It’s Not the End of the World: What the Ancient Maya Tell Us About 2012

By Mark Van Stone, Ph.D., G.F.
What is this all about?

So, we’re hearing a lot about what the ancient Maya prophesied for us, far in their future…our year 2012.

The din is rising.
What did they actually tell us?

The short answer from the Maya is, It’s not the end of the world!
Indeed, current debate about 21 December 2012 results from contemporary confusion from projections, assumptions, and misunderstanding about the science and beliefs of several ancient cultures of the Americas.

The Maya were one of many cultures of the Americas who employed a solar calendar of 365 days. However, while the Maya calculated and utilized cycles of ~5125 years, other cultures, including the Aztecs, focused on shorter cycles of only 52 years.

Although the Aztec adopted many aspects of the Maya calendar, the milestone of 21 December 2012 is significant only in terms of the long cycles of Maya time. (For an introductory explanation of the Maya Calendrics, download Part IV – Appendix: Technicalities of the Calendars.)

The Maya Long Count notation for 21 December 2012 is 13.0.0.0.0 which completes a cycle of 5125.366 years (3114 BC – 2012 CE).

More later about the Maya. Let’s look now at current prophecies for 21 December 2012.
Some of the events proposed to come together on the winter solstice, 21 December 2012:

- On that morning, the Earth and Sun will align with the “Dark Rift” near the Galactic Center. This event last happened about 25,800 years ago.
- The magnetic poles of the Earth may reverse, leaving us unprotected from cosmic radiation for a time. The effect of magnetic fields on human creativity, initiative, mood, etc., is still unknown.
- There will be a Venus Transit, an eclipse-type alignment when Venus crosses between Earth and the Sun. We witness a pair of these about once a century: the last few were 1518 & 1526; 1631 & 1639; 1761 & 1769; 1874 & 1882; 2004 & then on 6 June 2012.
- NASA predicts an unusually powerful “Solar Maximum” (sunspot season) for 2012 (though it may peak as early as late 2011). This happens every 11 years, and disrupts satellite and other electromagnetic communications.
- The usual disasters loom: food shortages, cataclysmic storms due to global warming, gasoline prices going through the roof, looming chaos in the Middle East – site of Biblical Armageddon and Eden – which will disrupt oil production and bring civilization to a grinding halt (some like to call it Mess-o’-potamia).
Maya Prophecies for 21 December 2012

- According to ancient records, the Maya Long Count Calendar will reach 13.0.0.0.0. Due to the cyclic nature of Maya calendars, this date appears to replicate the same number as at the beginning of this Creation in August 3114 BC/BCE (which the Maya also wrote as 13.0.0.0.0). The interval is 5125 years & 133 days, or 5125.366 years.

- The return of Quetzalcoatl (one of the great gods of ancient Mesoamerica), according to Aztec and Maya prophecies.

- The “13” in the Maya date 13.0.0.0.0 indicates “13 Bak’tuns.” A Maya Bak’tun or Pik is 144,000 days, the same number as the number of devotees taken up in the Rapture, according to the Book of Revelation. Coincidence?

- There have been five Creations according to the Aztec records. Five times 5125.366 years is 25,626.8 years. Coincidence?
9 Reasons why the “Maya Prophecies” should be read very critically:

1. **Very fragmentary.** What we have is only a handful of passages from a lost, and much longer, story.

2. **Contradictory.** Though Aztec, Mixtec, and Maya sources provide us a number of narratives, different versions disagree. The calendar dates associated with Maya “end date,” Aztec “end date,” and “return of Quetzalcoatl” all vary.

   **For example:** the Aztec predict that this Creation will end on a 4-Movement day in a 2-Reed year, if it ends at all. The next possible Aztec end-date will be in 2027. Maya literature does not explicitly predict any end at all, and their so-called “end date” in 2012 is a 4-Ajaw [4-Flower in Aztec cycle], not 4-Movement. Mixtec Creation stories mention 2-Deer in year 13-Rabbit, and other dates.
3. **Manipulated.** Tlacaélel, Machiavellian minister to three Aztec emperors, had no illusions about the propaganda power of history, and saw to it that history was rewritten completely to exalt the Mexica and denigrate rivals. He was neither the first or the last to do this. At his behest, the Aztecs burned their own libraries as well as their enemies’, in order to start with a clean slate. They even changed Quetzalcoatl’s birthday. Likewise, Maya dates and intervals of time were manipulated for their numerological and augural significance.

