Overview of the results of the household CHR24 Single woman over 65 years 0

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

Energy Intensity: Random

Seed 1356

LoadProfileGenerator 5.8.0.16019

by Noah Pflugradt

Rendering date:16.12.2016 09:15:53

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Totals

Totals for each Loadtype

Load Type	Value	Unit
Cold Water	16150.03	L
Electricity	2386.36	kWh
Warm Water	43281.99	L

Totals for each Loadtype per Day

Load Type	Value	Unit
Cold Water	44.13	L
Electricity	6.52	kWh
Warm Water	118.26	L

Minimum and Maximum for each Loadtype

Household	Minimum	Maximum	Unit
Cold Water	0.00	15.00	L/Min
Electricity	-171.35	7503.99	Watt
Warm Water	0.00	16.02	L/Min

Totals for each Loadtype per Person

Load Type	Value	Unit
Cold Water	16150.03	L
Electricity	2386.36	kWh

Warm Water	43281.99	L

Totals for each Loadtype per Person per Day

Load Type	Value	Unit
Cold Water	44.13	L
Electricity	6.52	kWh
Warm Water	118.26	L

Persons

- HH0
    - CHR24 Martha (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.

HH0 - CHR24 Martha (68 Female)
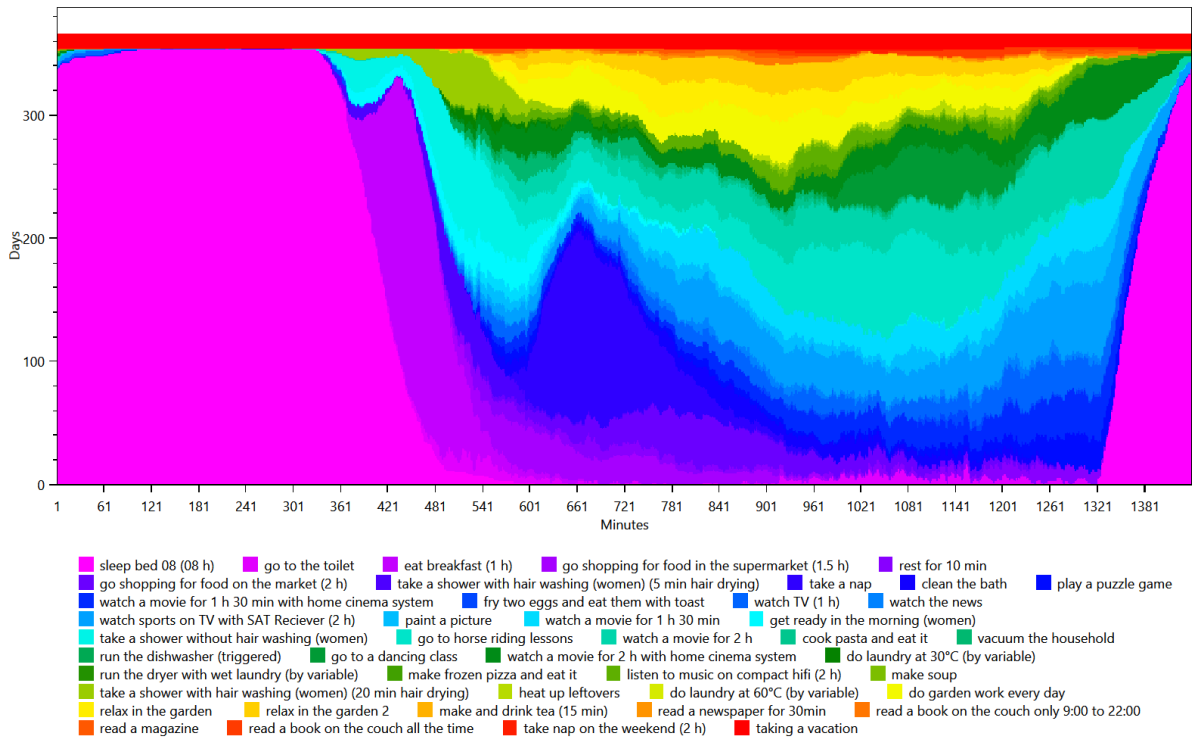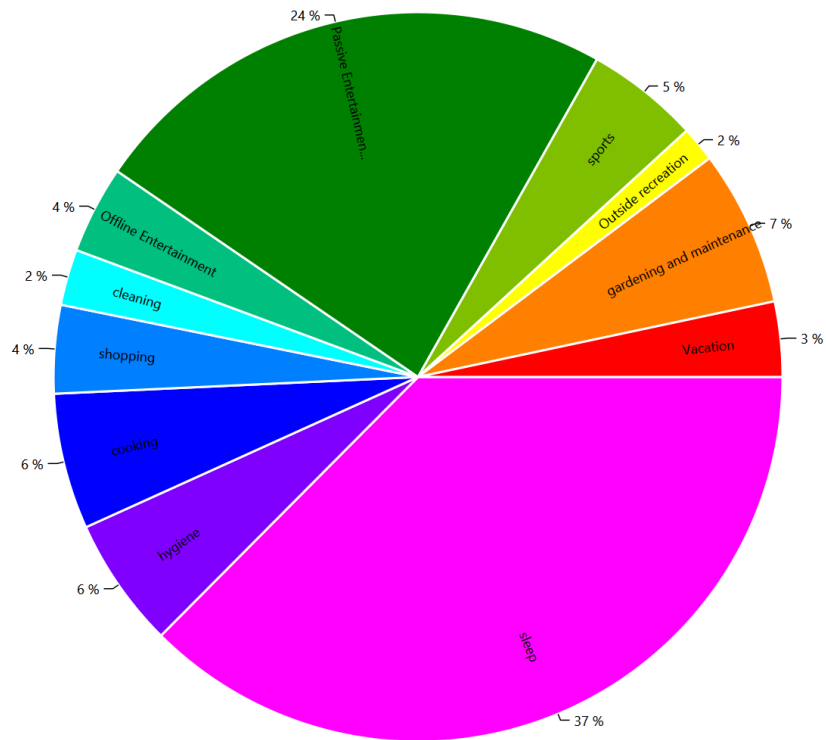
Activity Distribution per Person

This is made from the files starting with: ActivityPercentage

This shows the distribution of the activities, grouped by the affordance AffordanceToCategories.
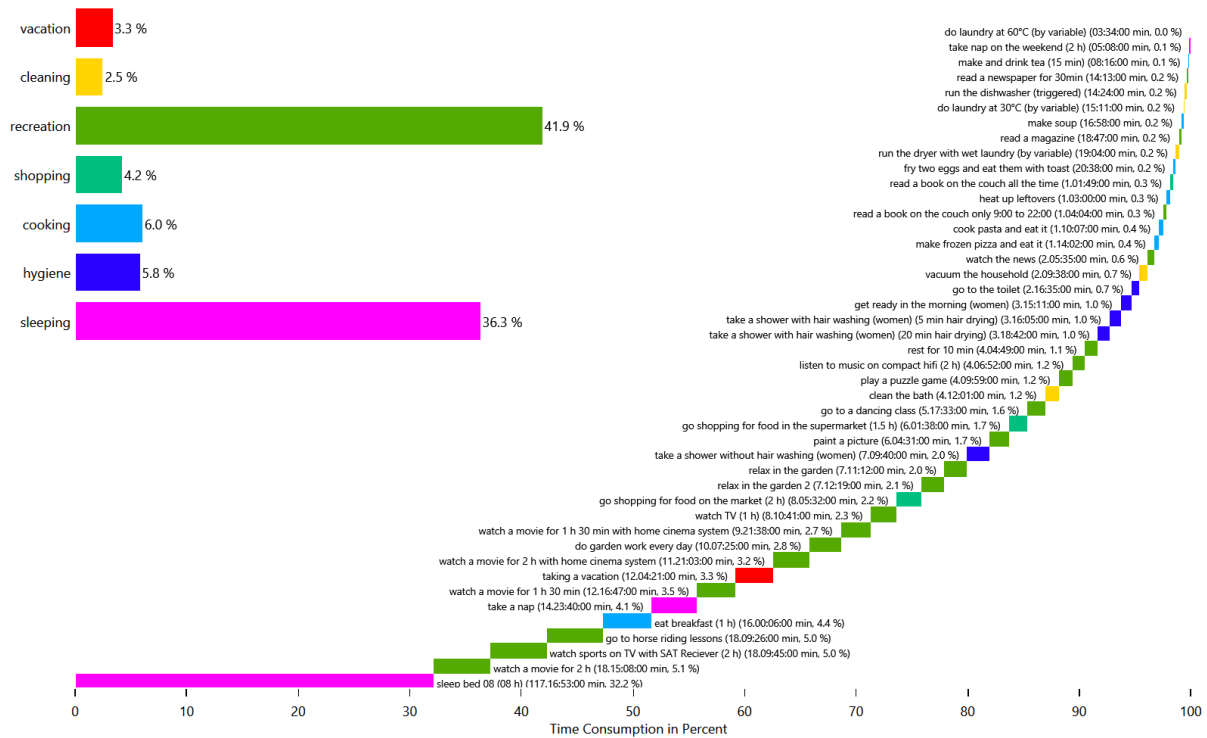
HH0 - CHR24 Martha (68 Female)

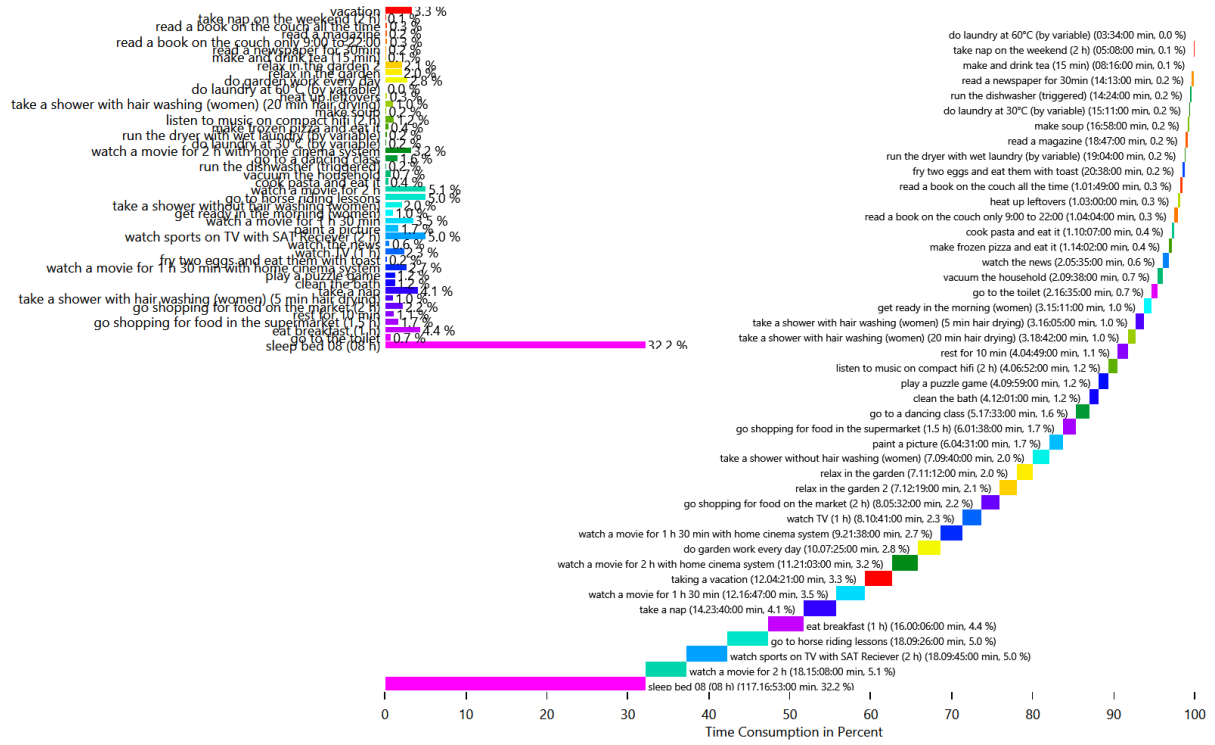# Time Use per Person per Affordance Per Person

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.
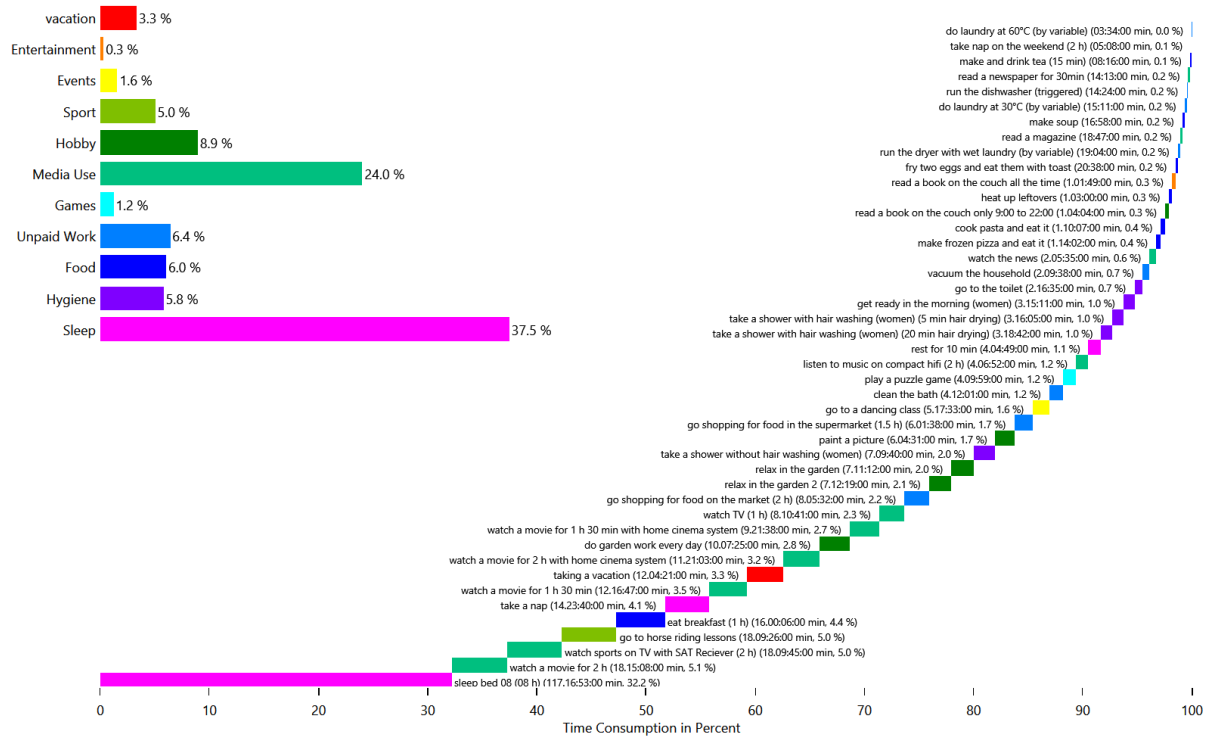
HH0 - CHR24 Martha (68 Female)

Bar chart — left side (affordance categories):
- vacation 3.3 %
- cleaning 2.5 %
- recreation 41.9 %
- shopping 4.2 %
- cooking 6.0 %
- hygiene 5.8 %
- sleeping 36.3 %

Right side (individual affordances):
- do laundry at 60°C (by variable) (03:34:00 min, 0.0 %)
- take nap on the weekend (2 h) (05:08:00 min, 0.1 %)
- make and drink tea (15 min) (08:16:00 min, 0.1 %)
- read a newspaper for 30min (14:13:00 min, 0.2 %)
- run the dishwasher (triggered) (14:24:00 min, 0.2 %)
- do laundry at 30°C (by variable) (15:11:00 min, 0.2 %)
- make soup (16:58:00 min, 0.2 %)
- read a magazine (18:47:00 min, 0.2 %)
- run the dryer with wet laundry (by variable) (19:04:00 min, 0.2 %)
- fry two eggs and eat them with toast (20:38:00 min, 0.2 %)
- read a book on the couch all the time (1.01:49:00 min, 0.3 %)
- heat up leftovers (1.03:00:00 min, 0.3 %)
- read a book on the couch only 9:00 to 22:00 (1.04:04:00 min, 0.3 %)
- cook pasta and eat it (1.10:07:00 min, 0.4 %)
- make frozen pizza and eat it (1.14:02:00 min, 0.4 %)
- watch the news (2.05:35:00 min, 0.6 %)
- vacuum the household (2.09:38:00 min, 0.7 %)
- go to the toilet (2.16:35:00 min, 0.7 %)
- get ready in the morning (women) (3.15:11:00 min, 1.0 %)
- take a shower with hair washing (women) (5 min hair drying) (3.16:05:00 min, 1.0 %)
- take a shower with hair washing (women) (20 min hair drying) (3.18:42:00 min, 1.0 %)
- rest for 10 min (4.04:49:00 min, 1.1 %)
- listen to music on compact hifi (2 h) (4.06:52:00 min, 1.2 %)
- play a puzzle game (4.09:59:00 min, 1.2 %)
- clean the bath (4.12:01:00 min, 1.2 %)
- go to a dancing class (5.17:33:00 min, 1.6 %)
- go shopping for food in the supermarket (1.5 h) (6.01:38:00 min, 1.7 %)
- paint a picture (6.04:31:00 min, 1.7 %)
- take a shower without hair washing (women) (7.09:40:00 min, 2.0 %)
- relax in the garden (7.11:12:00 min, 2.0 %)
- relax in the garden 2 (7.12:19:00 min, 2.1 %)
- go shopping for food on the market (2 h) (8.05:32:00 min, 2.2 %)
- watch TV (1 h) (8.10:41:00 min, 2.3 %)
- watch a movie for 1 h 30 min with home cinema system (9.21:38:00 min, 2.7 %)
- do garden work every day (10.07:25:00 min, 2.8 %)
- watch a movie for 2 h with home cinema system (11.21:03:00 min, 3.2 %)
- taking a vacation (12.04:21:00 min, 3.3 %)
- watch a movie for 1 h 30 min (12.16:47:00 min, 3.5 %)
- take a nap (14.23:40:00 min, 4.1 %)
- eat breakfast (1 h) (16.00:06:00 min, 4.4 %)
- go to horse riding lessons (18.09:26:00 min, 5.0 %)
- watch sports on TV with SAT Reciever (2 h) (18.09:45:00 min, 5.0 %)
- watch a movie for 2 h (18.15:08:00 min, 5.1 %)
- sleep bed 08 (08 h) (117.16:53:00 min, 32.2 %)

Time Consumption in Percent

HH0 - CHR24 Martha (68 Female)

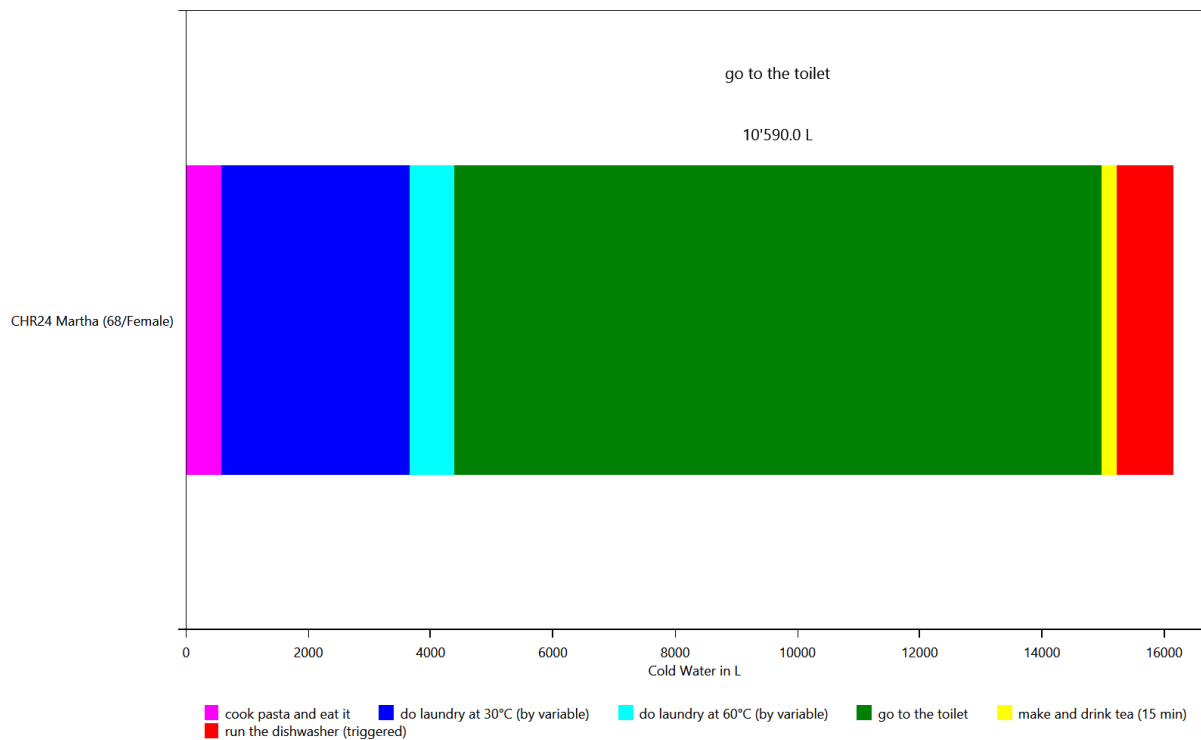

HH0 - CHR24 Martha (68 Female)
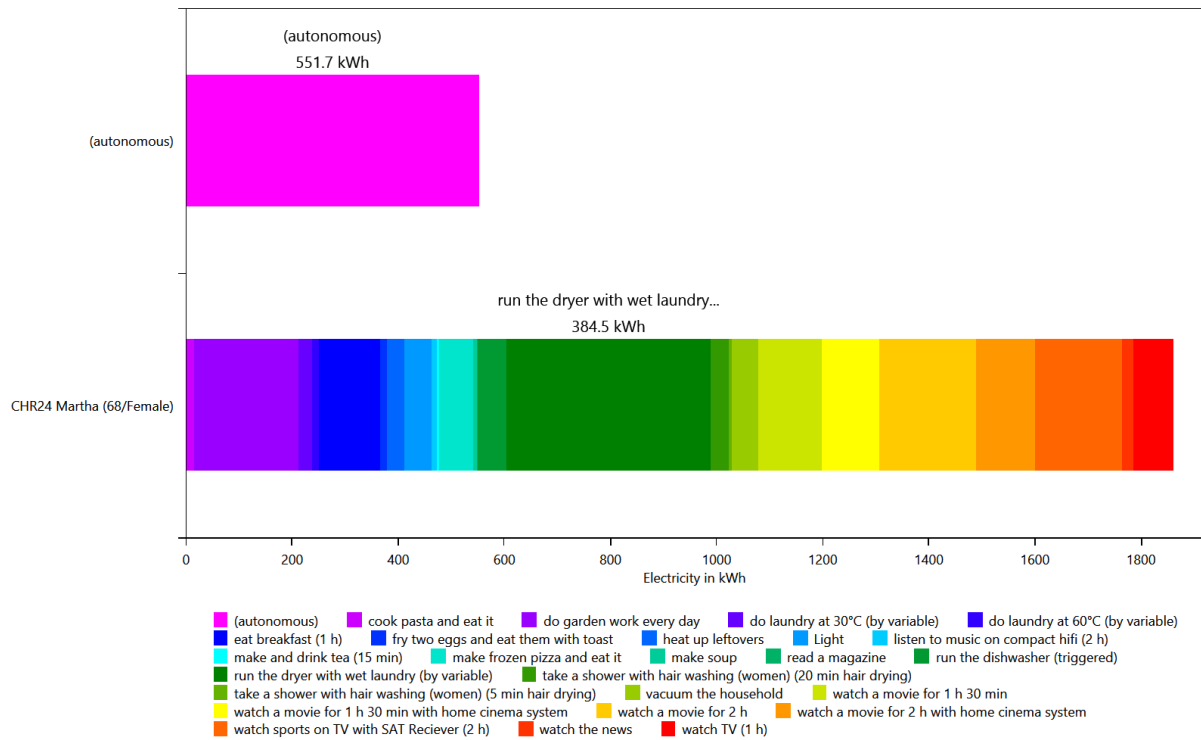
Energy use per person per affordance

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.
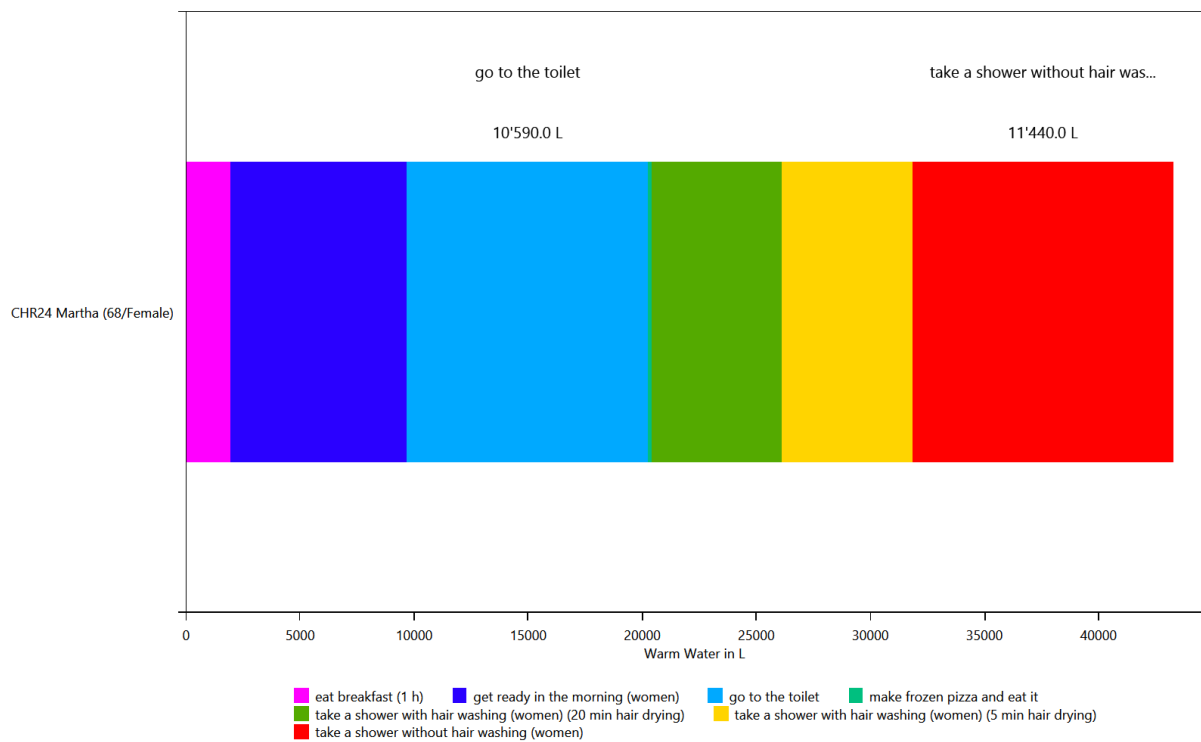
HH0 - Cold Water

