

## **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

Unit: The results are given in seconds

## **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

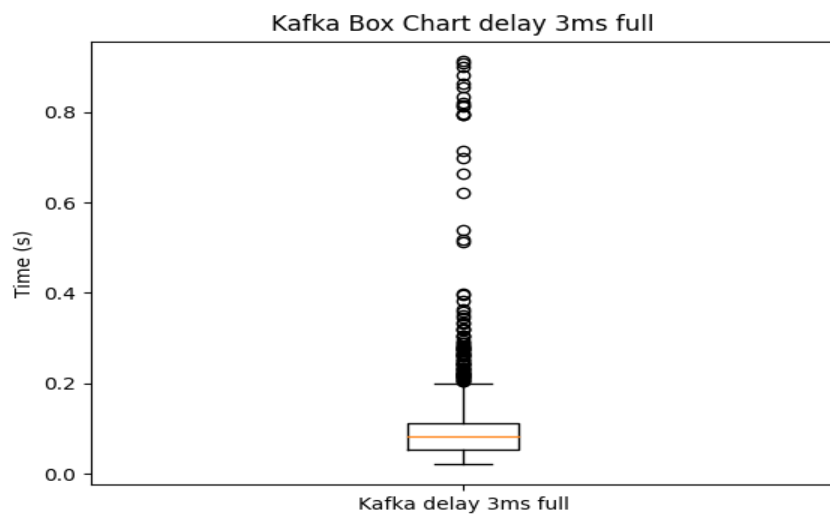
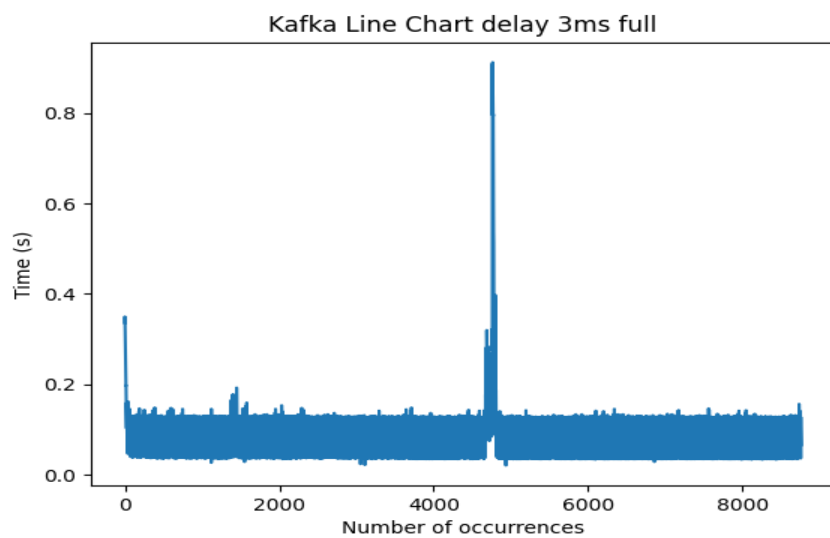
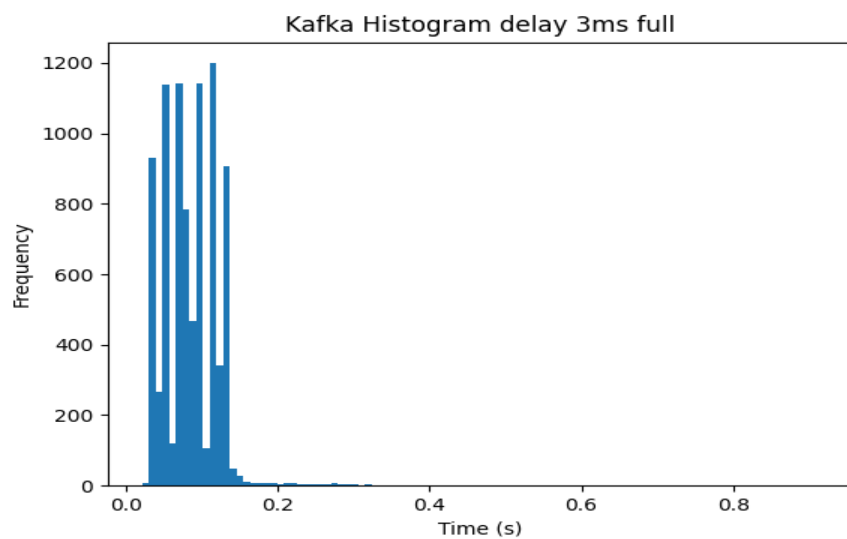
Number of data outside the std range: 65