4. **Misunderstood.** 21st-century Western world-view is very different from that of ancient Mesoamericans. We tend to project our own ideas and beliefs on others.

- **For example:** their distinction between truth and myth, and between various individual gods, were nowhere near our categorical boundaries. Gods did not have distinct personalities, they blended into each other, they split into gangs of 4 or 5. The days, and even the numerals in their calendars were living, powerful entities. Some Maya texts (below) appear to have indicated “myth time” with “unworkable” calendar days.
5. **Errors.** Maya monuments, particularly dates and distance numbers contain errors, both of transcription and of calculation. I count something over 50 numerical mistakes *carved in stone.* Apparently the Maya, believed that “a card laid is a card played” and **never, ever, erased and fixed a mistake.**

6. No mention of **destruction** nor of renewal, nor improvement, connected to the coming 13.0.0.0.0 Maya “end date”.

7. Implication that **Life and the calendar will continue without interruption** beyond 2012.

8. The Mesoamerican concept of “**cyclic time**” is **not that cyclic.** To both the Maya and the Aztec each Creation was an improvement on the previous era.
9. **Solstices** were of *very minor* importance. Though they record hundreds of ceremonies, anniversaries, jubilees, dedications, offerings, astronomical events, etc., inscriptions almost never mention events on solstices or equinoxes. However, especially very early, during the Middle Formative, the Maya built “E-Groups,” architectural alignments to the Solstices and Equinoxes. (Archaeoastronomers have long been puzzled by the fact that *most* E-Groups *do not* align to these risings. Recent investigation suggests that E-Groups may have been aligned to the solar Zenith Passages and Nadirs, events more highly esteemed than Solstices. The First Zenith Passage coincides with the onset of the rainy season in much of Mesoamerica.)
What is supposed to happen in 2012?

Four predictions

“An imminent polar reversal that will wipe our hard drives clean.”
Daniel Pinchbeck

“The rare celestial alignment of our solar system, our sun, and our planet with the center of our galaxy—an event that will not happen again for another 26,000 years.”
Gregg Braden

The “dawning of a Wisdom Age … standing on the shoulders of the Information Age.”
Peter Russell

“The December 21, 2012, date will likely be a “nonevent” similar to … the widely anticipated Y2K phenomenon.”
Robert K. Sitler
Cultural Diversity

The next 2 maps will show how diverse Mesoamerica is - both culturally and linguistically.

The Maya, and the later Mixtec and Aztec cultures, are only a few of many.

Mesoamerica has greater linguistic diversity than Europe.
3.20 THE MESOAMERICAN CULTURE AREA, showing approximate tribal locations (with modern boundaries)
Just the Mayan area (light blue), for example, comprises 22 living languages even today.

Map courtesy FAMSI.org — modified from The Handbook of Middle American Indians.
Culture Areas and Dates

The next 4 maps display the dates and areas of the Olmec, Early and Late Classic Maya, and the Aztec cultures.

These groups were as different from each other as Egypt, Greece, and Medieval Spain. Nevertheless, like Greece and Spain, the later cultures respected, and built on their forebears.

They also felt free to adapt as well as adopt. Ancient Mesoamericans had no compunctions about changing or even inverting stories, just as Christmas traditions vary around the world.
CITIES OF THE ANCIENT CIVILIZATION of the MAYA IN CENTRAL AMERICA

100 - 600 CE/AD
CITIES OF THE ANCIENT CIVILIZATION
of the MAYA
IN CENTRAL AMERICA
600 - 900 CE/AD
Cultures worldwide suffer cycles of Rise and Fall. But those in Mesoamerica apparently lived in a more fragile environment; when they fell, they fell hard. Unlike Rome, Baghdad, and other Old World cities who rebuilt after a collapse, most of the great Mesoamerican capitals were completely abandoned after their respective Falls.
## The Mesoamerican People suffered Multiple Collapses

