# Kafka test setup (kafkaDelay3Full)

Technology: Kafka Streams

Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Processed values (qty): 8646 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: 0.0832

### Kafka standard deviation

End Subtract Start: 0.021760853789575582

Lower Bound: 0.018738500393938054 UpperBound: 0.14930362313139156 Number of data in the std range: 8572 Number of data outside the std range: 74

# Kafka interquartile range

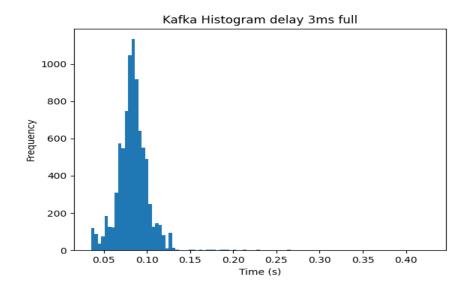
End Subtract Start: 0.018500000000000016

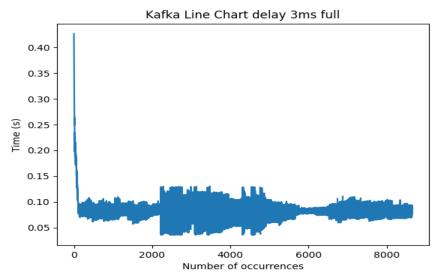
#### Kafka mean

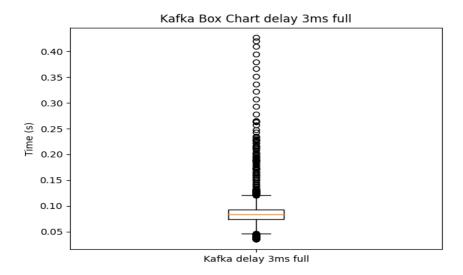
End Subtract Start: 0.0840210617626648

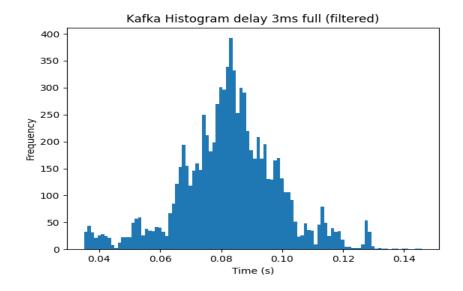
## Average time for each sample

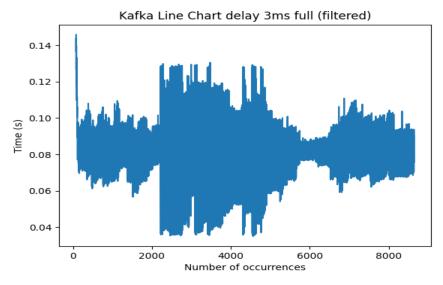
0.08287150127226464 0.08293453620171179 0.0830499653018737 0.08293789035392089 0.08286444598658341 0.08278799444829979 0.08312676382142031 0.08277307425399029 0.09387554938699978

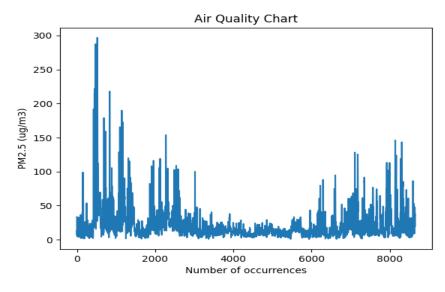


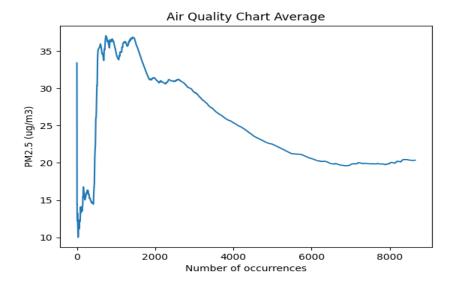












# Kafka test setup (kafkaDelay0Full)

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 8760

Processed values (qty): 8646 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: 2.3702499999999995

