# 2012 - The Facts

Hi there,

Thank you for making the effort to become more informed about 2012!

The 2012 meme is huge. Hundreds of books have been written, numerous documentaries have been made, and of course there was a blockbuster movie. Unfortunately the facts have been deeply buried, and virtually every piece of information you come across is speculation and trickery, disguised as fact.

The aim of this article is to ignore all the extreme speculations and fabrications, and just present the known facts. Plus I'll throw in some of the more plausible scenarios, to help you understand what might soon be upon us. Everything that follows is either accepted fact, or will be denoted as being disputable or an opinion.

Regards, *Robert Bast -* Melbourne, Australia, 2010

# **The Long Count Calendar**

The ancient Mayans had roughly 20 calendars, all of which were short in duration, with the cycles equating to astronomical phenomena, or were intended to relate to history repeating over and over again via prophecy. *Except for the Long Count calendar*. The Long Count is the Mayan equivalent of our calendar, in that it assigns unique dates over a long period of time. A short numerical description (like 12/6/1976 in our calendar) pinpoints a place in time. Unlike our calendar, which starts with the birth of Christ and heads towards infinity in two directions, the Long Count has a definite beginning and a definite end.

The start date of the Long Count calendar rarely gets a mention, and few experts have attempted to explain why this date, August 11, 3114BC, was chosen. Many independent researchers have noticed that the era of 3114BC includes the rise of multiple civilizations (especially the Egyptians), and the construction of the Egyptian pyramids, Stonehenge, and other ancient monuments.

The end date is accepted by scholars to be Dec 21, 2012. The only *fact* regarding this date is that it is the winter solstice in the northern hemisphere. For the "end of the world" to occur on the darkest day of the year is either by design, or a coincidence. 2012 is in the "era" of a galactic alignment (see below) that occurs during winter solstices at present.

The length of the calendar is 5125 years (some say 5126 years, but they have forgotten we do not have a year zero in our calendar). Several researchers have noticed that this is close to one-fifth of

the precession of the ecliptic, which completes every 26,000 years or so. Consequently five ages or "worlds" the length of the Long Count calendar would fit quite neatly into one cycle of precession.

# **Mayan Prophecy**

Perhaps more than any other ancient civilization, the Mayans loved prophecy. Their culture of prophecy and sacrifices makes the Long Count calendar appear quite dramatic. There are three sides to what the Mayans thought would occur on Dec 21, 2012:

**Mayans:** We have virtually nothing written by the Mayans regarding 2012. Thousands of Mayan books were known to have existed, yet they were unfortunately burned by the invading Spanish. Only 4 books survived. My speculation is that if we could go back in time and read the thousands of burned books, we would certainly find prophecies about 2012.

The only ancient prophetic mention of Dec 21, 2012 we do have is a single monument at Tortuguero, which says that "The Thirteenth Bak'tun" will be finished (on) Four Ahaw, the Third of K'ank'in. ? will occur. (It will be) the descent(?) of the Nine Support (?) God(s) to the ?."

The question marks denote glyphs that cannot be read or translated, and the rest of the prophecy has been broken off and not yet located. Other translations do exist, and the meanings assigned to them vary widely. So far no academic research has assigned a catastrophic meaning to the inscription.

**Scientists:** I have been studying 2012 for 11 years, and have not come across an accredited academic researcher who has claimed an "end of the world" scenario for the end of the Long Count calendar. Most scientists categorically state that there is no evidence to support such fears.

**Doomsdayers and Survivalists:** Those seeking confirmation of the apocalyptic fears can readily find proof via implication. Although 2012ers generally speak of the *Mayan* Long Count calendar, it is widely accepted that they inherited their calendar from the Olmecs, as did the Aztecs. In fact the most famous 2012 image is actually the Aztec Sun Stone Calendar:



While no doomsday information from the Mayans has been found regarding the end of the current Long Count calendar, the Aztecs were quite clear on what they believe happened at the end of their *previous* Long Count calendars, aka Suns or Worlds.

