
Gaetano Lauritano

Giugliano in Campania,
Naples, Italy
gaetano.lauritano@alice.it

Abstract: This report submits CCD measurements of ten pairs, observed in the period April 2012 – July 2012. All measurements were made at my urban location of Giugliano in Campania (Naples) with a Newtonian 8" F5 on an equatorial mount.

Introduction

Between April 2012 – July 2012 I performed primarily visual observations of several doubles. Some of these pairs I also performed measurements with Webcam Philips Vesta 675 with a IRCut filter at the prime focus of my Newtonian Skywatcher 8" F5. In some cases I also used a 2X apochromatic Barlow. For astrometric measurements I used the excellent software Reduc v4.6 by Florent Losse.

Method

Usually I select the systems to be observed in the free software Sky Charts, comparing the parameters with the WDS. Additional information is collected at the website http://stelledoppie.goaction.it. When all members of my family are in bed for the night, I go to the east balcony of my house, Figure 1. A neighbor looks at me, intrigued by the instrumentation in my possession.

The software for video capture is GiGiwebcapture. After capturing movies I return to the binary systems to make a visual observation.

**STF2264**
It is also known as 95 Herculis is veryr beautiful, bright pair in Hercules. The primary was sky blue and its companion was a rich, golden yellow, Figure 2.

**STF2894**
A nice pair whose components are represented by a white star and a red companion. The system is located on the border with Pegasus, Figure 4.

**STF3049**
It is also known as Sigma Cassiopeiae is a binary star in the Cassiopeia. The two stars seems to have the same color of blue, Figure 3.

**STF2841**
Easy split. At the eyepiece there was some color contrast of a whitish yellow primary with a tint of blue on the secondary, Figure 5.

**STFB11**

Flamsteed 1 Peg, a nice couple in Pegasus. Characterized by a strong difference in magnitude, Figure 6.

![Figure 6: STFB11](image)

**AGC15AB**

Beta Cassiopeia, also known as Caph, although not the main star is the brightest in the constellation of Cassiopeia, having an apparent magnitude of 2.2. Caph is a yellow-white giant star of F2 spectral type, with a surface temperature of 7000°, slightly higher than our sun and is just about 50 light years from us. It is a variable star, the brightest of the class of Delta Scuti, whose magnitude varies between +2.25 and 2.31 with a period of .5 hours. Caph is almost four times the radius of the Sun and is 28 times brighter. The companion has an orbital period of 27 days, Figure 7.

![Figure 7: AGC 15](image)

**STF99**

Not difficult to find, Primary bright and yellow, companion elusive, Figure 8. About this pair I've found an interesting files on the net. [http://adsa.bs.harvard.edu/full/1992Obs...112_125B](http://adsa.bs.harvard.edu/full/1992Obs...112_125B)

![Figure 8: STF 99](image)

STFA4

This pair is composed of two yellow giants and is located near the open cluster NGC 752, Figure 9.

References

Stelle Doppie - http://stelledoppie.goaction.it/
Florent Losse http://astrosurf.com/hfosaf/
Andrea Console http://andreaconsole.altervista.org
Skychart - http://www.ap-i.net/skychart/
The Washington Double Star Catalog (WDS), U.S. Naval Observatory.

Table 1: Measurements of the 10 double stars.

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<thead>
<tr>
<th>NAME</th>
<th>RA+DEC</th>
<th>MAGS</th>
<th>PA</th>
<th>SEP</th>
<th>DATE</th>
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Gaetano Lauritano began to scan the sky in 1989 with a small 60/700. Attracted by all objects beyond Earth's atmosphere is affecting recently astrometric measurement of double stars. He observes from an urban location in Giugliano in Campania, Napoli, Italy. He maintains the blog “The Nights of Wonder” (http://thenightsofwonder.wordpress.com/), devoted to his astronomical works.