

## Overview of the results of the household CHR12 Student 2, Male, Philosophy 0

Calculation Time

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

Energy Intensity: Random

Seed 5275

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:05:41

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## Totals

### Totals for each Loadtype

Load Type	Value	Unit
Cold Water	12192.40	L
Electricity	1102.67	kWh
Warm Water	44480.00	L

### Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	33.31	L
Electricity	3.01	kWh
Warm Water	121.53	L

### Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	15.00	L/Min
Electricity	-12.29	6289.61	Watt
Warm Water	0.00	20.00	L/Min

### Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	12192.40	L
Electricity	1102.67	kWh

Warm Water	44480.00	L
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### Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	33.31	L
Electricity	3.01	kWh
Warm Water	121.53	L

## Persons

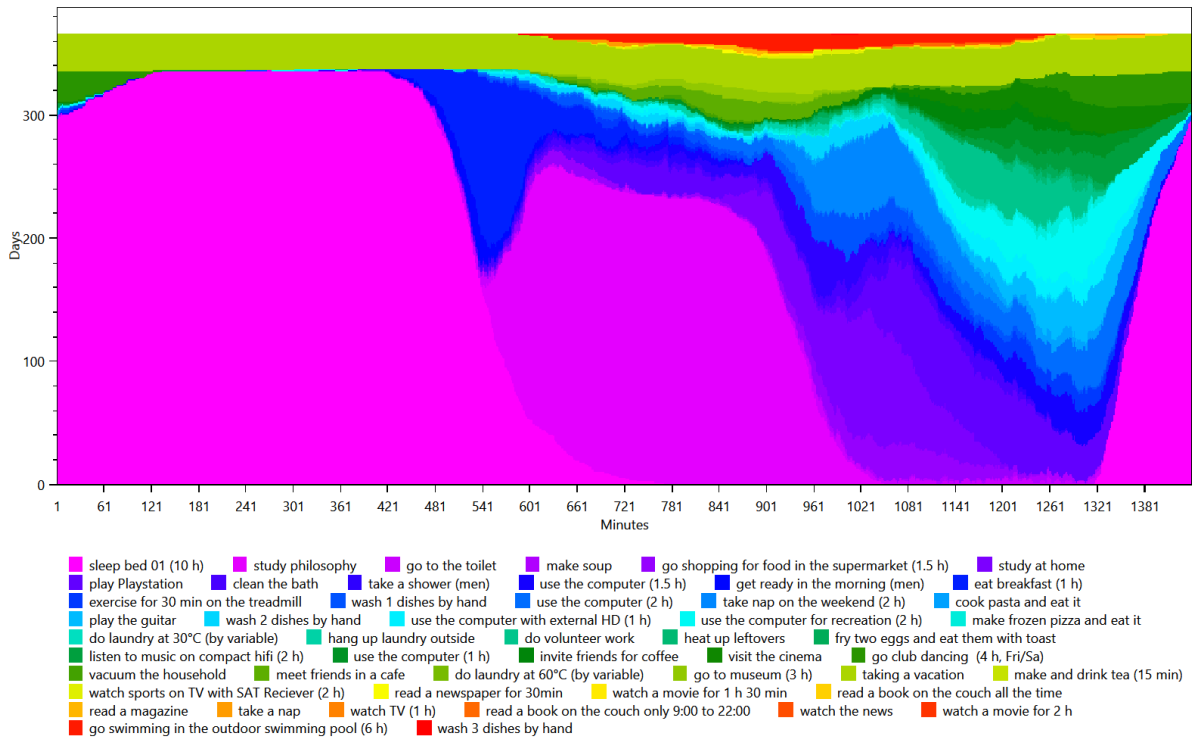
- HH0
  - CHR12 Chris 2 (22/Male)(22/Male)

# 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 - CHR12 Chris 2 (22 Male)

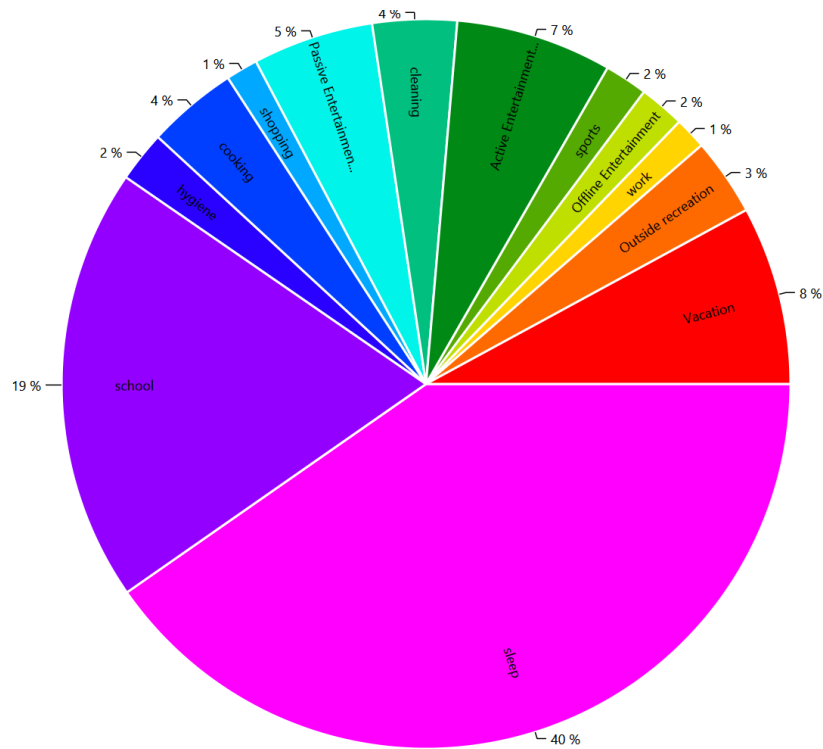


# Activity Distribution per Person

This is made from the files starting with: ActivityPercentage

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

HH0 - CHR12 Chris 2 (22 Male)

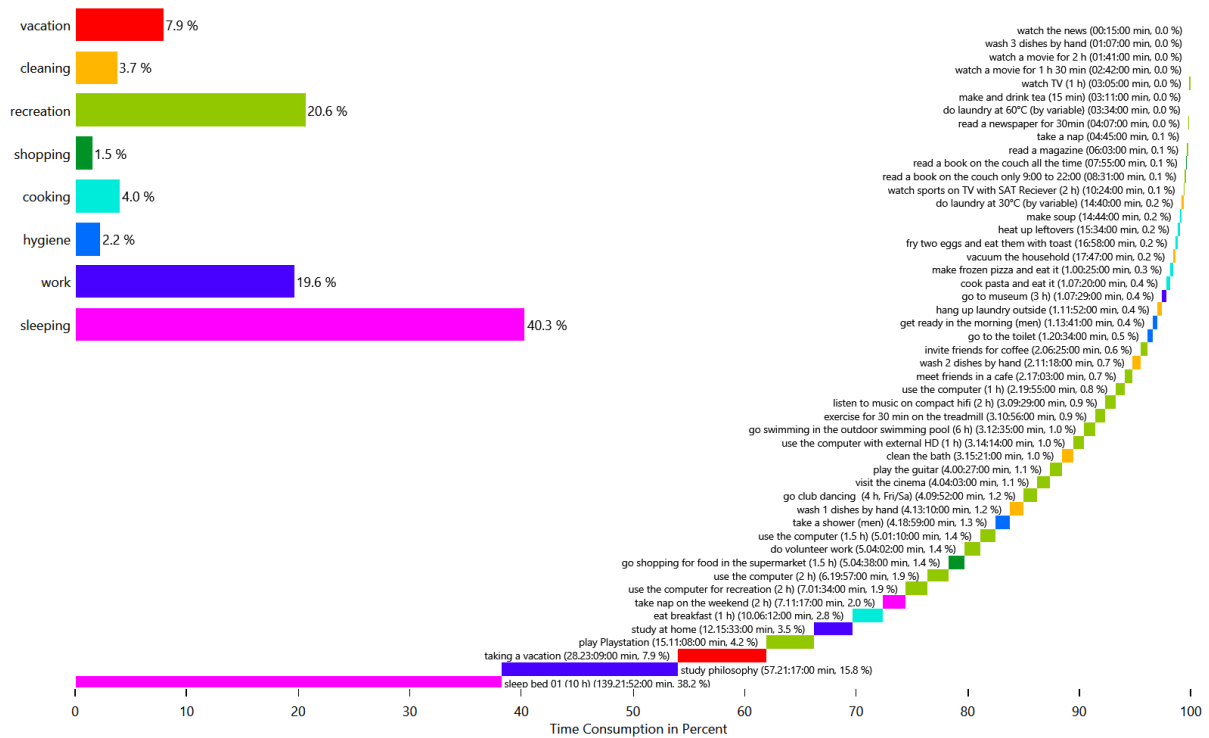


# Time Use per Person per Affordance Per Person

This is made from the files starting with: AffordanceTimeUse

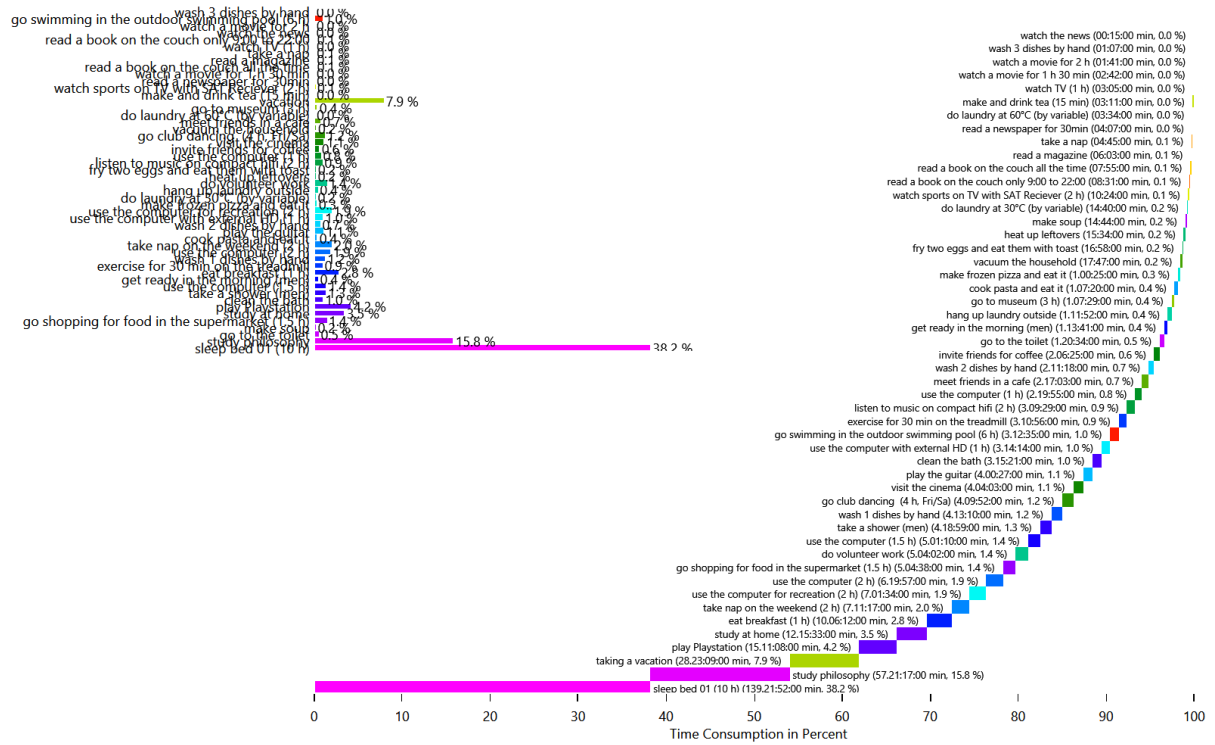
These charts show how the people in the household use their time. This shows the individual affordances to help find problems in the household definition.

## HH0 - CHR12 Chris 2 (22 Male)

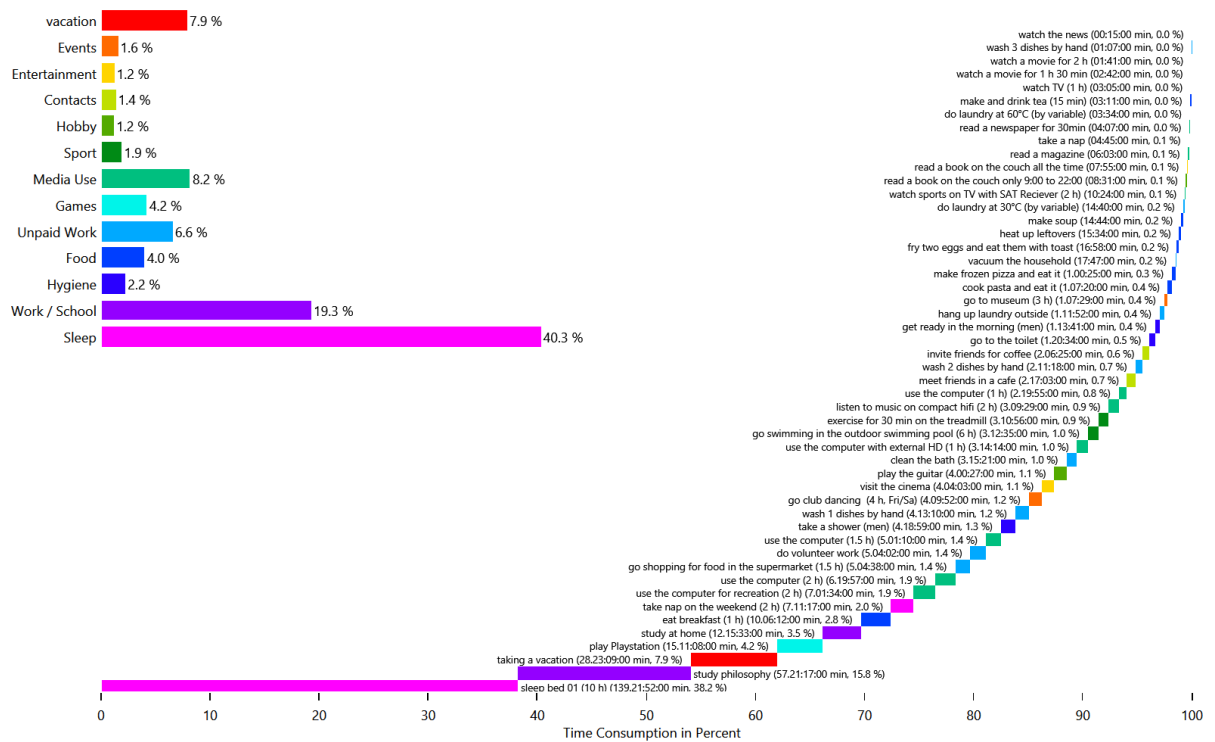




## HH0 - CHR12 Chris 2 (22 Male)



## HH0 - CHR12 Chris 2 (22 Male)

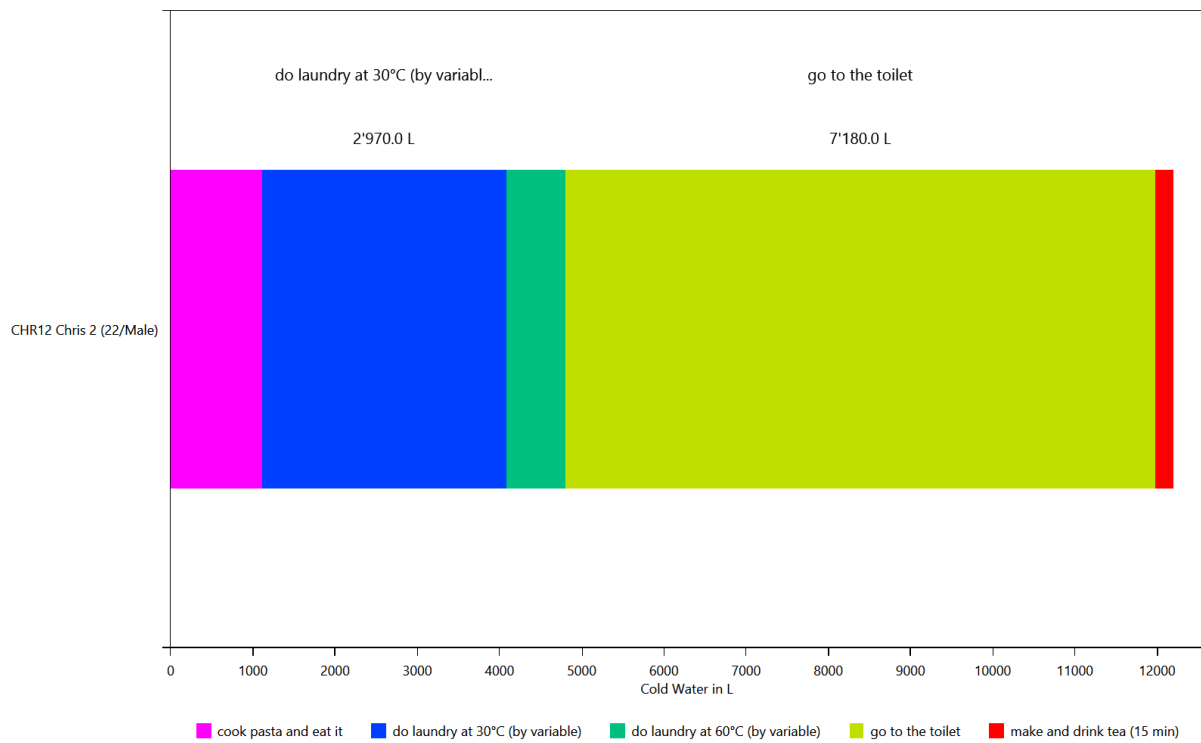


# Energy use per person per affordance

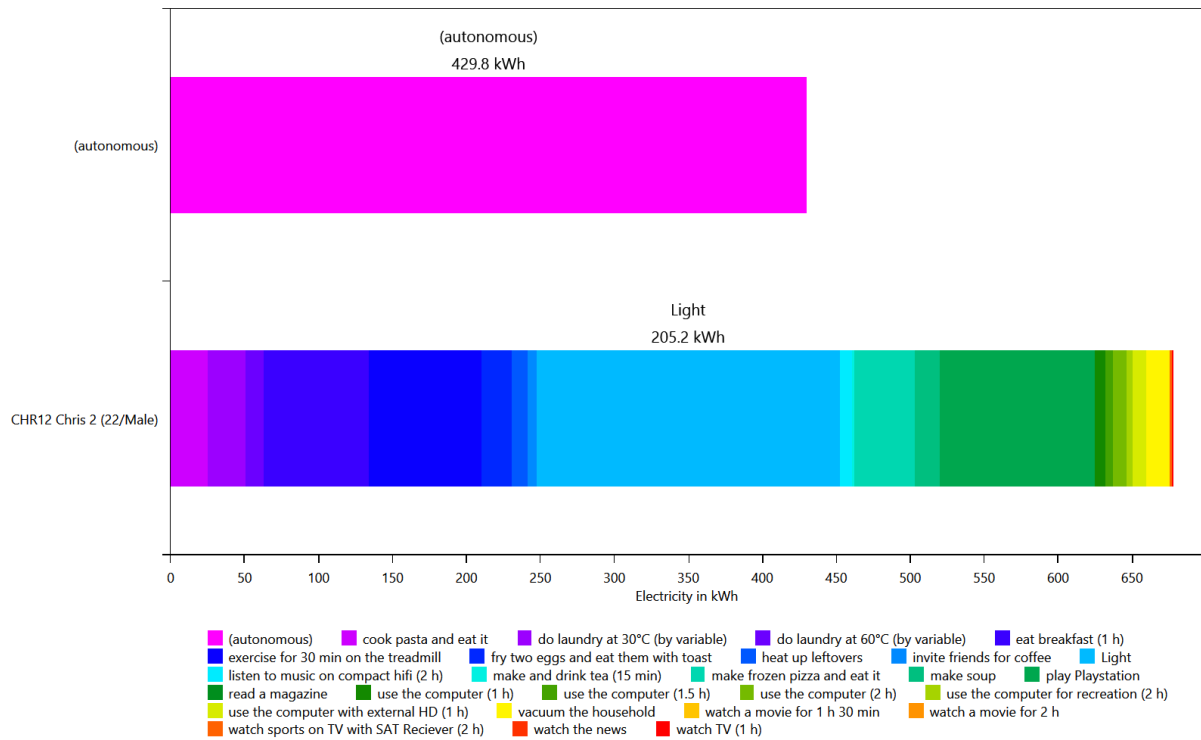
This is made from the files starting with: **AffordanceEnergyUsePerPerson**

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.

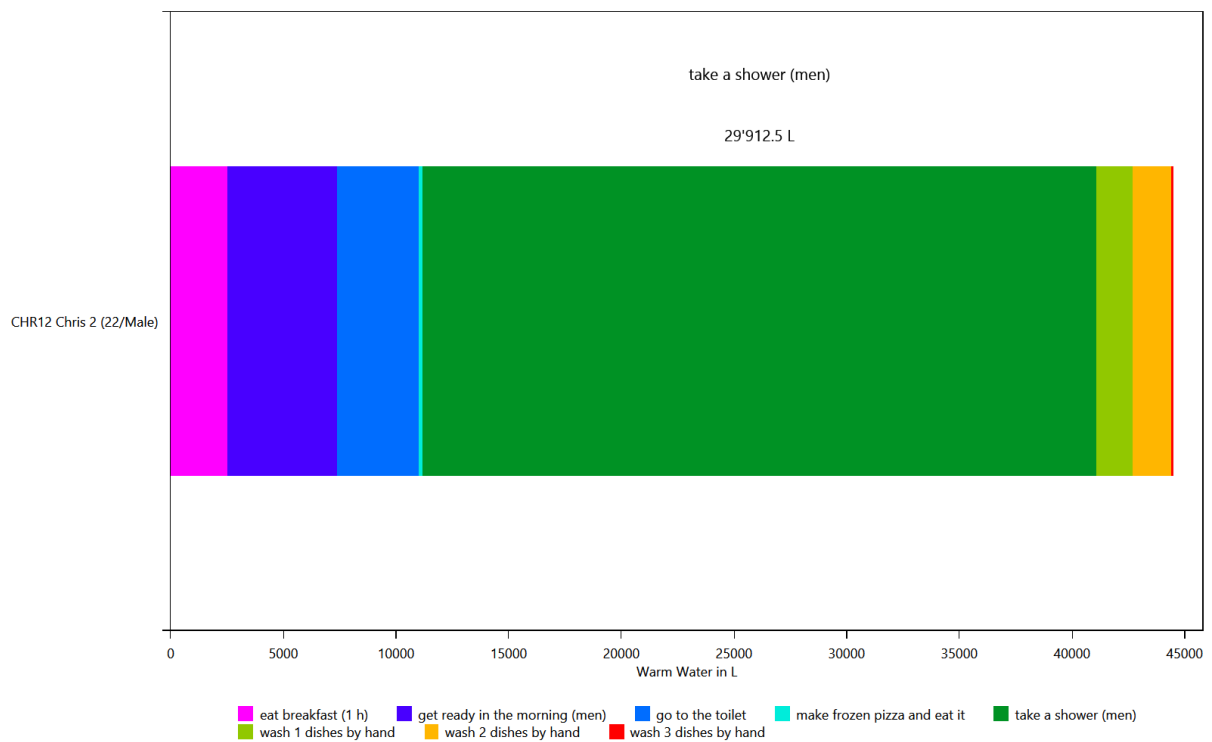
## HH0 - Cold Water



## HH0 - Electricity



## HH0 - Warm Water

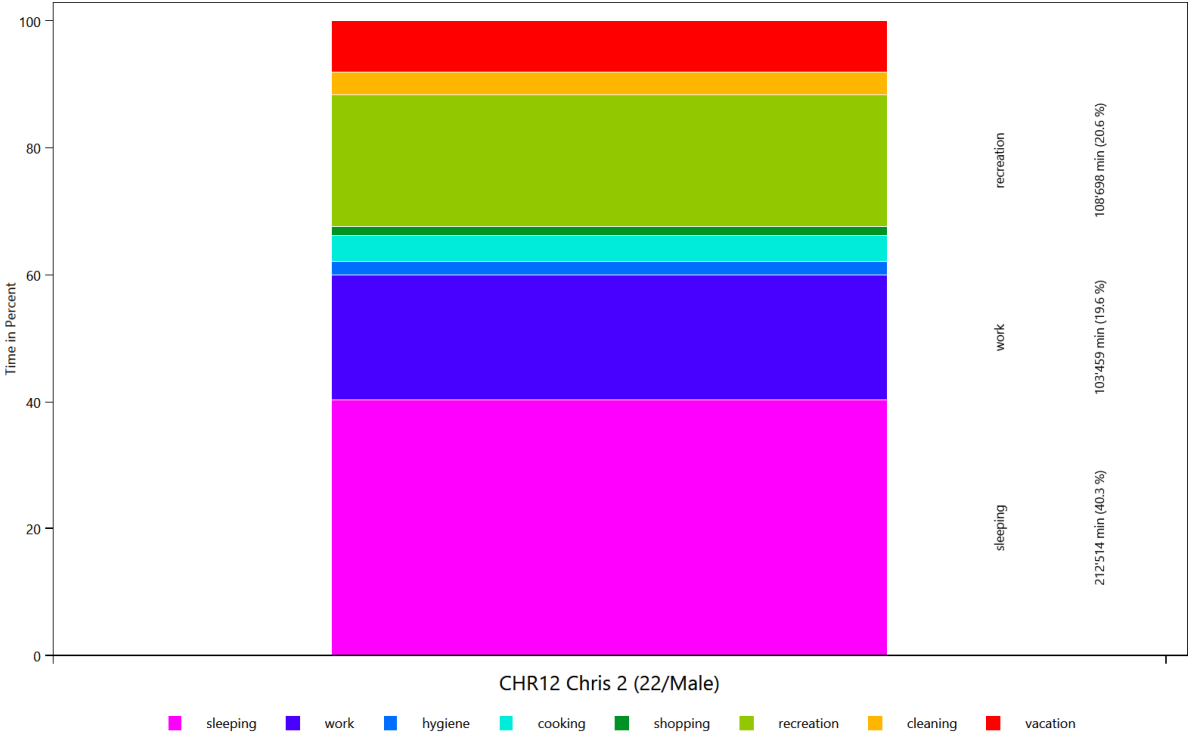


# Time Use per Person Per Affordance according to different category definitions

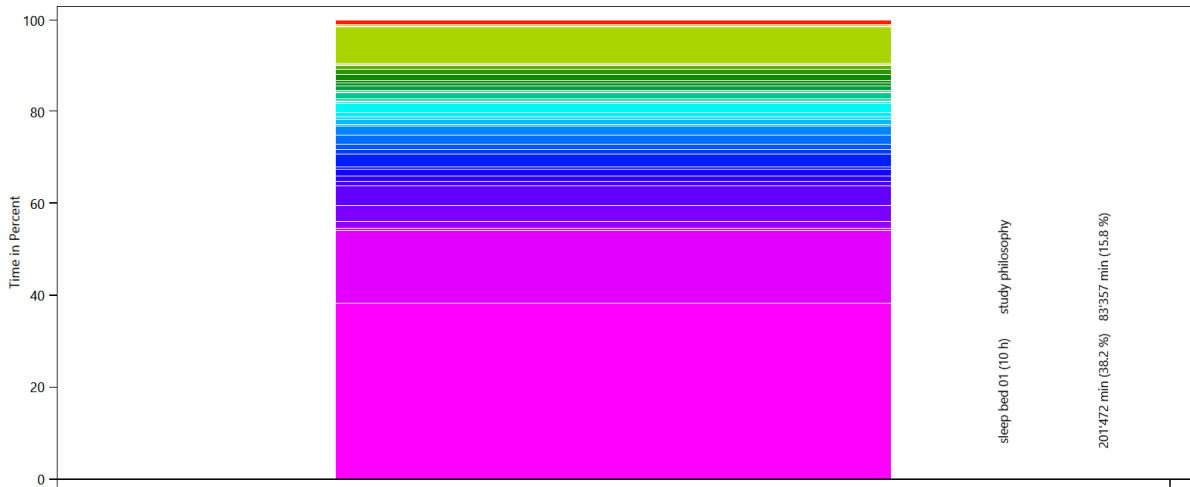
This is made from the files starting with: AffordanceTaggingSet

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



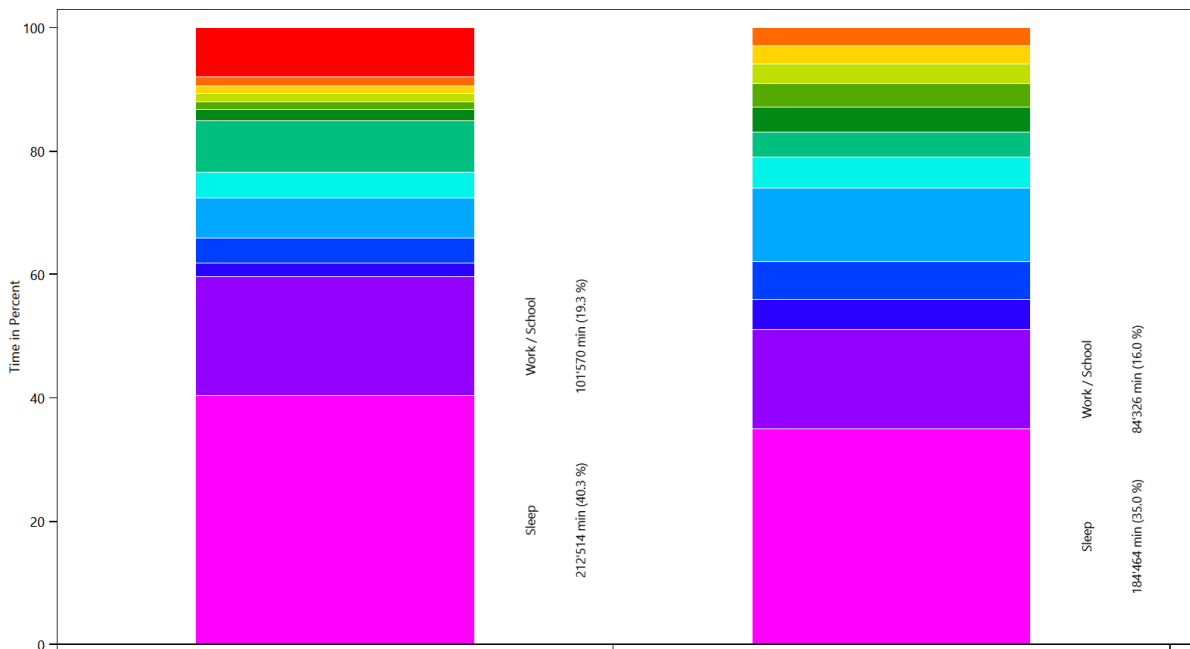
## Tagging Set For Planning - HH0



CHR12 Chris 2 (22/Male)

