

## **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: 0.0878

## **Kafka standard deviation**

End Subtract Start: 0.29746752852963587

Lower Bound: -0.7343188641277204

UpperBound: 1.050486307050095

Number of data in the std range: 8436

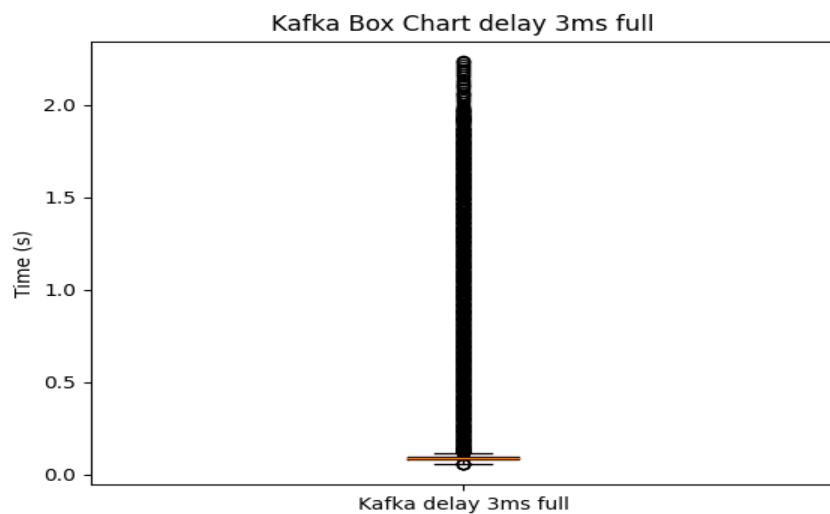
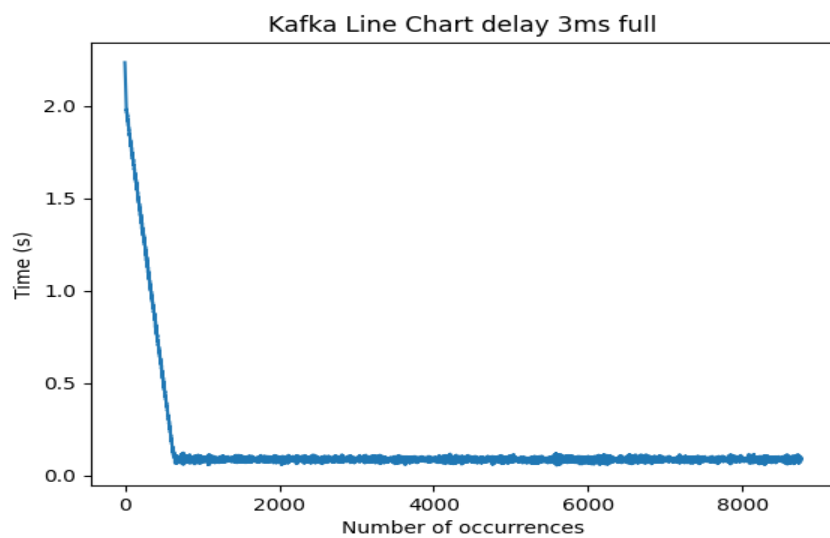
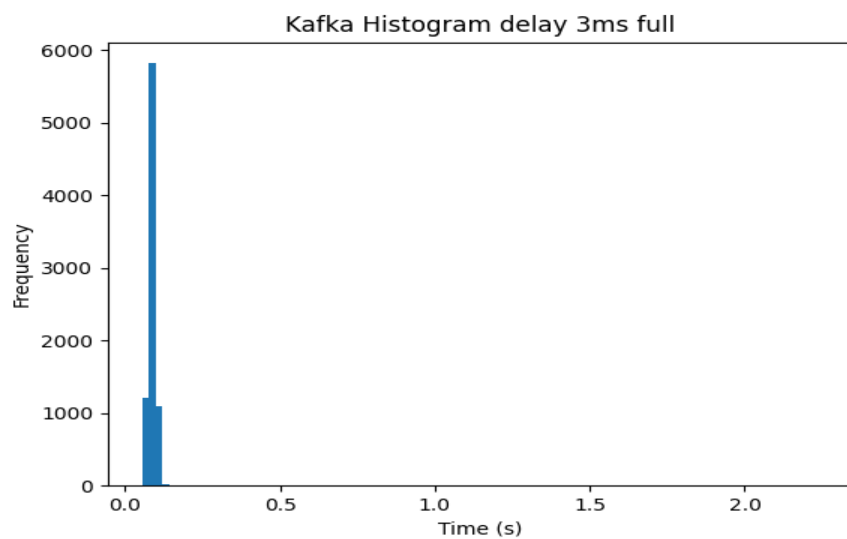
Number of data outside the std range: 324

