

Hamming Encoded Bit Pattern Transmission

Sensor Readings from 1:30 PM to 4:30 PM on 7/16/2024

Chemical : Thinner

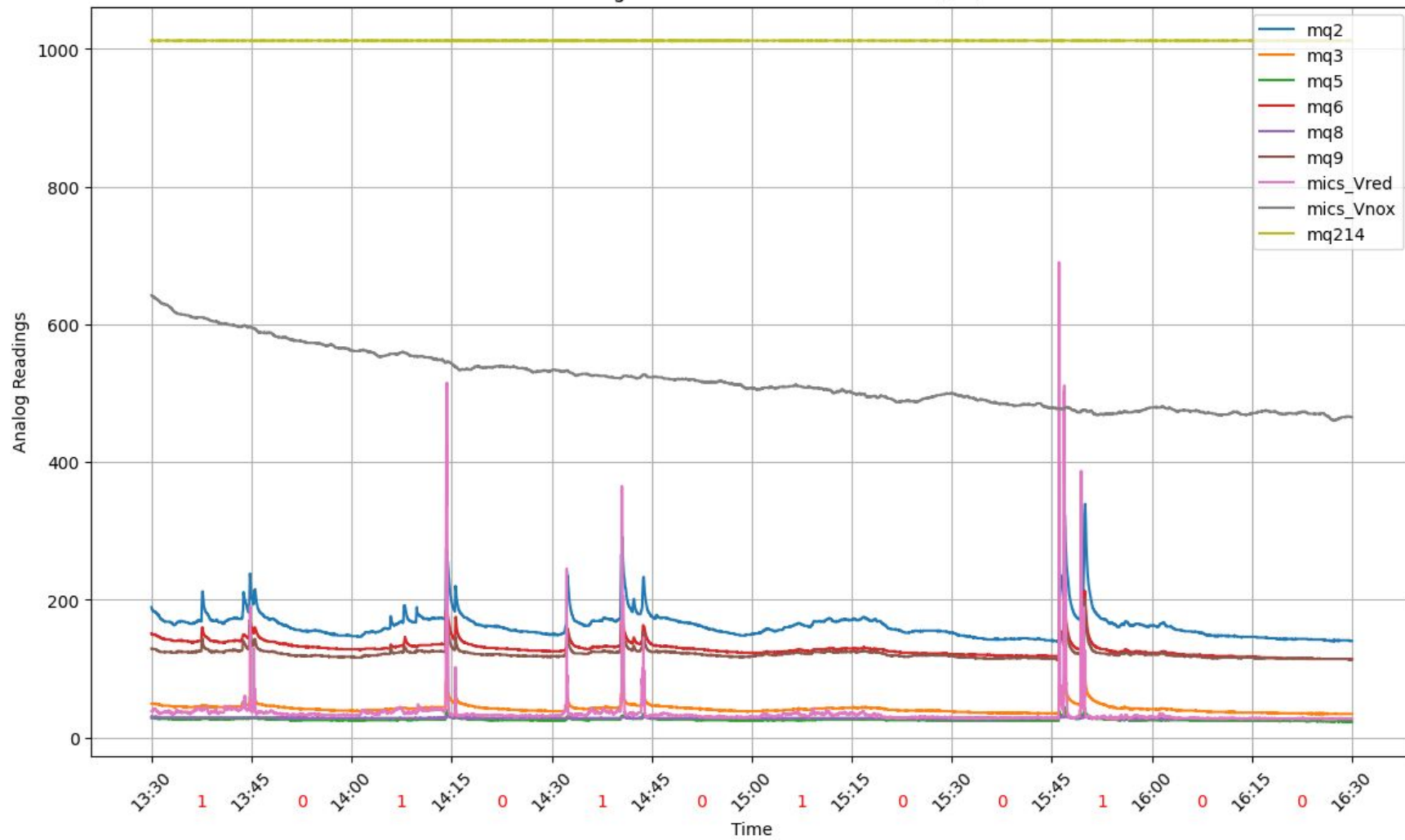
Bit Pattern : 101010100100

Raw Analog Value Analysis

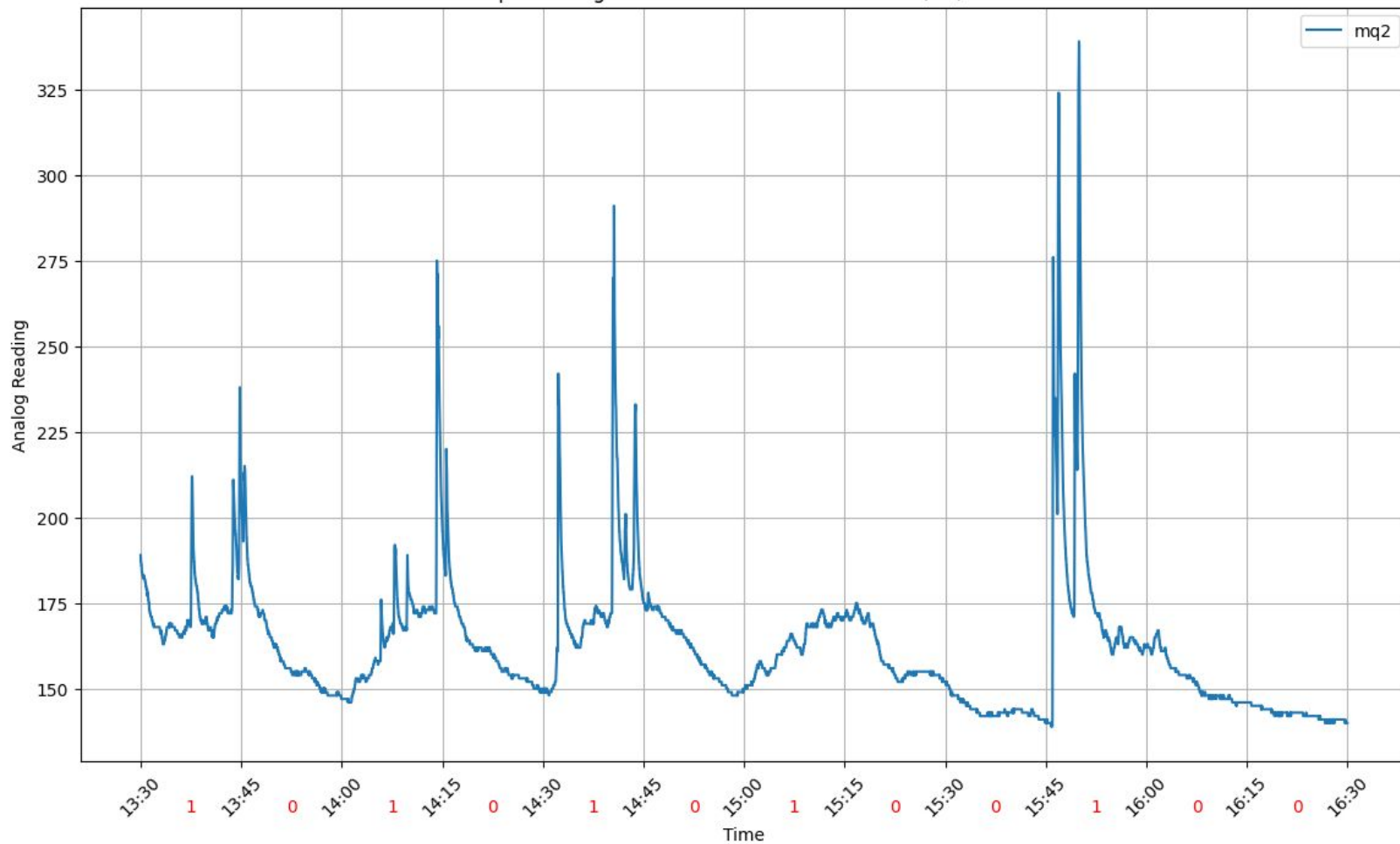
Chemical : Thinner

Bit Pattern : 101010100100

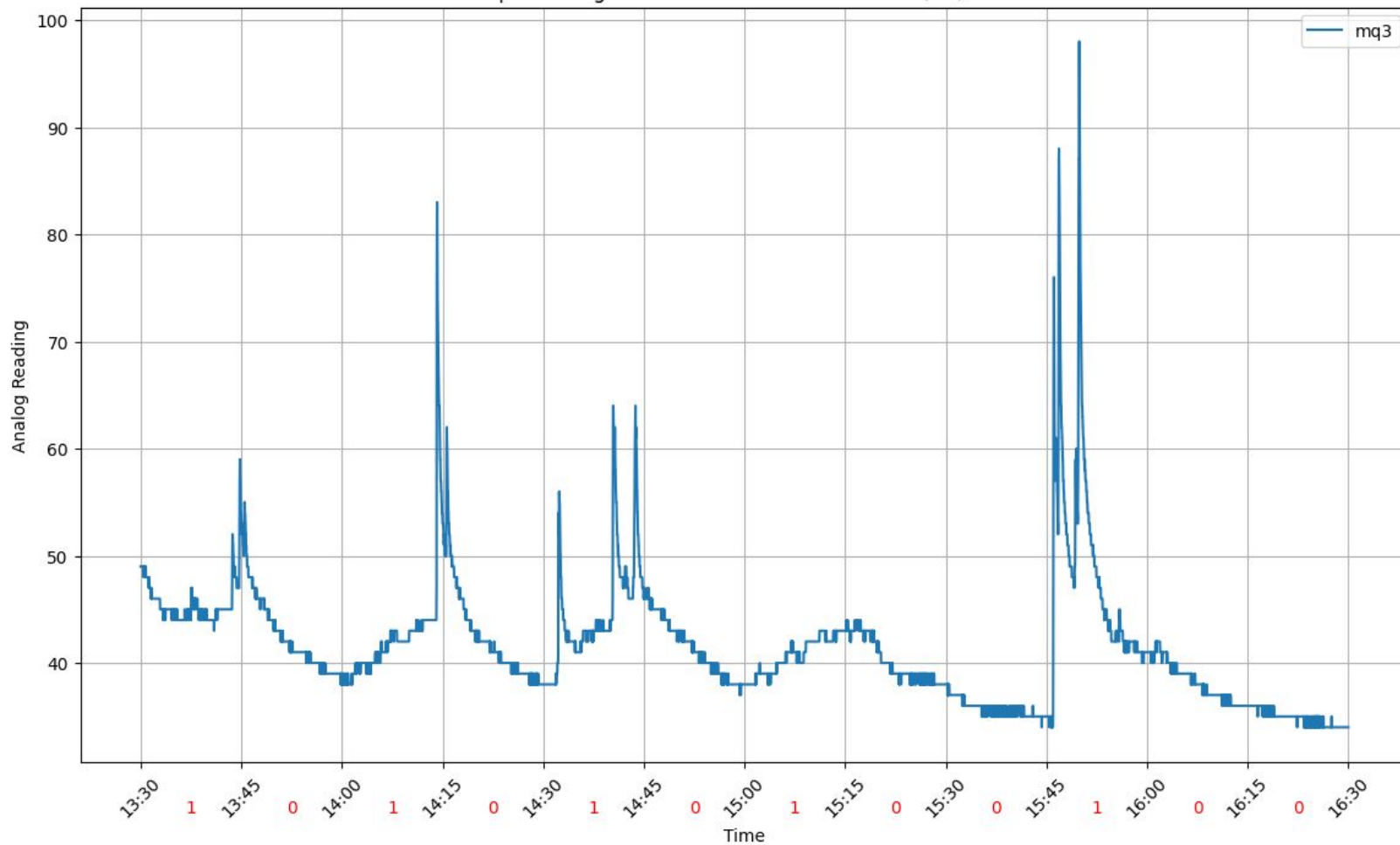
Sensor Readings from 1:30 PM to 4:30 PM on 7/16/2024



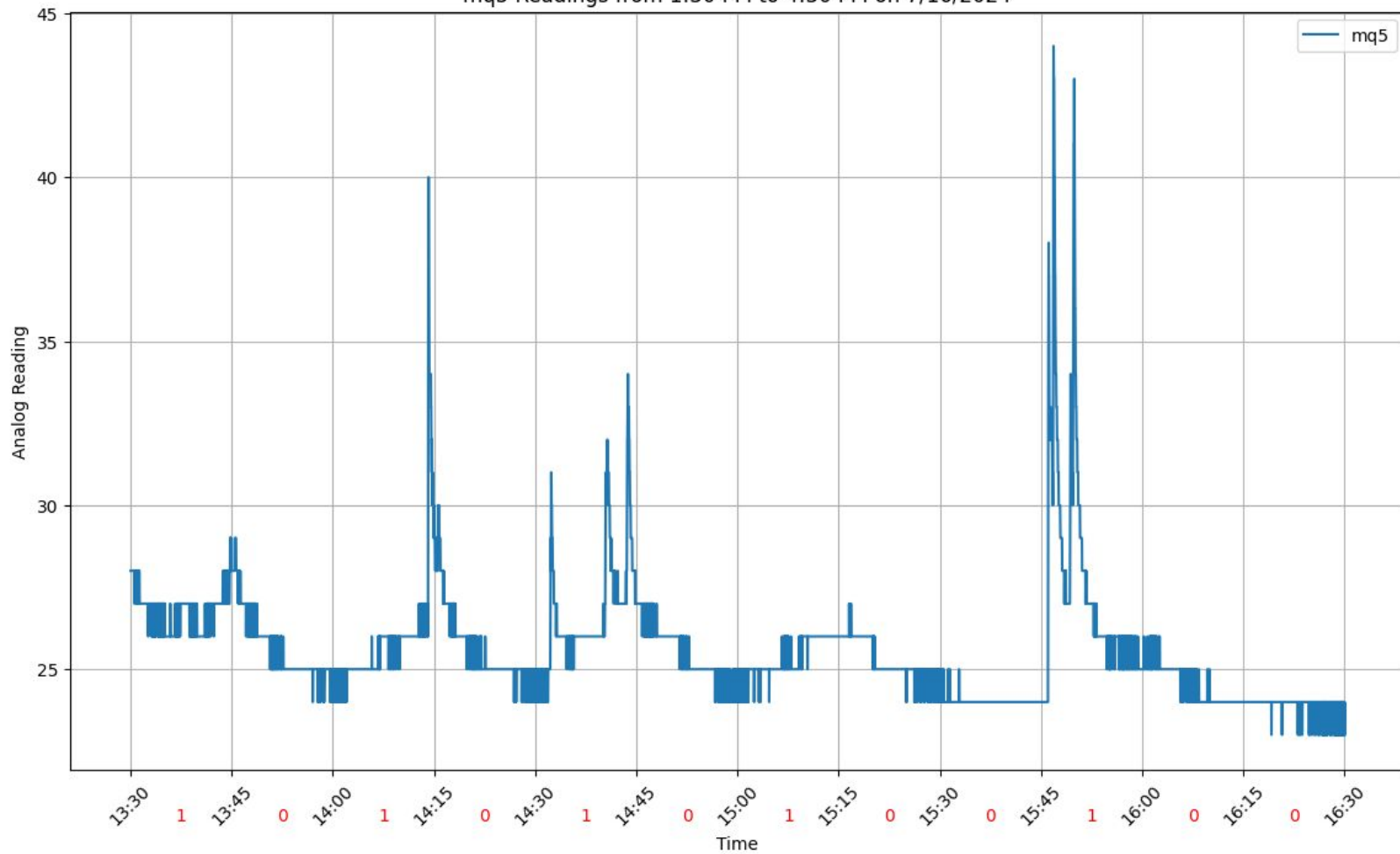
mq2 Readings from 1:30 PM to 4:30 PM on 7/16/2024



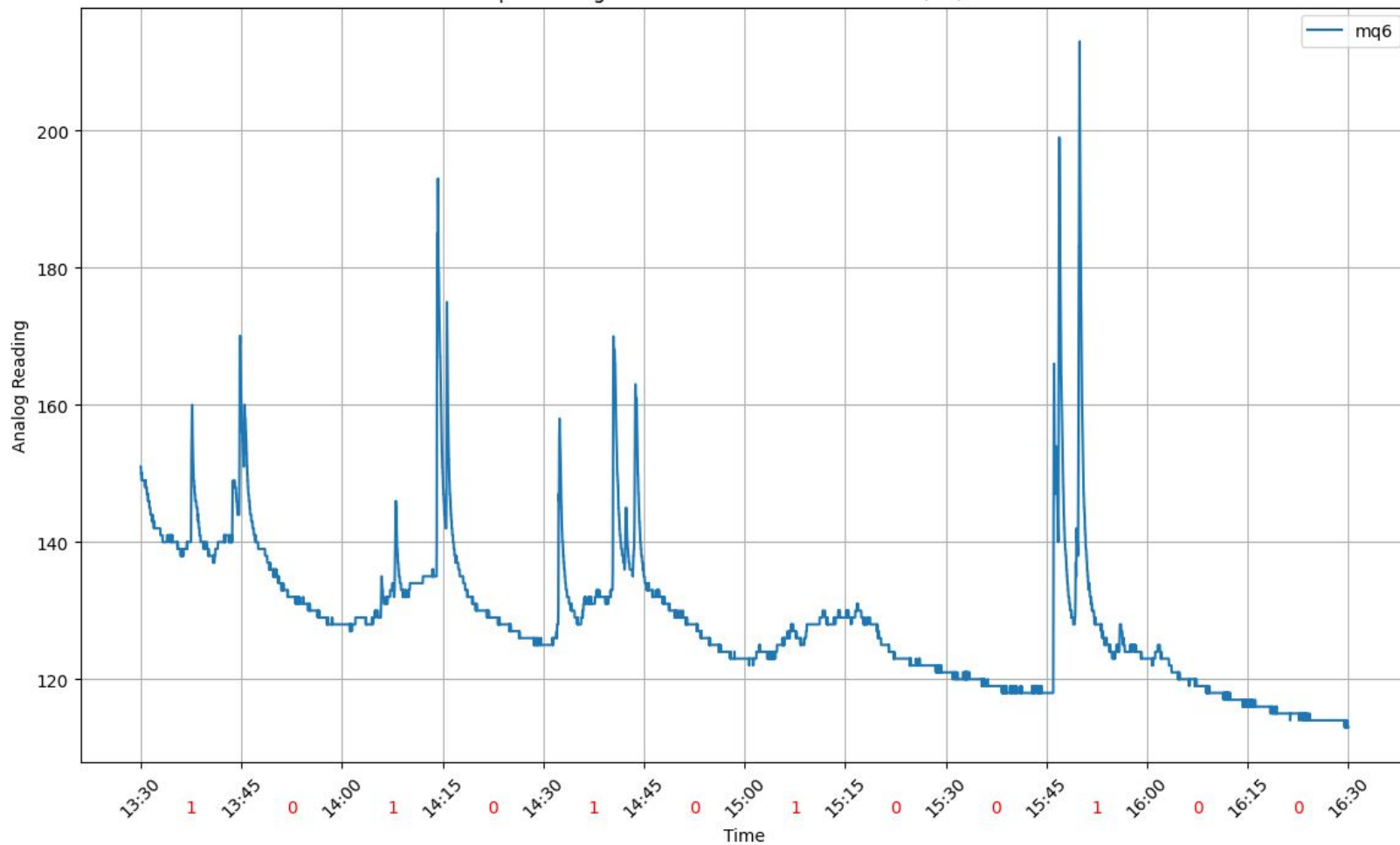
mq3 Readings from 1:30 PM to 4:30 PM on 7/16/2024



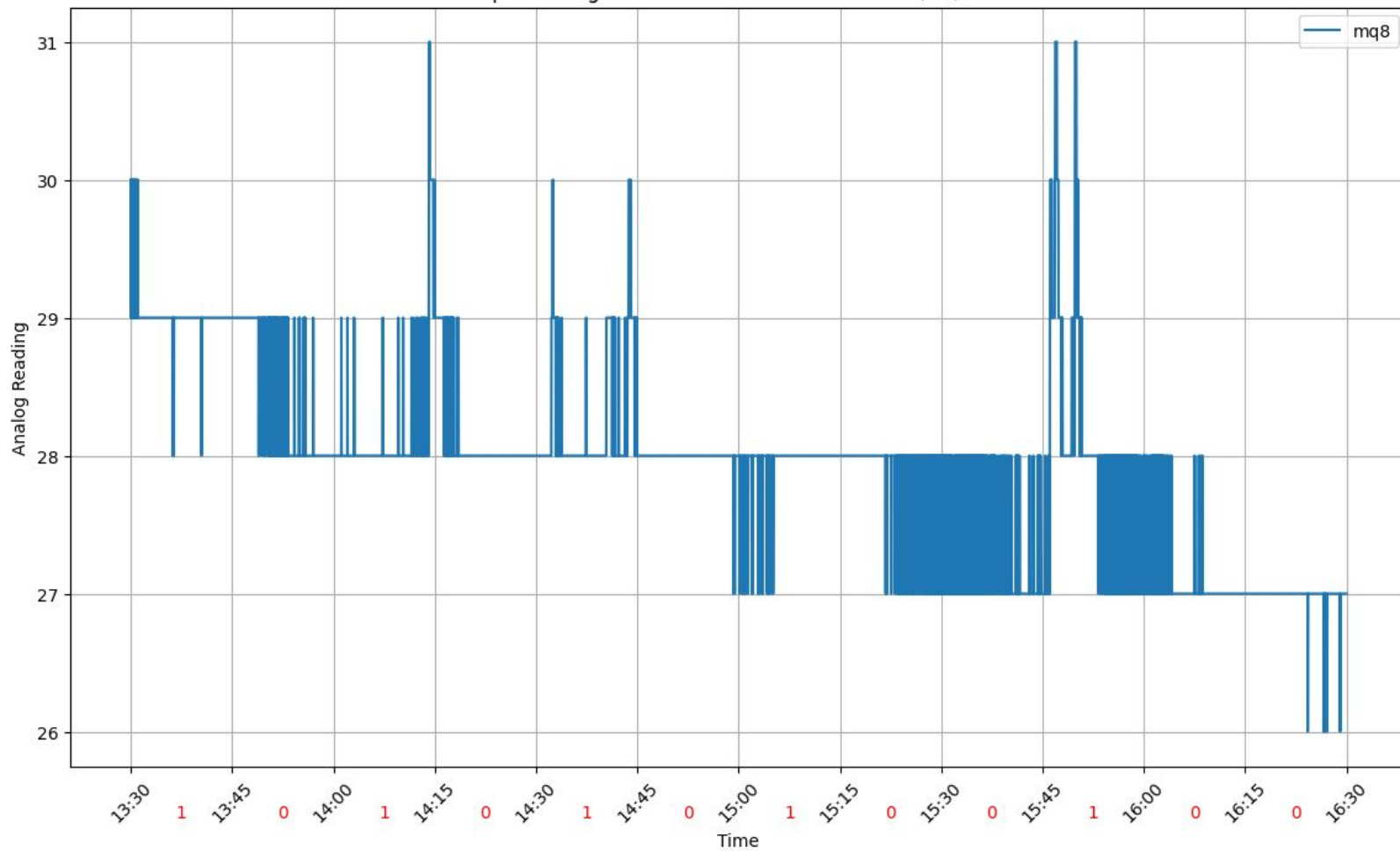
mq5 Readings from 1:30 PM to 4:30 PM on 7/16/2024



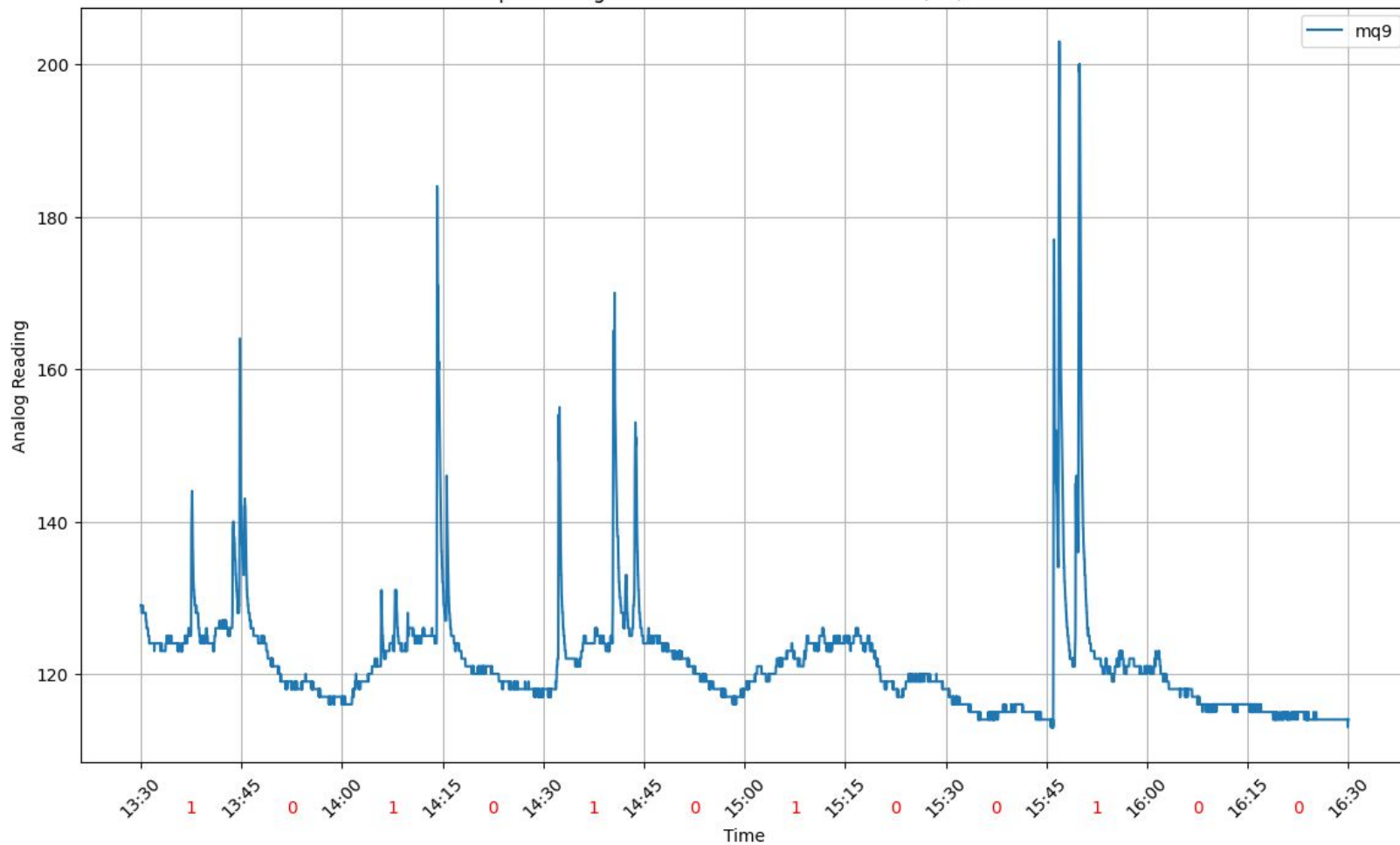
mq6 Readings from 1:30 PM to 4:30 PM on 7/16/2024



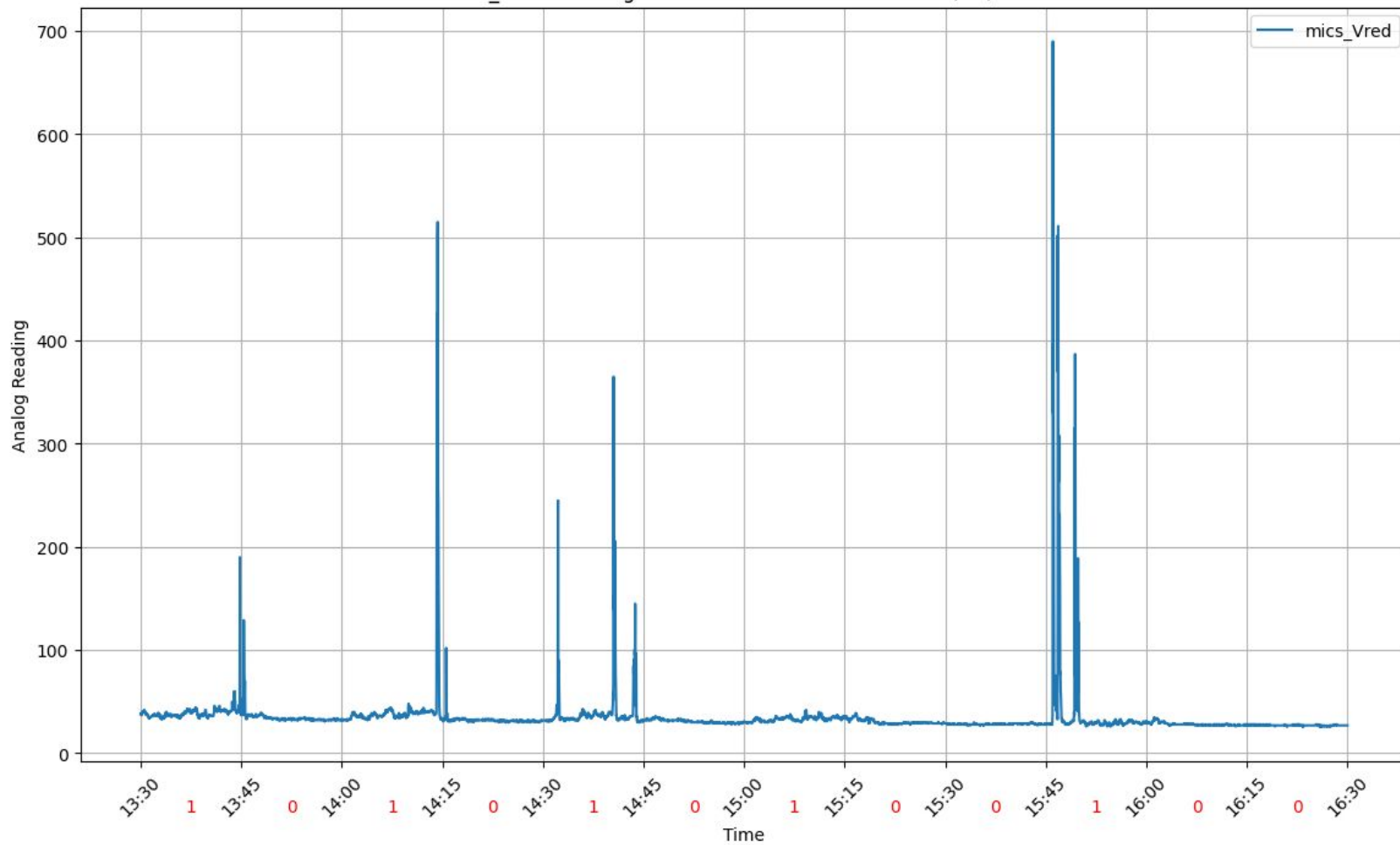
mq8 Readings from 1:30 PM to 4:30 PM on 7/16/2024



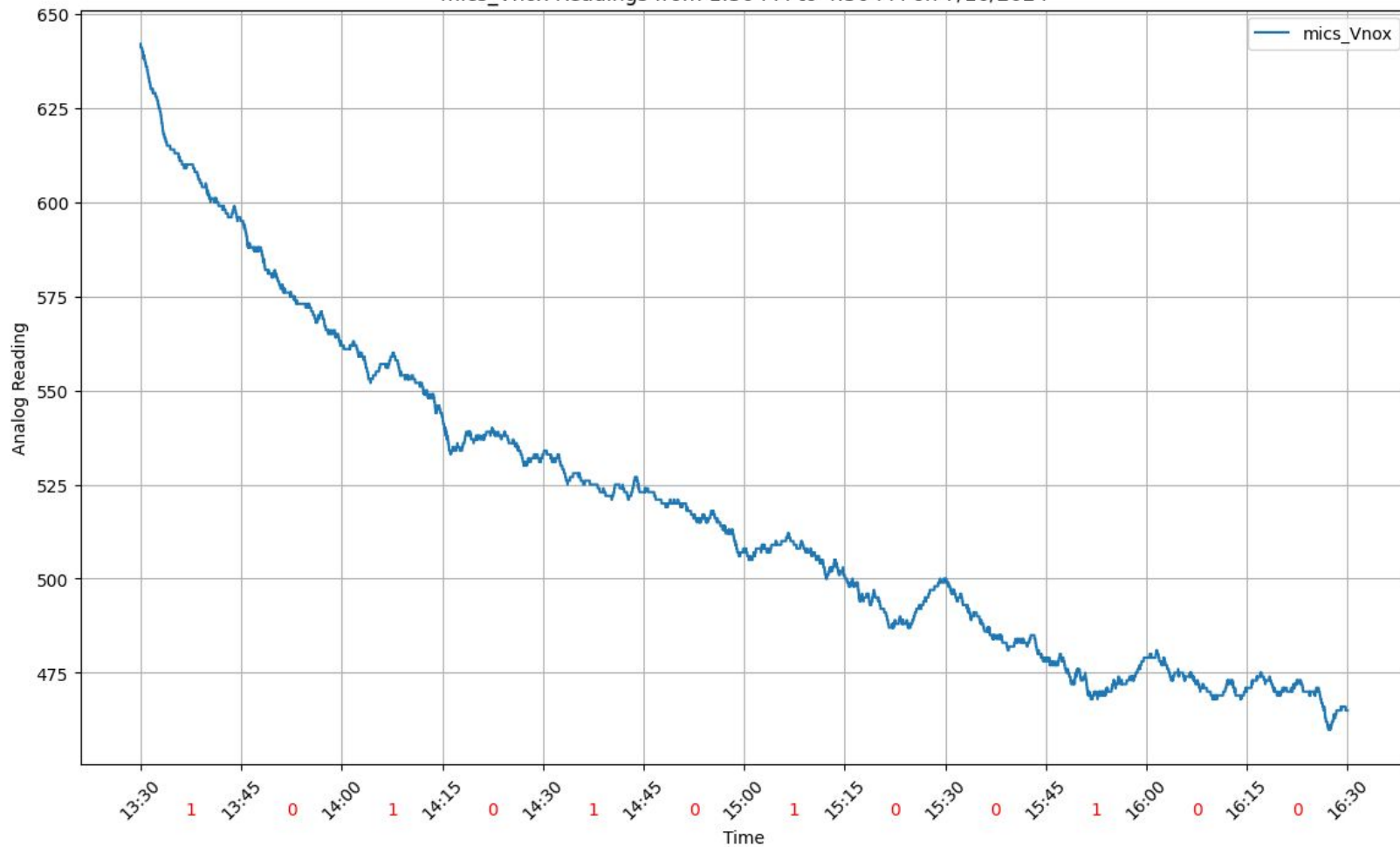
mq9 Readings from 1:30 PM to 4:30 PM on 7/16/2024



mics_Vred Readings from 1:30 PM to 4:30 PM on 7/16/2024



mics_Vnox Readings from 1:30 PM to 4:30 PM on 7/16/2024



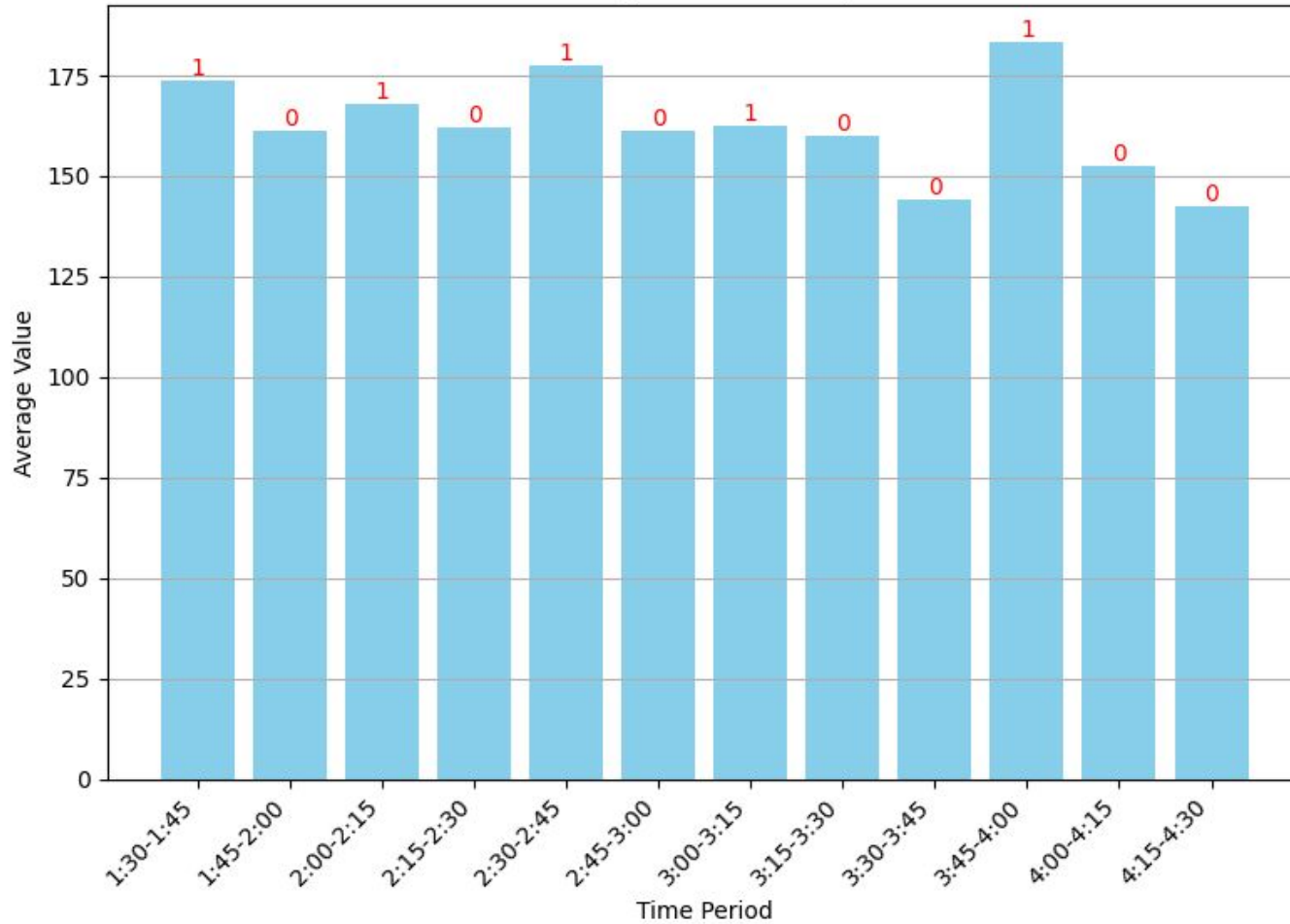
Average (Mean): Represents the sum of all values divided by the number of observations, providing a central tendency measure.

