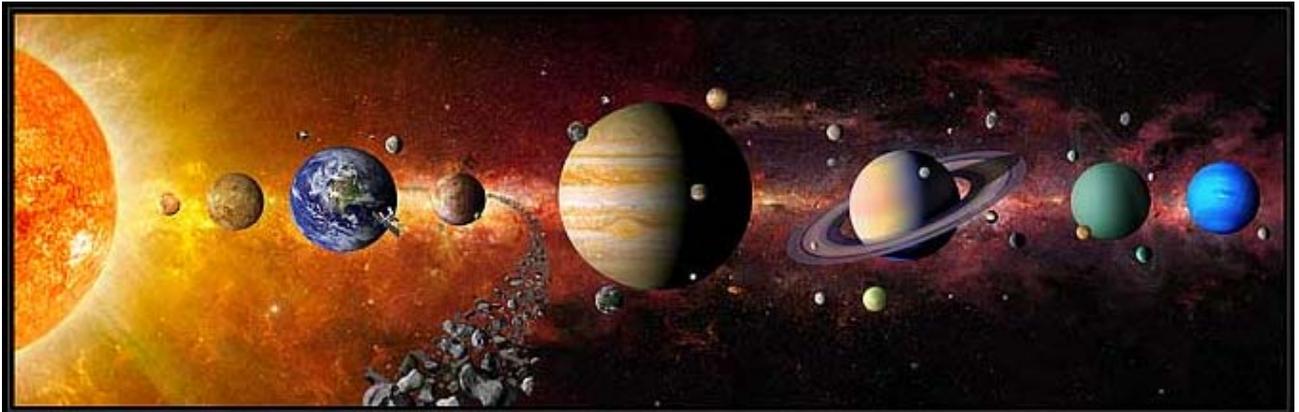


PASCAS WORLDCARE



3RD ROCK

FROM THE SUN



PASCAS FOUNDATION (Aust) Ltd
ABN 23 133 271 593

Queensland, Australia

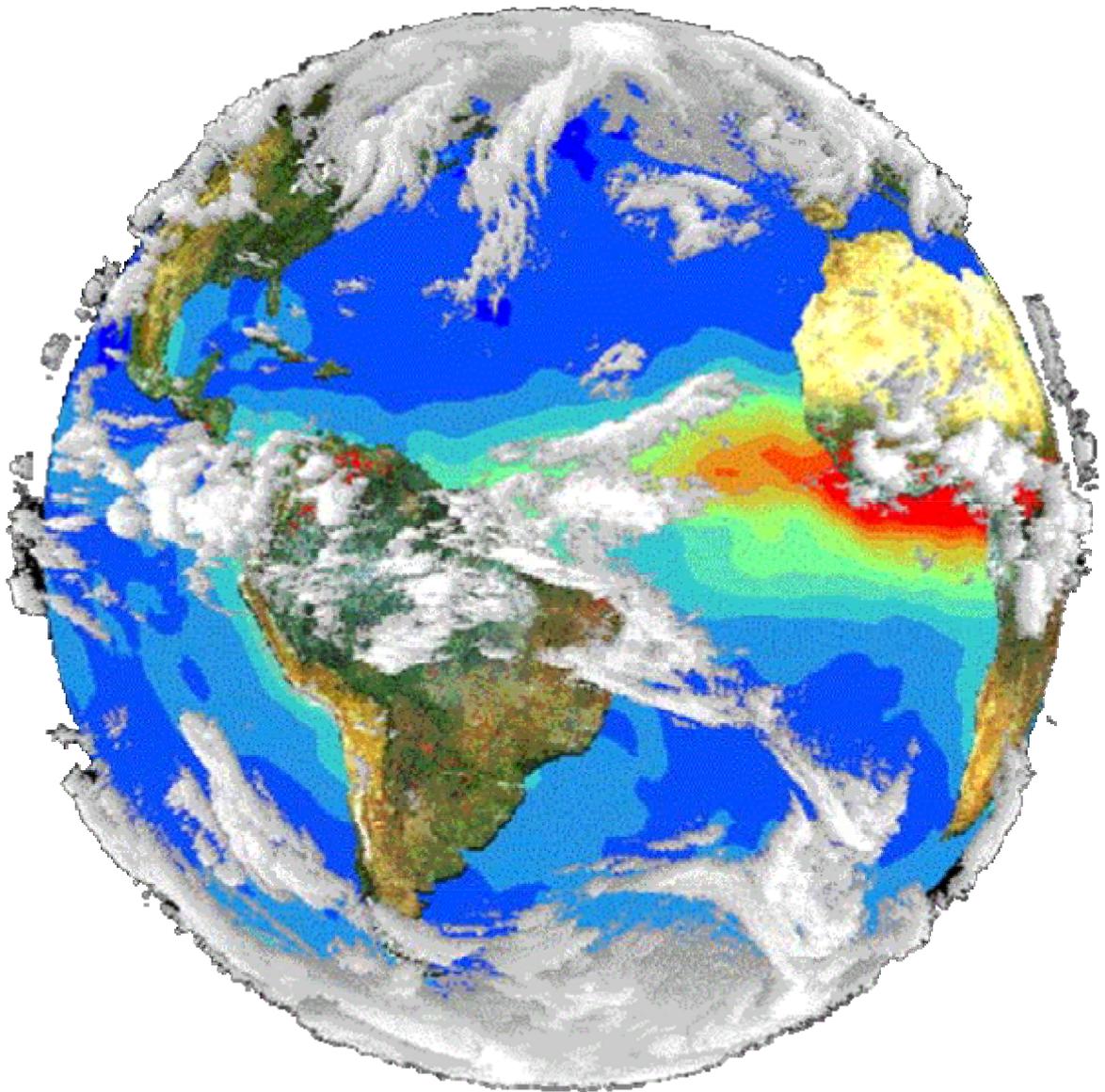
Pascas Foundation is a not for profit organisation

www.pascasworldcare.com www.pascashealth.com

Em: info@pascasworldcare.com

Em: info@pascashealth.com

This:



or this?

IVAN STEIN's Future Map of the World

<http://www.timeline2012.org/page/videos-1>



MAJOR EARTH EVENTS:

Our environment is interconnected in every facet that you can imagine. We look to grow in harmony with our environment. Fresh water, clean oceans, vibrant soils, clean air, expanded forest, all will be achieved by us growing in love and giving our love to our environment. The focus upon carbon dioxide emission is important, however, it is only a small element of what needs our caring attention. The sun is only responding to our love or lack of love for our environment. As we grow in soul condition so will the magnificence of our environment and the natural beauty of this planet.

What ever you anticipate to be the extent of major Earth events or Earth changes, they will be greater or lesser to what you may or may not be considering.

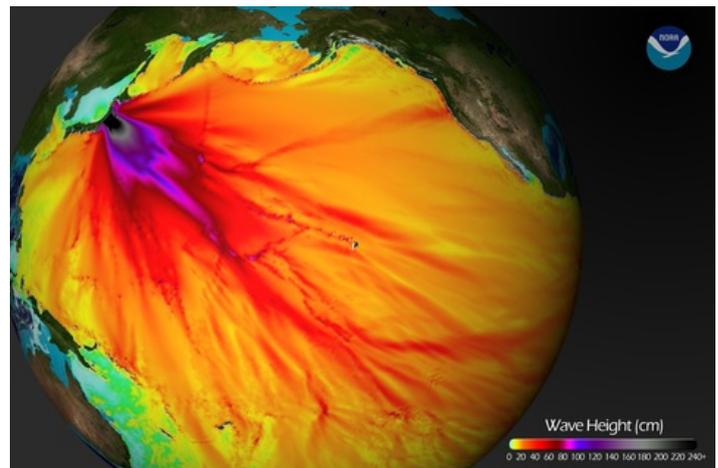
Should you live in Sendai in northern Japan, or in Christchurch in New Zealand, then you may consider that you have been through the Earth changes. You certainly have experienced a major Earth event.

The **8.9-magnitude earthquake** that struck coastal Japan on Friday, 11 March 2011, devastating large swaths of the coast and spawning a powerful tsunami, was caused by the Pacific tectonic plate thrusting underneath the country, and forcing the seabed and ocean water upward.



Japan sits on or near the boundary of four tectonic plates: the Pacific, North American, Eurasian and Filipino plates. These massive slabs of Earth's crust are endlessly creeping, slipping, locking up and then jolting again. In fact, the Pacific plate has been inching its way under the North American plate at a rate of 80 to 100 mm a year, as stated by John Bellini, a U.S. Geological Survey geophysicist.

The tsunami resulting from the earthquake stretched across the Pacific Ocean.



Major Earth events may come in a series. Consider the most volatile locations on Earth, they appear to be aligned near tectonic plate edges – naturally enough. The Mediterranean line between Spain and Turkey, centred around Naples in Italy. In Northern American centred at Yellowstone National Park. And Sumatra in Indonesia.

Should major volcanic activities commence with any of these three locations and then follow into another of these three locations, then the resulting disturbances could lead into many further major Earth events.

You could suggest that these comments are an early warning system. That is one's best guess you can consider on this subject.

Such enormous releases of pressure may result in significant plate movements, risings and sinkings, resulting in further enormous events. Should all remain stable then enjoy the day. It is not considered that these type of events would happen instantaneously, however, the roll on effect would suggest that one should consider his or her options promptly. The knock on effect could be cataclysmic.

There are two events that may now be occurring bringing enormous pressure onto the third rock from the sun. This third rock from the sun, planet Earth, is somewhat fragile.

It is considered that about every four thousand years or so, Planet X or Nibiru passes through our little universe and orbits around the sun in an opposing orbit to Earth.

Also at this time, our little universe with Earth passes through the equatorial line of our galaxy, the Milky Way. We do this twice a year, however there are cyclical events involving a high influx of energy into our solar system. This we may do around every 12,500 or so years. Major Earth events have coincided with that event. Atlantis subsided about 12,500 years ago. The prior occasion may have seen Lemuria subside in the Pacific Ocean.

It could be considered that these two events have already occurred, **or** they may still to occur.

One cannot consider that the calendar date predictions are valid. Simply put, even our current Julian Calendar has a three year error in it. The Julian Calendar was replaced with the Gregorian Calendar still with the three year error. Thus, if these major galactic events are to occur then any time from 2007 to 2017 should see them come to pass and then subside.

The main consideration is this, should major Earth events start to occur in prompt succession, then the events may well escalate. In the meantime, as we improve our individual soul condition, we also improve the condition of planet Earth, such improvements can significantly reduce the dimensions of these potential events.

Currently, our collective soul condition approximates the mid levels of the first sphere. This is the reason why so much of the planet is desertified, the deserts are the result of our poor soul condition. As we grow in love, the deserts and other degraded areas of the planet will start to improve. Our love will be reflected in how we treat the planet.

CLIMATE FORCING | Our Future is Cold

Ben Davidson

<https://youtu.be/rEWoPzaDmOA>

<https://www.youtube.com/watch?v=rEWoPzaDmOA&feature=youtu.be>

Climate Change, Solar Forcing, Ice Age | From volcanic cooling born beneath our feet to the most seemingly distant reaches of both space time, we lay out Climate Forcing: the problems, path forward, and character of the finish line.

Monday, 17 December 2018

James: Hi Nanna Beth, I feel like a chat, is that all right with you?

Nanna Beth – 3rd Celestial Heaven: Also you might like to know, the Earth itself is starting to change its rotation speed and is slightly moving on its axis, thereby causing shifts in surface weather patterns as warming and cooling takes effect, just happening in different places than how it has been. And these changes are coming from the core that's being affected by greater space changes. There is always massive pressures and forces affecting every part of natural creation, so the world and all space and all that's within it. And as David (Montaigne) points out, observers have observed that things remain the same, at least seem to be the same, although with minute incremental changes, all of which culminate to periodic, large swift changes. And so humanity is coming into a time of rapid change, and on all levels, not just the physical or spiritual. Of which I still can't say more.

So the debate about global warming or cooling will continue with both being right, as both are occurring. And in some areas they are affecting each other, in other areas they are happening independent of each other.

James: Thank you Nanna Beth, you've covered all I was wanting you to update.

EARTH CHANGES:

27 September 2011

Extracts from 'With Verna – a Nature Spirit' by James Moncrief

Verna: There's a marked increase in the 'goings on' inside Earth being brought about possibly by natural internal factors, factors extraterrestrial, or a combination of both, even one in league with the other. And I'm going to speak about such things in more detail later, but for now, you and the people you've read who think along such lines are correct, there is much going on, both from within and without.

It's going to be a horrendous time for humanity overall, but that's not to say that within it there will be much good and lots of good feelings for some people, and mostly for those people wanting to move with it in the understanding that it's for humanity's good, and as it couldn't go on any longer how it was, so something needed to happen.

What is happening now is yet another evolutionary event, however it's not going to come about as it did back then, it's coming about as a combination of humanity's impact on the planet and natural events timed to enhance humanity's impact, all so in the end, a 'new' humanity will result, willing and able to live on the world in a 'new' way. Back 65 million years ago it was purely a biological change, now it's one all for humanity, a spiritual change for humanity as Mary was telling you; a huge change, moving from living in a completely negative state, ending it, and moving to live in a completely positive one, and all along the way nature will be affected in various ways.



All that's to happen now is more to set the stage, or scene, for the 'new' humanity to evolve into being, that being on a spiritual level, rather than a whole new evolutionary line of creatures as it was with the demise of the reptile based nature, to the rise of the mammalian one. However, as I've already told you, some new creatures will come into being during the planetary ages to come, and others that have or will become extinct, will be brought back into being.

However the coming Earth changes will have periods of intense activity right through this turning of the age and the next one of one thousand years. There will be ups and downs, but overall the next age will be one of ongoing tumultuous times for the surface of the planet. And it's all designed to keep humanity giving up its evilness and helping it seek the way of truth. There's not to be one big cataclysmic episode now, and then it's all peace and harmony on Earth, and people can get back to re-building all they've had – all their negative way of being and wrongness, or even set about living in peace and harmony because of some dimensional change or new spiritual light and upliftment affecting the raising of humanity's consciousness to a higher level of peace, having giving up greed and self-indulgence in material things. No, all that is to come is not to let you off the hook, or allow you to keep going only manifesting and so expressing yet another version of truth denial.

The spiritual upliftment so far as the new 'vibration' humanity will experience is the new vibe of the next age, and it's upliftment will only be uplifting those people who chose to do their healing, to submit to their bad feelings and by expressing them to uncover the truth of their evilness – all that resulted from their childhood. All the rest is nonsense perpetuated by ignorant mind spirits. Certainly there is new cosmic light coming to Urantia from Paradise, being stepped down in universal harmony through

Nebadon; and certainly there is new soul-light being emitted from every soul on the planet, but as to how people choose to react to all of that is a personal choice, and many will fight their natural desire to seek the truth and so heal themselves, choosing instead to keep going in their negative states. And for such people, some will be relatively successful at doing it and keeping abreast of the increasing 'lights', others won't be so successful, failing and then succumbing to their bad feelings. And many will go to their graves feeling very bad about life; other's will want to know why they feel so bad so often, and honour their bad feelings and start looking seriously for the truth. But overall, increasing inner and outer pressure will be brought to bare on humanity as it moves through the next age. A certain level of collective consciousness about it's negative state, and a certain level of desire to heal humanity's evilness needs, both personally and collectively, to be achieved by the end of the next age; and as all things are perfect, it will be.

James: Okay, so back to the heart of the matter, the Earth changes.

Verna: Well, as you've read, the amount of seismic activity is on the increase, this being because the amount of rotation within the core of the Earth is speeding up. It's immeasurable currently to science, however as the core of Earth starts to move faster, so all the outer parts move faster, and that's stirring up the continental movement, which as you know from plate tectonics, is causing the crustal plates to grind against each other, with the stresses being released as earthquakes. And this core rotation is going to keep increasing for the next one thousand years.

James: Do you mean the whole Earth is spinning on its axis faster?

Verna: No, I mean the components of the core, are in relation to each other, moving faster, which could be seen, as for the need of a mental picture, that the core is rotating faster. It's more to do with hidden forces within the planet, ones humanity is yet to uncover; and they are more to do with, and respond directly to, the spiritual or higher light frequencies.

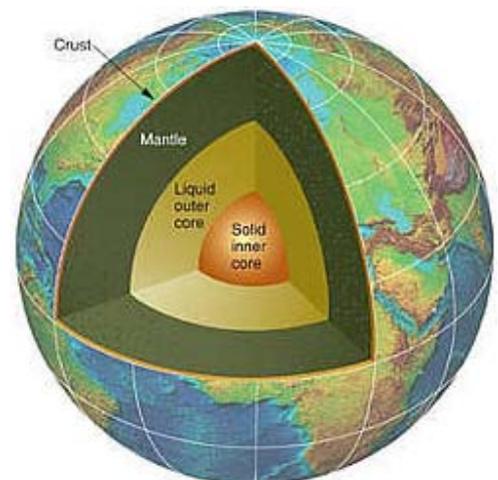
James: So it's like the spiritual rotation of Earth is increasing.

Verna: Yes, you could say it like that, and it's then having a direct affect on the material level.

James: Okay, so it's all coming from inner levels, not just the physical.

Verna: As does everything. The physical world, the globe as you know it, only responds to inner or more spiritual levels, it exists because of these levels, the whole physical level of creation does. From our spiritual perspective, we living in these higher or inner dimensions, we can see the energy, the light, we can sense it; we can sense it in all physical things; and we can sense or perceive – we 'feel it', as increasing in frequency, and so the physical planet is responding, it has to, it can't be otherwise.

James: So it's not just, say, because of what the sun is doing that's affecting the Earth.



Verna: That is happening too, it all being part of the physical relationship and interaction in those relationships, however the sun too is being driven, and so continuously affected, by the inner, unseen, and unknown to you, spiritual levels. You are only at best observing the physical level of Creation and trying to work out laws that determine it, however there is another whole plane or 'dimension' of laws that determine the relationship of the physical to the spiritual; and then even more laws determining the spiritual, and all the levels of the spiritual, and there are many, all the way to Paradise.

James: Okay, so whatever is happening, we won't be able to detect, only possibly seeing signs of it on the physical that are resulting from the increase movements of the surface crustal plates.

Verna: Yes, the sea floor is spreading faster in places as the subsidence of one plate under another is increasing, all making for very exciting times on the face of the Earth, if that's what excites you.

I can tell you, those like me who are from the very old days, boy, did we have fun back then, we were delirious during those times of massive Earth changes. And there were some times of massive changes. All that Earth is to go through now will be comparatively mild, just a remnant taste of the old days. Relative to back then, the Earth is destined to remain quite stable. It will have one last massive bout of cataclysmic Earth changes reminiscent of the ancient times when it's all to come to an End and Cease to Be, but humanity will be long gone by then.

I was talking about the acceleration of the rotation of the core of the Earth, but on inner levels, and how that's what's causing all the shifting in the crustal plates. And so this is what will cause most of the earthquakes. Now from your geology days at university, you remember being told about 'hot spots' where the continental plates mover over places where magma forces itself to the surface bringing about island chains and chains of continental volcanoes, well there's going to be a lot more of these erupting as well, old and even ancient ones coming to life again.

James: One website I visit posts up-to-date information on the status of many volcanos, and many of them are coming to life, and have been for a few years, even ones scientists didn't know existed.

Verna: Yes, and this is going to increase. There are going to be a few mega explosive events during the next fifty years, some that will cause the sun's rays to be blocked out for a number of days, but nothing too bad. However there will be continuous smaller eruptions and many of them, all disturbing the normal way of things, such as air flights, communications, and causing many people to be relocated. It's not so much the intensity of the volcanic eruptions that are to come, but how many of them and what combined effect they will have. A lot of new lava is going to come out onto the surface, this having a heating effect adding to the general present consensus of global warming.



