



Politecnico di Milano  
AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

# BACKGROUND SUBTRACTION

Results report:

Webcam: A08 - km. 5,6 - Milano Nord itinere Nord

Threshold = 40

Ratio = 0.85

Andrea Mazzeo - 895579  
Daniele Moltisanti - 898977

## BACKGROUND DETECTION NUMBER 0 WITH THRESHOLD OF 10

Background detected with accuracy of 93.99%

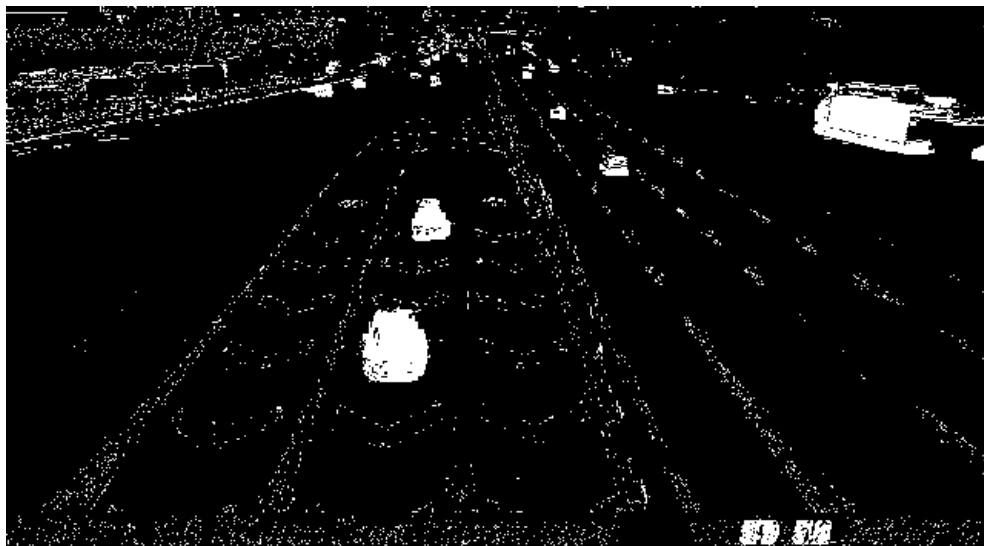
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 1 WITH THRESHOLD OF 10

Background detected with accuracy of 94.64%

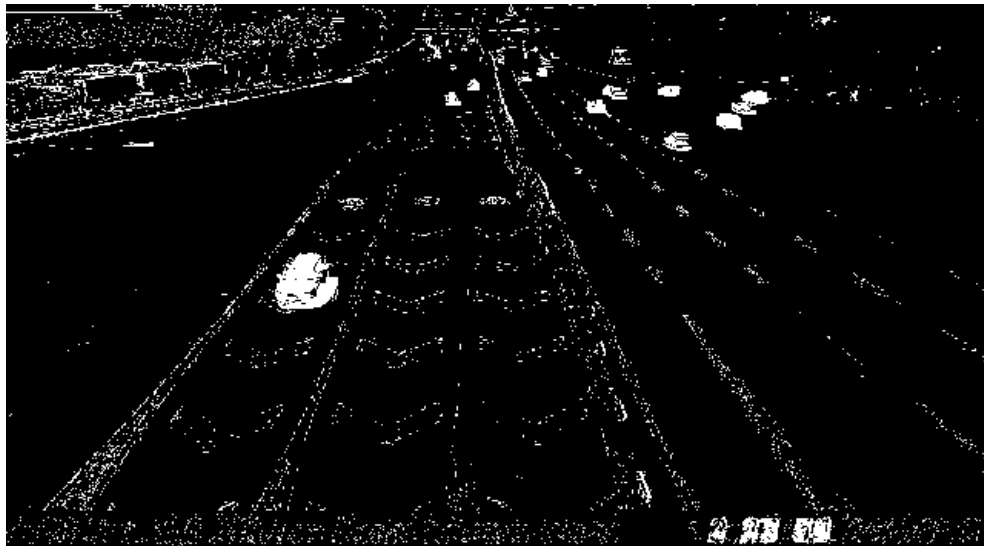
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 2 WITH THRESHOLD OF 10

