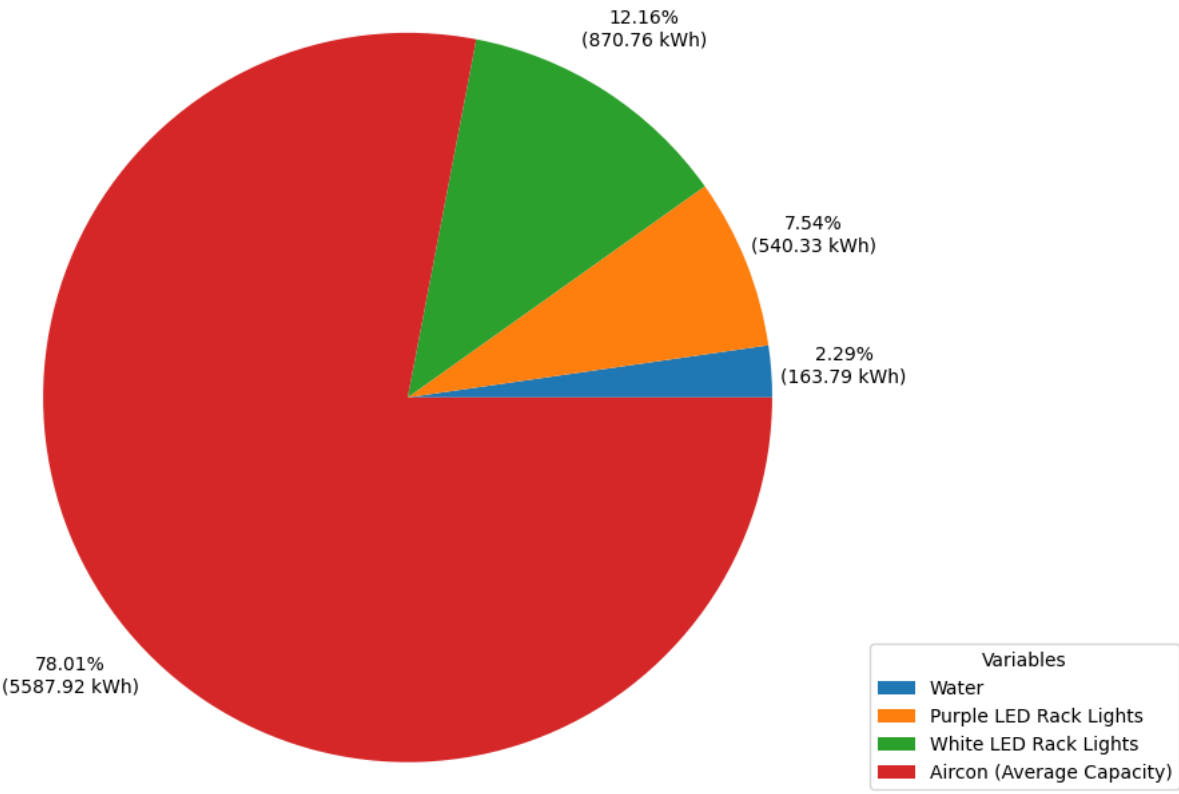
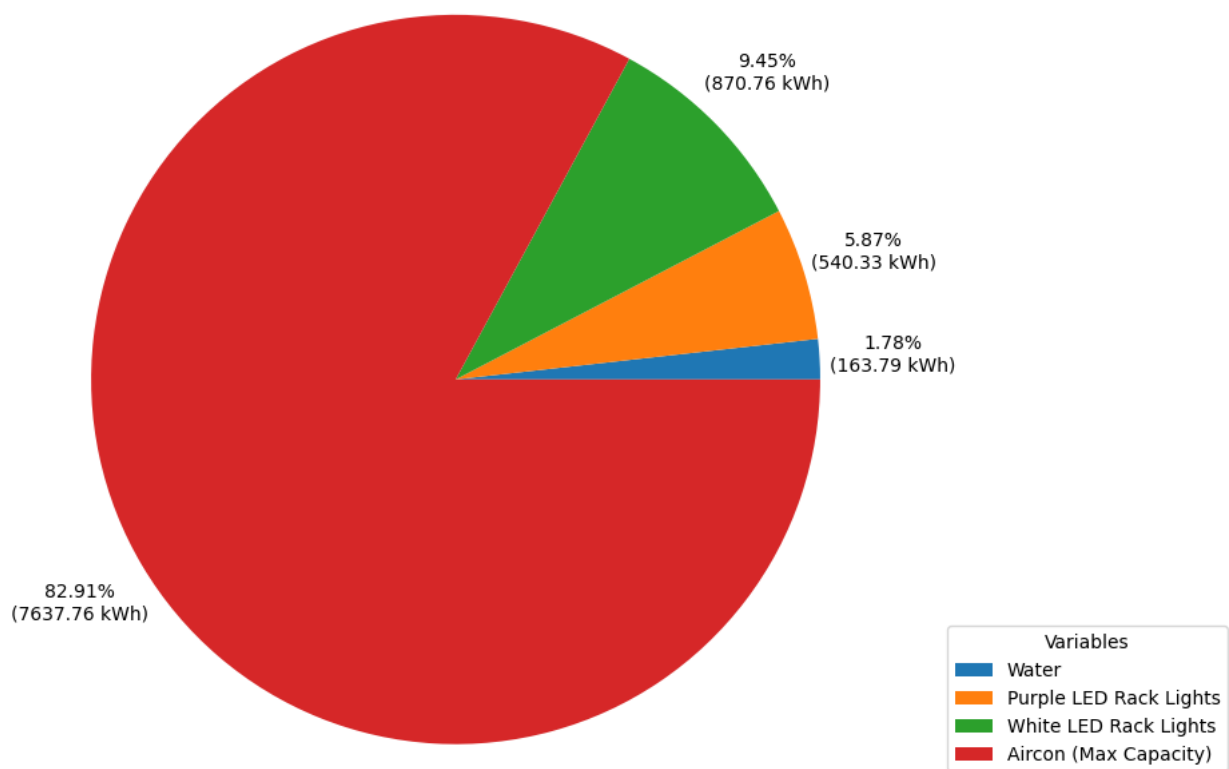