- sleep bed 01 (10 h)
- study at home
- eat breakfast (1 h)
- cook pasta and eat it
- use the computer for recreation (2 h)
- do volunteer work
- invite friends for coffee
- do laundry at 60°C (by variable)
- read a newspaper for 30min
- watch TV (1 h)
- go swimming in the outdoor swimming pool (6 h)
- study philosophy
- play Playstation
- exercise for 30 min on the treadmill
- play the guitar
- make frozen pizza and eat it
- visit the cinema
- go to museum (3 h)
- go to the toilet
- clean the bath
- wash 2 dishes by hand
- make frozen pizza and eat it
- go club dancing (4 h, Fri/Sa)
- make soup
- take a shower (men)
- wash 1 dishes by hand
- fry two eggs and eat them with toast
- go club dancing (4 h, Fri/Sa)
- go shopping for food in the supermarket (1.5 h)
- use the computer (1.5 h)
- use the computer (2 h)
- use the computer with external HD (1 h)
- do laundry at 30°C (by variable)
- read a book on the couch all the time
- watch the news
- wash 3 dishes by hand
- get ready in the morning (men)
- use the computer (2 h)
- take nap on the weekend (2 h)
- hang up laundry outside
- listen to music on compact hifi (2 h)
- vacuum the household
- meet friends in a cafe
- make and drink tea (15 min)
- watch sports on TV with SAT Receiver (2 h)
- read a magazine
- take a nap
- watch a movie for 2 h

## Wo bleibt die Zeit - HH0



CHR12 Chris 2 (22/Male)

Reference

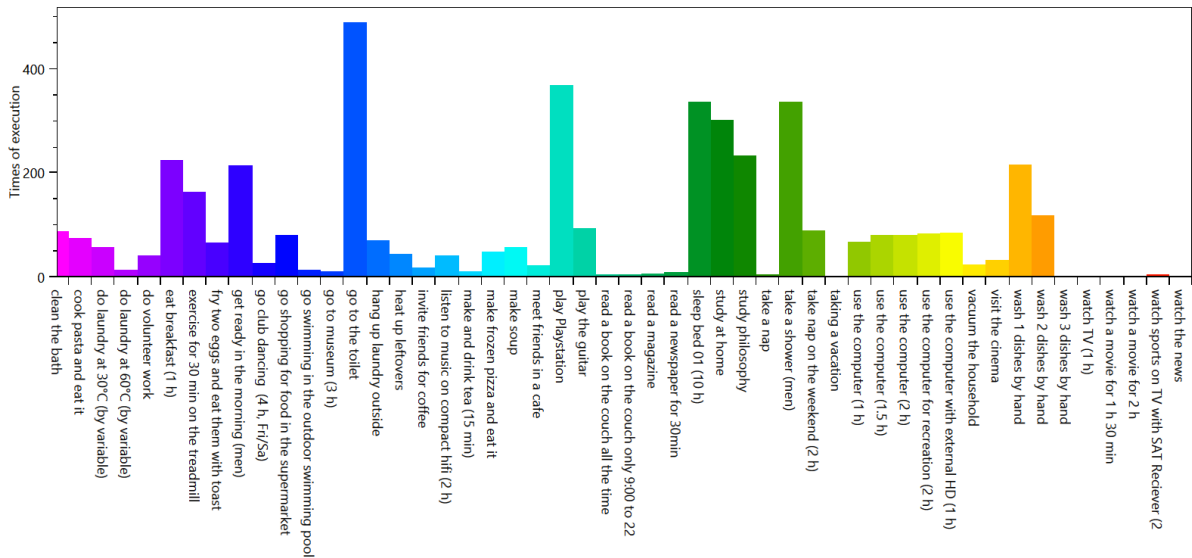
- Sleep
- Work / School
- Hygiene
- Food
- Unpaid Work
- Games
- Media Use
- Sport
- Hobby
- Contacts
- Entertainment
- Events
- vacation

# 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 - CHR12 Chris 2 (22 Male)

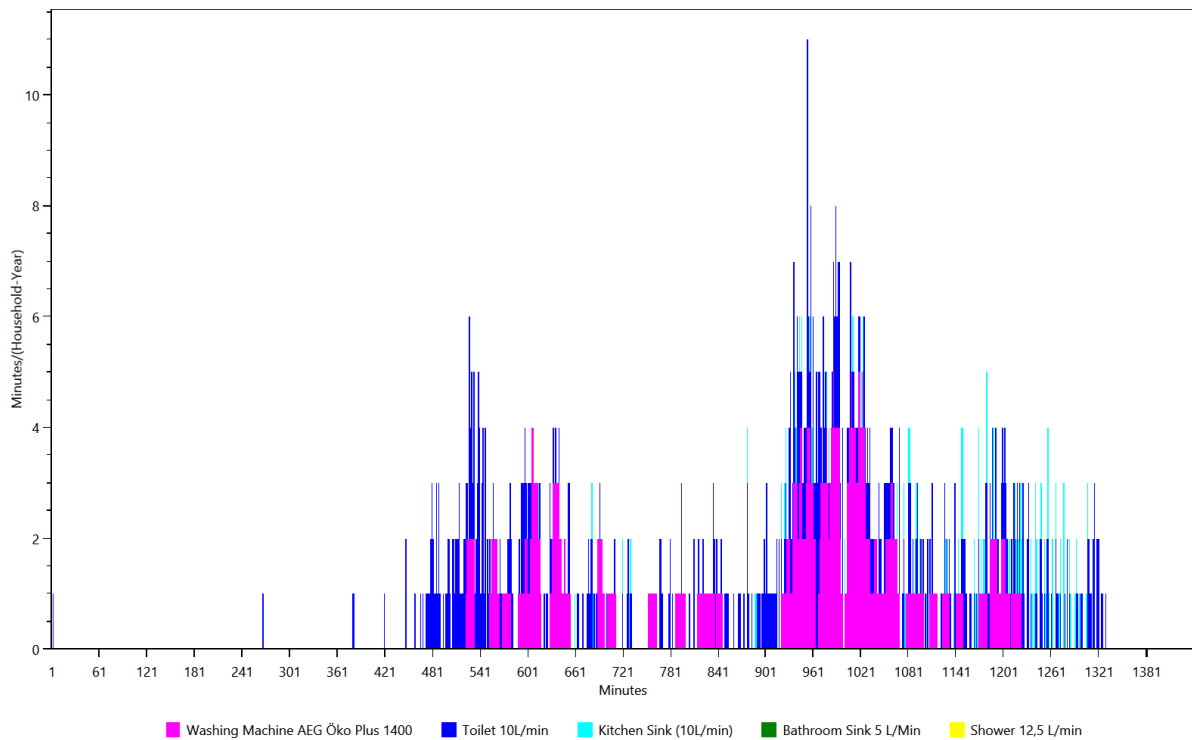


# Overview of the time of the use per load type per device

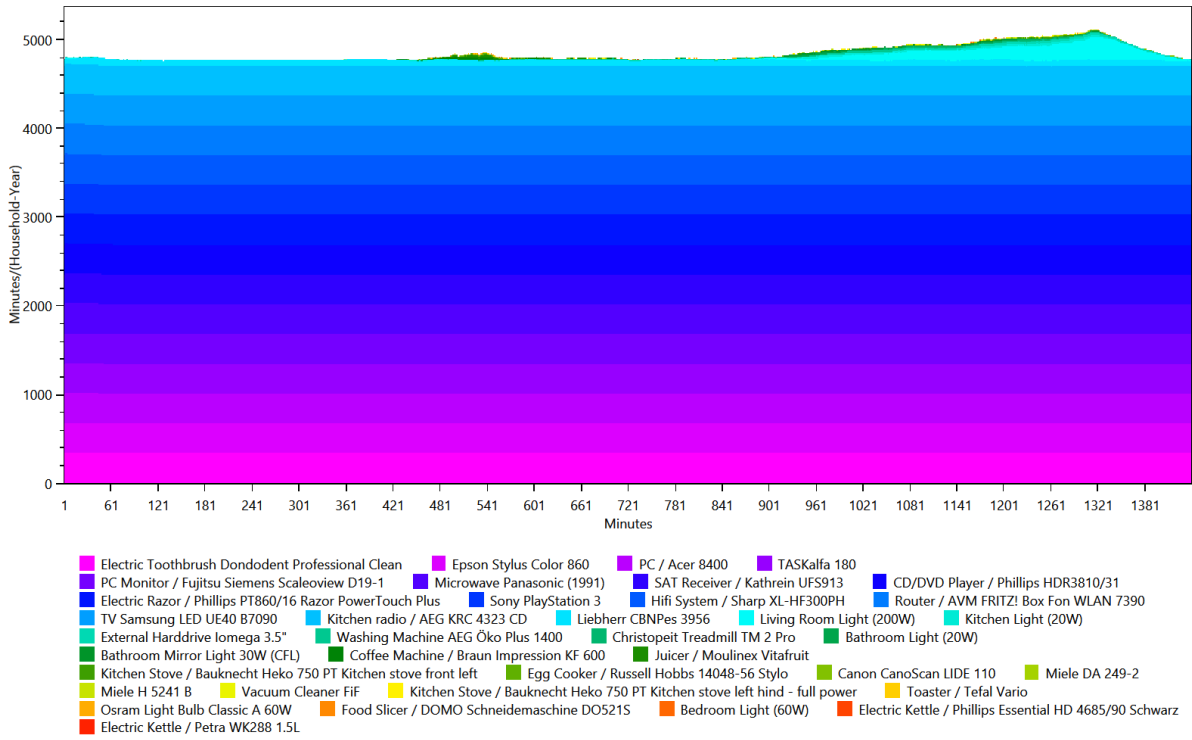
This is made from the files starting with: **TimeOfUseEnergyProfiles**

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

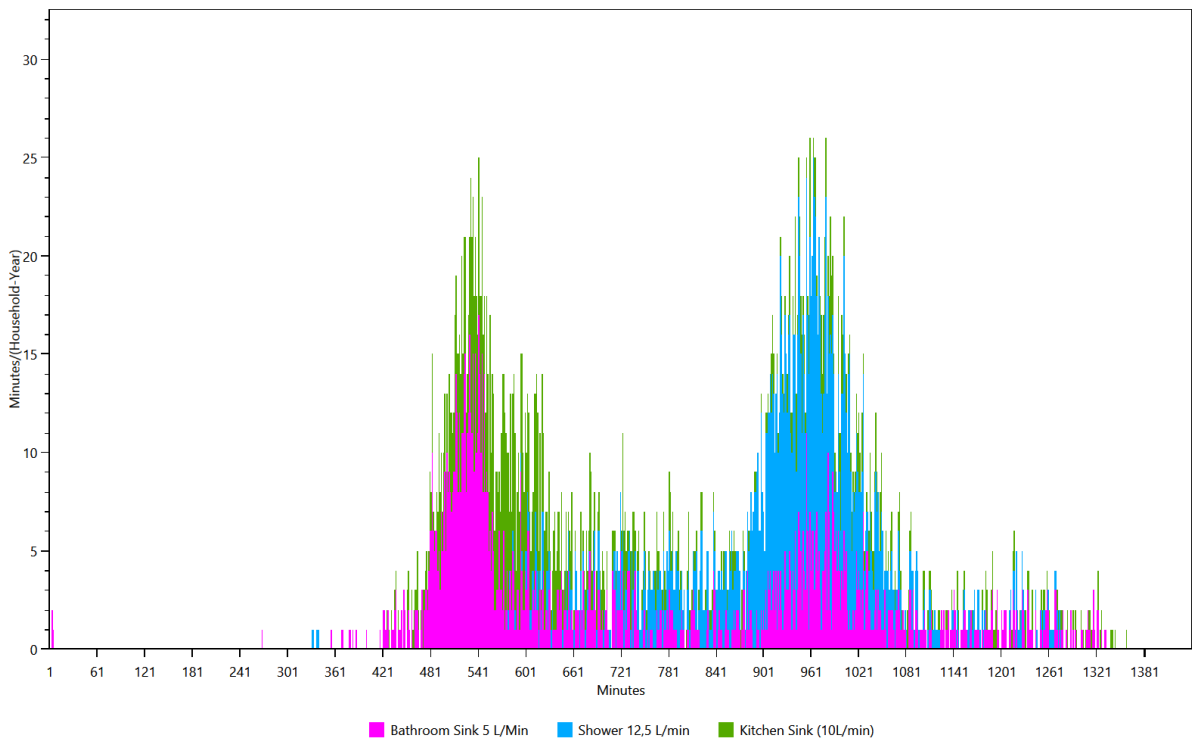
## Cold Water



## Electricity



## Warm Water



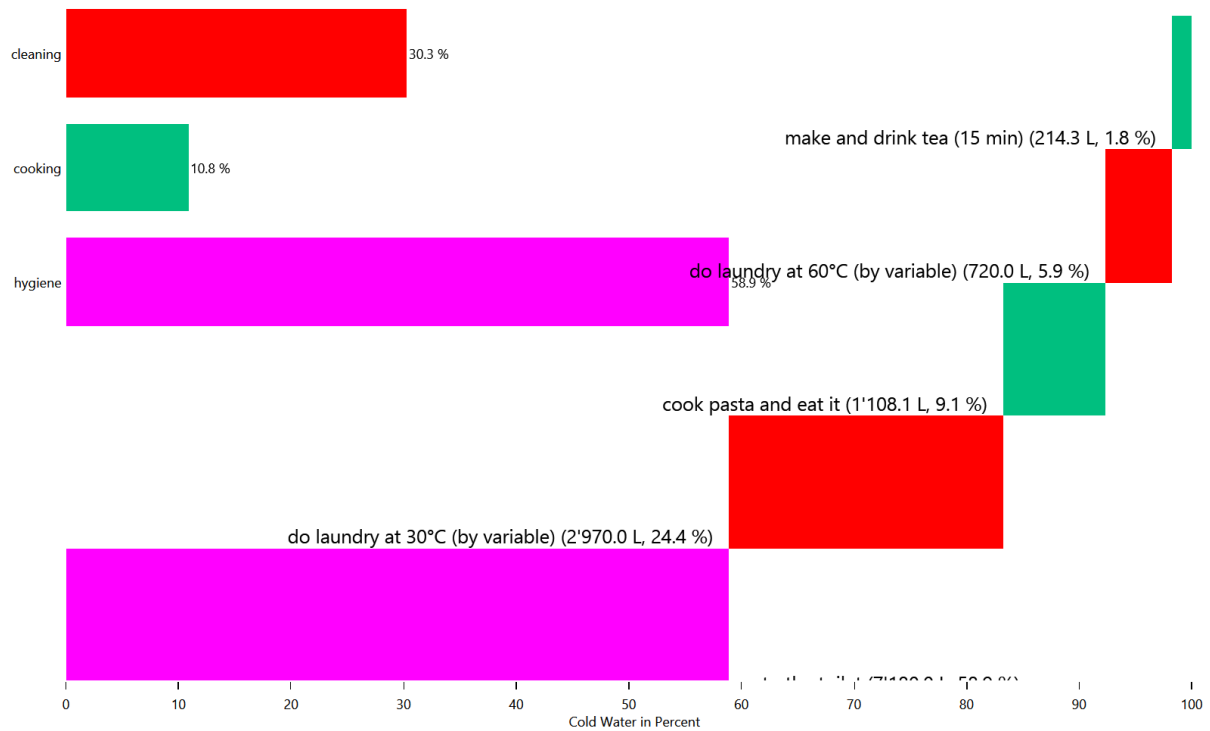


# Energy/Resource use distribution per load type per affordance

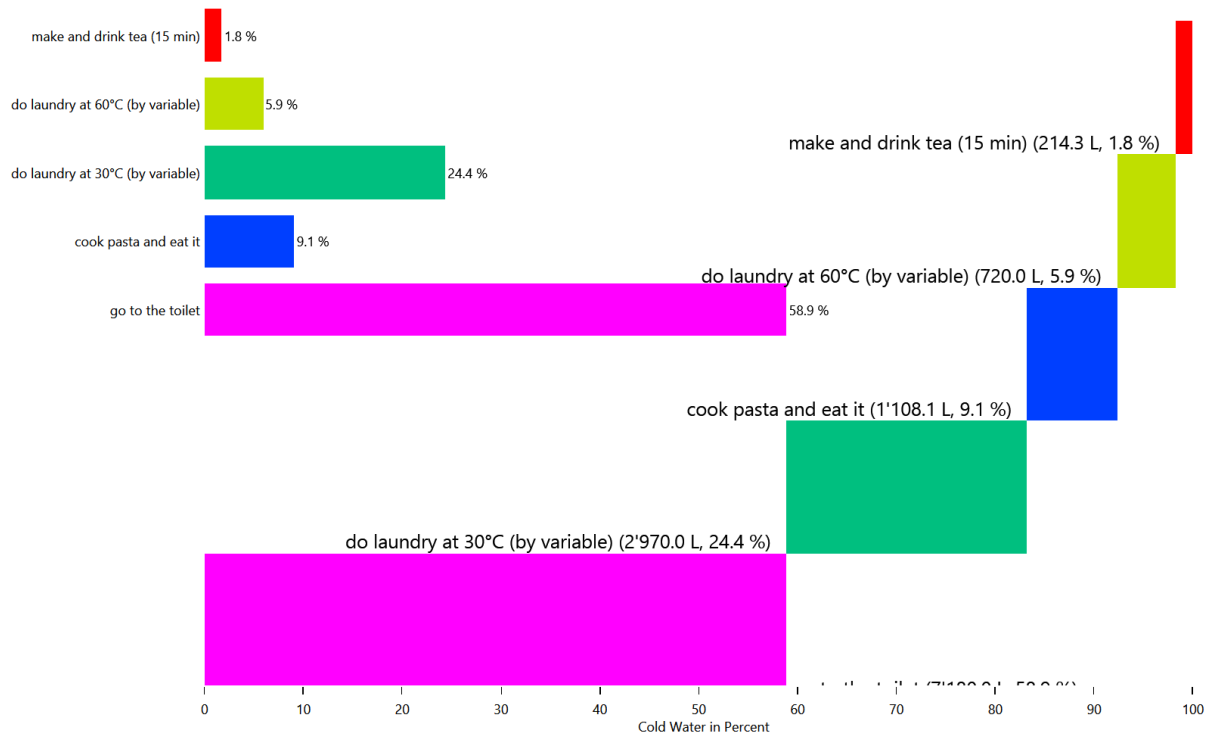
This is made from the files starting with: **AffordanceEnergyUse**

