

Overview of the results of the household CHR01 Couple both at Work 0

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

Energy Intensity: EnergySaving

Seed 4446

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date: 16.12.2016 09:07:37

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	41338.79	L
Electricity	2623.20	kWh
Warm Water	81940.00	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	112.95	L
Electricity	7.17	kWh
Warm Water	223.88	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	21.66	L/Min
Electricity	28.00	10087.23	Watt
Warm Water	0.00	17.50	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	20669.40	L
Electricity	1311.60	kWh

Warm Water	40970.00	L
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Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	56.47	L
Electricity	3.58	kWh
Warm Water	111.94	L

Persons

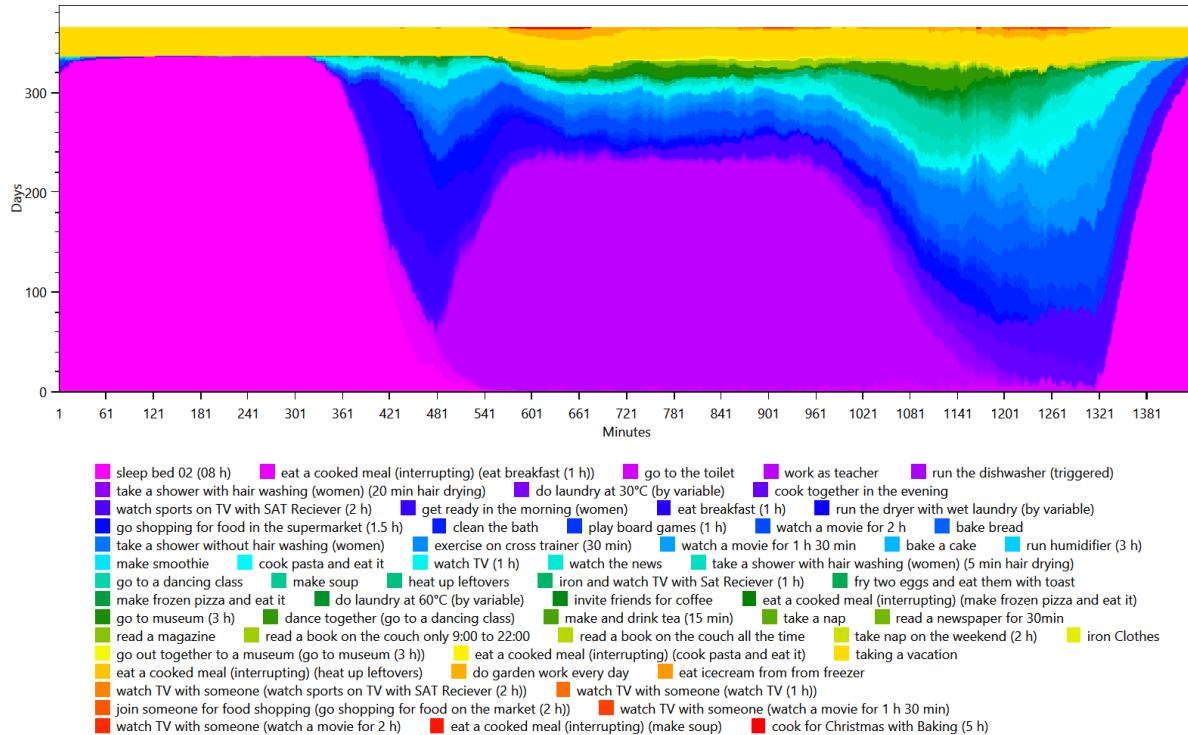
- HHO
 - CHR01 Rubi (23/Female)(23/Female)
 - CHR01 Sami (25/Male)(25/Male)

Activity Frequency Charts

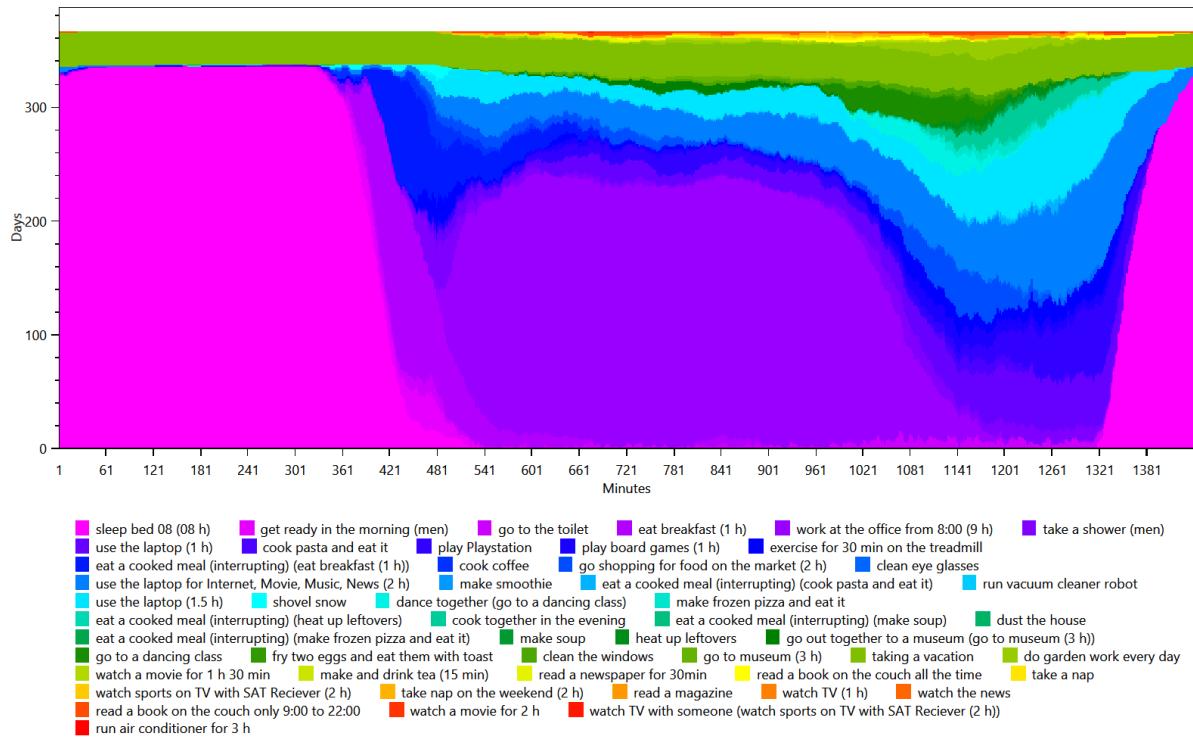
This is made from the files starting with: ActivityFrequenciesPerMinute

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 - CHR01 Rubi (23 Female)



HH0 - CHR01 Sami (25 Male)

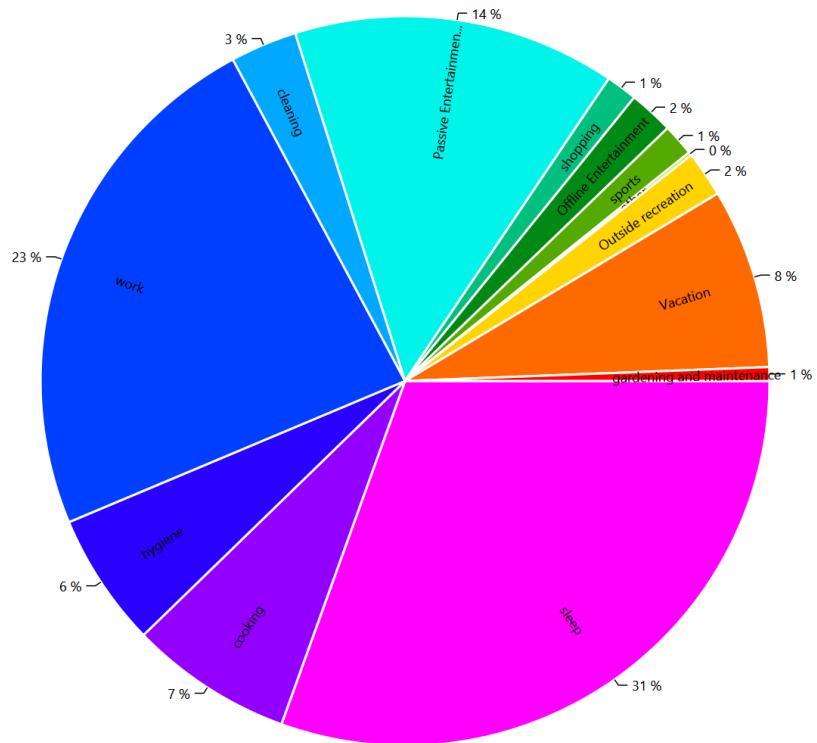


Activity Distribution per Person

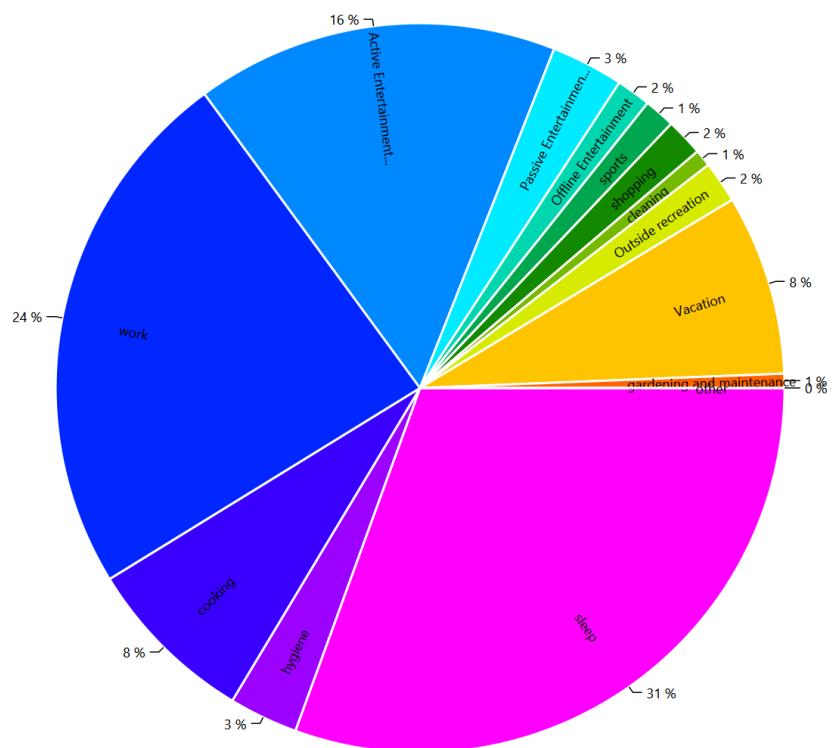
This is made from the files starting with: ActivityPercentage

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

HH0 - CHR01 Rubi (23 Female)



HH0 - CHR01 Sami (25 Male)

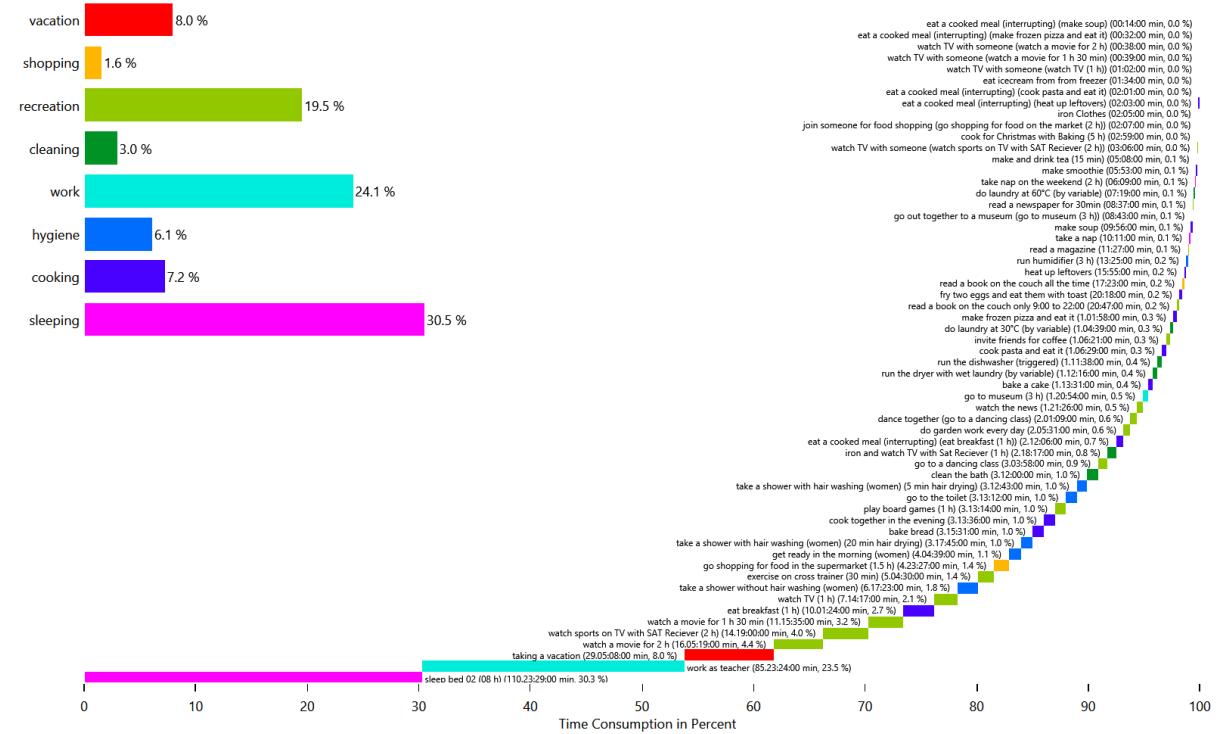


Time Use per Person per Affordance Per Person

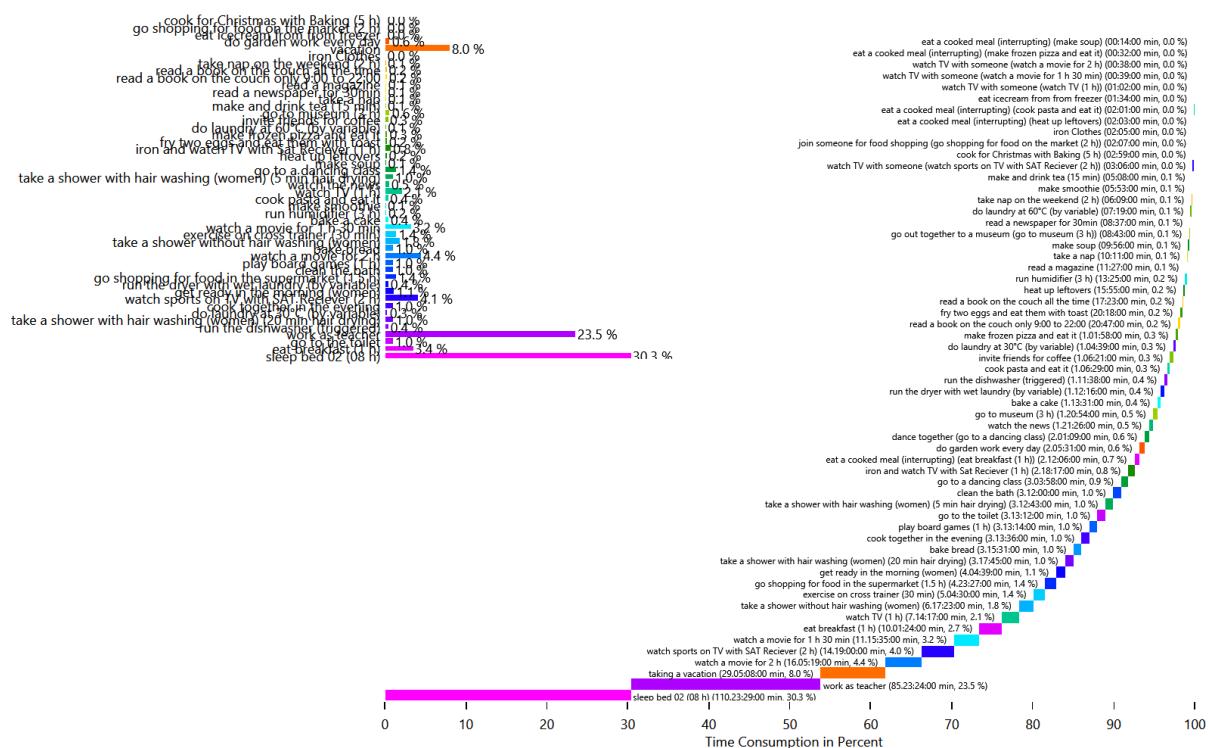
This is made from the files starting with: AffordanceTimeUse

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.

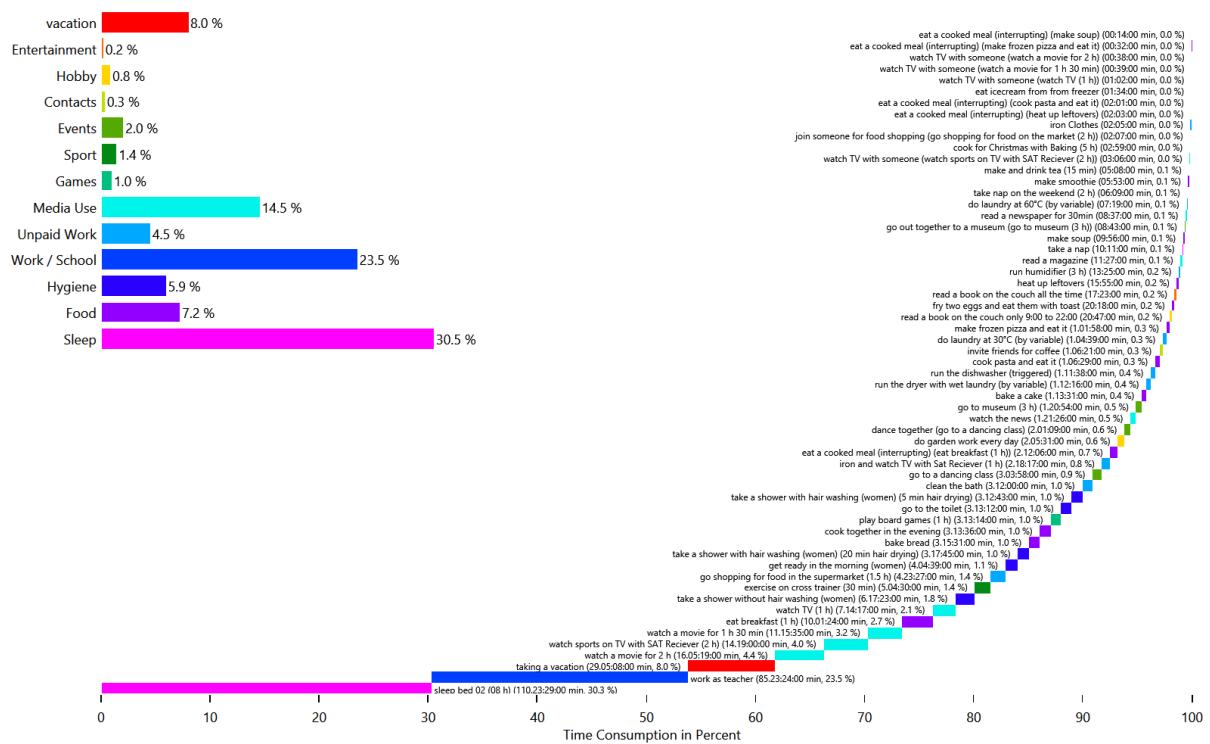
HH0 - CHR01 Rubi (23 Female)



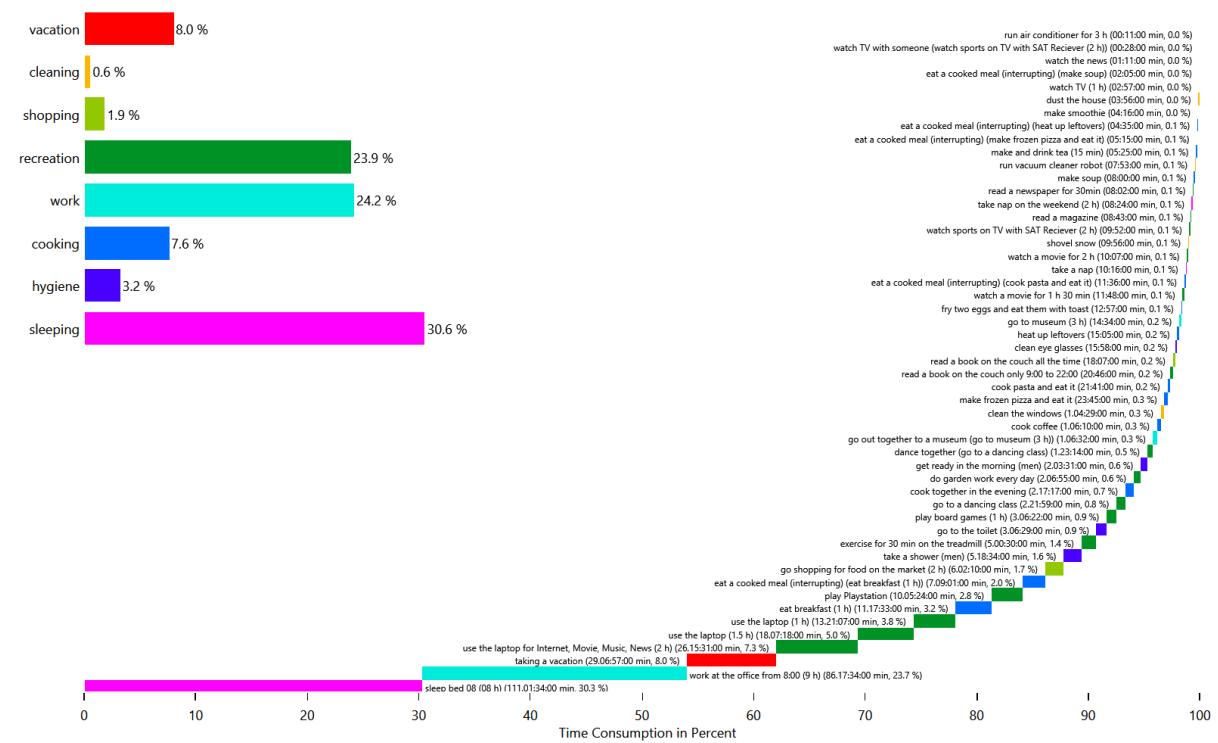
HH0 - CHR01 Rubi (23 Female)



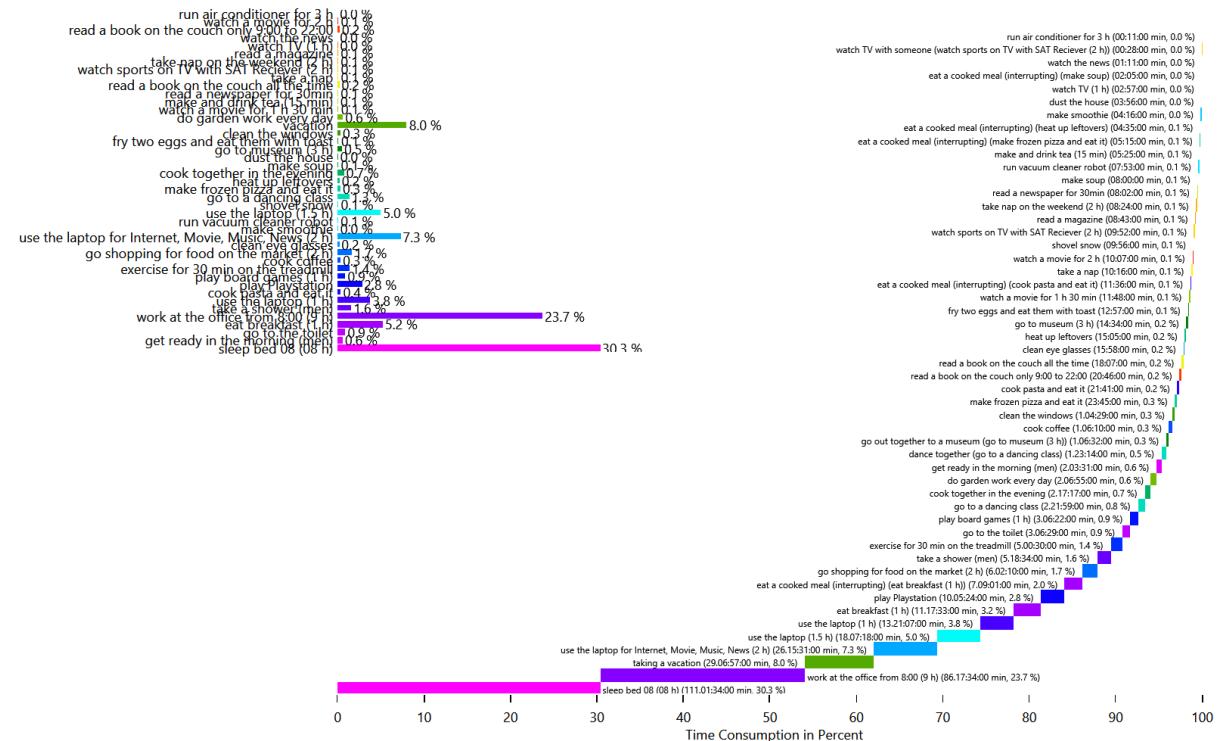
HH0 - CHR01 Rubi (23 Female)



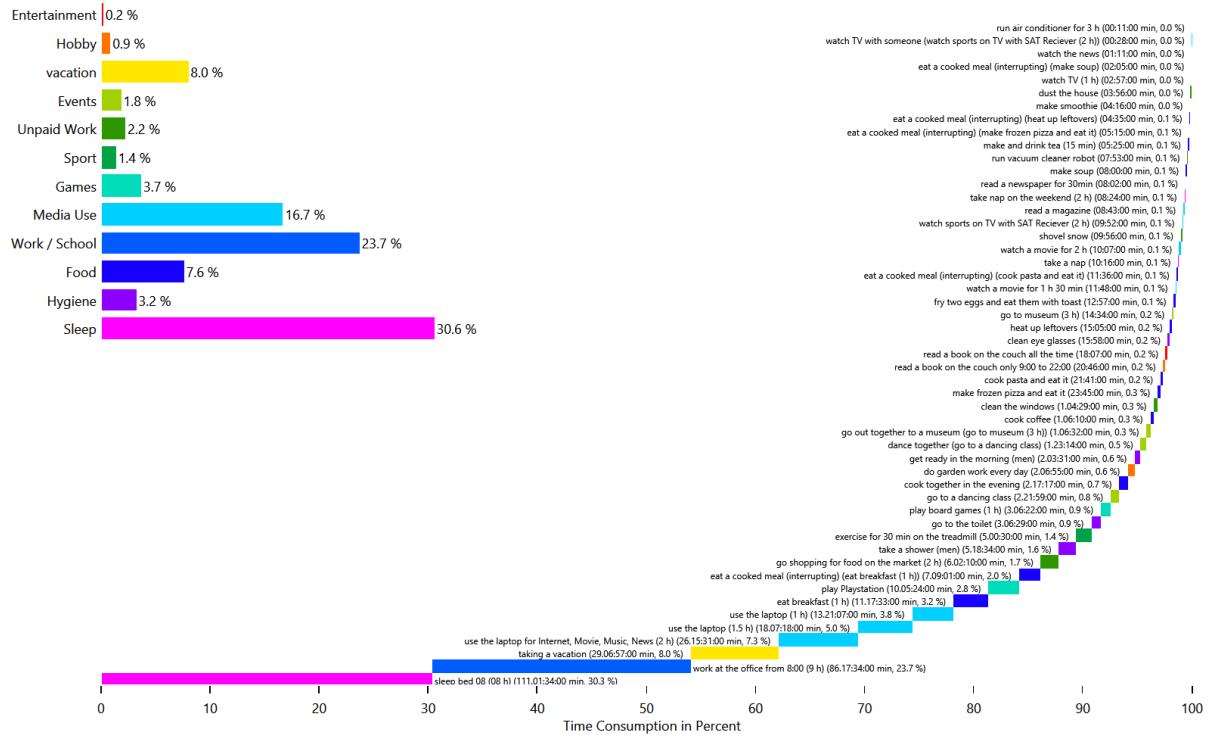
HH0 - CHR01 Sami (25 Male)



HH0 - CHR01 Sami (25 Male)



HH0 - CHR01 Sami (25 Male)

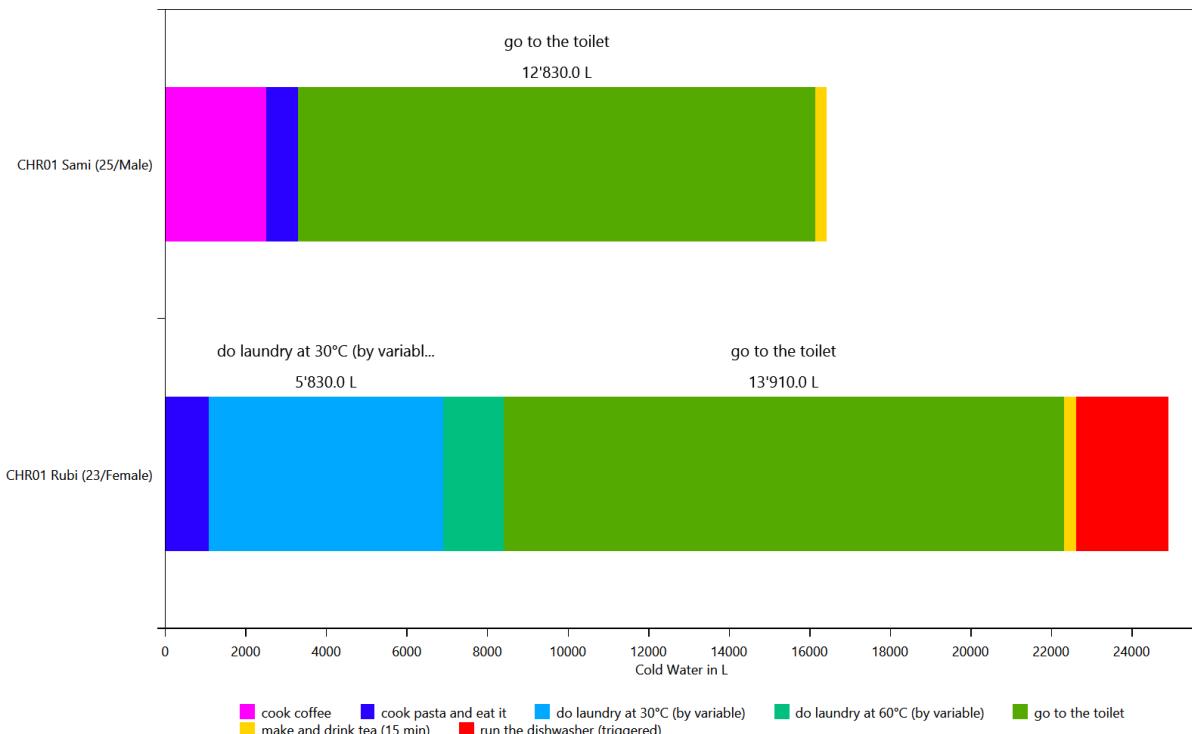


Energy use per person per affordance

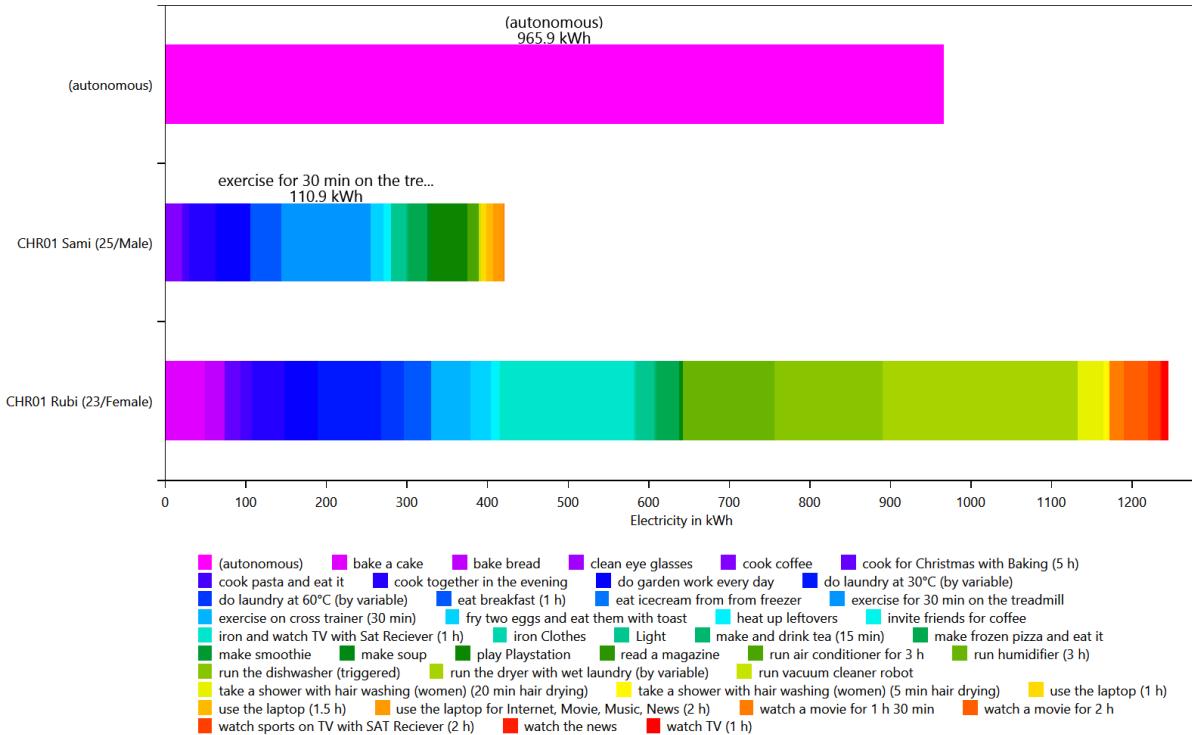
This is made from the files starting with: AffordanceEnergyUsePerPerson

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.

