

# Patient Report

## 1. Reading Statistics

Metric	Percentage
Time in Range (90–180 mg/dL)	43.81 %
Hypoglycemia (<70 mg/dL)	4.06 %
Hyperglycemia (>200 mg/dL)	29.93 %

## 2. Glucose Level Distribution

### Hourly averages

Hour	Avg BG (mg/dL)
Highest (04:00)	257.0
Lowest (14:00)	141.2

### Weekly averages

Day	Avg BG (mg/dL)
Highest (Friday)	183.2
Lowest (Wednesday)	152.5

## 3. Trends Over Time

- Trend slope: 0.074 mg/dL per day
- Interpretation: Blood glucose is gradually increasing over time

## 4. Overnight Glucose Stability

Metric	Value
Median overnight BG drift	0.0 mg/dL
Nights with upward drift (>20 mg/dL)	7.7 %
Nights with downward drift (<-20 mg/dL)	11.5 %

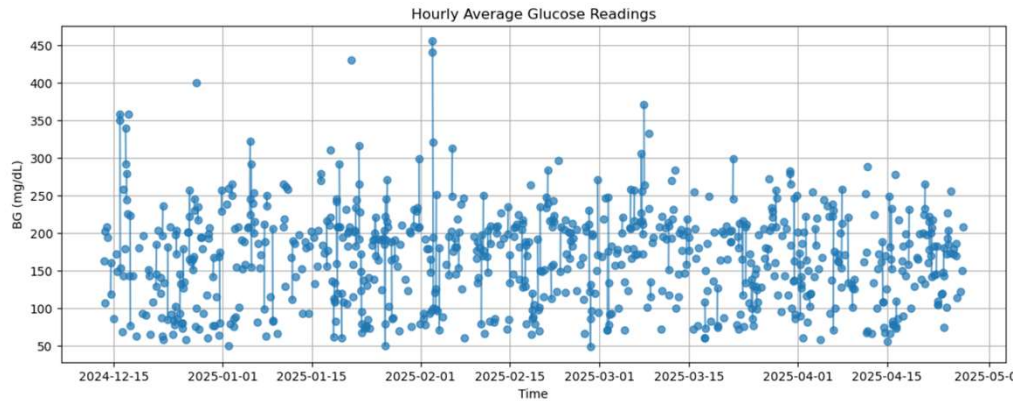
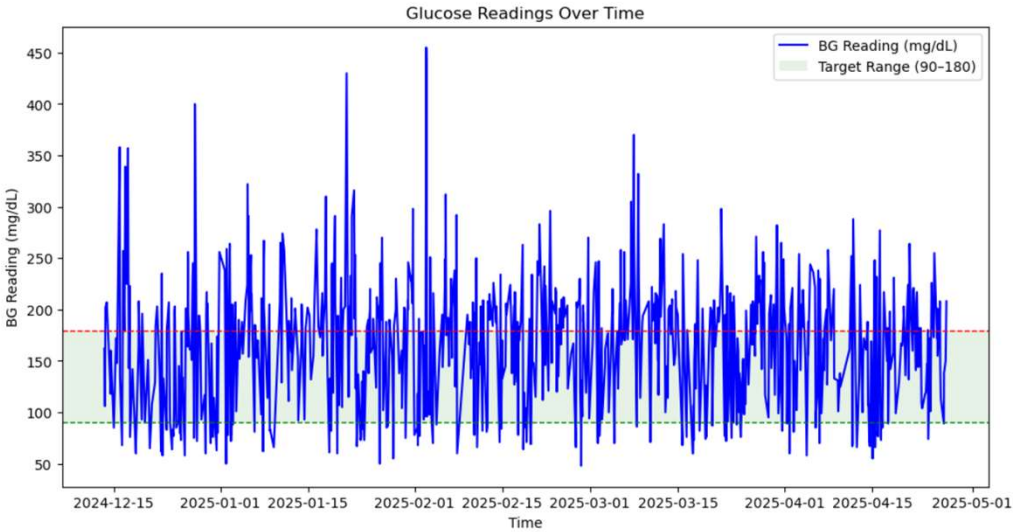
## 5. Alerts

