

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

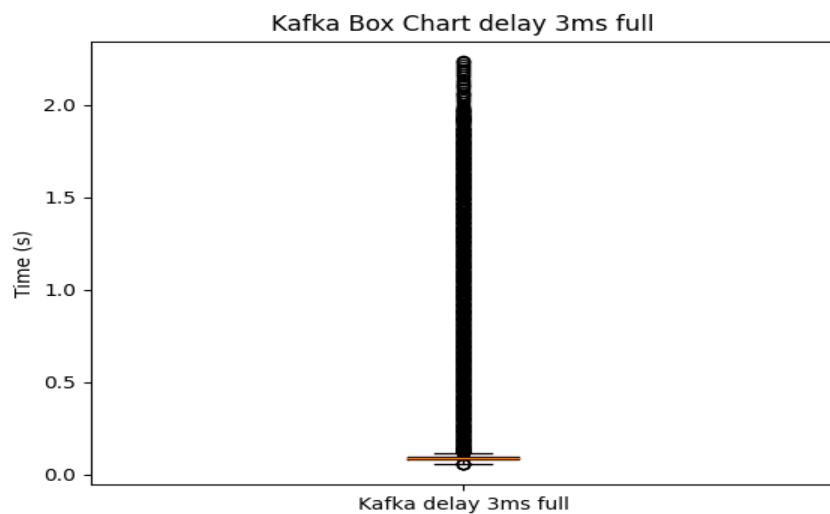
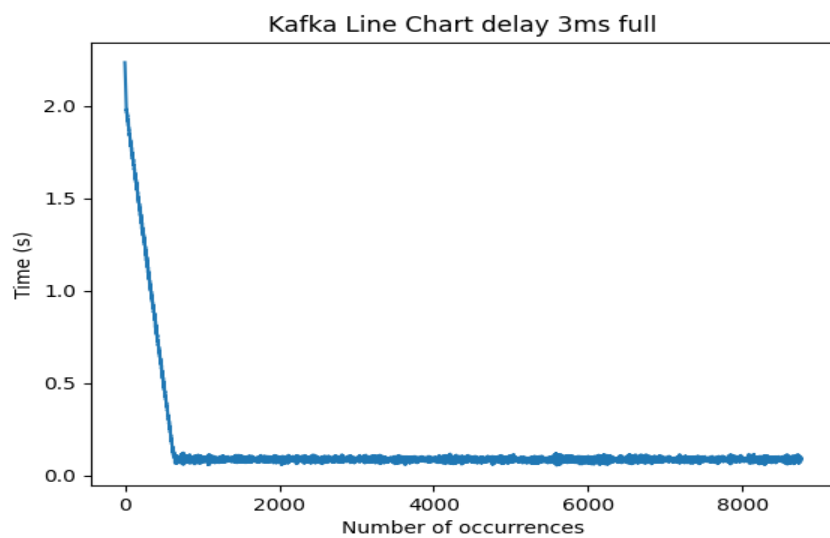
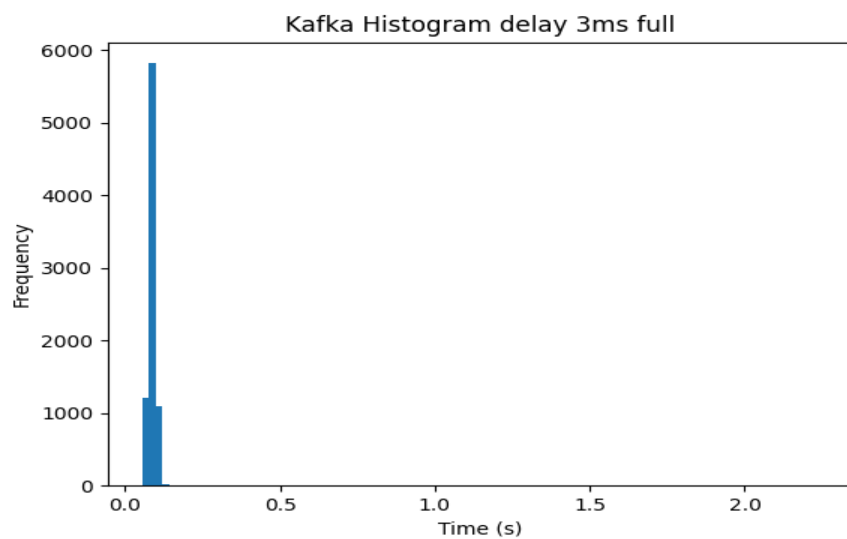
End Subtract Start: 0.015299999999999998