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

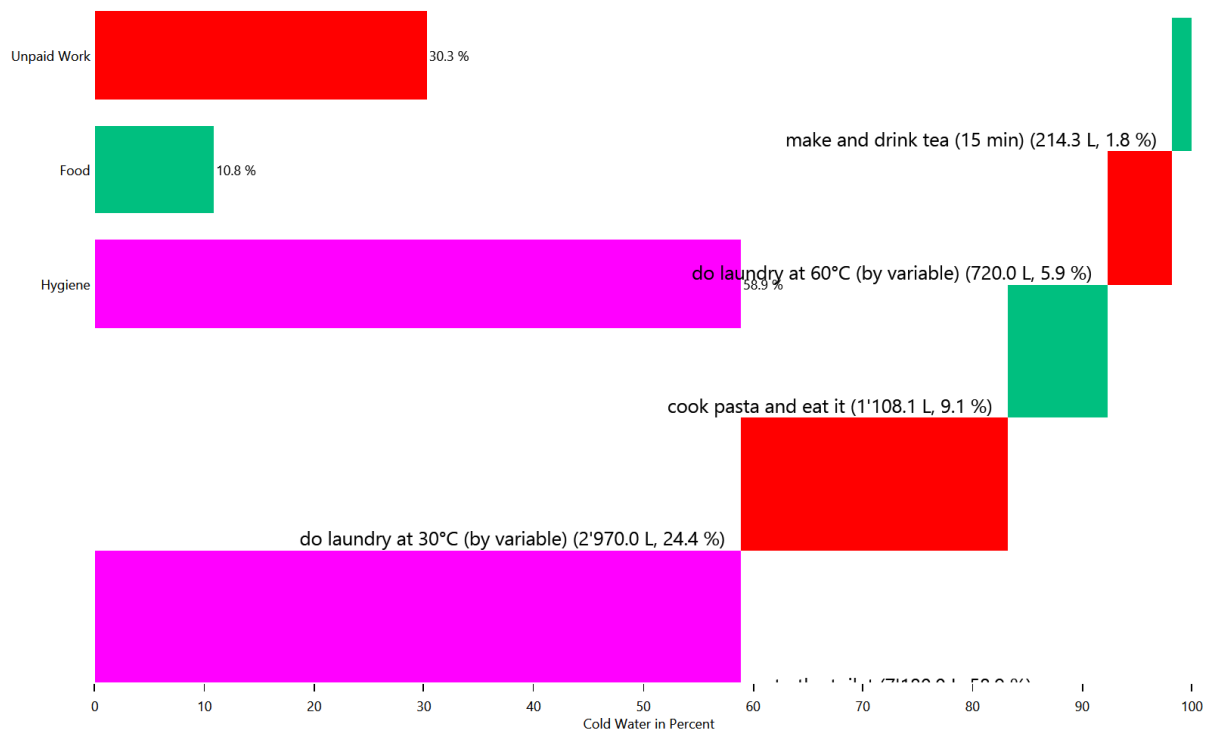
## HH0 - Cold Water



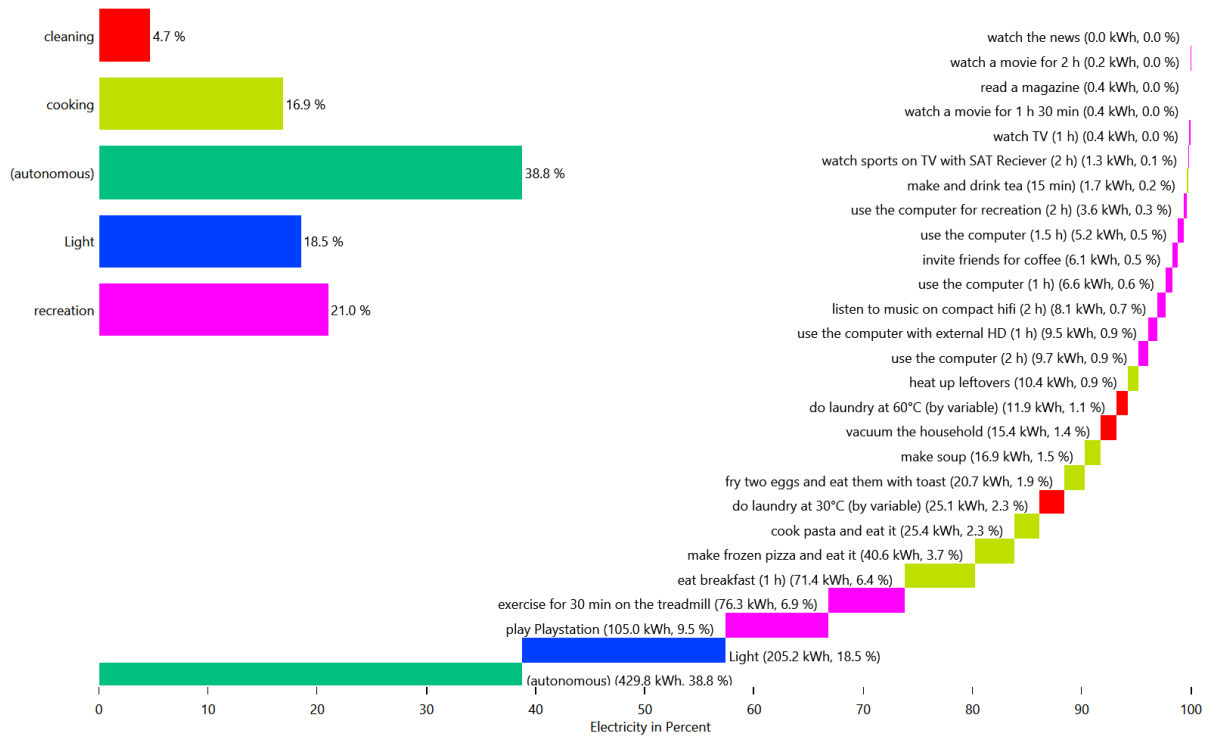
## HH0 - Cold Water



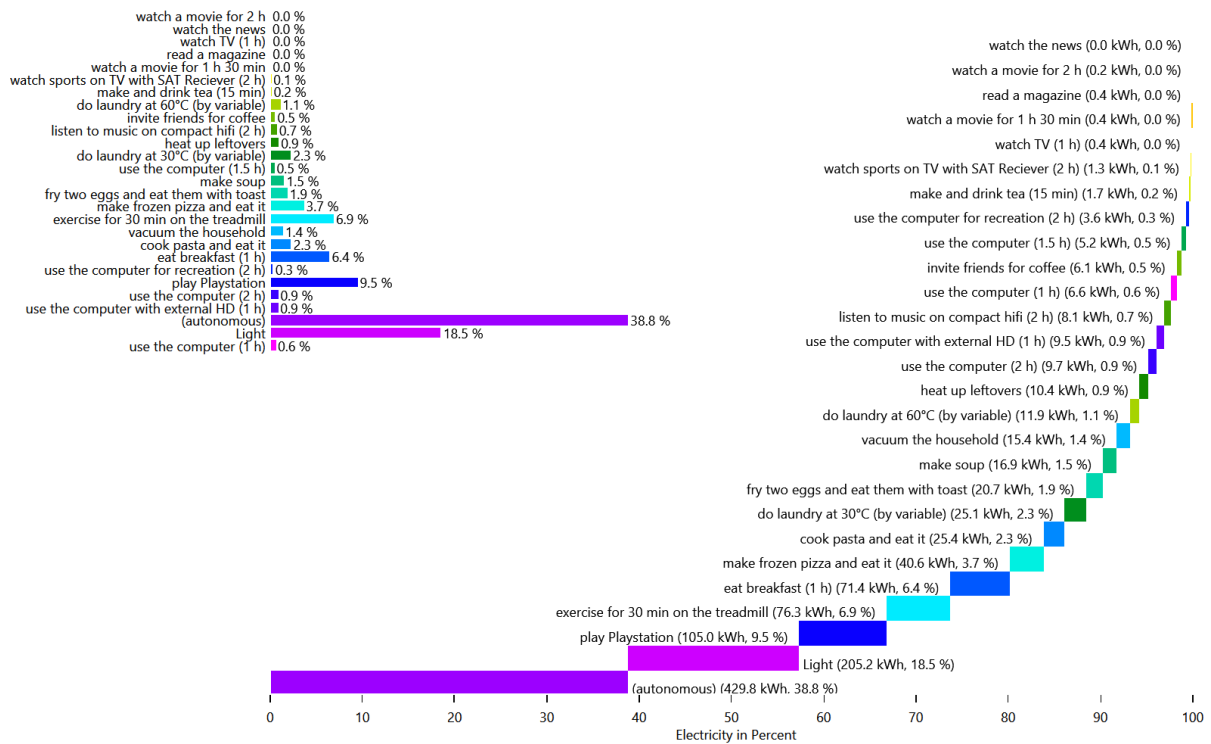
## HH0 - Cold Water



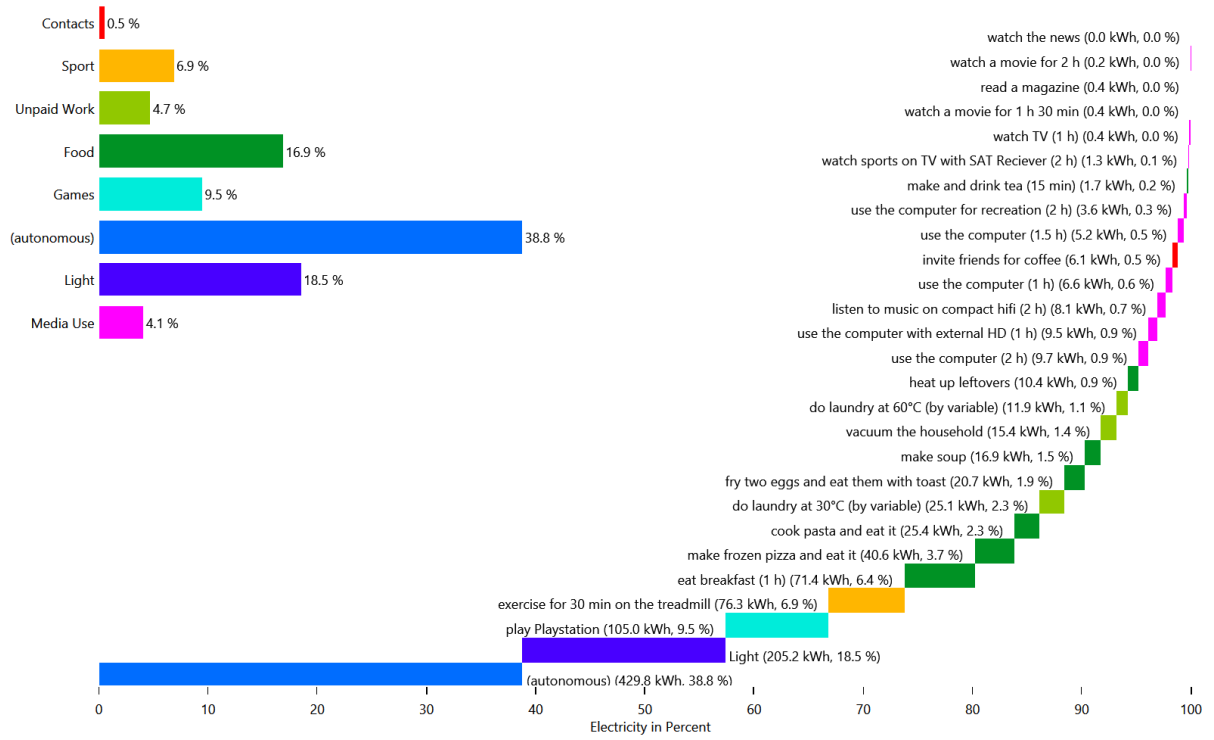
# HH0 - Electricity



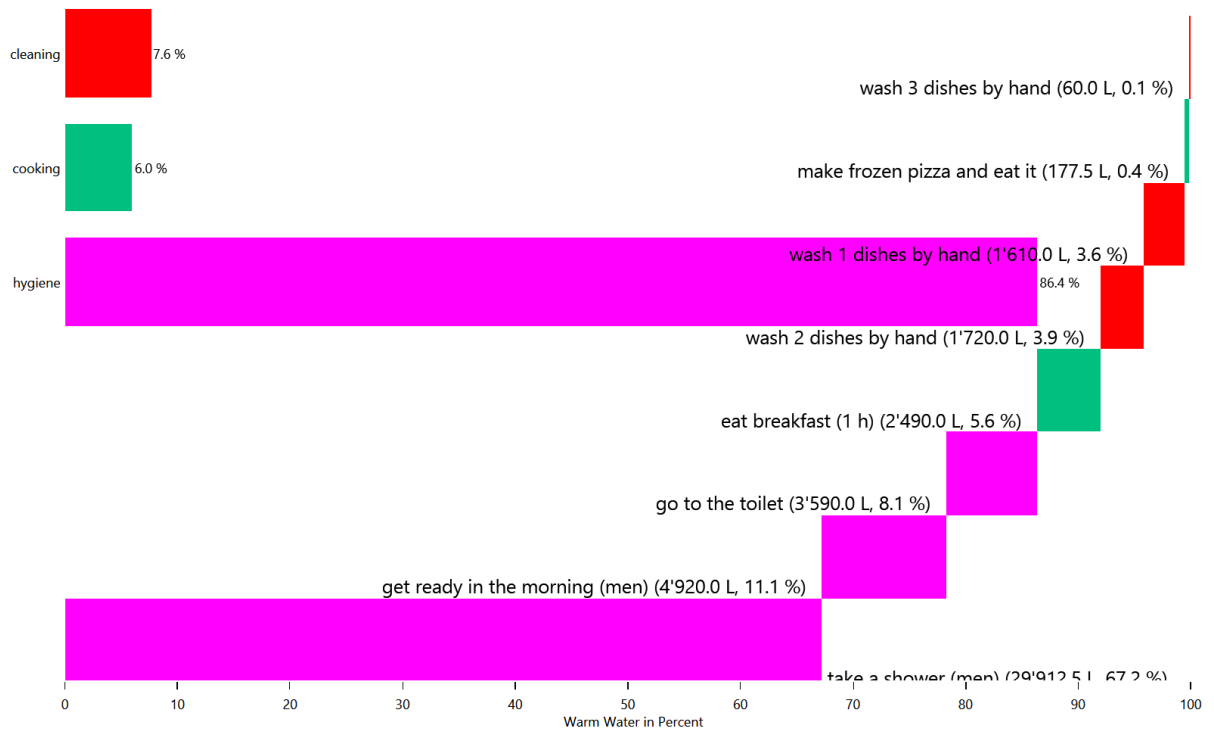
# HH0 - Electricity



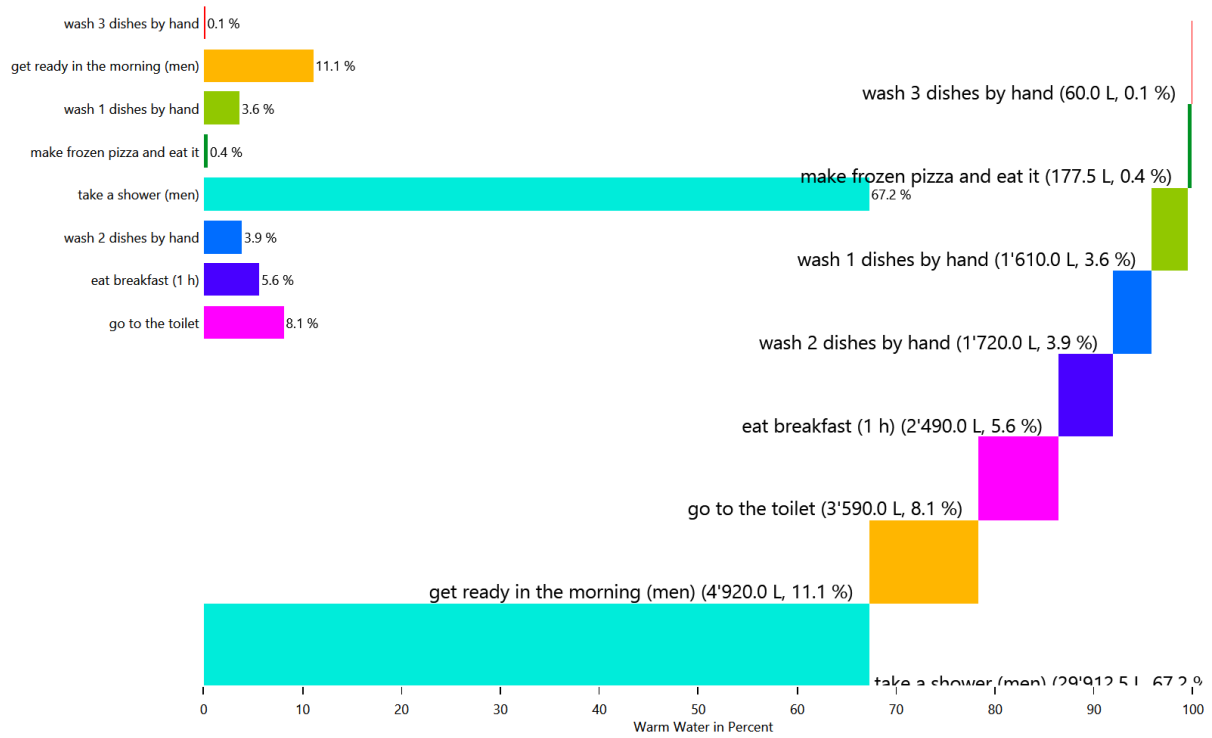
## HH0 - Electricity



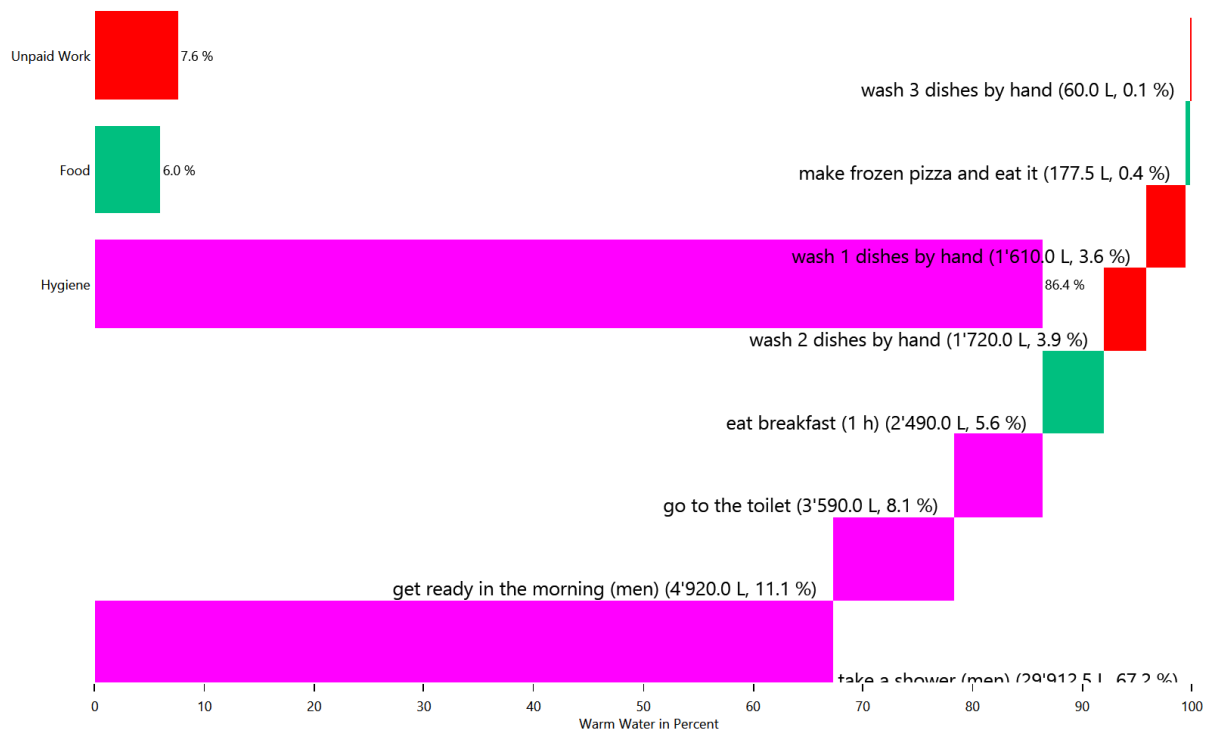
## HH0 - Warm Water



## HH0 - Warm Water



## HH0 - Warm Water

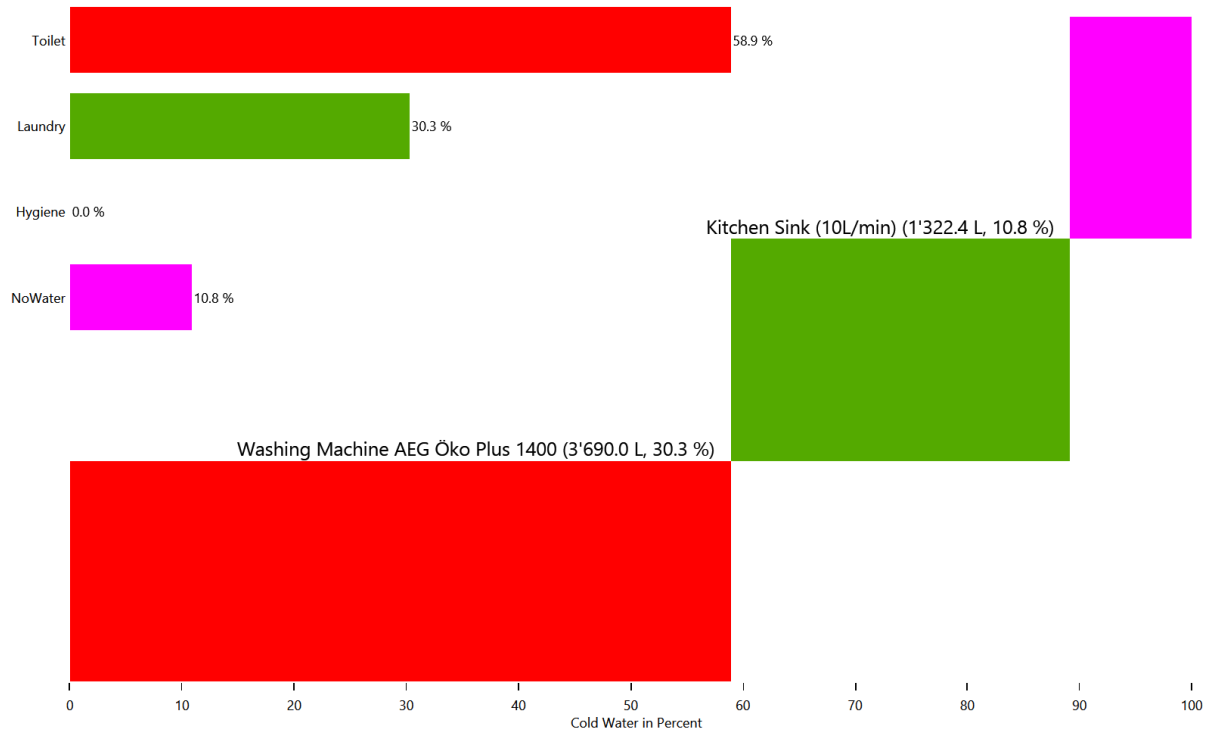


# Energy use for each load type for each device

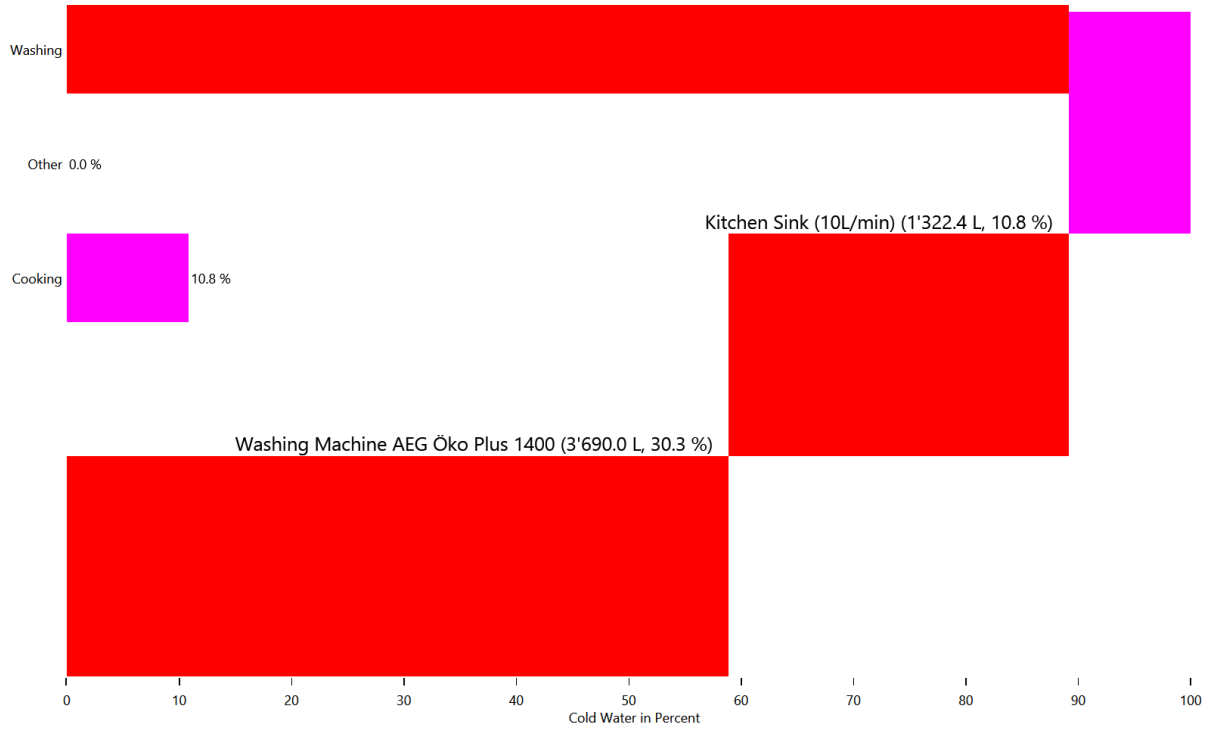
This is made from the files starting with: DeviceSums

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

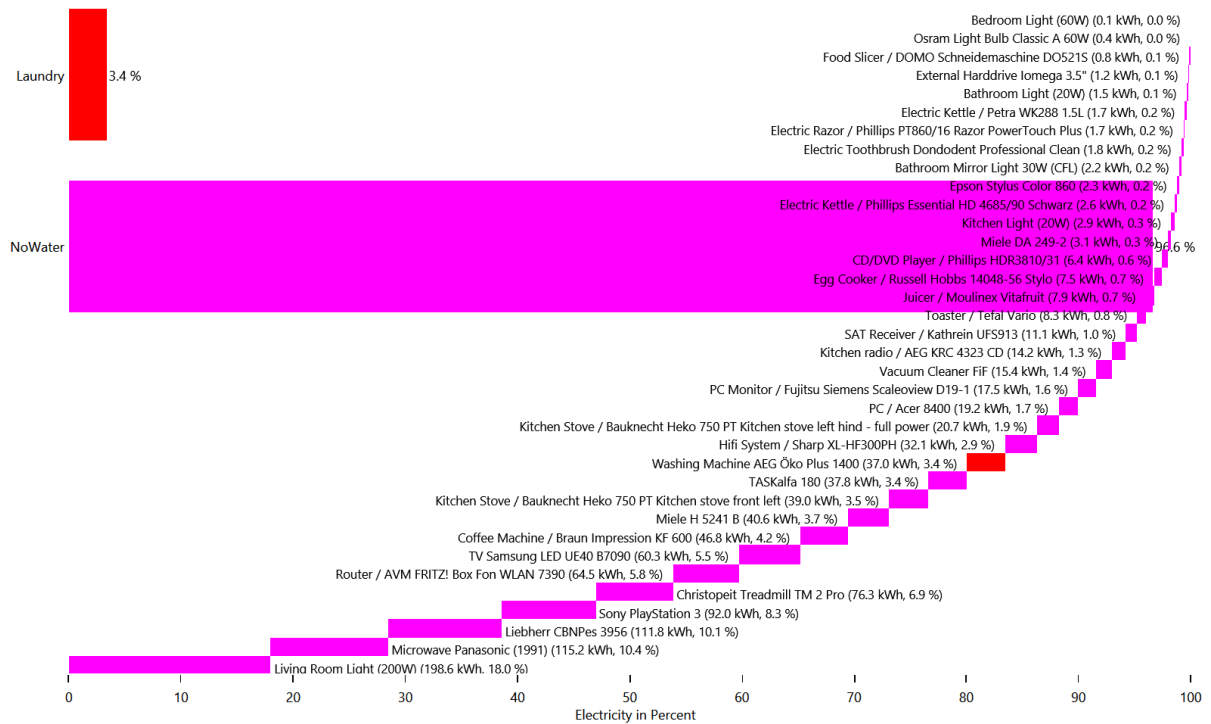
## Cold Water



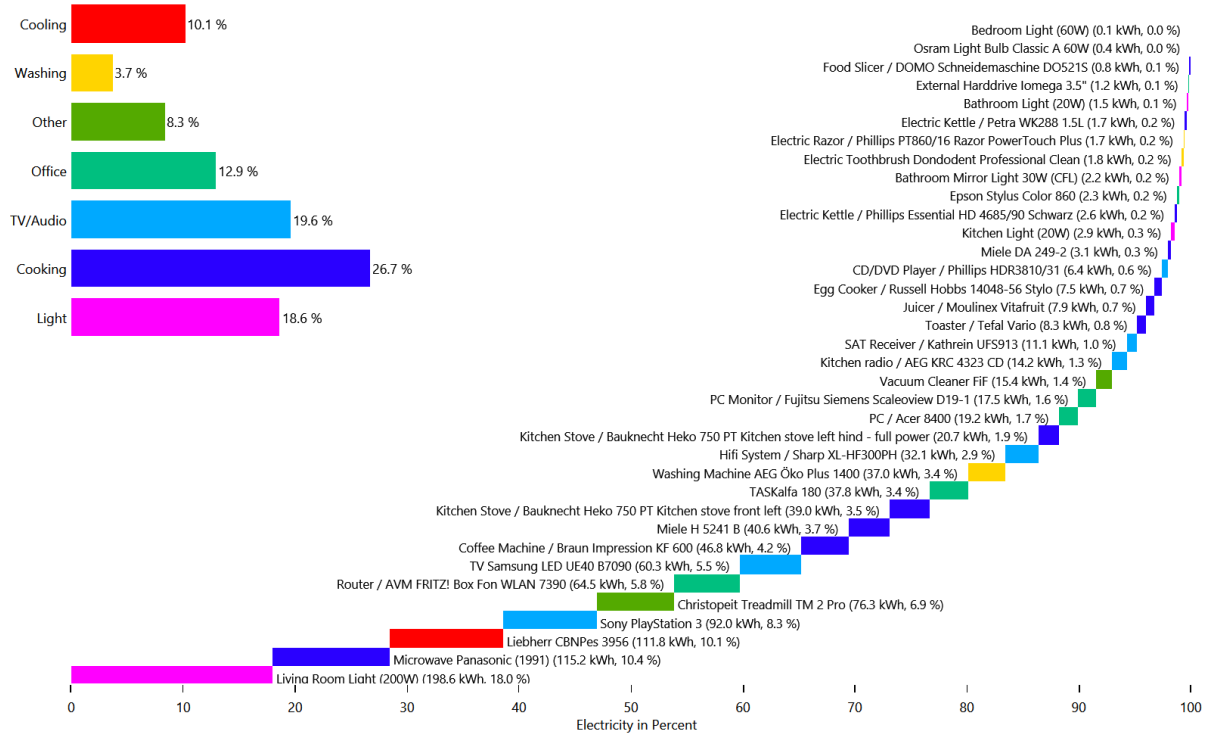
## Cold Water



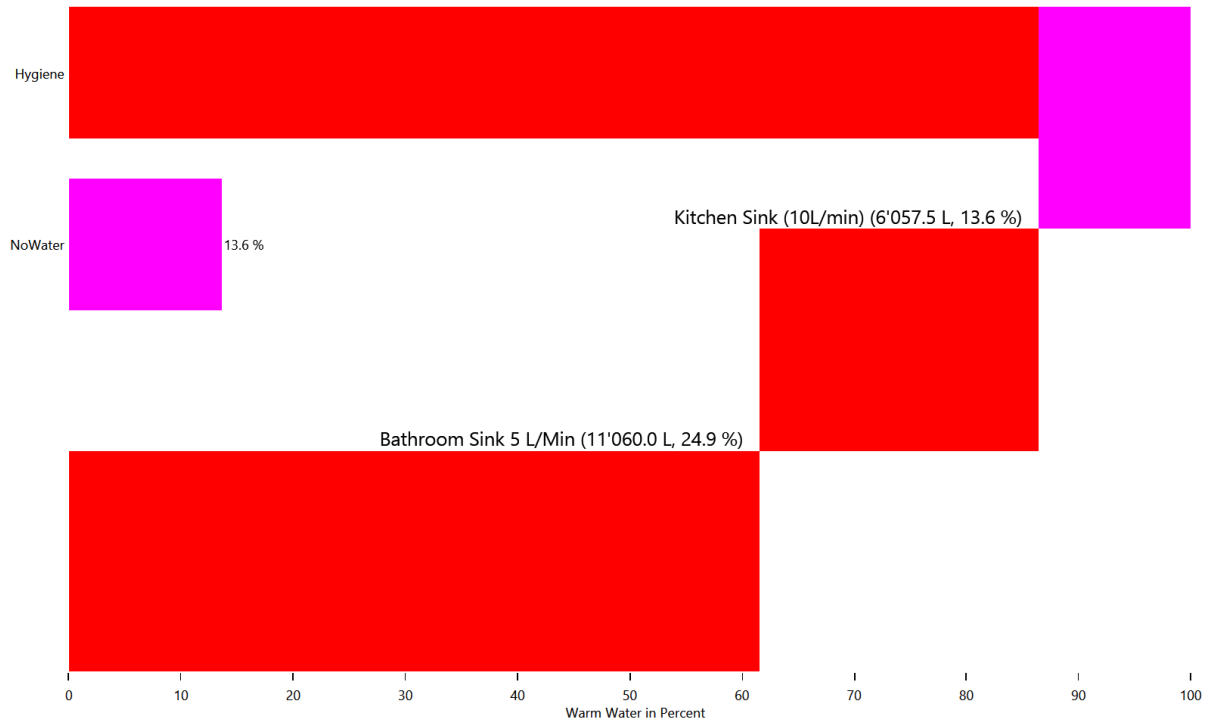
## Electricity



# Electricity

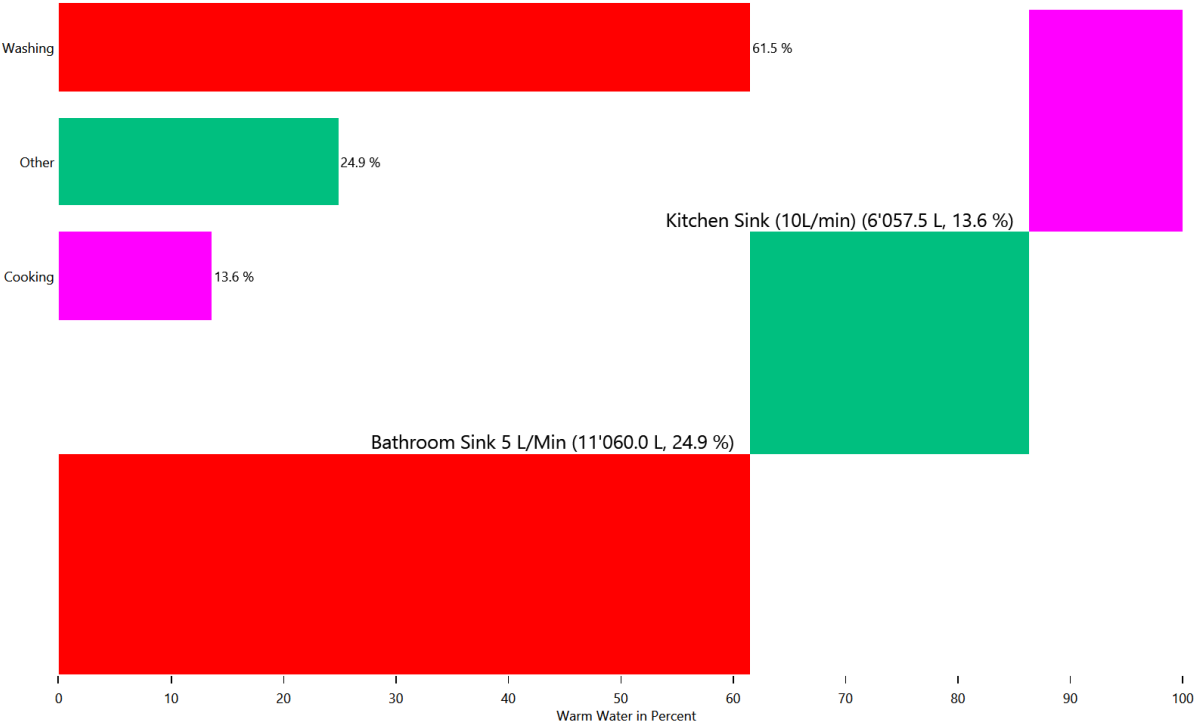


# Warm Water





# Warm Water

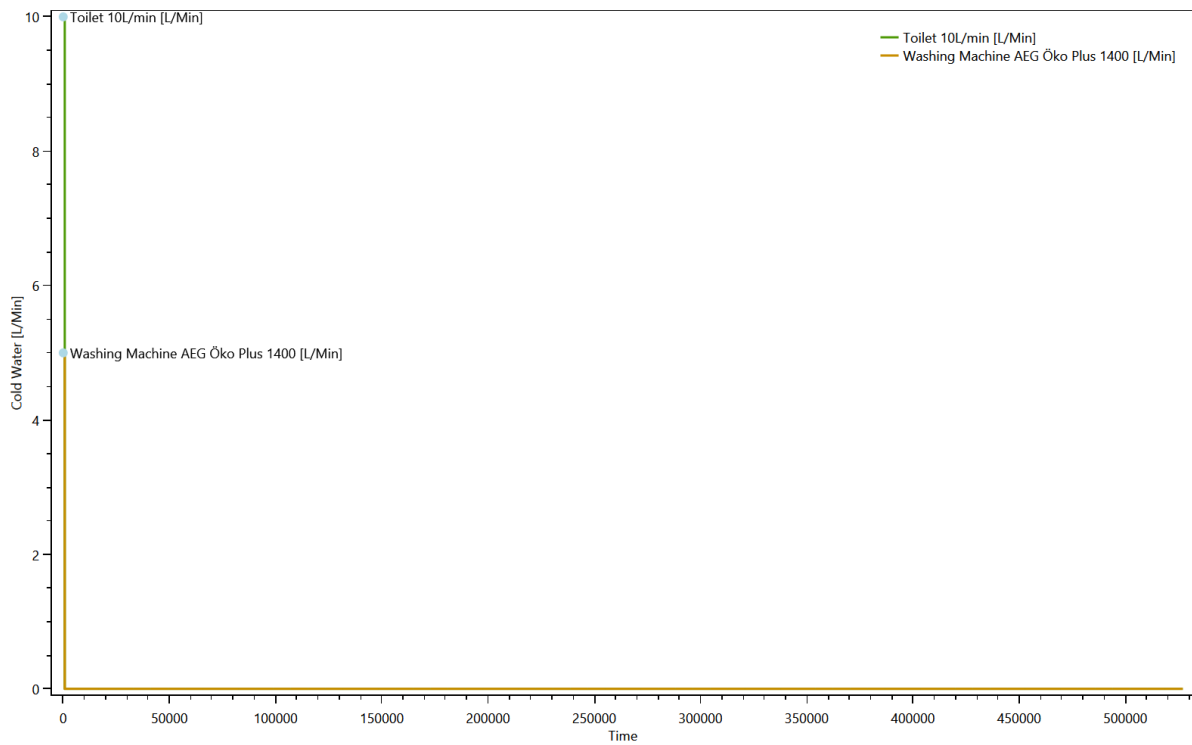


# Duration curve for each device for each load type

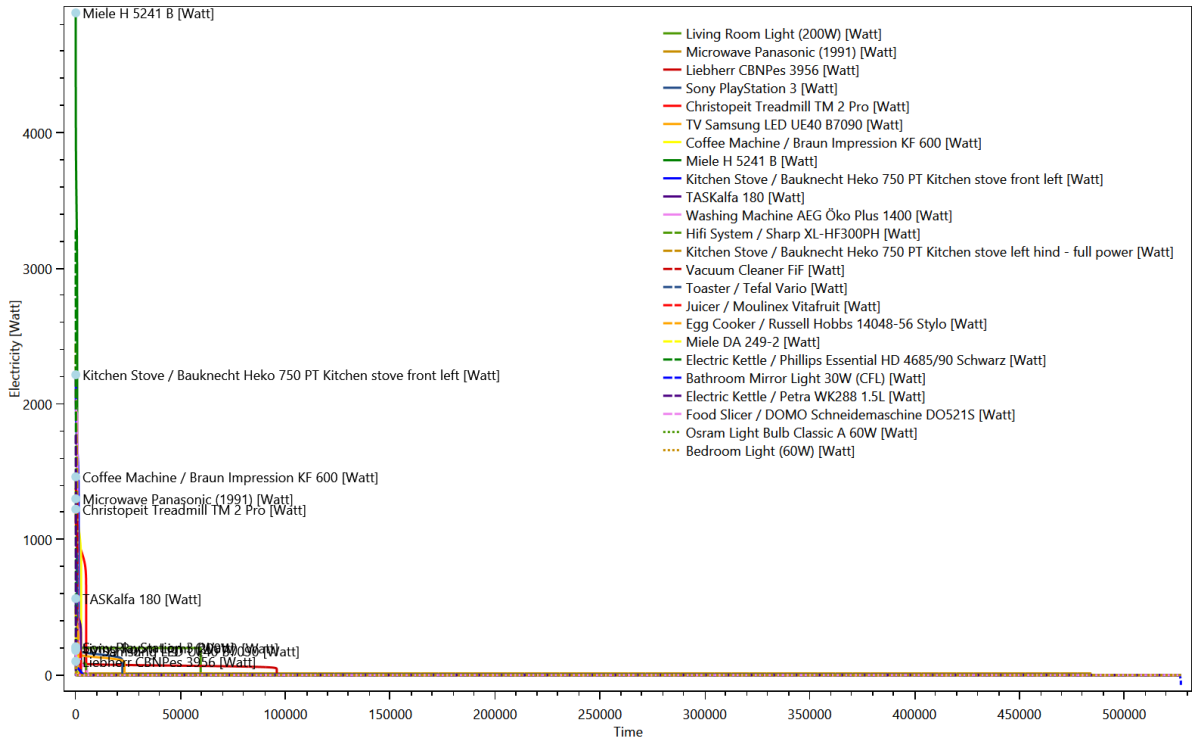
This is made from the files starting with: DeviceDurationCurves

