

Planetary Wonderings

July Focus: Jupiter

By Mary-Frances Bartels, NASA Solar System Ambassador

Many readers know that I raise a few animals on our homestead. In the evening the boys and I have feeding and watering chores. Often I will do my chores after the boys have gone to bed. This affords me the time, in the peace of the night, to glance at least briefly through the trees at the sky. Over the past two months I have watched a brilliant “star” climb higher and brighten in the eastern sky. It reached a magnitude -2.6 in June, but now is starting to dim slightly.

Gazing at Jupiter got me thinking. I wondered, what missions does NASA have specifically exploring Jupiter now? The answer is none. Back in the 1970’s NASA received extensive media coverage of the Pioneer, and especially Voyager missions. The 1990’s saw the Galileo mission. In late 2000 to early 2001 Cassini paid a brief visit on its way to Saturn. Likewise, earlier this year New Horizons took a look at Jupiter on its way to Pluto and beyond. Other than that, all has been fairly quiet.

Despite the dearth of Jupiter missions the first decade of the new millennium, there is one in development for the second decade, and others possible further in the future. The Jupiter Polar Orbiter (Juno) will fly to Jupiter and orbit its polar regions in order to understand the planet's gross size and structural properties, as well as measure Jupiter's atmospheric composition, temperature and wind.

I Need Your Help! Do you use astronomy-related software? If so, I would like to know what you use, or have used, and what your opinion of it is. I would like to feature a list of popular software programs in an upcoming column, but need input from readers because there are a lot out there, and I do not have time to evaluate them all.

Resource of the Month: Did you know that you can actually *listen* to Jupiter? Jupiter emits more radio noise than any other object in our solar system except the Sun, and this noise can be “heard” through a special receiver and antenna. This radio telescope can also be used to “listen” to the sun and galaxy in general. Learn more about this exciting project. Check out Radio Jove’s website at <http://radiojove.gsfc.nasa.gov/>.

Activity of the Month: Get outside and observe! Check out the Venus-Saturn conjunction on July 1 around 8:45 PM near the west. Also, on July 16 be sure to view the western sky around sunset. The crescent moon will be less than a degree to the left of Saturn. Just a few degrees to the left of the moon and up a little bit will be both Regulus and brilliant Venus. All four objects should be visible in a single binocular field! The view will be similar on the 17th, except that the Moon will be to the upper left of Venus.

Suggestions, questions, and comments about “Planetary Wonderings” are welcomed and may be directed to stargazer @ keeplookingup.net (remove spaces). Past columns may be found at www.keeplookingup.net (click on “Planetary Wonderings” on the right side of opening screen).

Remember to keep looking up!

Sources: www.aaa.org Amateur Astronomers Association of New York
<http://solarsystem.nasa.gov/planets/profile.cfm?Object=Jupiter> NASA’s Solar System Exploration