

The Implications of Sergey Pulinets' Approach to Earthquake Forecasting

The following is an edited transcript of the LPACTV Weekly Report of April 13, 2011, along with a selection of the graphics. It can be viewed at <http://www.larouchepac.com/node/17959>.

John Hoefle: Hello, welcome to the LaRouchePAC Weekly Report for April 13, 2011. I'm John Hoefle, and with me in the studio today are two members of our Basement Team, Ben Deniston and Sky Shields, and of course, Lyndon LaRouche.

We have an interesting development, it's a good development today, and some very interesting reports, so, Lyn, let's get right to it.

Lyndon LaRouche: We had a discussion of the progress of the crisis, the global crisis, and this discussion led to a fairly thorough review, particularly in light of a report which was presented by a Russian of Ukrainian origin, and this provoked, I think, some explication of the implications of what his remarks have been, in addition to what we had known earlier. And this was a time, I thought, and we agreed, that we should go through a summation by representatives of our Basement Team, to review the implications of the update given by Sergey [Pulinets]. So, why don't you take it away.

Layers of Instrumentation

Ben Deniston: To start, I think it's important that we take the thing in layers, because there are very clear layers to what's been discussed and proposed. Sergey, who presented his work in the video that's on the website [<http://www.larouchepac.com/node/17944>; and transcript, above], is an expert who's been studying earthquake precursor ac-

tivity, anomalous activity in the ionosphere and the atmosphere, and in various other ranges, preceding earthquakes anywhere from days to weeks before the event. Obviously, this is of crucial importance, given the developments we've been covering in the last number of weeks since the Japan quake put the real crisis this poses in the forefront.

One thing to put out very clearly—he was very forceful on it—is that the first layer to look at, even immediately, right now, is what systems we have, both ground-based and satellite systems, which are capable of detecting an array of these precursor events. That is sufficient for a limited amount of warning systems, currently; if we actually had the right facilities, and investment in the personnel required, we could, even using the existing systems, even if they weren't designed for it explicitly, we could provide some limited advanced warning of where major earthquakes are likely to strike.

But then, the other thing that comes up, is that no single precursor is going to give you a definite idea if an earthquake is going to occur. What's required, the way he discusses it, is a multi-parameter approach, where you're taking fundamentally different types of instrumentation, measuring fundamentally different types of activity, on the ground, in the atmosphere, in the ionosphere, and even higher, and only when you get certain unique types of correlations of anomalous activity from these different instrumentations, does that give you a real signal that something is likely to occur at some point in the near future.

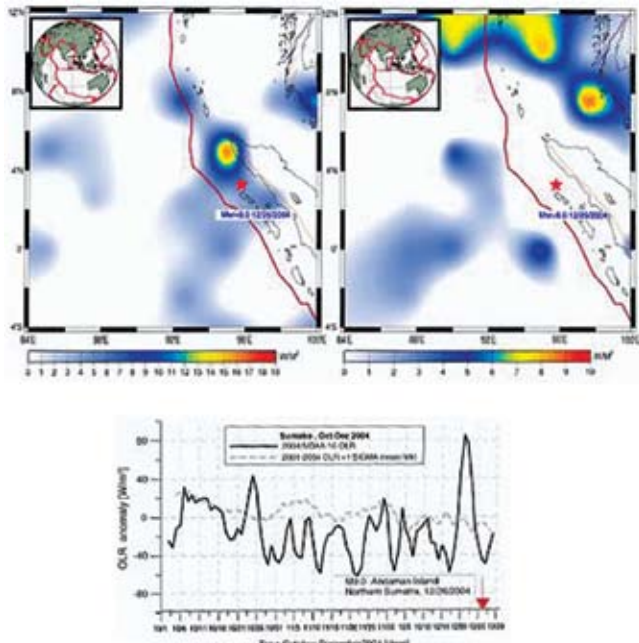
And so, to present some of this material, one thing we've done, is take just two examples of large earthquakes that have been stud-



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Ben Deniston: "The only reason we're not doing warnings right now, is there's simply no funding to set up the personnel and laboratories needed to process all this data in real time."

FIGURE 1



Dimitar Ouzounov et al., 2007.

Infrared radiation spiked five days before the December 2004 Sumatra earthquake.

ied, and so we will present an example of how this presently looks, with the current science.

Observing the Sumatra and Sichuan Quakes

The first one was the earthquake that hit Indonesia, Sumatra, in December of 2004, which was an extremely large earthquake and extremely devastating earthquake, deadly earthquake. There’s been a large number of scientific studies published, looking at the anomalous types of precursor activity before this quake struck.

The first study was published by a grouping led by somebody in the United States¹; as we’ll see here with the imagery (Figure 1), they were using weather satellites, which have the ability to detect infrared radiation emanating from the Earth.

1. Dimitar Ouzounov, Defu Liu, Kang Chunli, Guido Cervone, Menas Kafatos, Patrick Taylor, “Outgoing long wave radiation variability from IR satellite data prior to major earthquakes,” *Technophys* 431 (2007).

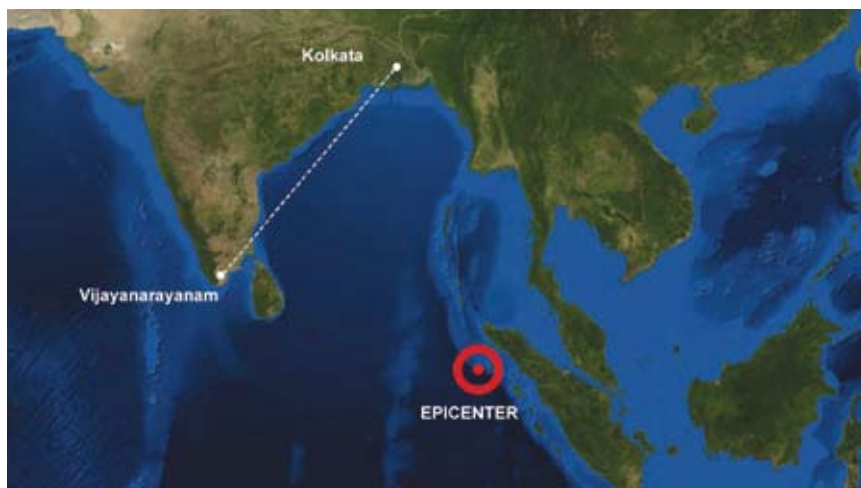
And they’re able to look at the data provided by these weather satellites in the period leading up to the earthquake, and they found very clearly, five days before the earthquake struck, a very large anomalous spike in the infrared radiation being emitted from what was soon to be the epicenter region. That’s what you see on the map (above), and then you get a representation of the spike in the OLR (below), outgoing long-wave radiation, which stands for a type of infrared radiation. You see a very clear spike in the five days leading up to the earthquake.

So this is one type of instrumentation, looking at a certain section of the electromagnetic spectrum, which showed signs of anomalous activity. If you were only to rely on just this one type of instrumentation, you could get other effects that would produce a similar reading, which might not be related to an earthquake precursor; but you take this another step, and start to look at more types of readings that we have for this specific event.

There was another grouping led by a number of people out of India.² They looked back at the data of radio communications between two stations in India. And when they looked back at the data, they saw evidence that, as the radio waves propagated through the ionosphere, between the two stations, as you see in the map (Figure 2, they saw evidence that the way the radio waves were propagating was being affected by some

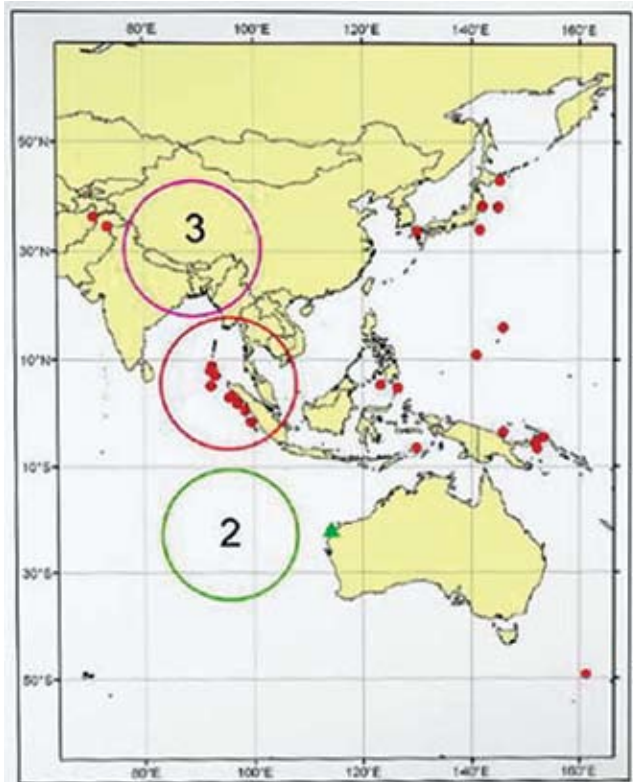
2. Sandip K. Chakrabartij, M. Saha, R. Khan, S. Mandal, K. Acharyya, and R. Saha, “Unusual Sunset Terminator behaviour of VLF signals at 17KHz during the Earthquake episode of Dec., 2004,” URSI General Assembly, 2005.

FIGURE 2



Two Indian radio communications stations observed the December 2004 Sumatra earthquake; their data showed a spike in anomalous activity in the ionosphere four days before the quake.

FIGURE 3



A. Rozhnoi et al., 2008.

DEMETER satellite data showed anomalous activities in its radio signals in the area of the Sumatra earthquake, starting one month before that earthquake.

anomalous activity in the ionosphere. And when they looked back at the data, this spike occurred four days before the earthquake.

This case is interesting. Even though it's not necessarily directly over the epicenter, the anomalous activity occurring above the epicenter was actually affecting the broader region of the ionosphere, such that these communication signals were being affected by this anomalous activity.

There was a third case,³ looking now at a different type of instrumentation, this time looking at the data provided by GPS satellites, which do certain radio signaling to the ground, and they found when they looked back at this activity, that five days before the earthquake, there was evidence above where the epicenter was soon to be, of anomalous changes in the structure

3. Tiger J.Y. Liu and Y.I. Chen, "Ionospheric Precursors of the 26 December 2004 M9.3 Sumatra Earthquake," *Res. Lett.* 2008 (under review as of date of Internet posting).

of the ionosphere. They were specifically measuring the total electron content of the ionosphere in this region, and looking back at the data, they saw that there was anomalous change in activity, five days before the earthquake.

