

Space weather assignment



**ASSIGN
BUSTER**

On Earth, we experience wind storms, electric storms, hurricanes, blizzards and heat waves, just to name a few. Who would have thought that in beyond our atmosphere, in outer space, there is also weather occurring? It is true.

Although the space weather does not occur in the ways in which most people, those that are not scientists or astronauts, would think of. Space weather is the “turbulent and dynamic” outputs from the Sun. These outputs can be in the form of light or particles that are electrically charged.

Our magnetosphere protects from much of these outputs, but it can still affect our satellites or other objects we have orbiting in space. Damage to these or temporary delays can cause major communication and technology failures on Earth. (NASA, 2006 up. 1, 4). There are people who know what NASA stands for: National Aeronautics and Space Administration, even if they are not space freaks. There are also some people who aren't aware of the exact meaning for the acronym NASA, but they know that it has something to do with space.

If you ask the “average Joe” what a CME is, you could get a variety of answers, most likely the wrong one. A CME is a coronal mass ejection. A coronal mass ejection is an eruption of plasma from the Sun's outer layer that becomes what is known as a solar storm. Fortunately, when God created this massive Earth, and solar system, he provided some amazing things to keep us safe. One of those amazing creations was an intricate magnetic field, which is referred to as the Earth's magnetosphere.

The magnetosphere is able to deflect 99% of the plasma that the Sun shoots out, the coronal mass ejections. Today's society is centered around

technology. MPH players, cell phones, internet, Bluetooth, plasma televisions, video games, etc. Most of these vices require some type of satellite communication or electric power. When a solar storm is in full effect, electric, radio and satellite operated objects may not be in full working order. When this happens, the technology that our society relies so heavily on can be delayed or sometimes even disrupted.

Which is what happened to many Canadian residences in 1994 when a coronal mass ejection took out two satellites. When this occurred, there were many people without telephone communications for months. Although there are many negative aspects of coronal mass ejections, there is one beautiful production that can be caused from Acme's. Not everyone in the world gets to experience these, but those in the northern areas and southern areas do, and that is the auroras.

When something electric is happening in space to Earth, bright lights of various colors are able to be seen near the north and south poles. These bright waves of light across the sky are visible signs of "magnetic mayhem" (NASA, 2006) that is going on in our atmosphere that can be seen on Earth.

References National Aeronautics and Space Administration. (2006). Space Weather. Retrieved on April 2, 2010 website: http://show.Noncom.NASA.Gob/sportscaster/Lancaster/Swoops_Webb.PDF. Space Weather By Elizabethans