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

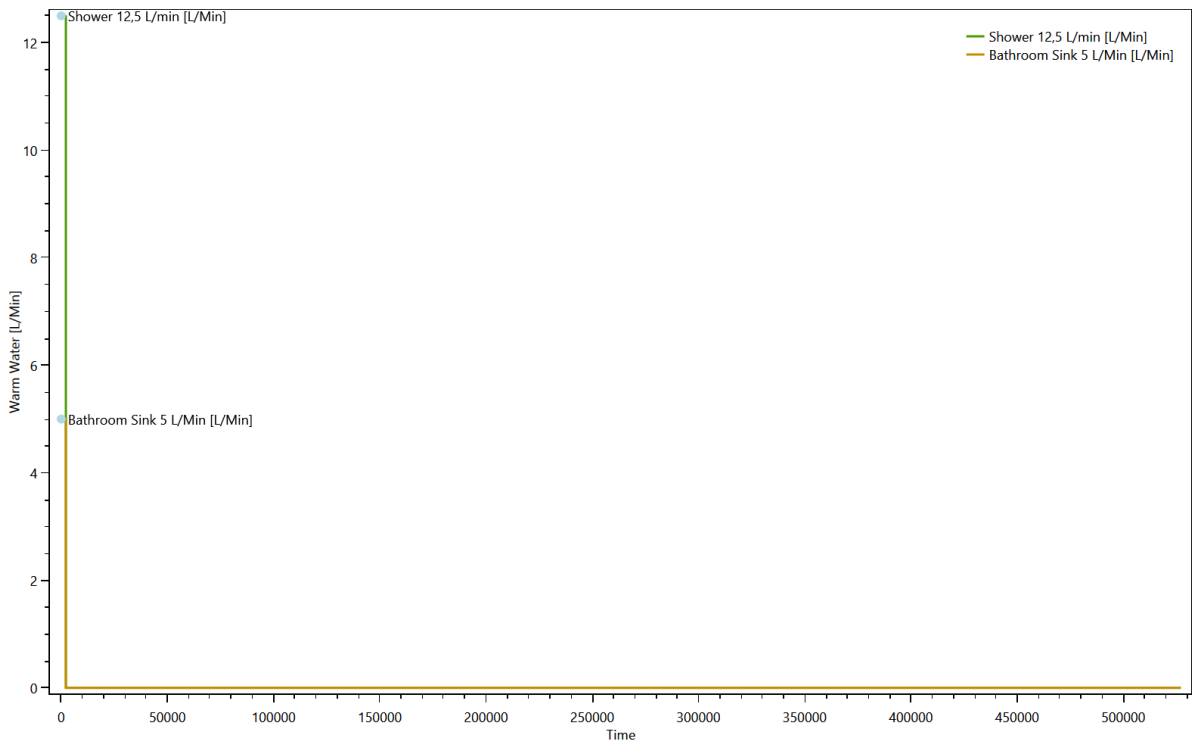
## Cold Water



## Electricity



## Warm Water

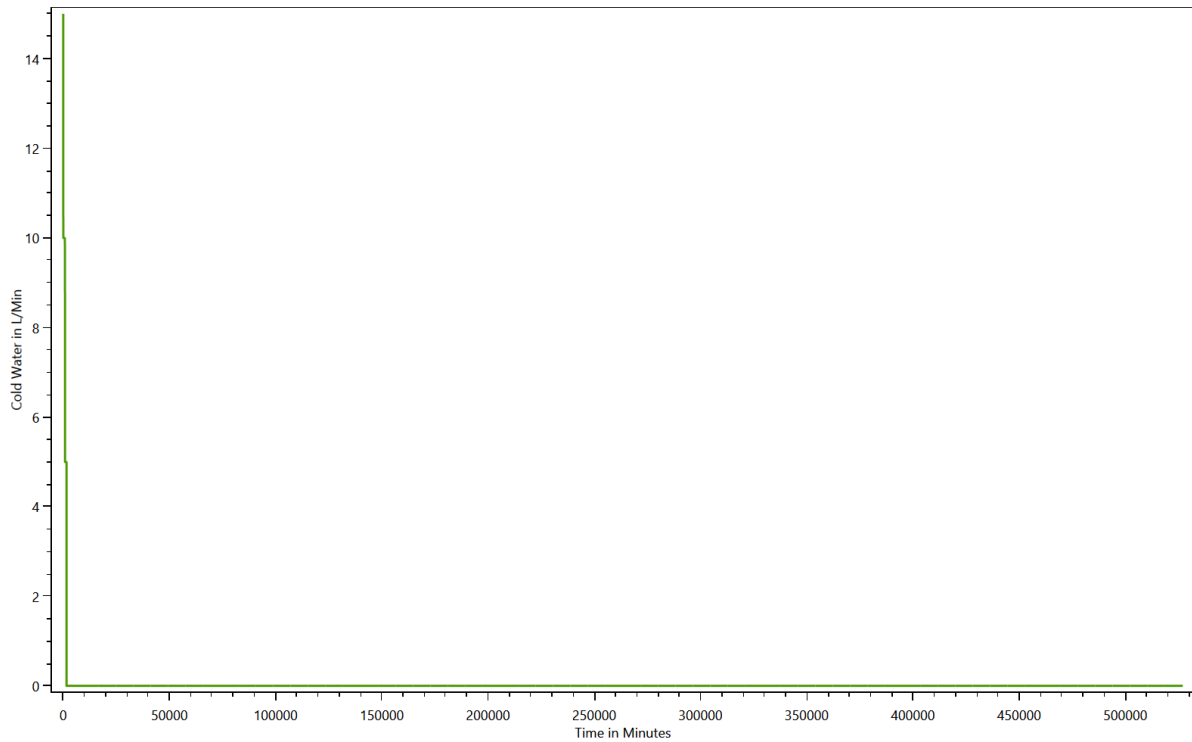


# Duration curve for each load type

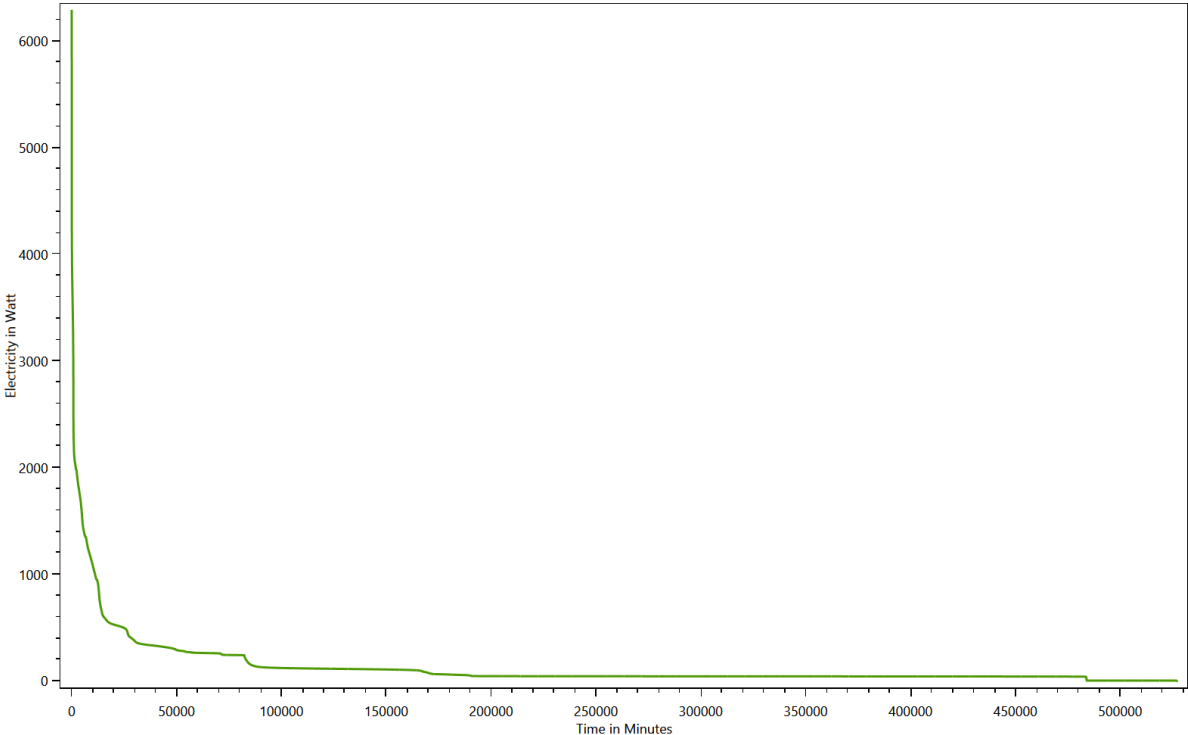
This is made from the files starting with: **DurationCurve**

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

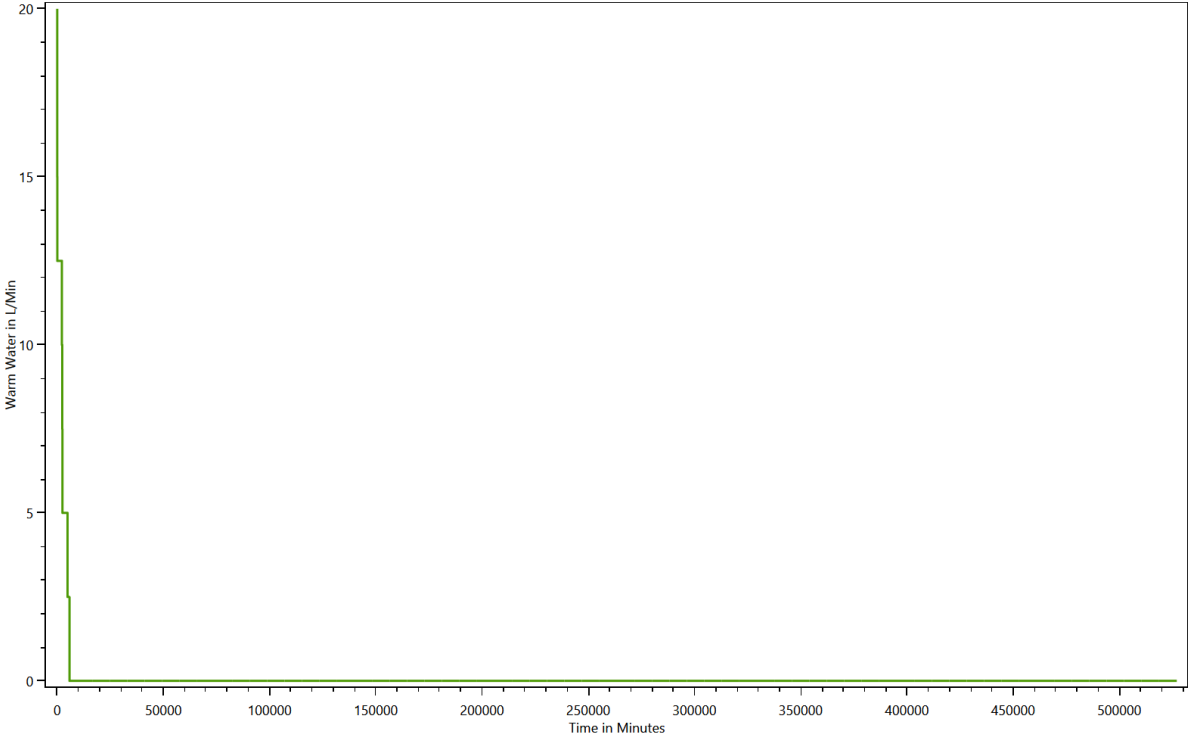
## Cold Water



# Electricity



# Warm Water

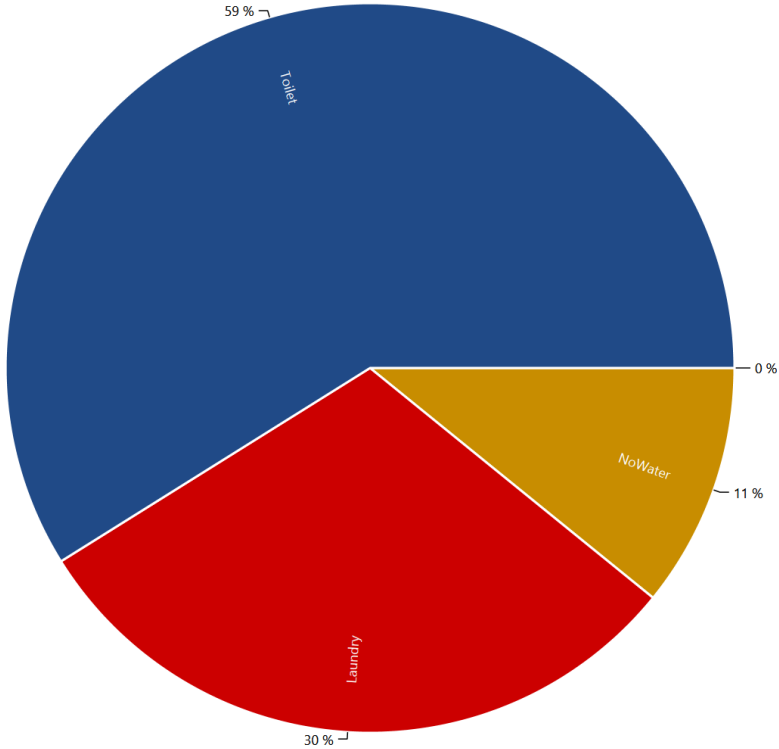


# Grouped energy use for each load type for each device

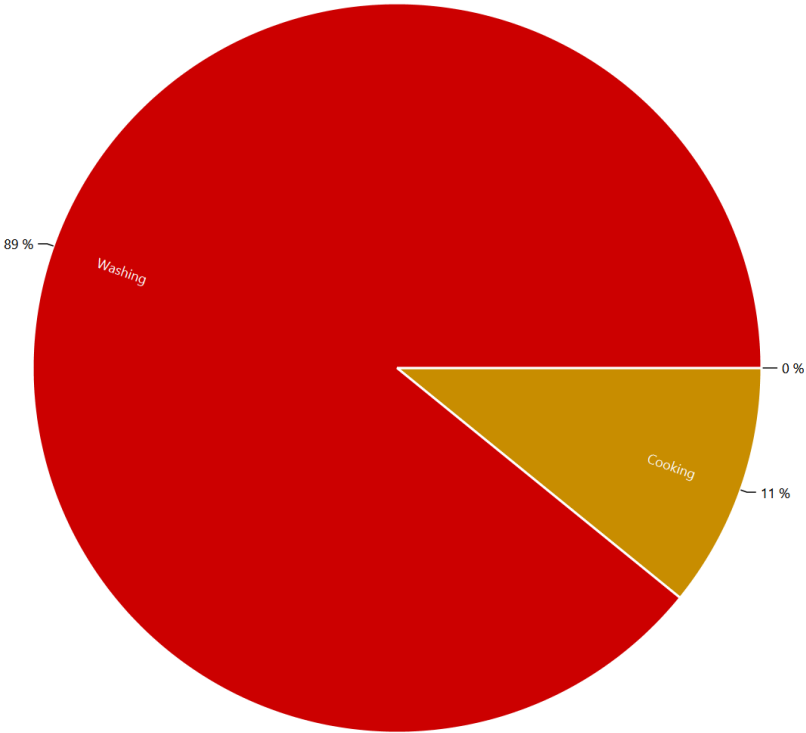
This is made from the files starting with: DeviceTaggingSet

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

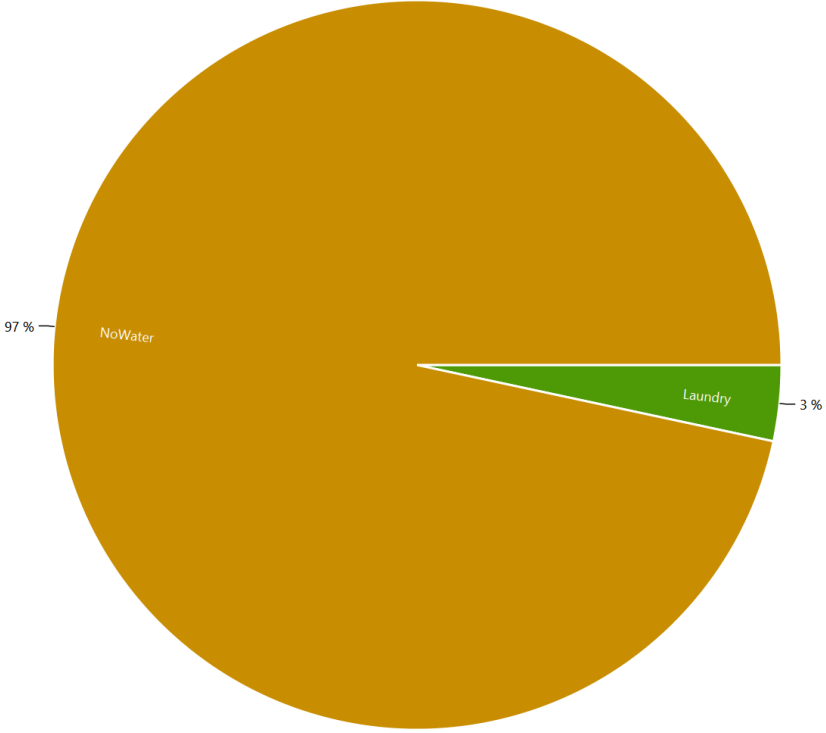
## HH0 - Destatis Water Usage Statistics - Cold Water



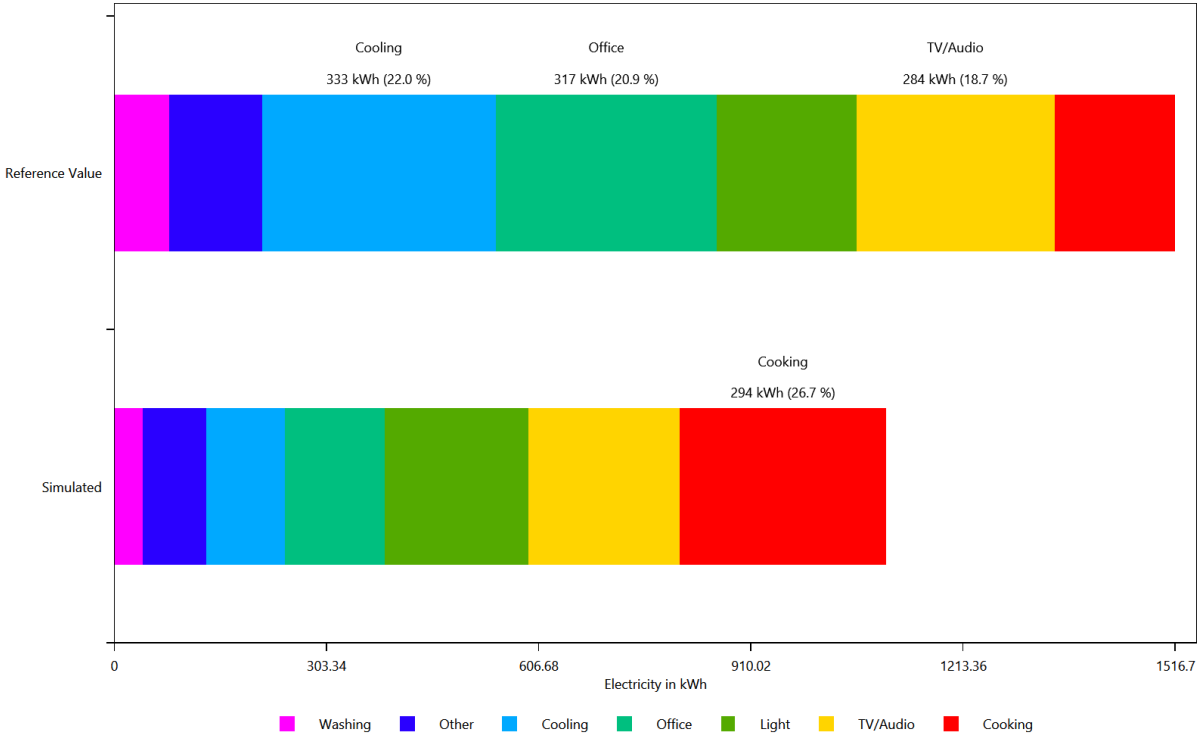
HH0 - Energieagentur - Cold Water



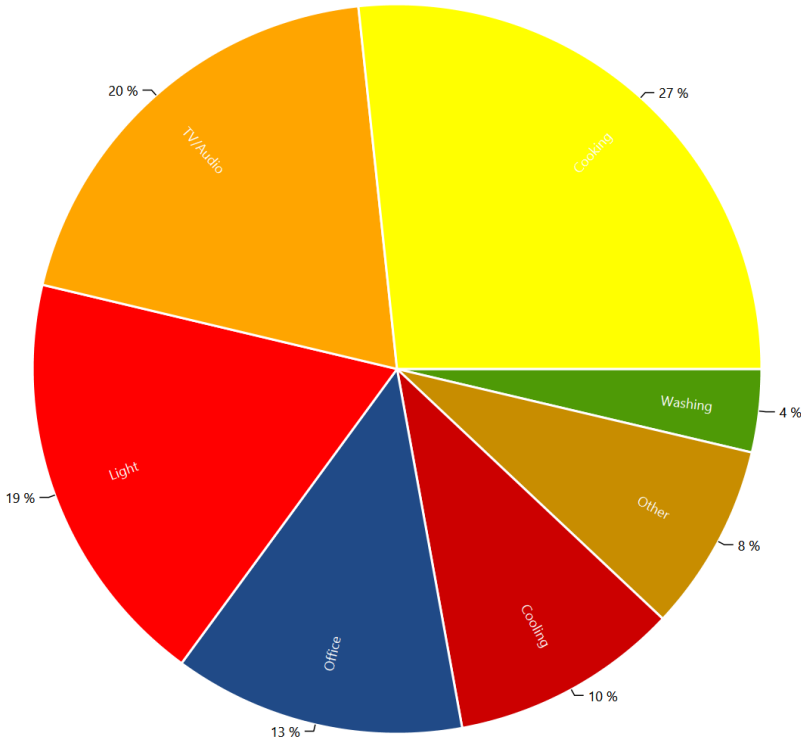
HH0 - Destatis Water Usage Statistics - Electricity