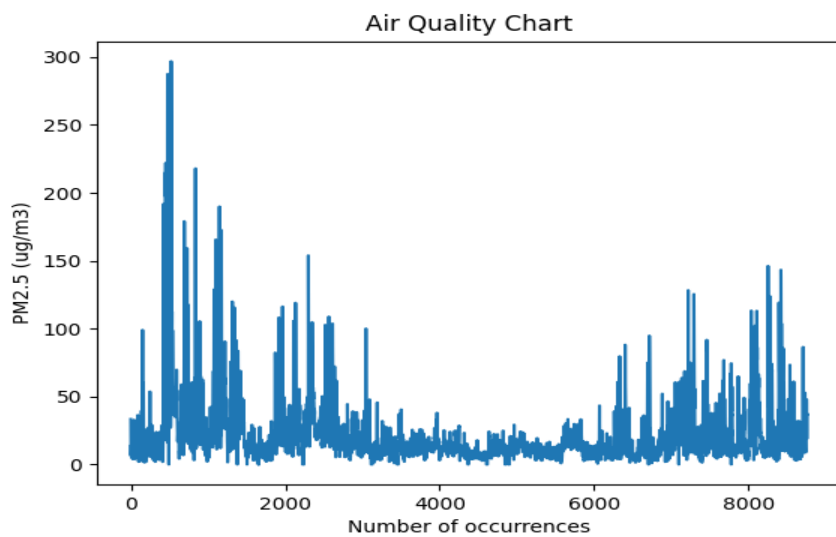
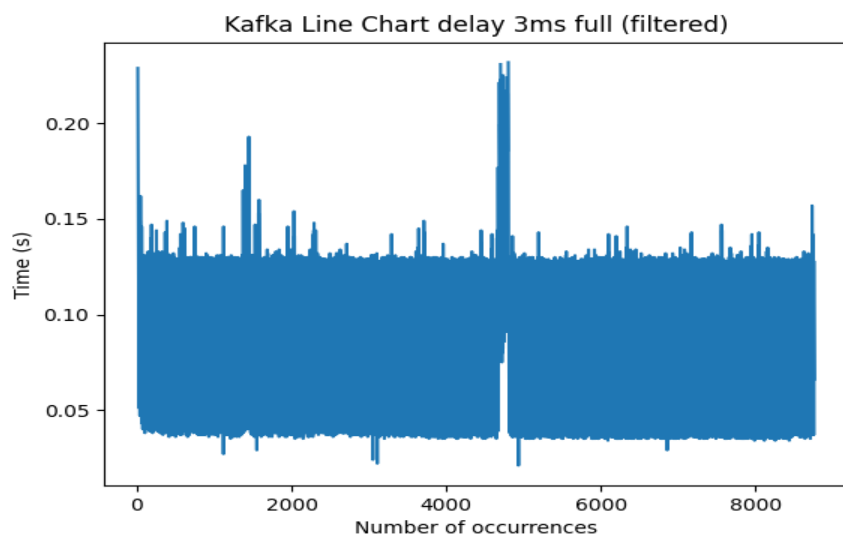
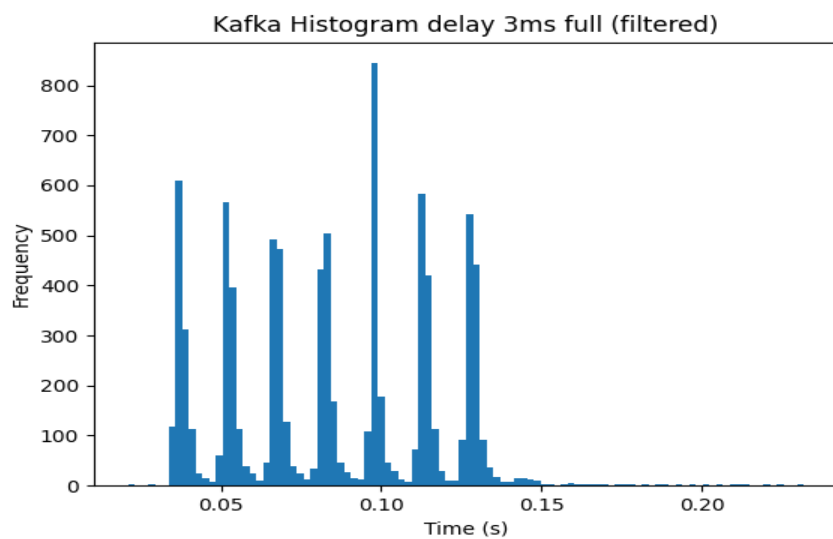
## **Kafka interquartile range**

End Subtract Start: 0.059000000000000004

## **Kafka mean**

End Subtract Start: 0.0874150684931507





## **Kafka 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

Unit: The results are given in seconds

## **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

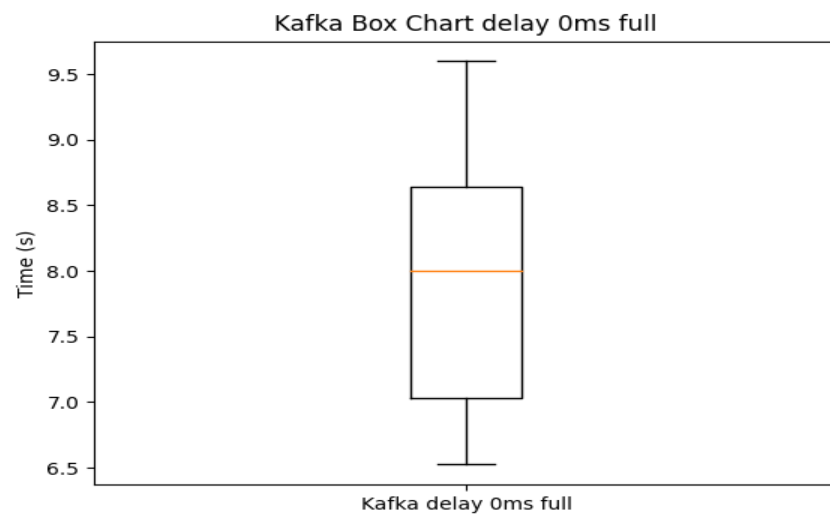
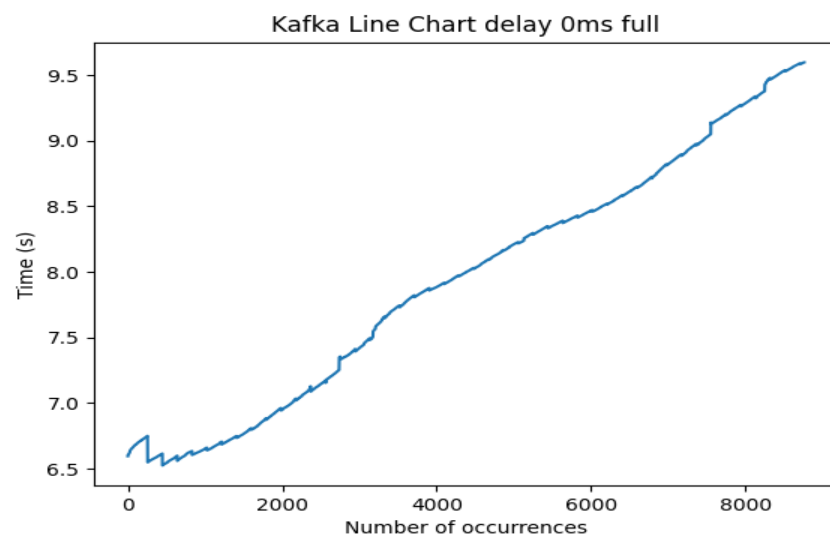
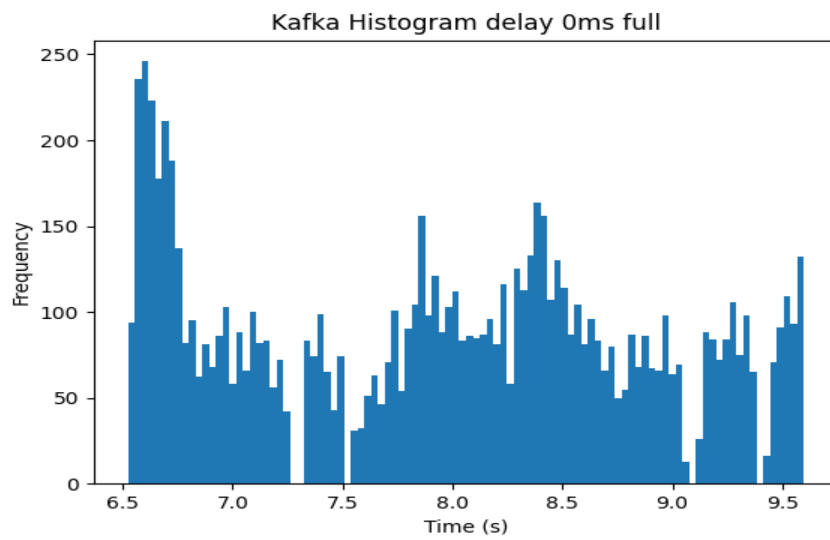
Number of data outside the std range: 0