And, we were able to also pull up a fourth independent case, this one also interesting. The previous study that I just mentioned was done by a grouping in Taiwan. This fourth case⁴ was done by a grouping in Russia, where they used data from the DEMETER satellite. For a whole month prior to the Sumatra earthquake—very large, devastating earthquake—when they looked back at the data, for a whole month, this satellite was registering anomalous activities in its radio signaling back and forth to the ground (**Figure 3**), another indication that there's some type of unusual, unexpected fluctuation in the ionosphere, associated with this earthquake.

Three of these are specifically ionospheric fluctuations, but they're different types of fluctuations, which wouldn't necessarily be associated with each other, other than being part of an earthquake precursor. The first case was an infrared radiation anomaly, not associated with the ionosphere. So you have distinctly different types of sensory apparatuses, detecting four cases of anomalous activity building up to this quake.

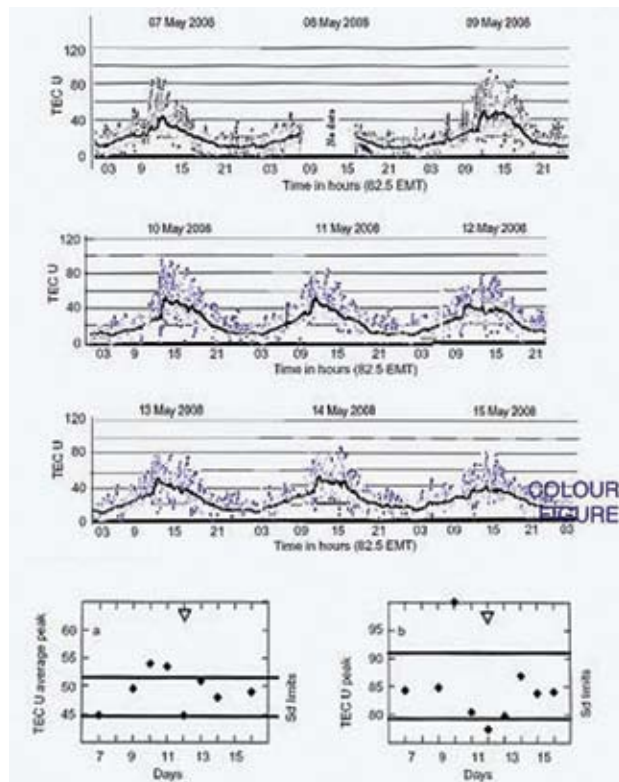
A second event that we looked back at, was an earthquake that struck Sichuan, China in May 2008: an 8.0 magnitude earthquake—a very large, very devastating earthquake. We found three studies, by independent groups, independent countries, looking at different types of activity; we found very clear cases of anomalous activity in different ranges of these sensory instrumentations.

The first one,⁵ published by a group in India, when we look back at the data, three days before the earthquake (**Figure 4**) they saw a very clear spike up, and then on the day of the earthquake a very dramatic drop down, in the total electron content of the ionosphere (**Figure 5**). They were looking at GPS satellites to get this. You can see that on the graph.

4. A. Rozhnoi, M. Solovieva, O. Molchanov, "Variations of VLF Signals Received on DEMETER Satellite in Association with Seismicity," Proceedings of the 7th International Conference "Problems of Geocosmos" (St. Petersburg, Russia, 26-30 May 2008).

5. M. Devia; A.K. Barbaraa; A.H. Depuevab; Y.Y. Ruzhinb; V. Depuevab, "Anomalous total electron content (TEC) and atmospheric refractivity prior to the very strong China earthquake of May 2008," *International Journal of Remote Sensing*, Vol. 31, No. 13, 2010.

FIGURE 4



M. Devia et al., 2010.

Satellite observations of the quake near Sichuan, China, May 7-15, 2008 showed a spike in total electron content of the ionosphere three days before the earthquake, then a dramatic drop on the day of the quake (May 8).

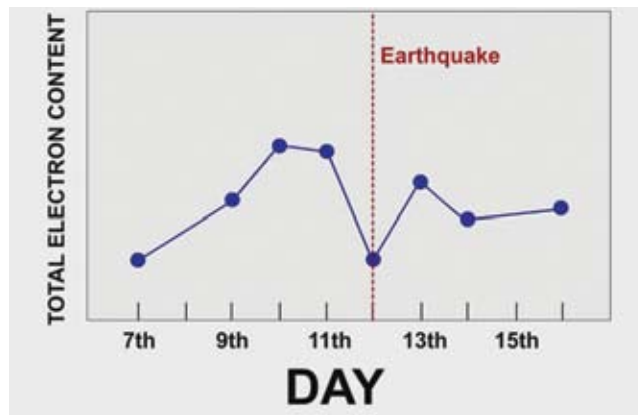
A second study,⁶⁶ independent again, by a grouping of people in Poland and France, used a different type of measure that we haven't brought up yet: They used this DEMETER satellite, which was rather unique while it was operating, because it could actually fly through the ionosphere. In a number of these previous cases, they were using radio transmissions through the ionosphere, and the way those radio transmissions were affected by the different structures of the ionosphere, would give some indication of the structure of the ionosphere. This one was actually able to fly through certain levels of the ionosphere—

LaRouche: Night or day?

Deniston: I think daytime, because it was set to do a solar synchronous orbit, this satellite specifically, so it

6. Jan Bleckia, Michel Parrotb, Roman Wronowska, "Plasma turbulence in the ionosphere prior to earthquakes, some remarks on the DEMETER registrations," *Journal of Asian Earth Sciences*, 2010 (in press as of date of Internet posting).

FIGURE 5



A schematic view of what is graphed in Figure 4.

always comes to the same location at the same time of day roughly. The ionosphere fluctuates, day to night, and there are other types of regular fluctuations you can expect. So, this satellite they set up with a specific type of orbit, where you would basically work out the daily variations, from the daily solar activity. If you work out these daily variations, then you get a sense if something unexpected pops up.

So, in this case, starting 11 days before the quake, and then with more intense peaks, 6 days and 3 days before, you had anomalous electrical fluctuations in the region directly above the quake. So that's a second case, for this Chinese quake.

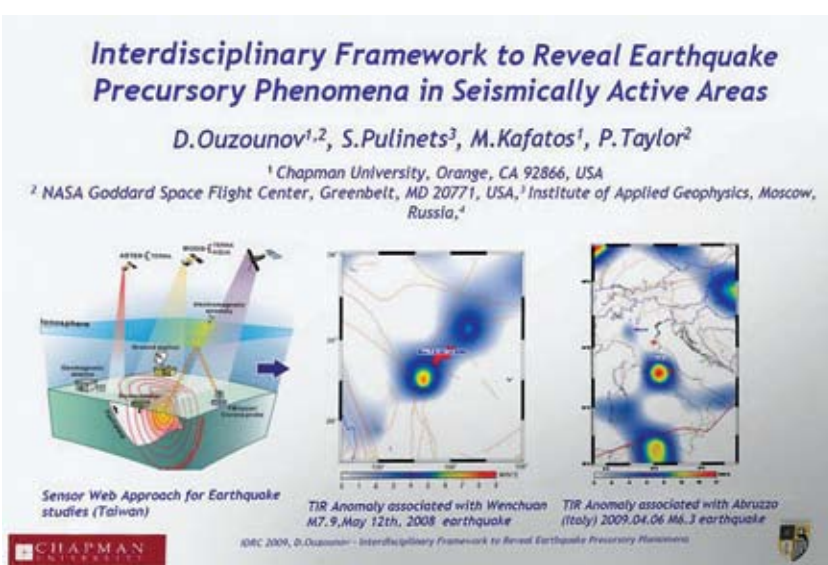
And then, a third case, again completely independent, different instrumentation: You had a "thermal anomaly," anomalous heating of the ground, starting six days before the earthquake hit, which was detected by NOAA and NASA weather satellites (**Figure 6**).

Nobody To Analyze the Data?

So, again, three completely different groupings, using three different types of instrumentation, all showing anomalous activity prior to this major, catastrophic quake.

There's obviously plenty of grounds to say, there's something anomalous going on here. It's a very important point to note that most of these studies were actually "hindcast" studies: After the earthquake happened, they said, what types of instrumentation do we have that were recording various forms of activity in that region? And then they would go back and look at the data that these satellites or ground-based systems had been recording, and they would analyze it, and they

FIGURE 6



D. Ouzounov et al., 2009.

These researchers found anomalous heating of the ground, starting six days before the Sichuan earthquake.

would say, “Oh, here’s this spike in activity; here’s this spike in activity.”

The satellites were always up there, recording all the activity, so the instrumentation sensed the anomalous activity when it happened. As Sergey emphasized, the only reason we’re not doing warnings right now, is there’s simply no funding to set up the personnel and laboratories needed to process all this data in real time. If we had teams of people, even with the current instrumentation, analyzing the data 24 hours a day, in real time, you could be looking and cross-correlating these different types of anomalous activity—it’s not immediately going to be a perfect prediction system, but it will at least give you high likelihoods of the need for warnings, where are the danger areas, these types of things. That could be done immediately.

But currently, there’s just no support to give these people the types of laboratories, infrastructure, personnel that they need to operate. So that’s useful to pose; it’s kind of a first layer for policy,

immediately. The only reason that’s not being done, is that the policy is not set up to actually support the activity that could be going on. We obviously need to activate that, but we should activate it from the standpoint of taking the research further, to figure out much more precise prediction capabilities, what types of new instrumentation we need. And to do what we want to do now, but do it from the standpoint beyond just finding anomalies and pointing them out, but then, setting up the instrumentation that will give us more motion towards actually figuring out what is really causing these events. What exactly are the solar relations to these events? What exactly is the galactic relation to these events?

So, as an immediate policy, we need to activate what we have already, but do

it from the standpoint of the type of investment towards a real mastery over this whole array of anomalous activity.