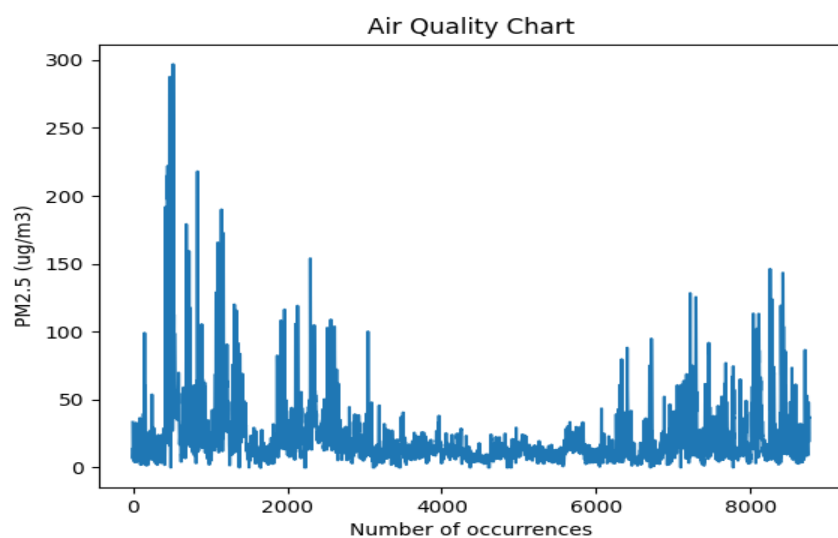
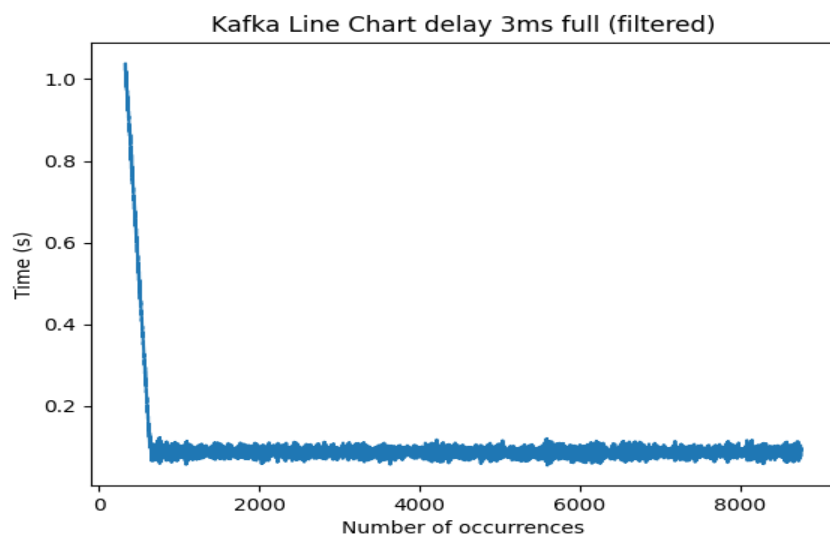
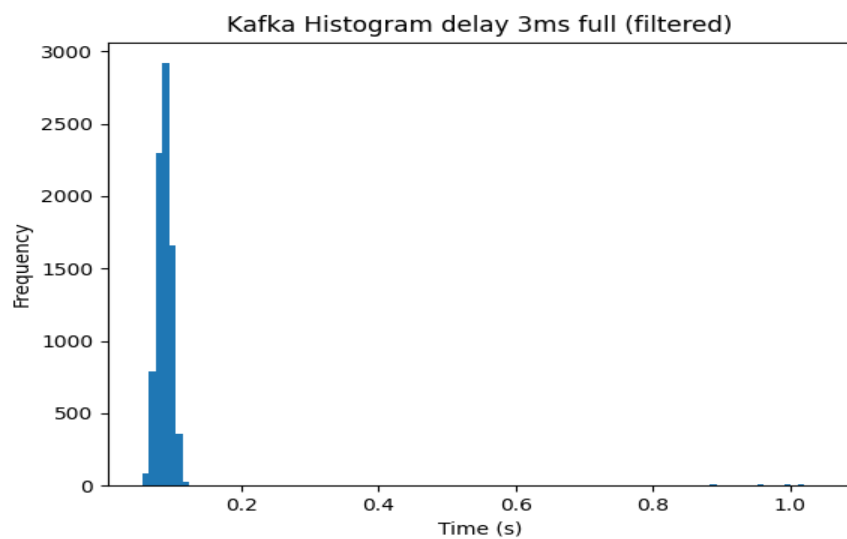
## **Kafka interquartile range**

