Overview of the results of the household CHR48 Family with 2 children, without work 0

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

Energy Intensity: Random

Seed 3666

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

http://www.loadprofilegenerator.de

Rendering date:16.12.2016 09:32:30

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	55161.68	L
Electricity	4456.46	kWh
Warm Water	102107.23	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	150.71	L
Electricity	12.18	kWh
Warm Water	278.98	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	15.00	L/Min
Electricity	0.16	10950.35	Watt
Warm Water	0.00	15.00	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	13790.42	L
Electricity	1114.12	kWh

Warm Water	25526.81	L
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Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	37.68	L
Electricity	3.04	kWh
Warm Water	69.75	L

Persons

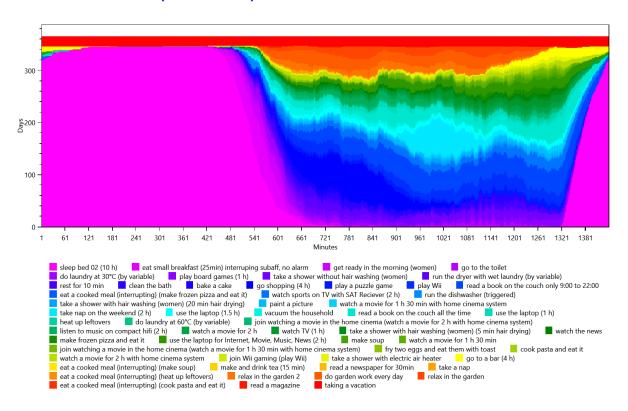
- HH0
- CHR48 Lisa (51/Female)(51/Female) CHR48 Maggie (13/Female)(13/Female) CHR48 Martin (7/Male)(7/Male)
- o CHR48 Stefan (51/Male)(51/Male)

Activity Frequency Charts

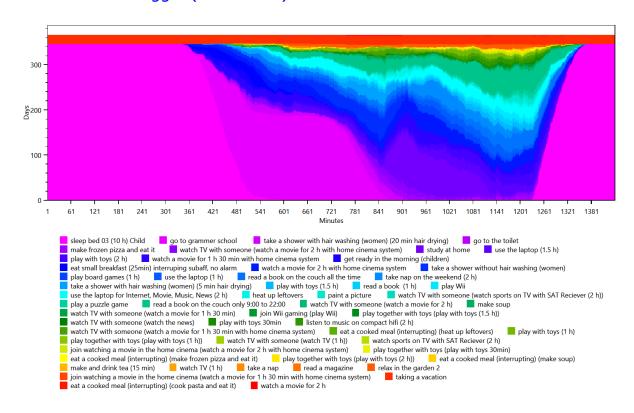
This is made from the files starting with: ActivityFrequenciesPerMinute

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.

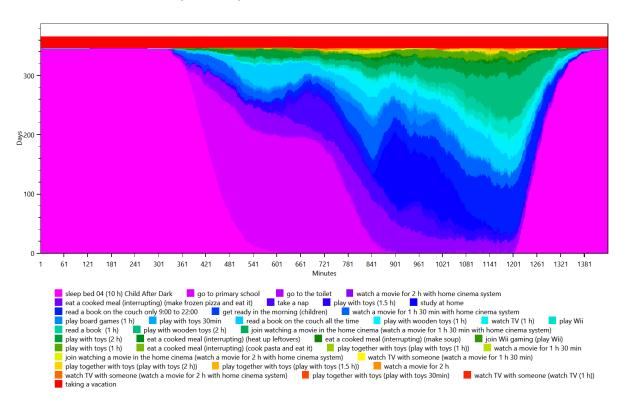
HH0 - CHR48 Lisa (51 Female)



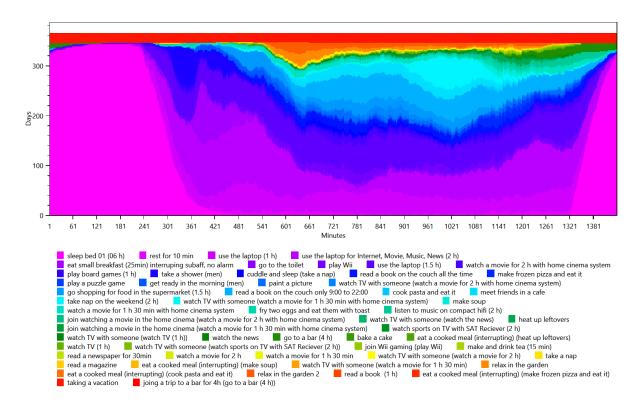
HHO - CHR48 Maggie (13 Female)



HH0 - CHR48 Martin (7 Male)



HH0 - CHR48 Stefan (51 Male)

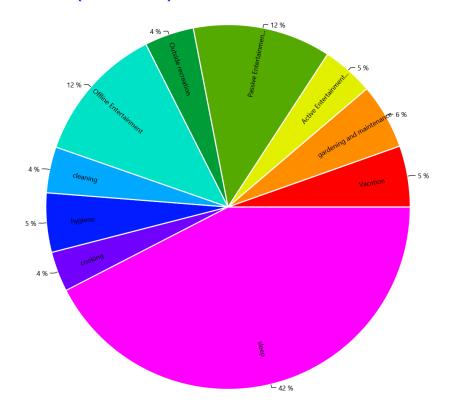


Activity Distribution per Person

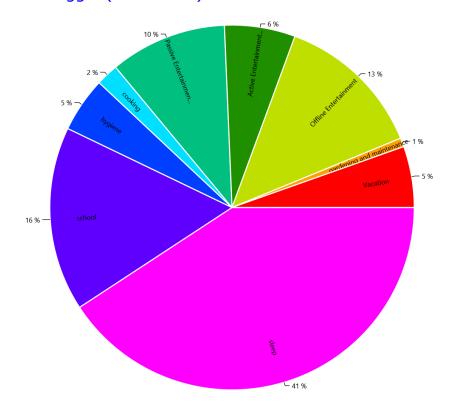
This is made from the files starting with: ActivityPercentage

This shows the distribution of the activities, grouped by the affordance Affordance To Categories.

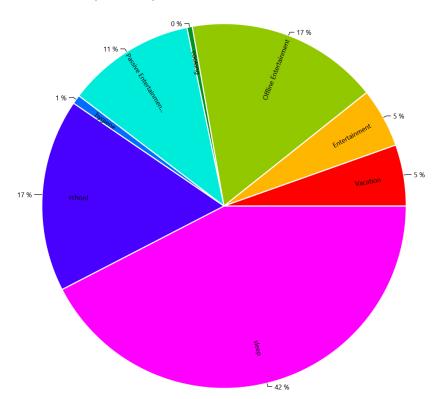
HH0 - CHR48 Lisa (51 Female)



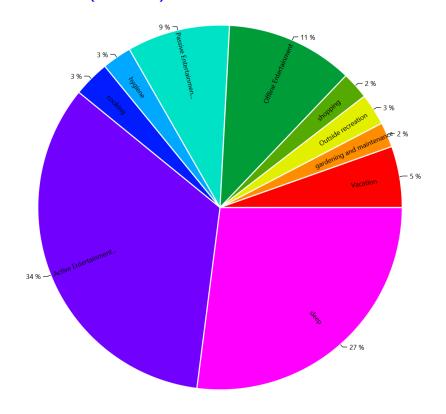
HH0 - CHR48 Maggie (13 Female)



HH0 - CHR48 Martin (7 Male)



HH0 - CHR48 Stefan (51 Male)

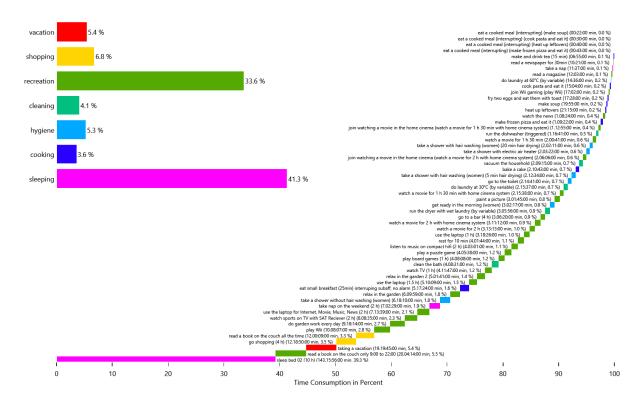


Time Use per Person per Affordance Per Person

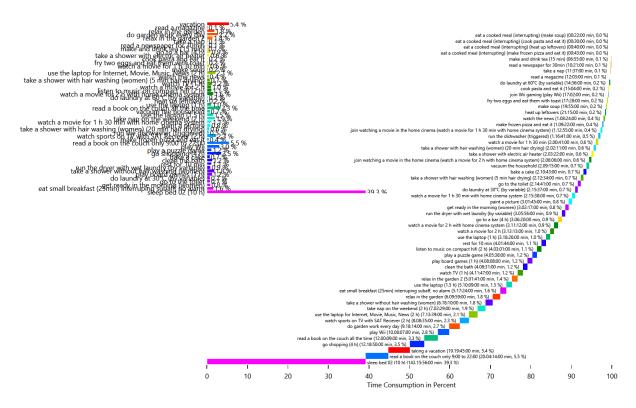
This is made from the files starting with: AffordanceTimeUse

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.

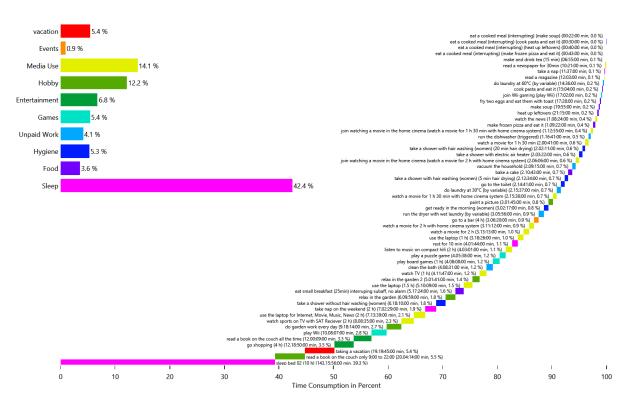
HH0 - CHR48 Lisa (51 Female)



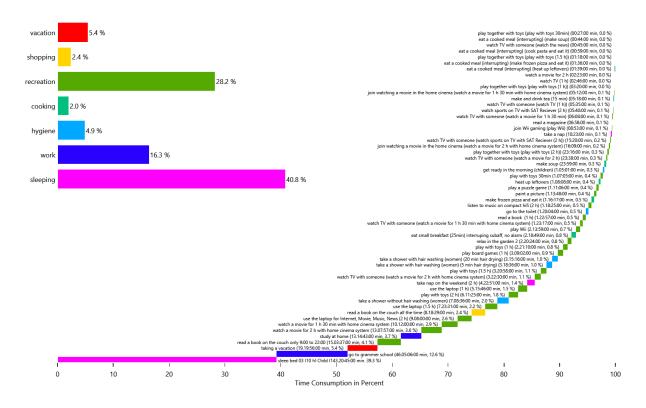
HH0 - CHR48 Lisa (51 Female)



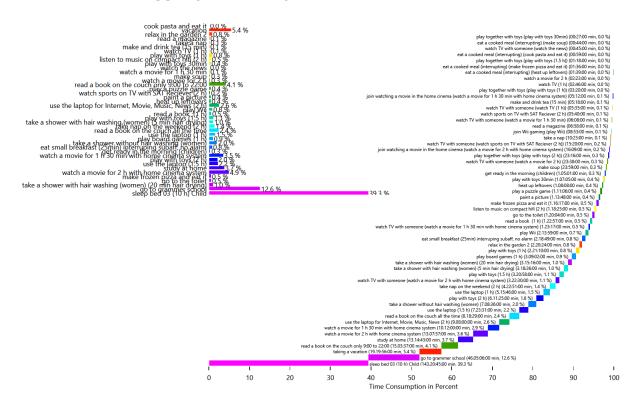
HH0 - CHR48 Lisa (51 Female)