Historical Analysis

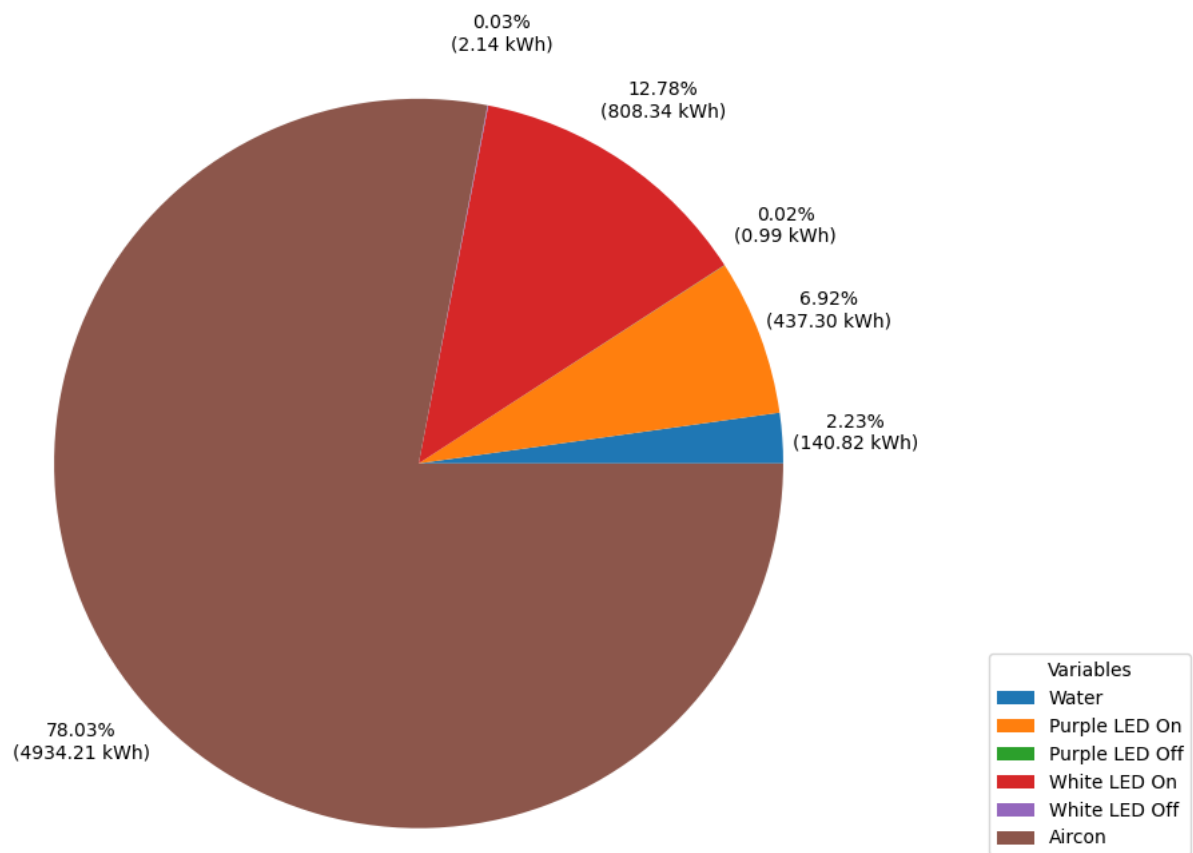
Variables that Affect Monthly Power Consumption - Average Capacity



