Politecnico di Milano
AA 2018 - 2019

Computer Science and Engineering

IMAGE ANALYSIS AND COMPUTER VISION PROJECT

BACKGROUND SUBTRACTION

Results report:

Webcam: A14 - km. 154,9 - Galleria Case Bruciate esterna Sud

Threshold = 40

Ratio = 0.85

Andrea Mazzeo - 895579
Daniele Moltisanti - 898977

BACKGROUND DETECTION NUMBER 0 WITH THRESHOLD OF 10
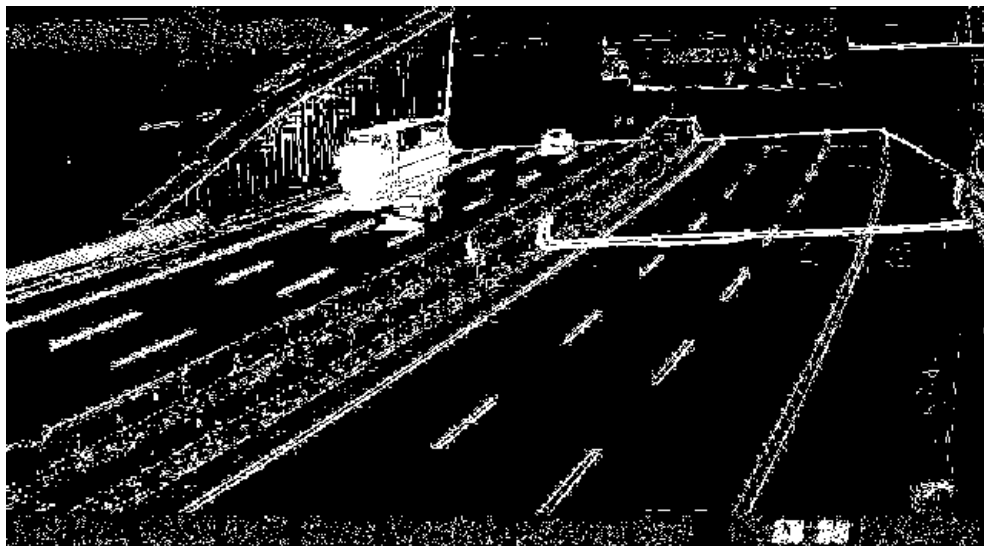
Background detected with accuracy of 86.99%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 1 WITH THRESHOLD OF 10
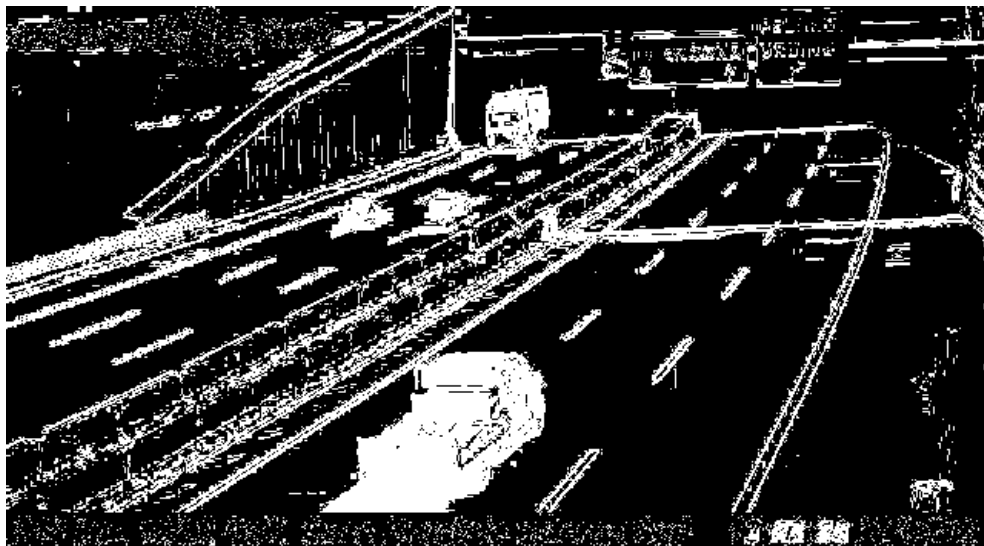
Background detected with accuracy of 78.55%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 2 WITH THRESHOLD OF 10
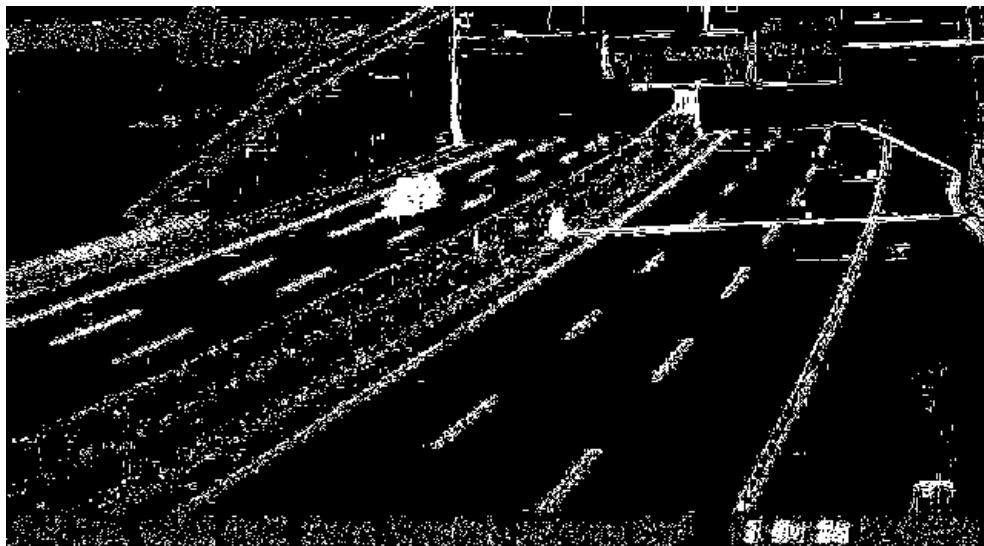
Background detected with accuracy of 89.05%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   14:03:36 27/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   13:39:18 27/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 3 WITH THRESHOLD OF 10