Average Value Analysis

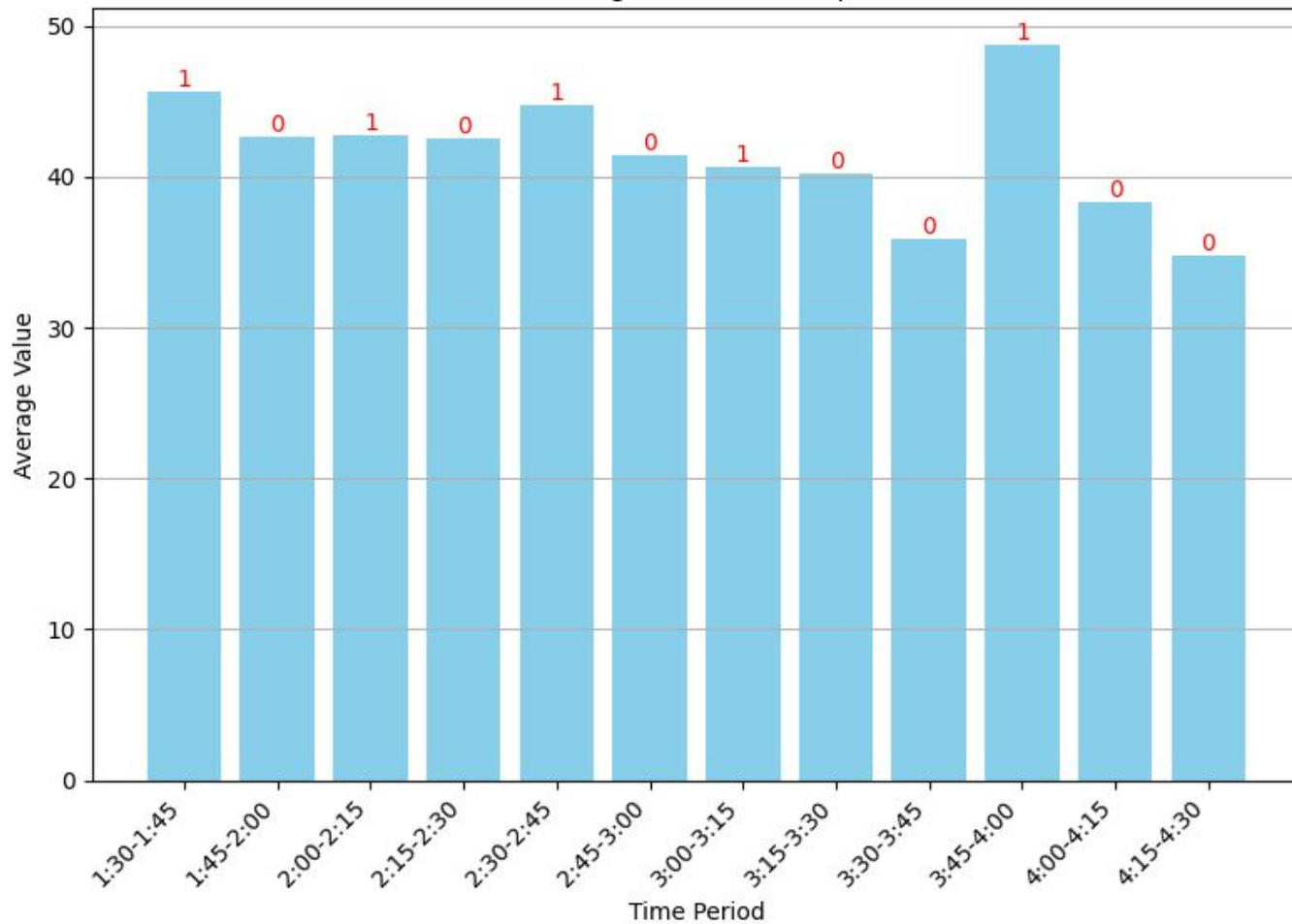
Chemical : Thinner

Bit Pattern : 101010100100

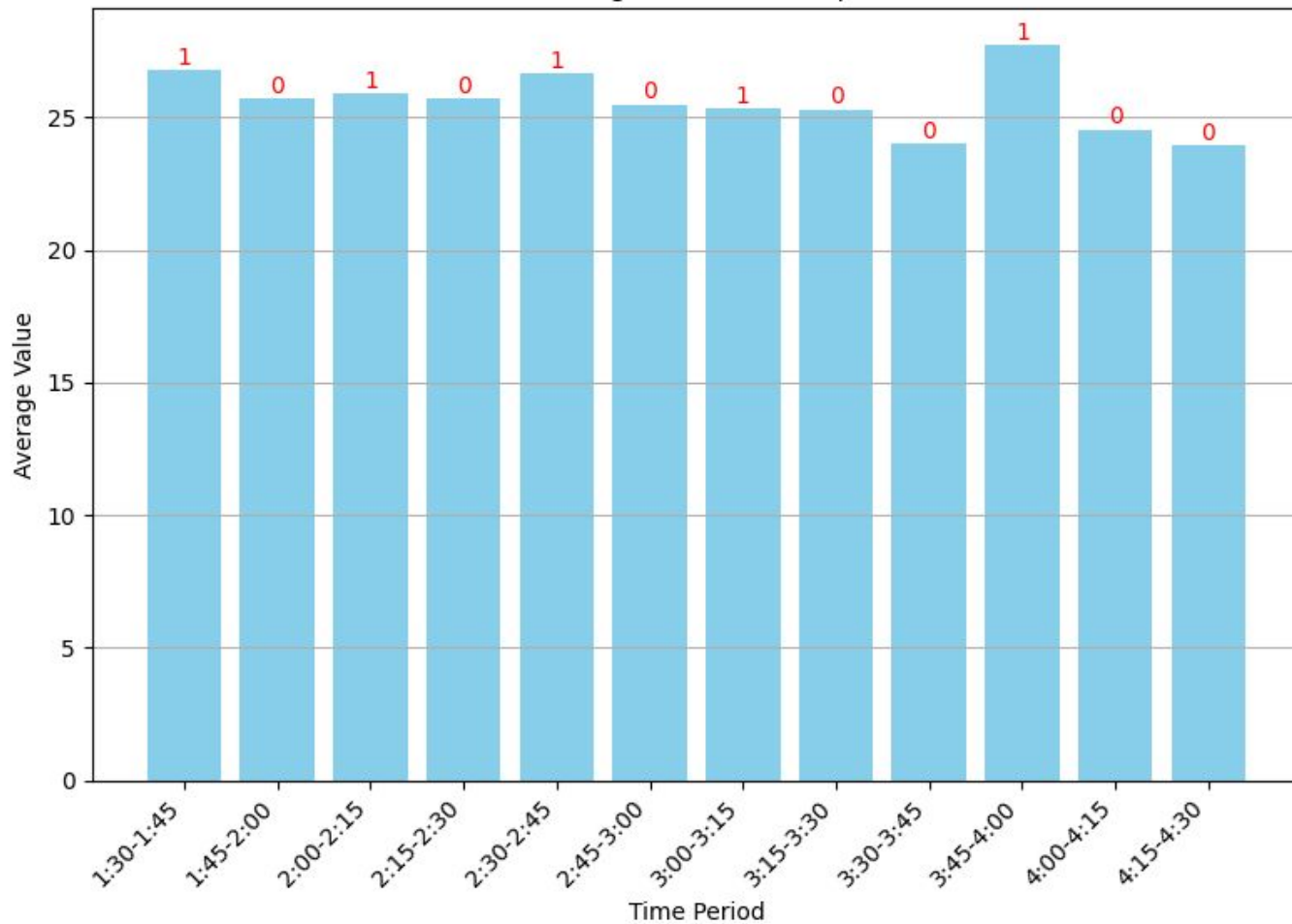
Average Values for mq2



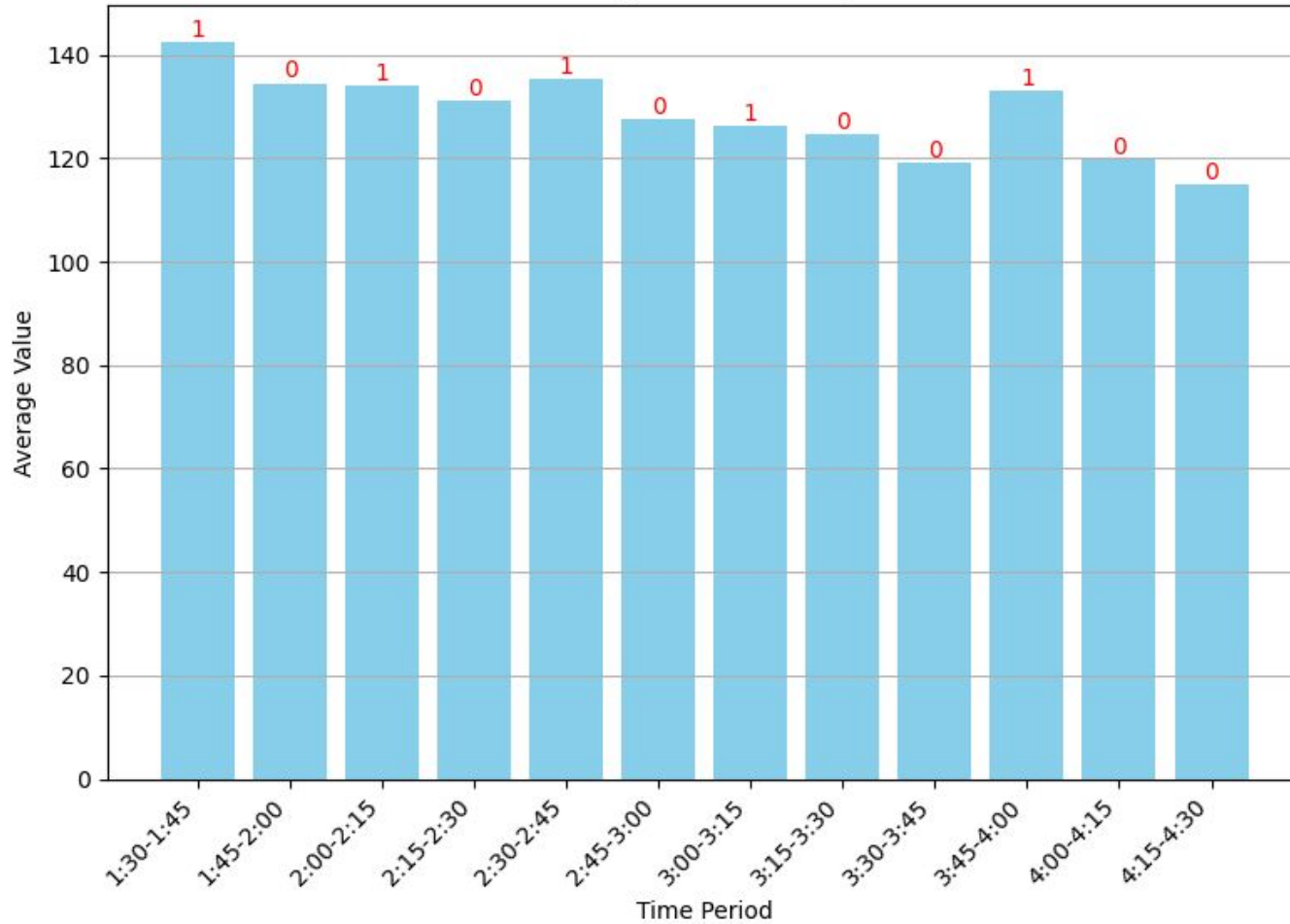
Average Values for mq3



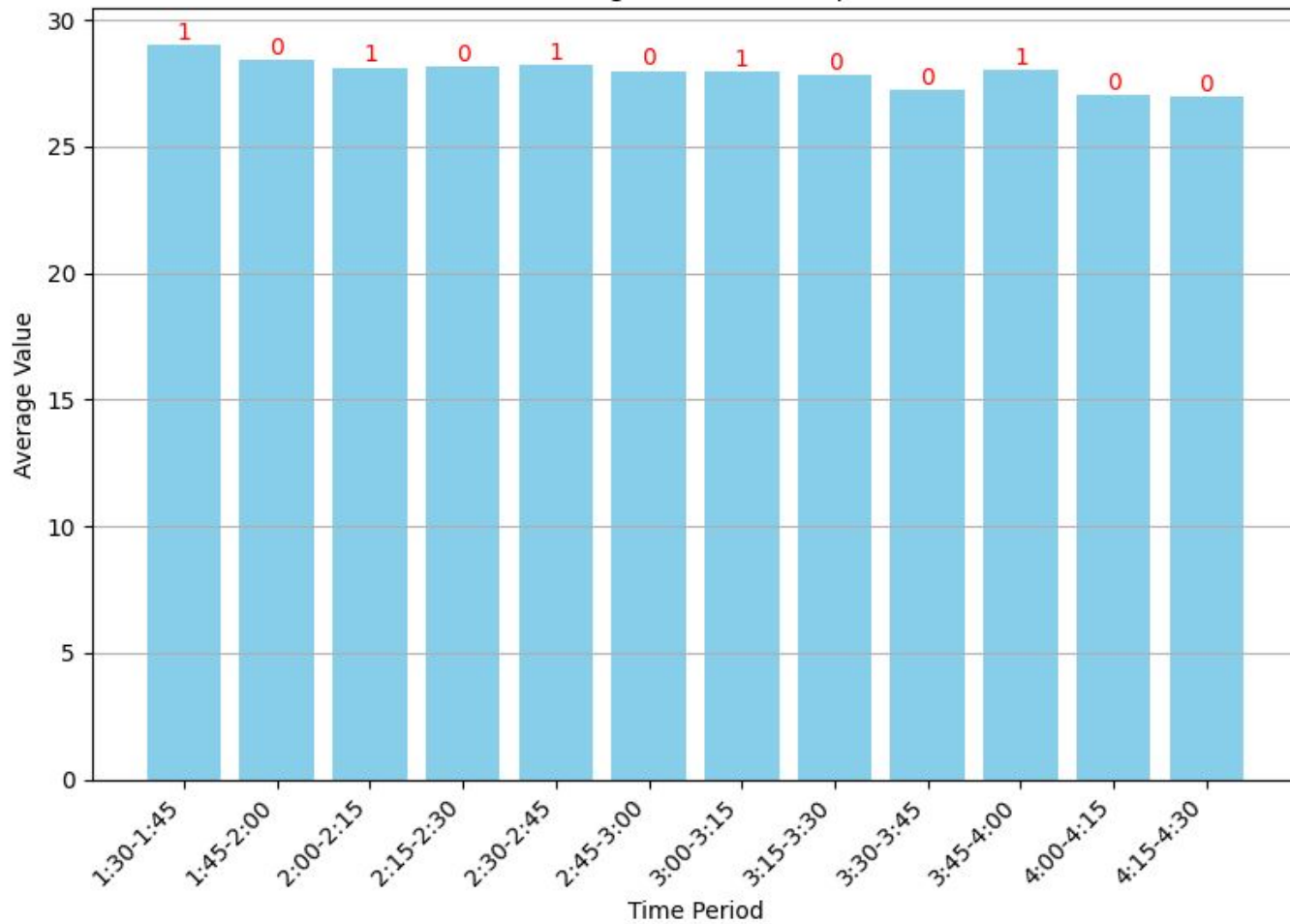
Average Values for mq5



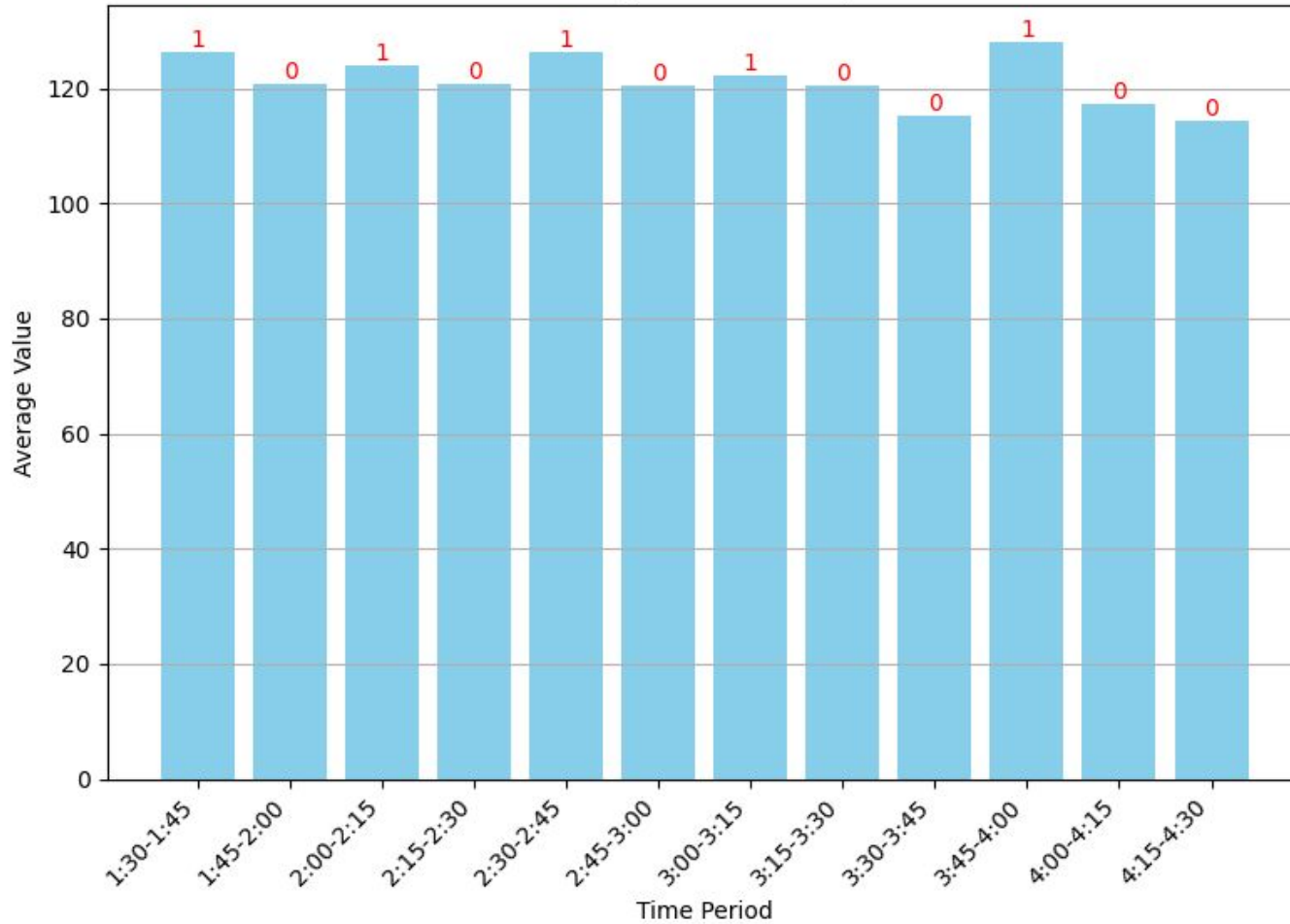
Average Values for mq6



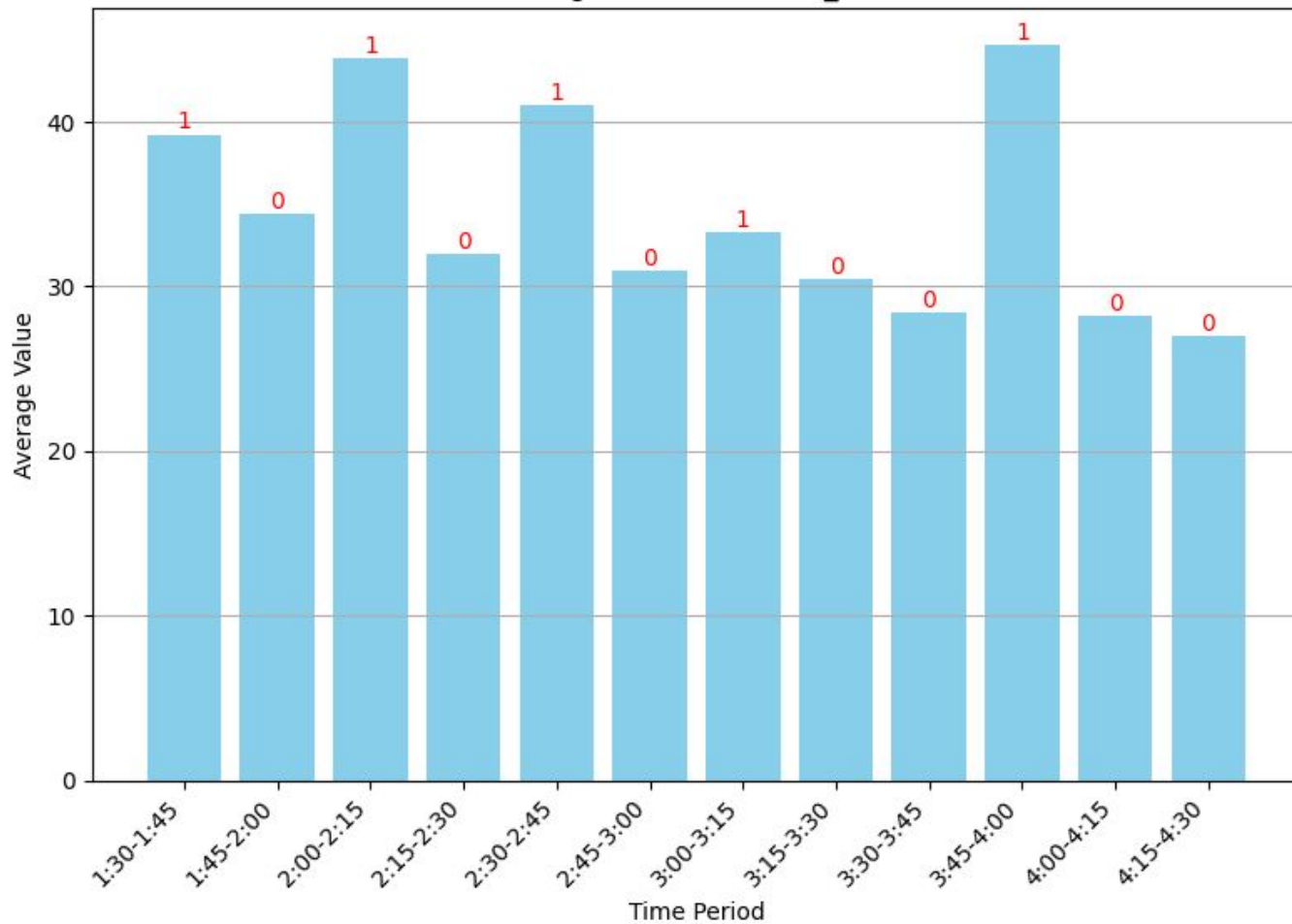
Average Values for mq8



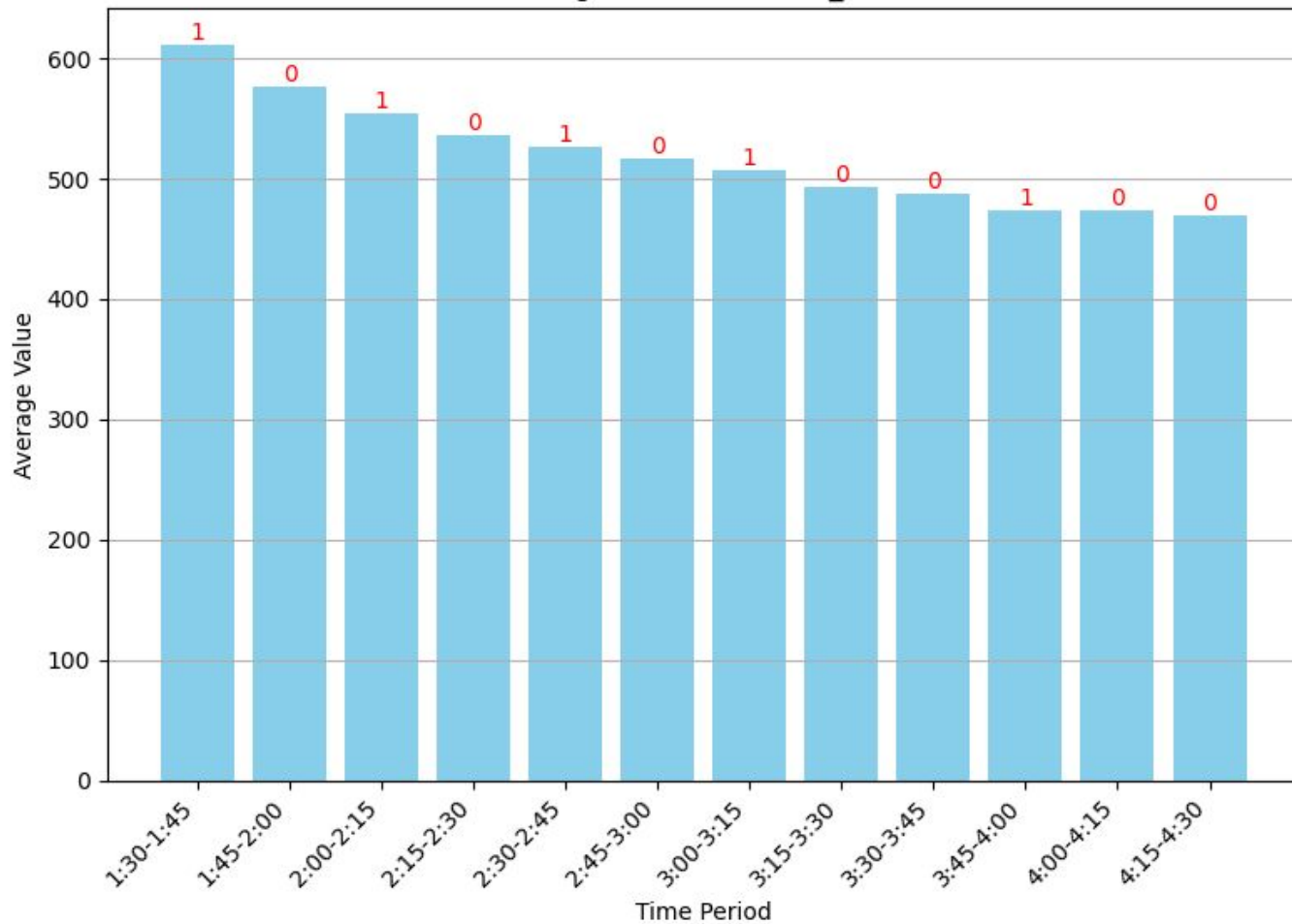
Average Values for mq9



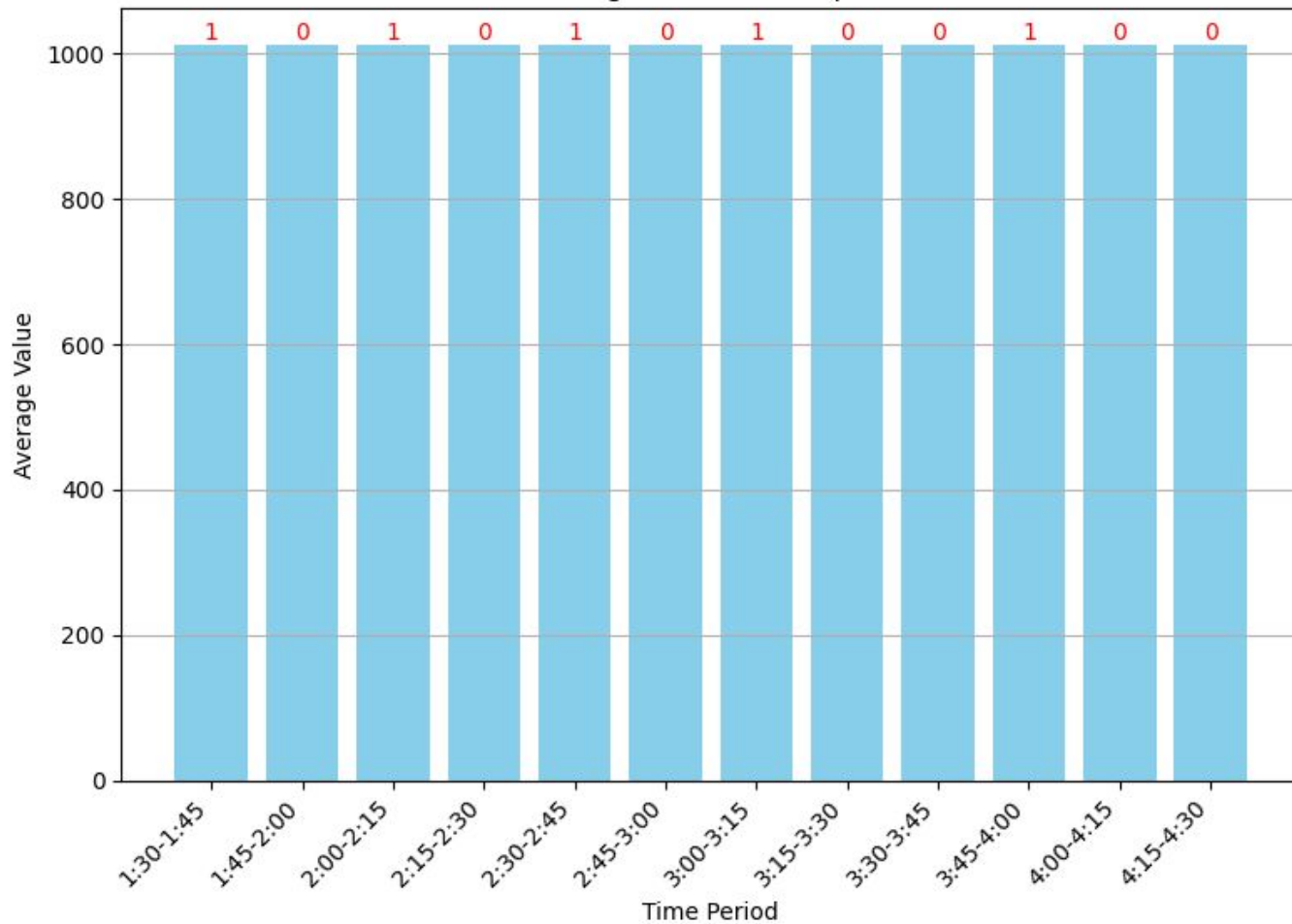
Average Values for mics_Vred



Average Values for mics_Vnox



Average Values for mq214



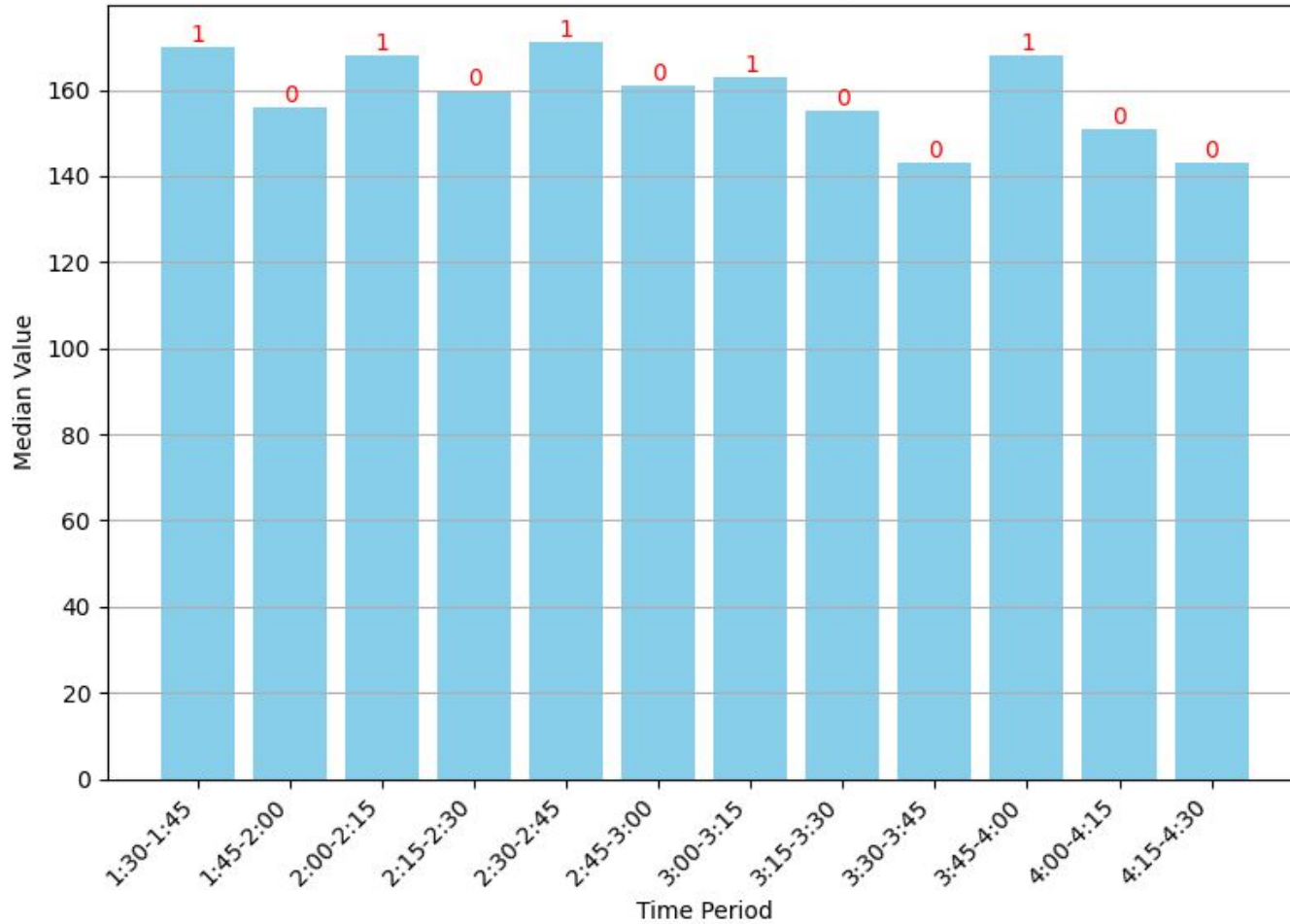
Median: Represents the middle value in a sorted list of numbers, useful for skewed datasets or outliers.