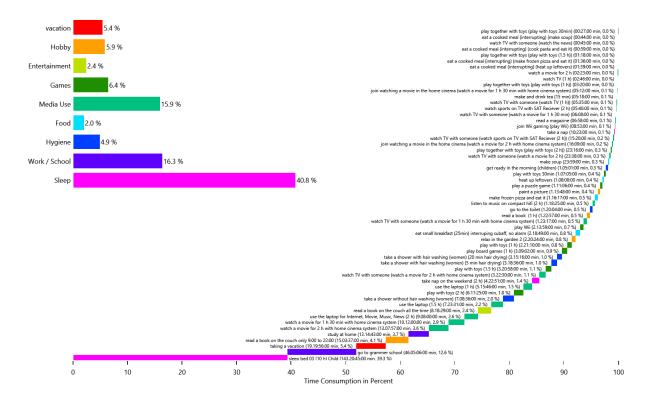
HH0 - CHR48 Maggie (13 Female)



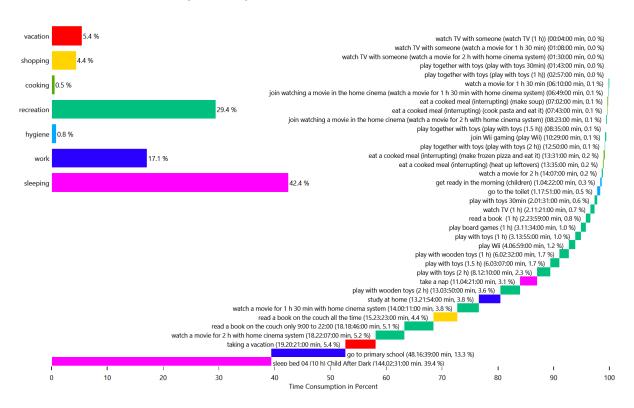
HH0 - CHR48 Maggie (13 Female)



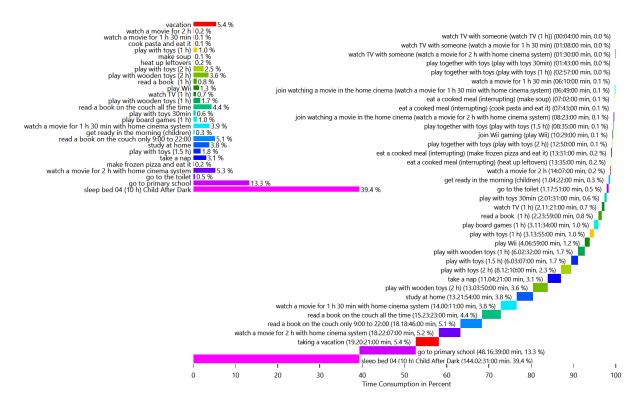
HH0 - CHR48 Maggie (13 Female)



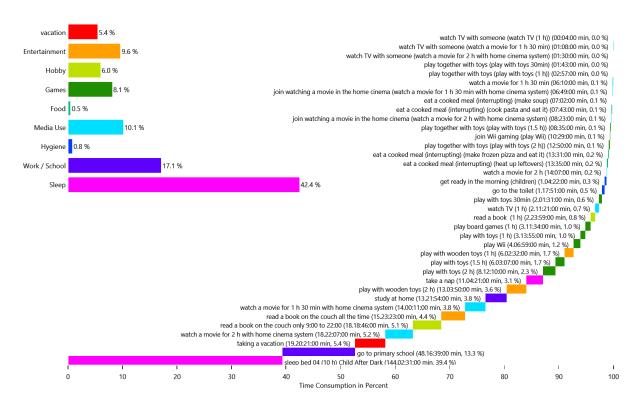
HH0 - CHR48 Martin (7 Male)



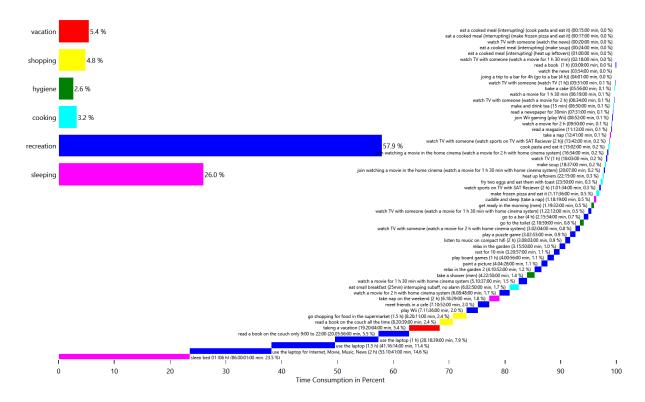
HH0 - CHR48 Martin (7 Male)



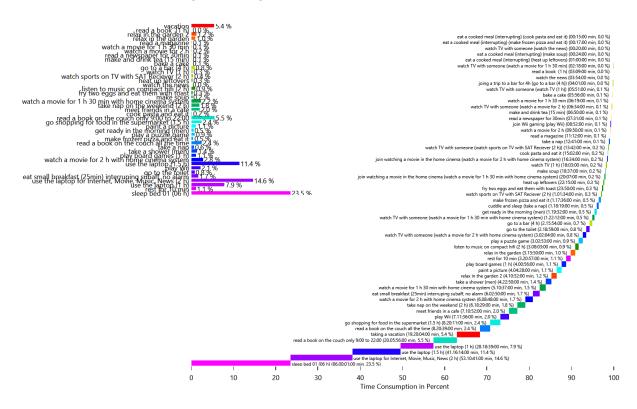
HH0 - CHR48 Martin (7 Male)



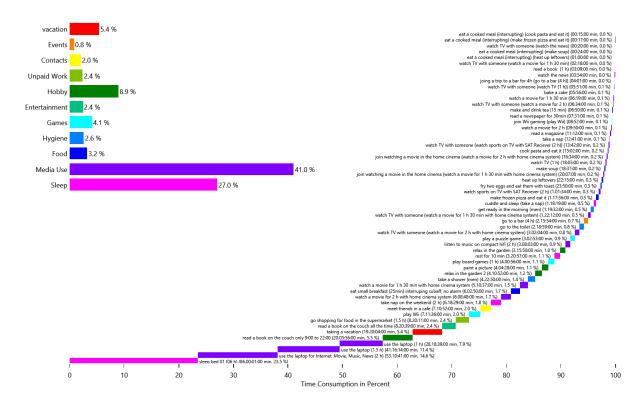
HH0 - CHR48 Stefan (51 Male)



HH0 - CHR48 Stefan (51 Male)



HH0 - CHR48 Stefan (51 Male)

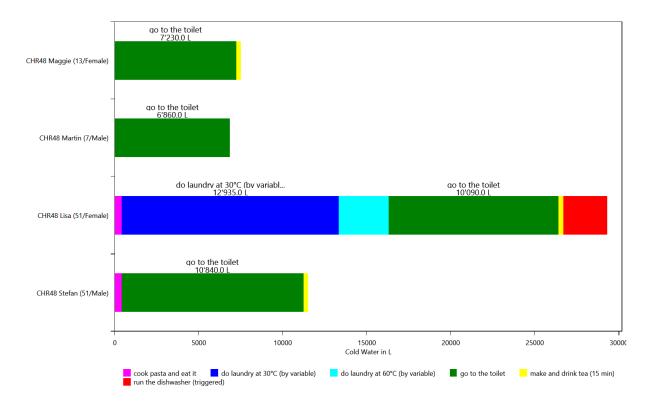


Energy use per person per affordance

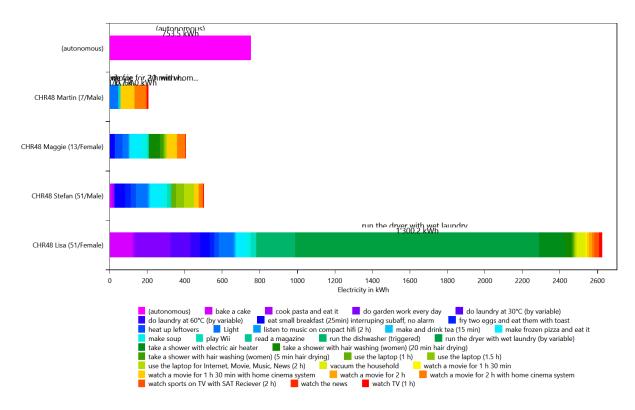
This is made from the files starting with: AffordanceEnergyUsePerPerson

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.

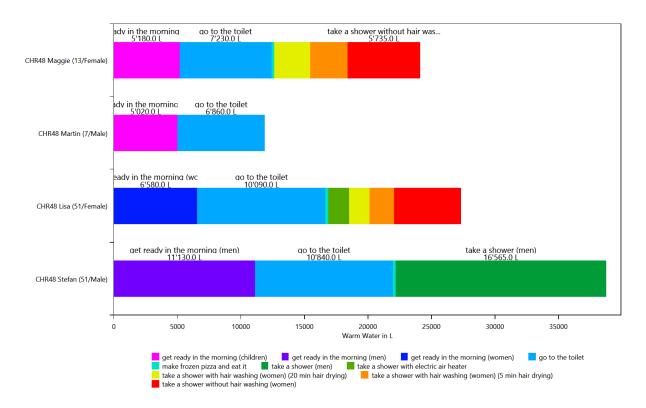
HH0 - Cold Water



HH0 - Electricity



HH0 - Warm Water

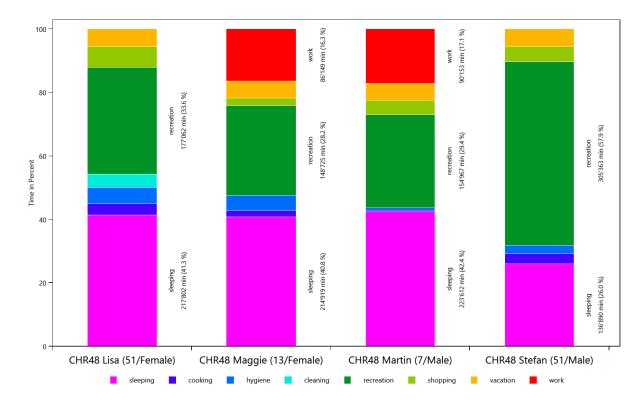


Time Use per Person Per Affordance according to different category definitions

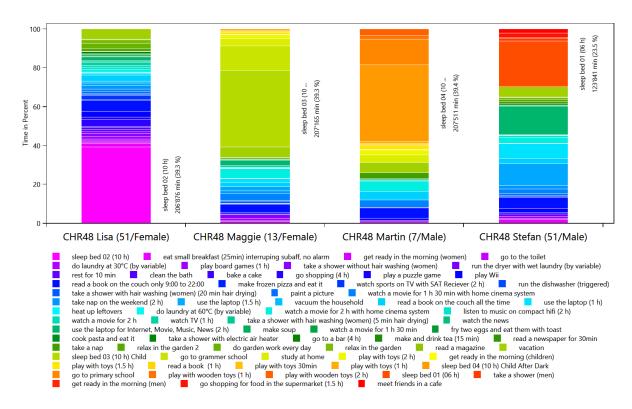
This is made from the files starting with: AffordanceTaggingSet

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.