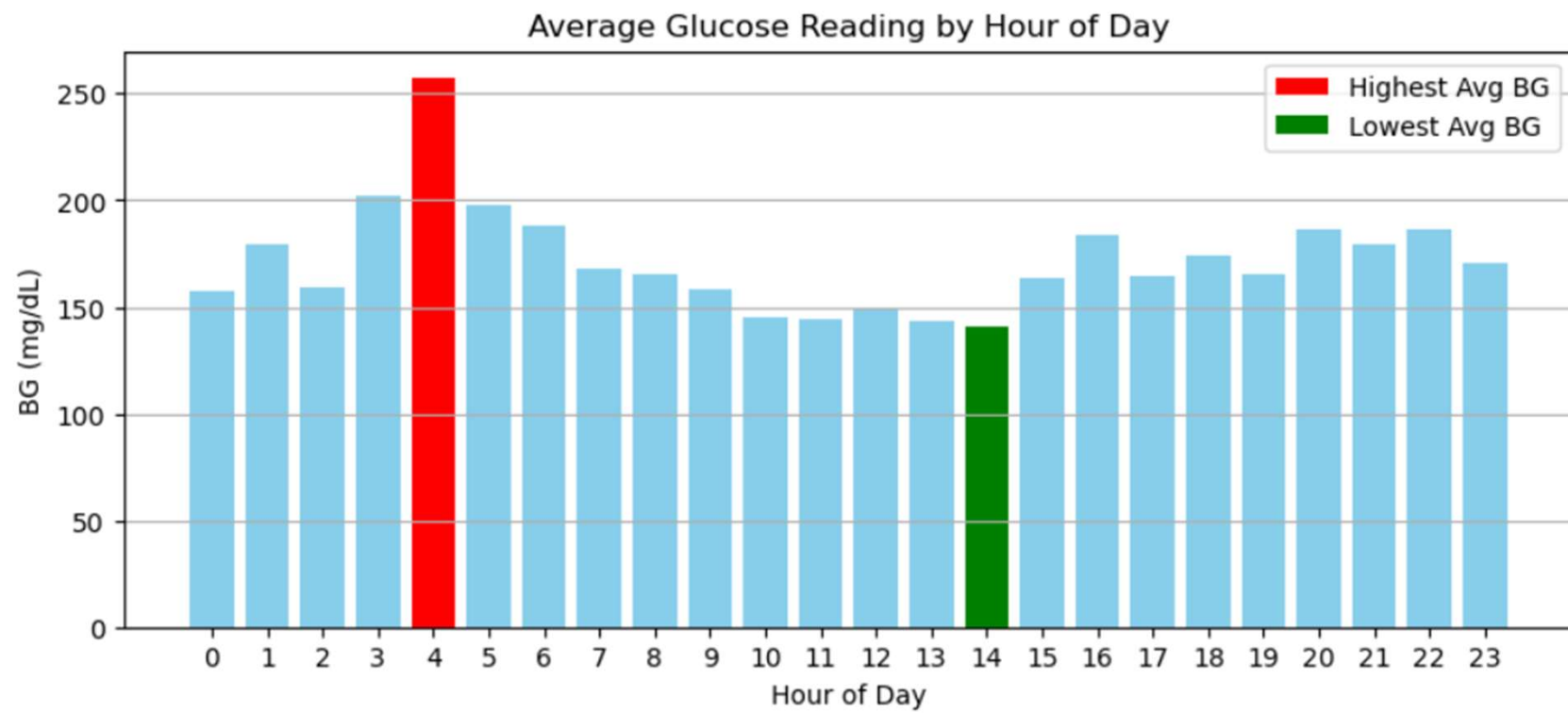
### Low sugar alerts

Day Type	Peak Hour	Count
Weekday	16:00	36
Weekend	18:00	14

