

Discovery of a New Bright Pair in Hydrus

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Abstract: I report on the discovery of a new double star in Hydrus. Investigation of the stars' proper motion, magnitudes and spectral types indicates that the pair may be a binary system.

While preparing a book on deep sky objects in the southern hemisphere, I discovered an interesting bright pair of stars in Hydrus. I was consulting the *Desktop Universe* software and noticed the pair HD 24062 (mV 7,42) and HD 24085 (mV 7,57), which are located at right ascension 03h 44m 46.8s and declination $-70^{\circ} 01' 35.1''$. This double star is not cataloged, and the astrophysical parameters seems to show that the stars form a physical pair. Figure 1 is an image of this pair.

The distance to the stars according to Hipparcos is 179.5 and 170.3 light years. Given the uncertainty in distances by Hipparcos, these stars may be situated at the same distance.

The radial velocities of the stars are similar: +27.1 and +27.3 km/s.

The two stars have the same spectral type (G0V) and very similar magnitudes. These data confirm the possibility that the stars are at the same distance.

The proper motions show that the two stars move in the same direction. The proper motion of HD 24062 is -11 mas/yr in RA and -97 mas/yr in declination. HD 24085 has proper motion -9 mas/yr in RA and -97 mas/yr in dec.

Unfortunately, living in the northern hemisphere, it is impossible for me to measure this double star. However, I did use *Guide 8* software to obtain a measurement on my computer. With *Guide 8* the separa-

tion is 1.27 arcminutes and the PA is 83.1° .

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Figure 1: The new double star can be seen in the center of this image from "Desktop Universe, Main Sequence Software"

Mr. Ferrero is author of the book Splendeurs du Ciel Profond.