### Kafka standard deviation

End Subtract Start: 0.707040543892119

Lower Bound: 0.20162836832364261

Upper Bound: 4.443871631676357

Number of data in the std range: 8646

Number of data outside the std range: 0

# Kafka interquartile range

End Subtract Start: 1.1897

#### Kafka mean

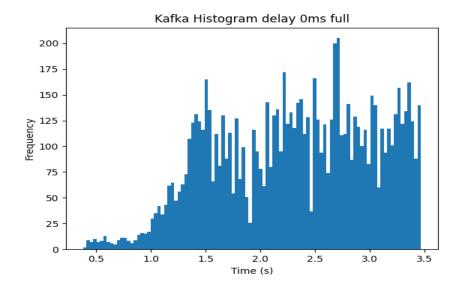
End Subtract Start: 2.3227499999999996

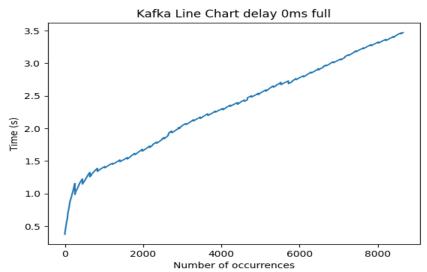
## Average time for each sample

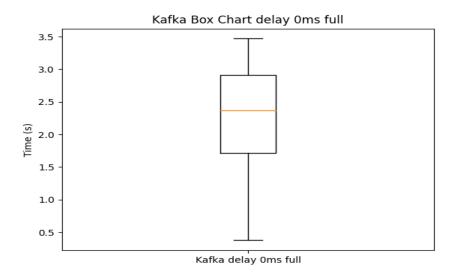
2.330861670136479 2.1058977561878325 2.1946205181586858

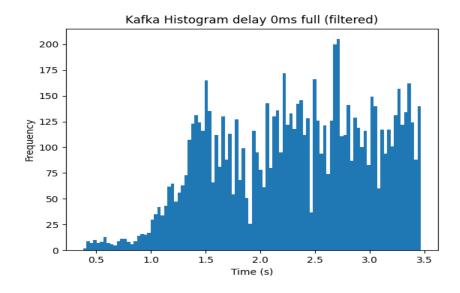
2.541644112884571 2.138341429562804 2.404750173490631

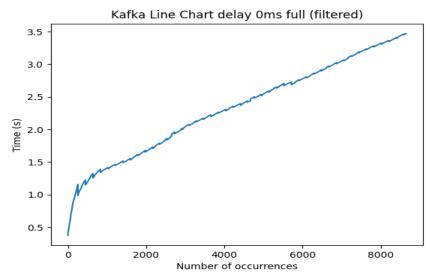
1.9151820495026604 1.9980927596576454 1.9348238491788112

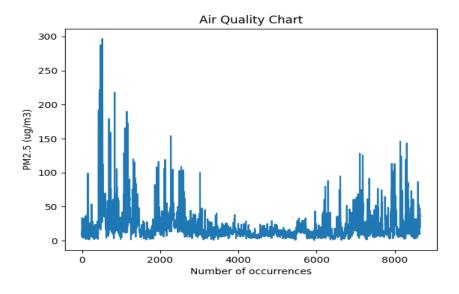


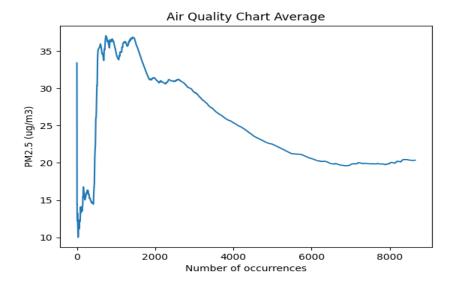












# Kafka test setup (kafkaDelay0Half)

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 4380

Processed values (qty): 4313

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: 1.213799999999998

### Kafka standard deviation

End Subtract Start: 0.34823553050886674

Lower Bound: 0.2254720312417744 Upper Bound: 2.314885214294975 Number of data in the std range: 4313

