

BACK SCATTER



A six-year galactic portrait

Andrew Resnick, an associate professor of physics at Cleveland State University in Ohio, and his family have seen some spectacular views of the Milky Way during their annual one-week vacation at the beach in North Carolina. This image is the culmination of a six-year effort by Resnick to photograph the Milky Way and was made from about 2500 individual photos taken at a single location. Resnick says that on one or two nights of his vacation each year, the sky gets sufficiently dark and clear for at least an hour or so—the conditions needed to see the galaxy.

Being on vacation, Resnick didn't use a motorized telescope mount or other specialized equipment. He took all the images using a DSLR camera with a 105 mm lens, a shutter speed of 1 second, and an f-stop of $f/2$, which allows for the aperture to take in a lot of light, even at night. Resnick stacked and assembled the photos into a composite image using the Astro Pixel Processor application. Such a spectacular view of the galaxy is rare: An atlas of artificial night-sky brightness published in 2016 found that the Milky Way is not observable for 80% of people living in North America. (Image courtesy of Andrew Resnick.)

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