

Overview of the results of the household CHR53 2 Parents, 1 Working, 2 Children 0

Calculation Time

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

Energy Intensity: Random

Seed 2031

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

<http://www.loadprofilegenerator.de>

Rendering date:16.12.2016 09:34:46

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	38459.78	L
Electricity	2559.48	kWh
Warm Water	114000.00	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	105.08	L
Electricity	6.99	kWh
Warm Water	311.48	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	17.34	L/Min
Electricity	0.00	5357.96	Watt
Warm Water	0.00	20.00	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	9614.94	L
Electricity	639.87	kWh

Warm Water	28500.00	L
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Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	26.27	L
Electricity	1.75	kWh
Warm Water	77.87	L

Persons

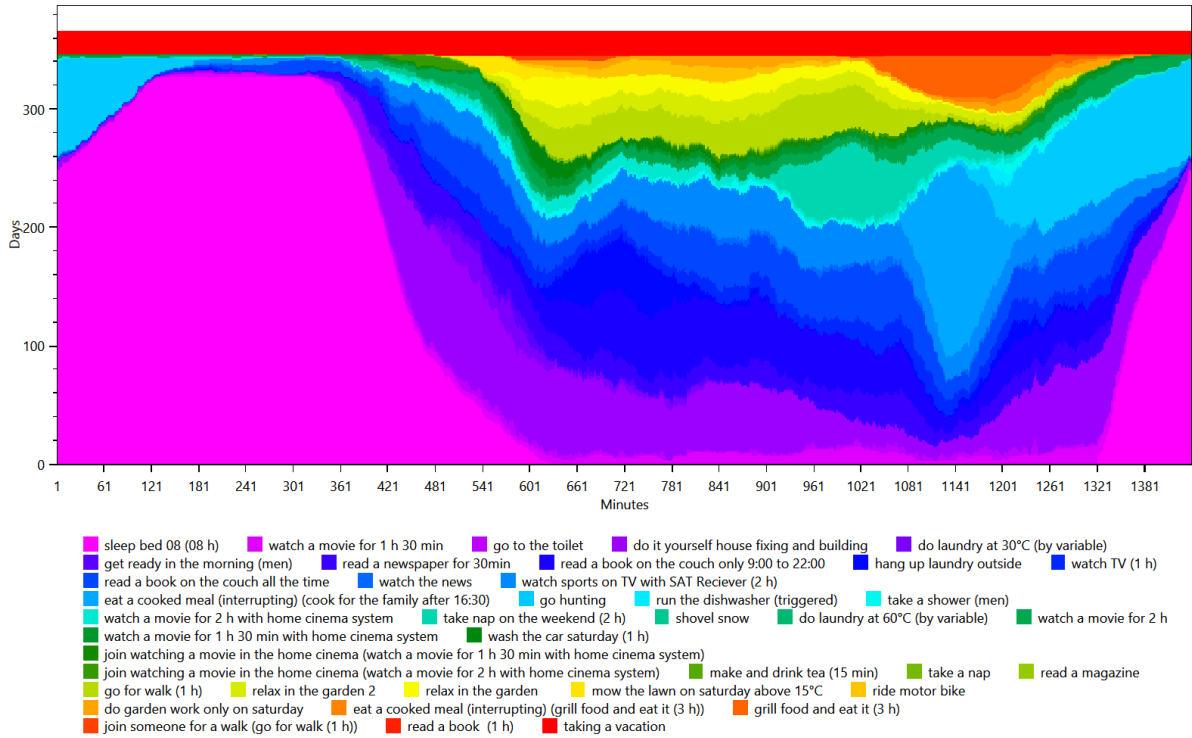
- HH0
 - CHR53 Franz (45/Male)(45/Male)
 - CHR53 Linda (11/Female)(11/Female)
 - CHR53 Robert (15/Male)(15/Male)
 - CHR53 Rosemarie (40/Female)(40/Female)

Activity Frequency Charts

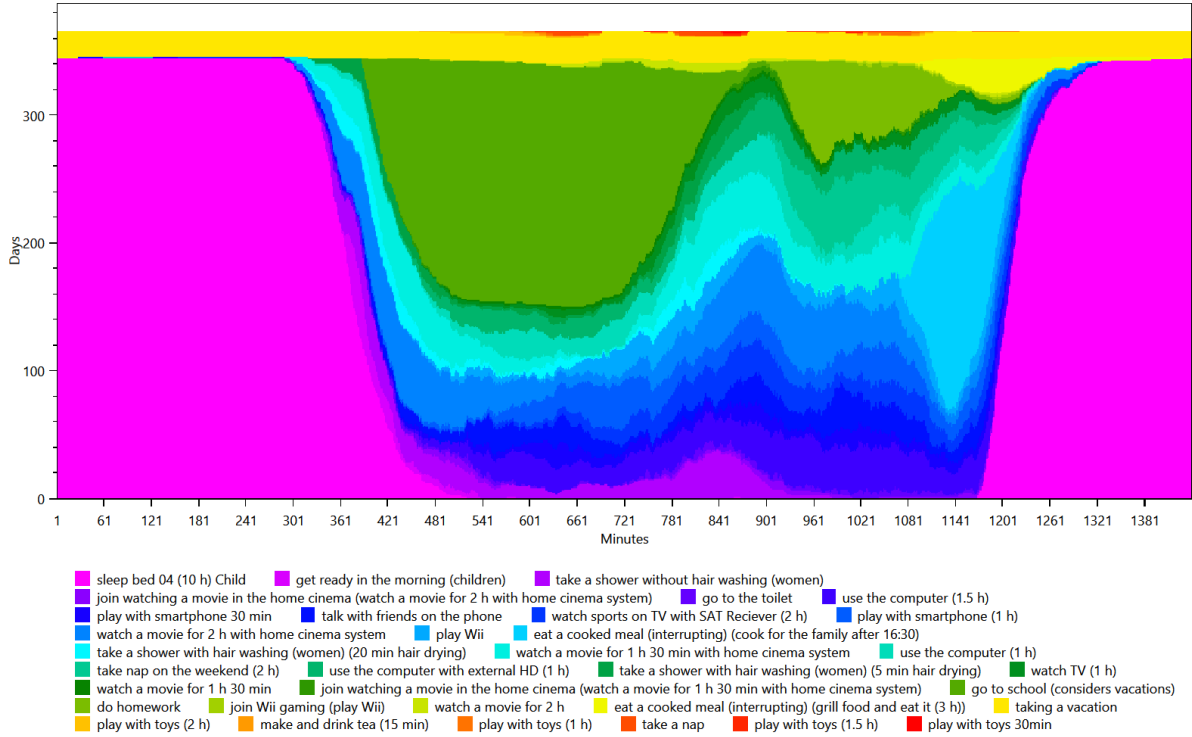
This is made from the files starting with: ActivityFrequenciesPerMinute

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.

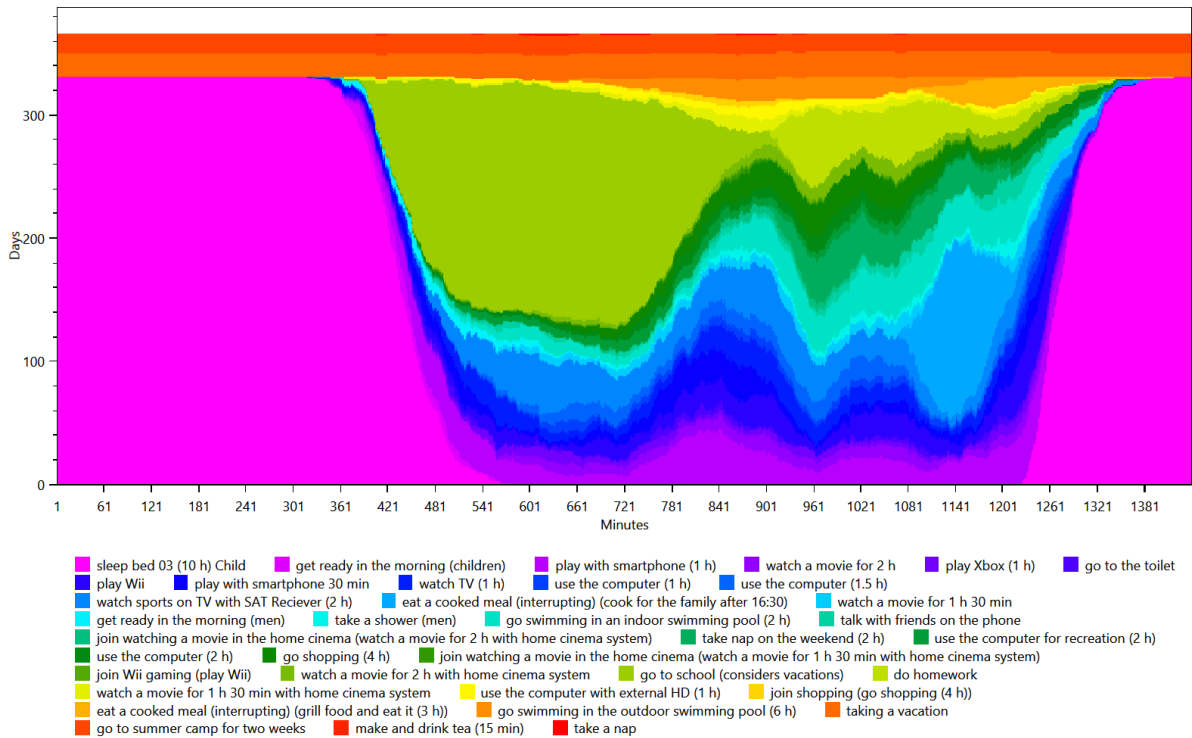
HH0 - CHR53 Franz (45 Male)



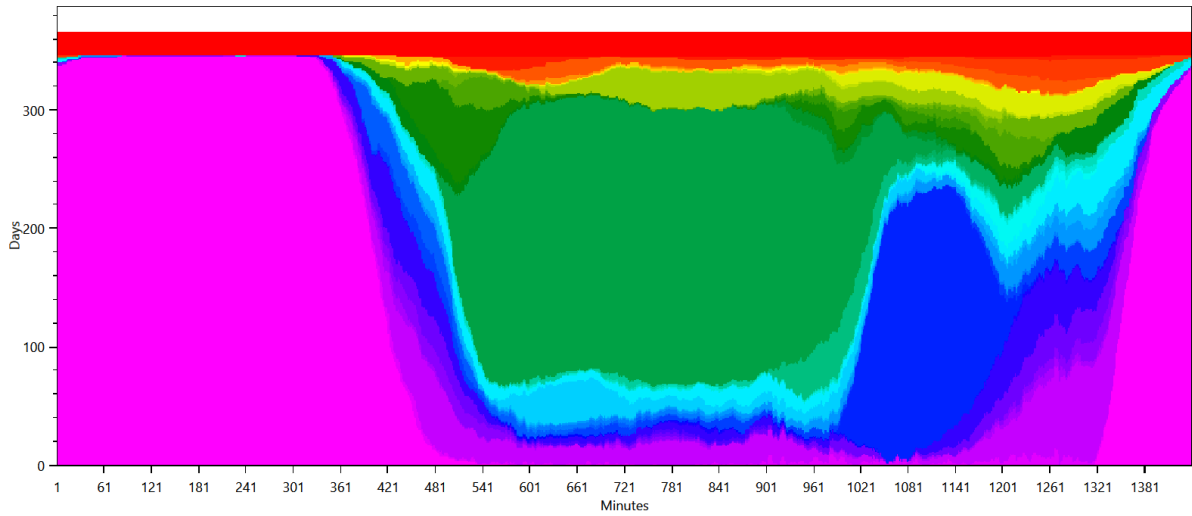
HH0 - CHR53 Linda (11 Female)



HH0 - CHR53 Robert (15 Male)



HH0 - CHR53 Rosemarie (40 Female)



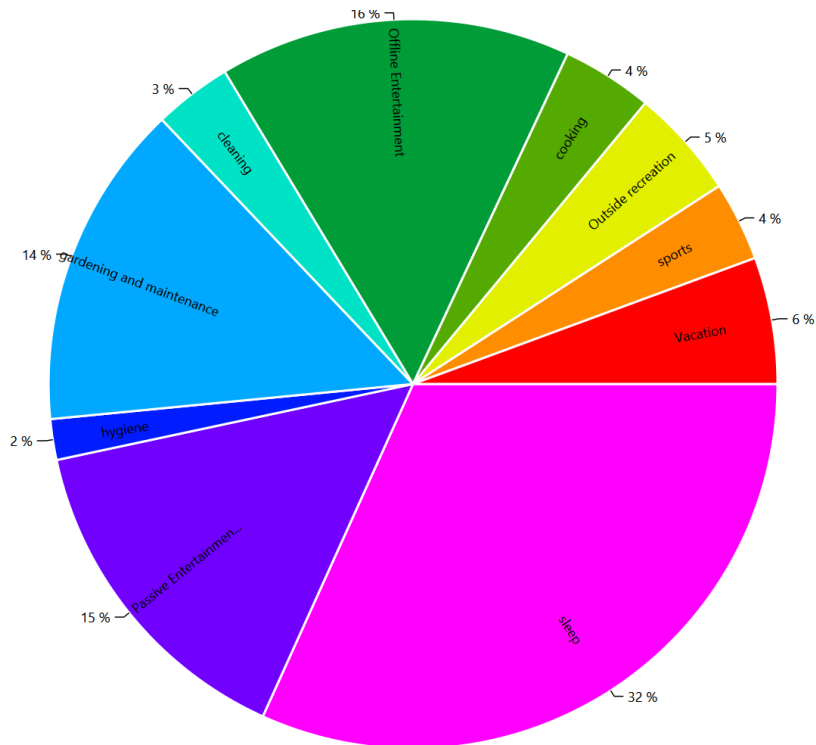
- sleep bed 02 (08 h) ■ go to the toilet ■ read romance novel ■ make and drink tea (15 min) ■ watch a movie for 2 h with home cinema system
- take a shower without hair washing (women) ■ take a nap ■ read a newspaper for 30min ■ read a magazine ■ read a book on the couch only 9:00 to 22:00
- cook for the family after 16:30 ■ watch TV (1 h) ■ get ready in the morning (women) ■ clean the windows ■ iron and watch TV with Sat Receiver (1 h)
- take a shower with hair washing (women) (5 min hair drying) ■ sewing cloths ■ watch sports on TV with SAT Receiver (2 h) ■ take a bath (150L)
- watch the news ■ watch a movie for 2 h ■ vacuum the household ■ take nap on the weekend (2 h) ■ take a bath (200L)
- work at the office from 8:00 (8 h) ■ iron Clothes ■ watch a movie for 1 h 30 min with home cinema system ■ go shopping for food in the supermarket (1.5 h)
- practice Tuba ■ clean the bath ■ take a shower with hair washing (women) (20 min hair drying) ■ dust the house ■ go shopping (4 h)
- watch a movie for 1 h 30 min ■ go to a dancing class ■ join watching a movie in the home cinema (watch a movie for 2 h with home cinema system)
- read a book on the couch all the time ■ join shopping (go shopping (4 h))
- join watching a movie in the home cinema (watch a movie for 1 h 30 min with home cinema system) ■ join someone for a walk (go for walk (1 h))
- watch TV with someone (watch TV (1 h)) ■ go for walk (1 h) ■ grill food and eat it (3 h) ■ do garden work only on saturday ■ taking a vacation

Activity Distribution per Person

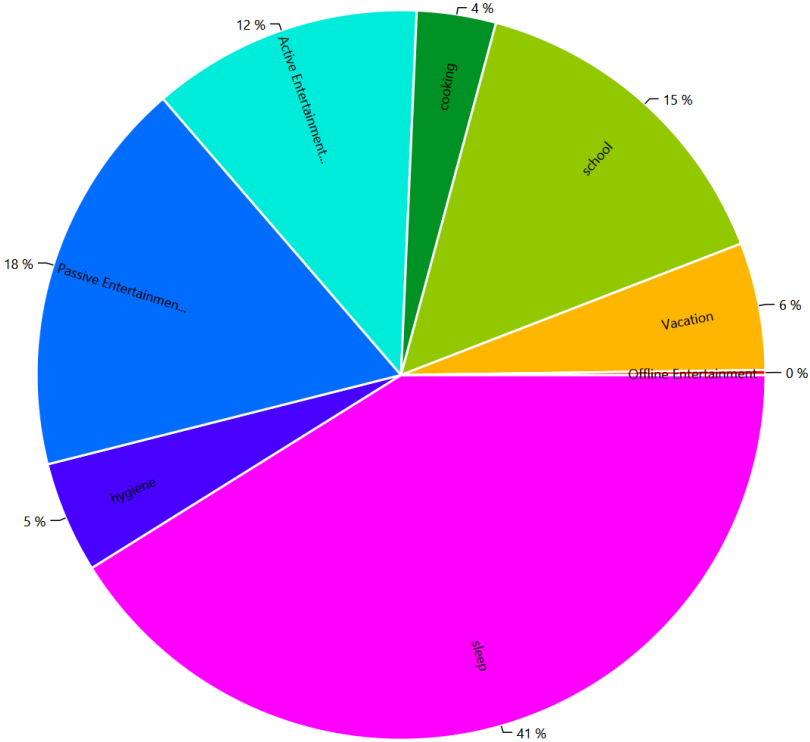
This is made from the files starting with: ActivityPercentage

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

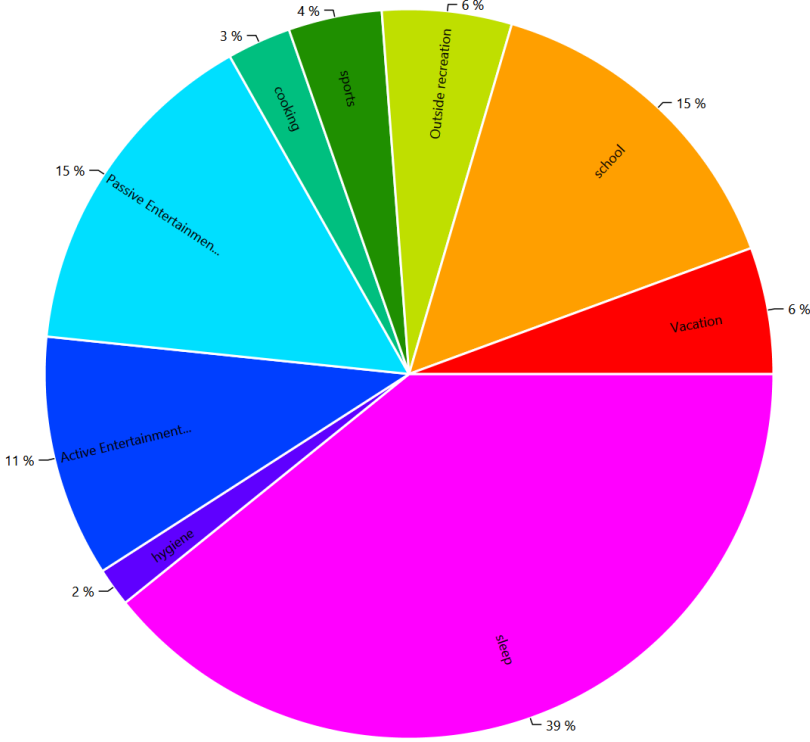
HH0 - CHR53 Franz (45 Male)



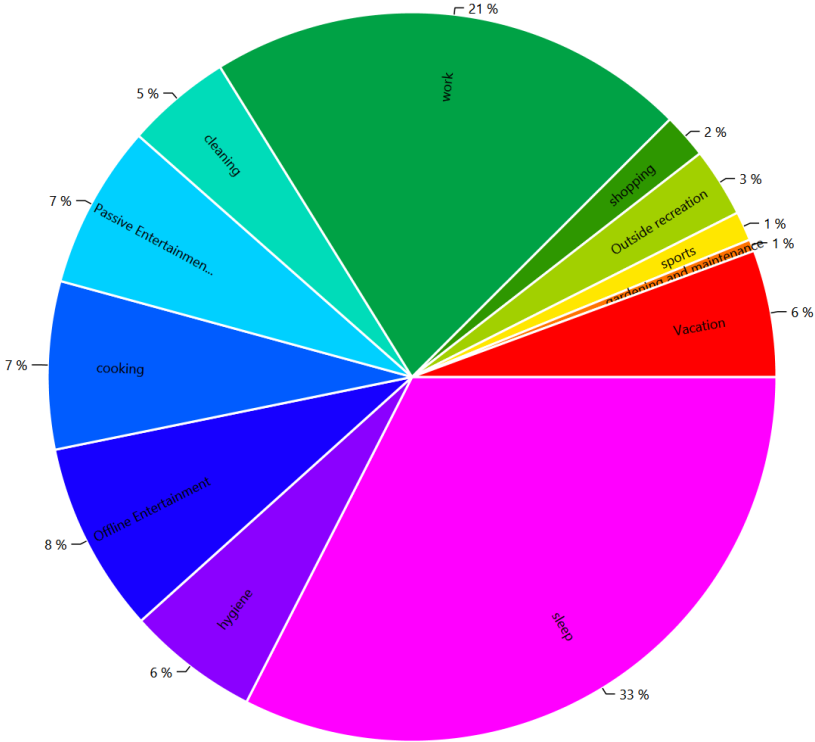
HH0 - CHR53 Linda (11 Female)



HH0 - CHR53 Robert (15 Male)



HH0 - CHR53 Rosemarie (40 Female)

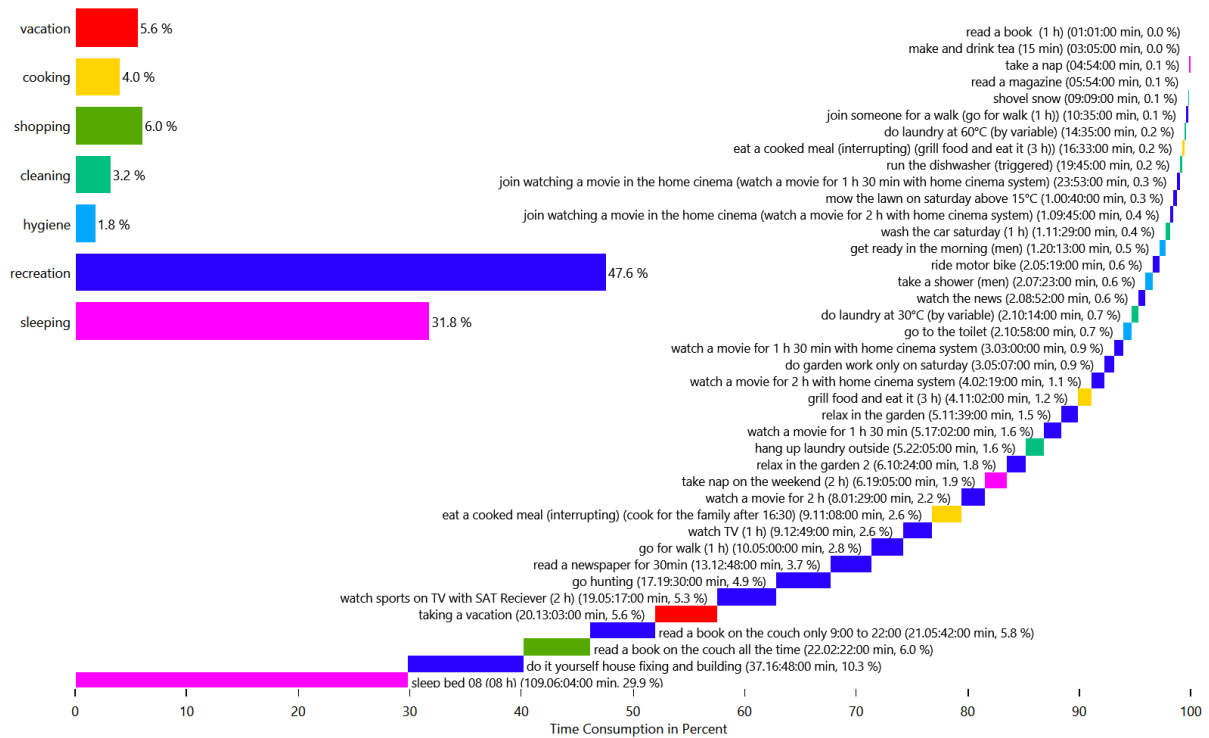


Time Use per Person per Affordance Per Person

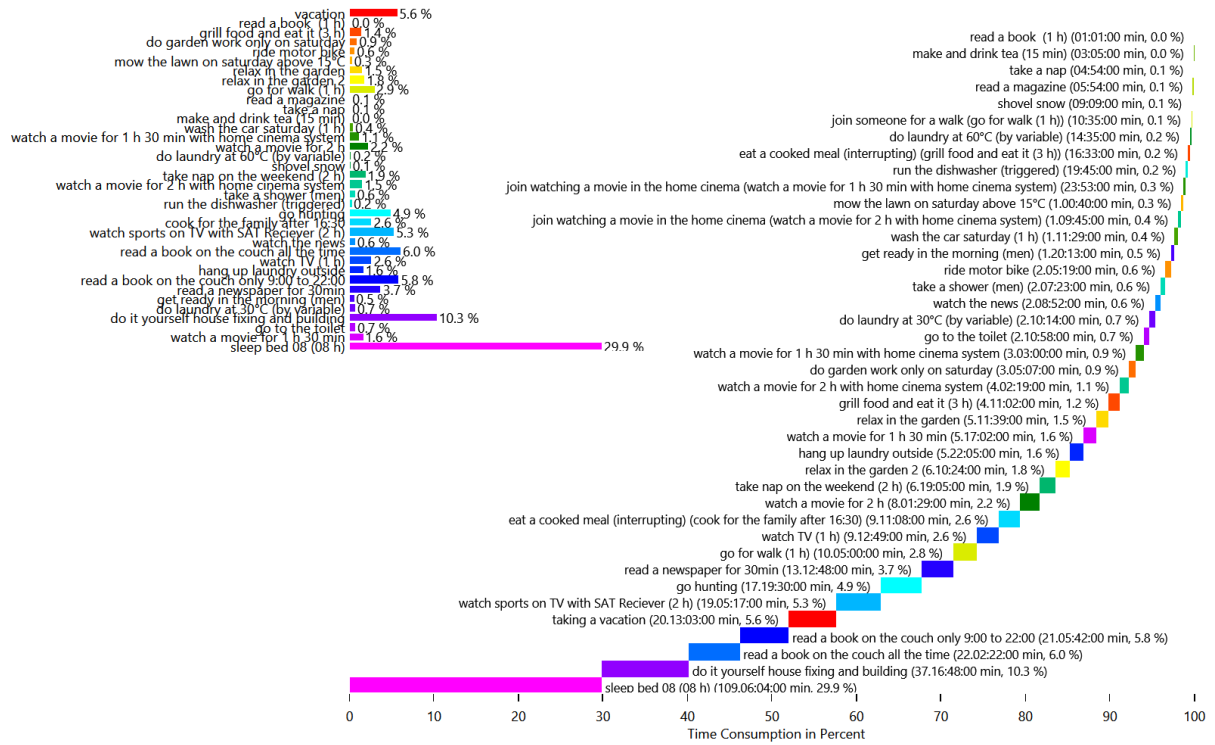
This is made from the files starting with: AffordanceTimeUse

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 - CHR53 Franz (45 Male)



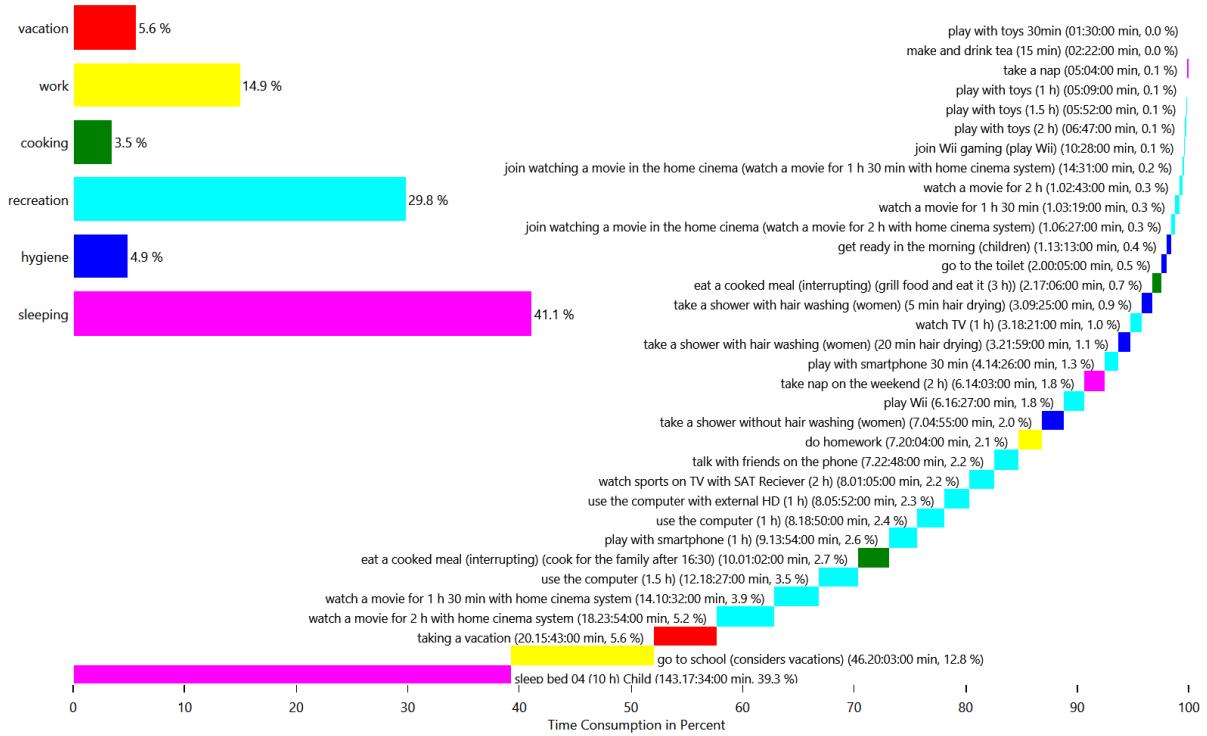
HH0 - CHR53 Franz (45 Male)



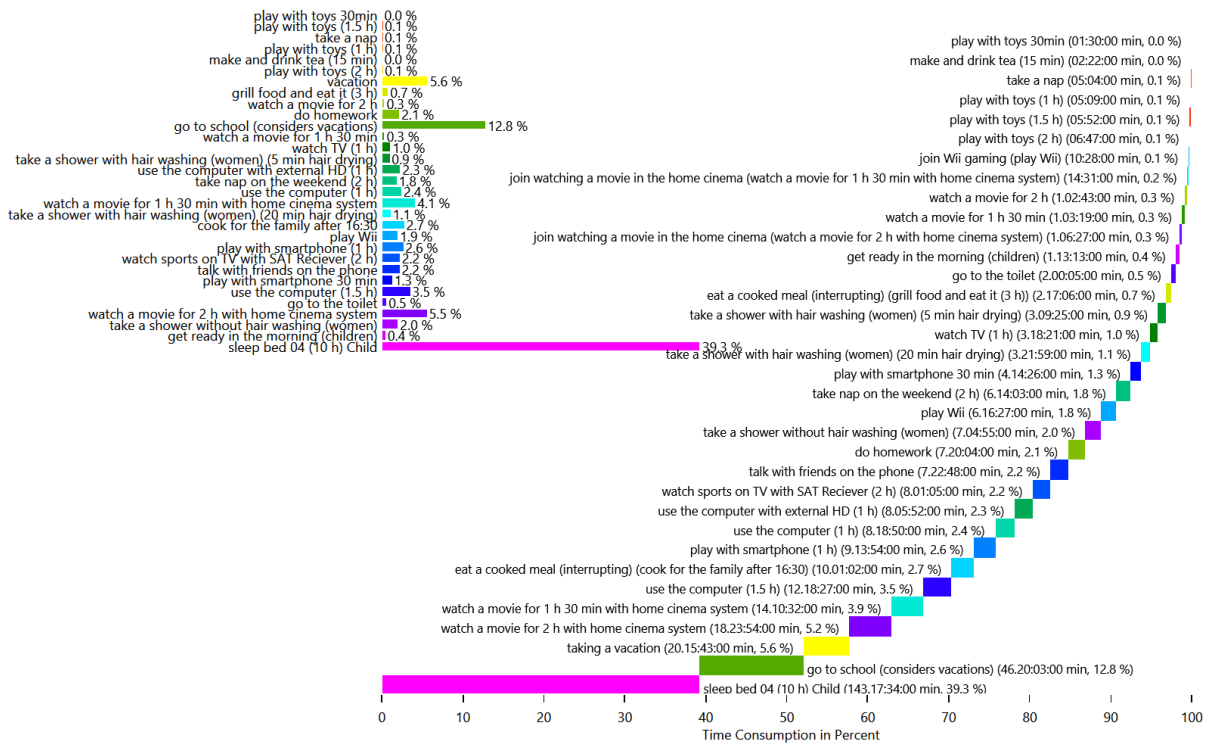
HH0 - CHR53 Franz (45 Male)



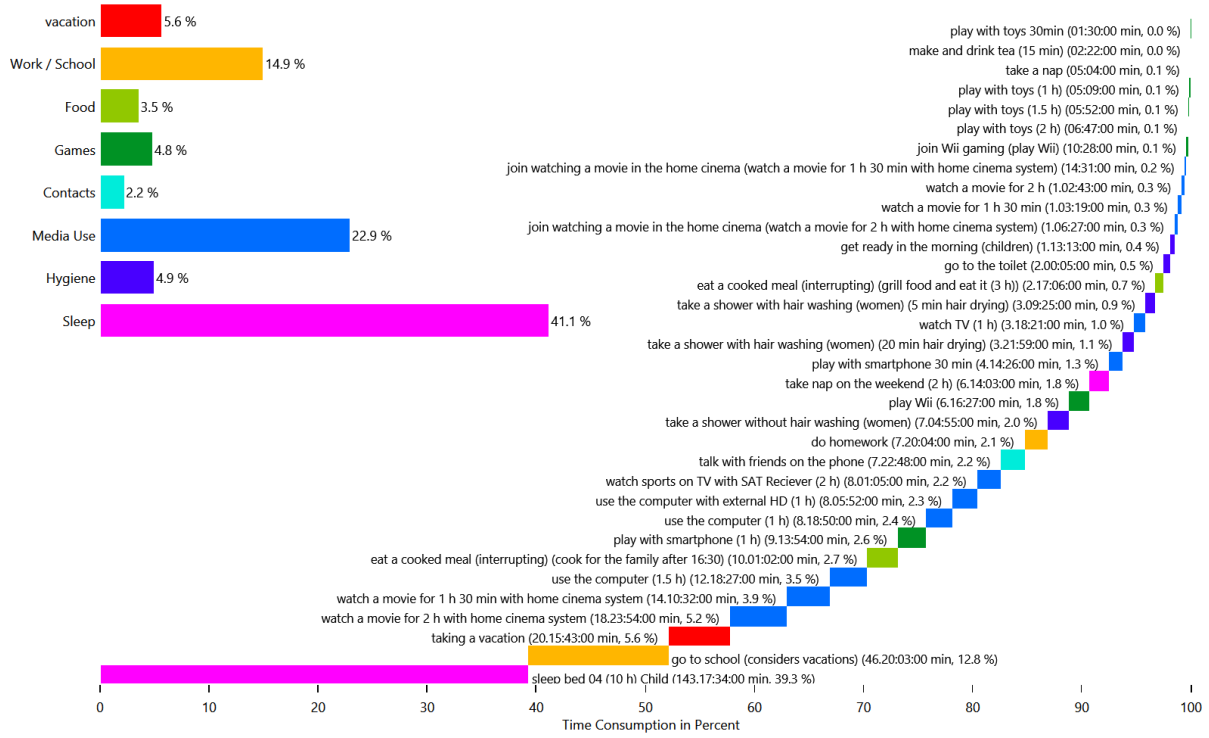
HH0 - CHR53 Linda (11 Female)