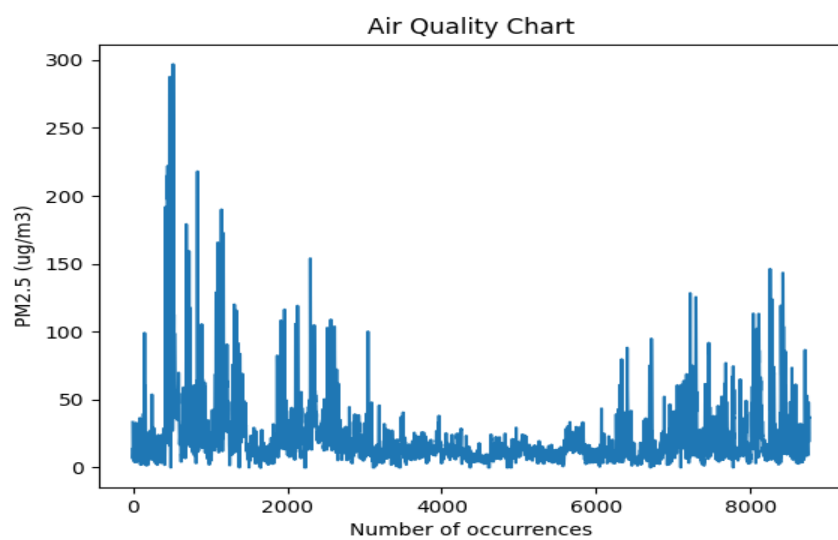
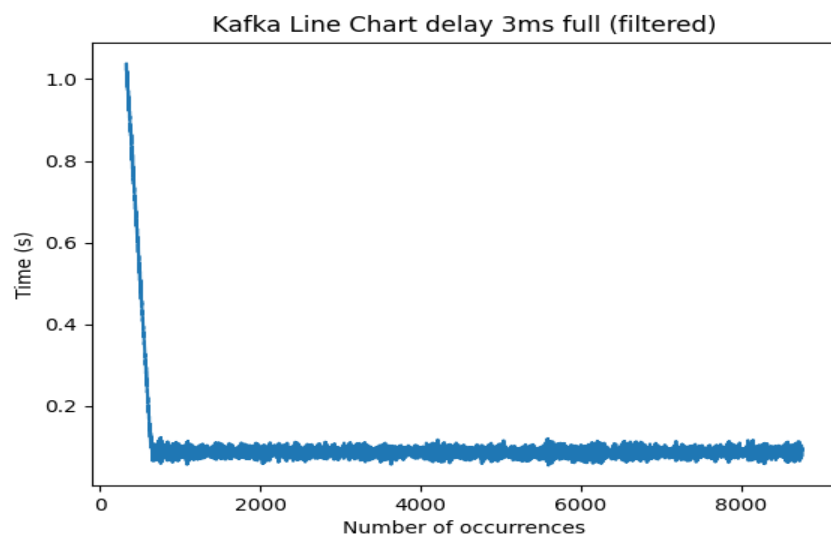
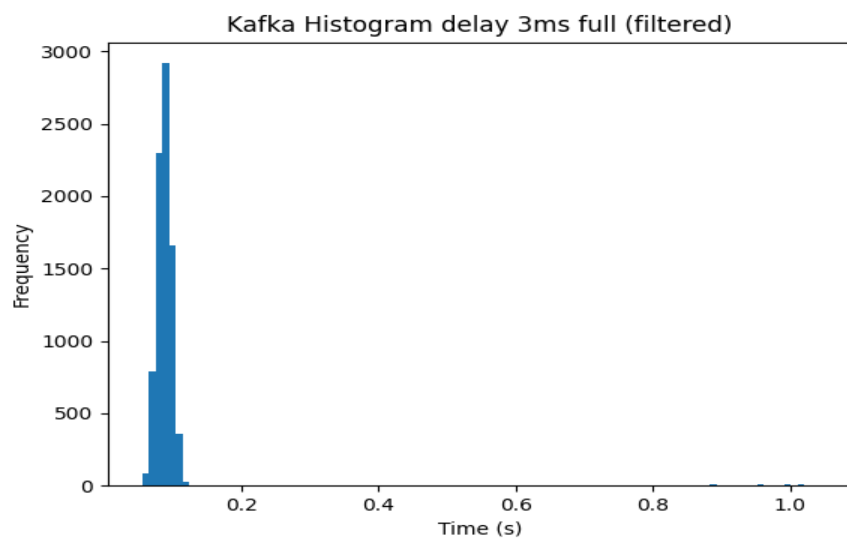
Kafka mean

End Subtract Start: 0.1580837214611872

Average time for each sample

0.08908390410958902	0.08864086757990867	0.08826084474885845
0.08864098173515982	0.08848116438356166	0.08803652968036531
0.44923744292237444	0.4312786529680365	0.08445262557077626
0.08472420091324202		





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: 2.4882

Kafka standard deviation

End Subtract Start: 0.7925569381703543

Lower Bound: 0.12372939096838875

Upper Bound: 4.879071019990516

Number of data in the std range: 8760

Number of data outside the std range: 0

Kafka interquartile range

End Subtract Start: 1.3931749999999992

Kafka mean

End Subtract Start: 2.501400205479452

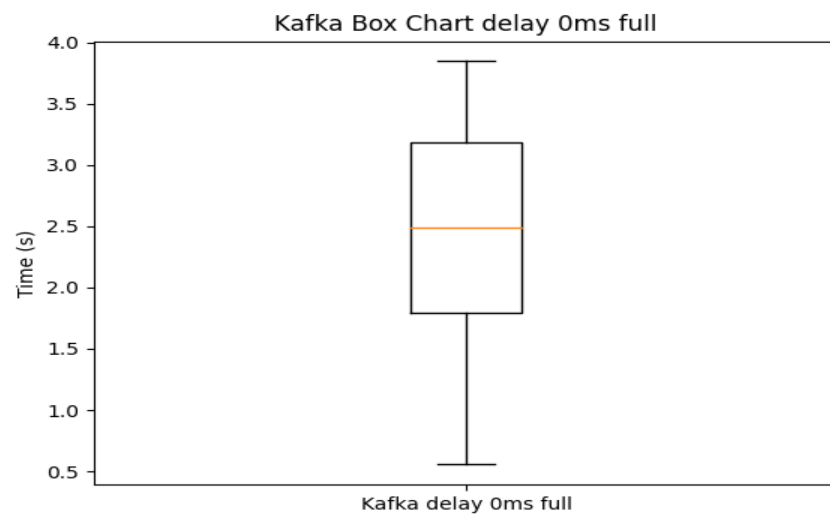
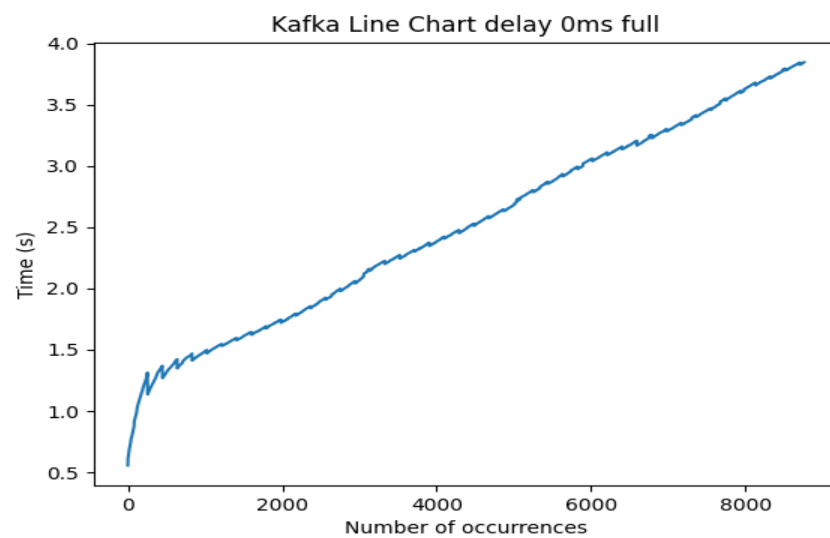
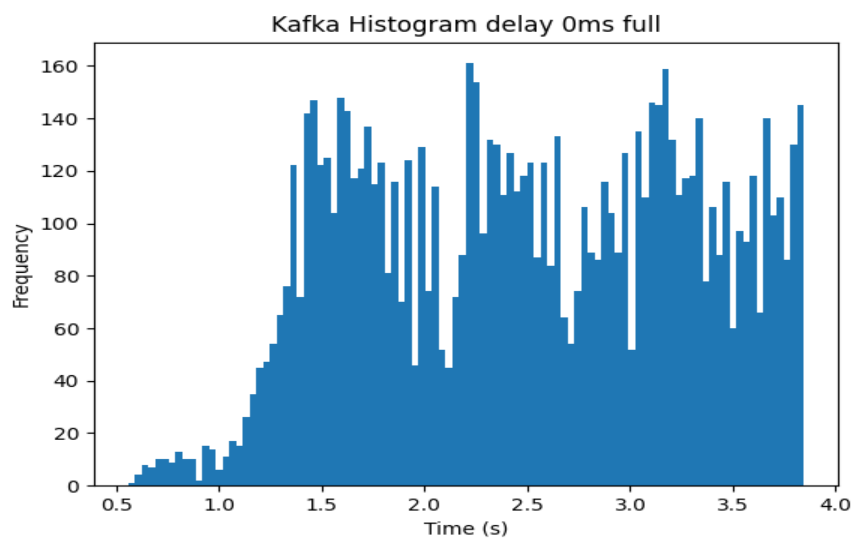
Average time for each sample

