

## **Kafka test setup (kafkaDelay3Full)**

Technology: Kafka Streams

Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Number of tests performed: 10

Start: Timestamp from Producer

End: Timestamp from Consumer

Unit: The results are given in seconds

## **Kafka median values**

End Subtract Start: 0.084300000000000001

## **Kafka standard deviation**

End Subtract Start: 0.4334065710452378

Lower Bound: -1.1140790966973573

UpperBound: 1.4863603295740695

Number of data in the std range: 8469

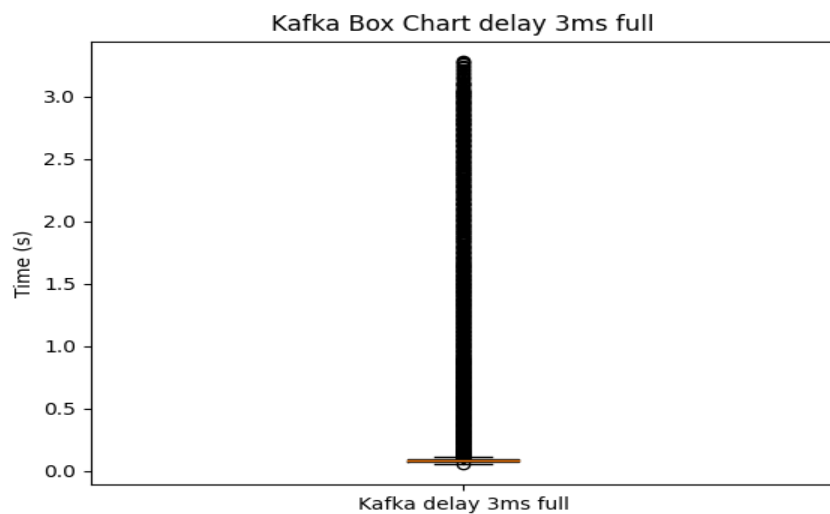
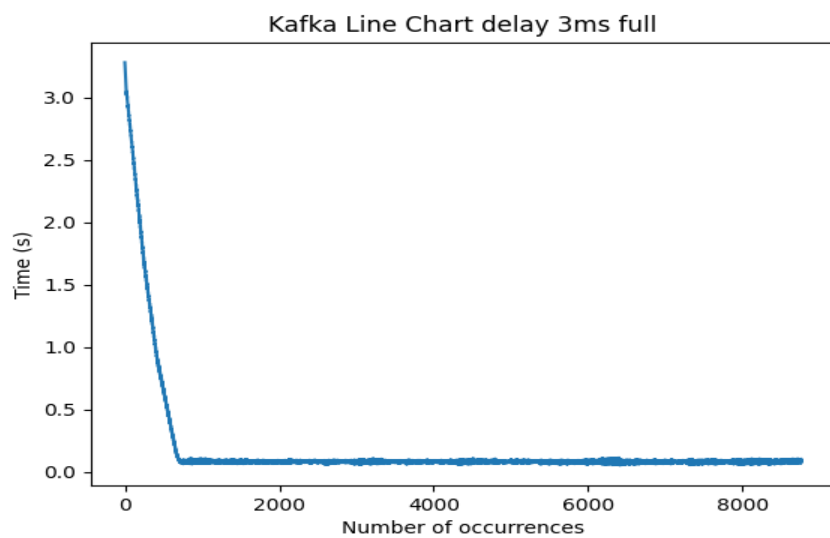
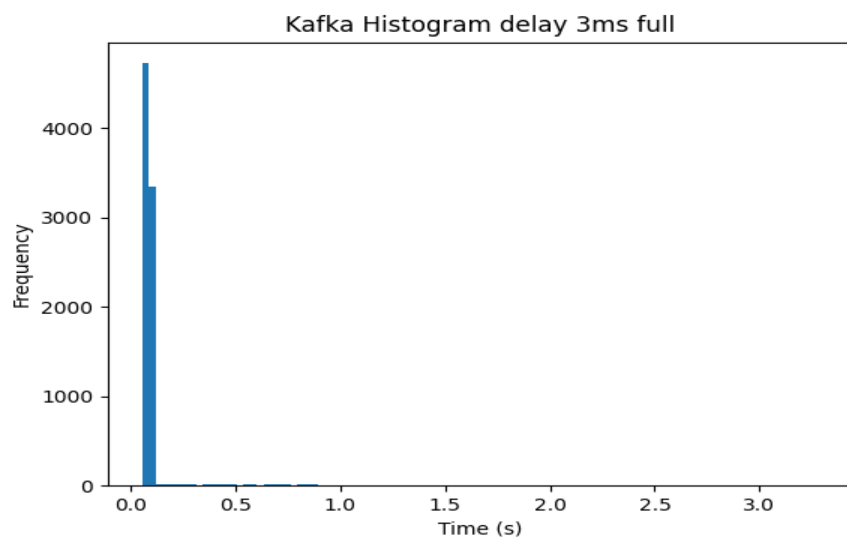
Number of data outside the std range: 291

