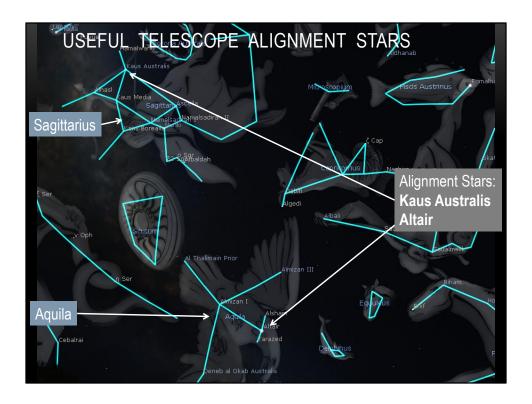
## BAS - MONTHLY SKY GUIDE October 2019

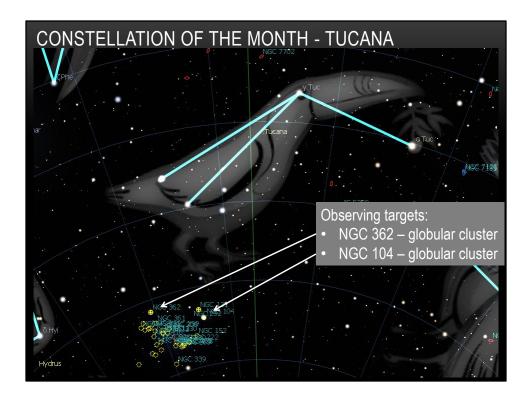
If you are quick you can just catch Scorpius and Sagittarius before they leave our western evening skies. Or look to the north late in the evening to find the huge Andromeda Galaxy low in the sky or seek countless more distant galaxies in the constellation Eridanus.



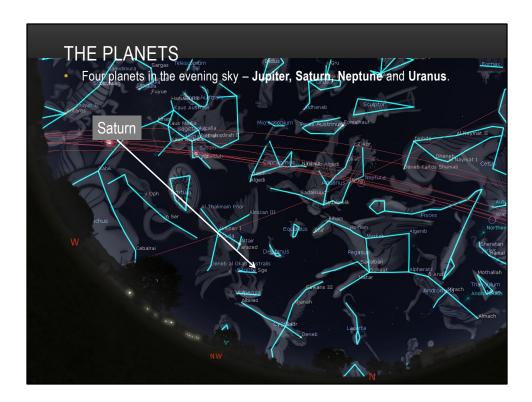
New Moon is Monday October  $28^{th}$ . A full evening of observing from sunset through to about midnight can be achieved for about a week prior to the New Moon. So plan your observing dates from about October  $22^{nd}$  onwards. The slim waxing crescent of the early New Moon setting after October  $28^{th}$  will set after the end of astronomical twilight and so the Moon starts to eat into early evening observing time after the  $28^{th}$ . So make good use of the period around October  $22^{nd}$  to New Moon on October  $28^{th}$ .



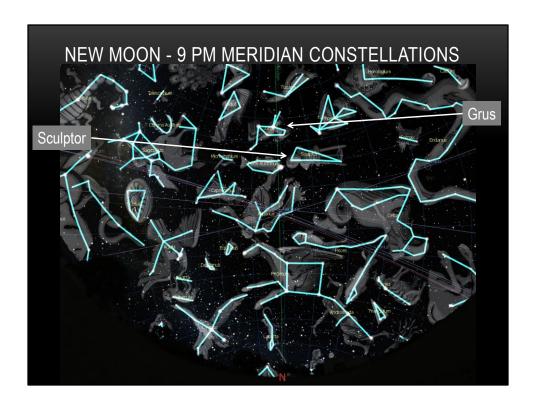
Two potential alignment stars that are not too hard to locate are Kaus Australis and Altair. We have encountered Altair in previous months. Look for the distinctive bright "eye" of Aquila "the Eagle" in the north-western sky. Altair looks a little like a widely separated double star with the nearby "beak" star in the head of the eagle asterism. Now look high in the western sky for the distinctive angular shape of the Sagittarius constellation. The star Kaus Australis marks the bottom of the "teapot spout" in the distinctive teapot asterism of Sagittarius. But be careful to ensure you have the right star in the finderscope and eyepiece as there are countless other stars nearby.



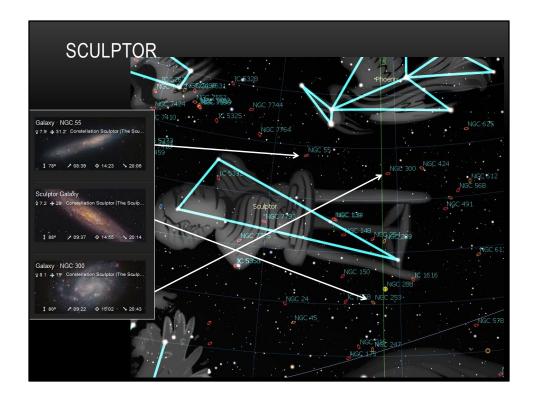
The constellation Tucana, "the Toucan", was created and named by the Dutch astronomer Pieter Dirkszoon Keyser in the late 1500's as a result of new discoveries of lands and animals by Dutch seafaring explorers. But most attention in this constellation focuses on the Small Magellanic Cloud and in particular the spectacular globular cluster 47 Tucanae or NGC 104. Nearby globular cluster NGC 362 is also work some telescope time too.



