## Our Night Sky for October 13th, 2025

Last week I suggested you look for an area of the universe on a galactic scale that is so empty that you could travel at extreme speed for hundreds of thousands of years without encountering anything but empty space.

This week we will look for an area in our own galaxy that is so densely populated with stars that it is unlikely it would ever get dark at night.

If you look left of the familiar horn shaped Corona Borealis high in the western sky, a little to the left of the horn shape is a large lop-sided box. Scan down the right side of this box with your binoculars and you should easily find a large ball of stars. This is the constellation of Hercules and the dense ball of stars is called the Hercules Globular Cluster.

The Milky Way galaxy is home to as many as 150-star clusters. The Hercules cluster is one of the largest, containing as many as 500,000 stars. Imagine living on a planet orbiting one of these suns. The night sky would be so densely covered in stars that it could never get dark at night.

You may think that the Milky Way galaxy is evenly populated with billions of stars but in fact there are approximately 150 areas with a similar density of star population, and many more areas called open clusters still with high populations but not quite the same density. The stars in these clusters are generally all about the same age meaning that they probably all formed at the same time from huge clouds of gas due to some cataclysmic event. A very interesting area in Our Night Sky.