# 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.
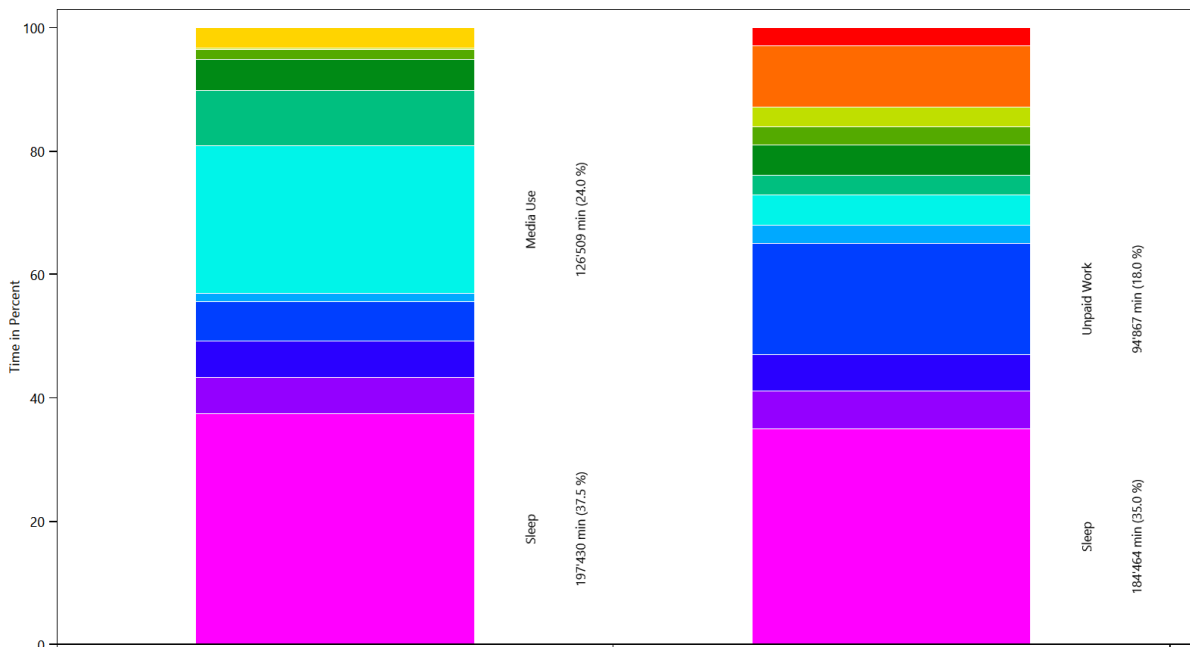
Basic Tagging - HH0
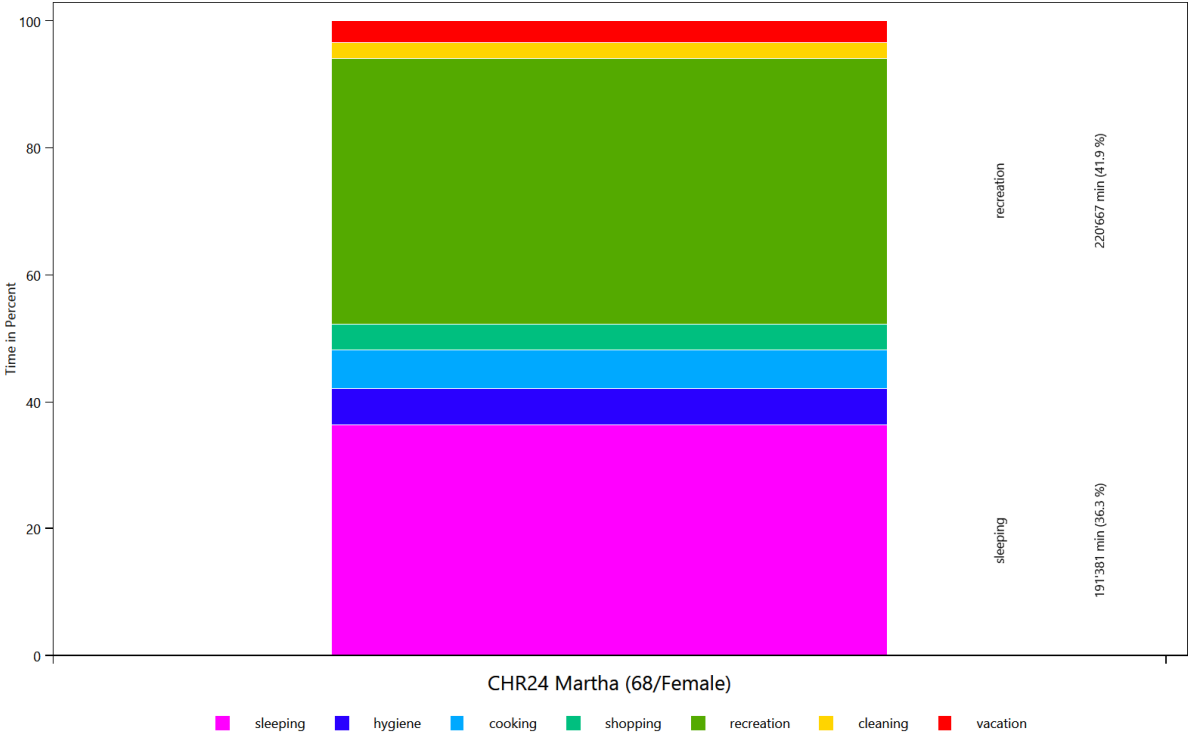
Tagging Set For Planning - HH0

Time in Percent

CHR24 Martha (68/Female)

sleep bed 08 (08 h) 169'493 min (32.2 %)
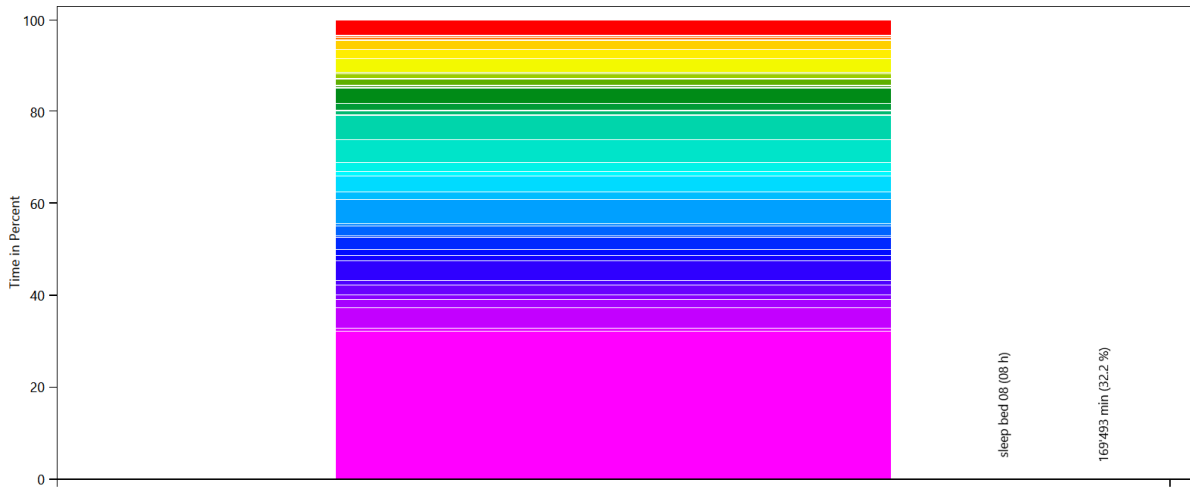
- sleep bed 08 (08 h)
- go to the toilet
- eat breakfast (1 h)
- go shopping for food in the supermarket (1.5 h)
- rest for 10 min
- go shopping for food on the market (2 h)
- take a shower with hair washing (women) (5 min hair drying)
- take a nap
- clean the bath
- play a puzzle game
- watch a movie for 1 h 30 min with home cinema system
- fry two eggs and eat them with toast
- watch TV (1 h)
- watch the news
- watch sports on TV with SAT Reciever (2 h)
- paint a picture
- watch a movie for 1 h 30 min
- get ready in the morning (women)
- take a shower without hair washing (women)
- go to horse riding lessons
- watch a movie for 2 h
- cook pasta and eat it
- vacuum the household
- run the dishwasher (triggered)
- go to a dancing class
- watch a movie for 2 h with home cinema system
- do laundry at 30°C (by variable)
- run the dryer with wet laundry (by variable)
- make frozen pizza and eat it
- listen to music on compact hifi (2 h)
- make soup
- take a shower with hair washing (women) (20 min hair drying)
- heat up leftovers
- do laundry at 60°C (by variable)
- do garden work every day
- relax in the garden
- relax in the garden 2
- make and drink tea (15 min)
- read a newspaper for 30min
- read a book on the couch only 9:00 to 22:00
- read a magazine
- read a book on the couch all the time
- take nap on the weekend (2 h)
- vacation

Wo bleibt die Zeit - HH0

Time in Percent

CHR24 Martha (68/Female)   Reference

Media Use 126509 min (24.0 %)
Sleep 197'430 min (37.5 %)

Unpaid Work 94'867 min (18.0 %)
Sleep 184'464 min (35.0 %)

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

Overview of the actions of each member of the household

This is made from the files starting with: ExecutedActionsOverviewCount

These charts show how often each affordance was executed.
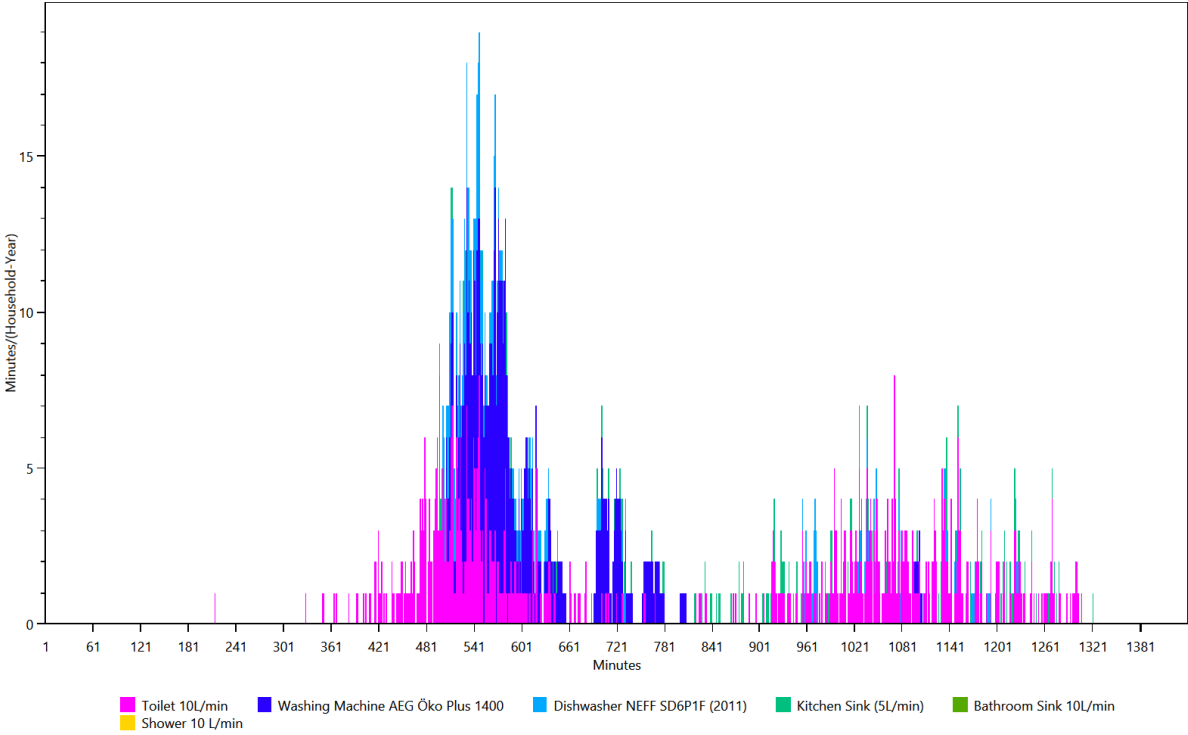
HH0 - CHR24 Martha (68 Female)
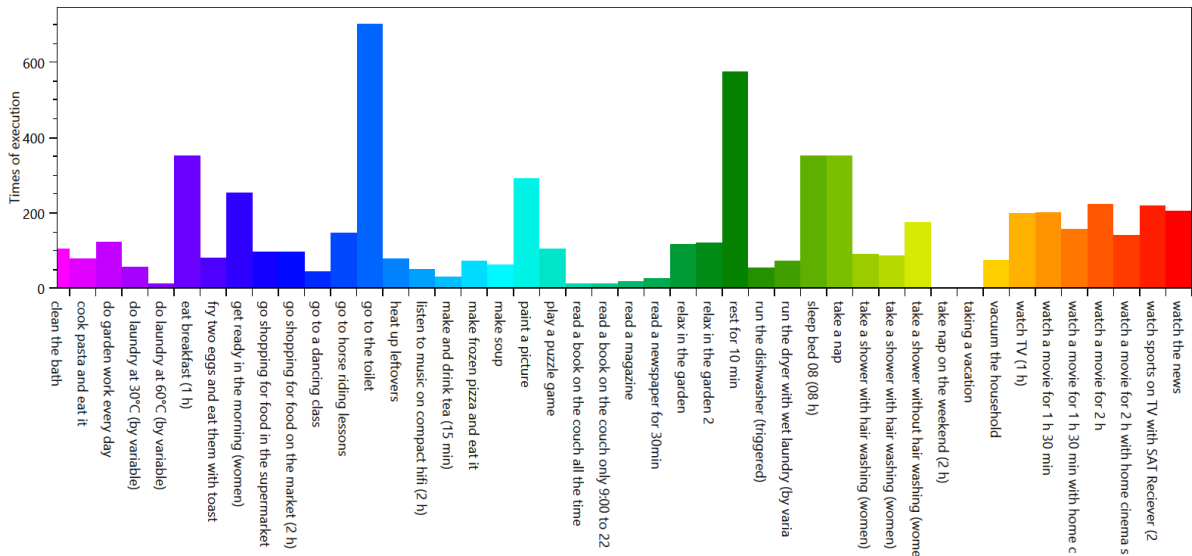
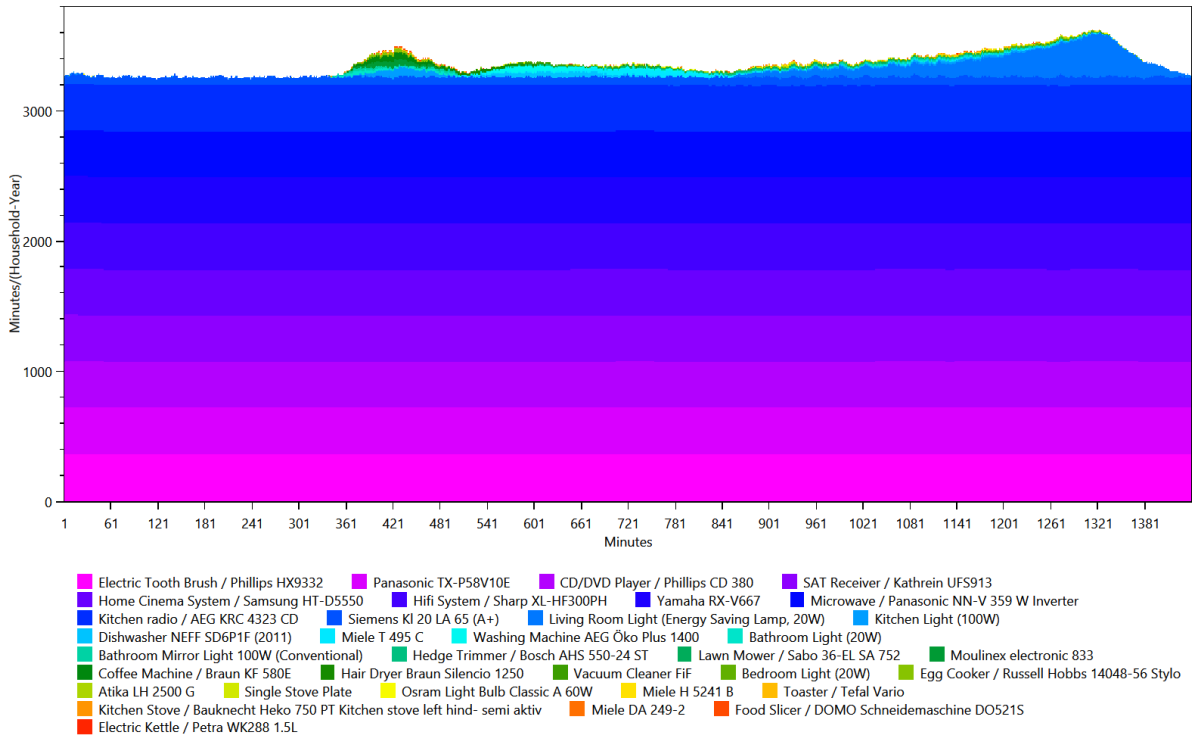# Overview of the time of the use per load type per device

This is made from the files starting with: TimeOfUseEnergyProfiles

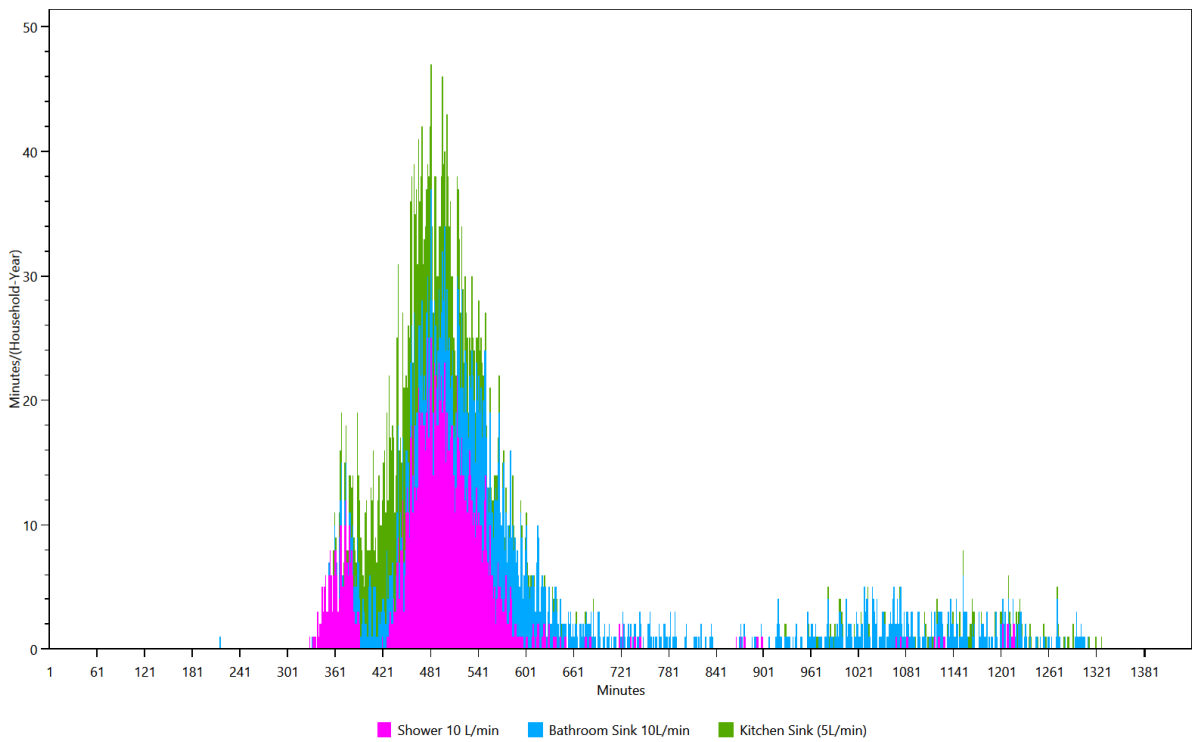The time of use energy profiles shows when each device was used.

Cold Water

Electricity

Electric Tooth Brush / Phillips HX9332 ■ Panasonic TX-P58V10E ■ CD/DVD Player / Phillips CD 380 ■ SAT Receiver / Kathrein UFS913
■ Home Cinema System / Samsung HT-D5550 ■ Hifi System / Sharp XL-HF300PH ■ Yamaha RX-V667 ■ Microwave / Panasonic NN-V 359 W Inverter
■ Kitchen radio / AEG KRC 4323 CD ■ Siemens Kl 20 LA 65 (A+) ■ Living Room Light (Energy Saving Lamp, 20W) ■ Kitchen Light (100W)
■ Dishwasher NEFF SD6P1F (2011) ■ Miele T 495 C ■ Washing Machine AEG Öko Plus 1400 ■ Bathroom Light (20W)
■ Bathroom Mirror Light 100W (Conventional) ■ Hedge Trimmer / Bosch AHS 550-24 ST ■ Lawn Mower / Sabo 36-EL SA 752 ■ Moulinex electronic 833
■ Coffee Machine / Braun KF 580E ■ Hair Dryer Braun Silencio 1250 ■ Vacuum Cleaner FiF ■ Bedroom Light (20W) ■ Egg Cooker / Russell Hobbs 14048-56 Stylo
■ Atika LH 2500 G ■ Single Stove Plate ■ Osram Light Bulb Classic A 60W ■ Miele H 5241 B ■ Toaster / Tefal Vario
■ Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv ■ Miele DA 249-2 ■ Food Slicer / DOMO Schneidemaschine DO521S
■ Electric Kettle / Petra WK288 1.5L

Warm Water

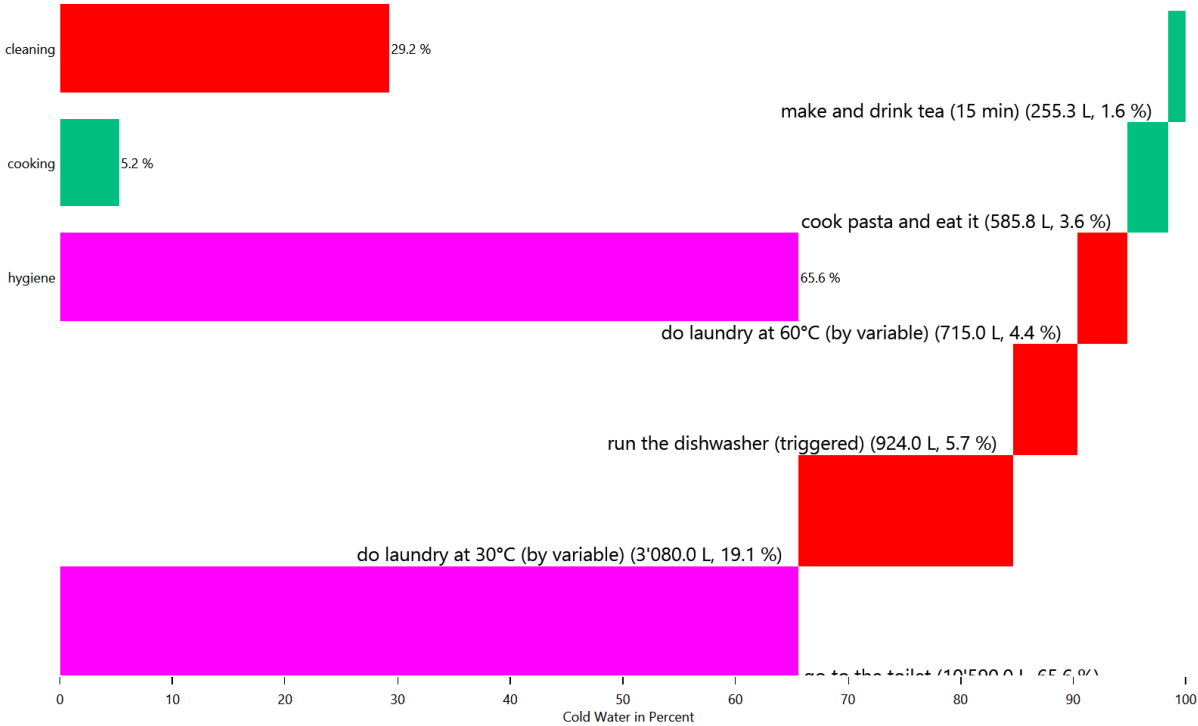■ Shower 10 L/min ■ Bathroom Sink 10L/min ■ Kitchen Sink (5L/min)

Energy/Resource use distribution per load type per affordance
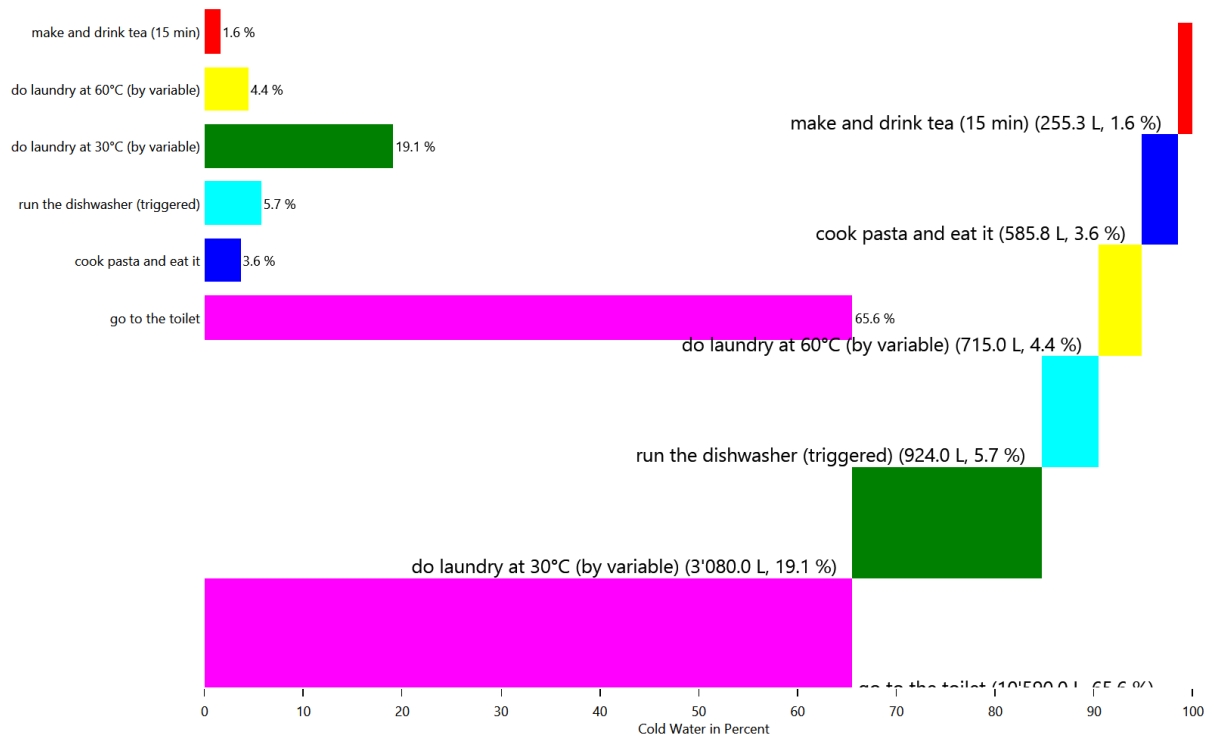
This is made from the files starting with: AffordanceEnergyUse