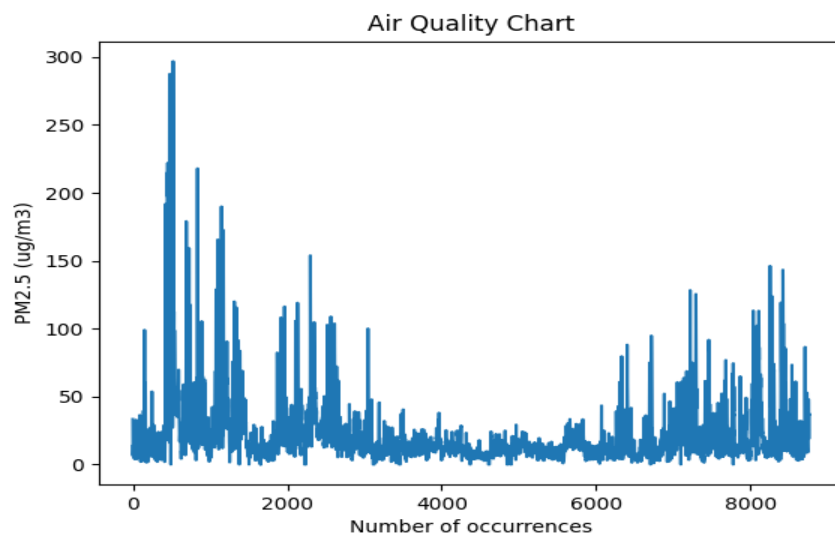
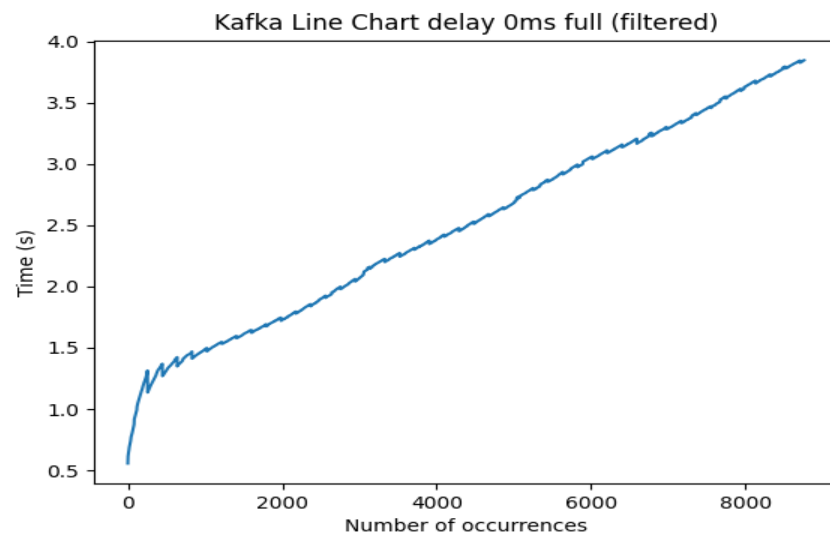
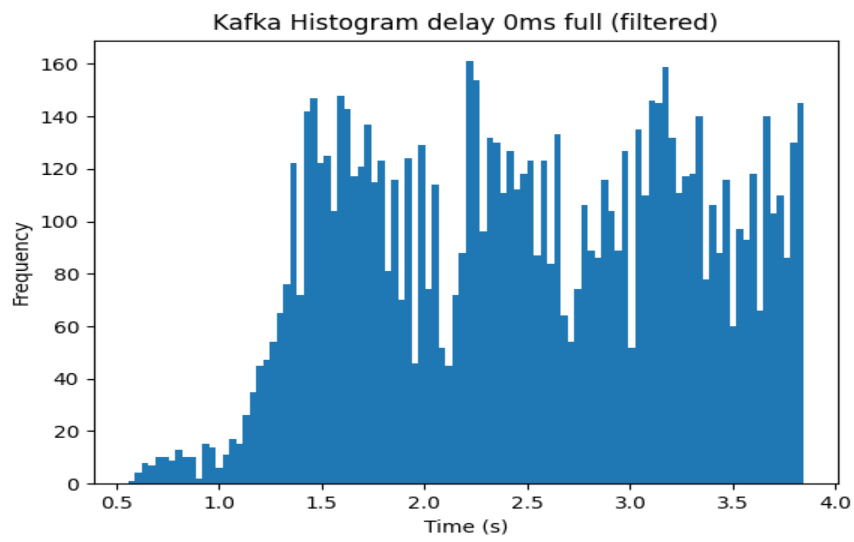
1.7377523972602742 3.0782602739726026 2.0137780821917812