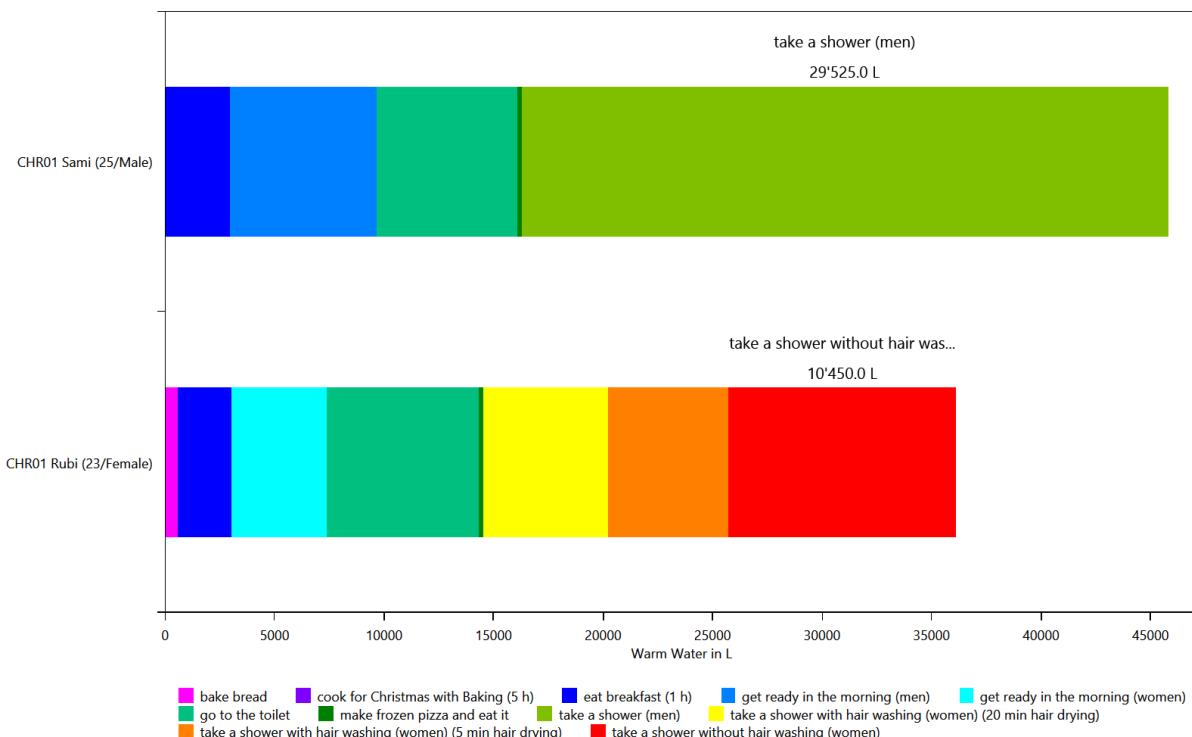
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

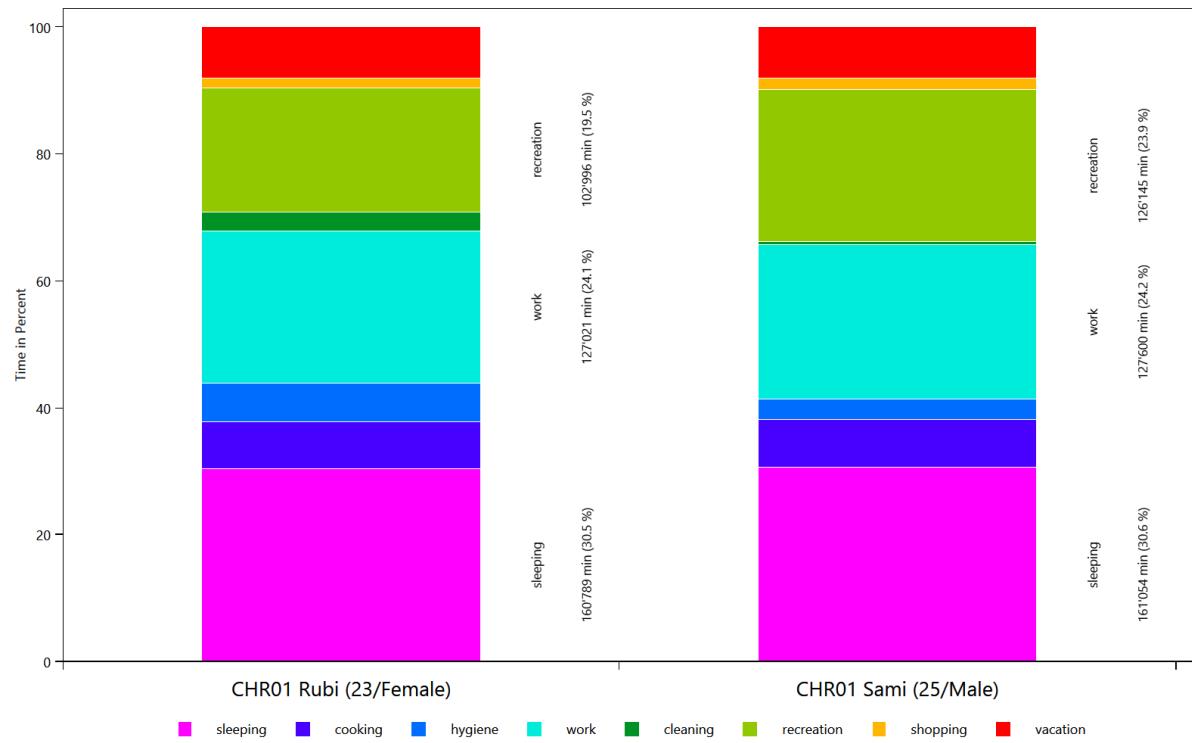


Time Use per Person Per Affordance according to different category definitions

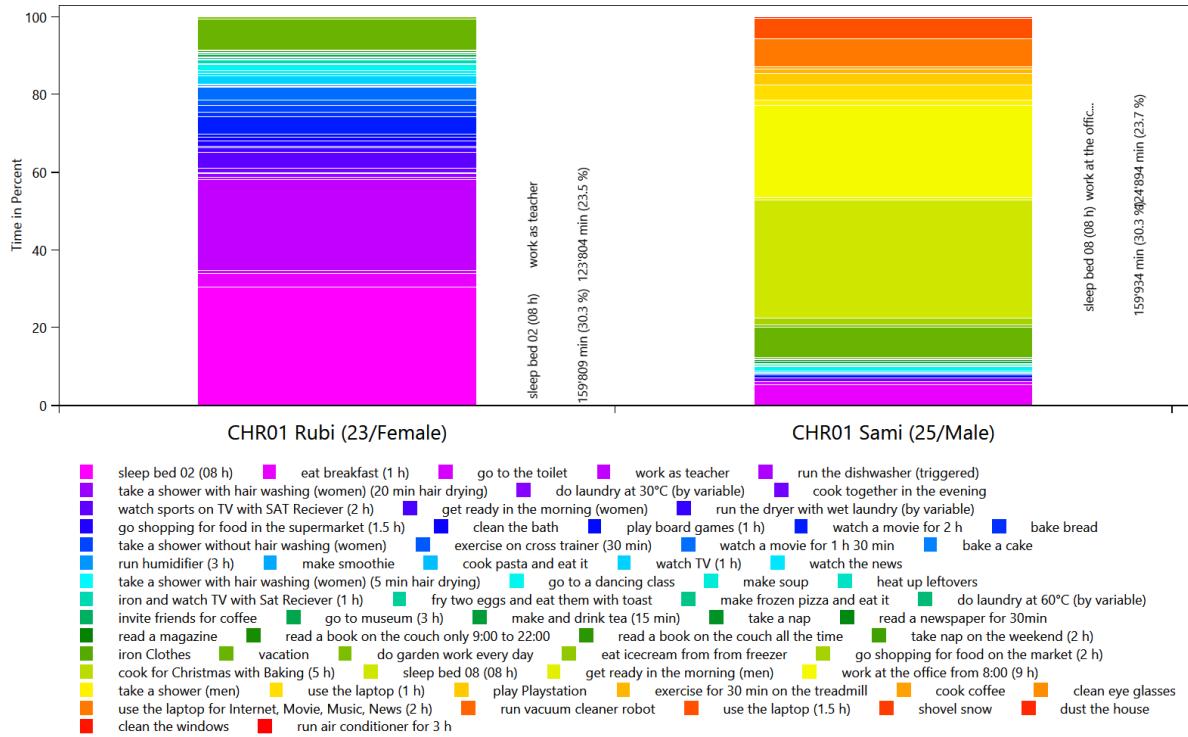
This is made from the files starting with: AffordanceTaggingSet

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.

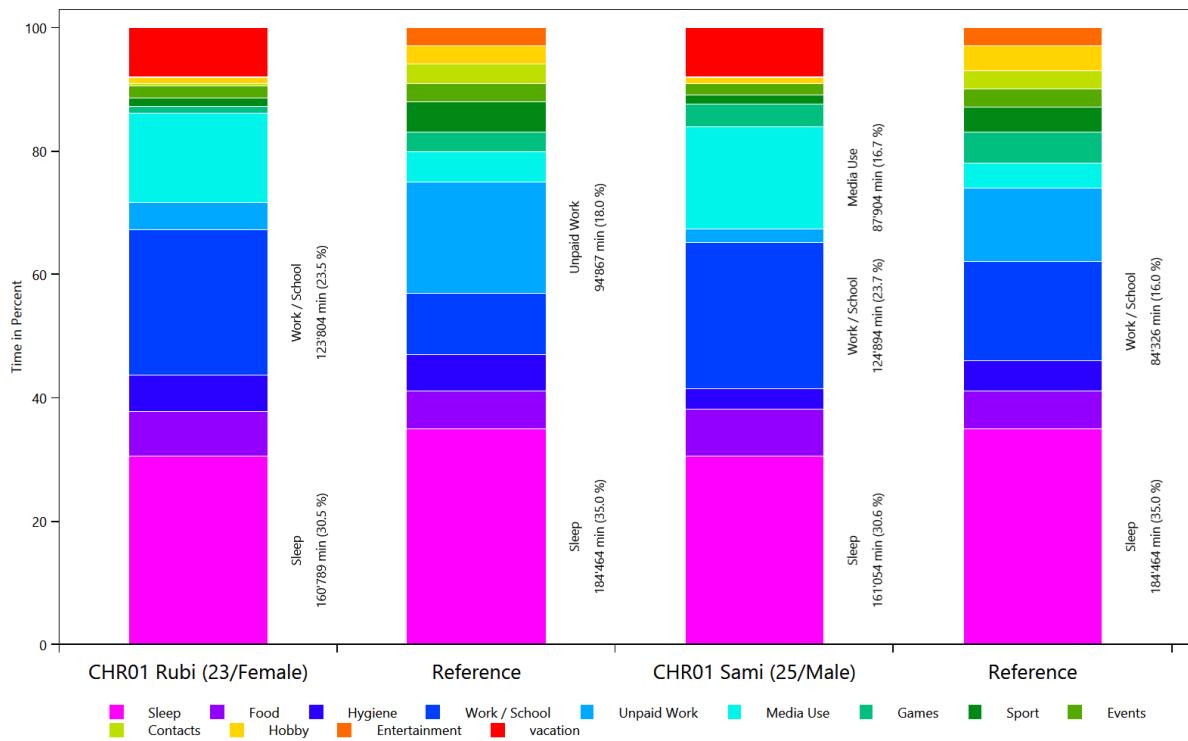
Basic Tagging - HH0



Tagging Set For Planning - HHO



Wo bleibt die Zeit - HHO

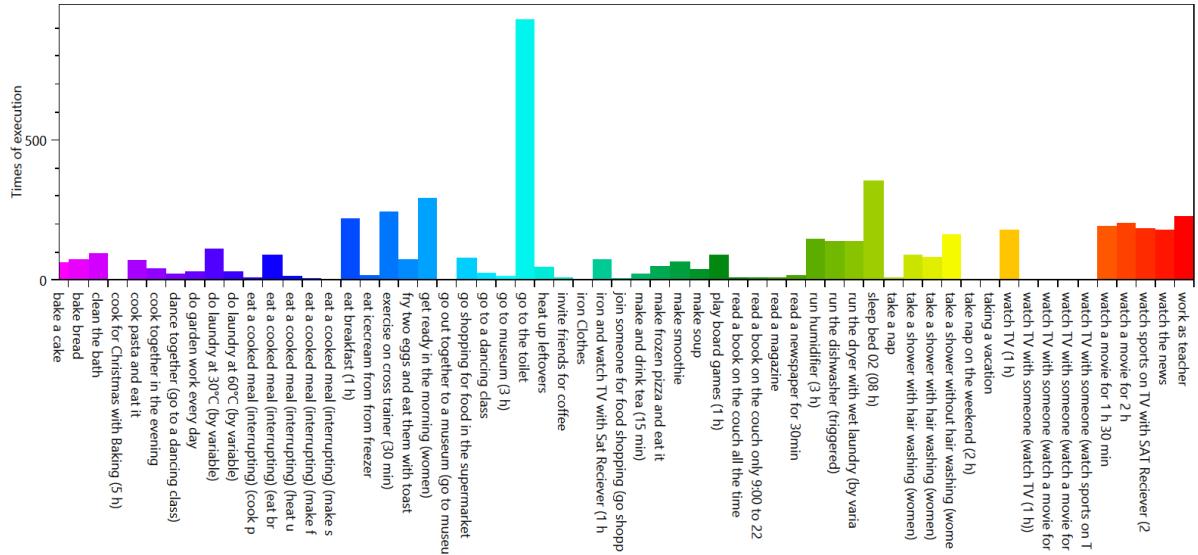


Overview of the actions of each member of the household

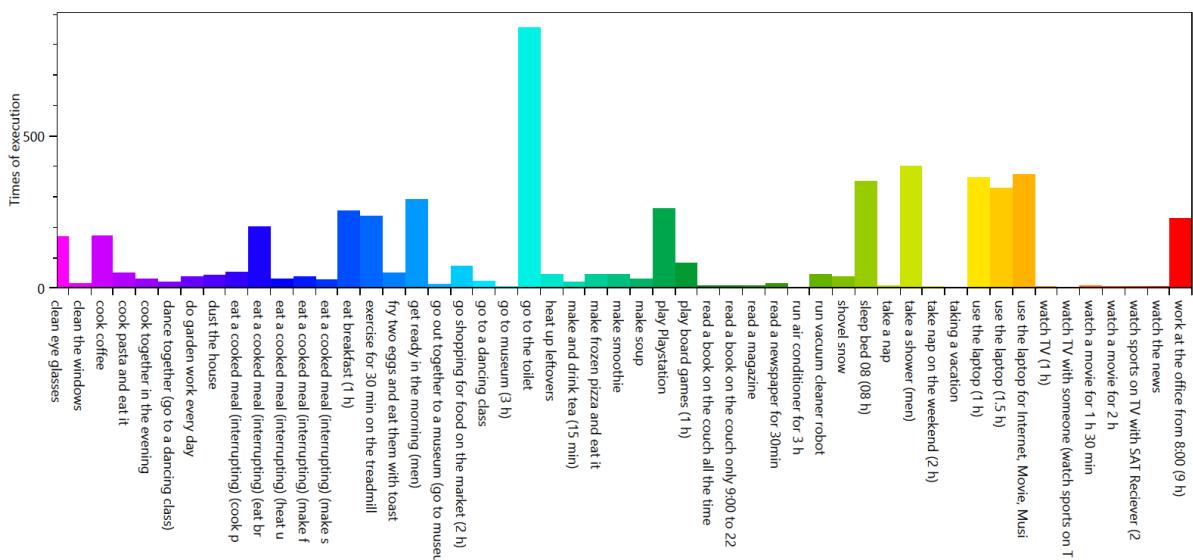
This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

HH0 - CHR01 Rubi (23 Female)



HH0 - CHR01 Sami (25 Male)

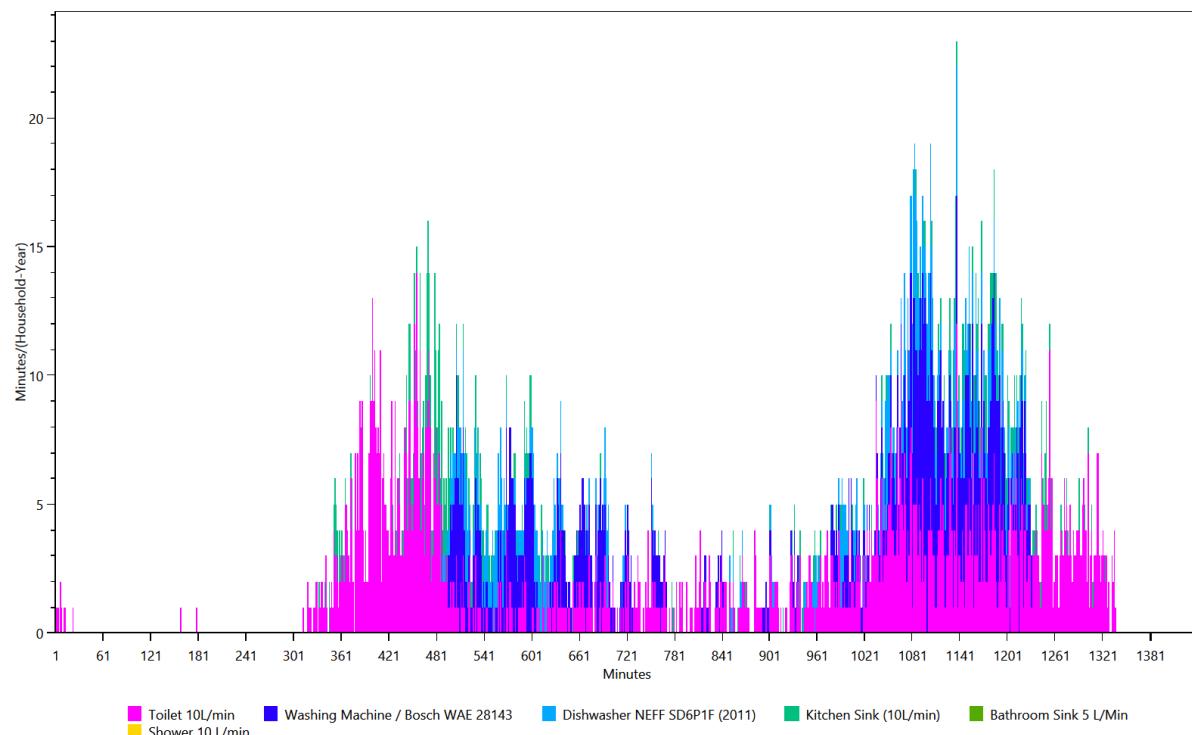


Overview of the time of the use per load type per device

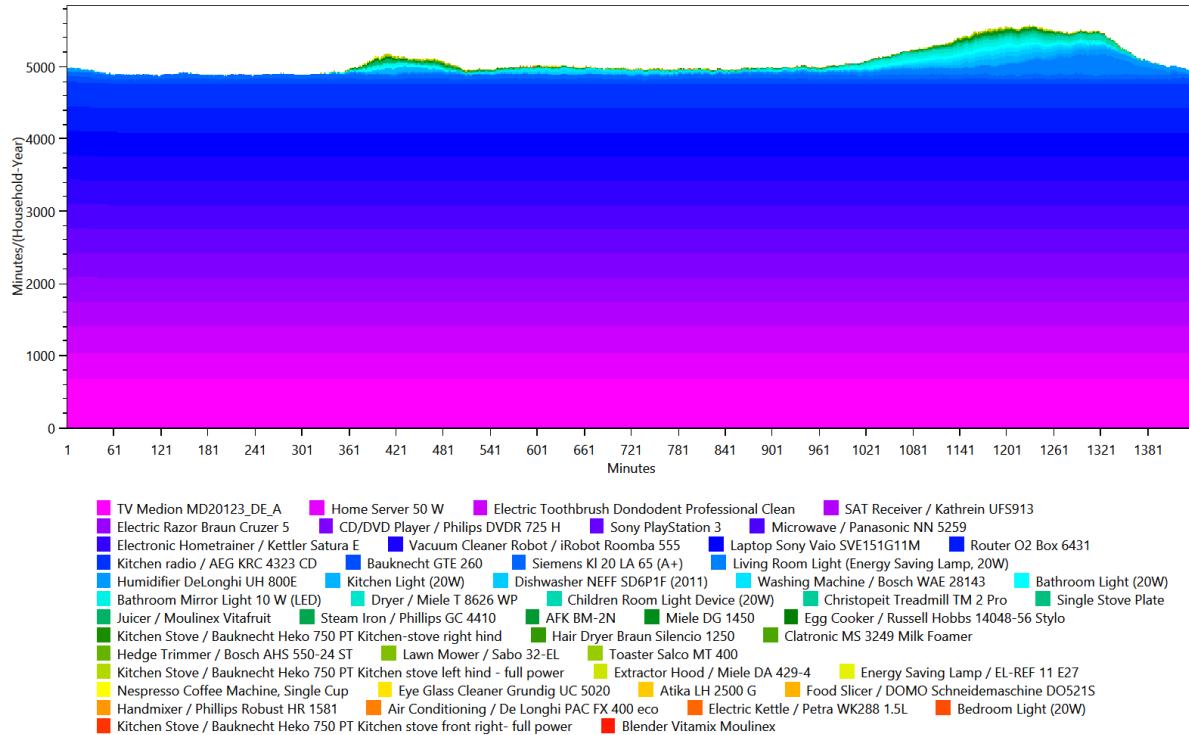
This is made from the files starting with: TimeOfUseEnergyProfiles

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

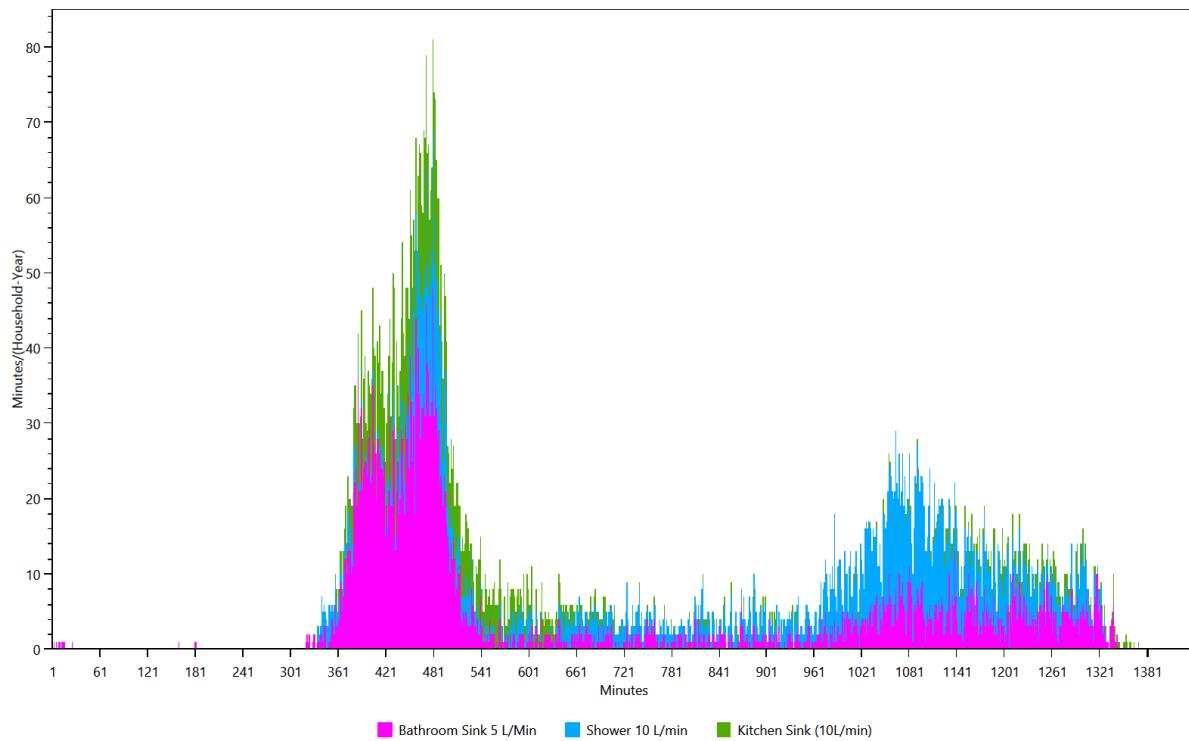
Cold Water



Electricity



Warm Water

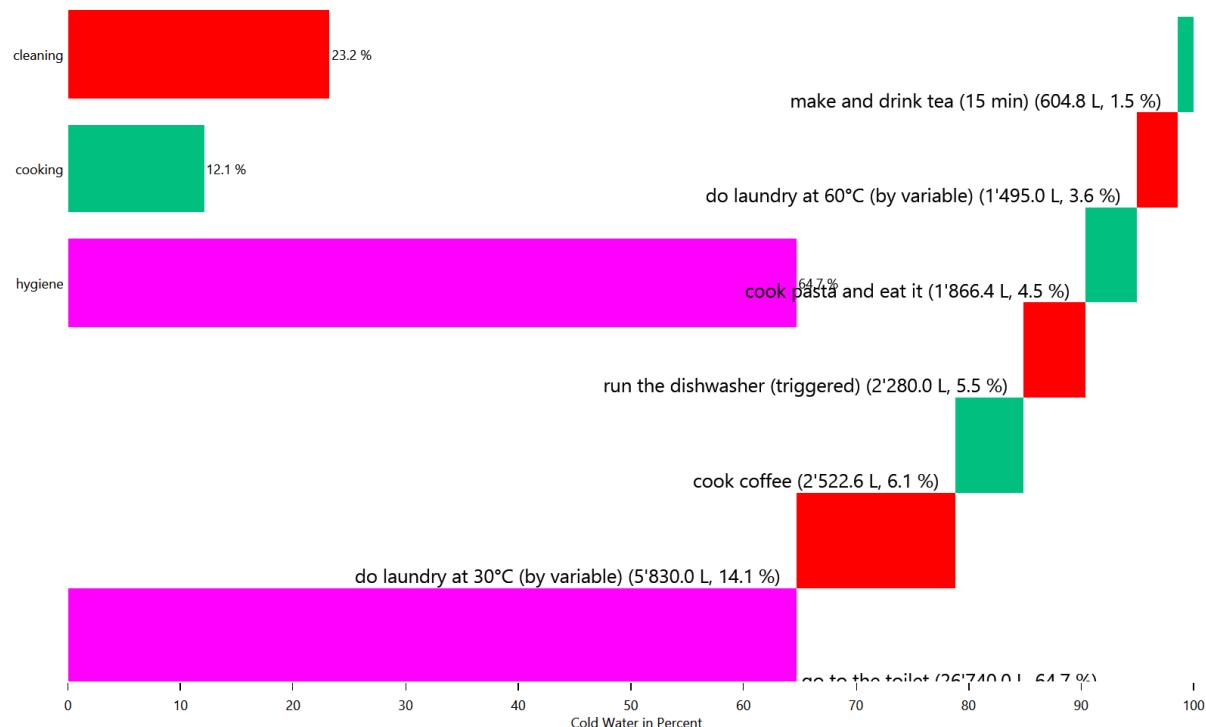


Energy/Resource use distribution per load type per affordance

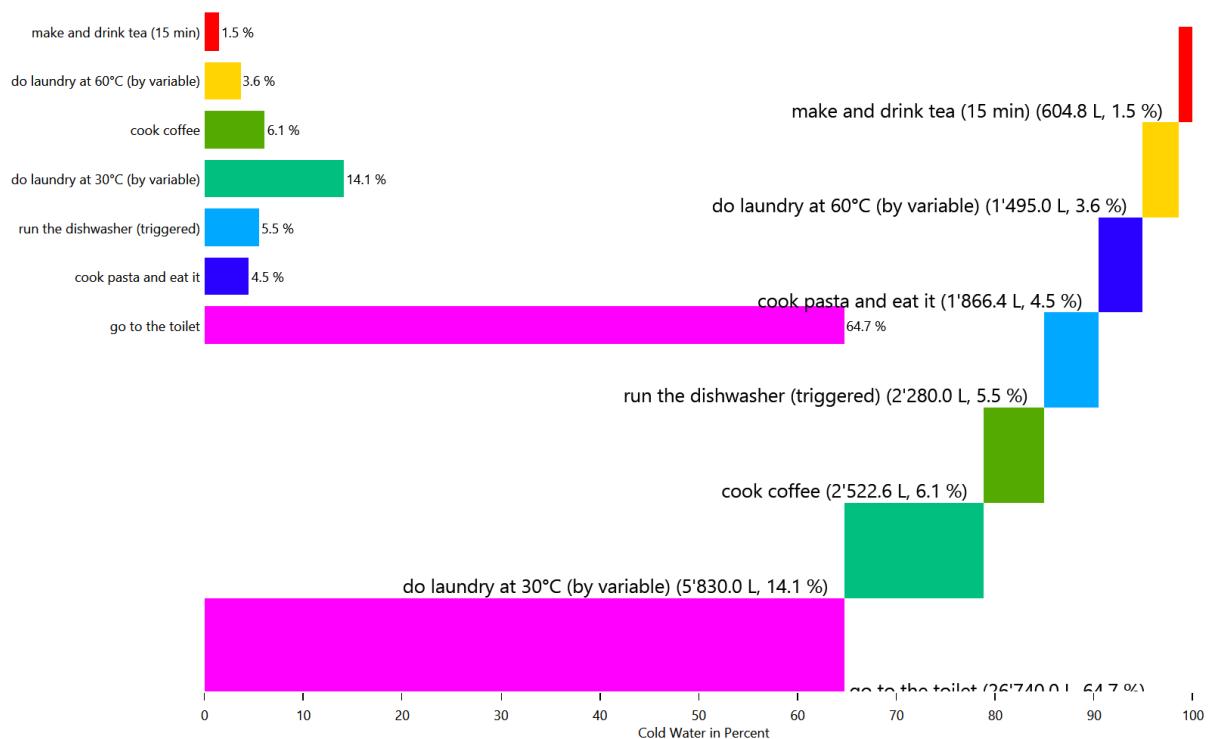
This is made from the files starting with: AffordanceEnergyUse