This shows the distribution of the energy/ressource use to each affordance by load type.
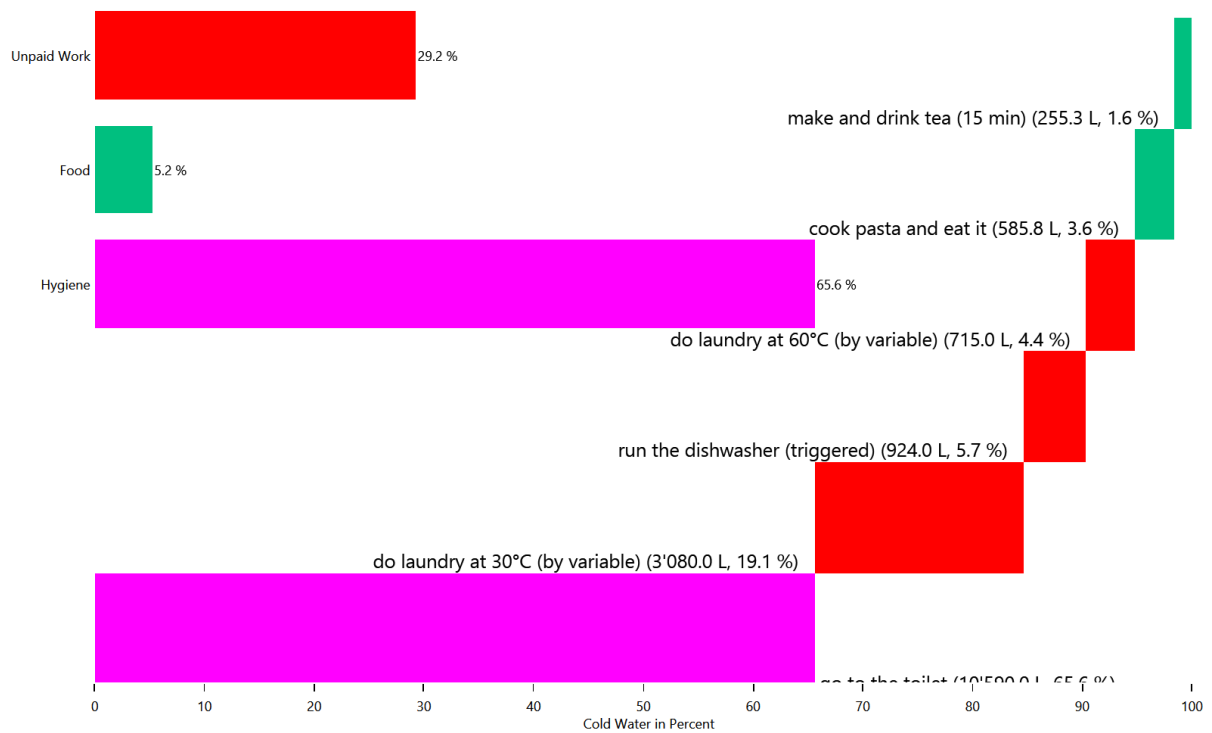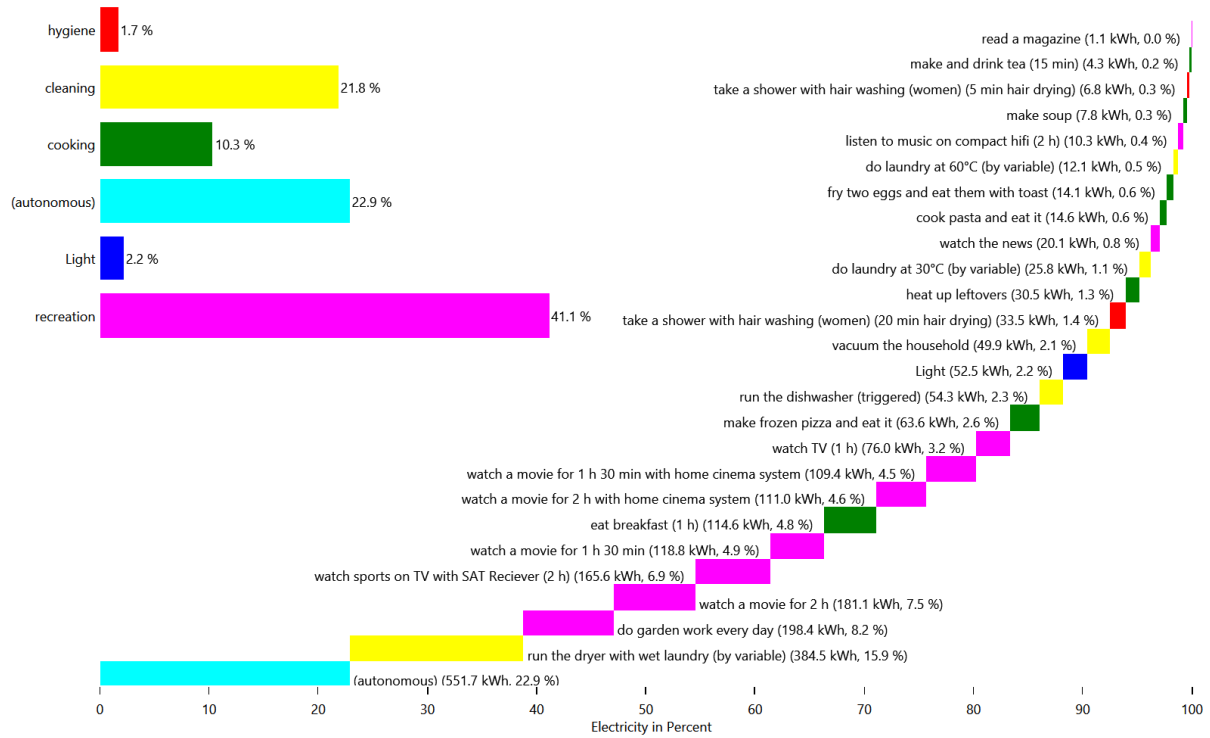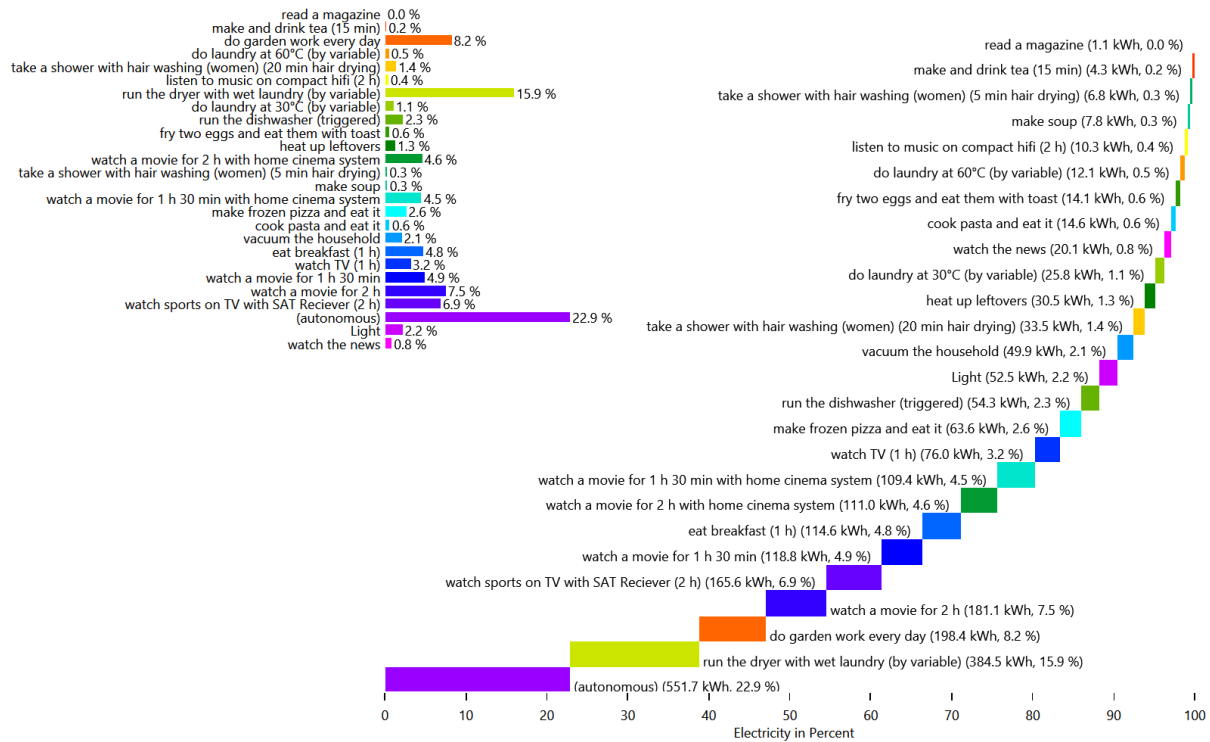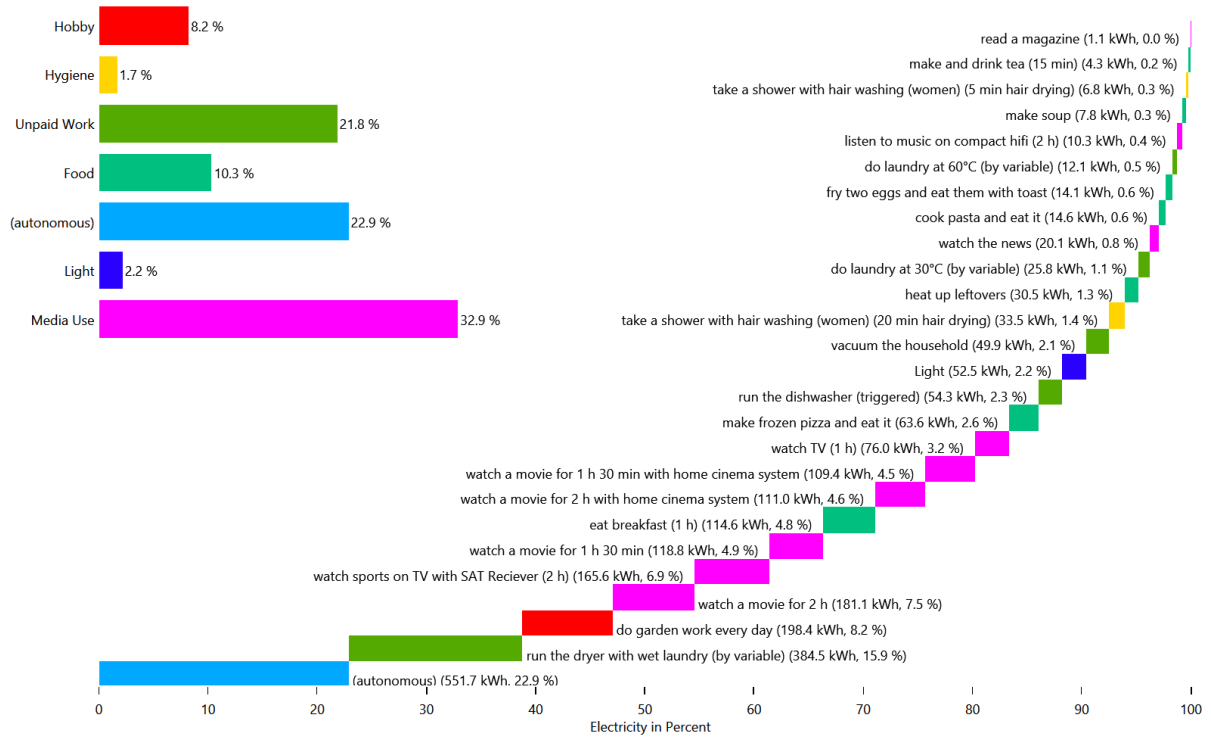
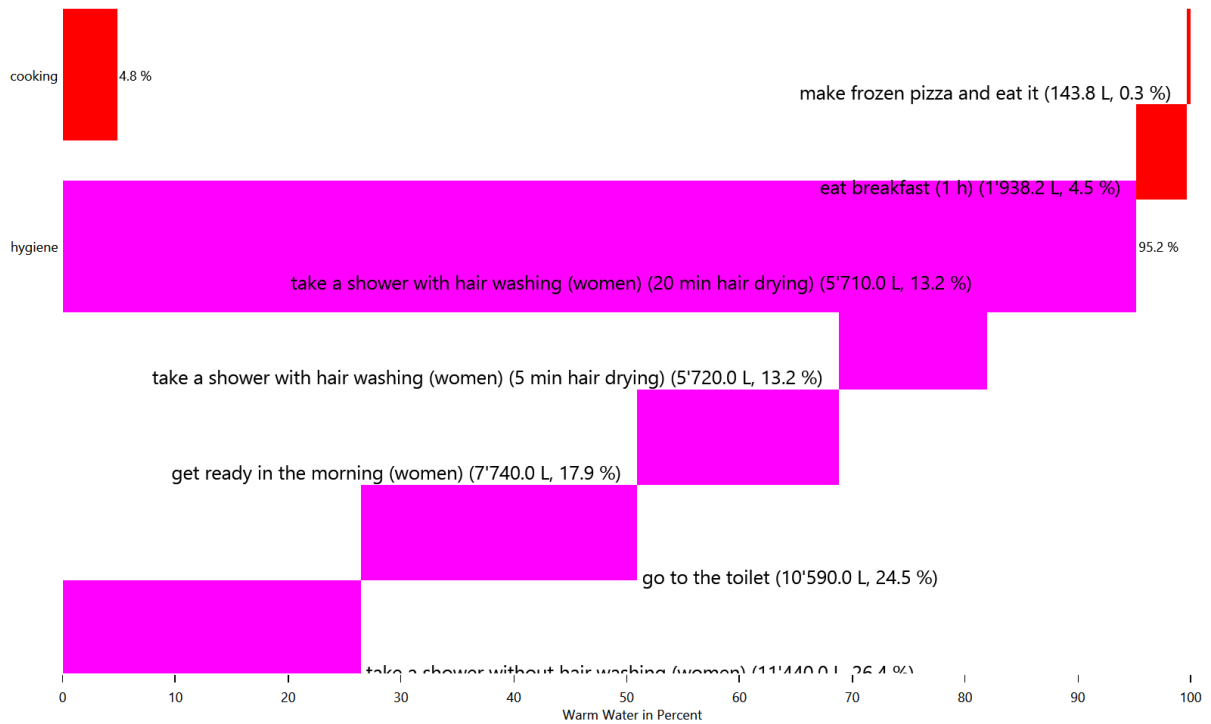## HH0 - Cold Water

HH0 - Cold Water

HH0 - Cold Water

HH0 - Electricity

Left bar chart:
- hygiene — 1.7 %
- cleaning — 21.8 %
- cooking — 10.3 %
- (autonomous) — 22.9 %
- Light — 2.2 %
- recreation — 41.1 %

Right cumulative chart:
- read a magazine (1.1 kWh, 0.0 %)
- make and drink tea (15 min) (4.3 kWh, 0.2 %)
- take a shower with hair washing (women) (5 min hair drying) (6.8 kWh, 0.3 %)
- make soup (7.8 kWh, 0.3 %)
- listen to music on compact hifi (2 h) (10.3 kWh, 0.4 %)
- do laundry at 60°C (by variable) (12.1 kWh, 0.5 %)
- fry two eggs and eat them with toast (14.1 kWh, 0.6 %)
- cook pasta and eat it (14.6 kWh, 0.6 %)
- watch the news (20.1 kWh, 0.8 %)
- do laundry at 30°C (by variable) (25.8 kWh, 1.1 %)
- heat up leftovers (30.5 kWh, 1.3 %)
- take a shower with hair washing (women) (20 min hair drying) (33.5 kWh, 1.4 %)
- vacuum the household (49.9 kWh, 2.1 %)
- Light (52.5 kWh, 2.2 %)
- run the dishwasher (triggered) (54.3 kWh, 2.3 %)
- make frozen pizza and eat it (63.6 kWh, 2.6 %)
- watch TV (1 h) (76.0 kWh, 3.2 %)
- watch a movie for 1 h 30 min with home cinema system (109.4 kWh, 4.5 %)
- watch a movie for 2 h with home cinema system (111.0 kWh, 4.6 %)
- eat breakfast (1 h) (114.6 kWh, 4.8 %)
- watch a movie for 1 h 30 min (118.8 kWh, 4.9 %)
- watch sports on TV with SAT Reciever (2 h) (165.6 kWh, 6.9 %)
- watch a movie for 2 h (181.1 kWh, 7.5 %)
- do garden work every day (198.4 kWh, 8.2 %)
- run the dryer with wet laundry (by variable) (384.5 kWh, 15.9 %)
- (autonomous) (551.7 kWh. 22.9 %)

Electricity in Percent

HH0 - Electricity

Left chart:
- read a magazine — 0.0 %
- make and drink tea (15 min) — 0.2 %
- do garden work every day — 8.2 %
- do laundry at 60°C (by variable) — 0.5 %
- take a shower with hair washing (women) (20 min hair drying) — 1.4 %
- listen to music on compact hifi (2 h) — 0.4 %
- run the dryer with wet laundry (by variable) — 15.9 %
- do laundry at 30°C (by variable) — 1.1 %
- run the dishwasher (triggered) — 2.3 %
- fry two eggs and eat them with toast — 0.6 %
- heat up leftovers — 1.3 %
- watch a movie for 2 h with home cinema system — 4.6 %
- take a shower with hair washing (women) (5 min hair drying) — 0.3 %
- make soup — 0.3 %
- watch a movie for 1 h 30 min with home cinema system — 4.5 %
- make frozen pizza and eat it — 2.6 %
- cook pasta and eat it — 0.6 %
- vacuum the household — 2.1 %
- eat breakfast (1 h) — 4.8 %
- watch TV (1 h) — 3.2 %
- watch a movie for 1 h 30 min — 4.9 %
- watch a movie for 2 h — 7.5 %
- watch sports on TV with SAT Reciever (2 h) — 6.9 %
- (autonomous) — 22.9 %
- Light — 2.2 %
- watch the news — 0.8 %

Right cumulative chart:
- read a magazine (1.1 kWh, 0.0 %)
- make and drink tea (15 min) (4.3 kWh, 0.2 %)
- take a shower with hair washing (women) (5 min hair drying) (6.8 kWh, 0.3 %)
- make soup (7.8 kWh, 0.3 %)
- listen to music on compact hifi (2 h) (10.3 kWh, 0.4 %)
- do laundry at 60°C (by variable) (12.1 kWh, 0.5 %)
- fry two eggs and eat them with toast (14.1 kWh, 0.6 %)
- cook pasta and eat it (14.6 kWh, 0.6 %)
- watch the news (20.1 kWh, 0.8 %)
- do laundry at 30°C (by variable) (25.8 kWh, 1.1 %)
- heat up leftovers (30.5 kWh, 1.3 %)
- take a shower with hair washing (women) (20 min hair drying) (33.5 kWh, 1.4 %)
- vacuum the household (49.9 kWh, 2.1 %)
- Light (52.5 kWh, 2.2 %)
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- do garden work every day (198.4 kWh, 8.2 %)
- run the dryer with wet laundry (by variable) (384.5 kWh, 15.9 %)
- (autonomous) (551.7 kWh. 22.9 %)

Electricity in Percent

HH0 - Electricity

Category	Percent
Hobby	8.2 %
Hygiene	1.7 %
Unpaid Work	21.8 %
Food	10.3 %
(autonomous)	22.9 %
Light	2.2 %
Media Use	32.9 %

read a magazine (1.1 kWh, 0.0 %)
make and drink tea (15 min) (4.3 kWh, 0.2 %)
take a shower with hair washing (women) (5 min hair drying) (6.8 kWh, 0.3 %)
make soup (7.8 kWh, 0.3 %)
listen to music on compact hifi (2 h) (10.3 kWh, 0.4 %)
do laundry at 60°C (by variable) (12.1 kWh, 0.5 %)
fry two eggs and eat them with toast (14.1 kWh, 0.6 %)
cook pasta and eat it (14.6 kWh, 0.6 %)
watch the news (20.1 kWh, 0.8 %)
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heat up leftovers (30.5 kWh, 1.3 %)
take a shower with hair washing (women) (20 min hair drying) (33.5 kWh, 1.4 %)
vacuum the household (49.9 kWh, 2.1 %)
Light (52.5 kWh, 2.2 %)
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do garden work every day (198.4 kWh, 8.2 %)
run the dryer with wet laundry (by variable) (384.5 kWh, 15.9 %)
(autonomous) (551.7 kWh, 22.9 %)

Electricity in Percent

HH0 - Warm Water

cooking — 4.8 %

make frozen pizza and eat it (143.8 L, 0.3 %)

eat breakfast (1 h) (1'938.2 L, 4.5 %)

hygiene — 95.2 %

take a shower with hair washing (women) (20 min hair drying) (5'710.0 L, 13.2 %)

take a shower with hair washing (women) (5 min hair drying) (5'720.0 L, 13.2 %)

get ready in the morning (women) (7'740.0 L, 17.9 %)

go to the toilet (10'590.0 L, 24.5 %)

take a shower without hair washing (women) (11'440.0 L, 26.4 %)

Warm Water in Percent

HH0 - Warm Water

- take a shower with hair washing (women) (20 min hair drying) — 13.2 %
- take a shower with hair washing (women) (5 min hair drying) — 13.2 %
- get ready in the morning (women) — 17.9 %
- take a shower without hair washing (women) — 26.4 %
- make frozen pizza and eat it — 0.3 %
- eat breakfast (1 h) — 4.5 %
- go to the toilet — 24.5 %

make frozen pizza and eat it (143.8 L, 0.3 %)
eat breakfast (1 h) (1'938.2 L, 4.5 %)
a shower with hair washing (women) (20 min hair drying) (5'710.0 L, 13.2 %)
with hair washing (women) (5 min hair drying) (5'720.0 L, 13.2 %)
ady in the morning (women) (7'740.0 L, 17.9 %)
go to the toilet (10'590.0 L, 24.5 %)
take a shower without hair washing (women) (11'440.0 L, 26.4 %)

Warm Water in Percent

HH0 - Warm Water

- Food — 4.8 %
- Hygiene — 95.2 %

make frozen pizza and eat it (143.8 L, 0.3 %)
eat breakfast (1 h) (1'938.2 L, 4.5 %)
take a shower with hair washing (women) (20 min hair drying) (5'710.0 L, 13.2 %)
take a shower with hair washing (women) (5 min hair drying) (5'720.0 L, 13.2 %)
get ready in the morning (women) (7'740.0 L, 17.9 %)
go to the toilet (10'590.0 L, 24.5 %)
take a shower without hair washing (women) (11'440.0 L, 26.4 %)

Warm Water in Percent

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

Washing	89.1 %
Other	0.0 %
Dish washing	10.9 %

Kitchen Sink (5L/min) (841.0 L, 5.2 %)

Dishwasher NEFF SD6P1F (2011) (924.0 L, 5.7 %)

Washing Machine AEG Öko Plus 1400 (3'795.0 L, 23.5 %)

Cold Water in Percent

Electricity

Laundry	1.6 %
Dishwashing	2.3 %
NoWater	96.1 %

Bedroom Light (20W) (0.7 kWh, 0.0 %)
Osram Light Bulb Classic A 60W (1.1 kWh, 0.0 %)
Food Slicer / DOMO Schneidemaschine DO521S (1.3 kWh, 0.1 %)
Bathroom Light (20W) (1.7 kWh, 0.1 %)
Miele DA 249-2 (3.3 kWh, 0.1 %)
Electric Kettle / Petra WK288 1.5L (4.3 kWh, 0.2 %)
Bathroom Mirror Light 100W (Conventional) (8.9 kWh, 0.4 %)
Egg Cooker / Russell Hobbs 14048-56 Stylo (11.8 kWh, 0.5 %)
Toaster / Tefal Vario (13.0 kWh, 0.5 %)
Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv (14.1 kWh, 0.6 %)
Moulinex electronic 833 (15.5 kWh, 0.6 %)
Kitchen Light (100W) (16.3 kWh, 0.7 %)
Kitchen radio / AEG KRC 4323 CD (16.5 kWh, 0.7 %)
Electric Tooth Brush / Phillips HX9332 (17.6 kWh, 0.7 %)
Single Stove Plate (18.9 kWh, 0.8 %)
Living Room Light (Energy Saving Lamp, 20W) (24.9 kWh, 1.0 %)
SAT Receiver / Kathrein UFS913 (31.0 kWh, 1.3 %)
Hifi System / Sharp XL-HF300PH (35.5 kWh, 1.5 %)
CD/DVD Player / Phillips CD 380 (36.4 kWh, 1.5 %)
Home Cinema System / Samsung HT-D5550 (37.4 kWh, 1.6 %)
Hedge Trimmer / Bosch AHS 550-24 ST (37.6 kWh, 1.6 %)
Washing Machine AEG Öko Plus 1400 (37.9 kWh, 1.6 %)
Hair Dryer Braun Silencio 1250 (40.3 kWh, 1.7 %)
Vacuum Cleaner FiF (49.9 kWh, 2.1 %)
Dishwasher NEFF SD6P1F (2011) (54.3 kWh, 2.3 %)
Miele H 5241 B (63.6 kWh, 2.7 %)
Coffee Machine / Braun KF 580E (67.8 kWh, 2.8 %)
Atika LH 2500 G (79.3 kWh, 3.3 %)
Siemens Kl 20 LA 65 (A+) (79.5 kWh, 3.3 %)
Lawn Mower / Sabo 36-EL SA 752 (81.5 kWh, 3.4 %)
Yamaha RX-V667 (101.9 kWh, 4.3 %)
Microwave / Panasonic NN-V 359 W Inverter (217.1 kWh, 9.1 %)
Miele T 495 C (384.5 kWh, 16.1 %)
Panasonic TX-P58V10E (780.9 kWh. 32.7 %)

Electricity in Percent

Electricity

Category	Percent
Cooling	3.3 %
Washing	4.0 %
Other	10.4 %
Drying	16.1 %
Dish washing	2.3 %
TV/Audio	43.6 %
Cooking	18.0 %
Light	2.2 %

Bedroom Light (20W) (0.7 kWh, 0.0 %)
Osram Light Bulb Classic A 60W (1.1 kWh, 0.0 %)
Food Slicer / DOMO Schneidemaschine DO521S (1.3 kWh, 0.1 %)
Bathroom Light (20W) (1.7 kWh, 0.1 %)
Miele DA 249-2 (3.3 kWh, 0.1 %)
Electric Kettle / Petra WK288 1.5L (4.3 kWh, 0.2 %)
Bathroom Mirror Light 100W (Conventional) (8.9 kWh, 0.4 %)
Egg Cooker / Russell Hobbs 14048-56 Stylo (11.8 kWh, 0.5 %)
Toaster / Tefal Vario (13.0 kWh, 0.5 %)
Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv (14.1 kWh, 0.6 %)
Moulinex electronic 833 (15.5 kWh, 0.6 %)
Kitchen Light (100W) (16.3 kWh, 0.7 %)
Kitchen radio / AEG KRC 4323 CD (16.5 kWh, 0.7 %)
Electric Tooth Brush / Phillips HX9332 (17.6 kWh, 0.7 %)
Single Stove Plate (18.9 kWh, 0.8 %)
Living Room Light (Energy Saving Lamp, 20W) (24.9 kWh, 1.0 %)
SAT Receiver / Kathrein UFS913 (31.0 kWh, 1.3 %)
Hifi System / Sharp XL-HF300PH (35.5 kWh, 1.5 %)
CD/DVD Player / Phillips CD 380 (36.4 kWh, 1.5 %)
Home Cinema System / Samsung HT-D5550 (37.4 kWh, 1.6 %)
Hedge Trimmer / Bosch AHS 550-24 ST (37.6 kWh, 1.6 %)
Washing Machine AEG Öko Plus 1400 (37.9 kWh, 1.6 %)
Hair Dryer Braun Silencio 1250 (40.3 kWh, 1.7 %)
Vacuum Cleaner FiF (49.9 kWh, 2.1 %)
Dishwasher NEFF SD6P1F (2011) (54.3 kWh, 2.3 %)
Miele H 5241 B (63.6 kWh, 2.7 %)
Coffee Machine / Braun KF 580E (67.8 kWh, 2.8 %)
Atika LH 2500 G (79.3 kWh, 3.3 %)
Siemens Kl 20 LA 65 (A+) (79.5 kWh, 3.3 %)
Lawn Mower / Sabo 36-EL SA 752 (81.5 kWh, 3.4 %)
Yamaha RX-V667 (101.9 kWh, 4.3 %)
Microwave / Panasonic NN-V 359 W Inverter (217.1 kWh, 9.1 %)
Miele T 495 C (384.5 kWh, 16.1 %)
Panasonic TX-P58V10E (780.9 kWh, 32.7 %)

Electricity in Percent

Warm Water

Category	Percent
Hygiene	
NoWater	4.8 %

Kitchen Sink (5L/min) (2'082.0 L, 4.8 %)

Bathroom Sink 10L/min (18'330.0 L, 42.4 %)

Warm Water in Percent

Warm Water

Washing   52.8 %

Other   42.4 %

Dish washing   4.8 %

Kitchen Sink (5L/min) (2'082.0 L, 4.8 %)

Bathroom Sink 10L/min (18'330.0 L, 42.4 %)

Warm Water in Percent

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

Legend:
- Panasonic TX-P58V10E [Watt]
- Miele T 495 C [Watt]
- Microwave / Panasonic NN-V 359 W Inverter [Watt]
- Lawn Mower / Sabo 36-EL SA 752 [Watt]
- Siemens Kl 20 LA 65 (A+) [Watt]
- Atika LH 2500 G [Watt]
- Coffee Machine / Braun KF 580E [Watt]
- Miele H 5241 B [Watt]
- Dishwasher NEFF SD6P1F (2011) [Watt]
- Vacuum Cleaner FiF [Watt]
- Hair Dryer Braun Silencio 1250 [Watt]
- Washing Machine AEG Öko Plus 1400 [Watt]
- Hedge Trimmer / Bosch AHS 550-24 ST [Watt]
- Home Cinema System / Samsung HT-D5550 [Watt]
- Hifi System / Sharp XL-HF300PH [Watt]
- Single Stove Plate [Watt]
- Moulinex electronic 833 [Watt]
- Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv [Watt]
- Toaster / Tefal Vario [Watt]
- Egg Cooker / Russell Hobbs 14048-56 Stylo [Watt]
- Bathroom Mirror Light 100W (Conventional) [Watt]
- Electric Kettle / Petra WK288 1.5L [Watt]
- Miele DA 249-2 [Watt]
- Food Slicer / DOMO Schneidemaschine DO521S [Watt]
- Osram Light Bulb Classic A 60W [Watt]

Warm Water

Legend:
- Shower 10 L/min [L/Min]
- Bathroom Sink 10L/min [L/Min]