Background detected with accuracy of 77.14%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 4 WITH THRESHOLD OF 10
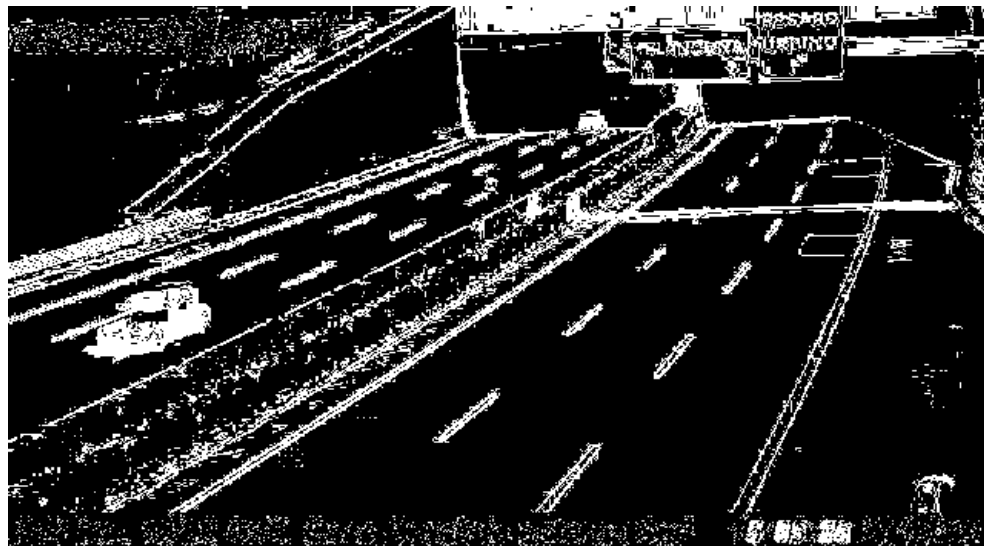
Background detected with accuracy of 83.27%
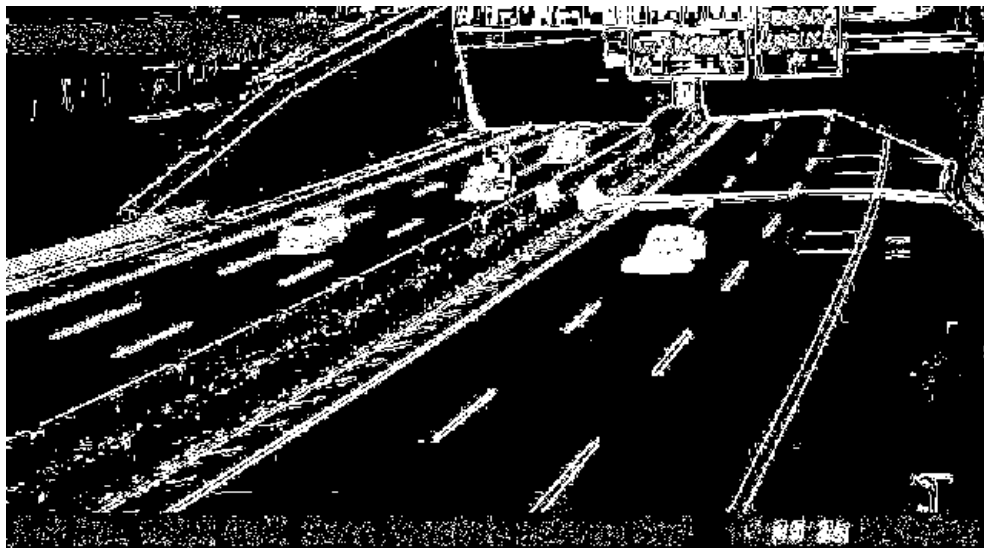
Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 5 WITH THRESHOLD OF 10

Background detected with accuracy of 86.06%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   15:55:24 27/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   15:39:18 27/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 6 WITH THRESHOLD OF 10

Background detected with accuracy of 81.75%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   16:35:36 27/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   16:39:48 27/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 7 WITH THRESHOLD OF 10

Background detected with accuracy of 88.91%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   17:11:36 27/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   16:05:48 27/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 8 WITH THRESHOLD OF 10

