AQC0945

Nanopublication — Computational Image Analysis - AQC0945

by Arnaud Quercy · Db Minor - Research on Harmony - Variations 10 · 2025

Claim 1: Computational Image Analysis - AQC0945

> K-means clustering analysis [3] (10 colors) performed on artwork Db Minor [1] - Research on Harmony - Variations 10 (AQC0945) [2] by Arnaud Quercy [2] on 2026-02-04. Documentation includes: color families, texture roughness, brightness distribution, spatial coherence.

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]: 1927x2697 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		35ADDB	20.3	blue	mediumturquoise
2		1F5DA6	17.7	blue-violet	steelblue
3		0B1628	14.1	blue-violet	very dark gray
4		18273B	11.6	blue-violet	very dark indigo
5		499ECF	9.8	blue	cornflowerblue
6		EAE3CF	7.8	yellow	antiquewhite
7		2682C5	7.5	blue-violet	royalblue
8		0A75B9	6.5	blue-violet	darkcyan
9		324860	2.9	blue-violet	grayish purple
10		EBD448	1.8	yellow	sandybrown
11		B9984B	0.3	yellow-orange	peru [Accent]
12		7B9EA4	0.3	blue-green	lightslategray [Accent]

Color Families:

Family	%
blue-violet	60.3
blue	30.1
yellow	9.6
yellow-orange	0.3
blue-green	0.3

Accent Colors:

Hex	Family	Name	Chroma
B9984B	yellow-orange	peru	44.1
7B9EA4	blue-green	lightslategray	13.0

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.231
Mean Local Roughness	0.023
Roughness Uniformity	0.022
Edge Density	0.081
Mean Gradient Magnitude	0.161
Gradient Variance	0.057
Gradient Smoothness	0.0
Directional Coherence	0.004
Pattern Complexity	0.127
Pattern Repetition	1.0
Detail Frequency Ratio	0.633
Spatial Variation	0.154
Texture Consistency	0.706

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.401
Brightness Variance	0.231
Brightness Uniformity	0.424
Brightness Skewness	0.402
Brightness Entropy	7.279
Rms Contrast	0.231
Michelson Contrast	1.0
Weber Contrast	0.843
Mean Local Contrast	0.023
Contrast Uniformity	0.044
Dynamic Range	1.0
Effective Dynamic Range	0.804
Shadow Percentage	38.934
Midtone Percentage	51.599
Highlight Percentage	9.467
Shadow Clipping	0.001
Highlight Clipping	0.001
Tonal Balance	0.0
Fine Contrast	0.014
Medium Contrast	0.029
Coarse Contrast	0.041
Multiscale Contrast Ratio	0.355
Edge Contrast	0.161
Contrast Clustering	0.294

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.721
Color Clustering	0.579
Color Transition Smoothness	0.561
Transition Uniformity	0.56
Sharp Transition Ratio	0.1

Metric	Value
Transition Directionality	0.003
Mean Saturation	0.687
Saturation Variance	0.049
Low Saturation Ratio	0.09
Medium Saturation Ratio	0.285
High Saturation Ratio	0.625
Saturation Clustering	0.997
Hue Concentration	0.944
Complementary Balance	0.009
Analogous Dominance	0.977
Temperature Bias	-0.954

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). Db Minor - Research on Harmony - Variations 10 — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0945.html

[2] Quercy, A. (2025). Db Minor - Research on Harmony - Variations 10 - Gallery. https://artquamanima.com/en/artworks/2025/12/db-minor-research-on-harmony-variations-10_1i65.html

[3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 https://multimodal.institute/en/publications/2025/11/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)

6b0ba2e2180c7b674f910a6d20e2f049b7fbb6b3fac8dc4f-b3f27312c3569b3f

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