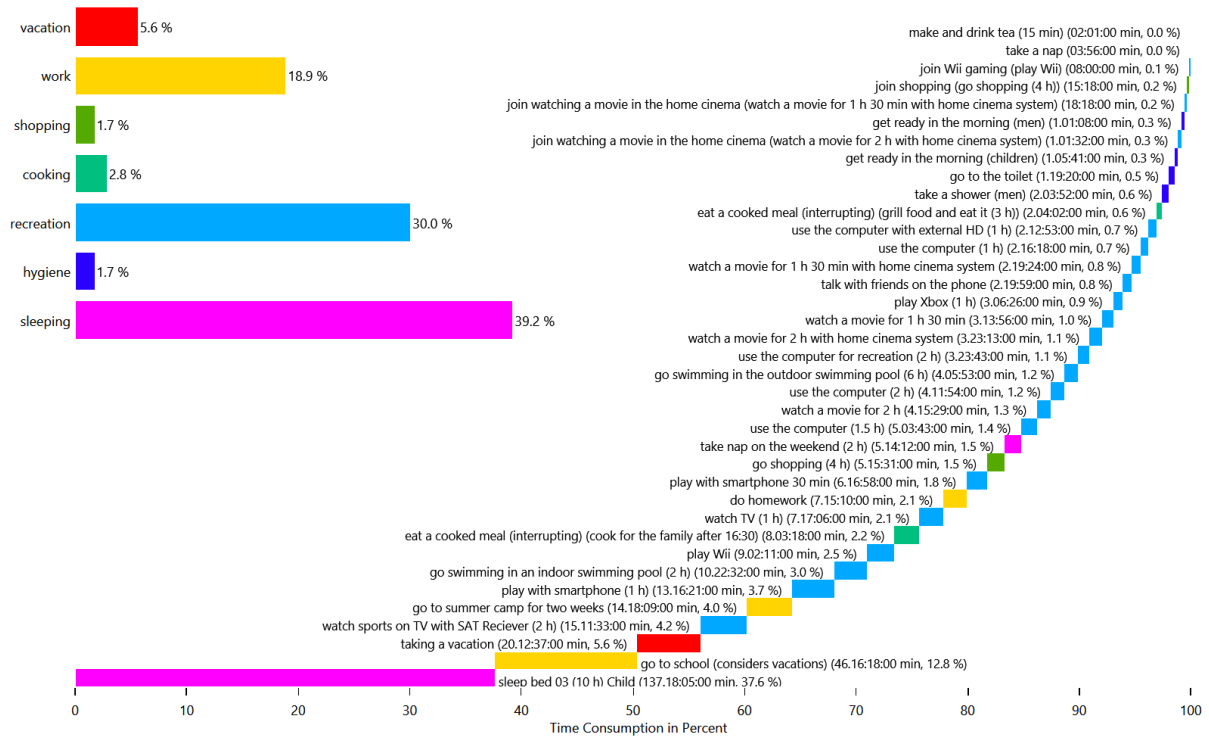
HH0 - CHR53 Linda (11 Female)



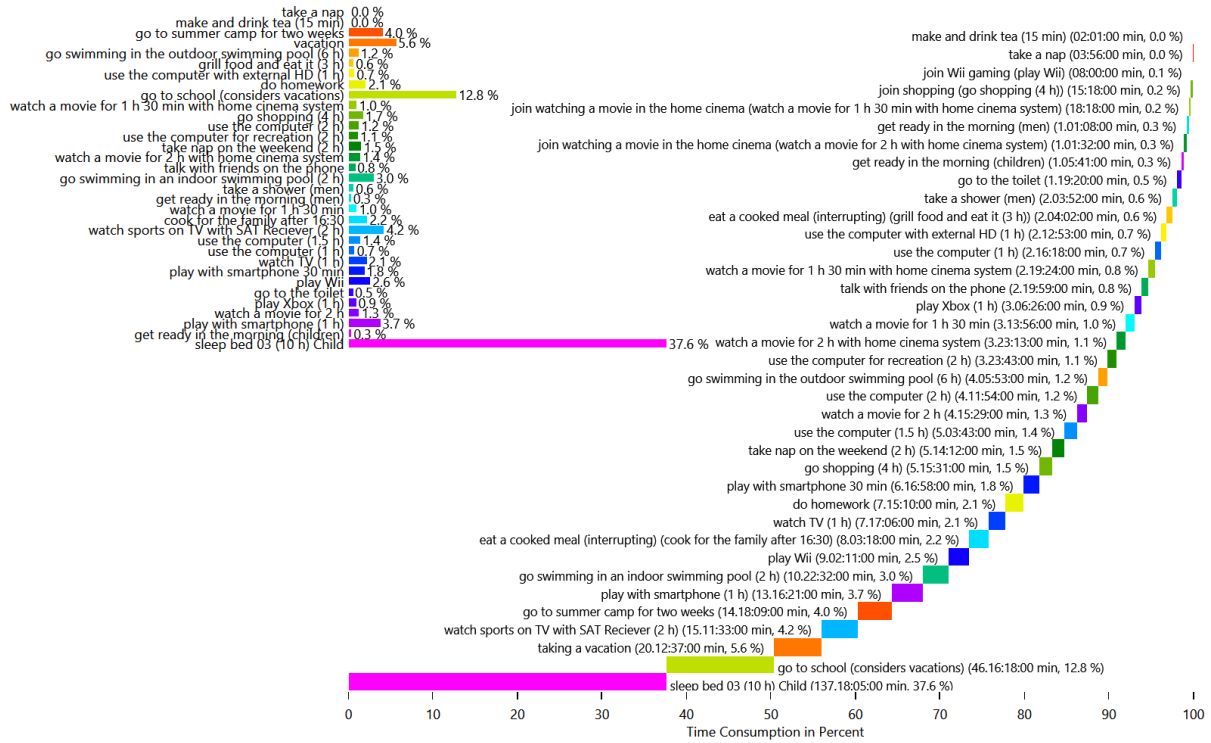
HH0 - CHR53 Linda (11 Female)



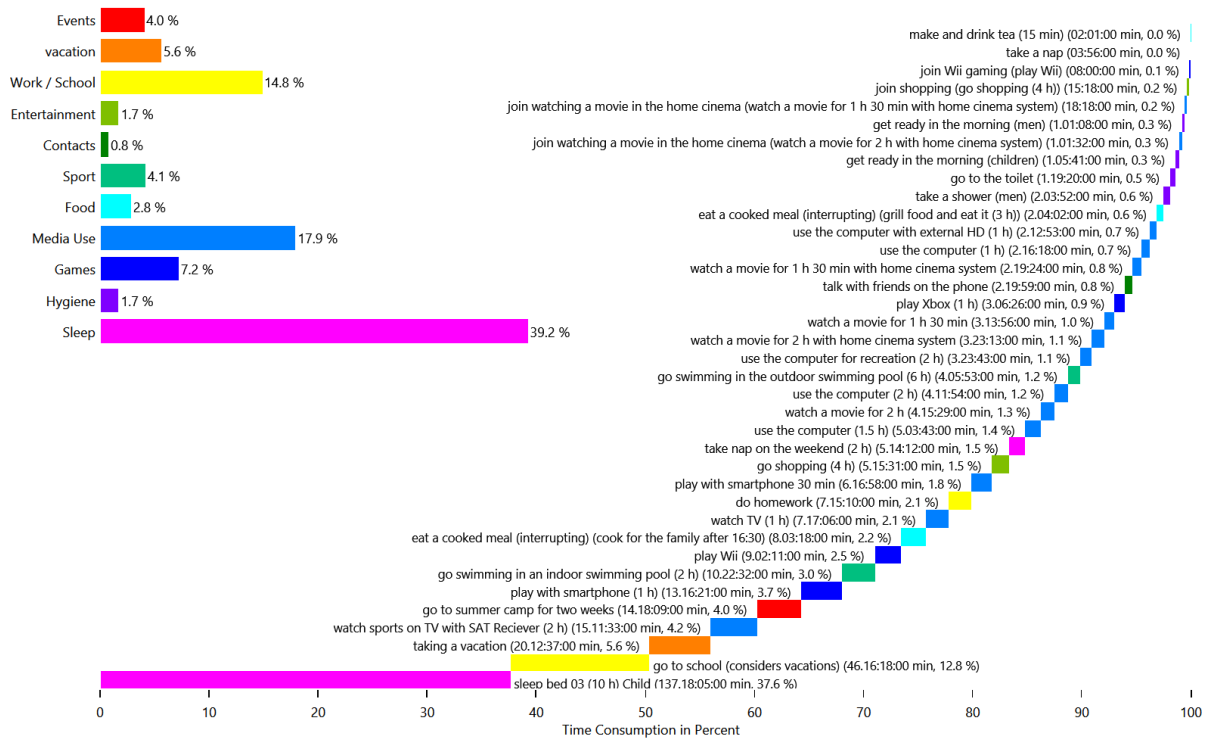
HH0 - CHR53 Robert (15 Male)



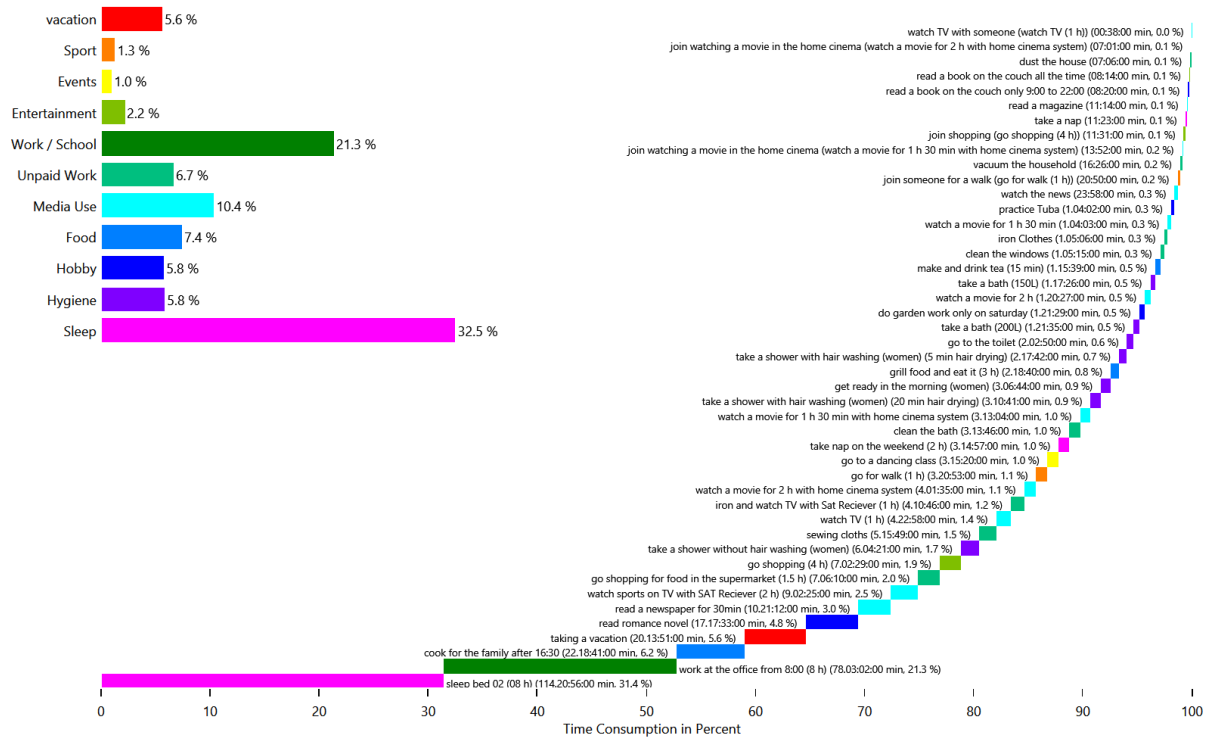
HH0 - CHR53 Robert (15 Male)



HH0 - CHR53 Robert (15 Male)



HH0 - CHR53 Rosemarie (40 Female)

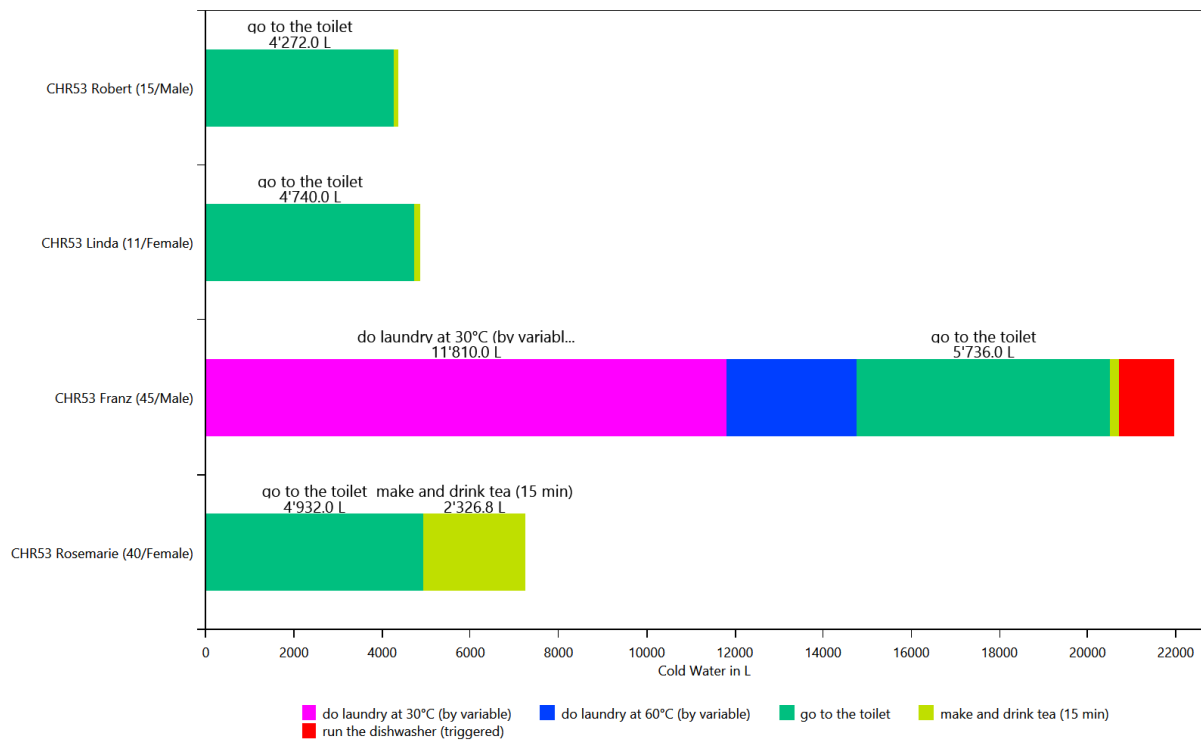


Energy use per person per affordance

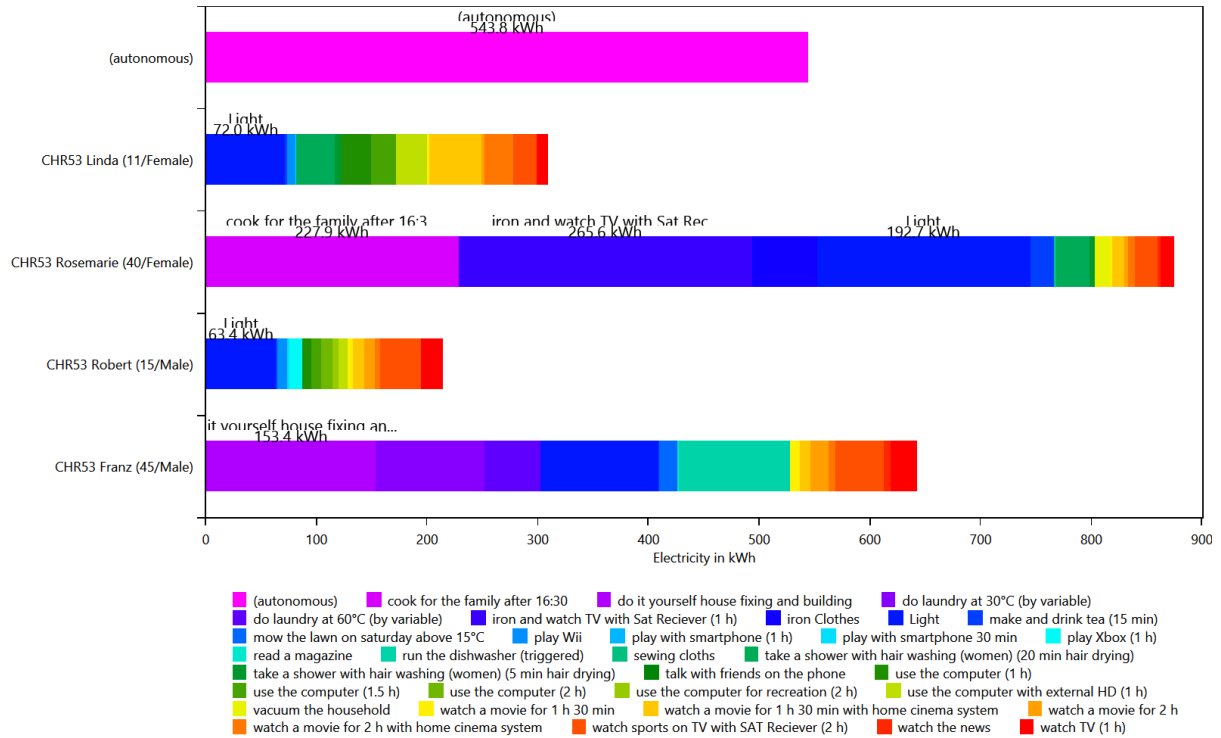
This is made from the files starting with: `AffordanceEnergyUsePerPerson`

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.

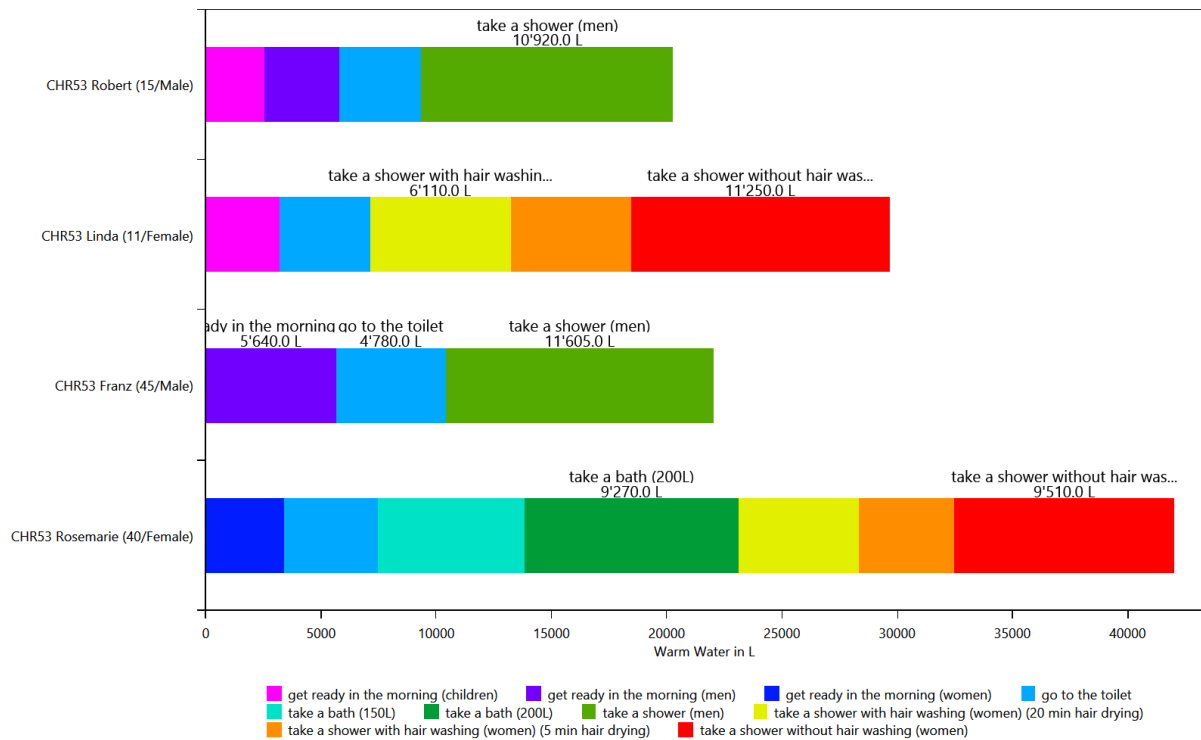
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

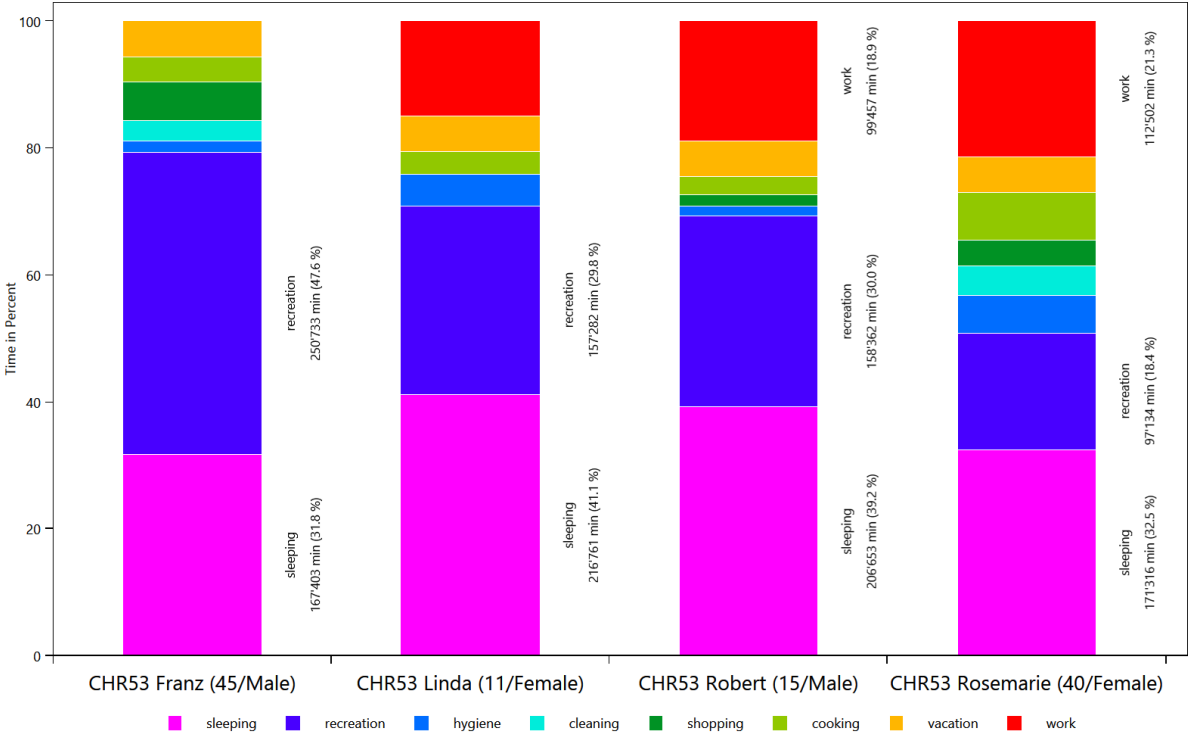


Time Use per Person Per Affordance according to different category definitions

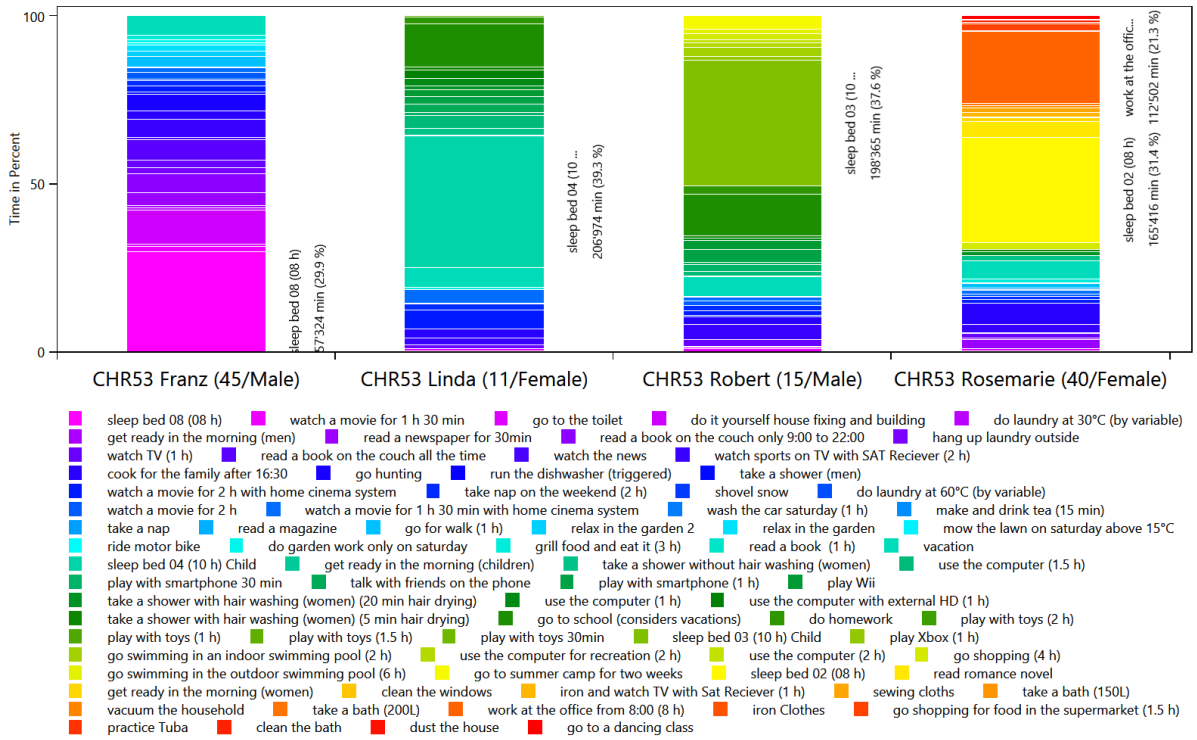
This is made from the files starting with: AffordanceTaggingSet

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.

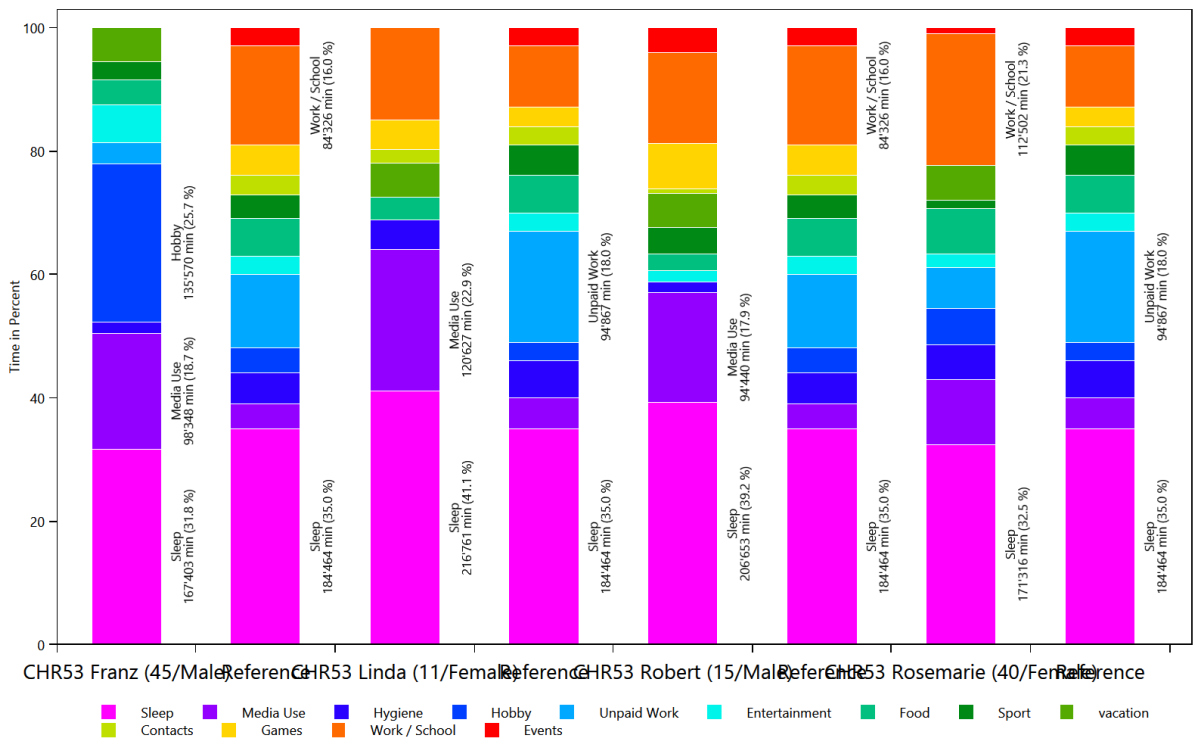
Basic Tagging - HH0



Tagging Set For Planning - HHO



Wo bleibt die Zeit - HHO

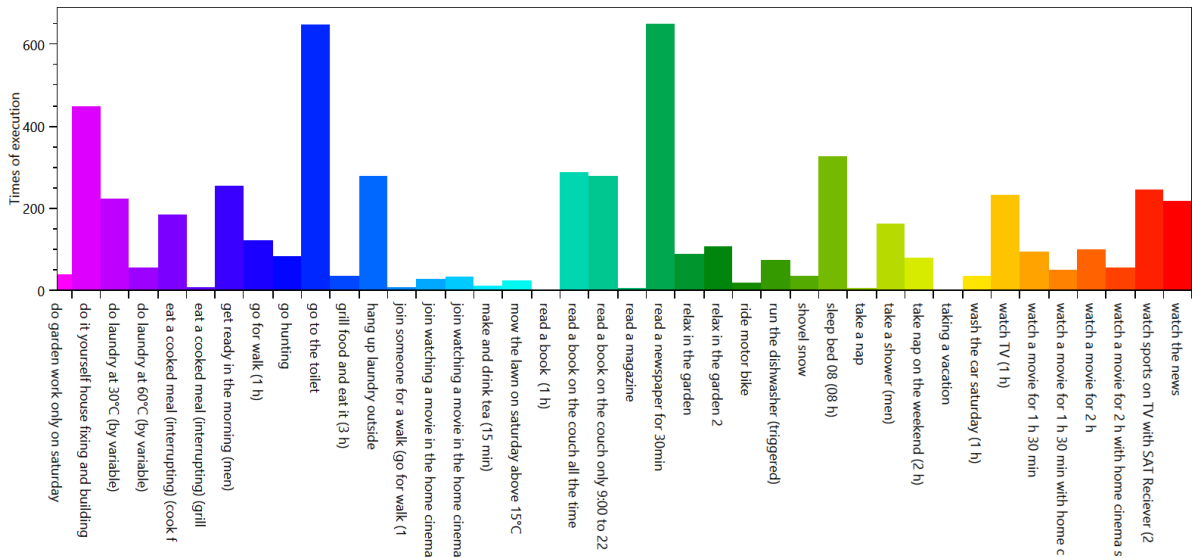


Overview of the actions of each member of the household

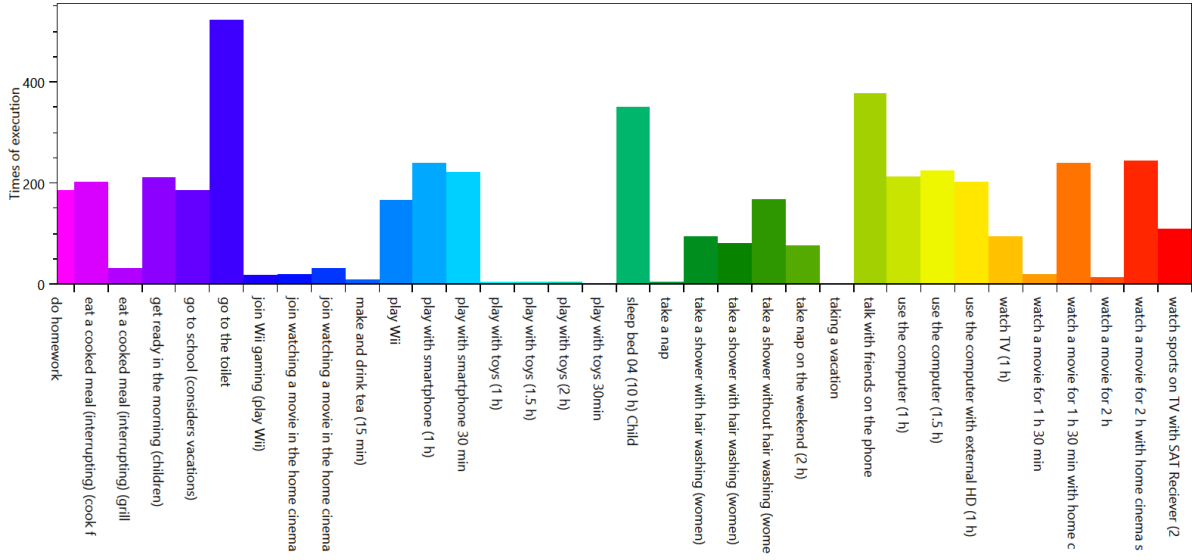
This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

