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BEYOND NAWAPA Controlling the Weather: Ionizing the Atmosphere

Megan Beets of the LaRouchePAC Science Team hosted this "New Paradigm for Mankind Weekly Report" on May 14, 2014. Lyndon LaRouche and Ben Deniston were her guests. Beets began by establishing the strategic context for the discussion, with reference to LaRouche's previous day's emphasis on the pending, precipitous blowout of the trans-Atlantic system, and the need for the immediate implementation of the Glass-Steagall law and a Hamiltonian credit system. The video is available at http://larouchepac.com/ node/30782.

Megan Beets: ... The key area that we're going to take up in today's discussion, is the physical crisis which is currently hitting the Western half of the United States, in what is an ongoing, and worsening drought condition hitting a great part of the nation. Now, as we have covered in previous discussions, this is

not a temporary condition. We're looking at perhaps a drought that could stretch on for years, decades, or longer.

So, as you've emphasized, Mr. LaRouche, quite strongly, we now know that the NAWAPA (North American Water and Power Alliance)¹ program, as pre-

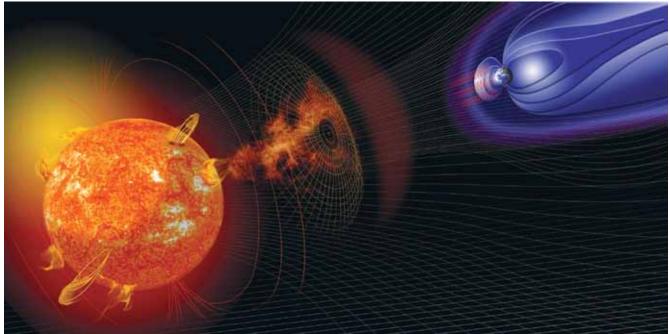


Ben Deniston: What's needed is "the leap-frog economic principle: go to a higher level of control, typified by fusion, typified by weather-modification systems, and then, from reaching further into the future, resituate these projects like NAWAPA, and related irrigation systems, to be able to handle the crisis."

viously discussed, will not be enough to correct and address the physical collapse and emergency hitting the Western United States with this drought. What we now know is that the NAWAPA system, or any land-based water-management system as such, is itself dependent upon a much larger global moisture and precipitation cycle. So if we intend to survive and develop and solve this crisis, it's that larger system that we must gain mas-

^{1.} For more on NAWAPA, see http://larouchepac.com/infrastructure

FIGURE 1



NASA Goddard Space Flight Center

A solar storm heading toward Earth (upper right, in the midst of magnetic fields). This schematic shows the type of factor that was not being considered when NAWAPA was designed, when all the irrigation and water systems of the West were designed. The climate system is not a fixed, stable system.

tery over, and that means evolving to higher levels than we've ever been at before, in terms of power and control as a species.

So Ben, I think you have something to say on that.

The Sun Is Weakening

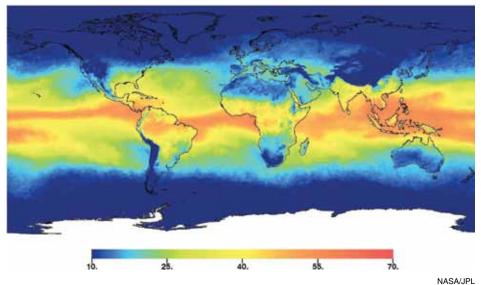
Ben Deniston: Yes. Today, we're going to get at some of what we might be able to do, to act on some of these larger systems that subsume NAWAPA and subsume these river diversion, river management projects. I think it's worth just putting on the table, that even if we had built NAWAPA in the 1960s, when it was designed; if we'd built it in the '60s and '70s, and completed it by, say, the '80s, bringing water down from the North into the West and linking up the continent as a continental water-management system; even if we had built that, we'd still be faced with the same challenges we're raising here, today, now.

Even if we'd built it then, we'd still be now realizing, the Sun is weakening. There are multiple, independent indicators pointing to the fact that we very likely could be heading towards a grand solar minimum, which will affect climate conditions differently in different regions, and globally. So this is a challenge, because of the development of the Solar System, and because of what the Sun is doing, and because of the level of development of society, this is a challenge that mankind is going to have to confront, no matter what.

Now, because we haven't built NAWAPA, we're in an even worse crisis, where we don't even have a certain stability point to work from, to handle these challenges, of larger-scale climate fluctuations, longer-term drought processes. So it just underscores the need to accelerate toward a future orientation, to what you might call the leap-frog economic principle: Go to a higher level of control, typified by fusion, typified by weather-modification systems, and from reaching further into the future, then, resituate these projects like NAWAPA, and related irrigation systems, to be able to handle the crisis.

