Kafka test setup (kafkaDelay3Full)

Technology: Kafka Streams

Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Number of tests performed: 1

Start: Timestamp from Producer

End: Timestamp from Consumer

Kafka median values

End Subtract Start: 0.083

Kafka standard deviation

End Subtract Start: 0.04822385587262407

Lower Bound: -0.05725649912472153

UpperBound: 0.23208663611102293

Number of data in the std range: 8695

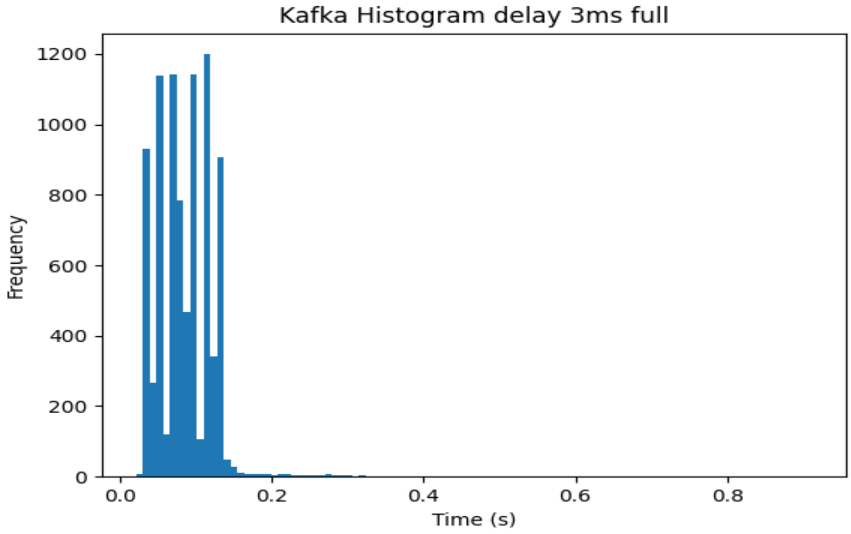
Number of data outside the std range: 65

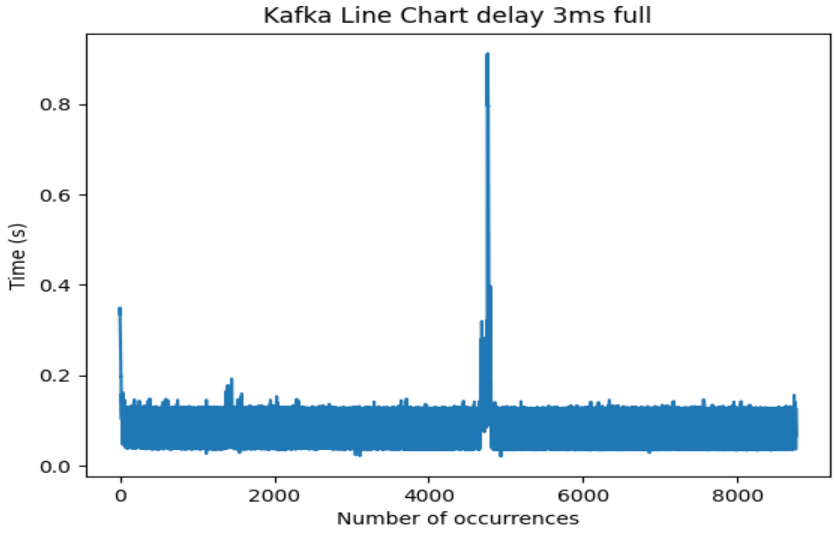
Kafka interquartile range

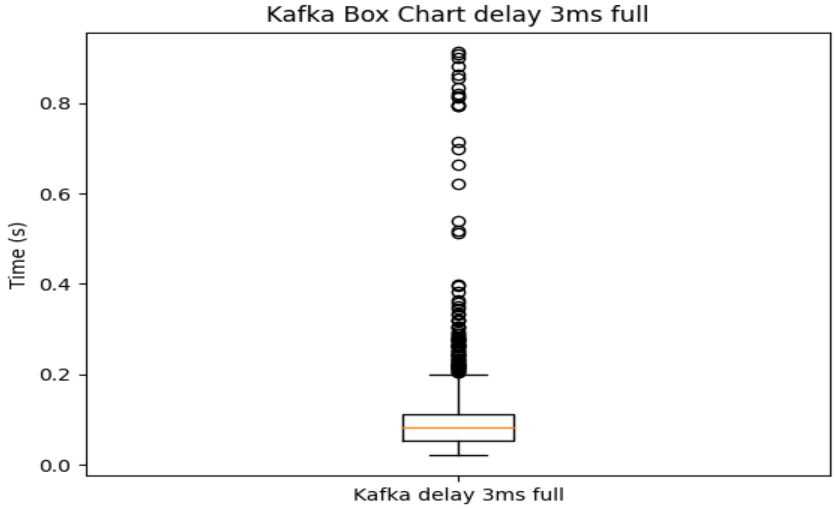
End Subtract Start: 0.059000000000000004