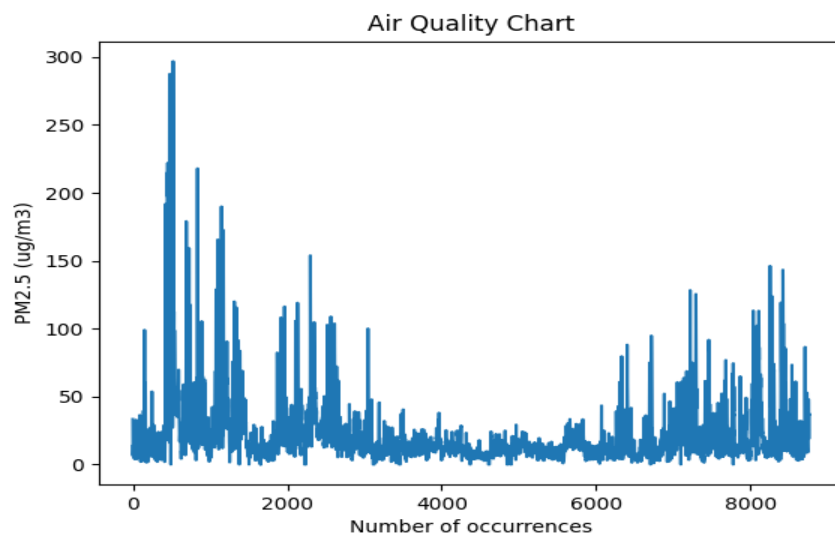
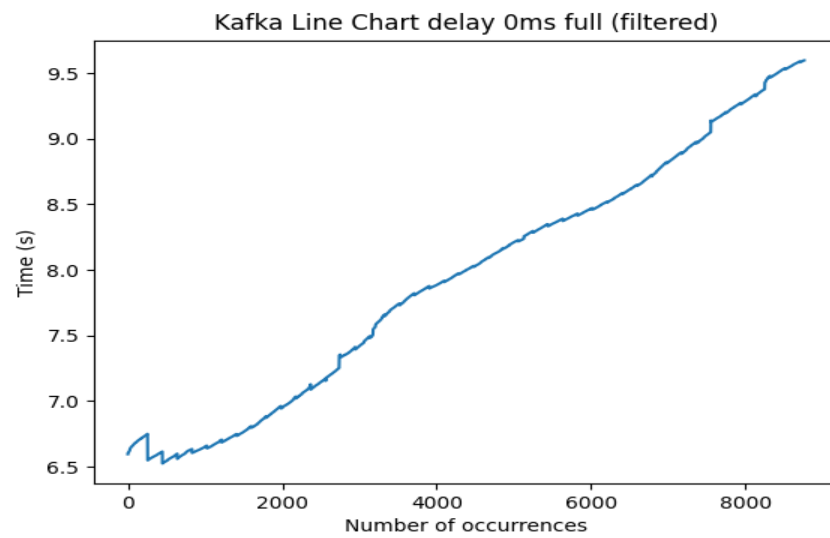
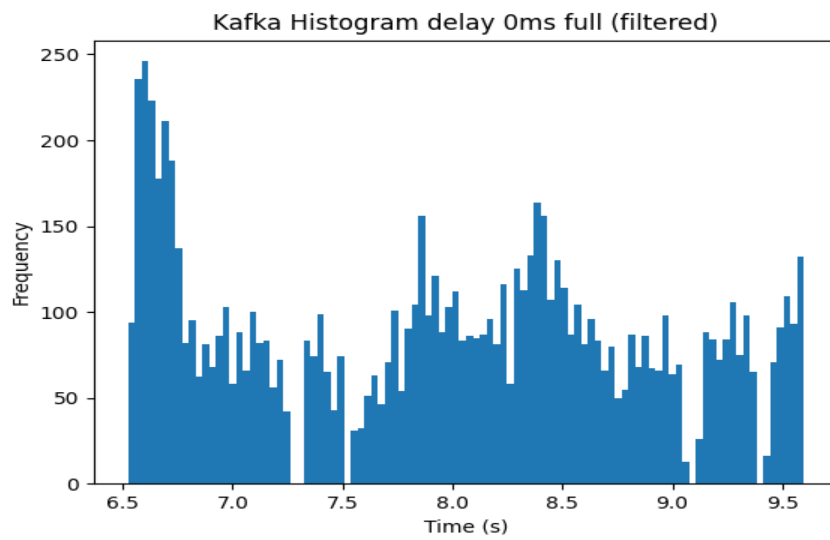
## **Kafka interquartile range**