James: So is global warming a reality, or is it our imagination; and is it something humanity is doing, or is it naturally happening?

Verna: It's naturally happening, however, overall the planet is moving toward another smaller iceage, but that's a long way off. In the short term it will warm significantly adding to humanities problems, once all the volcanic activity gets going.

Along with the increase in volcanic events it will be discovered that the ambient temperature of the upper crust is also warming, the ground will warm up a little. We're only talking about one degree, but it will add to the problems of increasing the ocean temperatures, rainfall distribution, melting the ice at the poles and how and where food will be grown.

James: I was reading whereby all of this is coming about because of the breaking down of Earth's magnetic field, all leading to a pole reversal, this all being caused by the sun moving towards a solar maximum in the next couple of years.

Verna: It's all part and parcel of it. Scientists will continue to understand all that's taking place on many physical levels as events unfold. But really it's all being caused by the increasing spiritual light that's driving the whole thing right through Nebadon, it's not just Earth and your sun that's being affected. On all worlds, ages are changing and spirits are moving on, and things are happening. You're just one piece in the whole.

So because of these warming influences, the weather will become more wild, more subject to change, and more unpredictable. There will be more: drought and heat, rain and snow, even cold extremes in some parts of the world, and less in others. There will be more wild storms in some places, cyclones and such, and less wildness in other places. Things will pretty much change all over the place as to how they have been. And some changes will become permanent, other's fluctuating.

And because of these weather disturbances, so the production of food will change; in some areas of the world severe famine and food shortages will occur, in other places pests and disease will predominate. You've seen all of these things already beginning to happen, and they are only going to happen more and become more intense.

And then come the physical Earth changes, not only from volcanic eruptions, but from the influence of large earthquakes.

Vulcanology:

28 September 2011

James: So what's happening to the Earth where the magma is? I mean how does it build up in pressure to come out?

Verna: It's a combination of internal Earth forces and external cosmic rays. They both interact to produce what might be likened to bringing a pot of water to the boil. The more internal pressure that builds the stronger and more vigorous it boils escaping on the surface. The Earth has been relatively cool of late, meaning there's only a very light boiling going on, with most of the pent up pressure and energy able to be released through what has been witnessed, some occasionally doing a lot of damage, other times, not so much, but the Earth has been going through a very quite time of vulcanology. However that's all soon to change as it warms up into one of its more active times. But as I said, not so

active as in times gone by, but certainly more active than what's happened during this past two thousand years.

James: So the letting off steam, the increased boiling will keep happening for... how long?

Verna: It will keep building up during the next ten years, then it will plateau for the next twenty, then start to settle down. But within these years there will be times of greater and less intensity. You must remember that things happen relatively slowly on a geological time period, so this time will be but a hiccup in the great scheme of things, but enough to give humanity the experiences it requires to keep the pressure on it to change. You don't have to worry about it starting with a rush then petering out. The inner forces that are going to bring about all the structural crustal change will last for as long as they need to.

WEATHER EVENTS and EARTH CHANGES are CYCICAL:

The Richard Messages via James Reid: Celestial Spirit Richard 12 January 2013

There are many factors involved in the production of weather patterns on the planet. If you had information from a much longer period time than that available you would see that such happenings are not uncommon or unusual. The scientists have developed a range of normal that is based on quite scanty data. So, while a relatively short-range view is taken of these elements, there must be varying opinions. The Earth is presently in a state of marked changes so there will be fluctuations and deviation from many 'normal' patterns. The present changes are much more related to what is happening deep within the planet than to manmade issues on the surface. However, people will always attempt to interpret any happening in the light of what is considered to be known and to use familiar terms.

Global Warming:

28 September 2011

Verna, is there really global warming, or is it something that seems to be happening but is being made up by certain people. I think I've asked you this question before –

That doesn't matter James, I'm happy to answer it again.

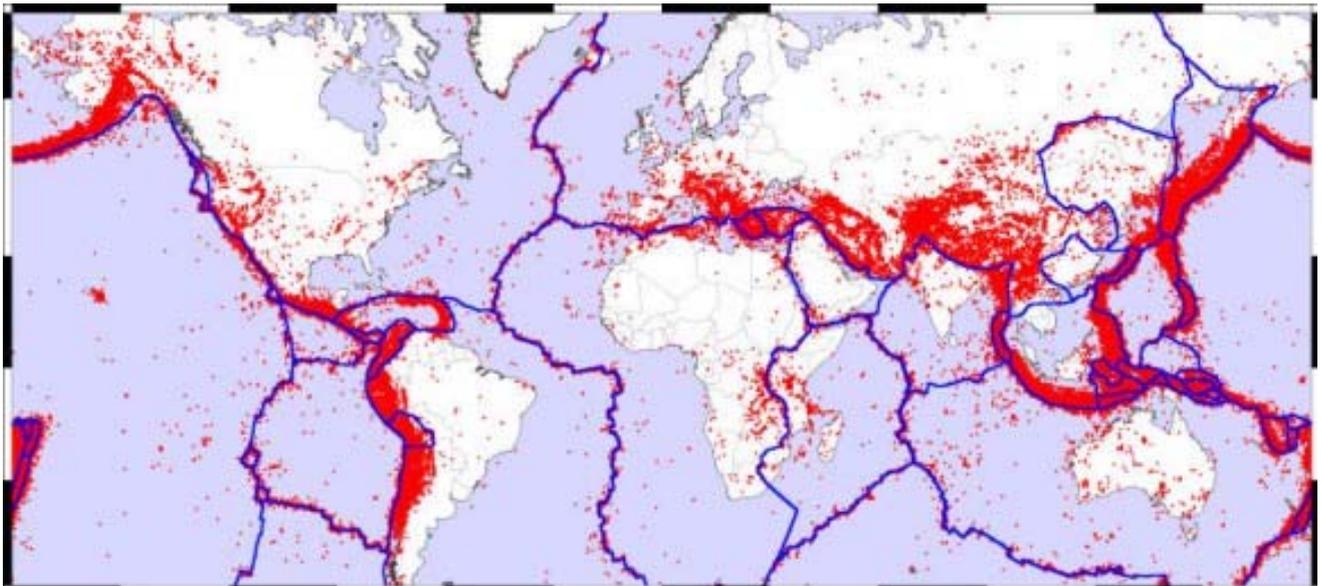
Verna: Yes, global warming is real, but it's not happening solely because of humanity's impact on the world. Humanity is only minimally affecting it, the world for the most part being able to absorb all you do that results in global warming, however it's the Earth itself that is heating up, internally and because of external influences. And these will continue as I've told you. But all humanity does in regards to global warming will be of no account because of the overall changes that are going to take place.

Entire solar system is heating up! Scientists blame solar warming

<http://www.space.news/2015-10-06-entire-solar-system-is-heating-up-scientists-blame-solar-warming.html>

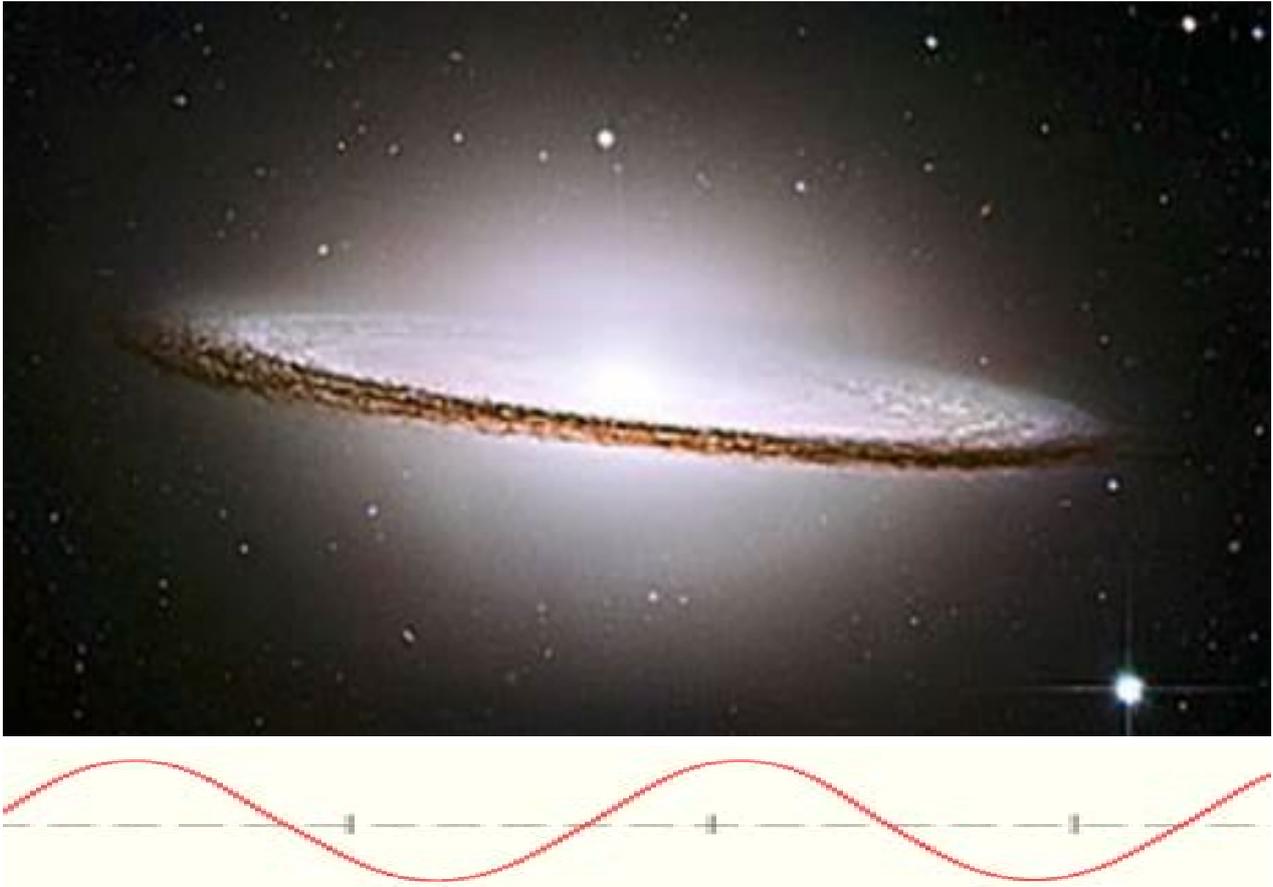
Tuesday, October 06, 2015 by [Chris Draper](#)

Many scientists suspect that the solar system has migrated to a region of the galaxy with high energy. We have the illusion that the sun is a nebulous ball of gas fixated in the sky that the rest of the solar system dances around. In reality, the sun is one star among many sitting on the outskirts of the Milky Way, hurtling through space at 72,000 kilometres per hour. Although the total amount of energy within the universe is conserved, pockets of energy in the Milky Way vary in intensity. The solar system may have rolled into one of these highly active regions.



Map of the Earth showing the relation between fault lines (blue) and zones of volcanic activity (red).

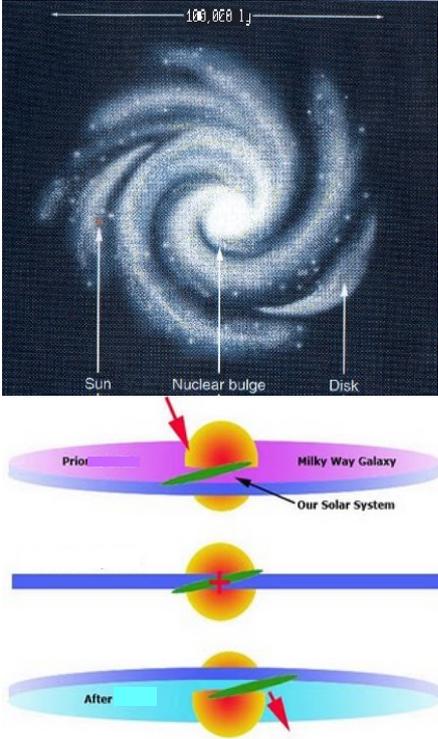
Credit: zmescience.com

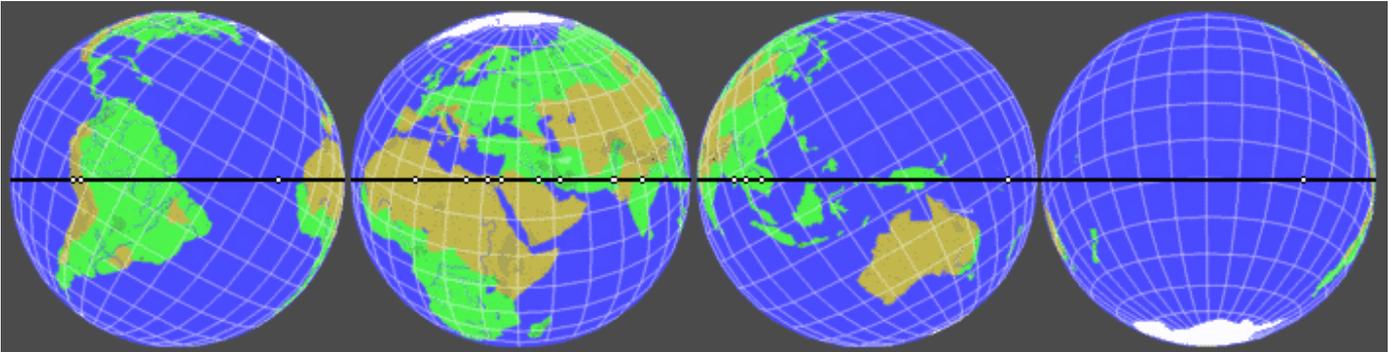
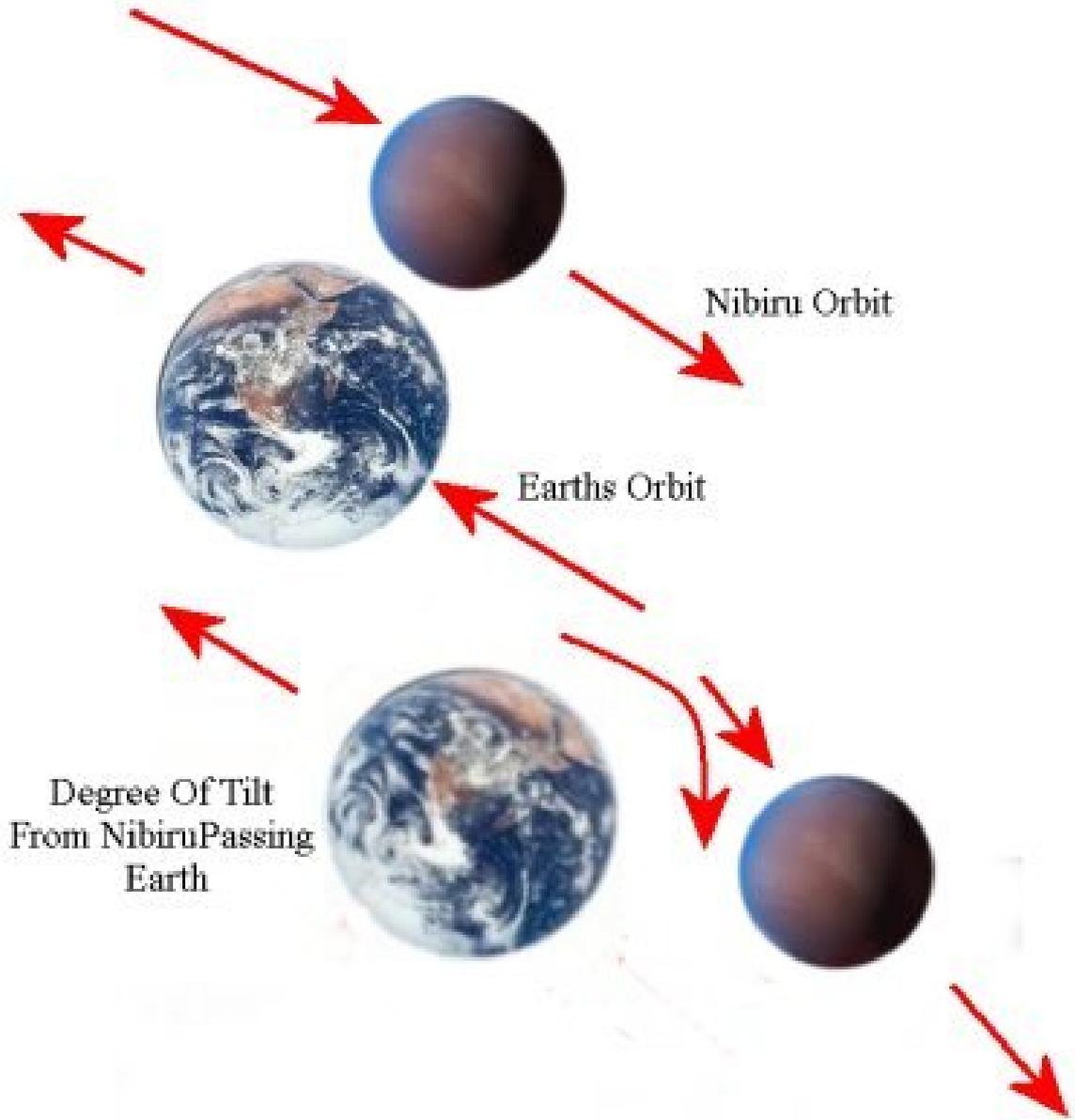


Consider that the oscillating path of Earth and its neighbouring planets takes them through the equatorial line of the universe twice in each complete cycle of around 26,000 years. That means it passes up through the line and then passed back down through the line every 26,000 years. This also coincides with the Mayan calendar structure.

At the time of passing through the equatorial line, concentrated pressures are placed upon the structure of spaceship Earth, thus accentuating normal climatic conditions and earth crust movements in the form of earthquakes. Similar abnormal events have been observed upon our neighbouring planets.

Thus, Earth now with 7 billion population and that population's overall soul condition being in the mid range of the 1st sphere, these galactic pressures tend to suggest that we are in for one very unstable ride over the coming years.





Maybe, this could be the line of the equator if the planet aligned true north and south?
That is an adjustment to true north of 23.5° , not just 15° as is being suggested.
At 8.5° off centre, then there will be still some small seasonal variations yearly.

The black hole at the centre of our galaxy is a source of energy for our universe.



At the time of the Harmonic Convergence 16-17 August 1987, David Hawkins noted that the level of consciousness as per his scale, Map of Consciousness, humanity, overall, jumped from 190 to 207. The level of consciousness had remained at 190 for hundreds of years prior to this event. It is anticipated that further waves of energy will embrace the universe.

1st SPHERE ASPECTS:
Summerland, etc, nurseries



Summerland, etc., are beautiful regions of 1st sphere.

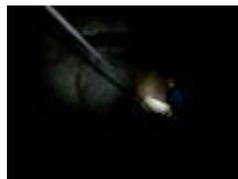
Summerland, etc, are within the highest planes of the 1st Mansion World / sphere.
There are 1,000s of plains in the 1st sphere.