# HH0 - Energieagentur - Electricity

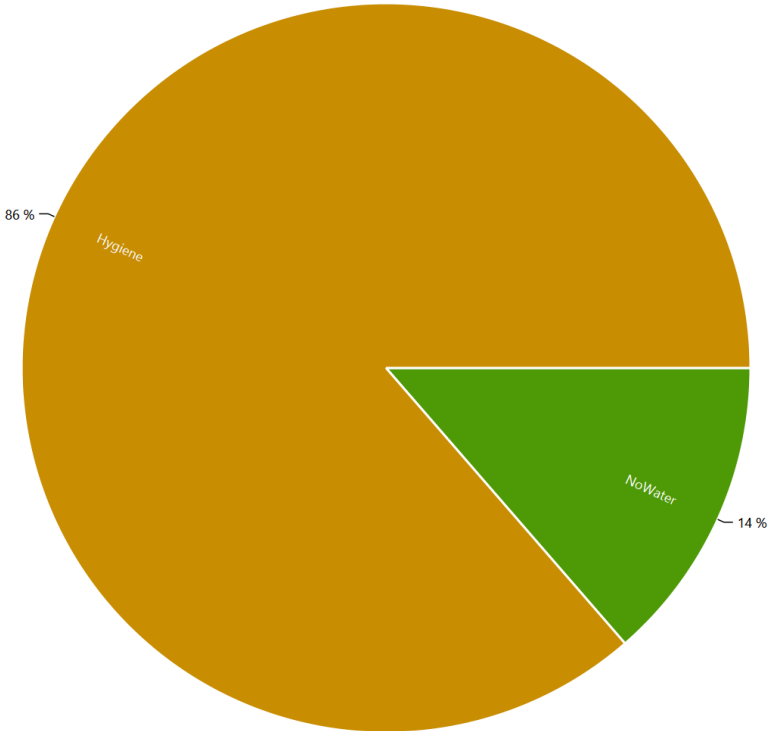


# HH0 - Energieagentur - Electricity

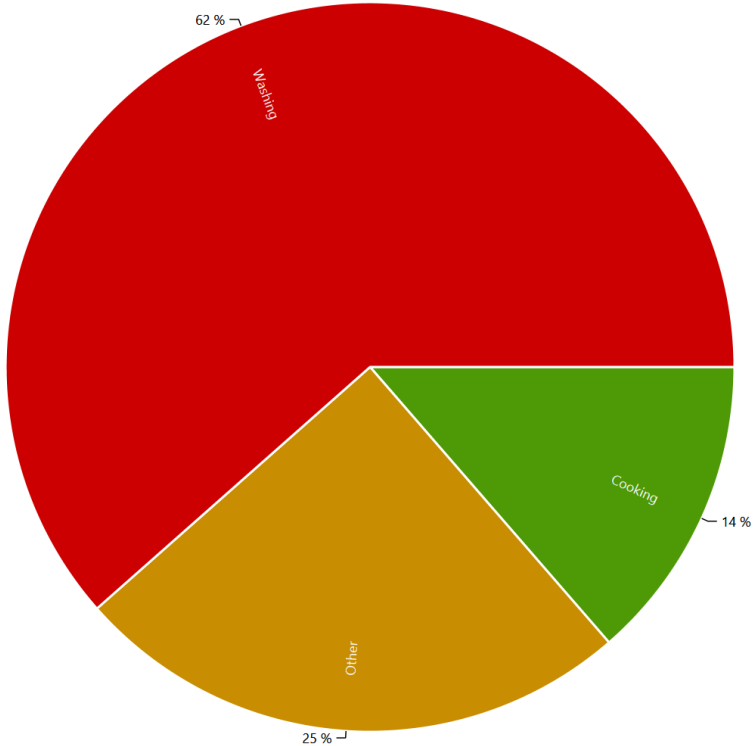




HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

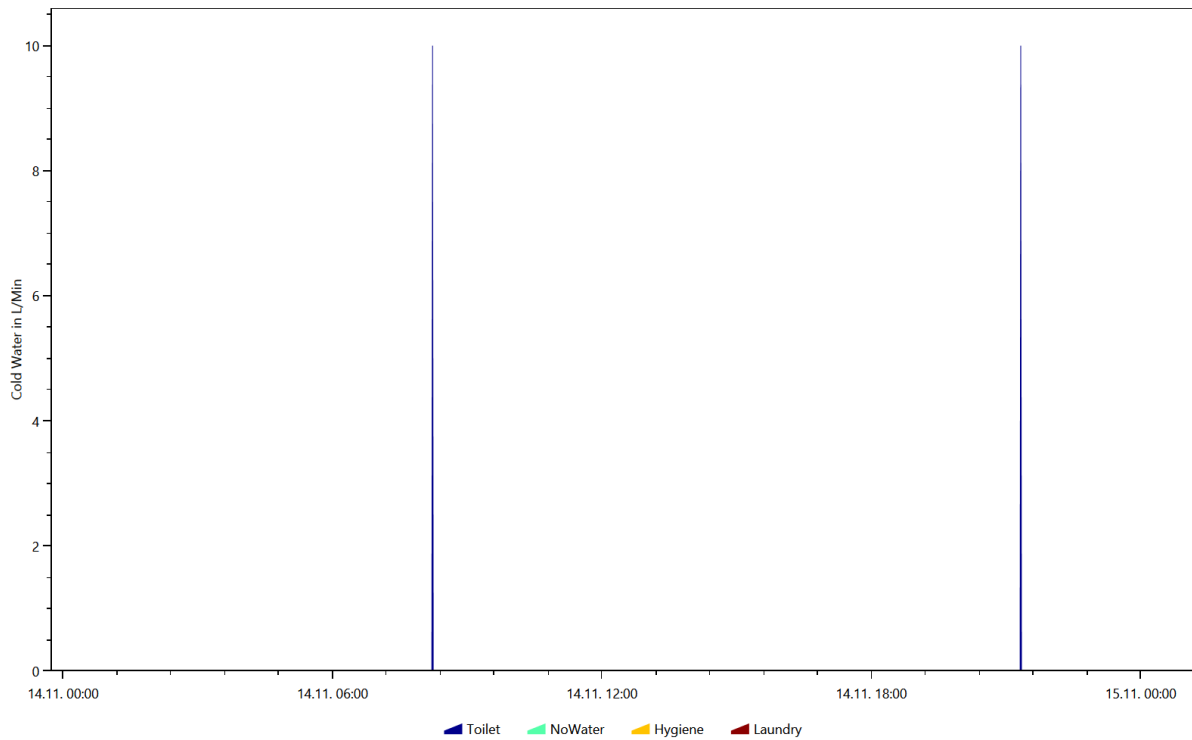


# Example of the device profiles for each load type

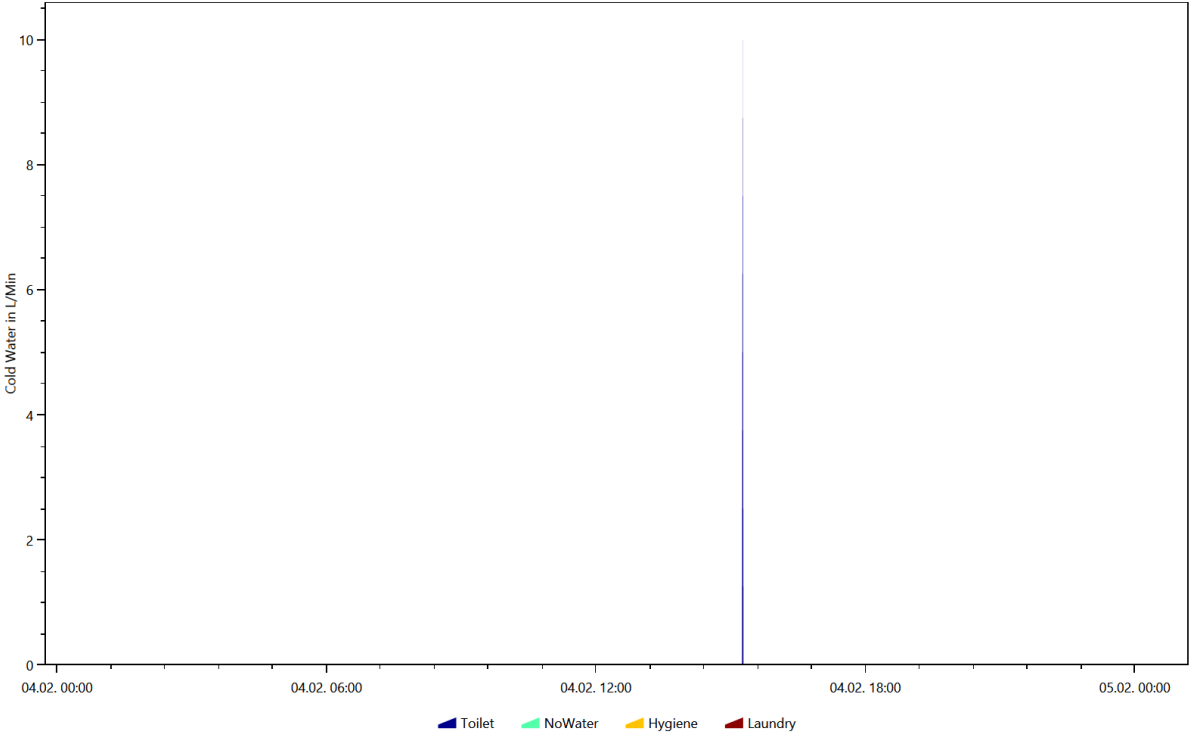
This is made from the files starting with: DeviceProfiles

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

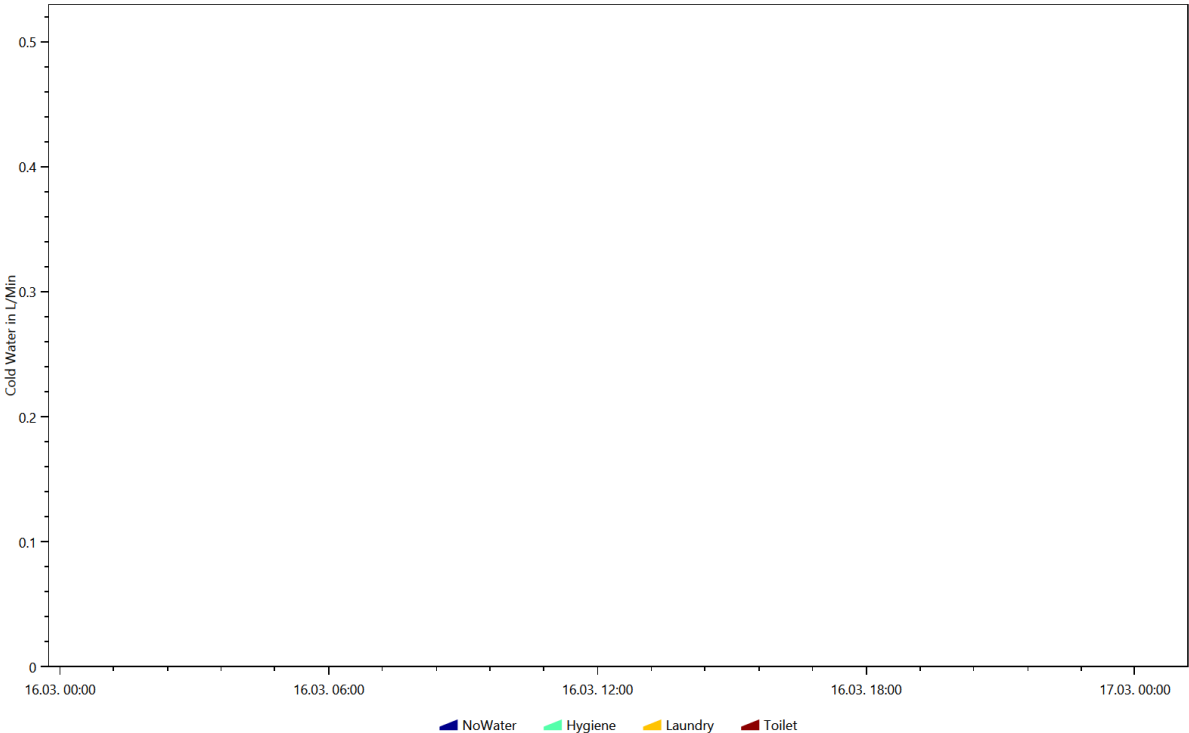
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.14



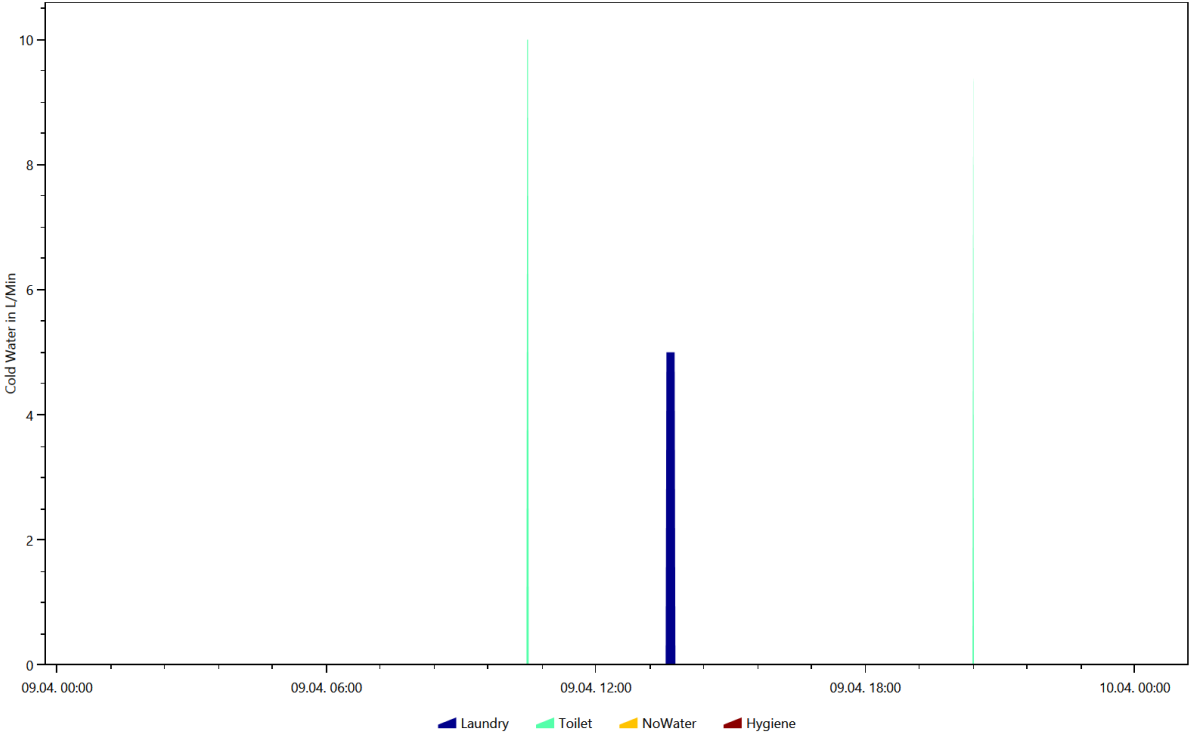
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.4



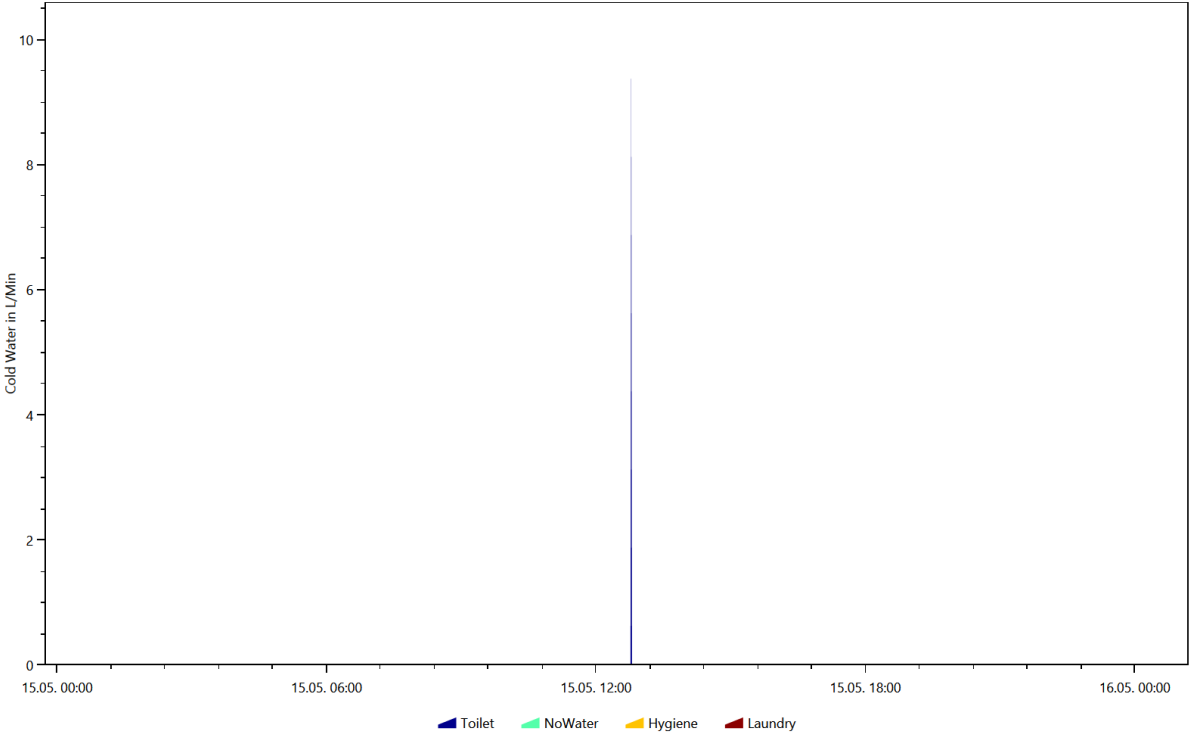
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.16



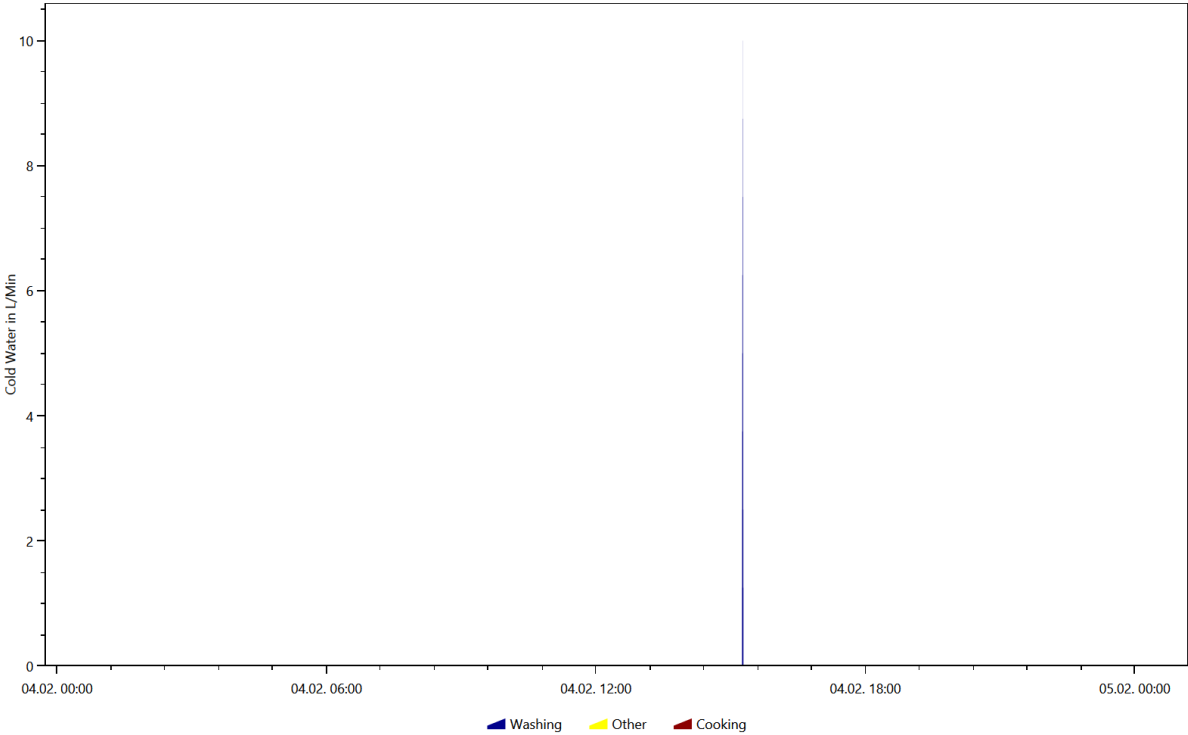
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.9



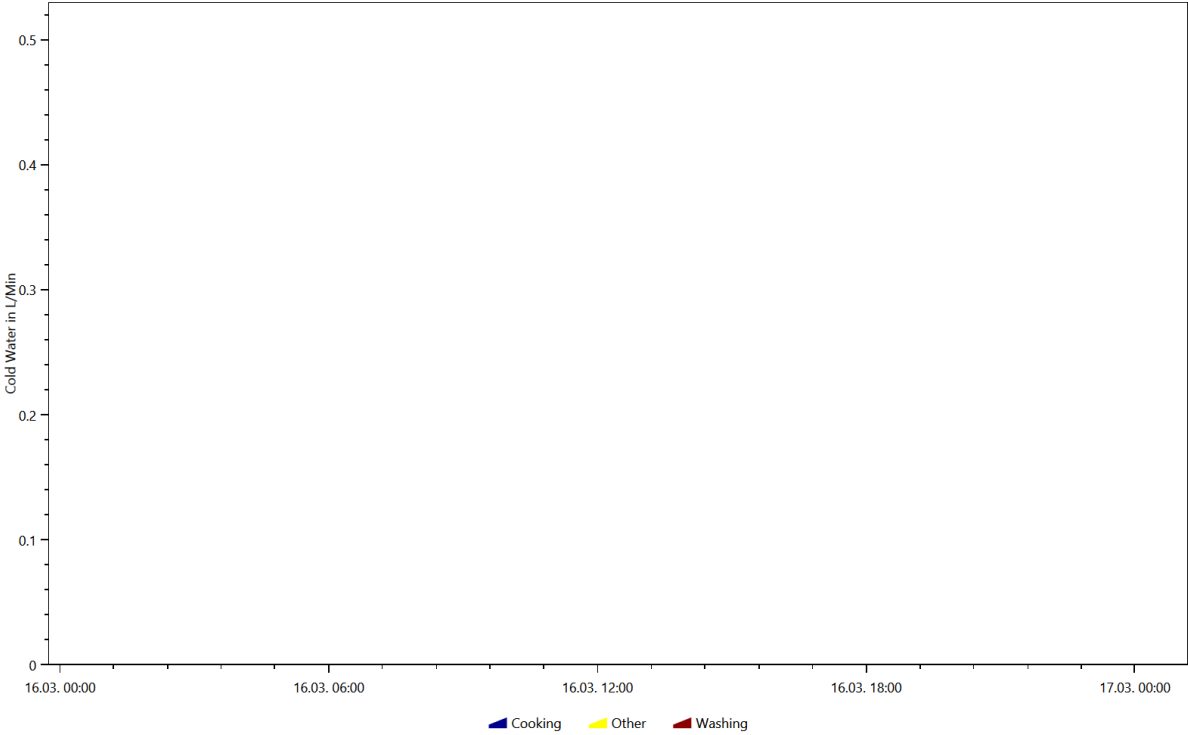
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.15



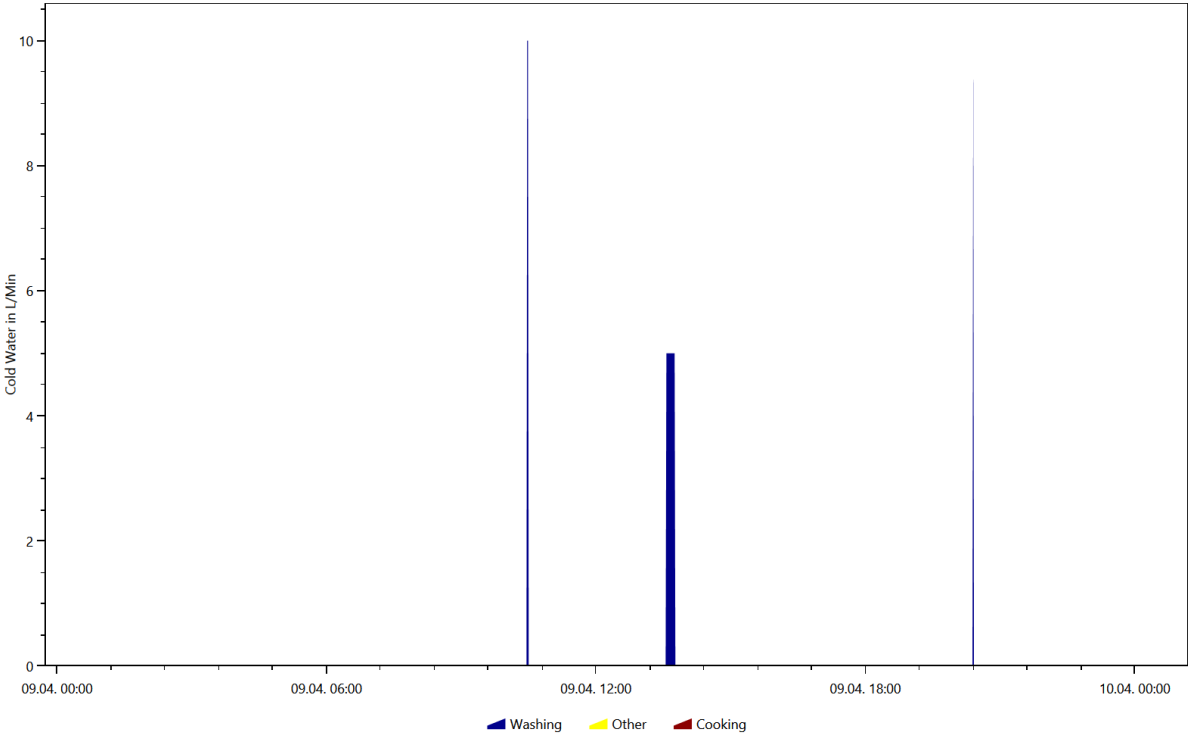
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.4



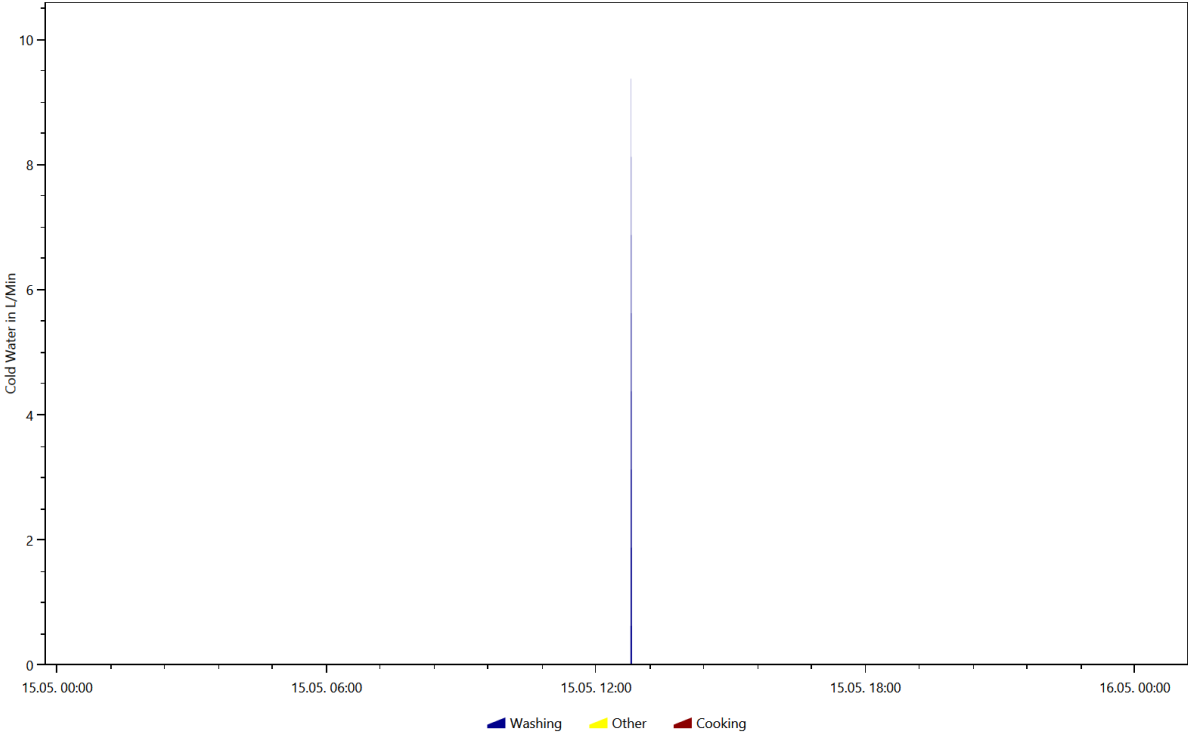
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.16



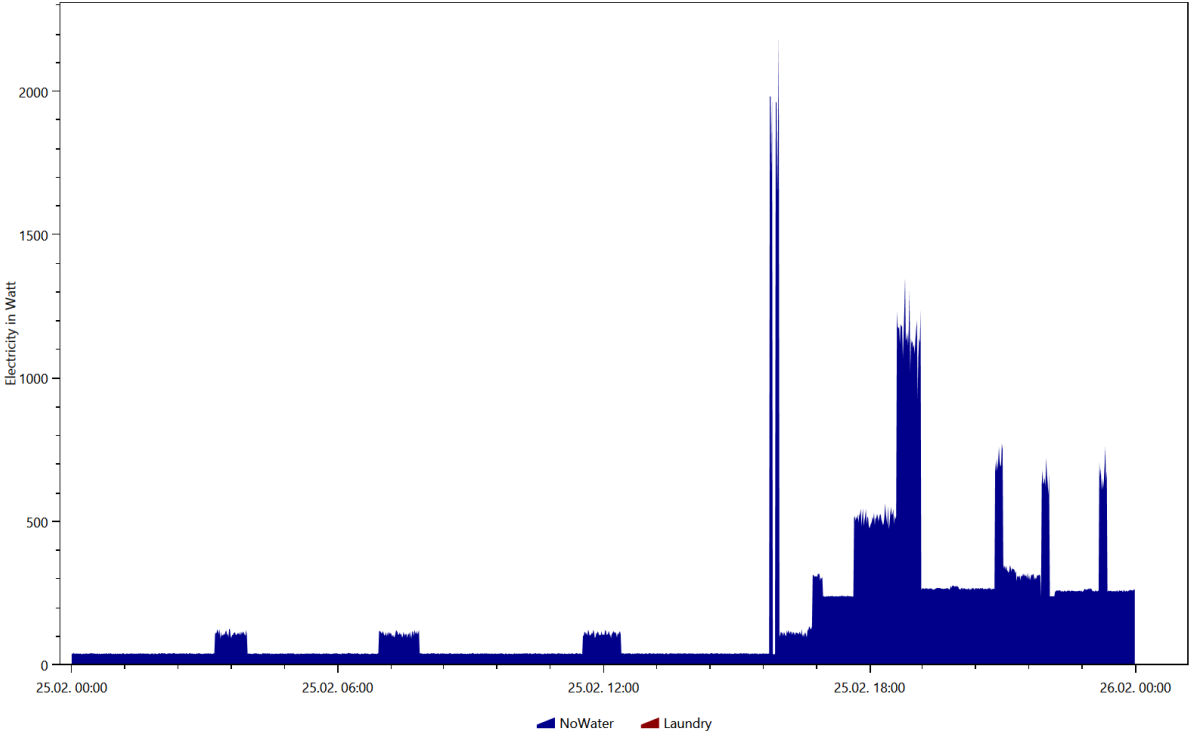
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.9



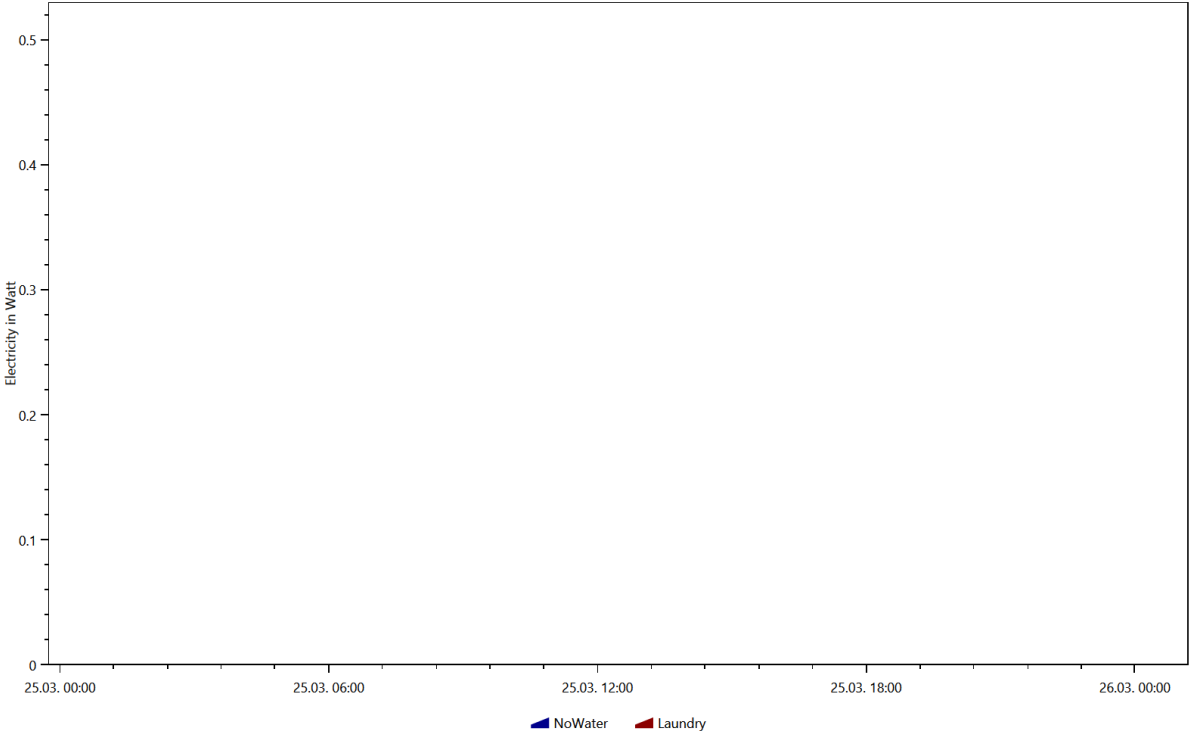
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.15