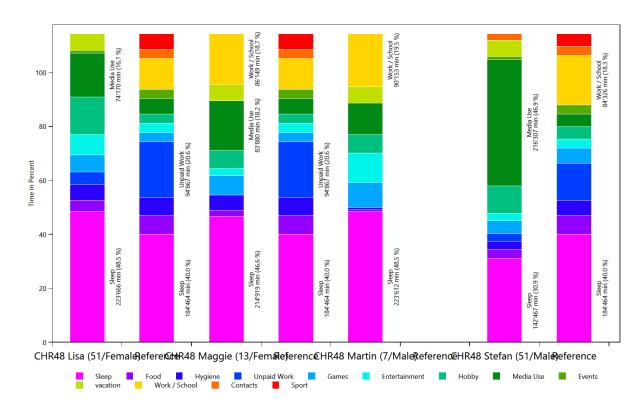
Basic Tagging - HH0



Tagging Set For Planning - HH0



Wo bleibt die Zeit - HH0

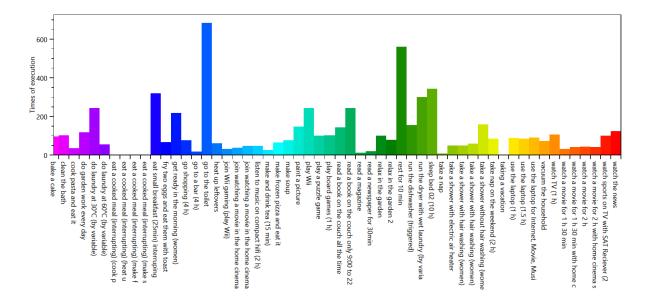


Overview of the actions of each member of the household

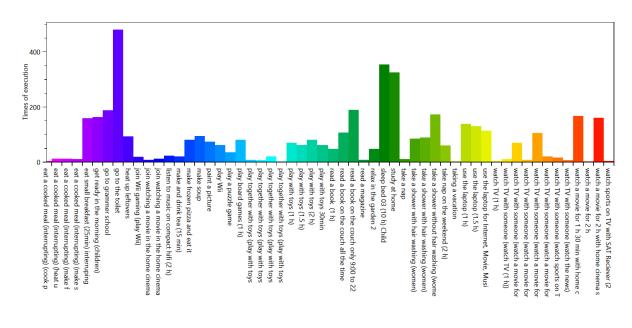
This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

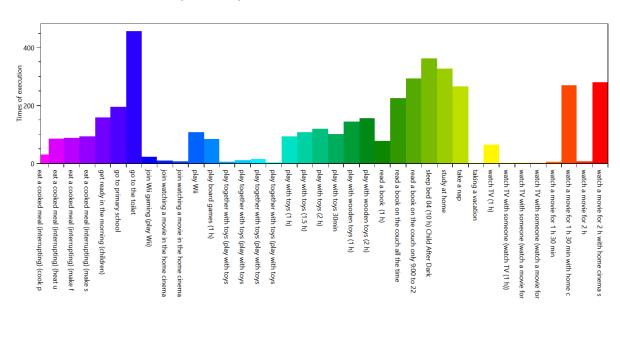
HH0 - CHR48 Lisa (51 Female)



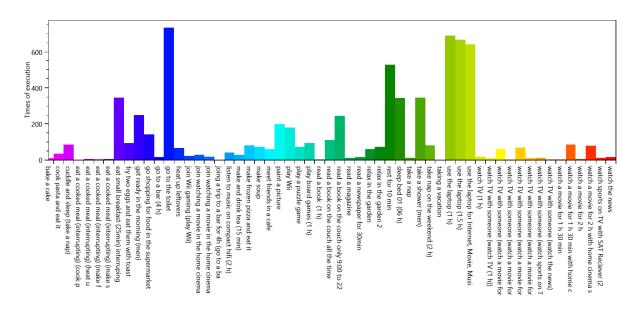
HHO - CHR48 Maggie (13 Female)



HH0 - CHR48 Martin (7 Male)



HH0 - CHR48 Stefan (51 Male)

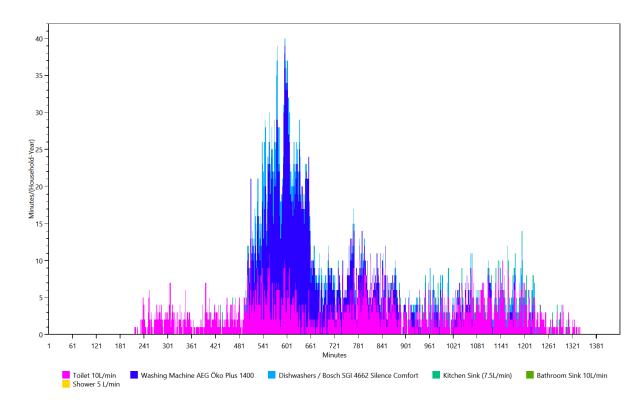


Overview of the time of the use per load type per device

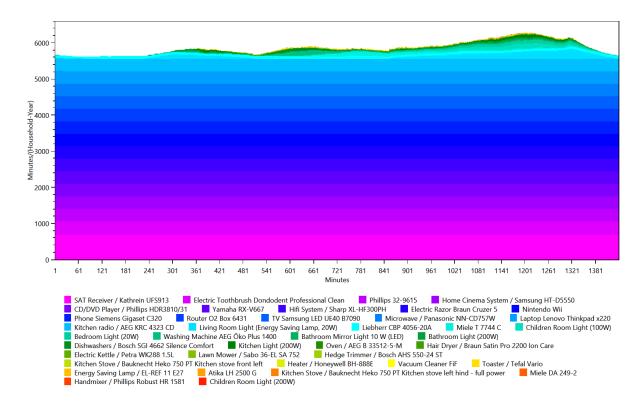
This is made from the files starting with: TimeOfUseEnergyProfiles

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

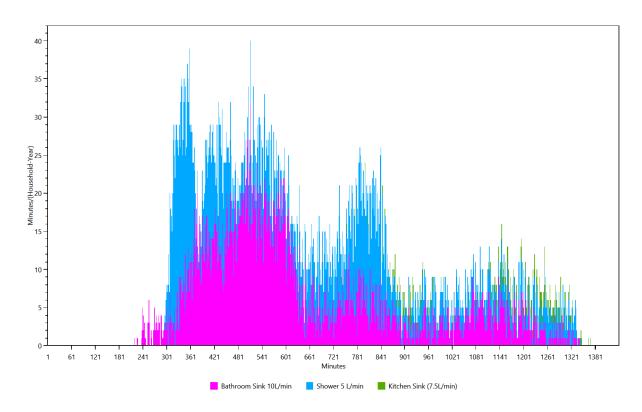
Cold Water



Electricity



Warm Water

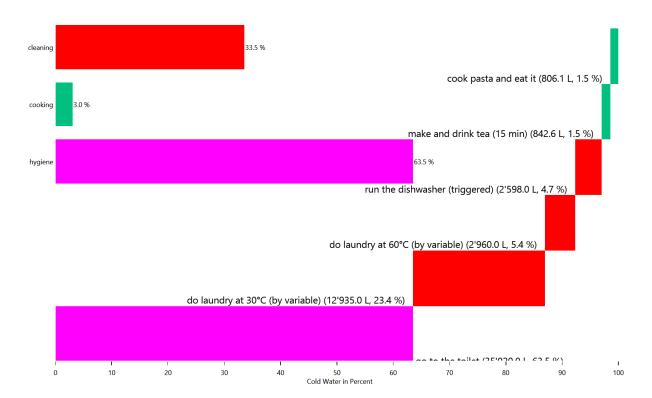


Energy/Resource use distribution per load type per affordance

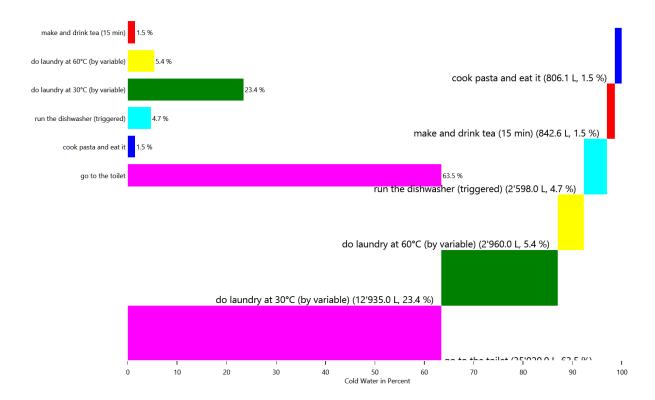
This is made from the files starting with: AffordanceEnergyUse

