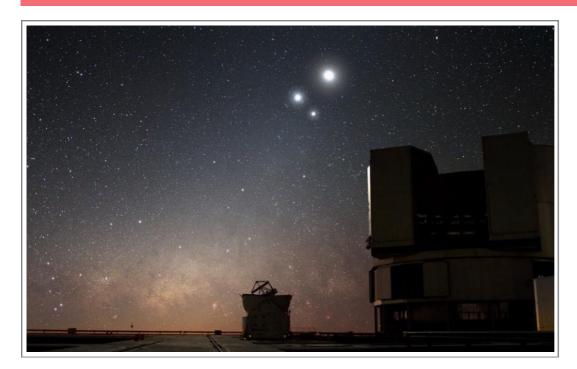
ASTROPHILE INDIA JANUARY 2021



## The Astrophile Newsletter

One Fond of Starlore: An Amateur Astronomer
Insta: @astrophile\_edu; Facebook: @astrophileeducation; Twitter: @astrophileedu



#### Jupiter, Saturn & Mercury Meet in the Sky

#### The trio will meet early evening, low in western sky.

On January 10, the three solar system planets, Jupiter, Saturn and Mercury will meet in the sky and will offer great opportunity for the astronomers and astrophotographers to click spectacular images.

The trio will be maintaining social distancing while coming closer in the sky. They will physically not come close to each other but will appear to share the same space in the sky from the vantage point on Earth.

The event, known as conjunction is not rare as the planets moving in their orbits around the Sun often align nearly in a straight line and appear to be in the same region of the sky as seen from Earth. However the events does not happen that often given the their revolution period varying from less than a year to 20 year for Jupiter and 30 years for Saturn.

#### Moon phases and dates

#### Important phases and dates for Moon to plan your observation

06/01/21	Third Quarter	15:07
13/01/21	New Moon	10:30
21/01/21	First Quarter	02:31
29/01/21	Full Moon	00:46



**Mercury**Mercury will be closest to Jupiter and

Saturn on

Jan 10 evening and at the greatest elongation from Sun on Jan 24. It is the best day to observe Mercury which is otherwise very close to Sun and not safe to observe.



**Venus**Venus will be

rising just a few minutes before the

Sun comes up and hence not the best time to observe. Wait till late February when it will be visible in the evening skies for a wonderful views of the sister planet



Jupiter
Jupiter will

be very close to Sun and hence shall

not be attempted to be seen unless supervised. Jupiter will be in close conjunction with Sun on January 29.



Saturn

Saturn will be very close to Sun and hence

shall not be attempted to be seen unless supervised. Saturn will be in close conjunction with Sun on January 24. ASTROPHILE INDIA JANUARY 2021

# Deep Solar System Settlement & Exploration



### Bring Back Dark Skies -Phase 5: Jan 04-13, 2021



Astrophile is proud to announce the launch of "<u>Deep Solar System Settlement & Exploration Competition</u>" on January 23, 2021. The competition will be organised in virtual environment with students participating from all across India.

The competition will aim to bring the wildest of ideas for humans to travel, explore and settle in the solar system other than Planet Earth. The students will work in teams, and submit a proposal for, what they think will be most safe, sophisticated and advanced environment for us to explore and grow and protect life from extinction.

The details will be emailed to you during the time of launch of the competition and the schools can participate by forming a team of students. Details will follow.

The fifth phase of Citizen Science project started on Monday Jan 04 and will go on till Jan 13.

The project aims to collect the data of **LIGHT POLLUTION** in your locality by using a simple method of counting number of stars visible in a specific constellation and reporting it back to us.

The submission process is very easy and simple. You visit: <a href="https://astro-phile.com/bring-back-dark-skies/">https://astro-phile.com/bring-back-dark-skies/</a> and click on the campaign months and fill out the form for the dates you have made the observation. The observations should essentially include the number of stars you can count in the constellation, and also you should know your latitude and longitude so that we can align you on the map.

#### THE YEAR 2020 & ASTROPHILE

Dear Knowledge Guru,

The year 2020 was not a normal one for any of us. While we were planning to make the most of it, Pandemic hit us big and hard. However this has given us the opportunity to look at the things in a different way and we have approached 2020 with an open mindset to evolve are explore. Some of the programs we started in this direction:

- 1. Astrophiler's Club An Online Space & Astronomy Club for school students.
- 2. Bring Back Dark Skies A citizen science project for everyone.
- 3. **Astrophile Asteroid Search Program**: In 2020, we worked with 10 different schools and worked with 50 students for the campaign and discovered 127 new asteroids. We will continue with more such discoveries in the coming months.
- **4. ISS EarthKAM Mission**: During the 3 missions we organised, we saw registrations from 35 schools, with over 200 students participating in this activity taking some 1000 Hi-Res images of Earth from ISS.
- **5.** Collaboration with Slooh telescope US: Astrophile and Slooh Telescopes US has come close to bring astronomy to your desk.
- **6.** <u>Annular Solar Eclipse and Eclipse Webinars</u>: The Annular Solar Eclipse of 2020 was a rare one and we organised several talks for the students to be aware of the eclipse. The Team also chased the eclipse from Suratgarh in Rajasthan.
- 7. Live interactive sessions with students: Astrophile team conducted several classes and workshops for school students and teachers during the course of 2020. We covered some 2000 students from 65 different schools covering 9 different topics spanning 100 days. Transition from offline to online classes teaching astronomy was we things the hardest thing we have done last year. We are grateful for your support in this.