An ancient Aztec document, the Vaticano-Latin Codex, describes the previous worlds:

"First Sun, 'Matlactli Atl': duration 4,008 years. Those who lived then ate water maize called 'atzitzintli'. In this age lived the giants... The First Sun was destroyed by water in the sign 'Matlactli Atl' (Ten Water). It was called 'Apachiohualiztli'(flood, deluge), the art of sorcery of the permanent rain. Men were turned into fish. Some say that only one couple escaped, protected by an old tree living near the water. Others say that there were seven couples who hid in a cave until the flood was over and the waters had gone down. They repopulated the Earth and were worshipped as gods in their nations...

Second Sun, 'Ehecoatl': duration 4,010 years. Those who lived then ate wild fruit known as 'acotzintli'. This Sun was destroyed by Ehecoatl (Winged Serpent) and men were turned into monkeys... One man and one woman, standing on a rock, were saved from destruction...

Third Sun, 'Tleyquiyahuillo': duration 4,081 years. Men, the descendents of the couple who were saved from the Second Sun, ate a fruit called 'tzincoacoc'. This Third Sun was destroyed by fire...

Fourth Sun, Tzontlilic: duration 5,026 years. Men died of starvation after a deluge of blood and fire..."

Mayan scholars tend not to mention this information, because it is Aztec, and they study the Maya. Both cultures had 5,000 year calendars, inherited from the Olmecs. Both cultures believe that we are in the 5<sup>th</sup> world (although some say we are in the 4<sup>th</sup> Mayan world). Both cultures believed that humans and human prototypes were destroyed by natural disasters, instigated by the gods, at the end of the previous Long Count calendars. The Aztecs believed that our current world would be destroyed by earthquakes. The Mayans believed that our current world ends in 2012. The implication is not one of joyous renewal, or of the turning of a calendar page. It is obvious that the Mayans expected the very worst in 2012.

#### More information here:

http://www.redicecreations.com/specialreports/2006/10oct/worldend2012.html http://en.wikipedia.org/wiki/Mesoamerican Long Count calendar

#### 11:11

A modern hysterical numerical meme revolves around people continually noticing the number 11, especially the time 11:11. It has been noted that the winter solstice of 2012 occurs at 11:11 Universal Time. While the coincidence is interesting, the local time for the solstice in Central America would be 5:11AM.

## **I Ching**

Often lists of predictions throw in "the I Ching" without elaborating. The I Ching was perhaps originally an ancient calendar, but the modern usage for it is prophecy and divination. However it is only a tool, just like a crystal ball or tarot cards. It does not contain any prophecies, and every time it is consulted, results will be dependent on the user and how it was used.

\*\*\*\*\*\*\*\*

Myth#1

The I Ching predicts a 2012

Doomsday.

Terrence and Dennis McKenna used the I Ching as a basis for their study on novelty, the result of which is a "timewave" that tracks highs and lows of novelty, and predicts a peak of novelty (some call it the "singularity"). That peak occurs on Dec 22, 2012, a date they maintain they arrived at prior to them having any knowledge of the Long Count calendar.

Far from being factual, the timewave is dependent on events that the McKennas considered to be novel, and as such the outcome is very subjective. Americans would be prone to use 9/11 as a peak time of novelty, whereas half of Asia would nominate the 2004 tsunami. Citizens recently caught up in a civil war might nominate a different event altogether.

More information here:

http://survive2012.com/index.php/fractal-ching.html

#### Web Bot

The Web Bot is a piece of software created in 1997 to predict stock market trends by listening to internet "chatter". According to Wikipedia, "the Web Bot works by using a form of the Wisdom of the crowd, with spiders that search the internet for about 300,000 keywords with emotional context and record the preceding and following words to create a "snapshot." The technology is claimed to be able to examine the collective unconscious and be able to predict catastrophic events 60 to 90 days in advance."

While this might work for some types of prediction, such as stock market trends, it is unable to predict any end-of-the-world type event. What it can do is pick up on our fears and concerns, such as 2012, wars or the Large Hadron Collider. It famously predicts a major catastrophe in 2012, and a "data gap" through to May 2013 due to the destruction of all things electronic.

