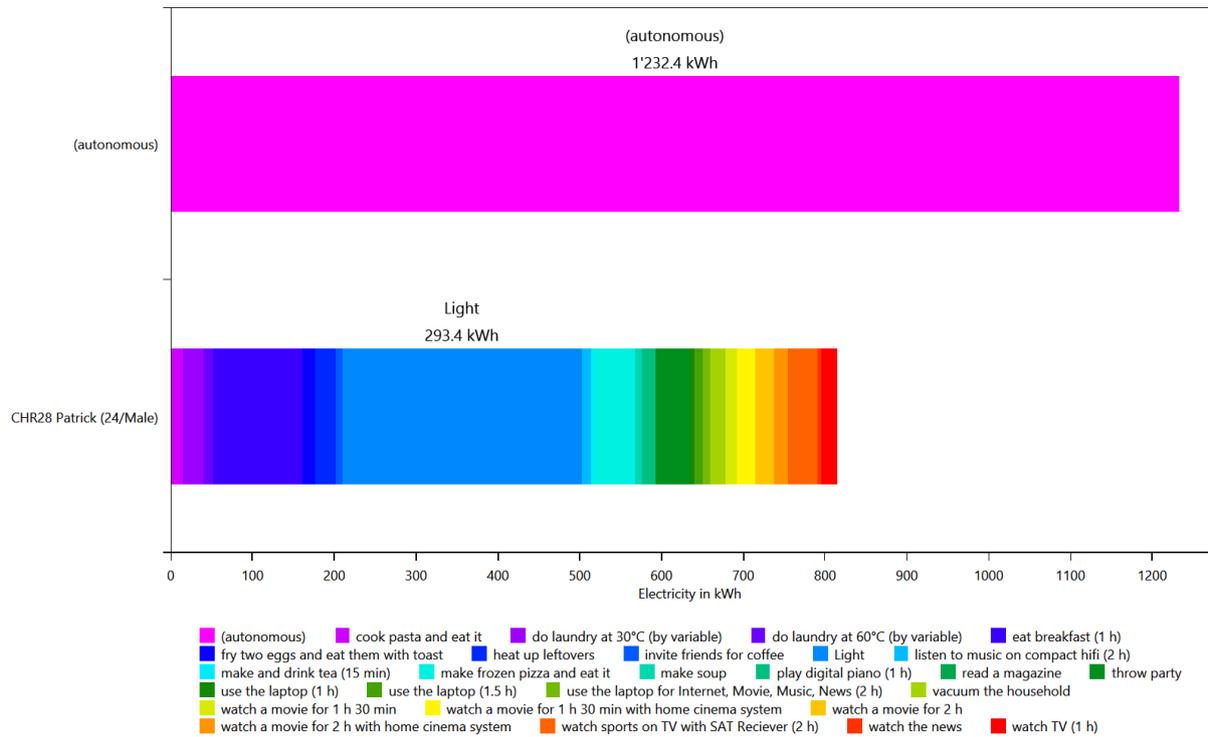
This is made from the files starting with: **AffordanceEnergyUsePerPerson**

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.

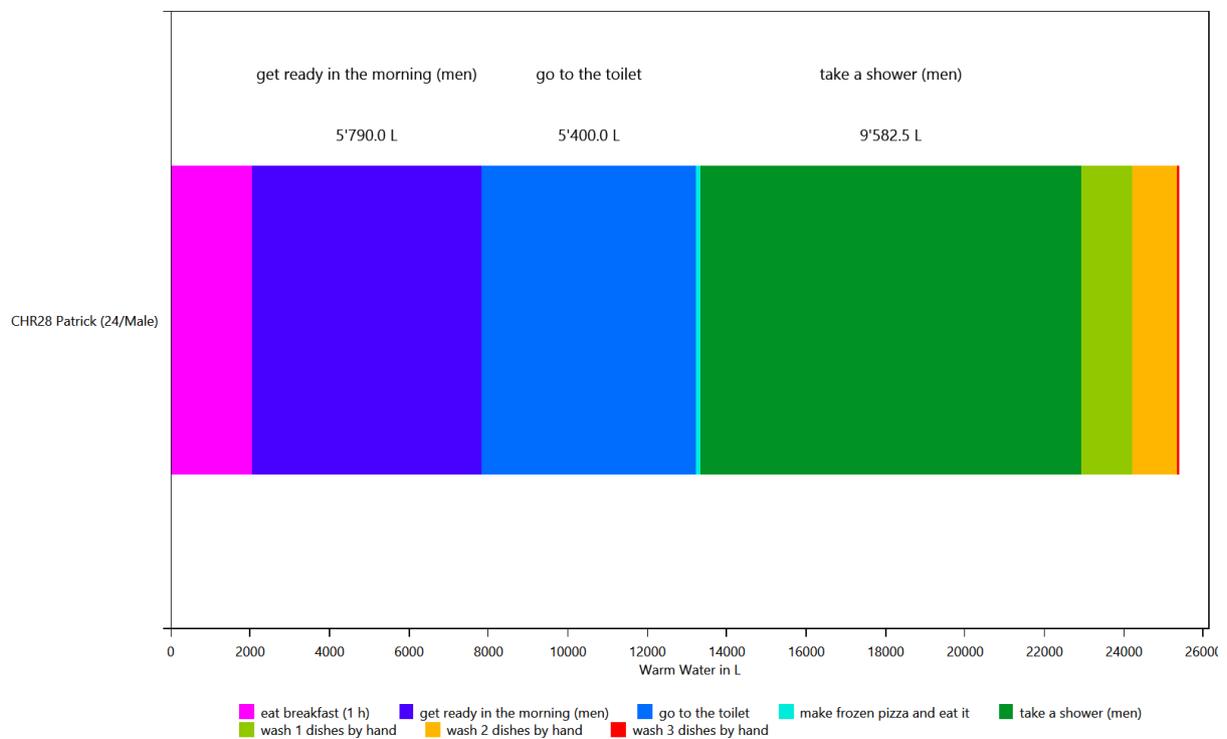
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

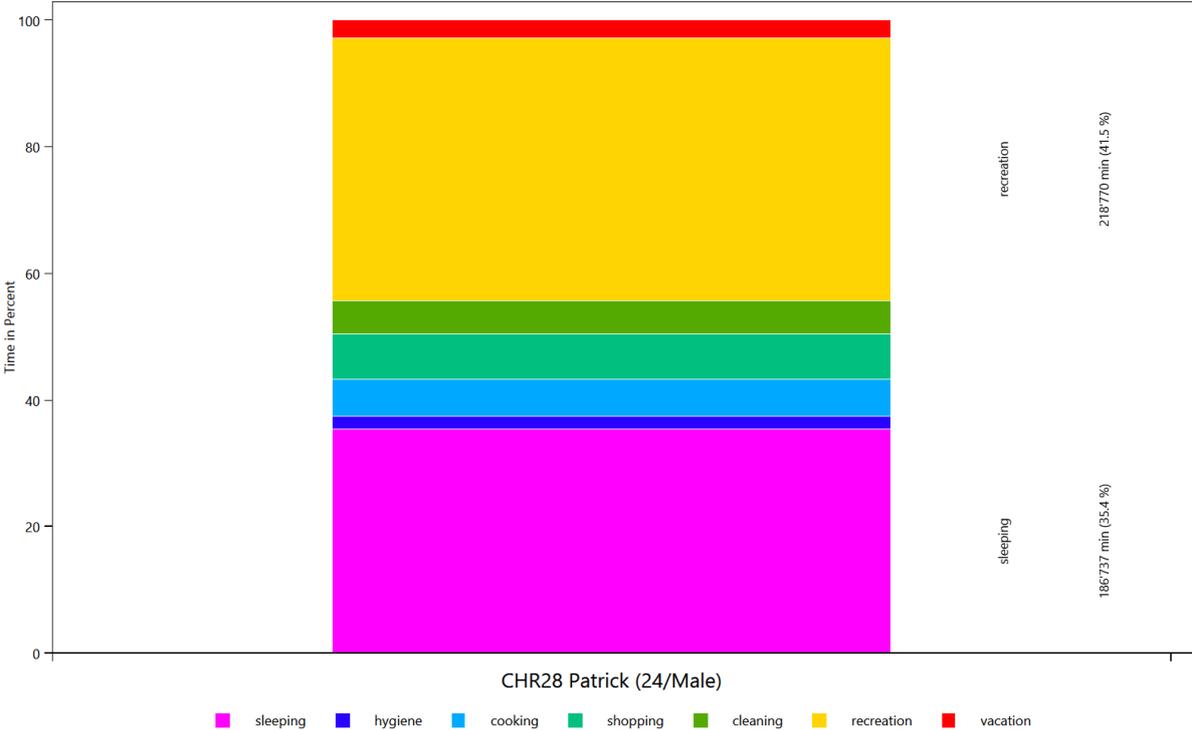


Time Use per Person Per Affordance according to different category definitions

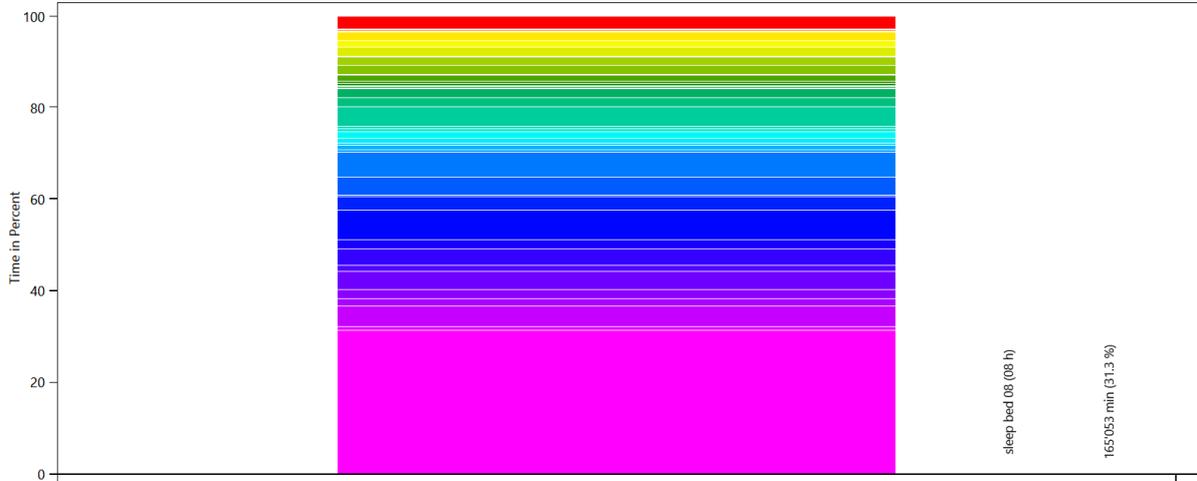
This is made from the files starting with: AffordanceTaggingSet

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



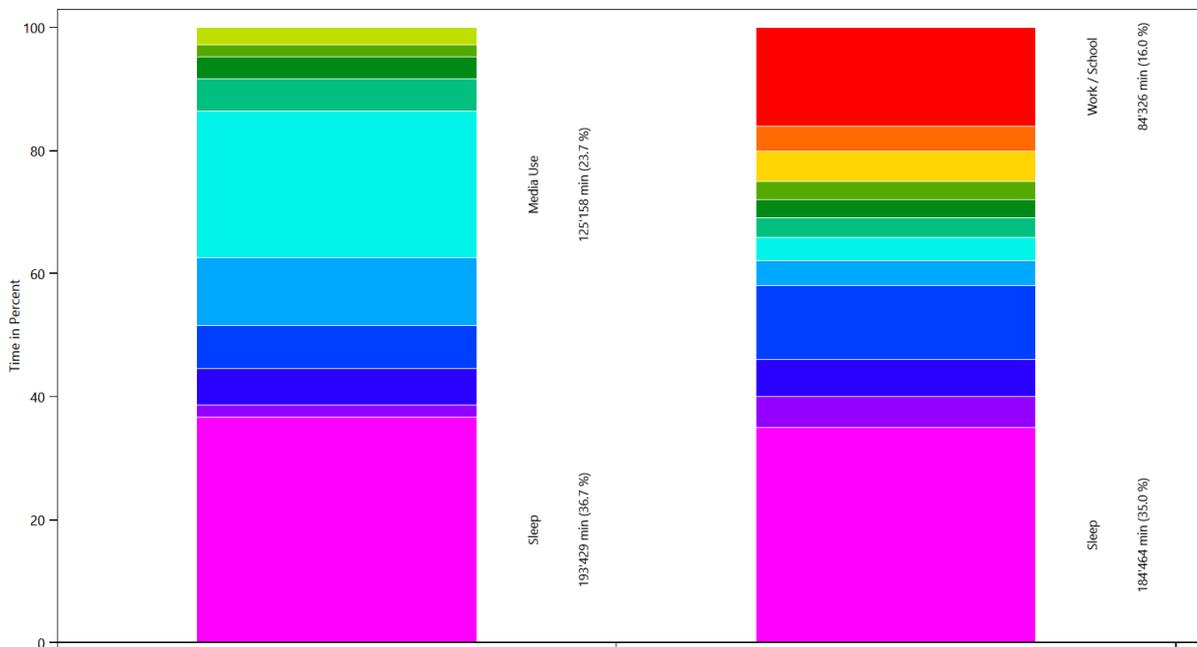
Tagging Set For Planning - HH0



CHR28 Patrick (24/Male)

- sleep bed 08 (08 h)
- go to the toilet
- eat breakfast (1 h)
- go shopping for food in the supermarket (1.5 h)
- wash 1 dishes by hand
- take a nap
- rest for 10 min
- play digital piano (1 h)
- watch TV (1 h)
- read a book on the couch only 9:00 to 22:00
- use the laptop (1.5 h)
- heat up leftovers
- watch sports on TV with SAT Receiver (2 h)
- read a book on the couch all the time
- get ready in the morning (men)
- wash 2 dishes by hand
- take a shower (men)
- paint a picture
- watch a movie for 1 h 30 min with home cinema system
- sweep the floors
- cook pasta and eat it
- use the laptop for Internet, Movie, Music, News (2 h)
- watch a movie for 2 h
- use the laptop (1 h)
- watch the news
- fry two eggs and eat them with toast
- do laundry at 30°C (by variable)
- hang up laundry outside
- clean the bath
- listen to music on compact hifi (2 h)
- make frozen pizza and eat it
- watch a movie for 2 h with home cinema system
- invite friends for coffee
- make soup
- go to a bar (4 h)
- watch a movie for 1 h 30 min
- throw party
- vacuum the household
- do laundry at 60°C (by variable)
- make and drink tea (15 min)
- read a newspaper for 30min
- read a magazine
- take nap on the weekend (2 h)
- wash 3 dishes by hand
- vacation

Wo bleibt die Zeit - HH0



CHR28 Patrick (24/Male)

Reference

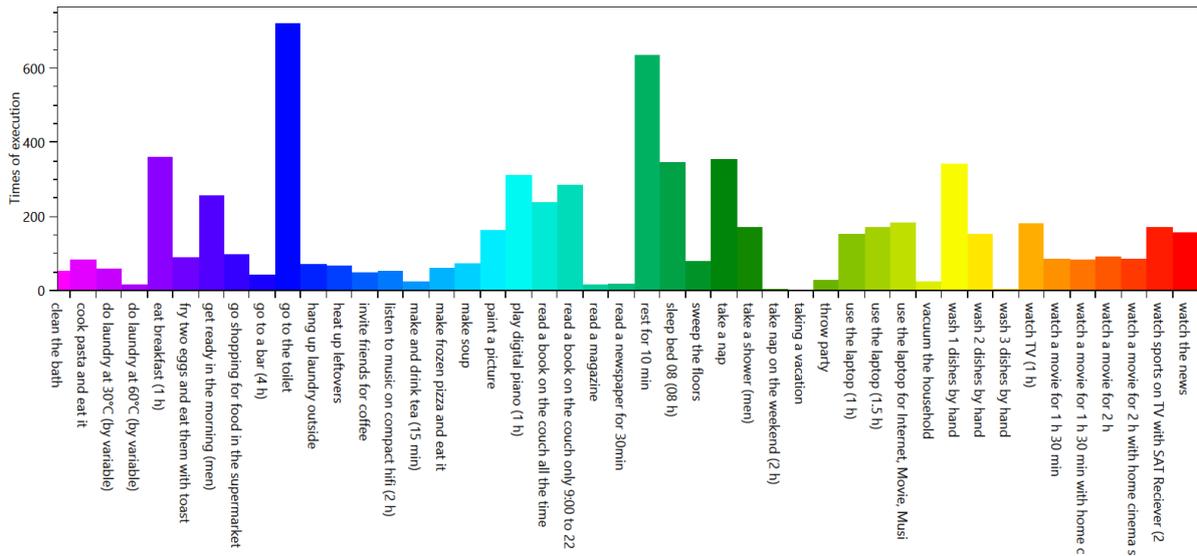
- Sleep
- Hygiene
- Food
- Unpaid Work
- Hobby
- Media Use
- Entertainment
- Contacts
- Events
- vacation
- Games
- Sport
- Work / School

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 - CHR28 Patrick (24 Male)

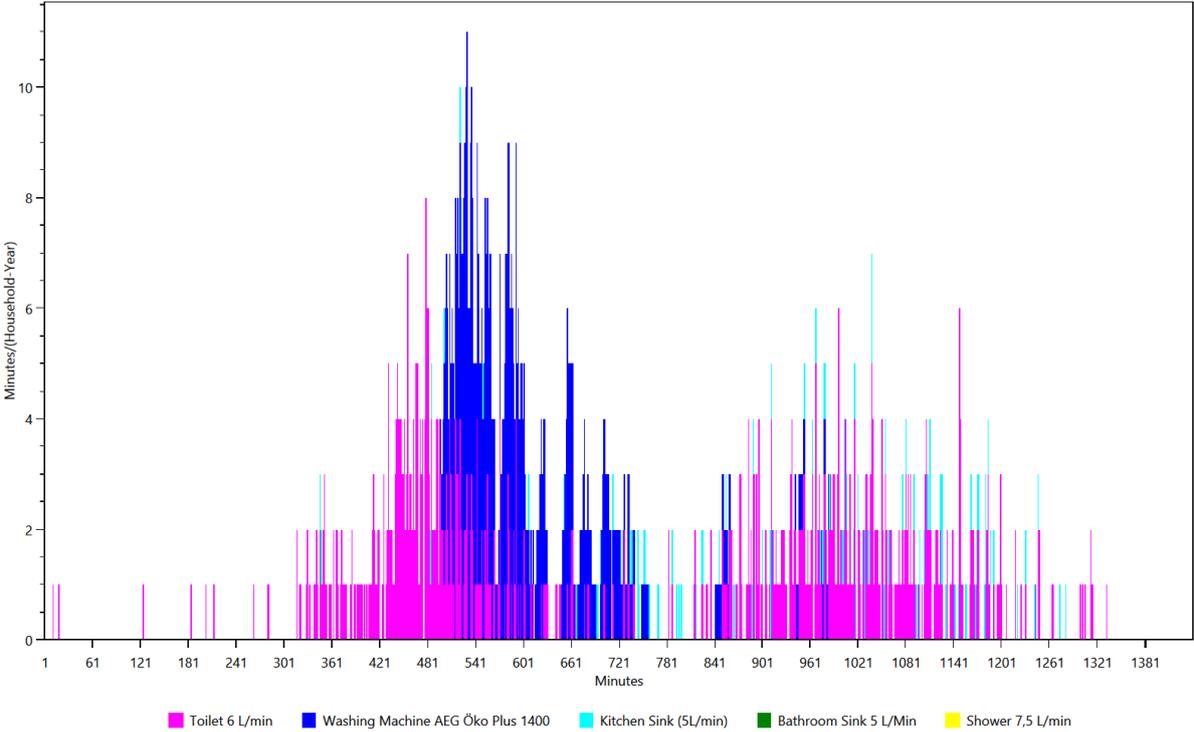


Overview of the time of the use per load type per device

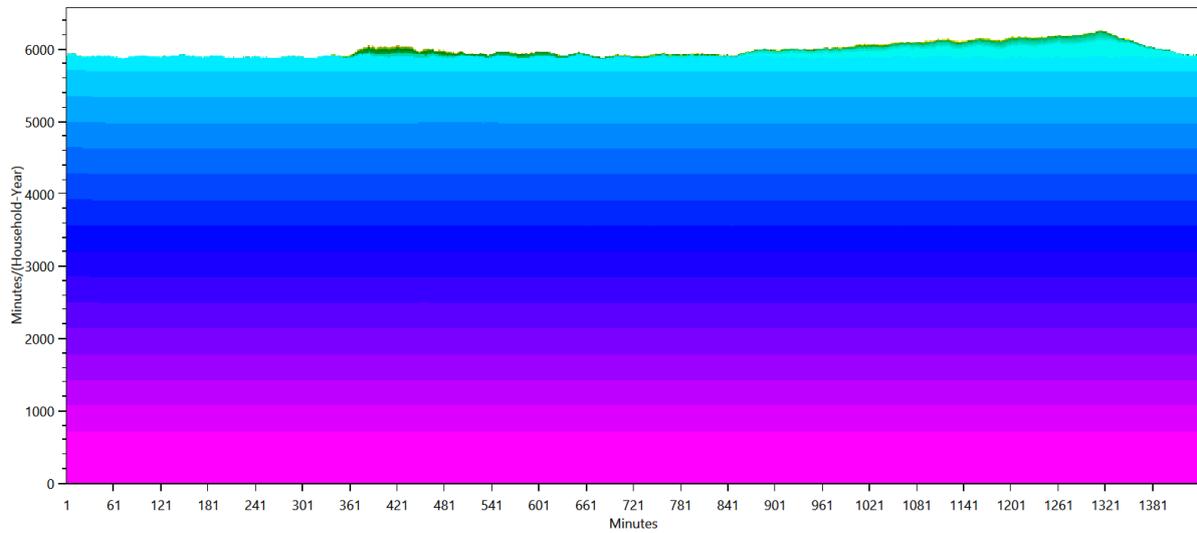
This is made from the files starting with: TimeOfUseEnergyProfiles

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

Cold Water

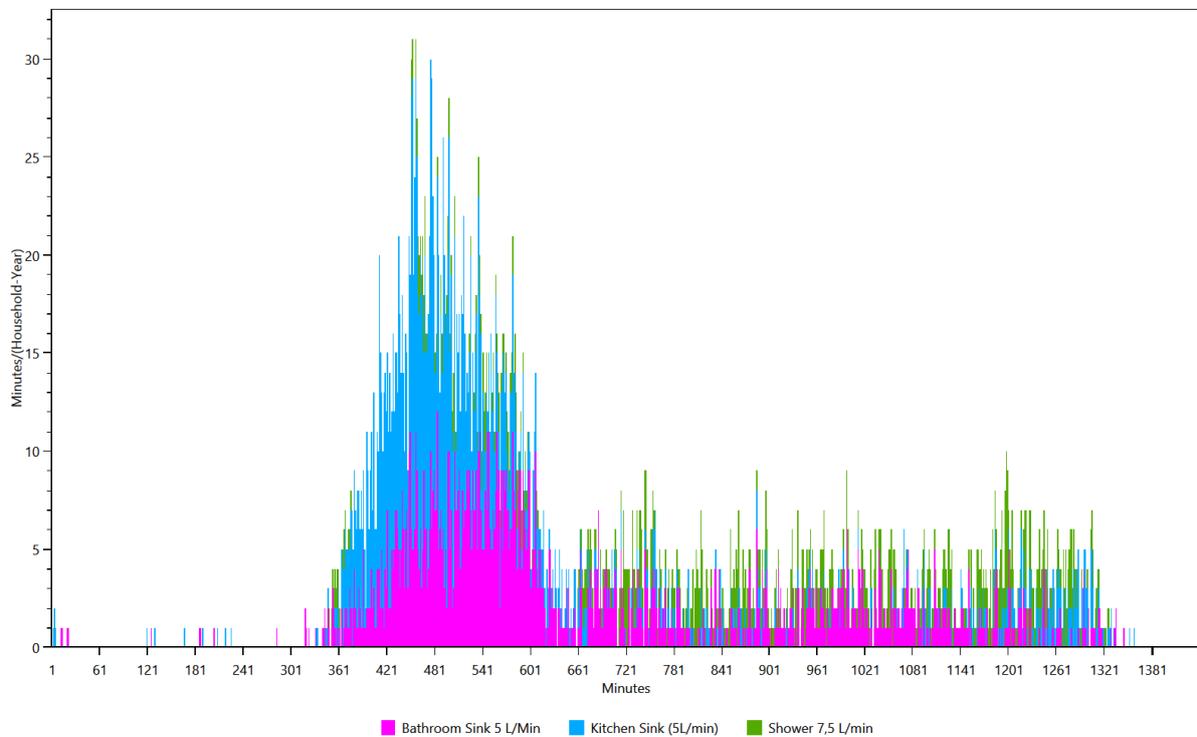


Electricity



- SAT Receiver / Kathrein UFS913
- Electric Razor / Philips PT860/16 Razor PowerTouch Plus
- Laptop Siemens Amilio from 2005
- Philips 32-9615
- Beamer / Acer H7531D
- Panasonic Hifi System (unknown type)
- Router O2 Box 6431
- Home Cinema System / Samsung HT-D5550
- TV / Philips 32PFL7605H
- Microwave / Panasonic NN-V 359 W Inverter
- Electric Tooth Brush / Philips HX9332
- Hifi System / Sharp XL-HF300PH
- Yamaha RX-V667
- CD/DVD Player / Philips DVDR 725 H
- Kitchen radio / AEG KRC 4323 CD
- Siemens Fridge from 1987 (unknown type)
- Living Room Light (200W)
- Digitalpiano / Kawai CN-23
- Kitchen Light (60W)
- Bedroom Light (200W)
- Children Room Light Device (20W)
- Washing Machine AEG Öko Plus 1400
- Juicer / Moulinex Vitafruit
- Coffee Machine / Braun Impression KF 600
- Kitchen professional Hot Stone
- Bathroom Light (20W)
- Bathroom Mirror Light 100W (Conventional)
- Egg Cooker / Russell Hobbs 14048-56 Stylo
- Single Stove Plate
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv
- Miele H 5241 B
- Energy Saving Lamp / EL-REF 11 E27
- Miele DA 249-2
- Canister vacuum cleaner / Siemens VS 06 G 1831
- Toaster / Bosch TAT8SL1
- Food Slicer / DOMO Schneidemaschine DOS215
- Electric Kettle / Philips Essential HD 4685/90 Schwarz
- Electric Kettle / Petra WK288 1.5L
- Nespresso Coffee Machine, Single Cup