Number of data outside the std range: 0

# Kafka interquartile range

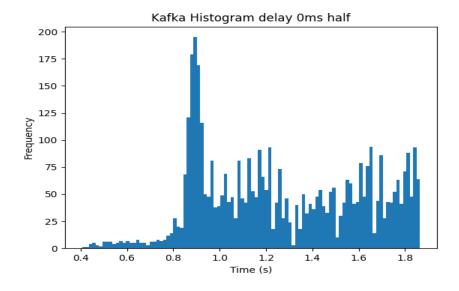
End Subtract Start: 0.66850000000000004

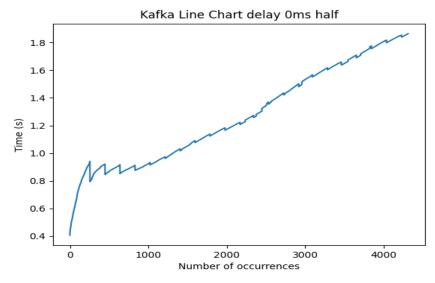
### Kafka mean

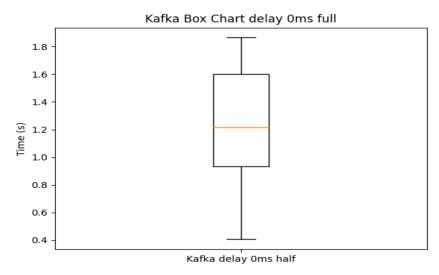
End Subtract Start: 1.2701786227683747

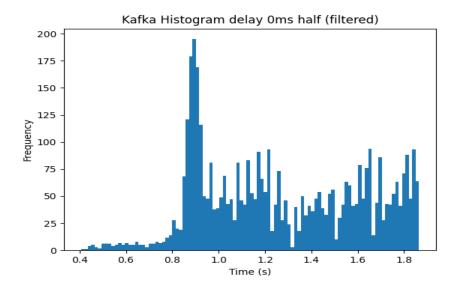
## Average time for each sample

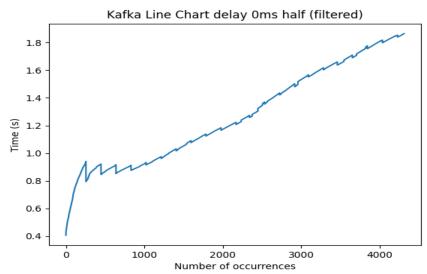
1.2619944354277766 1.2017289589612798 1.1363315557616507

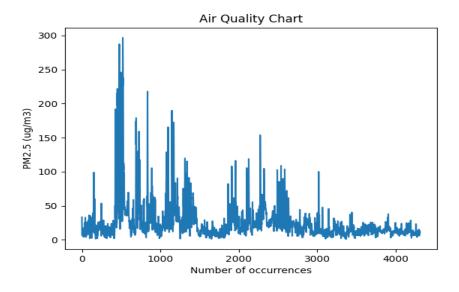


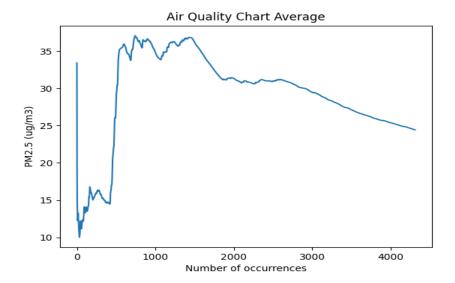












### Spark test setup (sparkDelay3Full)

Technology: Spark Structured Streaming
Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Processed values (qty): 8646 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: 0.7938

### **Spark standard deviation**

End Subtract Start: 0.779760236238106

Lower Bound: -1.3498301766763814 Upper Bound: 3.3287312407522545 Number of data in the std range: 8359