End Subtract Start: 1.6109999999999998

## **Kafka mean**

End Subtract Start: 7.937630136986301





## **Kafka 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

Unit: The results are given in seconds

## **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

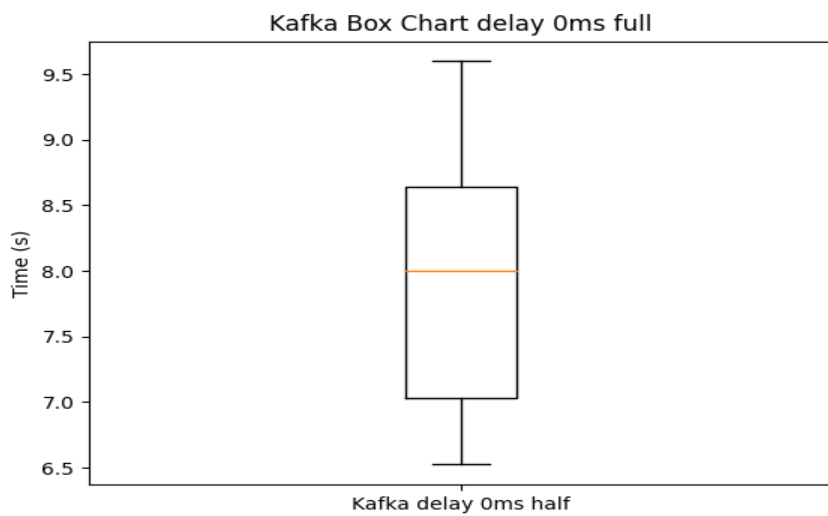
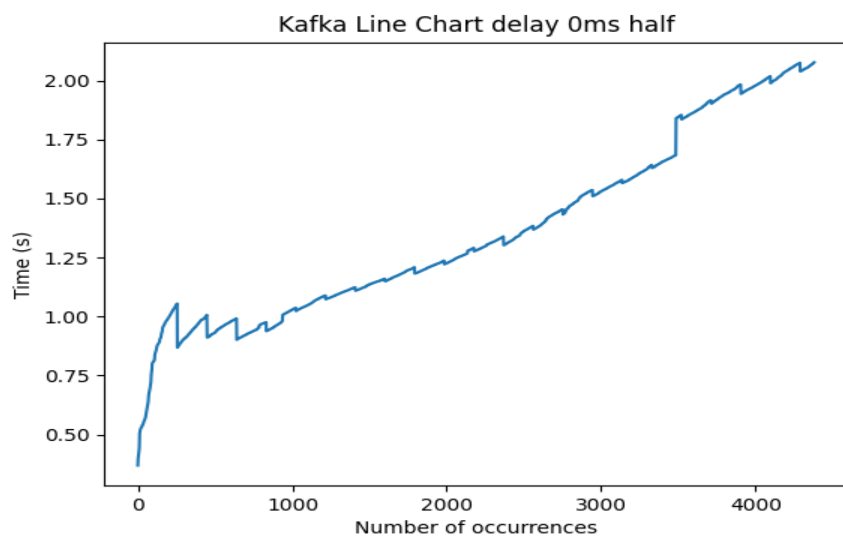
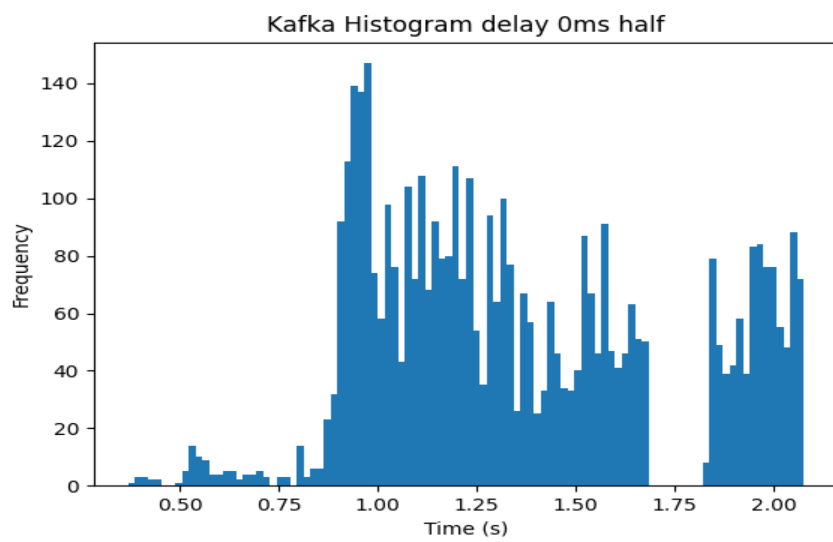
Number of data outside the std range: 0