Warm Water

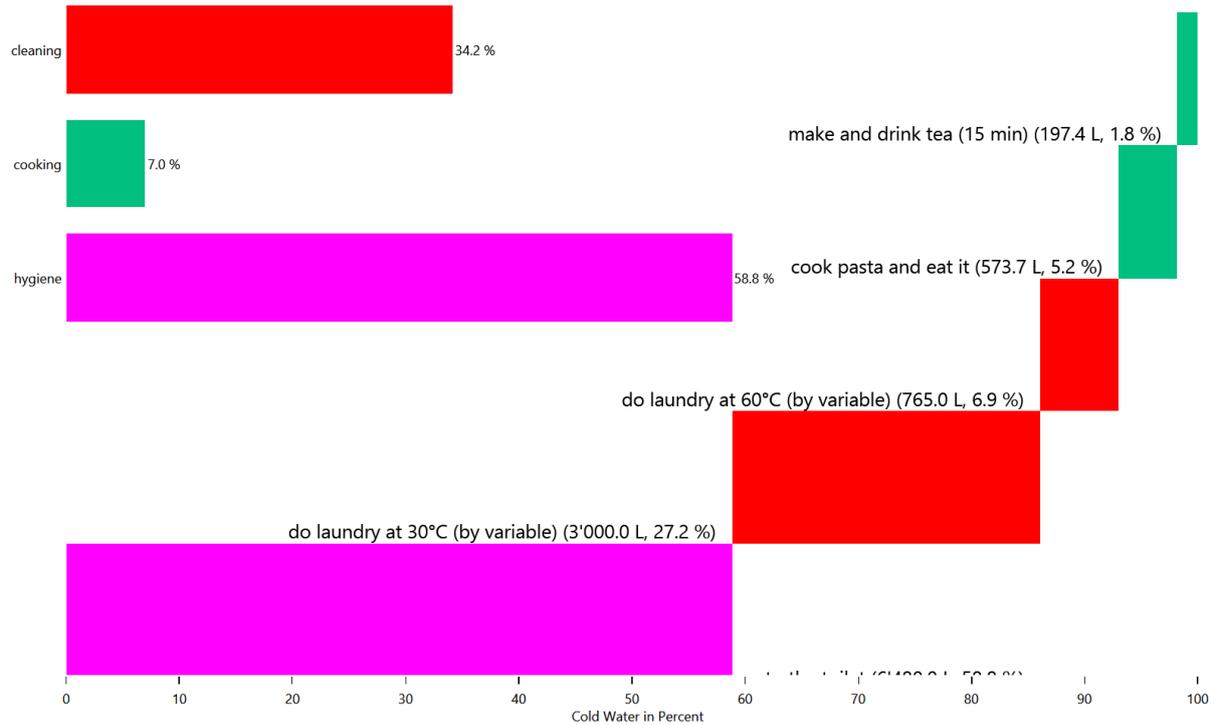


Energy/Resource use distribution per load type per affordance

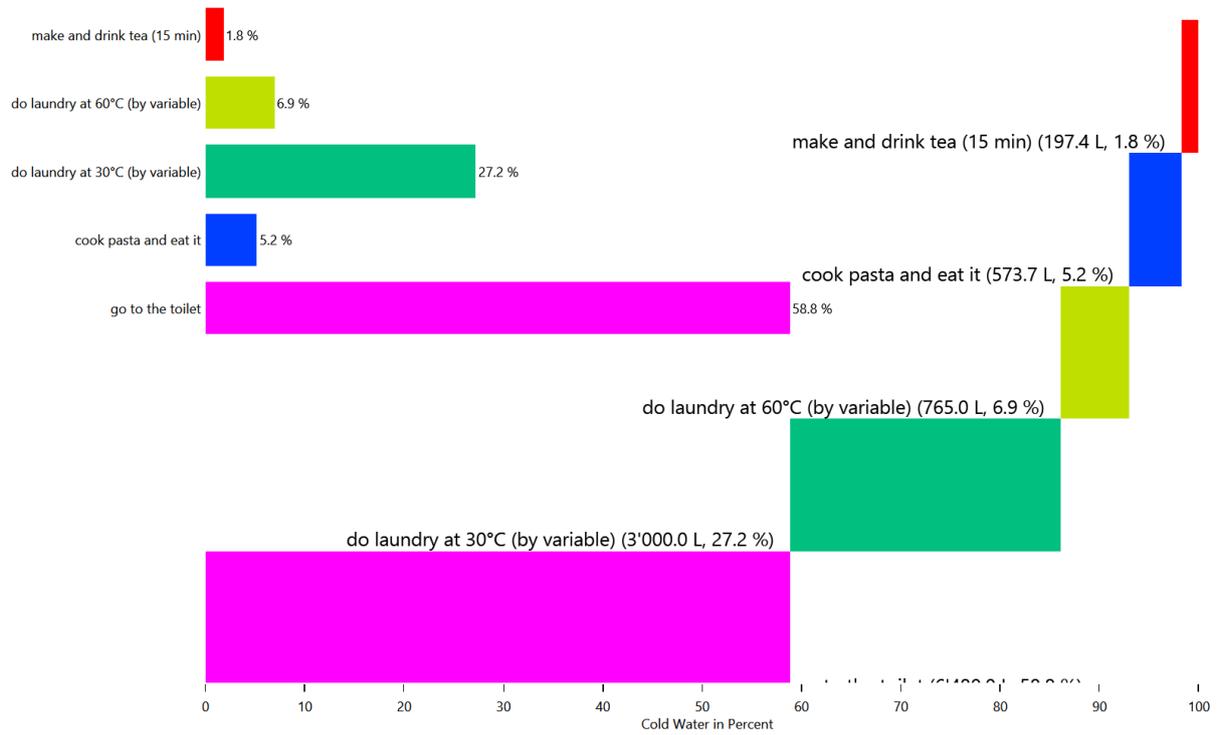
This is made from the files starting with: **AffordanceEnergyUse**

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

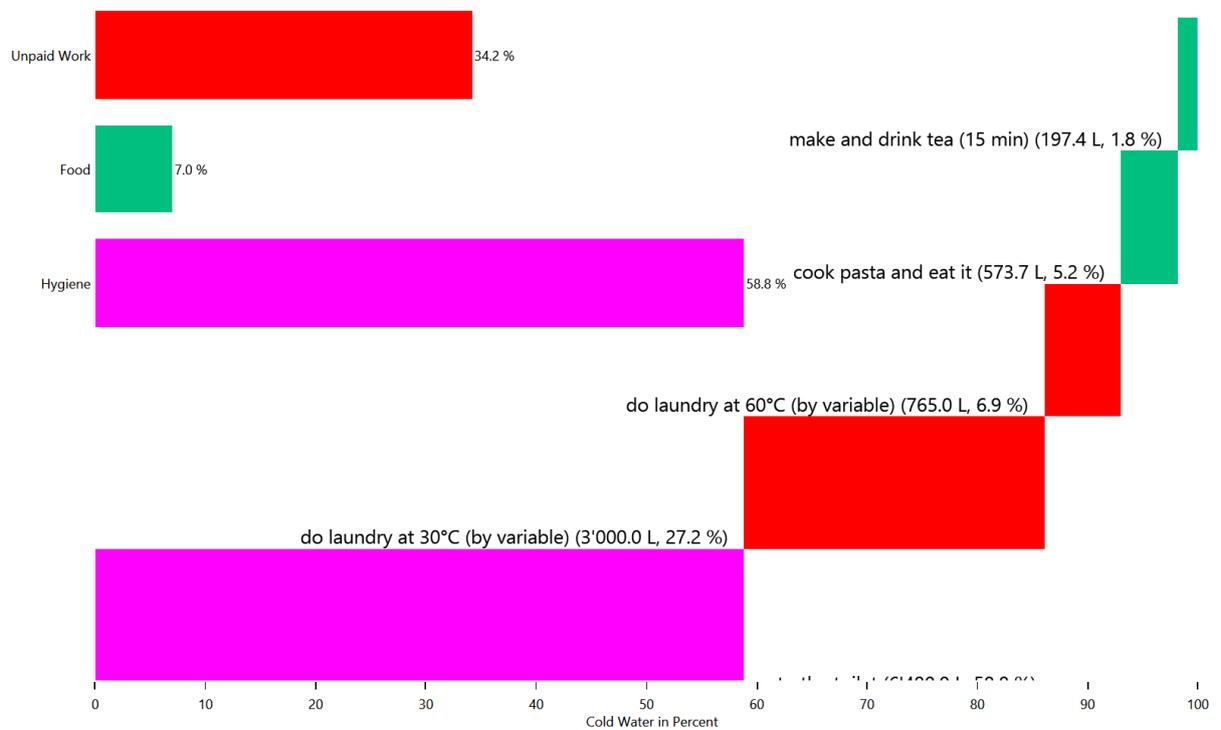
HH0 - Cold Water



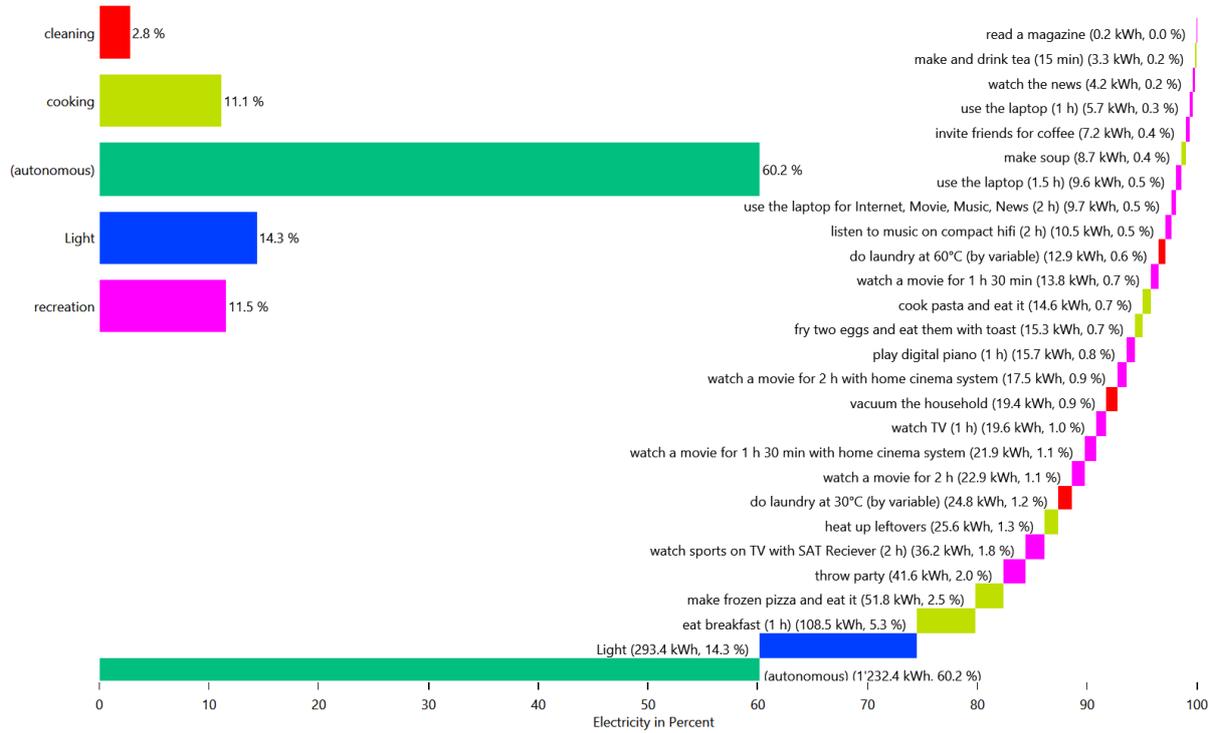
HH0 - Cold Water



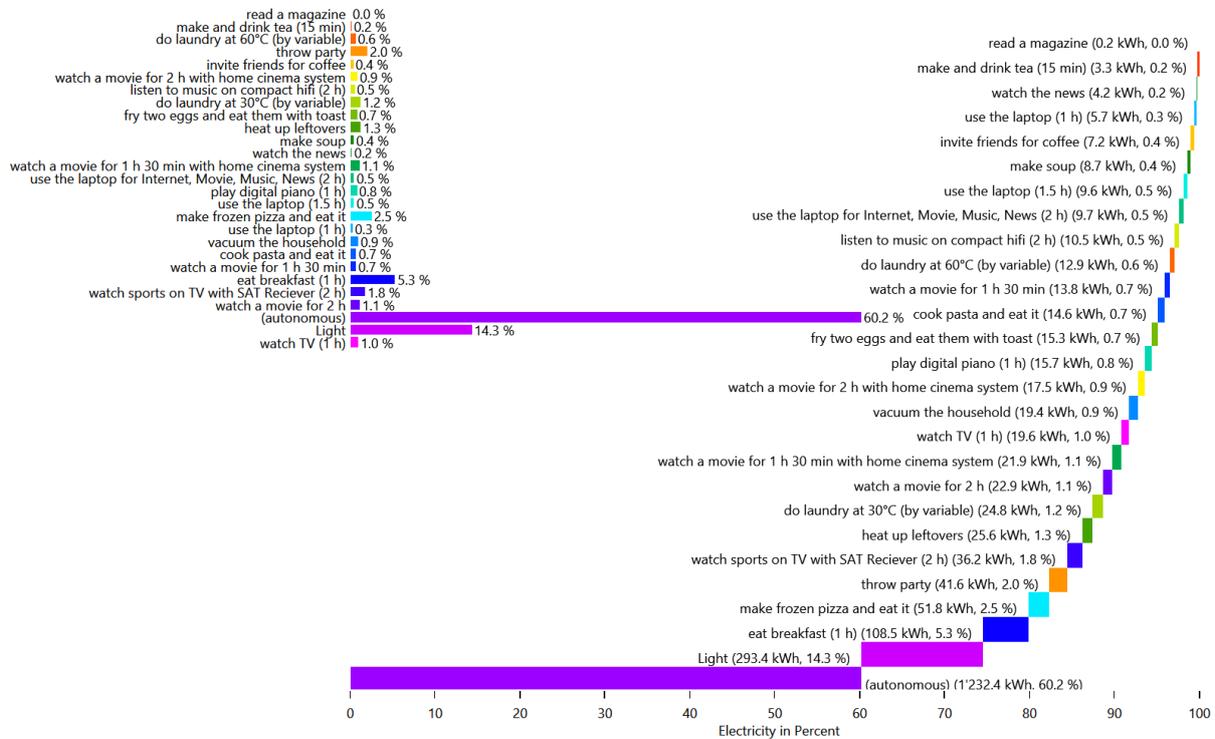
HH0 - Cold Water



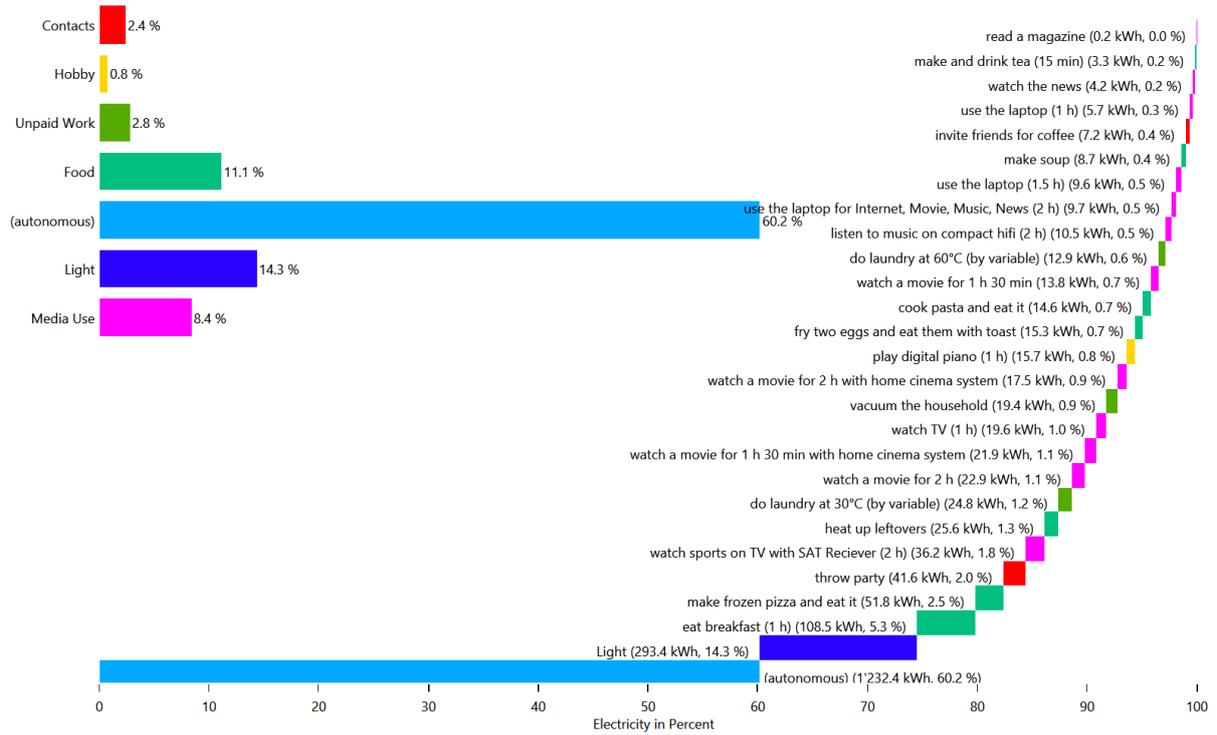
HH0 - Electricity



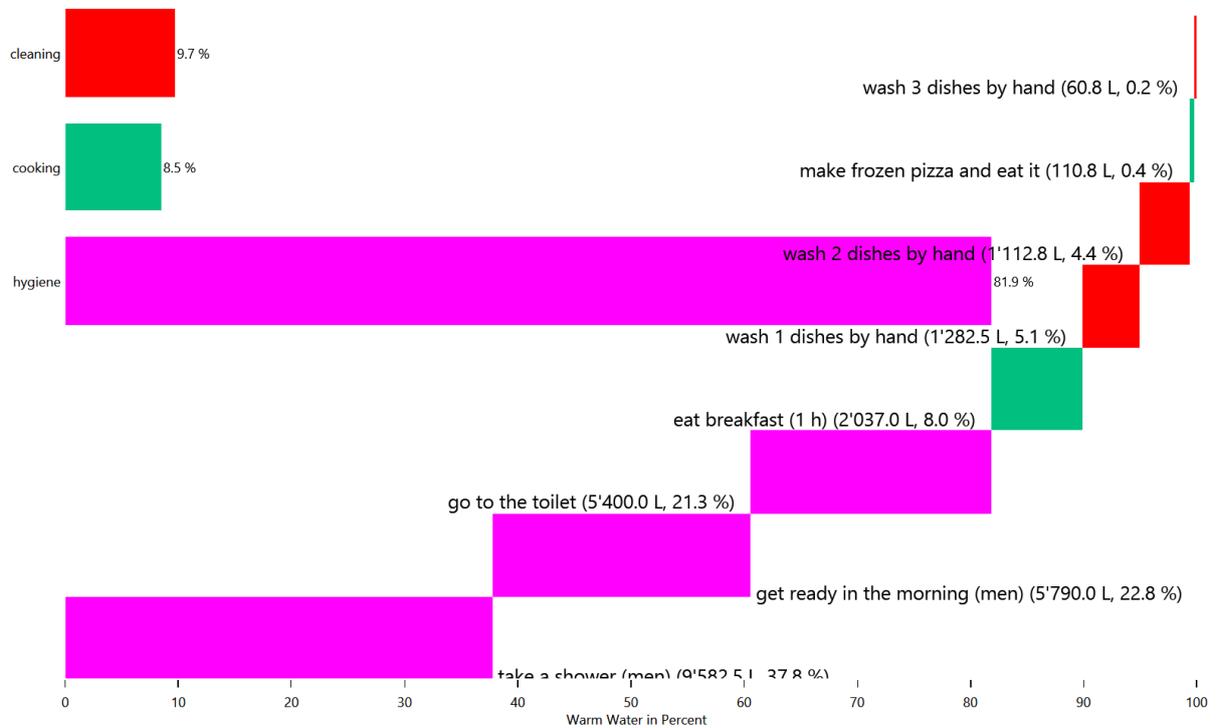
HH0 - Electricity



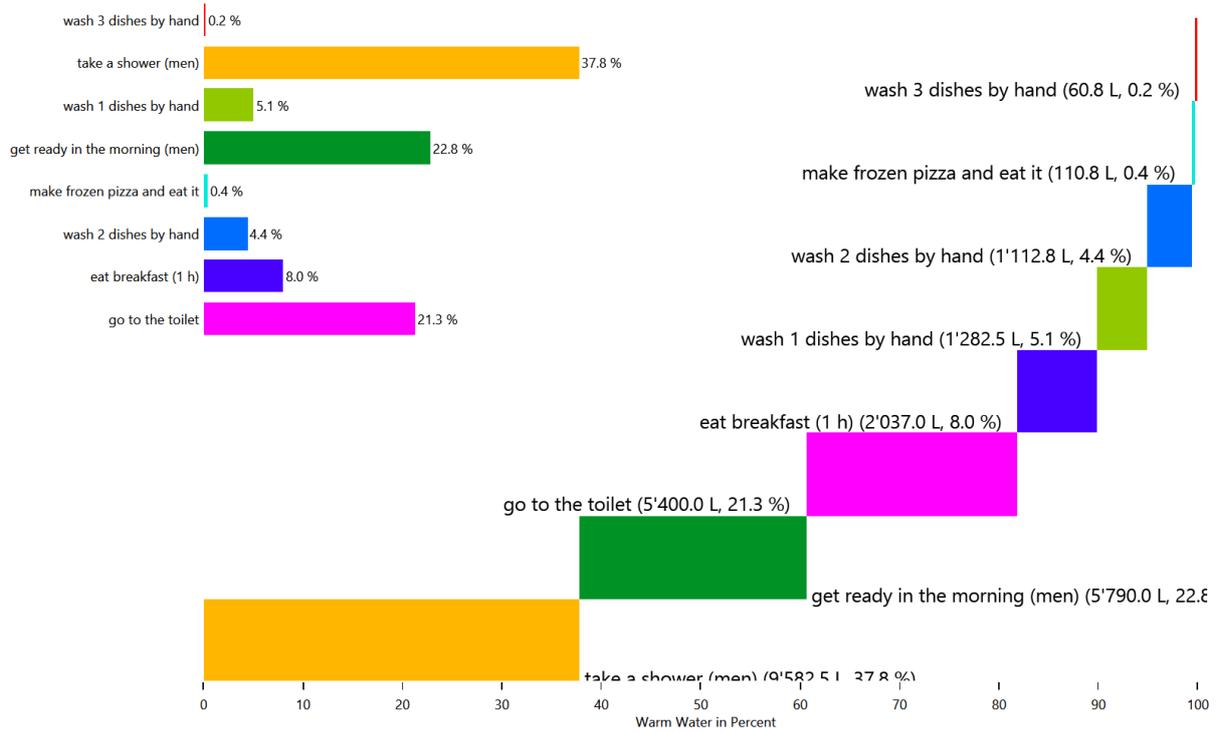
HH0 - Electricity



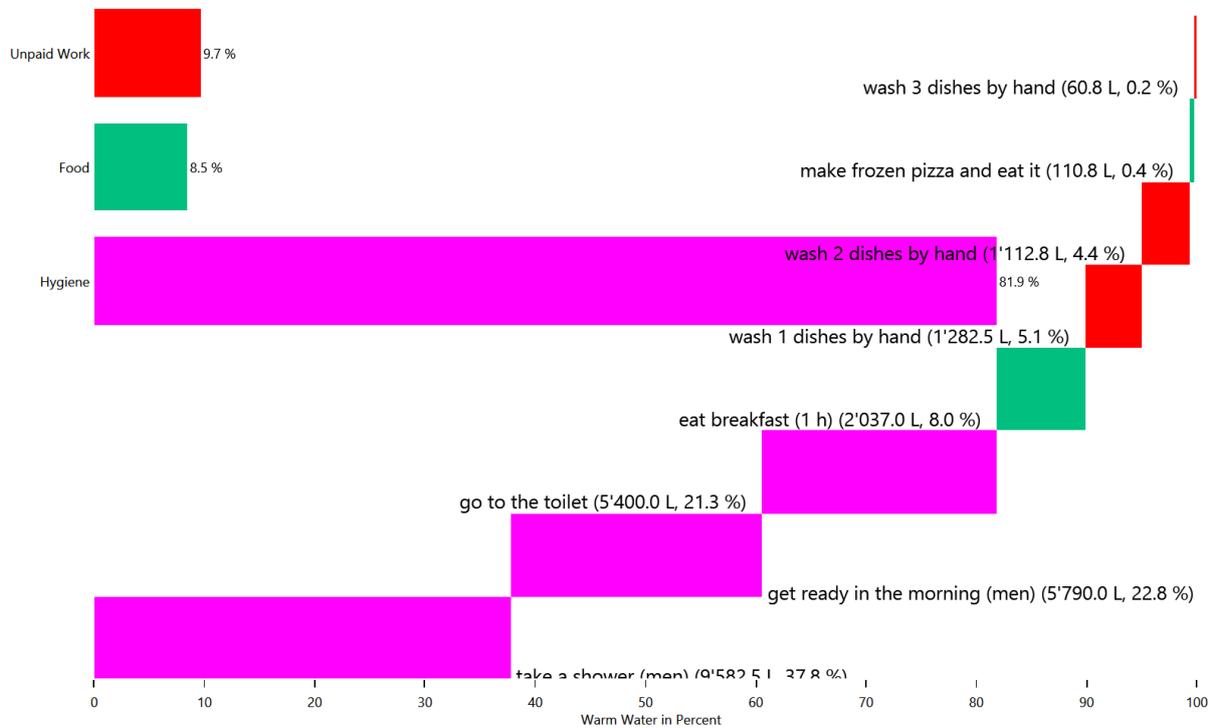
HH0 - Warm Water



HH0 - Warm Water



HH0 - Warm Water

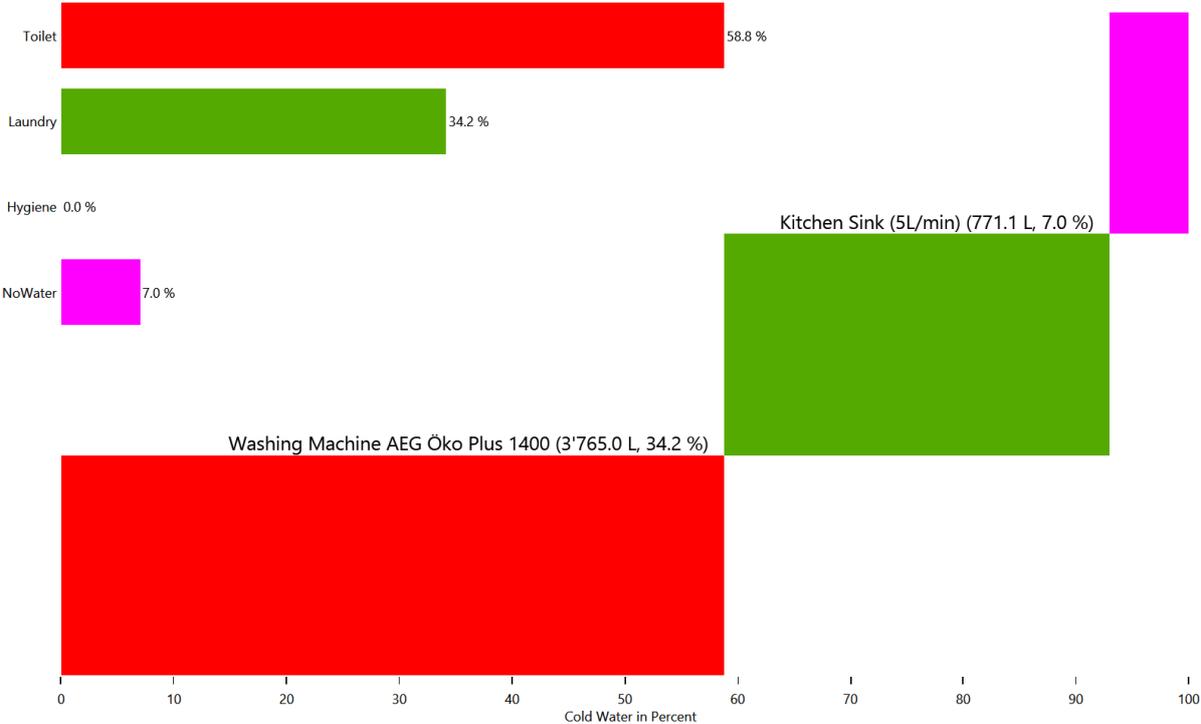


Energy use for each load type for each device

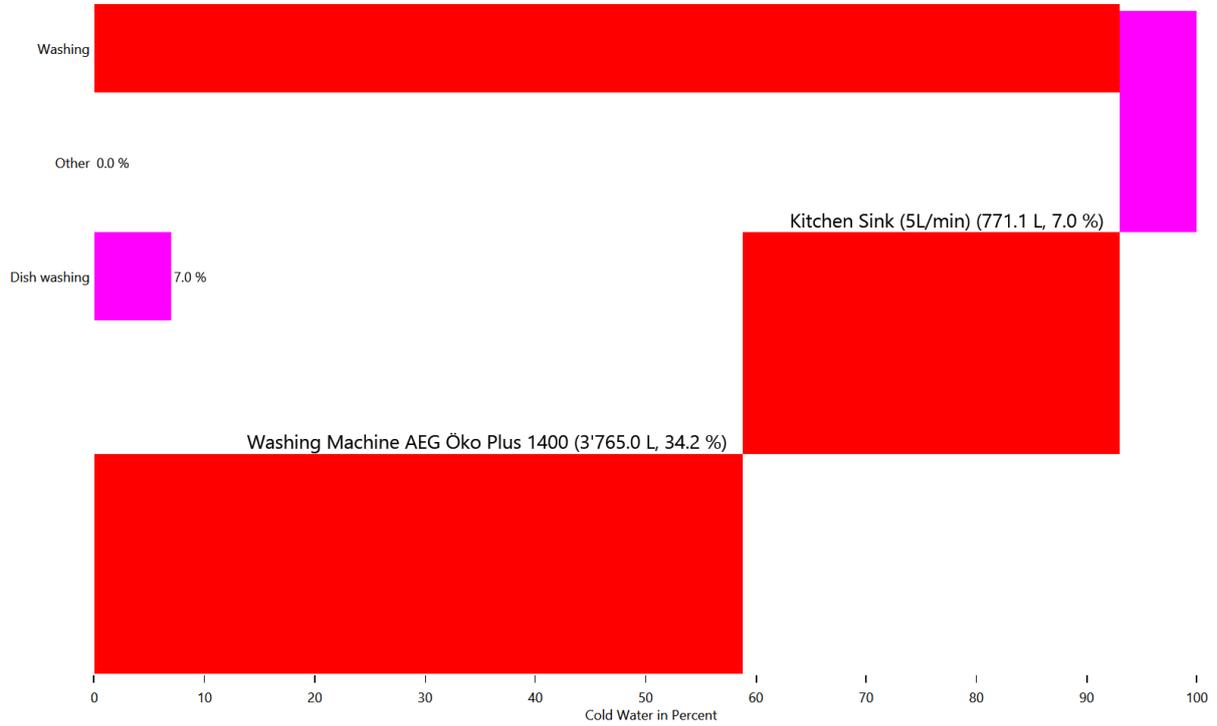
This is made from the files starting with: DeviceSums