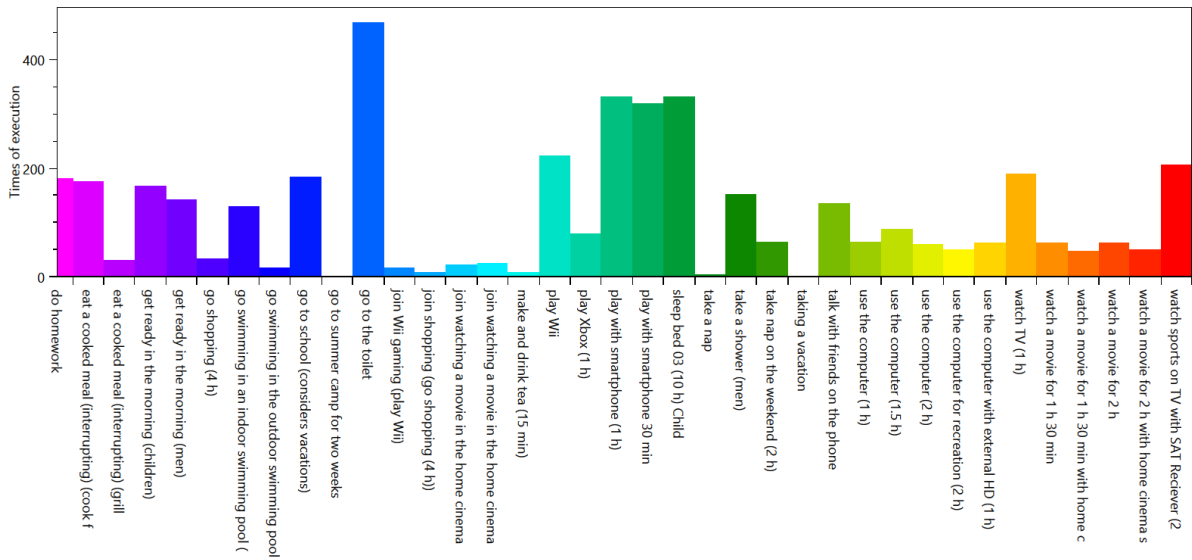
HH0 - CHR53 Franz (45 Male)



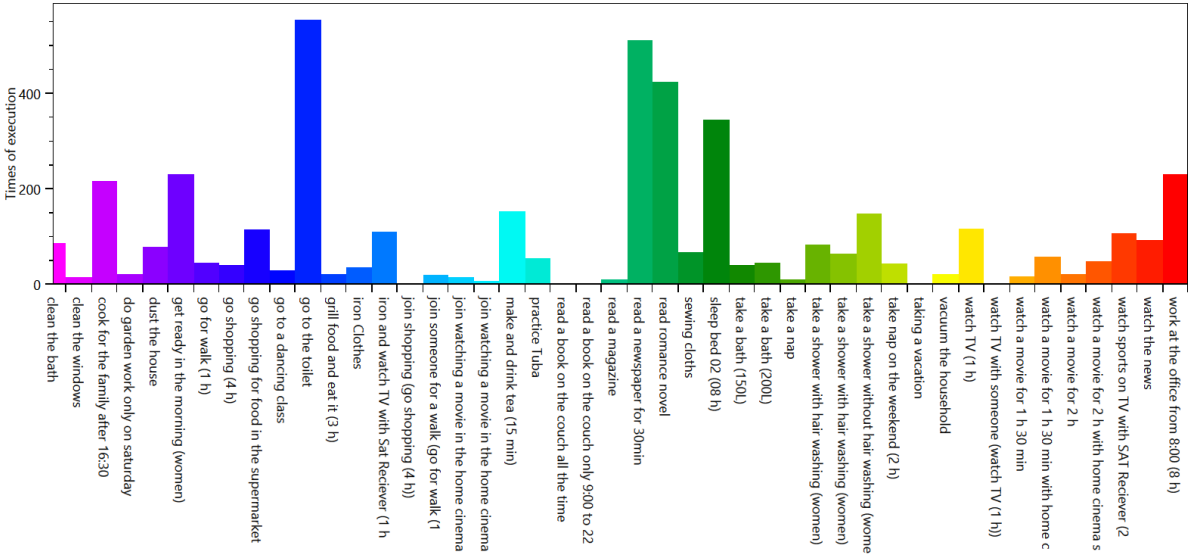
HH0 - CHR53 Linda (11 Female)



HH0 - CHR53 Robert (15 Male)



HH0 - CHR53 Rosemarie (40 Female)

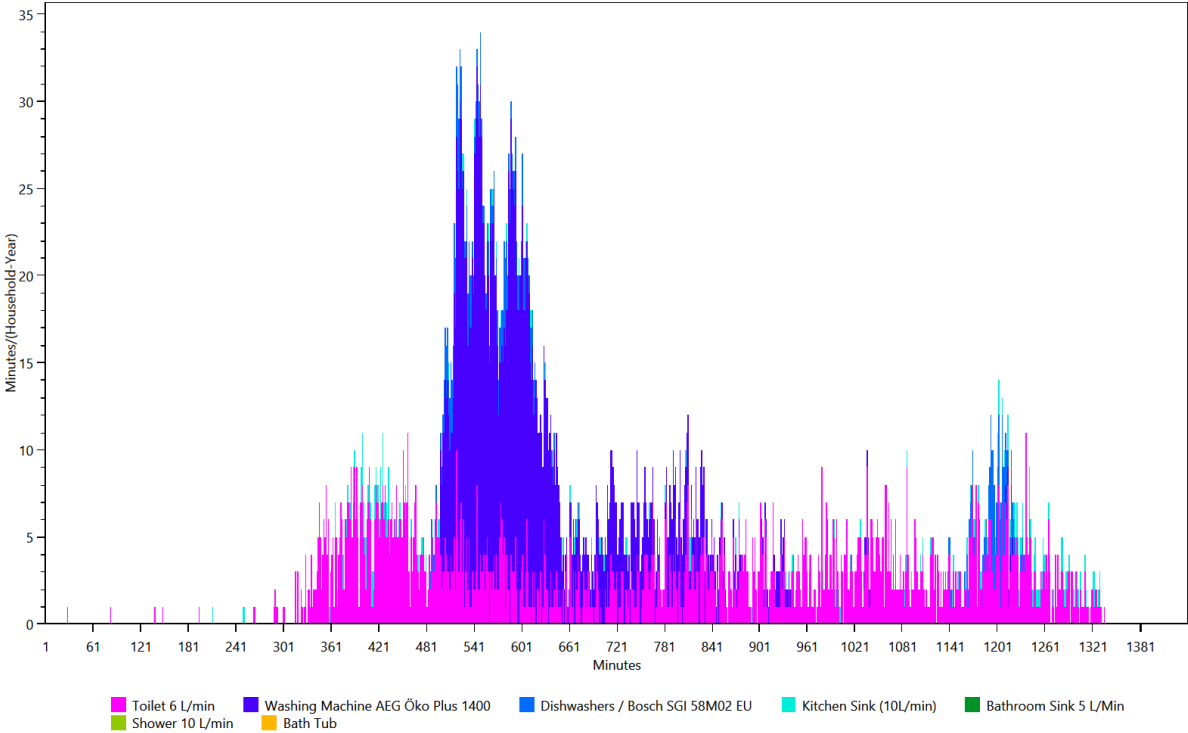


Overview of the time of the use per load type per device

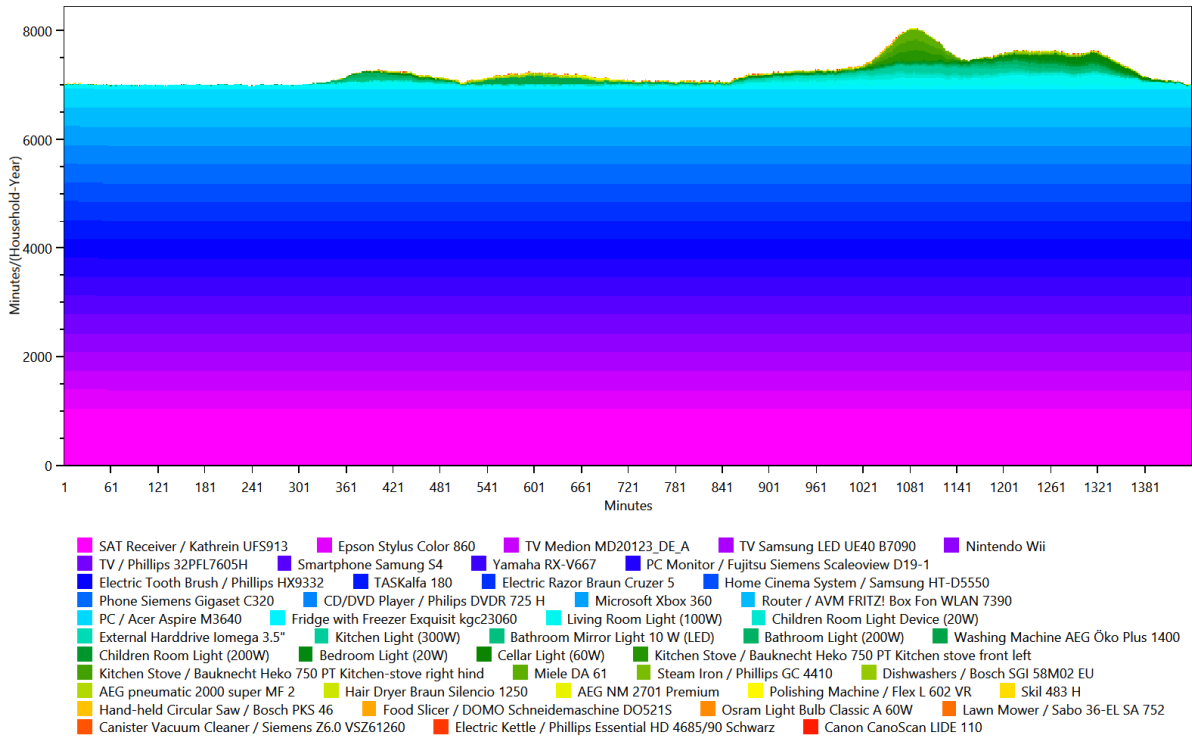
This is made from the files starting with: TimeOfUseEnergyProfiles

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

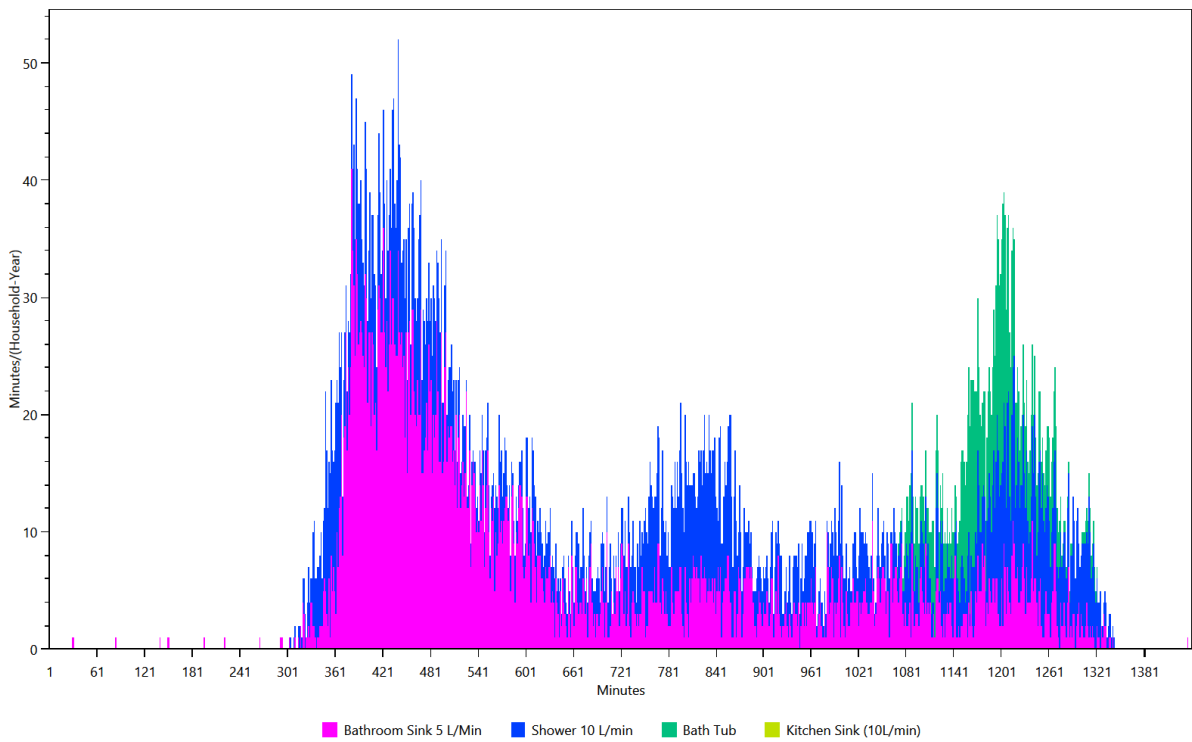
Cold Water



Electricity



Warm Water

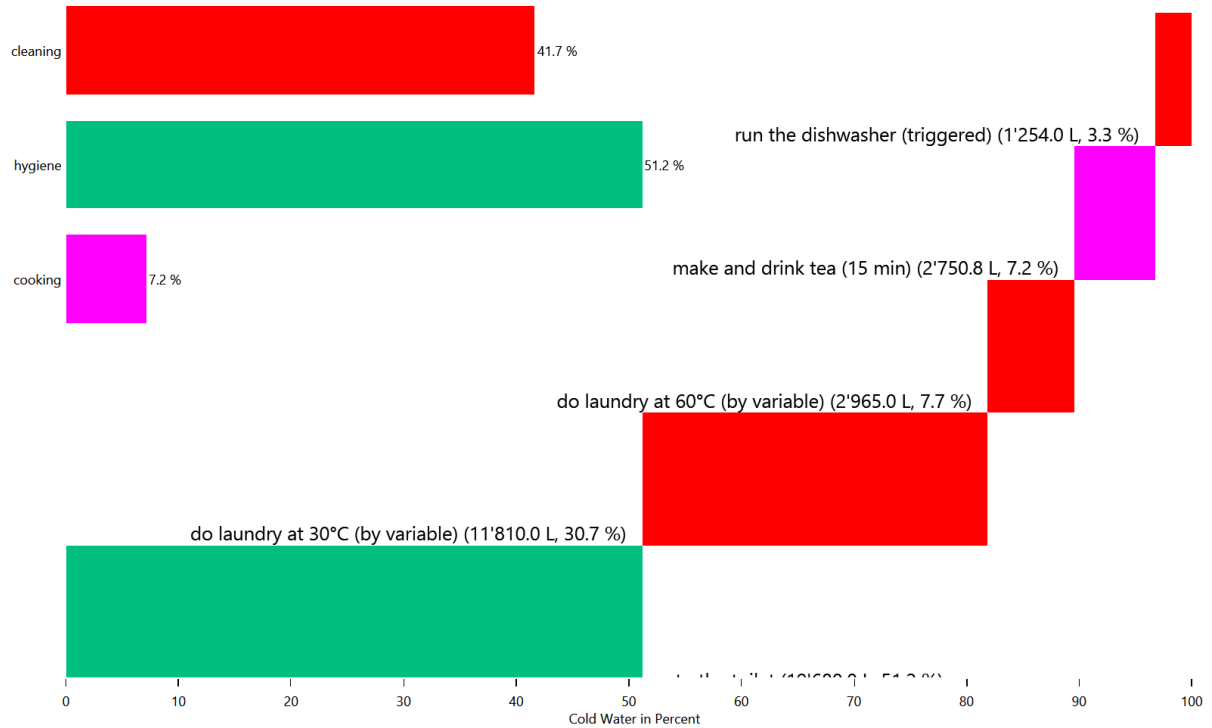


Energy/Resource use distribution per load type per affordance

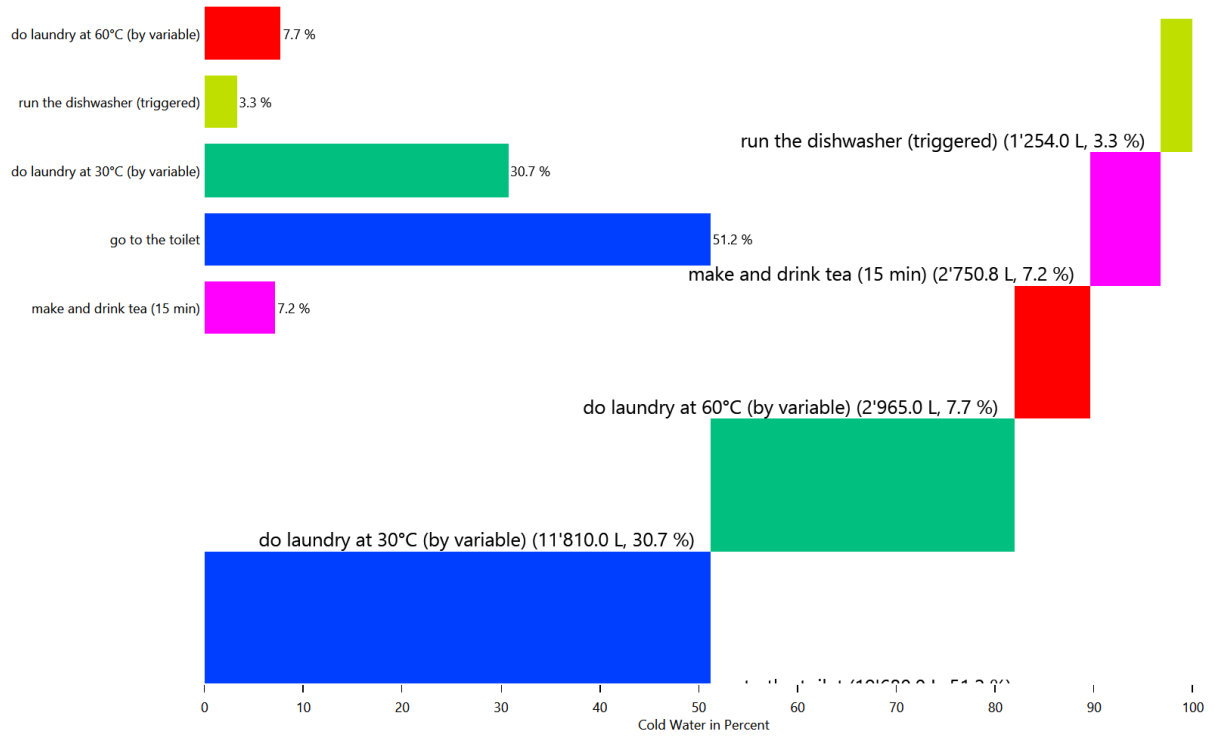
This is made from the files starting with: AffordanceEnergyUse

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

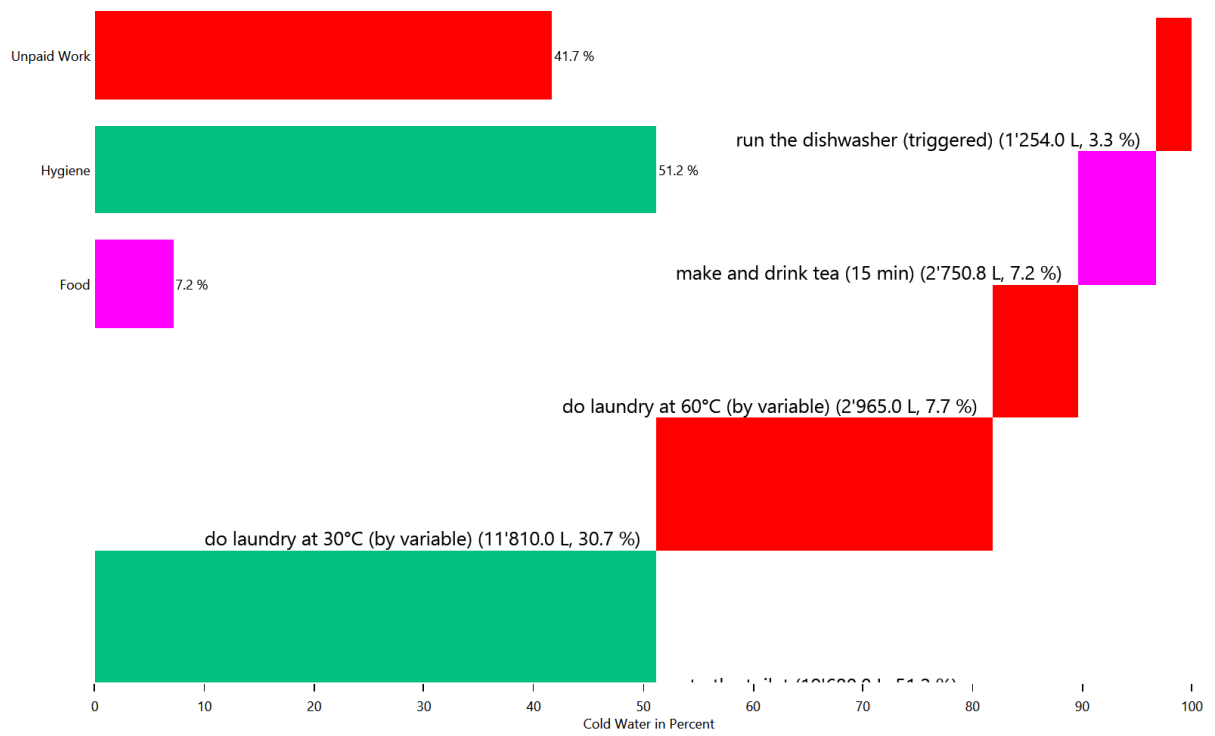
HH0 - Cold Water



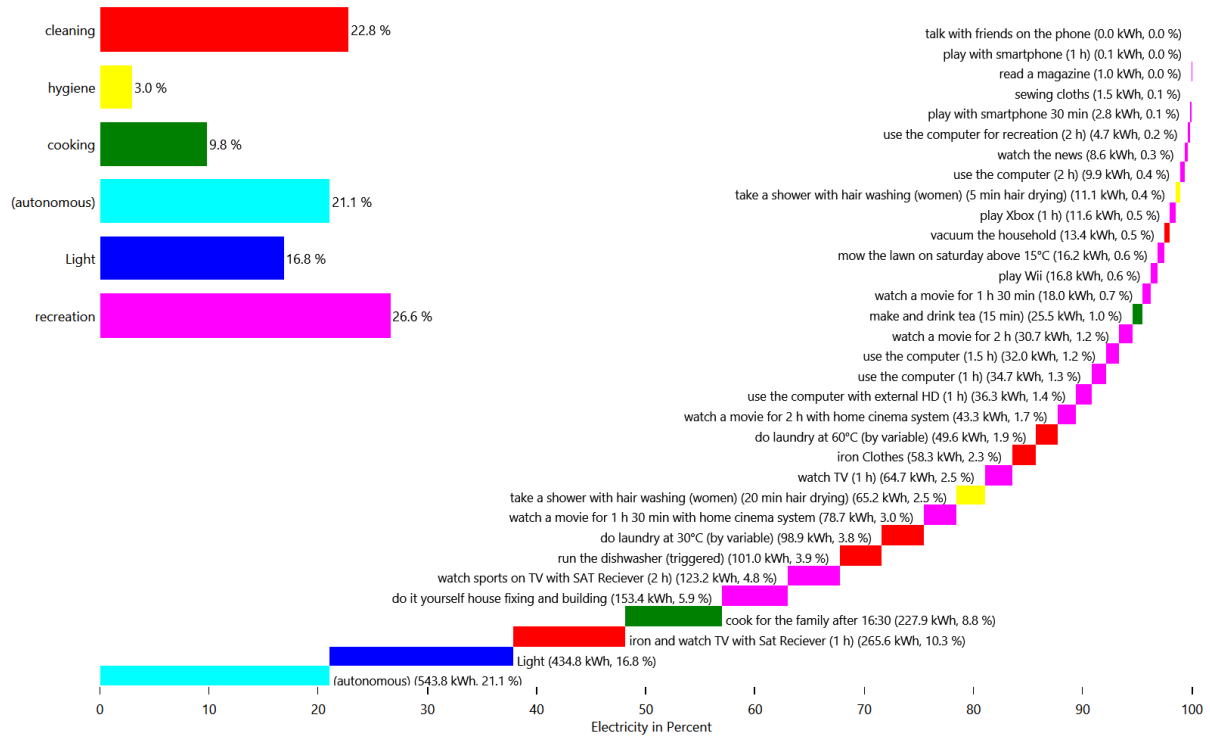
HH0 - Cold Water



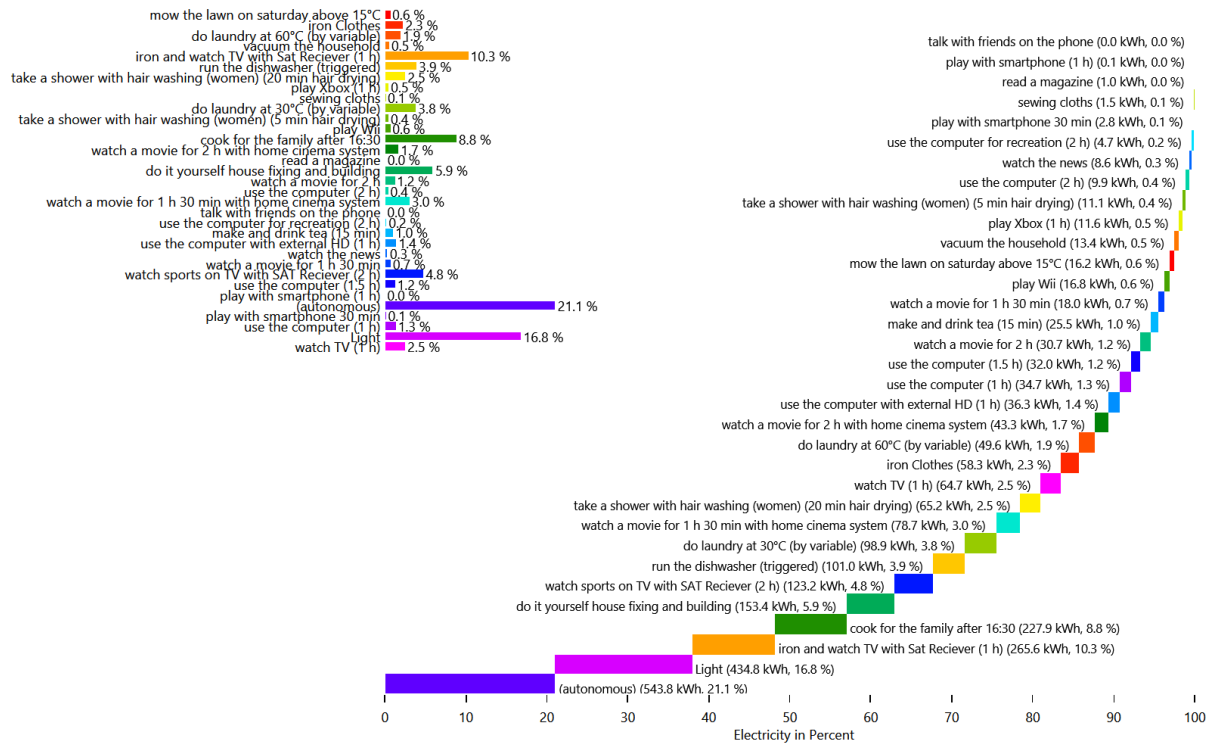
HH0 - Cold Water



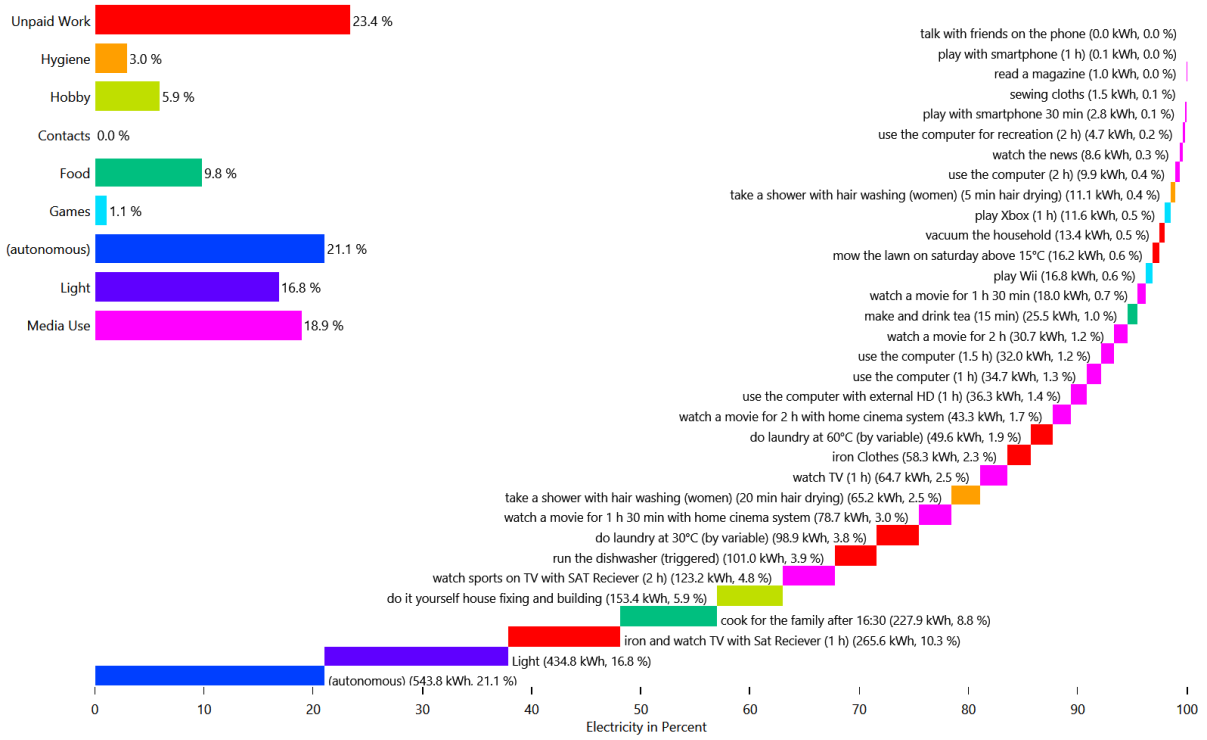
HH0 - Electricity



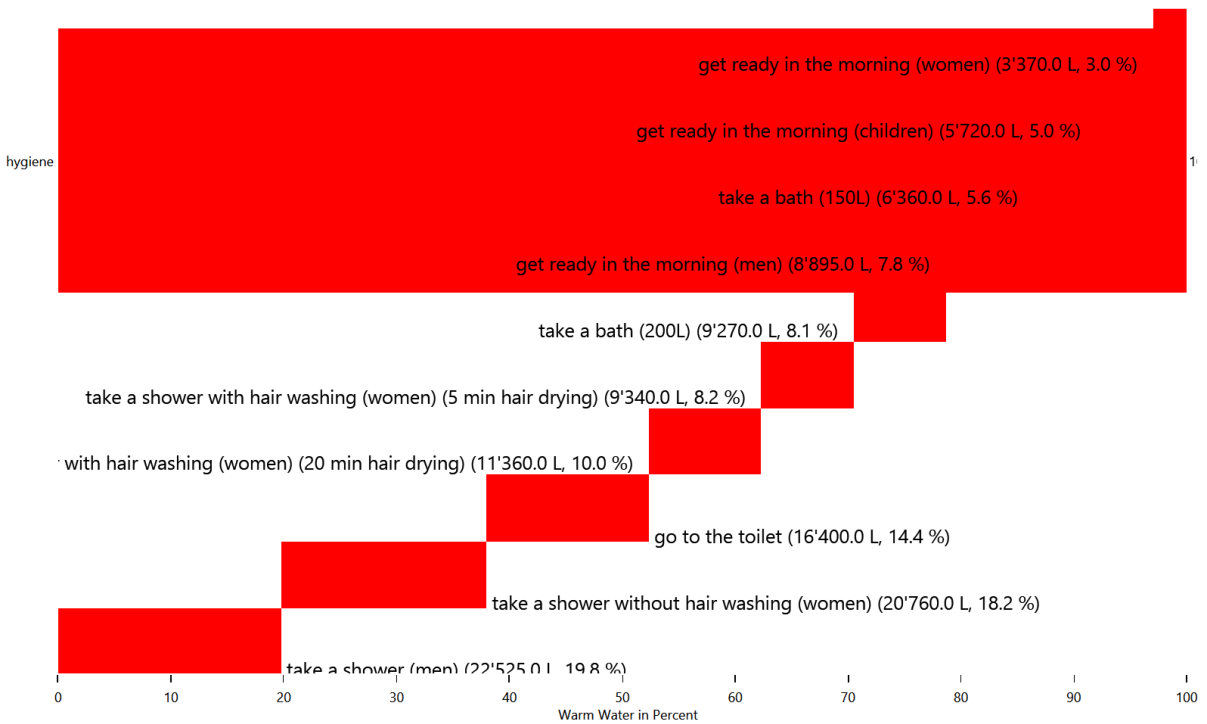
HH0 - Electricity



HH0 - Electricity



HH0 - Warm Water

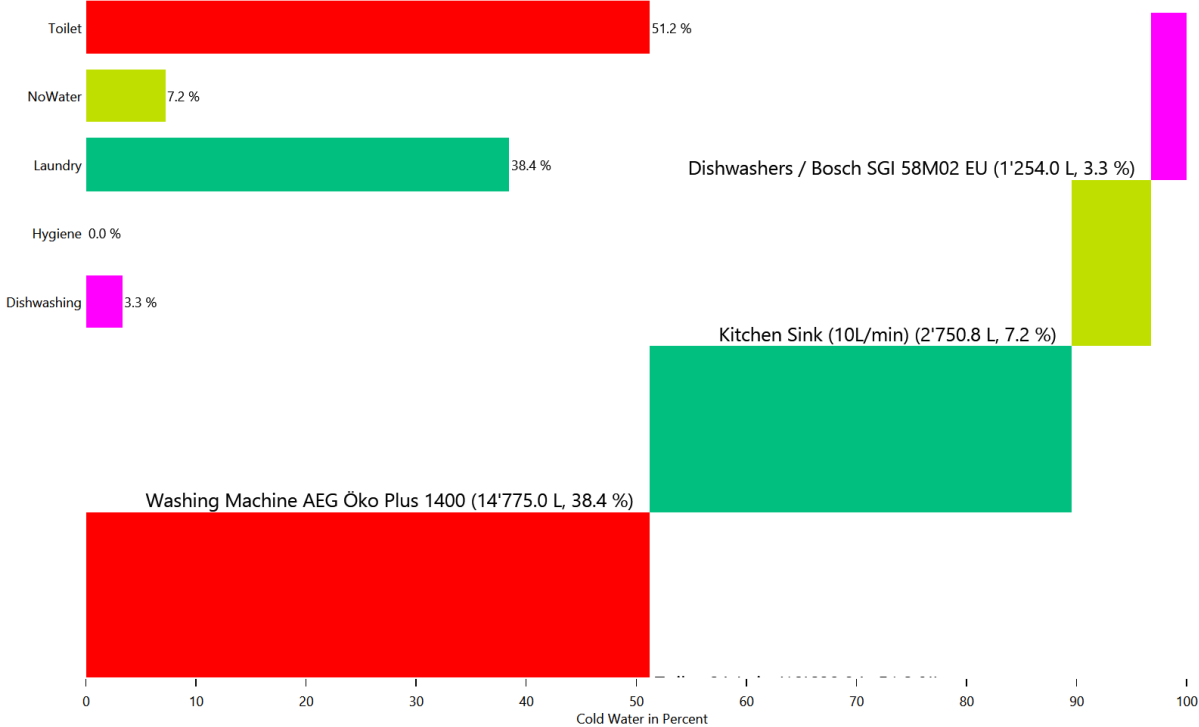


Energy use for each load type for each device

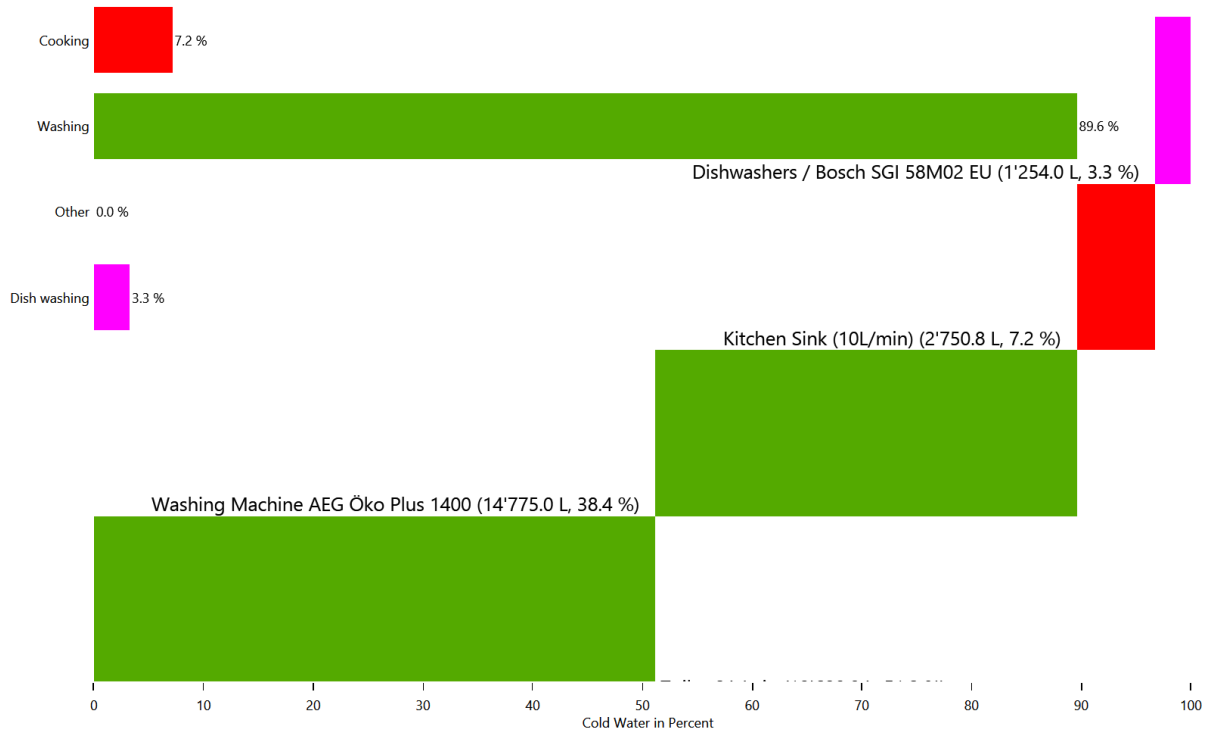
This is made from the files starting with: DeviceSums