No Such Thing as ‘Empty Space’

Sky Shields: Yes, that’s significant. To give sort of a recap, you get an idea of all these different types of precursor material. There was an image that I thought was interesting, which was one used by two of the presenters, Sergey Pulinets and then [Dimitar] Ouzonov: a very nice image of a bunch of blind scientists fondling an elephant, and each one is looking at the different portions of it, and they have it labeled with the different earthquake precursors, all the different types of thermal anomaly, electromagnetic anomaly, funny things in the ionosphere; and each person is trying to describe it as a thing in and of itself. But obviously, the implication of the image is that you’re looking at one, clear phenomenon there.

That is, when you’re looking



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Sky Shields: “The entire universe is a constant soup of cosmic radiation material. Not only is it nowhere empty, but it’s incredibly energetic, so energetic, that it’s a real safety consideration, moving astronauts through this.”

at something like an earthquake, you see what looks like a singular event. If we're acting like animals, and we're sort of on the ground next to them, it shocks us the same way it would shock them—well, that's actually an insult to the animals, as we'll see in a second. But if we're behaving unconsciously, these seem like discrete events. But in reality, you've got one continuous process there. You've got a real, steady buildup of an amazing amount of potential, that feeds into these single earthquake events.

I mean, you think about something like what hit Japan—and Sergey made this point—you've got something that's orders of magnitude beyond the largest nuclear weapons we've ever used actively in fighting.⁷ Something like that doesn't just happen without any sort of indication beforehand. You've got a buildup process there, that's massive, equally as massive as what's released, obviously. So you know that that's going to manifest itself in what we call "precursors."

But to understand that, requires figuring out how to conceptualize this system as a whole, *everything*, including all the phenomena that are occurring on Earth, the entire development of Earth, the Biosphere, etc.; and we'll see that all of Earth's history is involved in being able to make a real model of the forecasting. But also, its interaction with the galaxy, and then the universe as a whole; and we'll be able to demonstrate that, and it will underscore the fact that there's no such thing as "empty space," when talking about phenomena within the Biosphere, or outside the Biosphere, or their interaction.

Where Lightning Strikes

I'll make the point, that the first thing is sort of a qualitative idea of what some of this precursor material is representing. I'll begin here: Take a look at a global lightning map (**Figure 7**). You get an interesting picture of where these things occur. Most lightning strikes are all not only above land—because you know there's

7. See Pulinets interview, this issue. Pulinets says that the amount of energy is larger than several thousand nuclear bombs.

FIGURE 7

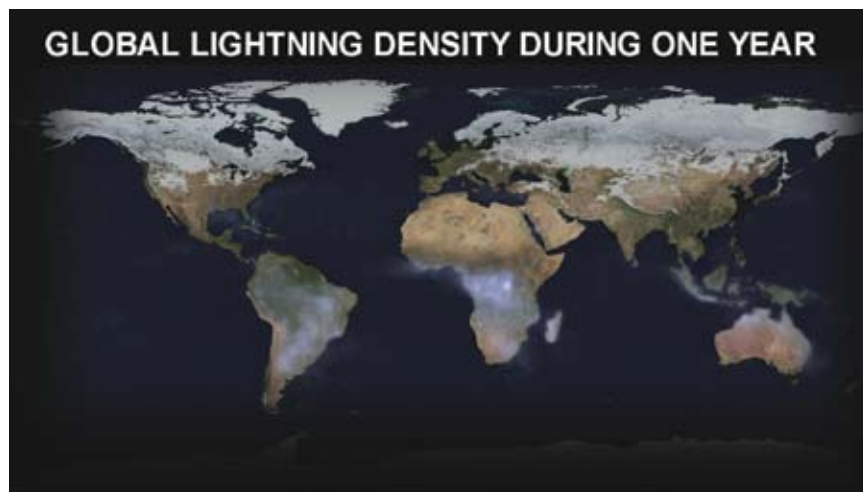


FIGURE 8



very little lightning activity above the oceans—but also there is very little outside certain key, dense areas. You take a look at Central Africa (**Figure 8**), and you see that the vast majority of all lightning strikes on the planet are concentrated in this one area; there are also concentrations down in South America, concentrations in various places in Southeast Asia, also along the Gulf of Mexico and various tropical regions in the United States.

They're concentrated where all of the highest densities of plant life are located! This is for a very specific reason: In order to get the development of a thunderstorm, you have to be able to have water vapor rise at a very rapid rate, that requires sudden heat changes on the ground, to force evaporation suddenly. That forces

FIGURE 9a



FIGURE 9b

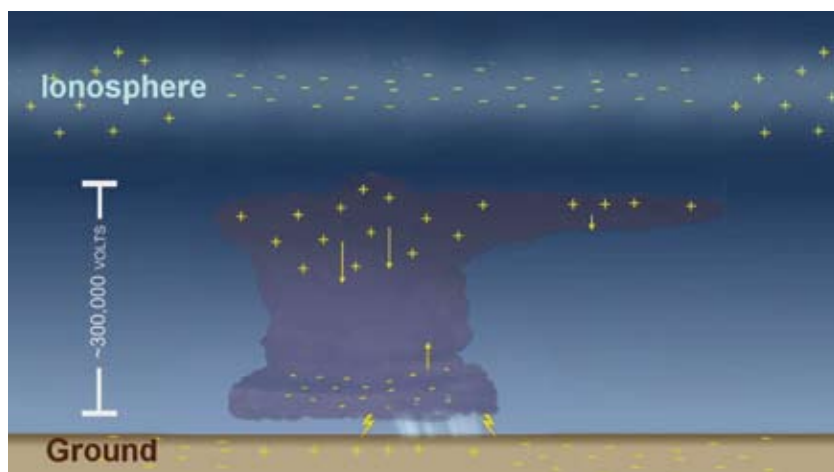
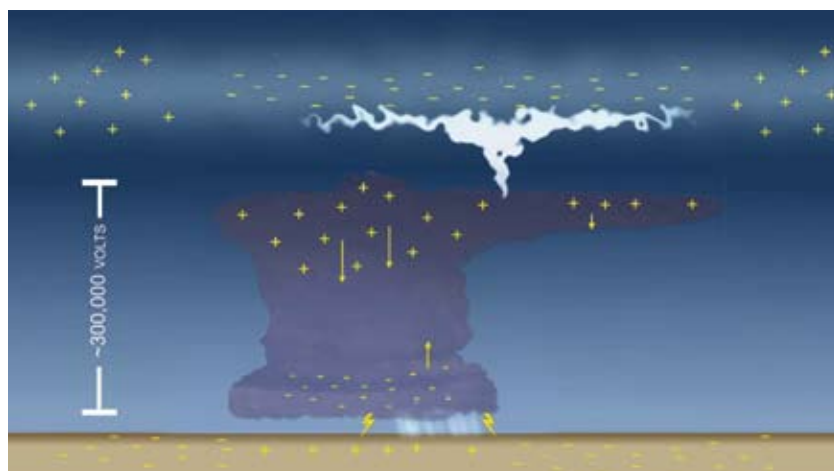


FIGURE 10



Both the ground and the ionosphere are conductors, and the thunderclouds behave like a battery in the circuit.

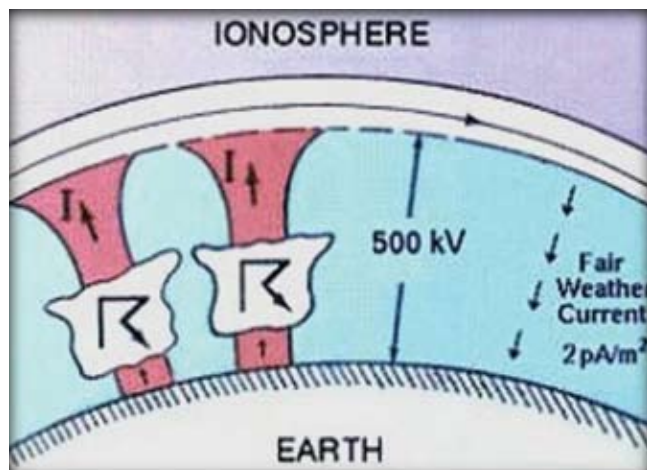
the types of clouds that can create the cloud separation that generates lightning in thunderstorms. That only happens at the moment you get large bodies of water on land, in the form of soils and other things that can heat rapidly. Bodies of water like the ocean, or even lakes, heat much too slowly to be able to produce the rapid precipitation that would give you thunder clouds and lightning.

So, you see here that lightning is a phenomenon that does not occur until you have life colonizing land (and we're going to have a video on this, coming out very soon, by some colleagues of ours in the Basement). So, this gives at first, a very different picture of what's happening, and what we mean when we talk about the Biosphere: You already start to get the smell, that this is an incredibly energetic phenomenon. As we'll point out later, the energy that's involved in that evaporation becomes massive amounts of stored energy from the Sun, and that's capable of doing an amazing amount of work, as we'll see.

But the first thing to look at, is the work performed by these thunderclouds, as they form (Figure 9). Now, this part of it is unknown, why this occurs: why, with the thunderstorm formation, you get this charge separation. But you do. You get a very distinct charge between the top and the bottom of the thunderclouds. It's that charge separation that facilitates, on the bottom side, the phenomenon that we recognize as lightning. You get the formation of a very specific charge at the bottom of the cloud, what's called a "shadow charge," on the ground. You get a reverse mirror image of that, and you begin to get an attempt, from both sides, to balance out that amazing potential that's built up between the cloud and the Earth's surface.

As a result, you get the ionization of the air, which normally is a very good insulator, and which normally would keep current from flowing; you get the

FIGURE 11



The “fair weather field,” where there is no thunderstorm, reconnects the two conductors: the ionosphere and the ground.

