

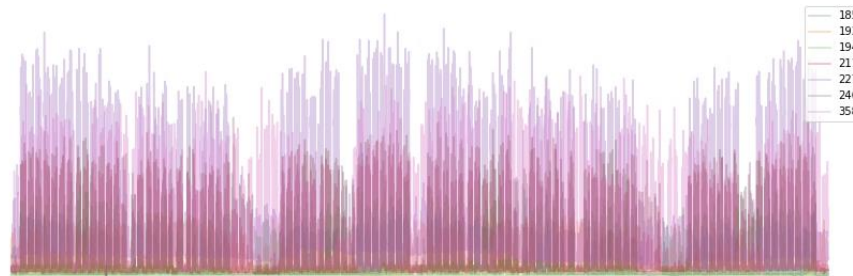
KI-Analyse von Energieverbrauchsdaten



Benjamin Adrian
Fraunhofer ITWM



Marvin Albrecht
logarithmo



2-Jahres Profil von 7 Schulen aus Wuppertal

Gefördert durch:



Bundesministerium
für Wirtschaft
und Energie

aufgrund eines Beschlusses
des Deutschen Bundestages

Welche Fragen stelle ich an eine KI

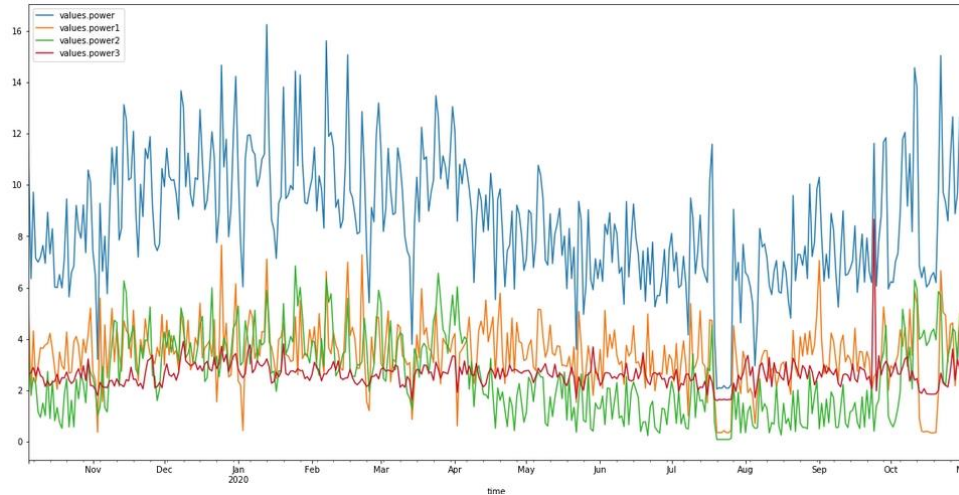
Was ist der aktuelle **Verbrauchszustand**?

Hat sich mein **Verbrauchsprofil verändert**?

Wodurch verändert sich der Verbrauch?

Gibt es **ähnliche** Verbrauchsprofile

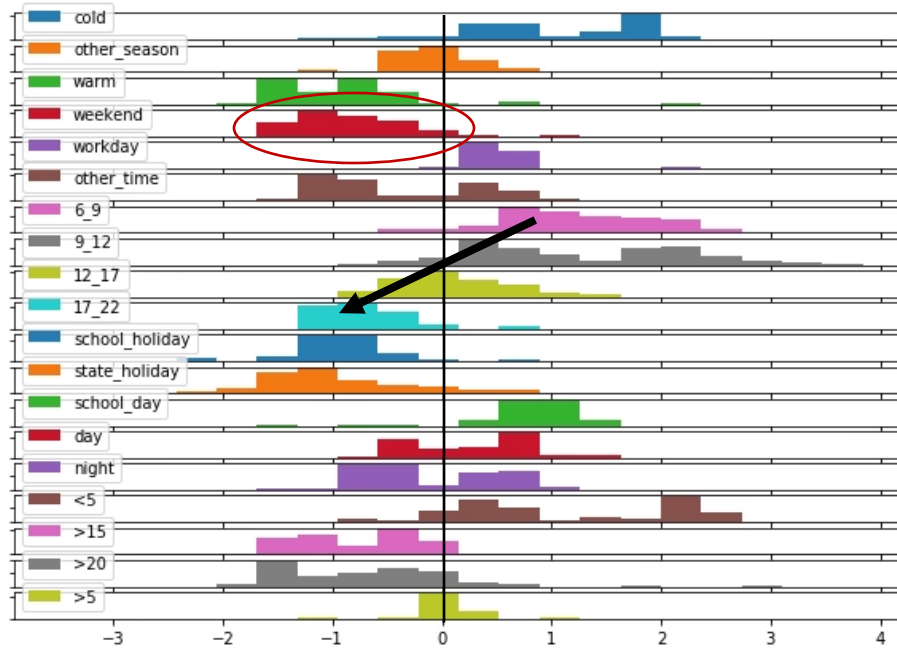
Ist der Verbrauch zu **hoch**?