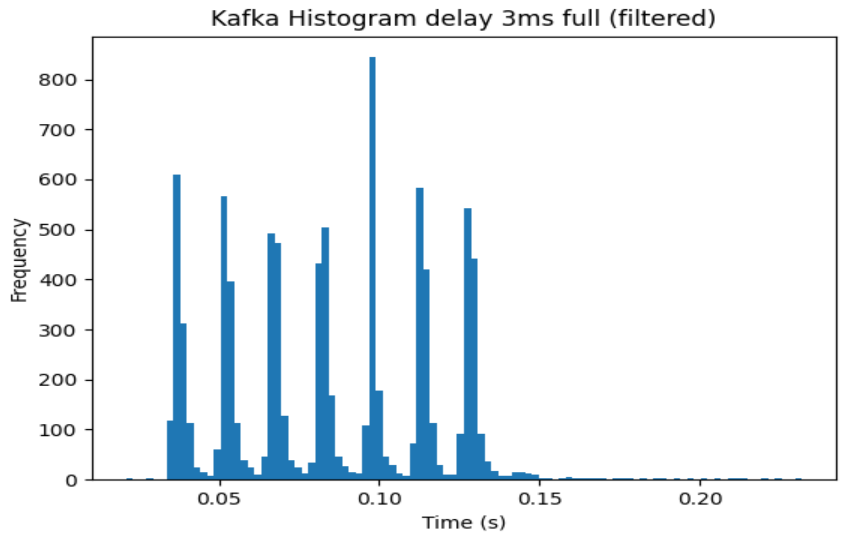
Kafka mean

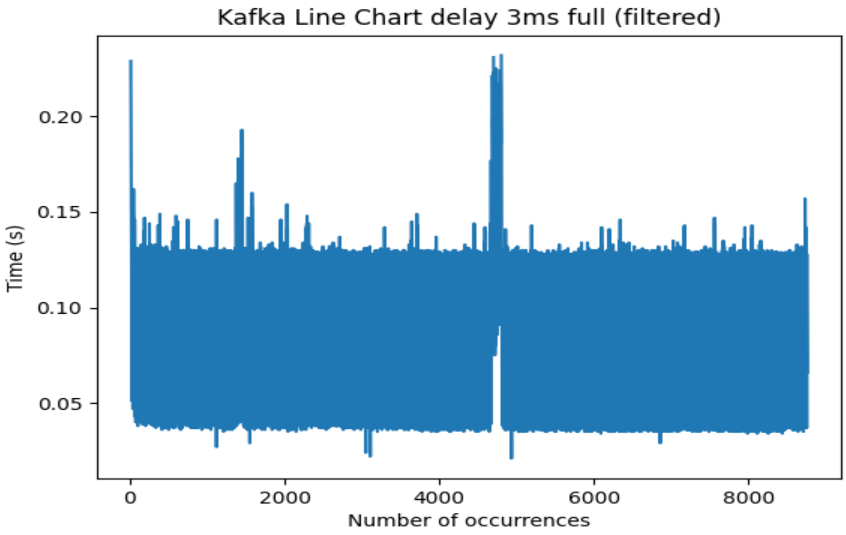
End Subtract Start: 0.0874150684931507

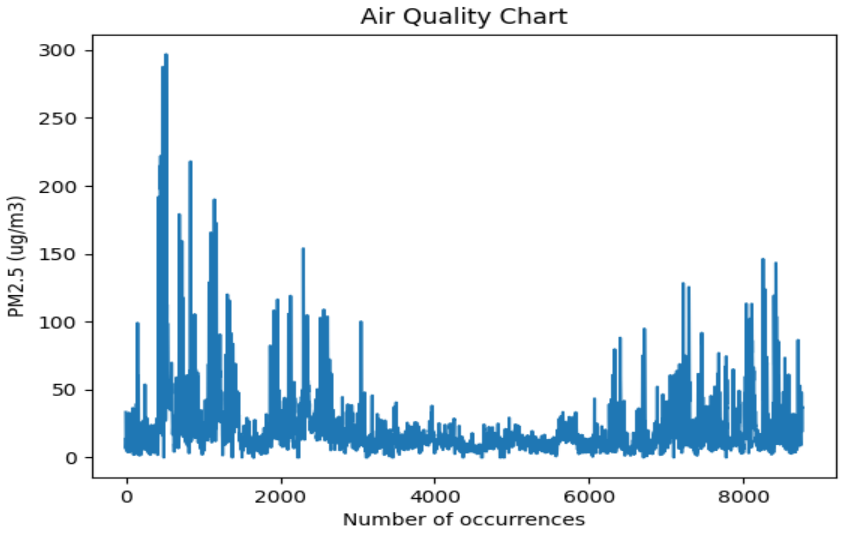

Kafka Histogram delay 3ms full
Frequency
Time (s)
0
200
400
600
800
1000
1200
0.0
0.2
0.4
0.6
0.8


Kafka Line Chart delay 3ms full
Time (s)
Number of occurrences
0.0
0.2
0.4
0.6
0.8
0
2000
4000
6000
8000


Kafka Box Chart delay 3ms full
Time (s)
Kafka delay 3ms full
0.0
0.2
0.4
0.6
0.8


Kafka Histogram delay 3ms full (filtered)
Frequency
Time (s)
0
100
200
300
400
500
600
700
800
0.05
0.10
0.15
0.20


Kafka Line Chart delay 3ms full (filtered)
Time (s)
Number of occurrences
0.05
0.10
0.15
0.20
0
2000
4000
6000
8000


Air Quality Chart
PM2.5 (ug/m3)
Number of occurrences
0
50
100
150
200
250
300
0
2000
4000
6000
8000

Kafka test setup (kafkaDelay0Full)