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

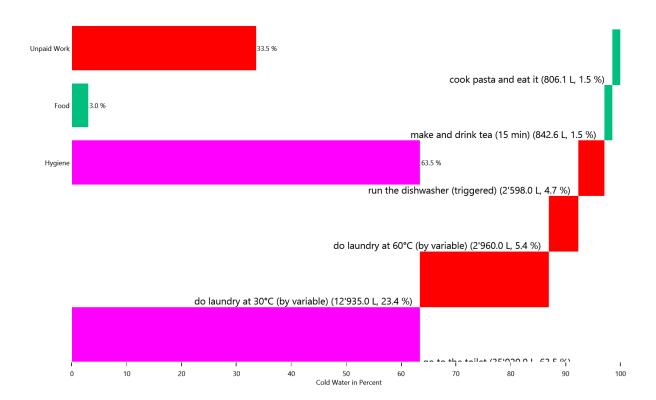
HH0 - Cold Water



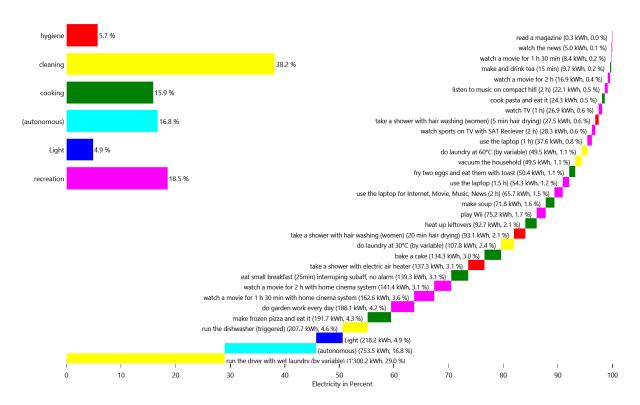
HH0 - Cold Water



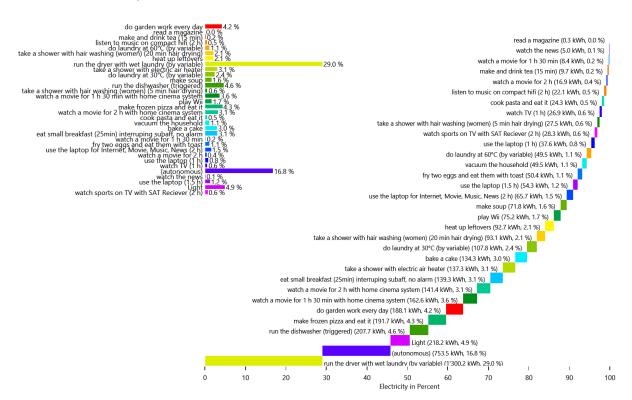
HH0 - Cold Water



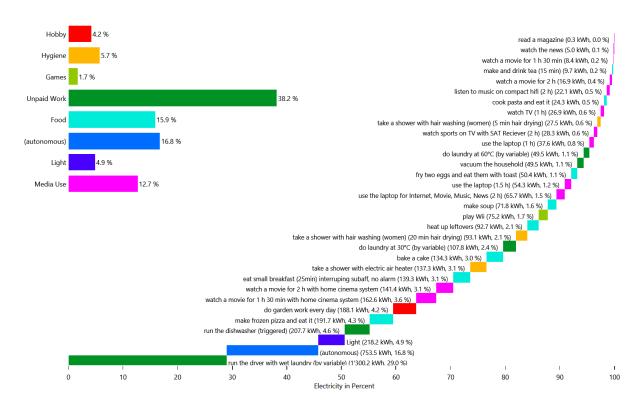
HH0 - Electricity



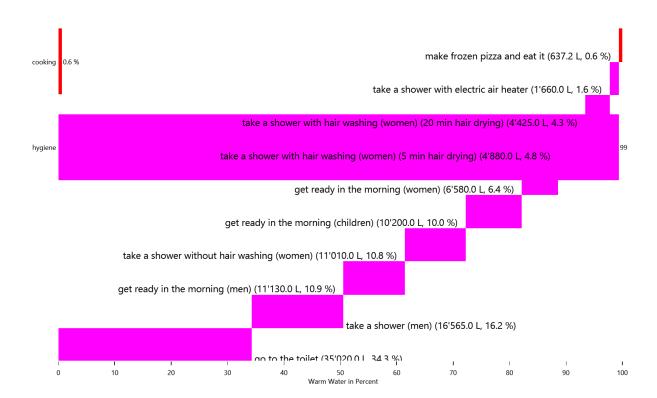
HH0 - Electricity



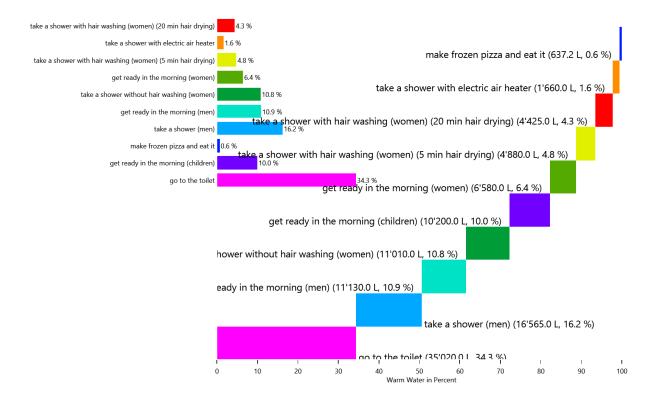
HH0 - Electricity



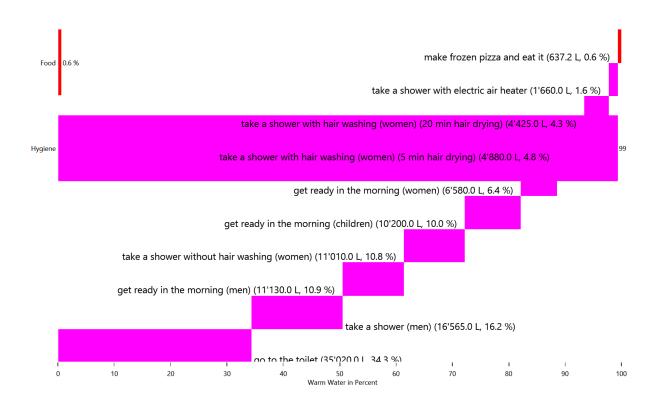
HH0 - Warm Water



HH0 - Warm Water



HH0 - Warm Water

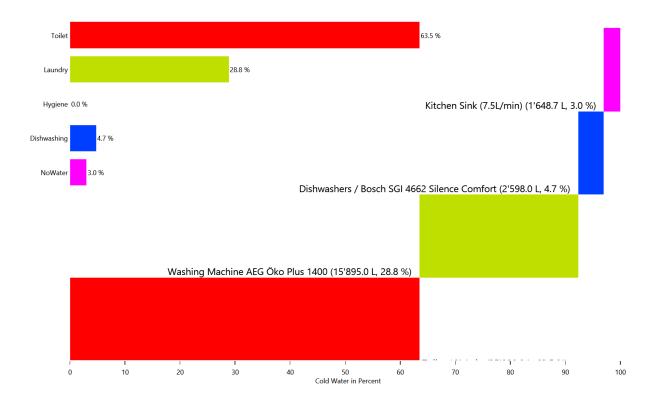


Energy use for each load type for each device

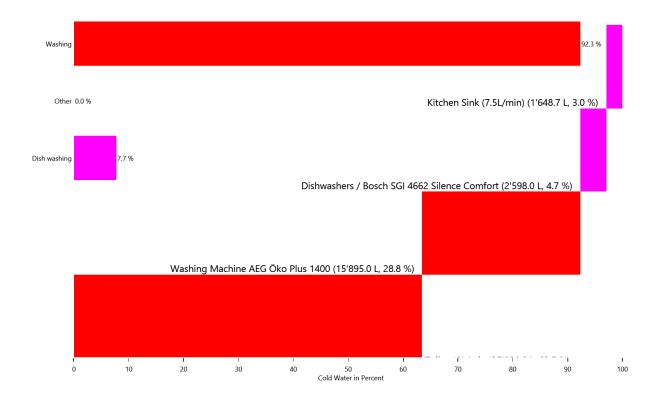
This is made from the files starting with: DeviceSums

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

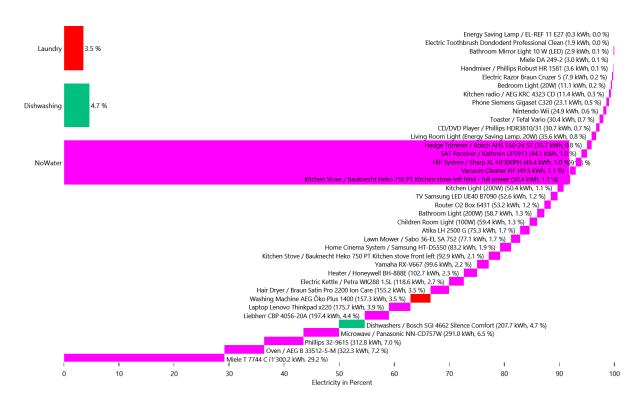
Cold Water



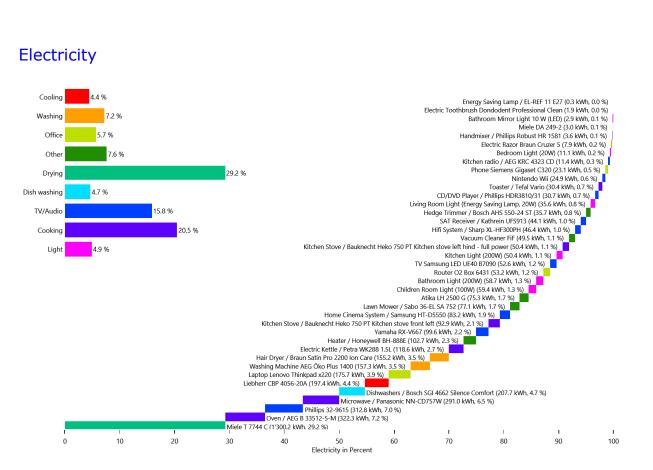
Cold Water



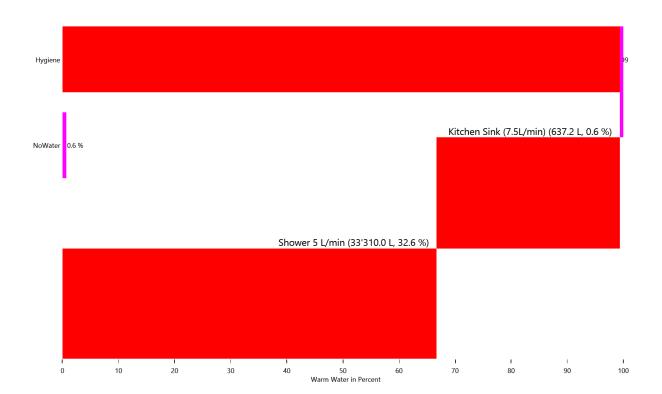
Electricity



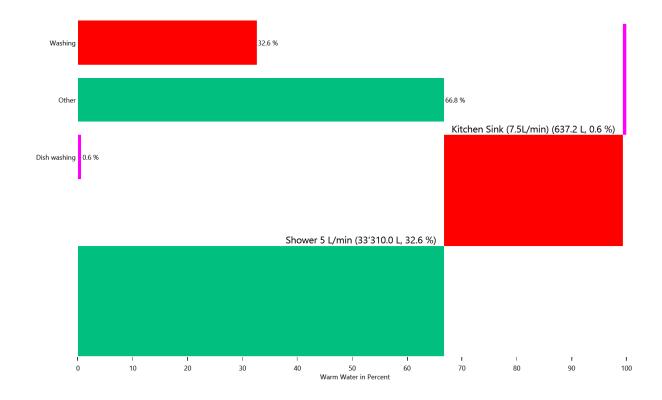
Electricity



Warm Water



Warm Water

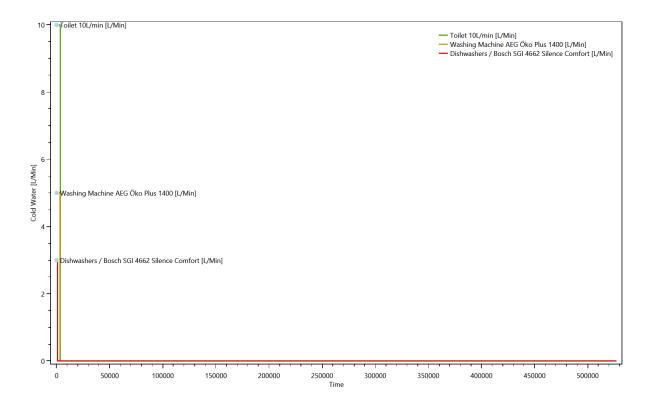


Duration curve for each device for each load type

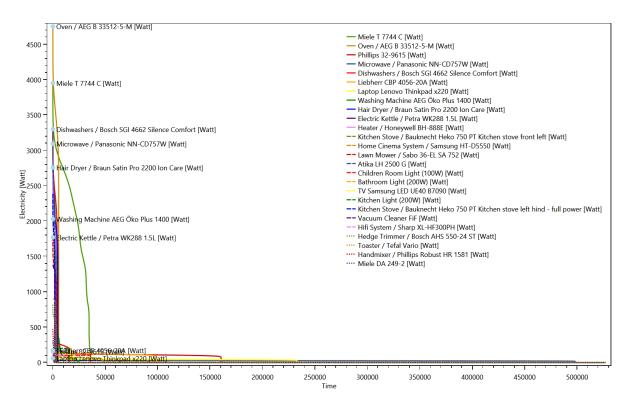
This is made from the files starting with: DeviceDurationCurves

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

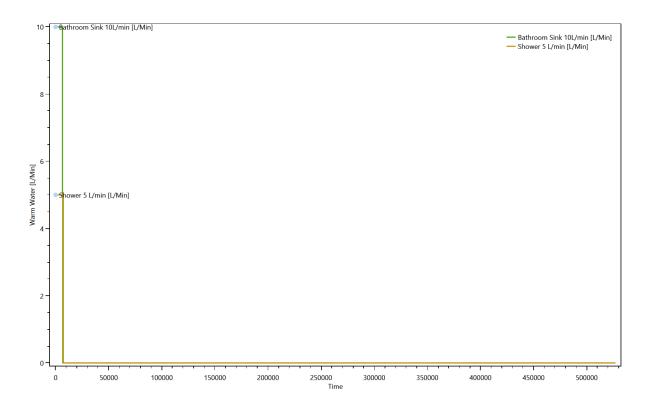
Cold Water



Electricity



Warm Water

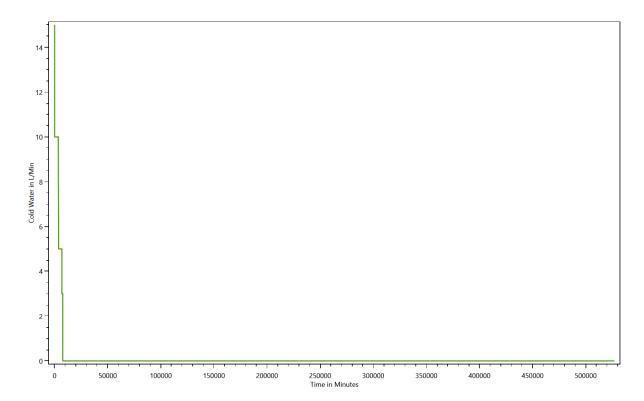


Duration curve for each load type

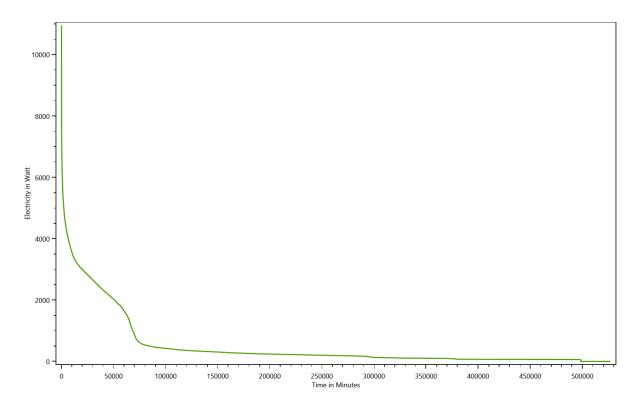
This is made from the files starting with: DurationCurve