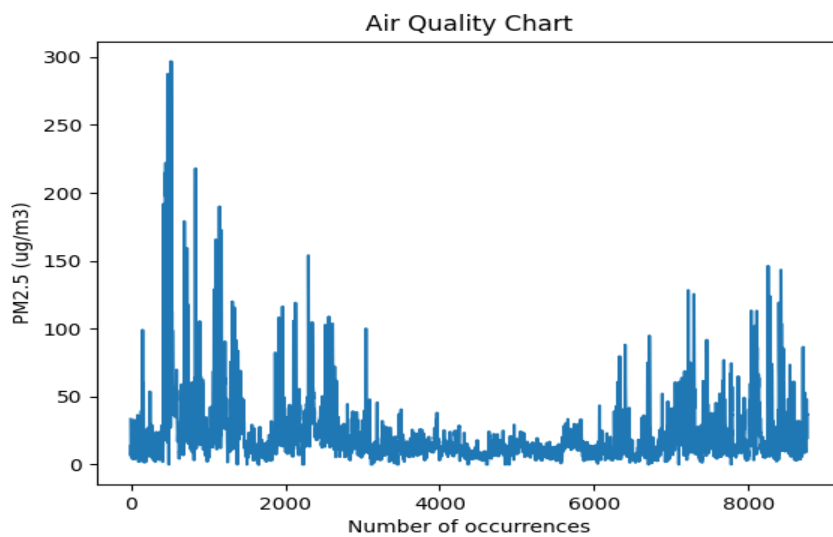
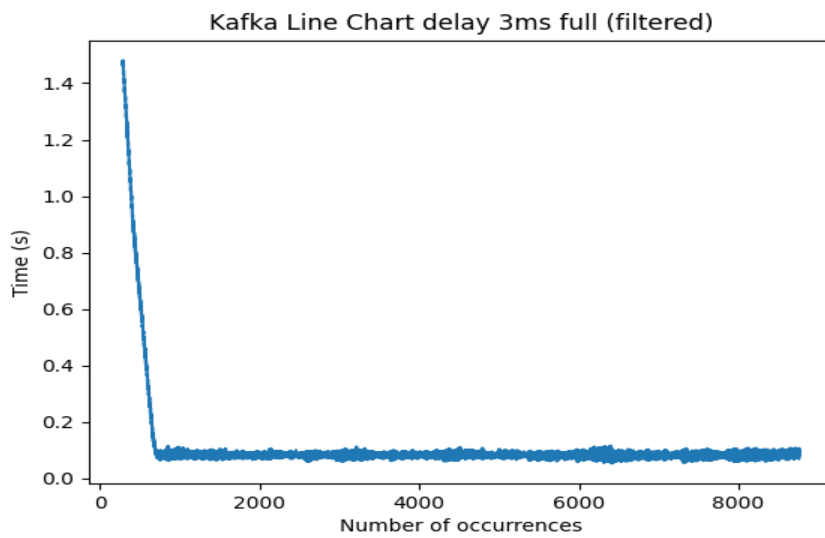
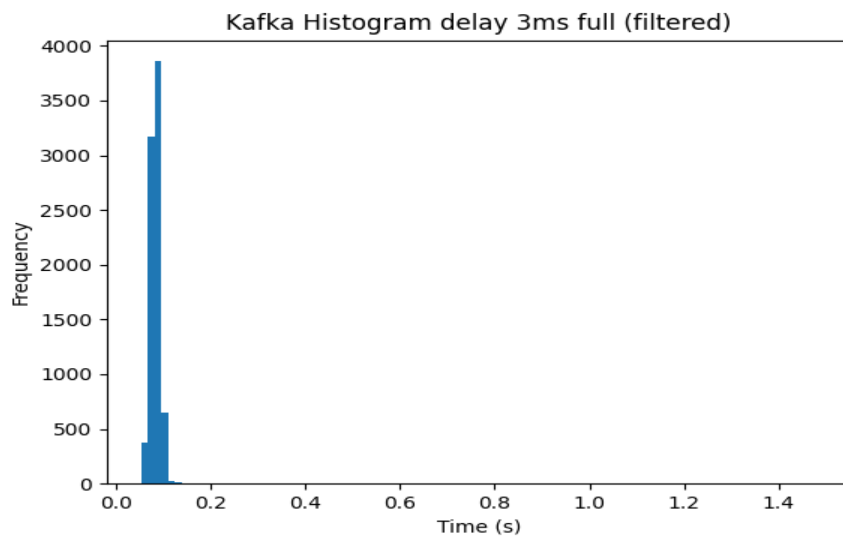
## **Kafka interquartile range**