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

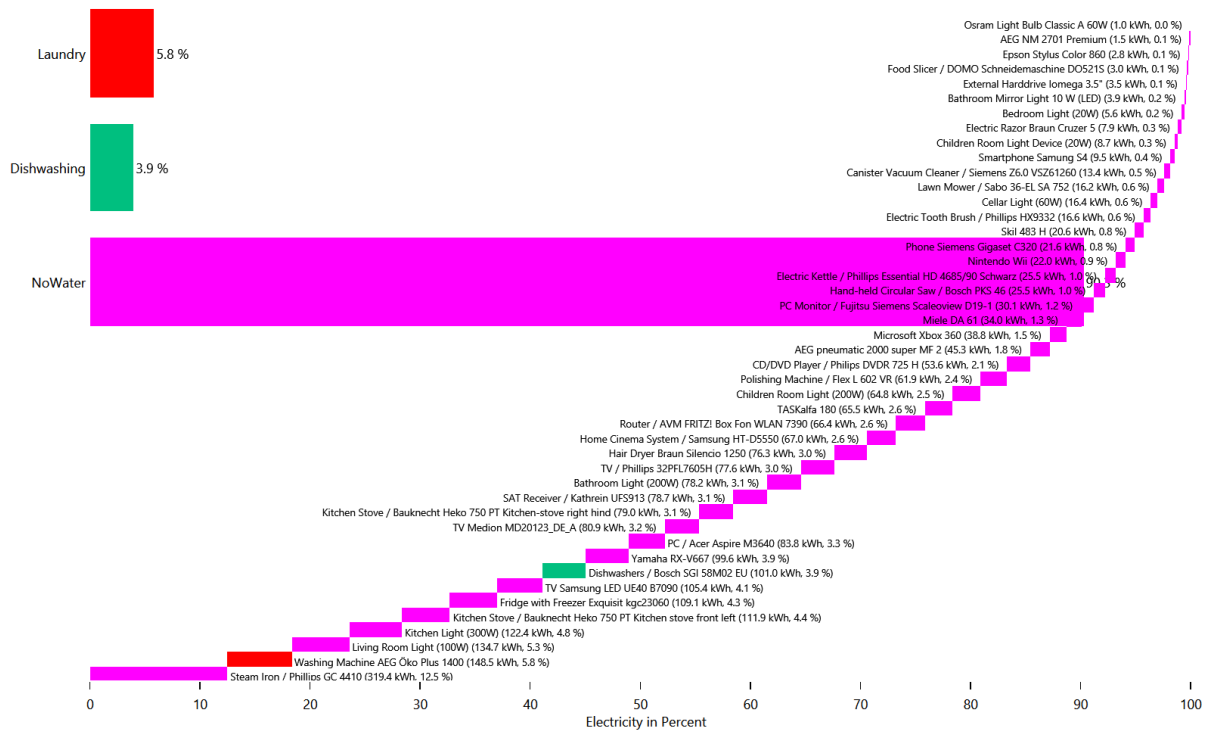
Cold Water



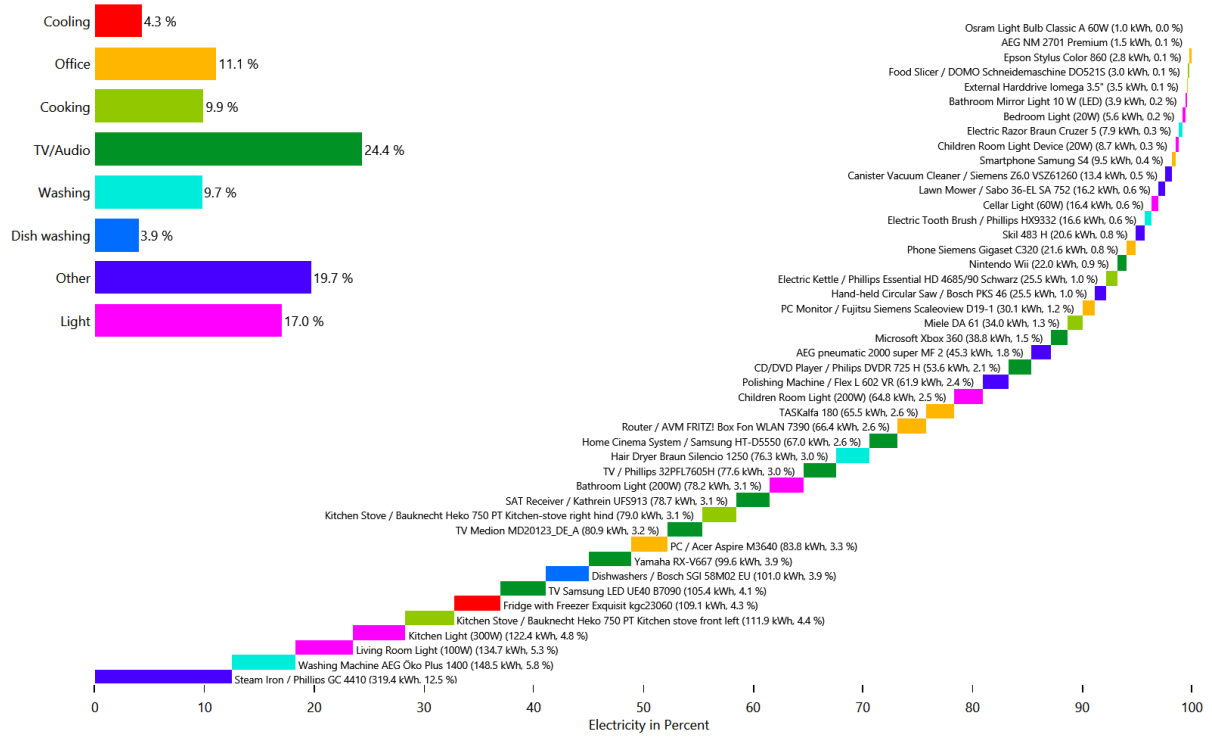
Cold Water



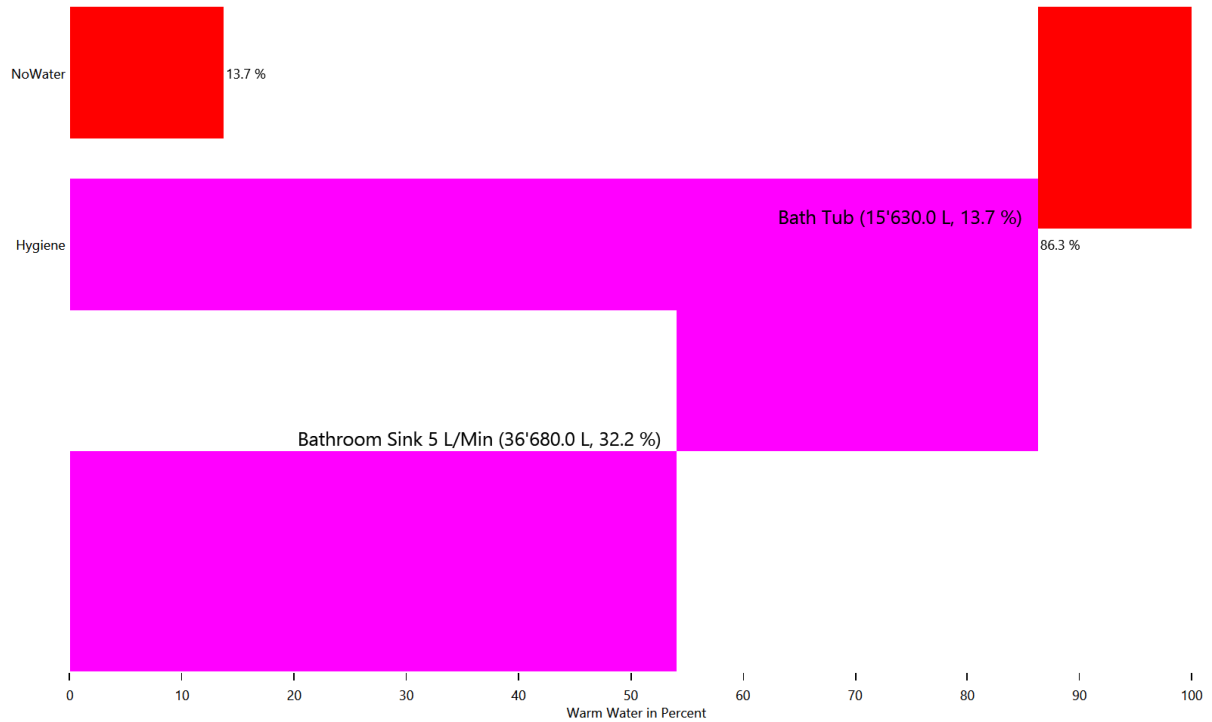
Electricity



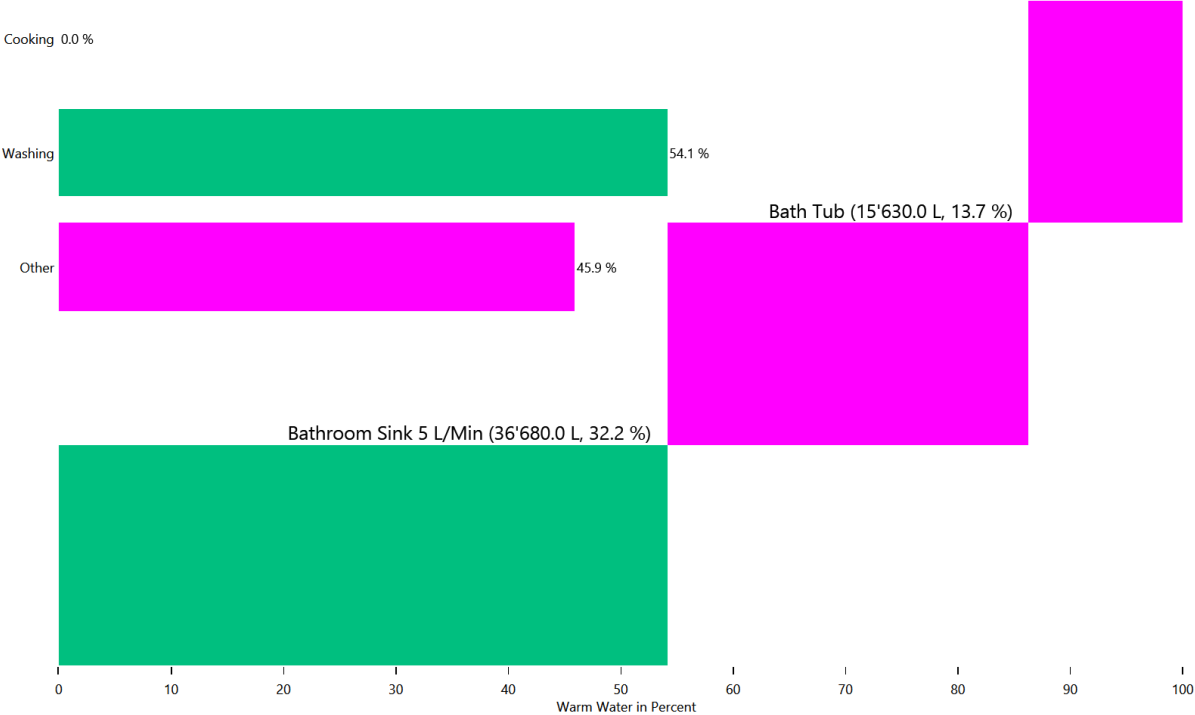
Electricity



Warm Water



Warm Water

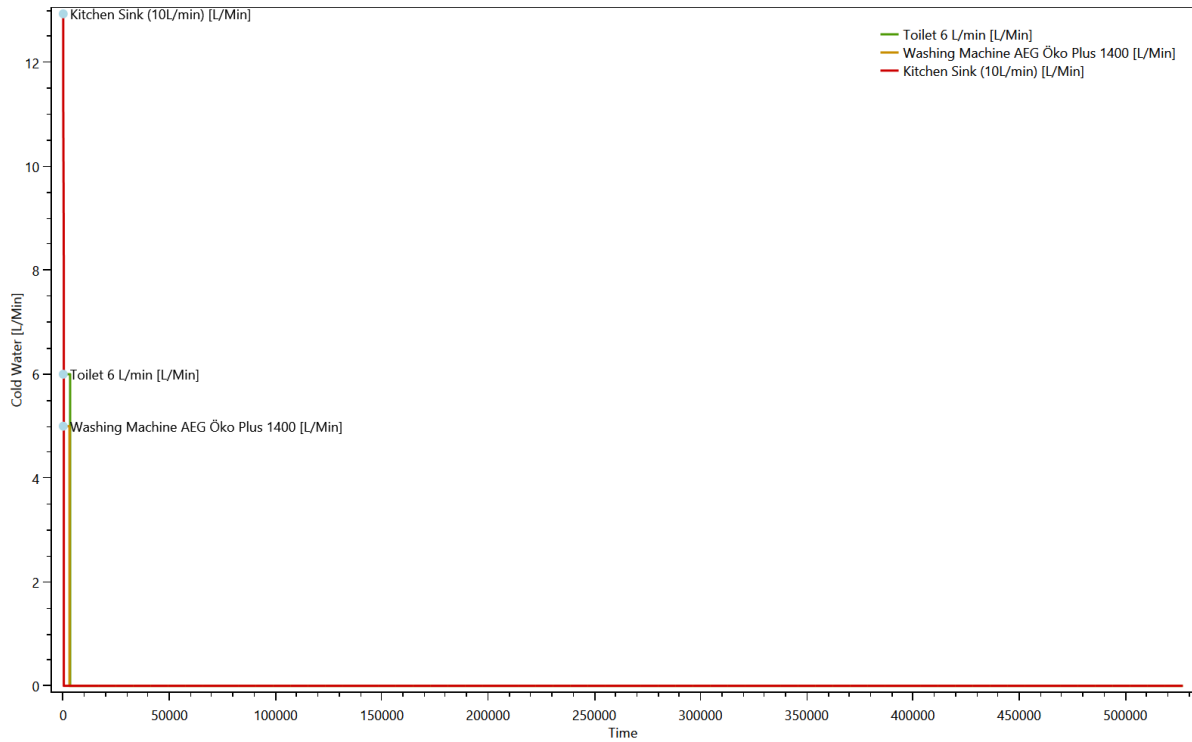


Duration curve for each device for each load type

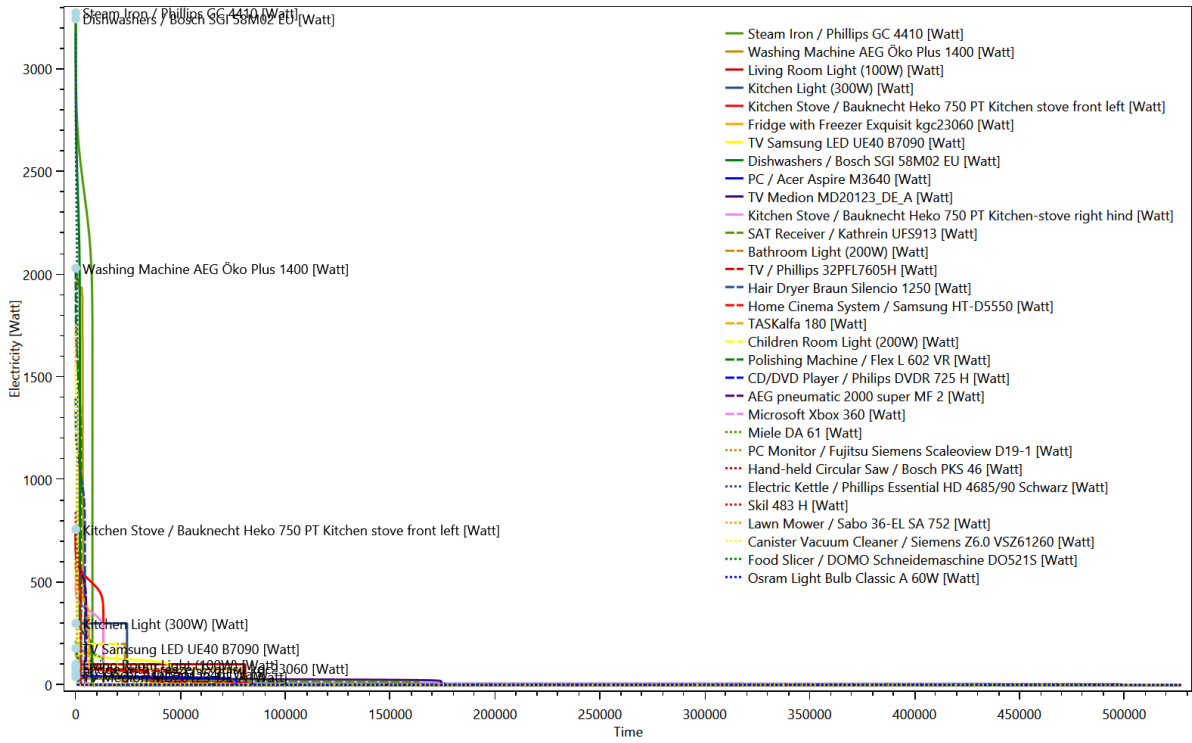
This is made from the files starting with: DeviceDurationCurves

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

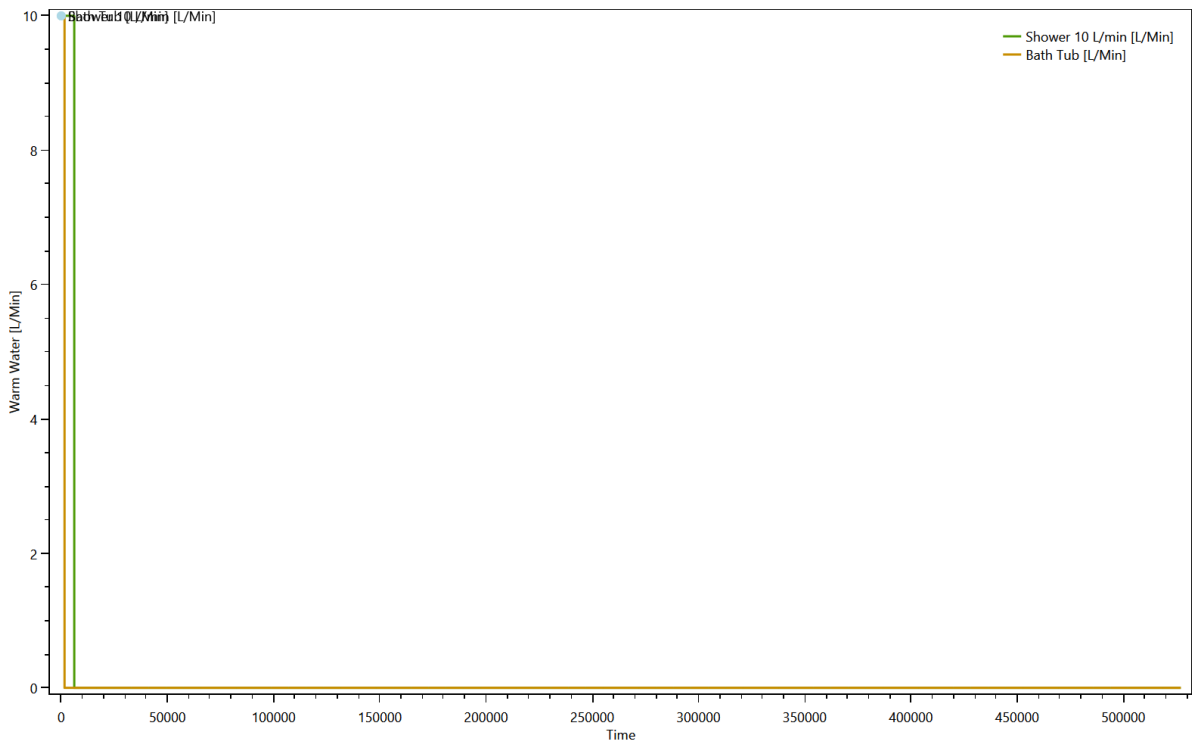
Cold Water



Electricity



Warm Water

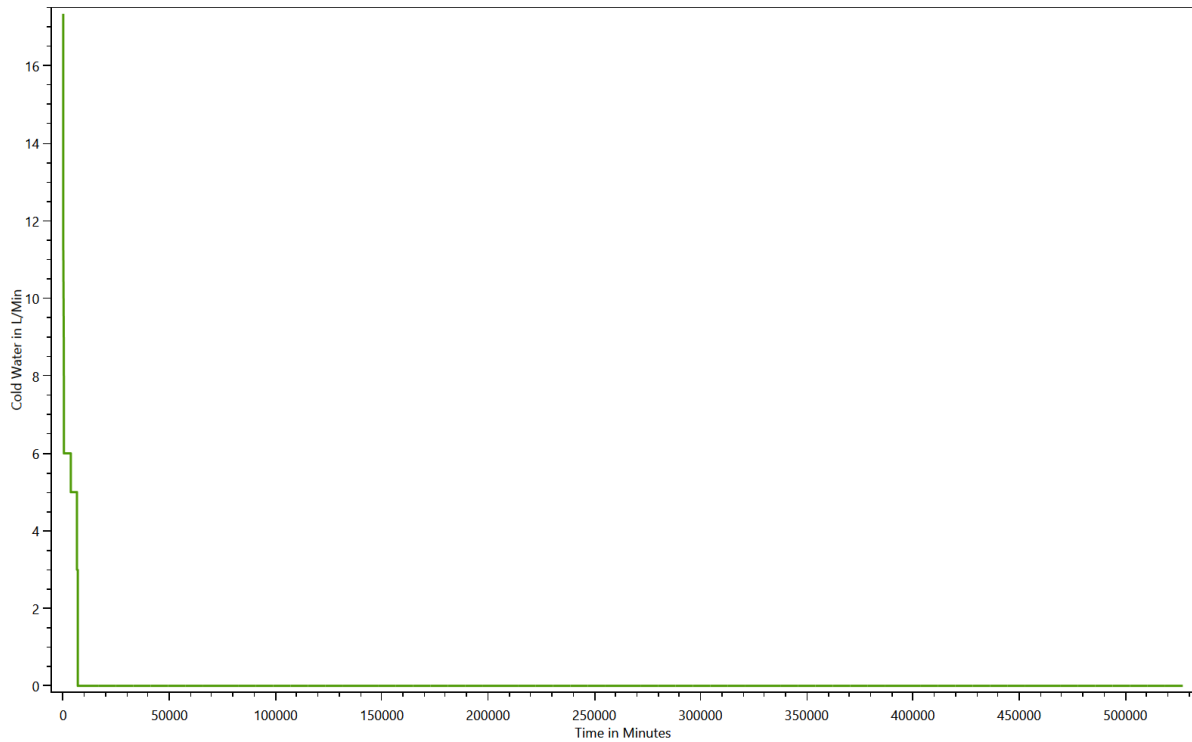


Duration curve for each load type

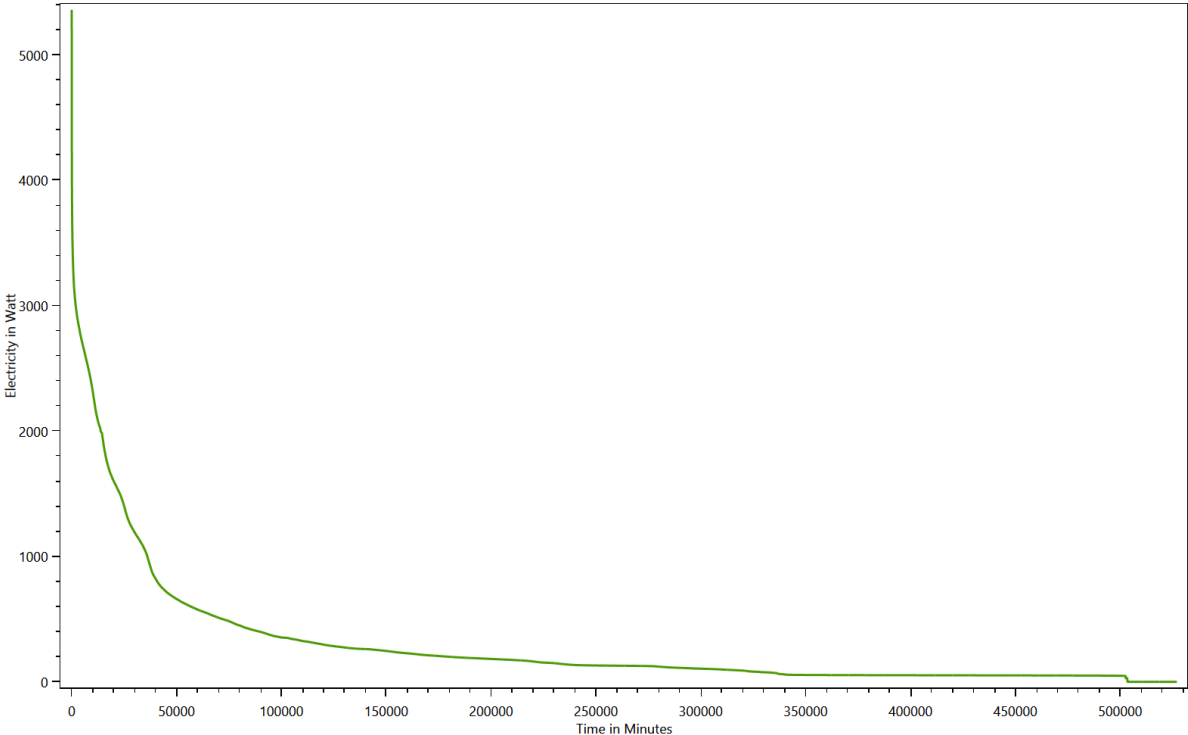
This is made from the files starting with: DurationCurve

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

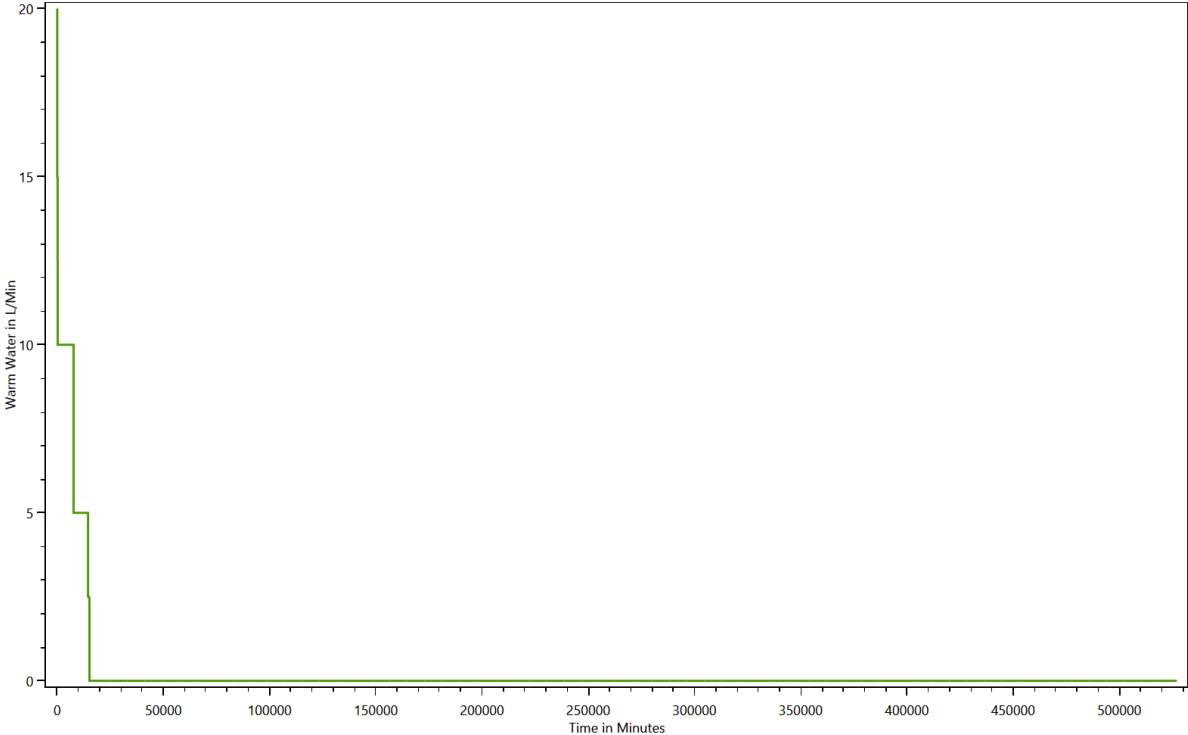
Cold Water



Electricity



Warm Water

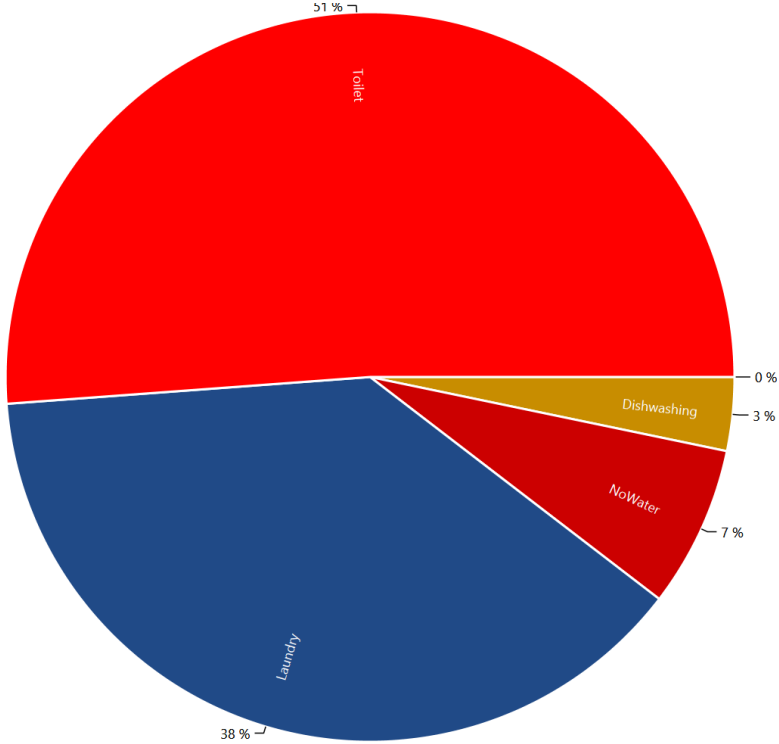


Grouped energy use for each load type for each device

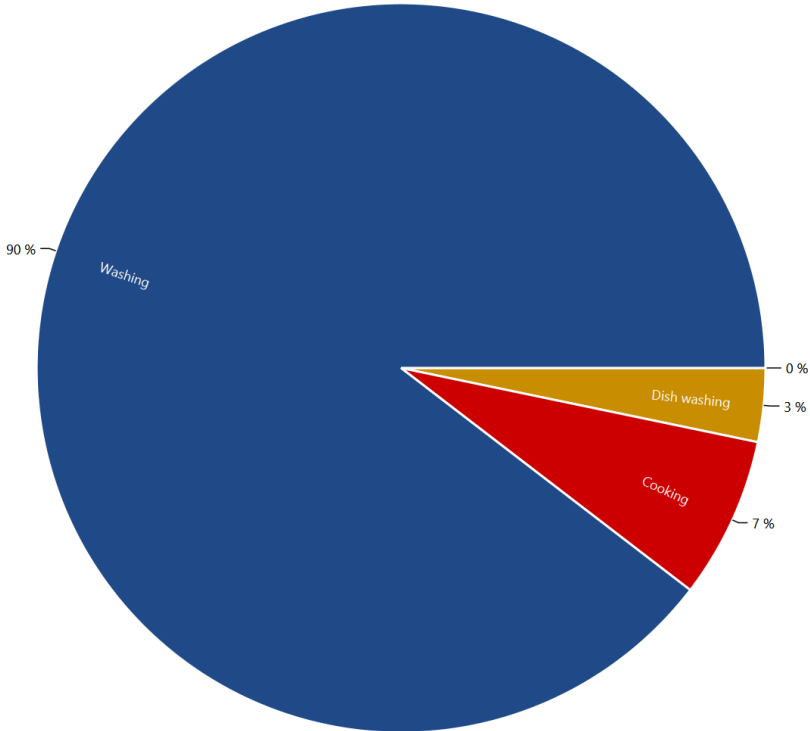
This is made from the files starting with: DeviceTaggingSet