Variables that Affect Monthly Power Consumption - Max Capacity



Variables that Affect Monthly Power Consumption



Cost Efficiency Output:

Amount spent during the day: \$61.79

Amount spent during the night: \$105.77

Most cost efficient period is from 0700-1900.

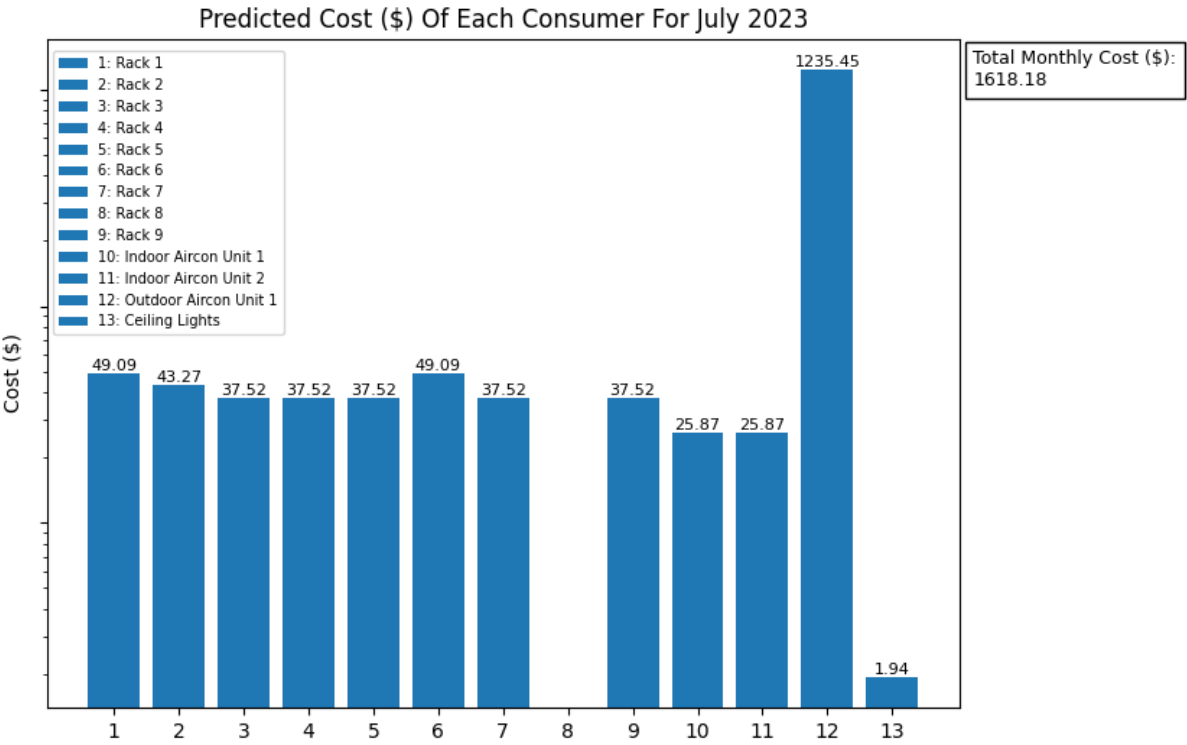
Average power per hour consumed > 31 degree celsius: 905.40 W/h