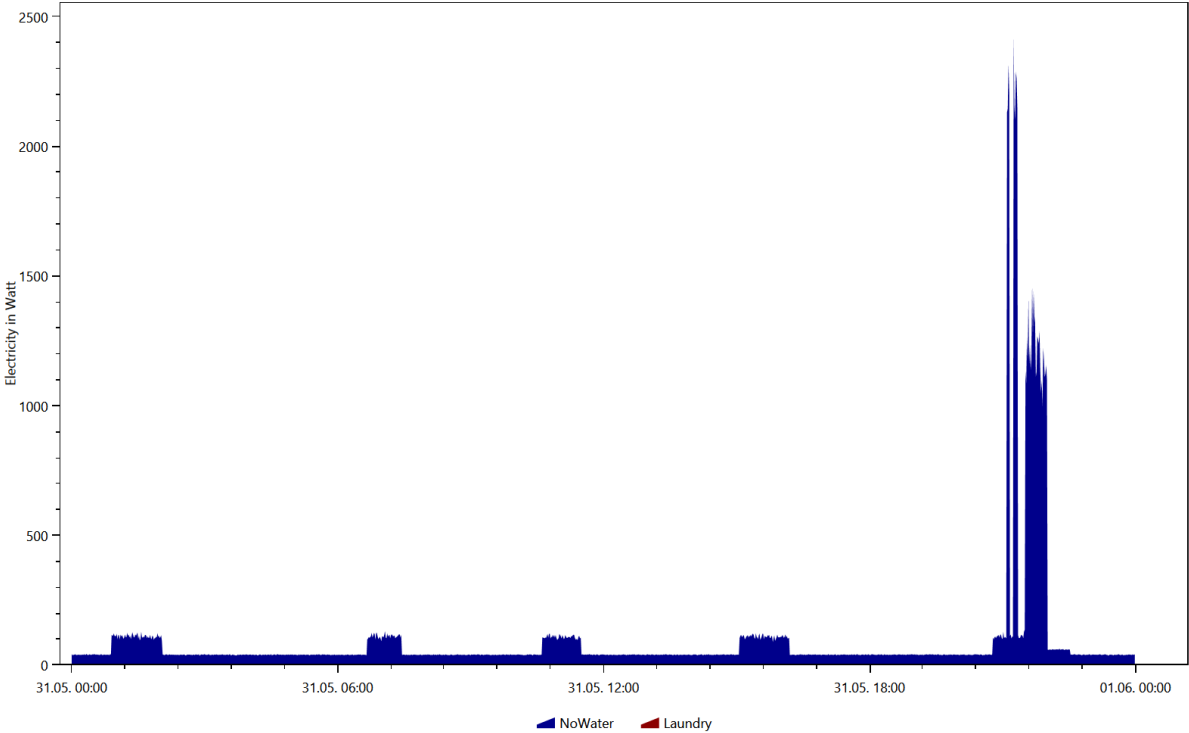
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.25



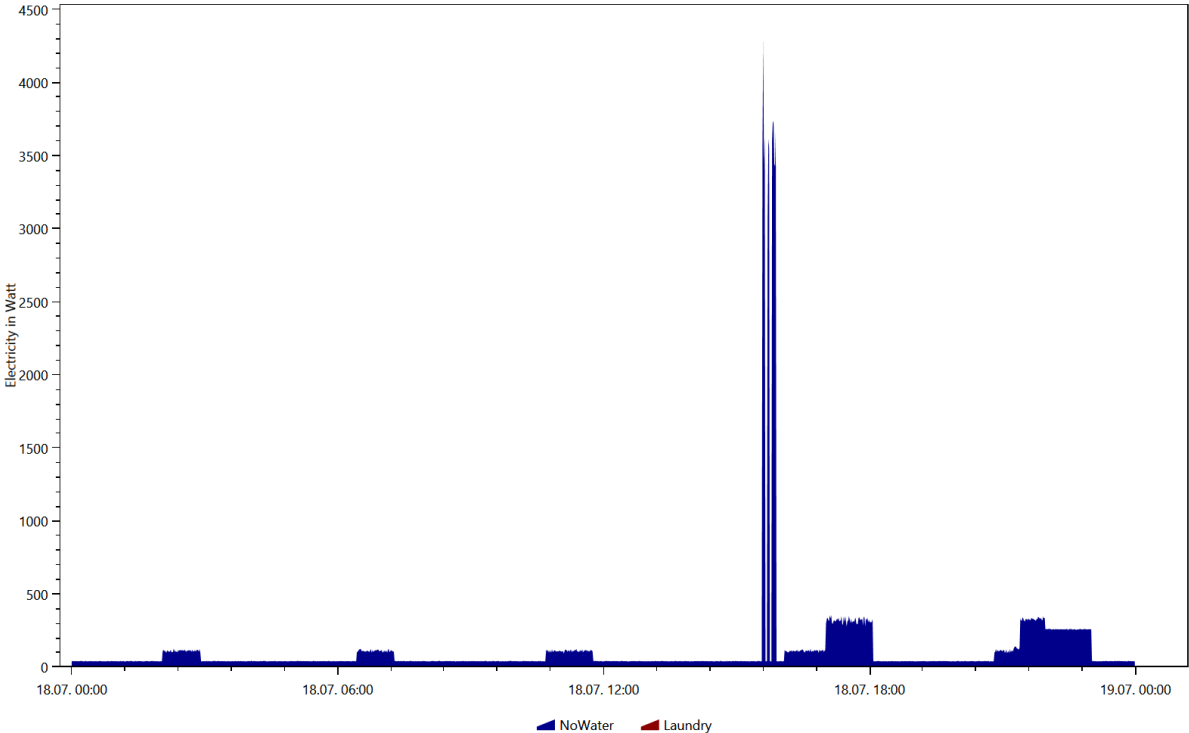
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.25



Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.31

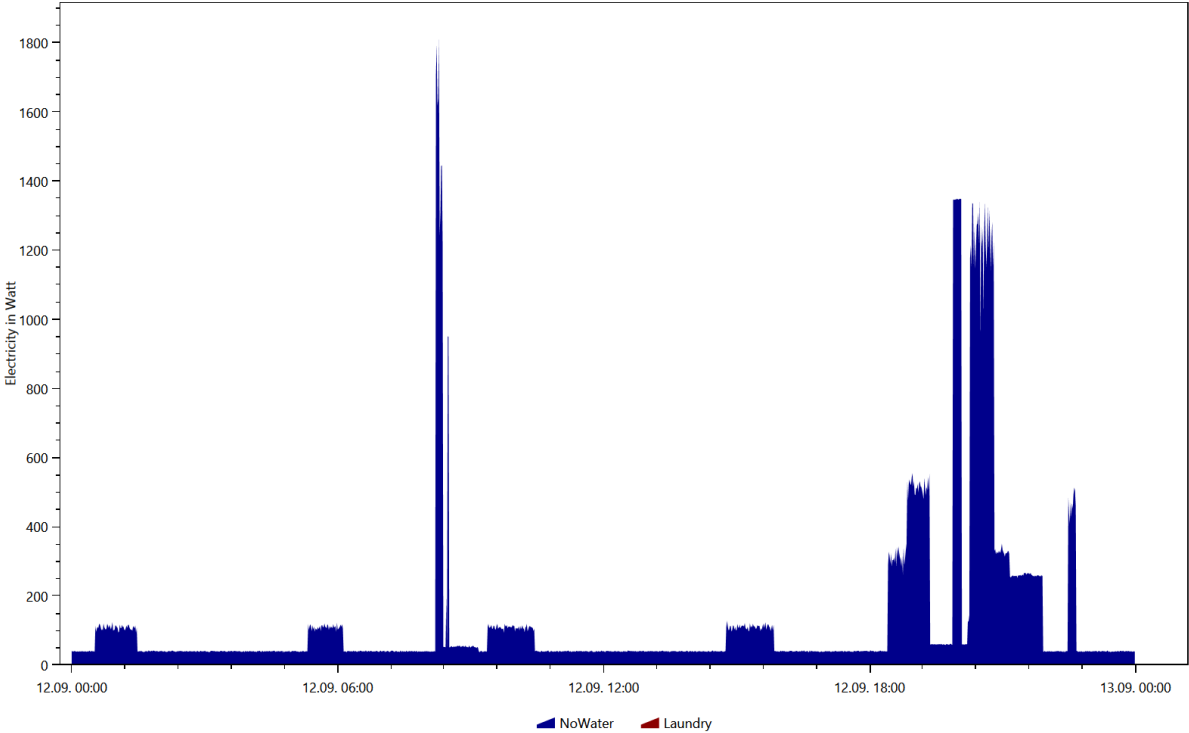


Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.18

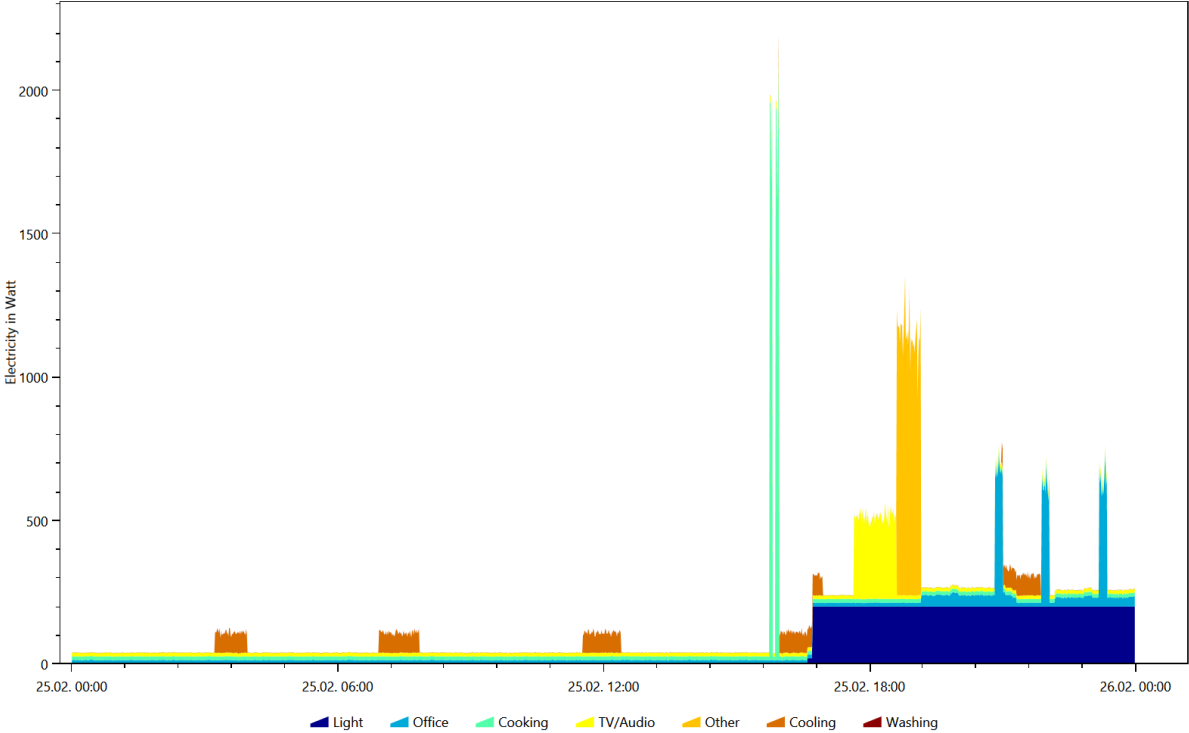




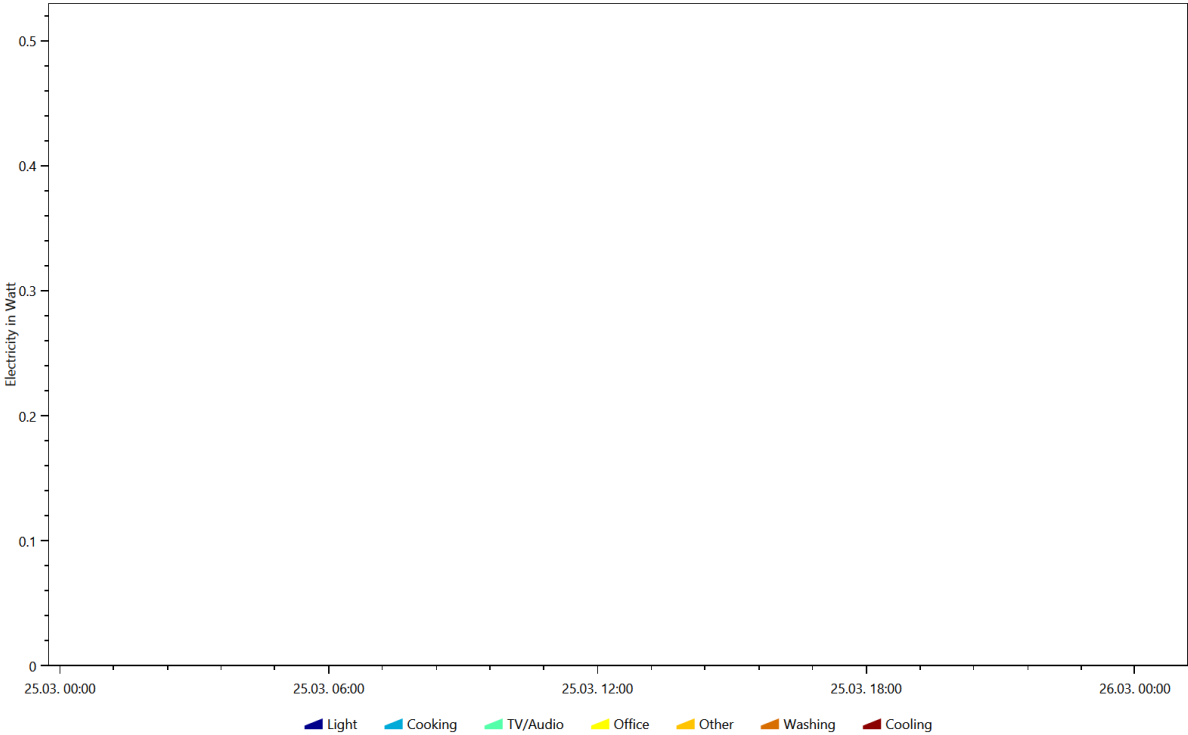
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.12



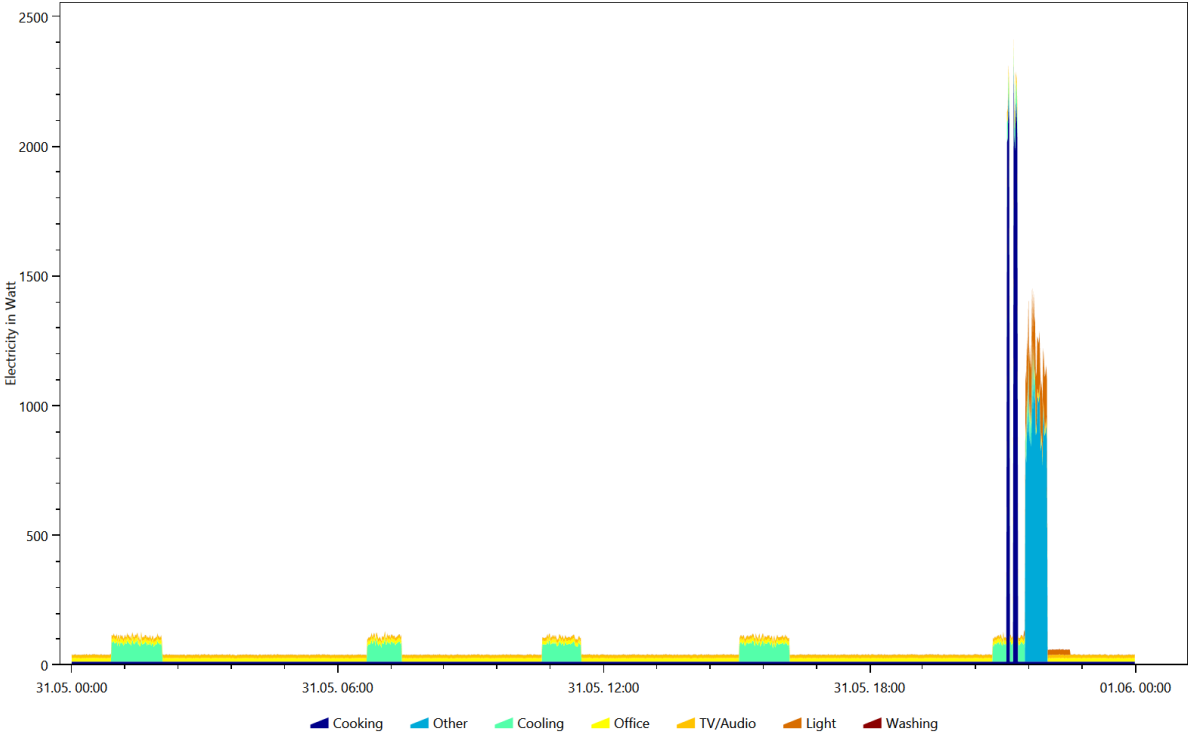
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.25



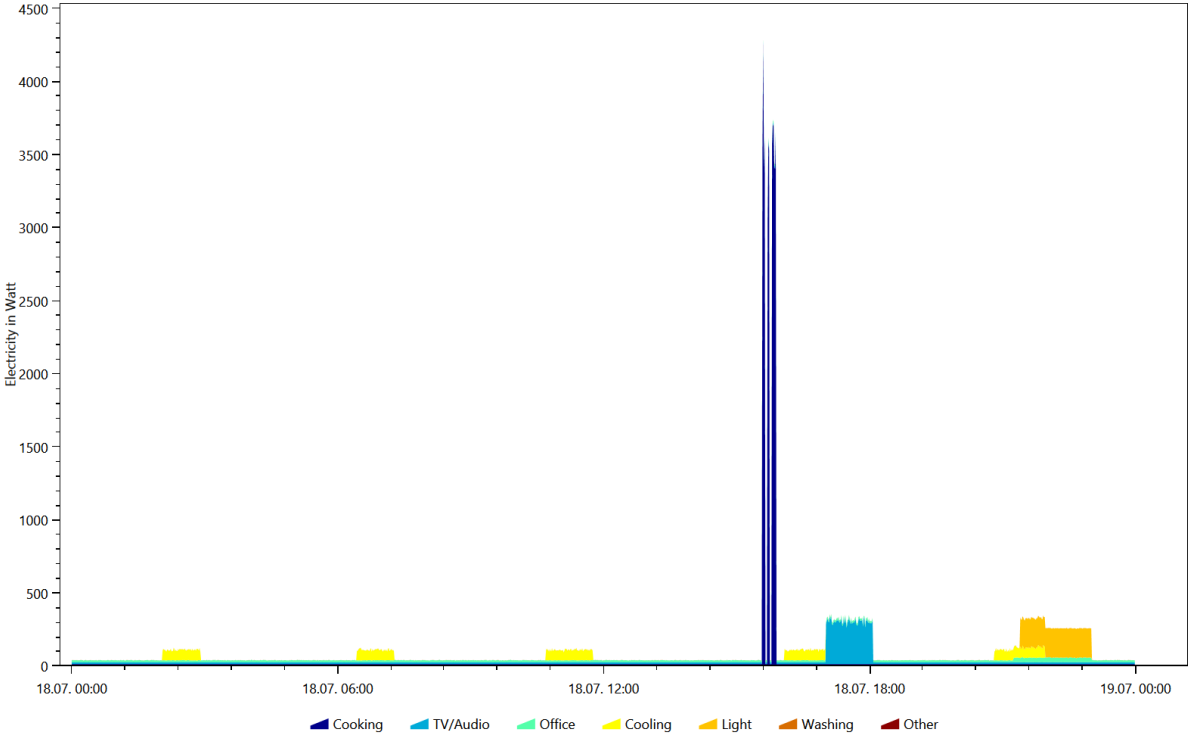
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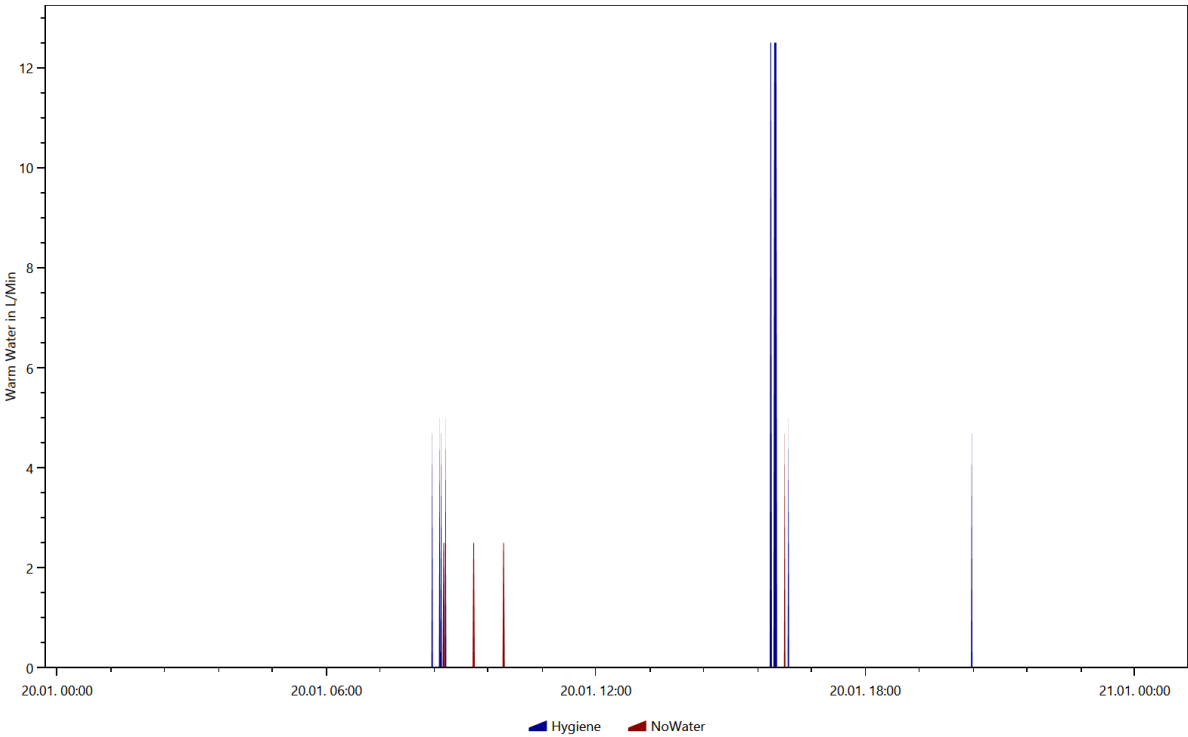
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.31



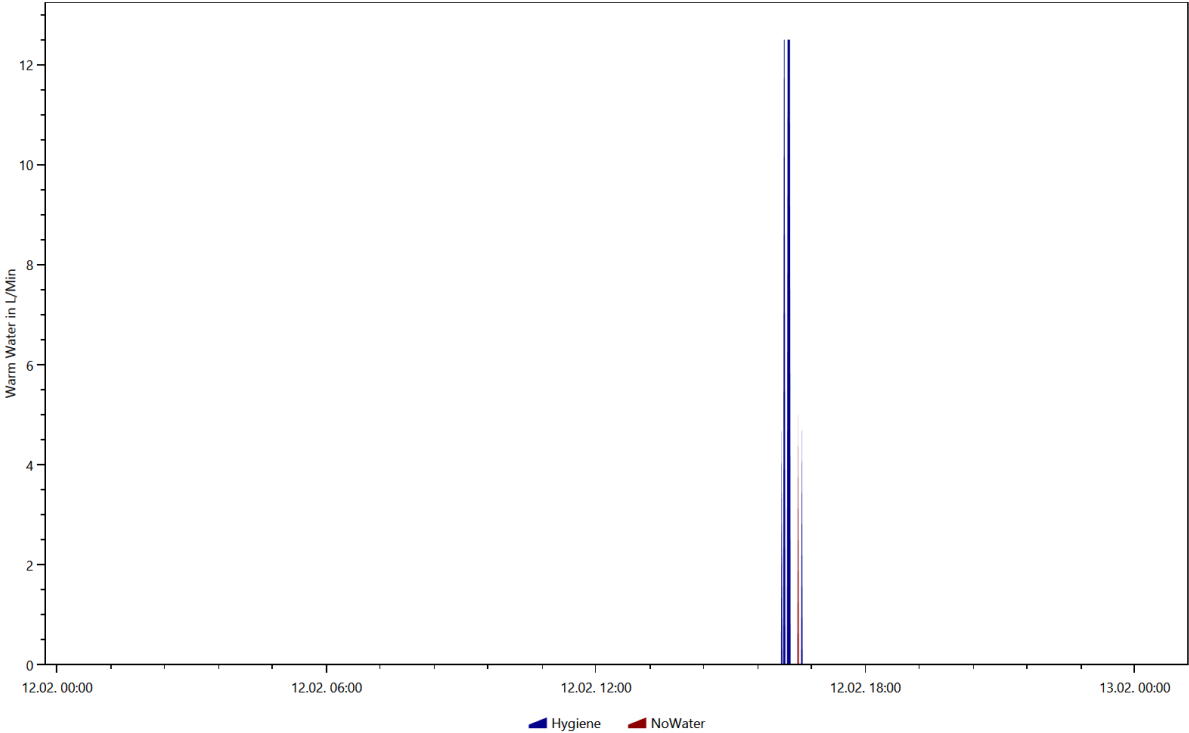
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.18



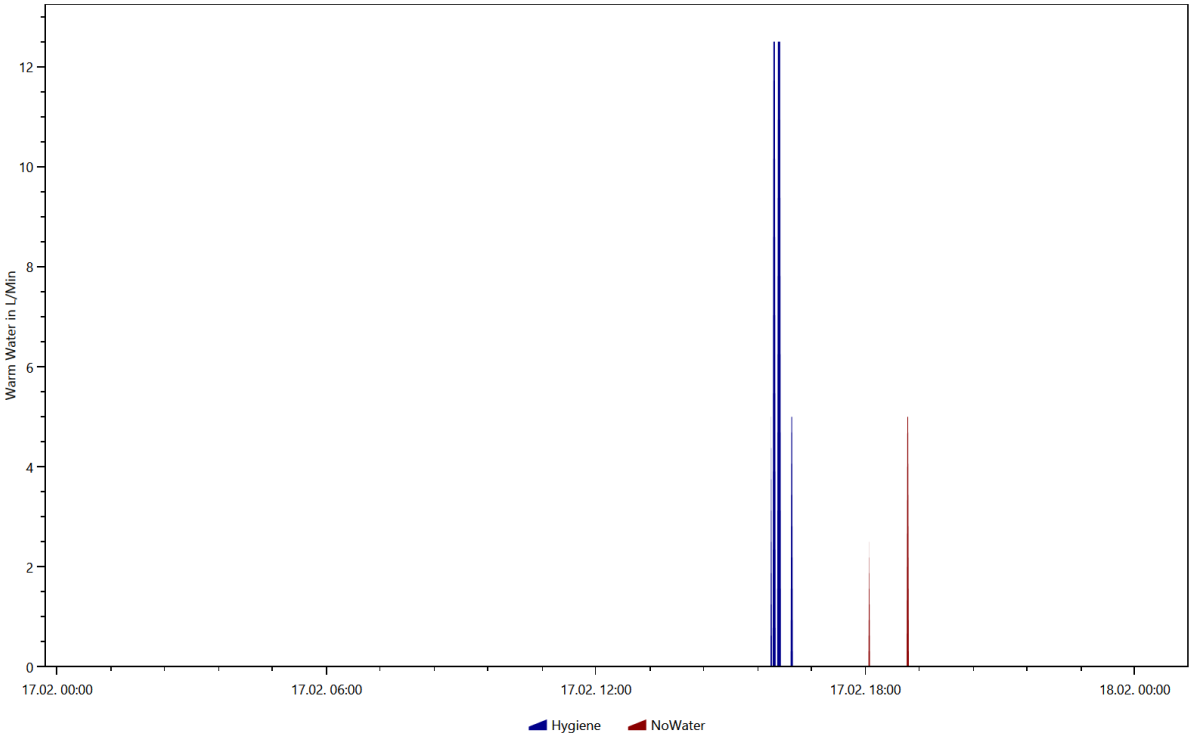
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.20



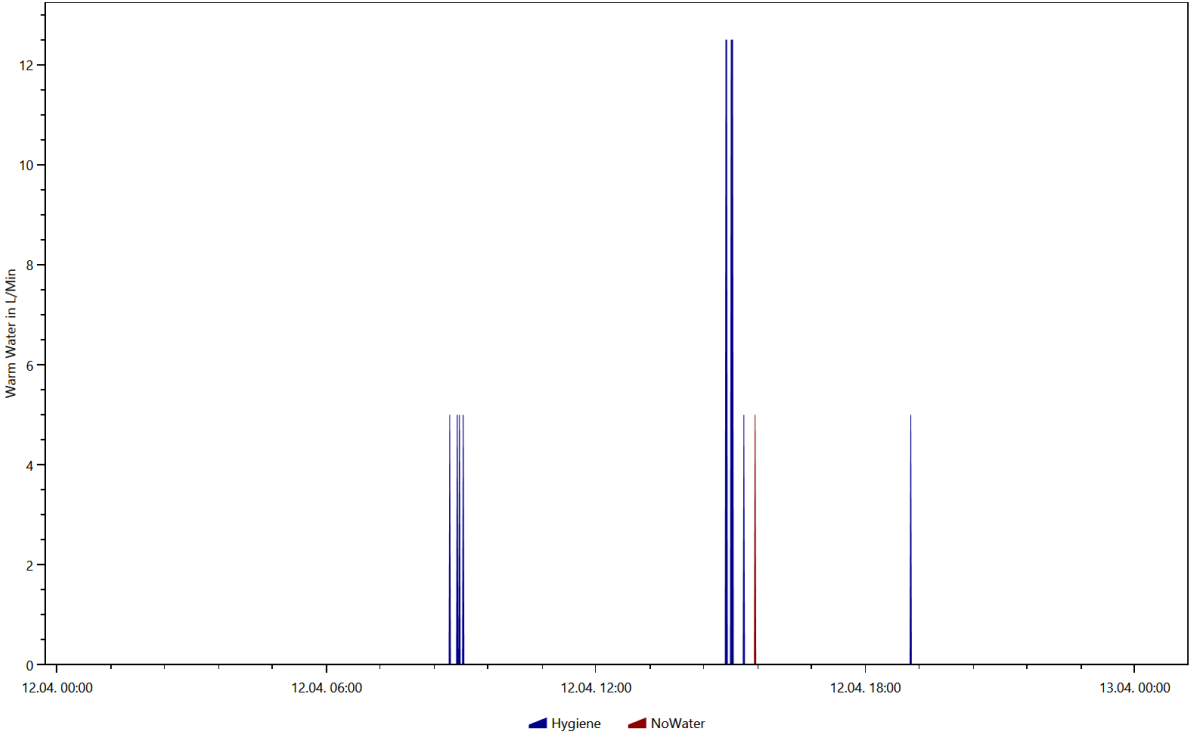
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.12