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
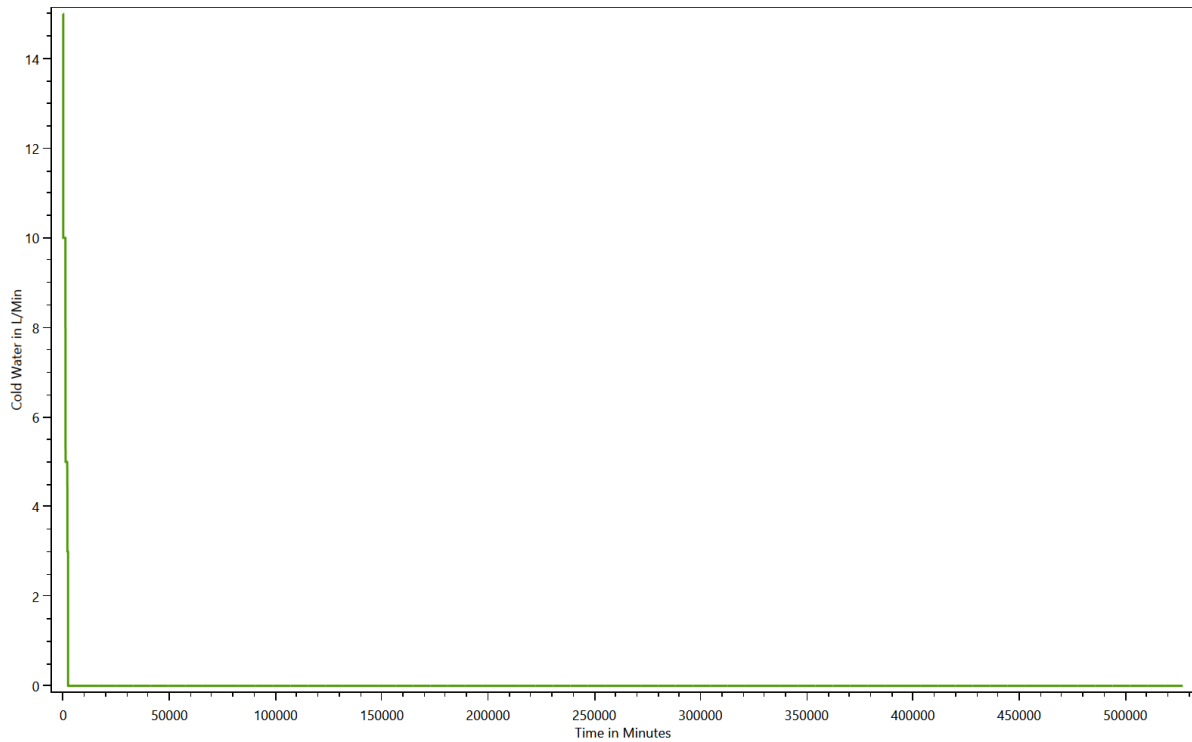
Electricity
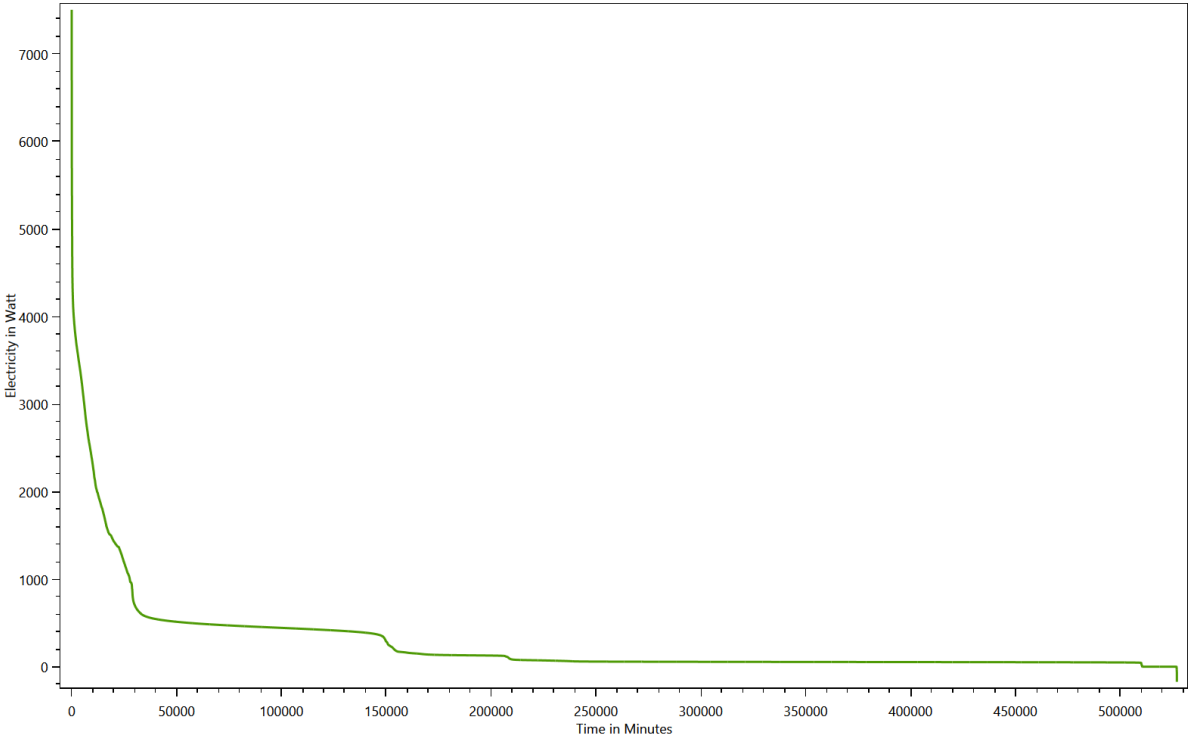
Warm Water
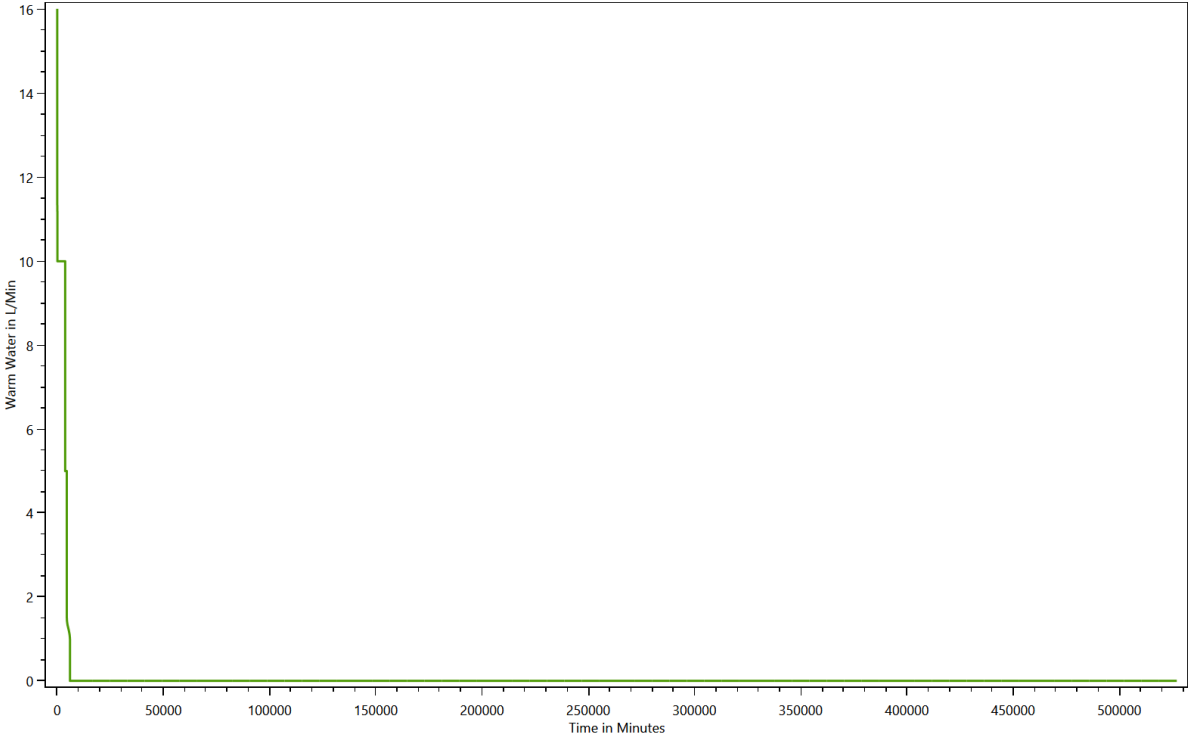
Grouped energy use for each load type for each device

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
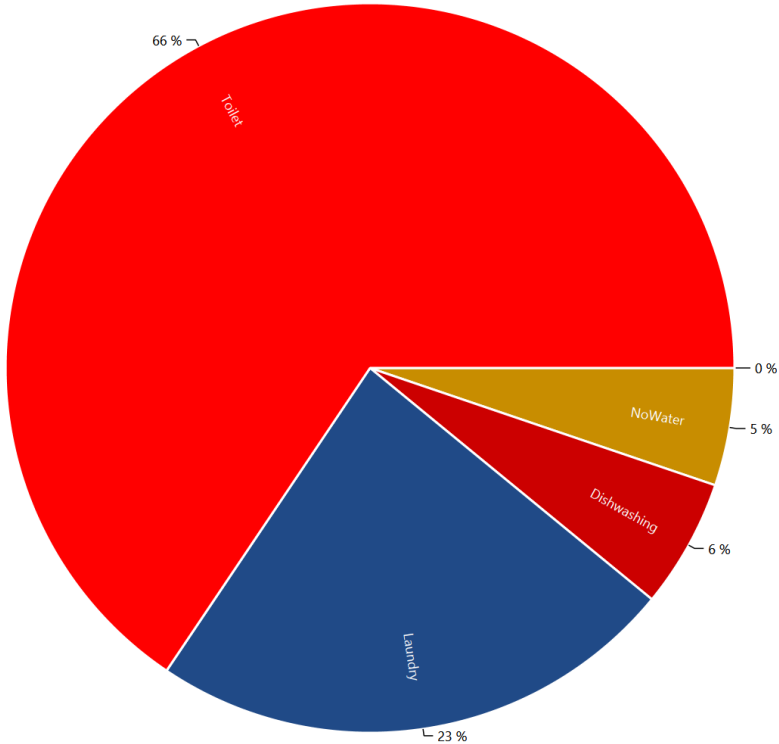
HH0 - Energieagentur - Cold Water

89 % — Washing

0 %

Dish washing — 11 %
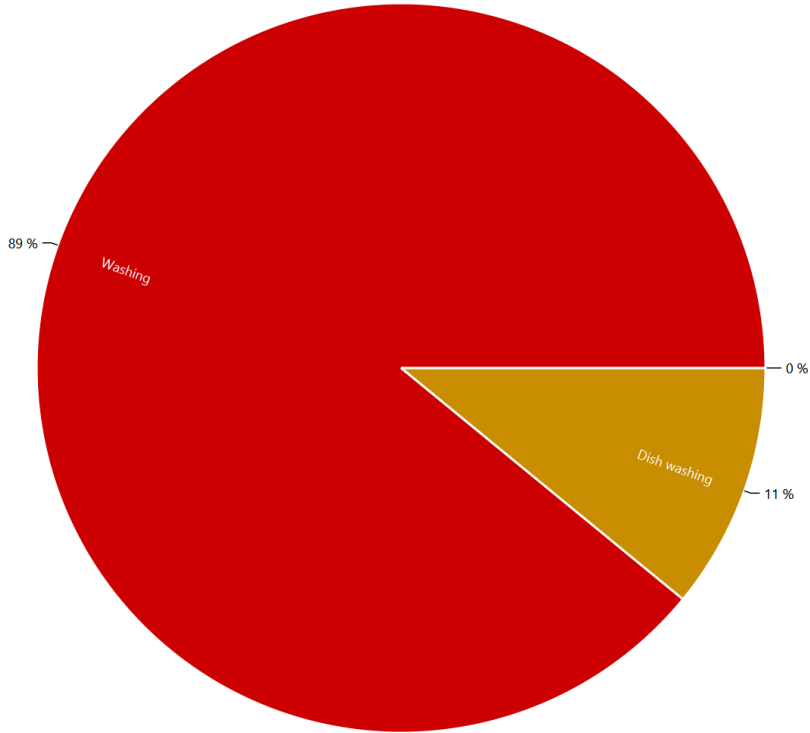
HH0 - Destatis Water Usage Statistics - Electricity

96 % — NoWater

Laundry — 2 %

Dishwashing — 2 %
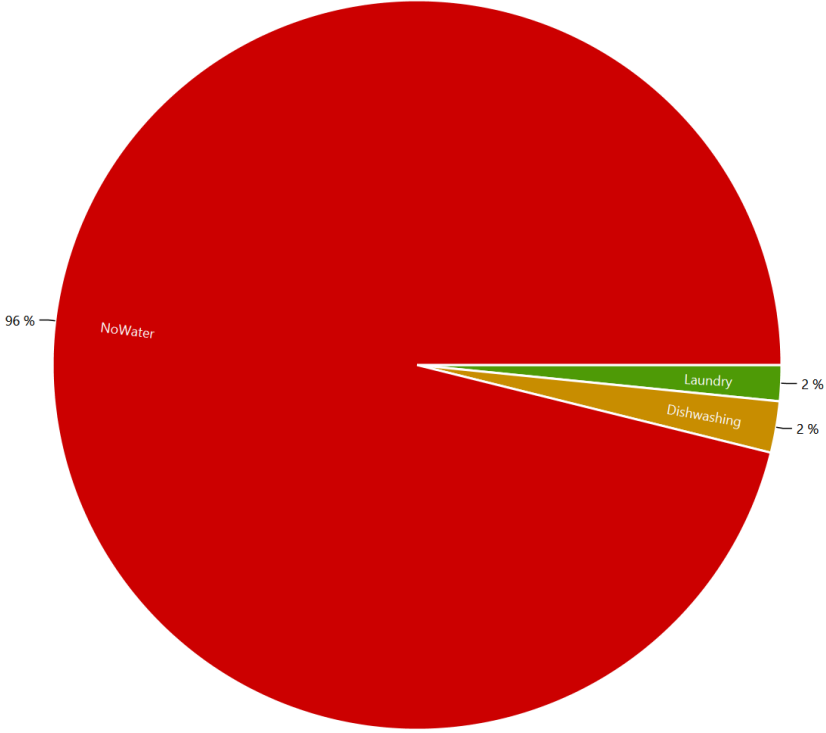
HH0 - Energieagentur - Electricity
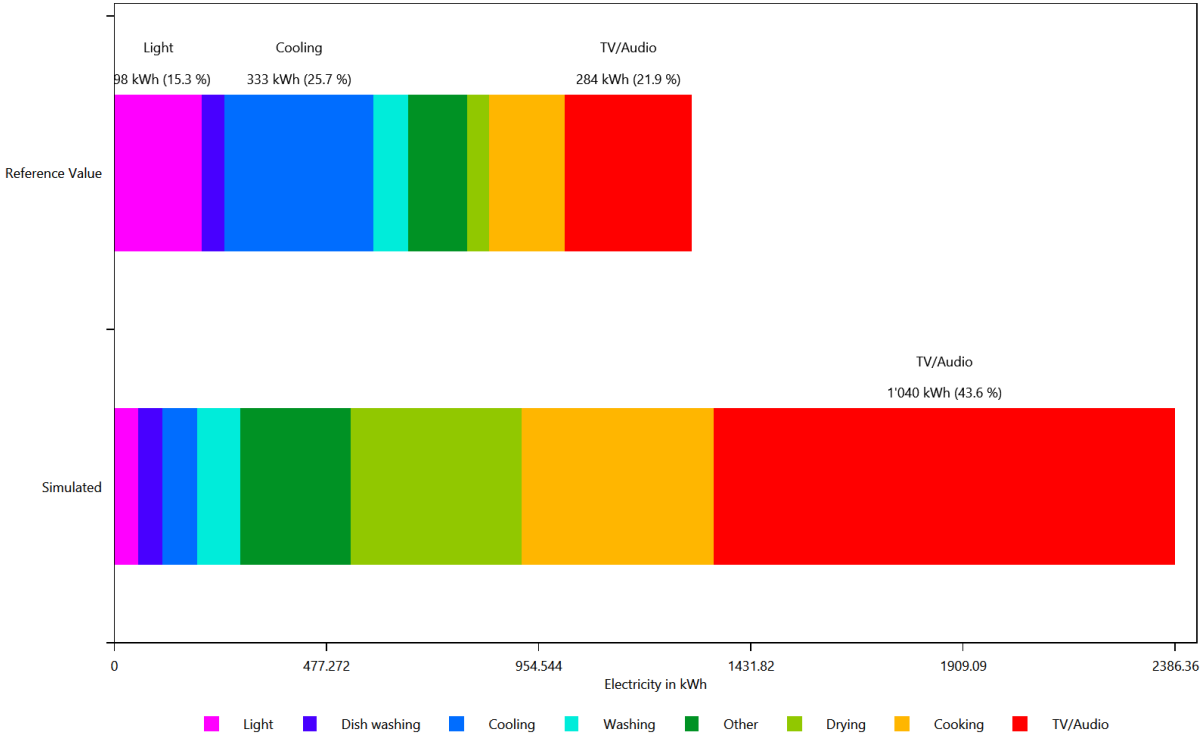
HH0 - Energieagentur - Electricity
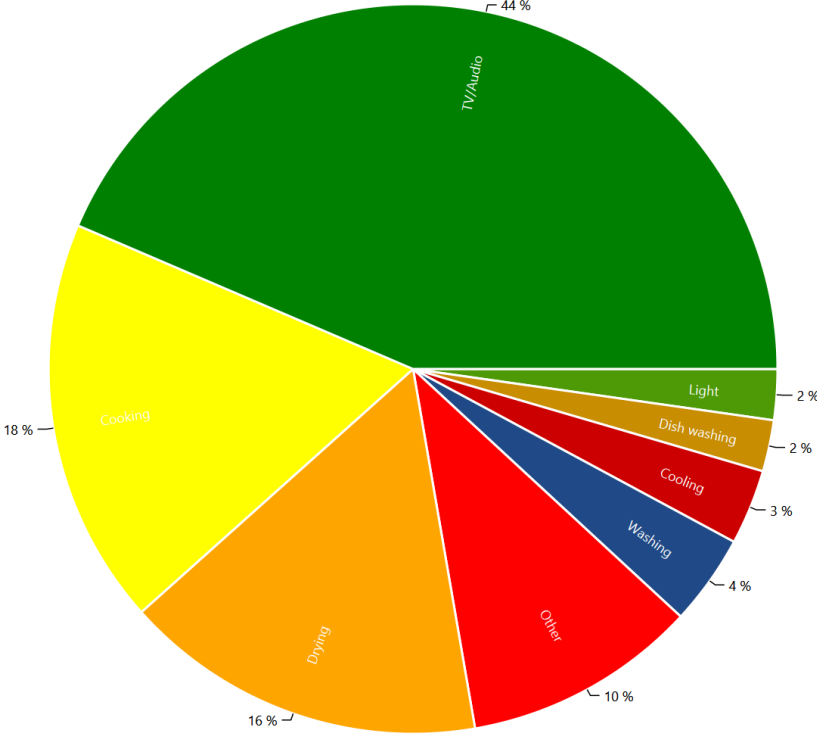
HH0 - Destatis Water Usage Statistics - Warm Water

95 % — Hygiene

NoWater — 5 %
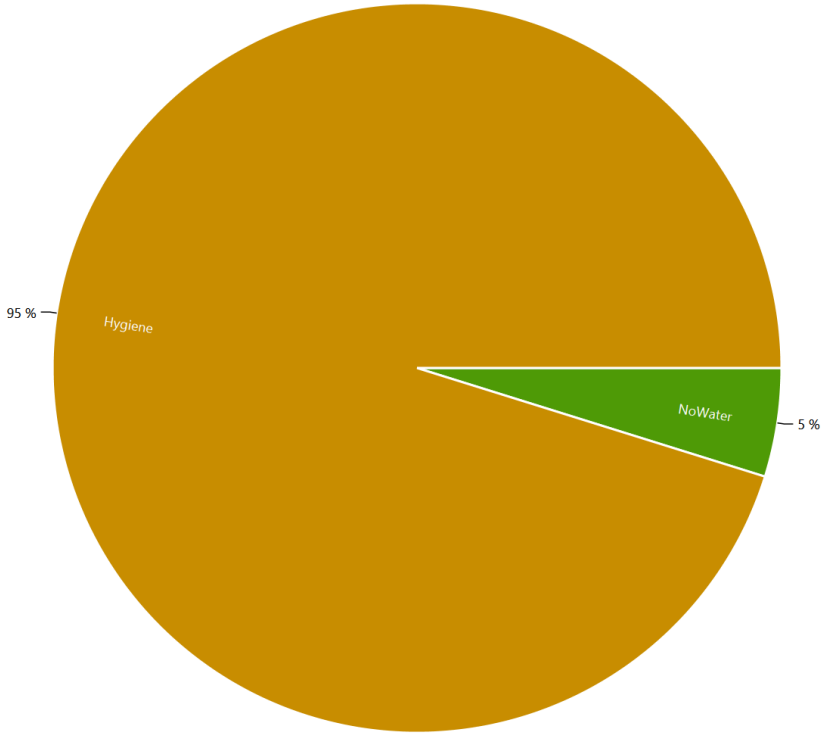
HH0 - Energieagentur - Warm Water

53 % — Washing

Dish washing — 5 %

Other — 42 %
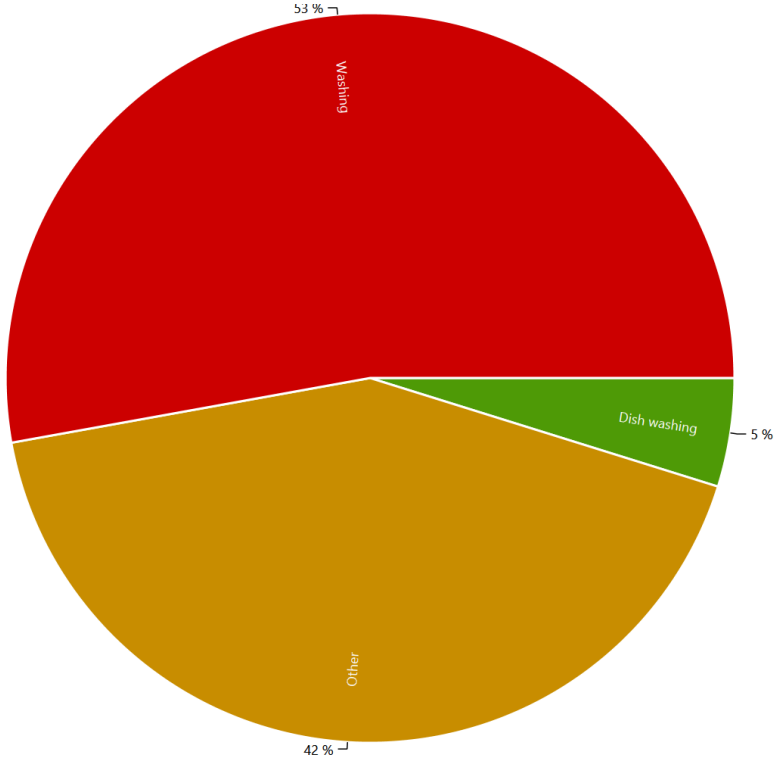
Example of the device profiles for each load type