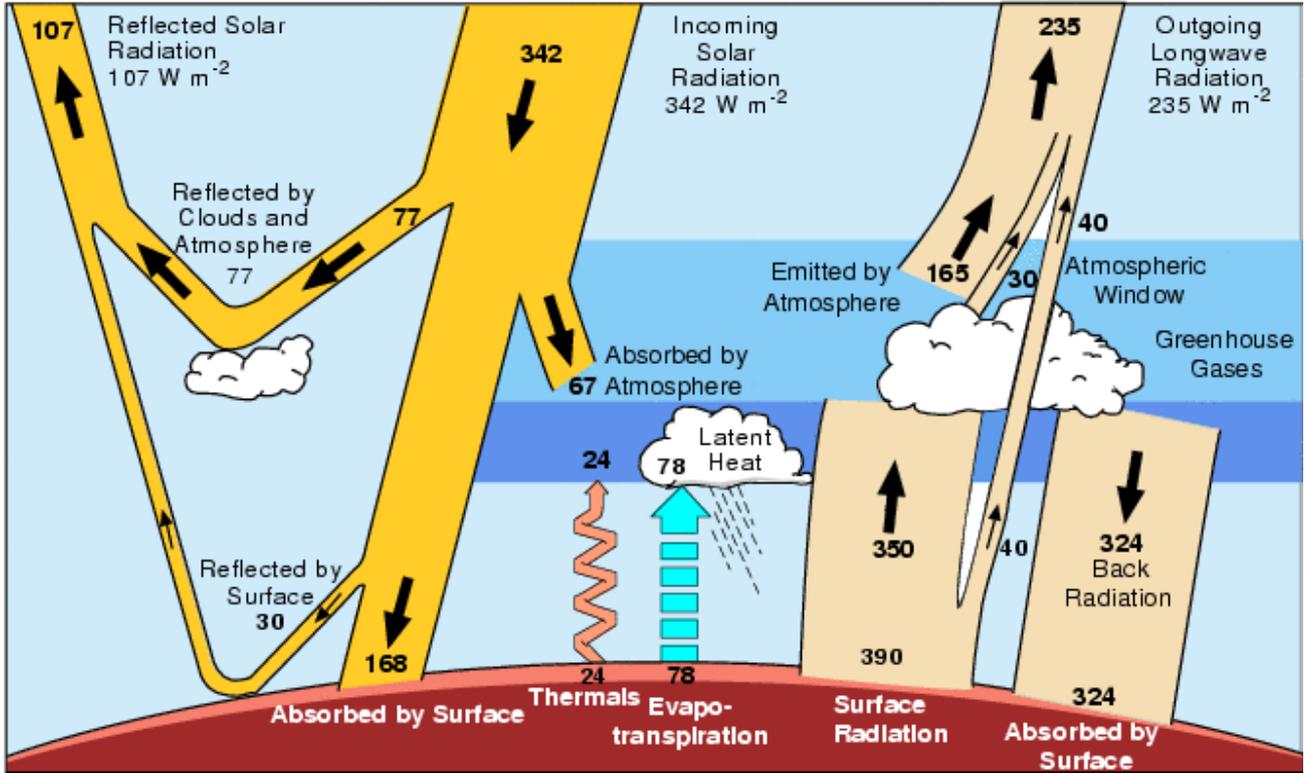
Ambience of mid range plains of the 1st sphere is where the majority of humanity pass into.



2 Planes of Disharmony / Earth:
The hells are unimaginable places of darkness.
Consider you are stuck at the end of the deepest longest mine ever, on your own, without any lights!

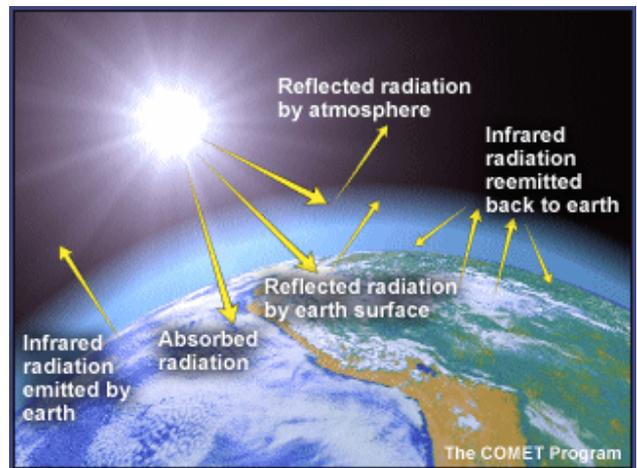
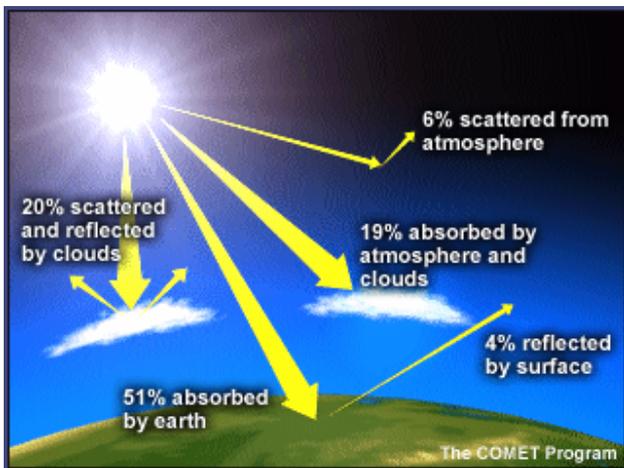


Global Heat Flows



Kiehl and Trenberth 1997

http://www.windows2universe.org/earth/climate/greenhouse_effect_gases.html



Twelve good reasons to improve soil health

Improve Soil Health

Soil health is defined by its ability to perform essential ecosystem functions such as: nutrient cycling, water filtration, and habitat provision for plants and animals. Some properties that determine soil health include texture, depth, density, water infiltration and holding capacity, amount of organic matter, nutrient holding capacity (CEC) and respiration. Every one of these properties is influenced by the mass of microbes and larger soil-dwelling organisms studied by Soil Foodweb. When the health of this biology is disturbed by sudden changes to the ecosystem (e.g., over-tilling or application of any fungicide / herbicide / pesticide chemical), soil health is drastically affected. When such practices become the normal management regime, soil becomes cyclically dependent upon amendments because its ability to perform these processes through biology is continually impaired. The biological approach to soil re-establishes soil biology to rebuild the desired properties that bring soil back to good, natural health.



Re-mediate Soil / Convert to Organic Agriculture

Soil degradation as a product of man-made pollution is a serious environmental threat facing our planet. Soil Foodweb is dedicated to revitalizing soils by rebuilding the biology that keeps it healthy. Whether a soil is heavily polluted by industrial toxins or simply depleted from overuse of chemical pesticides and fertilizers, the biological approach is the healthiest way to restore the environment to a natural state.

Supplement Biology Lost to Pesticide, Herbicide and Fungicide Application

Crops suffering from massive infestation can be equated to a human suffering from cancer. It is necessary to get rid of the problem but the mechanism for doing so kills the good biology as well as the bad. It is important to replace the good biology after the harmful entity has been removed. Farmers who use chemical products to prevent problems before they occur are wasting resources and harming their soil unnecessarily. Soil Food Web recommends the use of biology as the preventative measure to discourage unwanted pests and disease. Pesticides, herbicides and fungicides should only be used when there is clearly an infestation. The biological approach should then be used to restore biology after pesticide / herbicide / fungicides are used.

Enhance Chemical Application Efficiency & Reduce Production Costs

The biological approach to soil is still an important practice for those who use chemical fertilizers and intensive tilling. As described above, the addition of biology prevents loss of added nutrients, reducing the amount of chemical fertilizers needed each year. Movement of the biology in the soil also improves texture, reducing the need to till soil and the fuel costs related to that process.

Reduce Erosion and Nutrient Leaching

The organic substances produced by biological nutrient cycling (e.g., clay and humus) have an ionic charge that holds nutrients in soil. When there is little organic matter in soil, nutrients are easily leached out by rapidly moving water. Biological exudates also create the adhesive effect that strengthens soil aggregates, improving structure so that soil is not easily broken down by water and blown away by wind.

Conserve Water: Increase Water Holding Capacity

Soil biology can increase a field's water-holding capacity by adjusting the chemistry and physical properties of a soil. As the organisms consume and excrete organic matter, they produce the substances that glue soil particles together. Adding organic matter, and the biology to process it, changes the chemistry of the soil to increase the clay content. Because clay particles are magnitudes smaller than sand particles, the spaces between them are smaller as well. When water is caught in smaller pore spaces, it is less likely to drain out because it is held by the forces of adhesion. Cultivating soil to increase water-holding capacity saves money on irrigation and prevents leaching of nutrients.

Remediate Physical Properties: Improve Drainage, Build Structure

When compaction and poor drainage is a problem in your soil, improved tilth can be achieved by encouraging the proper soil biology. Fungi, insects and worms move through soil, creating macro-pores (air-filled spaces 50nm or larger) throughout and often deeper than the root zone of the plants. These macro-pores are the channels through which water can drain out. They also create space for plant roots to move in the soil, decreasing compaction. The conventional approach of intensive tilling to loosen compacted soil actually creates a hard pan beneath the tilled layer that impedes root penetration and can become anaerobic (attracting pathogenic bacteria). These tilling techniques also destroy fungal colonies that naturally aerate the soil. Soil Food Web advocates conservation tilling methods that reduce impact on soil biology and prevent the formation of hard pans.

Adjust Soil Structure and Hydrology

Loam soil, which is an even mixture of sand, silt and clay, is considered to be the best soil texture in which to grow crop plants. This is because the even mixture of different particle sizes creates an even mixture of pore (air / water-filled spaces in soil) spaces. Small pore spaces (called micro-pores) hold water by the forces of adhesion so that it stays in soil and is available to plants. Large pores (called macro-pores) allow water to drain out of the soil so that air can move through, providing oxygen that keeps the soil respiring aerobically. It is important to have a good mixture of macro / micro pores so that your soil holds water but does not get water-logged to the point of anaerobic respiration. The application and support of soil biology creates the diversity in texture necessary for healthy soil and easy plant cultivation.

Reduce Pests and Improve Disease Resistance

Crop-crippling pest infestation and disease occurs when there is a lack of biodiversity. A mono-crop grown in soil without a healthy biology is extremely vulnerable to massive pest infestation because it is a concentrated food source with no protective ecology. A healthy soil food web supports pest predators that keep harmful organisms from over-populating and destroying your crop. A well-balanced ecology

also provides the natural nutrient cycling that keeps plants healthy. Just like with humans, plants are more susceptible to disease when they are stressed from lack of nutrition. The Soil Foodweb approach is the preventative medicine that makes plants strong enough to resist disease.

Reduce Weeds / Condition Soil for New Crop

The Soil Foodweb approach seeks to match crops with their ideal soil conditions. Different plants require different ratios of fungus and bacteria based on the successional state of the ecosystem in which they originated. Some plants are naturally acclimated to forest soils which are strongly fungal dominated, and other plants are acclimated to grasslands that are more bacterially dominated. The biology in the soil can enhance or impede plant growth based on the symbiotic or antagonistic relationships that are made between microbes and plants. Recommendations from our lab and consultants take crop type into consideration and help you to acclimate the soil's fungal / bacterial ratios to support the desired crop. Conditioning the soil's biology to compliment your crop will increase nutrient uptake and give the desired crop an edge over weeds that try to compete. Many weeds are vigorous in unhealthy soils because they are adapted to those conditions. If the soil is healthy, and supporting a successful crop, it will be more difficult for weeds to establish themselves.

Create Natural Nutrient Cycling

The most productive systems in the world are the ones with the most flourishing biology because nutrients are being cycled in a way that is supportive to every aspect of the environment. Insects and worms shred dead plant matter, creating increased surface area for bacteria and fungi to consume and decay. Larger organisms eat the bacteria and fungi and excrete excess nutrients, making them available to plants. Plants grow from these nutrients and eventually deposit more dead organic matter for the microbes to continue to cycle.

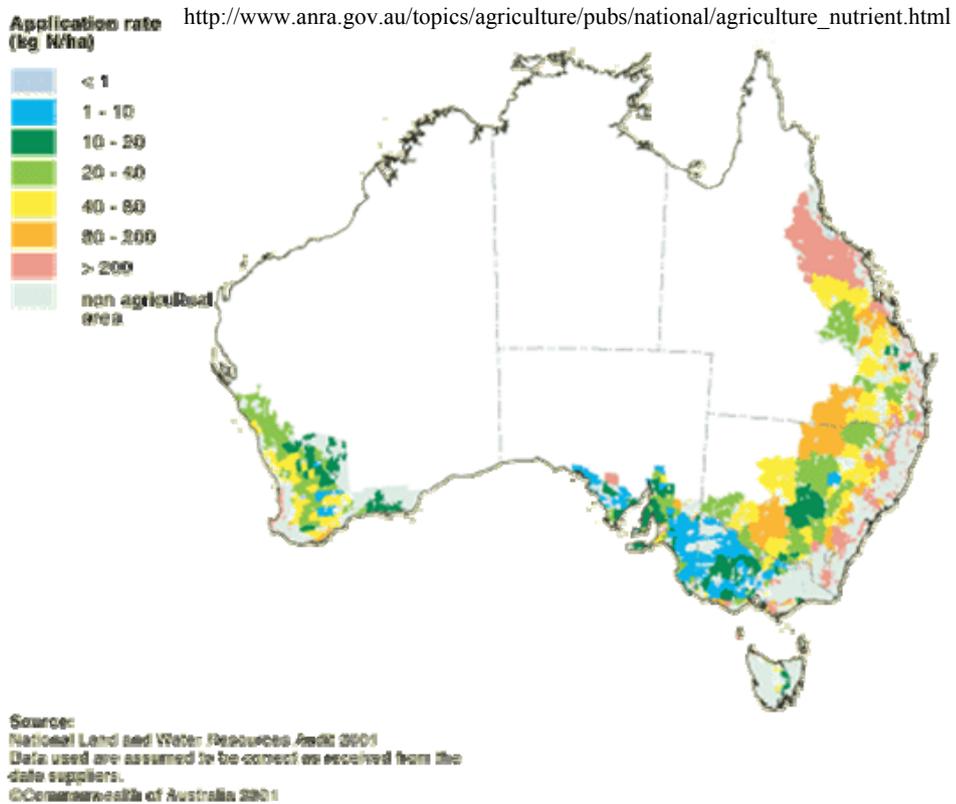
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Enhance Crop Quality

The relationship between life in soil and life of plants is inseparable. Plants' ability to move their roots through soil and find essential nutrients is dependent on the soil's texture, structure and nutrient content. The biology in the soil creates movement of space and organic matter to aid the ease of root exploration. It is also the mechanism by which nutrients are made available to plants: through decomposition and excretion of dead organic matter. When these two biological processes are functioning properly, plants are able to produce at the optimum level naturally supported by the environment.

Figure 3.10 Nitrogen fertilizer application rates (kg N/ha) for crops by statistical local area (averaged 1992 - 1996)



Consider over laying this map noting the usage of chemical nitrogen fertiliser with the extreme weather conditions experienced within Australia during the summer of 2010 / 2011.

Cyclone Yasi devastated the northern region of Queensland entering the coast line on 3 Feb 2011. The cyclone proceeded inland producing a rain depression that resulted in extensive flooding of much of Victoria and Tasmania in the south of the country.

This following upon massive flooding that occurred in south eastern Queensland in January 2011 which fed floods throughout much of New South Wales.

In the meantime, Western Australia has experienced major droughts and bush fires.

The areas affected by these recent natural disasters mirrors the regions that employ chemical fertilisers, as per the map above.

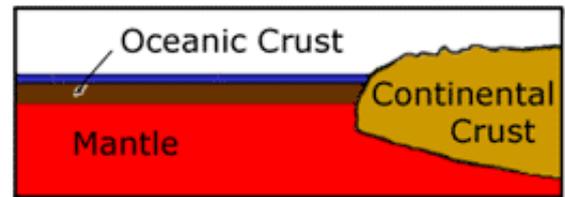
'The land does not have a soul condition, it actually REFLECTS our soul condition. (I have never said that the Land has a soul condition, because the land itself does not have a soul).

The land is always attempting to repair itself, but man generally tries to destroy it through man's soul condition.'
Yeshua 9 Dec 10

The Earth's Interior

A look at the Inner Earth

http://www.rocksandminerals4u.com/earths_interior.html

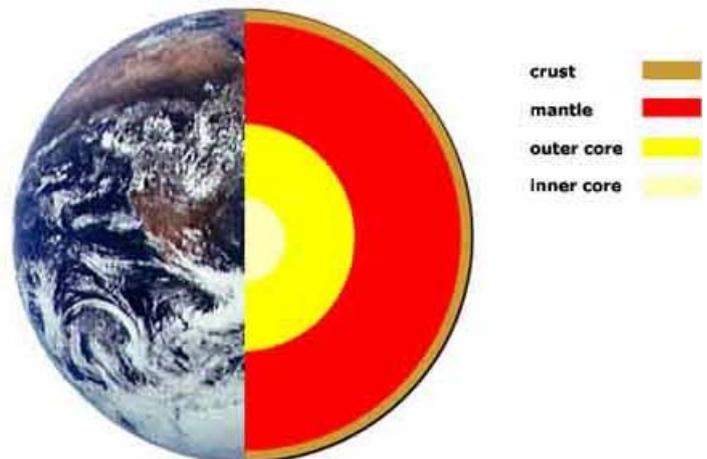


Studying the Earth's interior can help us to understand earthquakes, volcanoes, plate tectonics and more about the inner Earth's natural processes.

In general the **Earth's interior** has been sorted by **Gravity**. Heavier elements like iron tend to sink toward the centre or core of the Earth. Lighter materials, the silicates, oxygen compounds and water have risen to become part of the crust. This action has created distinct layers within the Earth and is still in process today.

The Inner Earth is composed of three main parts; the crust, the mantle, and the core as shown in the diagram of the Earth's interior below:

- **The Crust** – silicate rocks, primarily granite and basalt
 - **Oceanic Crust** – mostly basalt
 - **Continental Crust** – igneous, metamorphic, and sedimentary rocks
- **The Mantle** – iron and magnesium rich silicate rocks
 - **Upper Mantle**
 - **Lower mantle**
- **The Core** – iron nickel alloy
 - **Outer core**
 - **Inner core**



The Crust

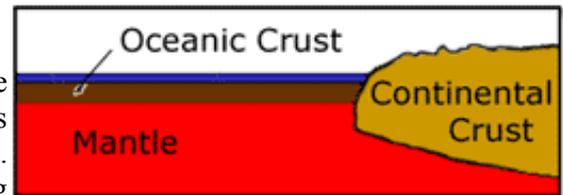
The crust of the Earth is very slowly growing thicker. Volcanic activity is continually adding mass to the crust. Though the crust is solid it is made up of about 12 plates. They are called **Tectonic Plates**. These plates are in constant motion. The movement is caused by convection currents in the mantle. The movement is very slow, averaging about 2 inches (5cm) a year. This is about like the growth of your fingernails.

- The crust is about 0.5 % of the Earth's total mass.
- The crust is made up of silicate rocks such as granite and basalt.
- The continental crust is much thicker than the oceanic crust as shown here in the diagram of the Earth's crust.
 - **Oceanic crust** – The crust under the oceans is about 10 kilometres thick and is generally made up of rock rich in iron and magnesium. These are primarily basalt formed by volcanic action at the mid ocean ridges. The oceanic crust is denser than continental crust.
 - **Continental crust (continental cratons)** – Where there are continents the crust is about 30 to 50 km thick. It is made up of igneous, metamorphic, and sedimentary rocks. The continental crust is less dense than the oceanic crust. When the continental crust collides with oceanic

crust through plate movement the continental crust rides over the top of the oceanic crust while the oceanic crust is pushed back down towards the mantle.

Earth's Interior – The Mantle

Much less is known about the mantle than the crust. The crust we can see, measure, dig and drill. The mantle is different. We have little direct contact with the inner Earth. We can tell some things about the mantle by studying volcanoes and what comes out of them.



