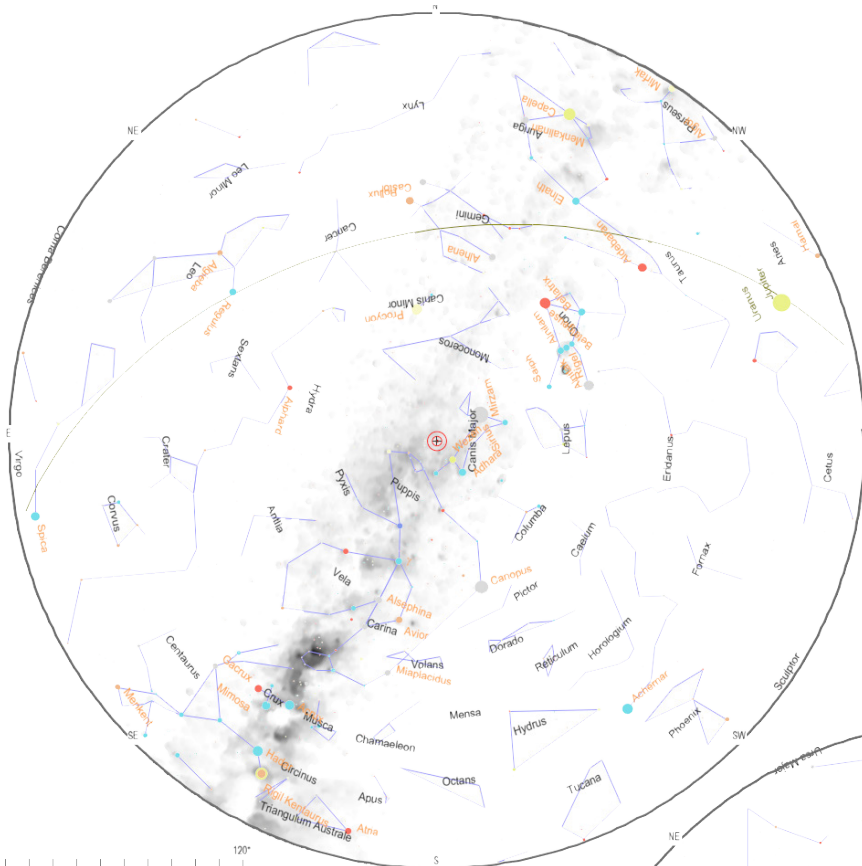


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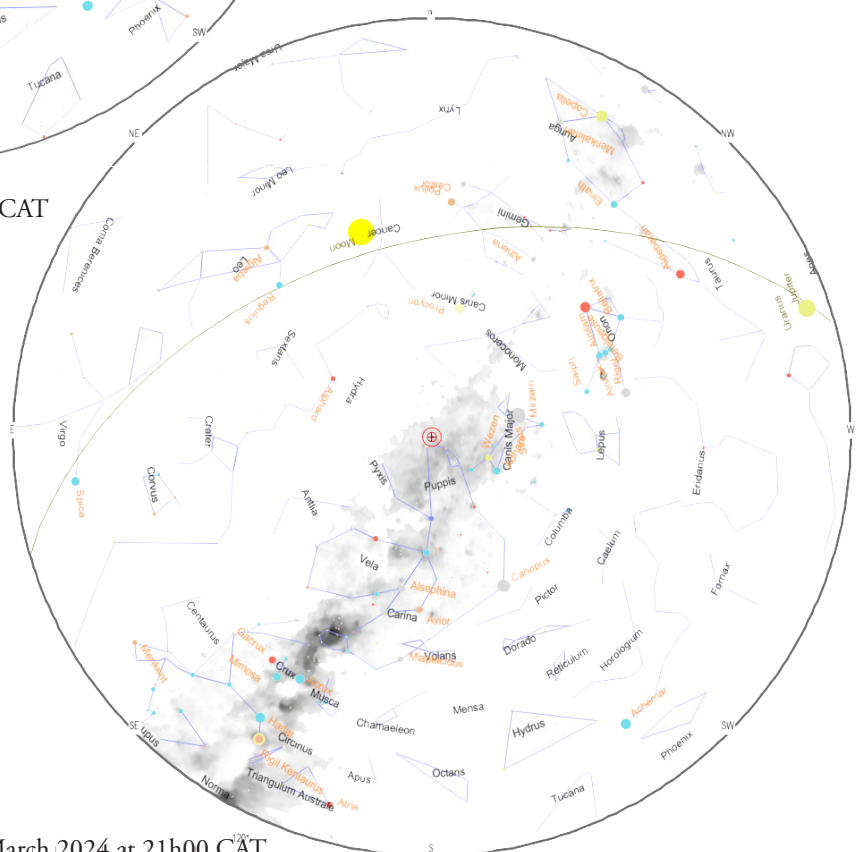
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Astronews March 2024

