

Nanopublication — Computational Image Analysis - CLO0006

by Caroline Lopez · Echanger au luxembourg · 2025

Claim 1: Computational Image Analysis - CLO0006

The artwork Echanger [1] au luxembourg (CLO0006) [2] by Caroline Lopez [2] underwent comprehensive computational analysis [3] on 2026-03-06. Method: k-means clustering with 10 colors extracted. Metrics documented: color distribution, texture analysis, brightness/contrast, spatial patterns.

CONTEXT

Analysis performed according to MMIDS-CMP-2025 [3] includes four metric categories: (1) Color distribution via k-means (10 colors), (2) Texture analysis using Haralick features, (3) Brightness and contrast measurements, (4) Spatial pattern characterization. Source image [5]: 1752x1752 pixels. Analysis date: 2026-03-06.

COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1		C8CBDD 27.3	blue-violet	lightgray
2		C2C3D5 20.4	violet	lightsteelblue
3		CFD2E5 14.3	violet	lightgrey
4		B8B8CC 14.2	violet	silver
5		ADAEC3 11.9	violet	steel gray
6		DAE8F3 6.8	blue	white
7		CB4743 1.9	red-orange	indianred
8		D45855 1.6	red-orange	tomato
9		A9565C 0.9	red-orange	burnt sienna
10		BC868D 0.6	red	rosybrown

Color Families:

Family	%
violet	60.8
blue-violet	27.3
blue	6.8
red-orange	4.5
red	0.6

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.088
Mean Local Roughness	0.012
Roughness Uniformity	0.013
Edge Density	0.015
Mean Gradient Magnitude	0.082
Gradient Variance	0.019
Gradient Smoothness	0.0
Directional Coherence	0.044
Pattern Complexity	0.144

Metric	Value
Pattern Repetition	1.0
Detail Frequency Ratio	0.629
Spatial Variation	0.046
Texture Consistency	0.217
BRIGHTNESS & CONTRAST ANALYSIS	

Metric	Value
Mean Brightness	0.767
Brightness Variance	0.088
Brightness Uniformity	0.885
Brightness Skewness	-1.958
Brightness Entropy	6.001
Rms Contrast	0.088
Michelson Contrast	0.67
Weber Contrast	0.177
Mean Local Contrast	0.011
Contrast Uniformity	0.0
Dynamic Range	0.78
Effective Dynamic Range	0.247
Shadow Percentage	0.043
Midtone Percentage	5.475
Highlight Percentage	94.482
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.007
Medium Contrast	0.014
Coarse Contrast	0.019
Multiscale Contrast Ratio	0.361
Edge Contrast	0.082
Contrast Clustering	0.783
SPATIAL DISTRIBUTION ANALYSIS	

Metric	Value
Spatial Coherence	0.752
Color Clustering	0.0
Color Transition Smoothness	0.799
Transition Uniformity	0.885
Sharp Transition Ratio	0.1
Transition Directionality	0.048
Mean Saturation	0.124
Saturation Variance	0.012
Low Saturation Ratio	0.953
Medium Saturation Ratio	0.045
High Saturation Ratio	0.002
Saturation Clustering	1.0

Metric	Value
Hue Concentration	0.997
Complementary Balance	0.0
Analogous Dominance	1.0
Temperature Bias	1.0

Methodology

This analysis employs standardized computational methods for objective image characterization. Color extraction uses k-means clustering algorithm. Texture analysis applies Haralick feature extraction. Brightness metrics include mean, variance, and distribution analysis. Spatial patterns are characterized through coherence and clustering measurements. All methods are deterministic and reproducible. Analysis performed by Multimodal Institute's computational imaging systems.

REFERENCES

[1] Caroline Lopez (2025). Echanger au luxembourg — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/CLO0007.html>

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/02/echanger-au-luxembourg_1yvl.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h
<https://multimodal.institute/en/publications/2025/10/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

EPISTEMIC PROFILE

Claim type	computational analysis
Voice	third person
Epistemic status	empirical measurement
Methodology	computational analysis
Certainty	high

CHECKSUM (SHA-256)

5820b51af39fc30cb7020af701b7386c3af246887138d2cb90b-cfeaca366a475

Artist	Caroline Lopez
Date	2025
Collection	A moment with you....
Asset code	CLO0007
Version	1
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