<table>
<thead>
<tr>
<th>Time Period</th>
<th>Event Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>900 BCE/BC</td>
<td>The major Olmec city of San Lorenzo was abandoned, and La Venta rose. (Gulf coast)</td>
</tr>
<tr>
<td>400-300 BCE/BC</td>
<td>The Middle Classic Collapse snuffed the Olmec Horizon, and fertilized dozens of Late Formative city-states. (pan-Mesoamerica)</td>
</tr>
<tr>
<td>100 BCE/BC</td>
<td>Cuicuilco, buried by a volcanic eruption (southern Valley of Mexico), coincides with rise of Teotihuacán (northern Valley of Mexico)</td>
</tr>
<tr>
<td>200 CE/AD</td>
<td>The abandonment of great cities in the Mirador Basin. (Northern Guatemala)</td>
</tr>
<tr>
<td>600/650 CE/AD</td>
<td>The burning of Teotihuacán marks the boundary between Early and Late Classic.</td>
</tr>
<tr>
<td>600-800 CE/AD</td>
<td>The Late Classic saw not only a dramatic florescence of Maya cities, but also the appearance of new civilizations: Tajín, Huasteca, Xochicalco, Cacaxtla.</td>
</tr>
<tr>
<td>900 CE/AD</td>
<td>The Classic Collapse: Maya, Zapotec, Veracruz, etc. (pan-Mesoamerica)</td>
</tr>
<tr>
<td>1100 – 1250</td>
<td>The rise of the Mixteca city-states.</td>
</tr>
<tr>
<td>1350 – 1450</td>
<td>The Aztec/Mexica establish an empire.</td>
</tr>
<tr>
<td>1500-1540 CE/AD</td>
<td>The Conquest: Introduced disease; the fall of Tenochtitlán (1521), and then the rest of the Americas. (pan-Mesoamerica)</td>
</tr>
</tbody>
</table>
The 2012 Galactic Alignment: How rare is it?

Some researchers claim that the Maya Calendar was set, originally devised, specifically to reach its “end” (the Long Count date 13.0.0.0.0) coinciding with this very special event.

So how rare is this “galactic alignment,” that occurs every 26,000 years?
The 2012 Galactic Alignment: How rare is it?

Here is a sky chart showing the sun on the morning of 21 Dec., 2012. The line marking the Ecliptic is green, and the Galactic Equator is violet.

The Galactic Center is about here: X
The 2012 Galactic Alignment: How rare is it?

Sunrise, 21 Dec., 2009

The Galactic Center is about here: X

Here is a sky chart showing the sun on the same day, three years earlier in 2009.
The 2012 Galactic Alignment: How rare is it?

Sunrise, 21 Dec., 2006

Here is a sky chart showing the sun on the morning of Dec. 21, 2006.
The 2012 Galactic Alignment: How rare is it?

Sunrise, 21 Dec., 2003

The Galactic Center is about here: X

The sky chart showing the sun on the morning of Dec. 21, 2003.
To see the slight movement of the sun at these three-year intervals, click back and forth through the last three slides a few times. You will notice that the sun has been in virtually the same spot *every* Dec. 21st for many years.

In fact, the sun has already crossed the Galactic Equator in 1999. The edge of the sun first touched that Equator in the early 1980’s, and will be in contact with it each 21st of December until about 2019. Again, this “rare” alignment has already been happening for twenty-five years and will continue for a decade more.
The 2012 Galactic Alignment: How rare is it?

Sunrise, 21 Dec., 1999

The Galactic Center is about here: X

The sky chart showing the sun on the morning of Dec. 21, 1999.
The next slide shows the sky chart showing the position of the sun on the morning of the solstice in 1941, seventy-one years before 2012. It is approximately one degree, or two solar diameters, away from the Galactic Equator. This slow movement is what astronomers call “Precession of the Equinox.”
The 2012 Galactic Alignment: How rare is it?

Sky chart showing the position of the sun on the morning of the solstice in 1941, seventy-one years before 2012.
The 2012 Galactic Alignment: How rare is it?

The Galactic Center is about here:  

Sunrise, 21 Dec., 1870

This shows the sun’s position at dawn of the solstice 71 years earlier still, when it was two degrees short of the Galactic Equator.
The 2012 Galactic Alignment: How rare is it?

The Galactic Center is about here: X

Here we show the sun’s position on mornings two days apart, in 1870 and 2012. The sun in 2012 occupies precisely the same positions as it did 142 years and two days earlier. They are two degrees apart, or four solar diameters.
The 2012 Galactic Alignment: How rare is it?

