

# ASTRAL PROJECTIONS

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## Cover Photo

*The Orion Nebula, The Photo attached was taken at IBSP Nov 17. Canon Rebel T6s / Tamron 18-270mm @ 270mm & / f:6.3 / 46 seconds / ISO 1600 / Skyguider Mount / Single shot / Processed in Lightroom.  
Image credit: Jim Webster*

## EVENT CALENDAR

### December 14th - Monthly Meeting

Location: Ocean County College, Building #10 opposite the Planetarium

Annual club officer elections, in addition to honoring ASTRA members with participation awards.

Time: 7:00 p.m. - 10:00 p.m.

### December 22nd - Winter Solstice Star Party

Location: Ocean County College Planetarium parking lot #2(R), 1 College Drive, Toms River NJ

Time: 7:00 p.m. - 10:00 p.m.



## For Your Information...

NASA's Space Place is now called Night Sky Notes.

As of 2019, member dues have been reduced to \$15 for current members. New members, and current members who aren't paid up by March, will pay \$20 in dues.

## A.S.T.R.A.

**Robert J. Novins Planetarium**  
**Ocean County College**  
**P.O. Box 2001**  
**Toms River, NJ 08754-2001**

## EVENT CANCELLATIONS

Members will receive an email notification of event cancellation, or call the ASTRA Hotline: 609-971-3331

### President:

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# RECAP

## RECAP

Despite a seasonably cold and rainy night, ASTRA welcomed a large crowd to the monthly meeting on November 9th. It was an informal affair where ASTRA President John Endreson discussed the upcoming December elections and general club business.

We are saddened to learn that Amanda Boyle will be leaving Ocean County College and the Novins Planetarium in the near future. In the wake of this news, a few members are plotting something to bid her a fond farewell. ASTRA treasurer Ro Spedaliere recounted a "close encounter" at Island Beach State Park where two strange lights were observed in the constellation of Cetus.

Being informal, we rounded out the evening watching astronomy and space-themed commercials on YouTube.



[Macy's Space Station](#)



[Oreo's Dippers](#)



[Cinesite's ad for Haynes Baked Beans](#)



[Dos Equis's Keep It Interesante: Moon](#)

## IBSP Observing Report 11/3/2018

by Ro Spedaliere

On Saturday November 3, 2018 a few ASTRA members got together for an informal observing session at Island Beach State Park. The attendees included myself, Vic Palmieri, Vinny Illuzzi, Sarah Waters, Matthew McCue, Jim and Gloria Webster, along with Sam Granovsky and his mom.

It was a beautiful clear night. The Milky Way spread its splendor above us. We observed some spectacular items such as M15, M56, M77, M76, and NGC 1023 among many others. We even had an unexplained object situation that none of us could figure out. It was around 8:45 p.m. when Vic and I noticed 2 symmetrical lights in the constellation Cetus. The lights appeared from nowhere and it seemed like they were looking right at us. While we gazed upon them in awe, the light on the left gently faded then glided in a downward motion off to the left, emitting a soft red glow for about 20-30 seconds. A few seconds later, the light on the right did the same exact thing.

We were amazed, and I had the presence of mind to consult my phone's Google Sky Map to determine exactly what star they were near. It was Deneb Kairos (aka. Diphda) which at 8:45 p.m. on 11/3 was Mag 2.04, Alt. 24° AZ 146°. Vic and I noted that it was very dark in the Eastern sky, nor were we aware of any sounds from cars or airplanes. The surf before, during, and after seeing the lights was calm and quiet. There were no visible blinking lights anywhere near the object, as one would expect of an earthly aircraft. We just couldn't get the image out of our minds.

A few days later I was online and found reports of the same type of lights which appeared in Ocean City N.J. a few days before we saw them. We searched various web pages to see if anyone reported seeing our lights from that night, and no one had. This will be in my log book as one of the strange items of the night.

Hmm... are we alone?



## Analysis by an Anomalist

by Chris Savia

My side gig is collecting anomalous stories and links for The Anomalist ([anomalist.com](http://anomalist.com)), in addition to summarizing content or providing editorials. When I heard Ro's account on November 9th, her story piqued my interest.

What stands out in Ro's account is the lack of sound at the time of the observed phenomenon. This coincides with a concept called The Oz Factor, coined by Jenny Randles, which is the experience of being isolated or transported by the real world of everyday life into another environment which is quite similar to the real world but changed enough to be noticeable and disturbing. The Oz Factor often involves sudden silences, like a forest suddenly going quiet as a library or the sudden realization of being alone in a place previously occupied by many people. In Ro's case, the Oz Factor could've manifested by the quieter surf and absence of noise from cars or airplanes.

Ro does mention a sighting over Ocean City around the time of these lights over Island Beach State Park. Doing my own investigation, a rigorous five minutes wrangling Google, I found three reports shared at MUFON and the National UFO Reporting Center. Typos belong to the object observers, not me.