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

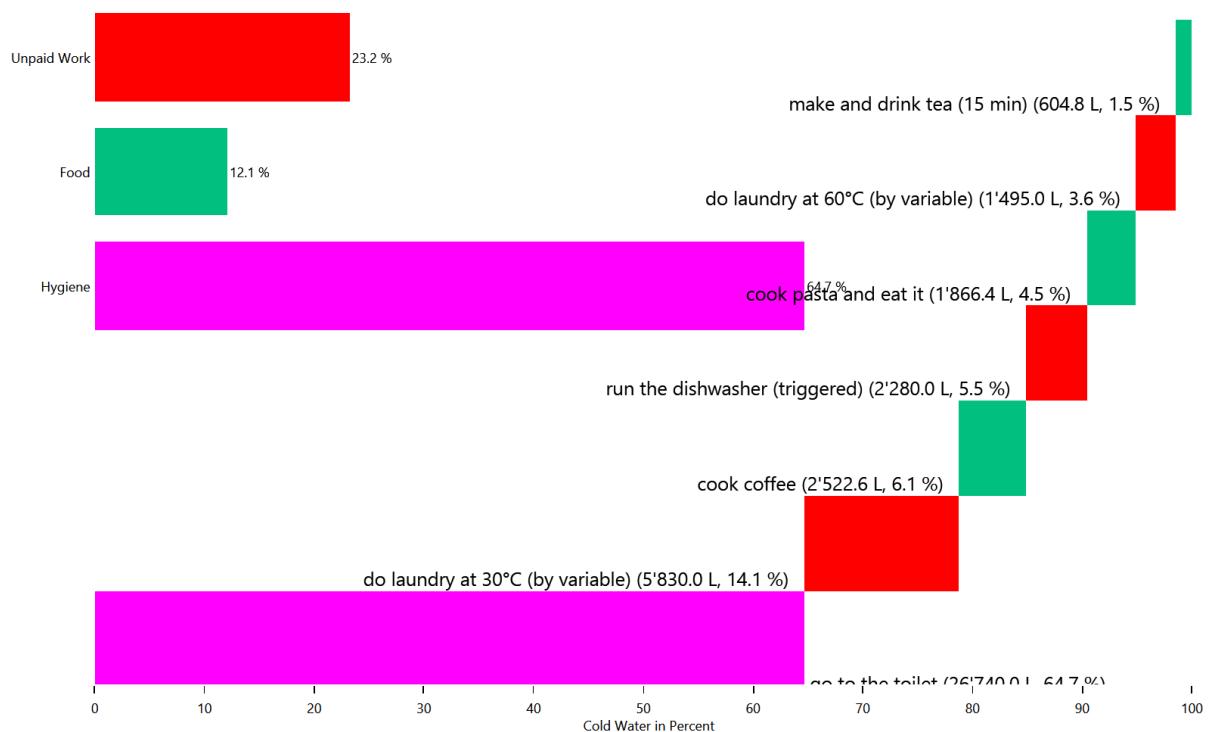
HH0 - Cold Water



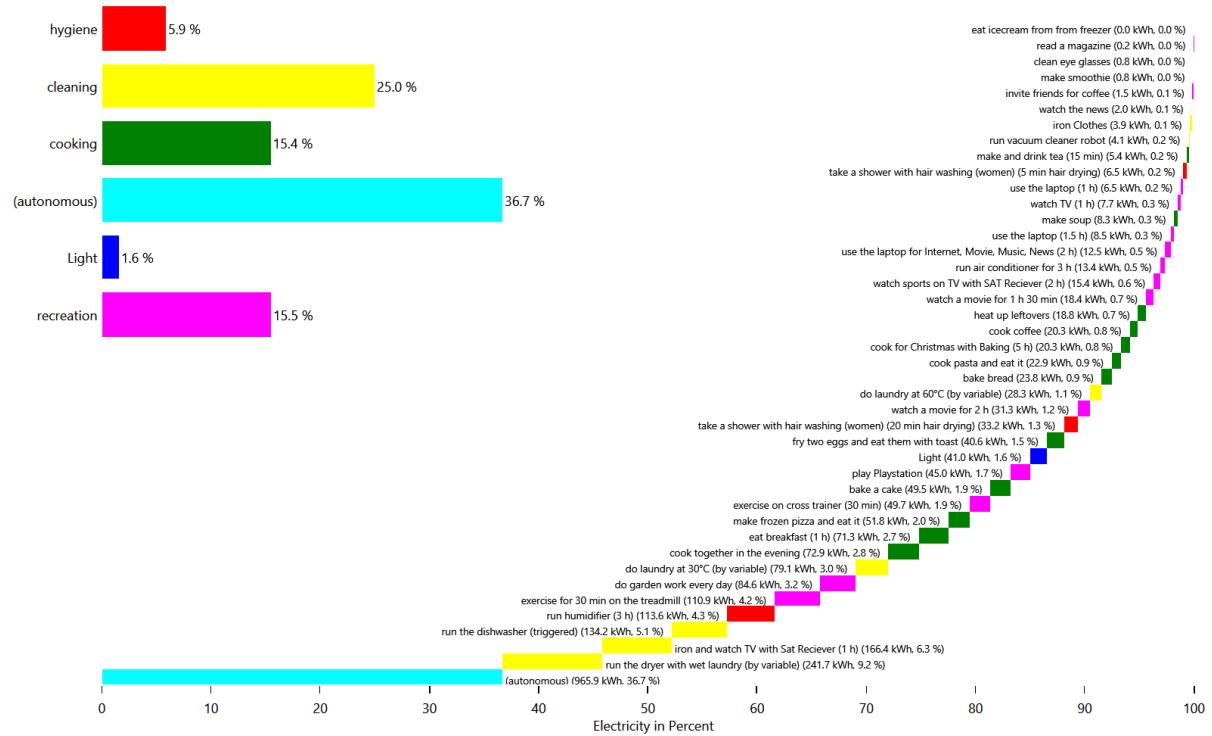
HH0 - Cold Water



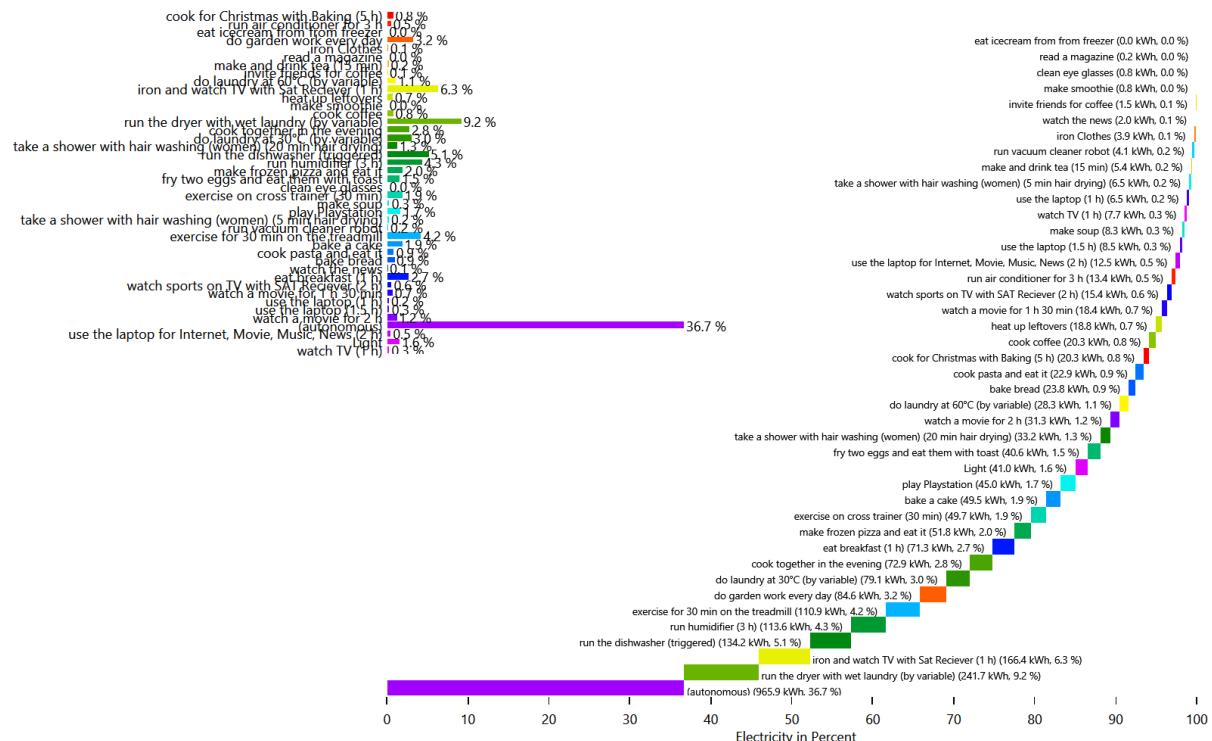
HH0 - Cold Water



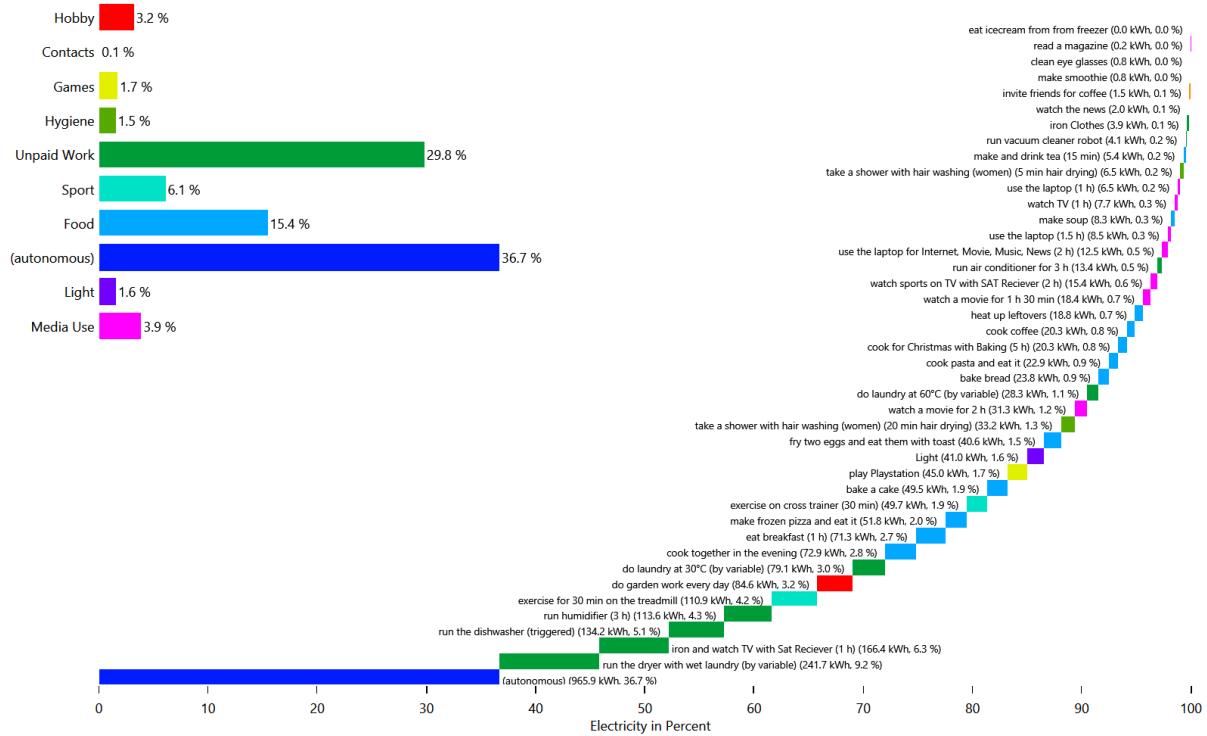
HH0 - Electricity



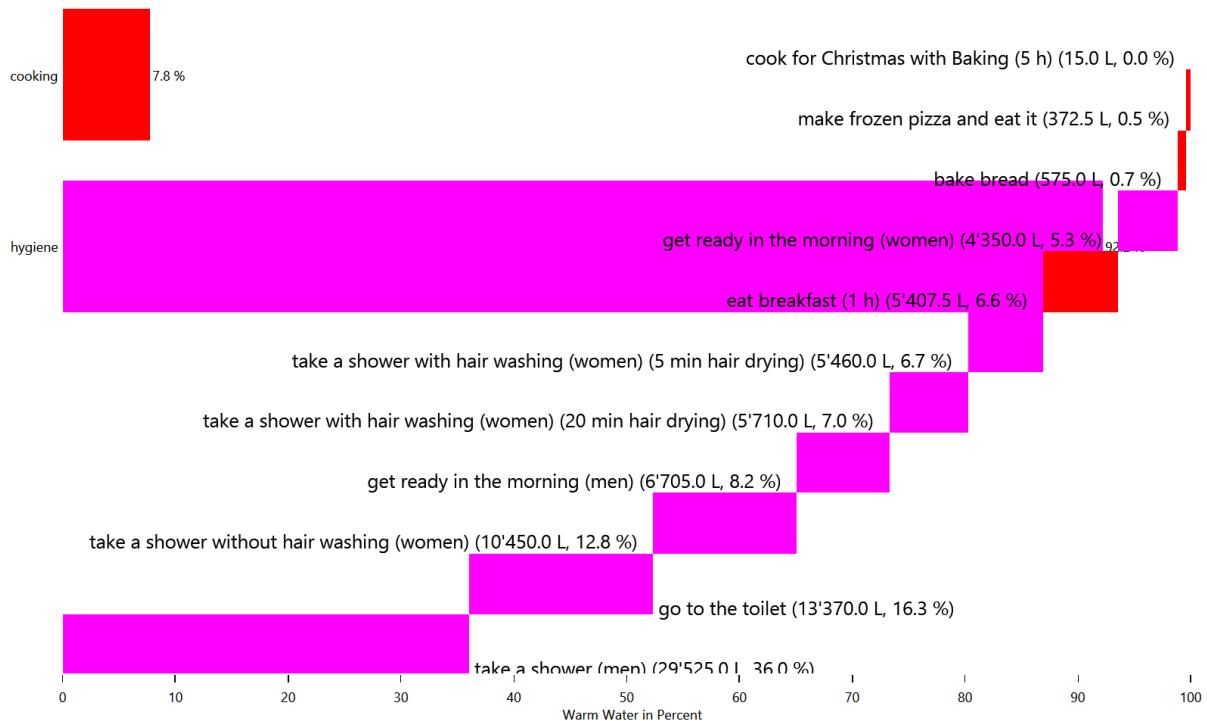
HH0 - Electricity



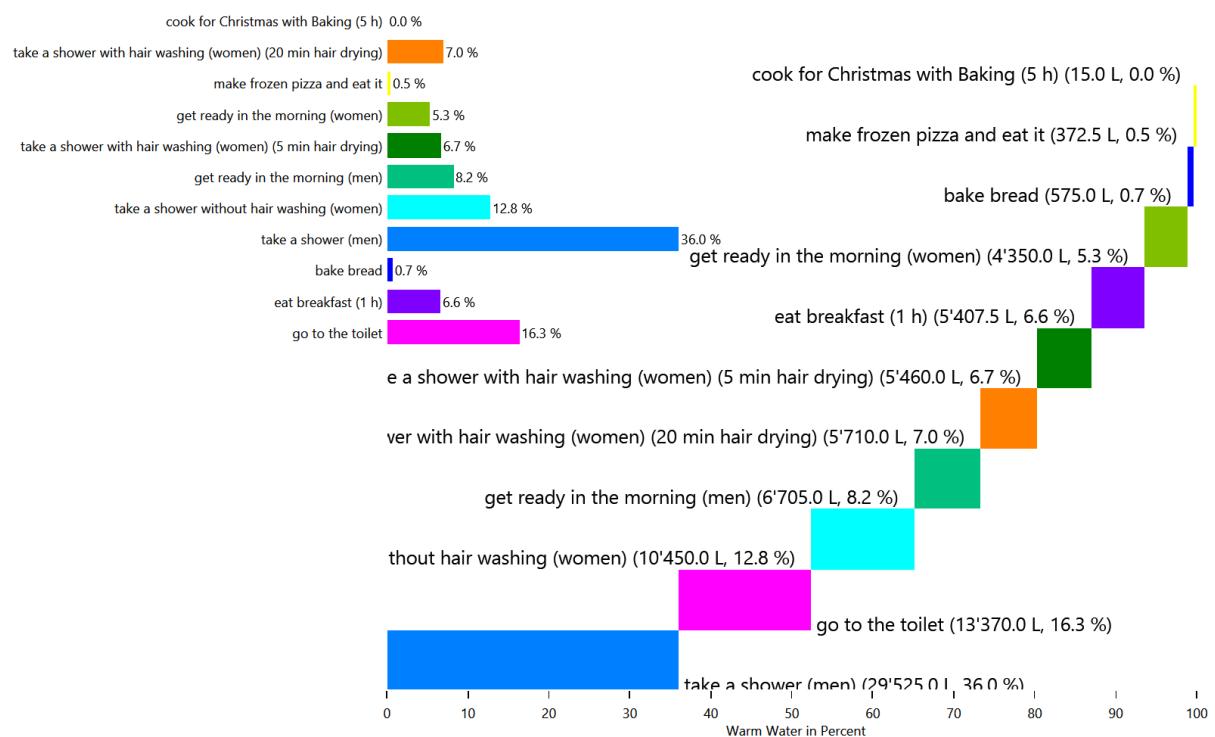
HH0 - Electricity



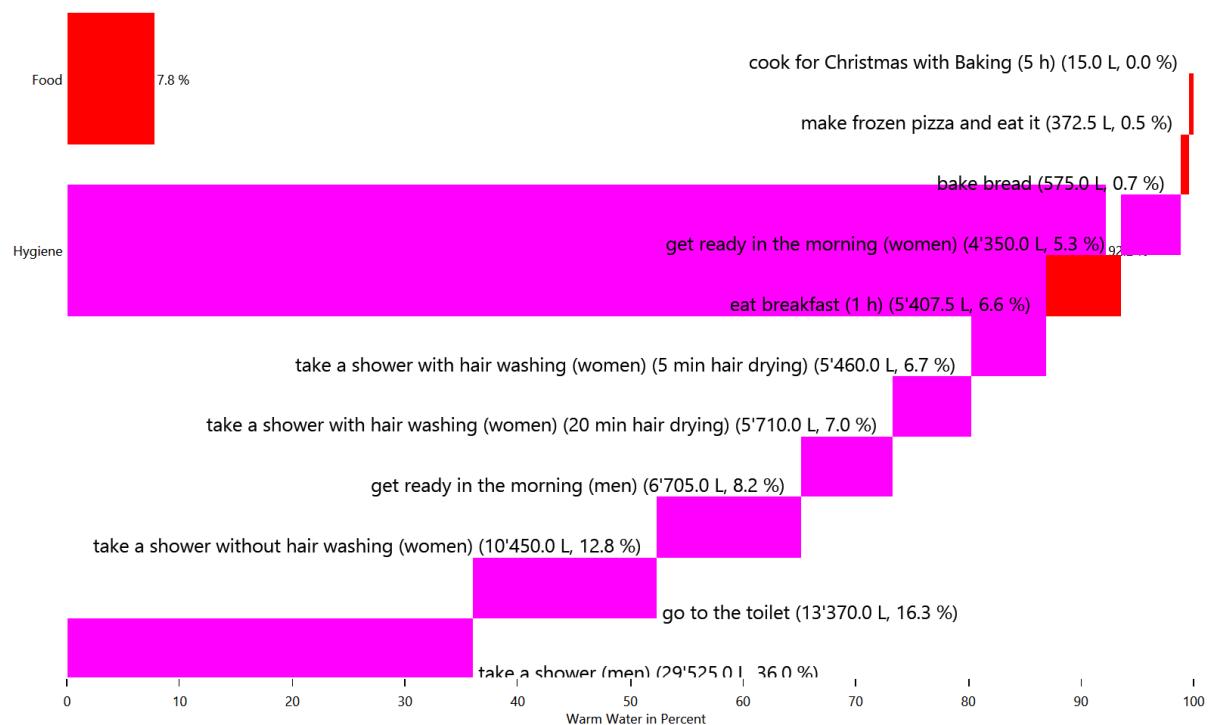
HH0 - Warm Water



HHO - Warm Water



HH0 - Warm Water

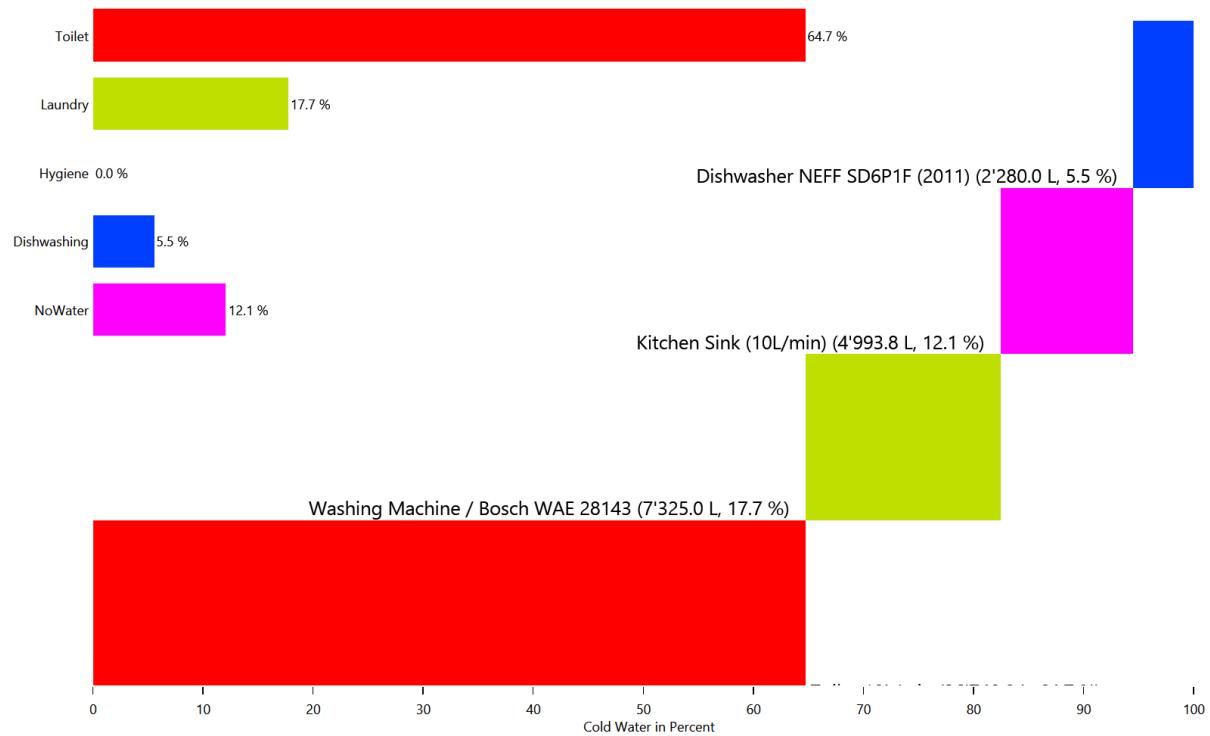


Energy use for each load type for each device

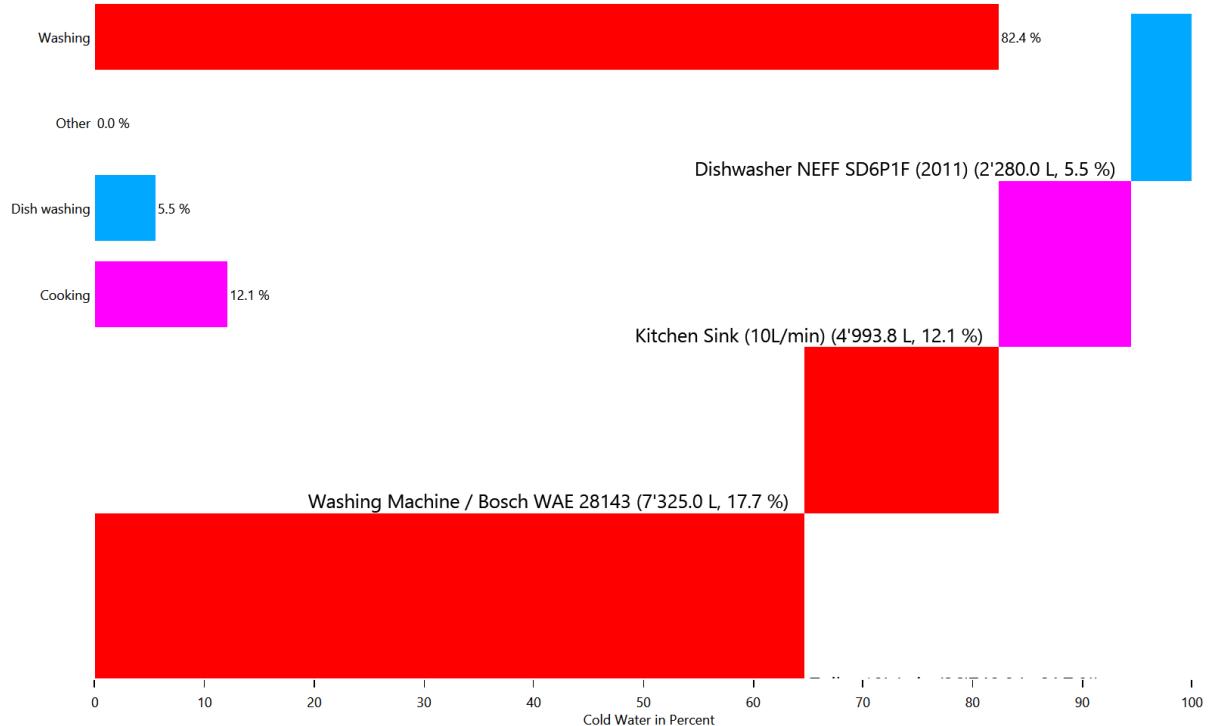
This is made from the files starting with: DeviceSums