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

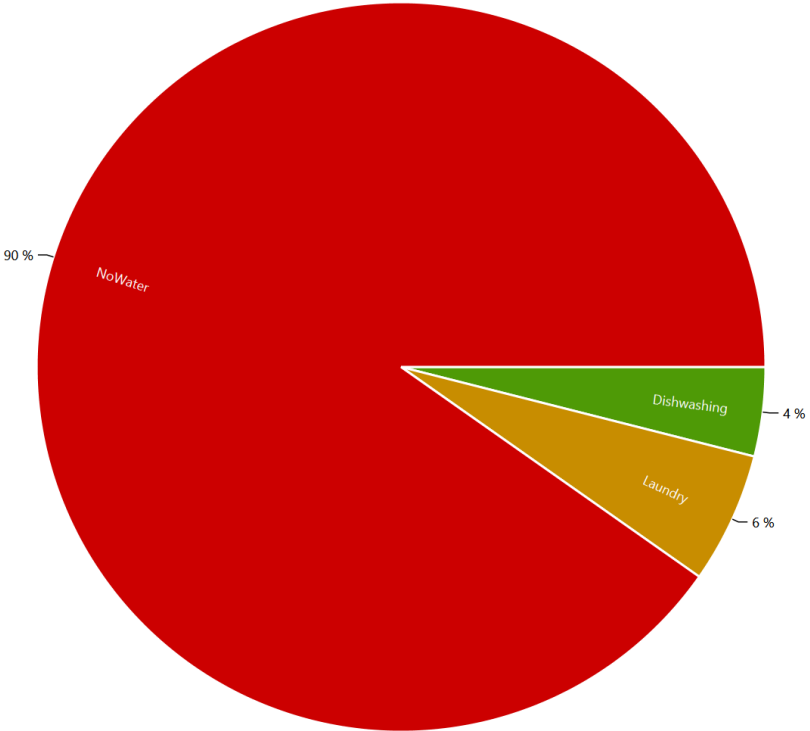
HH0 - Destatis Water Usage Statistics - Cold Water



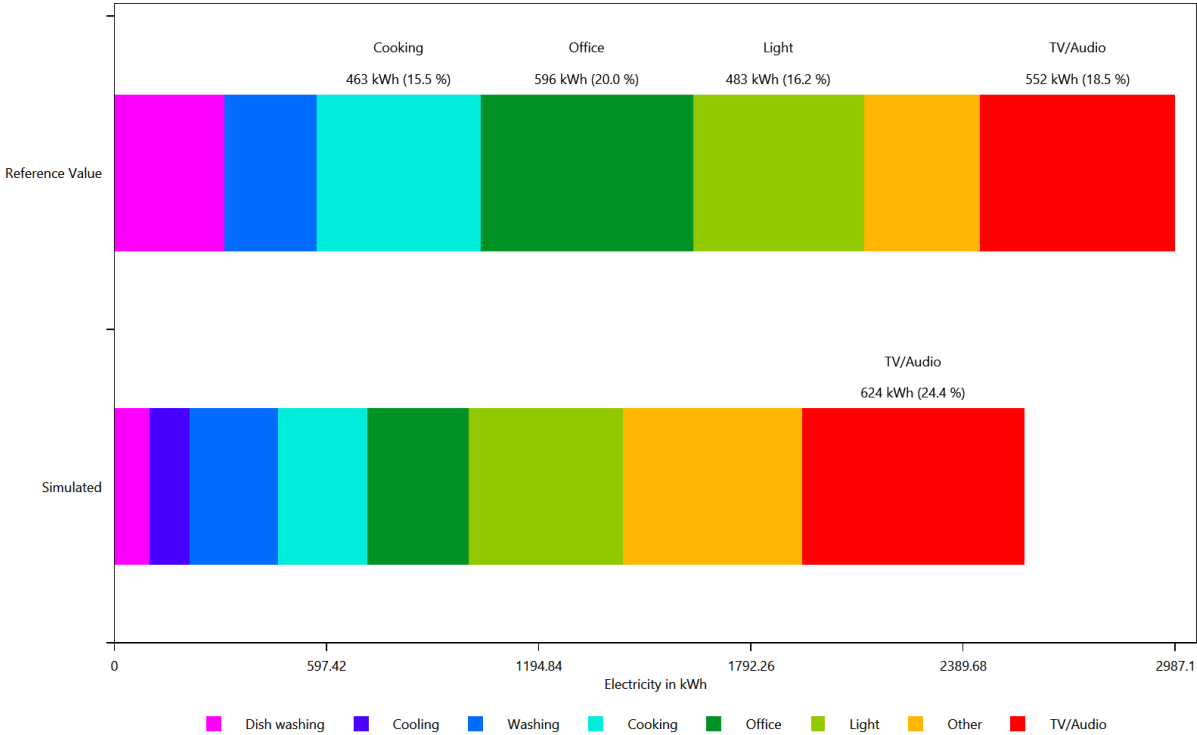
HH0 - Energieagentur - Cold Water



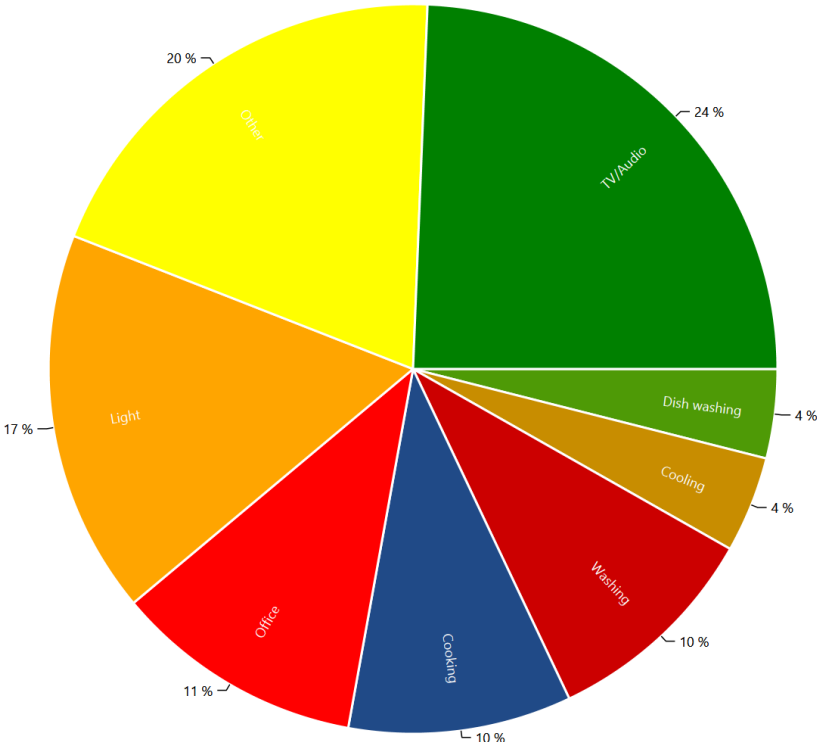
HH0 - Destatis Water Usage Statistics - Electricity



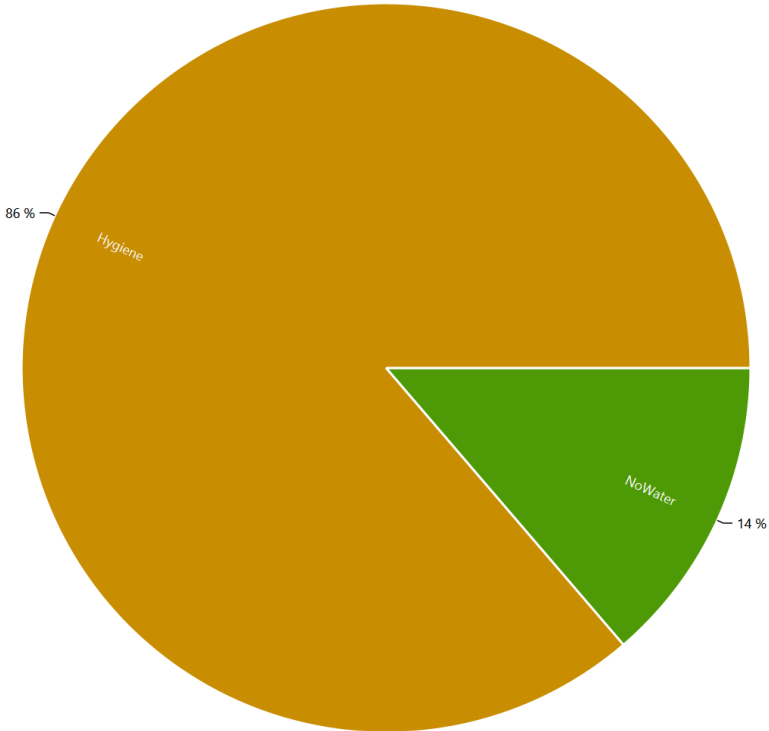
HH0 - Energieagentur - Electricity



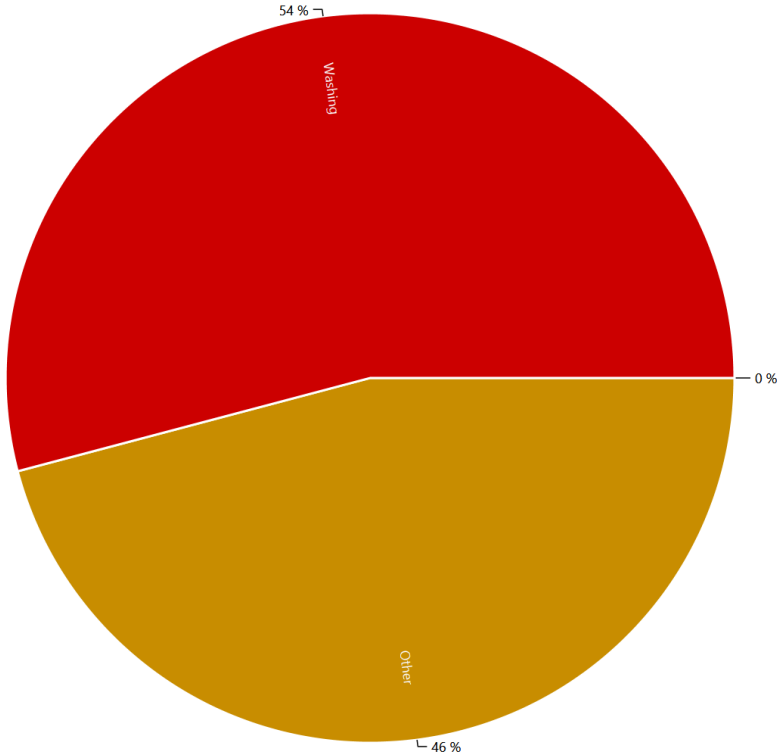
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

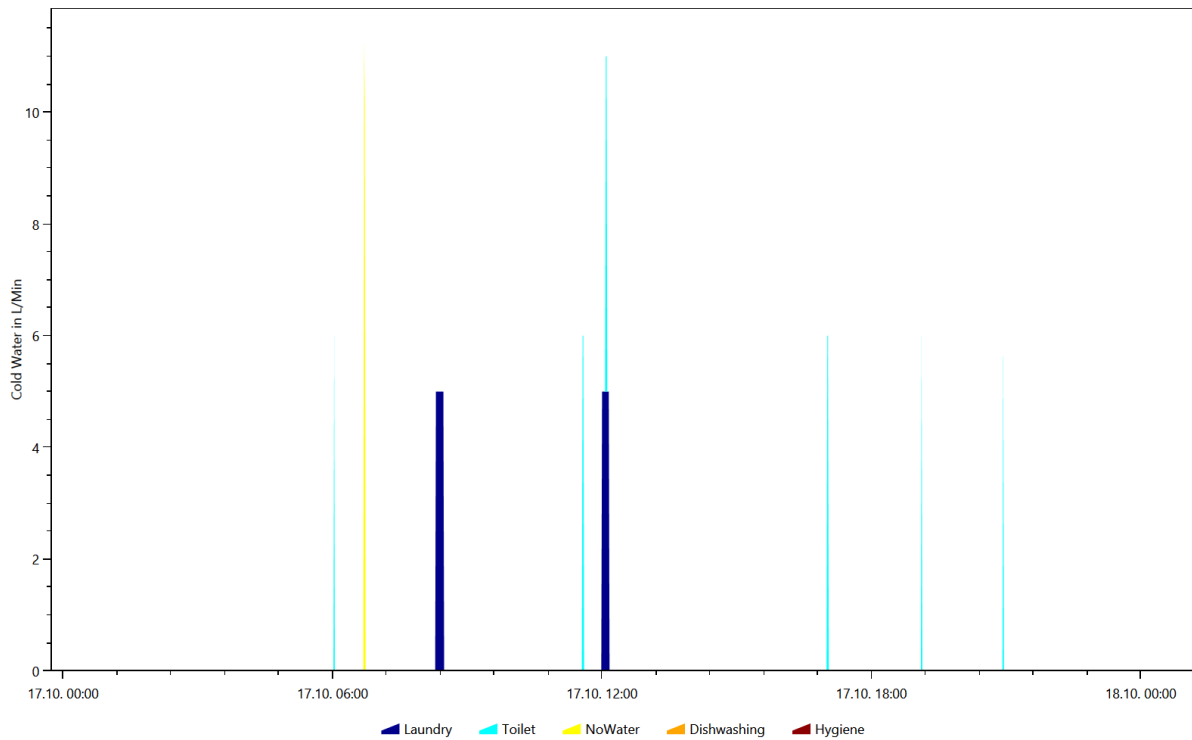


Example of the device profiles for each load type

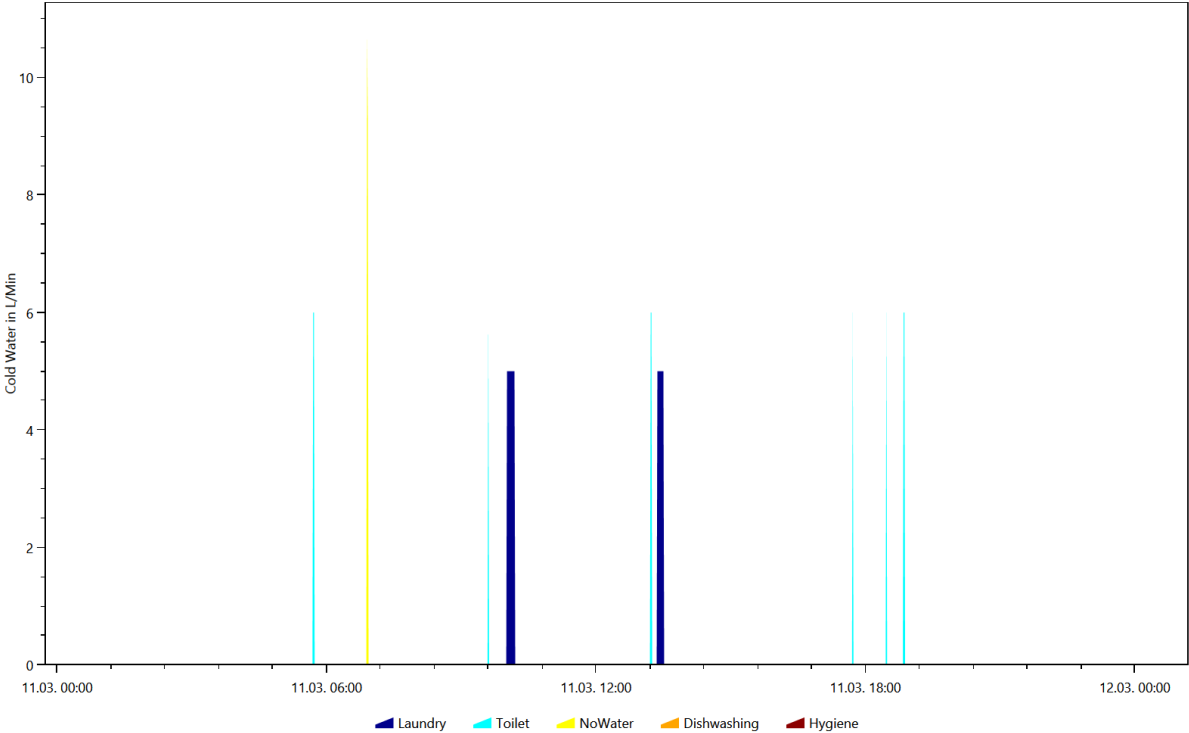
This is made from the files starting with: DeviceProfiles

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

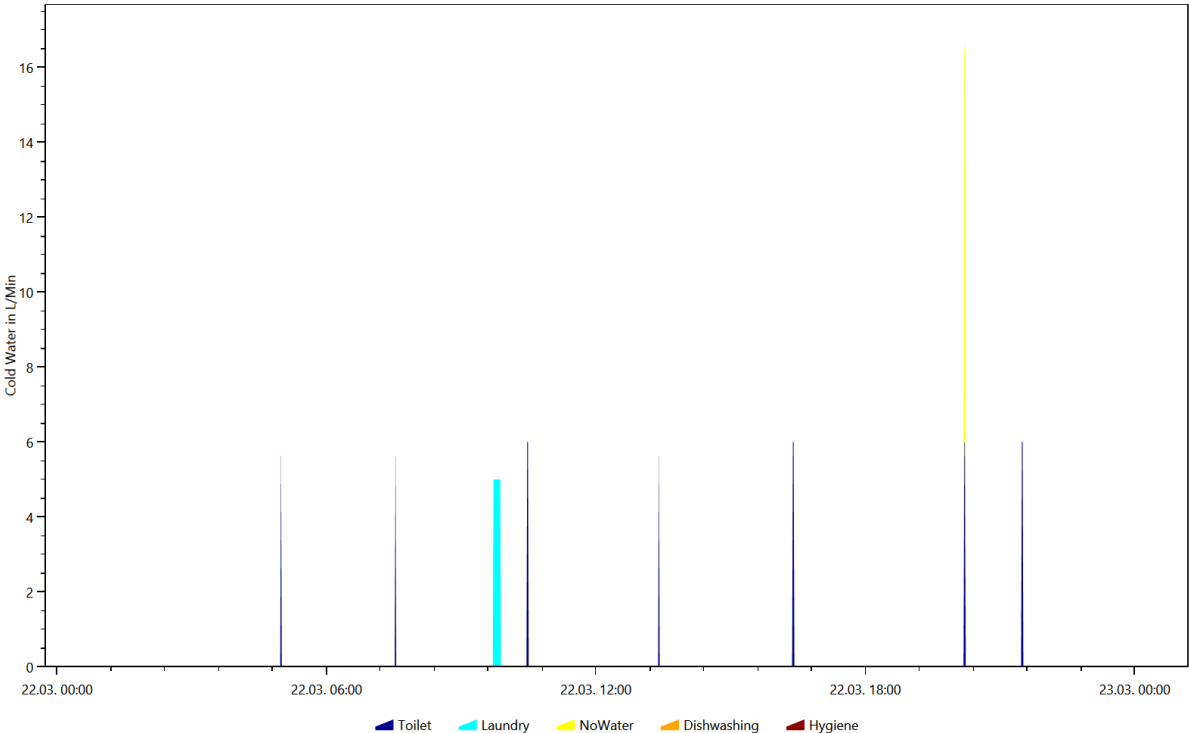
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.17



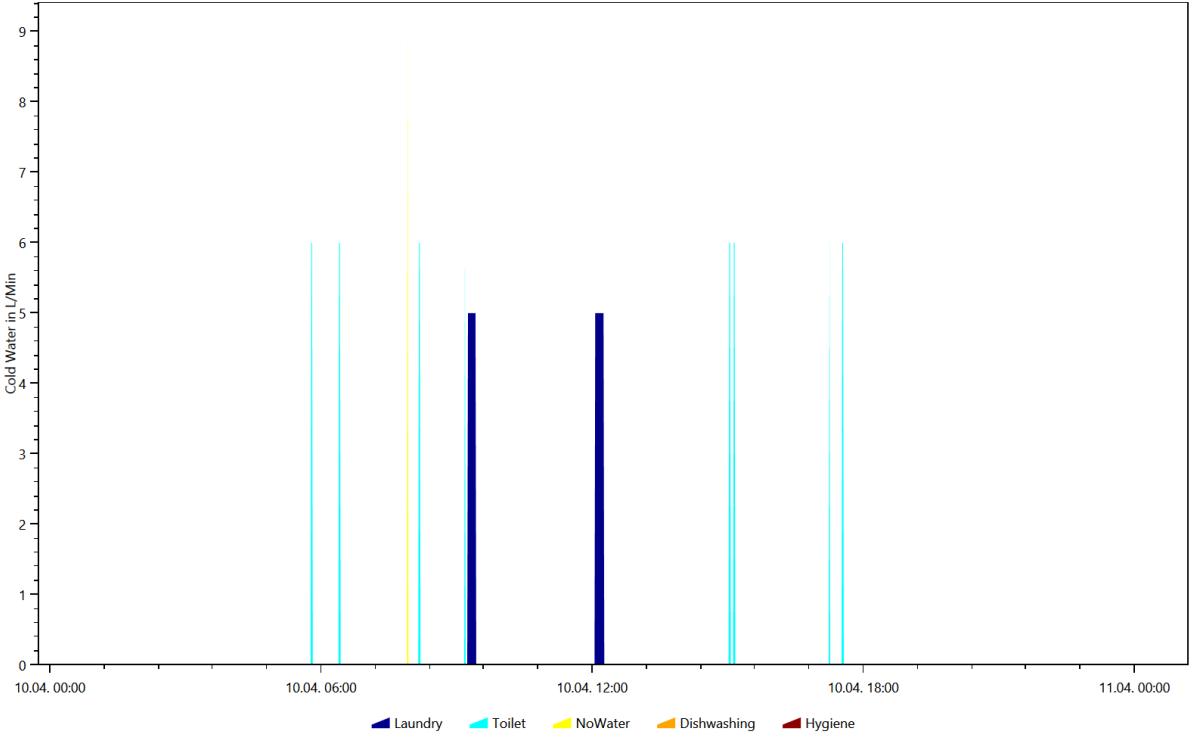
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.11



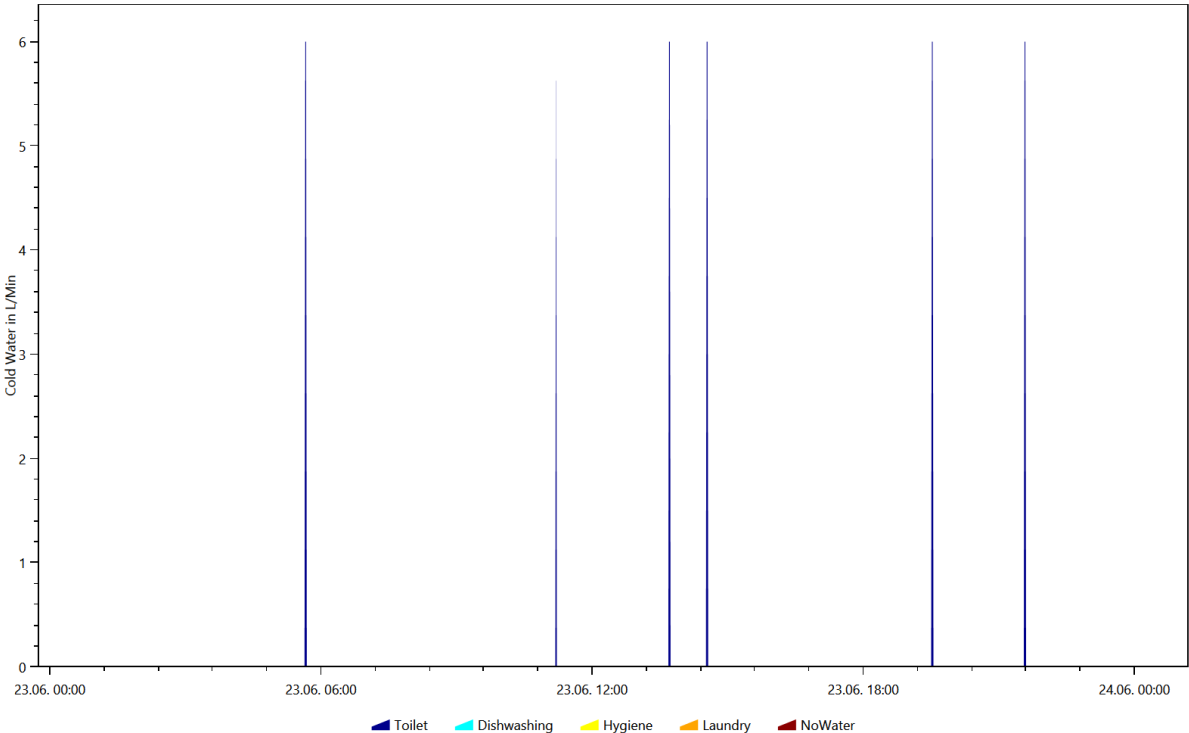
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.22



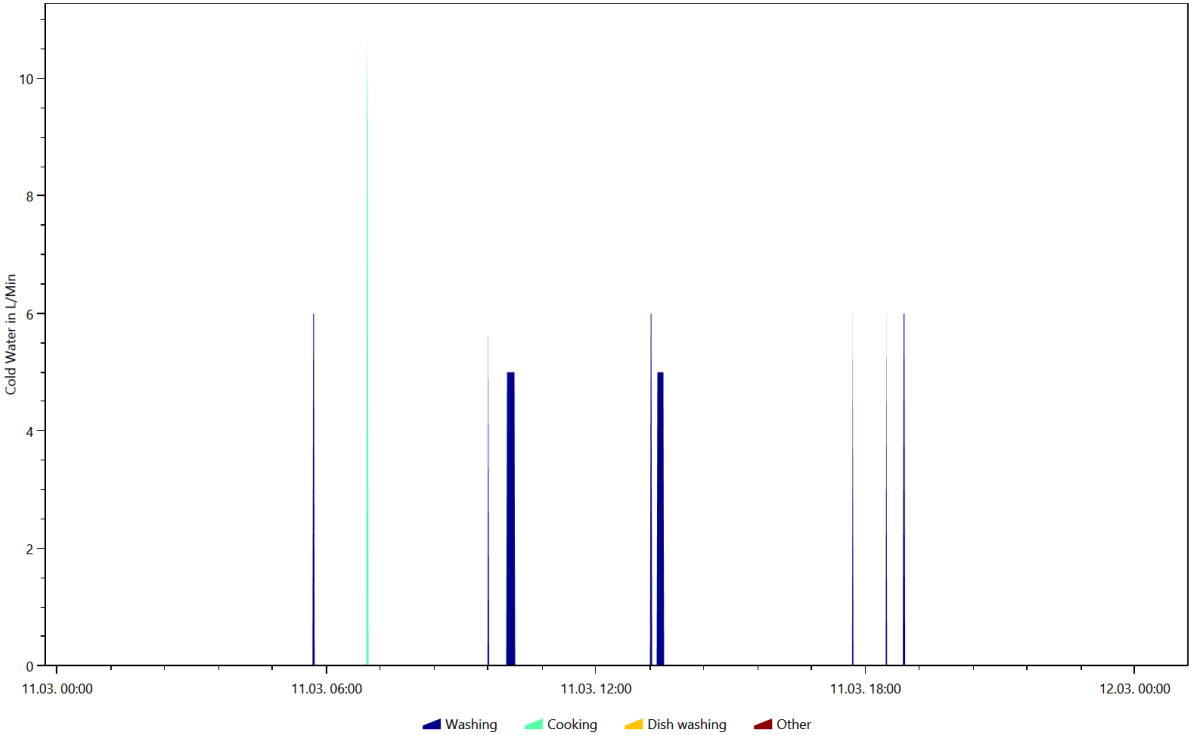
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.10



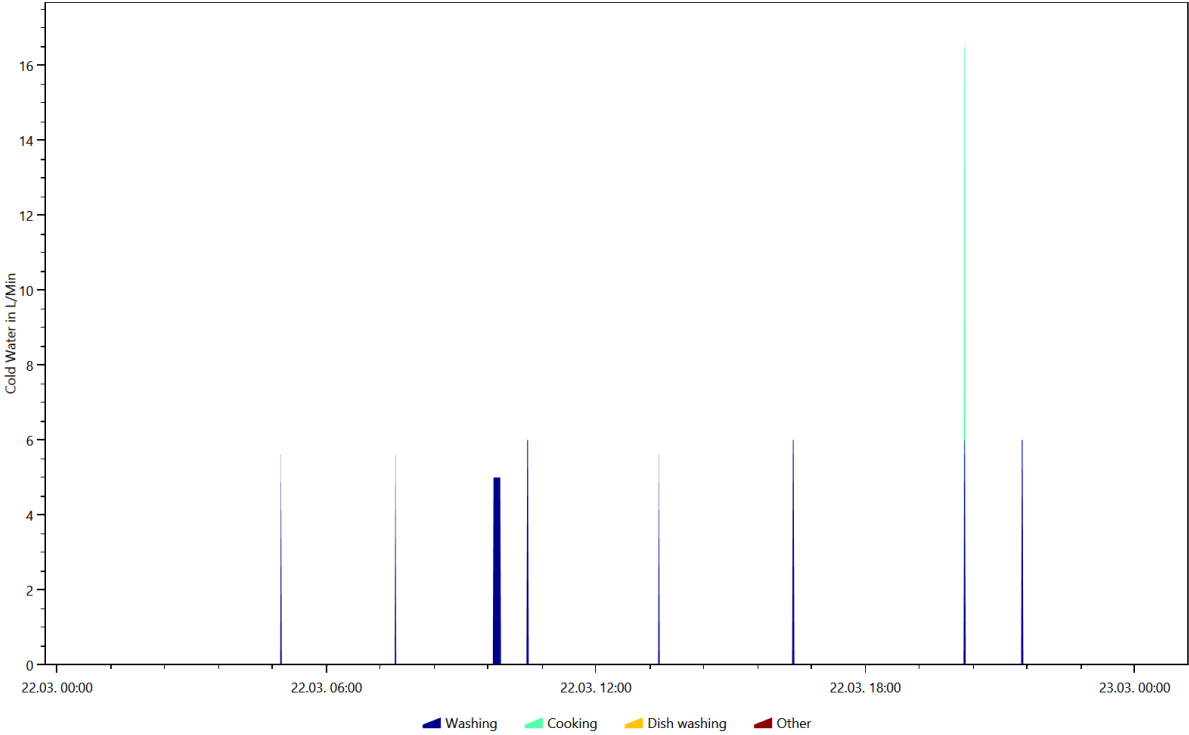
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.23



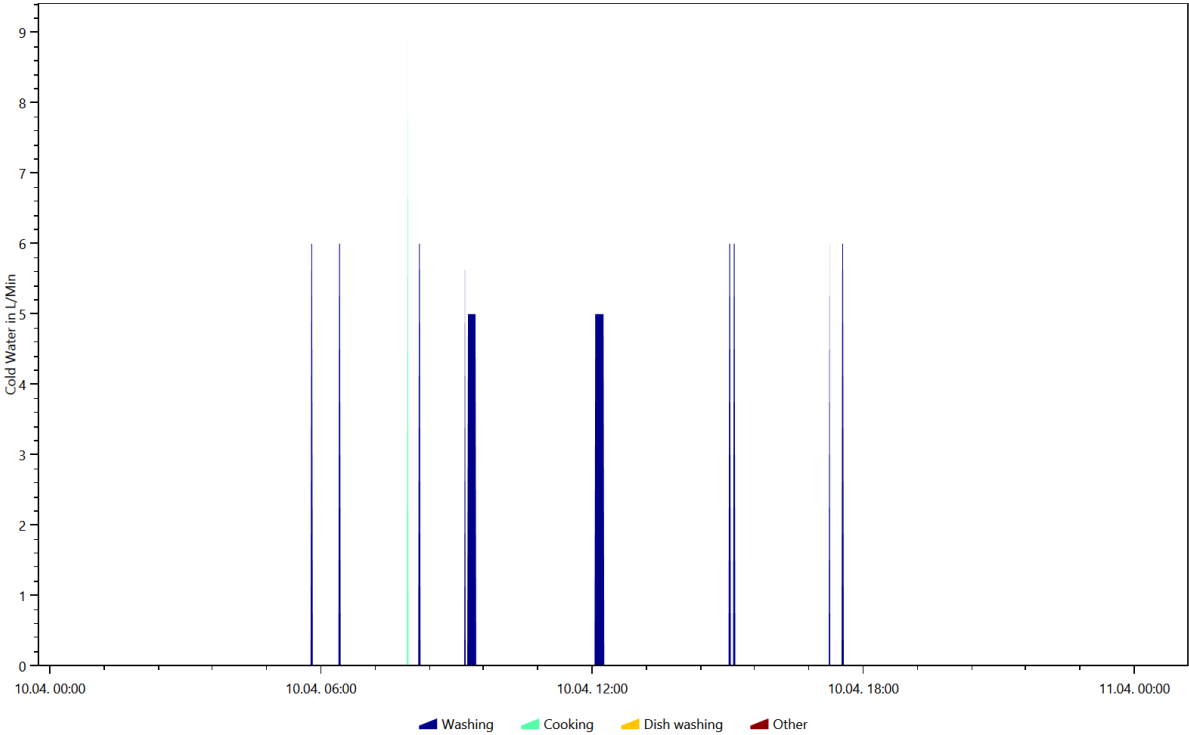
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.11



