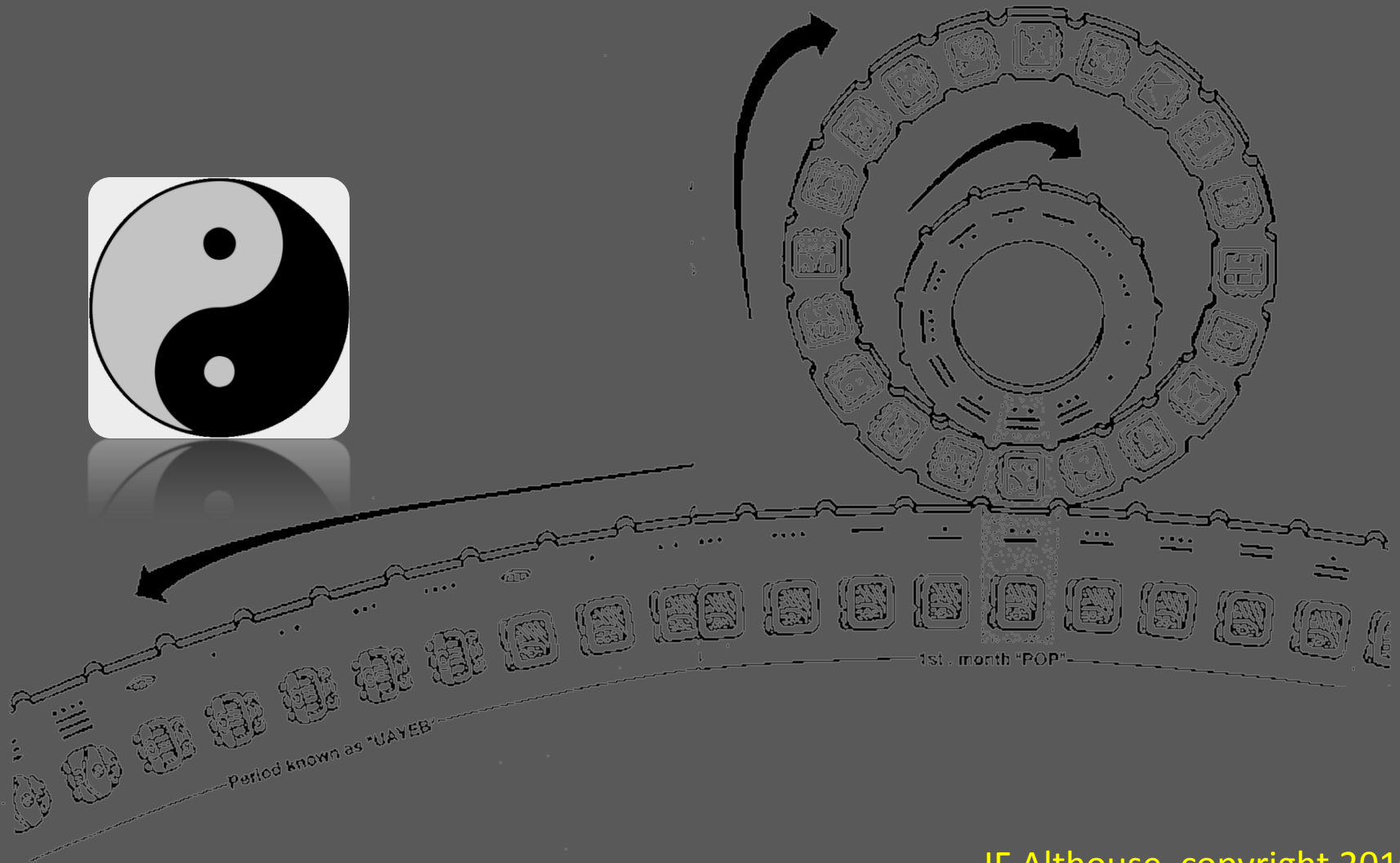
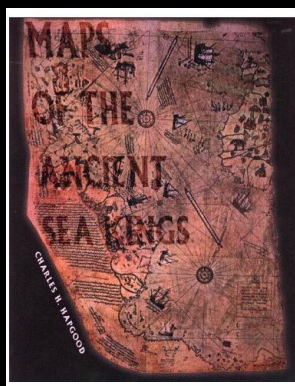
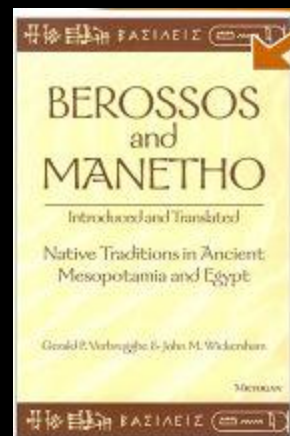
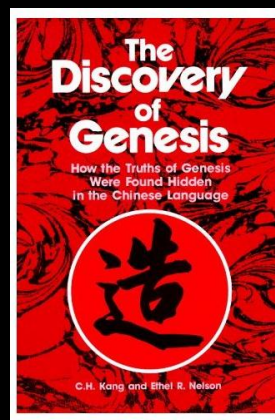
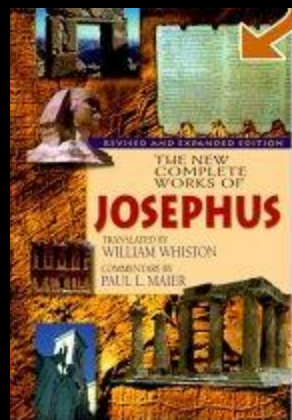
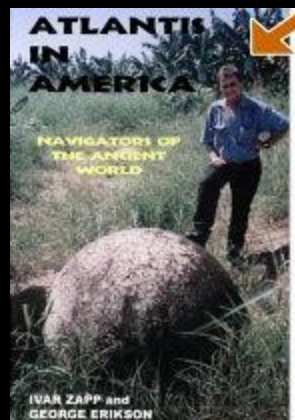


Mysteries of Ancient Architecture

Why the Past May Be Our Future





SECOND SIGHT



J.F. ALTHOUSE

SECOND BIRTH



J.F. ALTHOUSE

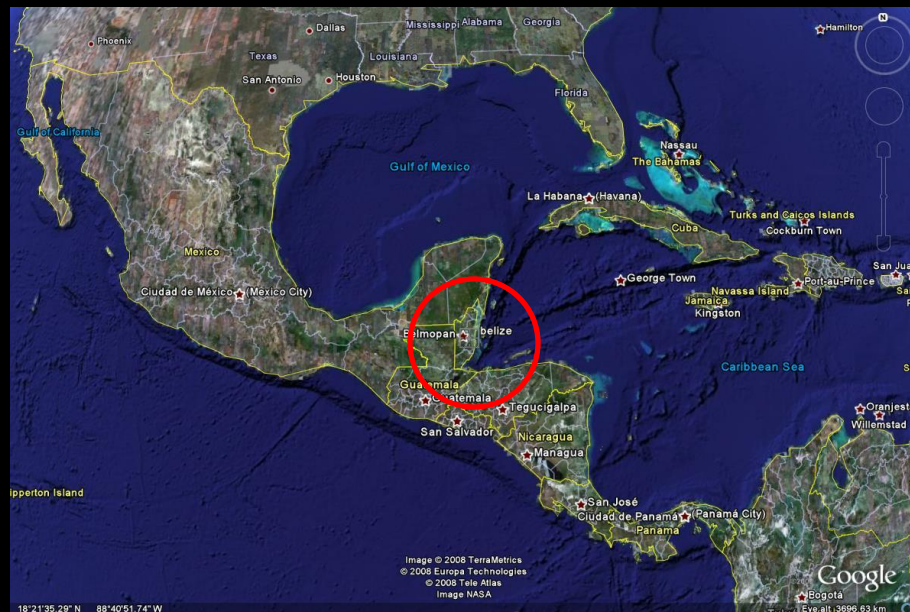
Which country has the most pyramids in the world?

- A. China
- B. United States of America
- C. Egypt
- D. Belize

Which country has the most pyramids?

- A. China 90
- B. United States of America 2,000*
- C. Egypt 118
- D. Belize 20,000

*Prior to 1800

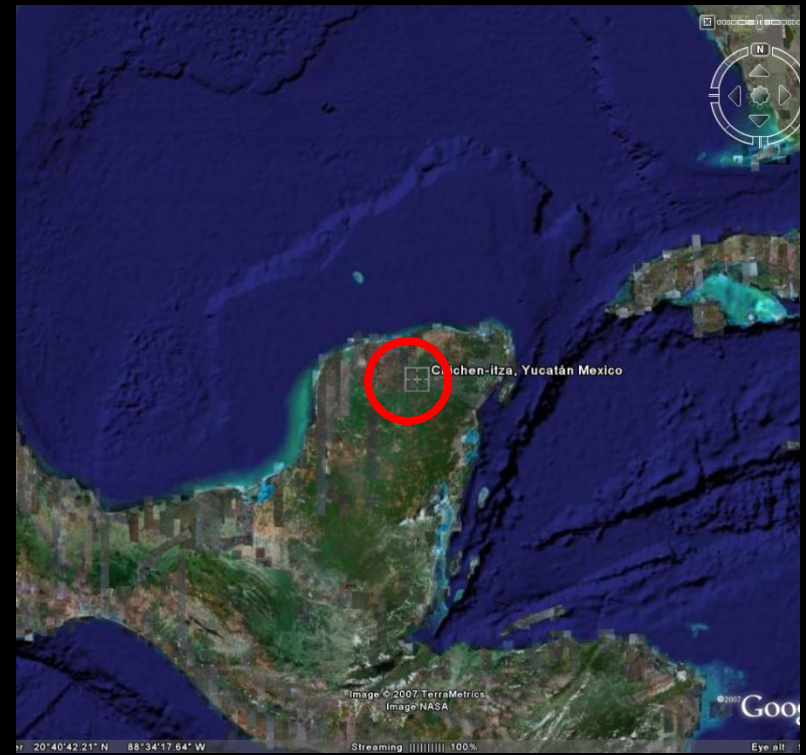




Where is this pyramid located?



Where is this pyramid located?



Chichen Itza, Mexico



Where is this pyramid located?



Where is this pyramid located?



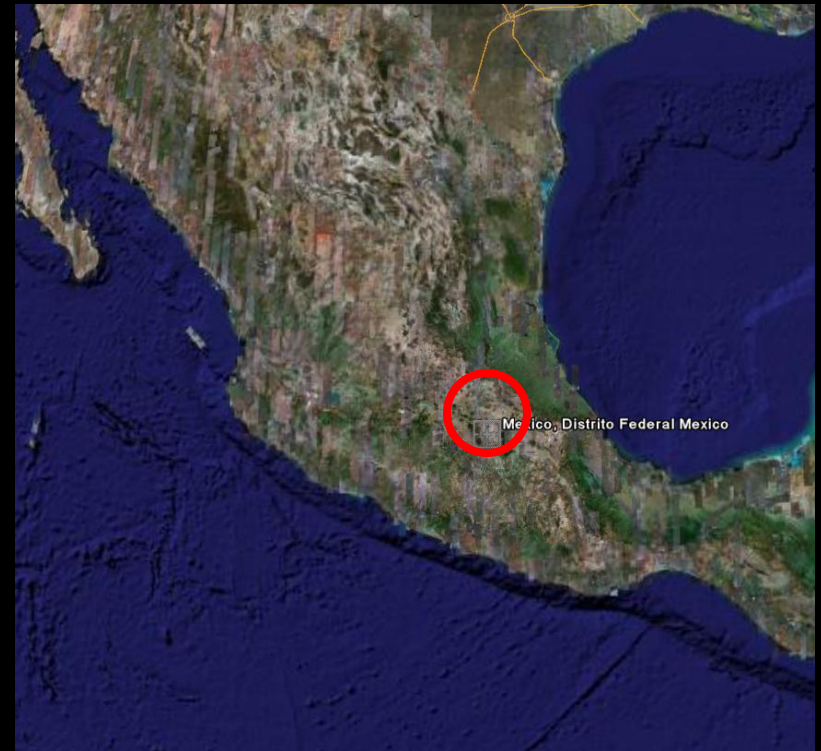
Candi Sukuh , Solo , Java



Where is this pyramid located?



Where is this pyramid located?



Teotihuacan, Mexico



Where is this pyramid located?



Where is this pyramid located?



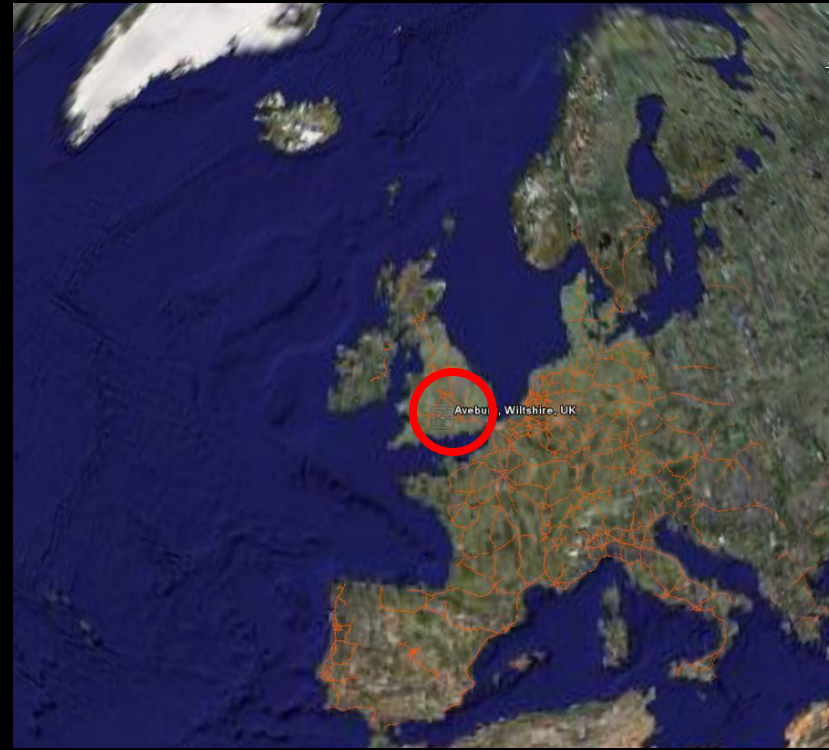
Xian, China



Where is this pyramid located?



Where is this pyramid located?



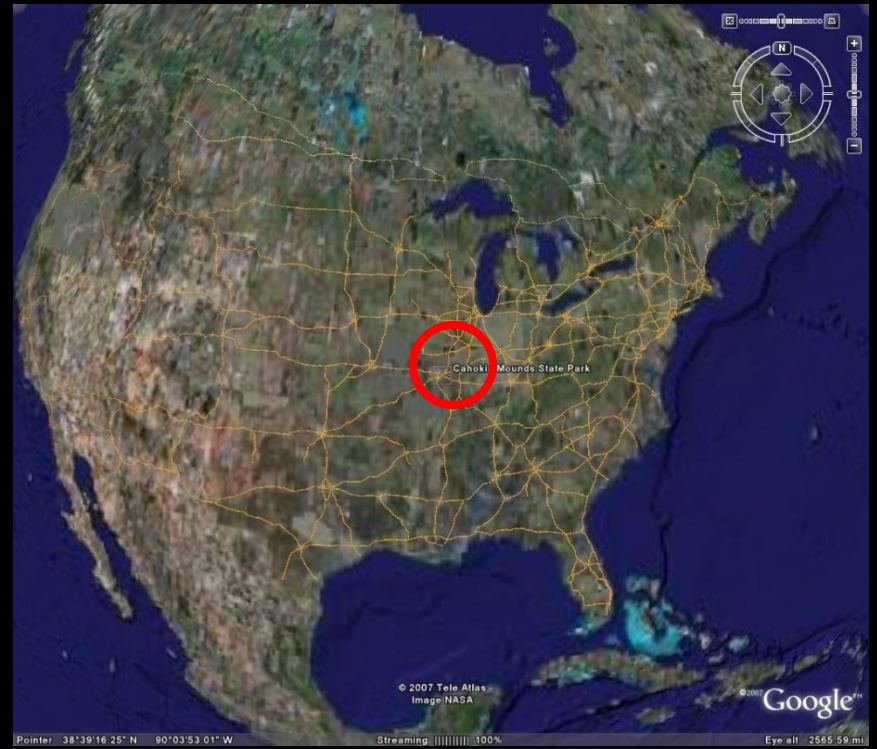
Avebury, England



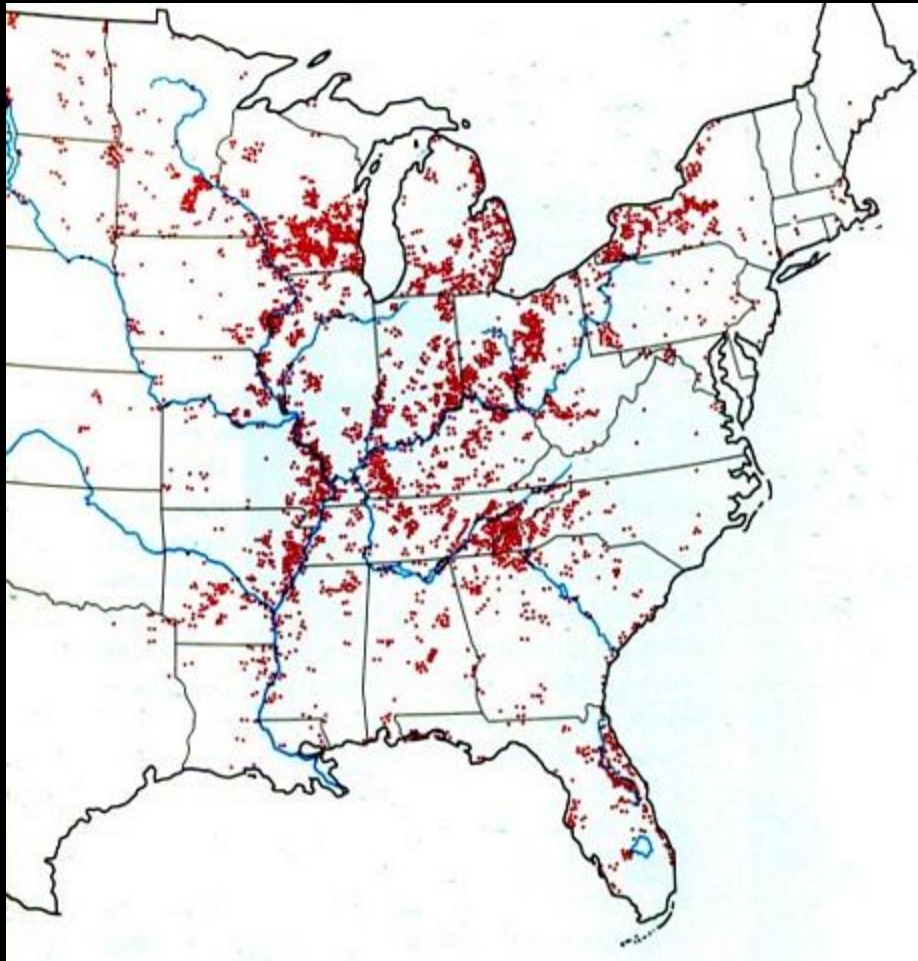
Where is this pyramid located?



Where is this pyramid located?



Belleville, Illinois



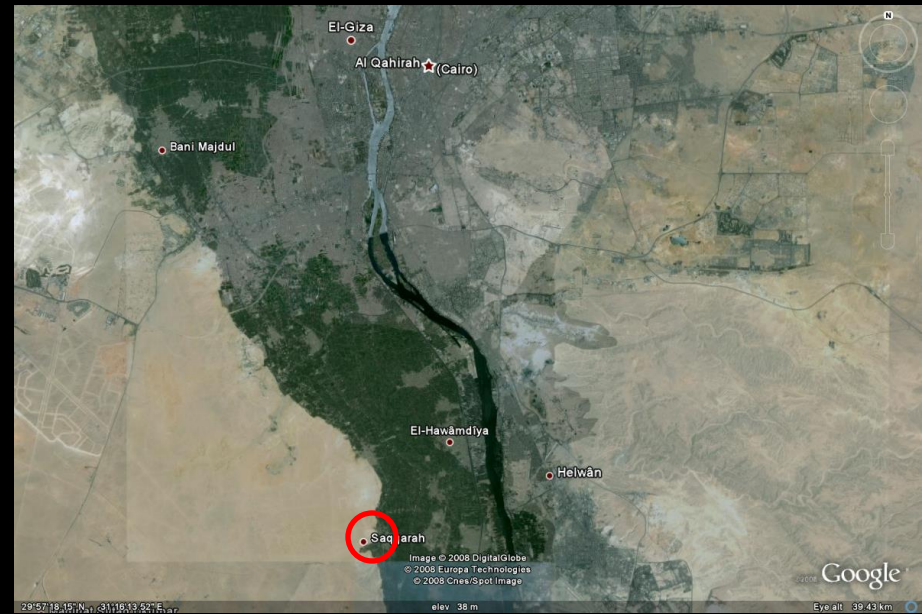
Locations of mounds in the United States circa 1000 AD



Where is this pyramid located?



Where is this pyramid located?



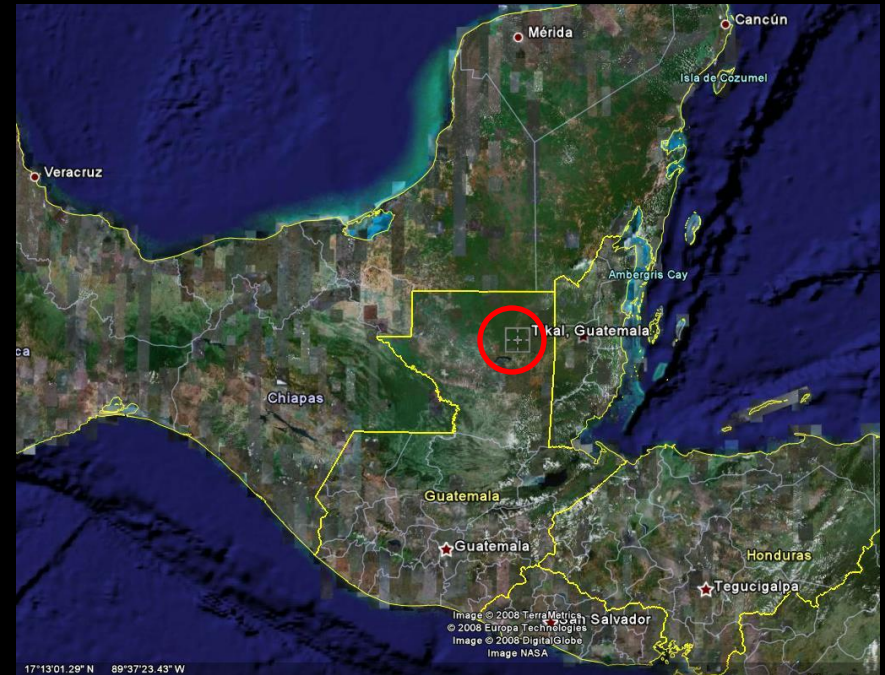
Saqqarah, Egypt



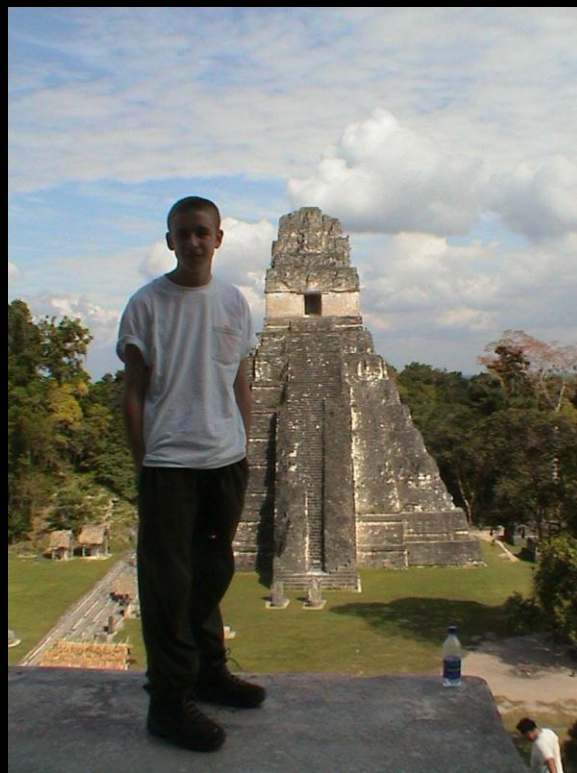
Where is this pyramid located?



Where is this pyramid located?



Tikal, Guatemala







Old Fashioned Fourth Dynasty Great Pyramid and Khafre Pyramid

[Egyptologists](http://en.wikipedia.org/wiki/Great_Pyramid_of_Giza) believe that the pyramid was built as a tomb for fourth dynasty [Egyptian](#) Pharaoh [Khufu](#)

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

If we are supposedly evolving into ever greater levels of civilization and technology, why does our architectural record shout the opposite?



New Improved Fifth Dynasty Userkaf Pyramids



My photo of same pyramid



Gizeh, Egypt



Menkaure's Pyramid

Khafre's Pyramid

Great Pyramid of Khufu

Menkaure, Khafre, Great Pyramid

Gizeh, Egypt

Third Pyramid

4739- 4751 BC (Manetho)

“Nitokris, the bravest and most beautiful of her time, blonde in complexion, who built the Third Pyramid. She ruled 12 years.” – Manetho circa 260 BC (indirect quote from other historians who still had access to his writings now lost.)

Not Mentioned

Great Pyramid

5352 -5386 BC (Manetho)
2470 BC (Egyptologists)

“Souphis ruled 63 years. He built the Great Pyramid...He was arrogant toward the gods. He wrote the Sacred Book, highly regarded by the Egyptians.” – Manetho circa 260 BC (indirect quote from other historians who still had access to his writings now lost.)



Menkaure, Khafre, Great Pyramid

Gizeh, Egypt

Menkaure Pyramid

Khafre Pyramid

Khufu Pyramid

All three pyramids supposedly built between 2575 -2467 BC (Herodotus)
Herodotus visited Egypt 2000 years after these pyramids were built according to his timeline. First came Cheops, then Chephren, then Mycerinus. If true, why does the Sphinx sit in front of the second most important pyramid? Why does the second most important pyramid sit on the highest ground?

Built by Mycerinus (Herodotus)
Date of reign unknown.
Not even sure he existed!

Built by Chephren, brother of
Cheops (Herodotus)

Built by Cheops (Herodotus)



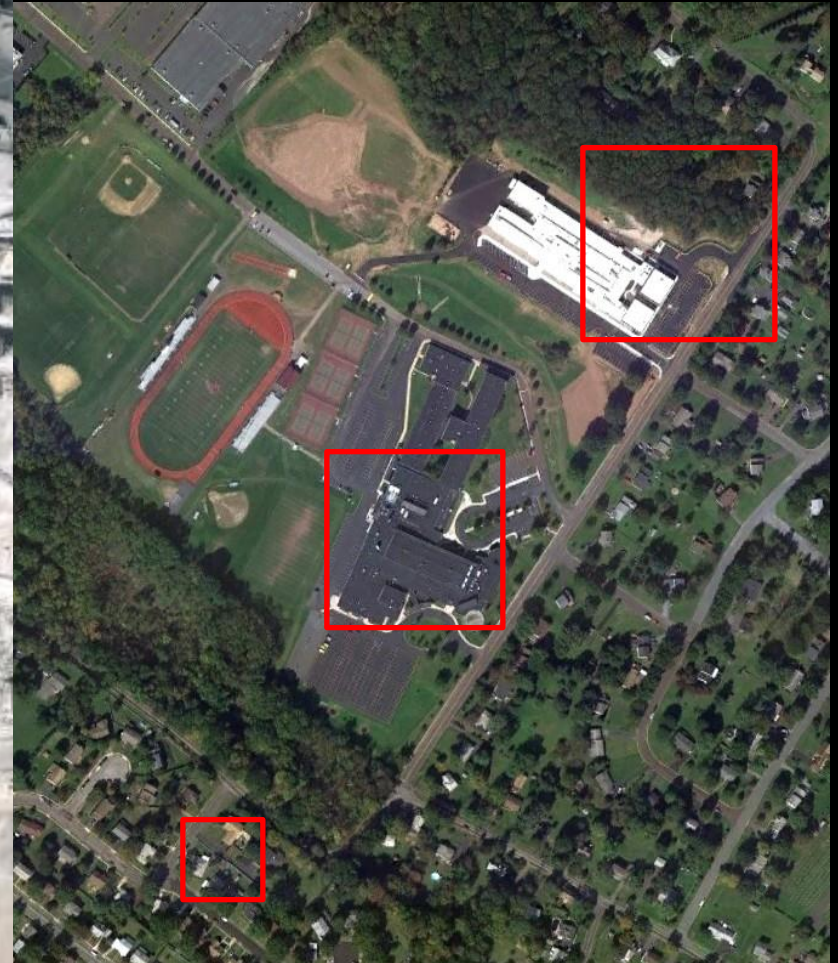
Menkaure, Khafre, Great Pyramid

Gizeh, Egypt



Great Pyramid in foreground, Kahfre Pyramid in background

Gizeh, Egypt

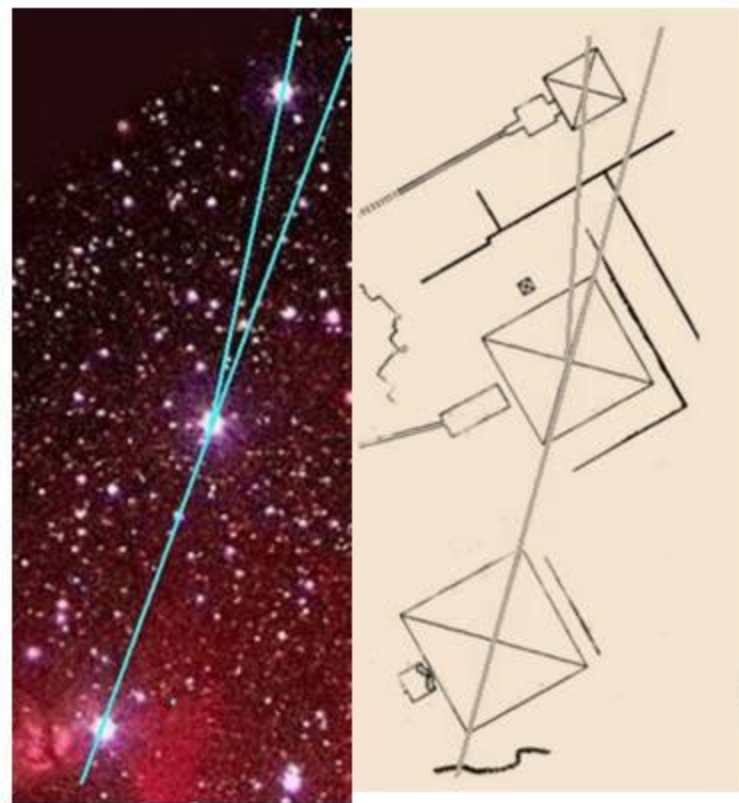


Comparison of Gizeh Plateau to Pottsgrove High School



Were there are only three pyramids at Gizeh?

The pyramids of Giza Egypt seem to align with the stars of Orion's Belt



The great library of Alexandria existed here. It was destroyed by Julius Caesar in 47 BC.



