Beacon 29 Operation During Period of 2020-06-01 to 2020-09-01

Introduction

The following presentation is a summary of the Beacon data from the study period indicated above.

Sensor Data

Total Volatile Organic Compounds

The TVOC values and reliability are summarized below

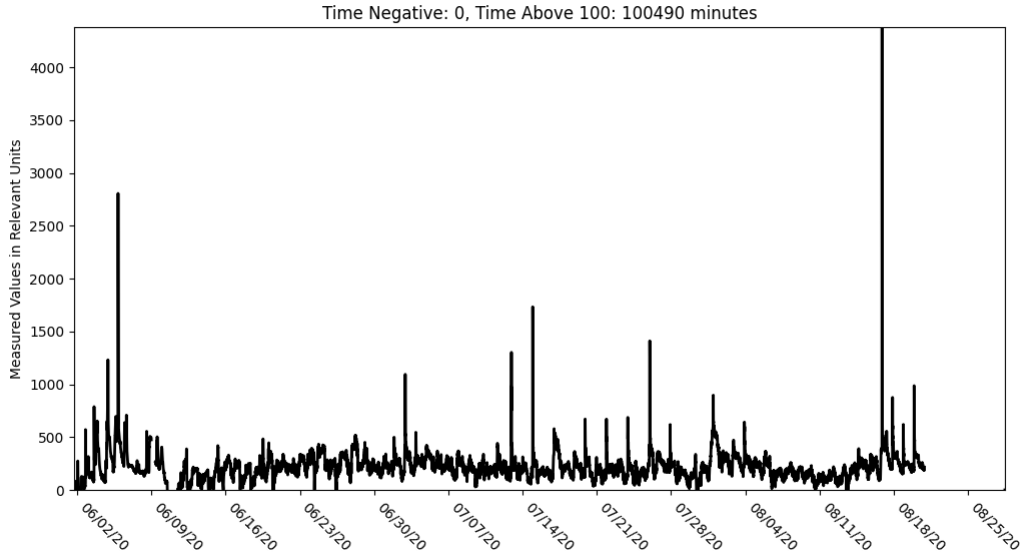

Figure 1.1 TVOC timeseries data with units of parts-per-million during the study period