2.372401826484018 2.4109519406392694 2.7579323059360727

3.063842694063927 2.362364726027397 3.040686073059361

2.1760317351598175





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: 1.46115

Kafka standard deviation

End Subtract Start: 0.3834166326676319

Lower Bound: 0.3554513577048668

Upper Bound: 2.6559511537106584

Number of data in the std range: 4380

Number of data outside the std range: 0

Kafka interquartile range

End Subtract Start: 0.7127999999999997

Kafka mean

End Subtract Start: 1.5057012557077625

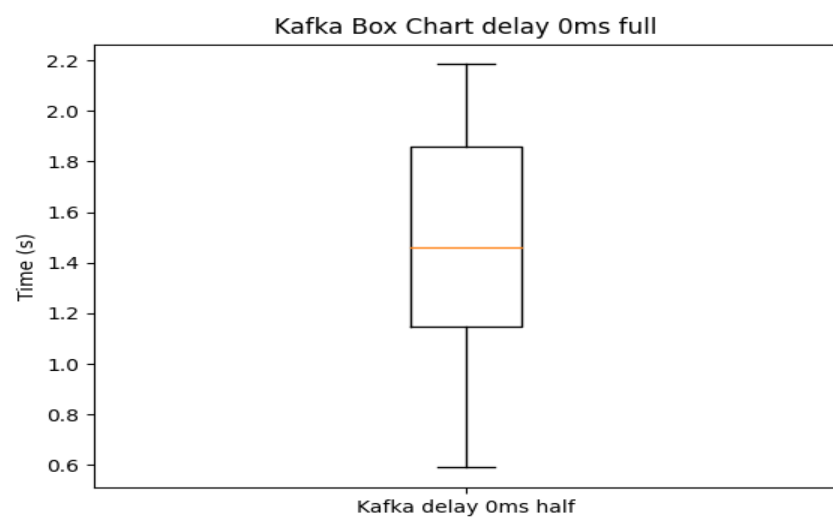
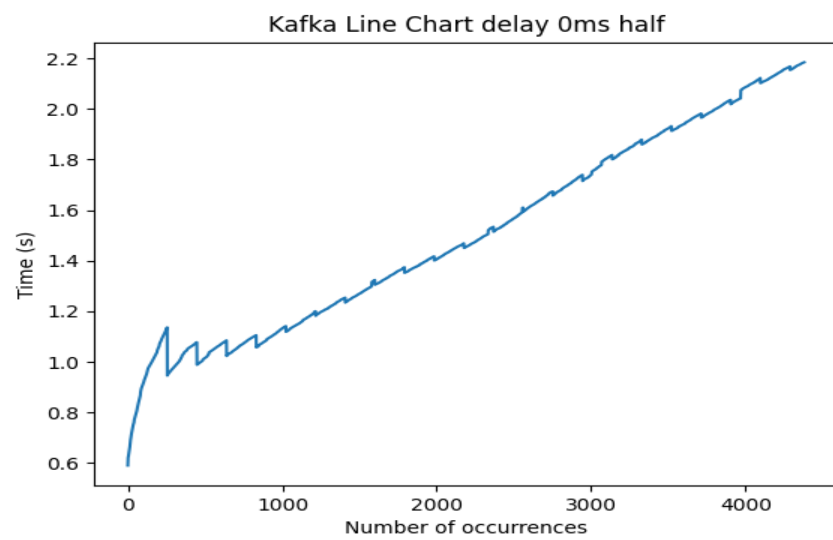
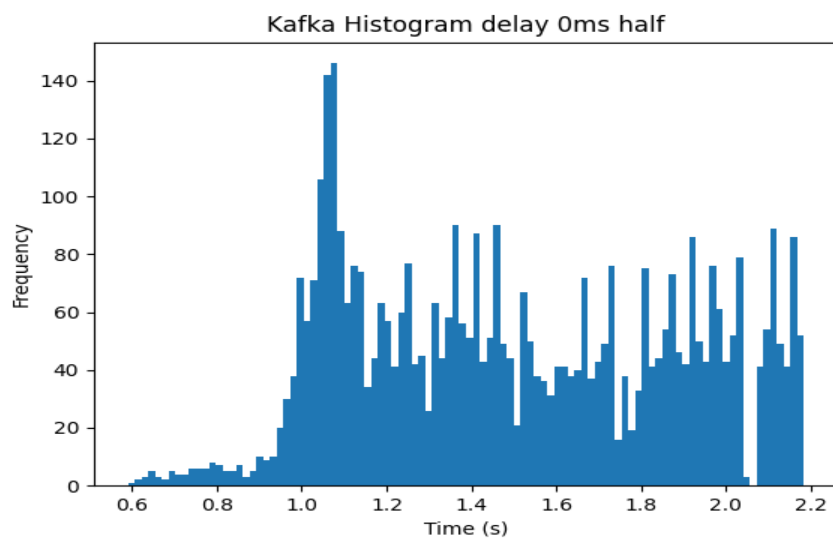
Average time for each sample