## **Kafka interquartile range**

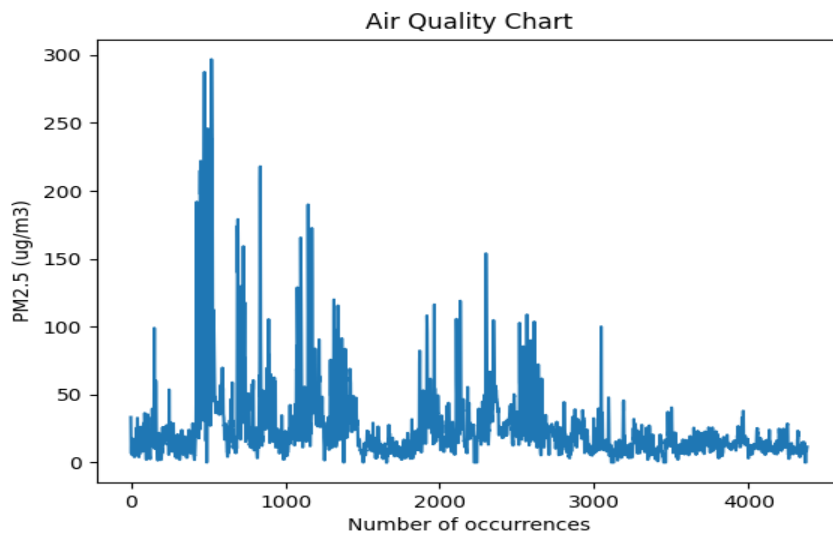
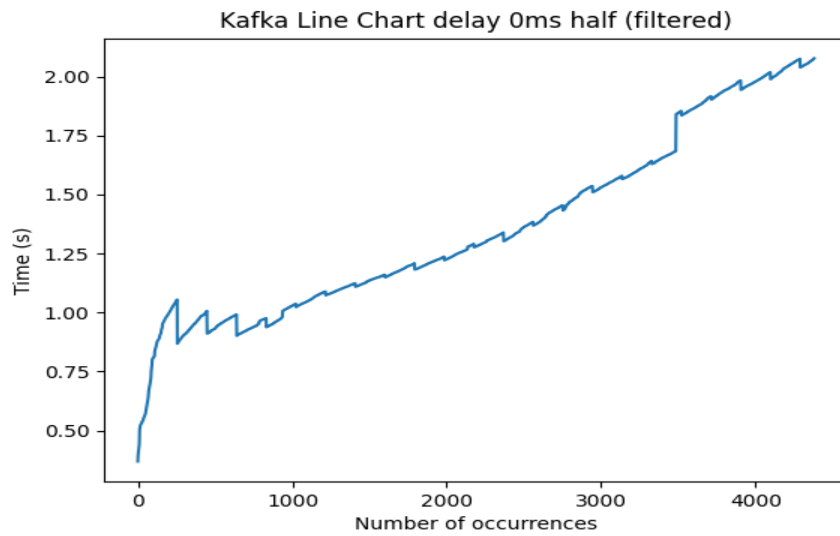
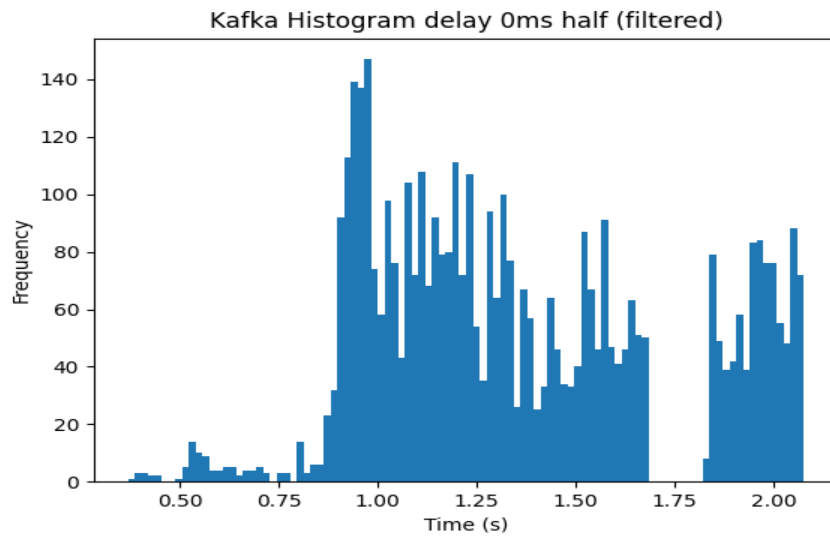
End Subtract Start: 0.5714999999999999