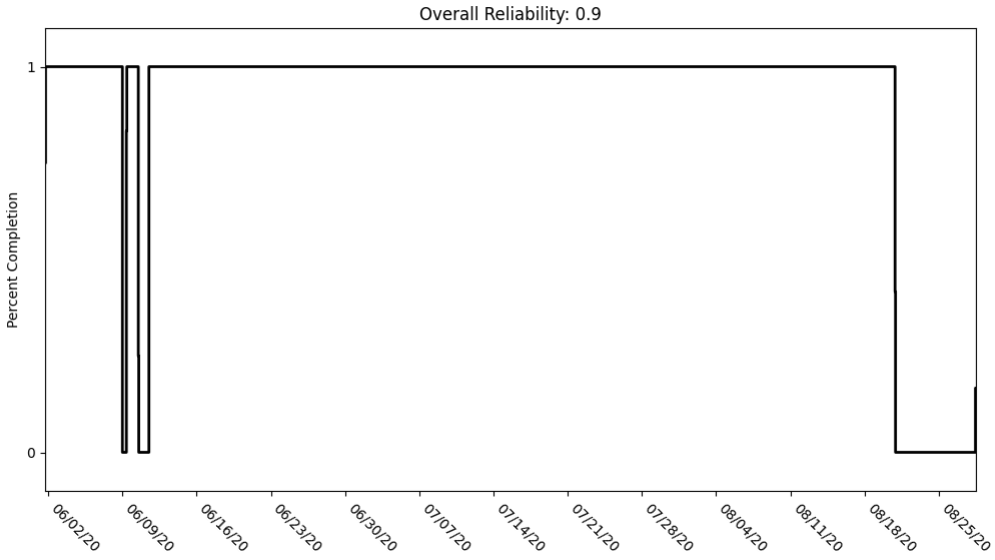

Figure 1.2 Reliability of the TVOC sensor during the study period

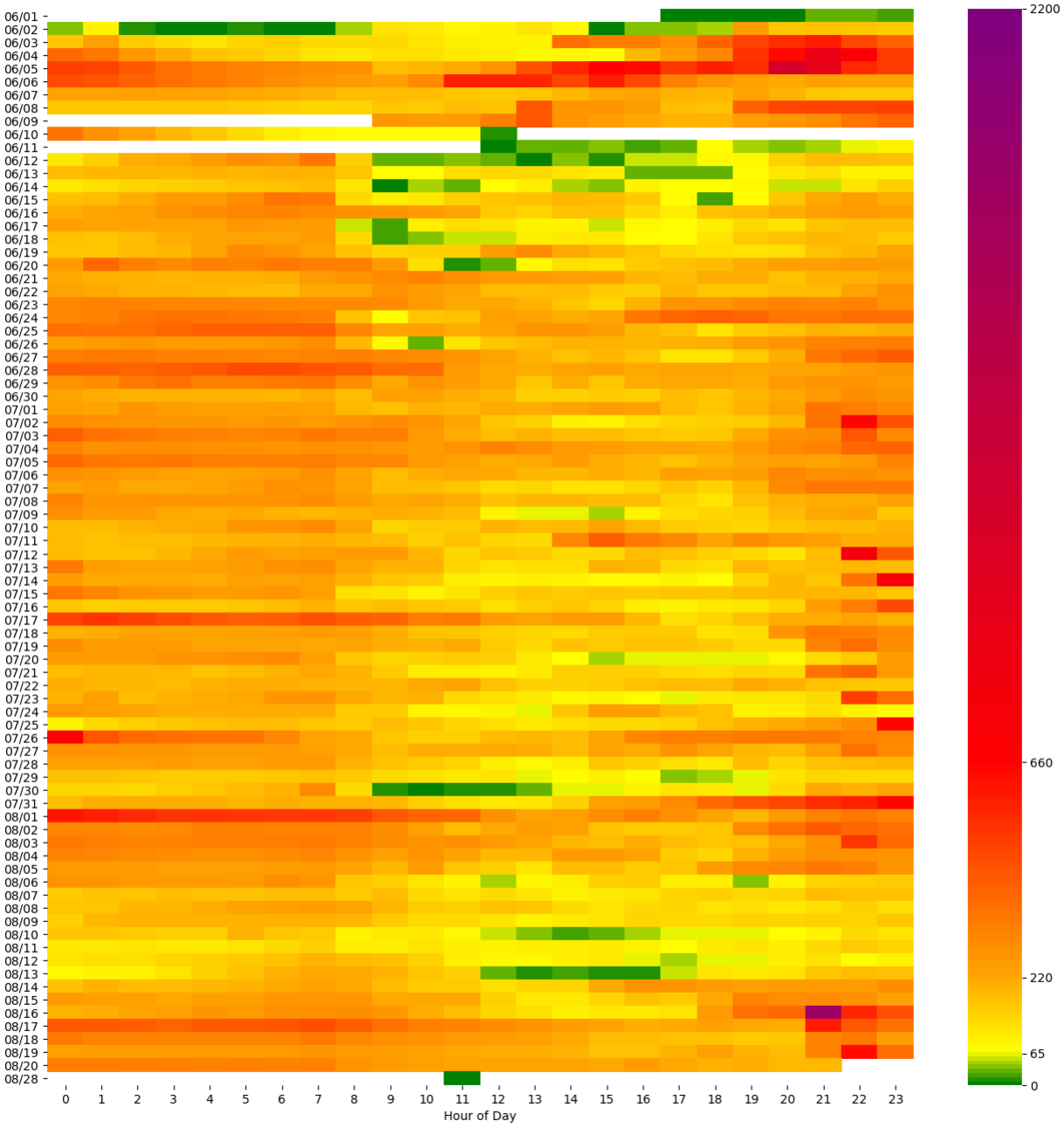

Figure 1.3 Heatmap of TVOC measurements during the study period

Light Levels

The light level values and reliability are summarized below

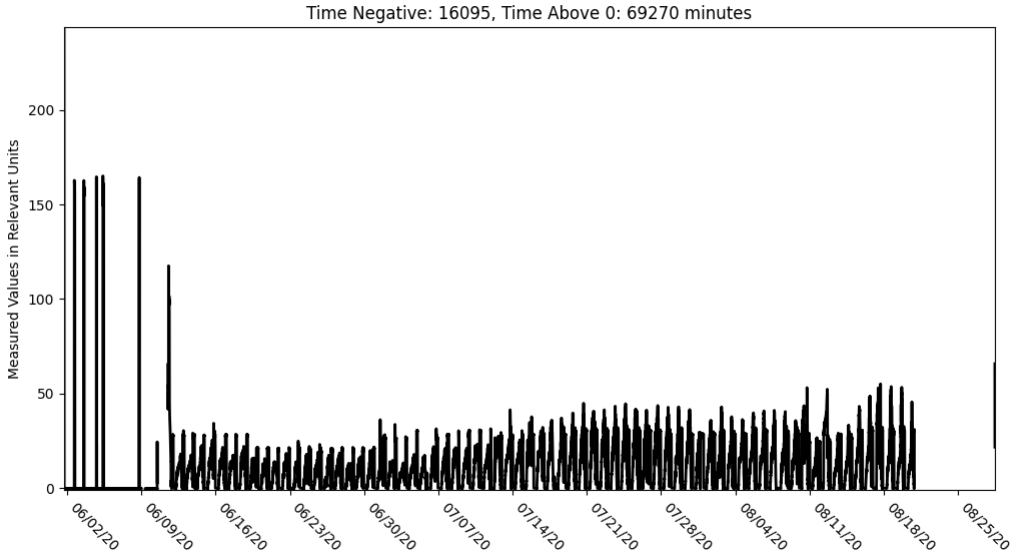

Figure 2.1 Light level timeseries data in units of lux during the study period

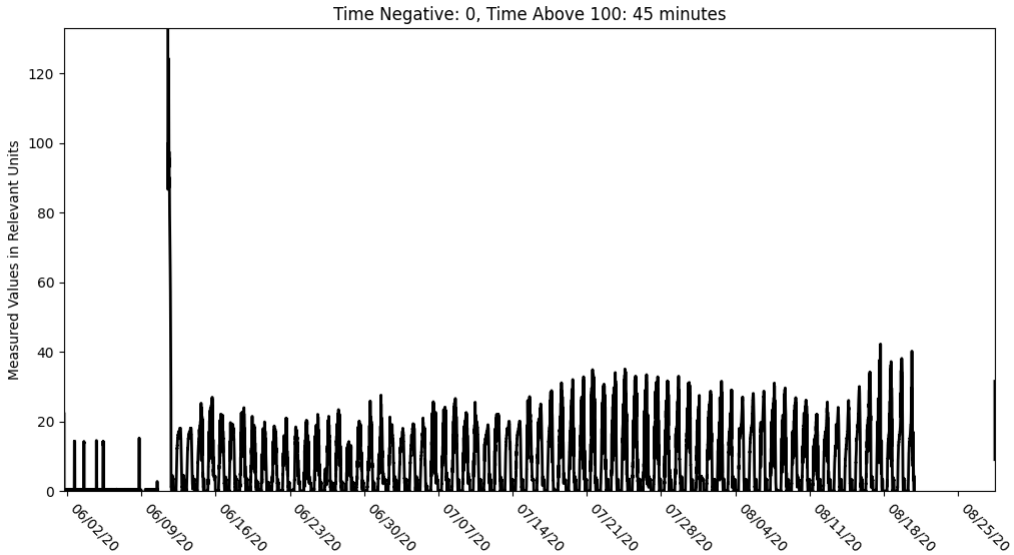

Figure 2.2 Infrared levels during the study period

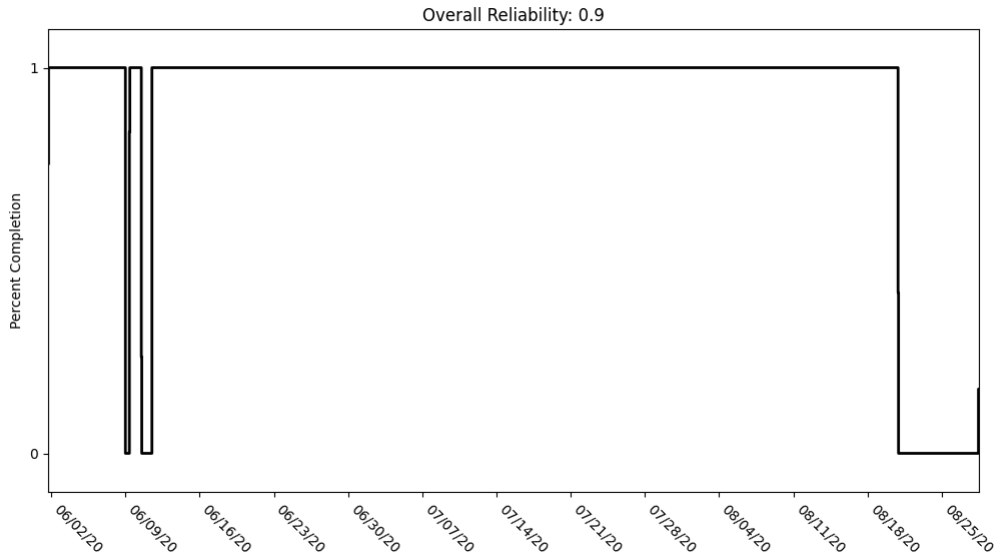

Figure 2.3 Reliability of the light sensor during the study period

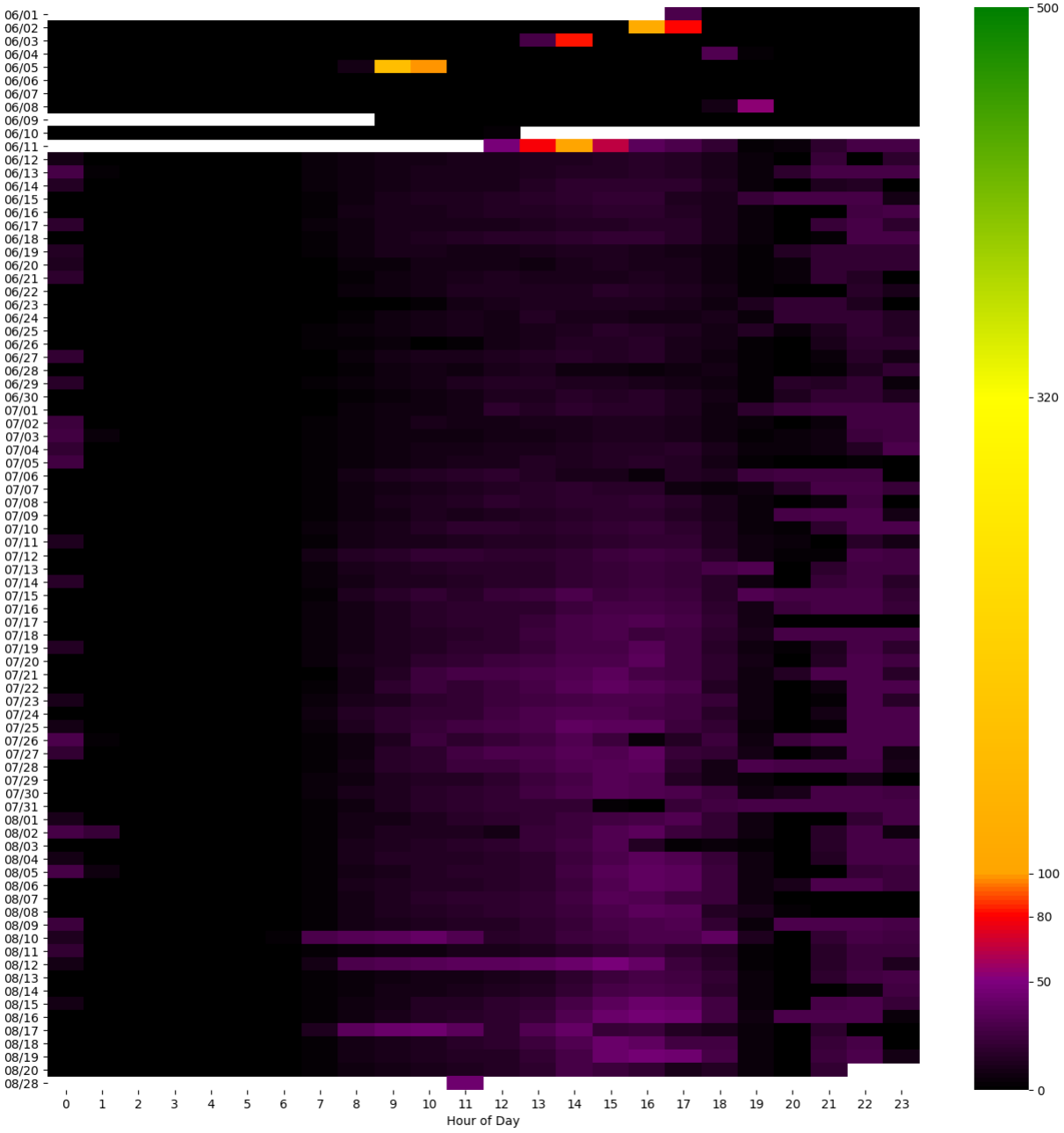