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 8760

Number of tests performed: 1

Start: Timestamp from Producer

End: Timestamp from Consumer

Kafka median values

End Subtract Start: 7.997

Kafka standard deviation

End Subtract Start: 0.92574137300078

Lower Bound: 5.160406017983961

Upper Bound: 10.71485425598864

Number of data in the std range: 8760

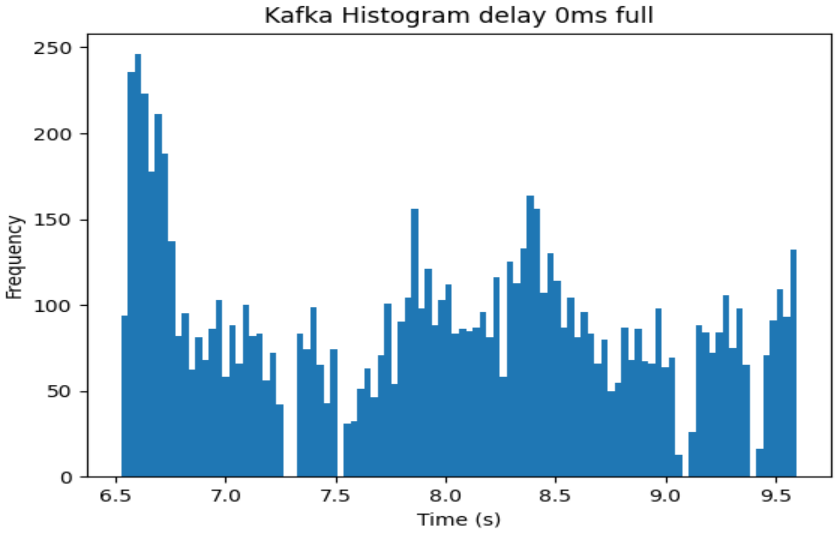
Number of data outside the std range: 0

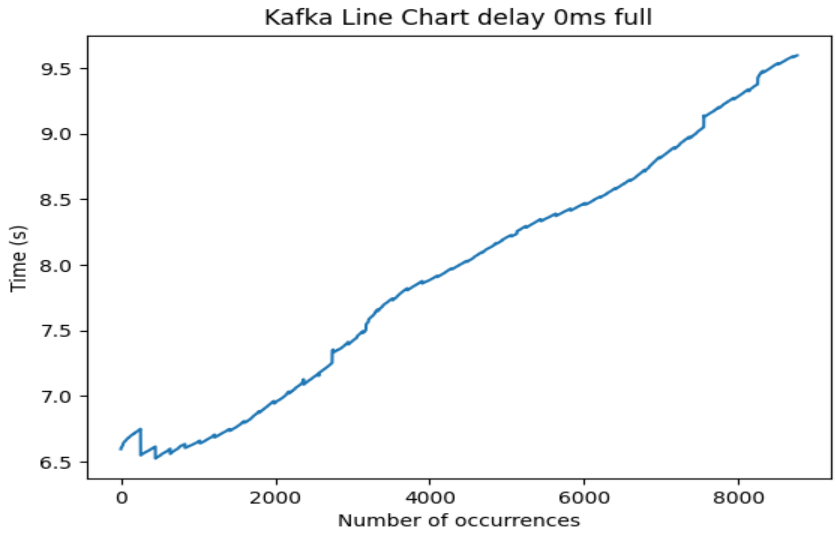
Kafka interquartile range

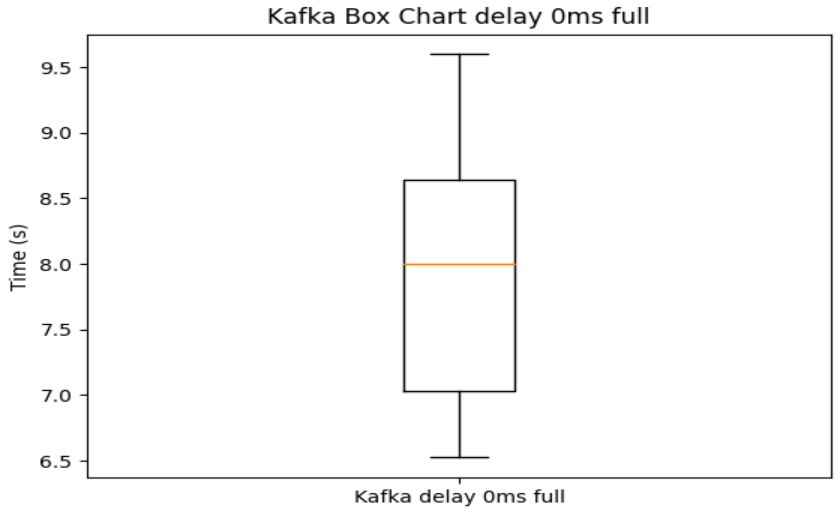
End Subtract Start: 1.6109999999999998

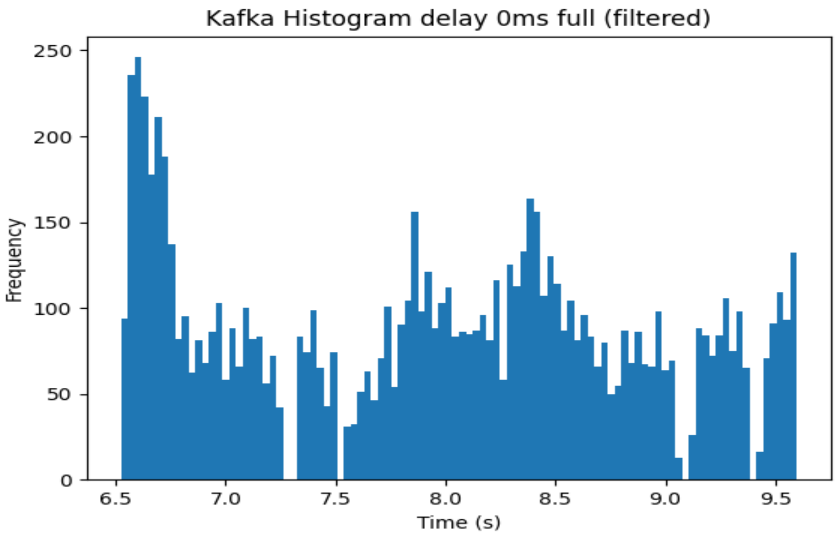
Kafka mean

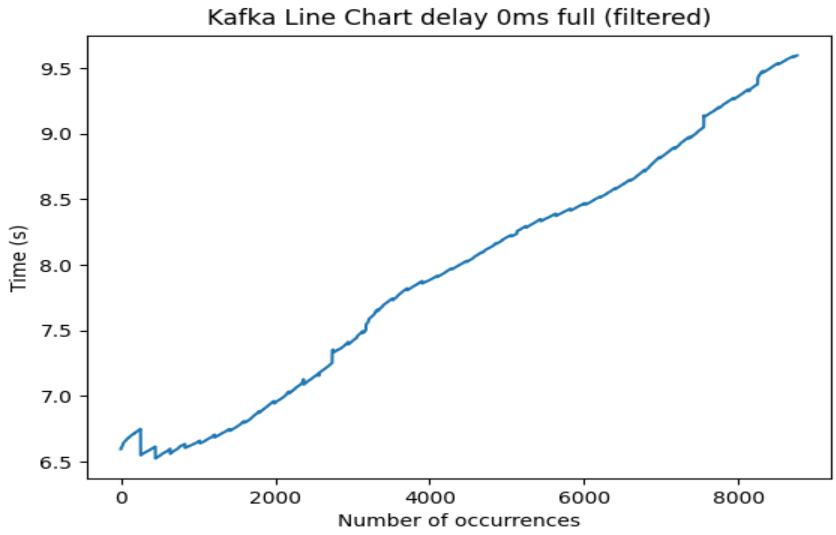
End Subtract Start: 7.937630136986301

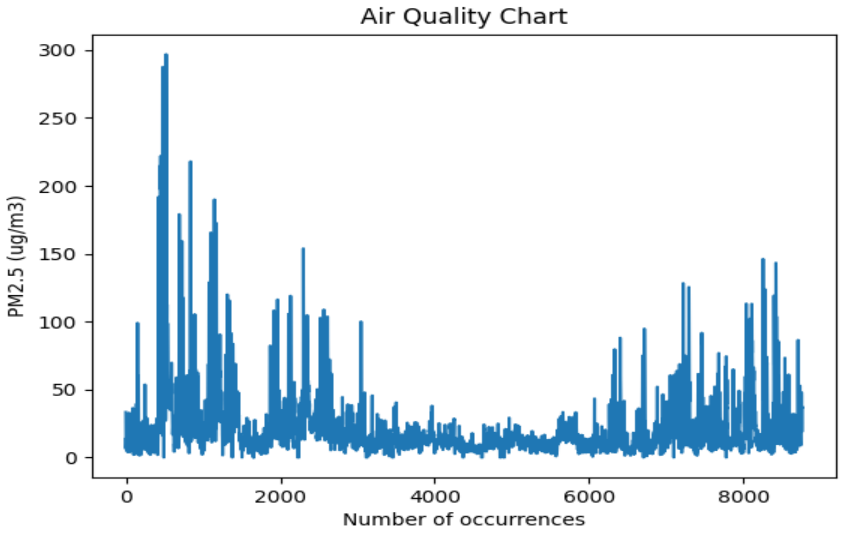

Kafka Histogram delay 0ms full
Frequency
Time (s)
0
50
100
150
200
250
6.5
7.0
7.5
8.0
8.5
9.0
9.5


Kafka Line Chart delay 0ms full
Time (s)
Number of occurrences
6.5
7.0
7.5
8.0
8.5
9.0
9.5
0
2000
4000
6000
8000


Kafka Box Chart delay 0ms full
Time (s)
6.5
7.0
7.5
8.0
8.5
9.0
9.5
Kafka delay 0ms full


Kafka Histogram delay 0ms full (filtered)
Frequency
Time (s)
0
50
100
150
200
250
6.5
7.0
7.5
8.0
8.5
9.0
9.5


Kafka Line Chart delay 0ms full (filtered)
Time (s)
Number of occurrences
6.5
7.0
7.5
8.0
8.5
9.0
9.5
0
2000
4000
6000
8000


Air Quality Chart
PM2.5 (ug/m3)
Number of occurrences
0
50
100
150
200
250
300
0
2000
4000
6000
8000

Kafka test setup (kafkaDelay0Half)