Median Value Analysis

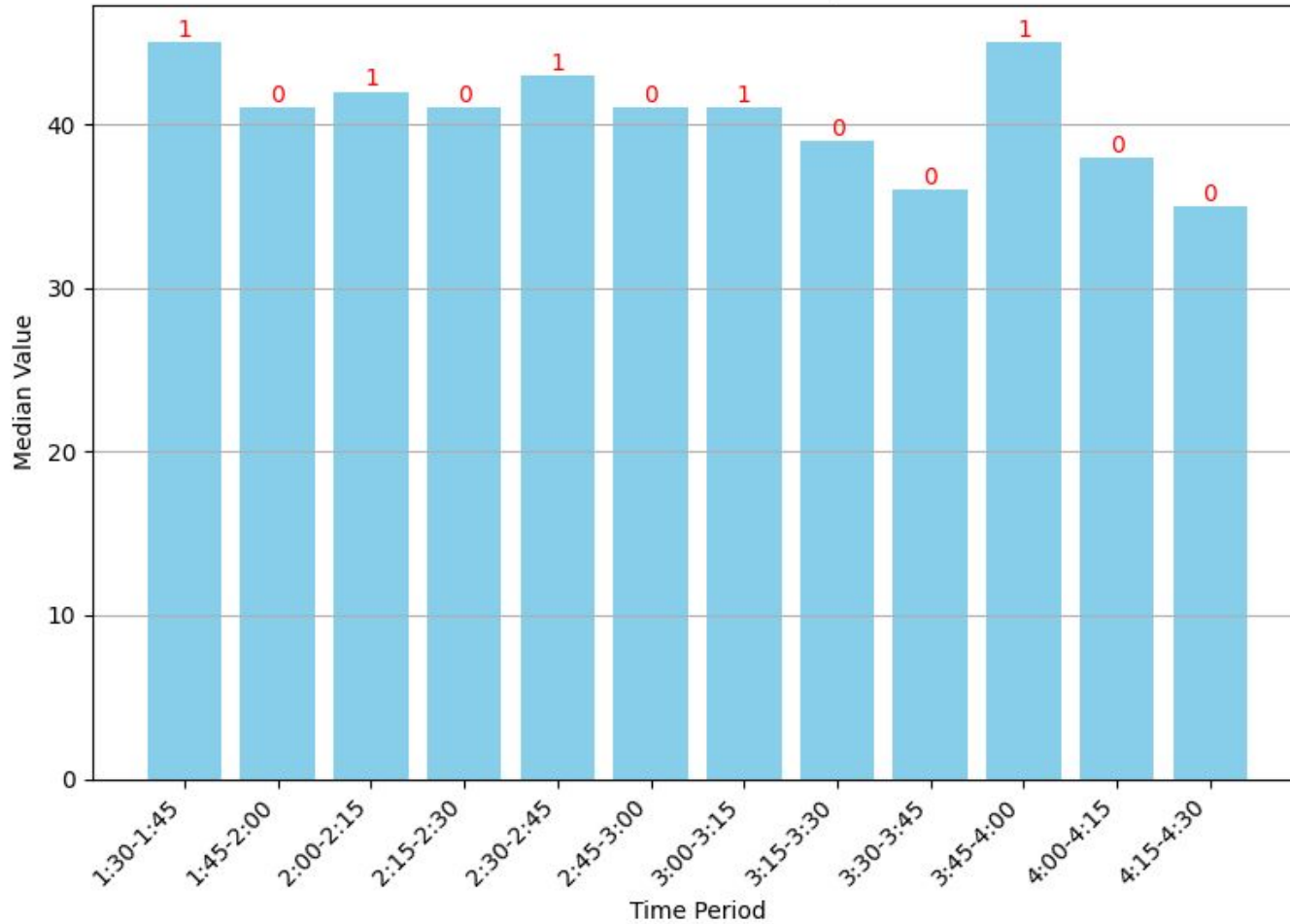
Chemical : Thinner

Bit Pattern : 101010100100

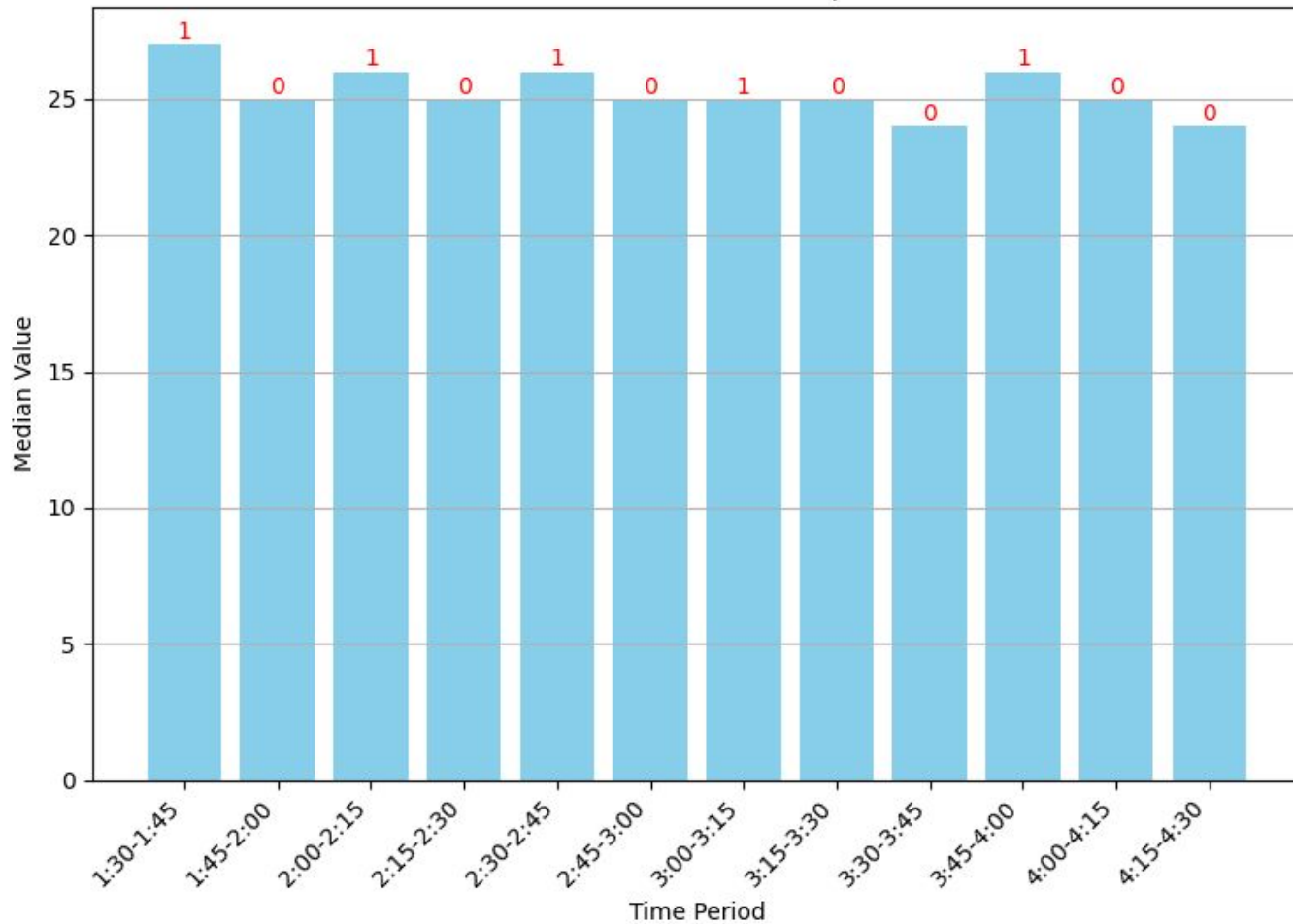
Median Values for mq2



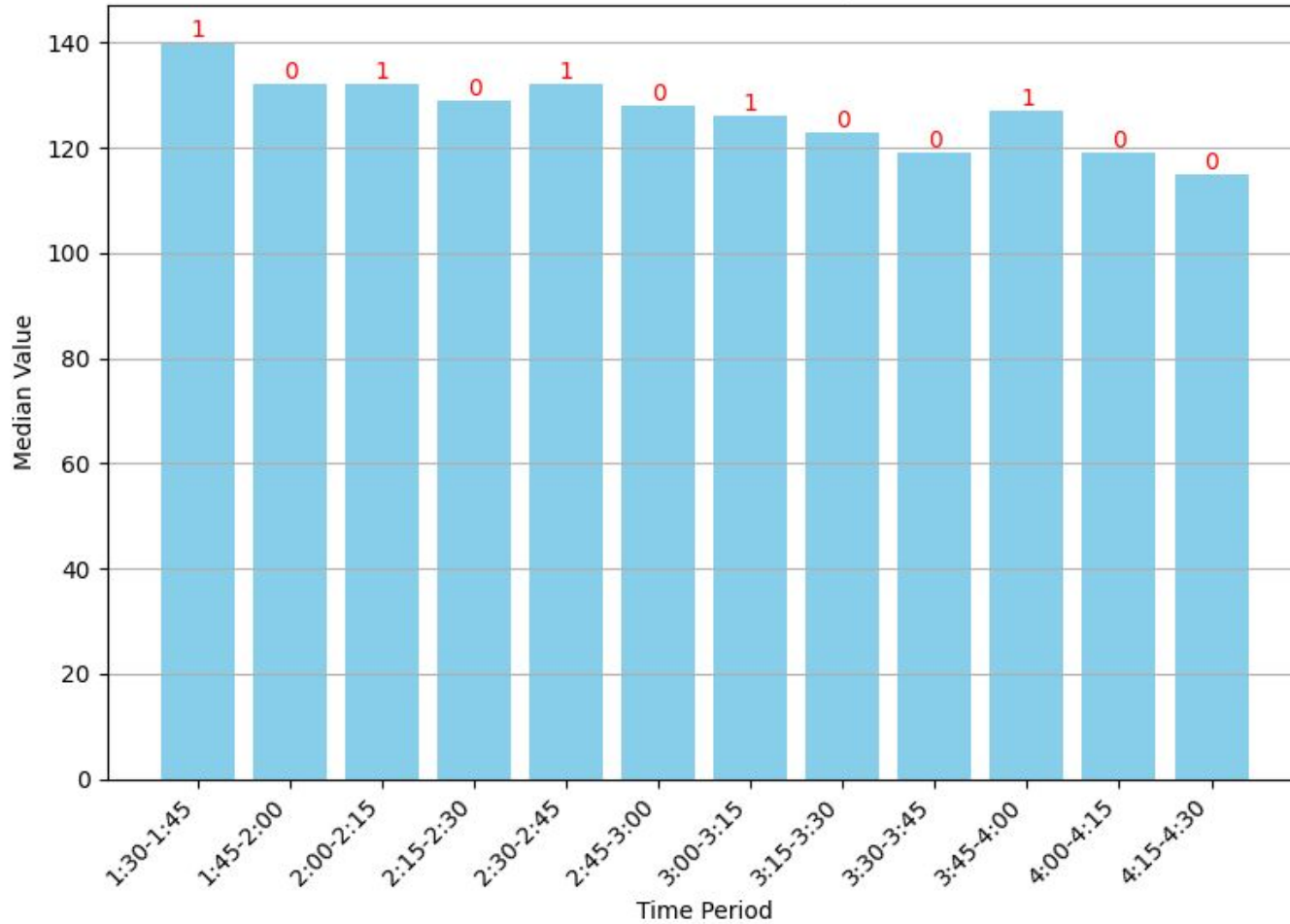
Median Values for mq3



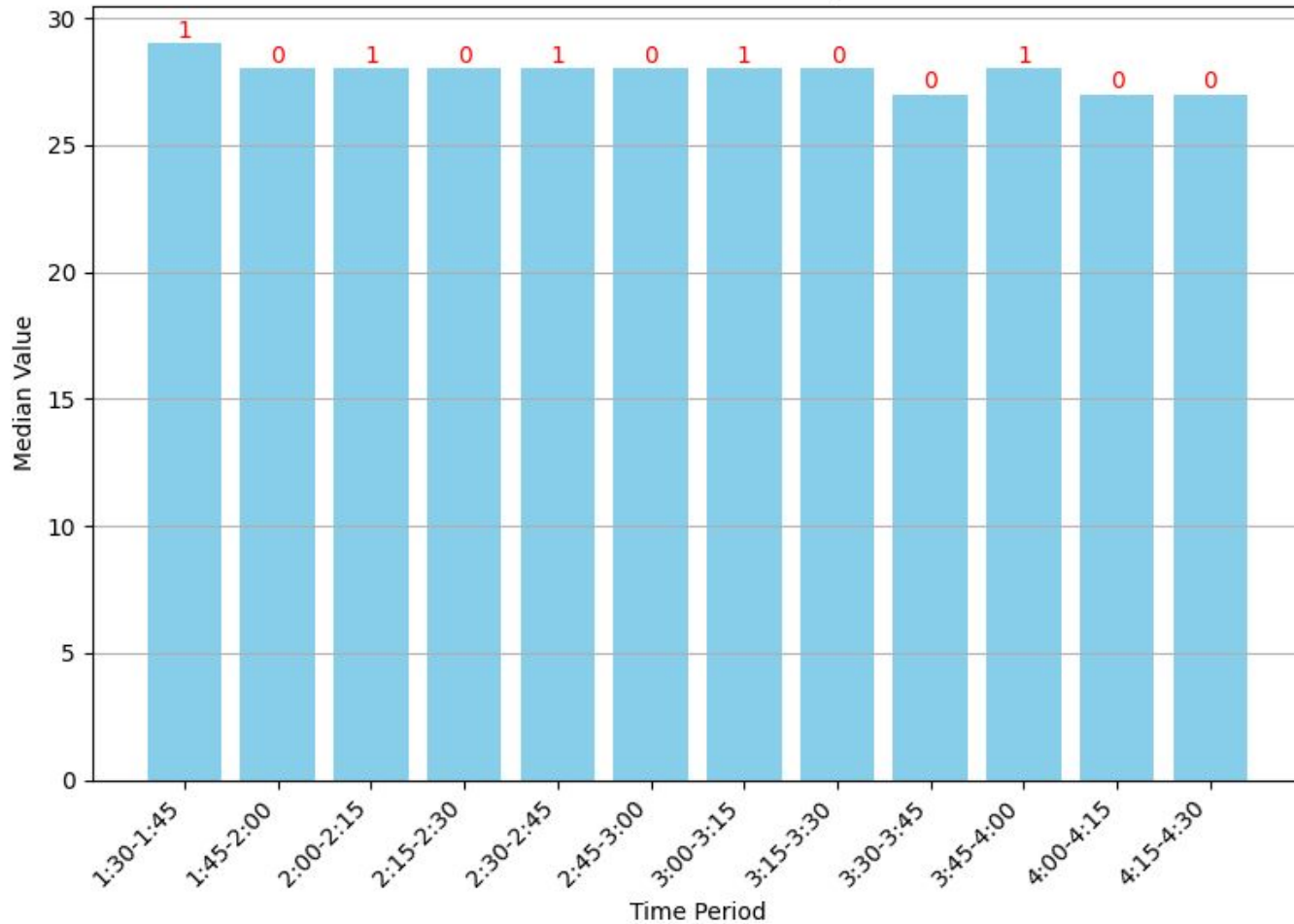
Median Values for mq5



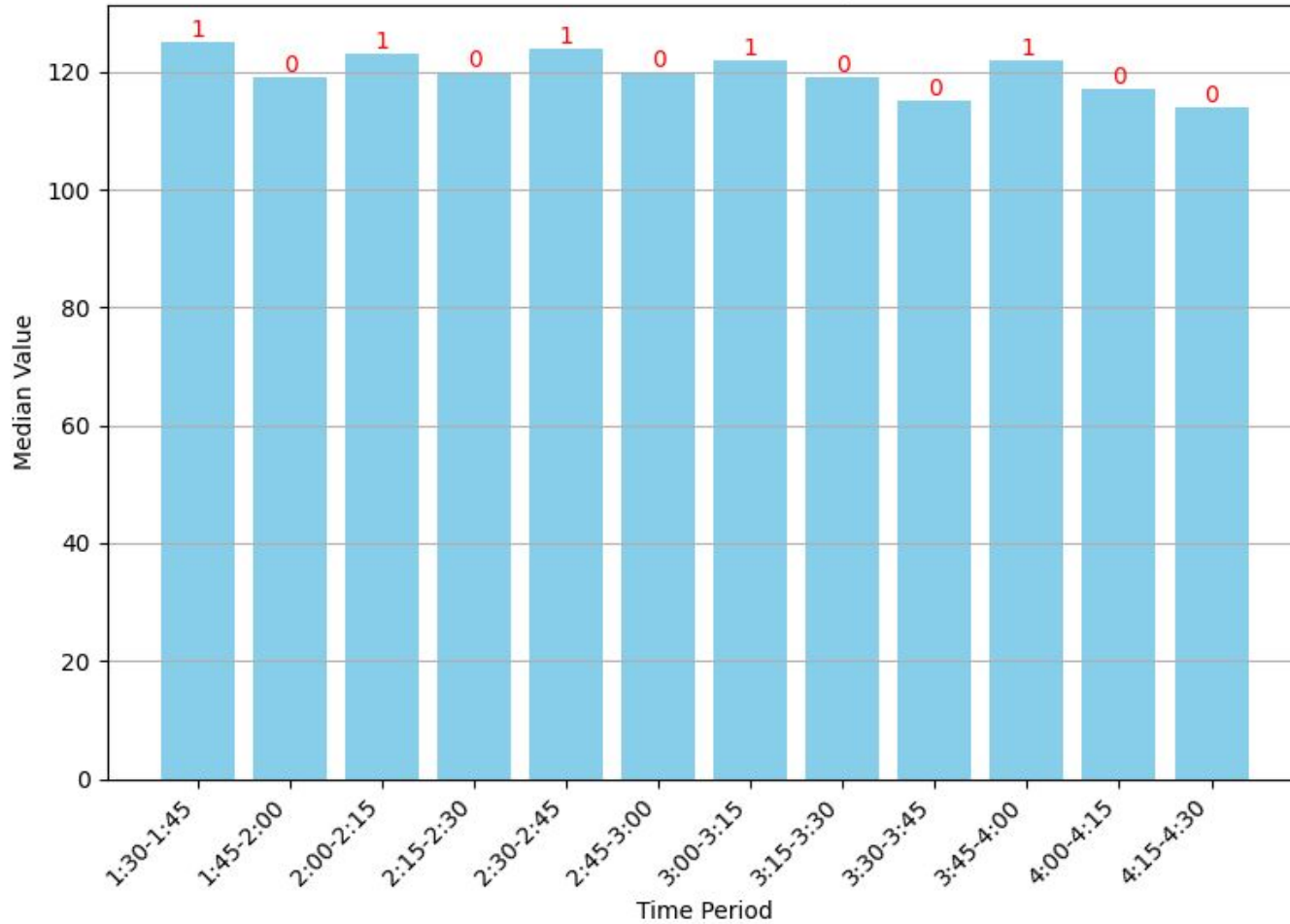
Median Values for mq6



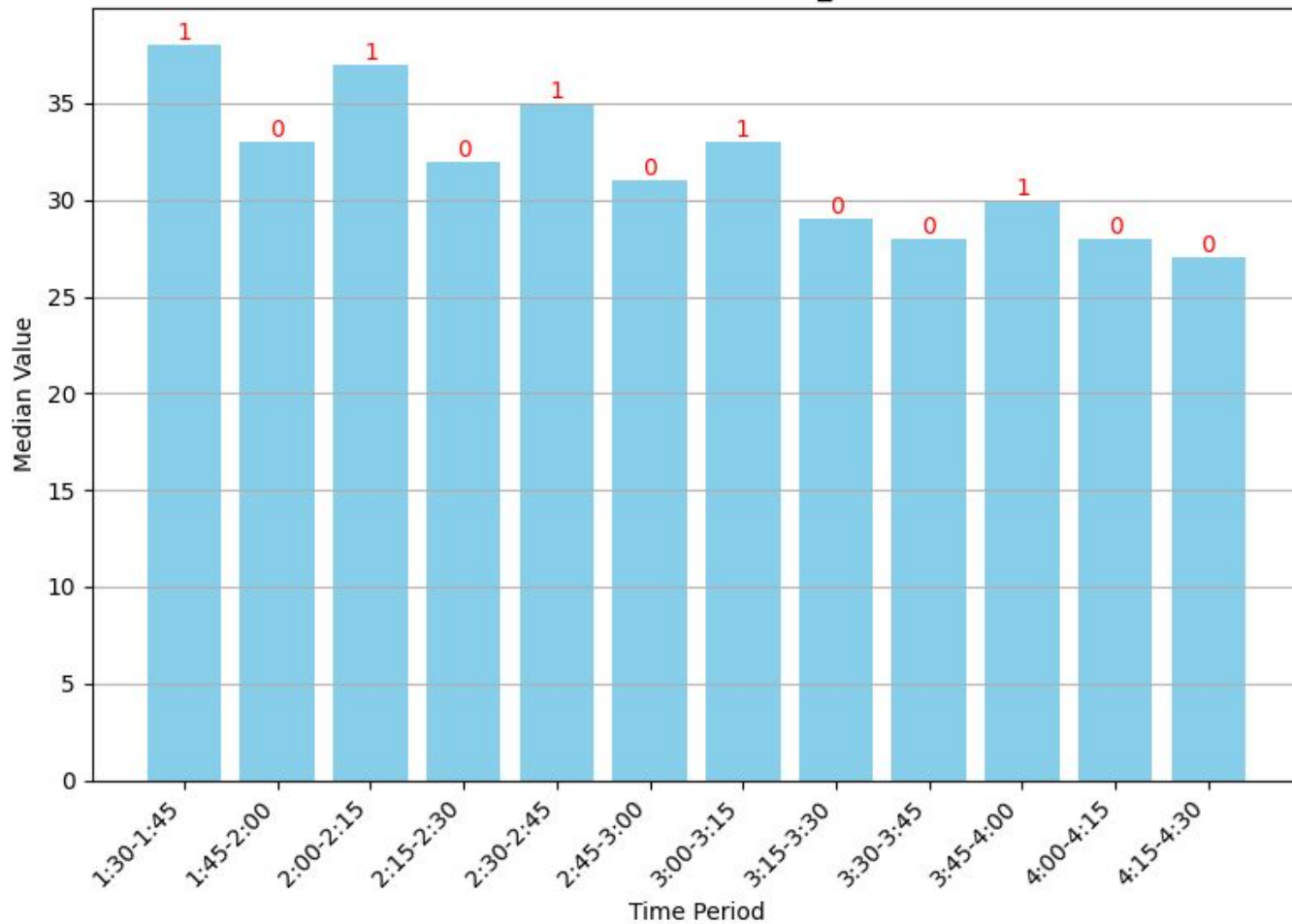
Median Values for mq8



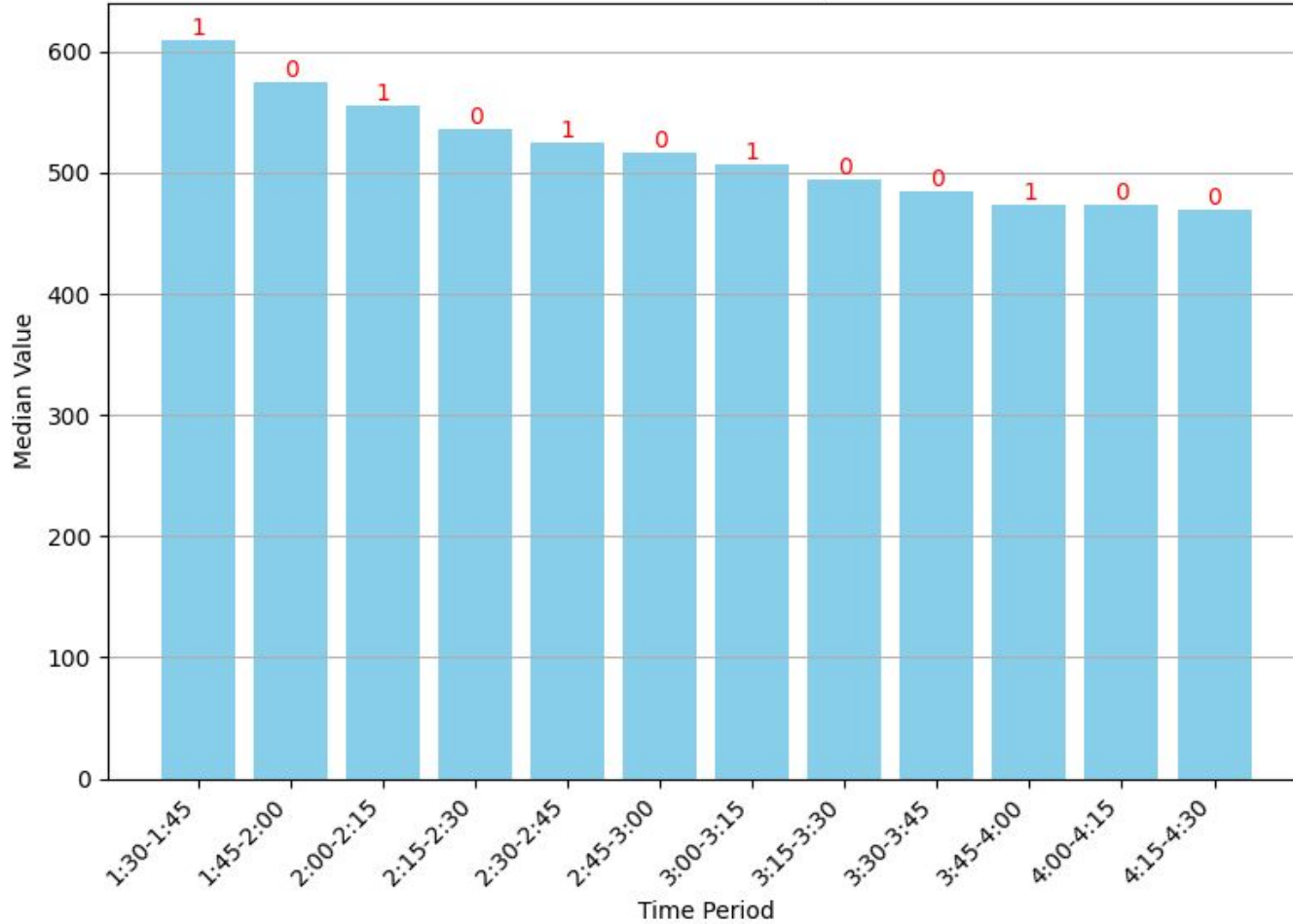
Median Values for mq9



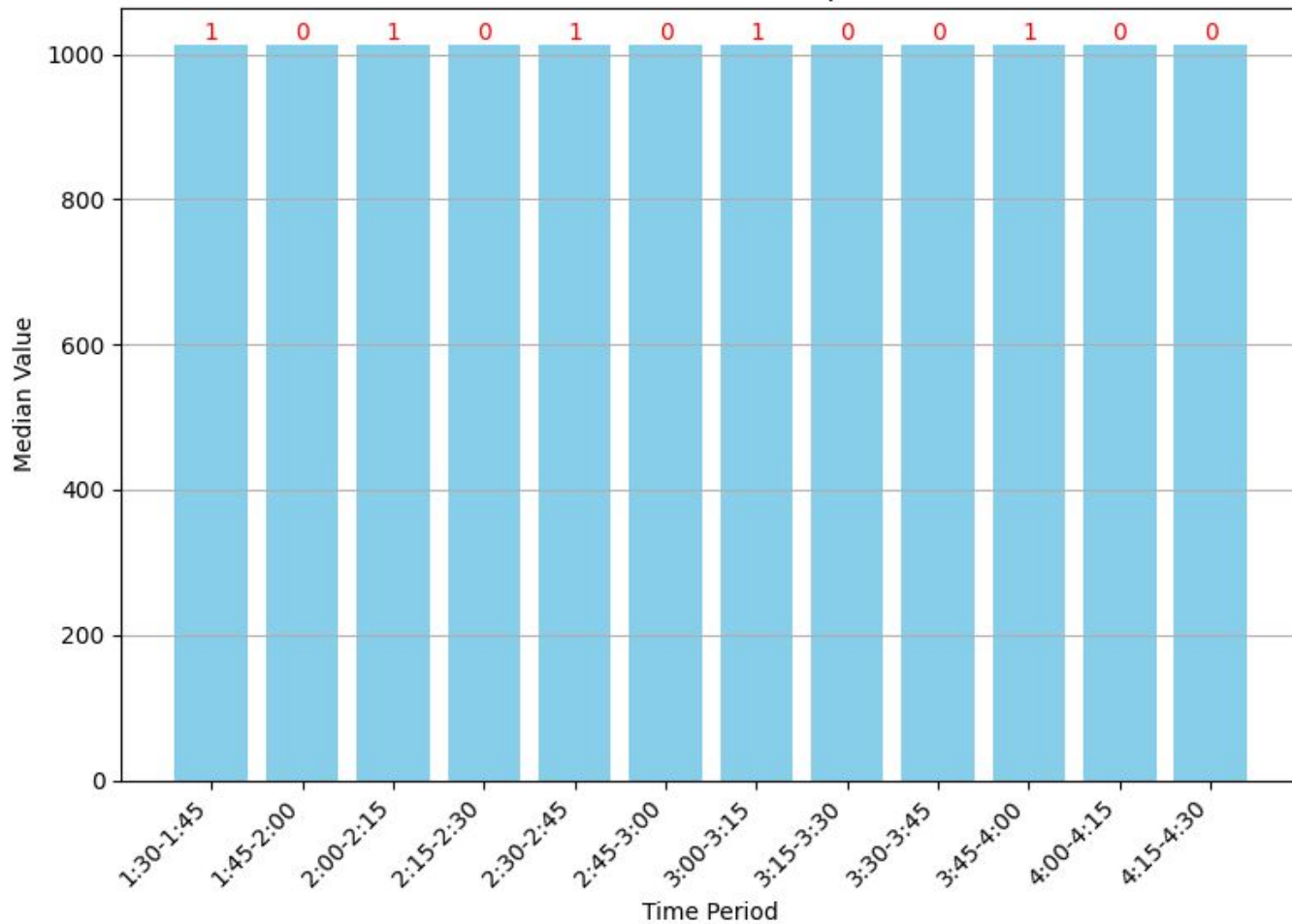
Median Values for mics_Vred



Median Values for mics_Vnox



Median Values for mq214



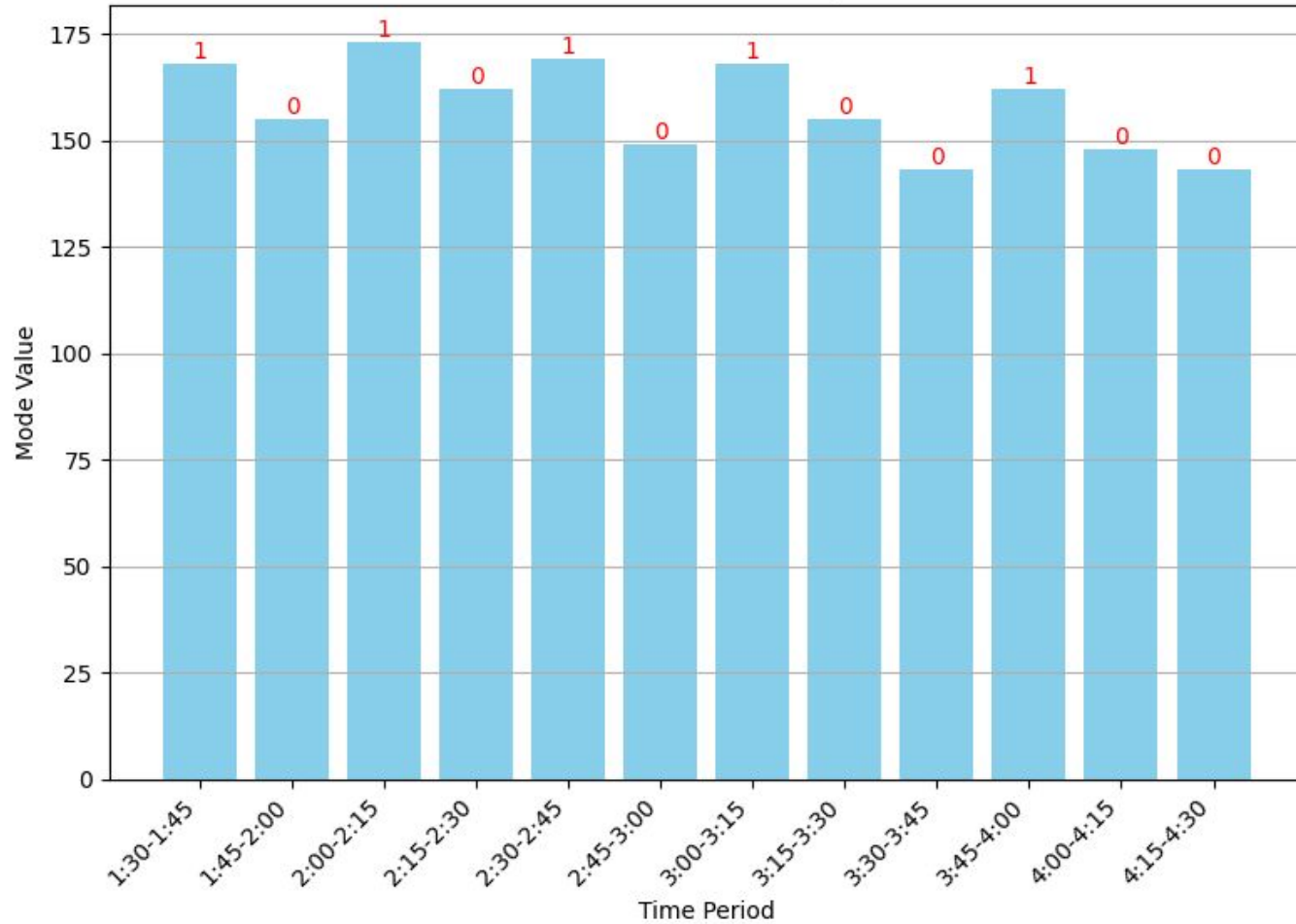
Mode: Represents the most frequently occurring value in a dataset, useful for categorical or discrete data.