Figure 2.4 Heatmap of light measurements during the study period

Nitrogen Dioxide

The NO2 values and reliability are summarized below

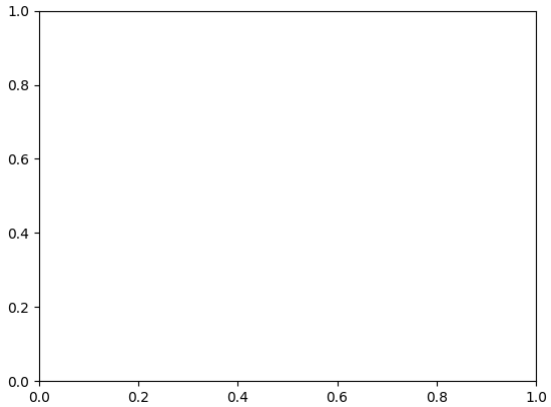

Figure 3.1 NO2 timeseries data with units of parts-per-billion during the study period

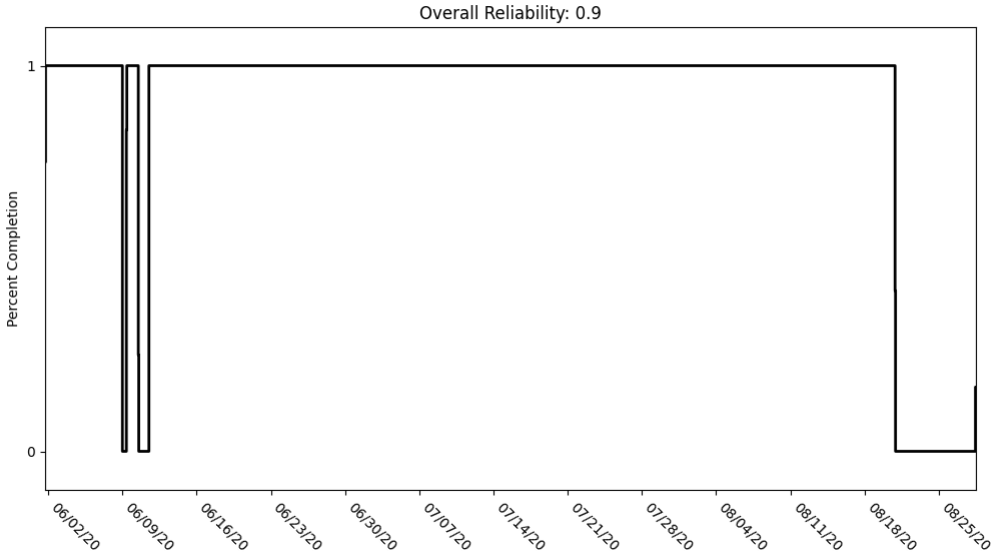

Figure 3.2 Reliability of the NO2 sensor during the study period

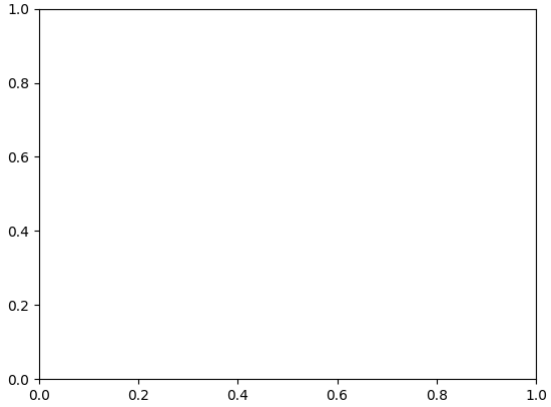

Figure 3.3 Heatmap of the NO2 measurements during the study period

Carbon Monoxide

The CO values and reliability are summarized below

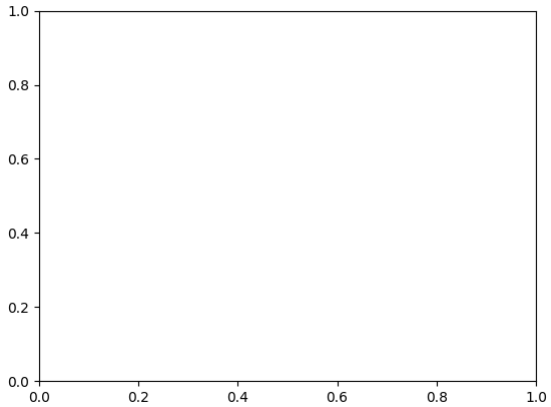

Figure 4.1 CO timeseries data with units of parts-per-billion during the study period