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

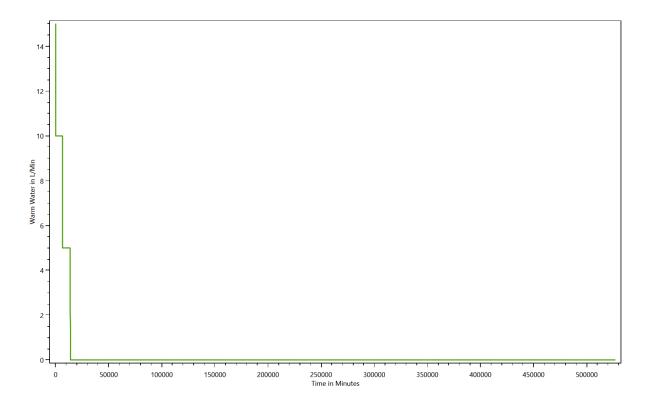
Cold Water



Electricity



Warm Water

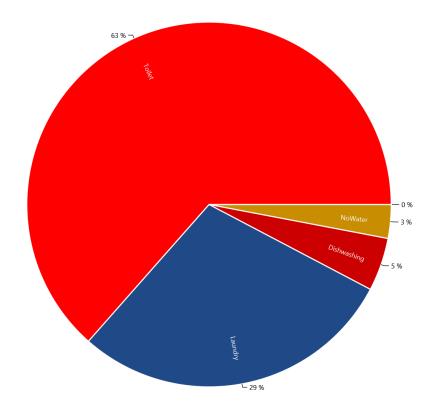


Grouped energy use for each load type for each device

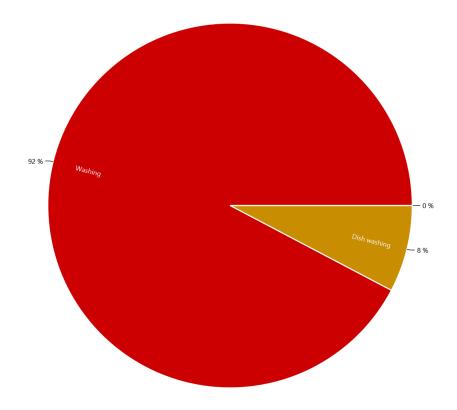
This is made from the files starting with: DeviceTaggingSet

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

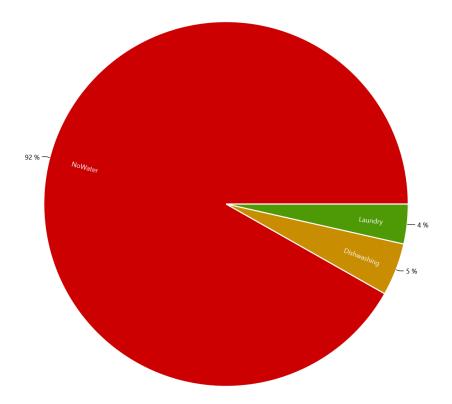
HH0 - Destatis Water Usage Statistics - Cold Water



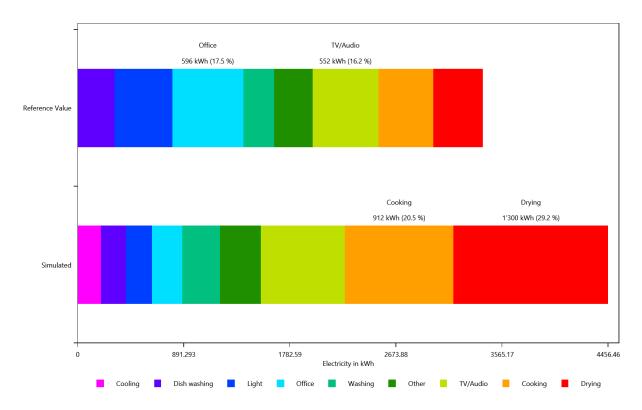
HH0 - Energieagentur - Cold Water



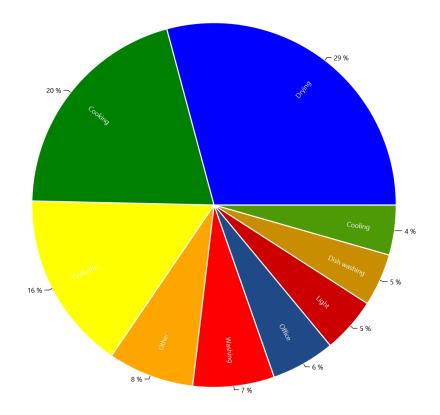
HH0 - Destatis Water Usage Statistics - Electricity



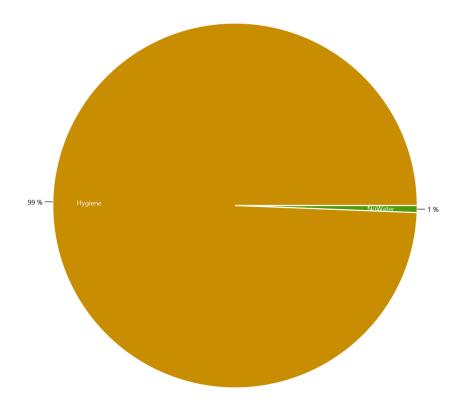
HH0 - Energieagentur - Electricity



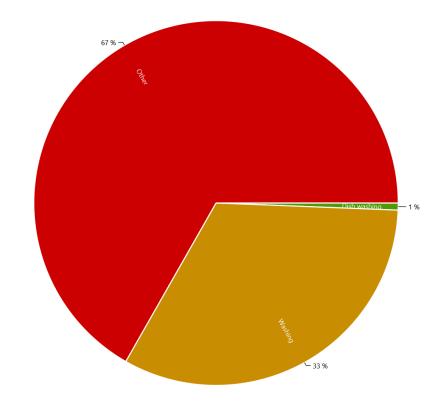
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

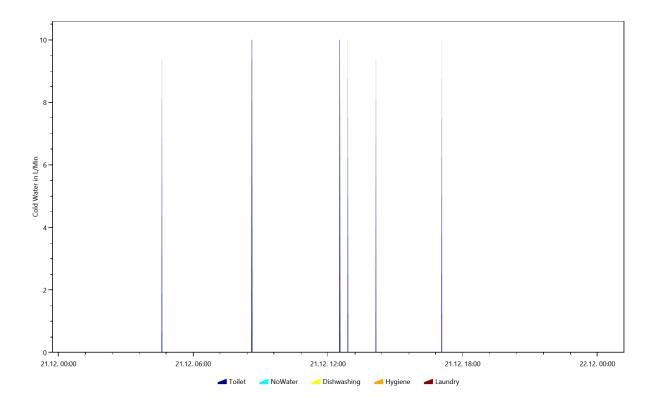


Example of the device profiles for each load type

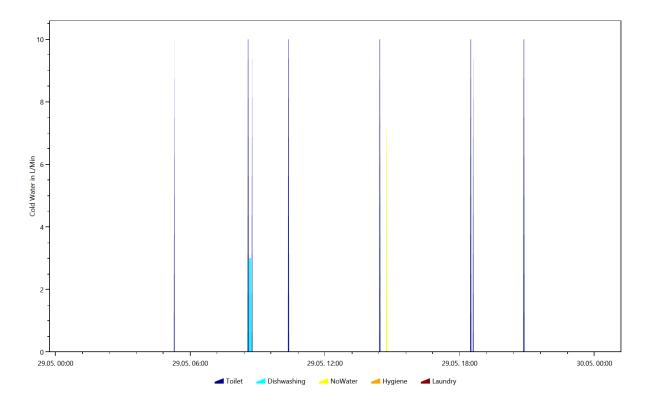
This is made from the files starting with: DeviceProfiles

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

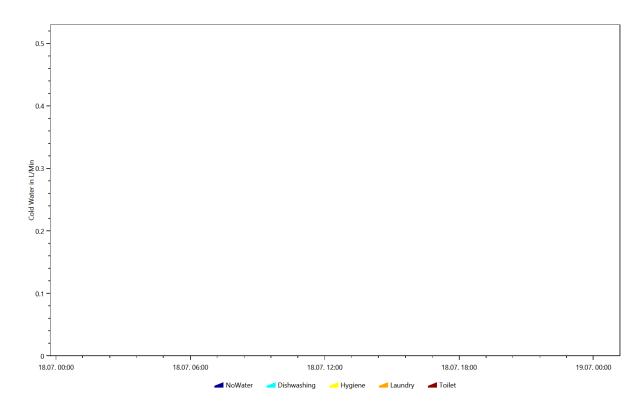
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.21



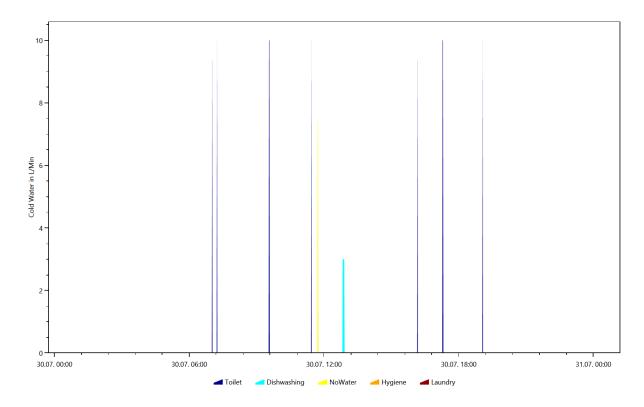
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.29



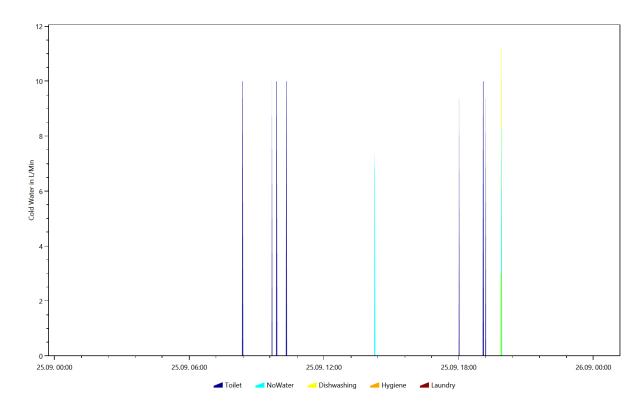
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.18



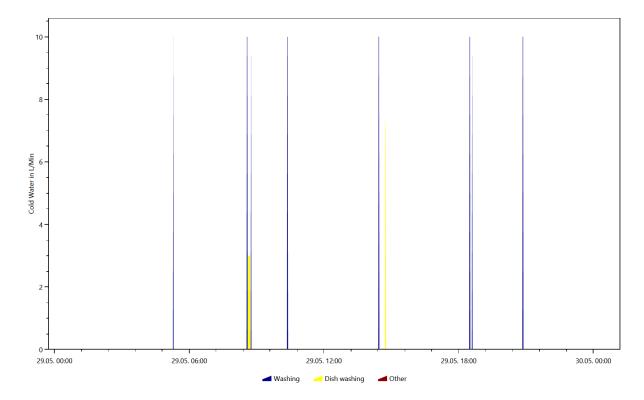
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.30



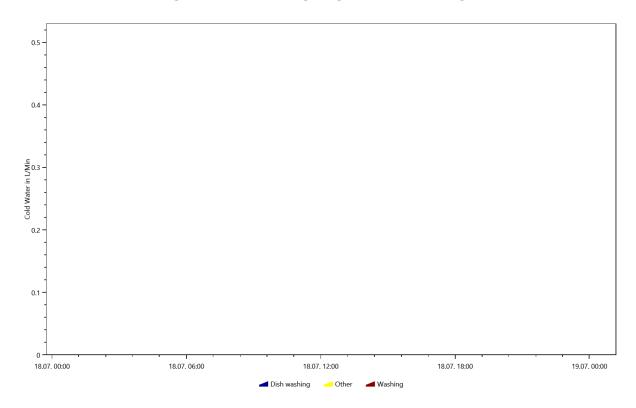
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.25