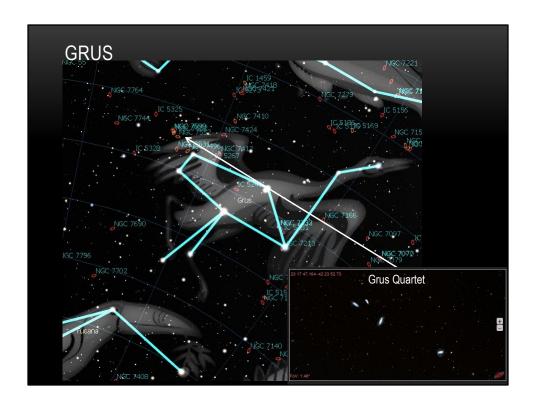
We still have four planets in the evening sky, as we did in September, but they have all advanced a little to the west. Jupiter is now get low in the western horizon and more challenging to observe. Saturn is also heading westward but still high enough to observe in the early evening. Neptune and Uranus continue to rise in the east.



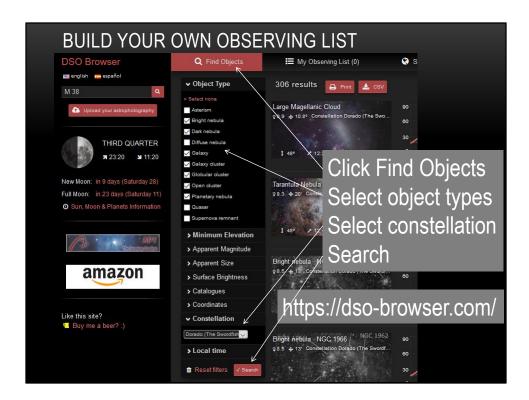
Two commonly overlooked constellations in the southern sky are Sculptor, and Grus, "the Crane". Sculptor occupies a rather sparse patch of sky and its principal stars are not particularly prominent. However the constellation is known for some fantastic galaxies that are easily observable through amateur telescopes. Grus is another constellation that was defined by the Dutch astronomer Pieter Dirkszoon Keyer around 1596. It is also located in a sparse patch of sky however its angular shape and bright star Alnair make it readily recognisable with a little practice.



The Sculptor constellation is best known for its galaxies – close, big and bright. The showiest is NGC 253, also known as the Silver Dollar Galaxy. This galaxy is located just 12 million light years away from our Sun and fills many eyepieces to overflowing. The galaxy is partially side-on and has many prominent dust lanes and a few superimposed stars that could be mistaken for supernova – but check first before claiming your discovery. The galaxy is about 70,000 light years across and so just a little smaller than our Milky Way. NGC 55 is even closer at just 6.9 million light years distant but looks smaller than NGC 253. It is also very elongated and has many dust lanes and some star birth regions. NGC 300 is also closer at 6.6 million light years and is a face-on spiral galaxy. There are also many more distant galaxies to search for in this constellation plus a small globular cluster NGC 288 located 29,000 light years away.

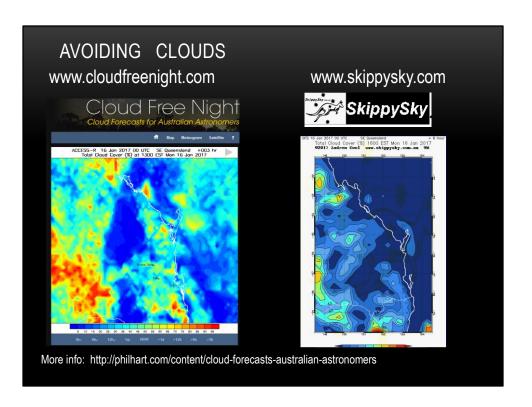


Grus is best known for its galaxies and in particular the Grus Quartet. These four galaxies, NGC 7552, 7582, 7590 and 7599 are located about 94 million light years away and so appear very small in the eyepiece. However they make up for their size with the attractive arrangement of four galaxies in the same field of view. Scouting further around this region of sky can also reveal many other associated galaxies strung across the sky.



Make sure you take a look at the great observing planning tool DSO-Browser before the New Moon period. This is a fantastic tool to help you build a list of objects you can try and find each month.

Just a few clicks on www.dso-browser.com can generate a fantastic observing list of object types you are interested in.



And the find the best cloud-free evenings for observing make sure you check CloudFreeNight and Skippysky as you plan your next observing evening.