Result Plots for all Data Series

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1 Introduction

This document lists all result plots for the experiments conducted in the afore mentioned publication.

Three algorithms are compared: Log Gradients Segmentation, Entropy Filter Segmentation and the BCAnalyzer Tool. The algorithms are applied on the dataset comprising of 10 image sequences. Each sequence is identified with an alphanumerical code which represents the coordinates of the location of the well on microplate: A2, A3, A8, A12, B7, B9, B10, C1, C2 and C3. Each sequence contains 9 images acquired with 4× magnification and 9 images with 10× magnification. For more details on the data see the original manuscript.

In the following section the results of each algorithm applied on a image sequence are collected in one figure, where in the left column the results for the 4× and in the right column the results for the 10× magnification are shown. Each row represents a different compression rate: C (low compression rate), B (medium compression rate) and A (high compression rate).

2 Results

2.1 Algorithm: Log Gradients Segmentation

2.1.1 Data series A2

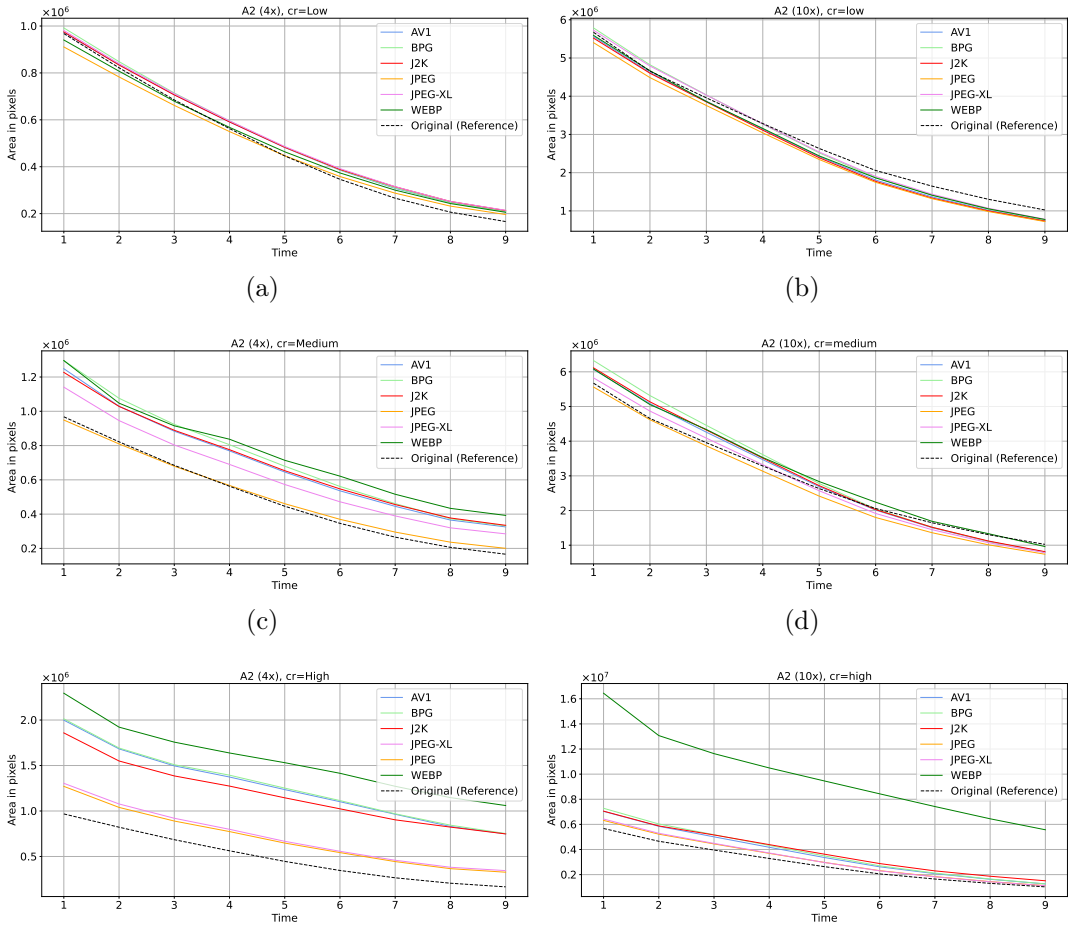

Figure 1: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A2 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.2 Data series A3

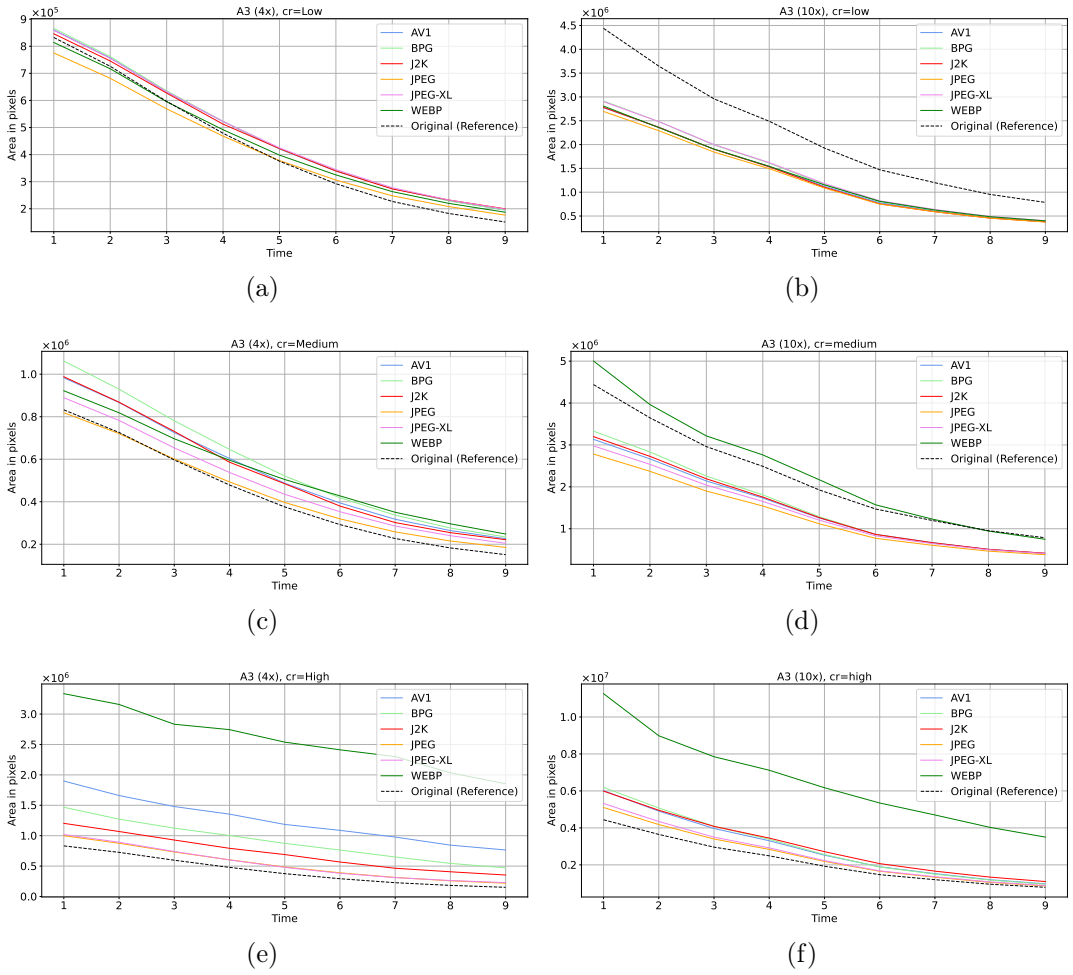

Figure 2: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A3 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.3 Data series A8

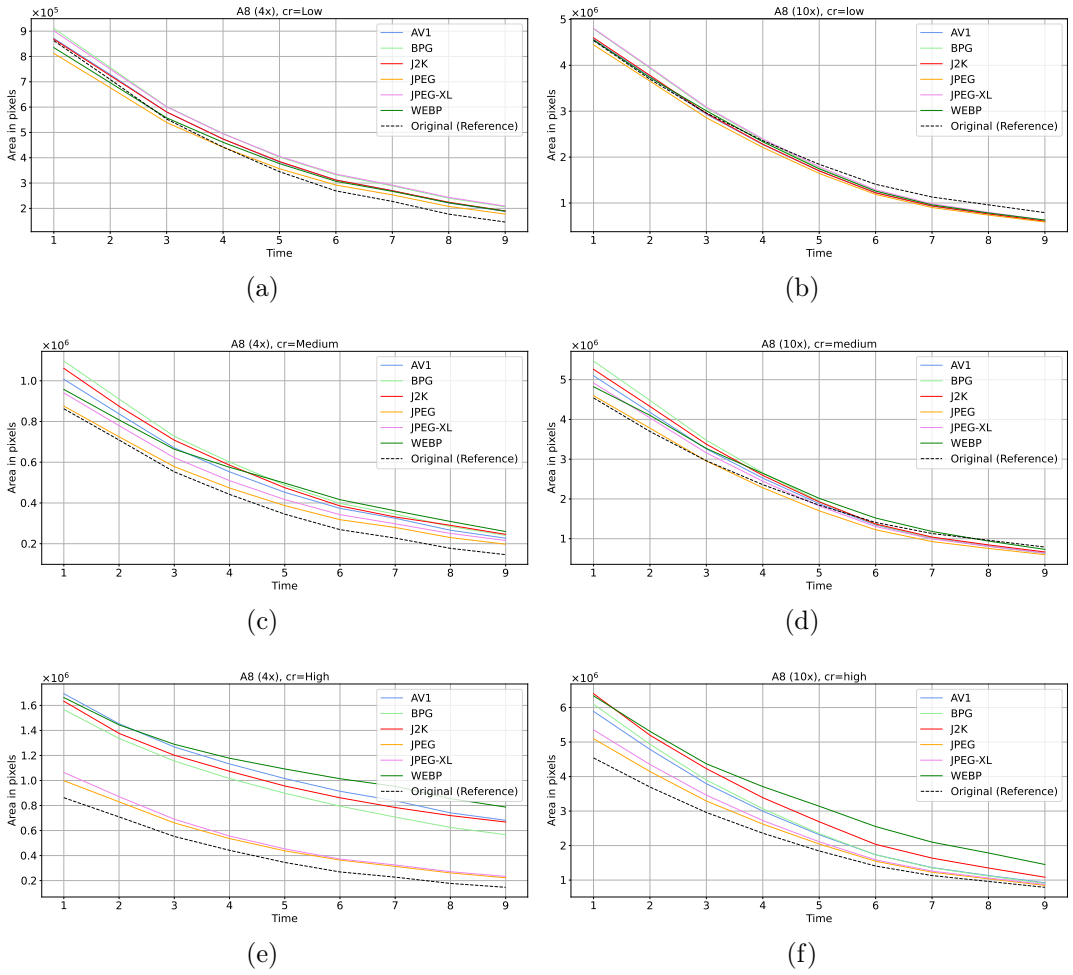

Figure 3: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A8 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.4 Data series A12

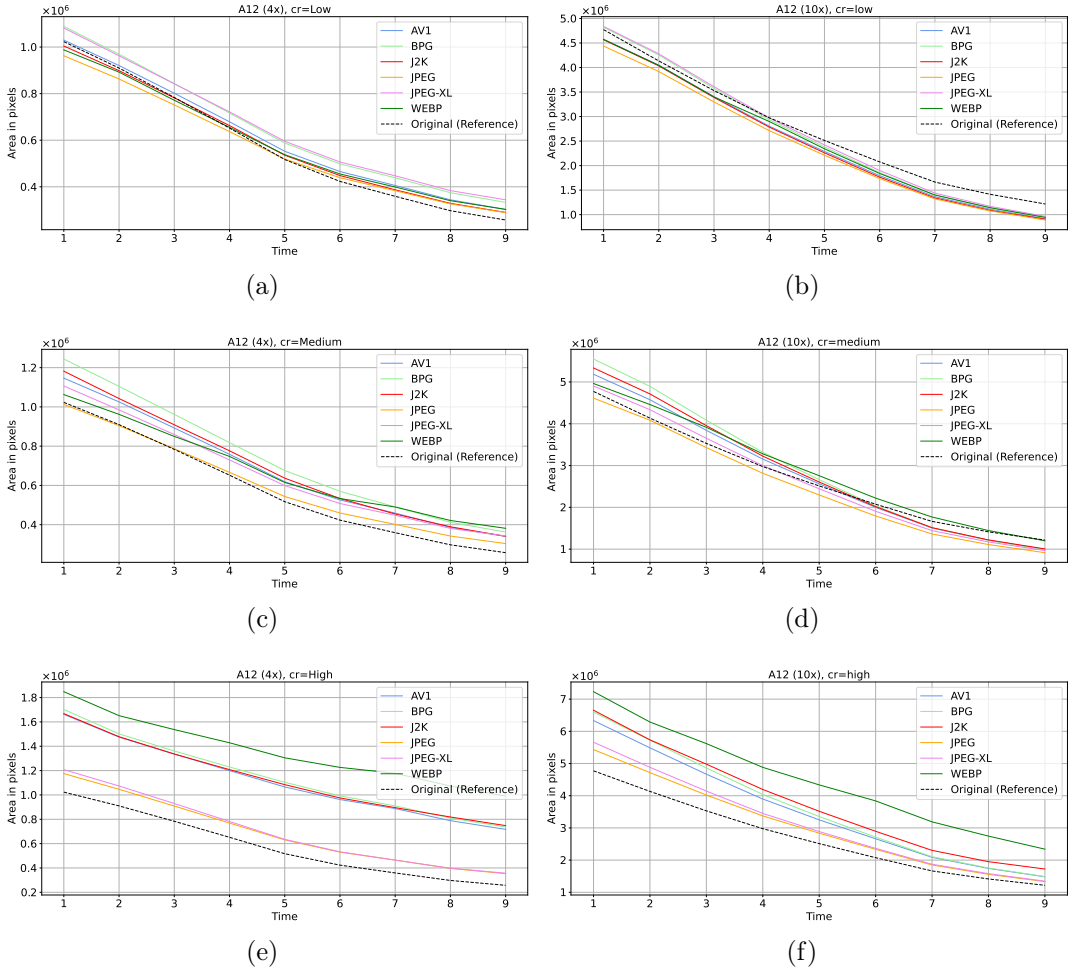

Figure 4: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A12 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.5 Data series B7