Background detected with accuracy of 88.48%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 9 WITH THRESHOLD OF 10
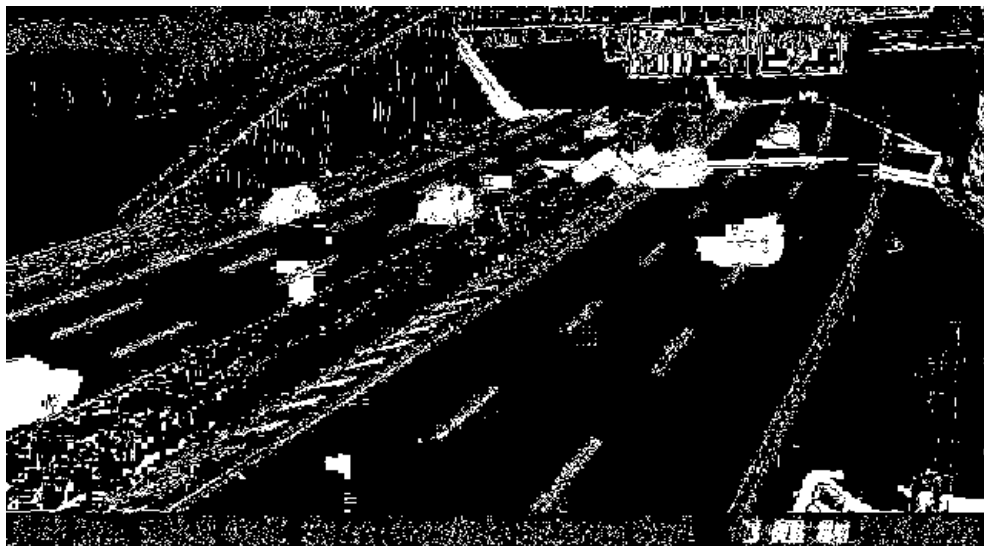
Background detected with accuracy of 84.1%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 10 WITH THRESHOLD OF 10
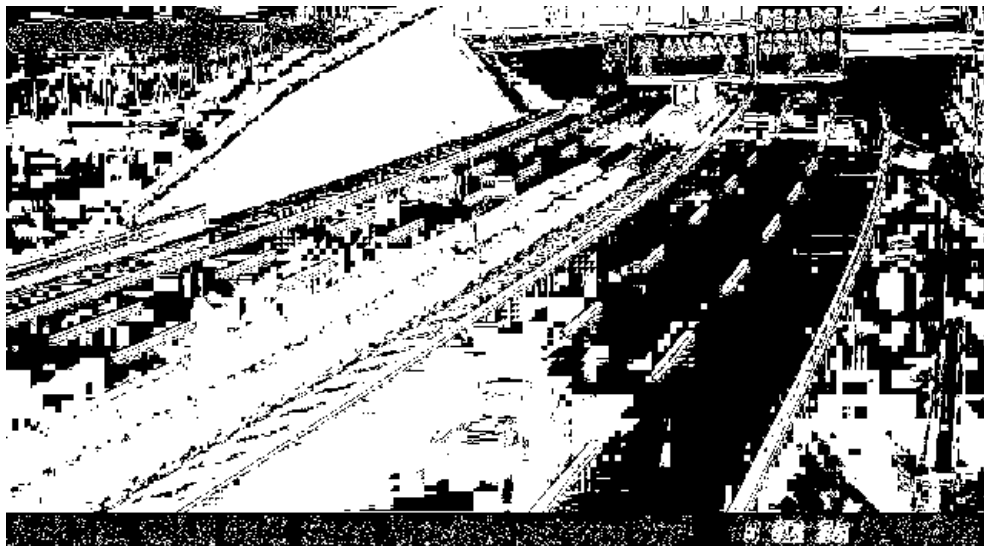
Background detected with accuracy of 35.71%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 11 WITH THRESHOLD OF 10
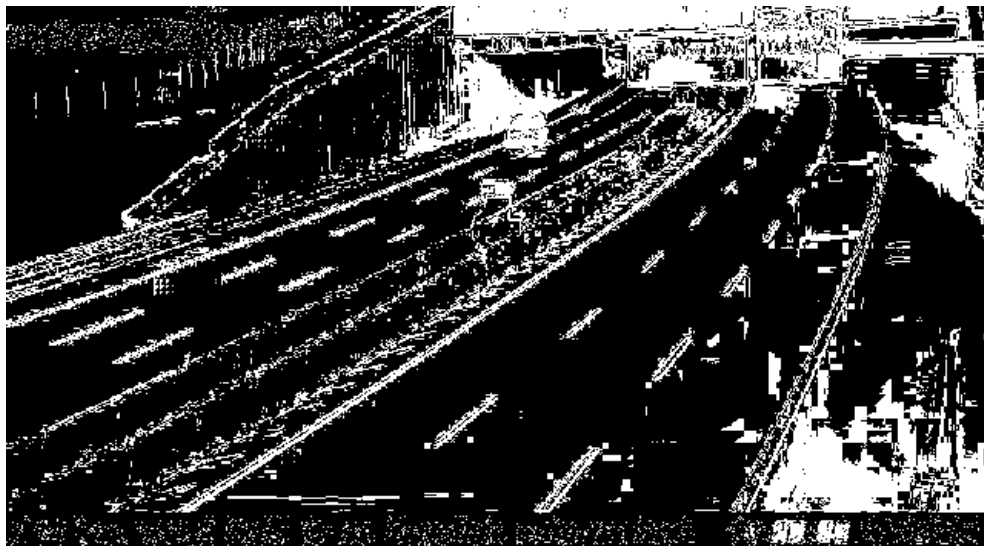
Background detected with accuracy of 75.01%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 12 WITH THRESHOLD OF 10
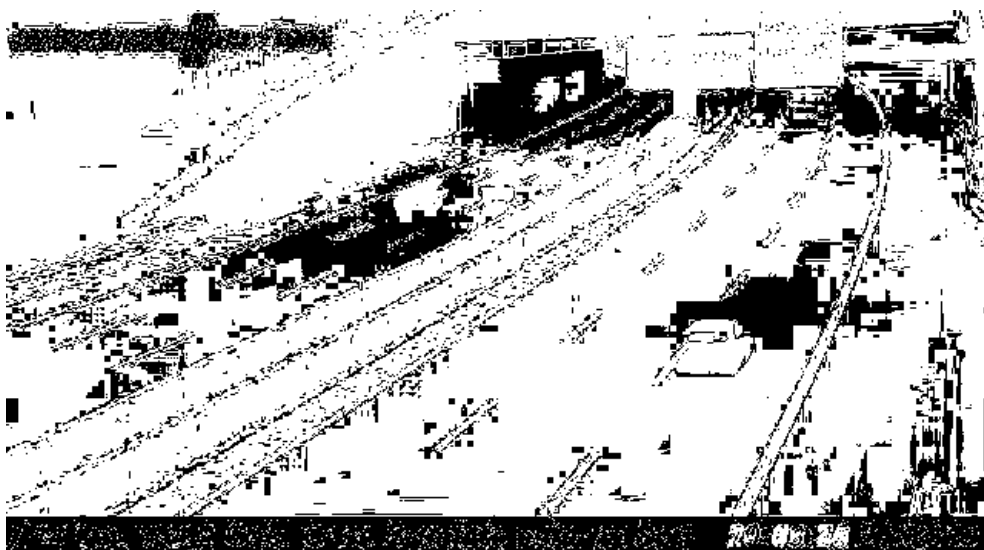
Background detected with accuracy of 19.23%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 13 WITH THRESHOLD OF 10

