

Key notions in astronomy

[Science](#), [Physics](#)



A new telescope specially designed to meet the needs of this problem can be helpful. This telescope should be equipped with the latest technology. It will target the ultraviolet wavelength of the electromagnetic spectrum. My grand telescope will roughly have a diameter of 450 in and a focal length of 660 in. The project will be very expensive and international support will be definitely required. Total expenses involving construction, transportation, and installation can surpass \$160m.

If the greatest auroral storm or the largest solar flare to date hit the Earth on August 01, 2013 and I were to visit New York City that day, I would expect the sky all over to have a deep crimson hue. Everything around me would brighten up in the most brilliant and intense way due to the solar flare. All electrical and wireless systems will fail which will cause a lot of damage worth trillions of dollars. When power systems will shut down, the city will be badly affected as will my personal life. Everyone will have to survive without electricity and power of any kind. It will probably take me a long while to get back home.

Our sun is quite common in the universe and is not at all unique. It is basically a ball of plasma of average size. Trillions of other stars of the same size as the sun and even bigger than it are scattered around the universe. Stars also produce their own light, just like the sun produces its own light. This makes the sun very common. However, what makes the sun unique among other stars in the galaxy is the fact that the sun is closer to the earth than any other star in the galaxy. Also, no other star can compete with the temperature of the sun. Light from the sun reaches us within minutes, while light from other stars can take years to reach the earth.

Stars compose heavier elements from lighter elements by their fusion during their lives. These elements are then thrown out of stars into space and they form new stars. Humans have these heavier elements within them. Our earth and the remaining universe are also made out of these elements which came from stars. So, we are in a sense made up of star stuff. This means that our origin is related to elements heavier than hydrogen or helium. Those elements responsible for our origin and the world's origin came from stars. Water in the human body would not be possible without these larger atoms because, without oxygen, hydrogen or helium alone could not have done anything.

During the sun's transition when it will blow 100 times larger, the earth's atmosphere will become deleteriously dry because all water vapors and water resources will become depleted. It will become very hard to live on this planet then because, with the sun's transition, the earth will become a harsh, dried-out, and an unfriendly place to occupy. All terrestrial life on the earth will become extinct due to no water and inhospitable conditions. No other planets will be habitable as well and the earth will be pulled into the sun.