Much of what we believe is true about the Earth's interior comes from studying **Seismology**. Seismology began as the study of earthquakes and the seismic waves they produced. These waves travel through the Earth and move at different speeds in different materials. By studying these waves and how they move through the inner Earth we can learn about its structure.

The upper mantle

- Is made up of rocks rich in magnesium and iron, and poor in silica; mostly peridotites.
- It is about 400 km (kilometre) thick and is much denser than the crust.
- It comprise 10% of the Earth's mass.

The Lower mantle

- It is more dense and contains a greater amount of iron than the upper mantle.
- It is about 1900 km thick
- It makes up 41% of the Earth's mass.

Earth's Interior – The core

The core is composed primarily of a nickel-iron alloy. There is an outer core that is liquid and an inner core that is solid.

- **Outer core**
 - Is about 2100 km thick.
 - It makes up about 30 % of the Earth's total mass.
- **Inner core**
 - Is about 1300 km thick.
 - It makes up about 2 % of the Earth's total mass.

Some points to remember in studying the Earth's interior:

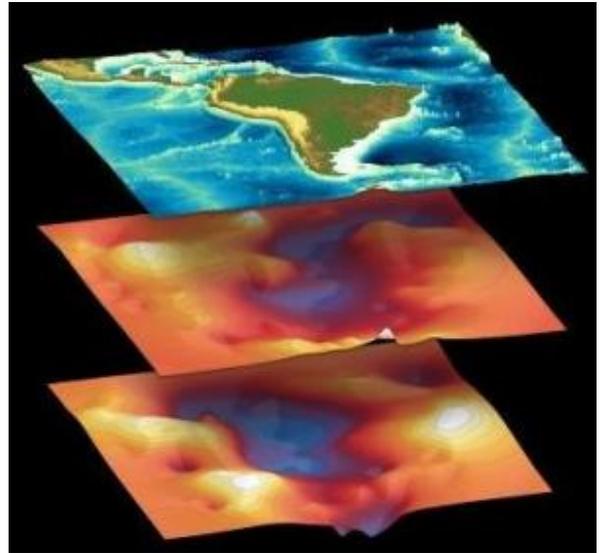
- There are distinct layers to the Earth's interior.
- Heavier elements tend to sink to the core.
- Lighter elements rise toward the surface.
- Much more is known about the crust than the mantle and core.
- What we believe is true about the mantle and core comes from studying seismology.

Deep Inside Planet Earth, Interplay of Temperature, Pressure, Chemistry

<http://www.sciencedaily.com/releases/2007/10/071025143332.htm>

ScienceDaily (Oct. 30, 2007) — Seismologists in recent years have recast their understanding of the inner workings of Earth from a relatively benign homogeneous environment to one that is highly dynamic and chemically diverse. This new view of Earth's inner workings depicts the planet as a living organism where events that happen deep inside can affect what happens at its surface, like the rub and slip of tectonic plates and the rumble of the occasional volcano.

New research into these dynamic inner workings are now showing that Earth's upper mantle (an area that extends down to 660 km) exhibits how far more than just temperature and pressure play a role in the dynamics of the deep interior.



A study by Nicholas Schmerr, a doctoral student in Arizona State University's School of Earth and Space Exploration is shedding light on these processes and showing that they are not just temperature driven. His work helps assess the role chemistry plays in the structure of Earth's mantle.

The simplest model of the mantle -- the layer of the Earth's interior just beneath the crust -- is that of a convective heat engine. Like a pot of boiling water, the mantle has parts that are hot and welling up, as in the mid-Atlantic rift, and parts that are cooler and sinking, as in subduction zones. There, crust sinks into the Earth, mixing and transforming into different material "phases," like graphite turning into diamond.

"A great deal of past research on mantle structure has interpreted anomalous seismic observations as due to thermal variations within the mantle," Schmerr said. "We're trying to get people to think about how the interior of the Earth can be not just thermally different in different regions but also chemically different."

The research, which Schmerr conducted with Edward Garnero, a professor in ASU's School of Earth and Space Exploration, was published in the October 26 issue of the journal *Science*. Their article is titled "Upper Mantle Discontinuity Topography from Thermal and Chemical Heterogeneity."

Schmerr's work shows that Earth's interior is far from homogeneous, as represented in traditional views, but possesses an exotic brew of down and upwelling material that goes beyond simply hot and cold convection currents. His work demonstrates the need for a chemical component in the convection process.

At key depths within Earth, rock undergoes a compression to a denser material where its atoms rearrange due to the ever-increasing pressure. Earth scientists have long known that the dominant

mineral olivine in Earth's outer shell, compresses into another mineral named wadsleyite at 410 km (255 mile) depth, which then changes into ringwoodite around 520 km (325 mile) depth and then again into perovskite + magnesiowüstite at 660 km (410 mile) depth.

These changes in crystal structure, called phase transitions, are sensitive to temperature and pressure, and the transition depth moves up and down in the mantle in response to relatively hot or cold material.

Beneath South America, Schmerr's research found the 410 km phase boundary bending the wrong way. The mantle beneath South America is predicted to be relatively cold due to cold and dense former oceanic crust and the underlying tectonic plate sinking into the planet from the subduction zone along the west coast. In such a region, the 410 km boundary would normally be upwarped, but using energy from far away earthquakes that reflect off the deep boundaries in this study area, Schmerr and Garnero found that the 410 km boundary significantly deepened.

"Our discovery of the 410 boundary deflecting downwards in this region is incompatible with previous assumptions of upper mantle phase boundaries being dominantly modulated by the cold temperature of the subducting crust and plate," Garnero said.

Geologists and geochemists have long suspected that subduction processes are driven by more than temperature alone. A sinking oceanic plate is compositionally distinct from the mantle, and brings with it minerals rich in elements that can alter the range of temperatures and pressures at which a phase change takes place.

"We're not the first to suggest chemical heterogeneities in the mantle, however, we are the first to suggest hydrogen or iron as an explanation for an observation at this level of detail and over a geographical region spanning several thousands of kilometres," Schmerr said.

Hydrogen from ocean water can be bonded to minerals within the crust and carried down as it is subducted into the mantle, Schmerr explained. When the plate reaches the 410 km phase boundary, the hydrogen affects the depth of the olivine to wadsleyite phase transition, reducing the density of the newly formed wadsleyite, and making it relatively more buoyant than its surrounding material. This hydrated wadsleyite then "pools" below the 410 km boundary, and the base of the wet zone reflects the seismic energy observed by Schmerr.

Alternatively, subduction can bring the iron-poor and magnesium-enriched residues of materials that melted near the surface to greater depths. Mantle mineral compositions enriched in magnesium are stable to greater depths than usual, resulting in a deeper phase transition.

"Either hypothesis explains our observation of a deep 410-km boundary beneath South American subduction, and both ideas invoke chemical heterogeneity," Schmerr said. "However, if we look deeper, at the 660-km phase transition, we find it at a depth consistent with the mantle being colder there. This tells us that the mantle beneath South America is both thermally cold and chemically different."

To make their observations, Schmerr and Garnero used data from the USArray, which is part of the National Science Foundation-funded EarthScope project.

"The USArray essentially is 500 seismometers that are deployed in a movable grid across the United States," Schmerr said. "It's an unheard of density of seismometers."

Schmerr and Garnero used seismic waves from earthquakes to measure where phase transitions occur in the interior of Earth by looking for where waves reflect off these boundaries. In particular, they used a set of seismic waves that reflect off the underside of phase transitions halfway between the earthquake and the seismometer. The density and other characteristics of the material they travel through affect how the waves move, and this gives geologists an idea of the structure of the inner Earth.

"Seismic discontinuities are abrupt changes in density and seismic wave speeds that usually occur where a mineral undergoes a phase change -- such as when olivine transitions to wadsleyite, or ringwoodite transforms into perovskite and magnesiowüstite. The transformed mineral is generally denser, and typically seismic waves travel faster through it as well. Discontinuities reflect seismic energy, which allows us to figure out how deep they are. They are found throughout the world at certain average depths -- in this case, at 410 and 660 km," Schmerr said. "Because these phase transitions are not always uniform, these layers are bumpy with ridges and troughs."

"Right now the big question that we have is about Earth's thermal state and its chemical state, and there are a lot of ways we can go about getting at that information," Schmerr said. "This study lets us look at one particular area in Earth and constrain the temperature and composition to a certain degree, imaging this structure inside the Earth and saying, these are not just thermal effects -- there's also some sort of chemical aspect to it as well."

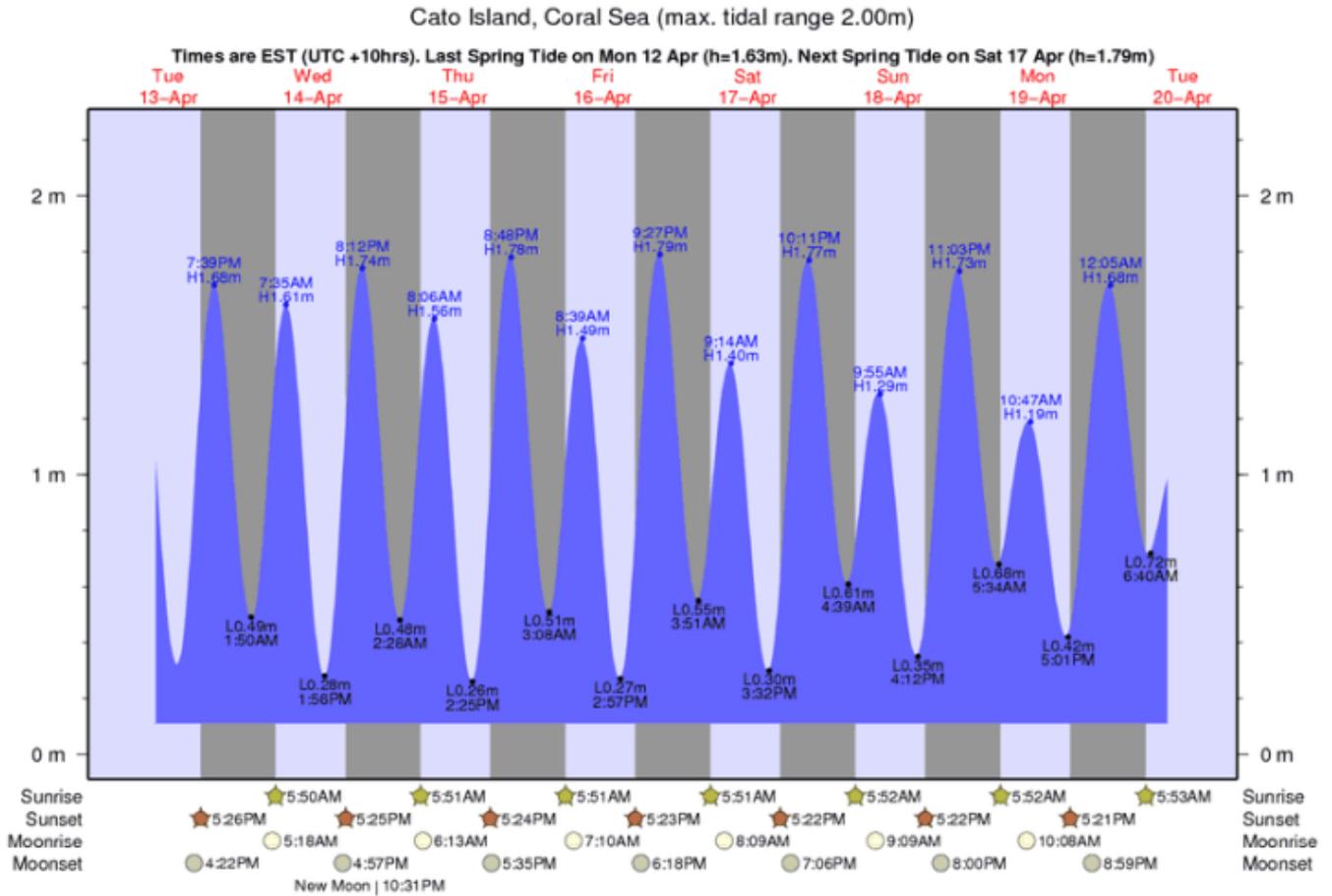


OCEAN FLOOR RISING BY 13 FEET PER DAY IN AUSTRALIA

<http://reinep.wordpress.com/2010/05/16/ocean-floor-rising-by-13-feet-per-day-in-australia/>

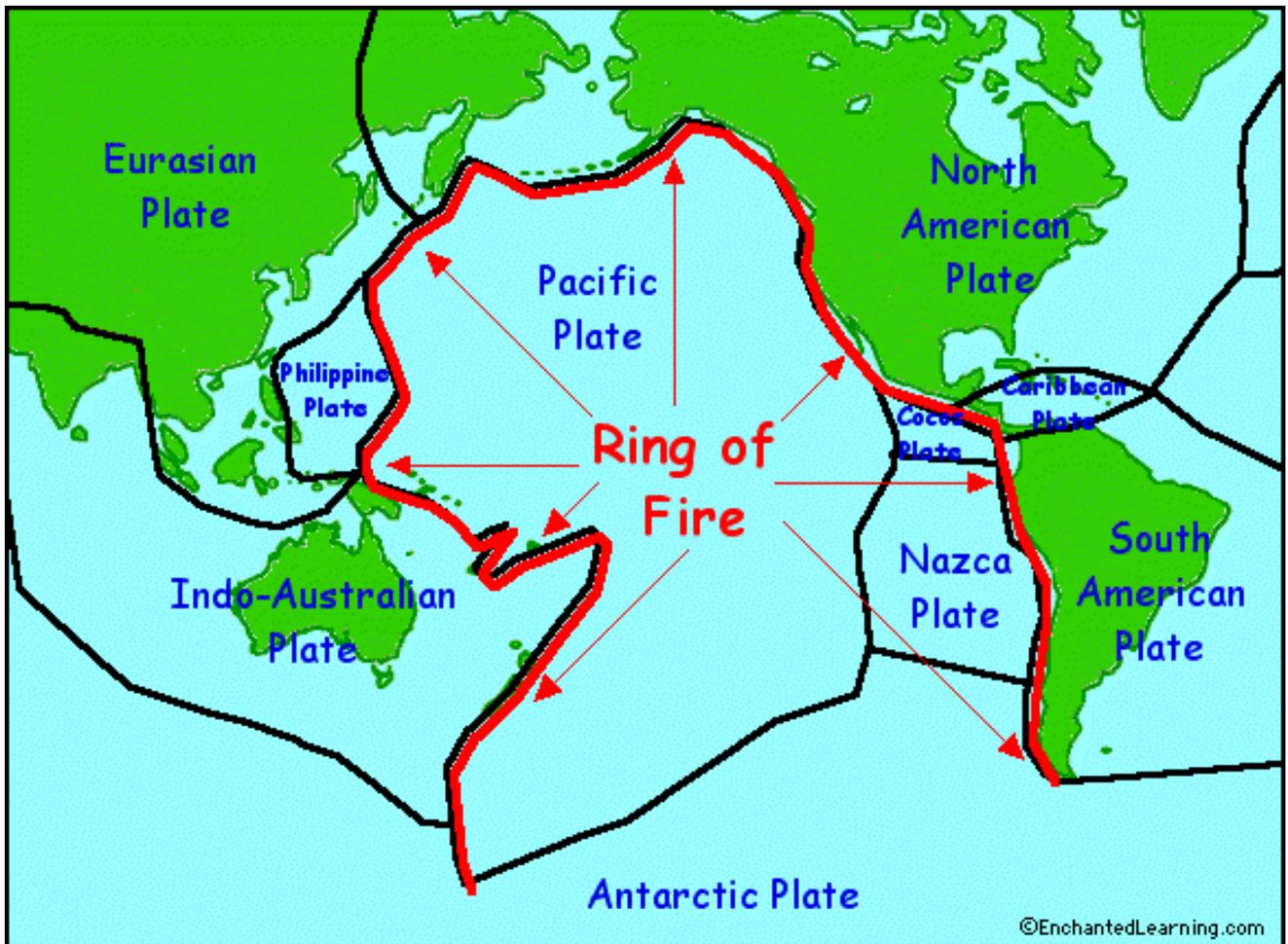
(This is an example of how difficult it is to determine truth!)

The National Oceanic and Atmospheric Administration website [link](#)



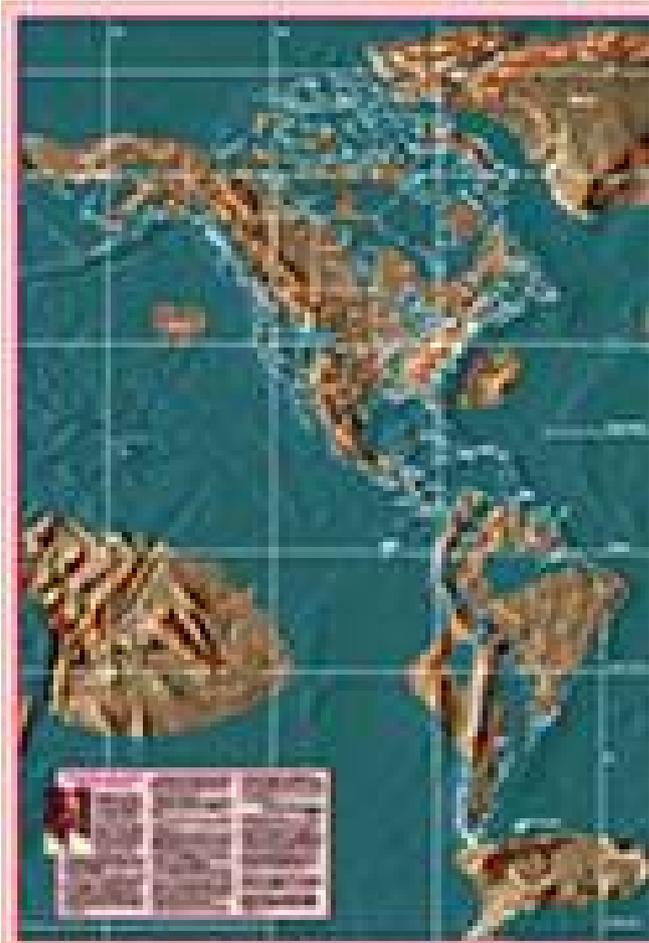
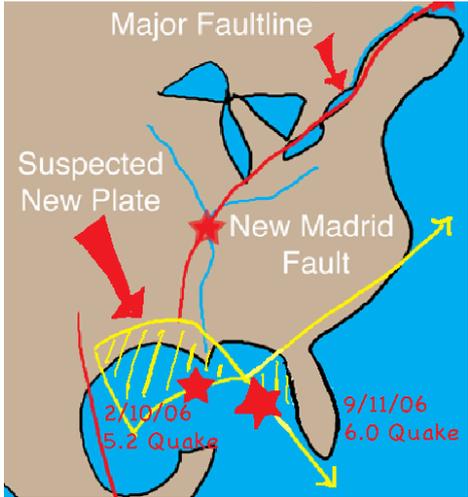
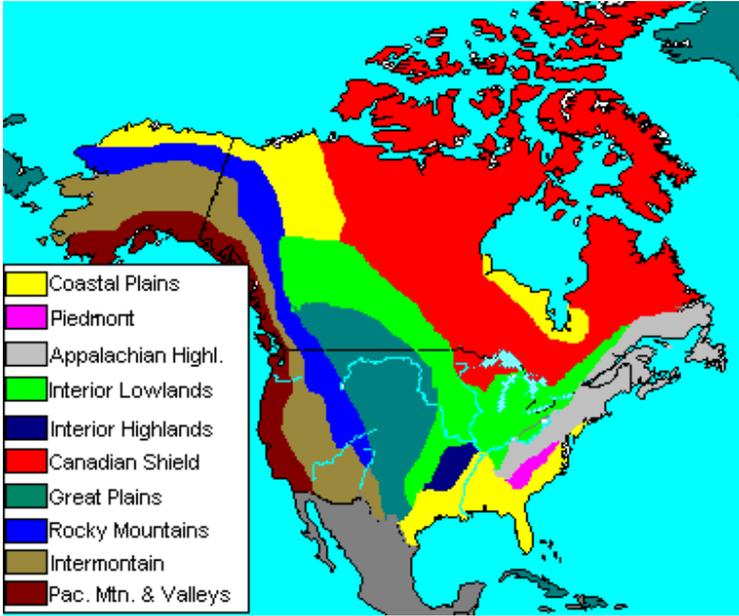
This is very disturbing. More and more things are happening that really shouldn't. Is the 2012 events we are waiting for, starting already? The National Oceanic and Atmospheric Administration has a Tsunami station in event mode activated for Station 55023 – STB Coral Sea located at 14.803 S 153.585 E (14°48'9" S 153°35'6" E). The tsunami station has been in event mode since the large quakes occurred in the area for several days now. This is triggered by the buoys' anomalies of water column height above the sea floor. If you do a data search for 2010 March 20th to 2010 April 13th you get this- Over 100 meters or 328 feet less distance from buoy to sea floor in 24 days! That's 13 feet per day since the quakes. As you will see from the waves on the line graph it matches the tide lines perfectly.