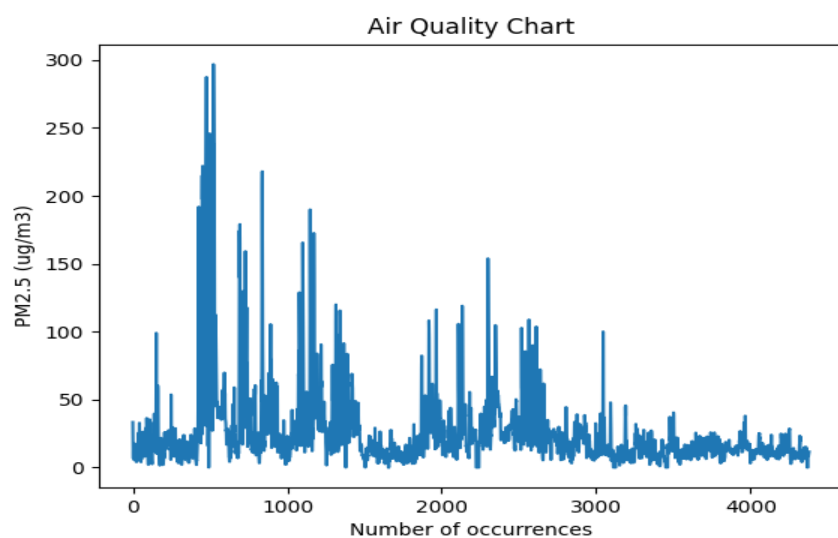
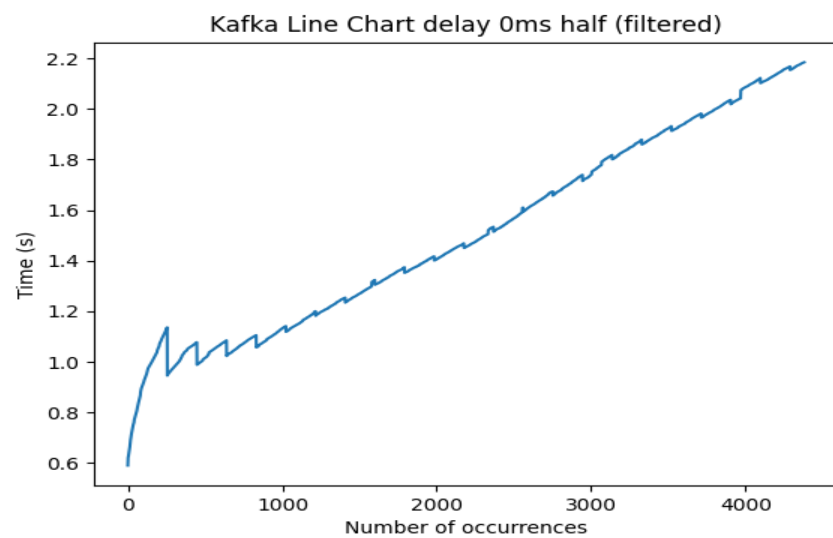
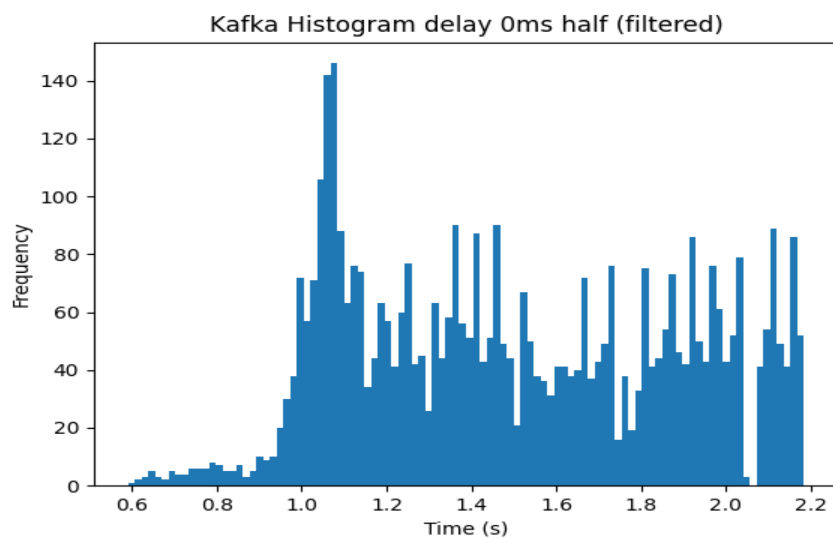
1.1708449771689498 2.0448404109589045 1.3709397260273974

