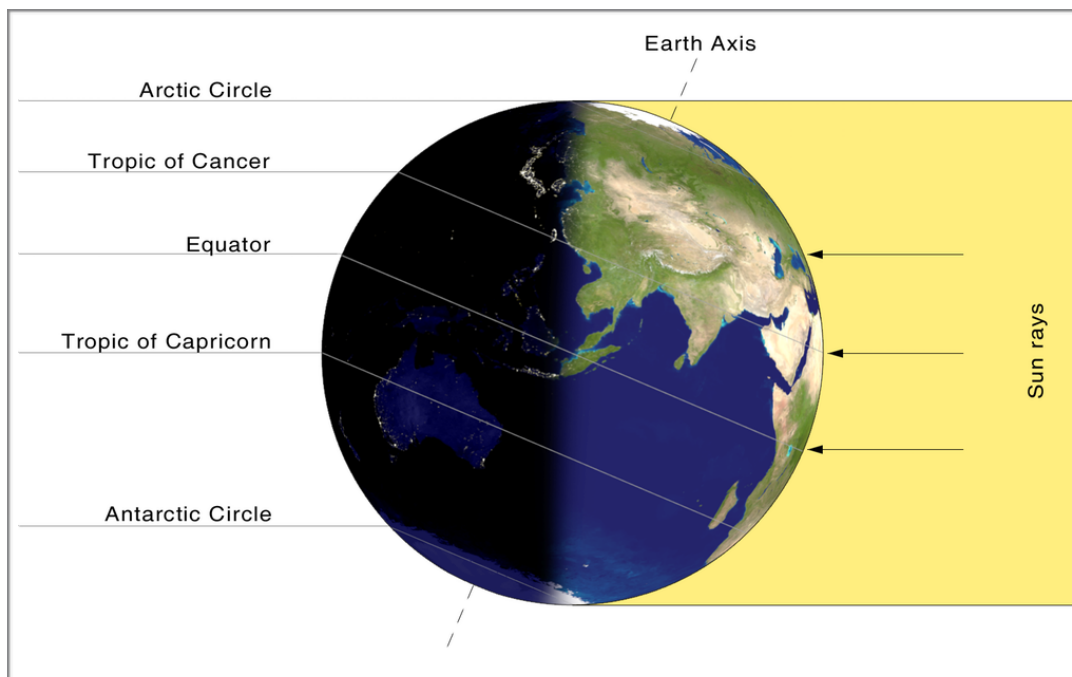




The Astrophile Newsletter

One Fond of Starlore: An Amateur Astronomer

Insta: [@astrophile_edu](#); Facebook: [@astrophileeducation](#) Twitter: [@astrophileedu](#)



Summer Solstice - Longest day of the Year

Summer solstice is the day when The Sun is highest, days are longest and nights are shortest in Northern Hemisphere.

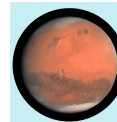
Summer solstice this year will be celebrated on June 21 at 9:24pm when The Sun will momentarily shine exactly overhead the Tropic of Cancer. This will mark the longest day and shortest night of the year in northern hemisphere while the opposite in the southern hemisphere.

The Solstices and equinoxes happen due to the 23.5° tilt of Earth's axis. When the tilt is towards the Sun, it shines exactly overhead 23.5°N and we celebrate Summer solstice in Northern Hemisphere. When the tilt is away from the Sun it shines at 23.5°S and we celebrate summers in Southern Hemisphere. When the tilt is on either side but Sun, we celebrate equinoxes and the Sun shines exactly overhead at the equator making the days and nights equal.

Moon phases and dates

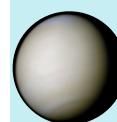
Important phases and dates for Moon to plan your observation

03/06/19	New Moon	15:31	
10/06/19	First Quarter	11:29	
17/06/19	Full Moon	14:00	Strawberry Moon
25/06/19	Third Quarter	15:16	



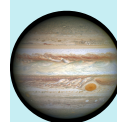
Mars

The red planet will be setting an hour after the sunset this month shining faint in the evening twilight. Also at over 4 million KM from Earth, the features will be missing as seen from the telescope.



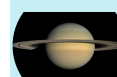
Venus

Venus will be rising an hour before the sunrise and hence the bright planet will not be at its best due to morning twilight. It will be showing crescent phase.



