Presidents Message – November, 2011

The 1/4 mile diameter asteroid "2005 YU55" is making a near Earth pass as I am writing this. The object's closest point will be about 200,000 miles from Earth. In astronomical terms that is quite close, being within the distance of the Moon's orbit, which averages about 240,000 miles from Earth. If this asteroid did ever impact Earth, it would make a crater four miles in diameter, and 1/3 of a mile deep. If it impacted in the ocean, it would cause 70 foot high tsunami waves.

Some of our member telescope operators are at the Observatory this evening, attempting to image the asteroid during its flyby. We have to get this newsletter in the mail, so I cannot give you the results of their telescope work at this time. However, they will give a report at our monthly meeting this coming Tuesday evening, November 15th @ 7:00 PM.

I have been following this story for a couple weeks and I've found the media coverage of the event to range from accurate (rarely) to comical. Last week Dan Vergano, a journalist for USA Today, wrote an article that was titled "2005 YU55 to make 'spectacular' display". He then goes on to describe the asteroid as "carbon-colored and dark". He was accurate about that because it is a C-Type asteroid containing carbon based materials. It has a low albedo, meaning it is not very reflective, and will be difficult to see. Vergano's article is accompanied by a graphic from Sky & Telescope magazine, which shows a family standing in their backyard gazing up at the asteroid zooming through the constellation Pegasus, without benefit of binoculars or telescope. Quite "spectacular", heh?

This past weekend Marcia Dunn, of the Associated Press, posted an article which was both accurate and well researched. She pointed out that this is Earth's closest encounter of a relatively "large" object in 35 years. She stated that the asteroid passes us every 200 years in its orbital period; and that NASA is "100 percent" sure that the asteroid is not a threat to Earth. She goes on to say that scientists are interested in determining if the asteroid is "pockmarked with craters and if it contains any water-bearing materials or even frozen water". Dunn also states that the asteroid will be difficult to see because, "amateur astronomers would need a 6 inch, or bigger, telescope and know exactly where to look to spot it". So much for Dan Vergano's "spectacular display" description.

In other news, this week Russia launched an unmanned probe toward Phobos, a moon of Mars. The daring plan is to have the spacecraft land on Phobos, collect a seven ounce soil sample, and return it to Earth. That is a very ambitious mission. This is Russia's first interplanetary flight since the time of the old Soviet Union.

Mike Thomas

October, 2011

October 2011 Meeting Minutes

- **Mike gave a report on the recent theory that the Universe is expanding at an accelerating rate.**
- **Jim Bean gave a solar weather update, and a report on his student's data collection.**
- **Dr. Tom Herring gave an excellent lecture on CCD Image Sensors.**

WNAS Officers

President	Vice President	Treasurer/Secretary	Newsletter Editor	Webmaster
Mike Thomas	Robert Collier	Brian Guerin	James Bean	Doug George
mnethomas@sbcglobal.net	collier@wnc.edu	zapkgbg@gmail.com	jbean@carson.k12.nv.us	doug_george@msn.com

Speaker info for the ***Tuesday, November 15, 2011 @ 7pm *****membership meeting:

Evening program for the 7:00 PM, Tuesday, November 15th monthly membership meeting:

"Members Star Party"

For the first time, in a long time, we will have a member's star party after the business portion of the meeting. So bring your own telescope or use any of the Observatory's telescopes and explore the night sky. Stay as late as you wish, interact with other members, get assistance from our telescope operators, learn about the Observatory, or just hang out. This is your night. Bring guests if you wish, and be sure to heavy coat, and maybe a hot beverage. If the viewing is bad, due to weather conditions, we will have a PowerPoint Lecture, topic to be determined.

Events Calendar

~ November 2011 ~						
Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
		1	**2** Moon 1st Qtr	**3**	**4**	**5** Star Party
6	**7**	**8** Asteroid 2005 YU55 Flyby	**9**	**10** Full Moon	**11**	**12** Star Party
13	**14**	**15** ***WNAS Meeting 7pm JCDO***	**16**	**17** Leonids Meteor Shower	**18** Moon Last Qtr Leonids Meteor Shower	**19** Star Party
20	**21**	**22**	**23**	**24**	**25** New Moon Partial Solar Eclipse; Antarctica	**26** Dark Skies Star Party
27	**28**	**29**	**30**	**Notes:**		

	~ December 2011 ~					
Sun	**Mon**	**Tue**	**Wed**	**Thu**	**Fri**	**Sat**
*Total Lunar Eclipse; The eclipse will be visible throughout most of Europe, eastern Africa, Asia, Australia, the Pacific Ocean, and the North America				**1**	**2** Moon 1st Qtr	**3** Star Party
4	**5**	**6**	**7**	**8**	**9**	**10** Star Party Full Moon *Lunar Eclipse
11	**12**	**13** **Geminid meteors**	**14** **Geminid meteors**	**15**	**16**	**17** Star Party
18 Moon 3rd Qtr	**19**	**20** ***WNAS Meeting 7pm JCDO***	**21** Winter Solstice 05:30 UTC	**22**	**23**	**24** Star Party Dark Skies New Moon
25	**26**	**27**	**28**	**29**	**30**	**31** Star Party