End Subtract Start: 0.015299999999999998

## **Kafka mean**

End Subtract Start: 0.1580837214611872





## **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: 4.084300000000001

## **Kafka standard deviation**

End Subtract Start: 0.7532552960723539

Lower Bound: 1.8101147168057699

Upper Bound: 6.329646493239893

Number of data in the std range: 8760

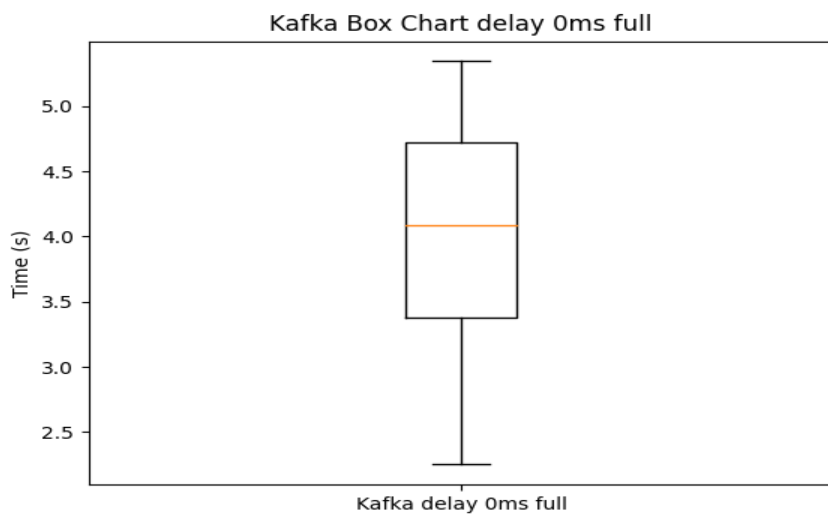
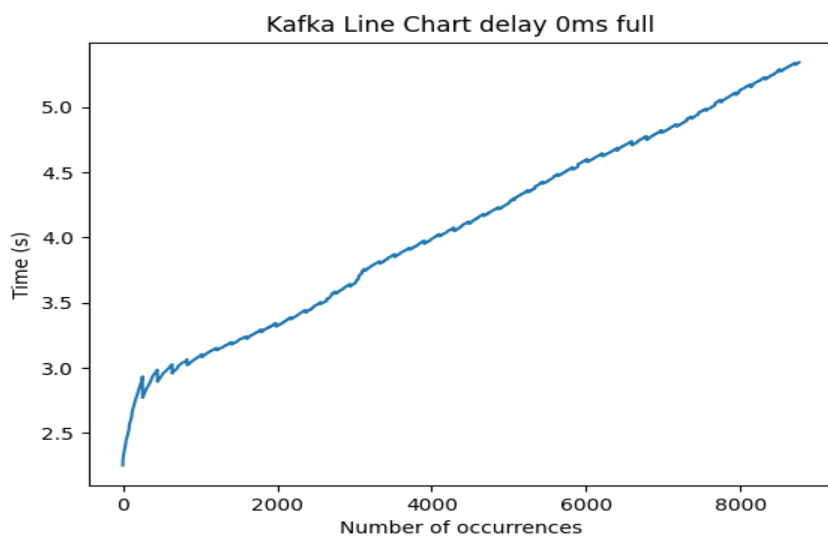
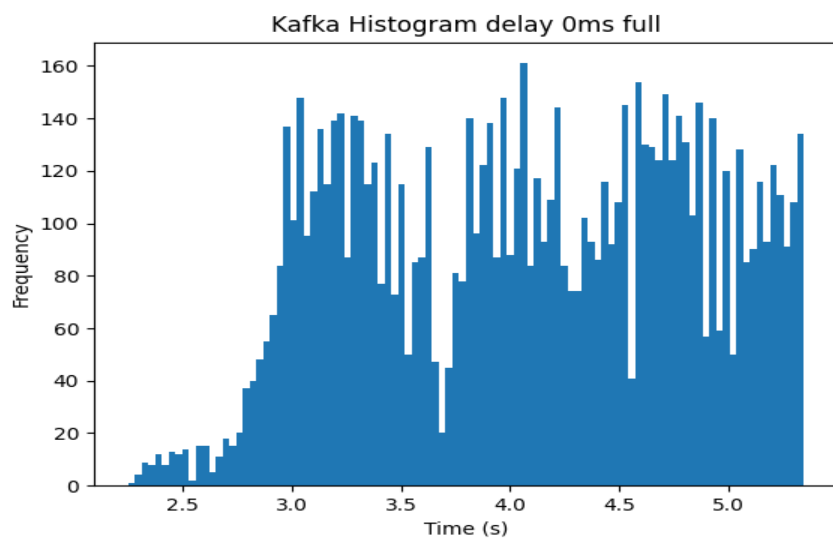
Number of data outside the std range: 0

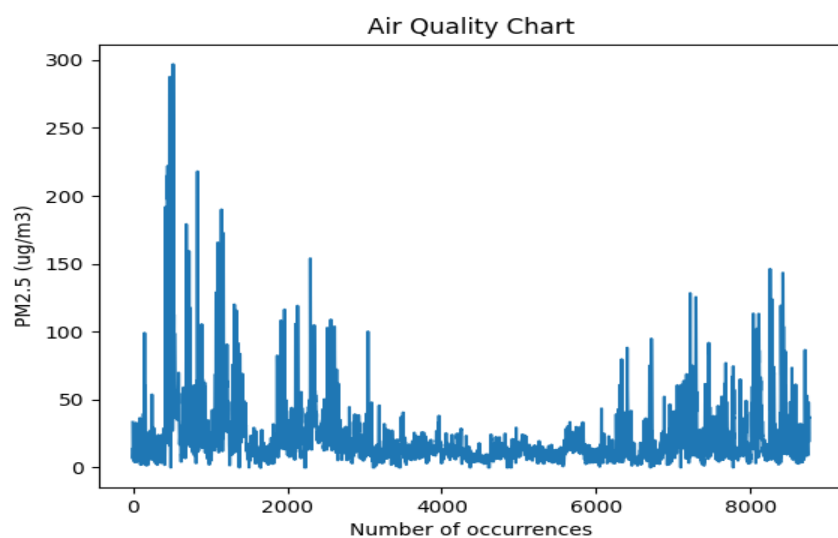
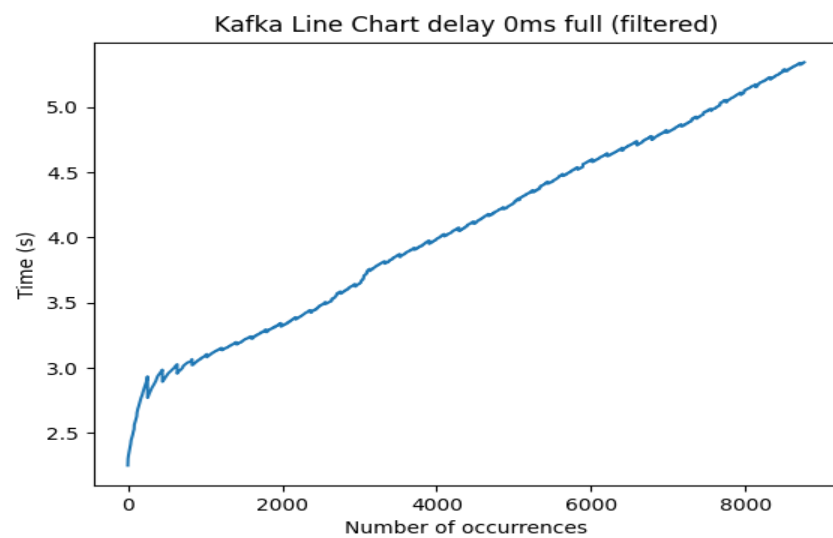
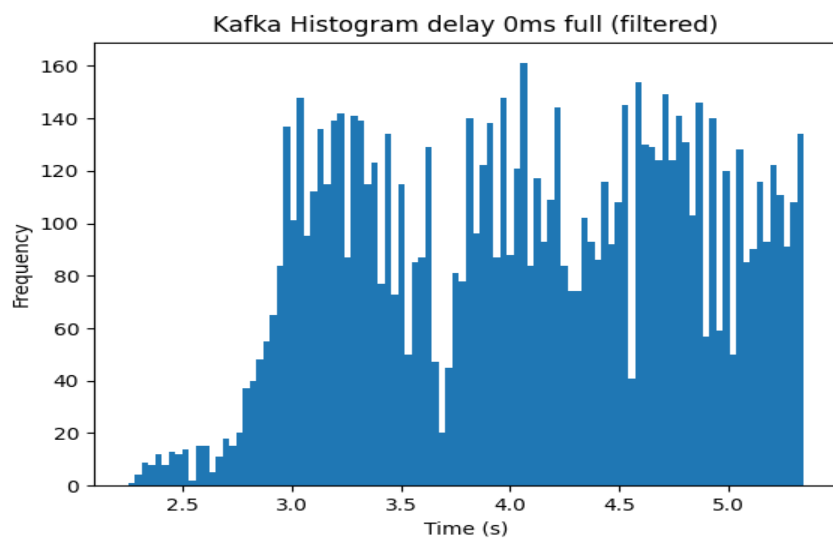
## **Kafka interquartile range**

