

## Overview of the results of the household CHR29 Single man under 30 years with work 0

Calculation Time

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

Energy Intensity: Random

Seed 4380

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:16:42

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## Totals

### Totals for each Loadtype

Load Type	Value	Unit
Cold Water	10685.58	L
Electricity	1512.73	kWh
Warm Water	27455.80	L

### Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	29.20	L
Electricity	4.13	kWh
Warm Water	75.02	L

### Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	11.00	L/Min
Electricity	-160.16	7208.11	Watt
Warm Water	0.00	13.60	L/Min

### Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	10685.58	L
Electricity	1512.73	kWh

Warm Water	27455.80	L
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### Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	29.20	L
Electricity	4.13	kWh
Warm Water	75.02	L

## Persons

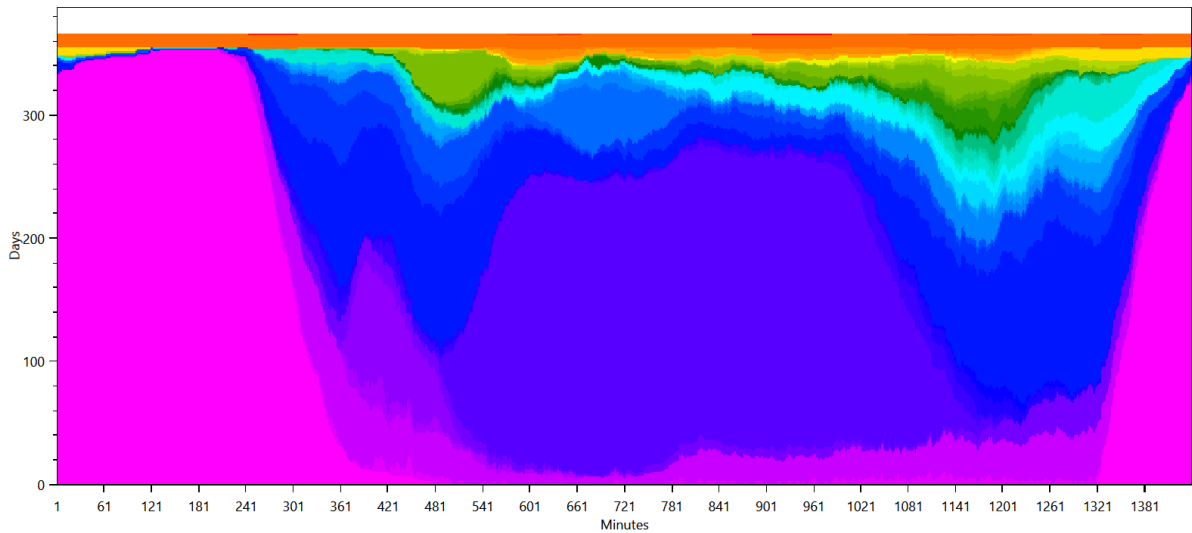
- HH0
  - CHR29 Benjamin (26/Male)(26/Male)

# 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 - CHR29 Benjamin (26 Male)



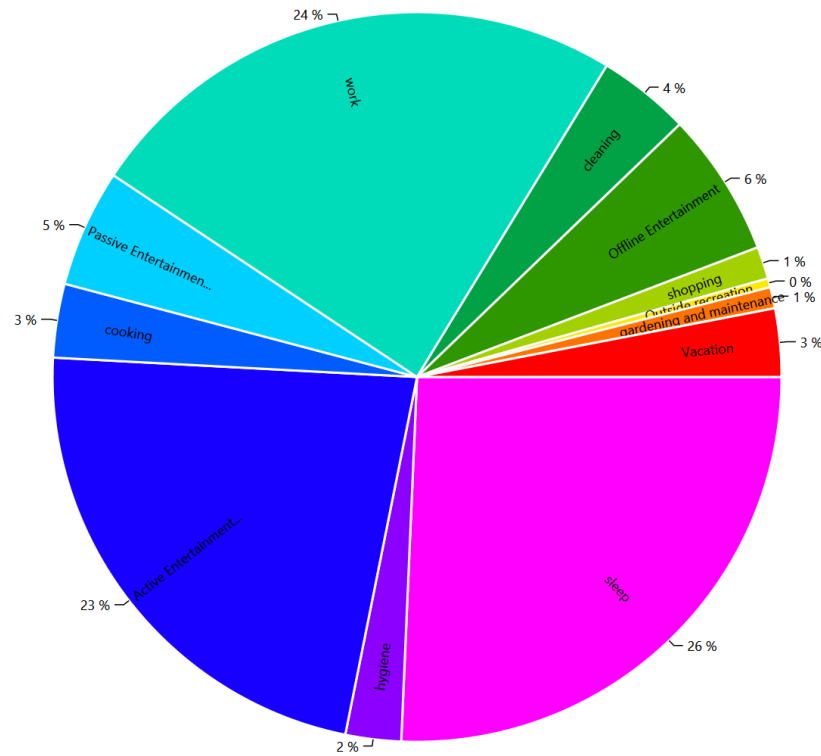
- sleep bed 01 (06 h)
- go to the toilet
- use the laptop (1.5 h)
- get ready in the morning (men)
- eat small breakfast (25min) interrupting subaff, no alarm
- watch a movie for 2 h with home cinema system
- work at the office from 8:00 (9 h)
- take a shower (men)
- wash 1 dishes by hand
- heat up leftovers
- use the laptop for Internet, Movie, Music, News (2 h)
- use the laptop (1 h)
- read a book on the couch all the time
- take a nap
- wash 2 dishes by hand
- play digital piano (1 h)
- paint a picture
- make frozen pizza and eat it
- read a book on the couch only 9:00 to 22:00
- vacuum the household
- watch a movie for 1 h 30 min with home cinema system
- fry two eggs and eat them with toast
- do laundry at 30°C (by variable)
- cook pasta and eat it
- watch TV (1 h)
- make and drink tea (15 min)
- watch sports on TV with SAT Receiver (2 h)
- read a newspaper for 30min
- run the dryer with wet laundry (by variable)
- sweep the floors
- make soup
- clean the bath
- go shopping for food in the supermarket (1.5 h)
- listen to music on compact hifi (2 h)
- play a puzzle game
- watch the news
- take nap on the weekend (2 h)
- do laundry at 60°C (by variable)
- go to a bar (4 h)
- watch a movie for 2 h
- relax in the garden
- relax in the garden 2
- taking a vacation
- read a magazine
- wash 3 dishes by hand
- read a book (1 h)
- watch a movie for 1 h 30 min

# 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 - CHR29 Benjamin (26 Male)

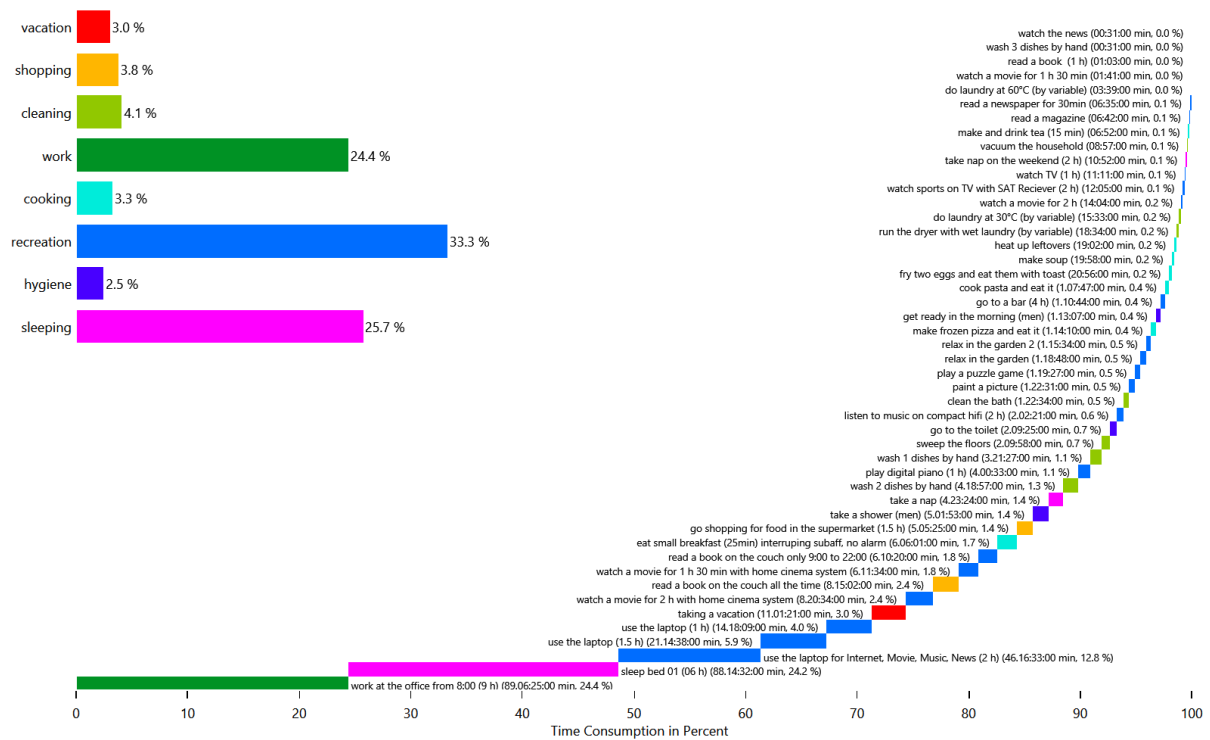


# Time Use per Person per Affordance Per Person

This is made from the files starting with: AffordanceTimeUse

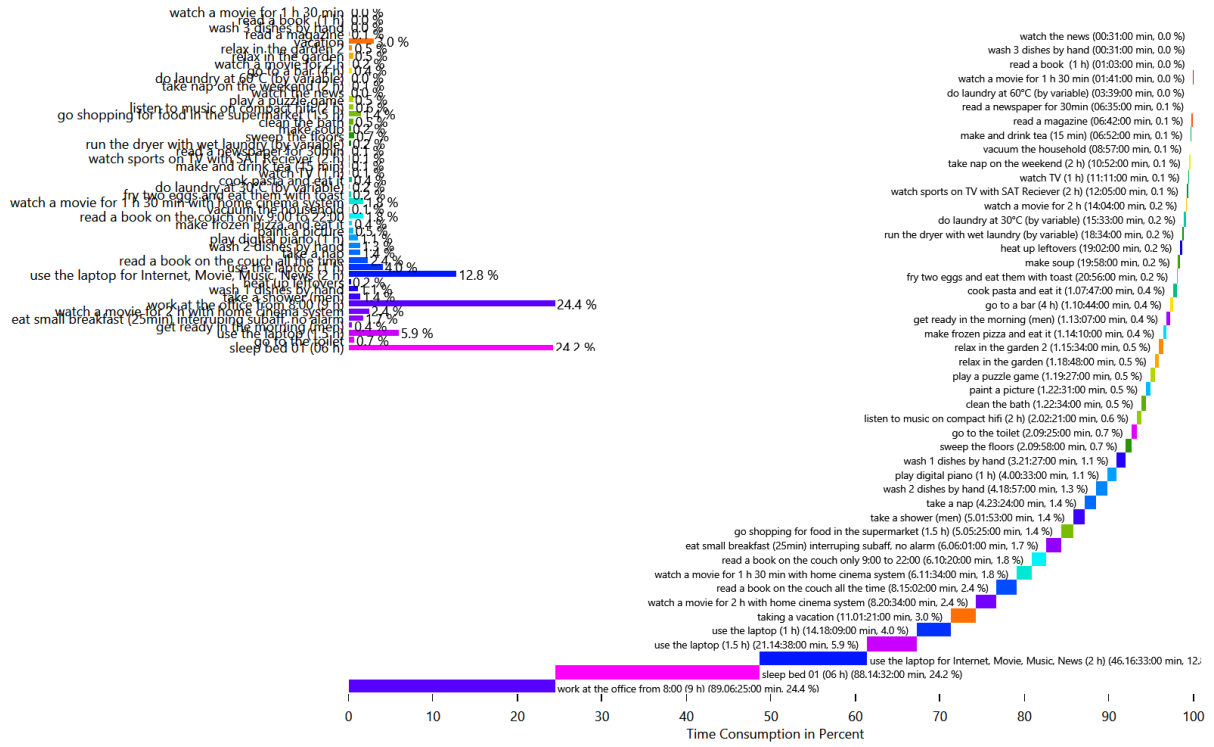
These charts show how the people in the household use their time. This shows the individual affordances to help find problems in the household definition.

## HH0 - CHR29 Benjamin (26 Male)

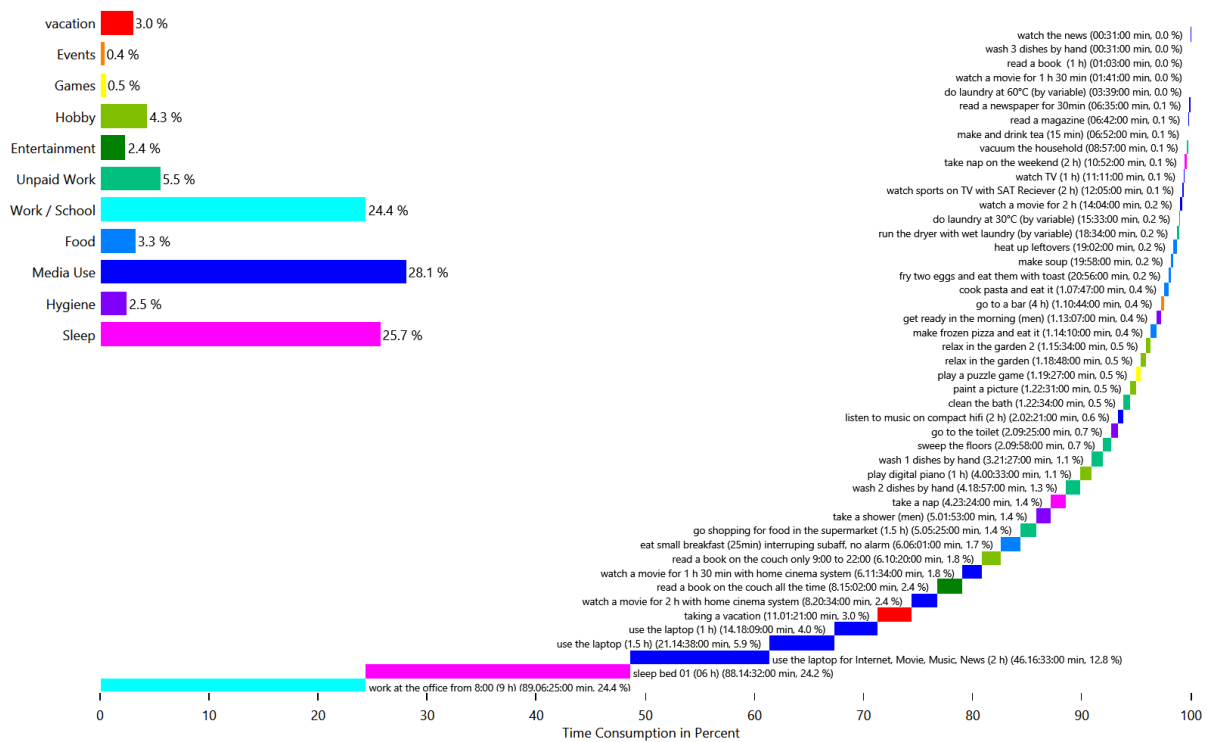




## HH0 - CHR29 Benjamin (26 Male)



## HH0 - CHR29 Benjamin (26 Male)

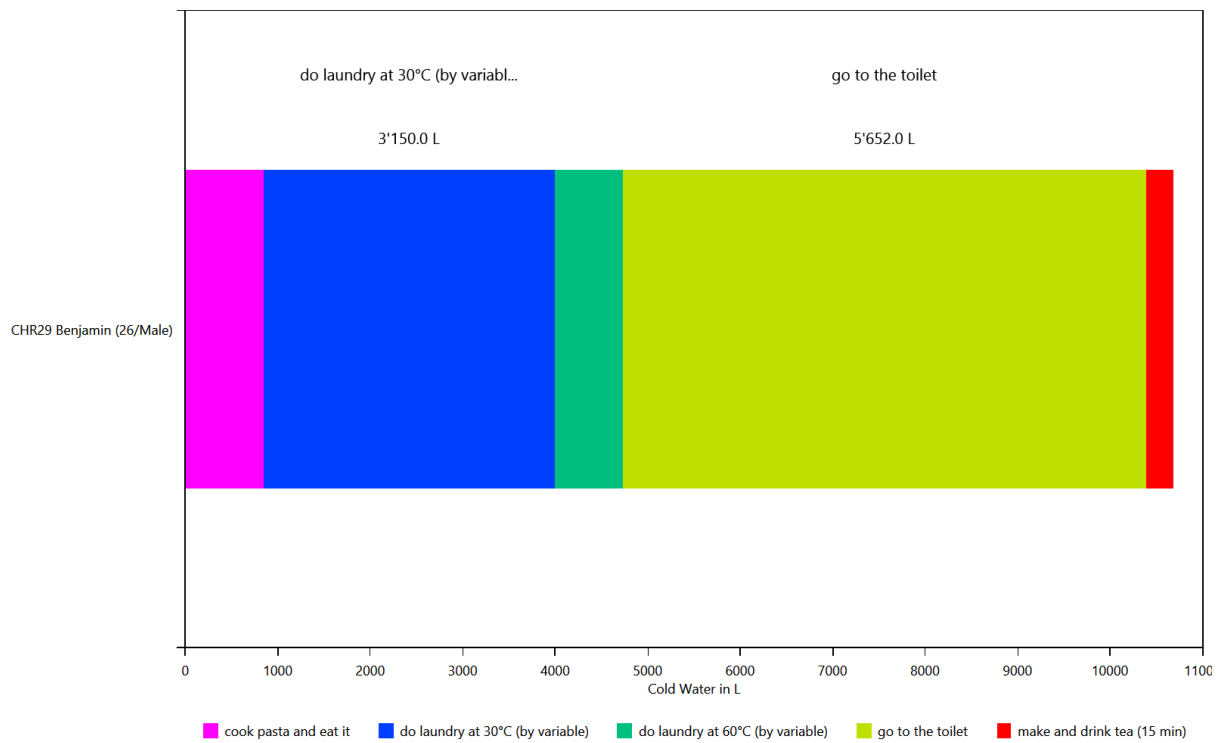


# Energy use per person per affordance

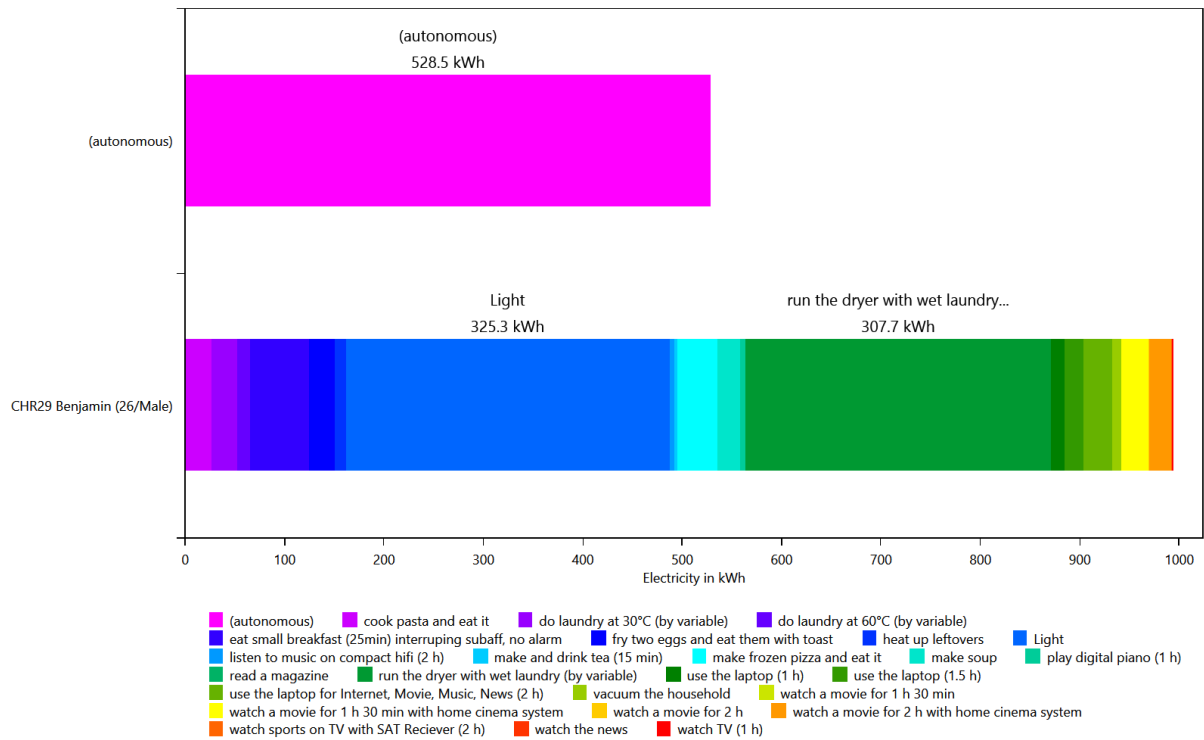
This is made from the files starting with: **AffordanceEnergyUsePerPerson**

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.

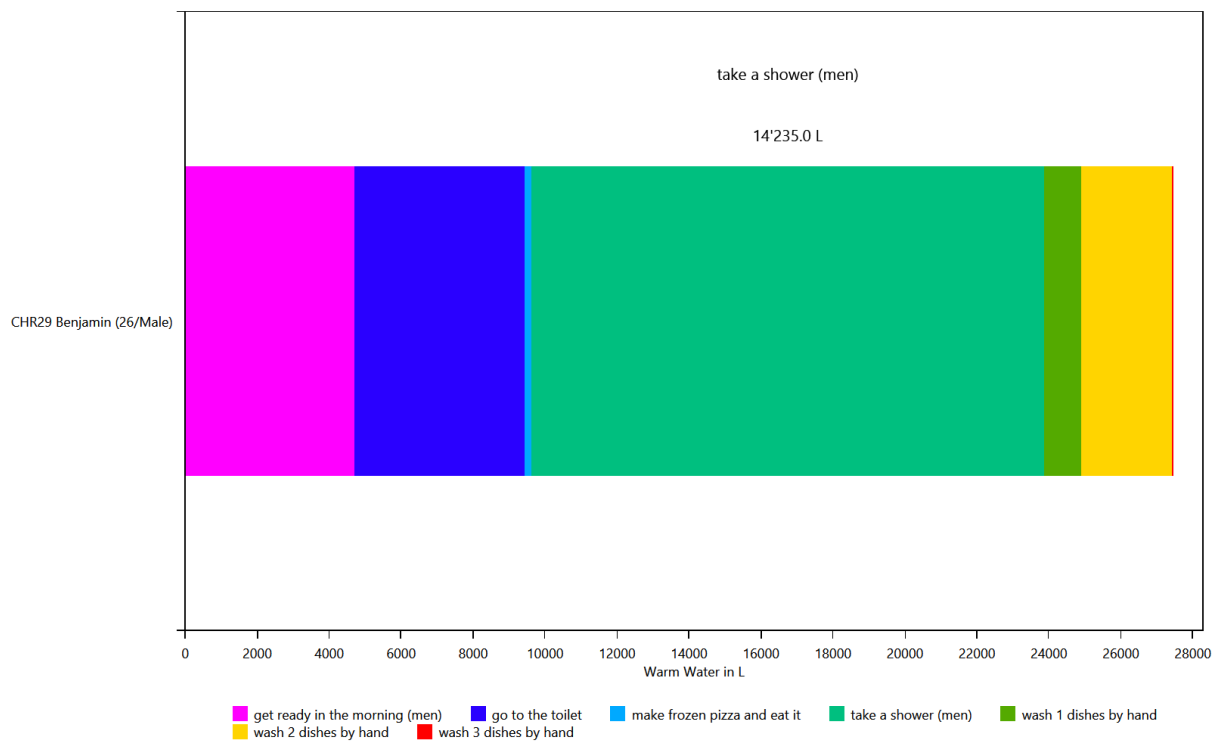
## HH0 - Cold Water



## HH0 - Electricity



## HH0 - Warm Water

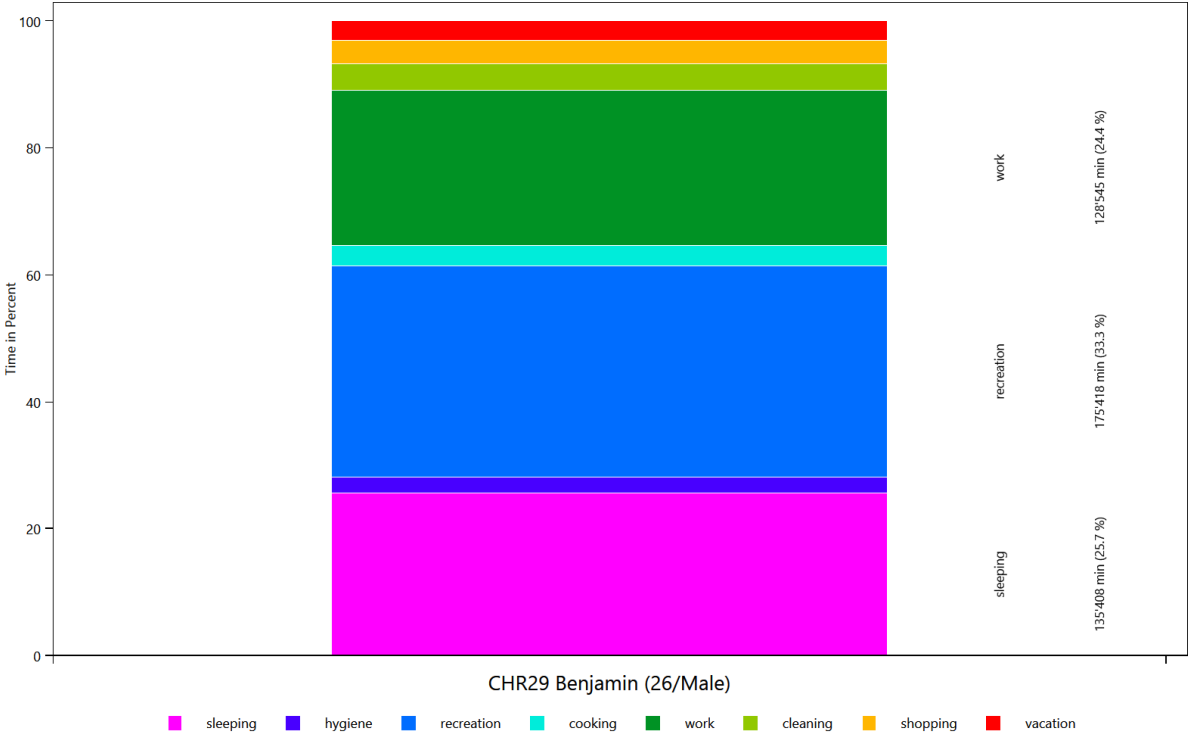


# Time Use per Person Per Affordance according to different category definitions

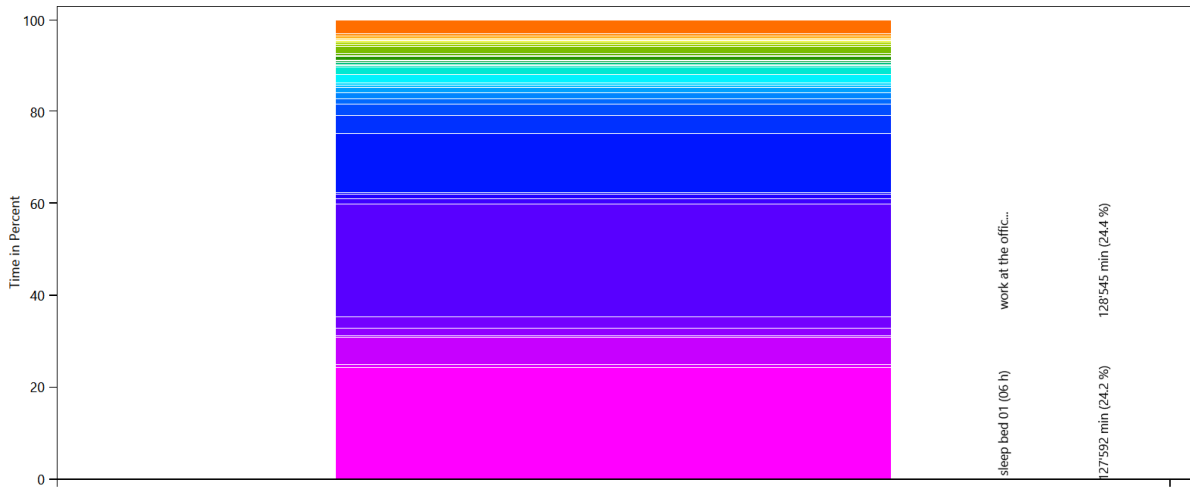
This is made from the files starting with: AffordanceTaggingSet

