

## Sharpening with Topaz Sharpen AI

Topaz Denoise AI seems to be frequently used for noise reduction in astrophotography. Recently, I started using another software product from Topaz – Sharpen AI - for sharpening my (astro) pictures.

Topaz Sharpen AI is a sharpening and shake reduction photo retouching software, which can help make blurry or out-of-focus areas of images sharper. Topaz claims to use Artificial Intelligence (machine learning), which can tell the difference between real image information and image noise.

Sharpen AI works by targeting and reversing three specific types of blur to create more “natural” results: motion blur (stabilize), out of focus and softness. It includes only two settings sliders: one for sharpness (remove blur) and one for noise suppression.

The attached pictures give an impression what Topaz Sharpen AI can do. The split view allows you to move a slider across the image to see a before (left) and after sharpening view (right).

It does a great job on Moon shots (with auto-settings in the “out of focus” mode). It can be a good alternative for other wavelet or deconvolution based sharpening tools (such as Registax, Lynkeos, Sharpening in Raw Filter mode of Photoshop CC...)

I experience variable results with sharpening of deepsky images. Usually, sharpening with the “motion blur” or “out of focus” mode looks best. In the attached picture, the “motion blur” sharpening mode was used on the Crescent Nebula. Extra sharpening or local contrast enhancement can always be obtained by applying e.g. a high pass filter (always use masks!).

What’s your experience with Topaz Sharpen AI? Other tips & tricks for effective sharpening (& noise suppression)?