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

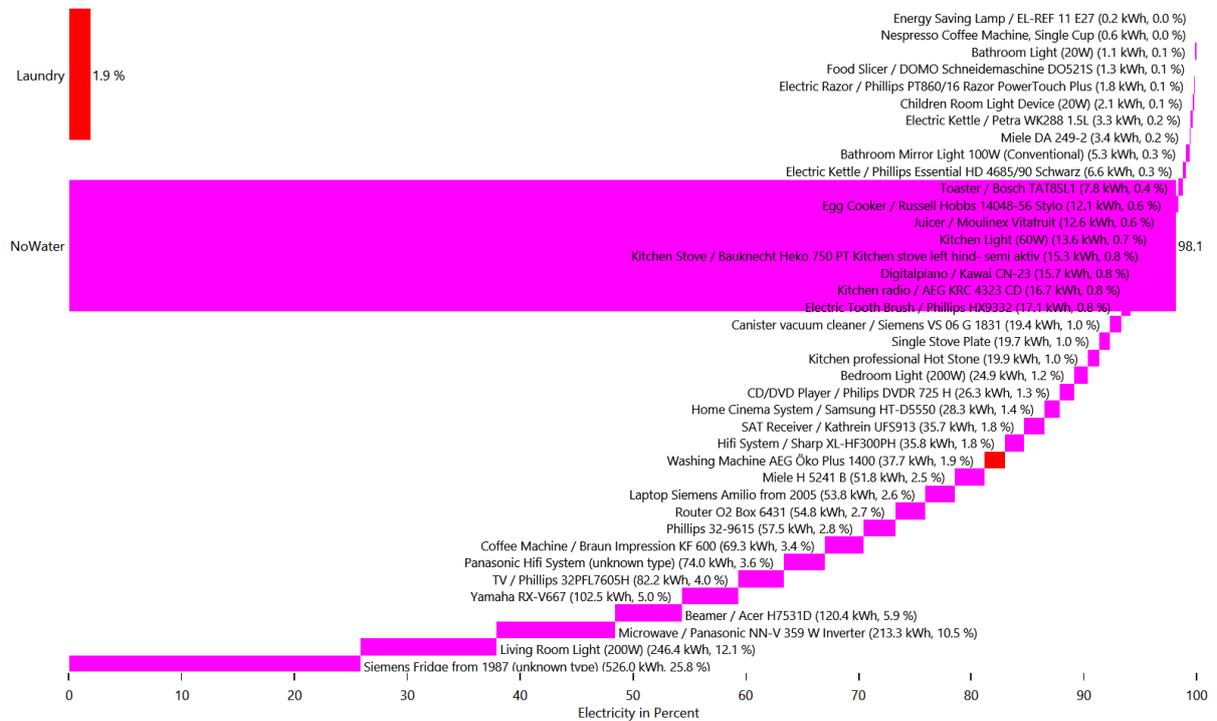
Cold Water



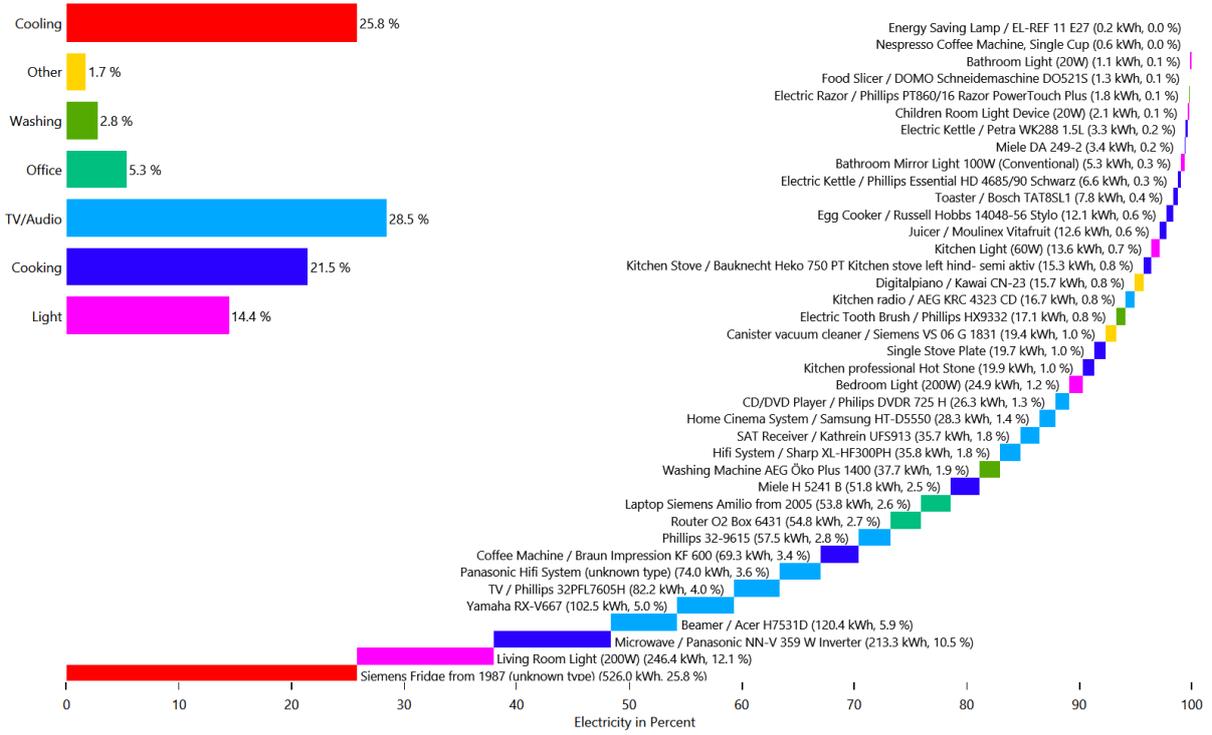
Cold Water



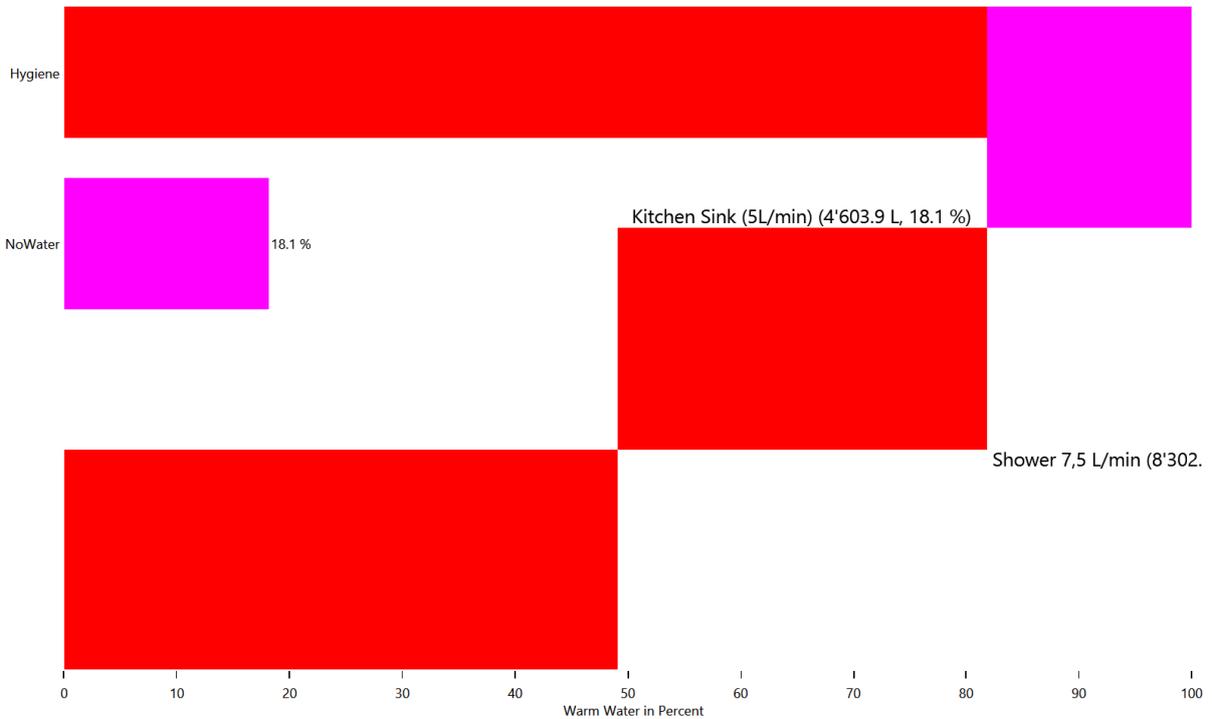
Electricity



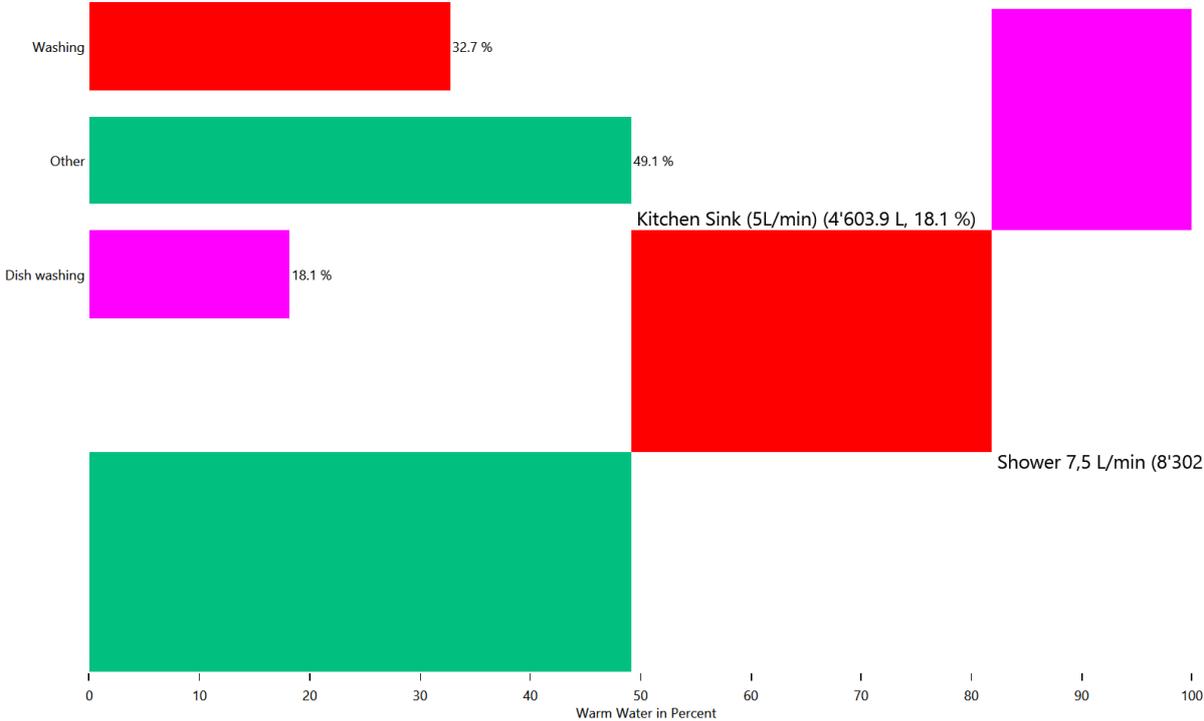
Electricity



Warm Water



Warm Water

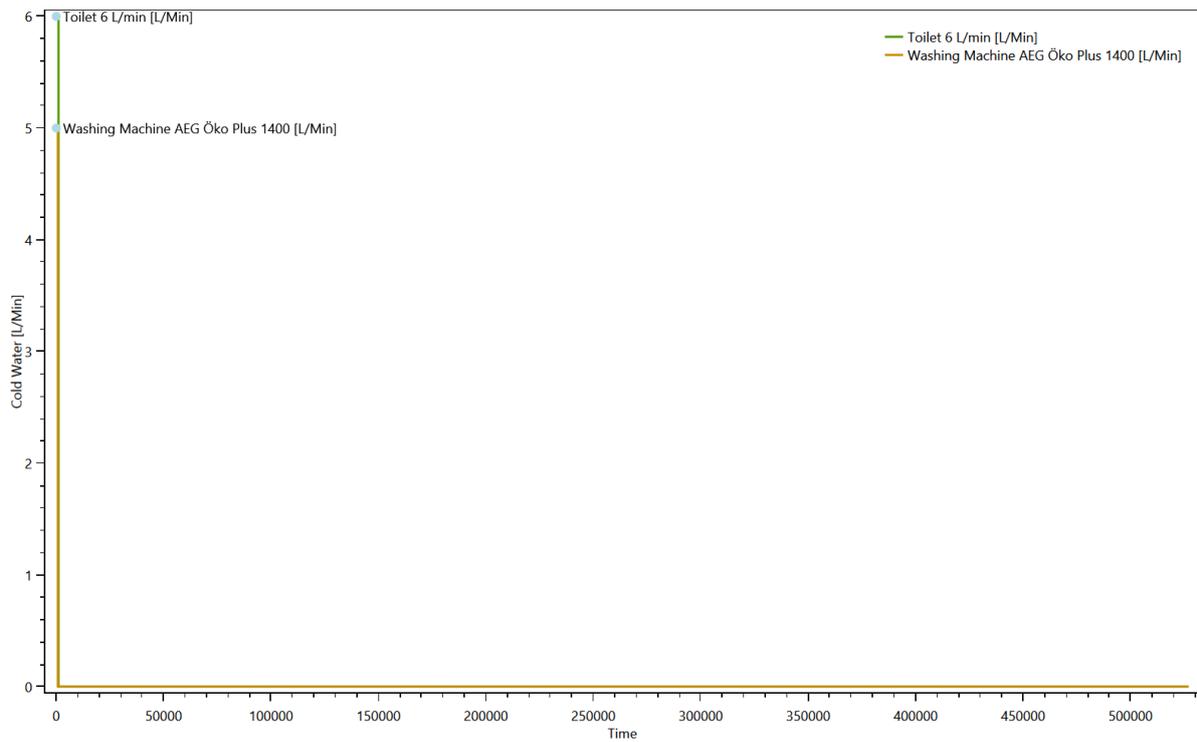


Duration curve for each device for each load type

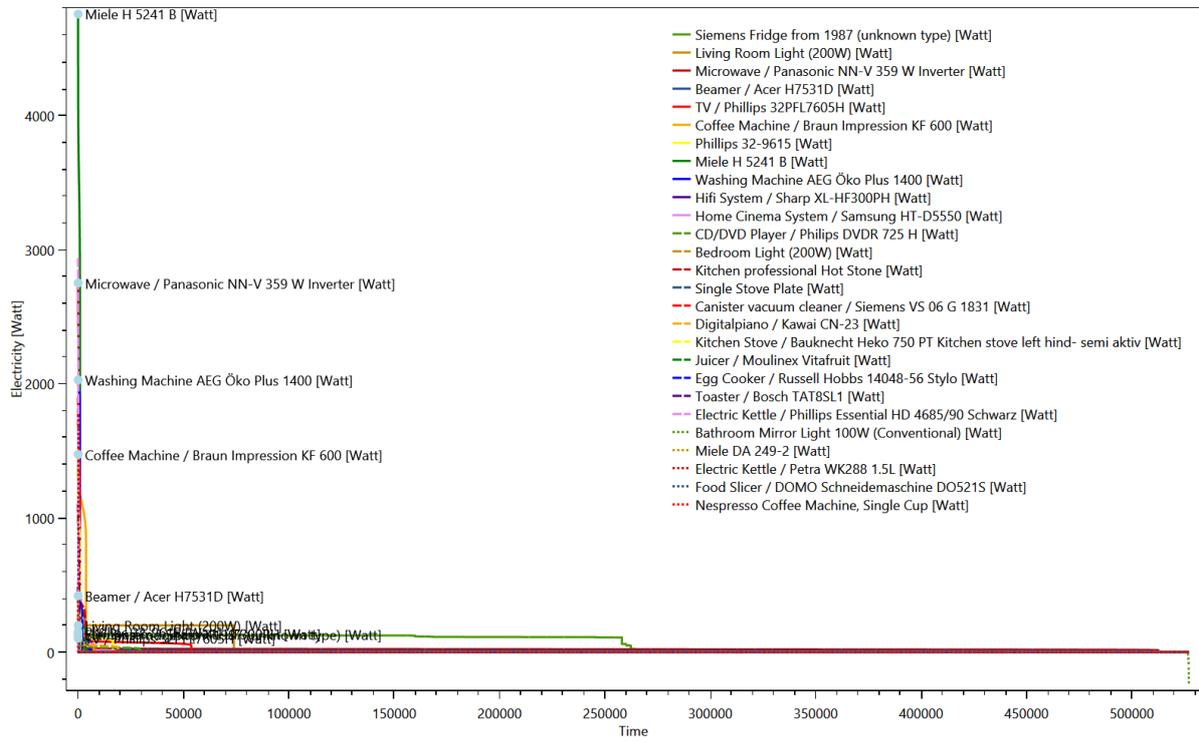
This is made from the files starting with: DeviceDurationCurves

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

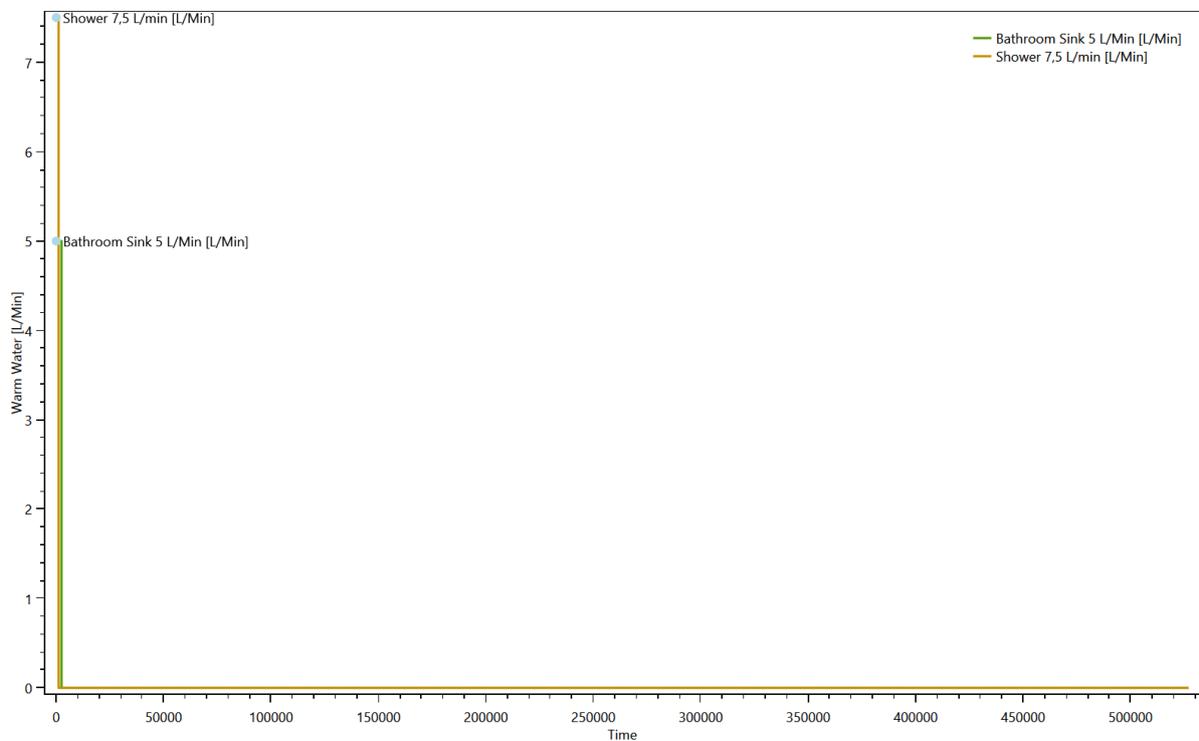
Cold Water



Electricity



Warm Water

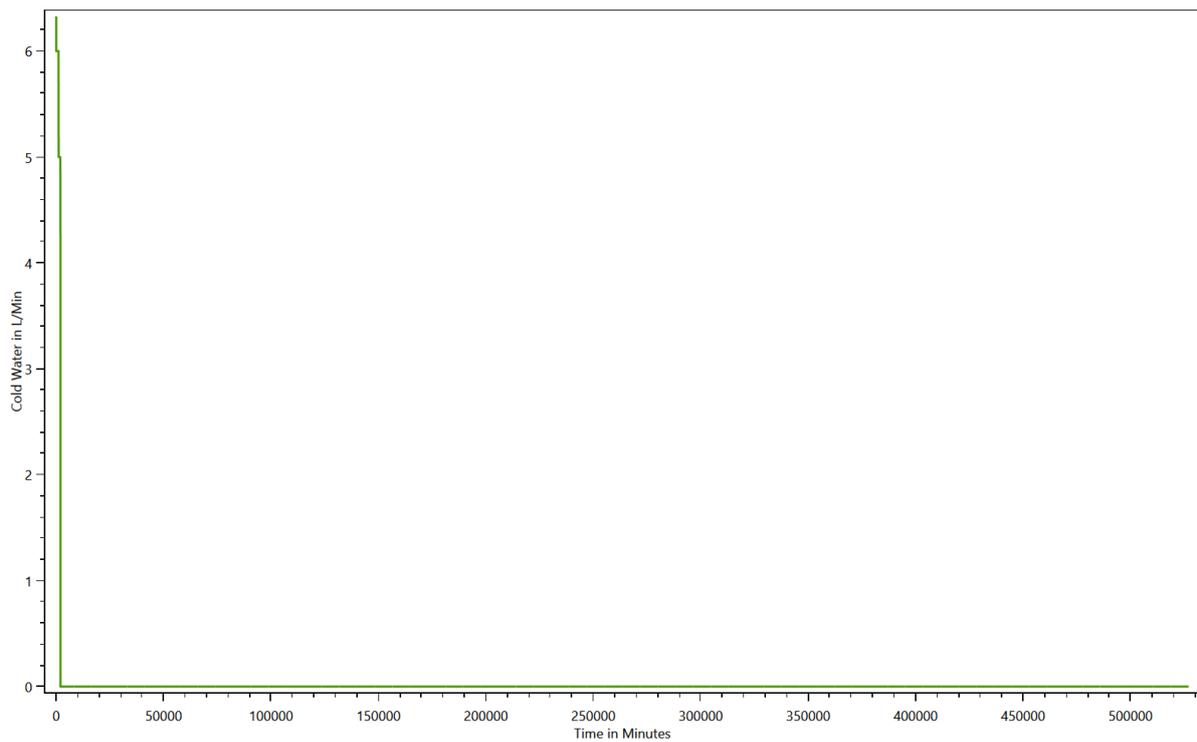


Duration curve for each load type

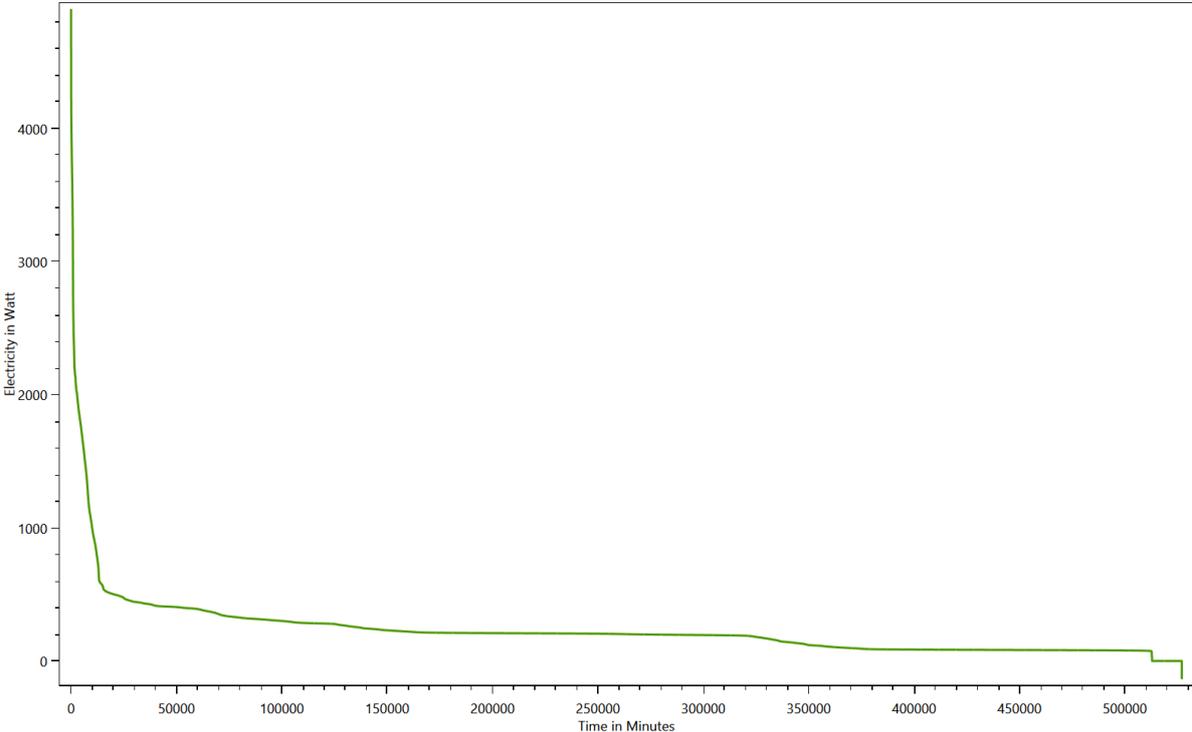
This is made from the files starting with: DurationCurve