Mode Value Analysis

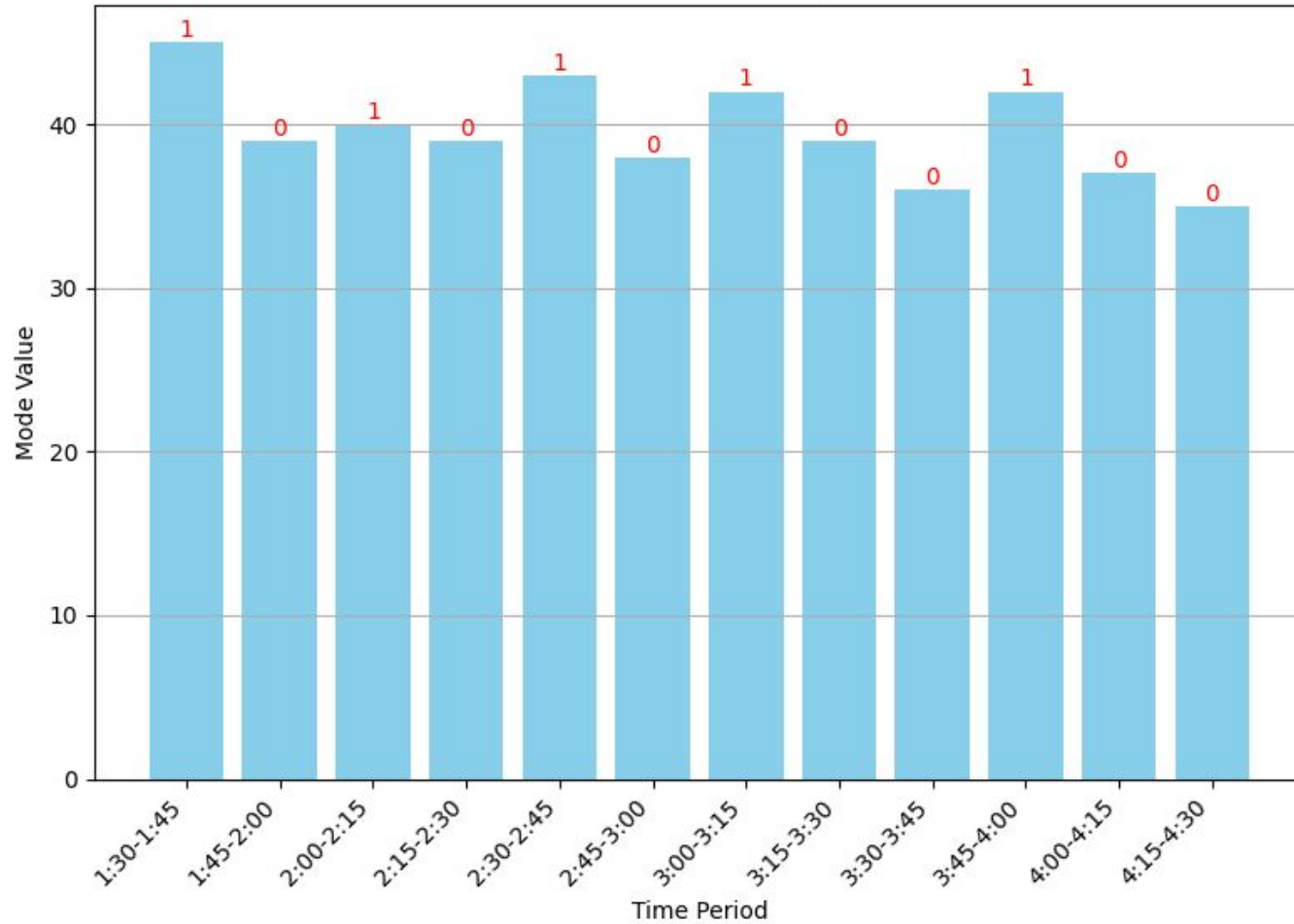
Chemical : Thinner

Bit Pattern : 101010100100

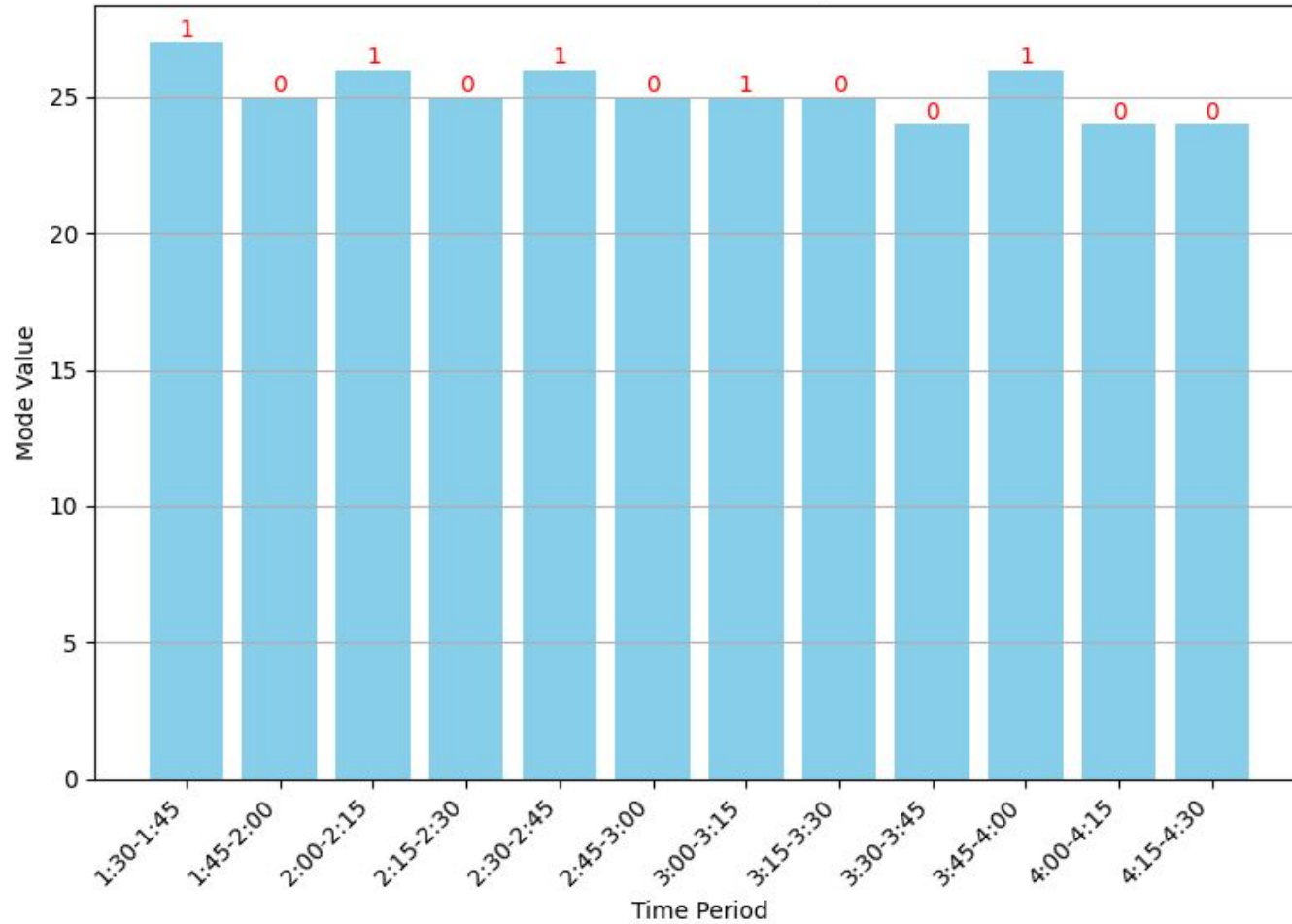
Mode Values for mq2



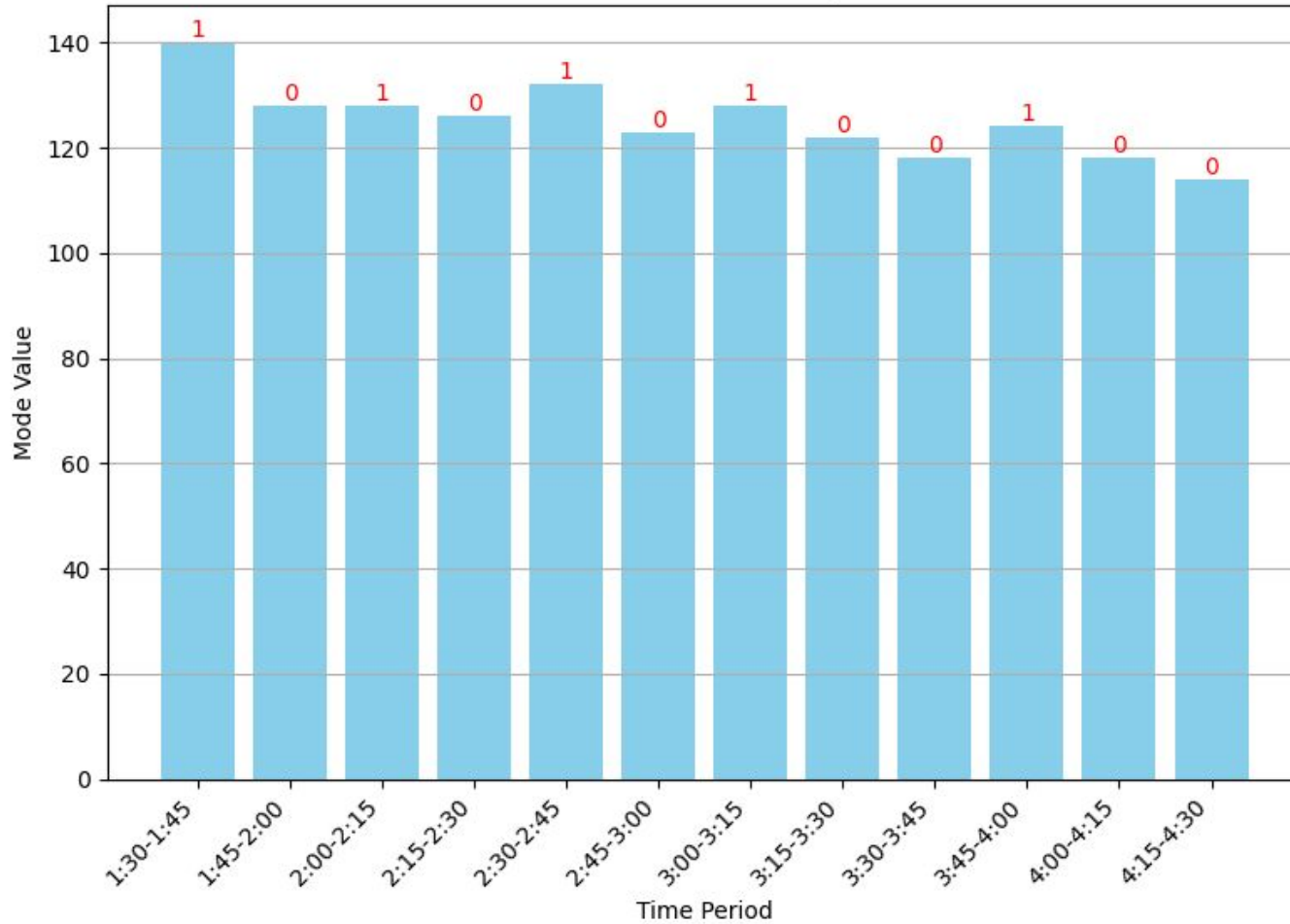
Mode Values for mq3



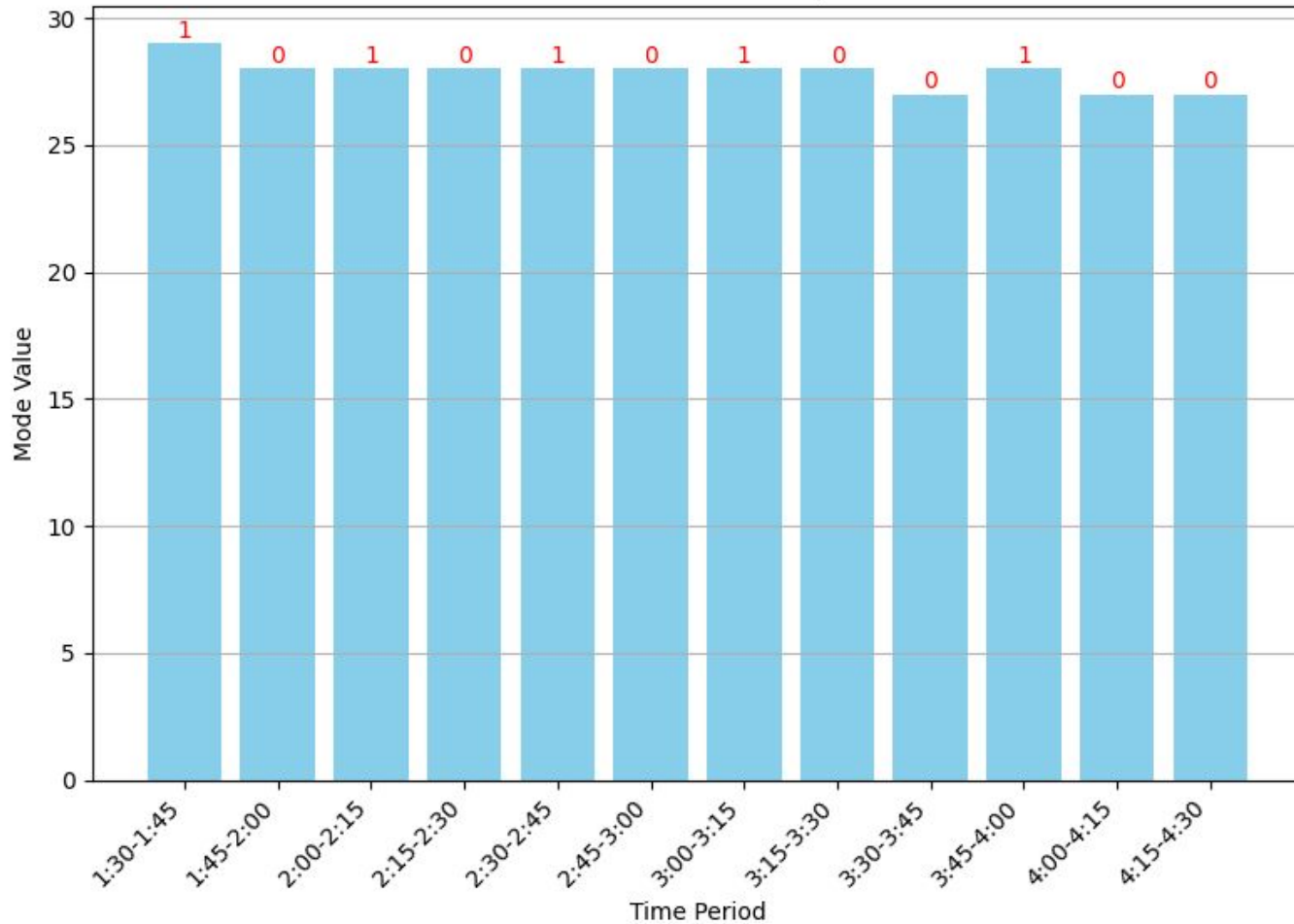
Mode Values for mq5



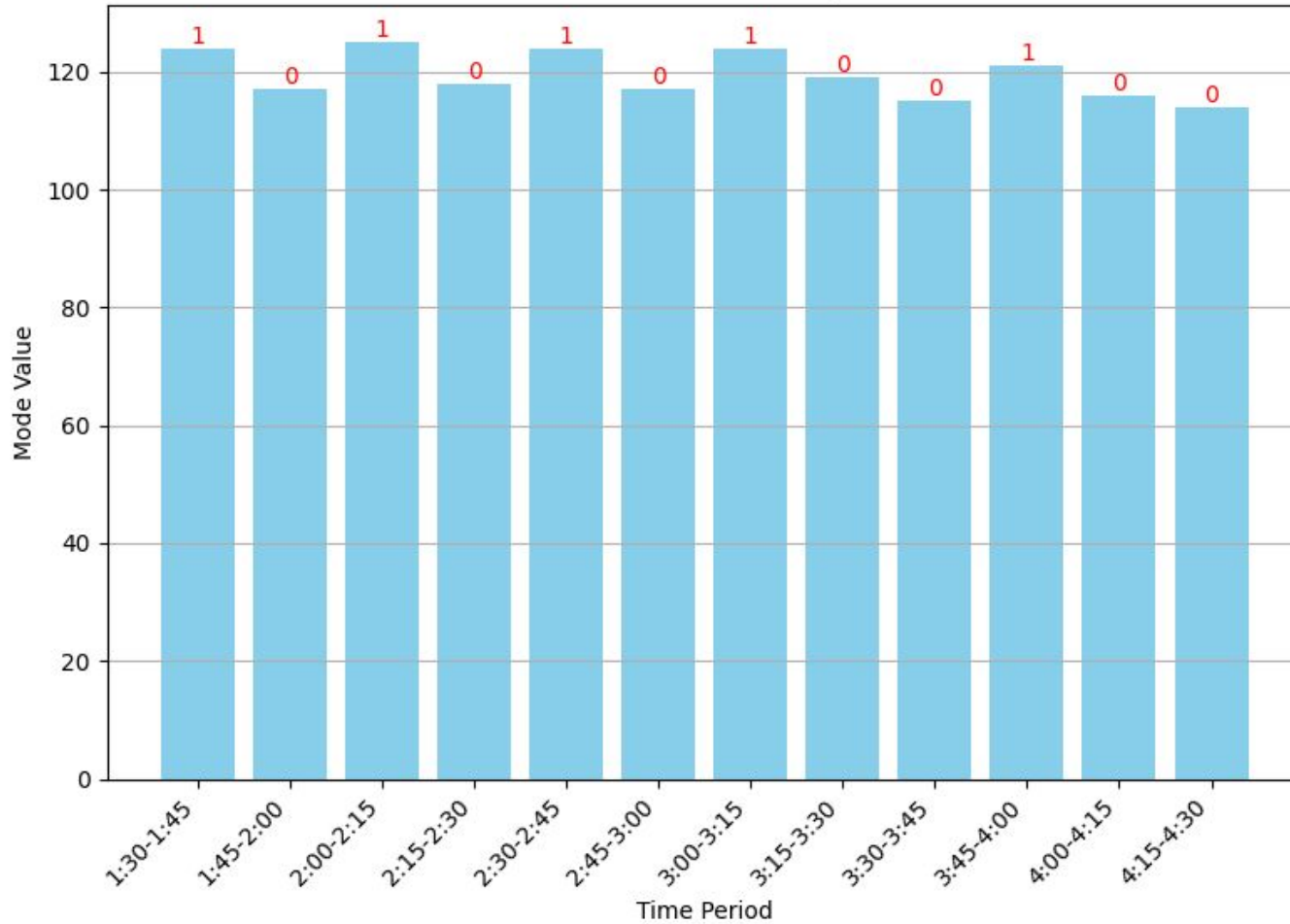
Mode Values for mq6



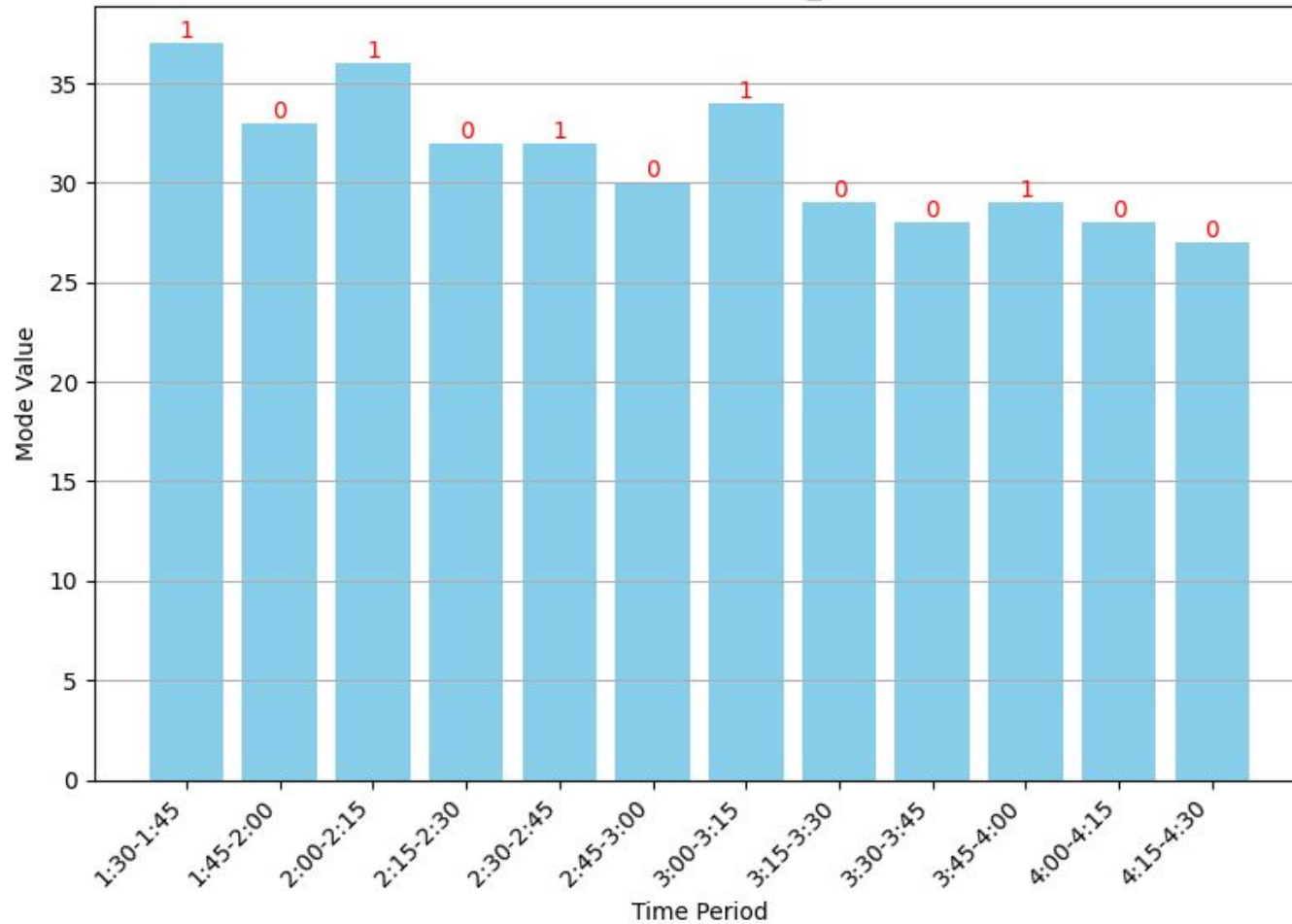
Mode Values for mq8



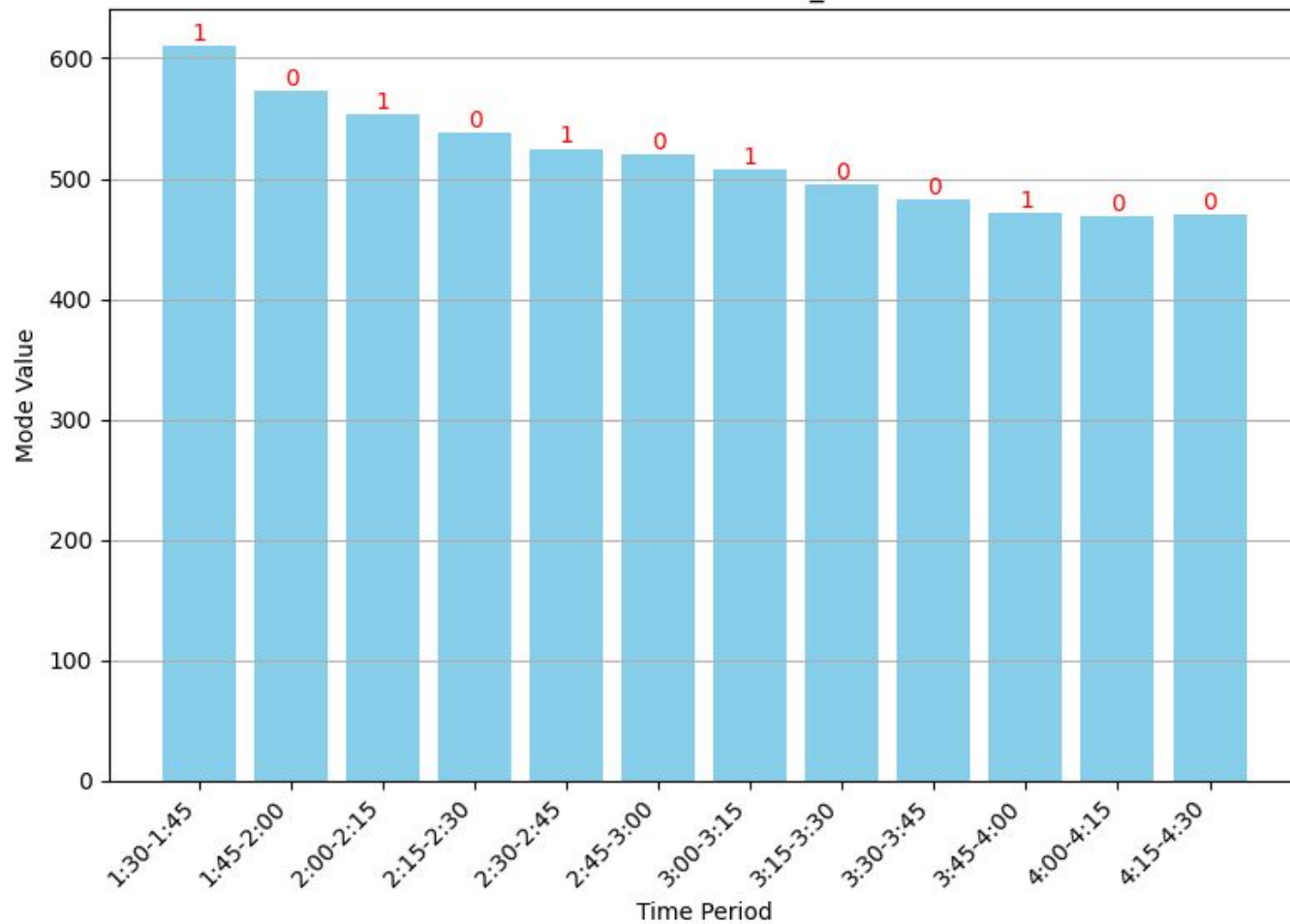
Mode Values for mq9



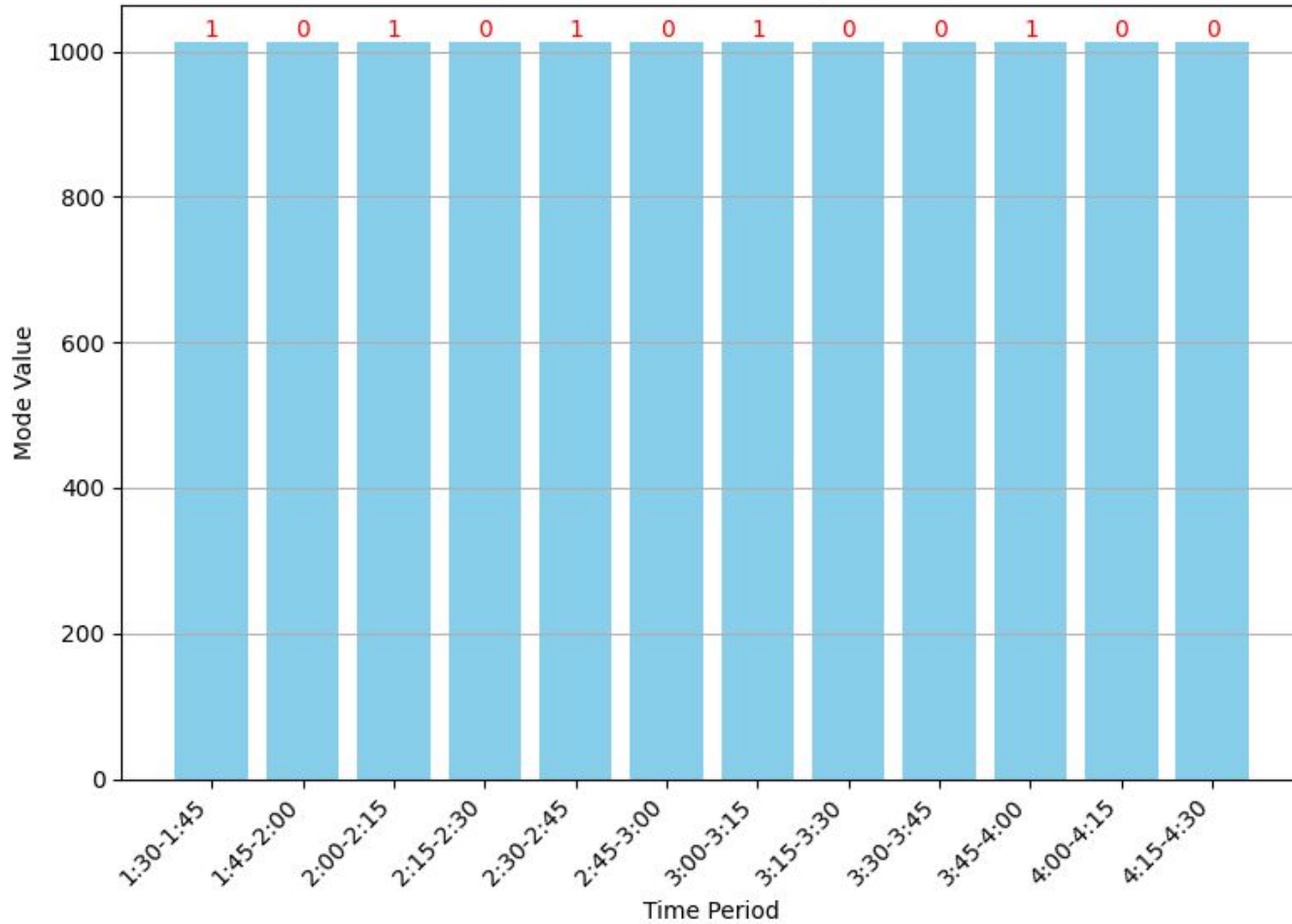
Mode Values for mics_Vred



Mode Values for mics_Vnox



Mode Values for mq214



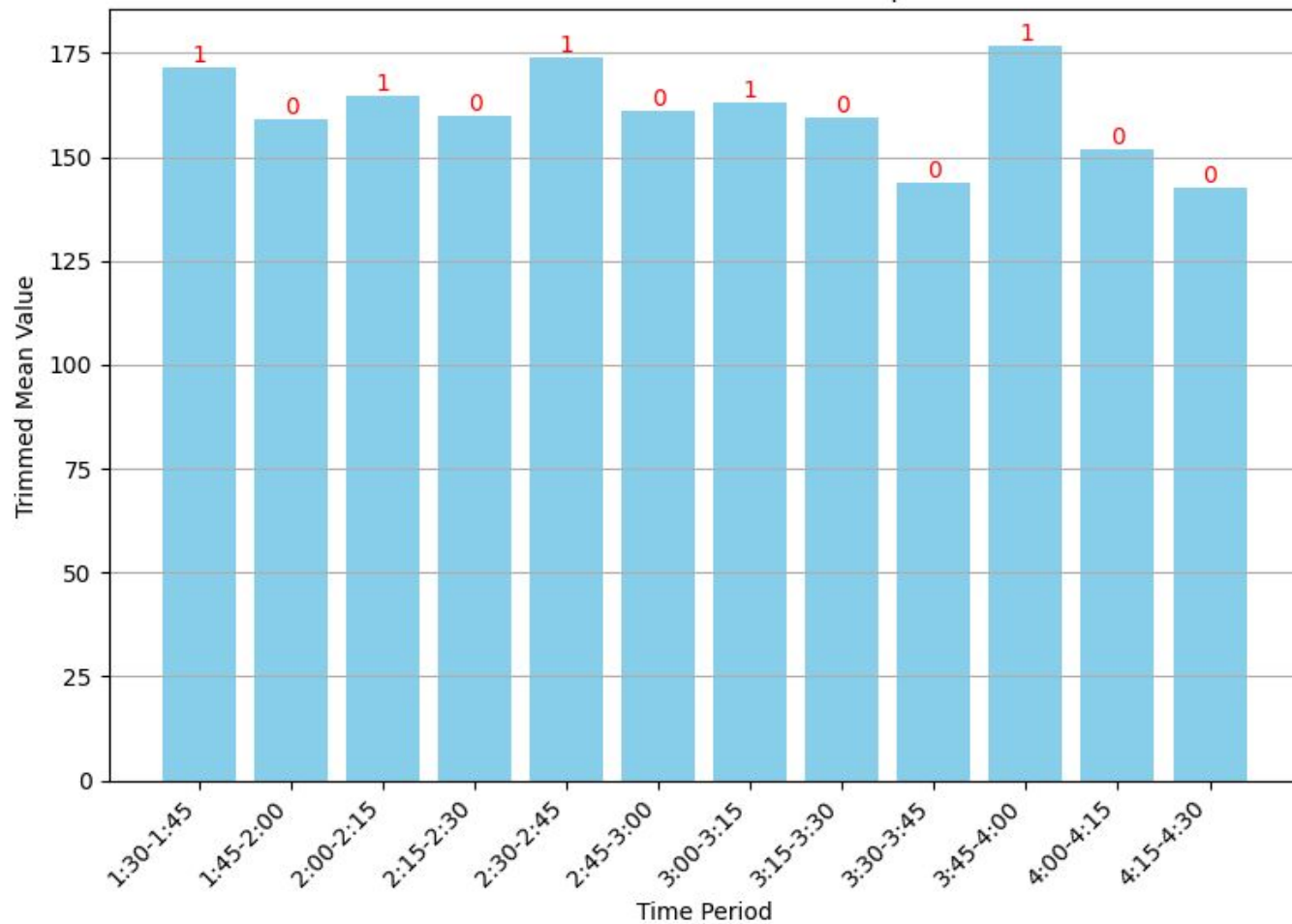
Trimmed Mean: Represents the mean of a dataset after a specified percentage of outliers are removed from both ends, providing a robust measure against extreme values.