Sunrise, 23 Dec., 1870
Sunrise, 22 Dec., 1941
Sunrise, 21 Dec., 2012

The Galactic Center is about here: X

However, two days later in 1870 on Dec. 23rd, the sun *did* cross the Galactic Equator. And in 1941 it crossed on the 22nd.
The 2012 Galactic Alignment: How rare is it? *Not very.*

Sunrise, 23 Dec., 1870
Sunrise, 22 Dec., 1941
Sunrise, 21 Dec., 2012

The Galactic Center is about here: X

Allow us to repeat, the sun has crossed the galactic equator *every* winter solstice since 1983, and will continue to do so until 2019.
In fact, the sun has aligned annually (on other days) since time began. (It precesses a solar diameter in 36 years.)

This is an annual event, is not rare at all.
However, the Maya did celebrate the Sun’s almost-imperceptibly slow progression through the Zodiac (or “around the sky”) called the Precession of the Equinox.
Barbara MacLeod has been working with an unusual Maya concept, a significant interval of time they called “3-11-Pik” (or “3-11-Baktun,” to use the traditional epigrapher’s name for the 144,000-day/400-year period). 3 x 11 x 144,000 days is 4,752,000 days, or **13,010.5 years**, half the length of the Precession cycle.
Maya rulers celebrated a micro-cycle of this huge interval: every 8660 days (about 24 years) was an “11-Pik station” in the Long Count, (it would have the same Calendar Round as 11 Piks later would have). If a king lived long enough, he would witness three of these in succession (taking 25,980 days, about 71 years; 3.12.3.0 in Maya numerals) and be given the title “3-11-Pik Ajaw.” This 71 years is the length of time for the Equinox sun to precess one day. In other words, the sun’s position against the backdrop of stars would have shifted to the adjacent day’s position 71 years before.
...Not only did the Maya occasionally celebrate the Precession, they observed and measured its progress sufficiently to calculate with it.

If a lord saw 3 successive 8660-day periods (about 71 years), he was given the title “3-11-Pik Ajaw.”

(71 years is the time it takes for the sun to precess back one day. Thrice 8660 is also 25,980 days, microcosmically reflecting the full Precession cycle of 25,800 years. Perhaps.)

Premier archaeoastronomer Anthony Aveni is not at all convinced by Barbara MacLeod’s evidence, which he calls coincidental. (We scholars are not at all monolithic.)
This is a drawing of a Xcalumk’in inscription (CMHI 4:197) one of the handful of monuments mentioning this 3-11-Pik interval/title. Glyph A is the title “3-11-\(pi-k(u)\),” or “3-11-Pik-ku,” one of a string of titles boasted by the Lord ending at glyph J with “Ajaw”.
This is a drawing of a Copan Stela 49 with the 3-11-\textit{Pik Ajaw} interval/title highlighted.
This is a photograph of Naranjo Altar 1 along with a drawing of the altar. The text selected is H9 – I12. The 3-11 Pik Ajaw title exists in H12 (highlighted).
This is a drawing of Quirigua Stela F, A12 – B14. The 3-11 Pik Ajaw interval/title is highlighted in A13.
Solstices: How important were they?

Observatory, Palenque Palace

Photo by Linda Schele
So far, we have found no glyphic inscription that refers to a solstice or an equinox *per se*. The only events recorded in inscriptions that consistently fall near one of these dates are the “Flapstaff Dance” lintels at Yaxchilan. The Maya called this baton/banner *Jasaw-Chan*, and the handful of records of this dance always happen a couple days after the summer solstice: June 25, June 26, etc. *(GMT+2 correlation; two days earlier in the GMT correlation).*
a. Stela 16: the first flapstaff event by Shield-Jaguar on June 27, 736(?)

b. Lintel 50: Shield-Jaguar in first flapstaff event??

drawing by Ian Graham
c. Stela 11: Shield-Jaguar enacts his flapstaff rite with his son Bird-Jaguar on June 26, 741.


drawing by Ian Graham
Further, Maya rulers could choose the date of their inauguration. They had substantial leeway for it; a typical Maya Ajaw-to-be had between a month and about two years after his predecessor’s death to set a date.

Examining 80 recorded coronations for Maya lords, I found only one (in each correlation) that fell on either a solstice or an equinox, which is precisely what chance would predict. In fact, I found four that coincided with February 14th, but that does not prove that the Ancient Maya celebrated St. Valentine’s day. Remember that!!
When faced with a choice of an auspicious day on which to schedule an important event, Maya almost *never* chose a solstice or an equinox.

**Solstices:**

How important were they?

**Answer:**

Not very