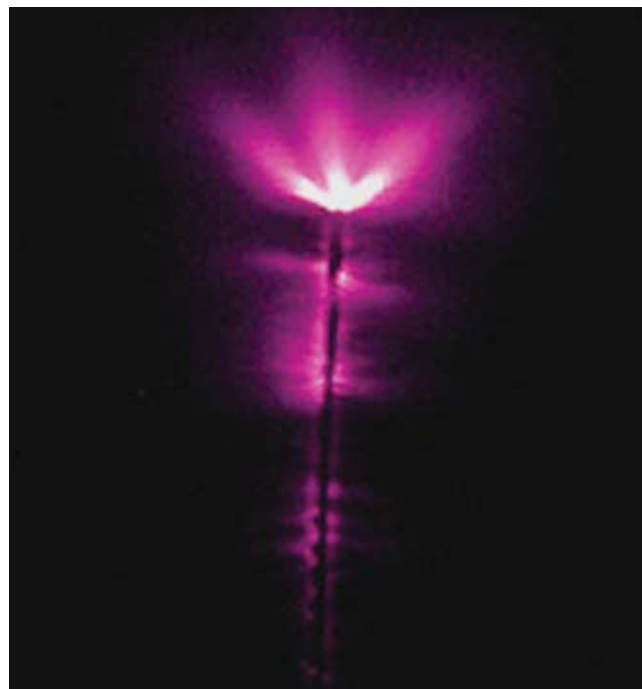
ionization which turns it into a current-carrier. And if you watch it, you see what are called these little “leading strokes,” coming down from the cloud, up from the ground, trying to meet each other. When they finally *do* meet, you get the boom that you recognize as a lightning strike. And if you play it in slow motion, you can see that this thing looks like a repeated series of strikes, as it sucks all the different charge areas out of the cloud, equalizes each of those areas with the ground. That’s fascinating, that’s amazing.

What wasn’t noticed until recently, is, when you look at the topside of the clouds, you’re getting the exact same effect happening (Figure 10). Here, you get what are called the “sprites”; they are different other kinds of electrical discharge, from the top of the clouds, up into the ionosphere, which is a region of the Earth’s atmosphere which has been ionized, based on the intense ionizing radiation from the Sun.

Now, because it’s ionized, you’ve got the stripping of atoms from their electrons, and you’ve got a very efficient current-conductor. As the potential balances out between the top of the cloud and the ionosphere, it’s able to immediately transmit that throughout the entirety of the ionosphere. Meanwhile, you’ve also got the ground, which, as we saw, is able to release this charge to the cloud, is also an efficient conductor.

So, you’ve got these *two* conducting surfaces here, between the ground and the ionosphere, and if you were to treat it like an electrical circuit, engineering-style, the cloud functions like a battery in that circuit.

FIGURE 12



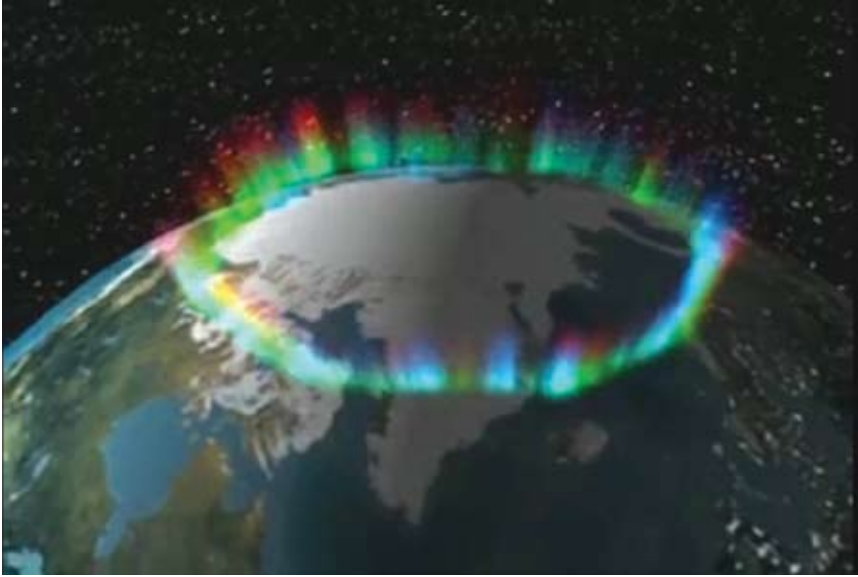
St. Elmo’s fire: ionization of the air causes the glow, including of objects on the ground, during thunderstorms.

So, you’ve got the thunderclouds behaving like a battery in a circuit. What you see from these two conductors, is another aspect of that, which is that everywhere else on the planet is what’s called the “fair weather field,” where you’ve got the reconnection between those two conductors, between the ionosphere and the Earth (Figure 11). Everywhere on the planet, you’ve got a steady flow of charge, of current—*slight*, but significant. The *potential* between those two plates can range between 150,000 volts and 600,000 volts of potential.

This makes, I think, in a real clear way, the “no empty space” polemic: Not only do you have nothing empty there, but you’ve got an *amazing* amount of potential charge just across that difference, there. That’s something huge, and it’s incredibly active, and we’ll be able to see the role it plays in these earthquake phenomena.

And here’s an image (Figure 12), to give you an idea, which I like a lot: People are familiar with the phenomenon, maybe, of a corona discharge. In thunderstorms it’s often called “St. Elmo’s fire,” which is when that potential builds up so much, that *everything* on the ground, typically sharp objects, but everything—people

FIGURE 13



One “organism,” one system, one universe.

included, animals; in Texas and other places you see it on the Longhorn cattle, that you’ve got electrical discharge coming off the horns, and everything glows with this, it’s “burning” with this St. Elmo’s fire. That’s the part *you see*: That’s where you can see the air ionizing, you can see this glow. Even when you don’t see the glow—that’s just when it’s intense enough, that you can see—even when you don’t see that, you’ve got this constant discharge occurring.

To give you an idea of the invisible substance that you’re inside of, *that* connects all the way down, as far as we know, into the ground, and likely much deeper than we know. It also continues an *amazing* distance, out into so-called “space,” again making clear, this is not empty. Those effects, any effect you see changing in that potential here, that space between the Earth and the ionosphere, is communicated into the ionosphere, changing the ionosphere, and we’ll see it again, in very specific ways, around earthquakes. All the changes in the ionosphere, immediately communicate into the entire magnetosphere of the Earth. That’s obviously communicated out into the interplanetary magnetic field, and you start to see, you’ve got a *huge system* there: solid, fluid, organic, all interacting.

The Electromagnetic ‘Platform’

And we’ll see, as we start looking through that whole system, where all these very specific precursor

phenomena are coming from (**Figure 13**). Every single one of these separate things that we’ve been observing, really is part of *one* creature, one organism, one process that’s capable of being observed, studied, *and read*—very clearly read, to understand what its current behavior and future behavior is going to be. And the reading of its future behavior is what we’ll register as the earthquake precursors that Pulinets and others are looking at.

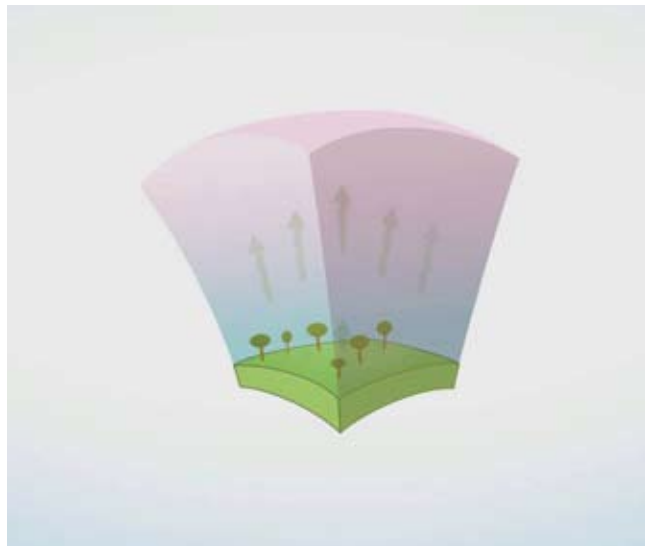
So, have in mind that you’ve got this constant flow, constantly being stirred up by these thundercloud formations. Other effects of it, we’ve discussed. In our *Extended Sensorium* report (*EIR*, Feb. 4, 2011, <http://tiny.cc/1cs65>), Peter Martinson discusses the fact that the sense of

time in animals, and in humans, the internal sense of time, is largely connected to what’s often called the “global electric circuit”—that this steady flow exists. Because if you can shield people from it, they lose their ability to keep track of time; if you shield animals, they lose their ability to coordinate certain types of behavior.

It’s significant, that if you go back in Earth’s history, this established itself, just before animal life moved onto land. The first thing you had, on the order of millions of years for smaller plants, and then for larger and larger plants, moving onto land, carrying, for the first time, large amounts of water, *as their bodies*, as their bodies, onto land, basically moving the environment you had in the oceans, onto the surface of the land, creating the ability for these evaporative processes to move, the water cycle to move. And then, generating with it, these types of electrical phenomena, and structuring the space, what you might call an “electromagnetic platform,” building the structured space, the structured platform, that’s required for animal life to be able to sustain itself on land. So, have that whole process in mind, because that’s what will be our basis for being able to discuss all the other phenomena, the precursor phenomena we want to look at.

So, hold that aside, and we’ll look at one other thing.

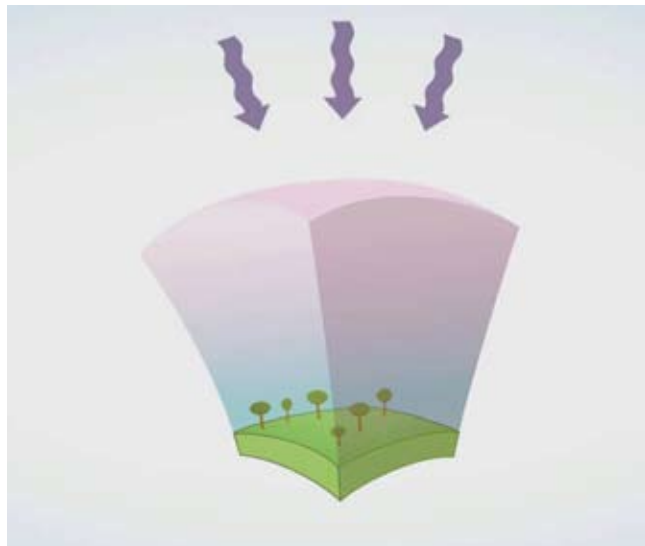
FIGURE 14a



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The release of ionizing radiation during an earthquake.

