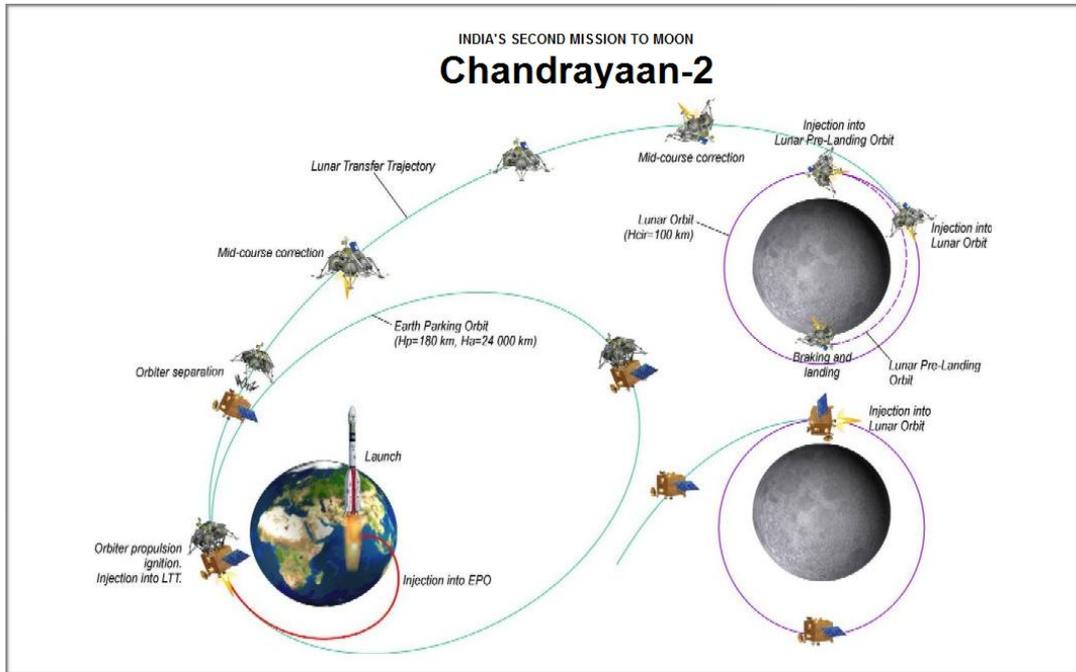




The Astrophile Newsletter

One Fond of Starlore: An Amateur Astronomer

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Chandrayaan II on a journey to the Moon

It will embark a 45 day long journey to the Moon to land near South Pole for a 15 day mission

Chandrayaan 2 was launched from SHAR on July 22, 2019 at 2:43 PM onboard GSLV-MkIII 'Bahubali' rocket for a 45 day mission to the Moon. The rocket was carrying the orbiter, lander and rover which will explore an important area near the South Pole of Moon.

The mission duration for the orbiter is 1 year while that of lander and rover is expected to 15 days due to the length of day on Moon. ISRO is hopeful that the rover might recover after the long gap of 15 day once the sunlight start charging the batteries. If this happens, the mission can be extended like in case of Spirit and Opportunity rovers on Mars. Chandrayaan II is expected to reach Moon by September 7th.

Moon phases and dates

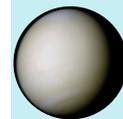
Important phases and dates for Moon to plan your observation

07/08/19	First Quarter	23:00
15/08/19	Full Moon	17:59
23/08/19	Third Quarter	20:26
30/08/19	New Moon	16:07 aka Black Moon



Mercury

Mercury will be rising about 90 minutes before the Sunrise. It will be visible in the dark sky for about 45 minutes before the bright twilight will make it hard to see. Also one should not observe Mercury an hour before sunrise



Venus

Venus will not be visible for the entire month as the planet is placed in-between Earth and Sun making it impossible to spot.