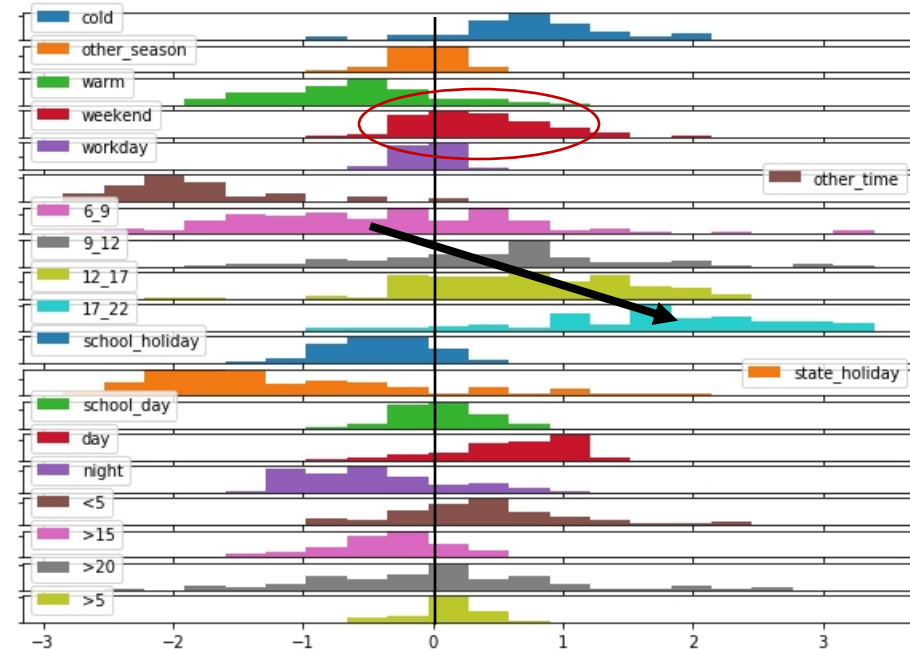
Welche **energiesparende Maßnahmen** sind zu empfehlen?

Wie **verbessere** ich den Verbrauch?