Average power per hour consumed > 27 and > 31 celsius: 482.31 W/h

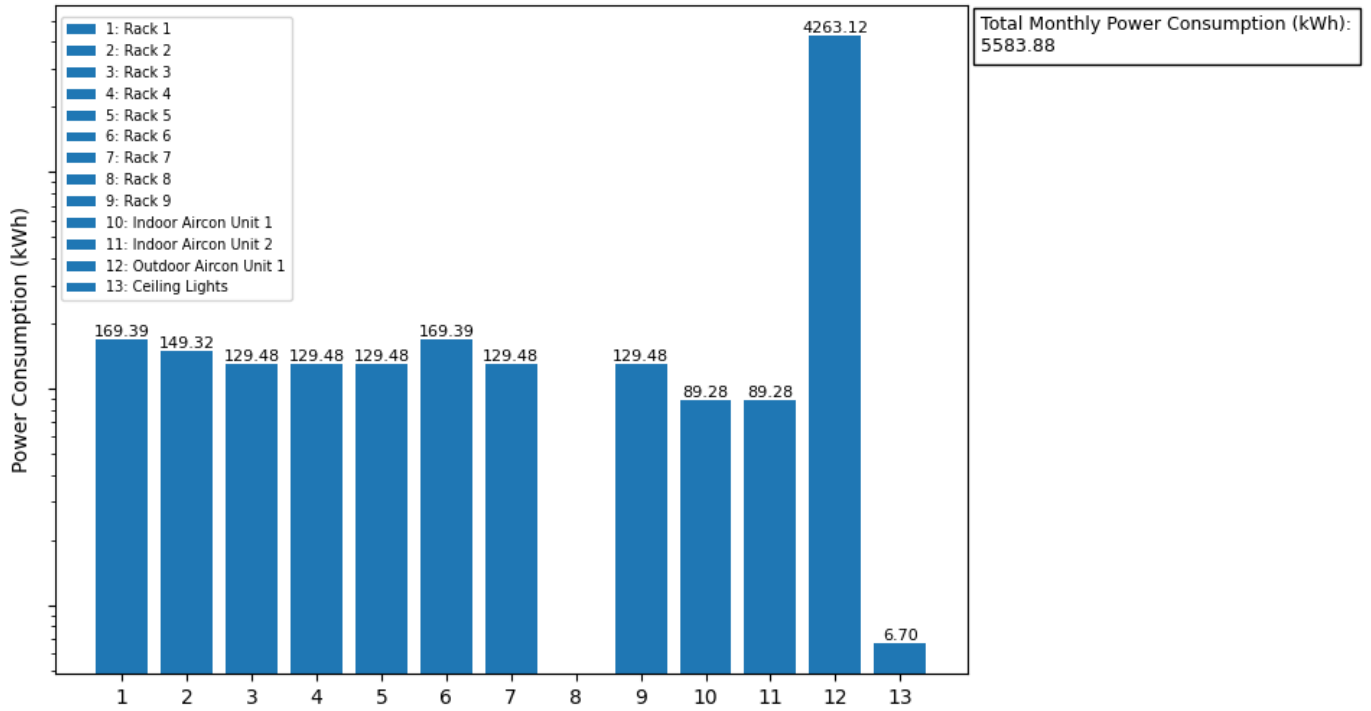
Average power per hour consumed < 27 degree celsius: 807.06 W/h

Most cost efficient season is when temperature is between 27 and 31 degree celsius.