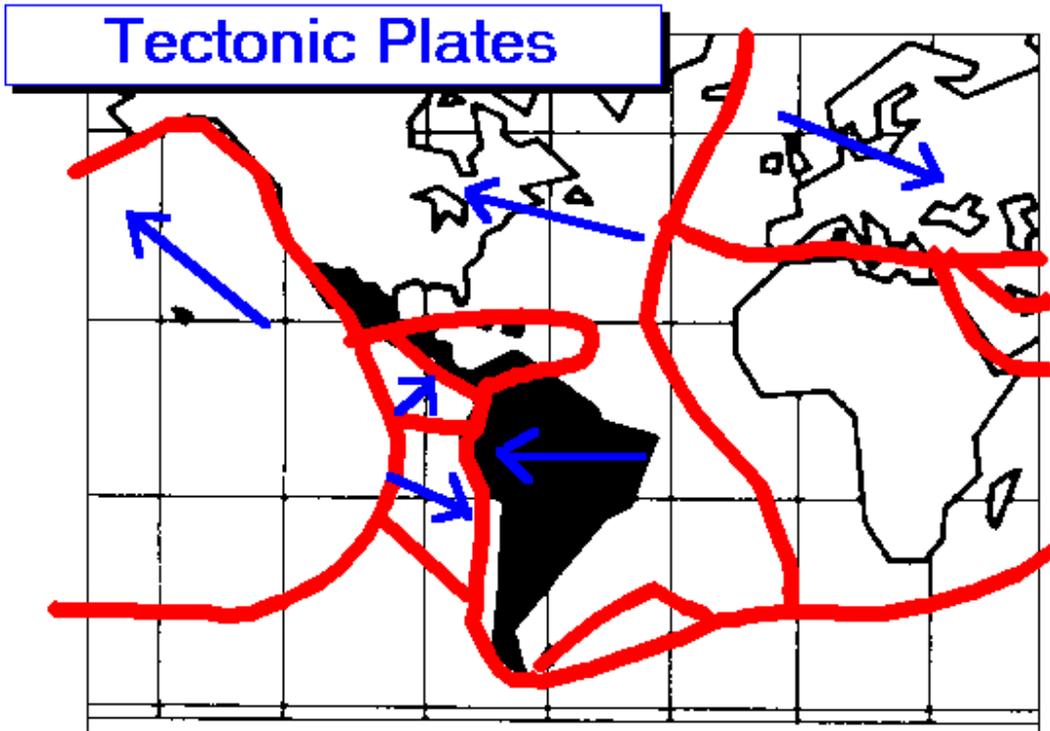
So Station buoy 55023 is still on the surface. Its not the lunar cycles, checked that as well. There also has been a very odd sea surface temperature in the same location See link CSIRO web page [[link](#)] Note the area in blue on the map on the left then see the unusually cold surface temperatures on the surface in the map on the right. Seismic activity has also offers a good insight as to what may be occurring.



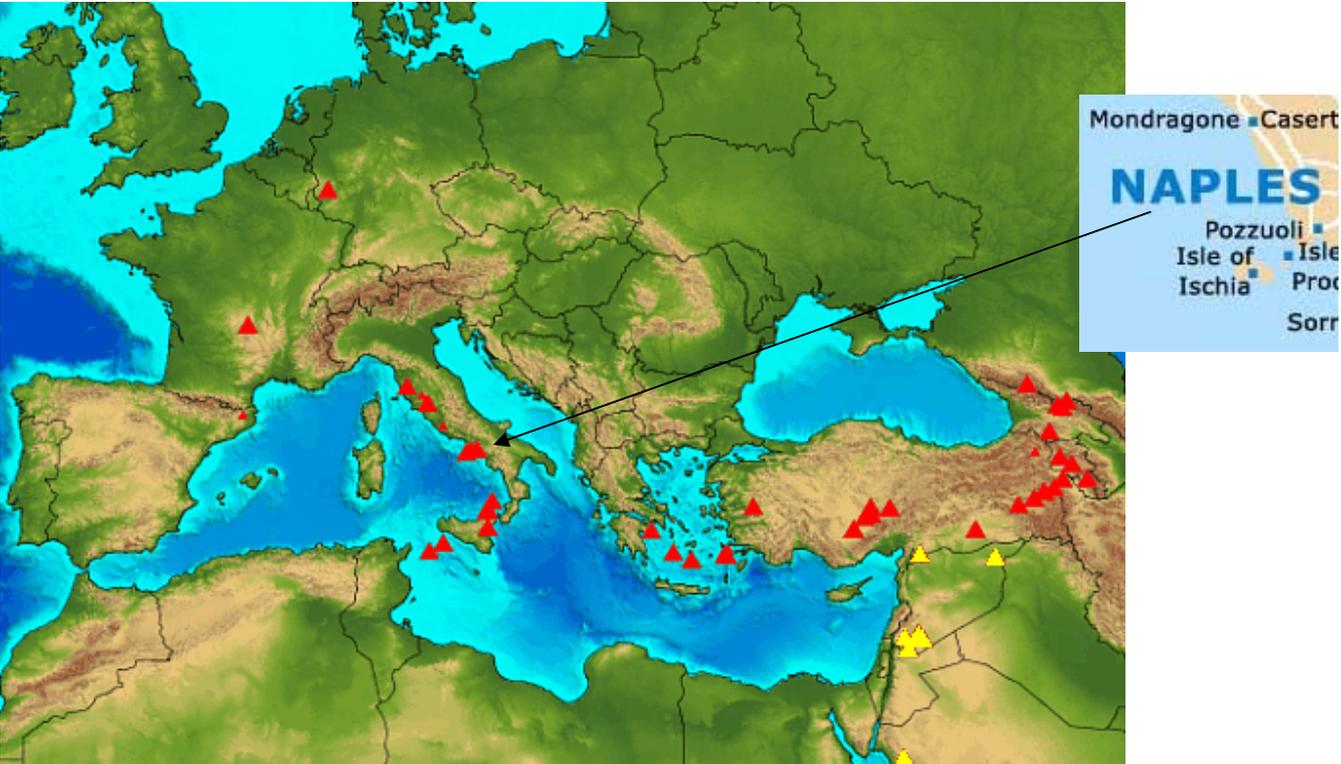
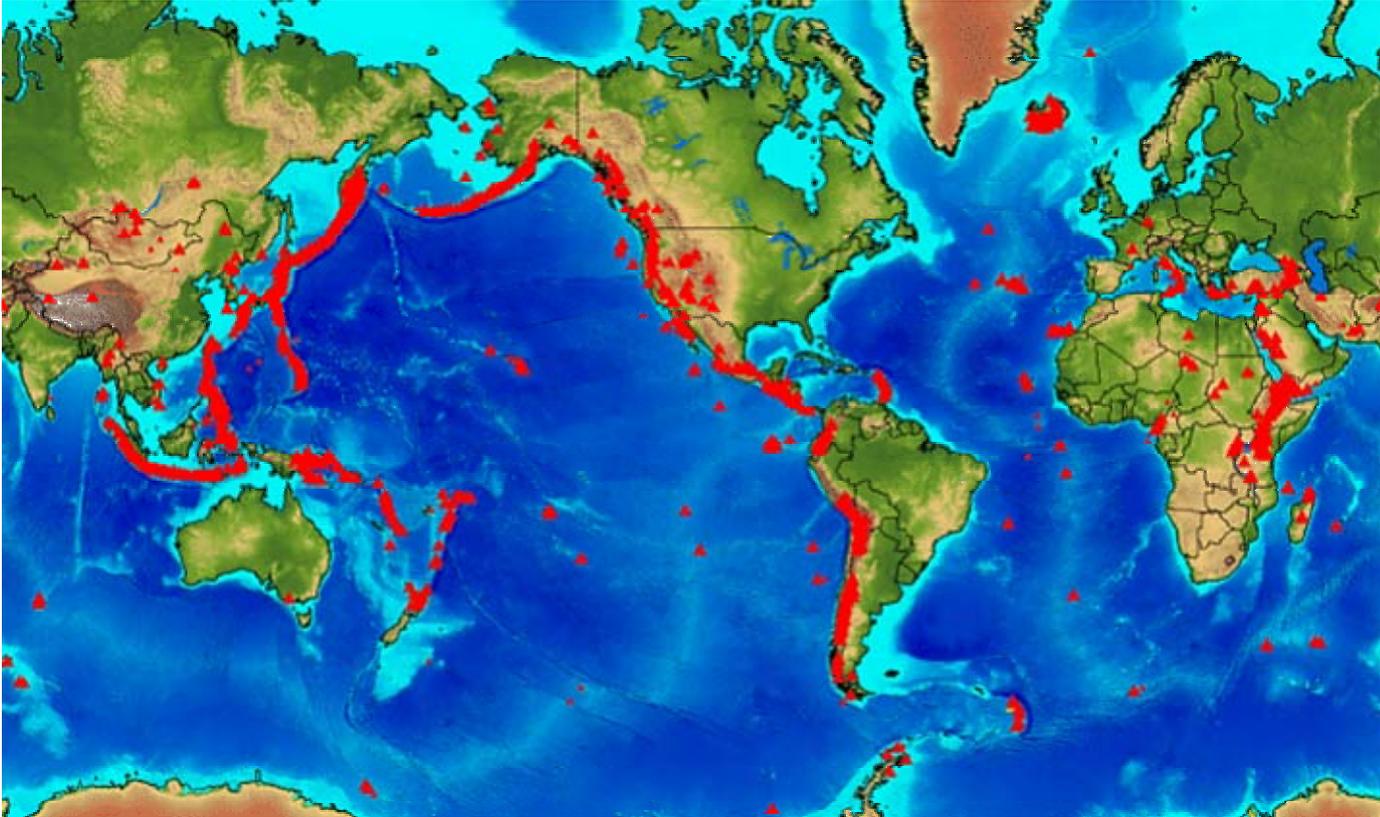
[Dave](#) says: [09/07/2010 at 08:06](#)

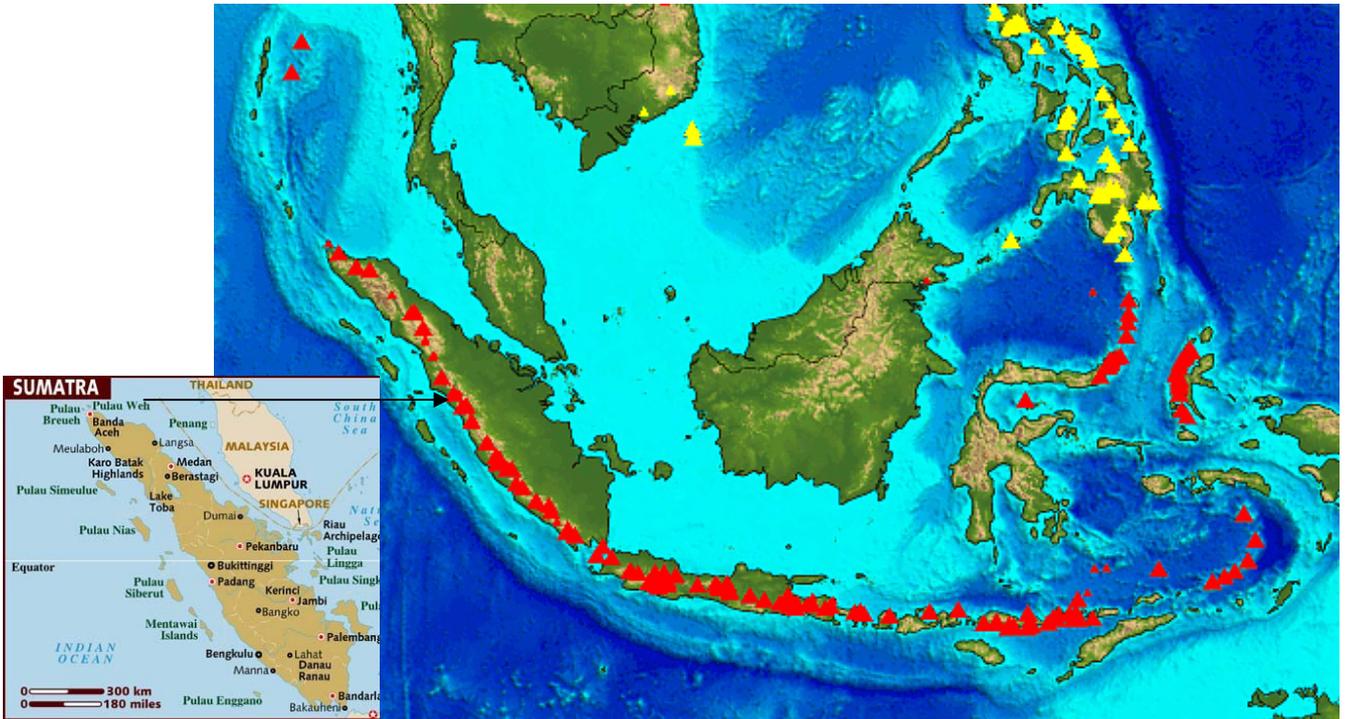
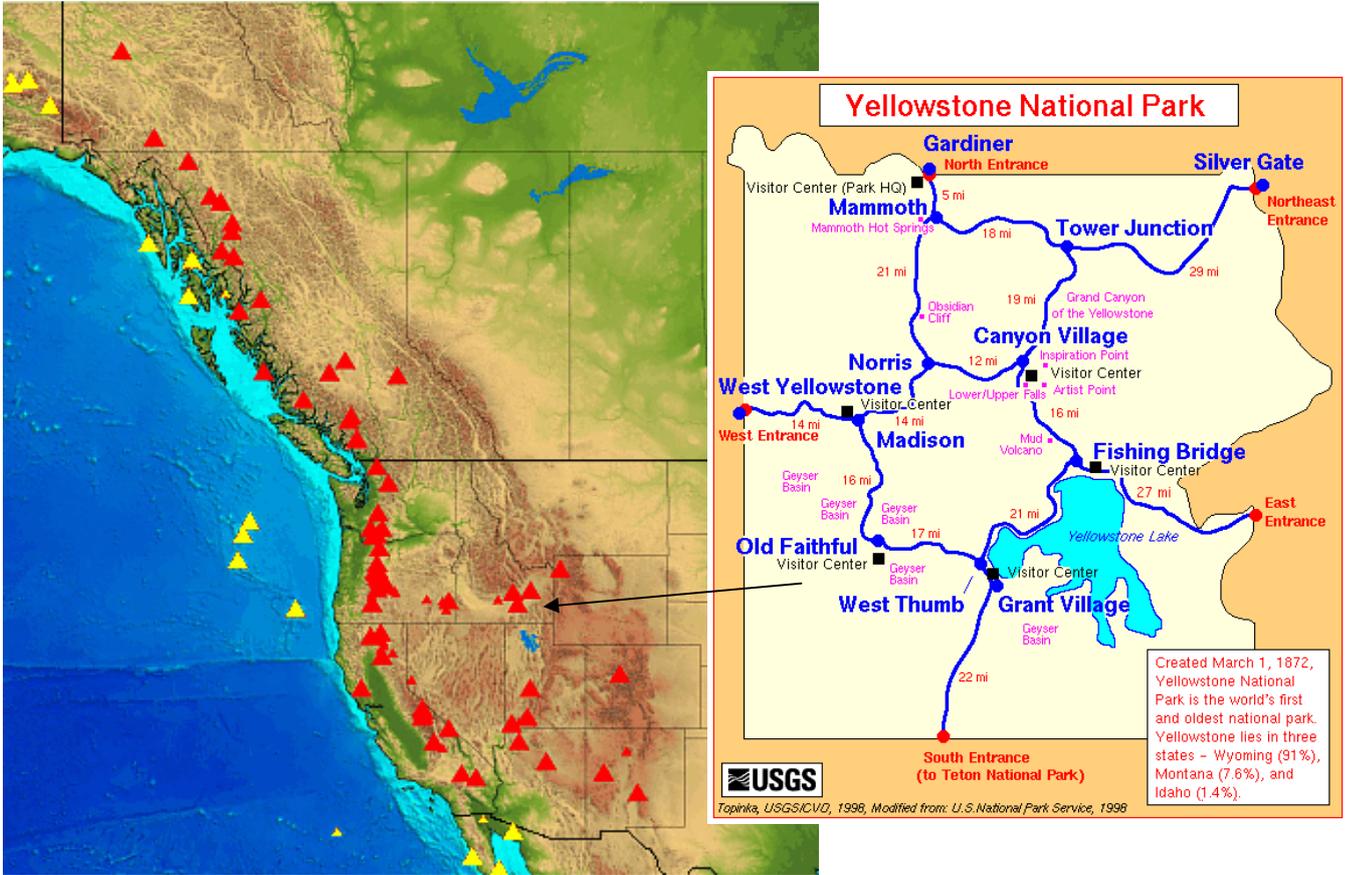
“Station 55023 was faulty. It has since been repaired and was put back into service in late may. The sea floor is now back to where it was before the station went on the blink.”





http://www.volcano.si.edu/world/find_regions.cfm





Supervolcano

<http://pidema.wikispaces.com/Super+Volcano>

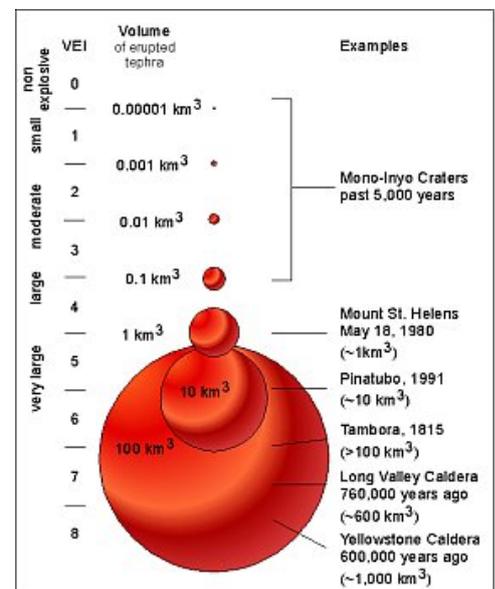
A **supervolcano** is a volcano that produces the largest kinds of eruption on Earth. The volume of ejected tephra (airfall material) is enough to radically change the landscape and severely affect global climate for years and the "volcanic winter" supervolcanoes produce can have a dramatic effect on life. The term was originally coined by the producers of the BBC program, "Horizon", in 2000 to refer to these types of eruption. That investigation brought the subject more into the public eye, leading to further studies of the possible effects.

