AQC0449

Nanopublication — Computational Image Analysis - AQC0449

by Arnaud Quercy · Lone Star State · 2023

Claim 1: Computational Image Analysis - AQC0449

> The artwork Lone [1] Star State (AQC0449) [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]: 1536x2048 pixels. Analysis date: 2026-02-04.

COLOR ANALYSIS

Rank	Color	Hex	%	Family	Name
1		D7D0C6	17.2	yellow-orange	lightgray
2		D8BF9D	14.1	yellow-orange	tan
3		2F2820	11.8	orange	very dark gray
4		4D3D32	11.0	orange	darkslategray
5		C9A56C	9.7	yellow-orange	ochre
6		585761	9.5	violet	dusty mauve
7		9FAEA3	9.1	yellow-green	steel gray
8		88867A	7.9	yellow	gray
9		833D2B	6.0	red-orange	russet
10		B76A44	3.7	orange	peru
11		4F5F8C	0.3	blue-violet	grayish purple [Accent]
12		7AC6A9	0.3	green	mediumaquamarine [Accent]
13		B68C94	0.3	red	rosybrown [Accent]
14		29434E	0.3	blue	darkslategray [Accent]

Color Families:

Family	%
yellow-orange	41.0
orange	26.6
violet	9.5
yellow-green	9.1
yellow	7.9
red-orange	6.0
blue-violet	0.3
green	0.3
red	0.3
blue	0.3

Accent Colors:

Hex	Family	Name	Chroma
4F5F8C	blue-violet	grayish purple	27.9
7AC6A9	green	mediumaquamarine	30.8
B68C94	red	rosybrown	17.1
29434E	blue	darkslategray	12.2

TEXTURE ANALYSIS

Metric	Value
Global Roughness	0.241
Mean Local Roughness	0.019
Roughness Uniformity	0.022
Edge Density	0.072
Mean Gradient Magnitude	0.154
Gradient Variance	0.059
Gradient Smoothness	0.0
Directional Coherence	0.008
Pattern Complexity	0.116
Pattern Repetition	1.0
Detail Frequency Ratio	0.607
Spatial Variation	0.133
Texture Consistency	0.795

BRIGHTNESS & CONTRAST ANALYSIS

Metric	Value
Mean Brightness	0.533
Brightness Variance	0.241
Brightness Uniformity	0.549
Brightness Skewness	-0.227
Brightness Entropy	7.582
Rms Contrast	0.241
Michelson Contrast	1.0
Weber Contrast	0.761
Mean Local Contrast	0.02
Contrast Uniformity	0.0
Dynamic Range	1.0
Effective Dynamic Range	0.682
Shadow Percentage	30.147
Midtone Percentage	29.095
Highlight Percentage	40.759
Shadow Clipping	0.001
Highlight Clipping	0.002
Tonal Balance	0.299
Fine Contrast	0.01

Metric	Value
Medium Contrast	0.026
Coarse Contrast	0.041
Multiscale Contrast Ratio	0.23
Edge Contrast	0.154
Contrast Clustering	0.205

SPATIAL DISTRIBUTION ANALYSIS

Metric	Value
Spatial Coherence	0.683
Color Clustering	0.81
Color Transition Smoothness	0.594
Transition Uniformity	0.609
Sharp Transition Ratio	0.1
Transition Directionality	0.014
Mean Saturation	0.292
Saturation Variance	0.041
Low Saturation Ratio	0.614
Medium Saturation Ratio	0.336
High Saturation Ratio	0.05
Saturation Clustering	0.999
Hue Concentration	0.738
Complementary Balance	0.07
Analogous Dominance	0.852
Temperature Bias	0.718

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 (2023). Lone Star State — Catalog raisonné. https://arnaudquercy.art/en/catalogue-raisonne/AQC0449.html

[2] Quercy, A. (2025). Untitled - Gallery. https://artquamanima.com/en/artworks/2023/01/lone-star-state_52u.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)

395a3f561fcd5b9684fd1e43bc9f385aa232bec07043a213cc0c522-fa7e6d6a8

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