1.2782858447488585 1.2858025114155252 1.3879511415525114

1.444313926940639 2.354176712328767 1.4893639269406393

1.2304933789954338





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

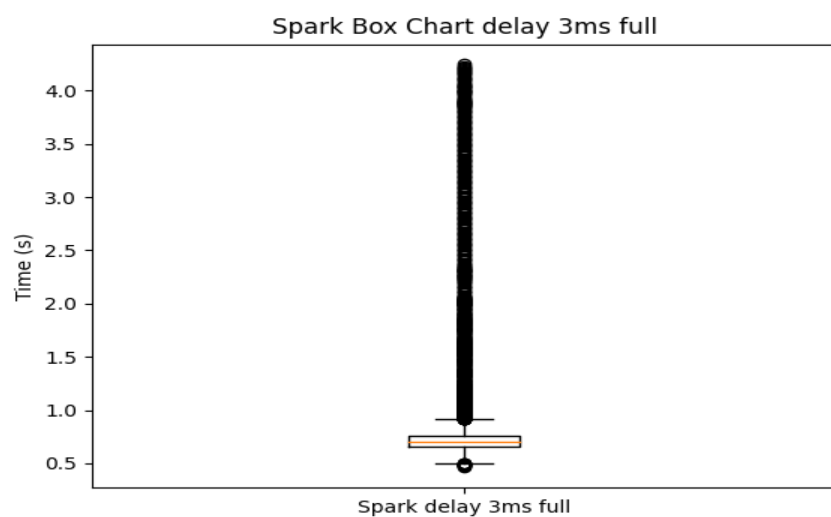
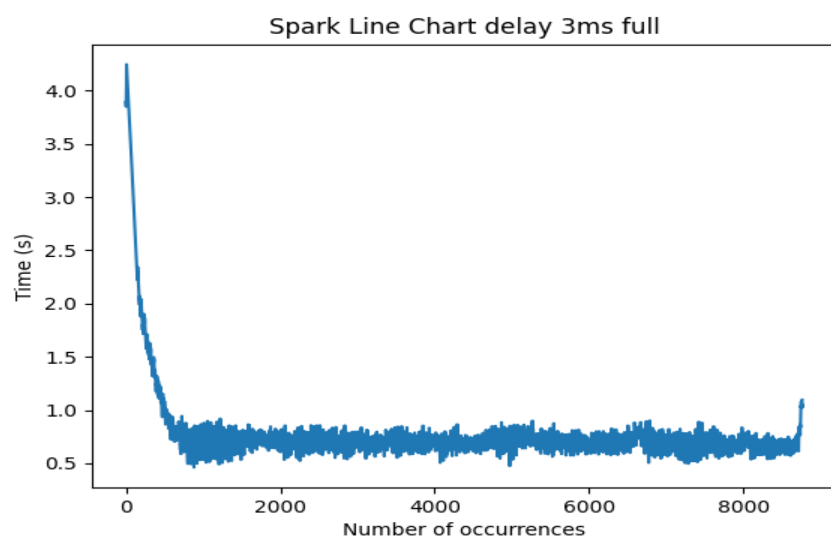
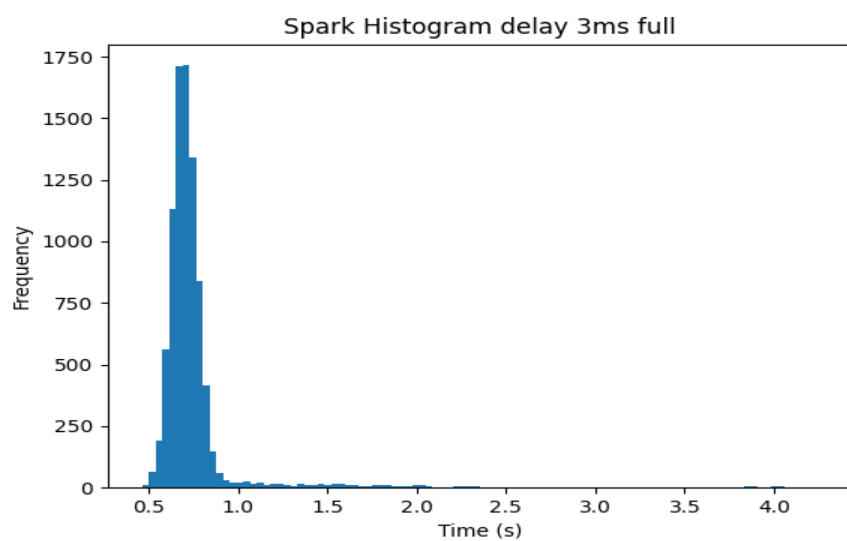
End Subtract Start: 0.10270000000000001

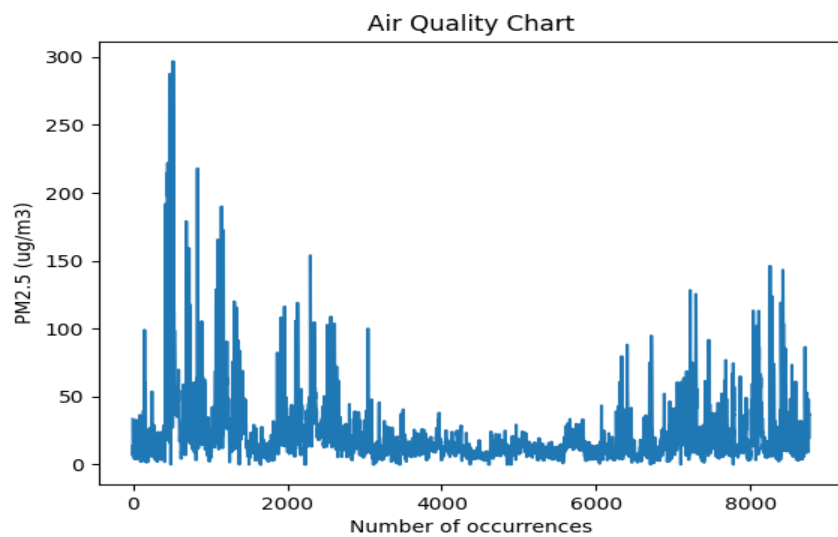
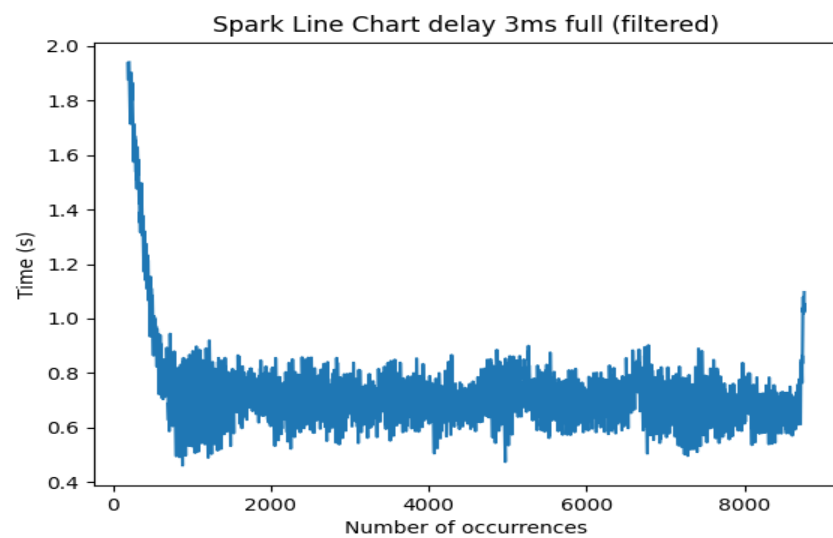
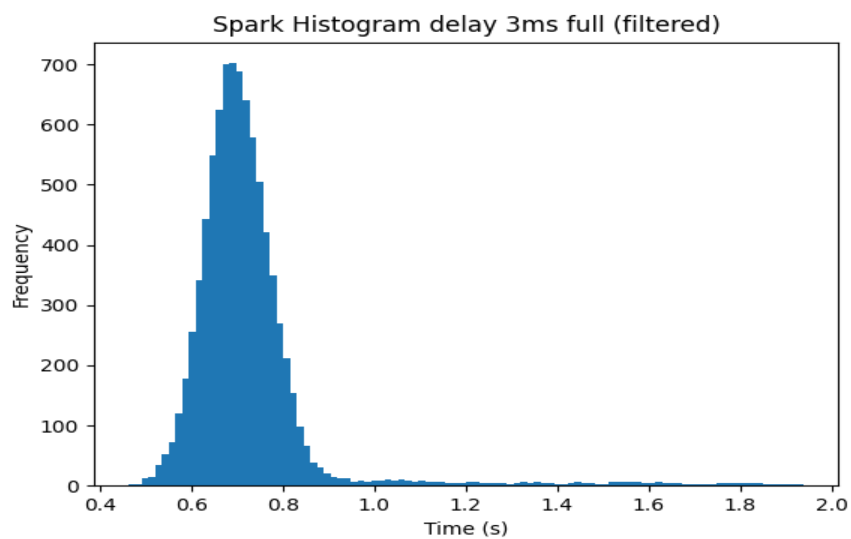
Spark mean