Background detected with accuracy of 92.35%

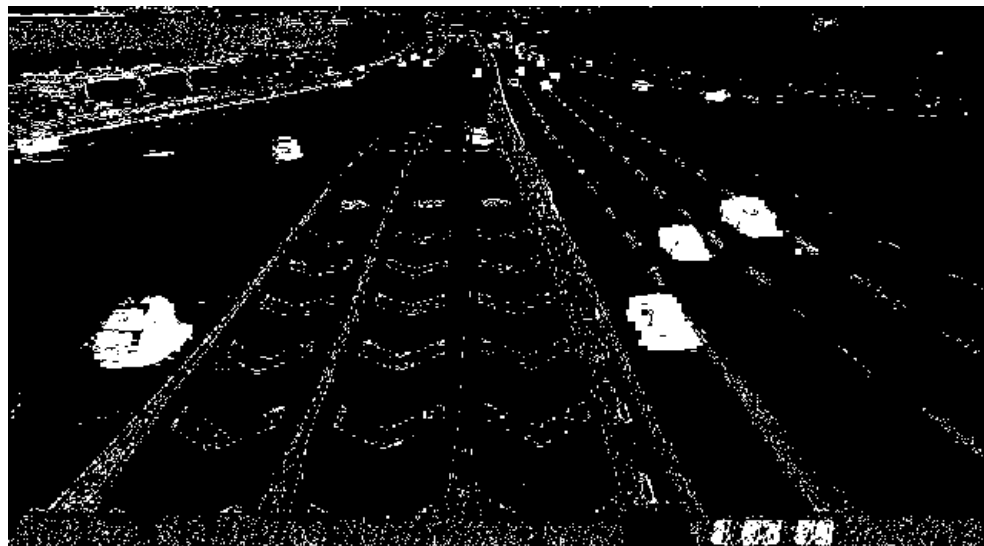
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 3 WITH THRESHOLD OF 10

Background detected with accuracy of 91.38%

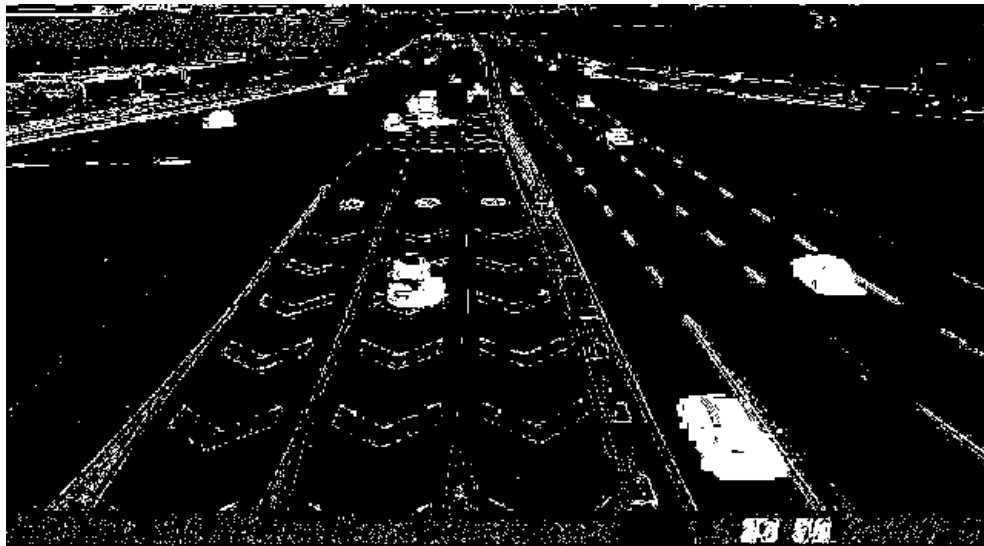
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 4 WITH THRESHOLD OF 10

Background detected with accuracy of 93.11%

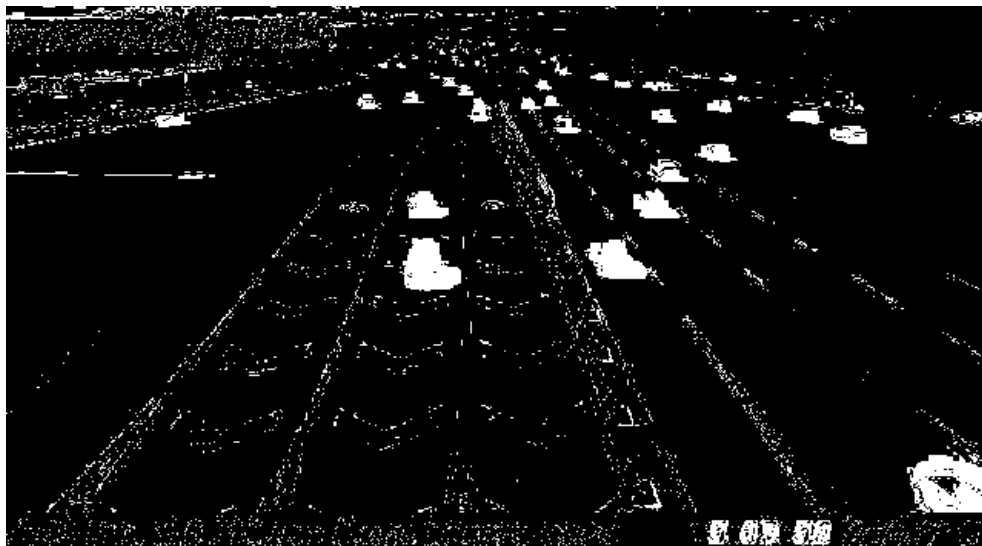
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 5 WITH THRESHOLD OF 10