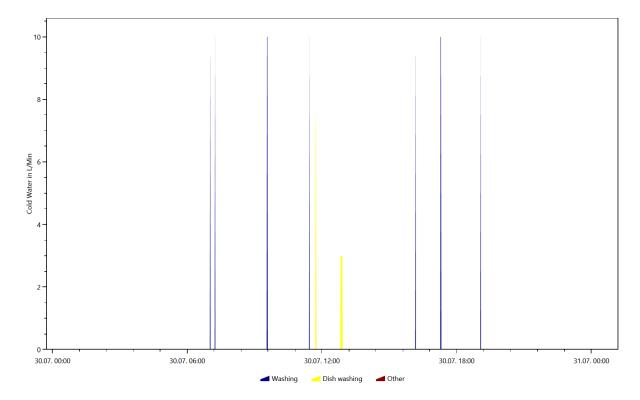
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.29



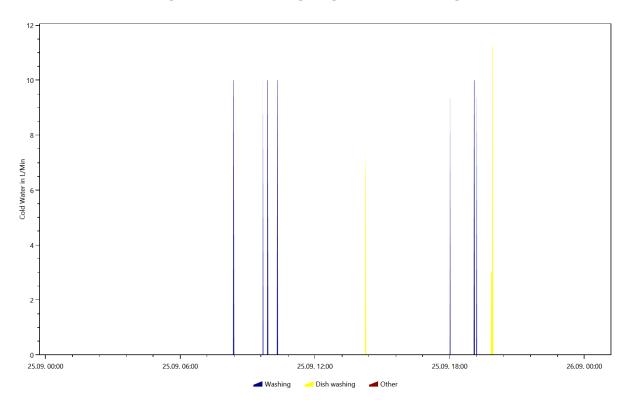
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.18



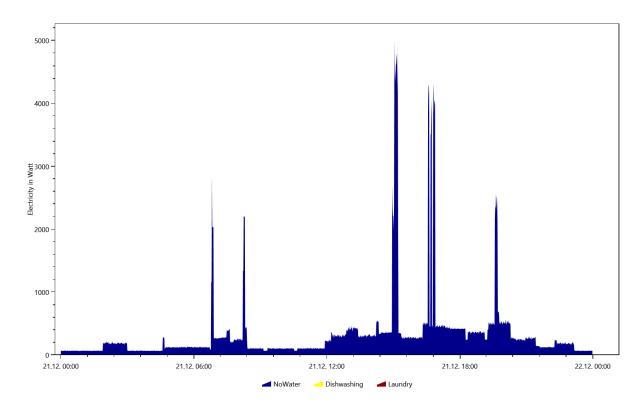
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.30



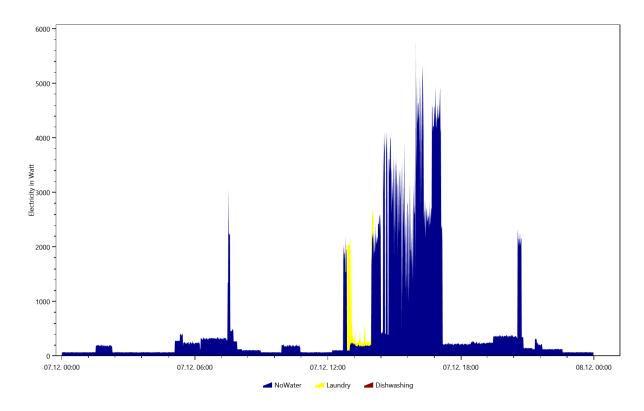
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.25



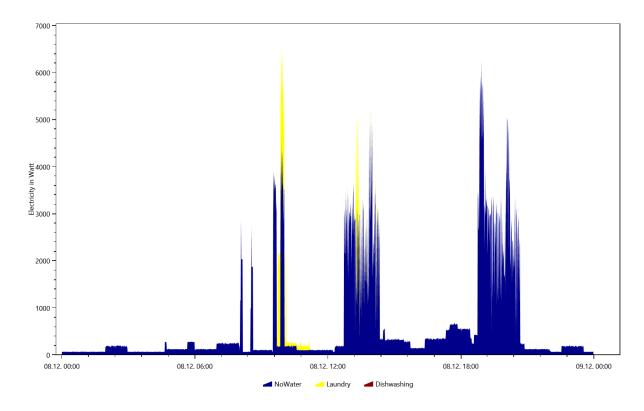
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.21



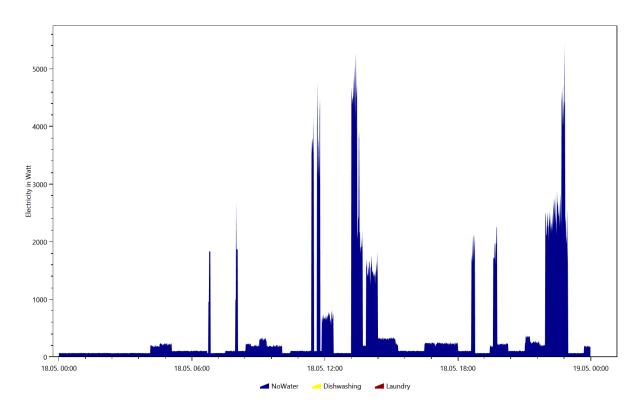
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.7



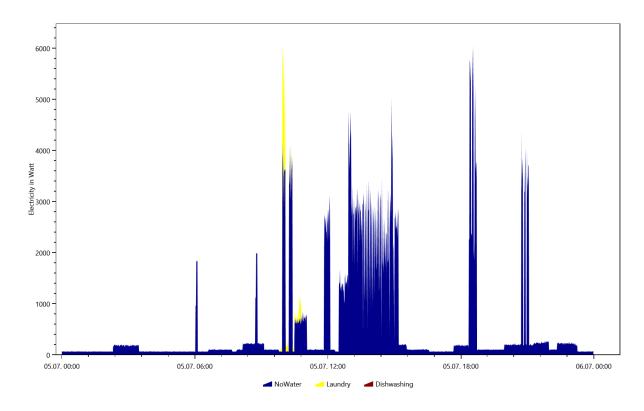
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.8



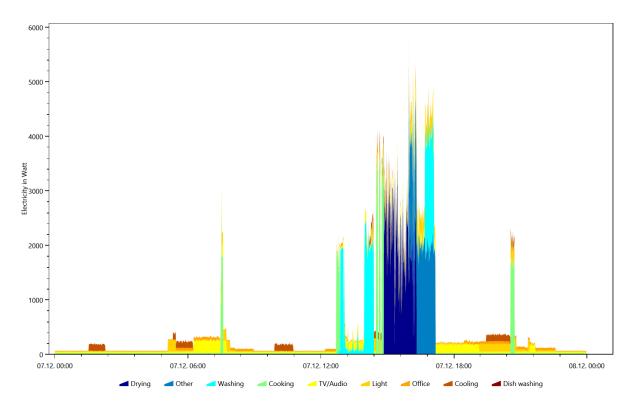
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.18



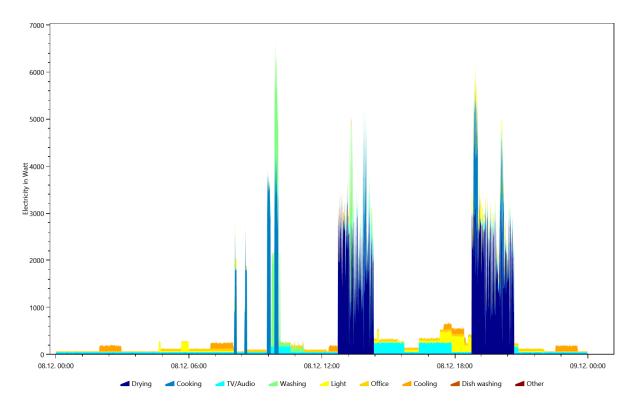
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.5



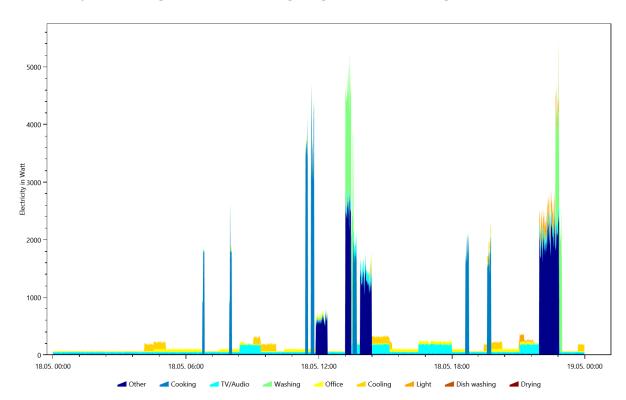
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.7



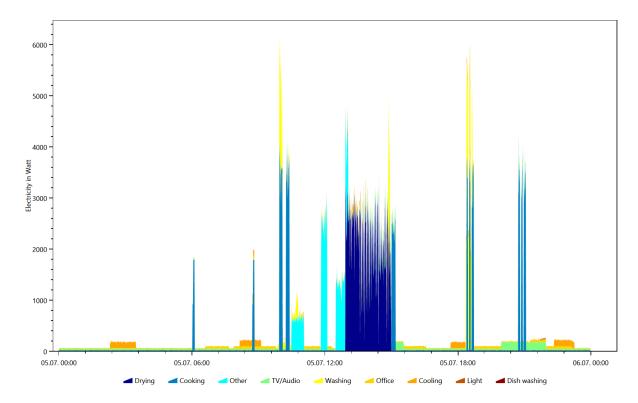
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.8



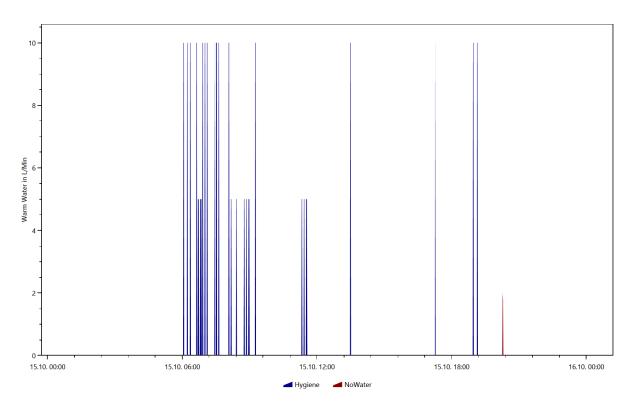
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.18



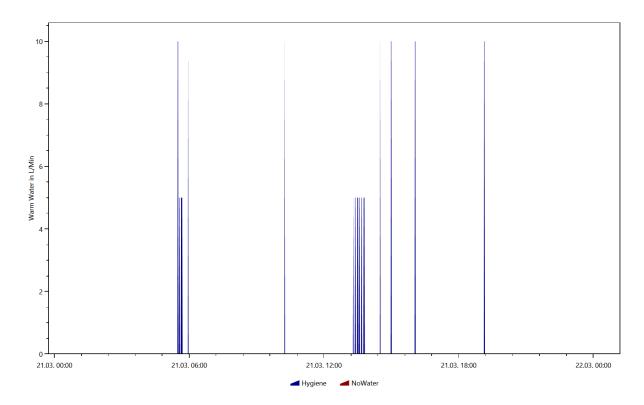
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.5



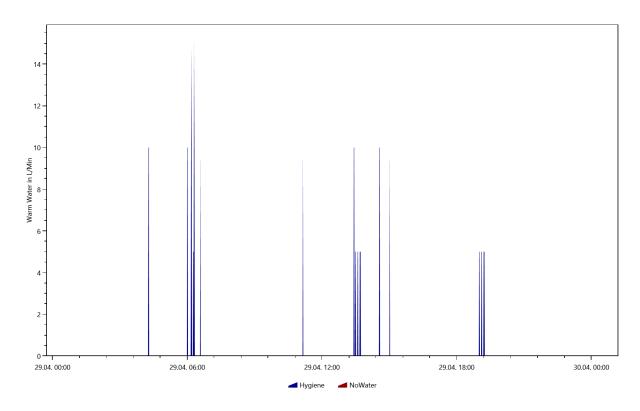
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.15