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

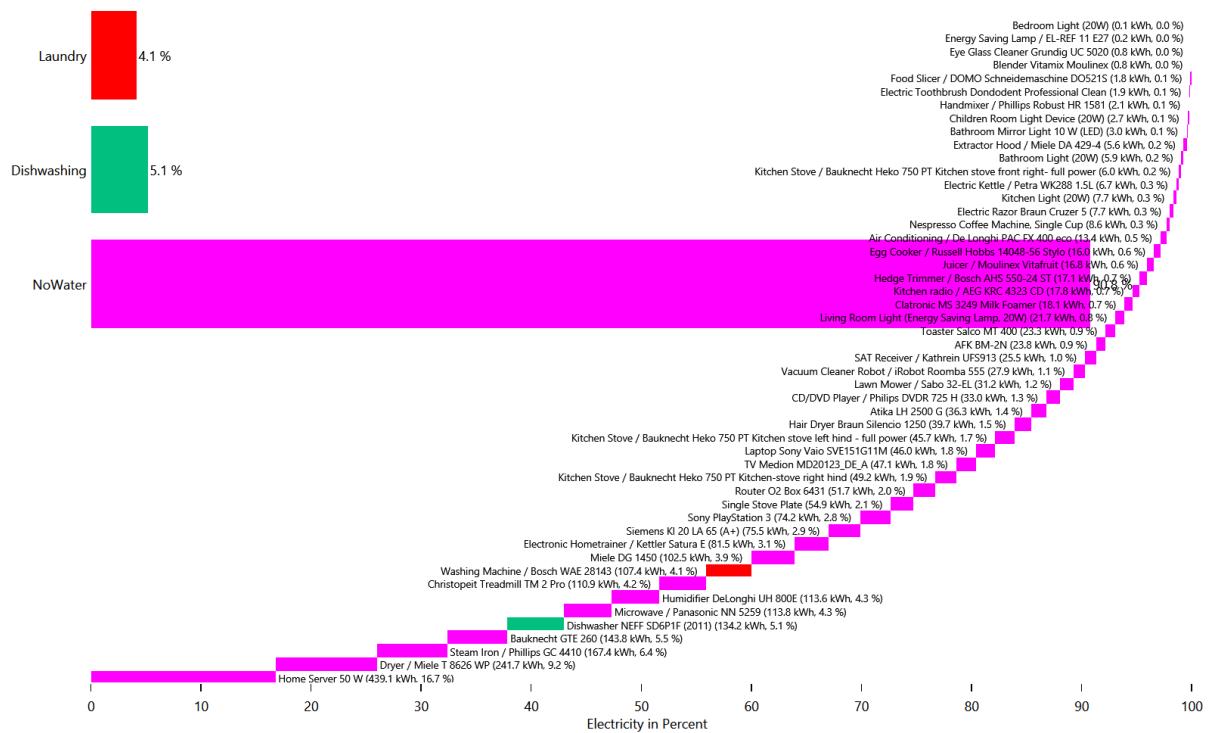
Cold Water



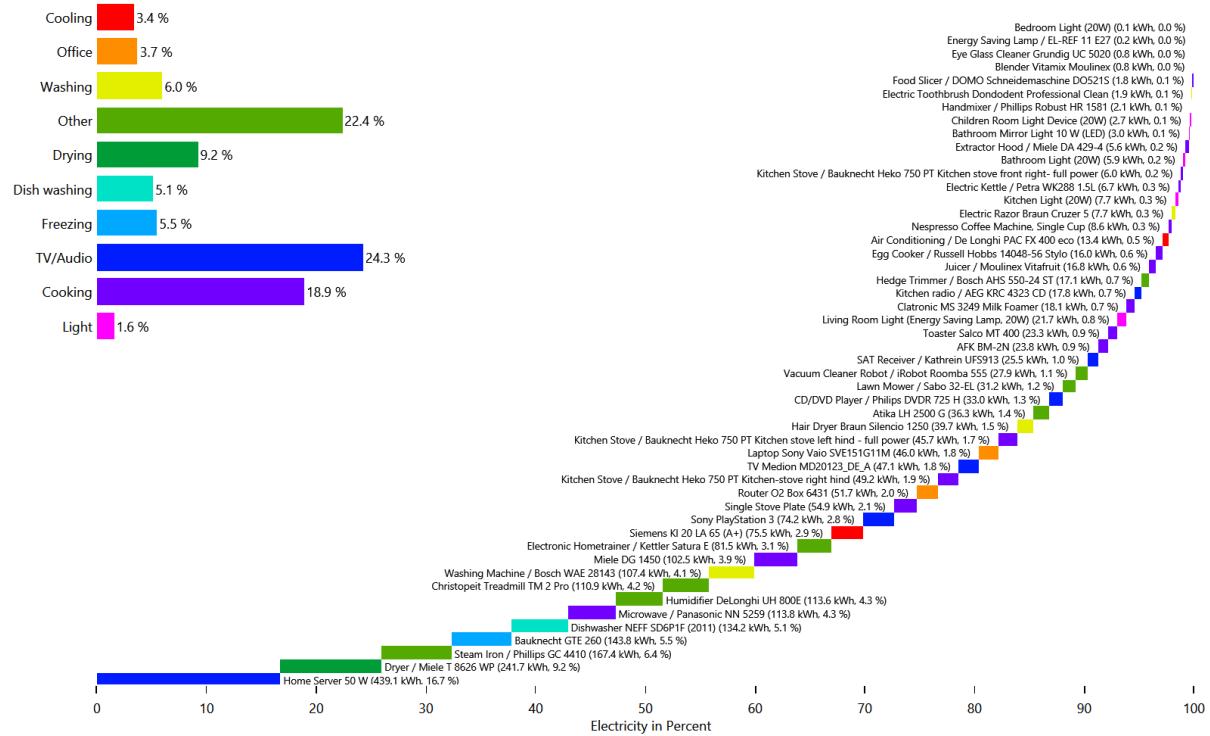
Cold Water



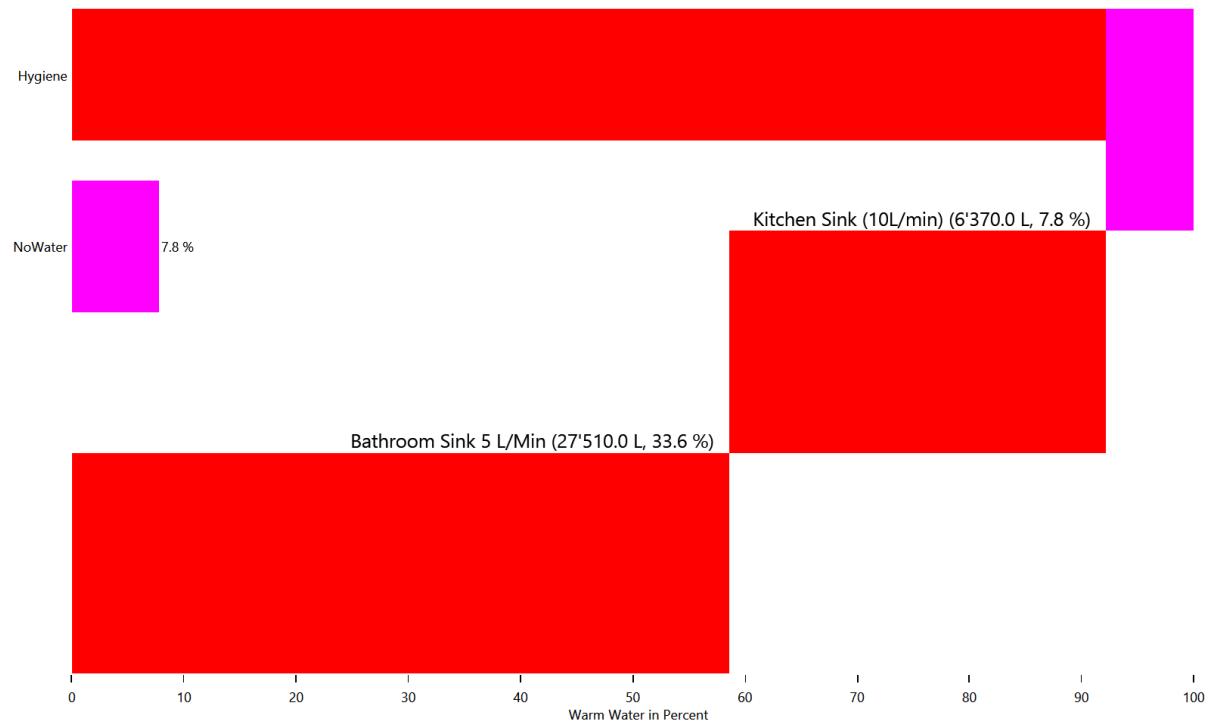
Electricity



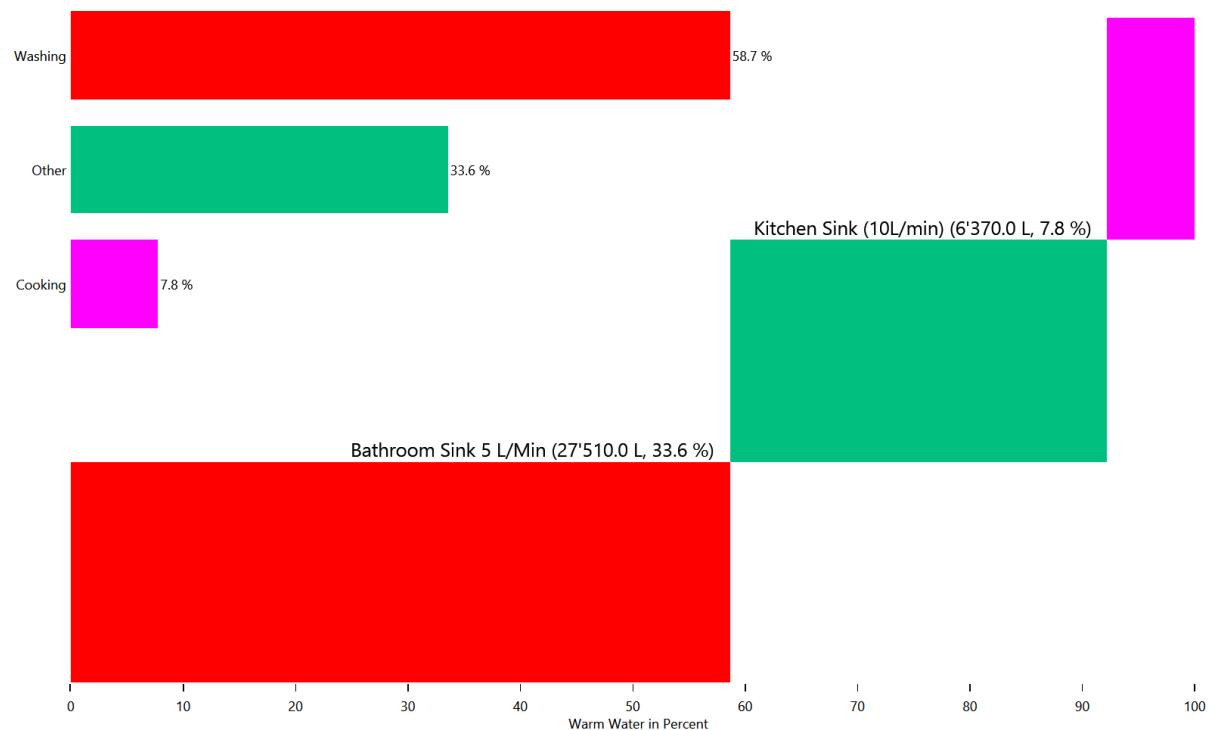
Electricity



Warm Water



Warm Water

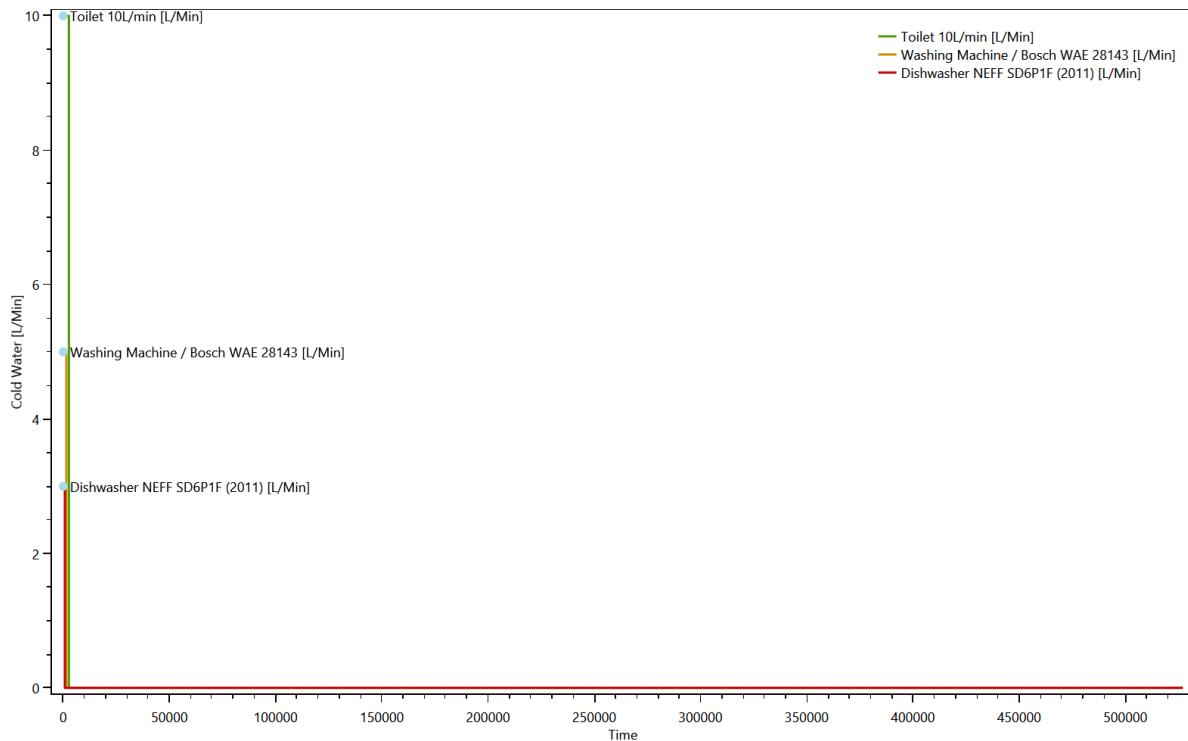


Duration curve for each device for each load type

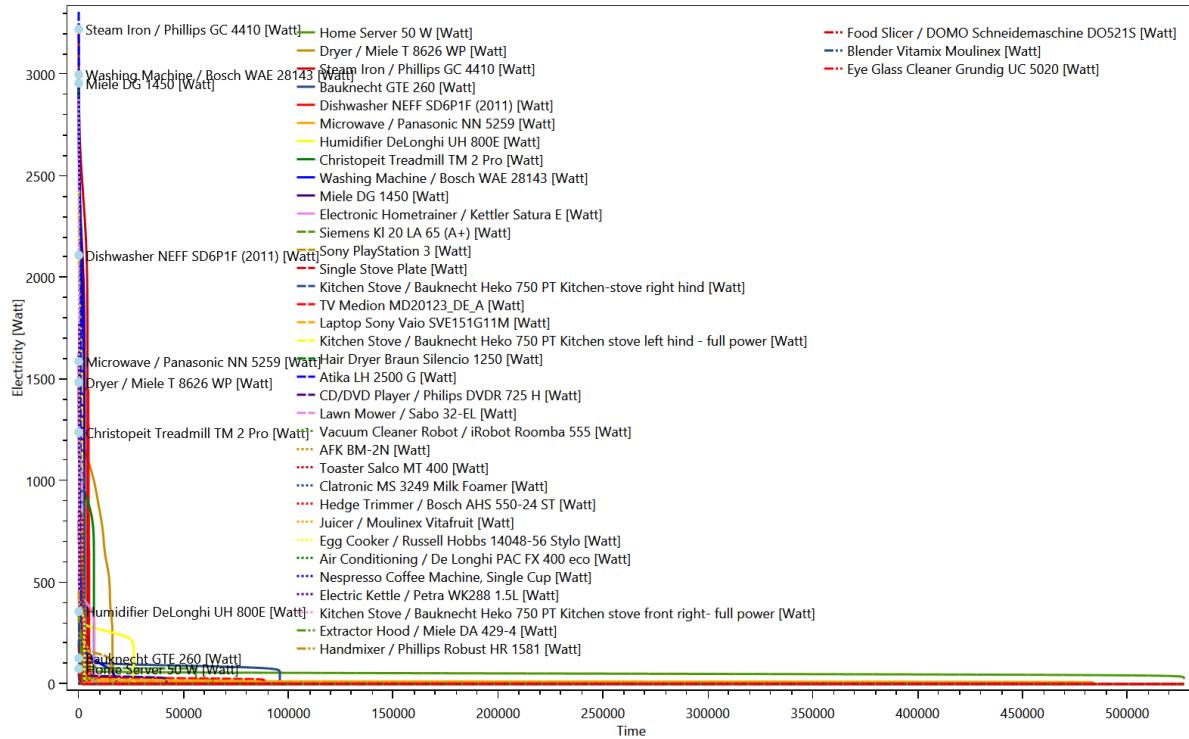
This is made from the files starting with: DeviceDurationCurves

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

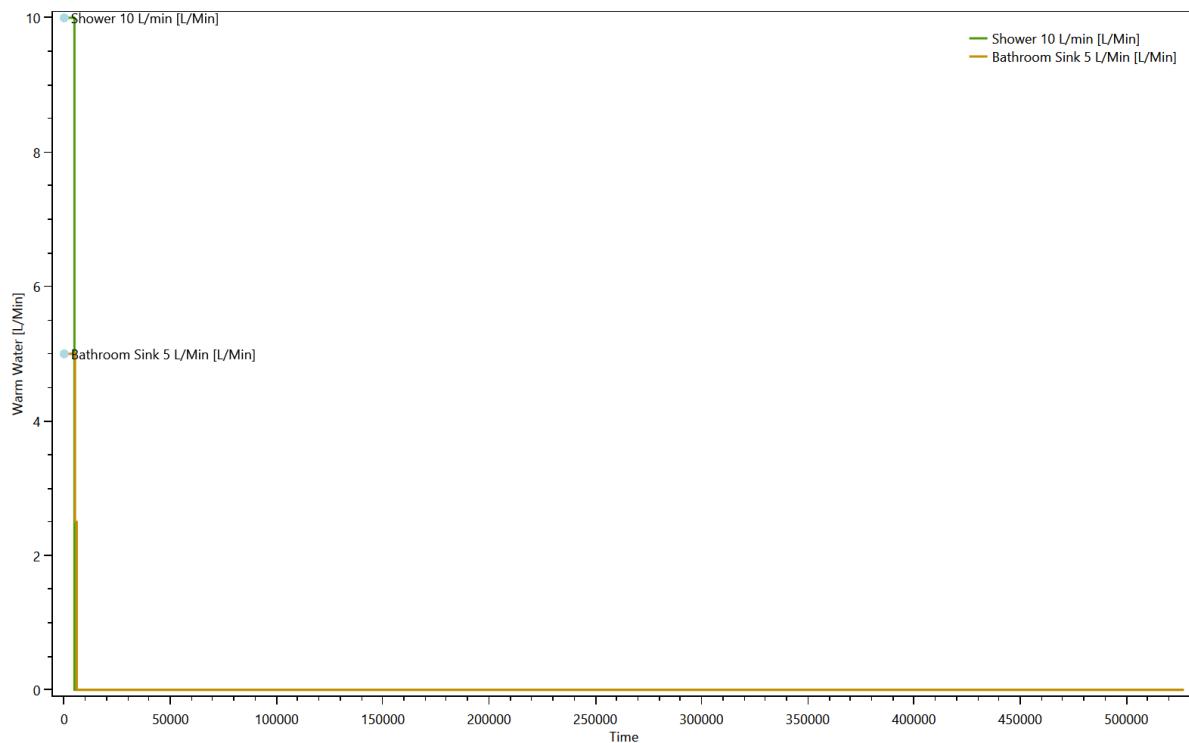
Cold Water



Electricity



Warm Water

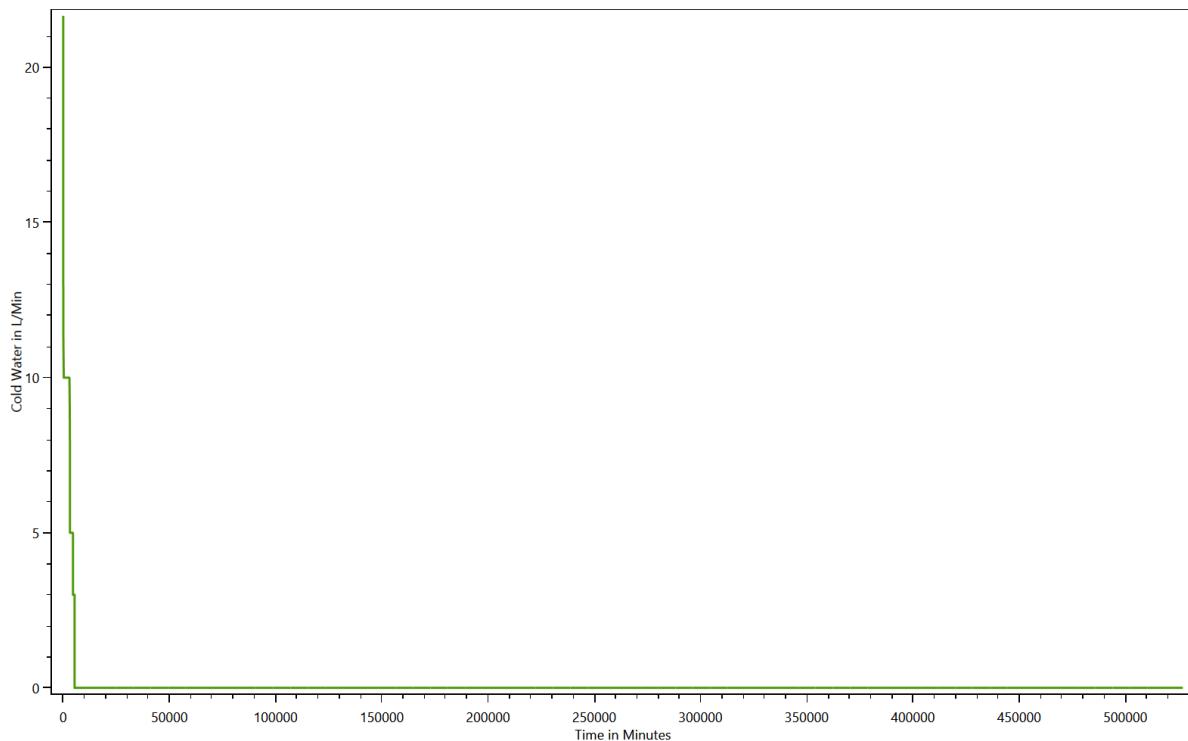


Duration curve for each load type

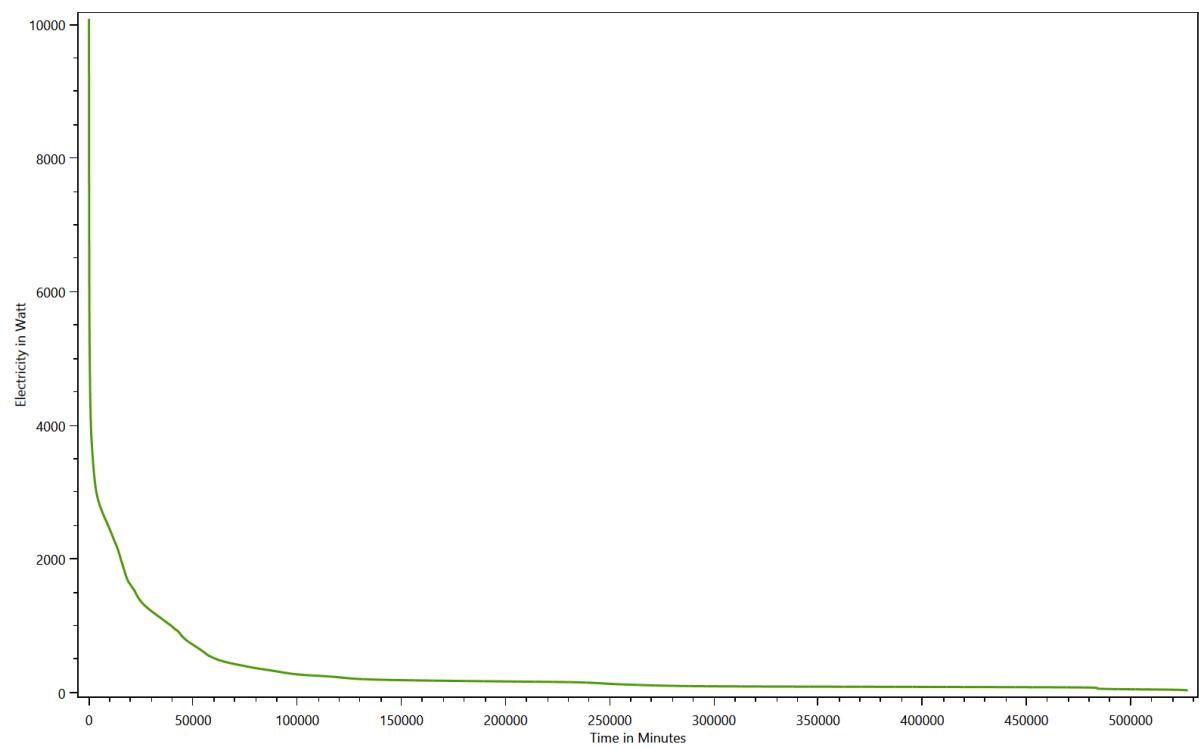
This is made from the files starting with: DurationCurve

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

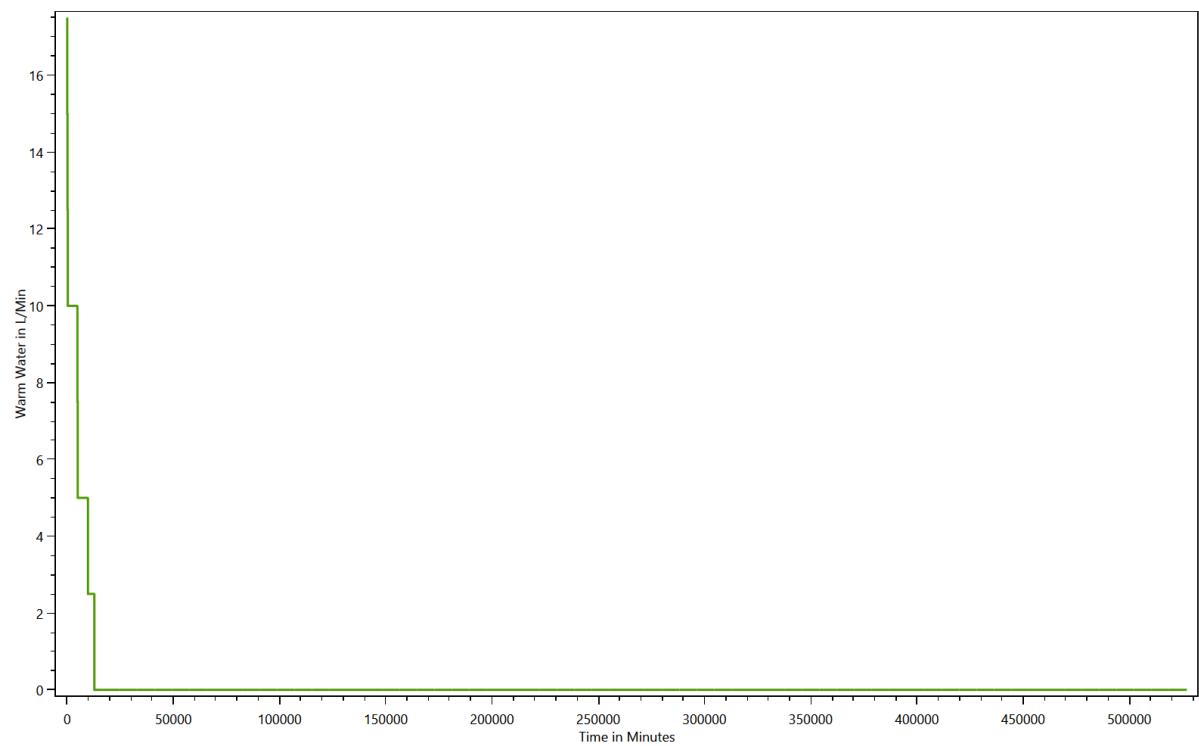
Cold Water



Electricity



Warm Water

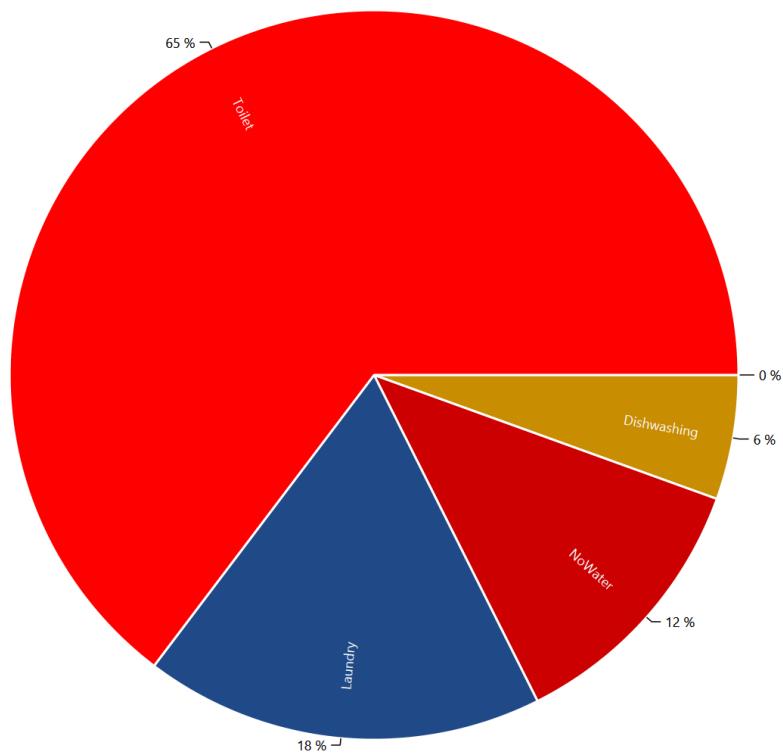


Grouped energy use for each load type for each device

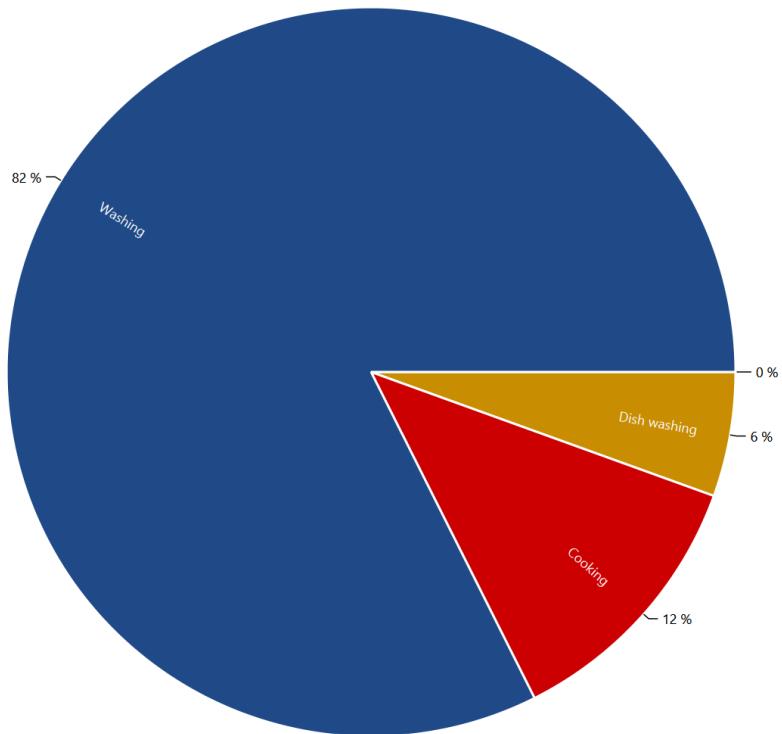
This is made from the files starting with: DeviceTaggingSet

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

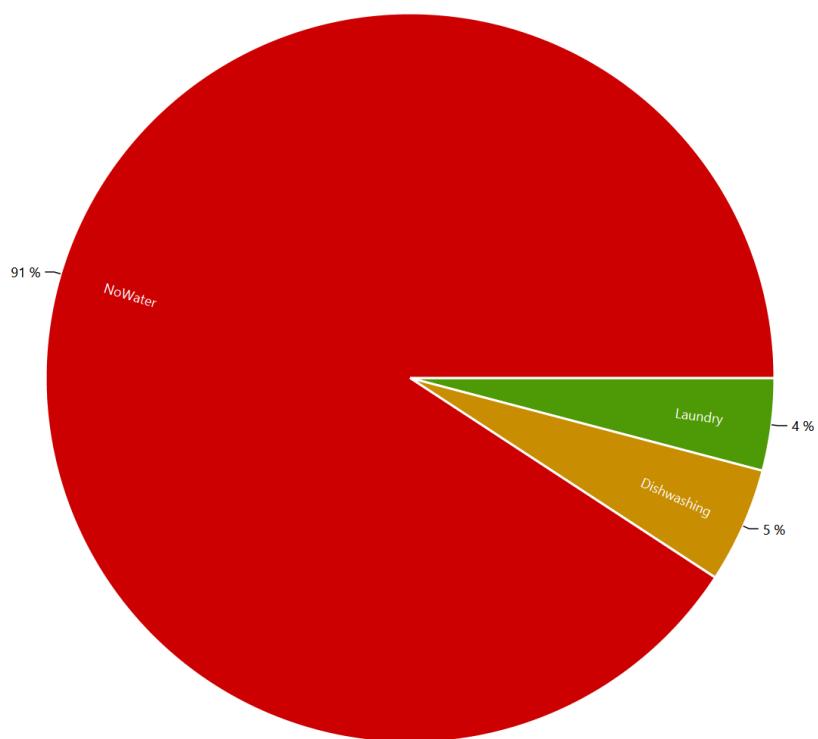
HH0 - Destatis Water Usage Statistics - Cold Water



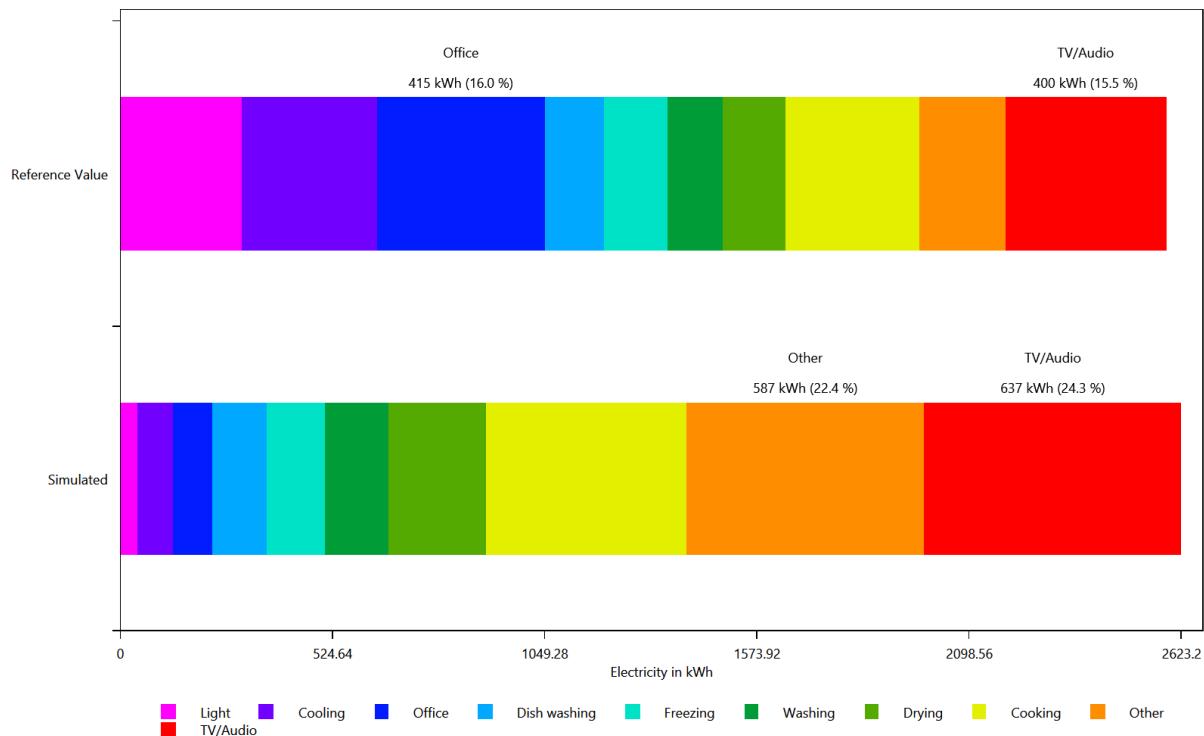
HH0 - Energieagentur - Cold Water



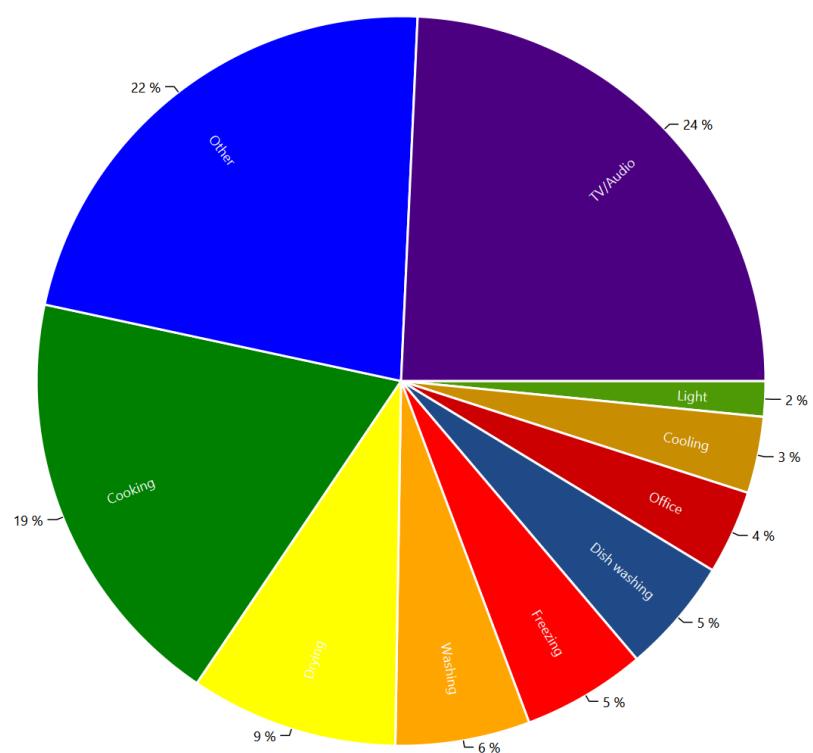
HH0 - Destatis Water Usage Statistics - Electricity



