

# Nova Delphini 2013

*Telescope:* **8x40** (Nikon 8×40)

*Time:* 2013/08/15 20:30-22:25UT

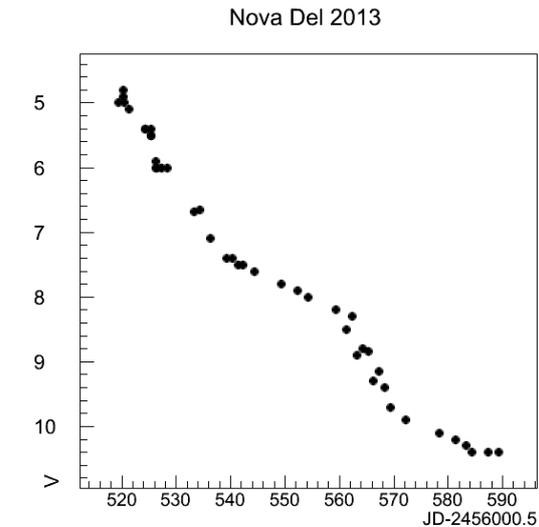
*Location:* Říčany

*Weather:* Bad transparency with strong haze near horizon but zenith was quite good.

I did not want to go out this evening at all. There was thick strong haze up to about 30 degrees above the horizon. But as I learnt that there was a bright nove in Delphinus, I took at least my Nikon 8×40 binocular and went out for what I though would be a quick session. At the end I spent on our terrace almost two hours as I rediscovered a pleasure of observing through small binoculars. I did it in past under darker skies but I never tried this from our backyard. I thought that the sky is too bright for low power wide views. Sure, many objects that I looked at this night would look under the darker skies much better. But I was quite surprised how many objects were not only detecable but also quite beautiful.

But let's start with the nova. I located the star easily with no problem and my estimate of its visual brightness was  $V=5.0$ . This was bright enough to try to see it with naked eye. In moments with smaller haze, I could glimpse it from time to time, together with nearby  $V=4.8$  star. This star was slightly easier to notice. I decided to watch the nova as much as possible. In total I was following the star till late October and I made about 40 estimates of its visual brightness. Light curve was showing at the end several interesting bumps and knees. I have also noticed that nova's color changed from pure white to yellow and latter to red.

Funny thing is that I could have discovered the nova independently the night before. I was sketching planetary nebula NGC6905 in Telementor. If I were star hopping to it from different direction, I would have noticed probably a bright star missing in *Uranometria 2000.0*. Well, may be next



time I will have more luck.

When I was done with the nova I just sit on our terrace and started looking for some larger clusters and other objects. In the beginning, I was just picking the objects from my memory but later on I brought *Uranometria 2000.0* to identify some of my unexpected findings. Here is what I saw that night.

In the place of open cluster **NGC 6940** (6.3v, 31'), I saw large cloud of stars elongated in north-south direction. I was not sure if the whole cloud was the cluster or whether the cluster was just a part of it.

Galaxy **NGC 224 (M31)** was visible very well together with its bright stellar nucleus surrounded with bright central bulk and extended fainter outer parts.

I was surprised that I could trace in those unfavorable conditions the well known shape of nebula *North America*, **NGC 7000** (100'×60'). Especially the contrast between

the bright nebula and the dark Mexican See was quite vivid.

Encouraged by the view, I decided to go for some less known objects. The first that came to my mind was open cluster **NGC 6709** (6.7v, 13') in Aquila. It was quite distinct small misty spot. Open cluster **NGC 6633** (4.6v, 20') was a showpiece with its more than ten bright stars and elongated shape. Nearby cluster **IC 4756** (4.6v, 40') was more difficult even though its overall brightness is the same as of NGC 6633. But with averted vision, I could see large misty cloud which was peppered with faint stars. It was showing some very mild central condensation.

Next showpiece was double star  $\delta_{12}$  **Lyr** (5.6v+4.3v, 10') and open cluster **Stephenson 1** (20'). I was taken aback by vivid colors of the bright pair showed in this binocular. The brighter one was orange while the second component was nicely blue. I don't remember such intense colors from views through my other telescopes. As for the cluster, it was faintly visible with averted vision as it just started to separate from the background.

Then I checked globular cluster **NGC 7078 (M15)** (6.3v, 12'). It was distinctly non-stellar and looked like small rounded misty spot with central condensation.

Now, it was time for another type of DSO, planetary nebula. **NGC 6853 (M27)** (7.4v, 8.0'  $\times$  5.7') showed with averted vision as a very bright rounded spot. Nearby globular cluster **NGC 6838 (M71)** (8.4v, 7.2') could be felt as a small misty spot. Bronchi's Cluter, asterism **Cr 399** (3.6v, 60') was of course striking object. Nearby open cluster **Stock 1** (60') was quite rich, however due to starry background, it was not too distinct. It was large irregular group of fainter stars.

Then I tried to go more south but I had not good luck in this hazy area, neither with globular cluster **NGC 6981 (M72)** (9.2v, 5.9'), neither with asterism **NGC 6994 (M73)** (8.9v, 2.8'). So I went back to the area near zenith.

Globular cluster **NGC 6779 (M56)** (8.4v, 7.1') was nice small misty cloud. I noticed nice orange bright star just northwest of the cluster. As I have learnt at home, this star (HD180450) has color index of  $B - V = 1.67$  and it is red giant of spectral type M0III. This interesting star is about 1300ly away from us.

I finished the night with open cluster **MGC6913 (M29)** (6.6v, 10'). It looked like a small misty spot.

**Alexander Kupčo**