Figure 1 is just a very cartoonish schematic of the type of processes we're looking at, where this new factor that was not being considered when NAWAPA was designed, that was not being considered when all the irrigation and water systems of the West were designed, is the fact that the climate system is not a fixed, stable system. Large-scale climate systems and regional

FIGURE 2 AIRS Total Precipitable Water Vapor (mm) May 2009



AIRS=Aqua/Atmospheric Intrared Sounder

from the oceans by solar evaporation ends up falling on land. Obviously it fluctuates seasonally, it fluctuates year to year-but based on NASA's observations, certain modeling, a good estimate is about 10%, we think, of this moisture, water that came from the ocean, evaporated, about 10% of that falls on land. And that determines all the river systems that we have; that determines the recycling of the water on land, where plant life will put that water back up into the atmosphere; it'll fall on land again, as rain, but ultimately, the input to the whole land-based water system is this ocean-water transport

climate systems fluctuate; they can fluctuate rather dramatically over even years and decades. And one of the key factors, not the only thing, but one of the key factors that can play a major role in this is major changes in solar activity, like what I went through last week.² We could be seeing such changes with this weakening Sun right now.

So that means, we can't guarantee that the rivers that exist now, will continue to be the same types of river systems, because those depend upon these climate patterns and these precipitation patterns. What we have to look at, is what determines the rivers, what determines the snow-pack, what determines the precipitation in different regions (**Figure 2**). And, where all this water ultimately comes from is, initially, the oceans. That's, obviously, the major store of water on the whole planet. Then the Sun is doing a lot of work for us, evaporating huge amounts of water from the oceans and pumping it up into the atmosphere.

Now, just coming from the oceans, globally, it's equivalent to about 1,000 Mississippi Rivers' worth of water. So, if people have been to the Mississippi, it's an impressive flow of water: Imagine 1,000 of those rivers worth of water, flowing vertically up, from the oceans into the atmosphere—that's continuously happening. Only about 10% of that water that flows up

from solar activity.

So, if we're going to handle the type of climate changes—real climate changes, not the lies that Prince Philip and his associates are putting out—but actual changes and developments and shifts in the climate system that are going to come from solar activity and associated processes, we have to start to look at these subsuming processes of the atmospheric moisture cycles.

And so the question is—and we'll get into some detail today—how do we make that water that's in the atmosphere, fall where we want it to fall, or, not fall where we don't want it to fall? How do we bring it over to regions where we want it, and how do we get it to change from a vapor state to a liquid state, so it can fall down to the land system?

This has been a subject, obviously, that mankind has been fascinated with for a long time, and done a fair amount of work on. People are probably familiar with cloud-seeding. There's frankly a lot of cloud-seeding activity that goes on, where people will distribute particles of material into clouds, and if the clouds are near a tipping point, it can accelerate the condensation process, and ensure that the droplets get big enough to fall. But it's a very limited aspect. It depends upon a certain amount of moisture and cloud formation to already be there, so you can kind of push it over the edge, so to speak, just give it a little boost.

^{2.} See http://larouchepac.com/node/30718

Weather Modification: Ionization

What I want to look at today is another avenue, by no means the only one, but one specific avenue of weather modification, weather control, called "ionization systems," and I want to go through a few case studies of these systems.

Here is, a picture of some of these systems operating in Mexico (Figure **3**). These are towers connected by a series of electrical wires. It actually takes not a whole lot of power input; but the key is not just blasting a bunch of power through the system, but tuning it. You can tune these systems, ionize the atmosphere in the region surrounding them. You take regions of the atmosphere that were not nec-

FIGURE 3 Producing Rain with Ionization, Mexico



Left: the central mast; right: an example of the installation used

Seraei Pulintes

essarily very charged, not electrically active, and you make them electrically active by ionizing the region, by separating these electrons from the nuclei of the atoms. So, these systems can be used to ionize a region of the atmosphere, which will then actually have a much larger effect, on the scale of tens of miles, hundreds of miles, around one of these systems. And this ionization process can actually help facilitate the condensation of water vapor.

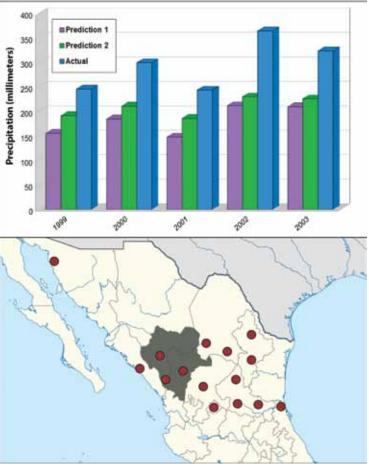
By creating these charged particles, you're helping to give something for the water to condense onto, and helping to facilitate the process, something that's always going on to some degree-more in some places, less in other places-but there's always this process of the vapor changing. The Sun turns ocean water into vapor; at a certain point, the vapor changes back to a liquid state and then falls from the atmosphere, as rain or snow, or whatever.

Beets: Some say this is more effective than simple cloud seeding.