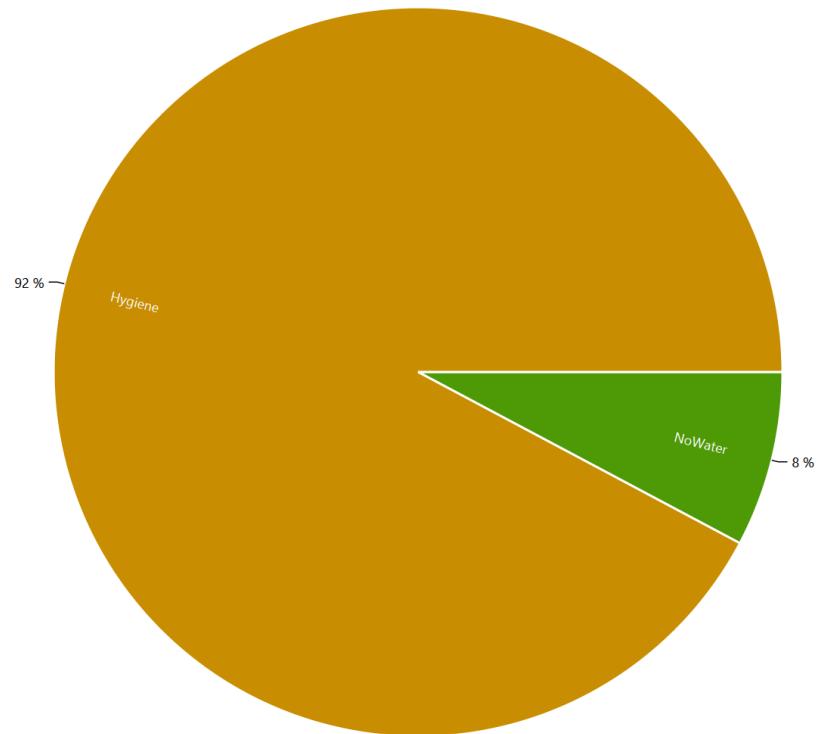
HH0 - Energieagentur - Electricity



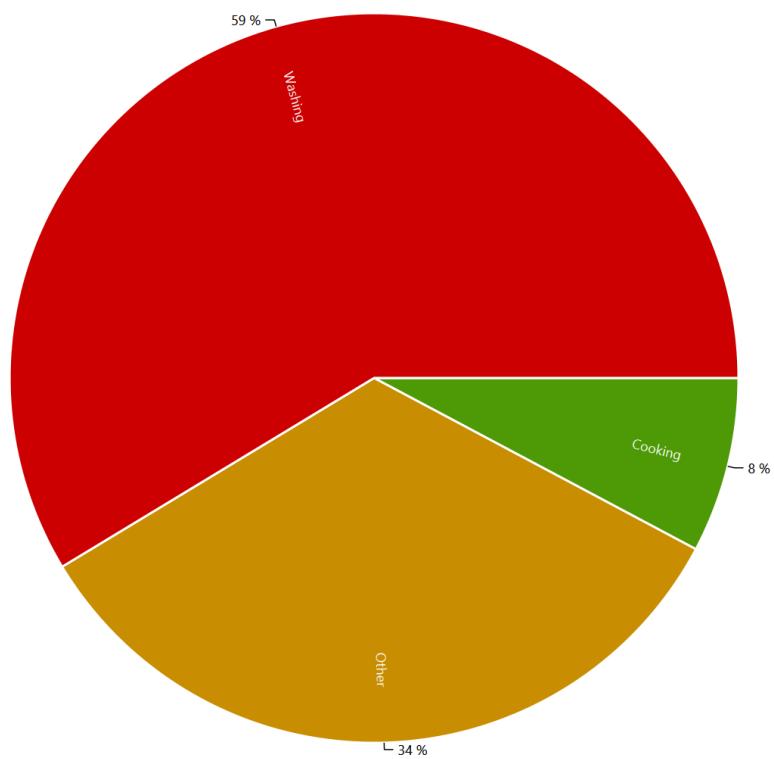
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

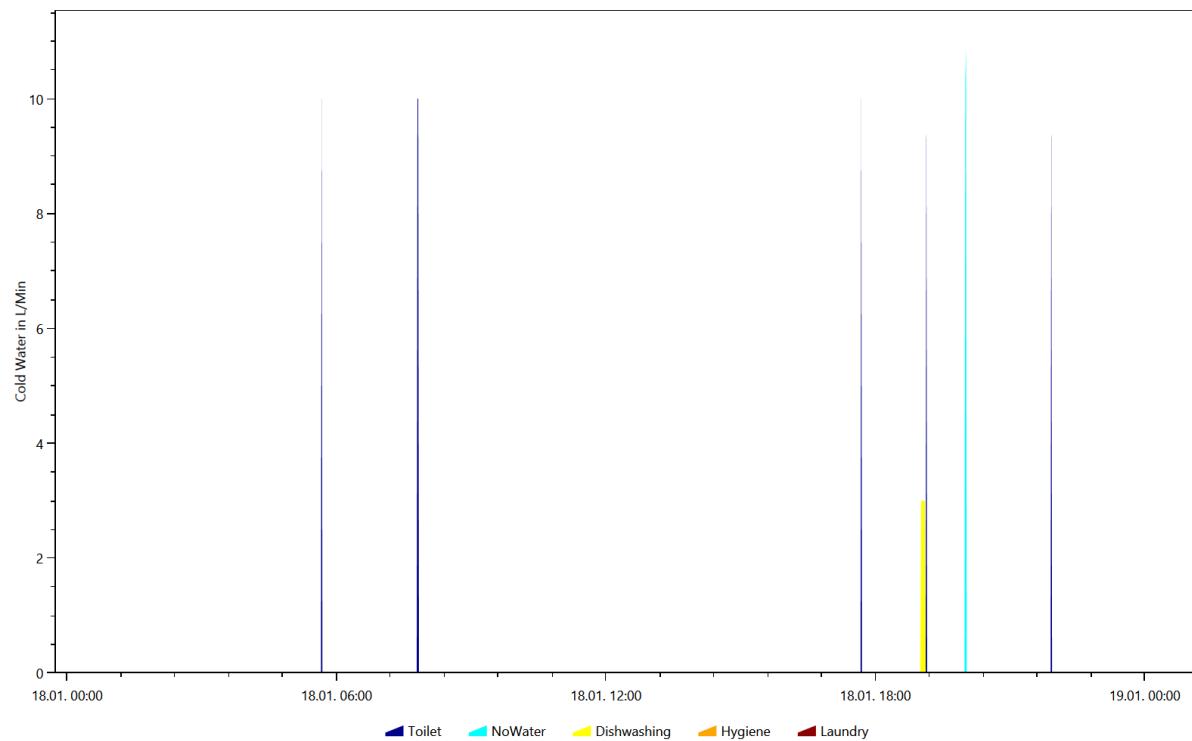


Example of the device profiles for each load type

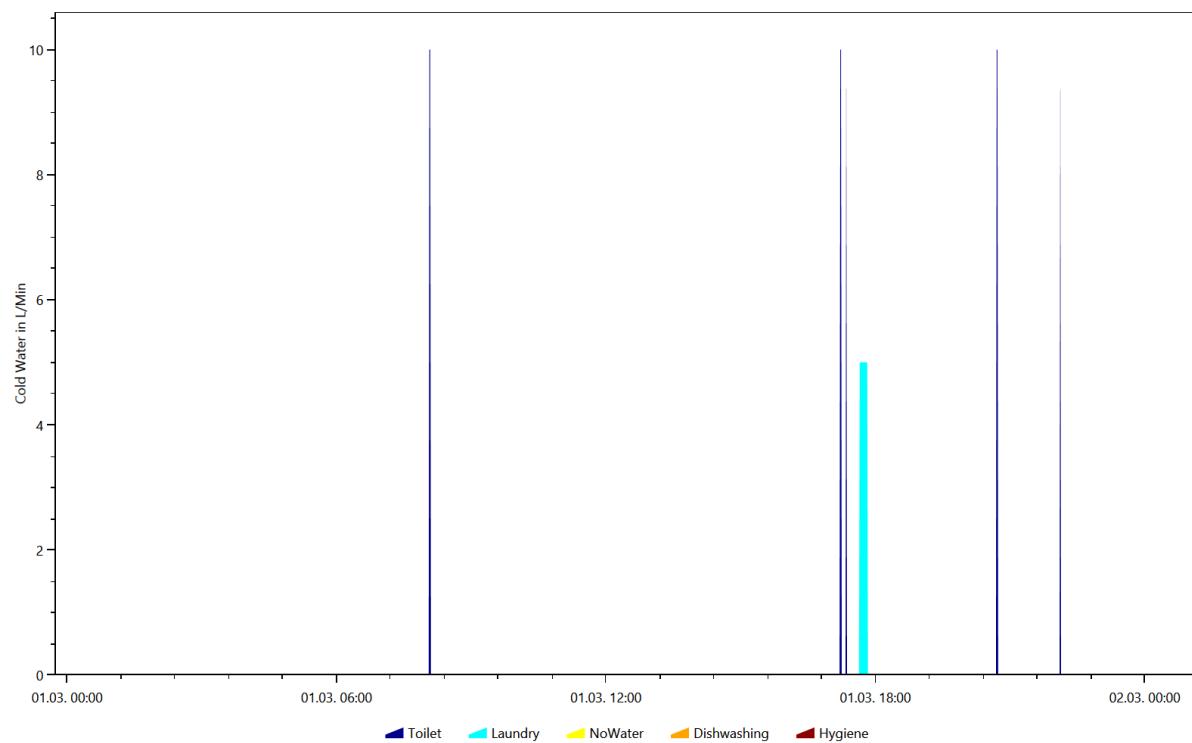
This is made from the files starting with: DeviceProfiles

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

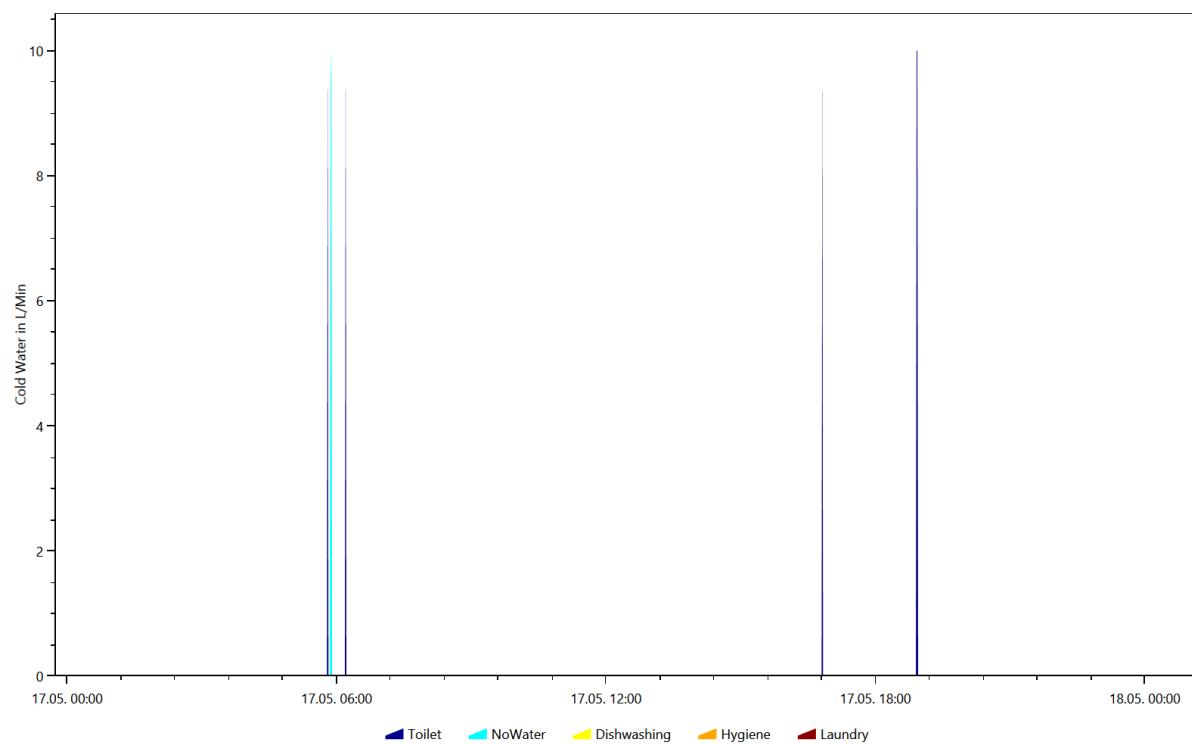
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.18



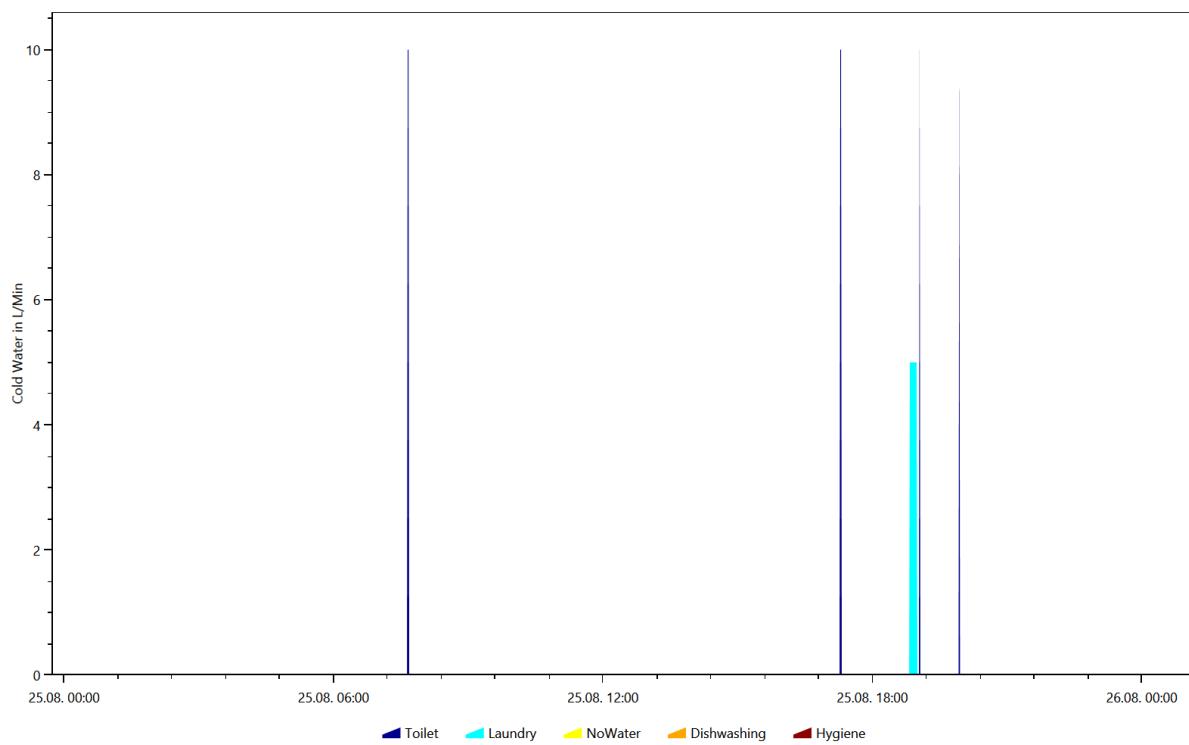
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.1



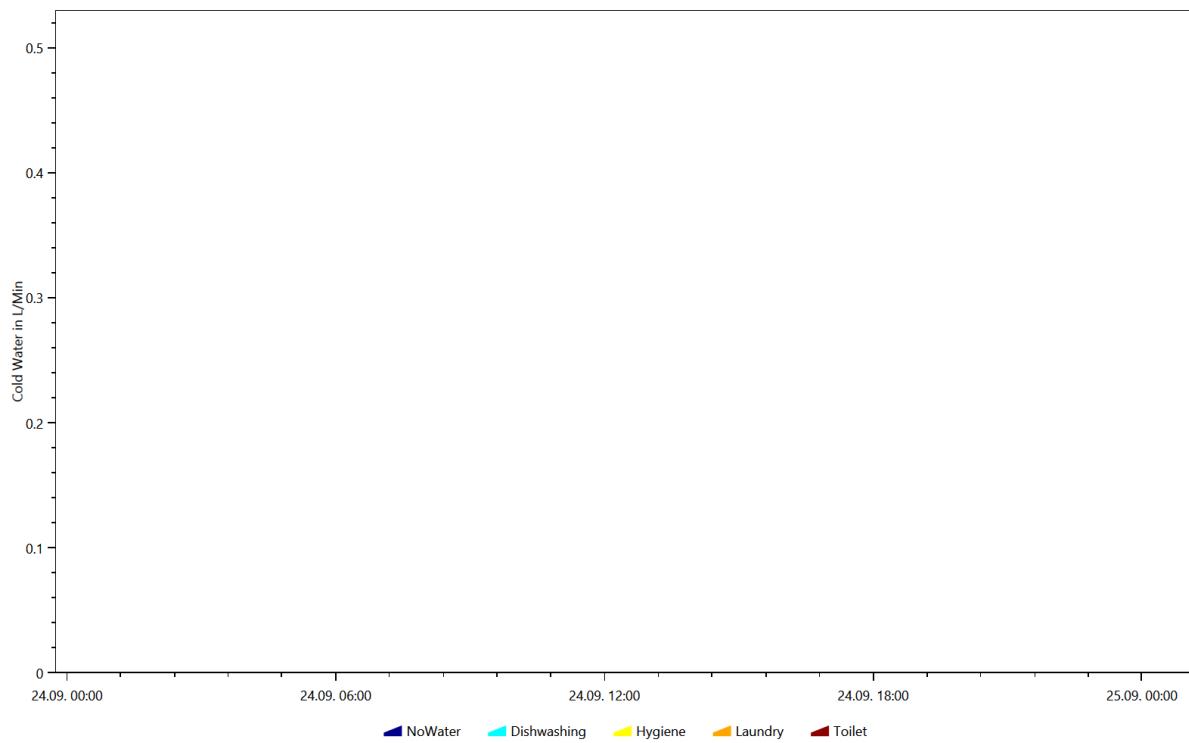
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.17



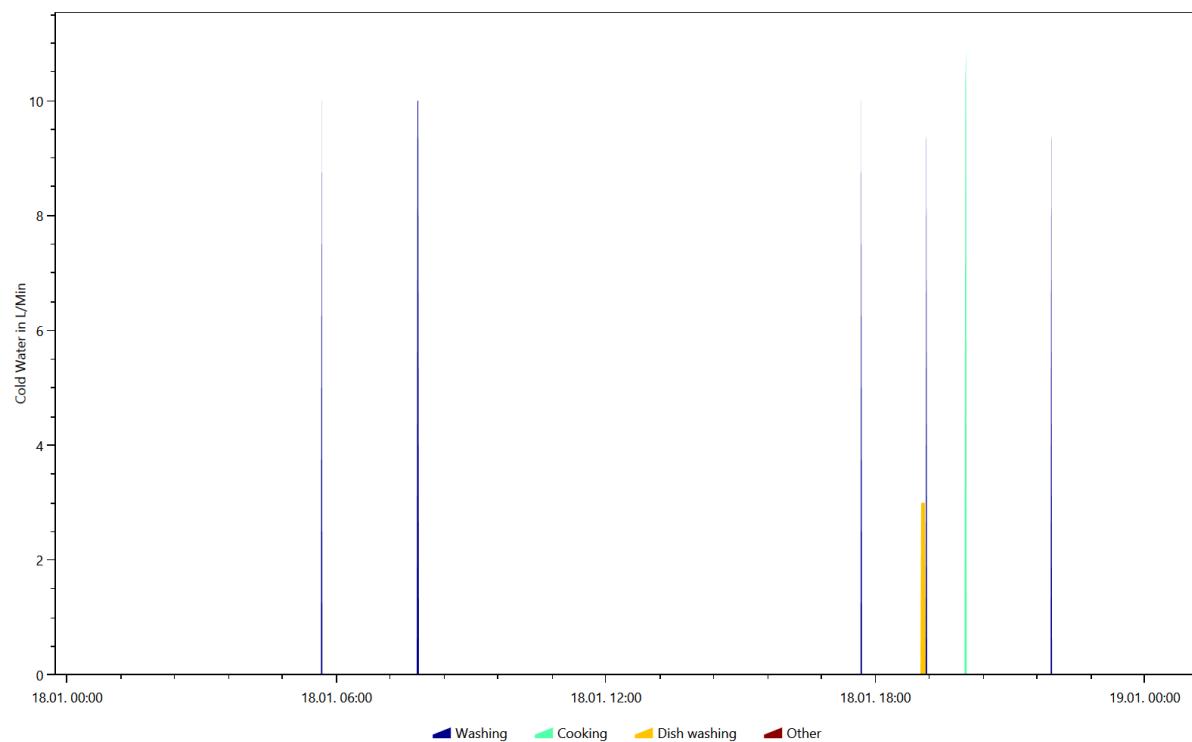
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.25



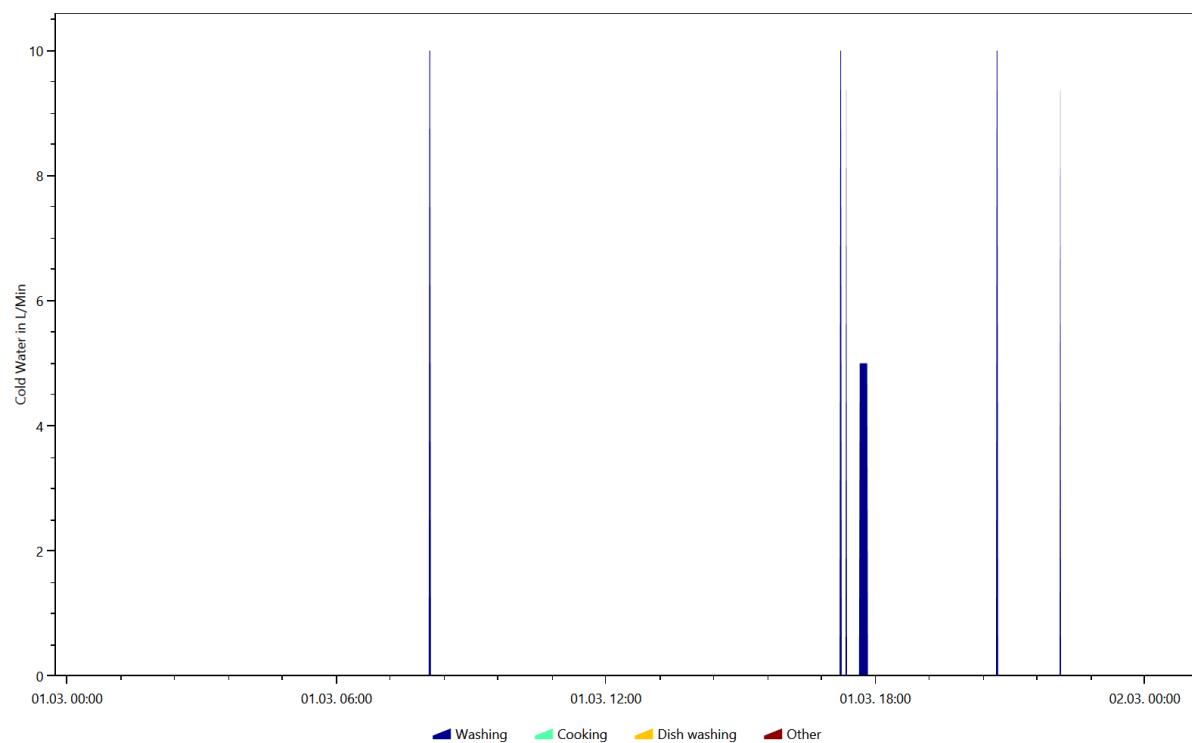
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.24



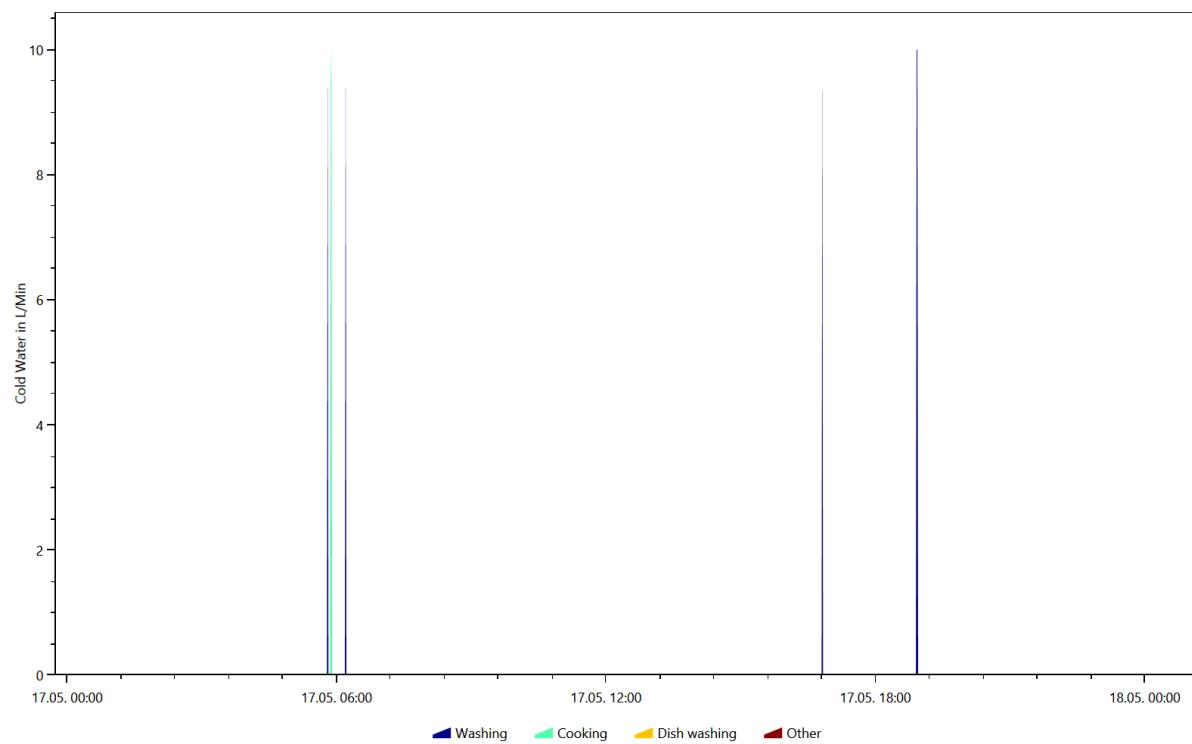
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.18



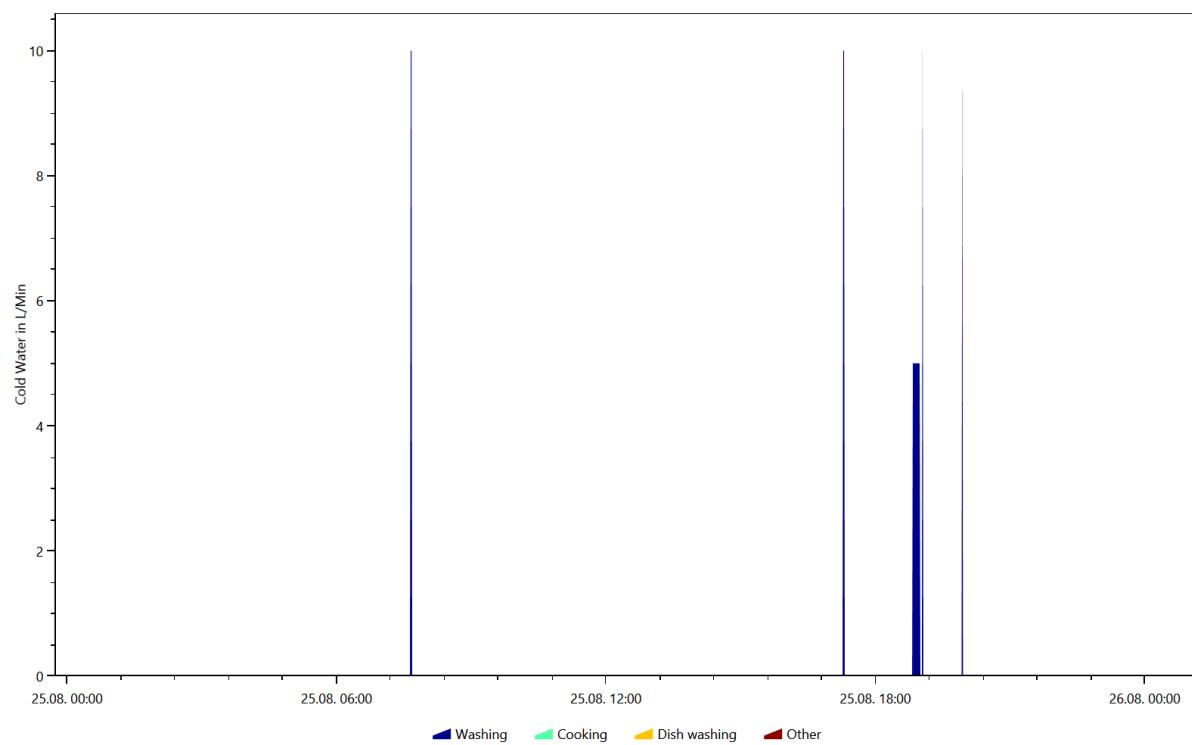
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.1