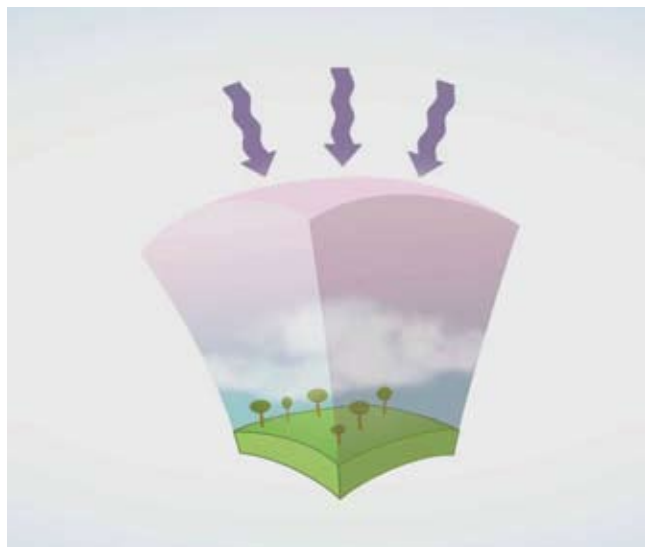
FIGURE 14b



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Cosmic radiation penetrates the Earth's atmosphere.

FIGURE 15a



LPACTV

Cosmic radiation interacts with the Earth's atmosphere, resulting in showers of chain-reactions, of transformation

FIGURE 15b



LPACTV

Ionizing Radiation

In connection to earthquakes, the period leading up to earthquakes, and then the actual release of energy in the earthquake itself, there's ample evidence that you can observe different types of ionizing radiation being released (**Figure 14**), essentially the same thing we describe as cosmic radiation, but now moving in the other direction. There are various reasons that this could be the case. One that Pulinets has put forward, and other

people have put forward, is that you have large amounts of radon gas being formed at various locations in the Earth. This is a natural decay product. It occurs in several decay series, several that we find within the Earth itself. Obviously, this is a gaseous radioactive material, so as certain materials are moving from one solid state to another, they're passing through this radioactive gaseous state; that results in massive buildups of pressure, at different places in the Earth.

FIGURE 16



The Solar System moves through the spiral arms of our galaxy.

As to what other mechanism might facilitate that, we'll leave that as a potential. What that would mean, is that, in the event of certain kinds of major tectonic changes, you would get the release of this gas. This is measurable, people have seen it. Pulinets made the point that this is something you search for in your house; you search to see whether you've got dangerous levels of radon emission. But in an earthquake, this, or whatever other mechanism may be causing the ionizing radiation, would give you an effect that looks a lot like what Henrik Svensmark has described for cosmic radiation (**Figure 15**).

He describes certain types of cosmic radiation, most of these galactic and extra-galactic cosmic radiation. The entire universe is a constant soup of this cosmic radiation material. It's composed of it. Not only is it nowhere empty, but it's incredibly energetic, so energetic that it's a real safety consideration, talking about moving astronauts through this. It has huge effects on living tissue—it's invisible, but it has serious effects on living processes.

It has a very specific interaction with Earth's atmosphere, very specific. This exact same atmosphere that was developed by plant life as plants moved onto land, functions as a sort of interface, that translates the activity of this radiation into very specific types of phenom-

ena we observe on the Earth. One that Svensmark identifies is, as these energetic particles hit the Earth's atmosphere, they form particle cascades: One particle strikes material, and the other particulate material in the atmosphere, and you get these showers. You get these showers of chain-reactions, of

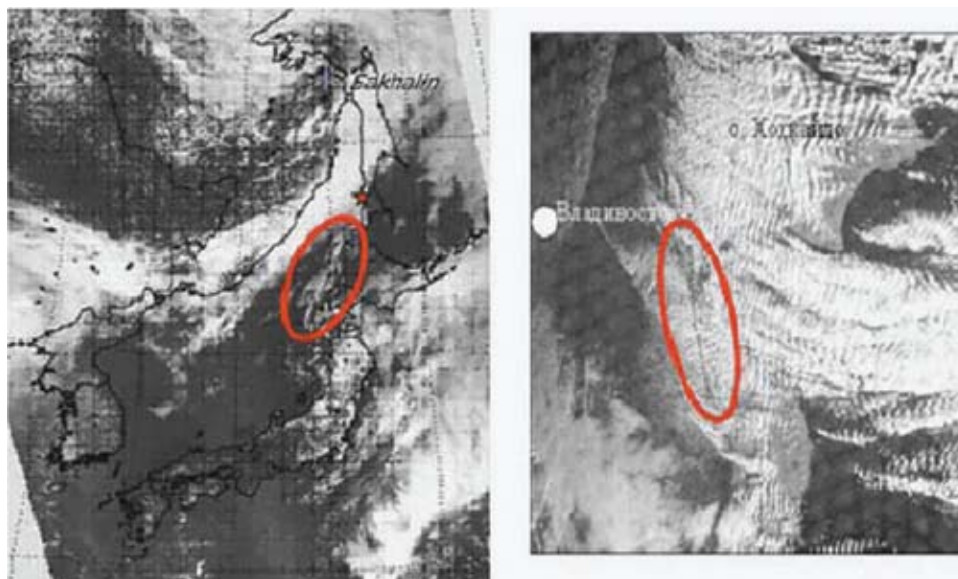
These have all sorts of different effects: These have the effect of ionizing certain parts of certain gases in the atmosphere, creating a very particular structure, of which the ionosphere, as we discussed before, is one layer. But the significant thing you get, down in the troposphere—beneath the iono-

sphere, down in the region that we would normally refer to as where weather events take place, you get cloud formation, etc.—is that this creates very specific ions, that can serve as nuclei for condensation, and in places where you would normally not get condensation. That is, the density of the water vapor is not enough to cause what you would normally recognize as condensation, these nuclei seed the clouds, and so, you get clouds forming where otherwise they wouldn't.

As a result, you get this pattern of cloud formation that corresponds to major galactic changes, and, as the work of Svensmark showed, and collaborators of his, you can see cycles of global warming and cooling, which are tied to the supposed, the theorized motion of our Solar System, both through the arms of the galaxy (**Figure 16**) and then, in and out of the plane of the galaxy.

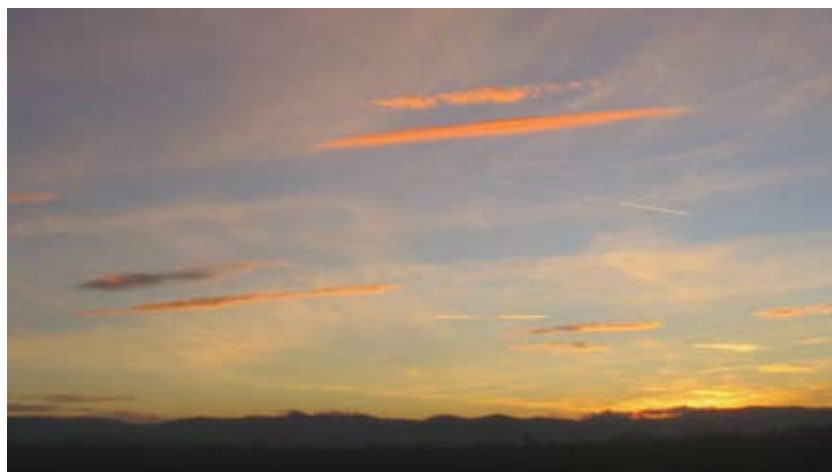
If you look, you see that global heating and cooling cycles have *nothing* to do with human activity. None of this stuff that you're getting from the Greenies right now—all of that becomes completely invalid, as soon as you take a closer look at any process on this scale. When you look at this scale, what you *do* see, is these massive changes in climate, which are correlated to what the Solar System, the galaxy, are doing as a whole.

FIGURE 17



Seeding of clouds occurs with the radiation emitted during earthquakes, over earthquake sites. Shown are Sakhalin Island (left) in 2008 and Japan (right) in 2004.

FIGURE 18



So-called “earthquake clouds” are highly structured, with sharp edges, lining up with earthquake faults.

Now, that same mechanism of seeding of clouds, occurs with the radiation that’s emitted during earthquakes, and this has been a lot of the study that Pulinets and collaborators have been undertaking. That, as you look over earthquake sites—now this is in Sakhalin Island in 2008 (Figure 17), and then Japan in 2004—you see what has often been described by eyewitness evidence, as “earthquake clouds” (Figure 18). You get these very sharp clouds formed, very structured, sharp

edges, lining up with earthquake faults, and which don’t drift as the other cloud patterns move and drift.

Now, this is an indication that something in the fault itself, connected to the earthquake, is causing the formation of these different cloud structures, and you can see in the images that it’s very sharp, very crisp. Depending on what’s the polarity, what’s produced by the ionizing radiation, you’ll either get a very sharp appearance of clouds, or a very sharp absence of them, but you’ll see this very clear distinction mapping out.

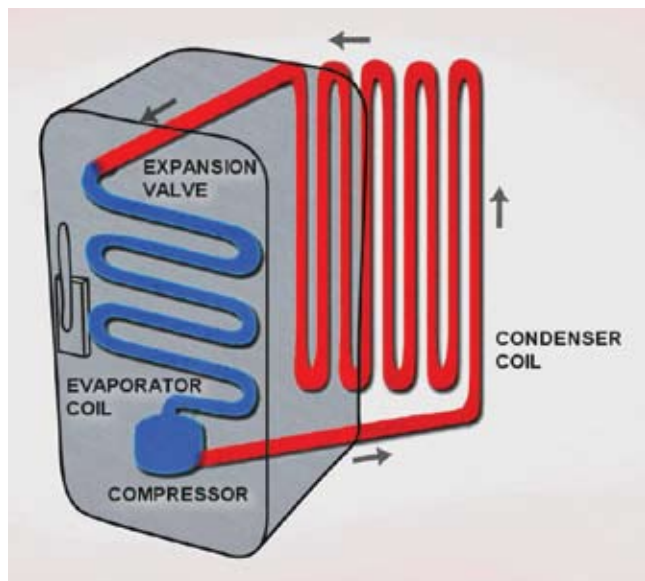
That’s something that can be seen as a clear precursor. And if you look at a lot of this anecdotal historical evidence, you find what it is: There’s lots of discussion of “earthquake clouds,” “earthquake weather”; this was sort of known, but now you can start to see how it fits into a much bigger, single system.

