Patterns in a simulated field

Original raster figures | Fictional research poster for compression testing

Purpose

Compare two generated spatial fields and inspect smooth gradients, fine texture and small labels.

All data and figures are synthetic. No scientific result or institutional affiliation is implied.

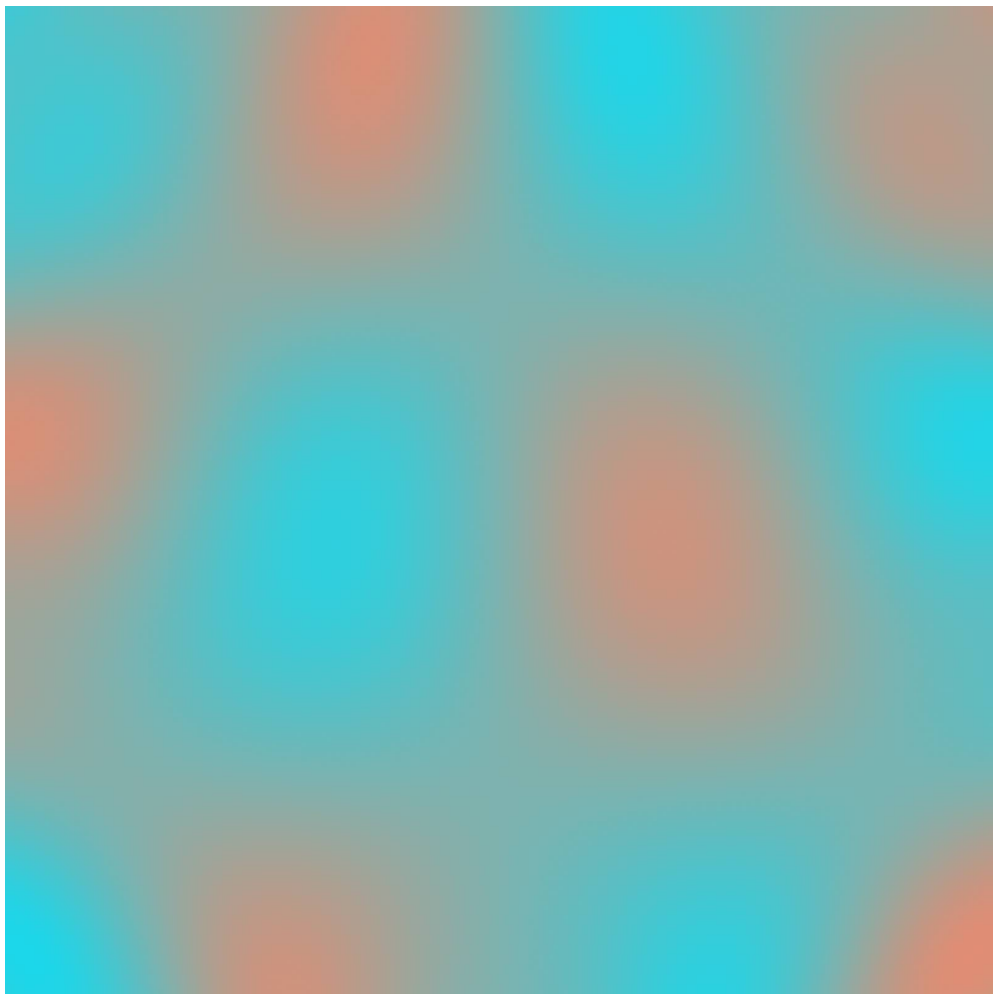

Figure 1. Simulated field A

High-resolution PNG; continuous colour and fine texture.

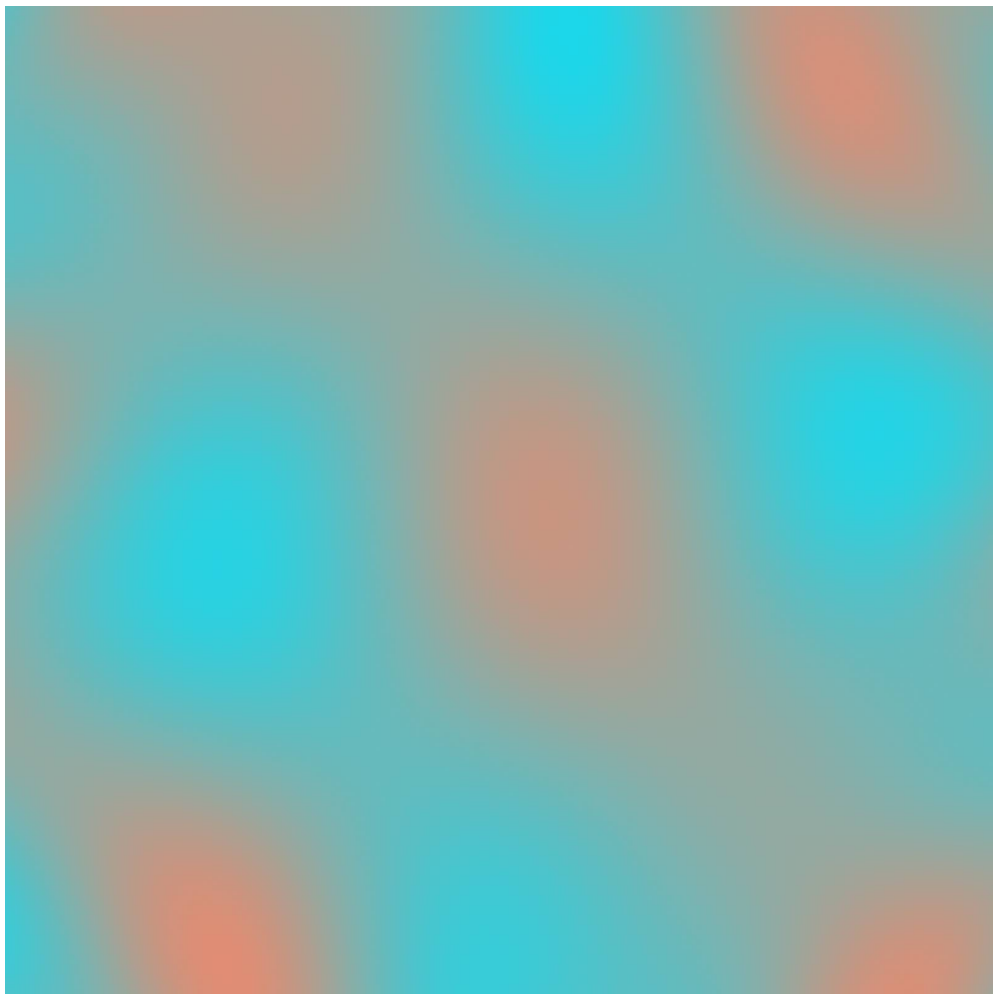

Figure 2. Simulated field B

High-resolution PNG; continuous colour and fine texture.

Method

1. Generate two deterministic mathematical fields on a 1,800 x 1,800 grid.
2. Add a small seeded variation to create realistic raster detail.
3. Export the figures as lossless PNGs and embed them without resampling.
4. Compare the compressed PDF with the same original at the same viewing scale.

What to inspect

Are the captions readable? Are the gradients smooth? Does the page layout stay aligned?

A smaller file can soften raster detail. Inspect the result before submitting important work.

These two original images intentionally represent a large, image-heavy academic poster.

Detail check: 0.001 | 1,024 | 10.5% | ABCDEFGHIJKLMNOPQRSTUVWXYZ | abcdefghijklmnopqrstuvwxyz

SYNTHETIC TEST MATERIAL | No real students, research participants or personal data