Background detected with accuracy of 32.78%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   20:55:13 27/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   20:39:48 27/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 14 WITH THRESHOLD OF 10
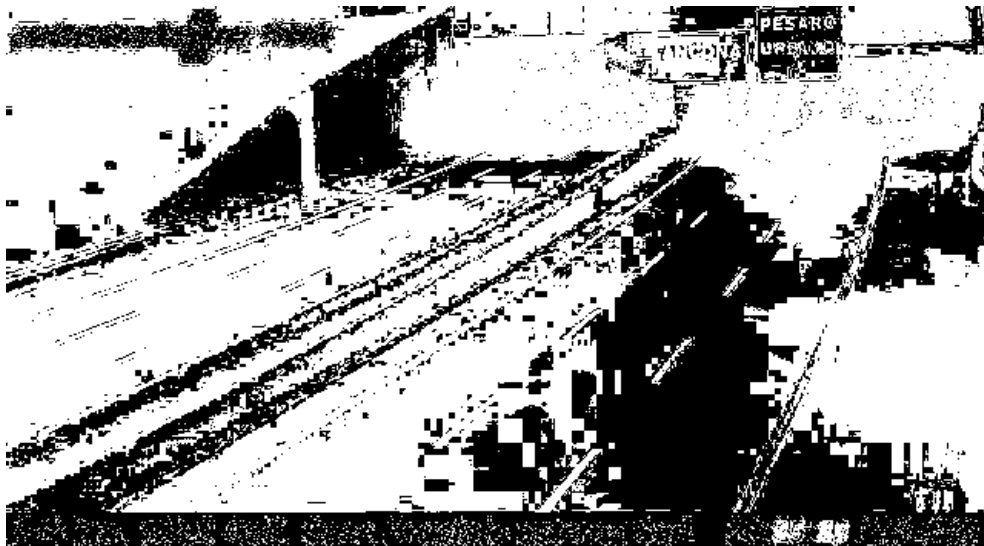
Background detected with accuracy of 63.99%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 15 WITH THRESHOLD OF 10

Background detected with accuracy of 55.51%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   22:05:36 27/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   21:05:18 27/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 16 WITH THRESHOLD OF 10
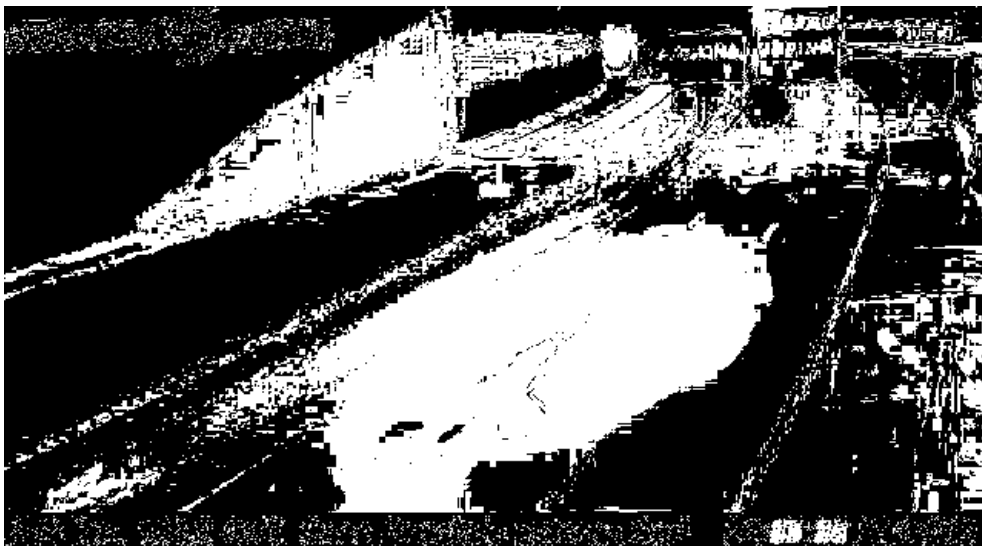
Background detected with accuracy of 59.21%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 17 WITH THRESHOLD OF 10