Background detected with accuracy of 94.19%

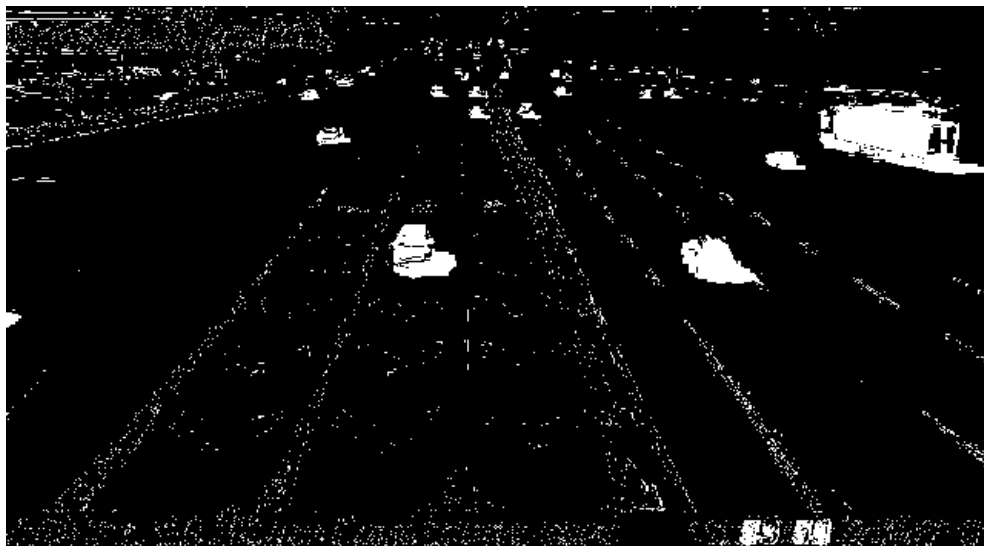
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 6 WITH THRESHOLD OF 10

Background detected with accuracy of 93.34%

Original frame:



Background detected:



Error plotted with threshold of 12:





## BACKGROUND DETECTION NUMBER 7 WITH THRESHOLD OF 10

Background detected with accuracy of 85.12%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 8 WITH THRESHOLD OF 10

Background detected with accuracy of 83.41%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 9 WITH THRESHOLD OF 10

Background detected with accuracy of 86.81%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 10 WITH THRESHOLD OF 10

Background detected with accuracy of 65.57%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 11 WITH THRESHOLD OF 10

Background detected with accuracy of 20.85%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 12 WITH THRESHOLD OF 10

Background detected with accuracy of 23.81%

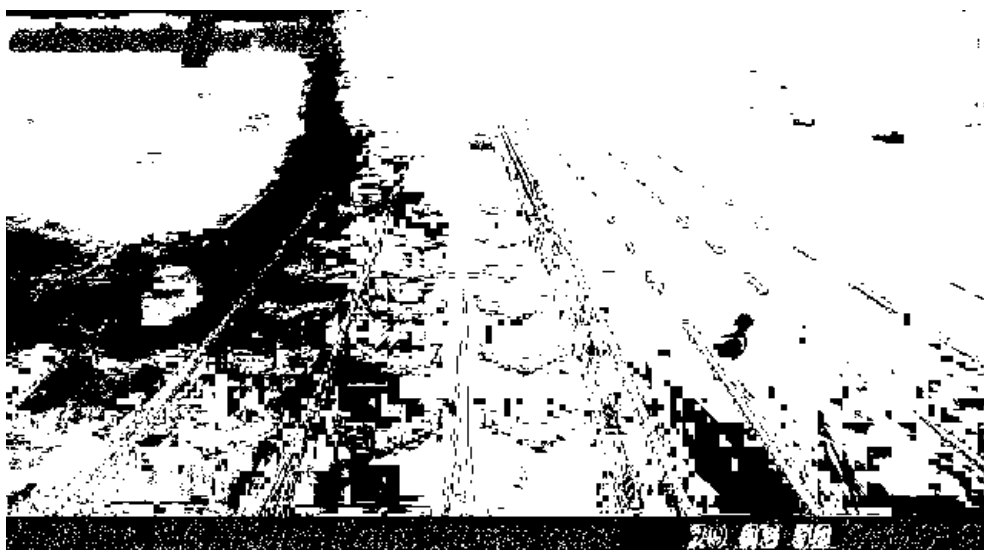
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 13 WITH THRESHOLD OF 10