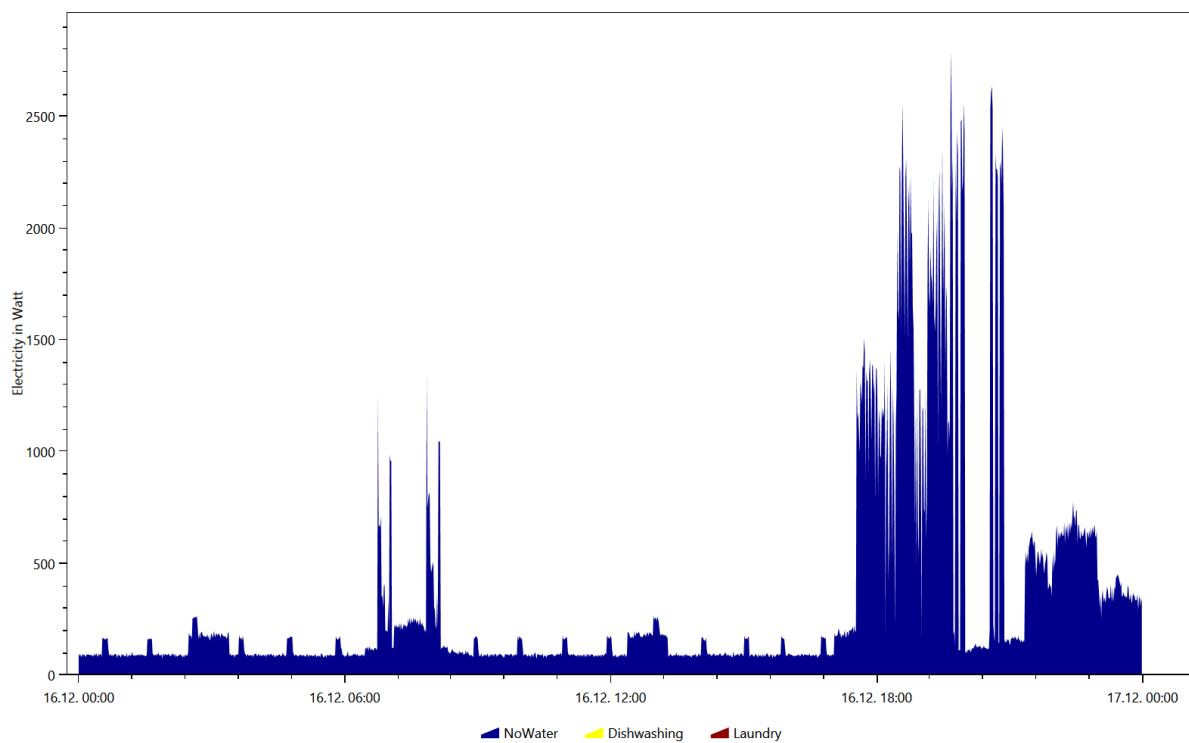
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.17



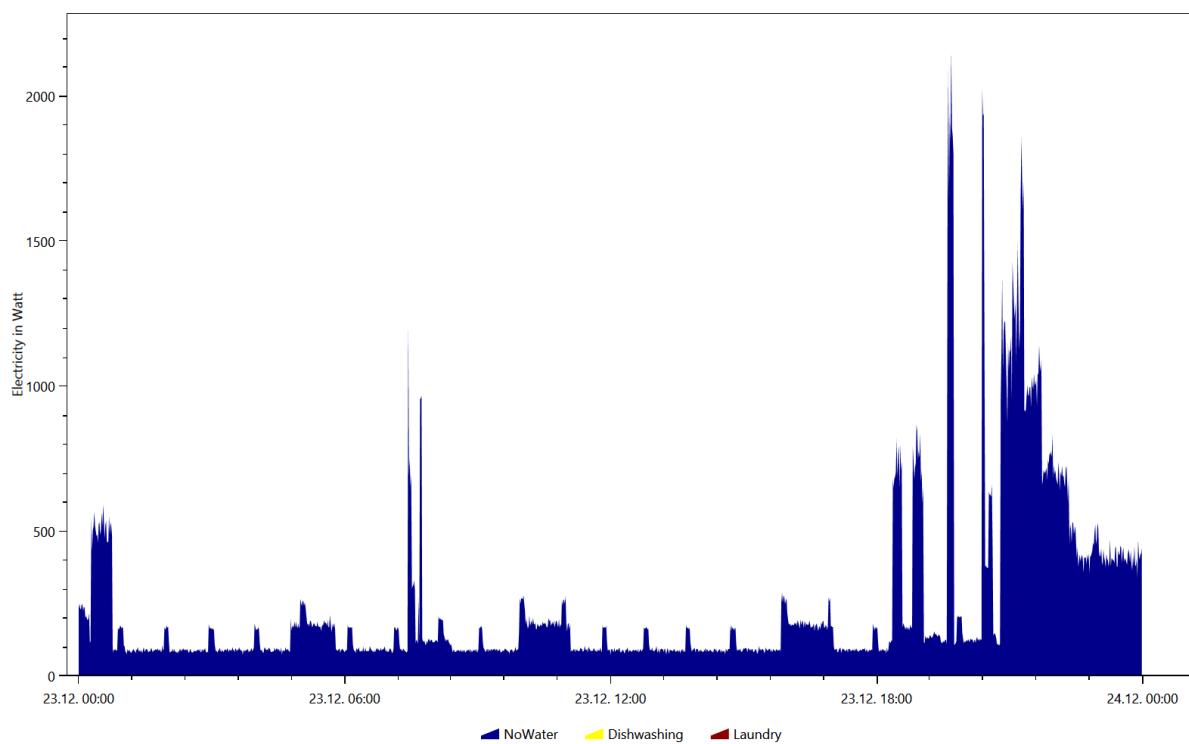
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.25



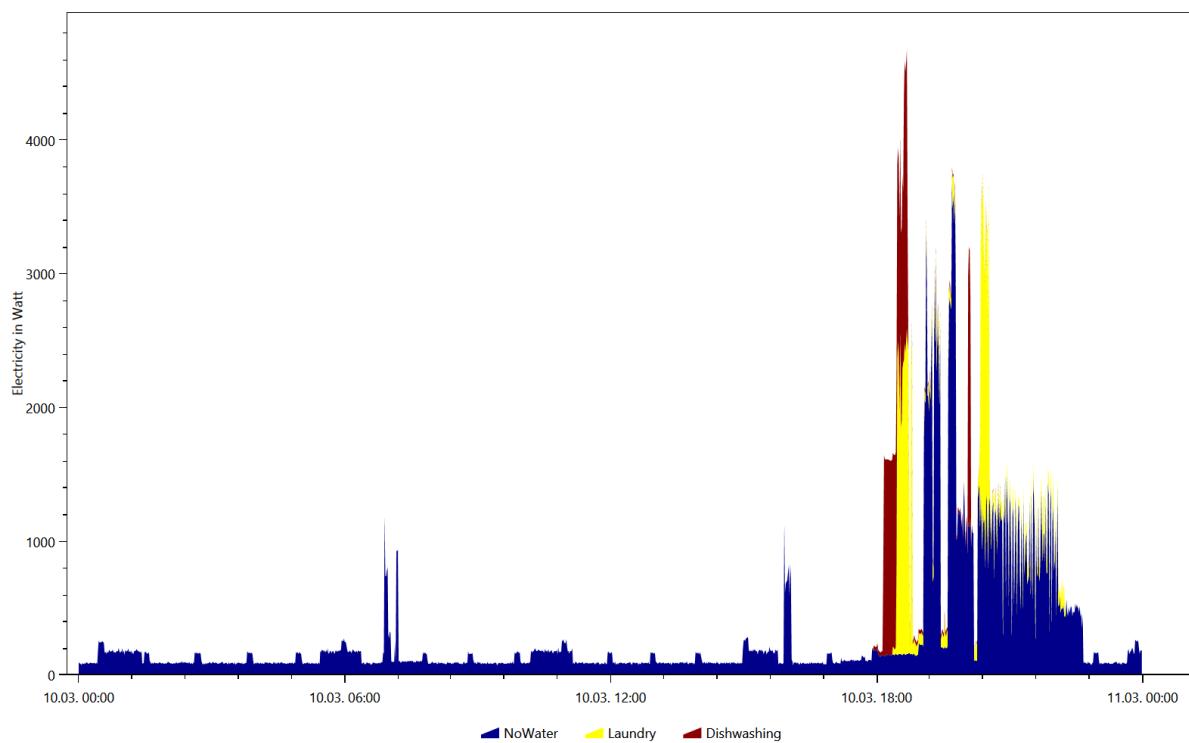
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date
2016.12.16



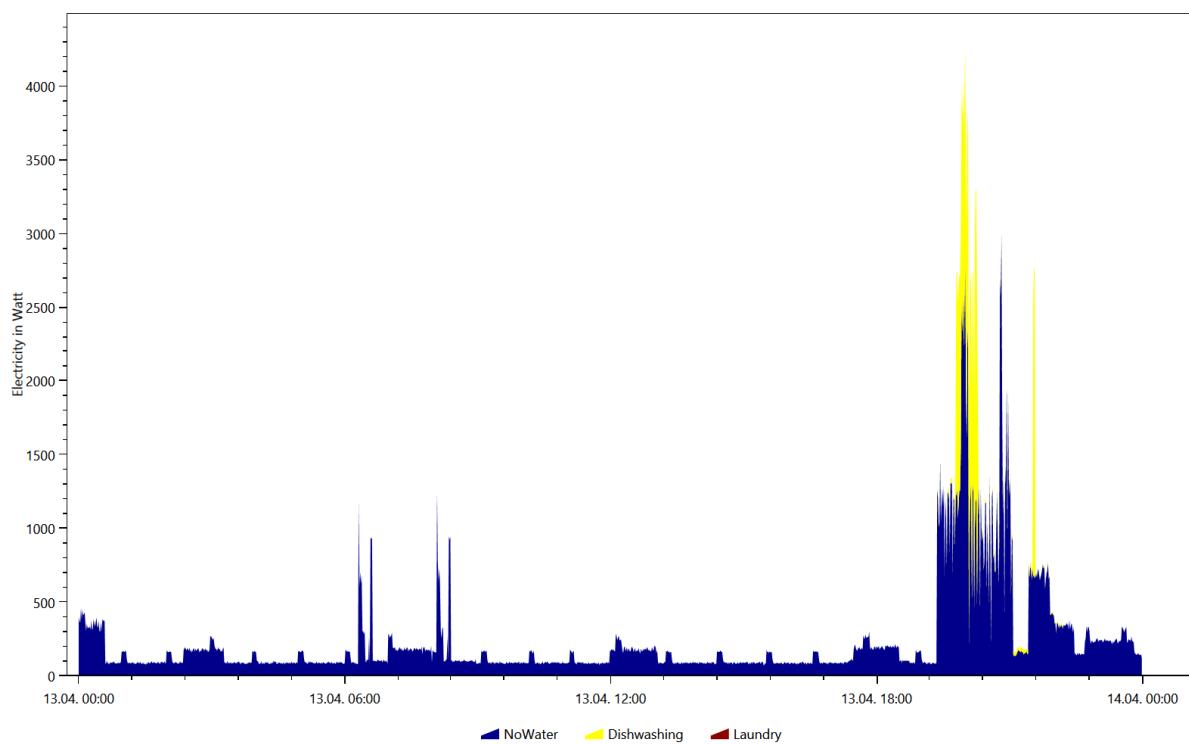
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date
2016.12.23



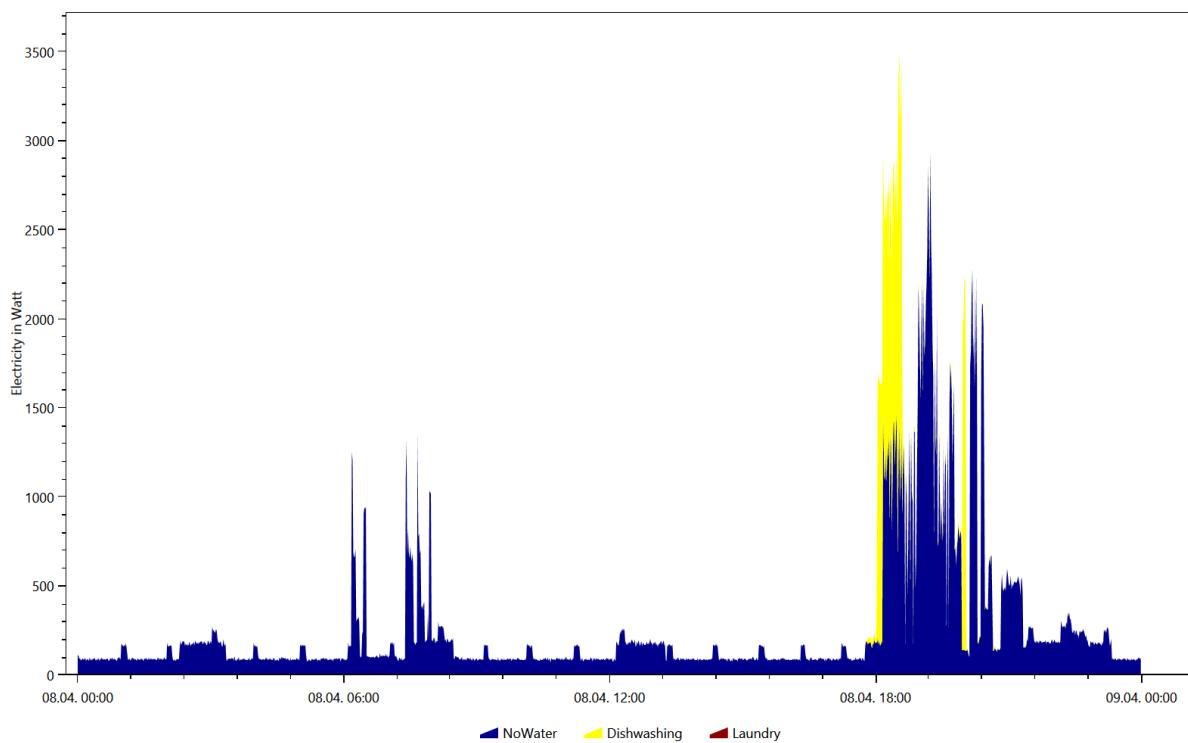
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.10



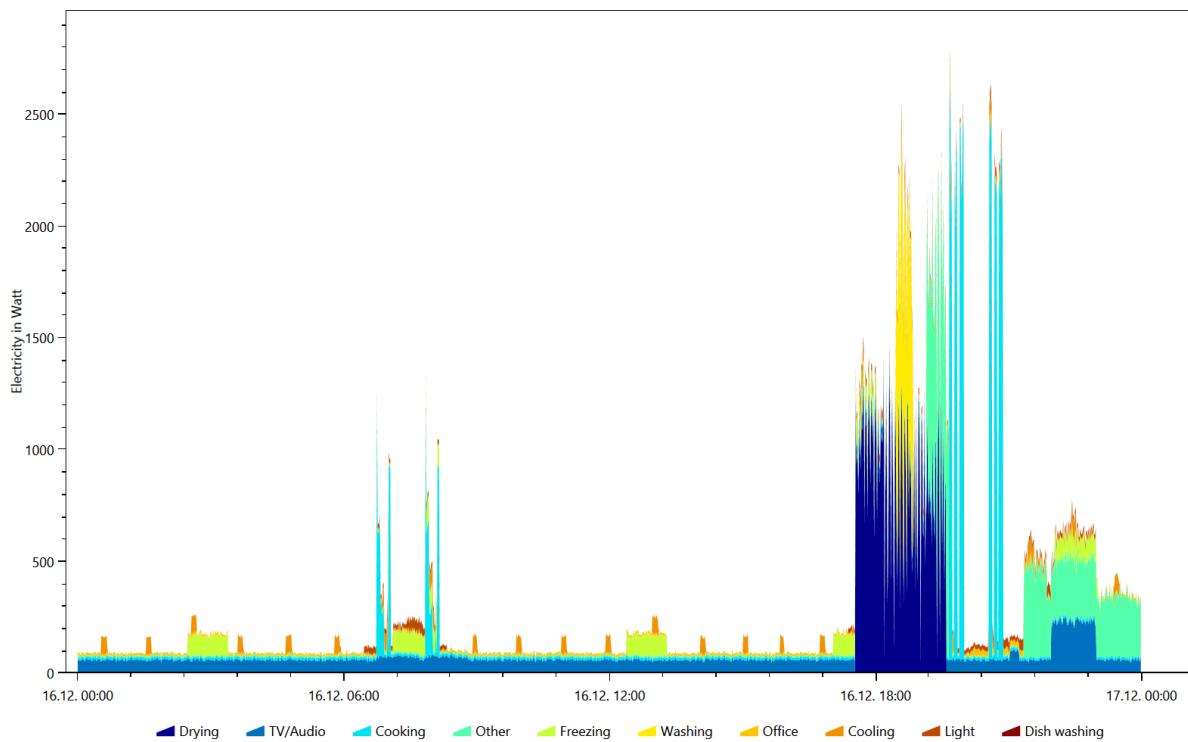
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.13



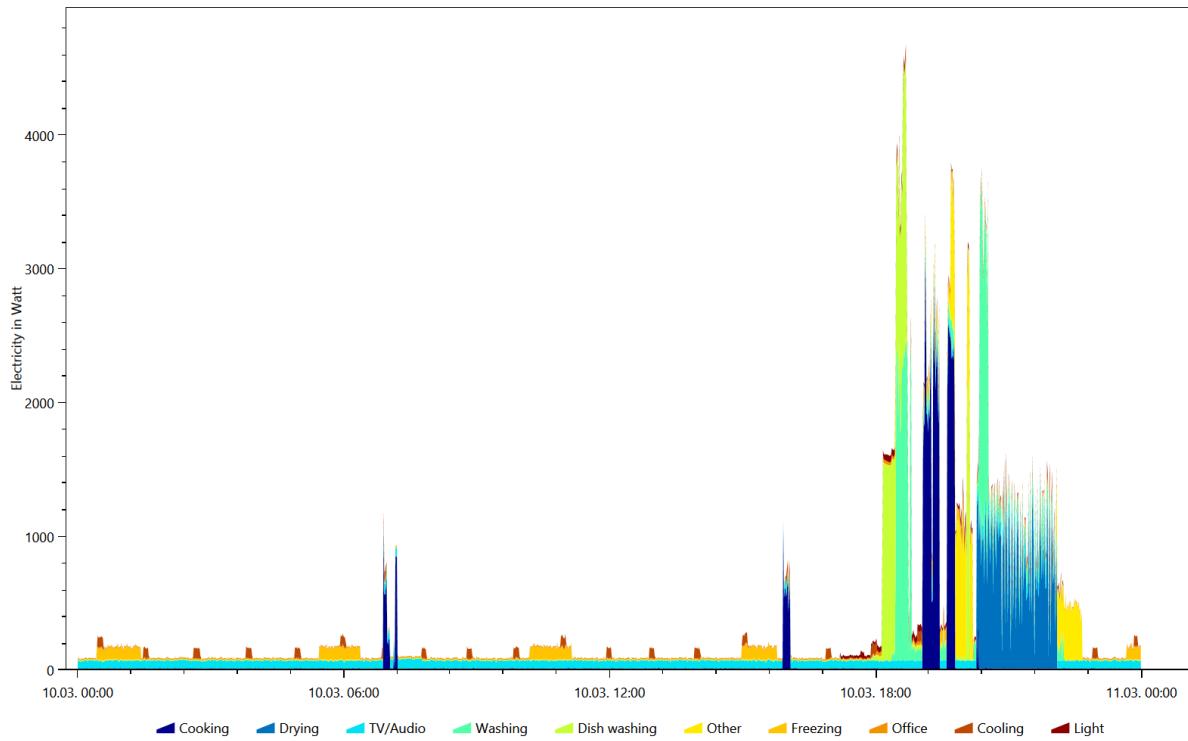
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.8



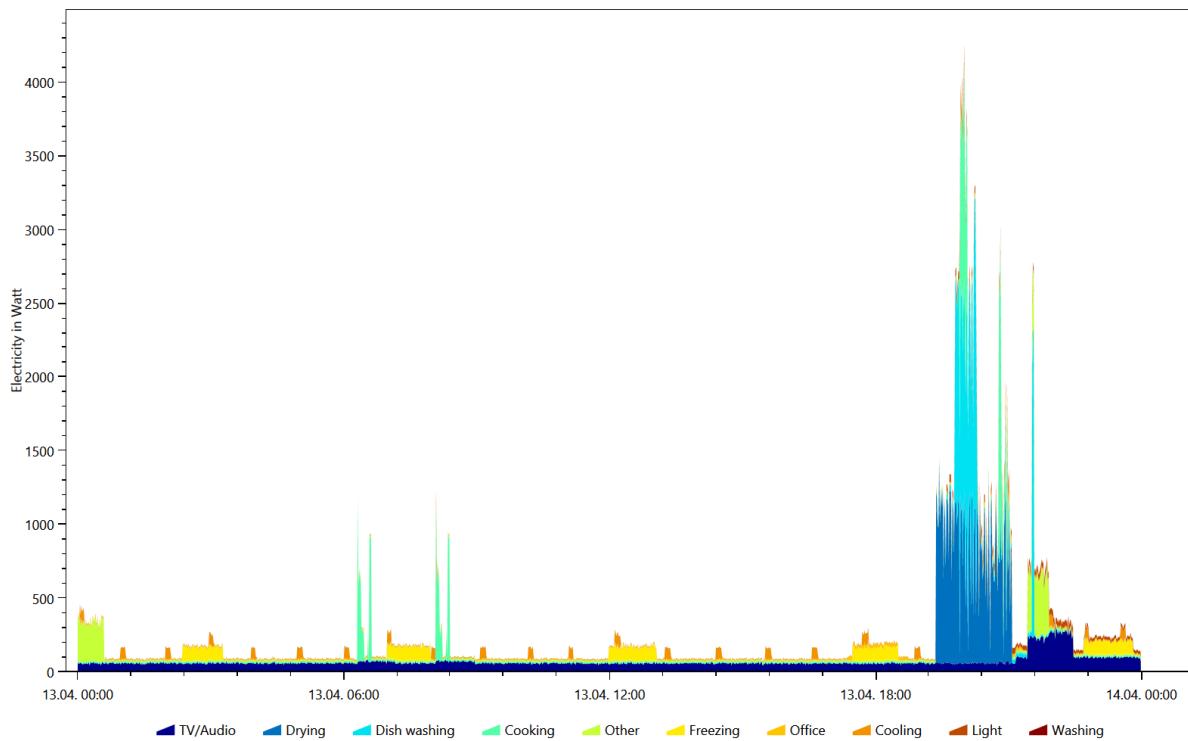
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.16



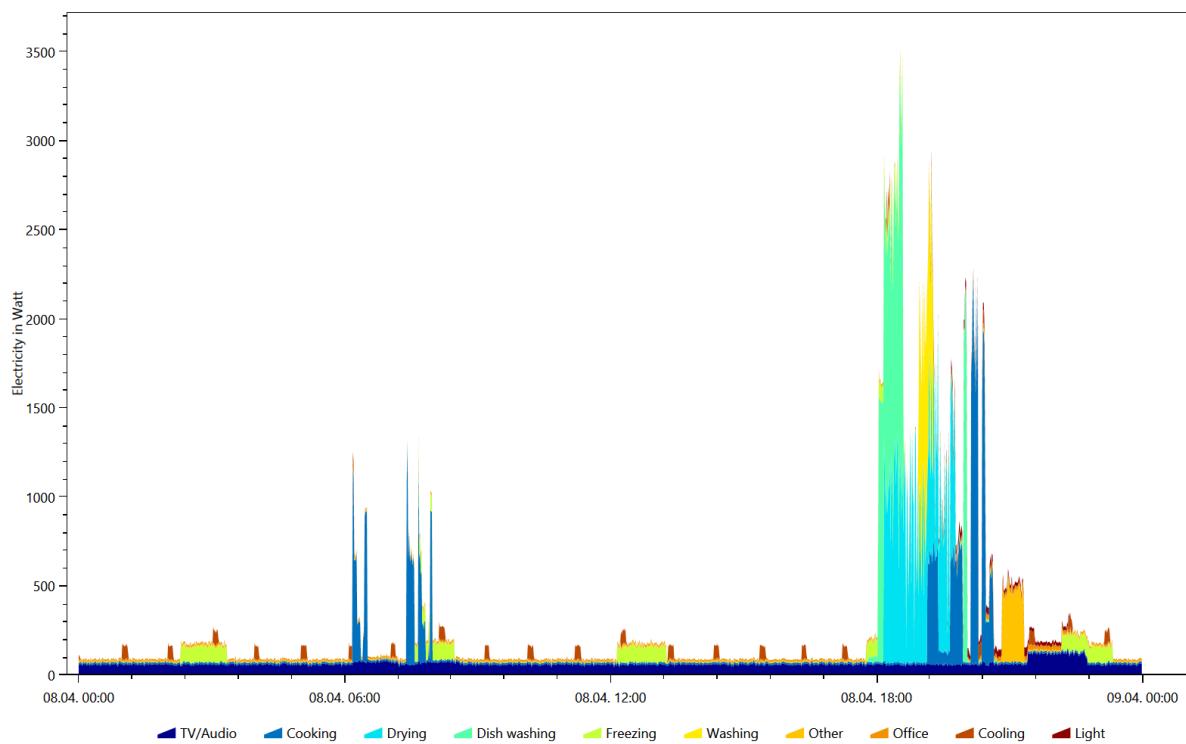
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.10



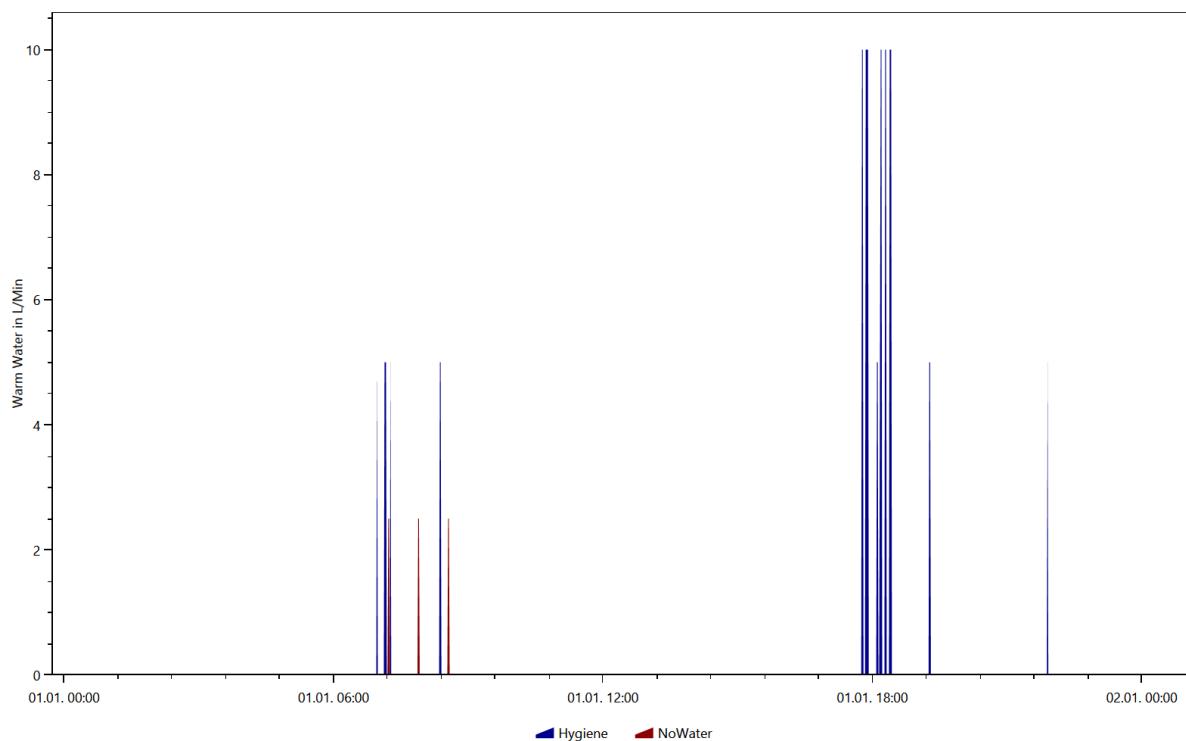
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.13



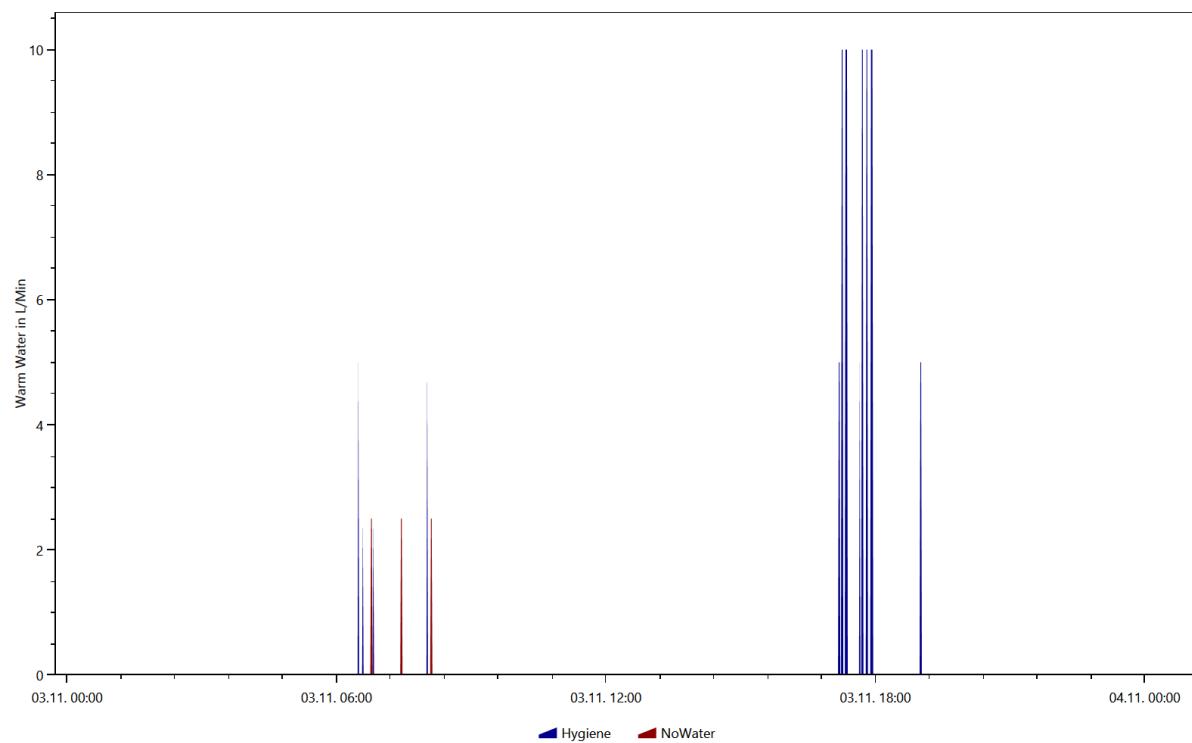
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.8



