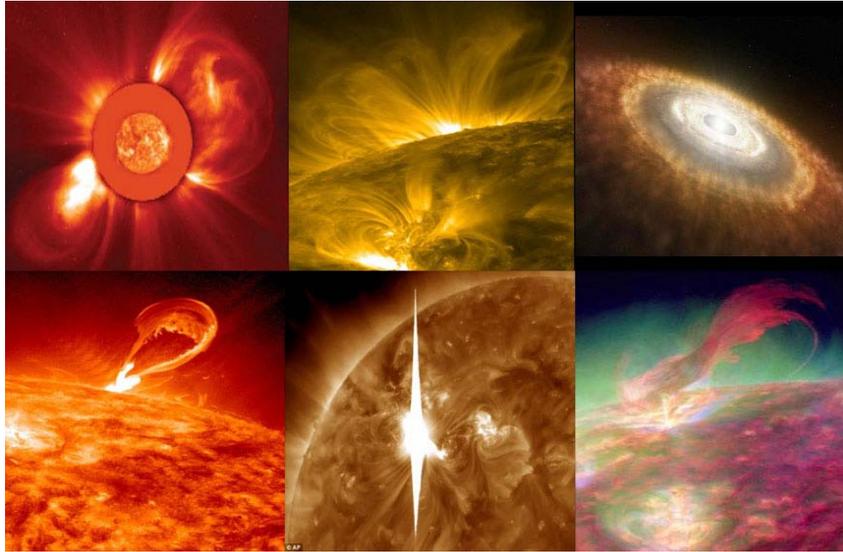


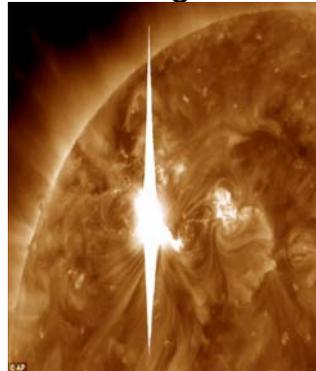
DISASTER PREPAREDNESS FOR A SOLAR FLARE, EMP OR CORONAL MASS EJECTION EVENT



Main Sources of EMP's

Solar Flares and Coronal Mass Ejections,
Coronal Holes and Lightning Strikes

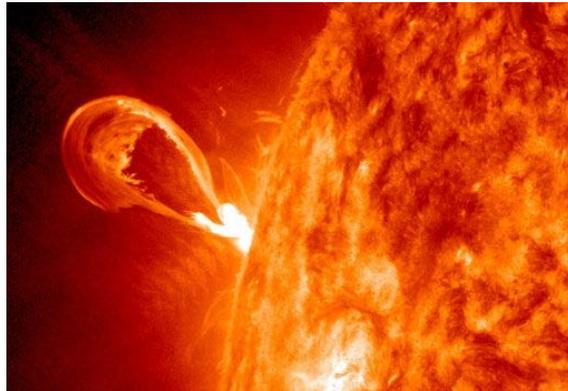
Since 774 AD there have been 6 major solar flare events that impacted the land, people and technology of the period around the world. Nov. 4, 2003 an X-45 solar flare erupted it was not earth directed. The cyclical output of the sun has a major influence on the earth's weather. A large Solar Flare, CME, EMP or Coronal Hole eruption can cause damage by overwhelming the magnetic field with high voltage surges that reach the surface of the earth at weak places in the earth's magnetic field.



An **electromagnetic pulse** or **EMP** is a burst of [electromagnetic radiation](#). The abrupt pulse of electromagnetic radiation usually results from certain

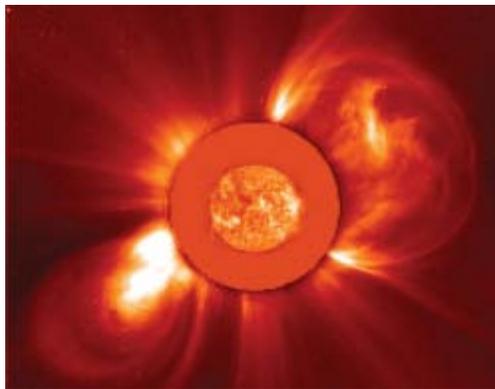
types of high energy explosions, such as Solar Flares, CME's form a suddenly fluctuating [magnetic field](#). The resulting rapidly-changing [electric fields](#) and magnetic fields may couple with electrical/electronic systems to produce damaging current and extreme [voltage surges](#).

SOLAR FLARE



Solar flares are tremendous explosions in the atmosphere of the Sun capable of releasing as much energy as a billion megatons of TNT. Caused by the sudden release of magnetic energy, in just a few seconds flares can accelerate solar particles to very high velocities, almost at the speed of light, and heat solar material to tens of millions of degrees.

