## Overview of the results of the household CHR07 Single with work 0

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

Energy Intensity: EnergySaving

Seed 4555

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

http://www.loadprofilegenerator.de

Rendering date:16.12.2016 09:06:00

## **Table of Contents**

Totals	3
Persons	5
Activity Frequency Charts	6
Activity Distribution per Person	7
Time Use per Person per Affordance Per Person	8
Energy use per person per affordance	10
Time Use per Person Per Affordance according to different category definitions	12
Overview of the actions of each member of the household	14
Overview of the time of the use per load type per device	15
Energy/Resource use distribution per load type per affordance	17
Energy use for each load type for each device	22
Duration curve for each device for each load type	26
Duration curve for each load type	28
Grouped energy use for each load type for each device	30
Example of the device profiles for each load type	34
Overview of the time and power of the use per load type per device	48
Energy use per load type during different seasons, split by weekday/saturday/sunday	50
Location Distribution per Person	52
Actions.csv	53
Sum Profiles	54
Time Profiles	58
Variables	59

## **Totals**

### **Totals for each Loadtype**

Load Type	Value	Unit
Cold Water	19419.22	L
Electricity	1454.87	kWh
Warm Water	47785.00	L

### **Totals for each Loadtype per Day**

Load Type	Value	Unit
Cold Water	53.06	L
Electricity	3.98	kWh
Warm Water	130.56	L

### Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	16.27	L/Min
Electricity	0.00	4926.98	Watt
Warm Water	0.00	20.00	L/Min

### **Totals for each Loadtype per Person**

Load Type	Value	Unit
Cold Water	19419.22	L
Electricity	1454.87	kWh

Warm Water	47785.00	L
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## **Totals for each Loadtype per Person per Day**

Load Type	Value	Unit
Cold Water	53.06	L
Electricity	3.98	kWh
Warm Water	130.56	L

## Persons

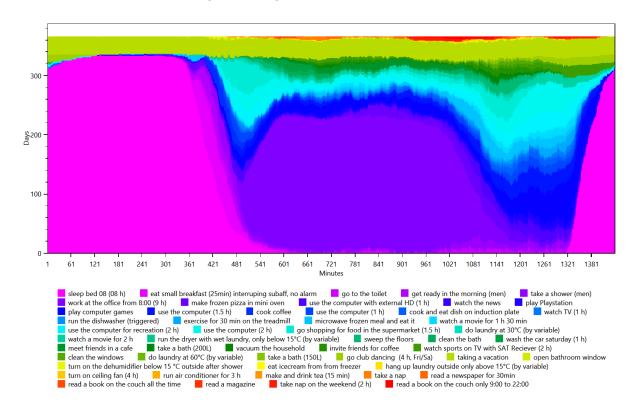
- HH0
- o CHR07 Christian (23/Male)(23/Male)

### **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 - CHR07 Christian (23 Male)

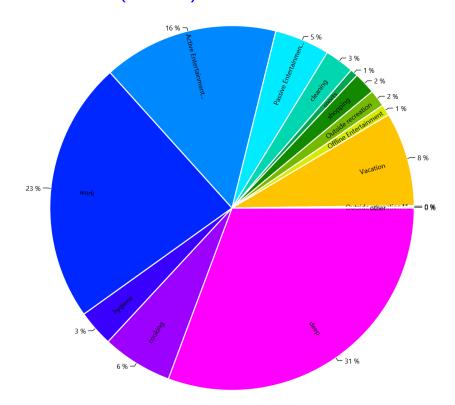


## **Activity Distribution per Person**

#### This is made from the files starting with: ActivityPercentage

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

HH0 - CHR07 Christian (23 Male)

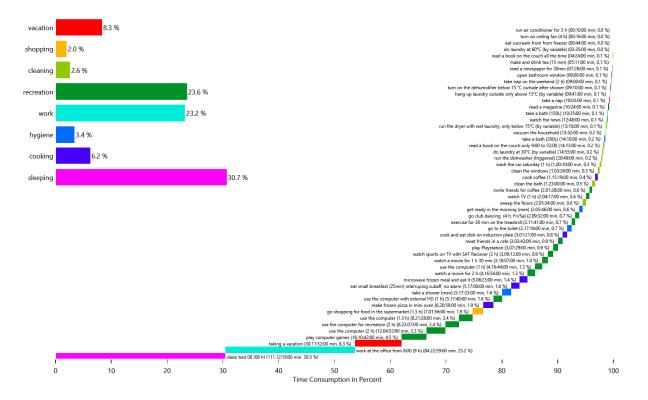


## Time Use per Person per Affordance Per Person

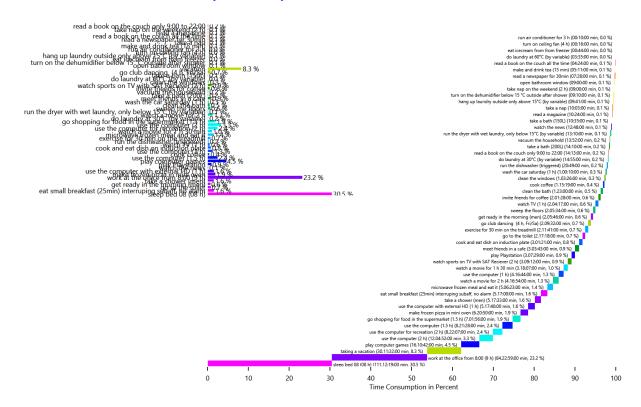
#### This is made from the files starting with: AffordanceTimeUse

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.

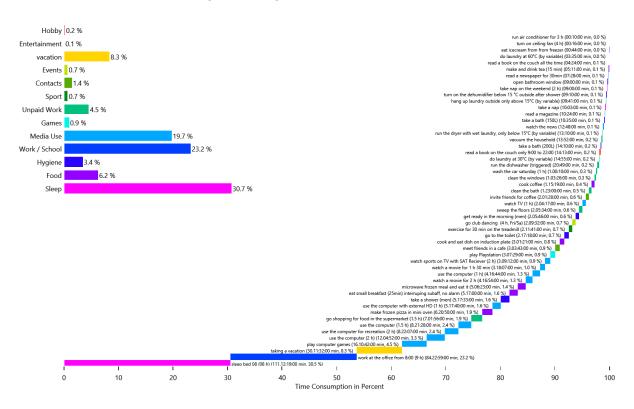
#### HH0 - CHR07 Christian (23 Male)



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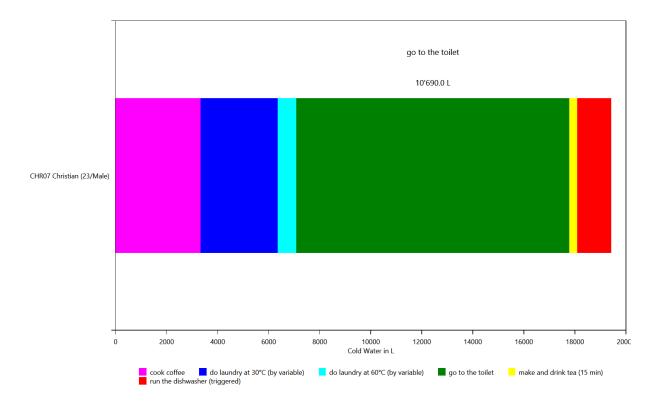


## Energy use per person per affordance

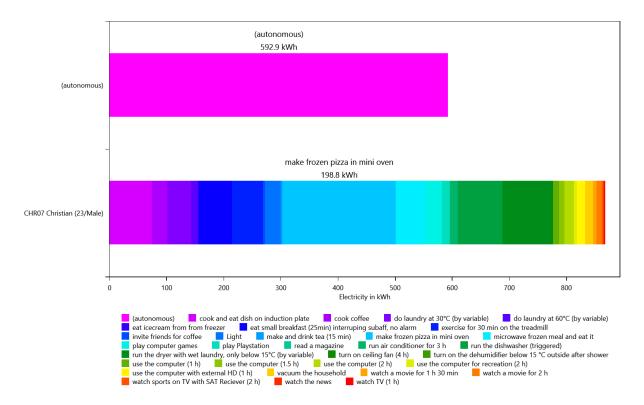
#### This is made from the files starting with: AffordanceEnergyUsePerPerson

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.

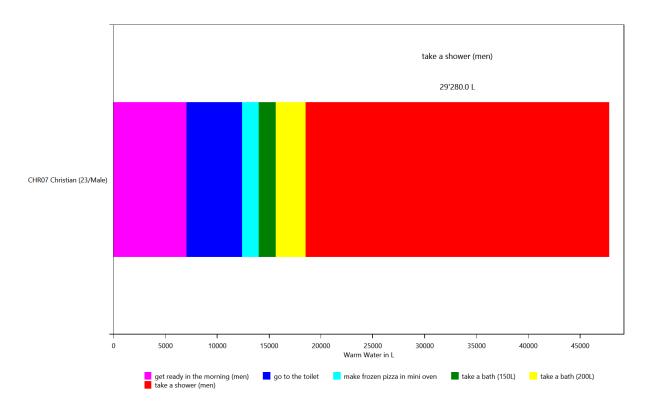
#### HH0 - Cold Water



#### HH0 - Electricity



#### HH0 - Warm Water

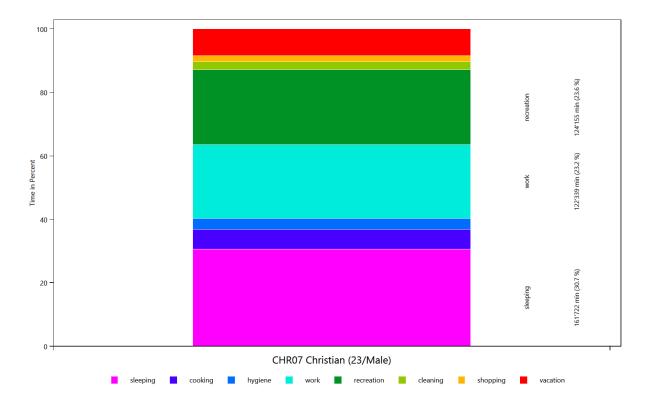


# Time Use per Person Per Affordance according to different category definitions

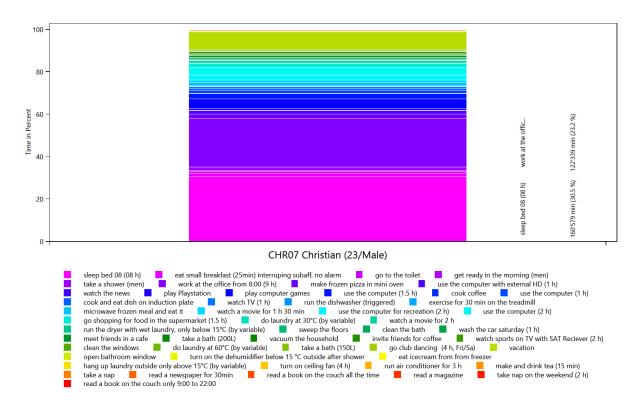
#### This is made from the files starting with: AffordanceTaggingSet

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.