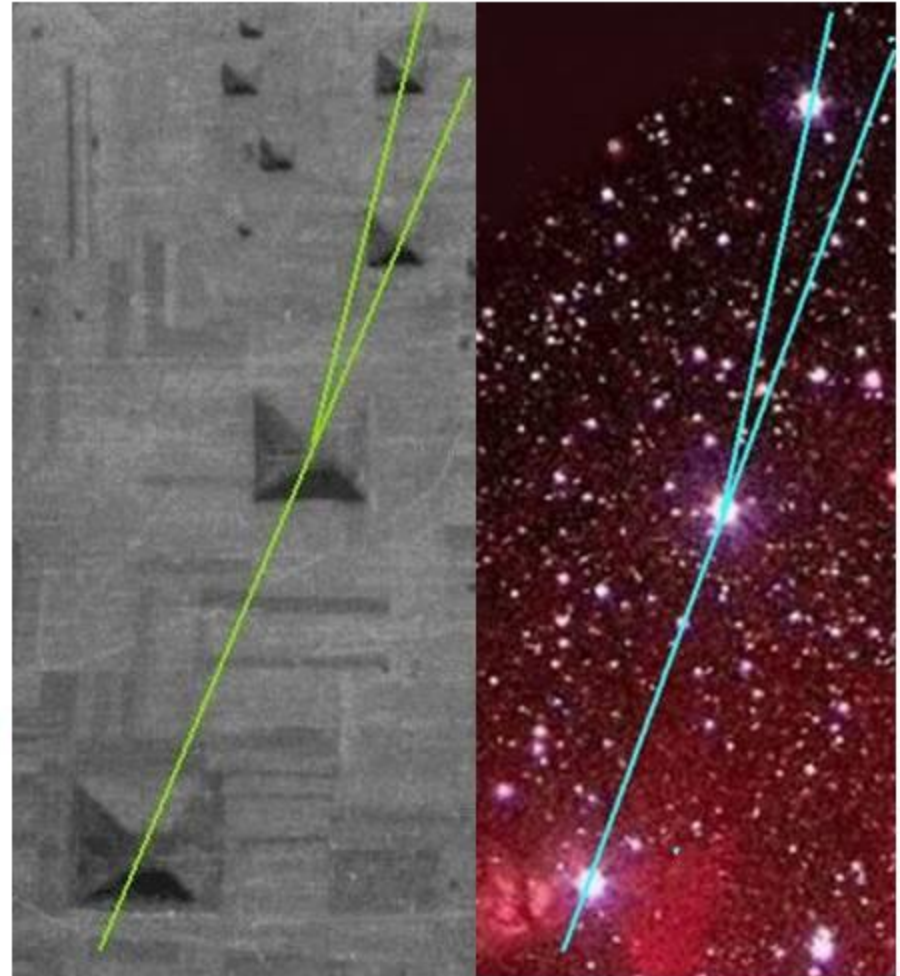
White Pyramid?

Near the ancient capital of Xian, China

The pyramids of Xian China seem to align with the stars of Orion's Belt



A great library existed here. It was burned to the ground by Ch'in Shih Huang-ti in 247 BC. Some writings dated back beyond 4,000 BC.





Sun Pyramid of Teotihuacan northwest of Mexico City, Mexico



View from Moon Pyramid Plaza was a reflecting pool.

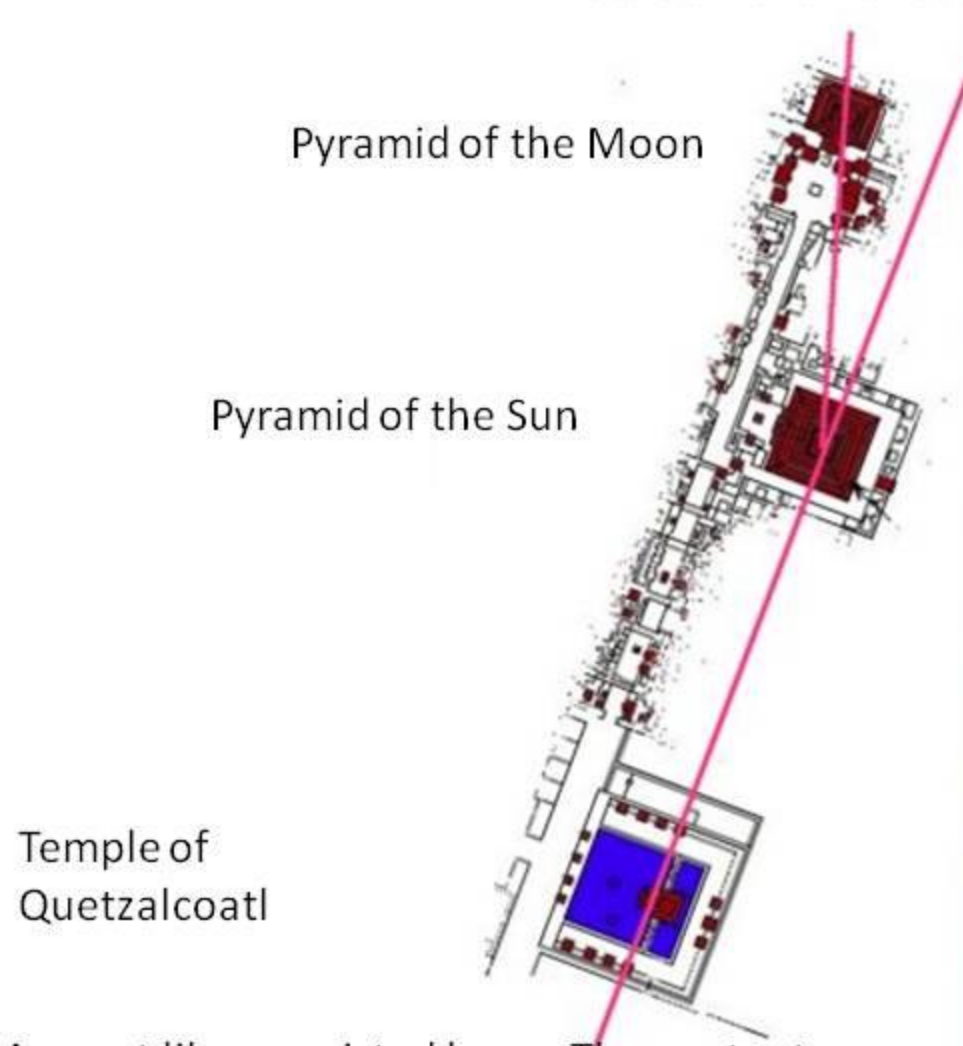


View from Moon Pyramid



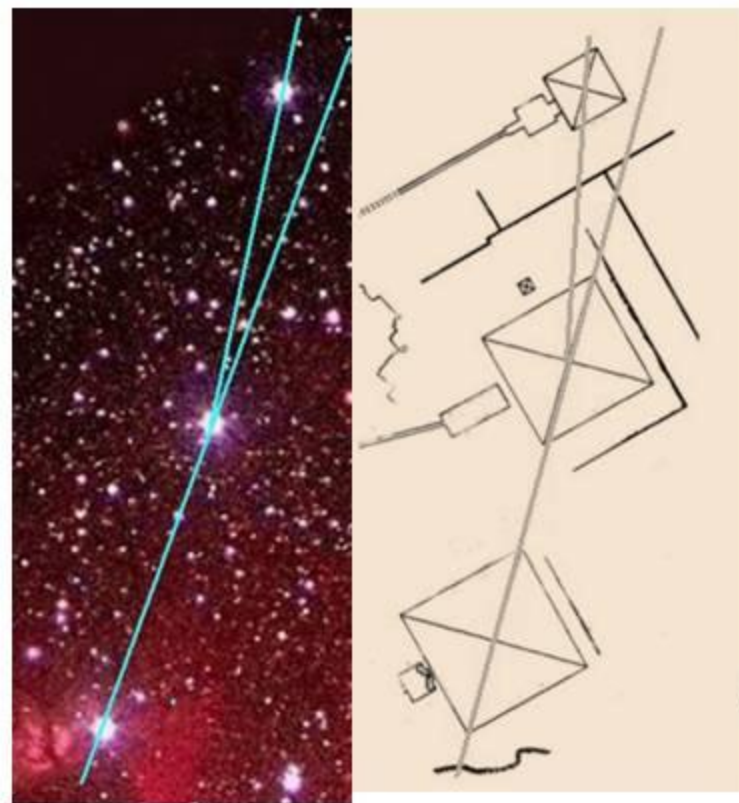
Moon Pyramid in distance.
Sun Pyramid to left.
Evidence of rebuilt structures.

The pyramids and main temple of Teotihuacán seem to align with the stars of Orion's Belt



A great library existed here. The contents were burned by the Spanish in the 16th century. Over four million documents destroyed.

The pyramids of Giza Egypt seem to align with the stars of Orion's Belt

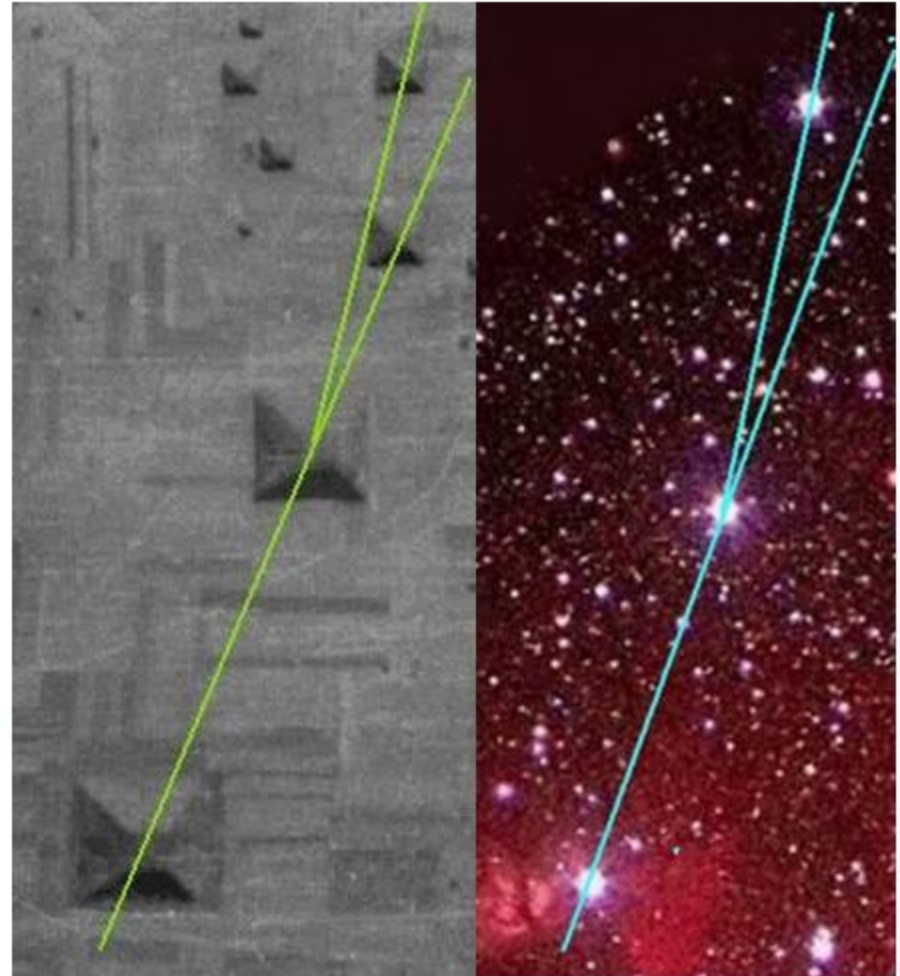


The great library of Alexandria existed here. It was destroyed by Julius Caesar in 47 BC.

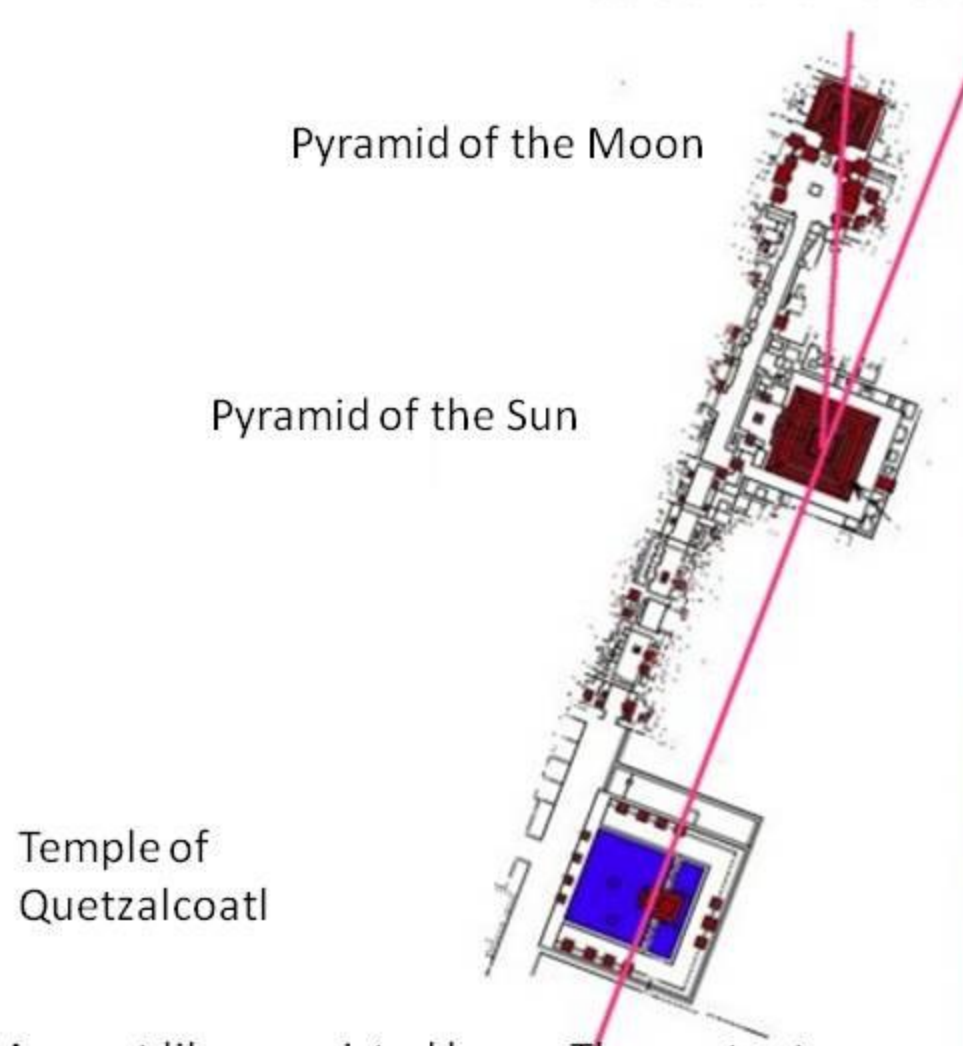
The pyramids of Xian China seem to align with the stars of Orion's Belt



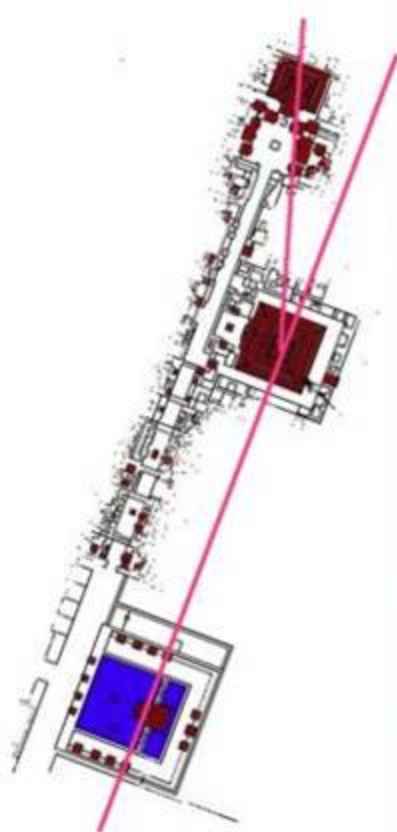
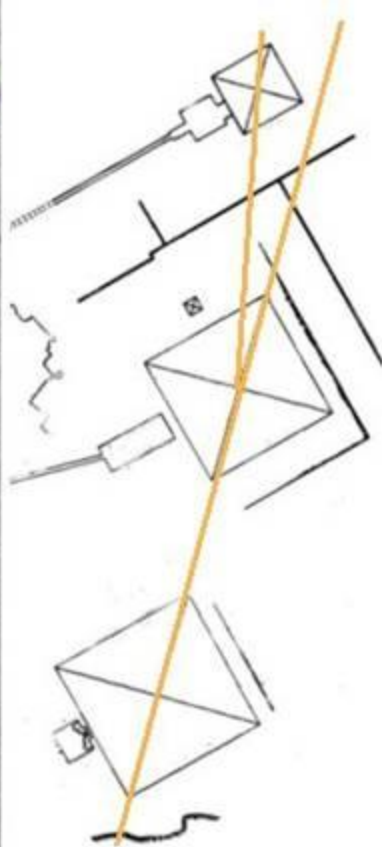
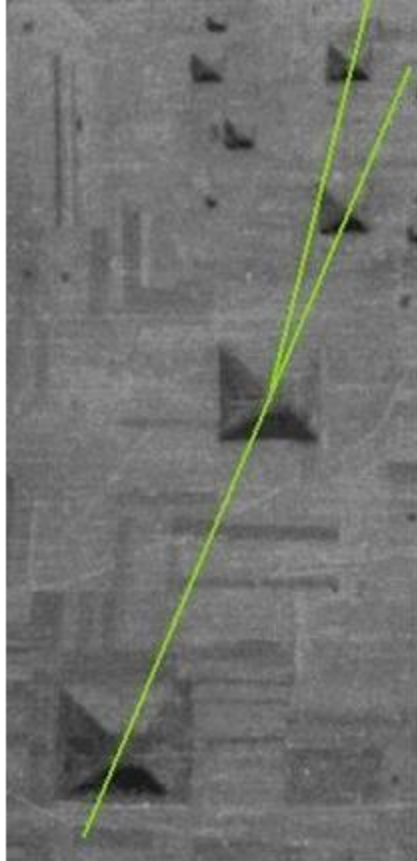
A great library existed here. It was burned to the ground by Ch'in Shih Huang-ti in 247 BC. Some writings dated back beyond 4,000 BC.



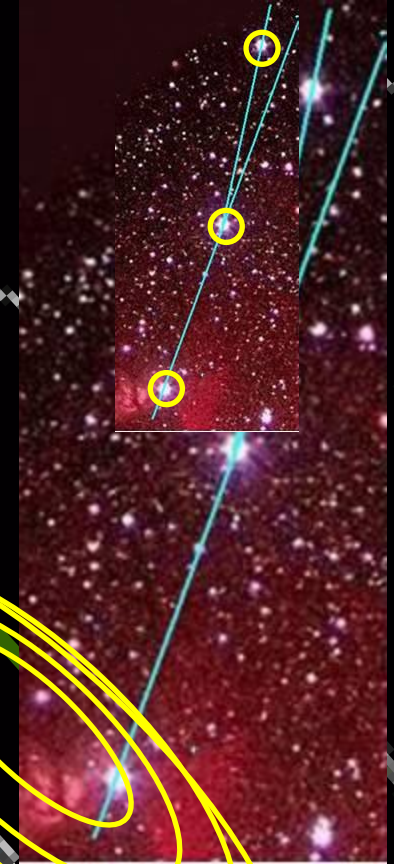
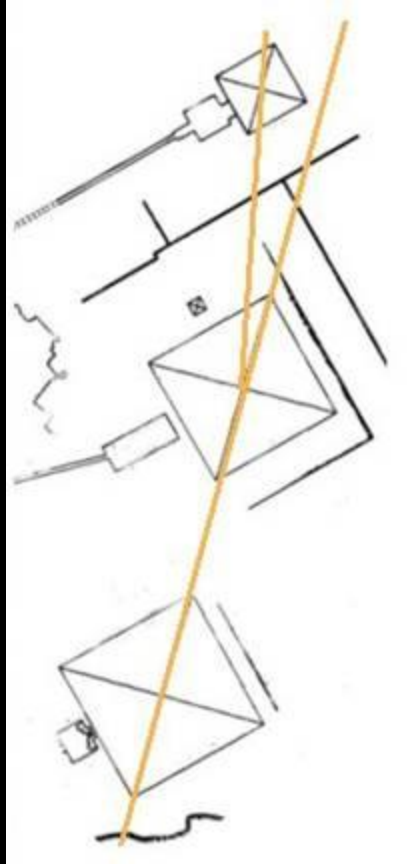
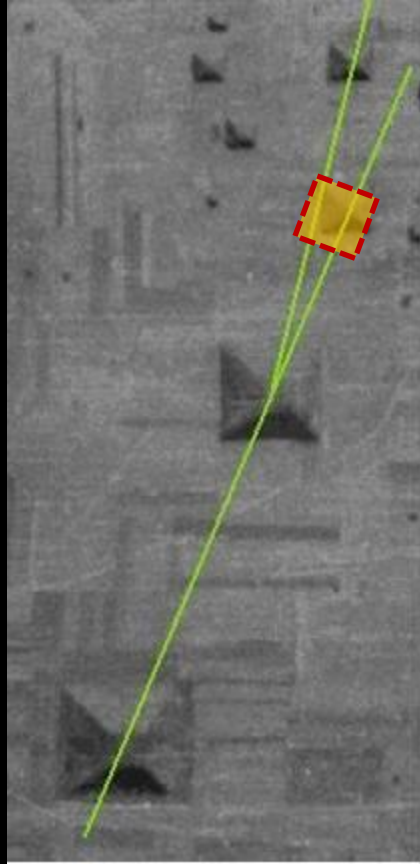
The pyramids and main temple of Teotihuacán seem to align with the stars of Orion's Belt



A great library existed here. The contents were burned by the Spanish in the 16th century. Over four million documents destroyed.



The three great libraries were located in the vicinity of three greatest pyramid groupings; Xian, Teotihuacán, and Giza. All three pyramid groupings bear a resemblance to the positioning of the Orion's Belt. Three stars in the constellation of Orion that were very important to many ancient cultures.



As Oliver mentioned before, some astronomers think that Barnard's Loop in Orion is part of an old supernova remnant. I haven't seen any estimates on it's age, but the Veil Nebula in Cygnus is estimated, by some, to be 8,000 years old. The remnant in Vella may be as much as 12,000 years old, so your time frame is not unreasonable.

How could three different ancient cultures on three different continents build exactly the same monument and keep a massive library beside it?

Did ancient cultures know how to cross the ocean?

Did they possess maps of the entire world?



To the left is the 1754 Buache map of Antarctica showing the continent to be free of ice. It is believed that Bauche copied a more ancient map to create his. It shows an inland sea between the two islands that are devoid of ice. It also shows rivers flowing to the coast. The map on the right shows how it looks today. The entire area is covered with ice. In addition to the 15, 000 feet of ice above sea level, there is nearly a mile of ice beneath the ocean filling the inland sea. The last time this continent was ice free is estimated to have been about seven thousand years ago.

Even more amazing about the accuracy of this and other ancient maps of this region is that Antarctica wasn't discovered until November 18th, 1820 by U.S. Navy Capt Nathaniel B. Palmer. Not only are the maps accurate, they were drawn using spherical trigonometry, a science barely understood by 18th century cartographers. The accuracy of the coastlines was confirmed recently by satellite study. Scientists have found frozen remains of large trees, dinosaurs, etc. and have speculated that Antarctica experienced a sudden and catastrophic climate change from semi tropical to frigid wasteland.

So what happened to all that knowledge?

How many Egyptian pyramids contained mummies?

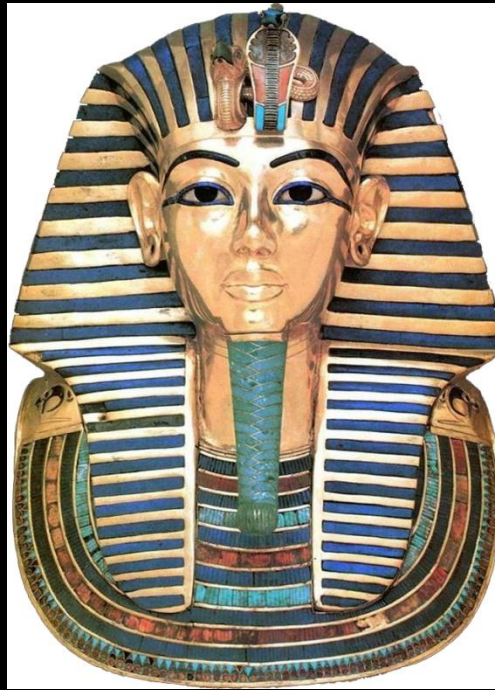


None!



“...where are the mummies that were supposedly buried in these pyramids? According to one Egyptologist, there are not any! In 1975...U.S. Egyptologist Dr. Mark Lehner told William Fix that no original burial has ever been found in any pyramid in Egypt.” Dunn p.6

Wait a minute,
Wasn't King Tut buried
inside the Great Pyramid?



ERRRRRR wrong.



Model of underground network of tombs in Valley of the Kings



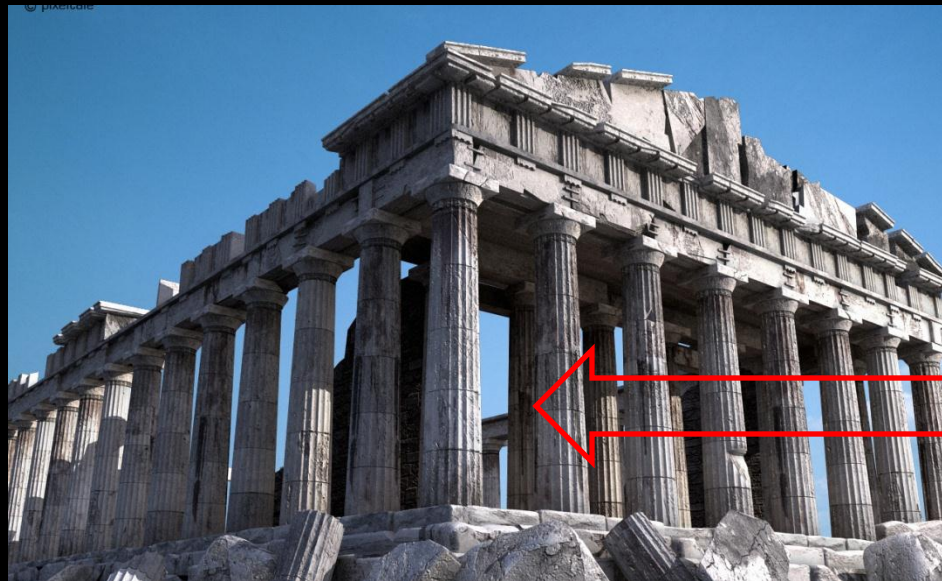
New excavation of tomb

King Tut is buried 300 miles away in the Valley of the Kings. The same distance from Philadelphia to Boston. This is where all the great Pharaohs have been found. Form follows function. If you want to keep your stuff with you in the after life, why put it in a giant structure and tell everybody where it is stashed?



To my knowledge not a single pyramid anywhere in the world was originally designed to act as a tomb.

Some pyramids have been found to contain bodies but the bodies were placed inside the structures long after they had been originally built



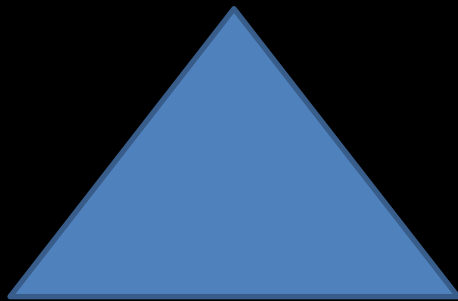
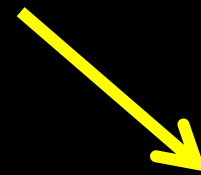
Look Professor!
Lincoln was
Greek!!!!

Kind of like putting Lincoln's body in the Parthenon and a thousand years later archeologists finding his body and pronouncing the Parthenon his tomb.

If it is true that pyramids were not built
to be tombs,
Why were they built?

Architects design according to the rule that
Form follows function.

Vast majority of pyramids around the world are
raised platforms with sloped sides.



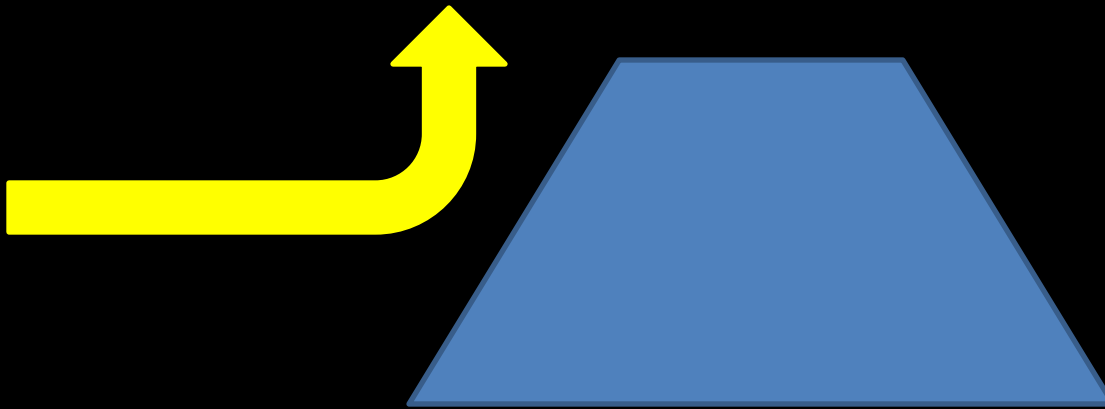
Less than a dozen
worldwide that I
know of.



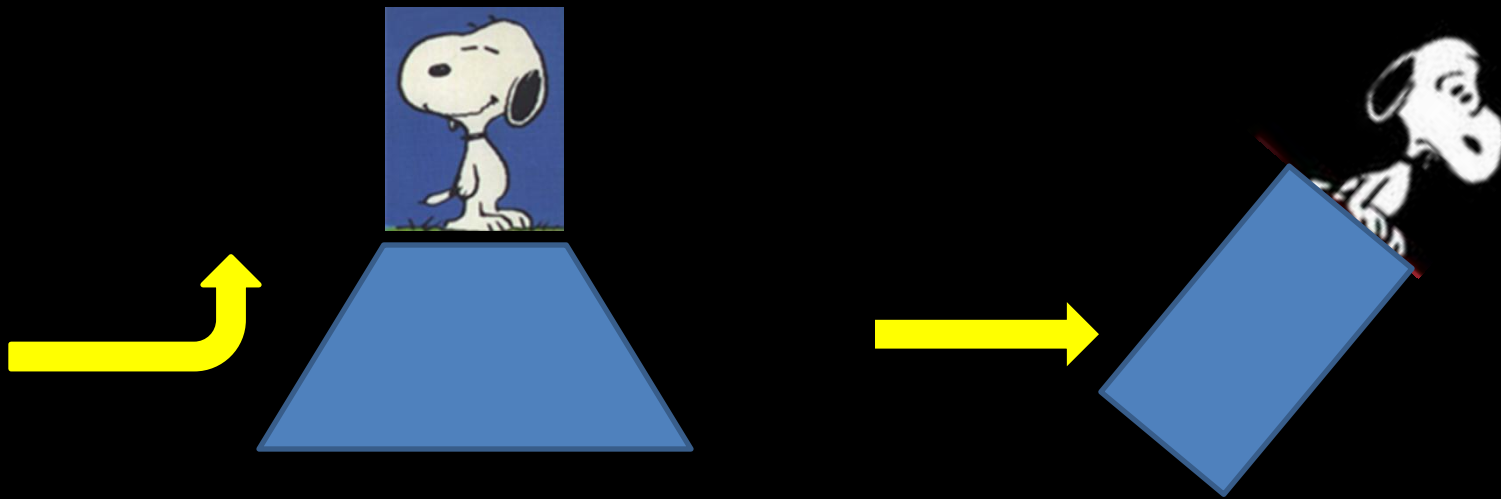
None built this way



Over 60,000 on
every continent
except Antarctica



Architecturally the trapezoid is
the best shape to resist lateral
forces



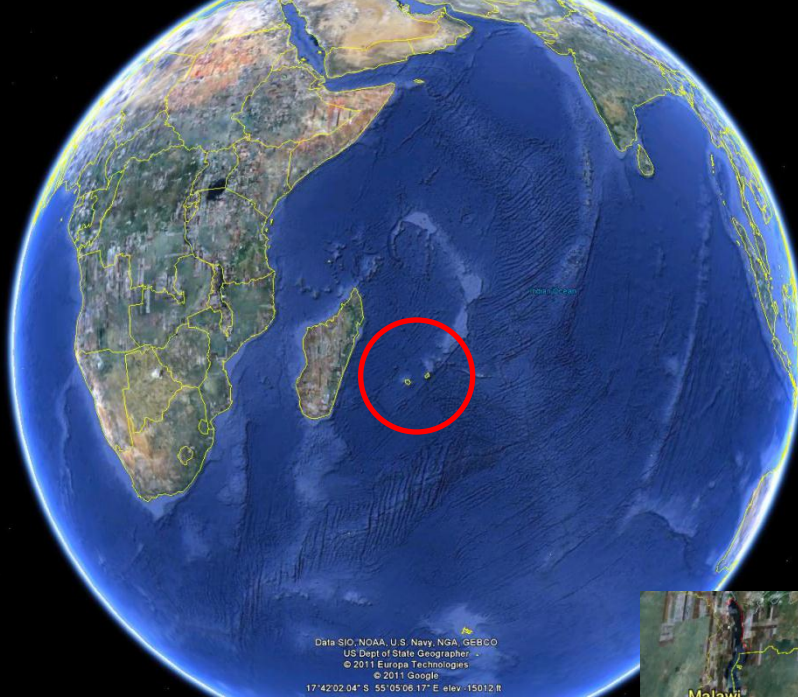
Like Tidal Waves



JF Althouse

Pyramids Off the Coast of Africa

Copyright 2011 May 28 JF Althouse



I learned about another pyramid cluster. This time off the coast of Africa.