Number of data outside the std range: 287

# Spark interquartile range

End Subtract Start: 0.10129999999999995

# Spark mean

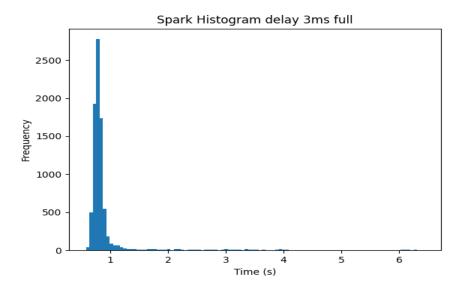
End Subtract Start: 0.9894505320379366

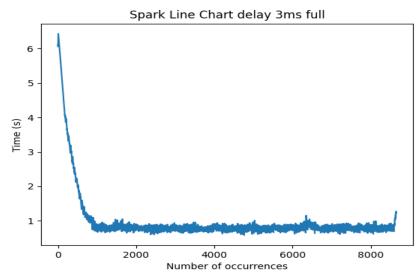
## Average time for each sample

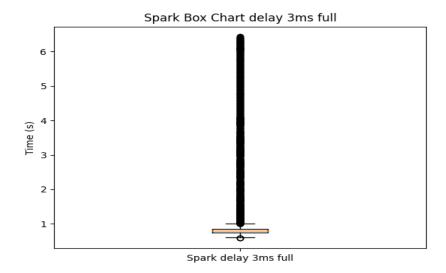
 $0.7956338191071016 \quad 0.8559990747166321 \quad 1.6076655100624564$ 

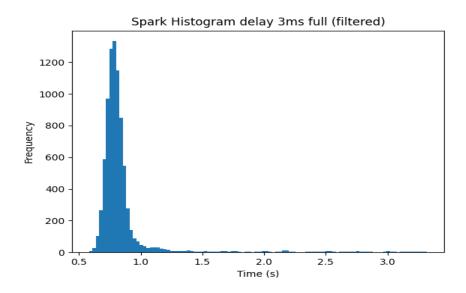
0.8249144112884571 1.0192809391626185 1.1527426555632665

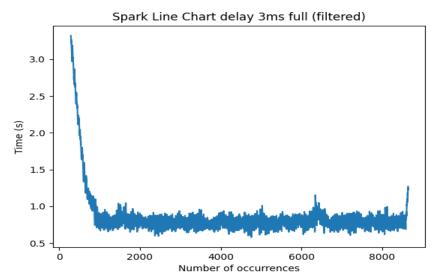
 $0.7994271339347675 \quad 0.8154614850798058 \quad 0.8450062456627342$ 

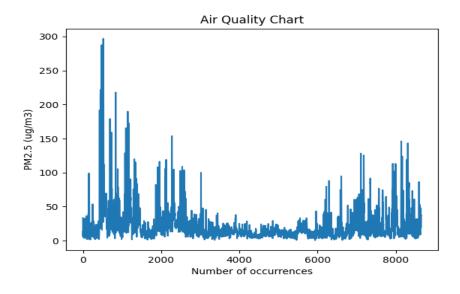


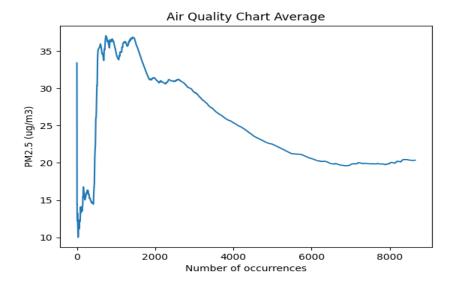












# Spark test setup (sparkDelay0Full)

Technology: Spark Structured Streaming
Producer Delay (Send next message): 0ms

Full data set (qty): 8760

Processed values (qty): 8646
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: 7.223000000000001

### **Spark standard deviation**

End Subtract Start: 1.1054649482698062

Lower Bound: 3.74681407260904

Upper Bound: 10.379603762227877 Number of data in the std range: 8646 Number of data outside the std range: 0

