

March 2025 Chippewa Valley Astronomy Update



Caption: This image of comet Hale-Bopp is from 1997. The comet was seen naked eye, and showed both the main dust tail and a fainter blue ionized gas tail. Image credit: William Childs, a member of the Chippewa Valley Astronomical Society.

The Greatest Comets of My Lifetime -- Essay by Kevin Litten

The great American author Mark Twain famously commented that he was born with Halley's Comet (1P/Halley) and that he would also be going out with it. Sure enough, history records that Halley's Comet was visible in 1835 and again in 1910. The years of Twain's birth and death. What a coincidence.

As a child I remember being told that if I was lucky I would see two great comets in my lifetime. That on average a great comet would show up once about every 40 years. So I waited and I waited. Sure enough, one year before I turned 40, Comet Hyakutake (C/1996 B2) made its appearance. Disappearing almost as quickly as it came.

The summer before Comet Hyakutake's appearance the members of the Chippewa Valley Astronomical Society had been anxiously showing Comet Hale-Bopp (C/1995 O1) to everyone who would look at it from Hobbs Observatory on the Beaver Creek Reserve. It was a telescopic comet at that stage, not yet visible to the naked eye. Our anxiety abated when one year later Comet Hale-Bopp lived up to our expectations. It became "The Great Comet of 1997." Great because it was visible to the naked eye for over a year and a half.

Comets are notorious for being unpredictable. They may appear bright from a great distance only to dim as they get closer. Some disappear entirely as they go around the sun. At least one, Comet Shoemaker-Levy 9 (D/1993/F2) broke apart then fell into the planet Jupiter. All comets are gravitationally attracted to the sun. Periodic comets, those that return, aren't always on time. Many never return.

Comet 3I/ATLAS (C/2025 N1) came from outside our solar system. Only two other objects are known to have come “from beyond.” This may have happened many more times in our lifetime yet astronomers are only now detecting these objects. We have satellites and automated telescopes specifically designed to detect these visitors. Well not really, they were designed to give us early warning about any objects that might impact Earth. Yikes!

Here is the big story. Do not get excited, yet stay vigilant. A satellite called PanSTARRS has spotted a comet designated (C/2025 R3), it might be the greatest comet of our lifetime. It may also go bust. The good news is we will know sometime this April 2026. So not long to wait.

I’ve seen my two great comets, a few good comets, more barely visible comets, and missed even more comets entirely. Unlike Mark Twain I’m holding out for at least one more. It is a good time to be an astronomer.

--Kevin Litten is a member of the Chippewa Valley Astronomical Society.