Trimmed Mean Value Analysis

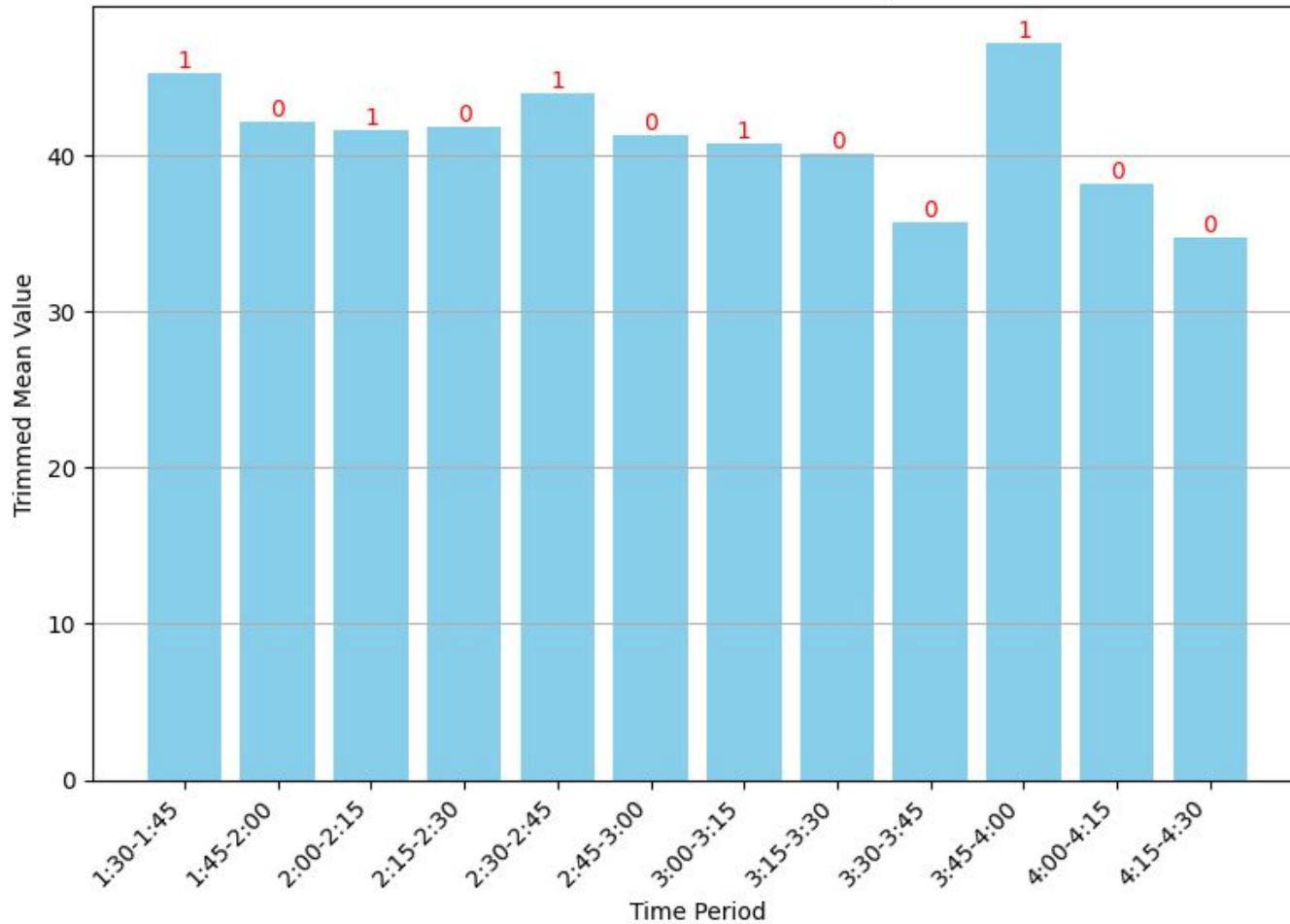
Chemical : Thinner

Bit Pattern : 101010100100

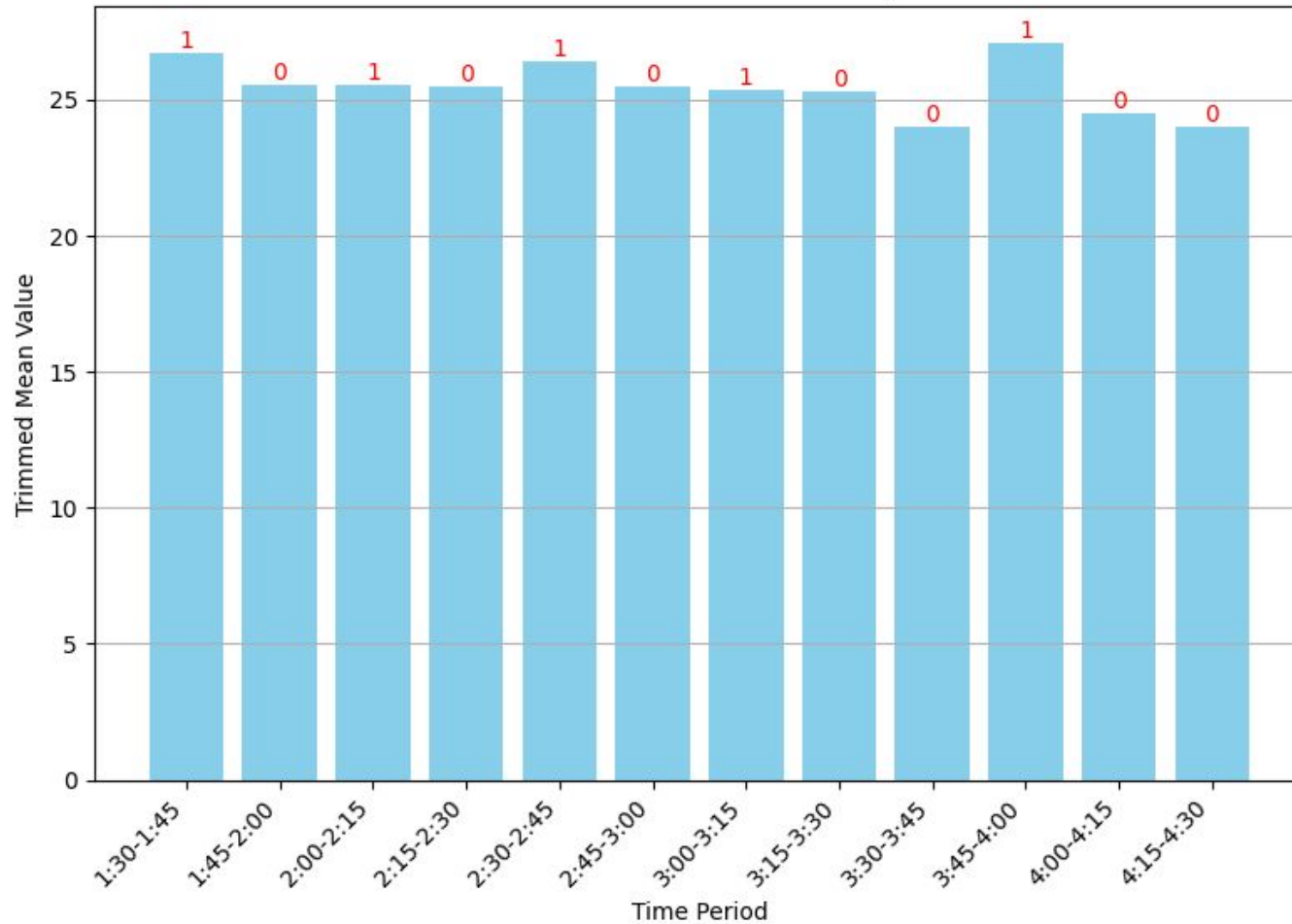
Trimmed Mean Values for mq2



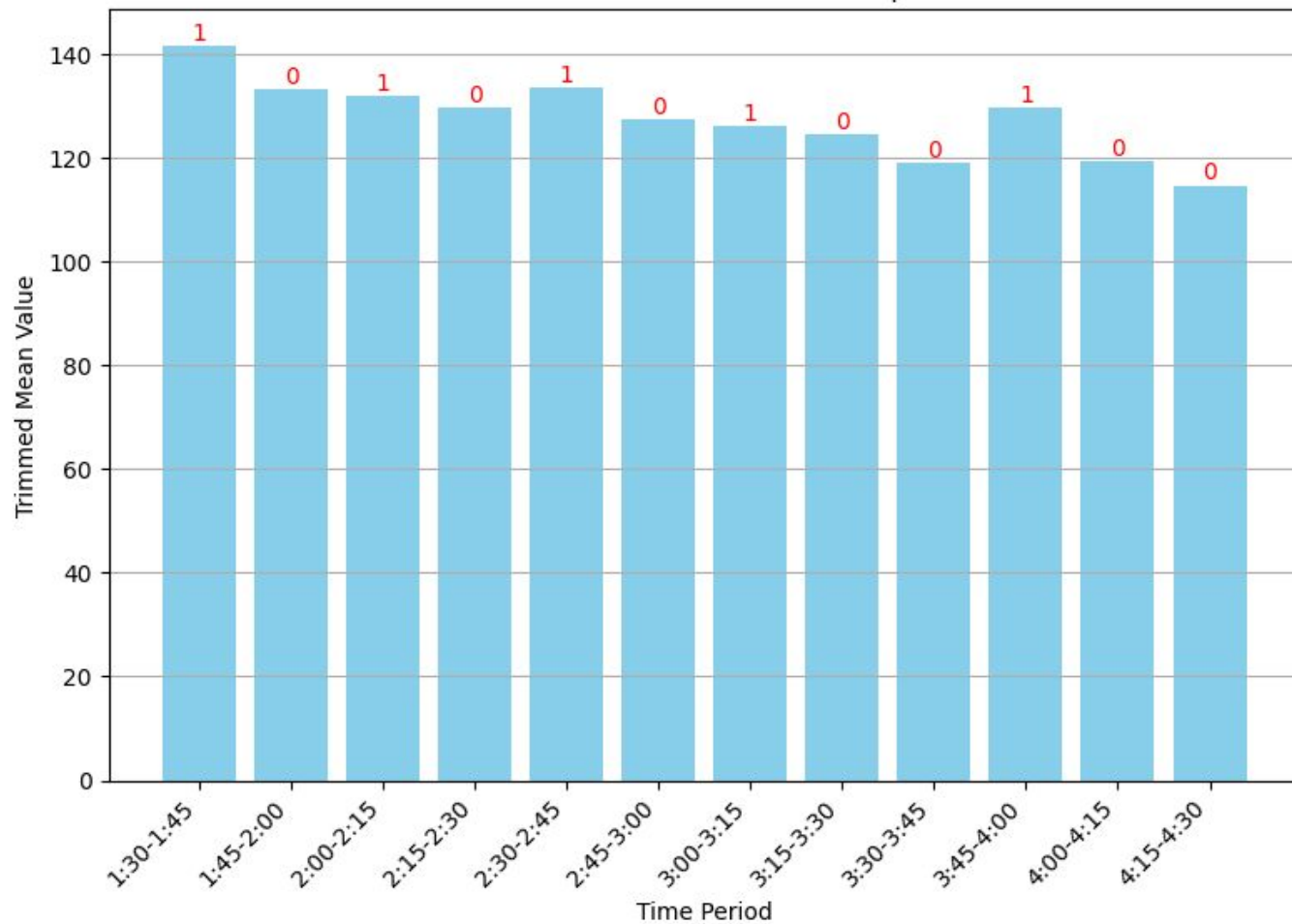
Trimmed Mean Values for mq3



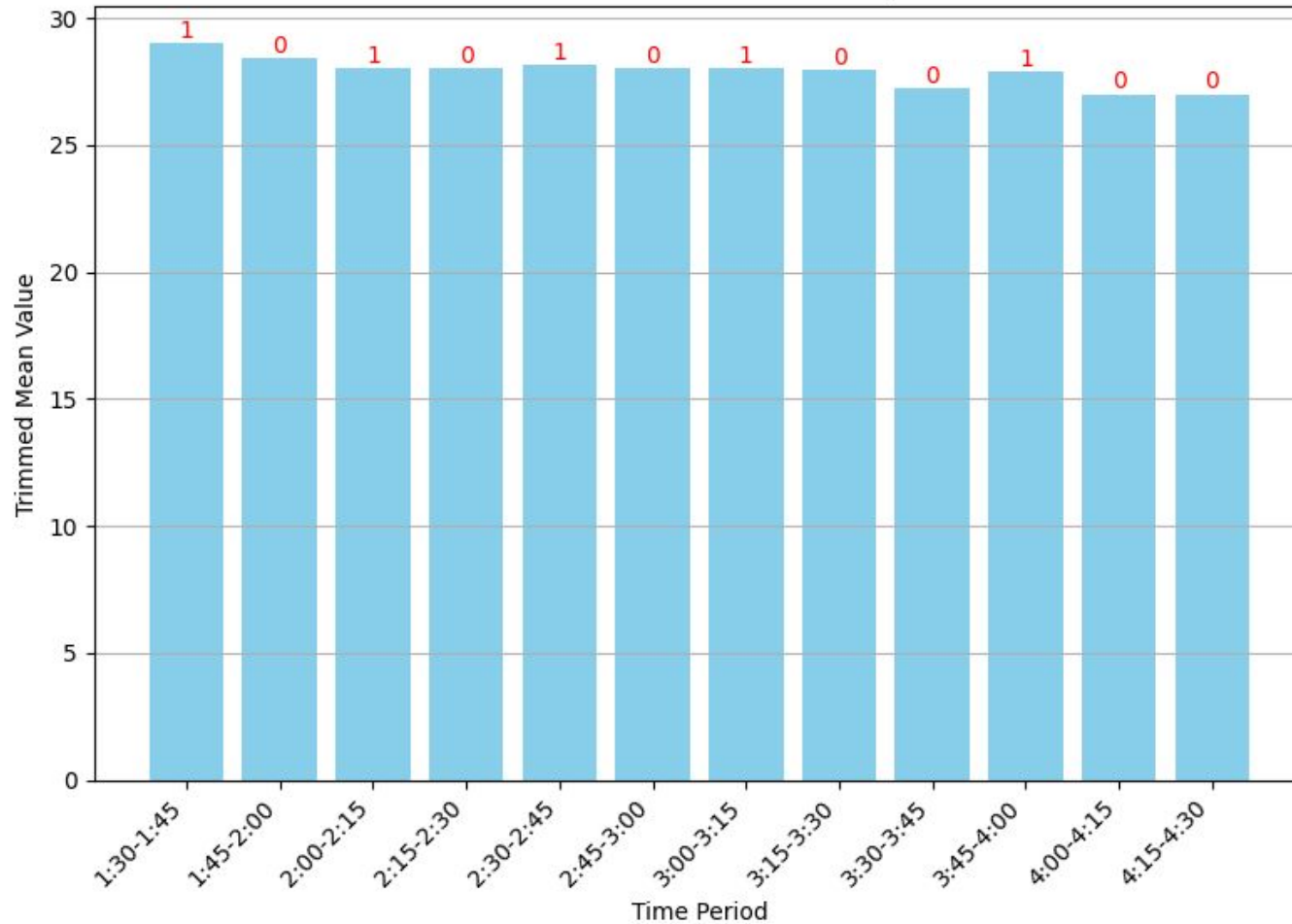
Trimmed Mean Values for mq5



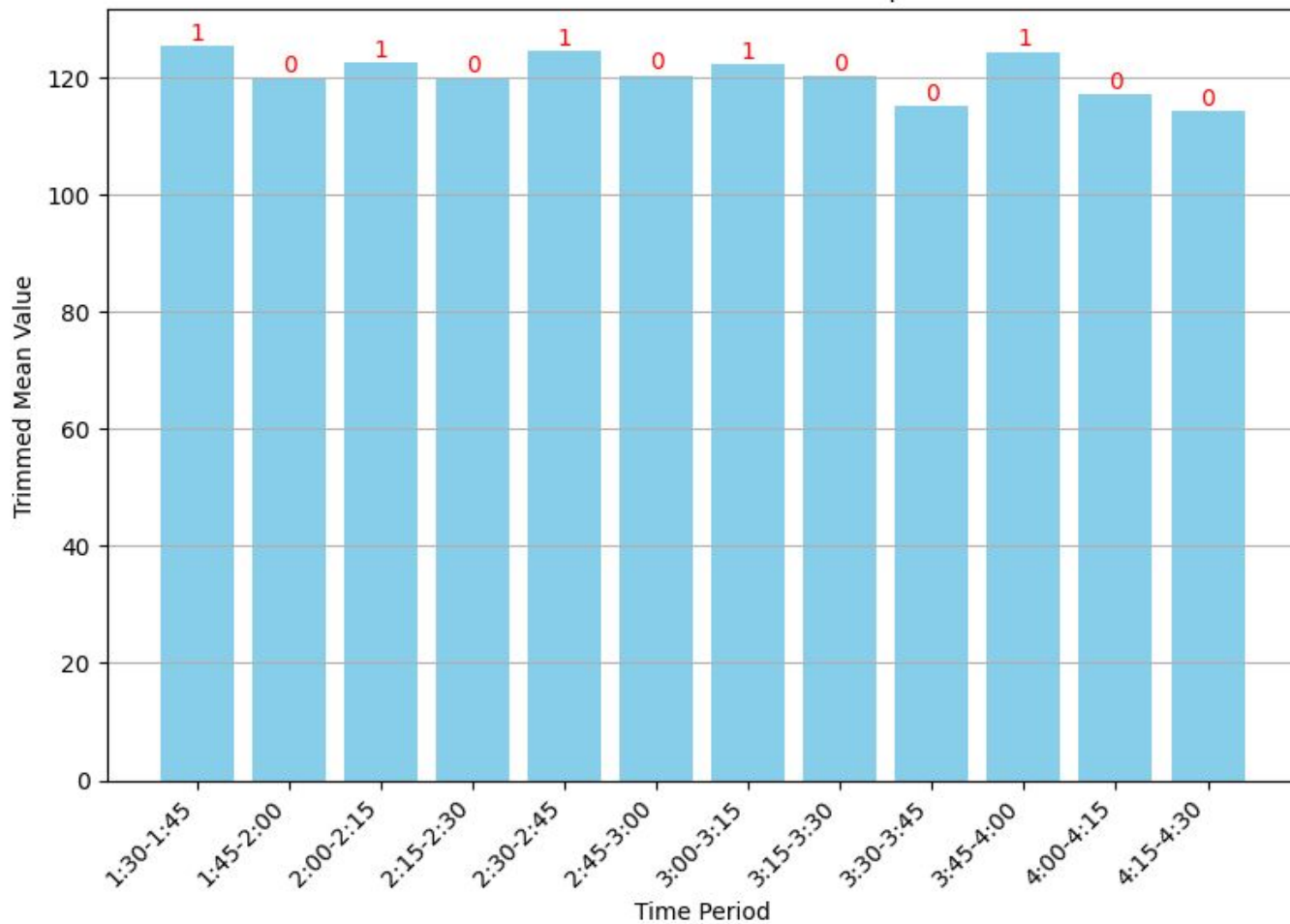
Trimmed Mean Values for mq6



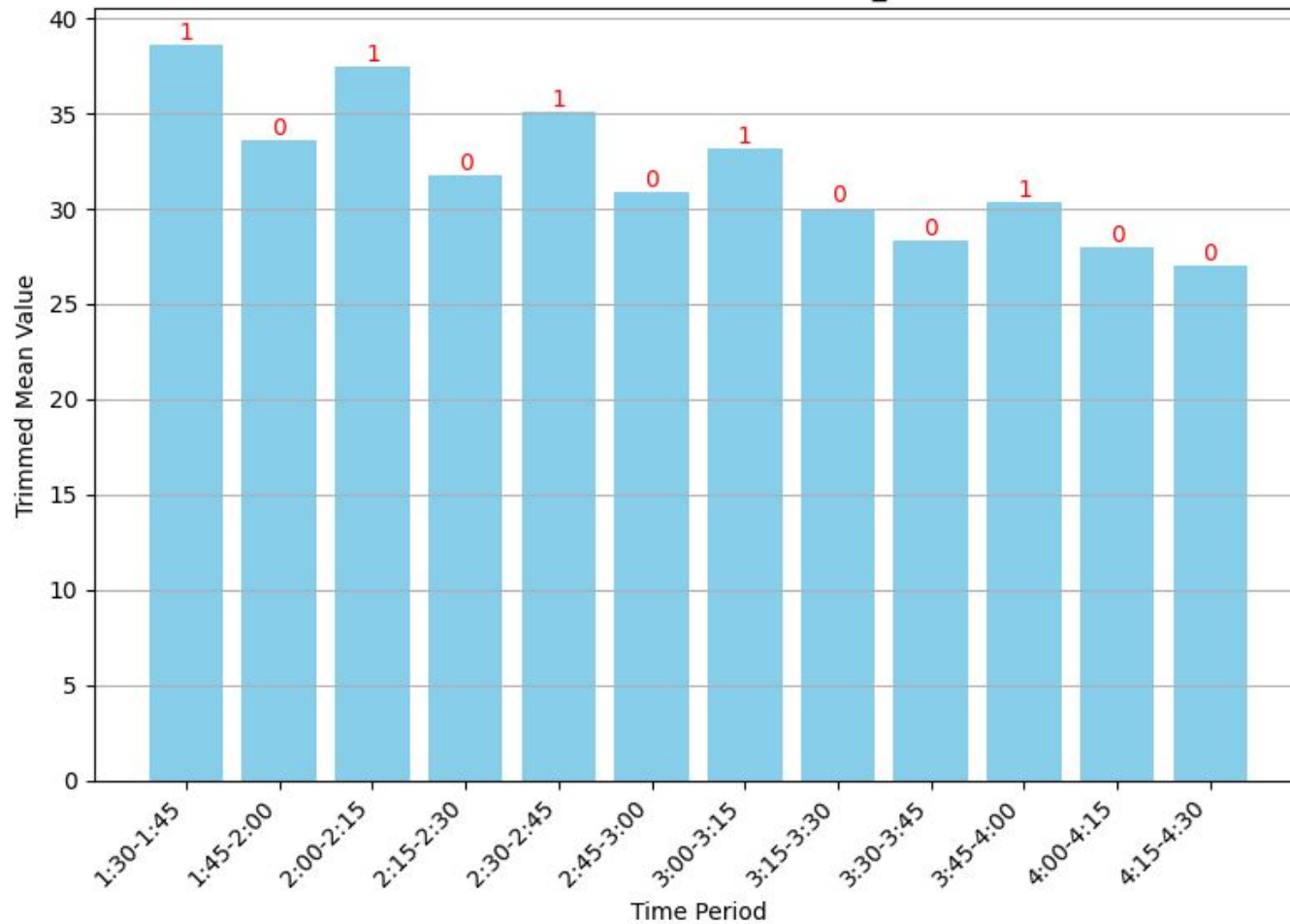
Trimmed Mean Values for mq8



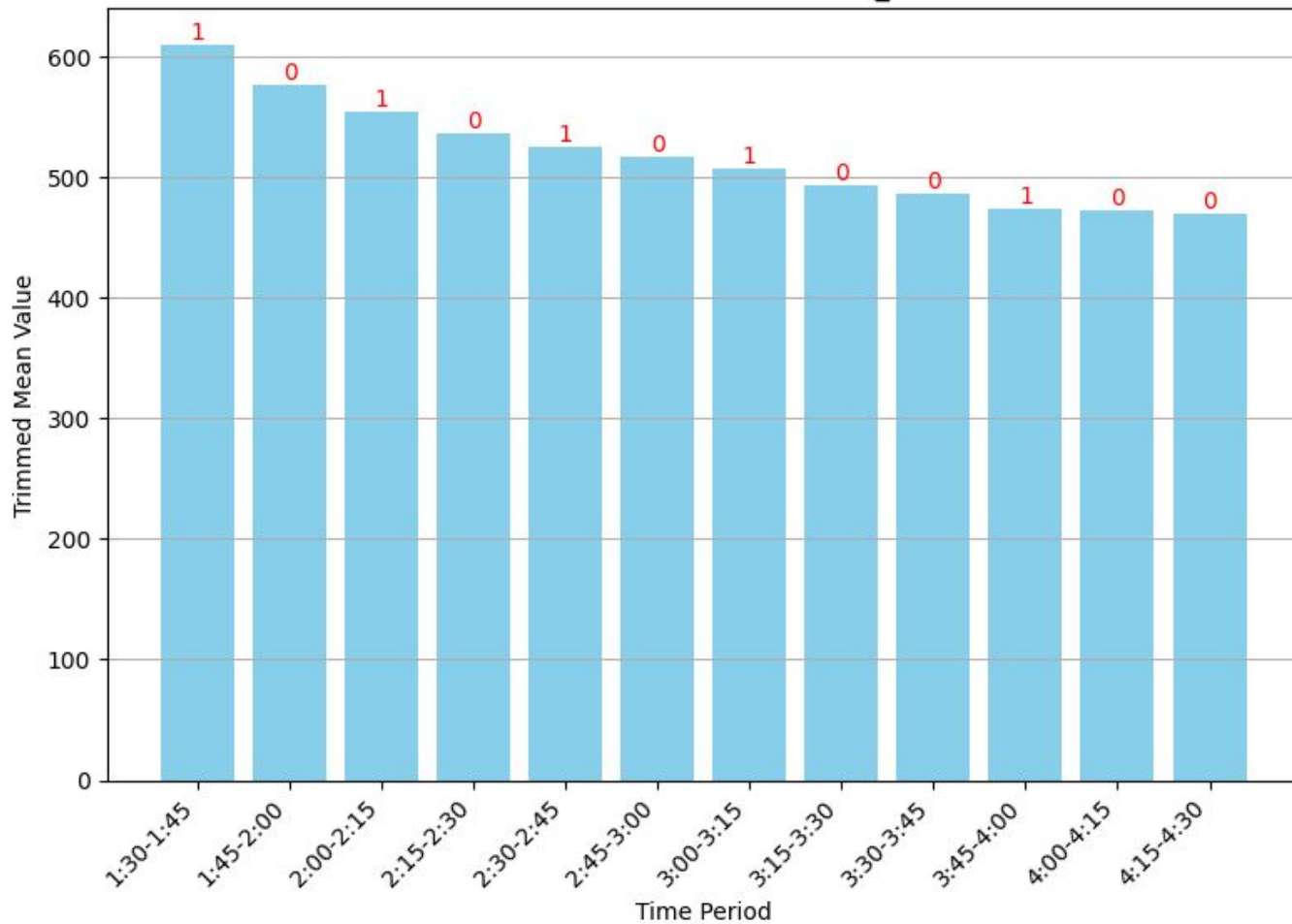
Trimmed Mean Values for mq9



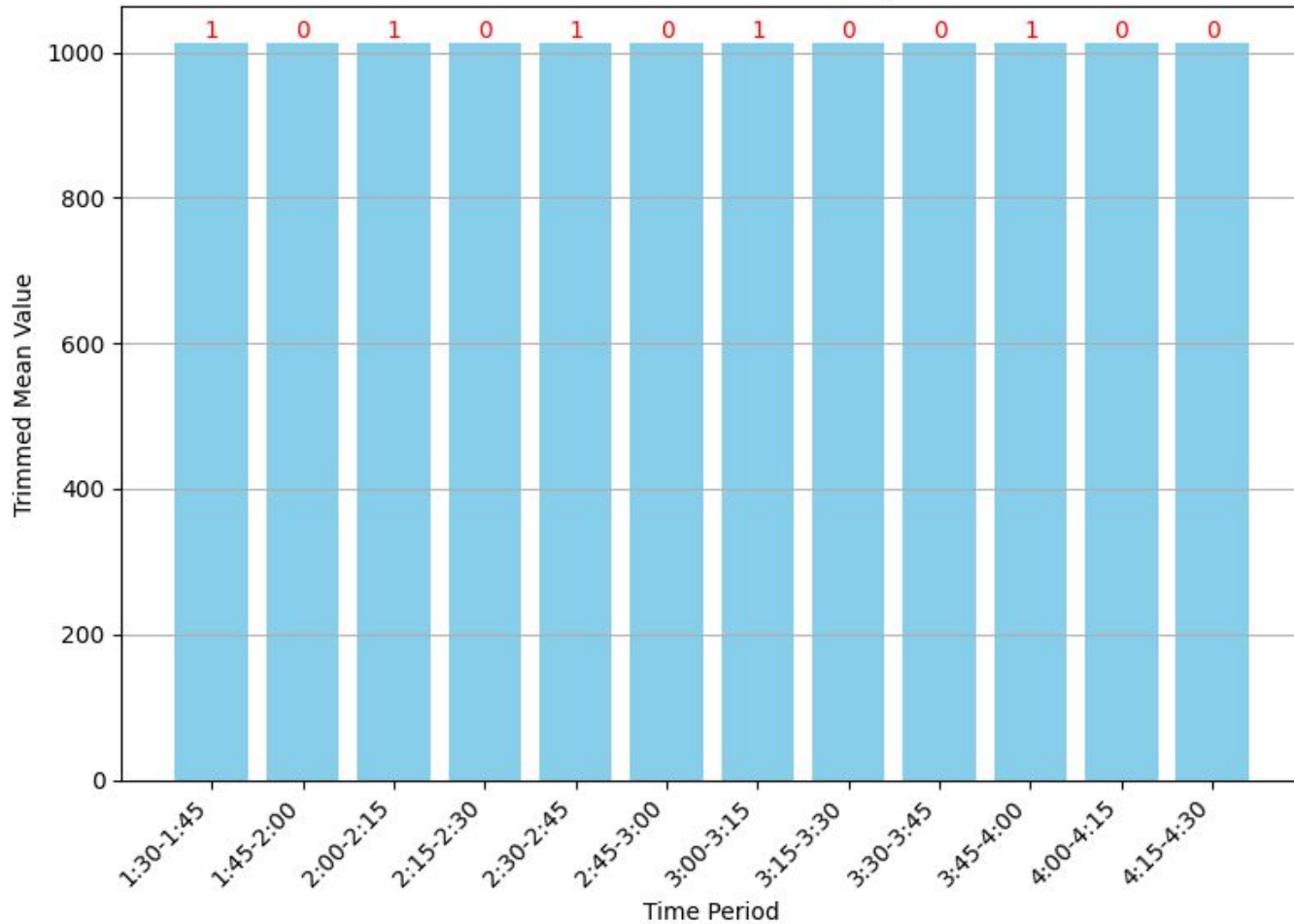
Trimmed Mean Values for mics_vred



Trimmed Mean Values for mics_Vnox



Trimmed Mean Values for mq214



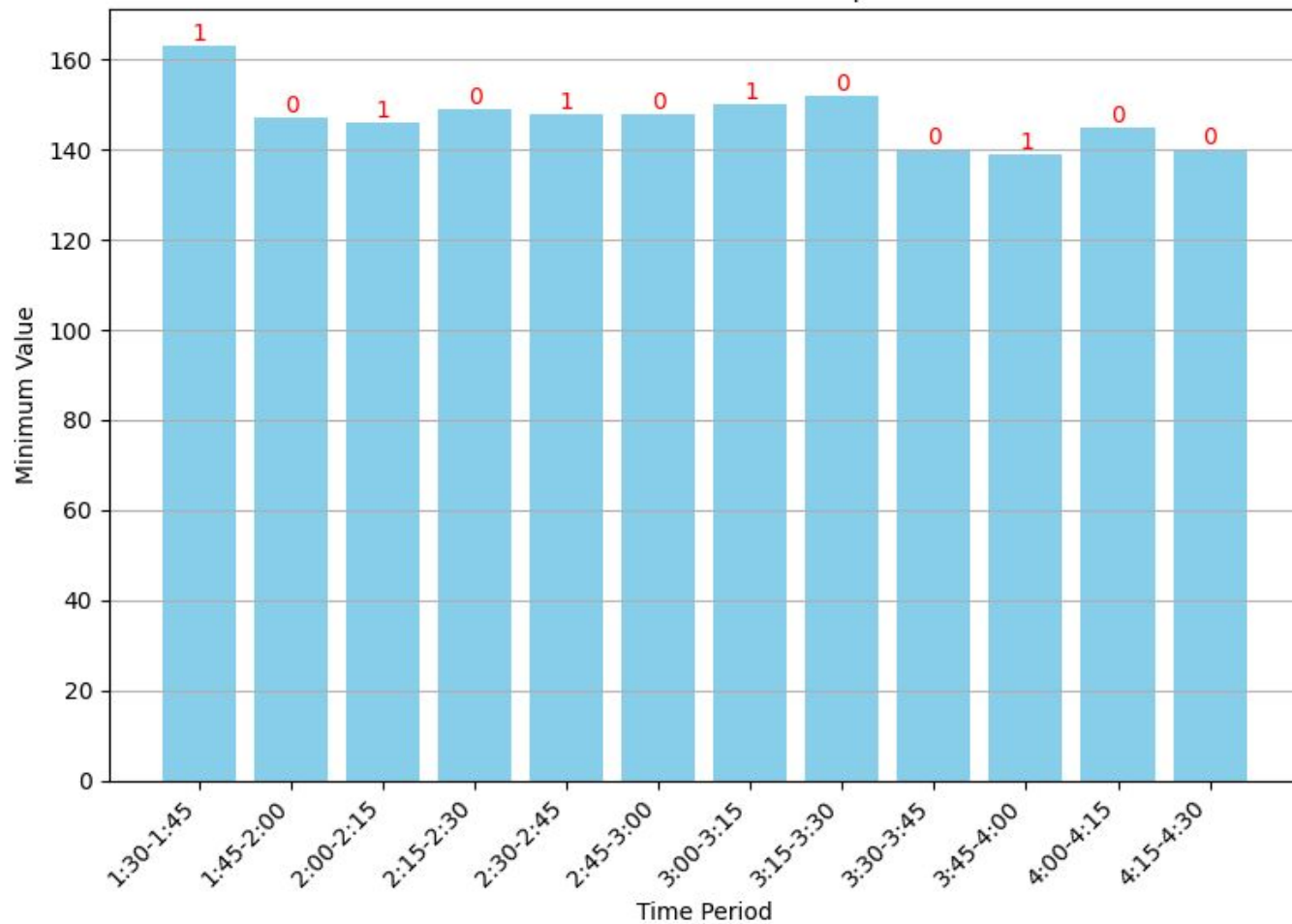
Minimum: Represents the lowest value in a dataset, providing insight into troughs or lower limits.