Deniston: Yes, this has been shown to be much more effective than the traditional cloudseeding processes.

So, here's a map of the operations in Mexico (Figure 4). This is one useful case study, where they've done this. There is a scientist who was doing some of this work in the Soviet Union, and

FIGURE 4 **ELAT Stations & Precipitation in Durango**



Phillip Kauffman and Arquimedes Ruiz-Columbié

when the Soviet Union fell, he basically started a company and said, "I can be hired to create rain, I can affect weather systems, I can affect storm systems." And at the time, 1992-'93, it generated somewhat of an international media buzz. A lot of the international media were trying to dismiss him as some kook, but he ended up getting into some discussions with the head of the space research program at the National Autonomous University of Mexico (UNAM), and they started talking about some of this work. And they got the support of someone who at the time was the head of the science committee in the Federal Senate in Mexico.

So they got together and said, let's give these systems a try.³ By '96, they had built three trial systems these ionization stations in Mexico—and they got positive results; they could actually increase the rainfall, and the amount of precipitation over these regions. So based on that success, they expanded it from 3 stations in '96, to, I believe, 21 stations in 2004.

Each of the red dots on the map is the location of one of these systems, set up across Mexico. The shaded state there, is the state of Durango, and [in the bar graph, above], we have an illustration of, over five years, the expected versus the actual rainfall, which has been attributed to these ionization systems. So you have each year, 1999 to 2003, measuring this precipitation in millimeters. And the purple and the green, are a low and a high prediction for the natural rainfall, what they naturally expect to get in the region, the forecast based on historically what they get in the region and whatever climate patterns they're seeing for the coming year. So you have a high versus a low prediction, for what they expected the rainfall in the state of Durango to be. And the blue is what actually happened, under the influence of these ionization systems.

So you can see, for this region of Durango, as one case study of these Mexico operations, that you had consistently for five years, a higher level of precipitation under the influence of these ionization systems.

I'll read a couple quotes from some of the media coverage of these Mexico operations. In 2003, a magazine called *Mass High Tech*, from Massachusetts, was covering these investigations, and the technology is

FIGURE 5 Meteo Systems in the United Arab Emirates



called ELAT, the name of the ionization systems they use; so, in 2003, *Mass High Tech* wrote: Mexico's "first ELAT station, in the drought-stricken state of Sonora, increased average rainfall from 10.6 inches to 51 inches in the first year, according to Mexican Department of Agriculture statistics. When a lack of state funds shut down the station the following year, area rainfall measured 11 inches. In the third year, with the station operational again, the area recorded 47 inches of rainfall."

In 2004, *IEEE Spectrum* covered this, and they looked at the entire central basin region of Mexico, and on average, under the operations of these systems over a few years, they concluded, there was about a doubling of precipitation of rain over this larger central basin region, which corresponded to a 61% increase in bean production in the region.

And there are other studies. They're also looking at using these systems to put out fires, so there's a significant reduction of fires in the Yucatan Peninsula, under the operation of these systems, because they bring in moisture.

So the Mexico operations have been successful for well over a decade, and have led to the expansion of these systems, and a very clear demonstration that there is some potential to use this ionization effect to induce precipitation and induce moisture flows for some control over these weather patterns.

Not Just Mexico

Another operation, using a similar concept, not necessarily the exact, same technology, but still based on ionization method, was launched in the United Arab Emirates (**Figure 5**). This is a screenshot from their website, called Meteo Systems, and the image of some

^{3.} See Sergei Pulinets, "Are Earthquakes Foreseeable? The Current State of Research," *EIR*, Aug. 5, 2011.



of these ionization stations they had set up, I believe, in 2011 there. And based on these operations, they claimed to have generated 51 or 52 unanticipated rain showers, that were not forecast by the weather, just to-tally a surprise, but came in association with the development of these ionization systems in the UAE. And this actually helped to generate a fair amount of media buzz, and I think, scared some people a little bit, because they took down the website for a little while. There were all these attacks: "That can't happen, it's impossible, it's physically impossible, you can't control the weather." So it went down for a little bit, and now it's all back up and you can go to the website (http://www.meteo-systems.com/), and they have their studies there.

The third case where this has been demonstrated has been in Australia (**Figure 6**), on a somewhat smaller scale than the Mexico operations. This is a company called Australian Rain Technologies. They have another variation of this ionization system; the map shows three regions where they've been doing relatively small-scale, limited, but very rigorous and very conservative studies, of running these systems, measuring how much rainfall happens. And they've been claiming, again, consistent results through these studies, ranging between a 10-20% increase in the regions affected. And they also make the point—and you can also go to their website (http://www. australianrain.com.au/)—they have very lengthy, detailed studies, with all the assumptions involved, and they're very clear that they're being extremely conservative in their estimates. So if anything, they're undershooting the effect they're actually having, but to make sure that they're really countering all the naysayers and attacks, they're being very conservative in their estimates of what effects their systems are having.