# Spark interquartile range

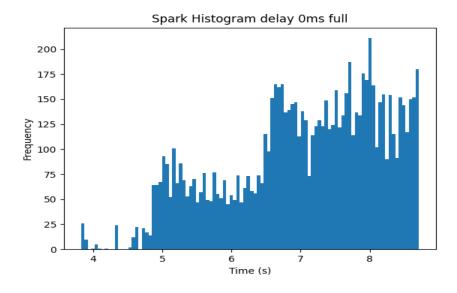
End Subtract Start: 1.58265000000000019

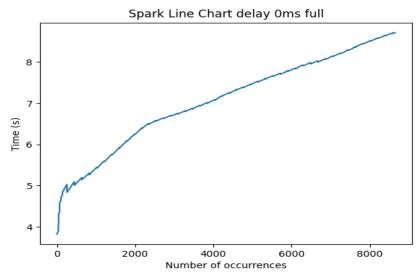
# Spark mean

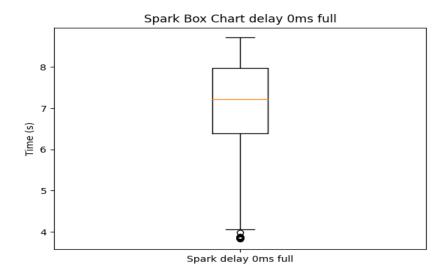
End Subtract Start: 7.063208917418459

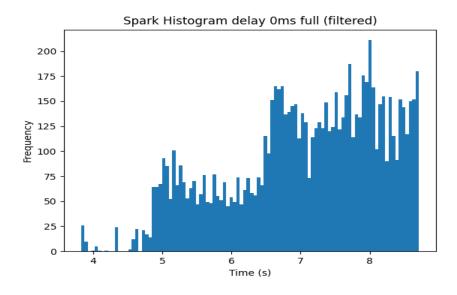
## Average time for each sample

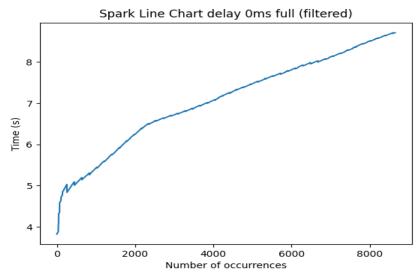
6.780835530881332 7.325431066389081 7.013809622947027 6.384552856812399 6.368124913254684 6.437828822576914 8.984951191302335 6.469745778394634 8.582914179967615

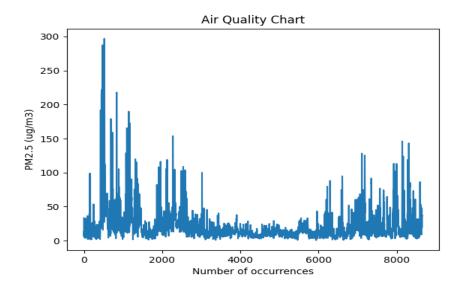


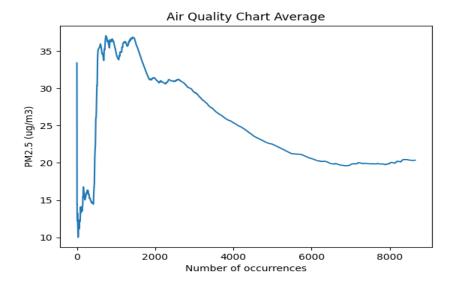












### Spark test setup (sparkDelay0Half)

Technology: Spark Structured Streaming
Producer Delay (Send next message): 0ms

Full data set (qty): 4380

Processed values (qty): 4313 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: 5.342100000000001

## **Spark standard deviation**

End Subtract Start: 0.4949301958137683

Lower Bound: 3.8349907944274646 Upper Bound: 6.804571969310074

Number of data in the std range: 4273

Number of data outside the std range: 40

# Spark interquartile range

# Spark mean

End Subtract Start: 5.319781381868769

## Average time for each sample

5.1304567586366785 4.296784140969163 6.672792719684674

5.220437282633897 6.8504817992116855 6.070767679109668

5.122185717597959 4.295475307210758 4.759088337584049