Anomalies in Heat Release

But then, Pulinets’s team noted that connected to that, connected to the formation of these little condensation nuclei, is an image for everybody to take a look at. I think people have some idea, maybe you’ve had some direct experience with it: how your refrigerator works (Figure 19). Taking water and

boiling it, requires the input of heat, to convert water into steam. That heat is essentially stored in the steam, as you may have noticed, if you’ve ever accidentally opened a pot too early and had your hand over it and gotten a steam burn. The reverse is also true: In order to condense that steam back into water, you’ve got to release that heat that was put into it in the course of boiling it. Now that means, connected to all condensation, you get a heat release. Now, typically this is done sort

FIGURE 19



The mechanism of condensation and heat release in a refrigerator: an analogy to the condensation caused by ionized particles being released in connection with earthquakes.

of directly: You want to get condensation, you do it by cooling the gas, in order for it to condense.

But, now what happens if you force the condensation without cooling it, without managing it by adjusting the temperature yourself: You'll get a corresponding release of heat. And that's what is happening in the condenser coil of your refrigerator. You're forcing the condensation of your cooling fluid, and you're getting the release of heat that was picked up from the items in the fridge. So your coolant is moving into the fridge, absorbing what little heat is left there; as it leaves, you condense that fluid again, and what heat was there is pumped out, so when you feel the little coils in the back of your fridge and the heat in the back there, that's all the heat that used to be in your food, that's all being steadily pumped out.

Take that mental image, and go back to the condensation being caused by the little ionized particles being released in connection with these earthquakes: You should get not only the formation of certain clouds, not only the formation of water vapor, but you should get the release of massive amounts of heat—and

you do. This shows up as thermal anomalies that are picked up by weather satellites.

So our weather satellites that are looking at infrared radiation, the idea was originally to pick up different kinds of cloud structures, but in the maps they're trying to get, you sort of get, as an accidental picture, what are called "thermal anomalies": You get these anomalous areas of heating, and in many cases, as Ben was saying, if you look at the measurement of this long-wave radiation, they find that it will map back to fault lines, with particular characteristics, prior to earthquakes. And these are thermal anomalies that are observed. This is the example in Gujarat, India (Figure 20).

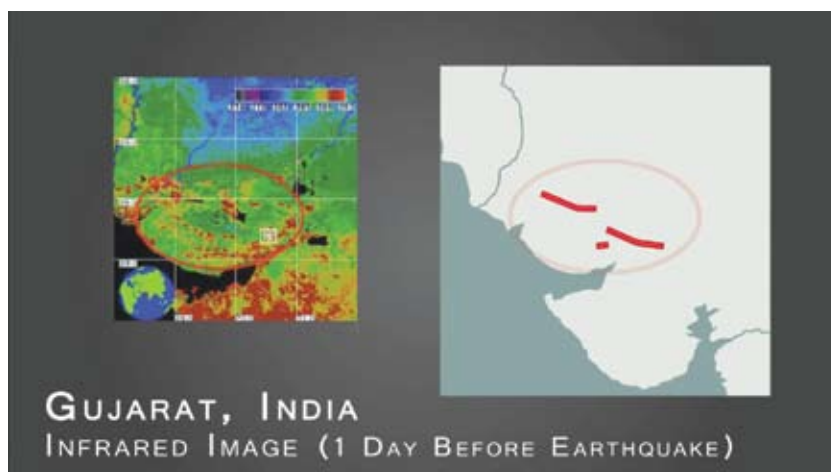
Thunderstorms and the Ionosphere

So you've got a whole set of things here: You've got the peculiar cloud formation; you've got these different thermal anomalies. But now, go back to what we talked about in the beginning, with the global electric circuit, and you realize, that you've got this image here (Figure 11), of the "fair weather field."

So, we've got thunderclouds, which are forcing, creating a potential difference, so they act sort of like batteries. You know, that's the way a battery works: A battery's got a potential difference between the two ends. You link that up through a whole process, one end to another, and it fuels the whole thing.

All these various thunderclouds, in that little belt around the Earth that we looked at earlier, those thunderclouds are steadily fueling this process; maintaining this potential, again, 150,000 volts to 600,000 volts, between the Earth and the ionosphere, depends on what

FIGURE 20



Thermal anomalies measured by infrared detection devices before an earthquake.

goes up in the thunderclouds, comes down through what's called the "fair weather field" everywhere else, and so much so, that you can measure it. If you take three sensors anywhere on the planet, you can map out every lightning strike location on the surface of the planet, because, no matter where you're placing your sensors, you can triangulate it, because of its global effect. You can also measure the change in the fair weather field places in the planet, based on what happens around the thunderstorms.

This is a complete system. But now, its behavior depends on the behavior of that dielectric, that little insulating layer of the atmosphere. What happens if you release the ionizing radiation of the type that Svensmark is talking about, or the type that Pulinets is showing, or others are showing, as connected to these earthquakes, into that column of what's normally your dielectric, that has a certain, very minimal conducting capability?

You change that conductivity, and Pulinets shows that, you do it in two ways: First, the free ions *increase* the conductivity of that column, as they collect water molecules around them; as they collect the water vapor into these droplets, they *decrease* the conductivity. It's as though, in that column, you're creating a wire, and then you're creating an increased insulation. If you create that wire between your two conducting plates there, you create a sudden ability to discharge more rapidly from the ionosphere down into the ground. That shows up as an ionospheric anomaly.

It shows up as a much bigger anomaly, because, as we said before, that plasma, that ionized plasma, ionized as a result of the Sun's activity, that makes it a perfect—a near-perfect—a very excellent conductor. That means it's going to try to equalize the potential across the entire surface; as soon as that little column is changed by the earthquake, you're going to detect a change throughout the entire surface, that's going to try to equalize that change of potential. That's observable.

Now, if you look back, that change corresponds to what you see, both what DEMETER observes, what the various observing satellites are noticing as ionospheric changes, prior to an earthquake, during an earthquake, and after the earthquake. *Those changes in the iono-*

FIGURE 21



Not detected by the human sensory organs, but powerfully influential on our planet: Earth's magnetosphere is revealed by the "extended sensorium" of instrumentation.

sphere also translate into changes in the Earth's magnetosphere that are recognizable. The entire process is perturbed.

And you notice, you've got something there now (**Figure 21**)—again, *all* in what were otherwise invisible, to your "in the box" senses. All these processes are invisible, except in one respect, as we'll discuss, but more or less invisible to the sort of "untrained" mind; but they're completely visible to this array of sensory apparatuses, many of which, again, weren't specifically designed for this purpose. They were designed to observe other things, but they pick up these as phenomena. So, this gives you a whole class of precursors that you can sort of see as you're treating this thing as a single organism.

Changes in Animal Behavior

But to add to the earthquake clouds, we'll add one more anecdotal precursor, the change in animal behavior, connected to earthquakes. Now, this has been observed, reported—during the one quake in China we reported on, it was even used as an early warning system, to evacuate a city in time to save many lives, by observing the strange behavior in animals. There are lots of anecdotal reports about changing behaviors of different kinds of sea animals, seemingly, in particular, animals that are inclined to use different types of electronavigation.

Now, think back to what we said, back in the Devonian to the Silurian—I think I've got the right ages

there—when you’ve got the first motion of plant life onto land, facilitating the ability for animal life to move onto land. So you’ve got the entirety of animal life on land being built within this platform established by plant life. What happens to that animal life, as you start to perturb that basis for its existence there on land, is that you’re going to see recognizable changes in behavior, in connection with those changes. As you mess with the behavior of that current flow, you *will* see, and you *do* see, different types of anomalous animal behavior, most of which seems to be connected to their ability to navigate. So you’ll get the beaching of different kinds of animals, etc.

All that should give the idea, and hopefully, we can create an image of it, that you’ve got a single, continuous process there that’s recognizable, that extends all the way from some, as-yet-untouched region within the Earth—we have no idea how long and how far that goes yet. We’ve tunneled an *insignificant* distance into the Earth; human knowledge has actually extended farther into space, than it has into the body of the Earth. And as we know, we’ve taken very limited steps into space; we’ve only taken the very precursory actions off the planet.

So, it extends much deeper than we know into the Earth; it extends much, *much* more distant than we know off of the Earth. As far as we’ve got an ability to make observations, or take our different sensory data, this whole process extends; it’s fueled by extragalactic cosmic radiation. *We*, in response, serve as a beacon in return. If you take a look at the tops of those thunderclouds, those exact same thunderclouds, as they’re pumping the discharge into the ionosphere, charging the ionosphere; if you take a look, we recently saw, by accident, as we had the Fermi gamma-ray telescope up there to look for these huge gamma-ray bursts outside, gamma-ray objects, they noticed that you’re also getting massive gamma-ray bursts *from the Earth itself*.

And you look down and you realize what’s happening is, you’re getting these huge bursts of gamma radiation from above these same thunderclouds. So, by the

activity of the Biosphere, suddenly, the Earth itself becomes a beacon. So, we’re not just receptive; we’re also communicating back. What we’re communicating, we don’t know—we might want to have some say in that, and see if we can not let the plants have all the say! But right now, they’re sending some kind of message out.

Connected to that, you get these bursts, you get the creation of antimatter, which has secondary gamma-ray bursts connected to it. You get this *hugely* energetic process there, and again, it’s functioning in this continuum. This completely filled, active, structured, knowable continuum, which fills all of space, has got a character to it, is involved in a constant anti-entropic development: that that’s the thing that we as a species

should be acting on, and the establishment of an early warning system for earthquakes would be a first step towards that, and a necessary step!

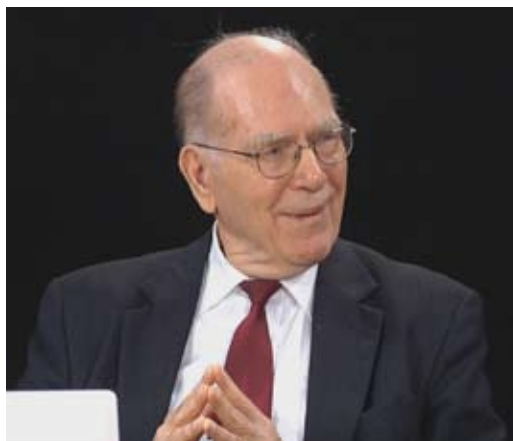
The Galactic Effect

LaRouche: So therefore, what we’re looking at, with your remarks here, is the nature of the comprehensibility of the kind of process we’re dealing with. And we didn’t even touch some of the deeper things, which we can touch more deeply at a later time, or it may come up here.