End Subtract Start: 0.7789741780821917

Average time for each sample

0.7002181506849315 0.6776760273972604 0.680264611872146
1.06410296803653 0.6993745433789954 0.7118796803652969
0.6926377853881278 0.8925182648401827 0.9145908675799087
0.7564788812785387





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: 5.2867999999999995

Spark standard deviation

End Subtract Start: 0.9527813103450008
Lower Bound: 2.3908347333485587
Upper Bound: 8.107522595418564
Number of data in the std range: 8760
Number of data outside the std range: 0

Spark interquartile range

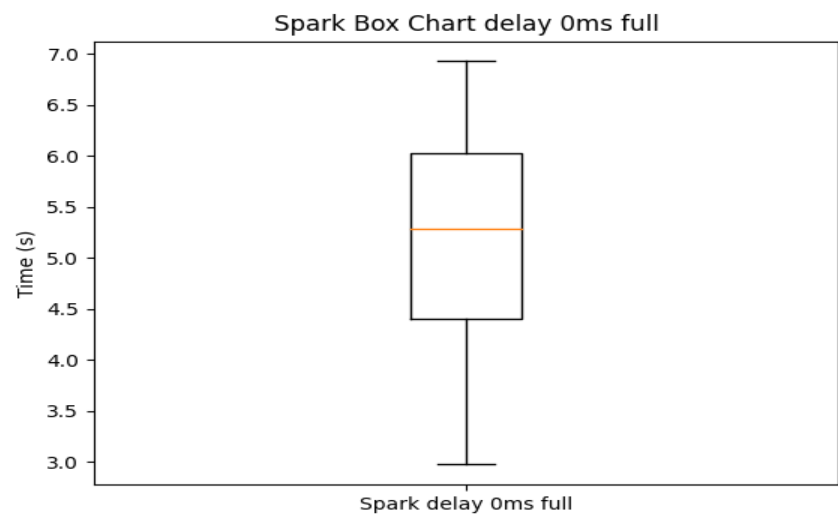
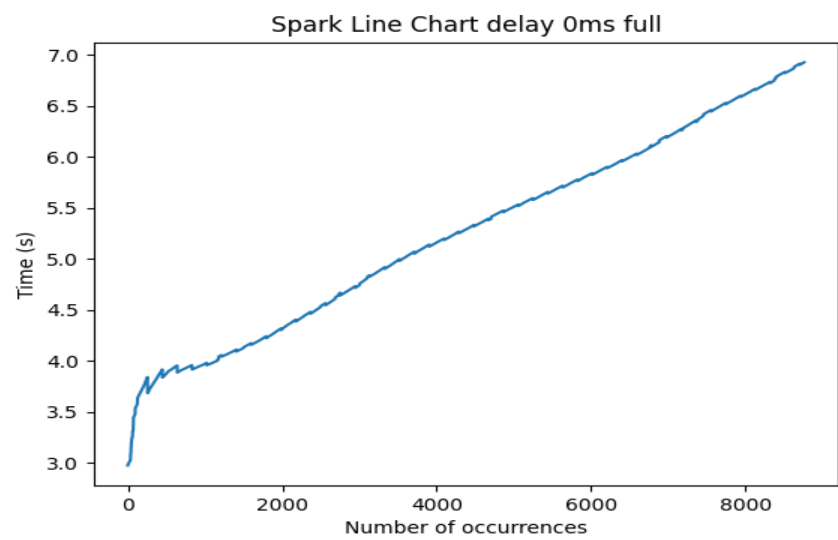
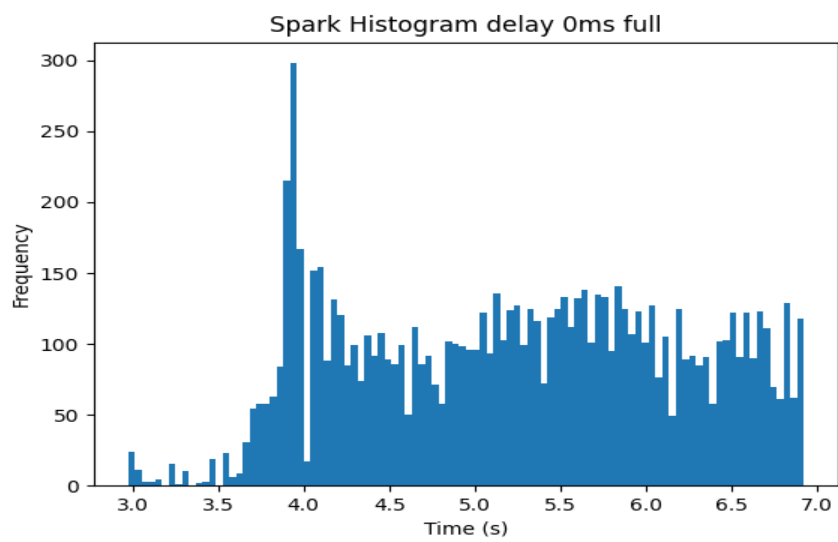
End Subtract Start: 1.6220249999999999