### **MUFON Case: 93815. 2018-07-10 00:00, Ocean City, NJ:**

*i was watching the sunset on a 2nd story porch facing the bay. 2. i first noticed how bright the object was and i thought odd there were no stars out yet. 3. i had no idea what it was but it was slowly moving in my direction. then became stationary. 4. the object had huge bright lights surrounding w a metallic background and smaller dimmer lights in the center. moving very slowly. 5. we brought my cousins telescope out to the porch. we then could see the details described in #4. i was very excited, jumping up and down, due to details we could see through the telescope. it was not normal. 6. i had to attend to my special needs daughter inside for about 15 min. when i went back*

*outside, it was gone. we did see the same object the night before on july 9th in the same place. i also reported seeing an object in the same area two yrs ago. i recieved an email from one of your investigators. life got busy, i lost the email and i just let it go. never thinking i'd see another ufo in the same place.*

### <http://www.nuforc.org/webreports/143/S143525.html>

**10/18/2018 16:50, Lakewood, NJ:**

*Five witnesses describe highly-reflective silver UFO's over Lakewood, N. J Mostly hovering in place, but also moving slowly across the sky.*

*Appeared and disappeared several times throughout incident.*

*Extremely bright light, APPEARED AND DISAPPEARED WHILE HOVERING STILL AND MOVING.*

### <http://www.nuforc.org/webreports/143/S143711.html>

**11/4/2018 23:00, Cherry Hill, NJ:**

*Loud boom followed by a shake, leaving an enormous smoke trail, followed by jets flying over afterwards in the direction of the smoke t*

*It was 11:00pm, I was watching tv and all of a sudden I heard a loud boom that shook my house for a second. I thought it was a bomb but I went outside and all my neighbors were also out inspecting. We all noticed and HUGE trail of smoke in the sky, and about a minute after, I could hear jets flying in the direction of the smoke trails. I checked the news to see if it were maybe a plane crashing, but I could find nothing.*

Considering our proximity to Joint Base McGuire-Dix-Lakehurst, and with drones filling our skies at all hours of the day, there are plenty of opportunities to mistake something with a perfectly reasonable explanation for otherworldly phenomena. But by no means does it eliminate the possibility of the truth being out there.



## Observe Apollo 8's Lunar Milestones

*By David Prosper*

December marks the 50th anniversary of NASA's Apollo 8 mission, when humans first orbited the Moon in a triumph of human engineering. The mission may be most famous for "Earthrise," the iconic photograph of Earth suspended over the rugged lunar surface. "Earthrise" inspired the imaginations of people around the world and remains one of the most famous photos ever taken. This month also brings a great potential display of the Geminids and a close approach by Comet 46P/Wirtanen

You can take note of Apollo 8's mission milestones while observing the Moon this month. Watch the nearly full Moon rise just before sunset on December 21, exactly 50 years after Apollo 8 launched; it will be near the bright orange star Aldebaran in Taurus. The following evenings watch it pass over the top of Orion and on through Gemini; on those days five decades earlier, astronauts Frank Borman, Jim Lovell, and Bill Anders sped towards the Moon in their fully crewed command module. Notice how the Moon rises later each evening, and how its phase wanes from full on Dec 22 to gibbous through the rest of the week. Can you imagine what phase Earth would appear as if you were standing on the Moon, looking back? The three brave astronauts spent 20 sleepless hours in orbit around the Moon, starting on Dec 24, 1968. During those ten orbits they became the first humans to see with their own eyes both the far side of the Moon and an Earthrise! The crew telecast a holiday message on December 25 to a record number of Earthbound viewers as they orbited over the lifeless lunar terrain; "Good night, good luck, a merry Christmas and God bless all of you - all of you on the good Earth." 50 years later, spot the Moon on these holiday evenings as it travels through Cancer and Leo. Just two days later the astronauts splashed down into the Pacific Ocean after achieving all the mission's test objectives, paving the way for another giant leap in space exploration the following year.

The Geminids, an excellent annual meteor shower, peaks the evening of December 13 through the morning of the 14th. They get their chance to truly shine after a waxing crescent Moon sets around 10:30 pm on the 13th. Expert Geminid observers can spot around 100 meteors per hour under ideal conditions. You'll spot quite a few meteors by avoiding bad weather and light pollution if you can, and of course make sure to bundle up and take frequent warming breaks. The Geminids have an unusual origin compared to most meteor showers, which generally spring from icy comets. The tiny particles Earth passes through these evenings come from a strange "rock comet" named asteroid 3200 Phaethon. This dusty asteroid experiences faint outbursts of fine particles of rock instead of ice.

You can also look for comet 46P/Wirtanen while you're out meteor watching. Its closest approach to Earth brings it within 7.1 million miles of us on December 16. That's 30 times the average Earth-Moon distance! While passing near enough to rank as the 10th closest cometary approach in modern times, there is no danger of this object striking our planet. Cometary brightness is hard to predict, and while there is a chance comet 46P/Wirtanen may flare up to naked eye visibility, it will likely remain visible only via binoculars or telescopes. You'll be able to see for yourself how much 46P/Wirtanen actually brightens. Some of the best nights to hunt for it will be December 15 and 16 as it passes between two prominent star clusters in Taurus: the Pleiades and the V-shaped Hyades.

Happy hunting!