The next prediction from the Web Bot, as listed at Wikipedia, is "November 8-11, 2010 - The web bot warns of a big tipping point, possibly a stock market crash or financial meltdown of some sorts". It is October as I write this, so use your own judgement to rate the Web Bot when that time comes.

More information here:

http://en.wikipedia.org/wiki/Webbot

# The Christian Calendar is Wrong!

Often I get emails from people telling me that 2012 has already been and gone, because *blah blah blah* blah means that Jesus was actually born in 4BC or whatever. Simply put, the correlation determined by experts is between the Mayan Long Count calendar, and the calendar we are using <u>today</u>. If for some reason the powers that be decided that 2010 will be henceforth known as 3010, then the Long Count calendar would end in 3012. Historical inaccuracies do not affect the Mayan end date.

# **Galactic Alignment**

This particular meme is worthy of a lengthy discussion, for it underlies much of the misinformation surrounding the 2012 phenomenon.

The idea of a galactic alignment was popularized by John Major Jenkins, in books such as *Maya Cosmogenesis 2012*. The writings of Jenkins are very scholarly, yet have been ignored by most orthodox Mayan experts, possibly because he does not have the appropriate tertiary education. Also, while his arguments are convincing, studies of the ancient Maya involve a lot of interpretation, and opinions on meanings can vary widely.

\*\*\*\*\*\*\*\*

Myth#2

A Galactic Alignment will occur in 2012

\*\*\*\*\*\*\*\*\*

The 'Galactic Alignment' is an astronomical phenomenon that refers to an alignment between the December solstice Sun with the equator of our galaxy, the Milky Way – from a viewpoint on Earth. This alignment occurs as a result of the precession of the equinoxes. Precession is caused by the earth wobbling very slowly on its axis and shifts the position of the equinoxes and solstices one degree every 71.5 years. Because the sun is one-half of a degree wide, it will take the December solstice Sun 36 years to "precess" through the Galactic equator.

The Galactic Equator is a virtual line that describes 0 degrees longitude and 0 degrees latitude, and acts as a divisionary line between the northern and southern hemispheres of the Milky Way galaxy.

The precise alignment of the solstice point with the Galactic equator was calculated to occur in 1998 (Jean Meeus, Mathematical Astronomy Morsels, 1997 - mentioned by Jenkins at http://alignment2012.com/whatisGA.htm ). This date was further refined by Sergey Smelyakov to May 7, 1998 (http://tech.groups.yahoo.com/group/TIMEWAVEZERO2012/message/15675). Therefore, if the significance of 2012 is related to a precise intersection with the Galactic Equator, whatever that significance would have meant has already occurred.

No valid scientific theories have been put forth regarding how this alignment could affect us on Earth. The galactic centre is so far away that any gravitational pull it might have on our planet is insignificant. The other planets in our solar system exert a much stronger pull, and yet when they are in an alignment, their effect is less than a jumbo jet flying overhead – and has zero affect on us.

Consequently most alignment theories are either New Age or deliberately vague. This is not to dismiss any New Age angles, because astrology is all about alignments that have no scientific meaning, and astrology has many believers.

The closest I have come across to a believable scenario is that energy from the galactic centre is enhanced when it passes through the Sun, and it is only during the alignment that this energy strikes Earth in an enhanced form. Although the alignment was at its truest in 1998, the theory argues that it is the cumulative effect that will be telling. The theory still lacks measurement or a valid scientific explanation.

There is some concern that Jenkins was deliberately misleading when describing an alignment with the galactic centre in 2012. Not only was the correct year 1998, but the alignment was with the galactic *equator*, not the centre. A true alignment between us, the Sun and the galactic *centre* never occurs, and the closest we get to such an alignment will be in 2220AD (according to Jenkins).

In Maya Cosmogenesis 2012 Jenkins consigns these facts to an appendix, and in later works refers to the alignment occurring in the *era* of 2012. Perhaps due to perpetuating the myth of an alignment occurring exactly in 2012, Jenkins is a regular guest on sensationalist TV documentaries and appears at many 2012 conferences.