End Subtract Start: 0.014299999999999998

## **Kafka mean**

End Subtract Start: 0.1861406164383562





## **Kafka test setup (kafkaDelay0Full)**

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 8760

Number of tests performed: 10

Start: Timestamp from Producer

End: Timestamp from Consumer

Unit: The results are given in seconds

## **Kafka median values**

End Subtract Start: 3.7594

## **Kafka standard deviation**

End Subtract Start: 0.7197608356887196

Lower Bound: 1.5878725043493667

Upper Bound: 5.906437518481685

Number of data in the std range: 8760

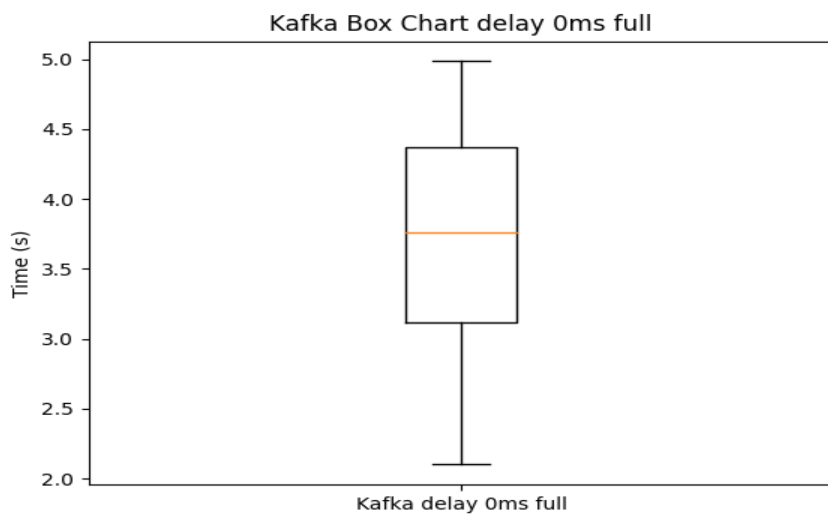
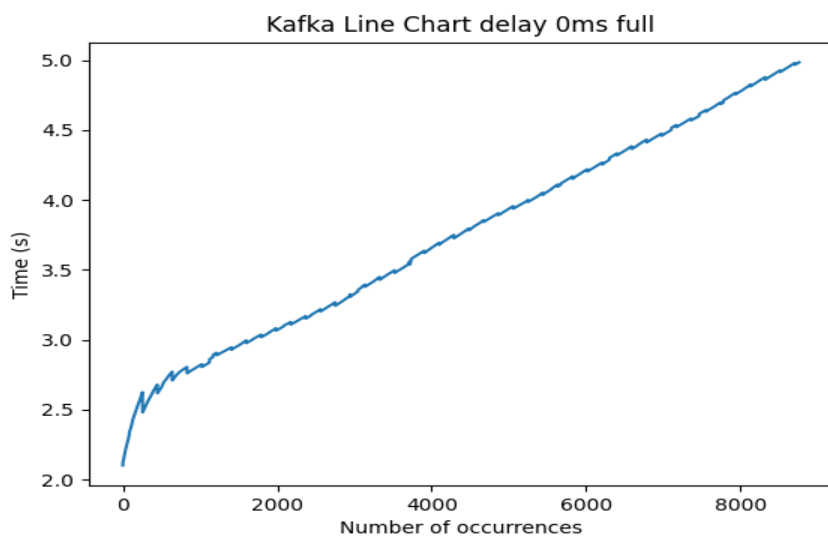
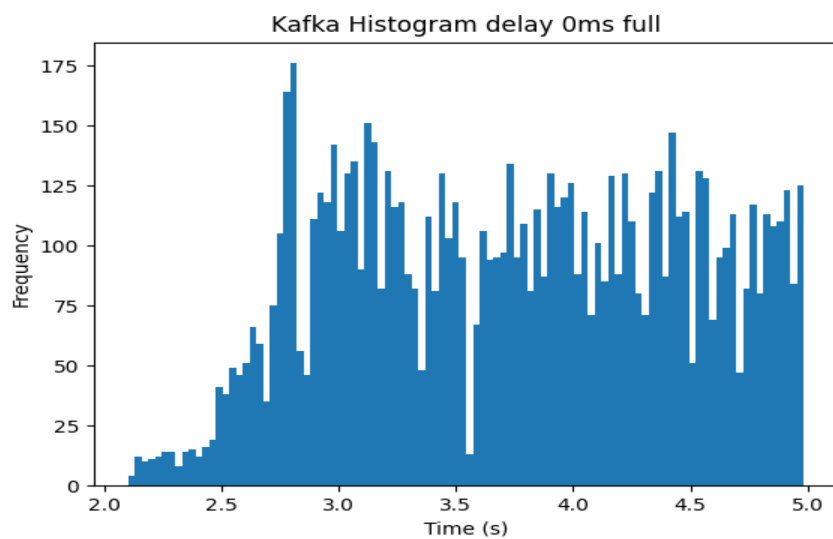
Number of data outside the std range: 0

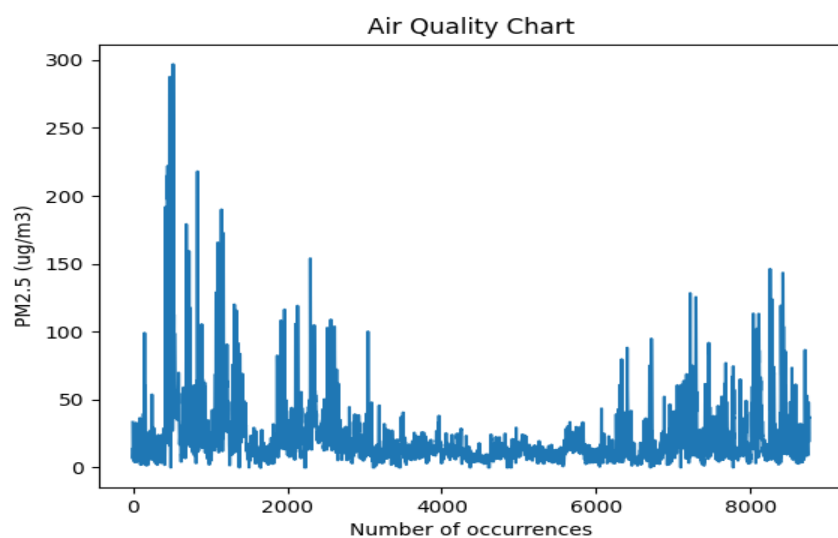
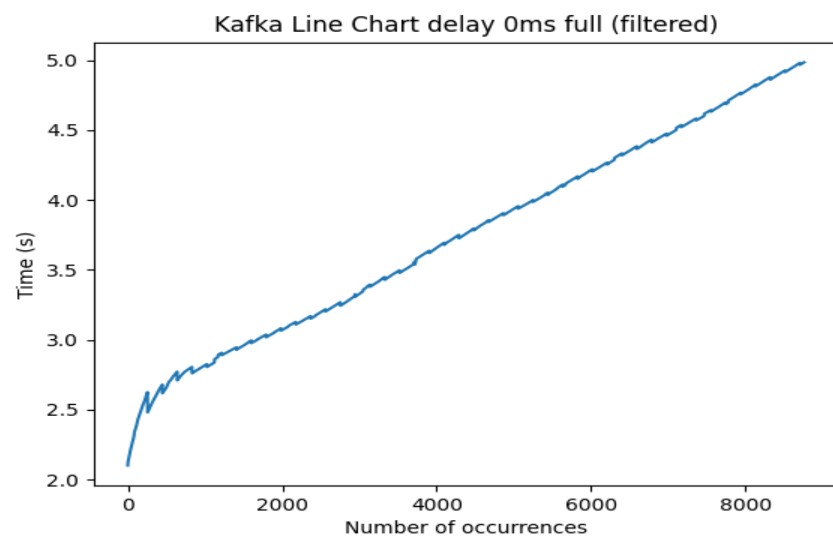
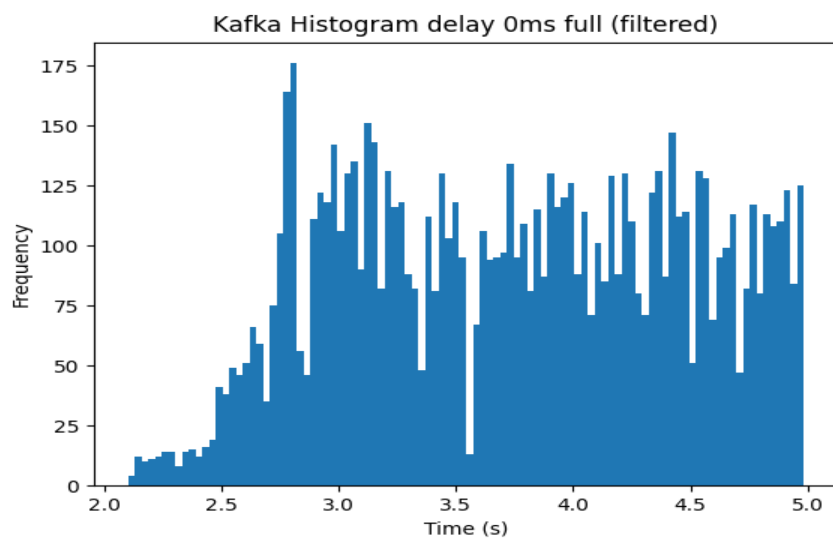
## **Kafka interquartile range**