- Until 2003, *supervolcano* was not a technical term used in the study of volcanoes.
- There is no well-defined minimum explosive size for a "supervolcano".
- Volcanologists do not use the term "super volcano or mega caldera," except when dealing with the media as it seems it is the only way the media and hence some non-scientific people understand the scale of the phenomena.

Massive Eruptions: Eruptions with a **Volcanic Explosivity Index** of 7 or 8 (VEI-7 or 8) are colossal events that eject at least 1,000 km³ Dense Rock Equivalent (DRE) of pyroclastic material. VEI-7 or 8 eruptions are so powerful that they often form circular calderas rather than cones because the magma chamber that produces uplift becomes drained and the land above the chamber collapses into it. One of the closest calderas to our location is the Yellowstone caldera located north and west of (and including part of) Yellowstone Lake.

VEI-8 volcanic events have included eruptions at the following locations. Estimates of the volume of erupted material are given in parentheses.

- [Lake Taupo](#), North Island, New Zealand – Oruanui eruption 26,500 years ago (1,170 km³)
- [Lake Toba](#), Sumatra, Indonesia – 75,000 years ago (2,800 km³)
- [Yellowstone Caldera](#), Wyoming, United States – 2.2 million years ago (2,500 km³) and 640,000 years ago (1,000 km³)
- [La Garita Caldera](#), Colorado, United States – Source of the truly enormous eruption of the Fish Canyon Tuff 27.8 million years ago (~5,000 km³)

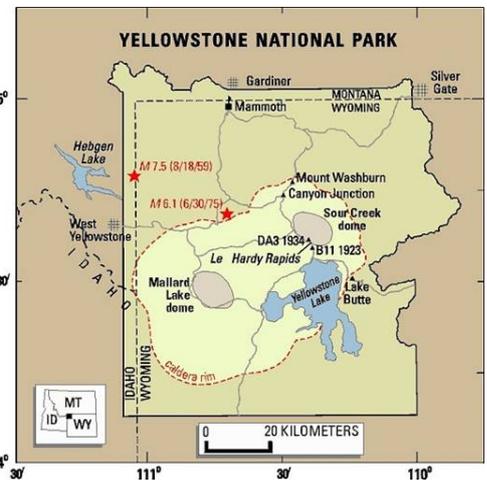


The Lake Toba eruption plunged the Earth into a volcanic winter, eliminating an estimated 60% of the human population (although humans managed to survive, even in the vicinity of the volcano), and was responsible for the formation of sulphuric acid in the atmosphere.

The Yellowstone Caldera: The **Yellowstone Caldera** is a volcanic caldera in Yellowstone National Park and measures about 55 kilometres (34 miles) by 72 kilometres (45 miles).

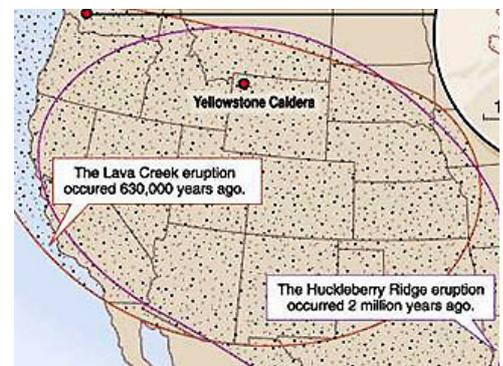
The caldera was discovered based on geological field work conducted by Bob Christiansen of the United States Geological Survey in the 1960s and 1970s. After a BBC television science program coined the term super-volcano in 2000, it has often been referred to as the "Yellowstone super-volcano."

Yellowstone, like the Hawaiian Islands, is believed to lie on top of one of the planet's few dozen hotspots where light, hot, molten mantle rock rises towards the surface. The Yellowstone hotspot⁴⁵ has a long history. It is thought that over the past 17 million years or so, successive eruptions have flooded lava over wide stretches of Washington, Oregon, California, Nevada, and Idaho, forming a string of comparatively flat calderas linked like beads, as the North American plate moves across the stationary hotspot. The oldest identified caldera remnant is straddling the border near McDermitt, Nevada-Oregon. The calderas' apparent motion to the east-northeast forms the Snake River Plain. However, what is actually happening is the result of the North American plate moving west-southwest over the stationary hotspot deep underneath.

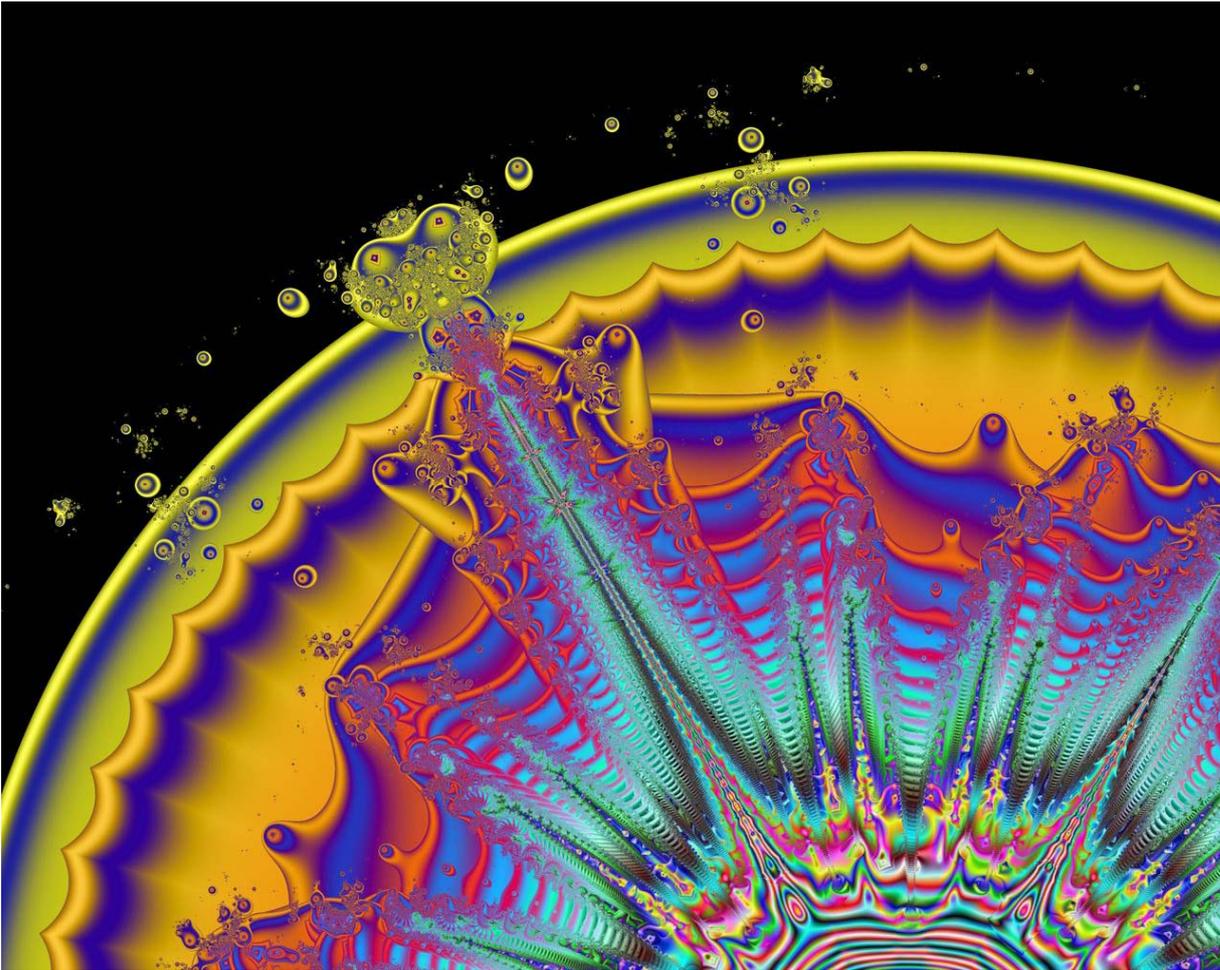
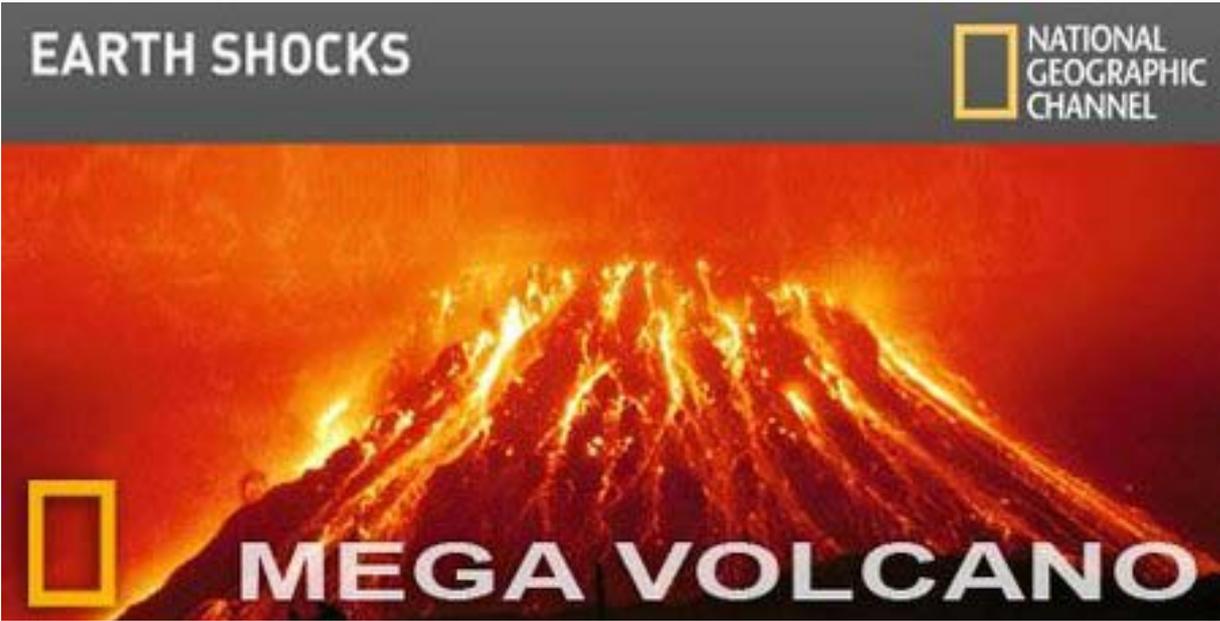


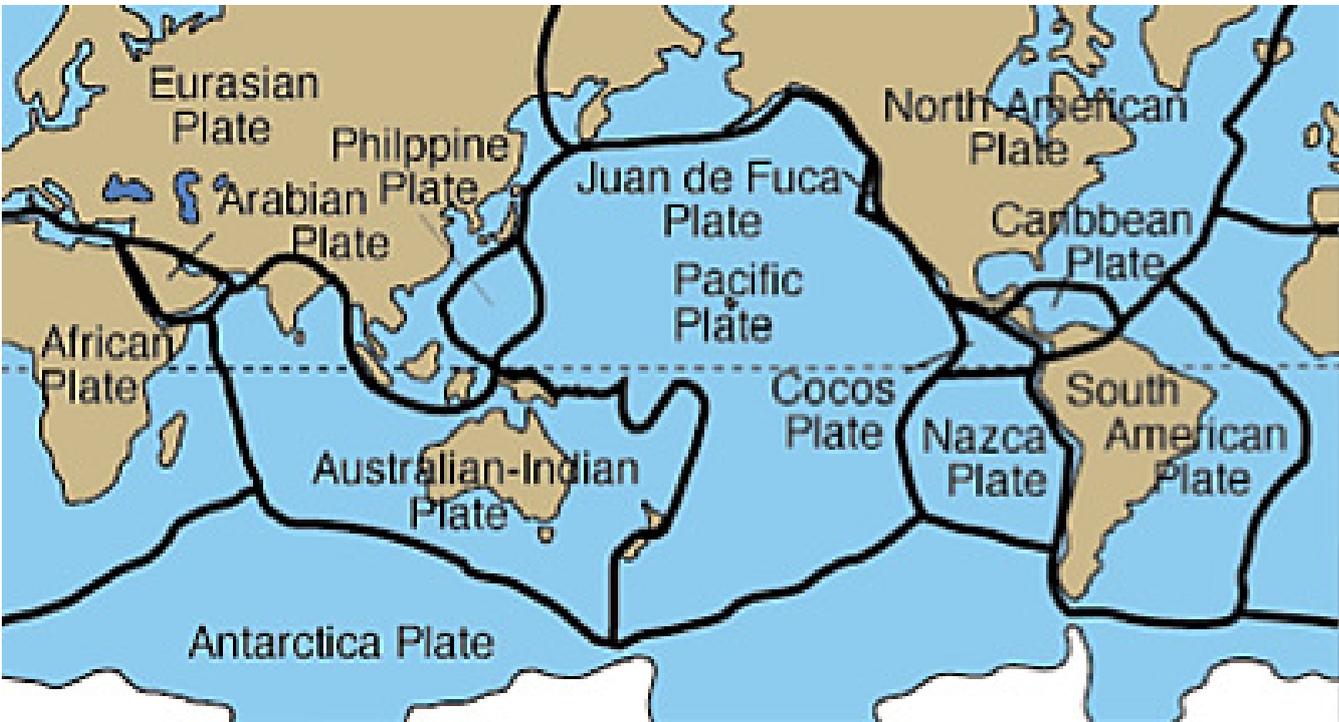
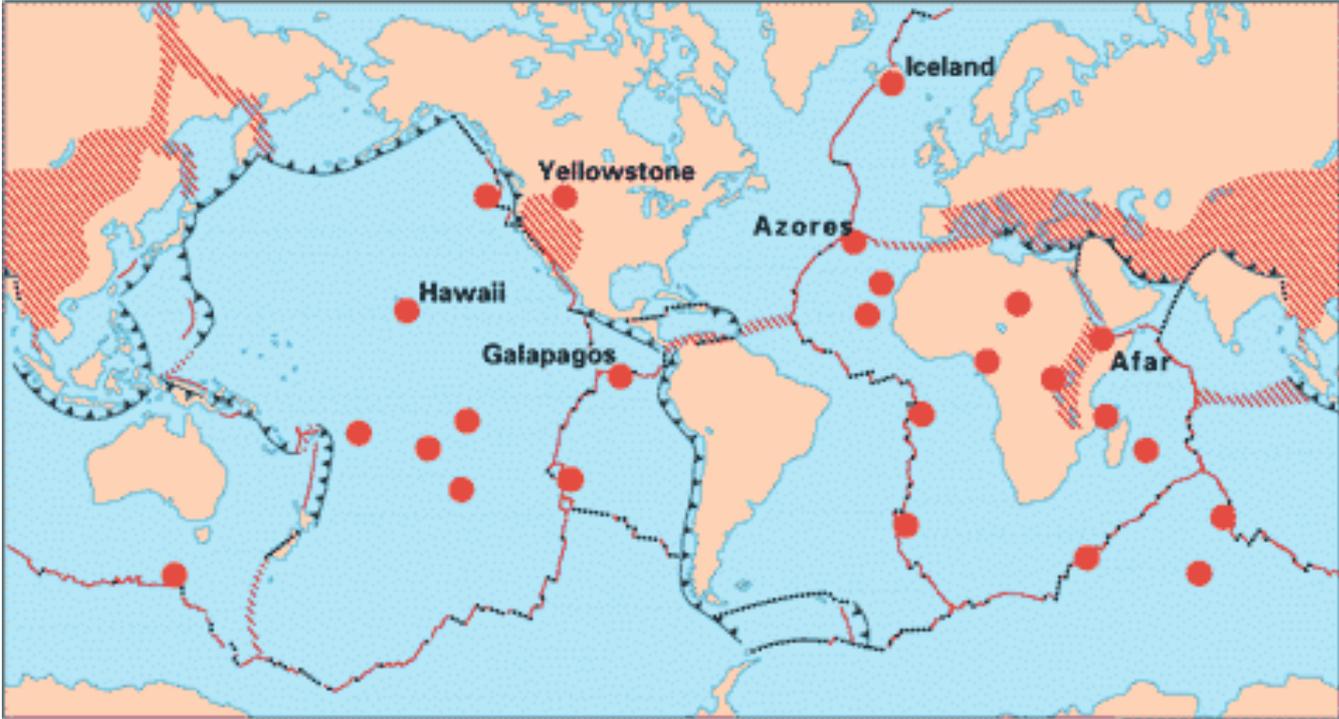
Yellowstone sits on top of three overlapping calderas. Currently, volcanic activity is exhibited only via numerous geothermal vents scattered throughout the region, including the famous Old Faithful Geyser, but within the past two million years, it has undergone three extremely large explosive eruptions, up to 2,500 times the size of the 1980 Mount St. Helens eruption. The three eruptions happened 2.1 million years ago, 1.3 million years ago, and the most recent such eruption produced the Lava Creek Tuff 640,000 years ago and spread a layer of volcanic ash over most of the North American continent. Between major eruptions and in the time since then, several small volcanic episodes have occurred along with continuing geothermal activity (see "[Thermal features](#)") as a result of a large chamber of magma located below the caldera's surface. The magma in this chamber contains gases that are kept dissolved only by the immense pressure that the magma is under. If the pressure is released to a sufficient degree by some geological shift, then some of the gases bubble out and cause the magma to expand. This can cause a runaway reaction. If the expansion results in further relief of pressure, for example, by blowing crust material off the top of the chamber, the result is a very large gas explosion.