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Skychart at Windhoek on 10 March 2024 at 21h00 CAT



Skychart at Windhoek on 20 March 2024 at 21h00 CAT

Moon Phases

03 Mar 2024	Last Quarter
10 Mar 2024	New Moon
17 Mar 2024	First Quarter
25 Mar 2024	Full Moon

Solar System

Planet	Visibility	Rise	Culm.	Set
Mercury		07:31	13:34	19:38
Venus		05:11	11:36	18:01
Mars		04:36	11:06	17:36
Jupiter		10:40	16:18	21:55
Saturn		06:10	12:28	18:46

Mercury recently passed behind the Sun at a superior solar conjunction. From Namibia, it is not readily observable since it is very close to the Sun, at a separation of only 2° from it.

Venus remains just about visible as a morning object, returning closer to the Sun. rising at about 04:56 (CAT) – 1 hour and 49 minutes before the Sun, and reaching an altitude of 20° above the eastern horizon before fading from view as dawn breaks at around 06:31.

Mars recently passed behind the Sun at solar conjunction. It is visible in the dawn sky, rising at 04:40 (CAT) – 2 hours and 5 minutes before the Sun – and reaching an altitude of 19° above the eastern horizon dawn breaks.

Jupiter is currently an early evening object, now receding into evening twilight. It will become visible at around 19:45, 42° above your north-western horizon, as dusk fades to darkness. It will then sink towards the horizon, setting 3 hours and 47 minutes after the Sun at 23:17.

Other Occurrences

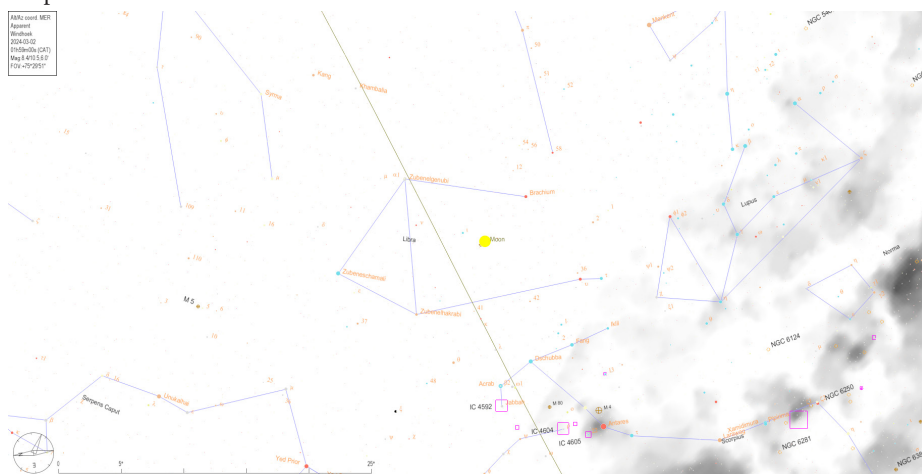
In March evenings Crux will be high in the south, with Canopus in the south-west and Arcturus prominent in the northern sky. Scorpio will start to rise after midnight in the south-east.

Moon and Libra

NGC 5897 is a globular cluster in the constellation Libra. This satellite of the Milky Way, which is quite remote (located about 41,000 light years away), has a diameter of over 170 light years. was discovered in April 1784, by William Herschel.

During 2024 the moon will occult the globular cluster 14 times. Four of these times, the event will occur over southern Africa and two times we will be able to witness it. On March 2 and on May 22.

Shortly after midnight on the morning of the 2nd of March, the moon rising will occult the star cluster, taking about 20 minutes to cover it up. The entire event will last for less than two hours.