It adds to why I think pyramids were built.



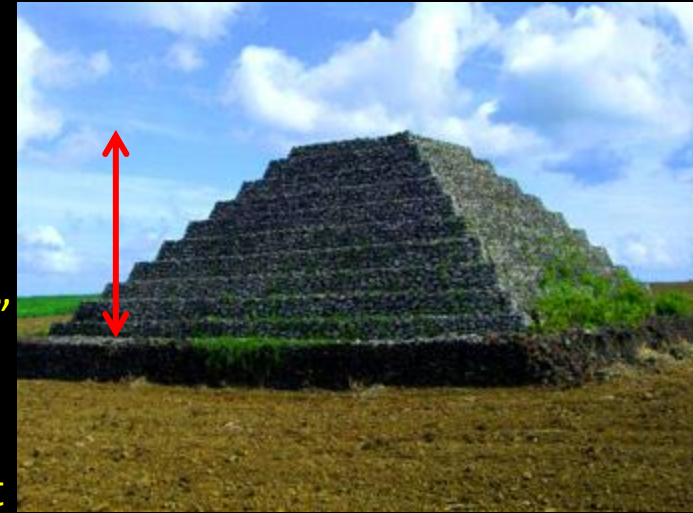
<http://www.gigalresearch.com/uk/pyramides-maurice.php>

Why would so many people build the same structure all over the world? Why are they always on flat plains? Why are they near shorelines?



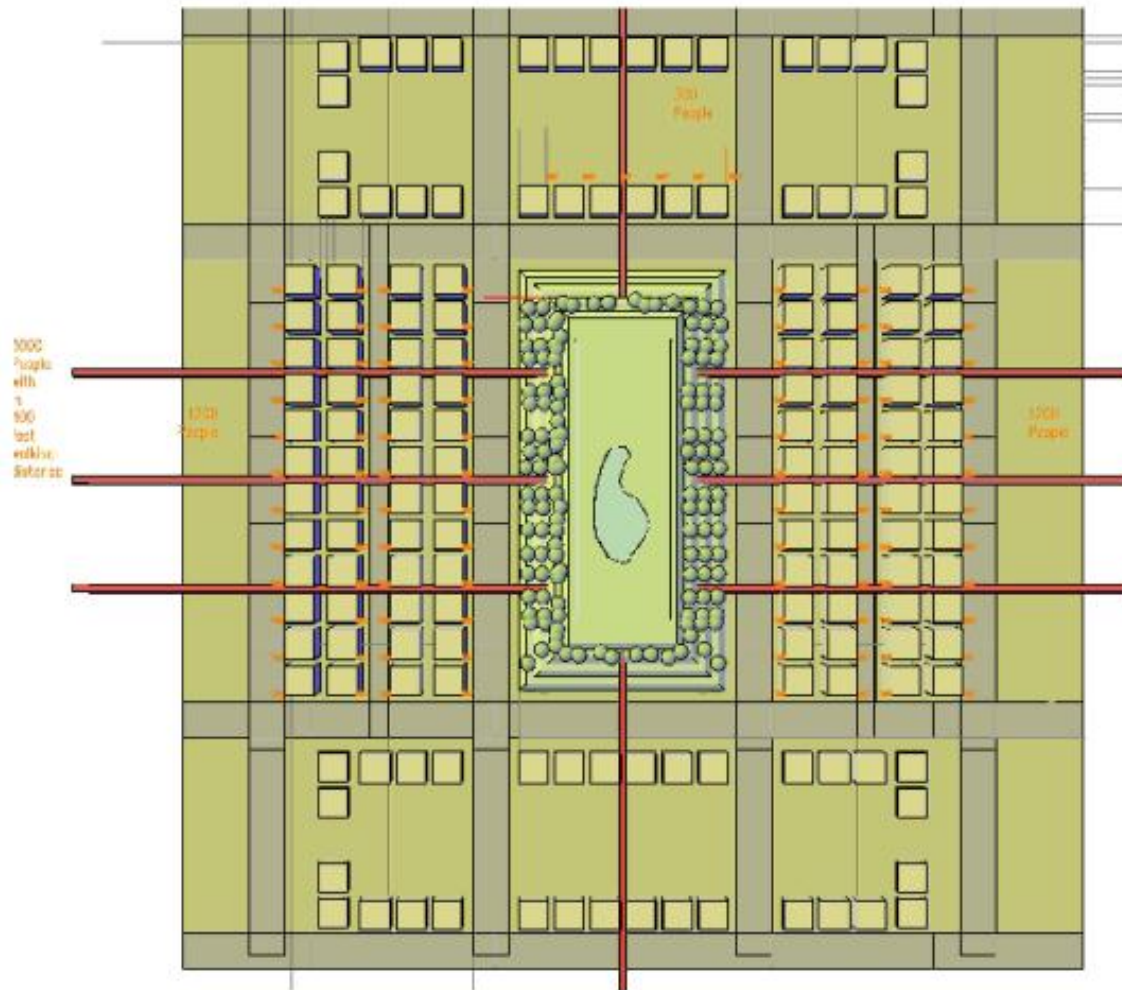
Typical Mauritius
Pyramid is less than 12
meters high or 39'-4 ½"

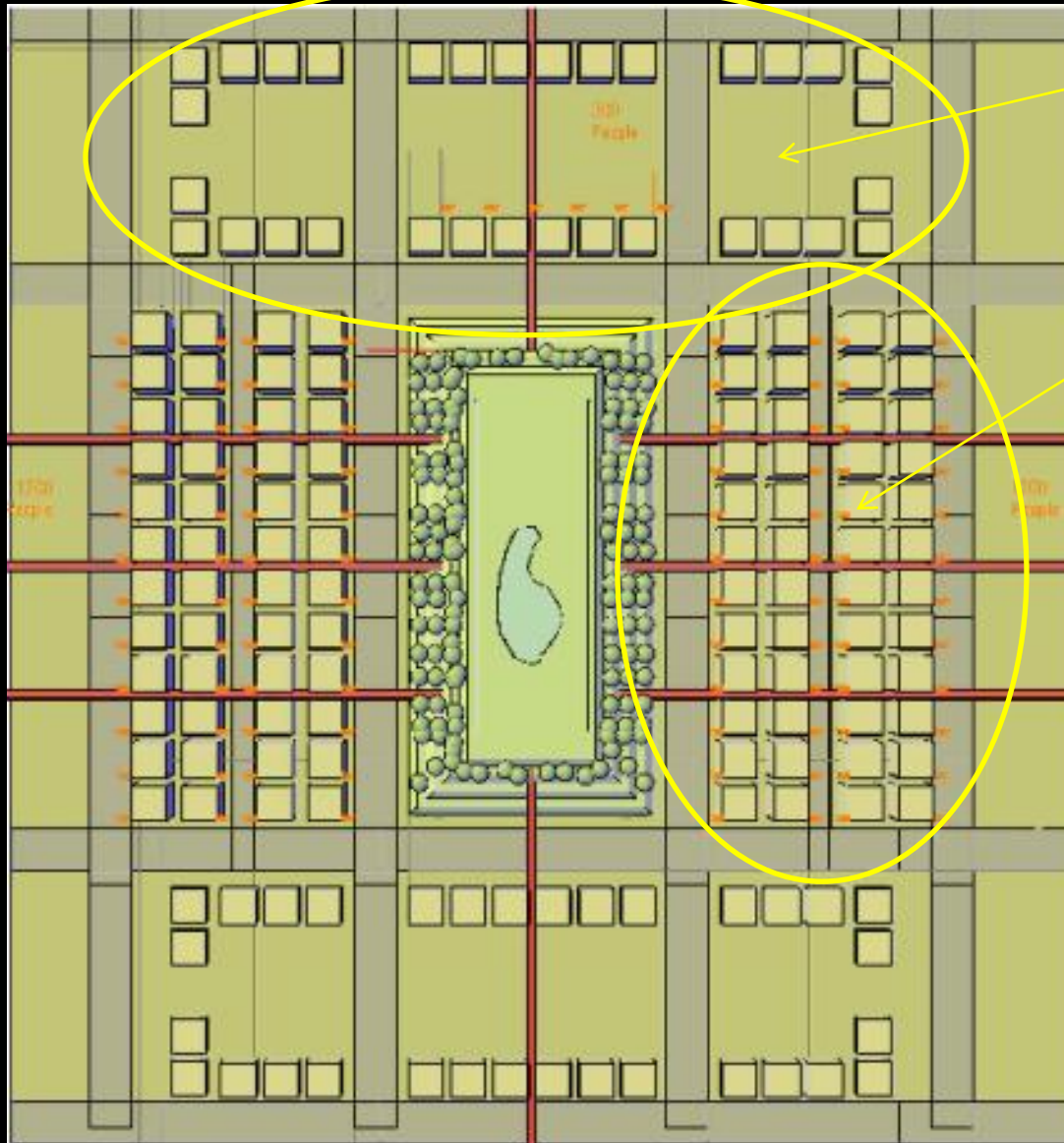
Coincidentally perfect
tidal wave proof height



Urban Tsunami Shelter

Copyright 2011 3 20 JFAlthouse





Single and Double Story
Homes 300 People

Five Story Apartment Blocks
1200 People

Park with Fresh Water
and Timber Elevated to
Wave Amplitude using
Rubble from previous
Disaster

Summit Plateau = 67,000
SF Sufficient to Shelter
3000 People @ 20 SF per
Person

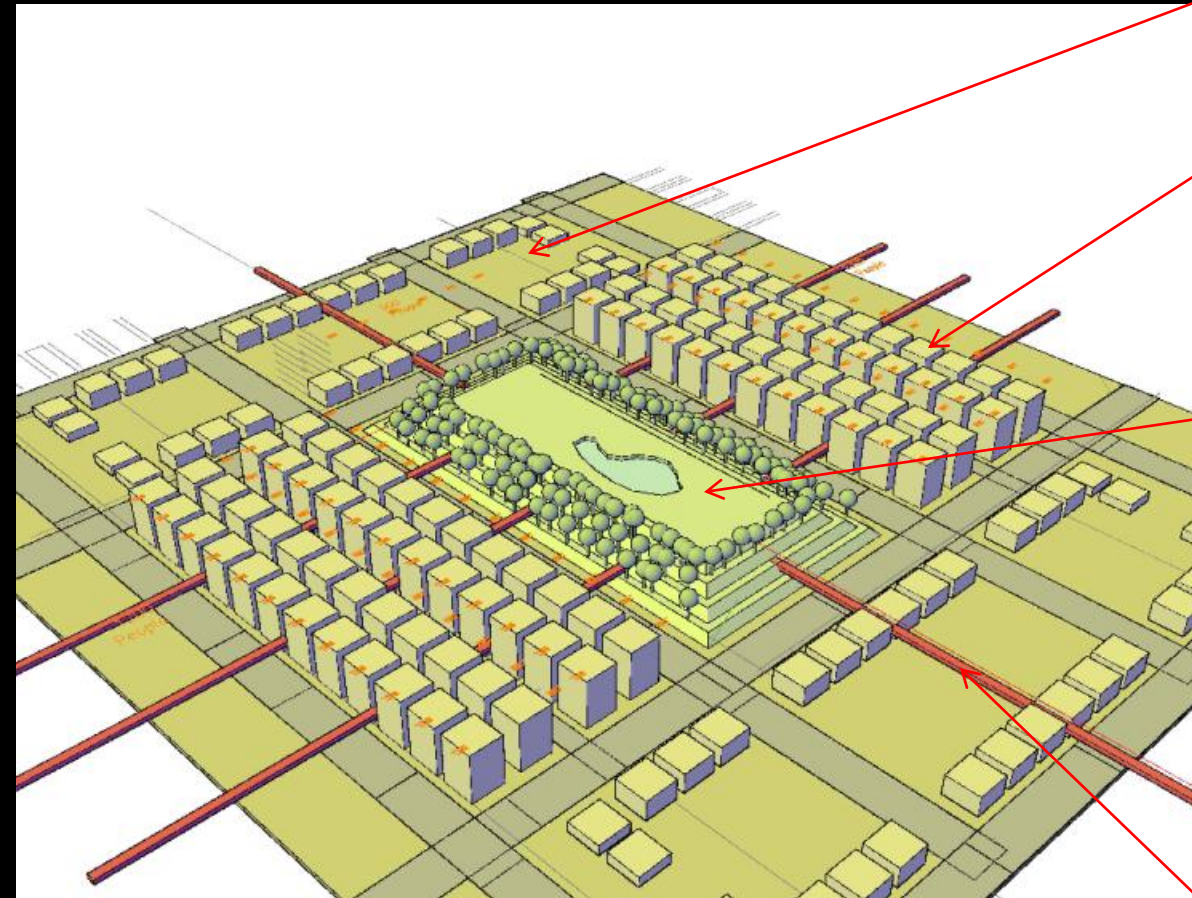
Single and Double Story
Homes 300 People

Five Story Apartment Blocks
1200 People

Park with Fresh Water
and Timber Elevated to
Wave Amplitude using
Rubble from previous
Disaster

Summit Plateau = 67,000
SF Sufficient to Shelter
3000 People @ 20 SF per
Person

Pedestrian Bridge



The Pyramid is a perfect shape to resist lateral forces. With large enough mass, they are also capable of resisting earthquake forces.



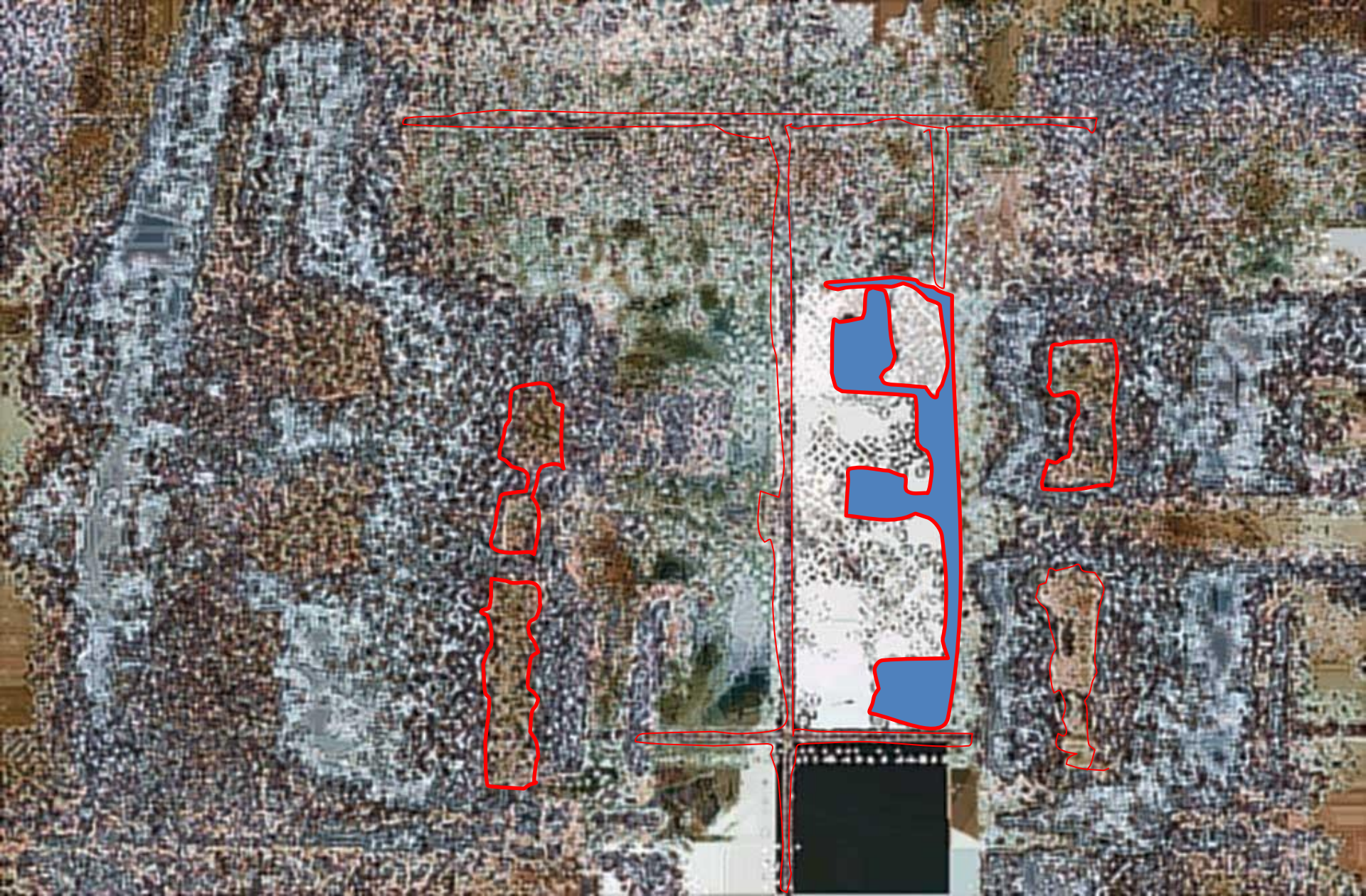
The Japan Tsunami waves were roughly 30 to 40 feet high, depending on landfall topography. How many people could have survived if pyramid shaped mounds had been built in their towns with wide steps for quick climbing?

<http://www.youtube.com/watch?v=rzqMljEPdd8>



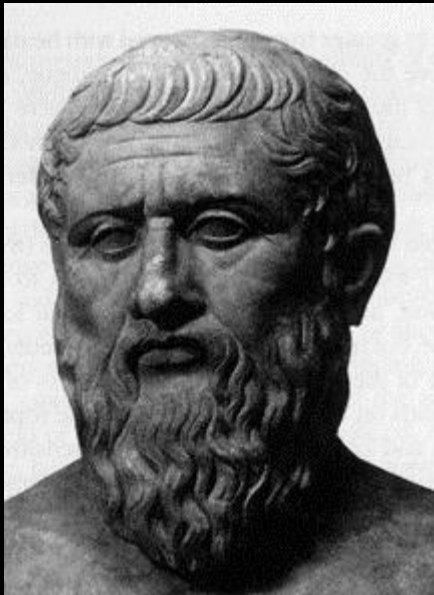
I sent this concept to an architecture firm in Sendai , Japan following the disaster. I have since learned the city planners are thinking along similar lines.

Did large disasters disrupt or destroy past civilizations?



Sonar Images 2100 feet below sea level off southwest coast of cuba

“...after the usual interval, the stream from heaven, like a pestilence, comes pouring down, and leaves only those of you who are destitute of letters and education; and so you have to begin all over again like children, and know nothing of what happened in ancient times...”

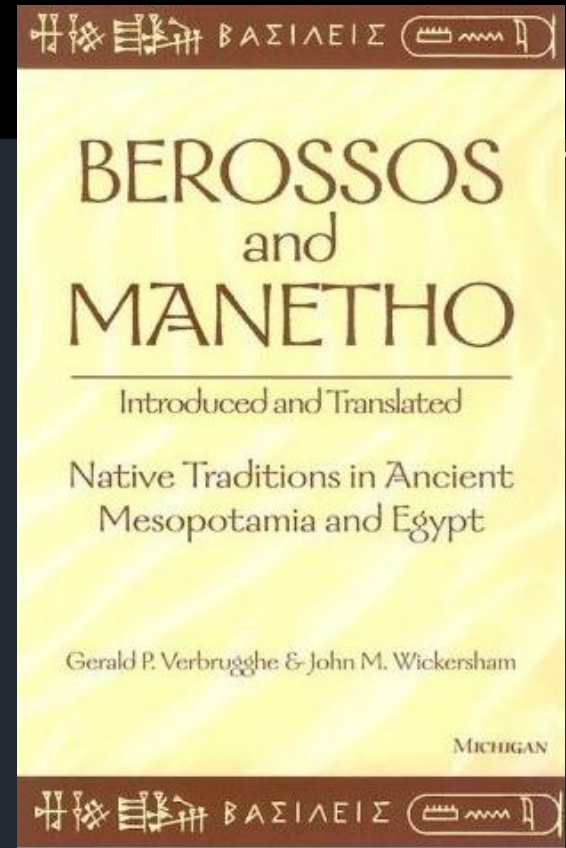
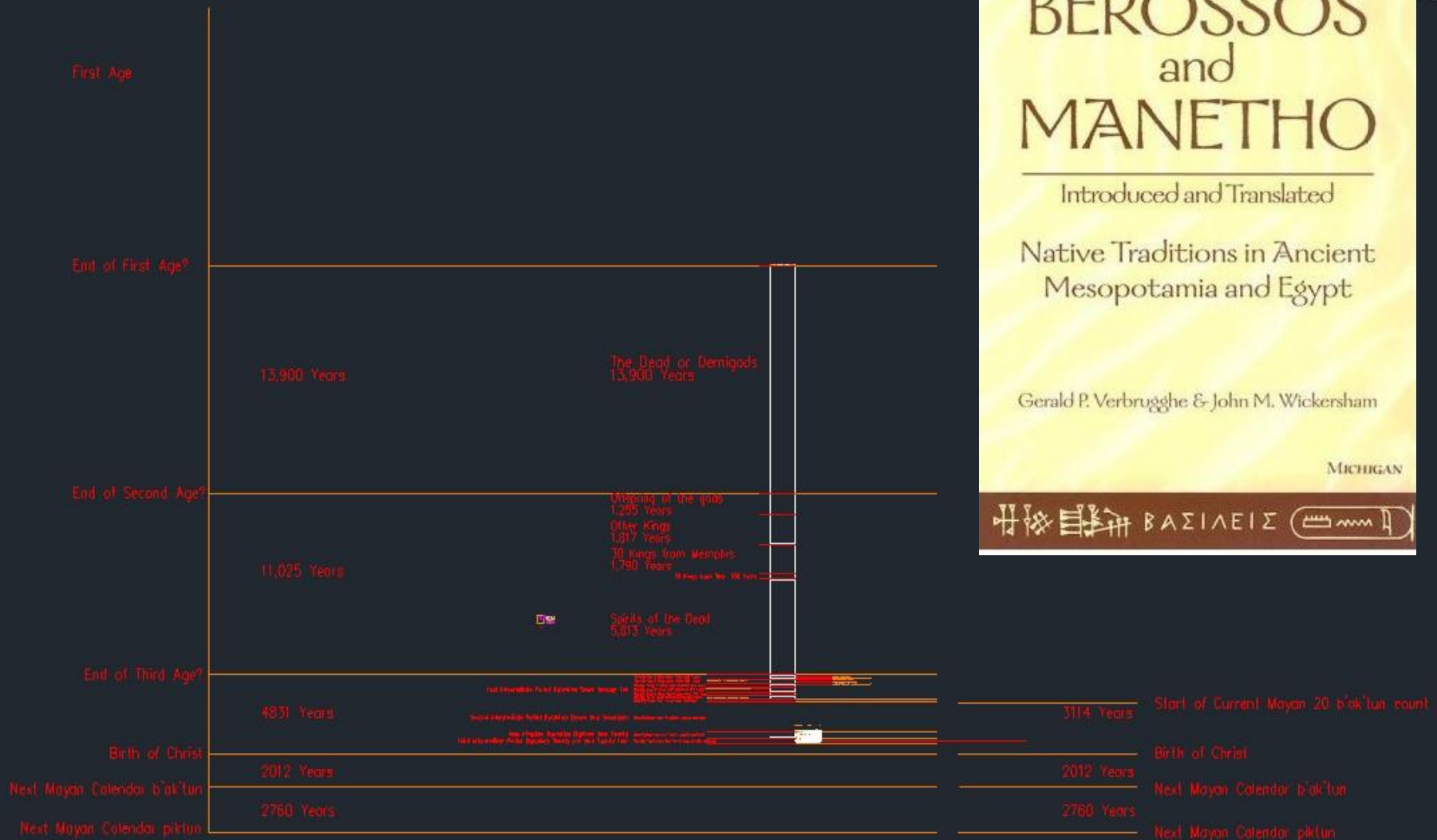


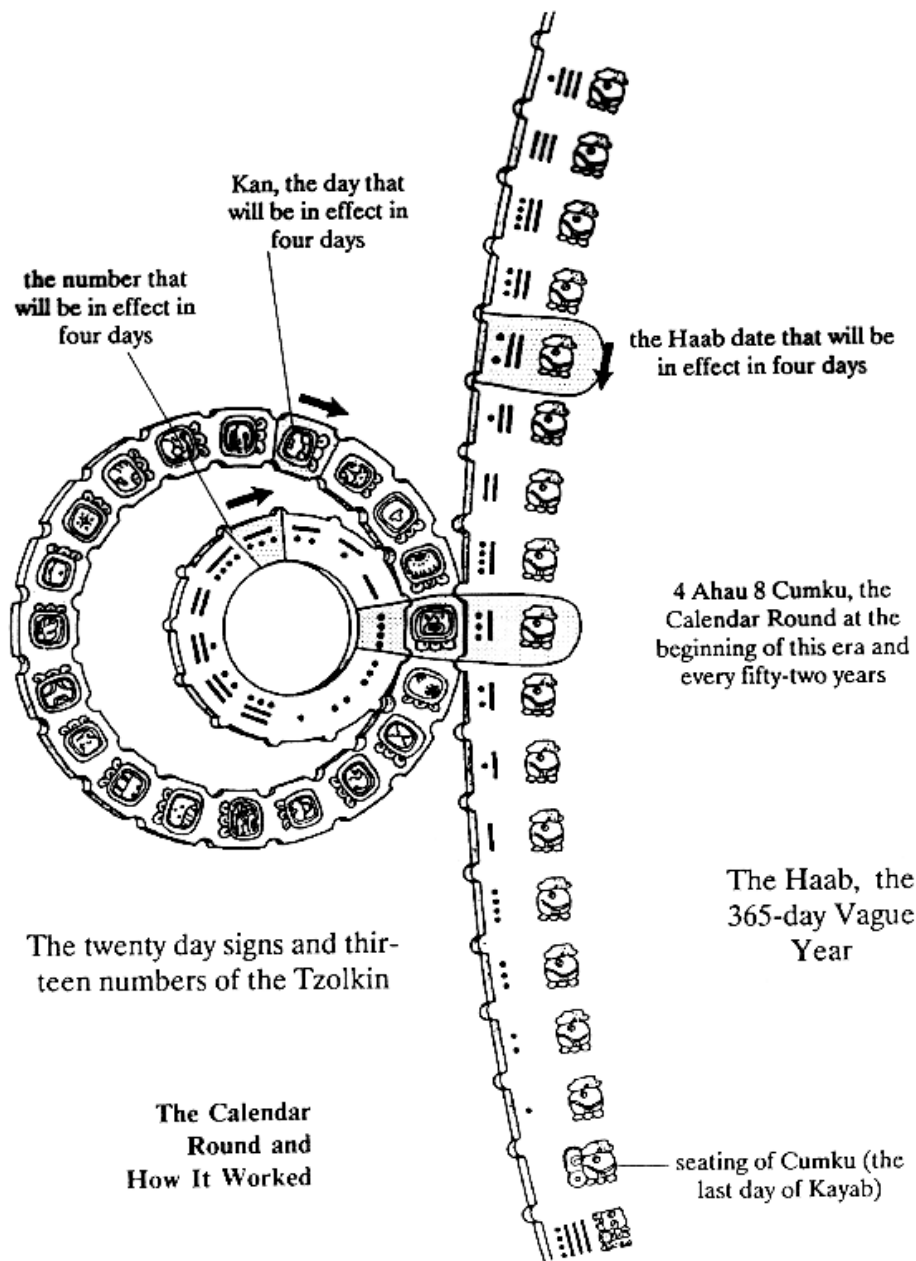
Timaeus

By Plato

Written 360 B.C.E

Translated by Benjamin Jowett





Mayan Calendar has had a rough life.

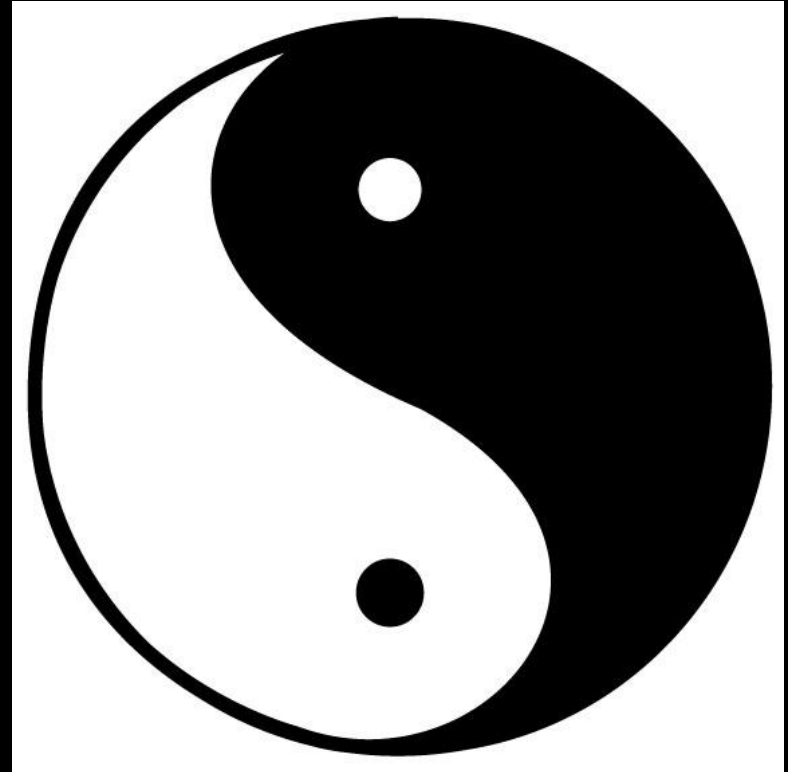
Started out as a 260 day calendar.

Year changed length thanks to Feathered Serpent striking the Earth and causing massive flood.

Adjusted the calendar to 360 days.

Feathered Serpent struck Earth causing massive shaking of the Earth.

Adjusted the calendar to 365 day vague year.





Palenque Mexico



Palenque Mexico

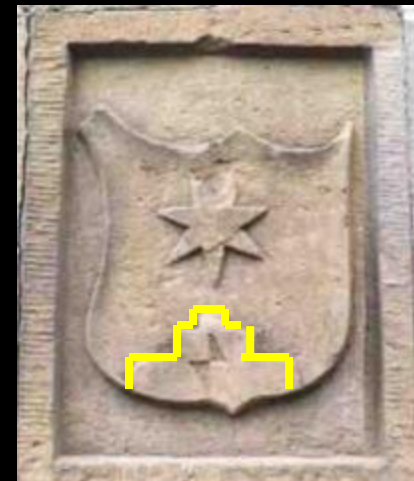


Palenque Mexico

The Mayan King Pacal lived in Palenque. This was a highly esteemed city of Astronomy to the Mayans. They like many called Earth the “seventh planet”. They counted from the outside of the solar system inward. How did they know about Pluto , Neptune and Uranus?



- 600 AD Palenque abandoned
- 1567 Spanish discover the ruins
- 1608 Dutch eyeglass maker, Hans Lippershey invents early telescope. For some reason a lot of other Europeans were working on the same concept. It is not clear exactly which European actually invented the telescope.