Consequently many 2012 authors have legitimized their own 2012 theories, and the advanced knowledge of the ancient Maya via this proof that they not only knew where the galactic centre lies (something modern man has only recently determined), but that the "alignment" would occur precisely at the end of the Long Count calendar.

It remains to be proven whether the Mayans knew of the galactic centre/equator and 2012 was an extremely good attempt at pinpointing the alignment, or if it is just an extraordinary coincidence.

#### **Other Calendars**

While it is commonly suggested that multiple ancient cultures have marked the year 2012 as being of importance, in reality it was only the Mayans. Indeed what makes the end of the Long Count calendar so special is the uniqueness of a date being prescribed for, it can be inferred, the end of the world.

**Hopi** – Hopi prophecy speaks of great destruction and the end of the fourth world. While multiple signs indicated by the prophecy appeared many years ago, perhaps we still await the ninth and last sign, a blue star. Apart from "soon", no date is provided (and many believed that the comet Holmes 17P was it), and the Hopi certainly did not have a calendar that ends in 2012.

Myth#3
Other ancient calendars also end in 2012. Incorrect.

\*\*\*\*\*

**Hindu** - The Hindu calendar corresponds with the age of Kaki Yuga which began in 3102BC, extremely close to the start date of 3114BC of the Long Count calendar. This brings up the possibility that once upon a time both calendars began together. Strictly speaking the Kali Yuga should last 432,000 years, and there is nothing to indicate that it will end in 2012.

**Hebrew** – December 2012 is in year 5773 of the Hebrew calendar. With a start date hundreds of years prior to that of the Long Count calendar, there appears to be no correspondence at all.

**Egyptian** – It has been suggested that the ancient Egyptian calendar began either in 2782BC or 4242BC. Nowhere is any even remotely sensible explanation that it ends in 2012. This misconception seemingly arose from the myriad of dates that have been assigned to a purported timeline that can be found within the Great Pyramid.

#### **Nostradamus**

Like many ancient prophets, Nostradamus focussed many of his prophecies on apocalyptic events in the distant future. Were his predictions more mundane and not as far into the future, it is unlikely we would have heard of him today.

2012 is not the first subject that has been connected to Nostradamus. While some events have been retrospectively tied to his quatrains, no modern events have been predicted beforehand via his writings.

Apart from the general doom'n'gloom nature of the works of Nostradamus, there is no direction connection with 2012, and certainly no mention of the year 2012.

# \*\*\*\*\*

# Myth#4

Nostradamus predicted a 2012 doomsday. False, none of his writings mention the year 2012



# Planet X / Nibiru

The idea that a planet is approaching Earth in the near future is a mash up of three quite different ideas, and has absolutely no basis in facts. Here are the three ideas:

- 1. NASA's occasional mention of "Planet X" not a specific body in space
- 2. Zacharia Sitchin's 12<sup>th</sup> Planet, due in 2085, if his *unique* interpretation of ancient Sumerian texts can be believed
- 3. Nancy Lieder (aliens told her) @ ZetaTalk.com was due in 2003

\*\*\*\*\*

# Myth#5

Planet X is arriving in 2012. It was first predicted for 2003 and never arrived.



Whenever "proof" is provided, it almost always has NASA as a source, and the mere mention of NASA legitimizes the idea for many people. On several occasions NASA has mentioned a "Planet X", a hypothetical planet that they have looked for, because that is their job. Not only has NASA not seen any "Planet X", they have never mentioned that such a planet could be coming our way. One of the mentions of Planet X was when NASA listed the possibilities for an infra-red source they had observed, but a later press release said that it was a galaxy after all. You'll find fans of Planet X mentioning the original story, but not the subsequent one.