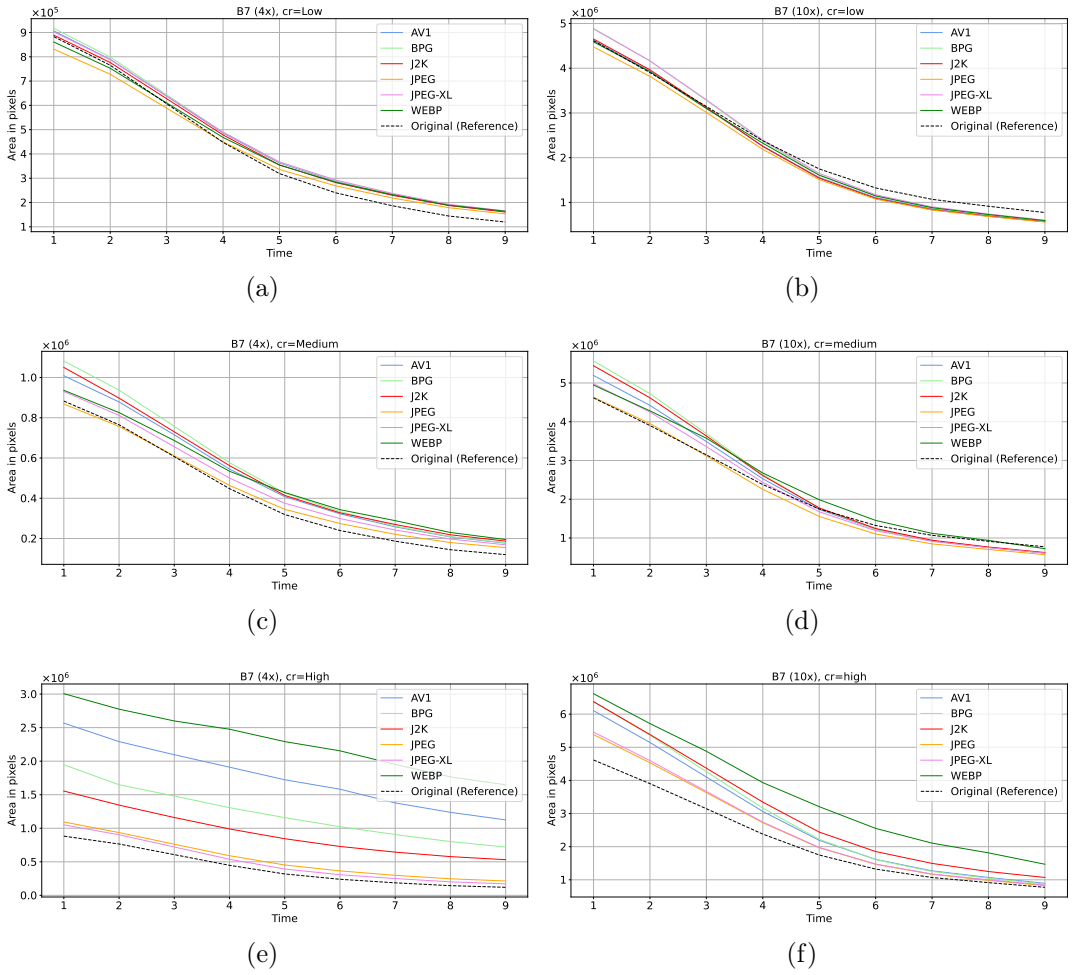

Figure 5: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B7 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.6 Data series B9

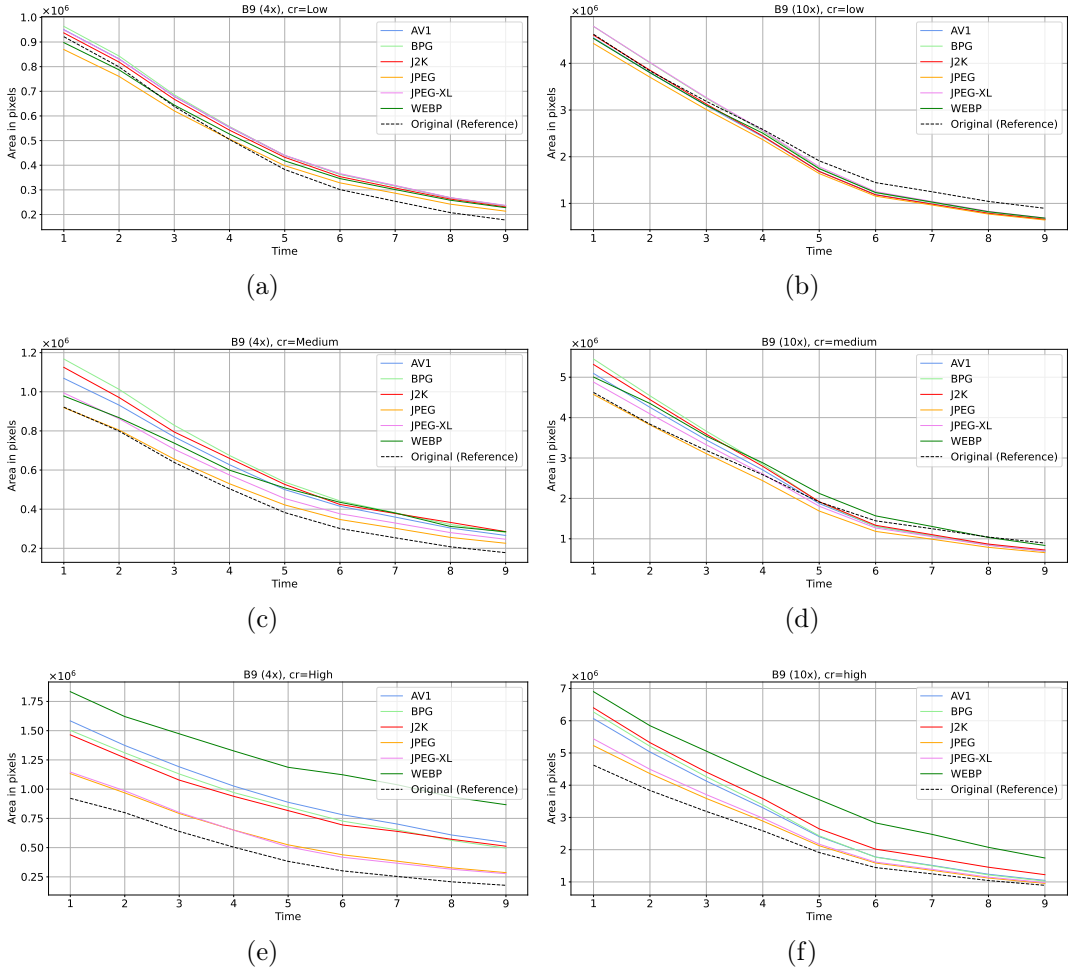

Figure 6: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B9 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.7 Data series B10

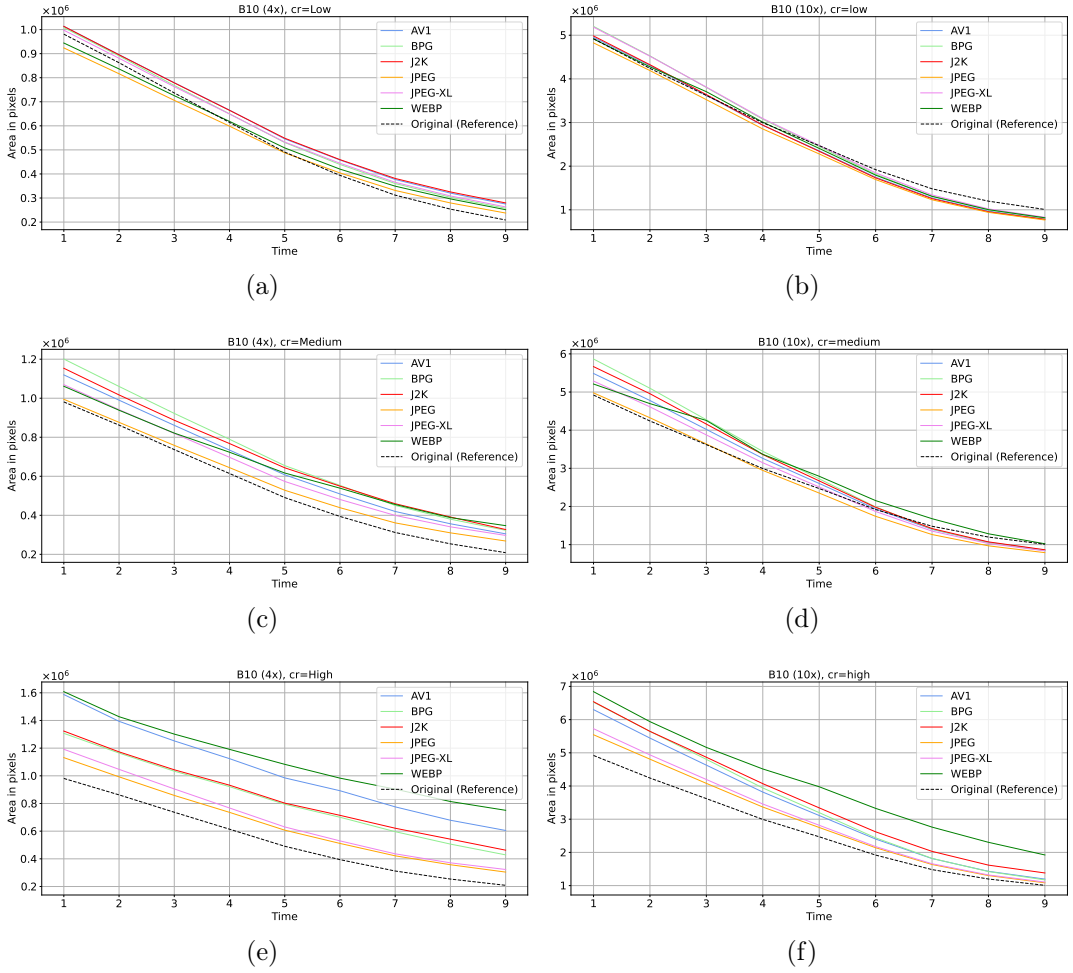

Figure 7: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B10 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.8 Data series C1

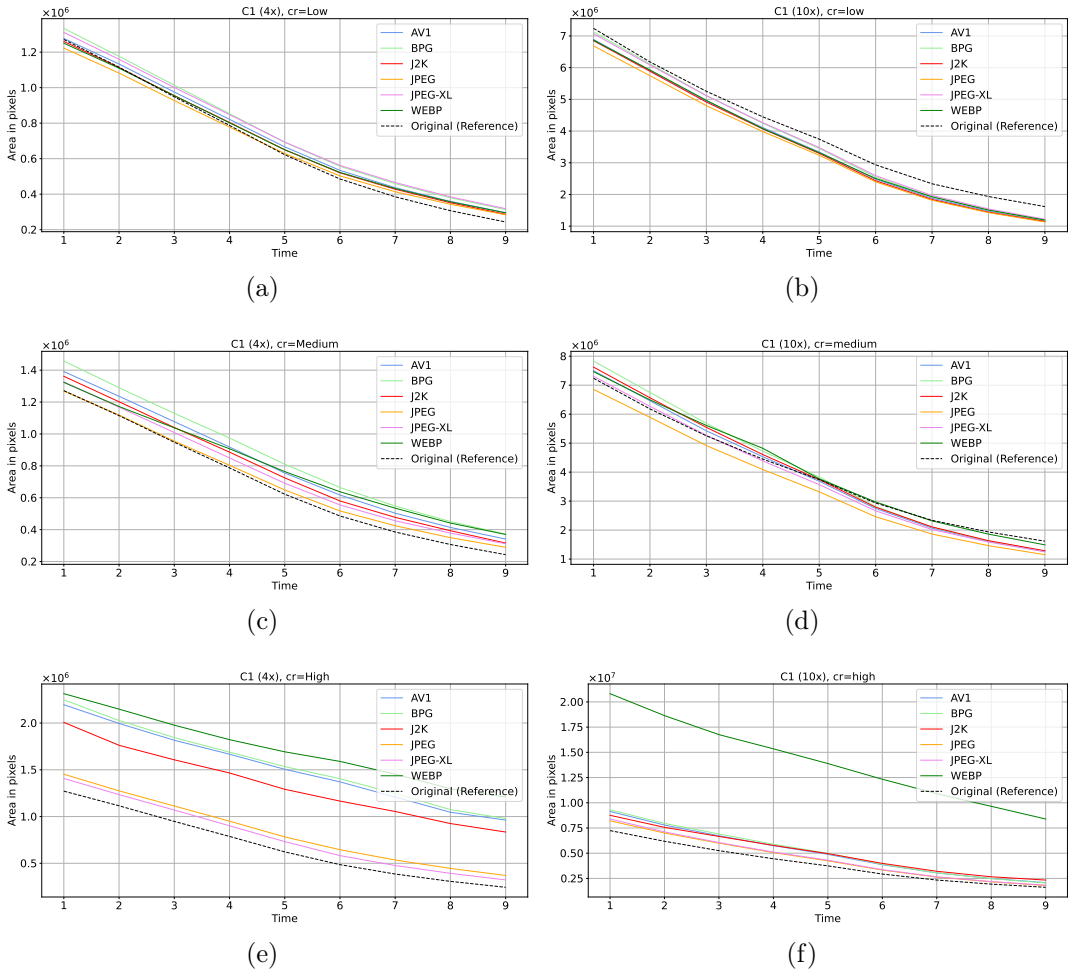

Figure 8: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C1 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.9 Data series C2

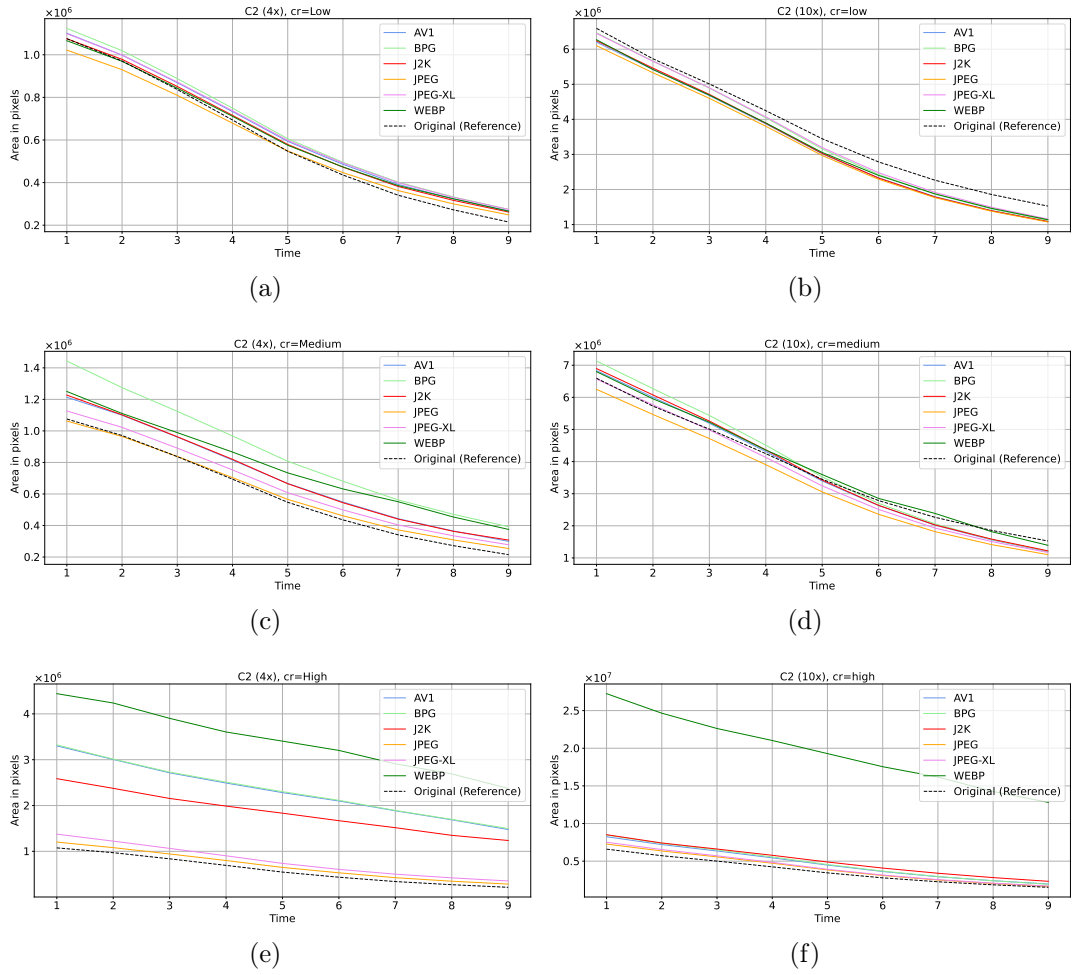

Figure 9: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C2 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.1.10 Data series C3

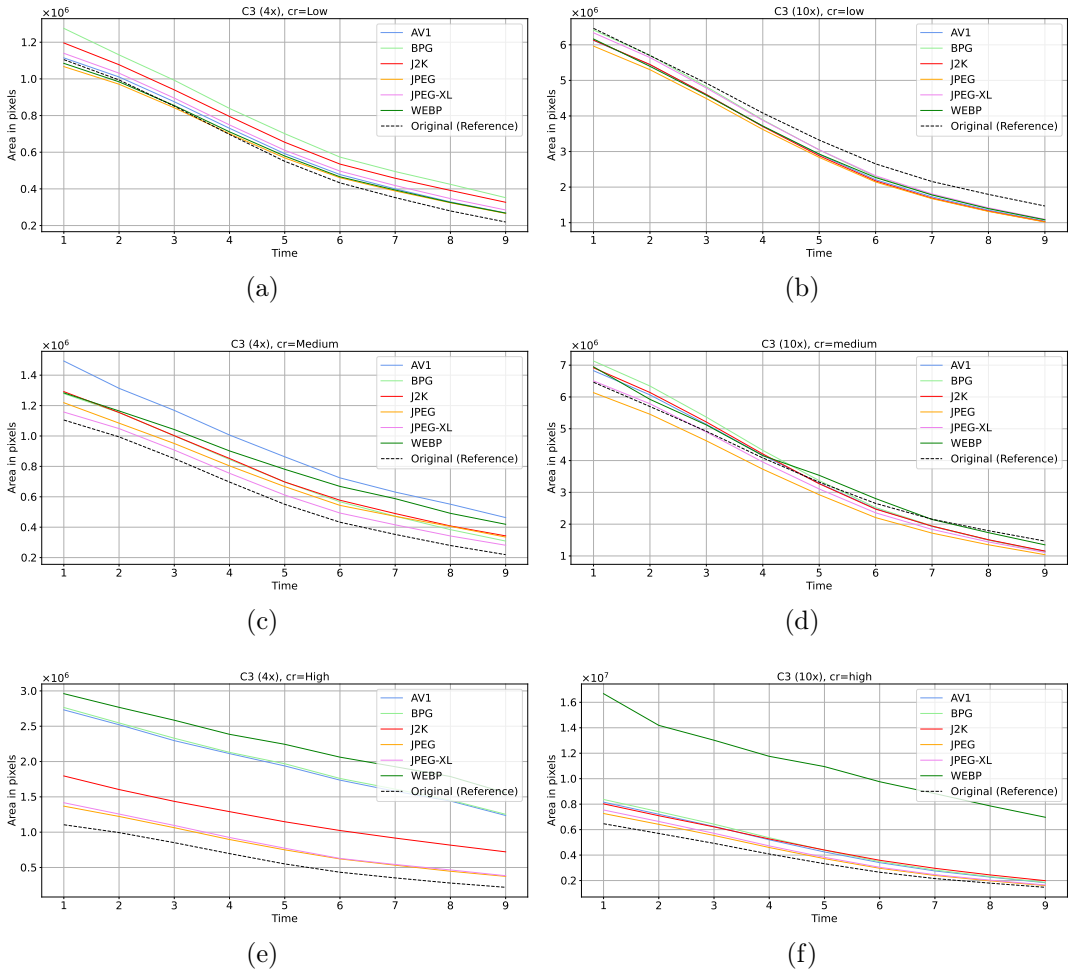

Figure 10: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C3 using the Log Gradients Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2 Algorithm: Entropy Filter Segmentation

2.2.1 Data series A2

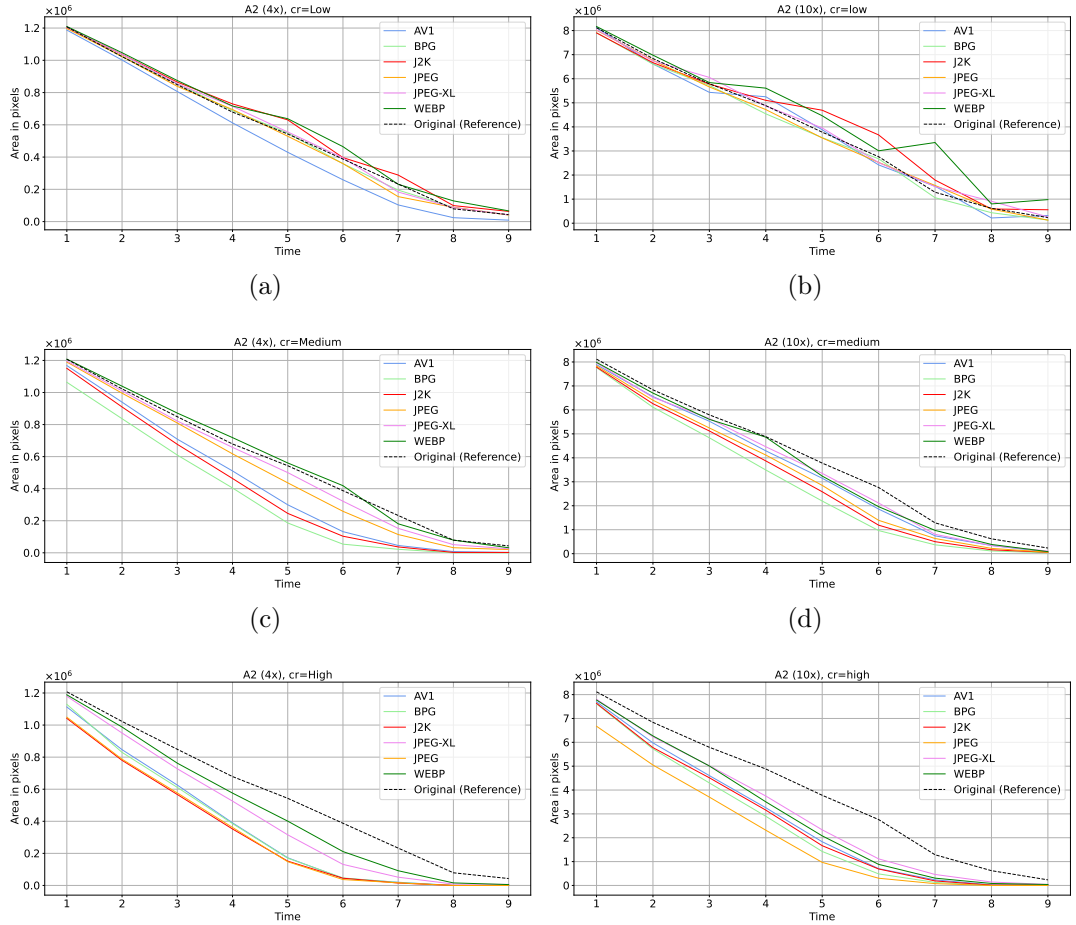

Figure 11: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A2 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.2 Data series A3

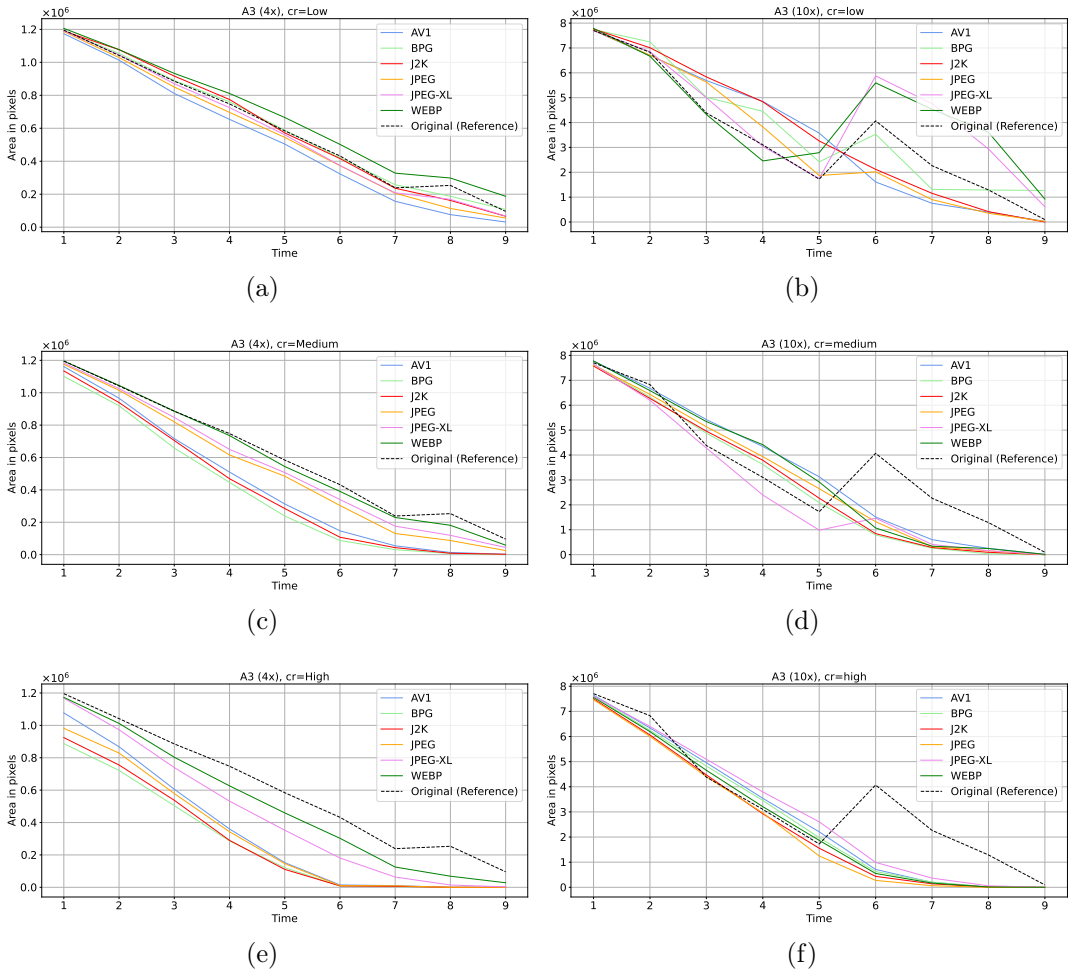

Figure 12: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A3 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.3 Data series A8

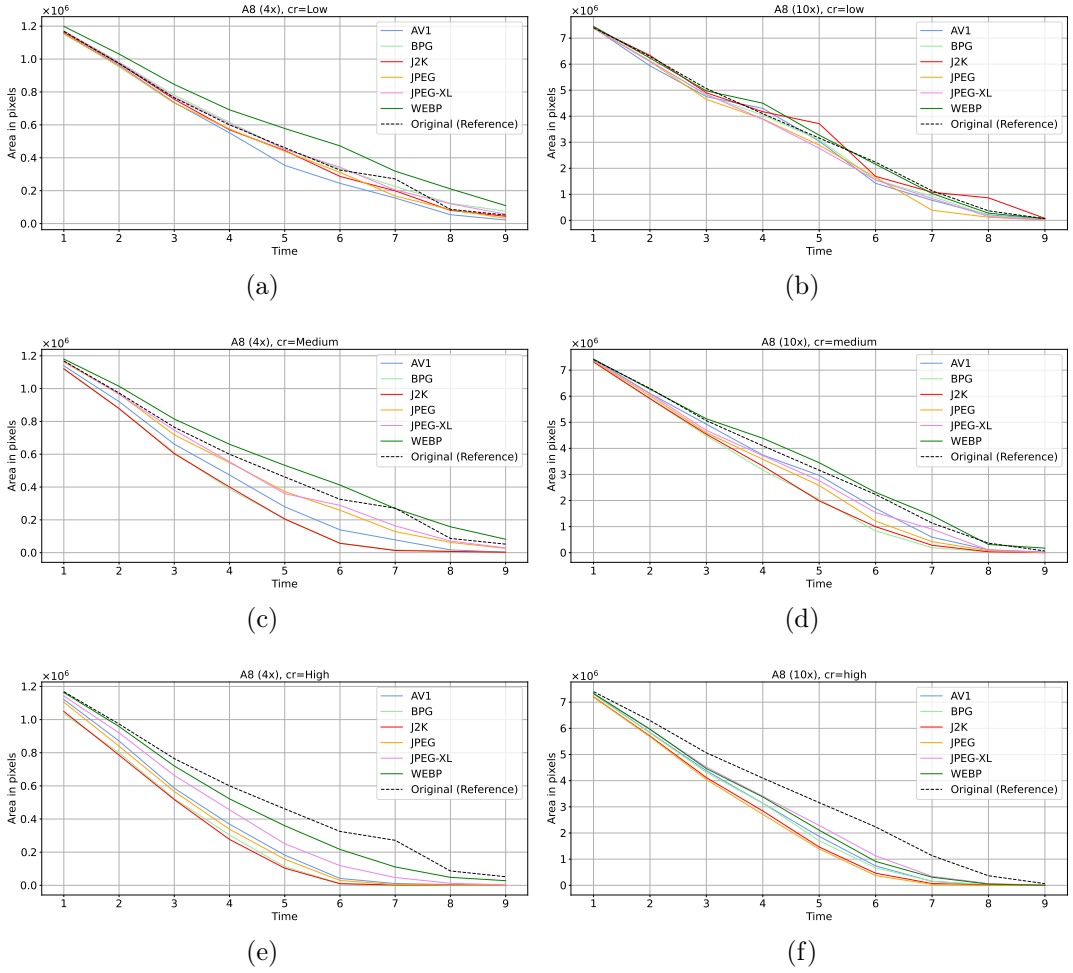

Figure 13: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A8 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.4 Data series A12

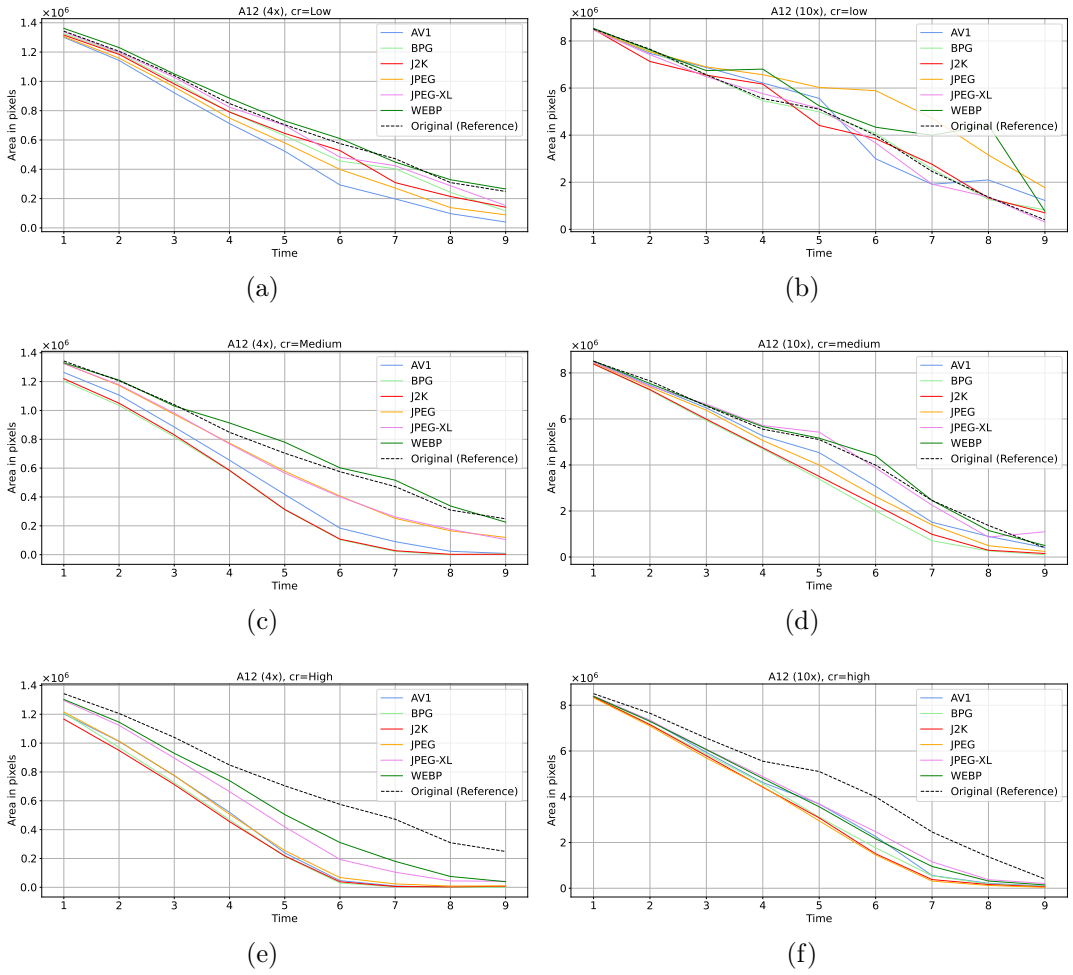

Figure 14: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A12 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.5 Data series B7

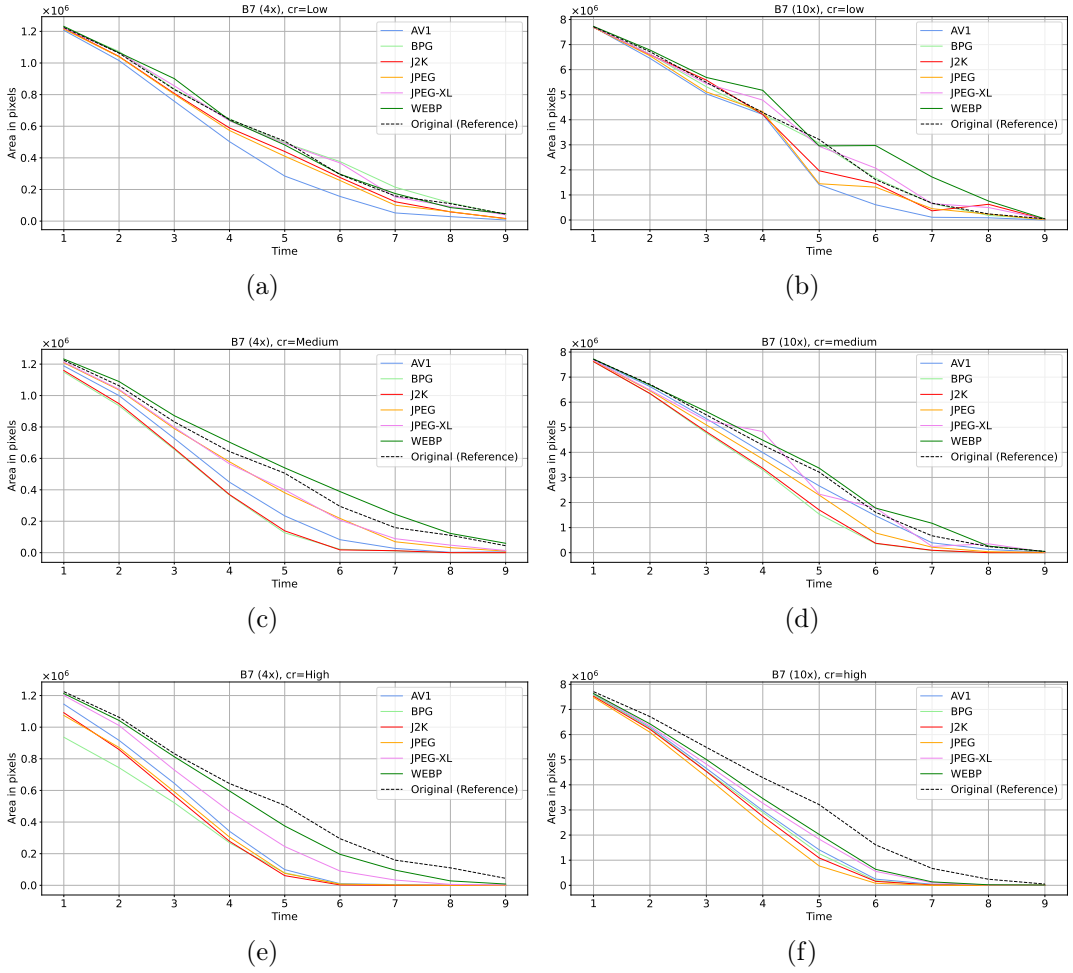

Figure 15: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B7 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.6 Data series B9

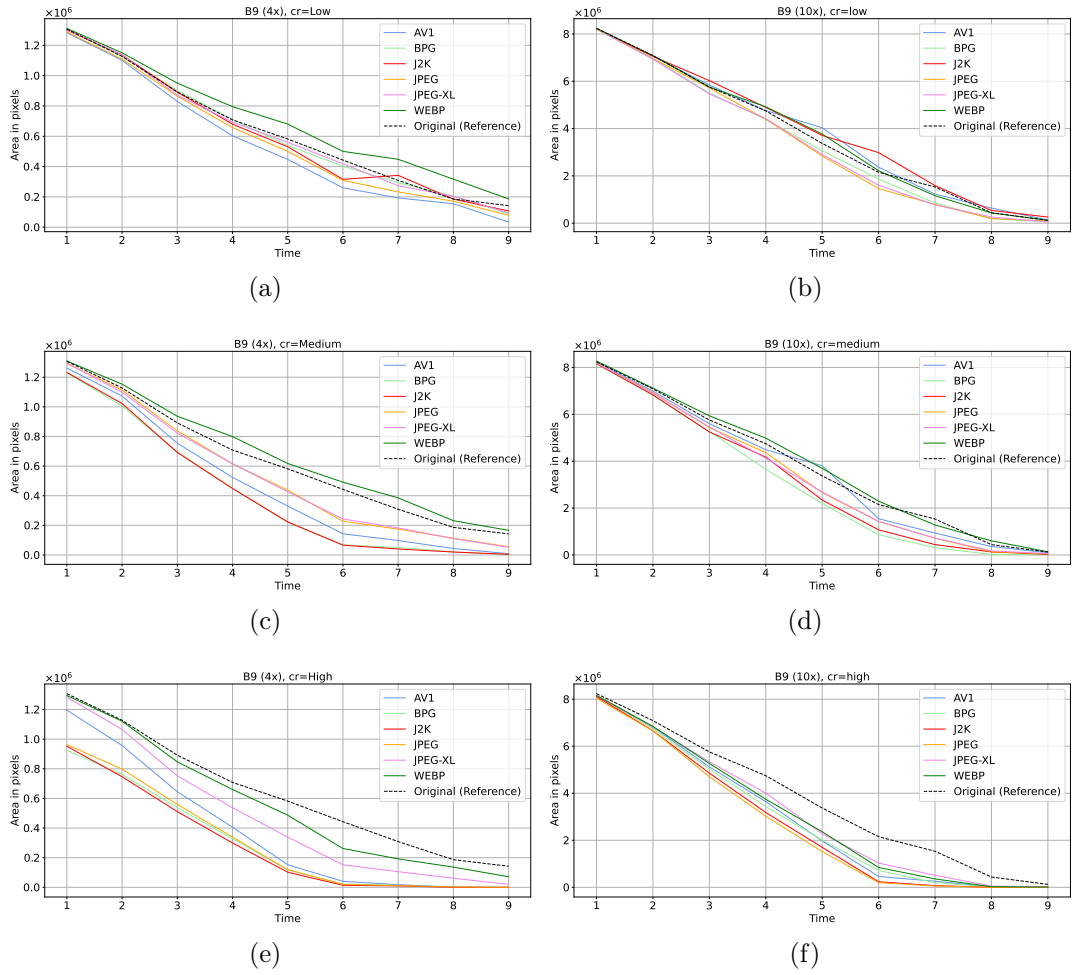

Figure 16: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B9 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.7 Data series B10

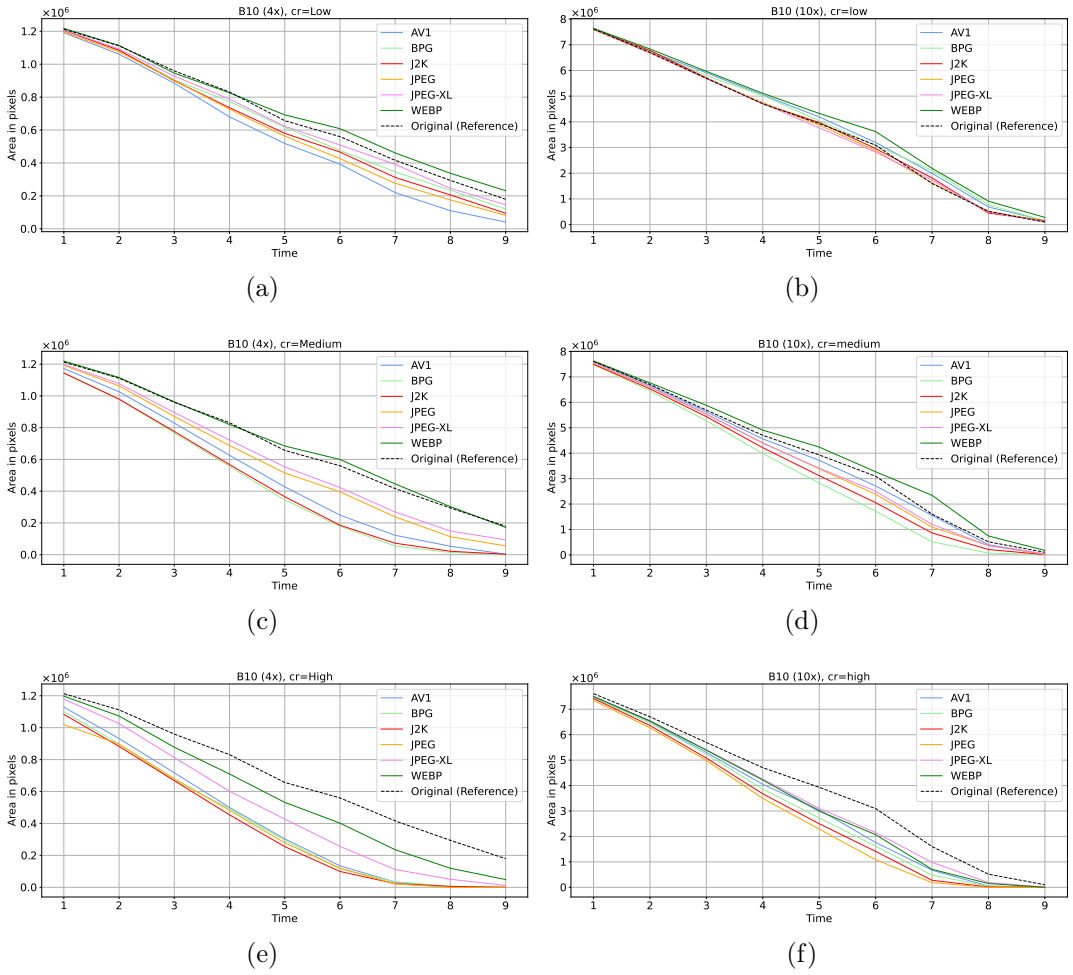

Figure 17: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B10 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.8 Data series C1

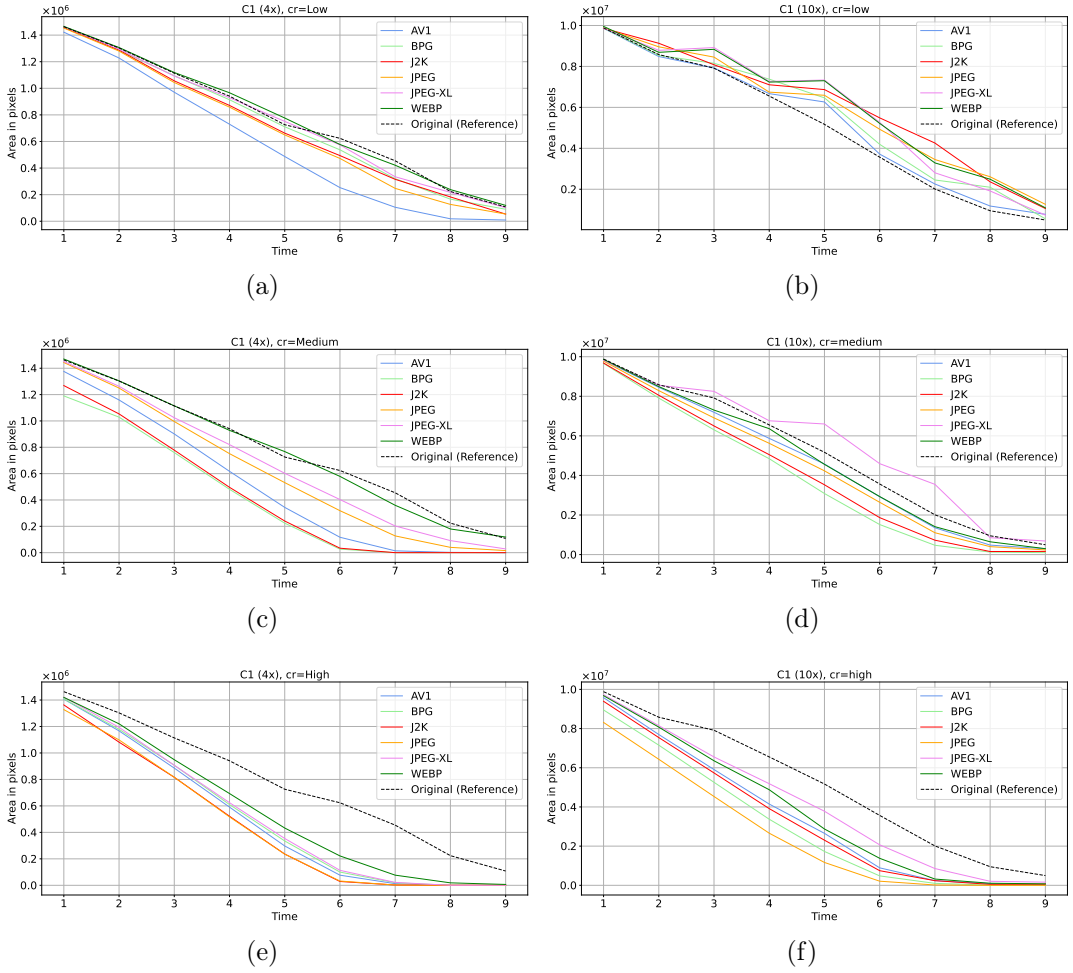

Figure 18: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C1 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.9 Data series C2

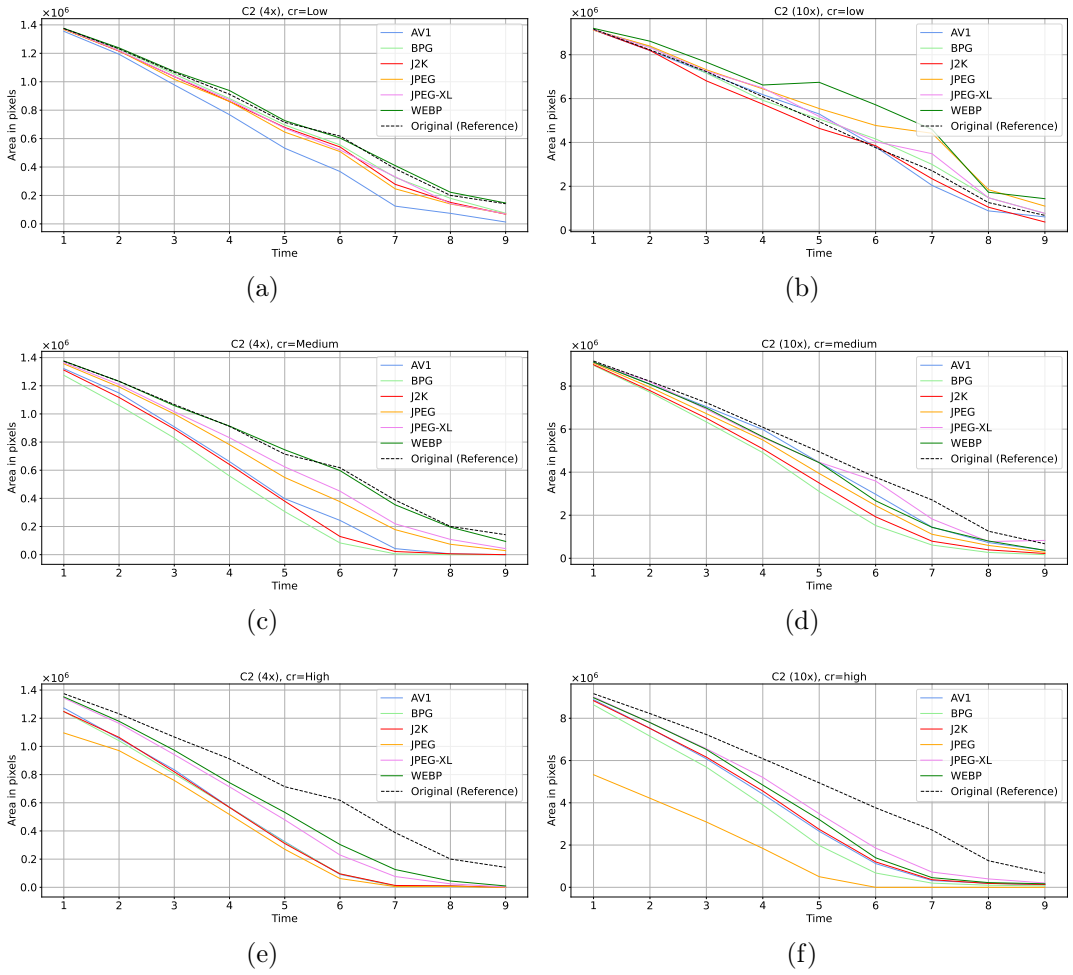

Figure 19: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C2 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.2.10 Data series C3

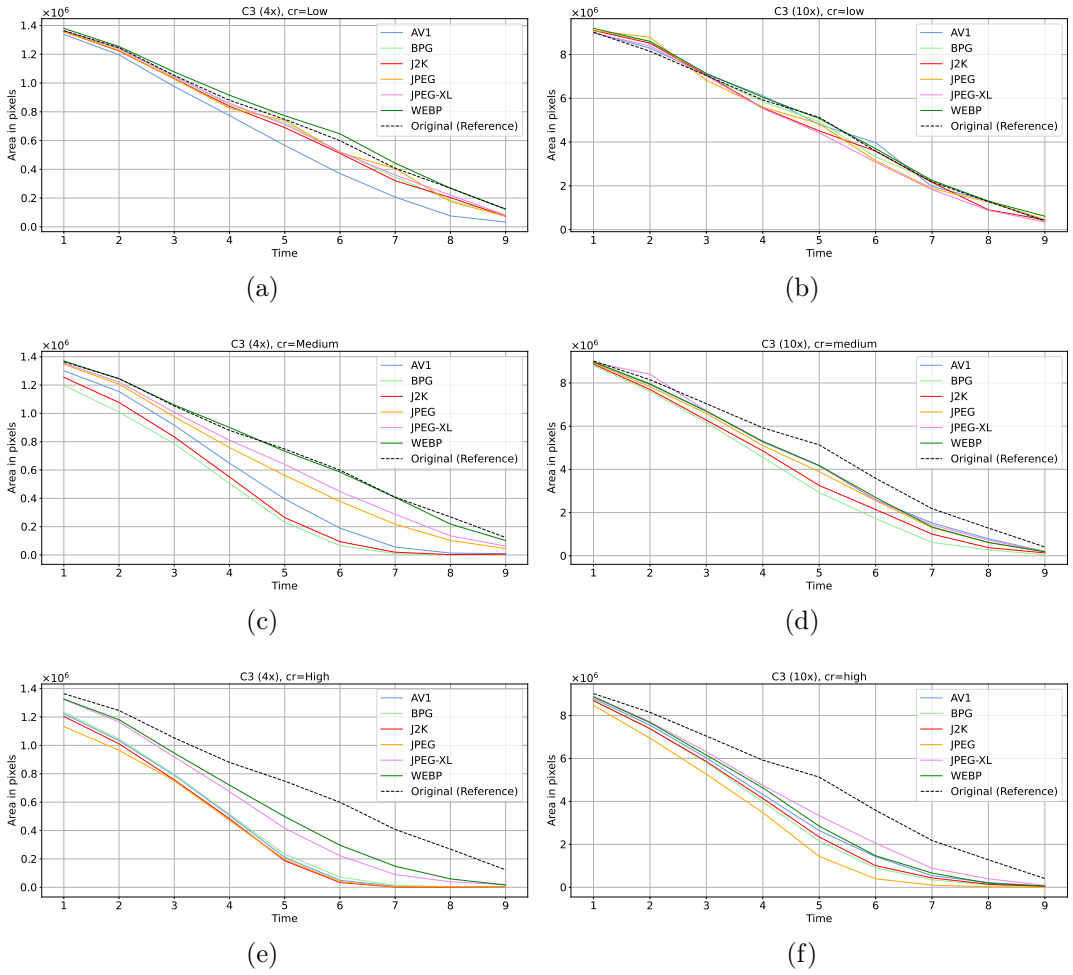

Figure 20: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C3 using the Entropy Filter Segmentation. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3 Algorithm: BCAnalyzer Tool

2.3.1 Data series A2

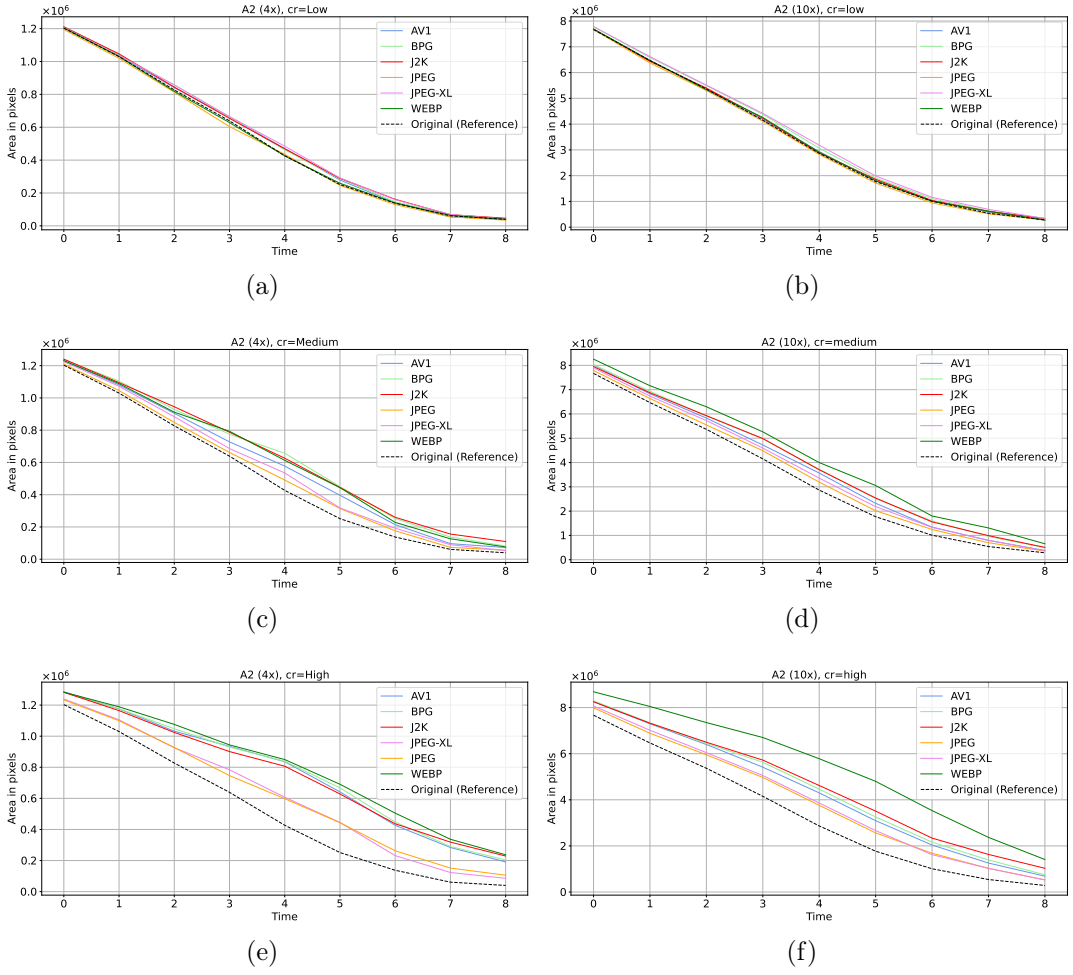

Figure 21: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A2 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.2 Data series A3

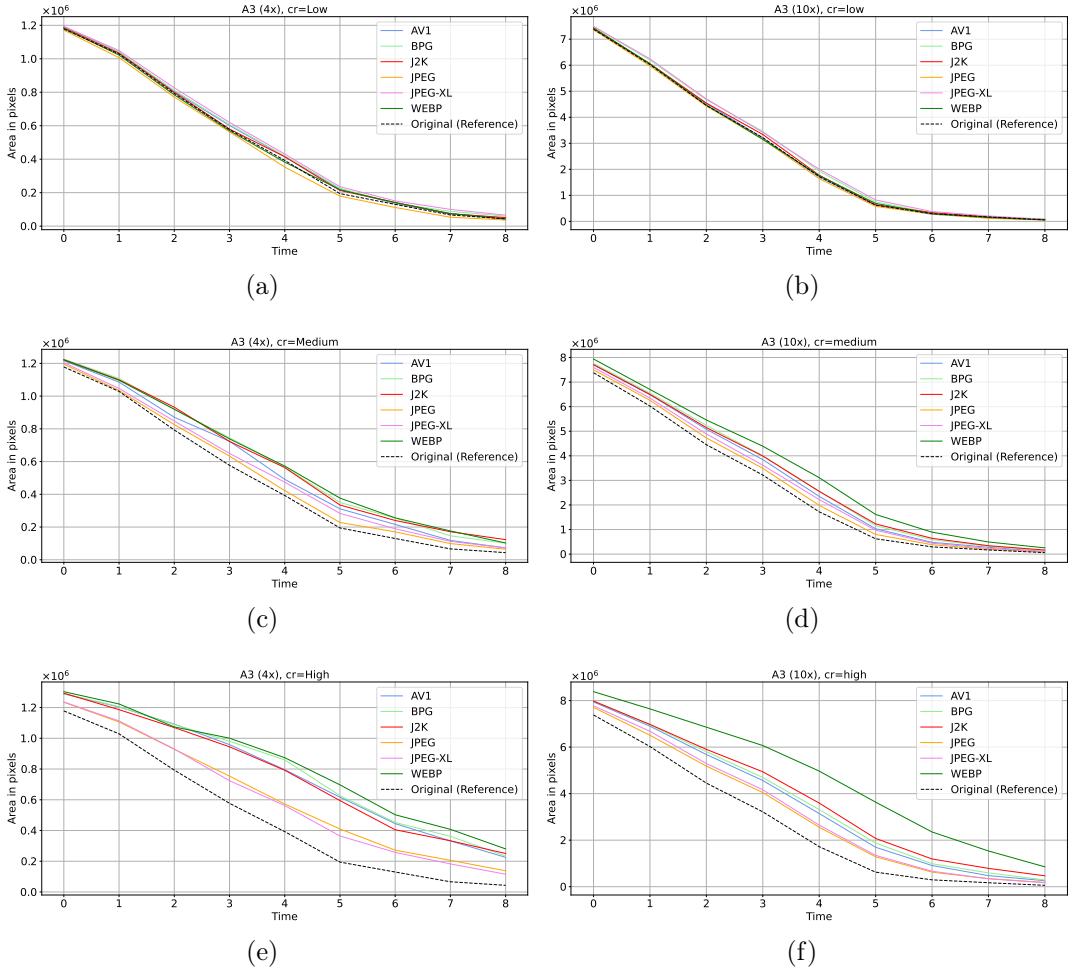

Figure 22: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A3 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.3 Data series A8

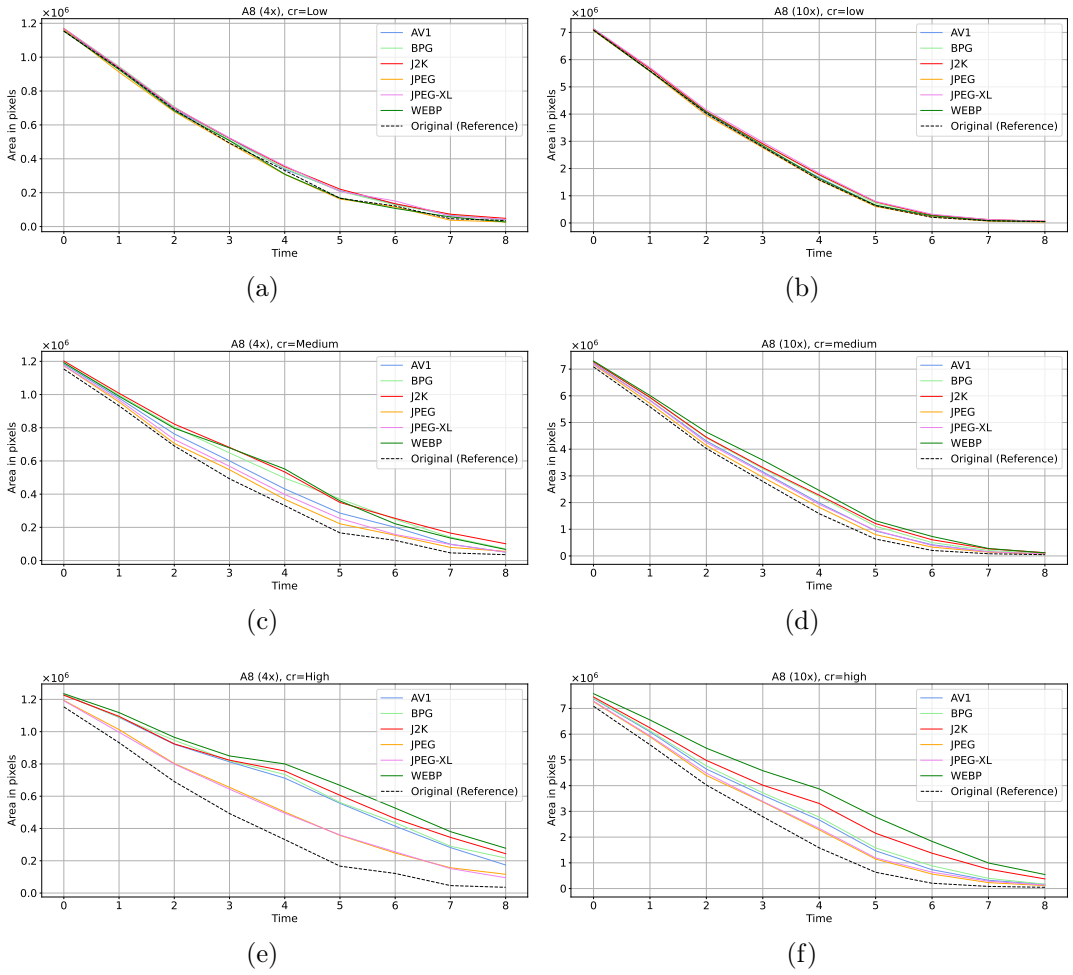

Figure 23: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A8 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.4 Data series A12

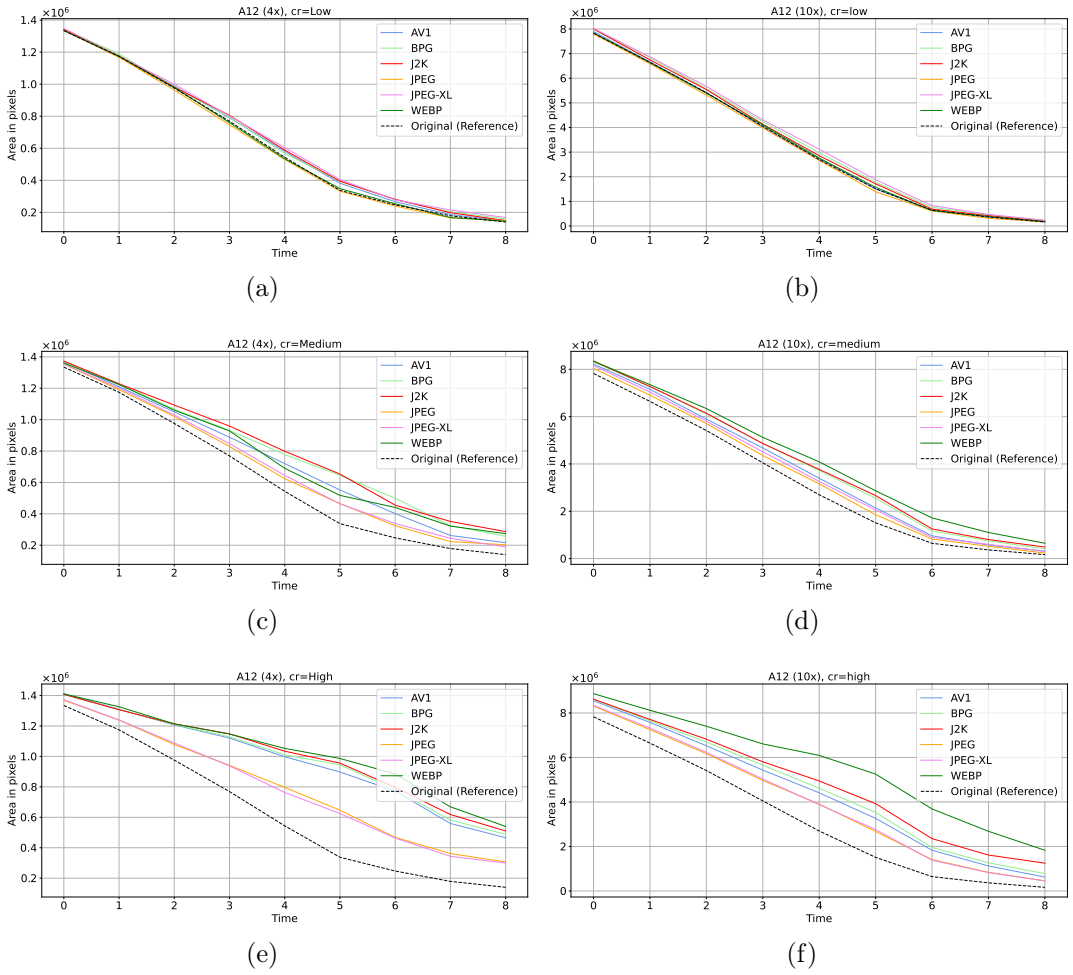

Figure 24: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence A12 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.5 Data series B7

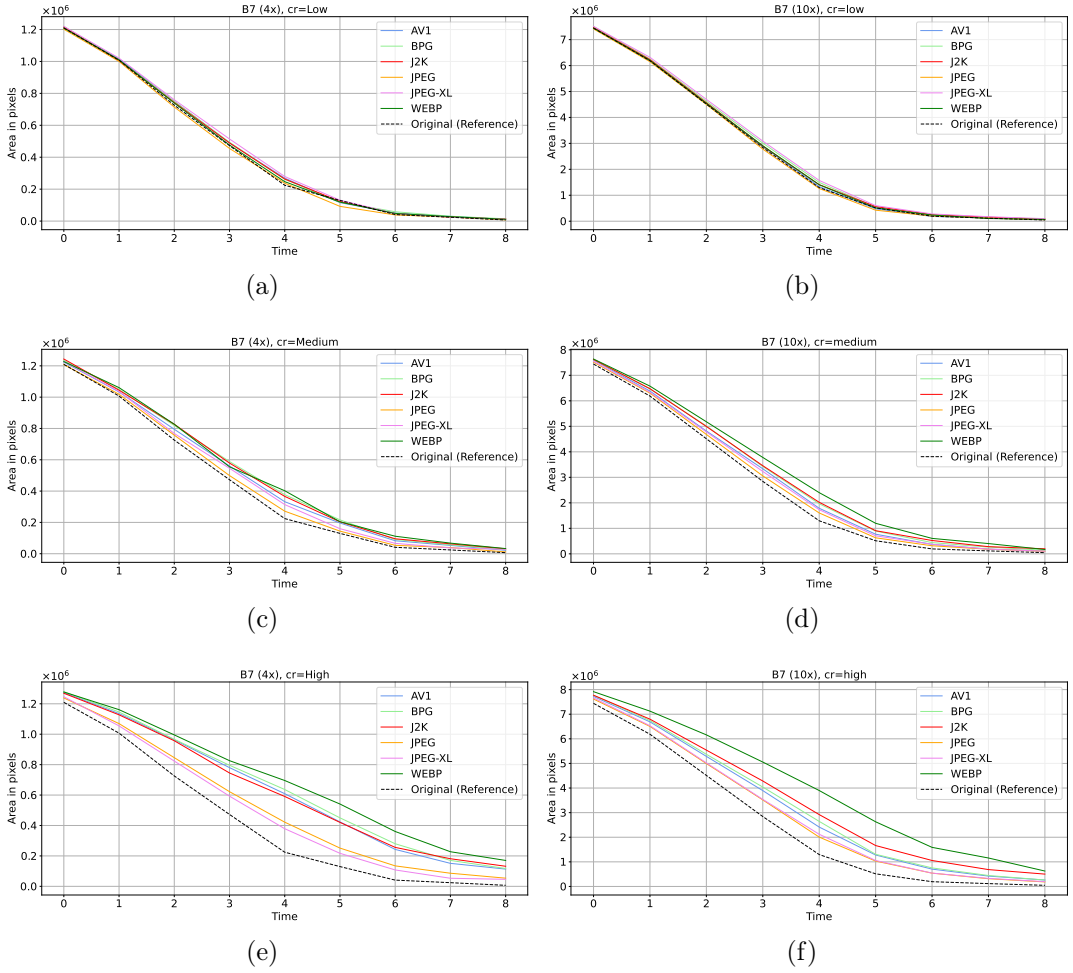

Figure 25: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B7 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.6 Data series B9

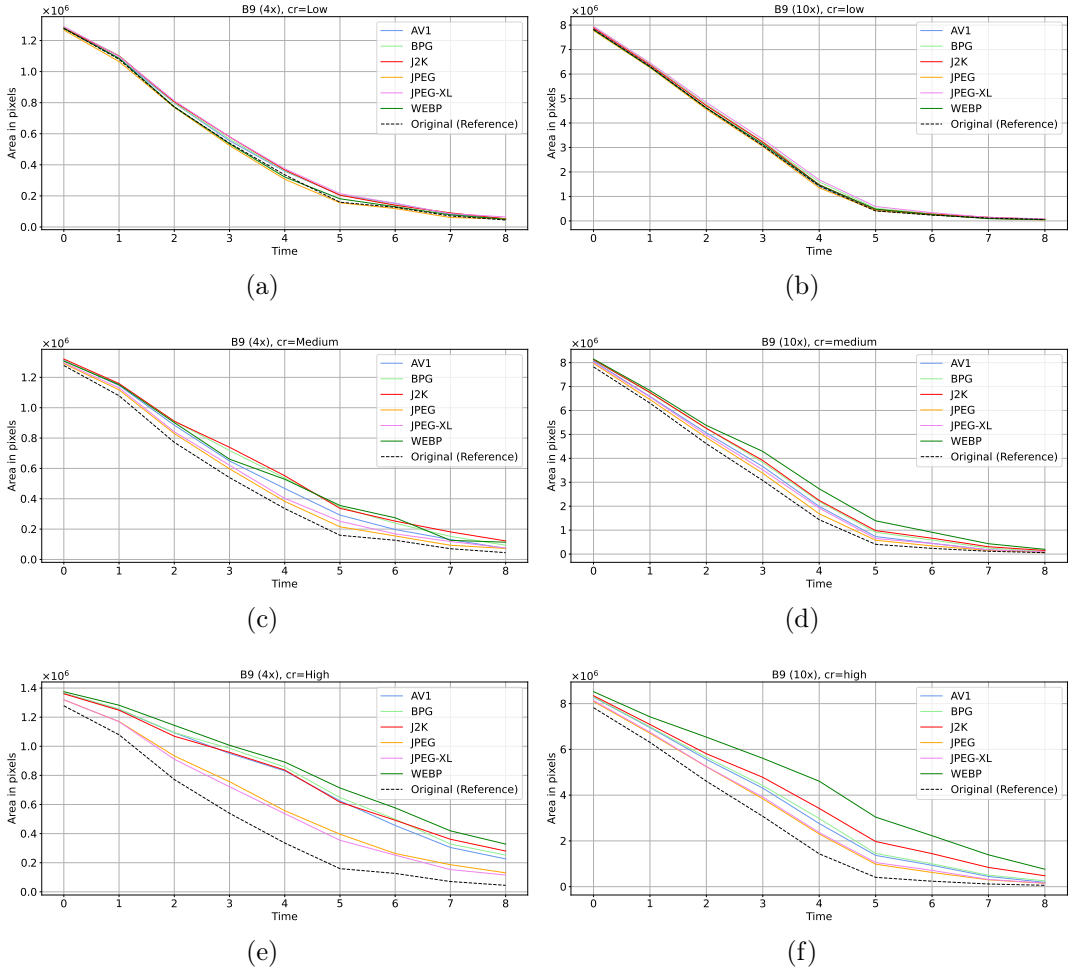

Figure 26: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B9 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.7 Data series B10

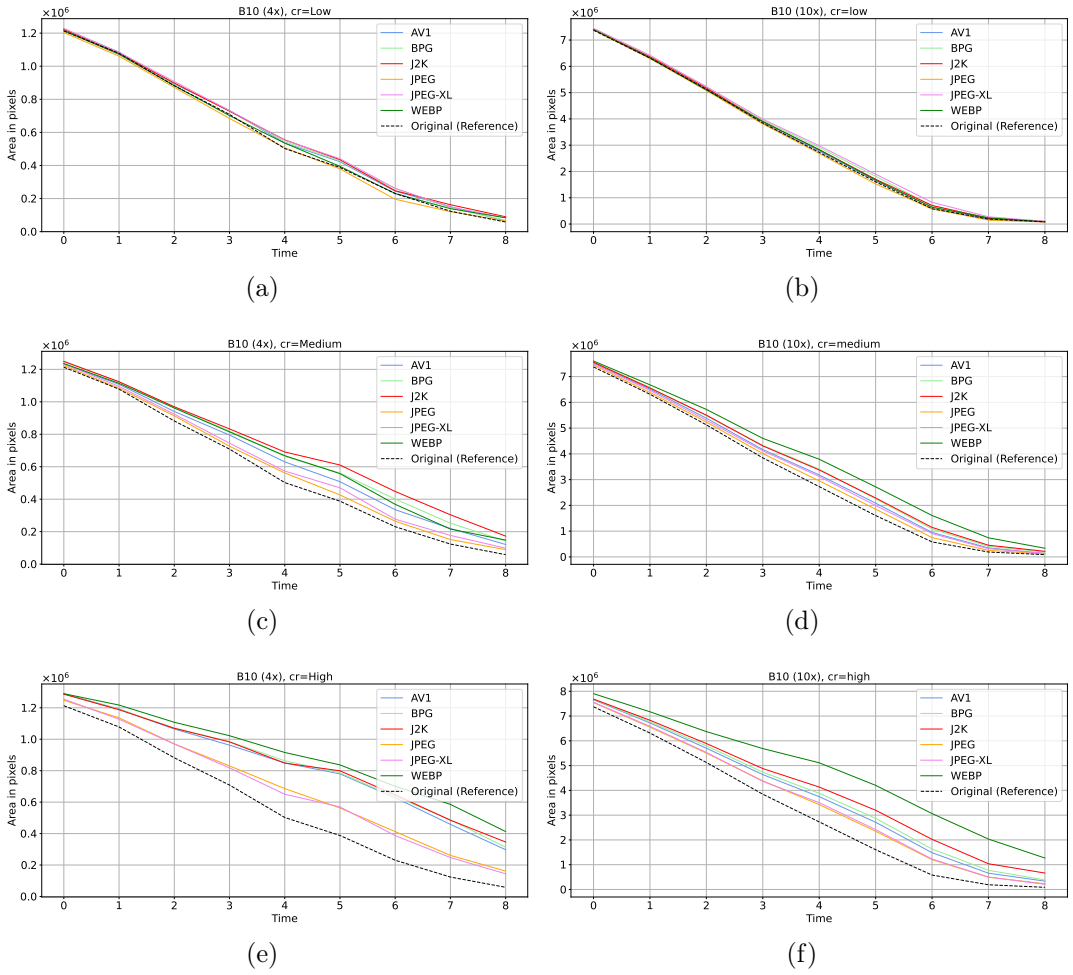

Figure 27: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence B10 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.8 Data series C1

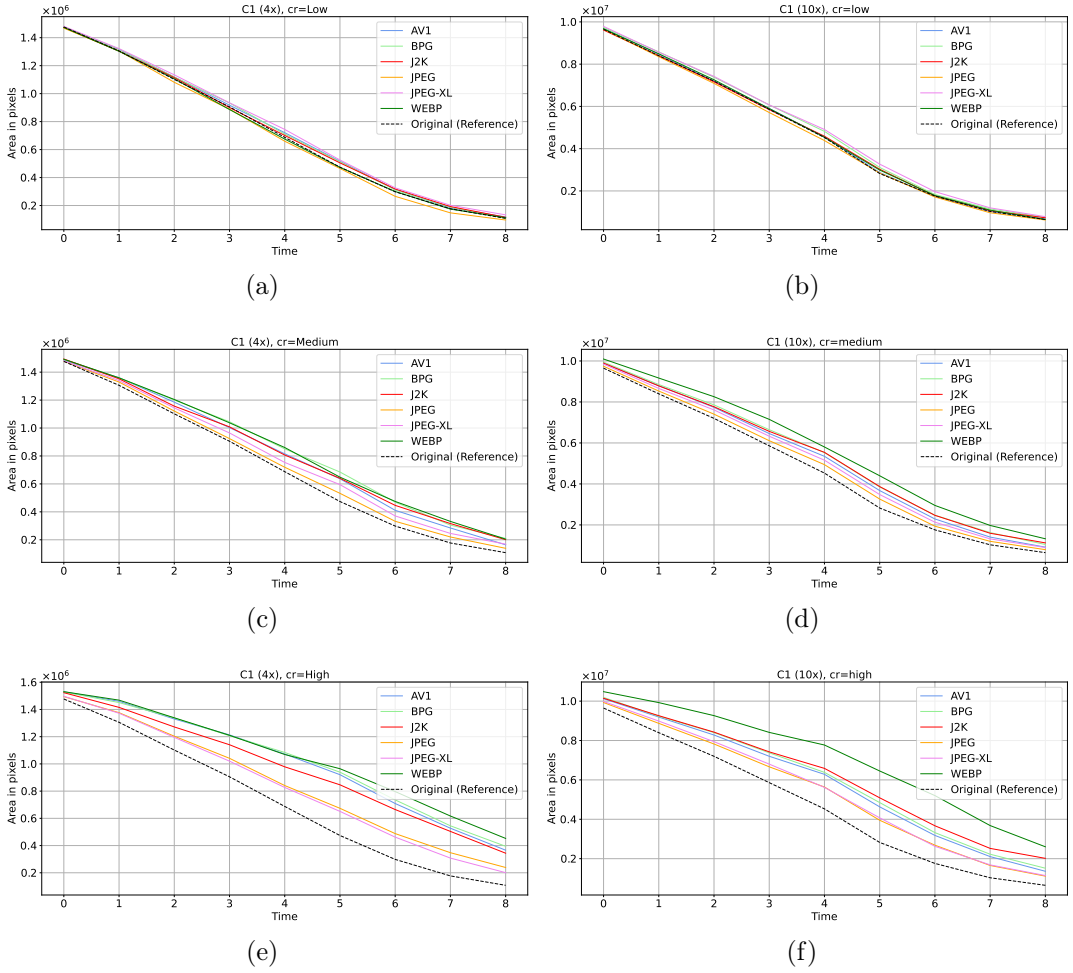

Figure 28: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C1 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.9 Data series C2

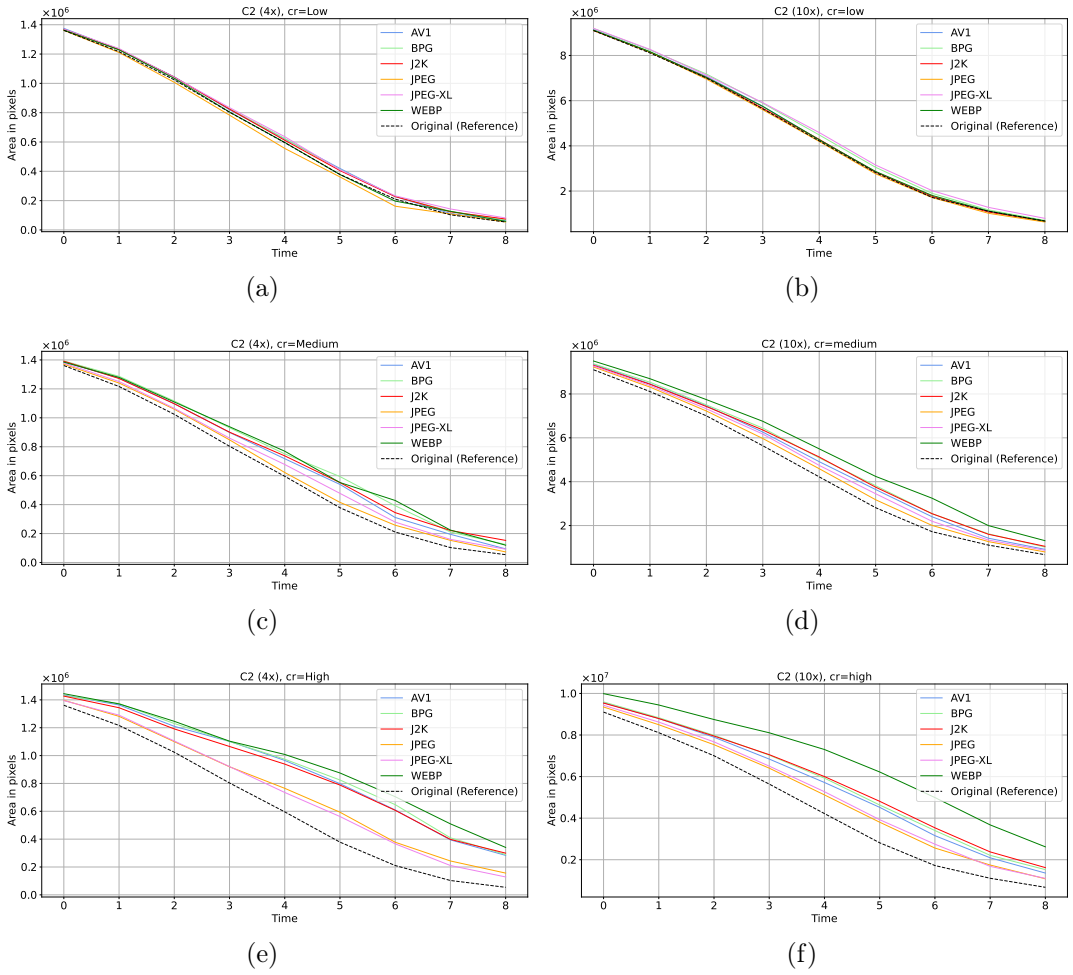

Figure 29: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C2 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.

2.3.10 Data series C3

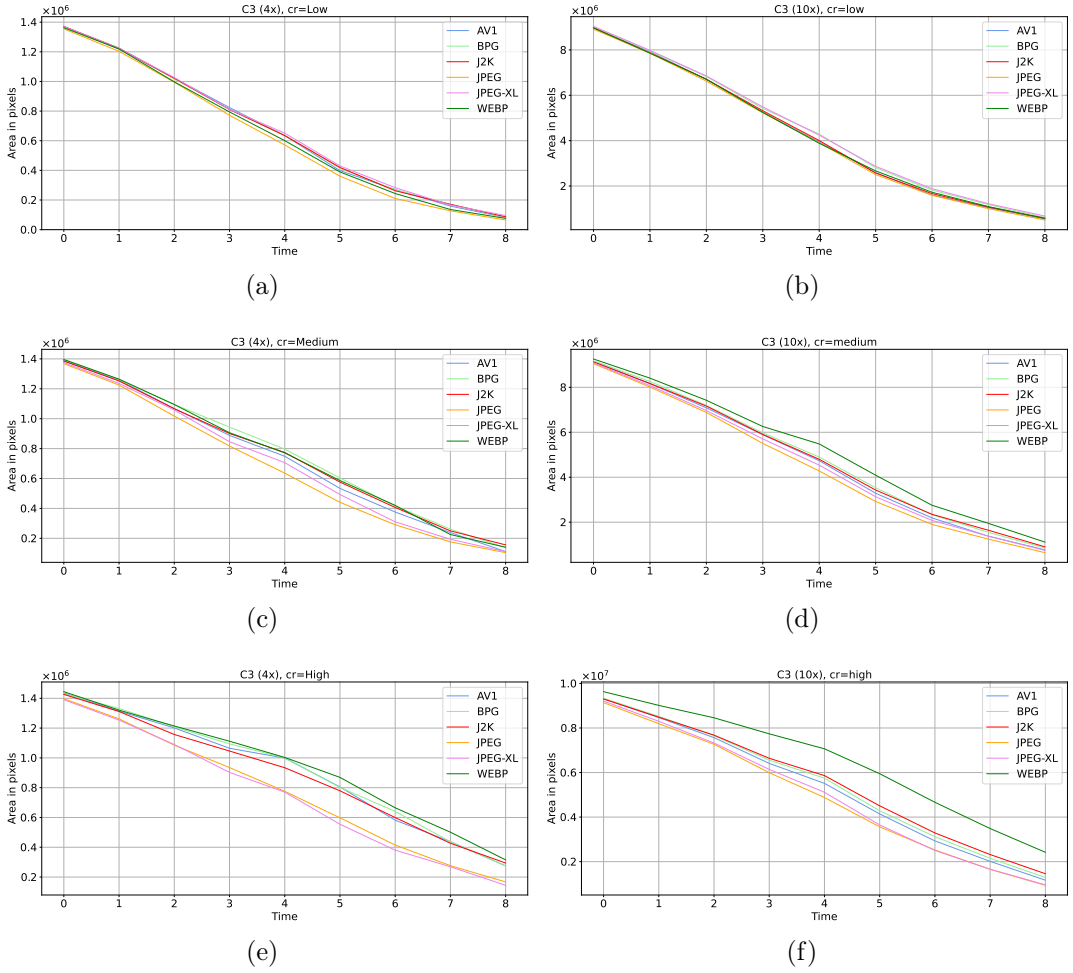

Figure 30: Segmentation performance on the C (a,b), B (c,d) and A (e,f) compressed images on sequence C3 using the BCAnalyzer Tool. In the left column the results are depicted for the 4× and in the right column for the 10× magnification images.