

My first experiences with the Seestar S50

Sunil Khandwala

6/29/2025

The Seestar S50 is a portable imaging telescope that is designed for beginners. I first saw this telescope in late February 2025, and after some research decided that this might be my entry into EAA and Astrophotography.

The Seestar S50 arrived in the middle of March 2025, and I wanted to immediately start using it. Sadly, that was not to be, with the arrival of the telescope, I was also delivered a few days of cloudy weather. Once the clouds and rain disappeared, I got out into the yard and found that I really liked the compact size, weight, and how quickly I was able to setup for an evening of imaging. Where I live the skies are Bortle 8.6 this year according to the light pollution map, Back in 2022, there was an effort by the city to make Flower Mound more dark skies friendly and the light pollution actually decreased between 2024 and 2025, my hope is that the city will continue to reduce light pollution and make the city more dark sky friendly.

My first image was M42 (likely the favorite for all beginners), I loved seeing the image appear on my phone live. I was sucked in! Since then, weather permitting, I've spent a few evenings imaging other galaxies and clusters and want to add an eq mount to my telescope for longer exposures. Currently 10 seconds is a realistic limit in alt-az mode otherwise a lot of images get rejected with star trail issues. With eq mode I hope to be able to get 30 second exposures and maybe more.

After trying to use Siril – with much difficulty - I decided I would try the built in AI denoise and then play with contrast, exposure control, and color. I was amazed at how good things turned out without using anything but my iPhone SE 3 for processing.

My next steps are to learn how to use Siril and an image editing program such as Affinity Photo 2. I've included a few processed images from my phone that show how easy it is to get nice images just by using a phone. Overall, I'm truly impressed with what the S50 can deliver at such a reasonable cost even in Bortle 8/9 skies.

M51 – Whirlpool Galaxy



Seestar S50

.97° W, 33° N / 2025.04.21 01:18

M 51

90min

M42 – Orion Nebula



Seestar S50.

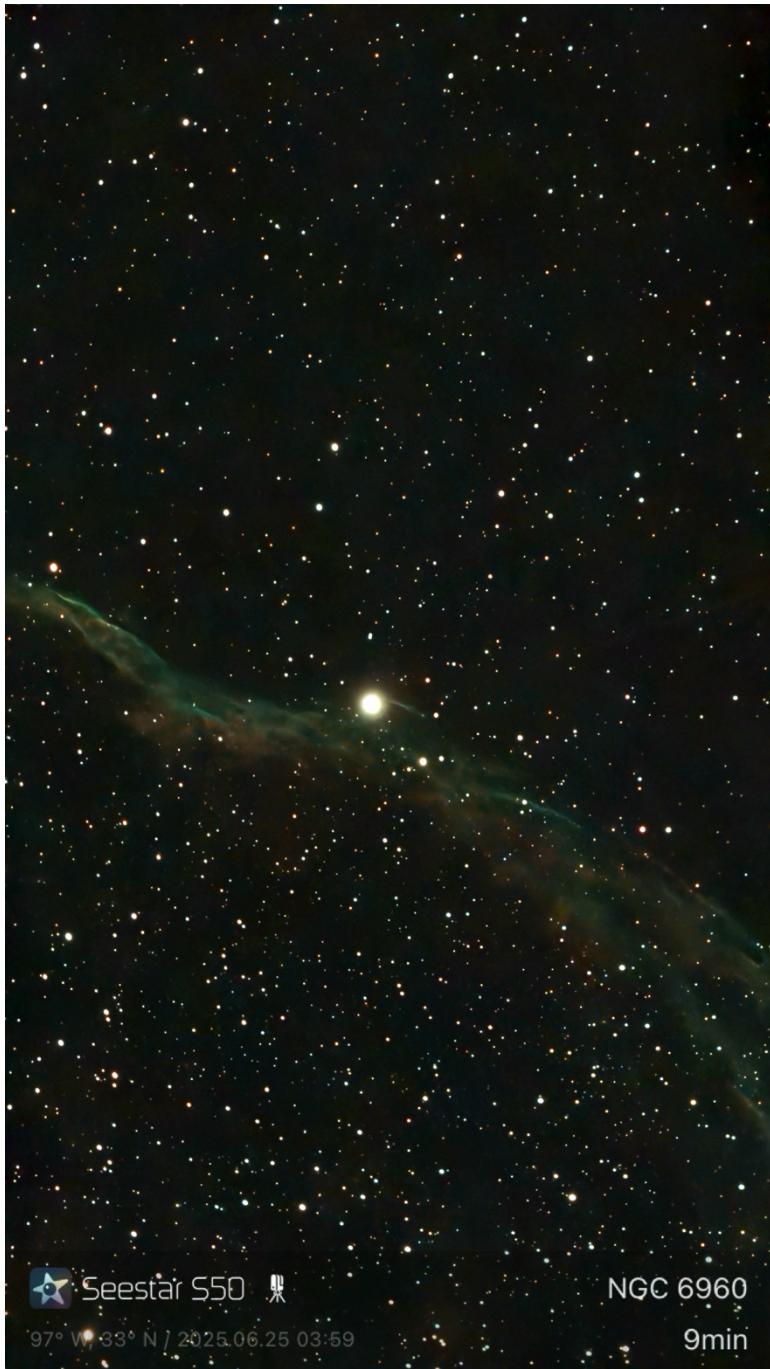
97° W, 33° N / 2025.03.28 20:56

M 42

15min

NGC 6960 – West Veil Nebula

Short exposure, I was hoping for 15 minutes, but at 9 minutes I ran into the Alt-AZ limitation of the S50, it can't image something that is over 85° elevation. Learned this through experience. Given it was 4am, I decided to call it a night and go with what I had.



Seestar S50



97° W, 33° N / 2025.06.25 03:59

NGC 6960

9min

NGC 4565 – Needle Galaxy



Seestar S50



97° W, 33° N / 2025.05.31 00:02

NGC 4565

76min

M44 - Beehive Cluster (and a satellite deciding to photo bomb my image)

