

Kafka test setup (kafkaDelay3Full)

Technology: Kafka Streams

Producer Delay (Send next message): 3ms

Full data set (qty): 8760

Processed values (qty): 1

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: 159.2765

Kafka standard deviation

End Subtract Start: 9.05707351411039

Lower Bound: 130.43617945766886

UpperBound: 184.77862054233117

Number of data in the std range: 10

Number of data outside the std range: 0

Kafka interquartile range

End Subtract Start: 13.428750000000008

Kafka mean

End Subtract Start: 157.6074

Kafka mean (PM2.5)

Mean value: 20.348879998843476

Time of each sample

144.06	157.386	147.553
162.069	160.527	169.237
143.806	169.513	163.897
158.026		

Kafka test setup (kafkaDelay0Full)

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 8760

Processed values (qty): 1

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: 25.948999999999998

Kafka standard deviation

End Subtract Start: 10.8965590513703

Lower Bound: -8.527877154110897

Upper Bound: 56.851477154110896

Number of data in the std range: 10

Number of data outside the std range: 0

Kafka interquartile range

End Subtract Start: 17.026999999999997

Kafka mean

End Subtract Start: 24.1618

Kafka mean (PM2.5)

Mean value: 20.348879998843476

Time of each sample

35.34	4.38	28.813
13.17	32.122	15.476
16.325	32.913	23.085
39.994		

Kafka test setup (kafkaDelay0Half)

Technology: Kafka Streams

Producer Delay (Send next message): 0ms

Full data set (qty): 4380

Processed values (qty): 1

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: 42.656000000000006

Kafka standard deviation

End Subtract Start: 13.361559248830206

Lower Bound: -3.9184777464906304

Upper Bound: 76.2508777464906

Number of data in the std range: 10

Number of data outside the std range: 0

Kafka interquartile range

End Subtract Start: 17.584249999999997

Kafka mean

End Subtract Start: 36.166199999999999

Kafka mean (PM2.5)

Mean value: 24.4260103060515

Time of each sample

21.401 44.054 48.87

42.597 43.194 8.936

40.816 42.715 49.4

19.679

Spark test setup (sparkDelay3Full)

Technology: Spark Structured Streaming
Producer Delay (Send next message): 3ms
Full data set (qty): 8760
Processed values (qty): 1
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: 201.851

Spark standard deviation

End Subtract Start: 13.887511555350727
Lower Bound: 164.2684653339478
Upper Bound: 247.59353466605216
Number of data in the std range: 10
Number of data outside the std range: 0

Spark interquartile range

End Subtract Start: 19.929000000000002

Spark mean

End Subtract Start: 205.93099999999998

Spark mean (PM2.5)

Mean value: 20.348879998843387

Time of each sample

186.438	192.472	201.327
202.375	231.274	191.757
214.037	201.008	214.701
223.921		

Spark test setup (sparkDelay0Full)

Technology: Spark Structured Streaming
Producer Delay (Send next message): 0ms
Full data set (qty): 8760
Processed values (qty): 1
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: 91.631

Spark standard deviation

End Subtract Start: 28.094210004198374
Lower Bound: 3.338569987404881
Upper Bound: 171.9038300125951
Number of data in the std range: 10
Number of data outside the std range: 0

Spark interquartile range

End Subtract Start: 16.753750000000001

Spark mean

End Subtract Start: 87.6212

Spark mean (PM2.5)

Mean value: 20.34887999884347

Time of each sample

87.138	117.11	78.681
113.328	93.482	89.78
99.667	102.107	10.974
83.945		

Spark test setup (sparkDelay0Half)

Technology: Spark Structured Streaming
Producer Delay (Send next message): 0ms
Full data set (qty): 4380
Processed values (qty): 1
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: 113.50450000000001

Spark standard deviation

End Subtract Start: 18.216750087762634
Lower Bound: 54.463549736712096
Upper Bound: 163.7640502632879
Number of data in the std range: 10
Number of data outside the std range: 0

Spark interquartile range

End Subtract Start: 27.719499999999982

Spark mean

End Subtract Start: 109.1138

Spark mean (PM2.5)

Mean value: 24.426010306051502

Time of each sample

137.337	126.124	101.777
93.223	84.33	78.392
112.191	124.689	114.818
118.257		