Background detected with accuracy of 27.02%

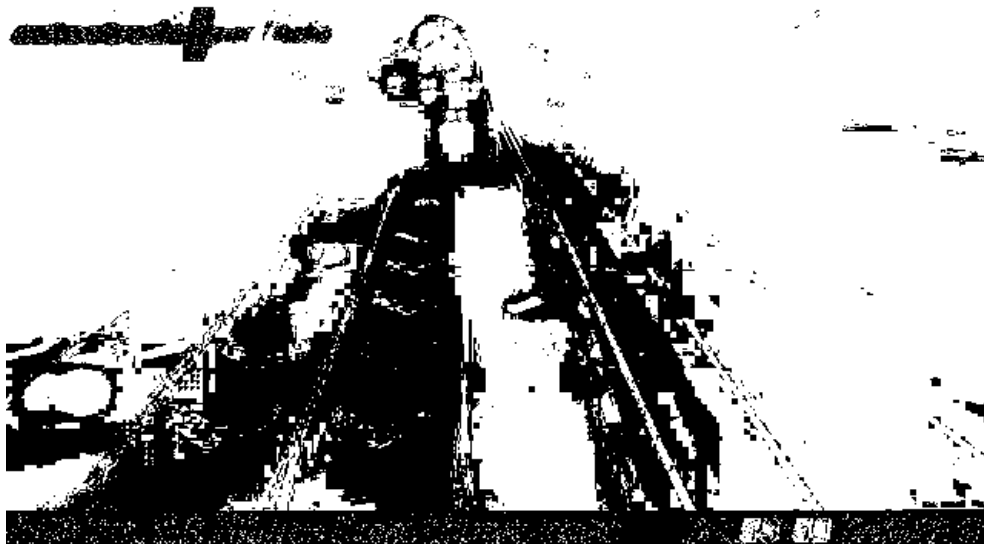
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 14 WITH THRESHOLD OF 10

Background detected with accuracy of 89.07%

Original frame:



Background detected:



Error plotted with threshold of 12:





## BACKGROUND DETECTION NUMBER 15 WITH THRESHOLD OF 10

Background detected with accuracy of 80.38%

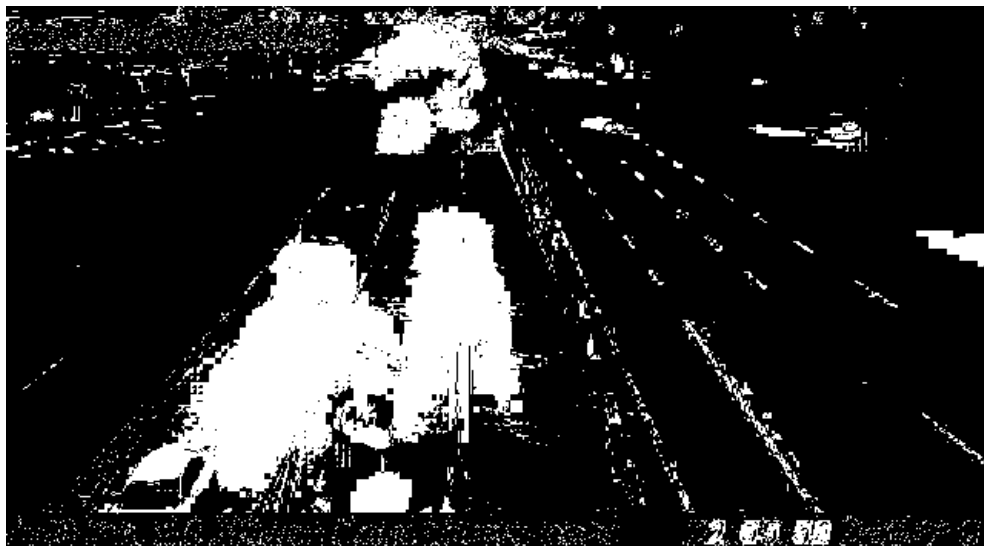
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 16 WITH THRESHOLD OF 10

Background detected with accuracy of 86.13%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 17 WITH THRESHOLD OF 10

Background detected with accuracy of 86.0%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 18 WITH THRESHOLD OF 10

Background detected with accuracy of 90.94%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 19 WITH THRESHOLD OF 10