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 4380

Number of tests performed: 1

Start: Timestamp from Producer

End: Timestamp from Consumer

Kafka median values

End Subtract Start: 1.285

Kafka standard deviation

End Subtract Start: 0.38016735772099947

Lower Bound: 0.22026048391462694

Upper Bound: 2.501264630240624

Number of data in the std range: 4380

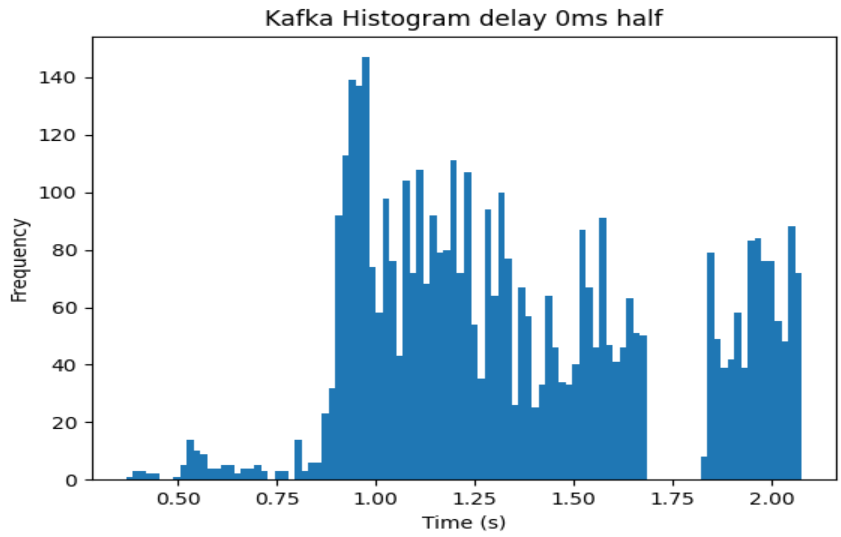
Number of data outside the std range: 0

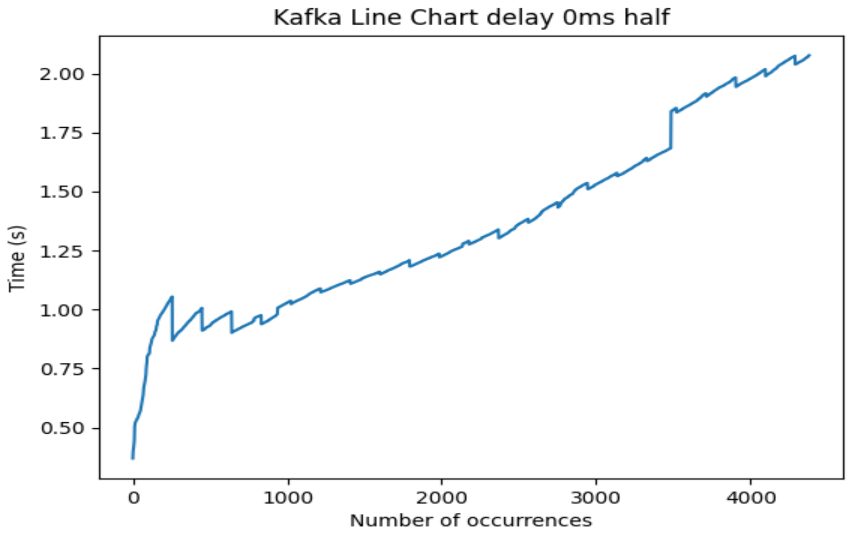
Kafka interquartile range

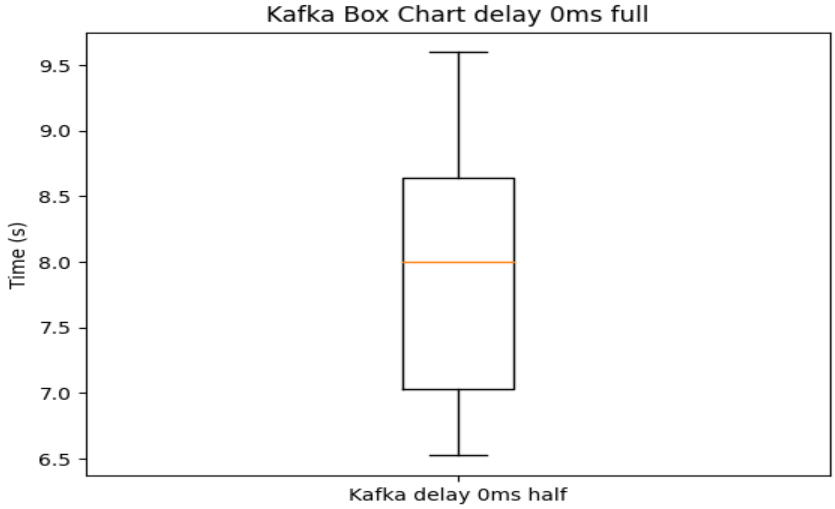
End Subtract Start: 0.5714999999999999

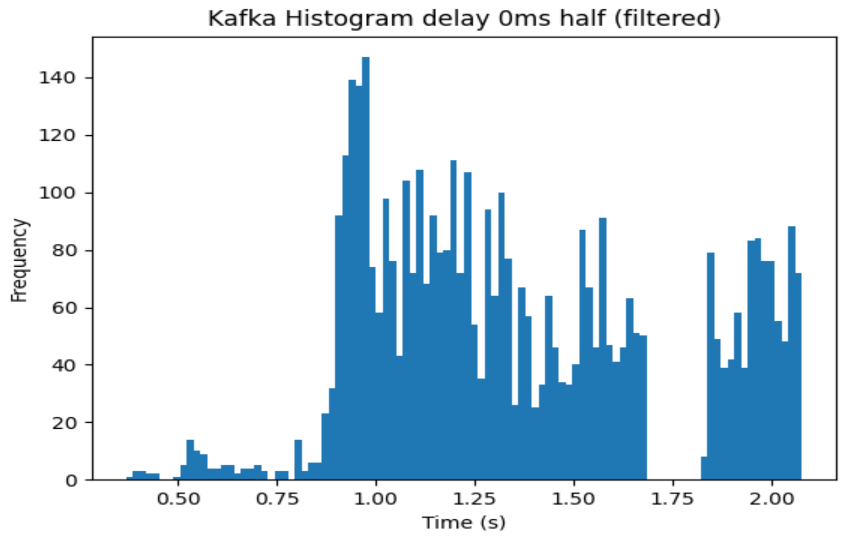
Kafka mean

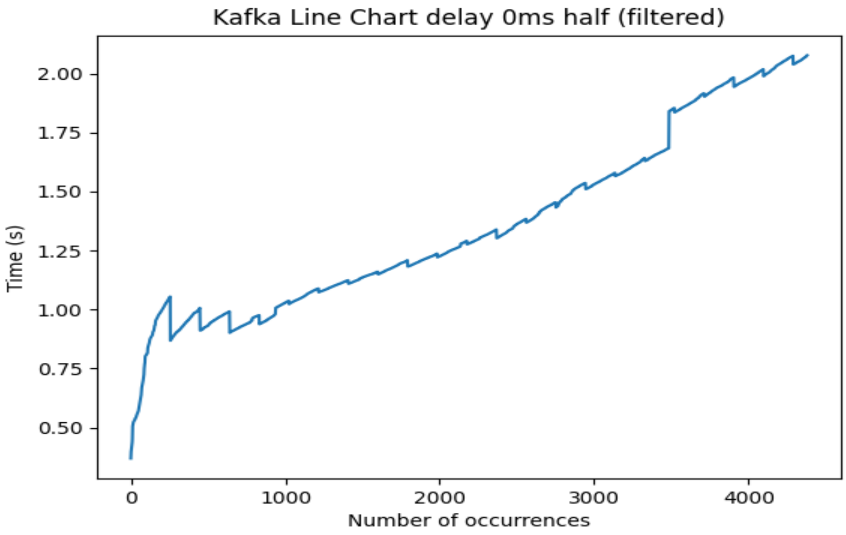
End Subtract Start: 1.3607625570776254

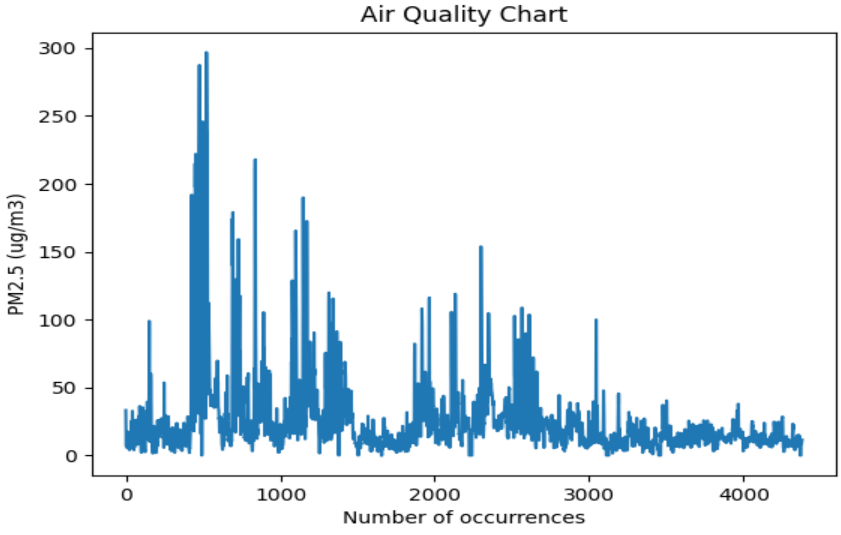

Kafka Histogram delay 0ms half
Frequency
Time (s)
0
20
40
60
80
100
120
140
0.50
0.75
1.00
1.25
1.50
1.75
2.00


Kafka Line Chart delay 0ms half
Time (s)
Number of occurrences
0.50
0.75
1.00
1.25
1.50
1.75
2.00
0
1000
2000
3000
4000


Kafka Box Chart delay 0ms full
Time (s)
6.5
7.0
7.5
8.0
8.5
9.0
9.5
Kafka delay 0ms half


Kafka Histogram delay 0ms half (filtered)
Frequency
Time (s)
0
20
40
60
80
100
120
140
0.50
0.75
1.00
1.25
1.50
1.75
2.00