Coronal Mass Ejections

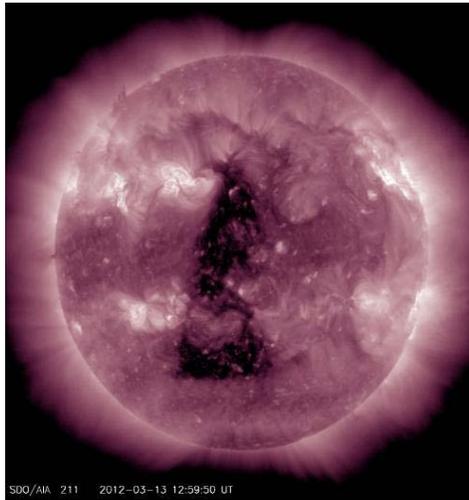


Coronal Mass Ejections CME's, see above image, which accompany Solar Flares are clouds of electrified, magnetic gas weighing billions of tons ejected from the Sun and hurled into space with speeds up to **7.6 million mph** and produce **shock waves**

Such as this one on 11-12-2012 the solar wind speed jumped from 196 to

232 mph, while the interplanetary magnetic field suddenly tripled in intensity.

CORONAL HOLES



Are regions of low density plasma on the Sun that have magnetic fields the open directly into space. Ionized atoms and electrons flow out of the Coronal holes to form the Solar Wind.

The Corona of the sun has a temperature of 1,799,540.33 °F. The sun's plasma at this temperature emits most of it's radiation in the UV and X ray bands. The solar photosphere, main surface of the sun, has a temperature of 9980.33 °F, emitting it's radiation in visible primarily yellow wavelengths.

ELECTRICAL MAGNETIC PULSE



ELECTRICAL MAGNETIC PULSE

The silent invisible pulse that can change the world in a second. Imagine how our lives would change without electricity and all the devices that make all our lives easier.

A FARADAY CAGE

Faraday cages shield their contents from static electric fields or EMP's. An **electric field** is a force field surrounding a **charged particles**. A Faraday cage distributes that charge or radiation around the cage's exterior, it cancels out electric charges or radiation within the cage's interior. In short, a Faraday cage is a hollow conductor, in which the charge remains on the external surface of the cage and transfers the EMP radiation into the earth by way of a grounding rod.

HOME MADE FARADAY CAGES

Wrap each device in heavy plastic and extra heavy duty aluminum foil. A grounded aluminum garbage can with a lid with a plastic garbage can inside for insulation.

A grounded metal filing cabinet with insulation.

A grounded insulated metal tool box

A wood bookcase wrapped in iron cloth screen, with no gaps.

A gutted, grounded and insulated microwave oven

Tin canisters or ammo cans insulated and grounded.

http://readynutrition.com/resources/diy-faraday-cage-ideas_09052012/

LIGHT

CANDLES, OIL LAMPS, HAND CRANK LIGHTS AND SOLAR LIGHTS WITH BUILT IN BATTERY SYSTEM STORED INSIDE A GROUNDED PROTECTIVE FARADAY CAGE OR ROOM WITH OTHER VALUABLE ELECTRONIC DEVICES.

Water & Natural Gas

Electric pumps keep the city water & gas under pressure so it can be delivered into your home.

Have 1 gallon of water per person, per day stored in a cool dark place to increase the shelf life up to 2 years (tap) 5 years (distilled) Remember to label and rotate stock.

Capture & store rainwater into rain barrels.

Dig a well.

FOOD

YOUR LOCAL MARKET HAS A 3 DAY FOOD SUPPLY FOR THE NEARBY POPULATION.

After 3 days frozen foods are not safe.

There are many companies that offer food with up to a 25 year shelf life.

Buy what your family likes, is easy to prepare and is compact to store.

COOKING

Many gas stoves have electric pilot starters.

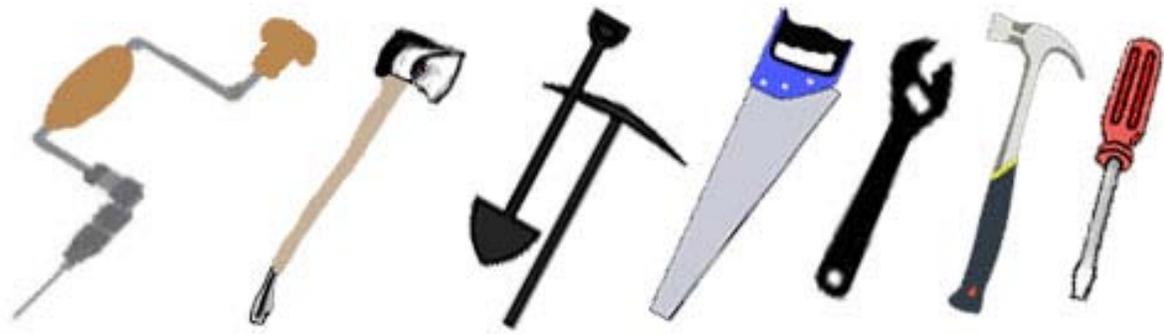
Use a BBQ or fireplace until the fuel runs out.

Use cast iron pots for faster cooking

Make and use a Solar Oven www.solarcooking.org/plans

This website has instructions on making 31 types





KEEP A BOX OF MANUAL TOOLS FOR SEARCH, RESCUE AND REPAIRS IN YOUR DISASTER KIT



RECREATION

INCLUDE BOOKS, BLANK JOURNALS, A VARIETY OF BOXED GAMES, SPORTING GOODS, TOYS, AND ART SUPPLIES FOR FUN AND RELAXATION. PLANT A VEGETABLE GARDEN.

Solar Flares Create Auroras



Evidence of solar flares interacting within the earth's magnetic field. Auroras have been seen all over the earth including at the equator during intense solar storms.