End Subtract Start: 1.250025

## **Kafka mean**

End Subtract Start: 3.7471550114155256





## **Kafka test setup (kafkaDelay0Half)**

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 4380

Number of tests performed: 10

Start: Timestamp from Producer

End: Timestamp from Consumer

Unit: The results are given in seconds

## **Kafka median values**

End Subtract Start: 3.3966

## **Kafka standard deviation**

End Subtract Start: 0.3818035575577879

Lower Bound: 2.347166861573212

Upper Bound: 4.637988206919939

Number of data in the std range: 4380

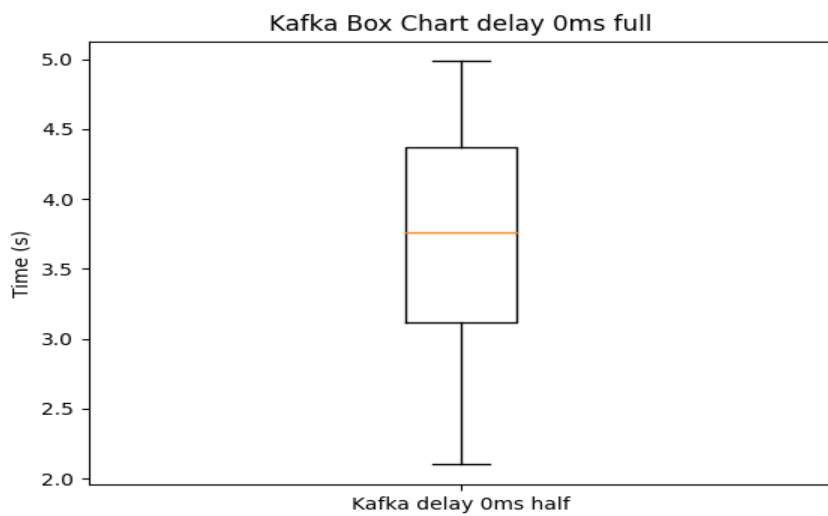
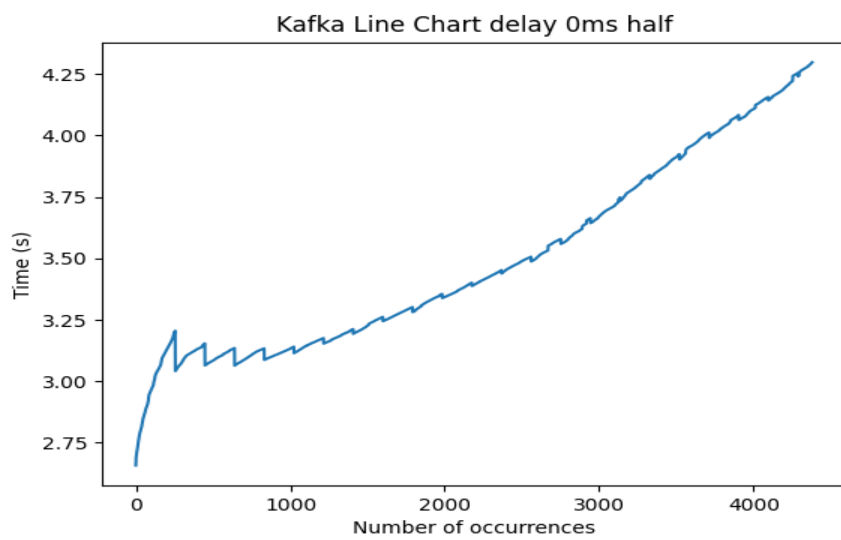
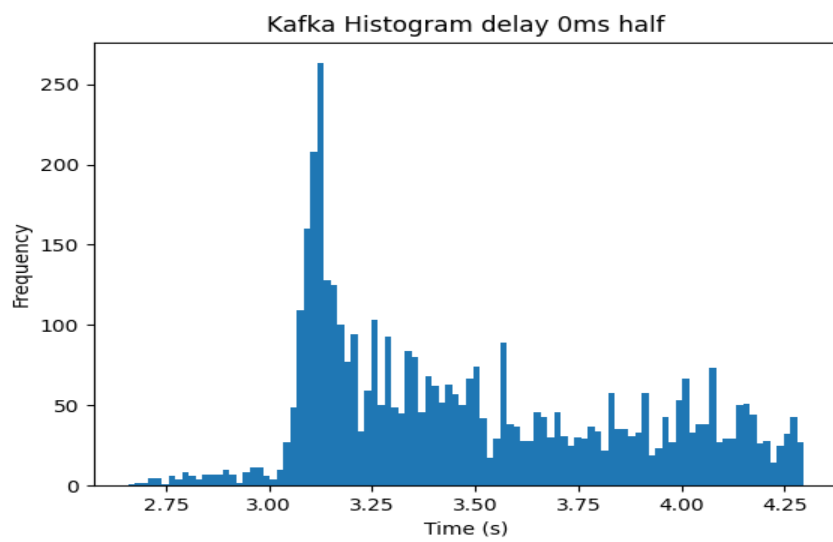
Number of data outside the std range: 0