## **Kafka mean**

End Subtract Start: 1.3607625570776254







## **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

Unit: The results are given in seconds

## **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

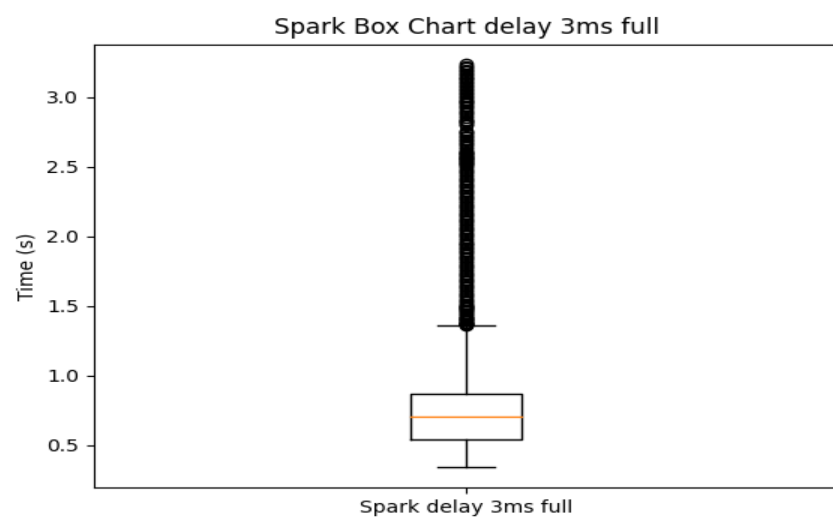
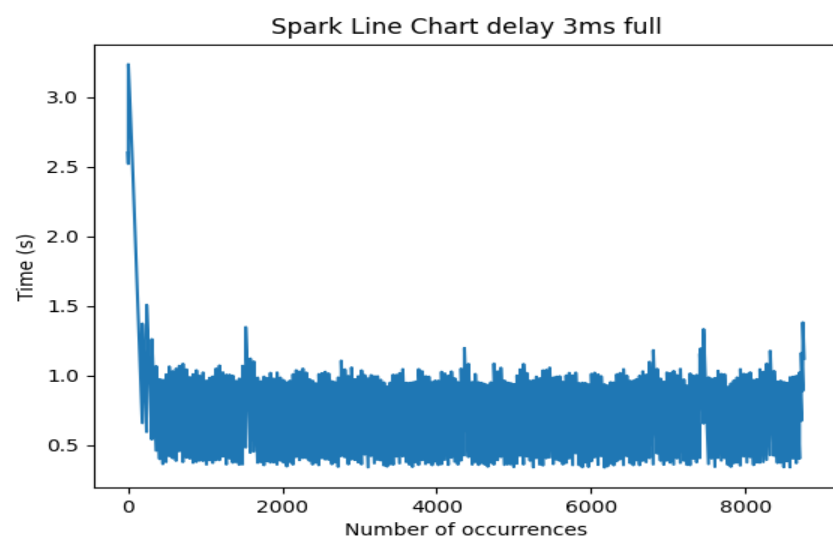
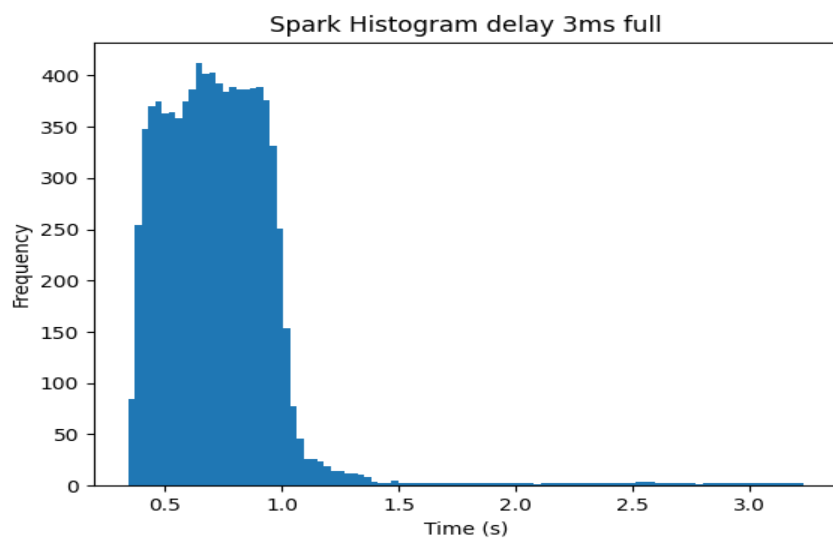
Number of data outside the std range: 124

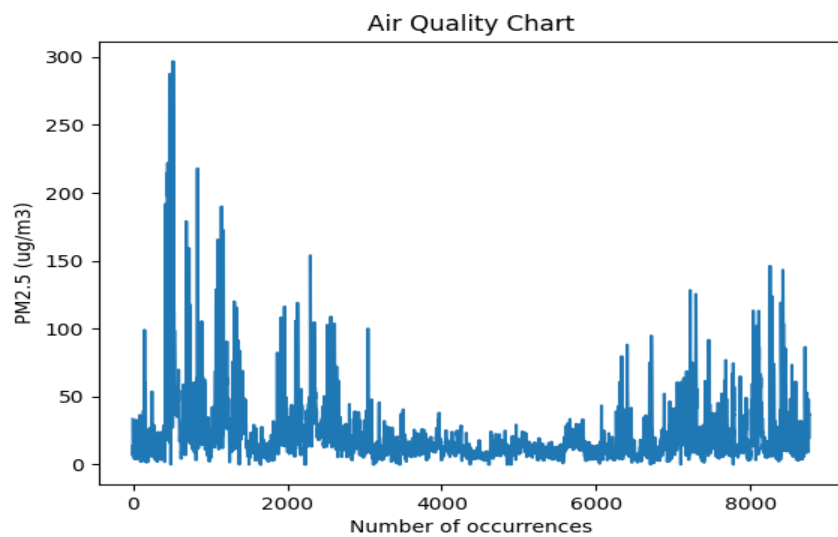
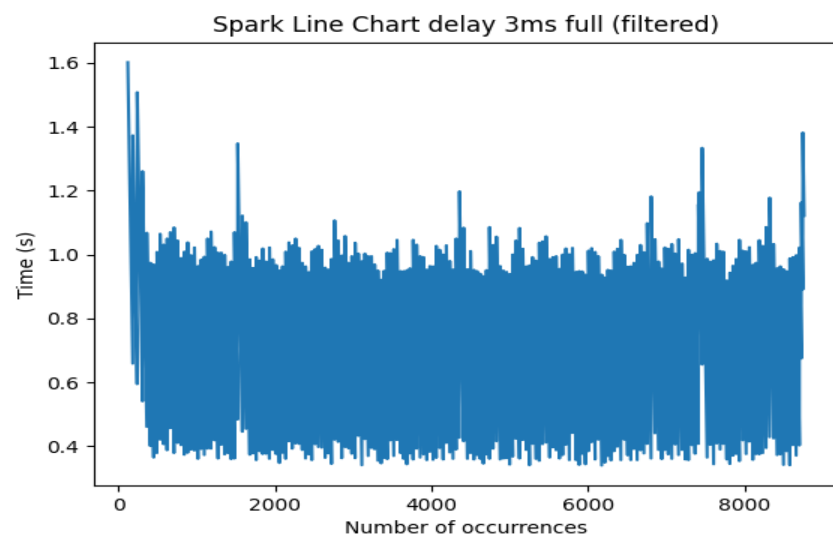
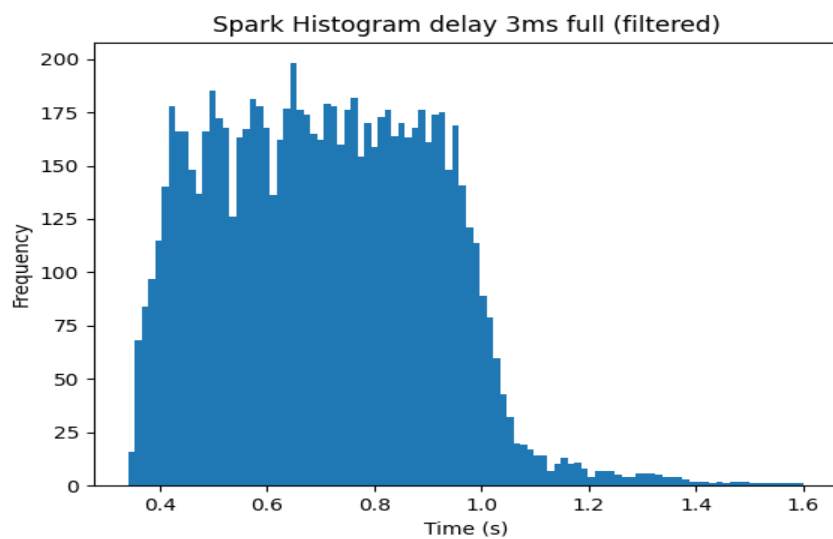
## **Spark interquartile range**