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



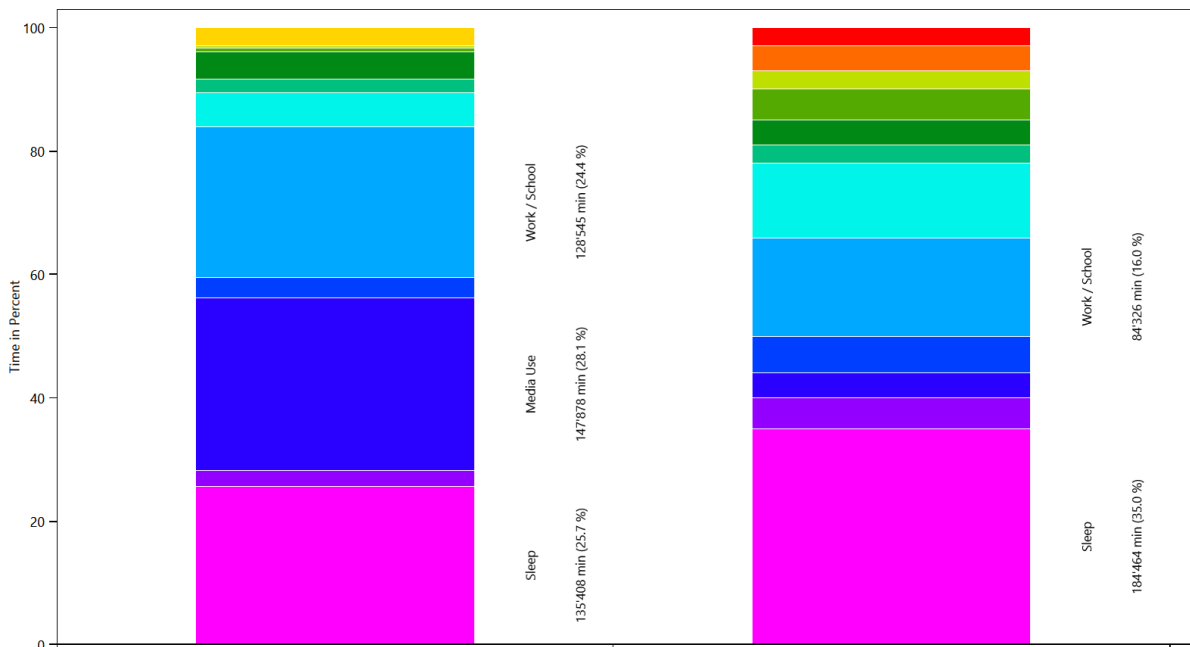
## Tagging Set For Planning - HH0



CHR29 Benjamin (26/Male)

- sleep bed 01 (06 h)
- go to the toilet
- use the laptop (1.5 h)
- get ready in the morning (men)
- eat small breakfast (25min) interrupting subaff, no alarm
- watch a movie for 2 h with home cinema system
- work at the office from 8:00 (9 h)
- take a shower (men)
- wash 1 dishes by hand
- heat up leftovers
- use the laptop for Internet, Movie, Music, News (2 h)
- use the laptop (1 h)
- read a book on the couch all the time
- take a nap
- wash 2 dishes by hand
- play digital piano (1 h)
- paint a picture
- make frozen pizza and eat it
- read a book on the couch only 9:00 to 22:00
- vacuum the household
- watch a movie for 1 h 30 min with home cinema system
- fry two eggs and eat them with toast
- do laundry at 30°C (by variable)
- cook pasta and eat it
- watch TV (1 h)
- make and drink tea (15 min)
- watch sports on TV with SAT Receiver (2 h)
- read a newspaper for 30min
- run the dryer with wet laundry (by variable)
- sweep the floors
- make soup
- clean the bath
- go shopping for food in the supermarket (1.5 h)
- listen to music on compact hifi (2 h)
- play a puzzle game
- watch the news
- take nap on the weekend (2 h)
- do laundry at 60°C (by variable)
- go to a bar (4 h)
- watch a movie for 2 h
- relax in the garden
- relax in the garden 2
- vacation
- read a magazine
- wash 3 dishes by hand
- read a book (1 h)
- watch a movie for 1 h 30 min

## Wo bleibt die Zeit - HH0



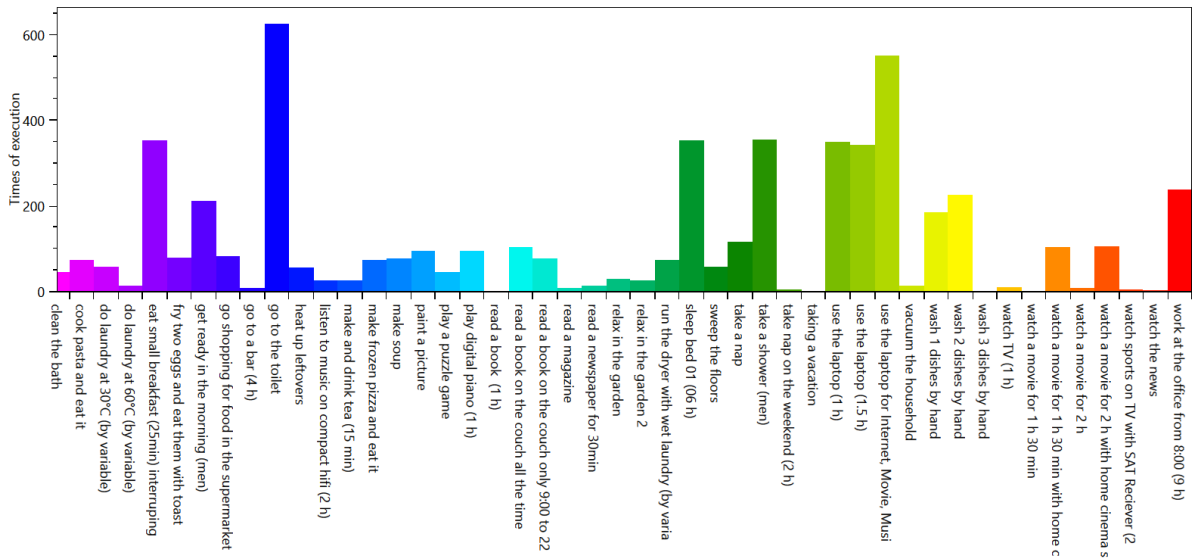
- Sleep
- Hygiene
- Media Use
- Food
- Work / School
- Unpaid Work
- Entertainment
- Hobby
- Games
- Events
- vacation
- Sport
- Contacts

# 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 - CHR29 Benjamin (26 Male)

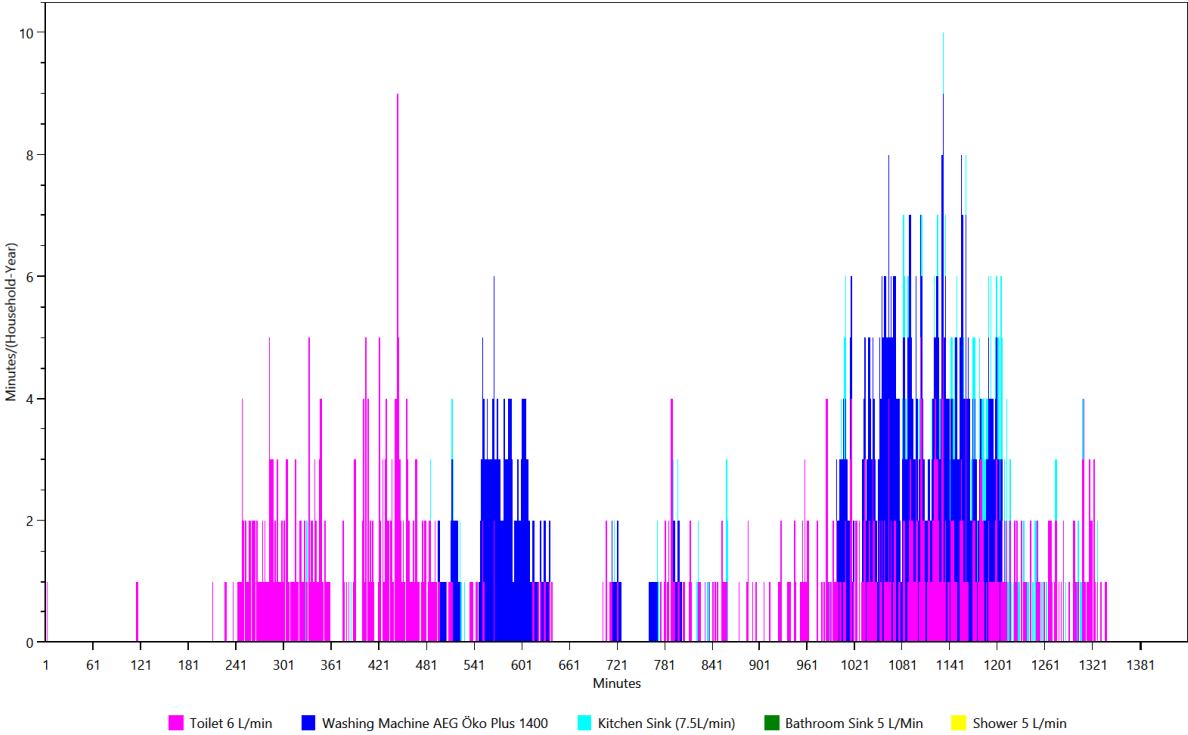


# Overview of the time of the use per load type per device

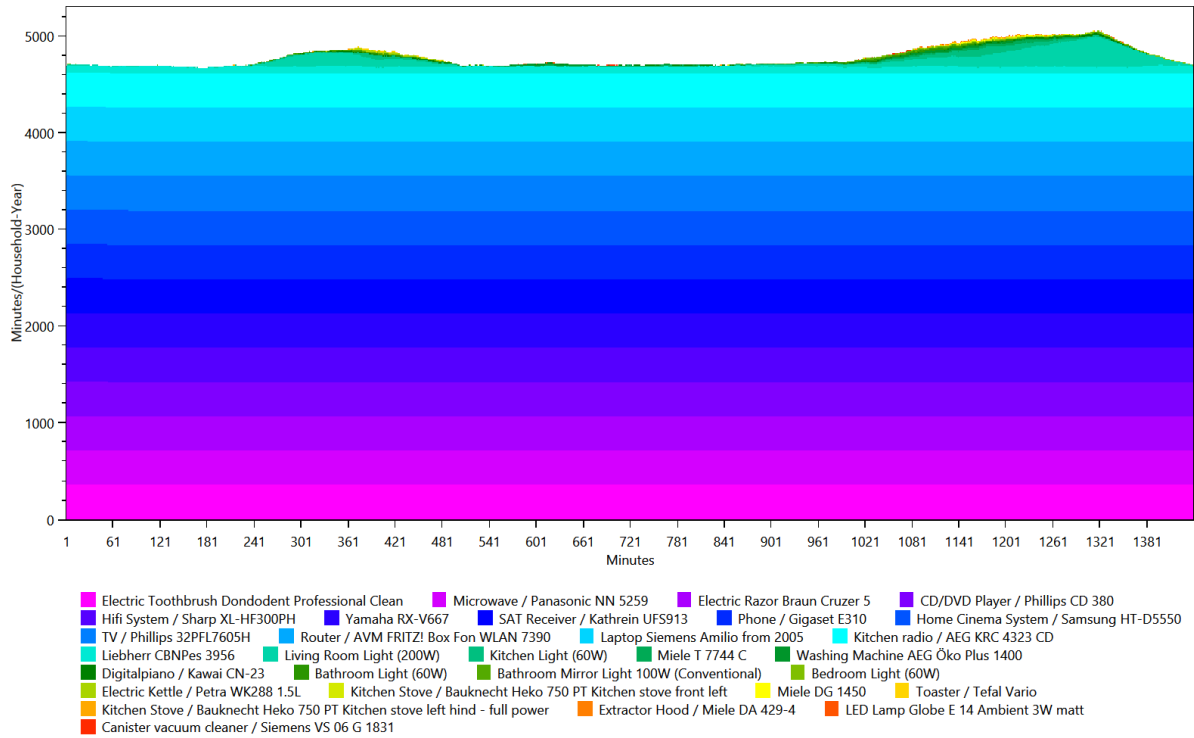
This is made from the files starting with: TimeOfUseEnergyProfiles

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

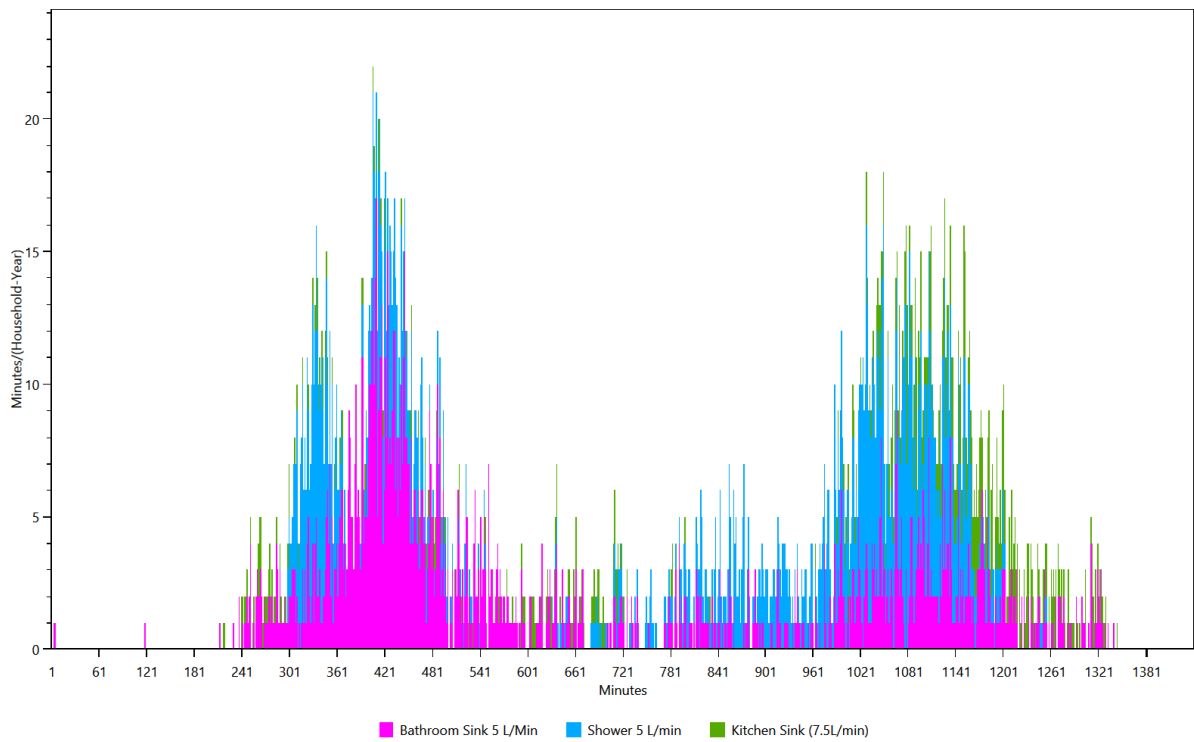
## Cold Water



## Electricity



## Warm Water



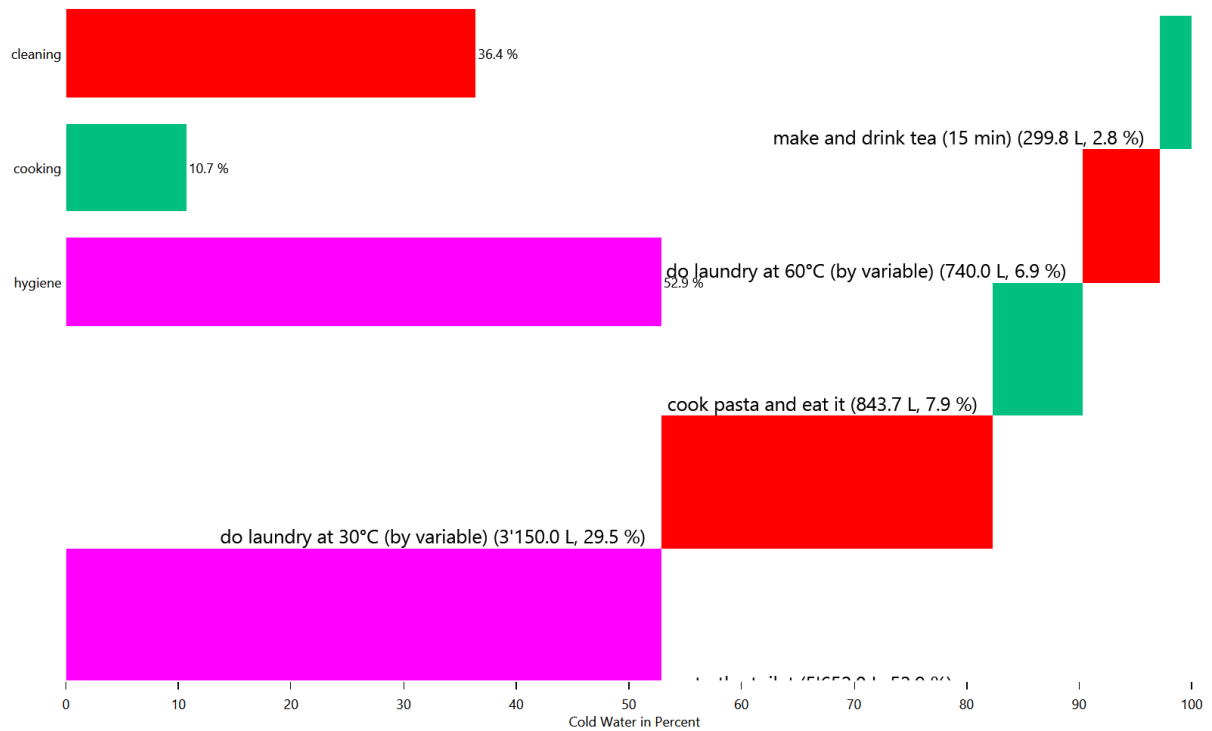


# Energy/Resource use distribution per load type per affordance

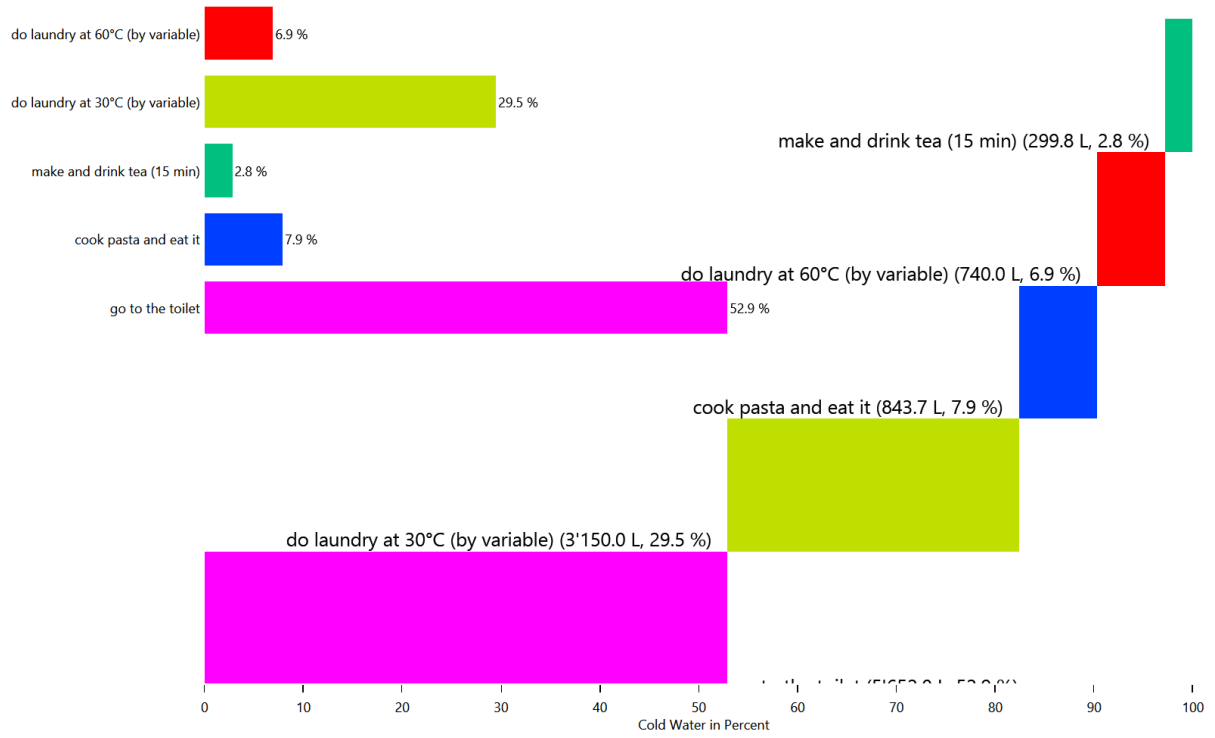
This is made from the files starting with: AffordanceEnergyUse