## **Kafka interquartile range**

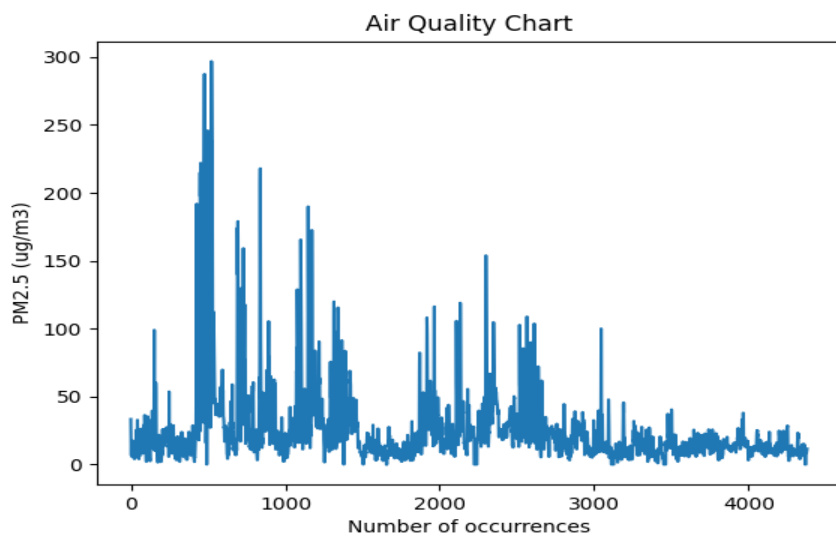
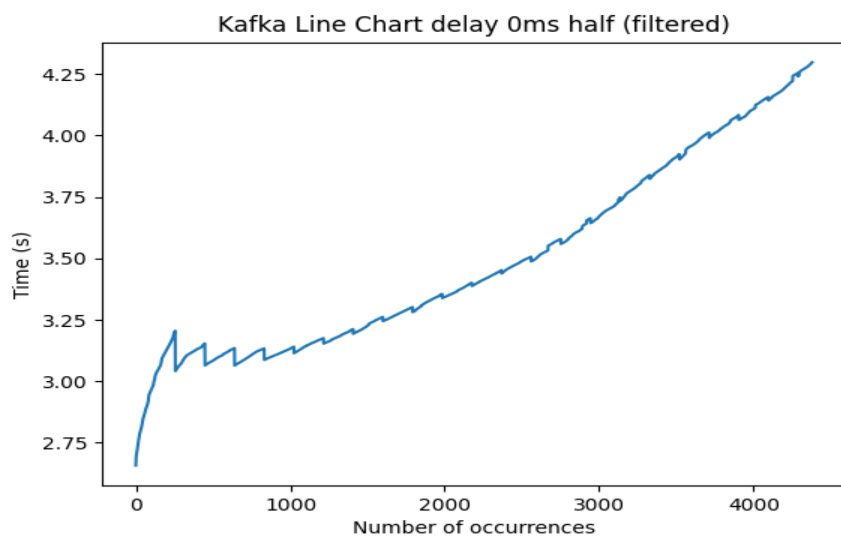
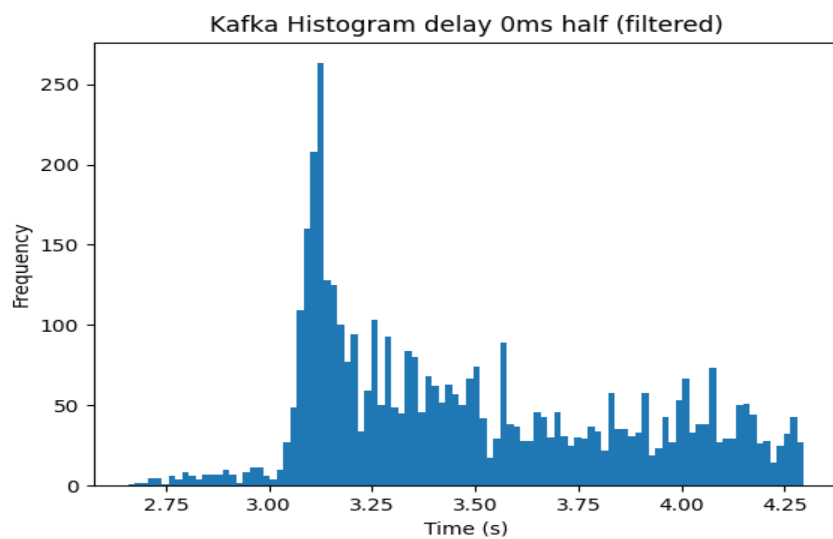
End Subtract Start: 0.6668749999999997

## **Kafka mean**

End Subtract Start: 3.4925775342465757







## **Spark test setup (sparkDelay3Full)**

Technology: Spark Structured Streaming

Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Number of tests performed: 10