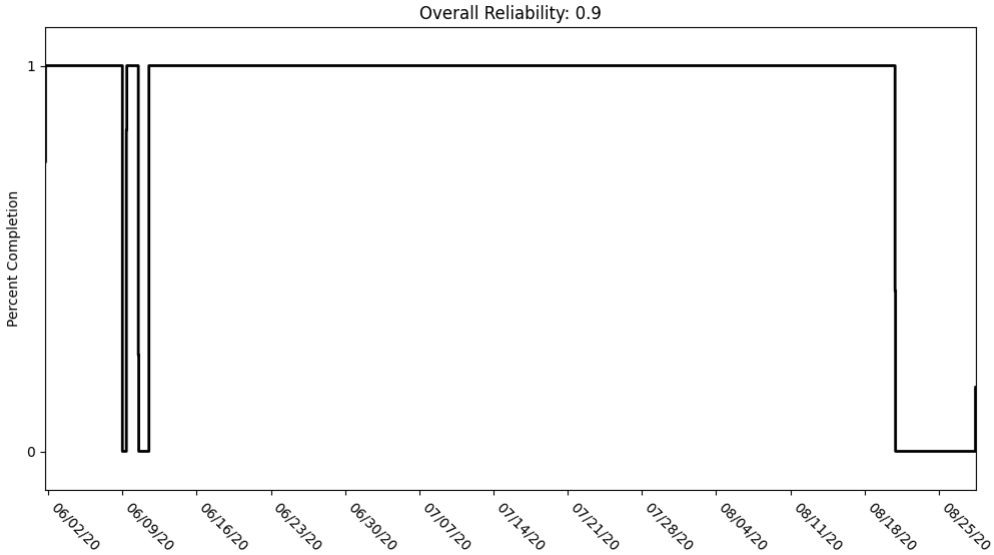

Figure 4.2 Reliability of the CO sensor during the study period

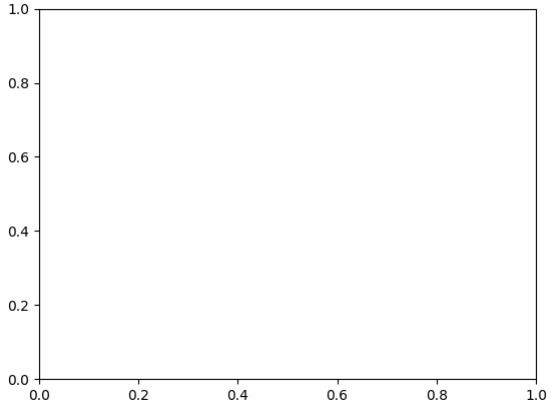

Figure 4.2 Heatmap of the CO measurements during the study period

Temperature

The temperature values from three various sensors and reliability are summarized below

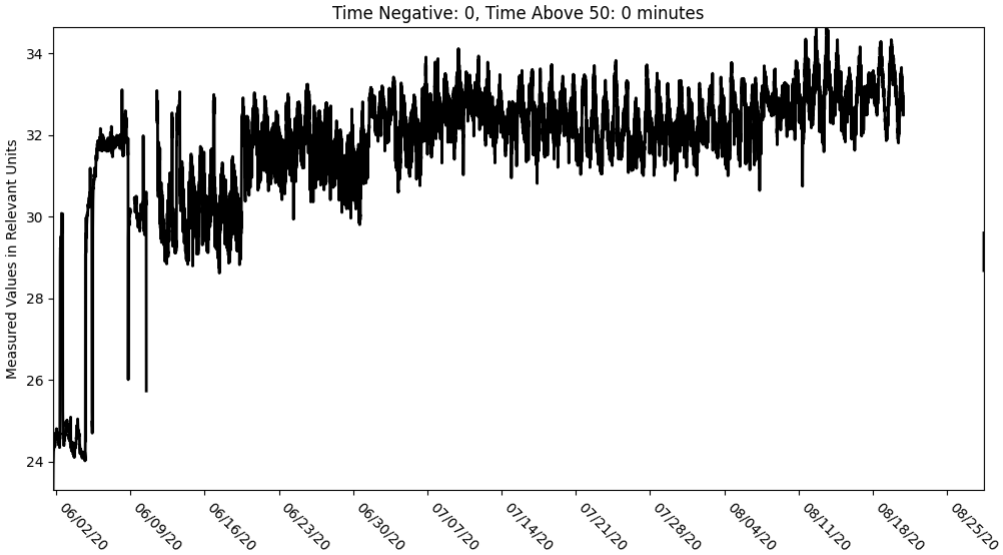

Figure 5.1 Temperature timeseries data in Celsius measured by the Sensirion SCD30 sensor