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

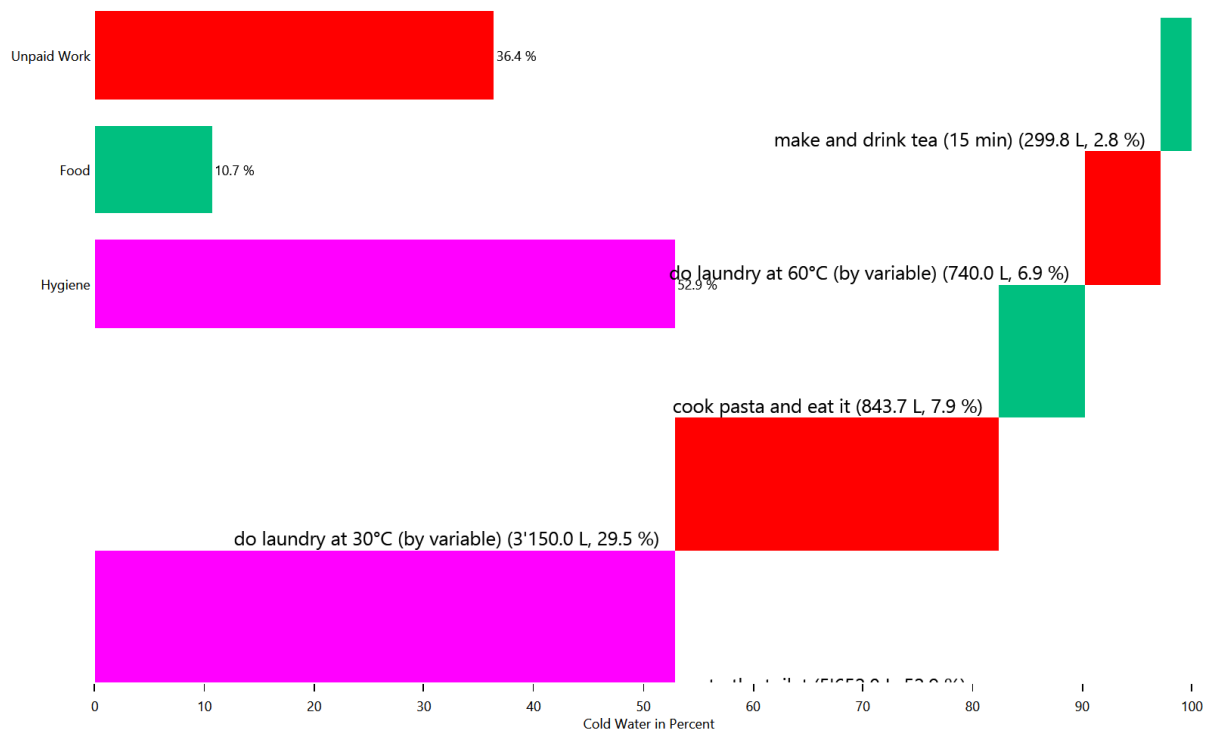
## HH0 - Cold Water



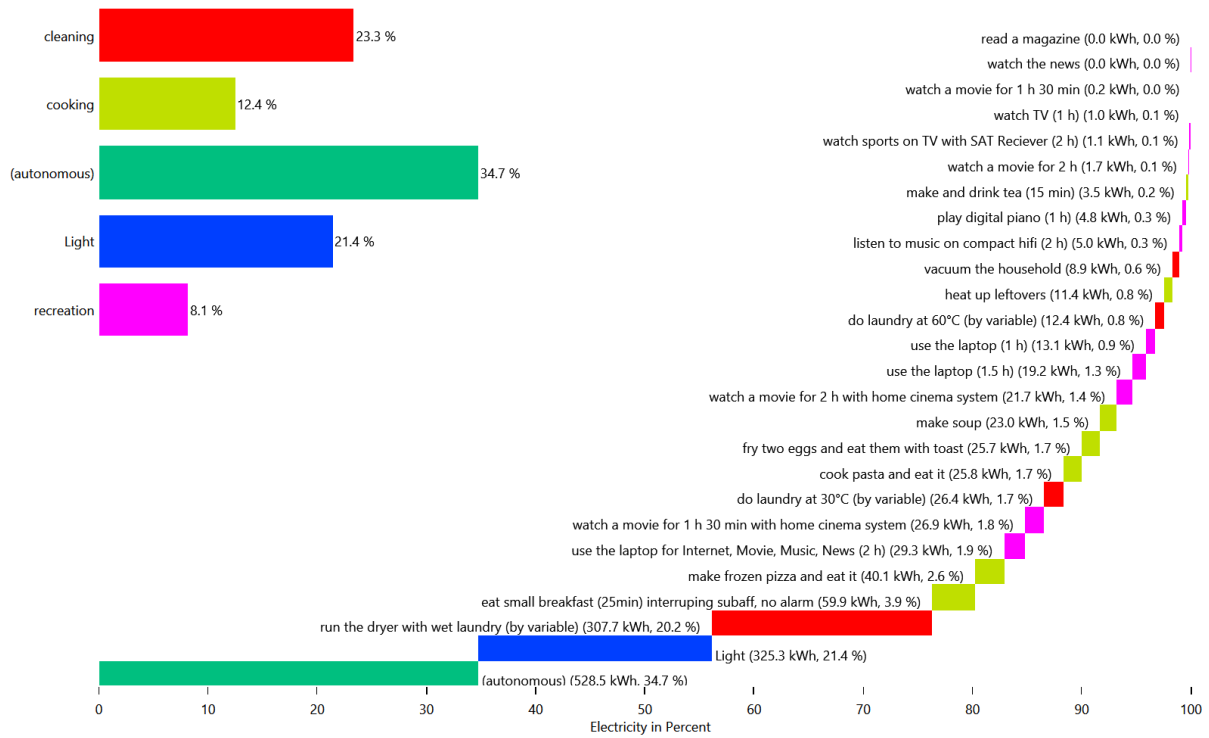
## HH0 - Cold Water



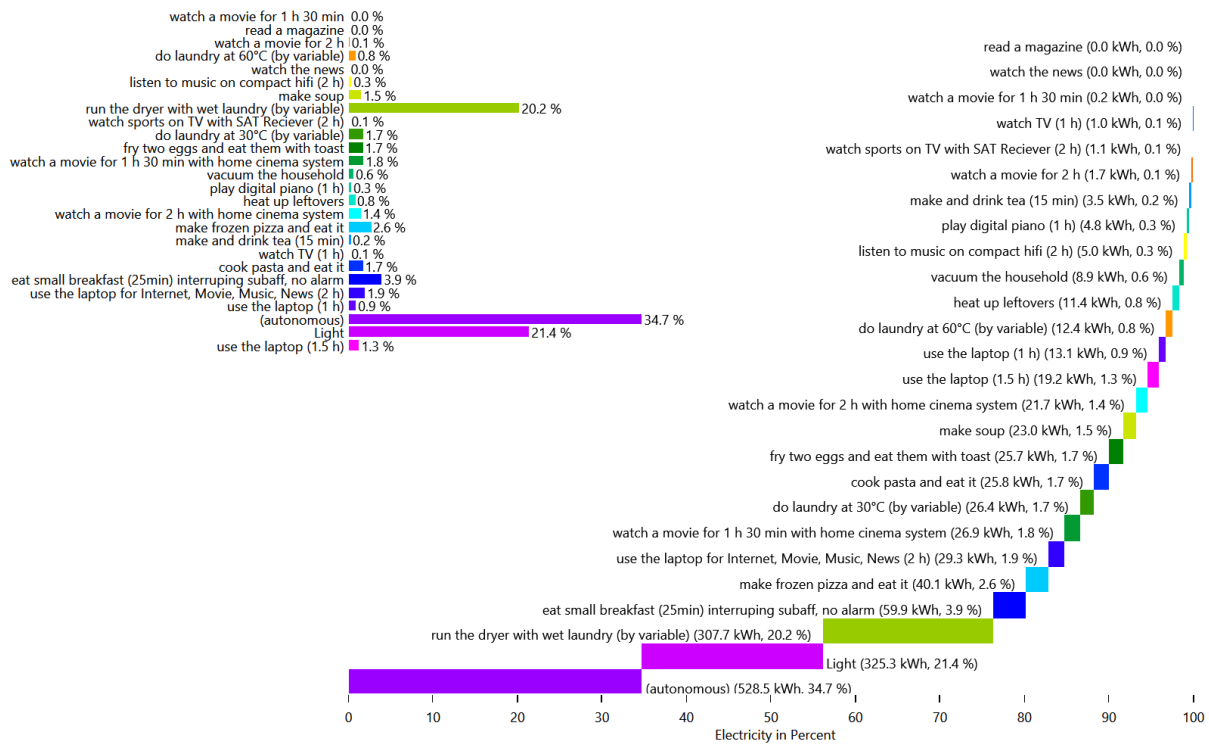
## HH0 - Cold Water



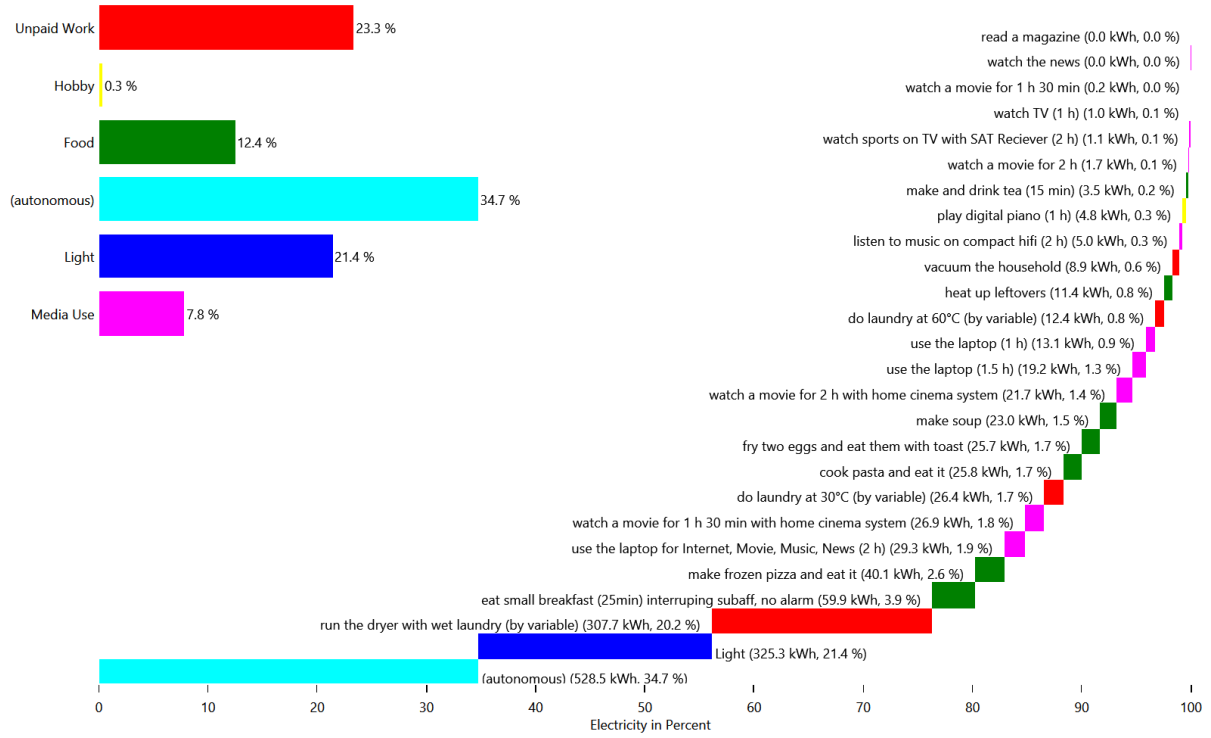
# HH0 - Electricity



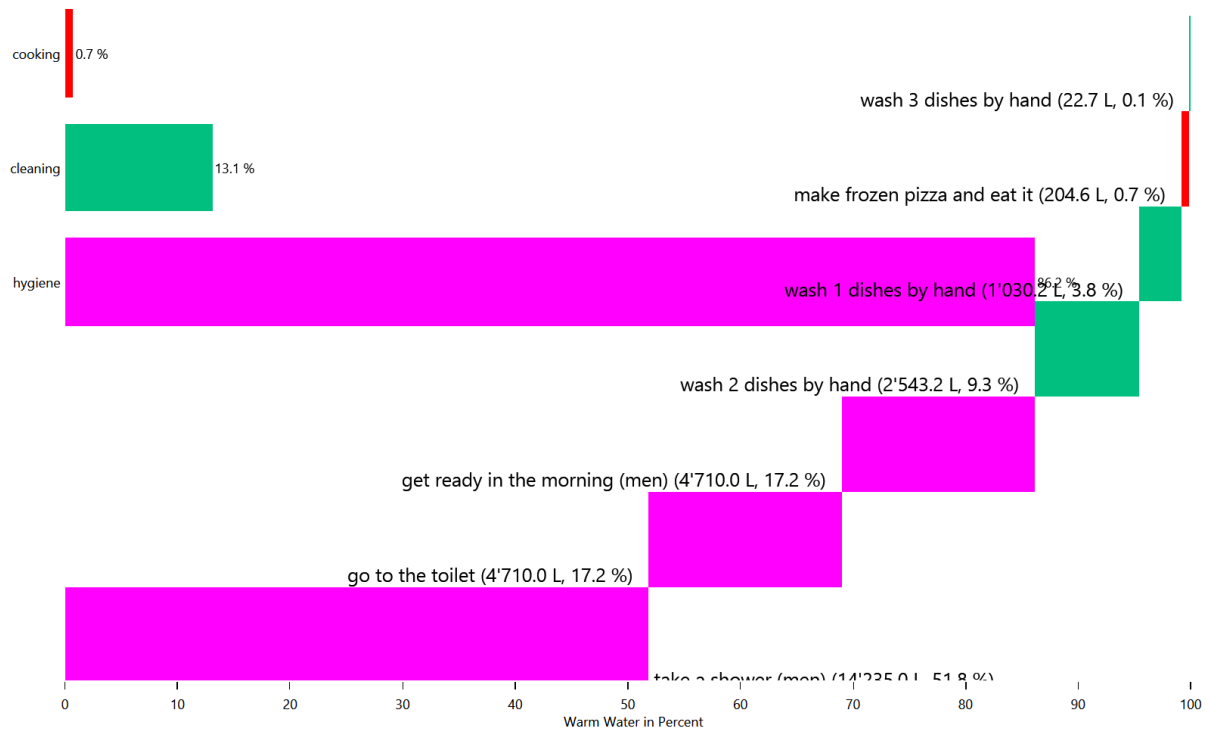
# HH0 - Electricity



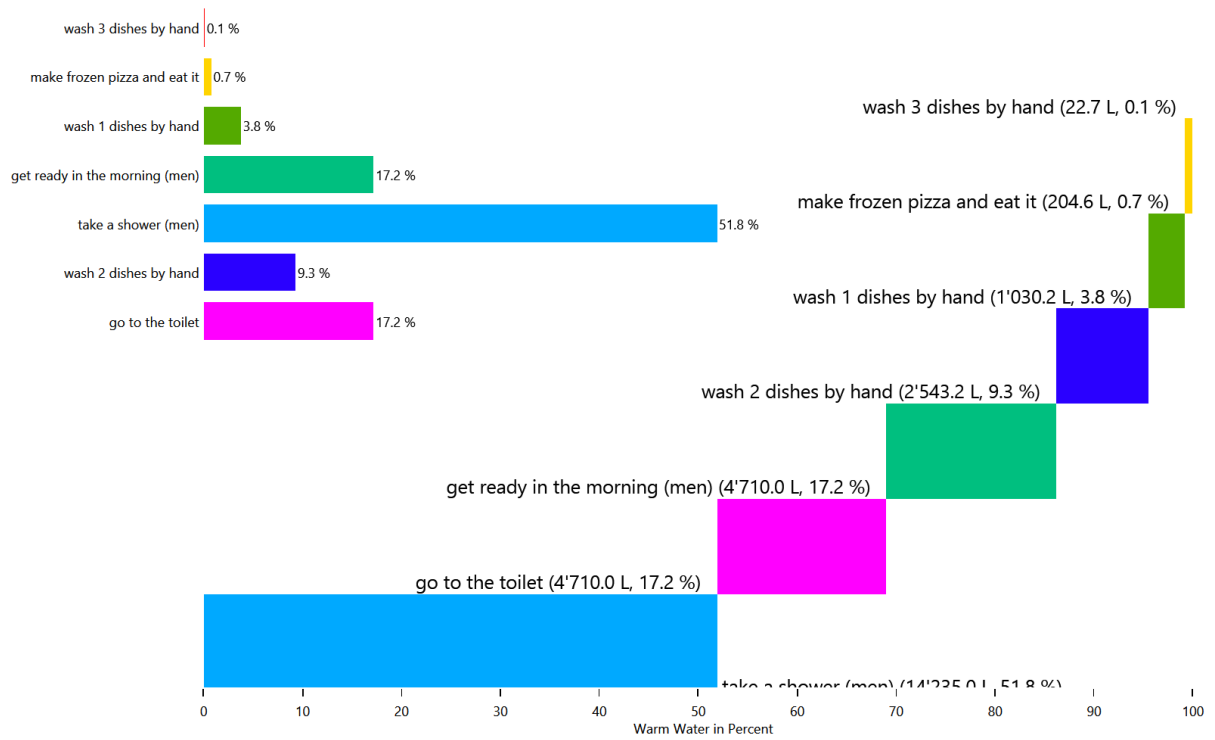
## HH0 - Electricity



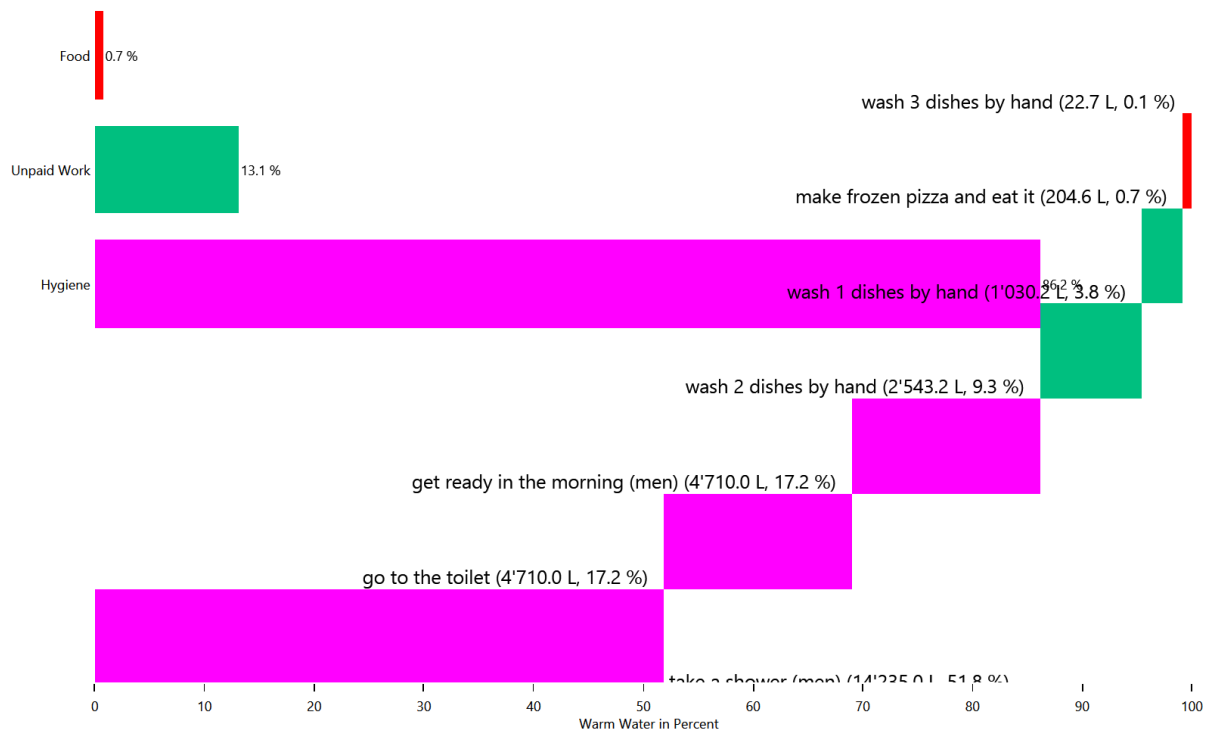
## HH0 - Warm Water



## HH0 - Warm Water



## HH0 - Warm Water

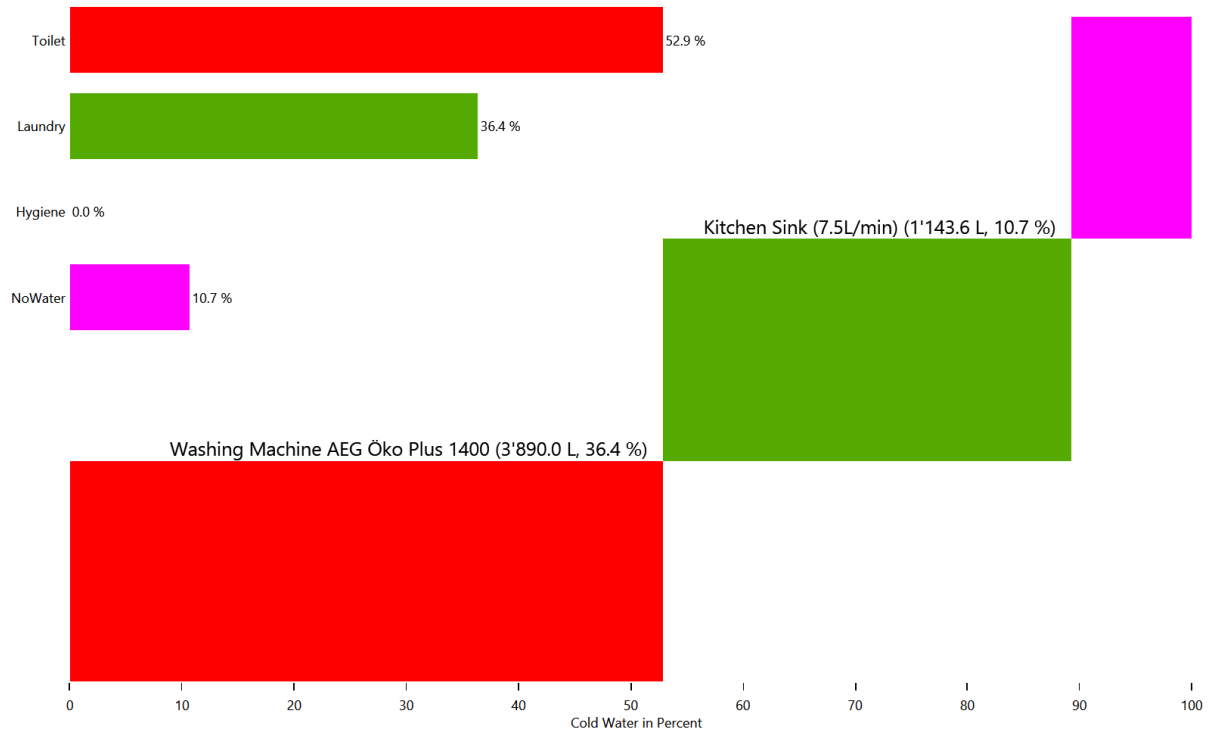


# Energy use for each load type for each device

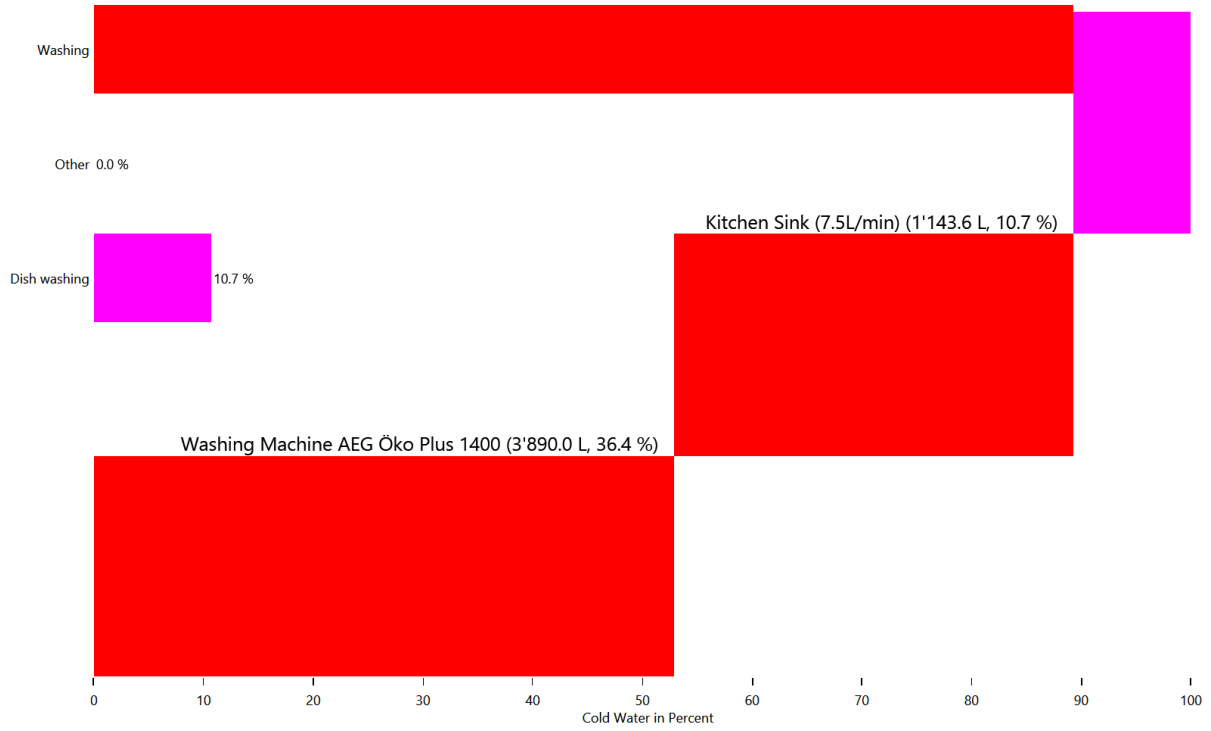
This is made from the files starting with: DeviceSums

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

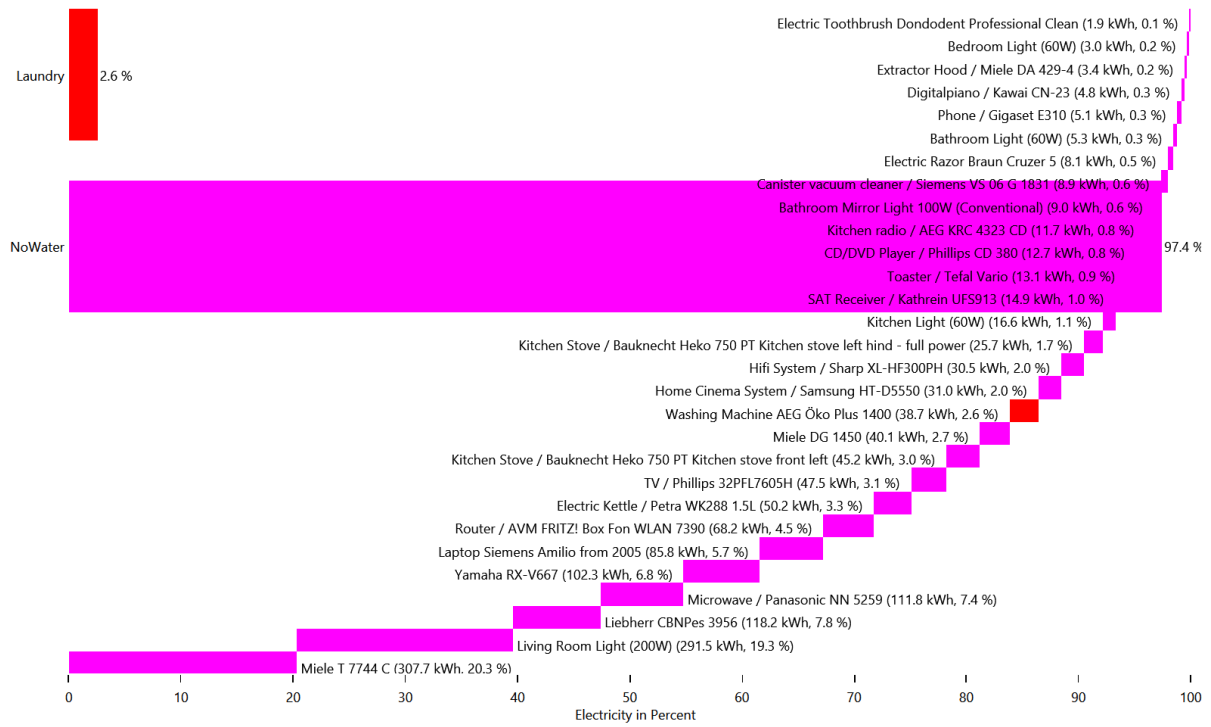
## Cold Water



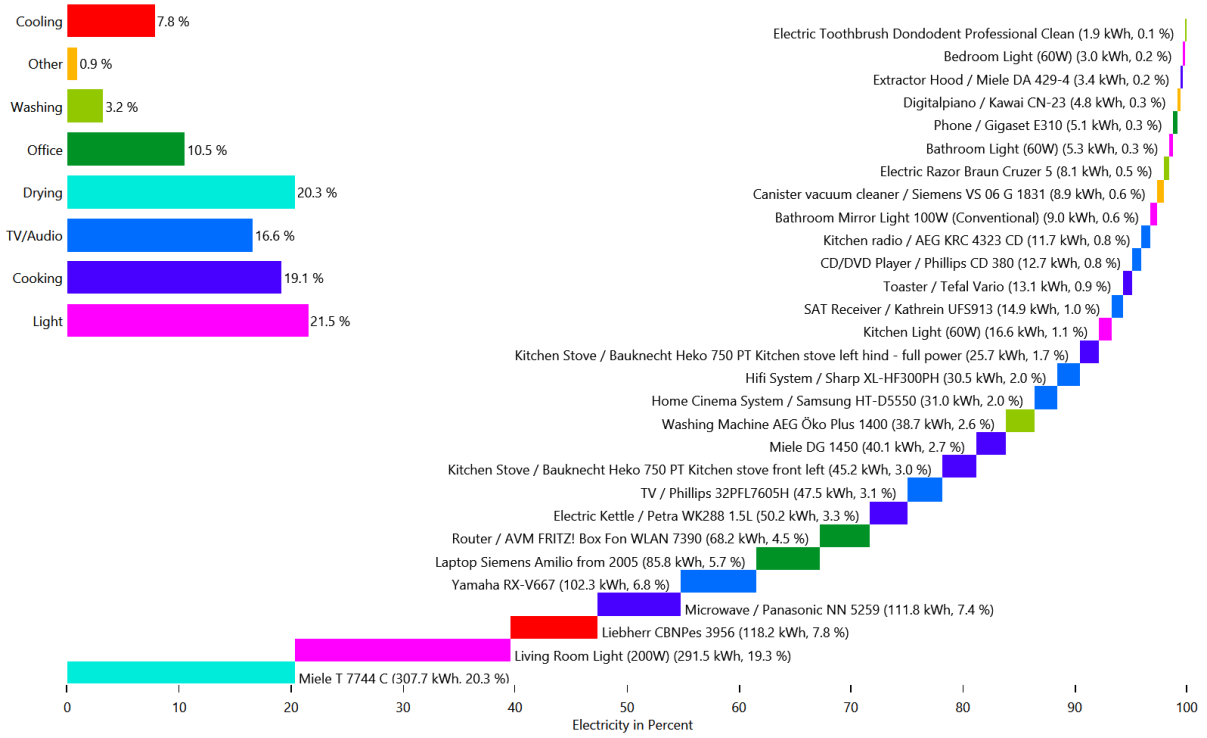
## Cold Water



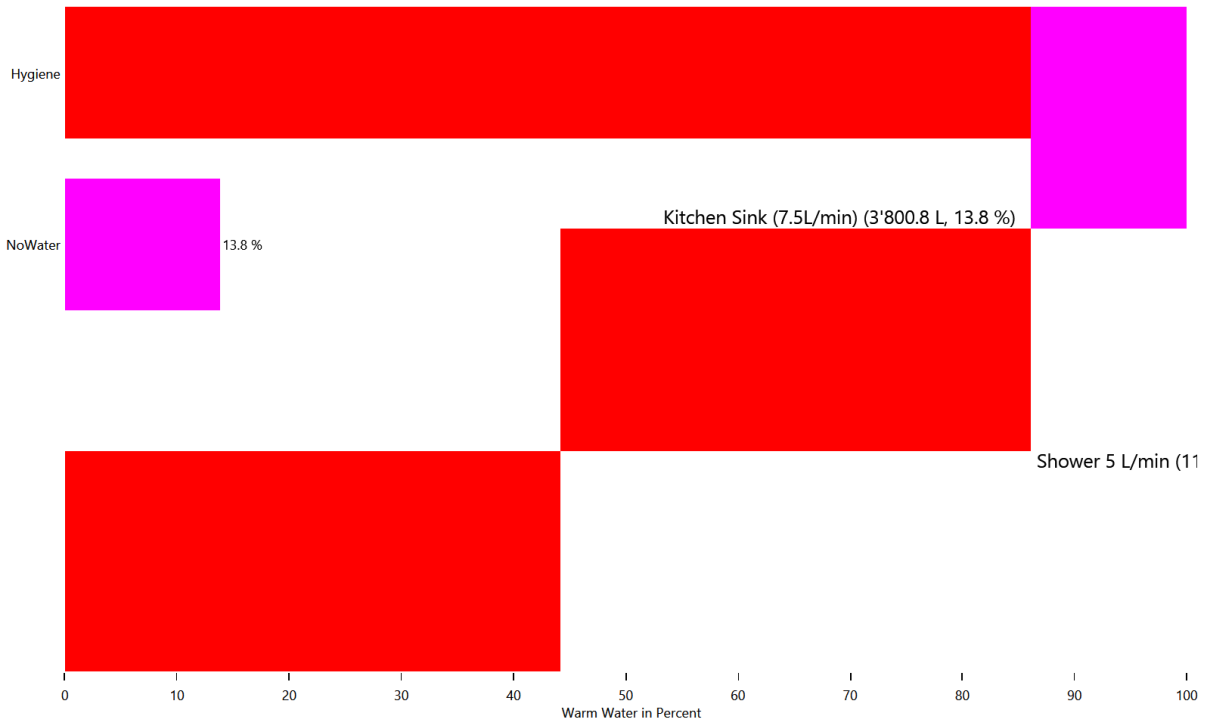
## Electricity



# Electricity

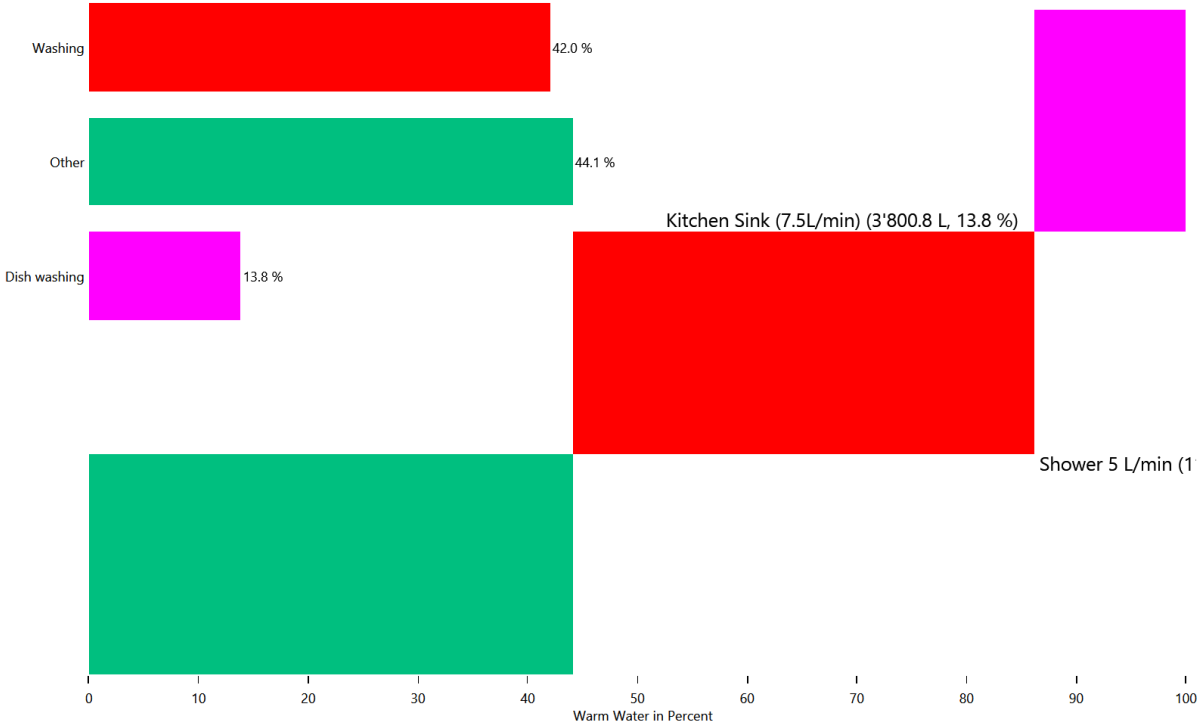


# Warm Water





# Warm Water

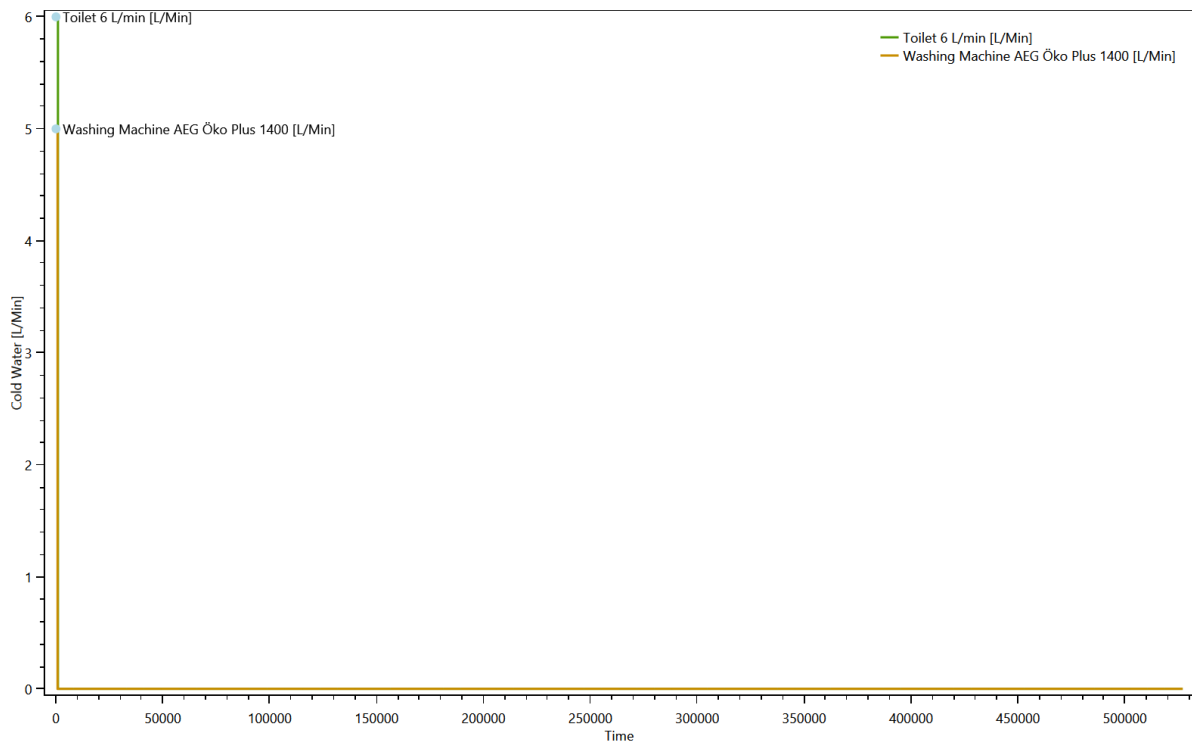


# Duration curve for each device for each load type

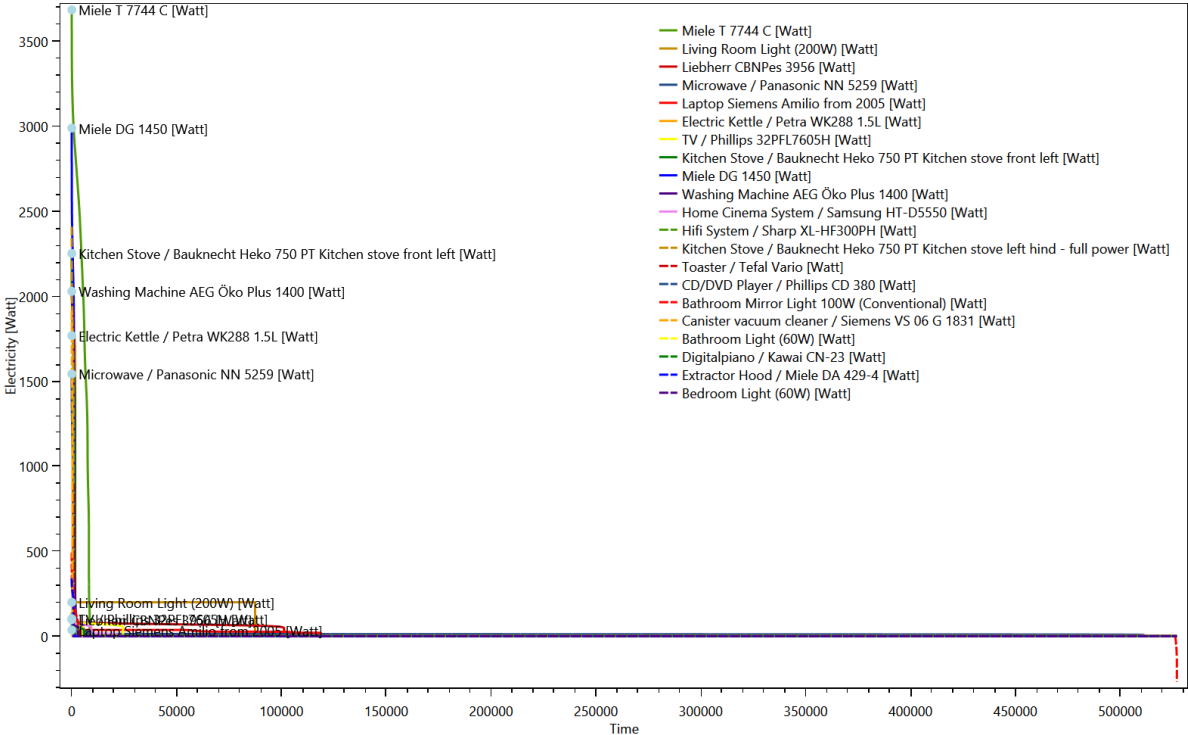
This is made from the files starting with: DeviceDurationCurves

