



SUN Moving through *Taurus* into *Gemini*. Summer Solstice at 05:45 UT on the 21st.

MOON New Moon on the 22nd, Full Moon on the 7th.

PLANETS **Mercury** is a morning object after the first week and draws further away from the Sun in the NE, shining at -0.5^m by end of month.
Venus is a morning object rising an hour before the Sun and shining at -4.2^m .
Mars is a morning object in *Aries* at 1.1^m . It is in conjunction with Venus and the Moon on 20th.
Jupiter is still the brightest object in the morning sky (-2.5^m) as it moves through *Aquarius*. It provides a rewarding view to binocular and telescope users.
Saturn is a fairly bright object in *Leo* shining at 0.6^m and visible all evening.

COMETS UK observers should pick up 22P/Kopff as a binocular object of around 9^m this month, when it is at its brightest. It slowly fades, remaining in *Aquarius*, and will be around 12^m magnitude in November when it sinks into the evening twilight for northern observers.

METEORS There is a weak shower, the Ophiuchids, peaking on the 20th. The maximum rate observed is only about 5 per hour which is of the same intensity as the sporadic rate visible on any night.

STARS *R corona borealis* is a fascinating star. Most of the time it is just on the limit of visibility at 6^m , but out of the blue it will fade down to 12^m - 250 times fainter! The reason for this is that this star is carbon rich and ejects shells of dark soot that obscure the starlight. It is the prototype of a class of eruptive variable stars. Normally there are two naked eye stars visible within the bowl of *Corona*, but if you glance upwards and notice that one of the stars is missing you will know that the "sooty star" is cloaking itself once again.
Another star nearby, *T corona borealis*, is normally invisible to the naked eye at 10^m . Every once in a while it will flare up to 2^m - one of the brightest stars in the constellation. It is an example of a recurrent nova.
Zubenelgenubi (α *librae*) is a fine binocular double. Its name means "The Southern Claw", as it was once part of *Scorpius*.
Zubeneschamali (β *librae*) is said to be the only naked eye star that appears green. See what you think!

NEBULÆ No worthwhile nebulae in this area of the night sky.

CLUSTERS NGC 5897 is a loose globular cluster in *Libra*, but needs large binoculars to see it.

GALAXIES There are no bright galaxies visible in *Boötes*, *Libra* or *Corona Borealis*, but the massive galaxy clusters in *Coma Berenices* and *Virgo* are not far away. Sweep round these areas with binoculars on a clear night and you may pick out dozens of faint fuzzballs - each a "star city" like the Milky Way!