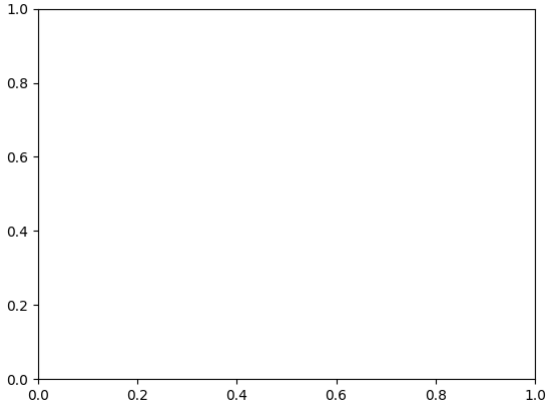

Figure 5.2 Temperature timeseries data in Celsius measured by the DGS-CO sensor

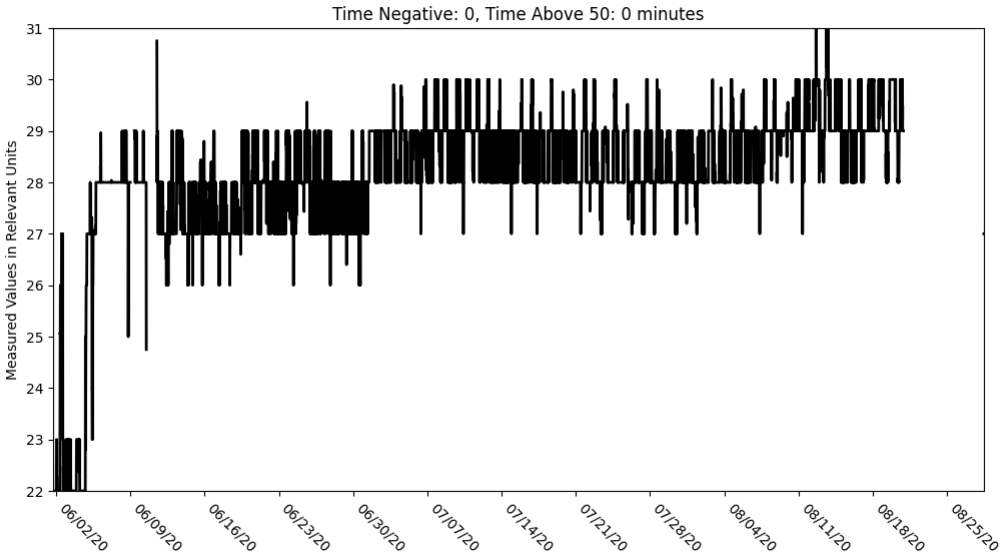

Figure 5.3 Temperature timeseries data in Celsius measured by the DGS-NO2 sensor

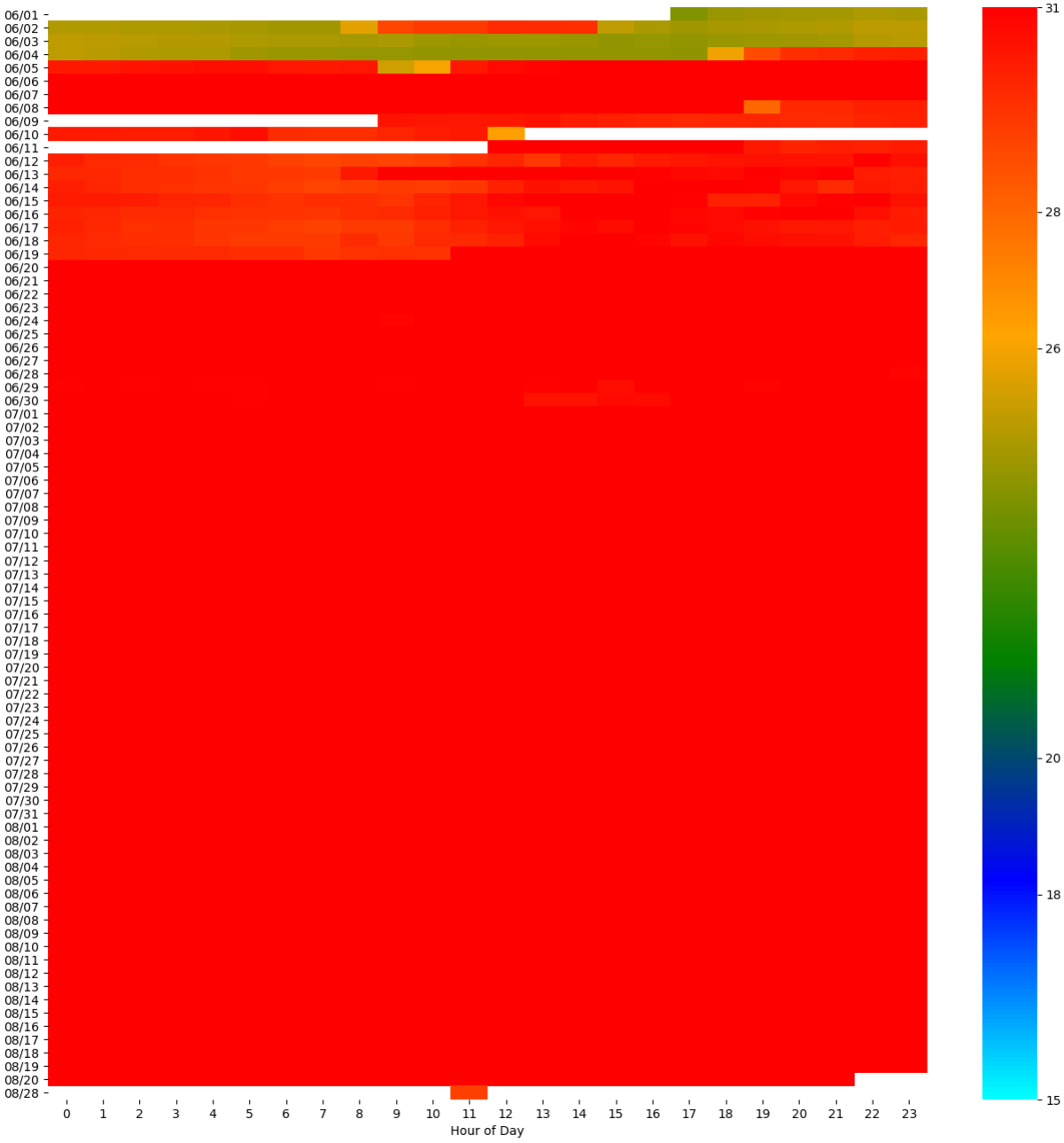

Figure 5.4 Temperature heatmap data in Celsius measured by the Sensirion SCD30 sensor