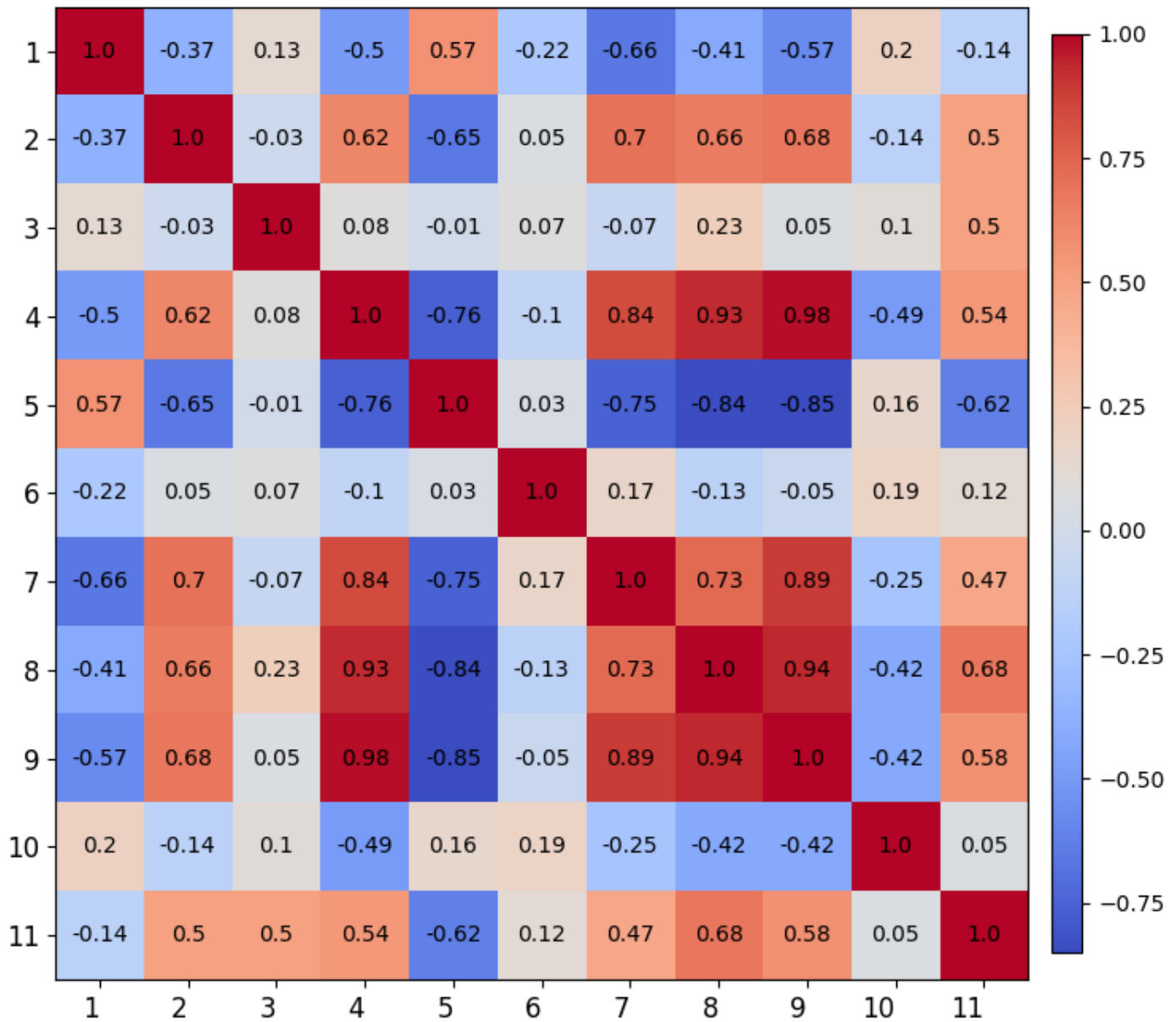
Prediction Analysis



Predicted Power Consumption (kWh) Of Each Consumer For July 2023

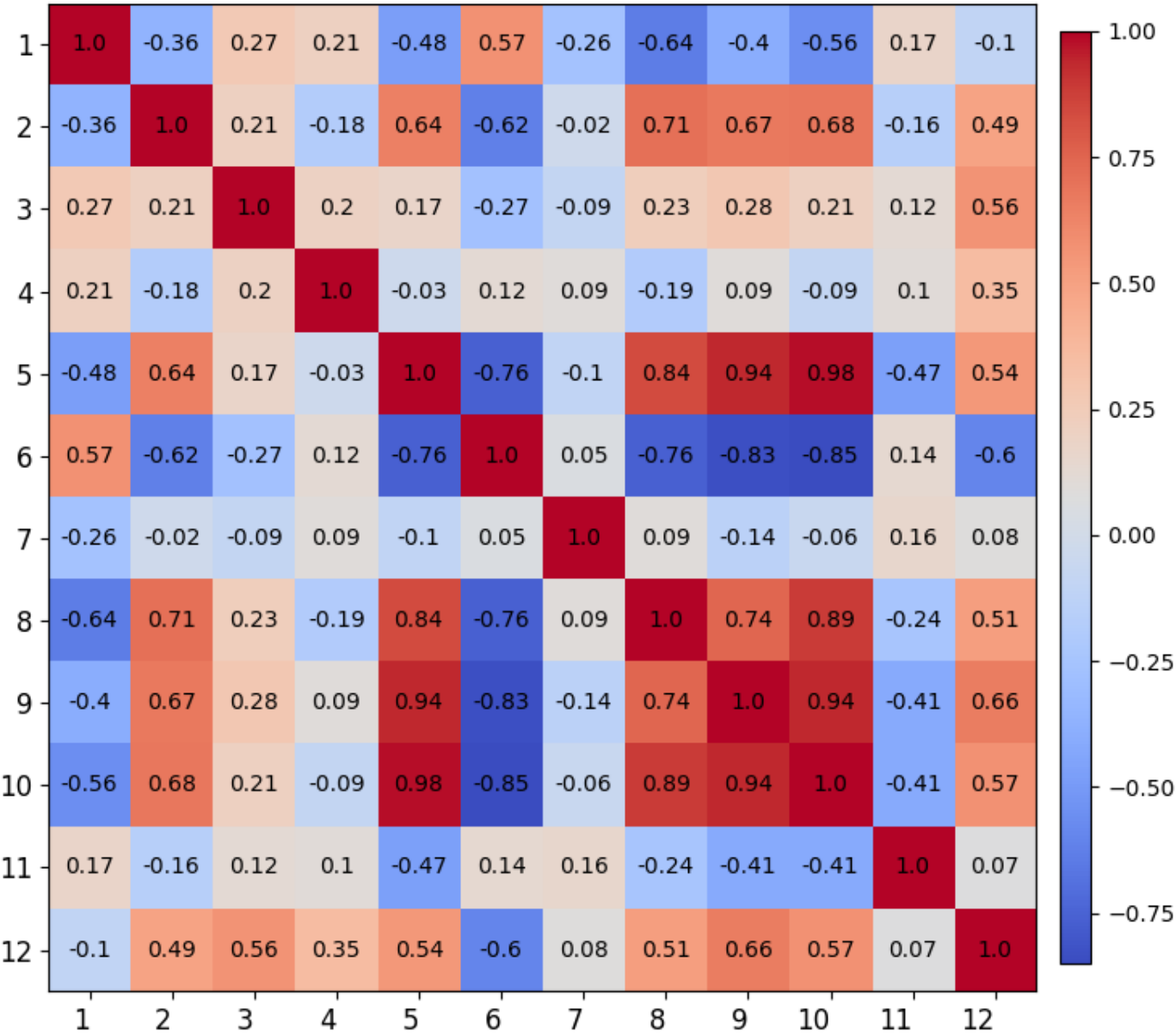


Correlation between Internal and External Farm Conditions



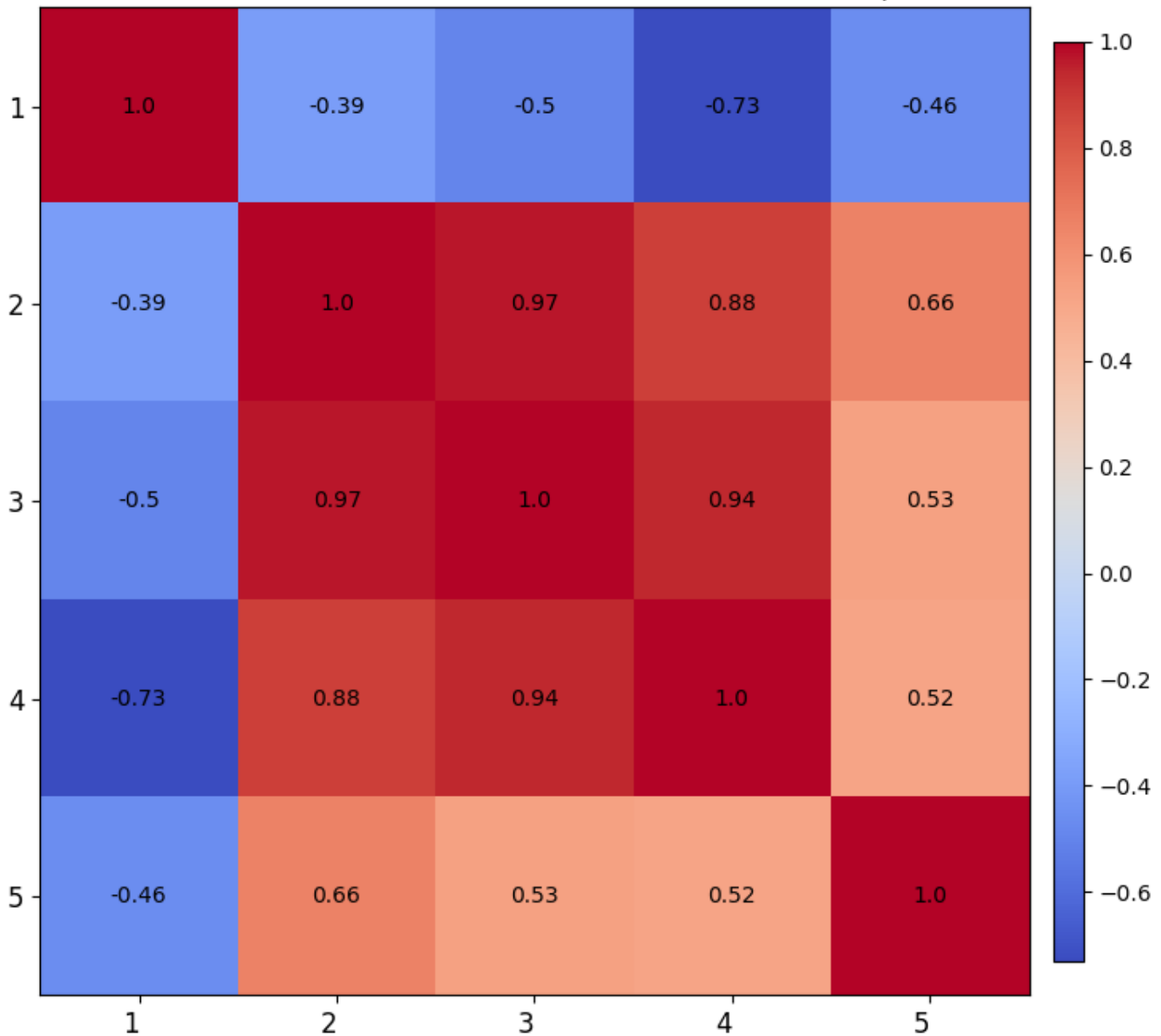
ID	Variable
1	Daily Average Farm Humidity
2	Daily Average Farm Temperature
3	cloudiness
4	feels_like
5	humidity
6	pressure
7	temp_max
8	temp_min
9	temperature
10	wind_deg
11	wind_speed

Correlation between farm environmental conditions to estimated power consumption



ID	Variable
1	Daily Average Farm Humidity
2	Daily Average Farm Temperature
3	Daily Farm Power Consumption
4	cloudiness
5	feels_like
6	humidity
7	pressure
8	temp_max
9	temp_min
10	temperature
11	wind_deg
12	wind_speed

Historical Weather data vs Historical Farm Power Consumption



ID	Variable
1	daily_rainfall_total
2	maximum_temperature
3	mean_temperature
4	minimum_temperature
5	total_power_consumption