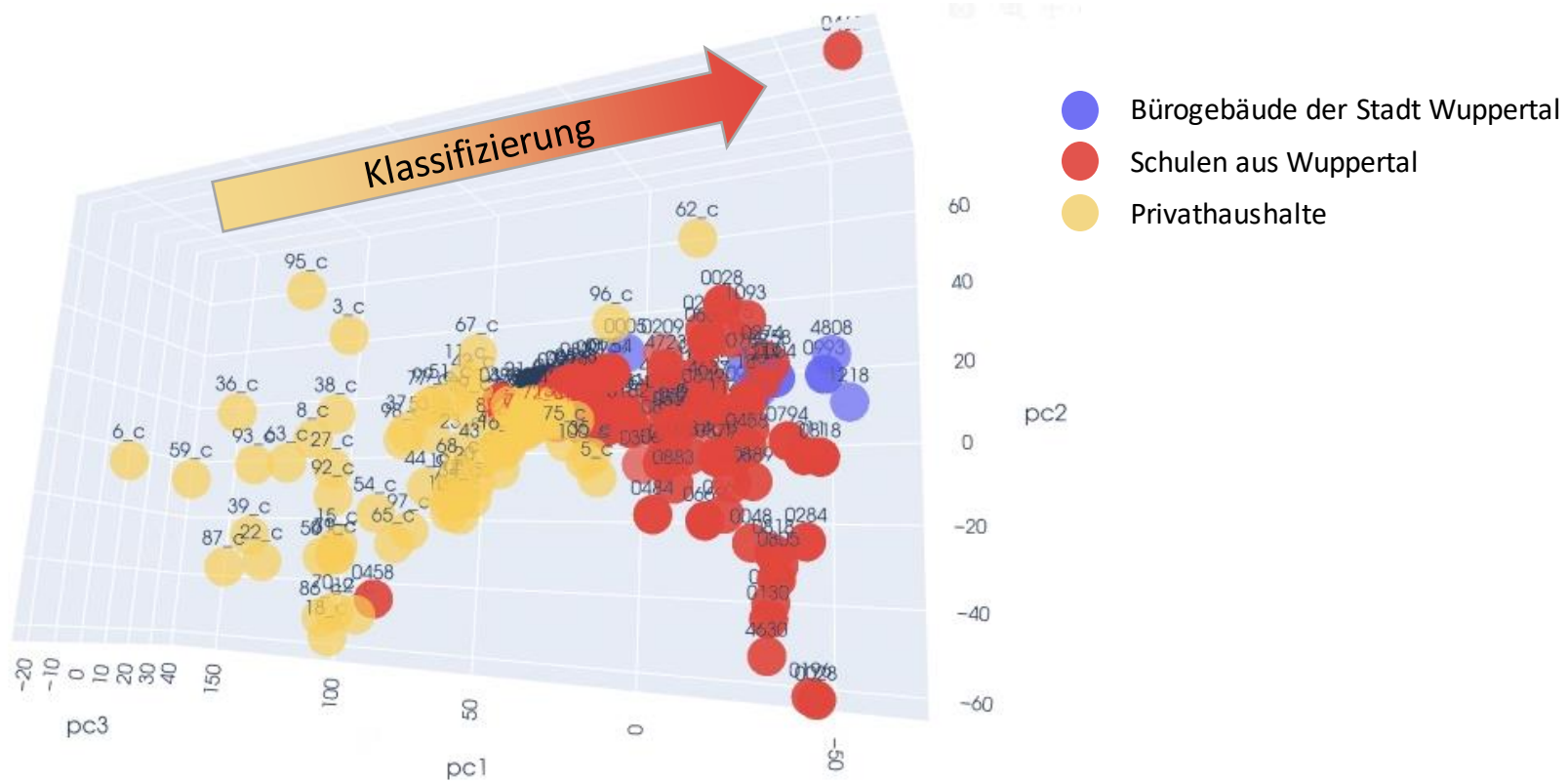
Schulen aus Wuppertal



Privathaushalte über Discoverygy



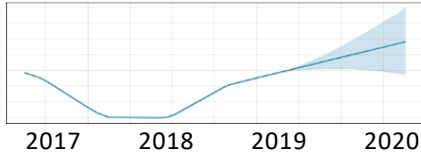
Verbrauchsprofile lassen sich separieren



