

TEN FLARES YESTERDAY
HOW LONG UNTIL FLARE IMPACT?
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Yesterday there were no less than 10 solar flares, most of them in the lower C-class, but at least three of them were M-class flares or very close to it.

The flares just keep on coming, and I am sure that many of you may be tired of hearing about them. Nevertheless, this kind of activity won't come around for another eleven years and hopefully some of you might be learning to use them to your advantage. I have spared you most the nitty-gritty details because of space and attention-span, but some detail is worth having, like how long does it take for these solar events to affect Earth.

SOLAR FLARES: A solar flare is a powerful burst of electromagnetic radiation in the form of X-rays, extreme ultraviolet rays, gamma ray radiation, and radio burst. Less than nine minutes after a solar flare, the dayside of Earth receives a blast of ultraviolet and x-ray radiation. Its outer effect on Earth lasts perhaps one or two hours.

PROTON STORMS: Solar proton events are protons emitted by the Sun during solar flares and CME events. An energetic solar proton storm or event takes from fifteen minutes to several hours to reach Earth, and the effect can last for days.

CORONAL MASS EJECTION (CME). A CME is a huge burst of solar plasma that erupts from the surface of the Sun, breaks the solar gravity, and hurtles through space, often directly at the Earth. This is the most violent solar event. A CME-event takes from two to four days to reach Earth, and the effect also can last for days.

Extreme solar events have been known to knock out entire power grids, destroying large transformers and triggering a domino effect that takes down the whole grid. This has happened many times. For example, on March 13, 1980 geomagnetically-induced currents overloaded the Hydro-Quebec power system, resulting in a blackout that affected 6 million people. From the initial event, it took only one-and-one-half minutes to bring down the grid, but took nine hours to restore 83% of the power. There are many similar stories.

Scientists don't know how the above outer effects register in our mind psychologically, much less spiritually. The soft sciences are always the last to be defined. Interested people like ourselves who monitor our inner states perhaps know more about this than the world of scientists. At least they don't talk about it, although there are signs of interest by scientists in these matters. And a few words about what rides the solar wind and the interstellar winds that carry the "cosmic dust."

COSMIC PIXIE DUST

The Earth's defense against geomagnetic storms is weakest at the poles. That is why the solar storms pour into Earth from the north and south geomagnetic poles causing auroras, radio blackouts, communication disruptions, and so on. The same is true for cosmic storms, solar flare-type emissions coming from outside our solar system. Although I have not said much to you so far about these, they too exist and impact Earth.

In other words, there is also matter coming from the center of the galaxy, the so-called 'cosmic dust'. During solar maxima (the peak of the 11-year sunspot cycle), the magnetic field of the Sun shields the solar system from these electrically-charged galactic dust particles. However at solar minima, the weaker Sun is less able to keep out cosmic radiation and in it comes. The effect of this cosmic information is anyone's guess, but it has come a long way and is not nothing.

In other words, at solar maxima we are bombarded by solar flare flux and at solar minima we are bombarded by cosmic material (at least three times more than usual) coming from outside our solar system. Each year about 40,000 tons of cosmic debris (from outside our solar system) hit Earth.

Right now we are getting information from our Sun (solar maxima), but in six years or so we will be getting more radiation coming from the center of our galaxy and elsewhere. So we get it coming and going, in alternation.

There is nothing new here, so we have been being bombarded alternately for eons, messages from our Sun and messages from the galactic center. We are just getting around to being aware of them, although they have been informing us forever.