Min Value Analysis

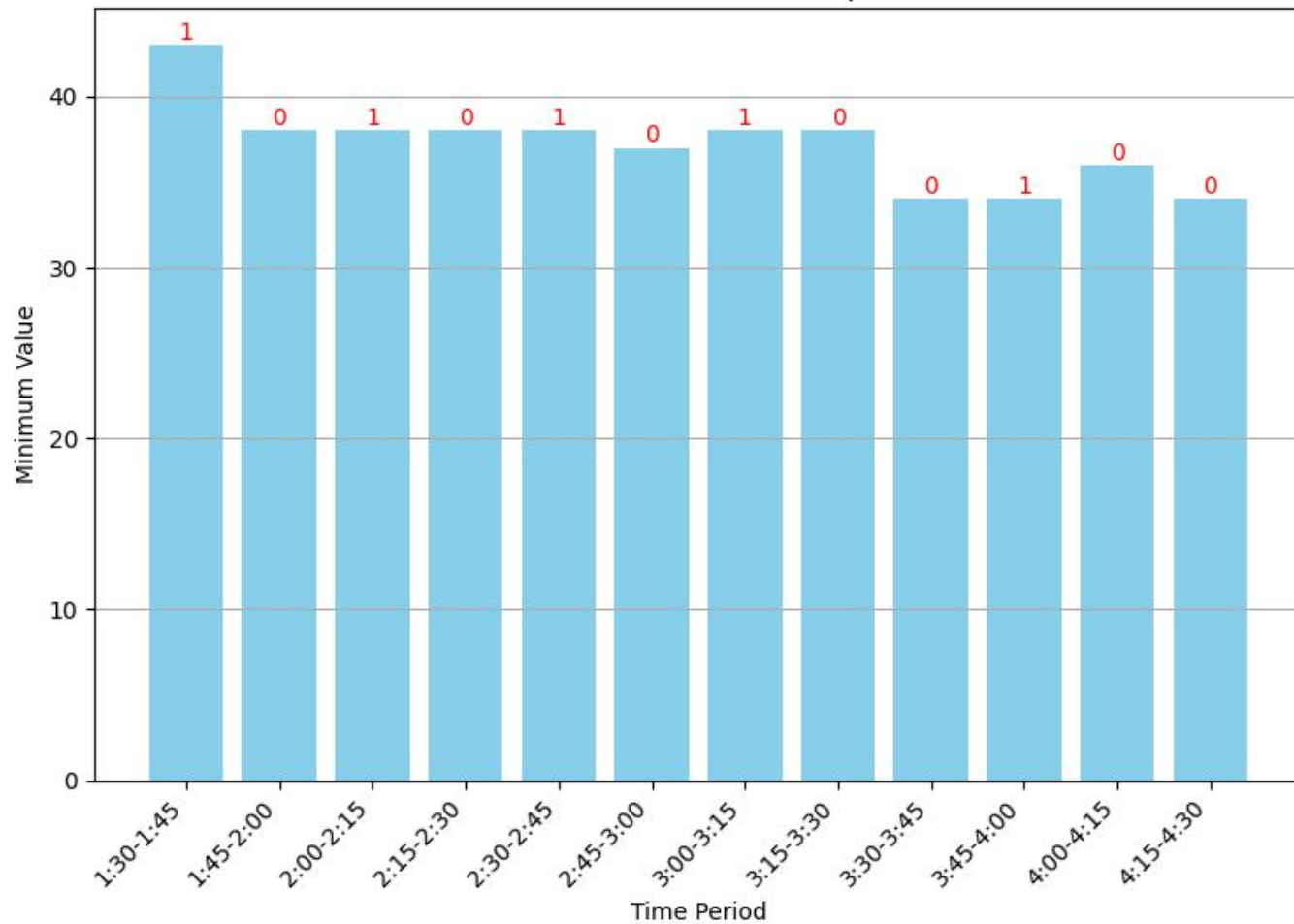
Chemical : Thinner

Bit Pattern : 101010100100

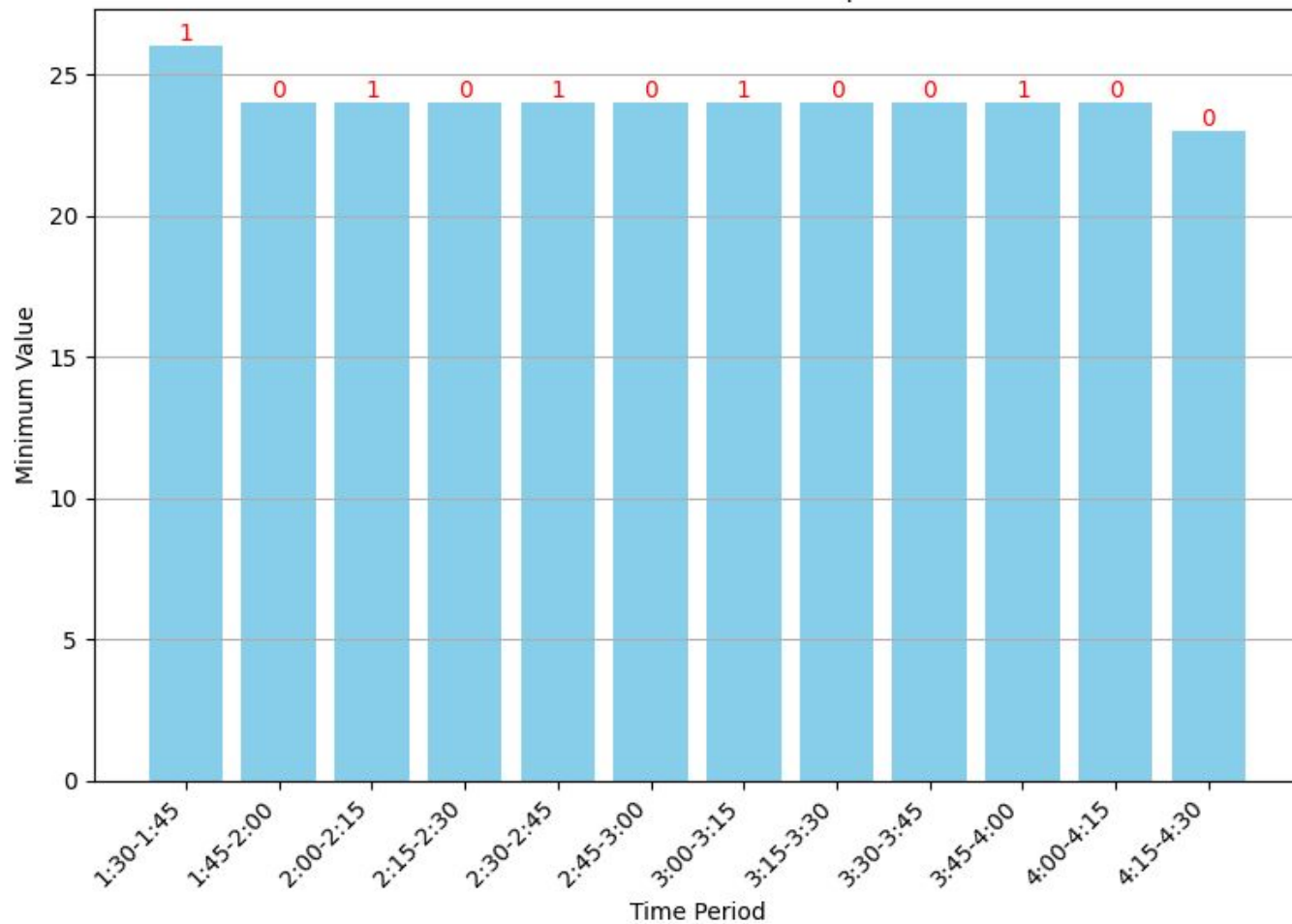
Minimum Values for mq2



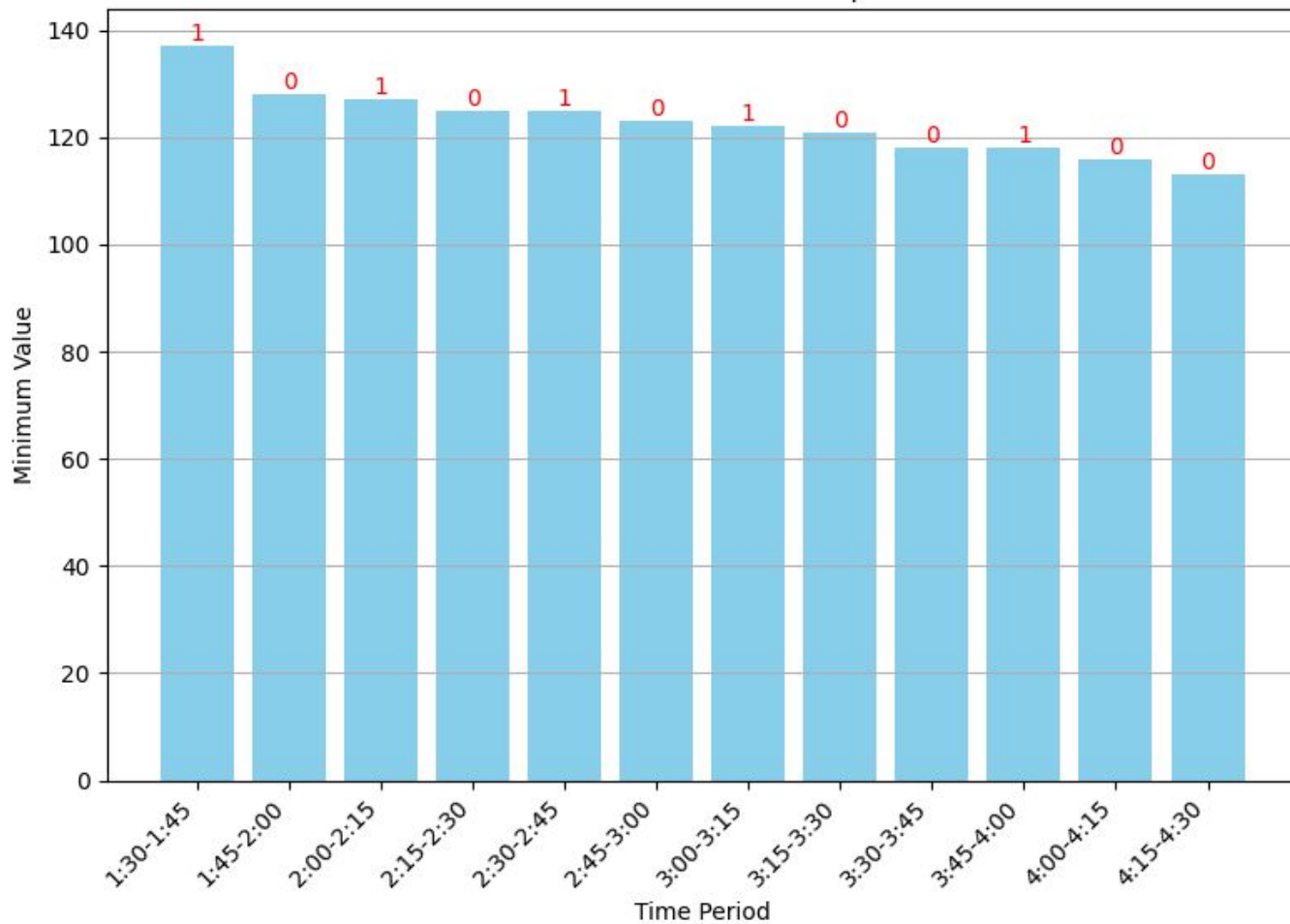
Minimum Values for mq3



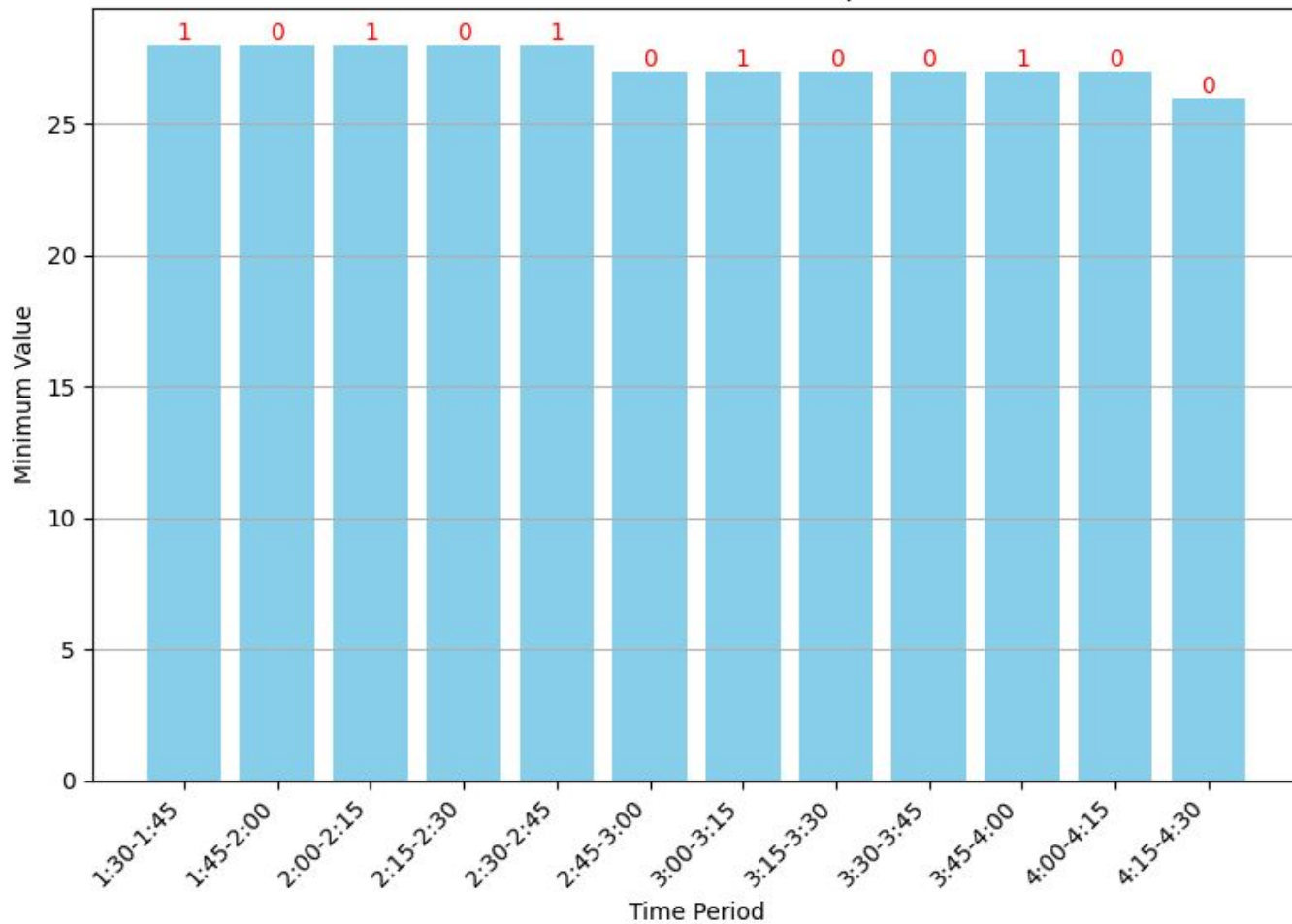
Minimum Values for mq5



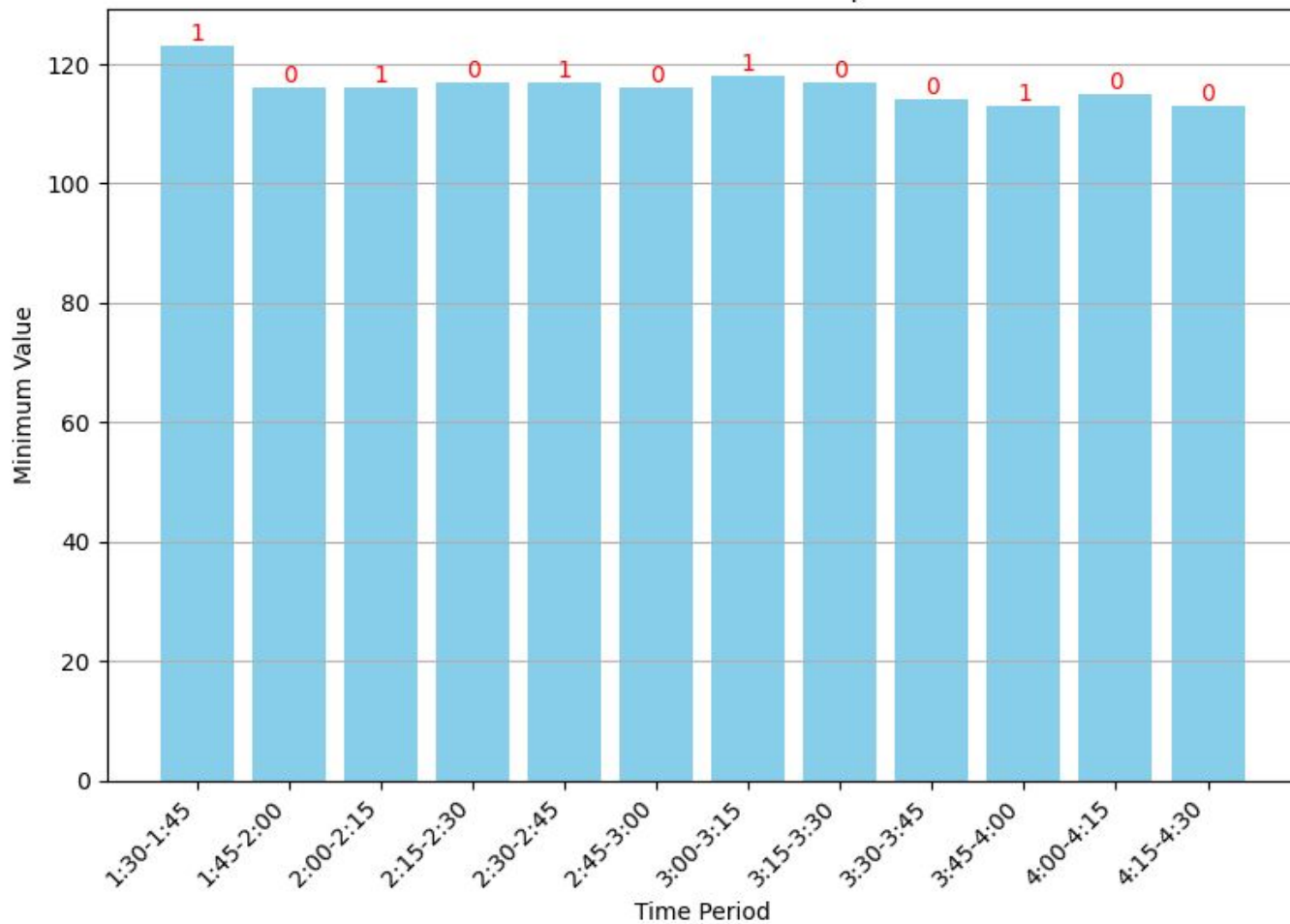
Minimum Values for mq6



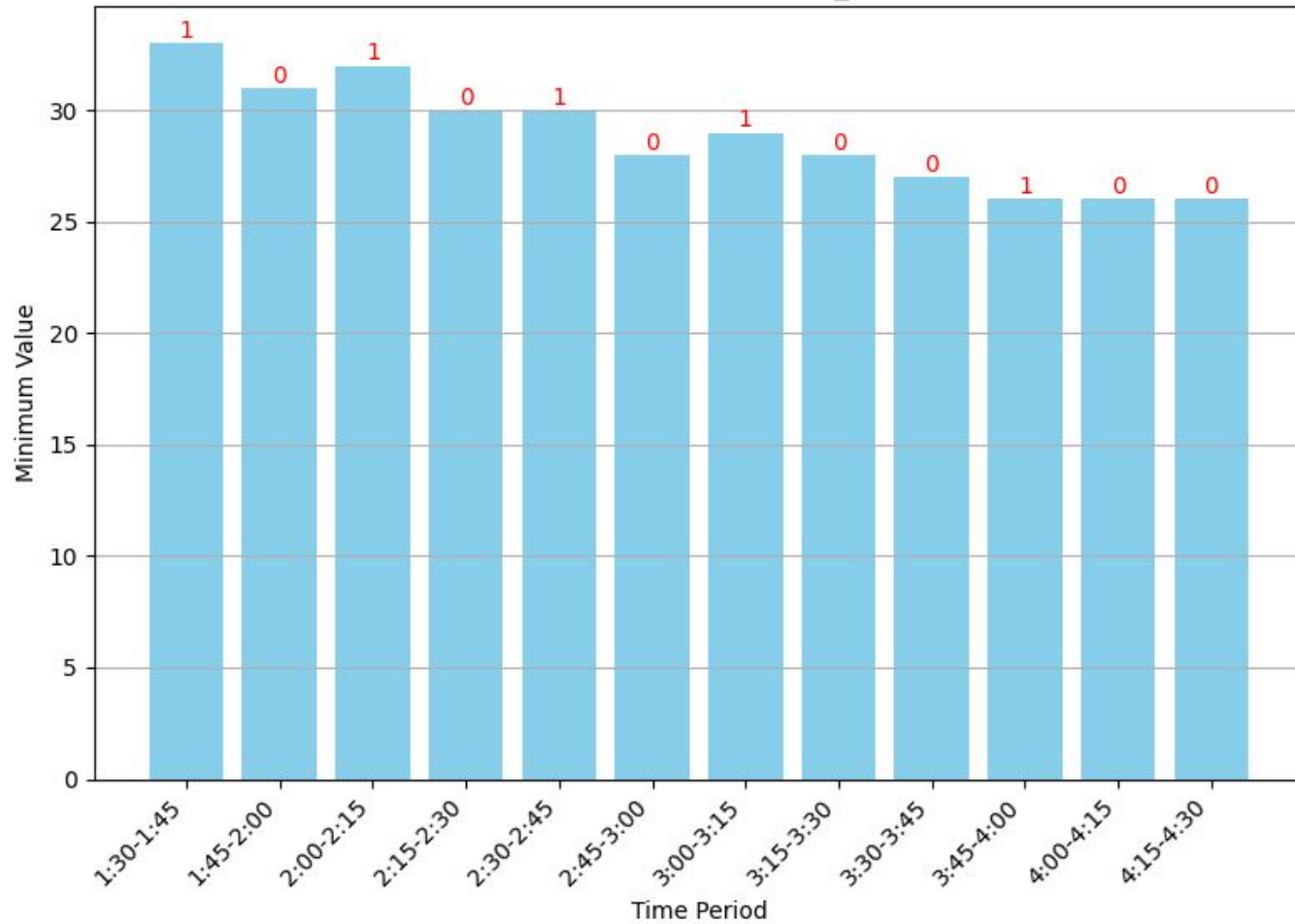
Minimum Values for mq8



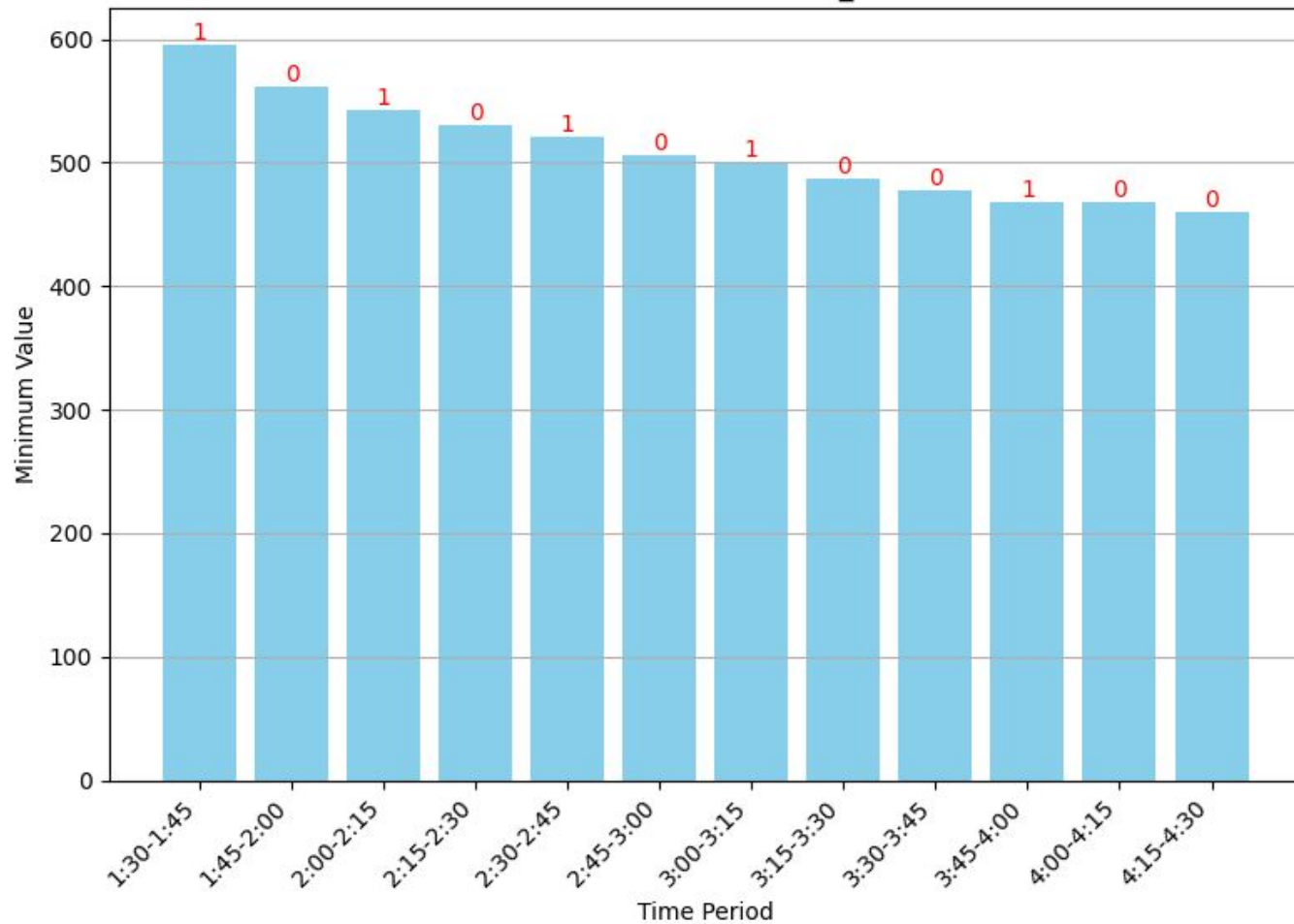
Minimum Values for mq9



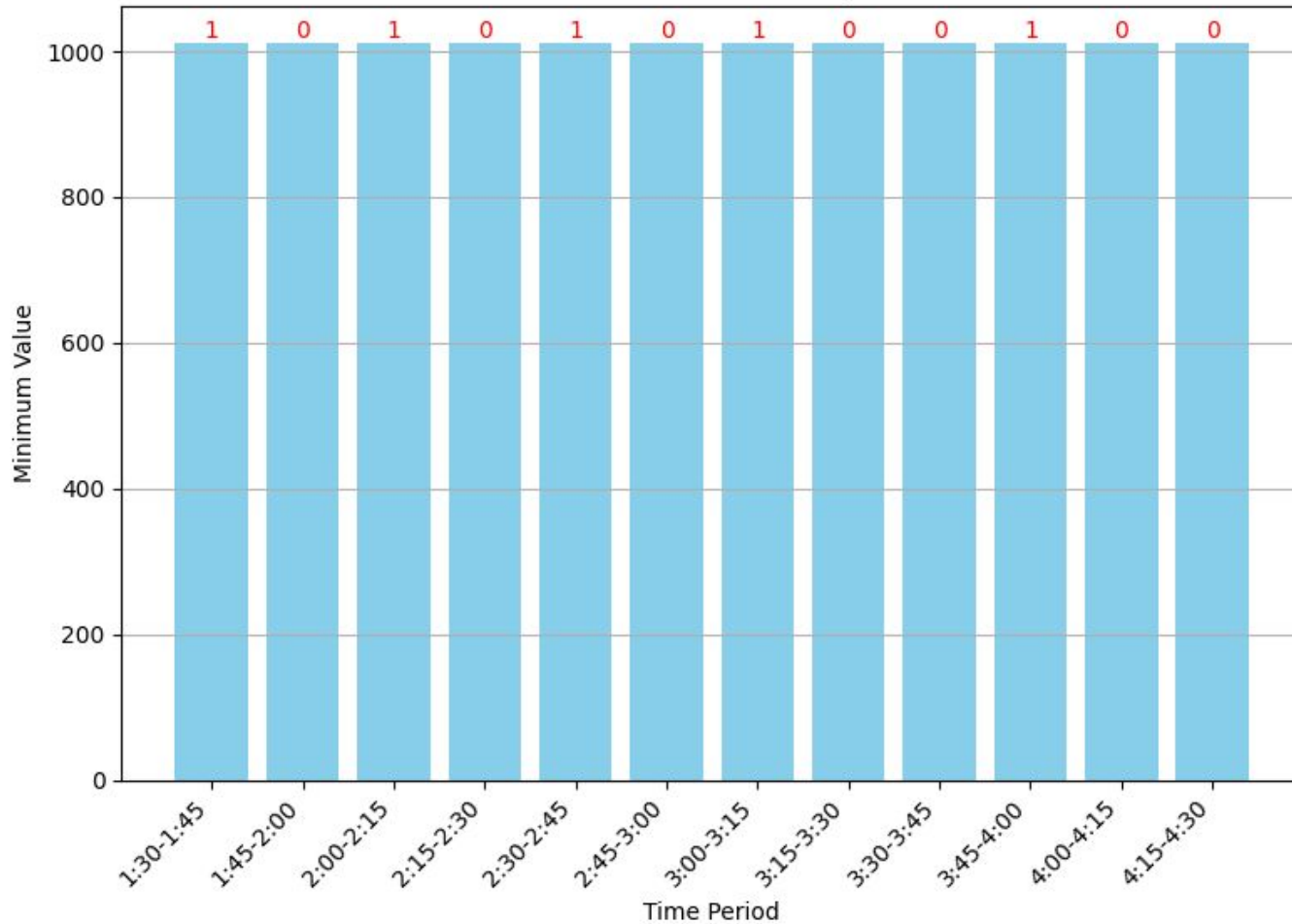
Minimum Values for mics_Vred



Minimum Values for mics_Vnox



Minimum Values for mq214



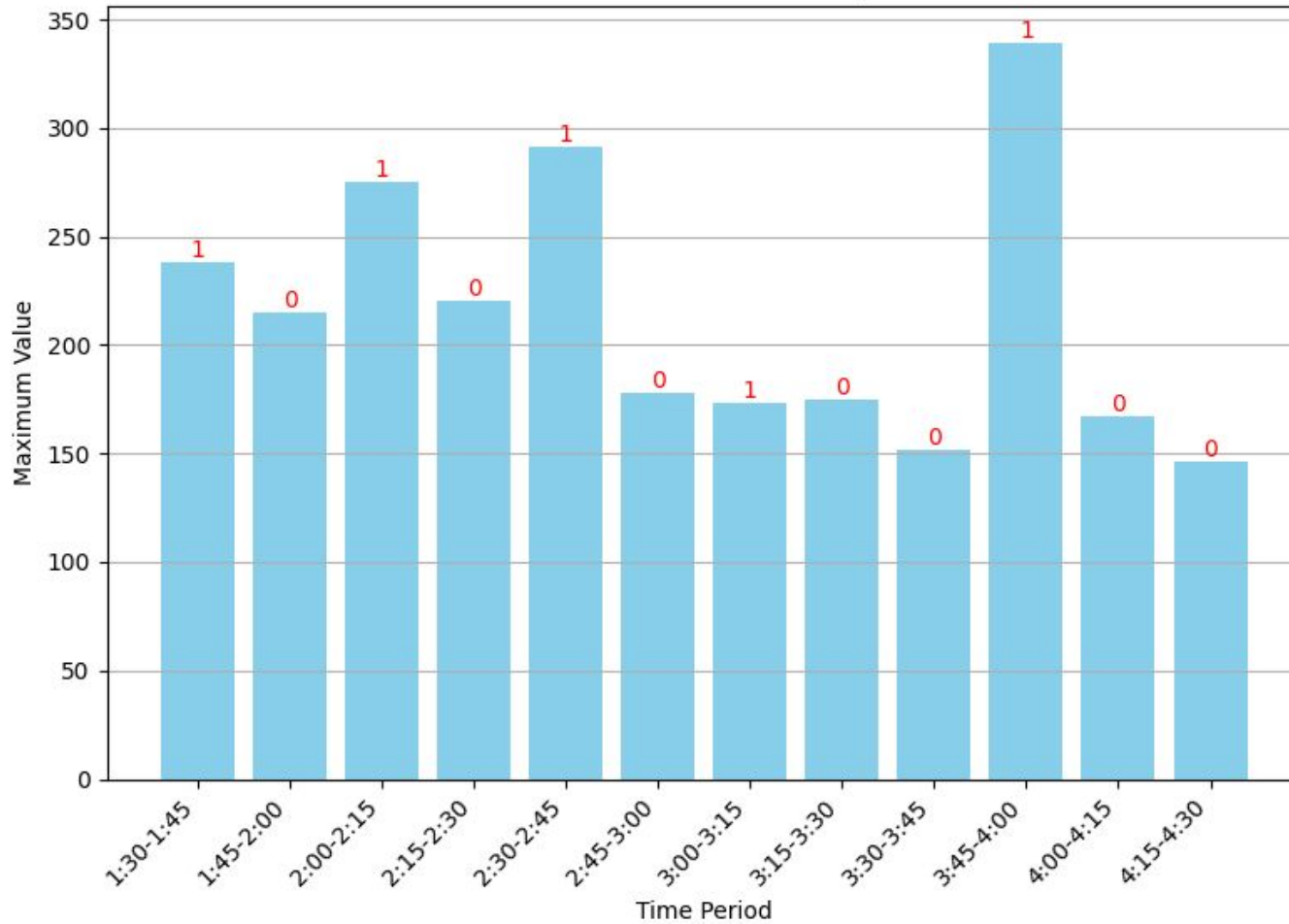
Maximum: Represents the highest value in a dataset, providing insight into peaks or upper limits.

