

Our Night Sky for September 8th, 2025

Last week I suggested watching the constellation Bootes as it approaches the western horizon and shortly it will set before sunset and not return to our sky for a couple of months.

Every night as our side of the earth rotates away from the sun, we are looking at a repeating carpet of stars. Each night we see the very same stars that we viewed a year ago on this same date. The earth is tilted on its axis seventeen and a half degrees compared to the concentric circles that all of the planets follow. This plain is called the ecliptic, and it is fairly easy to identify if you find the location of a couple of the outer planets and follow them for a few weeks you will see a repeated path across the sky. It is fairly high across our sky in the summer and lower in the winter month.

It seems to be a lot more complicated as you identify the inner planet, the ones closer to the sun than we are. Although they still follow approximately the same plain, from our perspective they don't seem to follow that path but are closely tied to the sun. And they are. But understanding how they appear in our sky is much more difficult to visualise. Venus and Mercury move with the sun as they move around the sun. From earth they appear to lead or trail the sun so they will be in the sky just after or just before sunrise or sunset. Early observers knew these objects were special and called them wanderers, but it took centuries for science to explain the planets motion in Our Night Sky.