Credits: SkyChart: Cartes du Ciel, Data: <https://in-the-sky.org/> ASSA Sky Guide 2024, Picture: San Esteban - <http://www.astrosurf.com>

Constellation of the Month

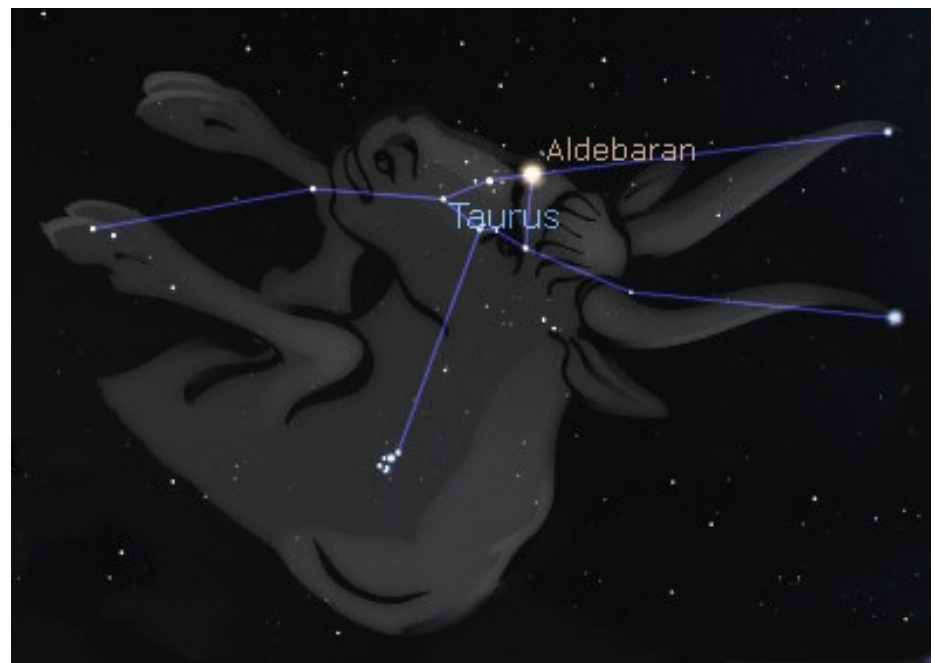
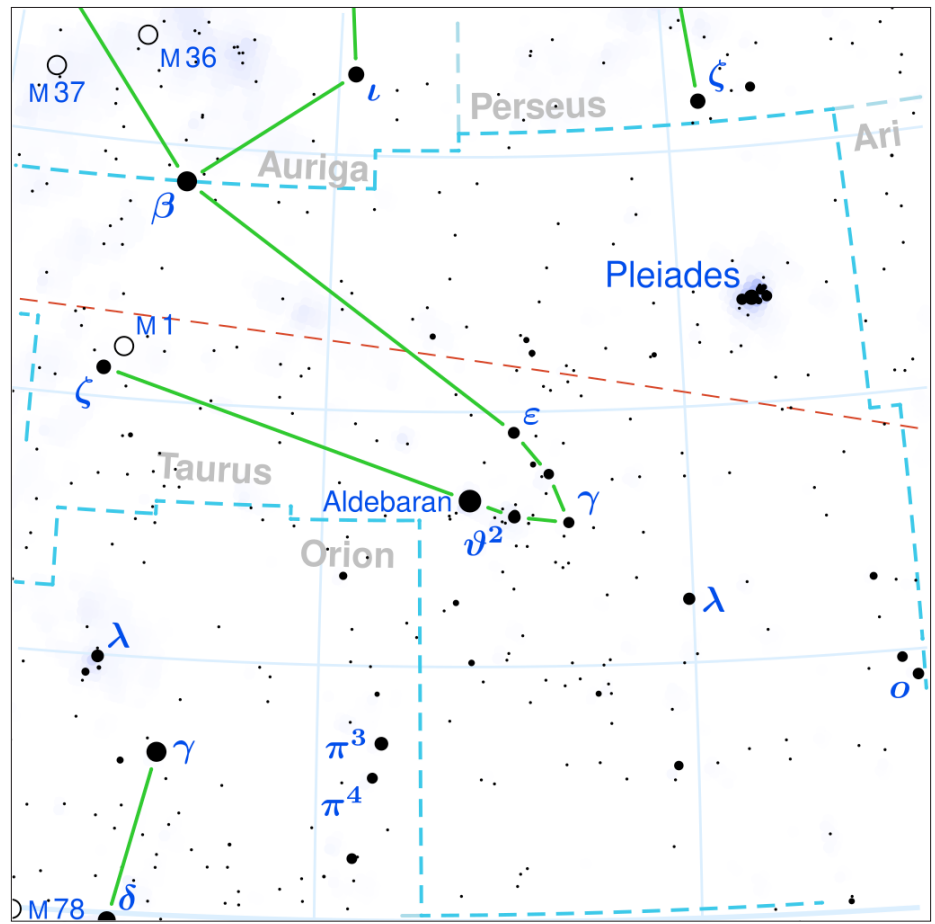
by Simon van der Lingen

