

A Light Transport Framework for Lenslet Light Field Cameras

Supplemental Material

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- The light fields are taken by the Lytro light field camera under general lighting conditions.
- Besides projection, only the following processing is applied
 - Bilinear demosaic and color correction to the light field.
 - Gamma correction to the output image.
- For each light field, we show
 - The sub-aperture image (effective f-number: $F/20$) at the lenslet resolution (330x330).
 - The all-in-focus image using the modified projection algorithm. The render resolution is set to 990x990.
 - The depth map extracted from the Lytro desktop software. The depth value is normalized to $[0, 255]$ for visualization, and the original depth range is listed on top.



Sub-aperture image

Depth range (λ):
-175 to 175 μm





All-in-focus image

Depth range (λ):
-175 to 175 μm





Sub-aperture image

Depth range (λ):
-225 to 225 μm





All-in-focus image

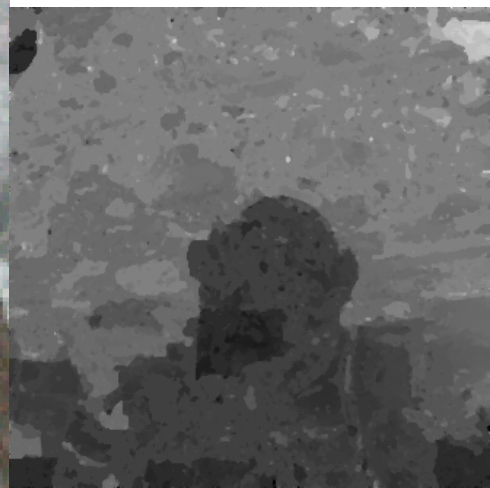
Depth range (λ):
-225 to 225 μm





Sub-aperture image

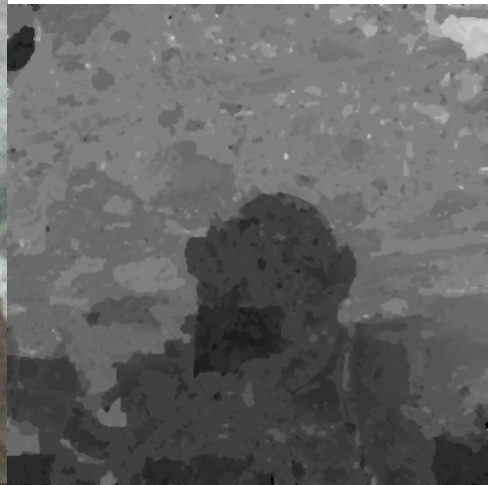
Depth range (λ):
50 to 200 μm





All-in-focus image

Depth range (λ):
50 to 200 μm





Sub-aperture image

Depth range (λ):
0 to 200 μm





All-in-focus image

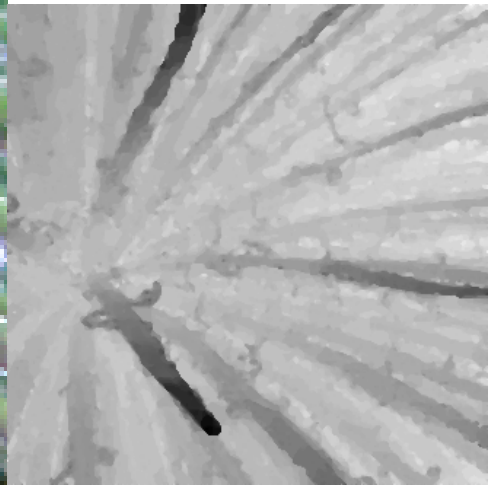
Depth range (λ):
50 to 200 μm





Sub-aperture image

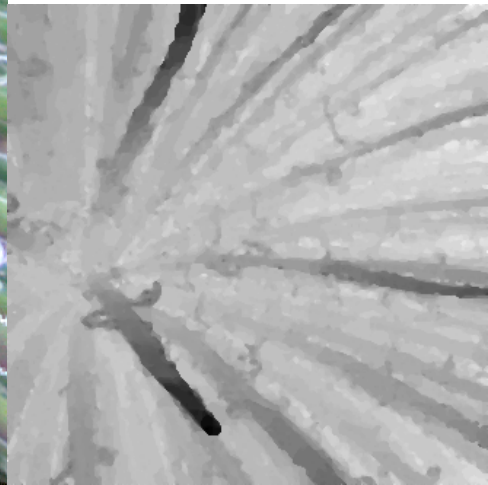
Depth range (λ):
-225 to 200 μm





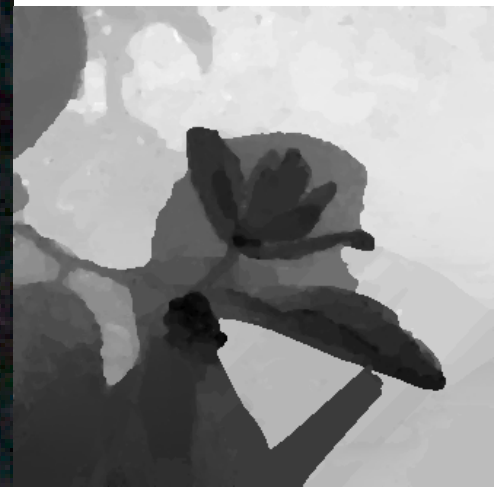
