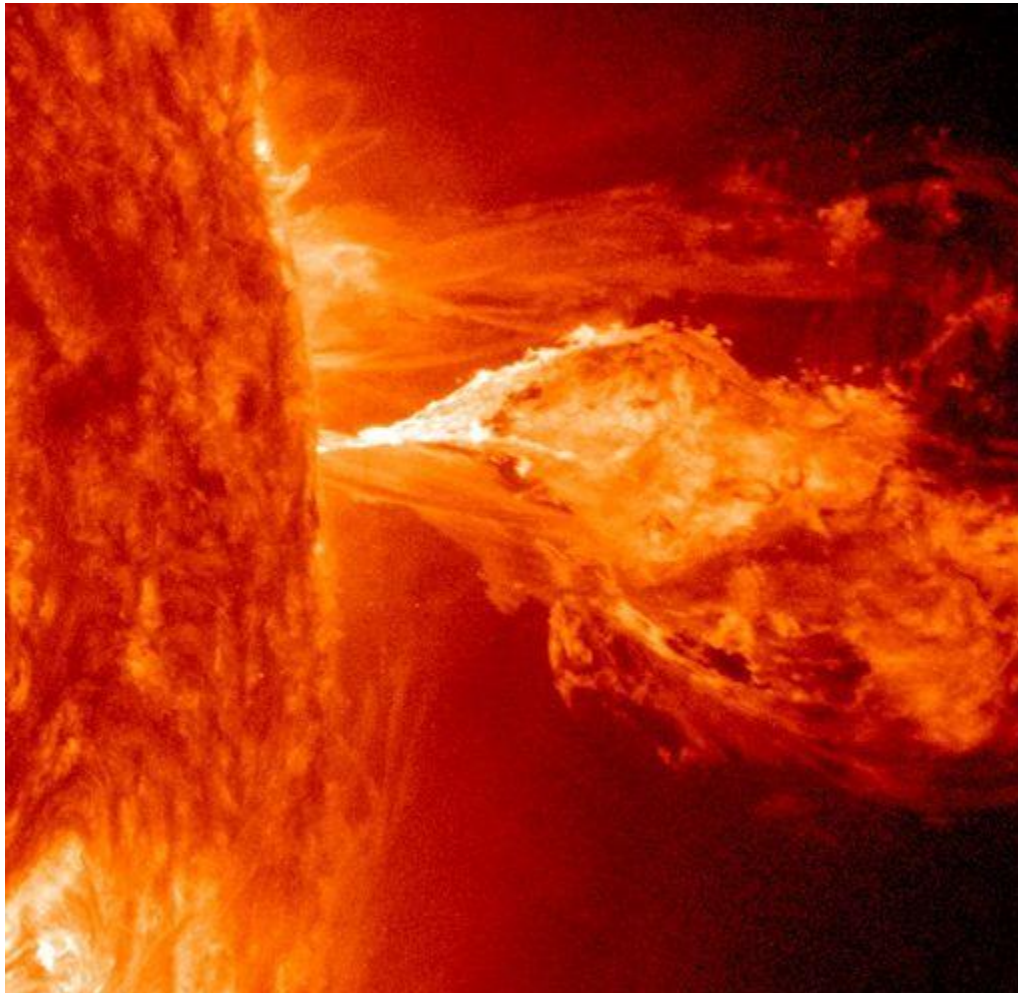


## Sunspotters -The Sun has finally Flipped!

- **Is Mother Sol our birth Mother or is she our Stepmother?**
- **Hidden Portals in Earth's Magnetic Field**
- **Earth Clouds blown by the Solar Wind**



'RADIOACTIVE' ERUPTION: On Feb. 17th at approximately 04:50 UT, a magnetic filament erupted from the sun's western limb

### **The Sun has finally Flipped!**

Sun has 'flipped upside down' as the new magnetic cycle begins and we reach the mid-point of the weak solar Cycle 24.

The switching of the magnetic poles occurs at or near the peak of solar activity. *"A reversal of the sun's magnetic field is, literally, a big event,"* said Nasa's Dr. Tony Phillips.

*"The domain of the sun's magnetic influence (also known as the heliosphere) extends billions of kilometers beyond Pluto. Changes to the field's polarity ripple all the way out to the Voyager probes, on the doorstep of interstellar space."*

- The sun's magnetic fields flip approximately every 11 years, defining the solar cycle
- The switch happens around the peak of solar activity or the time we call solar maximum.
- This reversal tells scientists that the second half of the solar cycle has begun.
- The flip will likely cause more space weather, including aurora

**Continue reading with an excellent video and graphics at:**

<http://www.thesuntoday.org/solar-facts/suns-magnetic-poles-flipped-solar-max-is-here/>

## **Is Mother Sol our birth Mother or is she our Stepmother?**

**Is this our distant relative?**



“Researchers discovered DNA and amino acids components in a smidgen of a space rock that fell over Murchison, Victoria, in Australia in September 1969.” (Picture above)

The question often asked is “How did Life begin on Earth?”

But others ask “**Did Life begin on Earth**”?