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

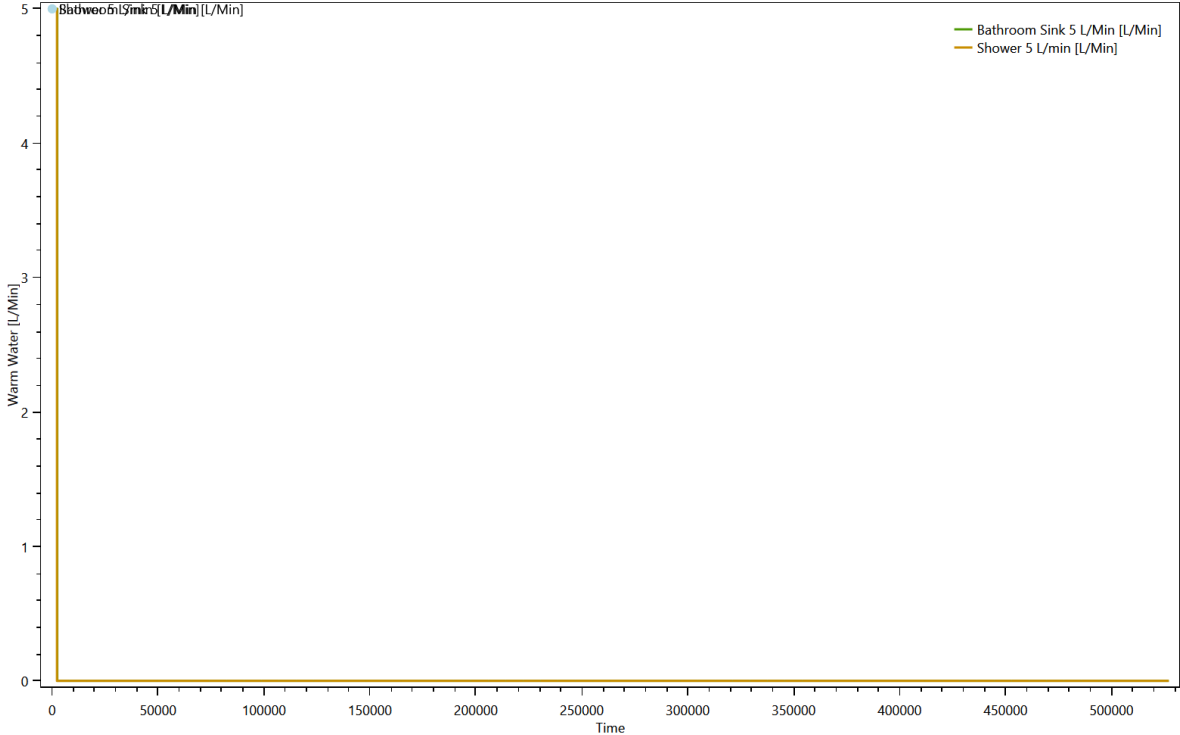
## Cold Water



# Electricity



# Warm Water

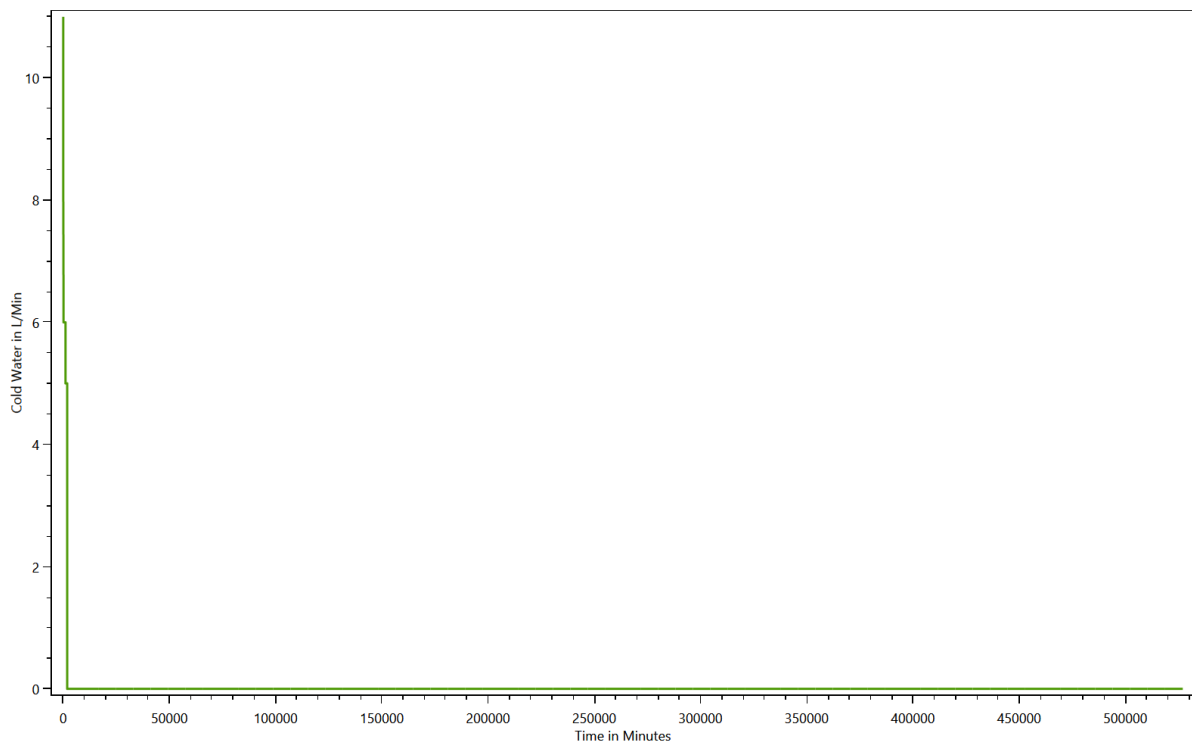


# Duration curve for each load type

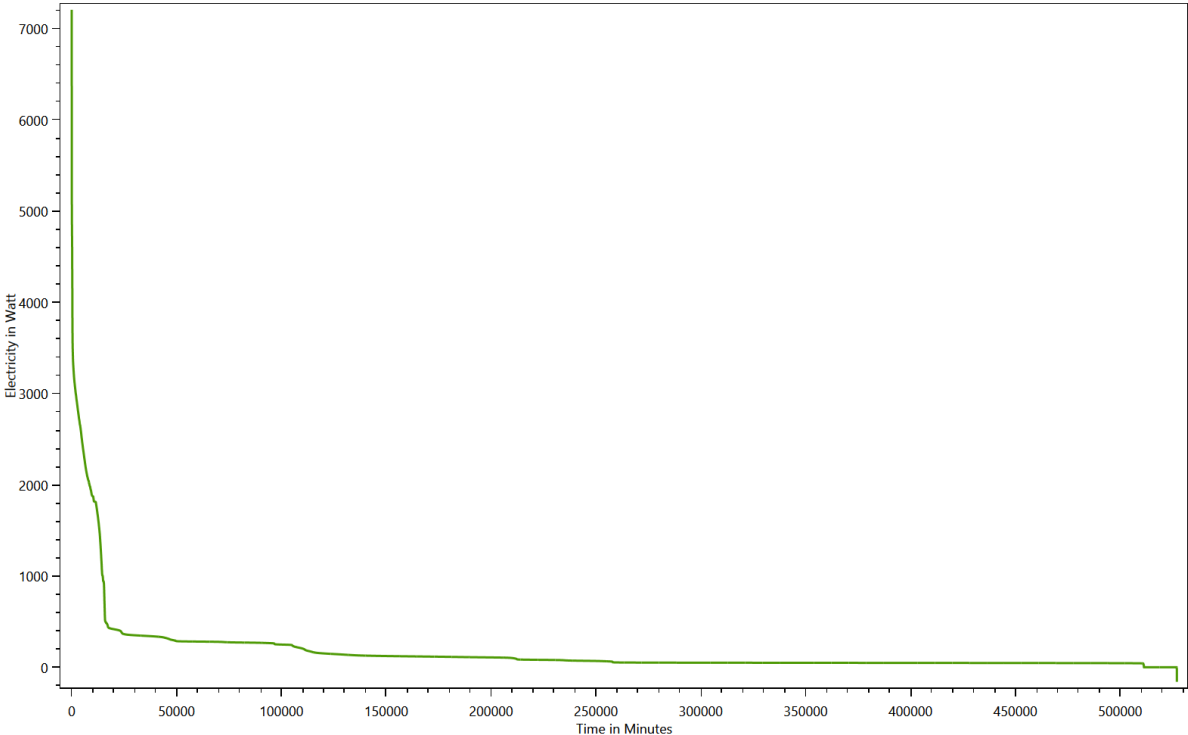
This is made from the files starting with: DurationCurve

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

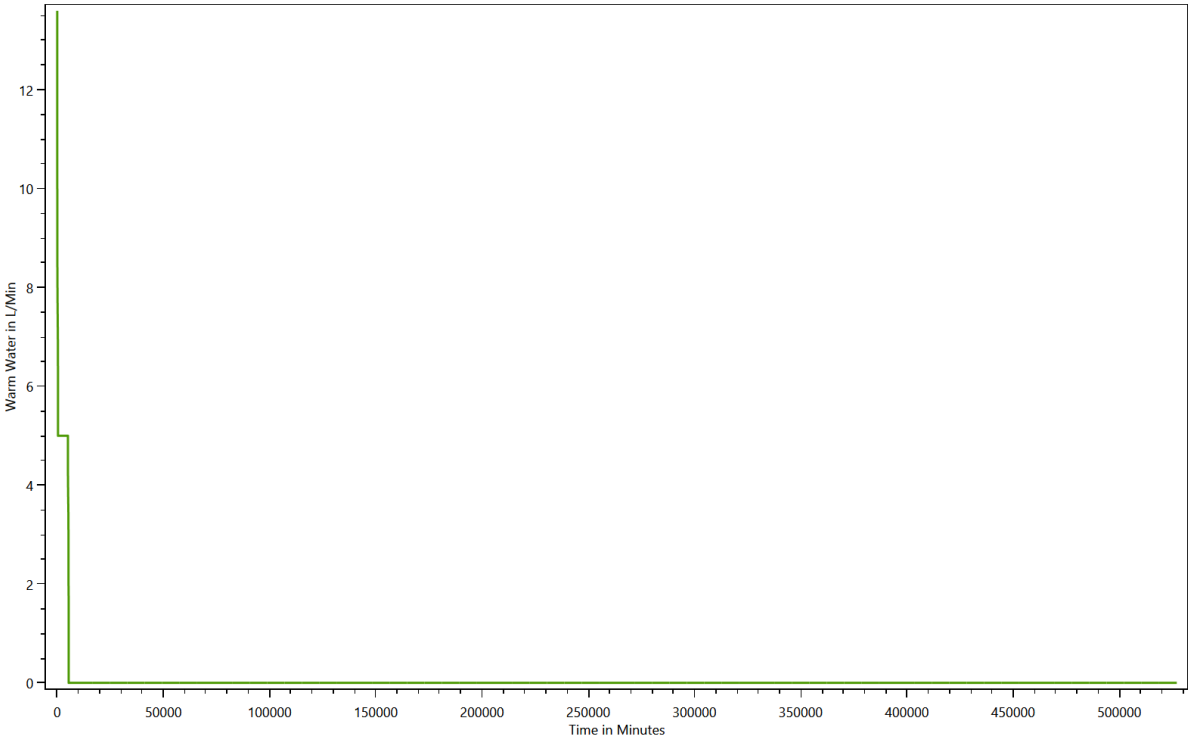
## Cold Water



# Electricity



# Warm Water

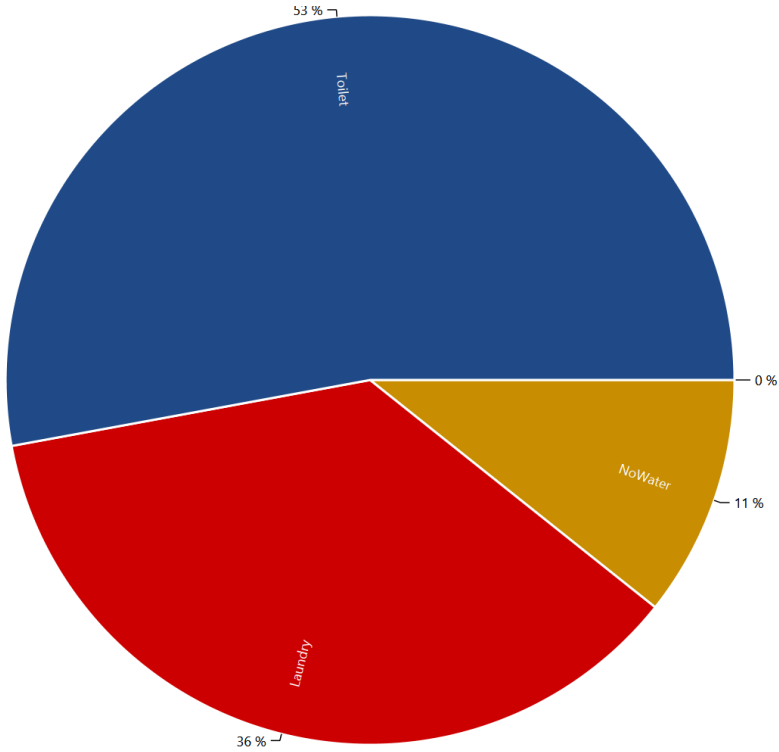


# Grouped energy use for each load type for each device

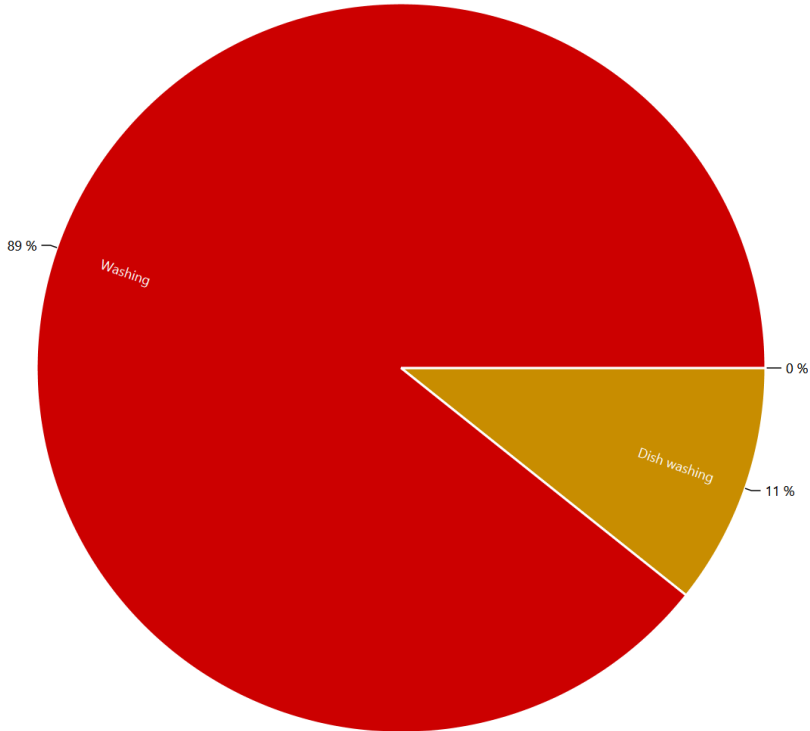
This is made from the files starting with: DeviceTaggingSet

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

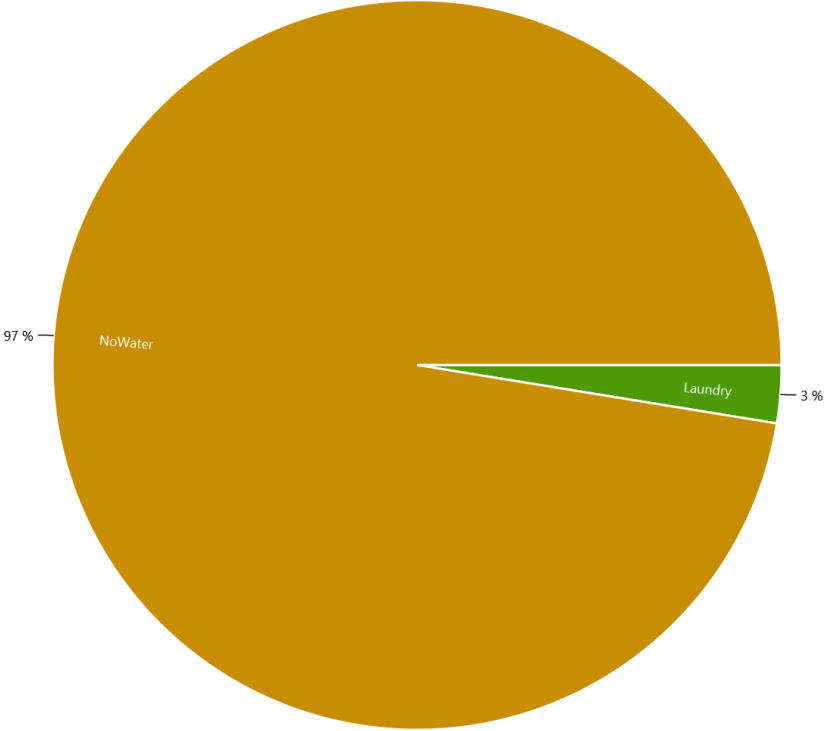
## HH0 - Destatis Water Usage Statistics - Cold Water



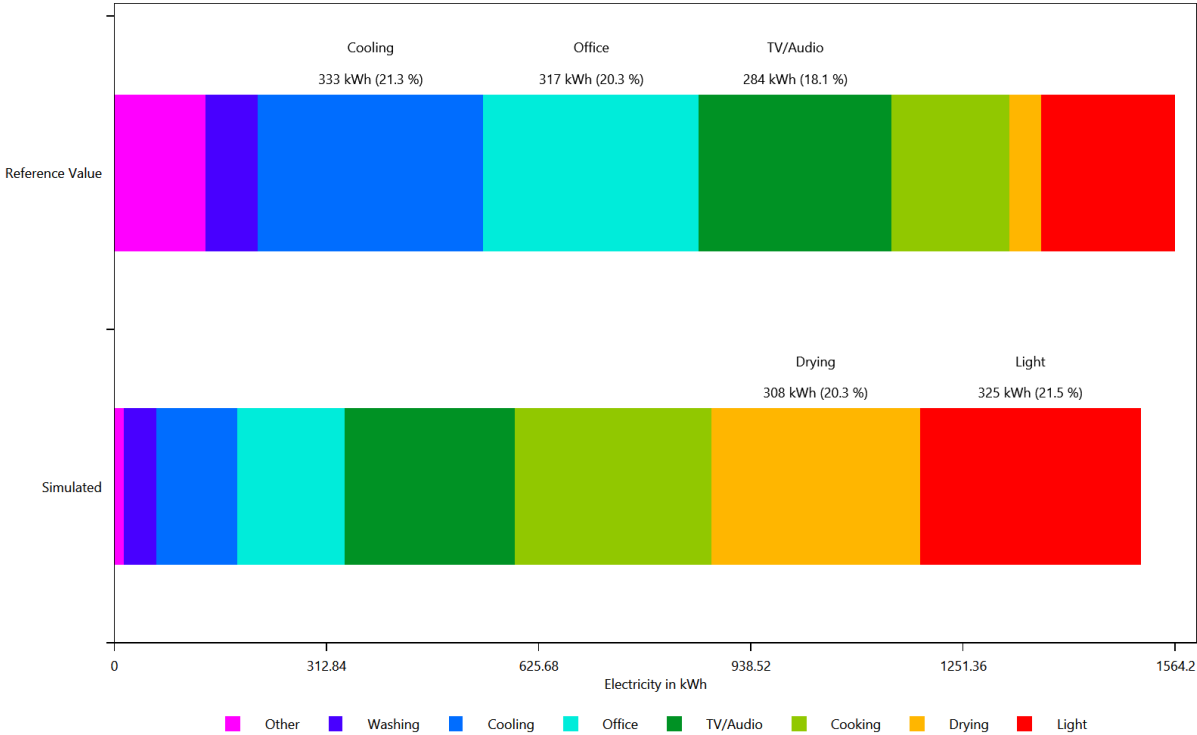
HH0 - Energieagentur - Cold Water



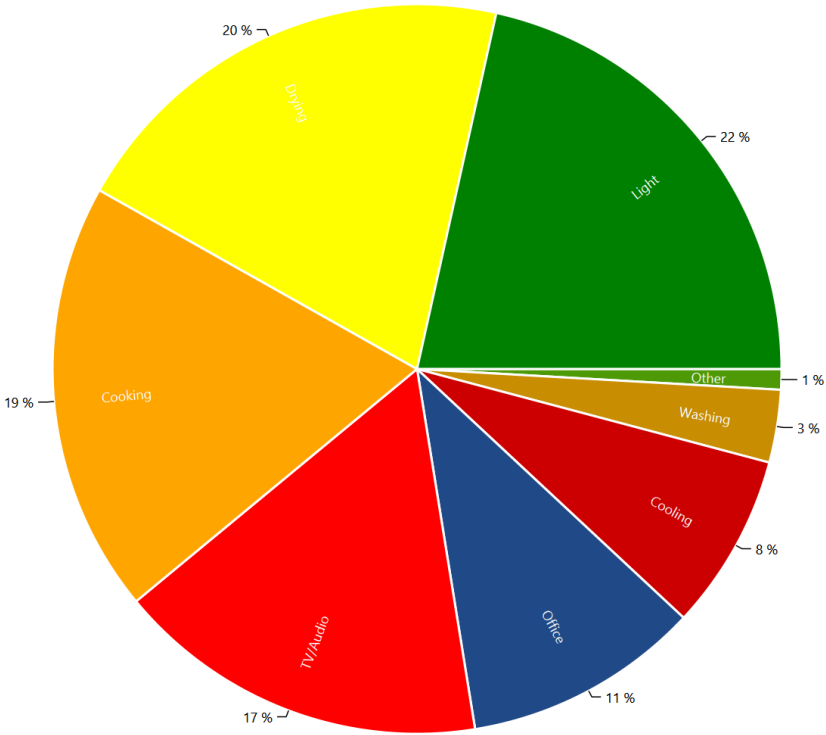
HH0 - Destatis Water Usage Statistics - Electricity