End Subtract Start: 1.3372999999999995

## **Kafka mean**

End Subtract Start: 4.069880605022831





## **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: 4.57375

## **Kafka standard deviation**

End Subtract Start: 0.41569180852261495

Lower Bound: 3.4225120858476803

Upper Bound: 5.91666293698337

Number of data in the std range: 4380

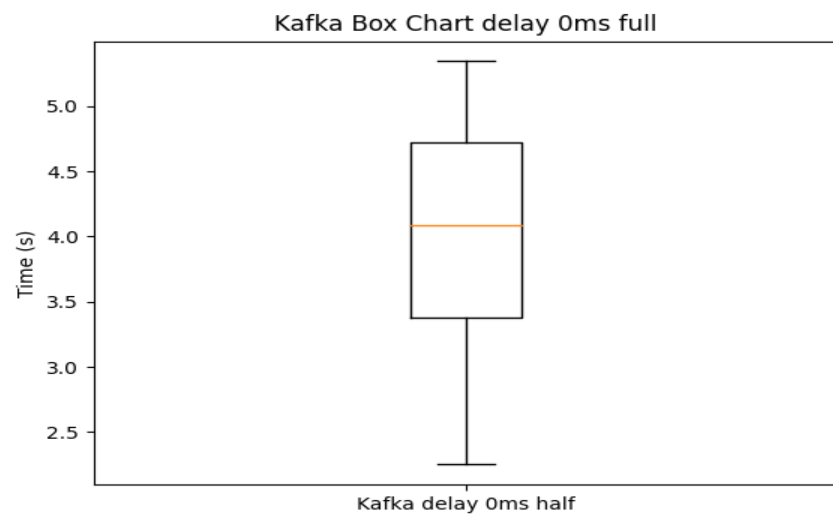
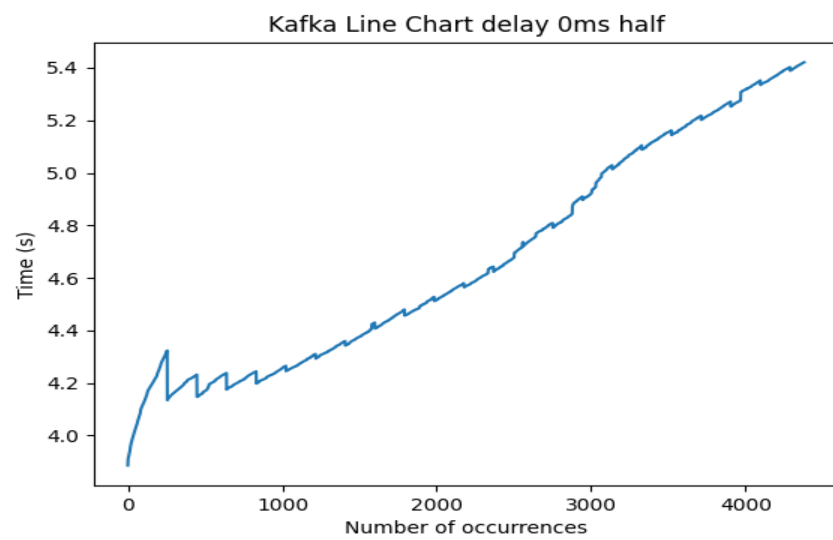
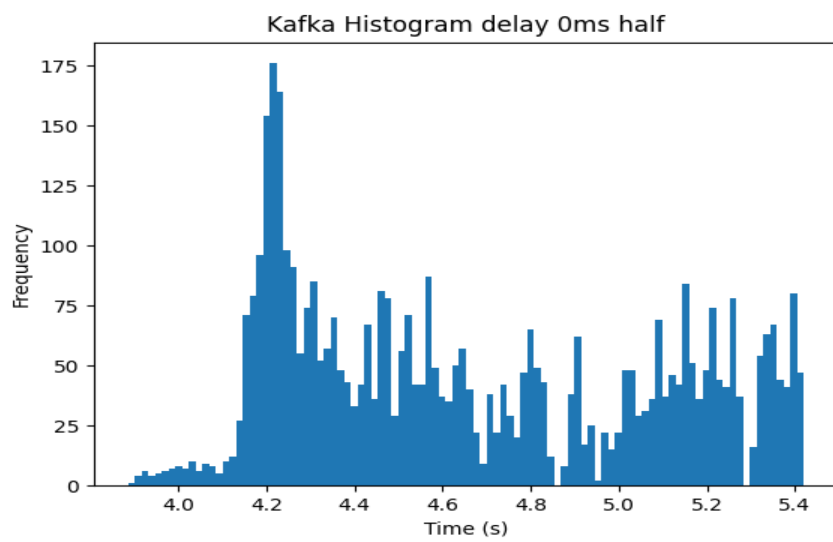
Number of data outside the std range: 0