And they, for example, proposed, a relatively cheap \$11 million project, to build 14 of these stations in the catchment area that leads to a reservoir that feeds the Murray Darling Basin, a region where there's major water shortages, largely because of crazy environmentalist policies. It's a huge agricultural region for Australia; it's fed by irrigation systems. So they've put out a proposal to say, let's build a series of these ionization systems, not covering the whole

basin, but covering the catchment area, where any rain that falls in that area falls into rivers that flow into reservoirs, so as to increase the rainfall that ultimately goes into the reservoirs, to give water supply for the whole basin.

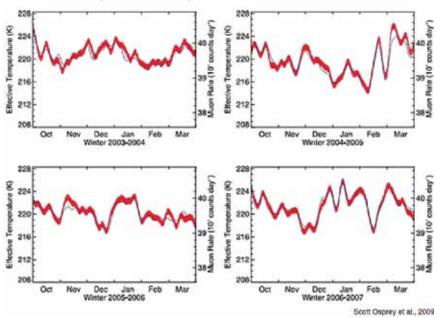
As far as I know, they haven't gotten support for that program, but that's the type of study they're proposing to do. I haven't seen any detailed studies, but there's multiple references to these technologies being used in Russia to good effect; some of the people in these other operations, were involved in Russia. Other coverage has cited Russian activity, and there are other nations as well, where some of this has been investigated.

So, this is not just some theory that somebody just came up with, and is untested. There are now at least three documented places, and there are others, but there are at least three regions, where this has been shown to be effective. In Australia, with relatively small-scale, but very rigorous studies; in Mexico, with larger operations, operating for many years, with consistent success.

So this is kind of the tip of the iceberg of the type of stuff we could be getting at, but I just want to take a few minutes now, to go through some of the science that we're dealing with.

Evaporation: Megatons of Energy

Going back to the total moisture in the atmosphere, this is the measure of what they call "total precipitable water vapor," water vapor that can precipitate, can fall out as liquid water (Figure 2). This is water vapor in the atmosphere. It was actually a surprise to me to realize how much energy is stored in this water vapor itself, because it takes a lot of energy to convert liquid water to a vapor form. And Jason [Ross, of the LPAC Science Team] has used the example a few times of boiling a pot of water on your stove: How long does it take to get boiling? It usually takes a little while. But then, how long does it take to boil all the water out of that pot? That's a lot of heat, a lot of energy, to vaporize, to turn from liquid to vapor FIGURE 7 Short-Term Correlation of Temperature in the Stratosphere and Secondary Cosmic Rays



state, a whole pot of water. Now, that energy is actually stored in the state of being a vapor, and if you can get it to condense, to change back from vapor to liquid, it releases heat, it releases energy. They call this "latent heat," the heat potential in a vapor state of a liquid.

So, actually, 23%, nearly a quarter of the Sun's energy that hits the Earth's system—not just that which hits the surface, but all the energy that comes to the whole Earth system—23% of that solar energy goes into the evaporation of water. So 23% of the energy input from the Sun into the Earth's system, is, in a sense, stored in the vaporization of water.

But it's a constant process. You could never do this—in case people get afraid about this example, or something: You could never actually do this, but, if you took all the water vapor in the atmosphere, and instantly condensed it into a liquid state, it would release the amount of energy on the order of 6,700 megatons of TNT equivalent—that much energy. The biggest nuclear bomb ever detonated, the Tsar Bomba that the Soviets detonated, was 50 megatons. The amount of energy contained, just in the vapor state, the state of the water being a vapor, in the atmosphere is the equivalent of 6,700 megatons, so over 100 of the largest nuclear bombs ever detonated; that much energy is constantly there, just in the latent heat factor.

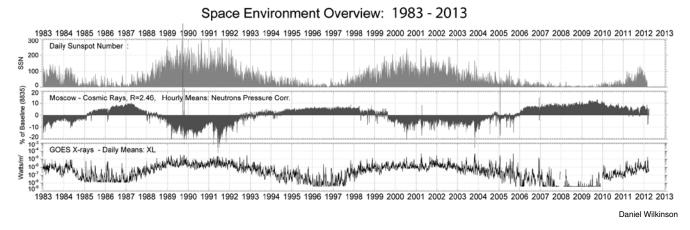
But it doesn't just stay there. The Sun's constantly

evaporating more water; that water is constantly condensing back to liquid and precipitating. And as it's condensing back to liquid, it's releasing heat and it's heating the atmosphere. Now, half of the heating of the entire atmosphere actually comes from this process, which I found to be remarkable. So, about half of the heating of the atmosphere comes just from the sunlight hitting the atmosphere directly; but the other half comes from the condensation, the water vapor changing back to liquid and releasing heat—this actually contributes to half of heating, the thermal effect, of the entire atmosphere. So this latent heat release, this evaporation and latent heat release, is a major, major factor in the entire thermal system of the atmosphere.