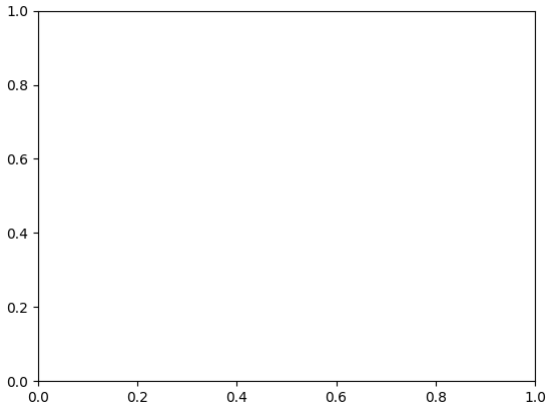

Figure 5.5 Temperature heatmap data in Celsius measured by the DGS-CO sensor

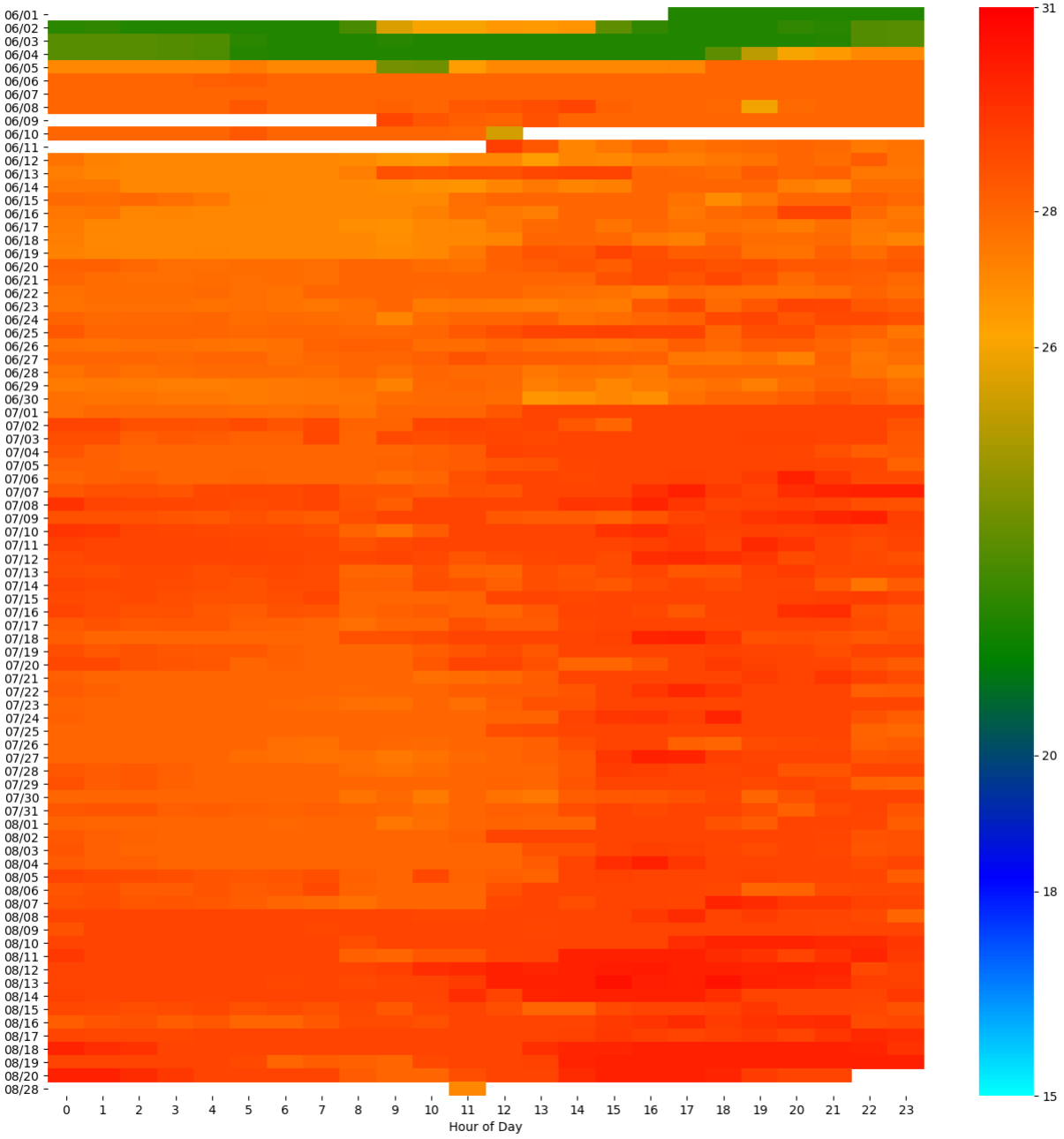

Figure 5.6 Temperature heatmap data in Celsius measured by the DGS-NO2 sensor

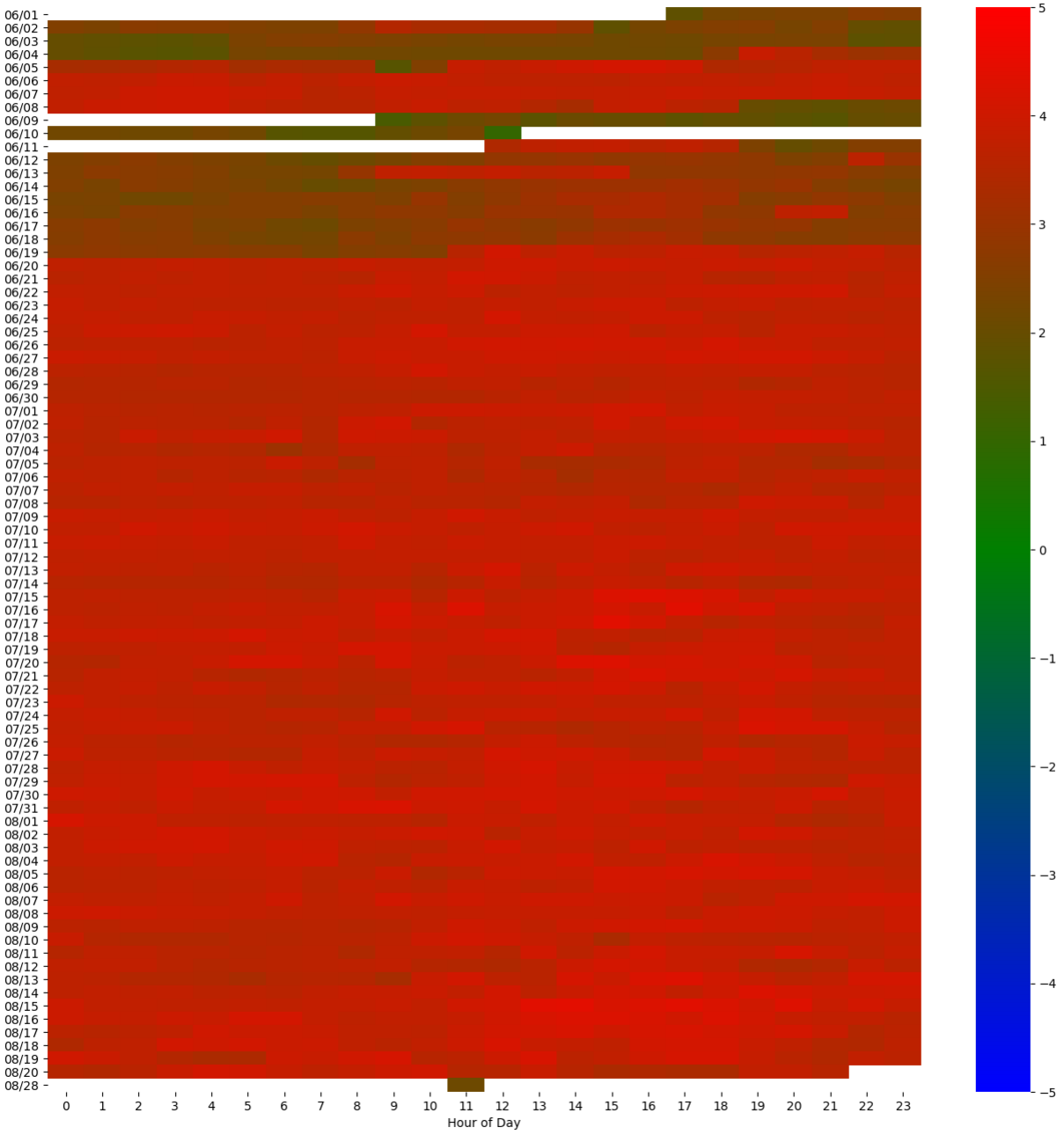

Figure 5.7 Difference in temperature measured by Sensirion and the average DGS (Sensirion - mean DGS)

Relative Humidity

The RH values from three various sensors and reliability are summarized below

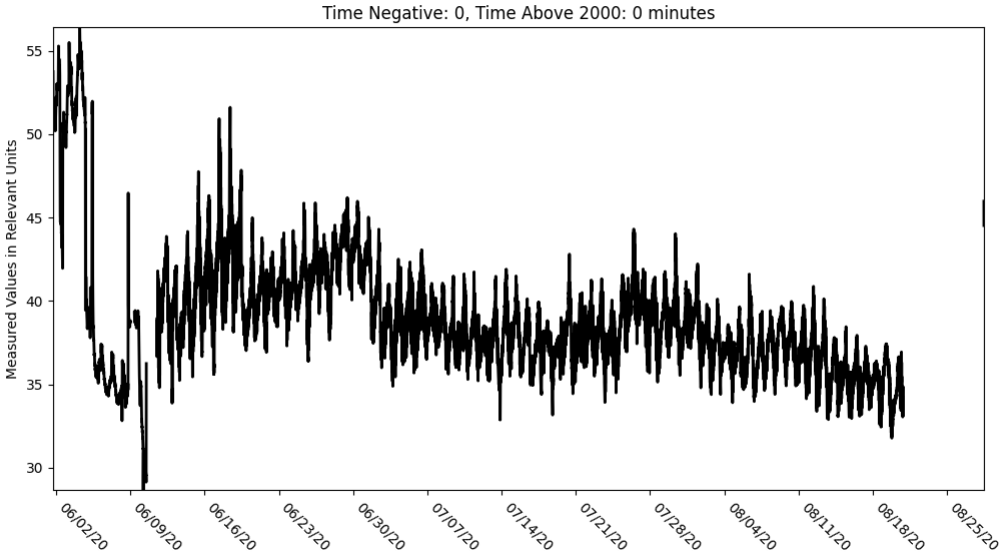

Figure 6.1 Relative humidity timeseries data during the study period by the Sensirion SCD30 sensor

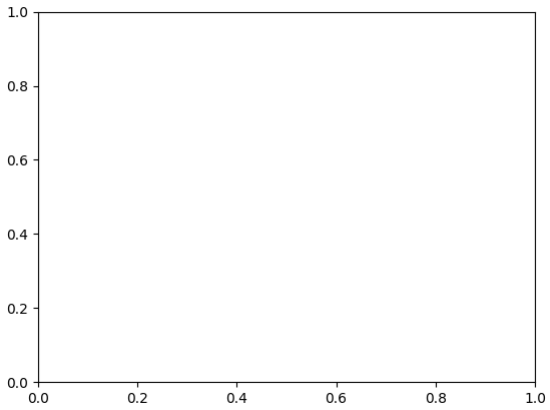

Figure 6.2 Relative humidity timeseries data in units of Celsius during the study period by the DGS-CO sensor

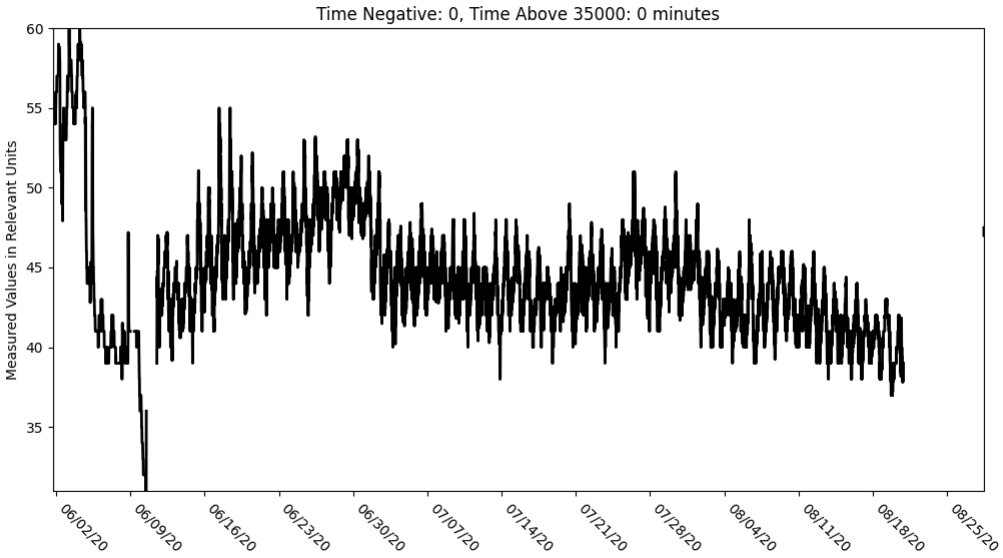

Figure 6.3 Relative humidity timeseries data in units of Celsius during the study period by the DGS-NO2 sensor