1496 crest of the Sternenfels noble family:
7 pointed star over step pyramid

Sternenfels Step Pyramid

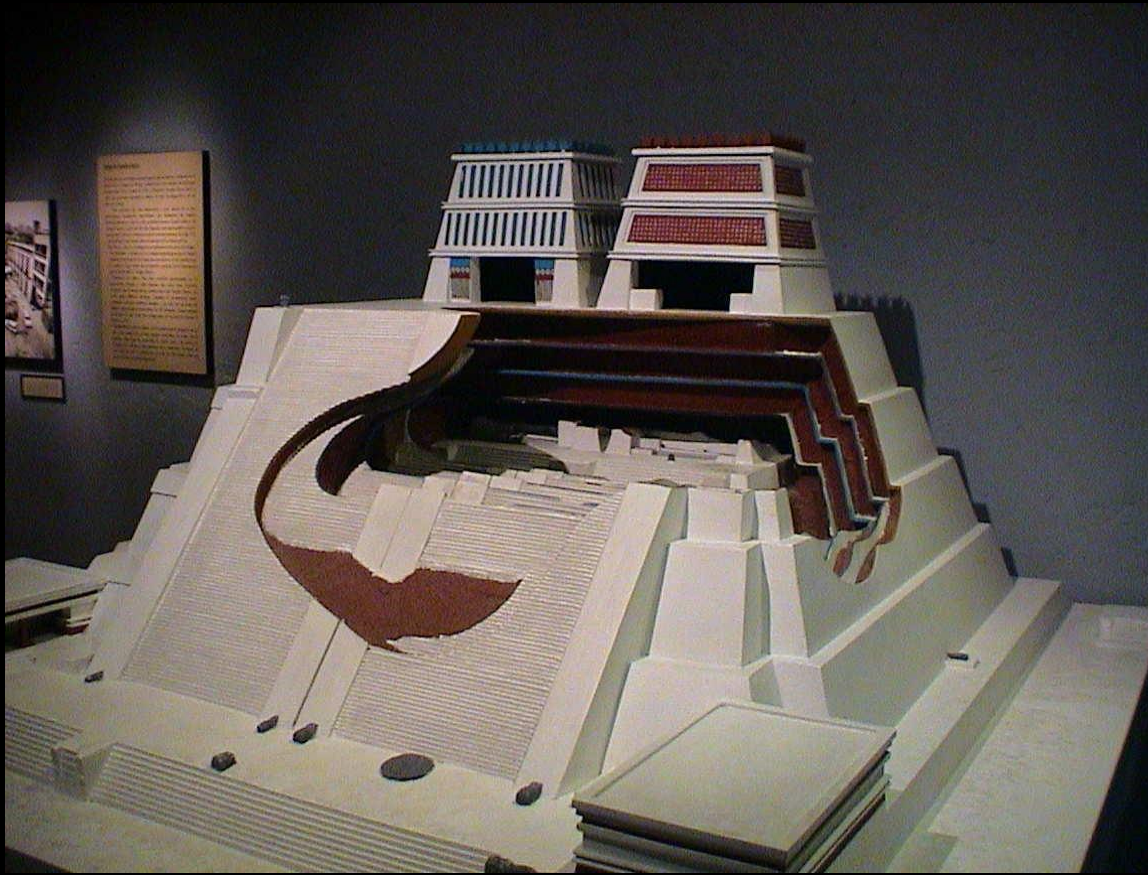
Germany

Some have strange carvings on them



Magician's Pyramid, Uxmal, Mexico
Meaning "Built Three times."

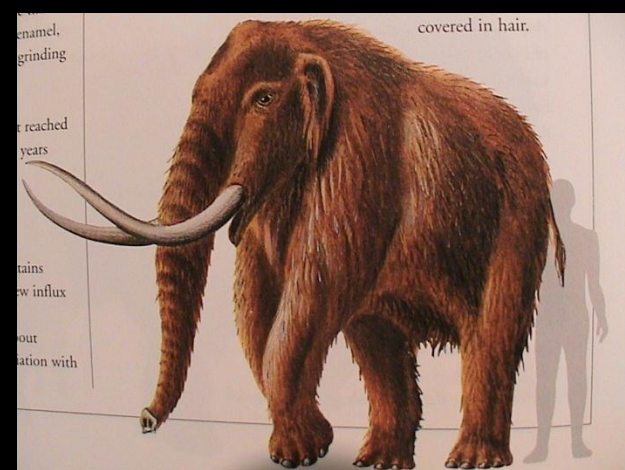
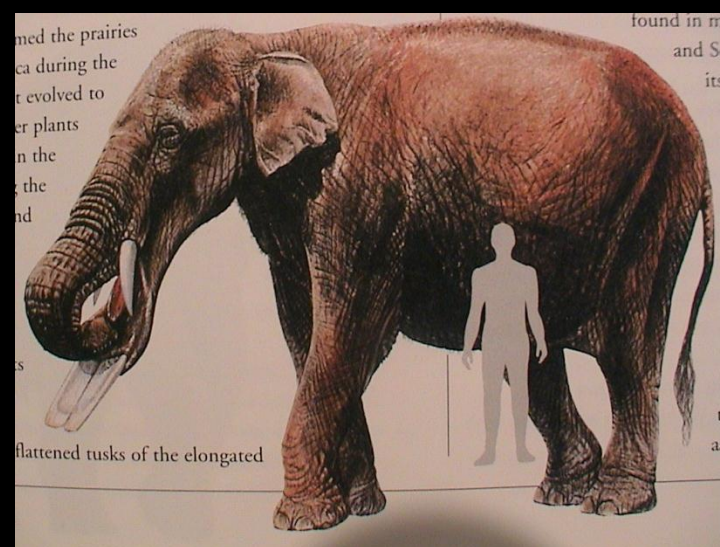
Mayan Elephant Trunk Carving
Elephants went extinct in America
around 11,000 BC



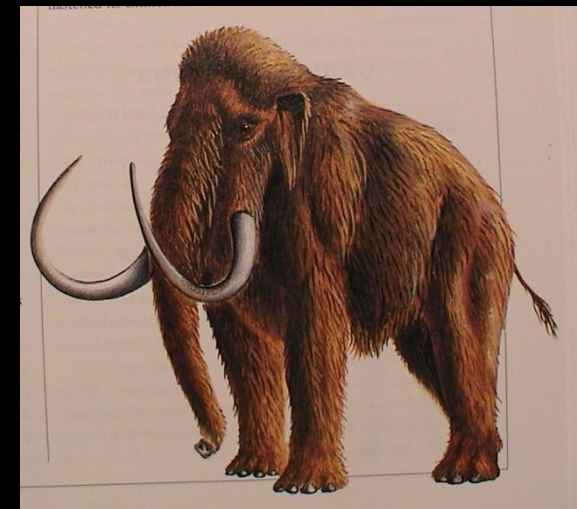
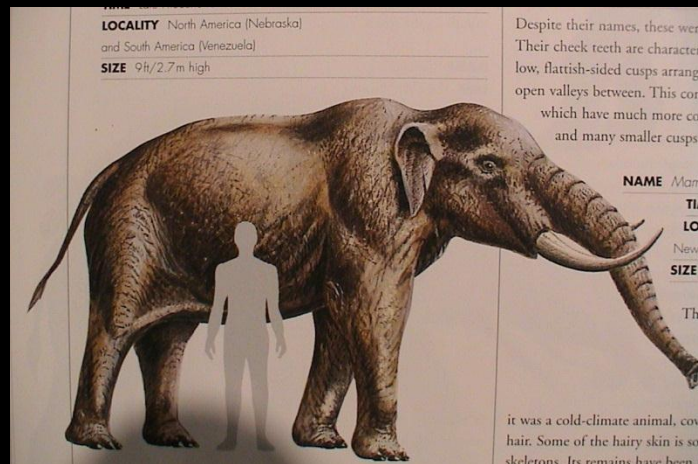
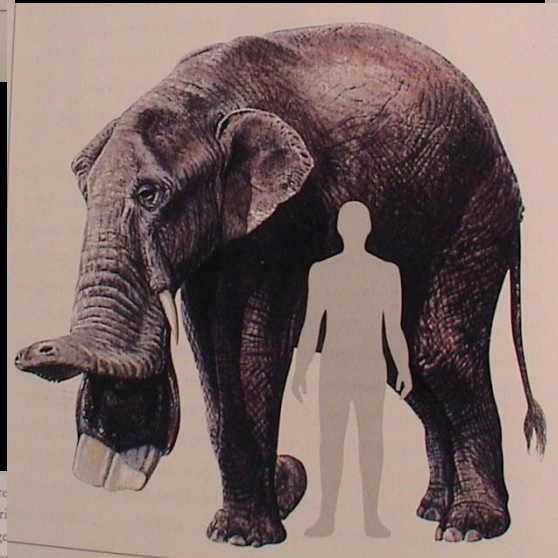
Example of a pyramid at Teotihuacán
with multiple stages of construction and reconstruction
Zona Archeologica Del Templo Mayor, Mexico City, Mexico

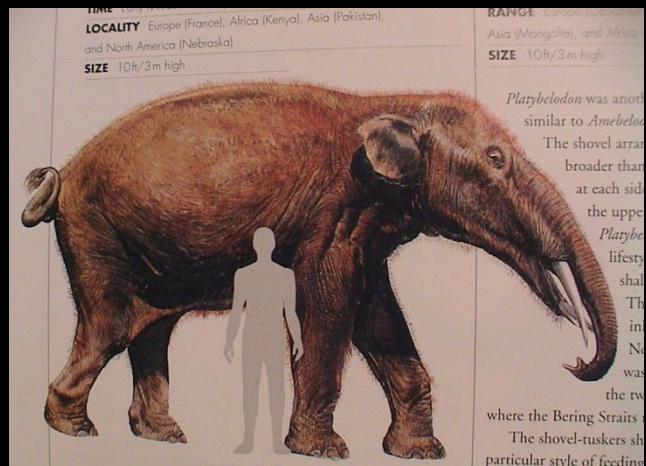
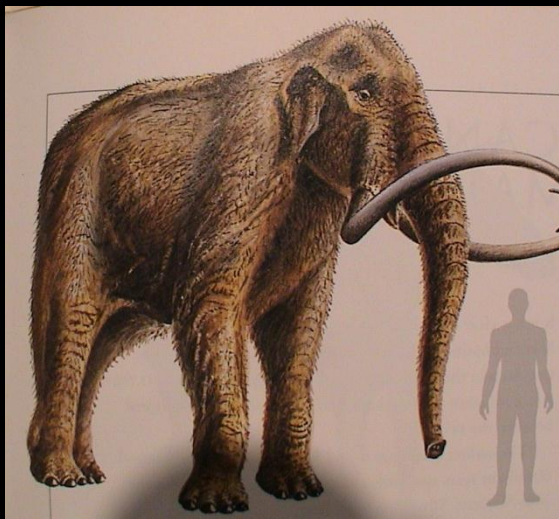
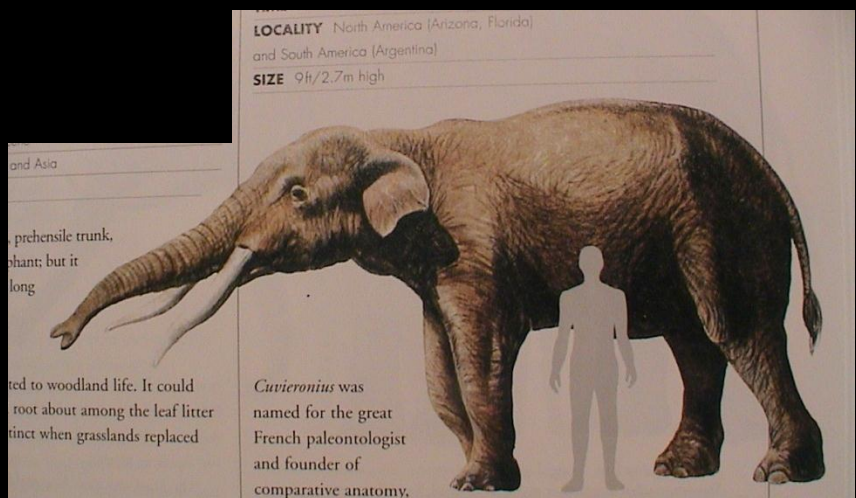
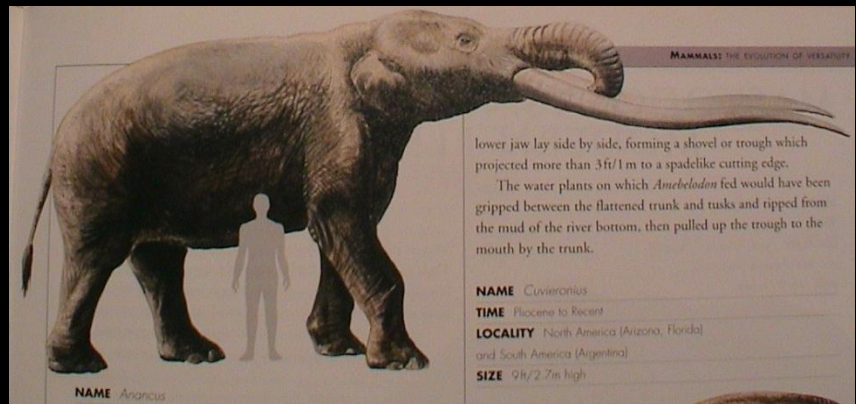
A lot of animals died in North and South America around 13,000 BC; including many species of elephant

Artodus—giant short-faced bears
Bootherium—extinct bovid
Boreostracon—glyptodon
Bos—yak
Brachyostracon—glyptodon
Camelops—extinct camels
Castorides—giant beaver
Cervalces—extinct moose
Chlamytherium—giant armadillos
Cuvieronius—extinct mastodons
Dinobastis—saber-toothed cat
Equus—horses
Eremotherium—giant ground sloth
Euceratherium—shrub oxen
Glyptodon—an armadillo-like creature
Glyptotherium—glyptodons
Hayoceros—extinct pronghorn
Hydrocherus—capybaras sloths
Mammut—American mastodons
Mammuthus—mammoths
Megalonyx—ground sloths
Mylohyus—woodland peccaries
Neochoceros—extinct capybara
Nothrotherium—small ground sloths
Paramylodon—ground sloths
Platyrrhinus—extinct bovid
Platygonus—extinct peccary

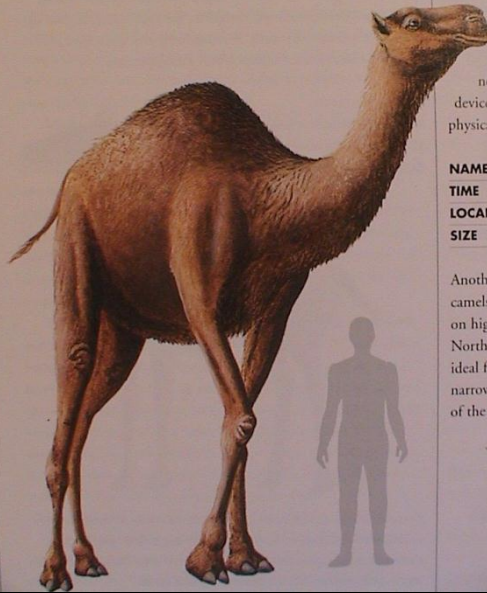


My personal favorite:





LOCALITY North America (Nebraska)
SIZE 11 ft 6 in / 3.5 m high at the shoulder



Certainly through the channels

ne device physically

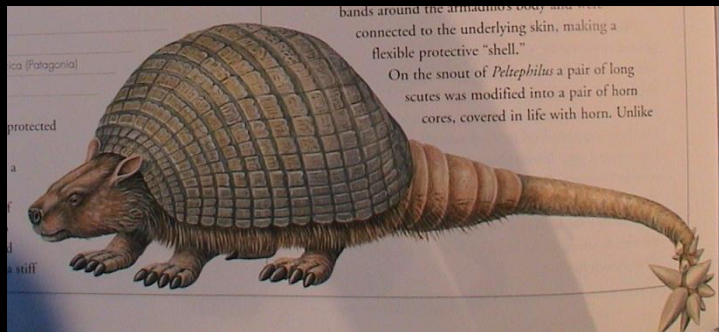
NAME
TIME
LOCAL
SIZE

Another camels on high North ideal for narrow of the

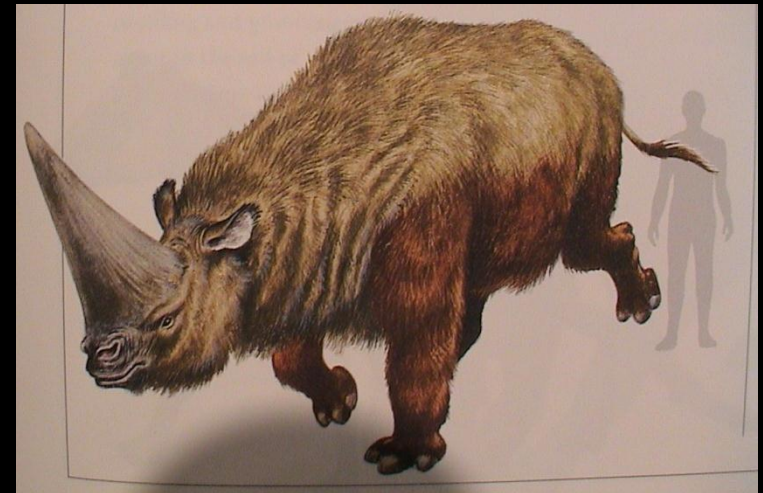
such as 3 tons/3 tonnes. Its head was deep
 jaws were equipped
 or grinding up
 the few
 cheek

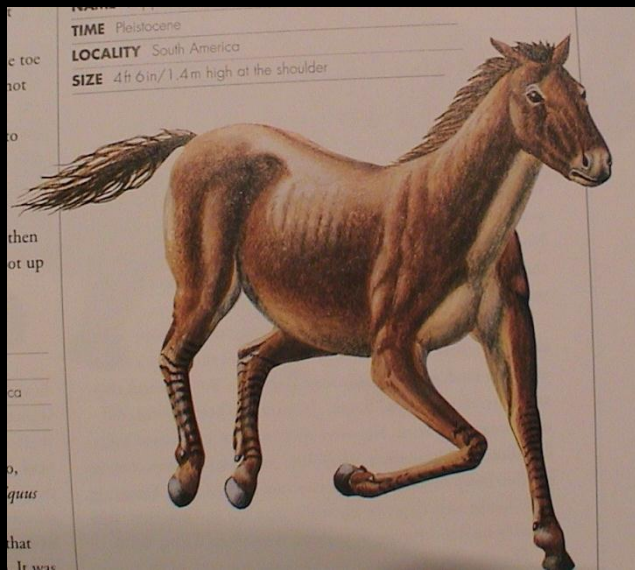


in its sturdy
 in its thick tail. (Such
 reminiscent of the
 saurs, such as
 1). In this position,
 crouse near the
 n branches with its



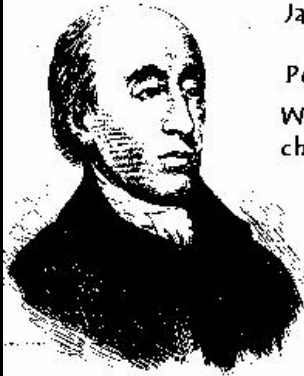
bands around the armadillo's body and were
 connected to the underlying skin, making a
 flexible protective "shell."
 On the snout of *Peltephilus* a pair of long
 scutes was modified into a pair of horn
 cores, covered in life with horn. Unlike





“It is impossible to reflect on the changed state of the American continent without the deepest astonishment. Formerly, it must have swarmed with great monsters: now we find mere pigmies... The greatest number, if not all, of the extinct quadrupeds lived at a late period... what then, has exterminated so many species and whole genera? The mind at first is irresistibly hurried into the belief of some great catastrophe; but thus to destroy animals, both large and small, in Southern Patagonia, in Brazil, on the Cordillera of Peru, in North America up to the Behring's Straits, we must shake the entire framework of the globe. It could hardly have been a change of temperature which at the same time destroyed the inhabitants of tropical, temperate, and Arctic latitudes on both sides of the globe... Certainly, no fact in the long history of the world is so startling as the wide and repeated exterminations of its inhabitants.”

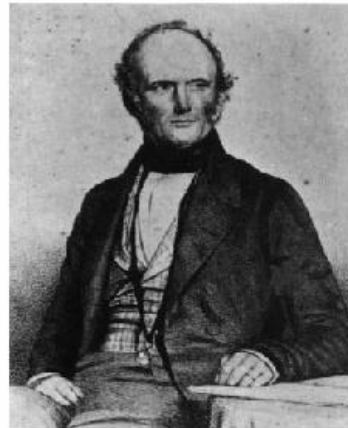
The Fathers of Gradualism



James Hutton 1795

Published THEORY OF THE EARTH

Walked around Scotland, didn't see anything changing. Pronounced the Earth stable.



Charles Lyell 1830

Published PRINCIPLES OF GEOLOGY

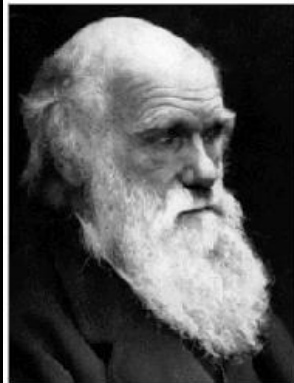
first to say "millions and millions of years between geologic periods"

Said the last ice age started in 1,000,000 BC.

End of discussion.

(Oops, Forgot about the erosion rate of Niagara Falls.

Quietly changed his firm date to 36,000 BC)



Charles Darwin 1859

Published ORIGIN OF THE SPECIES

Took a field trip with Lyell on the HMS Beagle

Saw the debris fields in Alaska full of sabertooths

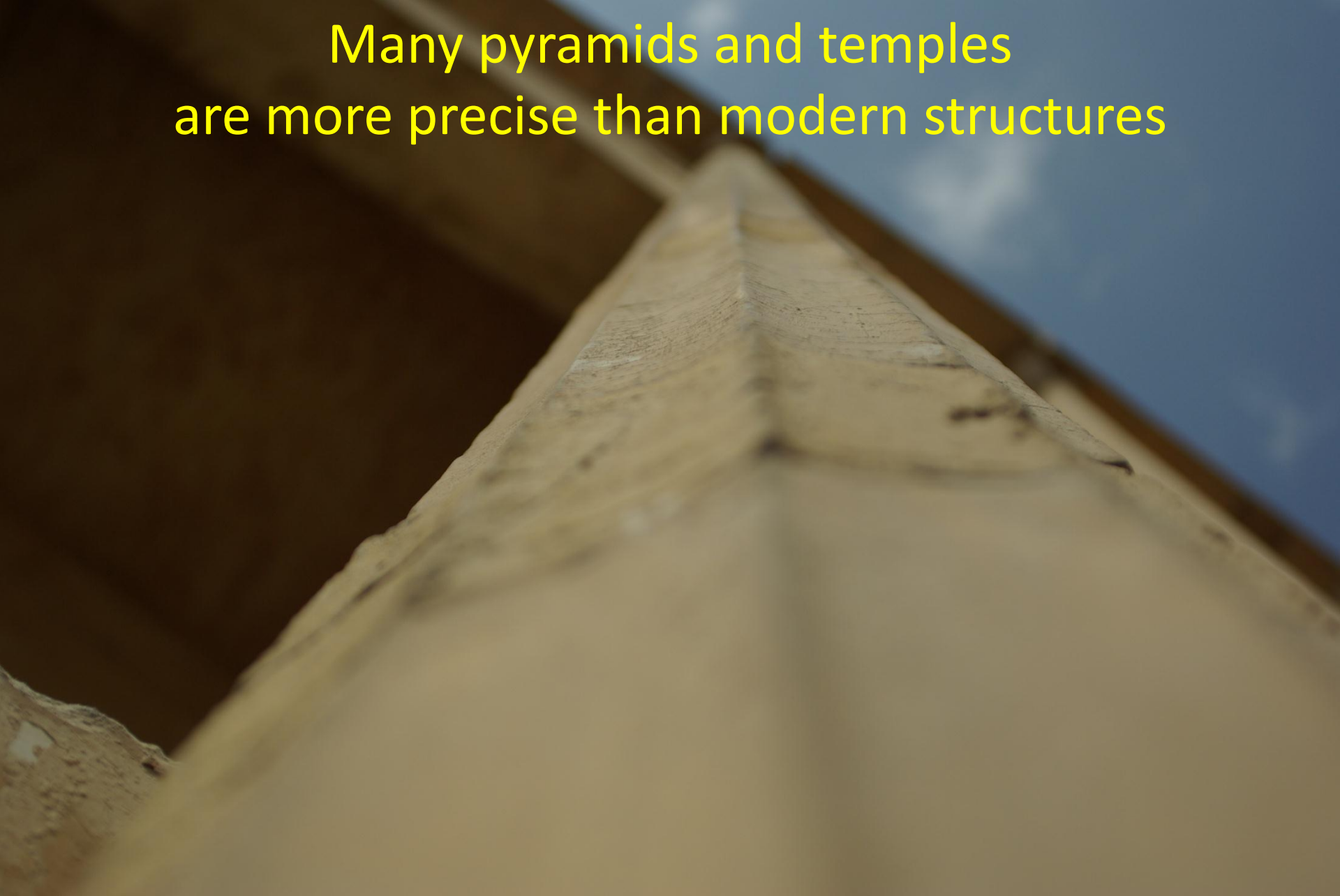
and mammoths. Believed in catastrophism.

Gave speeches on it. Nobody interested.

Lyell talked him into Slow Earth. Gave speeches on

Natural Selection. Industrialists loved it. Got rich.

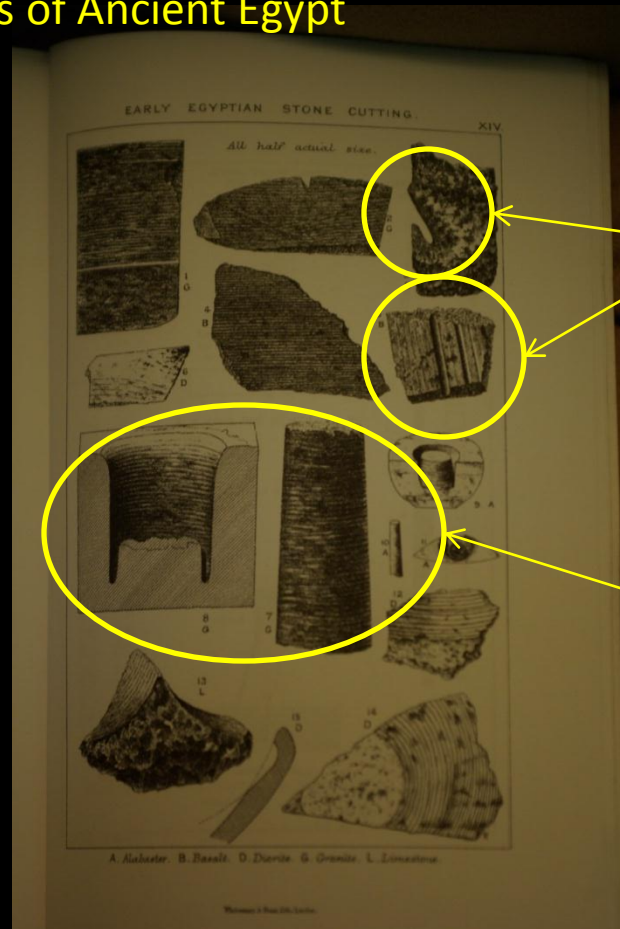
Many pyramids and temples
are more precise than modern structures



Rock Samples from W.M. Flinders Petrie 's 1880 -1882 Expedition to Gizeh, Egypt.

Commentary on methods of cutting and drilling from Christopher Dunn, The Giza Power Plant- Technologies of Ancient Egypt

“On the N. end [of the coffer] is a place...where The saw runs too deep Into the granite, and was Backed out again by the Masons; but a fresh start they made was still too Deep, and two inches lower they backed out a Second time, having cut out more than .10 inch Deeper than they intended.” Petrie 1883

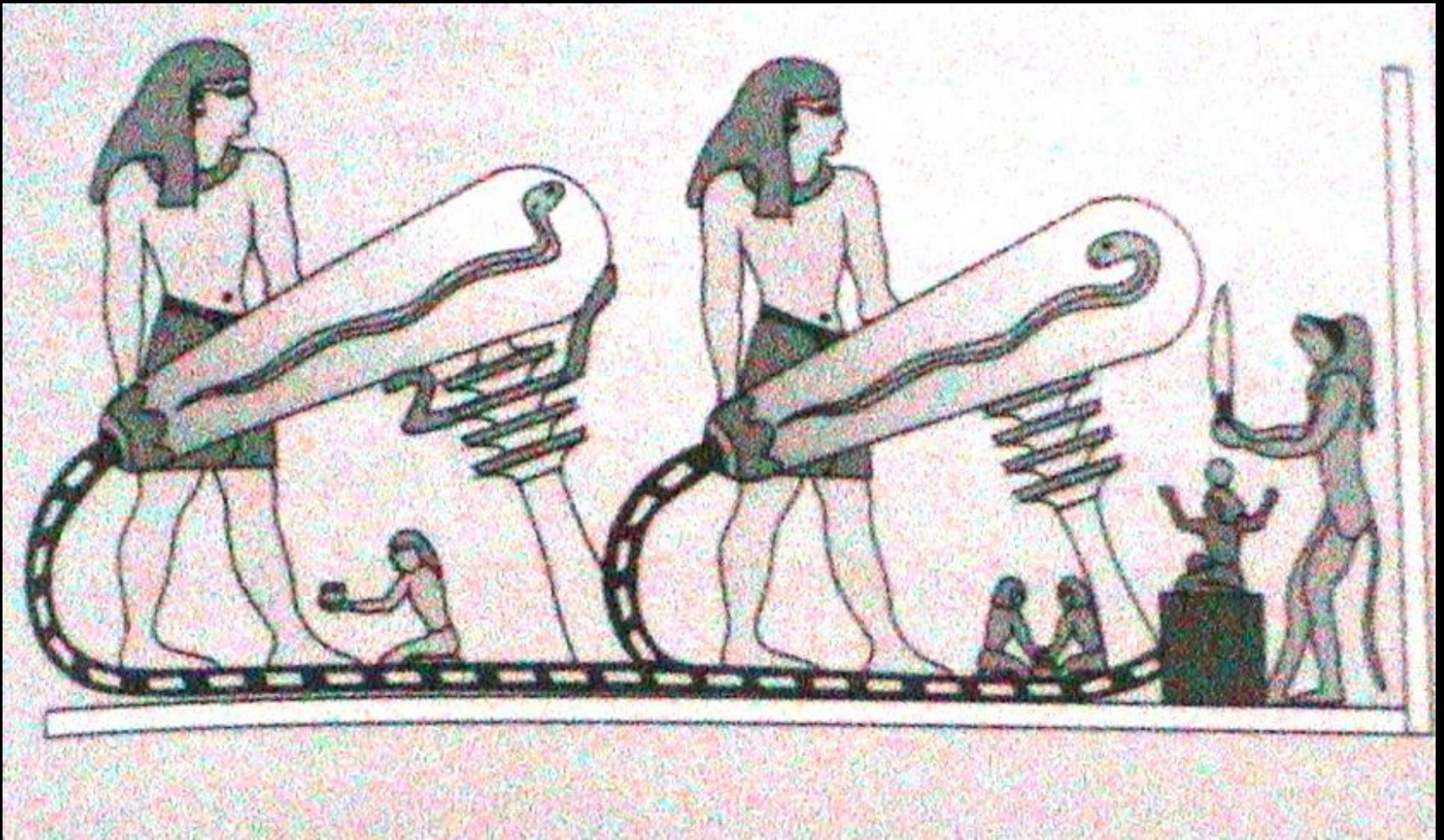


Wire cut double wheel saw marks in granite.

Diamond drills 900 revolutions per minute.

This was drilled at a rate 500 times faster. Eric Leither Tru-Stone Corp. Dunn 1998

“For those who may still believe in the ‘official’ chronology of the historical development of metals, identifying copper as the metal the ancient Egyptians used for cutting granite is like saying that aluminum could be cut using a chisel fashioned out of butter.” Dunn 1998



Wall Carving at Dendera, Egypt
Note small god far right holding up implement causing
snake's head to turn inside the tube. Could this be some
kind of experiment with electricity?





Could the cobra and the falcon heads on the pharaoh's headpiece symbolize his connection to science?

Could the falcon symbolize his power to rebuild the world after the fall of the feathered serpent?

Could the cobra represent some form of electrical power that he harnessed to achieve that great mission?

The cobra is powerful. His bite is swift, painful, and deadly.

Electricity has the same qualities.

Some have masonry joints that are half the thickness of
a credit card, less than 1/16"
(I checked with my Mac Card)



Modern masonry joints
Are typically 1/4"

The Joints are Filled with Mortar
using an unknown formula.

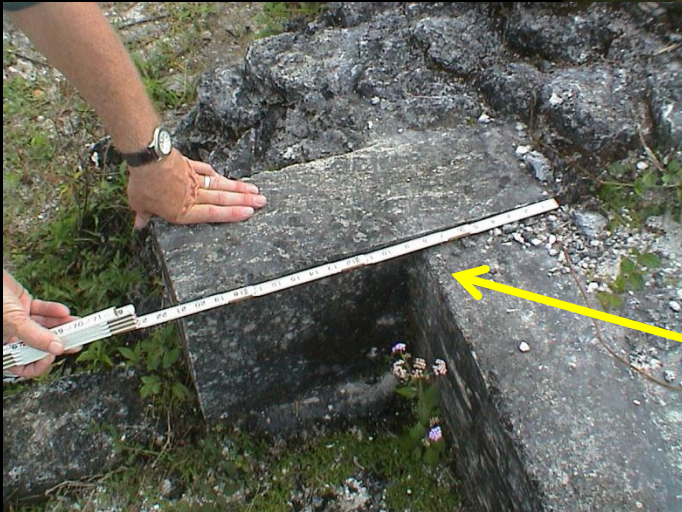
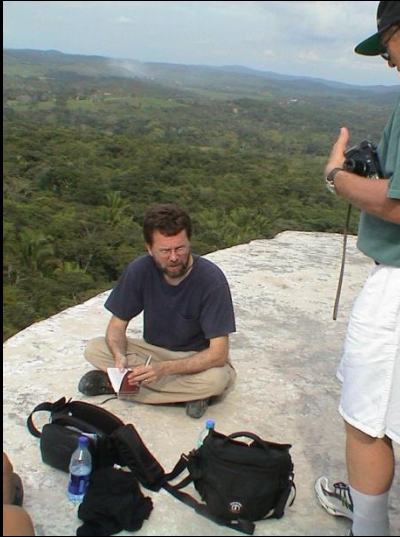


Portland Cement was “invented” In 1824 by
Joseph Aspdin. It lasts about fifty years.
Their mortar lasts *thousands* of years.