## **Kafka interquartile range**

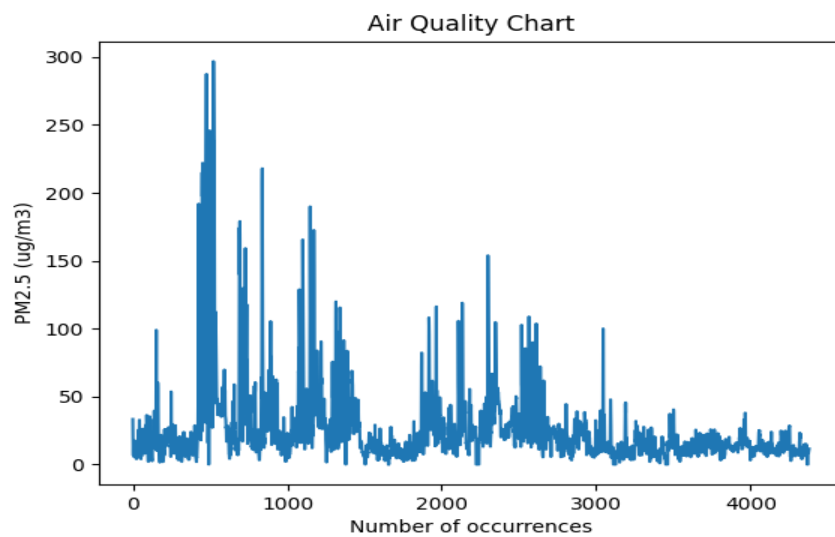
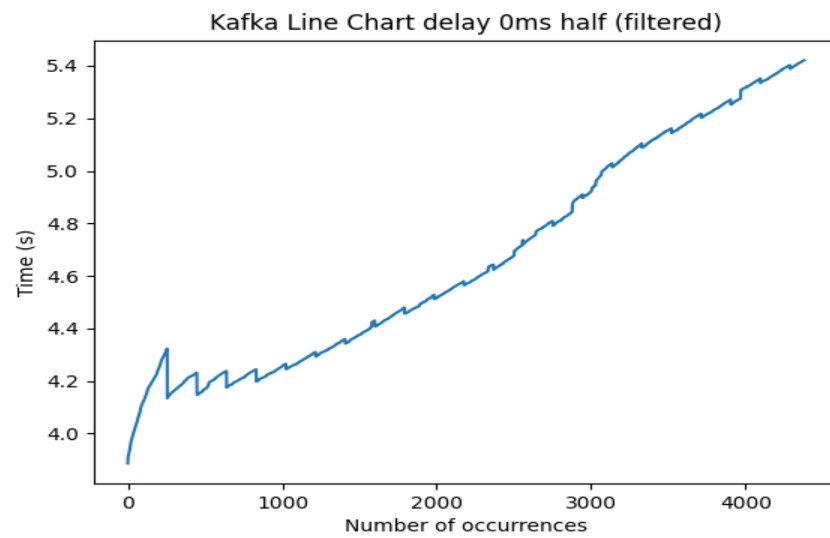
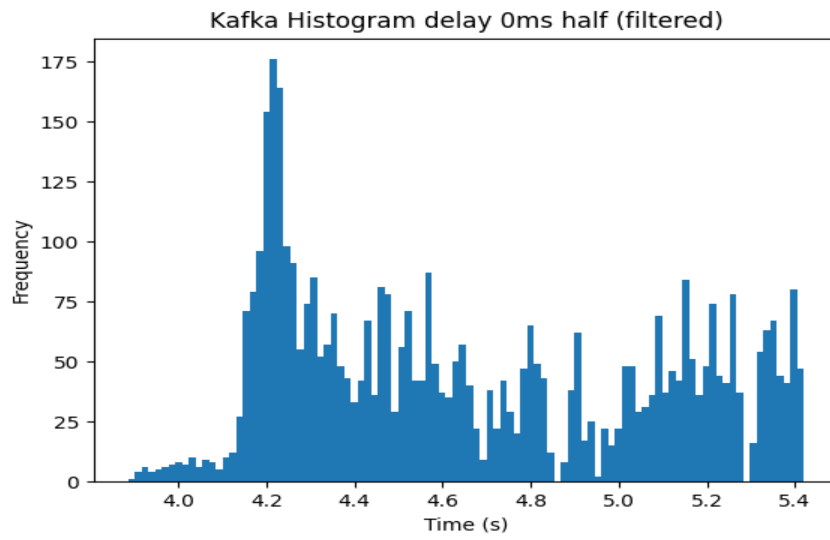
End Subtract Start: 0.8049