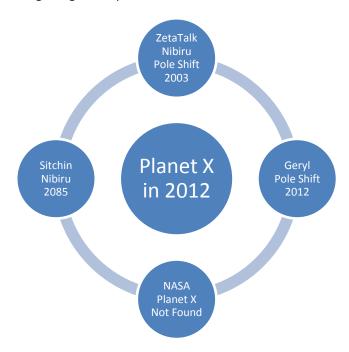
Sitchin's writings are all about his interpretation of ancient Sumerians texts, and how he believes they relate to alien beings that came to Earth and created humans using genetic technology. He describes a planet called Nibiru that has a 3600-year orbit, and it will next come close to Earth in

2085. His theory comes from a Sumerian seal that shows 12 planets, and somehow the Sumerians who considered the Sun and Moon to be planets, knew of an extra planet beyond Pluto (modern astronomers only recently discovered Pluto using large telescopes, something the Sumerians did not have.) If aliens had told the Sumerians about Nibiru, they would most likely have told them that the Sun and Moon are not planets...

ZetaTalk.com has been promoting Planet X for a long time – since long before 2012 became popular. Originally Planet X was due to arrive on May 15, 2003. Nancy Lieder received this information directly from the "Zetas", for she is their emissary. While the concept has now been aligned with the 2012 phenomenon, Nancy no longer appears to be providing an arrival date on her site.

An extra source of disinformation is the 2007 book *Planet X Forecast and 2012 Survival Guide*. The authors admit that nobody has seen the planet and that their main piece of evidence is the 1983 infrared report from NASA (again, they neglect to mention the subsequent press releases that nullify this "evidence"). As the title suggests, the book forecasts the flyby of Planet X – and that it will be visible to NASA infrared telescopes in 2007. The trajectory is detailed until 2014, with Planet X reaching perihelion on February 14, 2013, their nominated doomsday. NASA has not yet confirmed these predictions, neither have amateur astronomers who supposedly would be able to spot the planet in "2009 or even possibly 2010".

So it seems that Lieder (via aliens) predicted a pole shift in 2003 due to Planet X, and distorted every mention from NASA along with seemingly fake photos to prove it. Meanwhile people who read about ancient mysteries picked up on Sitchin's Nibiru. And then people heard about 2012 and other pole shift theories (primarily from myself and Patrick Geryl), and decided that they all fitted together, despite the glaring incompatibilities.



Whenever I have been contacted by well-meaning people telling me that Planet X will be arriving in 2012, I always ask them this:

Tell me the date, and the place in the sky when I will be able to clearly see it, and I'll take a look.

To date nobody has been able to supply me with this information, which should be easy to obtain if there were any facts to the story.

More information here:

http://www.badastronomy.com/bad/misc/planetx/nutshell.html

#### **Asteroids and Comets**

In recent years NASA has been doing a great job of spotting and tracking asteroids, as highlighted by the occasional news story that mentions asteroids having a remote chance of crashing into to us in the distant future. While they still haven't found every large asteroid, the likelihood of life on Earth being wiped out any time soon is very low. A small, undetected asteroid could still cause major regional damage.

Comets are a different matter altogether. Most comets are spotted by amateurs, not NASA. This is because NASA has been concentrating on only a small segment of the sky where the majority of asteroids can be found. The direction from which comets can approach us is not so narrowly defined.



NASA can guarantee we are safe from a comet colliding with Earth in 2012



A Long Period Comet - one that takes many hundreds or thousands of years to complete its orbit – is rare. To predict the return of such a comet would require a civilization that lasted for a very long time, and had an interest in astrology. It is possible that a long-lasting civilization such as the Egyptians could have made a *scientific* prediction for the return of a comet in 2012. Such an ancient prediction is unlikely to be precise, because planetary gravitational forces can constantly alter the path of a comet and it was only in the era of Halley that it is known such complex calculations for a comet have been made.

A concern with the comet scenario is the recently developed theory of dark comets. In a nutshell, the theory says that we only see comets because of the reflectivity of ice, and with each passage around the sun some ice melts away. When all the ice has melted, the comet is no longer visible, and we won't see it coming!