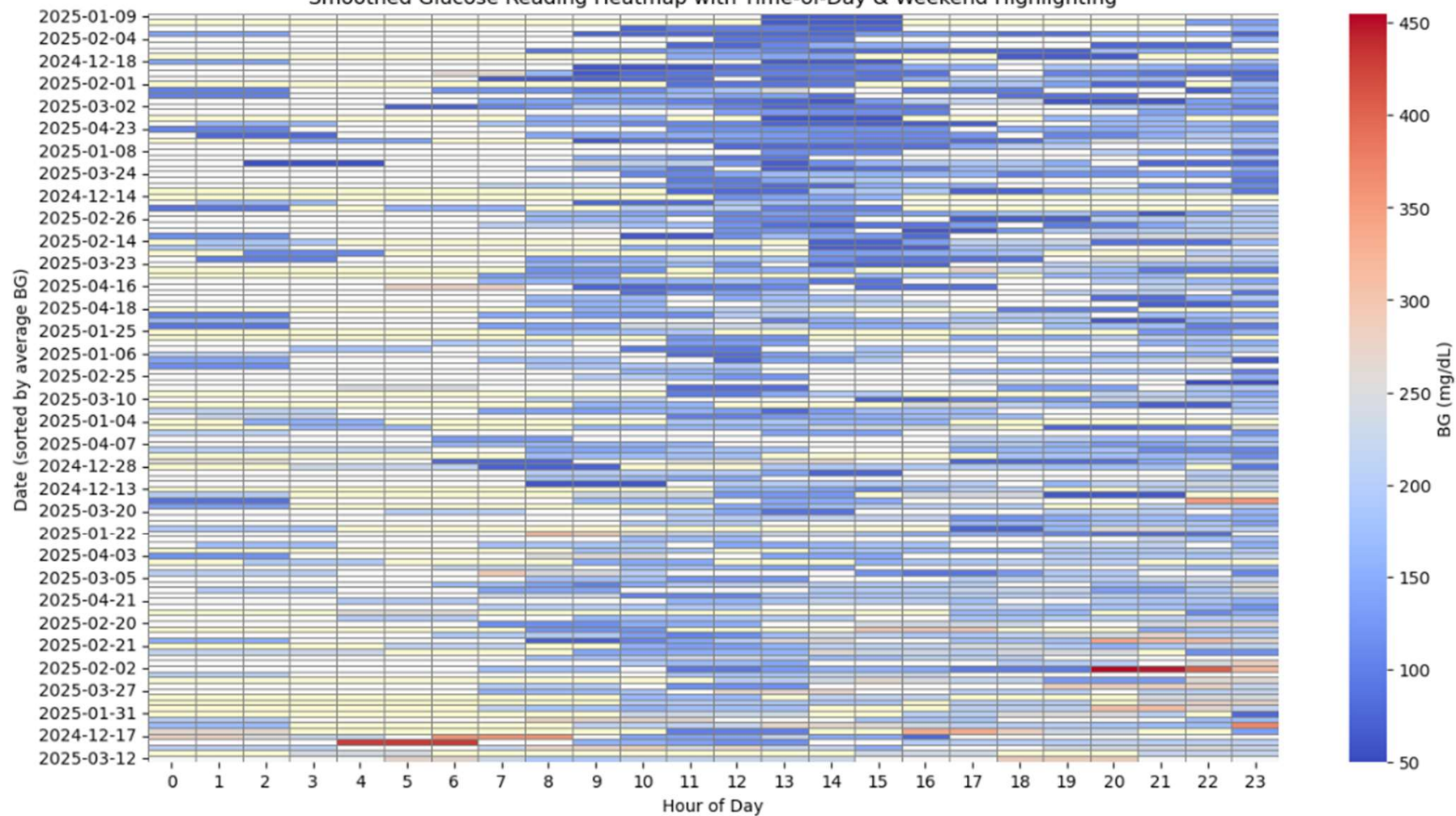
### High sugar alerts

Day Type	Peak Hour	Count
Weekday	23:00	18
Weekend	20:00	12

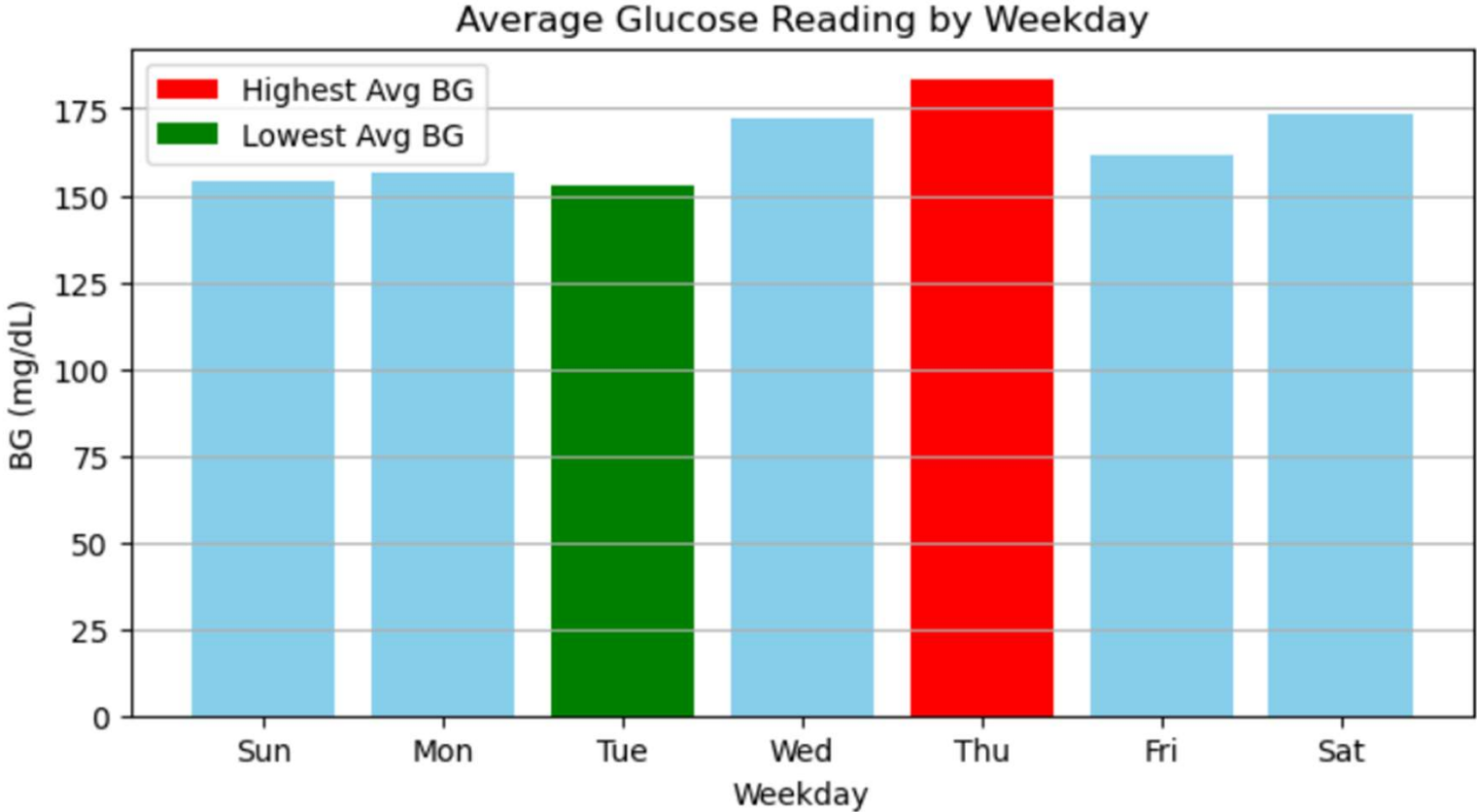