Kafka Line Chart delay 0ms half (filtered)
Time (s)
Number of occurrences
0.50
0.75
1.00
1.25
1.50
1.75
2.00
0
1000
2000
3000
4000


Air Quality Chart
PM2.5 (ug/m3)
Number of occurrences
0
50
100
150
200
250
300
0
1000
2000
3000
4000

Spark test setup (sparkDelay3Full)

Technology: Spark Structured Streaming

Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Number of tests performed: 1

Start: Timestamp from Producer

End: Timestamp from Consumer

Spark median values

End Subtract Start: 0.708

Spark standard deviation

End Subtract Start: 0.29284020476938516

Lower Bound: -0.144683970472539

Upper Bound: 1.612357258143772

Number of data in the std range: 8636

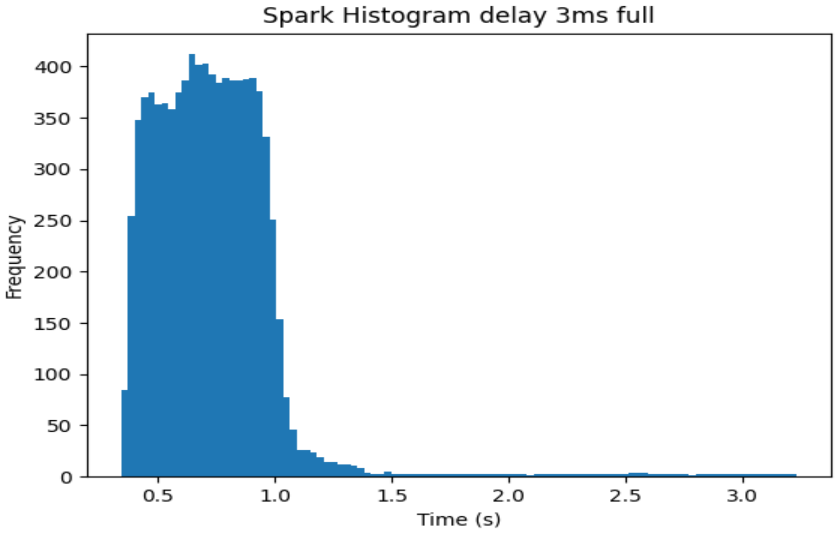
Number of data outside the std range: 124