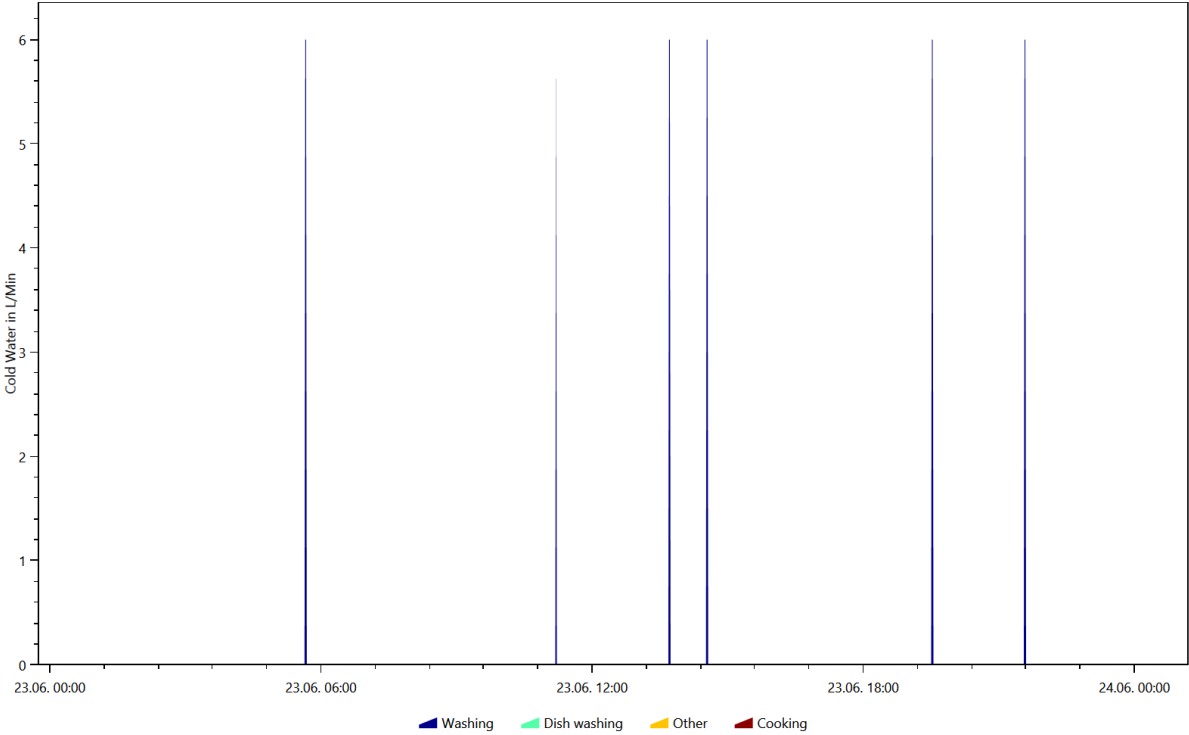
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.22



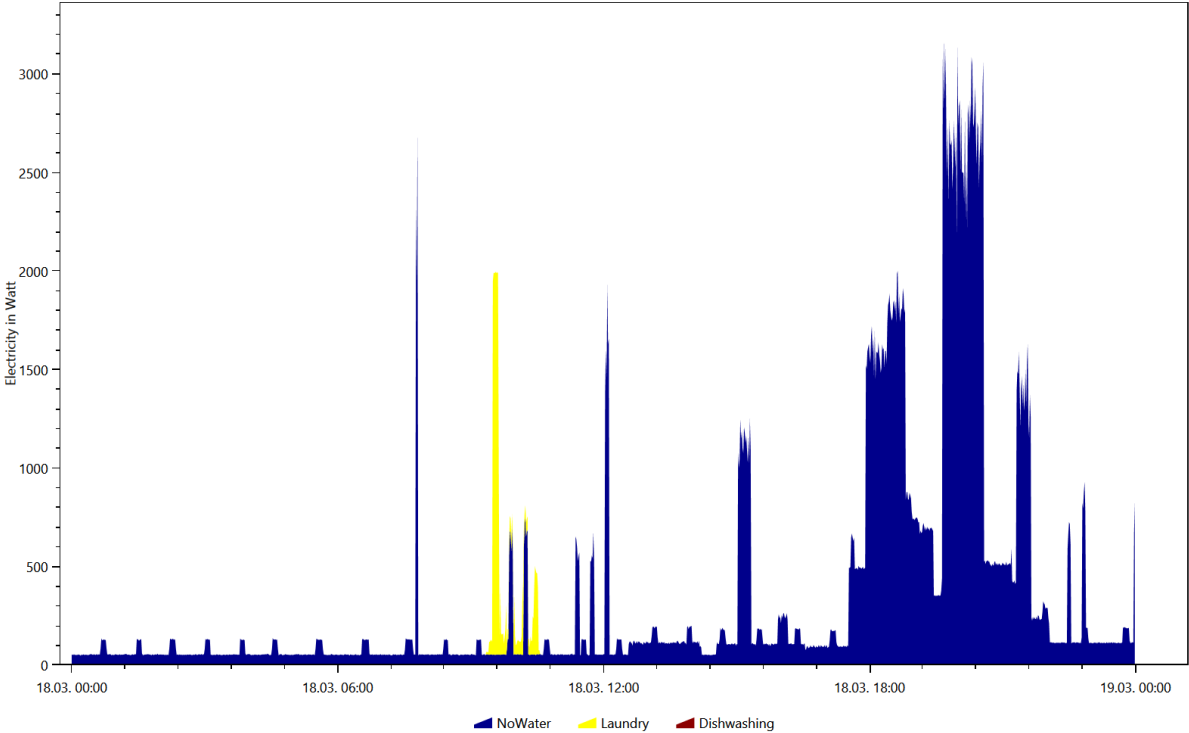
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.10



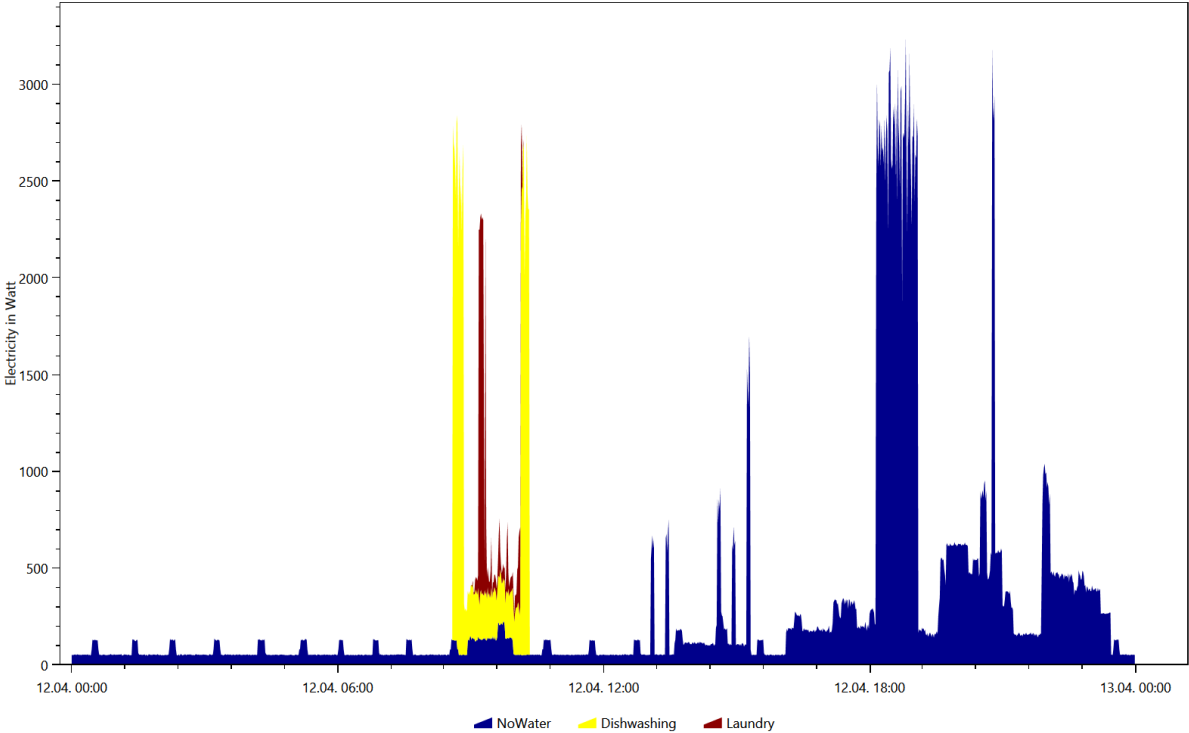
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.23



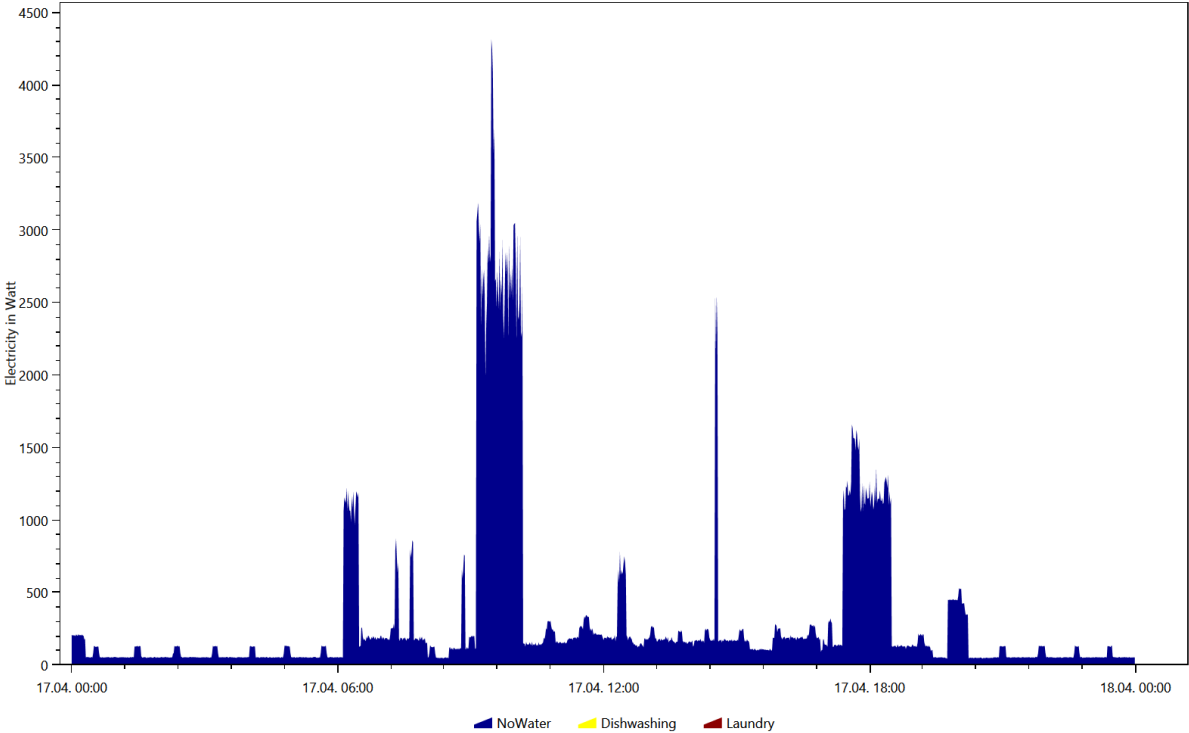
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.18



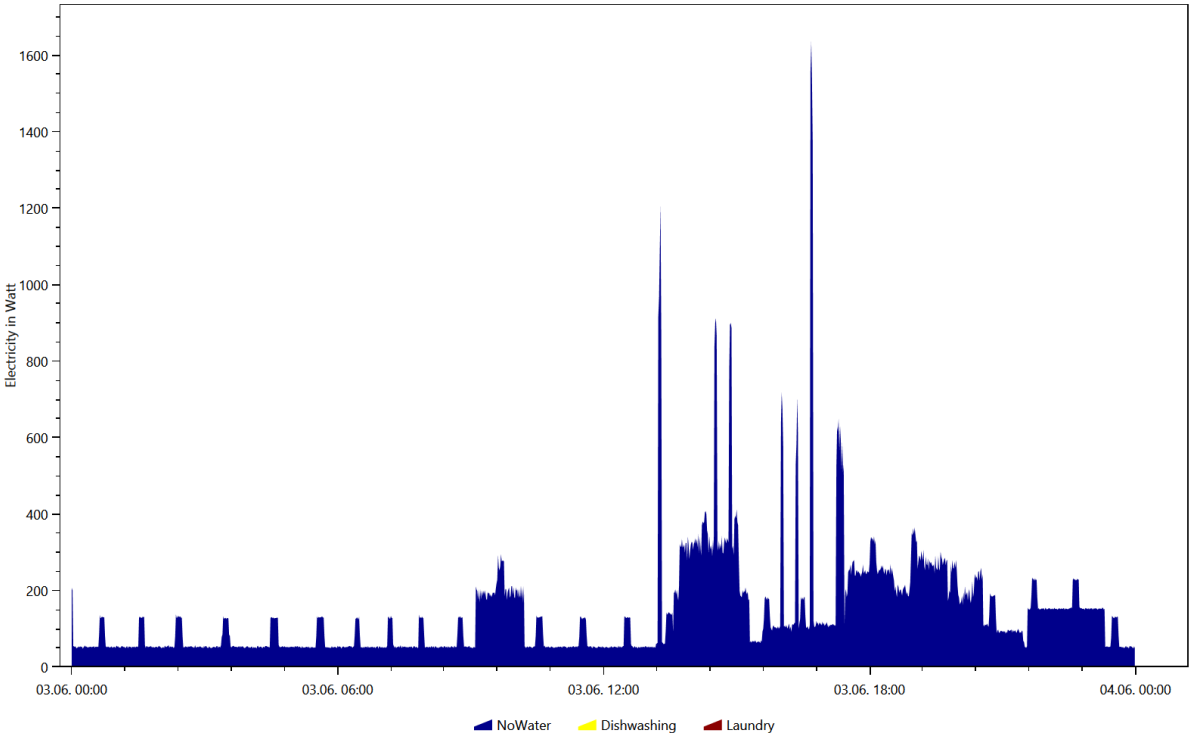
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.12



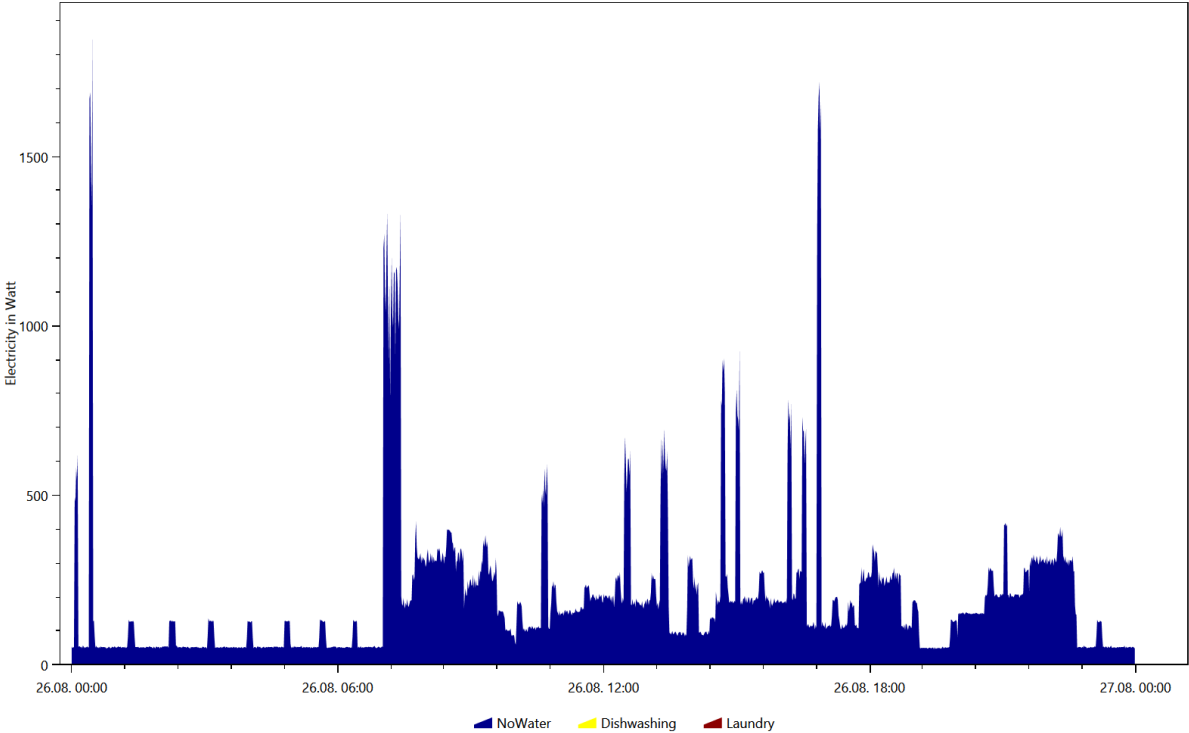
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.17



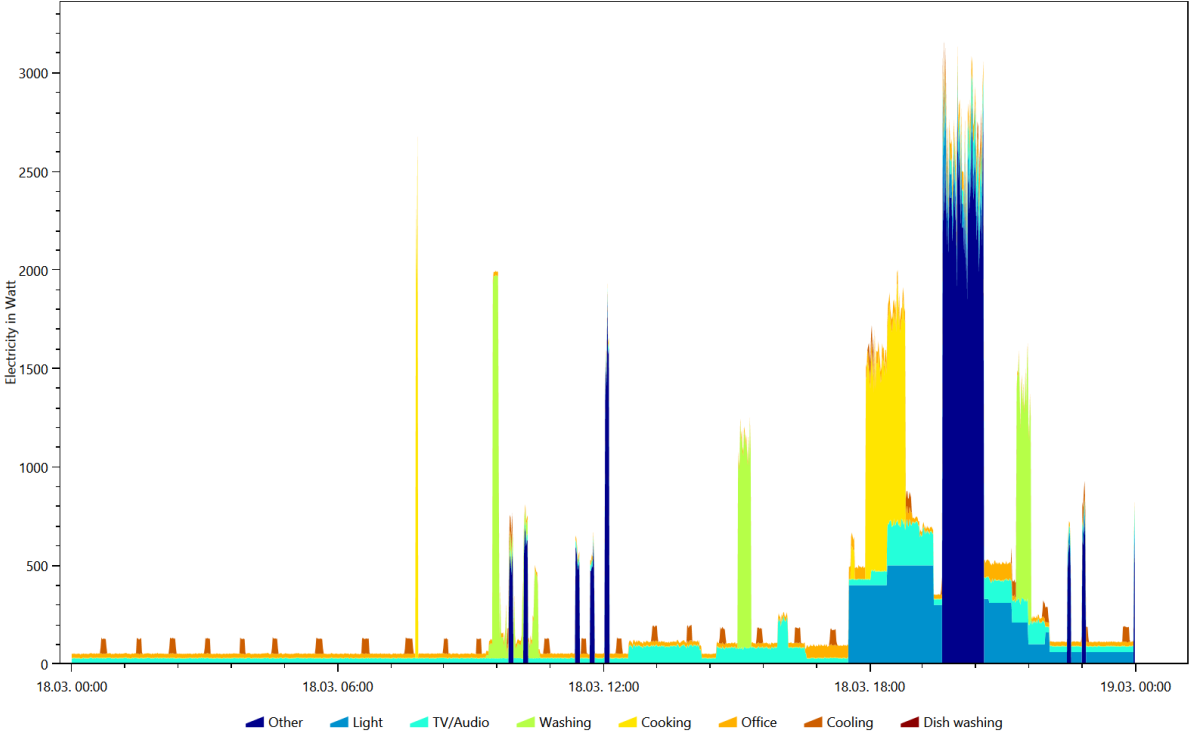
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.3



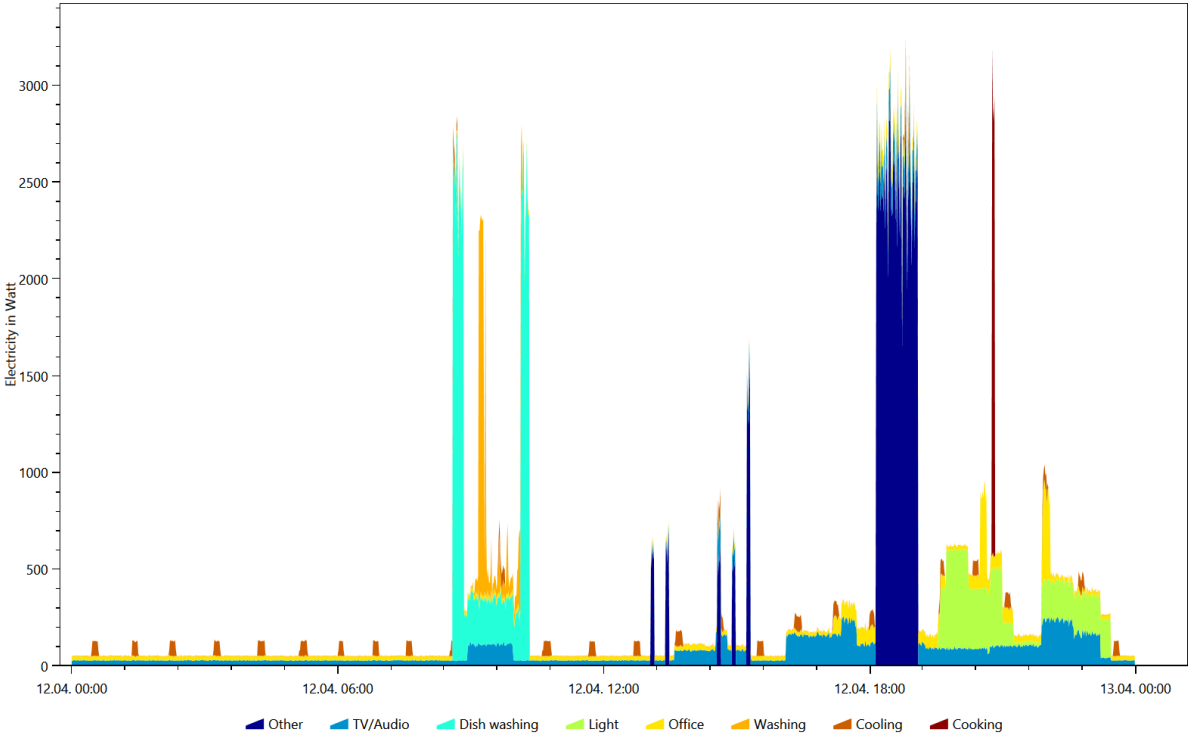
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.26



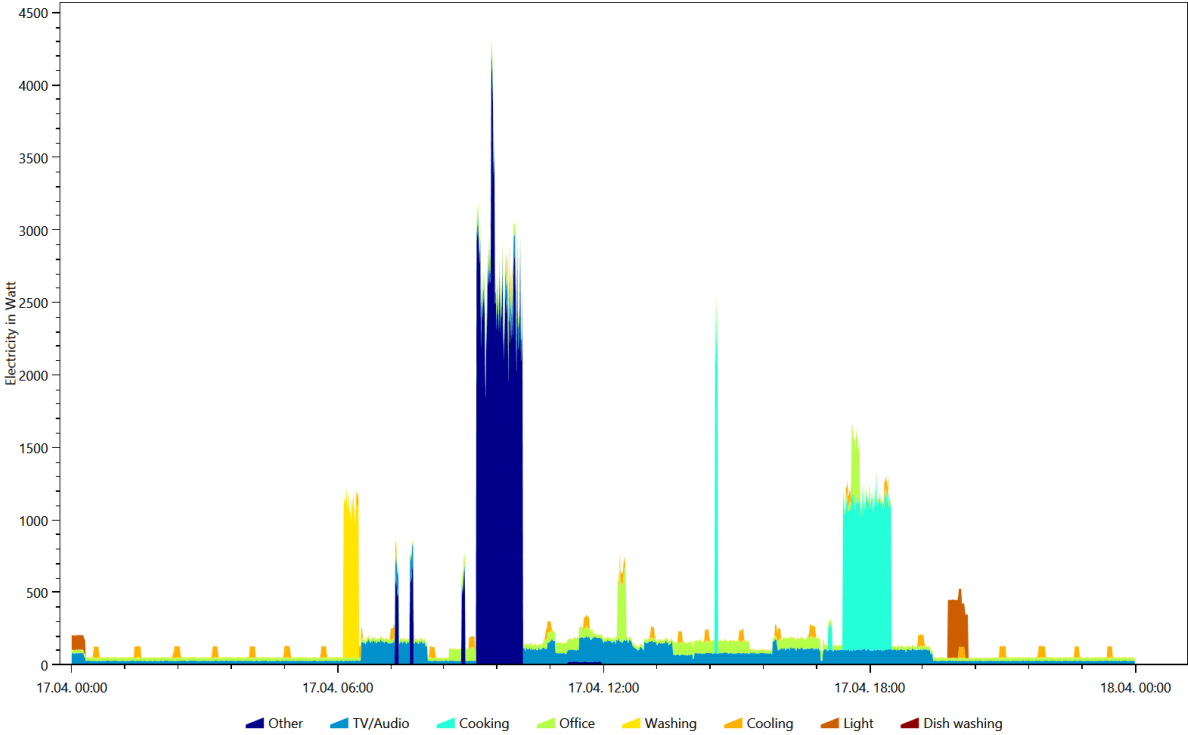
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.18



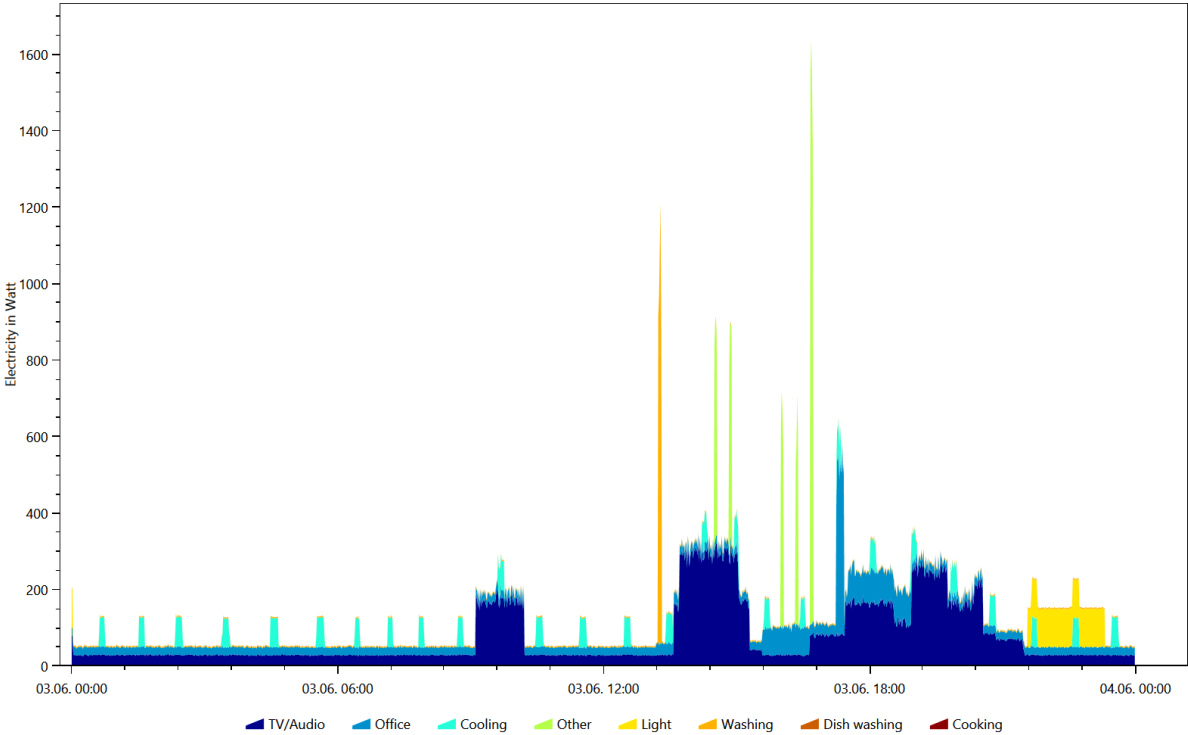
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.12



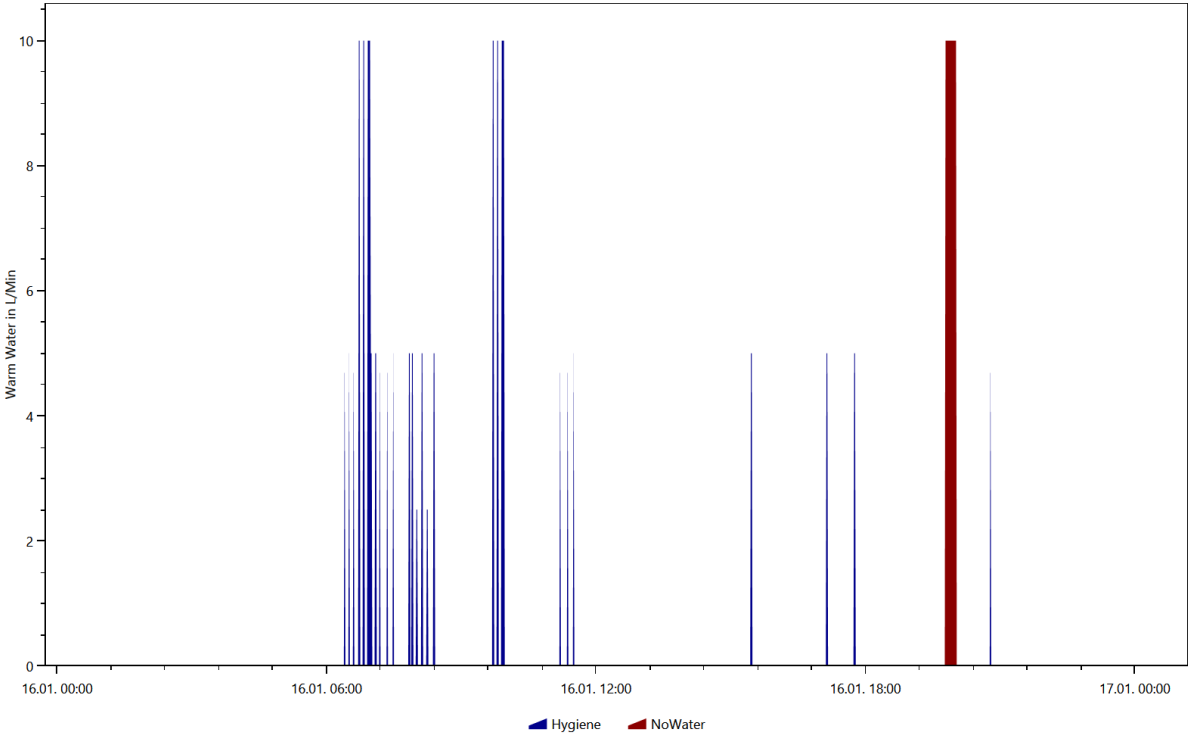
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.17



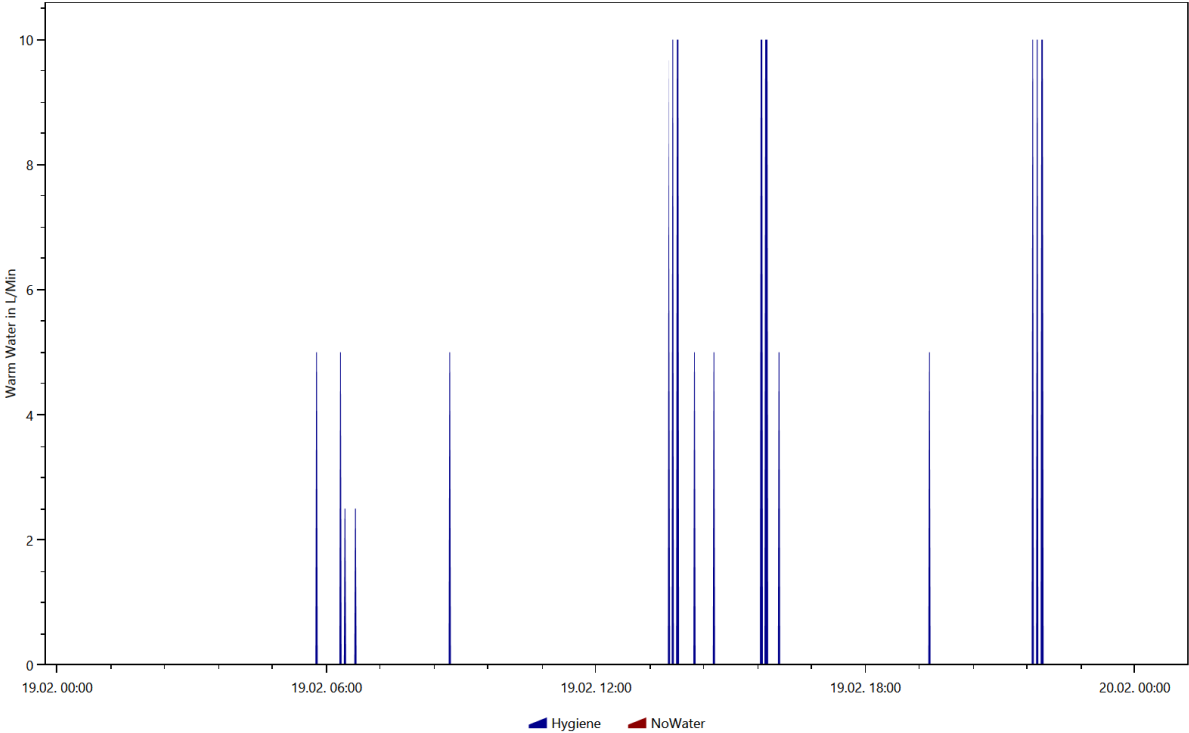
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.3