Taurus, The Bull, is one of the Zodiacal Constellations, arranged along the ecliptic and Astrologers will tell you that the Sun is in the House of Taurus between 20th April and 20th May each year. This means that Taurus should be directly overhead around midnight during November (it's not, but close enough). It's certainly still visible in the western part of the sky during March evenings, and, as one of our Southern Hemisphere Summer Constellations, is easy to find and certainly worth a look as it sinks towards the western horizon.

Find Taurus by looking first for Orion's Belt, and follow the line of the Belt westward towards a bright, reddish star. This is Aldebaran, the Eye of the Bull, lying at the top of a clear "V" which forms the face of the Bull. The rest of the Bull is more difficult to trace, although the points of the horns are relatively simple.

Greek mythology tells us that Zeus, King of the Greek Gods was spurned by the beautiful Phoenician Princess Europa, but returned to try his luck again, disguised as a beautiful white Bull. Not recognizing him, Europa leapt on the Bull's back and, not giving her a chance to dismount, he immediately ran into the sea and swam towards the island of Crete where his advances may have been more successful.

Aldebaran is a Red Giant, about 15% more massive than our Sun, which has converted almost all of the hydrogen at its core to much denser Helium, and still burning Hydrogen in a shell around the Helium core. The Helium core is much hotter than the Hydrogen it has replaced, and its heat and that of a burning shell of hydrogen surrounding it, have hugely expanded the outer layers of the star so that it is now about 45 times as large as our Sun. Although the core is producing extra heat, it is being dissipated through a much bigger surface area which, as a result, has become cooler, giving the Red Giant its typical reddish colour. Aldebaran will stay like this for a few brief million years more, adding to the mass of its' helium core, until the helium gets hot enough to begin to fuse to Carbon. The extra heat generated by this new process will drive the diffuse outer layers of the star further away, forming a beautiful Planetary Nebula and leaving behind a White Dwarf, super-dense lump of inert but white-hot carbon approximately the size of the Earth, that will very gradually cool to form a giant diamond.



Immediately behind Aldebaran, and forming the "V" of the Bull's face is the Open Cluster we call the Hyades. An Open Cluster is a group of gravitationally bound stars that formed at more-or-less the same time from the same cloud of gas. Gravitational interactions between the closely-spaced stars will tend to eventually tear the cluster apart, so stars in an Open Cluster will

be young, often bright and close together, making Open Clusters rewarding targets for binocular star-gazers. Although it lies in the same direction, Aldebaran is only half as distant as the Hyades and is not part of the Cluster. The Hyades is the closest Open Cluster to us, and binocular examination will reveal many more stars than are visible to the naked eye.

Also clearly visible as a naked-eye object is the Pleiades Open Cluster, also known as the Seven Sisters, to be found further to the west of Aldebaran, still on the line of Orion's Belt extended through Aldebaran. The Seven Sisters were the beautiful daughters of the Greek Titan Atlas, condemned by Zeus to forever hold the earth on his shoulders. While bathing in a river one evening, they realized they were being spied upon by the hunter Orion, who began pursuing them. Realising they could not depend on their father to defend their honour, the Pleiades begged Zeus for help and he threw them into the sky out of Orion's reach. This relief seems to have been only temporary, because Zeus later threw Orion into the same patch of sky to escape a Giant scorpion, so the Seven Sisters continue running before him. The myth of the Seven Sisters seems to have several close analogues in many cultures – Nordic mythology identifies the cluster as the seven daughters of a Troll King chased

by an ardent suitor until caught in sunlight and turned to stone. North American legend identifies seven children lost after being chased by their parents, and Australian Aboriginal legend tells us of seven sisters being courted by three young men (Orion's Belt) hoping to woo them with gifts of honey and witchety grubs.

The Roman Army used the Seven Sisters as an eyesight test for legionnaires (if you can see one, we'll take you) but today only Six Sisters are visible because one of the sisters has moved behind another.

Clearly visible to the naked eye, the Pleiades is spectacular through binoculars, with dozens of bright stars visible.