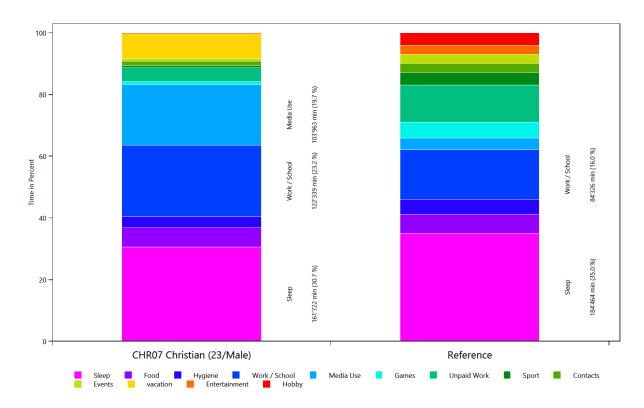
#### Basic Tagging - HH0



#### Tagging Set For Planning - HH0



#### Wo bleibt die Zeit - HH0

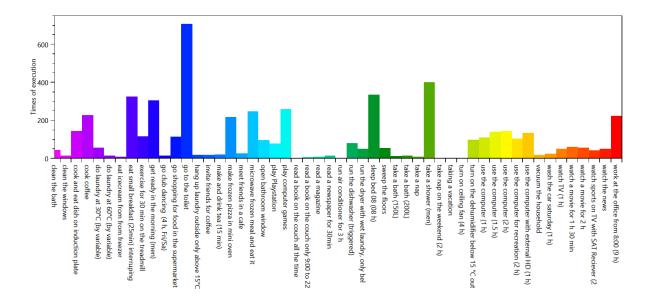


# Overview of the actions of each member of the household

#### This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.

#### HH0 - CHR07 Christian (23 Male)

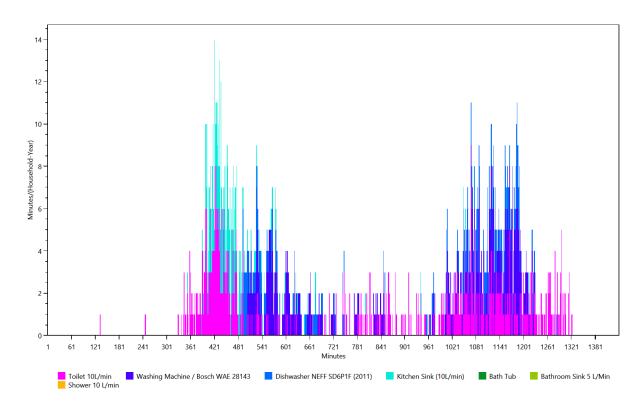


# Overview of the time of the use per load type per device

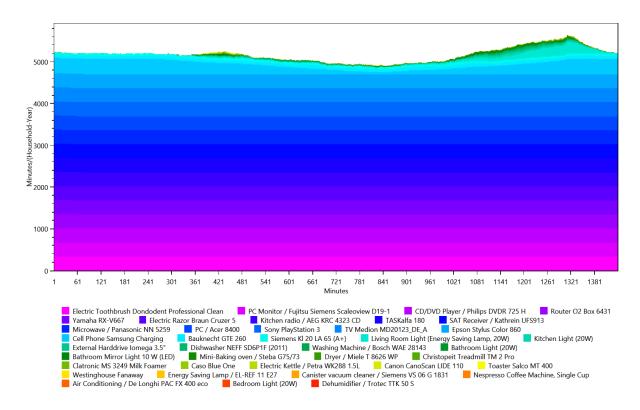
#### This is made from the files starting with: TimeOfUseEnergyProfiles

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

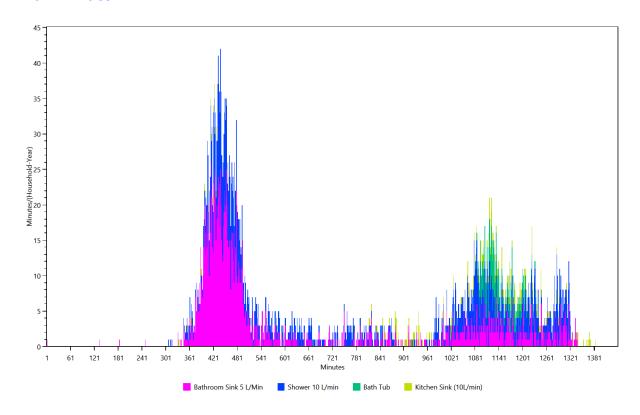
#### Cold Water



#### Electricity



#### Warm Water

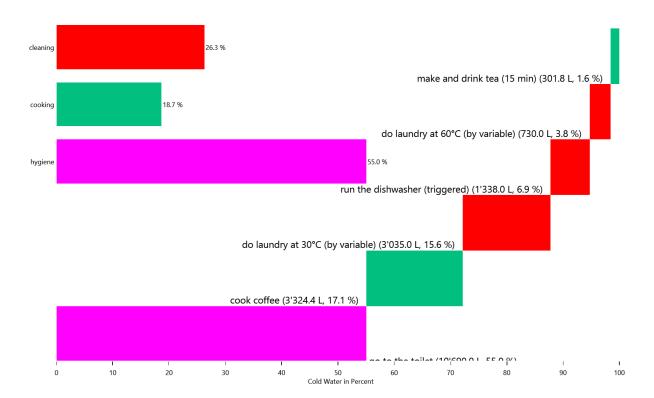


# Energy/Resource use distribution per load type per affordance

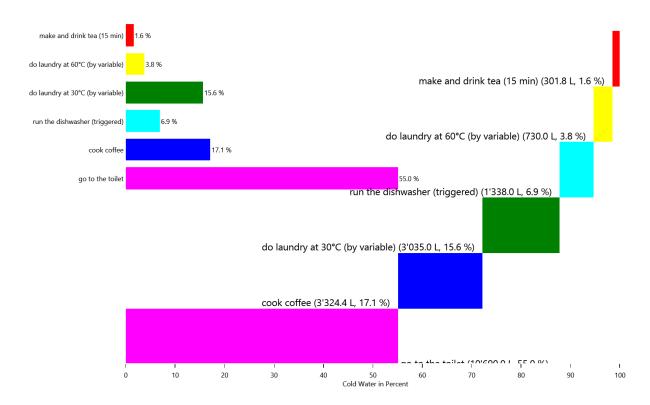
#### This is made from the files starting with: AffordanceEnergyUse