Background detected with accuracy of 83.49%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 18 WITH THRESHOLD OF 10

Background detected with accuracy of 24.49%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 19 WITH THRESHOLD OF 10

Background detected with accuracy of 65.72%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 20 WITH THRESHOLD OF 10
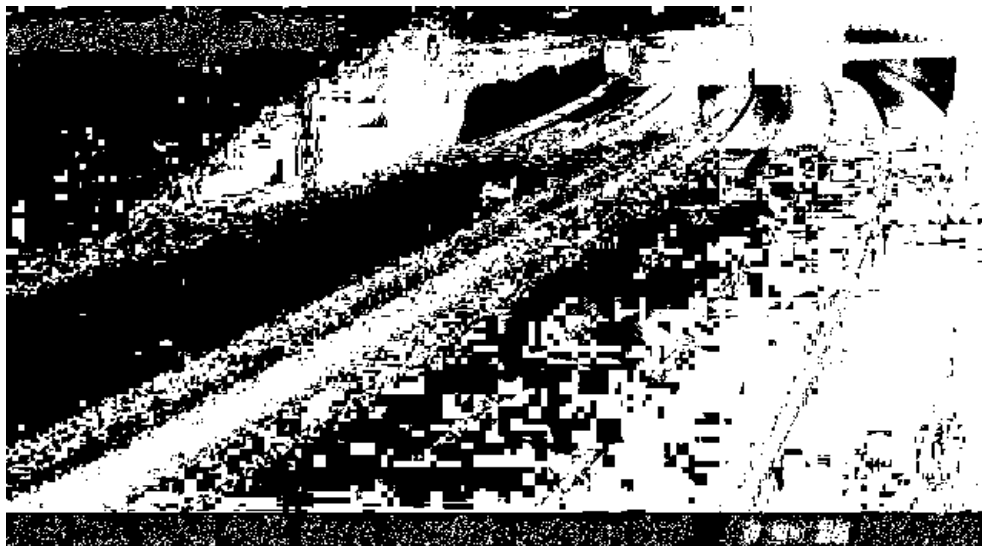
Background detected with accuracy of 47.51%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 21 WITH THRESHOLD OF 10
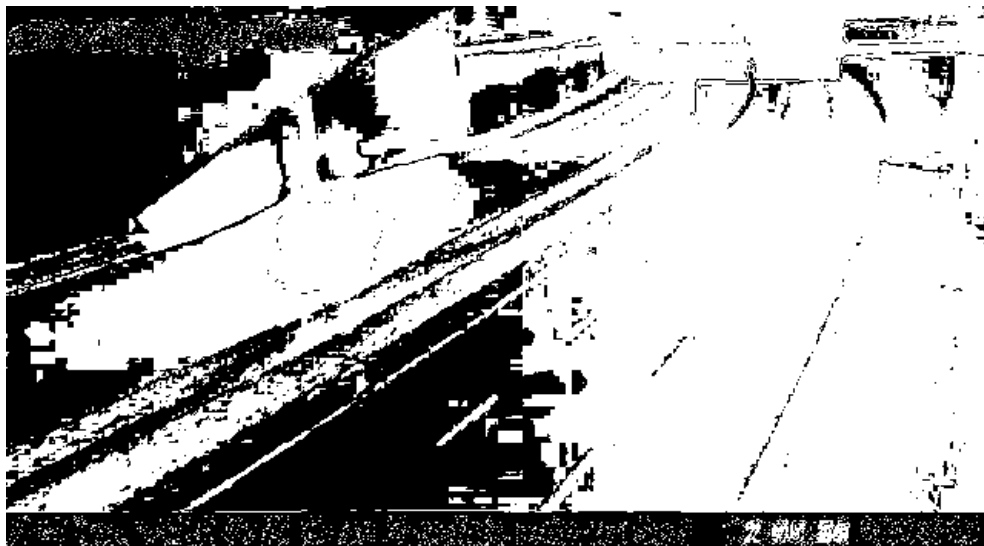
Background detected with accuracy of 32.82%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 22 WITH THRESHOLD OF 10

Background detected with accuracy of 77.38%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   02:45:36 28/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   02:39:28 28/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 23 WITH THRESHOLD OF 10

Background detected with accuracy of 84.36%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 24 WITH THRESHOLD OF 10
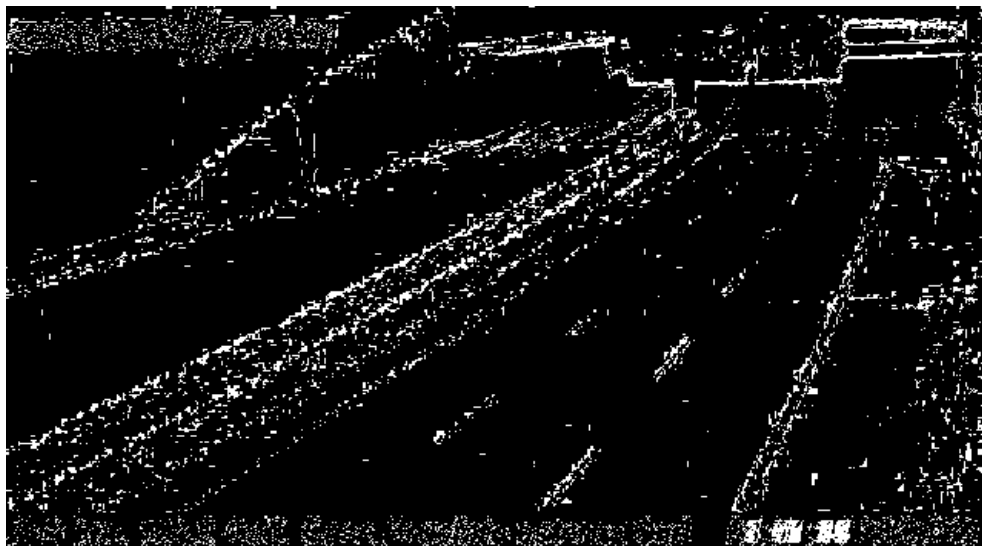
Background detected with accuracy of 91.47%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   04:07:14 28/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   03:51:18 28/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 25 WITH THRESHOLD OF 10