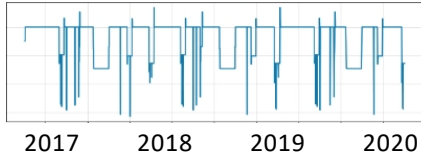
Dekomposition von Verbrauchprofilen

Eine Schule

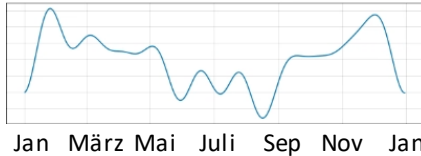
Trend



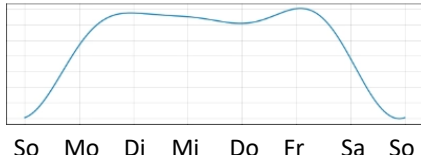
Ereignisse



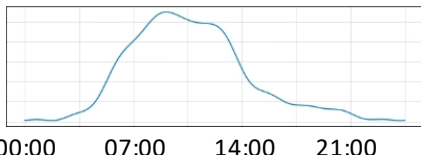
Jahresprofil



Wochenprofil

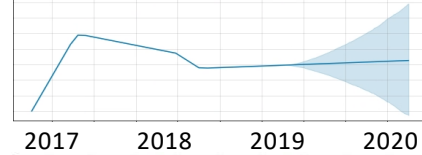


Tagesprofil

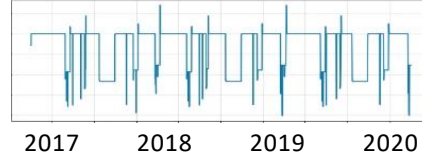


Durchschnitt Schule

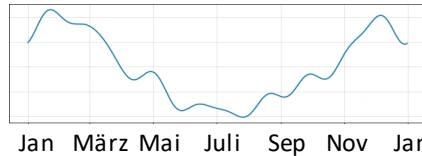
Trend



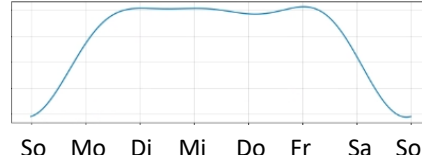
Ereignisse



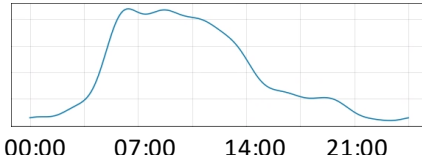
Jahresprofil



Wochenprofil

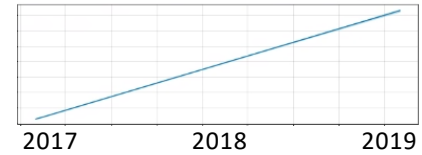


Tagesprofil

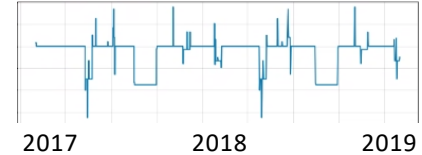


Ein Privathaushalt

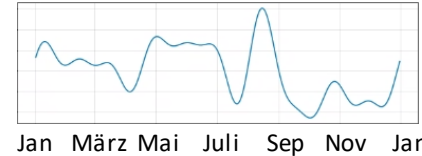
Trend



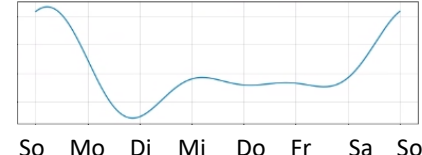
Ereignisse



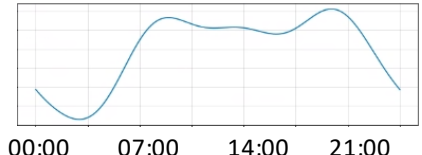
Jahresprofil



Wochenprofil

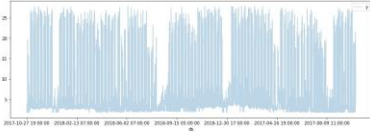


Tagesprofil

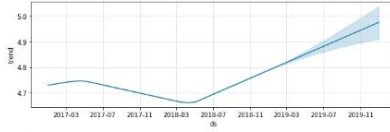


Zusammenfassung

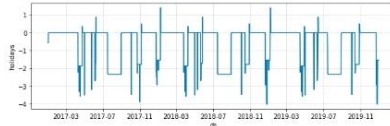
Verbrauchsdaten



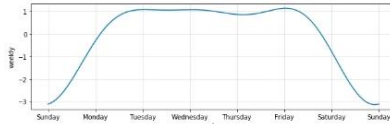
Trend
(Changepoints)



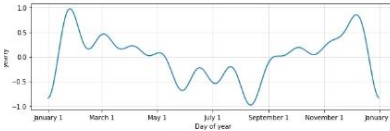
Ereignisse
(Feiertag)



Wochenkurve



Jahreskurve



Tageskurve

