AQC0860

Nanopublication — Computational Image Analysis - AQC0860

by Arnaud Quercy · F# Octaves - Reflexions 36 · 2025

Claim 1: Computational Image Analysis - AQC0860

> Computational image analysis [3] of artwork F# Octaves [1] - Reflexions 36 (AQC0860) [2] by Arnaud Quercy [2] using k-means clustering method with 10 color extraction parameters. Analysis includes color distribution, texture metrics, brightness/contrast measurements, and spatial pattern characterization. Analysis completed on 2026-02-04.

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]: 2282x3042 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		DAD4C6	30.8	yellow-orange	lightgray
2		94CCCF	15.0	blue-green	skyblue
3		82BEC1	11.0	blue-green	mediumaquamarine
4		7E9E9C	9.8	green	lightslategray
5		B1D7DA	7.7	blue-green	lightblue
6		4F9E97	7.5	green	cadetblue
7		3A8B82	6.7	green	mediumseagreen
8		5F8668	4.2	yellow-green	dimgray
9		253639	3.8	blue-green	darkslategray
10		AEBBA3	3.5	yellow-green	steel gray
11		BE9381	0.3	orange	rosybrown [Accent]
12		D19B8B	0.3	red-orange	rosybrown [Accent]
13		45555E	0.3	blue	darkslategray [Accent]
14		485561	0.3	blue-violet	grayish purple [Accent]

Color Families:

Family	%
blue-green	37.5
yellow-orange	30.8
green	23.9
yellow-green	7.7
orange	0.3
red-orange	0.3
blue	0.3
blue-violet	0.3

Accent Colors:

Hex	Family	Name	Chroma
BE9381	orange	rosybrown	21.3
D19B8B	red-orange	rosybrown	24.1
45555E	blue	darkslategray	8.1
485561	blue-violet	grayish purple	9.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.164
Mean Local Roughness	0.011
Roughness Uniformity	0.015
Edge Density	0.035
Mean Gradient Magnitude	0.097
Gradient Variance	0.027
Gradient Smoothness	0.0
Directional Coherence	0.046
Pattern Complexity	0.114
Pattern Repetition	1.0
Detail Frequency Ratio	0.599
Spatial Variation	0.1
Texture Consistency	0.493

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.683
Brightness Variance	0.164
Brightness Uniformity	0.76
Brightness Skewness	-1.167
Brightness Entropy	6.927
Rms Contrast	0.164
Michelson Contrast	1.0
Weber Contrast	0.447
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.451
Shadow Percentage	3.877
Midtone Percentage	31.737
Highlight Percentage	64.386
Shadow Clipping	0.0
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.006
Medium Contrast	0.015
Coarse Contrast	0.027
Multiscale Contrast Ratio	0.222
Edge Contrast	0.097

Metric	Value
Contrast Clustering	0.507

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.722
Color Clustering	0.753
Color Transition Smoothness	0.753
Transition Uniformity	0.816
Sharp Transition Ratio	0.1
Transition Directionality	0.054
Mean Saturation	0.253
Saturation Variance	0.025
Low Saturation Ratio	0.658
Medium Saturation Ratio	0.338
High Saturation Ratio	0.004
Saturation Clustering	1.0
Hue Concentration	0.947
Complementary Balance	0.01
Analogous Dominance	0.961
Temperature Bias	-0.978

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] Arnaud Quercy (2025). F# Octaves - Reflexions 36 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0860.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2025/01/f-octaves-reflexions-36_9io.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 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)

6e11bdbf5d8ea5f8714ef240c0f1527f18fb5122b2c8d4d23191b-c45eec27b5d

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