Jupiter

Jupiter will be rising in the evening, displaying the characteristics it is loved for. The gaseous giant is very close to the Milky Way arm of Scorpio and hence the constellation and the arm can be spotted easily from rural skies.



Saturn

Saturn will be rising an hour before sunset and will display its characteristics. Saturn will be visible for entire night giving observers a great chance to view its features. The opposition.

Perseids Meteor shower this August

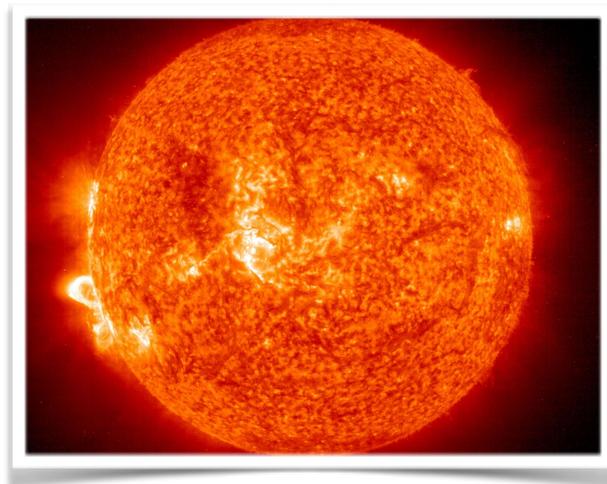


The Perseids are one of the brighter meteor showers of the year. They occur every year between July 17 and August 24 and tend to peak around August 9-13.

Made of tiny space debris from the comet Swift-Tuttle, the Perseids are named after the constellation Perseus. This is because the direction, or radiant, from which the shower seems to come in the sky lies in the same direction as Perseus. The Perseids are widely sought after by astronomers and stargazers because most years at its peak, one can see 60 to 100 meteors in an hour from a dark place.

To observe, you need a clear sky, lots of patience, and look towards North East area in the sky. This year the full moon may reduce the number of visible meteors.

The Sun - The most observed star in 2019



The world is gearing up to follow the Sun in the second half of 2019 with a Total Solar Eclipse in July last month, a Transit of Mercury in November this year following by an Annular Solar Eclipse later in December.

While the South American nations enjoyed the July eclipse, The North Americans, parts of Europe and Africa will endeavour the transit of Mercury, Middle East and South Asia will enjoy the Annular Solar Eclipse. If that is not enough, the Central Asia and South East Asia will enjoy another eclipse of the Sun in June 2020. This will make our Sun the most viewed star in the universe and will have observation surpassing any previous records by miles. The question is: ARE YOU READY TO OBSERVE?

ANNULAR ECLIPSE OF DECEMBER 26

On December 26, 2019, our Sun will be blocked by the Moon and an eclipse will be visible. Although it is not a rare thing but the same place on earth may not experience eclipse again in a century. This is what makes the eclipse special. Moreover the atmosphere of the Sun can only be observed during the total eclipse which makes it very special. The eclipse is also very beautiful to watch and shall not be missed. The next Solar Eclipse will be visible from India.

The eclipse will pass through several cities across south Indian states of Karnataka (Manglore), Kerala (Kasaragod, Kanhangod, Payyanur, Thaliparamba, Kannur, Thalassery, Vadakara, Kozikod, Malappuram and Palakkad), Tamil Nadu (Ooty, Metiupalayan, Coimbatore, Polachi, Tiruppur, Erode, Dharampuram, Tiruchangode, Namakkal, Karur, Divdigul, Tiruchirappalli, Pudukkottai, Karaikudi, Anandurm Pattukkotta).

It is an excellent opportunity for the schools in these areas to hold an observation session for the students and their parents. The schools can take this opportunity to stand out of the crowd and offer something different for all the students and the society.

We at Astrophile are committed to extend all support to the schools who are interested in organising these observation sessions in school for the eclipse. You can write to us or call us for any query or information required. If needed, we can organise a training session at school for the students and staff to learn the same.