Now, this gets very interesting, because one of the key factors that facilitates this condensation process, this changing from vapor to liquid, is the process of increasing the ionization: Having more charged electrical characteristics to a region of the atmosphere, can help facilitate a greater rate of condensation. We know this just by natural effects, by cosmic rays, galactic cosmic radiation: Our atmosphere is constantly bombarded with cosmic radiation.

Figure 7 shows two lines on each of these graphs: There's a thick red one, and there's a thinner blue one, but it's hard to see because they match so well. One of the lines is measuring cosmic rays beneath the surface

FIGURE 8 Space Environment Overview



of the Earth, which is fascinating; the other line is measuring the temperature of the stratosphere, the high atmosphere. And you have an extremely tight relationship between cosmic-ray flow into the Earth's system, and the temperature of the upper atmosphere. Because, the more cosmic rays, the more changing from vapor to liquid, of the water, and the more latent heat release, heating the upper atmosphere.

And this is actually a total surprise, in systems that were beneath the surface of the Earth, measuring very high-intensity cosmic rays; that they're able to use that data to show that the cosmic-ray flux tightly corresponds to the upper atmosphere temperatures, very likely relating to this latent-heat-release effect.

So, the galactic cosmic rays can modulate ionization and latent heat release and have a major effect on the thermal system of the atmosphere. The other factor that plays into that, is solar activity (**Figure 8**), because solar activity helps to modulate cosmic-ray flux: If the Sun is more active, has a stronger magnetic influence, it tends to block out more cosmic rays from entering the Earth system. If the Sun is weaker, as I was discussing last week, if the Sun's magnetic system is getting weaker, then it can't block as many cosmic rays, and we get more cosmic rays coming into the Solar System and the Earth system. And this is very well documented.

This can be seen very clearly in this graphic of 30 years: The upper curve is sunspot number—and again the number of sunspots is a good measure for how active the Sun is overall, but the activity is very magnetic in character, a very active magnetic field when it's

more active. So, you can see the regular, 11-year fluctuation in sunspots, and the very bottom is the x-ray flux. You can see that the x-rays leaving the Sun and hitting the Earth follow very closely with the solar cycle.

But you see an *inverse* relationship in the middle curve, in cosmic rays. So when the Sun is more active, peaking around '89, '90, '91, you see there's actually a dip, there's actually less cosmic rays reaching the Earth system, because the Sun was more active. As the Sun quiets down into a minimum period, like you see in '95, '96, '97, you get an increase in galactic cosmic radiation coming from outside the Solar System.

So you can see this tight relationship between solar activity and cosmic-radiation flux. It's a way to mediate how the Sun's activity, interacting with the cosmic radiation—those two play a role in affecting weather systems and thermal systems, and condensation and ionization in the Earth's atmosphere.

Now, you have an overall cycling here, but you also have singular, large events. You have these coronal mass ejections, when the Sun has a big explosion on its surface and sends out a large ball of plasma; basically, a mass of plasma leaves the Sun's surface and travels through the Solar System. When those masses of plasma hit the Earth's system—because they carry a magnetic field, the whole plasma itself is going to have magnetic characteristics—those can, temporarily, over just a short term, strengthen the magnetic influence around the Earth and also lower the cosmic rays coming in. They're referred to as Forbush decreases, named after the guy who discovered these things: That when you

FIGURE 9

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GEOPHYSICS =

Role of Variations in Galactic Cosmic Rays in Tropical Cyclogenesis: Evidence of Hurricane Katrina

Academician of the RAS V. G. Bondur, S. A. Pulinets, and G. A. Kim Received April 10, 2008

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Based on the analysis of experimental data on vertical temperature profiles in the propagation region of Hurricane Katrinn and variations in fluxes of galactic cosmic mays (hereafter, cosmic rays), we established an interrelation between temperature variations at the tropopause level and variations in the level of atmosphere ionization by cosmic rays. We found that variations in temperature and its spatial gradient related to the Forbush depression of cosmic ray flux induced by a magnetic storm could lead to variation in the direction of the meridional component of velocity and the intensification of Hurricane Katrina.

time periods in weather variations starting from the 11-yr-cycle of solar activity and finishing with shortperiod variations during magnetic storms (Forbush effect of cosmic rays). An increase in the density of solar wind plasma and the interplanetary magnetic field during active events on the San leads to scattering of cosmic rays and decrease in their flux on the Earth's surface, especially at low latitudes [5].

The author of [6] found short-period variations in the cloud cover during the Forbush depression. The cloud density decreased considerably in the regions with a thick cloud cover and increased over the ocean with a cover of lesser density.

FIGURE 10

have singular outbursts of solar activity, it can make a sharp, short-term dip in cosmic radiation flux.