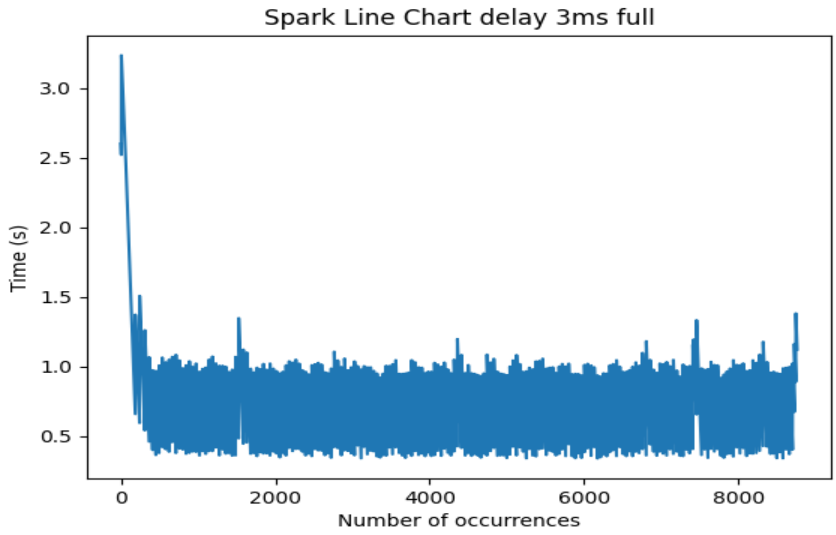
Spark interquartile range

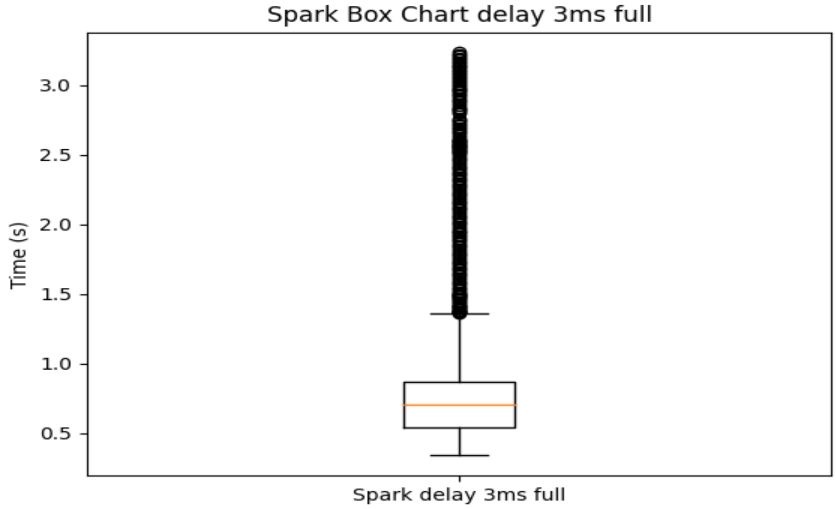
End Subtract Start: 0.32799999999999996

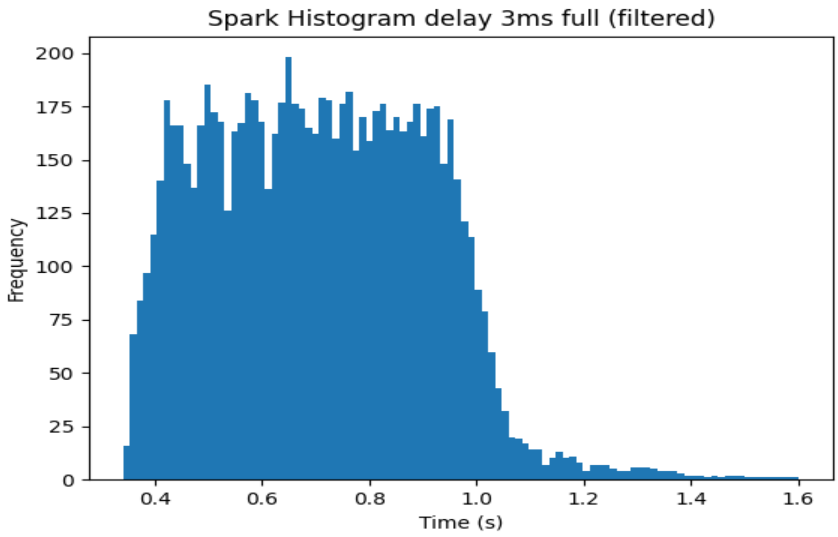
Spark mean

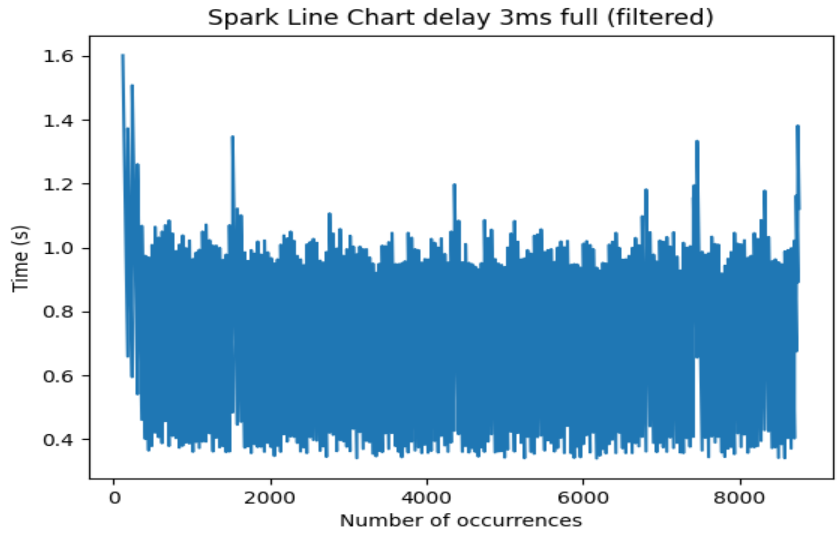
End Subtract Start: 0.7338366438356164

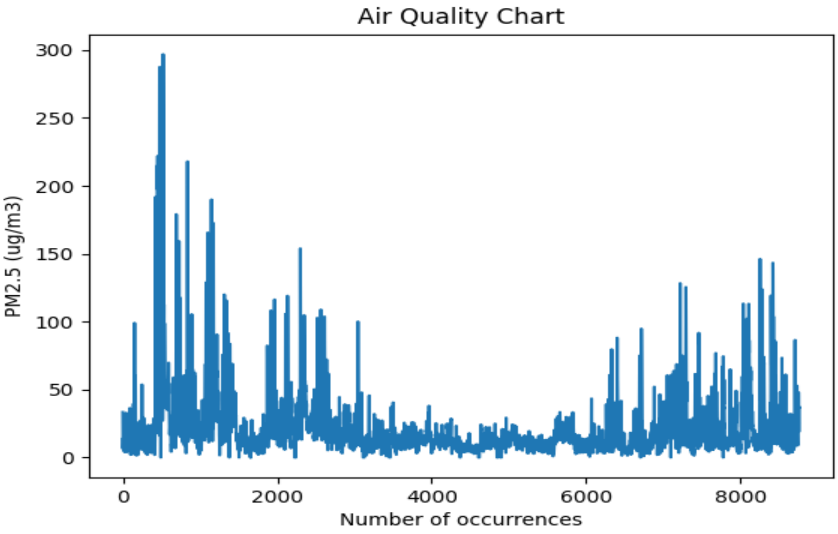

Spark Histogram delay 3ms full
Frequency
Time (s)
0
50
100
150
200
250
300
350
400
0.5
1.0
1.5
2.0
2.5
3.0


Spark Line Chart delay 3ms full
Time (s)
Number of occurrences
0.5
1.0
1.5
2.0
2.5
3.0
0
2000
4000
6000
8000


Spark Box Chart delay 3ms full
Time (s)
0.5
1.0
1.5
2.0
2.5
3.0
Spark delay 3ms full


Spark Histogram delay 3ms full (filtered)
Frequency
Time (s)
0
25
50
75
100
125
150
175
200
0.4
0.6
0.8
1.0
1.2
1.4
1.6


Spark Line Chart delay 3ms full (filtered)
Time (s)
Number of occurrences
0.4
0.6
0.8
1.0
1.2
1.4
1.6
0
2000
4000
6000
8000


Air Quality Chart
PM2.5 (ug/m3)
Number of occurrences
0
50
100
150
200
250
300
0
2000
4000
6000
8000

Spark test setup (sparkDelay0Full)