Max Value Analysis

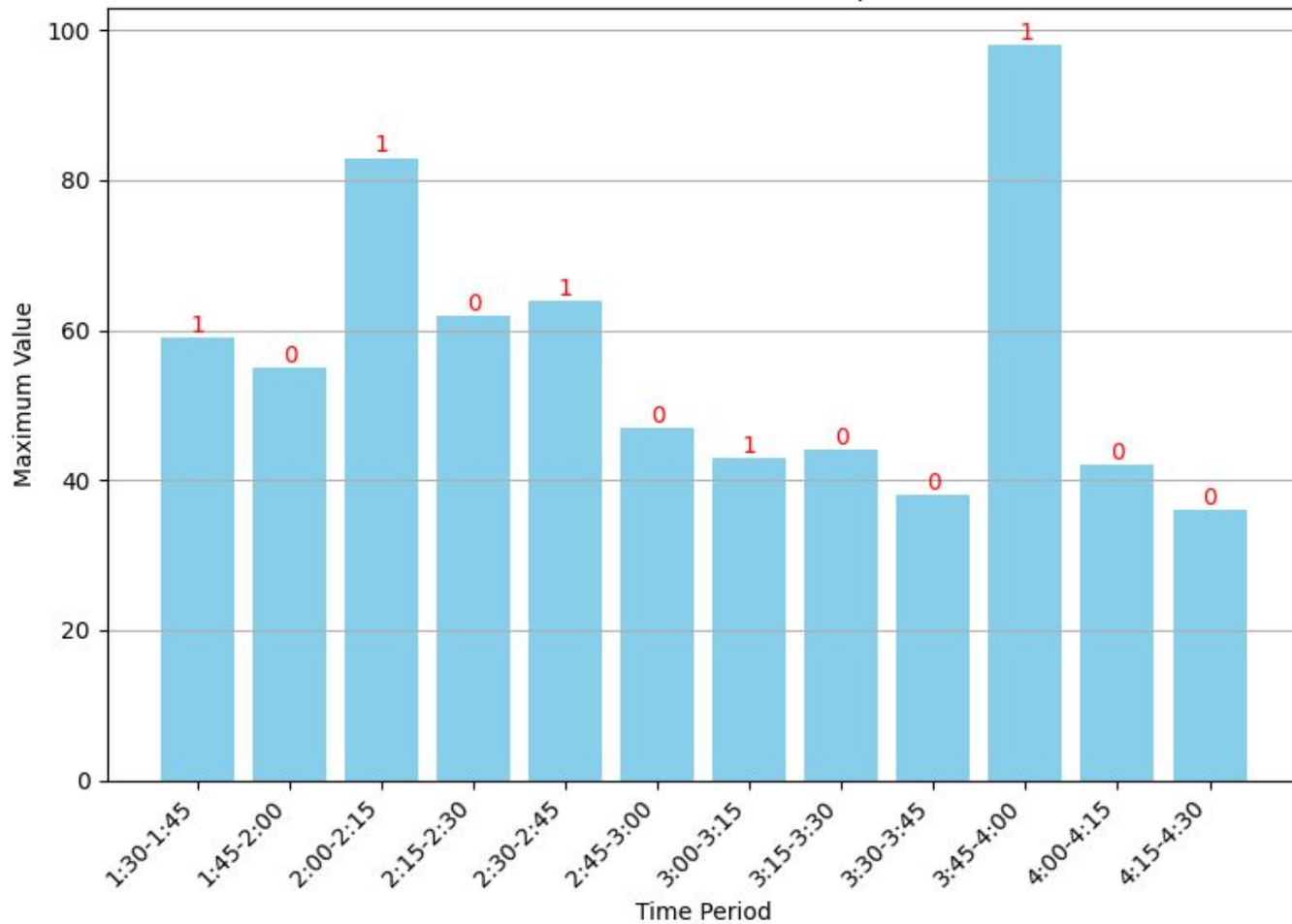
Chemical : Thinner

Bit Pattern : 101010100100

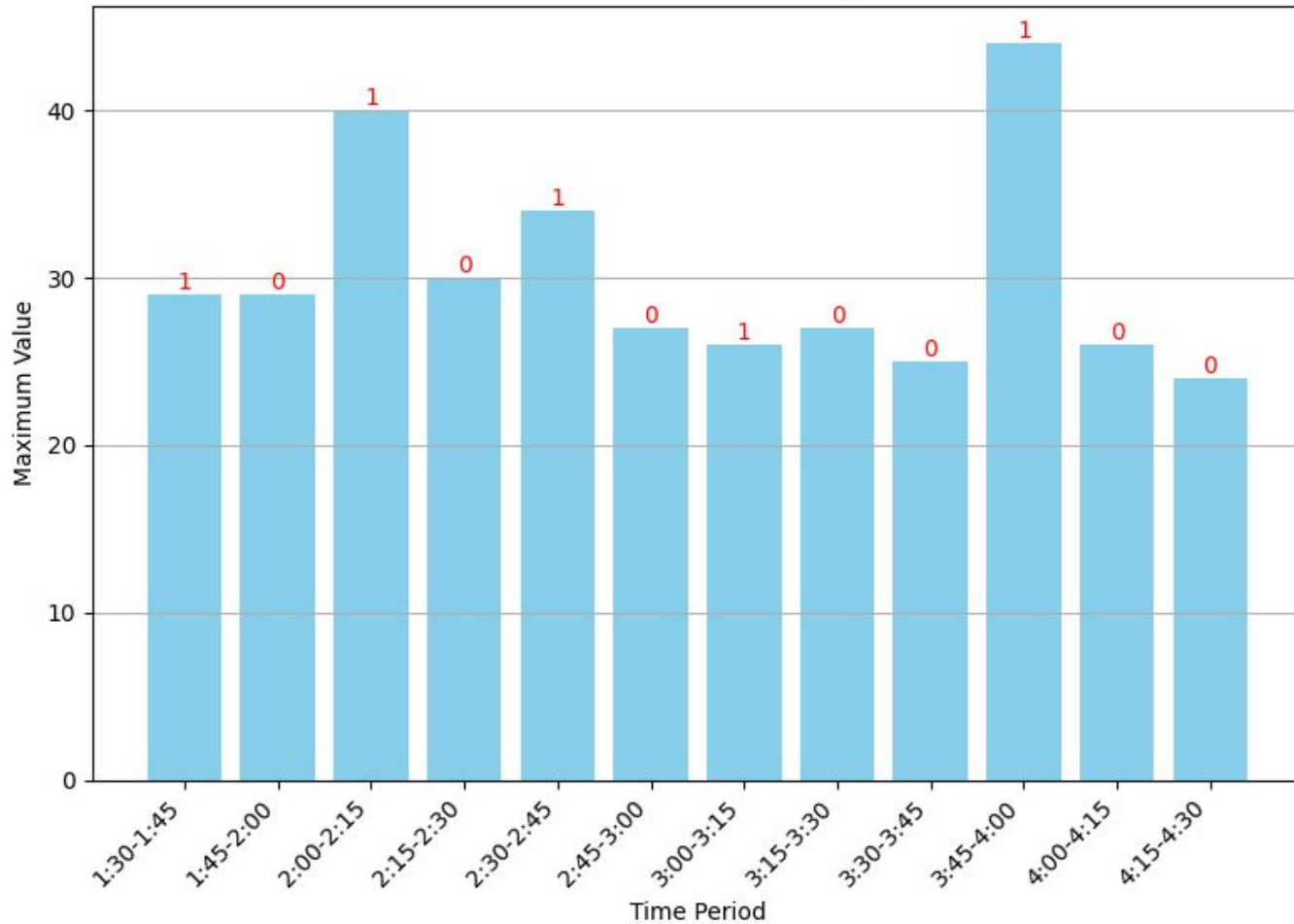
Maximum Values for mq2



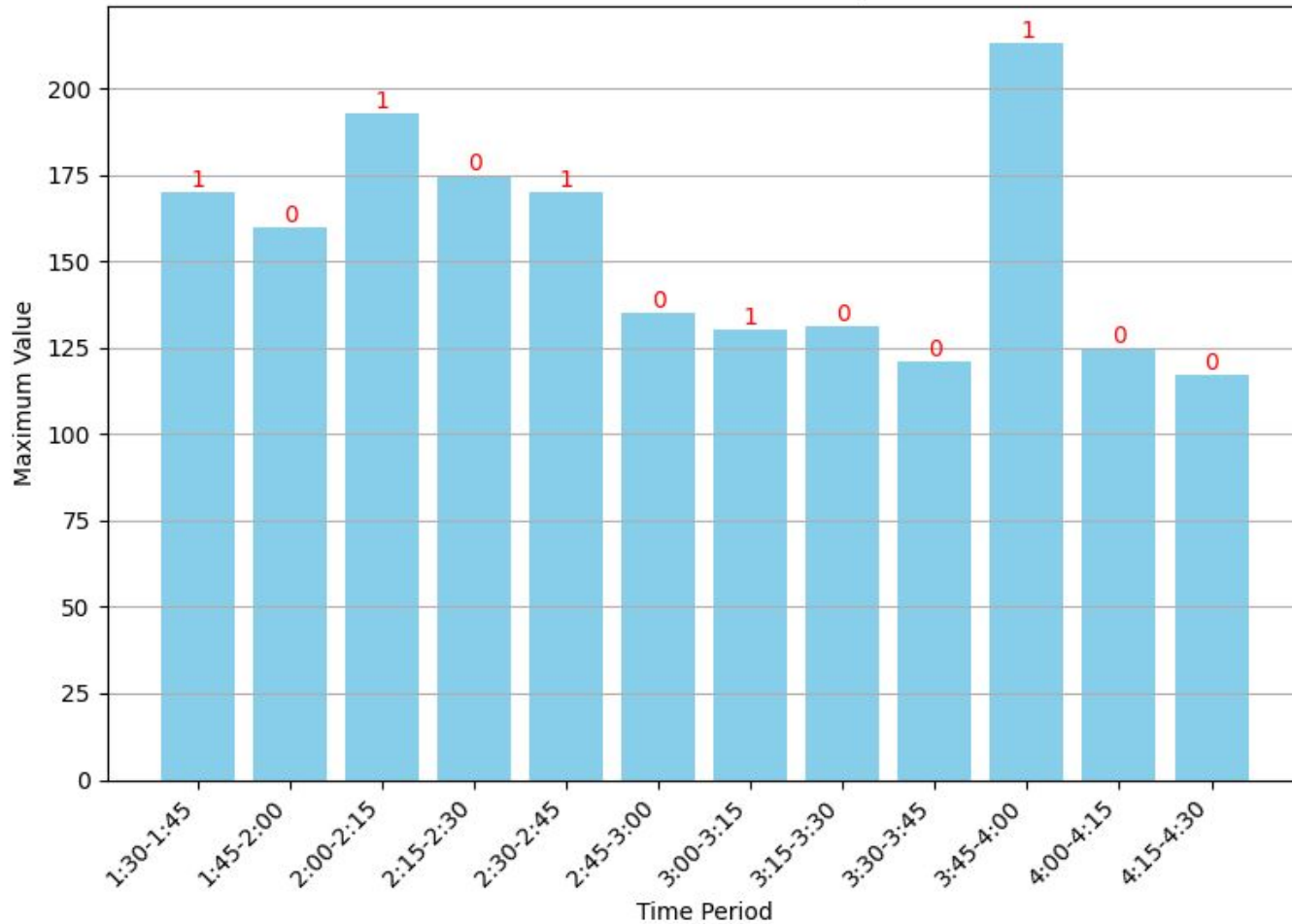
Maximum Values for mq3



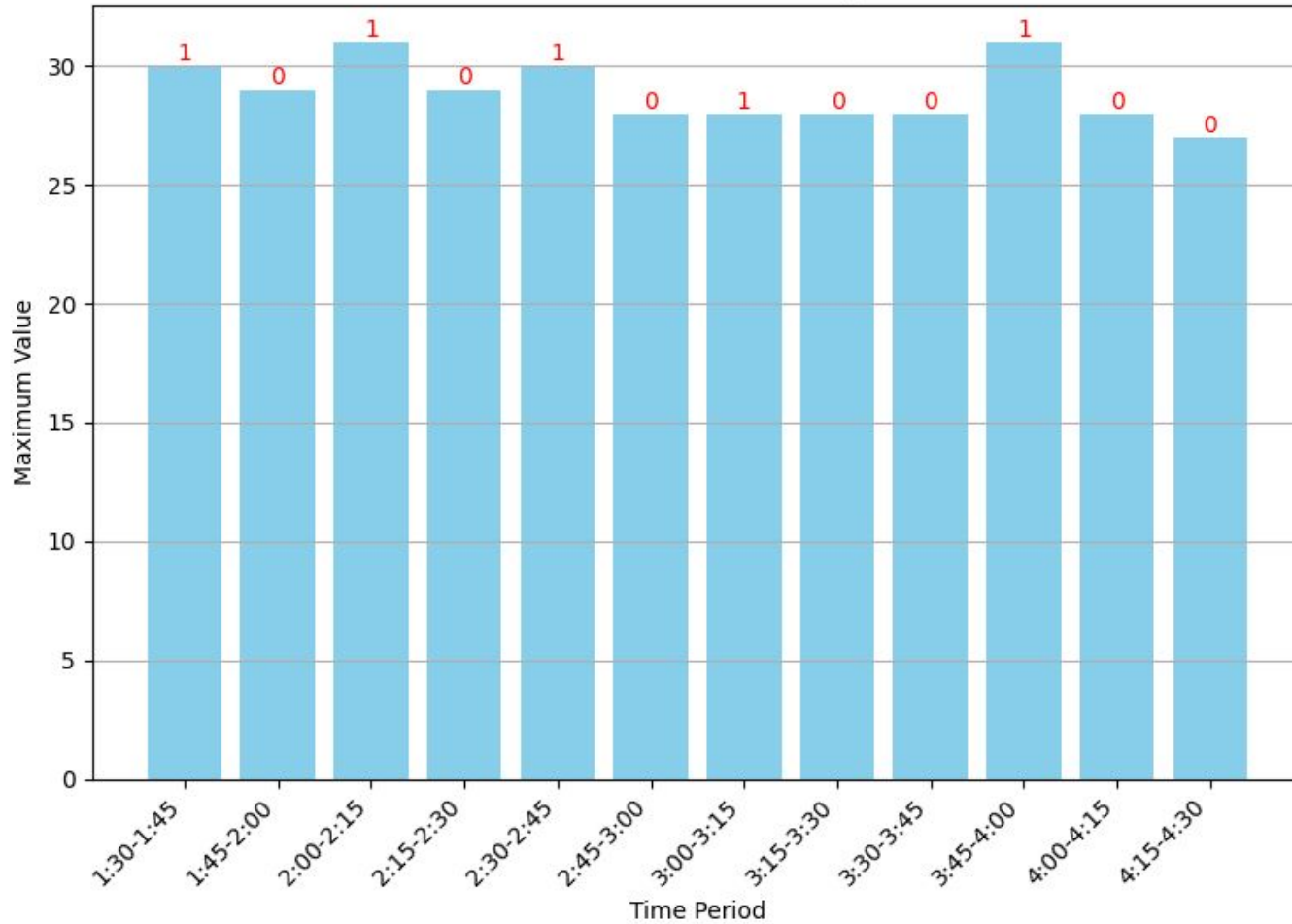
Maximum Values for mq5



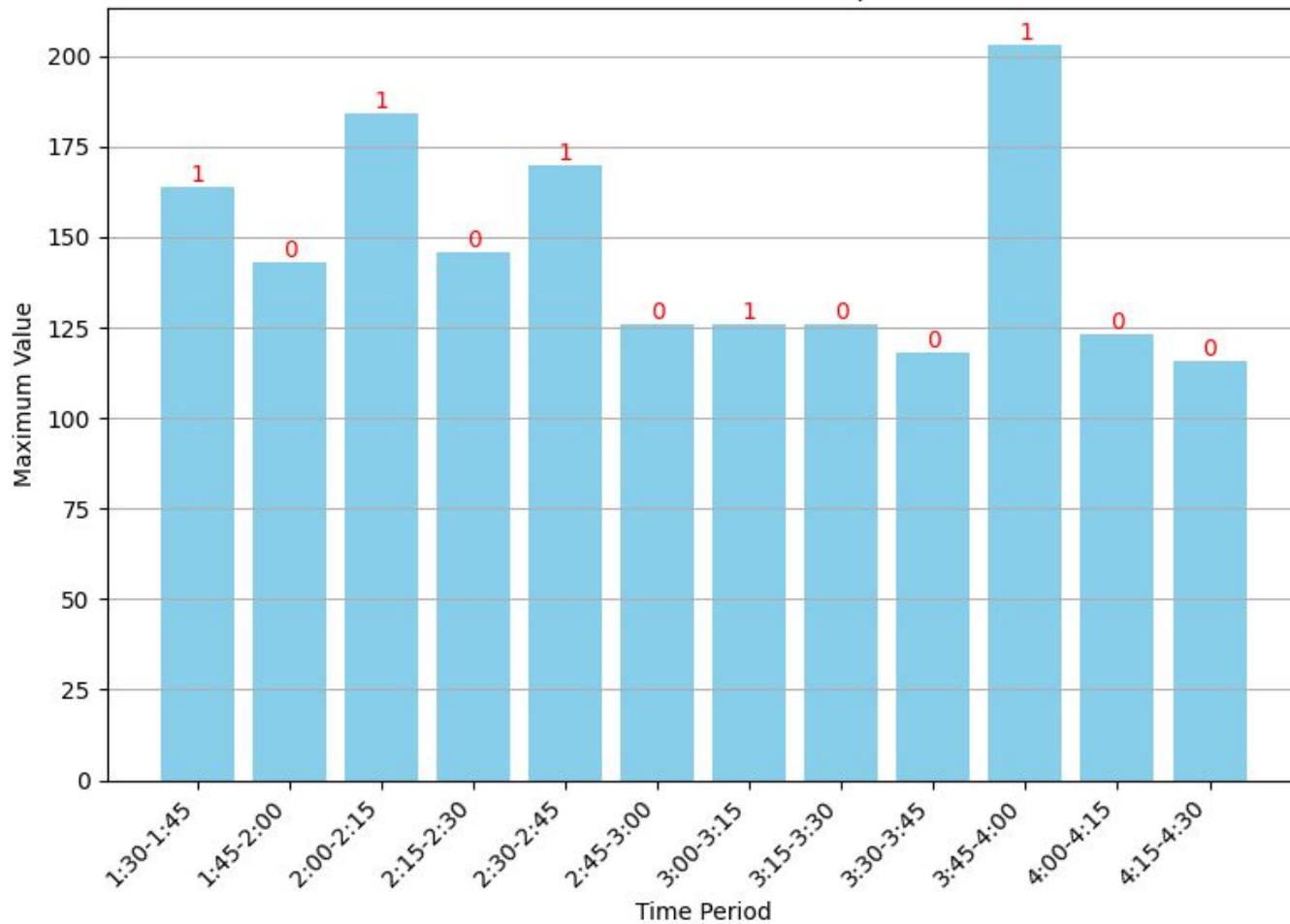
Maximum Values for mq6



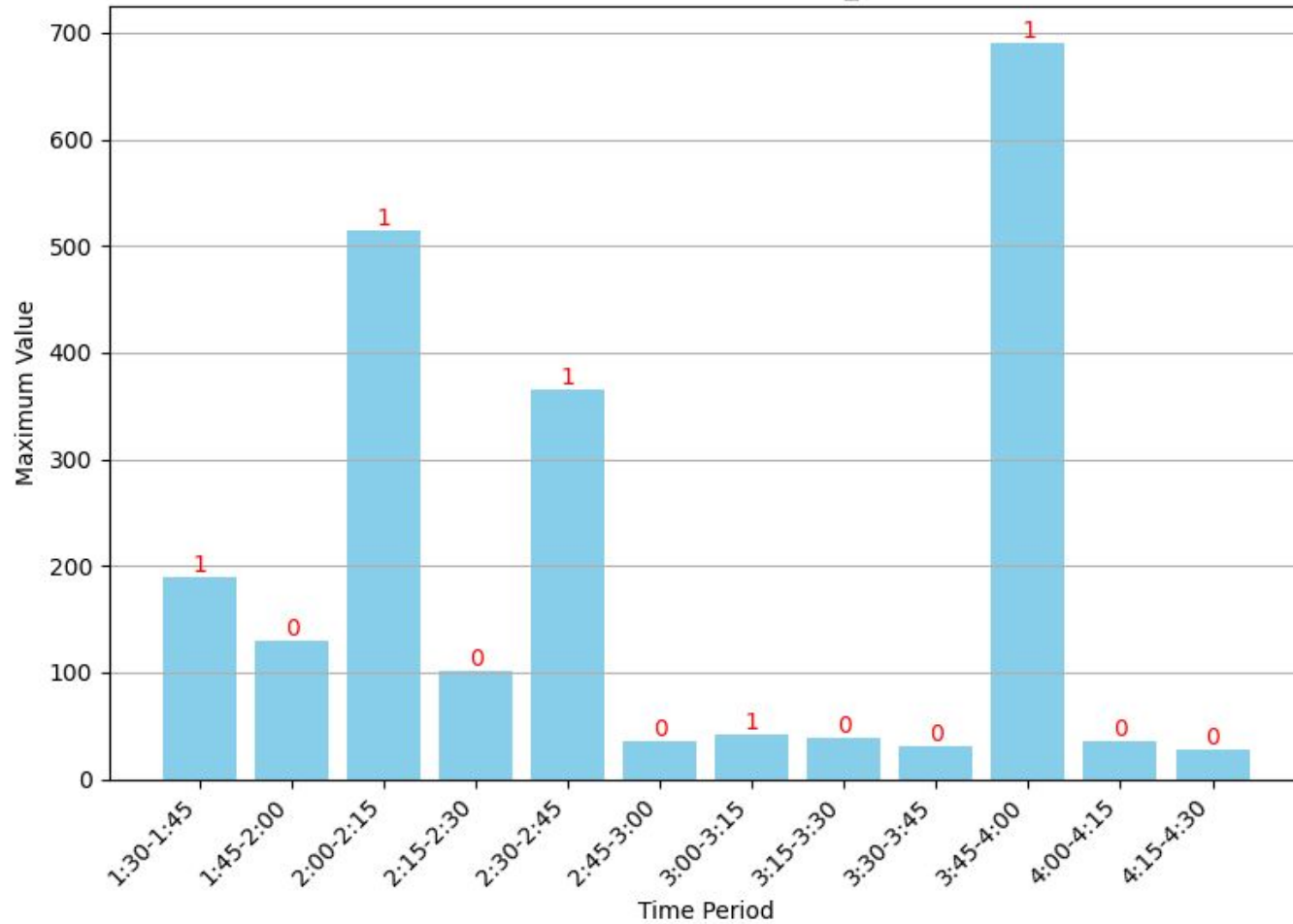
Maximum Values for mq8



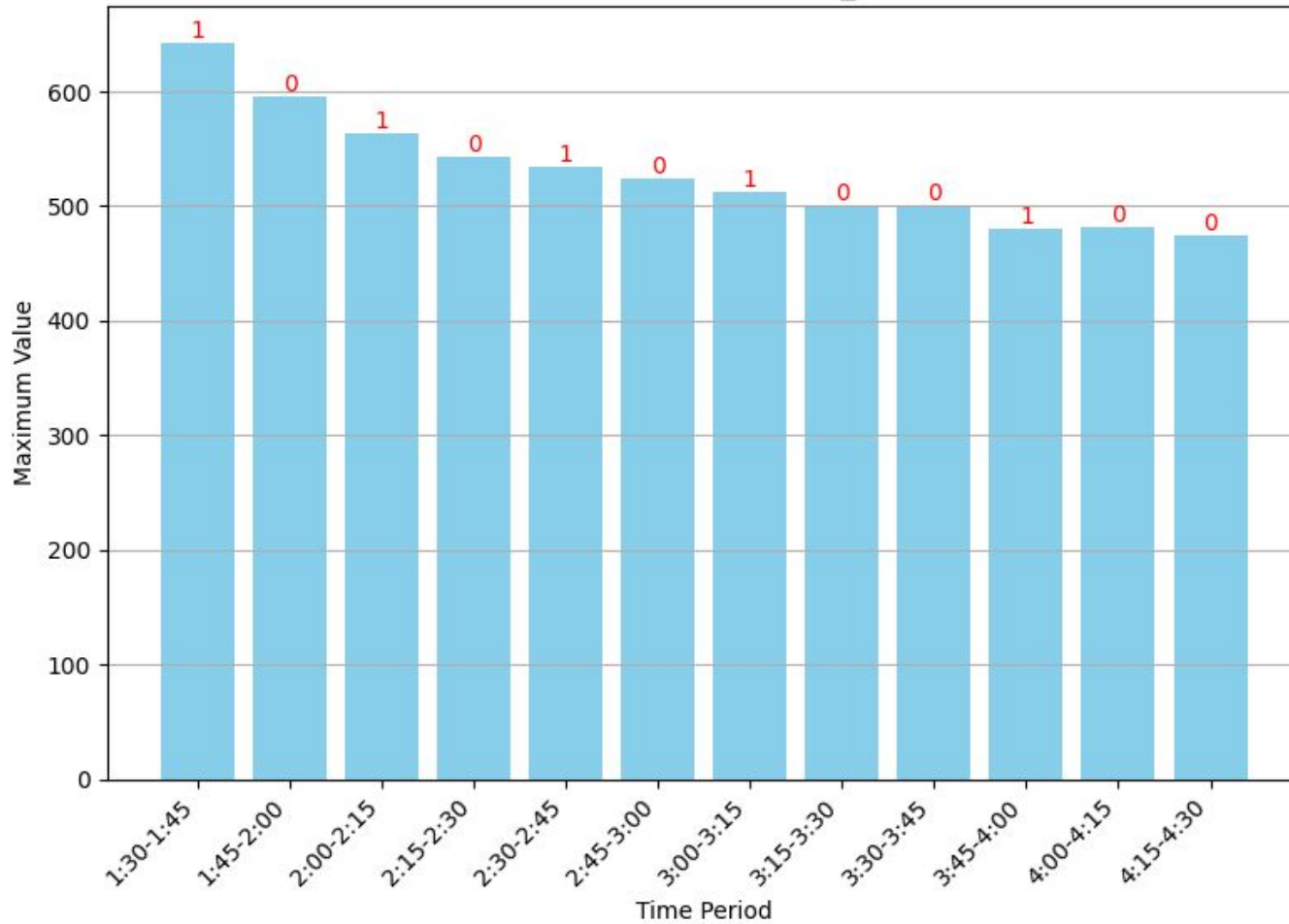
Maximum Values for mq9



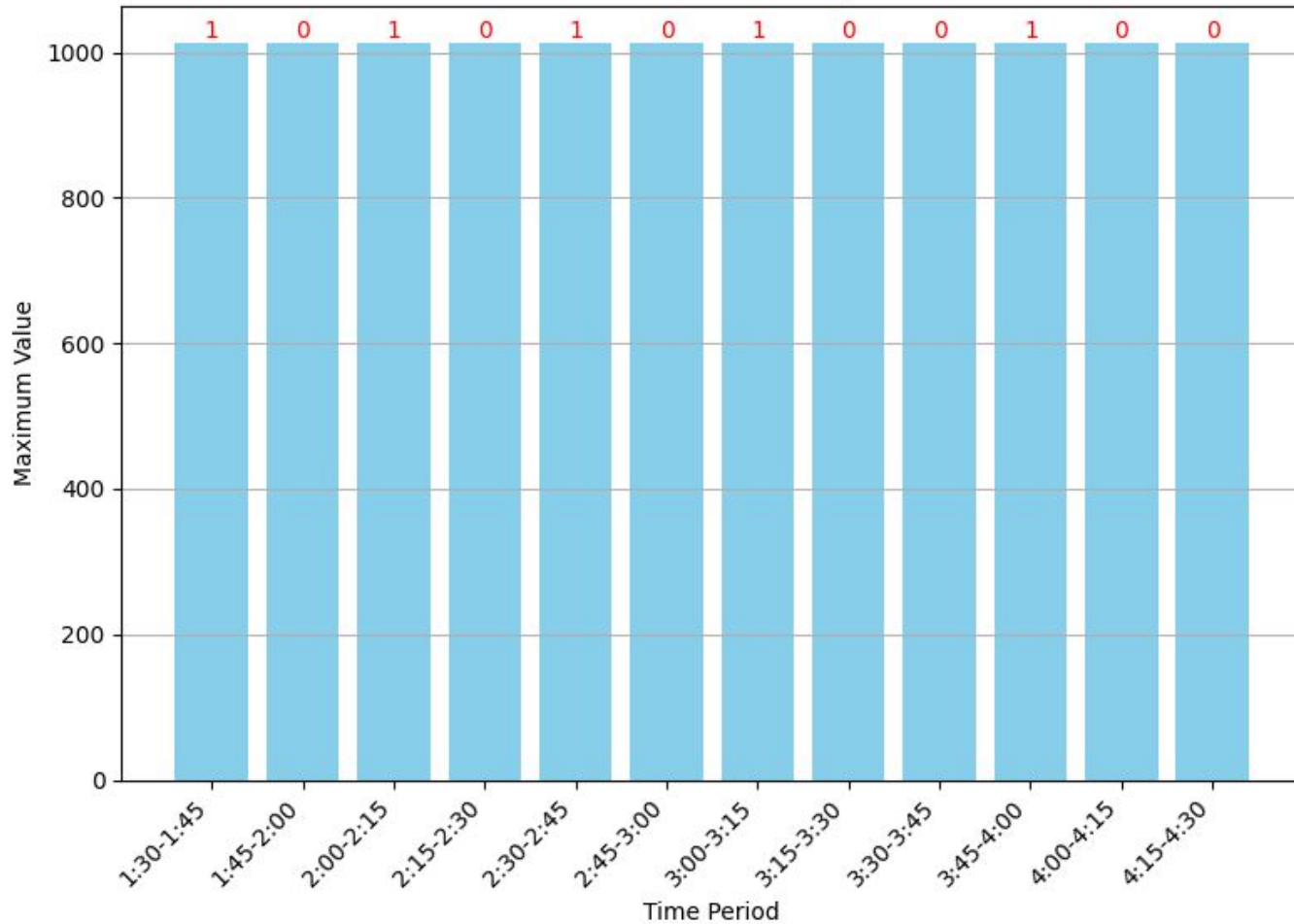
Maximum Values for mics_Vred



Maximum Values for mics_Vnox



Maximum Values for mq214



Box Plots for MQ9

Chemical : Thinner

Bit Pattern : 101010100100

1

Mean

Std Dev: 4.80

--- Mean: 126.44

Interval

1

Interval 1

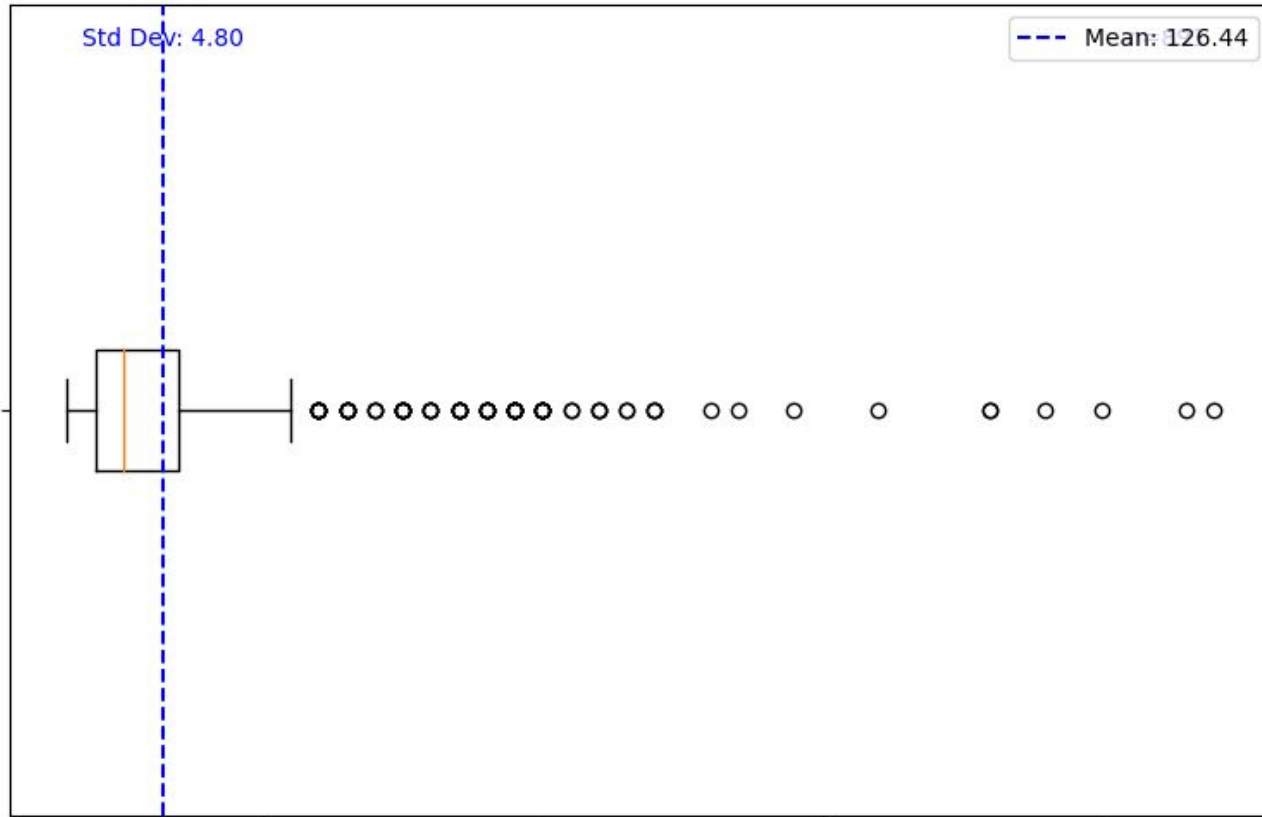
130