Temple of Hatshepsut

Egypt

This unknown mortar formula was used on both sides of the Atlantic in many ancient cultures.



These stones were recently exposed and had not yet eroded to weather. The mortared joints are rock hard and practically invisible.

Xunantunich

Belize

Why I think there was a massive tilting
of the earth around 13,000 BC



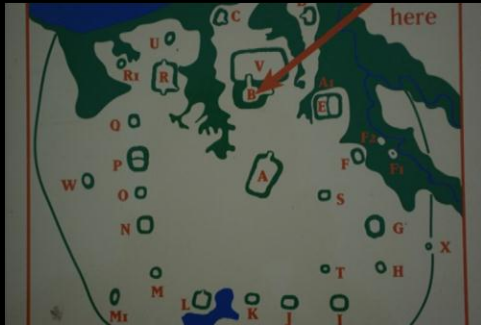
of
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they held political and religious control over a population of about 10,000 people over a 60 mile stretch up and down the Black Warrior River Valley from Tuscaloosa to Demopolis. We invite you to explore the wonder and mystery of this vanished civilization.

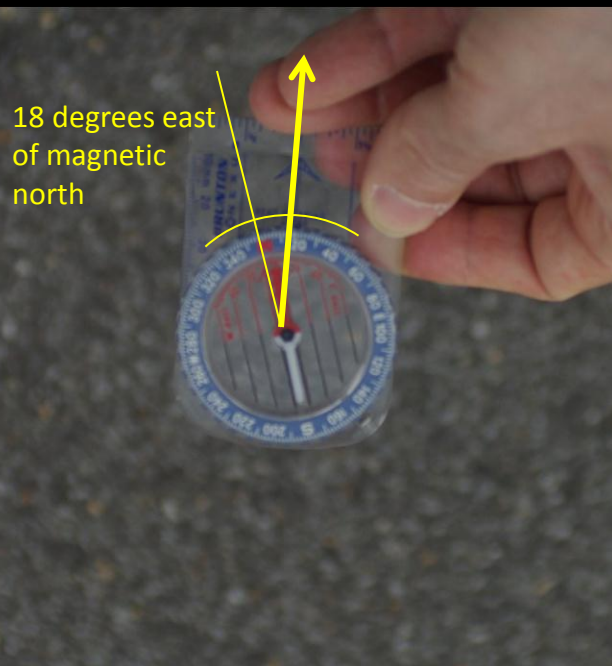


Moundville: from the river





Central Mound
Moundville Alabama











Fireplace
Grain is highly flammable.
No sane farmer would
Build a windmill to grind
Grain and put a fireplace in it.

Newport Tower, Newport, Rhode Island
Possible Celtic church from 1000 AD

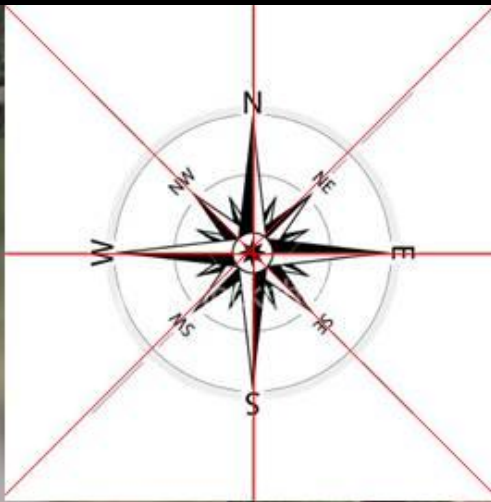


Newport Tower, Newport, Rhode Island
Predates settlement of colony



Circular Temple of Lanleff , Brittany, France
Circa 1000 AD



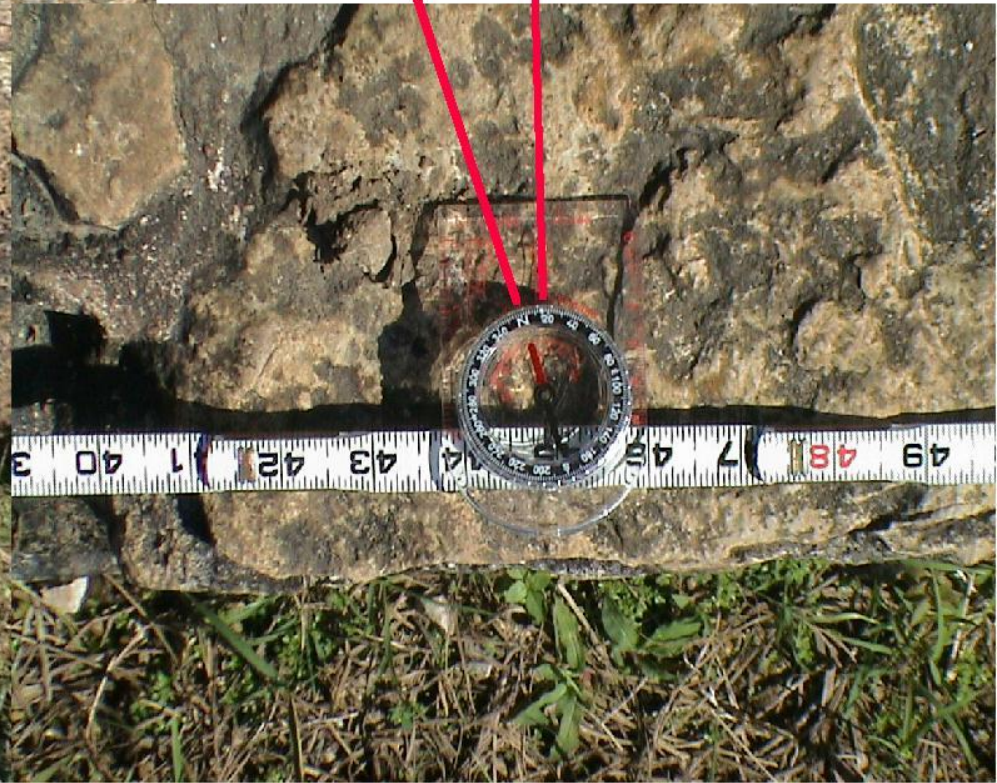


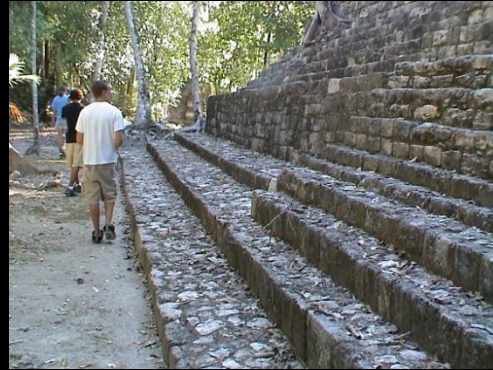
Palenque, Mexico



Magnetic
North

17 Degrees
East of Mag
North





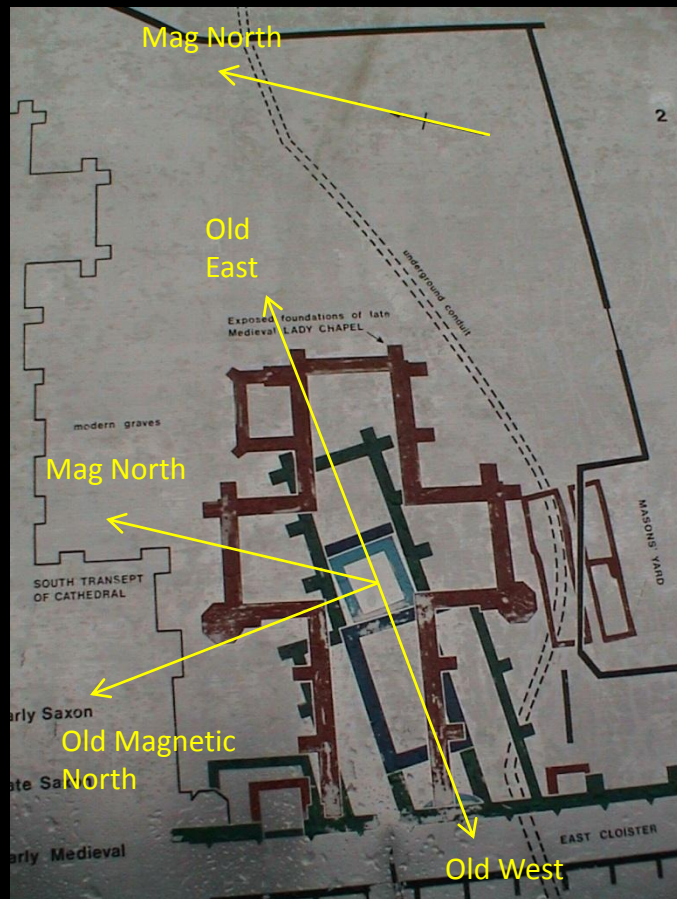
Balanku, Mexico

18 degrees east
of magnetic
north





Wells , England



Wells , England



Bath, England



Bath , England



Roman Brickwork



Older Celtic Stonework

Roman City built over Prehistoric Settlement



Older Celtic Stonework
Interlocking and able to resist Seismic forces



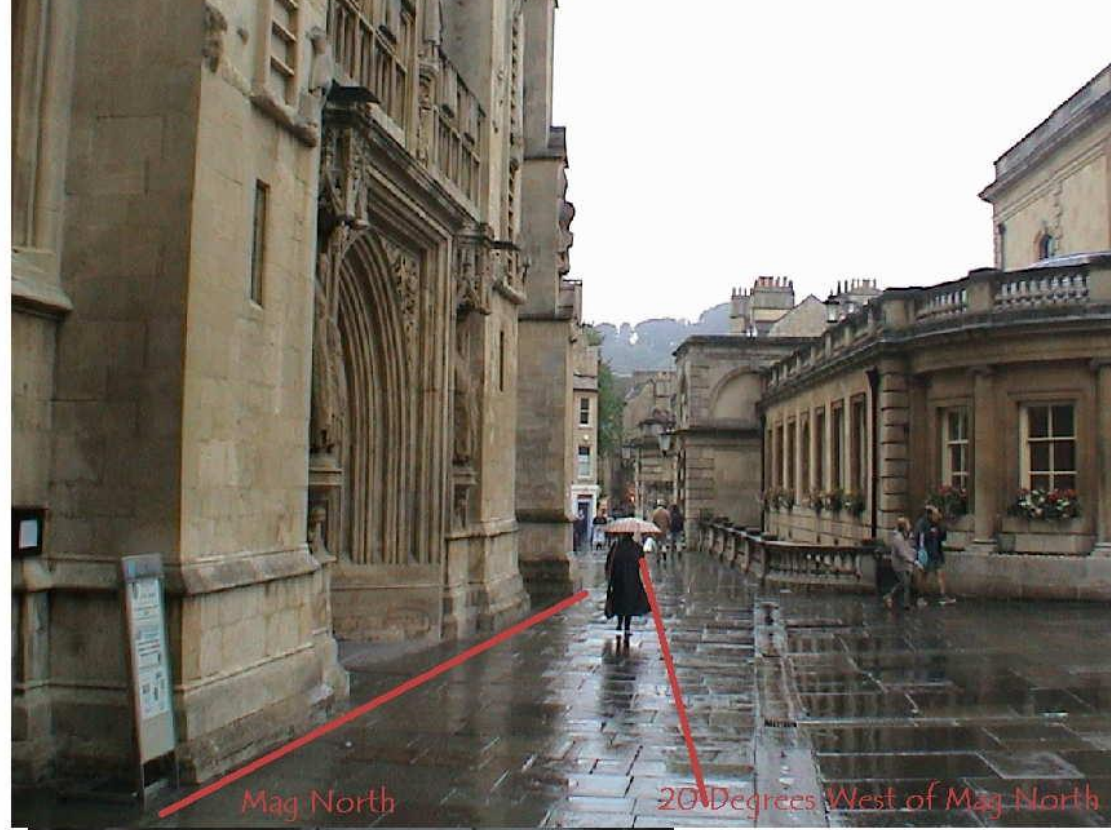
20 Degrees West of Mag. North

Roman Bath Compass Orientation



Parallel to Mag North

Cathedral Compass Orientation



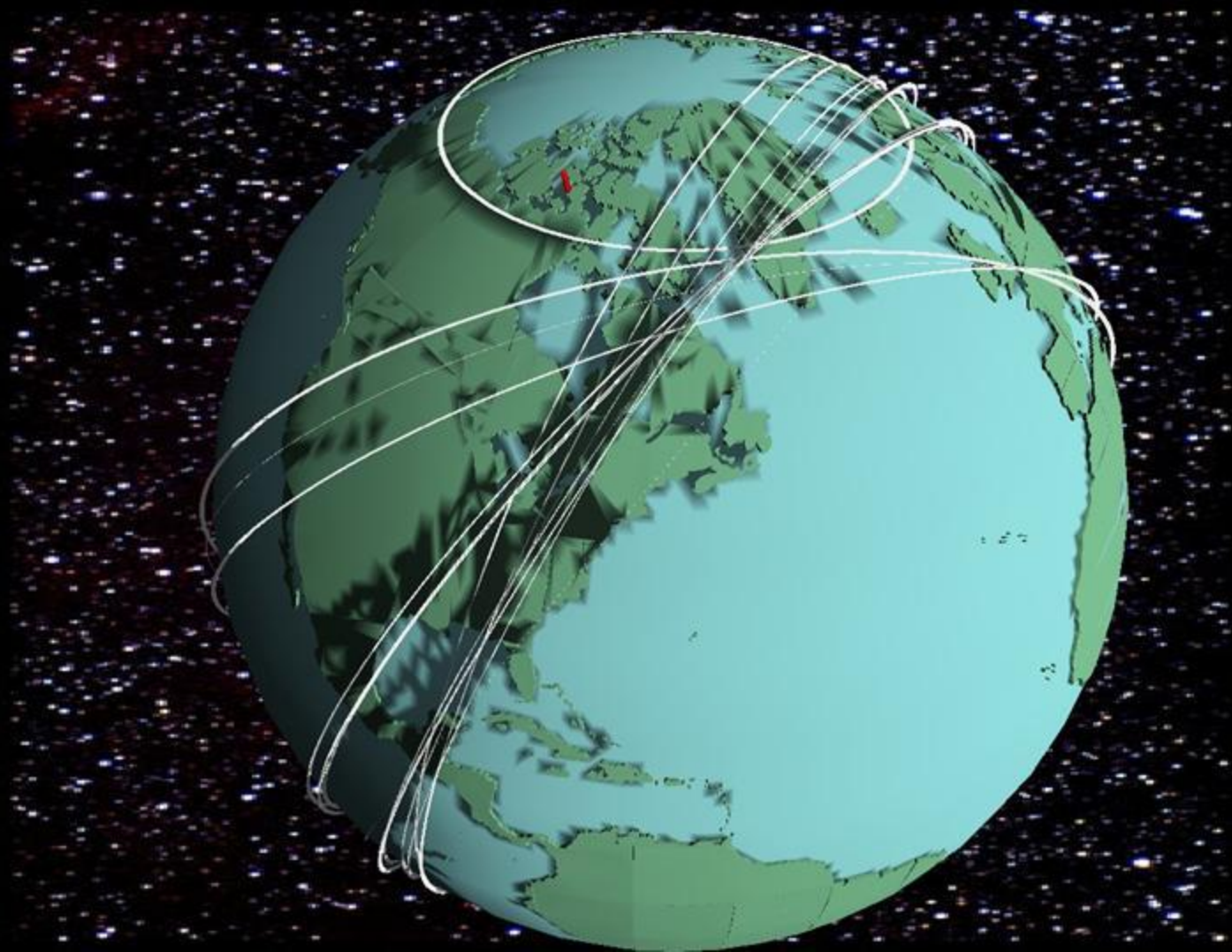
Mag North

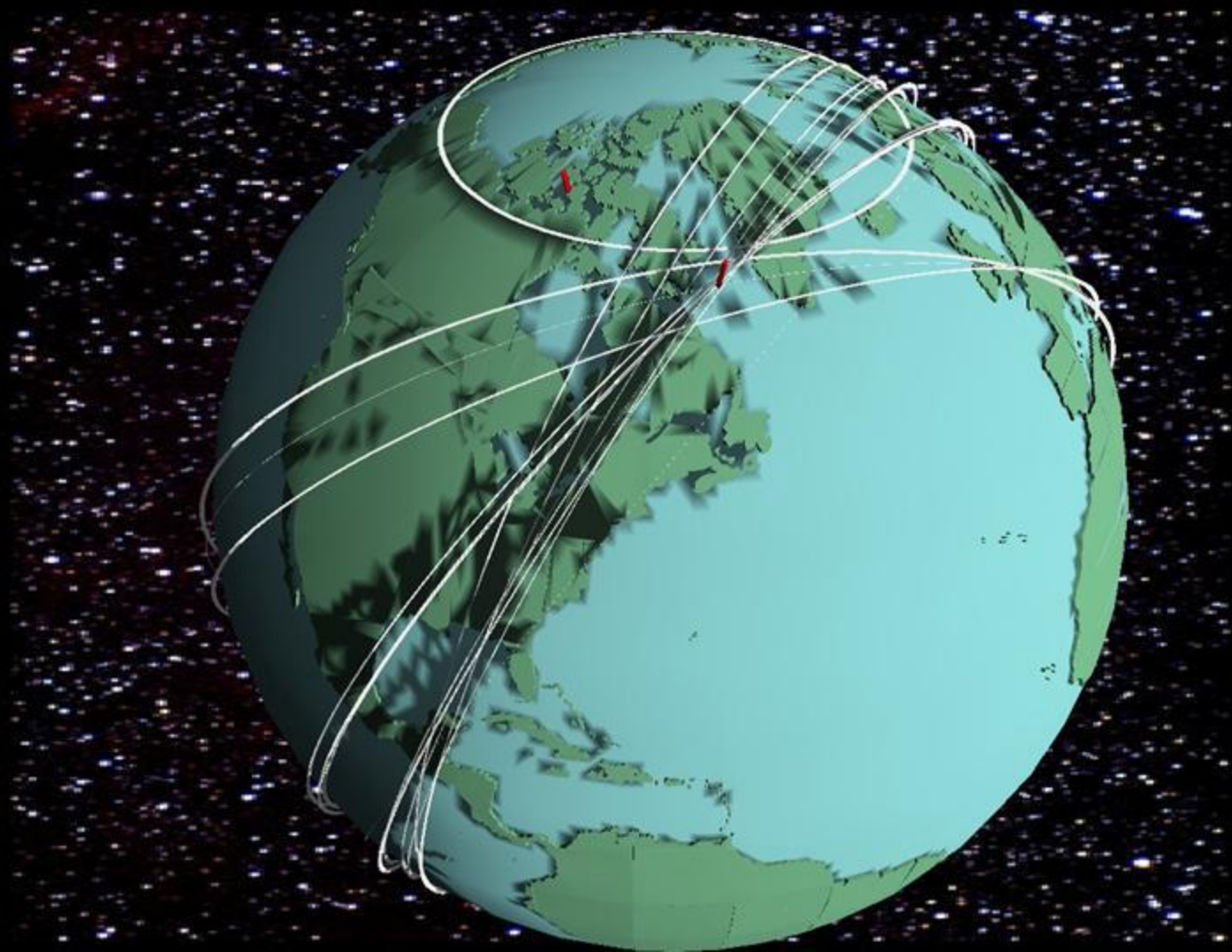
20 Degrees West of Mag North

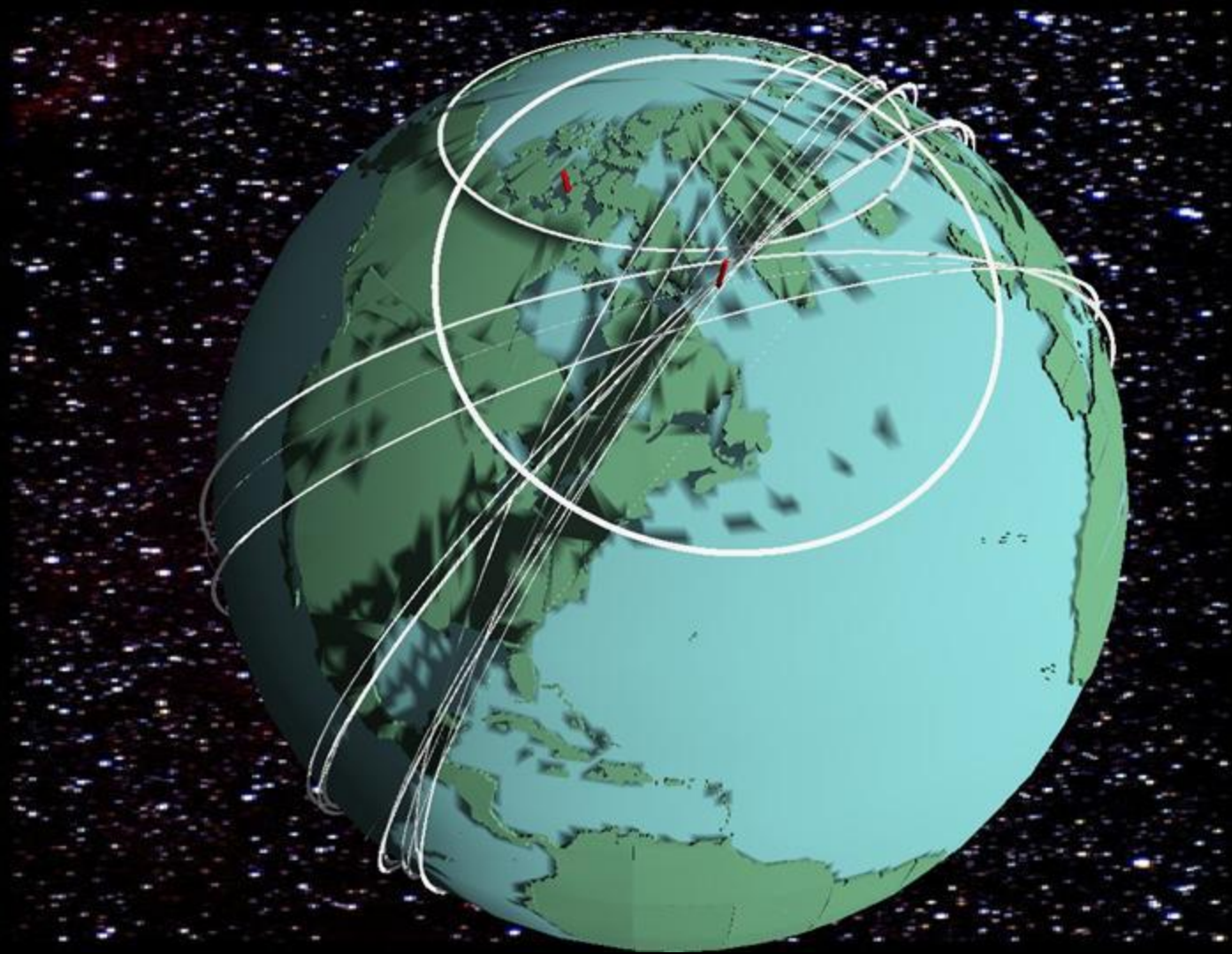
North facing Cathedral of Bath, England

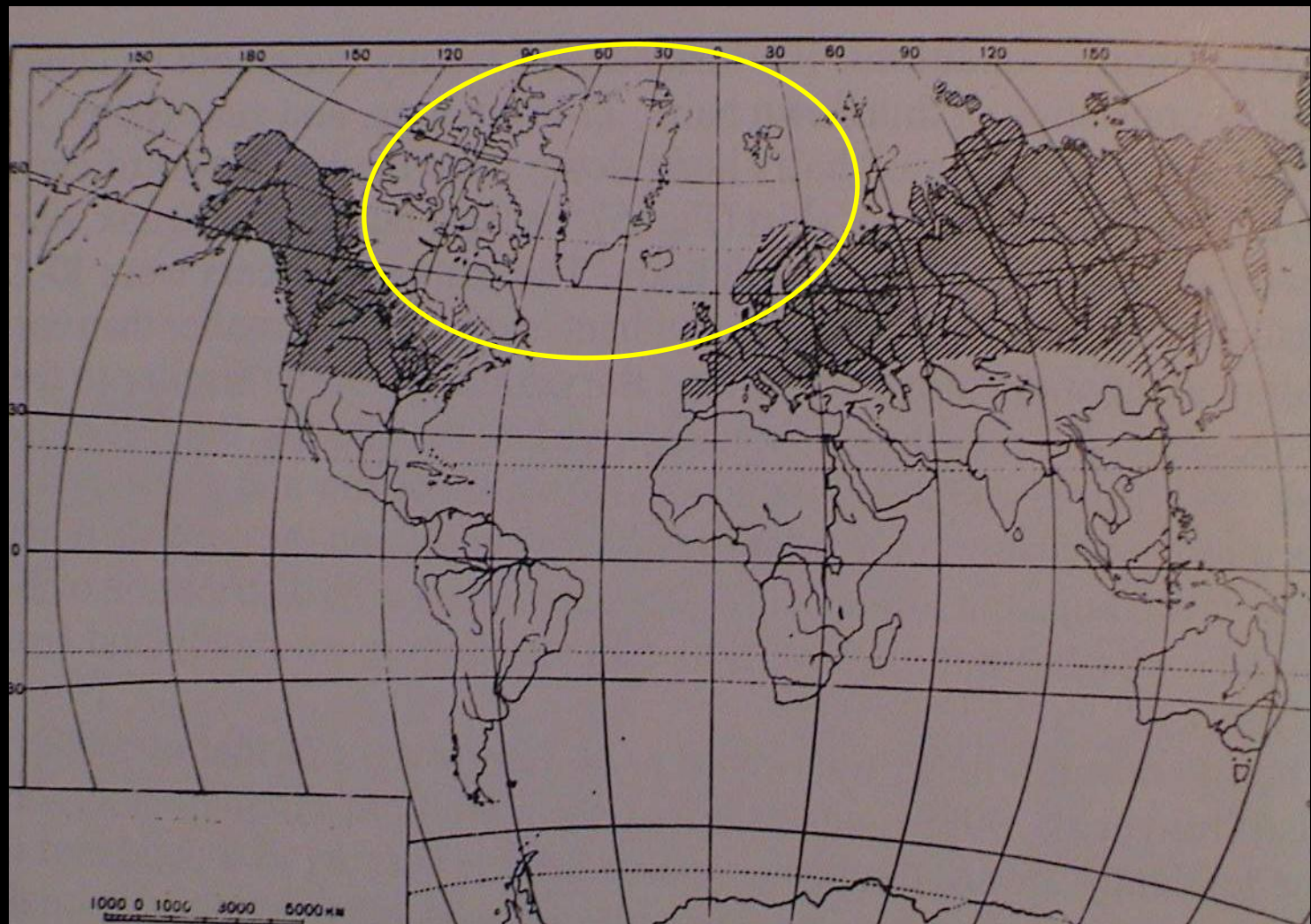
West of North Facing Roman Bath and the entire ancient Roman town beneath Bath, England

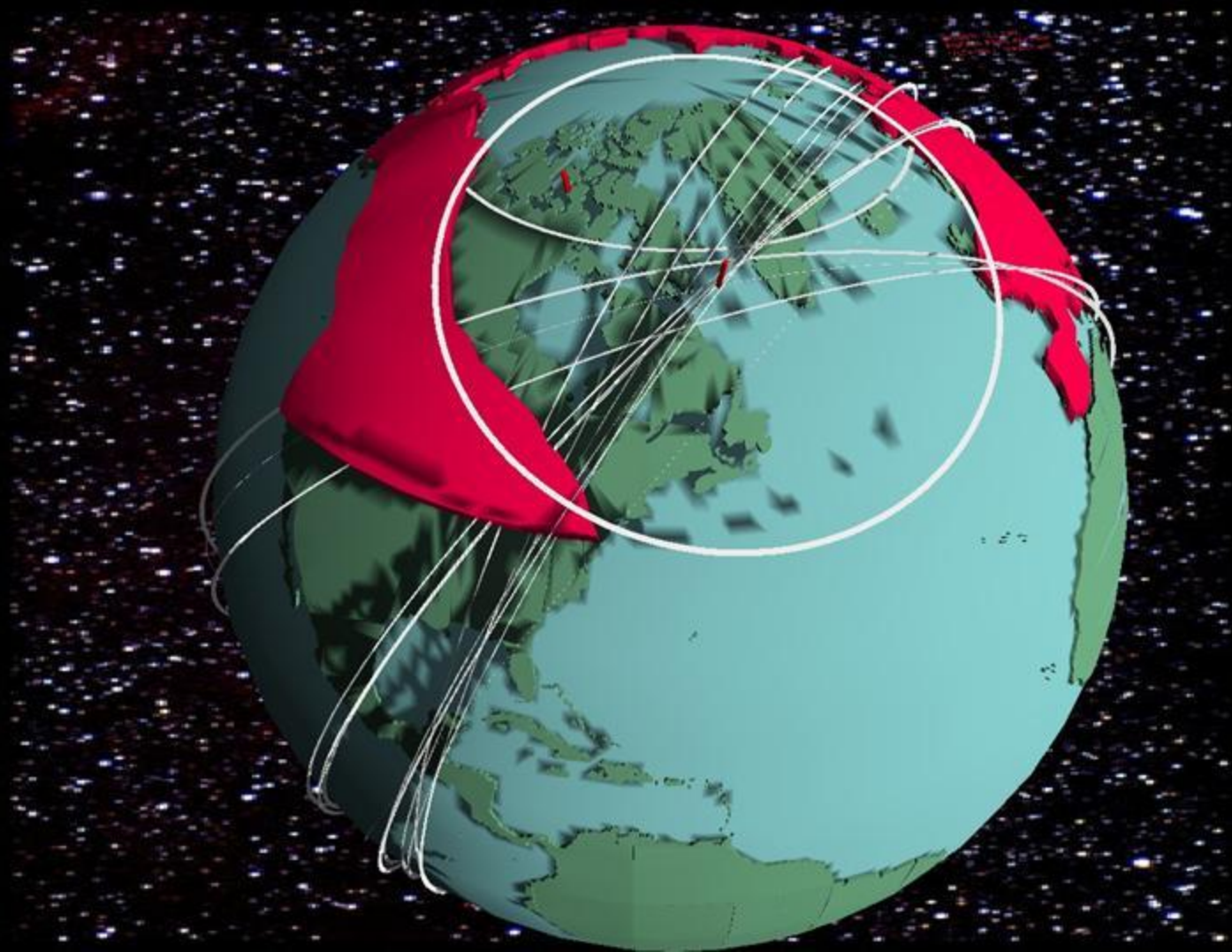




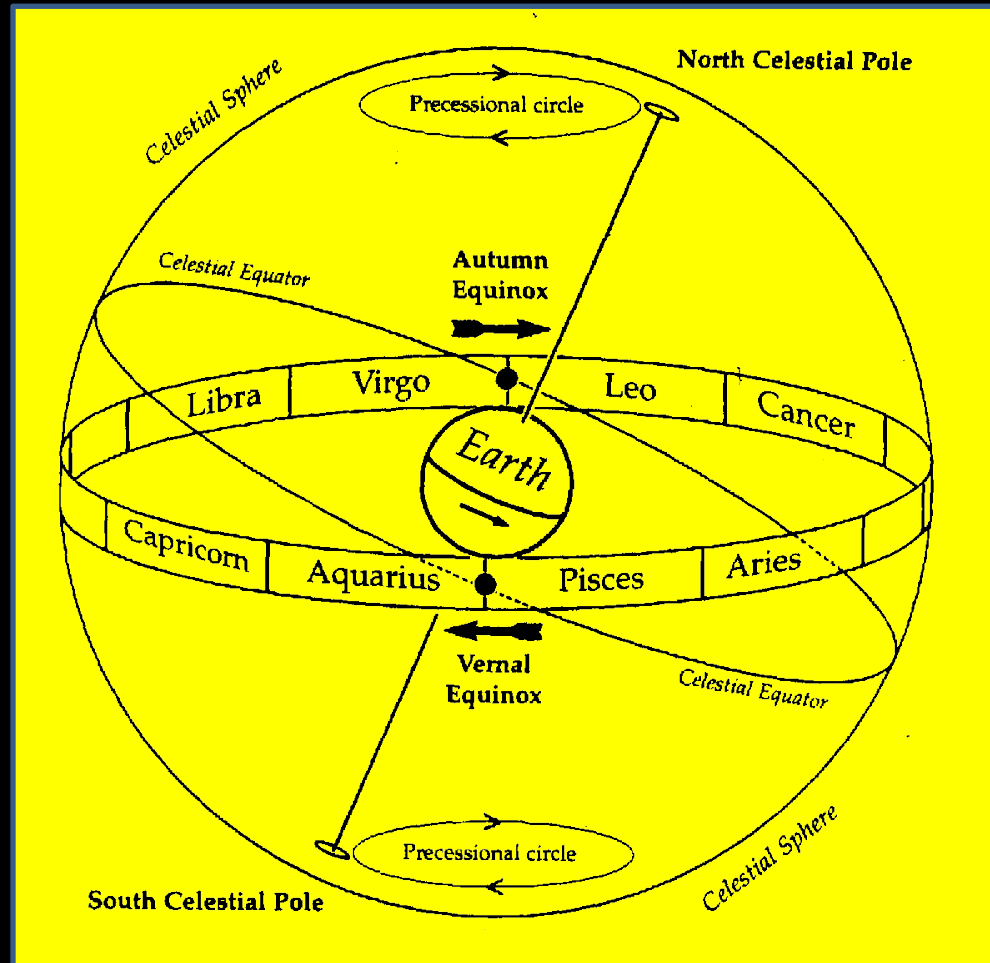








Tilting the Earth back to it's original position would cause the Constellations of the Zodiac to align with the Equator.



