

# Nanopublication — Computational Image Analysis - AQC0750

by Arnaud Quercy · Db Minor - Research on Harmony - Variation 6 · 2024
















## Claim 1: Computational Image Analysis - AQC0750

The artwork Db Minor [1] - Research on Harmony - Variation 6 (AQC0750) [2] by Arnaud Quercy [2] underwent comprehensive computational analysis [3] on 2026-02-04. 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]: 2953x3937 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color Hex	%	Family	Name
1	 181922	24.1	violet	black
2	 BDB19A	14.8	yellow-orange	tan
3	 EAD5BD	14.2	yellow-orange	wheat
4	 54AACB	11.3	blue	mediumturquoise
5	 A8C7D1	9.9	blue	lightsteelblue
6	 373741	9.2	violet	dusty mauve
7	 2C80BF	8.0	blue-violet	steelblue
8	 1C44A7	5.3	violet	darkslateblue
9	 E6BD81	2.0	yellow-orange	burlywood
10	 878E48	1.2	yellow	olivedrab
11	 452215	0.3	orange	very dark orange [Accent]
12	 421C18	0.3	red-orange	very dark red [Accent]
13	 619C82	0.3	yellow-green	cadetblue [Accent]
14	 40727F	0.3	blue-green	dimgray [Accent]
15	 8EACA8	0.3	green	steel gray [Accent]

### Color Families:

Family	%
violet	38.6
yellow-orange	31.0
blue	21.1
blue-violet	8.0
yellow	1.2
orange	0.3

Family	%
red-orange	0.3
yellow-green	0.3
blue-green	0.3
green	0.3

### Accent Colors:

Hex	Family	Name	Chroma
452215	orange	very dark orange	22.6
421C18	red-orange	very dark red	21.1
619C82	yellow-green	cadetblue	26.2
40727F	blue-green	dimgray	17.7
8EACA8	green	steel gray	11.0

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.285
Mean Local Roughness	0.01
Roughness Uniformity	0.011
Edge Density	0.025
Mean Gradient Magnitude	0.098
Gradient Variance	0.024
Gradient Smoothness	0.0
Directional Coherence	0.028
Pattern Complexity	0.12
Pattern Repetition	1.0
Detail Frequency Ratio	0.575
Spatial Variation	0.234
Texture Consistency	0.537

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.48
Brightness Variance	0.285
Brightness Uniformity	0.407
Brightness Skewness	-0.153
Brightness Entropy	7.438
Rms Contrast	0.285
Michelson Contrast	1.0
Weber Contrast	0.884
Mean Local Contrast	0.012
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.78
Shadow Percentage	37.817
Midtone Percentage	23.009
Highlight Percentage	39.174
Shadow Clipping	0.002

Metric	Value
Highlight Clipping	0.0
Tonal Balance	0.115
Fine Contrast	0.005
Medium Contrast	0.015
Coarse Contrast	0.028
Multiscale Contrast Ratio	0.168
Edge Contrast	0.098
Contrast Clustering	0.463

#### SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.781
Color Clustering	0.745
Color Transition Smoothness	0.734
Transition Uniformity	0.83
Sharp Transition Ratio	0.1
Transition Directionality	0.04
Mean Saturation	0.352
Saturation Variance	0.054
Low Saturation Ratio	0.6
Medium Saturation Ratio	0.257
High Saturation Ratio	0.143
Saturation Clustering	0.999
Hue Concentration	0.559
Complementary Balance	0.136
Analogous Dominance	0.793
Temperature Bias	-0.504

## 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 (2024). Db Minor - Research on Harmony - Variation 6 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0750.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/db-minor-research-on-harmony-variation-6\\_8bw.html](https://artquamanima.com/en/artworks/2024/01/db-minor-research-on-harmony-variation-6_8bw.html)
- [3] Quercy, A. (2025). Computational Image Analysis Standard - MMIDS-CMP-2025 h <https://multimodal.institute/en/publications/2025/11/mmids-cmp-2025-computational-image-analysis-standard-dg1.html>

#### EPISTEMIC PROFILE

<b>Claim type</b>	computational analysis
<b>Voice</b>	third person
<b>Epistemic status</b>	empirical measurement
<b>Methodology</b>	computational analysis
<b>Certainty</b>	high

#### CHECKSUM (SHA-256)

980e2924dcb19388ca506e07015a0c2b1854c11542d-ab09be650d82ff5be8b4e

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20241201-0247
<b>Asset code</b>	AQC0750
<b>Version</b>	1
<b>Published</b>	2026-04-09