Background detected with accuracy of 73.18%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 26 WITH THRESHOLD OF 10
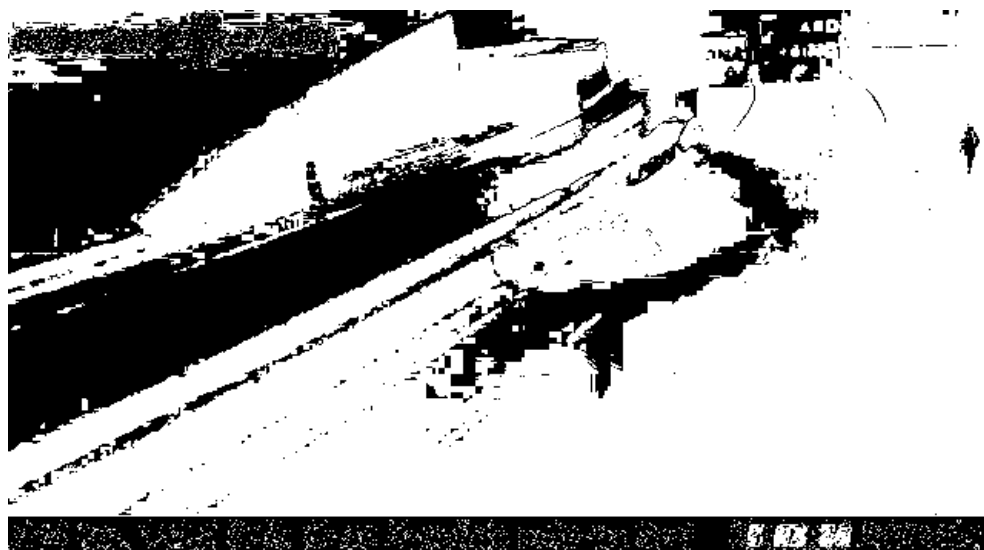
Background detected with accuracy of 30.37%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   05:23:36 28/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   05:03:48 28/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 27 WITH THRESHOLD OF 10
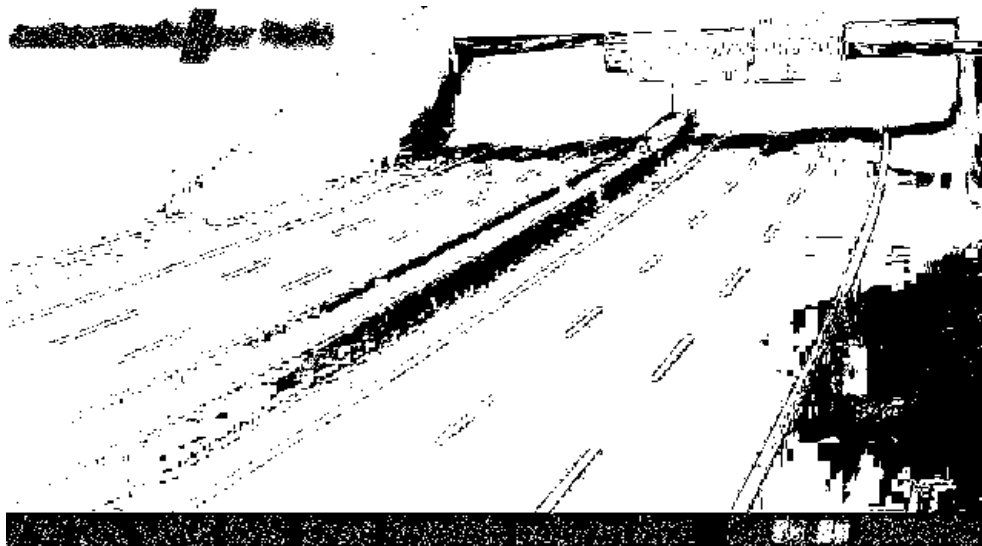
Background detected with accuracy of 19.97%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 28 WITH THRESHOLD OF 10
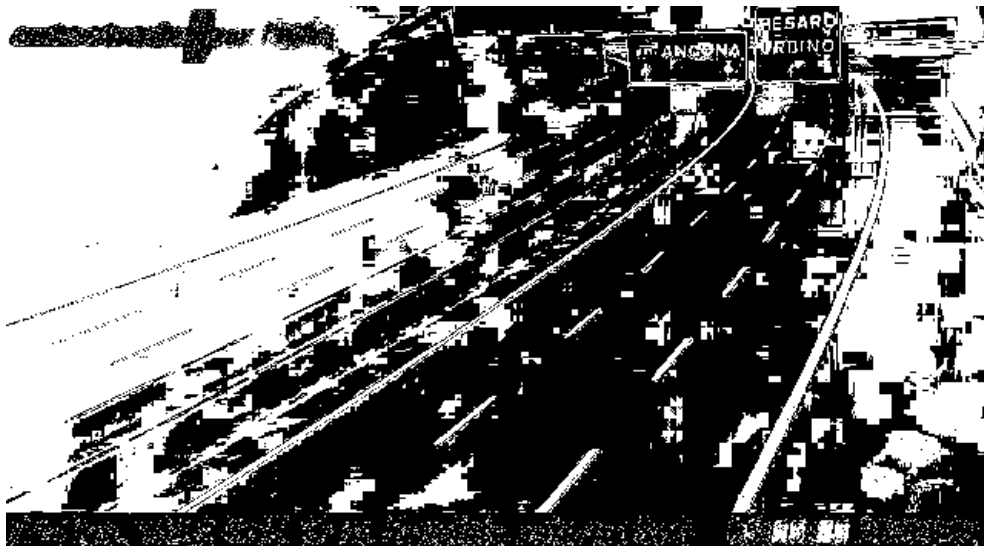
Background detected with accuracy of 49.61%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 29 WITH THRESHOLD OF 10