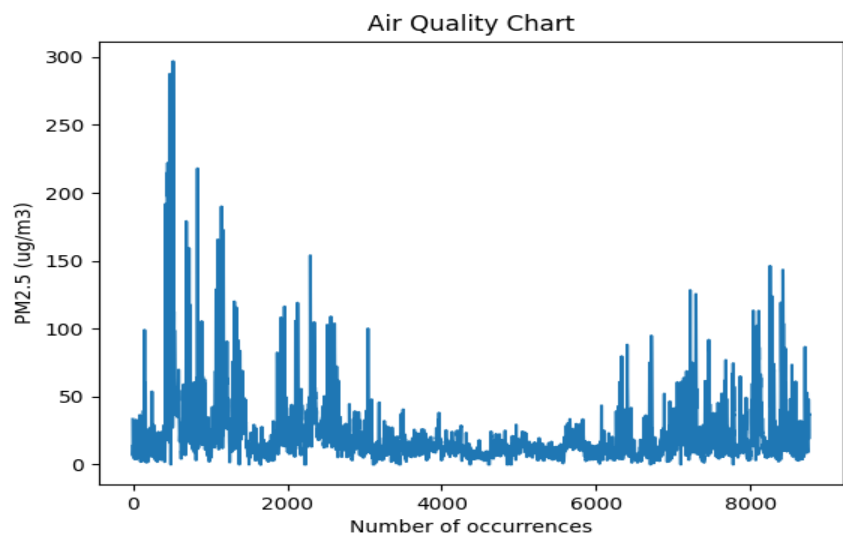
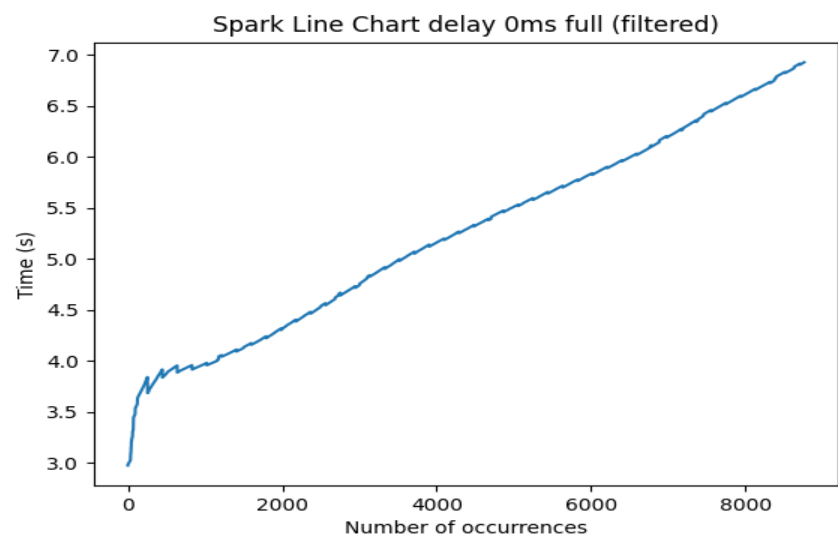
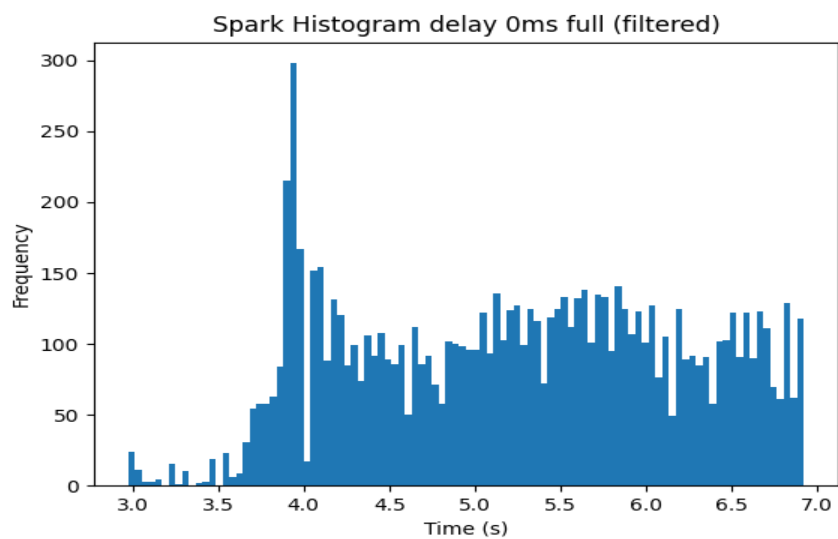
Spark mean

End Subtract Start: 5.249178664383561

Average time for each sample

5.643055936073059	4.905829109589041	5.523338584474885
5.077785958904109	4.962000799086758	4.892474543378996
5.125441552511416	5.817461187214612	5.117164726027397
5.427234246575343		





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: 3.8182499999999995

Spark standard deviation

End Subtract Start: 0.4747193562459839
Lower Bound: 2.4276804472437834
Upper Bound: 5.275996584719687
Number of data in the std range: 4380
Number of data outside the std range: 0

Spark interquartile range

End Subtract Start: 0.8928749999999998

Spark mean

End Subtract Start: 3.851838515981735

Average time for each sample

3.652109132420091	3.5215383561643834	3.432033105022831
3.6504198630136986	4.420983105022832	3.537013698630137
3.747970776255708	4.132677853881279	4.25497602739726
4.168663242009132		