# HH0 - Energieagentur - Electricity

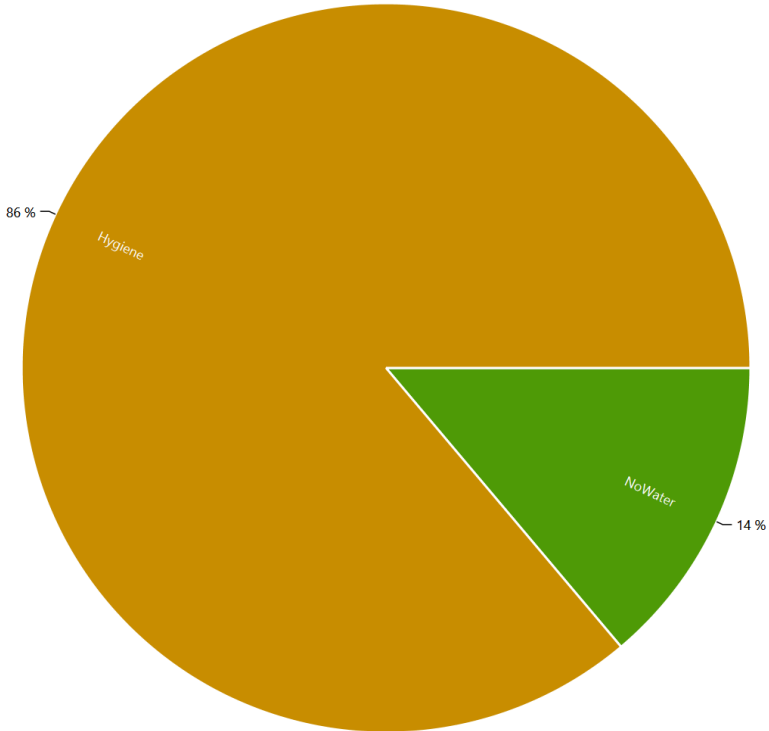


# HH0 - Energieagentur - Electricity

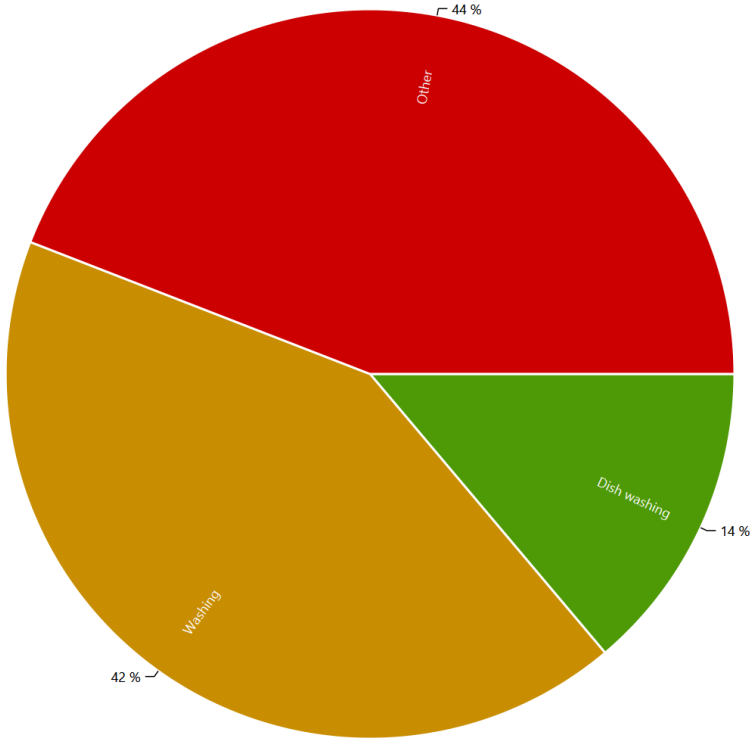




HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

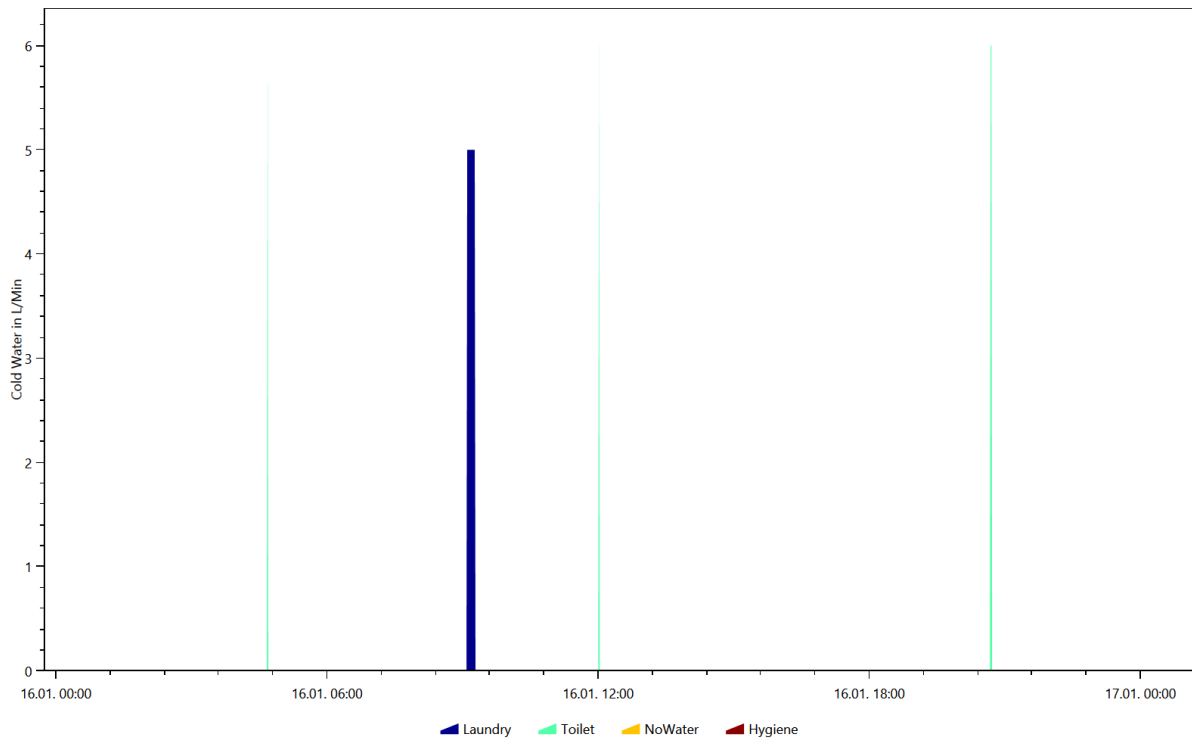


# Example of the device profiles for each load type

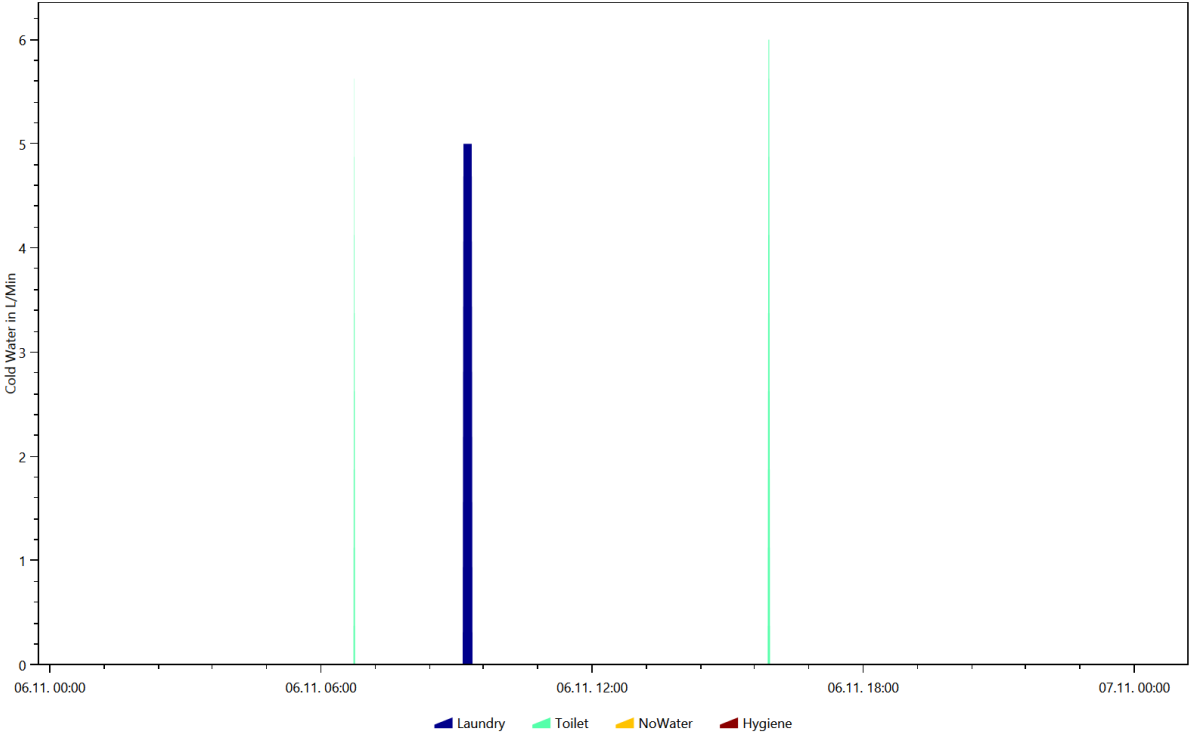
This is made from the files starting with: DeviceProfiles

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

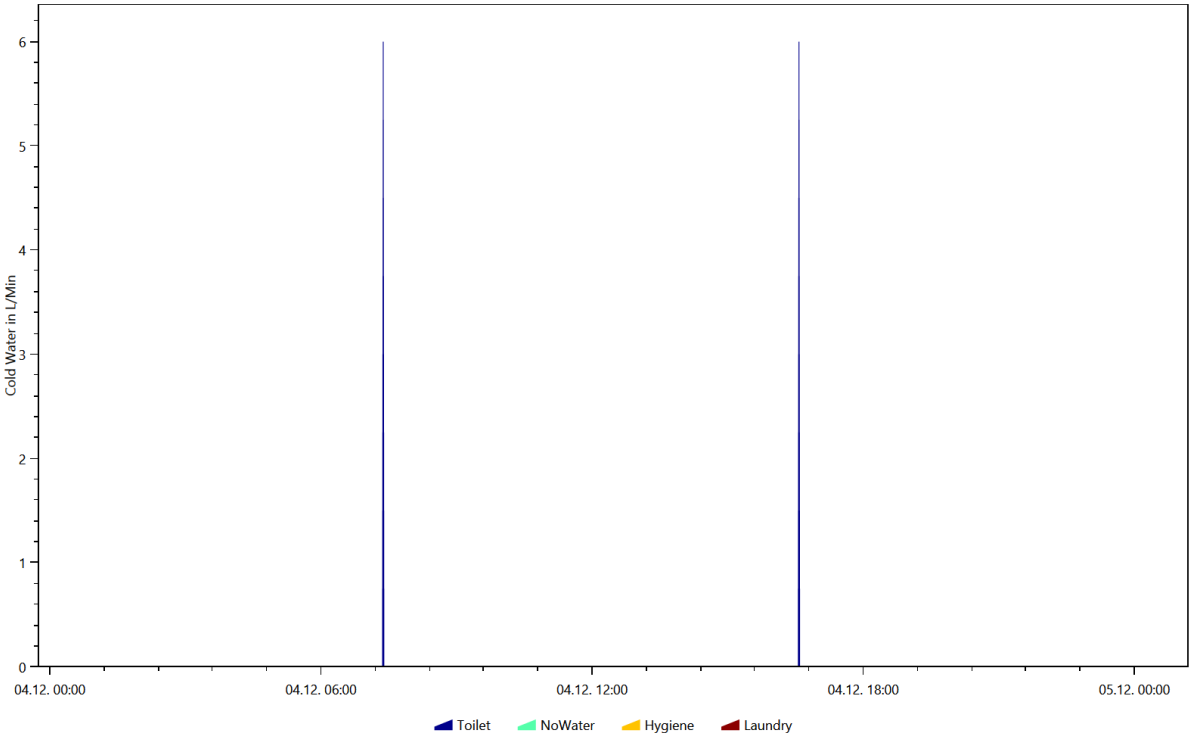
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.16



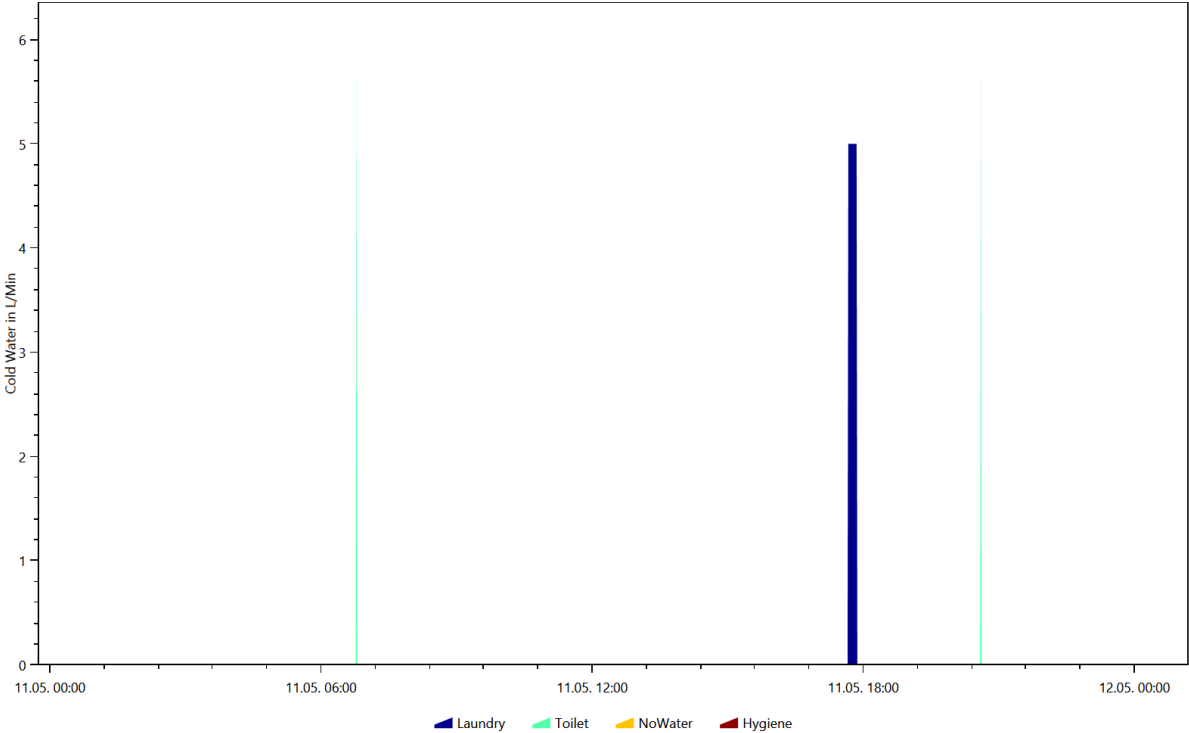
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.6



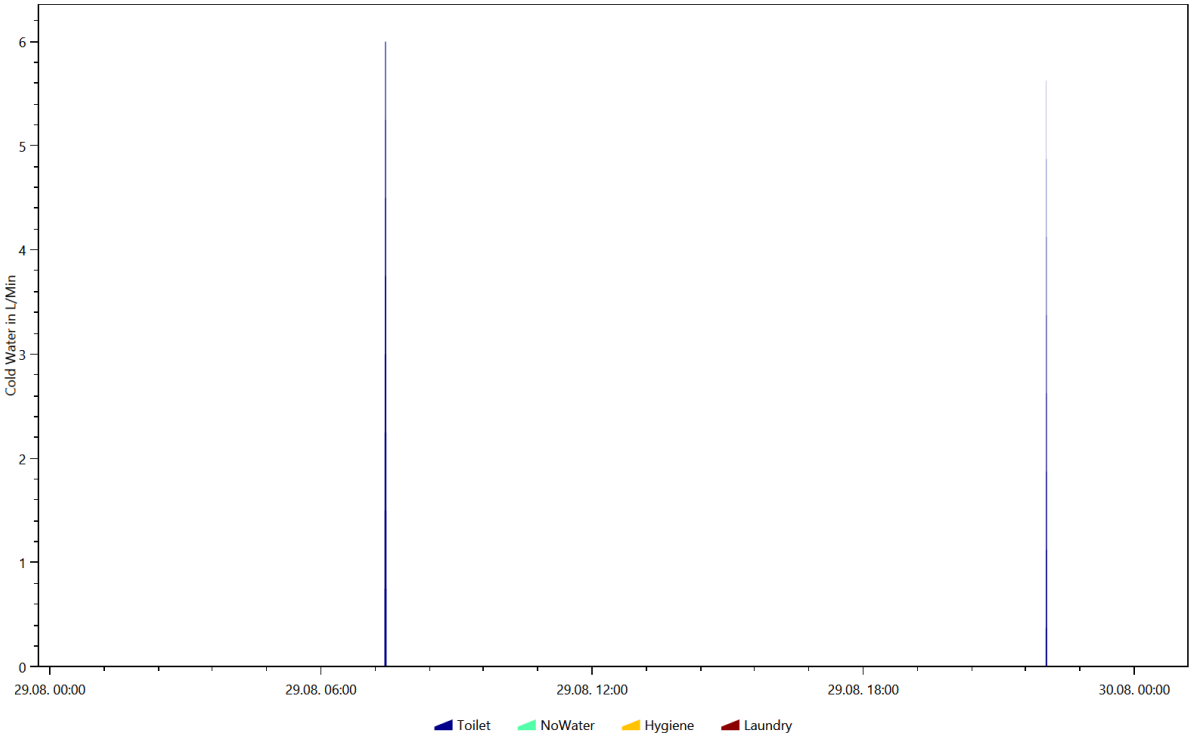
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.4



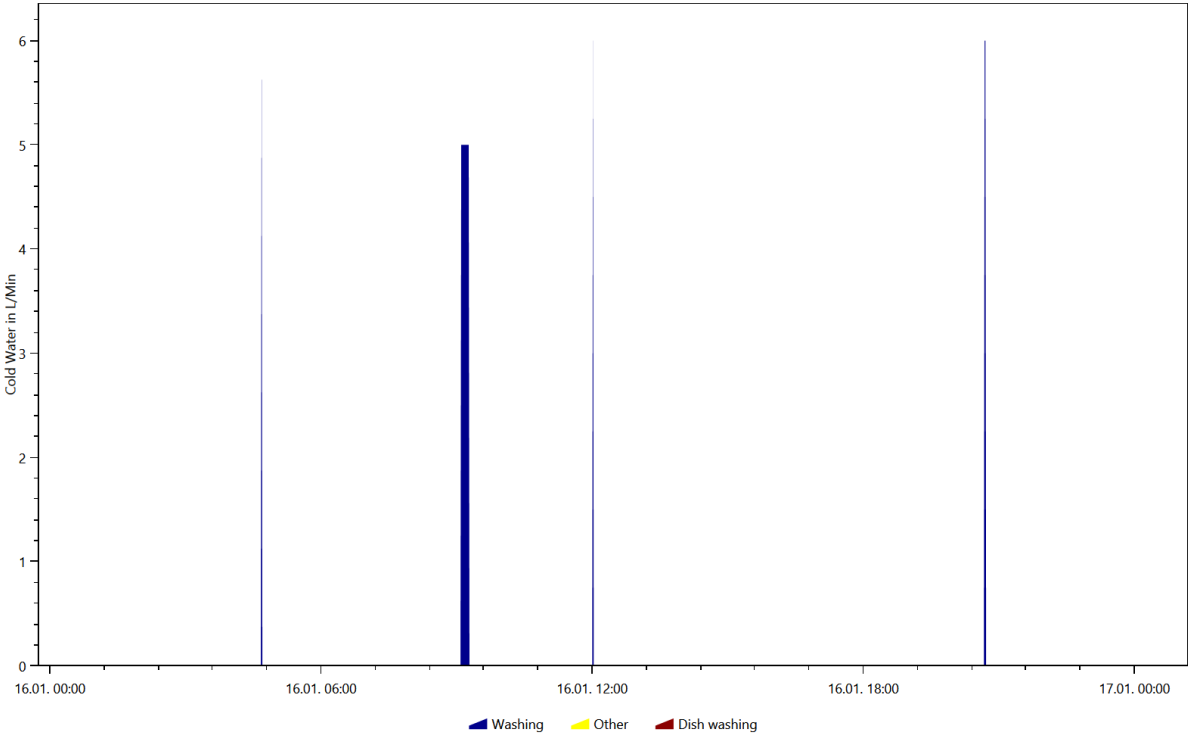
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.11



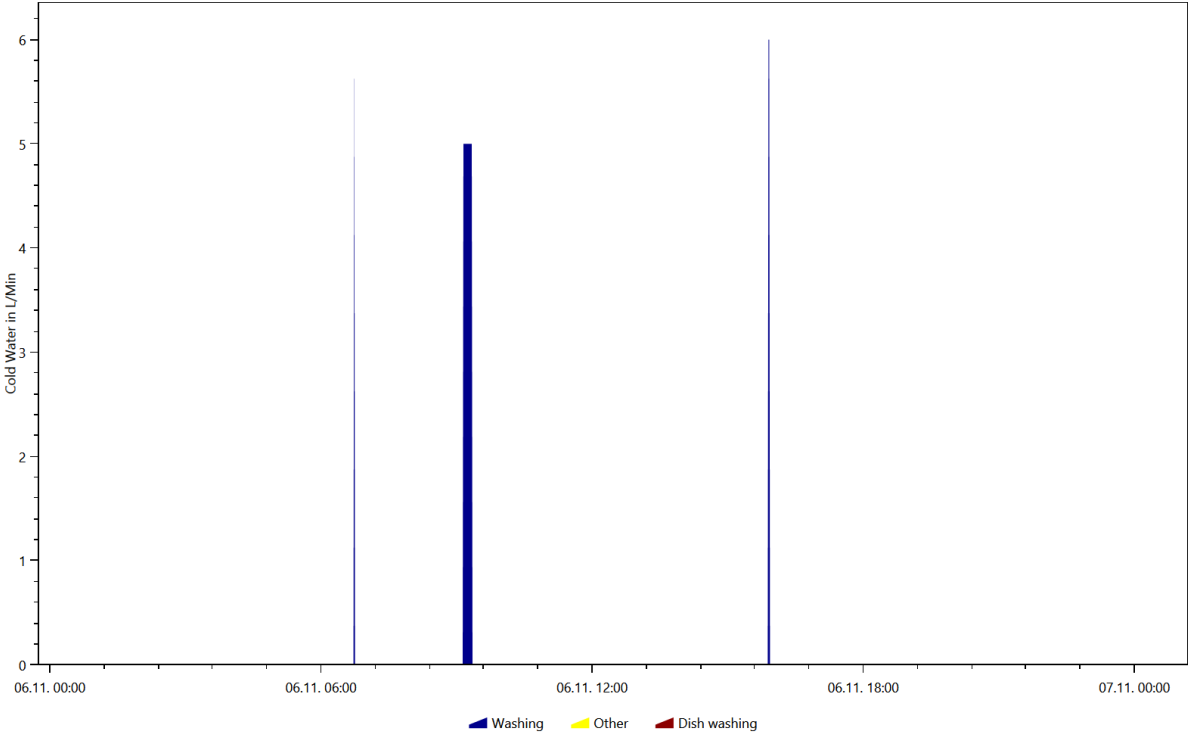
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.29



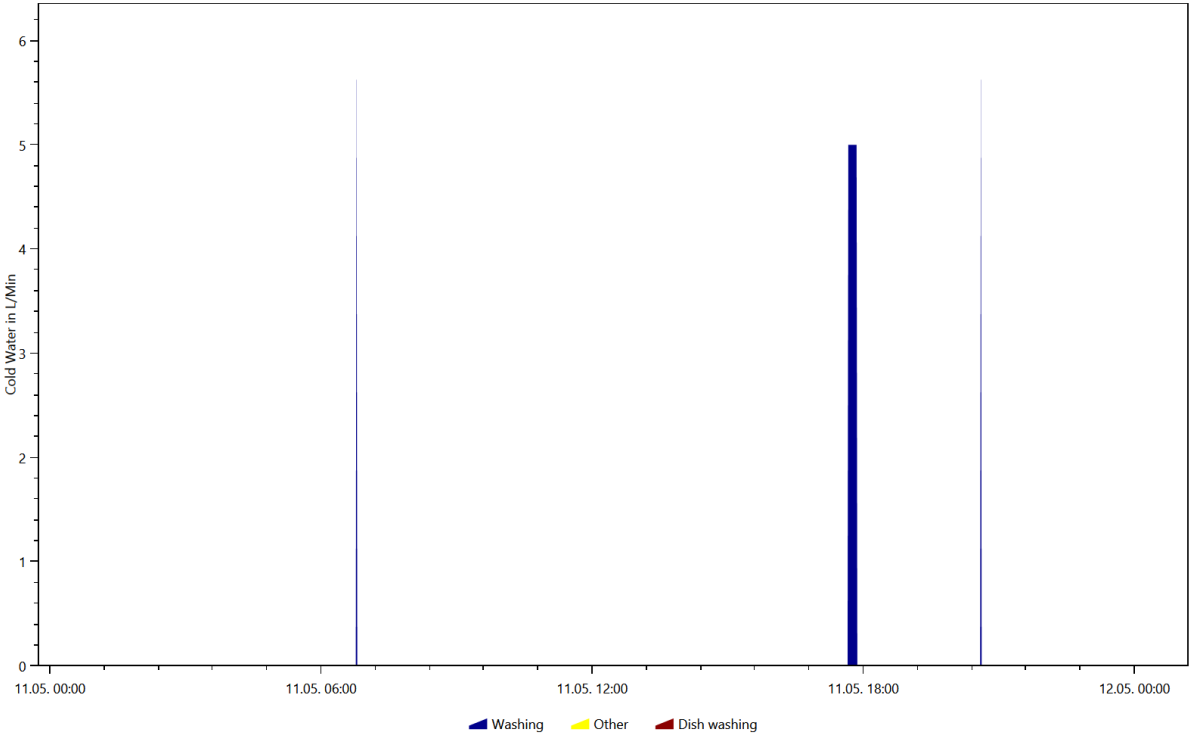
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.16



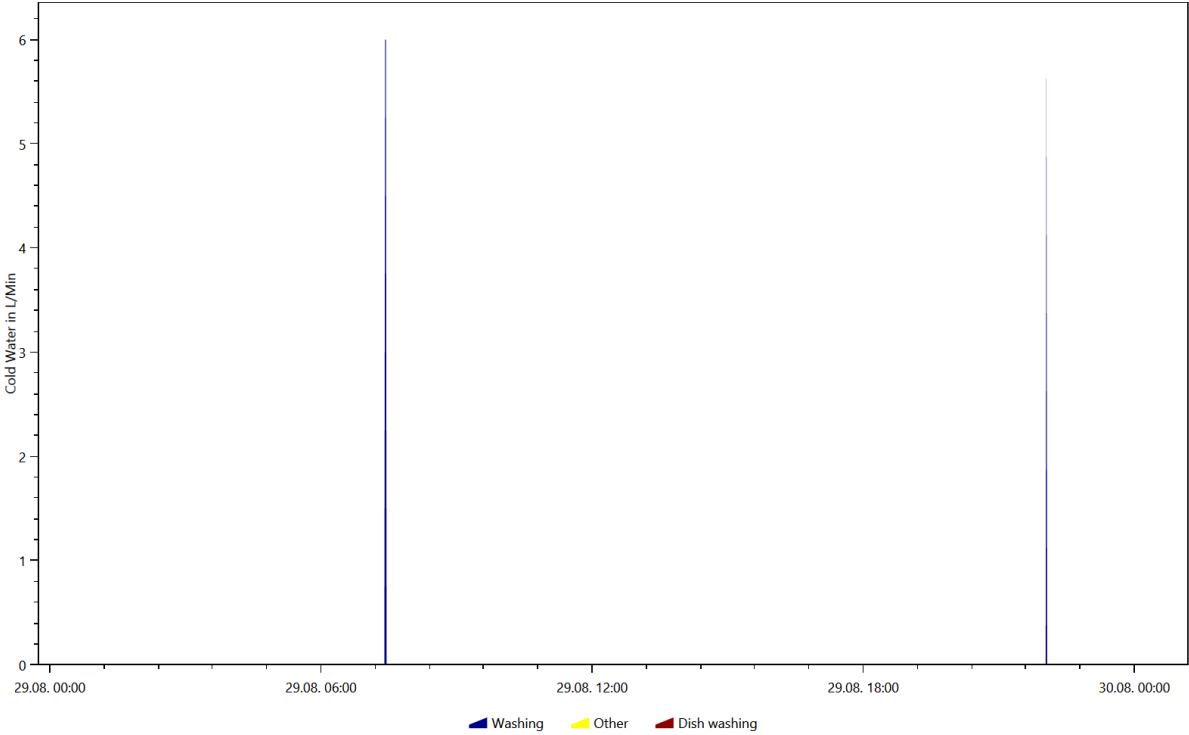
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.11.6



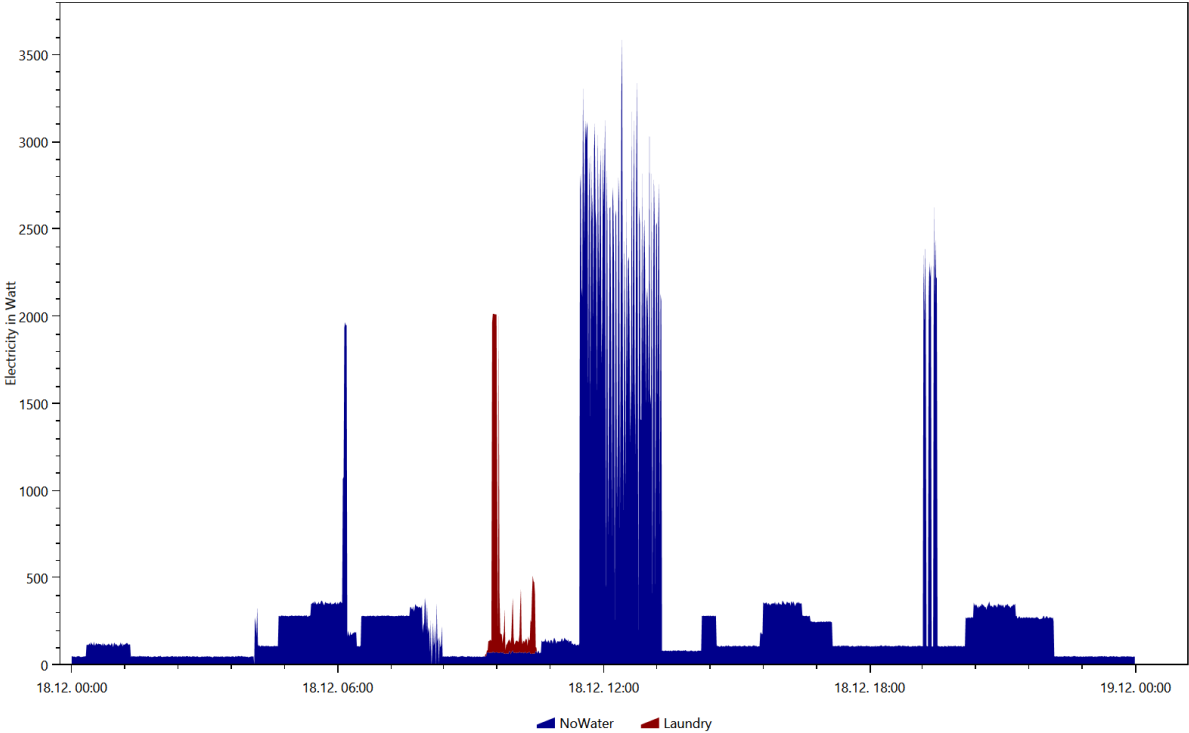
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.11