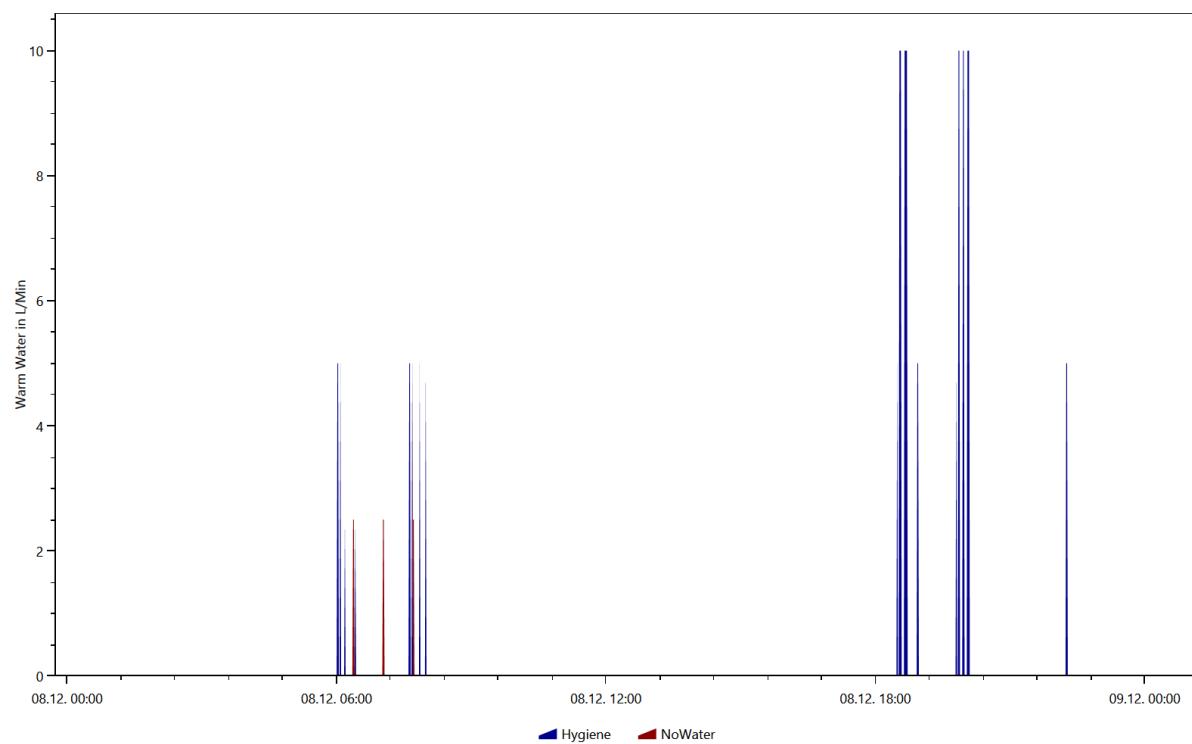
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.1



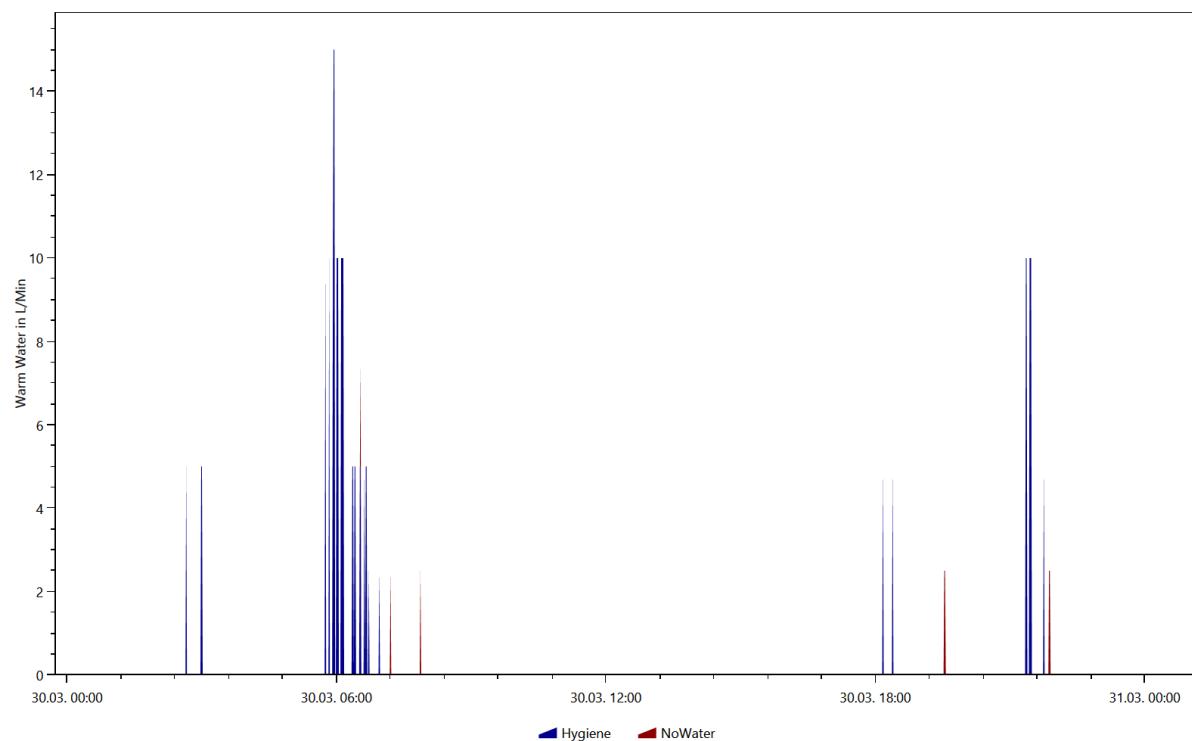
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date
2016.11.3



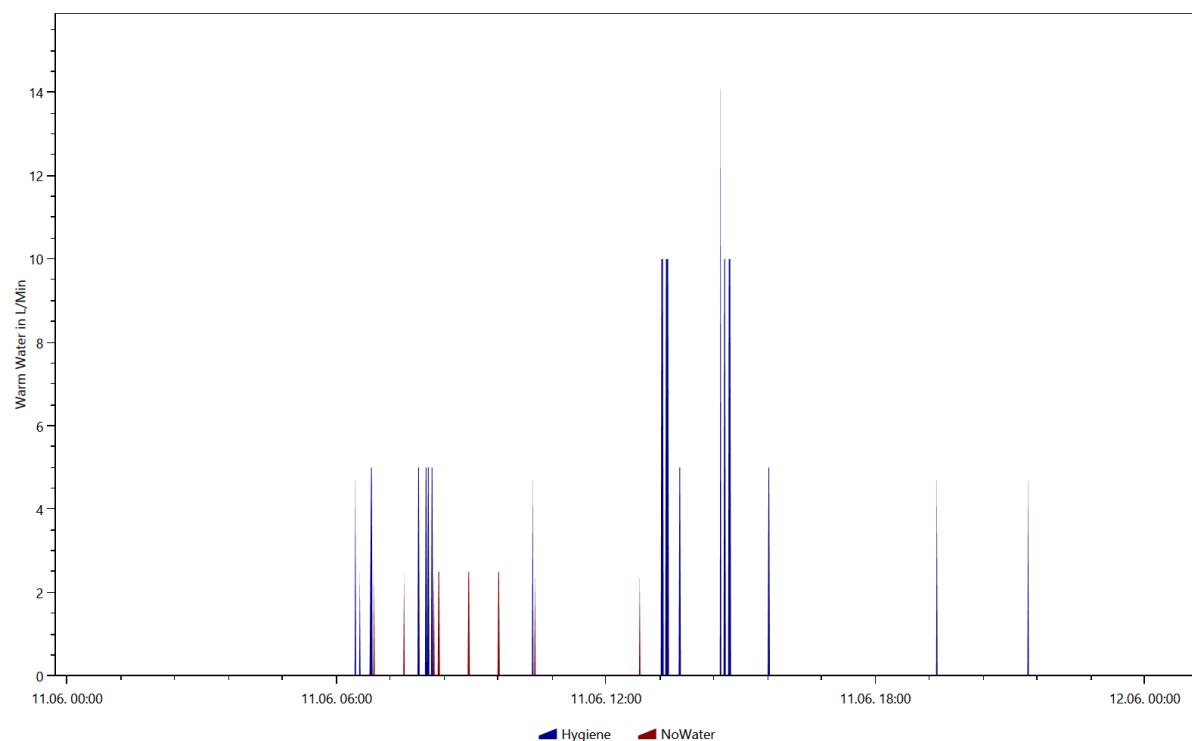
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date
2016.12.8



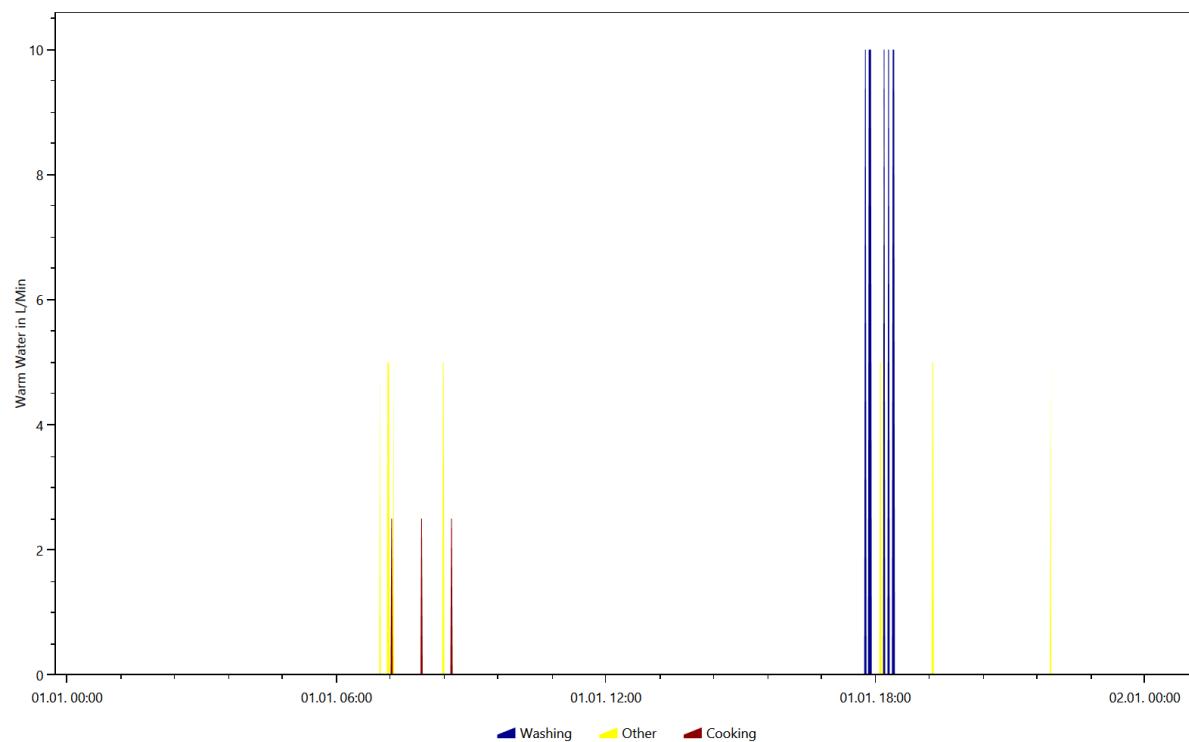
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date
2016.3.30



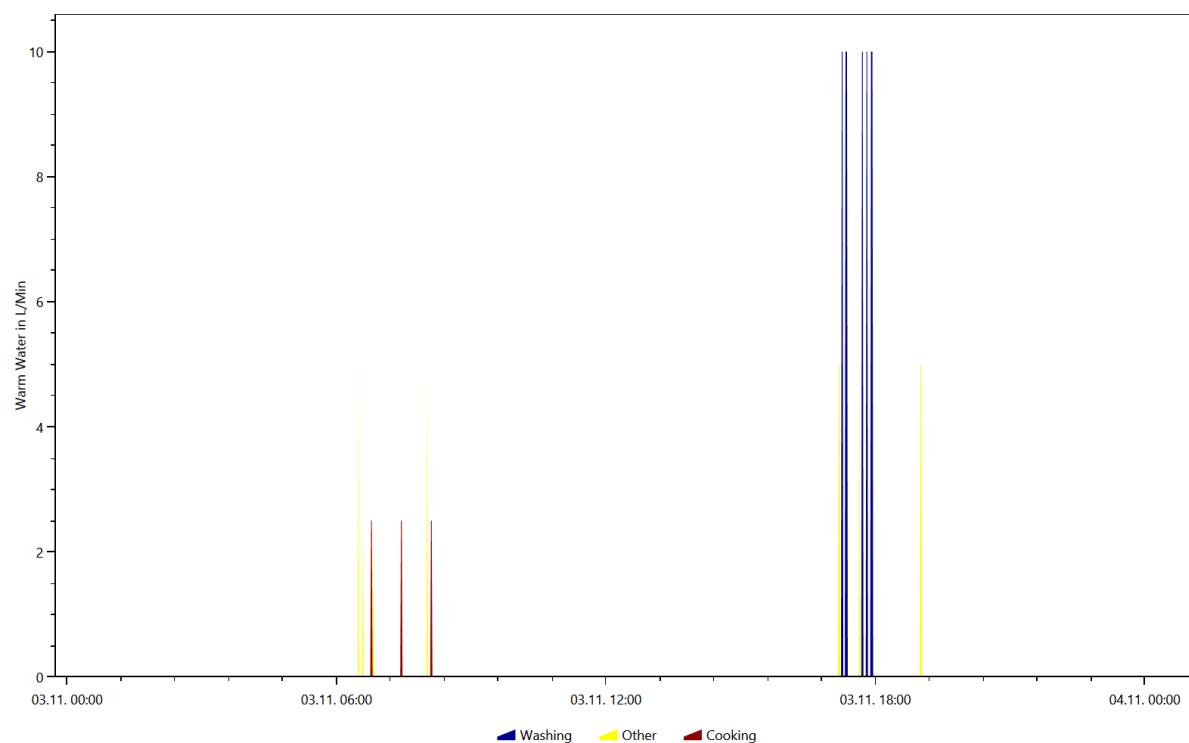
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date
2016.6.11



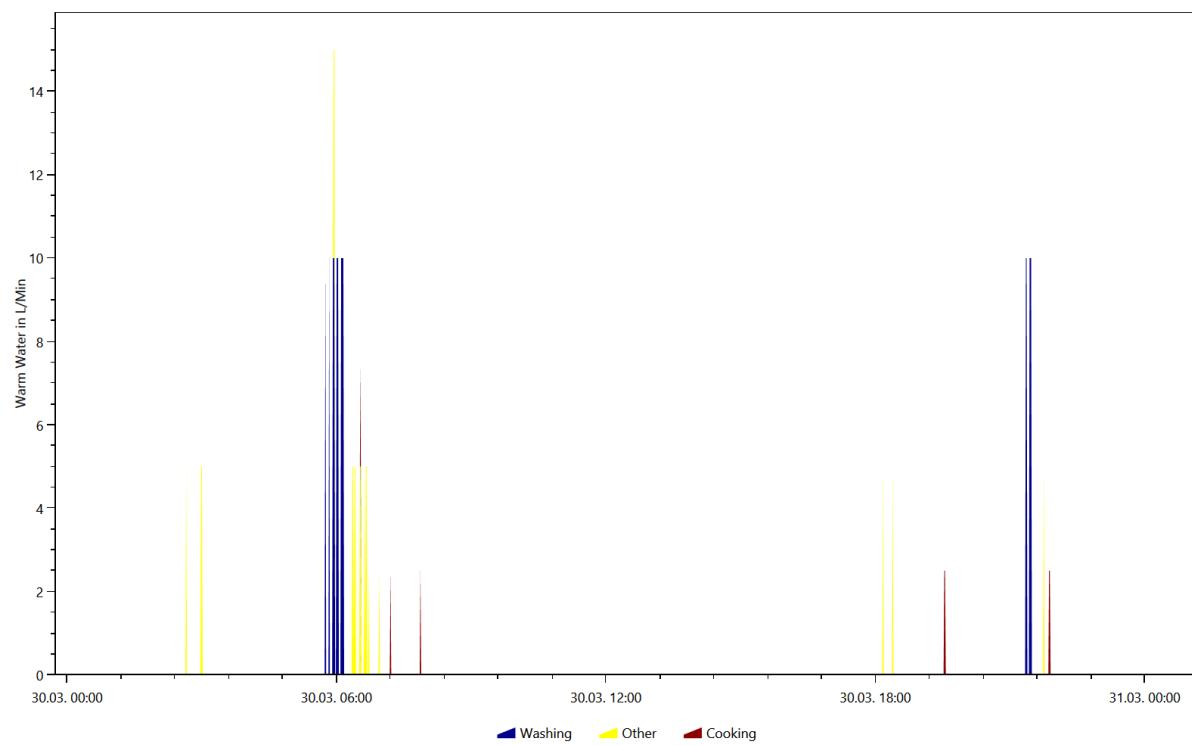
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.1



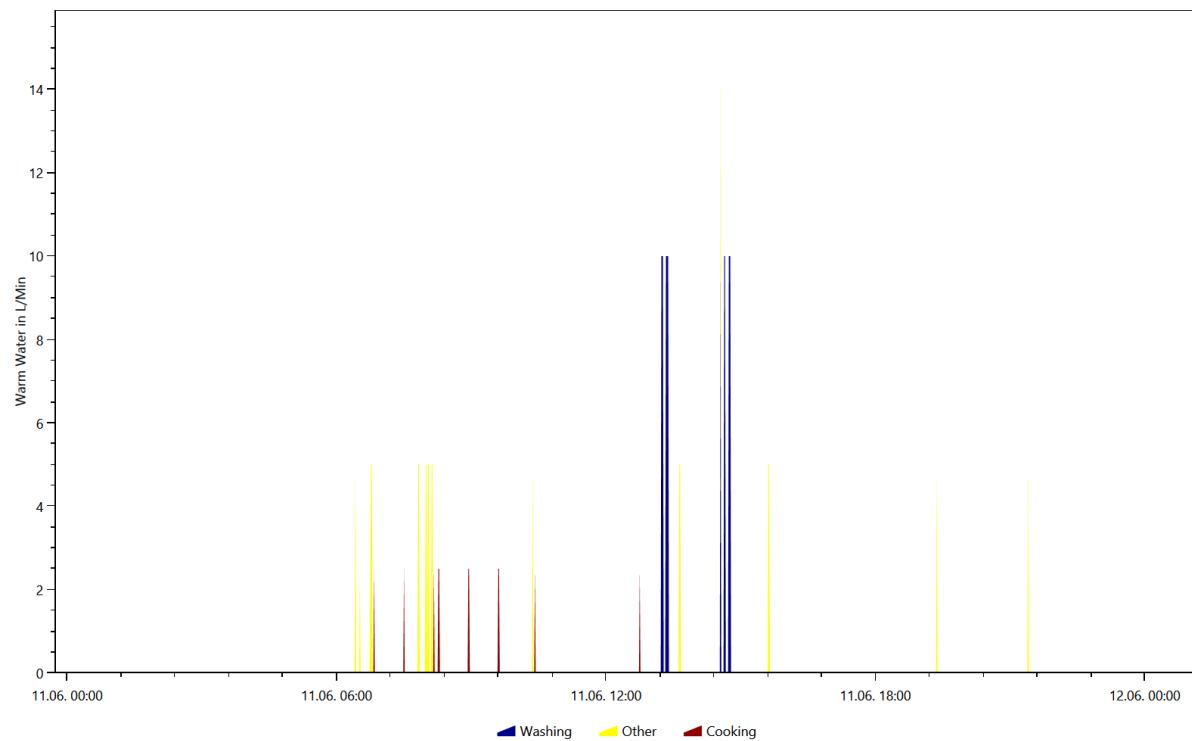
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.11.3



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



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date
2016.6.11

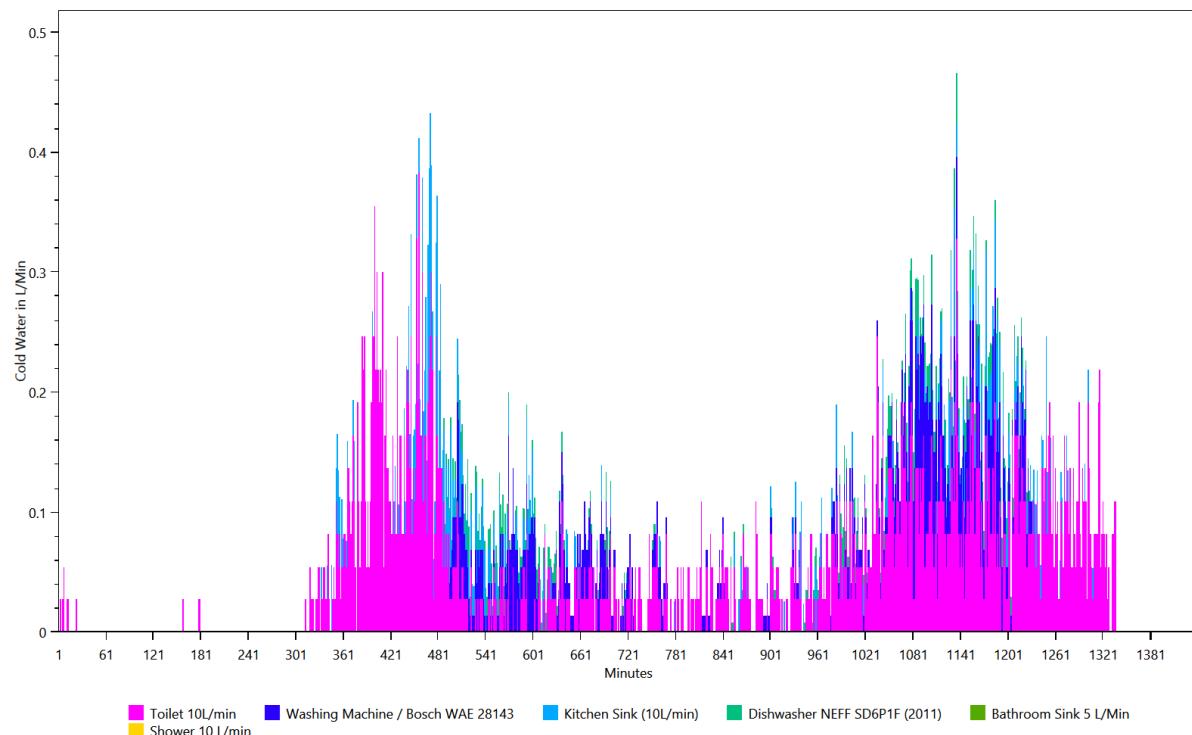


Overview of the time and power of the use per load type per device

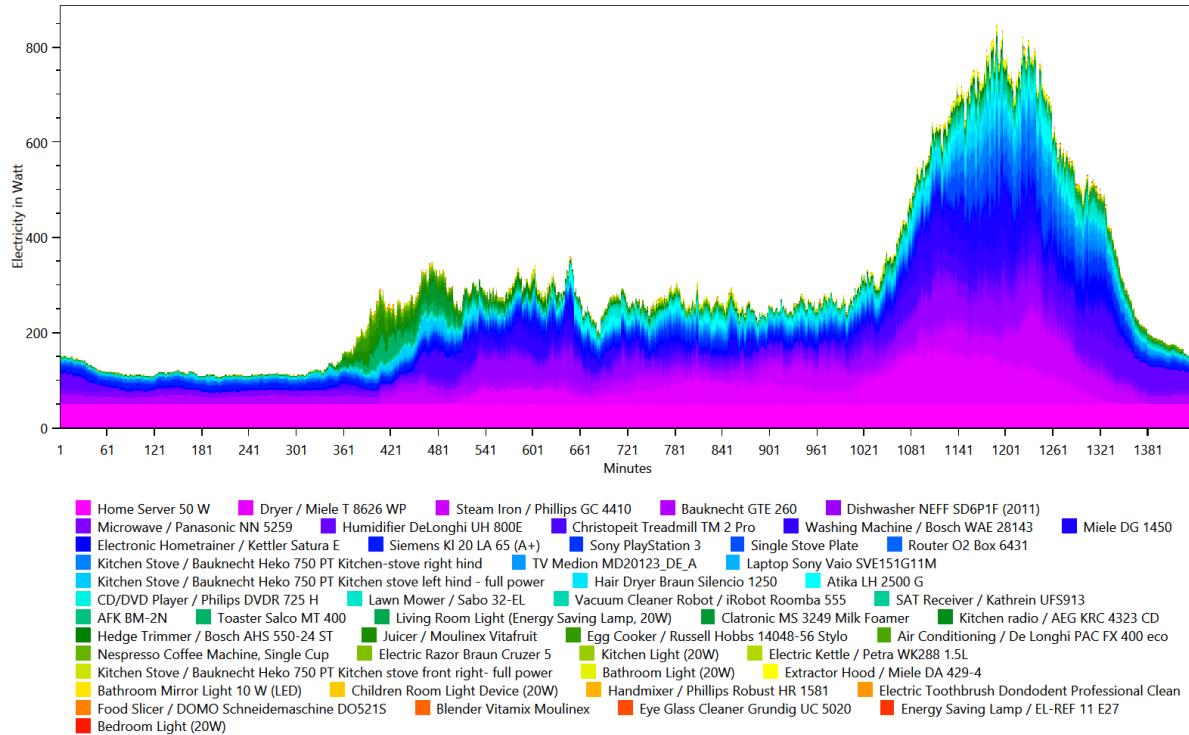
This is made from the files starting with: TimeOfUseEnergyProfiles

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

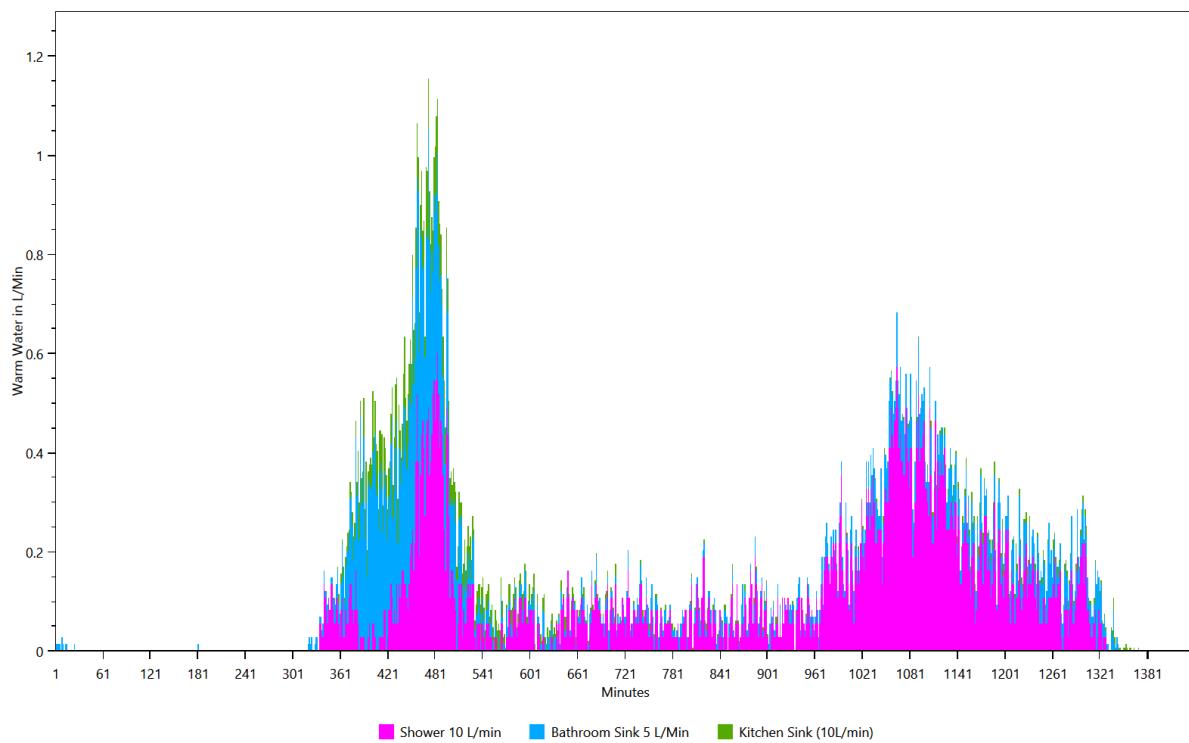
Cold Water



Electricity



Warm Water

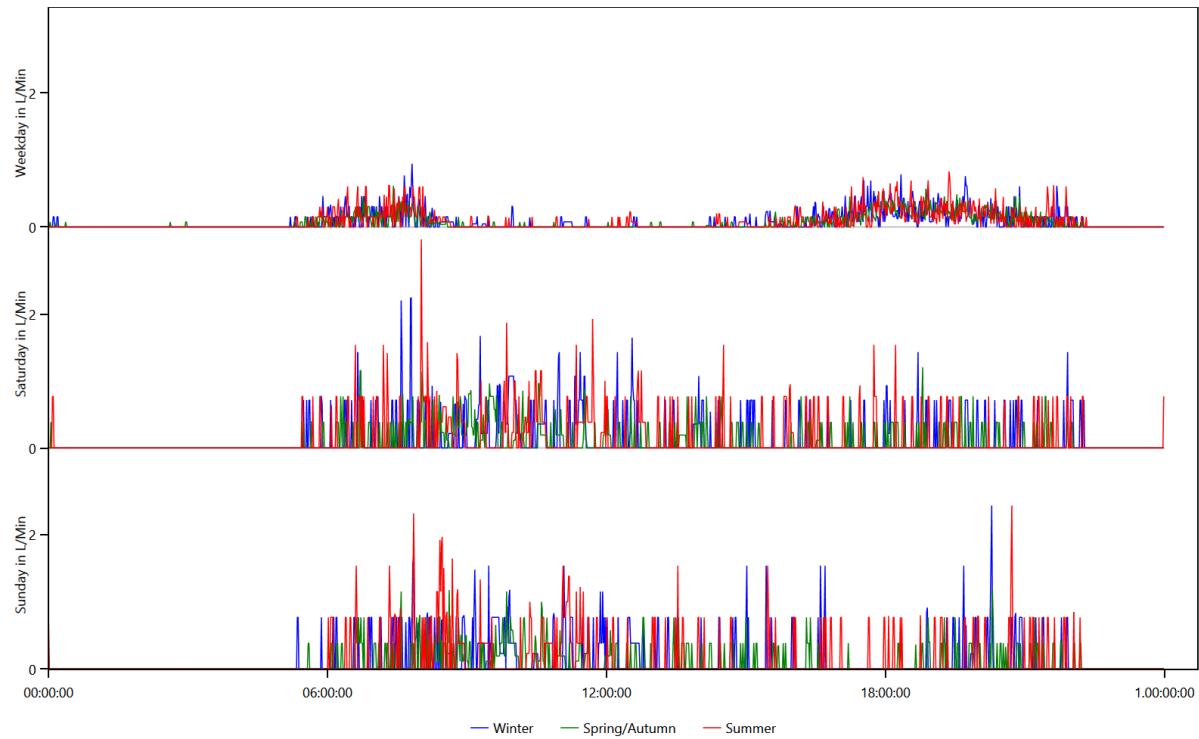


Energy use per load type during different seasons, split by weekday/saturday/sunday

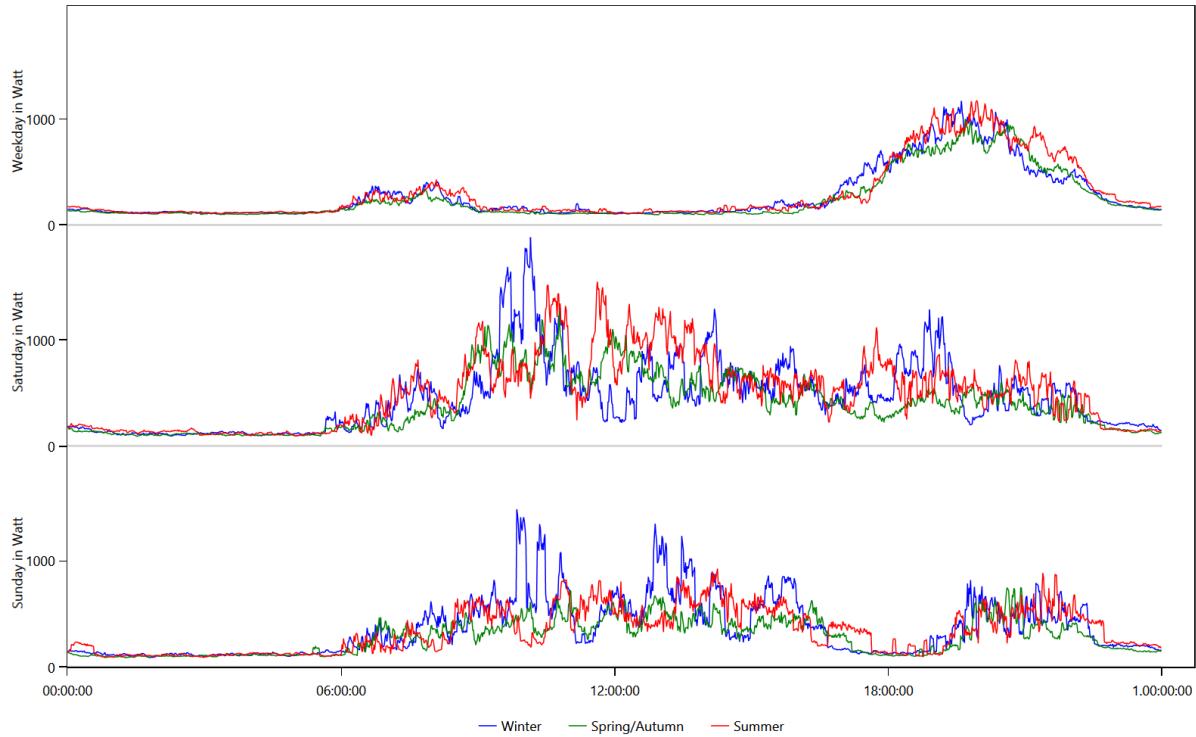
This is made from the files starting with: WeekdayProfiles

