



# Star Observation Report

**Date:** September 15, 2024

**Time:** 8:32 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** slightly bright skies, no clouds, temperature 23°C, light breeze

**Observations:** I observe the Taurus, which is just to the north of Orion. Taurus is visible with the bright red star Aldebaran as its eye. The Pleiades cluster (Seven Sisters) is also visible.



**Date:** September 20, 2024

**Time:** 9:23 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 24°C, no breeze

**Observations:** Saturn is low in the sky towards the southeast. It's not as bright as Jupiter, but it's visible with the help of a telescope. The rings of Saturn are visible through a medium magnification.



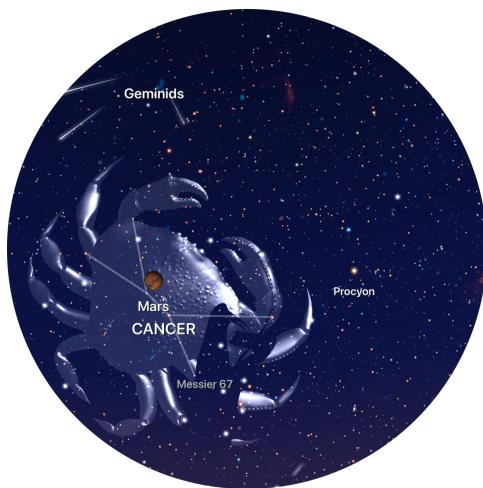
**Date:** September 23, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** dark skies, cloudy, temperature 24°C, light breeze

**Observations:** Tonight, I focused on the constellation Cancer, the Crab. While it's one of the fainter constellations, it's home to the beautiful Beehive Cluster (M44). This open cluster is visible to the naked eye as a fuzzy patch of light. Using binoculars or a telescope, I could resolve individual stars within the cluster, creating a stunning celestial sight.



**Date:** September 20, 2024

**Time:** 8:56 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** pure dark skies, no clouds, temperature 23°C, no breeze

**Observations:** I observe Gemini, the Castor and Pollux, the twin stars, are clearly visible near the western horizon. Pollux is the brighter of the two. This night's sky is very dark, which is fantastic to do stargazing.



**Date:** September 28, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** dark sky, cloudy, temperature 25°C, no breeze

**Observations:** The moon is in its waxing crescent phase, visible in the southwestern sky, about 25% illuminated. It casts a faint glow that illuminates some of the surrounding stars.



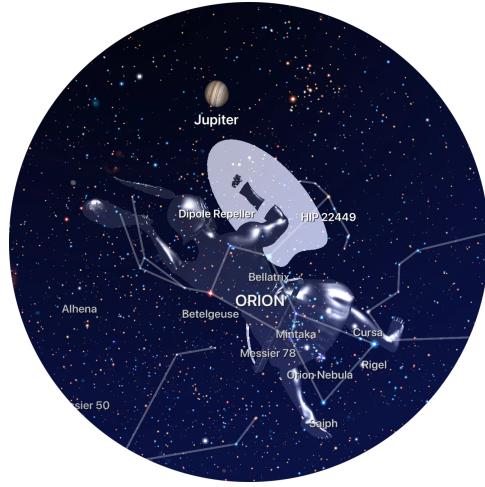
**Date:** October 1, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Dark skies, cloudy, temperature 21°C, light breeze

**Observations:** The Orion Nebula was a fantastic sight, even with the city lights. Its bright core and surrounding nebulosity were visible to the naked eye. Using my telescope, I could see more details, including the Trapezium cluster.



**Date:** October 10, 2024

**Time:** 8:32 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 20°C, light breeze

**Observations:** Last night was a truly magical night. A powerful geomagnetic storm caused the Aurora to be visible as far south as New Jersey! I rushed outside around midnight and was awestruck by the vibrant display of purple and pink lights dancing across the night sky. It was an unforgettable experience, a rare celestial show right here in Princeton.



**Date:** October 14, 2024

**Time:** 8:32 PM

**Location:** Cusco, Peru

**Weather Conditions:** Clear skies, no clouds, temperature 19°C, light breeze

**Observations:** Tonight, We ventured out to a dark sky location away from the city lights to observe the Milky Way in Peru. It was a breathtaking sight, a band of faint light stretching across the night sky. I used my camera to capture its beauty, setting up a long exposure to bring out the details of the galactic core.



**Date:** October 20, 2024

**Time:** 11:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Nearly dark skies, no clouds, temperature 22°C, light breeze

**Observations:** Tonight, I focused on the constellation Virgo, the Virgin. It's a large constellation, and its brightest star, Spica, is a beautiful blue-white star. I also tried to observe the Virgo Cluster, a massive cluster of galaxies located in this constellation. However, it requires a telescope to see any detail.



**Date:** October 21, 2024

**Time:** 4:57 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 21°C, light breeze

**Observations:** Tonight, I observed the last quarter Moon. It's not dark enough to observe other stars, we will go next time later for stargazing.



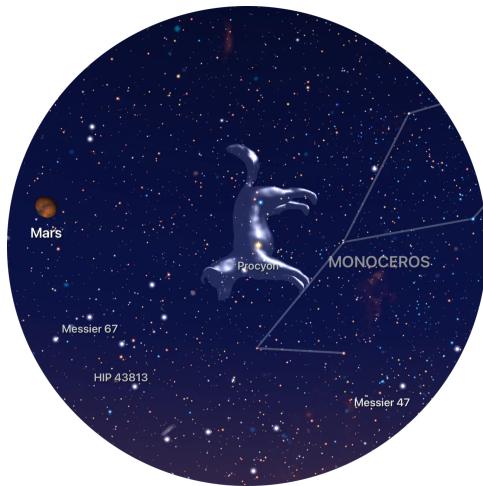
**Date:** October 22, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Dark skies, no clouds, temperature 19°C, light breeze

**Observations:** Finding the Procyon was a bit of a challenge, even with the dark sky. It appeared as a faint, fuzzy patch in the sky. I tried to get a better view, but it was still quite elusive.