Background detected with accuracy of 89.0%

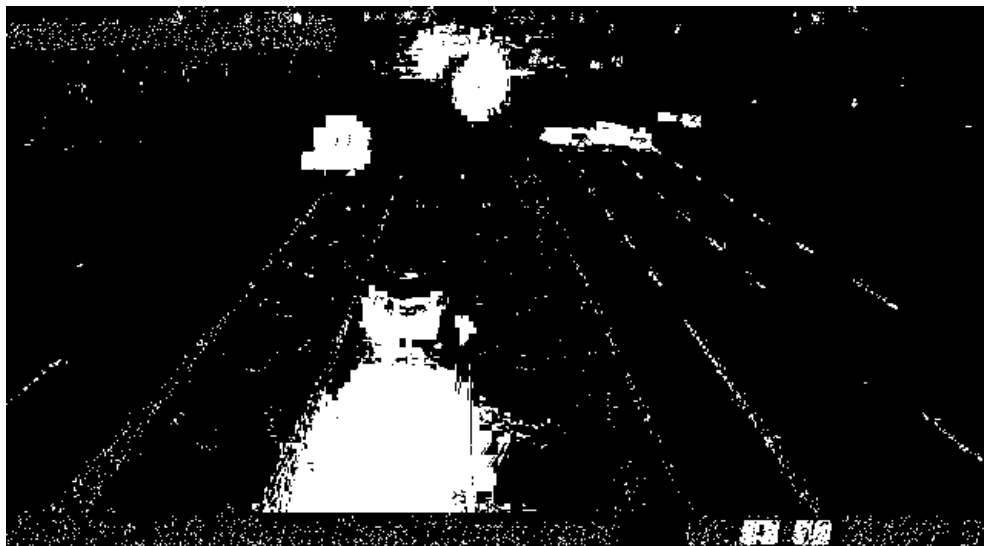
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 20 WITH THRESHOLD OF 10

Background detected with accuracy of 93.1%

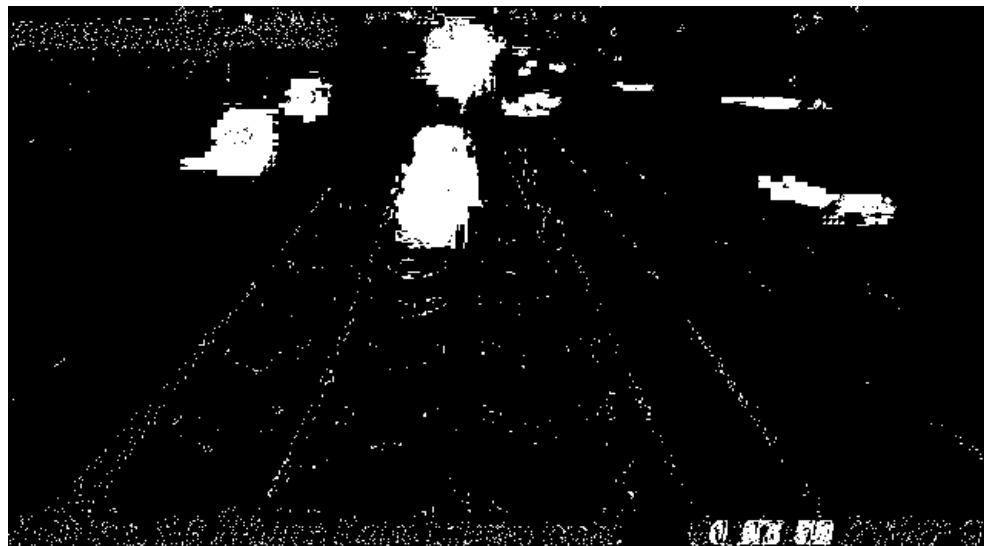
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 21 WITH THRESHOLD OF 10

Background detected with accuracy of 92.91%

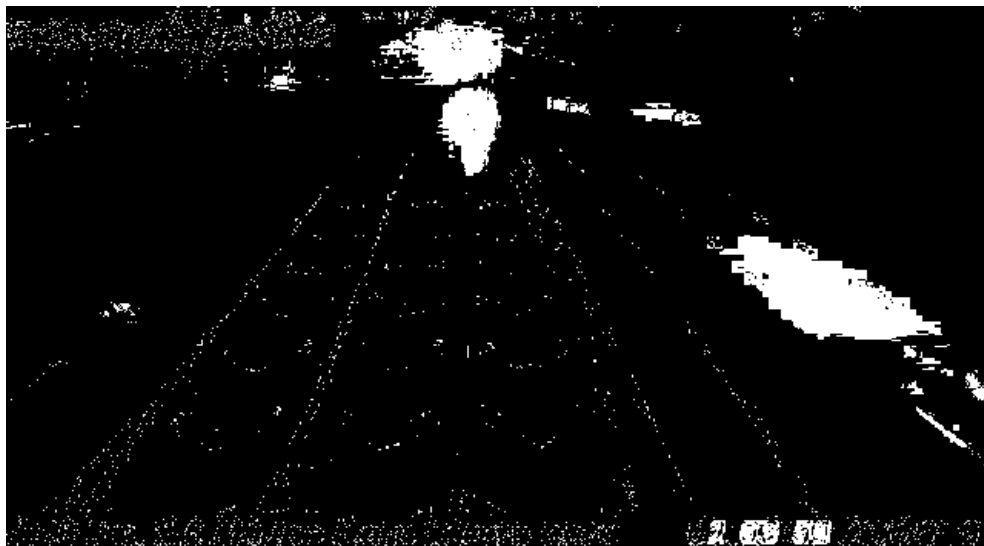
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 22 WITH THRESHOLD OF 10

