

November 24, 2025

I went down to Thompson's Beach this morning for another look at comets C/2025 K1 (ATLAS) and 3I/ATLAS before the beginning of astronomical twilight, which started at 5:19 am EST. I arrived about 4:15 am, when the temperature was 37°F with no wind (so it wasn't uncomfortable). The sky was cloud free, but transparency seemed less than ideal.

Initially, I looked for each of them with my 18x70 binoculars. 3I /ATLAS was about 1.3° below Zaniah, Eta Vir, while C/2025 K1 was about 1.3° to the right of 23 UMa towards the head of the Great Bear. I was unable to see either comet in the binoculars, although I had a momentary false alarm when I came across M81 while searching for K1 (M81 was about 6.5° below it). I subsequently did a little general observing with the 18x70s, then got out the 35x115 spotting scope to search more intently for the two comets.

Using my SkyTools finder chart, I found 3I/ATLAS at 4:35 am with direct vision. Mainly, it was a small fuzzy coma, but I also thought I saw a very faint tail, about 4 to 6 arc minutes long. I noted the direction which it pointed, then checked it against my chart and it matched. While in that area, I looked for the carbon star, SS Vir about 2° left Zaniah. It was easily identified by its deep red color.

Then I pointed high overhead and looked for C/2025 K1 near 23 UMa. I did find a fuzzy spot with a faint tail at 4:50 am, but the location didn't match my finder chart. Then I realized that for some reason, I prepared it for 3:00 am, 1hr 50 min before my sighting. I made a diagram of its location, and when I got home and set the time to 4:50 am, the location matched (about 21 arc minutes from the location at 3:00 am).

The appearance of K1 was much different than what I saw last week. This morning, it had a distinct coma and a faint tail about 6 arc minutes long. Like the previous comet, the direction the tail pointed matched the chart at 4:50 am. Last week, K1 looked like a detached tail with little or no coma. It has been active recently, following perihelion, which it wasn't expected to survive. The nucleus has been breaking into multiple fragments, which have drifted from the coma and in some cases, dissipated. Not a static object.

Finally, as I was packing up shortly after 5 am, I happened to notice the Zodiacal Light, even though I wasn't specifically looking for it. The ZL was running approximately from Spica in Virgo up to Regulus in Leo. Spica was about 13° altitude and it was at the upper edge of a band of haze along the eastern horizon. At the time, the ecliptic was at a relatively steep angle to the horizon, about 68° (which is why fall mornings are a good time to look for the ZL towards the east). As usual around here, the ZL wasn't very bright, but in this case, bright enough for me to catch it incidentally.

Joe