

January 2008. Happy New Year with many clear night skies for my readers. Nights can be very cold this month, so if you venture out dress warmly!

Comet 8P/Tuttle can be seen in January, however it is mag 6-7 and dropping to mag 13 by April. A small telescope or good binoculars is required and even then do not expect too much. It is only a “smudge” with a “tail”. On 01/01 it is near M33 (“the Pinwheel”) and by February it will have moved way south near beta-Fornacis.

Comet 17P/Holmes can be seen during January hanging around Perseus, still large but now much dimmer; binocs will suffice.

Mars remains close to Earth during the month (it was closest on 12/18). Its size is 15 arcsec, rather small, but details can be made out under good viewing conditions. An 8” scope and 500x will show Mars’ features around 01/08 (new Moon).

Saturn can best be observed after midnight. Its rings now have a tilt of only 7 degrees. The next years the tilt will be less, therefore look now.

Venus and Jupiter are early morning objects. By the end of the month they are “meeting up” in the SE sky just before dawn. This is a very nice sight, two bright ones so close! On 01/31 they are 1.5 degrees apart and the next day, early morning of February 1, as close as 40 arcmin before moving apart.

The Quadrantid meteor shower could be interesting this year! Just north of Her and Boo between midnight 01/03 and 2:00 AM of 01/04. With luck you could see hundred shooting stars in one hour. Notice that they appear to originate from one point and “fan” out.

You should make an effort to observe NGC 1535 in Eri. This pale bluish/green planetary nebula is sometimes called “Cleopatra’s Eye”, truly a beauty at mag 10. Its size is only 18 arcsec and distance from Earth is estimated at 1500 l-y. The central star is a white neutron star of mag 12. You’ll find it at 041416-1244 or near (4 degrees) ENE of gamma-Eridani. To refresh your memory let me write out the coordinate coding. “041416-1244” is RA: 04 h / 14 min / 16 sec & DEC: -12 degrees / 44’. You will need a clear night with excellent viewing so that you can apply some magnification.

Another interesting object is M78 or NGC 2068. Orion has several interesting objects and M78 is easily overlooked, even though it is the brightest diffuse reflection nebula ‘up there’. A cloud of interstellar dust reflects and scatters the light of two bright blue stars, HD 38563 A and B, of mag 10, easily visible inside the nebula. The size of the nebulosity is 8’ x 6’, making the cloud about 4 l-y across (at 1600 l-y distance). The interstellar dust cloud is part of the Orion Cloud Complex. You’ll find it at 054642+0003 or 2.5 degrees NE of Alnitak (zeta-Orionis, the lower-left star in Orion’s belt). NGC 2071 is nice too, but not as bright and is in your field-of-view to the NE.

I’m upgrading our Celestron-11. She is over twenty years old and developed problems with the focuser. The focusing mechanism moves the primary mirror (that 11 inch diameter piece of glass weighs about 30 lbs) and it started to bind a bit. It is a known problem with this type of Cassegrainian telescope. The ‘binding’ results in “flop” of the mirror position, quite irritating, and impairs focusing, extremely irritating. We decided to solve the problem by adding two “Flop-Stops”. That’s really the name and Ironwood Observatory makes it. We’ll lock the mirror and use a MoonLite/Crayford focuser to move the eyepiece for focusing rather than the mirror. In my February column I’ll write more about this and Starsplitters will make the instructions for this modification available to members, who like to, or have to, do this upgrade.

Happy 2008 with many good viewing nights.

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