Particulate Matter

The Particulate Matter values (PM1, PM2.5, and PM10) and reliability are summarized below

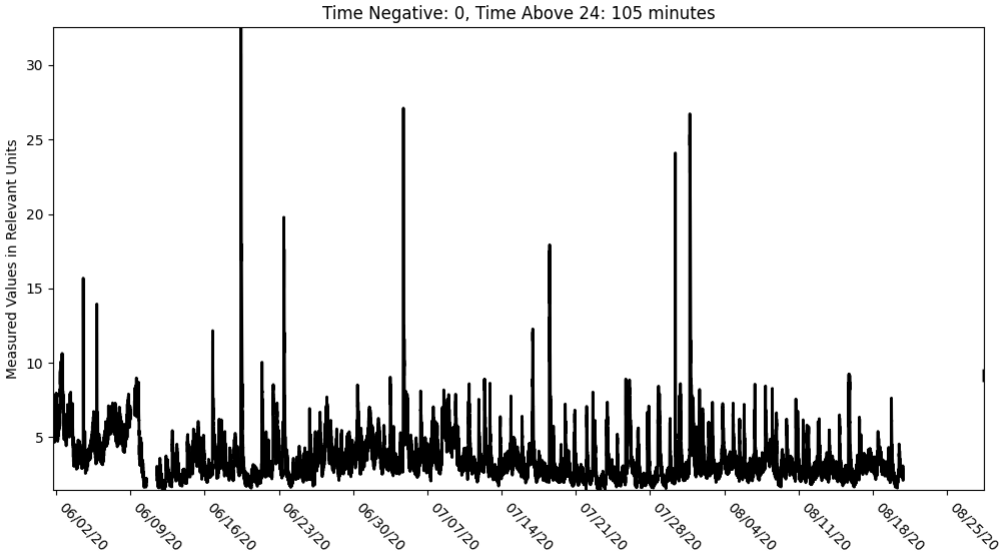

Figure 7.1 PM1 Timeseries data with units of micrograms per cubic meter

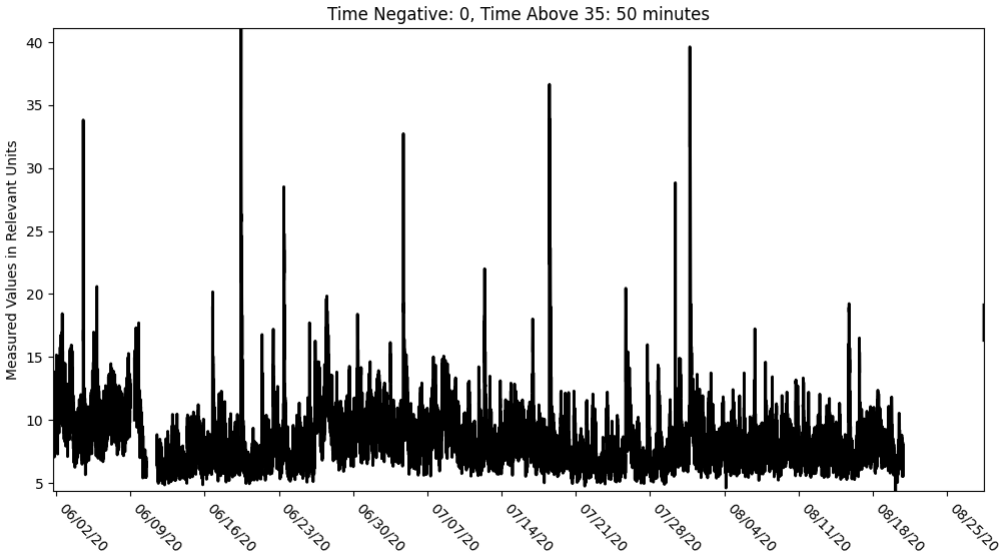

Figure 7.2 PM2.5 Timeseries data with units of micrograms per cubic meter

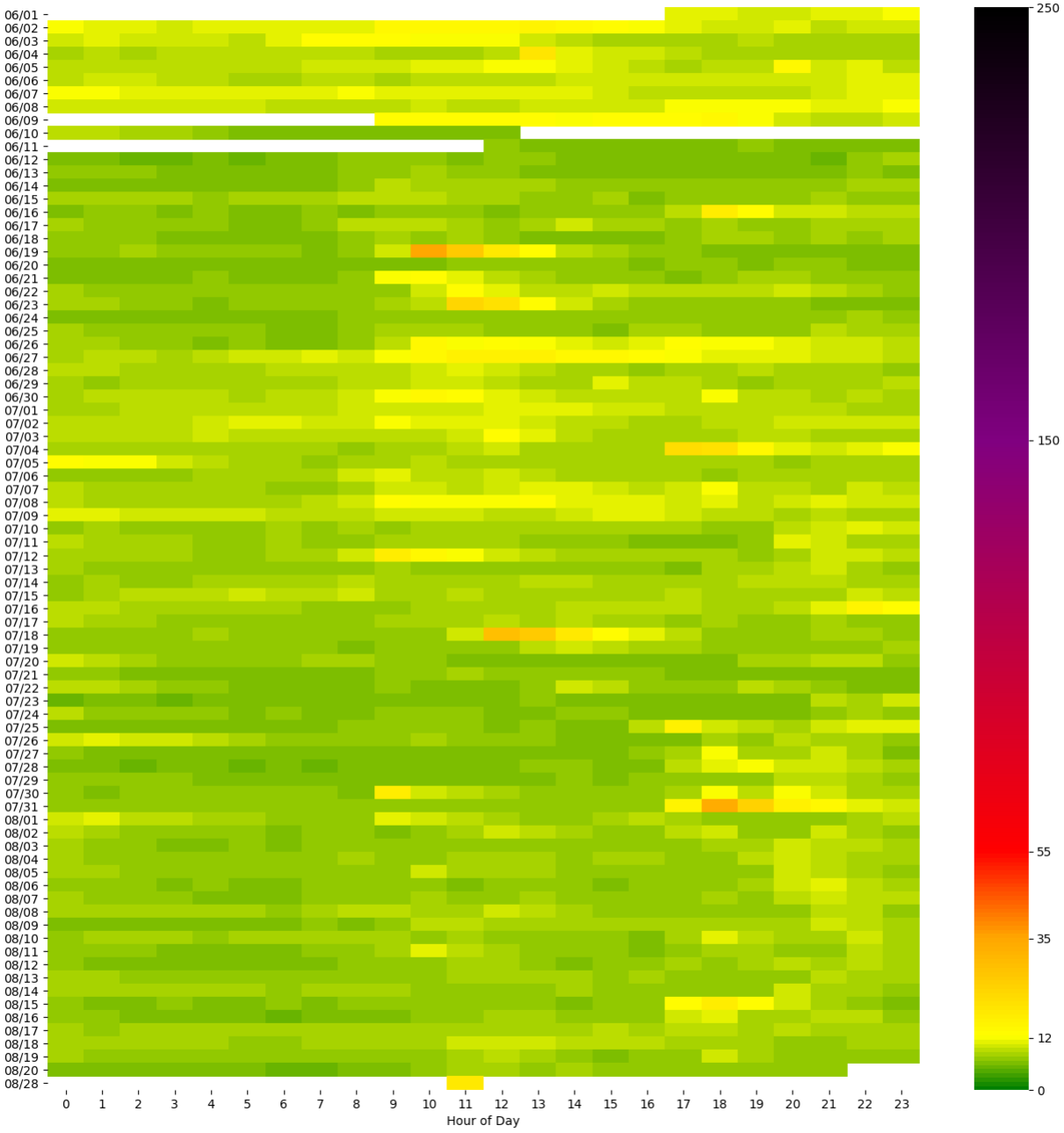