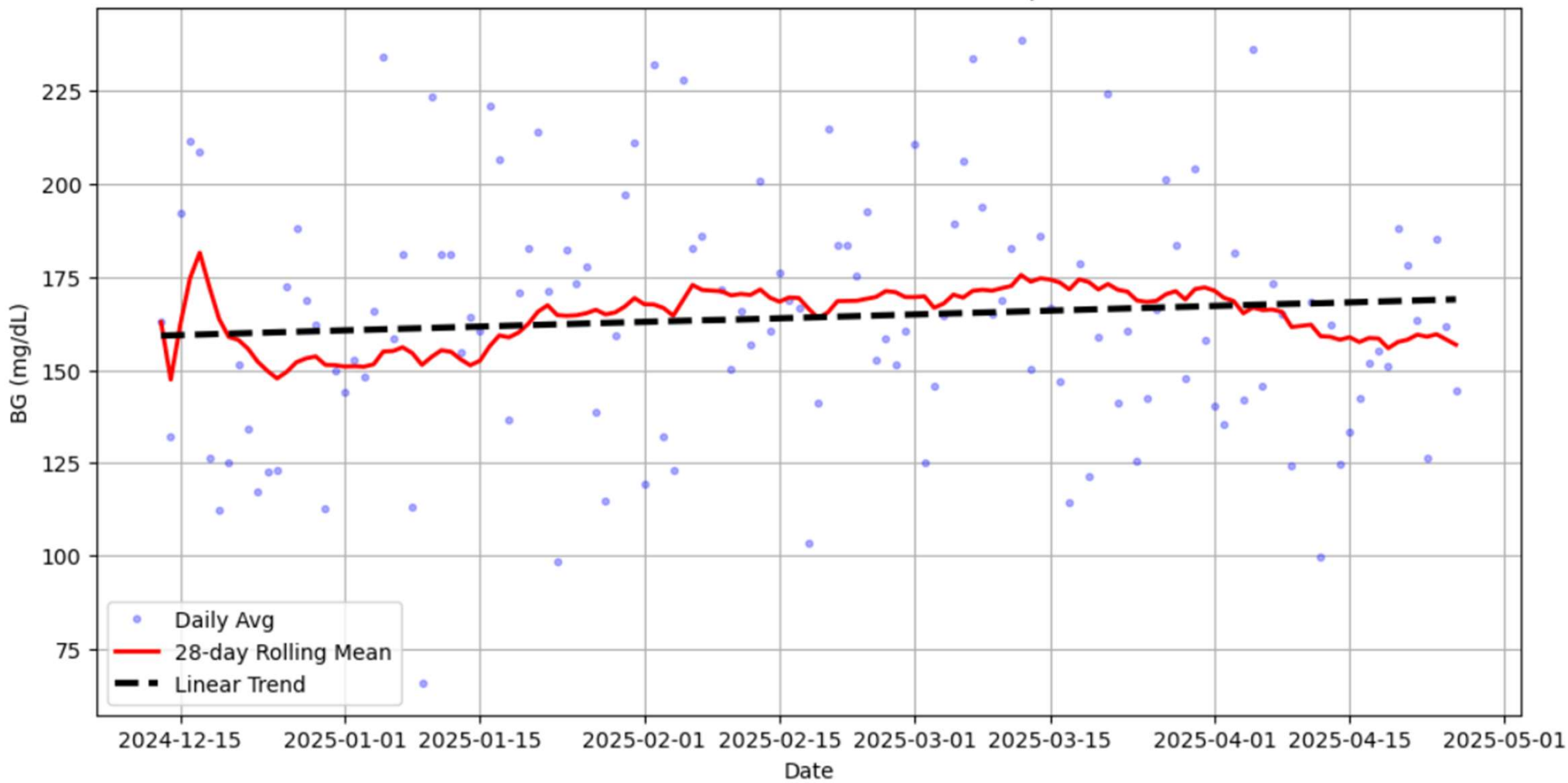
Smoothed Glucose Reading Heatmap with Time-of-Day & Weekend Highlighting