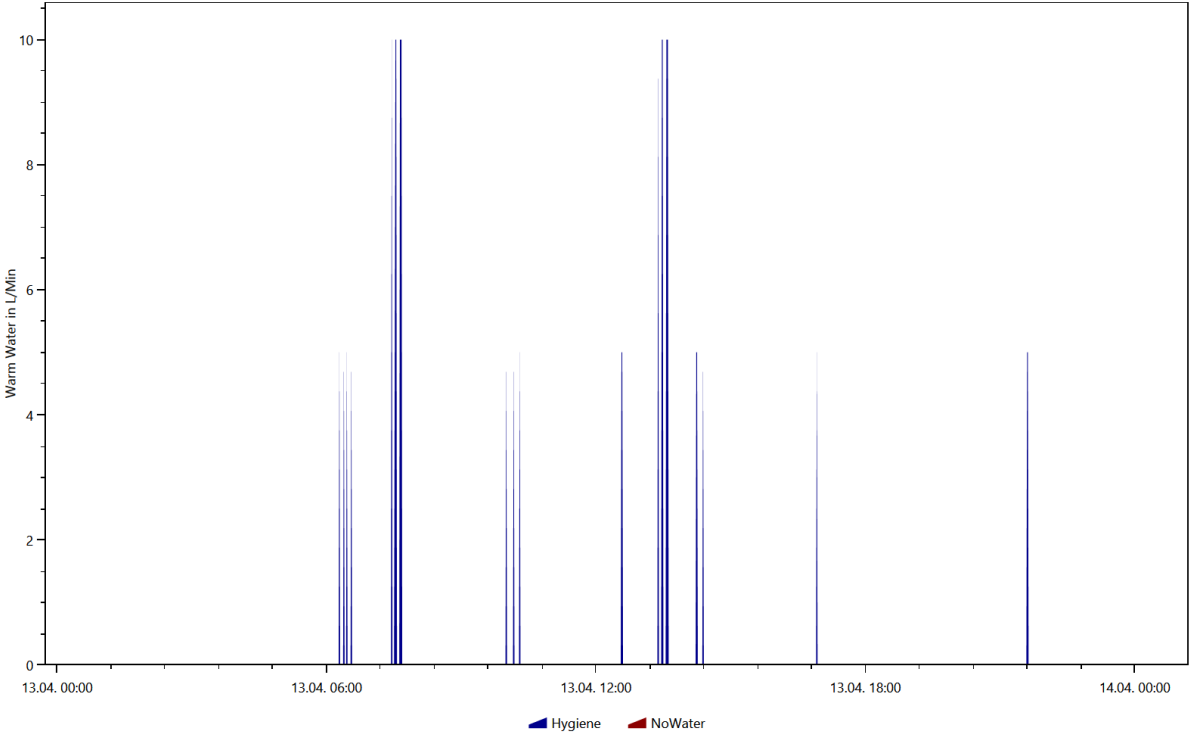
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.16



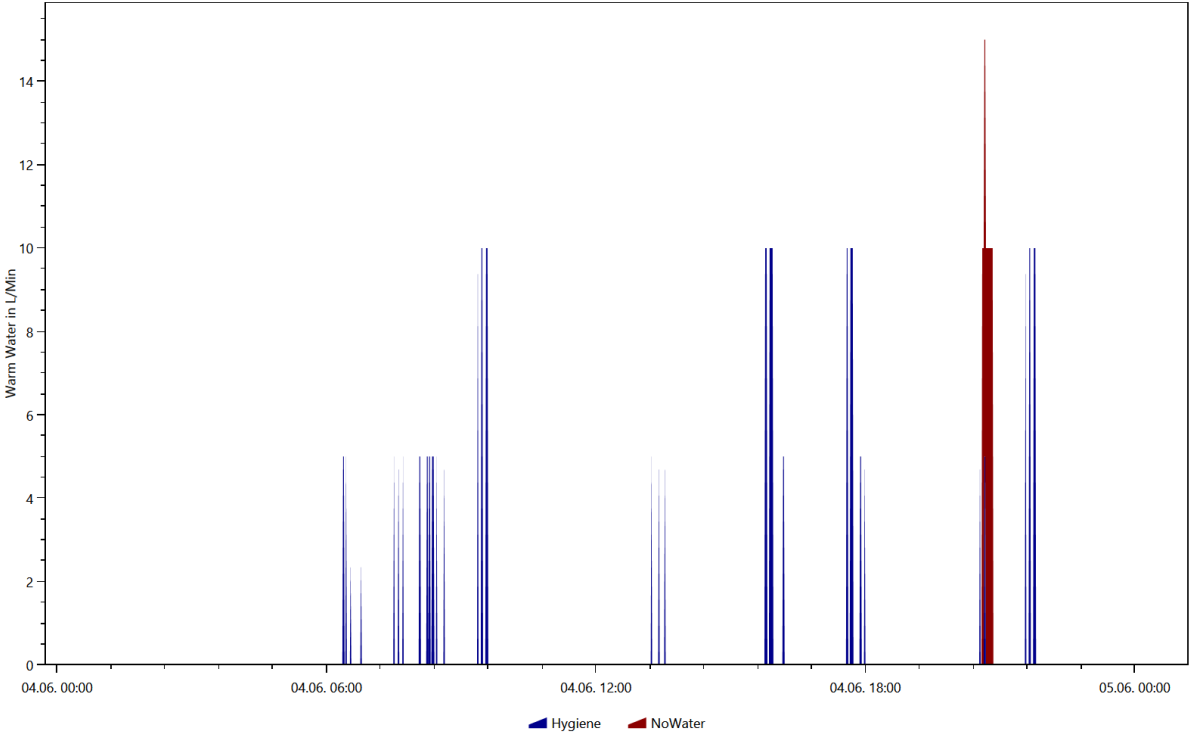
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.19



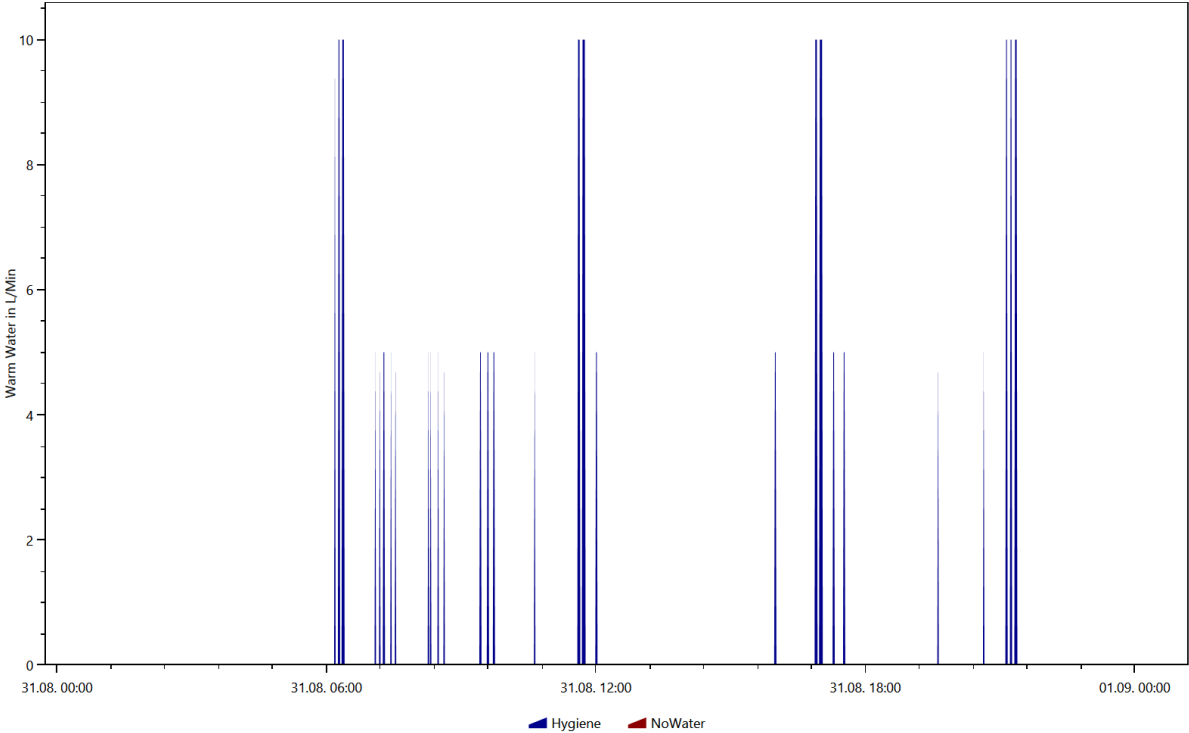
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.13



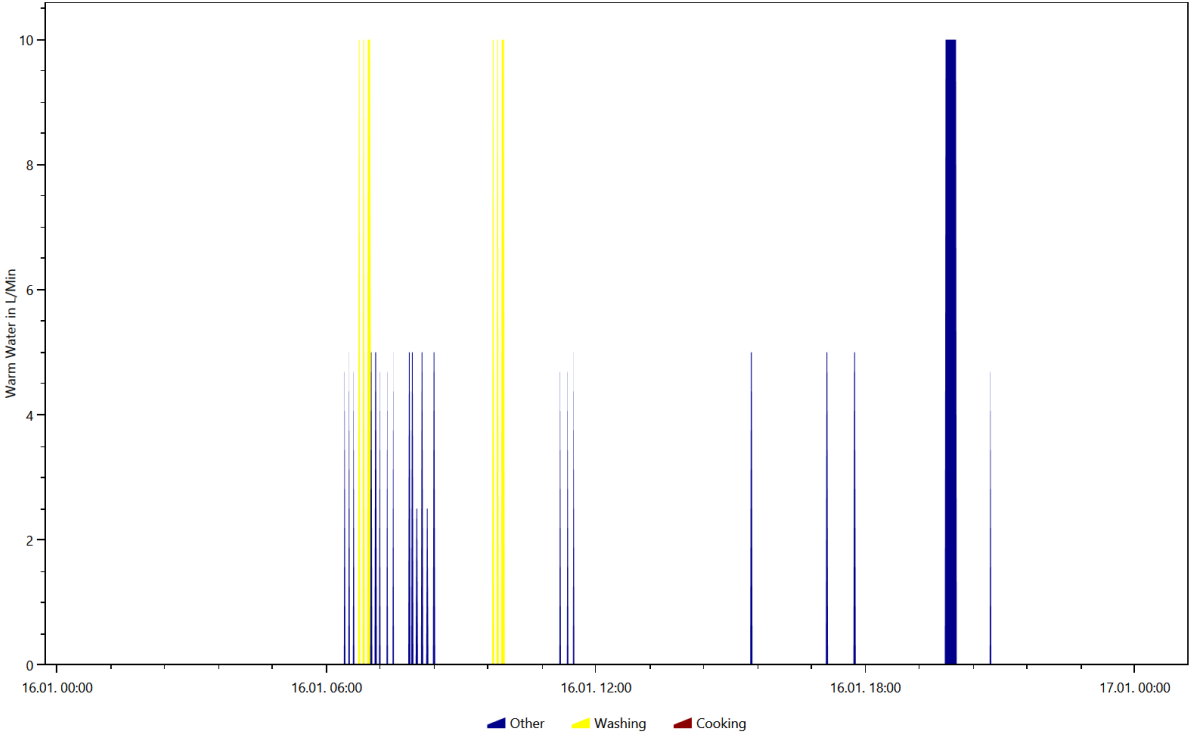
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.4



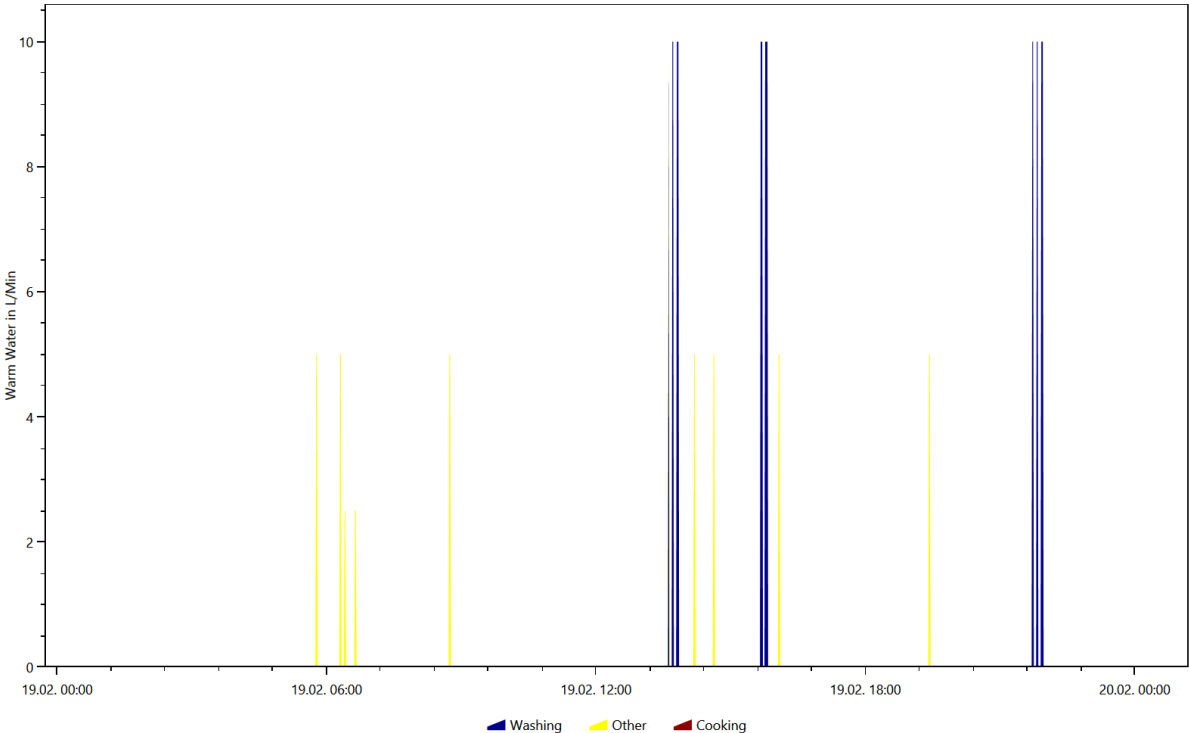
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.31



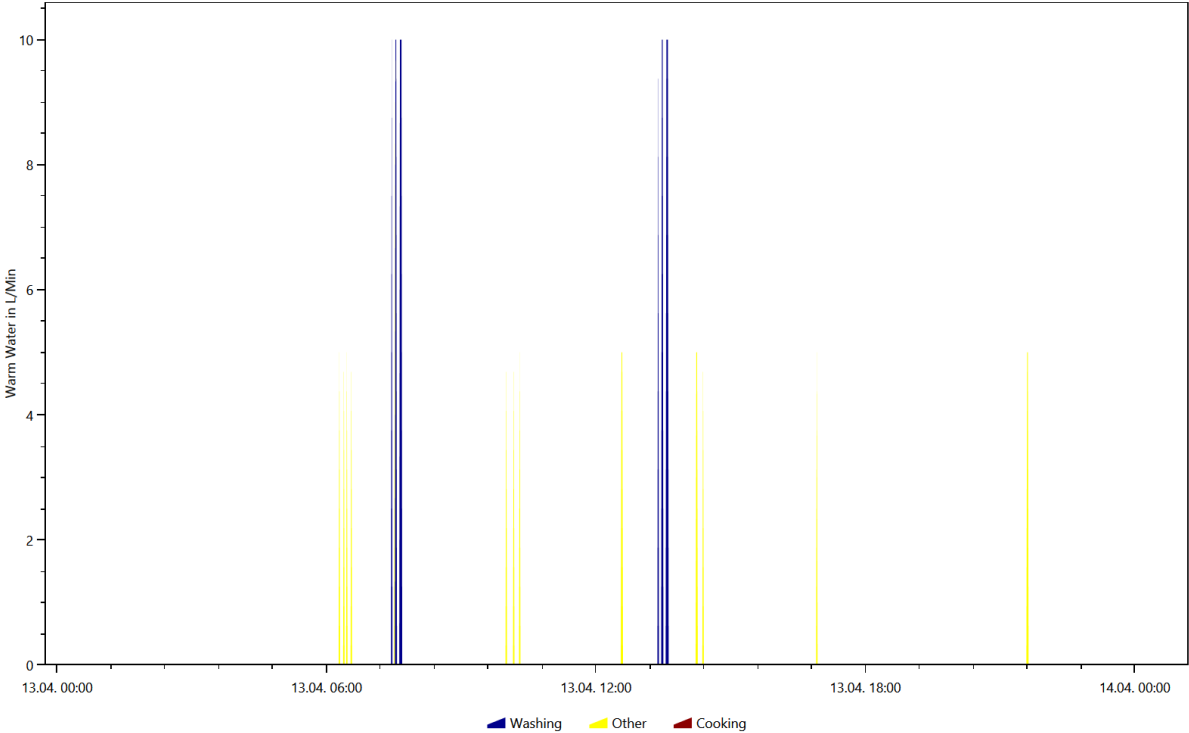
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.16



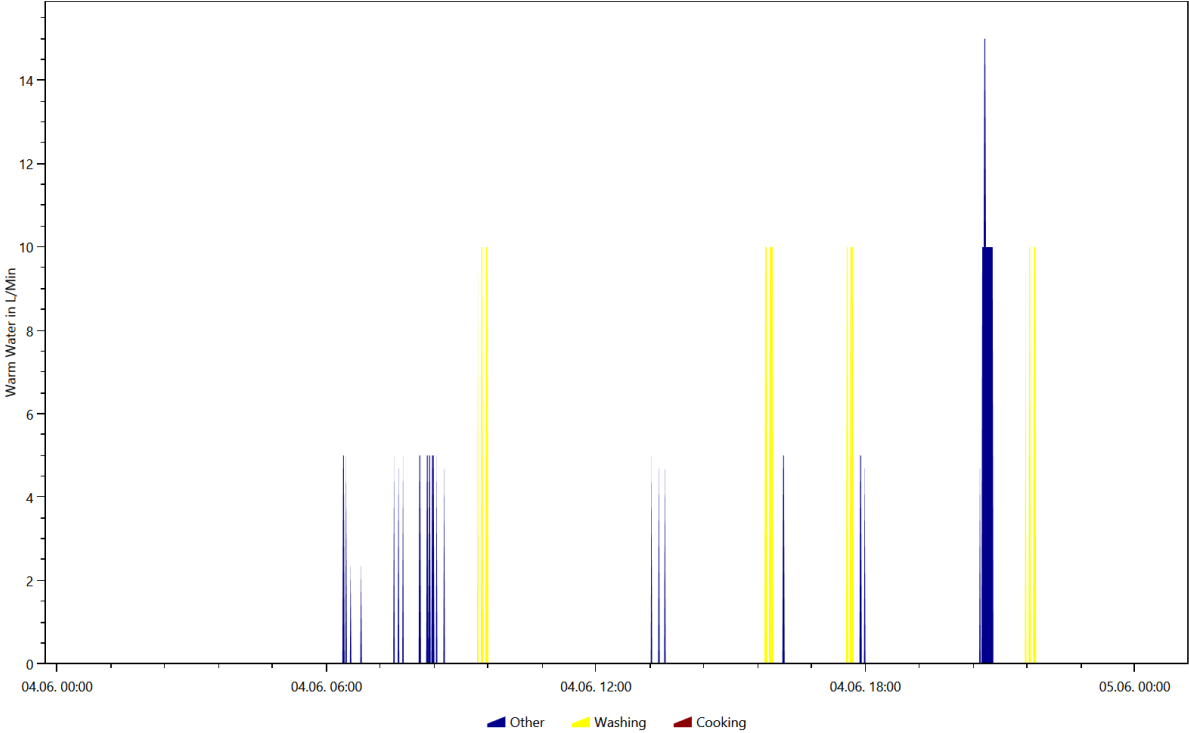
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.19



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.13



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.4

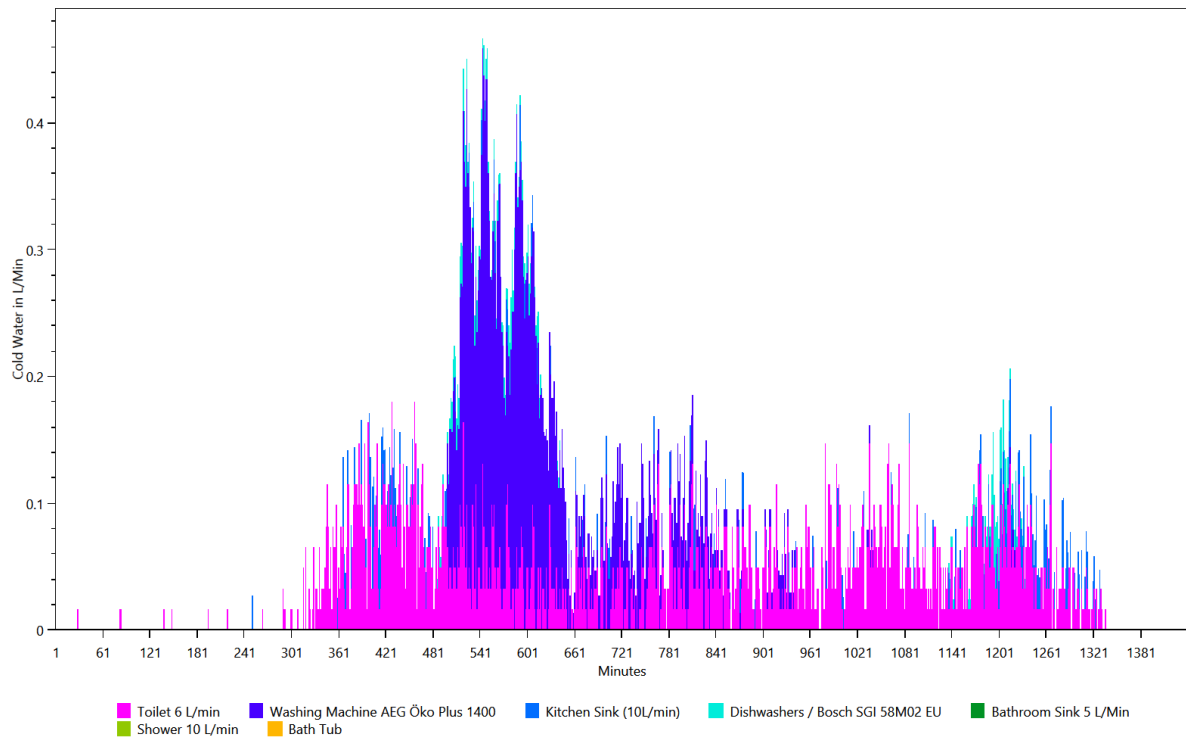


Overview of the time and power of the use per load type per device

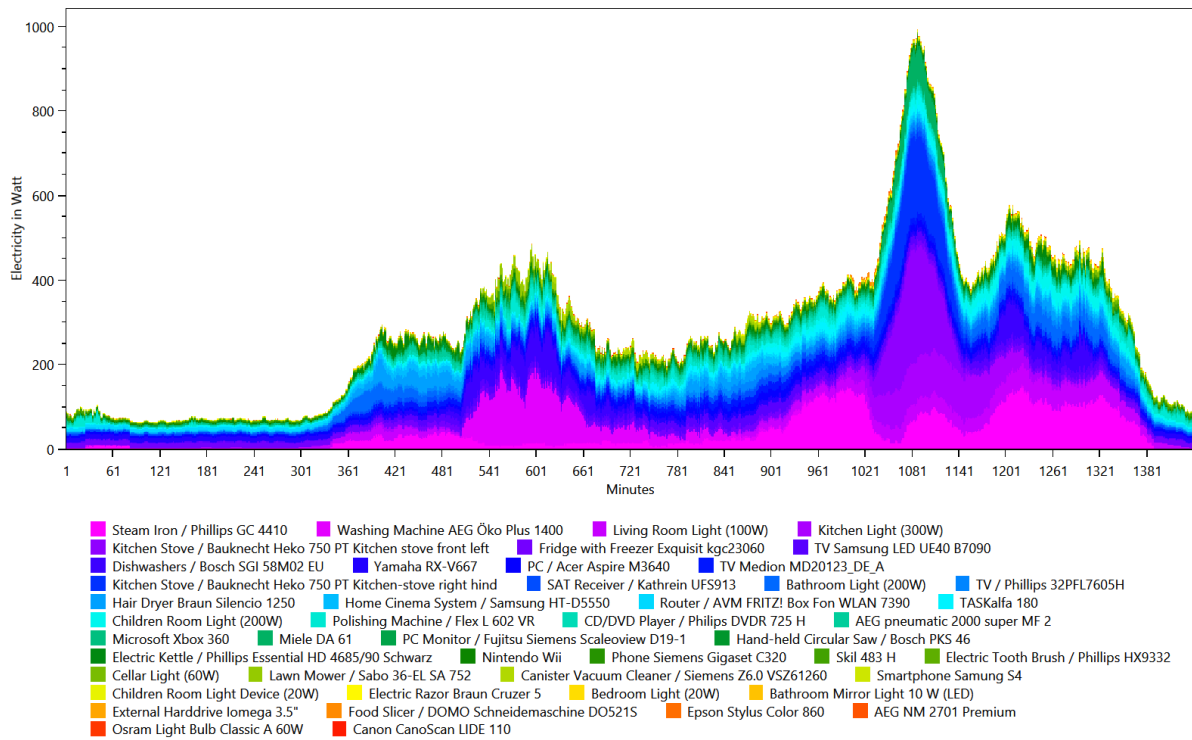
This is made from the files starting with: **TimeOfUseEnergyProfiles**

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

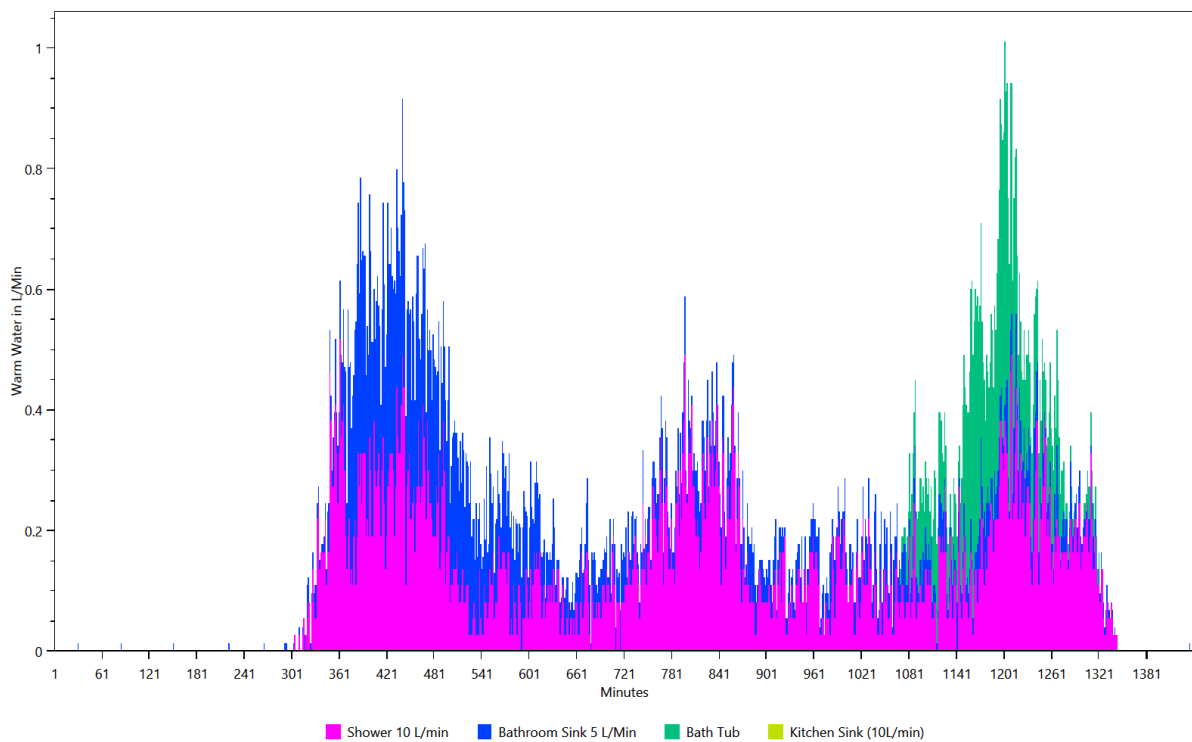
Cold Water



Electricity



Warm Water

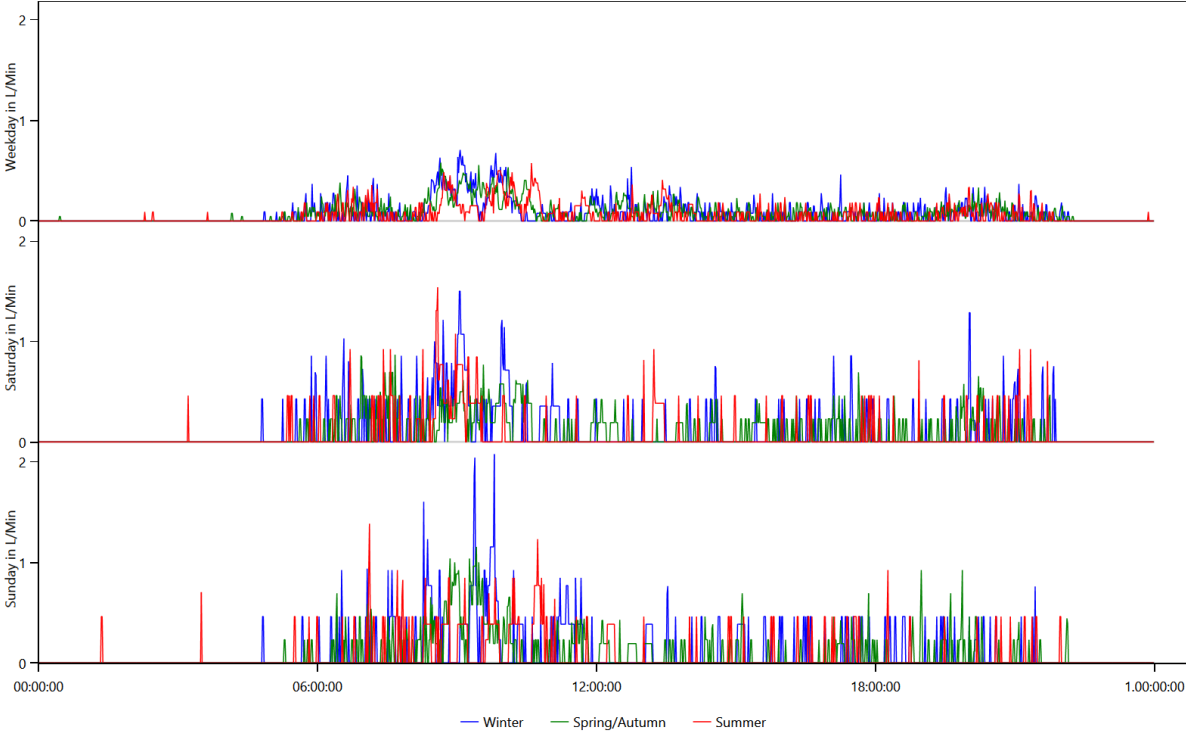


Energy use per load type during different seasons, split by weekday/saturday/sunday

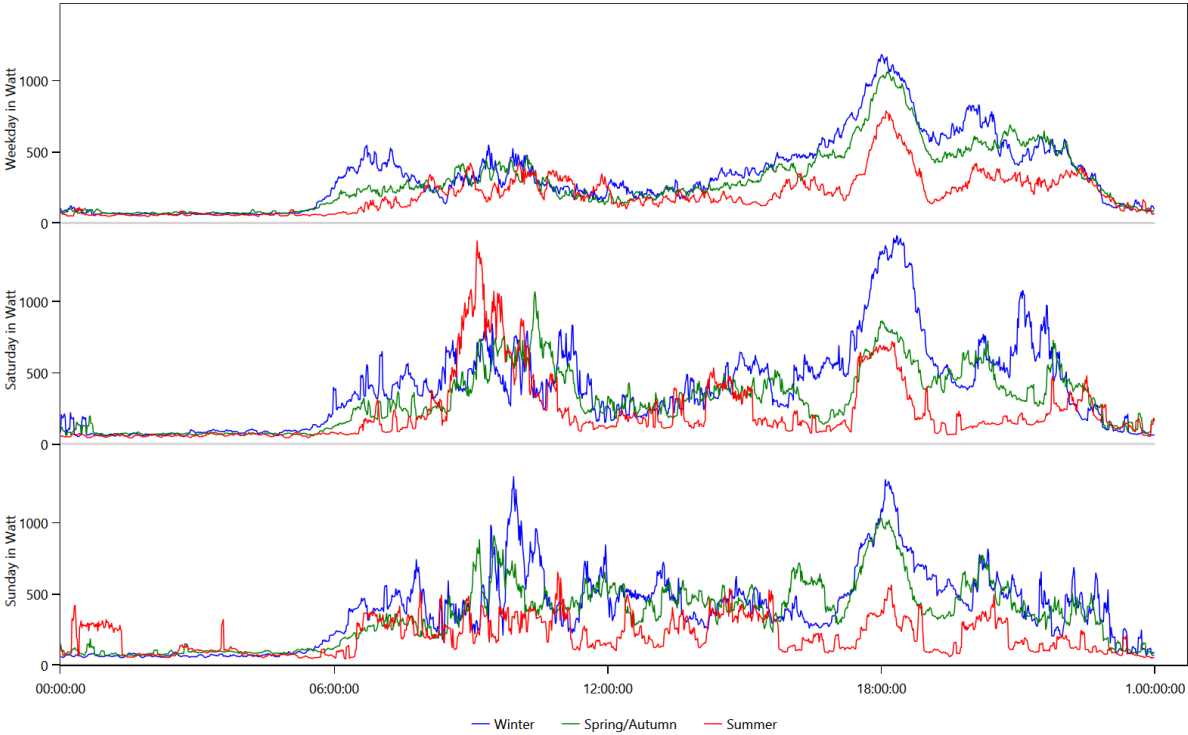
This is made from the files starting with: WeekdayProfiles