## **Kafka mean**

End Subtract Start: 4.669587511415525







## **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: 0.7031499999999999

## **Spark standard deviation**

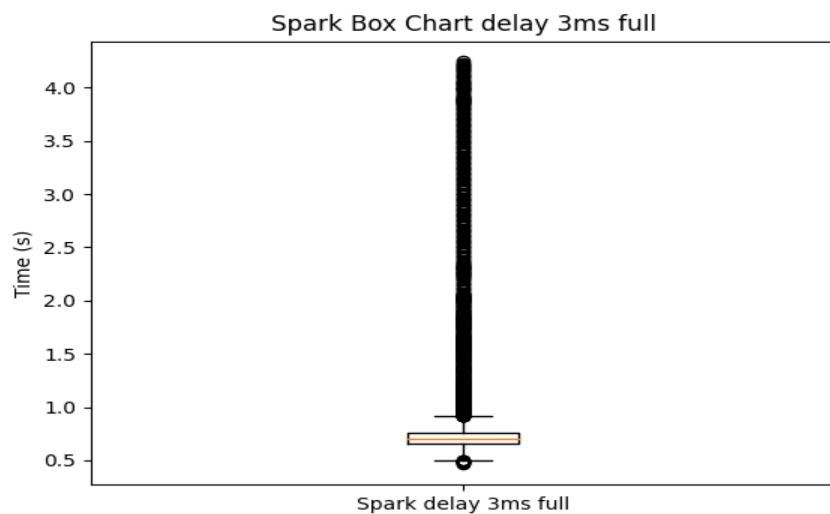
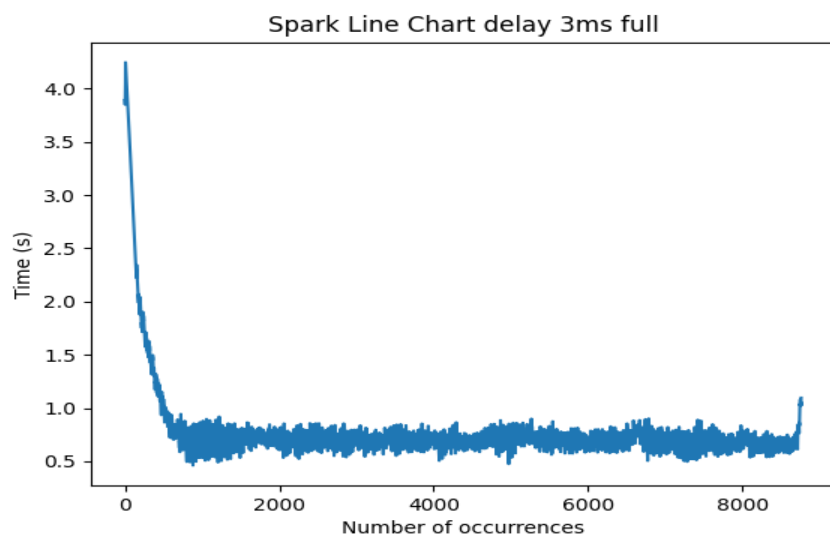
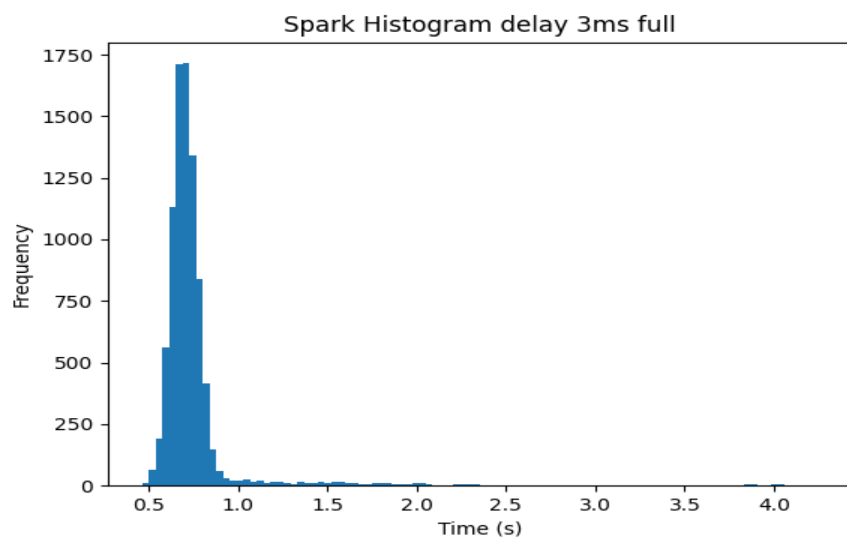
End Subtract Start: 0.3902536765655829  
Lower Bound: -0.39178685161455706  
Upper Bound: 1.9497352077789405  
Number of data in the std range: 8560  
Number of data outside the std range: 200

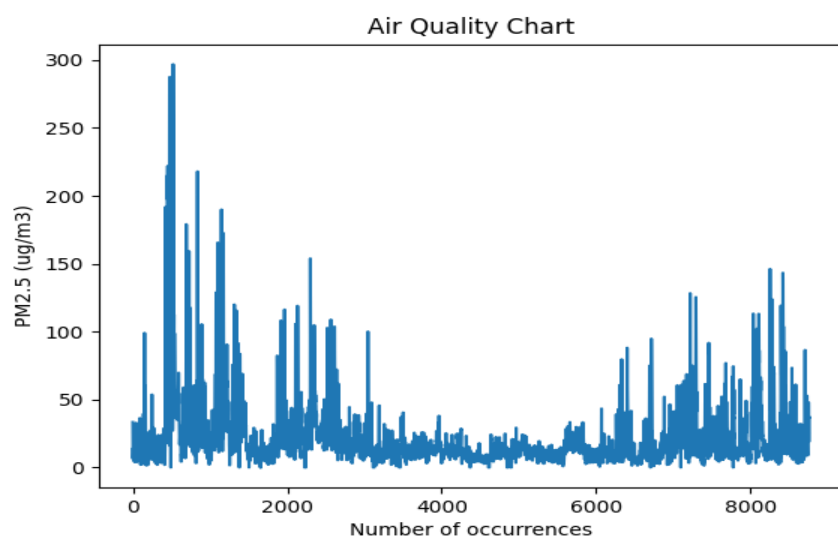
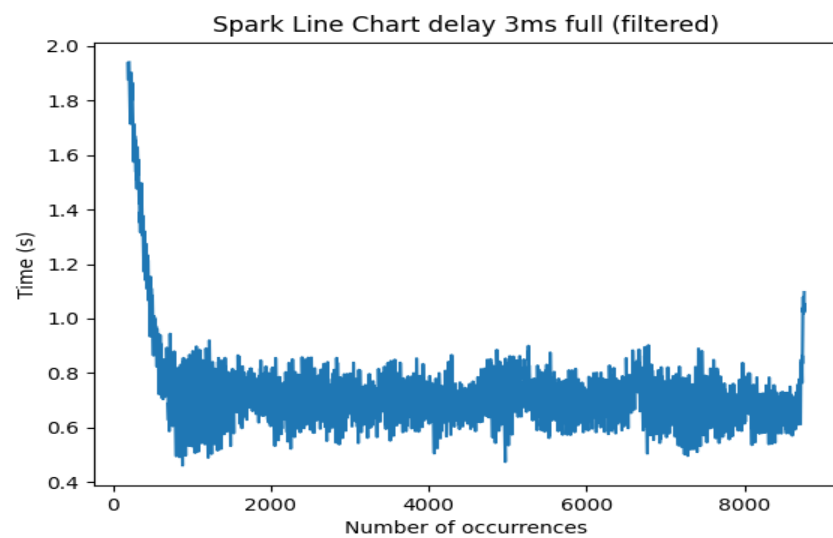
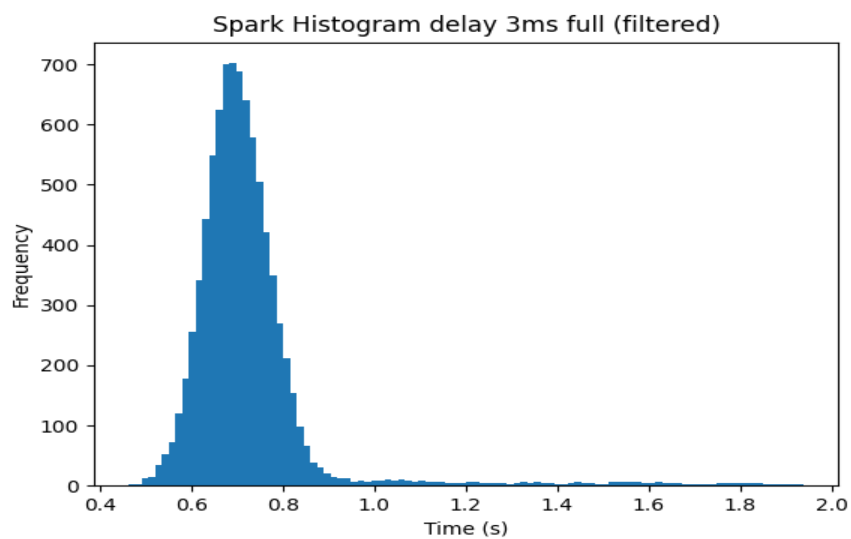
## **Spark interquartile range**