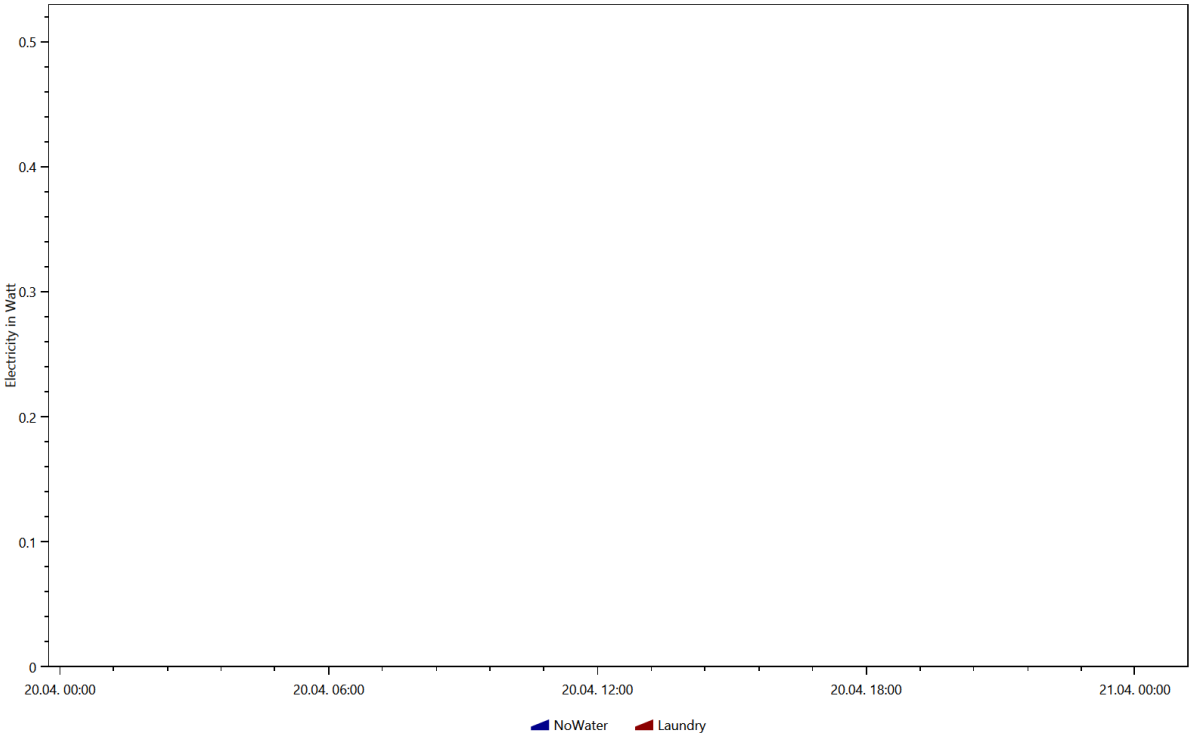
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.29



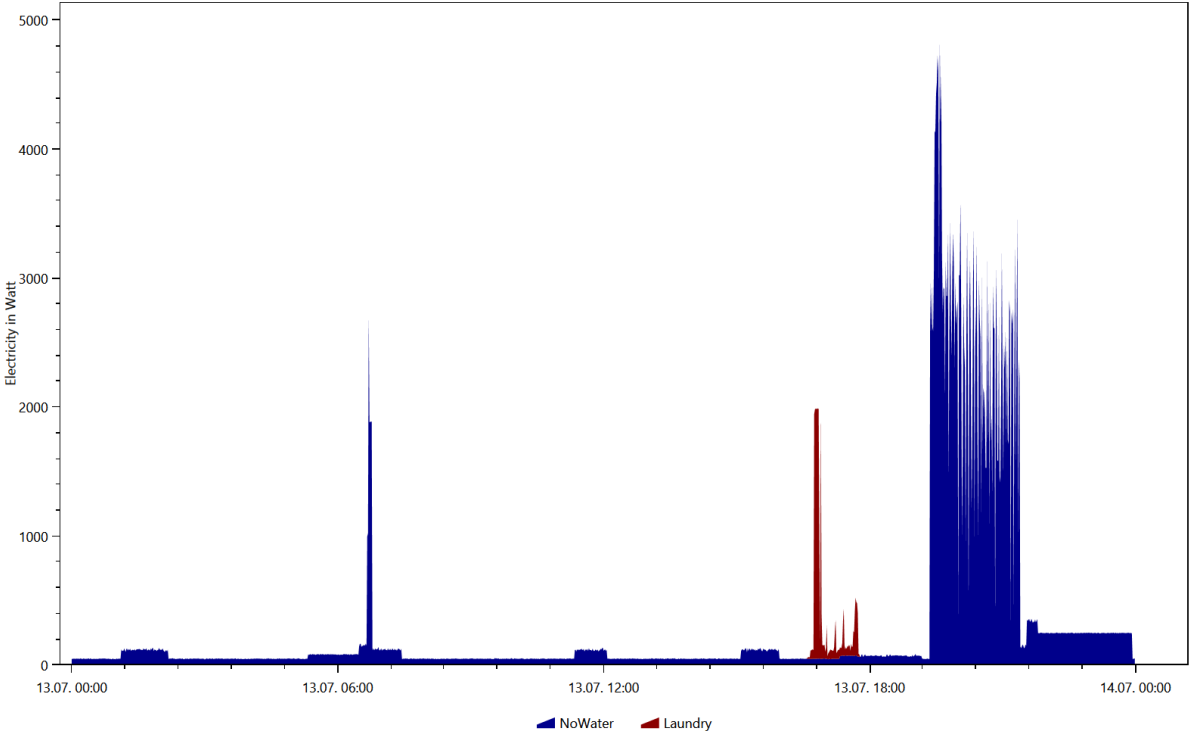
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.18



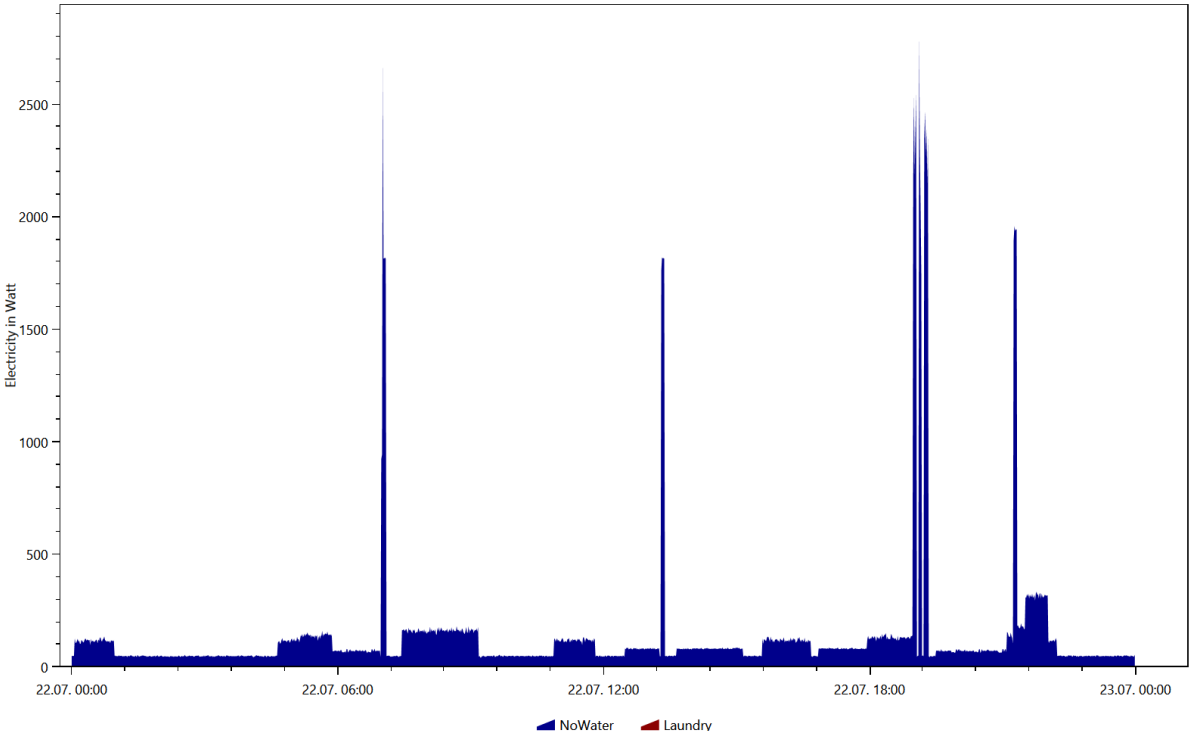
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.20



Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.13

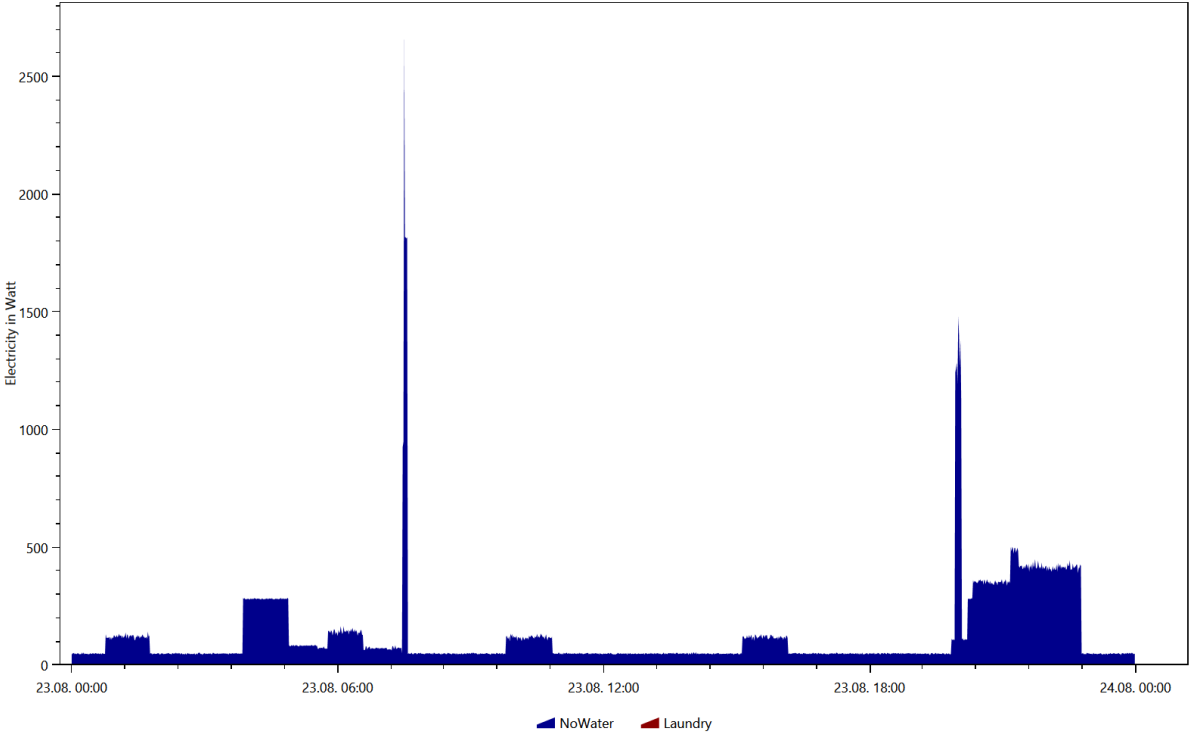


Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.22

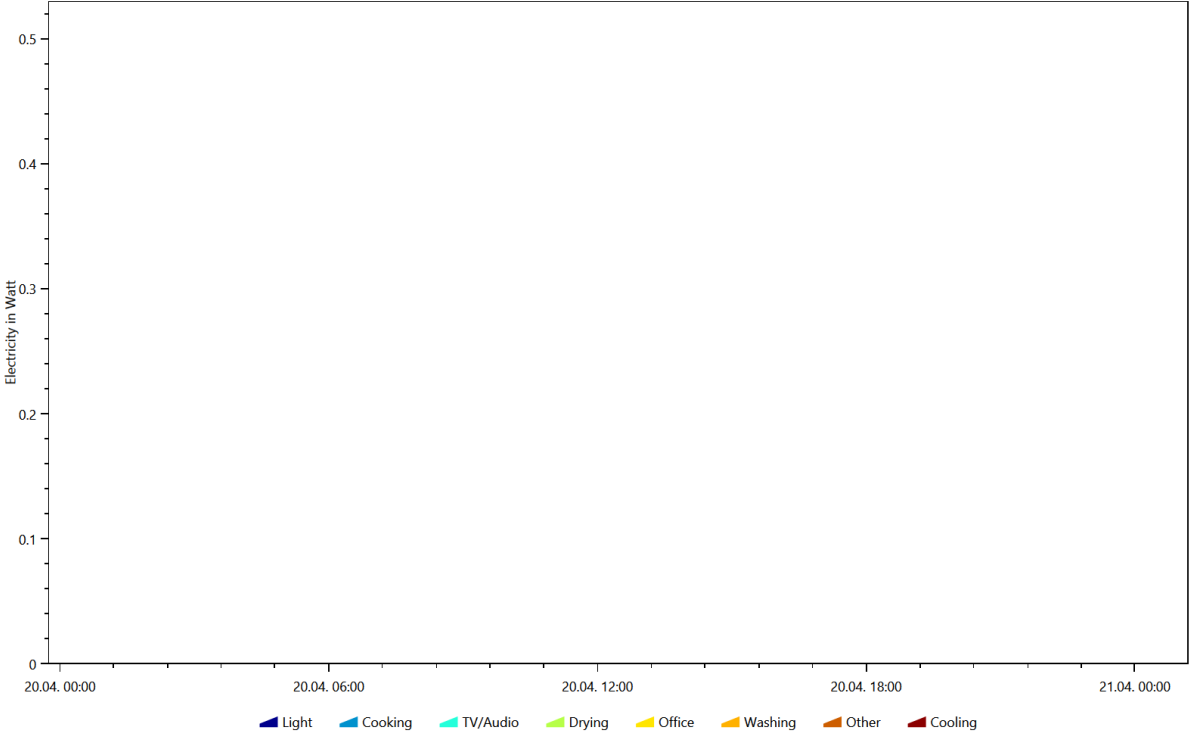




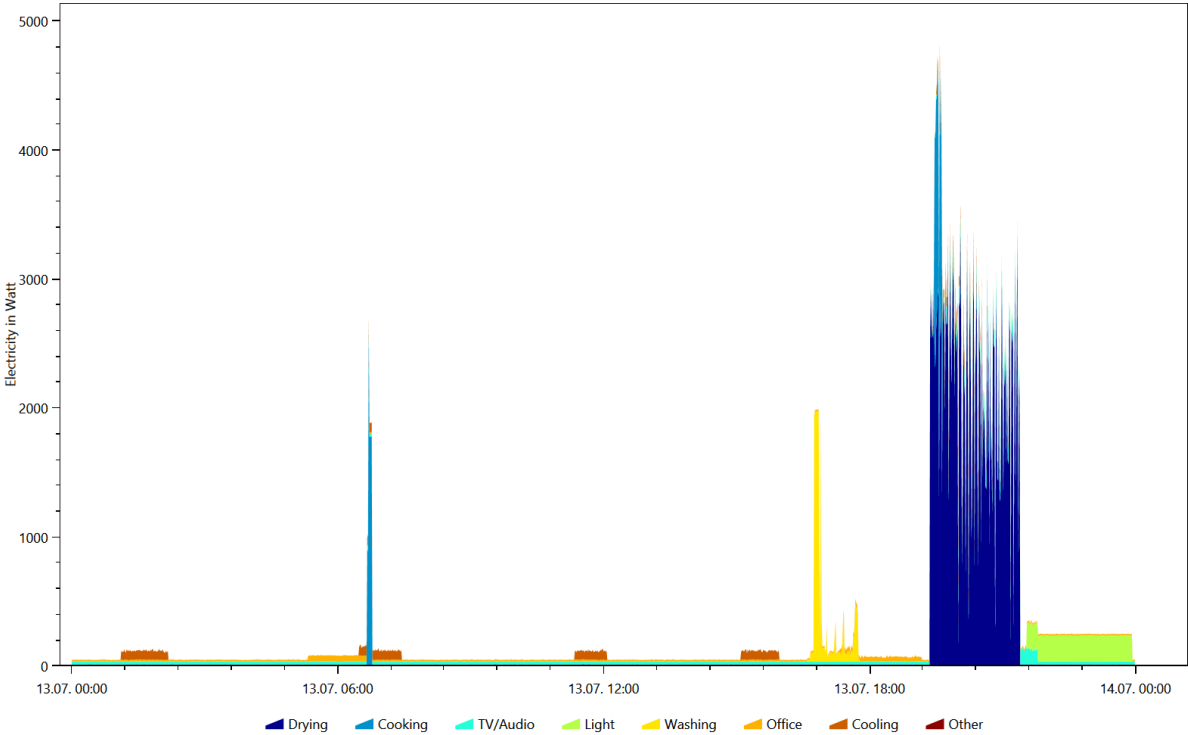
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.23



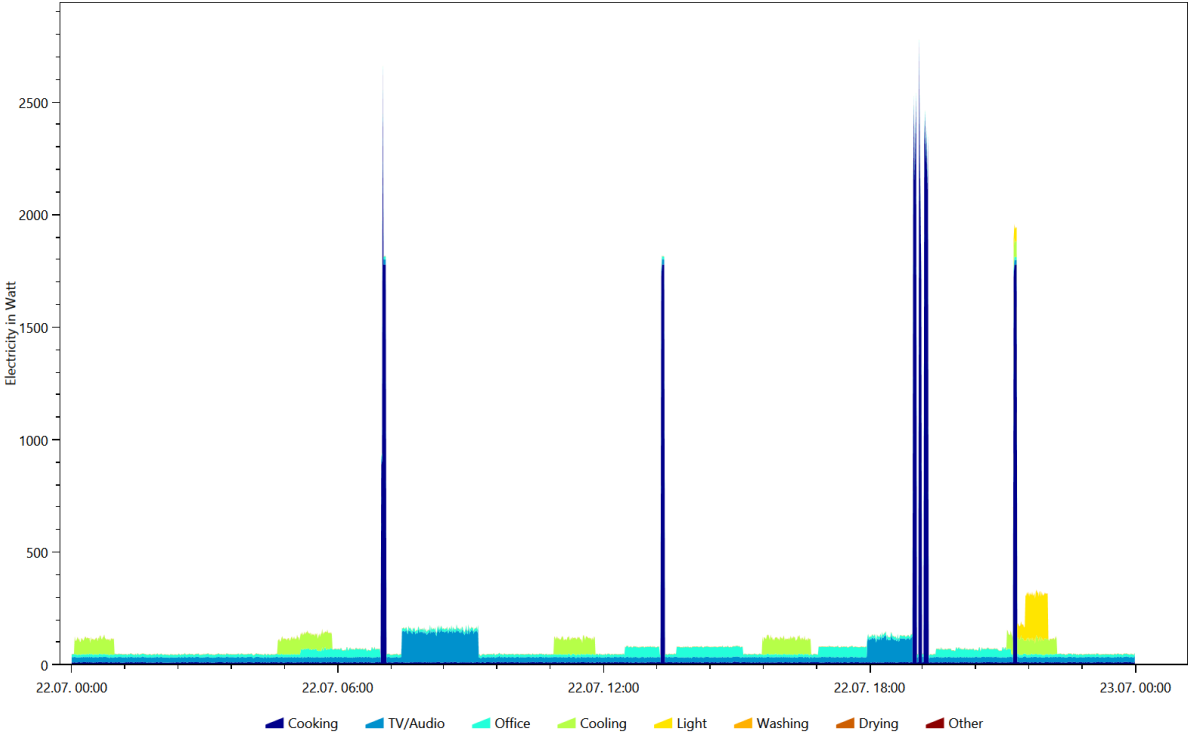
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.20



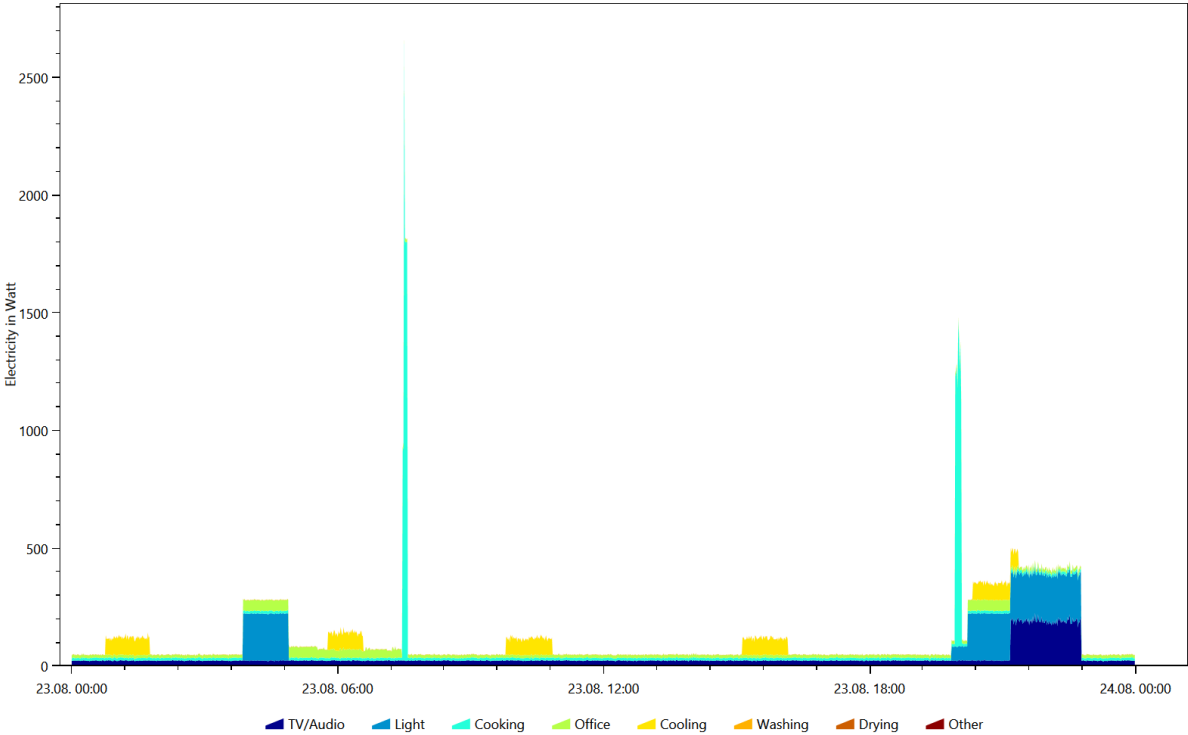
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.13



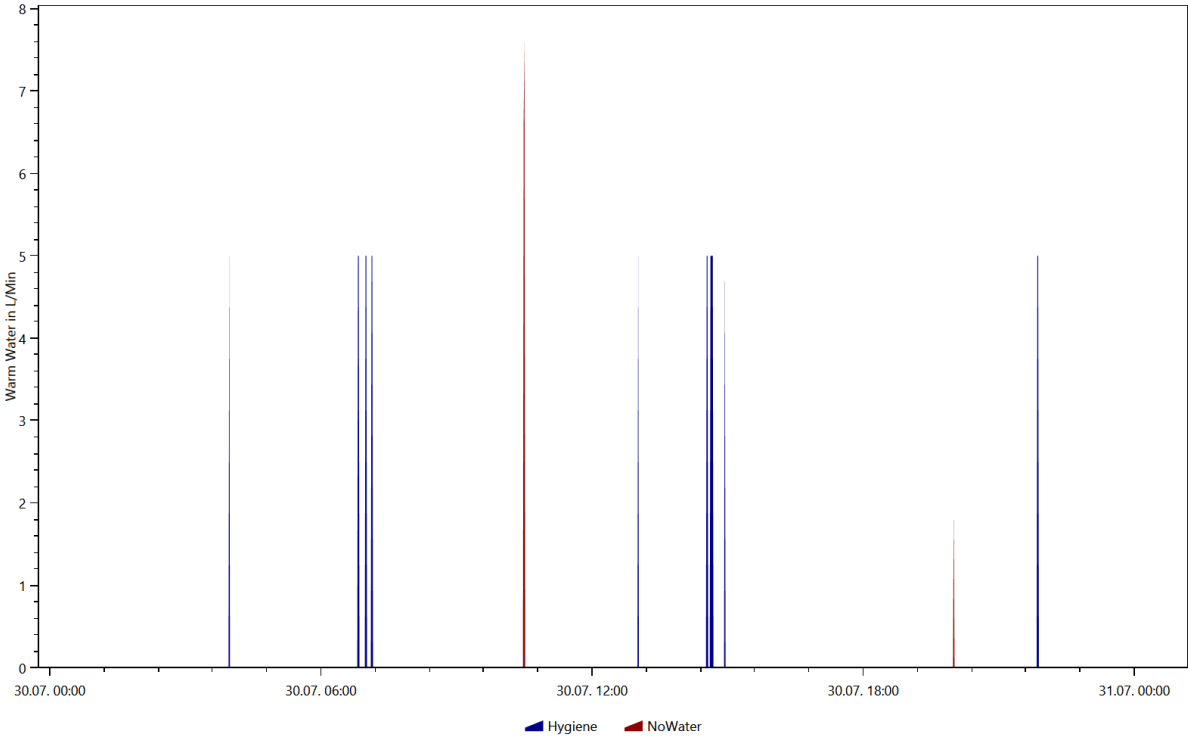
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.22



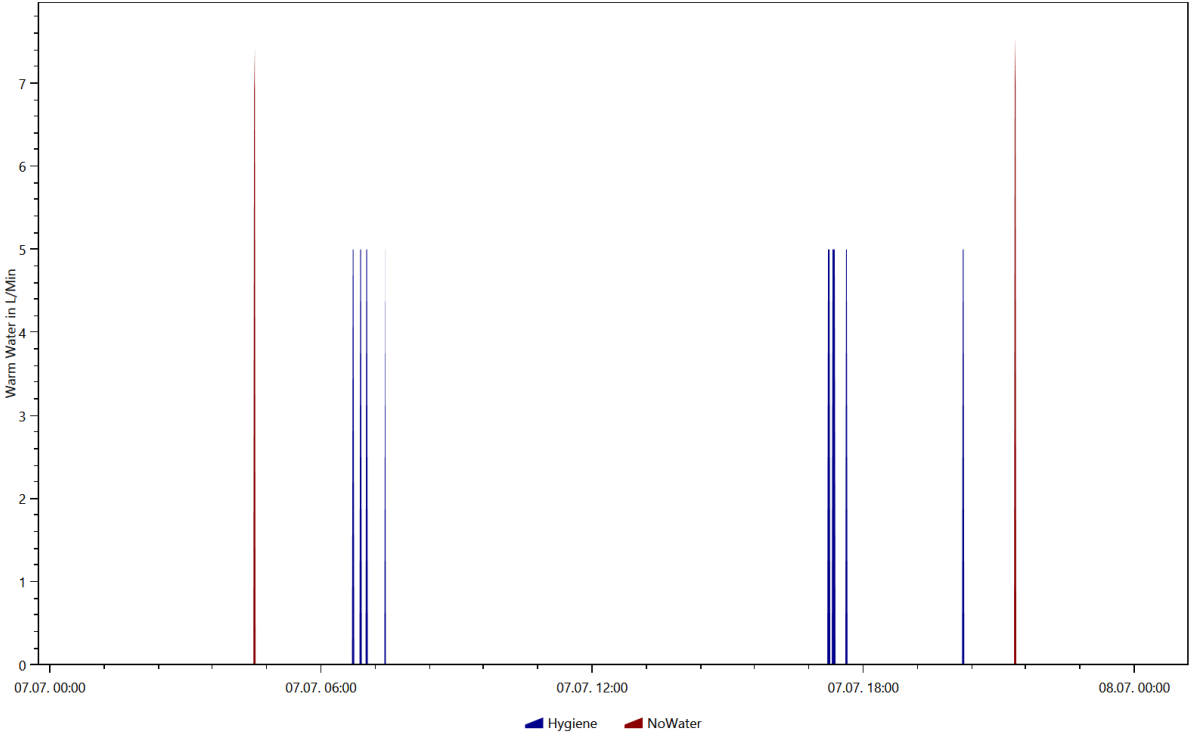
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.23



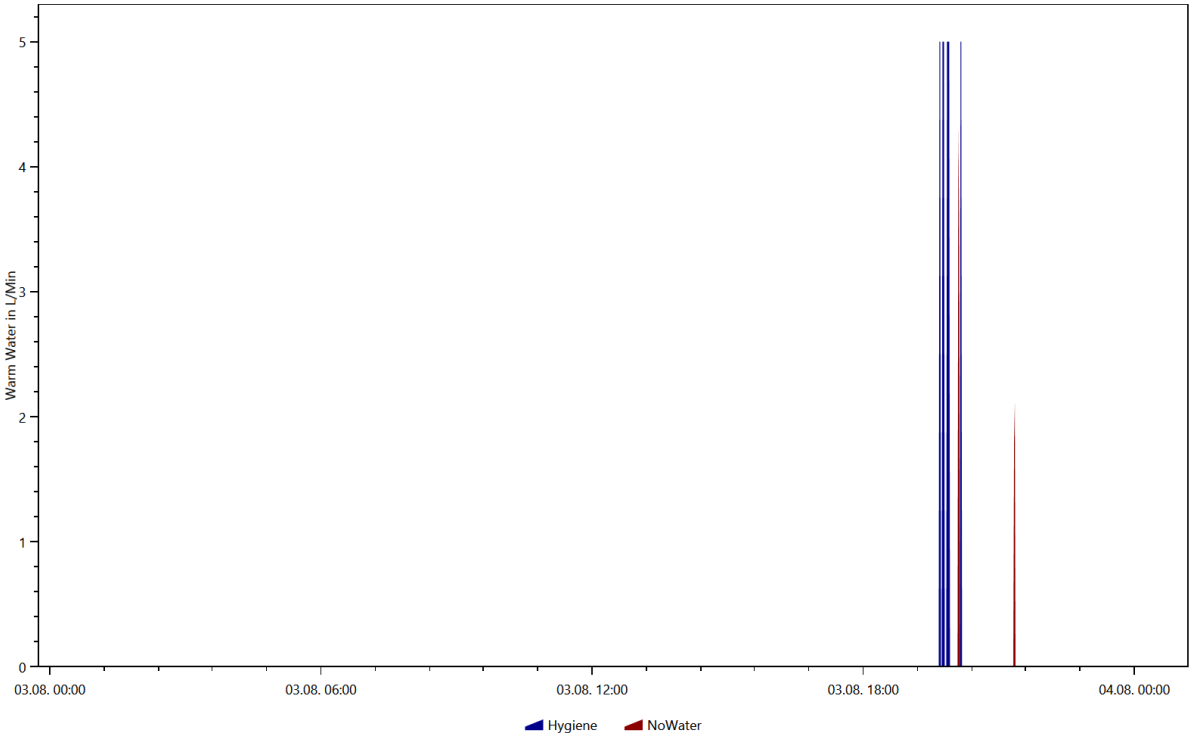
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.30