Hurricane Katrina

So I set all this up, to point to one very provocative and interesting study (Figure 9), looking at the rela-

tionship between galactic cosmic radiation, solar activity, and ionization and latent heat release—everything we've discussed so far—and hurricanes. And in this case, the case of Hurricane Katrina, which devastated New Orleans in 2005.

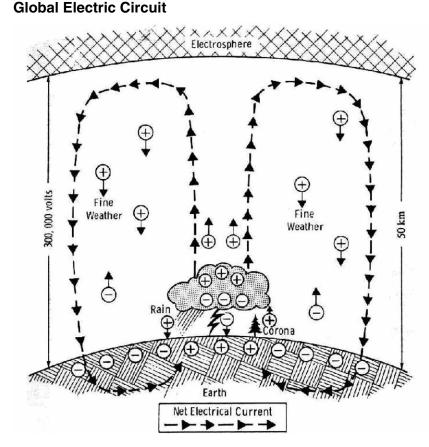
What they looked at in this study was very interesting; that one of the major factors in determining the strength of a hurricane is the temperature difference, with a relatively warmer ocean, and a cooler upper atmosphere: The greater difference in temperature, the greater convection, the greater change of state which strengthens the whole hurricane. That's why when a hurricane moves into the Gulf of Mexico, where the water's a lot warmer, that can affect the whole hurricane structure, create a larger temperature difference.

What they looked at, was the fact that, in the case of Hurricane Katrina, you had a geomagnetic storm, you had a changing of the Earth's magnetic field, likely associated with activity from the Sun, which actually decreased the cosmic-radiation flux, which meant that there was less ionization occurring in the upper atmosphere, which meant there was less heat being released. So less cosmic radiation coming in, meant less ionization and less release of this latent heat. So the upper atmosphere actually got colder, because of this magnetic storm and decrease in cosmic radiation. And that was enough to affect the entire hurricane; it strengthened, and it changed direction, because of a relatively small change in input of this ionization factor, which modulated the latent heat release and changed the temperature difference, affecting the whole hurricane system.

This has some potential large-scale, real effects that you can conceptualize—this type of ionization affecting latent heat release, is enough of a factor, to affect an entire hurricane system, based on what we see from this study.

Lyndon LaRouche: It changes the characteristics of Earth's weather, above the United States, for example.

Deniston: Yes. And that's what we want to start



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looking at. And the other factor, just to round off, real quick, the other contributing factor is the whole global electric circuit (**Figure 10**), which is another factor in weather systems which is affected by ionization.

The entire Earth system is characterized by this voltage, this potential difference, this electrical difference between the ground and the ionosphere, the very high atmosphere. And this is generated by thunderstorm activity; lightning and thunder clouds create this; the more lightning strikes you have and the more thunderstorms, the greater the intensity of the whole global electric circuit system.

So you have these thunderstorms generating this difference, and then everywhere else, you

have a current, flowing back down through the atmosphere. It's happening everywhere; it's happening right here. There's actually a current flowing through our system right now, from the ionosphere to the Earth. The ionization, either by galactic cosmic rays, or by manmade ionization systems, can affect these current systems, because if you increase the ionization of the atmosphere, you increase the ability for the current to flow through that particular region, potentially giving us another handle on being able to affect large-scale weather systems, moisture-flow patterns.

Here is another study that indicates some of this. This is actually a fun study, showing that cloud cover in certain regions of the Earth has actually been shown to correspond to solar wind, to the electrical coupling of the Sun to the Earth system (**Figure 12**)—another indication that weather and climate systems are tied to the global electric circuit in these processes.

Changing the Characteristics of the Solar System

LaRouche: This has a complementary implication which is more interesting in other ways. It's interesting psychologically, in terms of mankind's own behavior. That, for example, the problem we faced on NAWAPA, was the fact that there was an assumption that there was a fixed system on Earth, which could give you a NAWAPA program. What this demonstrates, of course, is an understandably foreseeable management capability, which is superior to any fixed system on Earth at one time, any climatic system. So we got caught in the fact, that the delay of NAWAPA—I'm sure that if it had been put in place at the proper time, it would not have

FIGURE 11

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Clouds blown by the solar wind	l
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Abstract In this letter we investigate possible relationships between the cloud cover (CC) and the interplanetary electric field (IEF), which is modulated by the solar wind speed and the interplanetary magnetic field. We show that CC at mid-high latitudes systematically correlate with positive IEF, which has a clear energetic input into the atmosphere, but not with negative IEF, in general agreement with predictions of the global electric circuit (GEC)-related mechanism. Thus, our results surgest that mid-high latitude clouds might be affected by the	

been collapsed today, because it's again, these kinds of process.