Background detected with accuracy of 92.46%

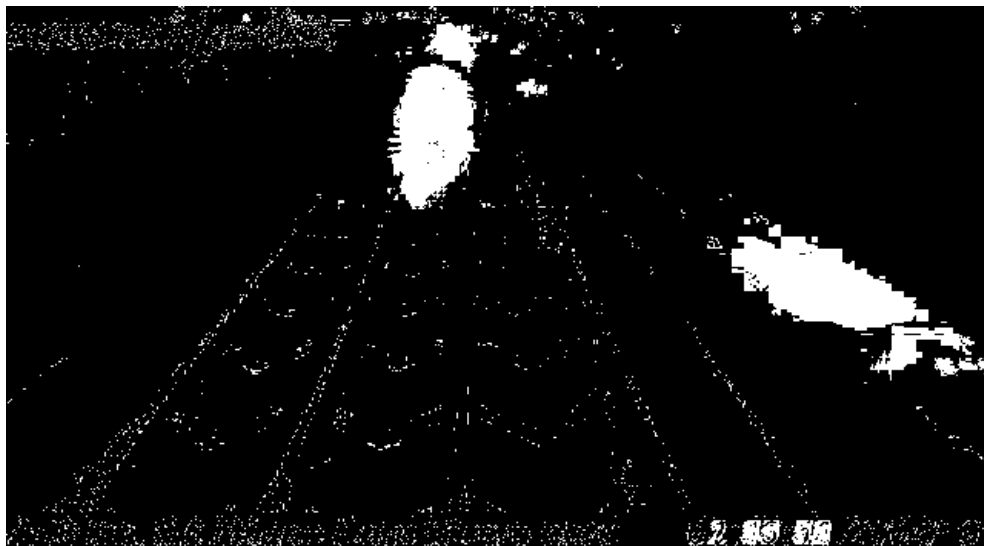
Original frame:



Background detected:



Error plotted with threshold of 12:





## BACKGROUND DETECTION NUMBER 23 WITH THRESHOLD OF 10

Background detected with accuracy of 97.49%

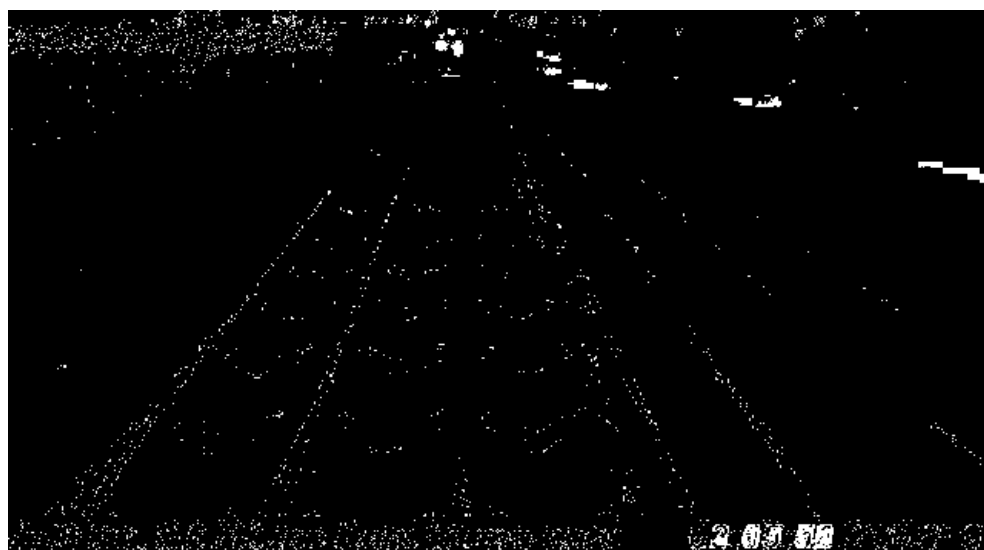
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 24 WITH THRESHOLD OF 10