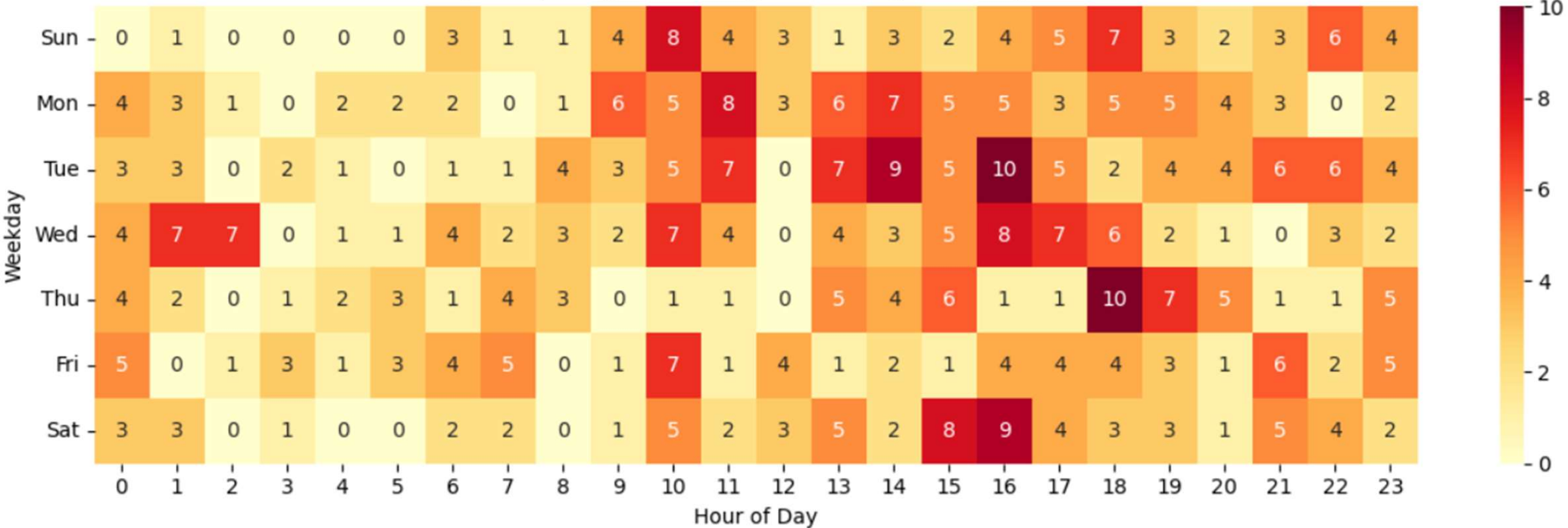
Highest average BG is on Thu → 183.2 mg/dL  
Lowest average BG is on Tue → 152.5 mg/dL



Glucose Level's Trend with Linear Slope



Heatmap: Frequency of Low Sugar Alerts by Weekday and Hour



Heatmap: Frequency of High Sugar Alerts by Weekday and Hour