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 2016.10.15
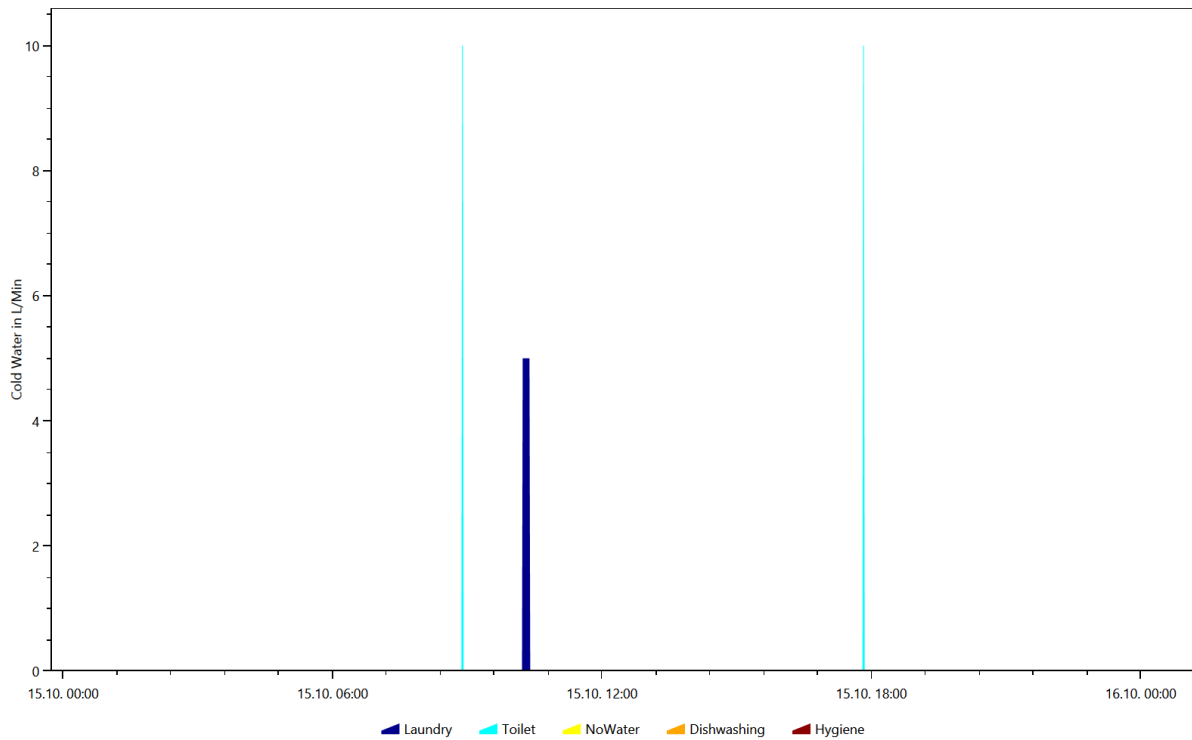
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.7
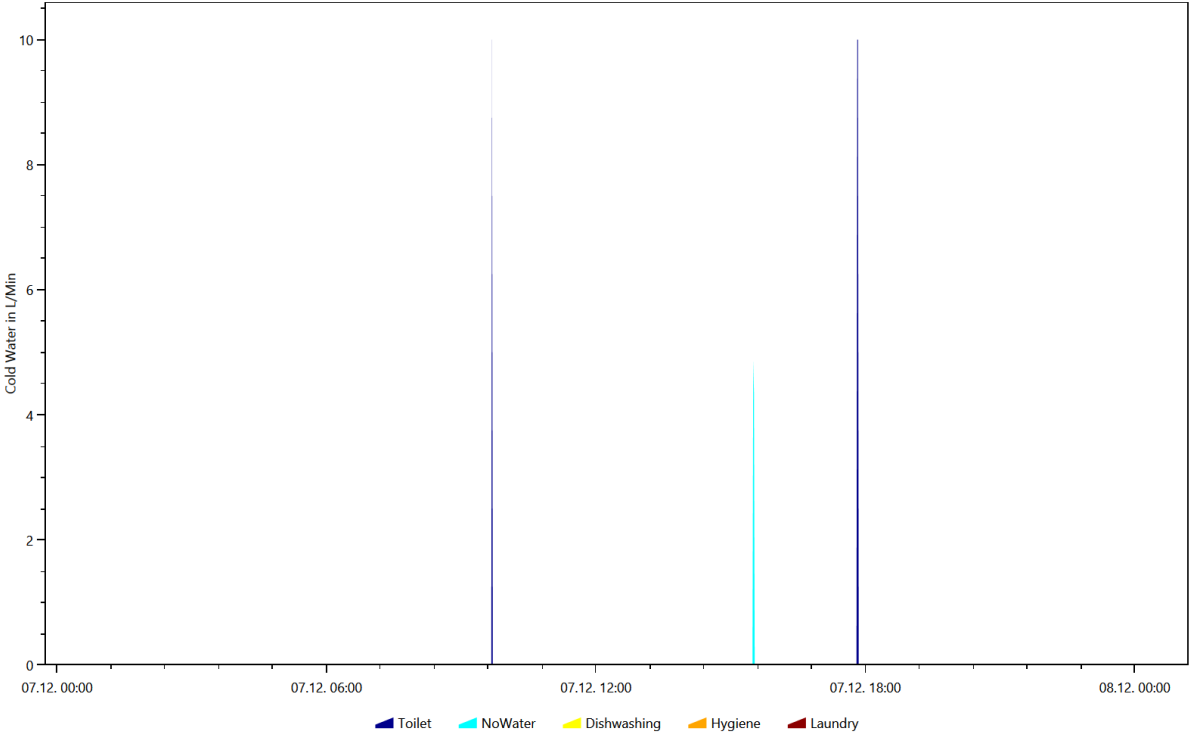
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.5
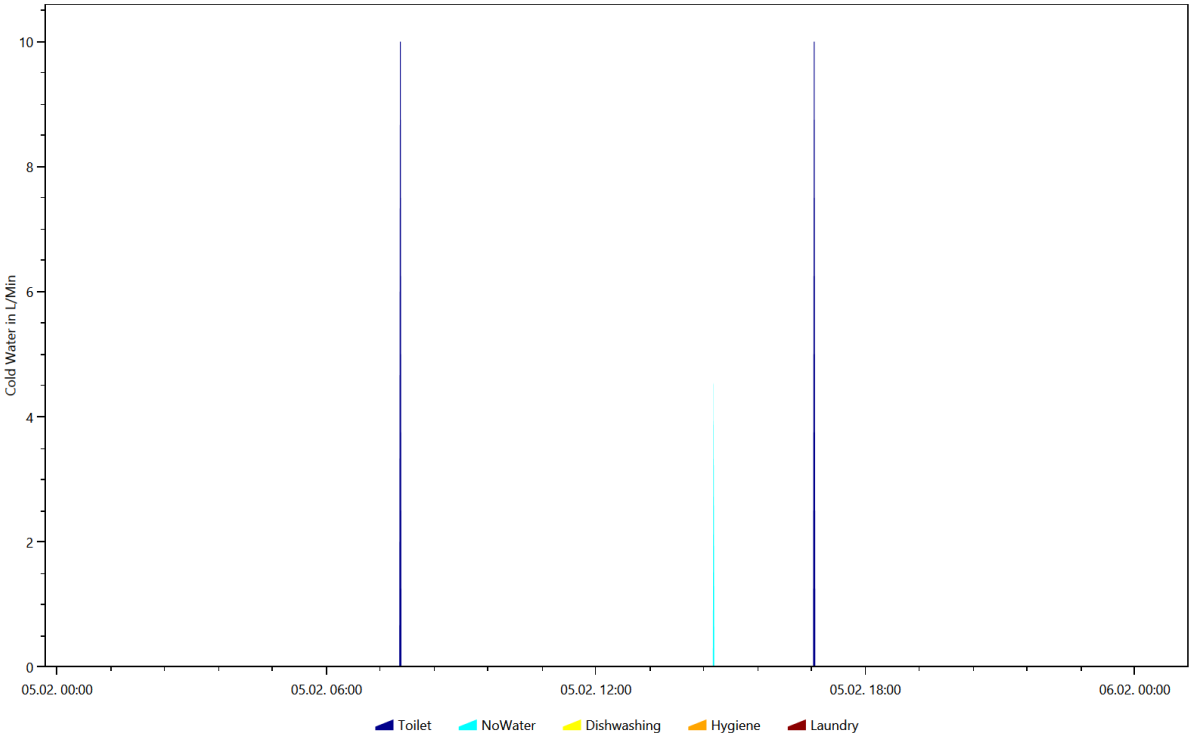
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.3.4
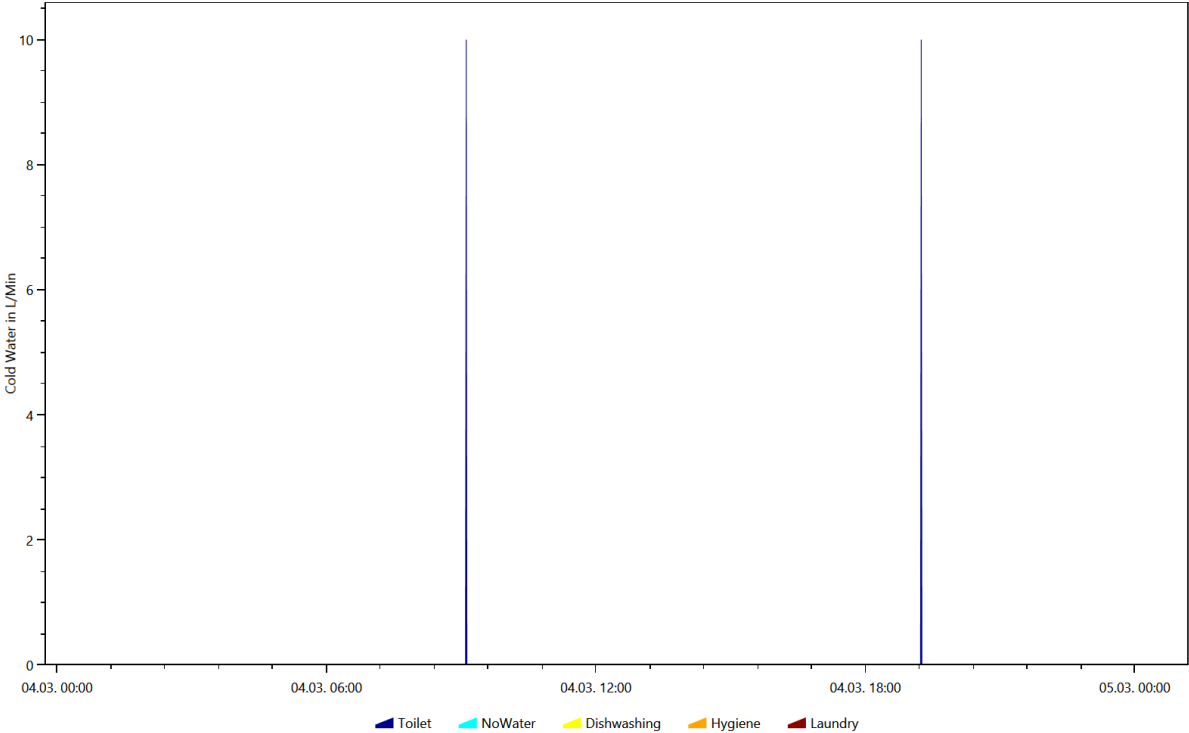
Cold Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.9.21
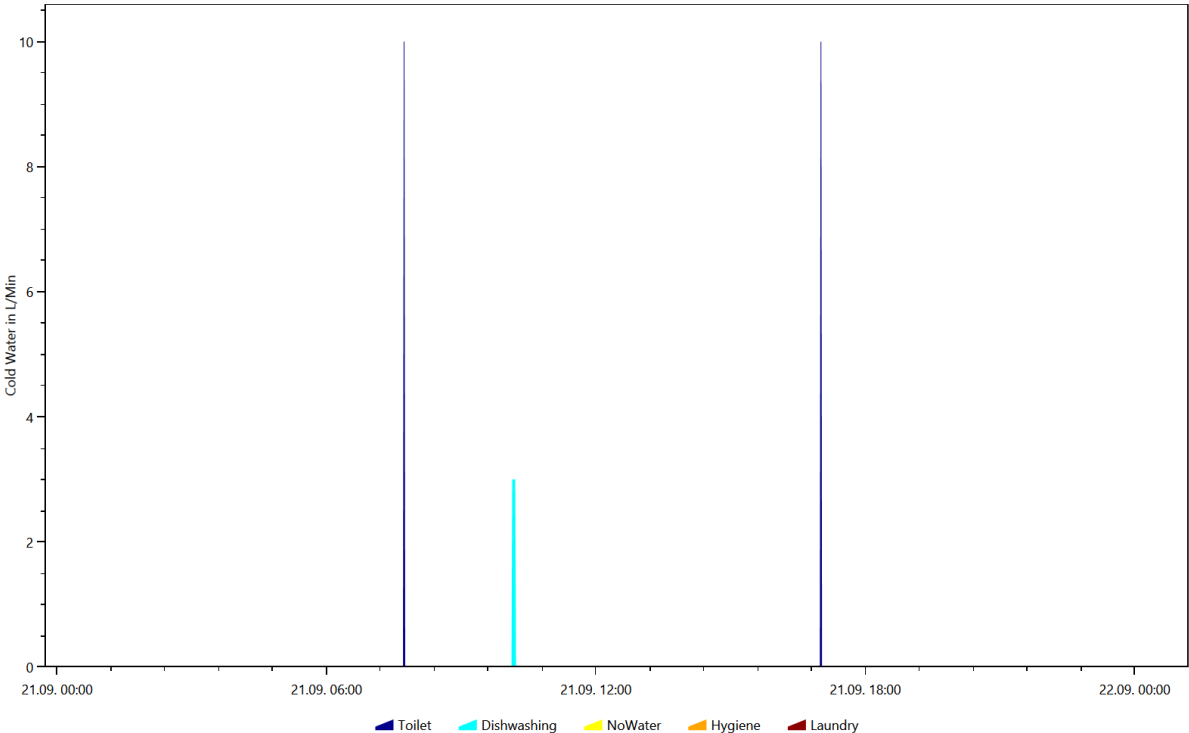
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.15
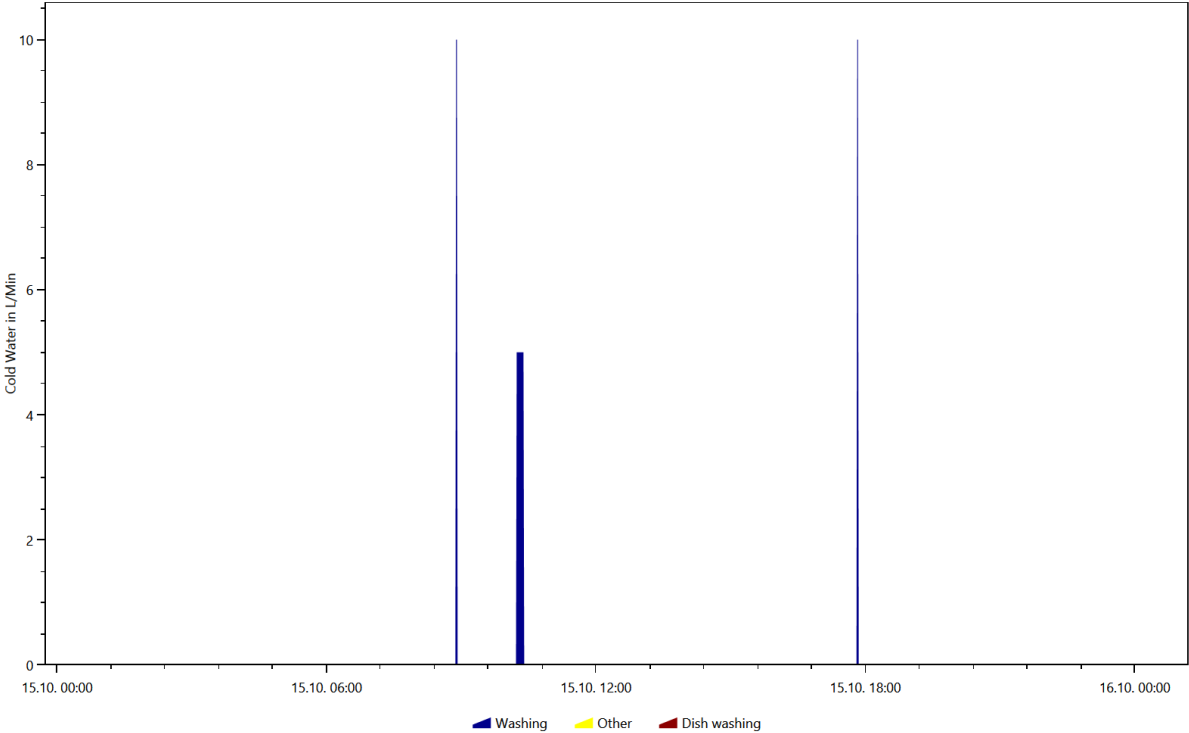
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.5
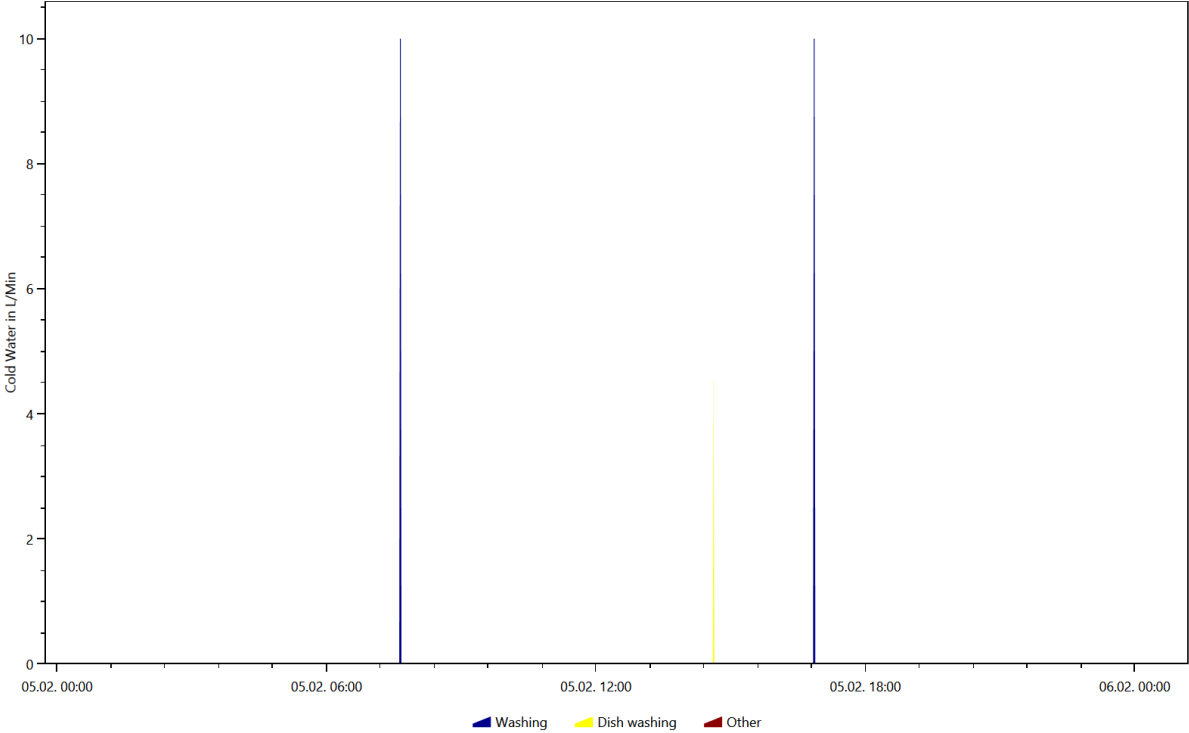
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.3.4
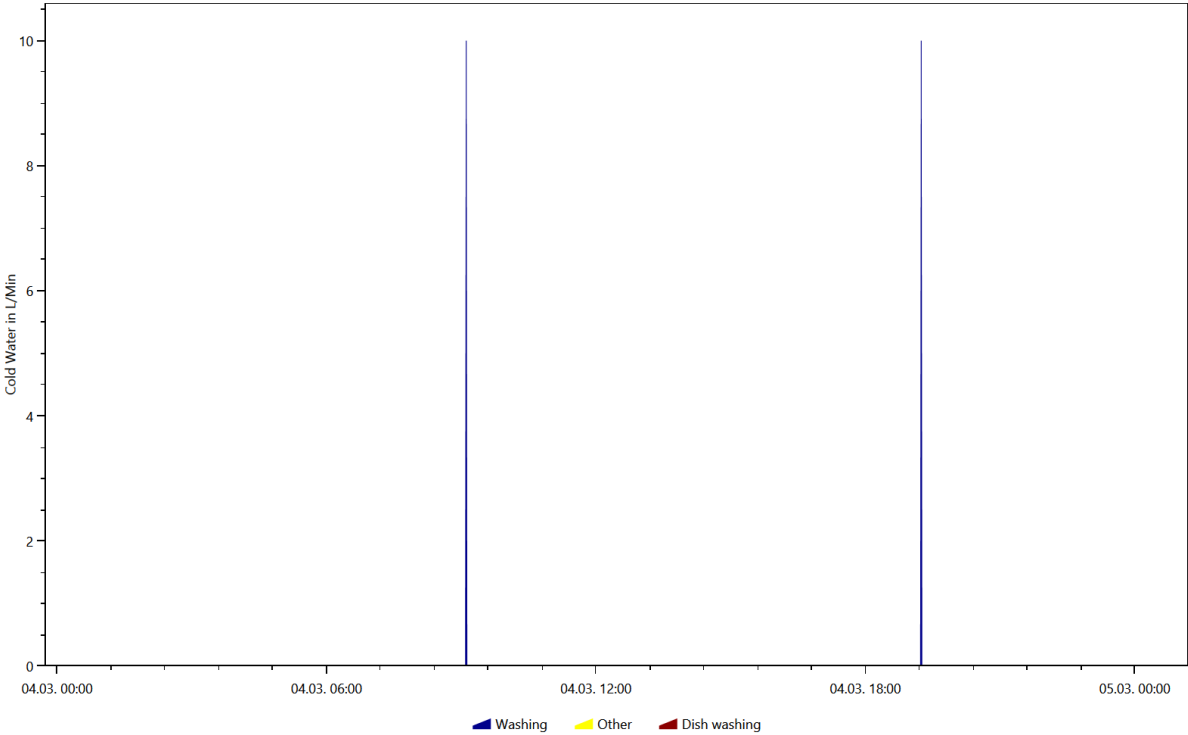
Cold Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.9.21
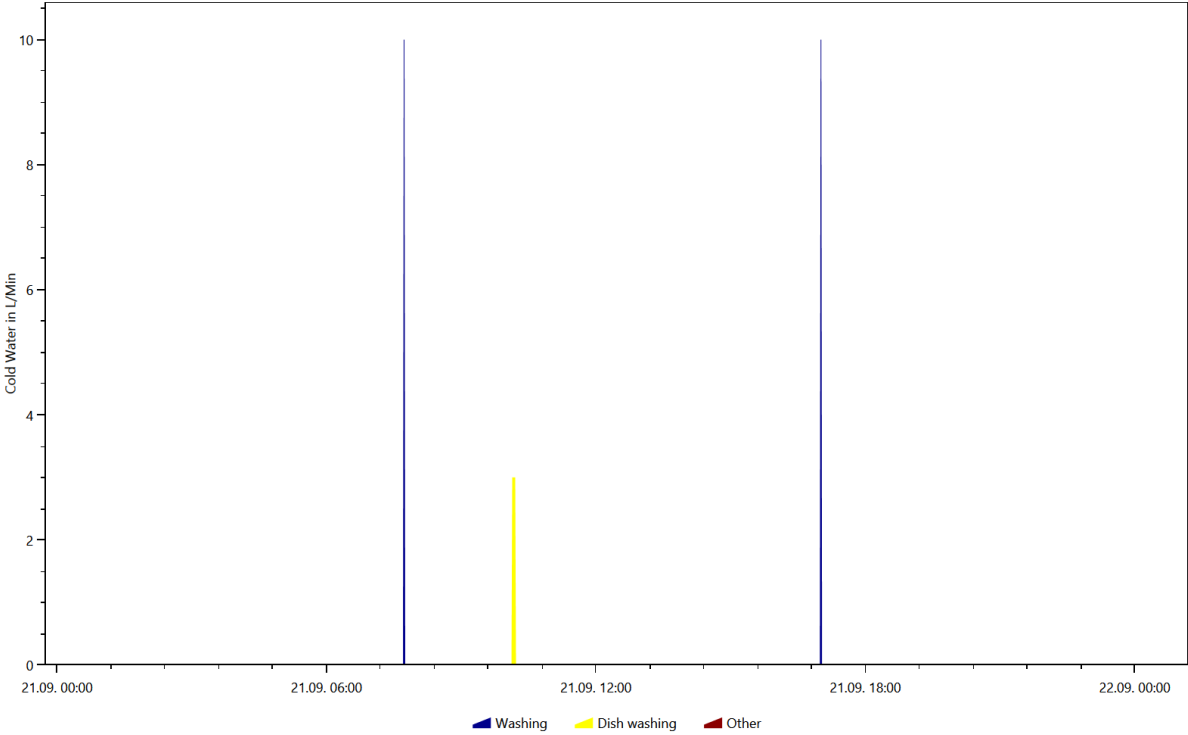
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.10.2
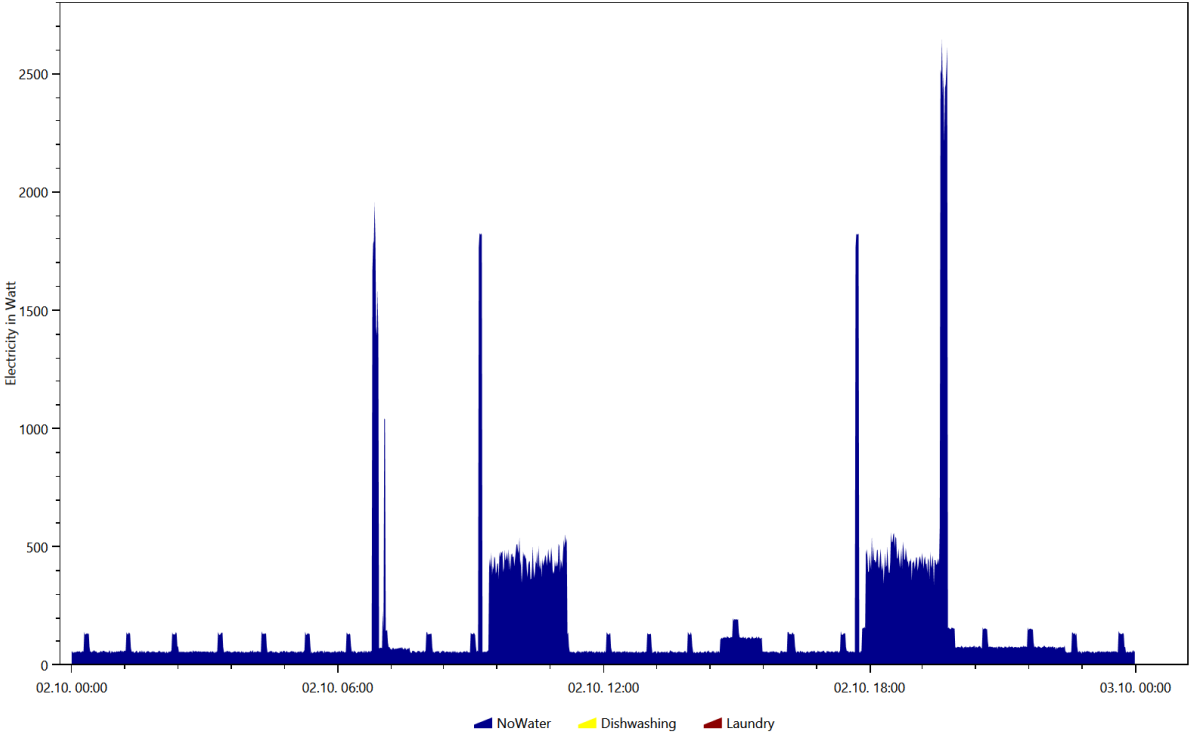
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.21
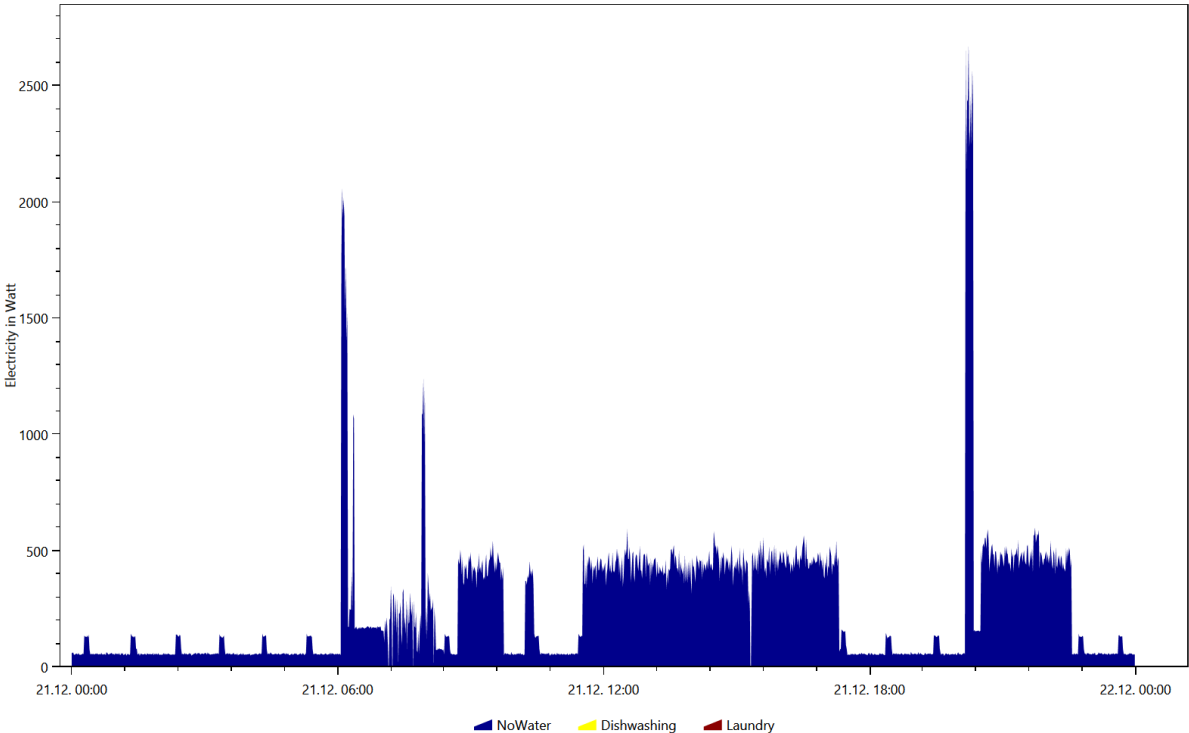
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.12.24
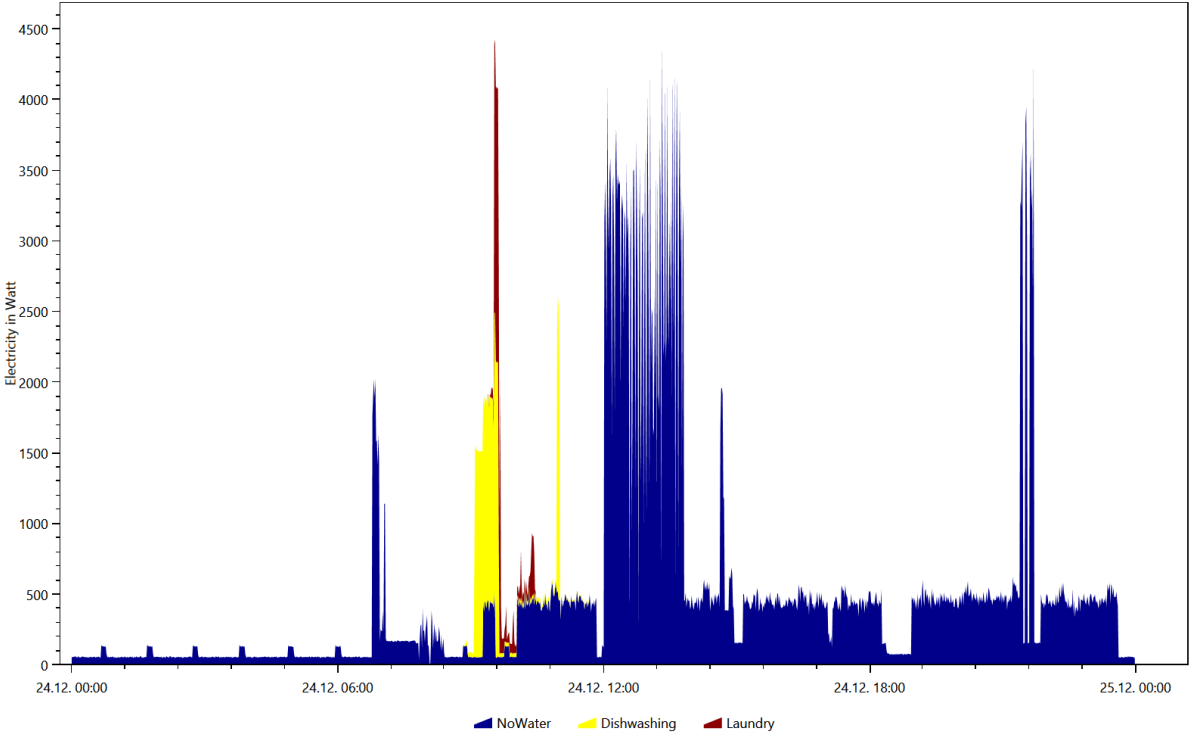
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.3
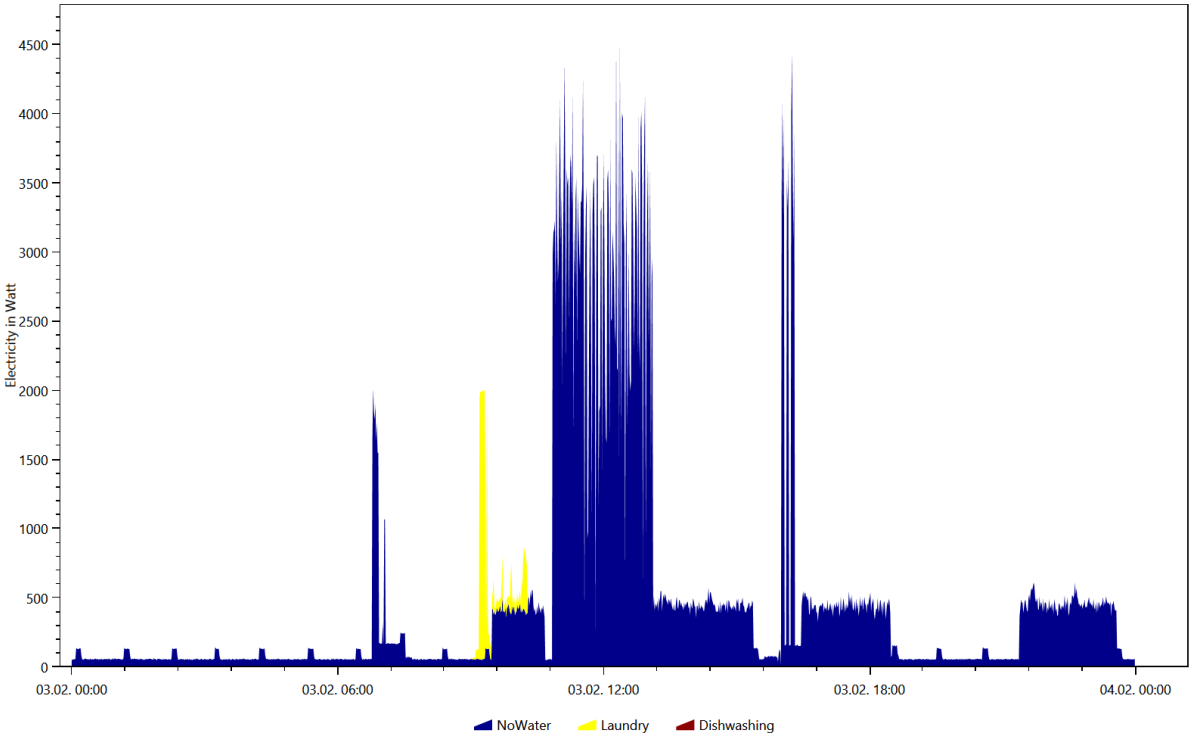
Electricity, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.22
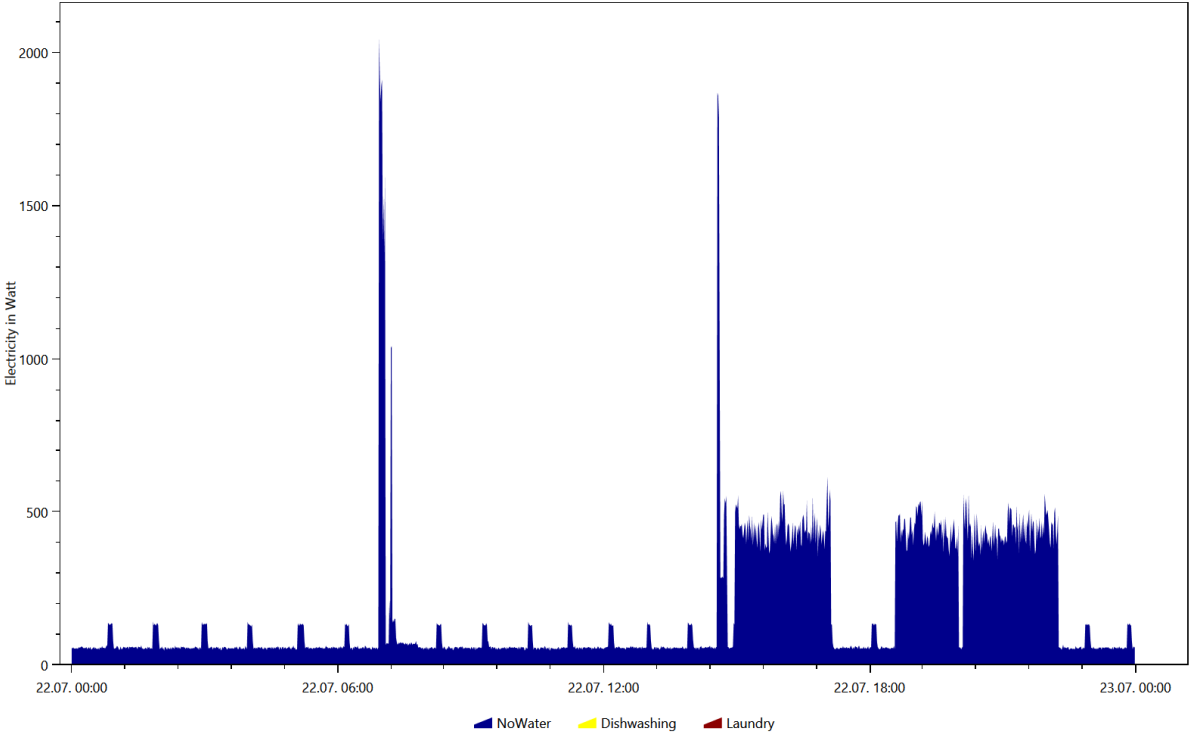
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.10.2
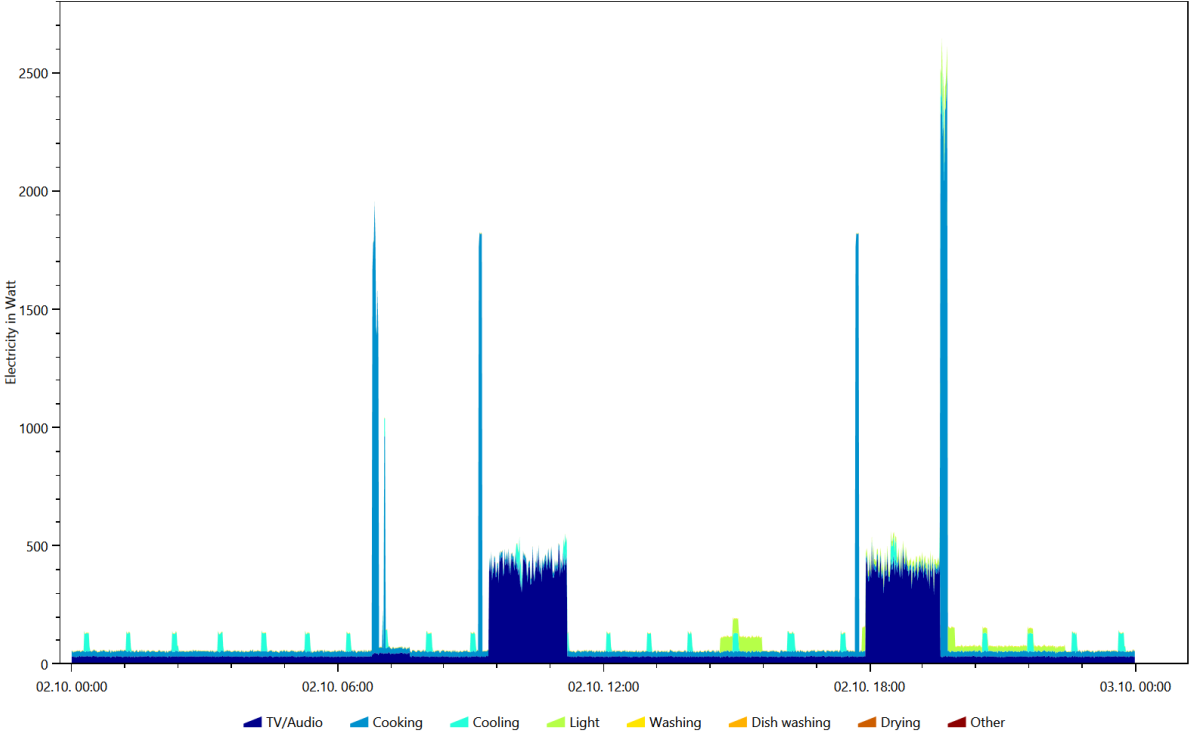
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.12.21
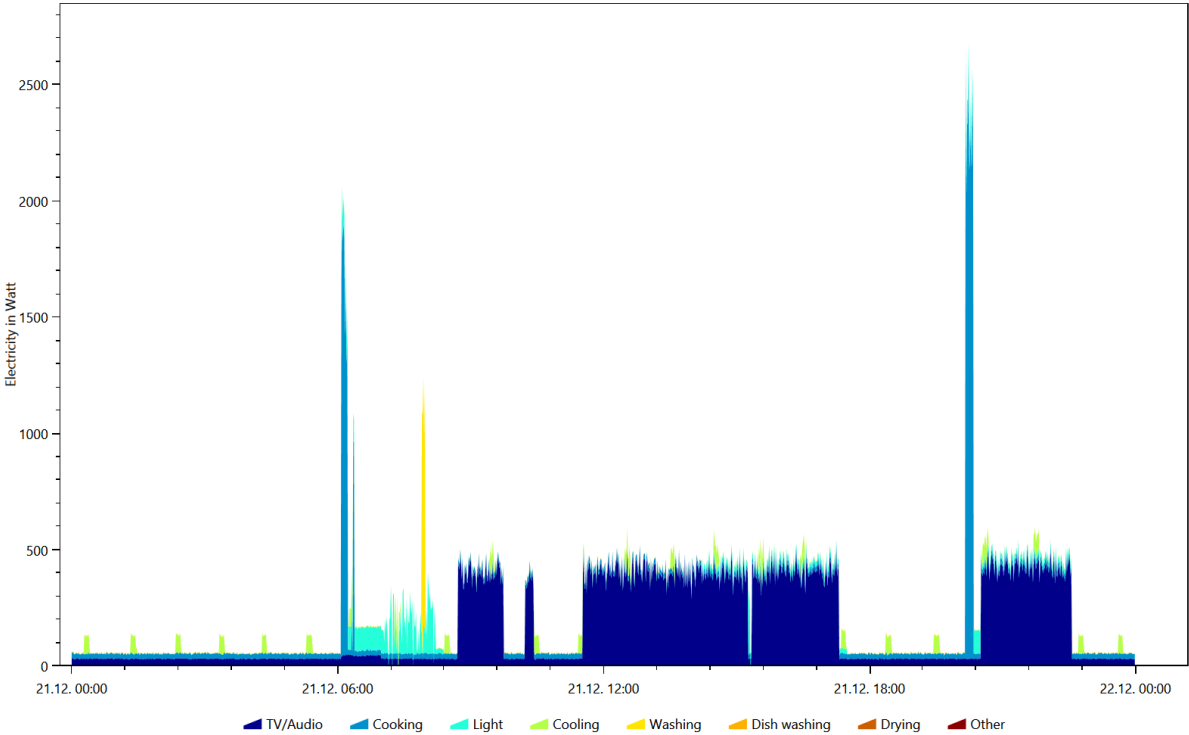
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.3
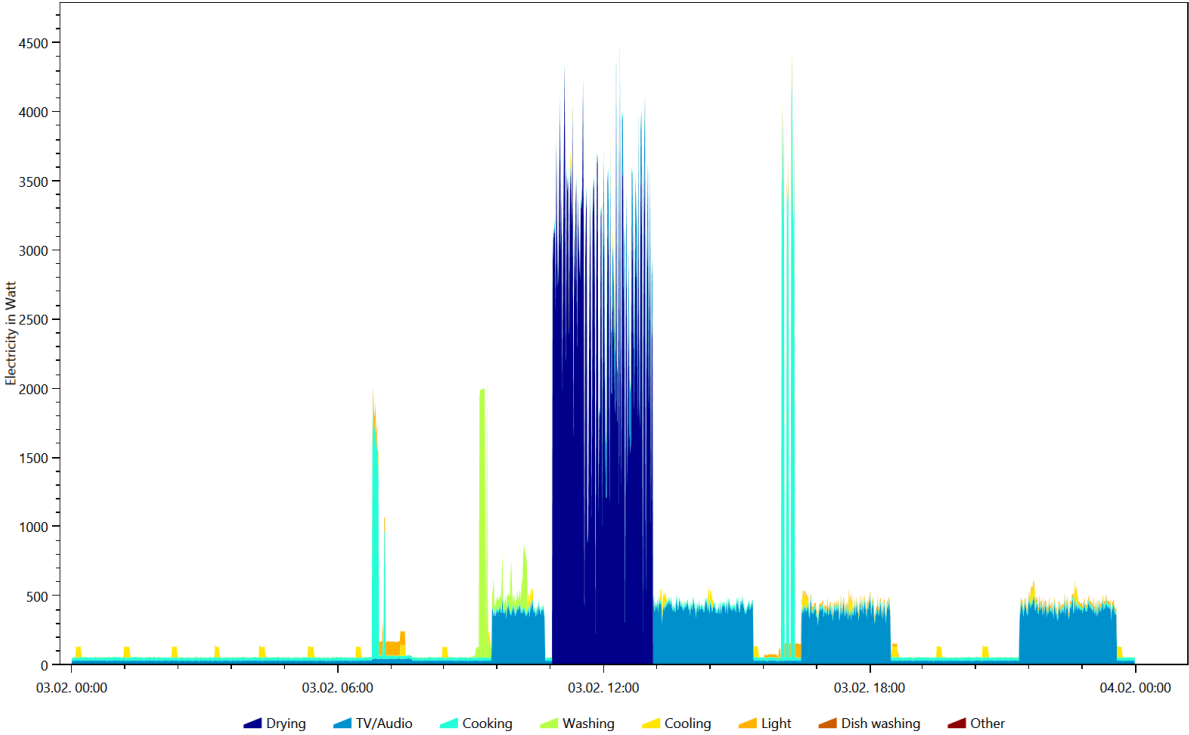
Electricity, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.22

Legend: ◢ TV/Audio   ◢ Cooking   ◢ Cooling   ◢ Washing   ◢ Light   ◢ Dish washing   ◢ Drying   ◢ Other
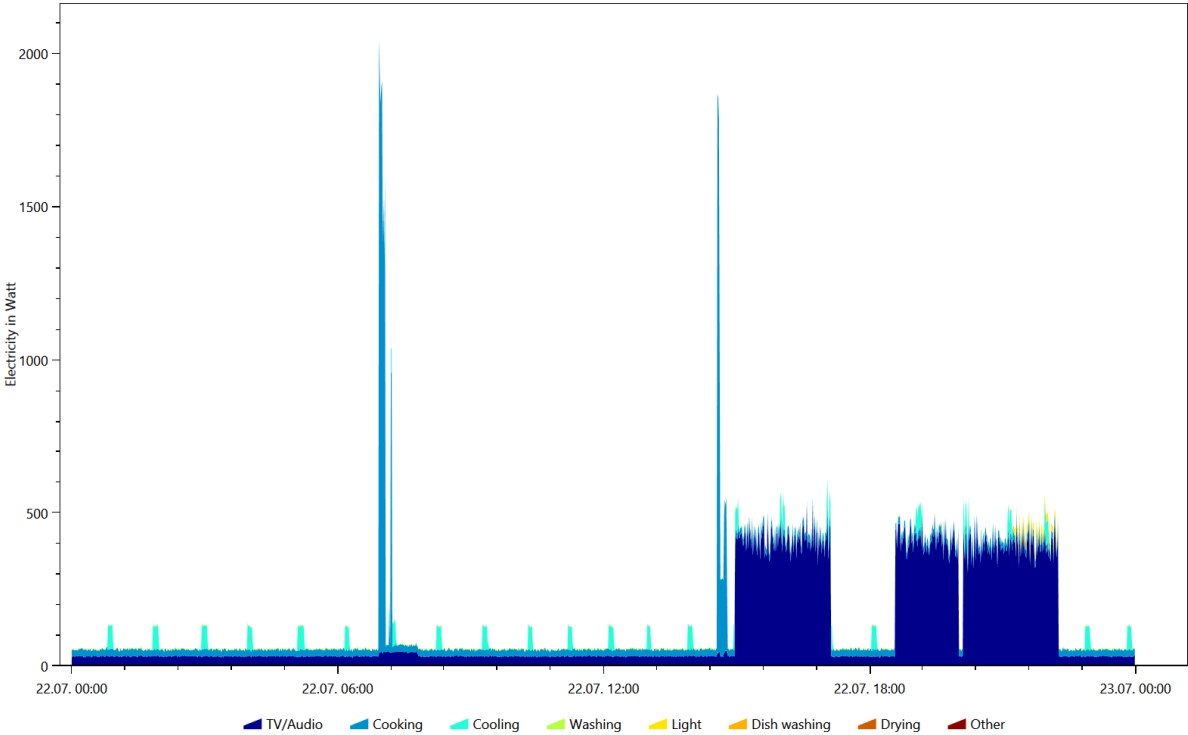
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.1.20

Legend: ◢ Hygiene   ◢ NoWater
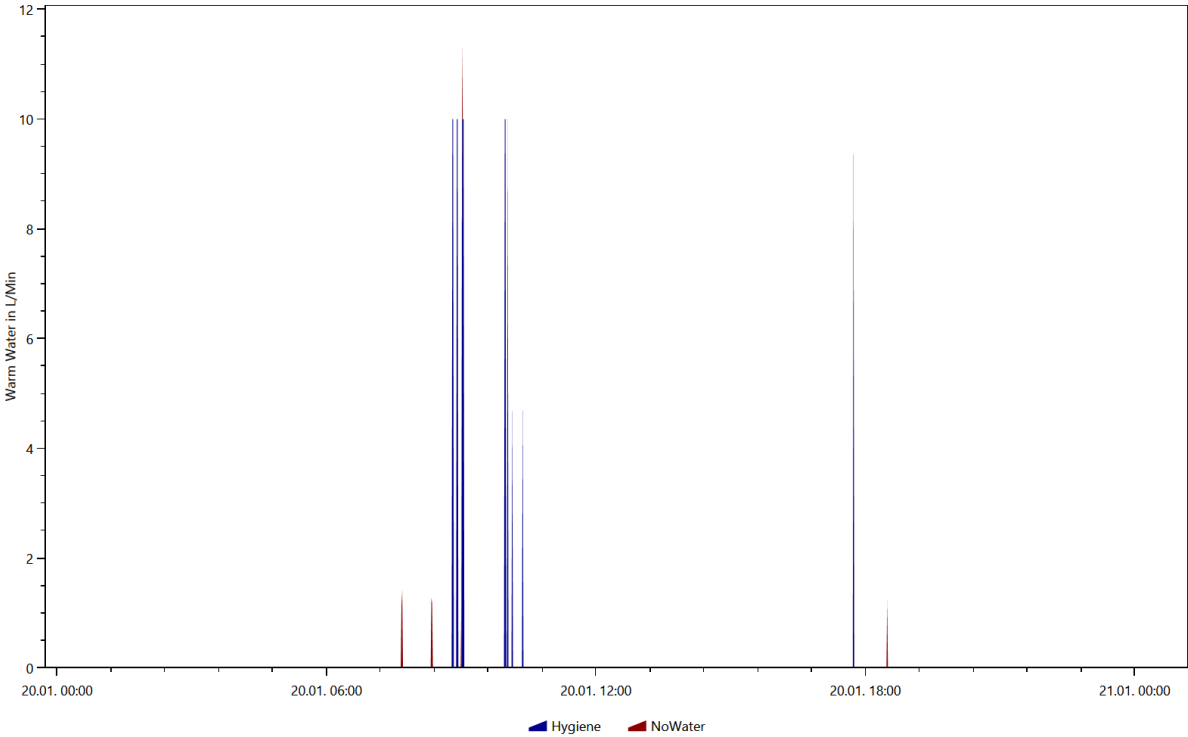
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.11.25

Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.2.19
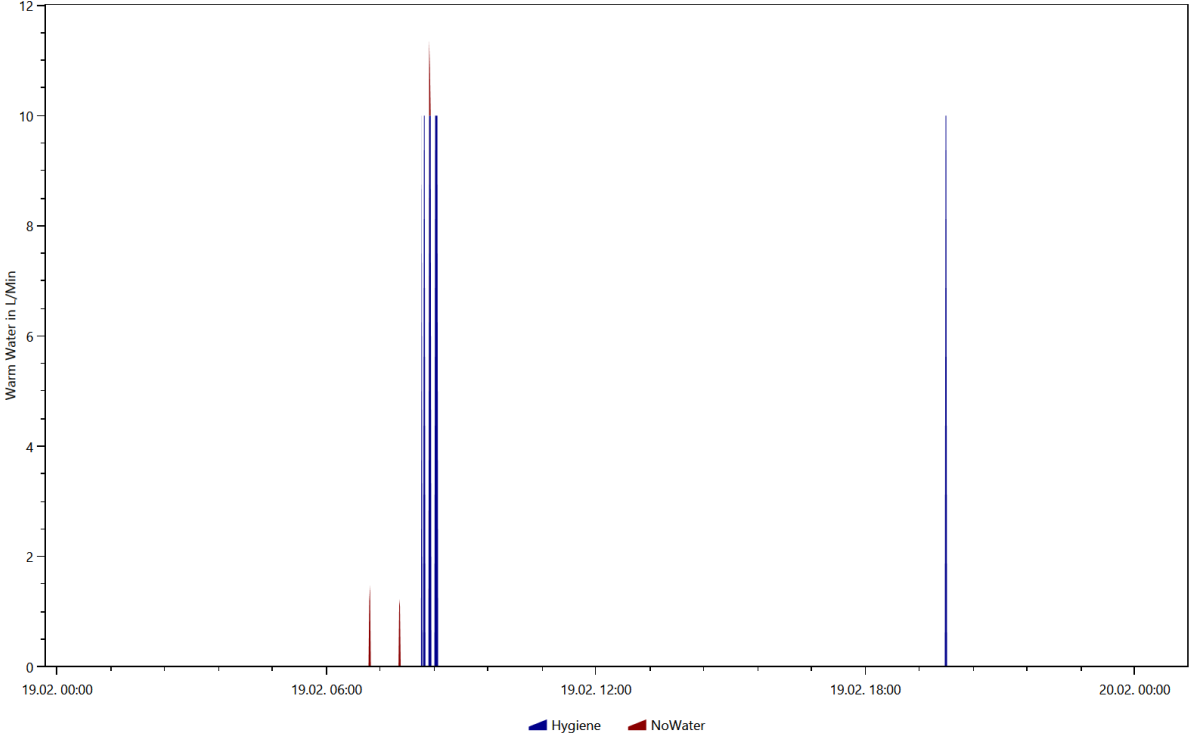
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.10
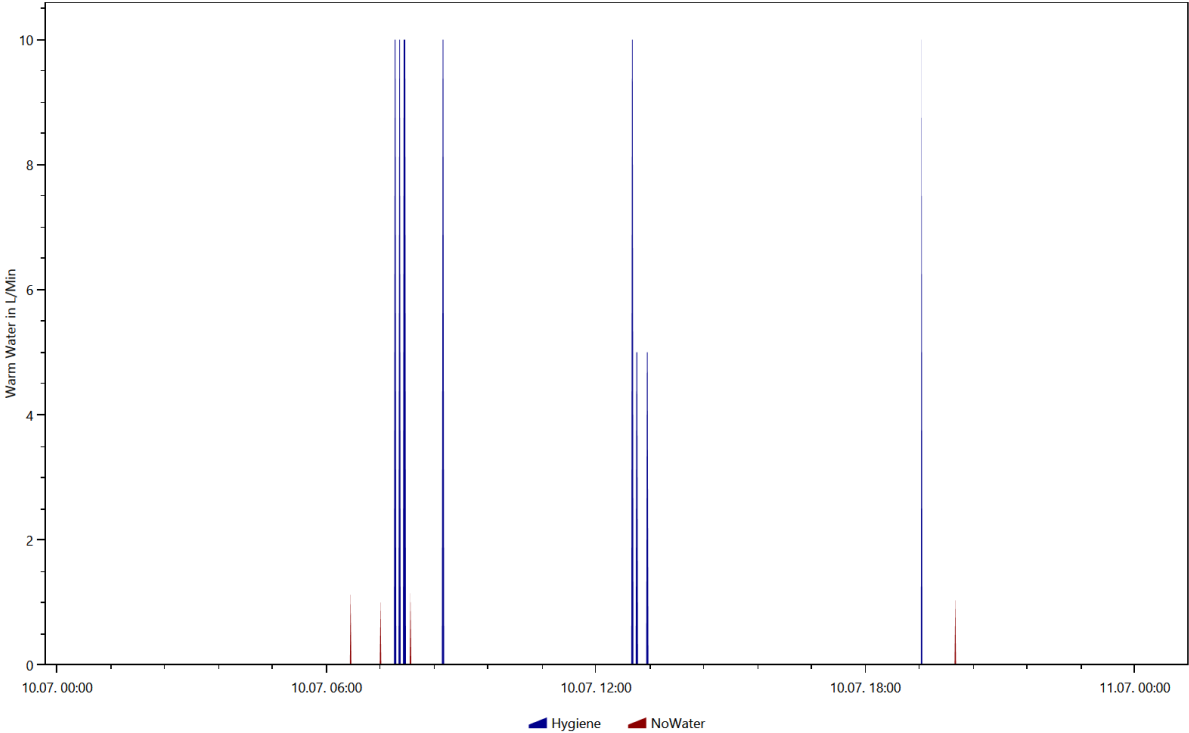
Warm Water, Coloring Scheme: Destatis Water Usage Statistics, Date 2016.7.5
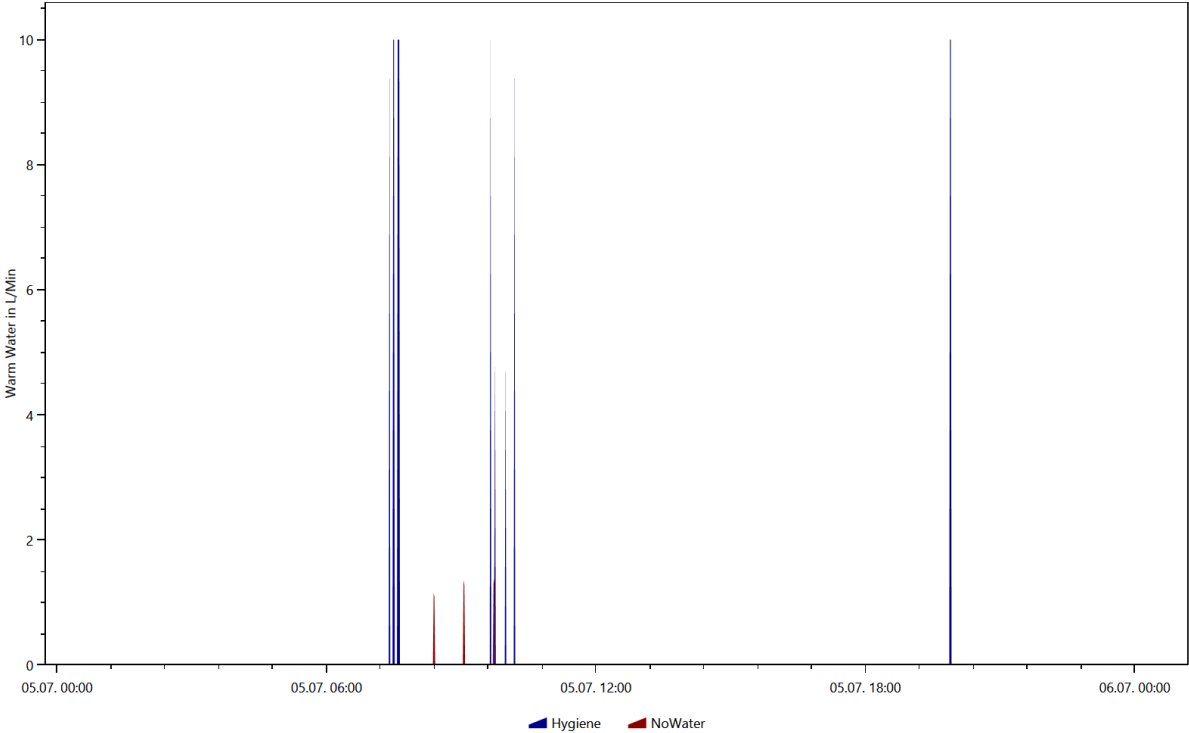
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.1.20
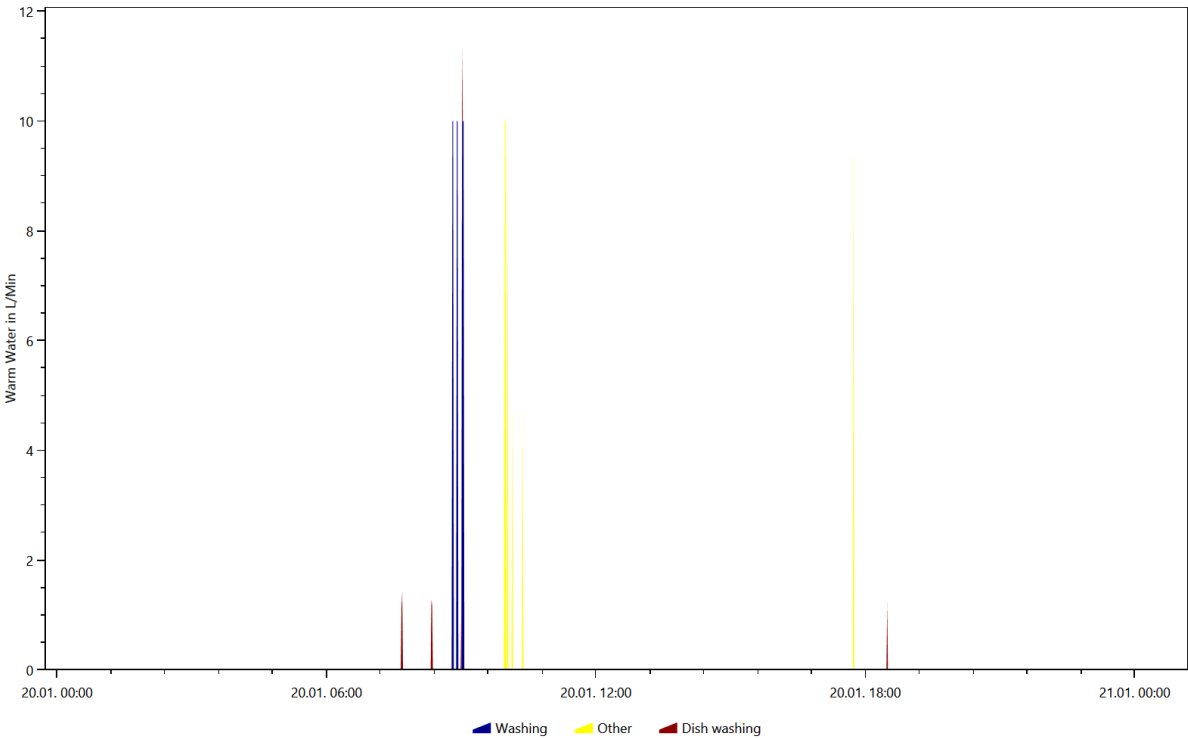
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.2.19
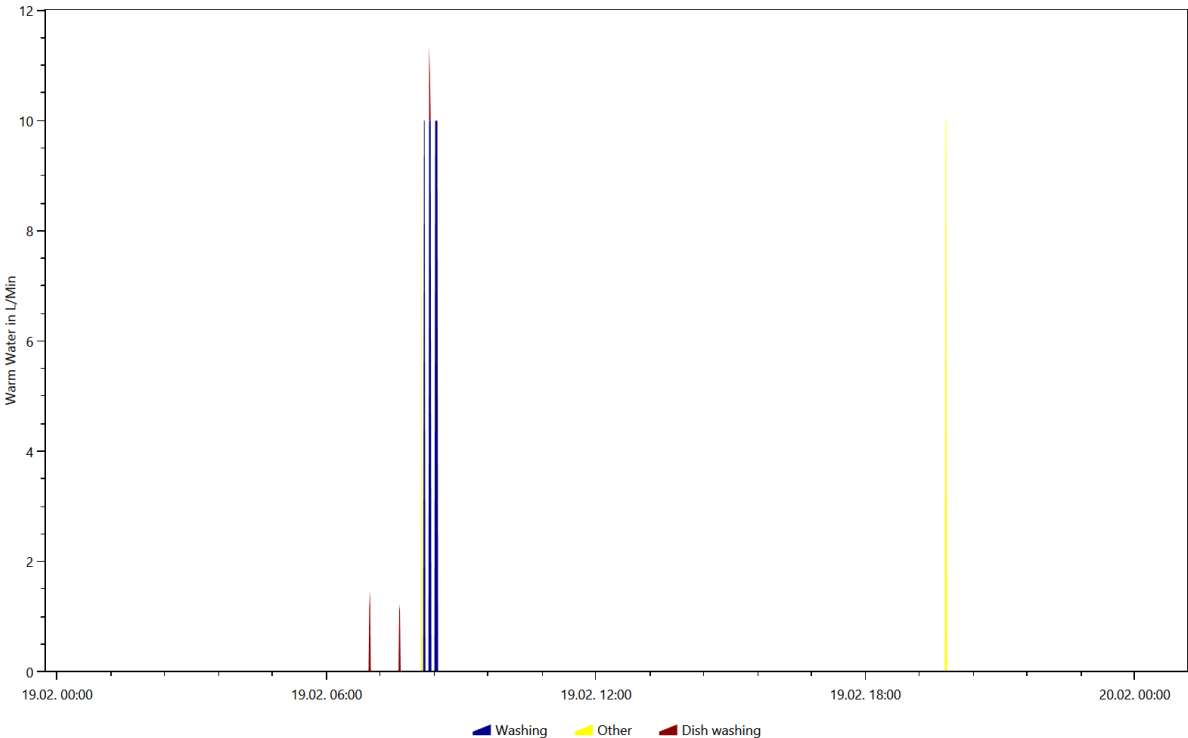
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.10
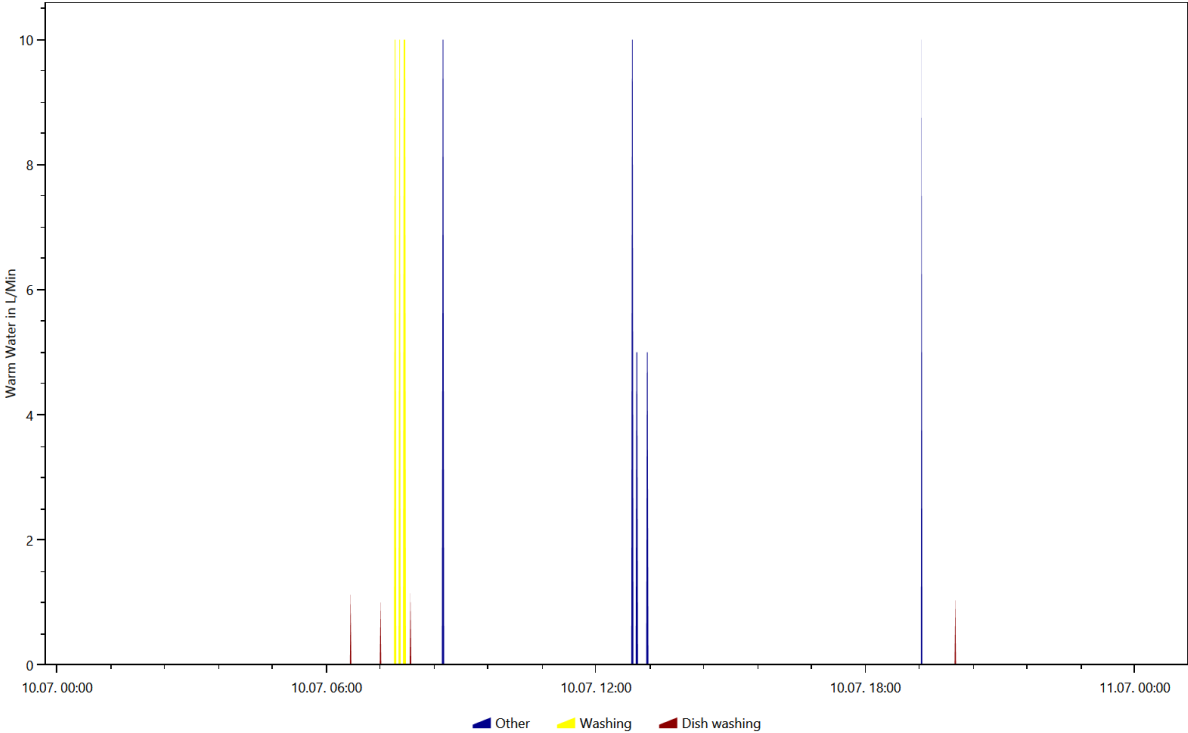
Warm Water, Coloring Scheme: Energieagentur.NRW Tags, Date 2016.7.5
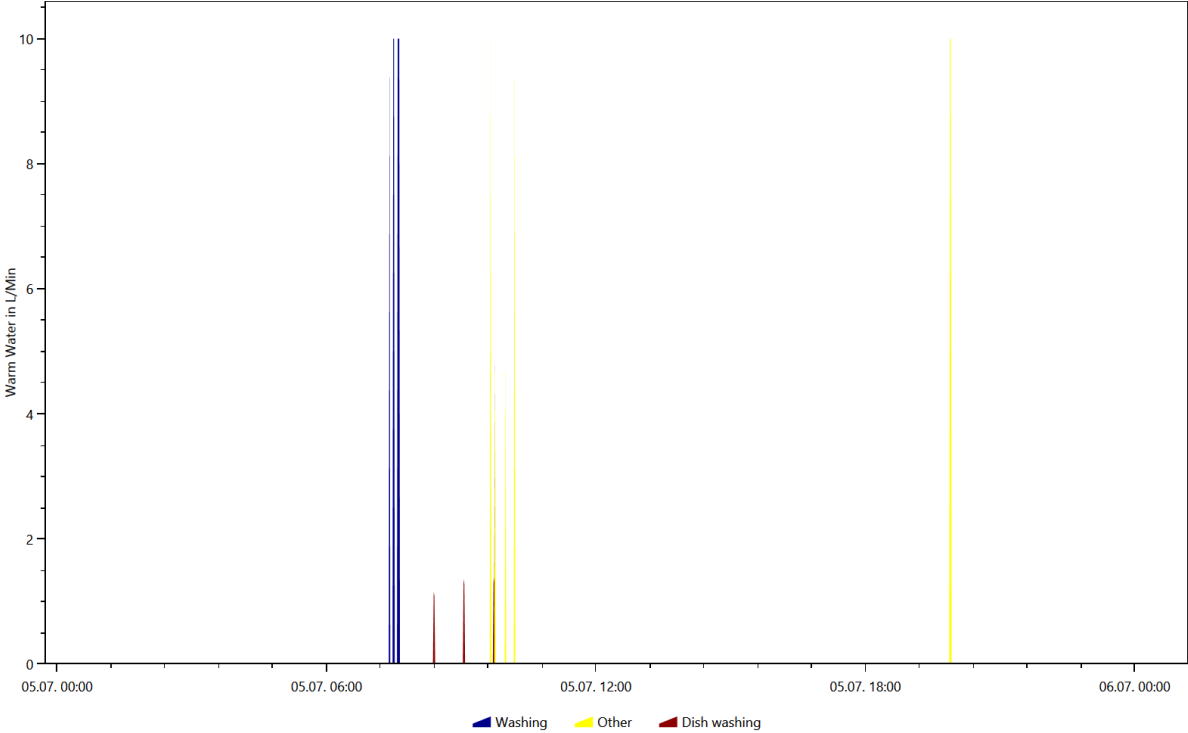
Overview of the time and power of the use per load type per device

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

Legend: Toilet 10L/min | Washing Machine AEG Öko Plus 1400 | Dishwasher NEFF SD6P1F (2011) | Kitchen Sink (5L/min) | Bathroom Sink 10L/min | Shower 10 L/min
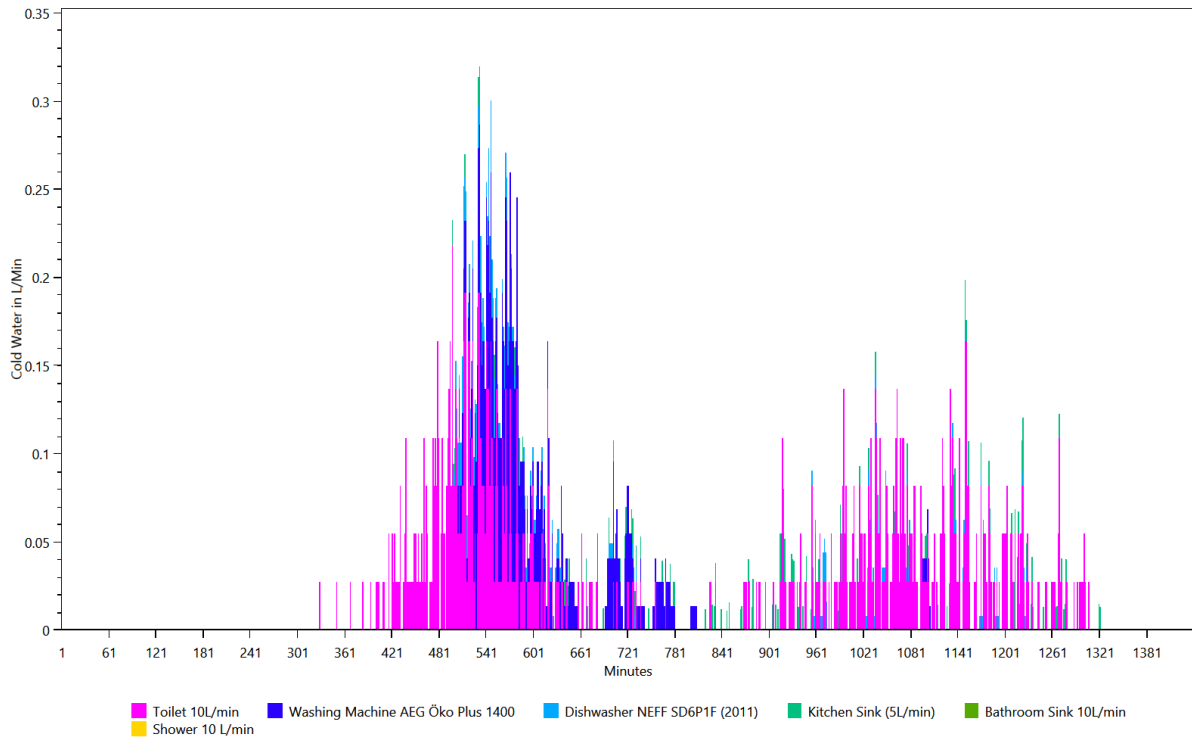
Electricity
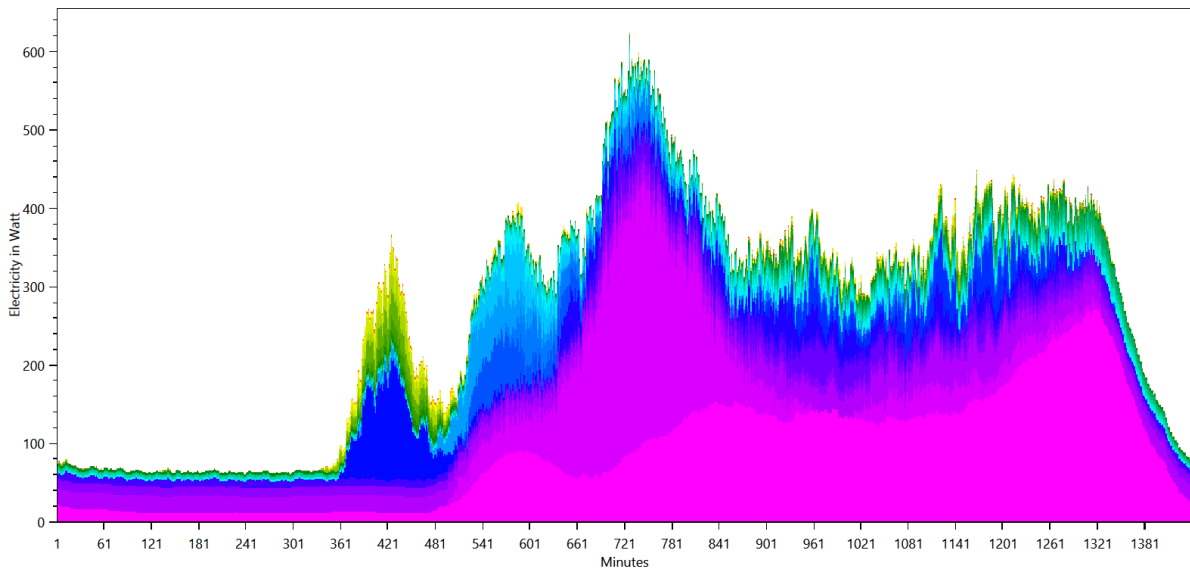
Panasonic TX-P58V10E | Miele T 495 C | Microwave / Panasonic NN-V 359 W Inverter | Yamaha RX-V667 | Lawn Mower / Sabo 36-EL SA 752
Siemens Kl 20 LA 65 (A+) | Atika LH 2500 G | Coffee Machine / Braun KF 580E | Miele H 5241 B | Dishwasher NEFF SD6P1F (2011) | Vacuum Cleaner FiF
Hair Dryer Braun Silencio 1250 | Washing Machine AEG Öko Plus 1400 | Hedge Trimmer / Bosch AHS 550-24 ST | Home Cinema System / Samsung HT-D5550
CD/DVD Player / Phillips CD 380 | Hifi System / Sharp XL-HF300PH | SAT Receiver / Kathrein UFS913 | Living Room Light (Energy Saving Lamp, 20W)
Single Stove Plate | Electric Tooth Brush / Phillips HX9332 | Kitchen radio / AEG KRC 4323 CD | Kitchen Light (100W) | Moulinex electronic 833
Kitchen Stove / Bauknecht Heko 750 PT Kitchen stove left hind- semi aktiv | Toaster / Tefal Vario | Egg Cooker / Russell Hobbs 14048-56 Stylo
Bathroom Mirror Light 100W (Conventional) | Electric Kettle / Petra WK288 1.5L | Miele DA 249-2 | Bathroom Light (20W)
Food Slicer / DOMO Schneidemaschine DO521S | Osram Light Bulb Classic A 60W | Bedroom Light (20W)

Warm Water
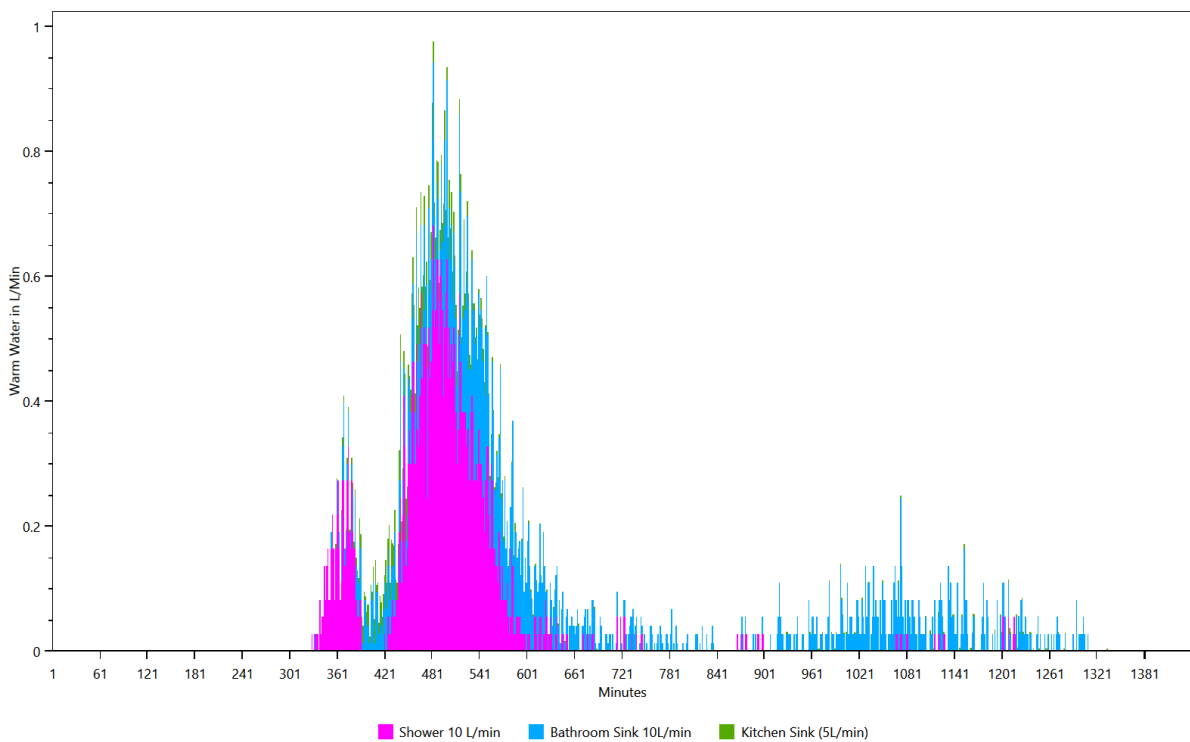
Shower 10 L/min | Bathroom Sink 10L/min | Kitchen Sink (5L/min)

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

This is made from the files starting with: WeekdayProfiles

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

Cold Water
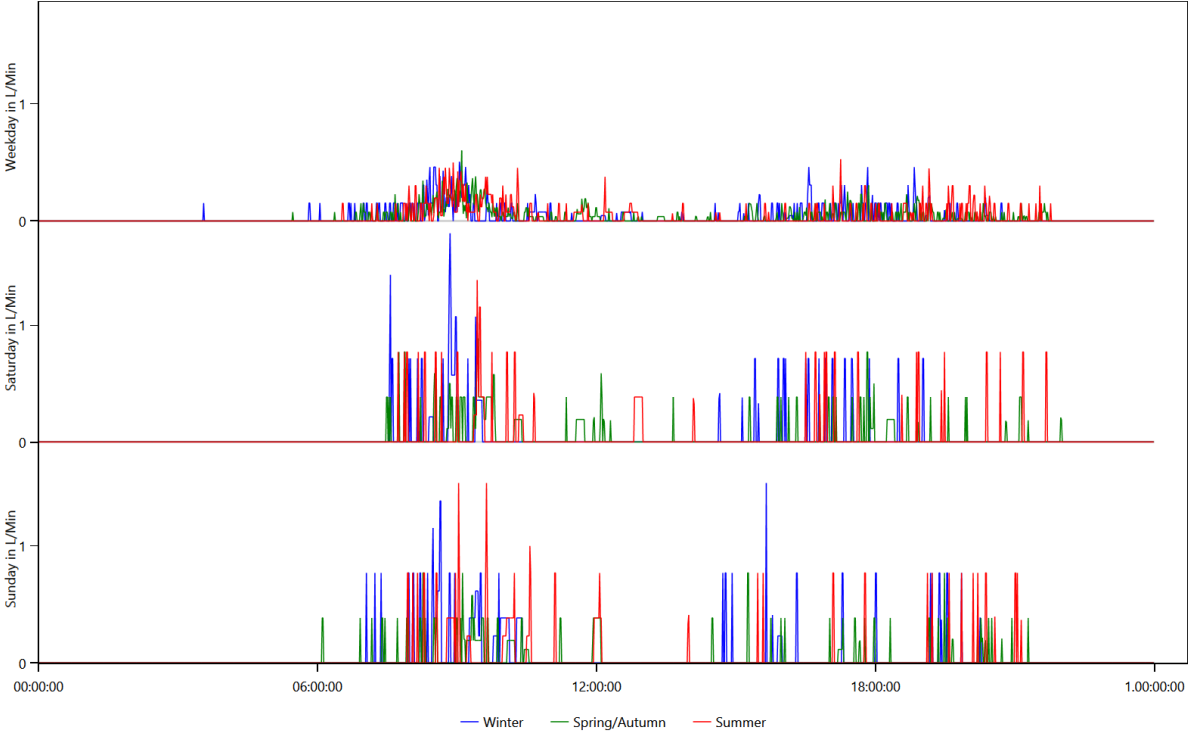
Electricity
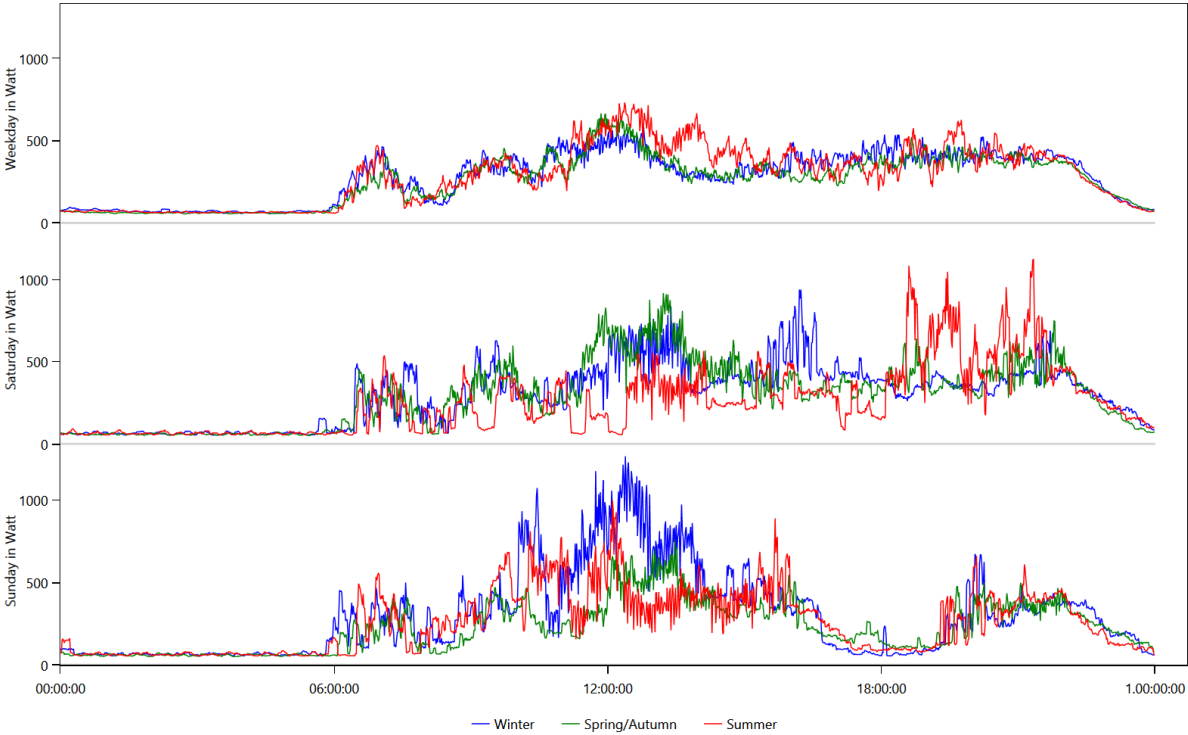
Warm Water
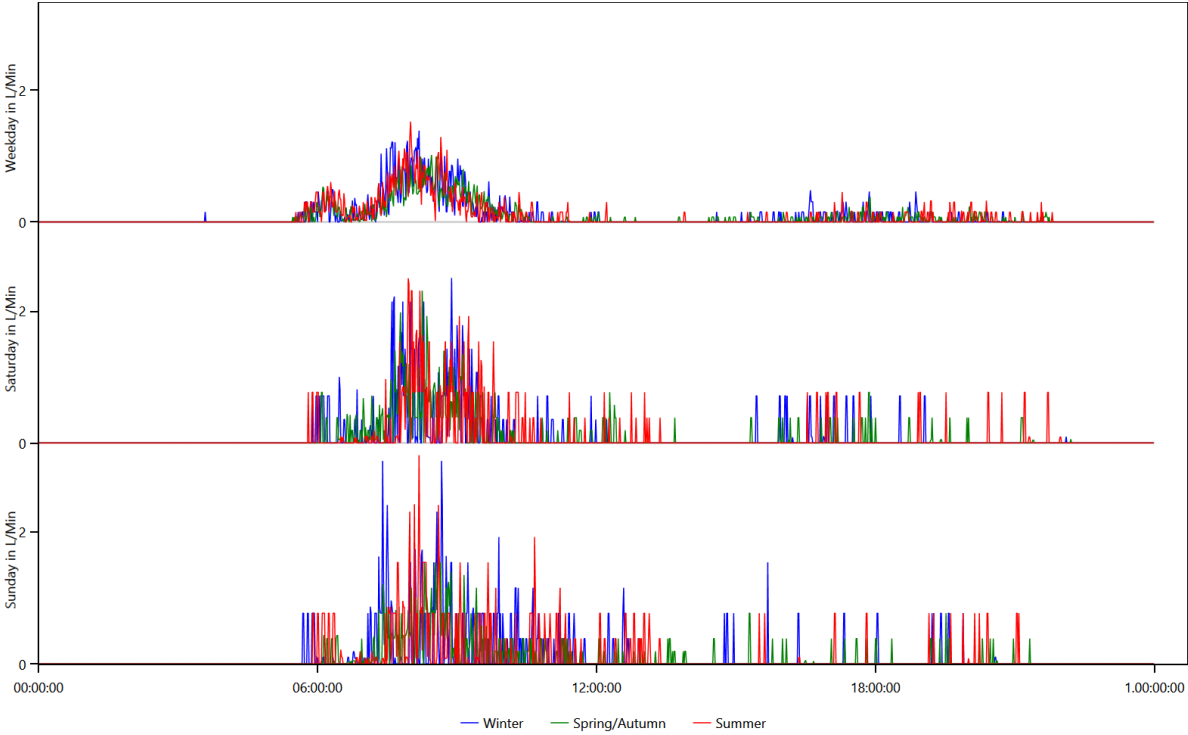
Location Distribution per Person

This is made from the files starting with: LocationStatistics

These charts show where the persons spend their time.

