June brings the dense central bulge of our Milky Way Galaxy into view in the eastern sky. This is a great time for hunting nebulae and globular clusters as Scorpius and Sagittarius come into view.
So for which evenings should you tell everyone you’ve got other commitments this month? From about Friday June 16\textsuperscript{th} the moon starts setting late enough to give some reasonable dark observing hours before the moon rises late in the evening. After New Moon you will have to wait until the Moon sets to have properly dark sky. So June 16\textsuperscript{th} the 24\textsuperscript{th} looks best this month.
Two prominent and widely spaced stars that make good alignment stars are Arcturus in the constellation Bootes and Antares in the constellation Scorpius, the Scorpion. We’ve pointed out Arcturus in previous months so it should be relatively easy to find by now. Scorpius is an easy constellation to find as it will be high overhead and its curly tail is very suggestive of the arachnid beast. Antares is a great alignment star as its distinctive bright orange colour is impossible to mistake for any other star in this part of the sky. So align with confidence on Antares.
The constellation Lupus, “The Wolf”, sits near the half-man half-horse warrior beast the Centaur and mythology suggests a fight to the death between the two is underway in the sky. Lupus is also not far from Libra and the central bulge region of our Milky Way Galaxy – this means it is a good place to find globular clusters attracted to the gravitational mass of the centre of our galaxy. A few objects worth chasing are the globular clusters NGC 5986 and NGC 5946 respectively located 34,000 and 35,000 light years from our Sun. The much harder to see faint planetary nebular NGC 5882 is also worth a try in a good dark sky.
The Planets

- Jupiter – mid-month Jupiter will be directly overhead in Virgo
- Saturn – mid-month Saturn will be overhead in Ophiuchus
- Pluto – a hard target that needs good star charts. High in star-crowded Sagittarius.

Make sure you use your observing time in June to spend some time on Jupiter – all too soon it will be lost to us in the low western sky. Saturn will be high overhead all month and perfectly placed for observing. If you still need another planetary challenge you could make an attempt on tiny Pluto in the crowded star fields of Sagittarius. You will need your Pluto finder charts in Astronomy 2017 and lots of patients over a couple of consecutive evenings to confirm you have actually bagged Pluto.
A couple of constellations in the sky along the meridian at about 9 PM during the new Moon period are the southern constellation Triangulum Australe and the northern constellation Corona Borealis – their Latin names even indicate they are of the south and the north. Triangulum Australe is something of an astro-desert with just a few catalogued deep sky objects within reach of amateur telescopes – a quick look at a few globular clusters can tick this constellation off an observer’s list. However Corona Borealis, “the Northern Crown”, is a little more interesting with a scattering of distance faint galaxies.
Triangulum Australe is a very challenging constellation for telescope observers. It is home to many galaxies but they are all very distant and very faint. A very dark sky is required to see any of the objects here. Start, and perhaps instantly finish, with the faint galaxy NGC 6183 located 220 million light years away shining at magnitude 12.2 near the bright star Atria. Good luck with this one.
Corona Borealis is home to dozens of galaxies around the crown itself and stretching across to neighbouring Hercules. The constellation is always rather low in the sky and this can make observing its faint galaxies even more challenging. Many of the galaxies are 13th to 15th magnitude and greater so they take a good dark sky to get even the merest glimpse. The 14th magnitude galaxy NGC 5961, located 94 million light years away, is a good place to start. If this one eludes you it might be time to move on to the next constellation.
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.