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

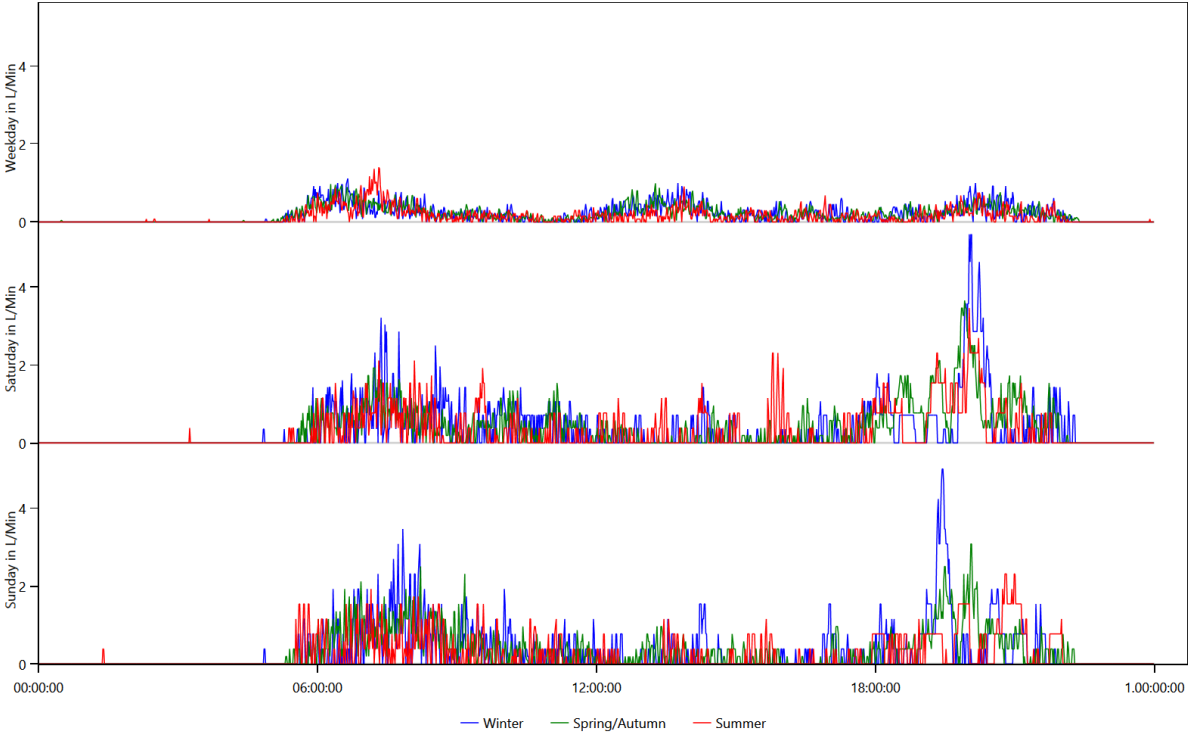
Cold Water



Electricity



Warm Water

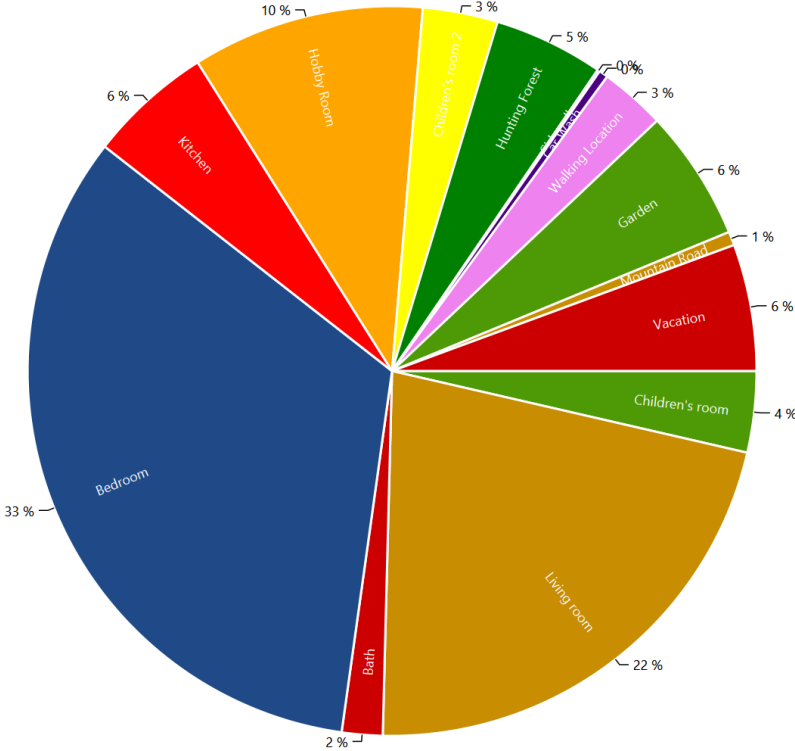


Location Distribution per Person

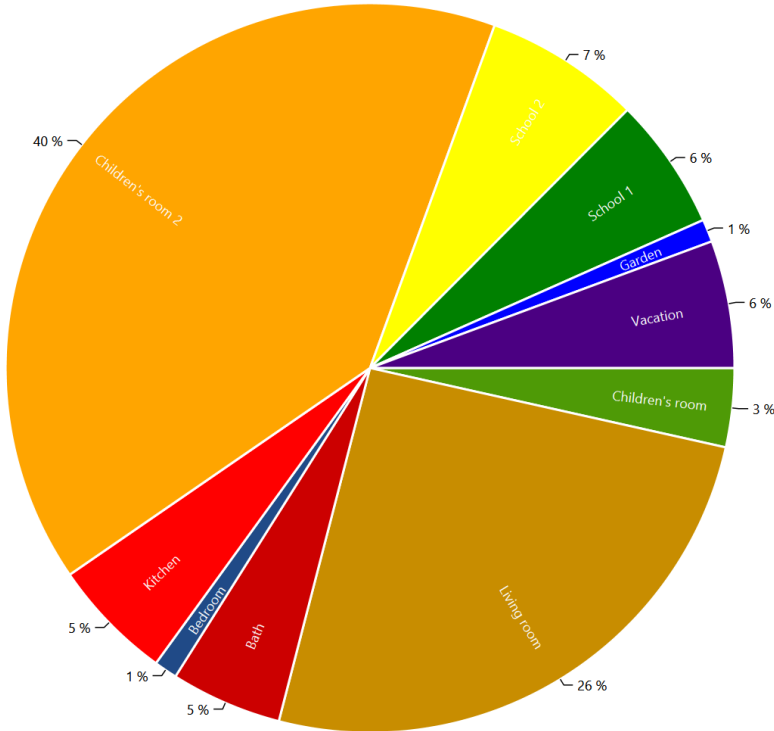
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

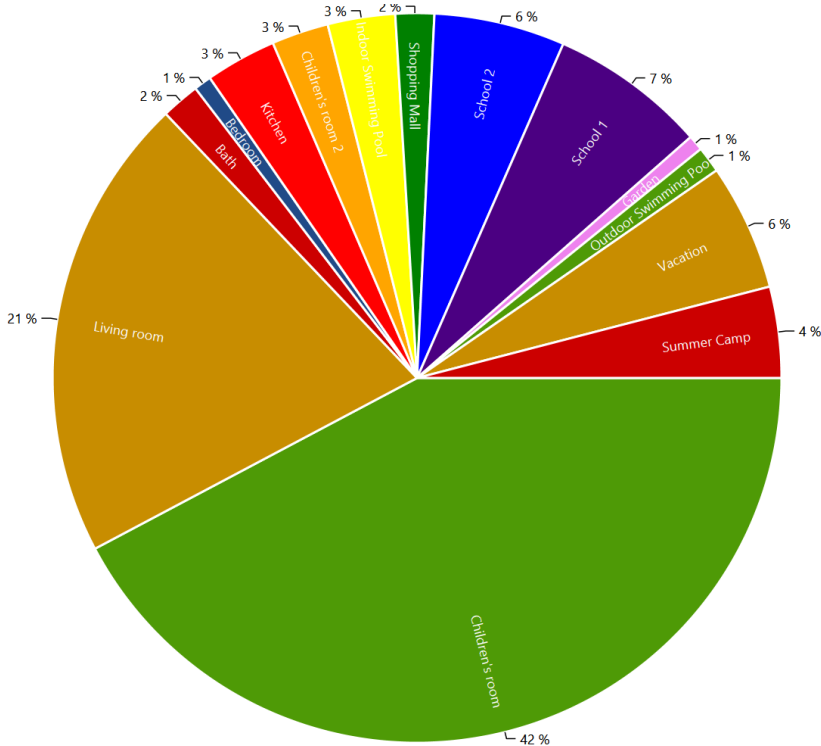
CHR53 Franz (45 Male)



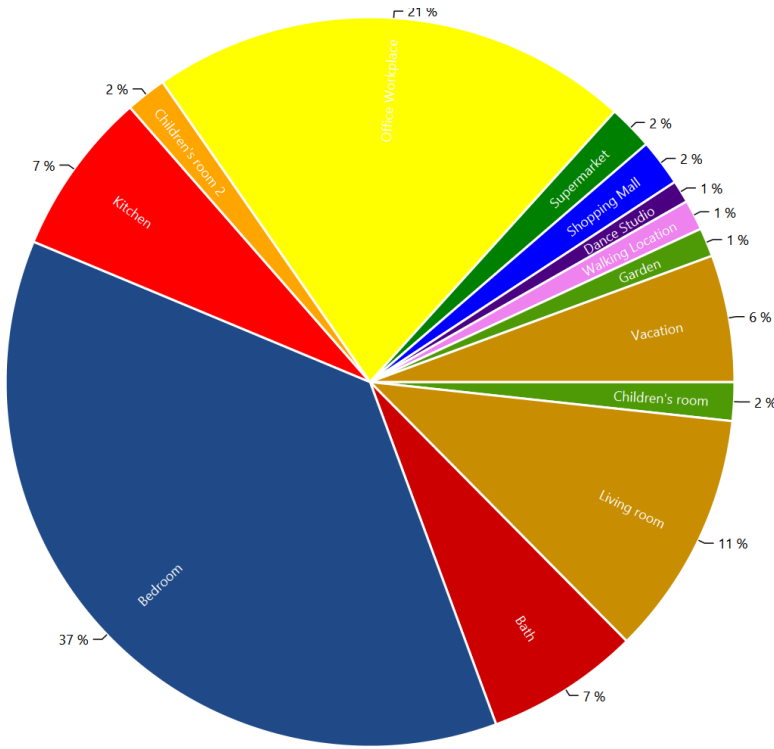
CHR53 Linda (11 Female)



CHR53 Robert (15 Male)



CHR53 Rosemarie (40 Female)



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

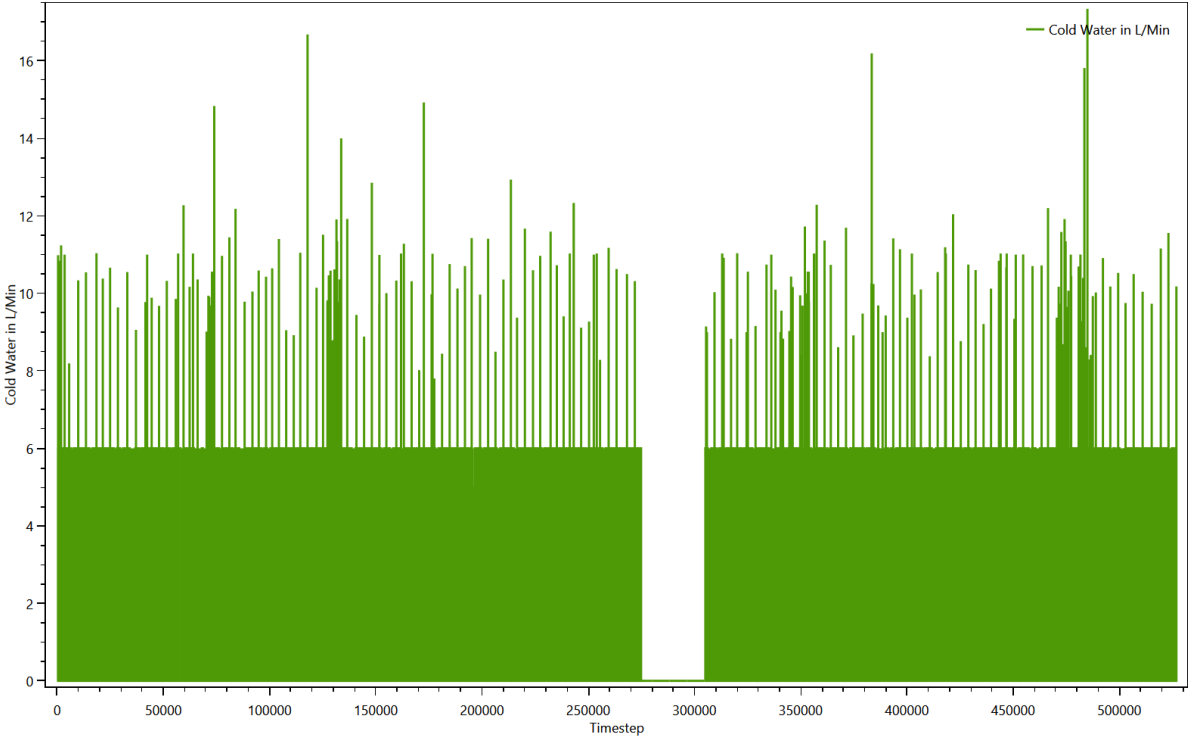
```
Time step;Calendertime;Person;Selected affordance;Affordance Category;Is Sick
0;01.01.2016 00:00;CHR53 Franz (45/Male);sleep bed 08 (08 h);sleep;False;
0;01.01.2016 00:00;CHR53 Linda (11/Female);sleep bed 04 (10 h) Child;sleep;False;
0;01.01.2016 00:00;CHR53 Robert (15/Male);sleep bed 03 (10 h) Child;sleep;False;
0;01.01.2016 00:00;CHR53 Rosemarie (40/Female);sleep bed 02 (08 h);sleep;True;
332;01.01.2016 05:32;CHR53 Franz (45/Male);watch a movie for 1 h 30 min;Passive Entertainment (TV
etc.);False;
353;01.01.2016 05:53;CHR53 Rosemarie (40/Female);go to the toilet;hygiene;True;
358;01.01.2016 05:58;CHR53 Rosemarie (40/Female);read romance novel;Offline Entertainment;True;
374;01.01.2016 06:14;CHR53 Linda (11/Female);get ready in the morning (children);hygiene;False;
386;01.01.2016 06:26;CHR53 Linda (11/Female);take a shower without hair washing (women);hygiene;False;
431;01.01.2016 07:11;CHR53 Rosemarie (40/Female);make and drink tea (15 min);cooking;True;
436;01.01.2016 07:16;CHR53 Franz (45/Male);go to the toilet;hygiene;False;
442;01.01.2016 07:22;CHR53 Franz (45/Male);do it yourself house fixing and building;gardening and
maintenance;False;
447;01.01.2016 07:27;CHR53 Rosemarie (40/Female);watch a movie for 2 h with home cinema system;Passive
Entertainment (TV etc.);True;
453;01.01.2016 07:33;CHR53 Linda (11/Female);join watching a movie in the home cinema (watch a movie for
2 h with home cinema system);Passive Entertainment (TV etc.);False;
544;01.01.2016 09:04;CHR53 Robert (15/Male);get ready in the morning (children);hygiene;False;
552;01.01.2016 09:12;CHR53 Linda (11/Female);go to the toilet;hygiene;False;
552;01.01.2016 09:12;CHR53 Rosemarie (40/Female);take a shower without hair washing
(women);hygiene;True;
555;01.01.2016 09:15;CHR53 Robert (15/Male);play with smartphone (1 h);Active Entertainment (Computer,
Internet etc);False;
558;01.01.2016 09:18;CHR53 Linda (11/Female);use the computer (1.5 h);Active Entertainment (Computer,
Internet etc);False;
```

Sum Profiles

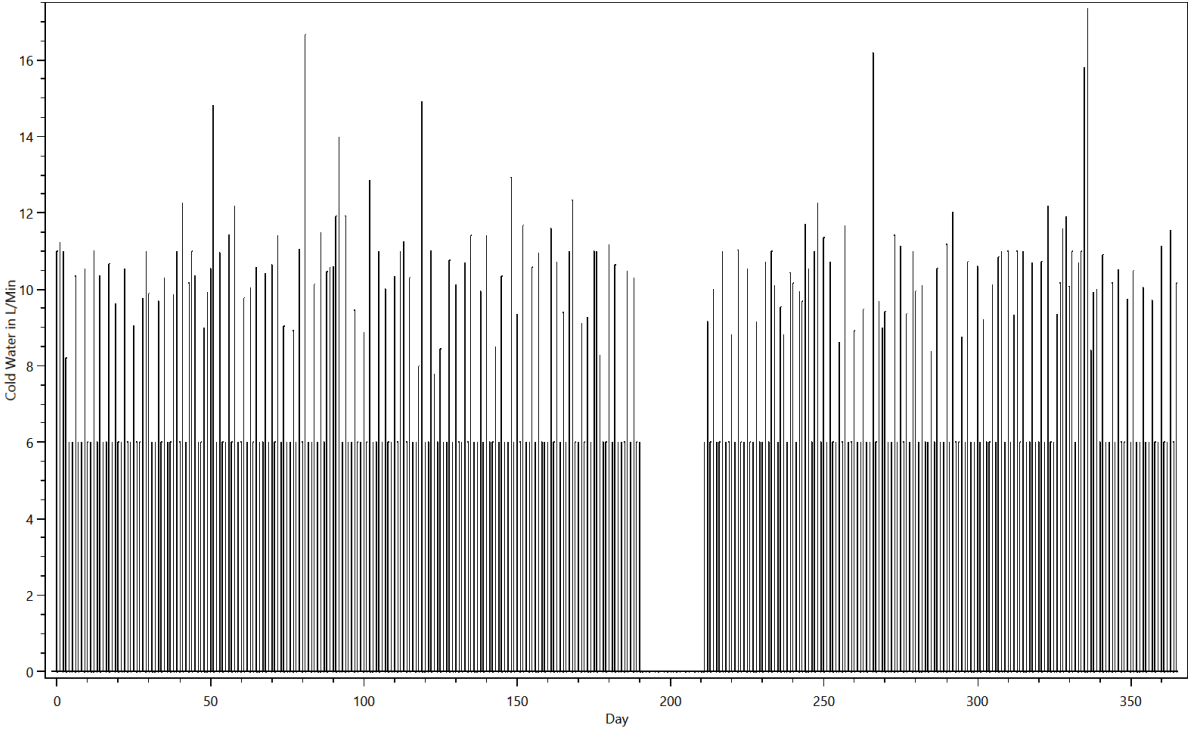
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

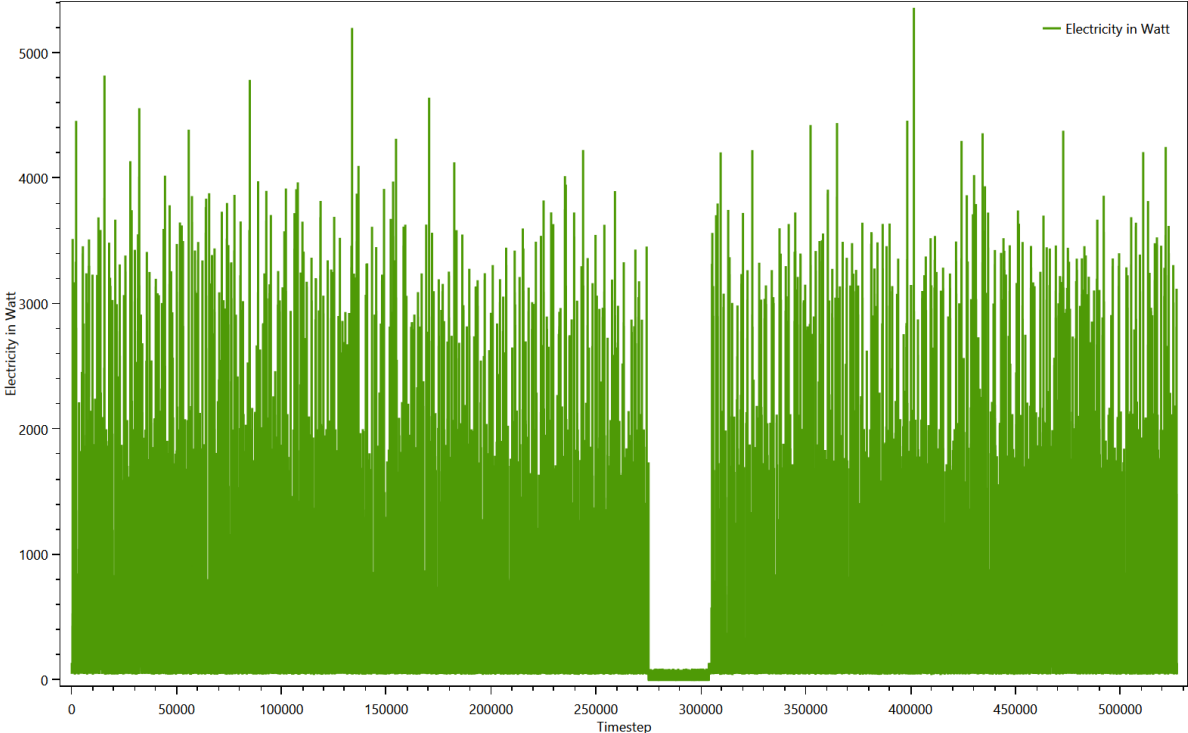
[Summed up curve for Cold Water from SumProfiles.Cold Water.png](#)



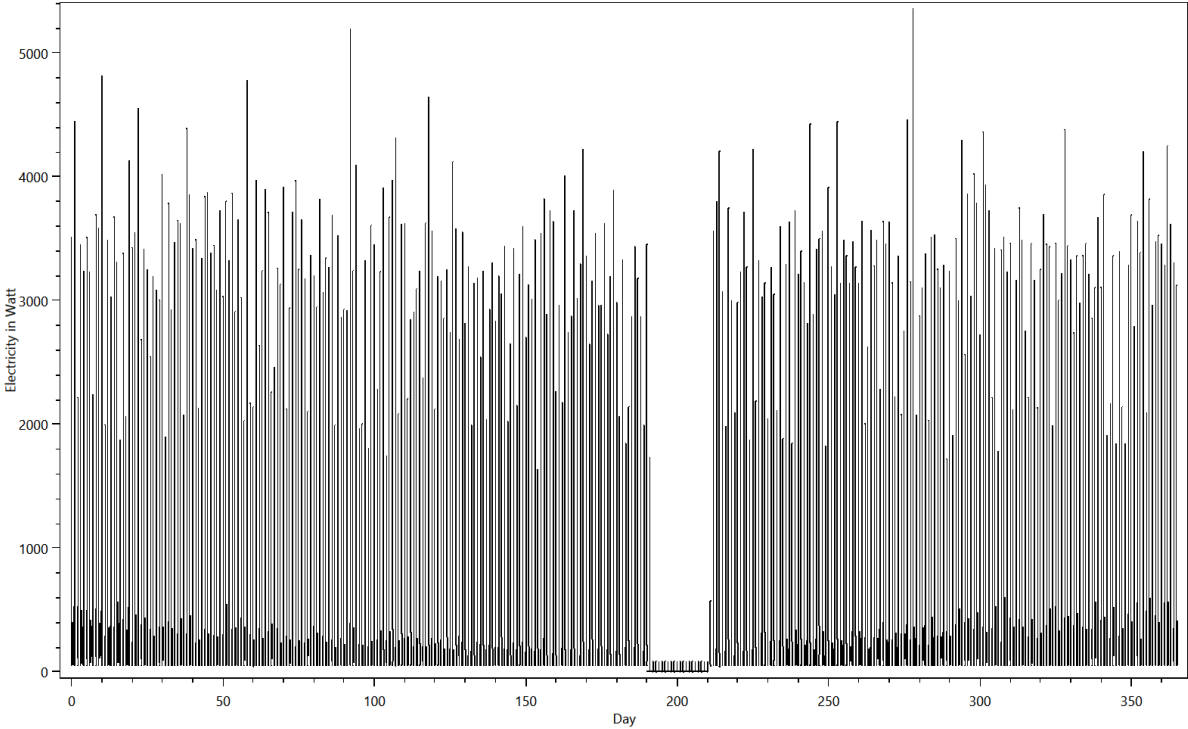
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax.png



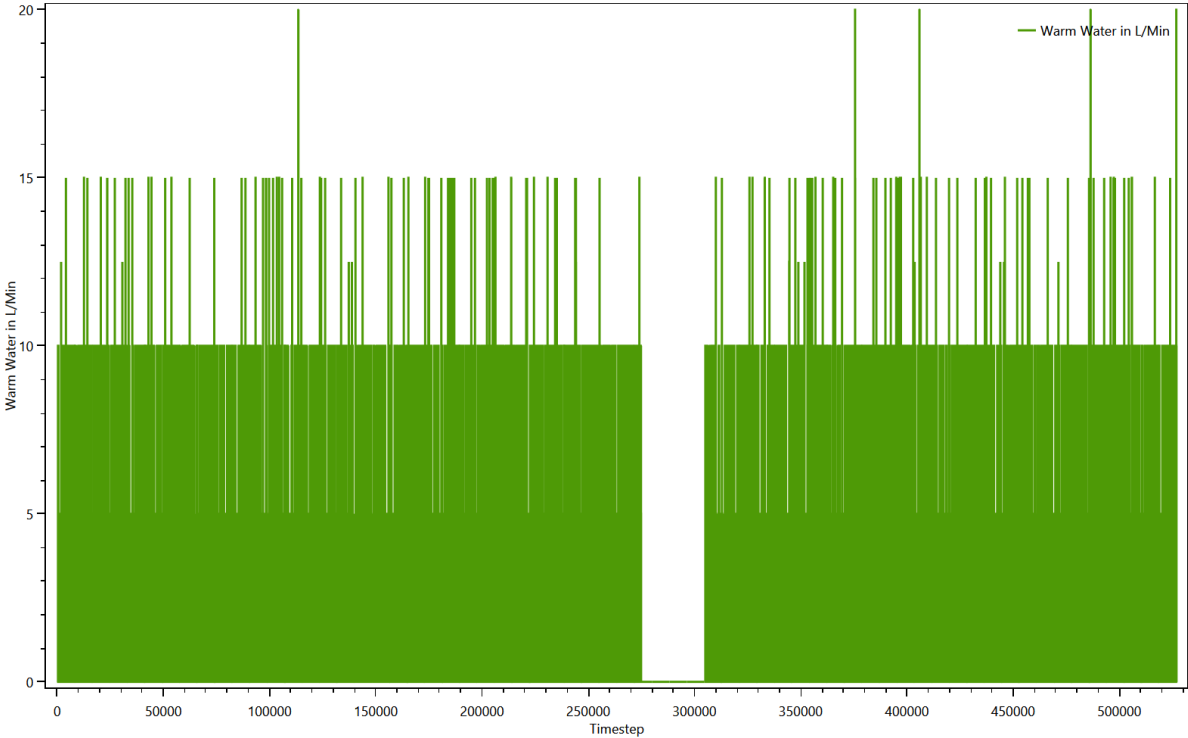
Summed up curve for Electricity from SumProfiles.Electricity.png



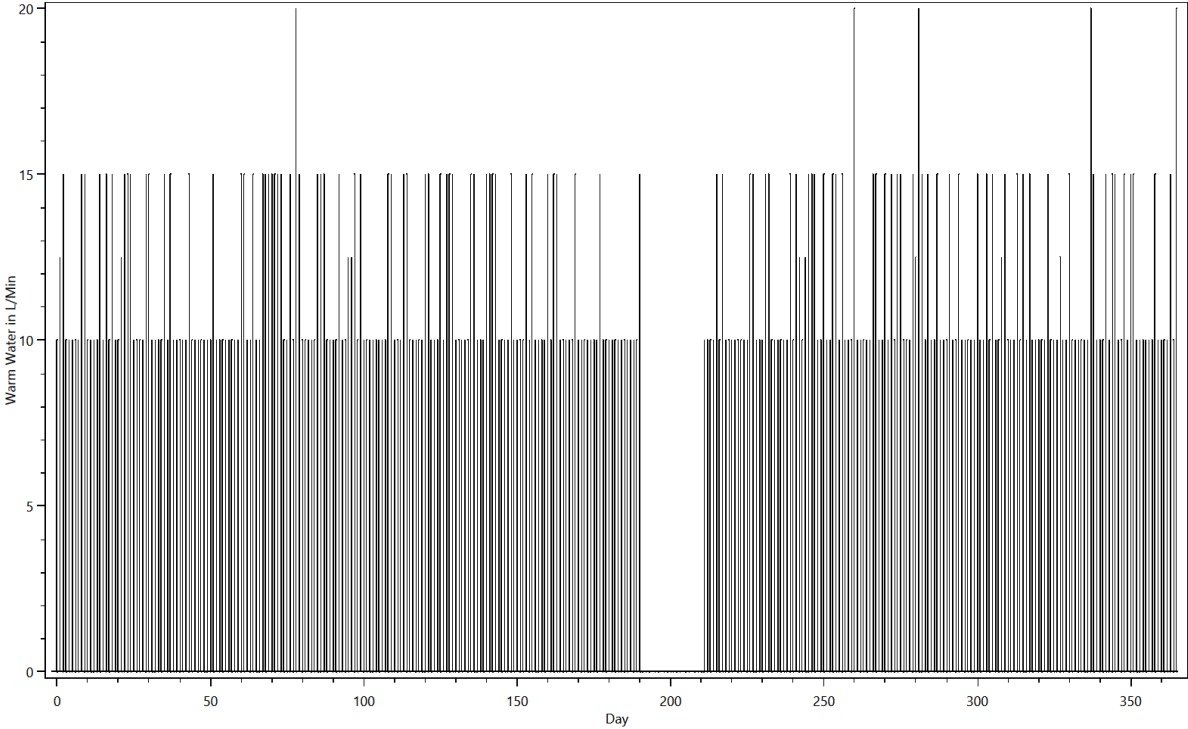
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR53 2 Parents, 1 Working, 2 Children 0.txt

Device;Load Type;Profile;Number of Activations

AEG NM 2701 Premium;Electricity;01 h 0 min 30% [Synthetic];68

AEG pneumatic 2000 super MF 2;Electricity;0 h 05 min 100% [Synthetic];904

Bath Tub;Warm Water;0 h 15 min 100% [Synthetic];41

Bath Tub;Warm Water;0 h 20 min 100% [Synthetic];47

Bathroom Light (200W);Electricity;Bath - light [Synthetic for Light Device];1312

Bathroom Mirror Light 10 W (LED);Electricity;Bath - light [Synthetic for Light Device];1312

Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 100% [Synthetic];4744

Bathroom Sink 5 L/Min;Warm Water;0 h 01 min 50% [Synthetic];468

Bed 2;None;08 h 0 min 100% [Synthetic];348

Bed 3 (Children);None;10 h 0 min 100% [Synthetic];334

Bed 4;None;10 h 0 min 100% [Synthetic];348

Bed 8;None;08 h 0 min 100% [Synthetic];330

Bedroom Light (20W);Electricity;Bedroom - light [Synthetic for Light Device];282

Book;None;01 h 0 min 100% [Synthetic];435

CD/DVD Player / Philips DVDR 725 H;Electricity;01 h 30 min 100% [Synthetic];594

CD/DVD Player / Philips DVDR 725 H;Electricity;02 h 0 min 100% [Synthetic];200

CD/DVD Player / Philips DVDR 725 H;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8319

Canister Vacuum Cleaner / Siemens Z6.0 VSZ61260;Electricity;0 h 30 min 100% [Synthetic];22

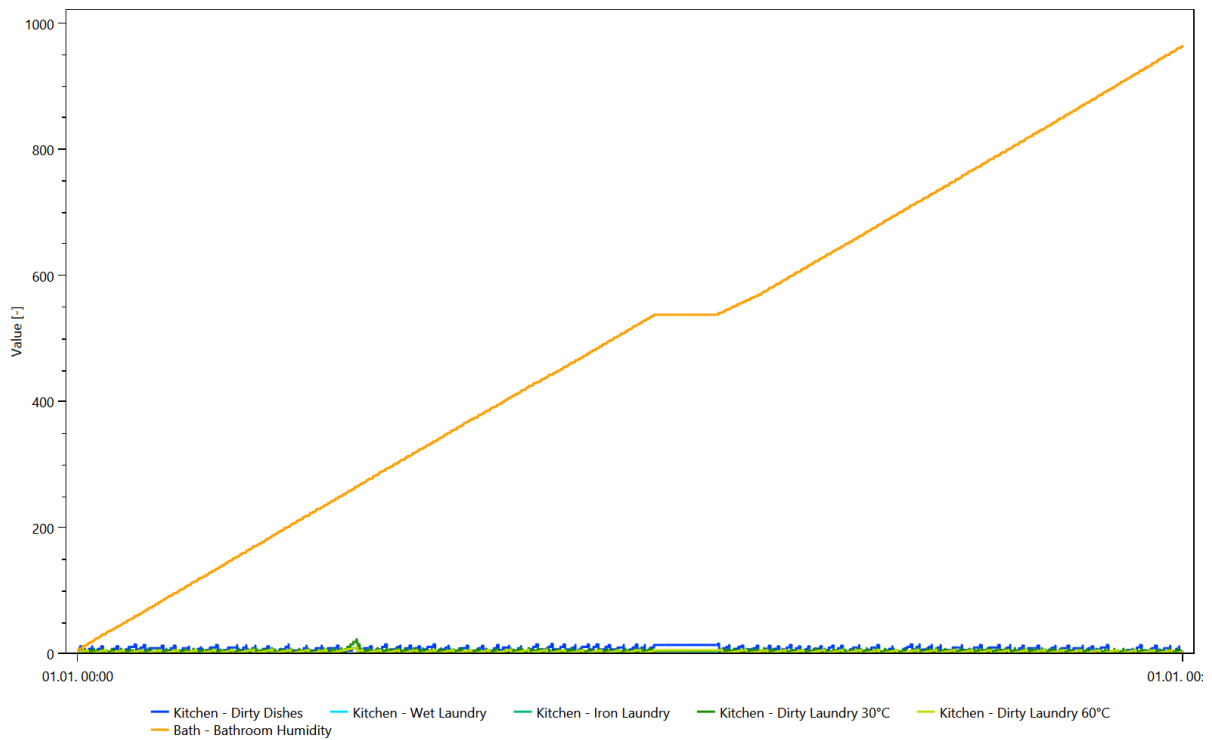
Canon CanoScan LIDE 110;Electricity;0 h 10 min 100% [Synthetic];60

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

