

Tips for picking a present

By Vernon Whetstone

Amateur Astronomer

Hope everyone had a chance to observe the total lunar eclipse last Wednesday. From where I was it was beautiful. Clear skies and clear western horizon made for some great viewing.

It was the last total lunar eclipse visible from the United States until April 2014.

'Tis the season, as they say. If you have an astronomer on your Christmas list, here are some suggestions.

Point your favorite web browser to either www.astronomy.com or www.skyandtelescope.com for some nice gift ideas, or just enter a subscription to the magazine in your astronomer's name.

Books are always a nice idea for any astronomer for those cloudy nights when viewing is not possible. A few of my favorites are "Nightwatch" by Terence Dickinson, I prefer the spiral bound version.

Also "365 Starry Nights" by Chet Raymo. It is a wonderful guide to each night of the year with some interesting astronomical history included, or you might consider another of Dickinson's books, "Exploring the Sky at Night."

All can be found at www.amazon.com and doing a search for astronomy and books, or by the book's name. There are some ideas for children too, but be careful. Some of the books labeled for children are a little too advanced for them. Read the reviews before buying.

December is a great month to celebrate the birthdays of pioneering astronomers.

Dec. 17 is the birth date of Tycho Brahe. He spent 25 years observing and recording the locations of stars and the movements of the planets from his private observatory in Denmark, all before the invention and use of the telescope.

His observations provided the basis for his associate Johann Kepler to formulate his three laws of planetary motion. He also deduced that the orbits of the planets were elliptical and not circular. His birthday is Dec. 27.

Dec. 25 is the birthday of Isaac Newton who formulated and recorded among other things, gravity.

Wednesday, Dec. 21, at 10:30 p.m. MST is the winter solstice, the date winter officially begins. The Sun will reach its furthest point south and will start its annual trip back north.

On that date it will rise and set over the Tropic of Capricorn, 23 and one-half degrees south of the Equator. The polar bears at the north pole will not see a sunrise and the penguins at the south pole will not see a sunset on that date.

All of that is due to the 23 and one-half degree tilt of Earth's axis. The northern hemisphere is tilted away from the Sun and the southern hemisphere is tilted toward the Sun, hence summers and winters are opposite in each extreme.

I have always been fascinated by pictures from Australia of people celebrating Christmas Day

with a trip to the beach and picnics while we up here in the northern hemisphere are trying to stay warm.

SKY WATCH: Third quarter moon Saturday, Dec. 17. All five of the visible planets will be making a nice showing for the next few weeks.

In the evening after sunset Venus is shining very brightly in the southwest and Jupiter is holding its own in the southeast. Tiny Mercury is at its best this week before sunrise in the southeast, this is a good week to attempt an observation if you have never seen it before.

Finally, Saturn and Mars are visible in the predawn sky. Saturn is still hovering close to the bright star Spica and Mars is lounging in Leo. The red planet will be visited by the moon on the morning of Dec. 17. The pair will rise in the northeast at about midnight and travel across the sky together.