Background detected with accuracy of 66.6%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   07:09:36 28/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   06:59:18 28/04/19

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 30 WITH THRESHOLD OF 10
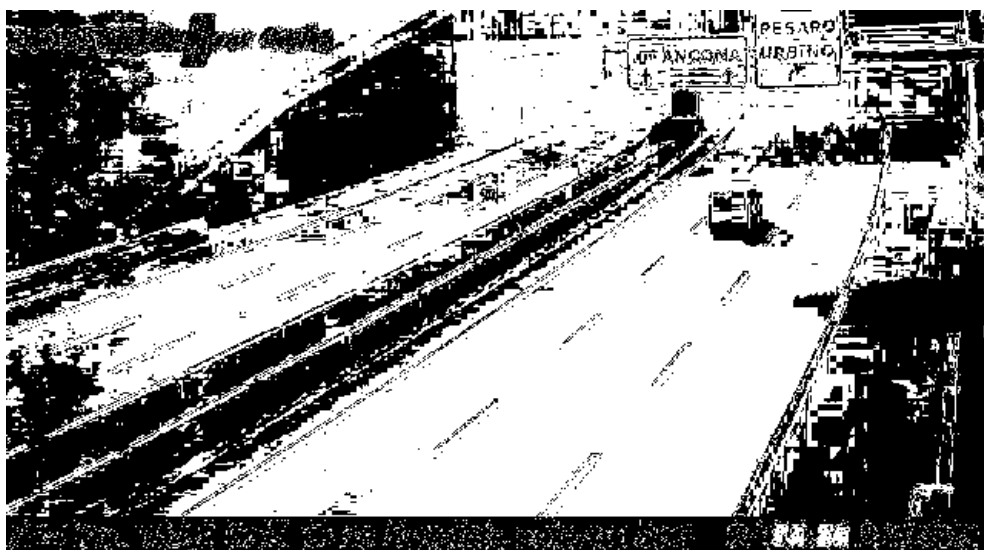
Background detected with accuracy of 41.33%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 31 WITH THRESHOLD OF 10

Background detected with accuracy of 56.86%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 32 WITH THRESHOLD OF 10