CHR24 Martha (68 Female)
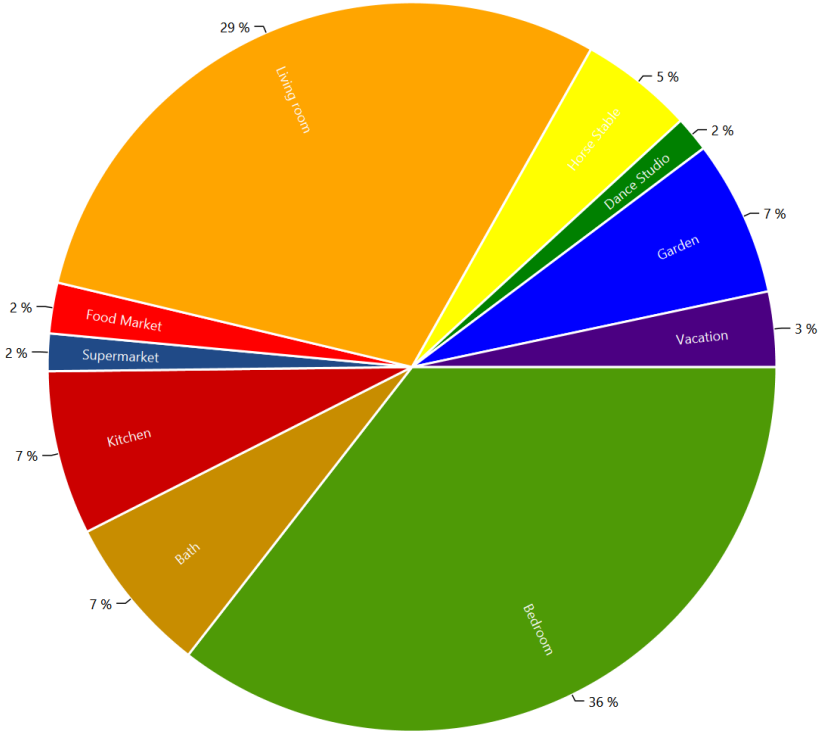
Actions.csv

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;CHR24 Martha (68/Female);sleep bed 08 (08 h);sleep;False;
419;01.01.2016 06:59;CHR24 Martha (68/Female);go to the toilet;hygiene;False;
425;01.01.2016 07:05;CHR24 Martha (68/Female);eat breakfast (1 h);cooking;False;
485;01.01.2016 08:05;CHR24 Martha (68/Female);go shopping for food in the supermarket (1.5 h);shopping;False;
579;01.01.2016 09:39;CHR24 Martha (68/Female);rest for 10 min;sleep;False;
591;01.01.2016 09:51;CHR24 Martha (68/Female);go shopping for food on the market (2 h);shopping;False;
713;01.01.2016 11:53;CHR24 Martha (68/Female);take a shower with hair washing (women) (5 min hair drying);hygiene;False;
760;01.01.2016 12:40;CHR24 Martha (68/Female);take a nap;sleep;False;
820;01.01.2016 13:40;CHR24 Martha (68/Female);clean the bath;cleaning;False;
887;01.01.2016 14:47;CHR24 Martha (68/Female);play a puzzle game;Offline Entertainment;False;
946;01.01.2016 15:46;CHR24 Martha (68/Female);go to the toilet;hygiene;False;
952;01.01.2016 15:52;CHR24 Martha (68/Female);watch a movie for 1 h 30 min with home cinema system;Passive Entertainment (TV etc.);False;
1037;01.01.2016 17:17;CHR24 Martha (68/Female);fry two eggs and eat them with toast;cooking;False;
1052;01.01.2016 17:32;CHR24 Martha (68/Female);watch TV (1 h);Passive Entertainment (TV etc.);False;
1099;01.01.2016 18:19;CHR24 Martha (68/Female);rest for 10 min;sleep;False;
1110;01.01.2016 18:30;CHR24 Martha (68/Female);watch the news;Passive Entertainment (TV etc.);False;
1125;01.01.2016 18:45;CHR24 Martha (68/Female);watch sports on TV with SAT Reciever (2 h);Passive Entertainment (TV etc.);False;
1250;01.01.2016 20:50;CHR24 Martha (68/Female);paint a picture ;Offline Entertainment;False;
1276;01.01.2016 21:16;CHR24 Martha (68/Female);watch a movie for 1 h 30 min;Passive Entertainment (TV etc.);False;
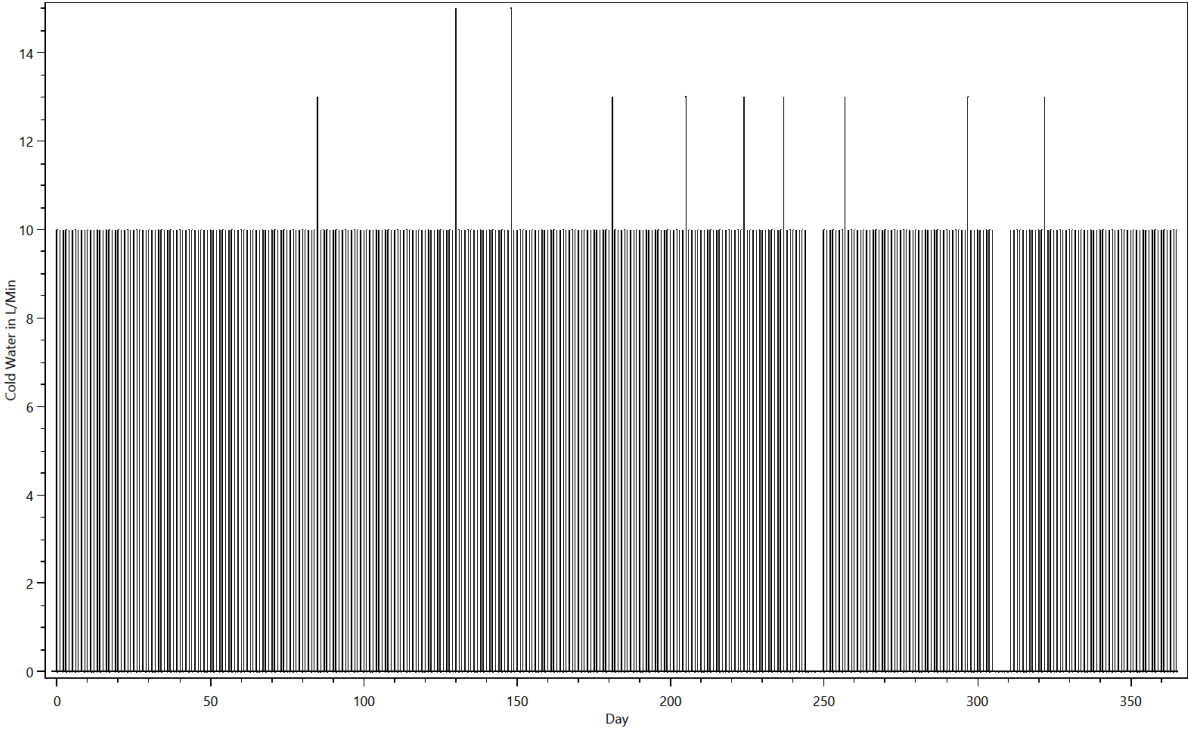
Sum Profiles

This is made from the files starting with: SumProfiles

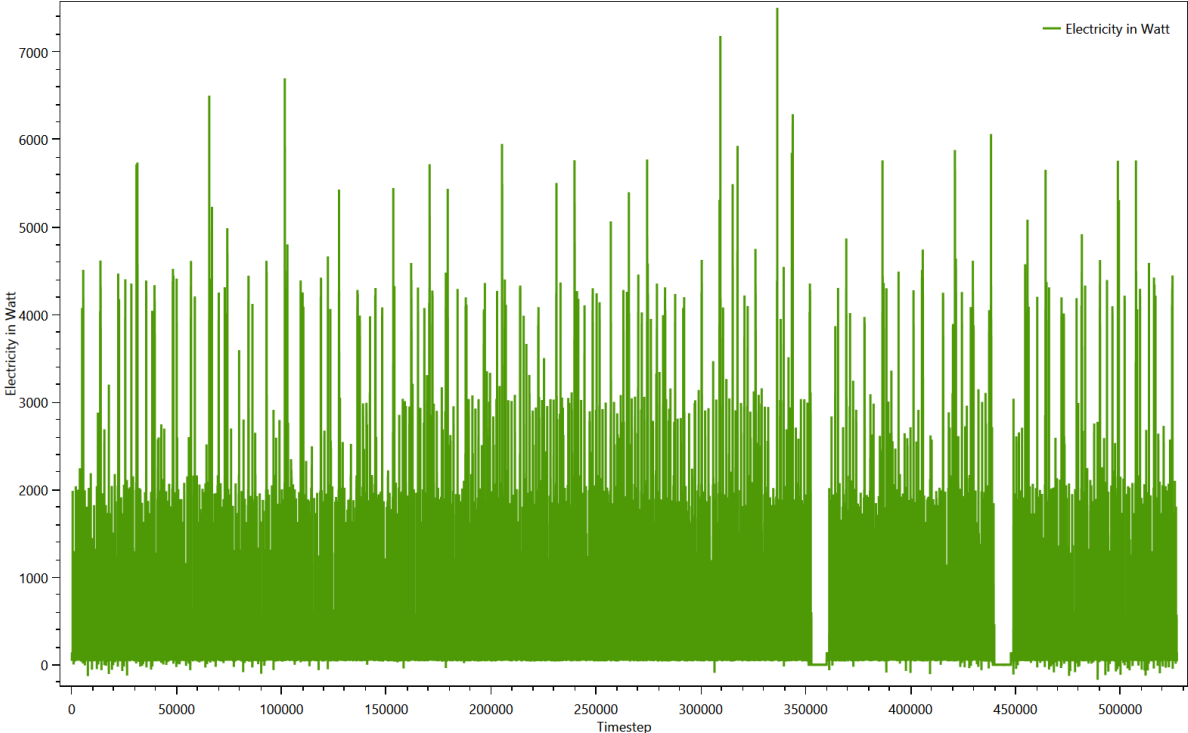This shows the energy use during the simulation.

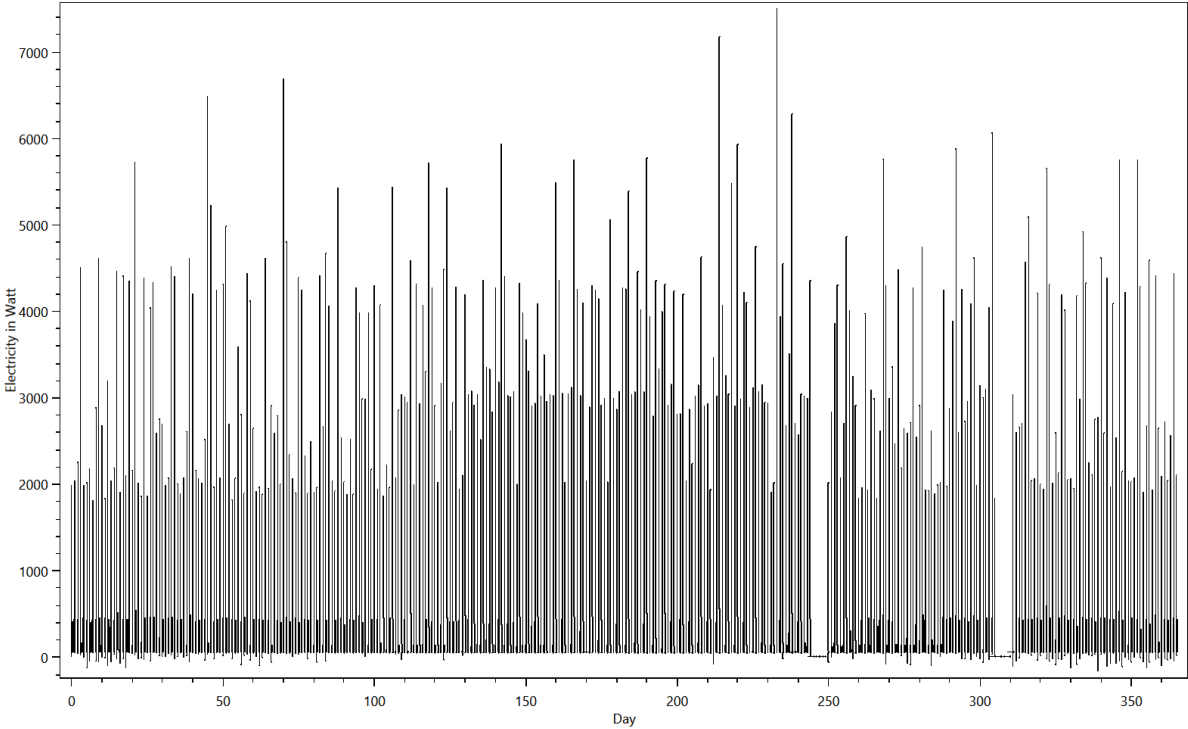Summed up curve for Cold Water from SumProfiles.Cold Water.png
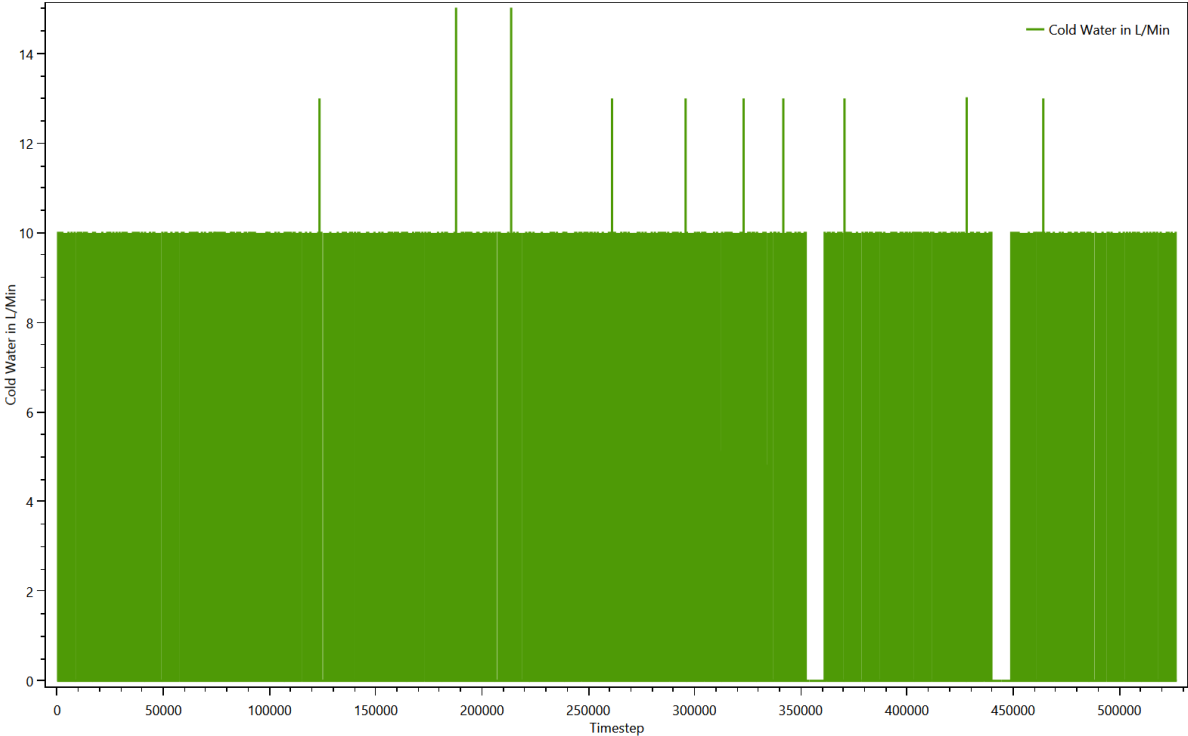
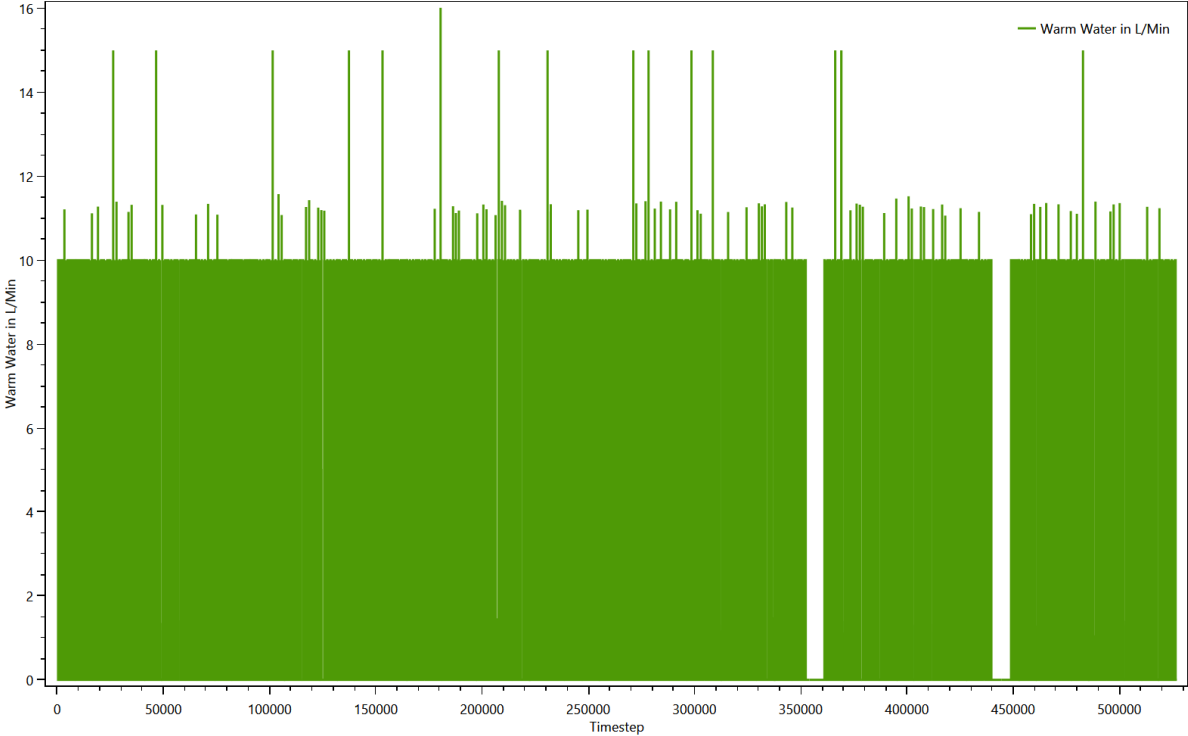## Summed up curve for Cold WaterMinMax from SumProfiles.Cold WaterMinMax..png

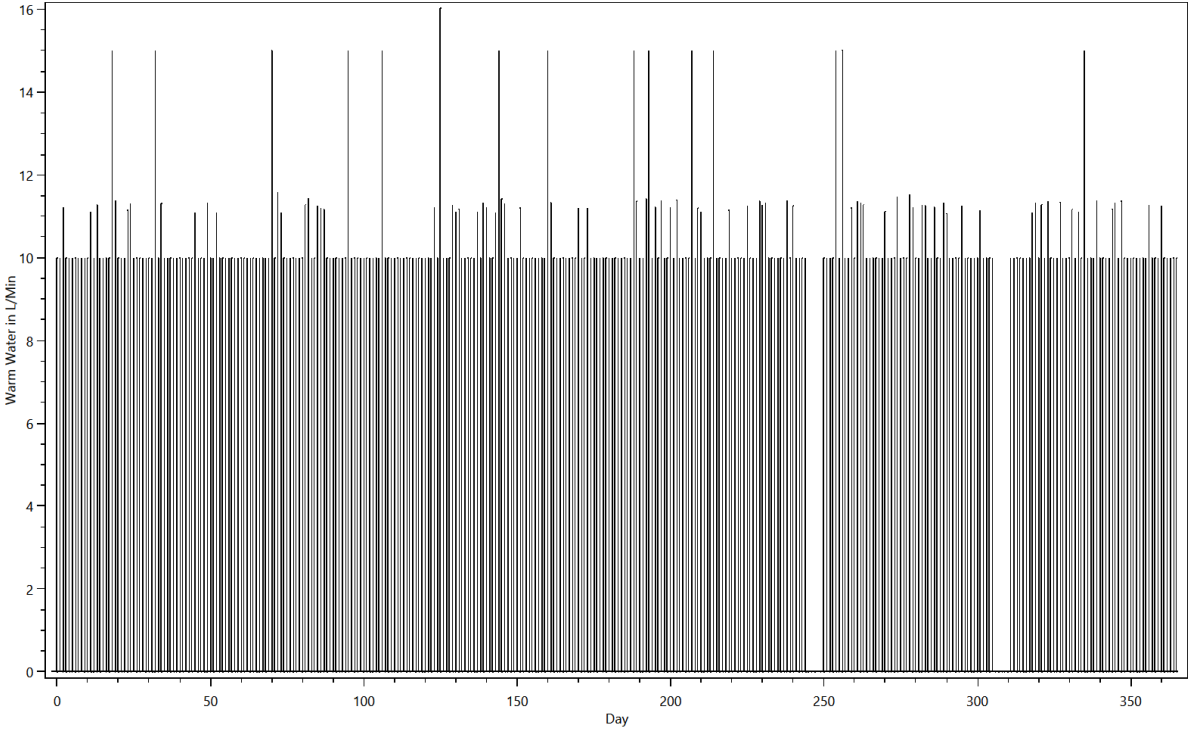## Summed up curve for Electricity from SumProfiles.Electricity.png

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.CHR24 Single woman over 65 years 0.txt

Device;Load Type;Profile;Number of Activations
Atika LH 2500 G;Electricity;0 h 15 min 100% [Synthetic];123
Bathroom Light (20W);Electricity;Bath - light [Synthetic for Light Device];335
Bathroom Mirror Light 100W (Conventional);Electricity;Bath - light [Synthetic for Light Device];335
Bathroom Sink 10L/min;Warm Water;0 h 01 min 100% [Synthetic];967
Bathroom Sink 10L/min;Warm Water;0 h 01 min 50% [Synthetic];512
Bed 8;None;08 h 0 min 100% [Synthetic];356
Bedroom Light (20W);Electricity;Bedroom - light [Synthetic for Light Device];193
CD/DVD Player / Phillips CD 380;Electricity;01 h 30 min 100% [Synthetic];368
CD/DVD Player / Phillips CD 380;Electricity;02 h 0 min 100% [Synthetic];228
CD/DVD Player / Phillips CD 380;Electricity;Standby TV / Receiver 1 h 0 min 3% [Synthetic];8493
Chair;None;0 h 10 min 100% [Synthetic];583
Cleanser;None;01 h 0 min 100% [Synthetic];107
Coffee Machine / Braun KF 580E;Electricity;0 h 10 min 100% [Synthetic];357
Couch;None;01 h 0 min 100% [Synthetic];357
Couch;None;02 h 0 min 100% [Synthetic];30
Dancing Shoes;None;03 h 0 min 100 % [Synthetic];46
Desk 2;None;0 h 30 min 100% [Synthetic];297
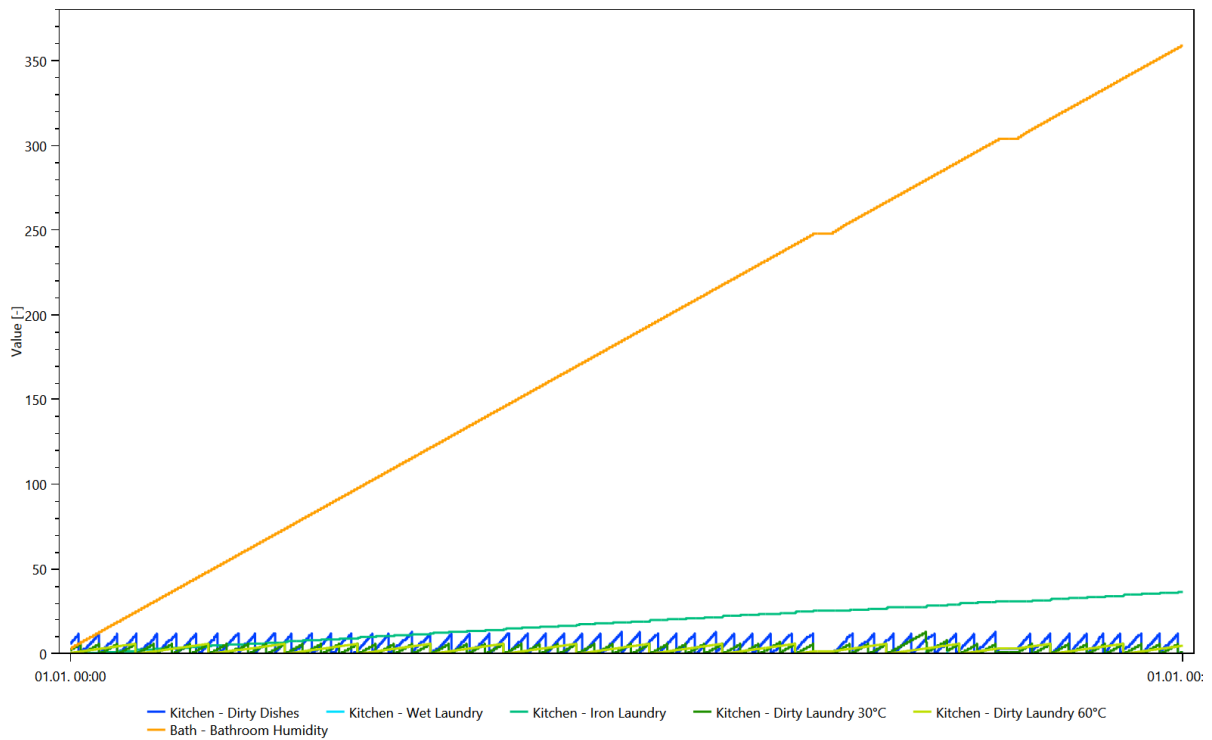Dishwasher NEFF SD6P1F (2011);Cold Water;0 h 05 min 100% [Synthetic];56
Dishwasher NEFF SD6P1F (2011);Electricity;Profile for Dishwasher NEFF SD6P1F (2011) Electricity [Measurement by ZSW (1min)];56

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