# NIGHT SKY NOTES

*Caption: Earthrise, 1968. Note the phase of Earth as seen from the Moon. Nearside lunar observers see Earth go through a complete set of phases. However, only orbiting astronauts witness Earthrises; for stationary lunar observers, Earth barely moves at all. Why is that?*



## Tycho Brahe's Psychic Dwarf

by Chris Savia

Tycho Brahe (December 14, 1546 - October 24, 1601) is notable for his astronomical pursuits which kicked off when he observed a partial solar eclipse in 1560. He received the island Hven as a gift from the King Frederick II of Denmark, whereupon he built his astronomical observatory Uraniborg where he spotted a supernova designated as SN 1572 and made several other notable discoveries, often solely by naked eye observations.

Brahe is also notorious for wearing a copper nose, having lost it in a duel over the title of being the superior mathematician. Tycho also kept an elk as a pet, who died after stumbling drunkenly down the stairs, keeping company with an astrologer, and a psychic dwarf named Jepp. Here's a biographical sketch of Jepp courtesy of John Louis Emil Dreyer's *Tycho Brahe: A Picture of Scientific Life and Work in the Sixteenth Century*.

*Two other inmates of Tycho's house may also be mentioned here. One was a maid of the name of Live (or Liuva) Lauridsdatter, who afterwards lived with Tycho's sister, Sophia, and later was a sort of quack-doctor at Copenhagen, where she also practised astrology, &c. She died unmarried in 1693, when she is said to have reached the ripe age of 124. The other was his fool or jester, a dwarf called Jeppe or Jep, who sat at Tycho's feet when he was at table, and got a morsel now and then from his hand. He chattered incessantly, and, according to Longomontanus, was supposed to be gifted with second-sight, and his utterances were therefore listened to with some attention. Once Tycho had sent two of his assistants to Copenhagen, and on the day on*

*which they were expected back the dwarf suddenly said during the meal," See how your people are laving themselves in the sea." On hearing this, Tycho, who feared that the assistants had been shipwrecked, sent a man to the top of the building to look out for them. The man came back soon after and said that he had seen a boat bottom upwards on the shore, and two men near it, dripping wet. ... When any one was ill at Hveen, and the dwarf gave an opinion as to his chance of recovery or death, he always turned out to be right.*

Happy 472nd birthday, Tycho from ASTRA!



*Not Jepp, but a reasonable facsimile. Image credit: Portrait of a Dwarf by Agnolo di Cosimo, used without permission of Florence's Uffizi museum, Fair Use 17 U.S. Code § 107.*

## SUBMISSIONS WELCOME

Members are invited to submit articles, photos, news, or stories for inclusion with Astral Projections. Please contact Chris Savia at [newsletter@astra-nj.org](mailto:newsletter@astra-nj.org).

**JANUARY'S NEWSLETTER DEADLINE: DECEMBER 26, 2018**

# CLUB BENEFITS

## OBSERVING CALENDAR

**December 7th** - New moon at 2:20 a.m. EST.

**December 13-14th** - Geminids meteor shower. It will be visible in the early morning, shooting up to 120 meteors per hour at its peak. The moon will be approaching the first quarter means it will not interfere with the show.

**December 13th** - Mercury at greatest western elongation. Mercury will be  $21.3^\circ$  from the sun, being visible just before sunrise.

**December 21st** - Winter solstice at 5:23 p.m. EST. We discourage ASTRA members, and the public, from engaging in blood sacrifices to ensure the return of the sun.

**December 22nd** - Full moon at 12:48 p.m. EST.

**December 21-22nd** - Ursids meteor shower. A minor meteor shower producing 5-10 meteors an hour from the dust grains left behind by comet 8P/Tuttle. Unfortunately a bright moon shining throughout the night will interfere with this humble display.

## WHY JOIN?

For \$15.00 a year, you can enjoy many benefits with the Astronomical Society of the Toms River Area. Members can take advantage of A.S.T.R.A.'s lending library, borrow telescopes for observations, access to private star parties, in addition to camaraderie with local amateur astronomers. Contact one of our club officers today to join the fun.

## ISLAND BEACH STATE PARK PERMITS

One of the perks of being an ASTRA member is the special permit for after-hours stargazing at Island Beach State Park. Please contact the executive board for more details about how you can acquire your 2019 permit.

## ASTRA'S TELESCOPES

ASTRA has several different types of telescopes, telescope mounts, along with binoculars, eyepieces, and eyepiece filters available for members to borrow. If any member is interested, please check out ASTRA's website and contact John Endreson at [telescope-loan@astra-nj.org](mailto:telescope-loan@astra-nj.org), or 609-971-3331.

## ASTRA'S LIBRARY

Many books are available for loan to ASTRA members from our library. A list of these books is available at the ASTRA website. To request any of these books, please email John Endreson at [Library-Loan@astra-nj.org](mailto:Library-Loan@astra-nj.org), or call 609-971-3331 with your request for materials.

## VOLUNTEER PRESENTERS

Members are invited to give presentations related to astronomy or space science at our monthly meetings. Please contact a club officer to make arrangements.