Background detected with accuracy of 69.87%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 33 WITH THRESHOLD OF 10
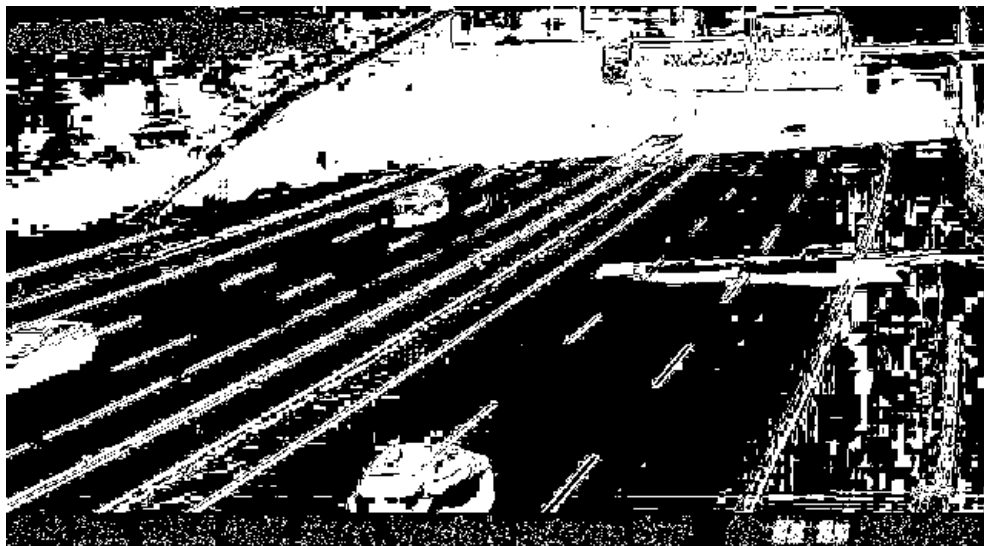
Background detected with accuracy of 59.06%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 34 WITH THRESHOLD OF 10
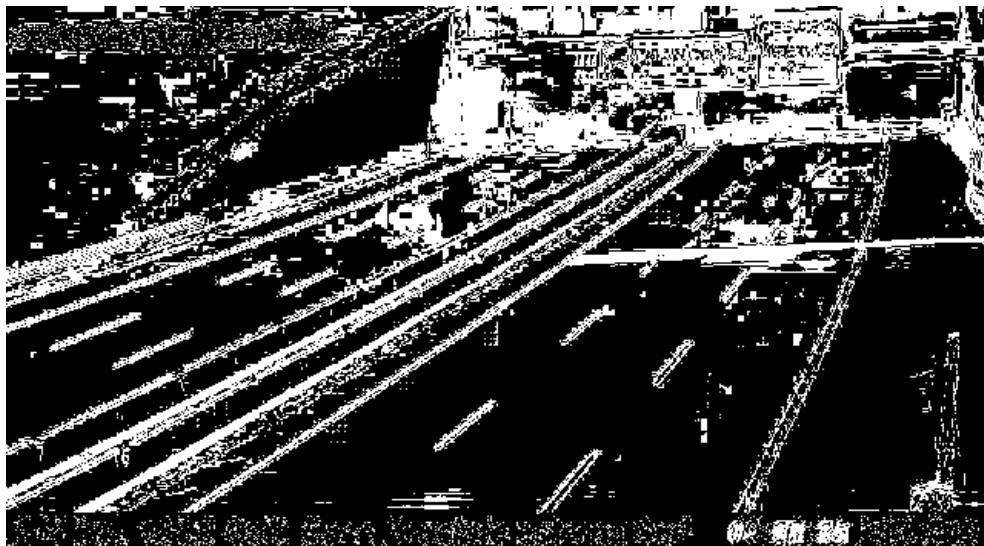
Background detected with accuracy of 68.42%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 35 WITH THRESHOLD OF 10
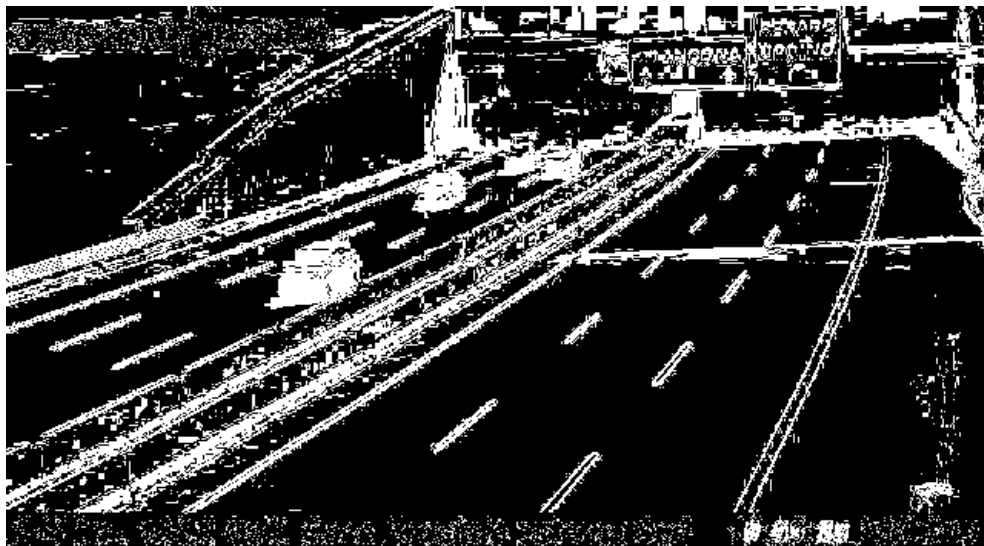
Background detected with accuracy of 75.84%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 36 WITH THRESHOLD OF 10
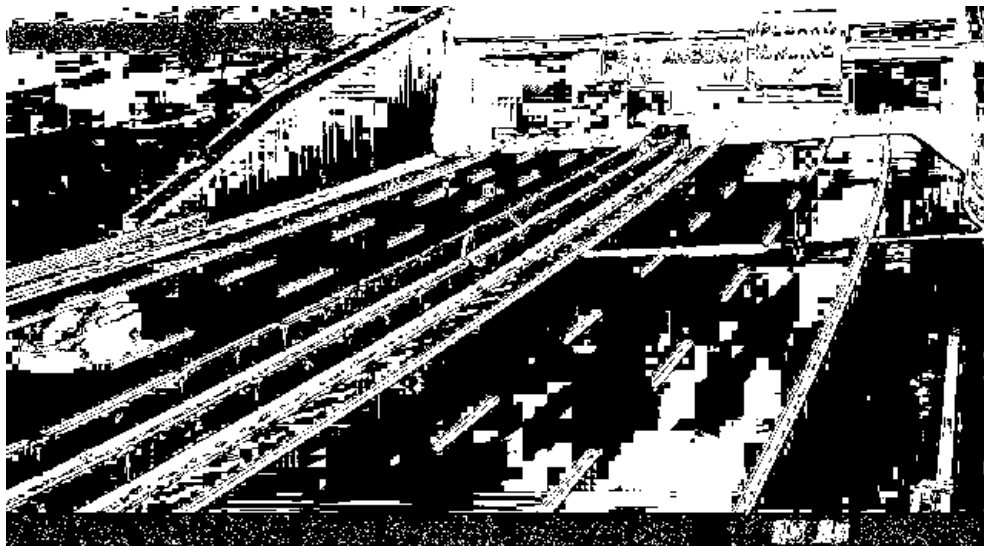
Background detected with accuracy of 53.05%

Original frame:

Background detected:

Error plotted with threshold of 12:

BACKGROUND DETECTION NUMBER 37 WITH THRESHOLD OF 10

Background detected with accuracy of 31.83%

Original frame:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   12:19:36 28/04/19

Background detected:

A14 km. 154,9 Gall. Case Bruciate esterna Sud   12:09:18 28/04/19

Error plotted with threshold of 12: