

The University of Saskatchewan
Department of Computer Science

Technical Report #2006-04



Sticks Filtering of Ovarian Images: Processed Image Library

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July 3, 2006

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Chapter 1

Introduction

This technical report is intended as a companion to the paper

Mark G. Eramian, Roger A. Pierson, and Gregg P. Adams. Sticks Filtering for Visualization of Ovarian Structure in Ultrasonographic Images (submitted).

This document serves as an accessible repository of the entire set of results from the experiments detailed in this paper.

Chapter 2

Sticks Filtering of Dominant Follicle Images

2.1 Original Images

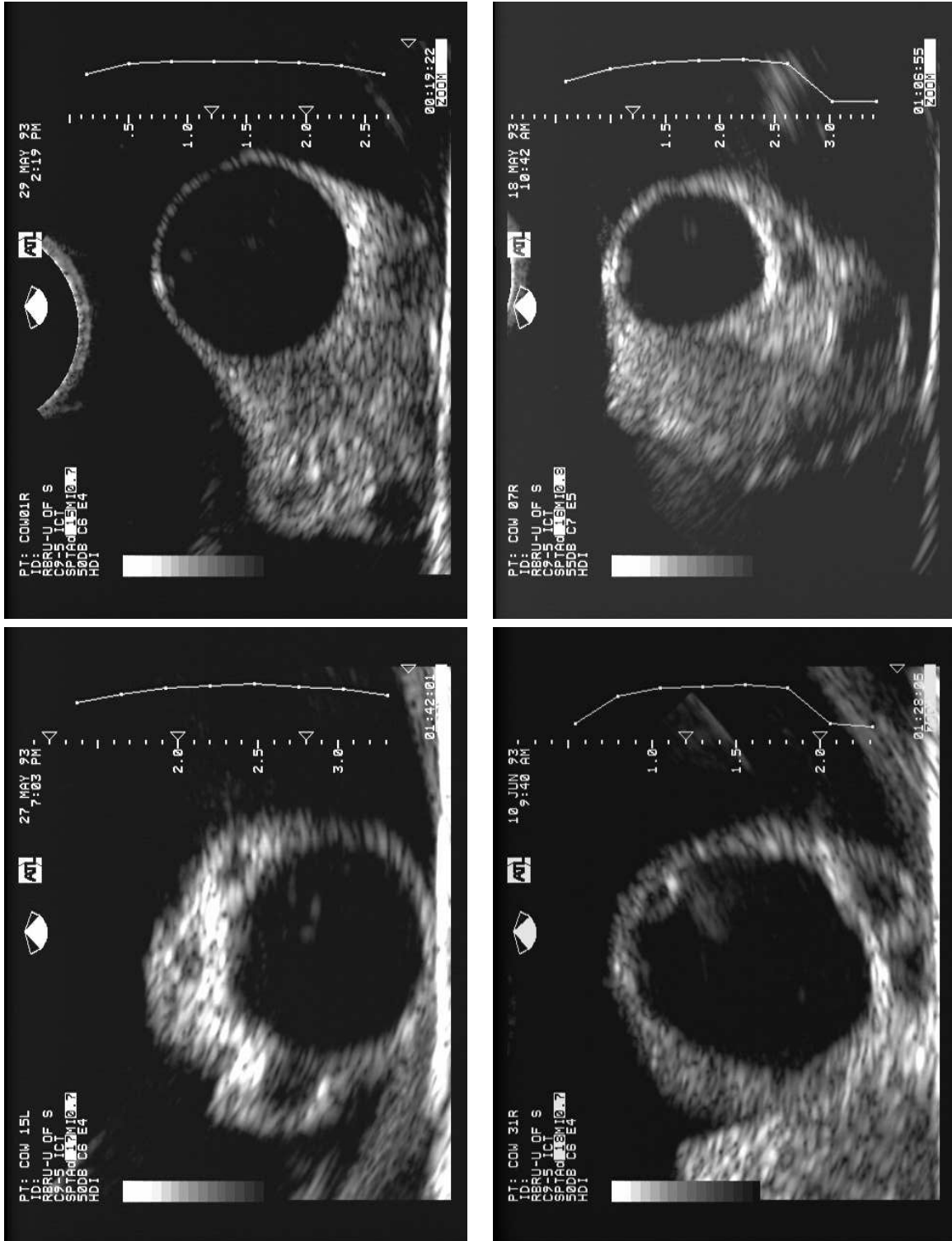


Figure 2.1: Original Dominant Follicle Images. TL: 01r.025, TR: 07r.040, BL: 15l.046, BR: 31r.016



Figure 2.2: Original Dominant Follicle Images. TL: 34r.060, TR: 42l.025, BL: 68l.025, BR: 71r.045

2.2 Uniform Sticks: Mean Output Mode

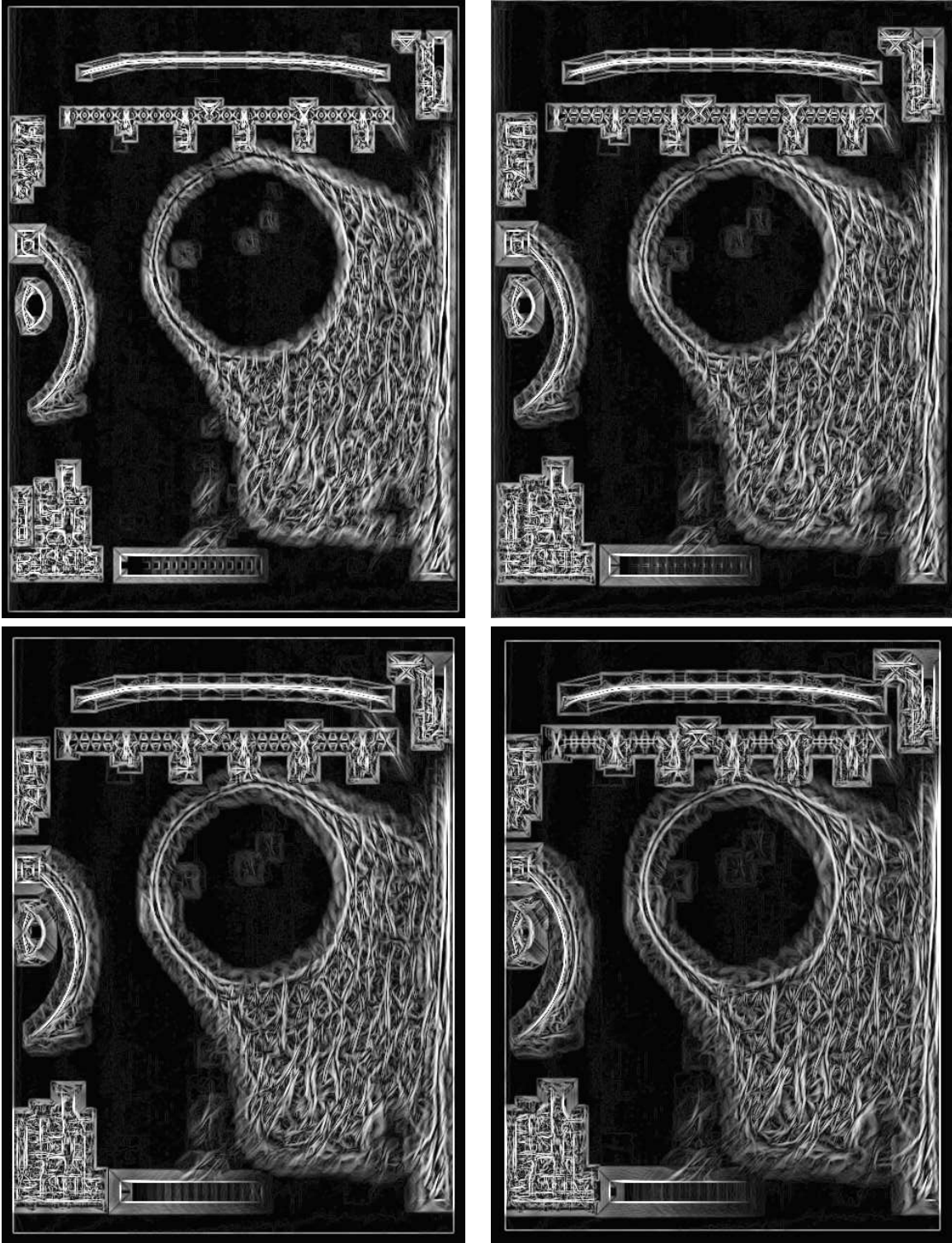


Figure 2.3: 01r.025 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

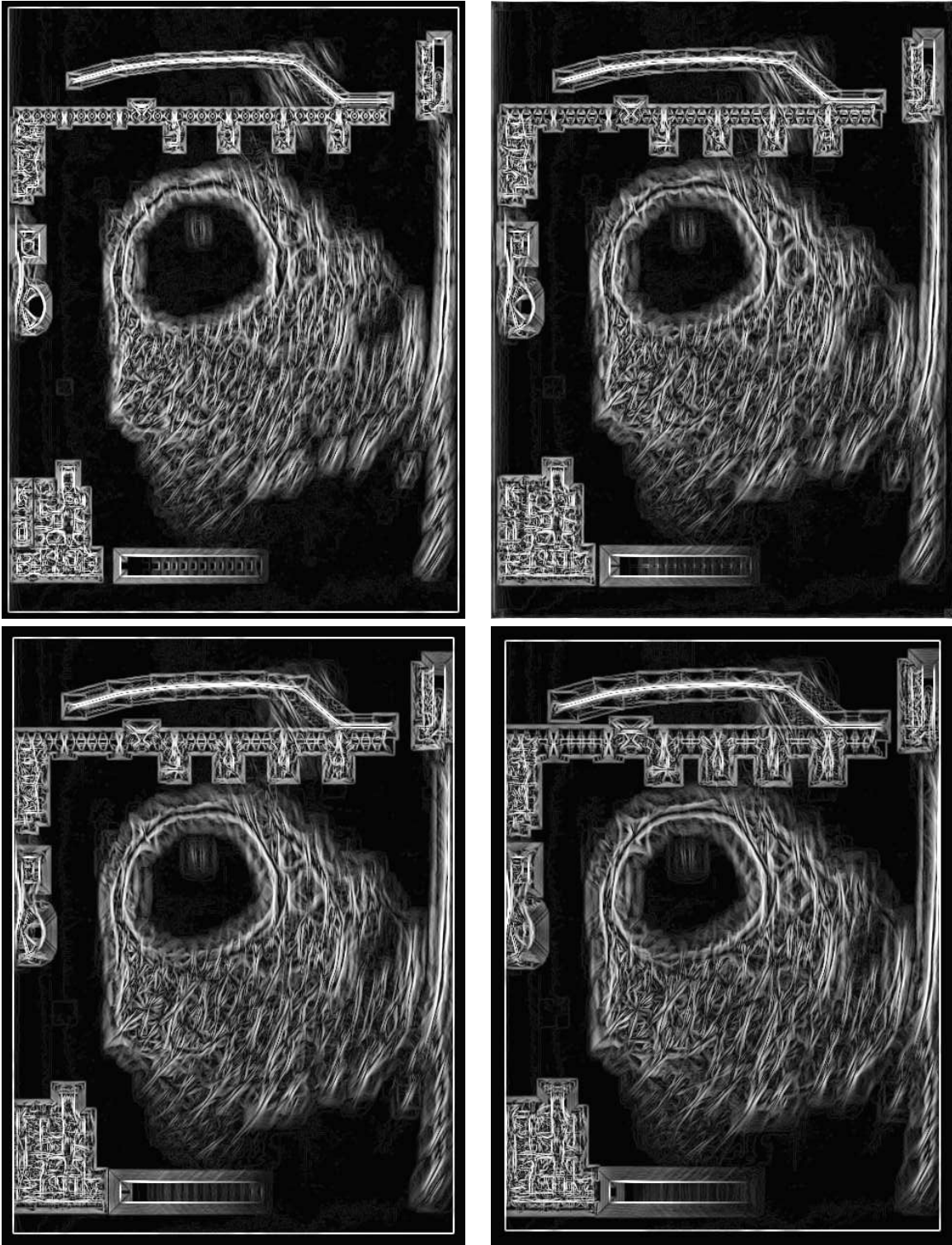


Figure 2.4: 07r.040 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

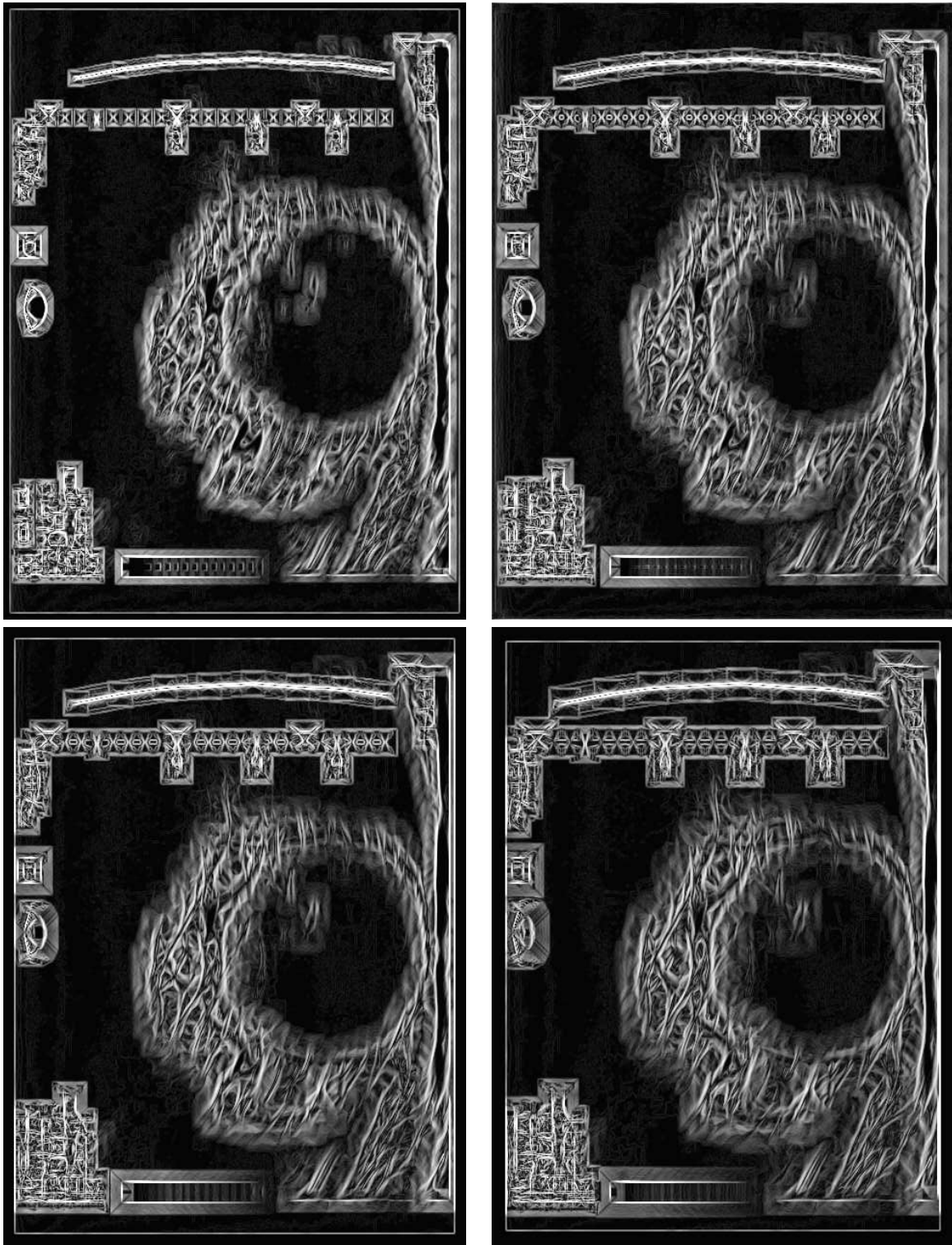


Figure 2.5: 15l.046 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

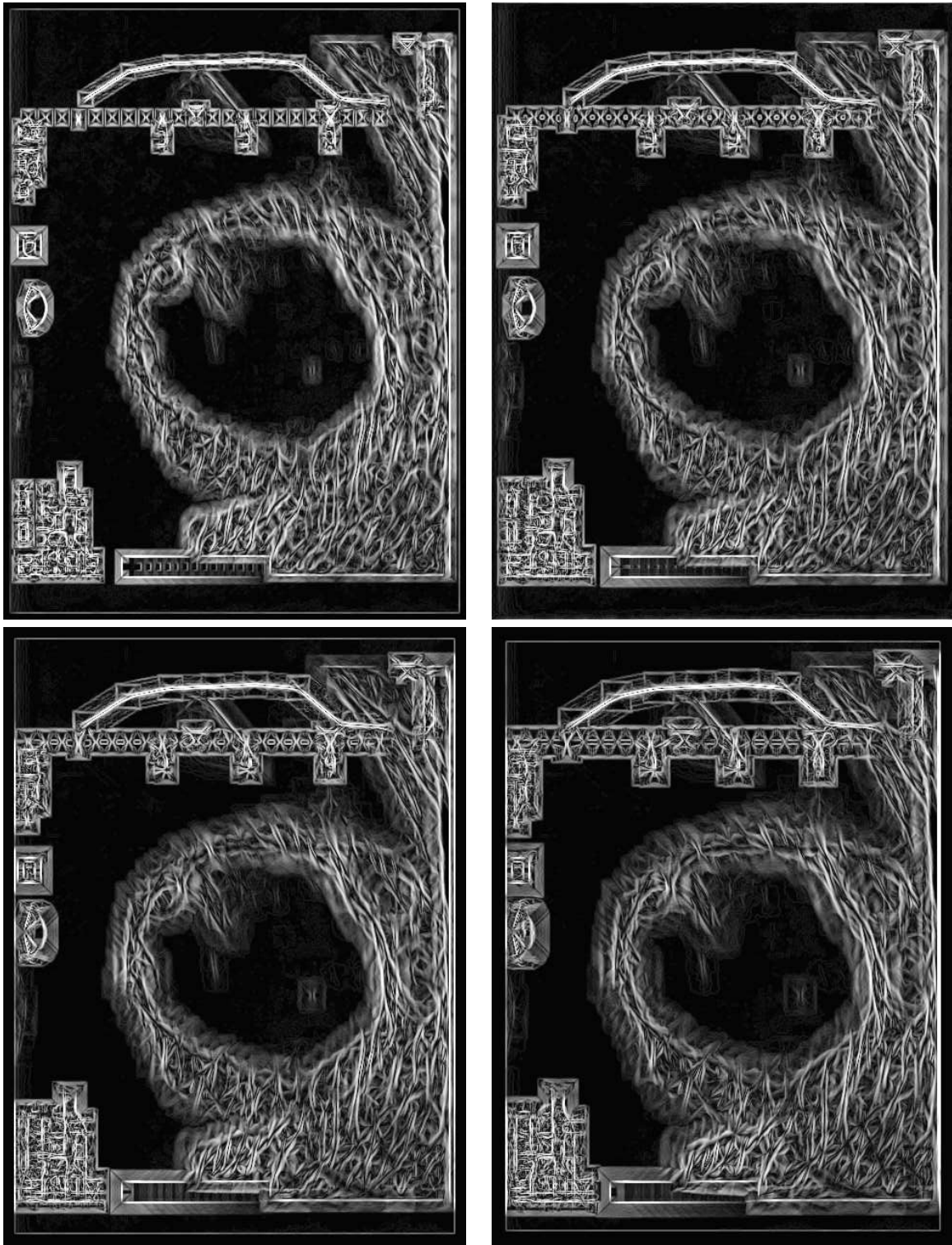


Figure 2.6: 31r.016 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

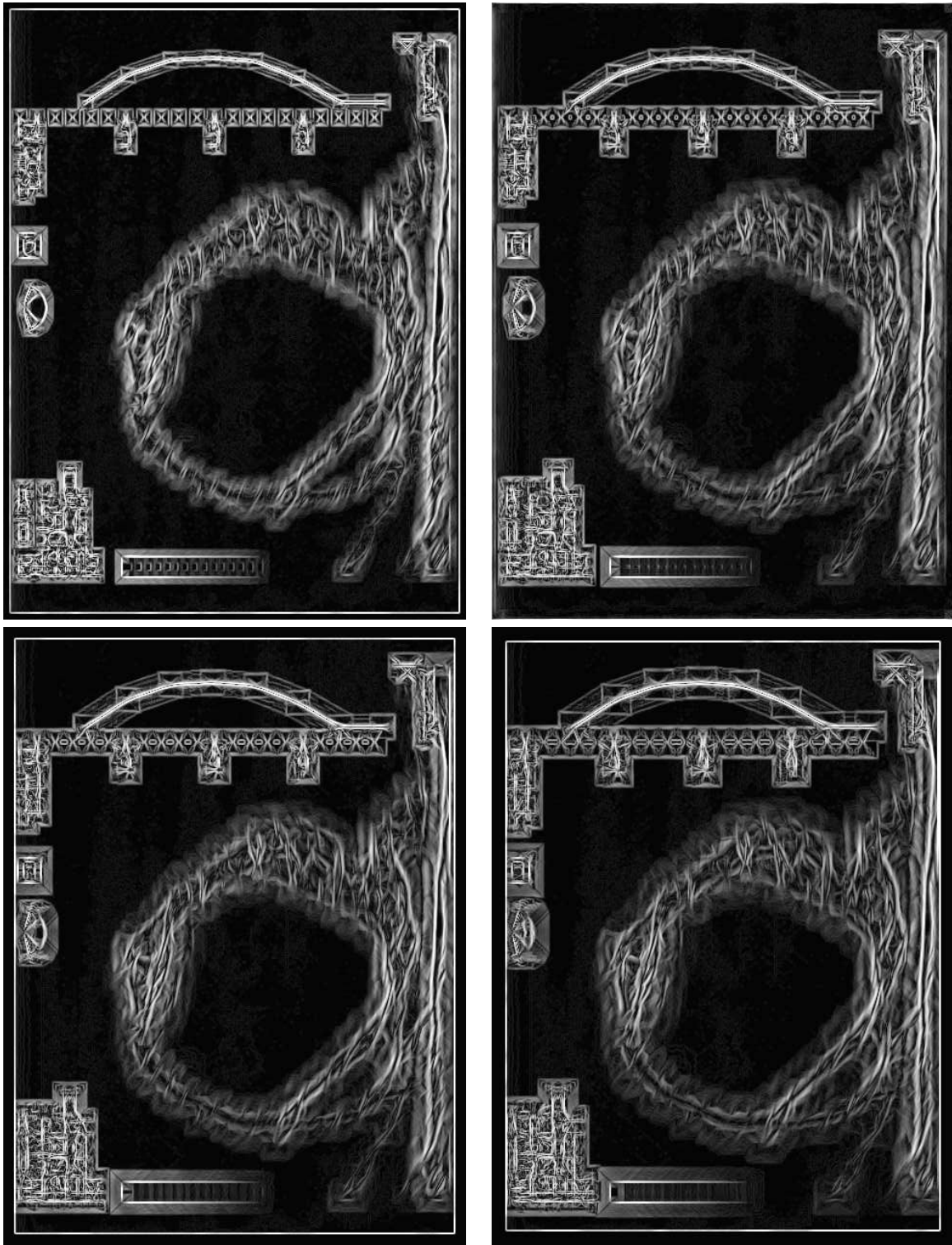


Figure 2.7: 34r.060 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

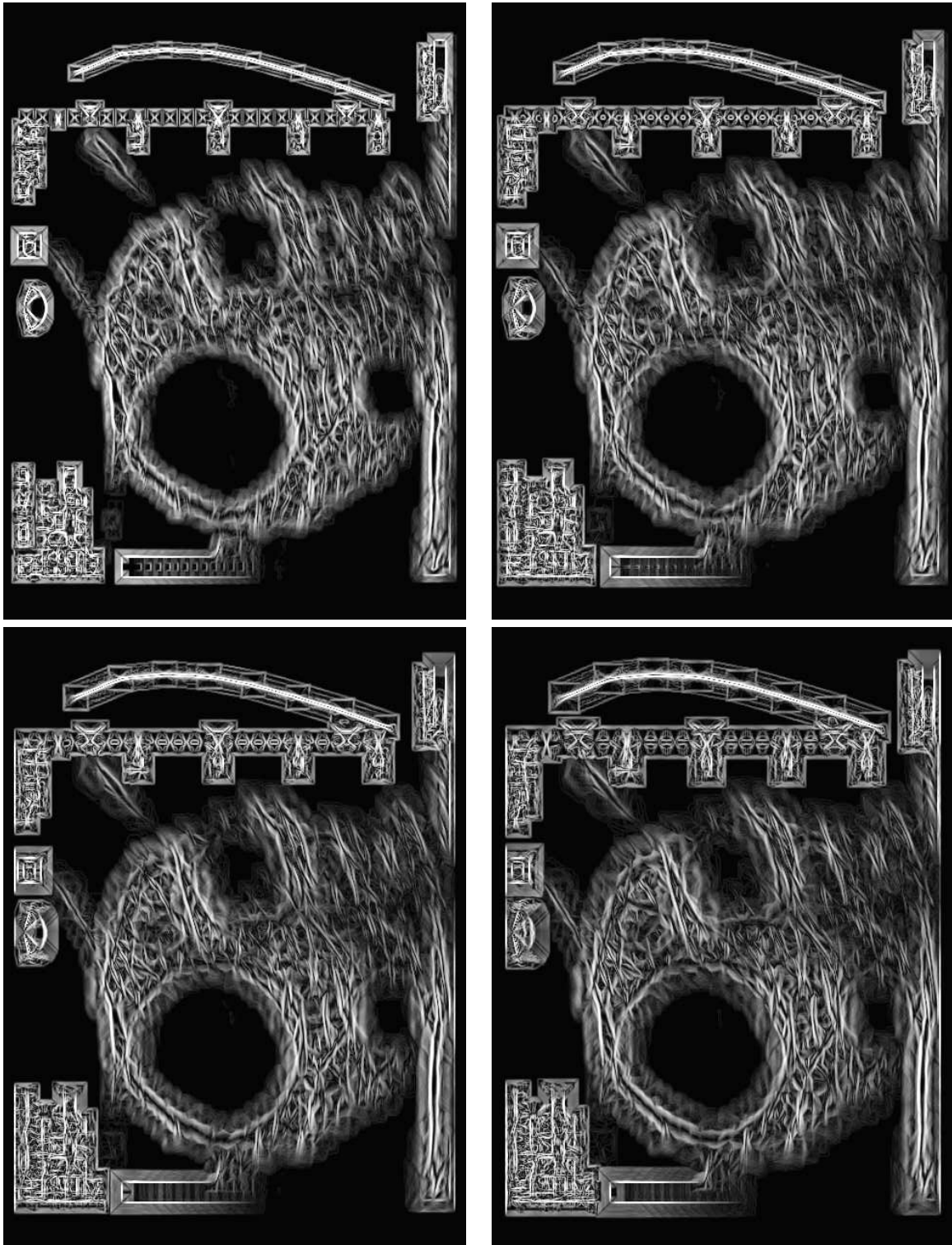


Figure 2.8: 42l.025 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

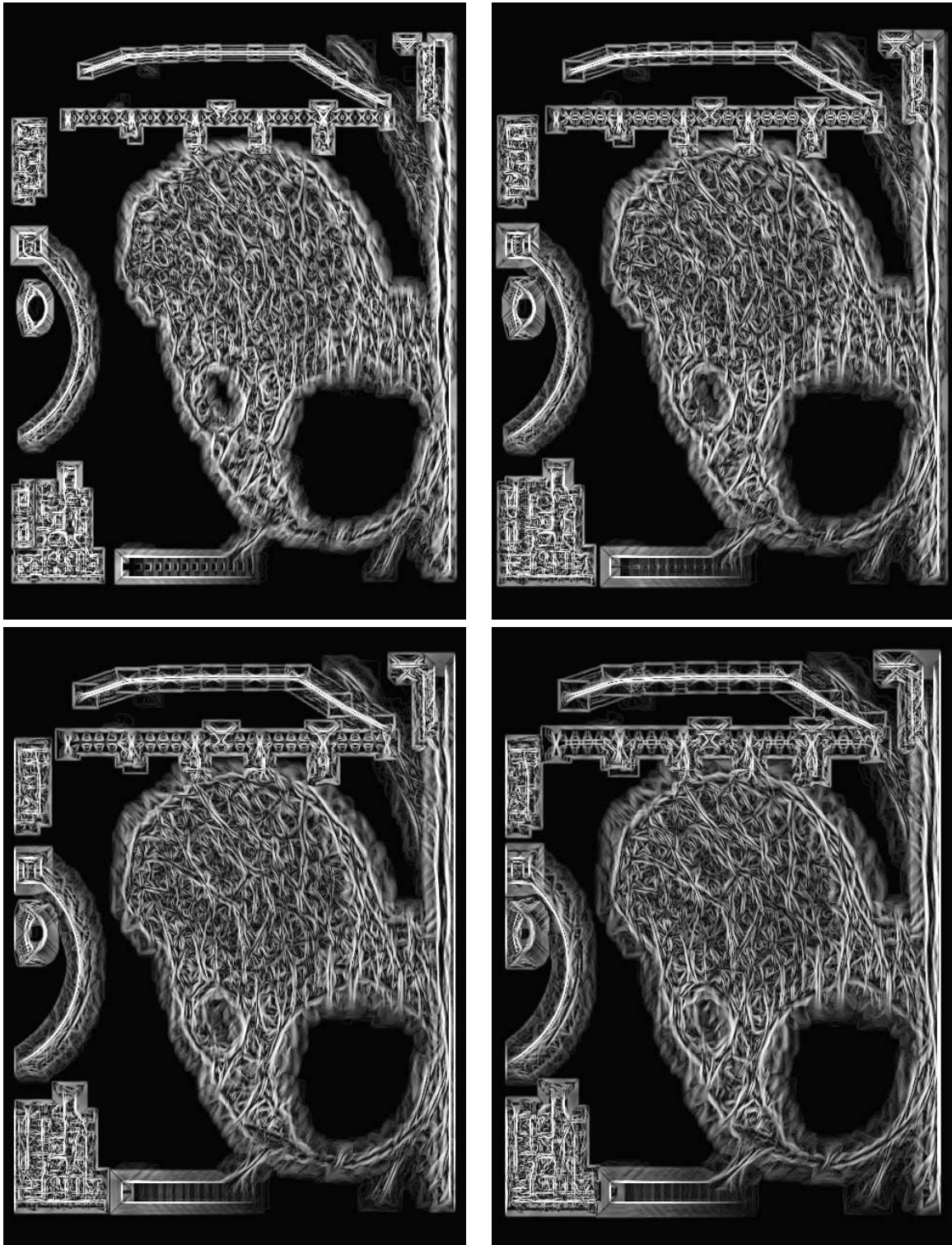


Figure 2.9: 68l.025 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

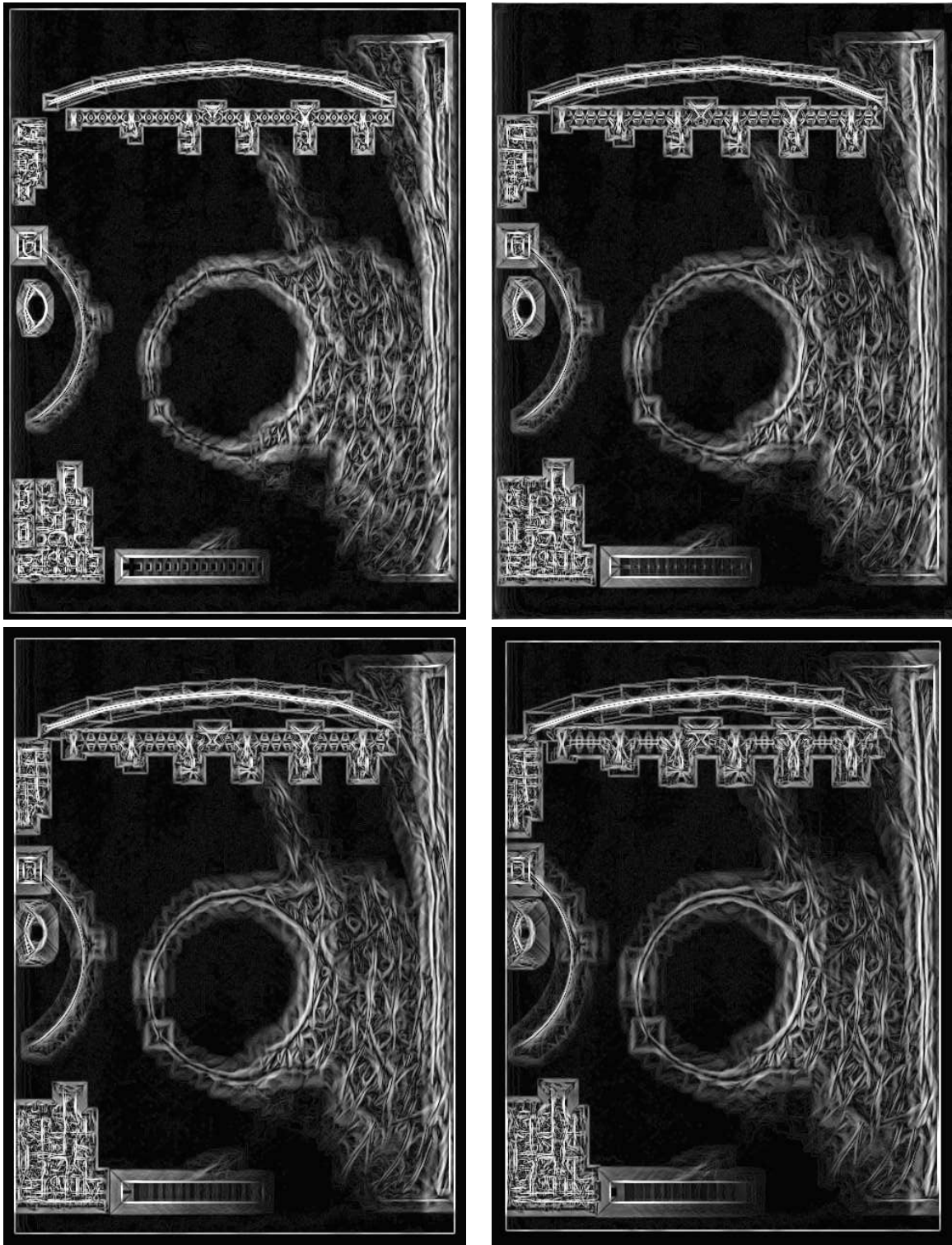


Figure 2.10: 71r.045 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

2.3 Uniform Sticks: Variance Output Mode

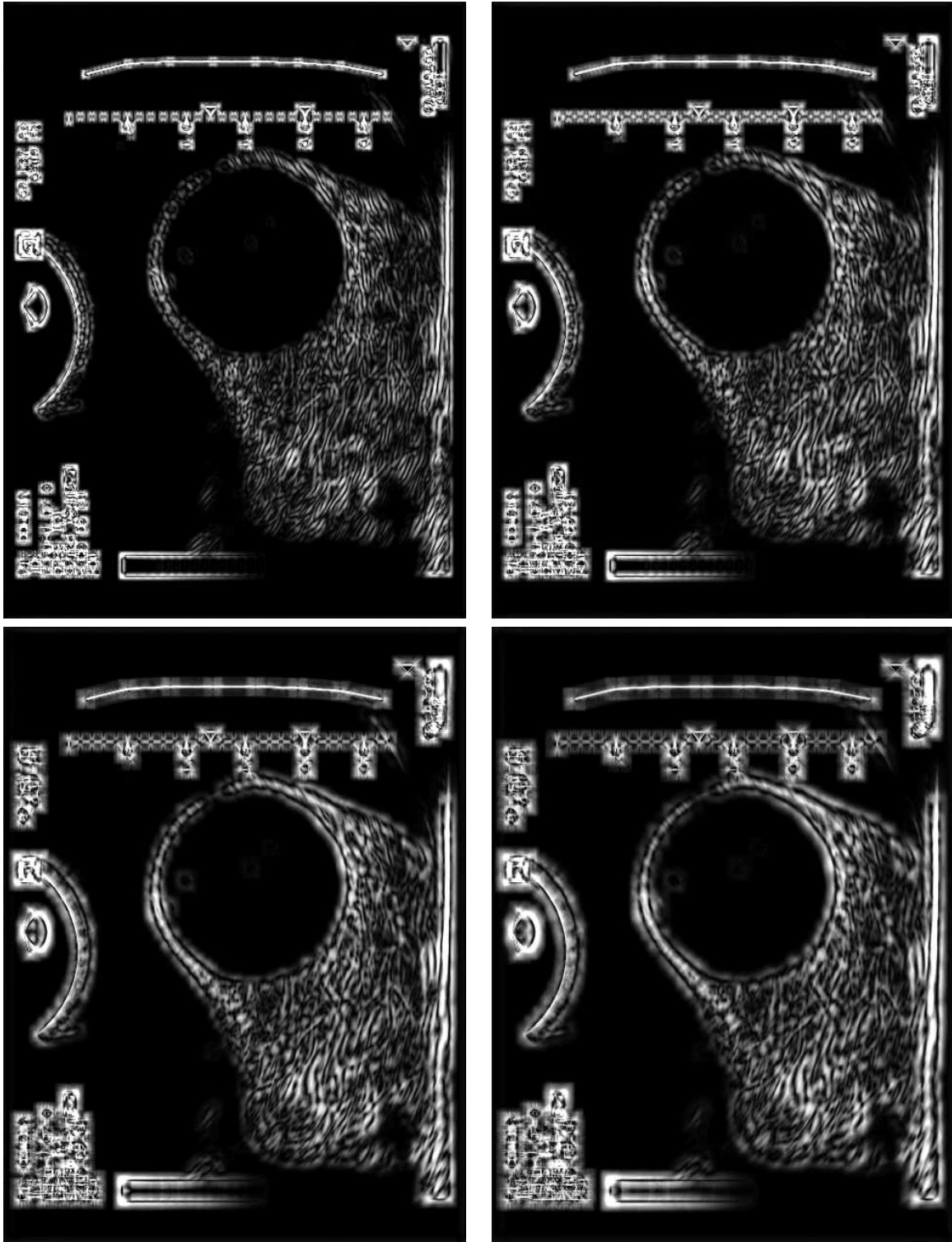


Figure 2.11: 01r.025 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

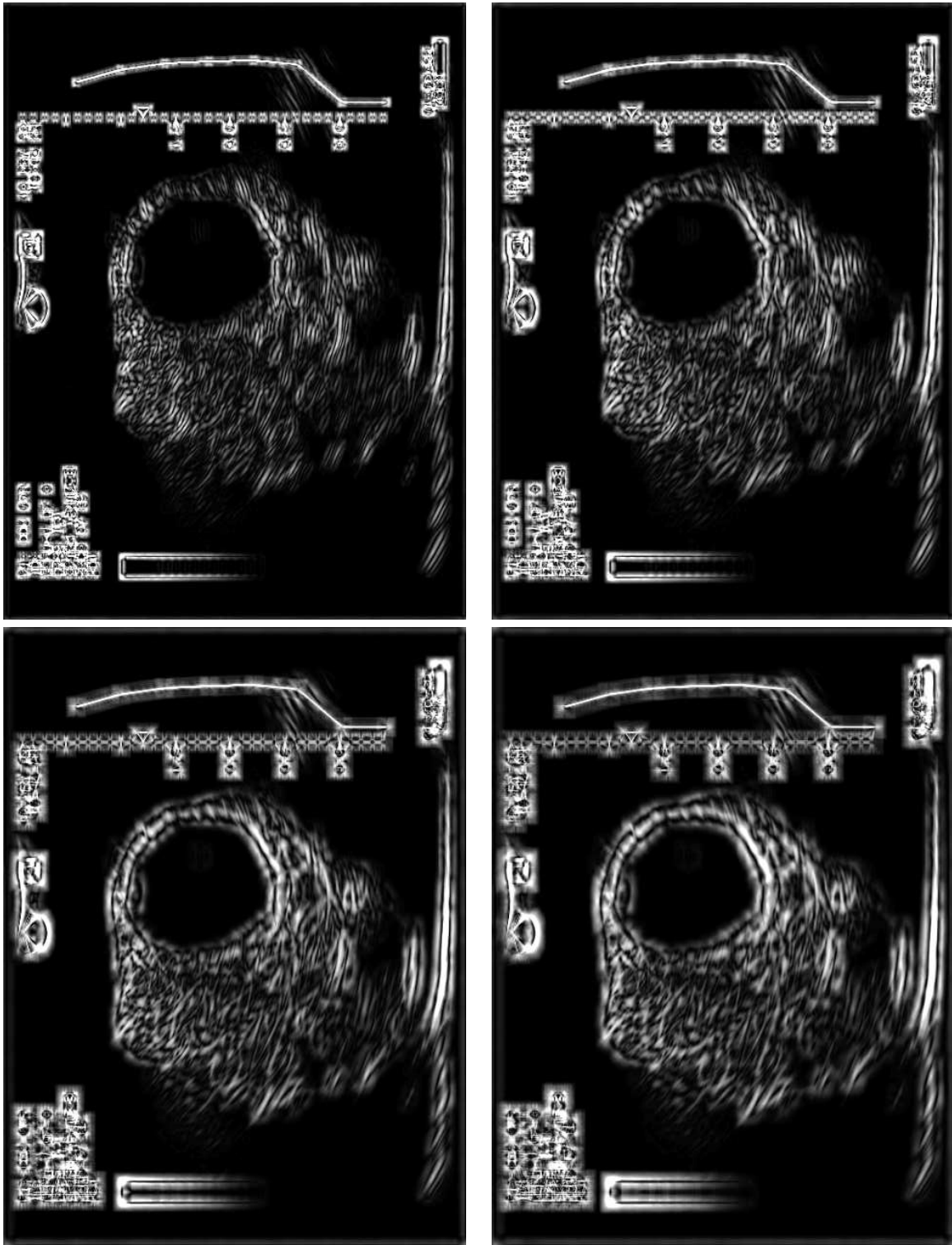


Figure 2.12: 07r.040 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

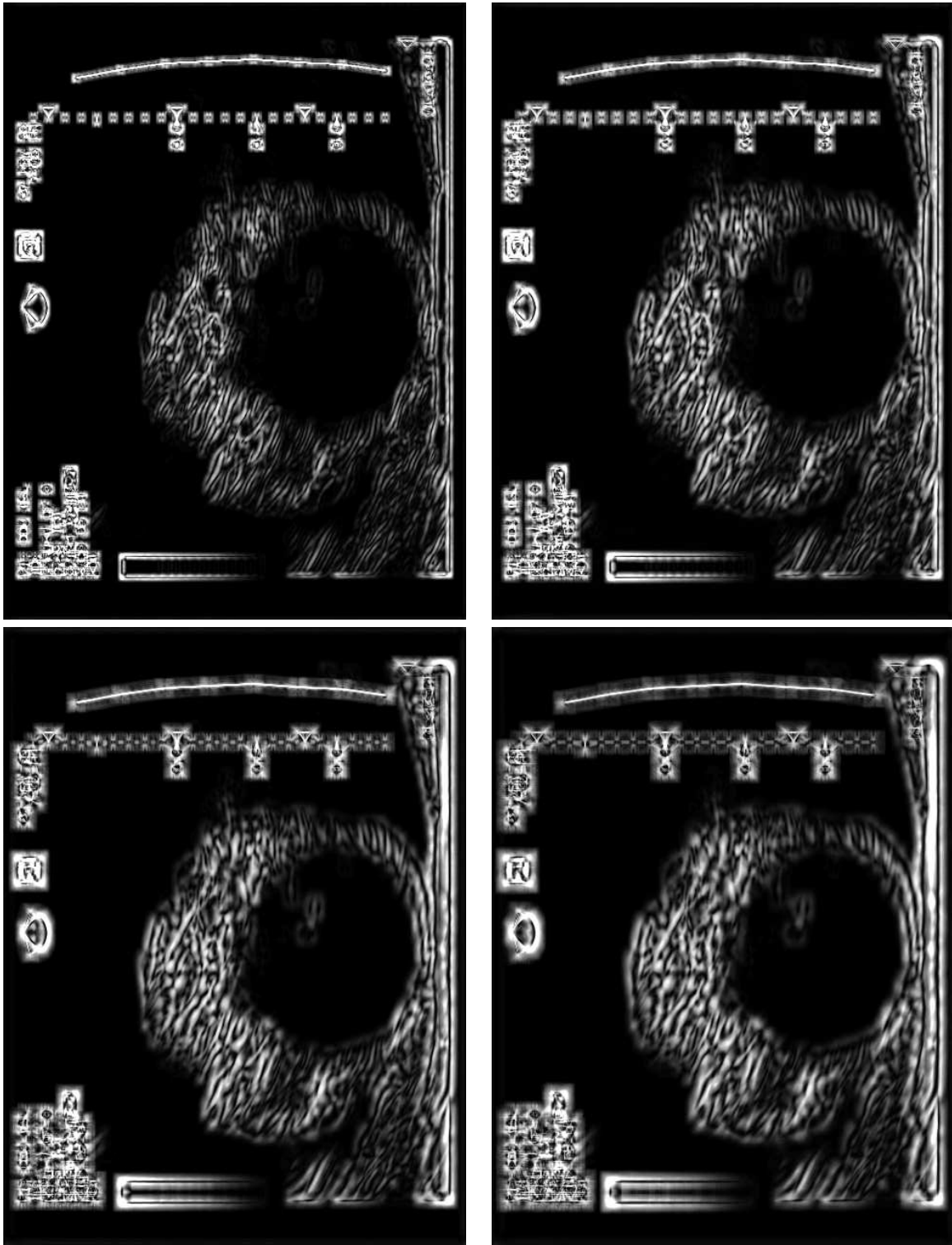


Figure 2.13: 15l.046 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

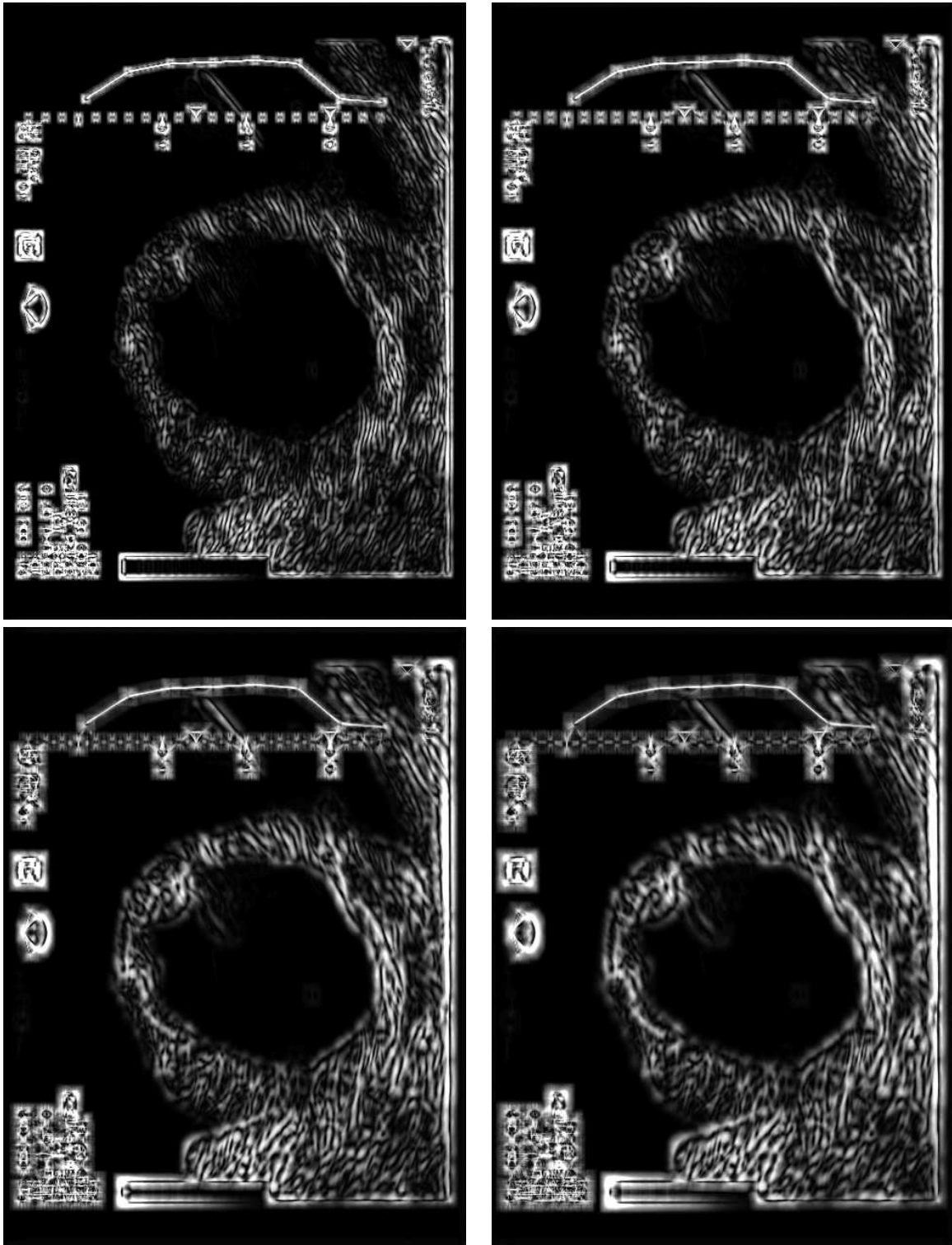


Figure 2.14: 31r.016 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

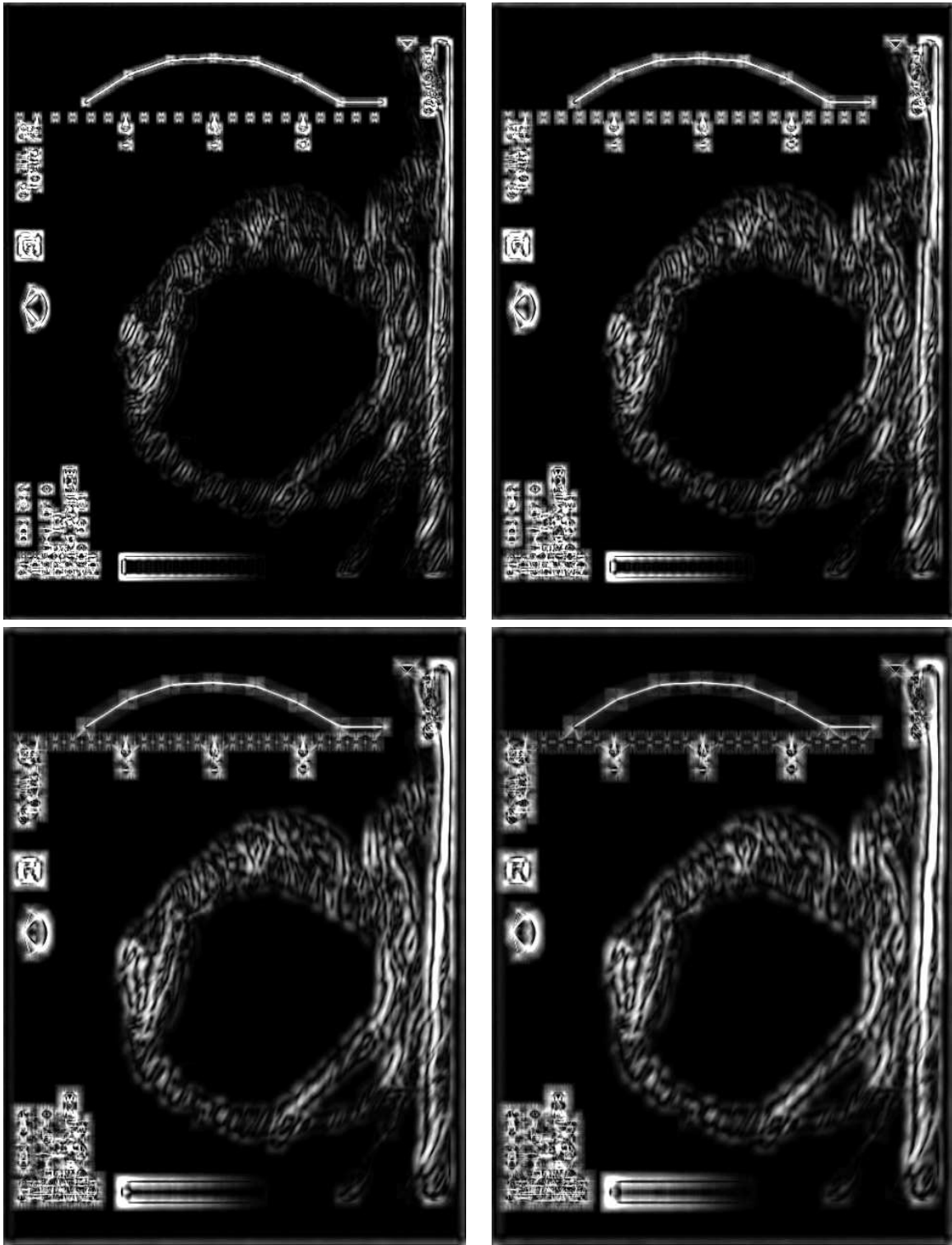


Figure 2.15: 34r.060 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

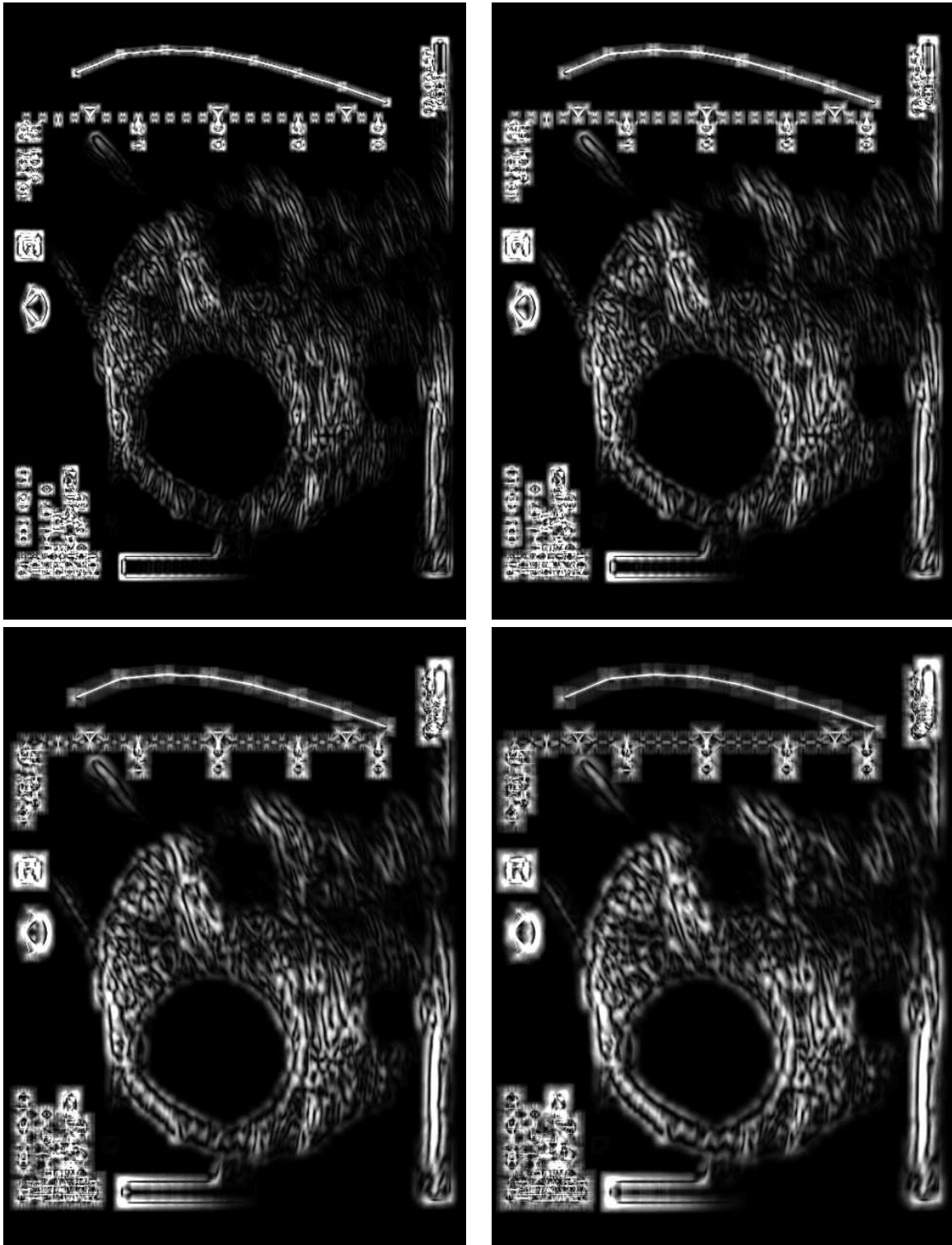


Figure 2.16: 42l.025 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

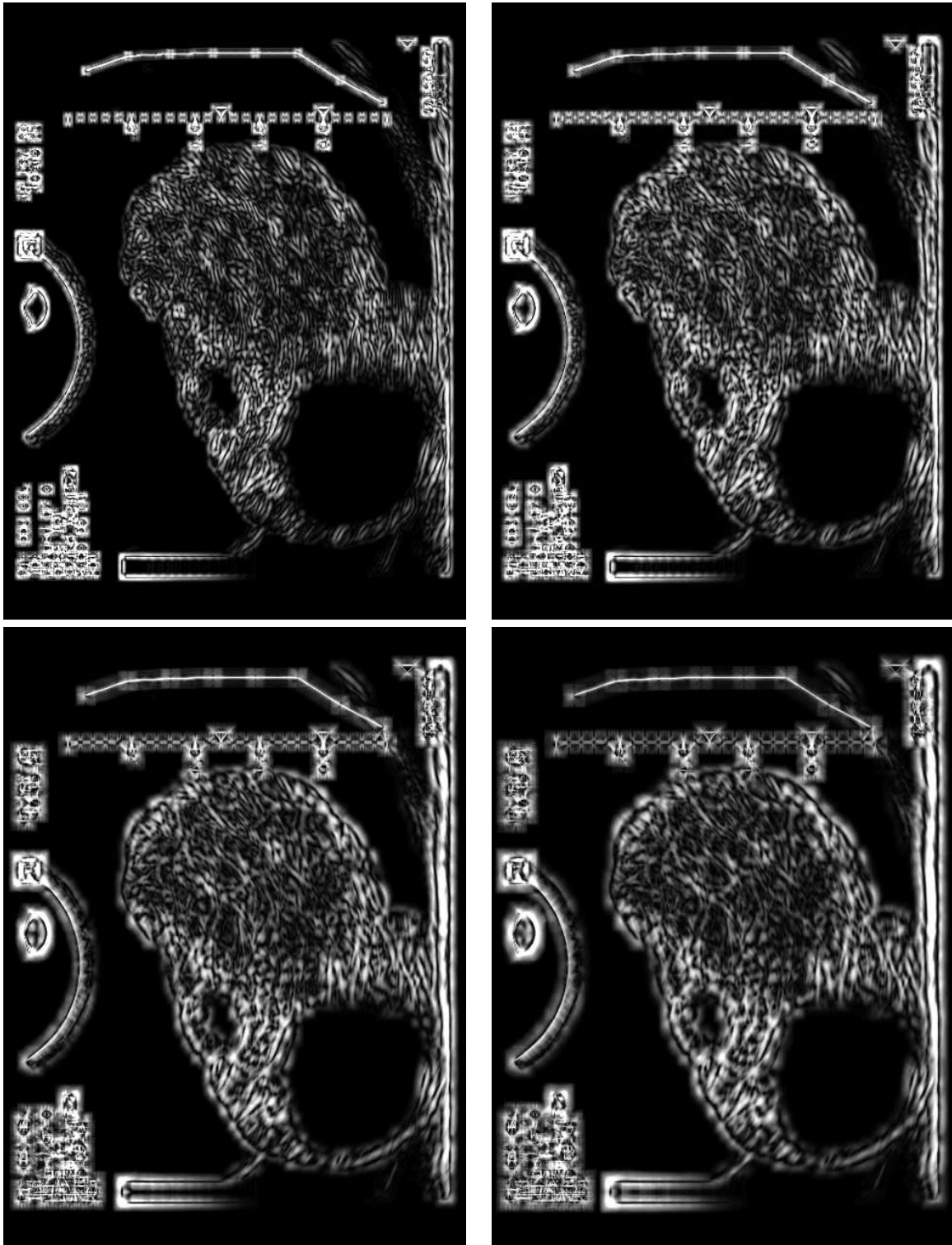


Figure 2.17: 68l.025 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

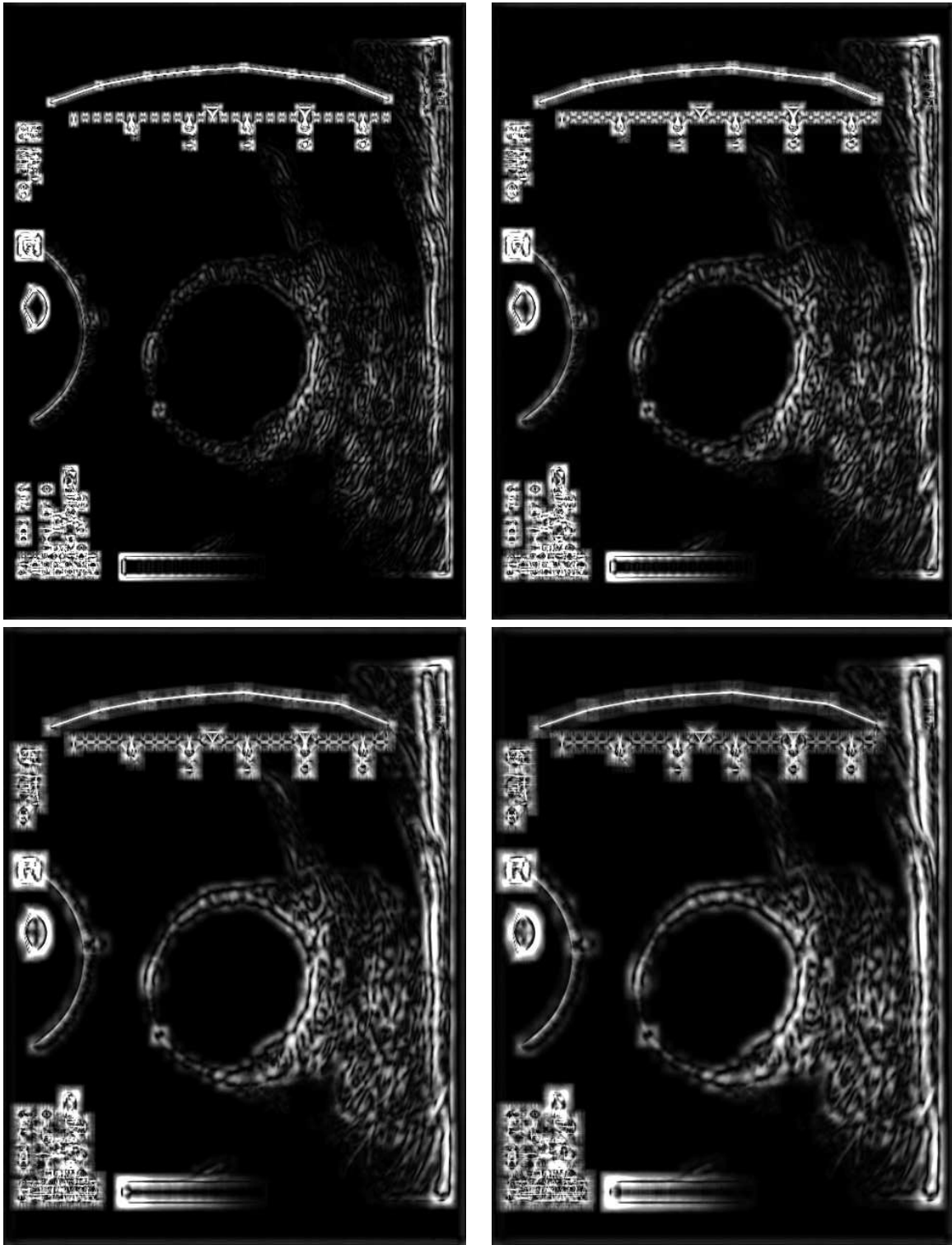


Figure 2.18: 71r.045 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

2.4 Gaussian Sticks: Mean output Mode

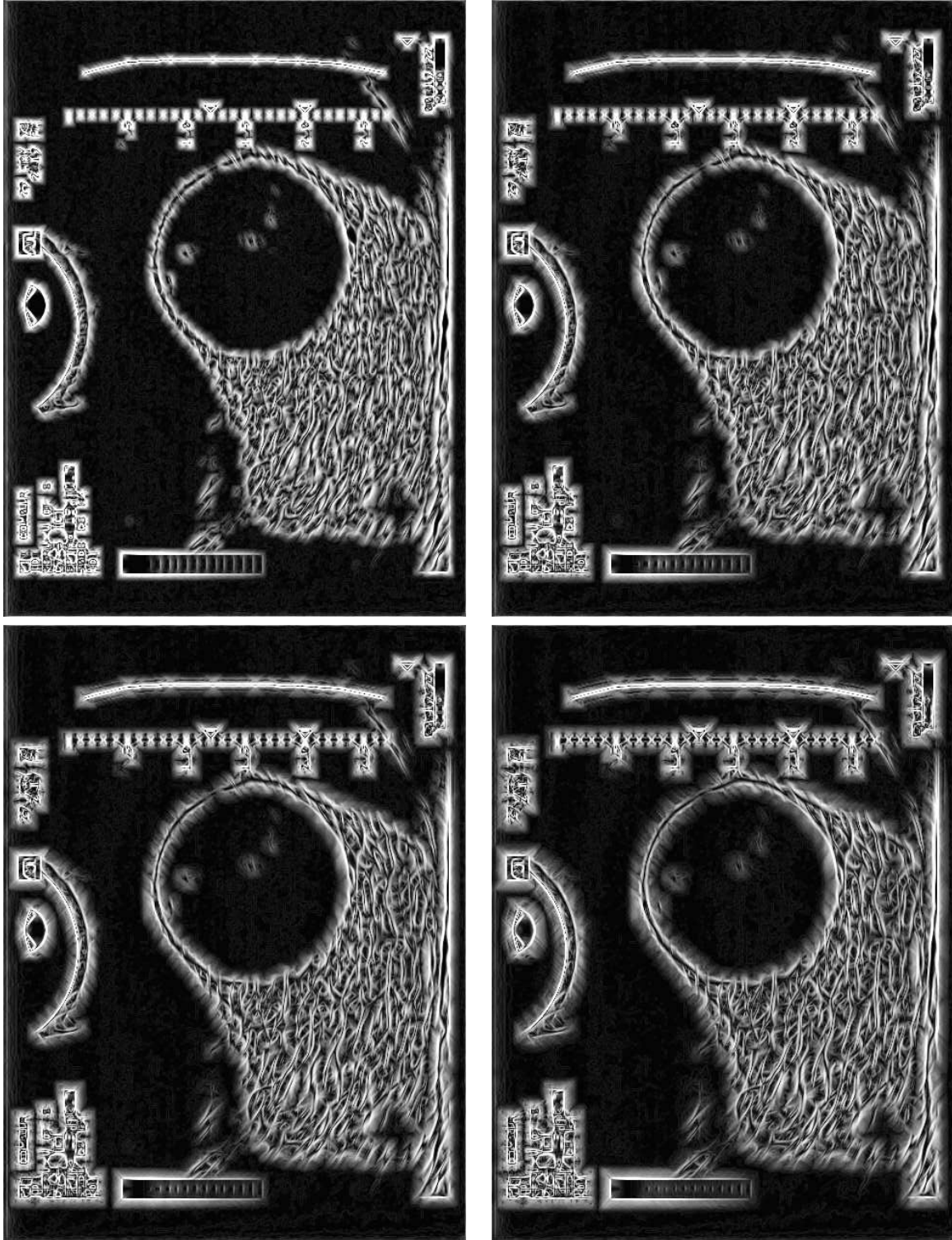


Figure 2.19: 01r.025 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

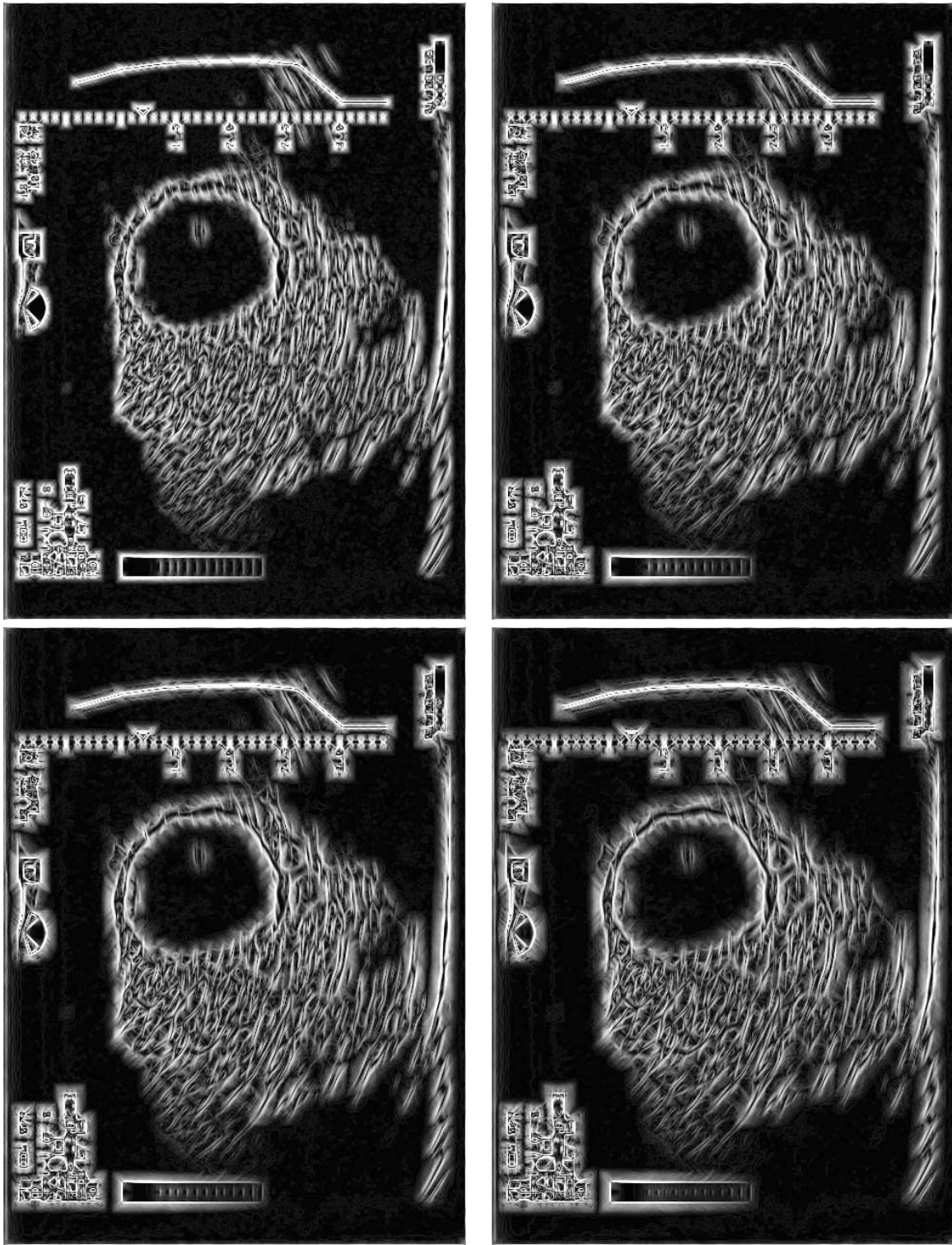


Figure 2.20: 07r.040 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

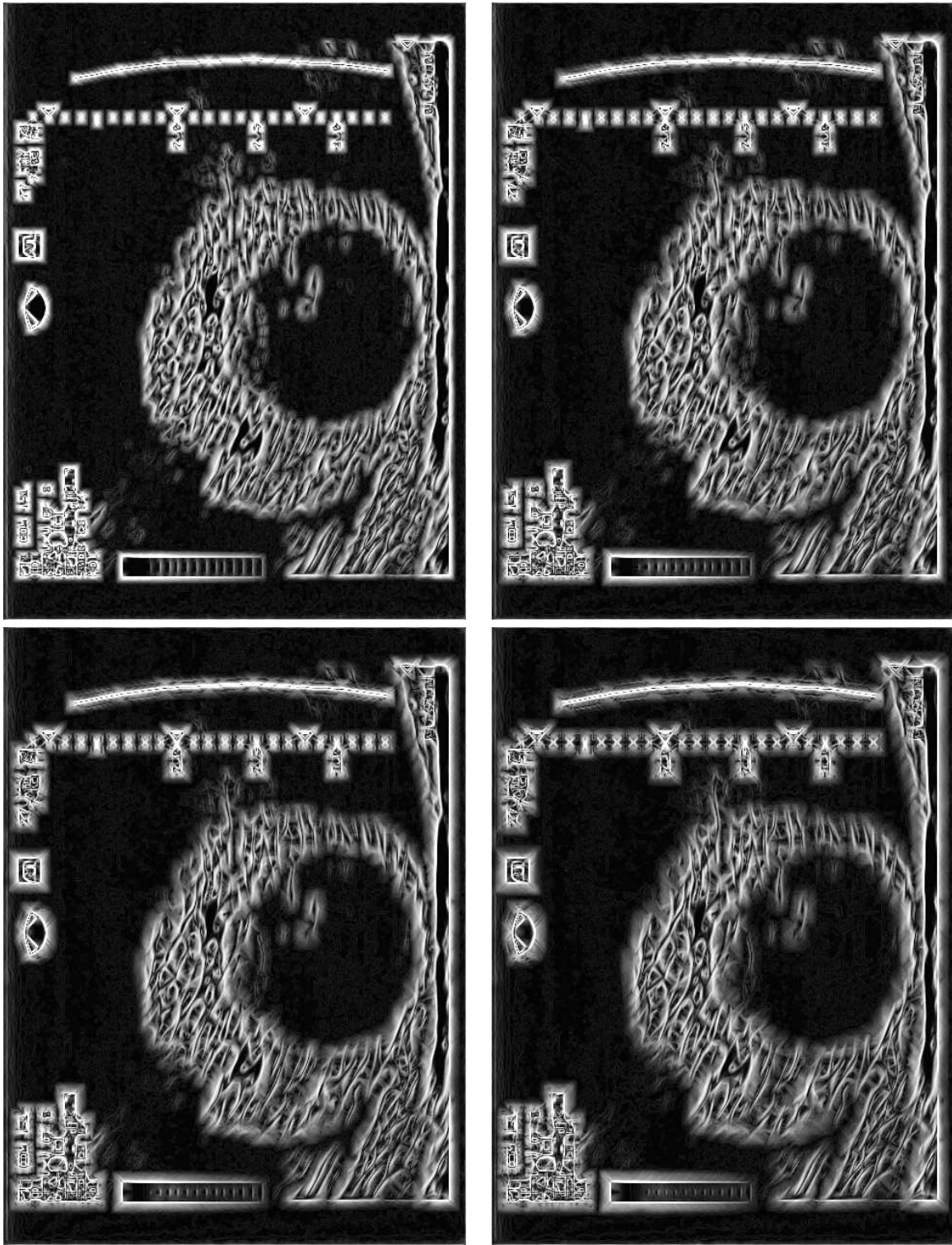


Figure 2.21: 15l.046 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

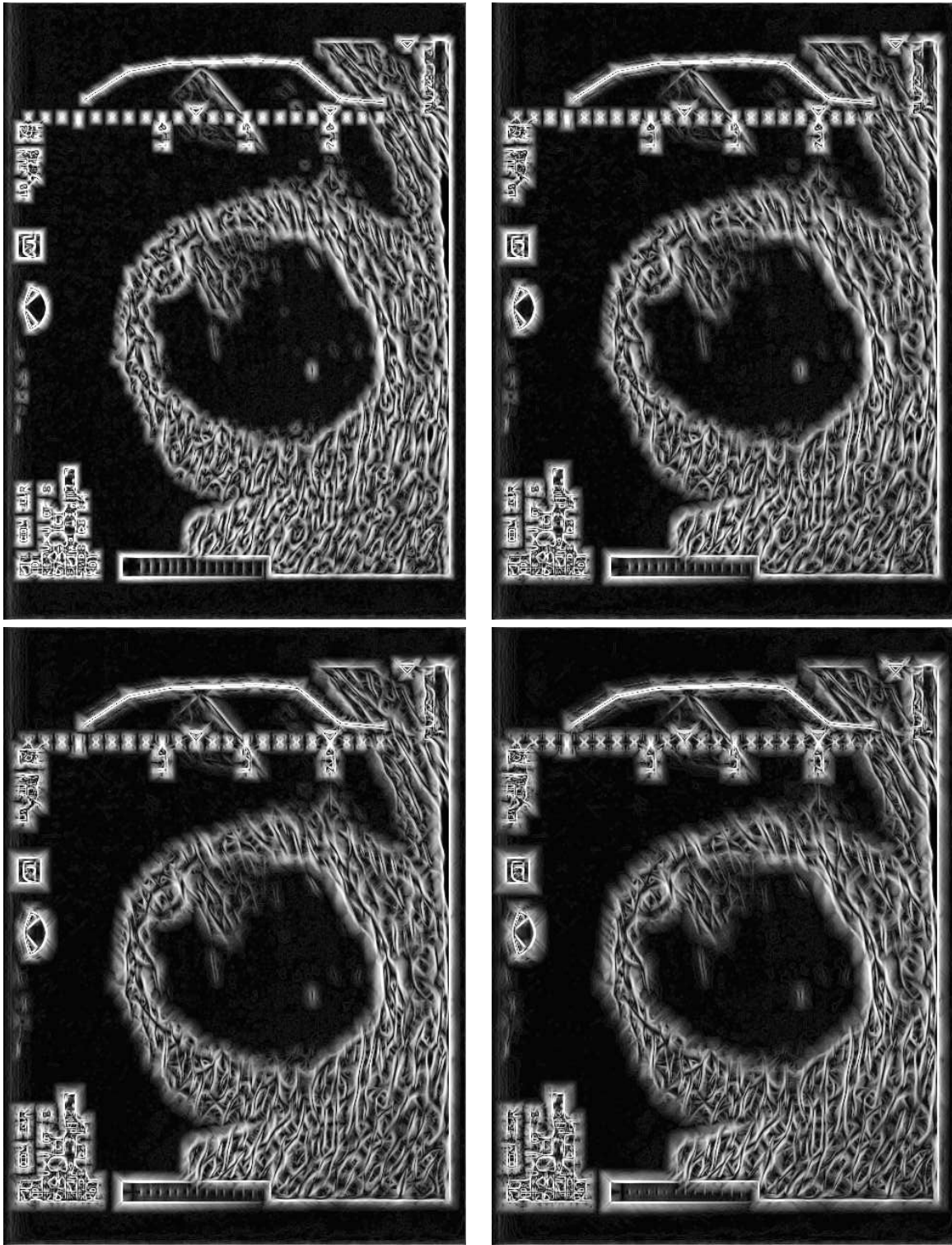


Figure 2.22: 31r.016 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

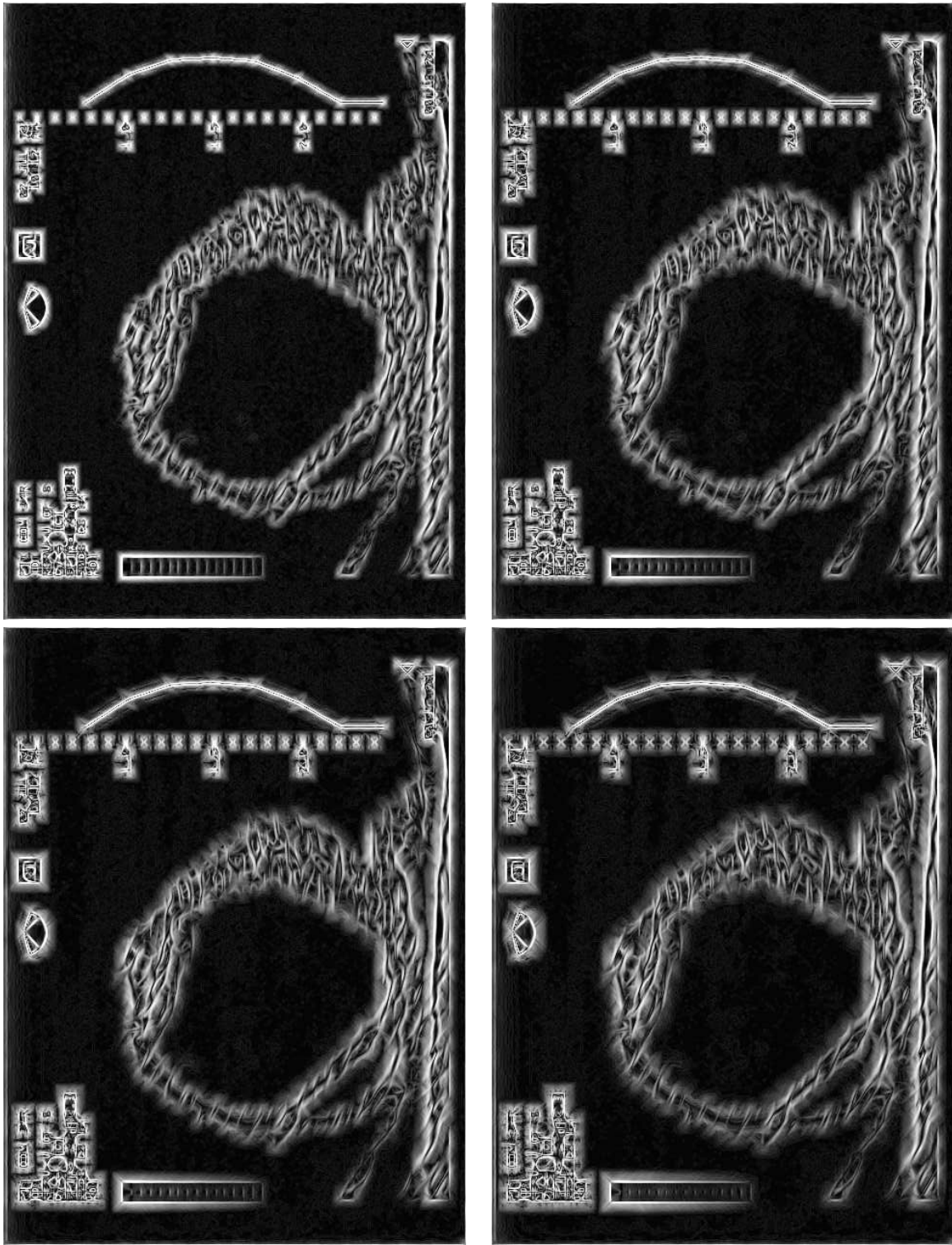


Figure 2.23: 34r.060 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

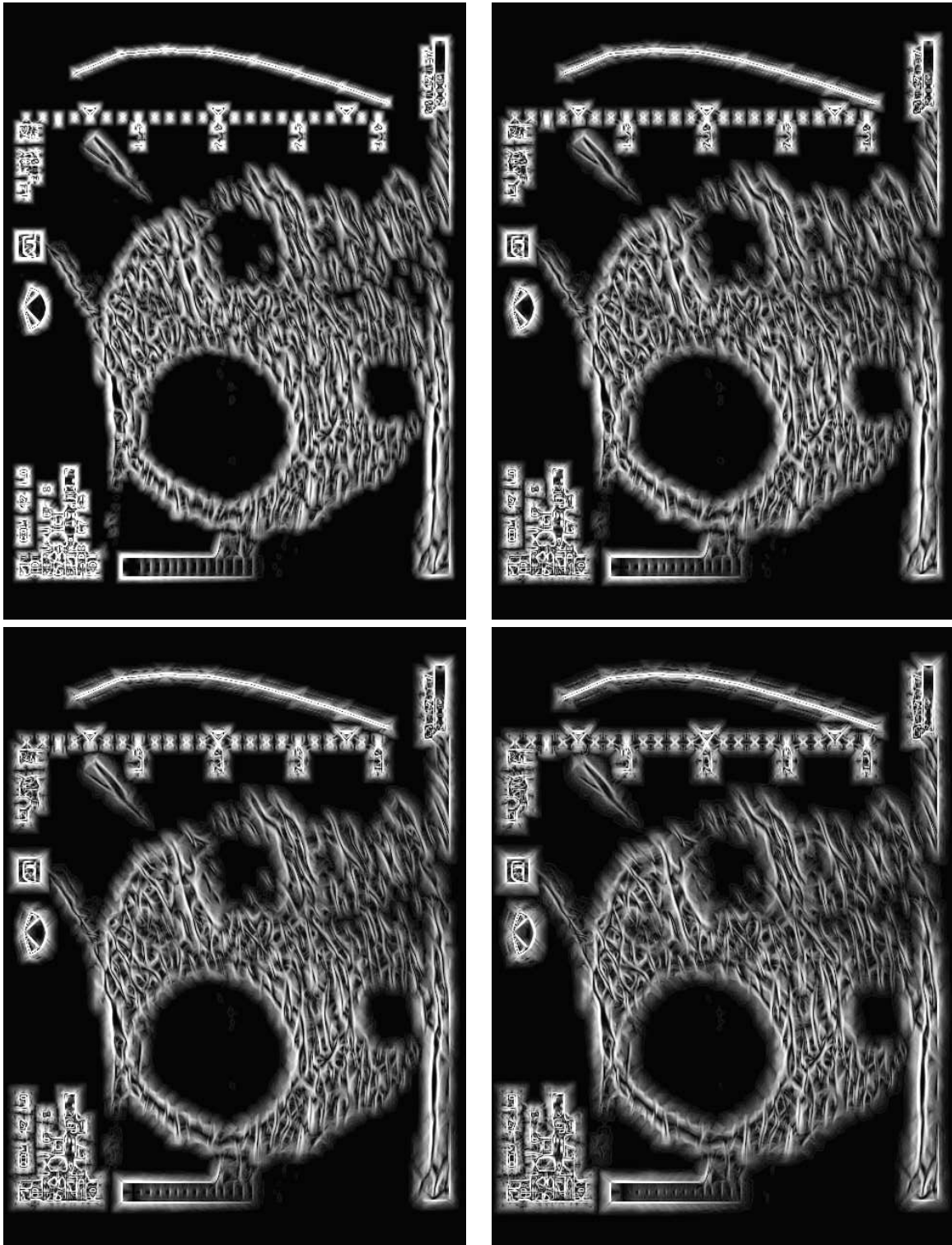


Figure 2.24: 421.025 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

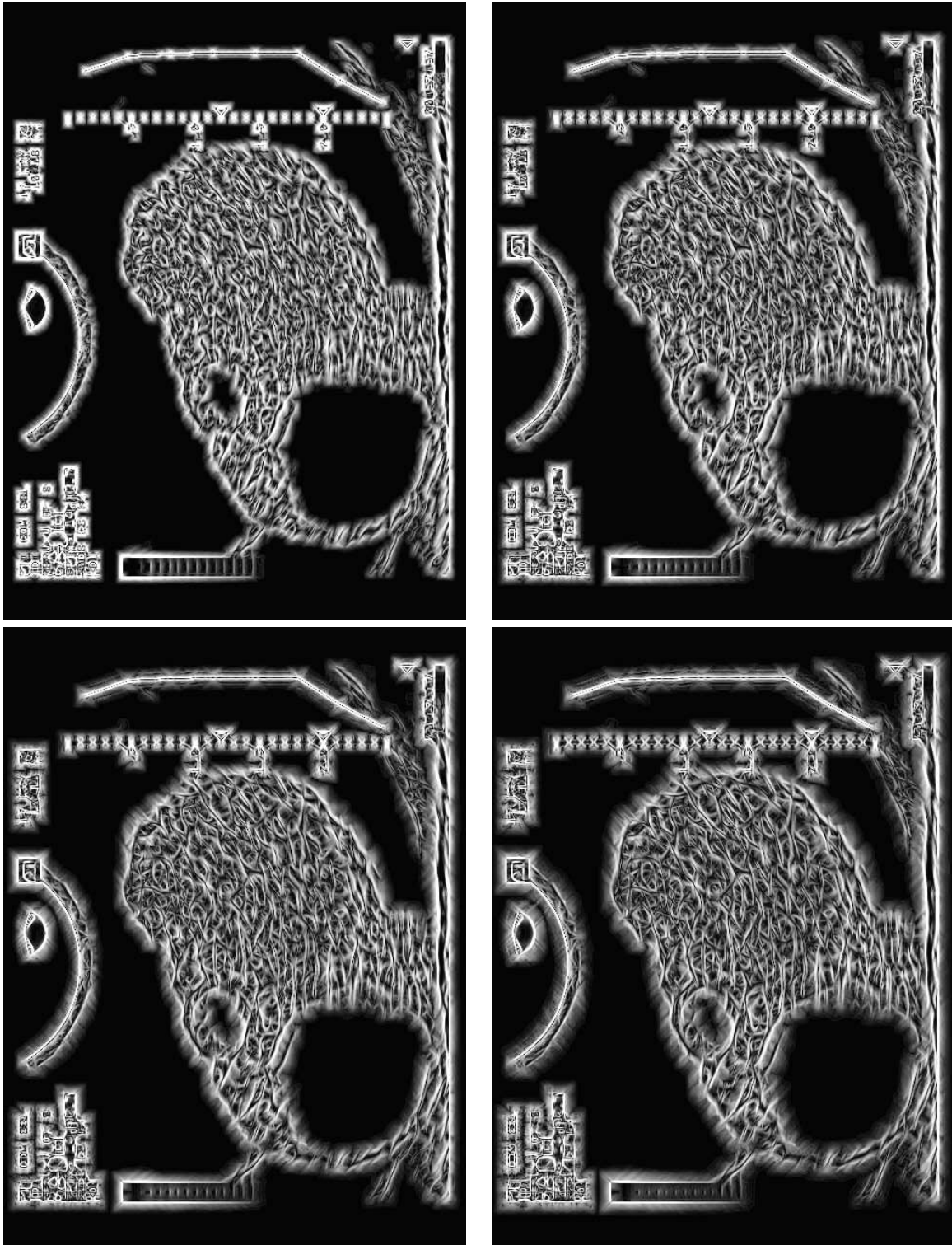


Figure 2.25: 681.025 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

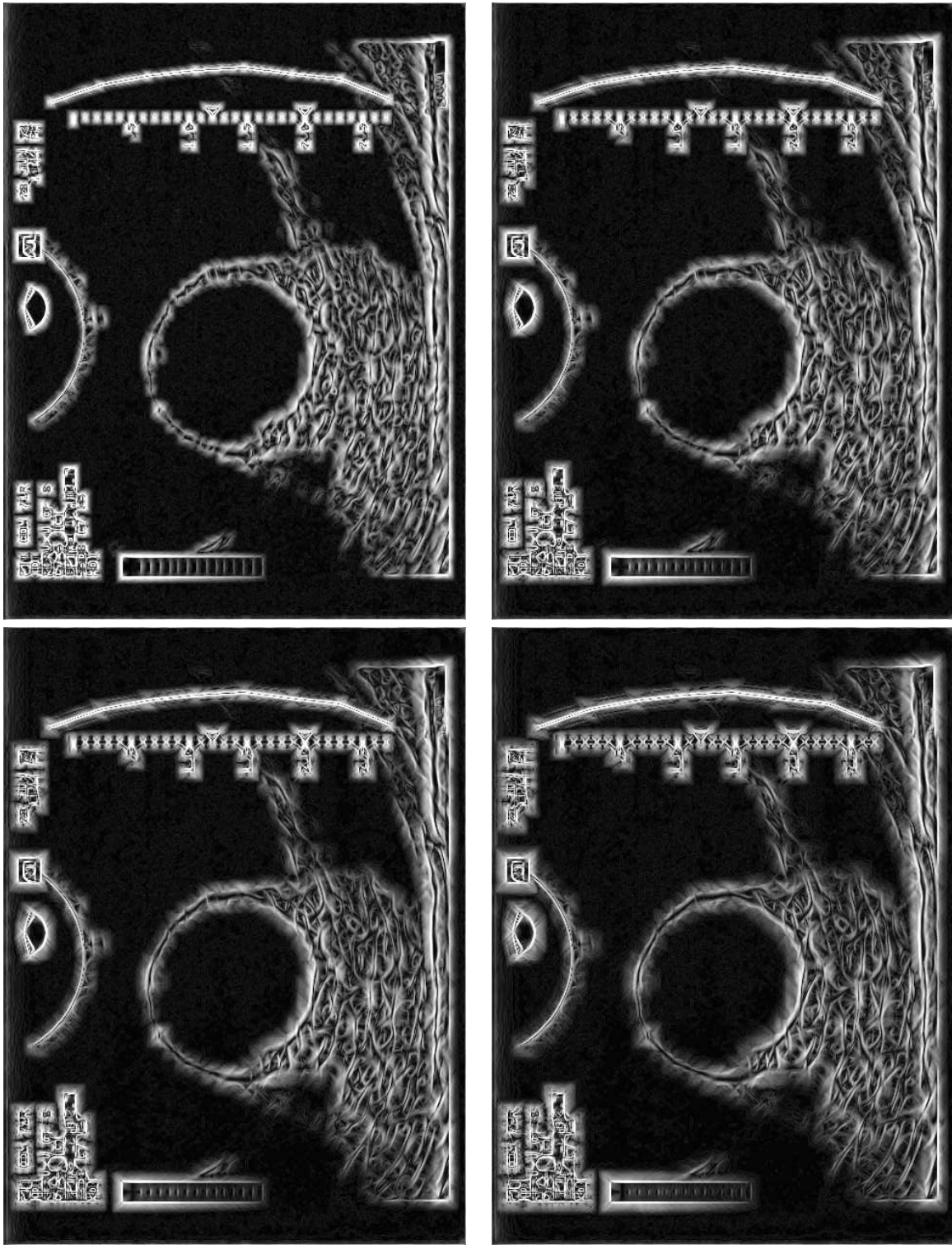


Figure 2.26: 71r.045 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

2.5 Gaussian Sticks: Variance Output Mode

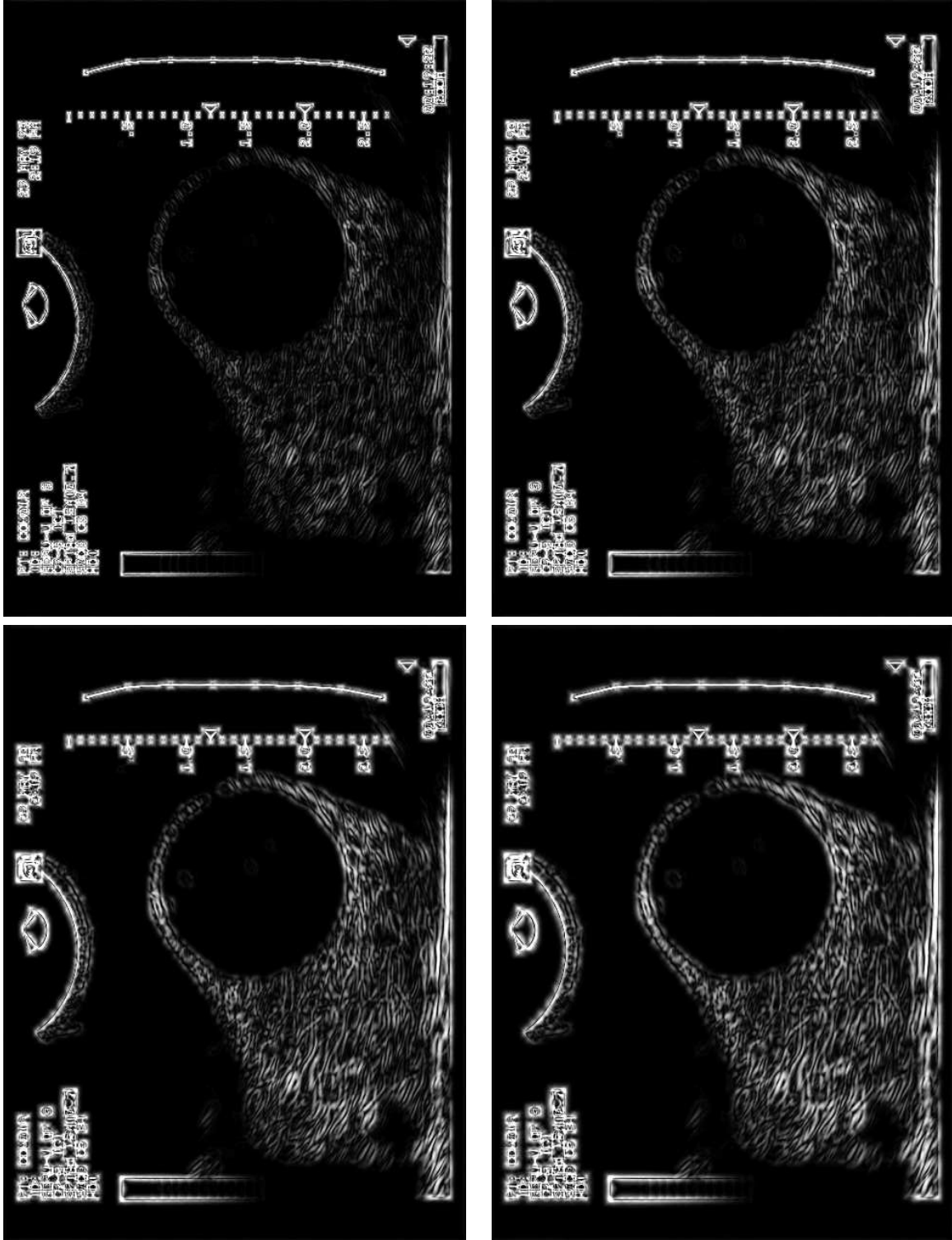


Figure 2.27: 01r.025 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

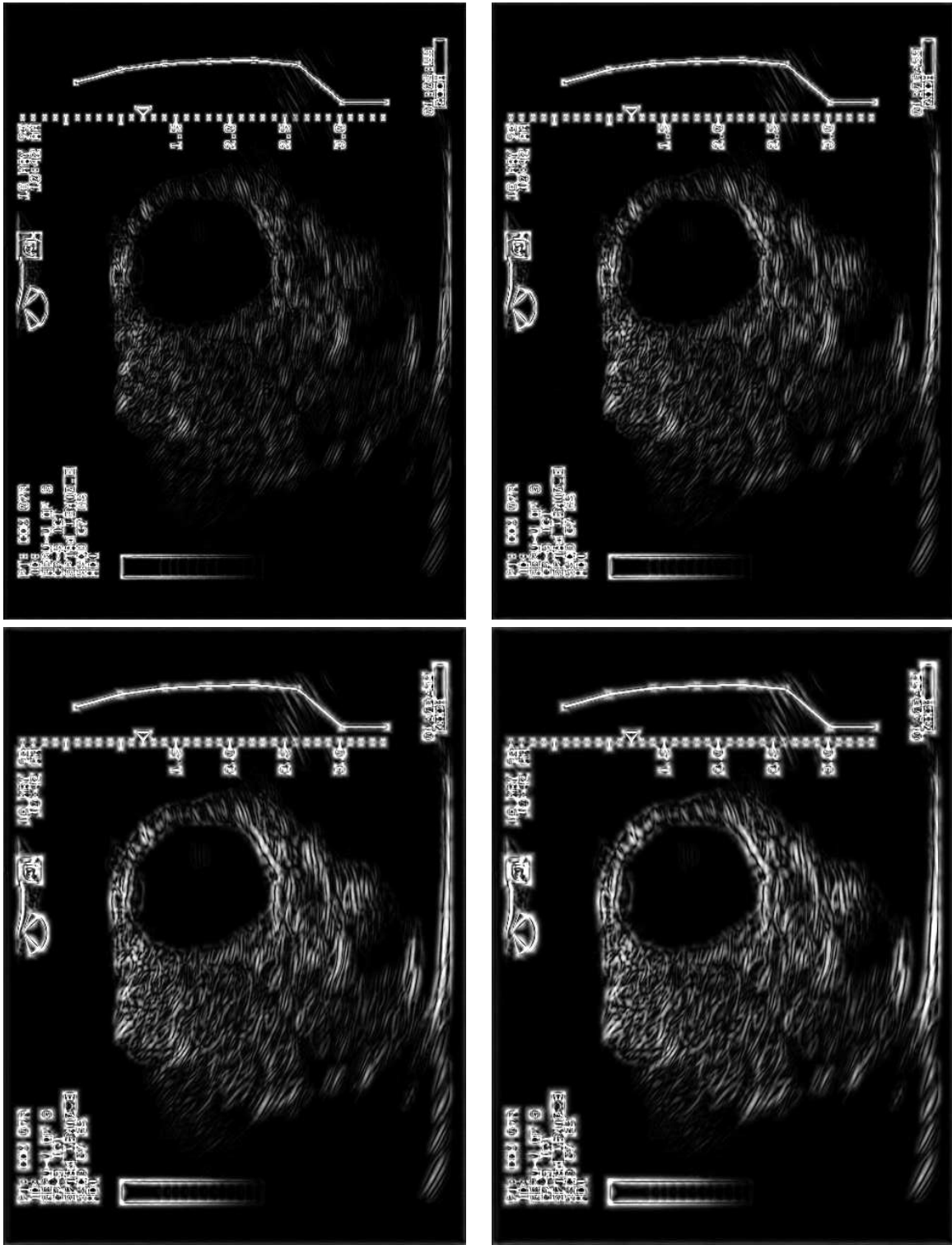


Figure 2.28: 07r.040 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

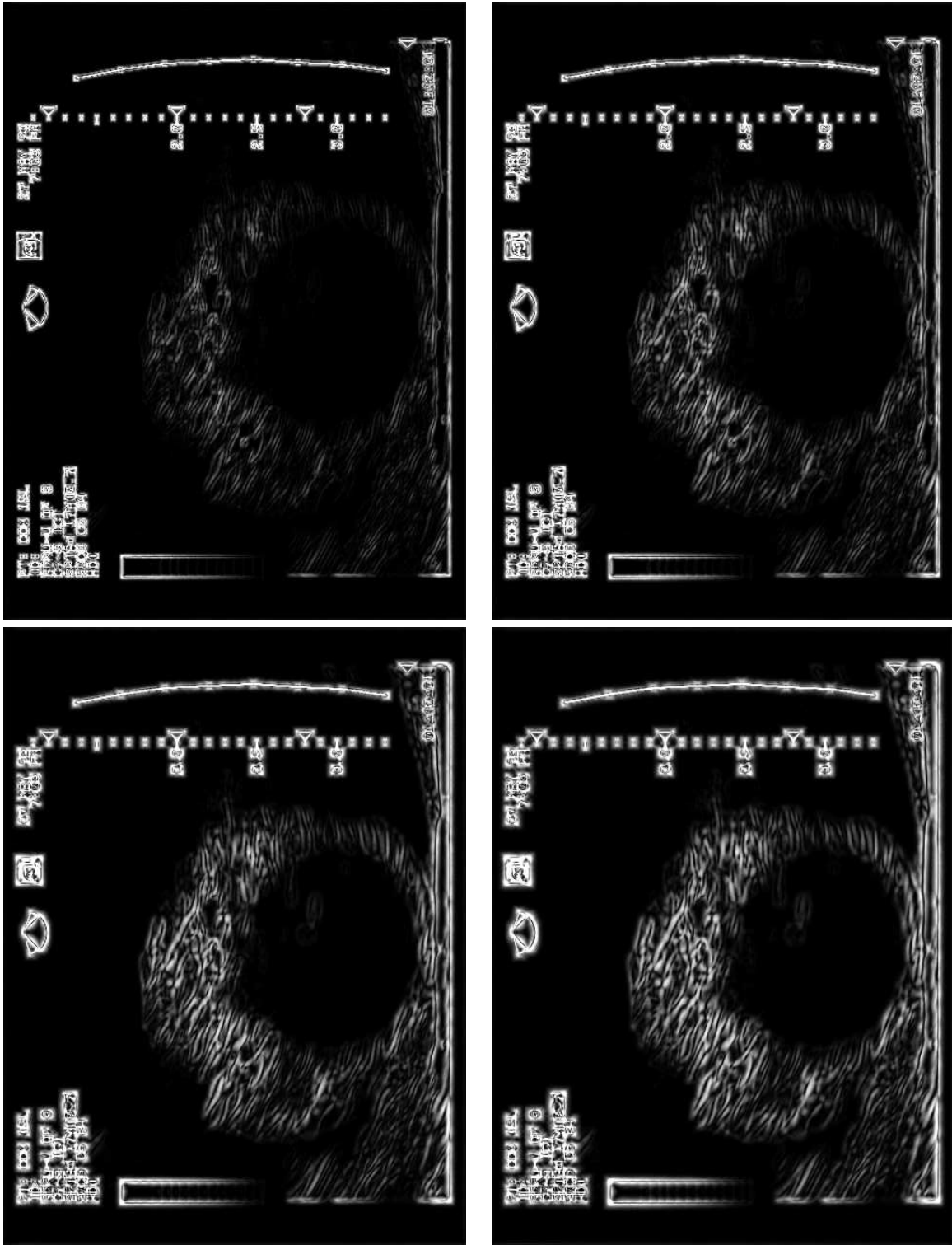


Figure 2.29: 151.046 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

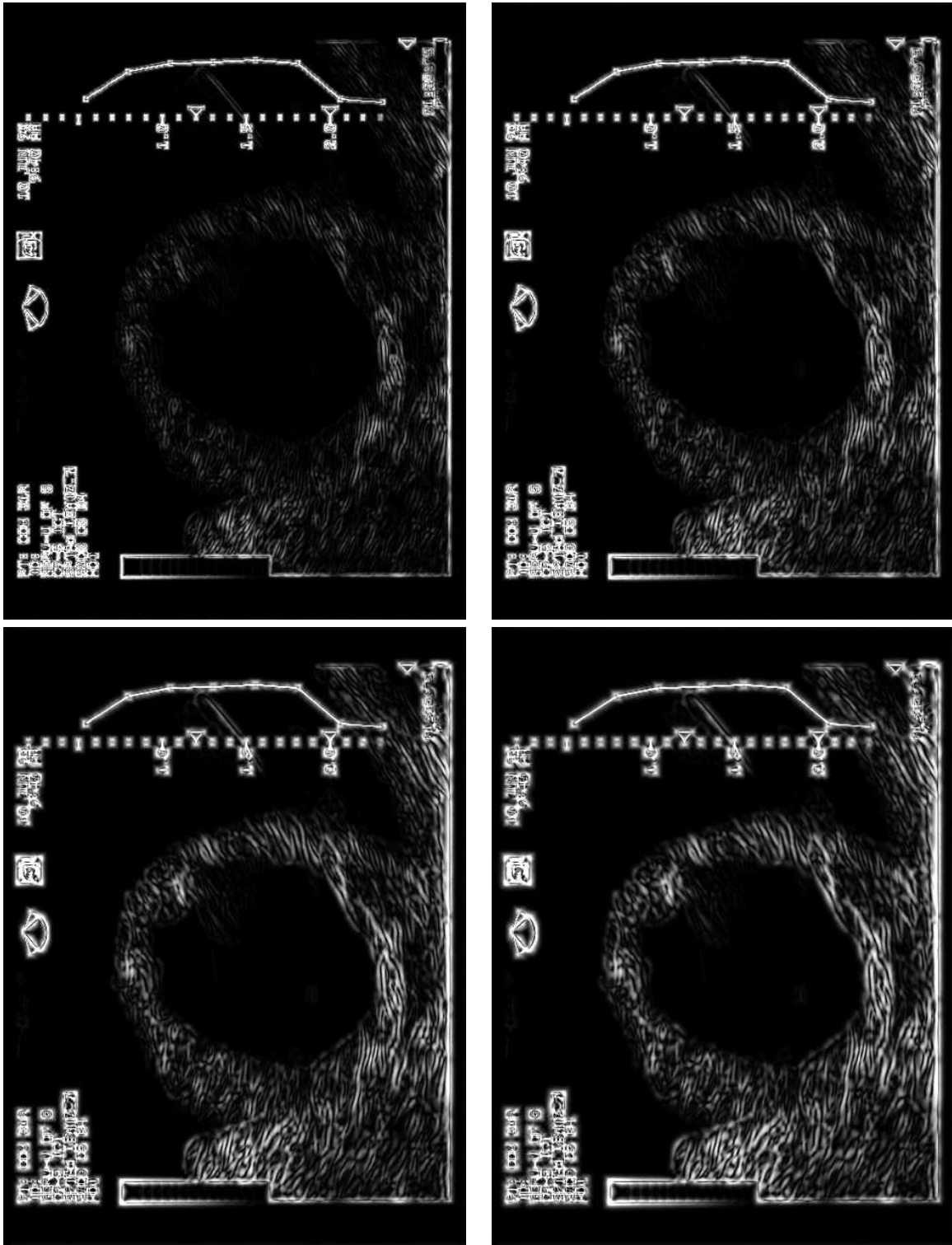


Figure 2.30: 31r.016 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

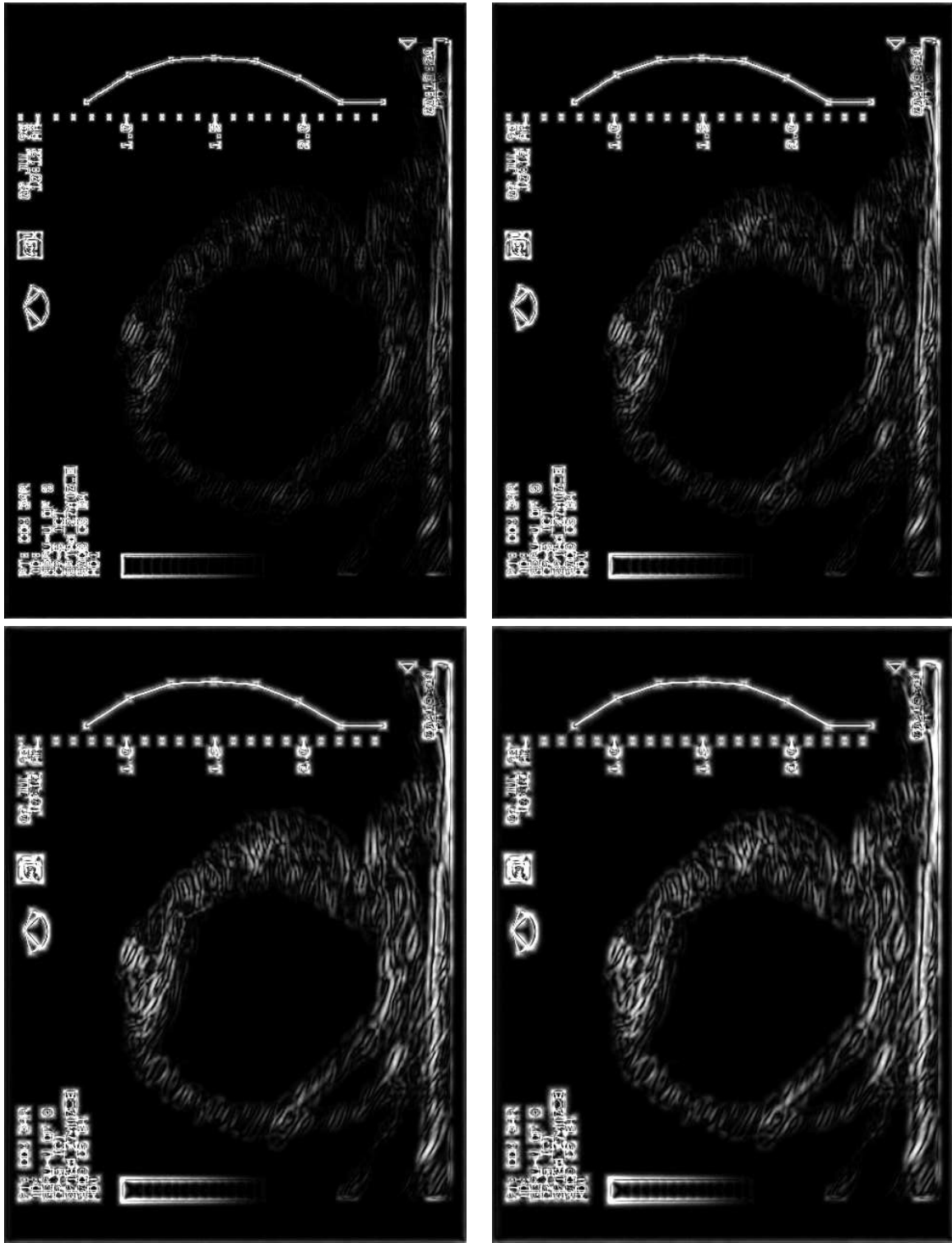


Figure 2.31: 34r.060 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

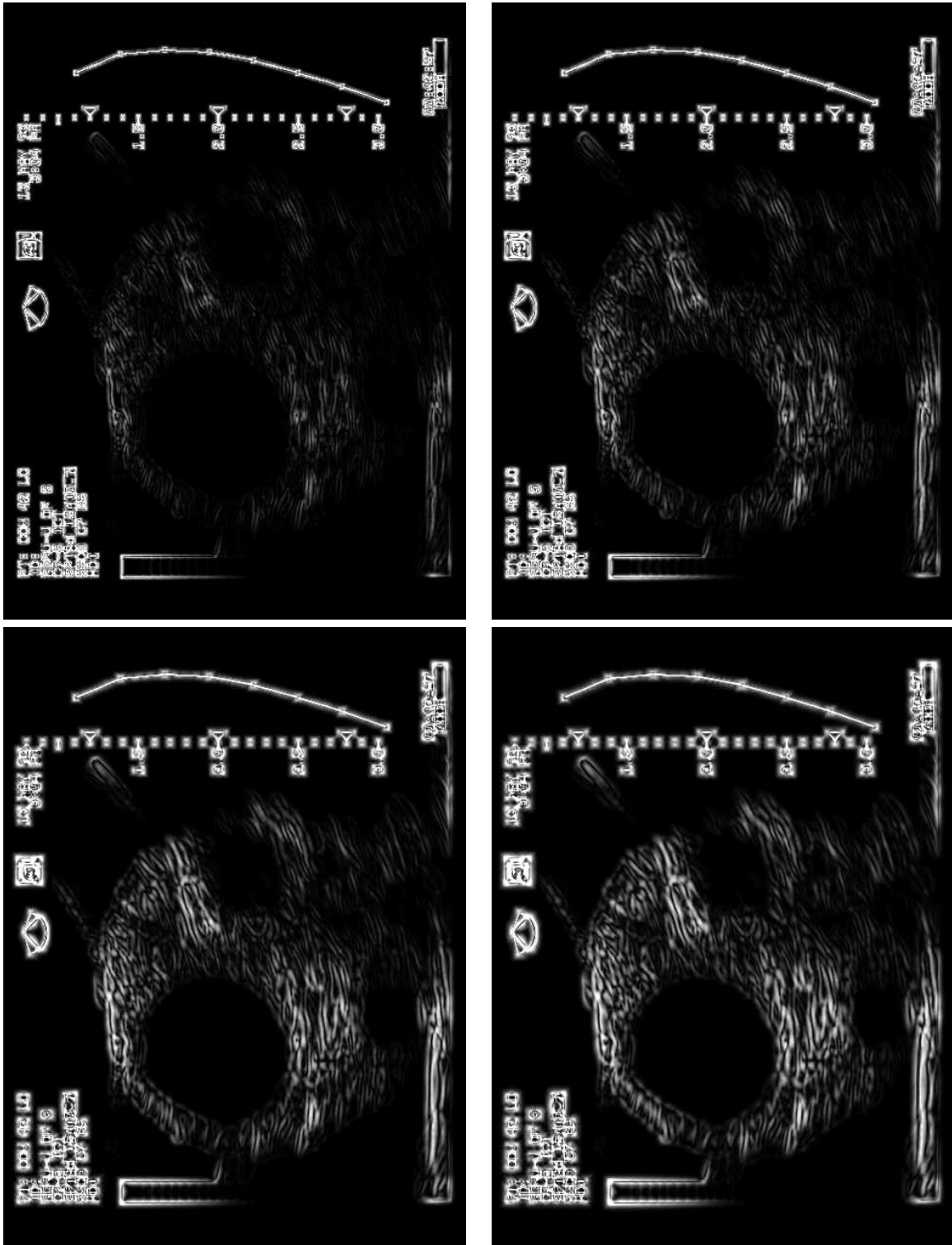


Figure 2.32: 421.025 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

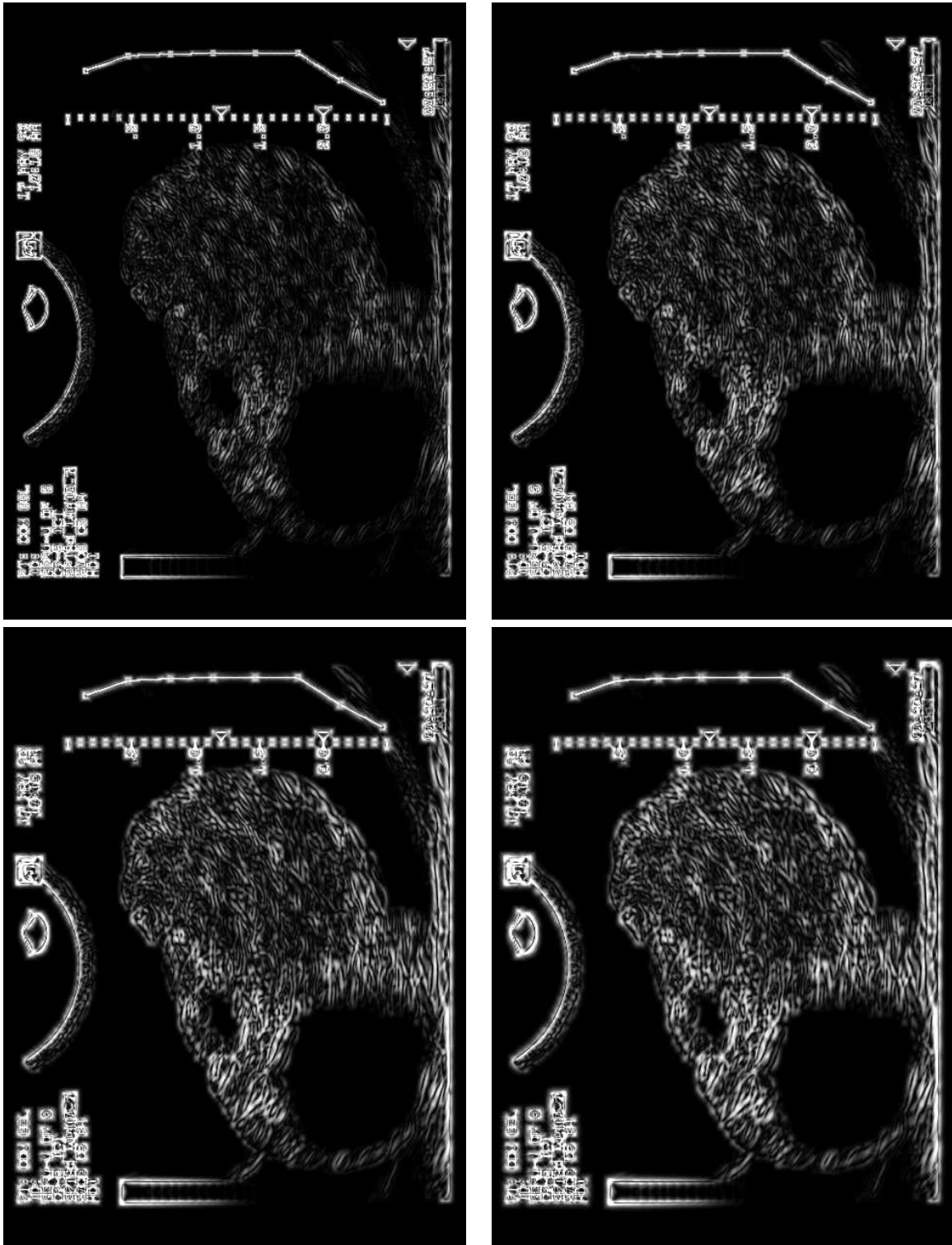


Figure 2.33: 681.025 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

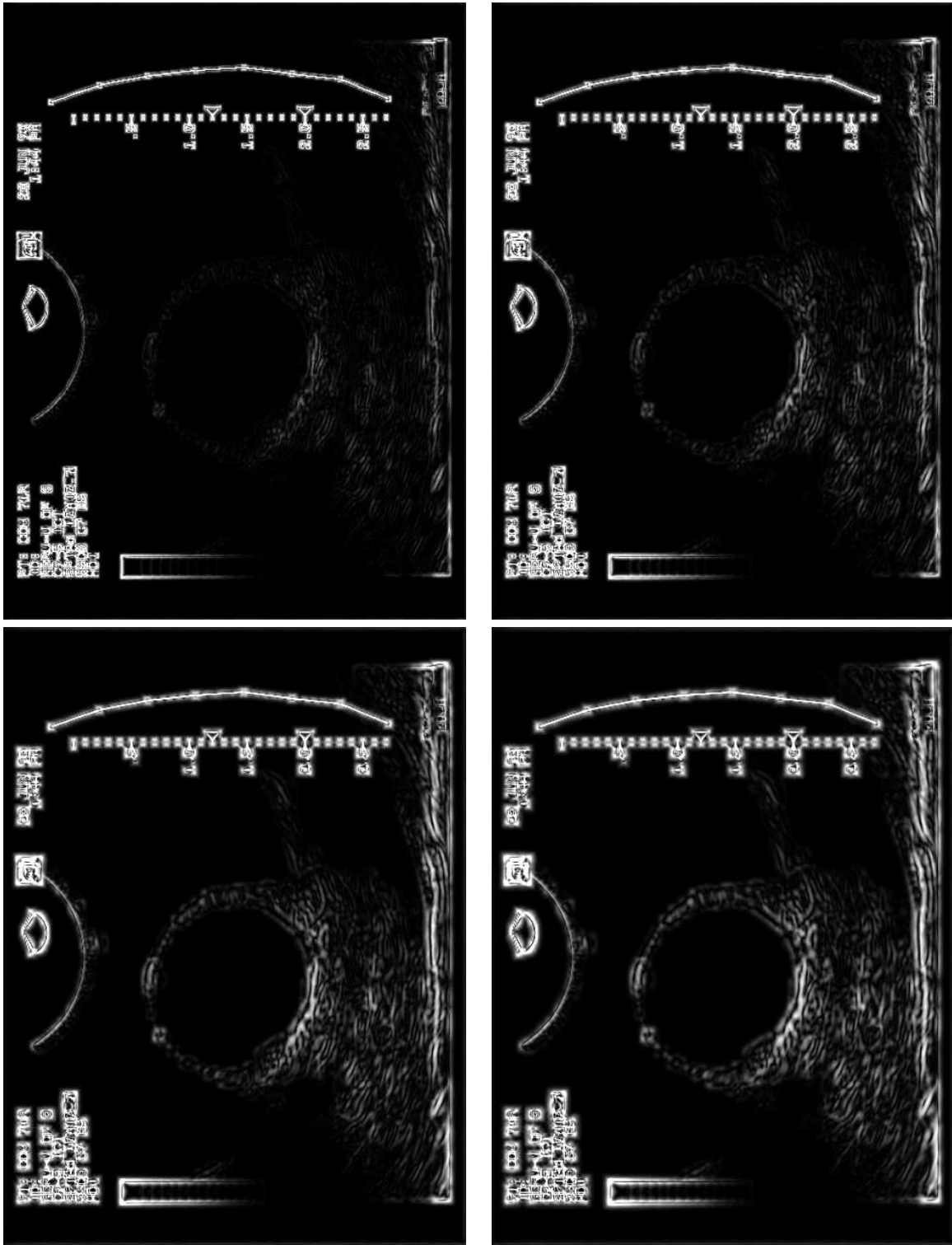


Figure 2.34: 71r.045 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

2.6 Difference Images: Mean Output Mode

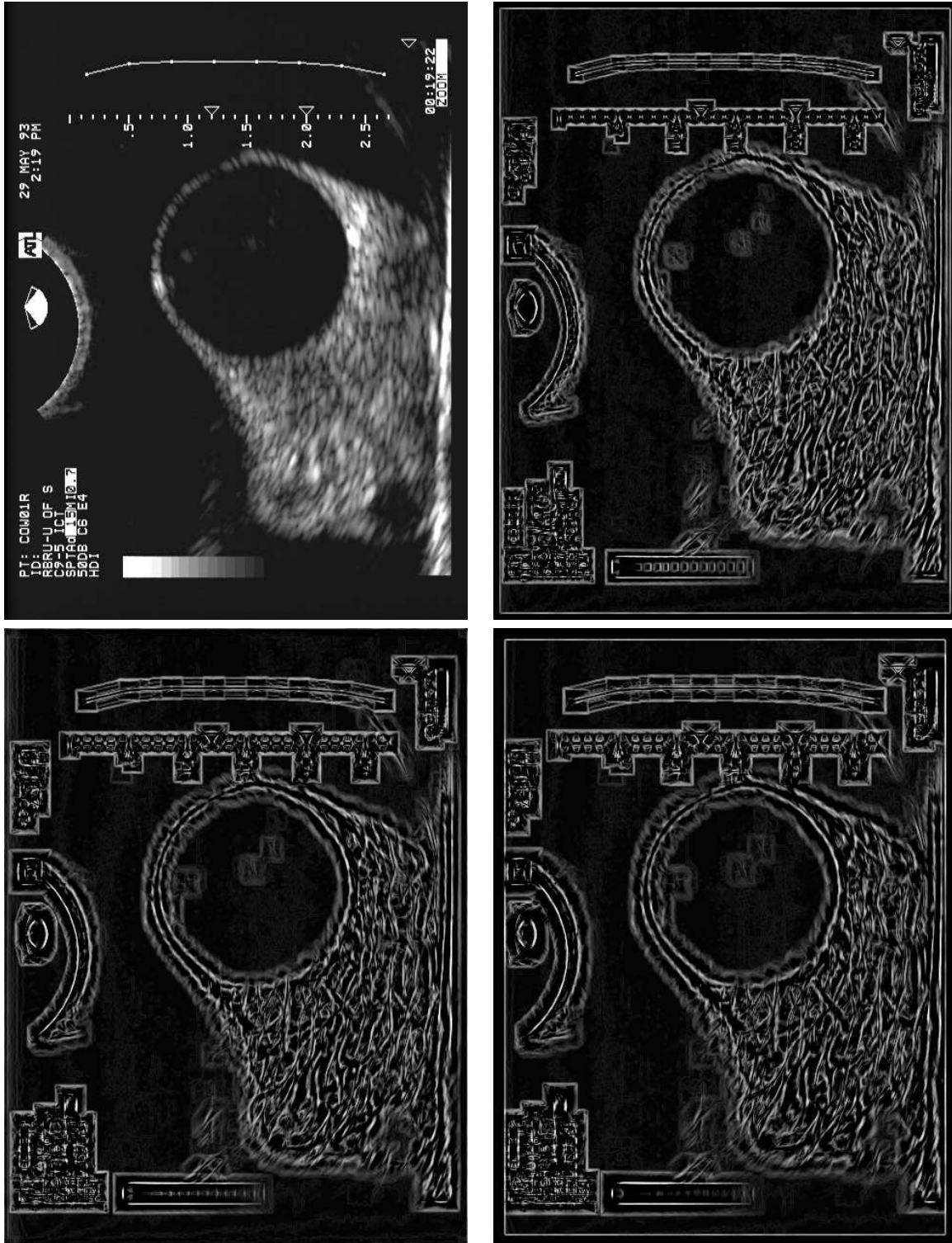


Figure 2.35: 01r.025 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

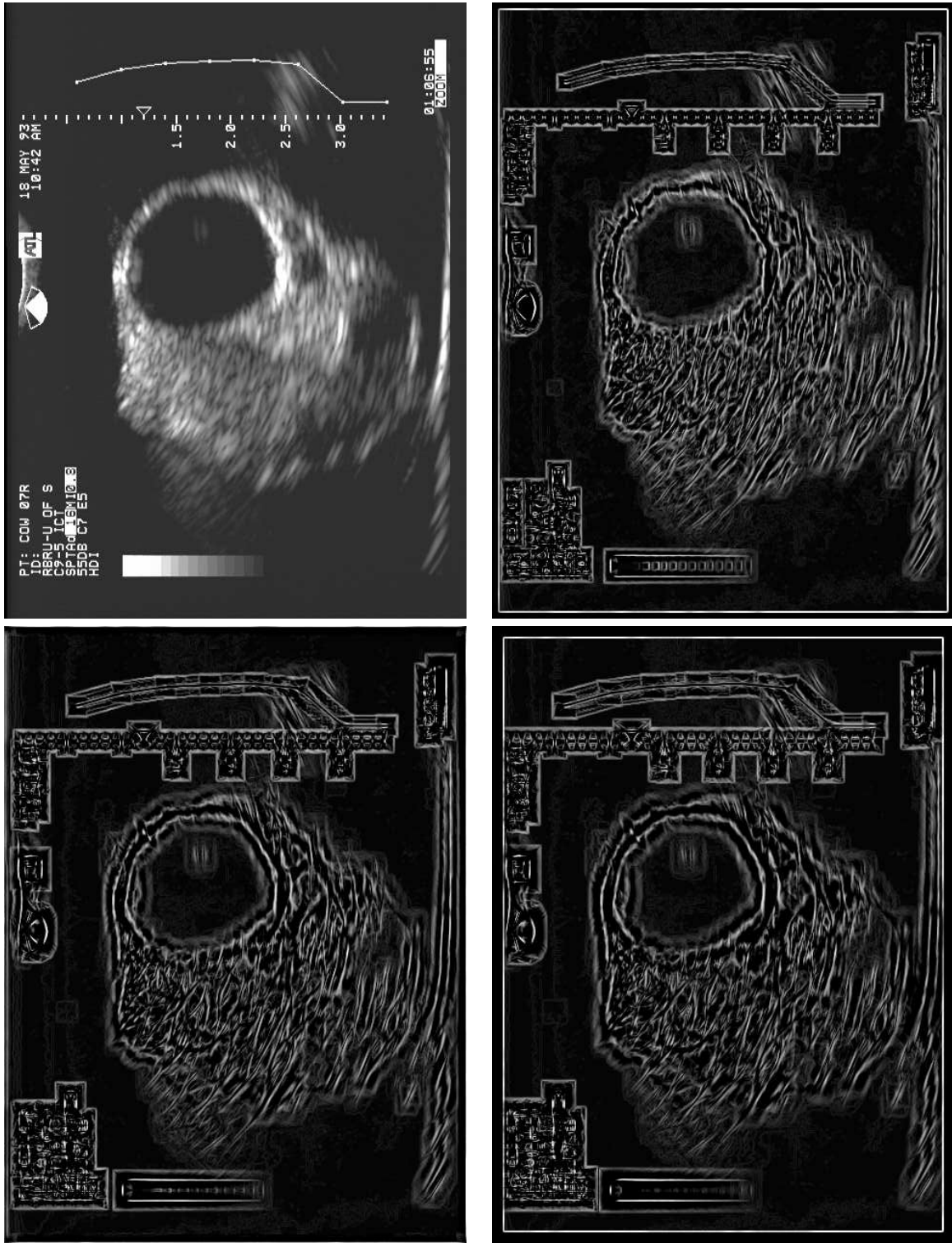


Figure 2.36: 07r.040 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

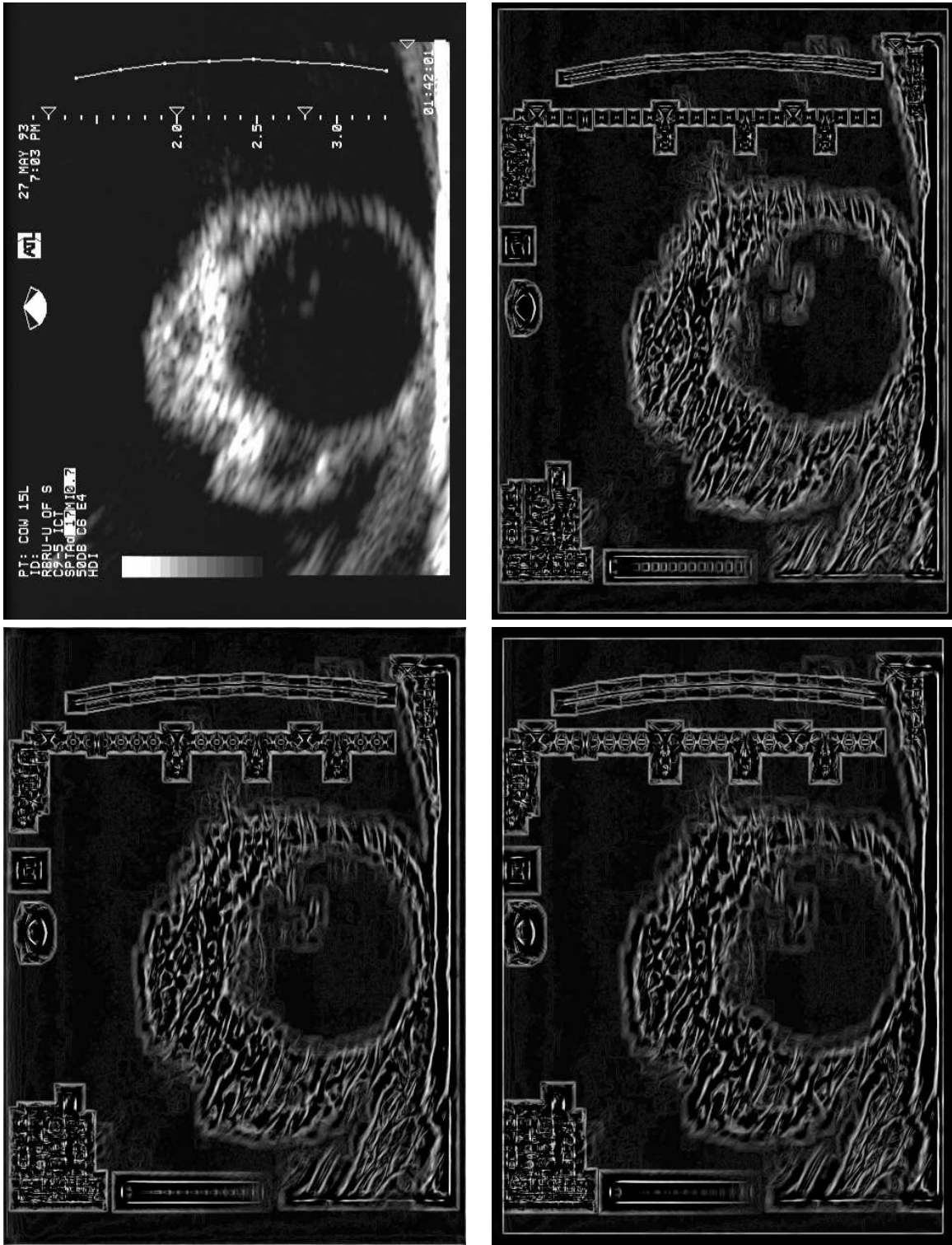


Figure 2.37: 15l.046 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

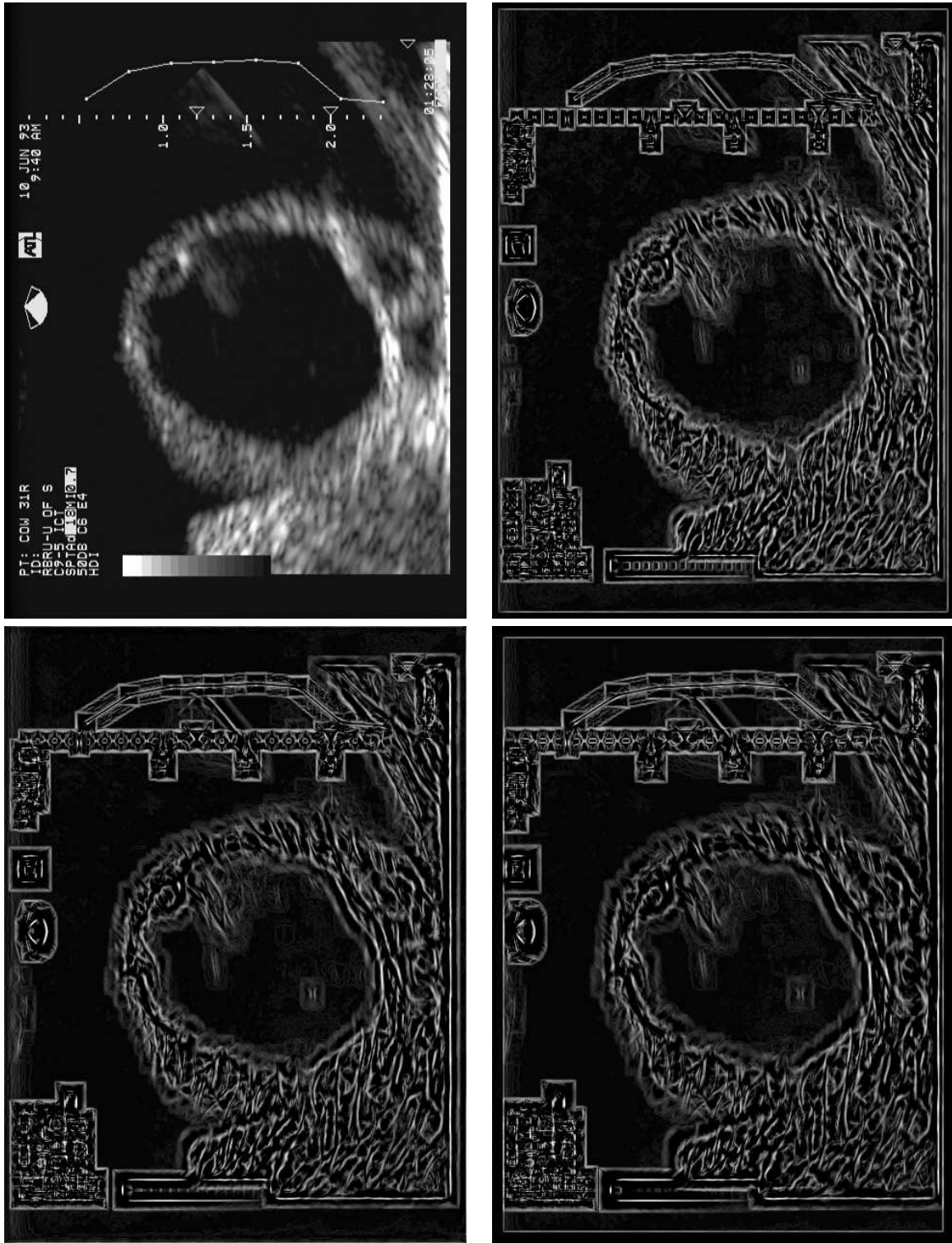


Figure 2.38: 31r.016 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

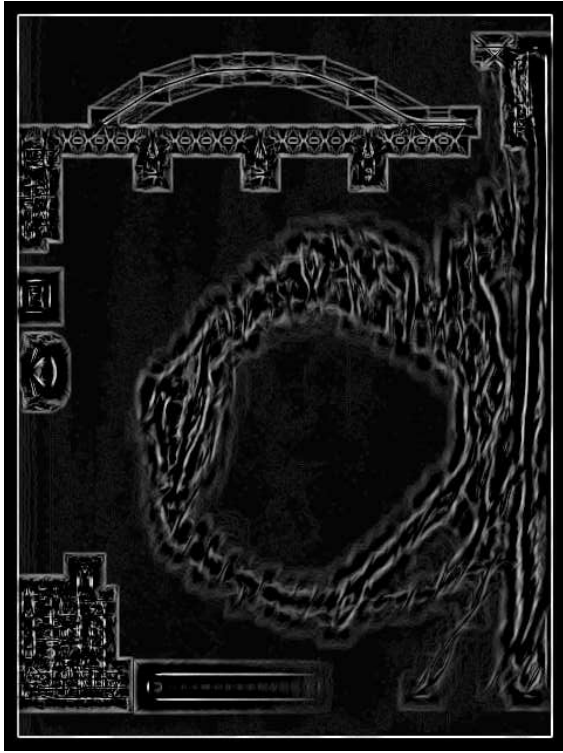
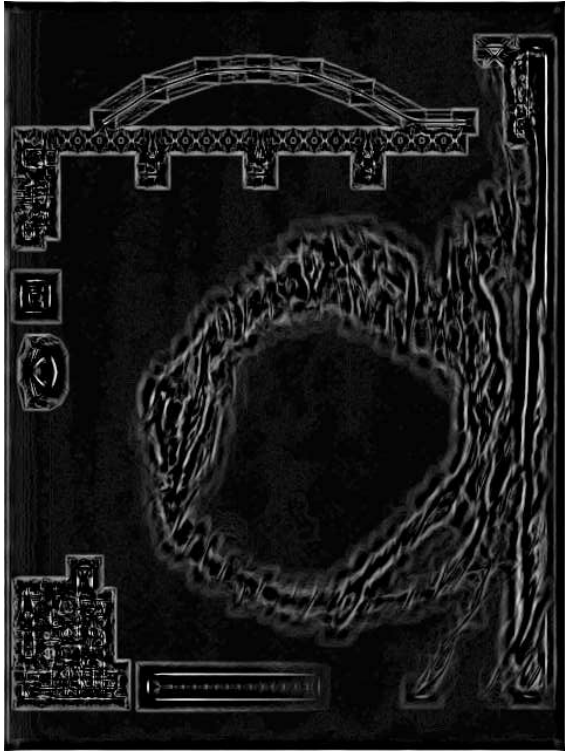
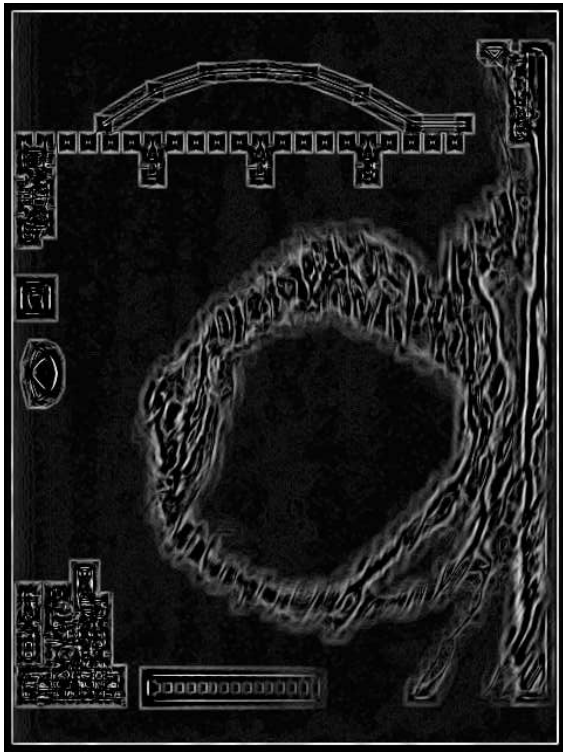
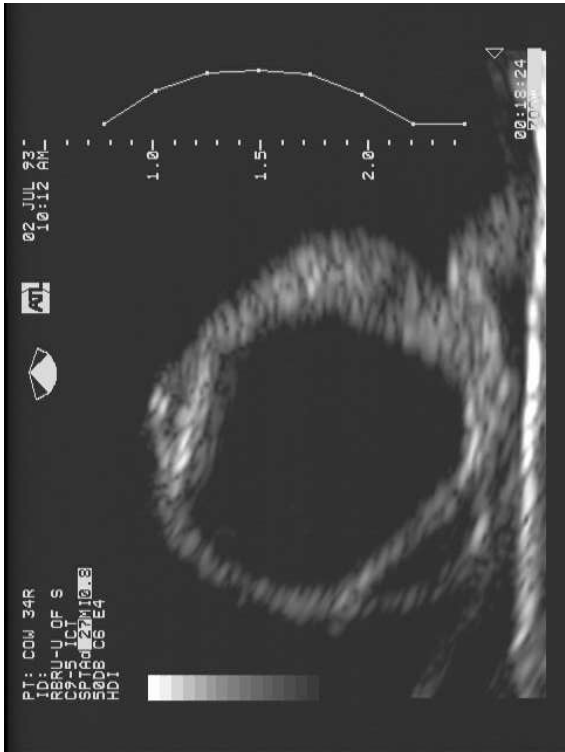


Figure 2.39: 34r.060 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

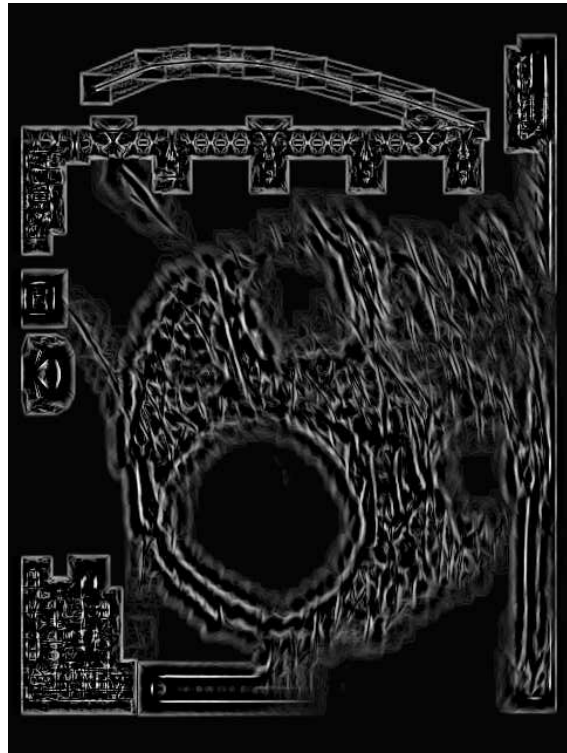
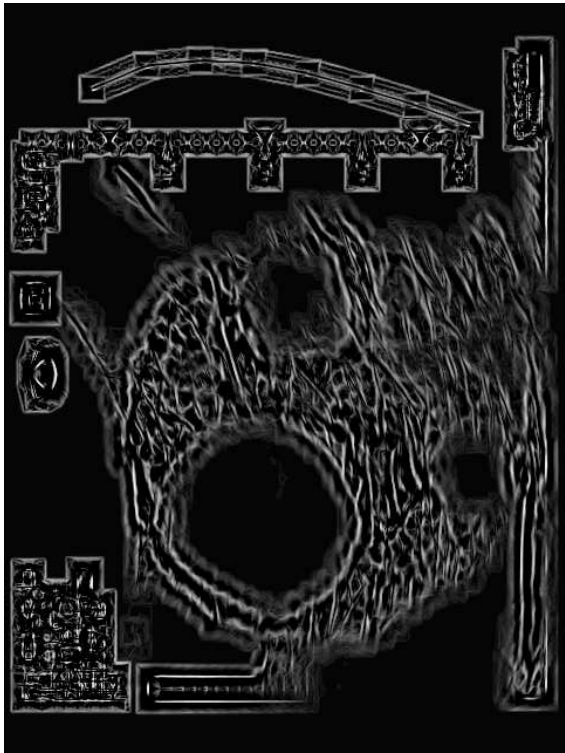
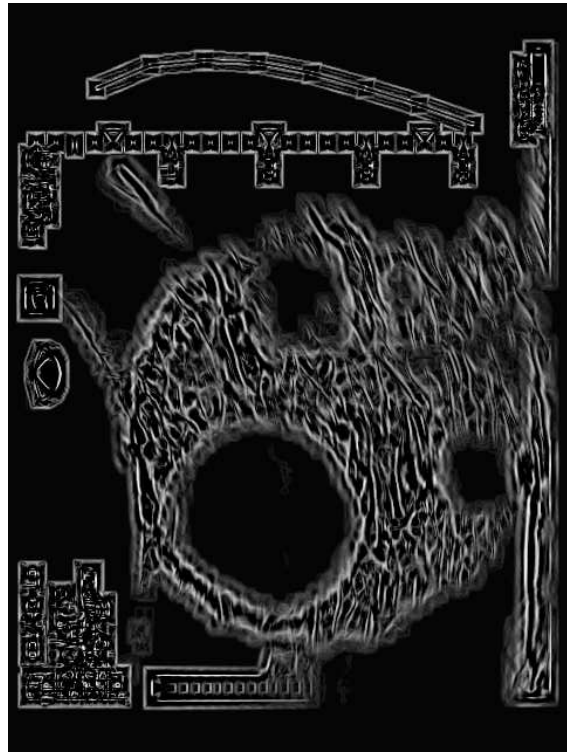


Figure 2.40: 421.025 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

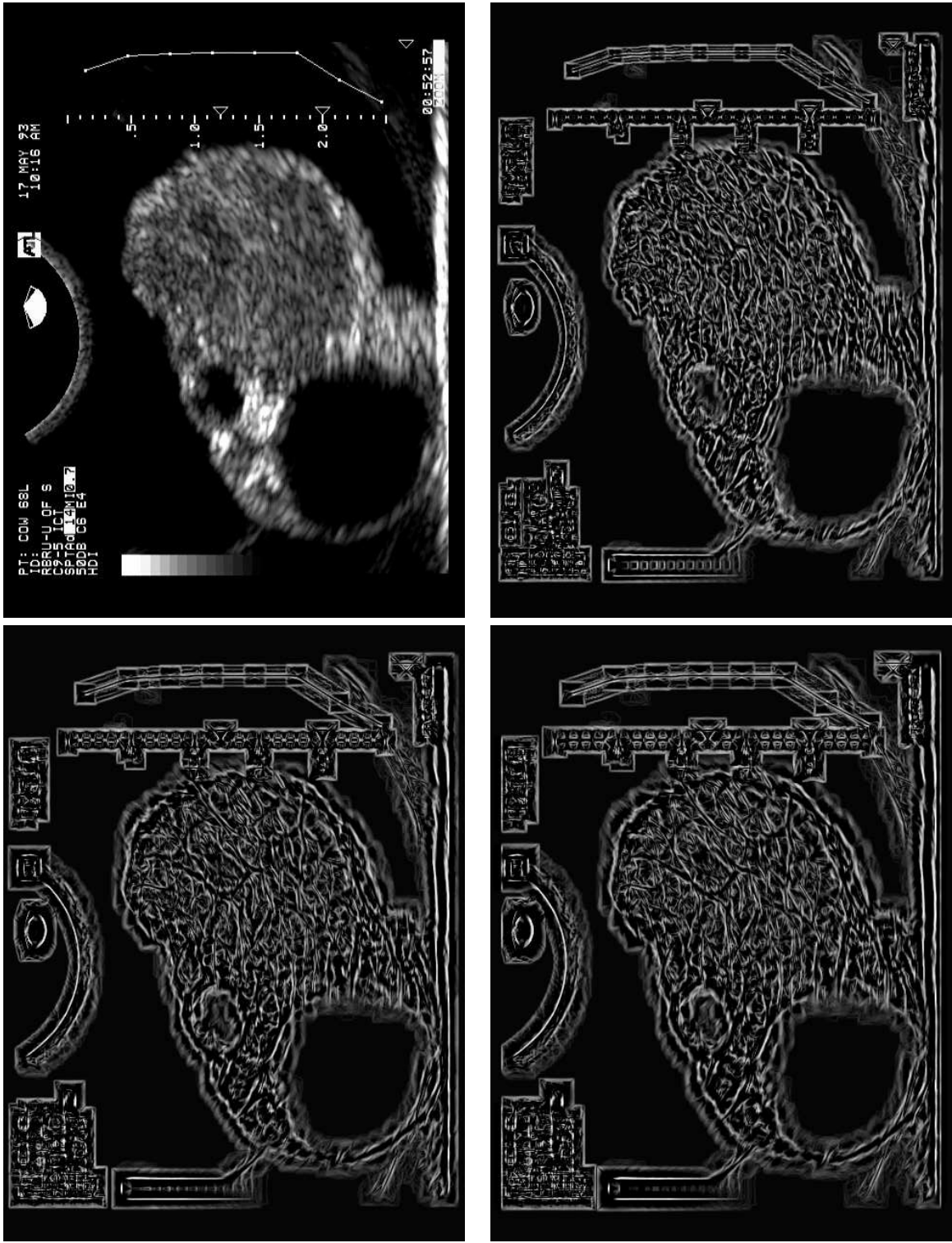


Figure 2.41: 68L.025 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

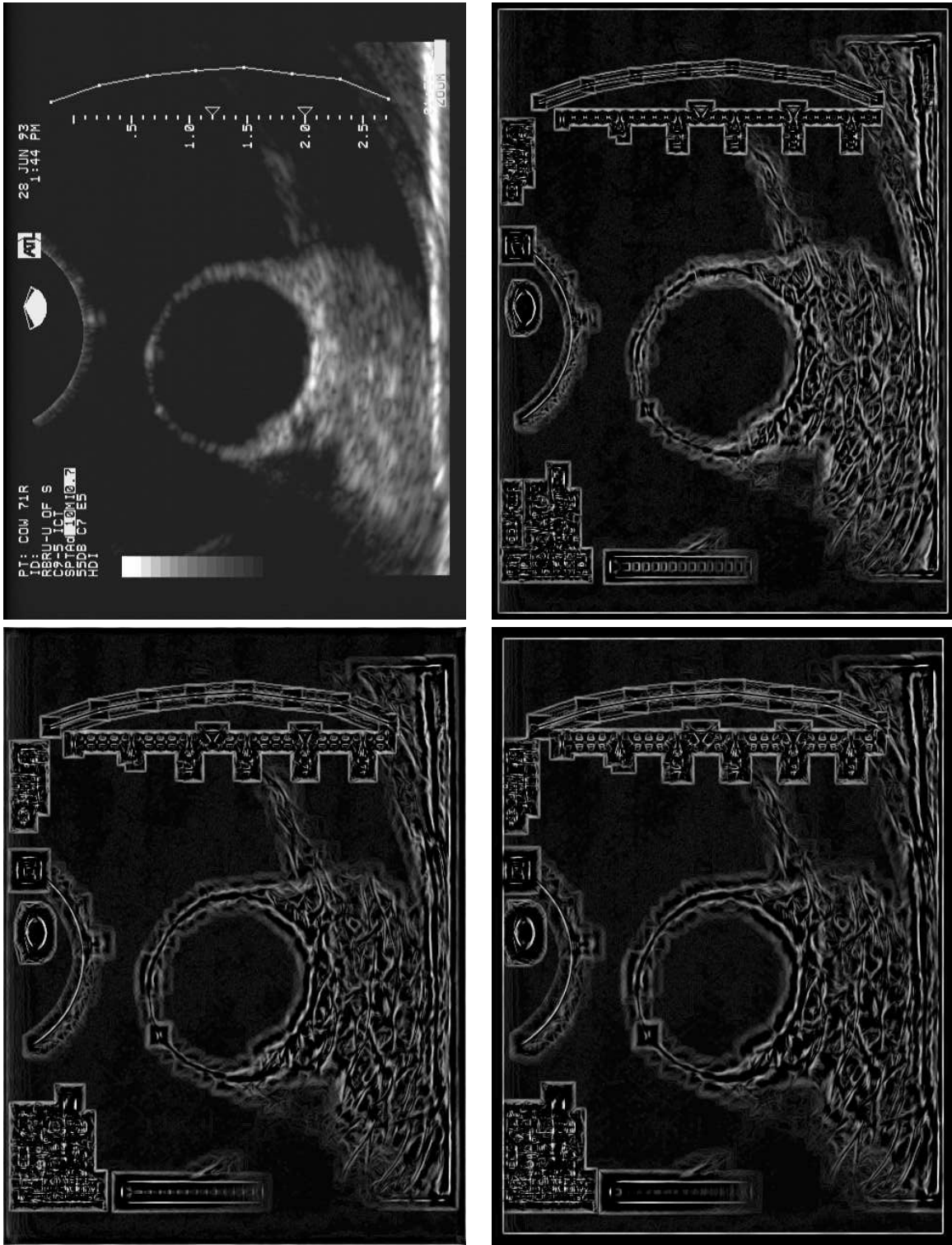


Figure 2.42: 71r.045 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

2.7 Difference Images: Variance Output Mode

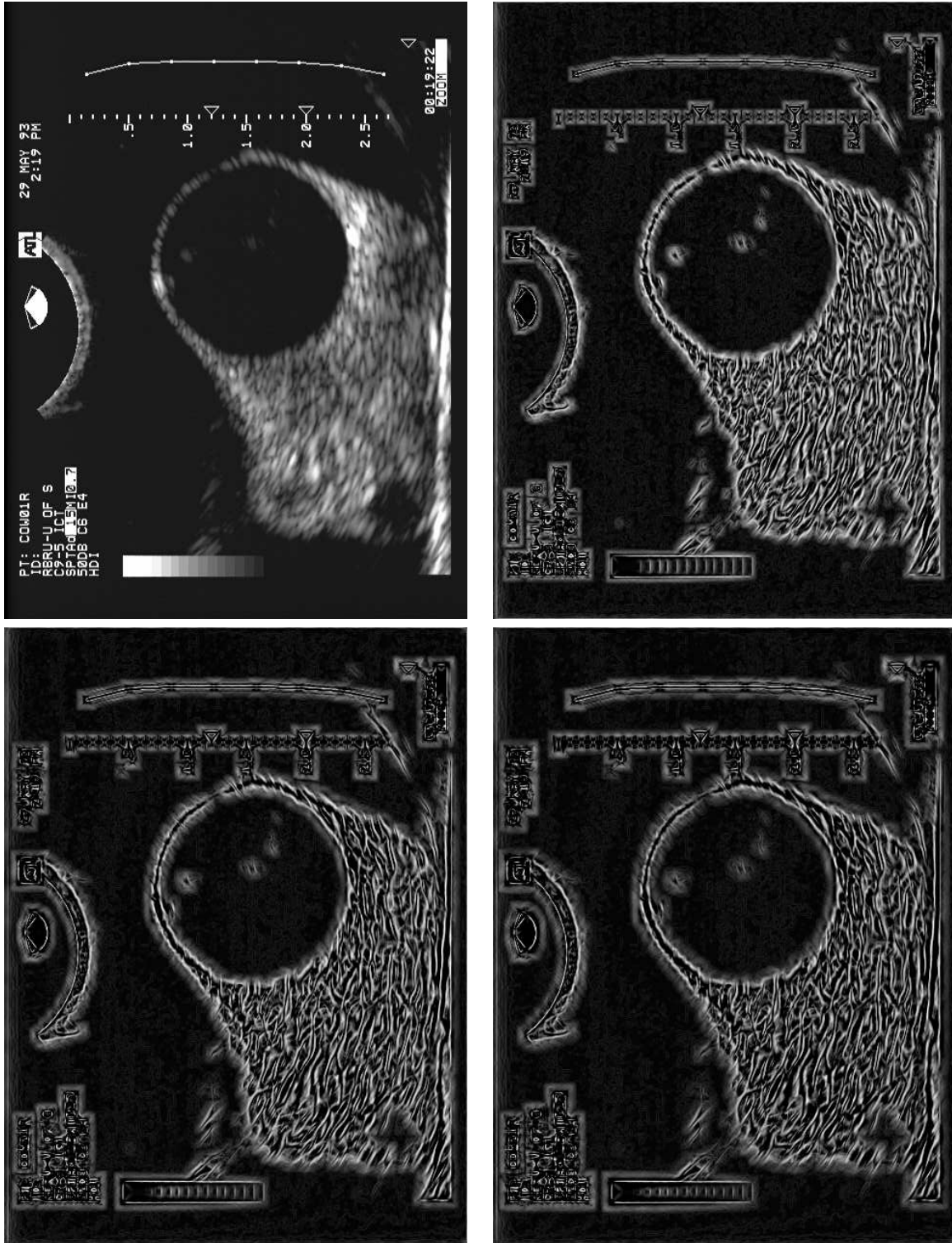


Figure 2.43: 01r.025 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

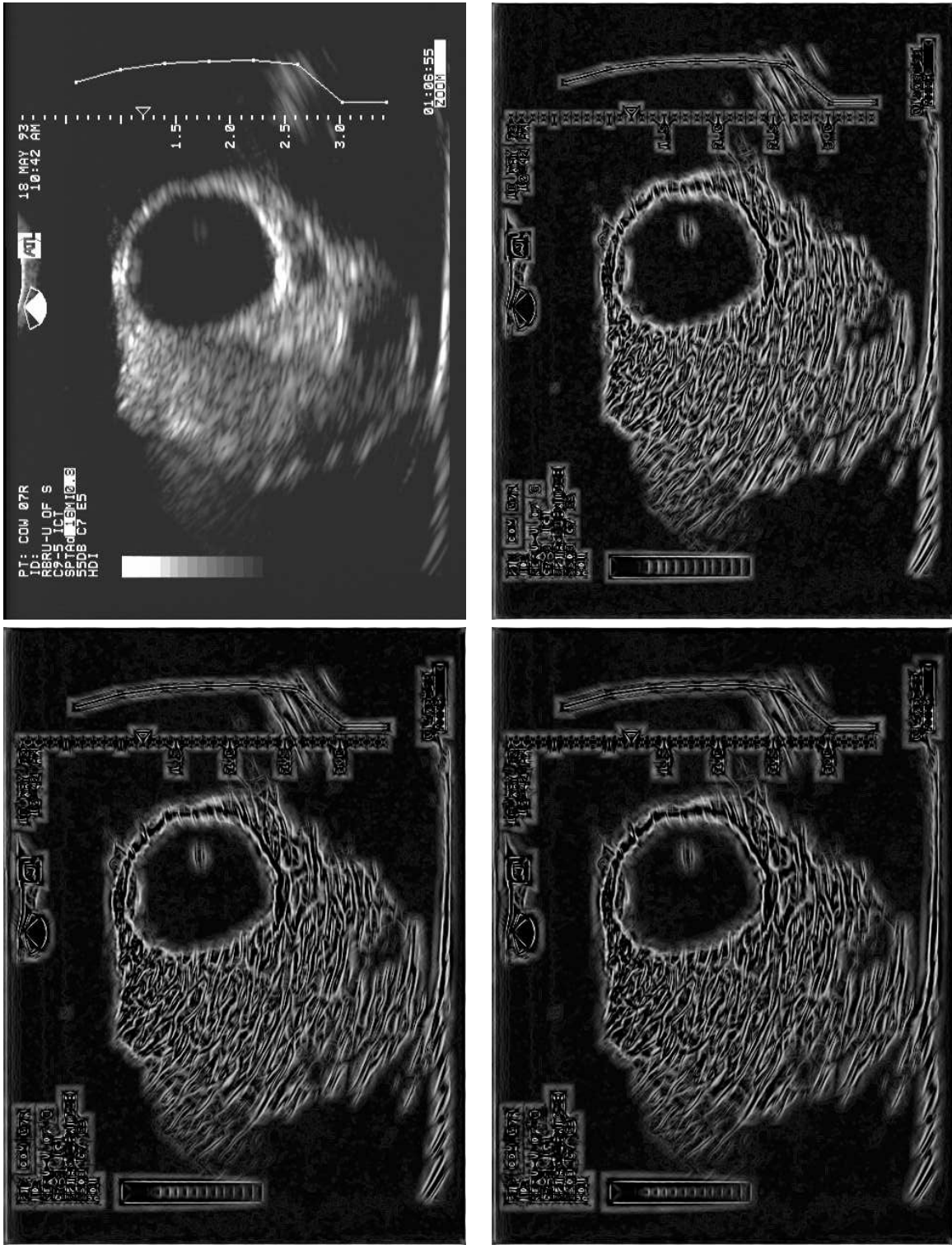


Figure 2.44: 07r.040 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

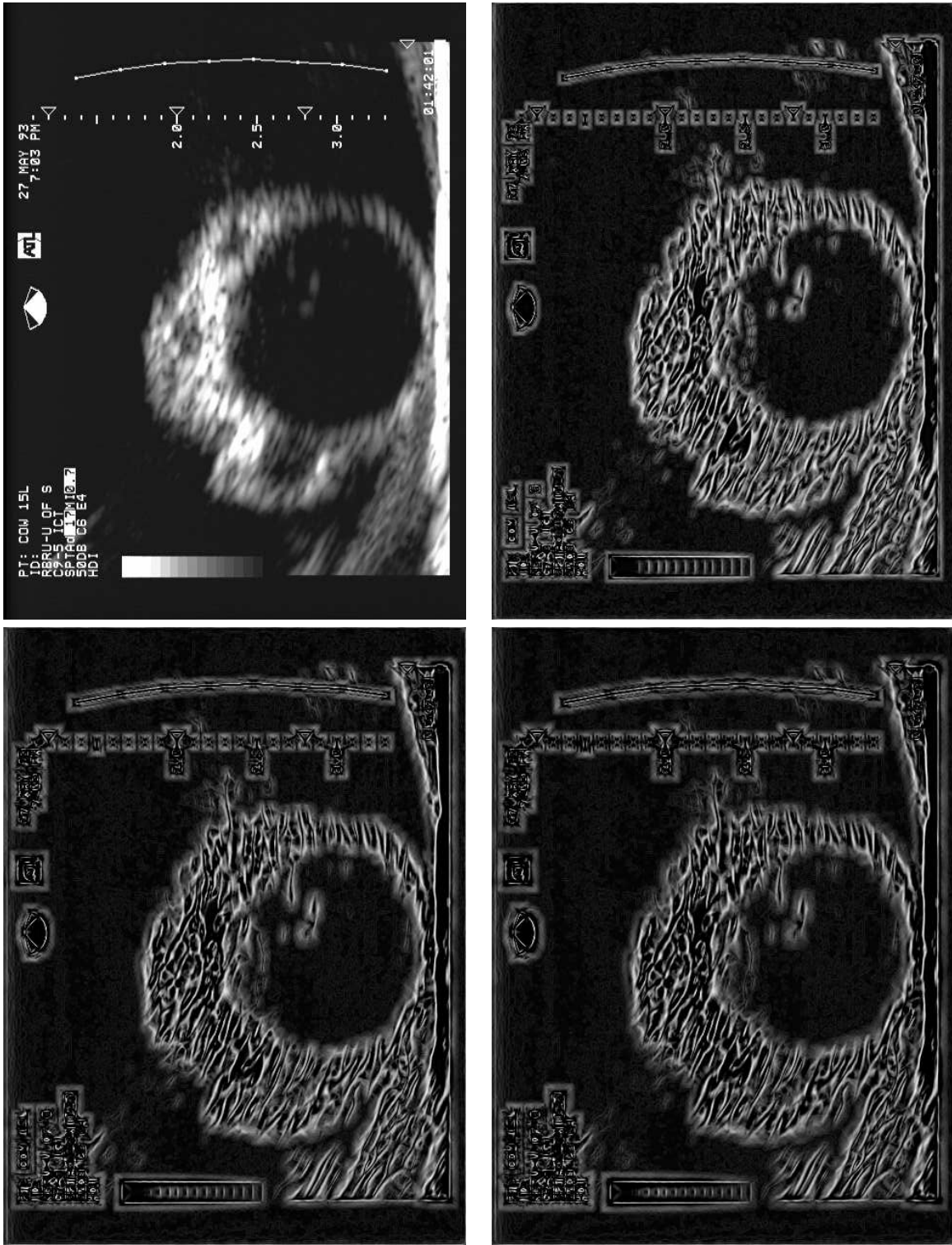


Figure 2.45: 151.046 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

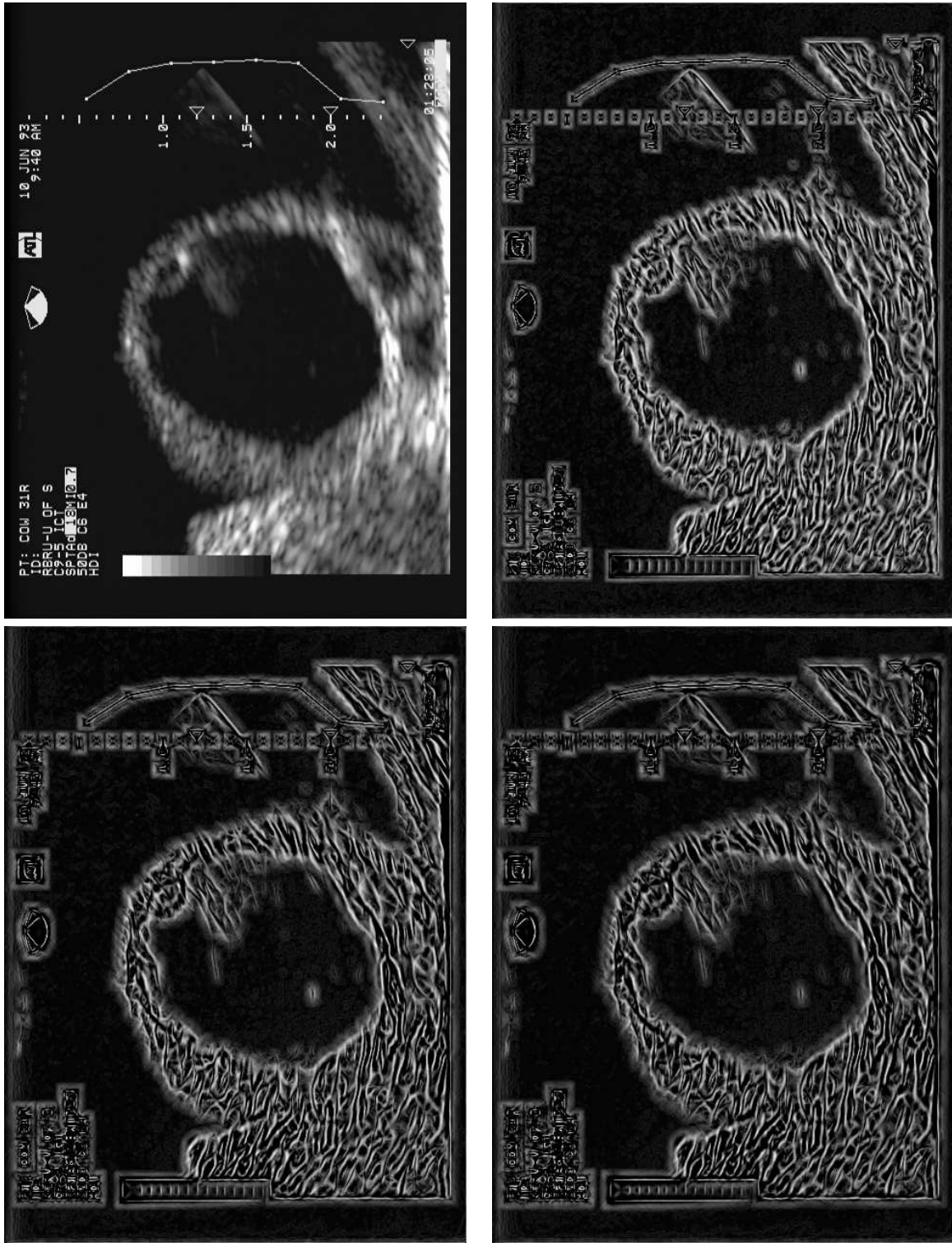


Figure 2.46: 31r.016 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

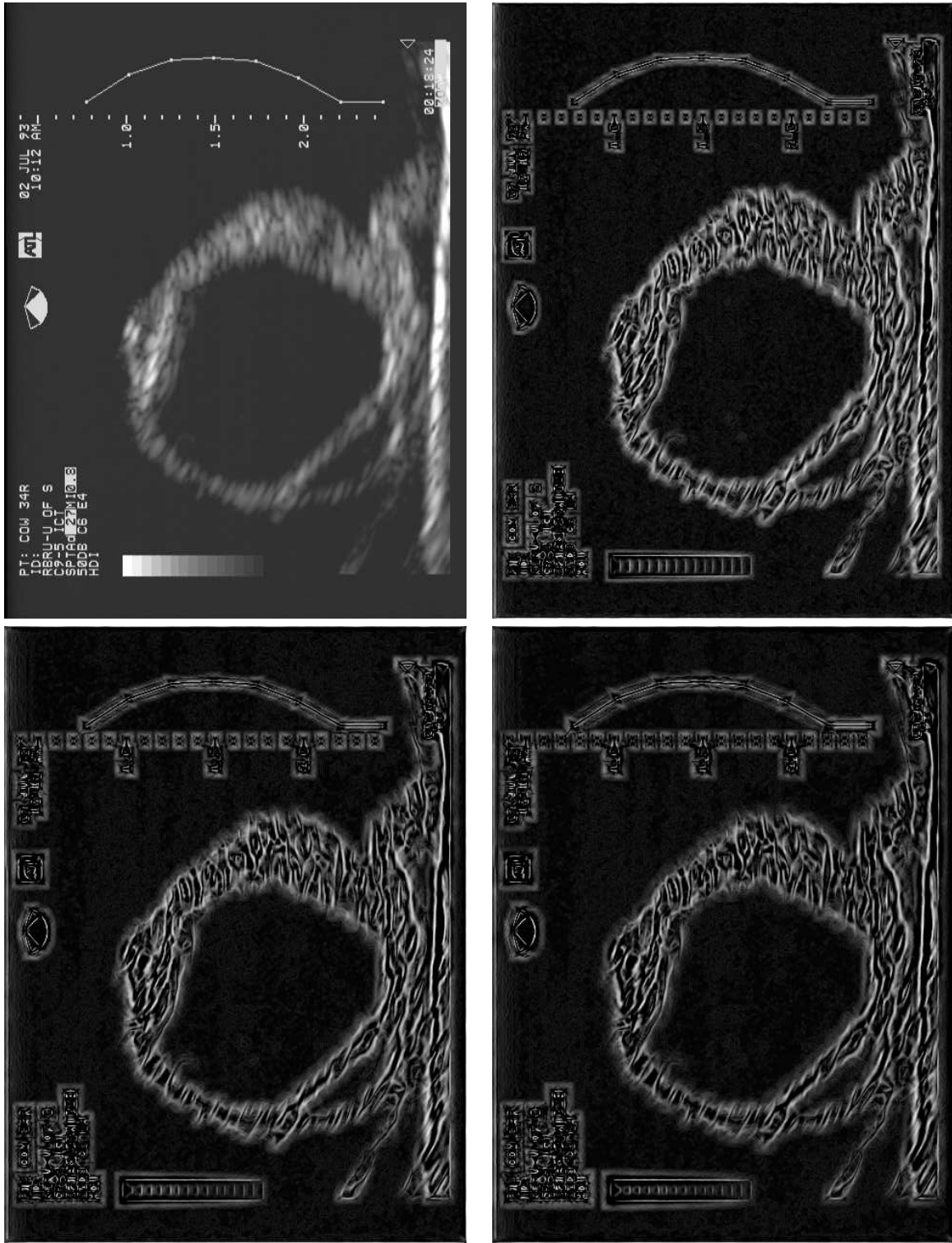


Figure 2.47: 34r.060 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

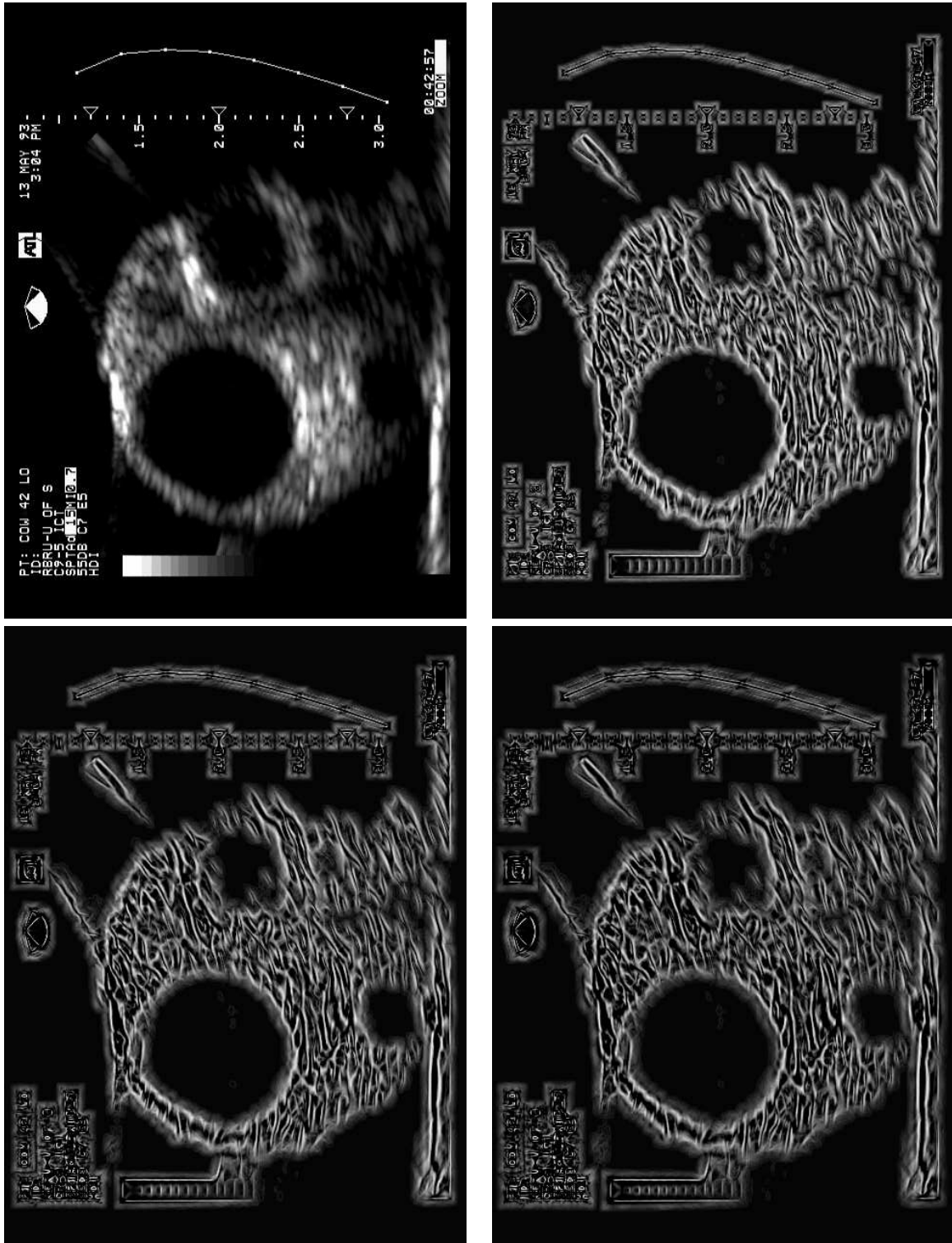


Figure 2.48: 42l.025 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

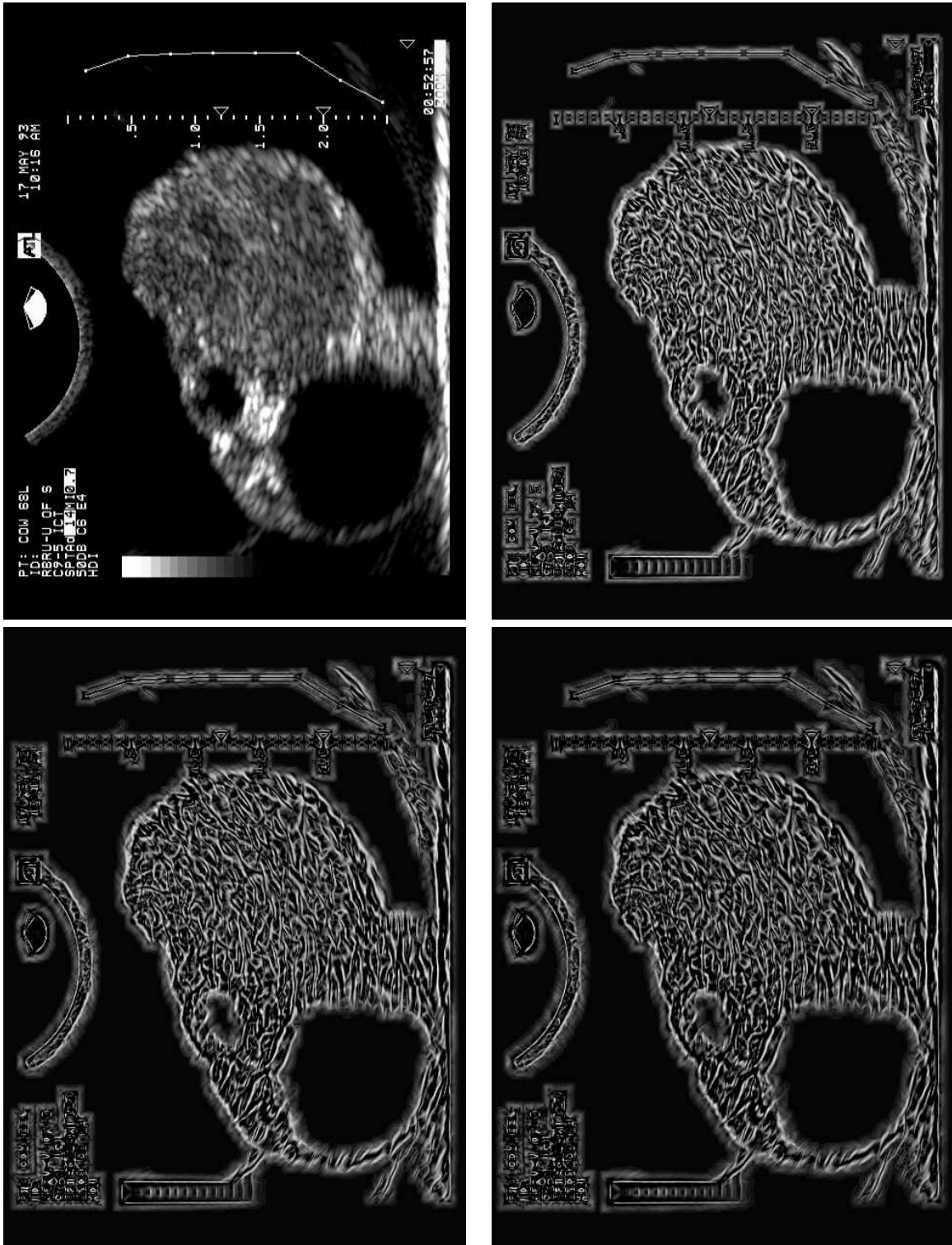


Figure 2.49: 68l.025 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

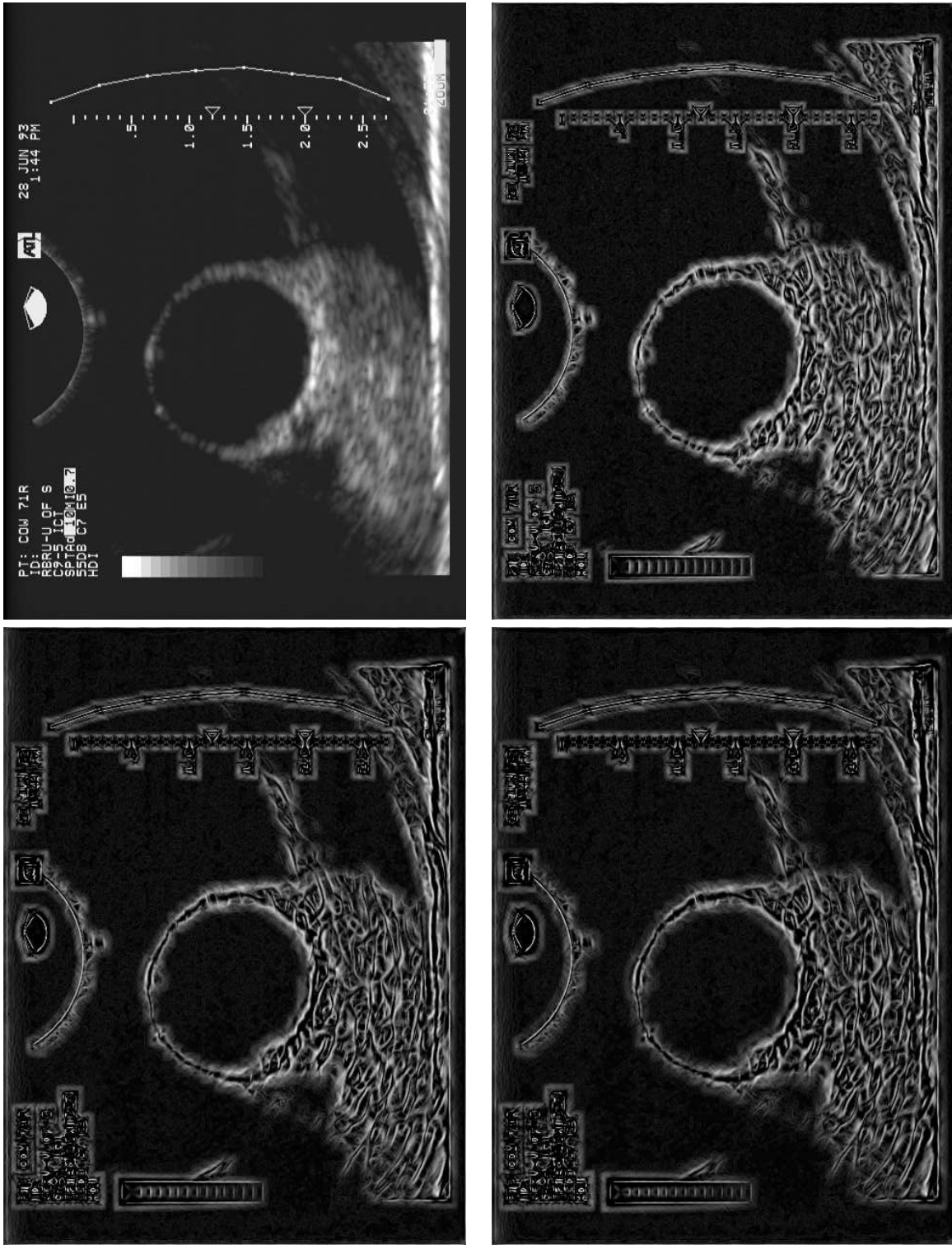


Figure 2.50: 71r.045 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

Chapter 3

Sticks Filtering of Corpus Luteum Images

3.1 Original Images

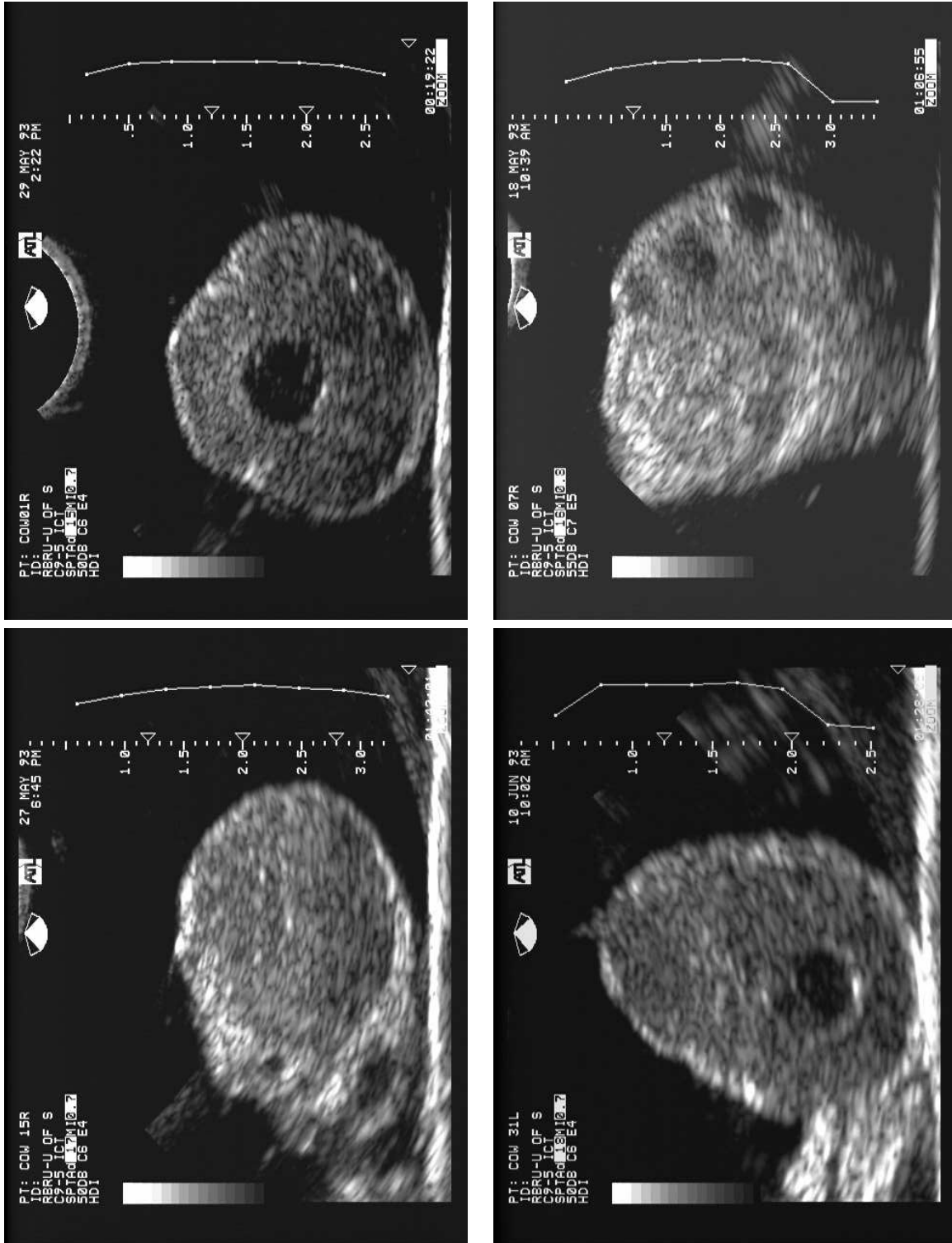


Figure 3.1: Original CL Images. TL: 01r.052, TR: 07r.027, BL: 15l.050, BR: 31r.026

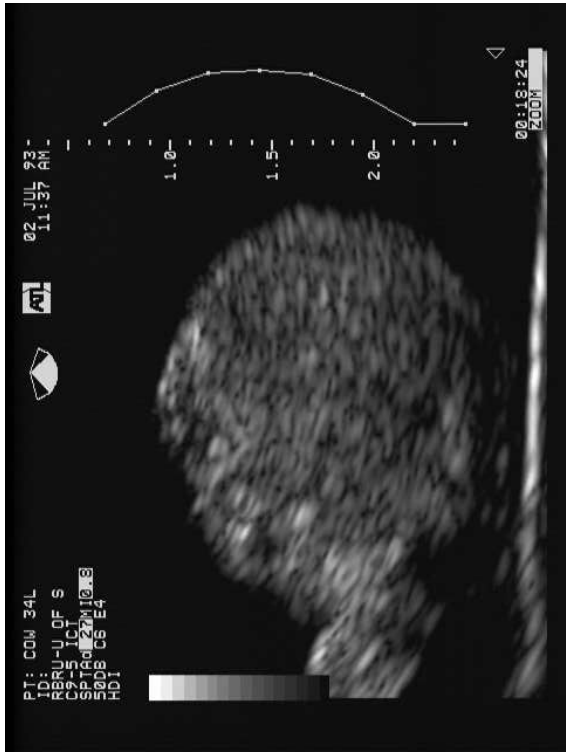


Figure 3.2: Original CL Images. TL: 34r.042, TR: 42l.021, BL: 68l.022, BR: 71r.065

3.2 Uniform Sticks: Mean Output Mode

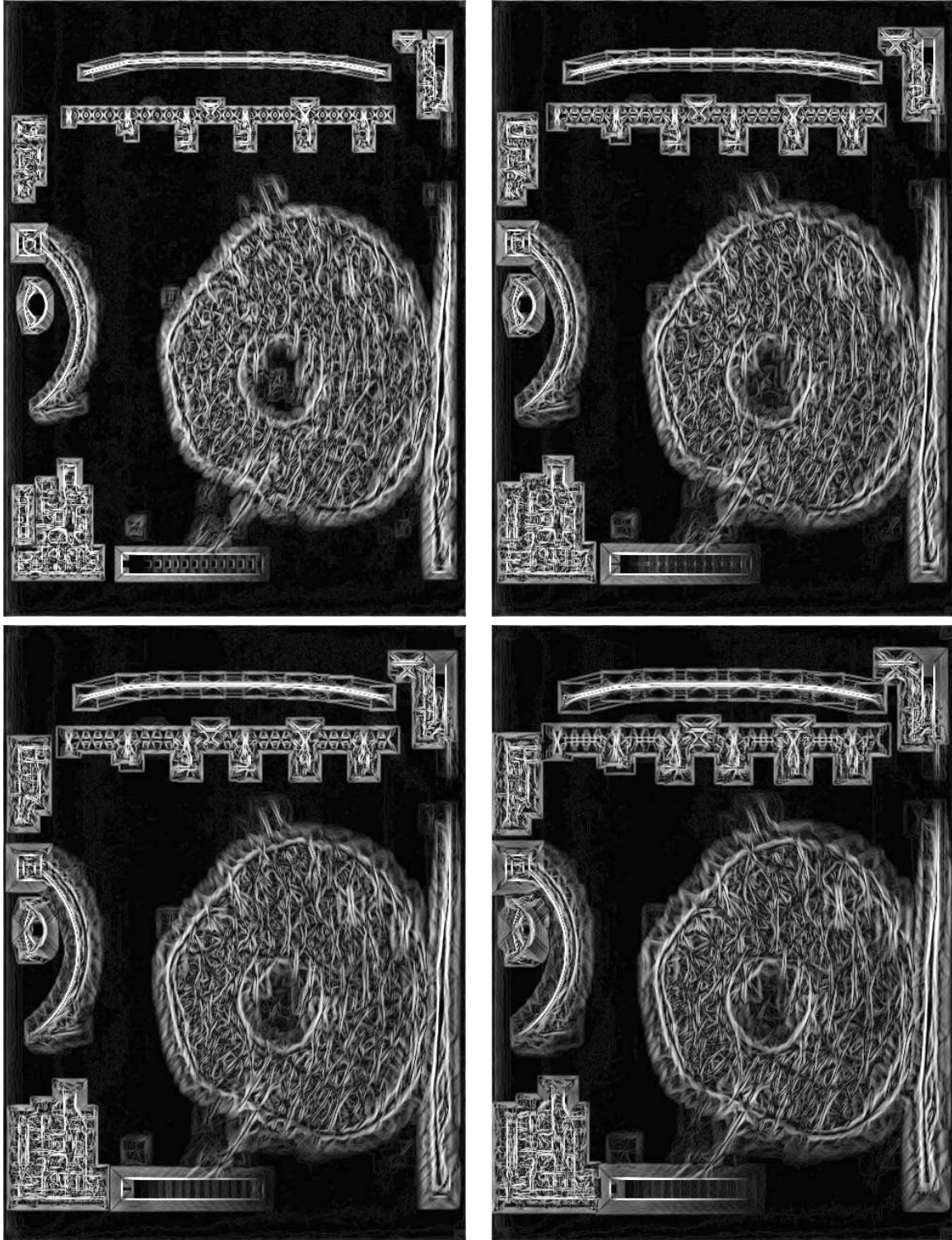


Figure 3.3: 01r.052 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

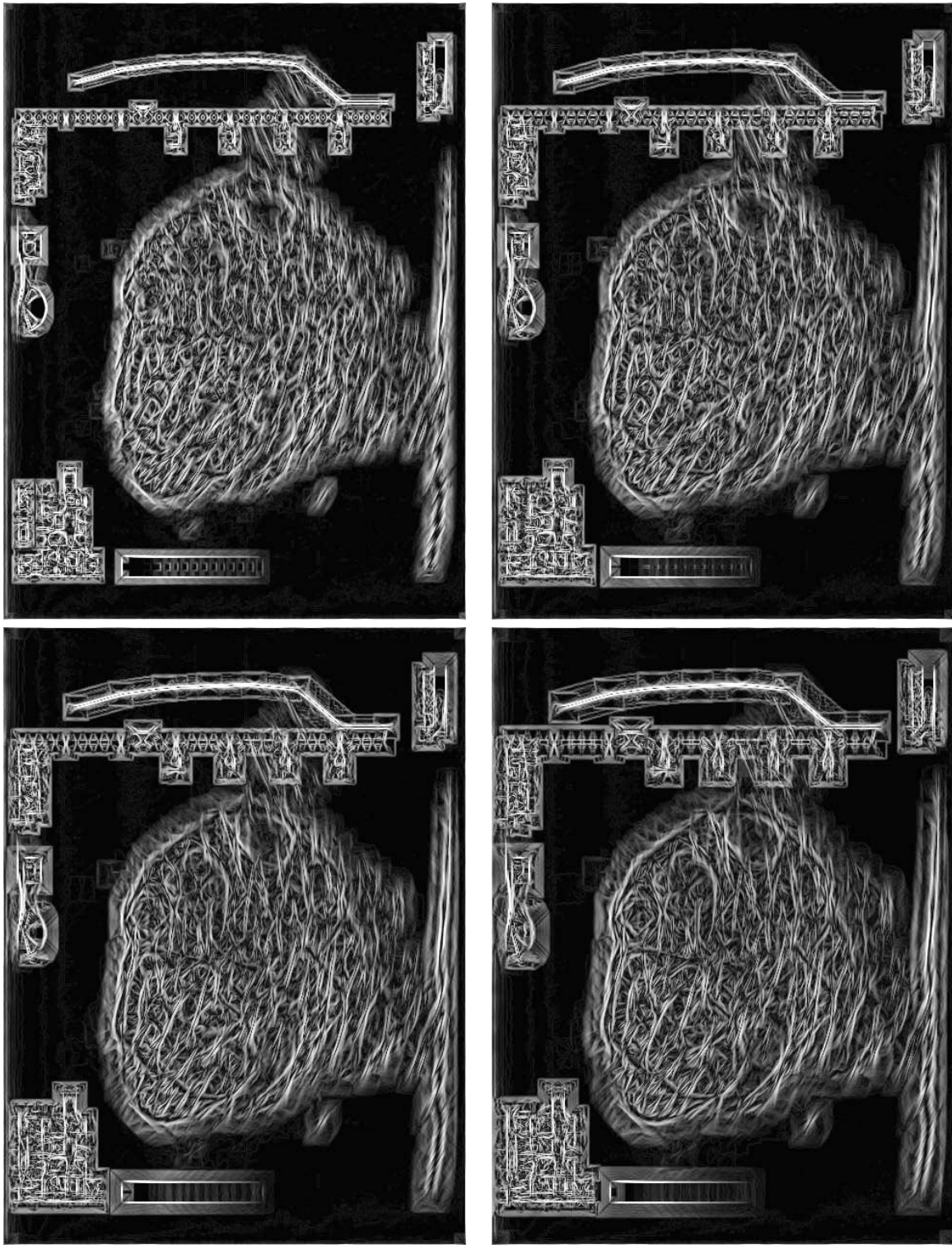


Figure 3.4: 07r.027 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

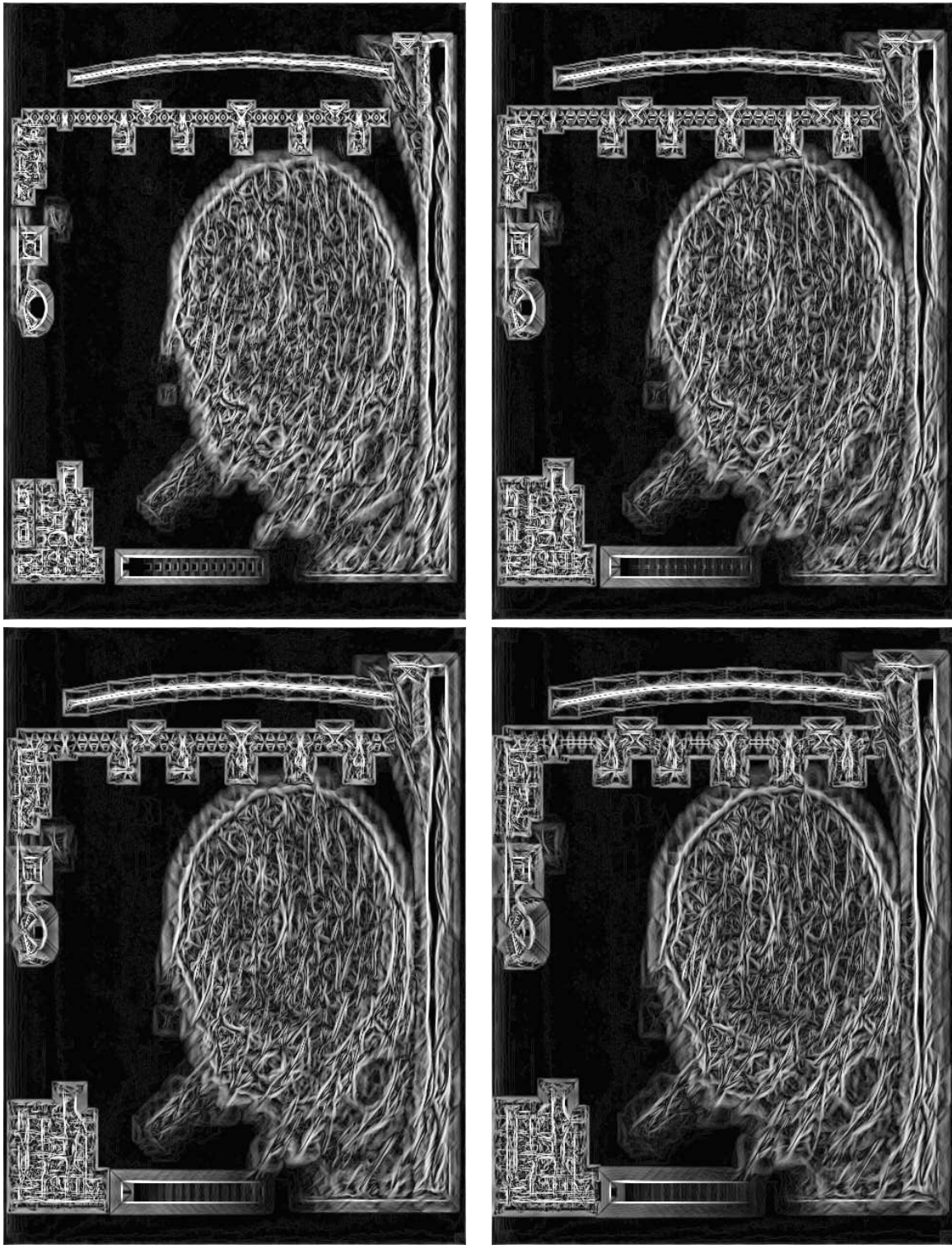


Figure 3.5: 15r.050 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

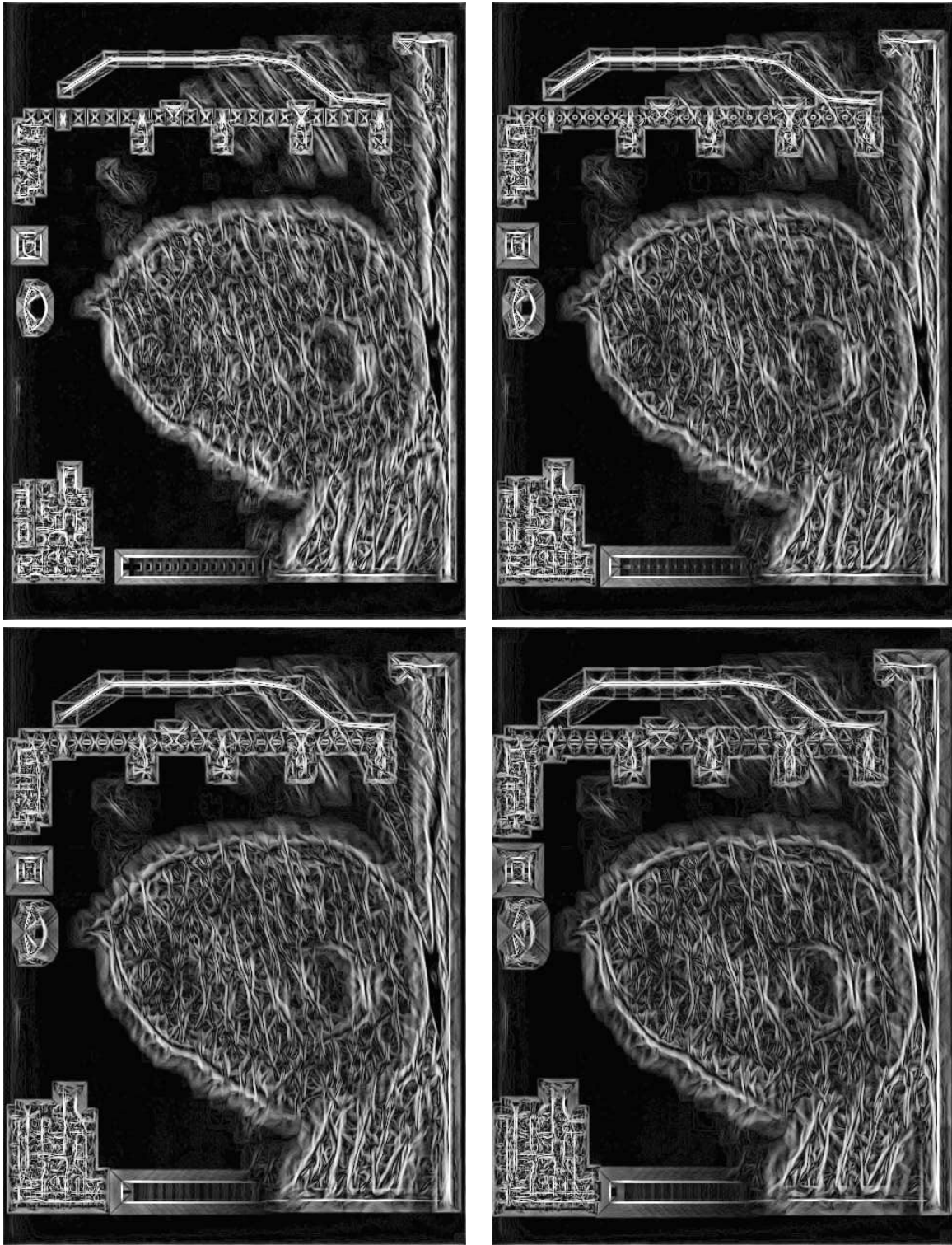


Figure 3.6: 311.026 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

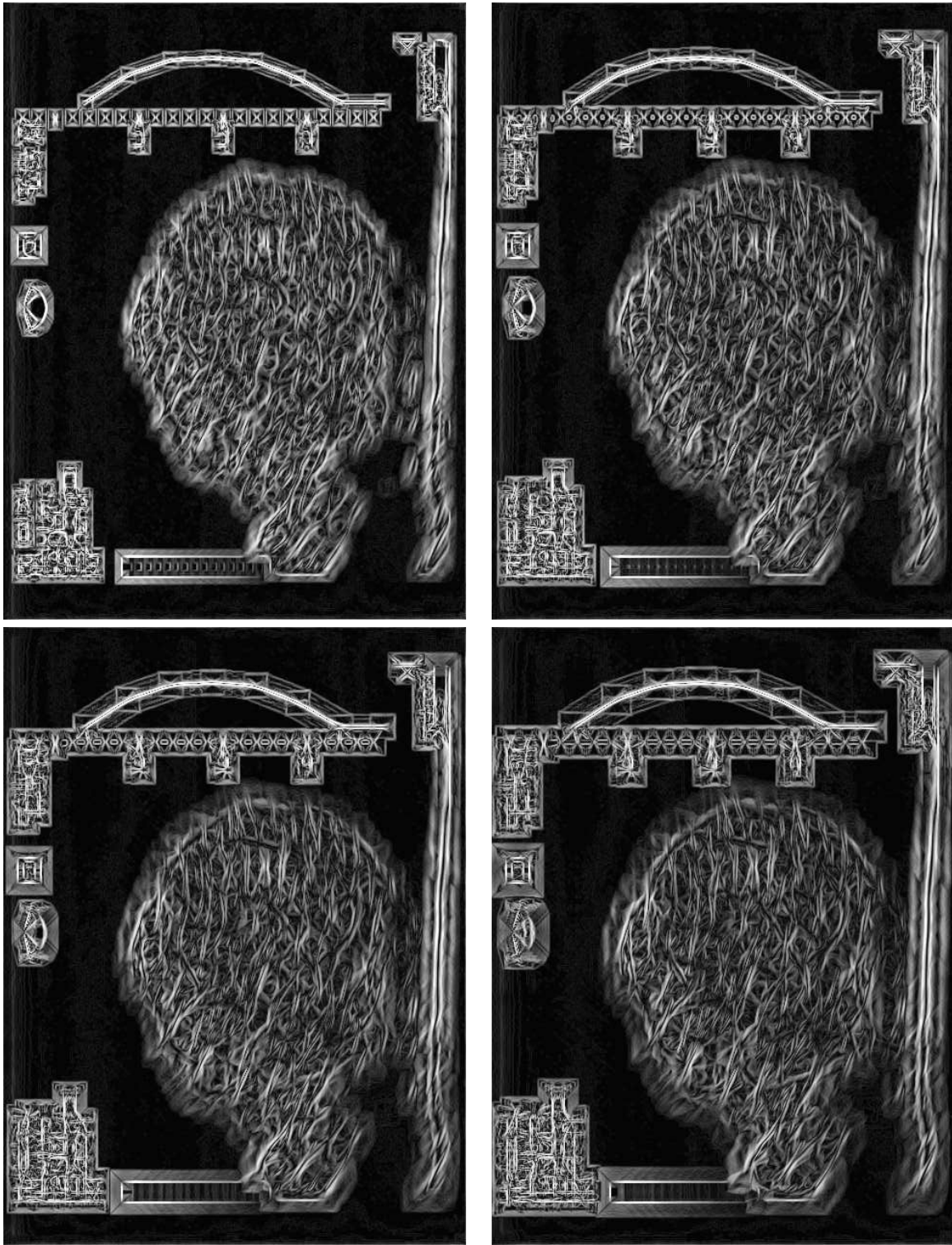


Figure 3.7: 34l.042 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

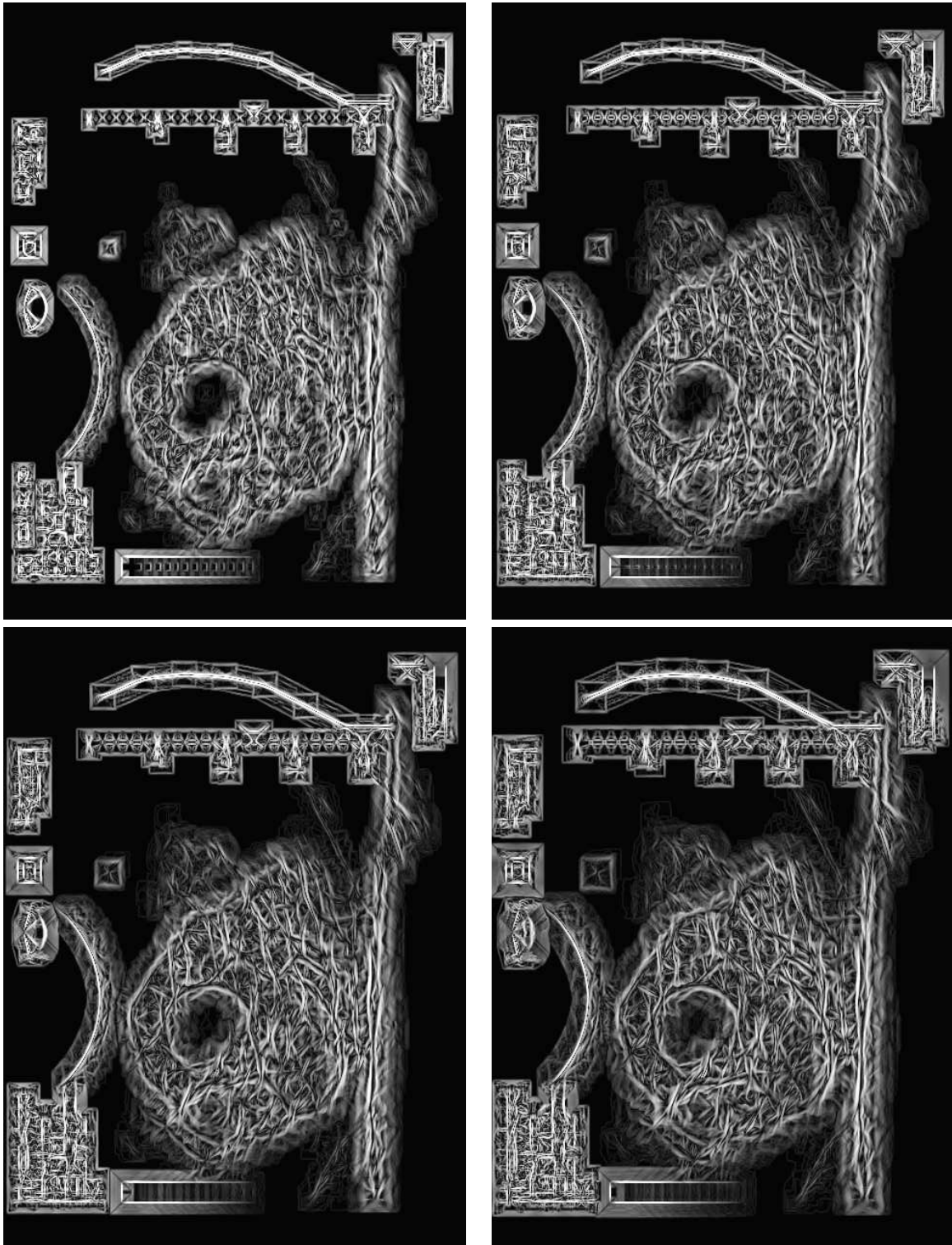


Figure 3.8: 42r.021 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

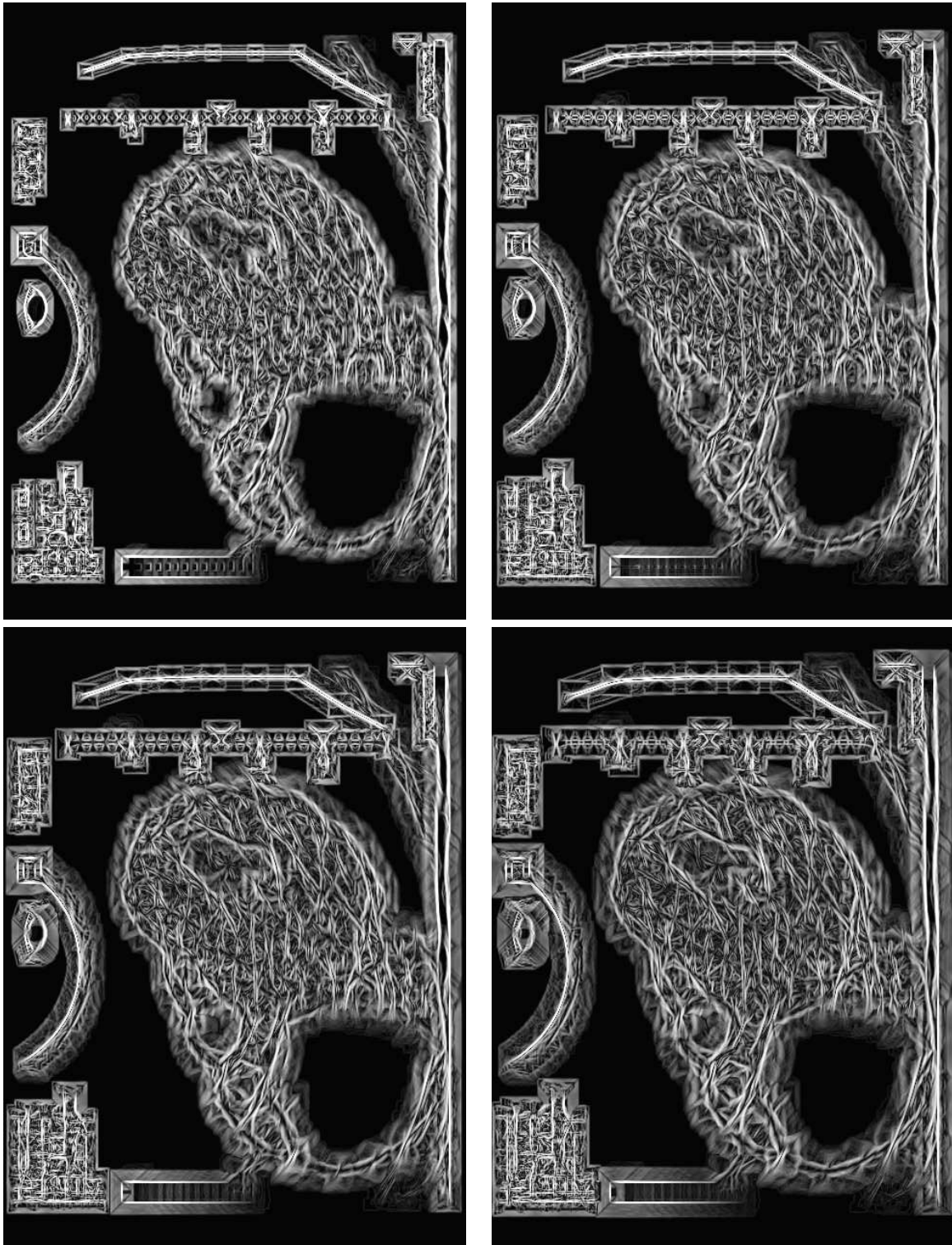


Figure 3.9: 68l.022 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

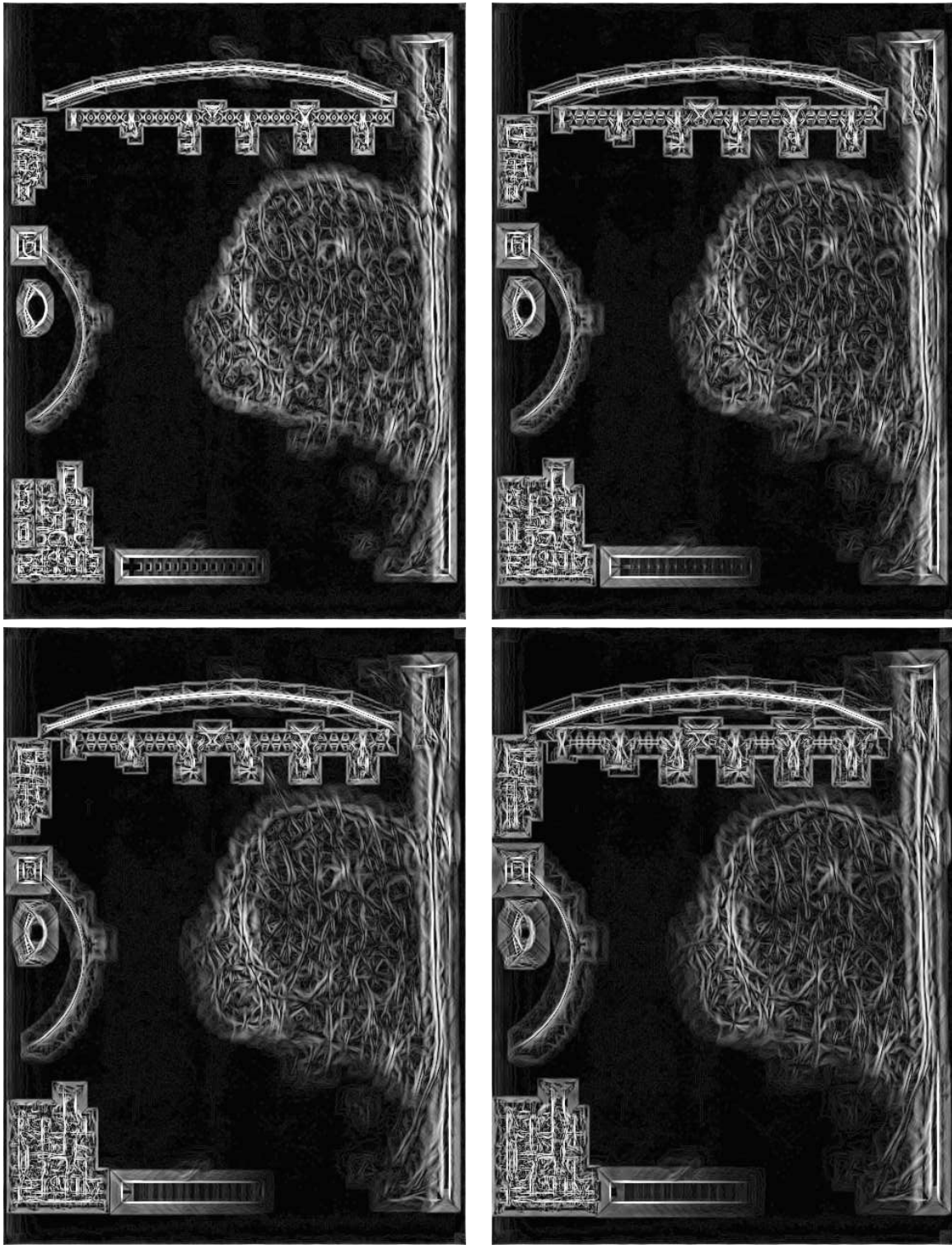


Figure 3.10: 71r.065 - Uniform Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

3.3 Uniform Sticks: Variance Output Mode

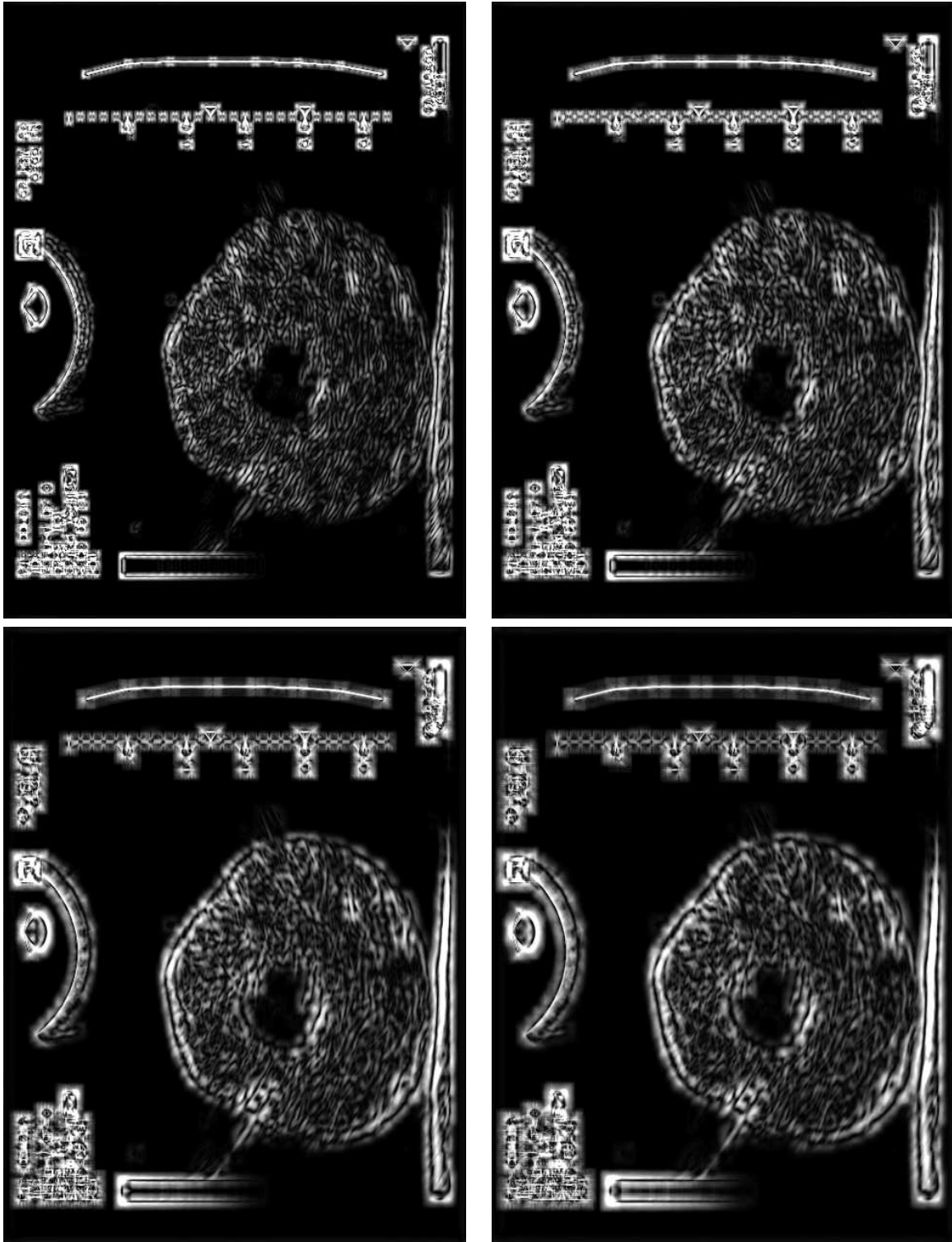


Figure 3.11: 01r.052 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

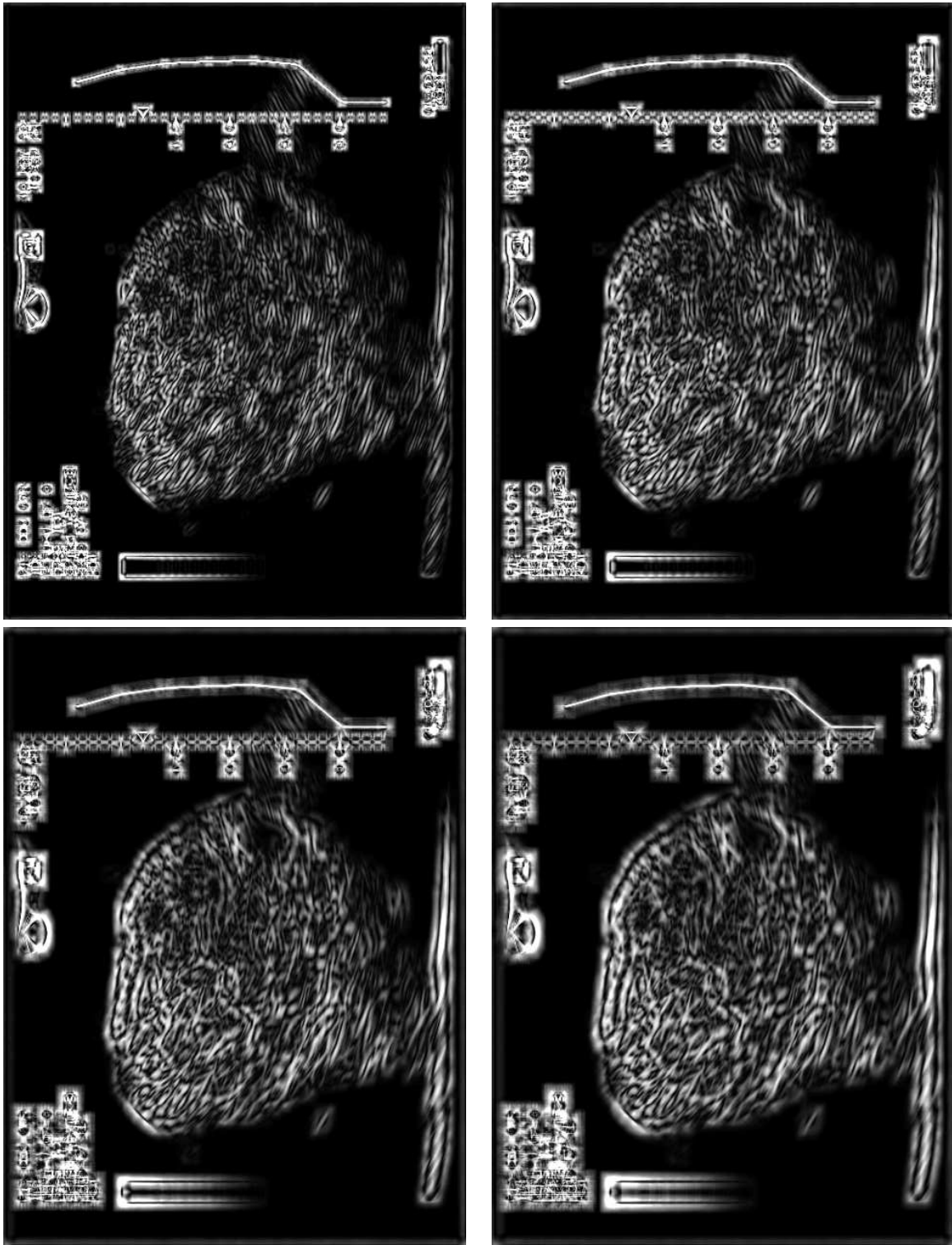


Figure 3.12: 07r.027 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

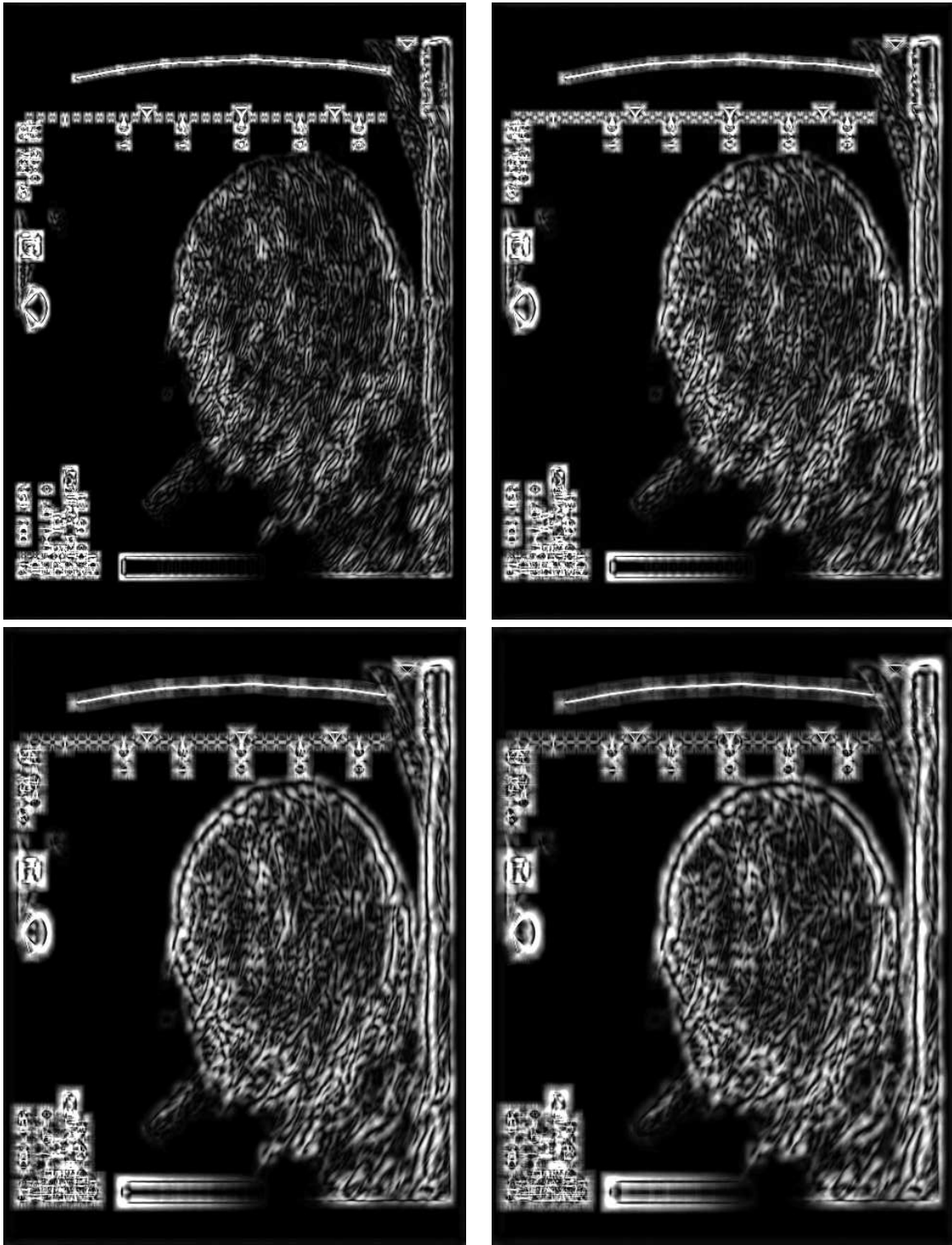


Figure 3.13: 15r.050 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

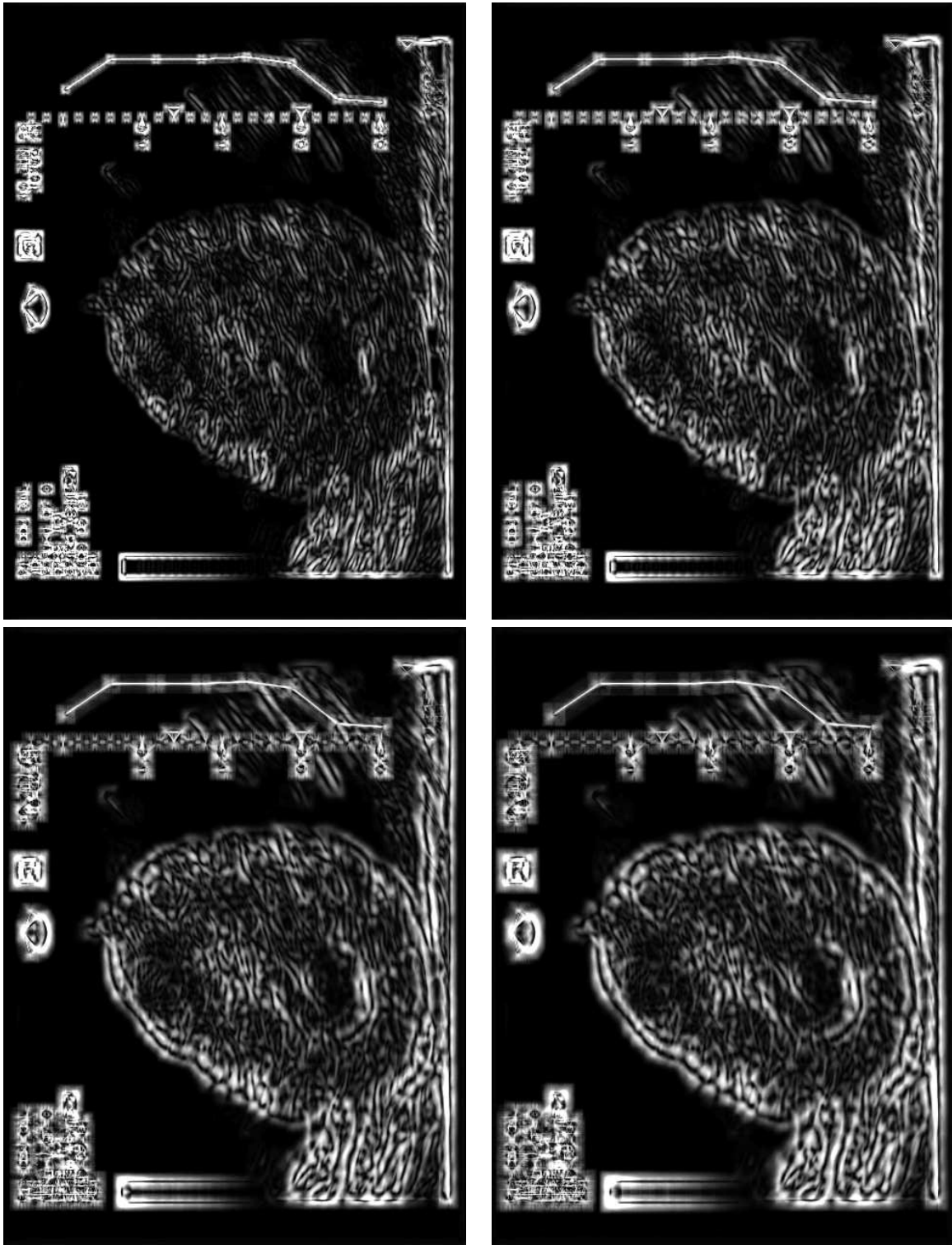


Figure 3.14: 311.026 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

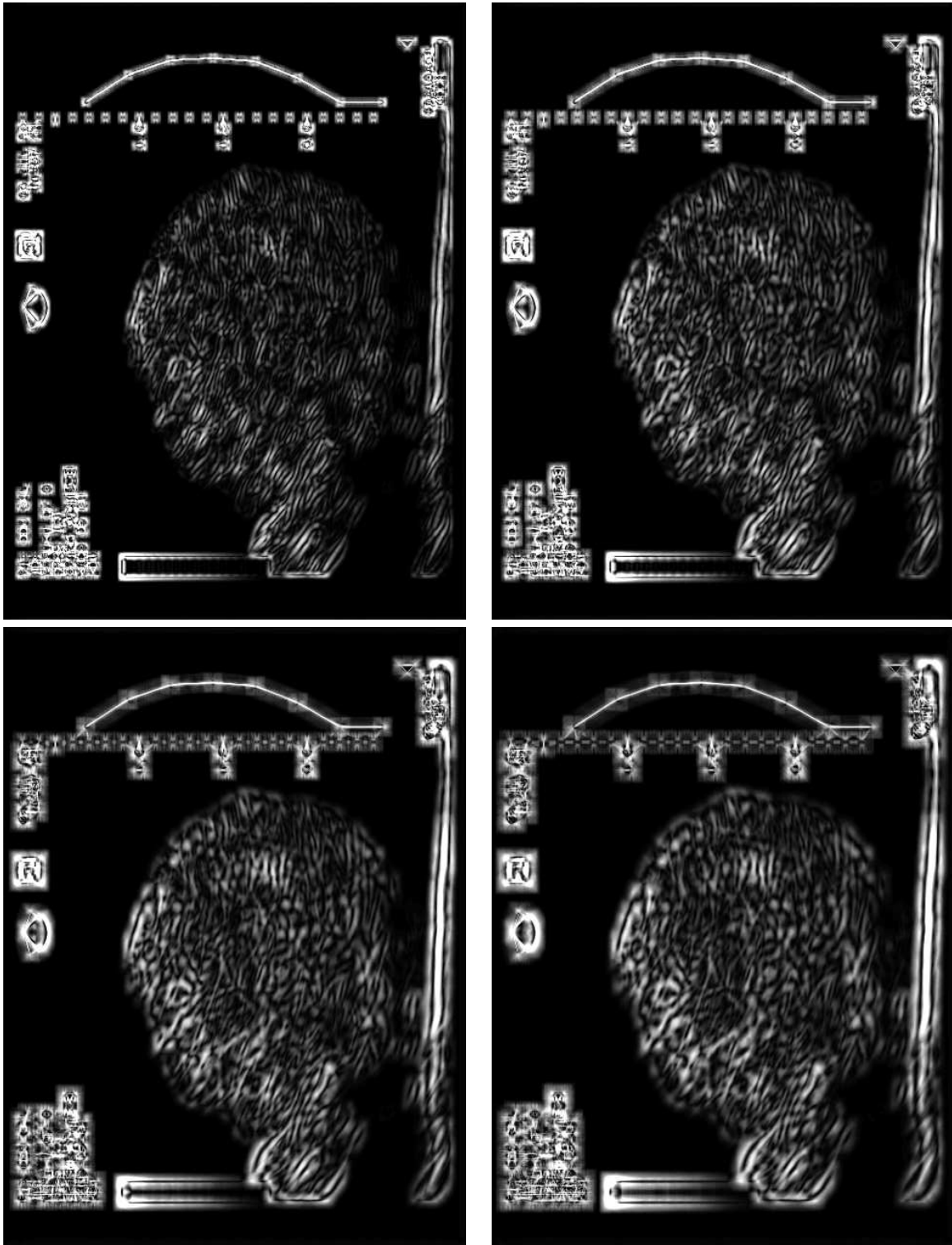


Figure 3.15: 34l.042 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

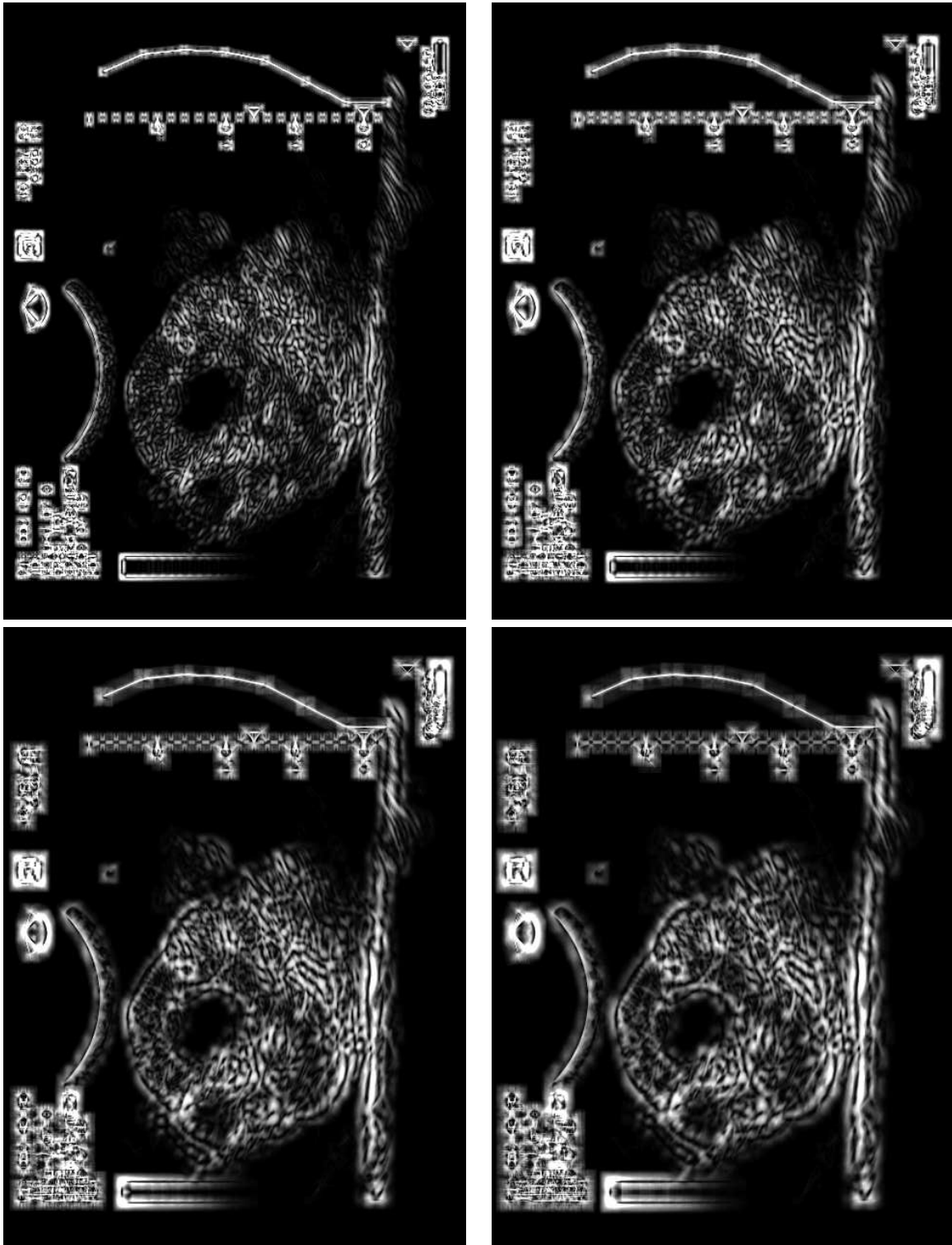


Figure 3.16: 42r.021 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

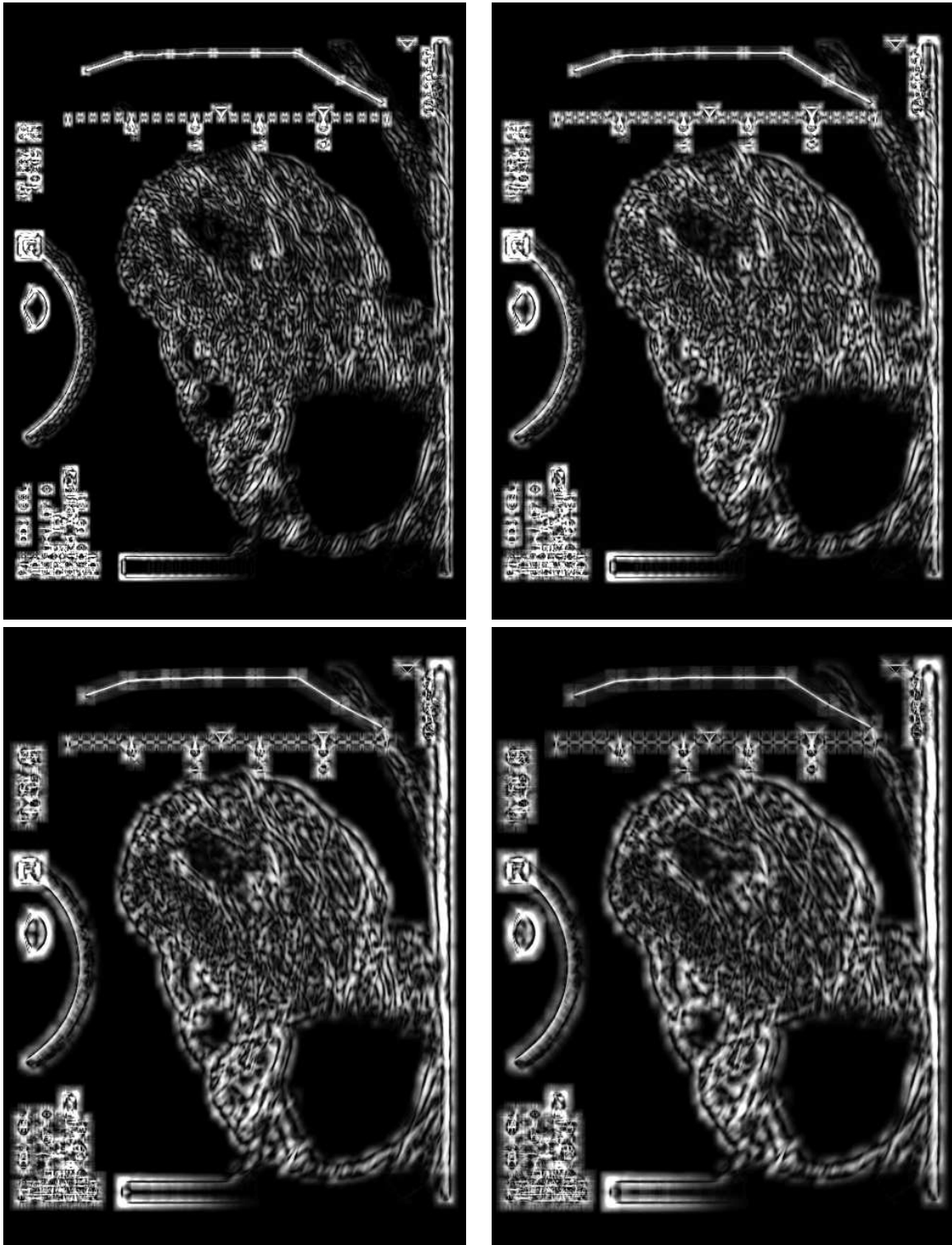


Figure 3.17: 68l.022 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

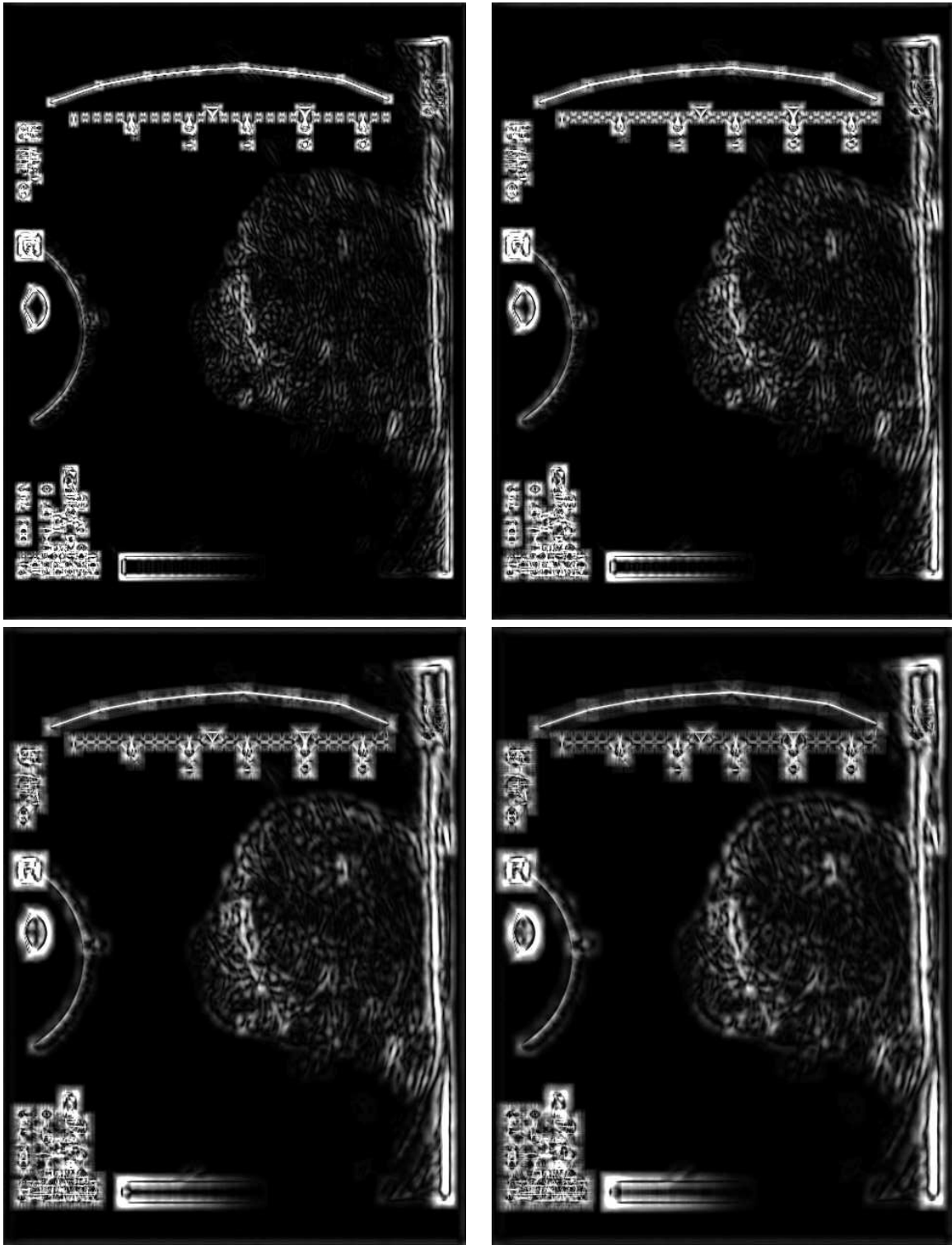


Figure 3.18: 71r.065 - Uniform Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

3.4 Gaussian Sticks: Mean output Mode

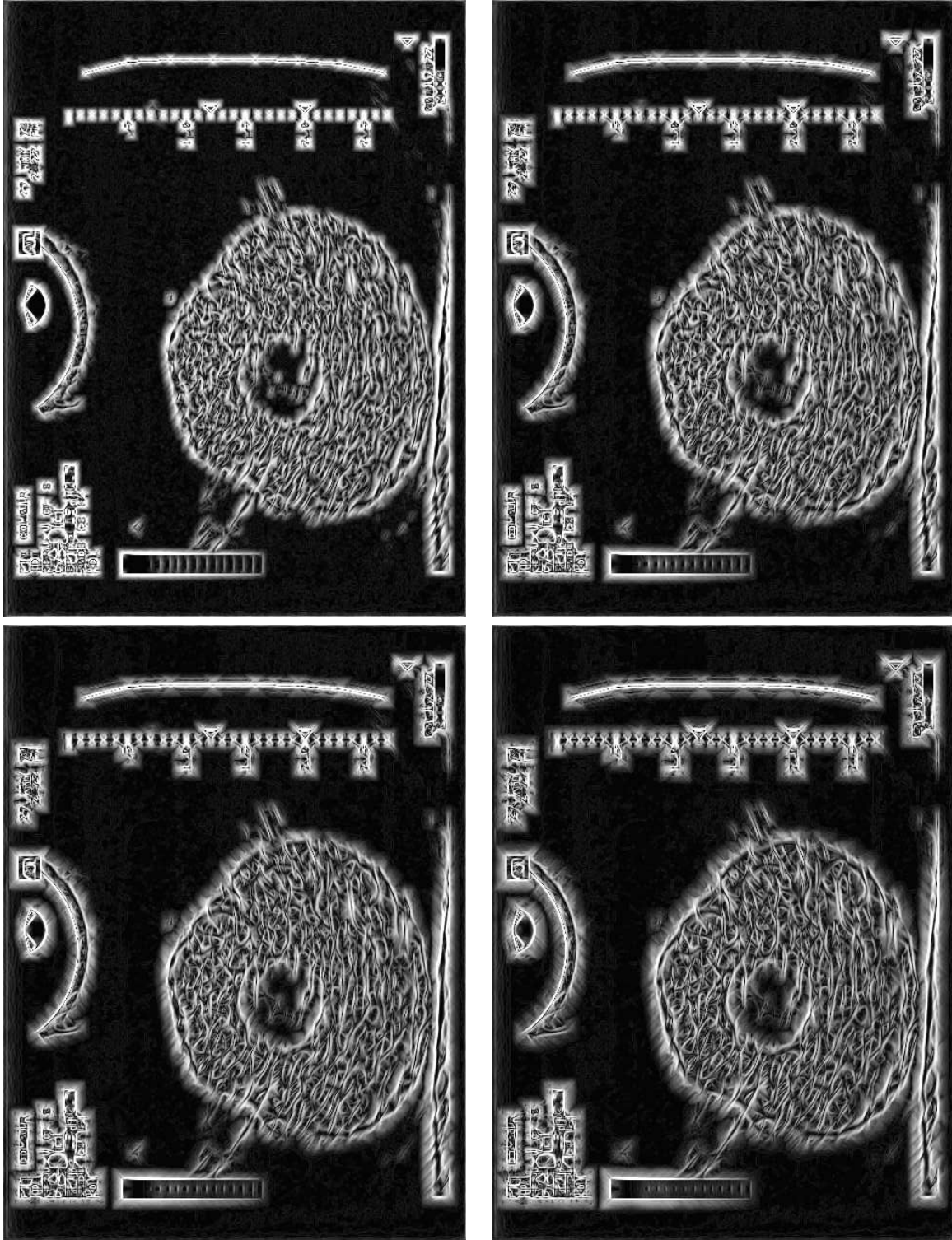


Figure 3.19: 01r.052 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

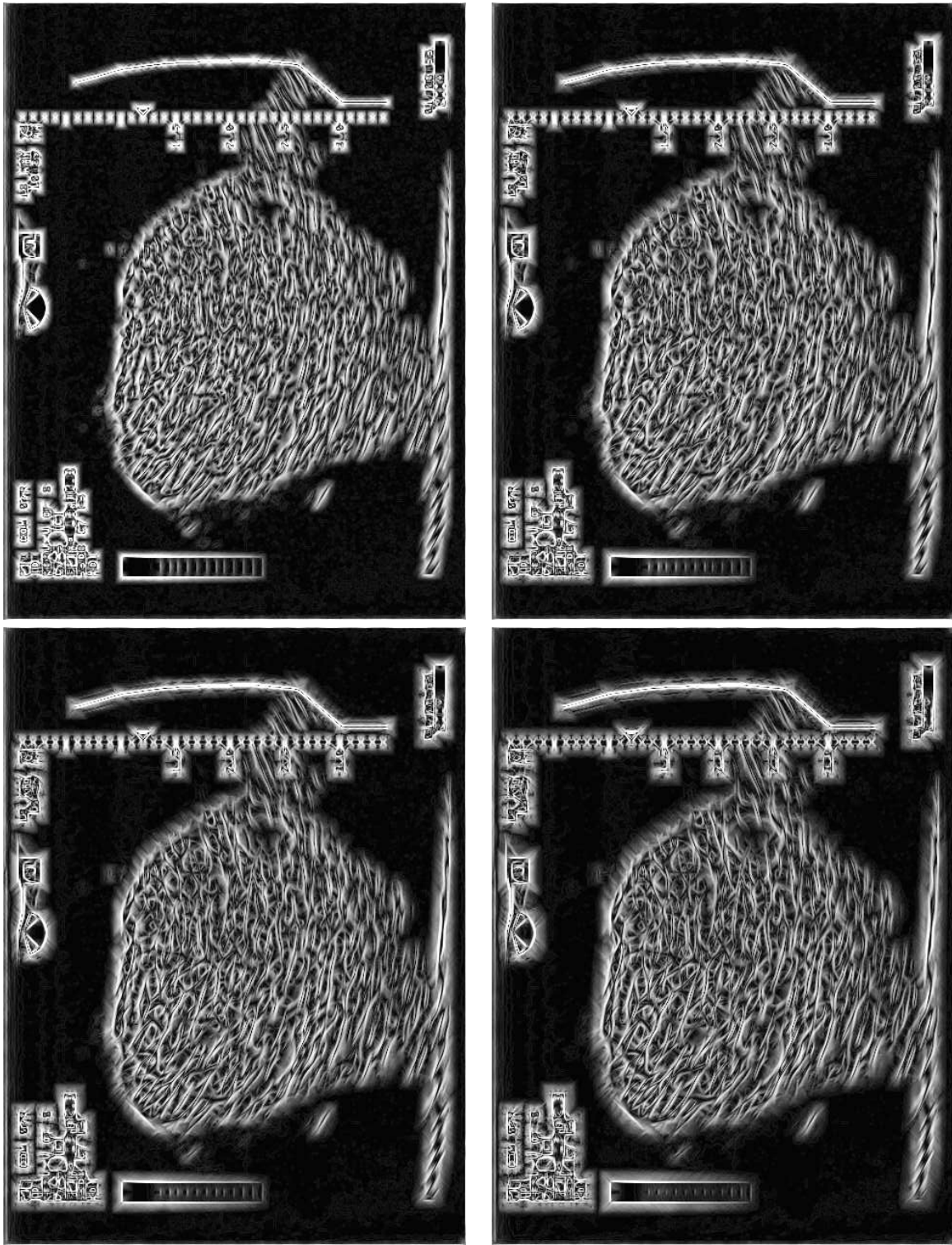


Figure 3.20: 07r.027 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

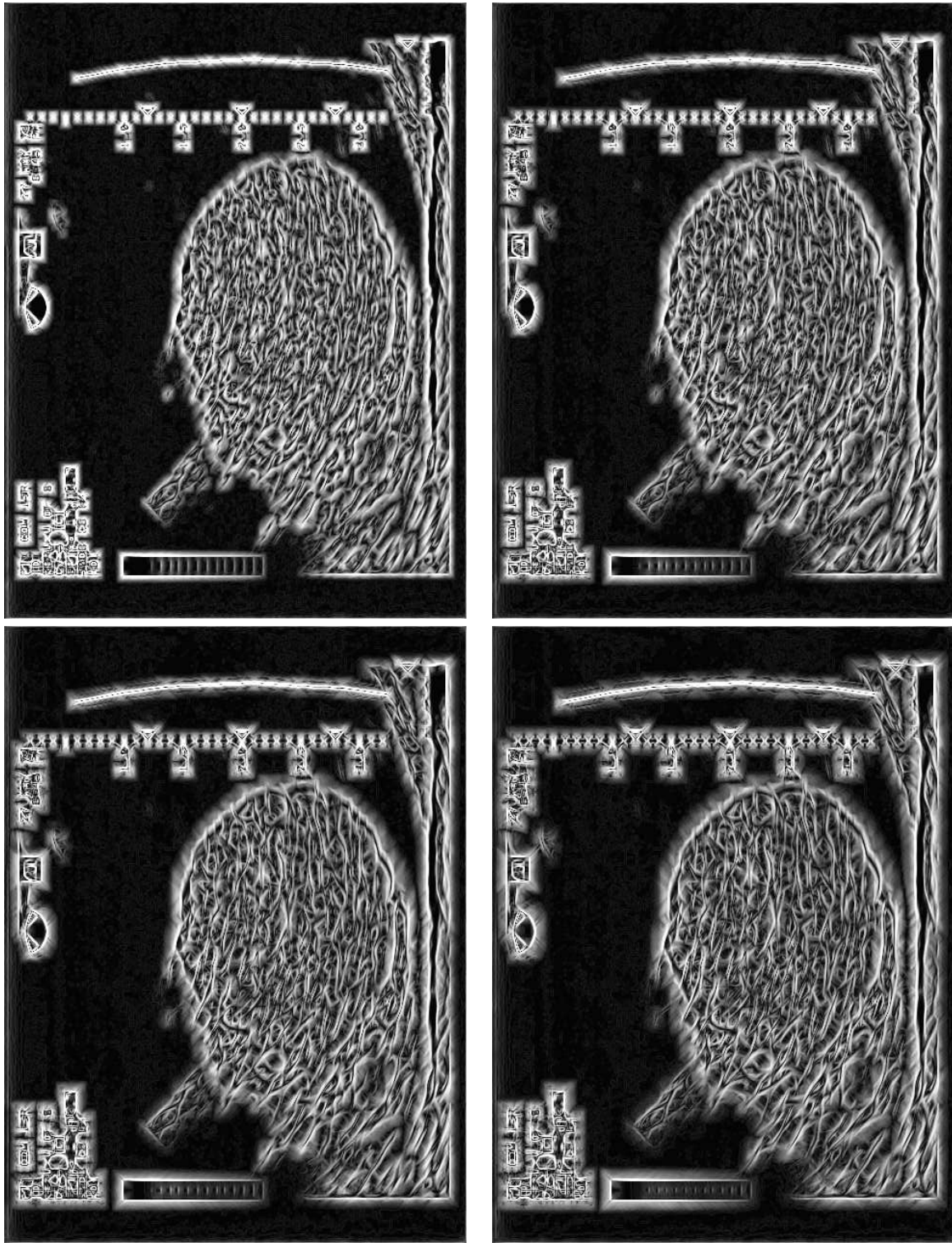


Figure 3.21: 15r.050 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

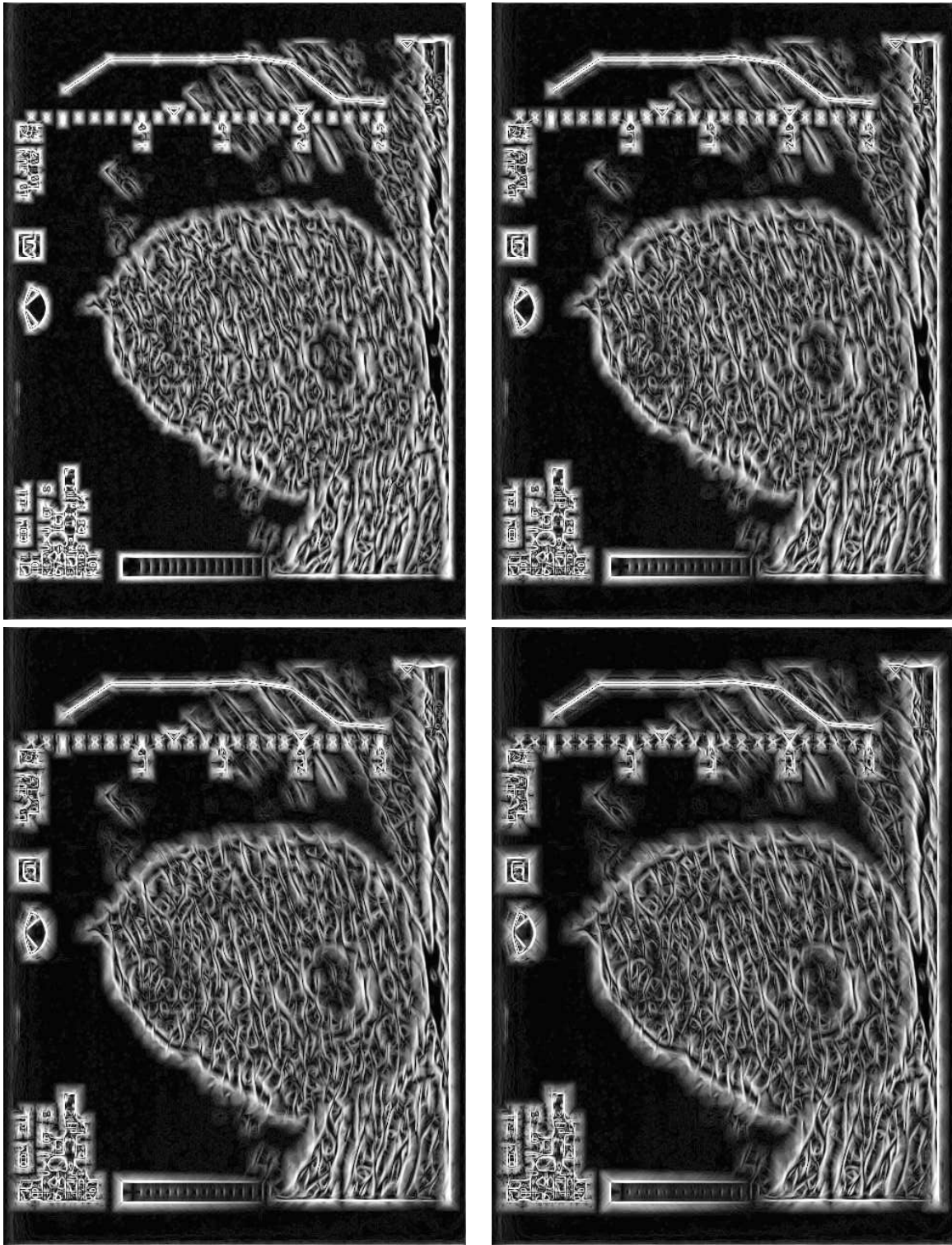


Figure 3.22: 311.026 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

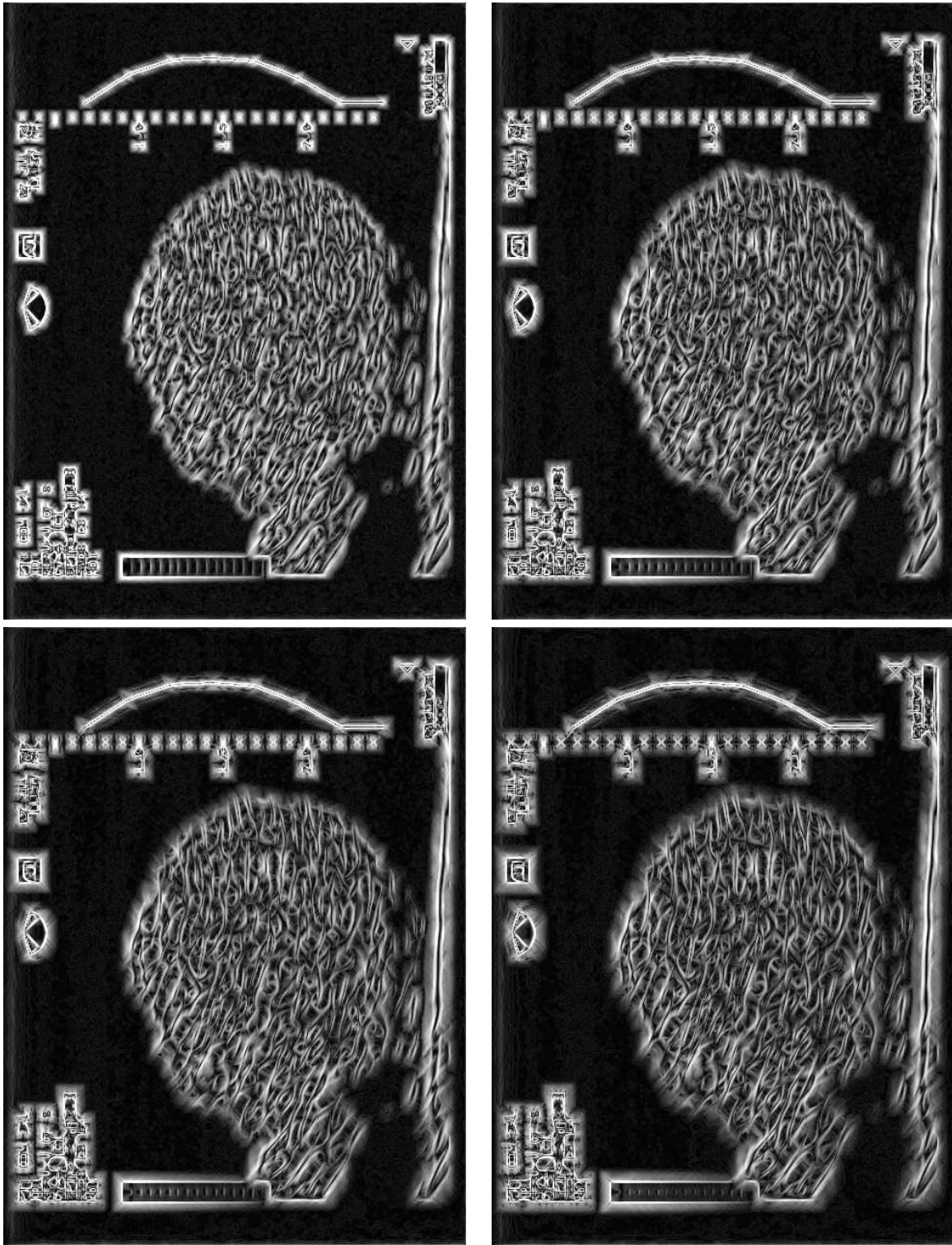


Figure 3.23: 341.042 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

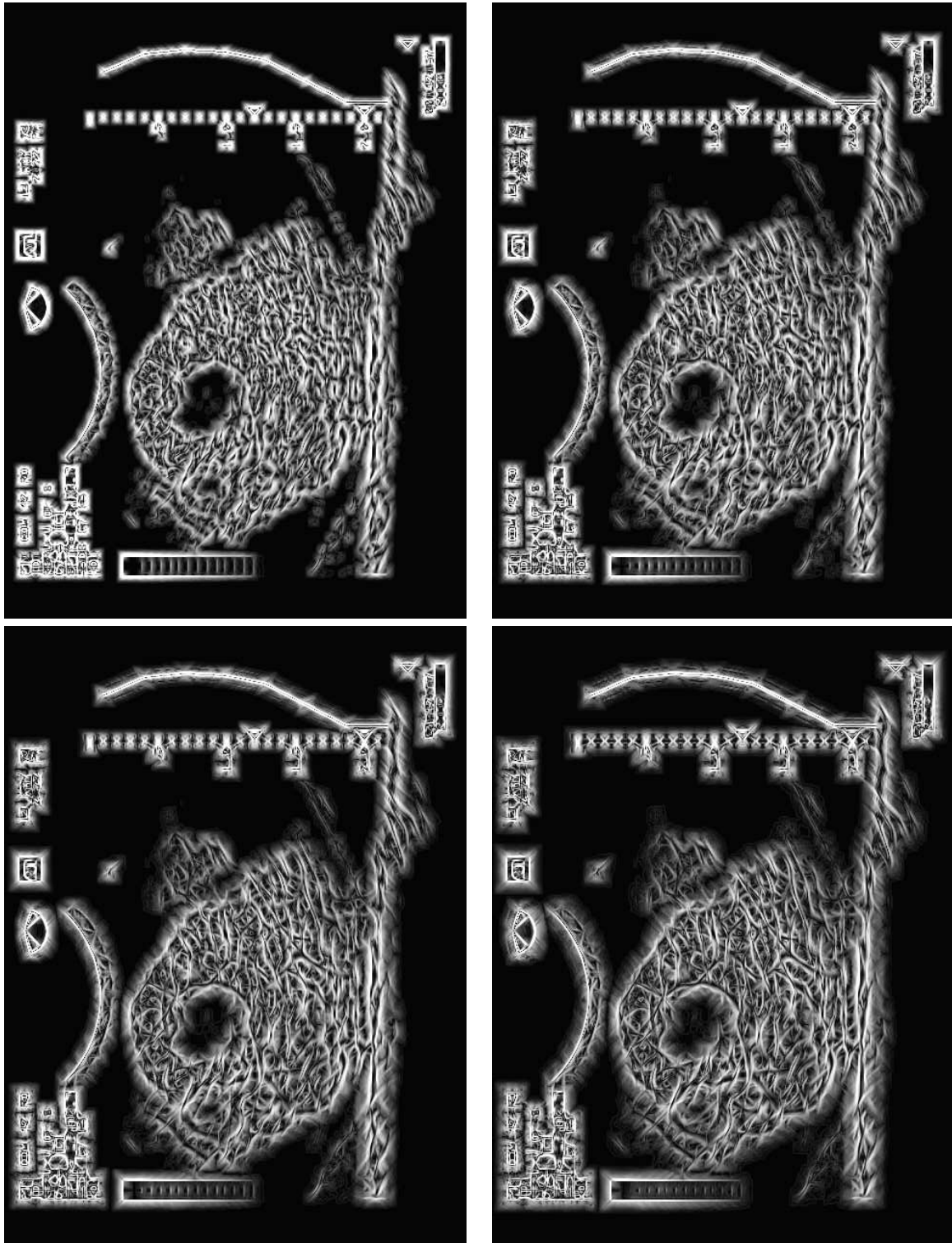


Figure 3.24: 42r.021 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

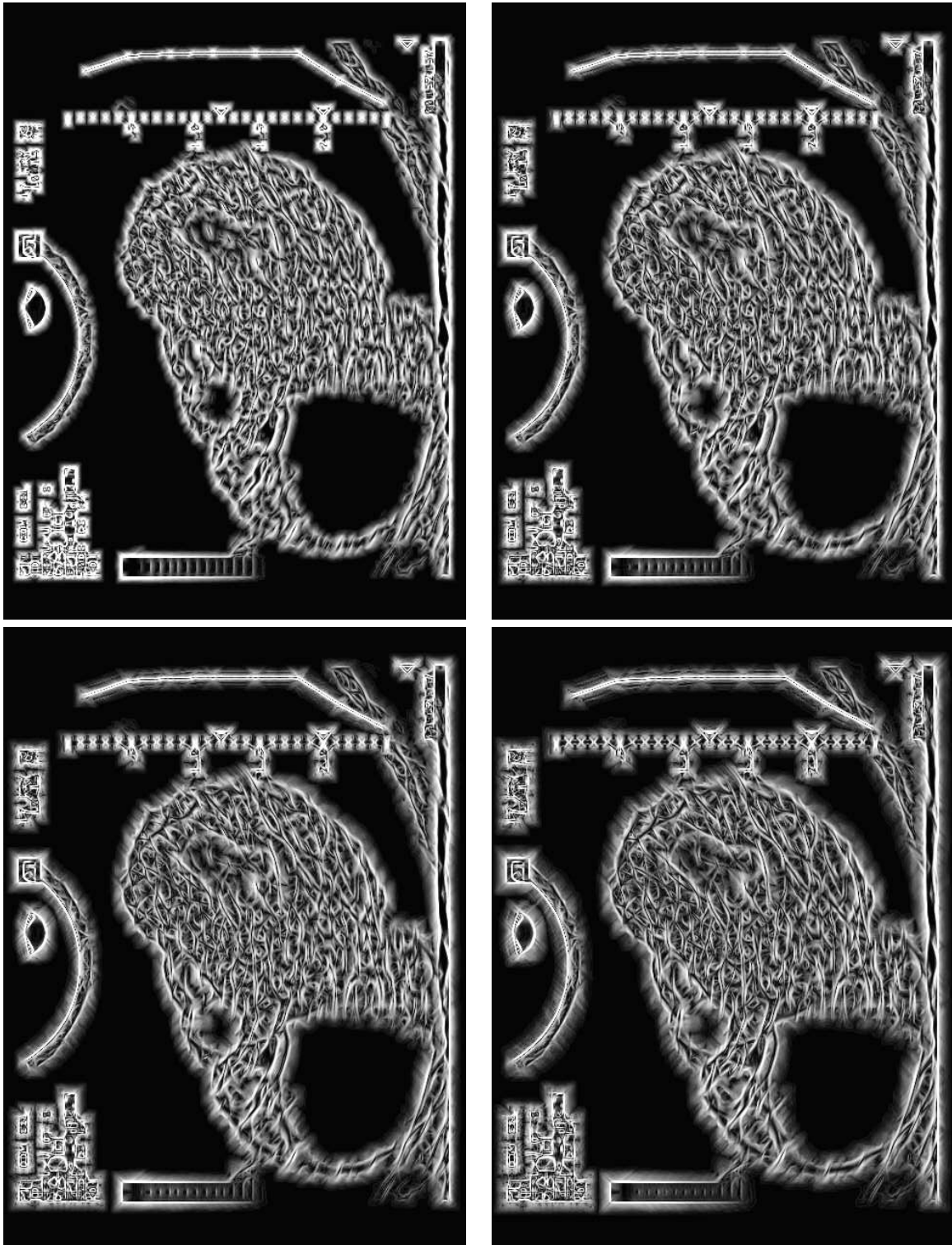


Figure 3.25: 681.022 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

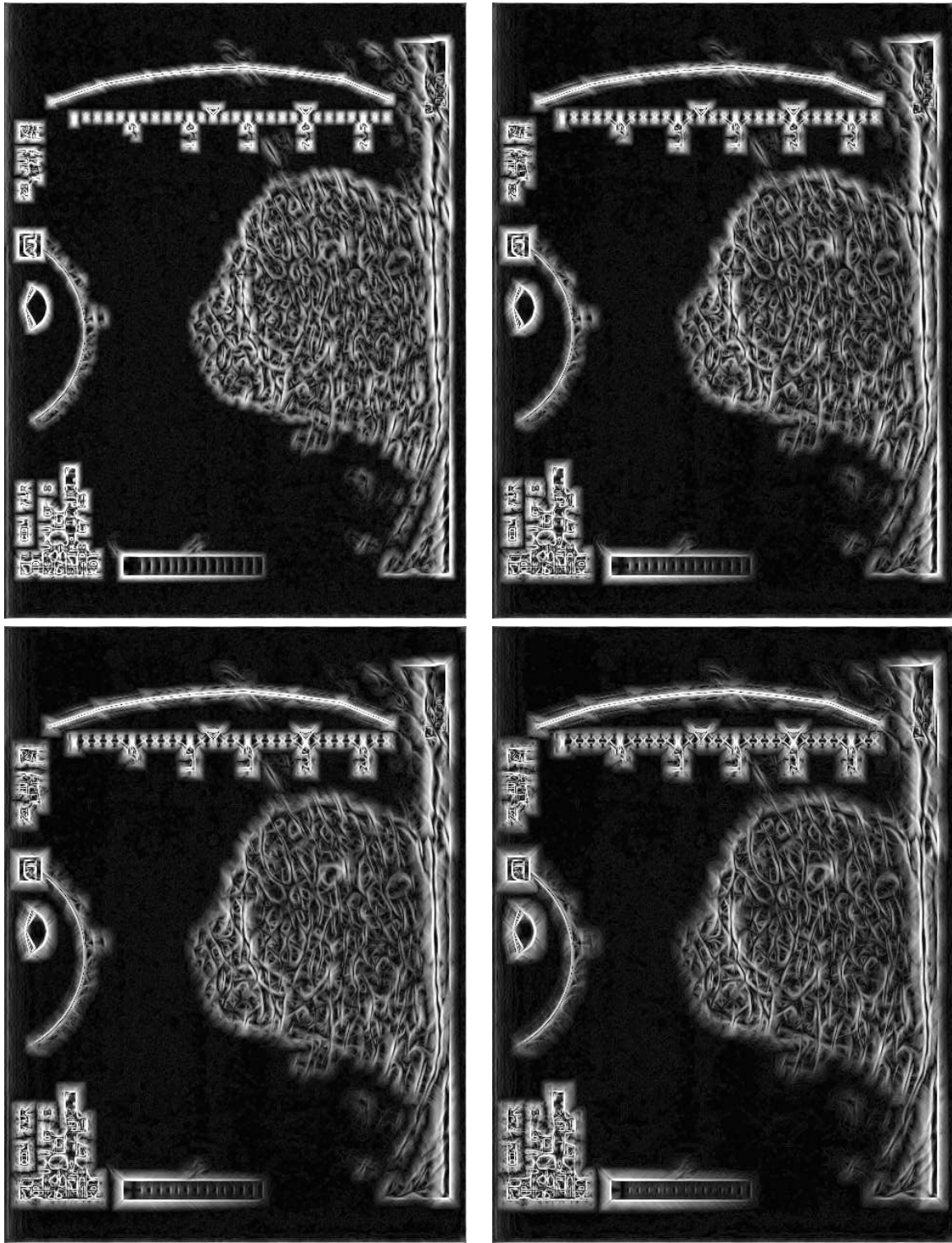


Figure 3.26: 71r.065 - Gaussian Stick Mean. TL: length 15, TR: 21, BL: 25, BR: 31.

3.5 Gaussian Sticks: Variance Output Mode

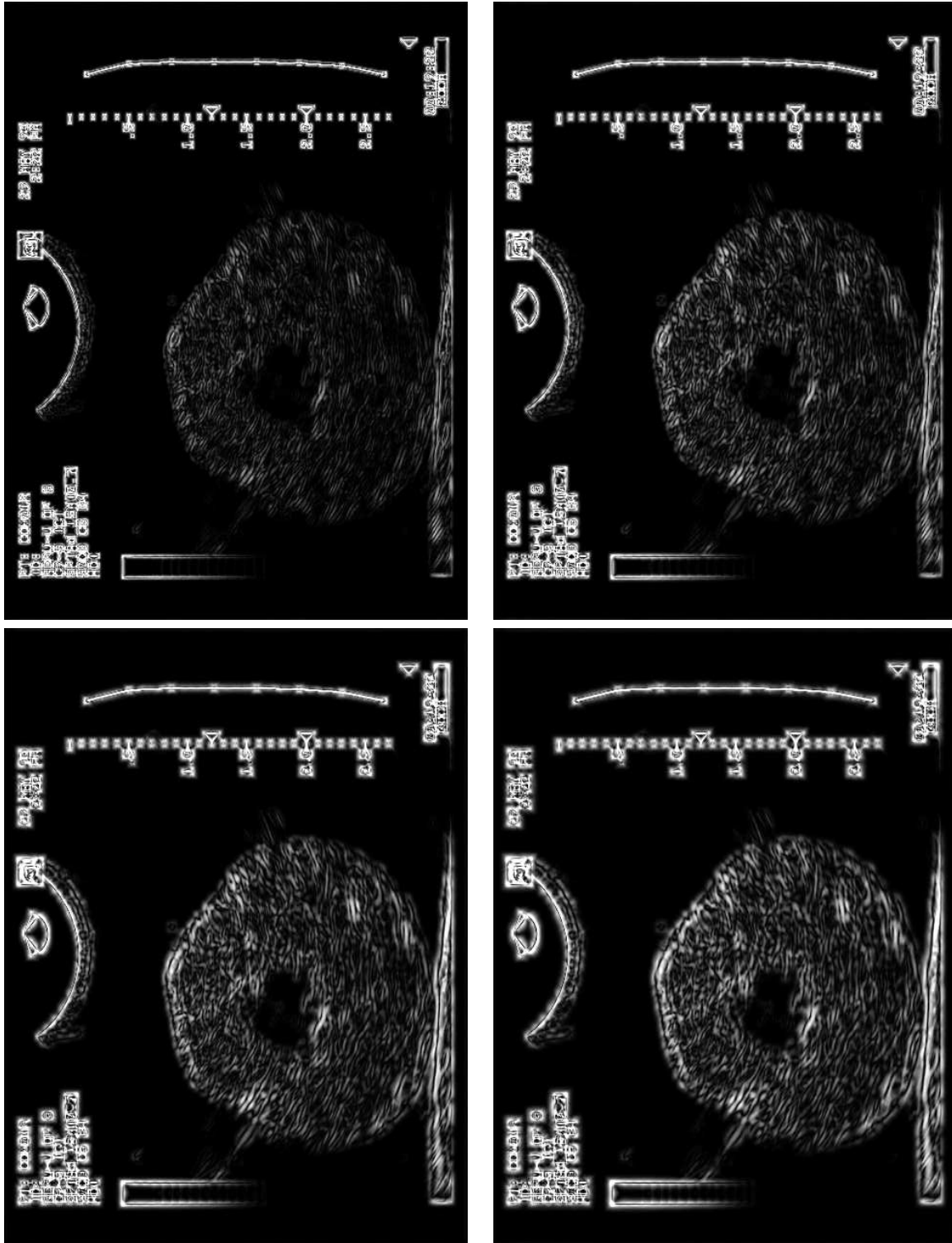


Figure 3.27: 01r.052 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

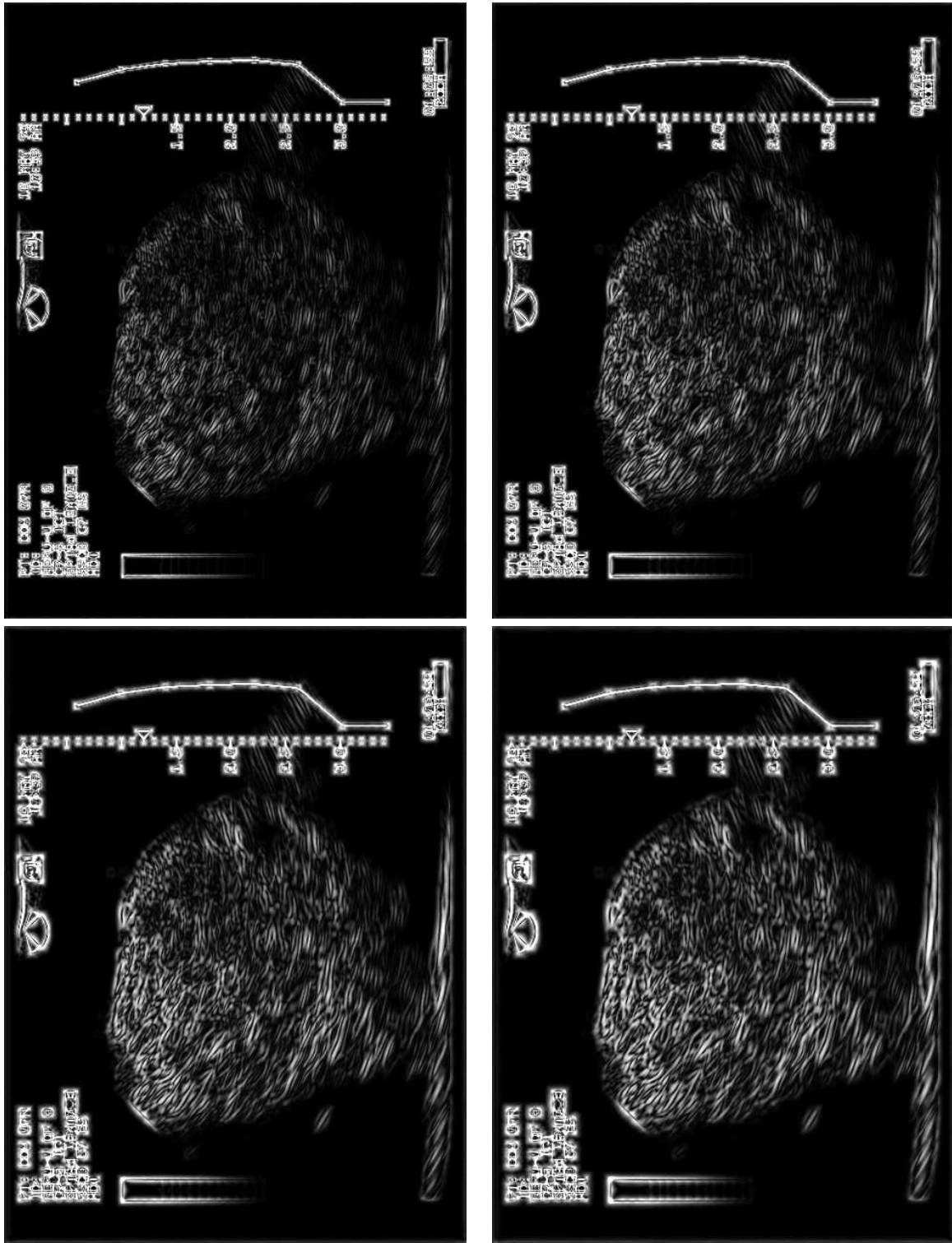


Figure 3.28: 07r.027 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

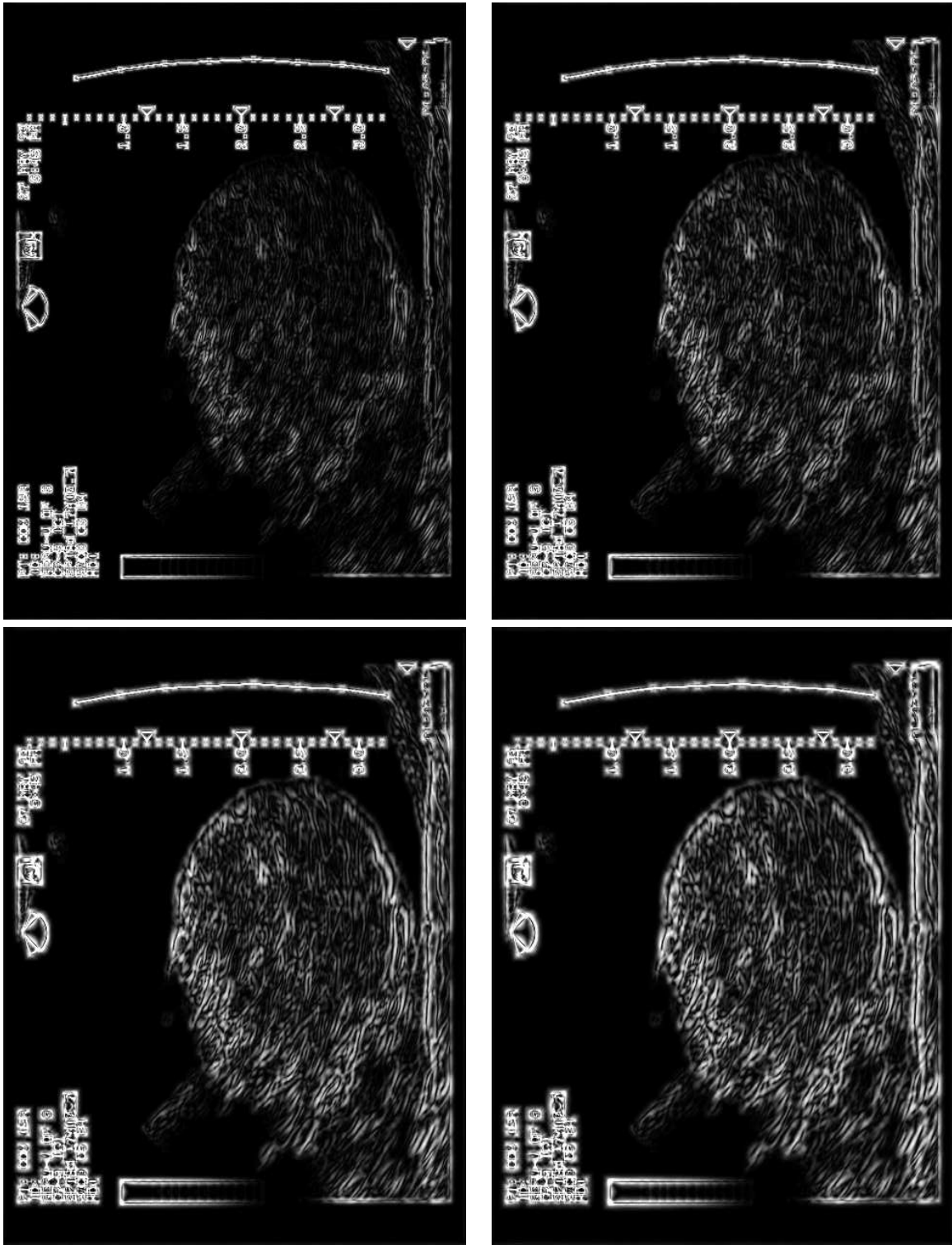


Figure 3.29: 15r.050 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

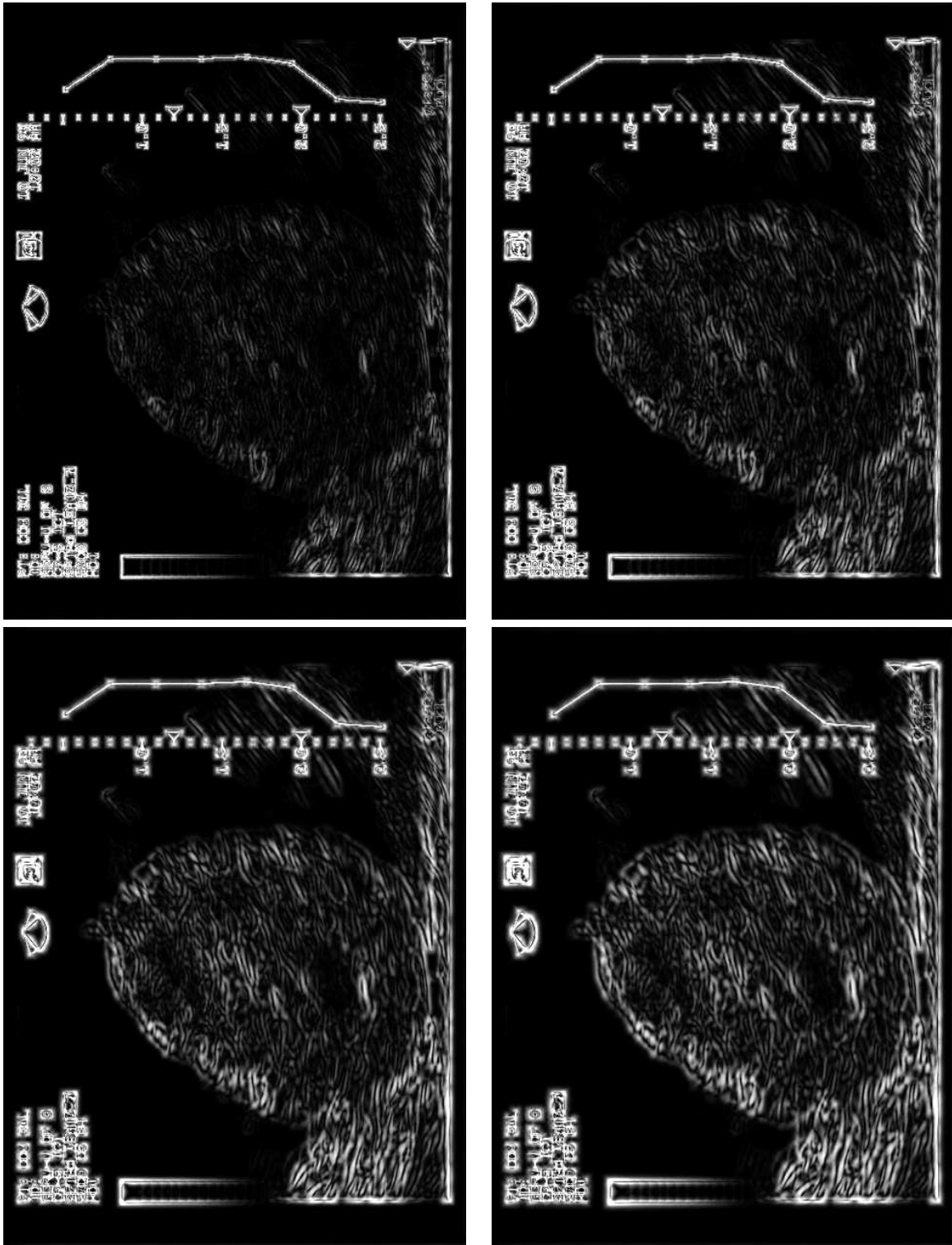


Figure 3.30: 311.026 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

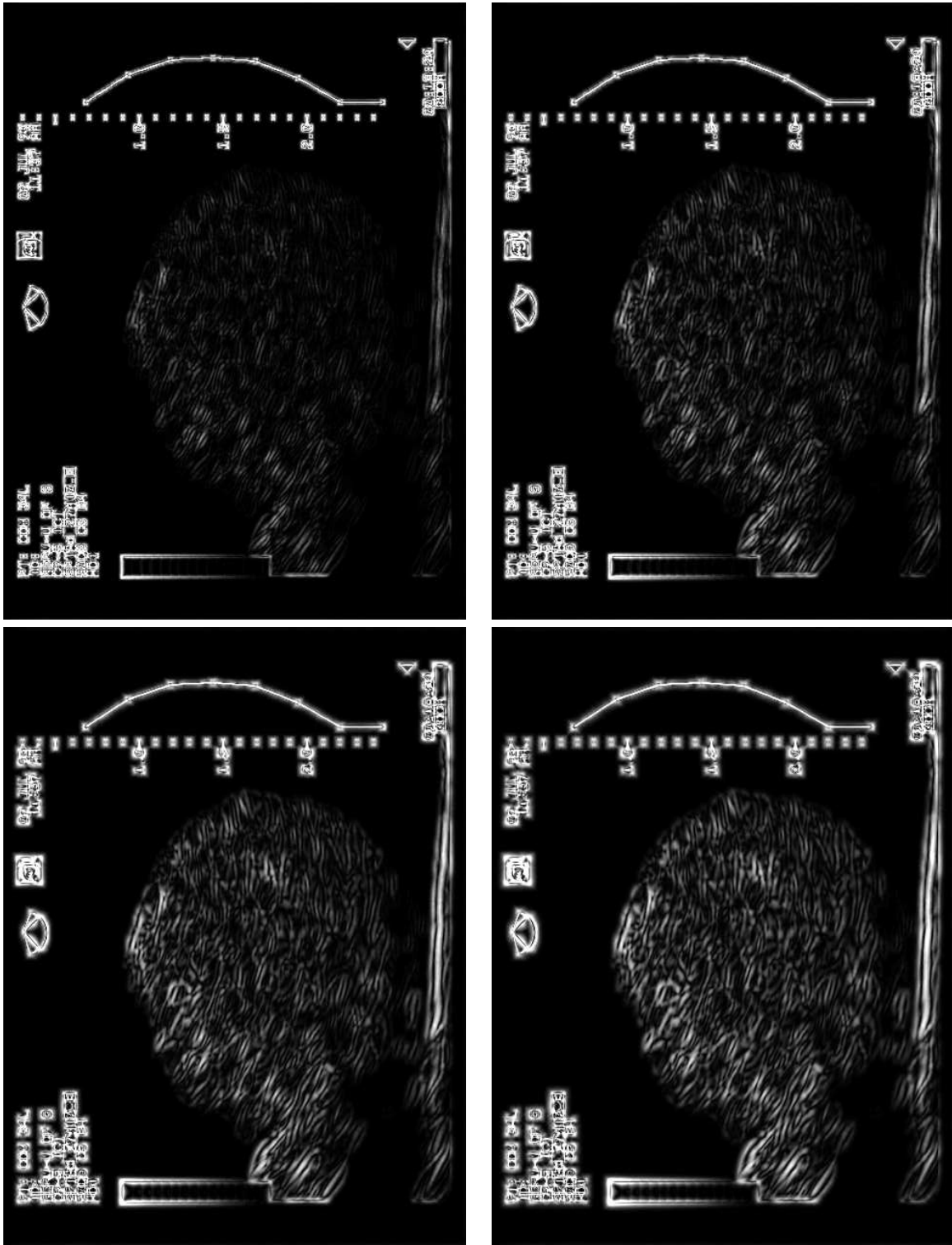


Figure 3.31: 341.042 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

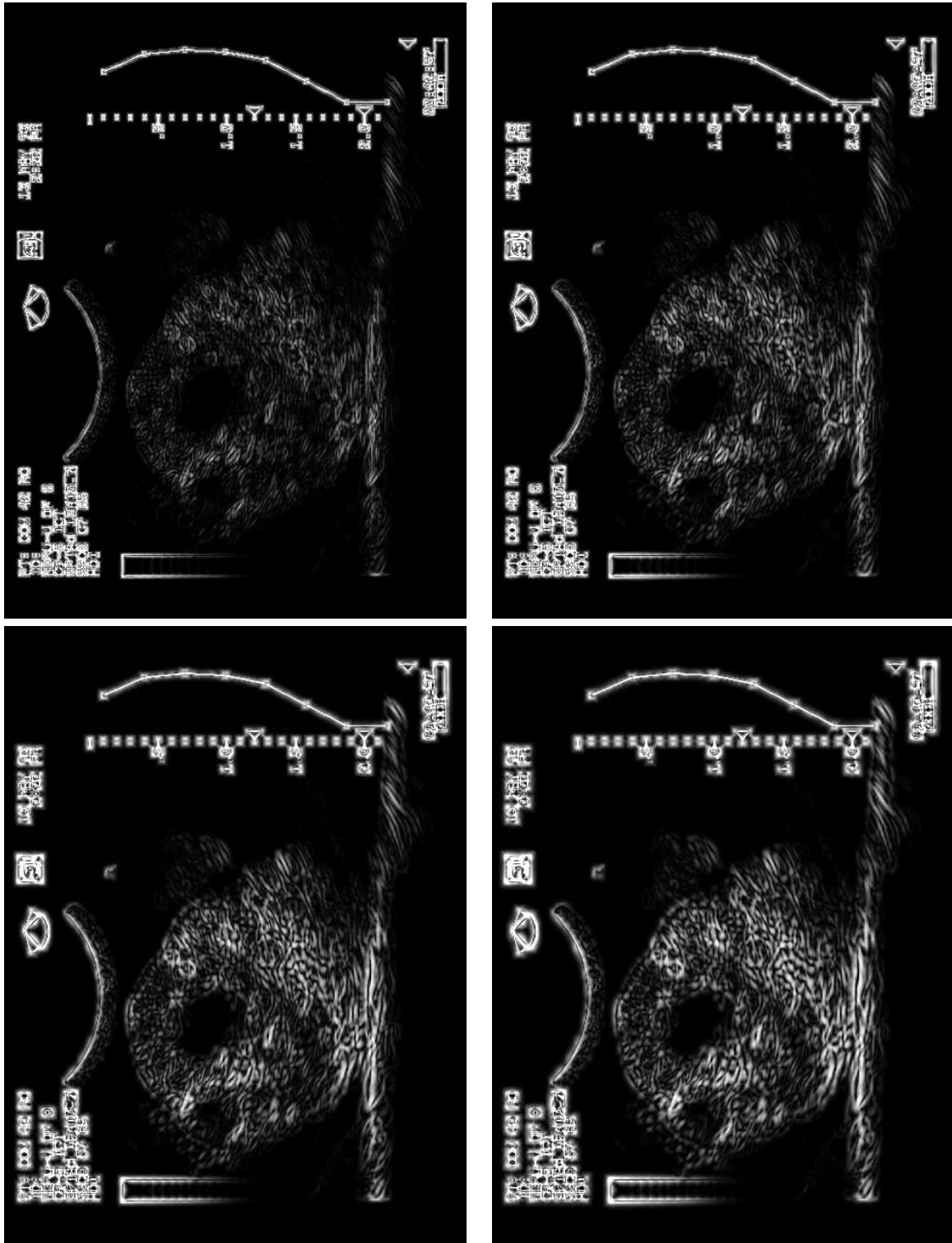


Figure 3.32: 42r.021 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

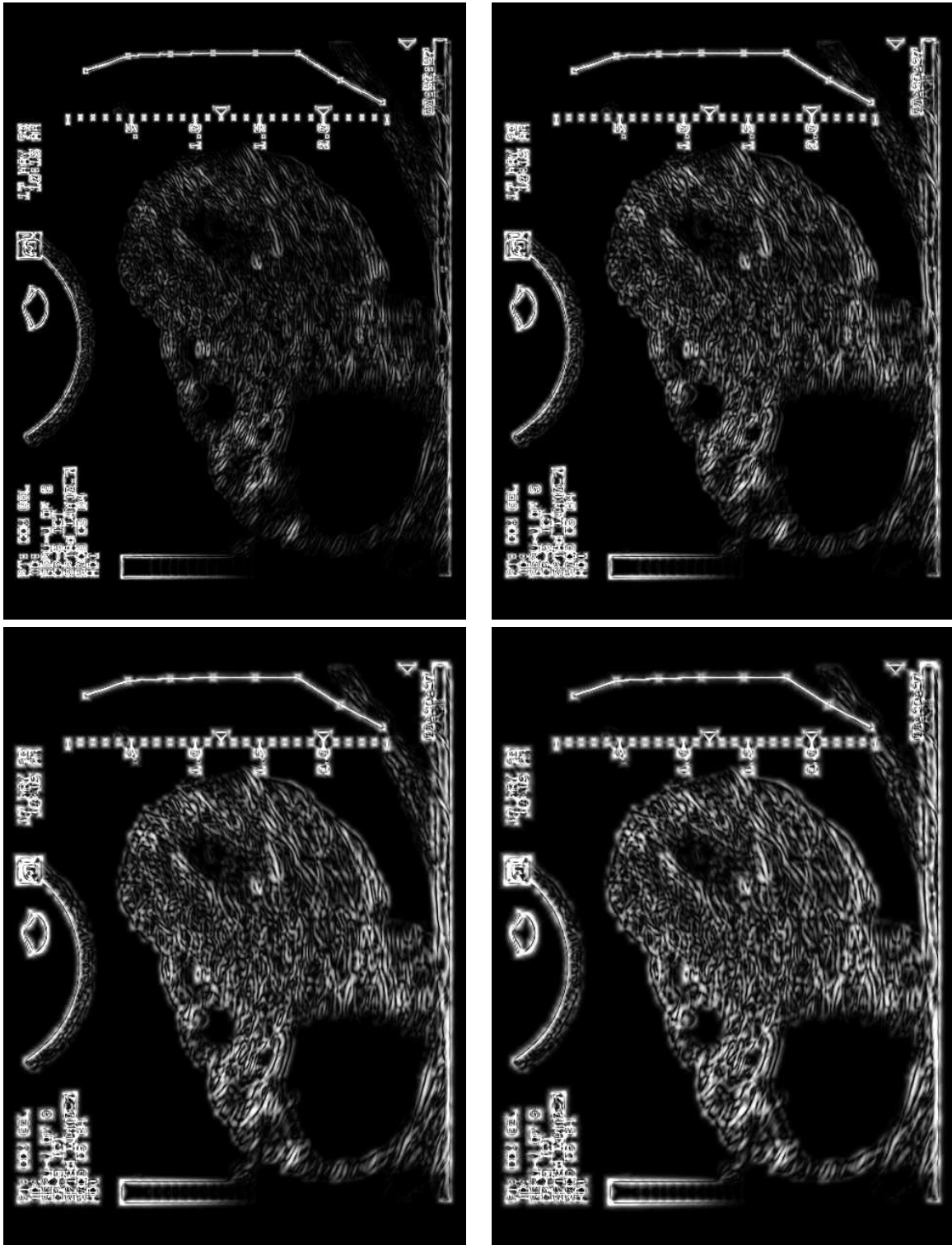


Figure 3.33: 681.022 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

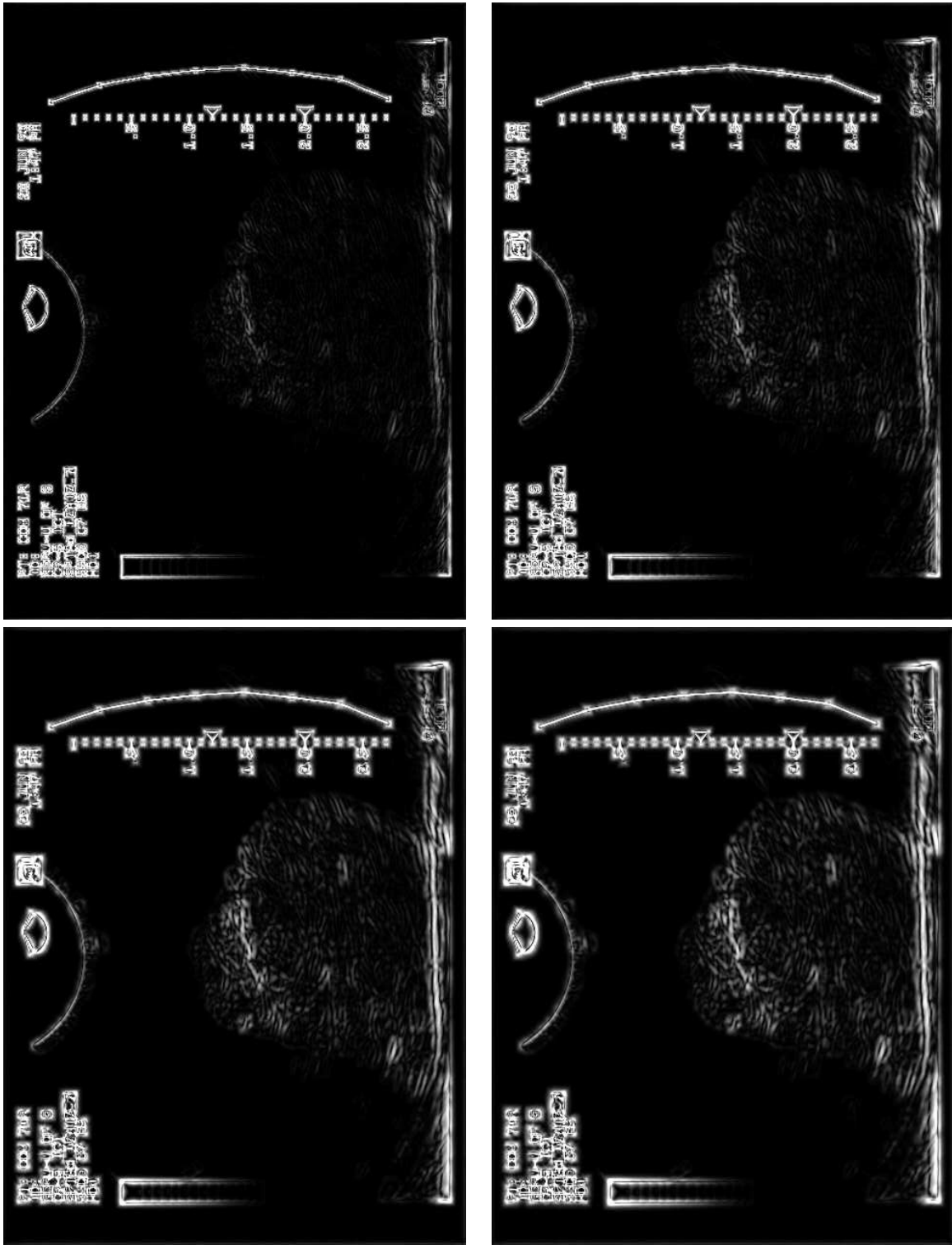


Figure 3.34: 71r.065 - Gaussian Stick Variance. TL: length 11, TR: 15, BL: 21, BR: 25.

3.6 Difference Images: Mean Output Mode

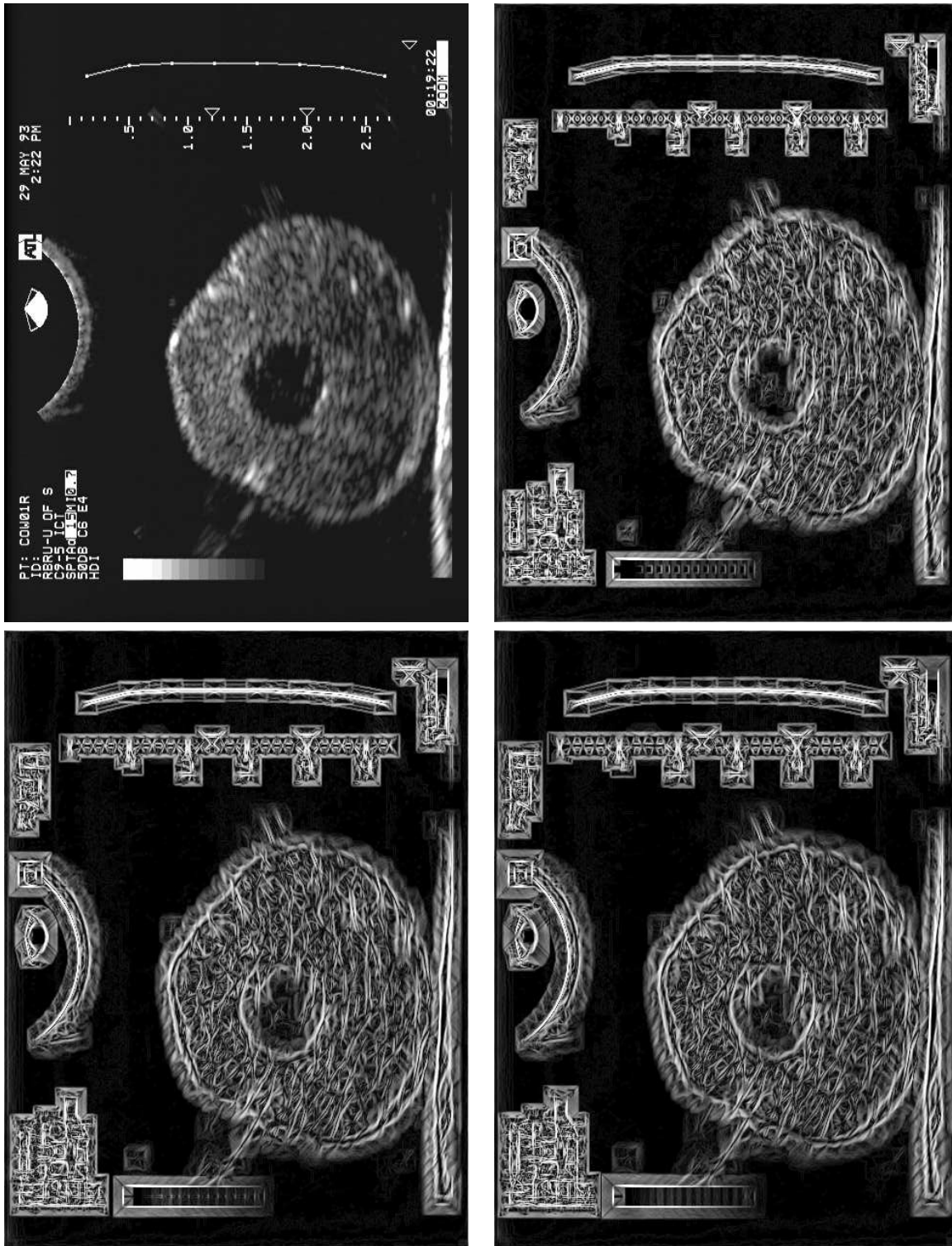


Figure 3.35: 01r.052 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

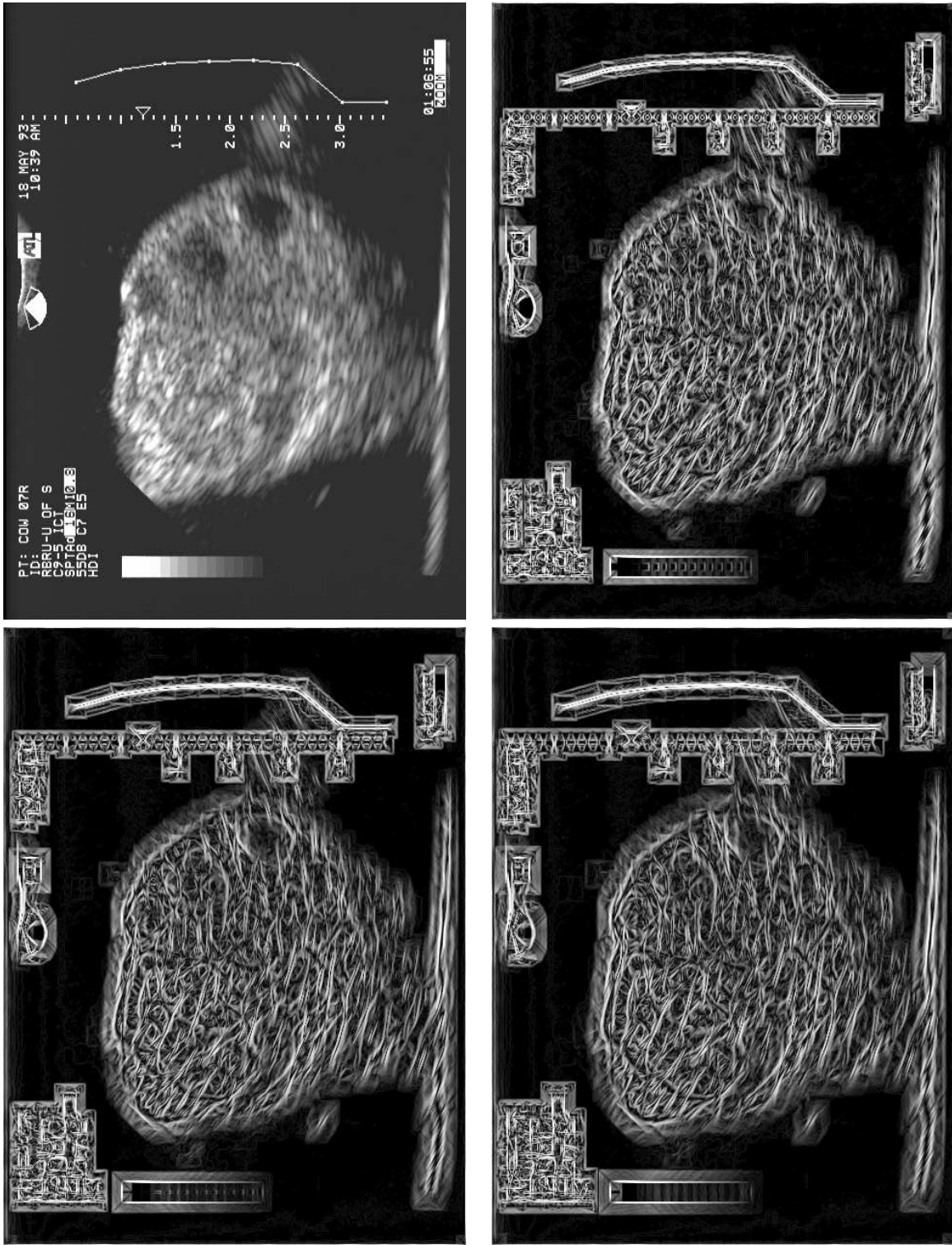


Figure 3.36: 07r.027 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

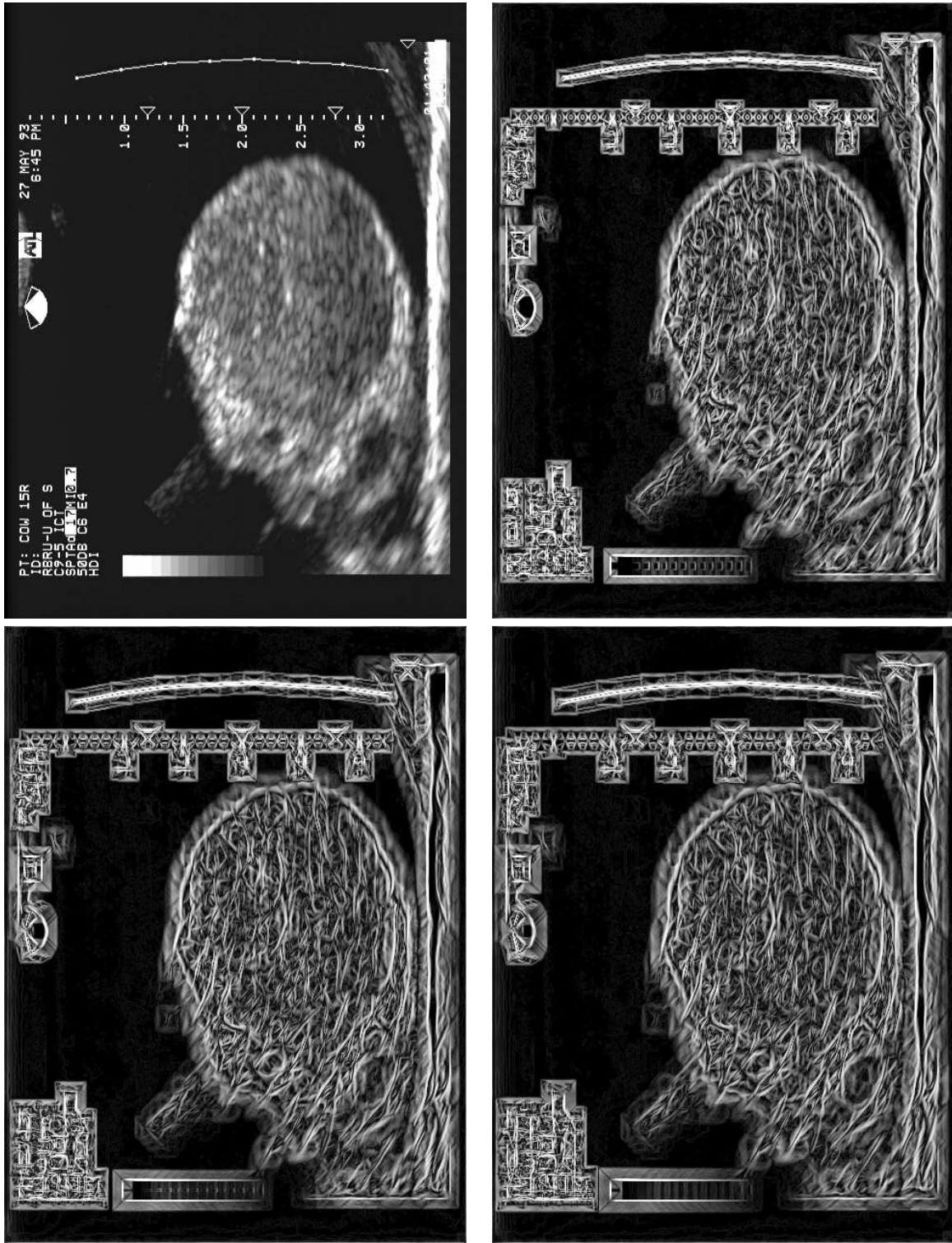


Figure 3.37: 15r.050 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

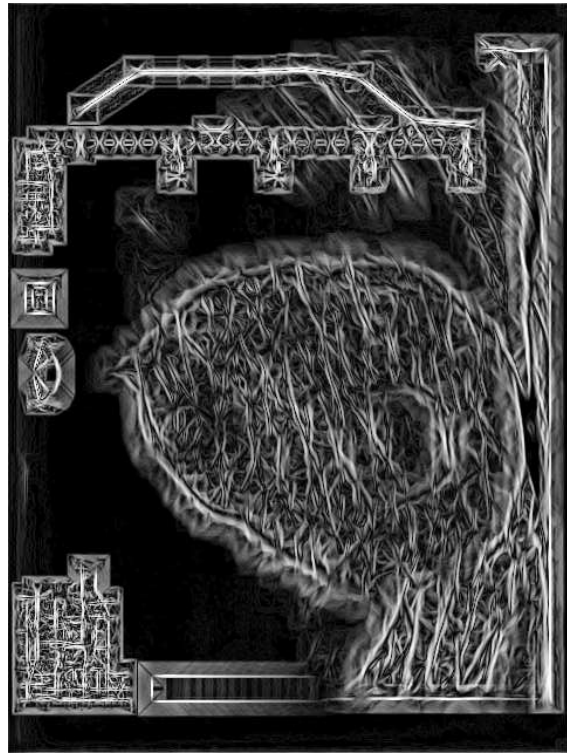
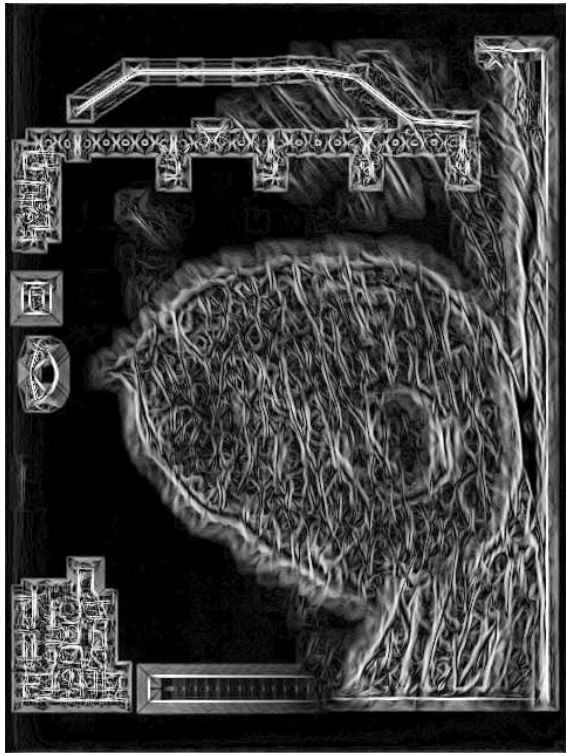


