

Our Night Sky for June 22 nd, 2026

We are enjoying the first day of summer. The highest number of hours of sunlight at about 17 hours of sunlight and roughly 7 hours of darkness. My birthday is the 21 st of June and as a little kid I remember thinking what a lucky kid I was to have the most hours in a day. Of course, as I got older, I realized that it wasn't that there were more hours in these summer days but a sliding balance between less dark hours and more daylight. But we are lucky to enjoy these extra hours of daylight to both enjoy the summer sights and for forests and agriculture to get this extra boost of warmth to help the growing season ahead.

There is a nearby star we can learn a lot about. Our sun follows the same physics and nuclear processes as all other stars. We are able to classify age and color in a diagram called a H - R diagram. If you plot a star's color and therefore it's temperature and size or mass you can make estimates of a it's age and the processes occurring inside as well a its relative remaining life by estimating it's remaining fuel and rate of consumption,

Deep inside the sun immense pressure pushes four hydrogen nuclei together and converts them into helium with a tiny bit left over. That tiny bit left over as illustrated by Einsteins famous equation $E=MC^2$, that tiny bit left over in the proton -proton reaction is what powers our universe and gives us Our Night Sky