Figure 7.2 PM2.5 heatmap with units of micrograms per cubic meter

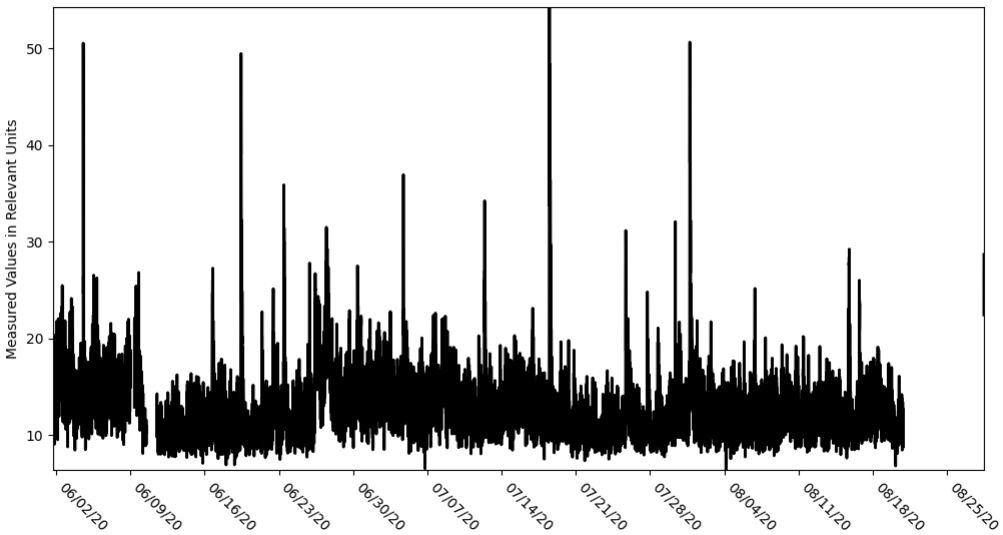

Figure 7.2 PM2.5 Timeseries data with units of micrograms per cubic meter

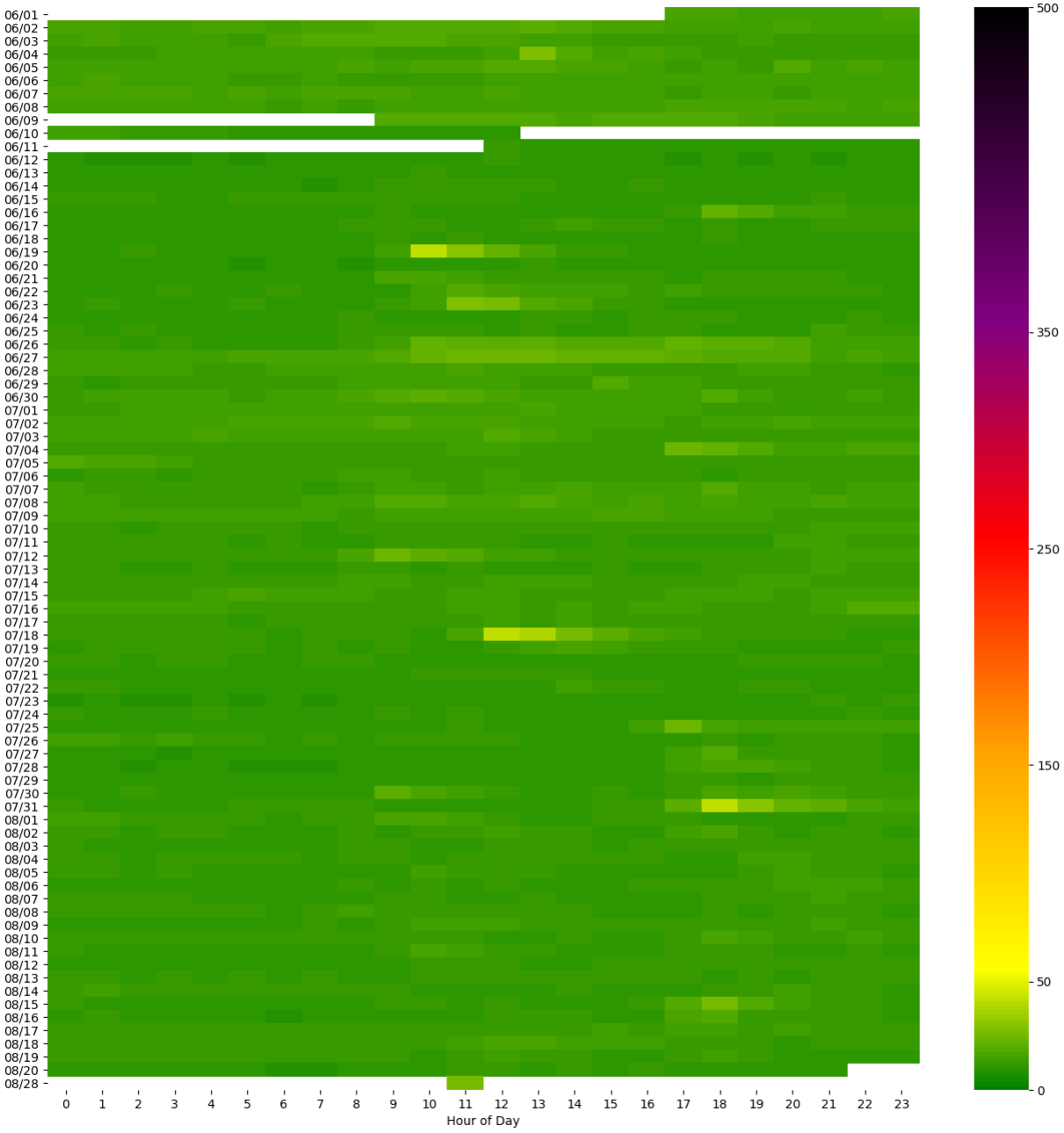

Figure 7.3 PM10 heatmap with units of micrograms per cubic meter

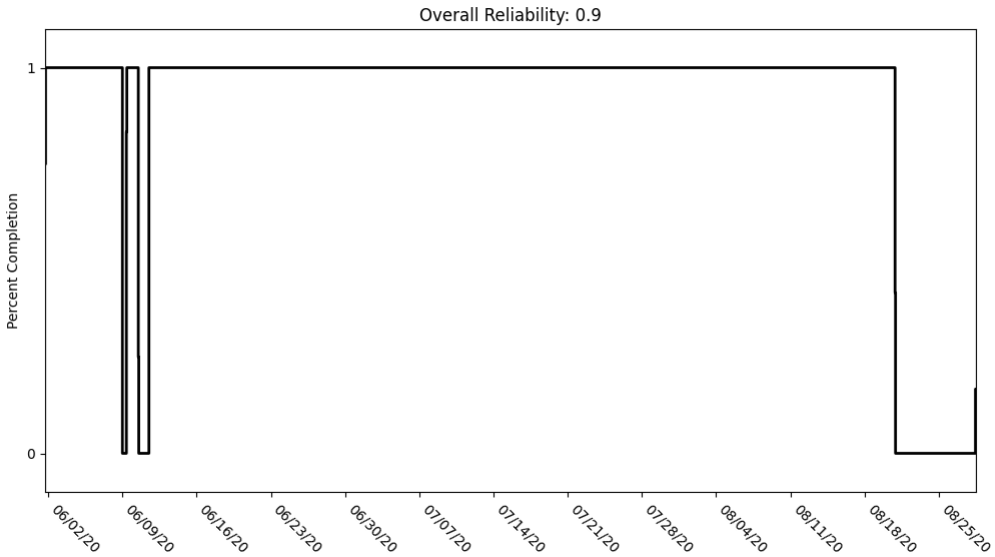

Figure 7.4 Reliability of the PM sensor (using PM2.5 values)