All-in-focus image

Depth range (λ):
-225 to 200 μm



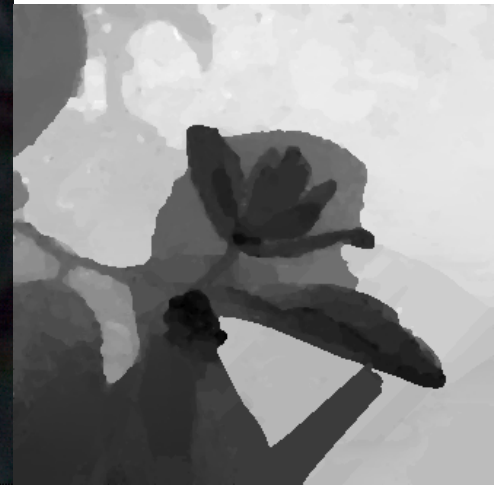
Sub-aperture image

Depth range (λ):
-150 to 375 μm



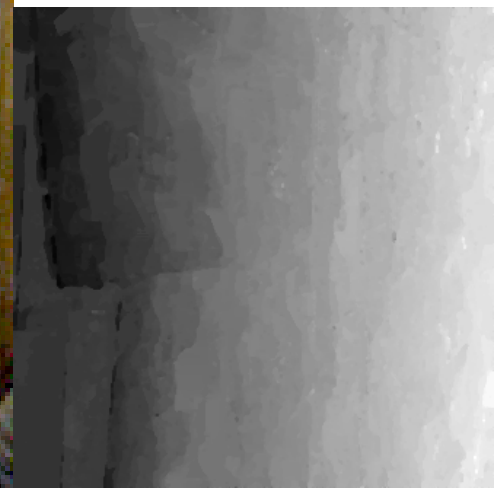
All-in-focus image

Depth range (λ):
-150 to 375 μm



Sub-aperture image

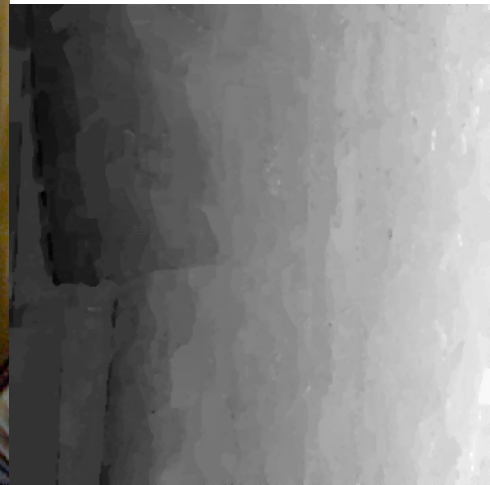
Depth range (λ):
-160 to 275 μm





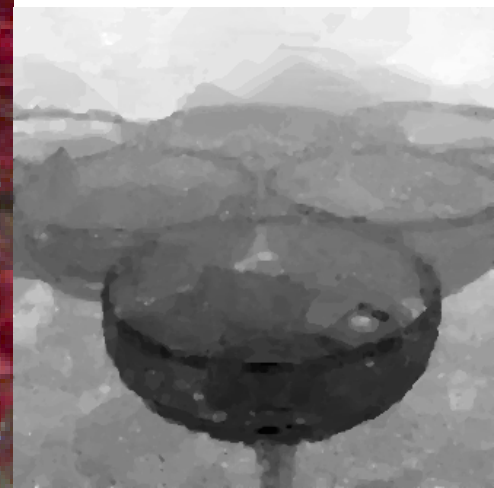
All-in-focus image

Depth range (λ):
-160 to 275 μm



Sub-aperture image

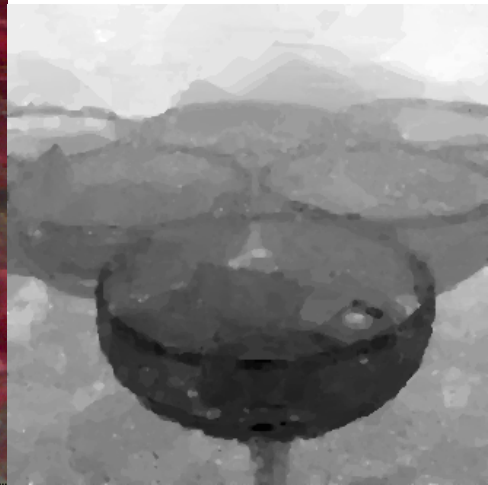
Depth range (λ):