Start: Timestamp from Producer

End: Timestamp from Consumer

Unit: The results are given in seconds

## **Spark median values**

End Subtract Start: 0.7660499999999999

## **Spark standard deviation**

End Subtract Start: 0.3439892246820013

Lower Bound: -0.20644130418299034

Upper Bound: 1.8574940439090177

Number of data in the std range: 8568

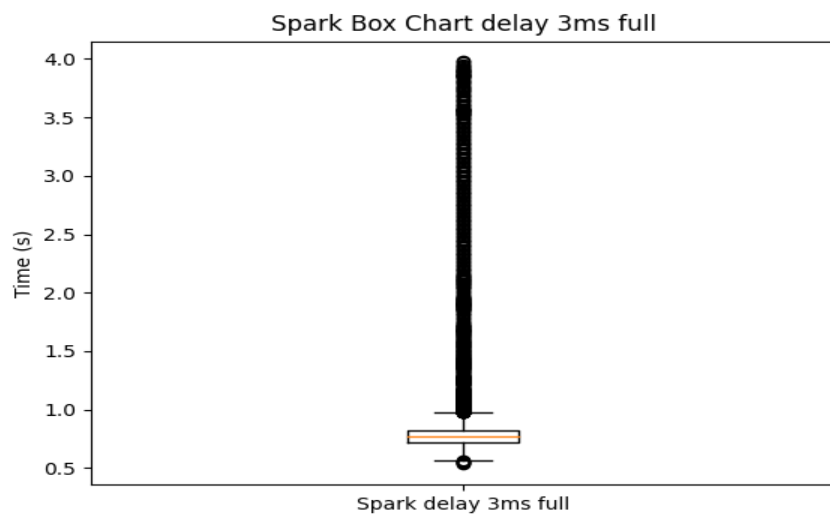
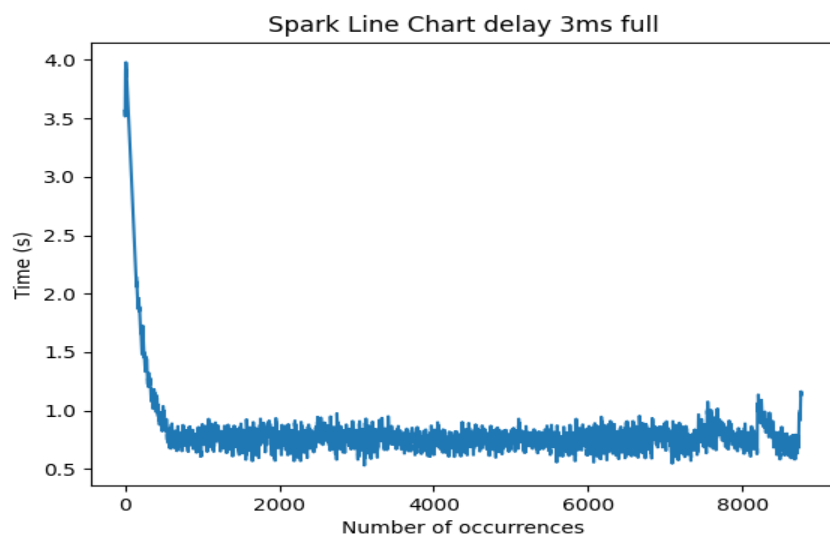
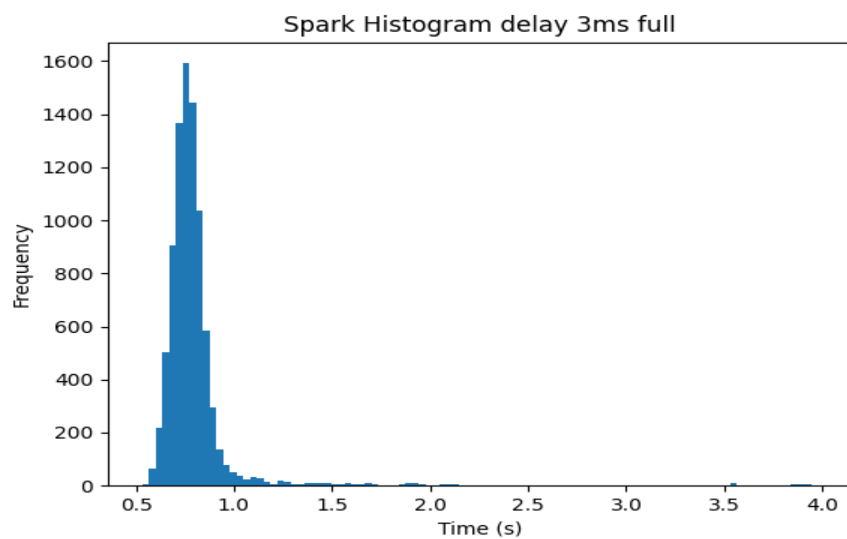
Number of data outside the std range: 192

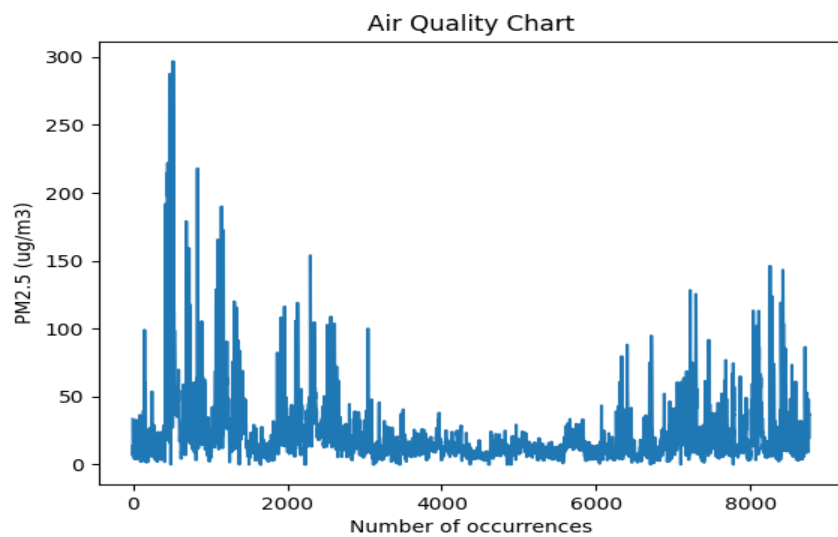
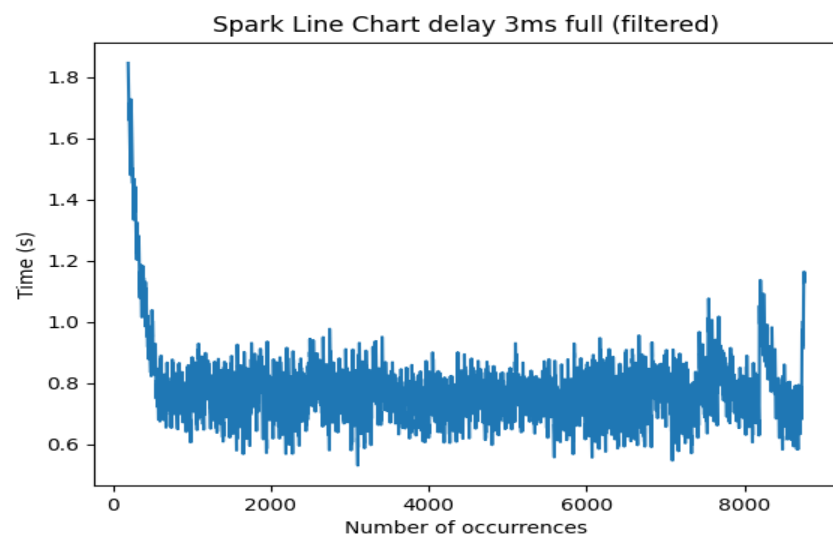
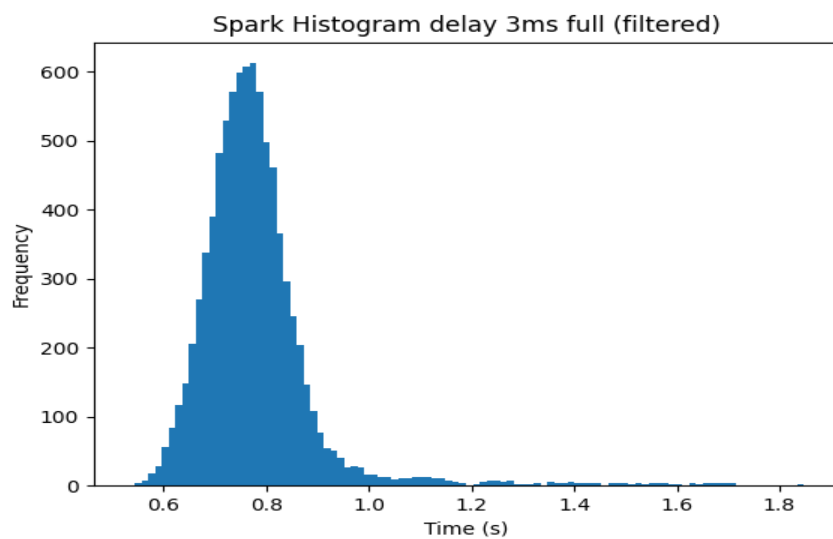
## **Spark interquartile range**