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

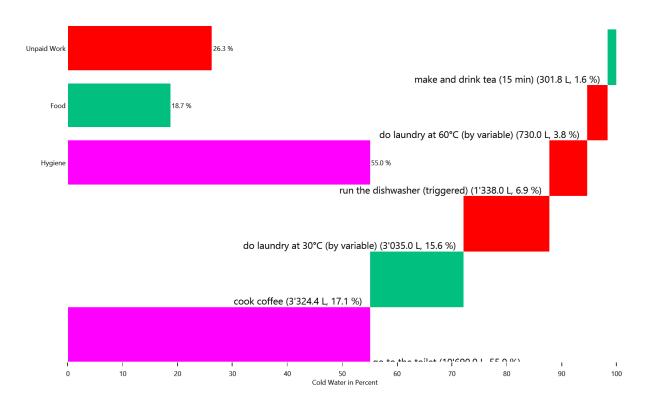
#### HH0 - Cold Water



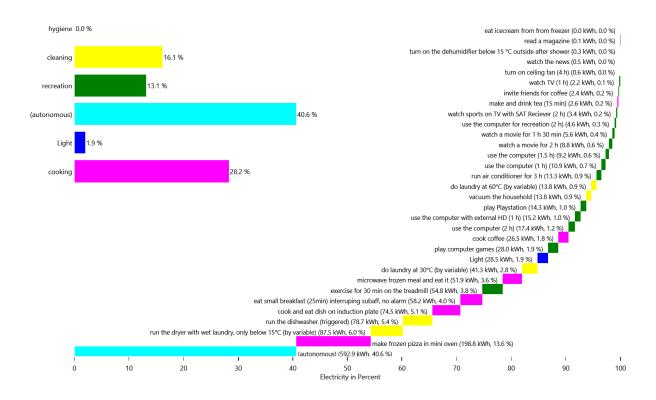
#### HH0 - Cold Water



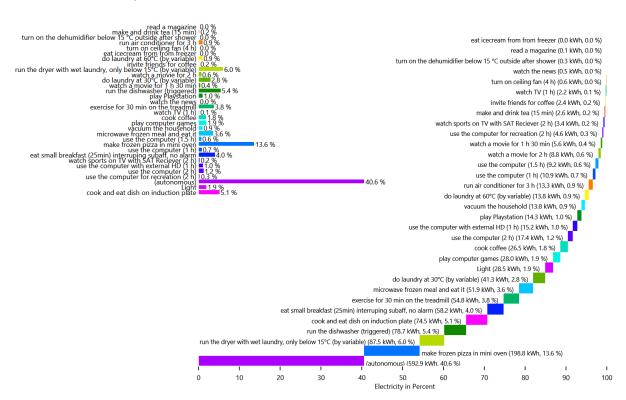
#### HH0 - Cold Water



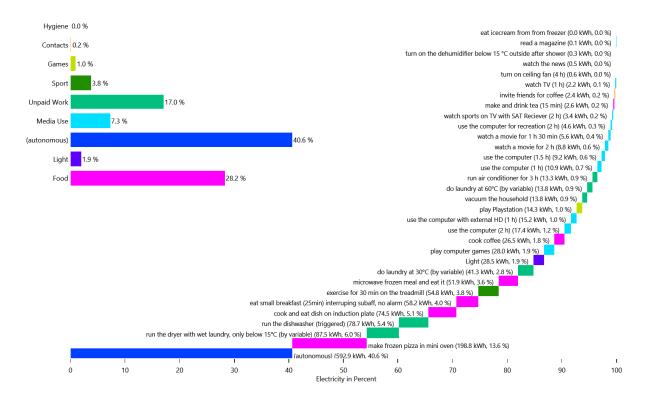
#### HH0 - Electricity



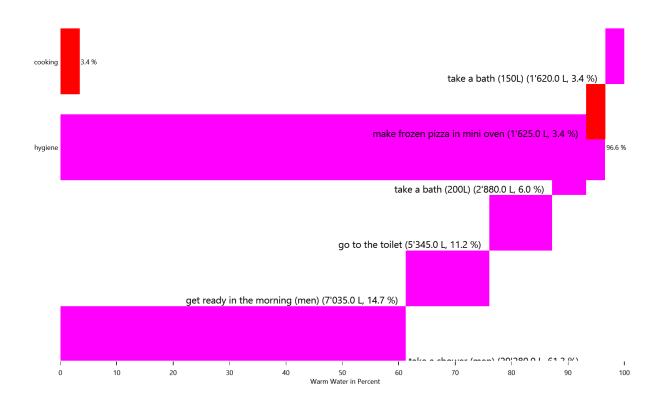
#### HH0 - Electricity



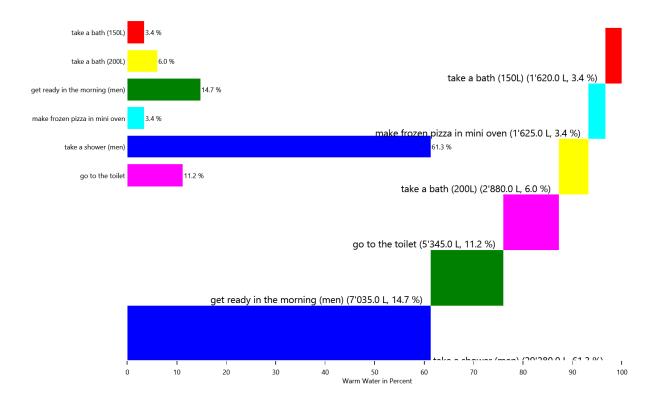
#### HH0 - Electricity



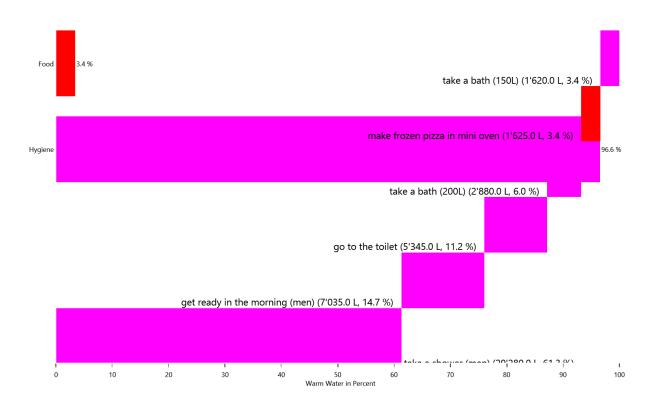
#### HH0 - Warm Water



#### HH0 - Warm Water



#### HH0 - Warm Water

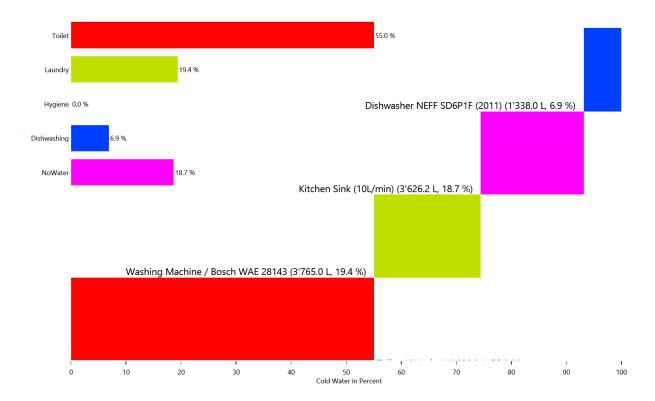


## Energy use for each load type for each device

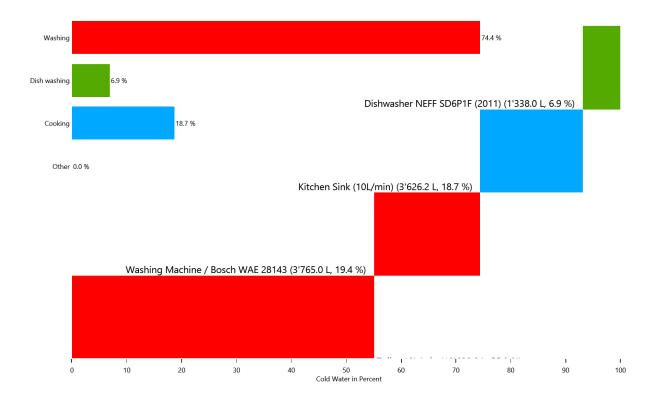
#### This is made from the files starting with: DeviceSums

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

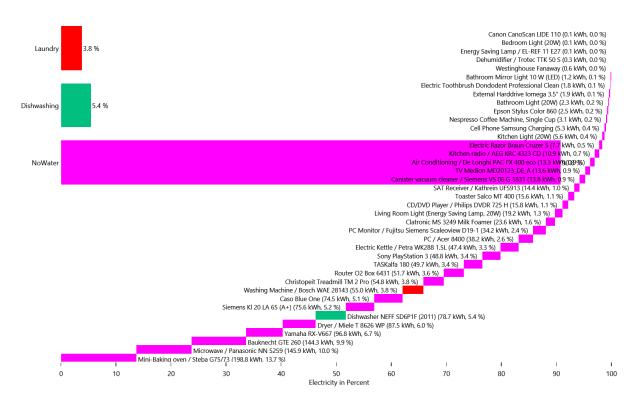
#### Cold Water



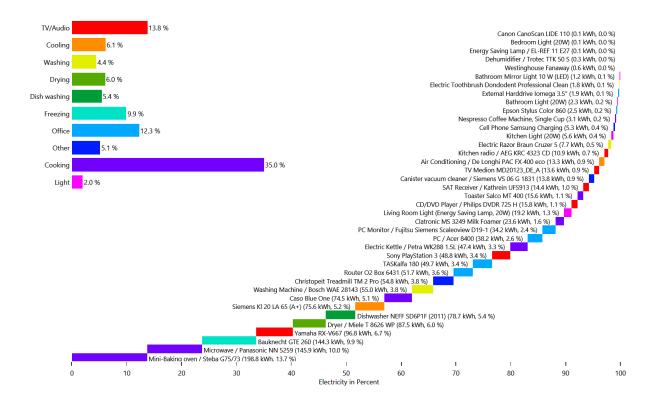
#### Cold Water



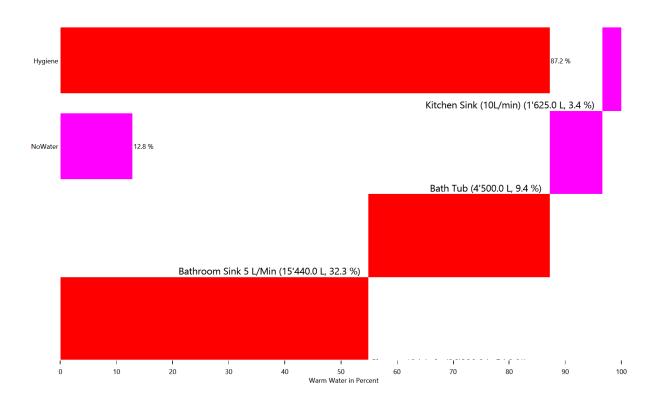
#### Electricity



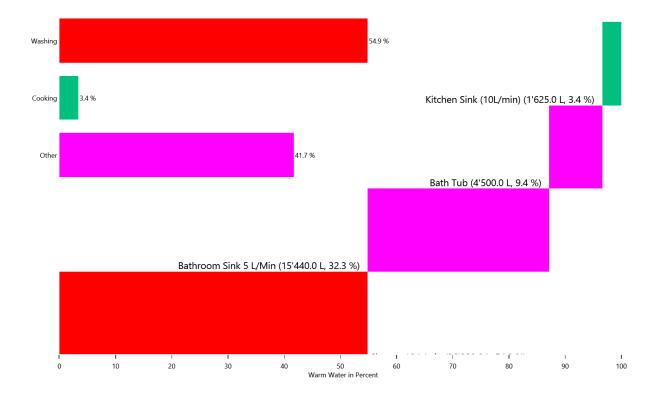
#### Electricity



#### Warm Water



#### Warm Water

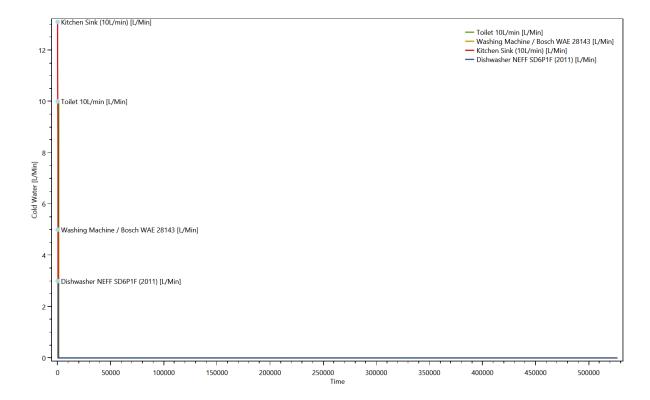


## Duration curve for each device for each load type

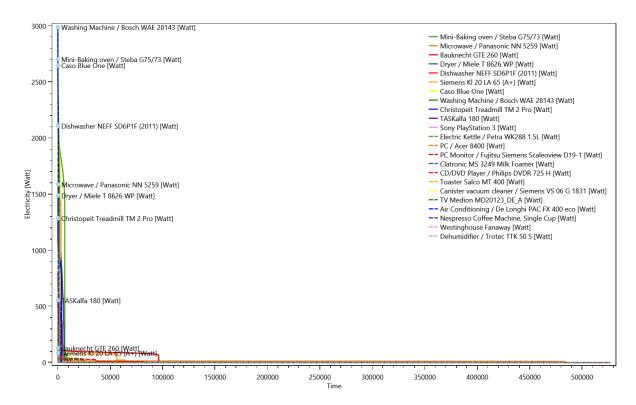
#### This is made from the files starting with: DeviceDurationCurves