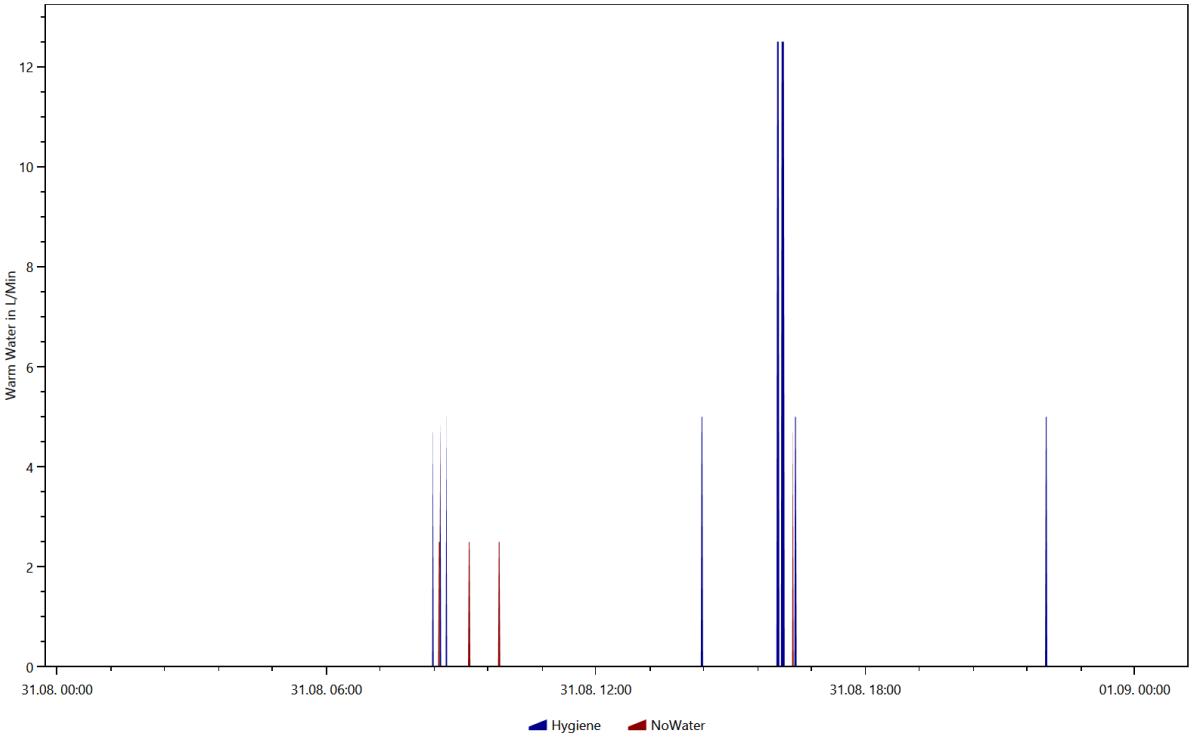
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.17



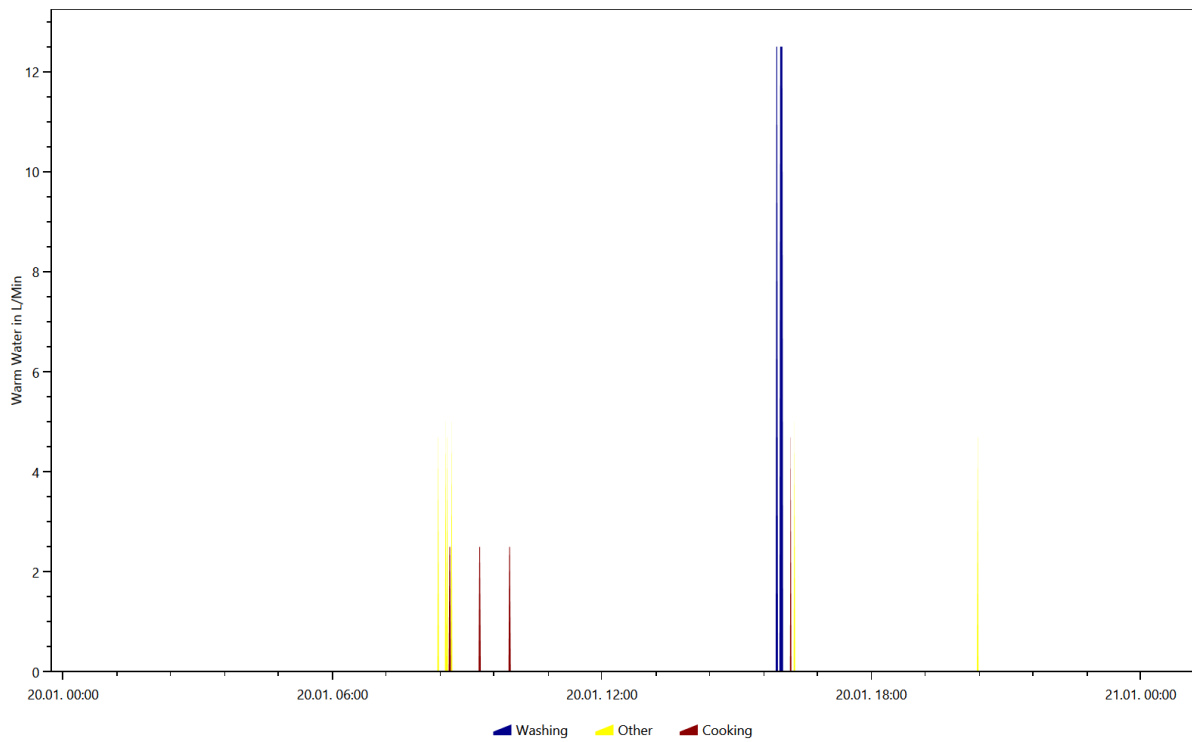
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.12



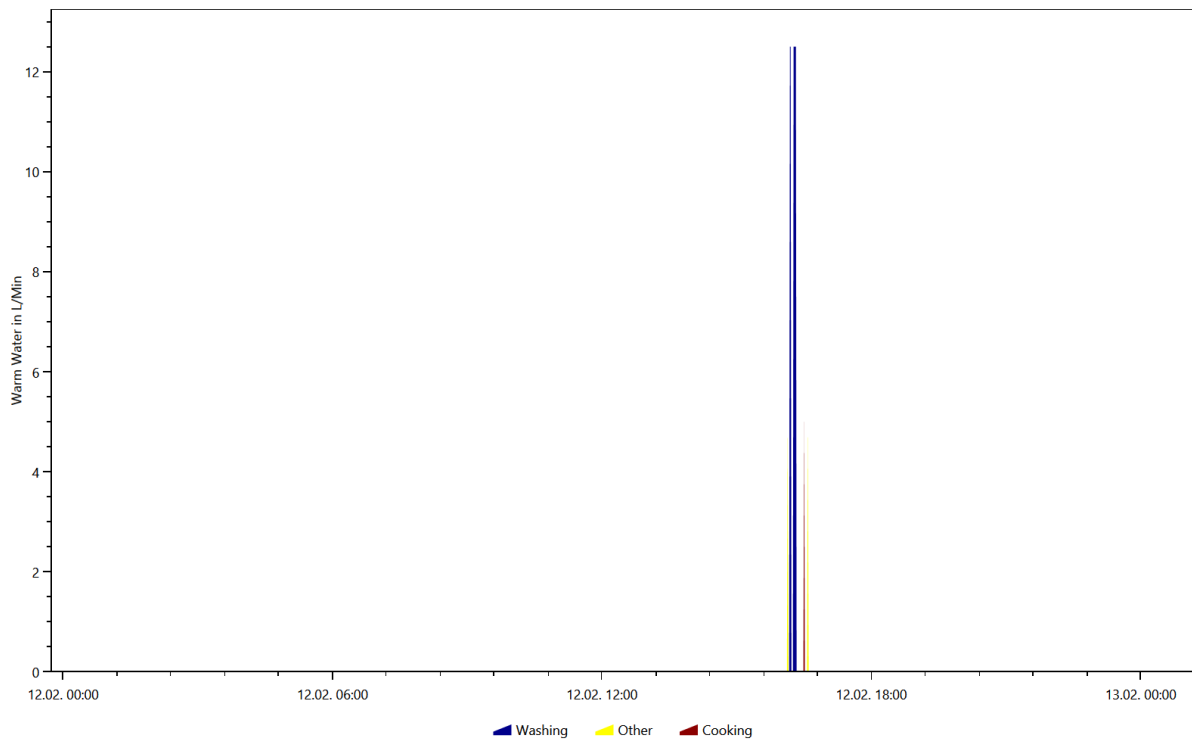
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.31



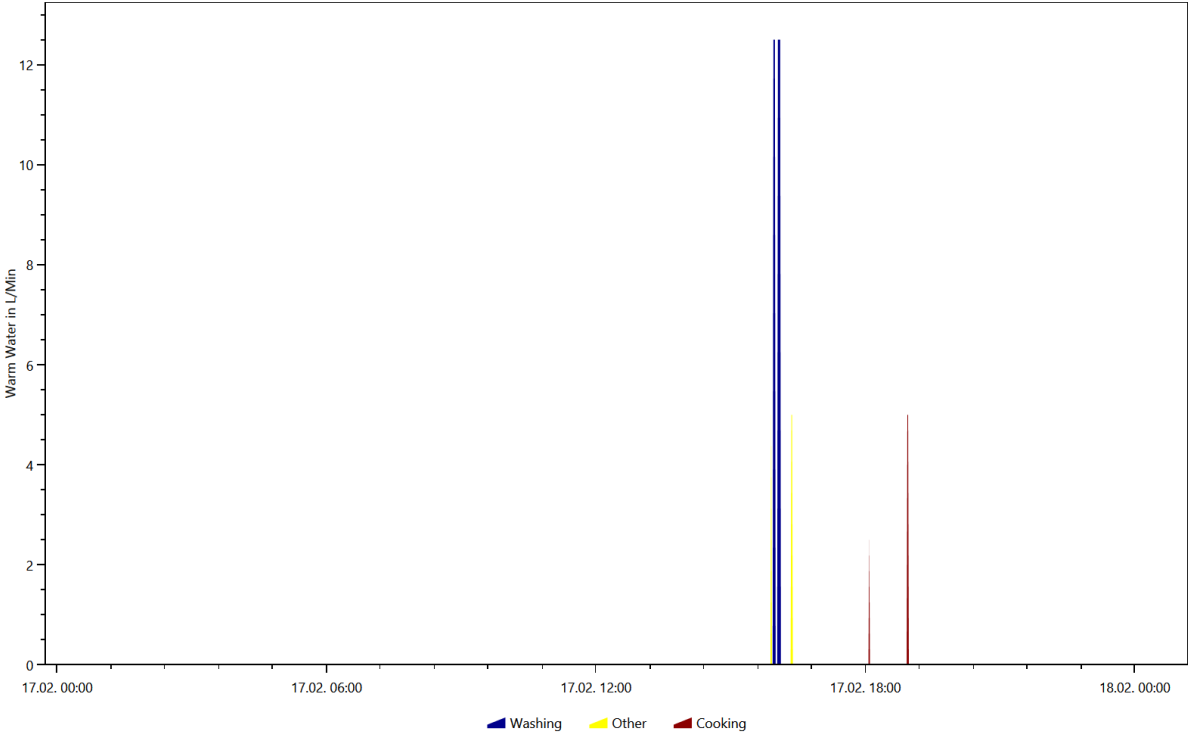
## Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.20



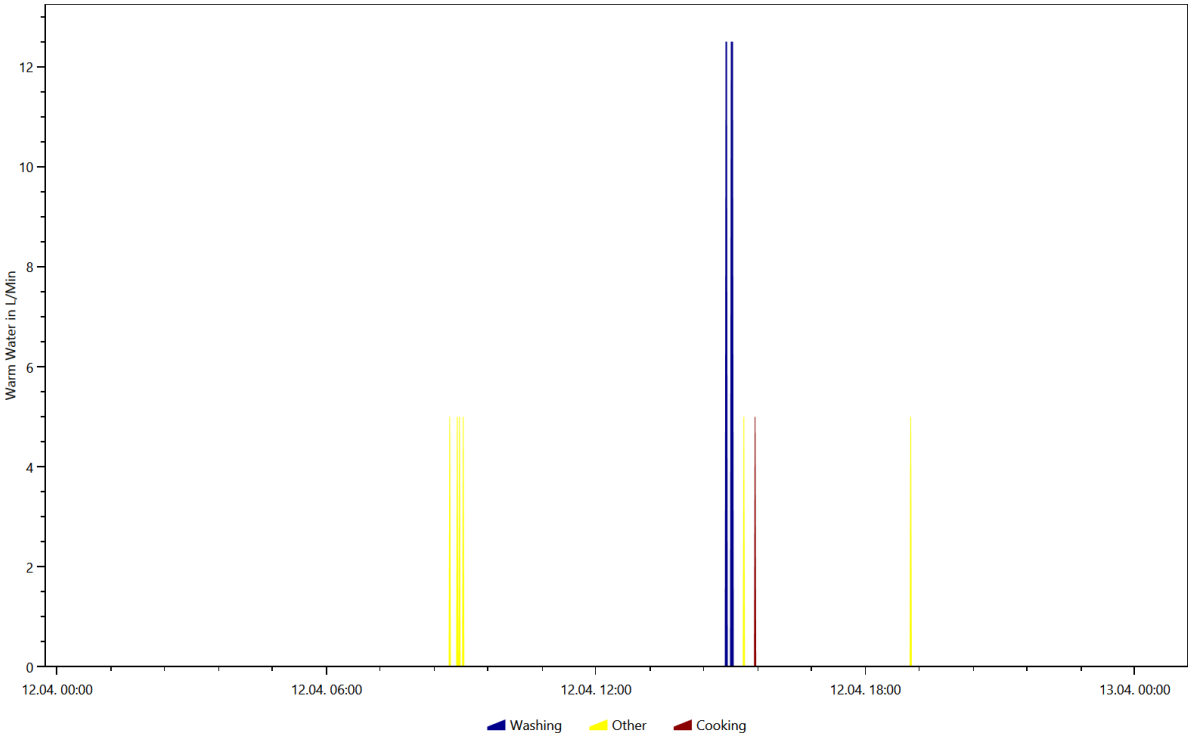
## Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.12



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.17



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.12

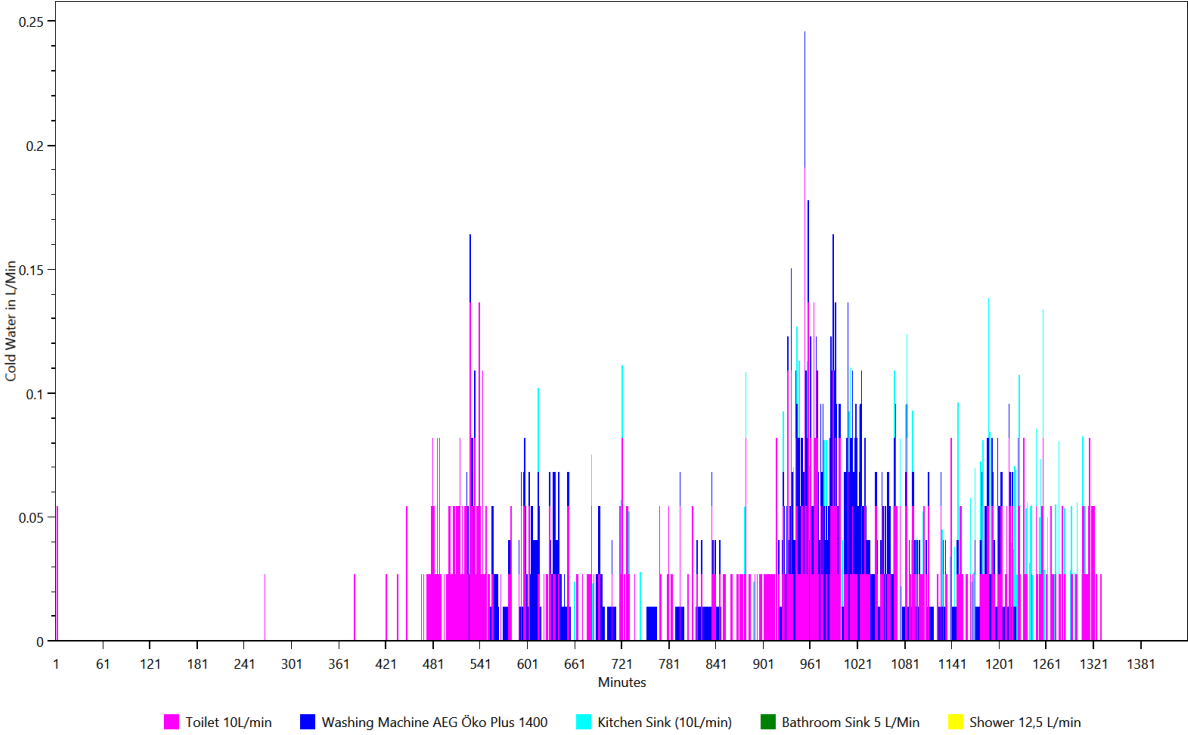


# Overview of the time and power of the use per load type per device

This is made from the files starting with: TimeOfUseEnergyProfiles

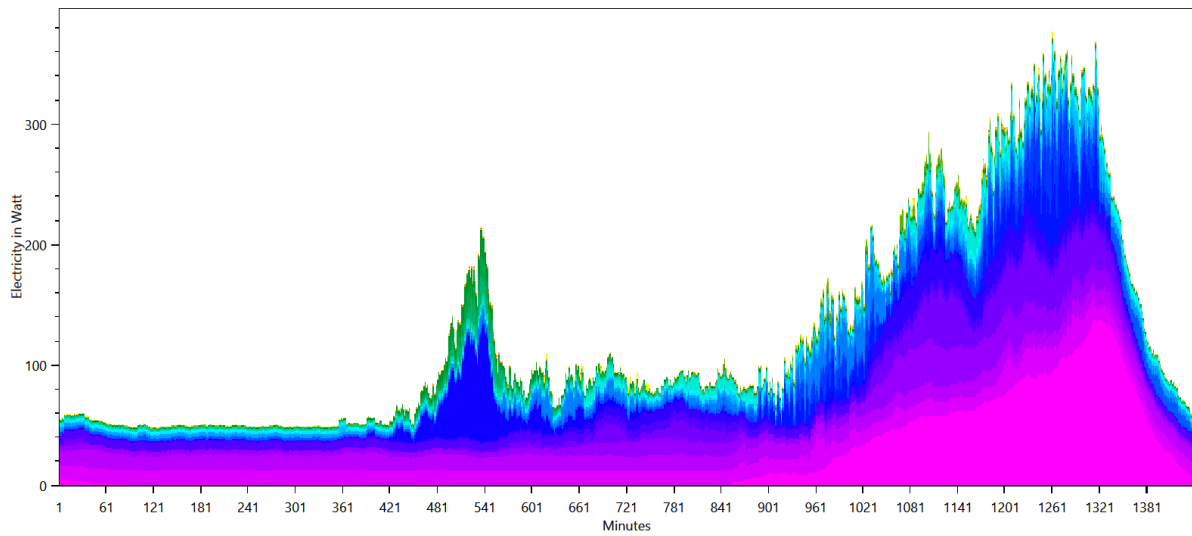
The time of use energy profiles show when each device was used and how much power it used.

## Cold Water



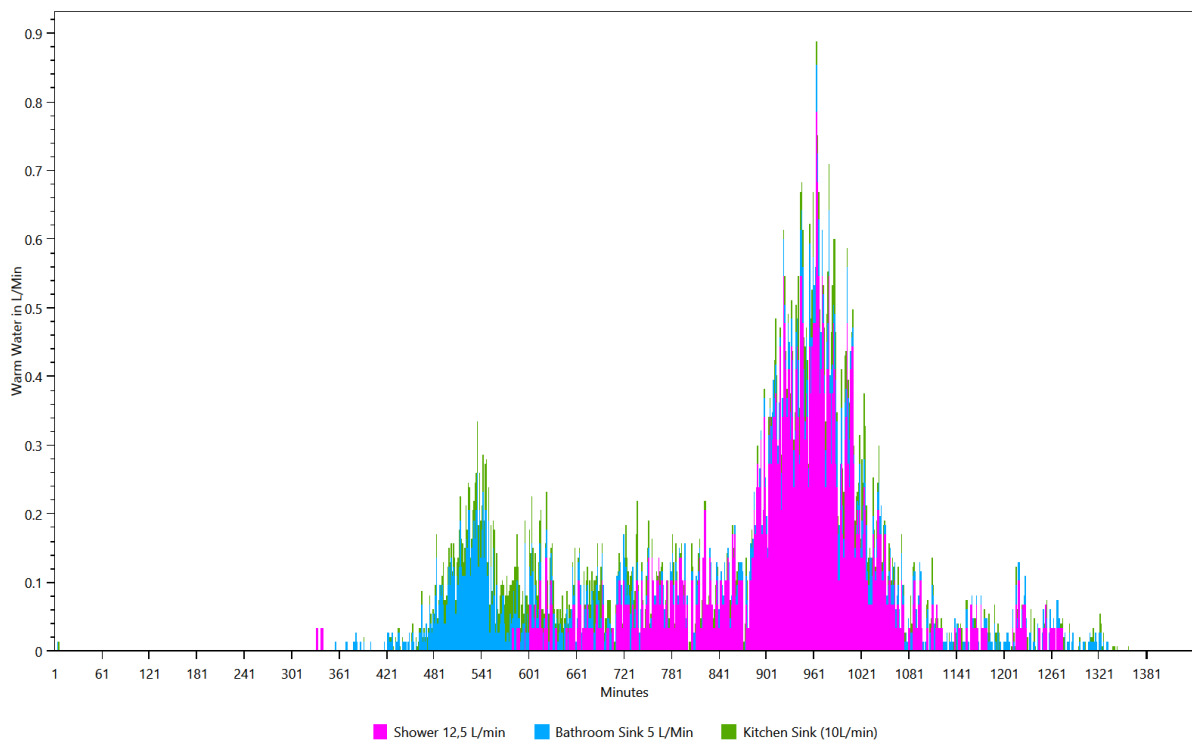


## Electricity



- Living Room Light (200W)
- Microwave Panasonic (1991)
- Liebherr CBNPes 3956
- Sony PlayStation 3
- Christopeit Treadmill TM 2 Pro
- Router / AVM FRITZ! Box Fon WLAN 7390
- TV Samsung LED UE40 B7090
- Coffee Machine / Braun Impression KF 600
- Miele H 5241 B
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove front left
- TASKalfa 180
- Washing Machine AEG Öko Plus 1400
- Hifi System / Sharp XL-HF300PH
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind - full power
- PC / Acer 8400
- PC Monitor / Fujitsu Siemens Scaleoview D19-1
- Vacuum Cleaner FIF
- Kitchen radio / AEG KRC 4323 CD
- SAT Receiver / Kathrein UFS913
- Toaster / Tefal Vario
- Juicer / Moulinex Vitafruit
- Egg Cooker / Russell Hobbs 14048-56 Stylo
- CD/DVD Player / Phillips HDR3810/31
- Miele DA 249-2
- Kitchen Light (20W)
- Electric Kettle / Phillips Essential HD 4685/90 Schwarz
- Epson Stylus Color 860
- Bathroom Mirror Light 30W (CFL)
- Electric Toothbrush Dondodent Professional Clean
- Electric Razor / Phillips PT860/16 Razor PowerTouch Plus
- Electric Kettle / Petra WK288 1.5L
- Bathroom Light (20W)
- External Harddrive Iomega 3.5"
- Food Slicer / DOMO Schneidemaschine DO521S
- Osram Light Bulb Classic A 60W
- Bedroom Light (60W)
- Canon CanoScan LIDE 110

## Warm Water



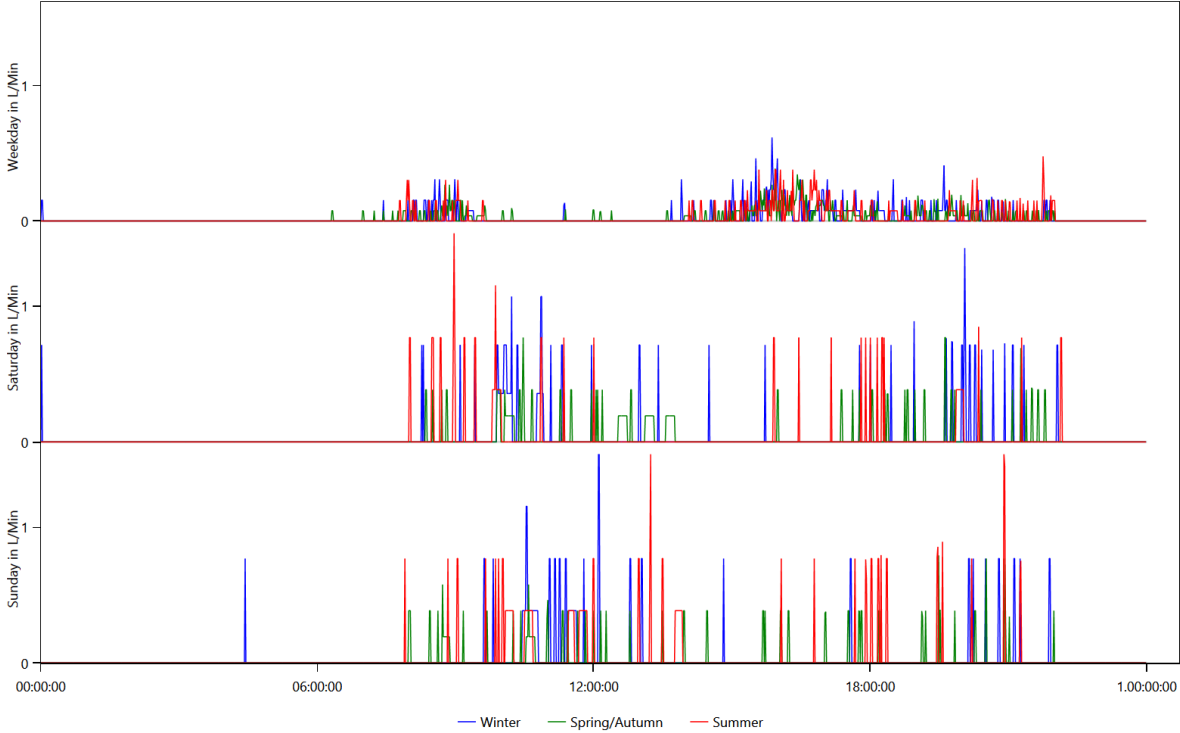
- Shower 12,5 L/min
- Bathroom Sink 5 L/Min
- Kitchen Sink (10L/min)

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

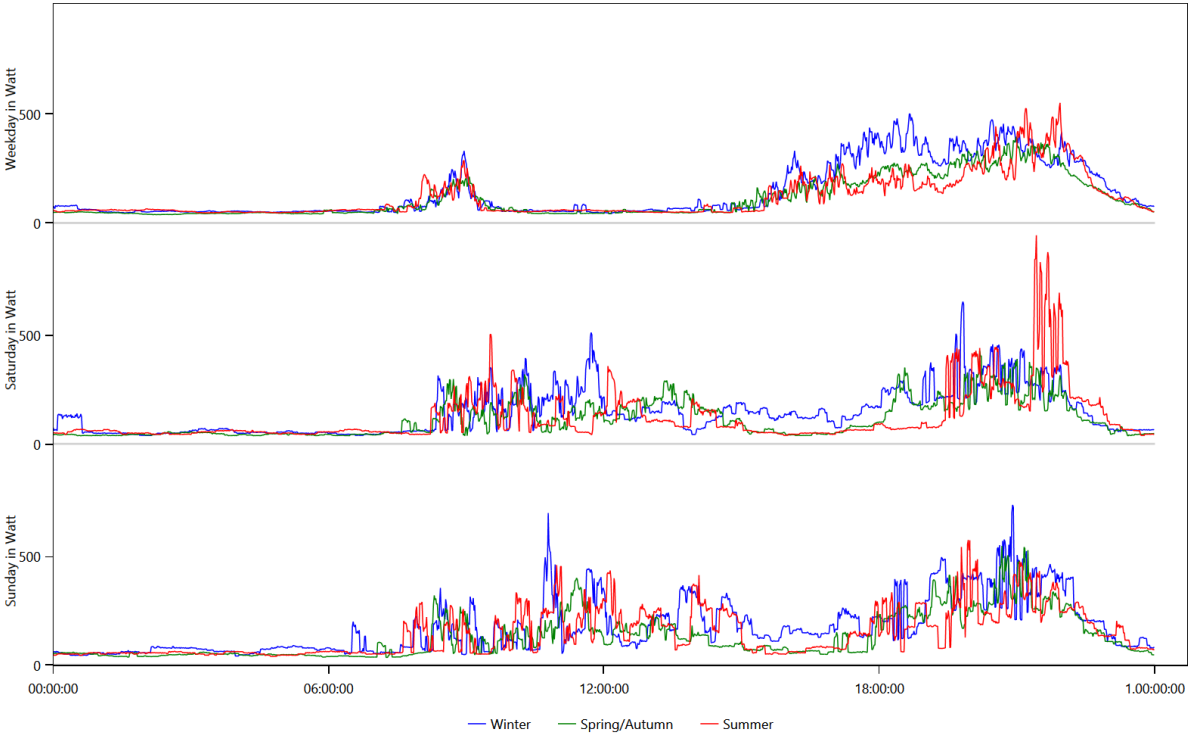
This is made from the files starting with: WeekdayProfiles