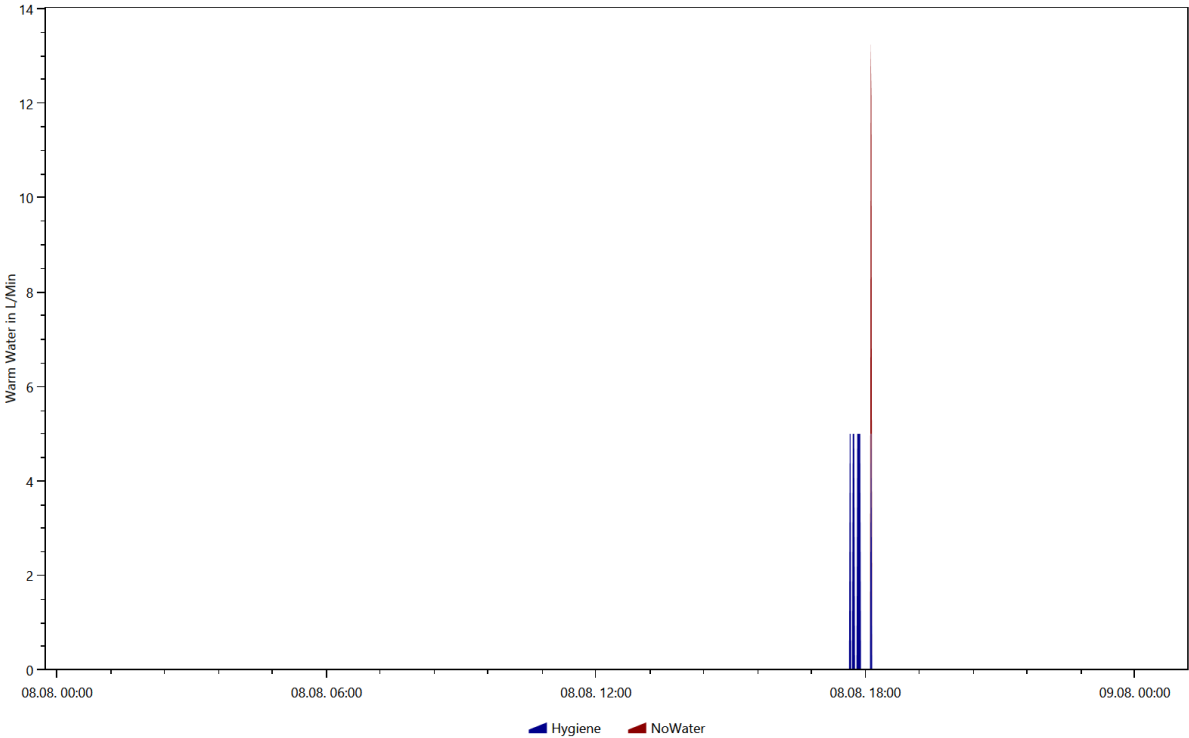
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.7



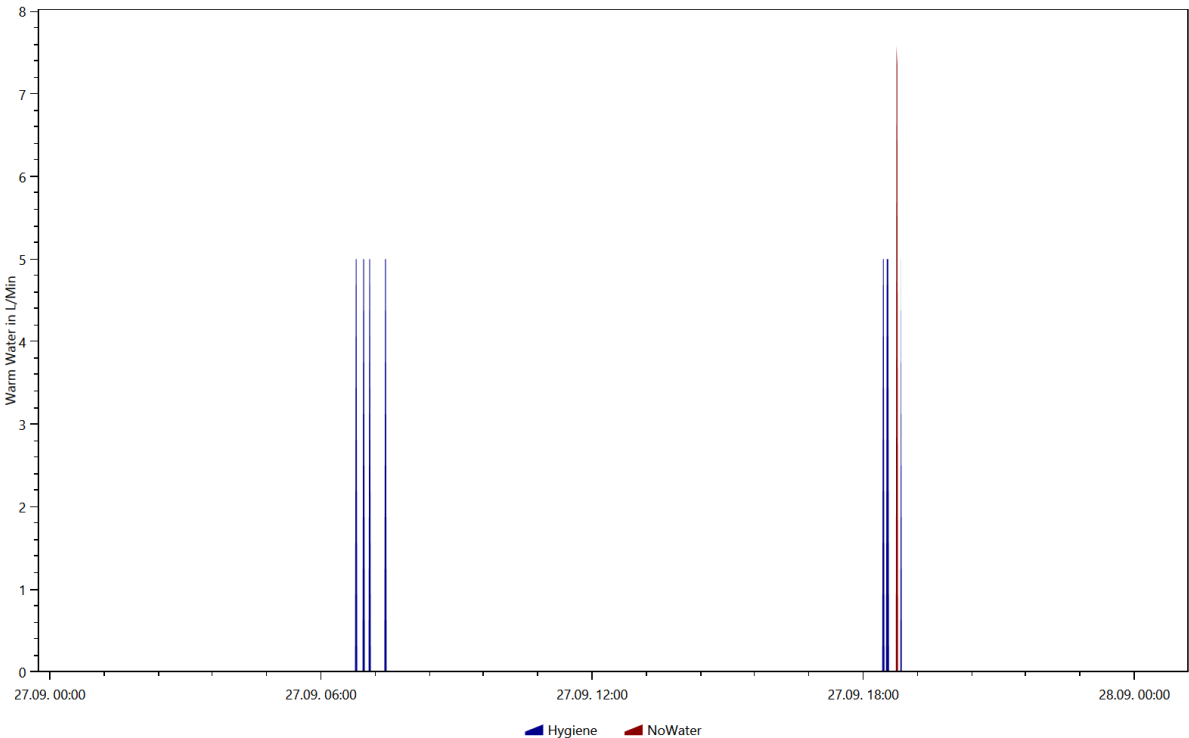
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.3



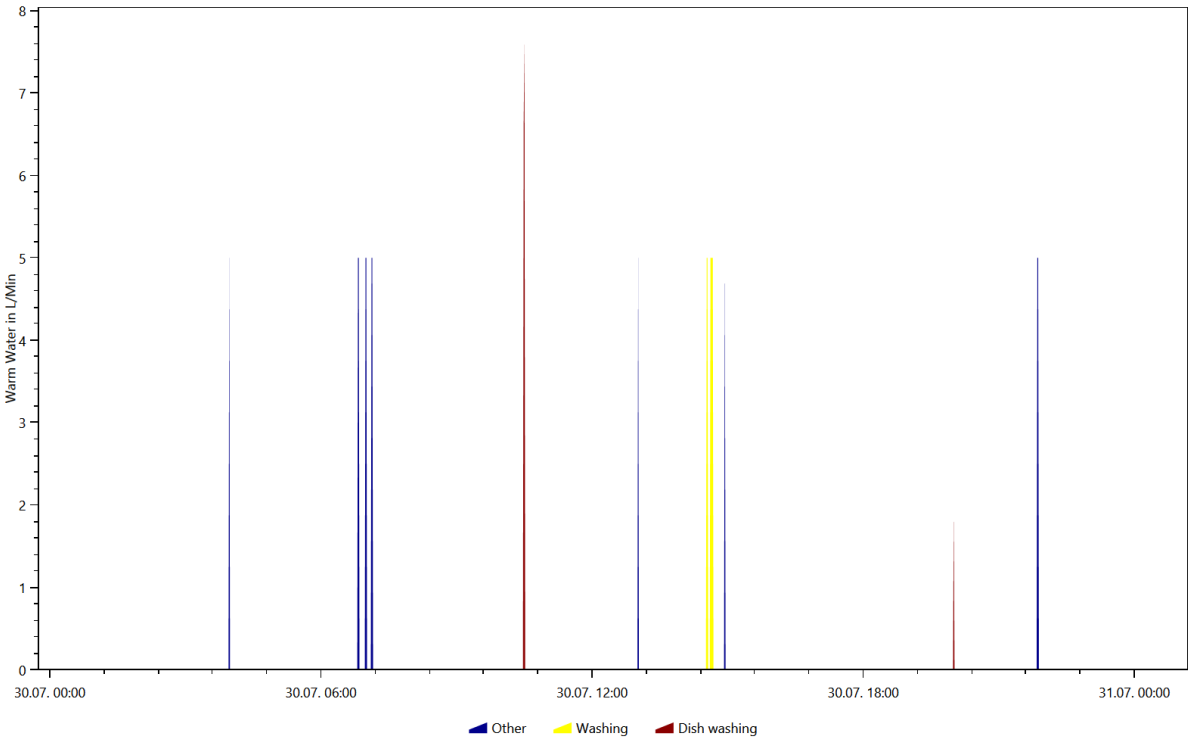
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.8



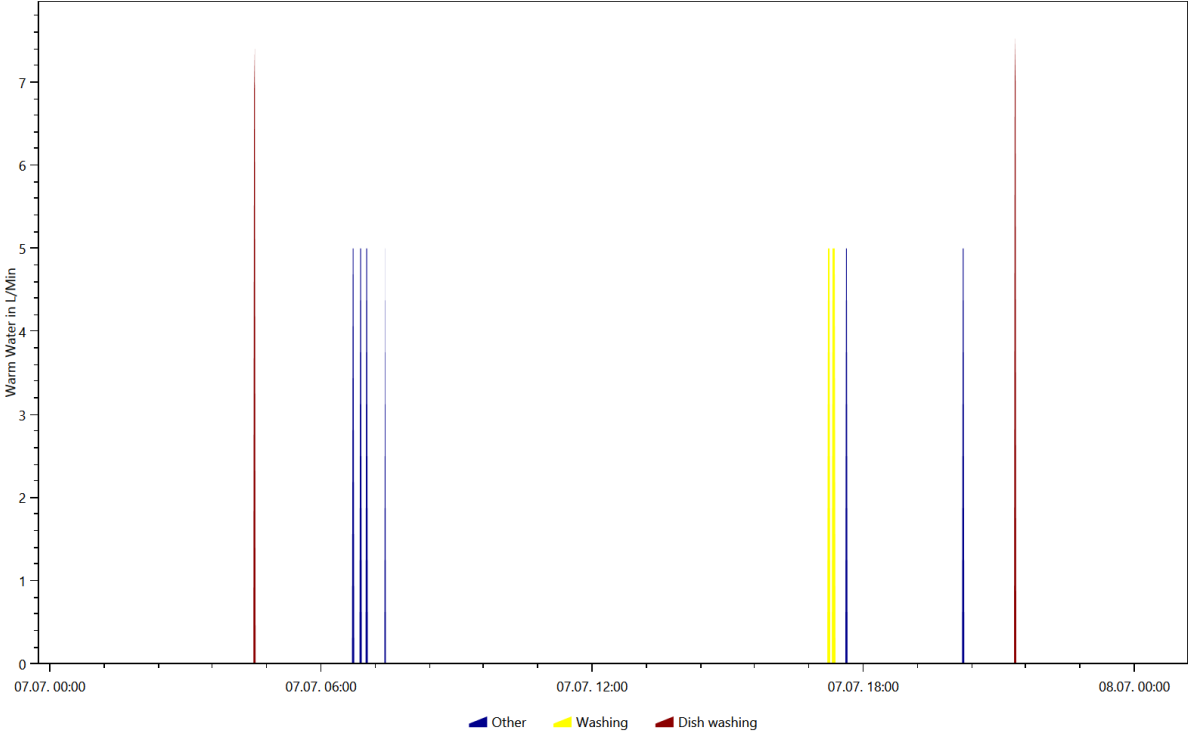
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.27



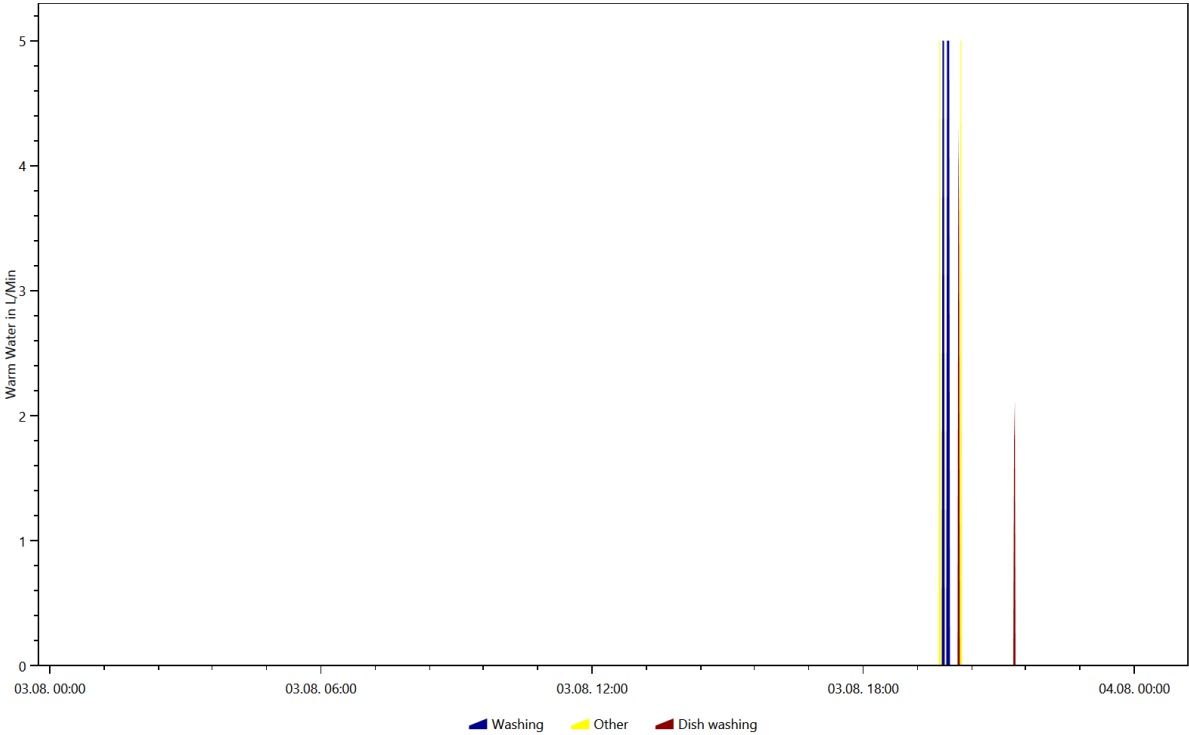
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.30



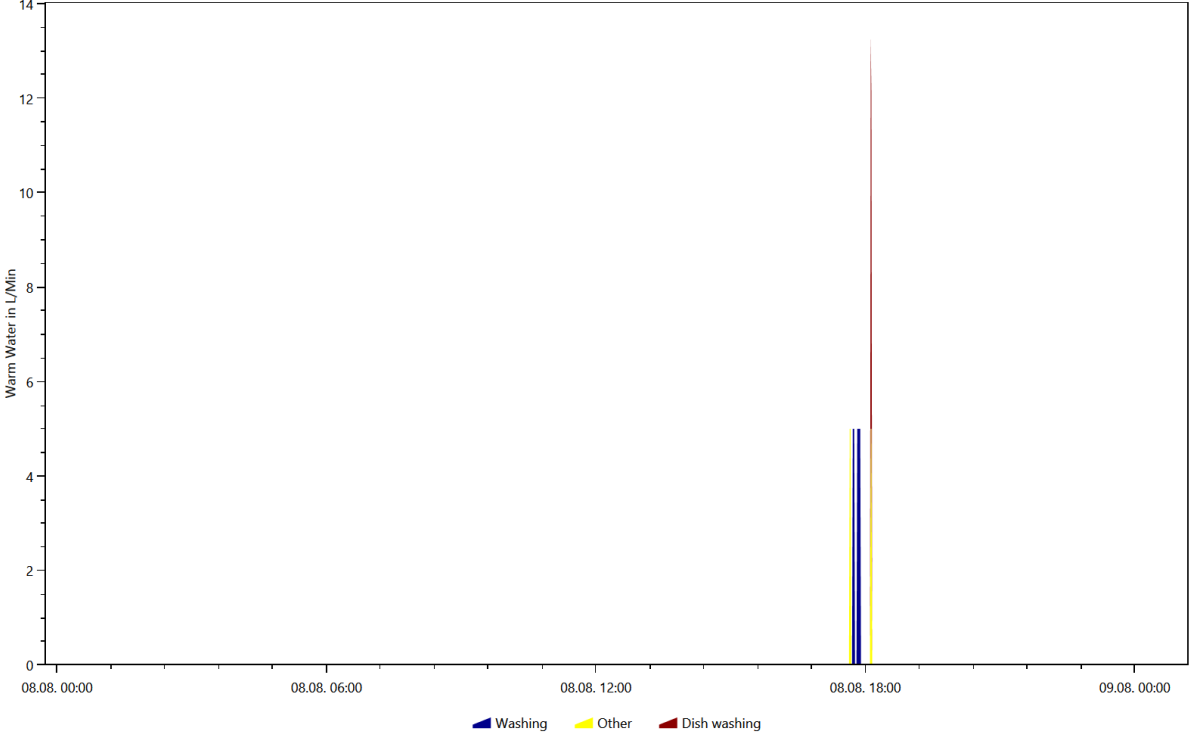
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.7



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.3



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.8

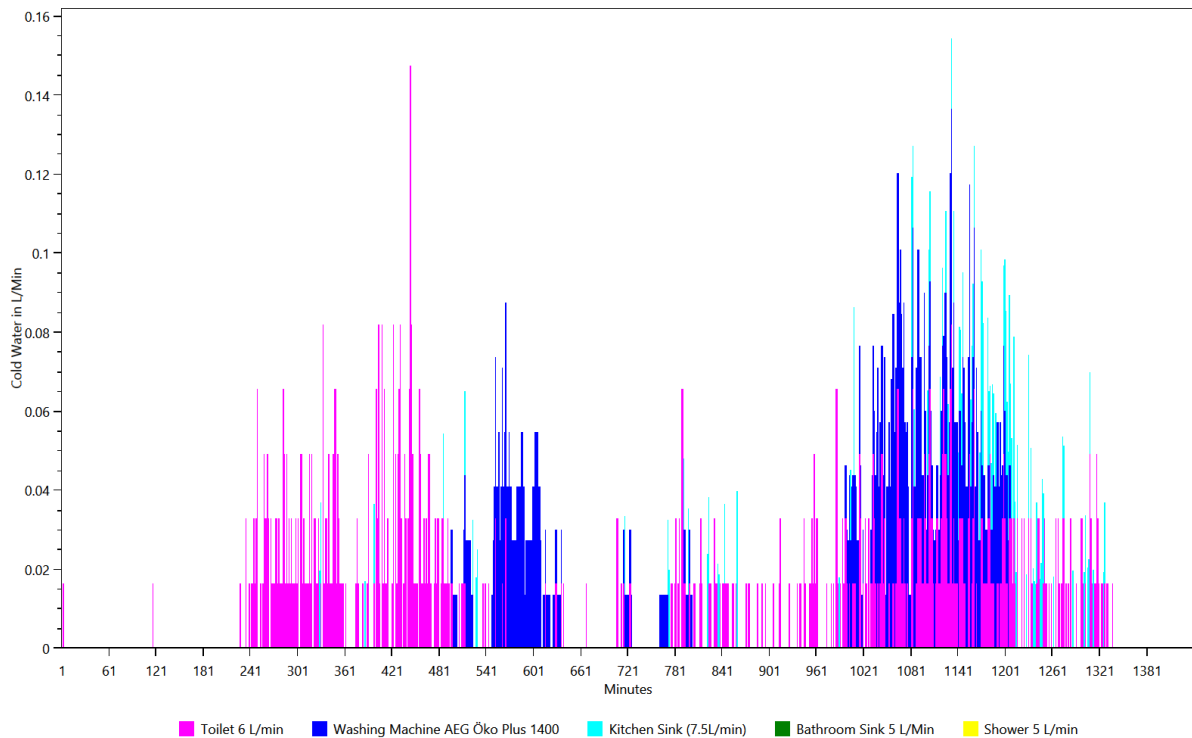


# Overview of the time and power of the use per load type per device

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

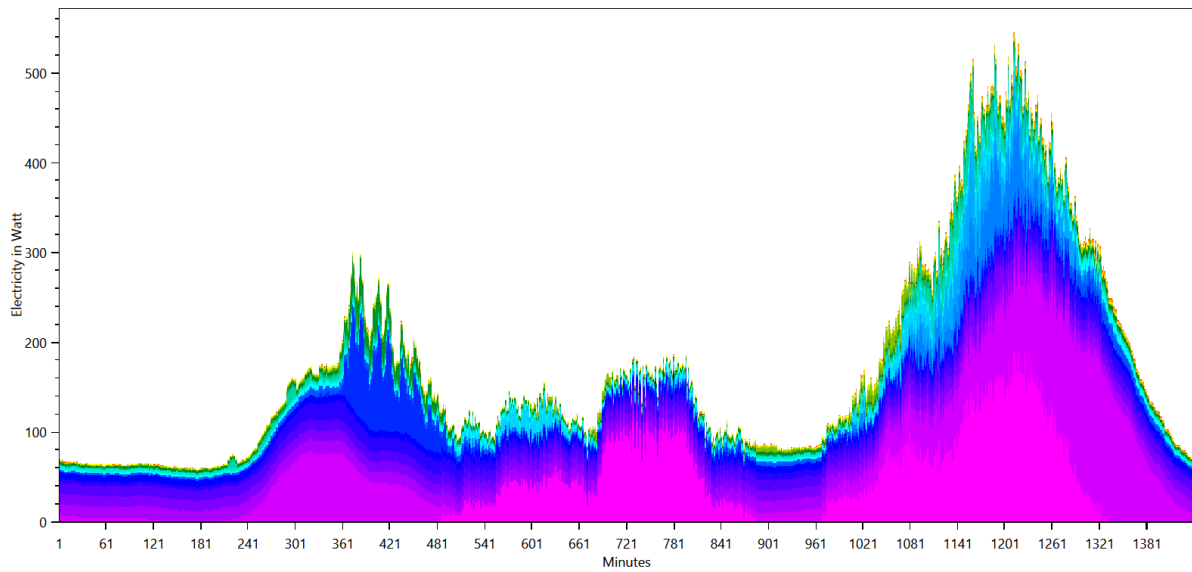
The time of use energy profiles show when each device was used and how much power it used.

## Cold Water



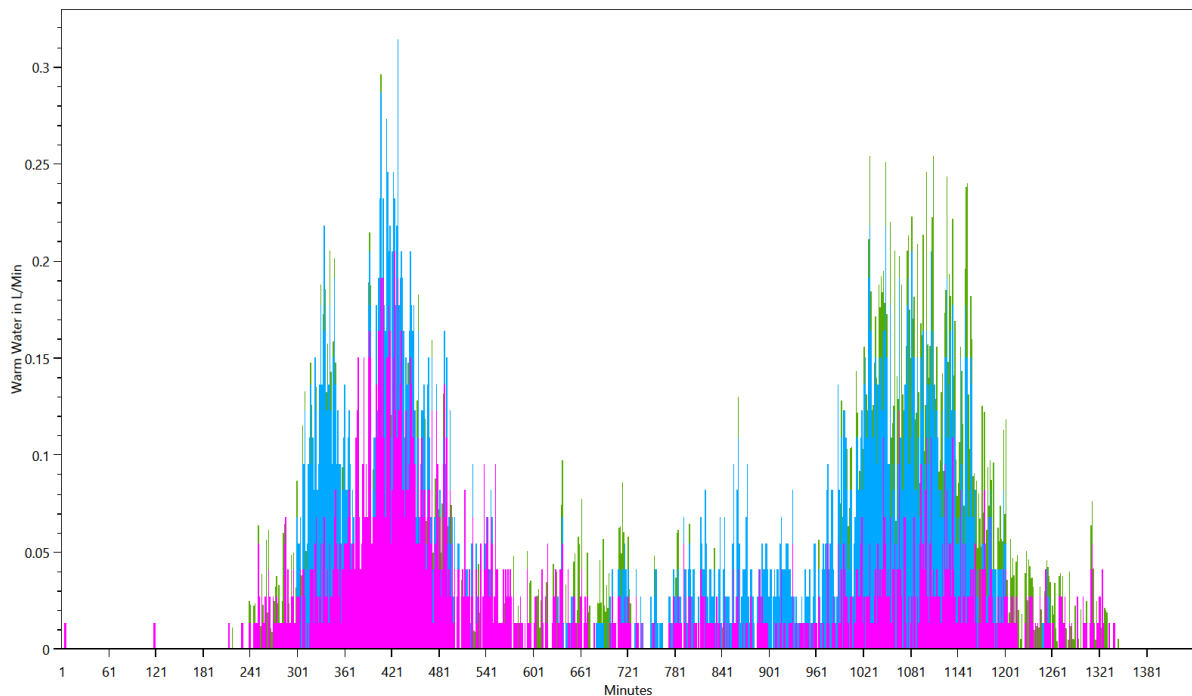


## Electricity



- Miele T 7744 C
- Living Room Light (200W)
- Liebherr CBNPes 3956
- Microwave / Panasonic NN 5259
- Yamaha RX-V667
- Laptop Siemens Amilio from 2005
- Router / AVM FRITZ! Box Fon WLAN 7390
- Electric Kettle / Petra WK288 1.5L
- TV / Phillips 32PFL7605H
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove front left
- Miele DG 1450
- Washing Machine AEG Öko Plus 1400
- Home Cinema System / Samsung HT-D5550
- Hifi System / Sharp XL-HF300PH
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind - full power
- Kitchen Light (60W)
- SAT Receiver / Kathrein UFS913
- Toaster / Tefal Vario
- CD/DVD Player / Phillips CD 380
- Kitchen radio / AEG KRC 4323 CD
- Bathroom Mirror Light 100W (Conventional)
- Canister vacuum cleaner / Siemens VS 06 G 1831
- Electric Razor Braun Cruzer 5
- Bathroom Light (60W)
- Phone / Gigaset E310
- Digitalpiano / Kawai CN-23
- Extractor Hood / Miele DA 429-4
- Bedroom Light (60W)
- Electric Toothbrush Dondodent Professional Clean
- LED Lamp Globe E 14 Ambient 3W matt

## Warm Water



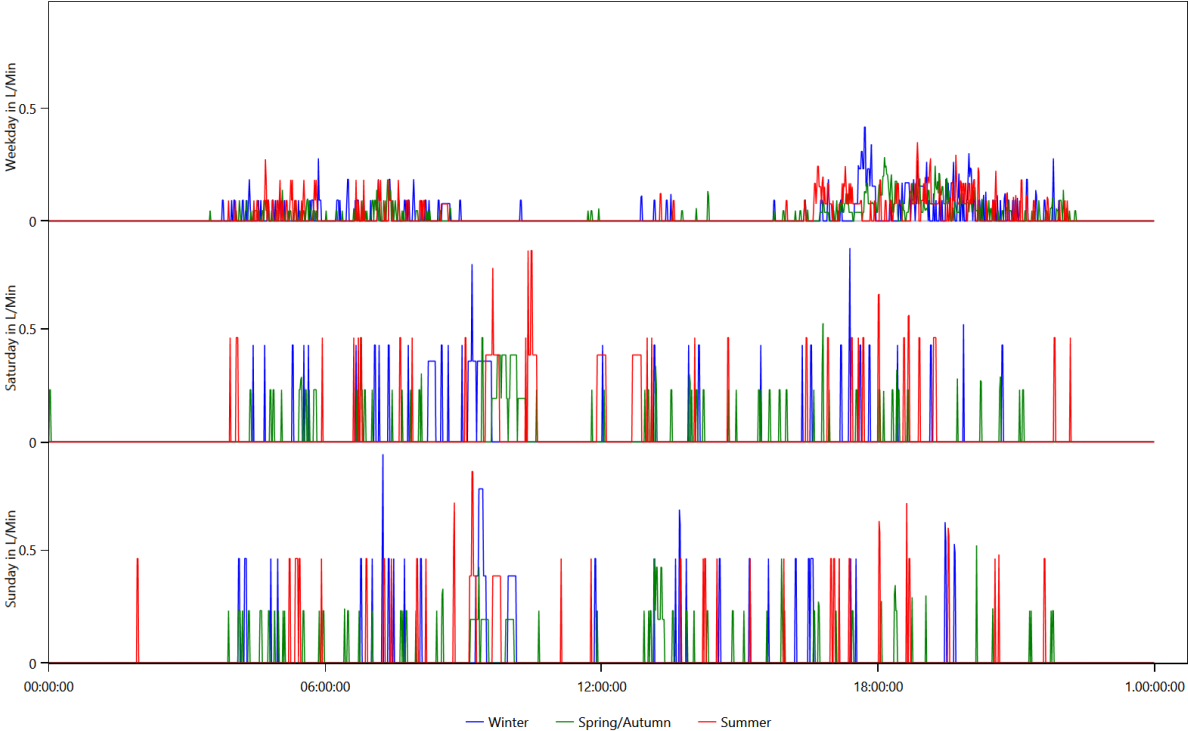
- Bathroom Sink 5 L/Min
- Shower 5 L/min
- Kitchen Sink (7.5L/min)