[Astronomy.com Forums - Automated Email](#) show details 12/29/10 (13 days ago)

to me

[RE:Author finishing novel wants to move the north pole and can't figure out where to put it.](#)

By [zachsdad](#) in Astronomy in the classroom

Orion would become a constellation of the zodiac if the Earth's axial tilt shifted more toward zero as compared to our orbital plane around the Sun. I'm not sure how much of a change it would take to bring The Big 'O' into the ecliptic.

Changing the location of the pole is more problematic. That would entail actually changing the Earth's rotational axis (Picture a quarterback throwing a nice tight spiral, which is then tipped by a defensive lineman). A sufficiently energetic impact, or series of impacts, could alter the axis -- Uranus axis of rotation is tipped almost 90 degrees to the plane of its orbit (it appears to 'roll' around the Sun). Such an event would probably change the axial tilt also (it would be a chaotic event), so, concievably when the spin re-stabilizes it could end up with a tilt which would be 12 to 18 degrees instead of 23. That would **probably** put Orion in the zodiac.

I hope this helps.

I don't think it is a coincidence that so many ancient mounds exist all over the world. It took a lot of effort to build these structures. In my opinion, a survival imperative could have motivated ancient people to build them.



Altun Ha , Belize JFAlthouse

Human made mounds constructed on flat plains with wide steps for fast movement of many people to the summit.

A world wide practice of a permanent priest cast paid to stand watch on the summit to warn of comets.

World wide ancient fear of comets and a racial memory of massive flood and earth tilt.

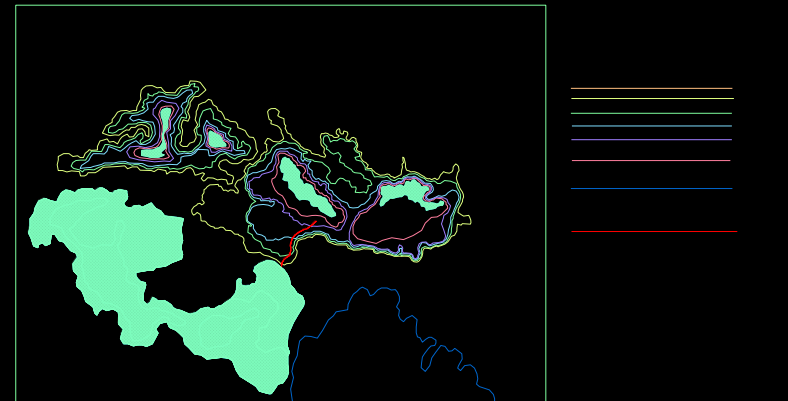
Step platform pyramids even exist in Giza east of an ancient ocean that dried up thousands of years ago. We call that ancient sea bed the Sahara Desert.





While I was working on the final battle scenes for Second Birth, I researched the old shore lines for the massive sea that used to be in the Sahara.

The light blue hatch areas are approximate sizes. Note I also show the locations of the possible original four small seas that existed in the Mediterranean Valley before it was flooded in 11,000 BC



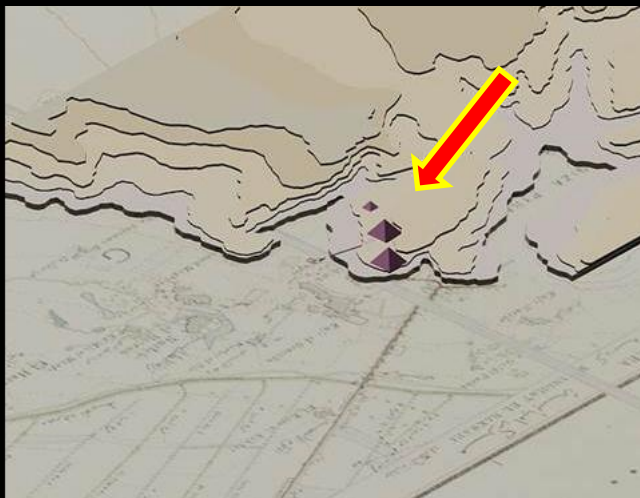


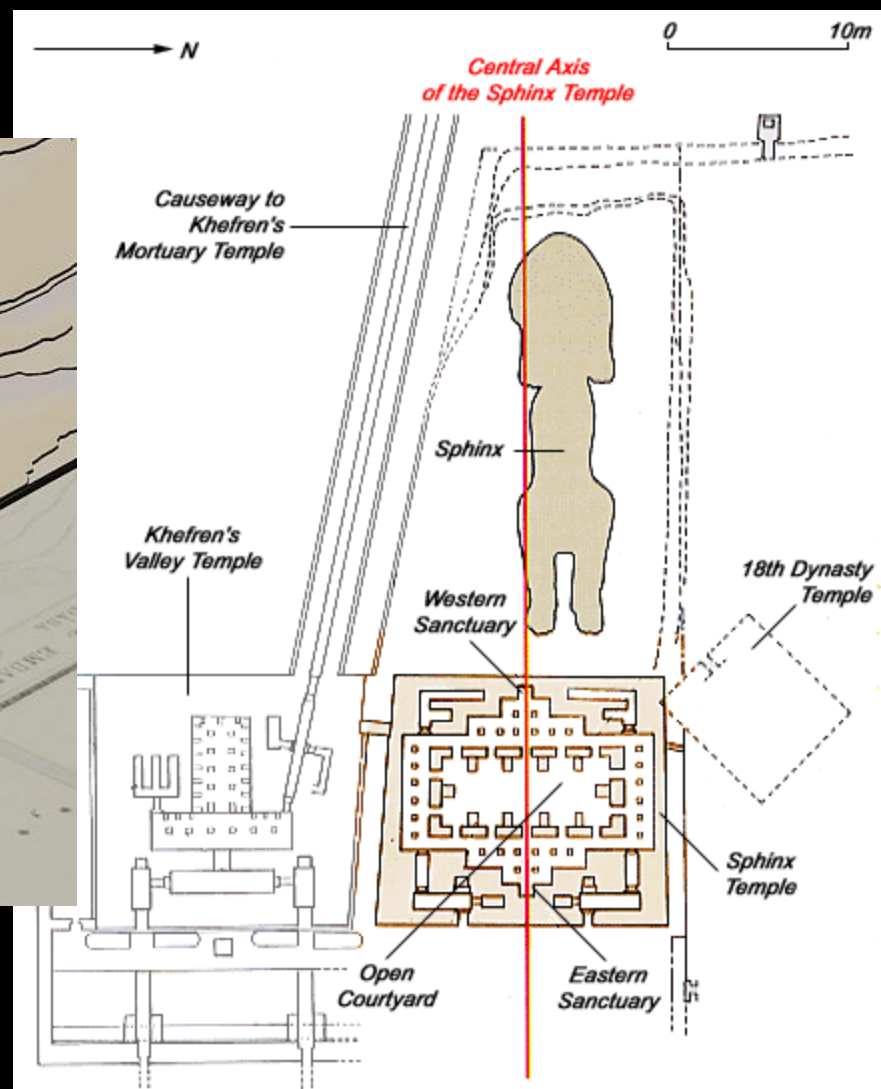
Petrified underwater
plants buried 90 feet
under the Sahara desert



What if this ancient sea was tossed eastward during the end of the Second Age, an event remembered in myth as the “tilting of the millpost” or tilting of the earth?

Such an event could explain the limestone formations protruding into the Nile Valley.

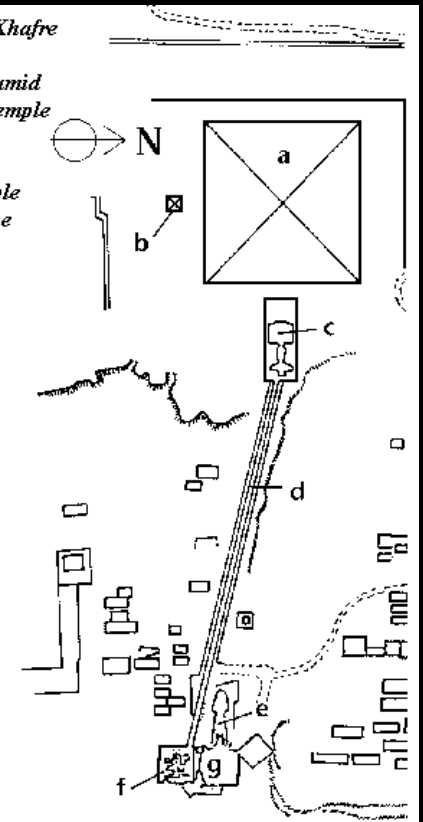




How old are the pyramids of Gizeh? Could something be buried beneath them that was covered by the tidal wave debris of the Sahara Sea?

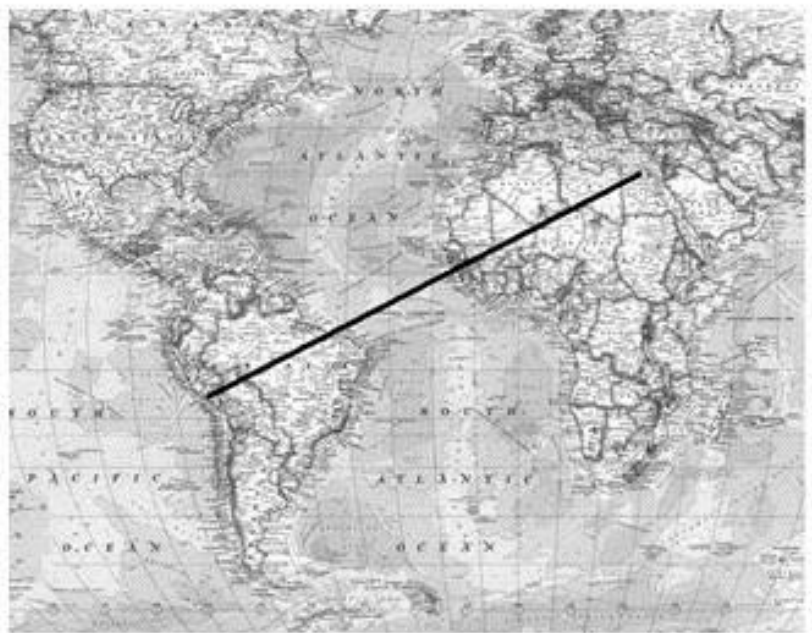
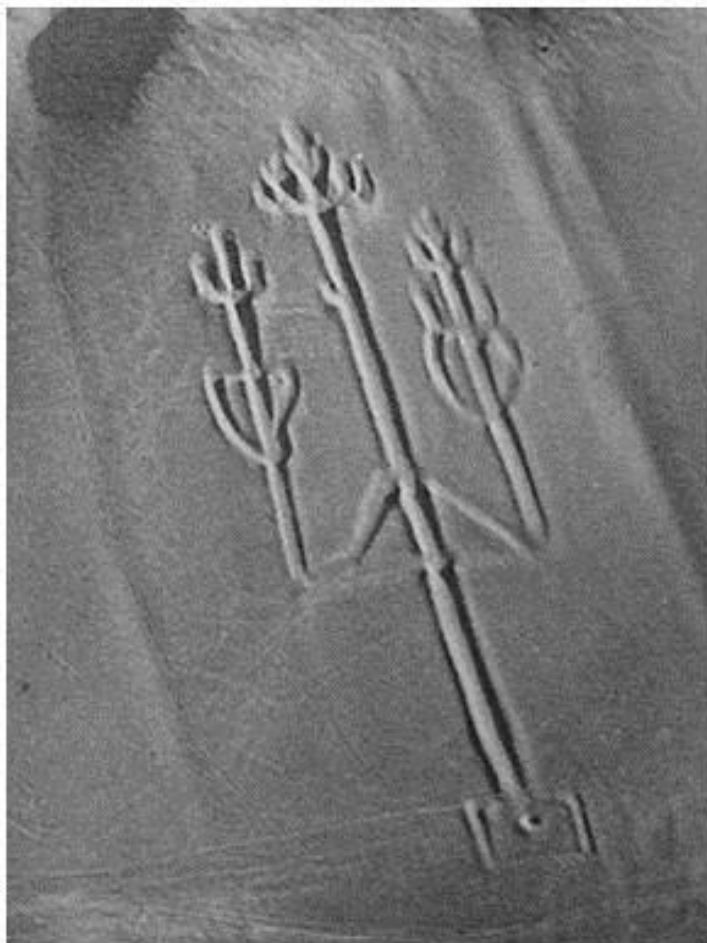


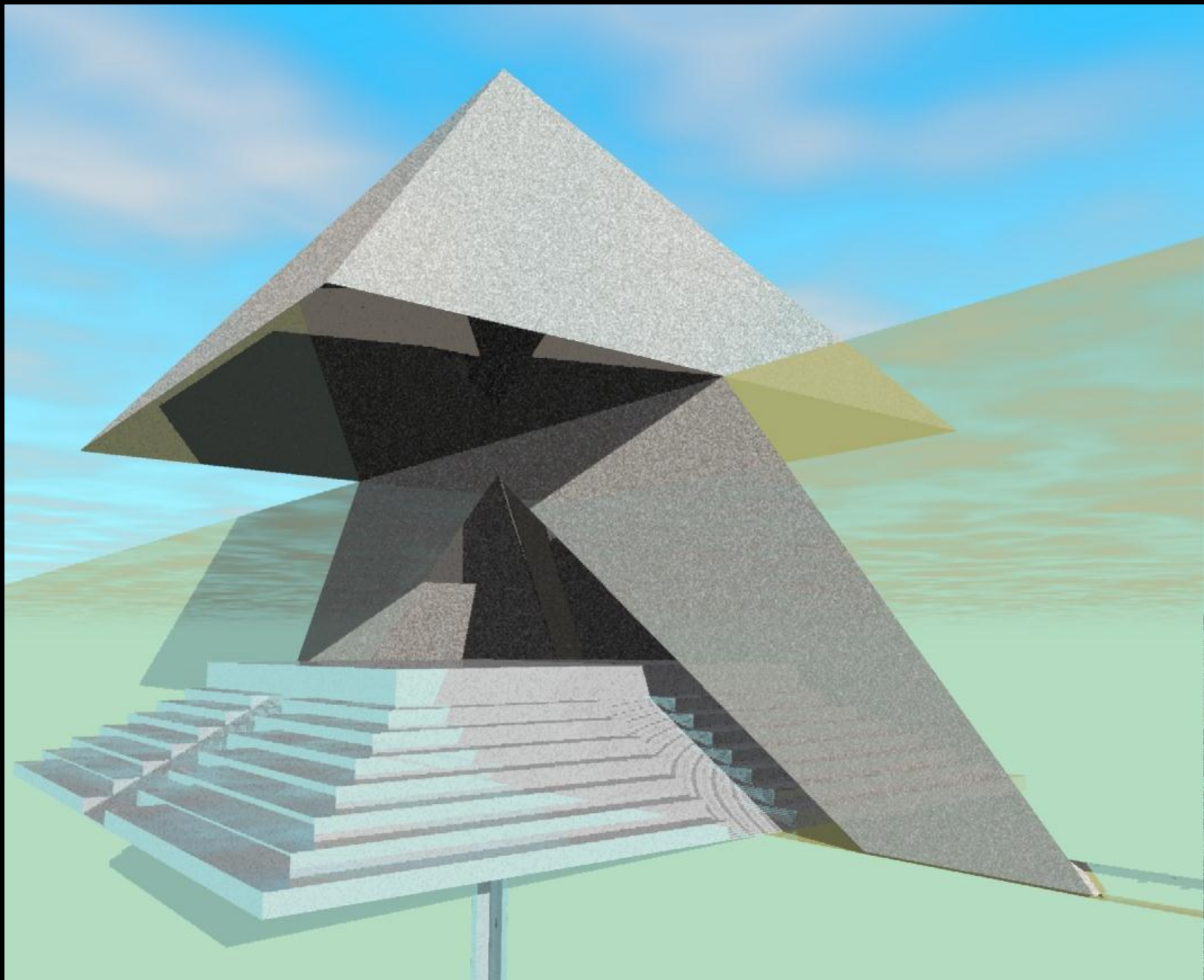
- a. *Pyramid of Khafre*
- b. *Remains of satellite pyramid*
- c. *Mortuary Temple*
- d. *Causeway*
- e. *Sphinx*
- f. *Valley Temple*
- g. *Temple of the Sphinx*

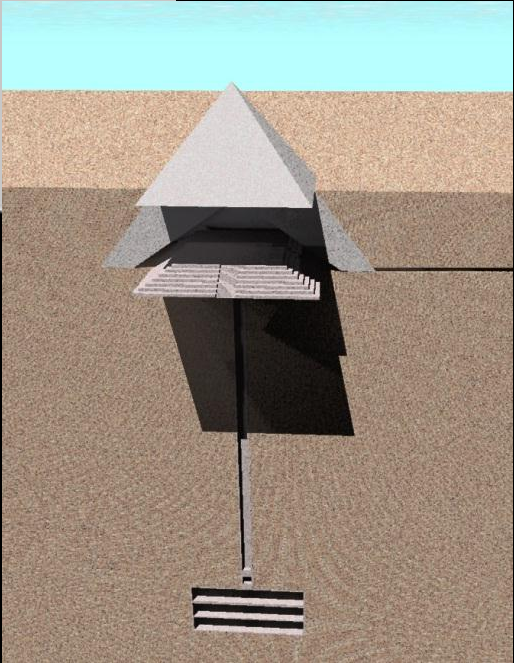
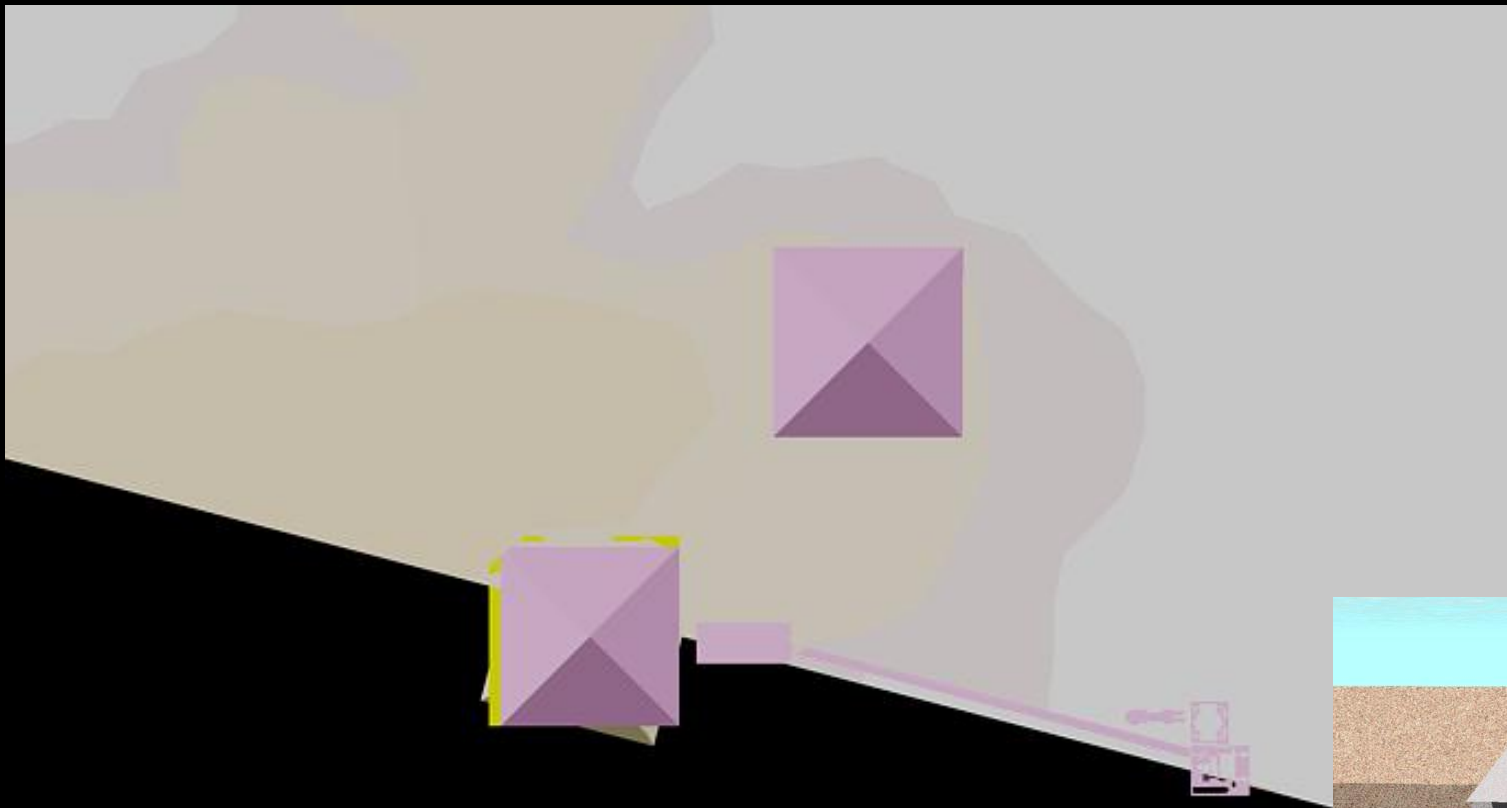








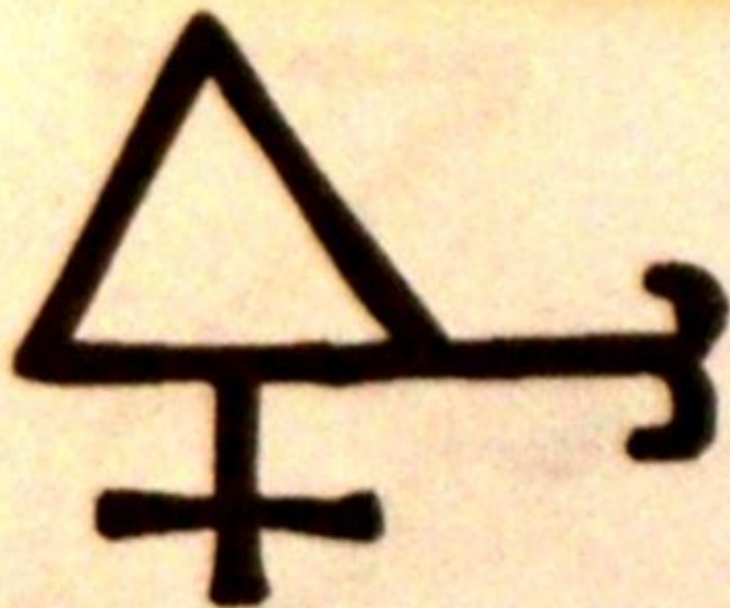


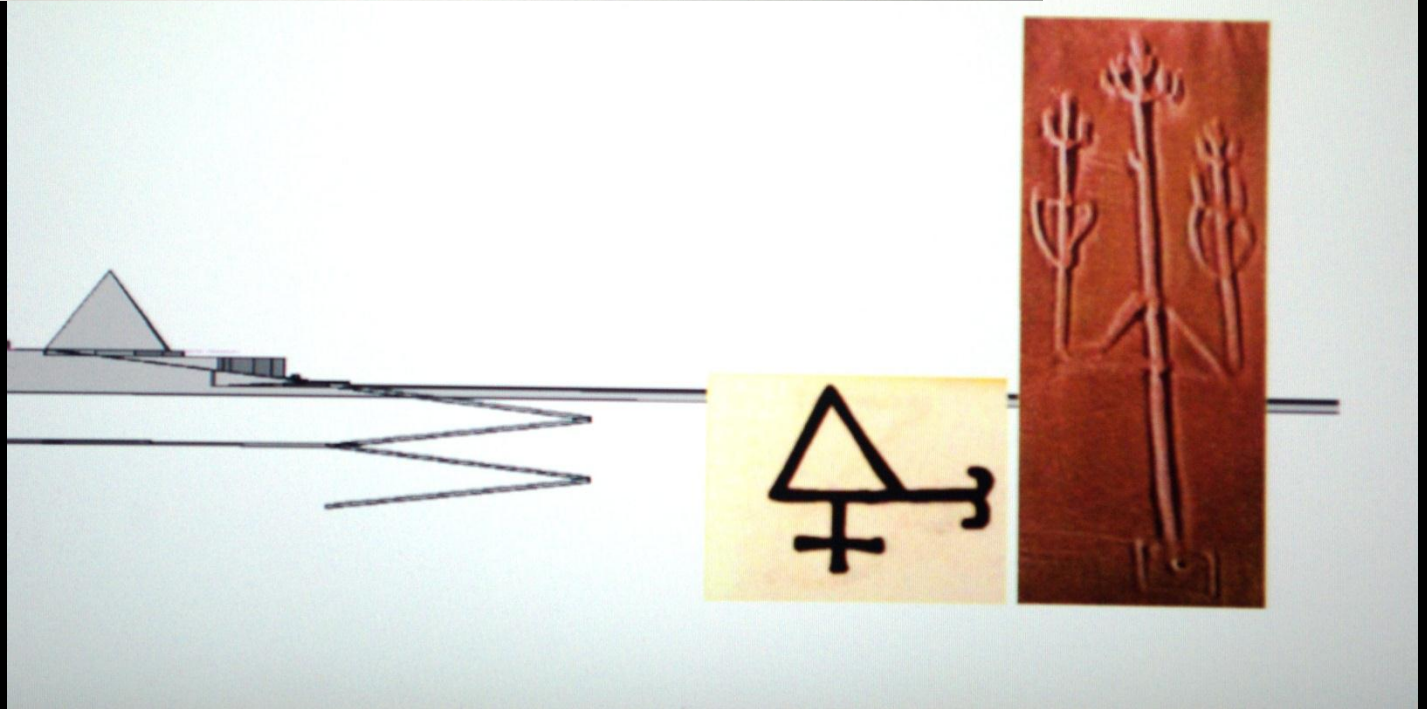
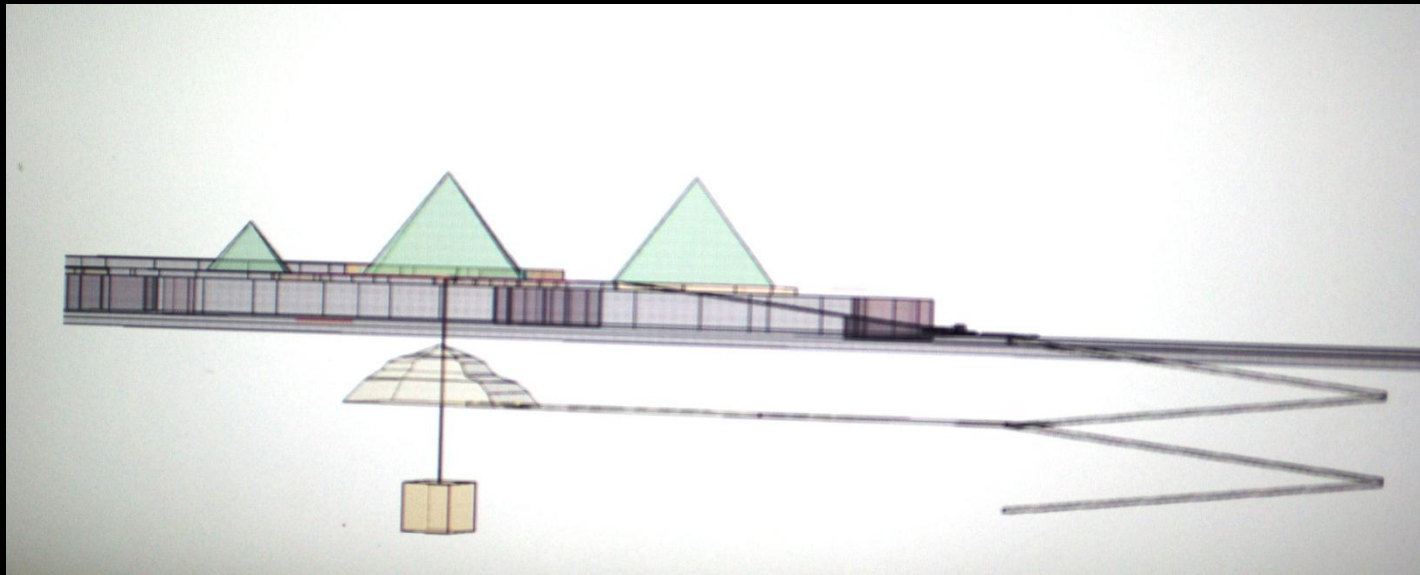