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

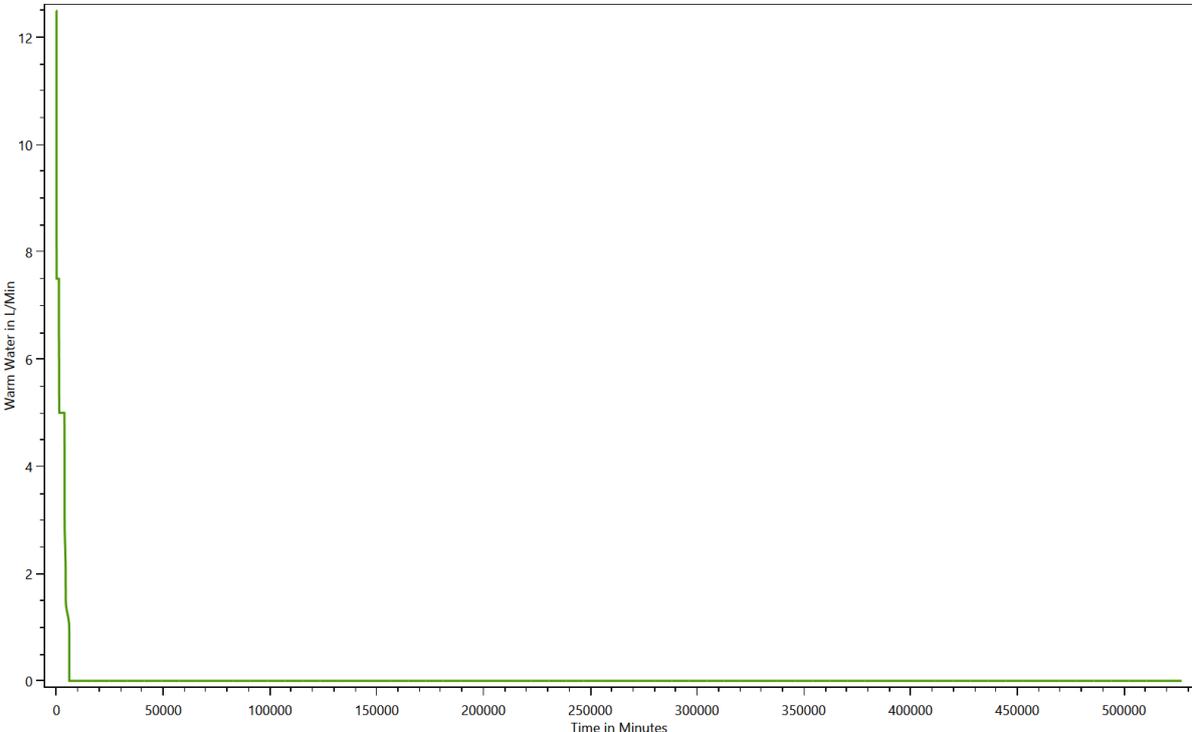
Cold Water



Electricity



Warm Water

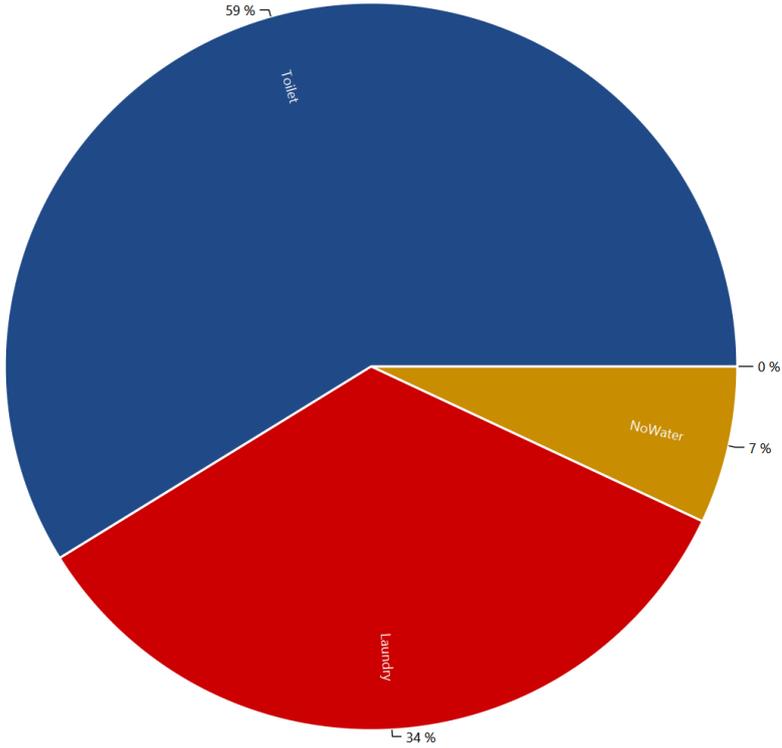


Grouped energy use for each load type for each device

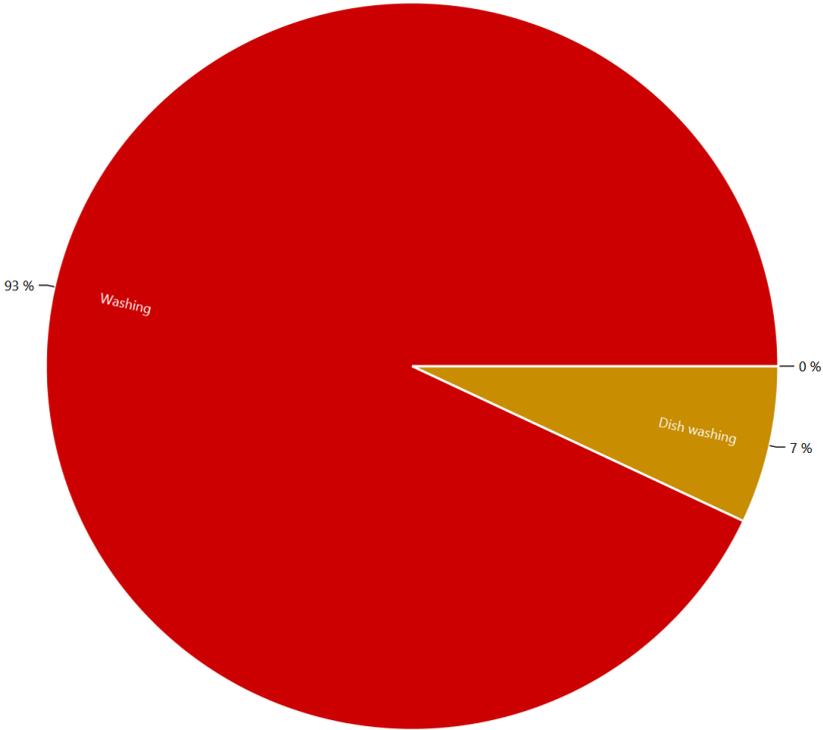
This is made from the files starting with: DeviceTaggingSet

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

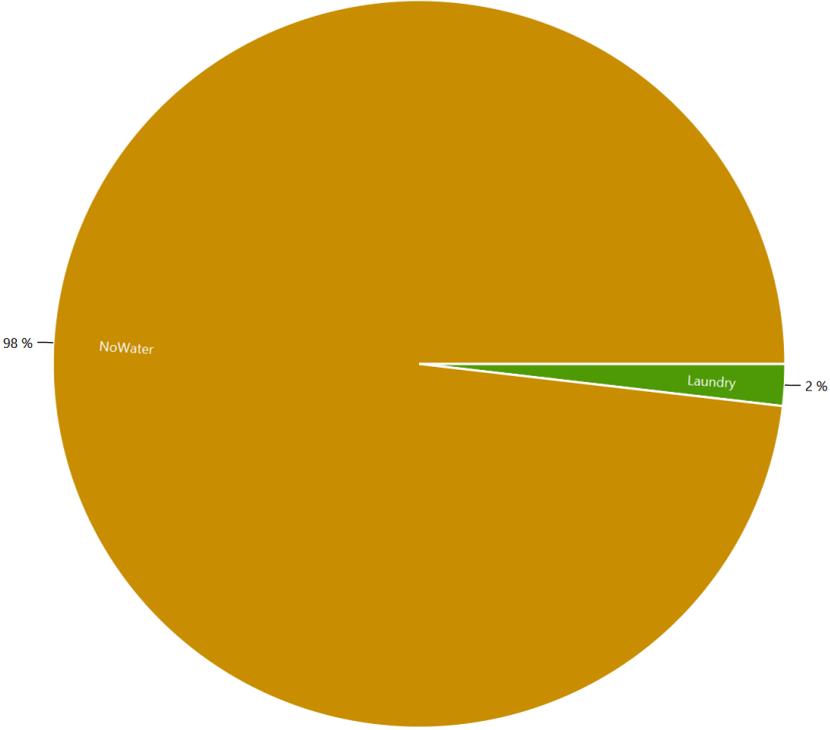
HH0 - Destatis Water Usage Statistics - Cold Water



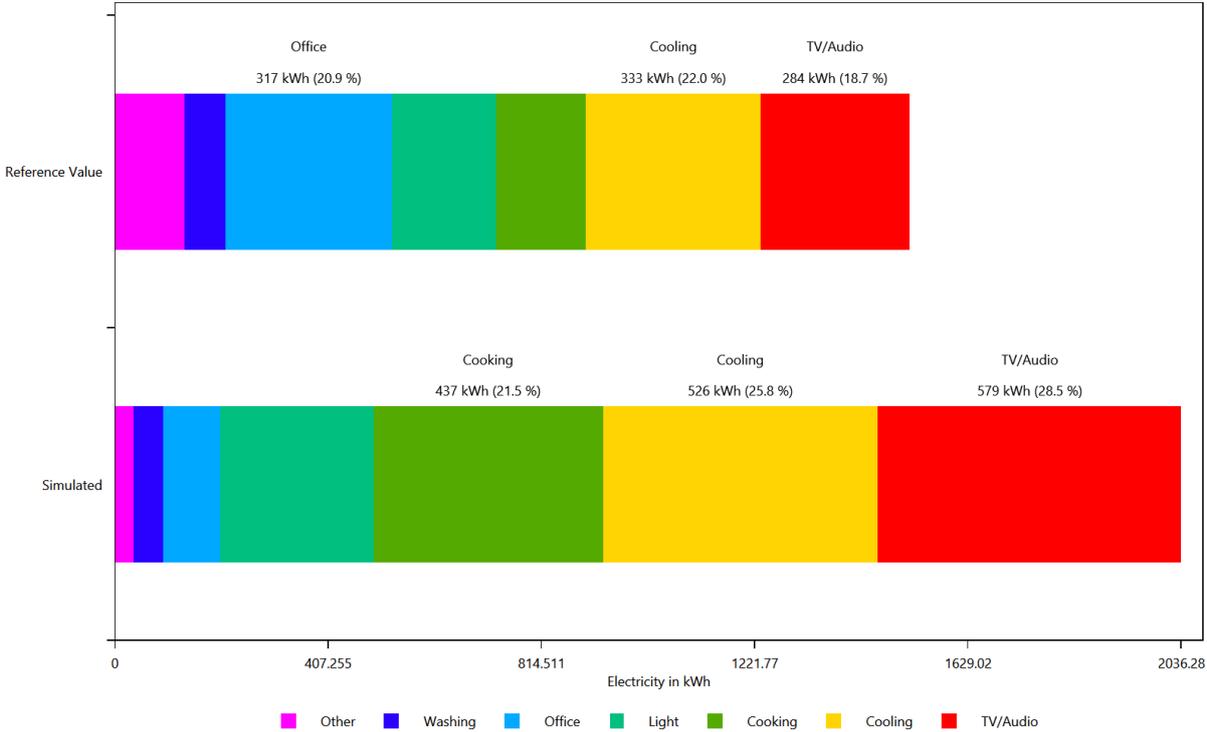
HH0 - Energieagentur - Cold Water



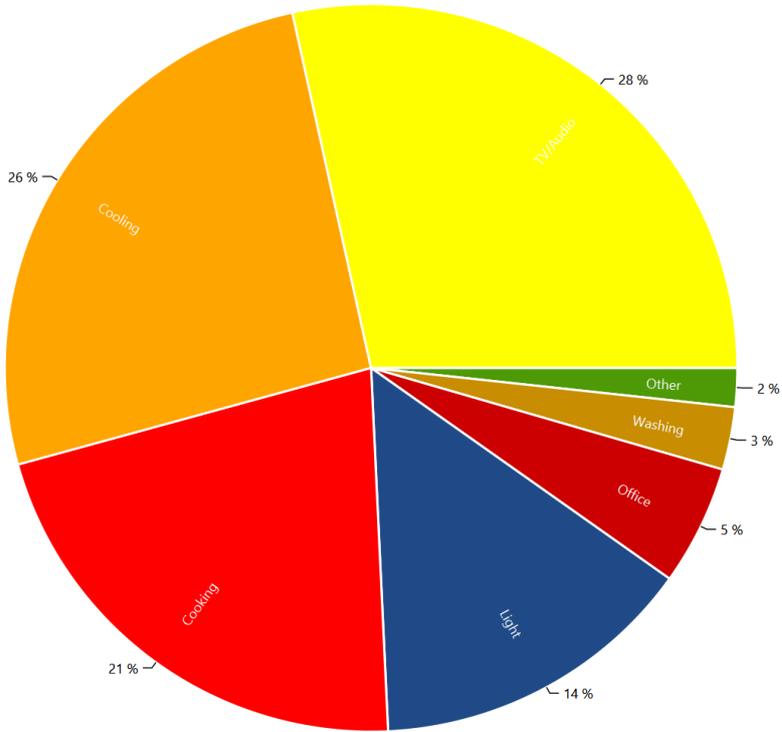
HH0 - Destatis Water Usage Statistics - Electricity



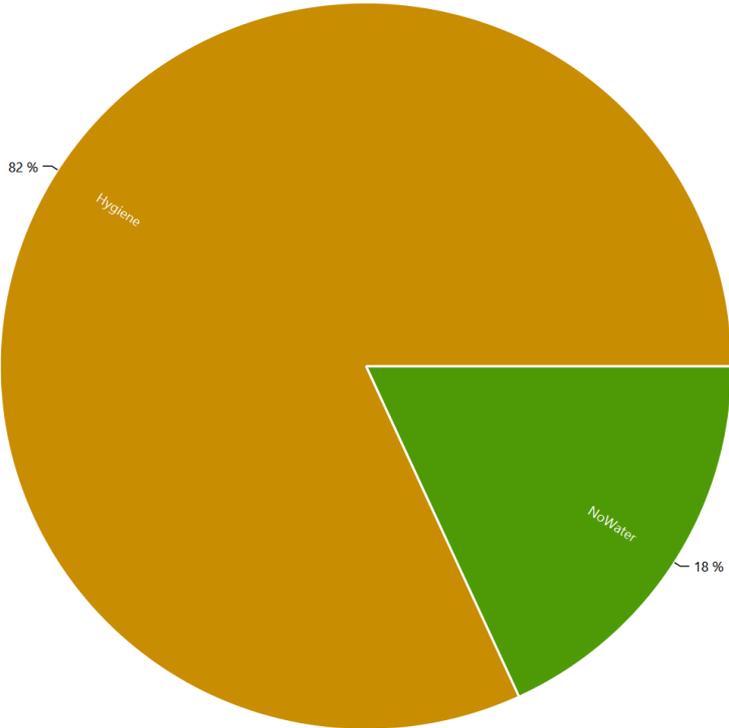
HH0 - Energieagentur - Electricity



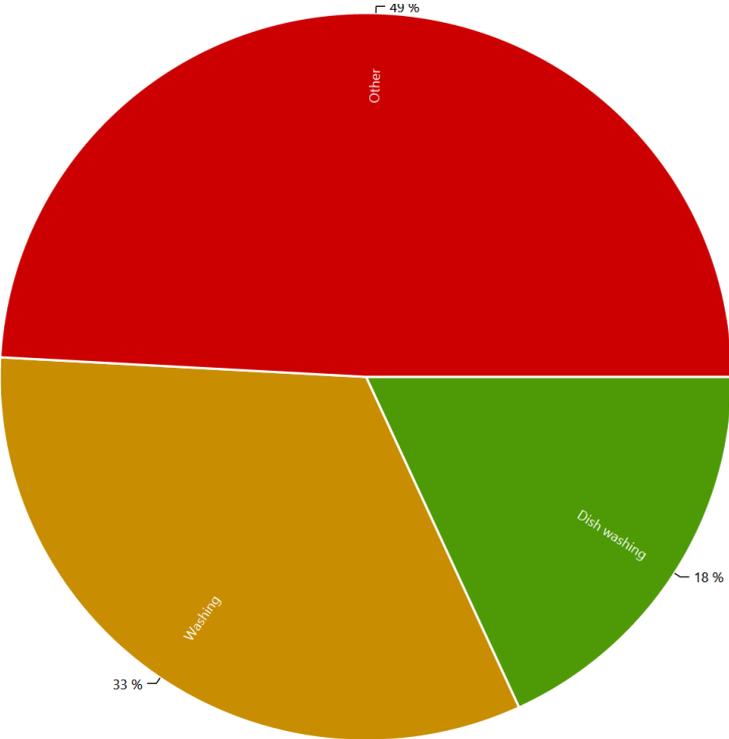
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

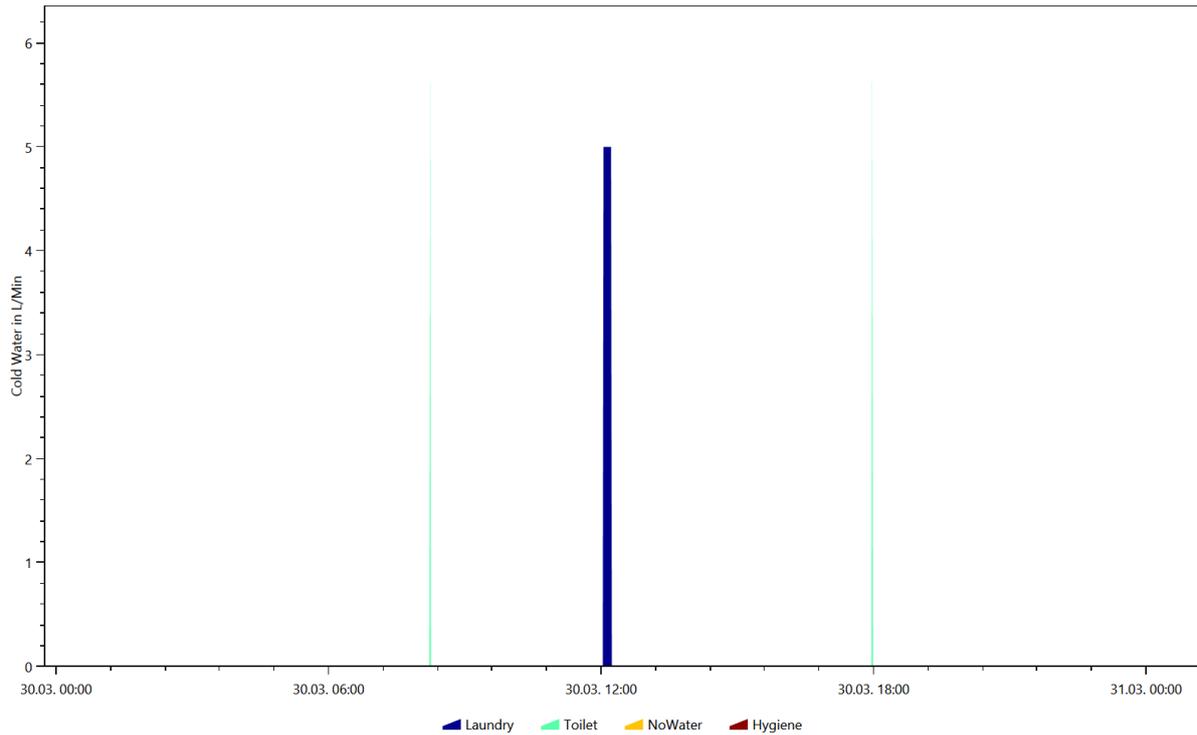


Example of the device profiles for each load type

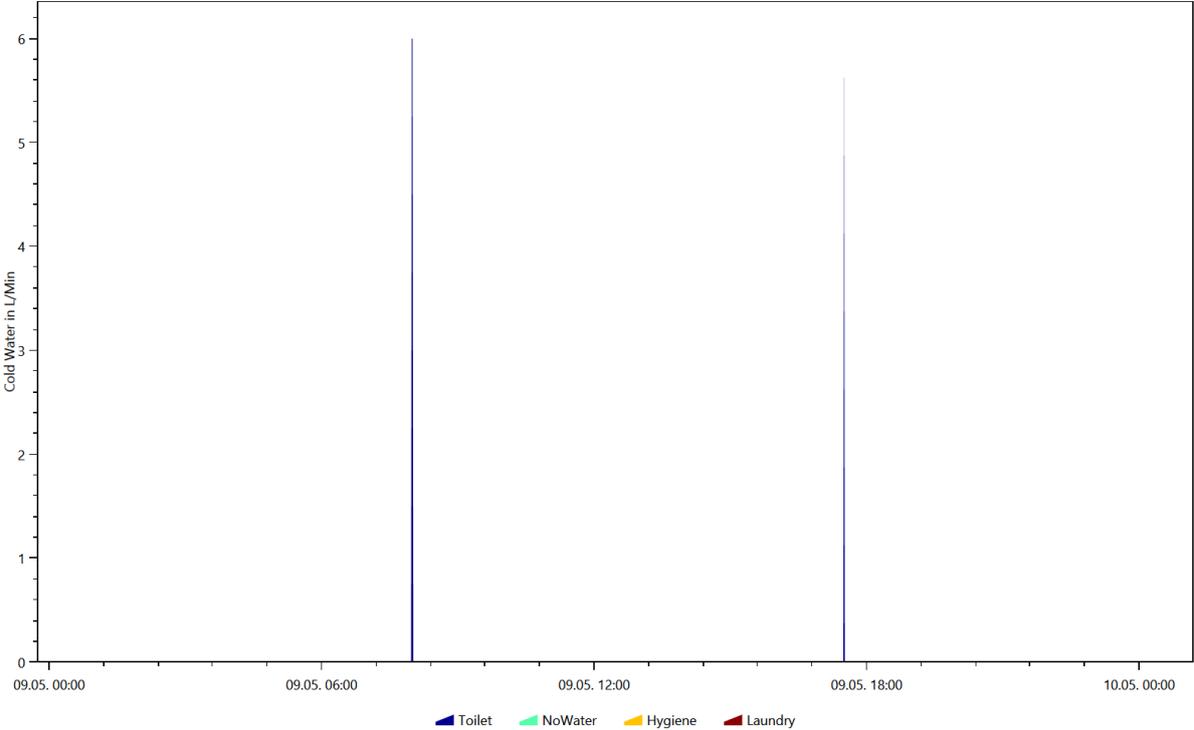
This is made from the files starting with: DeviceProfiles

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

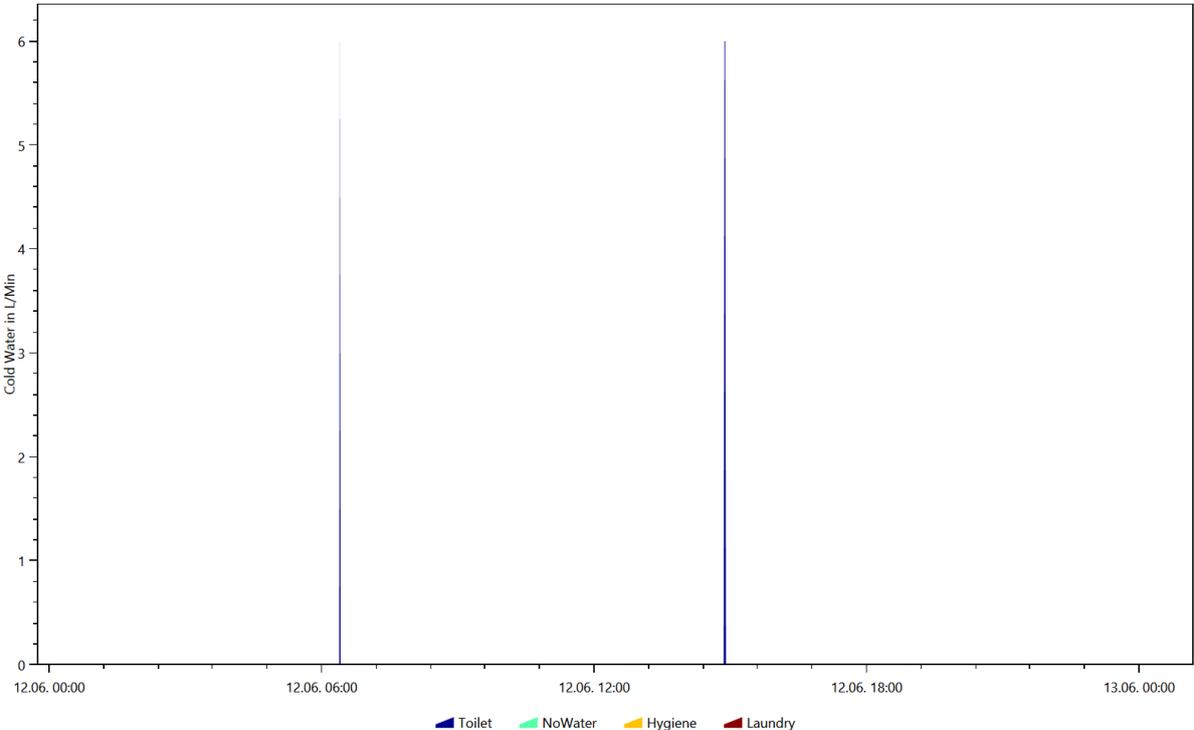
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.30