End Subtract Start: 0.10359999999999991

## **Spark mean**

End Subtract Start: 0.8255263698630136





## **Spark test setup (sparkDelay0Full)**

Technology: Spark Structured Streaming  
Producer Delay (Send next message): 0ms  
Full data set (qty): 8760  
Number of tests performed: 10  
Start: Timestamp from Producer  
End: Timestamp from Consumer  
Unit: The results are given in seconds

## **Spark median values**

End Subtract Start: 5.4548000000000005

## **Spark standard deviation**

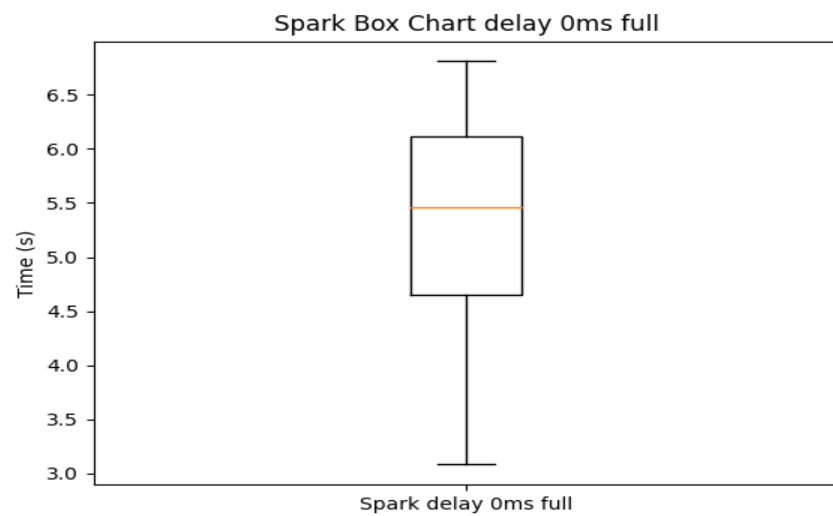
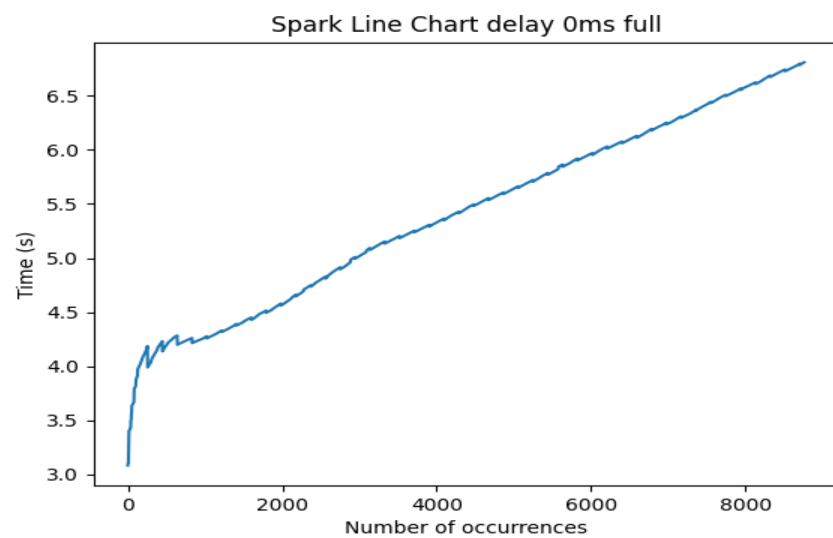
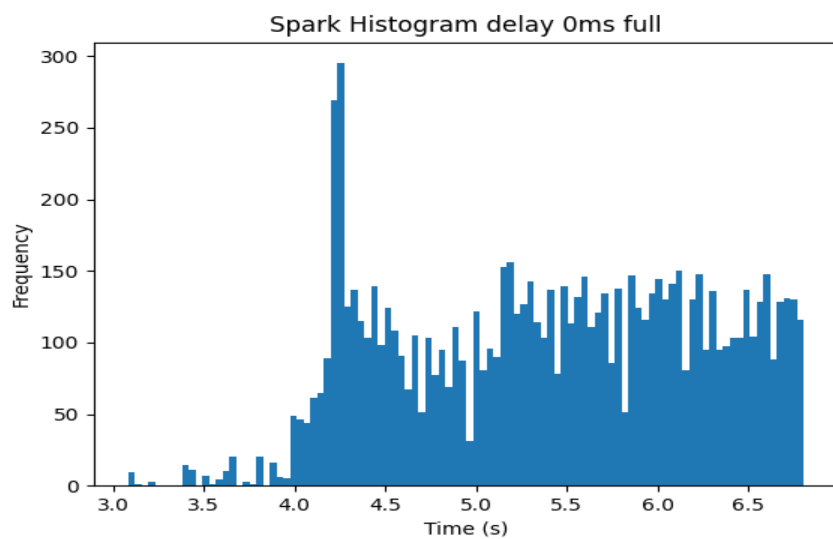
End Subtract Start: 0.836640550318469  
Lower Bound: 2.900631180094822  
Upper Bound: 7.920474482005636  
Number of data in the std range: 8760  
Number of data outside the std range: 0