End Subtract Start: 0.10270000000000001

## **Spark mean**

End Subtract Start: 0.7789741780821917





## **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: 5.99275

## **Spark standard deviation**

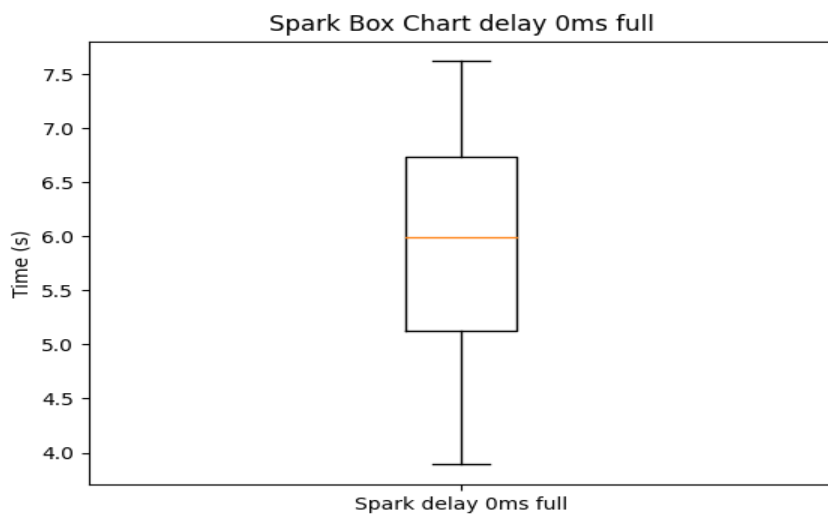
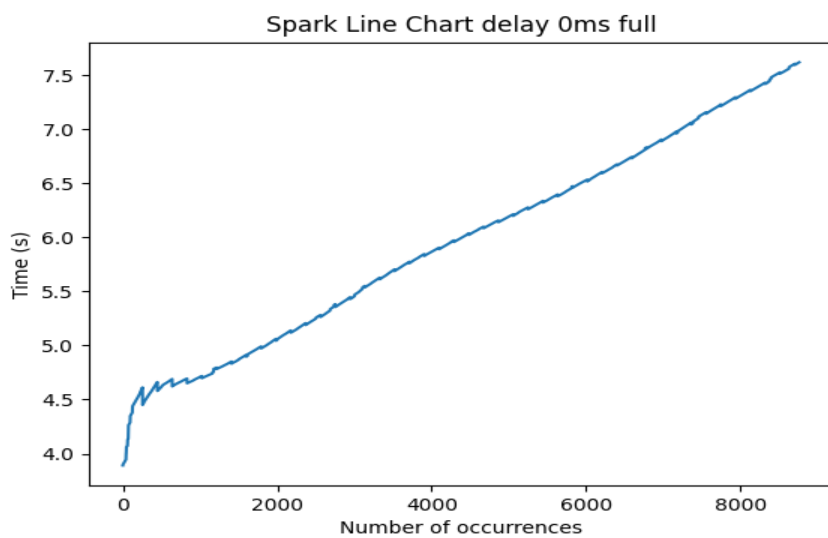
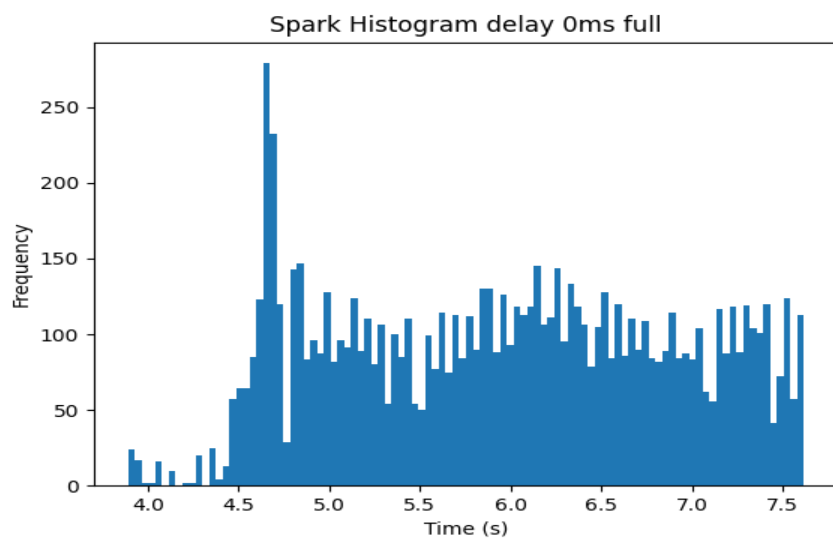
End Subtract Start: 0.9320117542328076  
Lower Bound: 3.16836538798651  
Upper Bound: 8.760435913383356  
Number of data in the std range: 8760  
Number of data outside the std range: 0