Jupiter

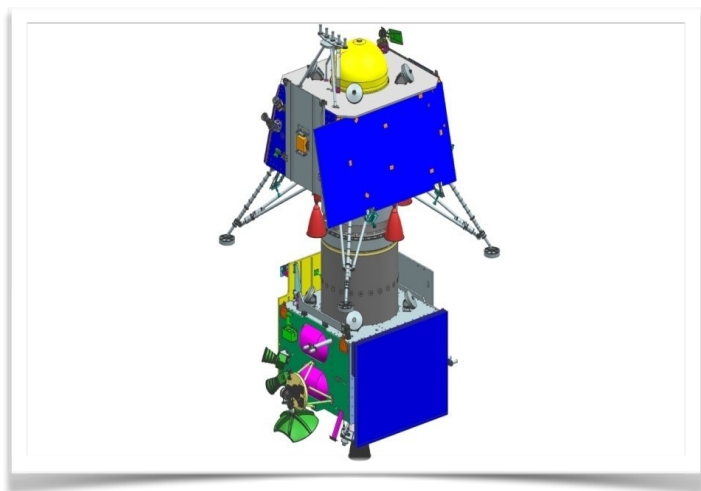
Jupiter will be rising in the evening, displaying the characteristics it is loved for. The gaseous giant is very close to the milky way arm of scorio and hence the constellation and the arm can be spotted easily from rural skies..



Saturn

Saturn will be rising just around midnight and post midnight, the planet will be in a very good position to display the rings it is known for. Saturn will be visible for rest of the night setting long after sunrise.

Students discover asteroid in month long campaign



Chandrayaan-2, India's second lunar mission, has three modules namely Orbiter, Lander (Vikram) & Rover (Pragyan). After launch into earth bound orbit by GSLV MK-III, the integrated module will reach Moon orbit using Orbiter propulsion module. Subsequently, Lander will separate from the Orbiter and soft land at the predetermined site close to lunar South Pole. Further, the Rover will roll out for carrying out scientific experiments on the lunar surface. Instruments are also mounted on Lander and Orbiter for carrying out scientific experiments. All the modules are getting ready for Chandrayaan-2 launch during the window of July 09, to July 16, 2019, with an expected Moon landing on September 06, 2019.

ISRO launches Radar Imaging Satellite



India's PSLV-C46 successfully launched RISAT-2B satellite from of Satish Dhawan Space Centre (SDSC) SHAR, Sriharikota.

PSLV-C46 lifted-off at 05:30 Hrs (IST) on May 22, 2019 from the First Launch Pad of SDSC SHAR, Sriharikota. PSLV-C46 was the 72nd launch vehicle mission from SDSC SHAR, Sriharikota. In this mission, the 'Core-Alone' configuration of PSLV was flown (without the use of solid strap-on motors).

RISAT-2B with a lift-off mass of 615 kg, is a radar imaging earth observation satellite. The satellite is intended to provide services to Agriculture, Forestry and Disaster Management domains.

TOTAL SOLAR ECLIPSE OF JULY 2, 2019 FROM SOUTH AMERICA

In on month from now, the residents of South American countries Chile and Argentina will witness a 2 minute 38 second long Total Solar Eclipse. It will be the second solar eclipse of 2019 and the second central eclipse this year. This eclipse will be followed by a partial Lunar Eclipse visible on July 16-17th 2019 visible from western and southern India. Though entire India can see the eclipse, other than western and southern India will miss the last phase of eclipse.

Solar eclipses takes place when the Moon comes in between the Earth and the Sun and block its light. The observer under the shadow of Moon sees the eclipse. The partial eclipse will be visible to Entire America however totality will be visible only in some parts of central Chile and Central Argentina. Thousands of people have decided to travel to either of the two countries to witness the marvellous show of nature.

At the end of the year, the third and final eclipse will take place and this time the residents of India are going to enjoy the views. It will be an annular eclipse and a very interesting one. It will be a repeat of the famous ASE of 2010 visible from Kerala and Tamil Nadu. The views from Southern Karnataka will join the party this time along with Kerala and Tamil Nadu. The partial phases will be visible from all across India however due to winters, the visibility might be a problem in North. Astrophile will be organising an expedition and soon will be sharing the details of the same.