End Subtract Start: 0.32799999999999996

## **Spark mean**

End Subtract Start: 0.7338366438356164





## **Spark 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  
Unit: The results are given in seconds

## **Spark median values**

End Subtract Start: 6.537

## **Spark standard deviation**

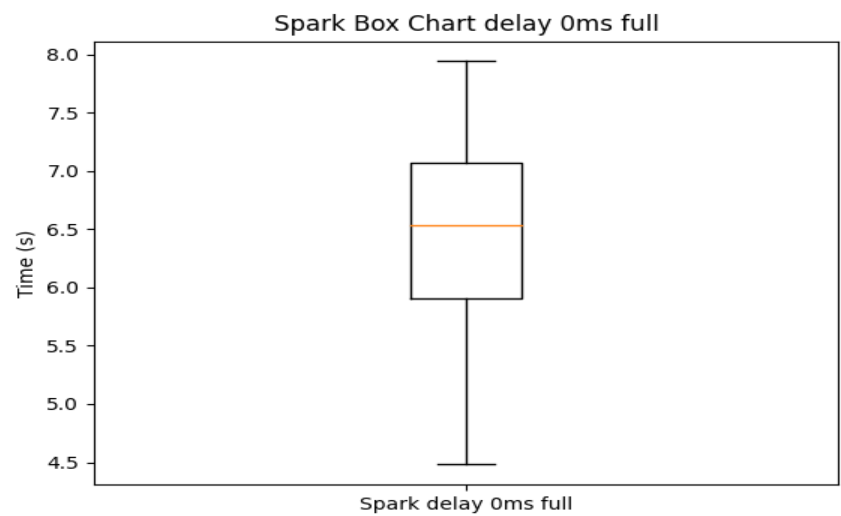
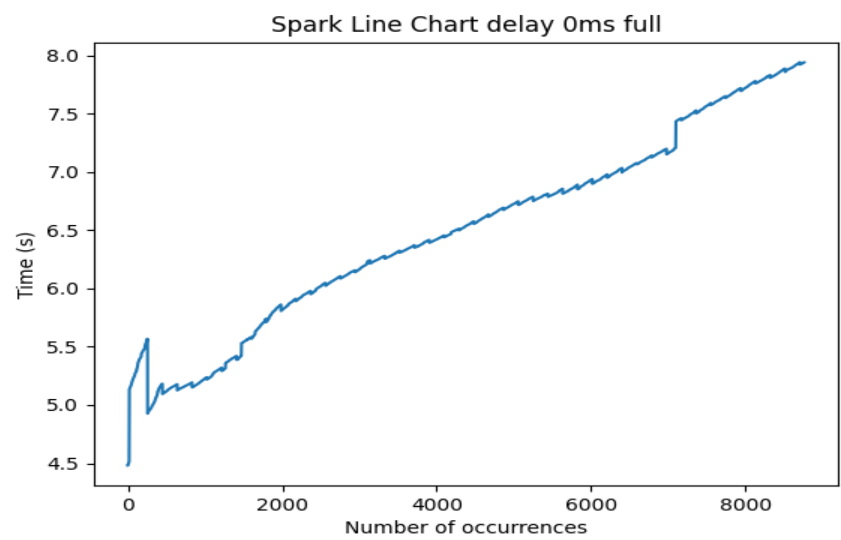
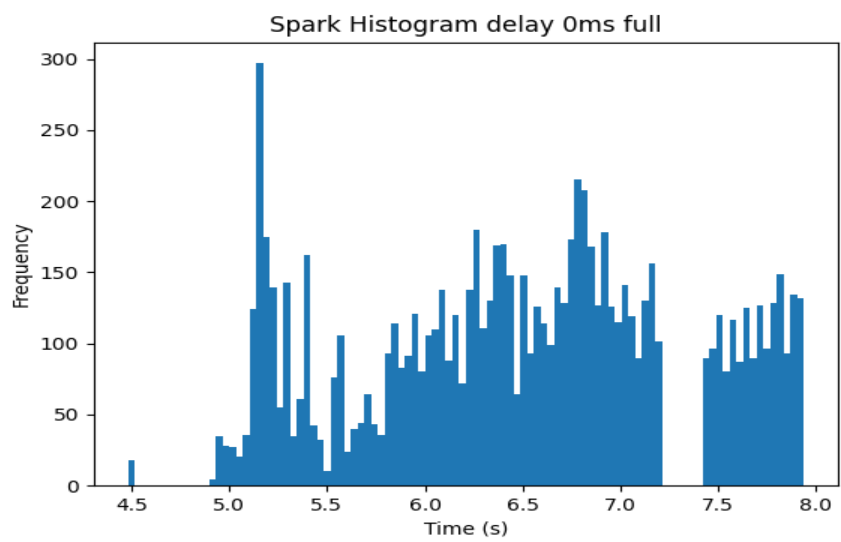
End Subtract Start: 0.8253937742250684  
Lower Bound: 4.0233572617996805  
Upper Bound: 8.97571990715009  
Number of data in the std range: 8760  
Number of data outside the std range: 0