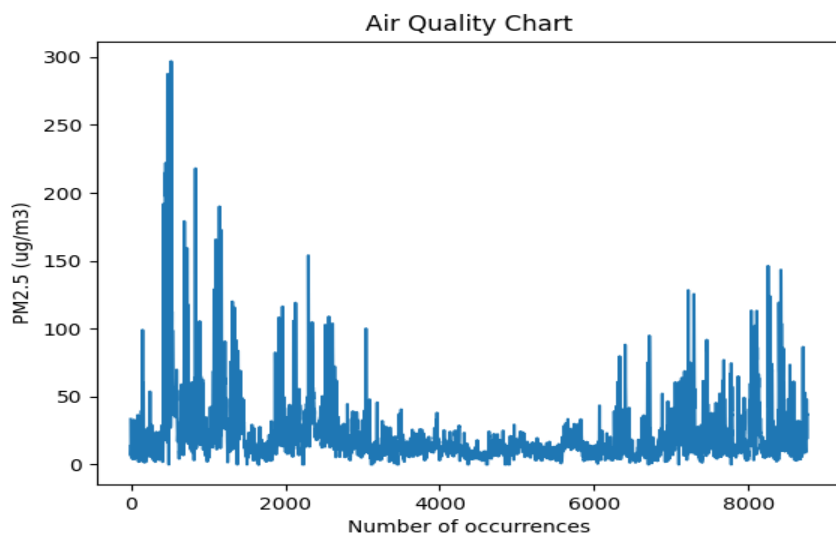
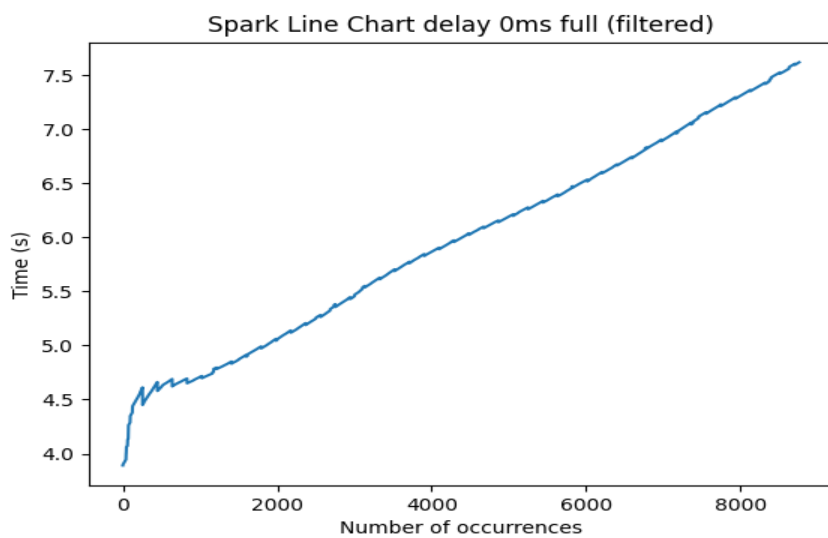
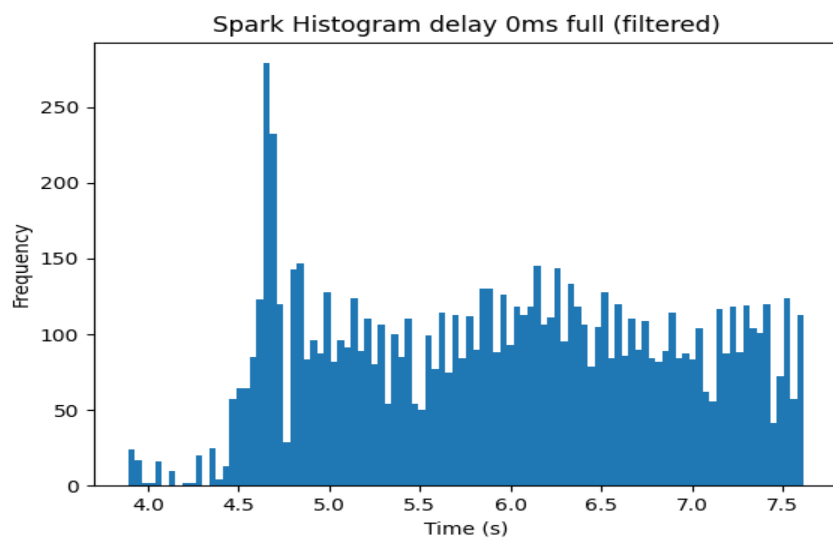
## **Spark interquartile range**

End Subtract Start: 1.6011000000000006

## **Spark mean**

End Subtract Start: 5.964400650684933





## **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: 4.84605

## **Spark standard deviation**

End Subtract Start: 0.44582104645675213  
Lower Bound: 3.57395649533294  
Upper Bound: 6.2488827740734525  
Number of data in the std range: 4380  
Number of data outside the std range: 0

## **Spark interquartile range**

End Subtract Start: 0.8414999999999999

## **Spark mean**

End Subtract Start: 4.911419634703196