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

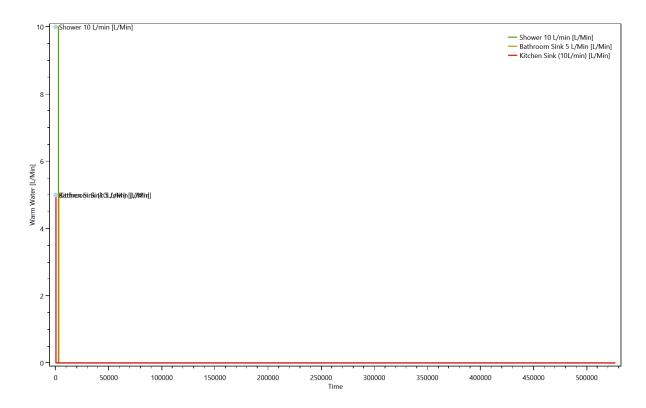
#### Cold Water



#### **Electricity**



#### Warm Water

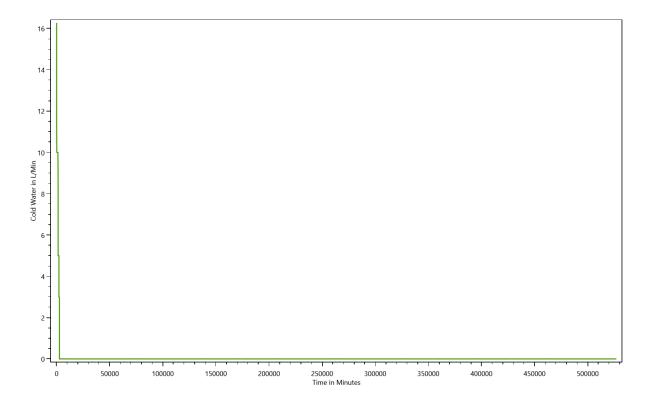


## **Duration curve for each load type**

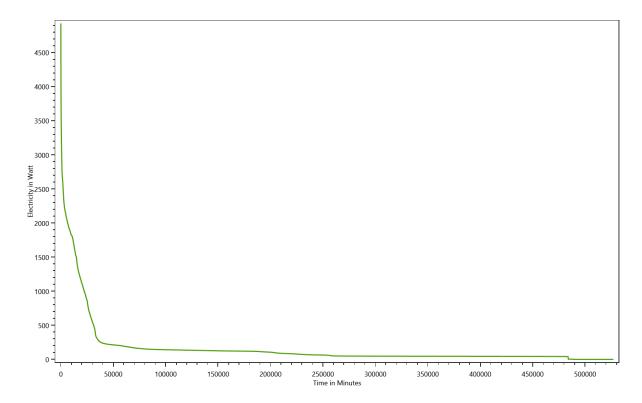
#### This is made from the files starting with: DurationCurve

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

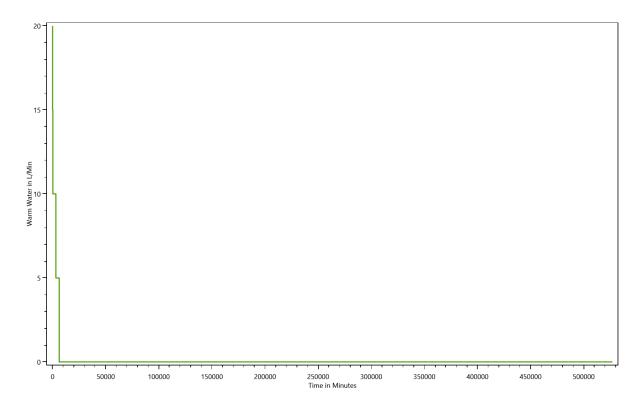
#### **Cold Water**



### Electricity



#### Warm Water

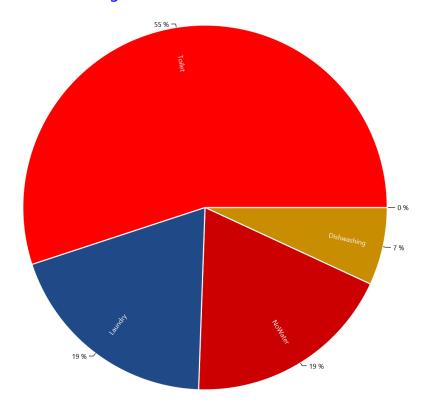


# Grouped energy use for each load type for each device

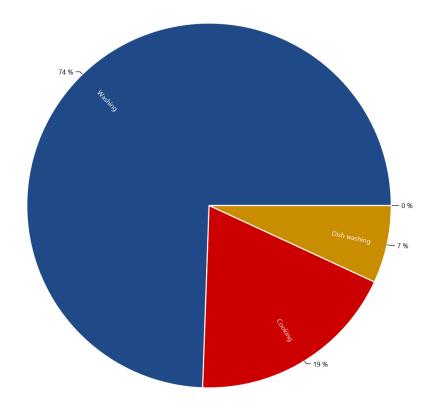
#### This is made from the files starting with: DeviceTaggingSet

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

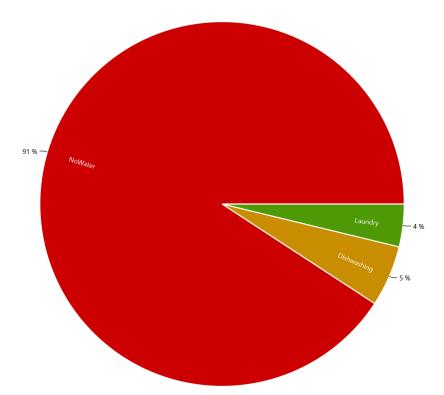
HH0 - Destatis Water Usage Statistics - Cold Water



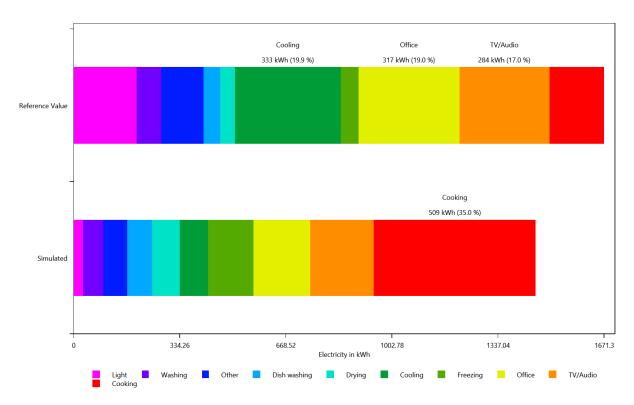
HH0 - Energieagentur - Cold Water



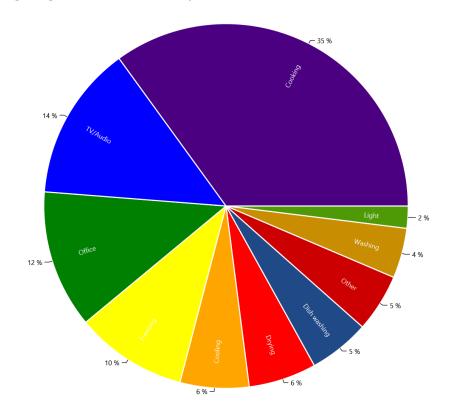
HH0 - Destatis Water Usage Statistics - Electricity



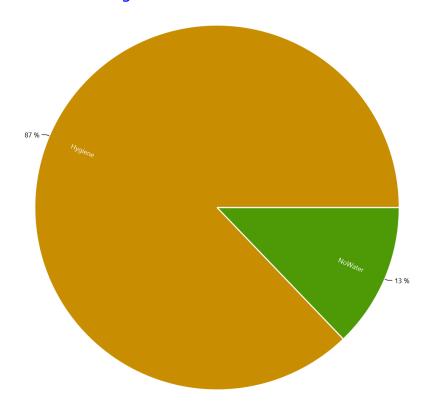
#### HH0 - Energieagentur - Electricity



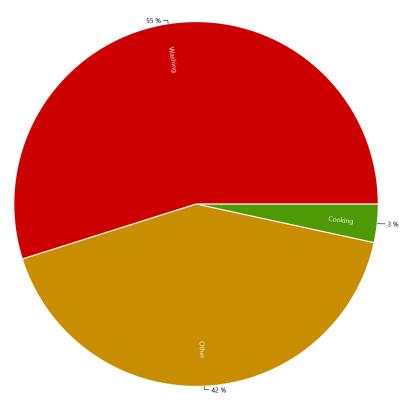
HH0 - Energieagentur - Electricity



HH0 - Destatis Water Usage Statistics - Warm Water



HH0 - Energieagentur - Warm Water

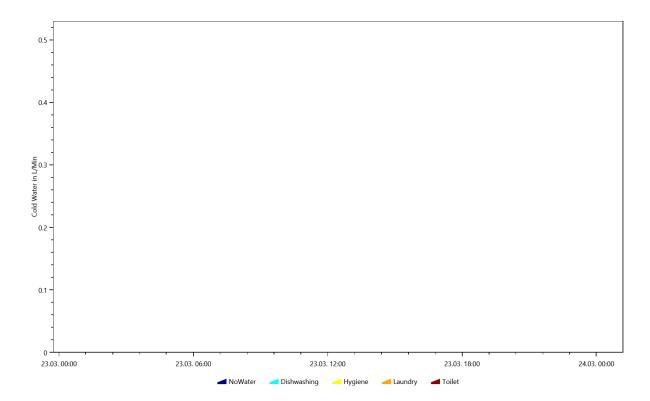


## Example of the device profiles for each load type

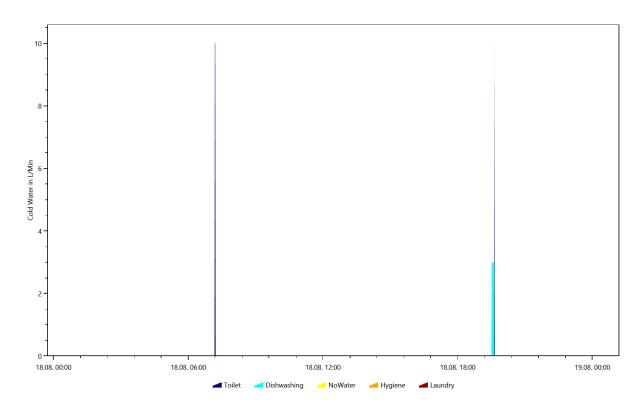
#### This is made from the files starting with: DeviceProfiles