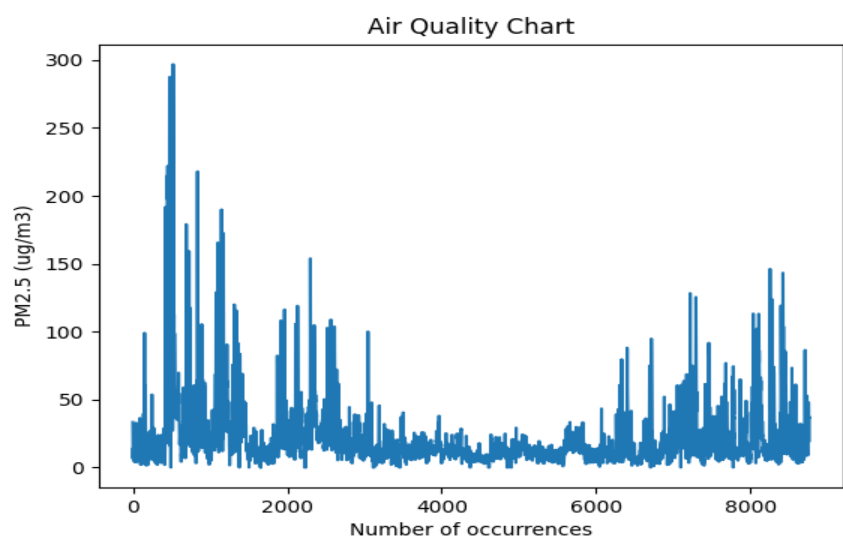
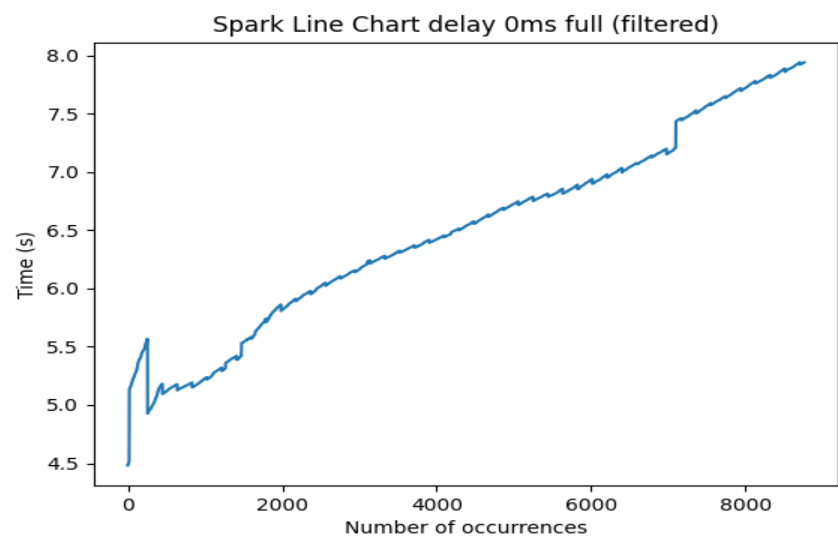
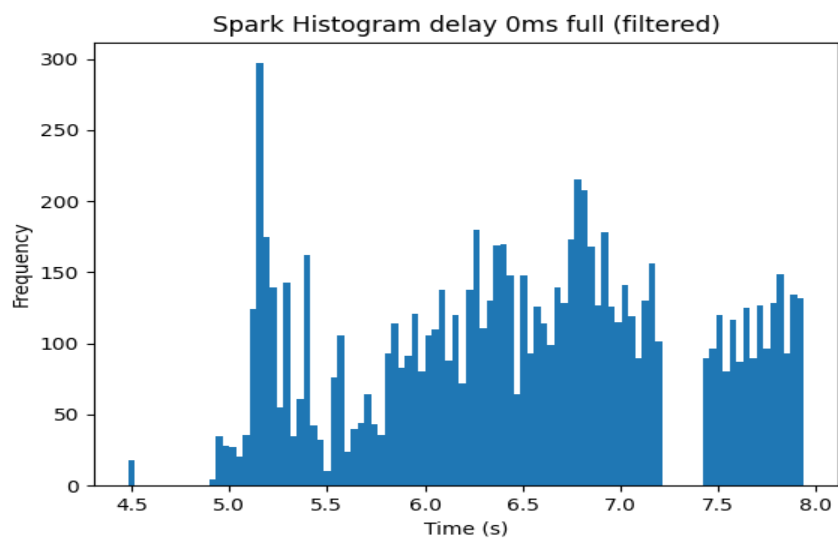
## **Spark interquartile range**

End Subtract Start: 1.1592500000000001

## **Spark mean**

End Subtract Start: 6.499538584474886





## **Spark 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  
Unit: The results are given in seconds

## **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



