

Our Night Sky for February 24th, 2025

Most of our planetary neighbours are in our night skies most evenings this week. The planets are slowly spreading out across the solar system.

But this week I offer a star that is in the news. When is the star in Corona Borealis going Nova?

Let's find the constellation before the Nova erupts and then when the eruption occurs you will spot the different star.

Corona Borealis is shaped like a crown and is located between kite shaped Boötes and the square blocky body of Hercules which are due east after 8 and then well above due east and easy to spot all evening. The star of interest is located just below the crown on the left and is quite dim and would require a telescope to see it in it's quiet state. It is actually a two star system or binary. One of the stars is a small very dense white dwarf. And the companion star is an enormous red giant. The two stars orbit fairly close together and the red giant is spilling hot gasses off to the smaller very dense star. It takes about eighty years for the white dwarf to accumulate enough mass to overcome the pressure from the nuclear processes deep in the star and it collapses and rebounds into a nova every eighty years. It was due to explode in 2024 so it will happen very soon. It will be about as bright as Vega, the bright star to the left in Lyra and you have spotted a truly once in a lifetime event in Our Night Sky.