Technology: Spark Structured Streaming

Producer Delay (Send next message): 0ms

Full data set (qty): 8760

Number of tests performed: 1

Start: Timestamp from Producer

End: Timestamp from Consumer

Spark median values

End Subtract Start: 6.537

Spark standard deviation

End Subtract Start: 0.8253937742250684

Lower Bound: 4.0233572617996805

Upper Bound: 8.97571990715009

Number of data in the std range: 8760

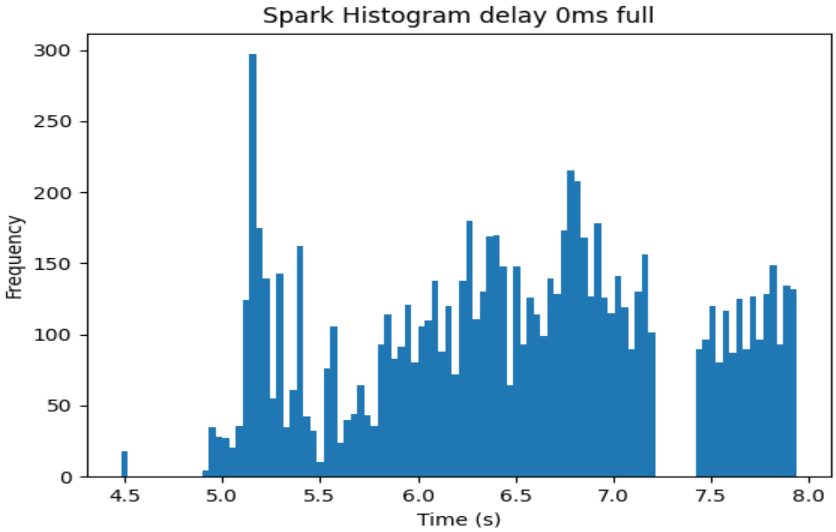
Number of data outside the std range: 0

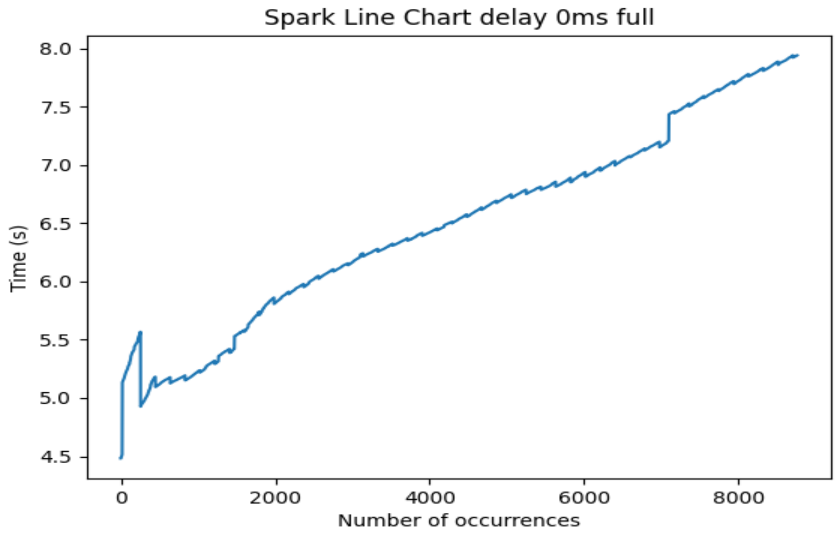
Spark interquartile range

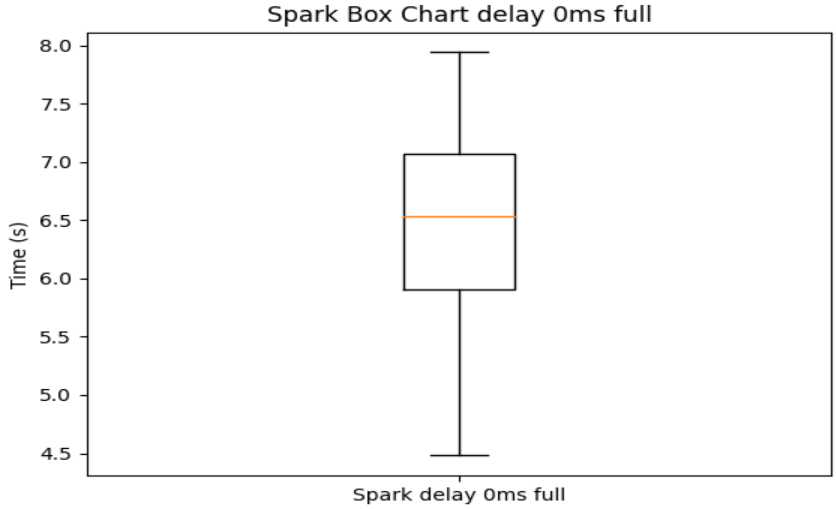
End Subtract Start: 1.1592500000000001

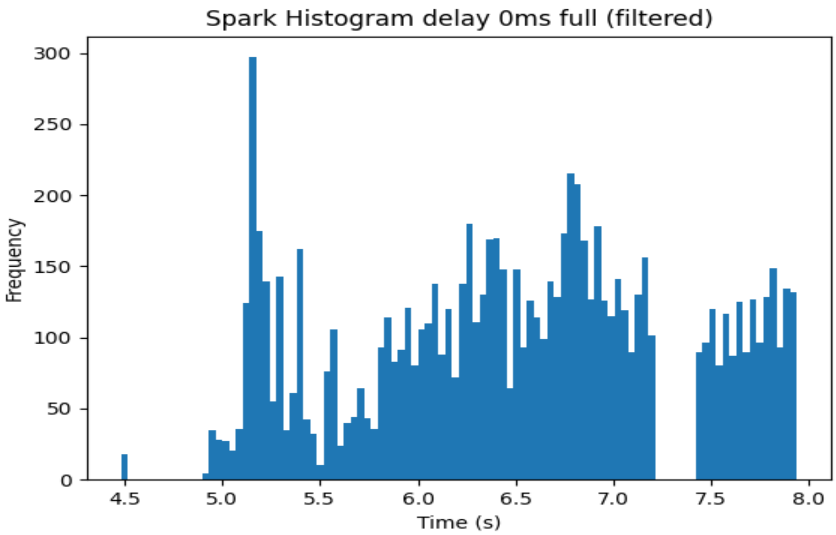
Spark mean

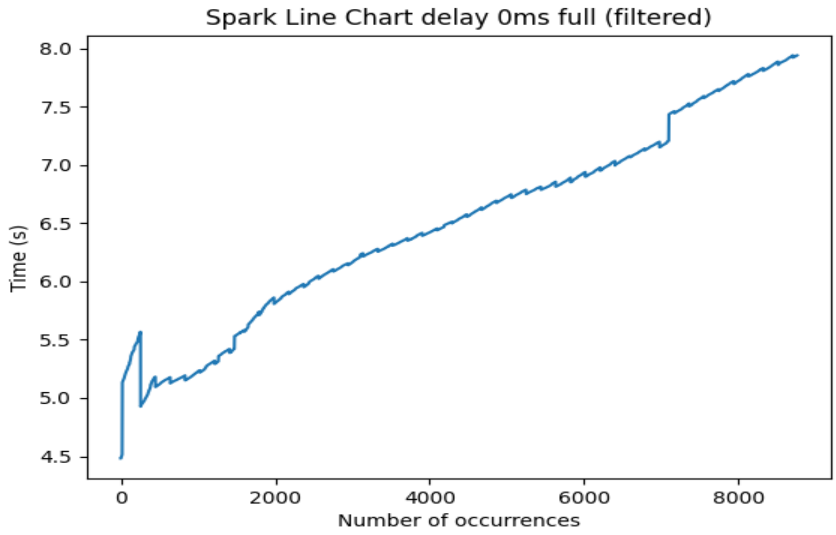
End Subtract Start: 6.499538584474886

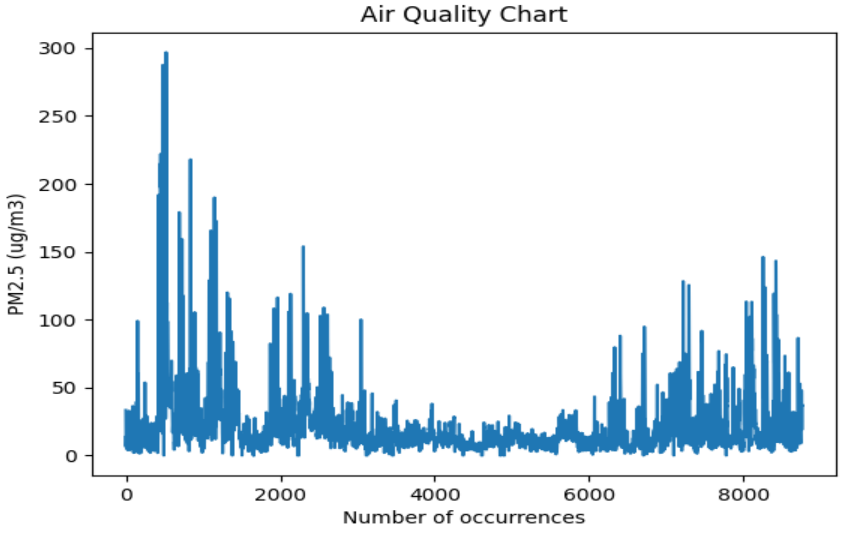

Spark Histogram delay 0ms full
Frequency
Time (s)
300
250
200
150
100
50
0
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0


Spark Line Chart delay 0ms full
Time (s)
Number of occurrences
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5
0
2000
4000
6000
8000


Spark Box Chart delay 0ms full
Time (s)
Spark delay 0ms full
8.0
7.5
7.0
6.5
6.0
5.5
5.0
4.5


Spark Histogram delay 0ms full (filtered)
Frequency
Time (s)
0
50
100
150
200
250
300
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0


Spark Line Chart delay 0ms full (filtered)
Time (s)
Number of occurrences
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
0
2000
4000
6000
8000


Air Quality Chart
PM2.5 (ug/m3)
Number of occurrences
0
50
100
150
200
250
300
0
2000
4000
6000
8000

Spark test setup (sparkDelay0Half)

