



Sky Outlook
for
December 2017

Planets

Mercury..Starts the month as an evening object. Inferior conjunction on the 13th becomes morning object

Venus..Too close to Sun in the morning sky to be observed.

Mars.. morning object in Virgo moving into Libra by the 21st increasing in size from 4.2

arcseconds to 4.8. Mag +1.7-+1.5

Jupiter..Also a morning object in Libra. Getting closer to us in its orbit and brightens slightly from -1.7 to -1.8 and grows from 31.3 -33 arcseconds

Saturn..Poorly situated in the evening sky.

Uranus..Up all night in Pisces +5.7

Neptune..Still in Aquarius +7.9mag

Lunar phases..Full Moon 13th, Last Quarter 10th, New Moon 18th, First Quarter 26th.

Lunar Occultation of Aldebaran occurs 31st at 01:14.

No Comets of note for this Month.

Constellation of the Month...

Taurus the Bull has a well recognised pattern of bright stars that helps beginners get their bearings and contains deep sky objects for both beginner and advanced observers. The focal point is the V shaped open cluster the Hyades with the red star Aldebaran.

Also home to the Pleiades (M45) visible to the naked eye and the very first item in Messier's list M1 the Crab nebula.

The Hyades brightest stars shine at third to fourth magnitude and spans 3×4 degrees making an ideal binocular target.

Pleiades (M45) another target ideal for binoculars or short focal length telescope. Contains at least 300 stars the whole cluster is swathed in unrelated reflection nebulosity, brightest area being around Merope.

The winter Milky Way passes through Taurus' extreme east flank and in doing so fills the constellation with plenty of open clusters...NGC 1647 spanning 45 arcminutes in a 100mm scope with roughly 200 stars, easy to find some 3.5* north east of Hyades at mag +6.4. Another bright cluster is NGC 1746 similar in size to 1647 but only contains 40 stars.

Crab Nebula (M1) supernova remnant lying near Zeta Tauri. Star exploded in April or May 1054 in a type-II event. Not an easy object can be just glimpsed in 10x50 binoculars as a faint patch from a dark site, small telescope shows it as an oval shaped fuzzy glow but scopes of at least 12" needed to

show signs of structure. OIII filter may help also.

Another difficult object is Planetary nebula NGC1514. 150mm scope and averted vision should show a one arcminute diameter glow and again OIII filter will help. Lies 3.5* east-south-east of zeta Persei.

Those with large telescopes may wish to take up the challenge of finding Simeis 147 a faint supernova Remnant which lies 3* of Elnath (beta Tauri). Another is NGC 1554/5 Hind's Variable Nebula, reflection nebula associated with the star T Tauri, which varies in brightness between mag +9.3 to +13.5 so dictates how bright the nebula will be.

**CLEAR SKIES and MERRY
CHRISTMAS TO YOU ALL!!!**