Background detected with accuracy of 97.03%

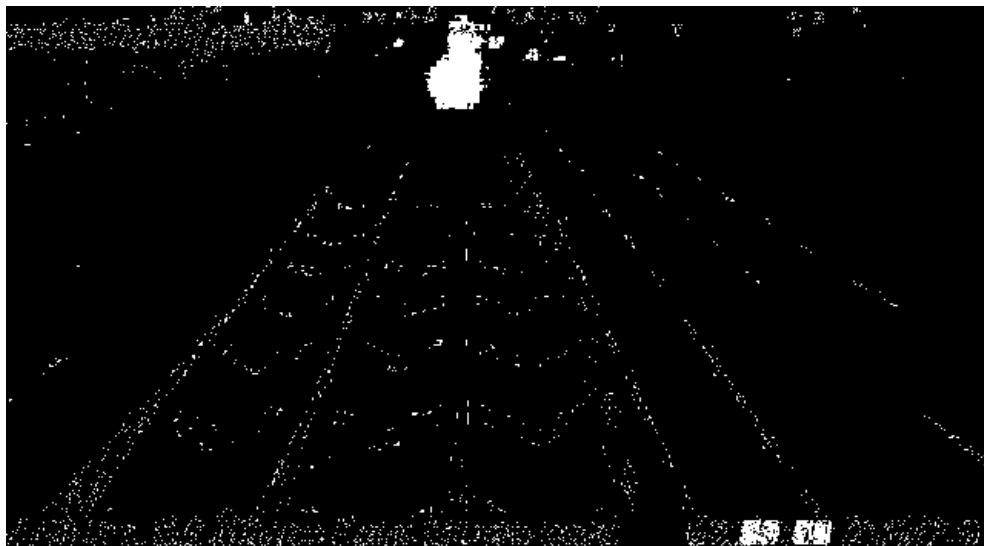
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 25 WITH THRESHOLD OF 10

Background detected with accuracy of 97.13%

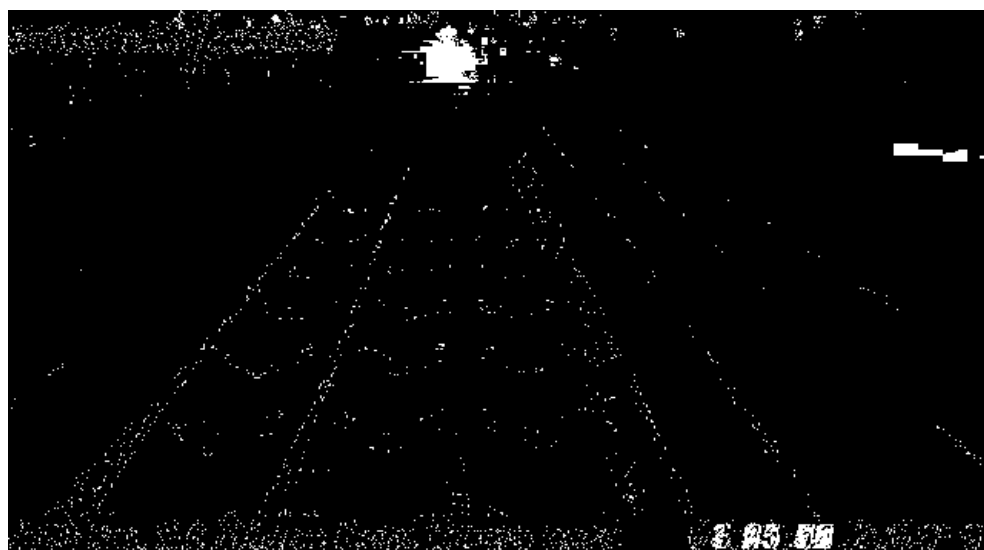
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 26 WITH THRESHOLD OF 10

Background detected with accuracy of 92.59%

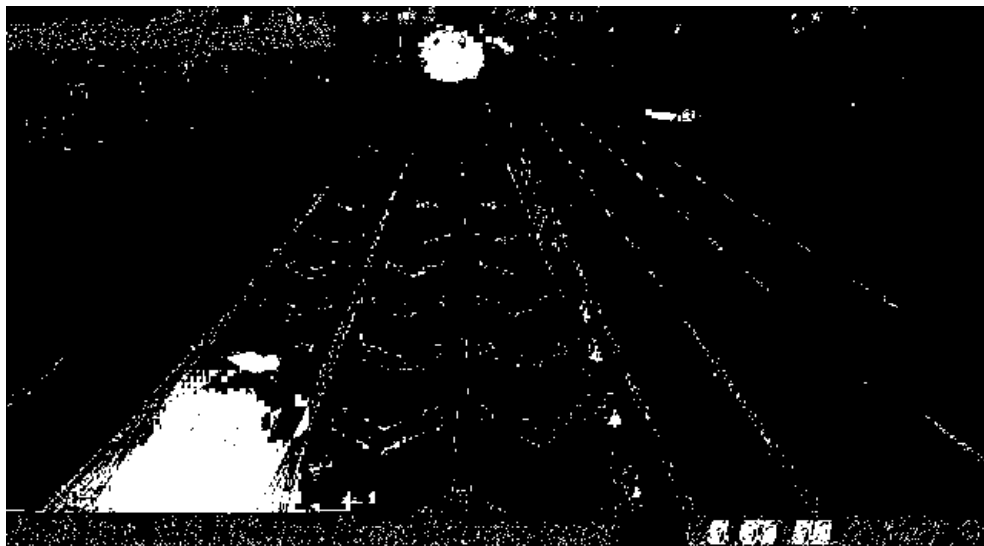
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 27 WITH THRESHOLD OF 10