Technology: Spark Structured Streaming

Producer Delay (Send next message): 0ms

Full data set (qty): 4380

Number of tests performed: 1

Start: Timestamp from Producer

End: Timestamp from Consumer

Spark median values

End Subtract Start: 5.957

Spark standard deviation

End Subtract Start: 0.998640589798448

Lower Bound: 2.7292506050338794

Upper Bound: 8.721094143824567

Number of data in the std range: 4380

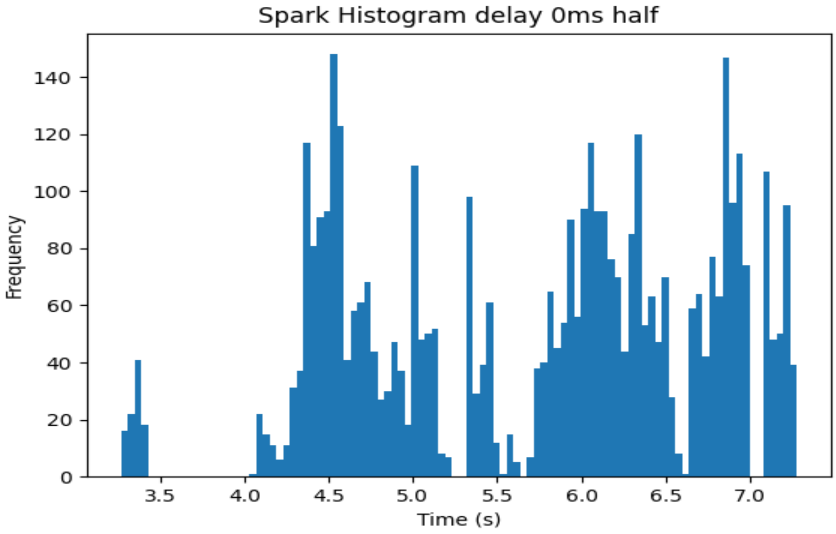
Number of data outside the std range: 0

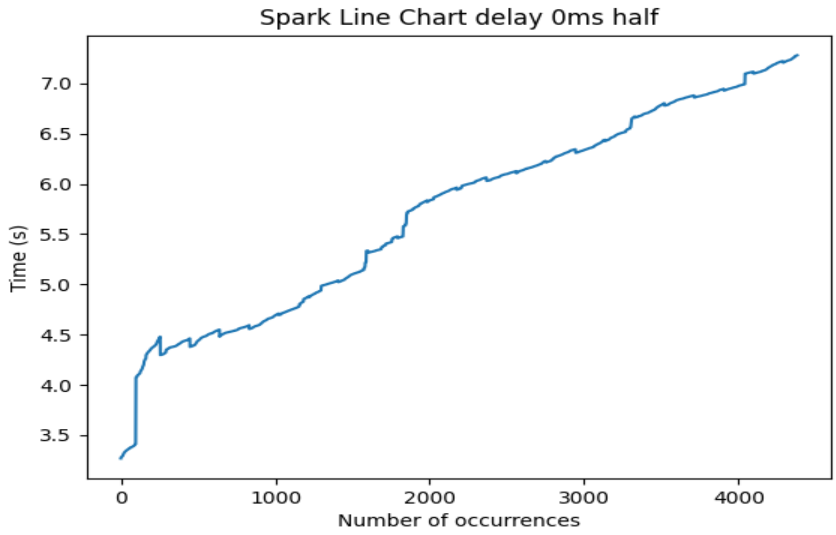
Spark interquartile range

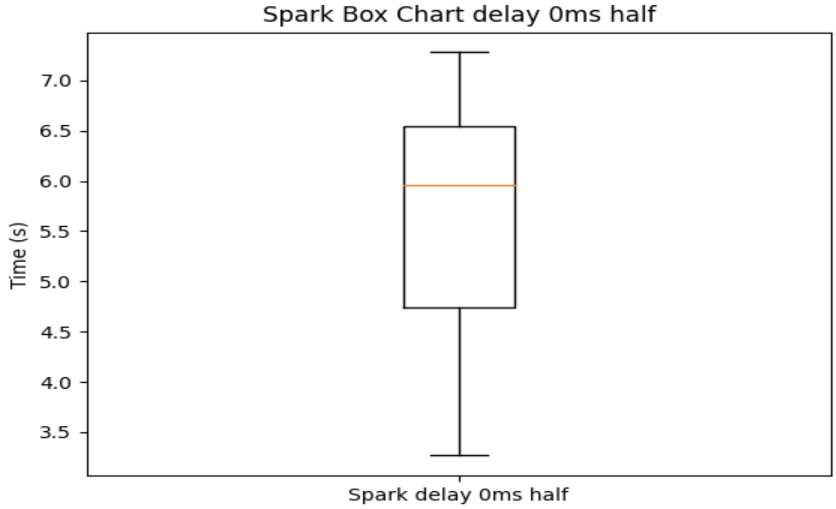
End Subtract Start: 1.8032500000000002

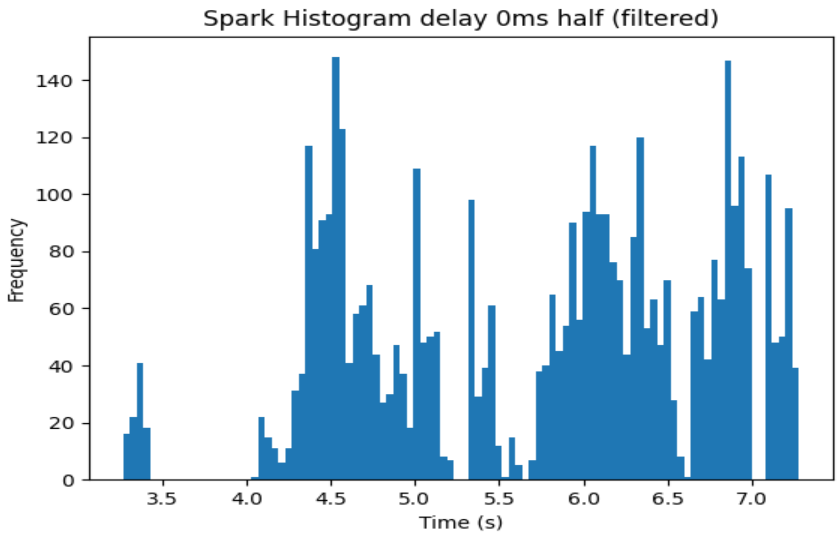
Spark mean

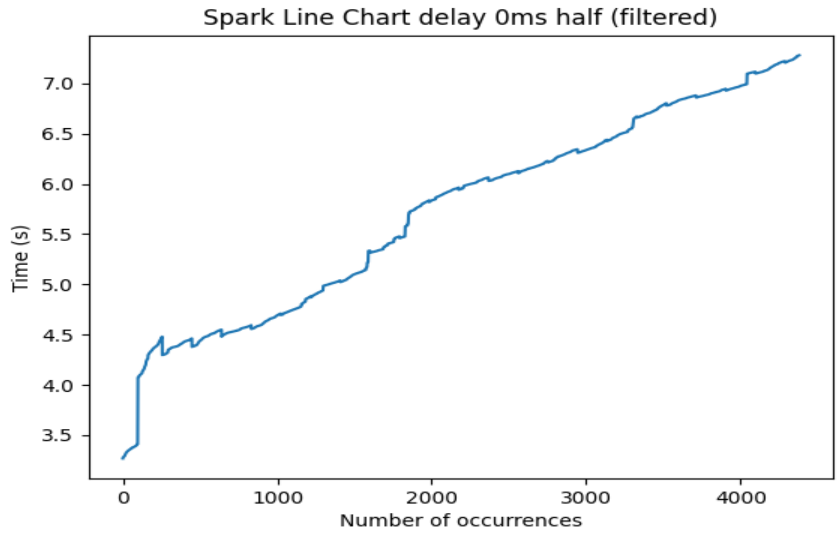
End Subtract Start: 5.725172374429223

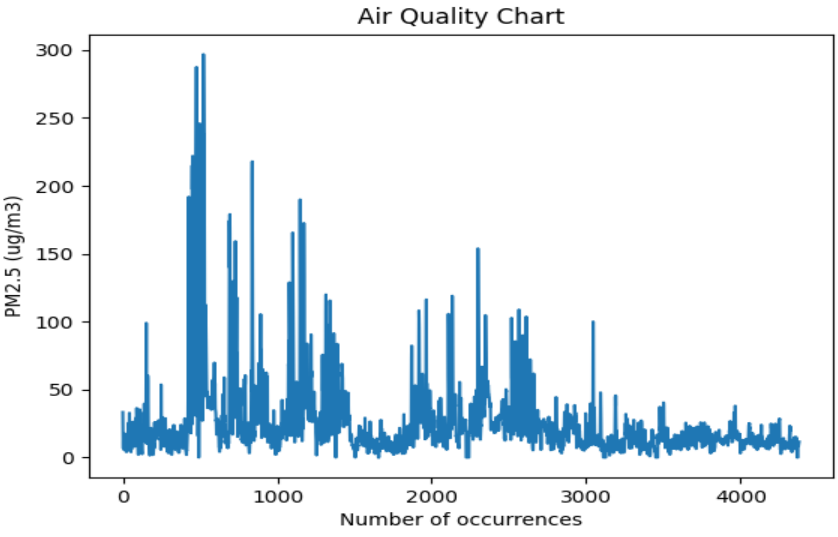

Spark Histogram delay 0ms half
Frequency
Time (s)
0
20
40
60
80
100
120
140
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0


Spark Line Chart delay 0ms half
Time (s)
Number of occurrences
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
0
1000
2000
3000
4000


Spark Box Chart delay 0ms half
Time (s)
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
Spark delay 0ms half


Spark Histogram delay 0ms half (filtered)
Frequency
Time (s)
0
20
40
60
80
100
120
140
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0


Spark Line Chart delay 0ms half (filtered)
Time (s)
Number of occurrences
3.5
4.0
4.5
5.0
5.5
6.0
6.5
7.0
0
1000
2000
3000
4000


Air Quality Chart
PM2.5 (ug/m3)
Number of occurrences
0
50
100
150
200
250
300
0
1000
2000
3000
4000