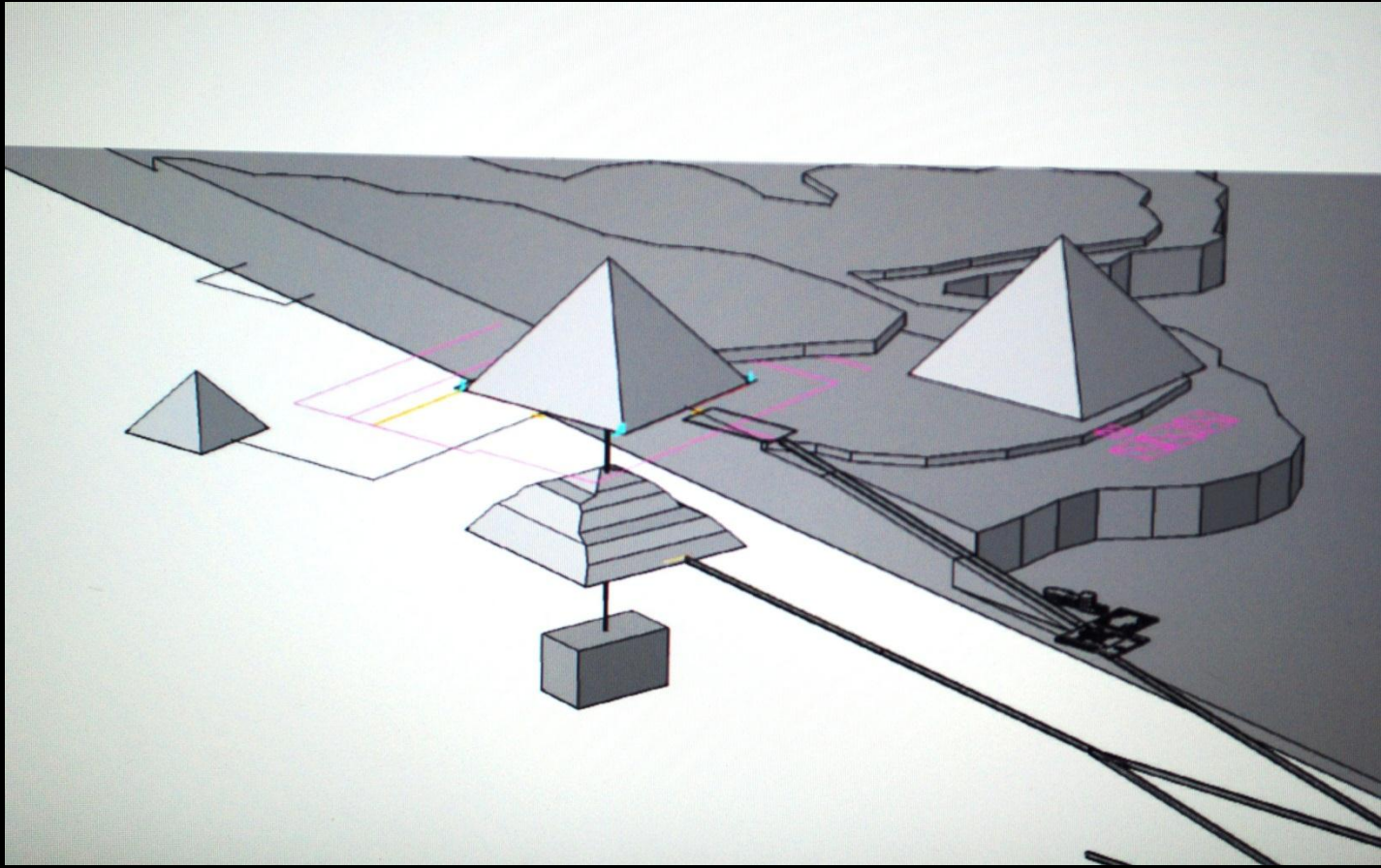


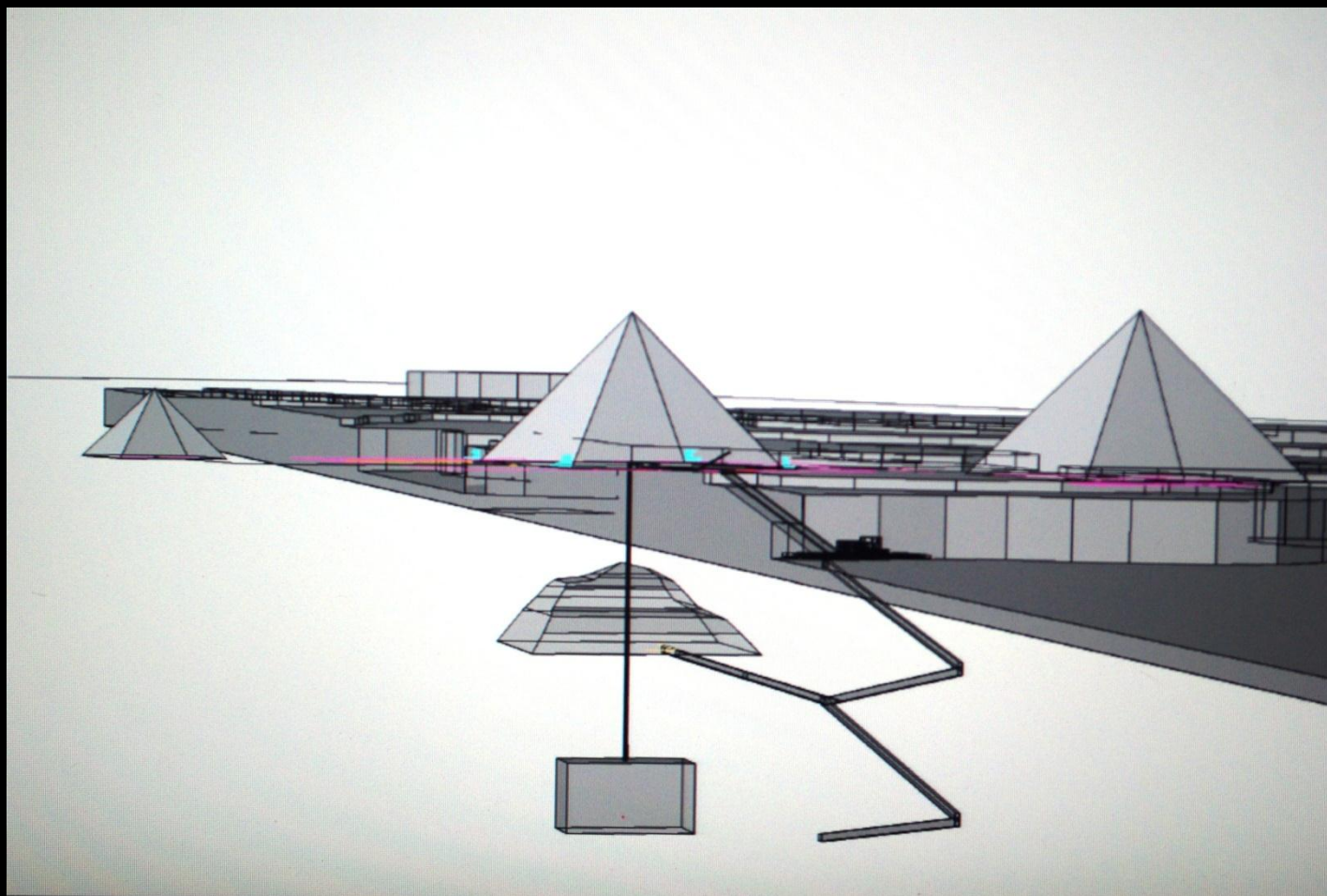


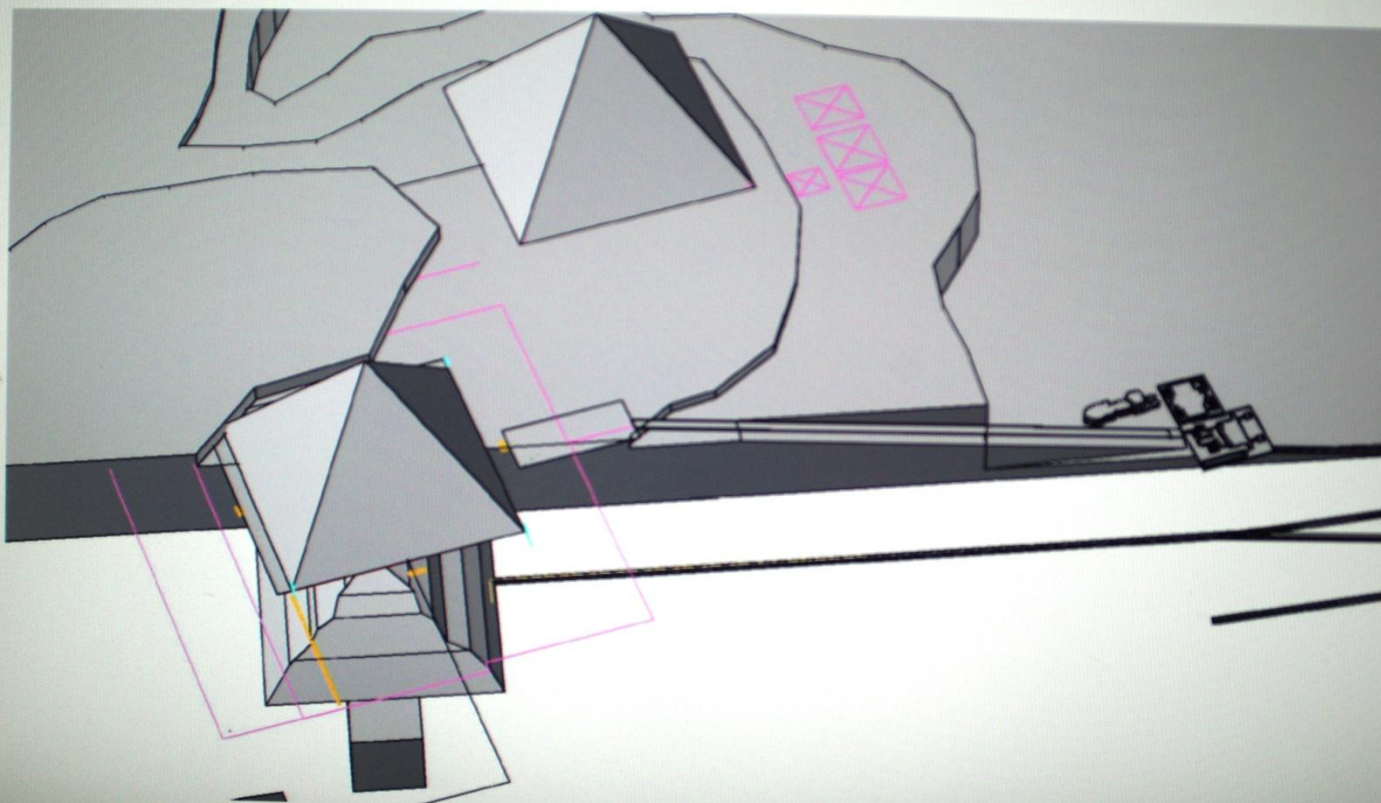
This is a sign from eighteenth-century chemistry for *sulphuric acid*. It is composed by joining the most common sign for sulphur, \triangleleft , and the prefix ϵ — for acid.









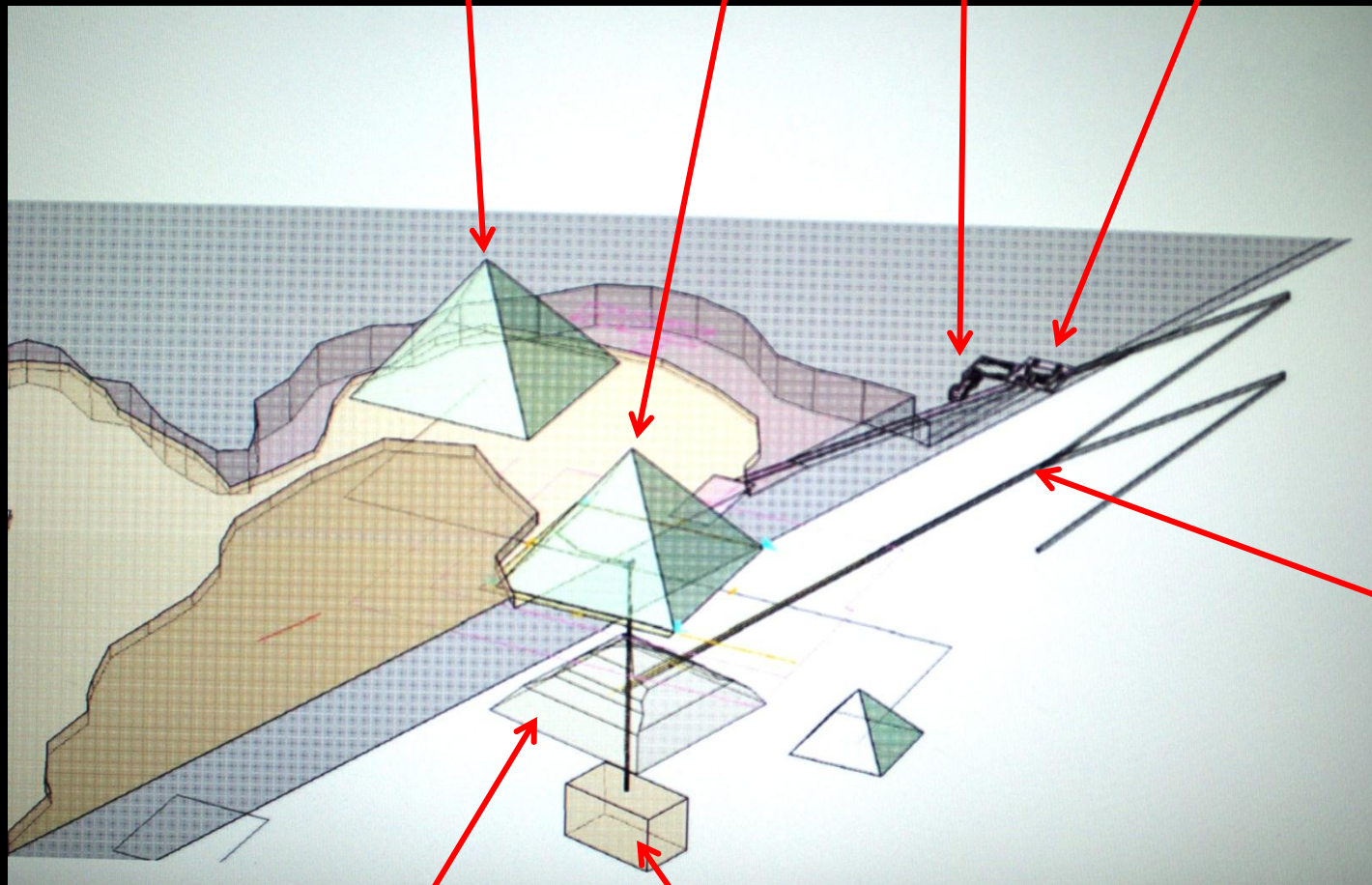


Great Pyramid

Khafre Pyramid

Sphinx

Valley Temple



Theorized
Location and
Layout of
Manetho's
Tunnel and
Ramp System

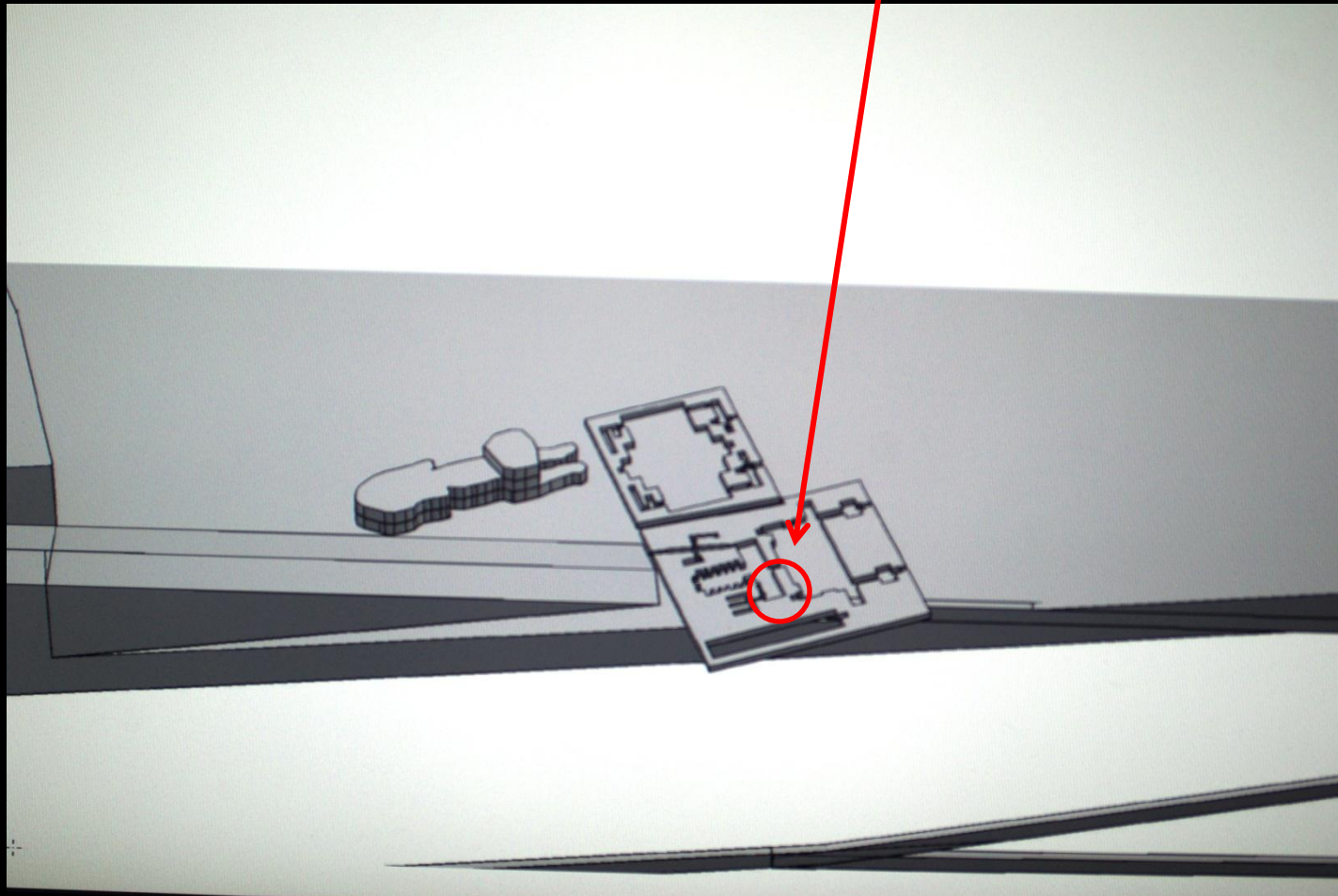
النفق والطريق
المنحدر

Theorized Location of Oros Buried Pyramid
دفن الهرم 31,600 BC

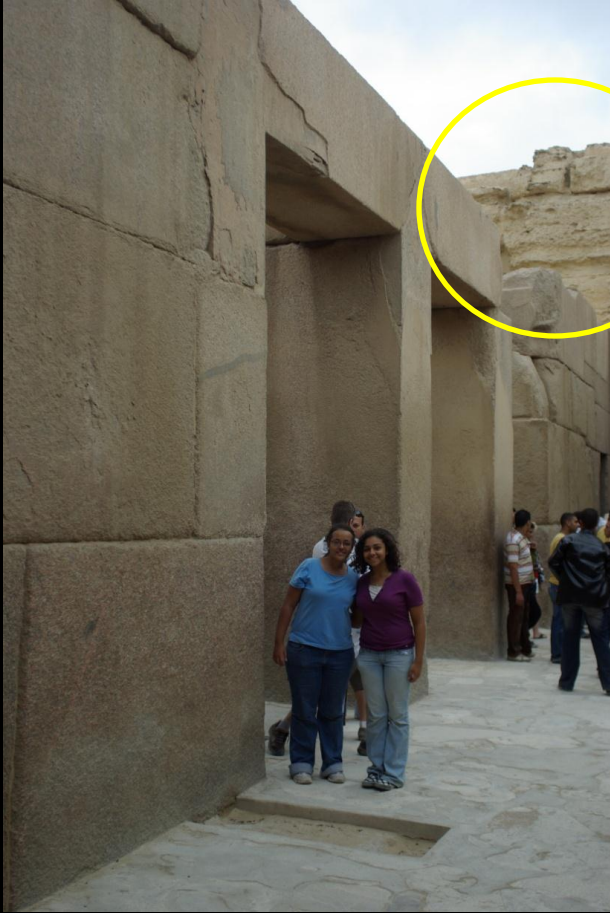
Theorized Location of Manetho's Library
دفن غرفة المكتبة

Theorized Location of Blocked Access to Manetho's
Ramp and Tunnel System

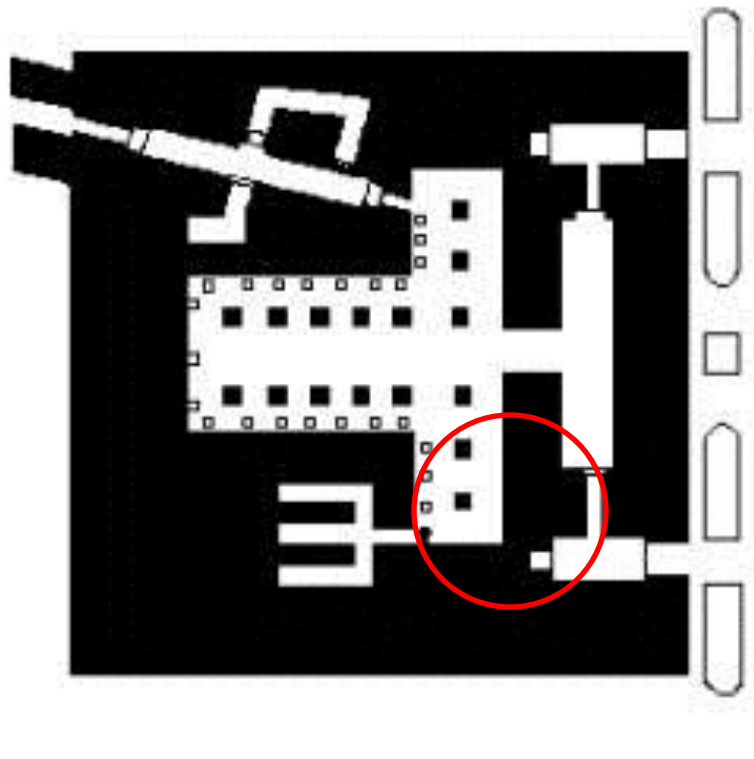
ممكنة للوصول إلى الطريق المنحدر والأنفاق



Valley Temple, Giza, Egypt



The structure is made of tightly fitted, massive granite stones cut with machine precision and at multiple angles, typical of cyclopean earthquake resistant masonry. It is very similar to Inca and Pre Mayan architecture, including razor thin joints cemented with a “butter coat” of rock hard mortar. The floor is made of alabaster. Note the older walls in the circled area. This appears to be a very ancient structure that was expertly renovated at least once a long time ago.



ممكنة للوصول إلى الطريق المنحدر والأنفاق



2012

On 1994 July 16-22, over twenty fragments of comet Shoemaker-Levy 9 collided with the planet Jupiter.

Scientists called this event : “A once in a lifetime experience.”

<http://sed.s.org/archive/sl9/sl9.html>

On July 21, 2009 Jupiter was hit by a second comet.

<http://www.msnbc.msn.com/id/32015814/>

Scientists have been silent about this second impact.

It takes 12 years for Jupiter to orbit the Sun. It was 15 years between impacts. Jupiter was on the same side of the sun for both hits.

The stars “wobble” during a 24,000 year cycle. The planets and the entire solar system do not. The outer edge of the Solar Systems Ort cloud is egg shaped, Suggesting there is a gravitational force outside and nearby.

NASA announced the existence of an unknown gravitational force near the edge of our solar system.

WISE was launched to map the sky using infrared technology to detect Brown Dwarf stars near our solar system. Wise went operational at the beginning of 2010. It will complete its mapping and analysis in 2013.

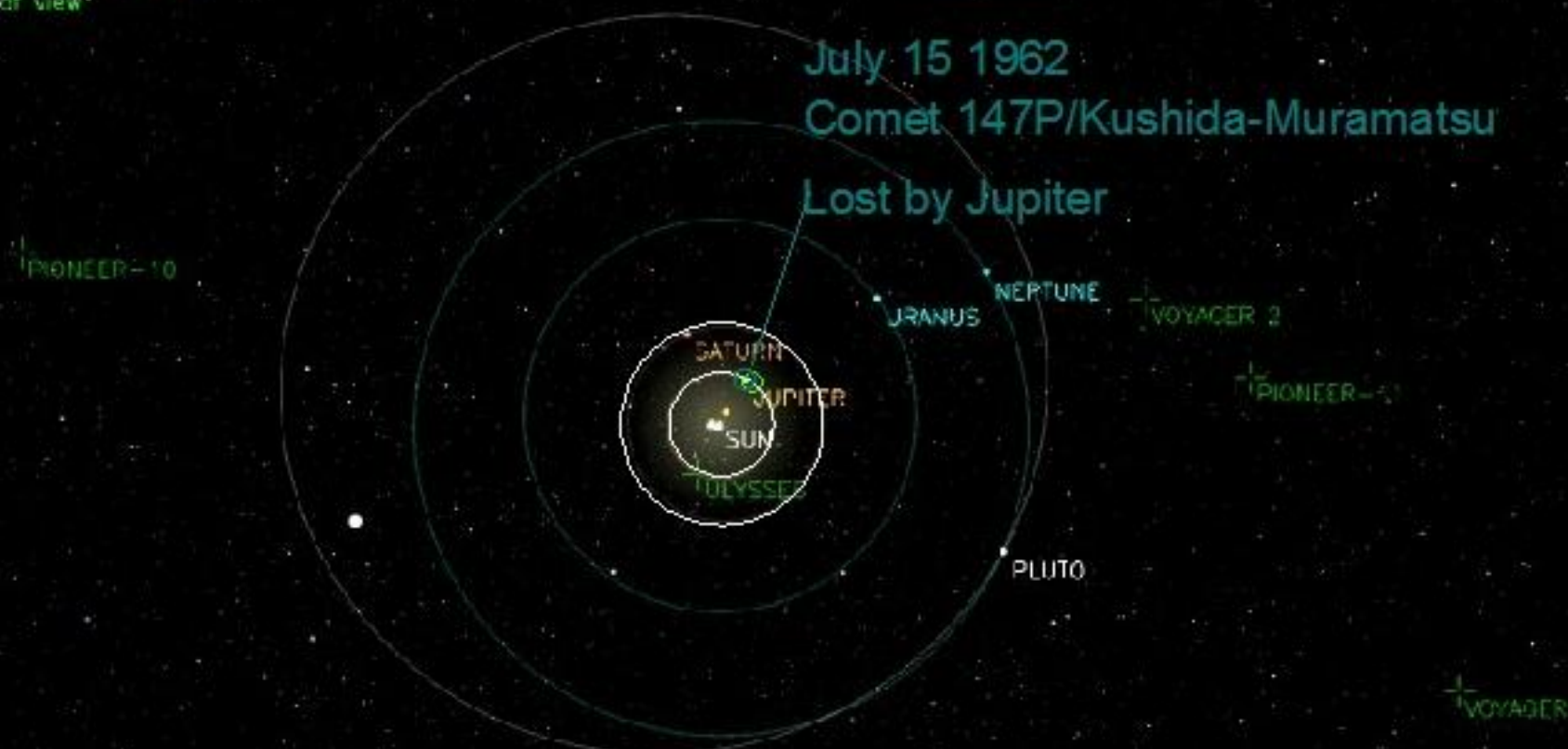
View of Solar System from above
1997 MAY 14 00:00:00 UTC
60.0° field of view

May 14 1949
Comet 147P/Kushida-Muramatsu
Captured by Jupiter



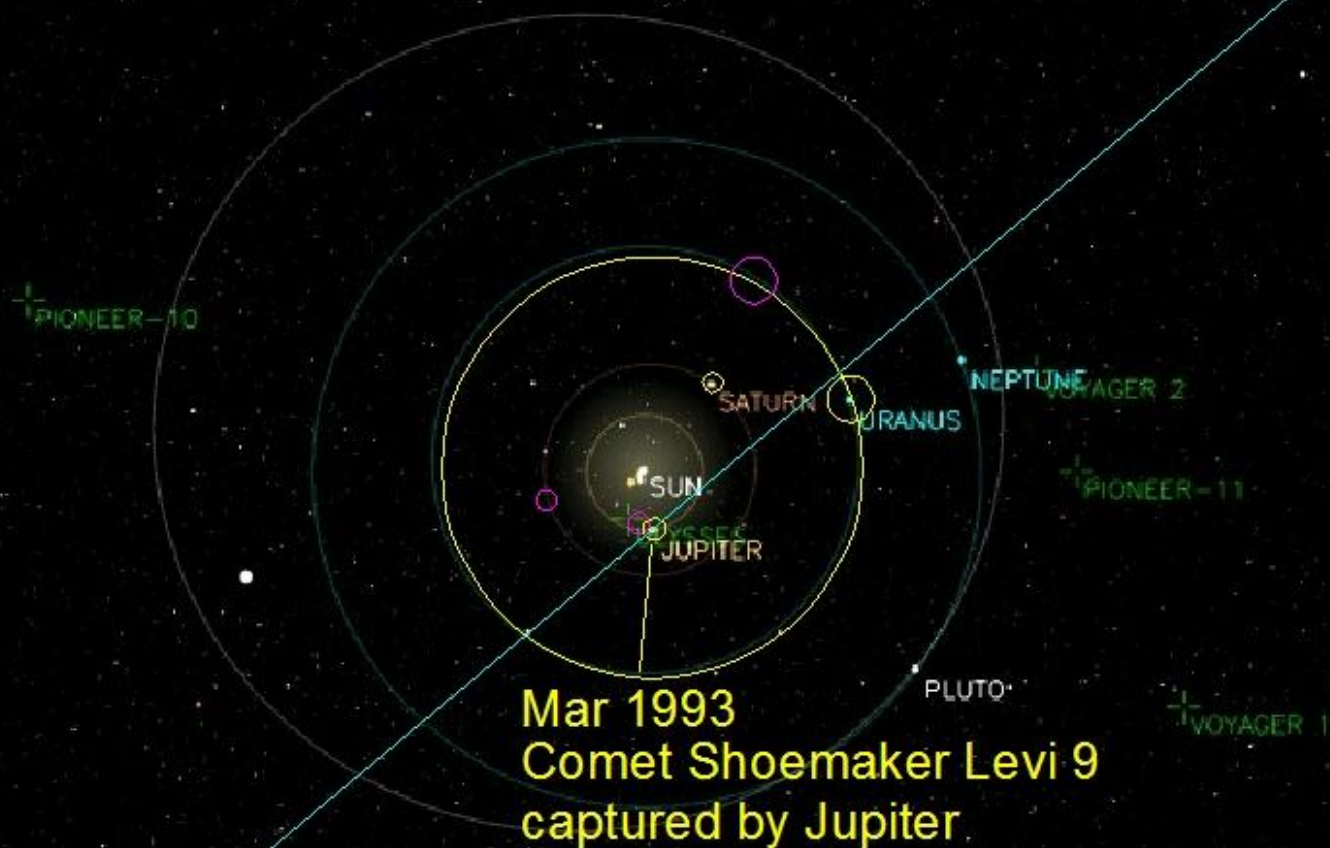
Note: Jupiter is the only planet shown in
correct location

View of Solar System from above
1998 JAN 01 00:00:00 UTC
60.0° field of view



Note: Jupiter is the only planet shown in
correct location

View of Solar System from above
1993 MAR 02 00:00:00 UTC
60.0° field of view



HUGE SPRINGTIME STORMS HIT THE PLANET URANUS



Inform Inspire Involve
science.nasa.gov

[Space Science News home](#)

HUGE STORMS HIT THE PLANET URANUS

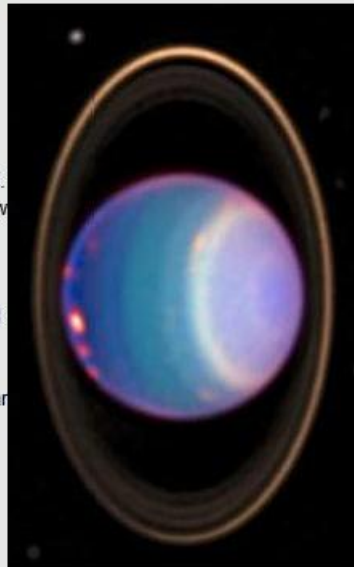
INFRARED IMAGES FROM THE HUBBLE SPACE TELESCOPE REVEAL DRAMATIC
STORM CLOUDS MOVING IN EXCESS OF 500 KM/HR

FROM A NASA HQ/STScI PRESS RELEASE

Mar. 29, 1999: If springtime on Earth were anything like it will be on Uranus, we would be experiencing waves of massive storms, each one covering the country from Kansas to New York, with temperatures of 300 degrees below zero.

A dramatic new [time-lapse movie](#) → by NASA's Hubble Space Telescope shows for the first time seasonal changes on the planet. Once considered one of the blander-looking planets, Uranus is now revealed as a dynamic world with the brightest clouds in the outer Solar System and a fragile ring system that wobbles like an unbalanced wagon wheel. The clouds are probably made of crystals of methane, which condense as warm bubbles of gas well up from deep in the atmosphere of Uranus.

Right: Last August the Hubble Space Telescope captured this near infrared image of Uranus. Recent analysis indicates that clouds seen here in orange appear to circle Uranus at speeds in excess of 500 kilometers per hour. Comparisons to earlier photographs show a slight precession shift in the brightest of Uranus' rings.