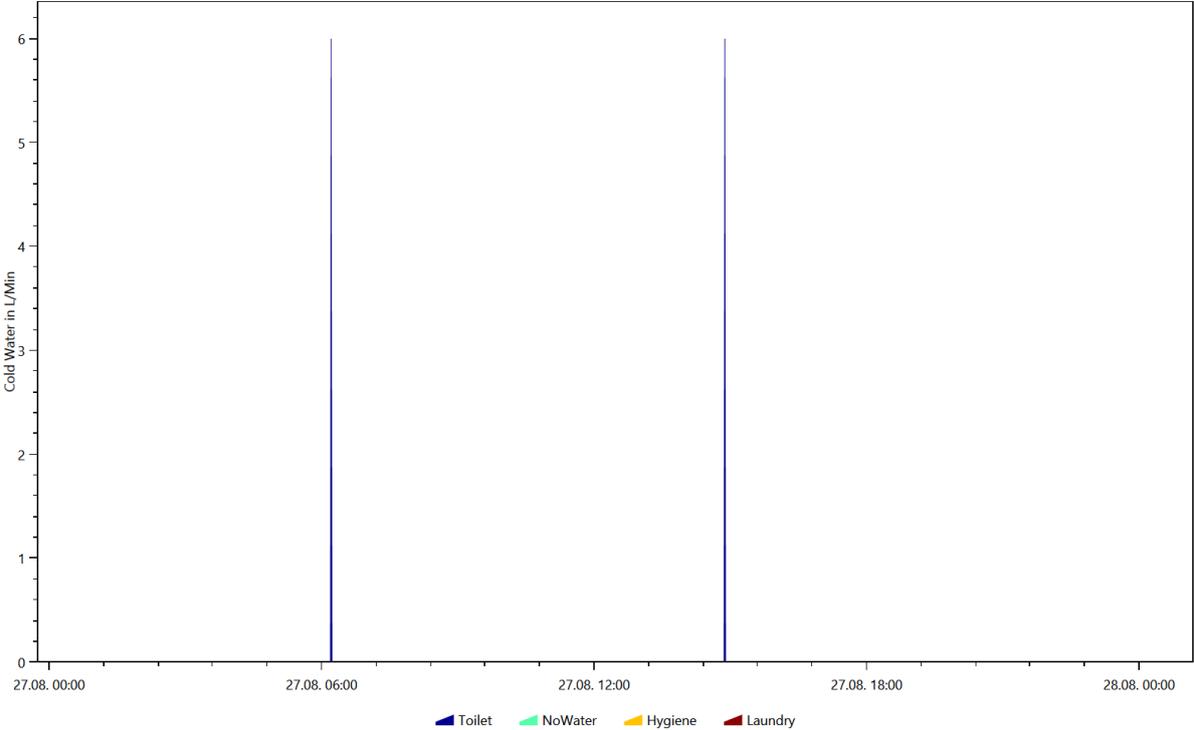
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.9



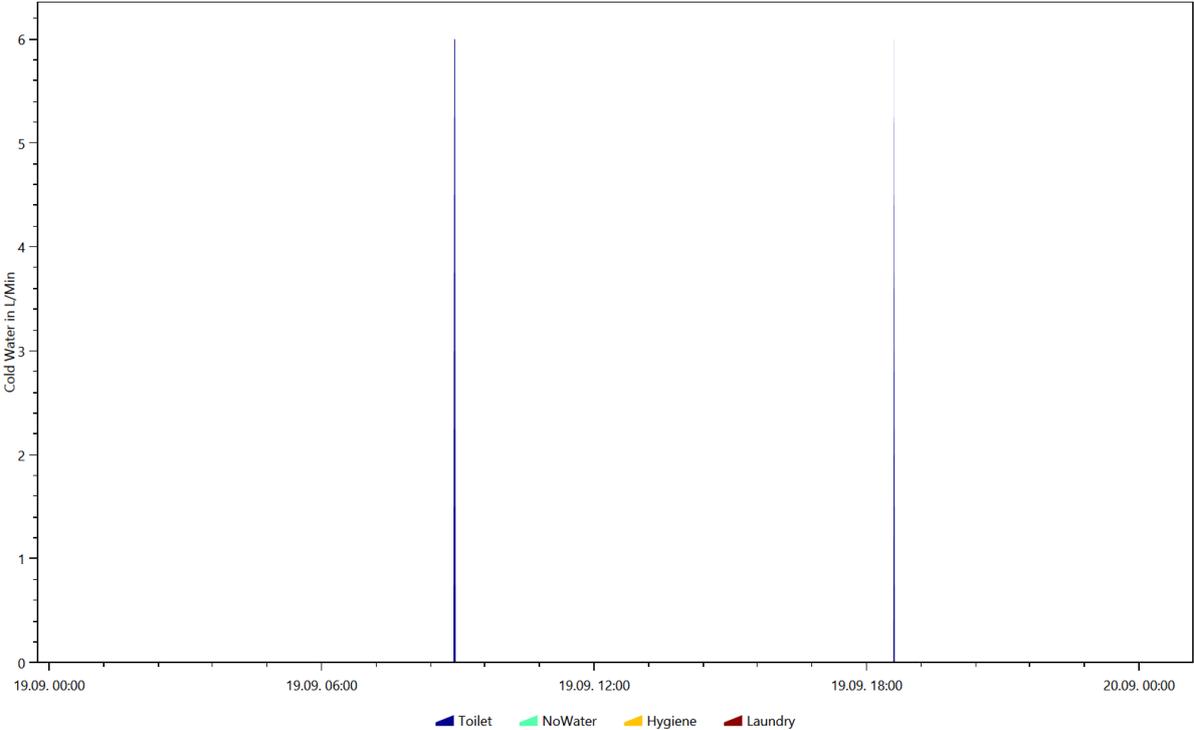
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.12



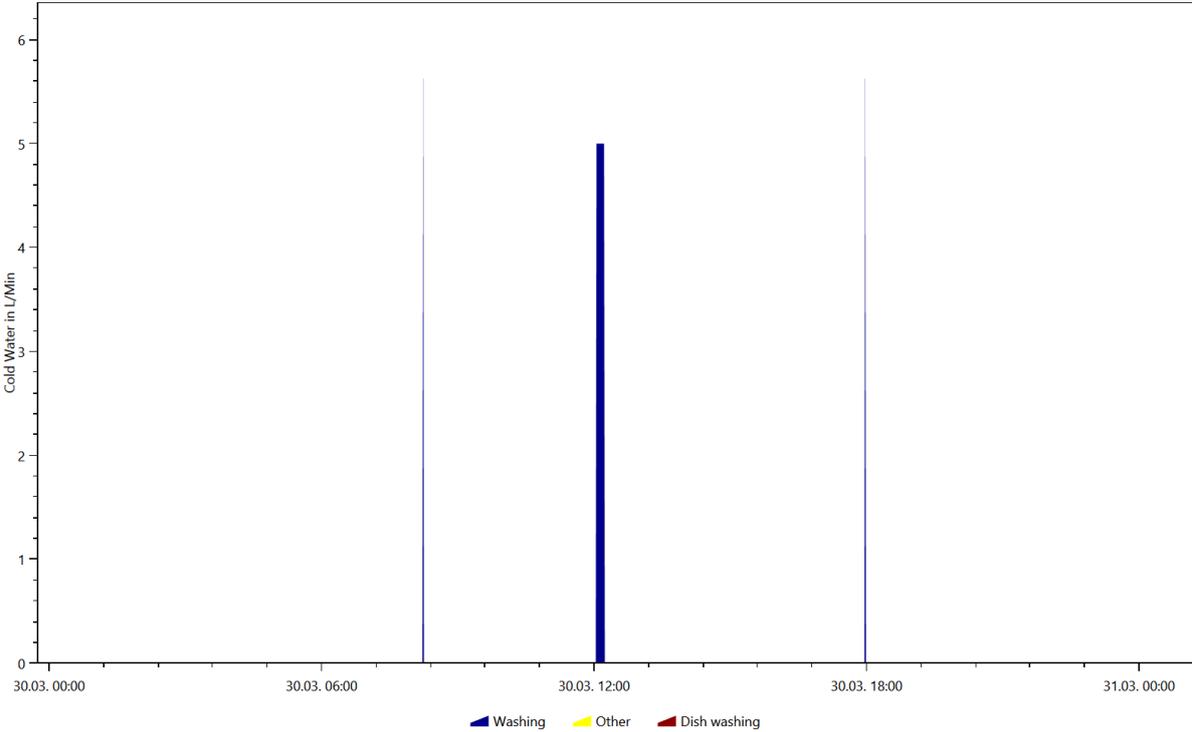
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.27



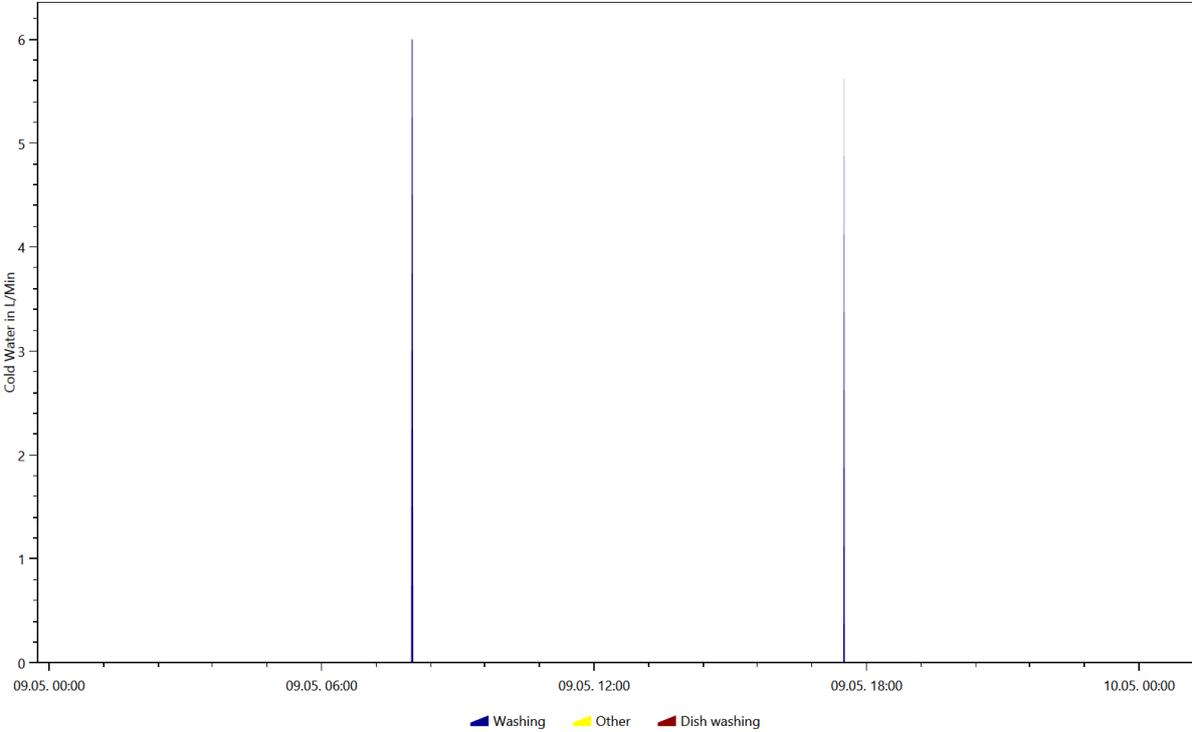
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.19



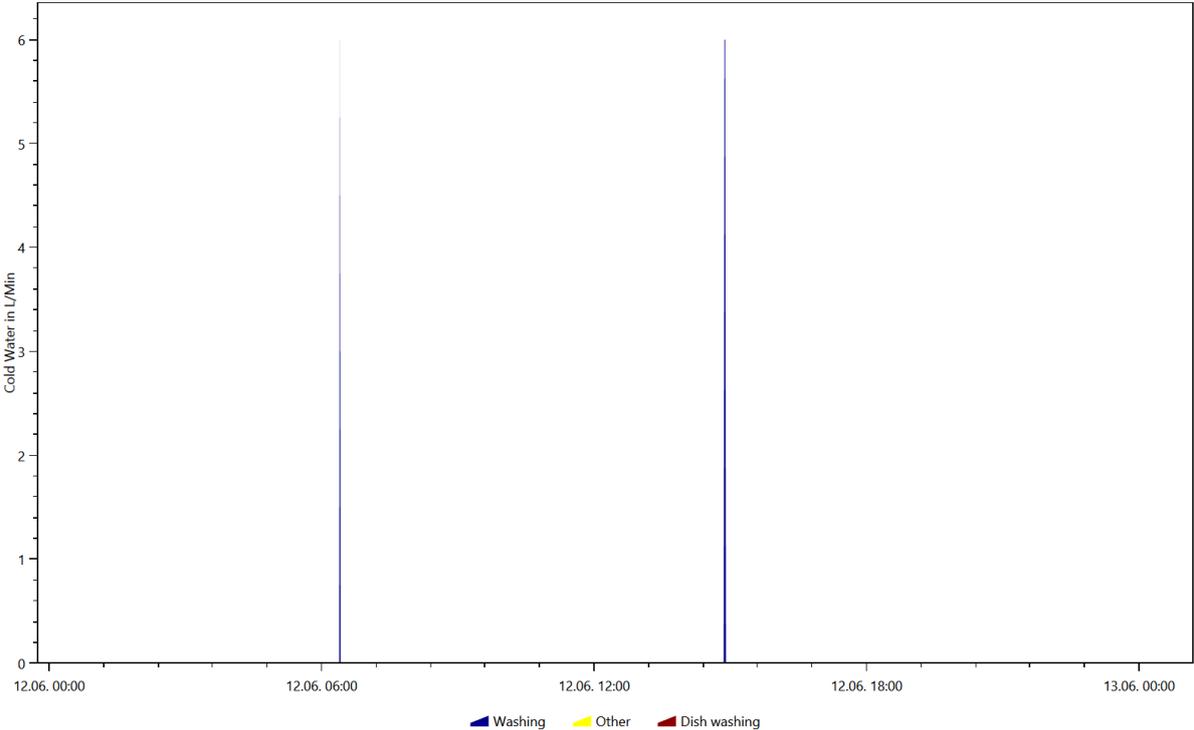
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.30



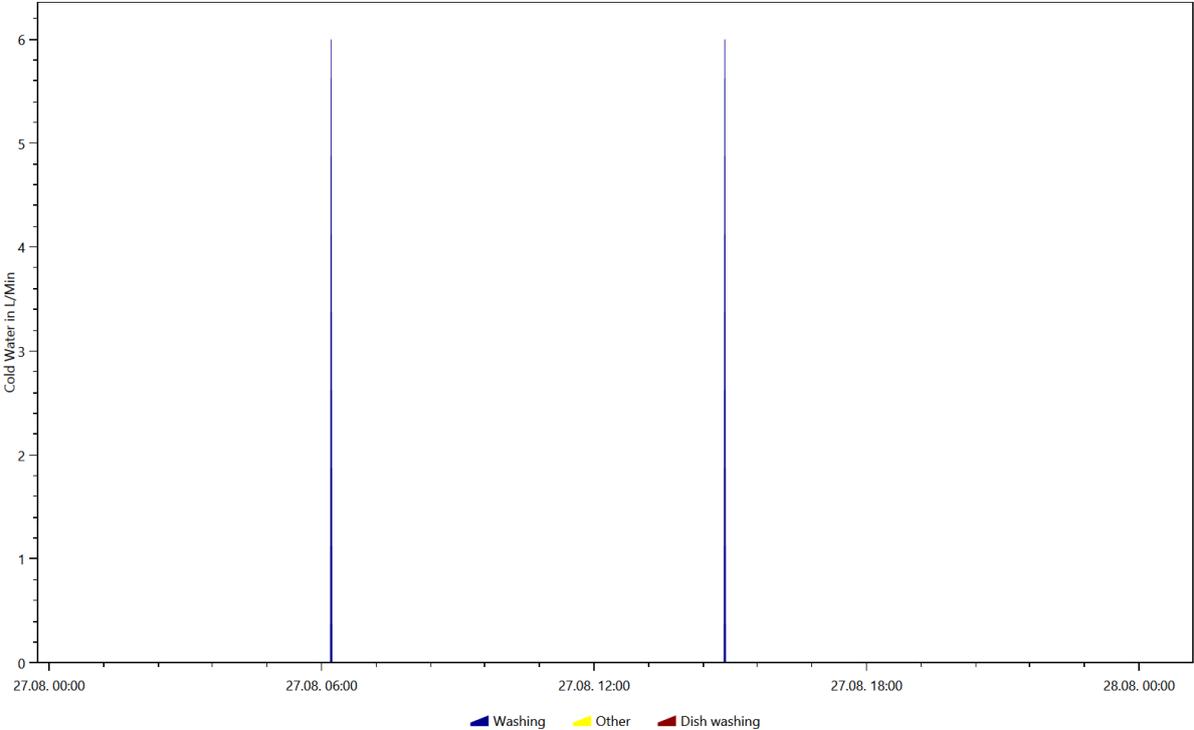
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.9



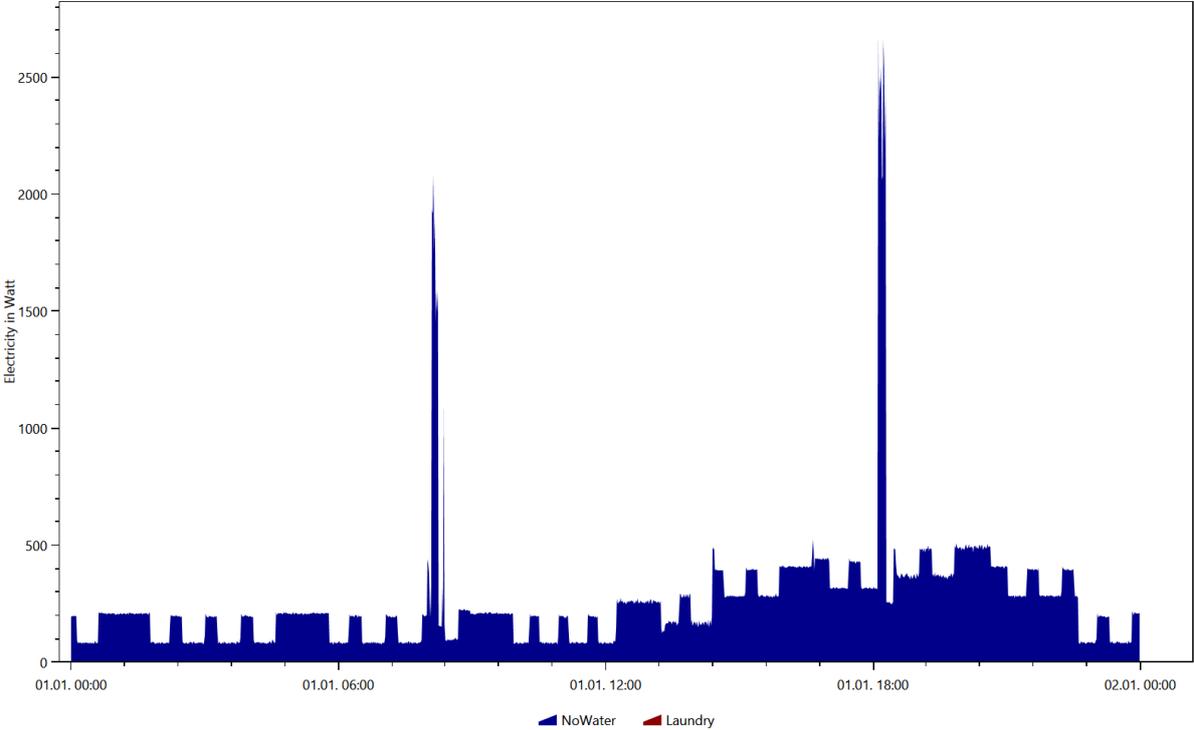
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.12



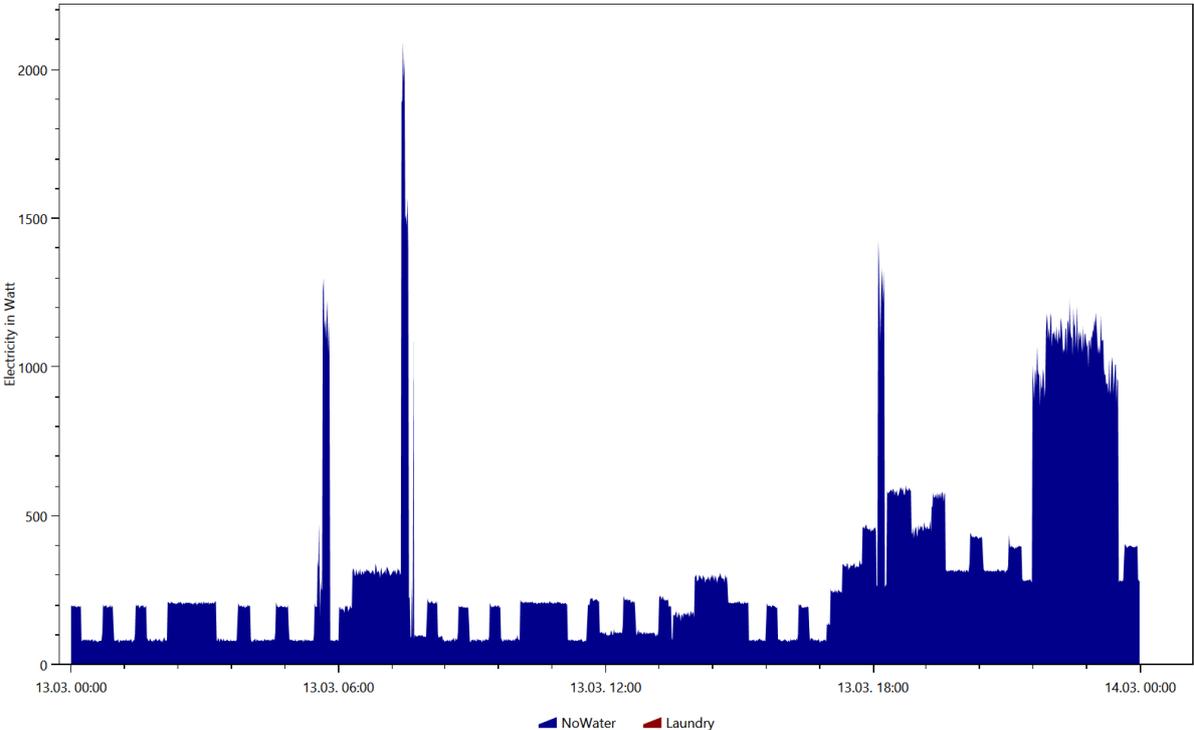
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.27



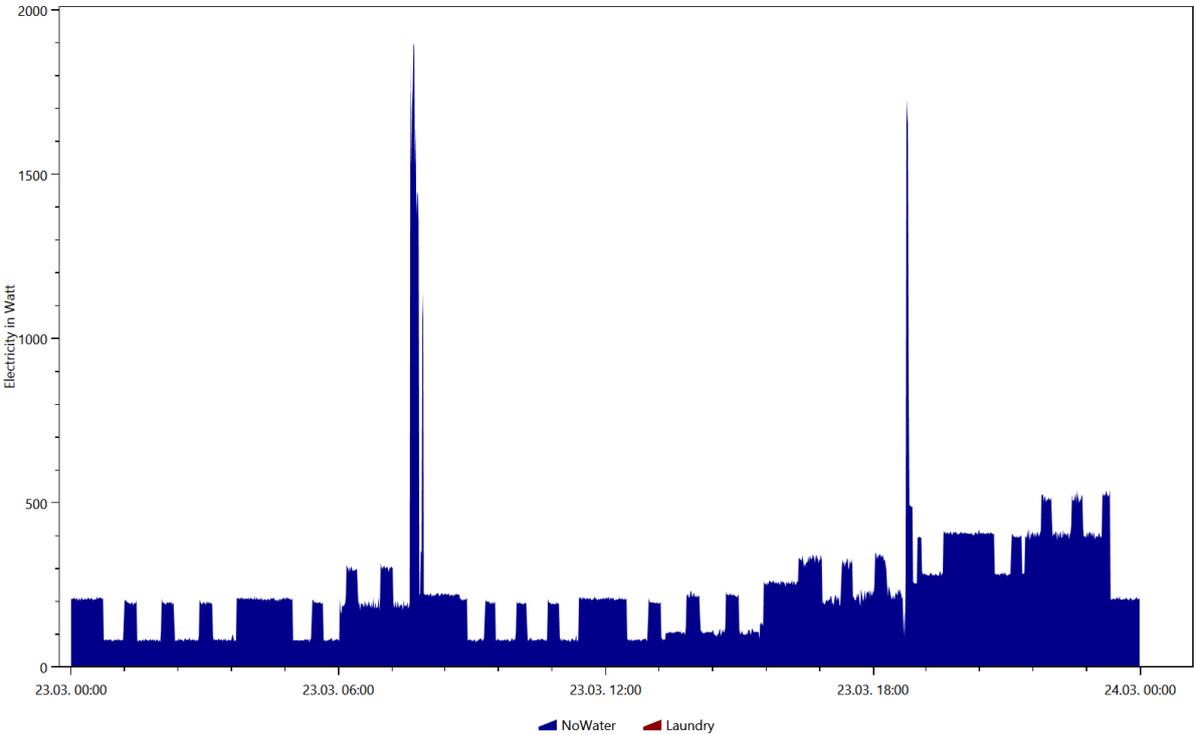
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.1



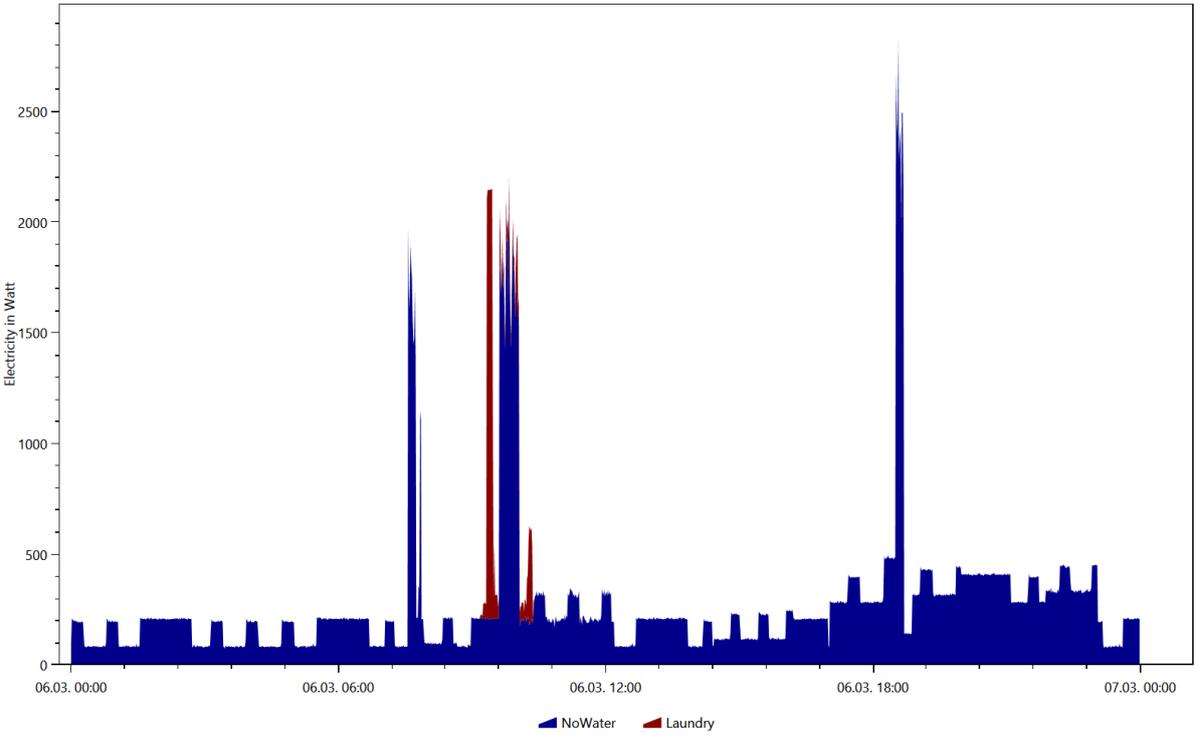
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.13