But the more important thing is to go beyond Earth as such, and to realize that mankind has a responsibility, as well as an ability, to change the characteristics of the Solar System itself. And that mankind now has to realize, to look at this process from the Solar System; and there's also a time factor in this thing, of course. When you go to the Solar System, you go to a greater disparity in time. But it means that mankind, potentially, that mankind on Earth, is not mankind: Mankind resides on Earth, under Earth conditions, but mankind's responsibility by going to higher energy-flux density, is to control the Solar System. And therefore, mankind's directive has to be the intention to increase man's power in the Solar System.

And one of the things that's most significant is, why haven't we done something about asteroids? Asteroids are a a near-Earth-passing phenomenon, with deadly implications for even the existence of the human species. Why haven't we done something about that?

So therefore, you're talking about—it's if Satan himself, otherwise known as Zeus, were planning the policies, stewed up in the mind in the Roman Empire and in the British Empire. Maybe they're Satanic forces. Not Satanic forces of nature, but Satanic forces of evil: The people that prevent us, as mankind, from doing what mankind *can* deal with, is the great crime.

So therefore, we should eliminate the Roman Empire, as something that should never have happened, as a Satanic phenomenon, and the British Empire is also, we know, close at hand, a Satanic phenomenon. And all these things, like weather and so forth, reflect mankind's Satanic subjection to influences of that type. Because man *could* do something about it. Most of the climate problems we have in the United States which are close to Earth, are things we could manage. But what prevents them from being managed? The *green* policy! The green policy is the threat to human existence. I think we have to get rid of the greenies.

Deniston: Yes, absolutely. As you've repeatedly emphasized, you just take 1968, '69, '71, through today—we've had no progress. There's been no economic progress—mankind has been *not allowed* to develop fusion; it has been suppressed and kept from being developed; nuclear power has been shut down.

LaRouche: It's obvious, we have to shoot Satan. Really! That's the term to use, "shoot Satan"!

Deniston: Right. And that's what people don't get. You literally hear the argument from some people, "Well, weather modification, earthquake forecasting, fusion power, if it could have happened, it would have happened already. And therefore, because it hasn't happened already, therefore it couldn't happen." That's just totally ahistorical....

LaRouche: That's Satanic. *That is* Satanic! A Satanic ideology. And it should be called that.

Deniston: Yes. But people don't realize that there's this active force, in society, trying to suppress this development.

LaRouche: Well, that's obvious. Because, the point is, mankind is responsible to control nearby space. And this is a perfect—what you've just done here, in this presentation, is a very nice, implicit presentation of exactly that issue. And you add in the asteroid question, and threats to mankind from asteroids; it's a similar kind of phenomenon. Mankind will not become mankind, until we can control asteroids. Because as long as those asteroids are running around, they're uncontrolled, without the means we *could* develop control for, mankind's very *existence* is insecure! And that is truly Satanic! And the British monarchy is truly the creation of Satan: Maybe we should *fire Satan*!

Beets: We can start by firing our President.

LaRouche: Yeah, well, that would help. That's the first thing. I think Obama should be one of the first to go: Like a leaf that's flowing in a hot stream, and suddenly it becomes ignited, and goes away in

the flare, and drops its ashes to ground—and is no more!

So this is a very informative, in terms of educating some of the people out there, to open their minds, as well as their eyes, and ears, and so forth, as to what the problem is. And let's not depend on *fixed systems*, on *fixed destinies*, on limits which are fixed! Ah! Let's have some *fun*!

A War Against Satan

Beets: As you pointed out yesterday, and also in this report that you just finished,⁴ mankind is not fixed like animal life, that's how you put it yesterday. That, in reality, man is not a fixed species, we're not a fixed system, and human evolution does not occur in the same mode as what we call biological evolution. And what that means is that mankind is constantly changing, because he's constantly able to master principles of the universe which are beyond what had ever been part of the human species before.

LaRouche: Well, that's my point. That's my point in my emphasis on the significance of Vernadsky's work, even though the guy died, in the middle of a process of continuing discovery. He died of old age and wear-and-tear, in the normal course of events. And then his creative powers were suddenly turned off, by his death, and other people were not able to do much in continuing them. Many people did try to push something here, push something there, as a result of his work, after he had died. But that became attenuated, especially with the breakup of the Soviet Union and the demoralization process that preceded that breakup.

I mean, we reached the high point right when I was doing the SDI, and that goes from 1978 into 1983, that period. And what we were doing, was going in exactly that direction. That was the intention: That we had to end this damned war business, because under thermonuclear war conditions, you can no longer have war in the conventional sense of global warfare. And therefore, you have to change the way in which mankind behaves, socially. But you have to get rid of Satan, the Queen.

She now has genders; we always took this matter of Zeus, which is really Satan, and we didn't pay any attention to the gender problem! The Queen may be the

^{4. &}quot;History Is Closing In on Obama," EIR, May 16, 2014.