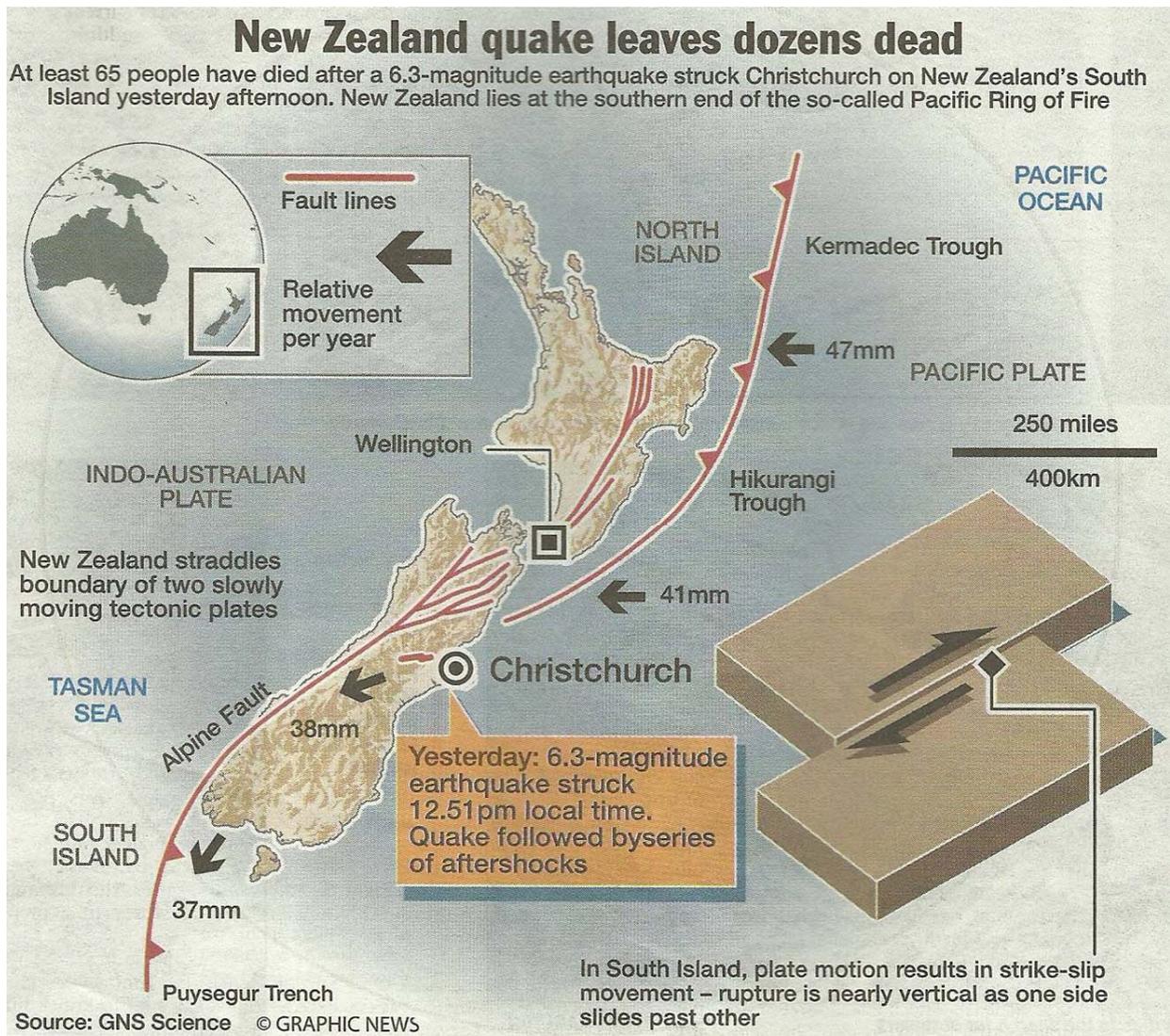
Geologists are closely monitoring the rise and fall of the Yellowstone Plateau, which averages +/- 1.5 cm yearly, as an indication of changes in magma chamber pressure.



<http://www.2012churchofdoom.com/yellowstone/yellowstone-super-volcano-eruption-coming#.Tg0bJSE7w6Q.facebook>







If you're interested in preparing for Earth Changes check out this website: www.lifestraw.com.au

The life straw is a simple and cheap 0.2 micron filtration device to allow water in creeks, dams and ponds etc to be safely drunk. It filters out all nasty bugs in water, but won't filter out chemicals. The life straw is also useful for travellers in third world countries and for camping and hiking. For every life straw sold they give one to someone in a third world country. For sale for AU\$30 at the Kingaroy Fireplace Centre and camping store at 99 Kingaroy St, Kingaroy, or from the Wombye house on the Sunshine Coast that is mentioned on the website. They cost AU\$25 each there.

Worst case scenario to rig up a solar still if you are caught surrounded by impure water:

http://www.survivalmetrics.com/id_solar-still-water-purification-kit

<http://www.motherearthnews.com/Renewable-Energy/1974-09-01/How-To-Build-and-Use-A-Solar-Still.aspx>

SUPPLY LINE CHAIN COLLAPSES:

Volcanoes followed by earthquakes followed by tsunamis of any proportions collapse transportation, communications, power supply, fuel supply and everything that is component related. Air transport can be out for months as we have recently experienced.

Complex products can have only one part missing in the supply chain and production stops.

Tsunamis destroy anything at low levels above sea. Presently about 40% of the world's population lives within 100 kilometres of the coast and 10% of the world's population live below 10 metres above sea level. That is the potential for massive disruption, whole technologies can disappear.

Fresh water, food, energy for everything, all supply lines are all threatened by any major Earth event.

Following major Earth events, one may consider that supplies that we take for granted may take many months to be re-established, some may never be re-established.

Q&A God Reliance Part1 2011 June 18

<http://www.youtube.com/watch?v=JmjxtqnhzHI>



CO² increases – good news!

With global CO² levels continuing to increase, not all the news is bad.

Increased plant growth was recently “confirmed by satellite data analyzed by scientists Steven Running of the University of Montana and Ramakrishna Nemani of NASA. They found that over a period of almost two decades, the earth's vegetation increased by a whopping 6.2%”.

<http://www.ibdeditorials.com/IBDArticles.aspx?id=300409593211234>

Supporting these measurements is a paper entitled “*Effects of Elevated*

CO² on Fine-Root Ectomycorrhizas of Forest Trees”.

This paper notes: “As the air's CO² content continues to rise, we can expect that the ECM fungal mantle that covers portions of the fine-roots of earth's trees will become even better established than it is currently, with the result that (1) the planet's forests will likely have better access to the nutrients they need and (2) they will therefore be better able to take advantage of the increased potential for growth that is provided by the increase in rates of needle and leaf photosynthesis that are typically induced by elevated concentrations of atmospheric CO².”

<http://www.co2science.org/articles/V11/N32/B1.php>

Weather, Weather, Everywhere?

http://solarsystem.nasa.gov/scitech/display.cfm?ST_ID=725

Scientists believe that Jupiter's Great Red Spot is actually a hurricane that has been raging for more than 400 years within the planet's atmosphere.



Every planet in our solar system has seasons. But the seasons that occur on other planets are extremely different from the traditional spring, summer, fall and winter weather that we experience here on Earth. Despite what may seem like great variations in temperature, weather and climactic conditions in different places around the globe, in reality there actually is little variation in Earth's overall climate. Why?

There are several factors that affect the weather on the planets: the tilt of a planet's axis (which causes the seasons), the shape of its orbit around the sun, the presence or absence of a significant atmosphere, its average distance from the Sun, and the length of its day.

Earth's axis is tilted about 23 degrees, causing the latitude of the Sun to vary from 23 degrees north of the equator at the beginning of northern summer to 23 degrees south of the equator at the beginning of northern winter. On Earth, that tilt is the primary reason for the differences in weather we observe between summer and winter. Planets with smaller tilts might have smaller weather variations; planets with larger tilts could have more extreme variations.

Our orbit is nearly circular, so there is little variation in Earth's overall climate, averaged over both northern and southern hemispheres. But other planets have more elliptical orbits, and therefore their seasonal variations in weather are much different than what we experience. We are much further from the Sun than Mercury or Venus, but closer than the other six planets. Generally, weather variations are more pronounced for those planets closer to the Sun.

The terms "summer" and "winter" tend to be Earth-oriented terms but can be applied to the other planets as well. When the North Pole of *any* planet is tilted toward the sun, astronomers call it the Summer Solstice; when the South Pole is tilted toward the sun it's called the Winter Solstice.

So, how do seasons and weather conditions stack up on other planets?

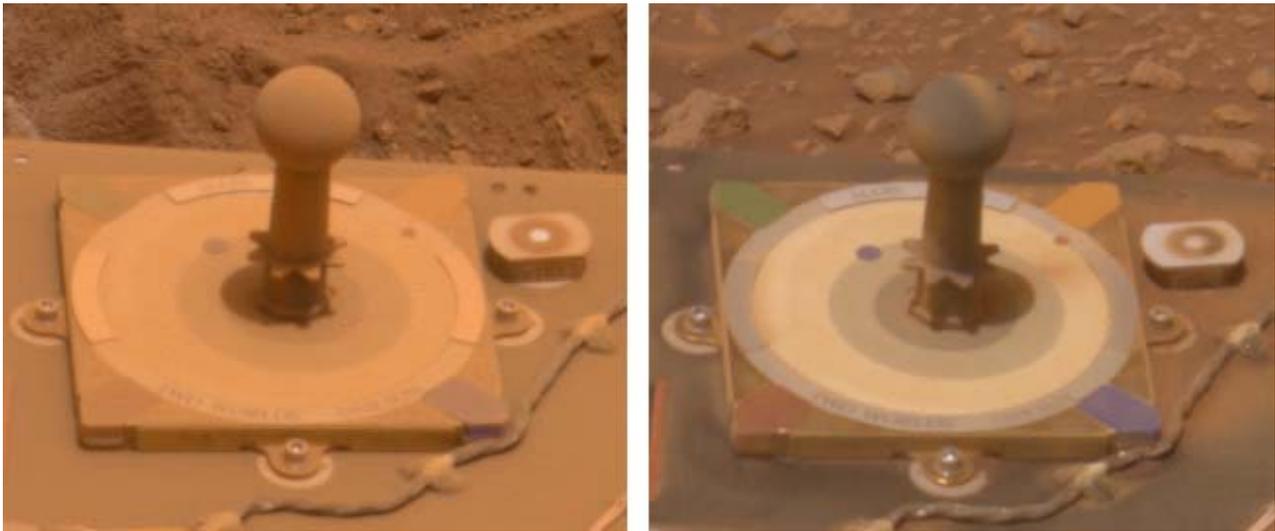


Hurricane Charley Hammers Florida

The tilt of the Earth is the primary reason for the differences in weather we observe between summer and winter.

Mercury experiences some of the most bizarre conditions. Until the 1960's, it was thought that Mercury's day was the same length as its year, keeping the same face to the Sun, much as the Moon does to Earth. But we now know that Mercury rotates three times during two of its years. With this bizarre 2:3 ratio, Mercury is the only body in the solar system locked into an orbit-to-rotation ratio other than 1:1. This fact and the high eccentricity of Mercury's orbit cause very strange effects if an observer were to stand on Mercury's surface. At some longitudes the observer would see the Sun rise and then gradually increase in apparent size as it slowly moves toward the zenith. At that point the Sun would stop, briefly reverse course, and stop again before resuming its path toward the horizon, and decrease in apparent size. It is the motion of the Sun against the background stars, which varies for an observer on Mercury. Observers at other points on Mercury's surface would see different but equally bizarre motions. That makes it impossible to really tell when one season ends and the next one begins. And, to add to the uniqueness of the planet, temperature variations on Mercury are the most extreme in the solar system, ranging from -280°F at night to 800°F during the day for parts of the surface. And yet near Mercury's poles there is almost no change in temperature, because, in spite of its very long duration between sunrises (176 Earth days), the tilt of its axis is zero, meaning that there are *no* seasonal variations on Mercury. Furthermore, with essentially no atmosphere, Mercury's weather changes are displayed not as storms in the atmosphere, but as wide swings in surface temperature.

Venus has a very small axial tilt -- 3 degrees versus Earth's 23.5 degrees. Its dense, acidic atmosphere produces a runaway greenhouse effect that keeps the surface at around 865°F year-round, which is hot enough to melt lead. Venus also has a smaller orbit than Earth, which makes its seasons shorter, and variations in temperature and conditions extremely slight. Its seasons last a mere 55-58 days, as opposed to 90-93 days on Earth. In fact, circumstances combine to make Venus' seasons shorter than its days: successive sunrises on Venus are separated by 117 Earth days, and Venus rotates backwards, causing the Sun to rise in the west and set in the east. When the Magellan spacecraft made its historic dramatic final fiery descent into Venus' atmosphere on October 11, 1994, it was northern springtime on Venus, while in the peak of northern autumn here on Earth.



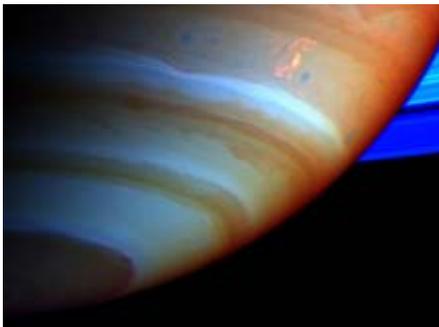
Mars' winds were strong enough to give the rover Spirit a good cleaning.

Mars has one of the highest orbital eccentricities of any planet in our solar system (other than Mercury and Pluto) -- its distance from the Sun varies between 1.38 and 1.67 AU over the Martian year. This large variation, combined with an axial tilt slightly greater than Earth's, gives rise to seasonal changes far greater than we experience here on Earth. On Mars, dramatic dust storms are common due to solar heat, which warms the Martian atmosphere and causes its air to move rapidly, lifting dust off the ground. Because the Martian atmosphere is thin -- about 1% as dense as Earth's at sea level -- only the smallest dust grains hang in the air, and the grains are as fine as smoke. One of the strangest effects of seasons on Mars is the change in atmospheric pressure. During winter the global atmospheric pressure on Mars is 25% lower than during summer. This happens because of the eccentricity of Mars's orbit and a complex exchange of carbon dioxide between the Martian dry-ice polar caps and its CO₂ atmosphere. Around the winter solstice when the North Pole is tilted away from the sun, the northern polar cap expands as carbon dioxide in the polar atmosphere freezes. At the other end of the planet the southern polar cap melts, giving CO₂ back to the atmosphere. This process reverses half a year later at the summer solstice. But Mars is 10% closer to the Sun in southern summer than it is in northern summer. At the time of the winter solstice the northern polar cap absorbs less CO₂ than the southern polar cap absorbs half a year later. The difference is so great that Mars's atmosphere is noticeably thicker during northern winter. Its orbital motion is slowest when it is at aphelion (the farthest point from the Sun) and fastest at perihelion (the closest point to the Sun). This makes Martian seasons vary greatly in duration than those on Earth.

Seasons change roughly every six months, with northern spring and fall lasting 171 Earth days, northern summer being 199 days in length, and northern winter being only 146 days. Because of these variations, Martian seasons do not start at the same Earth day each Martian year.

Jupiter, like Venus, has an axial tilt of only 3 degrees, so there is literally no difference between the seasons. However, because of its distance from the sun, seasons change more slowly. The length of each season is roughly three years. Jupiter is the fastest spinning planet in our Solar System, which causes the planet to flatten at the poles and bulge at the equator. Also, like Saturn, Uranus, and Neptune, Jupiter has a very dense, turbulent atmosphere that can cause dramatic storm activity. For example, the Hubble Space Telescope took a detailed look at a unique cluster of three immense oval-shaped storms that occurred below Jupiter's Great Red Spot, in 1995. Scientists believe that Jupiter's Great Red spot is actually a hurricane that has been raging for more than 400 years within the planet's atmosphere. The temperature on Jupiter also varies widely, because of the different chemical compositions that make up its atmosphere. For example, the highest white clouds are made of crystals of frozen ammonia, and the temperature here is about -220°F (-140°C). Measurements made by ground instruments and spacecraft show that Jupiter's temperature increases with depth below the clouds, and the temperature reaches 70°F (21°C) -- "room temperature" -- at a level where the atmospheric pressure is about 10 times as great as it is on Earth. As you travel further into the interior of Jupiter, the temperature becomes even hotter -- at the planet's core, it is even hotter than the Sun!

[Cassini captures Saturn's stormy surface.](#)



Saturn has an axial tilt of almost 27 degrees, which is slightly larger than that of Mars. But when talking about a gas giant in the outer reaches of the solar system, the concept of seasonal change doesn't quite mean the same as on Earth. Seasonal variations are strong on Saturn and each season lasts more than 7 years. That's a long winter! When the Cassini spacecraft began its revolutionary mission to Saturn and its largest moon, Titan, Saturn was two years into its northern fall season. When it arrived at Saturn in 2004, it will have just become northern winter on the ringed planet.

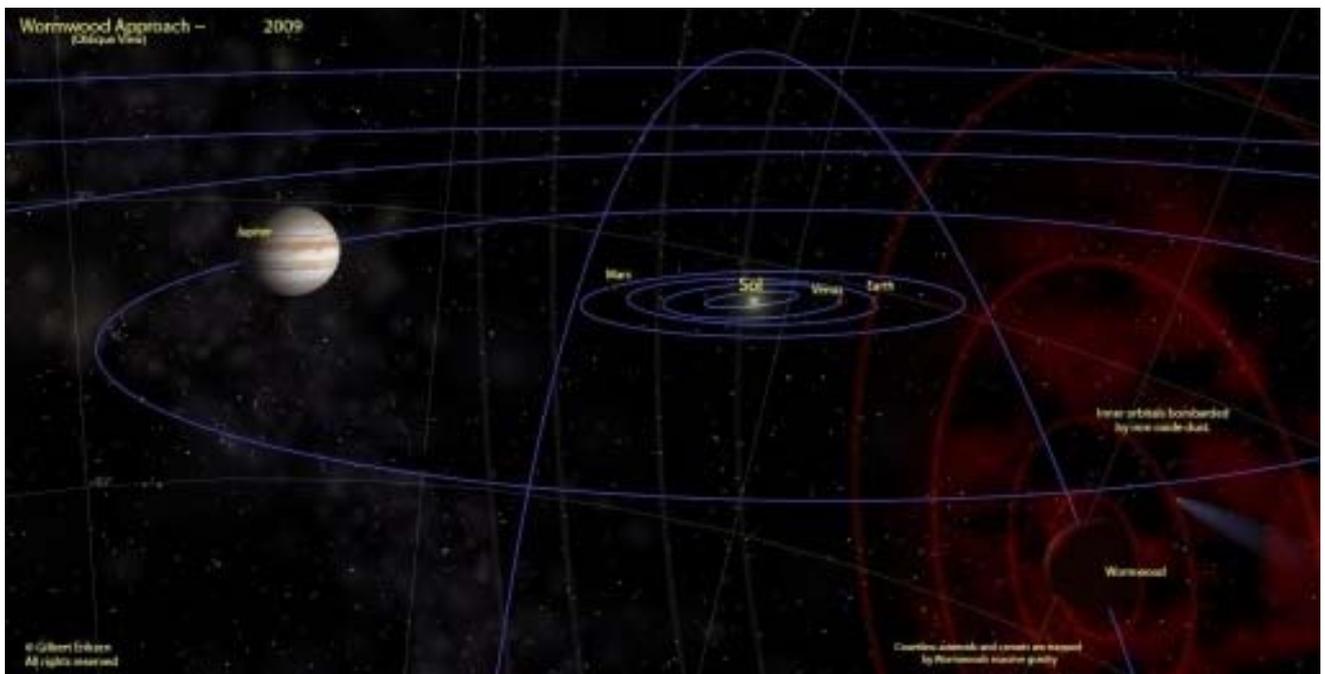
Uranus has a relatively circular orbit, so it remains at about the same distance from the Sun throughout its long year. But the axis of Uranus is tilted by 98 degrees! This causes 21-year-long seasons and unusual weather, although one thing that is certain: it is always cold. For nearly a quarter of the Uranian year (equal to 84 Earth years), the sun shines directly over each pole, leaving the other half of the planet plunged into a long, dark winter. Uranus has a deep atmosphere of mostly hydrogen and helium. Absorption of red light by methane in the atmosphere gives the planet its bluish colour. Early visual observers reported Jupiter-like cloud belts on the planet, but when the Voyager 2 spacecraft flew by in 1986, Uranus appeared virtually featureless. The Northern Hemisphere of Uranus is just now coming out of the grip of its decades-long winter. As the sunlight reaches some latitudes for the first time in years, it warms the atmosphere and triggers gigantic springtime storms comparable in size to North America with temperatures of 300°F below zero. By the year 2007, the sun will be shining directly over Uranus' equator, which will produce more evenly distributed sunlight and the ability to see features at all latitudes on Uranus.

Neptune has an axial tilt of 28.5 degrees, which isn't too much different than Earth's. But this gas giant doesn't really experience appreciable seasonal variation, although its seasons last for more than 40 years!

Because **Pluto** is so far away, virtually nothing is known about its seasons. However, because of its tilt of nearly 120 degrees and the highest eccentricity of any planetary orbit even at its great distance from the Sun, weather variations are expected to be significant -- perhaps enough to result in far greater changes in its atmospheric pressures than even that of Mars. It is possible that the very thin atmosphere of Pluto may entirely freeze and fall as snow to Pluto's surface as it gets farther and farther from the Sun.