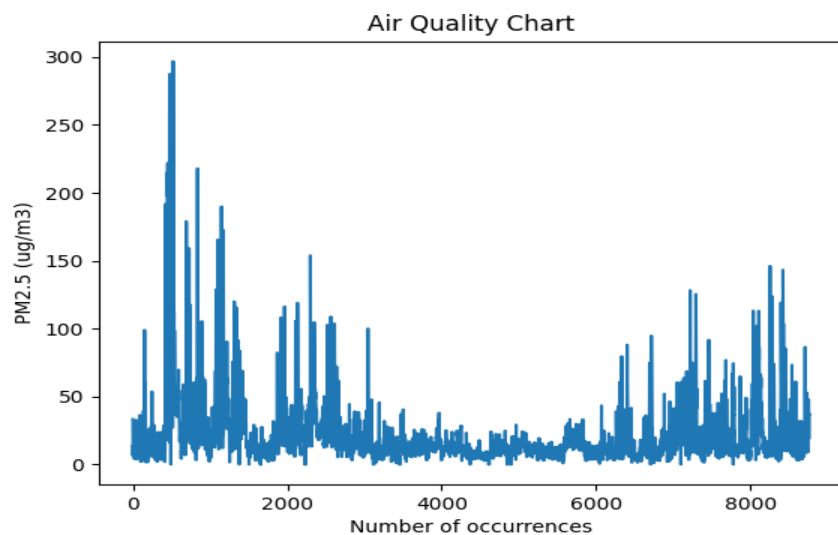
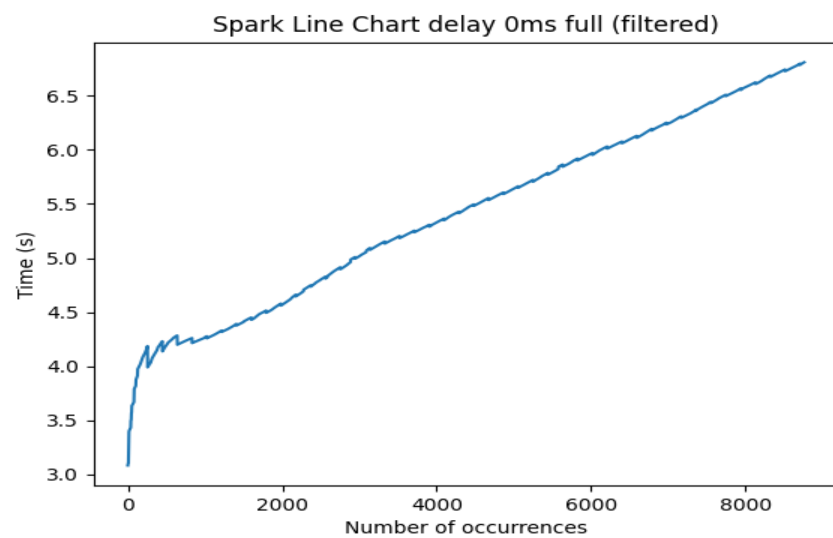
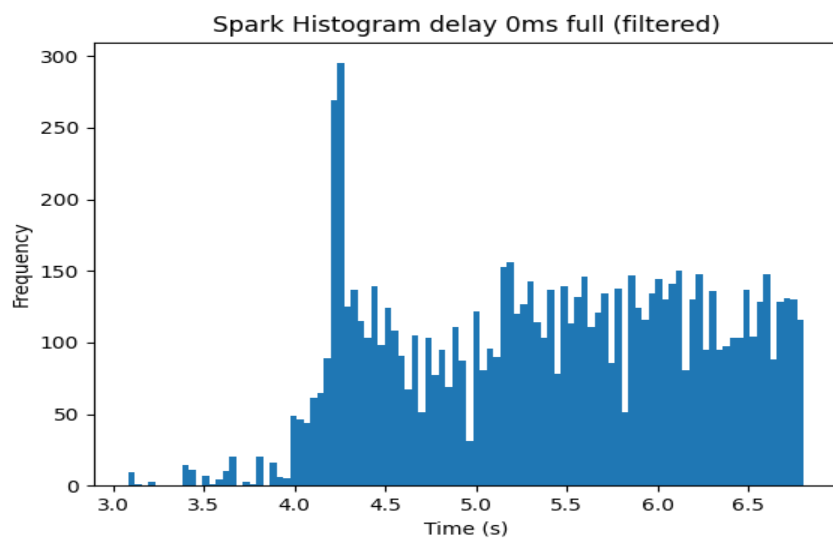
## **Spark interquartile range**

End Subtract Start: 1.4599000000000002

## **Spark mean**

End Subtract Start: 5.410552831050229





## **Spark test setup (sparkDelay0Half)**

Technology: Spark Structured Streaming  
Producer Delay (Send next message): 0ms  
Full data set (qty): 4380  
Number of tests performed: 10  
Start: Timestamp from Producer  
End: Timestamp from Consumer  
Unit: The results are given in seconds

## **Spark median values**

End Subtract Start: 4.51445

## **Spark standard deviation**

End Subtract Start: 0.45924119528811547  
Lower Bound: 3.1773814369667037  
Upper Bound: 5.932828608695397  
Number of data in the std range: 4379  
Number of data outside the std range: 1

## **Spark interquartile range**

End Subtract Start: 0.8185250000000002

## **Spark mean**

End Subtract Start: 4.55510502283105