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

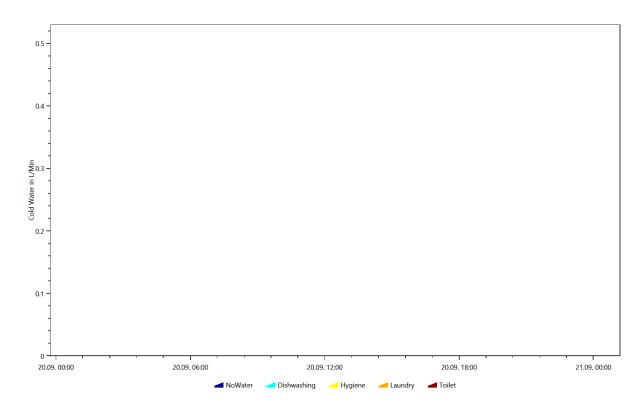
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.23



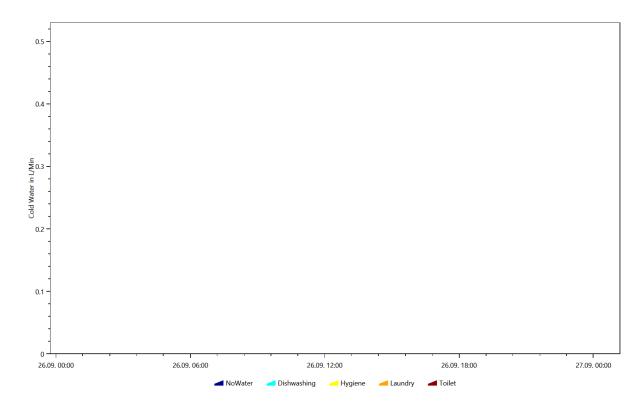
## Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.18



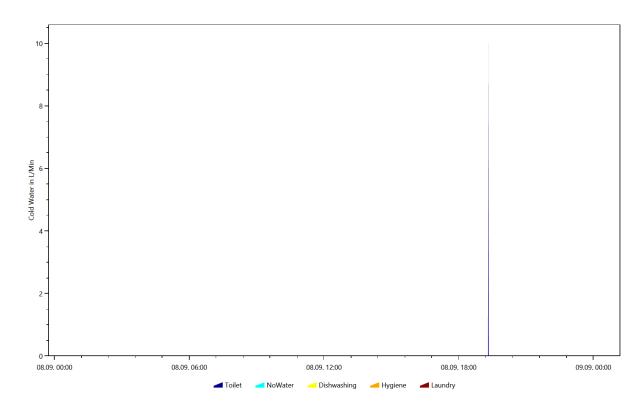
## Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.20



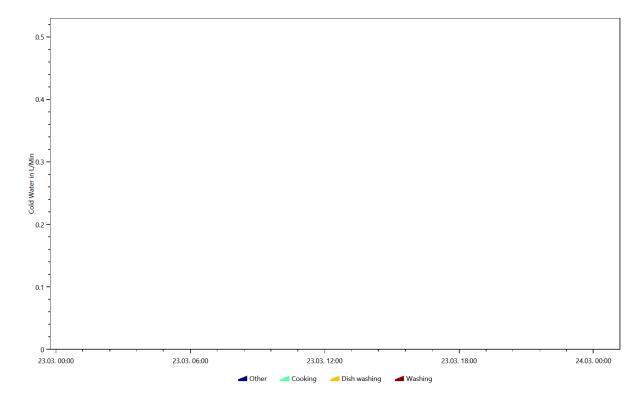
## Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.26



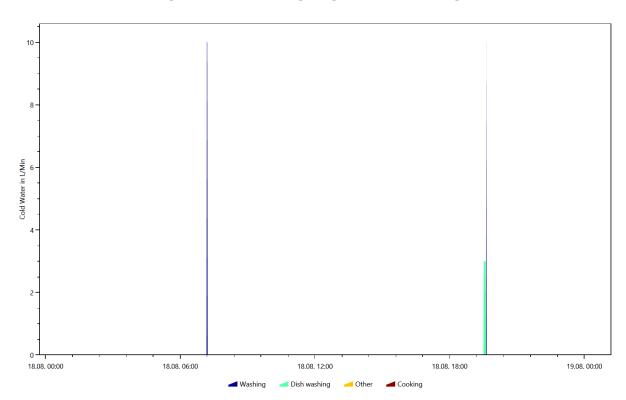
## Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.8



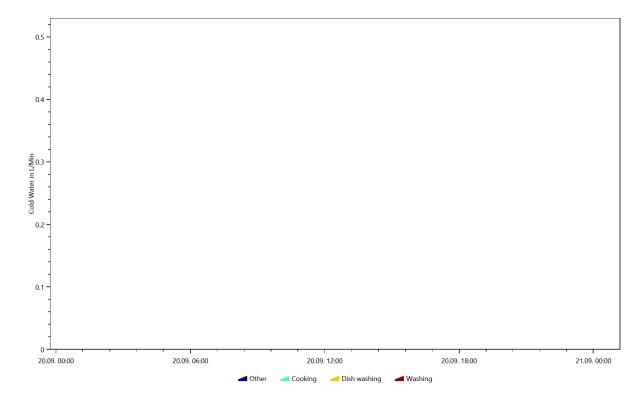
## Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.23



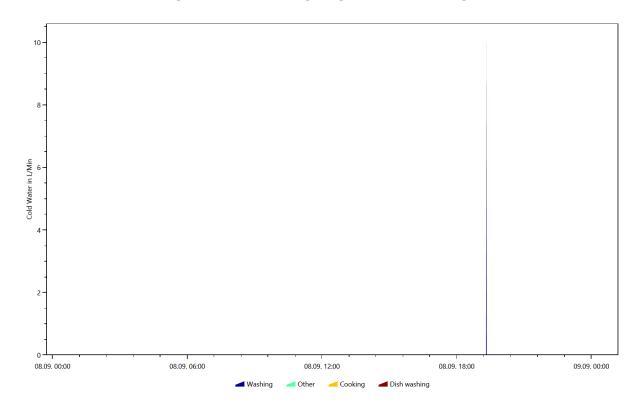
## Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.18



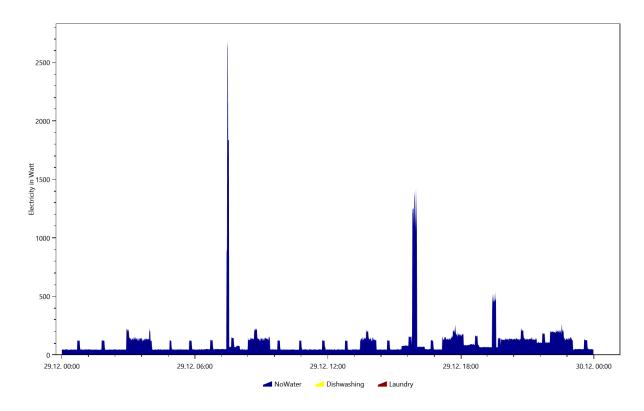
## Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.20



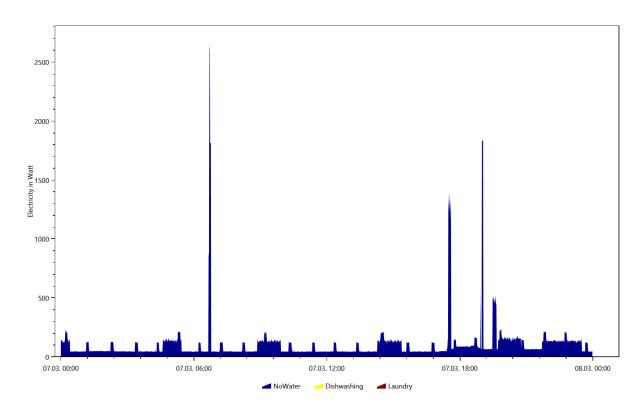
## Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.8



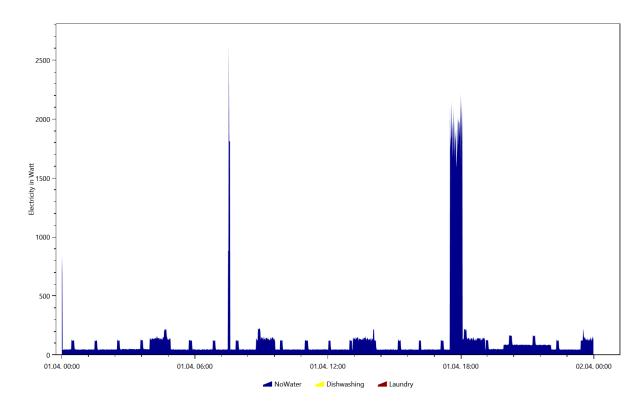
## Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.29