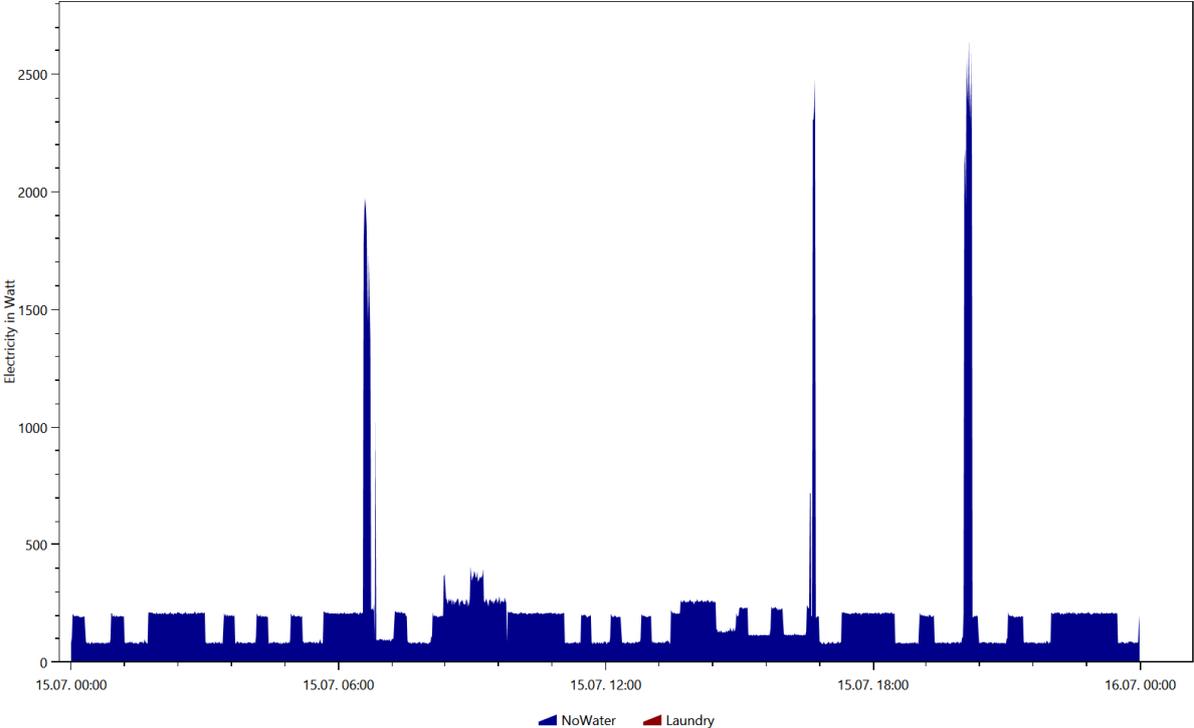
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.23



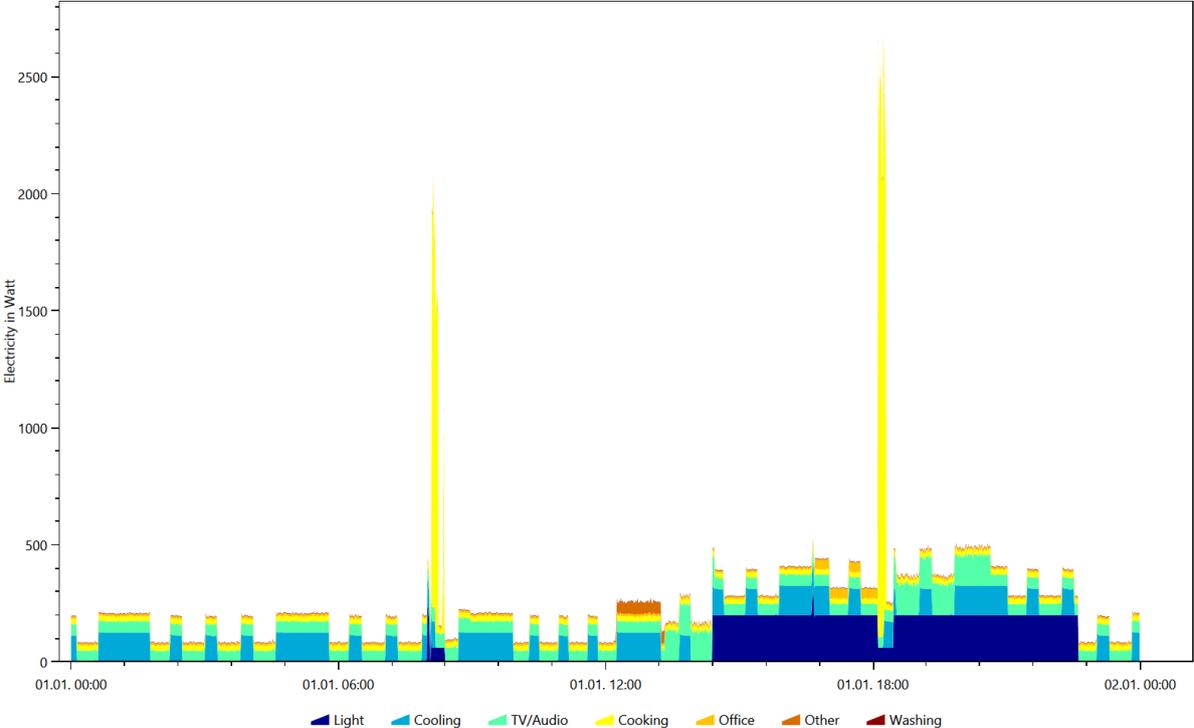
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.6



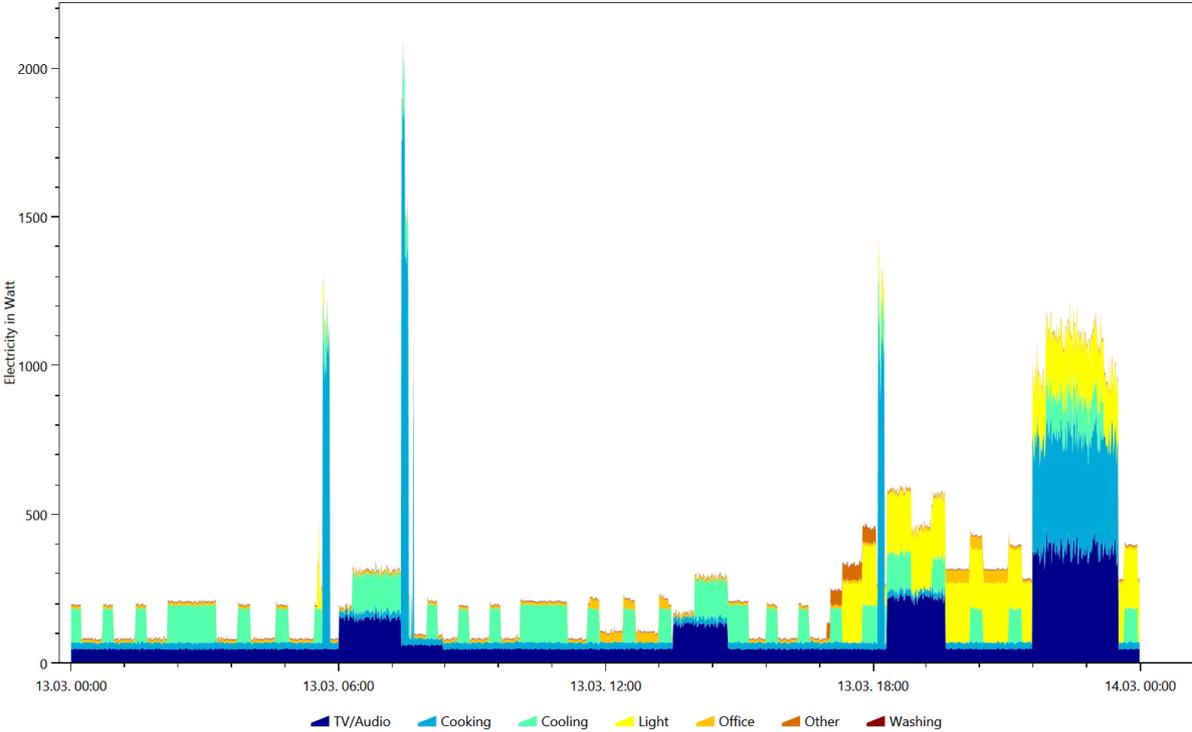
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.15



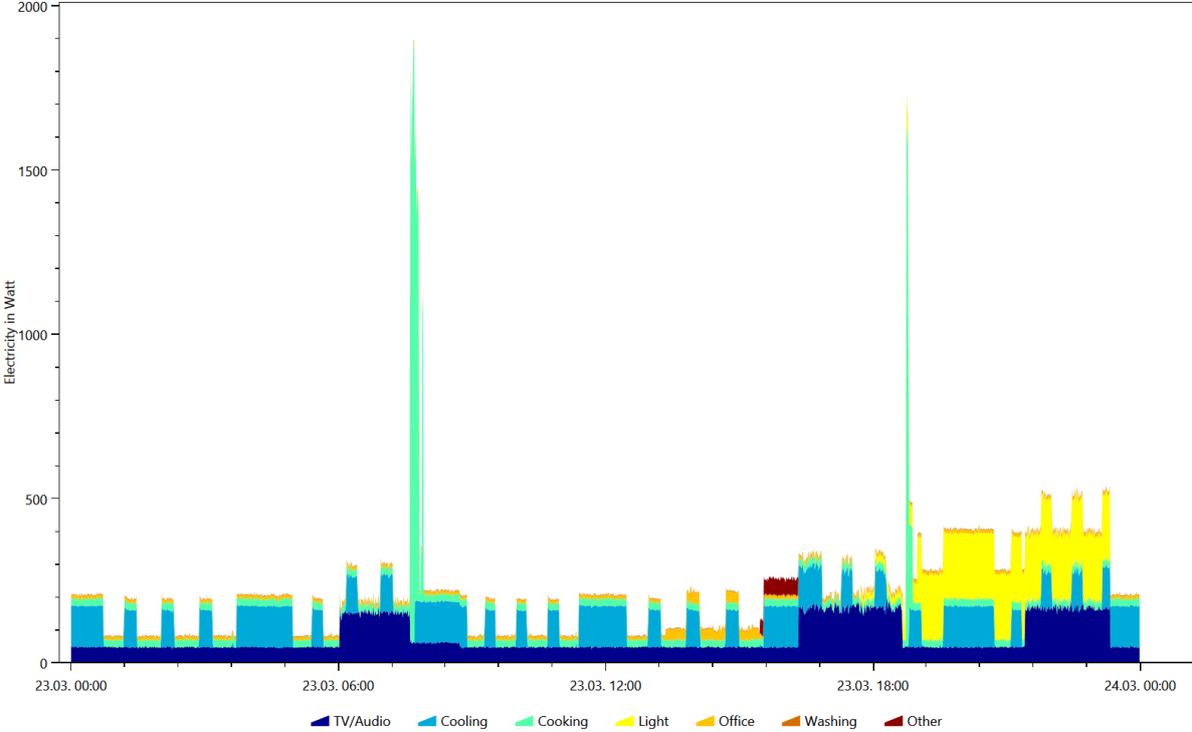
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.1



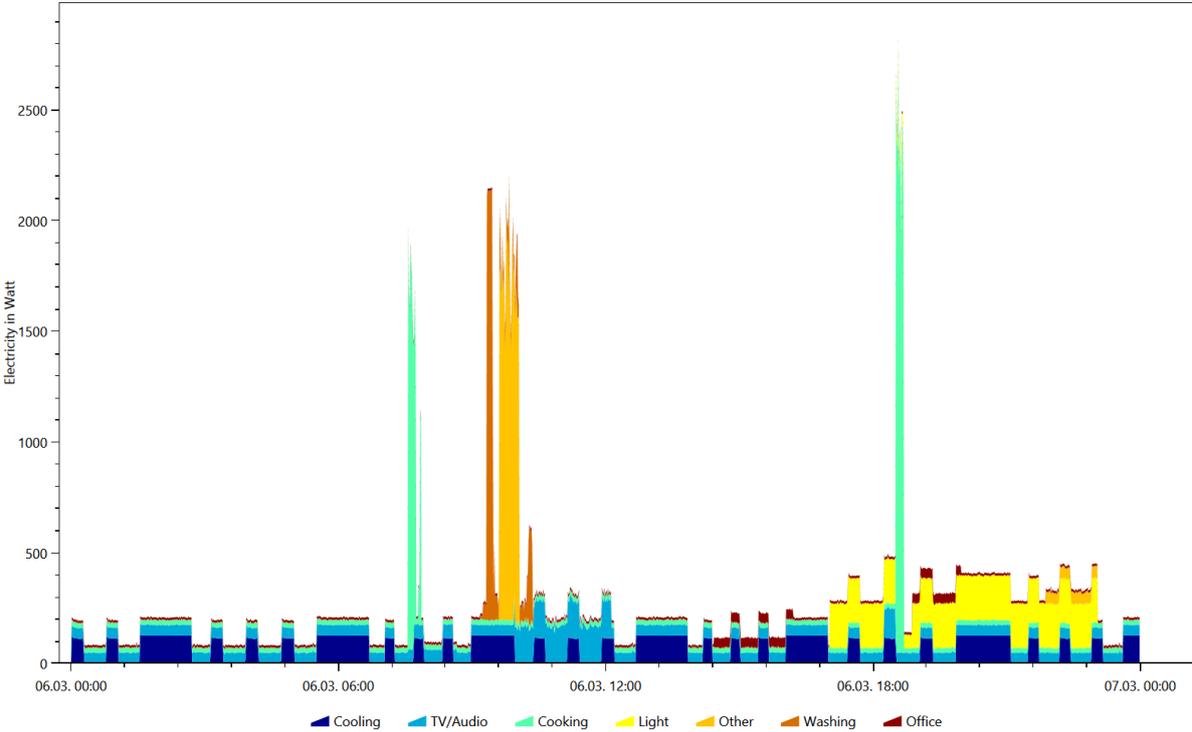
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.13



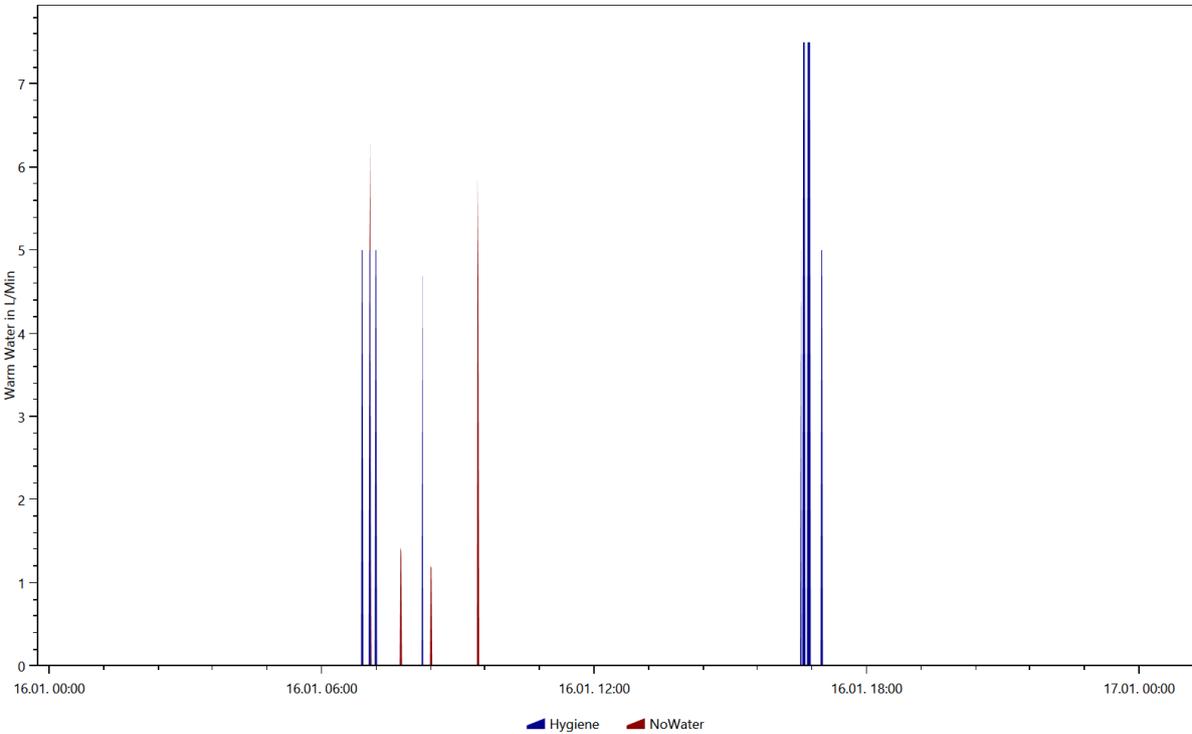
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.23



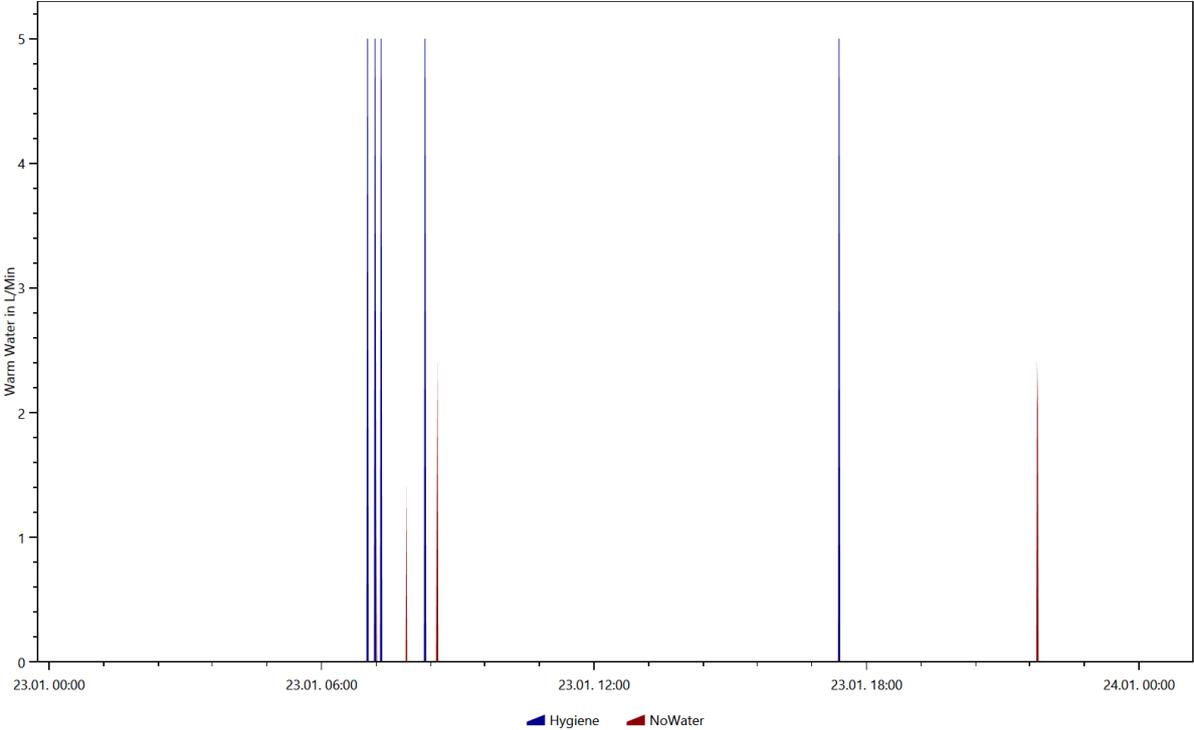
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.6



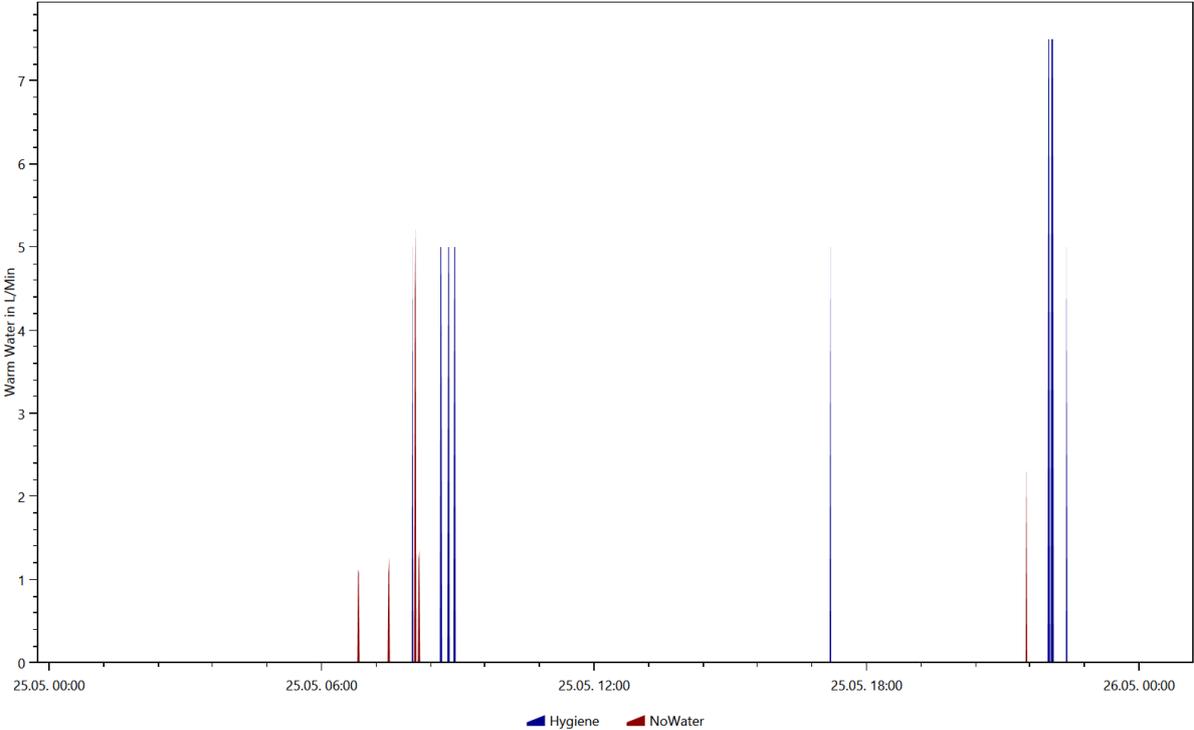
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.16



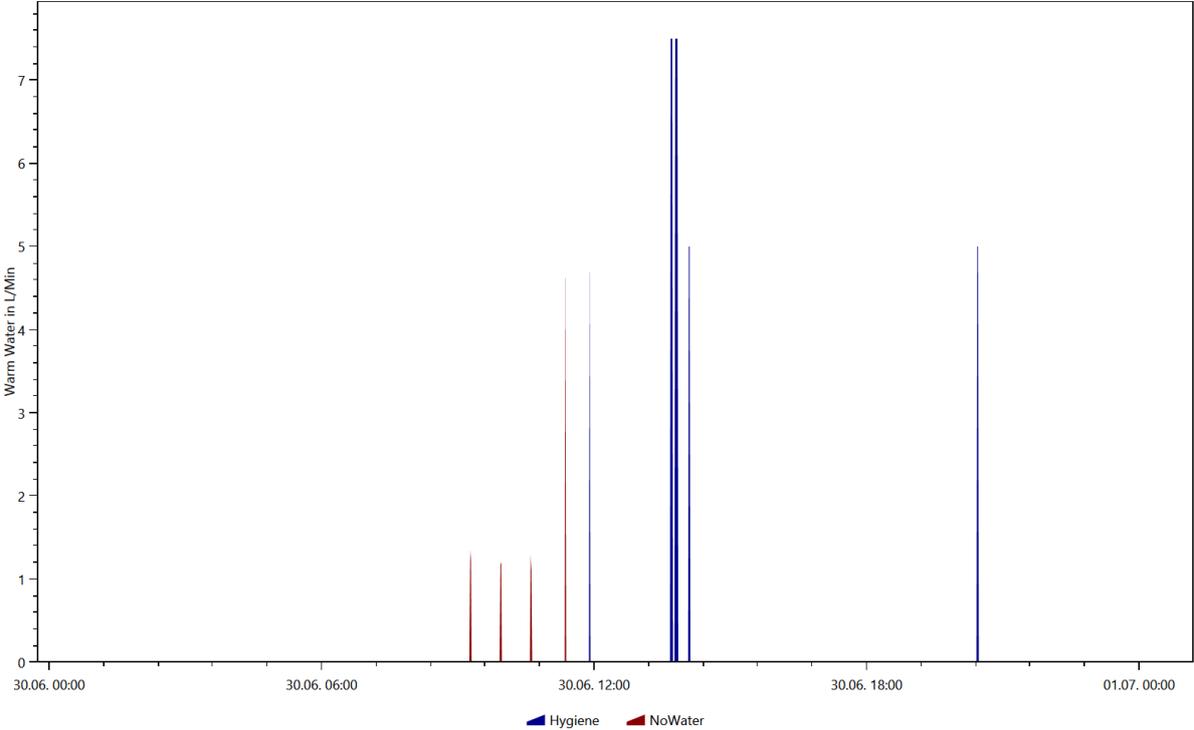
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.23



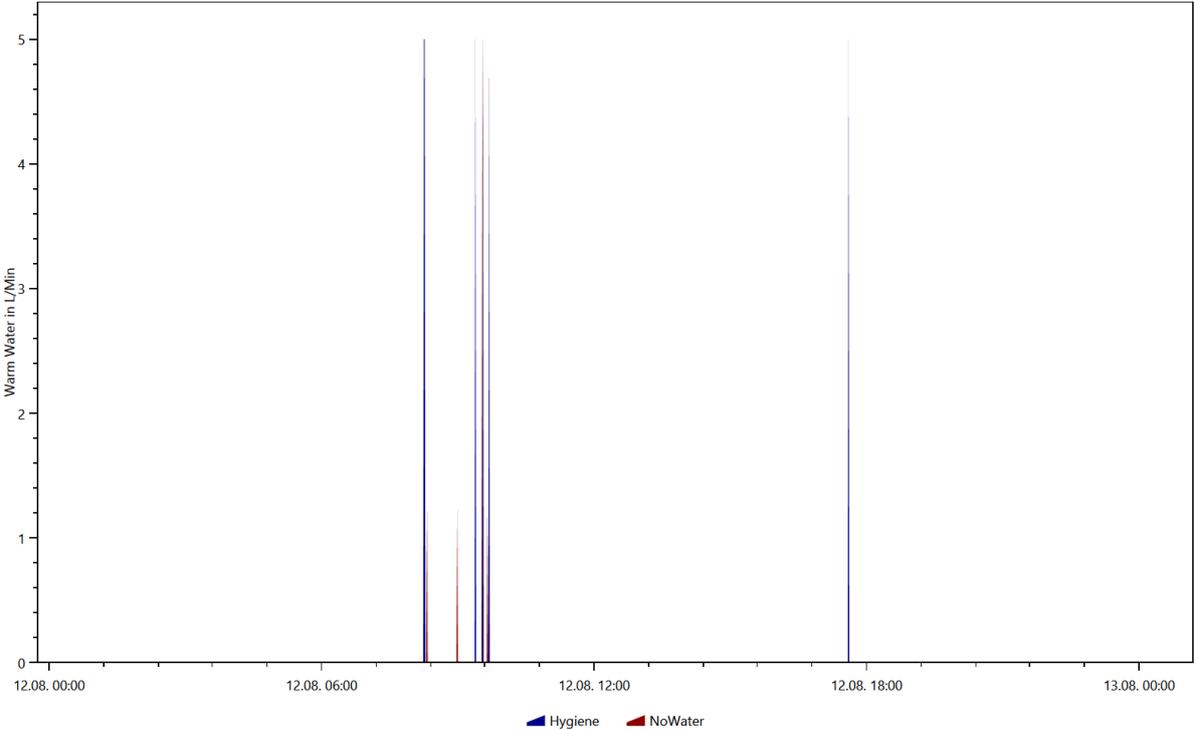
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.25