-250 to -125 μm

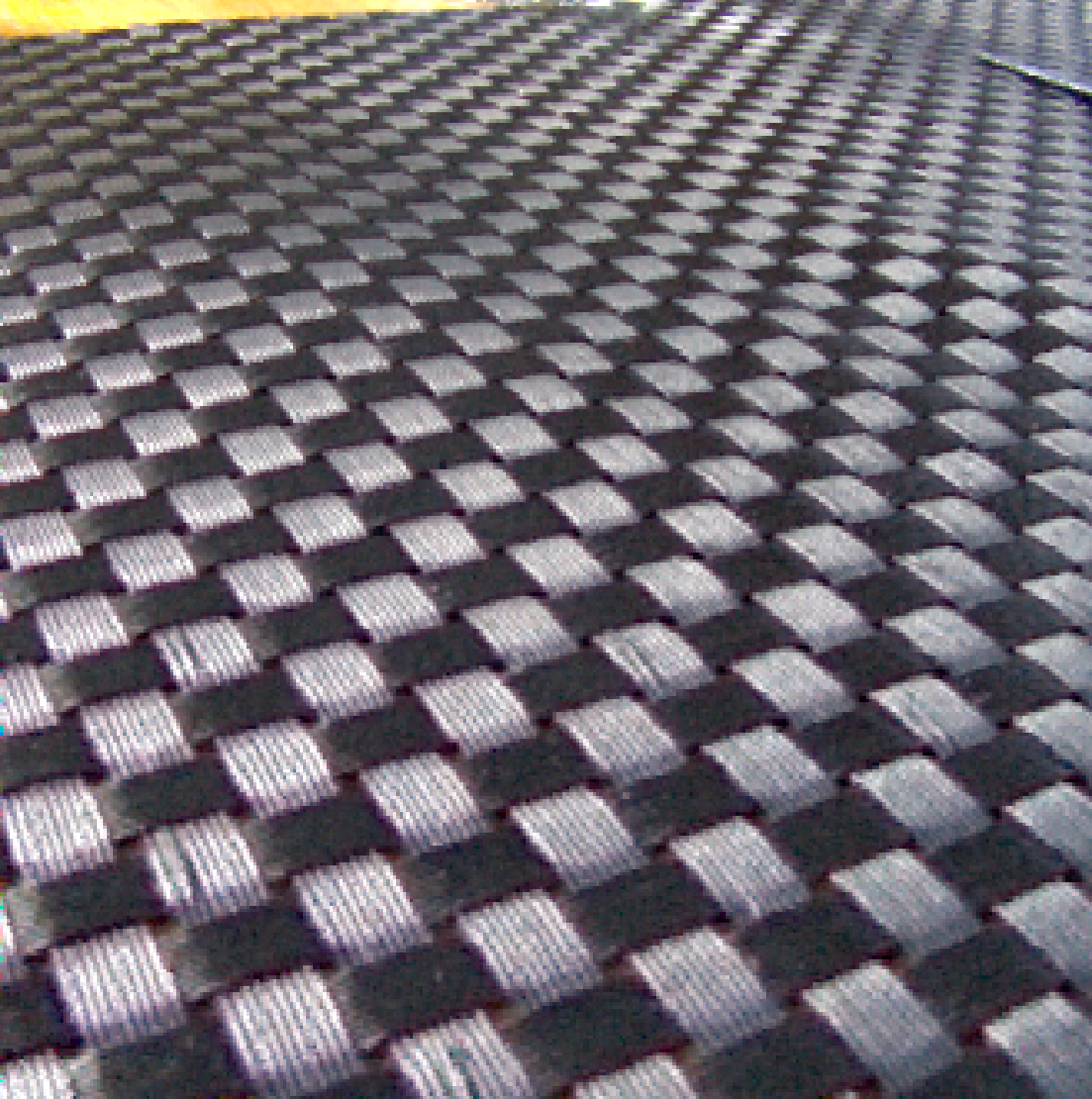




All-in-focus image

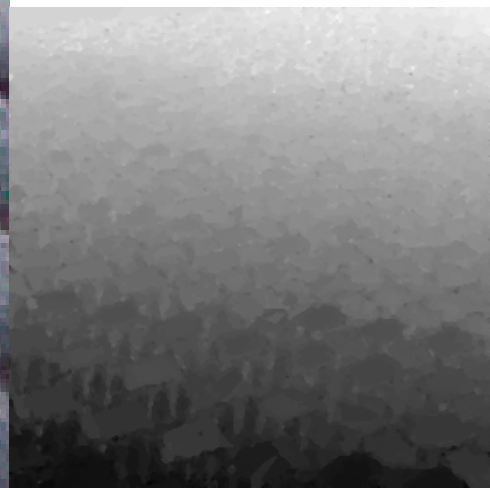
Depth range (λ):
-250 to -125 μm

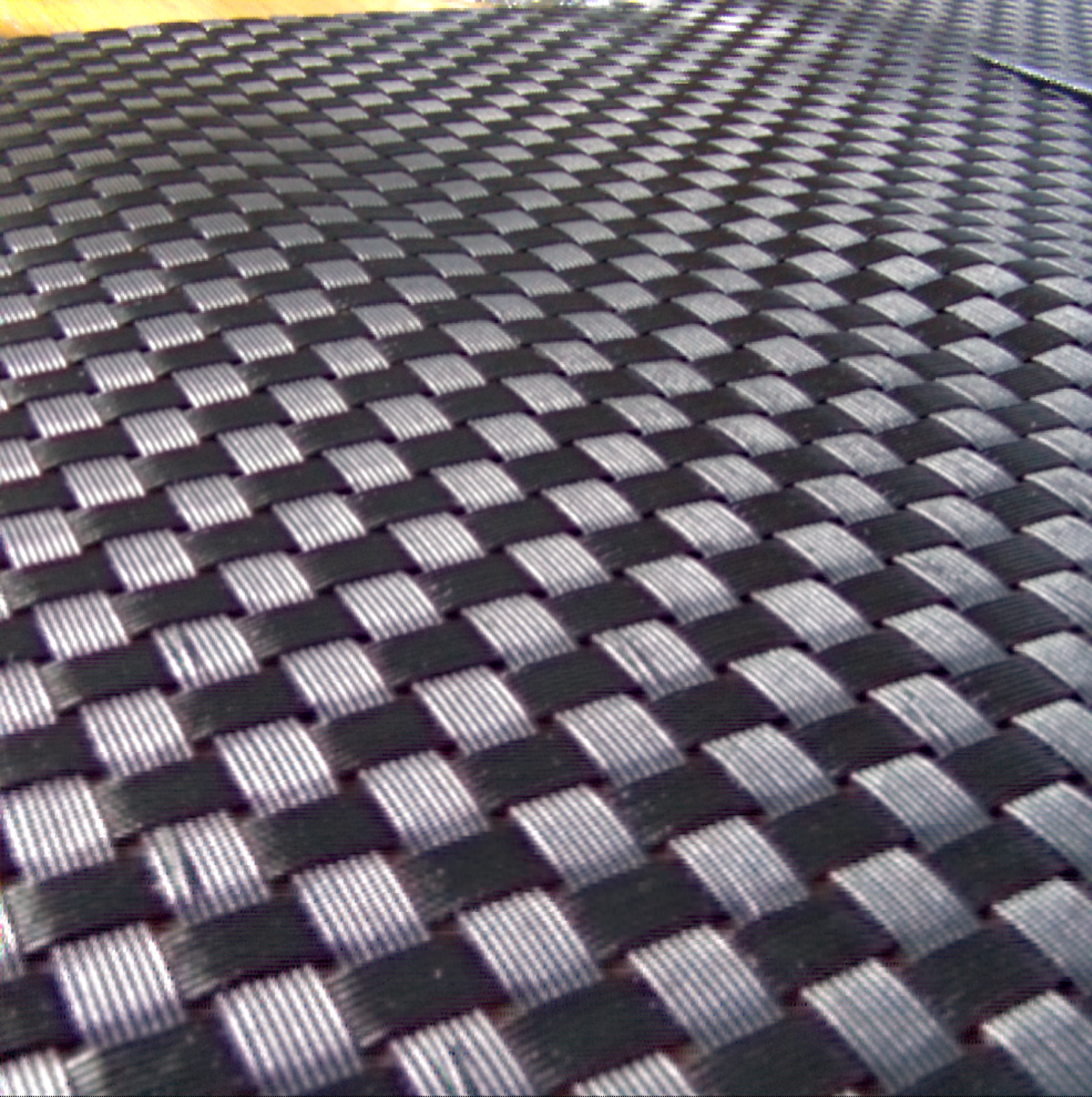




Sub-aperture image

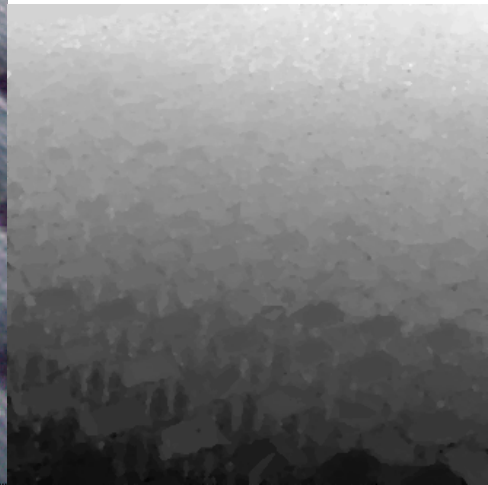
Depth range (λ):
-500 to 75 μm





All-in-focus image

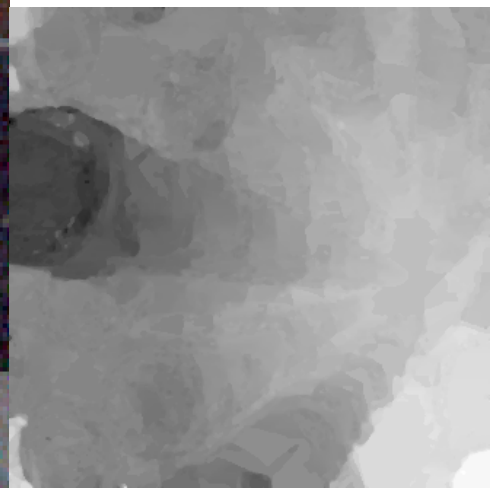
Depth range (λ):
-500 to 75 μm





Sub-aperture image

Depth range (λ):
-250 to 75 μm





All-in-focus image

Depth range (λ):
-250 to 75 μm