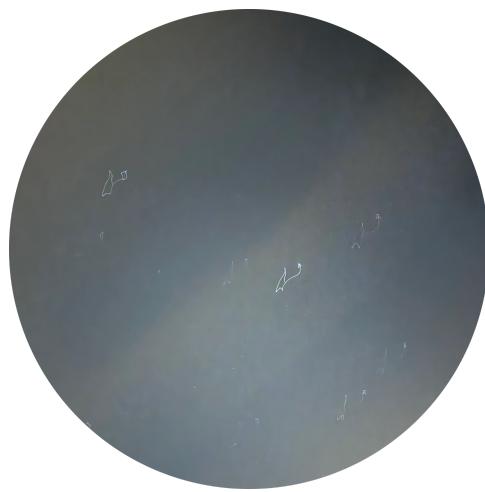
**Date:** October 24, 2024

**Time:** 9:08PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, occasional clouds, temperature 18°C, light breeze

**Observations:** The Double Cluster in Perseus was a breathtaking sight. The two clusters, h-chi Persei, were easily visible with the naked eye. I could also observe individual stars within the clusters.



**Date:** October 27, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 15°C, no breeze

**Observations:** The Astro-H was a fantastic sight, even with the city lights. Its bright core and surrounding nebulosity were visible to the naked eye. I could see more details, including the Phad.



**Date:** October 29, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** nearly clear skies, occasional clouds, temperature 20°C, no breeze

**Observations:** I tried to observe the Draconids meteor shower, but the building lights and occasional cloud cover hindered the viewing. I'll have to try again next time, perhaps in a darker location in the following days.



**Date:** November 1, 2024

**Time:** 7:45 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 20°C, light breeze

**Observations:** Tonight, I observed the constellation Ursa Major, also known as the Big Dipper. Its seven bright stars form a distinctive pattern, making it easy to identify. I also used it to locate the North Star, Polaris.



**Date:** November 9, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 18°C, light breeze

**Observations:** Tonight, I observed the constellation Leo, the Lion. Its brightest star, Regulus, is a beautiful blue-white star. I also tried to spot the Leo Triplet, a group of three galaxies located in the constellation. However, due to light pollution, they were difficult to see.



**Date:** November 15, 2024

**Time:** 4:44 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 15°C, no breeze

**Observations:** Tonight, I observed the waxing gibbous Moon. Its bright, illuminated surface was a stunning sight. The Moon's phases continue to fascinate me, offering a constantly changing celestial spectacle.



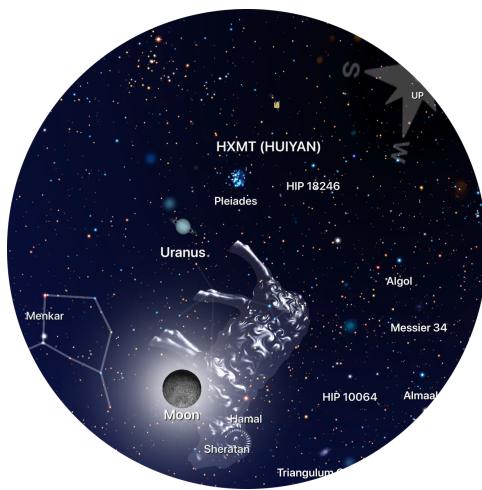
**Date:** November 20, 2024

**Time:** 9:31 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Dark skies, no clouds, temperature 12°C, light breeze

**Observations:** The cold, crisp night was perfect for stargazing. I observed the moon carefully. I also focused on the Sheratan, Pleiades. I also spent some time observing the Messier 34 and Hamal.



**Date:** November 25, 2024

**Time:** 8:07 PM

**Location:** Los Angeles, California

**Weather Conditions:** Clear skies, no clouds, temperature 15°C, light breeze

**Observations:** The Great Square of Pegasus was a prominent feature in the night sky. I used it as a starting point to locate other constellations like Andromeda and Pisces. The clear, dark sky made stargazing a real pleasure.



**Date:** December 5, 2024

**Time:** 11:56 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Dark sky, occasional cloud, temperature 6°C, no breeze

**Observations:** Tonight, under a clear sky, I ventured out to courtyard of Mannion Hall to observe the Summer Triangle. Deneb, Vega, and Altair formed a triangle high in the sky. I spent some time trying to identify fainter stars within the triangle, but the city lights made it a bit challenging.



**Date:** December 9, 2024

**Time:** 10:03 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Dark skies, cloudy, temperature 5°C, light breeze

**Observations:** I tried to observe the Sirius, but the building lights and occasional cloud cover hindered the viewing. I'll have to try again next time, perhaps in a darker location.



**Date:** December 12, 2024

**Time:** 4:59 PM

**Location:** Princeton, New Jersey

**Weather Conditions:** Clear skies, no clouds, temperature 5°C, light breeze

**Observations:** The lodestar and moon was a fantastic sight, even with the sunset. Their bright core and surrounding nebulosity were visible to the naked eye.