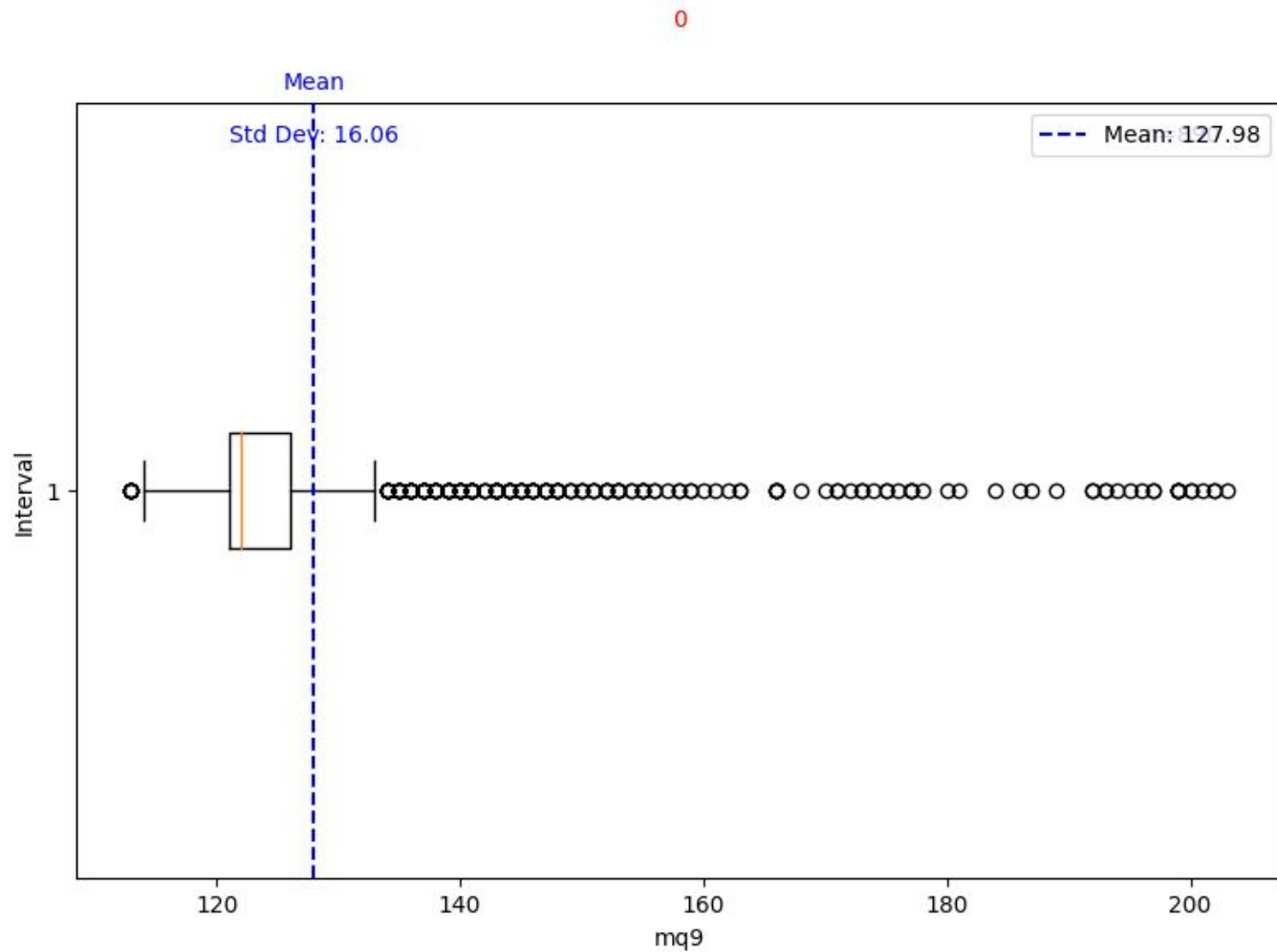
140

150

160

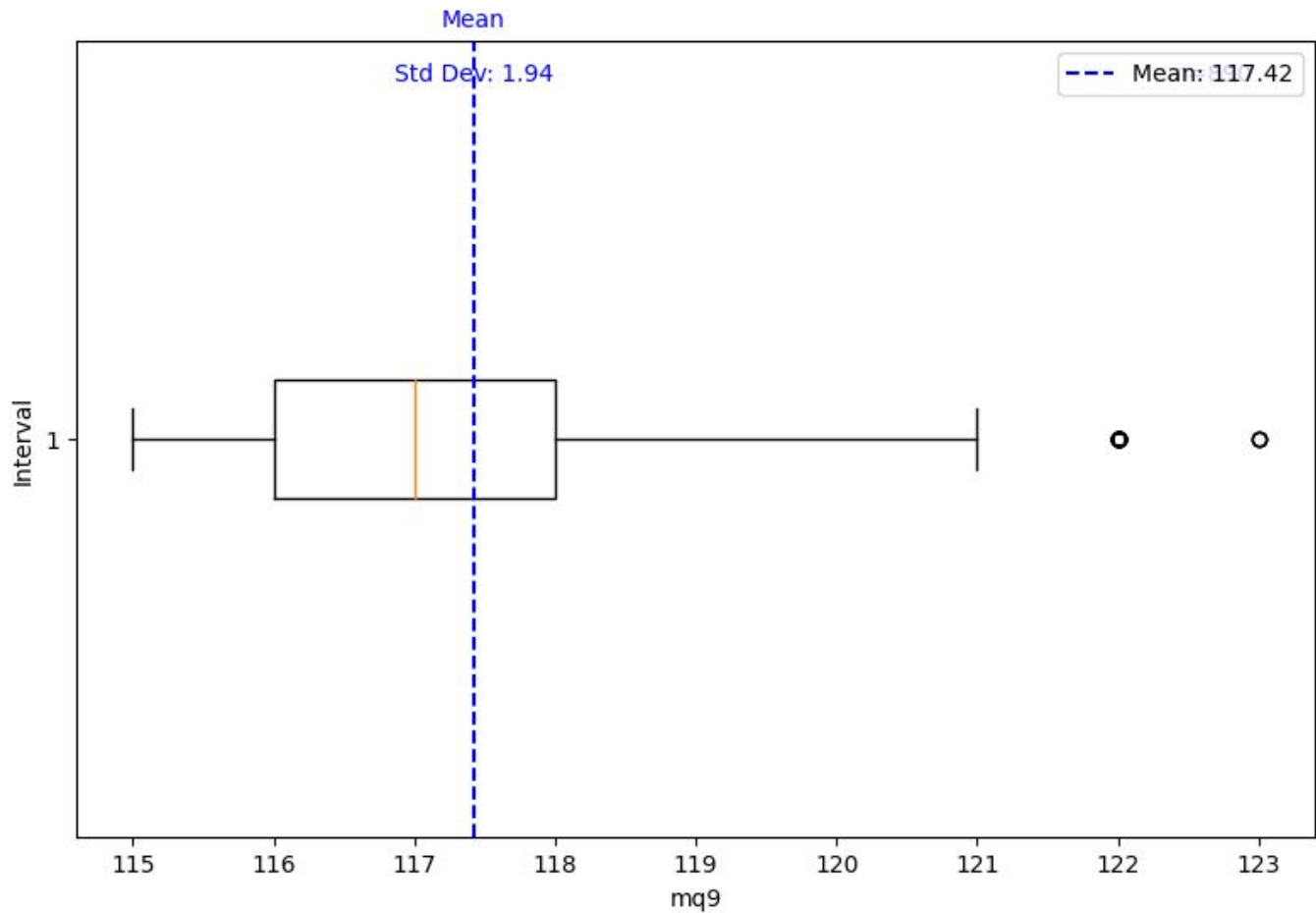
mq9





Interval 2

1



Interval 3

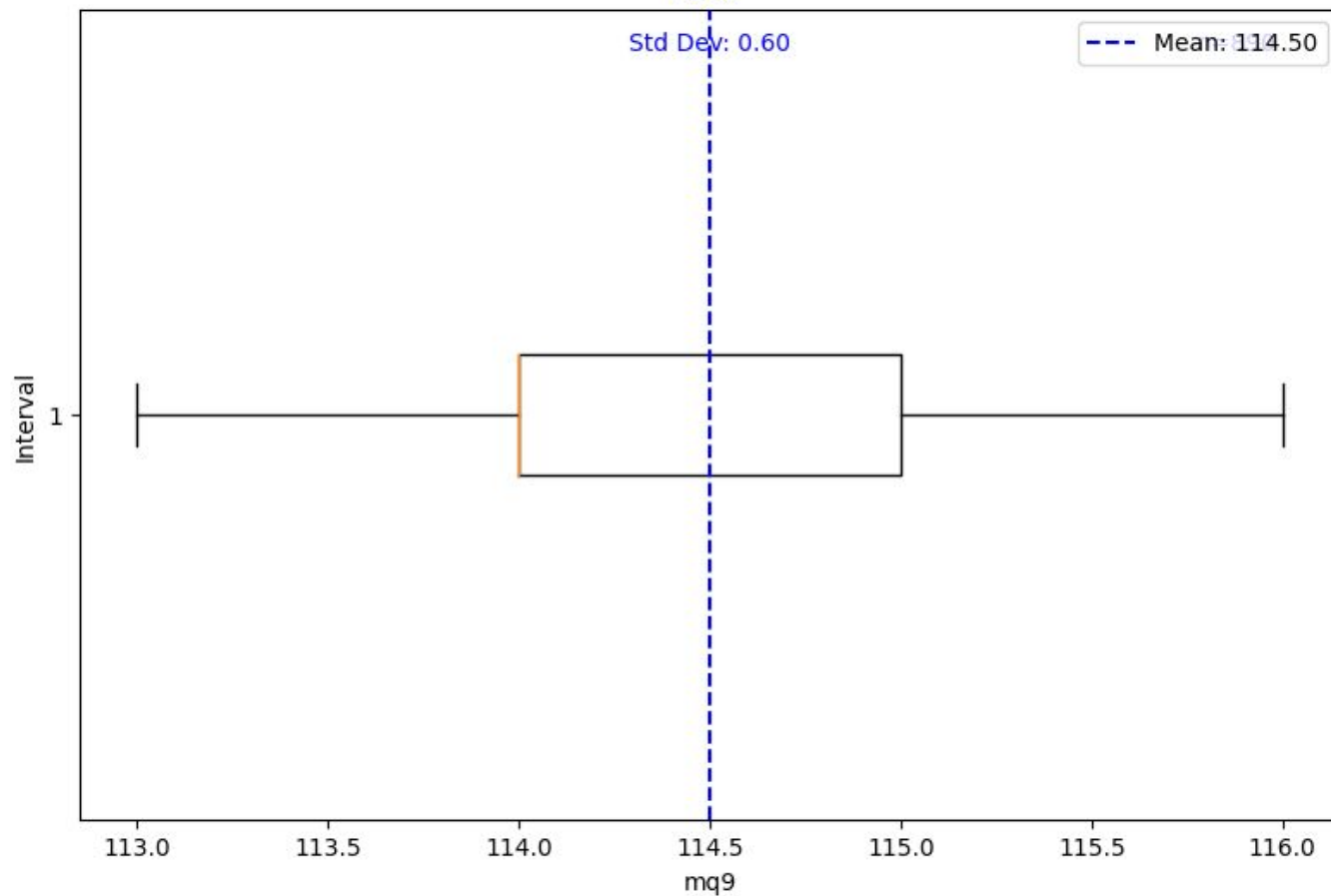
0

Mean

Std Dev: 0.60

--- Mean: 114.50

Interval 4



1

Mean

Std Dev: 5.03

--- Mean: 120.91

Interval

1

Interval 5

115

120

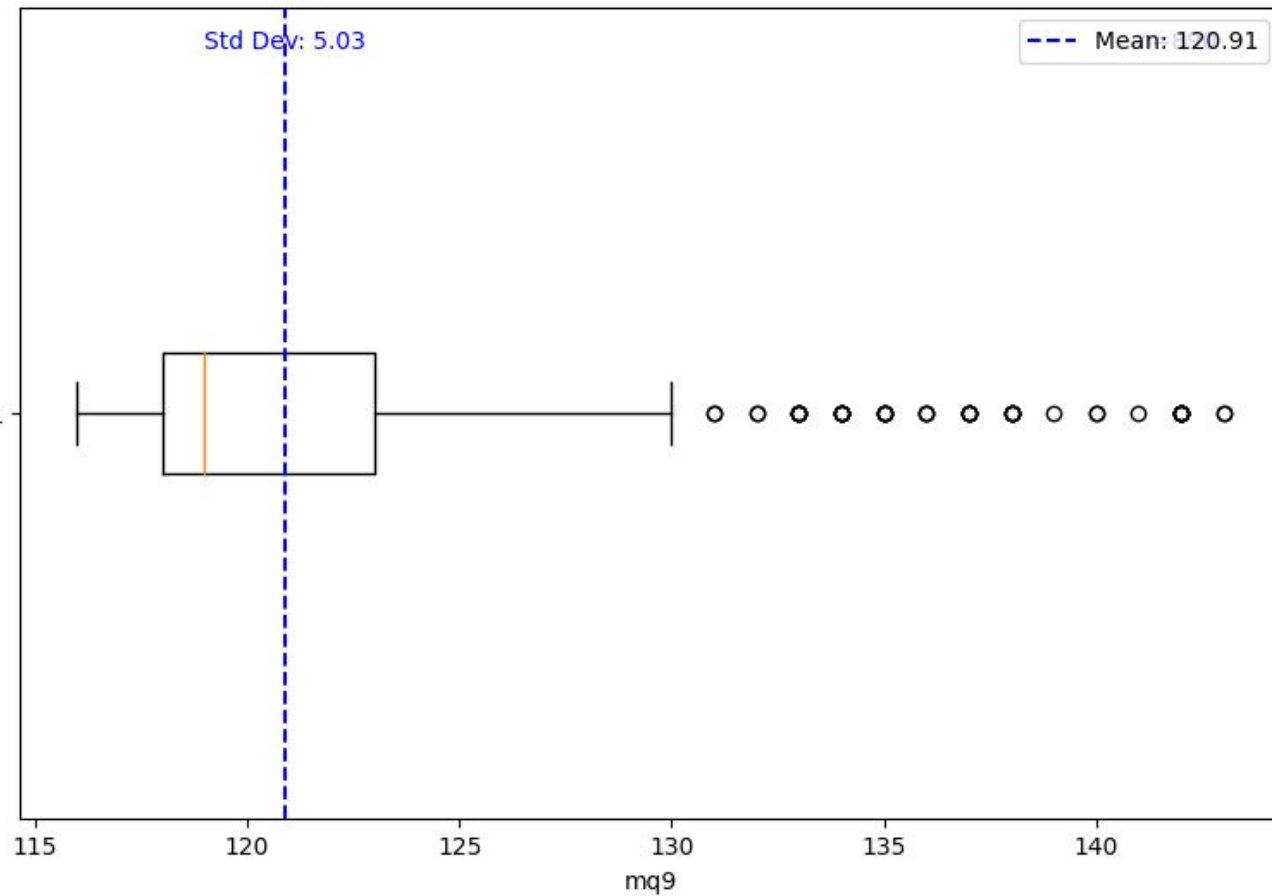
125

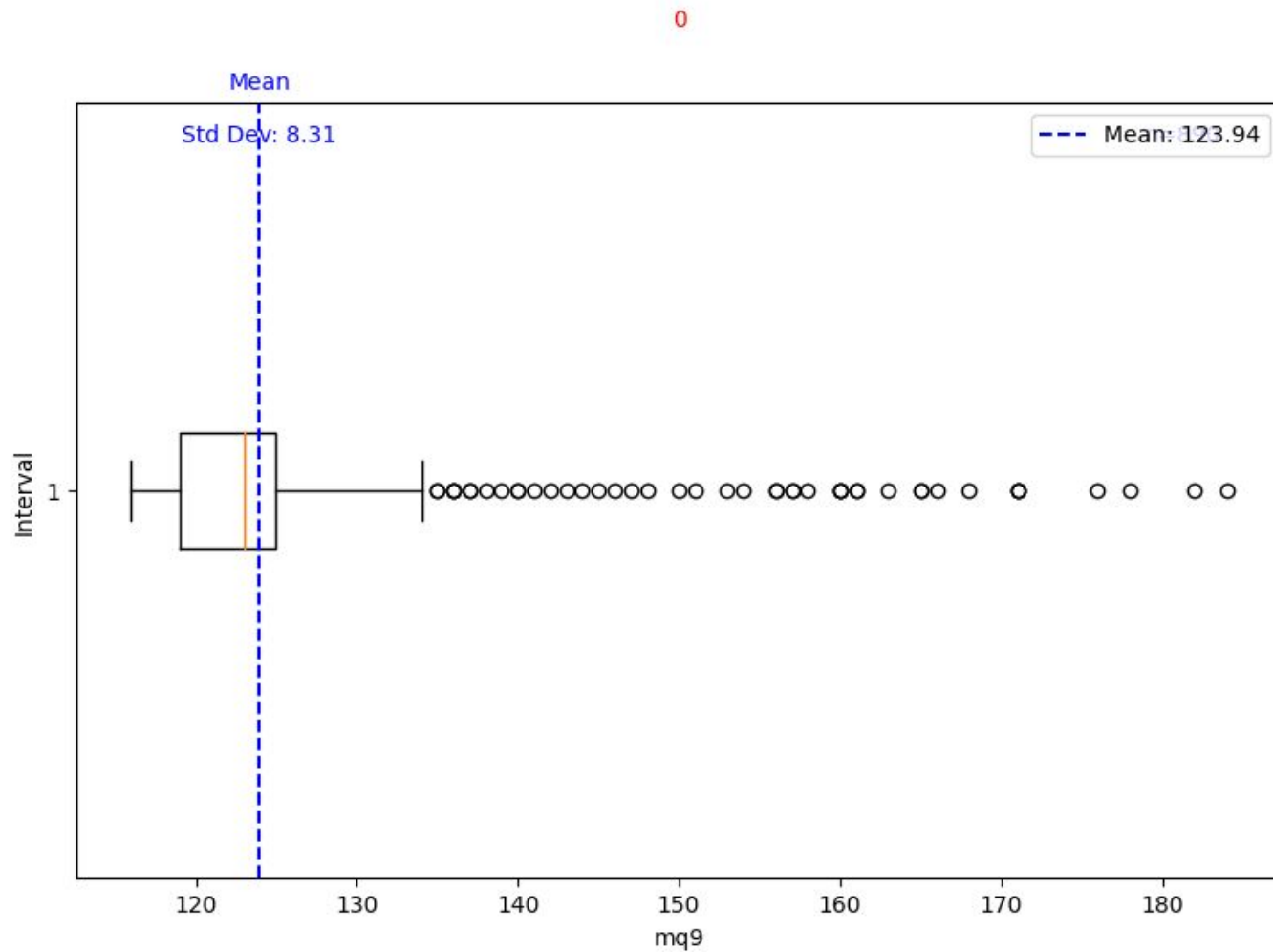
mq9

130

135

140





Interval 6

1

Mean

Std Dev: 3.83

--- Mean: 120.72

Interval

1

Interval 7

120

125

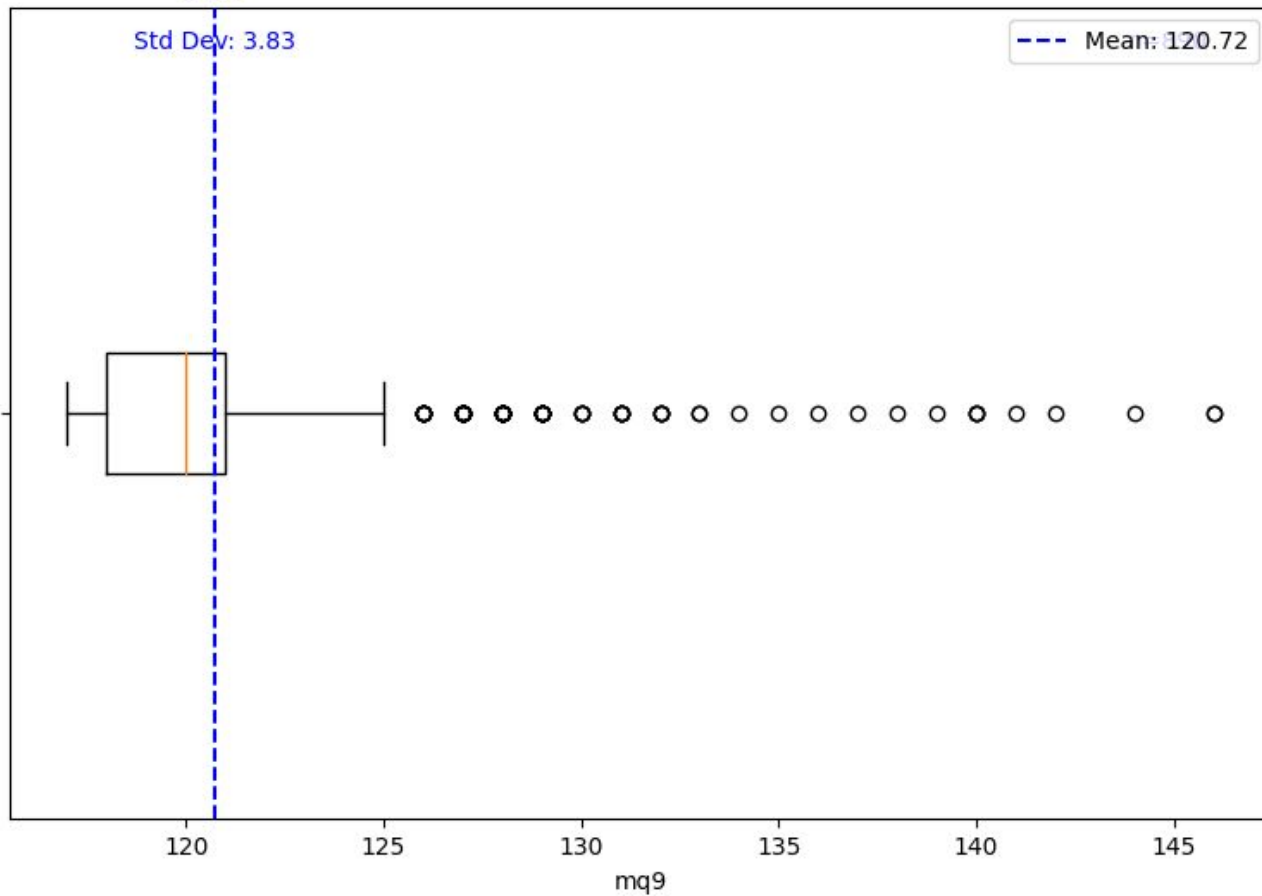
130

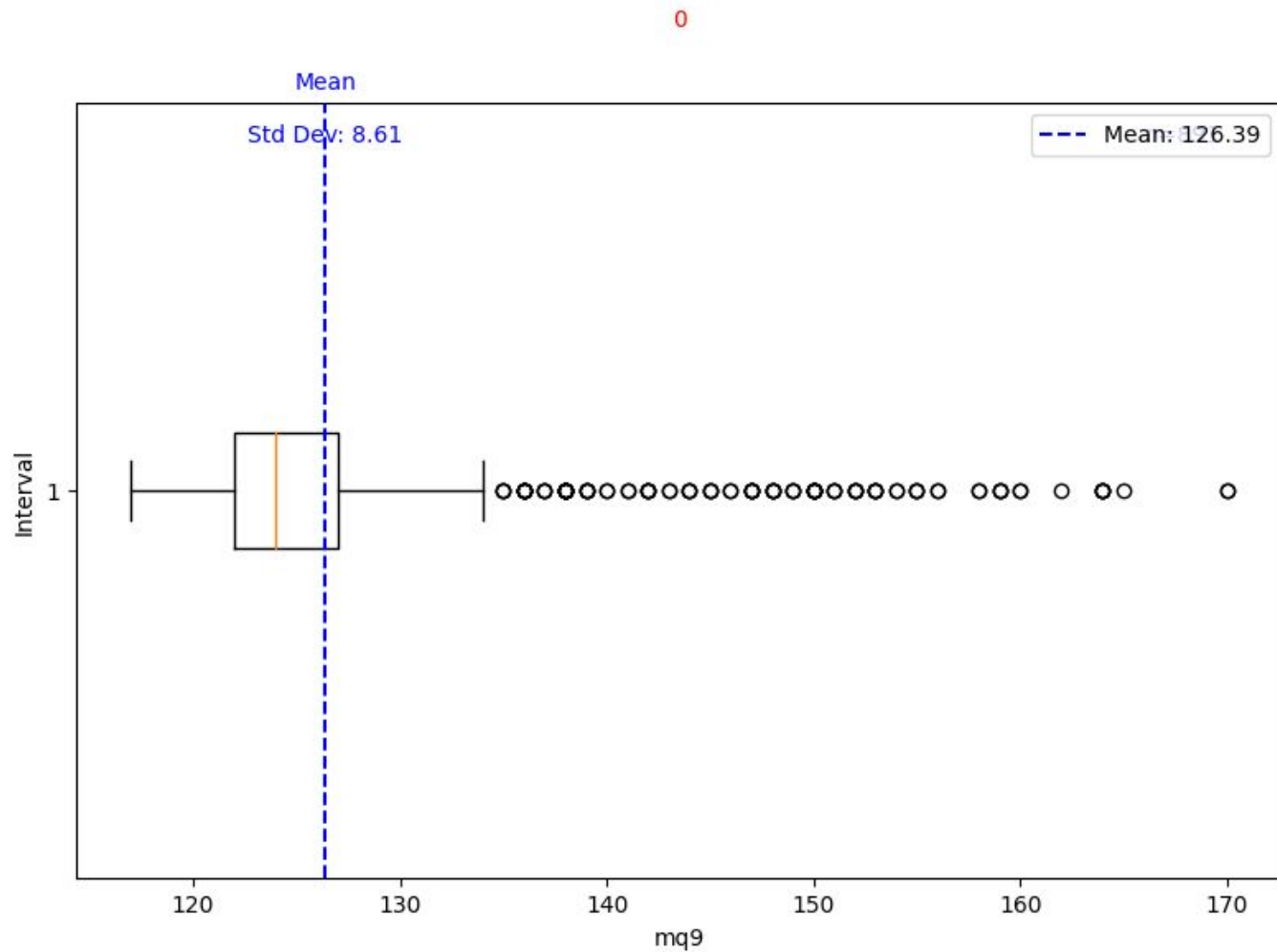
135

140

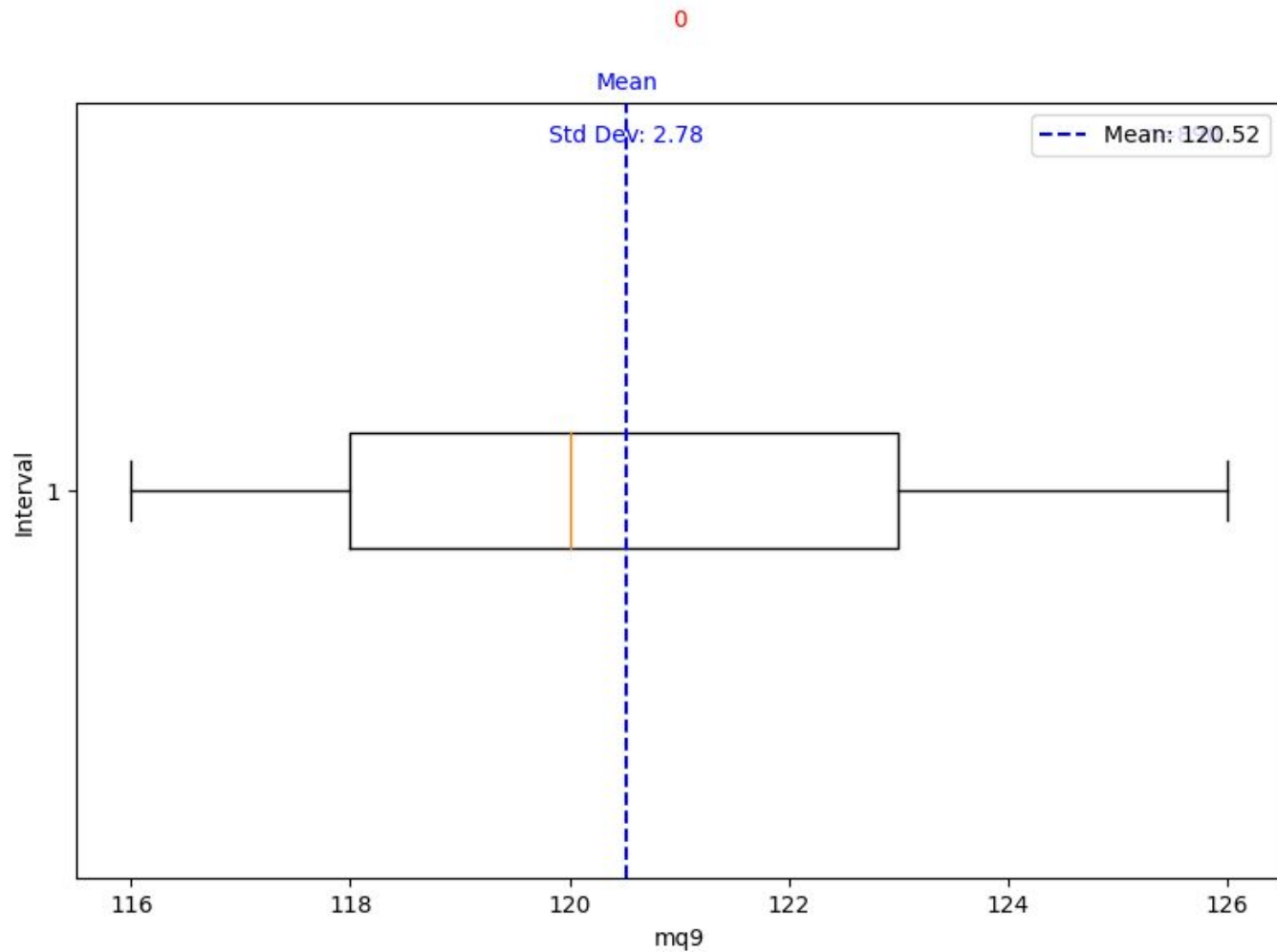
145

mq9

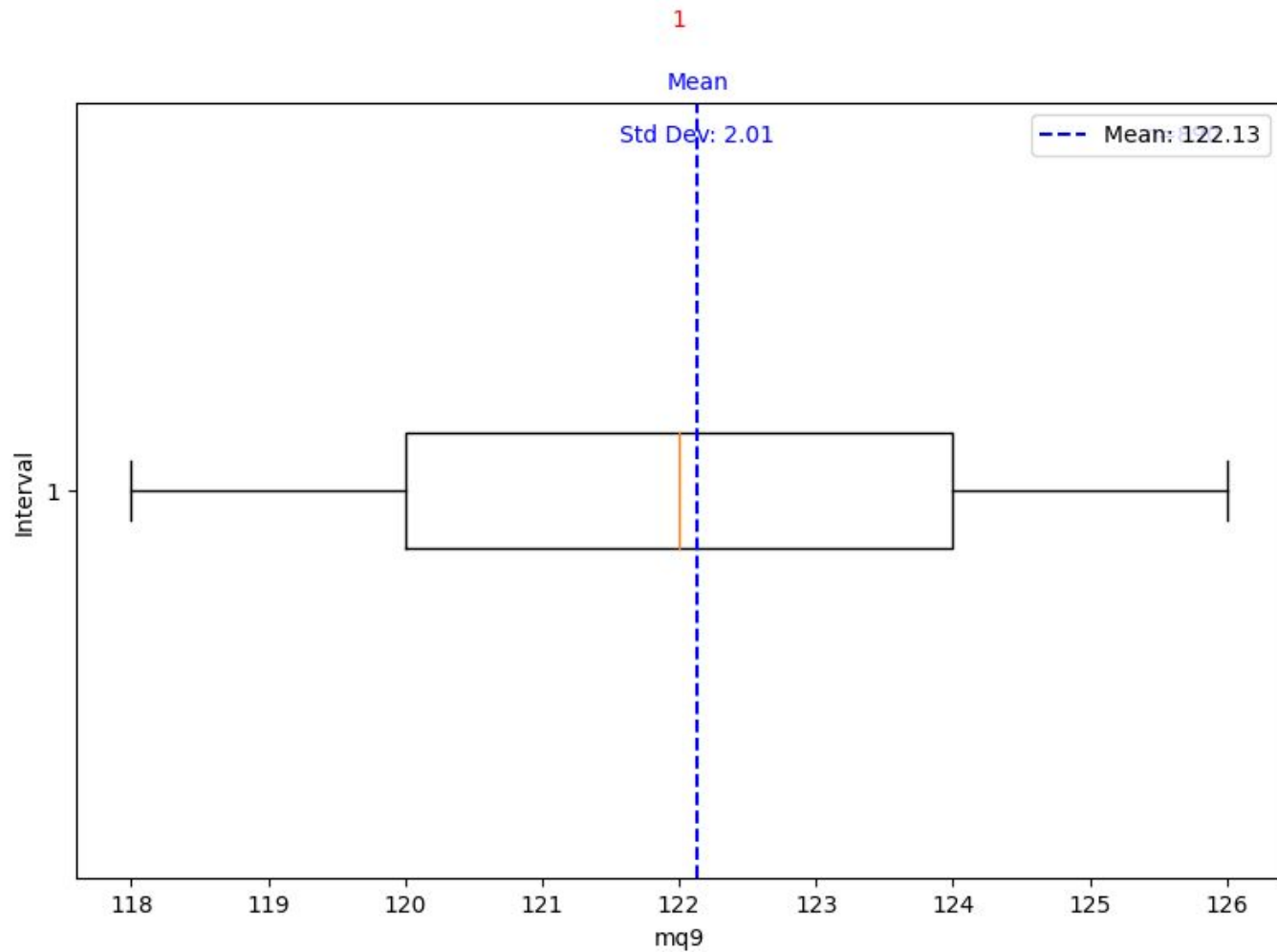




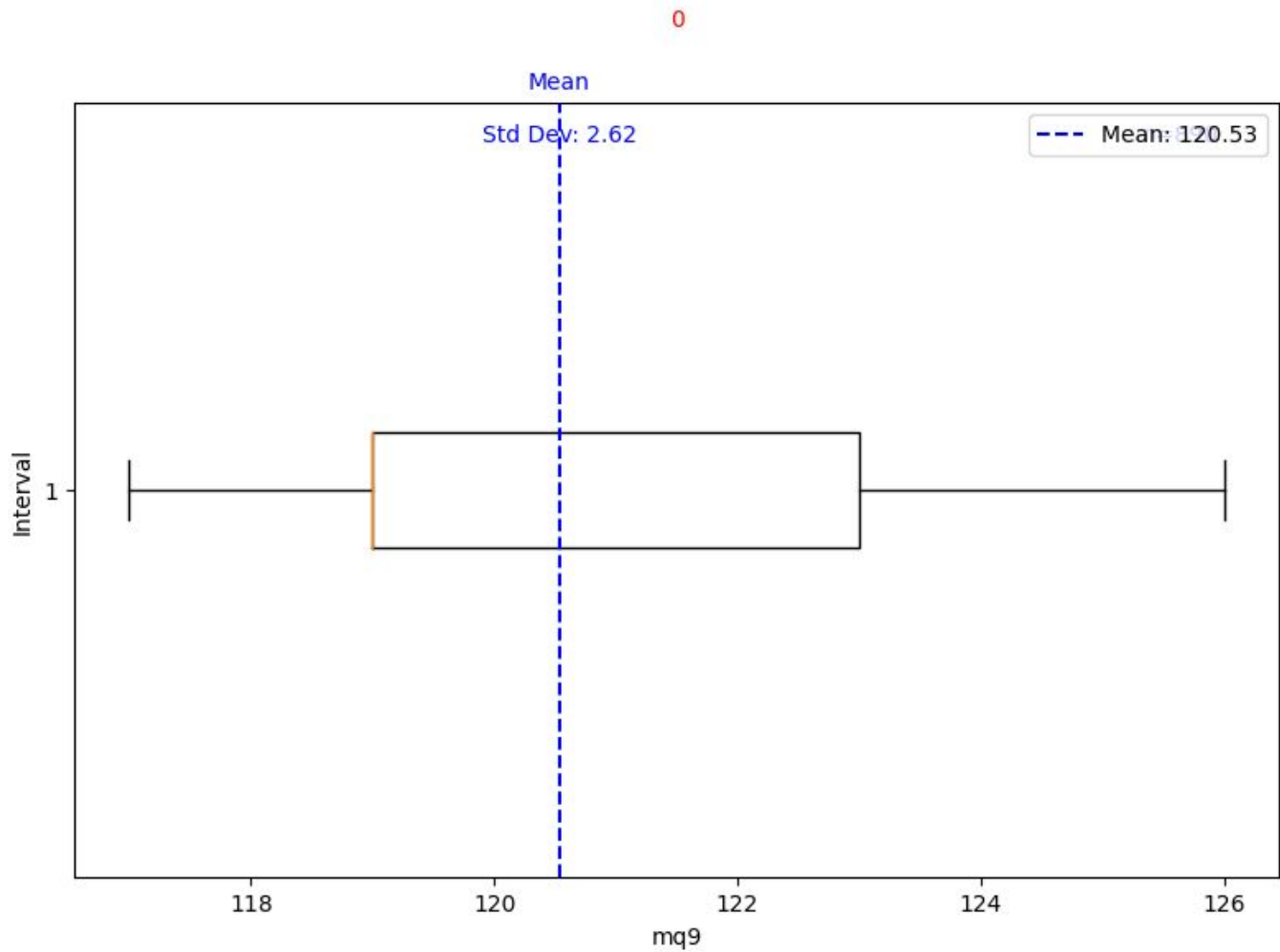
Interval 8



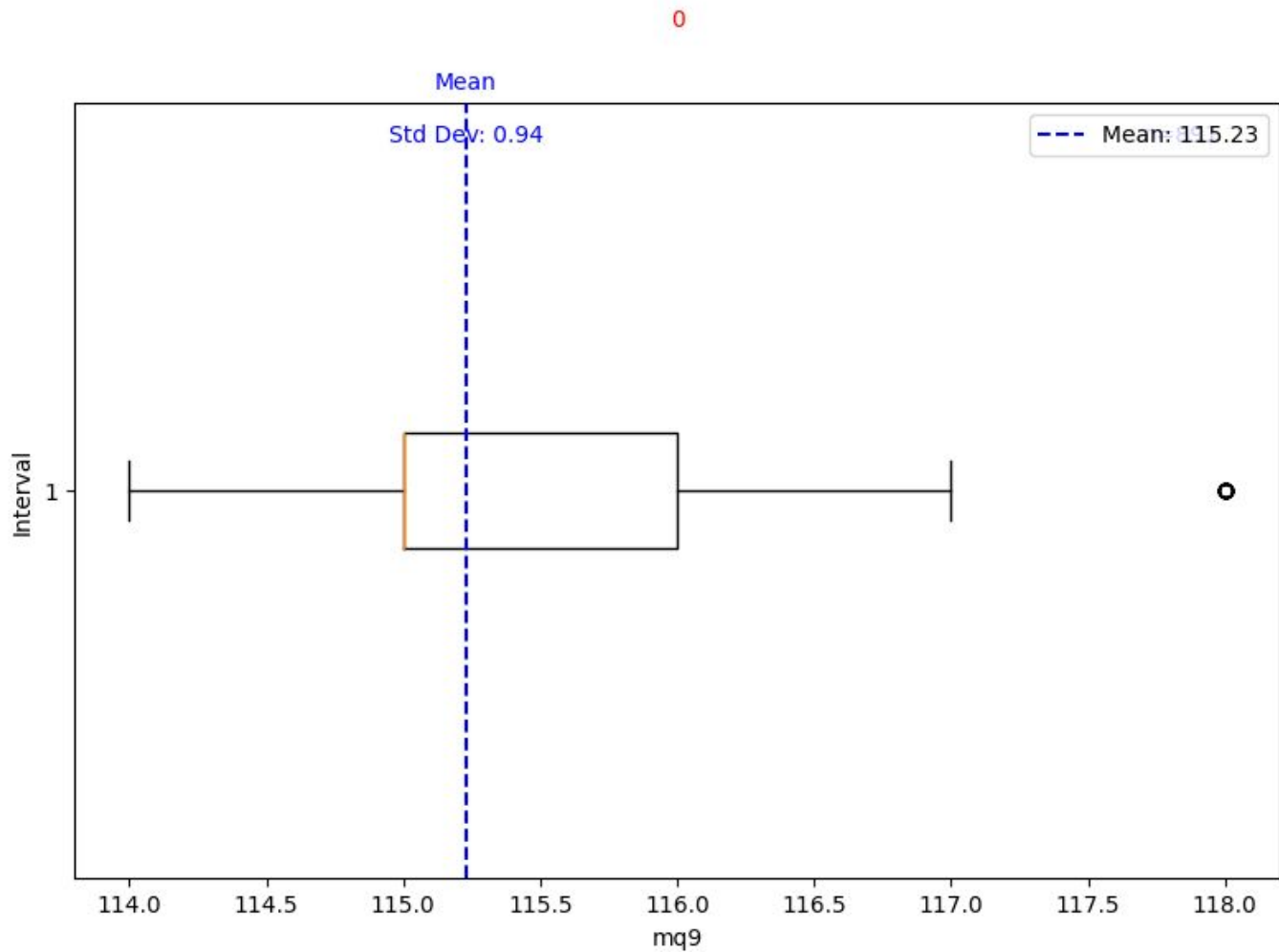
Interval 9



Interval 10



Interval 11



Interval 12