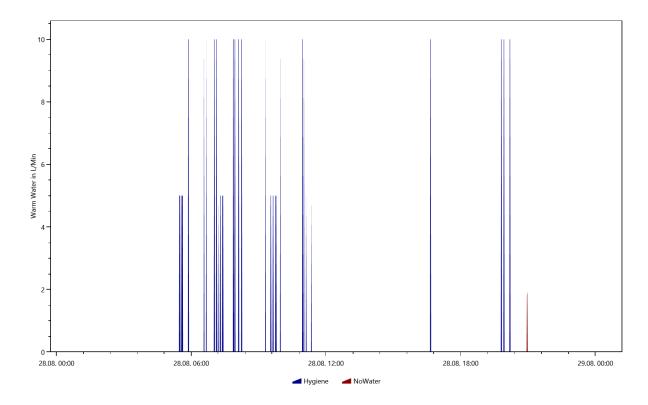
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.21



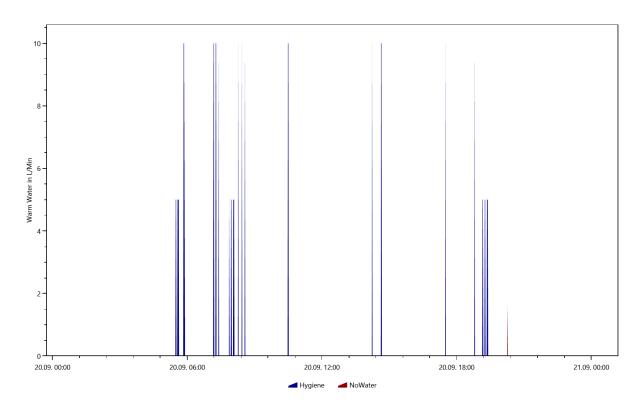
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.29



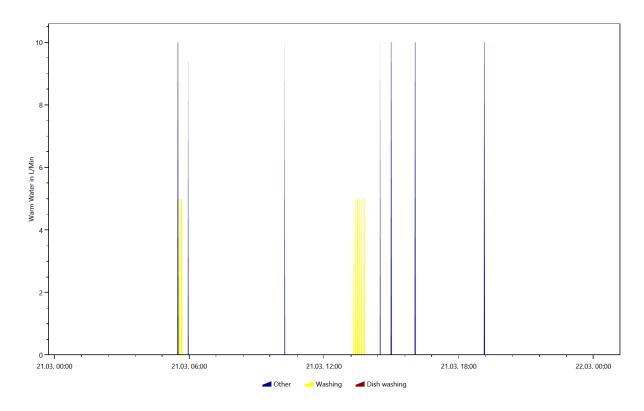
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.28



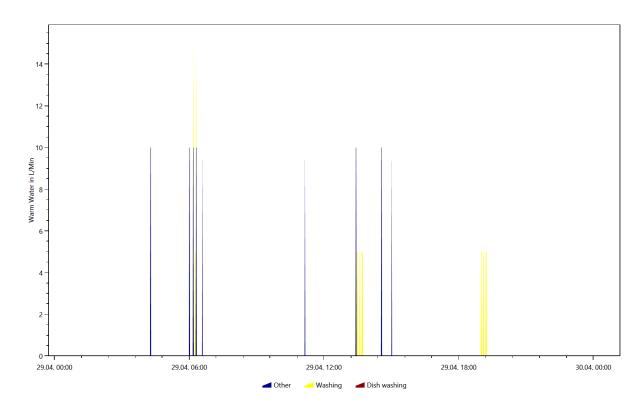
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.20



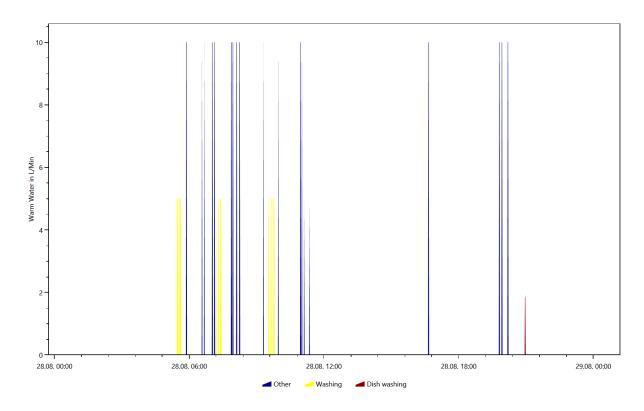
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.21



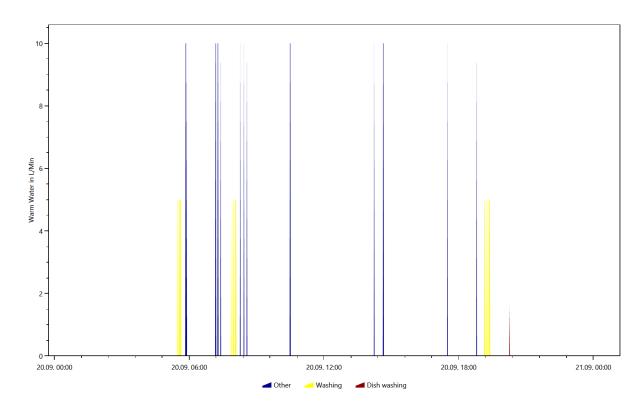
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.29



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.28



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.20

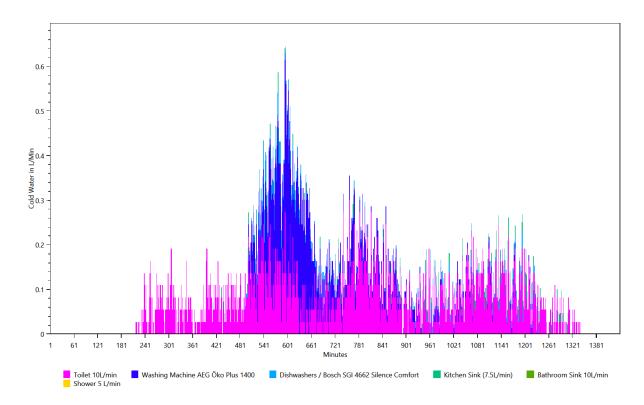


Overview of the time and power of the use per load type per device

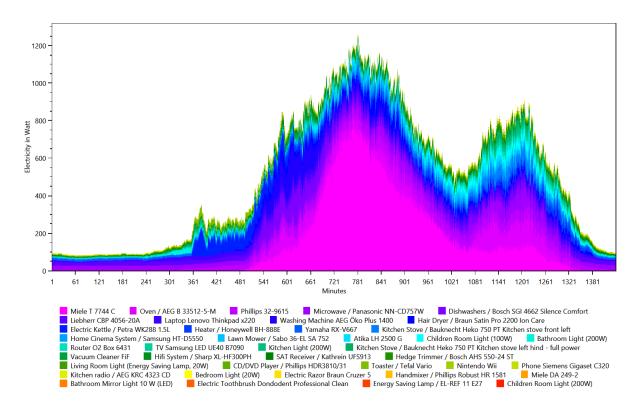
This is made from the files starting with: TimeOfUseEnergyProfiles

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

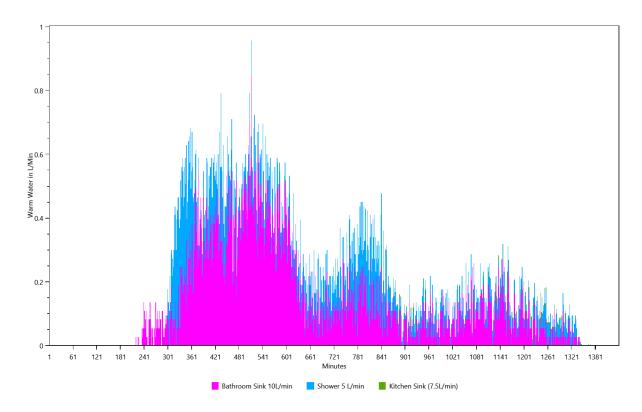
Cold Water



Electricity



Warm Water

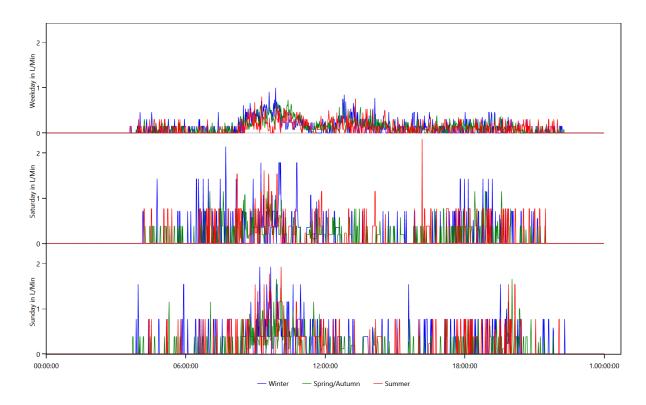


Energy use per load type during different seasons, split by weekday/saturday/sunday

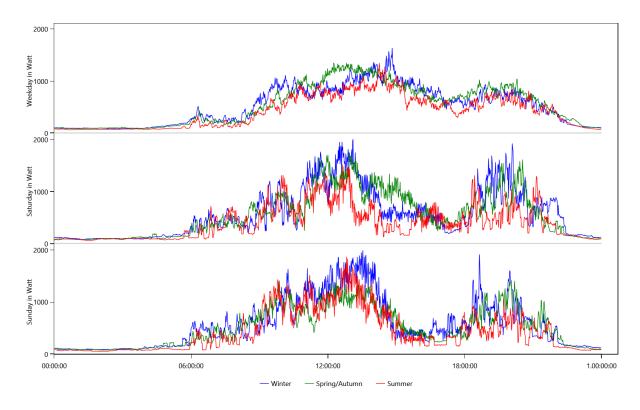
This is made from the files starting with: WeekdayProfiles

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

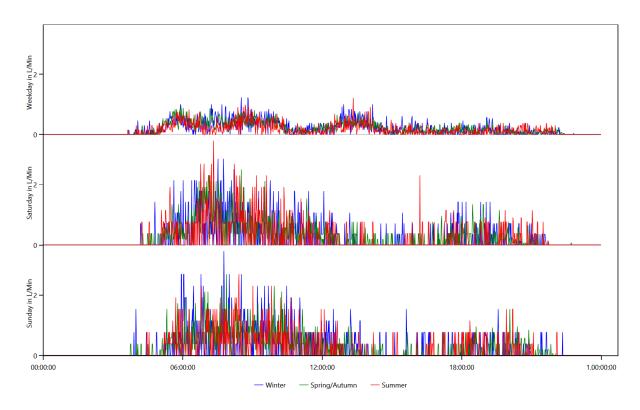
Cold Water



Electricity



Warm Water

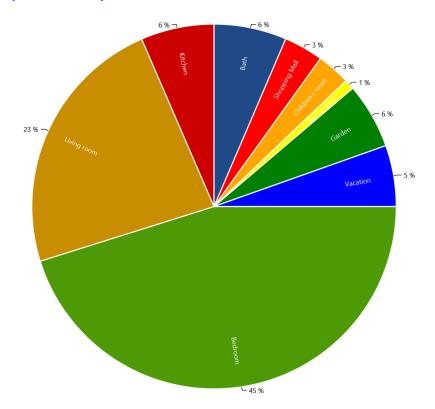


Location Distribution per Person

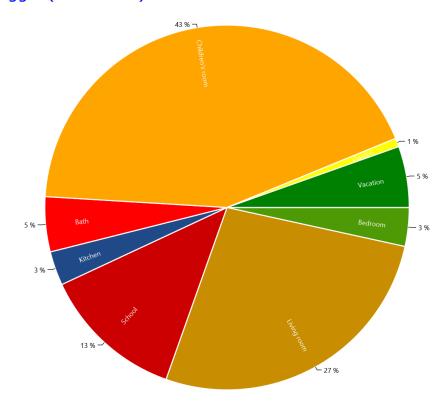
This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