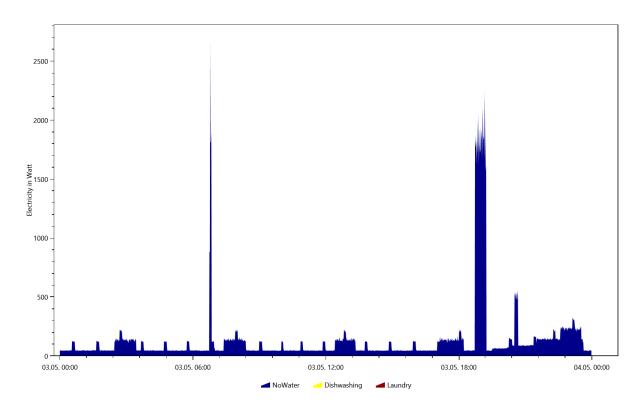
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.7



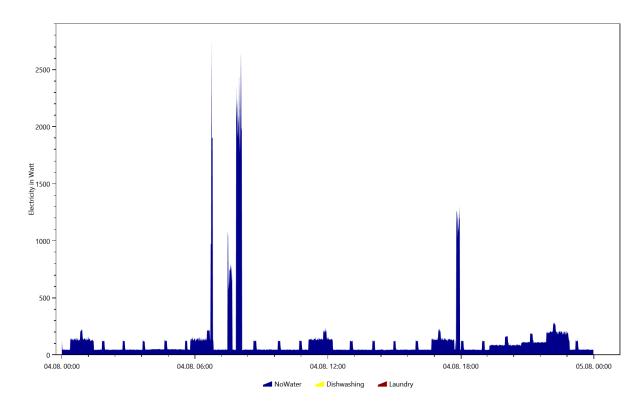
## Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.1



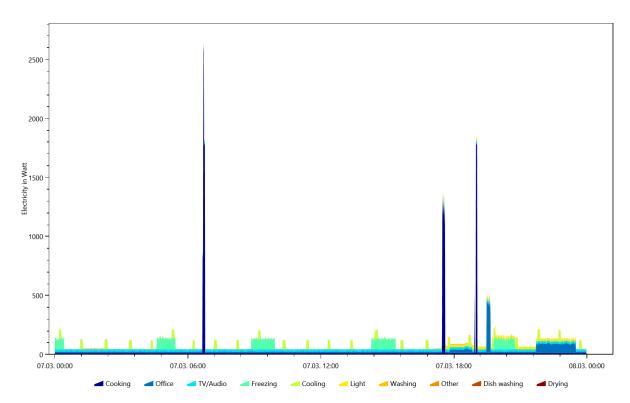
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.3



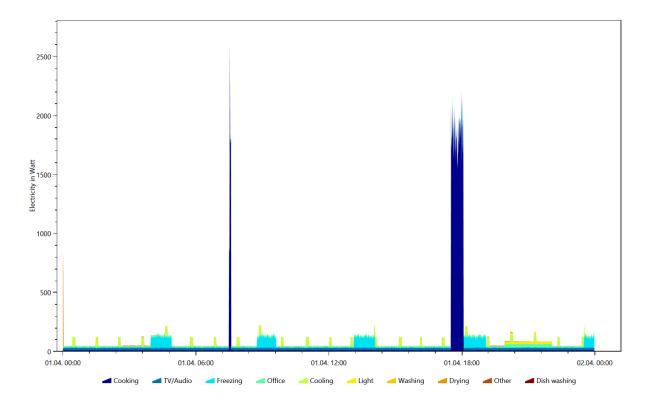
## Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.8.4



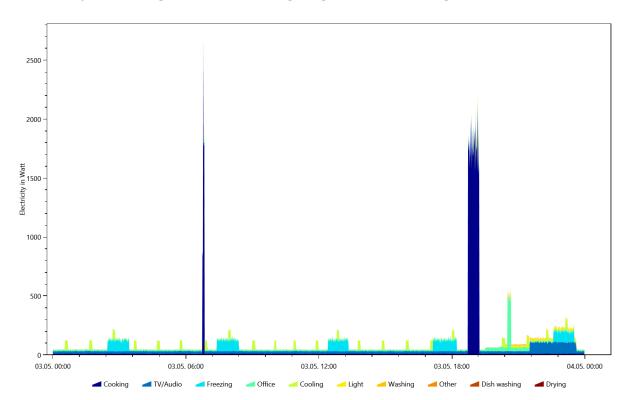
## Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.7



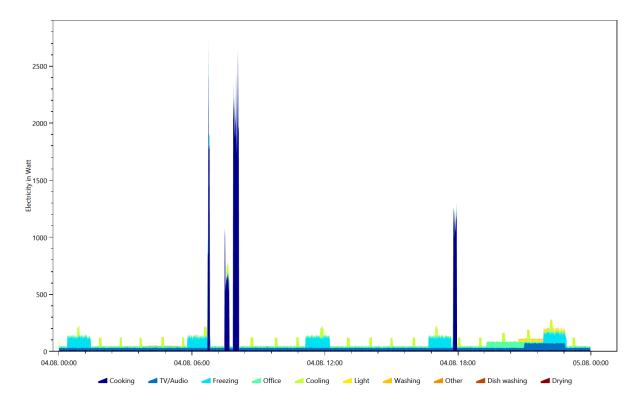
### Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.1



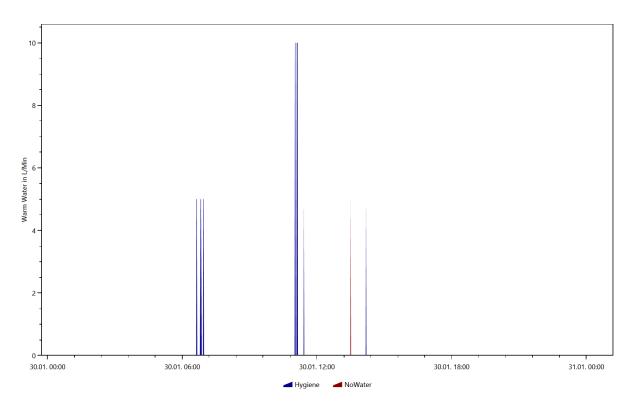
### Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.3



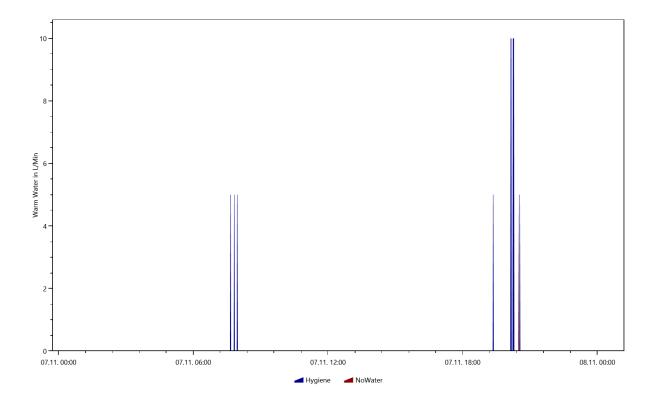
## Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.8.4



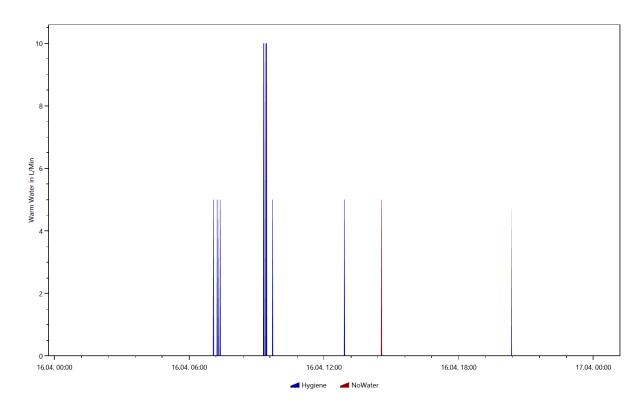
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.30



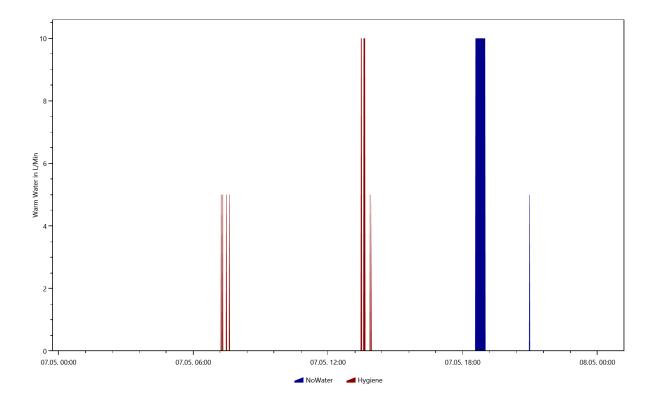
# Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.7



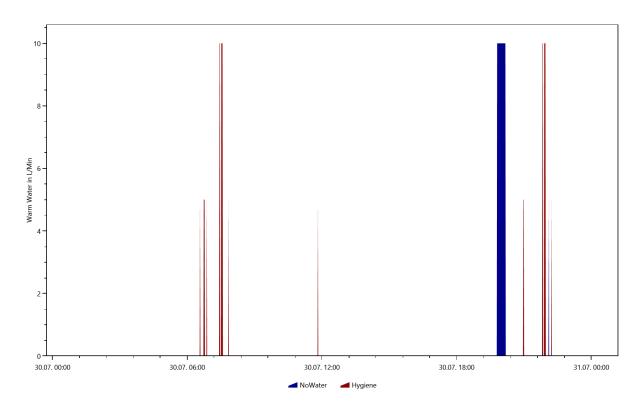
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.4.16