Figure 3.38: 311.026 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

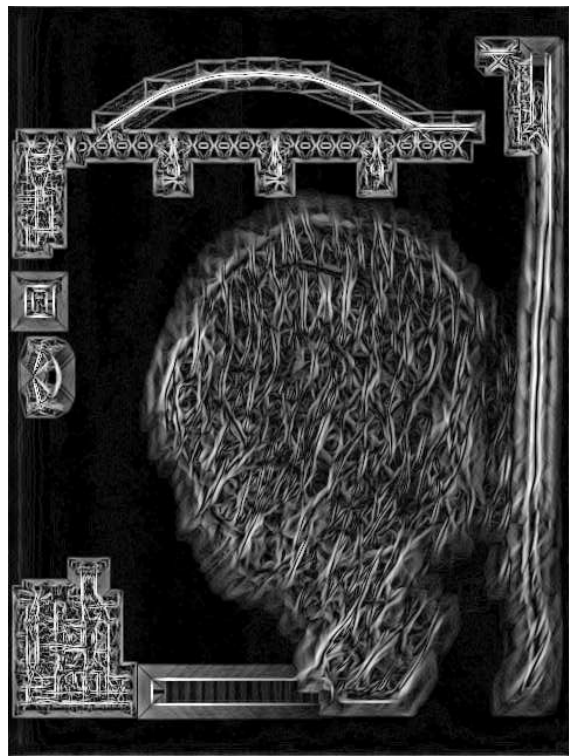
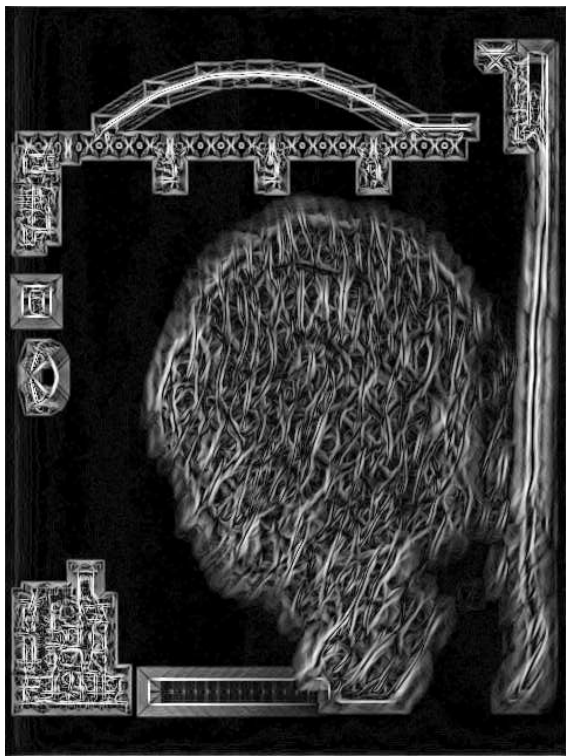
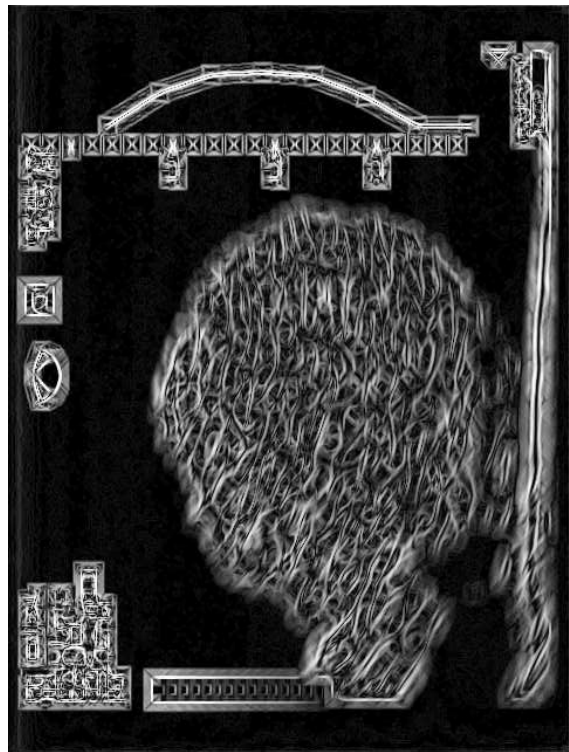


Figure 3.39: 34L.042 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

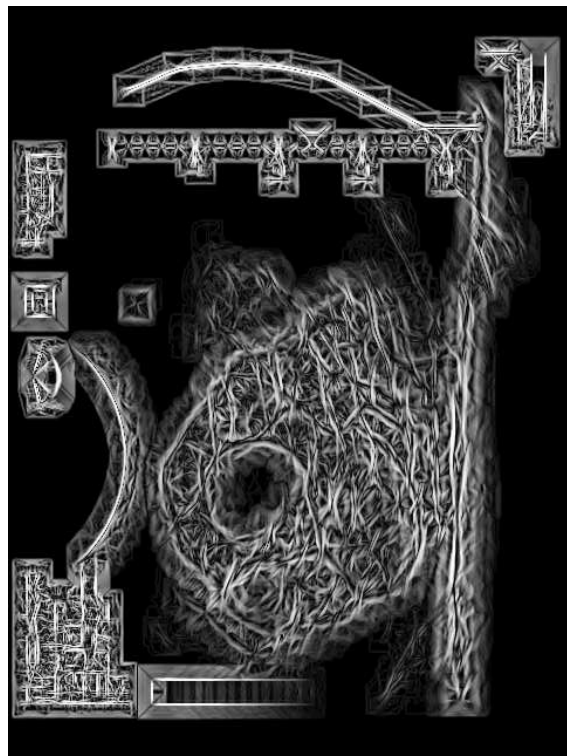
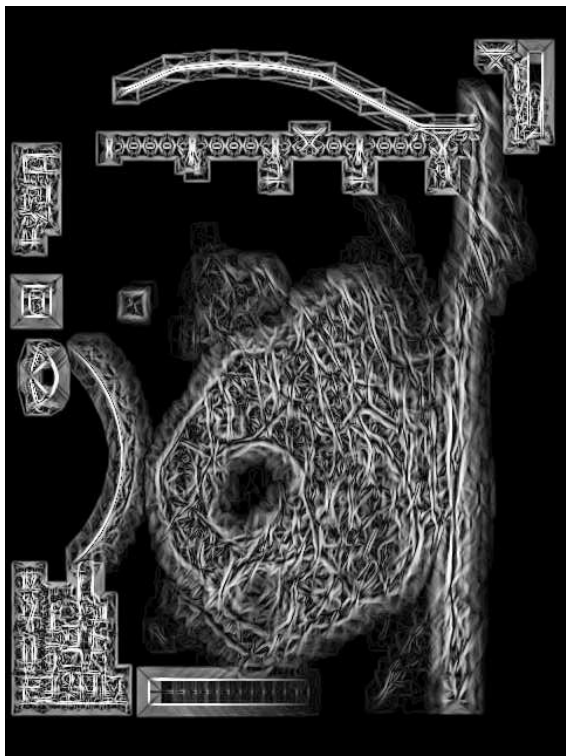
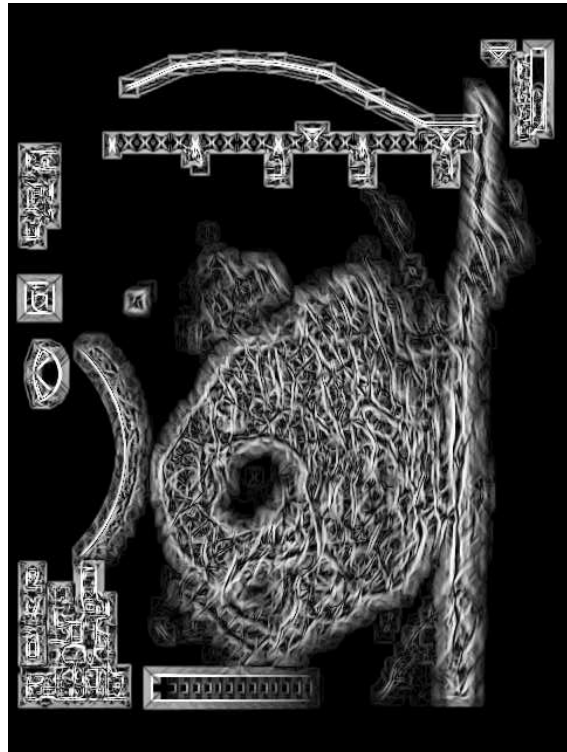


Figure 3.40: 42r.021 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

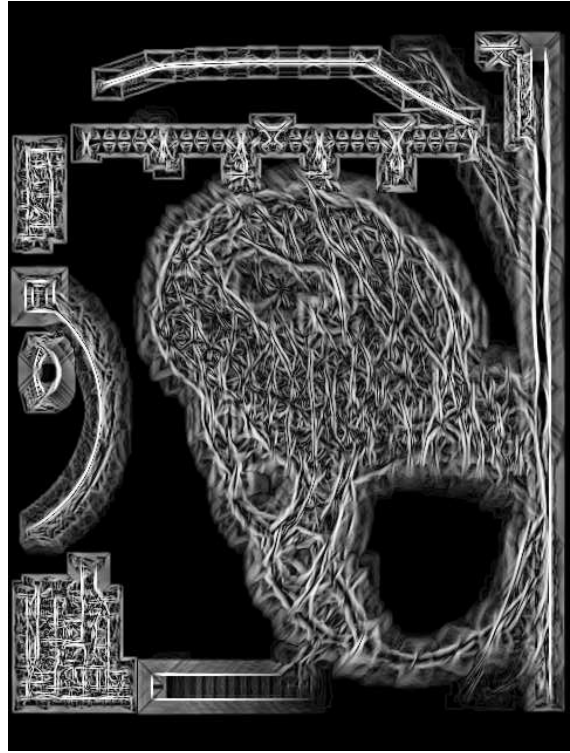
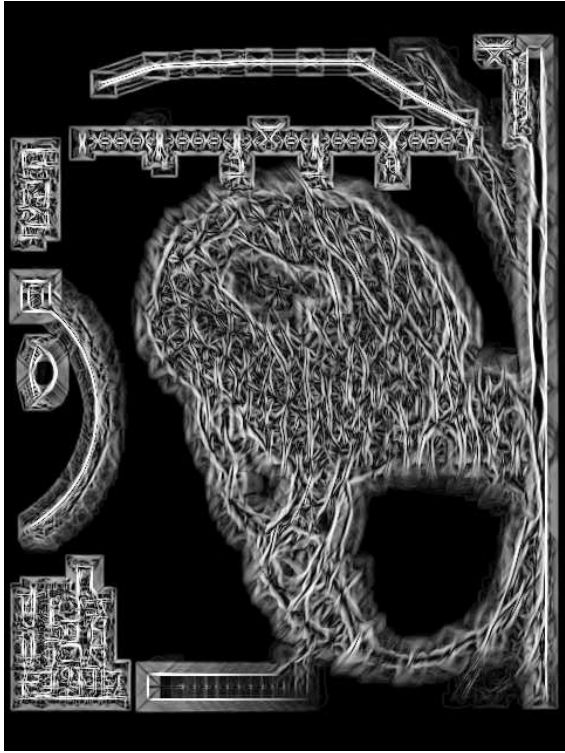
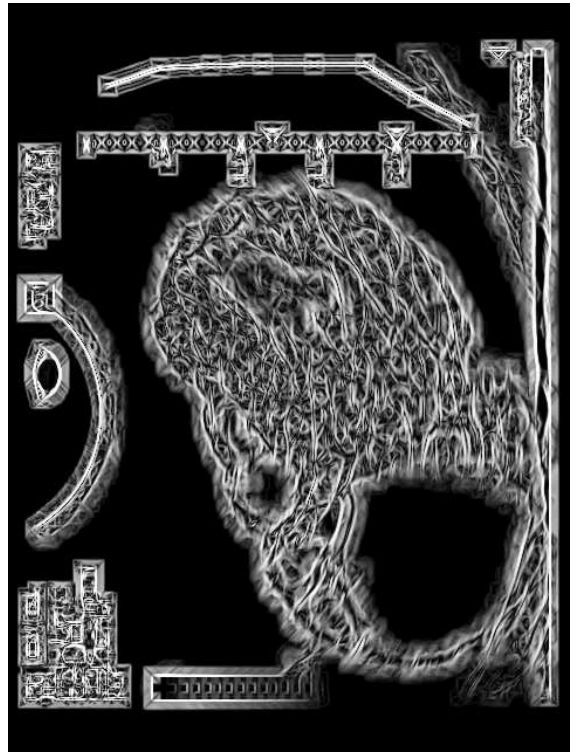


Figure 3.41: 68L.022 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

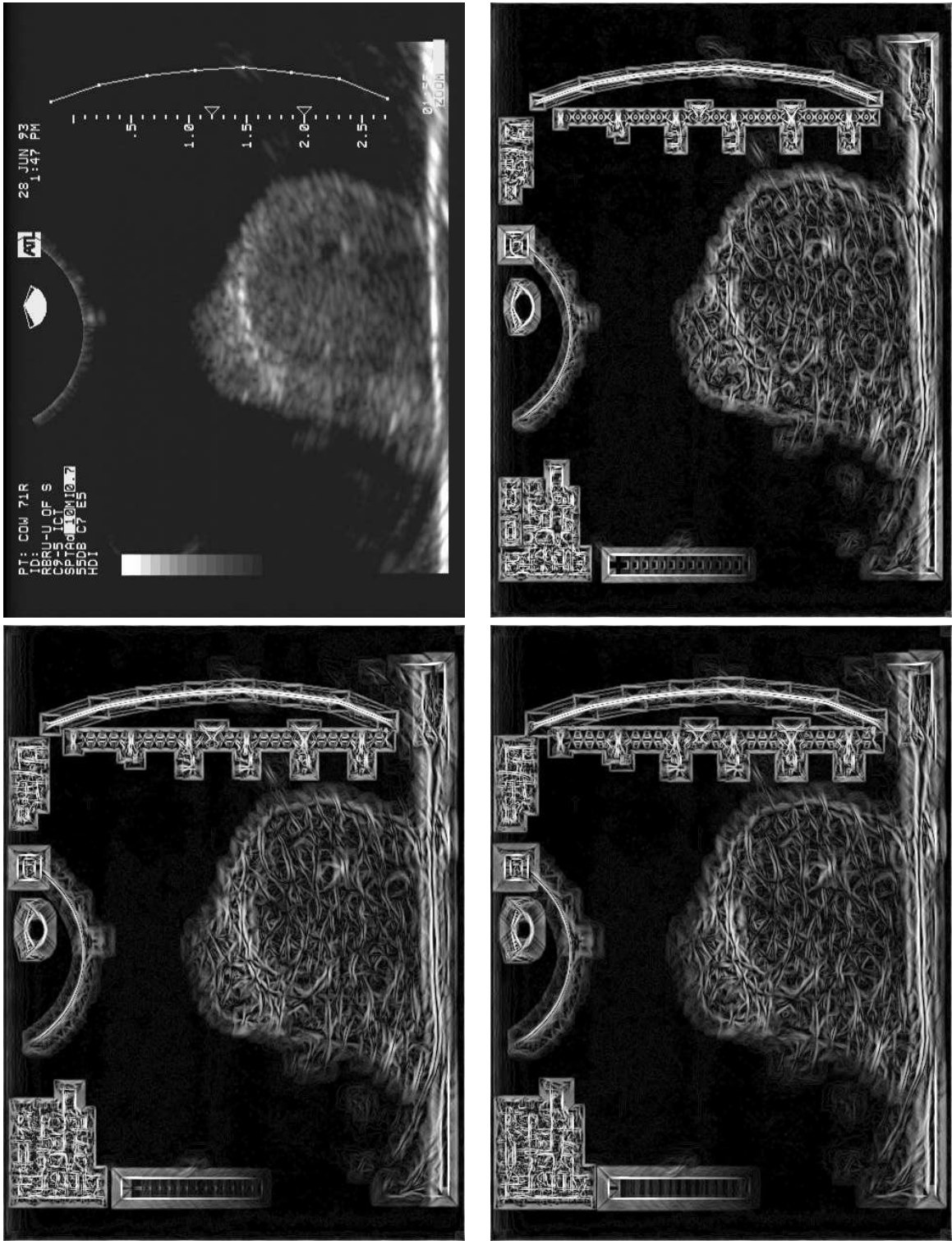


Figure 3.42: 71r.065 - Uniform Difference. TL: Original, TR: 15, BL: 21, BR: 25.

3.7 Difference Images: Variance Output Mode

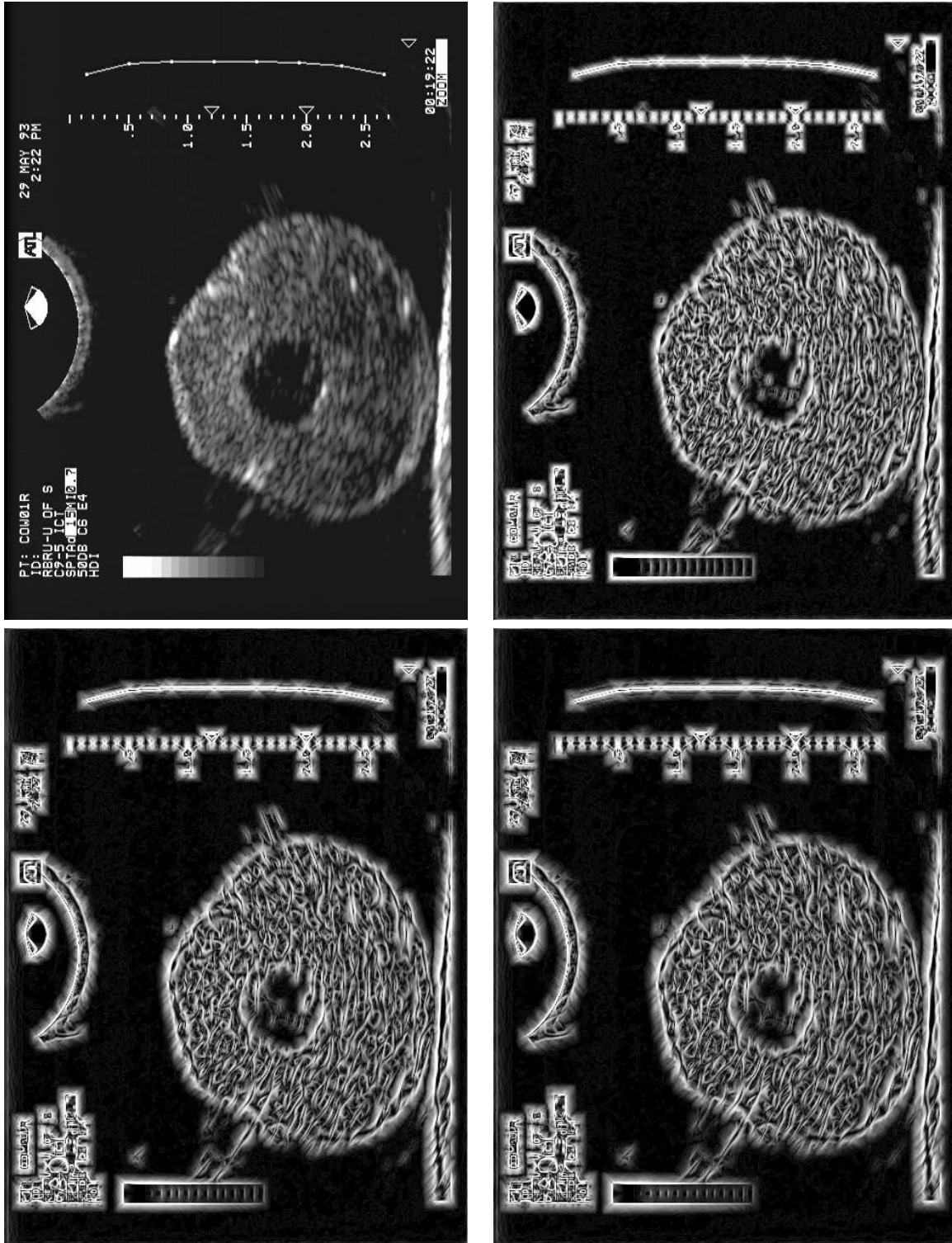


Figure 3.43: 01r.052 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

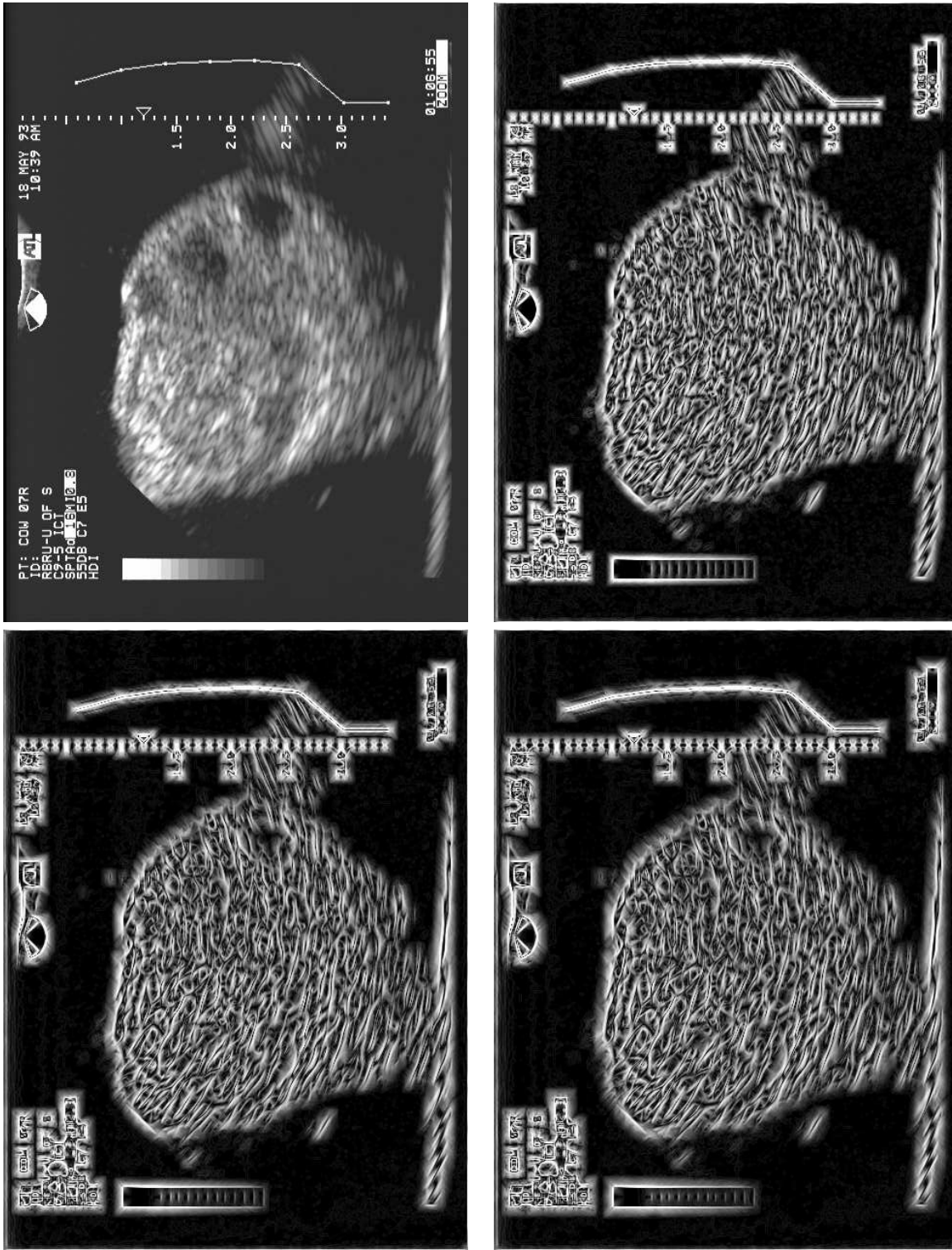


Figure 3.44: 07r.027 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

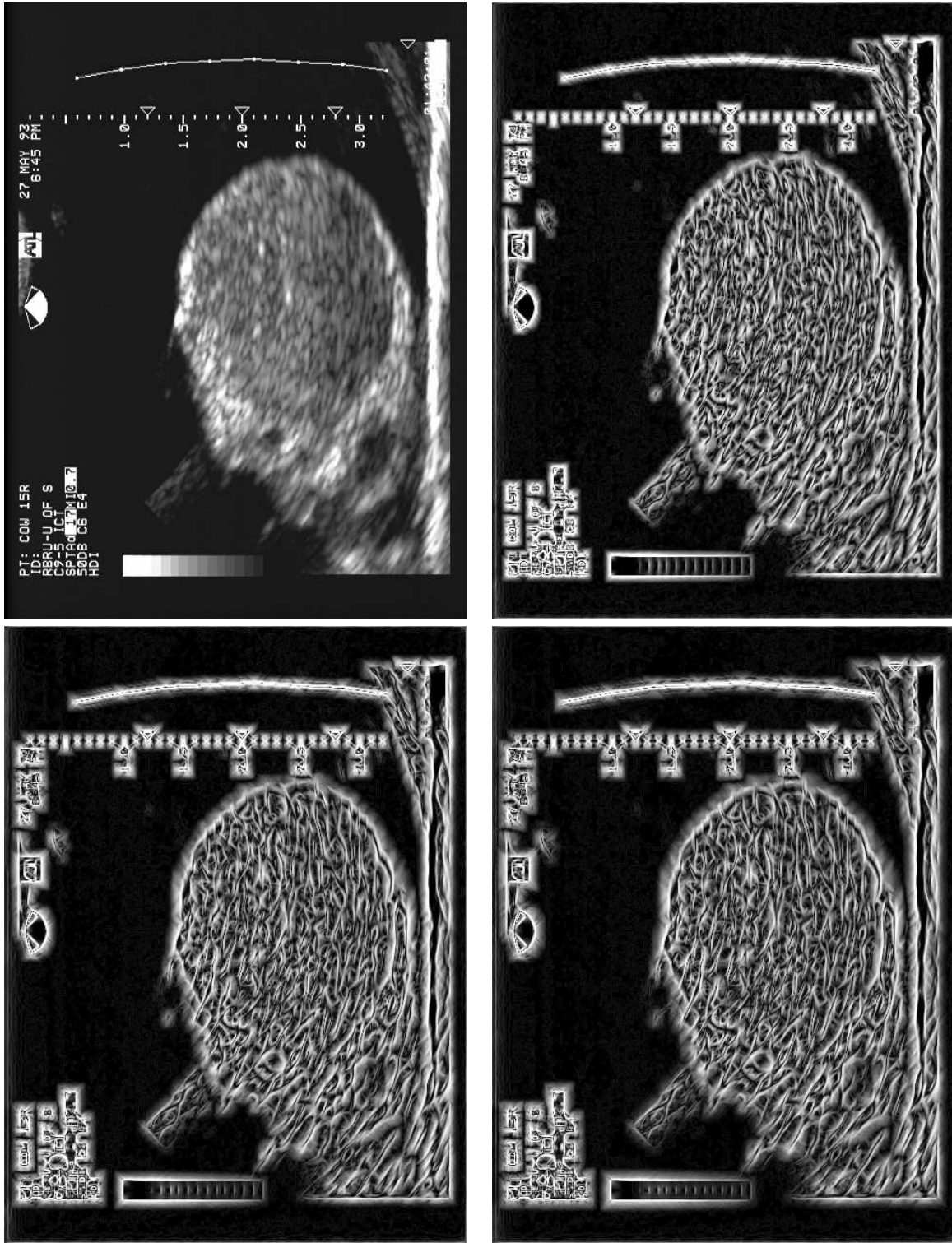


Figure 3.45: 15r.050 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

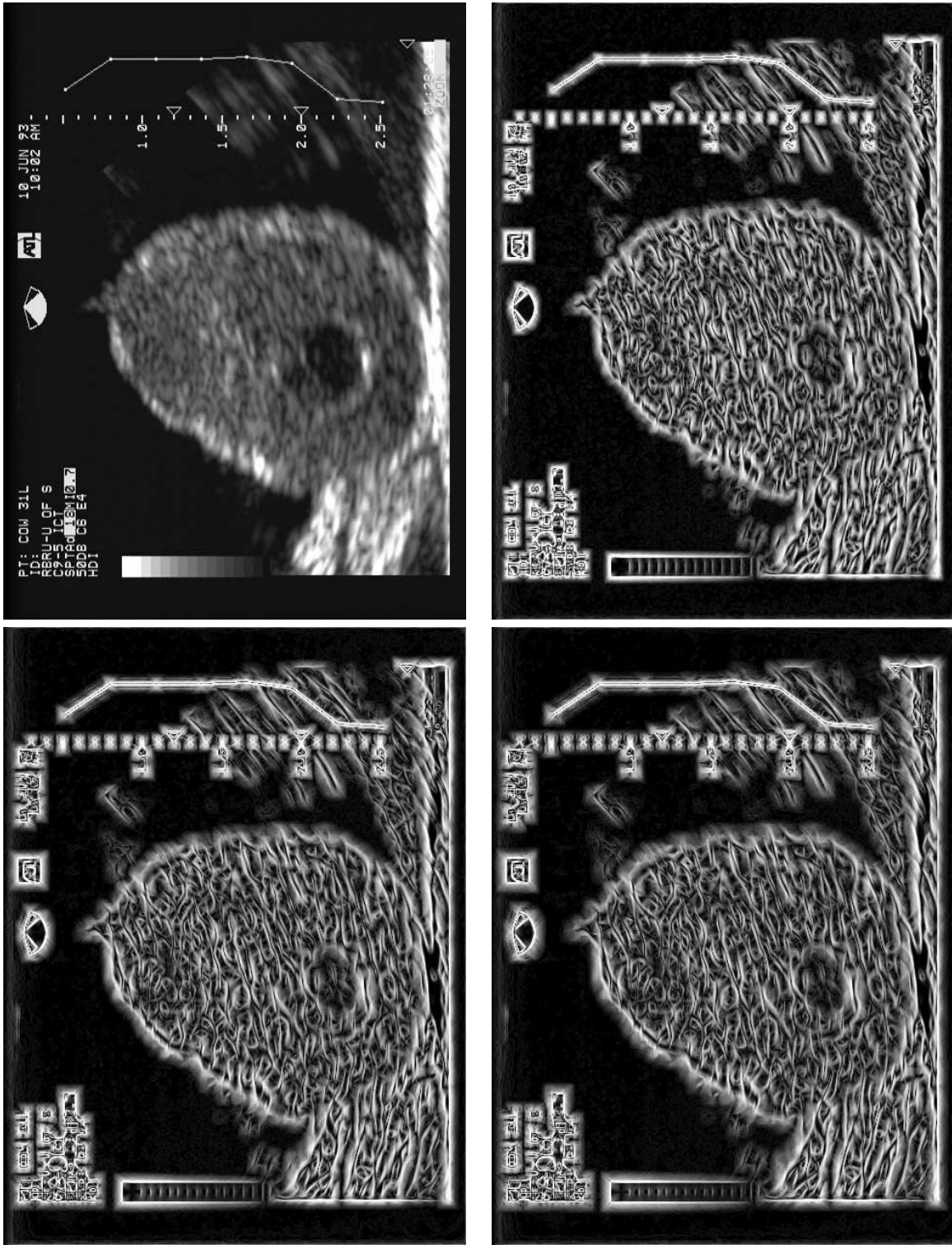


Figure 3.46: 311.026 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

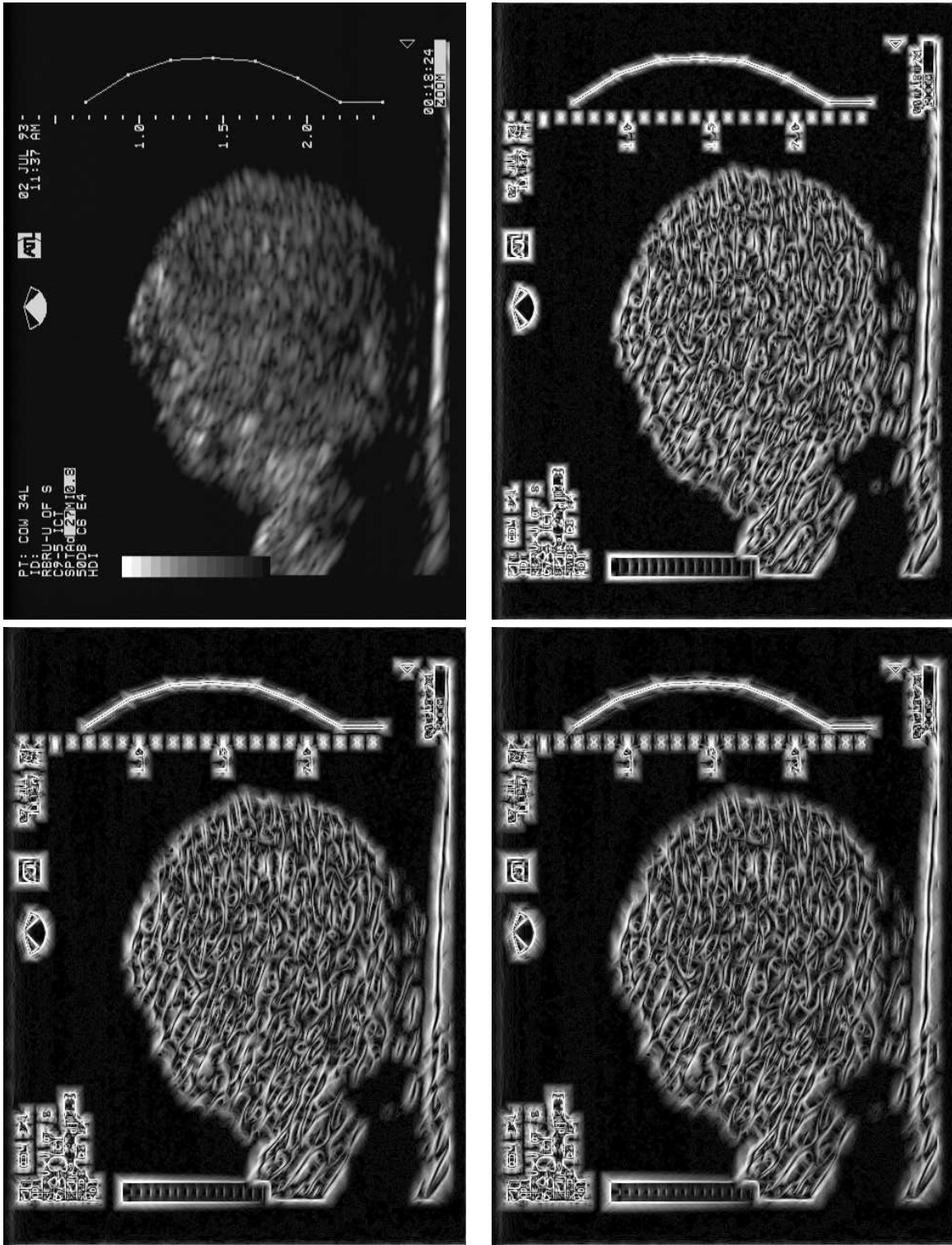


Figure 3.47: 341.042 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

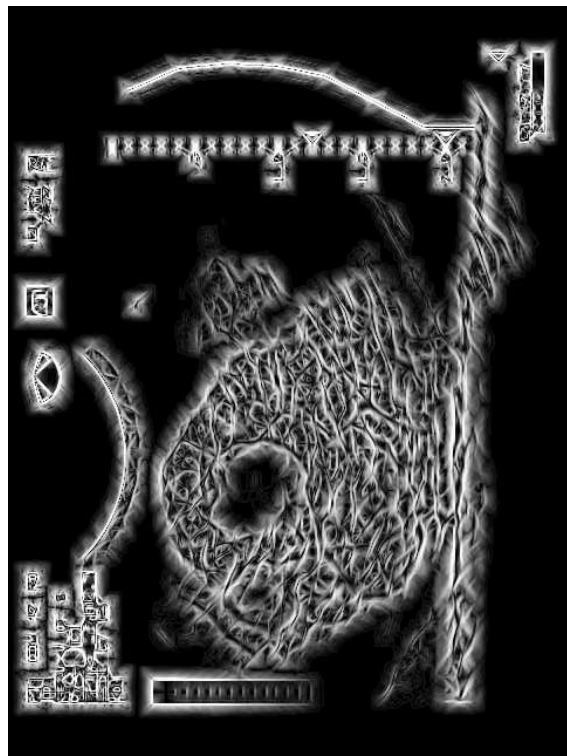
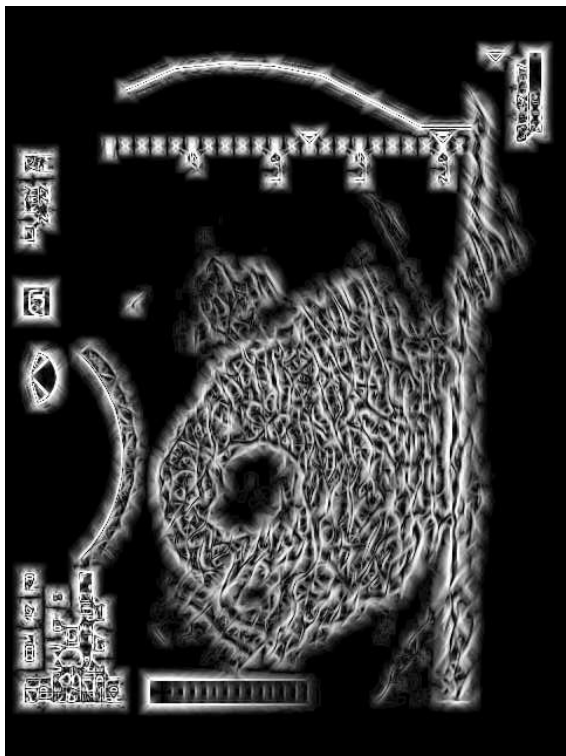
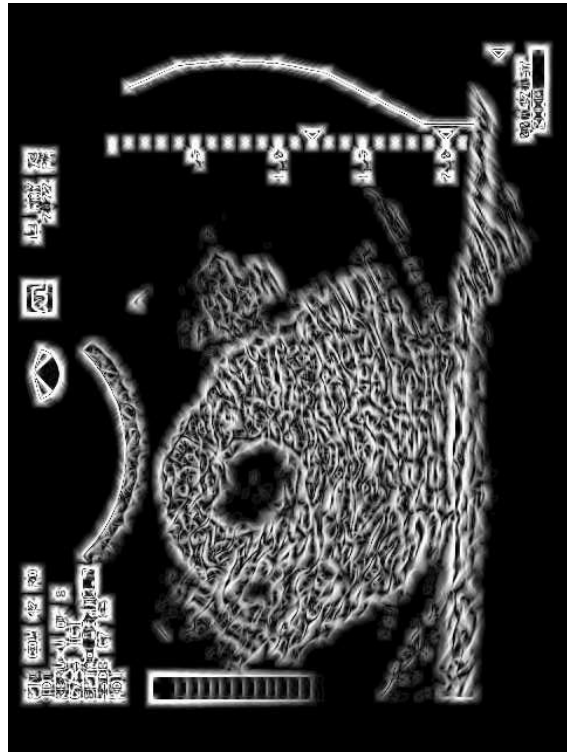


Figure 3.48: 42r.021 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

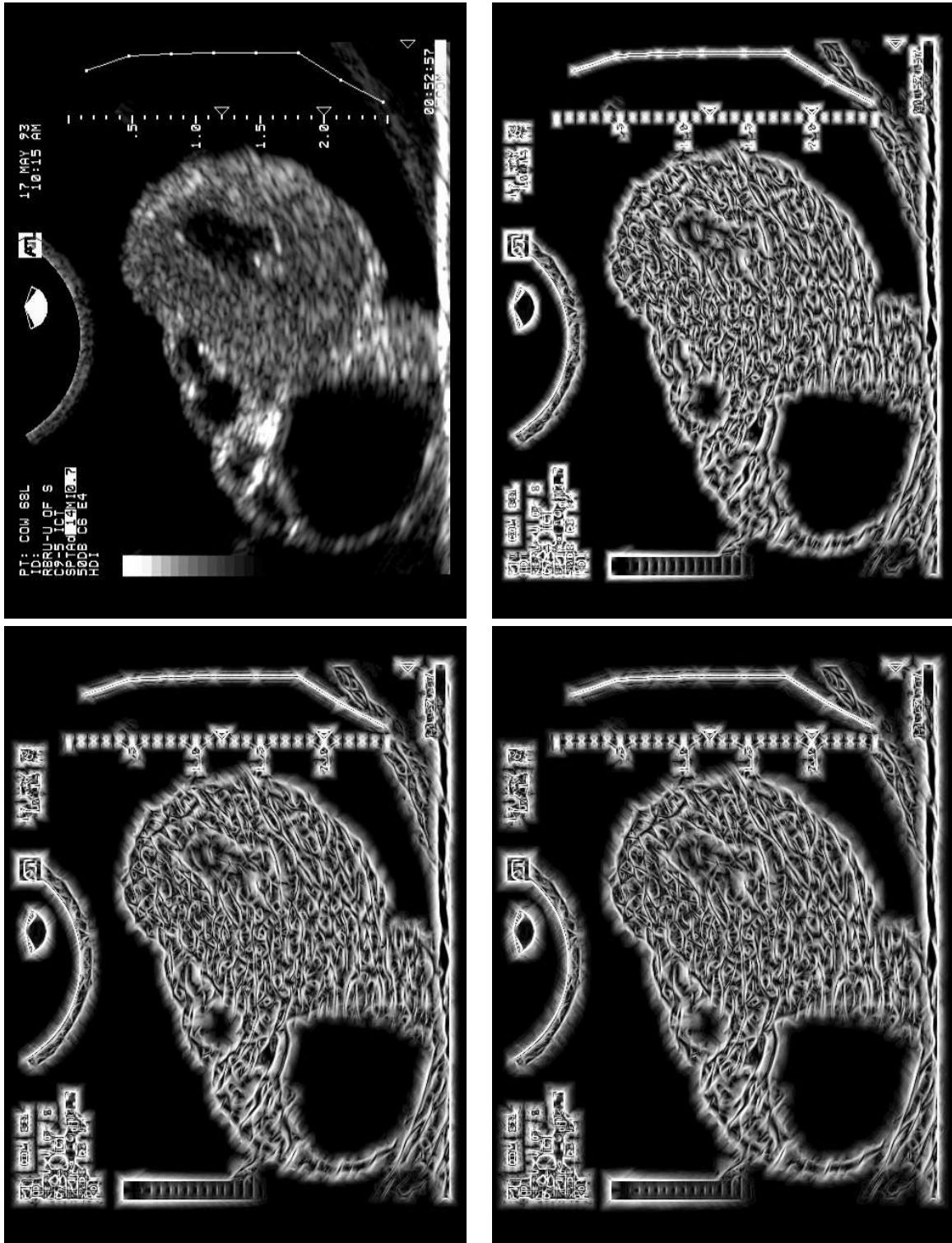


Figure 3.49: 68L.022 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.

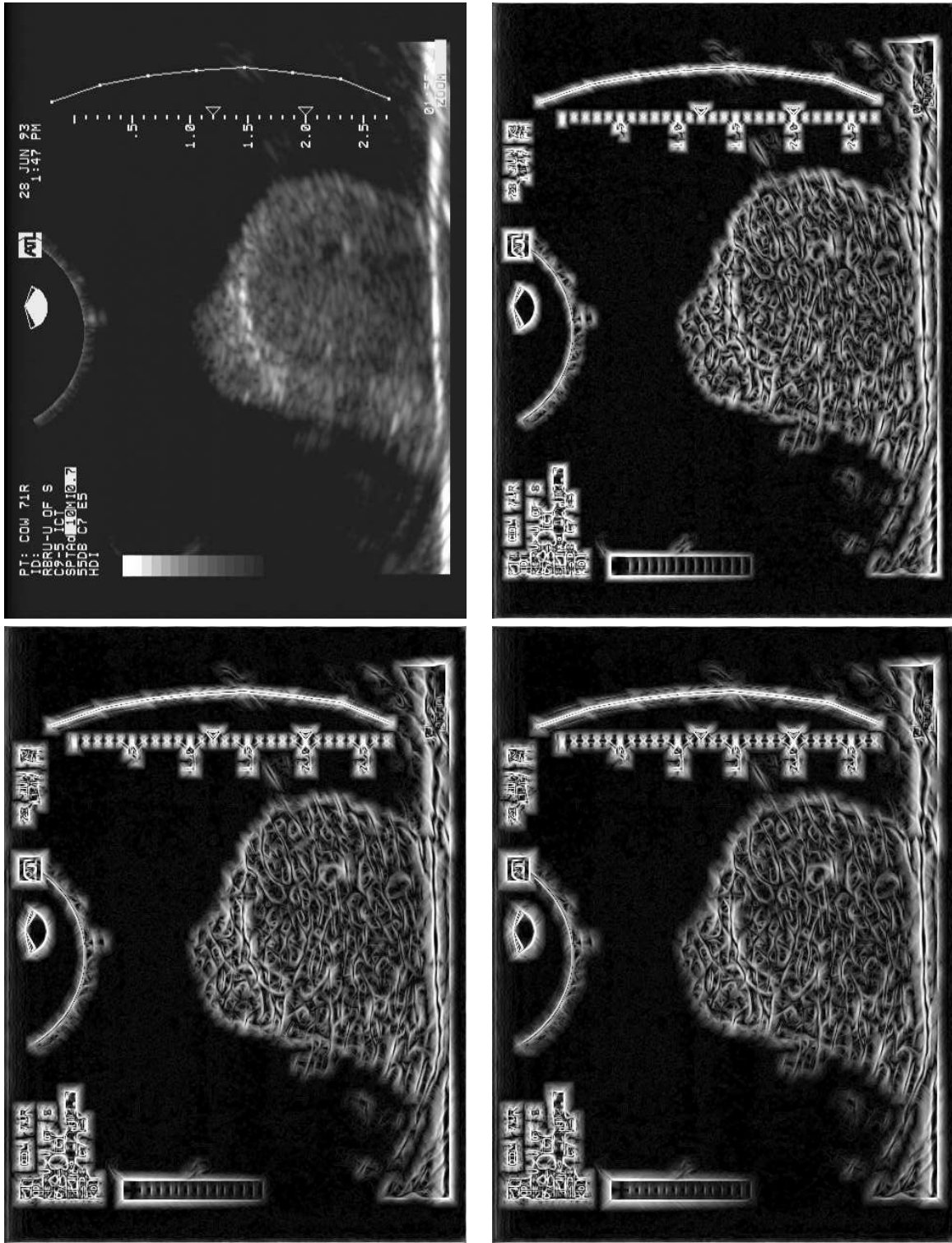


Figure 3.50: 71r.065 - Gaussian Difference. TL: Original, TR: 15, BL: 21, BR: 25.