More:

http://survive2012.com/index.php/comets-and-asteroids.html

#### **Coronal Mass Ejection**

As far as we know, aside from the 11-year sun spot cycle, the timing and direction of coronal mass ejections is random. They are more likely to occur at the peak of the solar activity, and the next solar maximum is predicted to occur in 2012/2013. The most recent solar minimum was one of the lowest

on record, and experts are divided over whether this means the next maximum will be weak or intense.

The threat of a coronal mass ejection is real. Wikipedia describes it as a massive burst of solar wind, other light isotope plasma, and magnetic fields ...being released into space. If we are in its path, and it is intense (or we are hit by multiple CMEs at once) then our precious electronics are at risk. A lesser CME could still knock out power grids, and of special concern is the antiquated and overburdened grid of the USA. 2012 researcher Lawrence Joseph has been focussing on this possibility, and government bodies have recently been vocal about the very real risk we face. While this is not necessarily something that will happen in 2012, it fits the 2012 meme by being potentially catastrophic in nature.

\*\*\*\*\*

# Myth#7

A coronal mass ejection that brings down a power grid would only have a minimal impact on our lives



Most of us have experienced power blackouts, and it is not something to be too concerned about because power is typically restored in a few hours or days at the most. But if a CME causes transformers to fail, grid-wide, then recovery could take months or years. In countries like the USA where many people rely on electricity for heating and cooling, the loss of power could be catastrophic. Also affected would be hospitals (typically they only have a few days worth of generator fuel), water supplies (water is pumped remember) and of course the economy. Some estimates for grid failure in the USA tell of millions dying.

#### **Crustal Pole Shift**

A crustal pole shift is the physical shifting of the Earth's crust in relation to the rest of the planet. It is a theory that is generally not accepted by mainstream science, all though they do concede that a shift that takes a million years per degree is possible. An exception was Albert Einstein who thought the theory had validity, and was even studying it when he died.

Even amongst alternative researchers there is no accepted mechanism for a pole shift. Originally it was thought the weight of polar ice could do it, but that weight has since been found to be too insignificant relative to the crust. One modern theory is Rotational Bending by James Bowles.

The idea of a pole shift has arisen from evidence of a past global cataclysm, roughly 12,000 years ago. Massive damage and mass extinctions at that time were caused by something, and the only other theory that encompasses a global event is that we were struck by an asteroid or meteor shower.

Without a viable mechanism, it is impossible to prove that a pole shift can occur in 2012, but the scale of the last cataclysm is keeping many survivalists prepared for the worst. This is a deep subject, and to fully understand it I can suggest reading *Pole Shift* by John White, *Path of the Pole* by Charles Hapgood & *When the Earth Nearly Died* by Allan and Delair.

# **Magnetic Pole Shift**

This is more properly known as a Geomagnetic Reversal, where basically the magnetic North Pole becomes the magnetic South Pole and vice versa. After the reversal all compasses will point south. This is one of the few 2012 scenarios that scientists have a level of agreement with. It is a real phenomenon that has occurred many times in the past. The key argument from scientists has always been that such a reversal would happen over a period of thousands of years. At Wikipedia it says:



A magnetic pole shift always takes thousands of years to complete

A geomagnetic reversal is a change in the orientation of Earth's

magnetic field such that the positions of magnetic north and
magnetic south become interchanged. These events often involve an extended decline in
field strength followed by a rapid recovery after the new orientation has been established.
These events occur on a scale of tens of thousands of years or longer.

http://en.wikipedia.org/wiki/Geomagnetic reversal

Recent studies are showing that the reversal can happen much more rapidly, prompting some 2012 researchers to believe that it could occur overnight. See my blog post <u>New Evidence for a Rapid Magnetic Pole Shift</u>.

Studies of the Earth's magnetic poles are too recent to make quality predictions, but in the short time of observation two key factors have been noted — our planet's geomagnetic field is weakening, and the movement of the magnetic North Pole is accelerating. While these two factors seem to point towards a reversal, and it has been a longer than average period since the last reversal, these could just be short-term changes that will right themselves.