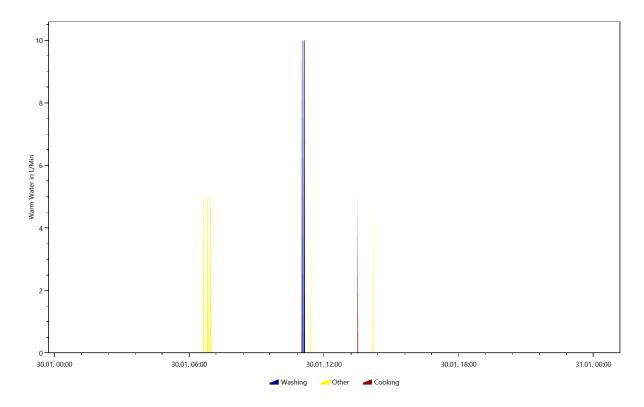
# Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.7



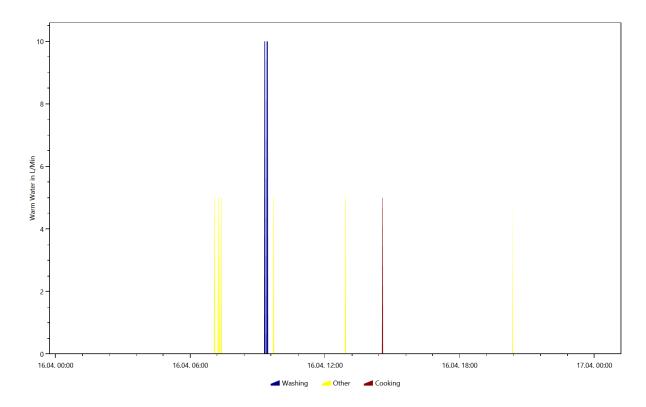
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.30



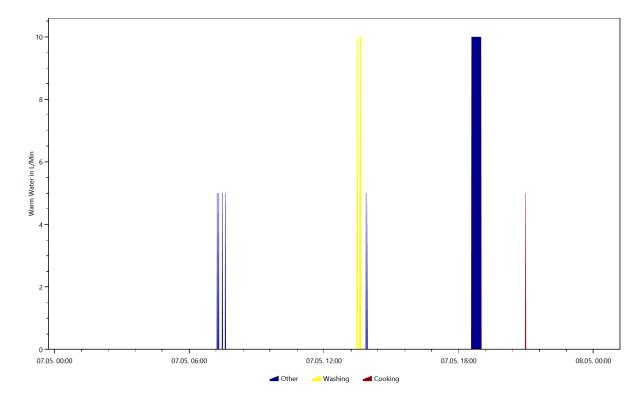
# Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.30



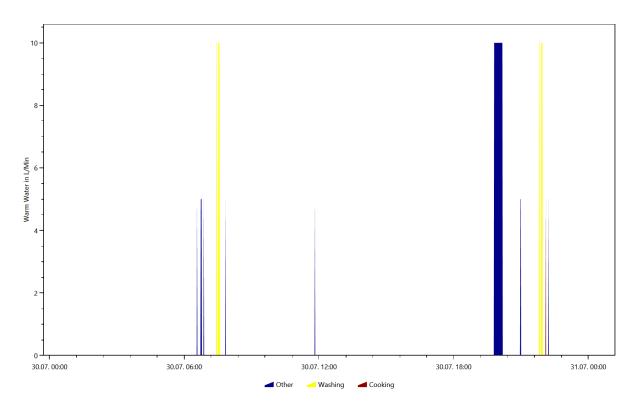
## Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.4.16



## Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.7



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

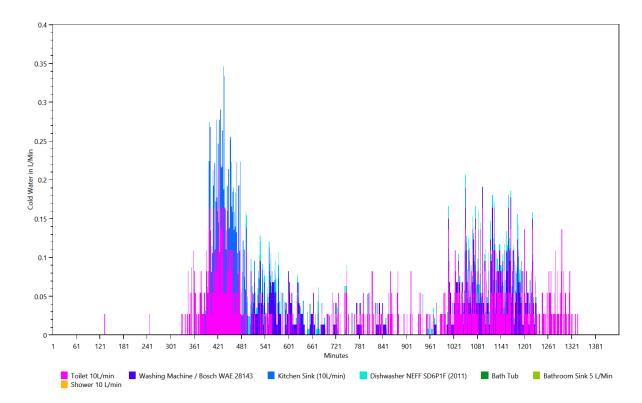


# Overview of the time and power of the use per load type per device

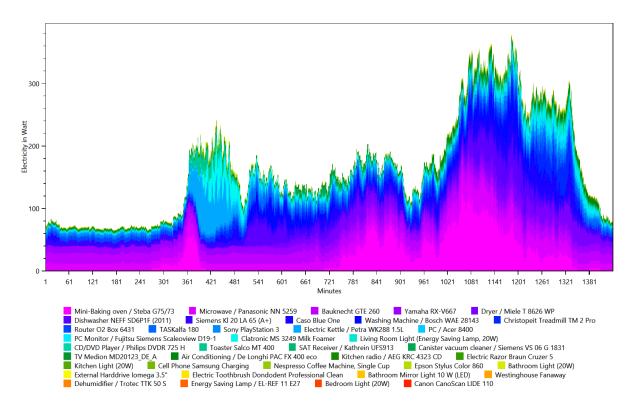
### This is made from the files starting with: TimeOfUseEnergyProfiles

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

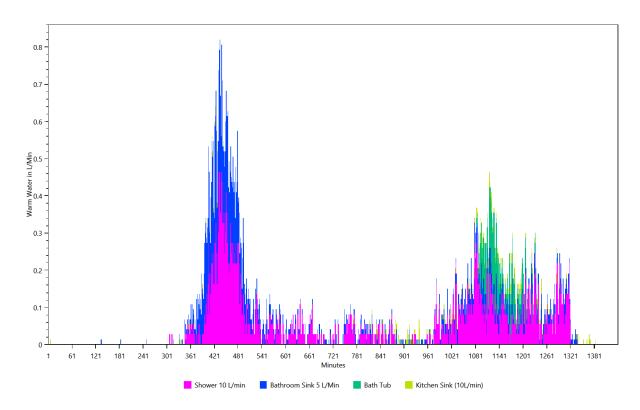
#### **Cold Water**



#### **Electricity**



#### Warm Water

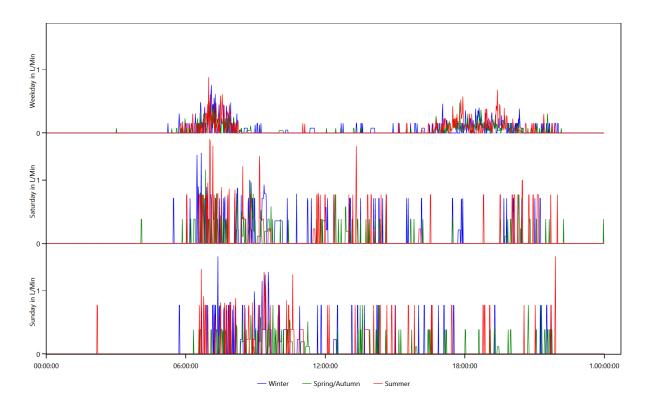


# Energy use per load type during different seasons, split by weekday/saturday/sunday

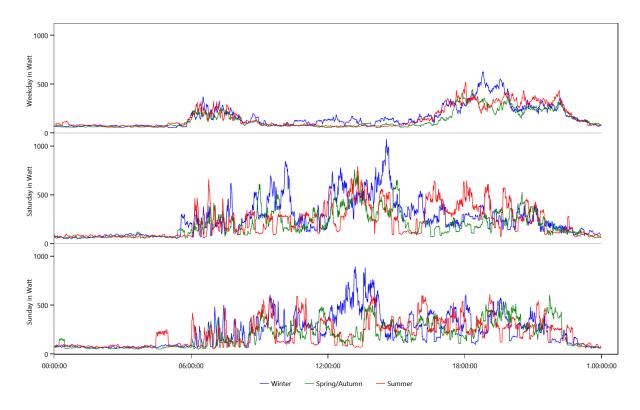
#### This is made from the files starting with: WeekdayProfiles

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

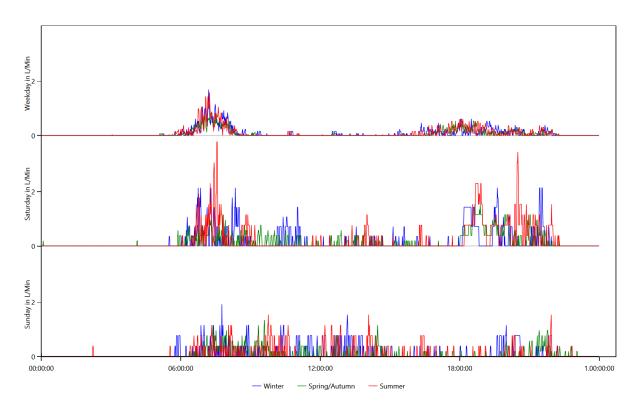
#### **Cold Water**



## Electricity



## Warm Water

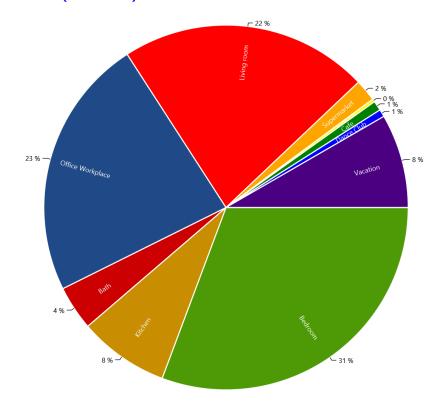


## **Location Distribution per Person**

#### This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

## CHR07 Christian (23 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;CHR07 Christian (23/Male);sleep bed 08 (08 h);sleep;False;

432;01.01.2016 07:12;CHR07 Christian (23/Male);eat small breakfast (25min) interruping subaff, no alarm;cooking;False;

459;01.01.2016 07:39;CHR07 Christian (23/Male);go to the toilet;hygiene;False;

464;01.01.2016 07:44;CHR07 Christian (23/Male);get ready in the morning (men);hygiene;False;

474;01.01.2016 07:54;CHR07 Christian (23/Male);take a shower (men);hygiene;False;

494;01.01.2016 08:14;CHR07 Christian (23/Male);work at the office from 8:00 (9 h);work;False;

1056;01.01.2016 17:36;CHR07 Christian (23/Male);make frozen pizza in mini oven;cooking;False;