Lyndon LaRouche: "Mankind resides on Earth, under Earth conditions, but mankind's responsibility is to increase, by going to higher energy-flux density, is to control the Solar System. And therefore, mankind's directive has to be the intention to increase man's power in the Solar System."

name of the menace, hmm? But the whole apparatus, her husband, her son, and a lot of people around them, they're all similar kinds of Satanic rubbish.

And what we're really doing, is we're fighting a war against Satan. And I think that is probably a good enough war for us to fight.

I don't think we need any other war. We just kill Satan, or put him in a prison; that should be sufficient to encourage man, to do what mankind is. I think that the British Empire and its predecessor, the Roman Empire, the follower of the original Satan, that's the fellow we have to get rid of. That's what we have to make war against.

I think, then, human beings will have the chance of being really human! We just have to order the affairs of mankind on Earth, so that we have nations, but the nations are really instruments of a common human intention. And we have to bring that about. That'll be fun. That will make life worth having been lived. That I like!

I'm pleased we're going to do something about this. **Deniston:** Yes.

LaRouche: The ideas have been rolling through my head as Ben went through this process. I've got a whole list of things, about a dozen things which just rolled through my head. It was not just what he was saying;

it's that what he was saying *popped* into my head as meaning this, meaning this, referring this! It was fun! It was great fun, a good ride.

Deniston: Thanks. But this also gets at what you've been pointing to in the replacement of science with mathematics. Because now, *this* type of process typifies the revival of science, real science. How can mankind act, hypothesize, and use that hypothesis to act to improve the conditions of life, to change things, to be an increasingly active force in the universe.

LaRouche: The point is, the trans-Atlantic region is now dying! Most of Western Europe is dying, beyond Central Europe. Most of trans-Atlantic region is *dying*. Dying of a self-inflicted wound, called "Satan," the British Empire.

What you're having now, you have a gradual recovery of Asia, and extending

into that. There are many parts of Asia which are absolutely destroyed. But, there are powerful forces in the Eurasian section which are moving, as Russia is trying to move and others are; now China, as well; so this driving force. What's happened is, the trans-Atlantic region has slipped into playing the role that Asia had. The trans-Atlantic region became a dominant region through the version of the British Empire, and related things, or the contention with the British Empire; and then Asia was subordinated, the Asia, trans-Pacific region.

Changing the Direction of Man's Destiny

So now, what's happened is, the trans-Pacific region has now come into prominence, in what, as of *now*, is the dominant trend, upward. Whereas the trans-Atlantic region is the dying region, of culture inherently. It's not a failure of one country, or another country; the whole region is dying, systemically!

What we're going to have to do, is think on a larger scale: We have to bring both regions of the planet into coherent agreement on principle. And that's what I'm looking at, in terms of the Russia thing. The Russia-China relationship gives us the opportunity. If we in the United States get rid of Obama, and get rid of the oligarchical and other tendencies of that type; if we do that, we can put the United States back to being the United States. And bringing that into synchronization with the upsurge in development in major parts of the Eurasian sector.

So that should be the policy of the United States government, now. And get rid of everything, in the U.S. government, which doesn't do that, and doesn't commit itself to that.

Beets: When you see some of these development projects that China has been proposing in the recent weeks—for example, the idea of building a system of maglev trains through an evacuated tube, that can go 1,800 miles per hour! This technology originated in the United States!

Deniston: Back in the '60s.

LaRouche: Yes!

Beets: And similarly, with the proposal to finally build this tunnel under the Bering Strait, which has been discussed in the United States and elsewhere for over a century!

LaRouche: The corresponding thing, is the tunnel through the Alps, which is one of the great achievements of that type, that macro-scale.

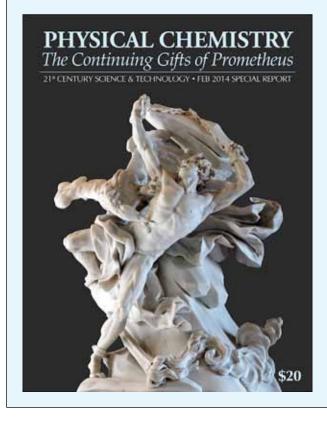
And that's what we have to do: We have to change the politics of the United States as such, in order to change the planet policy. We have to get rid of Obama, we have to get rid of Wall Street, everything like that. End the green policy! *Eradicate it*!

If we do that, and if we bring in the nations which are affected by that change, if the United States will change its character, back to what it was supposed to be, and coordinate with the Eurasian sector, or its leading sections, we have enough power, or influence, on this planet, to change the entire direction of man's destiny, to space.

So I think that's a mission-orientation, which we have to say, is the political destiny of mankind, which must be provident, in controlling what mankind, in various countries, does simultaneously now. It seemed like a good idea: I think it's probably the only good idea that will work right now, under these conditions.

This is good. And this stimulates one's thinking in that direction. Good!

Beets: Okay. Well, that'll do it for this week: Thank you, Ben; thank you, Lyn. And we'll see everybody soon.



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