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

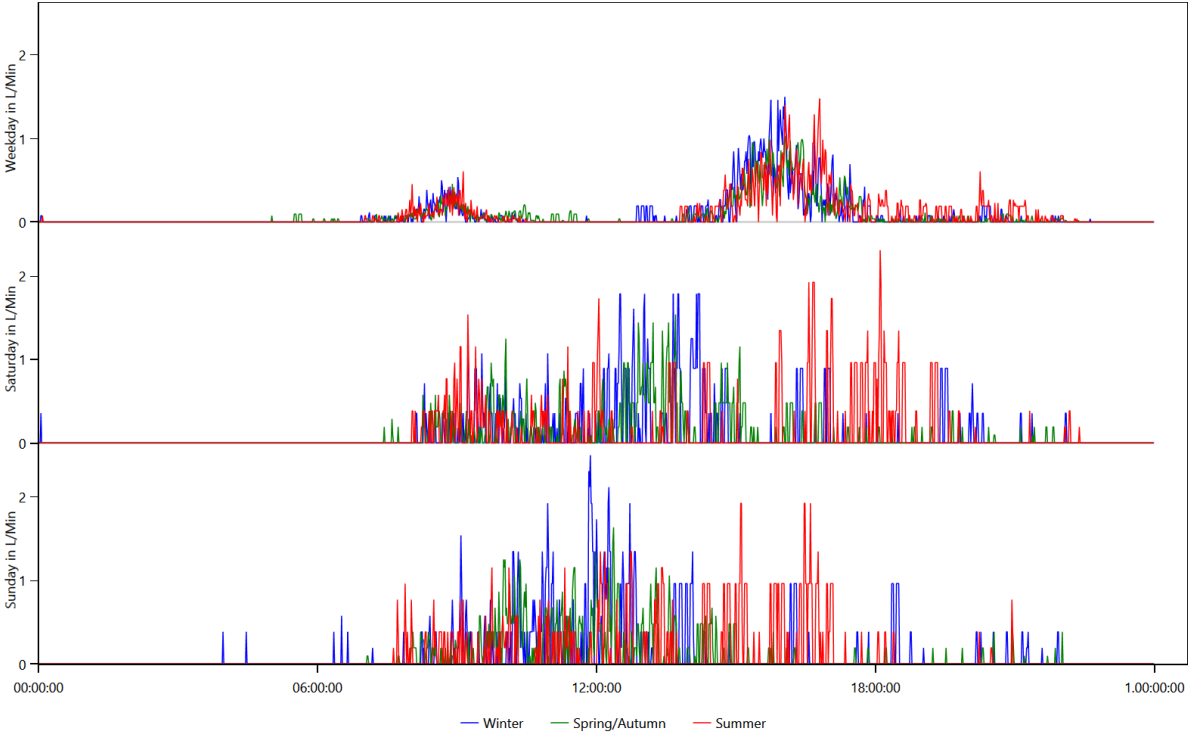
## Cold Water



# Electricity



# Warm Water

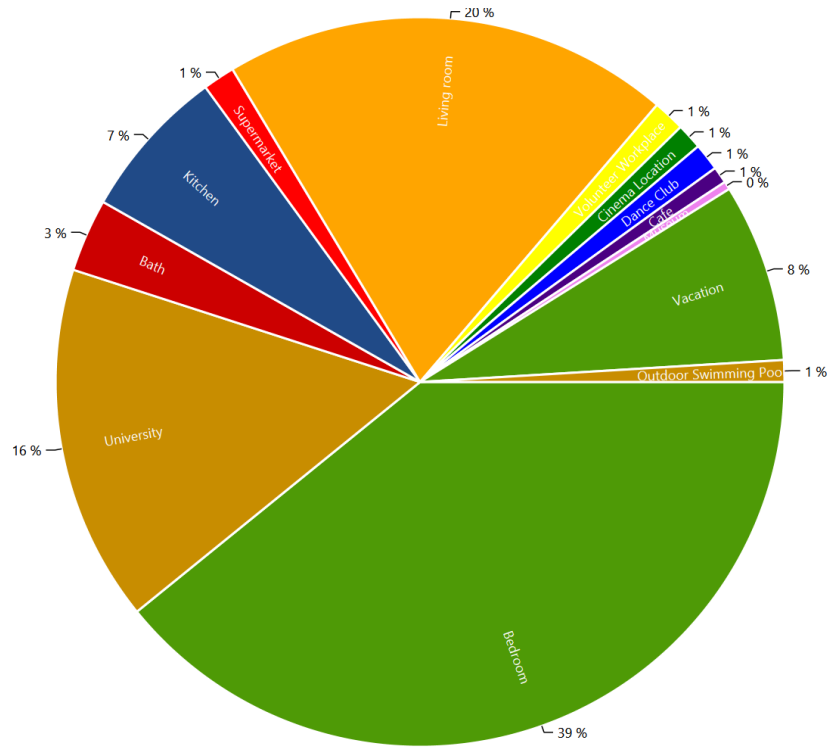


# Location Distribution per Person

This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR12 Chris 2 (22 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

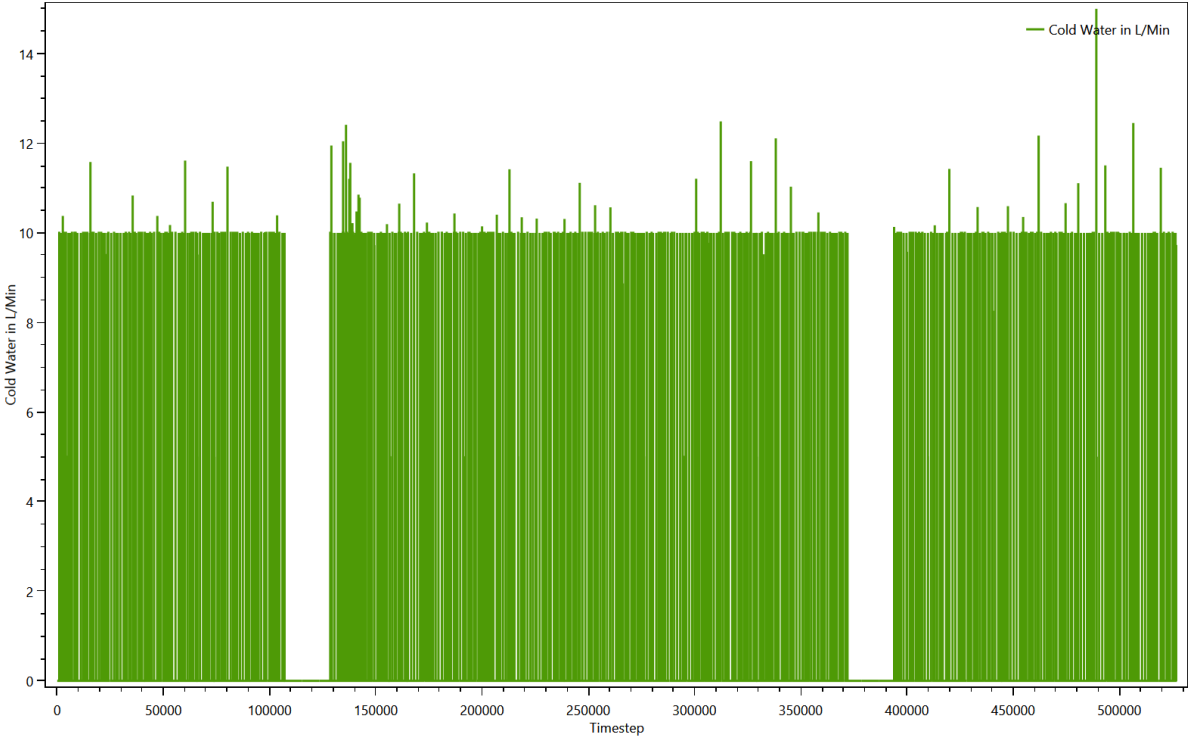
```
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR12 Chris 2 (22/Male);sleep bed 01 (10 h);sleep;False;
546;01.01.2016 09:06;CHR12 Chris 2 (22/Male);study philosophy;school;False;
935;01.01.2016 15:35;CHR12 Chris 2 (22/Male);go to the toilet;hygiene;False;
941;01.01.2016 15:41;CHR12 Chris 2 (22/Male);make soup;cooking;False;
958;01.01.2016 15:58;CHR12 Chris 2 (22/Male);go shopping for food in the supermarket (1.5
h);shopping;False;
1034;01.01.2016 17:14;CHR12 Chris 2 (22/Male);study at home;school;False;
1096;01.01.2016 18:16;CHR12 Chris 2 (22/Male);play Playstation;Passive Entertainment (TV etc.);False;
1157;01.01.2016 19:17;CHR12 Chris 2 (22/Male);clean the bath;cleaning;False;
1218;01.01.2016 20:18;CHR12 Chris 2 (22/Male);take a shower (men);hygiene;False;
1241;01.01.2016 20:41;CHR12 Chris 2 (22/Male);use the computer (1.5 h);Active Entertainment (Computer,
Internet etc);False;
1345;01.01.2016 22:25;CHR12 Chris 2 (22/Male);sleep bed 01 (10 h);sleep;False;
1993;02.01.2016 09:13;CHR12 Chris 2 (22/Male);get ready in the morning (men);hygiene;False;
2005;02.01.2016 09:25;CHR12 Chris 2 (22/Male);go to the toilet;hygiene;False;
2010;02.01.2016 09:30;CHR12 Chris 2 (22/Male);eat breakfast (1 h);cooking;False;
2069;02.01.2016 10:29;CHR12 Chris 2 (22/Male);exercise for 30 min on the treadmill;sports;False;
2097;02.01.2016 10:57;CHR12 Chris 2 (22/Male);wash 1 dishes by hand;cleaning;False;
2129;02.01.2016 11:29;CHR12 Chris 2 (22/Male);play Playstation;Passive Entertainment (TV etc.);False;
2187;02.01.2016 12:27;CHR12 Chris 2 (22/Male);use the computer (1.5 h);Active Entertainment (Computer,
Internet etc);False;
2273;02.01.2016 13:53;CHR12 Chris 2 (22/Male);use the computer (2 h);Active Entertainment (Computer,
Internet etc);False;
```

# Sum Profiles

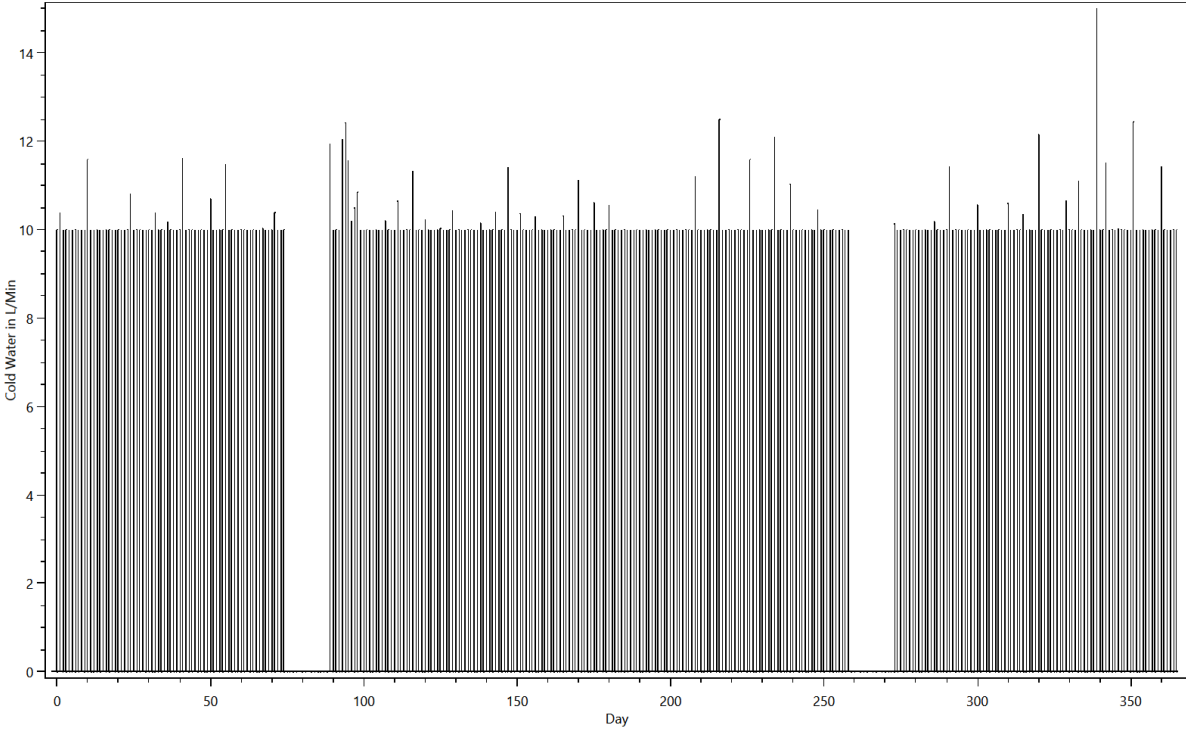
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

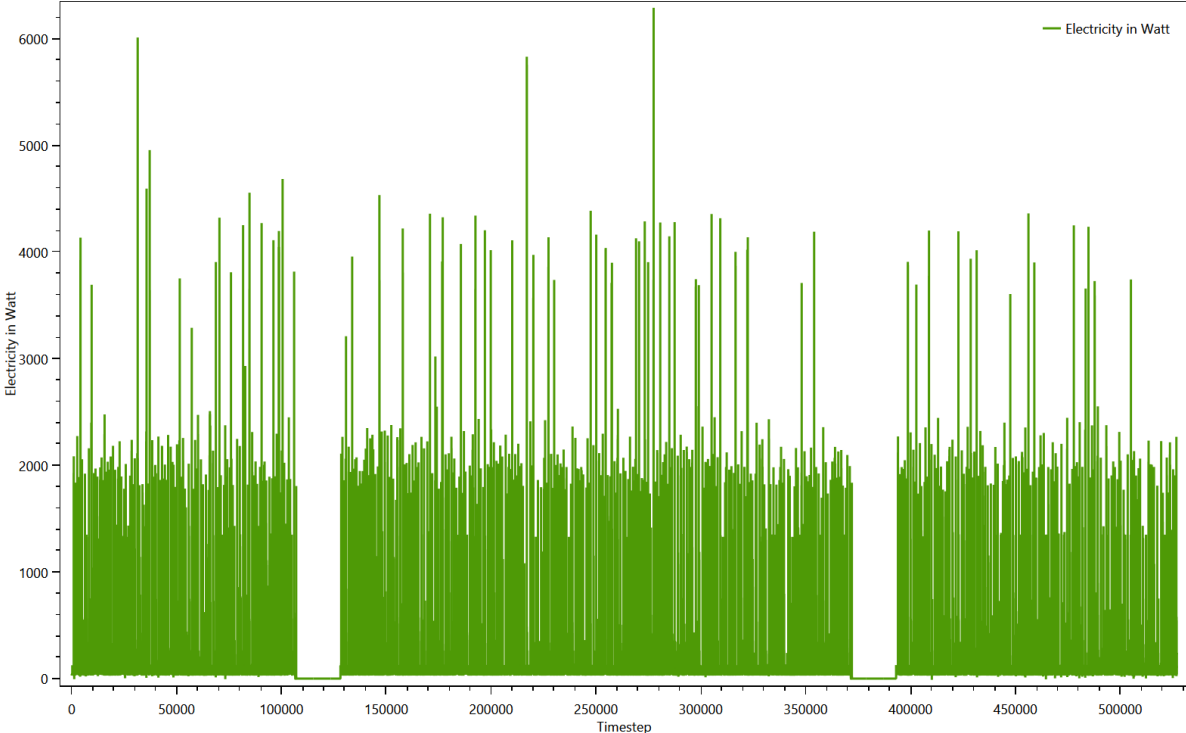
Summed up curve for Cold Water from SumProfiles.Cold Water.png



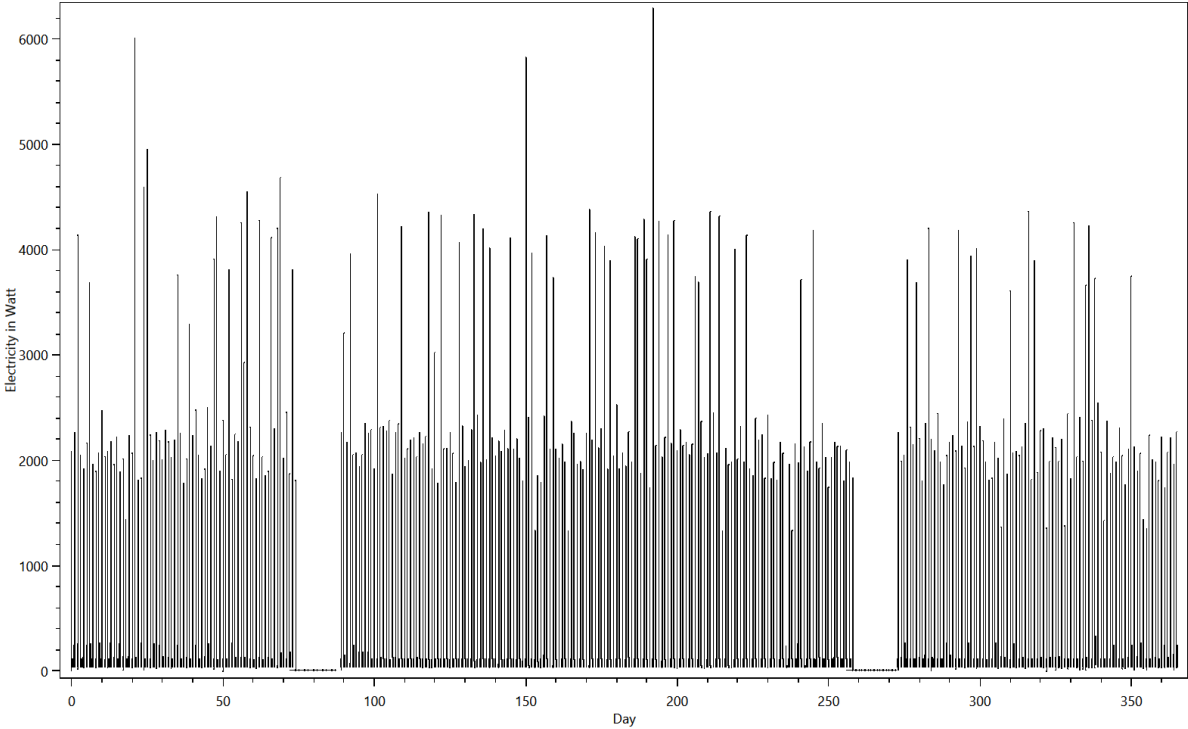
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



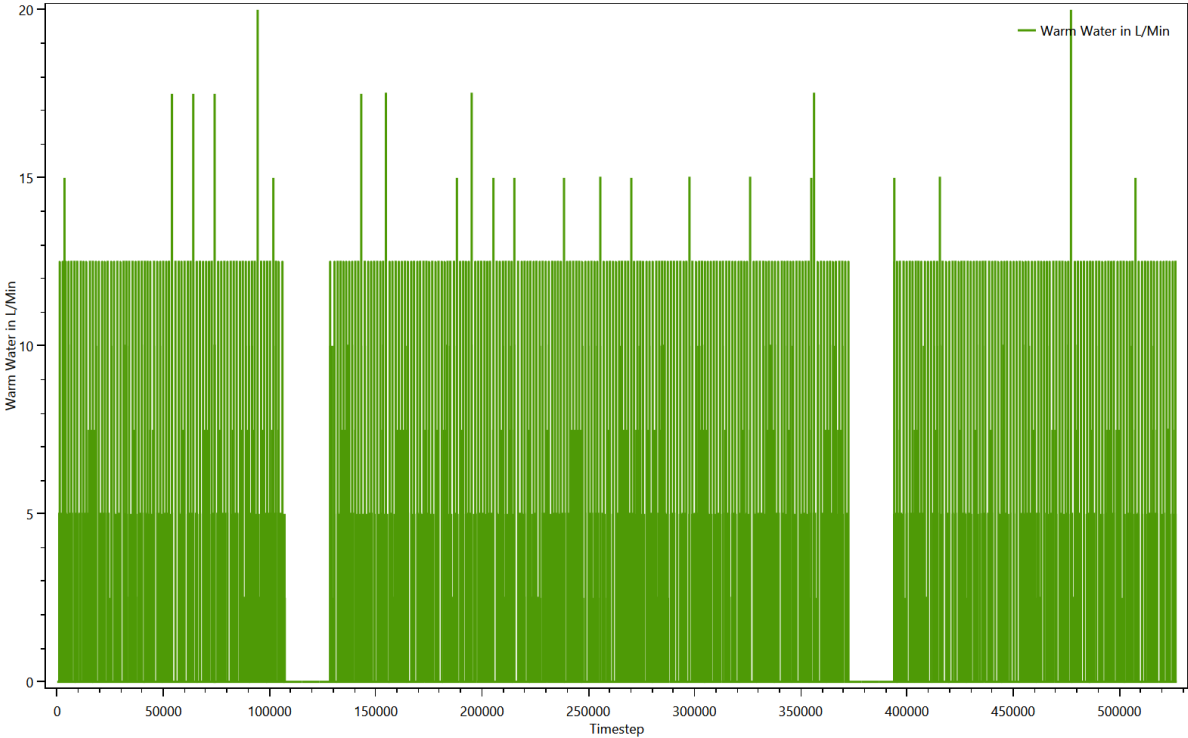
Summed up curve for Electricity from SumProfiles.Electricity.png



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

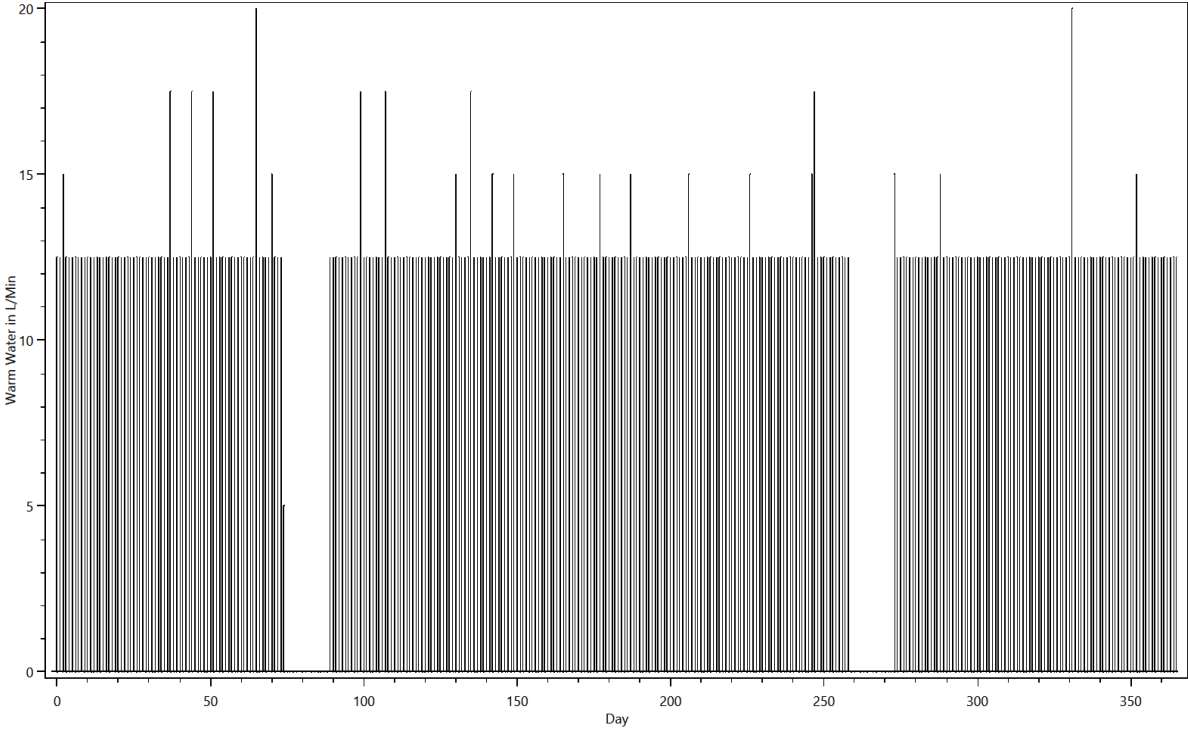


Summed up curve for Warm Water from SumProfiles.Warm Water.png





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



# Time Profiles

## This is made from the files starting with: Time Profiles

These files show which time profiles were used for each device and how often. The content looks like this:

TimeProfiles.HH0.CHR12 Student 2, Male, Philosophy 0.txt

Device;Load Type;Profile;Number of Activations

Bathroom Light (20W);Electricity;Bath - light [Synthetic for Light Device];289

Bathroom Mirror Light 30W (CFL);Electricity;Bath - light [Synthetic for Light Device];289

Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];1481

Bed 1;None;10 h 0 min 100% [Synthetic];339

Bedroom Light (60W);Electricity;Bedroom - light [Synthetic for Light Device];2

CD/DVD Player / Phillips HDR3810/31;Electricity;01 h 30 min 100% [Synthetic];2

CD/DVD Player / Phillips HDR3810/31;Electricity;02 h 0 min 100% [Synthetic];1

CD/DVD Player / Phillips HDR3810/31;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8070

Cafe Table;None;03 h 0 min 100 % [Synthetic];22

Canon CanoScan LIDE 110;Electricity;0 h 10 min 100% [Synthetic];82

Christopeit Treadmill TM 2 Pro;Electricity;0 h 30 min 100% [Synthetic];166

Cinema;None;03 h 0 min 100 % [Synthetic];34

Cleanser;None;01 h 0 min 100% [Synthetic];88

Cloth Drying Rack;None;0 h 20 min 100% [Synthetic];70

Coffee Machine / Braun Impression KF 600;Electricity;0 h 10 min 100% [Synthetic];245

Couch;None;01 h 0 min 100% [Synthetic];5

Couch;None;02 h 0 min 100% [Synthetic];98

Dance Club;None;04 h 0 min 100% [Synthetic];26

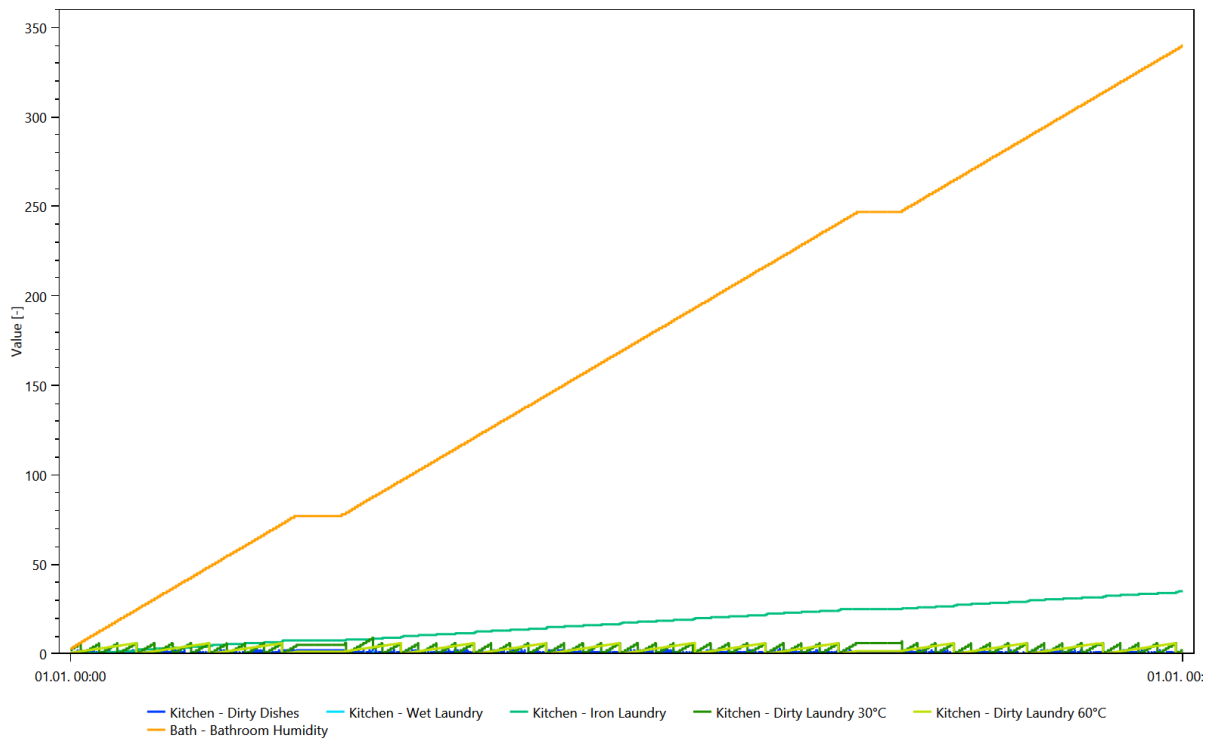
Desk;None;01 h 0 min 100% [Synthetic];304

# 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

