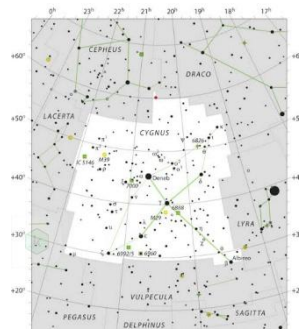


ASSA SHALLOW AND DEEP SKY OBSERVING BULLETIN
TARGET: THE BEJEWELLED EYE OF THE SWAN: ALBIREO (BETA CYGNI)

SHALLOW AND DEEP SKY DIRECTOR: COLIN STEYN



1 OVERVIEW

Albireo, the bejewelled eye of the celestial Swan (Cygnus), is one of the most beloved double stars in the night sky. Though not physically bound, its striking colour contrast makes it a favourite among amateur observers and astrophotographers alike.

- Constellation: Cygnus
- Apparent magnitude: -3.1
- Distance: 430 light-years
- Type: Optical double (not gravitationally bound)

2 SHALLOW SKY PERSPECTIVE

Albireo is best appreciated through small to medium telescopes. Even a modest 60mm refractor reveals its stunning duality:

- Albireo A: A golden-yellow giant (spectral type K3II)
- Albireo B: A sapphire-blue main sequence star (spectral type B9V)

This colour contrast is not just aesthetic – it's a vivid demonstration of stellar temperature differences. Albireo A glows at 4000K, while Albireo B blazes at 11000K.

OBSERVATION TIP

Try viewing Albireo during moonlit nights or from urban skies. Its brightness and colour contrast punch through light pollution which in turn dim the glare, making it a perfect target for outreach events or casual stargazing.

3 DEEP SKY PERSPECTIVE

While Albireo itself is an optical double, the surrounding region in Cygnus is rich with true binaries and deep sky treasures. Within a few arcminutes, observers can spot several faint double stars – some with separations as tight as 2.6 arcseconds.

ASTROPHOTOGRAPHY NOTE

High resolution imaging with HDR techniques reveals subtle diffraction halos and colour gradients. A recent image captured with a Stella Mira 80 ED telescope and ZWO ASI 678 MC camera showcased Albireo's vivid hues and nearby doubles.

ADVANCED CHALLENGE

Try resolving the nearby pair with magnitudes 14.3 and 14.5-visible in long-exposure images but elusive to the naked eye. This is a rewarding test of your optics and processing skills.

4 SEASONAL VISIBILITY

Albireo is best viewed from late Winter to Spring (August to October). Look for Cygnus rising in the Northeast after sunset. Albireo is the bejewelled eye of the Swan.

5 CO-ORDINATES

- RA: 19h 30m 43s
- DEC: +27° 57' 34"

6 CONCLUSION

Albireo reminds us that beauty in the night sky isn't always about deep space mysteries – it can be found in the simple elegance of colour and contrast. Whether you're a seasoned observer or just beginning your journey, Albireo is a must-see gem.

May you have clear skies and happy observing!

Colin Steyn
15 October 2025