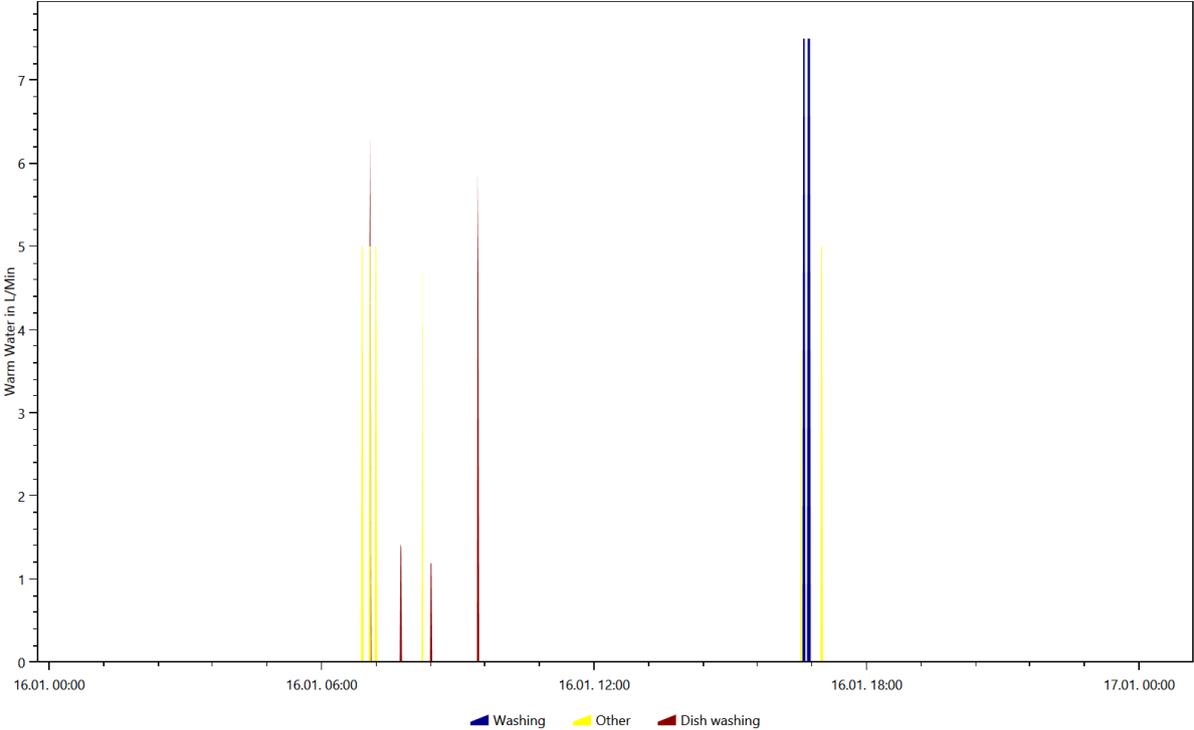
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.30



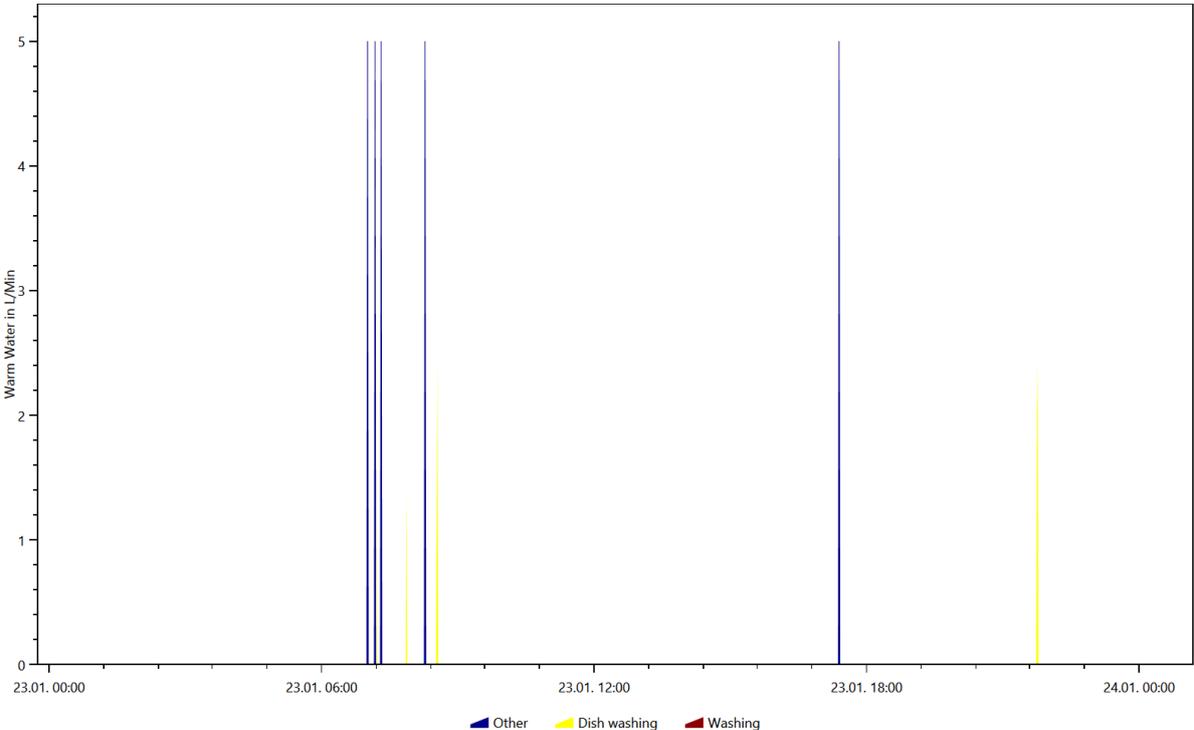
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.12



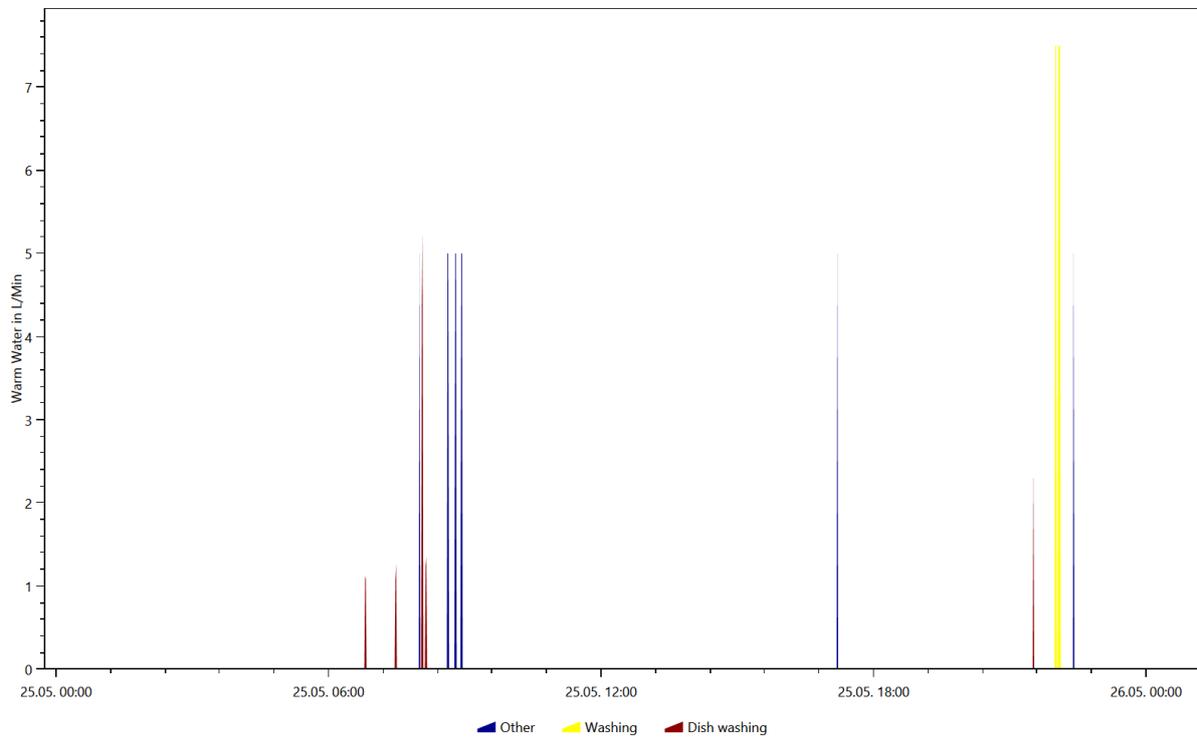
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.16



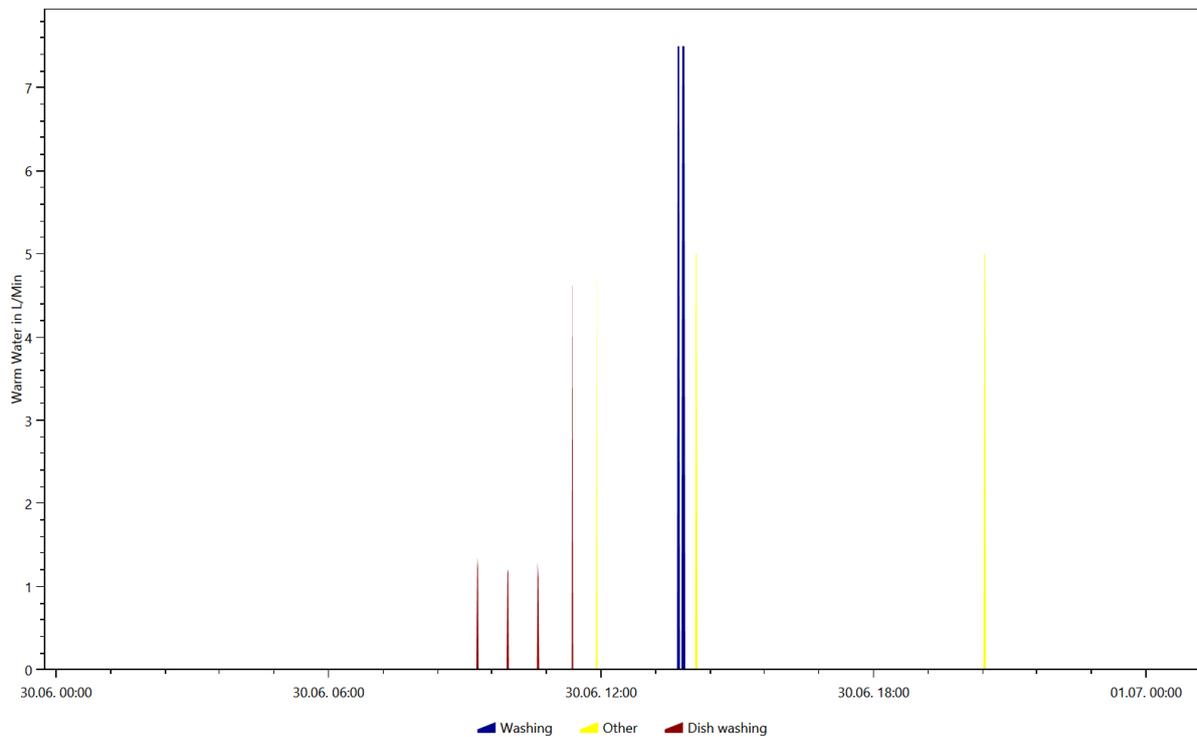
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.23



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.25



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.30

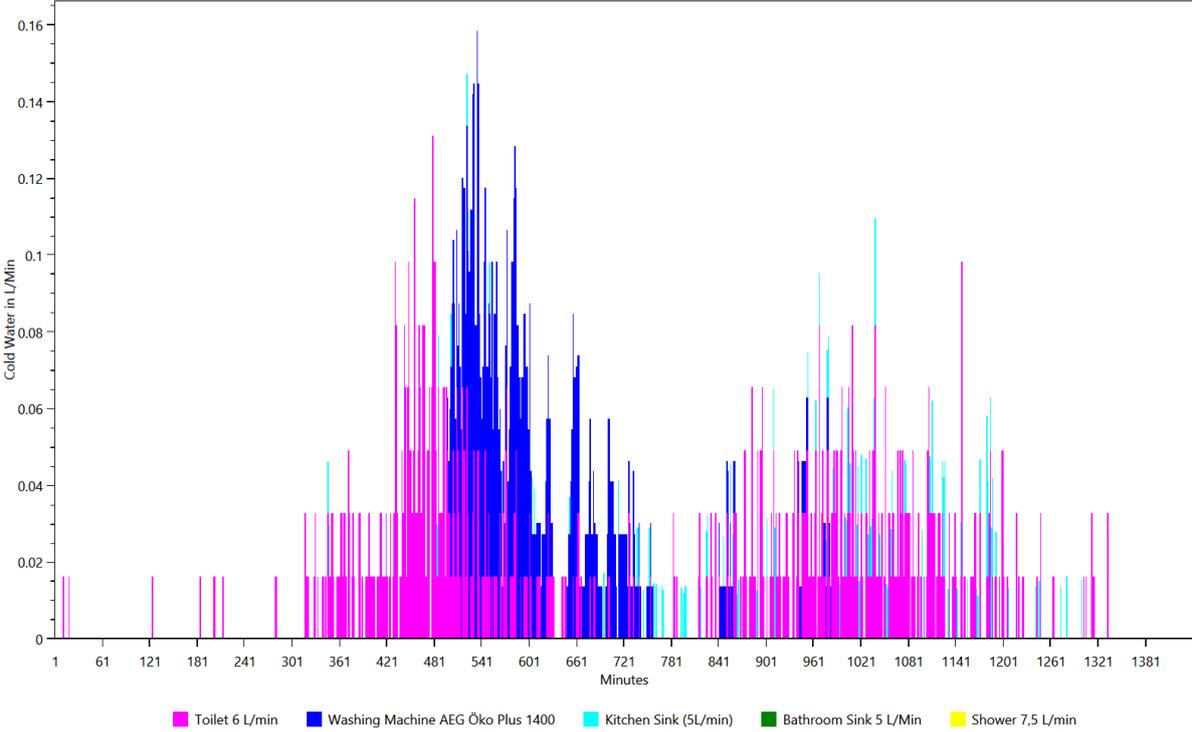


Overview of the time and power of the use per load type per device

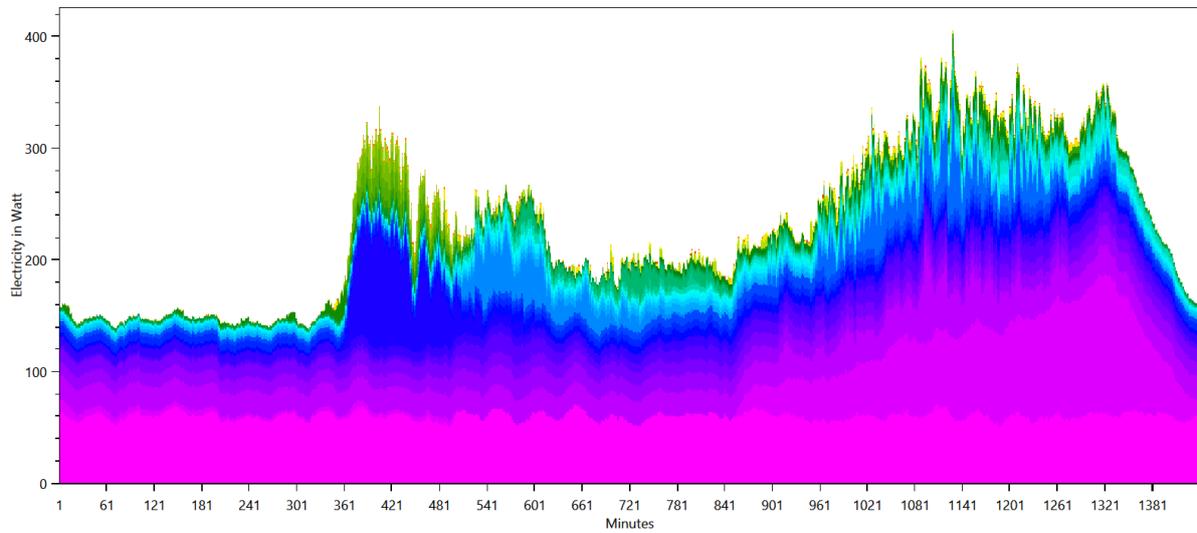
This is made from the files starting with: TimeOfUseEnergyProfiles

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

Cold Water

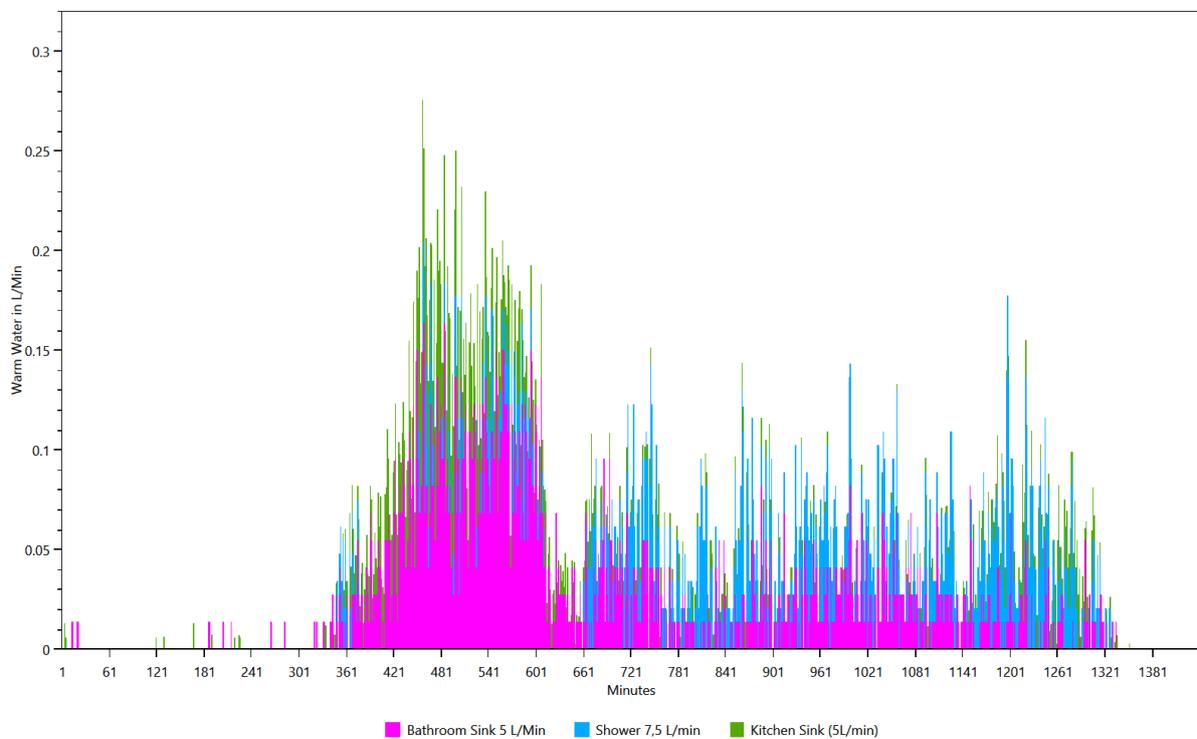


Electricity



- Siemens Fridge from 1987 (unknown type)
- Living Room Light (200W)
- Microwave / Panasonic NN-V 359 W Inverter
- Beamer / Acer H7531D
- Yamaha RX-V667
- TV / Phillips 32PFL7605H
- Panasonic Hifi System (unknown type)
- Coffee Machine / Braun Impression KF 600
- Phillips 32-9615
- Router O2 Box 6431
- Laptop Siemens Amilio from 2005
- Miele H 5241 B
- Washing Machine AEG Öko Plus 1400
- Hifi System / Sharp XL-HF300PH
- SAT Receiver / Kathrein UFS913
- Home Cinema System / Samsung HT-D5550
- CD/DVD Player / Philips DVDR 725 H
- Bedroom Light (200W)
- Kitchen professional Hot Stone
- Single Stove Plate
- Canister vacuum cleaner / Siemens VS 06 G 1831
- Electric Tooth Brush / Phillips HX9332
- Kitchen radio / AEG KRC 4323 CD
- Digitalpiano / Kawai CN-23
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv
- Kitchen Light (60W)
- Juicer / Moulinex Vitalfruit
- Egg Cooker / Russell Hobbs 14048-56 Stylo
- Toaster / Bosch TAT8SL1
- Electric Kettle / Phillips Essential HD 4685/90 Schwarz
- Bathroom Mirror Light 100W (Conventional)
- Miele DA 249-2
- Electric Kettle / Petra WK288 1.5L
- Children Room Light Device (20W)
- Electric Razor / Phillips PT860/16 Razor PowerTouch Plus
- Food Slicer / DOMO Schneidemaschine DOS215
- Bathroom Light (20W)
- Nespresso Coffee Machine, Single Cup
- Energy Saving Lamp / EL-REF 11 E27

Warm Water



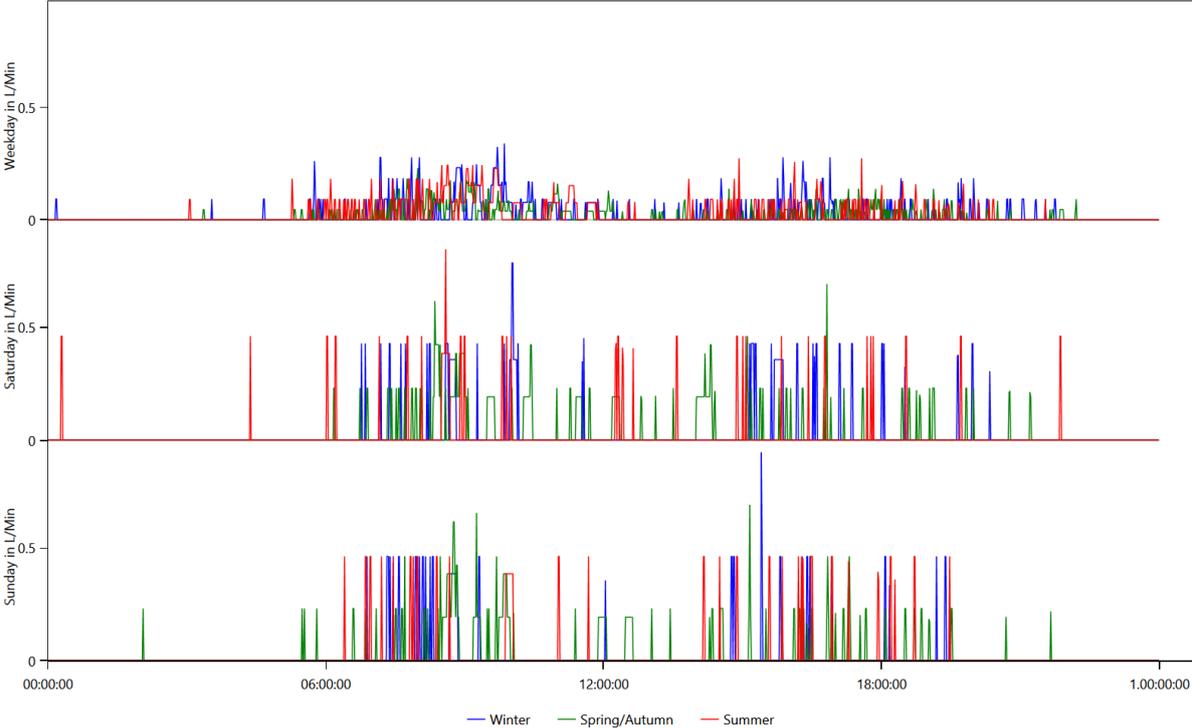
- Bathroom Sink 5 L/Min
- Shower 7,5 L/min
- Kitchen Sink (5L/min)

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

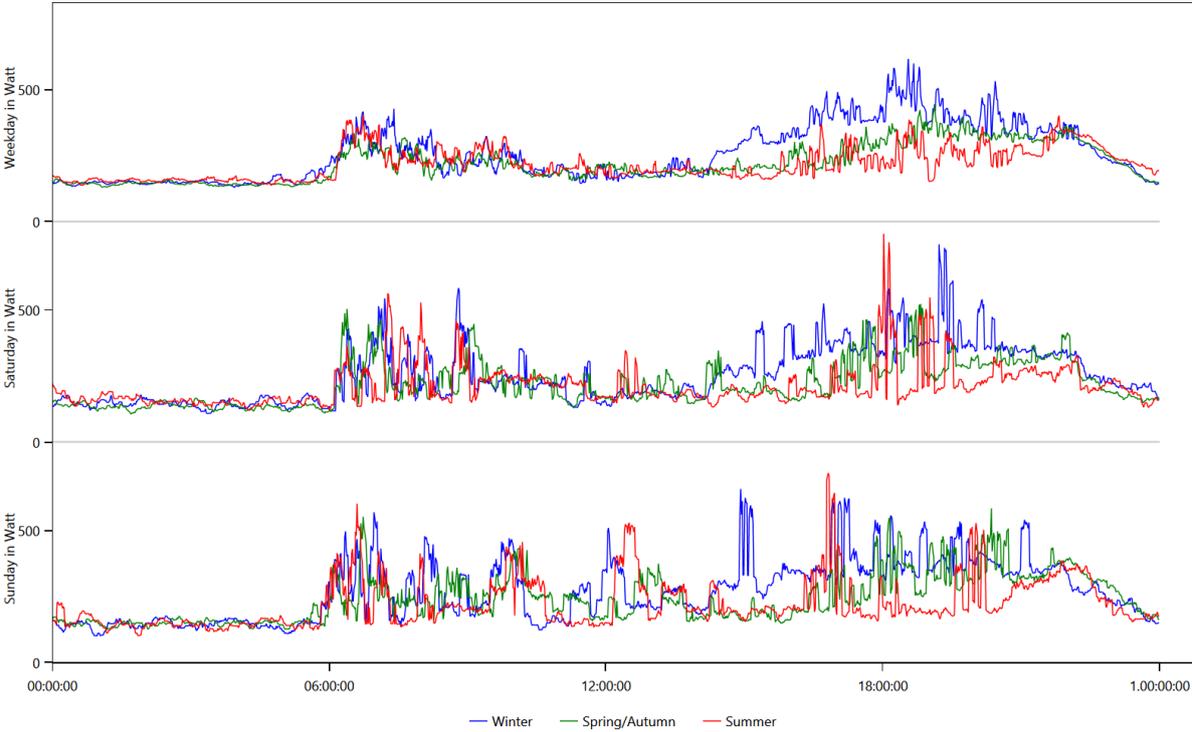
This is made from the files starting with: WeekdayProfiles