**Read more at:** <http://www.space.com/24720-space-dust-life-building-blocks.html>

When I was studying chemistry in school ... there were only four Elements to learn back then ... Earth, Air, Water and Fire ... it was believed that life, all life on Earth, arose on its nurturing surface or in the shallows or depths of the oceans. Our DNA code shows that we are all related to the first forms of life.

OK ... but that doesn't preclude that the “First Ones” came from Outer Space.



The theory that life may have begun somewhere in space and “seeded” earth is one that goes back centuries. **Panspermia** was coined by the Greek Philosopher; Anaxagoras who theorized that all life arose from small building blocks ... “small seeds.”

It was developed on a more scientific basis in the 19<sup>th</sup> Century. Lord Kelvin noted:

*“[W]e must regard it as probable in the highest degree that there are countless seed-bearing meteoric stones moving about through space.”*

Steven Hawking recently commented: *“But we don’t know how life first appeared. The probability of something as complicated as the DNA molecule being formed by random collisions of atoms in the primeval ocean is incredibly small. ... : However, there is a possibility, known as panspermia, that life could spread from planet to planet, or from stellar system to stellar system, carried on meteors.”*

What is new to the debate in the last few decades is the finding of vast clouds of organic building blocks in space and, using improved analytical methods, finding complex organic molecules distributed in space rocks. We also have found life on Earth existing deep in mines and in many other very inhospitable locations.

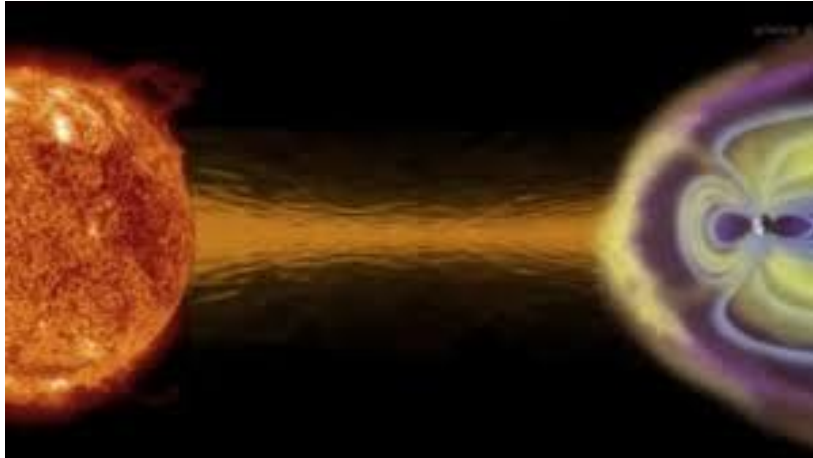
A recent scientific article weighs in with the conclusion:

**Researchers use Moore's Law to calculate that life began before Earth existed**

*“An extrapolation of the genetic complexity of organisms to earlier times suggests that life began before the Earth was formed.”*

Read more at: <http://phys.org/news/2013-04-law-life-began-earth.html#jCp>

## Hidden Portals in Earth's Magnetic Field?



Nasa - "A favorite theme of science fiction is "the portal"--an extraordinary opening in space or time that connects travelers to distant realms. A good portal is a shortcut, a guide, a door into the unknown. If only they actually existed...."

*It turns out that they do, sort of, and a Nasa-funded researcher at the University of Iowa has figured out how to find them.*

*"We call them X-points or electron diffusion regions," explains plasma physicist Jack Scudder of the University of Iowa. **"They're places where the magnetic field of Earth connects to the magnetic field of the Sun, creating an uninterrupted path leading from our own planet to the sun's atmosphere 93 million miles away."***

*NASA is planning a mission called "MMS," short for Magnetospheric Multiscale Mission, due to launch in 2014, to study the phenomenon. Bristling with energetic particle detectors and magnetic sensors, the four spacecraft of MMS will spread out in Earth's magnetosphere and surround the portals to observe how they work."*

**Continue reading and video at**

[http://www.nasa.gov/mission\\_pages/sunearth/news/mag-portals.html#.Uxy0OPmICm4](http://www.nasa.gov/mission_pages/sunearth/news/mag-portals.html#.Uxy0OPmICm4)

## Clouds blown by the solar wind

What "On Earth" are "Sprites," "Elves" and "Blue Jets"? Hint ... they aren't on the surface of the Earth.



A new paper provides insight into the effect of the sun's interaction with the Interplanetary Electric Field (IEF) and Global Electric Circuit (GEC) and the impact on earth's cloud cover.

- Cloud cover plays a major role in the terrestrial radiation budget
- Solar Wind speed and the interactions with Earth's magnetic field affects the global electric circuit (GEC)
- This interaction influences the global level of Cloud Cover which is a major factor in both short and long term Climate

A **great** 4 minute video explains, more clearly than I can the GEC and what those critters I mentioned come from.

[http://www.youtube.com/watch?feature=player\\_embedded&v=X7-0YRiIn7E](http://www.youtube.com/watch?feature=player_embedded&v=X7-0YRiIn7E)

More technical details of the paper are at:

<http://wattsupwiththat.com/2013/12/26/new-paper-clouds-blown-by-the-solar-wind/>

This debate will only be resolved when we find life outside earth's boundaries and compare its basic structure to our earthly DNA. Or we find this:



A Space Odyssey - 2001