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

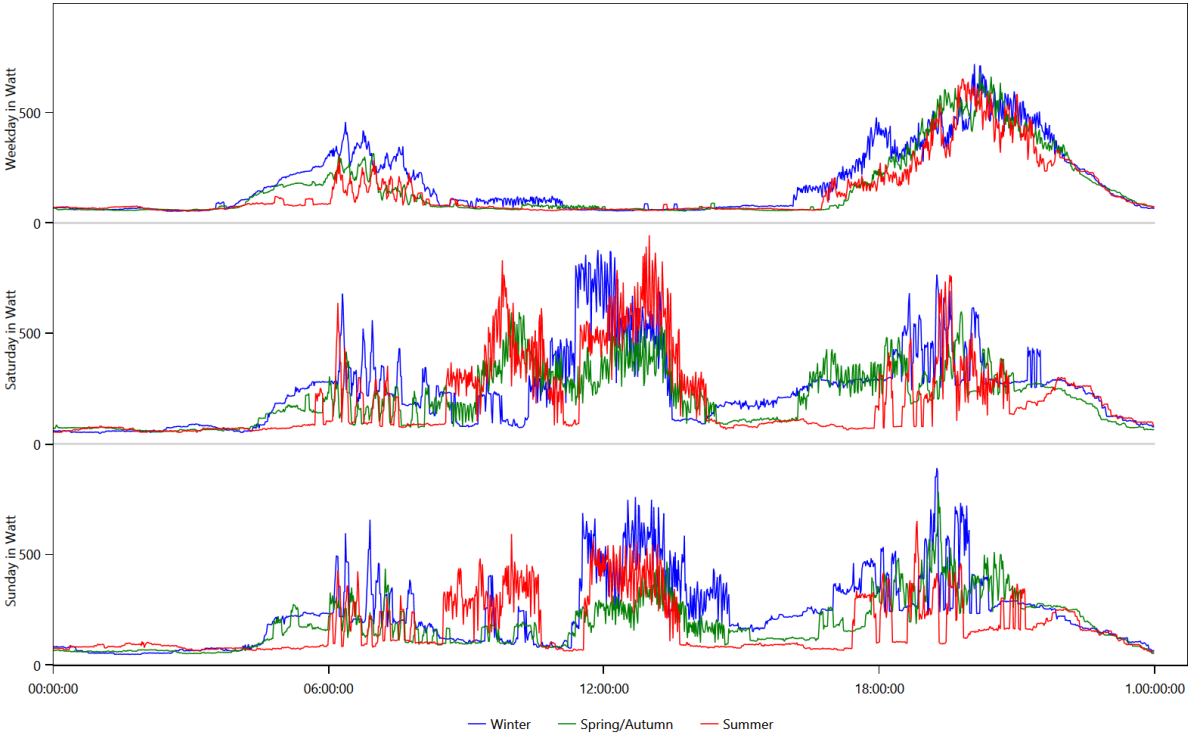
This is made from the files starting with: WeekdayProfiles

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

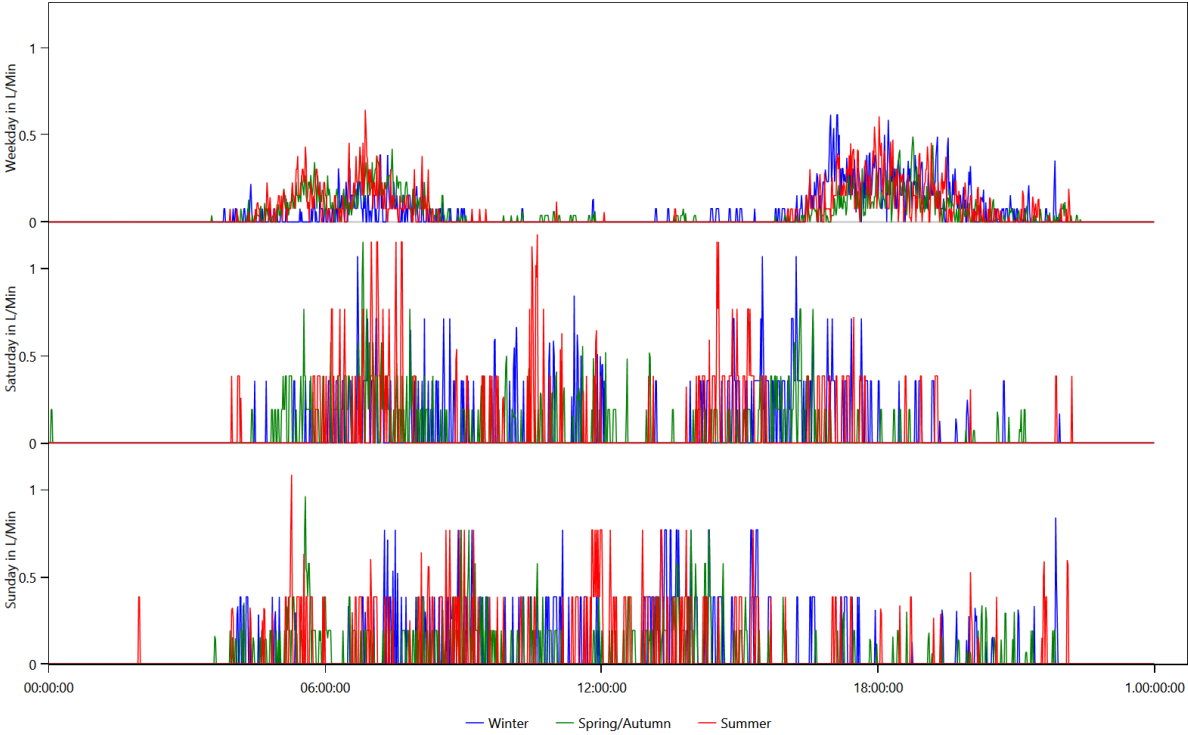
## Cold Water



# Electricity



# Warm Water

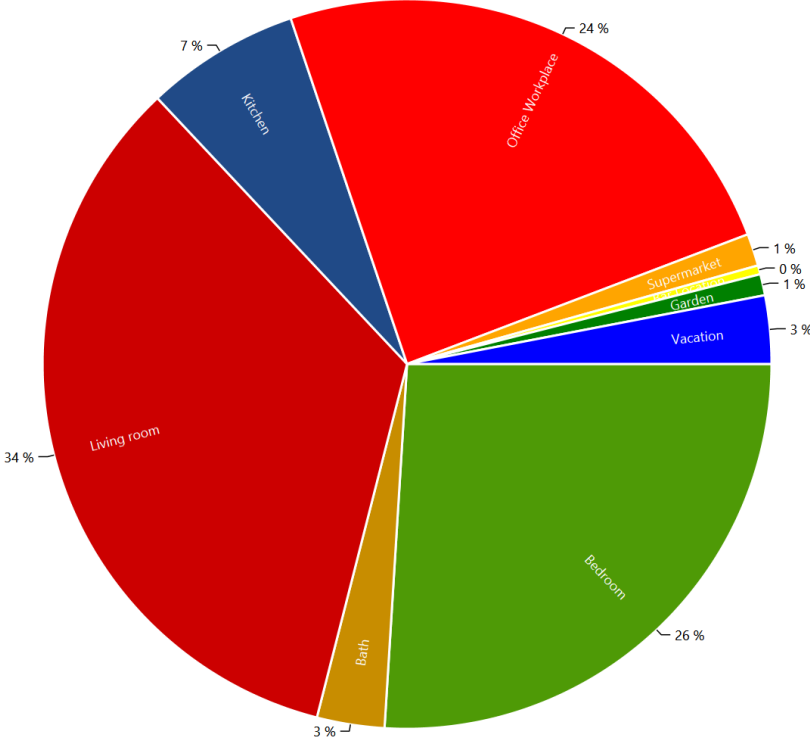


# Location Distribution per Person

This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR29 Benjamin (26 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

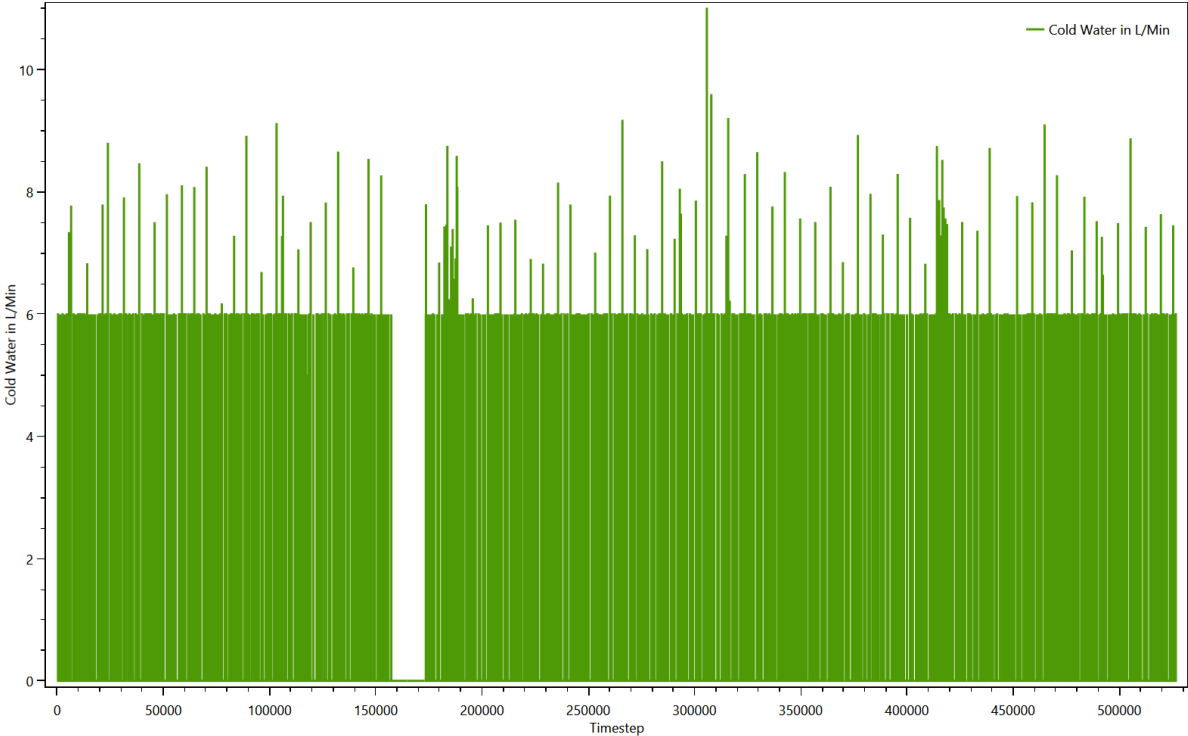
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick  
0;01.01.2016 00:00;CHR29 Benjamin (26/Male);sleep bed 01 (06 h);sleep;False;  
351;01.01.2016 05:51;CHR29 Benjamin (26/Male);go to the toilet;hygiene;False;  
357;01.01.2016 05:57;CHR29 Benjamin (26/Male);use the laptop (1.5 h);Active Entertainment (Computer, Internet etc);False;  
441;01.01.2016 07:21;CHR29 Benjamin (26/Male);get ready in the morning (men);hygiene;False;  
451;01.01.2016 07:31;CHR29 Benjamin (26/Male);eat small breakfast (25min) interrupting subaff, no alarm;cooking;False;  
479;01.01.2016 07:59;CHR29 Benjamin (26/Male);watch a movie for 2 h with home cinema system;Passive Entertainment (TV etc.);False;  
595;01.01.2016 09:55;CHR29 Benjamin (26/Male);work at the office from 8:00 (9 h);work;False;  
1177;01.01.2016 19:37;CHR29 Benjamin (26/Male);take a shower (men);hygiene;False;  
1198;01.01.2016 19:58;CHR29 Benjamin (26/Male);wash 1 dishes by hand;cleaning;False;  
1232;01.01.2016 20:32;CHR29 Benjamin (26/Male);go to the toilet;hygiene;False;  
1237;01.01.2016 20:37;CHR29 Benjamin (26/Male);heat up leftovers;cooking;False;  
1257;01.01.2016 20:57;CHR29 Benjamin (26/Male);use the laptop for Internet, Movie, Music, News (2 h);Active Entertainment (Computer, Internet etc);False;  
1364;01.01.2016 22:44;CHR29 Benjamin (26/Male);sleep bed 01 (06 h);sleep;False;  
1756;02.01.2016 05:16;CHR29 Benjamin (26/Male);use the laptop (1 h);Active Entertainment (Computer, Internet etc);False;  
1824;02.01.2016 06:24;CHR29 Benjamin (26/Male);eat small breakfast (25min) interrupting subaff, no alarm;cooking;False;  
1848;02.01.2016 06:48;CHR29 Benjamin (26/Male);read a book on the couch all the time;Offline Entertainment;False;  
1967;02.01.2016 08:47;CHR29 Benjamin (26/Male);get ready in the morning (men);hygiene;False;  
1978;02.01.2016 08:58;CHR29 Benjamin (26/Male);go to the toilet;hygiene;False;  
1983;02.01.2016 09:03;CHR29 Benjamin (26/Male);use the laptop for Internet, Movie, Music, News (2 h);Active Entertainment (Computer, Internet etc);False;

# Sum Profiles

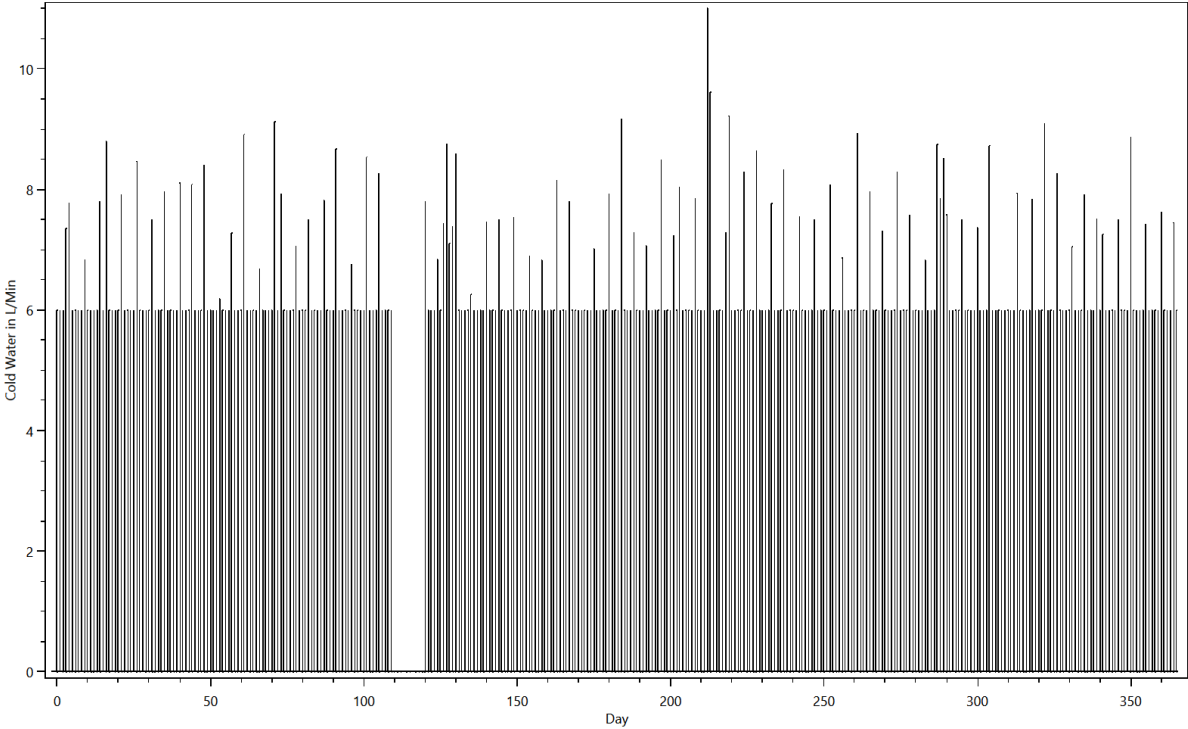
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

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



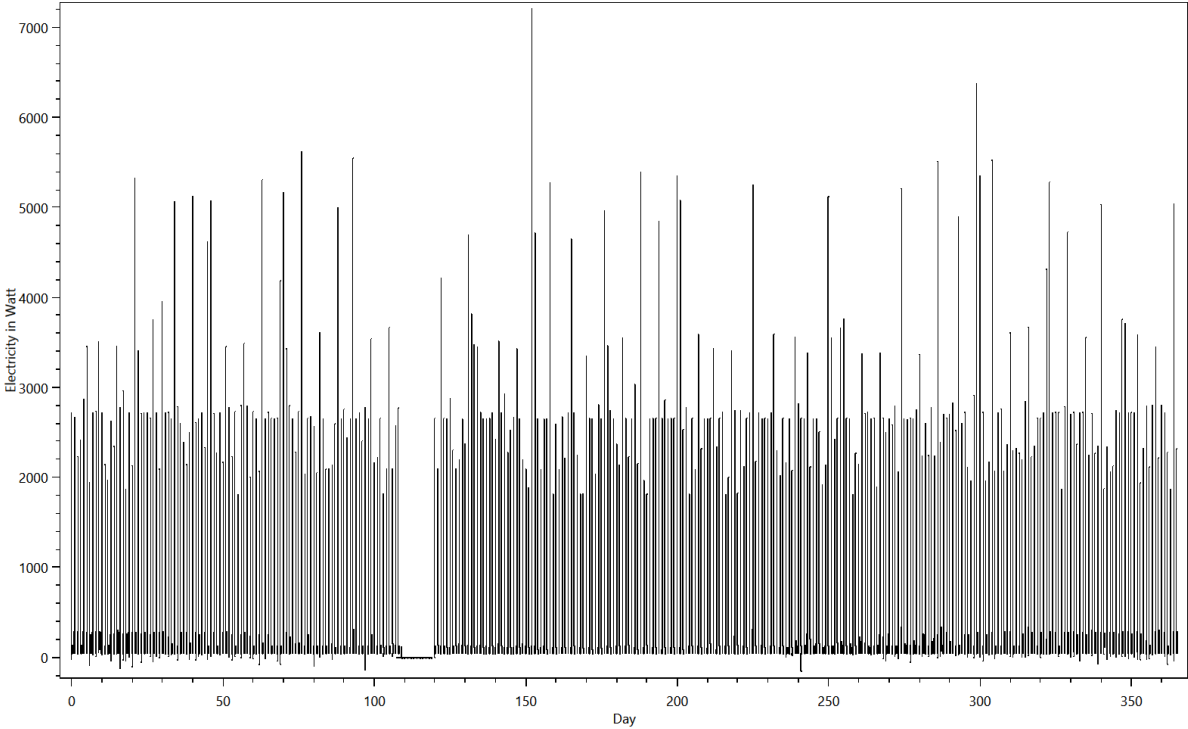
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



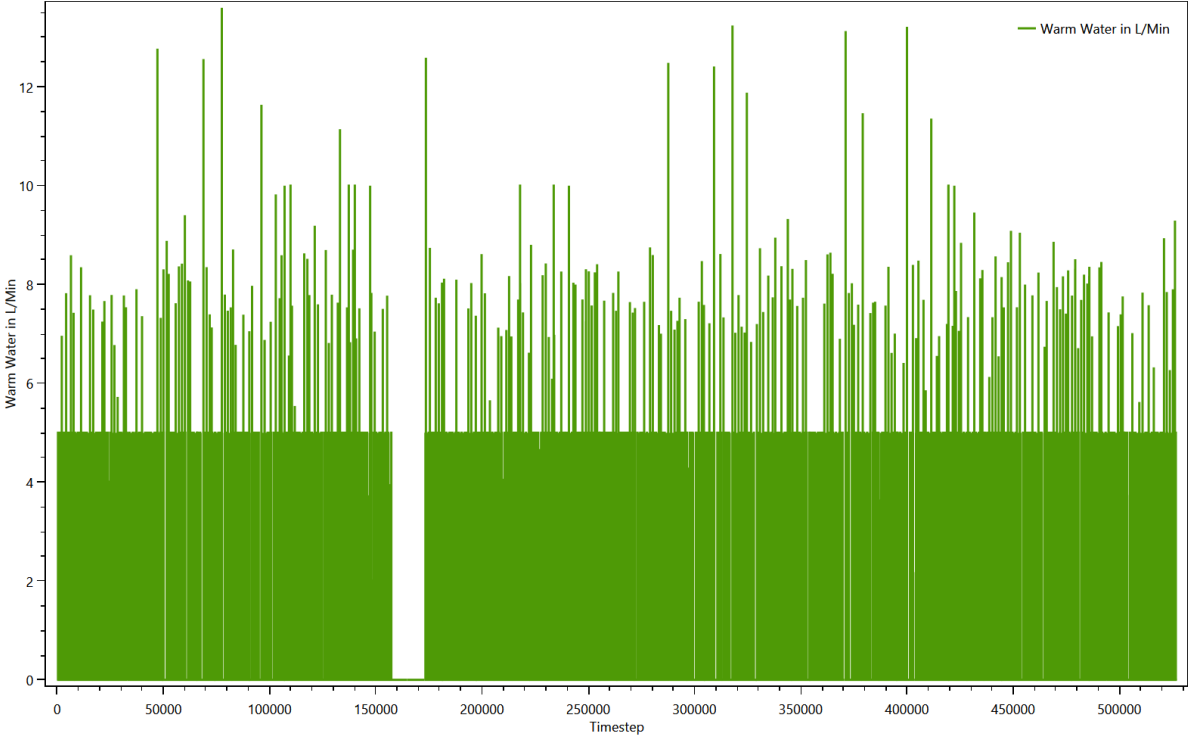
Summed up curve for Electricity from SumProfiles.Electricity.png



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

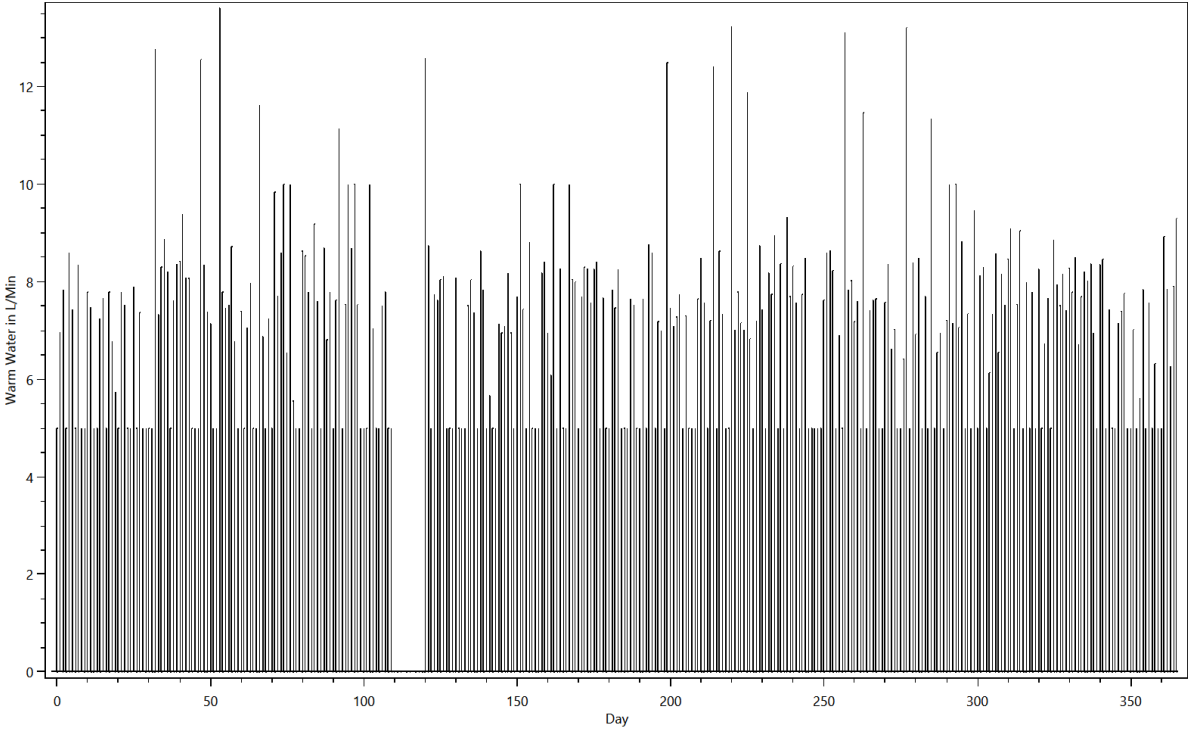


Summed up curve for Warm Water from SumProfiles.Warm Water.png





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.CHR29 Single man under 30 years with work 0.txt

Device;Load Type;Profile;Number of Activations

Bar;None;04 h 0 min 100% [Synthetic];9

Bathroom Light (60W);Electricity;Bath - light [Synthetic for Light Device];507

Bathroom Mirror Light 100W (Conventional);Electricity;Bath - light [Synthetic for Light Device];507

Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];1634

Bed 1;None;06 h 0 min 100% [Synthetic];356

Bedroom Light (60W);Electricity;Bedroom - light [Synthetic for Light Device];28

Book;None;01 h 0 min 100% [Synthetic];1

CD/DVD Player / Phillips CD 380;Electricity;01 h 30 min 100% [Synthetic];104

CD/DVD Player / Phillips CD 380;Electricity;02 h 0 min 100% [Synthetic];7

CD/DVD Player / Phillips CD 380;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8526

Canister vacuum cleaner / Siemens VS 06 G 1831;Electricity;0 h 30 min 100% [Synthetic];12

Cleanser;None;01 h 0 min 100% [Synthetic];47

Couch;None;01 h 0 min 100% [Synthetic];118

Couch;None;02 h 0 min 100% [Synthetic];190

Desk 2;None;0 h 30 min 100% [Synthetic];94

Digitalpiano / Kawai CN-23;Electricity;01 h 0 min 100% [Synthetic];96

Electric Kettle / Petra WK288 1.5L;Electricity;Profile for Electric Kettle Petra WK288 1.5L Electricity

[Measurement by ZSW (1min)];385

Electric Razor Braun Cruzer 5;Electricity;Profile for Electric Razor Braun Cruzer 5 Electricity [Measurement by ZSW (1min)];6488

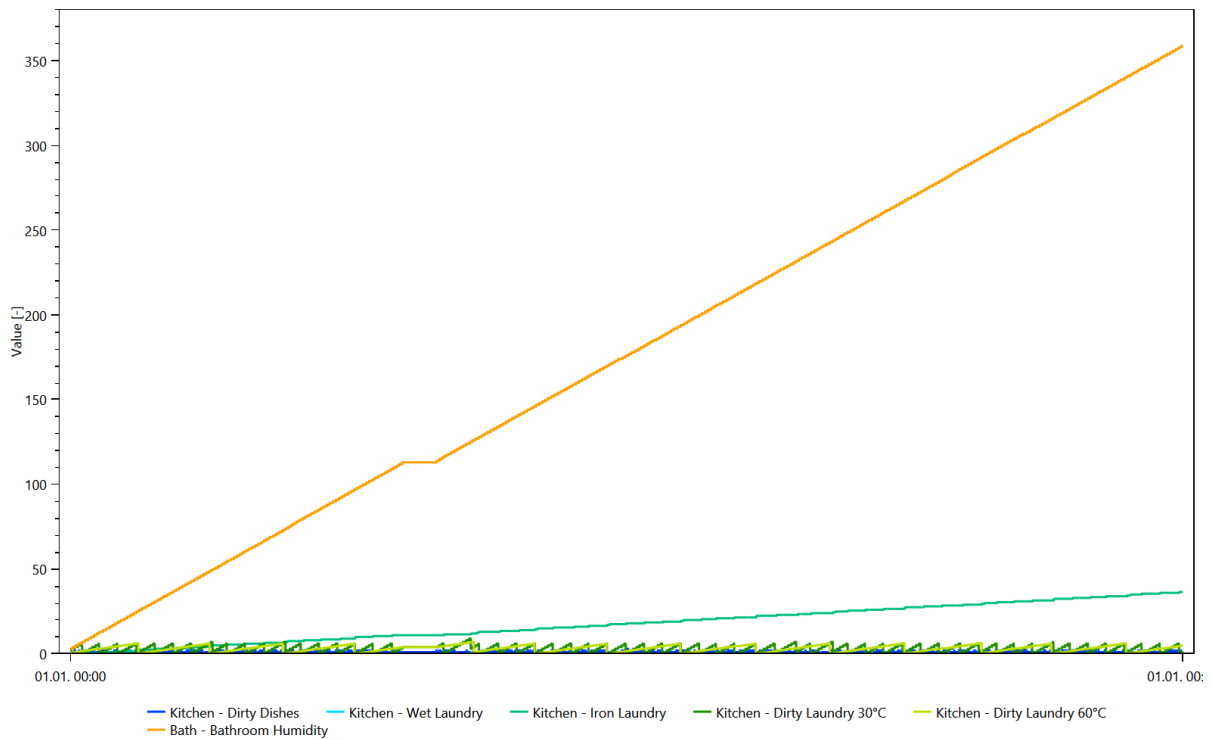
Electric Toothbrush Dondodent Professional Clean;Electricity;Profile for Electric Toothbrush Dondodent Professional Clean Electricity [Measurement by ZSW (1min)];6177

# 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