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

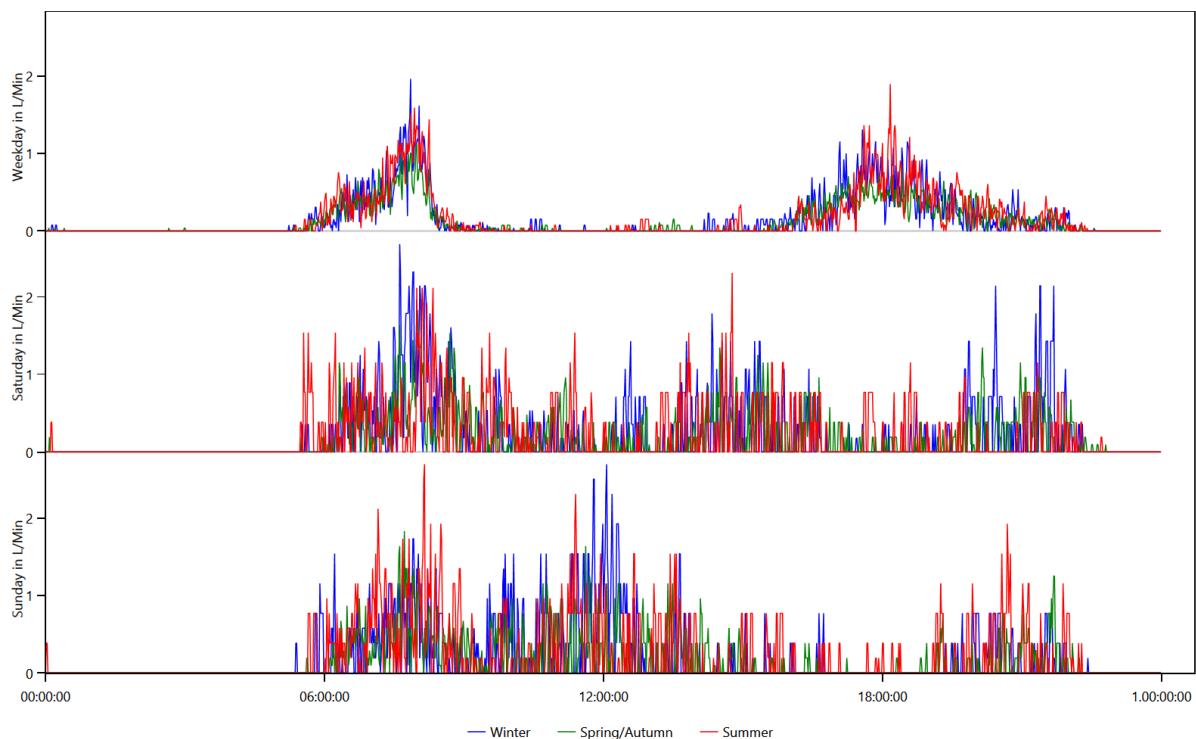
Cold Water



Electricity



Warm Water

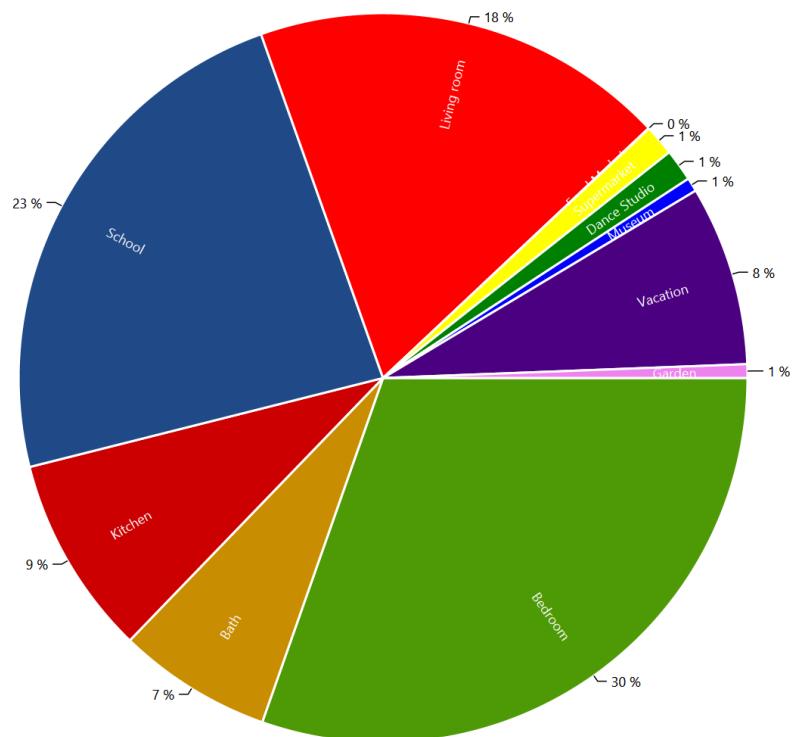


Location Distribution per Person

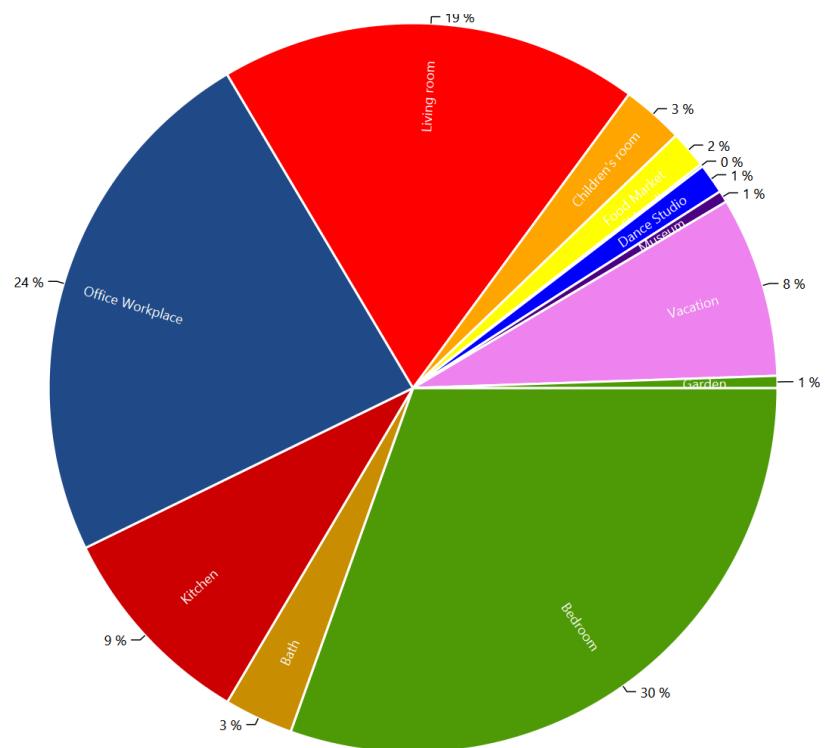
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR01 Rubi (23 Female)



CHR01 Sami (25 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

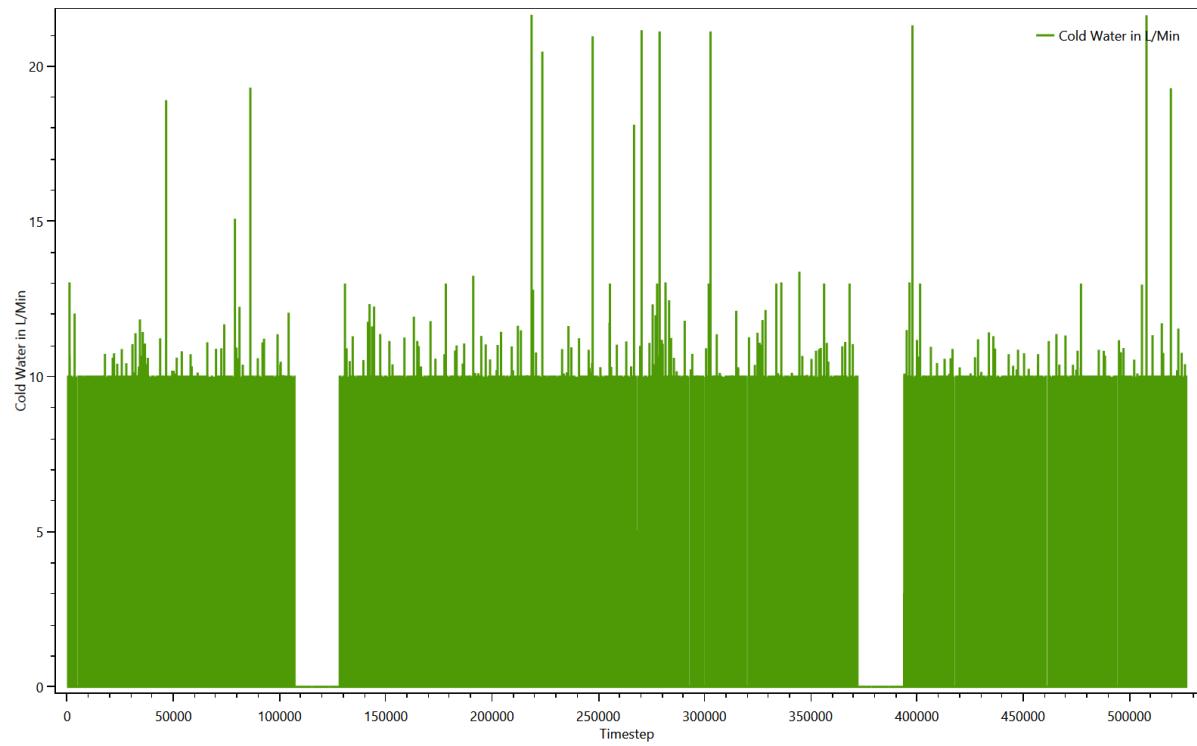
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR01 Rubi (23/Female);sleep bed 02 (08 h);sleep;False;
0;01.01.2016 00:00;CHR01 Sami (25/Male);sleep bed 08 (08 h);sleep;False;
418;01.01.2016 06:58;CHR01 Sami (25/Male);get ready in the morning (men);hygiene;False;
427;01.01.2016 07:07;CHR01 Sami (25/Male);go to the toilet;hygiene;False;
433;01.01.2016 07:13;CHR01 Sami (25/Male);eat breakfast (1 h);cooking;False;
444;01.01.2016 07:24;CHR01 Rubi (23/Female);eat a cooked meal (interrupting) (eat breakfast (1 h));cooking;False;
500;01.01.2016 08:20;CHR01 Rubi (23/Female);go to the toilet;hygiene;False;
500;01.01.2016 08:20;CHR01 Sami (25/Male);work at the office from 8:00 (9 h);work;False;
506;01.01.2016 08:26;CHR01 Rubi (23/Female);work as teacher ;work;False;
1066;01.01.2016 17:46;CHR01 Sami (25/Male);take a shower (men);hygiene;False;
1074;01.01.2016 17:54;CHR01 Rubi (23/Female);run the dishwasher (triggered);cleaning;False;
1084;01.01.2016 18:04;CHR01 Sami (25/Male);go to the toilet;hygiene;False;
1090;01.01.2016 18:10;CHR01 Sami (25/Male);use the laptop (1 h);Active Entertainment (Computer, Internet etc.);False;
1091;01.01.2016 18:11;CHR01 Rubi (23/Female);take a shower with hair washing (women) (20 min hair drying);hygiene;False;
1154;01.01.2016 19:14;CHR01 Rubi (23/Female);go to the toilet;hygiene;False;
1160;01.01.2016 19:20;CHR01 Rubi (23/Female);do laundry at 30°C (by variable);cleaning;False;
1164;01.01.2016 19:24;CHR01 Sami (25/Male);cook pasta and eat it;cooking;False;
1176;01.01.2016 19:36;CHR01 Rubi (23/Female);cook together in the evening;cooking;False;
1187;01.01.2016 19:47;CHR01 Sami (25/Male);play Playstation;Passive Entertainment (TV etc.);False;

Sum Profiles

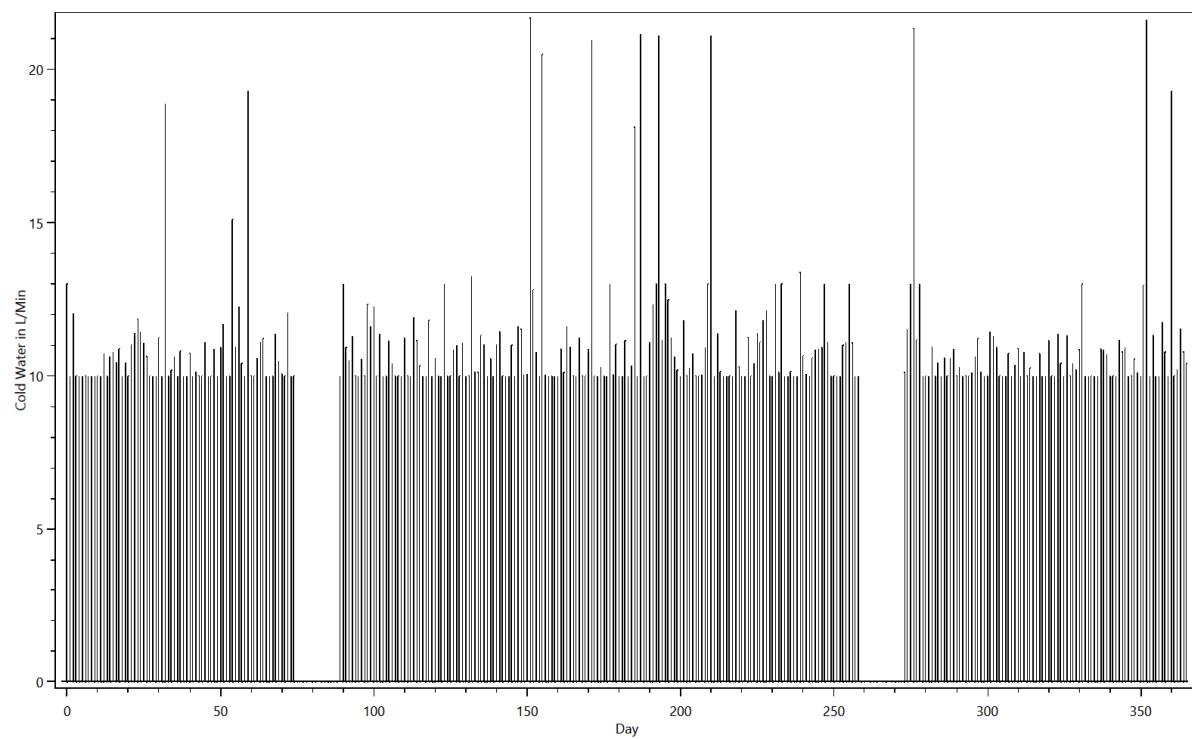
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

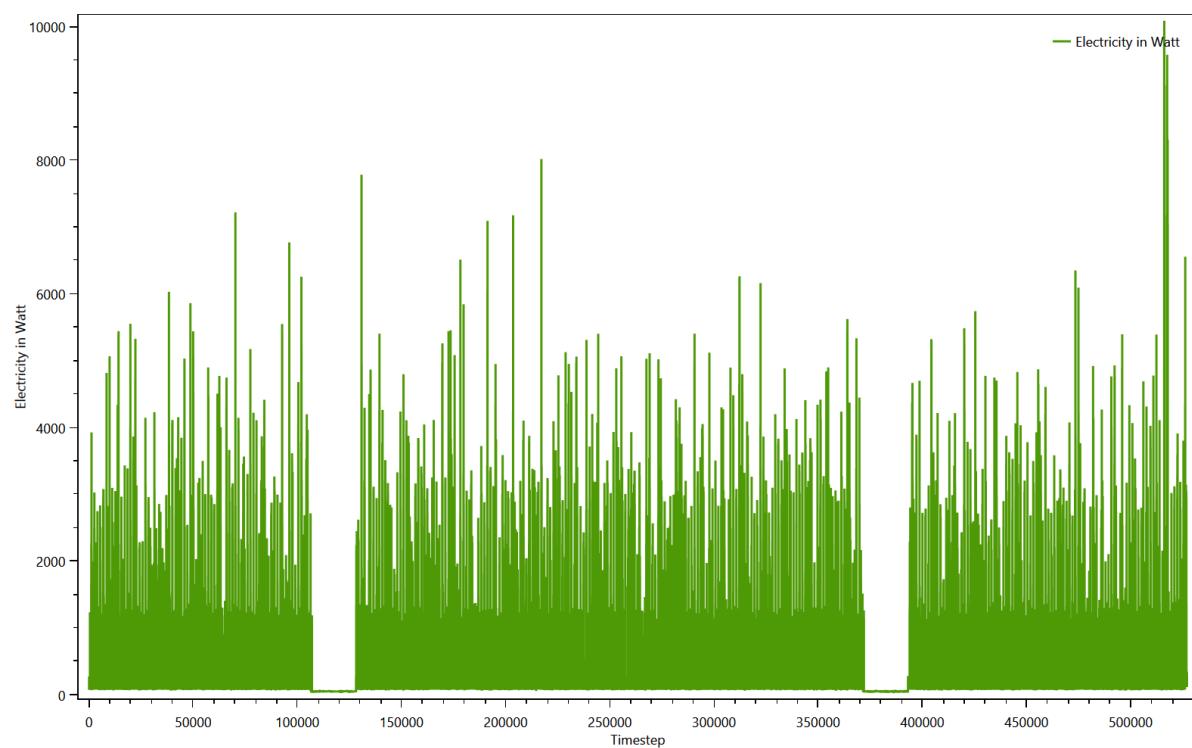
Summed up curve for Cold Water from SumProfiles.Cold Water.png



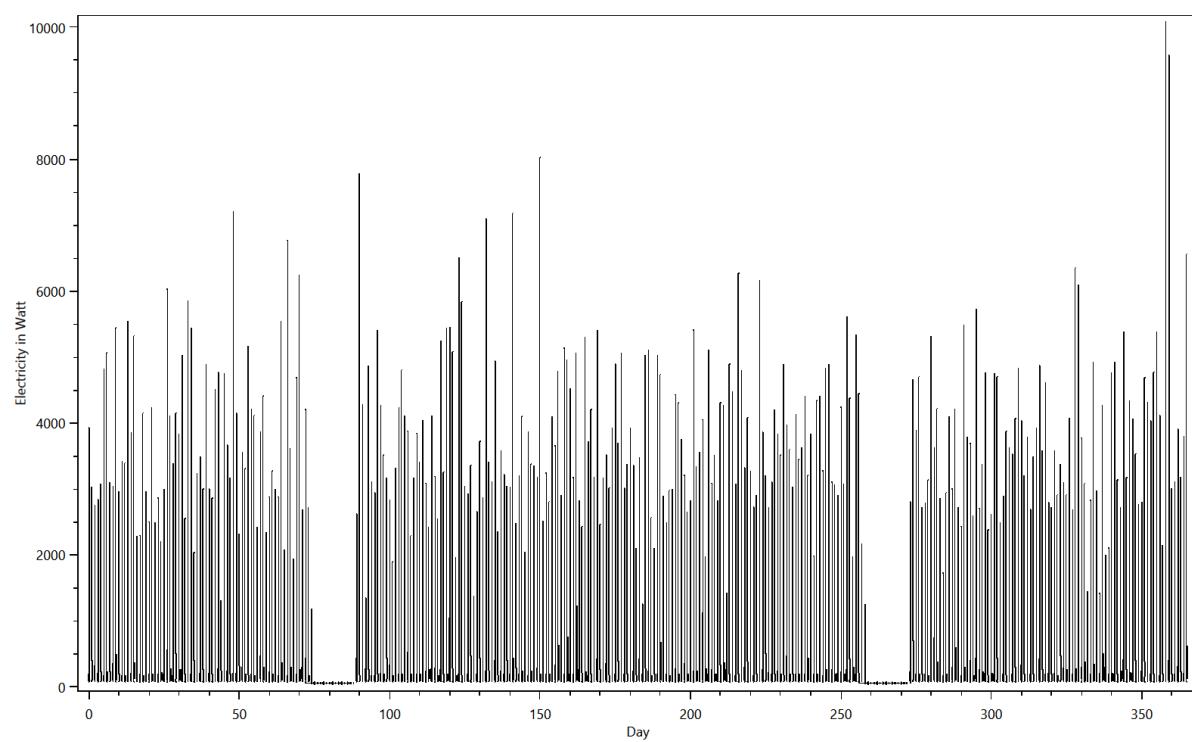
Summed up curve for Cold WaterMinMax from SumProfiles.ColdWaterMinMax..png



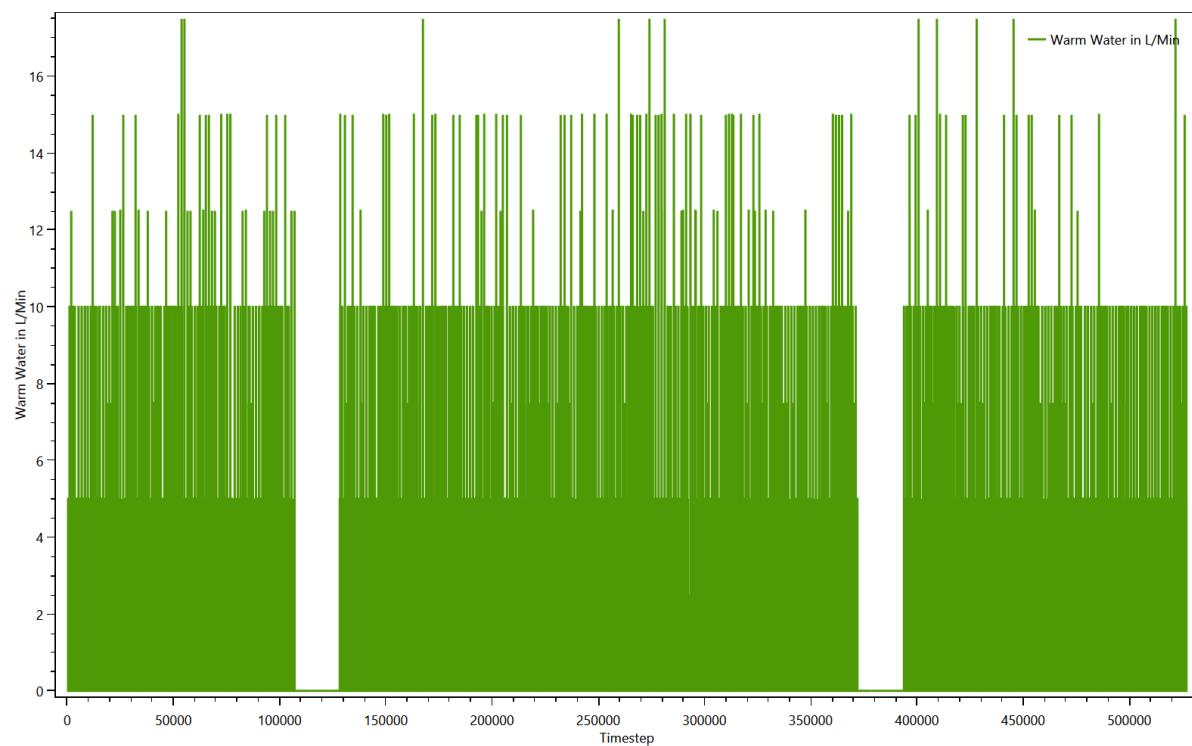
Summed up curve for Electricity from SumProfiles.Electricity.png



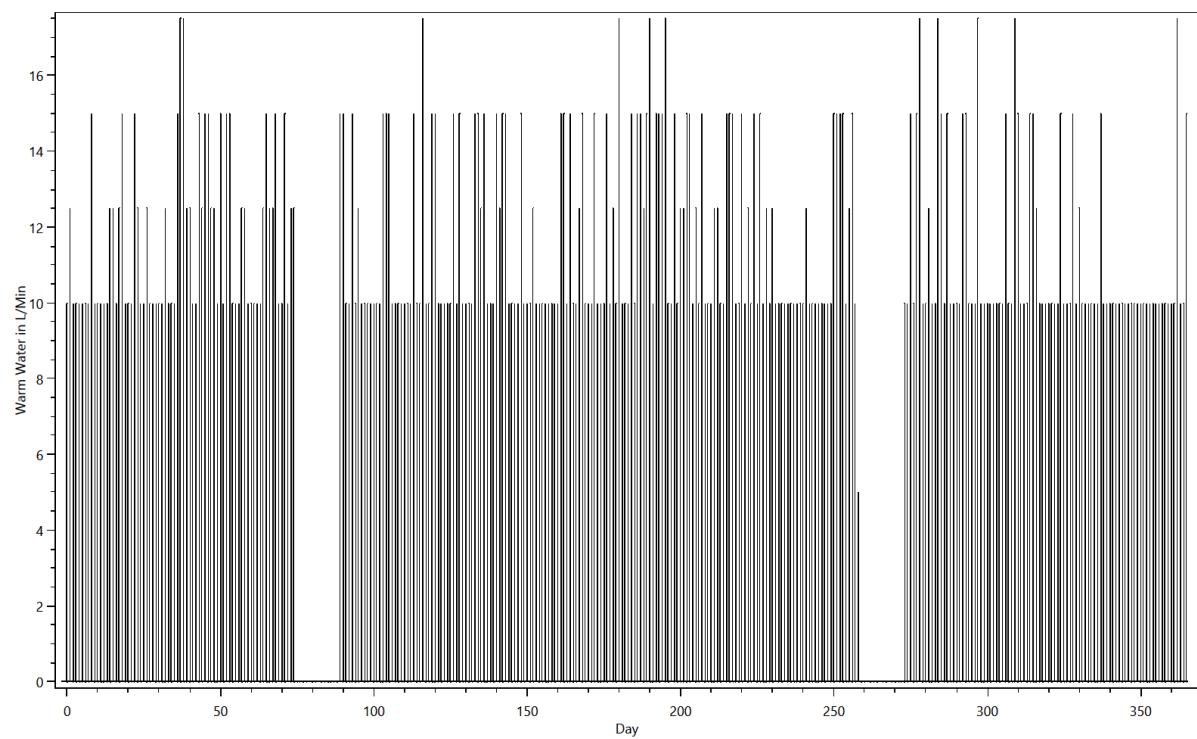
Summed up curve for ElectricityMinMax from
SumProfiles.ElectricityMinMax..png



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



Summed up curve for Warm WaterMinMax from SumProfiles.WarmWaterMinMax..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.CHR01 Couple both at Work 0.txt

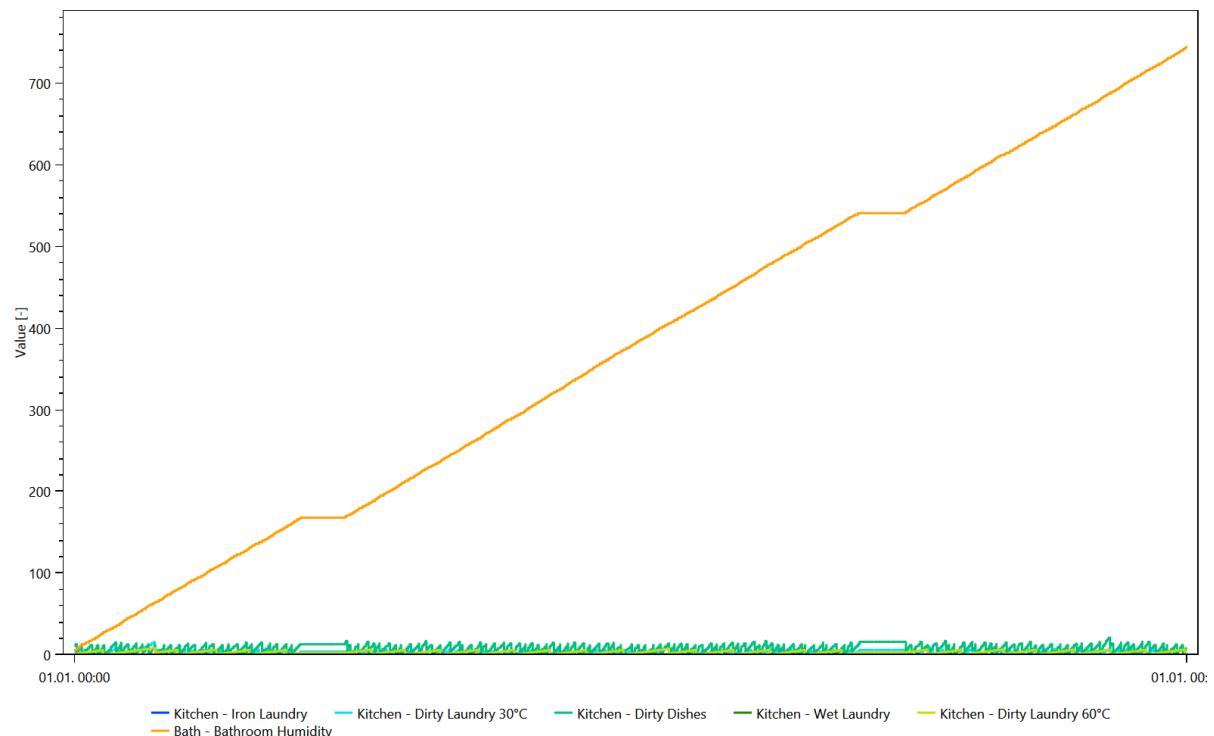
Device;Load Type;Profile;Number of Activations
AFK BM-2N;Electricity;Backing profile IV Bread 45 min [Synthetic];75
Air Conditioning / De Longhi PAC FX 400 eco;Electricity;03 h 0 min 100 % [Synthetic];2
Atika LH 2500 G;Electricity;0 h 15 min 100% [Synthetic];55
Bathroom Light (20W);Electricity;Bath - light [Synthetic for Light Device];1183
Bathroom Mirror Light 10 W (LED);Electricity;Bath - light [Synthetic for Light Device];1183
Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];3387
Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 50% [Synthetic];592
Bauknecht GTE 260;Electricity;0 h 01 min 100% [Synthetic];17
Bauknecht GTE 260;Electricity;05 h 0 min Fridge, 1h 100%, 4h 0% [Synthetic];1627
Bed 2;None;08 h 0 min 100% [Synthetic];338
Bed 8;None;08 h 0 min 100% [Synthetic];338
Bedroom Light (20W);Electricity;Bedroom - light [Synthetic for Light Device];2
Blender Vitamix Moulinex;Electricity;Profile for Blender Vitamix Moulinex Electricity [Measurement by ZSW (1min)];111
Board Games;None;01 h 0 min 100% [Synthetic];168
CD/DVD Player / Philips DVDR 725 H;Electricity;01 h 30 min 100% [Synthetic];195
CD/DVD Player / Philips DVDR 725 H;Electricity;02 h 0 min 100% [Synthetic];205
CD/DVD Player / Philips DVDR 725 H;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8084
Children Room Light Device (20W);Electricity;Children's room - light [Synthetic for Light Device];149
Christopeit Treadmill TM 2 Pro;Electricity;0 h 30 min 100% [Synthetic];238

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