If a rapid reversal does happen in 2012, the only agreed upon problems will be those of navigation — primarily making things difficult for aircraft and perhaps some animals. Of debate is whether the reversal will be accompanied by a diminished geomagnetic field. This field keeps our planet safe from the harm of cosmic rays, and a great influx of cosmic rays could cause mutations in any animals and humans who are not shielded from them, by being below ground or in a bunker.

#### More:

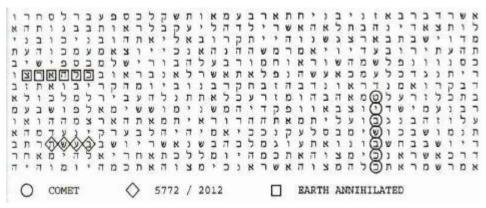
http://en.wikipedia.org/wiki/Earth's magnetic field

#### **Bible Code**

The original Bible Code (1997) book by Michael Drosnin provides quite a few prophecies, including events in the years 2000, 2006 and 2010 that did not eventuate. For 2012 the "code" says *Earth annihilated*, and that the disaster will be prevented because the predicted comet will be blocked.

Presumably the author had not heard of the Mayan Long Count calendar back then for that was the only mention 2012 received.





The sequel, Bible Code II (2003), didn't mention 2012 because World War 3 was predicted for 2006, and that was as far into the future that the author looked. Is there something to the Bible Code? Plenty of sceptics have dismissed it, famously finding pretty much whatever they wanted "encoded" in the Bible or other books:

Drosnin once said, "When my critics find a message about the assassination of a prime minister encrypted in Moby-Dick, I'll believe them." McKay promptly produced an ELS analysis of Moby-Dick predicting not only Indira Ghandi's assassination, but the assassinations of Martin Luther King, John F. Kennedy, Abraham Lincoln, and Yitzhak Rabin, as well as the death of Diana, Princess of Wales. Mathematician David Thomas did an ELS on Genesis and found the words "code" and "bogus" close together not once but 60 times. What are the odds of that happening? Thomas also did an ELS analysis on Drosnin's Bible Code II: The Countdown (2002) and found the message "The Bible Code is a silly, dumb, fake, false, evil, nasty, dismal fraud and snake-oil hoax."\* Does this mean that God put in a code to reveal that there is no code?

http://www.skepdic.com/bibcode.html

## **Supervolcanoes**

Supervolcanoes tend to be active over millions of years. They erupt less frequently than other volcanoes, but when they do erupt, they are substantially more intense. They are rare enough to be missing from modern history, and we only know they have ever occurred due to geological studies of the clues they have left for us.

There are a number of supervolcanoes globally, including Yellowstone, Long Valley and Valles Caldera in the USA, Lake Taupo (NZ), Lake Toba (Indonesia), and the Phlegraean Fields in Naples, Italy.

With no eruptions to observe in modern times, we can only *assume* that supervolcanoes act like regular volcanoes, including the potential to erupt suddenly, without any warning signs.

Of concern are recent changes at Yellowstone (the ground above the volcano has risen) and scientists drilling into the Phlegraean Fields. Yellowstone has not been observed for long enough to know if current changes are normal or not. And the drilling in Naples is still waiting on permission from the Mayor to proceed.

Supervolcanoes can be added to the long list of catastrophes that could occur in 2012, but could just as easily occur any other year.

#### More:

http://survive2012.com/index.php/supervolcanoes.html

## **Climate Change**

For those who believe in man-made climate change, the consensus is that the change is gradual, and our concern is not for tomorrow, but for decades from now. The required actions need to be taken now, but the problems faced if we do not are not going to be immediate.

Or perhaps not. Speculations have been made regarding the potential for a major and rapid climate change due to some type of "tipping point" being reached. An example of this line of thinking is *The Coming Global Superstorm* written by Art Bell and Whitley Strieber (which begat the movie *The Day After Tomorrow*). The scenario they present involves the melting of polar ice affecting the salinity of the oceans, and causing the North Atlantic Current to shut down – releasing a flood of freezing air into the northern hemisphere. Although scientists say such a change would be gradual, the book and movie suggest it could happen overnight.