But the point is, the thing is totally foreseeable. I think “predictable” is a bad word, I think foreseeable is a better term.

We know, in particular, that, as Sergey reports, if you give him a number of people, he can create a facility which would actually make up for the gap; that is, a facility which could actually assimilate this kind of information and process it in a coordinated way—take the coordination among these different types of phenomena, monitor them, and then put together the picture that we know now, retrospectively, by seeing these different types of phenomena. And putting one laboratory system to work, under which, say, a dozen specialists, who are really commanding the operation, in touch with and working with other institutions throughout the planet, we have a system of forecasting which gives us an indication of what we’re getting to.

The more important thing, of course, is the deeper



LPACTV

Lyndon H. LaRouche, Jr.: “A revolution in what we will define as science is actually coming out.”



J. Hester (ASU) et al., CXC, HST, NASA

A composite image of the Crab Nebula, combining optical data (red) from the Hubble Space Telescope and X-ray images (blue) from the Chandra Observatory. We still don't understand what it's doing, but it's doing something big!

one: the question of the galactic effect. All of this stuff is tied to the galaxy, and it's only since we began to pay more emphatic attention to this question of the galactic connection, and also to the idea of cosmic radiation; once we, in our organization, beginning last Summer, went from our work on NAWAPA [North American Water and Power Alliance], as a NAWAPA, and began to look at the galactic implications of this—because we're concerned about what these changes in the Earth, by NAWAPA, are going to mean—and what we touch upon, in other respects, by looking at these things, since then, we've had in our organization, a much-improved capacity to understand this whole process.

And a revolution in what we will define as science is actually coming out. When we deal with this thing as a cosmic phenomenon, as opposed to the old, crude, stupid, space-time-matter conception; once we look at this thing as a *cosmic* process, and look even, simply, at the relations within the orbit of our galaxy, we look at this kind of phenomenon, and then look back at Earth in the context of this phenomenon, we now see that we have to think about the universe in com-

pletely different terms.

This, interestingly, has two areas of impact. One, is the Einstein impact, Einstein-Planck, which is the precursor of this kind of thinking. The second one is Vernadsky. So, Vernadsky brings us what's crucial for this kind of forecasting, which is why some of our Russian friends are the best at it. The Russians and the Ukrainians are the best at it, because under the Soviet system, they went heavily into this kind of area of work.

And now we've got a situation, where we know, we have a better understanding. We still don't understand what the Crab Nebula is exactly doing to us, but it's there, and it's doing something big. We don't know what the intergalactic relations are, but we're beginning to get a smell of them, that they're very important. So we find that ordinary human beings, or extraordinarily ordinary human beings, like our friend Sergey and their teams, are actually putting together, from their modest resources, relatively speaking, exactly the kind of way we have to think about the universe.

What Holds People Back?

And we don't know that we can save mankind. I think we should say openly, as I said yesterday: The greatest danger, and Franklin Roosevelt said it in one word, so to speak, but I don't think even understanding what he said gets across to a lot of people: We have nothing as much to fear as fear itself. And, when we're afraid of something, so afraid of it, we don't bring it up, we don't discuss it, because we don't want to frighten people, we're doing precisely that! We're frightening people in the name of *not* frightening them.

What we have to do is sort of civilize our fears, and look at our fears straight in the eye. And the greatest danger, which is typical of the Baby-Boomer generation, and has affected the sequential generations, is they say, "Don't tell me about it! I don't want to hear about it! Don't tell me, you'll get me upset."

We had, in the Baby-Boomer generation, the rise of an idea of cowardice, of intellectual cowardice, which actually, when you think about strategy, military strategy, it's the kind of cowardice, which means a mighty army is going to crumble at the first flanking operation! With the Baby-Boomer generation, we have potentially

what could have been a mighty army, which, on the basis of its “mother’s fears”—mother says, “Don’t do that! Don’t do that! Don’t think about it, don’t mention it! Don’t talk about it!” These kinds of fears, which did not exist in my generation, the World War II generation, have made the American people, and Europeans, *impotent, psychosexually impotent*, because they look at fears as things you talk about!

And it’s by talking about the threat to humanity, which we know is a *credible threat* to the existence of humanity, coming up on the 62-million-year cycle, by closing our minds to it, we are failing to discover the means by which we might *avoid* that unfortunate conclusion!

Therefore, those, like the current President—who of course is a mental case, a frankly mental case, and that’s a technical fact; that’s not an opinion, that’s a technical fact—by tolerating this, we have reduced our people, with the Green movement so-called, and similar kinds, we’ve reduced the people of the planet, or many parts of the planet, to such a degree of cowardice, that it’s *cowardice seeking extinction*. That kind of cowardice, is a desire to become extinct, so you won’t feel the pain any more. You get away from the pain by killing yourself. And that’s what’s happening.

And this is what’s happening here, in what you’ve laid out, and we’ve only scratched the surface here. What we’ve laid out, demonstrates that this problem is a *cognizable problem*, and it’s only our own stupidity, in refusing to investigate these lines, which we should investigate to a further level, which causes the human race to be in danger! The human race could become extinct, not because it has to go extinct—we can’t answer that, yes or no—but we certainly are helping the extinction of the human mind, and human beings generally, by failing to face this thing, straight up!

And that’s another reason for getting rid of President Obama, for putting him into this 25th Amendment, section 4. And we have to put him there, because *his fears*—he seems to be asserting his arrogance, and threats and so forth. But actually what motivates this guy, is terror. He’s terrified into stupidity, and he’s aggressively defending his stupidity. And his stupidity, and the way he defends it, is a threat to the existence of the United States, and humanity generally. And we don’t have people in the Congress, or in the Presidency right now, generally, who are willing to take that on.

It’s the psychosexual impotence of the Baby-Boomer generation, which is threatening the potential

extinction of mankind! And our job is to scare the hell out of them, because they have to face these fears, because if you don’t face them, you don’t identify them, you’re not going to seek the methods by which to overcome the cause of the fear. And that’s what we’re looking at here. This is enough, to say—look, you’ve broken it down, effectively, to the point that we can say, “Hey! This is comprehensible.”

Sense Perception Is Not Reality

There’s nothing mysterious about this—there are lot of unknowns, we recognize that; but it goes to a more fundamental question, which, of course, is our shtick: People believe so much in sense-perception, as such, and believe in it as an exact truth, believe that it’s reality, sense-perception is reality.

What we know in science is that sense-perception is *not* reality. Sense-perception is a footprint of a man who can’t see: He walks through the thing; you don’t see him, you see the footprints, and you call the footprints, “We’re worshipping God! We’re worshipping the footprints.” This is the way human beings act when they say, “I’m being practical.” Practical is a synonym for being stupid, and dangerously so, suicidally stupid. What we’re doing, by looking at the shadows, which we’re looking at here, the shadows of reality, we see that the shadows correspond to a reality which sense-perception does not give us. We go outside sense-perception per se, to these other factors, and suddenly, “Hey! The universe makes sense!” We don’t know all the answers, but it makes sense.

And if we get people to understand what we’re trying to say, then they will come out of their cowardice! And the thing, as Roosevelt said, then: Nothing so much to fear, as fear itself. And the Baby-Boomer generation is a generation of fear, which generates fear, and produced a generation which is—actually the younger generation now, under 25 is increasingly nonfunctional. They’re not functional as human beings! Their capacity to face reality, is being destroyed, and a dwindling number, a dwindling, tiny minority of that generation is still capable of functioning.

And the key, the source of that, is this question of fear. As Roosevelt said: We have nothing as much to fear, including in *this* area, including in the cosmic problems, including the galactic problems, the threat of galactic extinction: We have nothing as much to fear, as fear itself.

If we had not lost 40 years of science, we would not

be in the mess we're in today. And therefore we have to say, "What do we have to correct?" We have to correct, and eliminate the popular opinion among the Baby-Boomer generation and its followers, which destroyed the ability of the people of the United States and Europe, to actually act, in *rational* defense of themselves. Mankind has always lived in terms of the unknown. Mankind has lived only because we're the only species that can invent new powers of conception. The Green movement is a movement of extinction. You want a 62-million-year cycle? Have a Green movement. That'll do it: It'll kill off the human species. And therefore, people have to realize that if they're Green, they're not really qualified as loyal members of the human race.

That's our lesson here.

Shields: Right.

LaRouche: Very simply, a few things, as we have done here, as Sergey did in his remarks, we can make realistic, what the factors are that we have to understand, to *begin* to understand what this problem is, and to *begin* to understand what direction of investigation we must go into, in order to answer the unresolved questions.

A New Leadership

We need a new leadership in this—I think, in yesterday's and today's development, in the announcement of the reinstatement of the Glass-Steagall Act, if restored, as intended by this action in the Congress, if that's restored, Obama's going to be out. He'll probably leave in a fit of rage—even the British won't be able to stop him from doing that—and we have a chance for humanity.

But we're going to have to change our opinion, the opinion of the population, so they're no longer—like the Green movement. The Green movement is people



EIRNS/James Rea

This 250,000-person anti-nuclear demonstration in Berlin on March 23, after the Japan earthquake, shows the insane impact of the Green ideology on the population at large.

who have been driven into becoming fascists by their Green fears. They're afraid of reality, and their fears, their hysterical fears, become worse than Hitler, as a menace on this planet. And if we don't overcome these fears, by forcing people to accept reality, we're not going to have a human race. That is, this can be a self-inflicting, self-perpetuating disaster for us. And this is extremely important: We break this Green movement nonsense, then humanity has a chance. If the Greenies take over the planet, the planet's finished, and the human race is finished.

Shields: And it's significant, all these developments make them so clearly and explicitly obsolete. Everything: Their whole view of the way the universe works, as you said, is based on no actual evidence.

It's based on no actual scientific knowledge, it's based on an internal neurosis, and internal psychosis, a willful detachment from reality, that they wish to impose on everybody else, even at the expense of everybody else's lives.