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

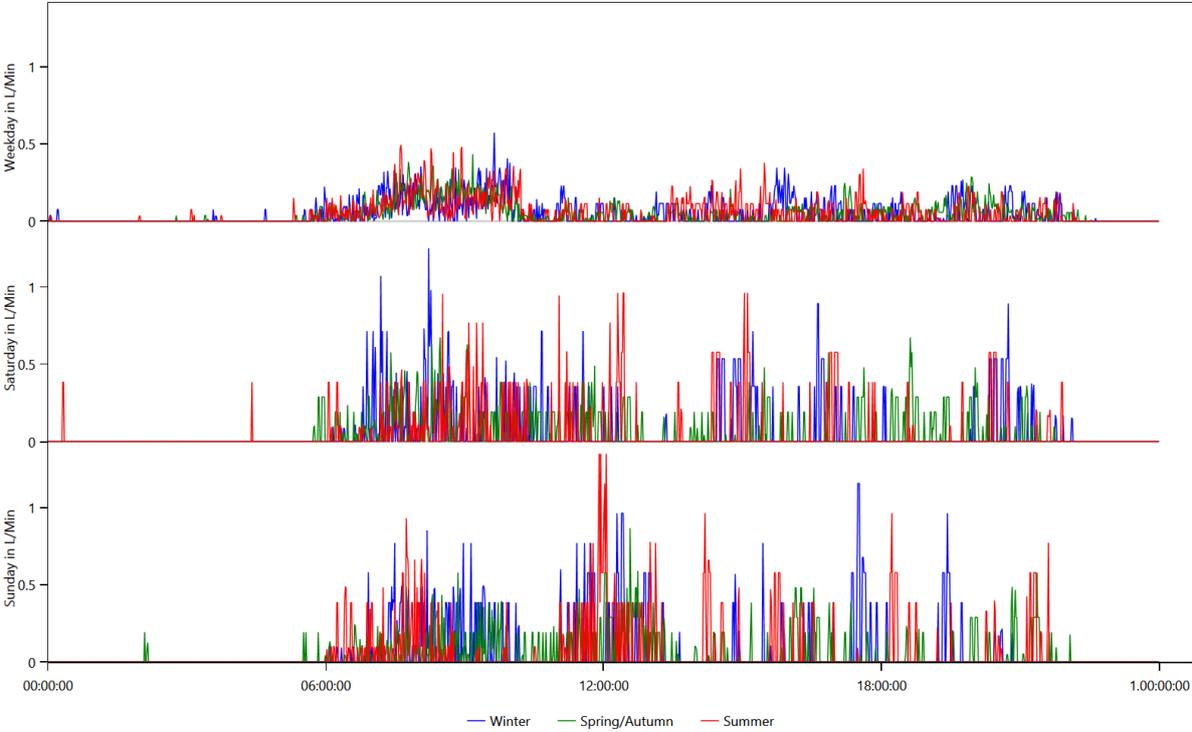
Cold Water



Electricity



Warm Water

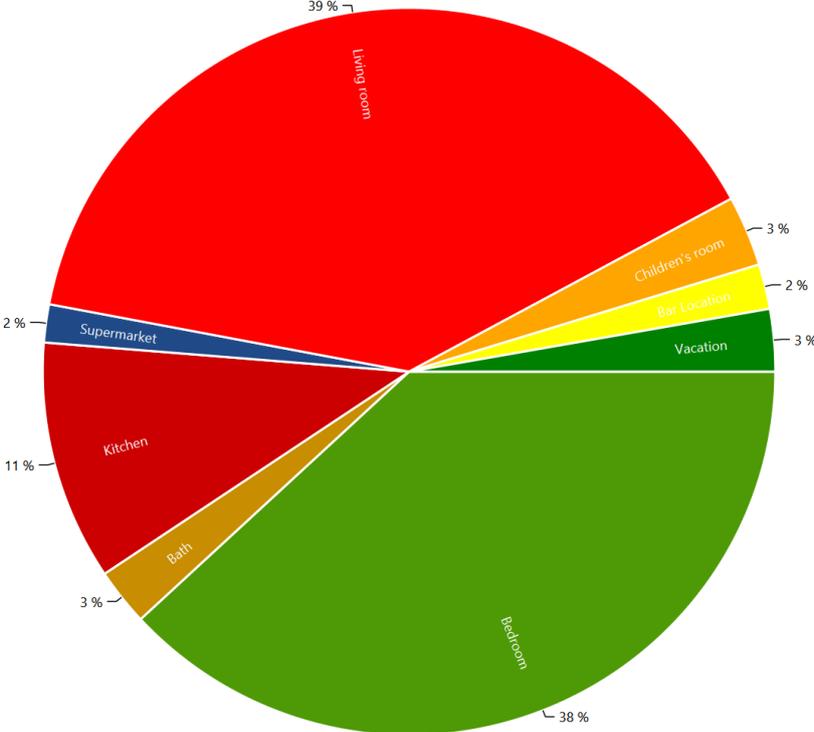


Location Distribution per Person

This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR28 Patrick (24 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

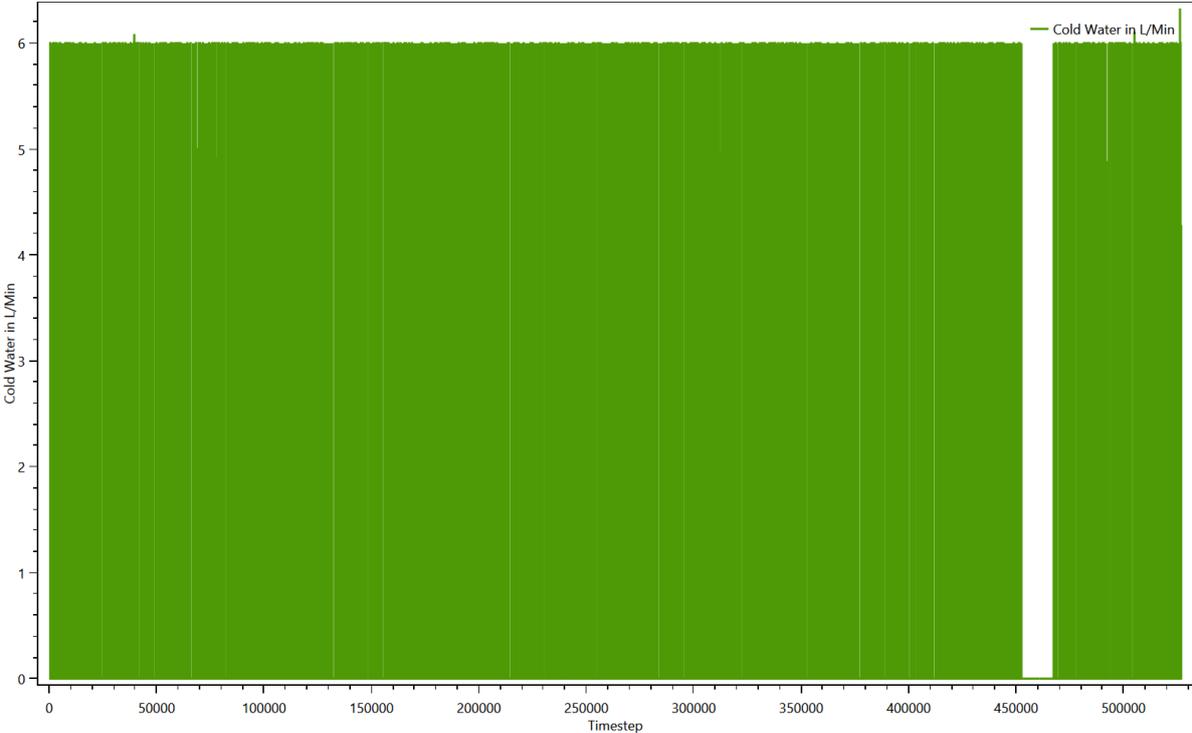
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR28 Patrick (24/Male);sleep bed 08 (08 h);sleep;False;
480;01.01.2016 08:00;CHR28 Patrick (24/Male);go to the toilet;hygiene;False;
486;01.01.2016 08:06;CHR28 Patrick (24/Male);eat breakfast (1 h);cooking;False;
542;01.01.2016 09:02;CHR28 Patrick (24/Male);go shopping for food in the supermarket (1.5
h);shopping;False;
638;01.01.2016 10:38;CHR28 Patrick (24/Male);wash 1 dishes by hand;cleaning;False;
669;01.01.2016 11:09;CHR28 Patrick (24/Male);take a nap;sleep;False;
724;01.01.2016 12:04;CHR28 Patrick (24/Male);rest for 10 min;sleep;False;
734;01.01.2016 12:14;CHR28 Patrick (24/Male);play digital piano (1 h);Offline Entertainment;False;
800;01.01.2016 13:20;CHR28 Patrick (24/Male);watch TV (1 h);Passive Entertainment (TV etc.);False;
867;01.01.2016 14:27;CHR28 Patrick (24/Male);read a book on the couch only 9:00 to 22:00;Offline
Entertainment;False;
998;01.01.2016 16:38;CHR28 Patrick (24/Male);go to the toilet;hygiene;False;
1002;01.01.2016 16:42;CHR28 Patrick (24/Male);use the laptop (1.5 h);Active Entertainment (Computer,
Internet etc);False;
1087;01.01.2016 18:07;CHR28 Patrick (24/Male);heat up leftovers;cooking;False;
1108;01.01.2016 18:28;CHR28 Patrick (24/Male);watch sports on TV with SAT Reciever (2 h);Passive
Entertainment (TV etc.);False;
1239;01.01.2016 20:39;CHR28 Patrick (24/Male);read a book on the couch all the time;Offline
Entertainment;False;
1357;01.01.2016 22:37;CHR28 Patrick (24/Male);sleep bed 08 (08 h);sleep;False;
1820;02.01.2016 06:20;CHR28 Patrick (24/Male);eat breakfast (1 h);cooking;False;
1873;02.01.2016 07:13;CHR28 Patrick (24/Male);get ready in the morning (men);hygiene;False;
1882;02.01.2016 07:22;CHR28 Patrick (24/Male);go to the toilet;hygiene;False;

Sum Profiles

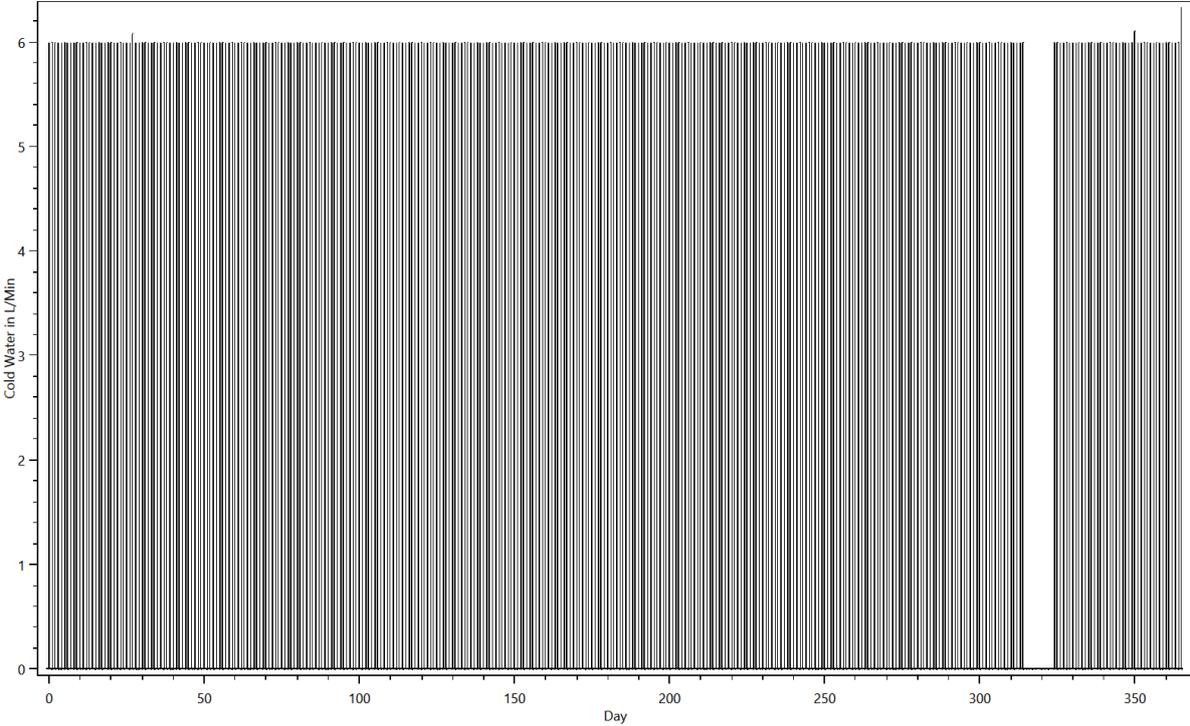
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

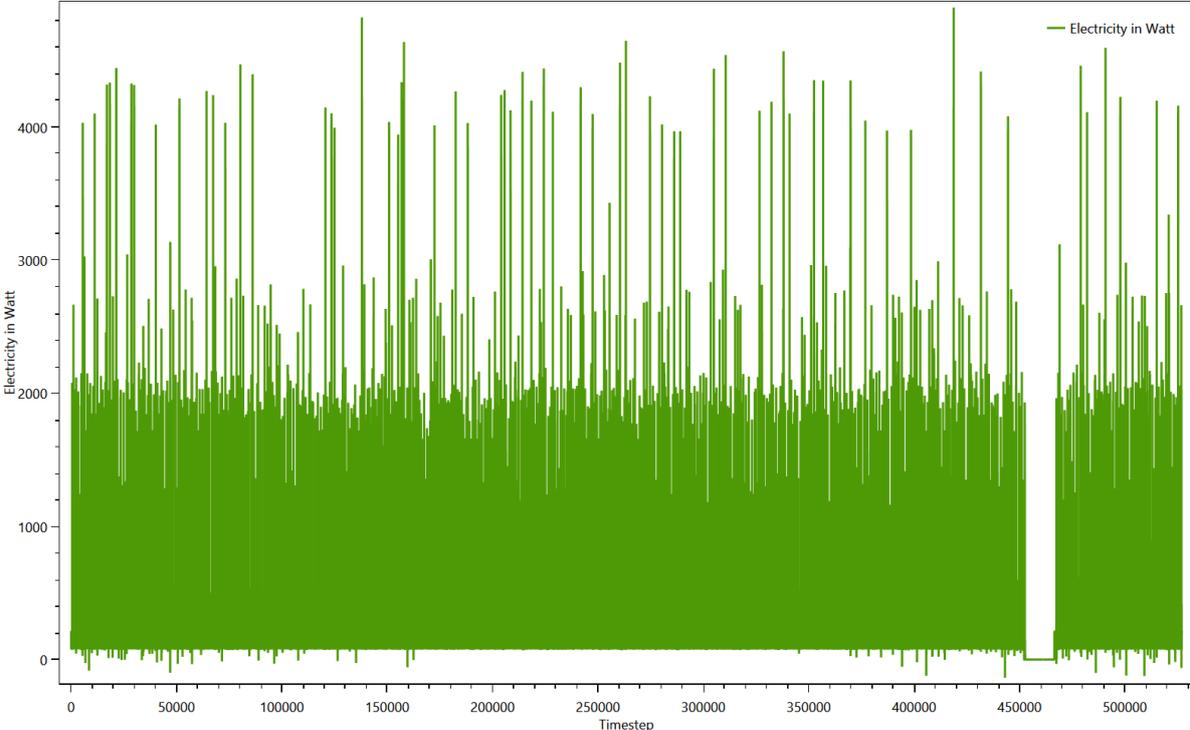
Summed up curve for Cold Water from SumProfiles.Cold Water.png



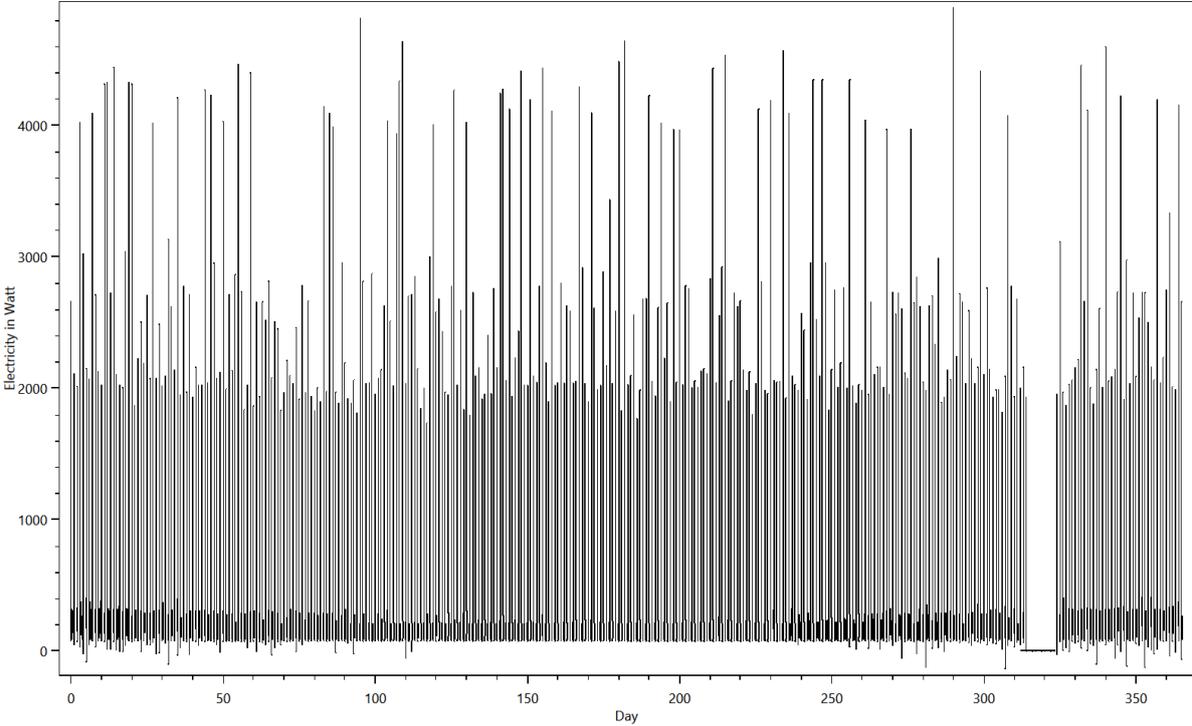
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax..png



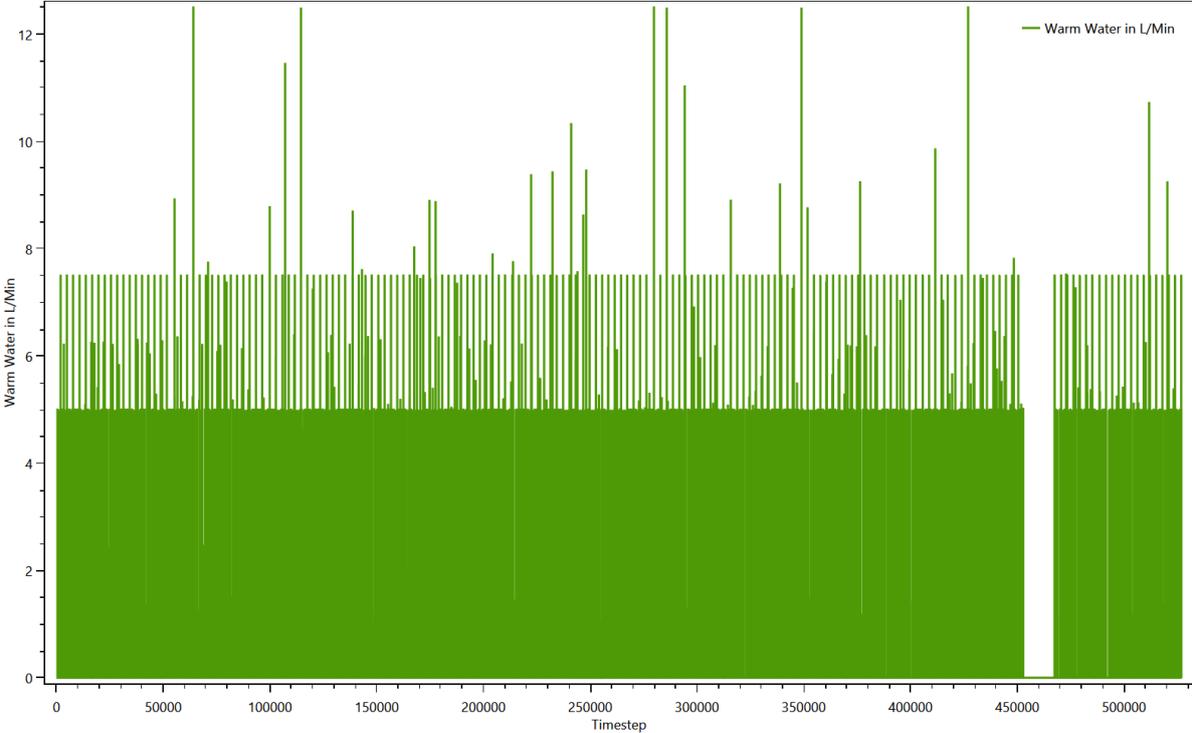
Summed up curve for Electricity from SumProfiles.Electricity.png



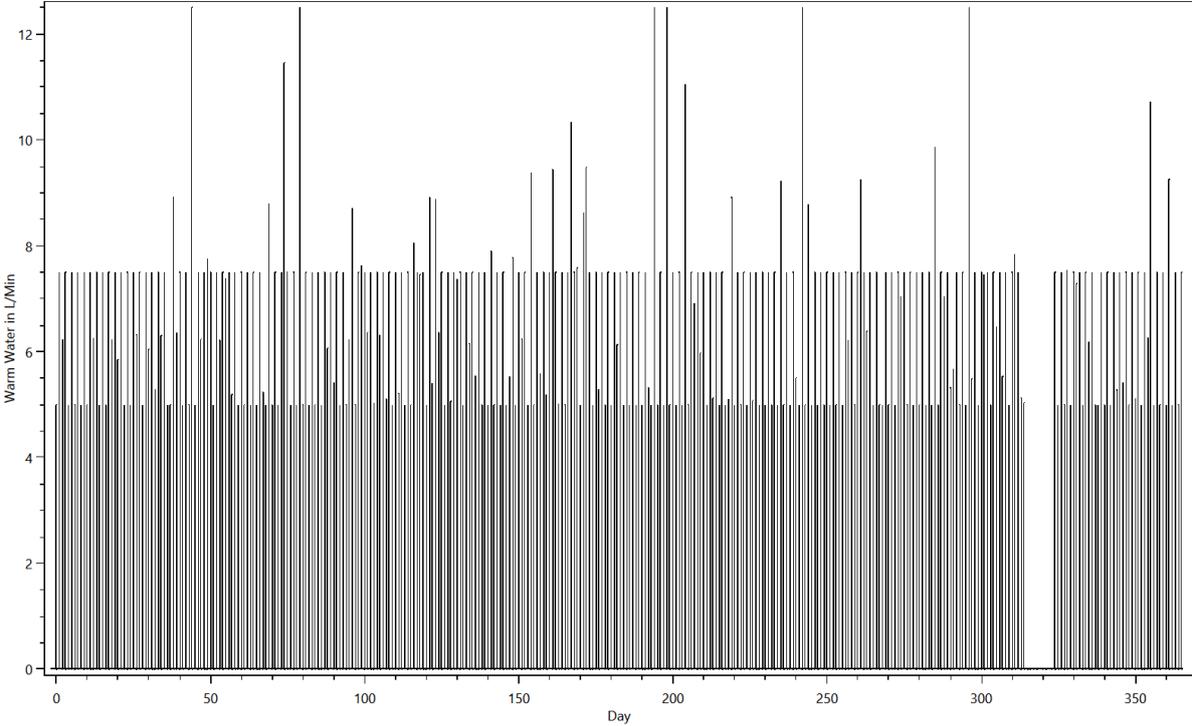
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR28 Single man under 30 years without work 0.txt

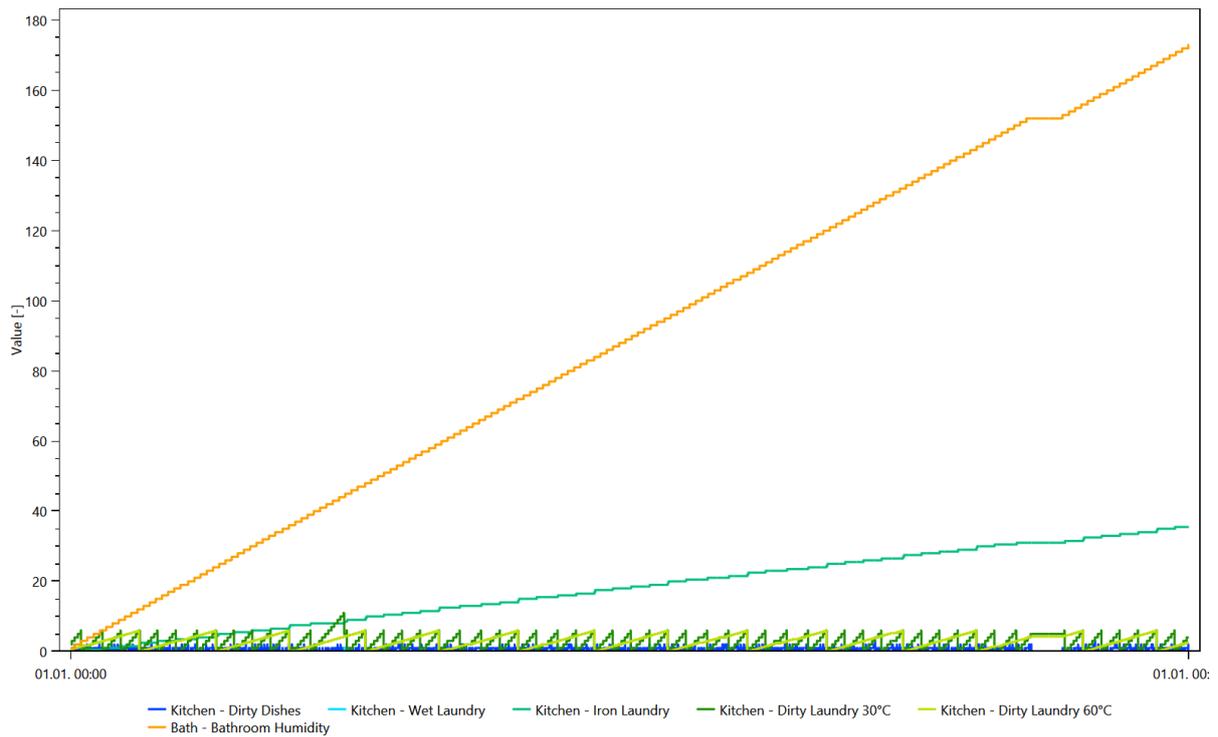
Device;Load Type;Profile;Number of Activations
Bar;None;04 h 0 min 100% [Synthetic];43
Bathroom Light (20W);Electricity;Bath - light [Synthetic for Light Device];310
Bathroom Mirror Light 100W (Conventional);Electricity;Bath - light [Synthetic for Light Device];310
Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];1677
Beamer / Acer H7531D;Electricity;02 h 0 min 100% [Synthetic];27
Beamer / Acer H7531D;Electricity;Standby PC 01 h 0 min 4% [Synthetic];8531
Bed 8;None;08 h 0 min 100% [Synthetic];347
Bedroom Light (200W);Electricity;Bedroom - light [Synthetic for Light Device];246
CD/DVD Player / Philips DVDR 725 H;Electricity;01 h 30 min 100% [Synthetic];169
CD/DVD Player / Philips DVDR 725 H;Electricity;02 h 0 min 100% [Synthetic];123
CD/DVD Player / Philips DVDR 725 H;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8538
Canister vacuum cleaner / Siemens VS 06 G 1831;Electricity;0 h 30 min 100% [Synthetic];26
Chair;None;0 h 10 min 100% [Synthetic];644
Children Room Light Device (20W);Electricity;Children's room - light [Synthetic for Light Device];106
Cleanser;None;01 h 0 min 100% [Synthetic];54
Cloth Drying Rack;None;0 h 20 min 100% [Synthetic];71
Coffee Machine / Braun Impression KF 600;Electricity;0 h 10 min 100% [Synthetic];364
Couch;None;01 h 0 min 100% [Synthetic];359
Couch;None;02 h 0 min 100% [Synthetic];532

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