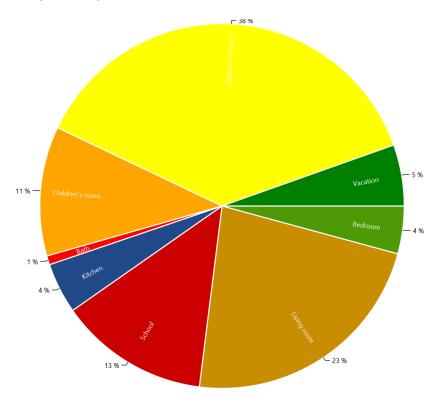
CHR48 Lisa (51 Female)



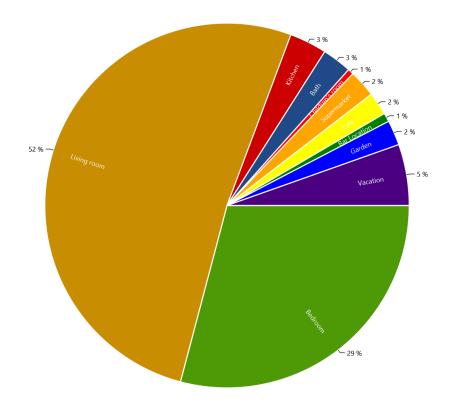
CHR48 Maggie (13 Female)



CHR48 Martin (7 Male)



CHR48 Stefan (51 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;CHR48 Lisa (51/Female);sleep bed 02 (10 h);sleep;False;

0;01.01.2016 00:00;CHR48 Maggie (13/Female);sleep bed 03 (10 h) Child;sleep;False;

0;01.01.2016 00:00;CHR48 Martin (7/Male);sleep bed 04 (10 h) Child After Dark;sleep;False;

0;01.01.2016 00:00;CHR48 Stefan (51/Male);sleep bed 01 (06 h);sleep;False;

272;01.01.2016 04:32;CHR48 Stefan (51/Male);rest for 10 min;sleep;False;

282;01.01.2016 04:42;CHR48 Stefan (51/Male);use the laptop (1 h);Active Entertainment (Computer, Internet etc):False;

354;01.01.2016 05:54;CHR48 Stefan (51/Male);use the laptop for Internet, Movie, Music, News (2 h);Active Entertainment (Computer, Internet etc);False;

407;01.01.2016 06:47;CHR48 Maggie (13/Female);go to grammer school;school;False;

422;01.01.2016 07:02;CHR48 Martin (7/Male);go to primary school; school; False;

457;01.01.2016 07:37;CHR48 Stefan (51/Male);eat small breakfast (25min) interruping subaff, no alarm;cooking;False;

478;01.01.2016 07:58;CHR48 Stefan (51/Male);go to the toilet;hygiene;False;

484;01.01.2016 08:04;CHR48 Stefan (51/Male);play Wii;Passive Entertainment (TV etc.);False;

502;01.01.2016 08:22;CHR48 Lisa (51/Female);eat small breakfast (25min) interruping subaff, no alarm;cooking;False;

528;01.01.2016 08:48;CHR48 Lisa (51/Female);get ready in the morning (women);hygiene;False;

538;01.01.2016 08:58;CHR48 Stefan (51/Male);use the laptop (1.5 h);Active Entertainment (Computer, Internet etc);False;

549;01.01.2016 09:09;CHR48 Lisa (51/Female);go to the toilet;hygiene;False;

554;01.01.2016 09:14;CHR48 Lisa (51/Female);do laundry at 30°C (by variable);cleaning;False;

566;01.01.2016 09:26;CHR48 Lisa (51/Female);play board games (1 h);Offline Entertainment;False;

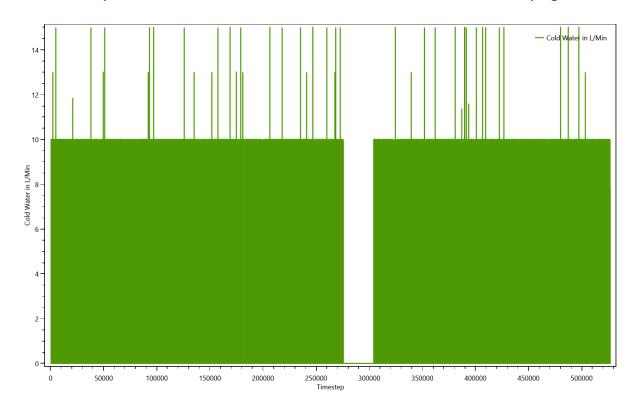
622;01.01.2016 10:22;CHR48 Stefan (51/Male);watch a movie for 2 h with home cinema system;Passive Entertainment (TV etc.);False;

Sum Profiles

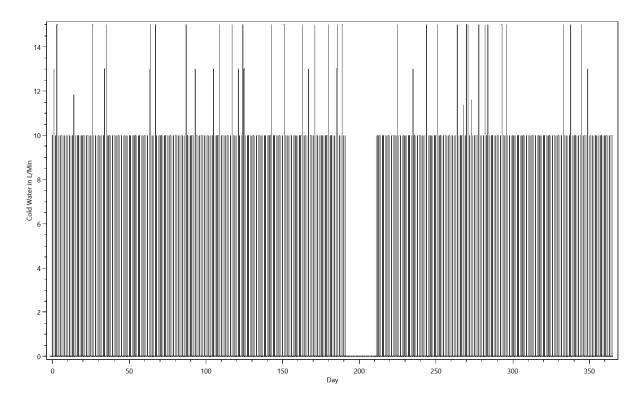
This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

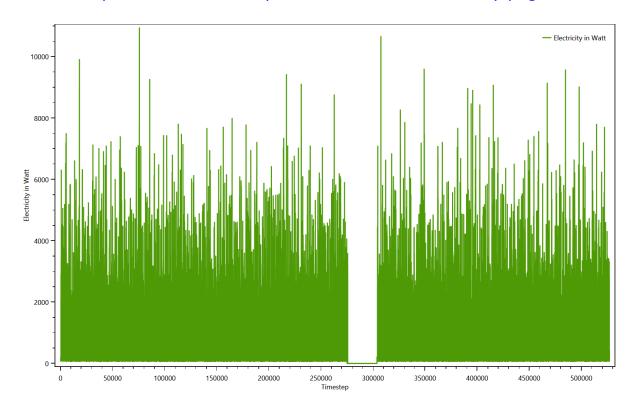
Summed up curve for Cold Water from SumProfiles.Cold Water.png



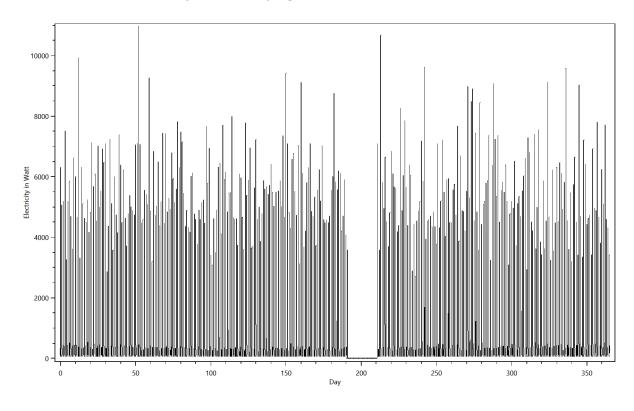
Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax..png



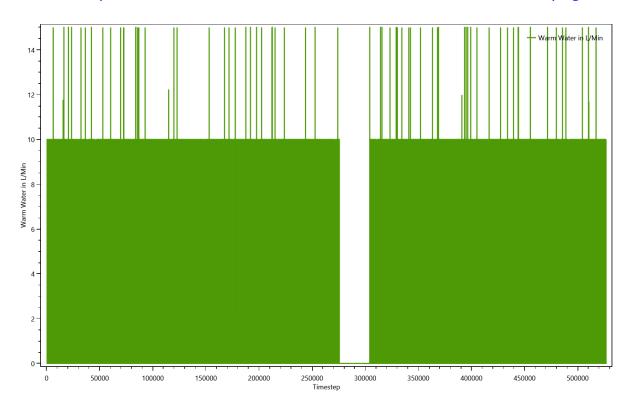
Summed up curve for Electricity from SumProfiles. Electricity.png



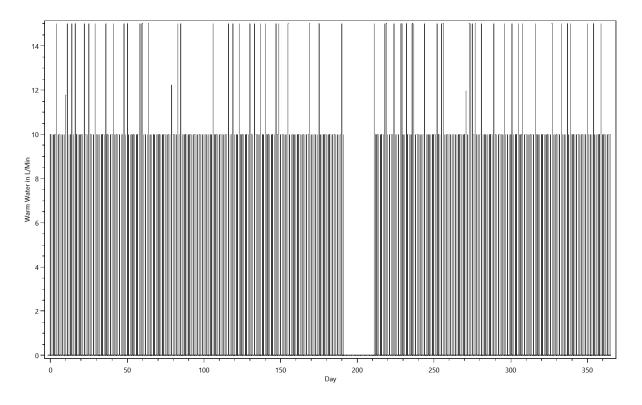
Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



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.CHR48 Family with 2 children, without work 0.txt

Device; Load Type; Profile; Number of Activations

Atika LH 2500 G; Electricity; 0 h 15 min 100% [Synthetic]; 117

Bar; None; 04 h 0 min 100% [Synthetic]; 35

Bathroom Light (200W); Electricity; Bath - light [Synthetic for Light Device]; 1122

Bathroom Mirror Light 10 W (LED); Electricity; Bath - light [Synthetic for Light Device]; 1122

Bathroom Sink 10L/min; Warm Water; 0 h 01 min 100% [Synthetic]; 4350

Bathroom Sink 10L/min; Warm Water; 0 h 01 min 50% [Synthetic]; 438

Bed 1; None; 06 h 0 min 100% [Synthetic]; 346

Bed 2; None; 10 h 0 min 100% [Synthetic]; 348

Bed 3 (Children): None: 10 h 0 min 100% [Synthetic]: 349

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

Bedroom Light (20W); Electricity; Bedroom - light [Synthetic for Light Device]; 623

Board Games; None; 01 h 0 min 100% [Synthetic]; 361

Book; None; 01 h 0 min 100% [Synthetic]; 124

CD/DVD Player / Phillips HDR3810/31; Electricity; 01 h 30 min 100% [Synthetic]; 572

CD/DVD Player / Phillips HDR3810/31; Electricity; 02 h 0 min 100% [Synthetic]; 59

CD/DVD Player / Phillips HDR3810/31; Electricity; Standby TV / Receiver 1 h 0 min 3% [Synthetic]; 8301

Cafe Table; None; 03 h 0 min 100 % [Synthetic]; 60

Chair; None; 0 h 10 min 100% [Synthetic]; 1103

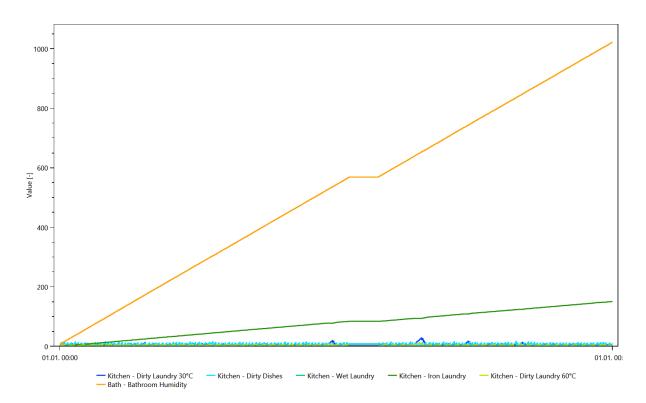
Children Room Light (100W); Electricity; Children's room - light [Synthetic for Light Device]; 547

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

