

NEWS From the 'Little-Blue 22' at Sandlot Observatory

by Gary Hug

The last 2 weeks I was able to recover 3 comets (see the links to the MPEC's Minor Planet Electronic Circulars at the bottom) with the help of my new .56 meter reflector and the venerable, now decade old, ST9e CCD Camera. I have dragged, kicked, and brutalized the ST9e through 10 years of service every clear night I had available; that is when I wasn't using Farpoint Observatory's 0.7 meter and STL1001e CCD Camera during Farpoint's Near Earth Object follow-up program. For three years, MPC #734, Farpoint, contributed thousands of follow-up observations on objects down to 22nd magnitude.

Moving out of the city of Topeka to a small rural setting and relatively dark skies in 2003, I built Sandlot Observatory in my backyard and quickly gained a Minor Planet Center code number H36. Until recently, I used a 12" LX-200 Schmidt-Cassegrain for almost all of my work at Sandlot Observatory. During the last two years I've been building what I now call the 'Little-Blue 22'. It is a 22" (.56 meter) reflector on a fork-mounted equatorial. It was placed in the observatory (after tearing down one wall to get it in) this last May, and the 22" mirror from Discovery Optics arrived in late July. For several months I was tweaking the alignment and baffles until I was satisfied I was close to optimum. (There's always room for more tweaking, of course.) Of particular note is the baffle I designed for the focuser tube made from black Delrin plastic. I think it may improve the Tombaugh's performance to build and place a similar baffle in its CCD carrier tube.

The marriage of the ST9e with the overbuilt (approx 1,500 lbs.) 22" and coupled with the convenience of operating out of the 'backyard' has proved quite fruitful.

With a focal length of 92.4" the ST9e provides a 1.74 arc-seconds/pixel resolution, nearly a perfect balance of sensitivity and resolution needed for astrometry of faint objects. During the last 6 months I have reported hundreds more NEO follow-up observations and discovered 60 more minor planets, (asteroids, SSSO's or whatever other name the I.A.U. has for them now). Included in the discovery list is a Jupiter Trojan asteroid. Imagine an object that is 5 A.U.'s out, shares an orbit with Jupiter, and discovering it from my backyard! Lately I've been concentrating on recovering comets along with my usual NEO follow-up. During the last lunation's 'dark run' I was fortunate enough to recover 3 comets; P/2005 R2 Van Ness, P/2002 O8 (NEAT), and P/2002 CW134 (LINEAR). Although P/2005 Van Ness was about a 1/2 magnitude dimmer than the other two, it was well placed at 50 to 60 degree altitude at the time of recovery, so it was actually easier to find than the other two which were not higher than 30 degrees up at my site.

<http://www.cfa.harvard.edu/mpec/K09/K09C19.html>

<http://www.cfa.harvard.edu/mpec/K09/K09C03.html>

<http://www.cfa.harvard.edu/mpec/K09/K09C04.html>

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