# Overview of the results of the household CHR31 Single, Retired Woman 0

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

Energy Intensity: EnergySaving

Seed 1304

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

http://www.loadprofilegenerator.de

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### Totals

### **Totals for each Loadtype**

Load Type	Value	Unit
Cold Water	27925.51	L
Electricity	1015.82	kWh
Warm Water	41292.50	L

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

Load Type	Value	Unit
Cold Water	76.30	L
Electricity	2.78	kWh
Warm Water	112.82	L

### Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	15.00	L/Min
Electricity	0.16	5070.31	Watt
Warm Water	0.00	12.50	L/Min

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

Load Type	Value	Unit
Cold Water	27925.51	L
Electricity	1015.82	kWh

Warm Water	41292.50	L
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### Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	76.30	L
Electricity	2.78	kWh
Warm Water	112.82	L

## Persons

- HH0
- CHR31 Monika (68/Female)(68/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.



## **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 ToCategories.



### 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 - CHR31 Monika (68 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 - HH0



#### 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.



# 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 - 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 - 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 2016.10.10



# Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.31



Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.28



# Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.5.10



# Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.30



# Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.10



#### Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.28



Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.10



Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.30



# Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.18



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



# Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.6.10



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



# Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.17



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





Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.6.10

Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.12





Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.17

Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.13



Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.17



Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.19



Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.13



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



# Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.13



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.17



# Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.13



Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.5.18



# 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







## **Location Distribution per Person**

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

These charts show where the persons spend their time.

#### CHR31 Monika (68 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;CHR31 Monika (68/Female);sleep bed 01 (06 h);sleep;False; 269;01.01.2016 04:29;CHR31 Monika (68/Female);go to the toilet;hygiene;False; 275;01.01.2016 04:35;CHR31 Monika (68/Female);watch the news;Passive Entertainment (TV etc.);False; 288;01.01.2016 04:48;CHR31 Monika (68/Female);clean eye glasses;cleaning;False; 294;01.01.2016 04:54;CHR31 Monika (68/Female);watch a movie for 2 h;Passive Entertainment (TV etc.);False; 403;01.01.2016 06:43;CHR31 Monika (68/Female);eat breakfast (1 h);cooking;False; 472;01.01.2016 07:52;CHR31 Monika (68/Female);go to the toilet;hygiene;False; 478;01.01.2016 07:58;CHR31 Monika (68/Female);go to doctor;work;False; 725;01.01.2016 12:05;CHR31 Monika (68/Female);take a shower with hair washing (women) (20 min hair drying);hygiene;False; 793;01.01.2016 13:13;CHR31 Monika (68/Female);sewing cloths;cleaning;False; 904;01.01.2016 15:04;CHR31 Monika (68/Female);go to the toilet;hygiene;False; 909;01.01.2016 15:09;CHR31 Monika (68/Female);take a nap;sleep;False; 969;01.01.2016 16:09;CHR31 Monika (68/Female);watch sports on TV with SAT Reciever (2 h);Passive Entertainment (TV etc.);False; 1100;01.01.2016 18:20;CHR31 Monika (68/Female);go to community college;school;False; 1297;01.01.2016 21:37;CHR31 Monika (68/Female);go to the toilet;hygiene;False; 1304:01.01.2016 21:44;CHR31 Monika (68/Female);make frozen pizza and eat it;cooking;False; 1336:01.01.2016 22:16:CHR31 Monika (68/Female):sleep bed 01 (06 h):sleep:False: 1712;02.01.2016 04:32;CHR31 Monika (68/Female);watch a movie for 2 h;Passive Entertainment (TV etc.);False; 1838;02.01.2016 06:38;CHR31 Monika (68/Female);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 ElectricityMinMax from SumProfiles.ElectricityMinMax..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.CHR31 Single, Retired Woman 0.txt

Device:Load Type:Profile:Number of Activations AEG NM 2701 Premium; Electricity; 01 h 0 min 30% [Synthetic]; 326 AEG PN 2200 RX 4935365097;Electricity;0 h 03 min 100% [Synthetic];24 AEG SB 2E 650 R;Electricity;0 h 03 min 100% [Synthetic];24 Bathroom Light (20W); Electricity; Bath - light [Synthetic for Light Device]; 766 Bathroom Mirror Light 10 W (LED); Electricity; Bath - light [Synthetic for Light Device]; 766 Bathroom Sink 5 L/Min; Warm Water; 0 h 01 min 100% [Synthetic]; 1662 Bathroom Sink 5 L/Min; Warm Water; 0 h 01 min 50% [Synthetic]; 450 Bed 1;None;06 h 0 min 100% [Synthetic];354 Bedroom Light (20W); Electricity; Bedroom - light [Synthetic for Light Device]; 8 CD/DVD Player / Philips DVDR 725 H;Electricity;01 h 30 min 100% [Synthetic];289 CD/DVD Player / Philips DVDR 725 H;Electricity;02 h 0 min 100% [Synthetic];321 CD/DVD Player / Philips DVDR 725 H;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8437 Canister vacuum cleaner / Siemens VS 06 G 1831;Electricity;0 h 30 min 100% [Synthetic];28 Cleanser;None;01 h 0 min 100% [Synthetic];94 Cloth Drying Rack; None; 0 h 20 min 100% [Synthetic]; 72 Community College;None;03 h 0 min 100 % [Synthetic];71 Cordless Screwdriver / Bosch PSR 18 LI-2; Electricity; 0 h 01 min 100% [Synthetic]; 24 Cordless Screwdriver / Bosch PSR 18 LI-2; Electricity; 01 h 0 min 30% [Synthetic]; 8450 Couch;None;01 h 0 min 100% [Synthetic];276

### 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