Extraterrestrial weather and seasons are harsh and may be rather unpredictable. So, as we contemplate the different times of year on Earth, and may lament about the coming of a long, hot summer or a cold harsh winter, take a quick mental tour of our solar system. Suddenly, having to water the garden or scrape ice off of a windshield doesn't seem so bad.

Nibiru's orbit:



Researchers believe Nibiru will come from the South. Source:
<http://www.millenniumprophecy.com/science.html>

Sun Blamed for Warming of Earth and Other Worlds



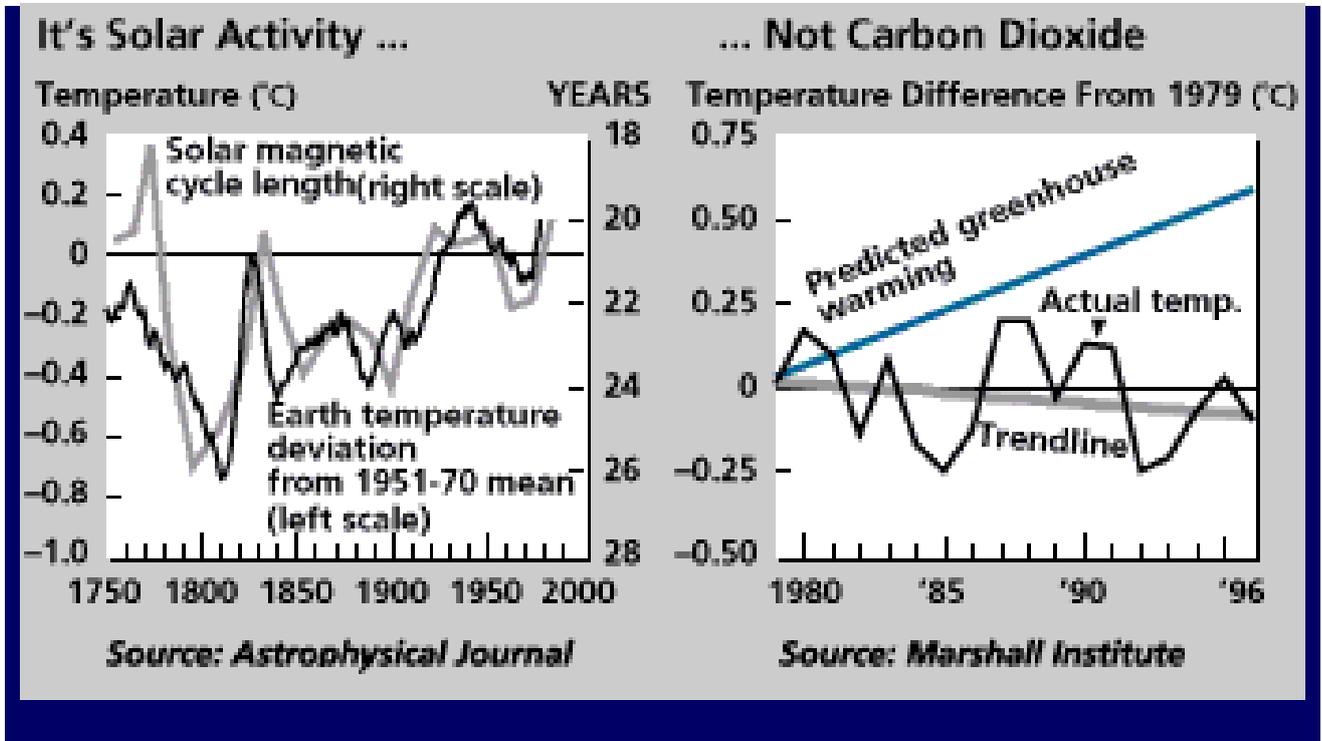
<http://www.livescience.com/1349-sun-blamed-warming-earth-worlds.html>

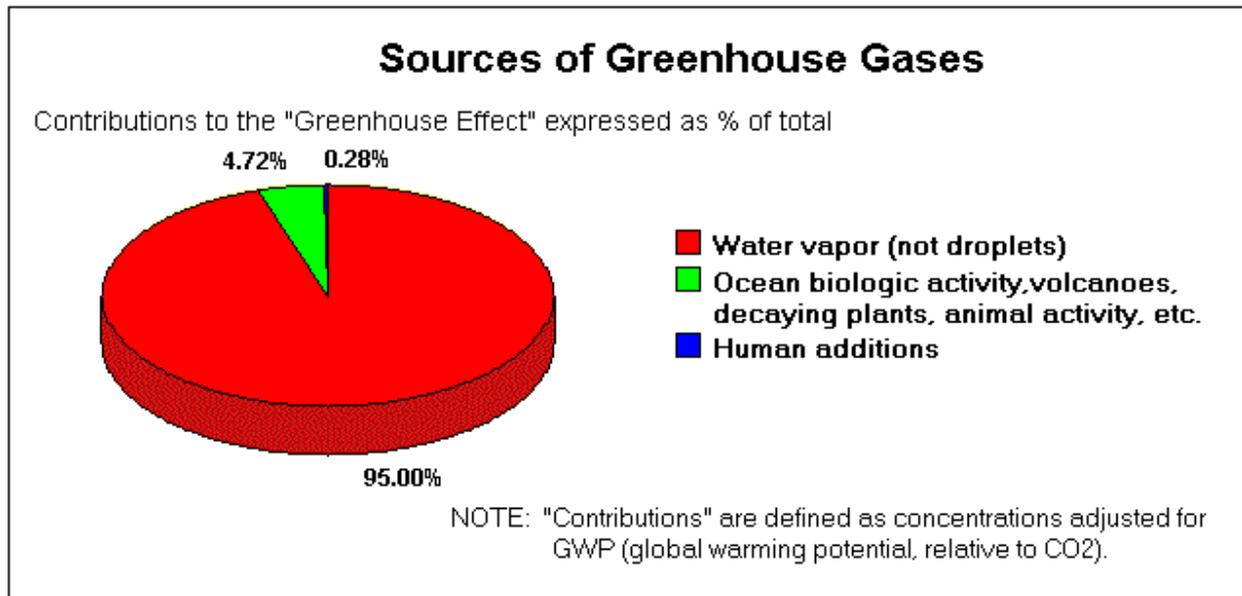
Earth is heating up lately, but so are [Mars](#), [Pluto](#) and other worlds in our [solar system](#), leading some scientists to speculate that a change in the [sun's](#) activity is the common thread linking all these baking events.

Others argue that such claims are misleading and create the false impression that rapid global warming, as Earth is experiencing, is a natural phenomenon.

While evidence suggests fluctuations in solar activity [can affect](#) climate on Earth, and that it has [done so](#) in the past, the majority of climate scientists and astrophysicists agree that the sun is not to blame for the current and historically sudden uptick in global temperatures on Earth, which seems to be mostly a mess created by our own species.

WHAT WARMS THE EARTH?





NOTE: "Human additions" represent such a small percentage of the total Greenhouse Effect (0.28%) that they are barely visible in this "pie chart" at the scale represented.

Atmospheric concentrations of the various greenhouse gases have been adjusted for heat retention potential of each. For example, the global warming potential (GWP) of various man-made **chloroflourocarbons** (CFC's) range between 1,300 and 9,300 times greater potency as greenhouse gases than CO₂. **Methane** has a GWP of about 21 and **nitrous oxide** a GWP of about 310.

Comparing greenhouse gases by strict **concentration** only, the total human component is somewhere between 0.1% and 0.2%, depending on whose numbers you use. Adjusted for GWP, the total human **contribution** to Earth's overall greenhouse effect is about 0.28%.

The INNER CORE of EARTH SPINS FASTER:

Earth's inner core, made up of solid iron, 'superrotates' in an eastward direction -- meaning it spins faster than the rest of the planet -- while the outer core, comprising mainly molten iron, spins westwards at a slower pace.

Although Edmund Halley -- who also discovered the famous comet -- showed the westward-drifting motion of Earth's geomagnetic field in 1692, it is the first time that scientists have been able to link the way the inner core spins to the behavior of the outer core. The planet behaves in this way because it is responding to Earth's geomagnetic field.

The findings, published in *Proceedings of the National Academy of Sciences*, help scientists to interpret the dynamics of the core of Earth, the source of our planet's magnetic field.

In the last few decades, seismometers measuring earthquakes traveling through Earth's core have identified an eastwards, or super-rotation of the solid inner core, relative to Earth's surface.

"The link is simply explained in terms of equal and opposite action," explains Dr Philip Livermore, of the School of Earth and Environment at the University of Leeds. "The magnetic field pushes eastwards on the inner core, causing it to spin faster than the Earth, but it also pushes in the opposite direction in the liquid outer core, which creates a westward motion."

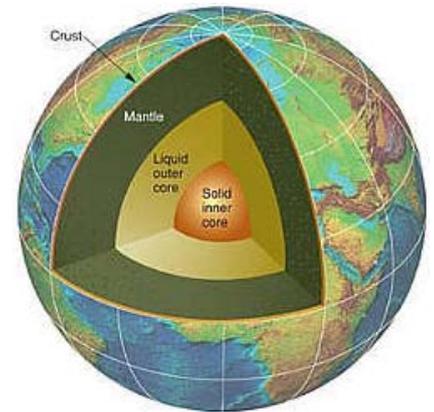
The solid iron inner core is about the size of the Moon. It is surrounded by the liquid outer core, an iron alloy, whose convection-driven movement generates the geomagnetic field.

The fact that Earth's internal magnetic field changes slowly, over a timescale of decades, means that the electromagnetic force responsible for pushing the inner and outer cores will itself change over time. This may explain fluctuations in the predominantly eastwards rotation of the inner core, a phenomenon reported for the last 50 years by Tkalčić et al. in a recent study published in *Nature Geoscience*.

Other previous research based on archeological artefacts and rocks, with ages of hundreds to thousands of years, suggests that the drift direction has not always been westwards: some periods of eastwards motion may have occurred in the last 3,000 years. Viewed within the conclusions of the new model, this suggests that the inner core may have undergone a westwards rotation in such periods.

The authors used a model of Earth's core which was run on the giant super-computer Monte Rosa, part of the Swiss National Supercomputing Centre in Lugano, Switzerland. Using a new method, they were able to simulate Earth's core with an accuracy about 100 times better than other models.

<https://www.sciencedaily.com/releases/2013/09/130916162005.htm>



SUMMARY:

Our Earth, the third rock from our sun, is rather fragile. It is being pushed and pulled by our galactic cousins who you will notice in the following graphics, many are massive in size compared to us.

As the Earth moves into their influence and then out from their influence, coupled with the treatment that humanity dishes out to her, we may experience and intensification and escalation of major Earth events, some may call this Earth changes. The extent will only be understood in the years ahead.

These pressures and events appear to have been progressively intensifying since around 2007 and it may be that by around 2017 that these pressures will have passed through their highest levels and may then have subsided to a more stable level.

These pressures will make themselves visible at the Earth's crust weakest points, the location of major volcanic calderas and tectonic plate friction lines. Should there be sudden and massive activities followed by subsequent Earth events in another region or two, then the collective force may see a continuous series of events emerge. You would best to consider your options in anticipation of such events. It will become a case of expediency should events start to unfold.

We could all be moving into a new way of life, one that is much more loving to the planet Earth and our environment.

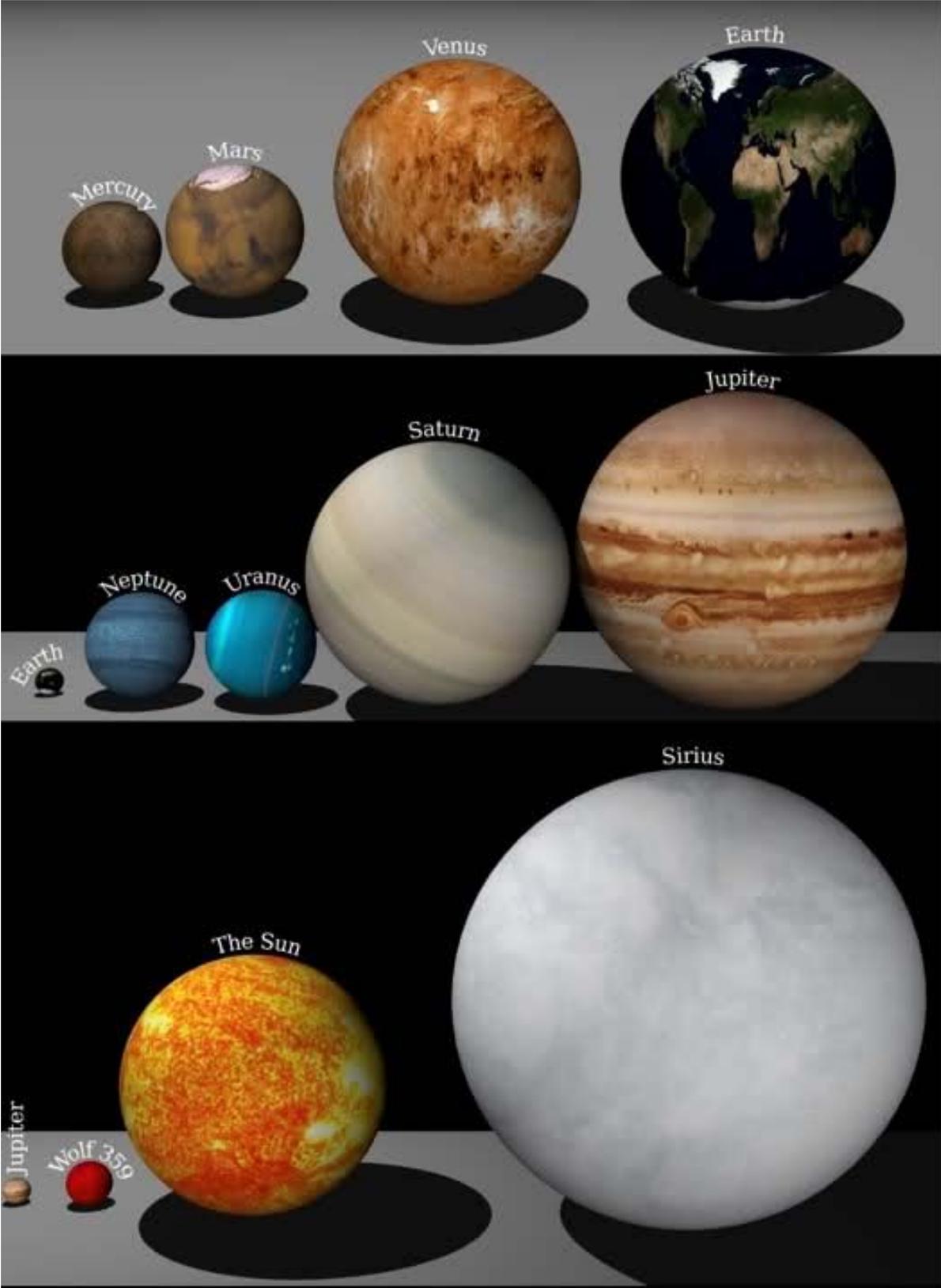
Recent research from the New Economics Foundation found that, once basic needs for food and shelter are secured, our happiness is fulfilled through five factors. One is our connection with other people – friends and family and the people we work with. Another is activity and exercise. Then there is appreciating beautiful surroundings and reflecting on such experiences. Another is continued learning, novelty and meeting new challenges and, finally, we gain well-being from giving and from being a member of a community.

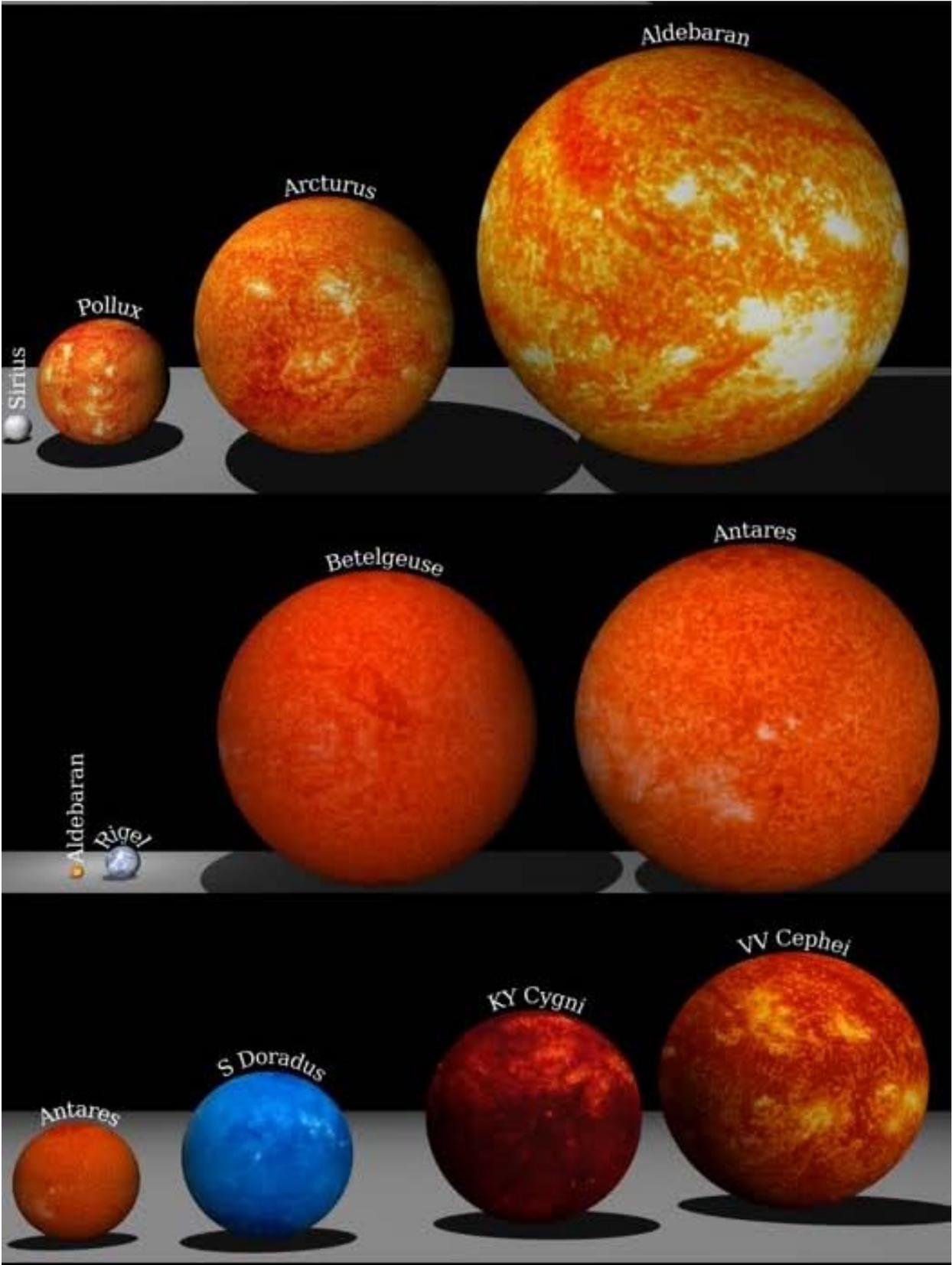
First sphere is dominated by decision making based on fear, the condition that prevails on Earth.

Second sphere is when you follow your desires and passions.

Third sphere is where truth is always spoken.

Consider following your passions and desires at all times. Regarding Earth events, feel about them and follow your feelings as you please.





People look for miracles to cure disease which is ONLY the removal of the effect of the emotion.



SOUL  SPIRIT BODY  PHYSICAL BODY