LaRouche: That's exactly it. That's where we are. And this Green movement is, right now, as you see in Europe in particular, the greatest threat to the human race, that we've faced by far. Hitler was a minor threat, compared to the Green movement, and Hitler was actually a forerunner of the Green movement. If you look back to the 1920s, when the British got him started: Anti-technology, anti-science. Anti-human.

Deniston: One thing that definitely stuck out in Sergey's interview, was the way he raised the solar relation question. These guys are already under a lot of pressure, even on the question of whether you can have these precursor events that you can detect and have some type of warning systems. There's an even larger persecution of people who are daring to take up some of



EIRNS/Stuart Lewis

The power of Classical artistic creativity, said LaRouche, is what you get with “the use of the function of irony.” The late Classical singer William Warfield was a master of irony. Here he is shown teaching a class with Schiller Institute chorus director John Sigerson (1995) (top); and reciting a poem at a Schiller Institute conference (2000) (right).



EIRNS/Stuart Lewis

very clearly.

LaRouche: It’s what I’ve just written about. I’ve dealt with the subject before, but I’ve written about it, because of the general circumstances.

The problem of mankind is, so far, that stupidity is belief in sense-certainty, and the typical guy who says, “I believe in what my hands, what my senses tell me.” And those people are not quite fully human. Because, as we see, in the indicators of these earthquakes, and we see the factors, even animals

know what human beings don’t know! And human beings can know this very easily, if they decide not to be animals: Because if they believe they’re animals who are limited in their reactions according to what they consider sense-perceptions, which they call “reality”—it’s what they *call* reality: “I’m a practical man, don’t give me this

these more frontier questions, within the scientific community of the solar relations, these activities, and the galactic relations, especially.

He made the point, that you have cases where you have the solar activity directly coinciding with the earthquake activity on the Earth; you have cases where you had it prior to the earthquake activity; you have cases where you have the solar activity coming after the earthquake activity. But no one, just looking at it, is going to deny the fact that there’s repeatedly a very clear, not always one-to-one, but very often a relationship between these two things.

He said it quickly, but he said, “What does that point you to? That points you to, well, maybe there’s something causing both.” Maybe there’s something directly relating to the activity on the Earth, and the Sun; like you said, we want to define what we know, and then define what we don’t yet know, as the clear question of the investigation. I think this comes up as one of them,

stuff!” A practical man is a person who is not fully human.

Because we see, that when you look at this thing, you unmask it, you realize that the precursors are not some mysterious thing from outer space. They’re what the human beings are too stupid to recognize, as long as they try to be practical: It’s only when they look outside their sense-perception.

The Nature of Man Is Creative

And there’s a deeper question here: It’s the nature of man. Greenies are morally stupid, that is, they are sub-human, morally! Because, the nature of mankind is our human creativity. Now, the Greenies, who are essentially the slaves of the worship of Zeus—that’s what they are. They just say, “We have to stick to our animal nature. Therefore, if we don’t have a sense organ which comes to us in infancy, which teaches us how to react to this stuff, it doesn’t exist.”

And the idea of discovery of principles in the universe which go beyond our sense-perceptual training, doesn't occur to them. They say, "Well, let's be practical. Let's be practical." When you hear a person saying, "let's be practical," you know you got a stupid man on your hands, and a stubbornly stupid one.

The problem is, we are so tied up, by Liberalism, the philosophy of Liberalism, of the pleasure/pain principle, that we recognize as reality that which gives us sensual pleasure and sensual pain. We do not recognize what's going on which is not in that category! That makes us an animal, not a human being! That makes the people who believe that, like the Greenies, not really fully human beings, but more like animals, because they do not believe things they *can* know, because it interferes with what they call their "pride of sense-perception."

Whereas, when you look at the animals then, you take the number of animal species which *do* recognize these precursors, they're not conscious of them, but they react to them, you recognize: Hey! Mankind is intrinsically stupid, because mankind is not intelligent enough to respect even what these animals react to, and other species react to; how the system is organized.

Then you look at how much of this planet's existence, going back several million years, on the existence of Earth, and looking at the 62-million-year cycle, and you look at the evolution of the planet, under the influence of life, and under the influence of human creativity, and you realize that what sense-certainty teaches you is stupidity!

And therefore, what happens as a result is, by believing in Liberalism, you believe that there are *no knowable principles* in the universe; there is only your interpretation of sense-perception. Yet, we know that with the aid of instruments, and by the aid of the mind, we can discover messages being sent to us, which are not just sense-perceptual messages, but in the same way that we're measuring these earthquake effects! The same way that Sergey and company are doing that: You're taking a complex of things, some things you can directly perceive; some things you can't. Some things you see by indirection, as in animal behavior, other kinds of behavior; you put these together, you find that your mind is capable, by discovery, of encompassing a larger universe than human sense-perception gives you. And you're able to understand how to use sense-perception.

In other words, you're able—when you have a man walking, when an invisible man is walking through the mud, he leaves footprints. Do you have the intelligence to adduce the presence of the man, or do you think that footprints are making those imprints? The typical person today, the so-called realist, has no conception of humanity. They don't see the man, the invisible man, who's creating the footprints by his walking. And that's where we fail.

Shields: To the extent that human beings identify with their physical senses, with their physical self, that's the extent to which, when you die, you just die.

LaRouche: Exactly.

Shields: To that extent, you're a groveling mortal.

LaRouche: Can you use the footprints of the invisible man walking, can you use the footprints to identify the man? So that therefore, instead of having the idea that "I *know* practical effects," which are sense-perceptual effects, do we have the ability to say that the human mind is outside sense-perception, and higher? Can we identify what the human mind's function is? Not by sense-perception, but by the implications of what we see as the ironies created by sense-perception?

And therefore, we have a limited number of people on Earth today, who believe in the human mind, and who are actually creative. The destruction of Classical artistic composition, has destroyed the main mechanism by which civilized forms of life, have been able to exist as human.

By the introduction, in 1950, of the sexual congress, or, as we call it, the "Sexual Congress for Cultural Freedom," by introducing this attack on Classical artistic composition, and Classical music in particular, we have destroyed the ability of mankind—through the denial of Classical artistic composition, we denied the powers of the human imagination, on which we rely, to understand the significance of unique phenomena! And therefore, the loss of Classical artistic composition, and our relationship to it, is the source of the stupidity. It's like brain-deadness: If you reject Classical artistic composition, you don't have scientific discovery. You don't have the capability of doing it. You just have stupid people, trying to be practical. And they're practically already dead, as a result. We're doomed.

And this is what the lesson is: We've got to get man-

kind to understand the existence of what we call the human mind, as not being the compounding of sense-perceptions, but as something which *sees* sense-perception, i.e., the footprints in the mud, as being organized by something which you don't see, which is the human being, the human mind!

Shields: Because in that lies human immortality.

LaRouche: Yes, and what is called the birth of Classical artistic creativity, is precisely that. If you have the power of Classical artistic creativity, which you get with the use of function of *irony*, in Classical poetry, the function of irony in Classical music composition, and you prefer the “ugh-ugh” variety of entertainment, then you've lost your humanity.

You have people out there, these Greenie types of movements, and their kinds of entertainment, the way they dance! What they consider music—bum-bum-bum-bum-bum! This is the definition of their loss of powers of humanity. Because it was through *Classical* artistic composition, through the sense of the principle of irony, that mankind's cultures were able to progress to a certain degree of brilliance.

What we have done, in the course of the 20th Century, we have increasingly, beginning with the so-called World Wars period, destroyed that Classical artistic capability. We've rendered people functionally stupid, and it's their functional stupidity and fears associated with that—it's like the guy, you're cut off from a sense of time. You no longer have an inner sense of time. This is the same kind of effect: If you believe in this kind of culture we have, the Greenie culture and so forth, if you believe in that, you're talking about a human species that's on the road to extinction. Because they've lost that power of creativity upon which humanity's existence has always depended.

Because that's what the importance of this is; it's not just saving man, practically, from these kinds of effects, which I'm sure we can do. But we're destroying the mechanisms, so to speak, the invisible mechanisms—invisible to our sense-perceptions—by which we're able to conquer these problems. And that's the issue here.

And a nation, that can not get rid, under the 25th Amendment, Section 4, of the Constitution, can not get rid of a President, who is, in fact, in effect by his very presence, the greatest threat to humanity on this planet, today... Because, if the United States survives, the world will survive, because it will only survive in this

way. And without our initiative, and what reposes in our Constitution, we can't inspire the rest of the world to take the actions, by which it can survive. Without that, without a shift from the so-called “practical mind” of the stupid person, of the half-brain-dead person, into this other view, into the view of the mind as a creative mind, only in that way, can we save humanity. And even something like what faces us now, could be the extinction of mankind.

And we have to realize the relationship of the continuation of this person in the Office of the Presidency as the threat of the extinction of mankind. When people wake up to that, we'll make it! But it's like, in all warfare, I can tell you, any war in which a Baby-Boomer generation is involved, is a war you're going to lose, because they have decided to lose it implicitly, before it's started.

That's the flanking principle, the principle of the flank. The principle of the flank is not some big physical principle; there are physical principles involved. The principle of the flank is, the enemy you're attacking, whom you're going to outflank, is incapable of reacting rationally in behavior, a rational response to the threat. All the interesting threats, of military threats in flanking, have come where an inferior force, numerically, has outflanked and destroyed—utterly destroyed!—what is apparently a superior force!

Now, that is a phenomenon of the human mind. The outflanked force is the one whose mind is not capable of responding to what the flanking force clearly understood. That's the secret of warfare in politics. That's why we can win. We're not a threat to them: Their stupidity is.

Hoefle: That's the importance of Glass-Steagall. Everything that we've just described is the potential future of mankind. And what the Brutish Empire is trying to do, with their monetary system, is kill off most of the people of the world, to prevent this future from happening. Glass-Steagall is our weapon to destroy them.

LaRouche: I'm very happy about that appearing finally. I don't think the President is happy at all about that! He's going to do everything possible. Are we going to survive? The answer is, “Are you going to get rid of this President?” Going to put him in a booby hatch where he can be comfortable and safe? He may not like it! But he'll be comfortable, and we'll keep him alive. And his punishment will be, to live with his wife. With her shopping list!