1110;01.01.2016 18:30;CHR07 Christian (23/Male);use the computer with external HD (1 h);Active Entertainment (Computer, Internet etc);False;

1180;01.01.2016 19:40;CHR07 Christian (23/Male); watch the news; Passive Entertainment (TV etc.); False;

1194;01.01.2016 19:54;CHR07 Christian (23/Male);go to the toilet;hygiene;False;

1199;01.01.2016 19:59;CHR07 Christian (23/Male);play Playstation;Passive Entertainment (TV etc.);False;

1246;01.01.2016 20:46;CHR07 Christian (23/Male);play computer games;Active Entertainment (Computer, Internet etc);False;

1330;01.01.2016 22:10;CHR07 Christian (23/Male);use the computer (1.5 h);Active Entertainment (Computer, Internet etc);False;

1407;01.01.2016 23:27;CHR07 Christian (23/Male);sleep bed 08 (08 h);sleep;False;

1905;02.01.2016 07:45;CHR07 Christian (23/Male);eat small breakfast (25min) interruping subaff, no alarm;cooking;False;

1932;02.01.2016 08:12;CHR07 Christian (23/Male);get ready in the morning (men);hygiene;False;

1943;02.01.2016 08:23;CHR07 Christian (23/Male);take a shower (men);hygiene;False;

1965;02.01.2016 08:45;CHR07 Christian (23/Male);cook coffee;cooking;False;

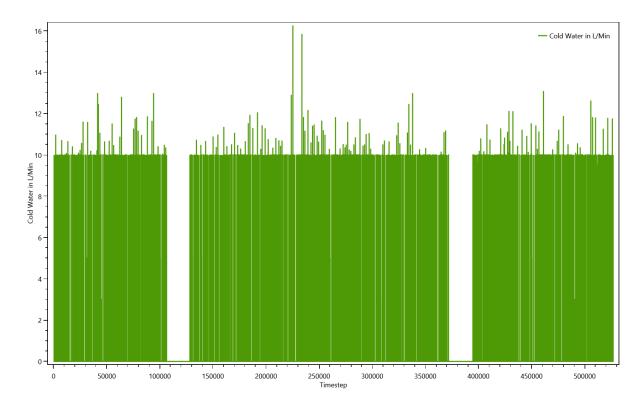
1977;02.01.2016 08:57;CHR07 Christian (23/Male);go to the toilet;hygiene;False;

## **Sum Profiles**

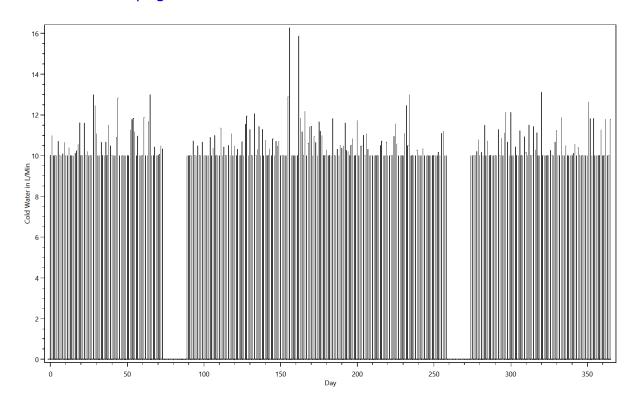
#### This is made from the files starting with: SumProfiles

This shows the energy use during the simulation.

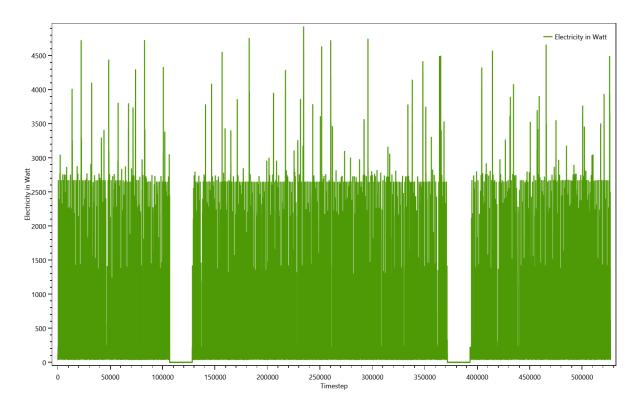
## Summed up curve for Cold Water from SumProfiles.Cold Water.png



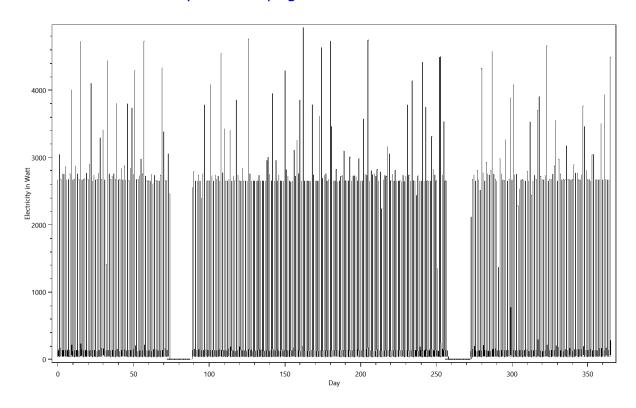
# Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax..png



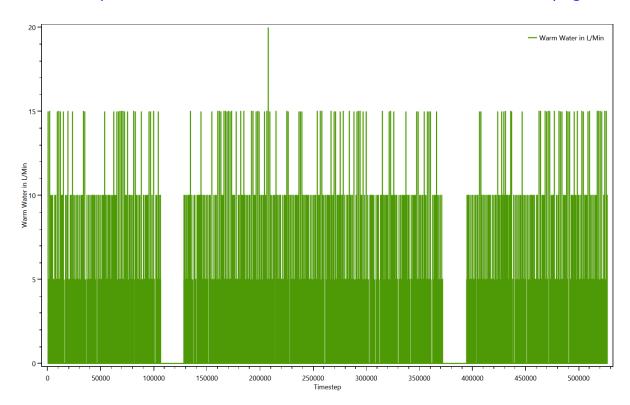
## Summed up curve for Electricity from SumProfiles. Electricity.png



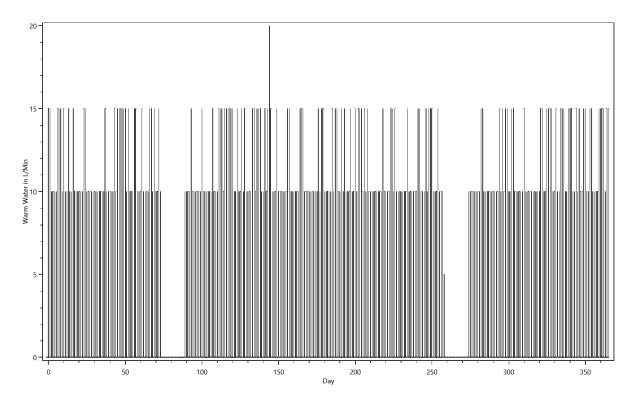
# Summed up curve for ElectricityMinMax from SumProfiles.ElectricityMinMax..png



## 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.CHR07 Single with work 0.txt

Device; Load Type; Profile; Number of Activations

Air Conditioning / De Longhi PAC FX 400 eco; Electricity; 03 h 0 min 100 % [Synthetic]; 2

Bath Tub; Warm Water; 0 h 15 min 100% [Synthetic]; 11

Bath Tub; Warm Water; 0 h 20 min 100% [Synthetic]; 14

Bathroom Light (20W); Electricity; Bath - light [Synthetic for Light Device]; 594

Bathroom Mirror Light 10 W (LED); Electricity; Bath - light [Synthetic for Light Device]; 594

Bathroom Sink 5 L/Min; Warm Water; 0 h 01 min 100% [Synthetic]; 2044

Bauknecht GTE 260; Electricity; 0 h 01 min 100% [Synthetic]; 259

Bauknecht GTE 260; Electricity; 05 h 0 min Fridge, 1h 100%, 4h 0% [Synthetic]; 1627

Bed 8; None; 08 h 0 min 100% [Synthetic]; 337

Bedroom Light (20W); Electricity; Bedroom - light [Synthetic for Light Device]; 3

CD/DVD Player / Philips DVDR 725 H; Electricity; 01 h 30 min 100% [Synthetic]; 61

CD/DVD Player / Philips DVDR 725 H; Electricity; 02 h 0 min 100% [Synthetic]; 56

CD/DVD Player / Philips DVDR 725 H; Electricity; Standby TV / Receiver 1 h 0 min 3% [Synthetic]; 8071

Cafe Table; None; 03 h 0 min 100 % [Synthetic]; 26

Canister vacuum cleaner / Siemens VS 06 G 1831; Electricity; 0 h 30 min 100% [Synthetic]; 19

Canon CanoScan LIDE 110; Electricity; 0 h 10 min 100% [Synthetic]; 146

Caso Blue One; Electricity; 0 h 15 min 100% [Synthetic]; 145

Cell Phone Samsung Charging; Electricity; Profile for Cell Phone Samsung Charging Electricity [Measurement by ZSW (1min)]; 690

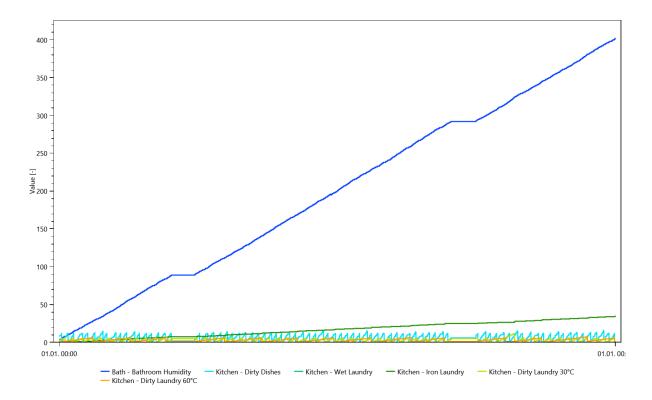
Christopeit Treadmill TM 2 Pro; Electricity; 0 h 30 min 100% [Synthetic]; 117

## **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**

