

Ultra-deep astrophoto of the Antenna Galaxies

24 July 2014, by Nancy Atkinson



75 hours of observing time allows for this 'amateur' view of the Antennae galaxies in the constellation Corvus. Look closely to see the myriad of distant background galaxies that show up in the image, as well. Credit: Rolf Wahl Olsen.

You might think the image above of the famous Antenna Galaxies was taken by a large ground-based or even a space telescope. Think again. Amateur astronomer Rolf Wahl Olsen from New Zealand compiled a total of 75 hours of observing time to create this ultra-deep view.

"To obtain a unique deep view of the faint tidal streams and numerous distant background galaxies I gathered 75 hours on this target during 38 nights from January to June 2014," Rolf said via email. "At times it was rather frustrating because clouds kept interrupting my sessions."

But he persisted, and the results are stunning.

He used his new 12.5" f/4 Serrurier Truss Newtonian telescope, which he said gathers approximately 156% the amount of light over his old 10" f/5 telescope.



A gallery of distant background galaxies in the same field of view as the Antenna Galaxies. Credit: Rolf Wahl Olsen



Comparison images from the Hubble Space Telescope and the Very Large Telescope, compared with the 75-hour ultra-deep image by Rolf Wahl Olsen. Credit: Rolf Wahl Olsen.

And if you look even closer you can see an incredible field of distant background galaxies. "Apart from the Antennae itself, what I like most about this scene is the incredible number of distant background galaxies," Rolf told Universe Today. "This area in Corvus seems very rich indeed. The full resolution image is worth having a look at just to see all these faint galaxies littering the background. There are many beautiful interacting pairs and groups which would be fantastic targets in themselves if they were only closer."

Provided by [Universe Today](#)

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