#### More:

http://en.wikipedia.org/wiki/The Coming Global Superstorm
http://news.nationalgeographic.com/news/2004/05/0518 040518 dayafter.html

#### Peak Oil

As I am writing this, the latest issue of Scientific American (title "The End"), shows a graph of global oil production and the "peak" is in 2014. The methodology purportedly covers everything, from the diminishing supply of known resources, the drilling of recently found oil fields, and the potential for new technology to improve discovery and production. Various other dates can be found, depending on whom you listen to and how they determine it. Ultimately it's all just educated guesswork, due to the unpredictable nature of new discoveries and technologies.

Peak is just the peak, not the end. A drop of 2% in production in 2015 will not on its own cause a whole lot of harm – we'll simply need to reduce our consumption to 2013 levels. It could be argued that the continual decline in production cannot be covered by other energy sources, and that the world will suffer economically. An elongated downturn in economies could create a range of problems, including wars and poverty, and this is something that we could be concerned with in the long-term. There is nothing to suggest "peak oil" can do us any harm in 2012, or during the short period that year encompasses.

More:

http://en.wikipedia.org/wiki/Peak oil

# **Government Conspiracy**

Discussions on 2012 regularly involve talk of "the government knows", but they are keeping it secret from us. This has some validity, in that if the end of the world was known to be happening soon, a government might decide that ignorance is bliss, and choose not to panic the populace. This is another good reason why preparing for the worst, just in case, is a smart move. However, "the government knows", but isn't telling, is used regularly across a wide-range of topics, and basically says that they could be harbouring all sorts of secrets – but that does not mean they are. Examples range from "Yellowstone is about to erupt", to "evidence of aliens" and "who shot JFK". Whistleblowers for a 2012 conspiracy are mysteriously lacking.

My personal belief is that, just like in the movie 2012, if governments knew of an impending catastrophe, at least some of the people entrusted with that information would choose to share it with everyone.

# **Large Hadron Collider**

First the good news: To date the LHC has run at half of its potential, and nothing bad happened. To enable to run at full power, the LHC will be shut down at the end of 2011, for a "long period" to fix some problems.

Most of the arguments against the LHC revolve around the possibility that micro-black holes might be created during its operation — as many as one per second. This has struck fear into the hearts of many, because the layperson only knows of one type of black hole — a giant collapsed star that sucks in all matter surrounding it and never stops. Scientists expect that micro-black holes would disappear immediately, and cause no harm. Although this concept has never been proven in a lab, cosmic rays which are constantly striking our planet's atmosphere have much higher energy than the LHC can produce, and any black holes they produce must be evaporating.

Even if these micro, or quantum black holes were to accrete mass, they are created at such velocity that the black hole would leave Earth before it had a chance to grow.

<u>Now for the bad news.</u> For some it is trivial and nitpicking, so you decide. The original safety study by the LHC folk told us that it was impossible for black holes (that could gobble up the entire planet) to be created, because they "would decay before they got the chance to do any damage".

A second study, published in 2009, says "the growth of black holes to catastrophic size *does not seem possible.*" and "the expected decay times are much longer (and possibly  $\gg 1$  sec) than is typically predicted by other models"

By "other models" this scientist is referring to his own previous study which announced that a microblack hole could not last longer than one second. It is possibly disturbing that the language used to describe the safety has changed, and the supposed factual timeframe has also changed.

Read about the LHC (and concerns about its safety) at Wikipedia: http://en.wikipedia.org/wiki/Safety\_of\_particle\_collisions\_at\_the\_Large\_Hadron\_Collider

#### **Recommended Books**

Fingerprints of the Gods – Graham Hancock
The Everything Guide to 2012 - Mark Heley
Beyond 2012: Catastrophe or Ecstasy – Geoff Stray

### **Recommended Web Sites**

<u>Discussion Forums:</u>
2012Forum.com
2012-comet.com/phpbb/2012/
december212012.com/phpBB2/
maya12-21-2012.com/2012forum/

### **Information:**

www.diagnosis2012.co.uk 2012Base.com

#### News:

2012News.com Survive2012.com/news