Background detected with accuracy of 91.14%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 28 WITH THRESHOLD OF 10

Background detected with accuracy of 9.62%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 29 WITH THRESHOLD OF 10

Background detected with accuracy of 96.0%

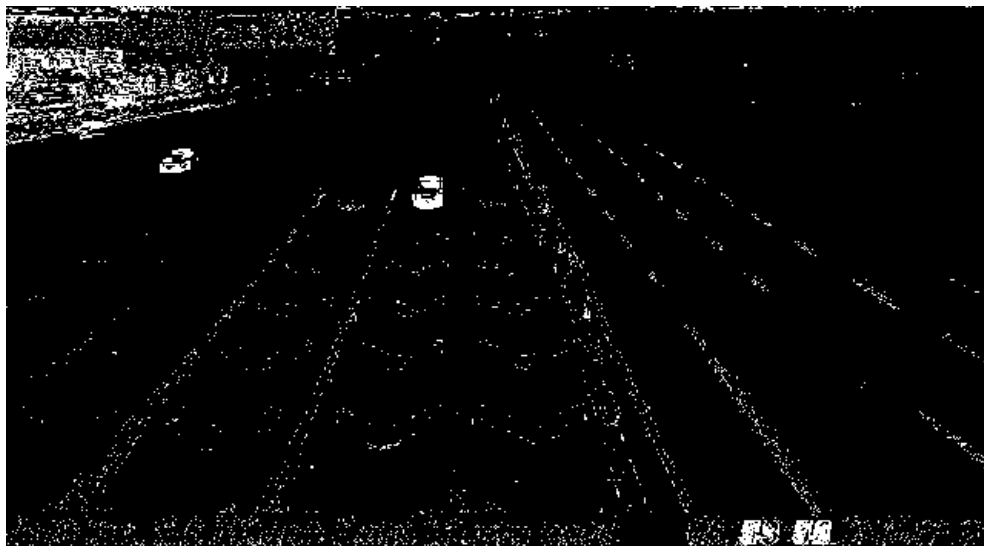
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 30 WITH THRESHOLD OF 10

Background detected with accuracy of 76.4%

Original frame:



Background detected:



Error plotted with threshold of 12:





## BACKGROUND DETECTION NUMBER 31 WITH THRESHOLD OF 10

Background detected with accuracy of 91.02%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 32 WITH THRESHOLD OF 10

Background detected with accuracy of 90.52%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 33 WITH THRESHOLD OF 10

Background detected with accuracy of 91.21%

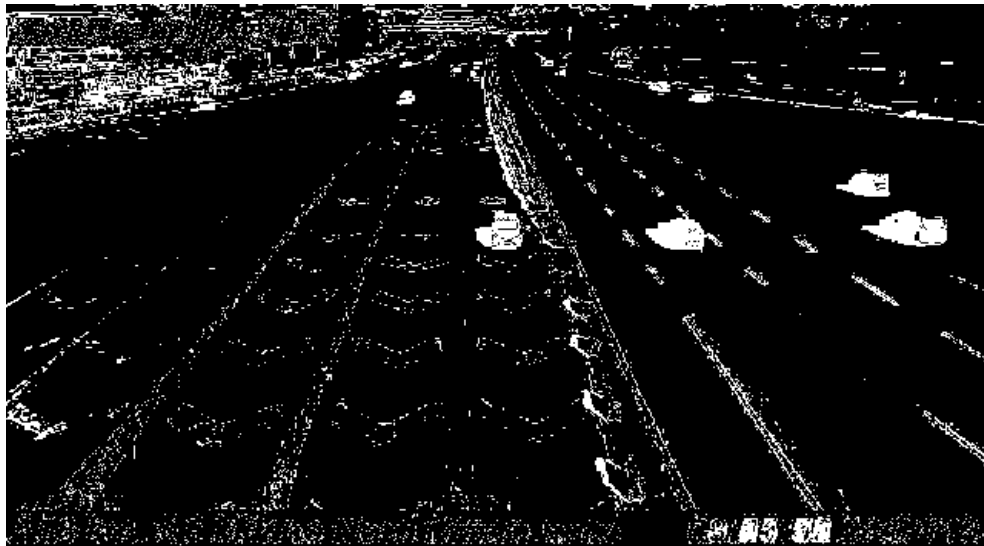
Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 34 WITH THRESHOLD OF 10

Background detected with accuracy of 89.83%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 35 WITH THRESHOLD OF 10

Background detected with accuracy of 92.7%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 36 WITH THRESHOLD OF 10

Background detected with accuracy of 91.2%

Original frame:



Background detected:



Error plotted with threshold of 12:



## BACKGROUND DETECTION NUMBER 37 WITH THRESHOLD OF 10

Background detected with accuracy of 91.95%

Original frame:



Background detected:



Error plotted with threshold of 12:

