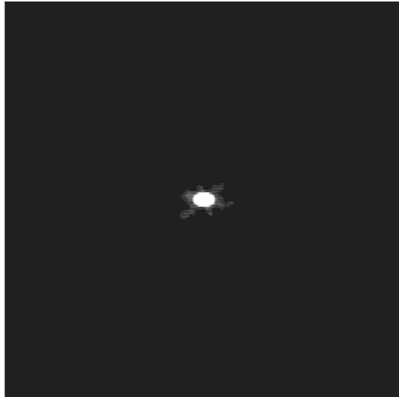
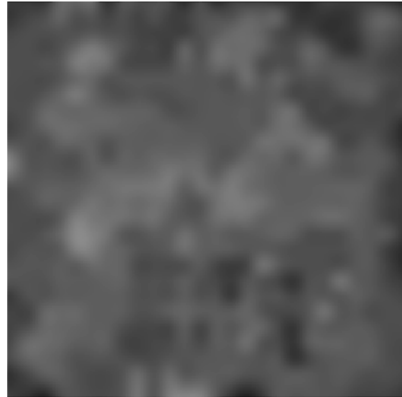


**Original image
(calibr. J1427-4206)**



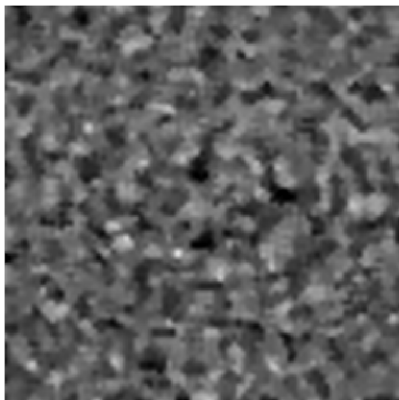
**Sources in the
original image**



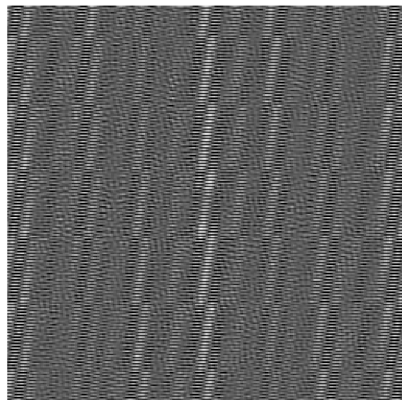
**Local underlying
RMS**



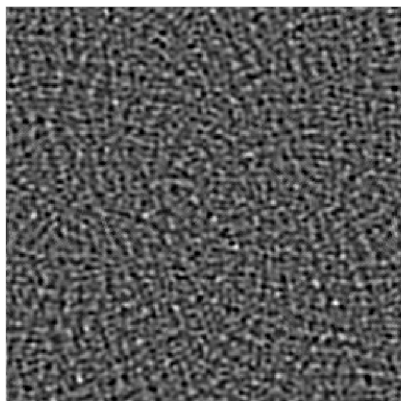
**Large scale
background**



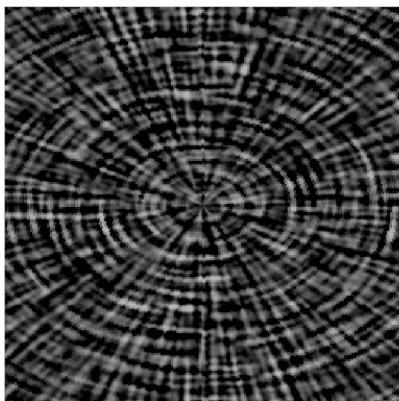
**Small scale
background**



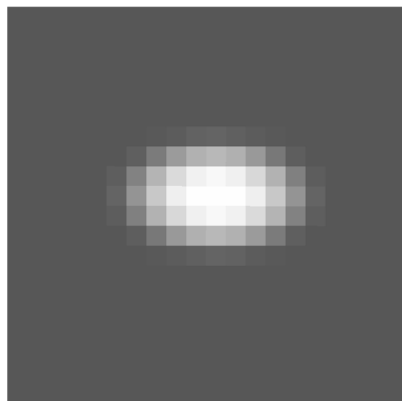
**High spatial
frequency patterns**



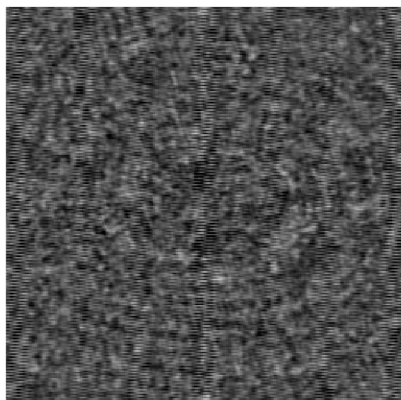
**Noise correlation
pattern**



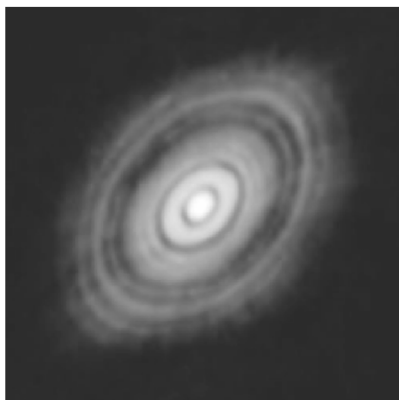
**Radial and elliptical
patterns**



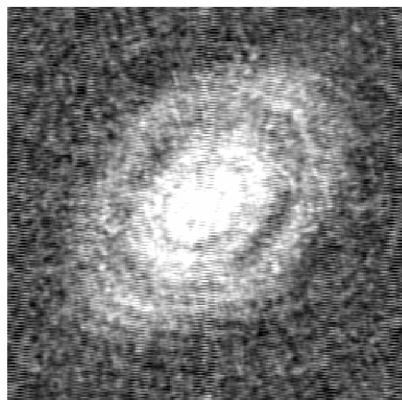
**PSF in the original
image**



**Simulated image
(noise only)**



**Simulated real sky
(HL-Tau protop. disk)**



**Simulated
observation**

Figure 1: examples of noise components, features and patterns isolated by our prototype (NOISEMPIRE v1.0.0) from a real ALMA band 3 image of calibrator J1427-4206 (upper left panel). The same noise structure and patterns are used to simulate a pure noise image (bottom left panel) and an image of the HL-Tau protoplanetary disk (bottom central panel) as observed under similar conditions (bottom right panel)