

# Nanopublication — Computational Image Analysis - AQC0778

by Arnaud Quercy · Db Minor - Research on Harmony - Variation 7 · 2024
















## Claim 1: Computational Image Analysis - AQC0778

The artwork Db Minor [1] - Research on Harmony - Variation 7 (AQC0778) [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]: 2388x3583 pixels. Analysis date: 2026-02-04.

### COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		317993	19.6	blue	steelblue
2		A7A191	19.4	yellow	steel gray
3		CDB89D	12.6	yellow-orange	tan
4		C4A37E	10.7	orange	rosybrown
5		B88E60	10.2	orange	peru
6		4B96B1	10.1	blue	cadetblue
7		131520	6.8	blue-violet	black
8		D8A020	3.8	yellow-orange	goldenrod
9		A4BEC9	3.8	blue	lightsteelblue
10		244175	2.9	blue-violet	grayish purple
11		684B46	0.3	red-orange	dark brown [Accent]
12		75AAA6	0.3	green	cadetblue [Accent]
13		12264F	0.3	violet	very dark purple [Accent]
14		6EC5D2	0.3	blue-green	skyblue [Accent]
15		46393B	0.3	red	darkslategray [Accent]

### Color Families:

Family	%
blue	33.5
orange	20.9
yellow	19.4
yellow-orange	16.5
blue-violet	9.7
red-orange	0.3
green	0.3
violet	0.3
blue-green	0.3

Family	%
red	0.3

### Accent Colors:

Hex	Family	Name	Chroma
684B46	red-orange	dark brown	13.6
75AAA6	green	cadetblue	18.4
12264F	violet	very dark purple	28.2
6EC5D2	blue-green	skyblue	27.5
46393B	red	darkslategray	6.1

### TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.178
Mean Local Roughness	0.011
Roughness Uniformity	0.014
Edge Density	0.026
Mean Gradient Magnitude	0.114
Gradient Variance	0.039
Gradient Smoothness	0.0
Directional Coherence	0.034
Pattern Complexity	0.119
Pattern Repetition	1.0
Detail Frequency Ratio	0.577
Spatial Variation	0.113
Texture Consistency	0.437

### BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.543
Brightness Variance	0.178
Brightness Uniformity	0.672
Brightness Skewness	-1.12
Brightness Entropy	7.101
Rms Contrast	0.178
Michelson Contrast	1.0
Weber Contrast	0.516
Mean Local Contrast	0.014
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.655
Shadow Percentage	9.513
Midtone Percentage	64.856
Highlight Percentage	25.631
Shadow Clipping	0.019
Highlight Clipping	0.0
Tonal Balance	0.0
Fine Contrast	0.005

Metric	Value
Medium Contrast	0.017
Coarse Contrast	0.035
Multiscale Contrast Ratio	0.152
Edge Contrast	0.114
Contrast Clustering	0.563

## SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.781
Color Clustering	0.429
Color Transition Smoothness	0.706
Transition Uniformity	0.728
Sharp Transition Ratio	0.1
Transition Directionality	0.038
Mean Saturation	0.43
Saturation Variance	0.056
Low Saturation Ratio	0.37
Medium Saturation Ratio	0.513
High Saturation Ratio	0.116
Saturation Clustering	0.999
Hue Concentration	0.099
Complementary Balance	0.115
Analogous Dominance	0.529
Temperature Bias	-0.044

## 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 7 — Catalog raisonné. <https://arnaudquercy.art/en/catalogue-raisonne/AQC0778.html>
- [2] Quercy, A. (2025). Untitled - Gallery. [https://artquamanima.com/en/artworks/2024/01/db-minor-research-on-harmony-variation-7\\_8ms.html](https://artquamanima.com/en/artworks/2024/01/db-minor-research-on-harmony-variation-7_8ms.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)

6a27ff520f4c4272f8315e54dae9e26f80ddd4c9d3247d-d709b0d889474c3f5

<b>Artist</b>	Arnaud Quercy
<b>Date</b>	2024
<b>Collection</b>	Synesthetic Explorations
<b>Certificate</b>	20241201-0275
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