The movie → , created by Hubble researcher Erich Karkoschka of the University of Arizona, clearly shows for the first time the wobble in the ring system, which is made of billions of tiny pebbles. This wobble may be caused by Uranus' shape, which is like a slightly flattened

Recent Headlines

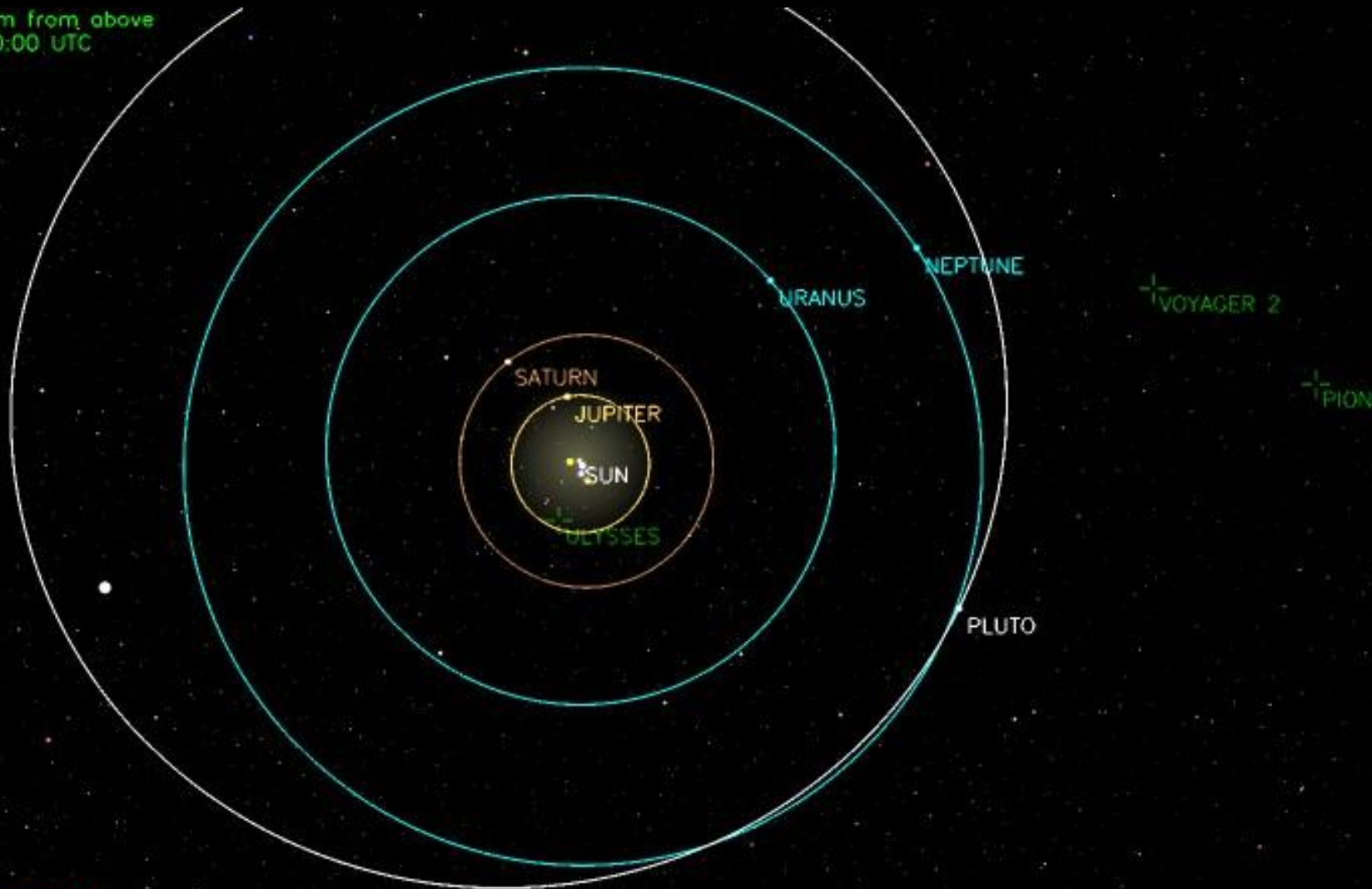
[December 3: Mars](#)

[Polar Lander nears](#)

[touchdown](#)

[December 2: What](#)

View of Solar System from above
1999 MAR 29 00:00:00 UTC
45.0° field of view



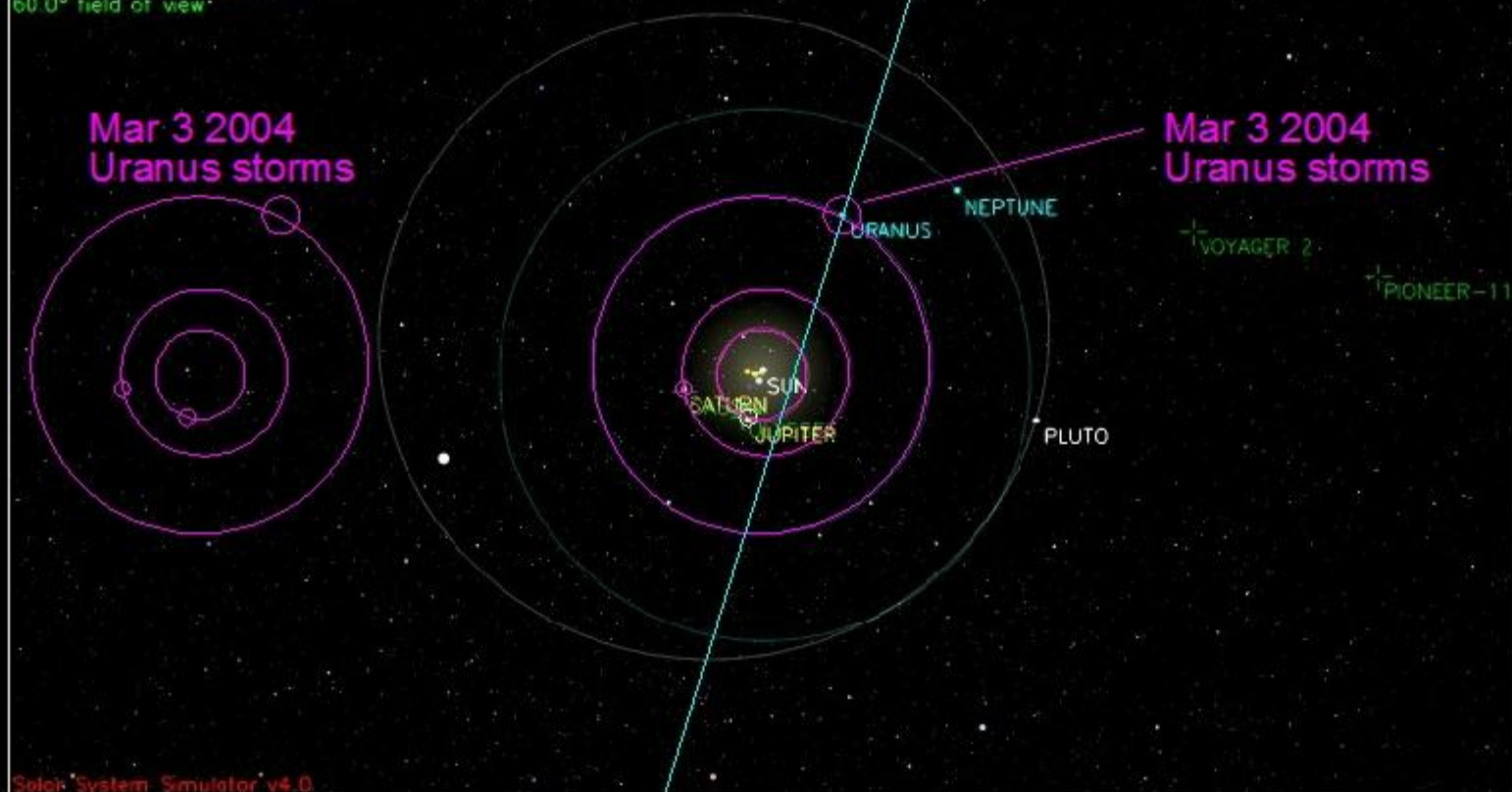
Solar System Simulator v4.0

Uranus's position March 29th, 1999 fully developed storms.

View of Solar System from above
2004 MAR 03 00:00:00 UTC
60.0° field of view

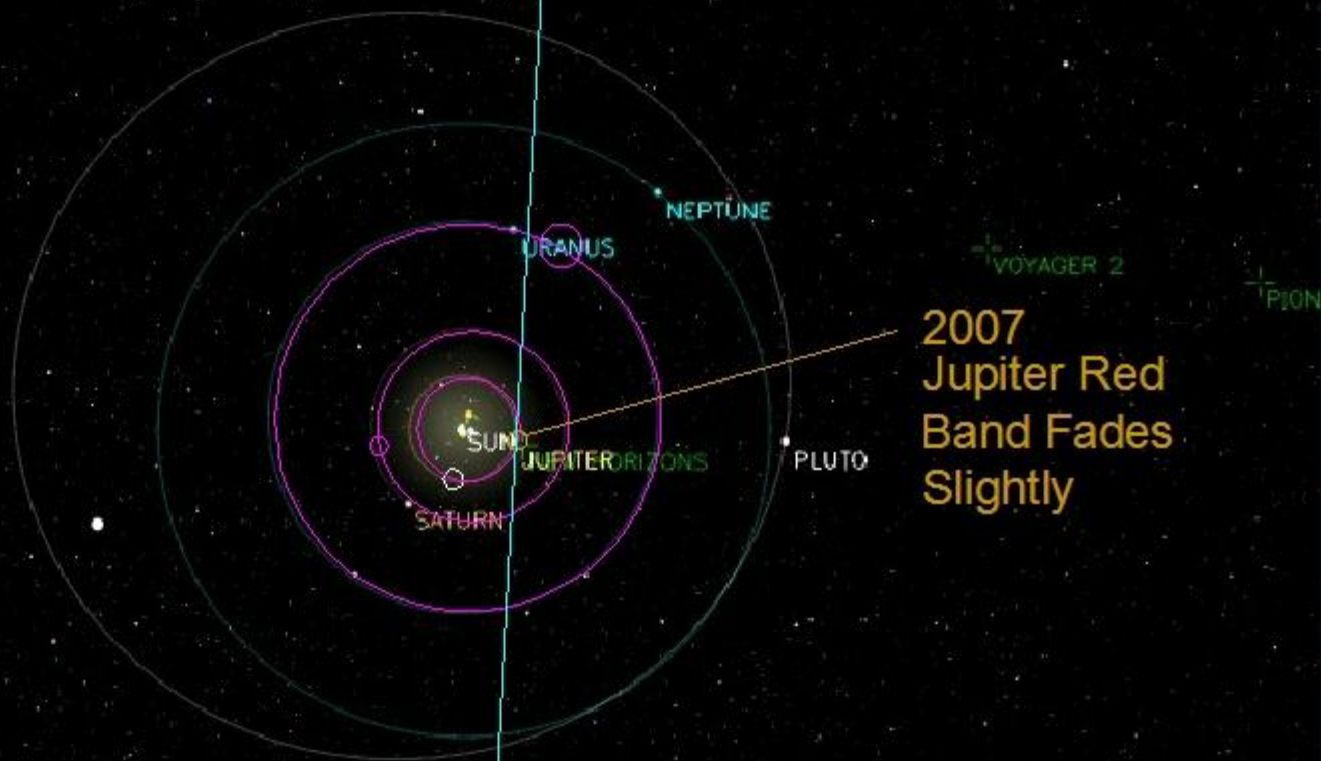
Mar 3 2004
Uranus storms

Mar 3 2004
Uranus storms



Solar System Simulator v4.0

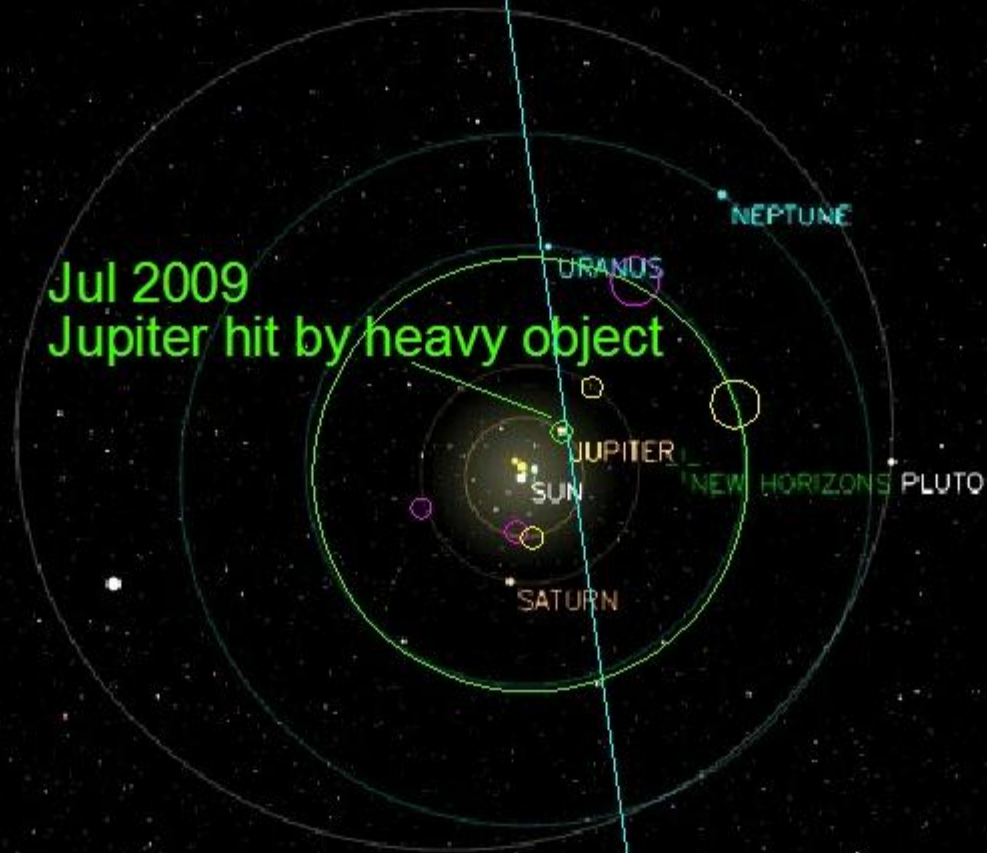
View of Solar System from above
2007 MAY 25 00:00:00 UTC
60.0° field of view



2007
Jupiter Red
Band Fades
Slightly

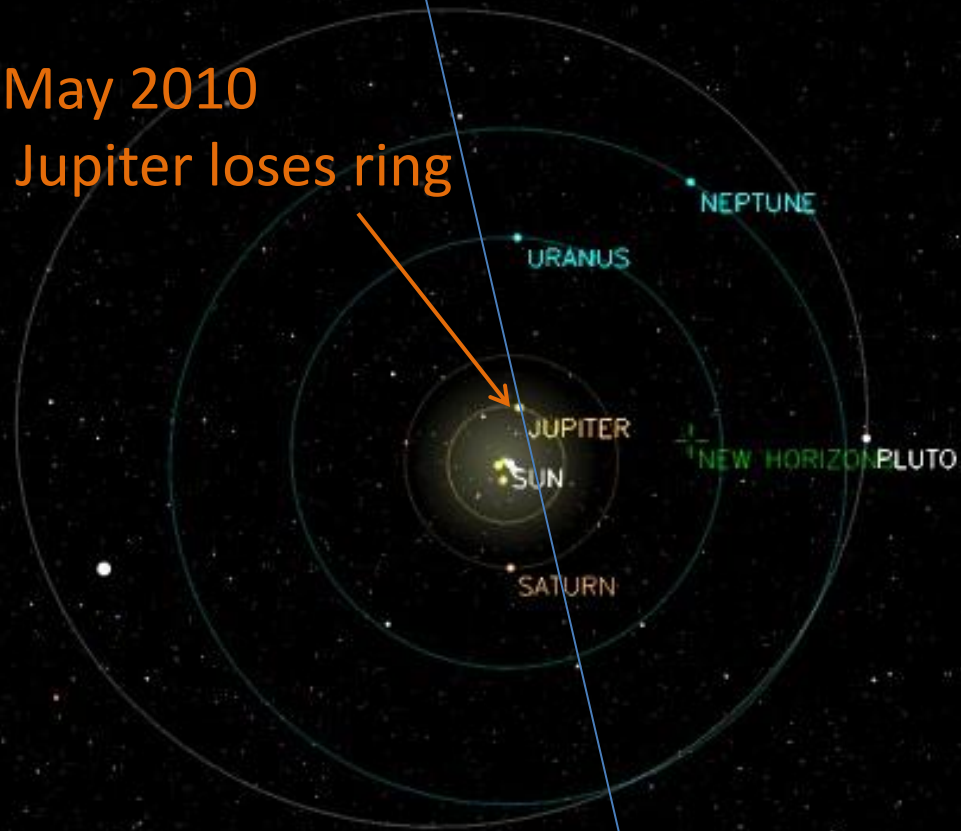
View of Solar System from above
2009 JUL 20 00:00:00 UTC
60.0° field of view

Jul 2009
Jupiter hit by heavy object



View of Solar System from above
2010 MAY 08 00:00:00 UTC
60.0° field of view

May 2010
Jupiter loses ring

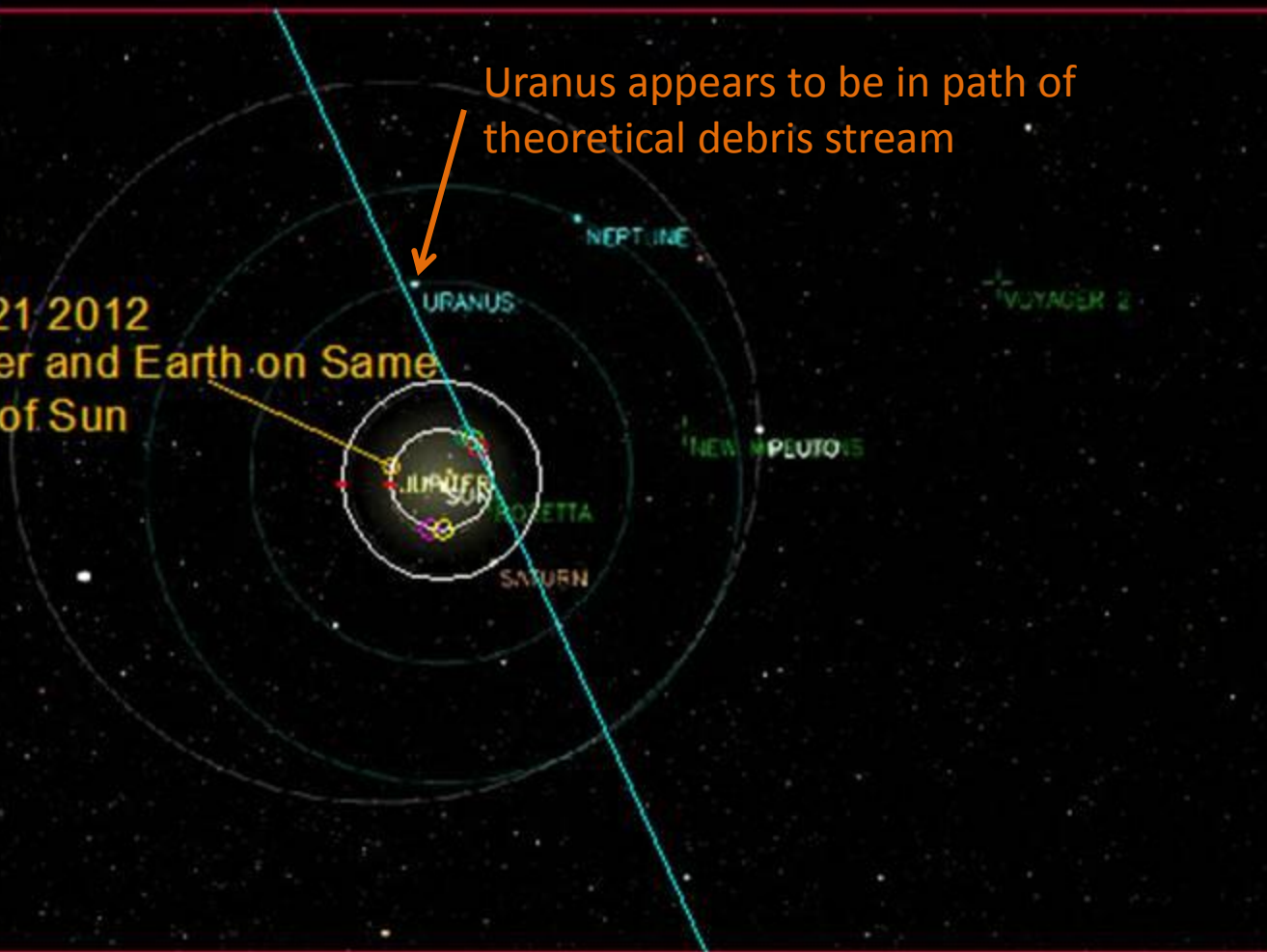


view of Solar System from above
2012 DEC 21 00:00:00 UTC
60.0° field of view

Dec 21 2012
Jupiter and Earth on Same
Side of Sun

Uranus appears to be in path of
theoretical debris stream

Solar System Simulator v4.0



Observing Alert: Bright Spot On ... +

www.sott.net/articles/show/236854-Observing-Alert-Bright-Spot-On-Uranus-Reported

Most Visited Getting Started

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Science & Technology

Observing Alert: Bright Spot On Uranus Reported

Tammy Plotner
Universe Today
Fri, 28 Oct 2011 19:30 CDT



© Universe Today

The bright spot on Uranus observed with Gemini.

There's nothing like a dynamic solar system... and right now another planet is being heard from. According to various sources, a bright spot - possibly a developing storm - has been spotted on Uranus.

"Professional observers this morning (October 27) reported a very bright cloud on Uranus, using the Gemini telescope, and need amateur confirmation if possible, to

RECENT COMMENTS

want to look at Gurdjieff's exercise/essay called "The last hour of life" [Link]for more insights....

ippos

Kinda Like "OBL," 2011, eh?

R.C....

Rowan Cocoon

50 million Americans are living without basic medical care, 85% is retiring into poverty and US gover...

AnandaMayi

...I saw no formation. Only two dots moving at differing speeds in different directions. One seemed...

Hellbound

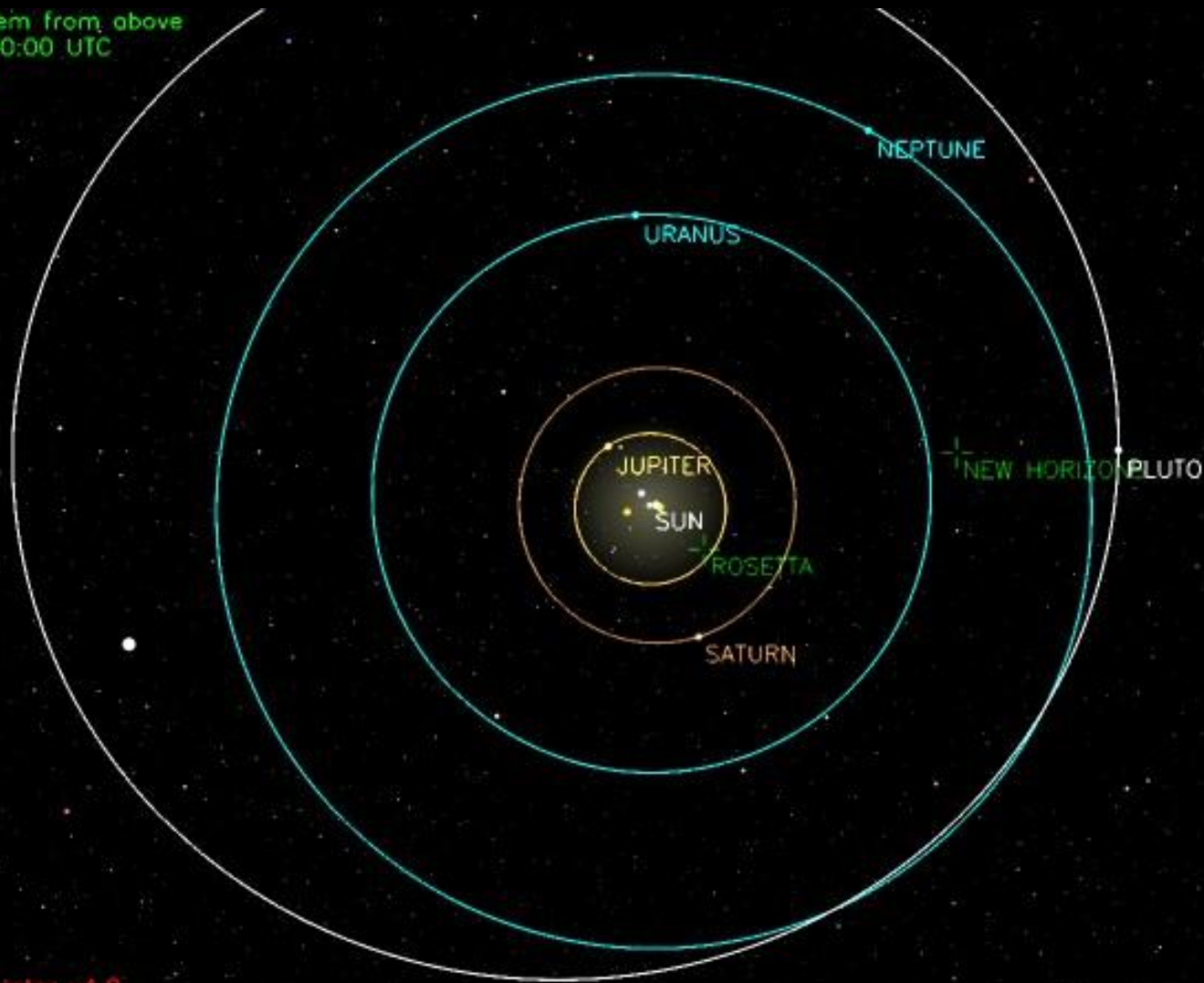
Storm or Comet Impact?



20,000 miles
32,000 kilometers

Relative sizes to scale

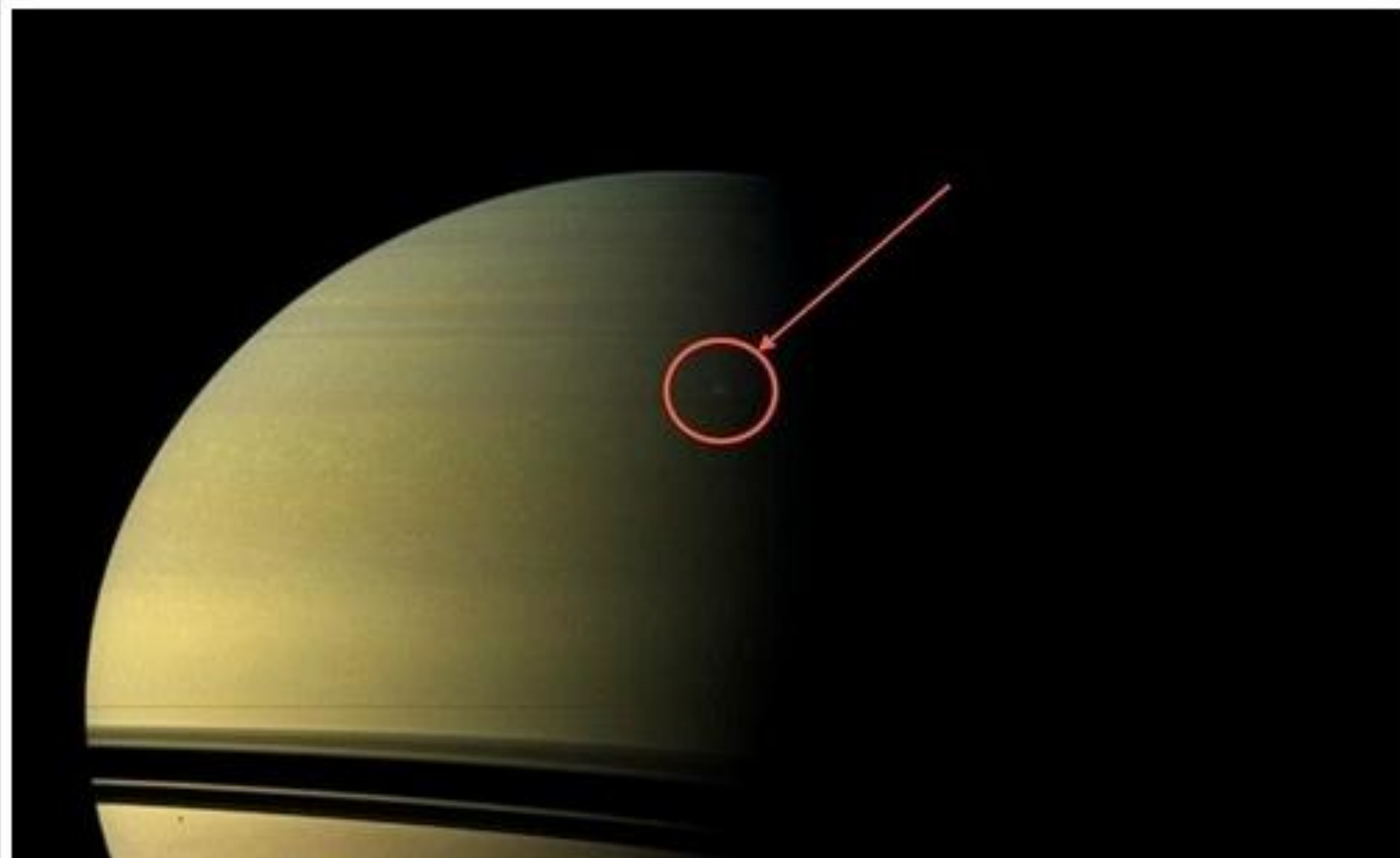
View of Solar System from above
2011 OCT 28 00:00:00 UTC
45.0° field of view



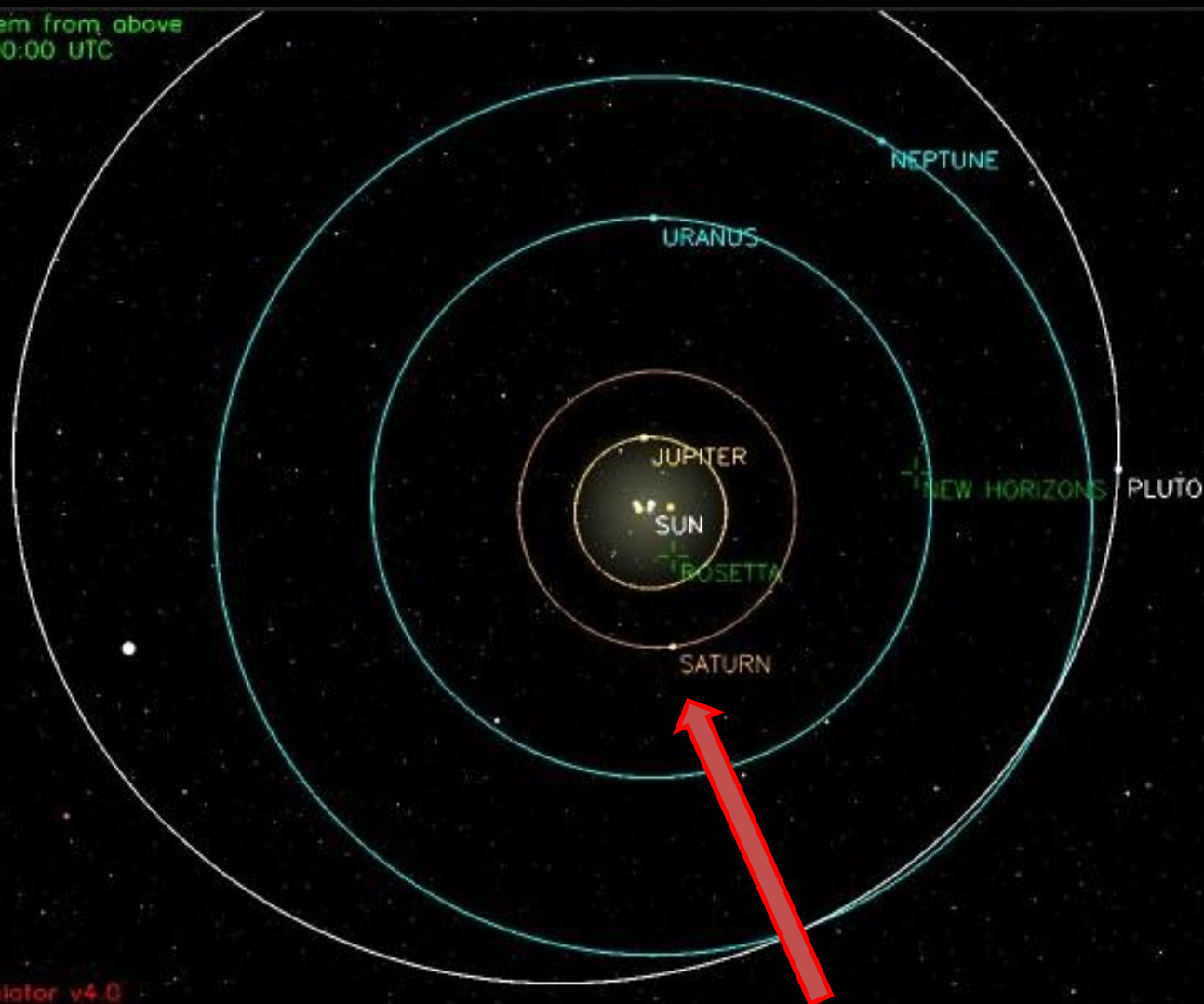
Solar System Simulator v4.0

Uranus's position October 28, 2011 new storm begins.

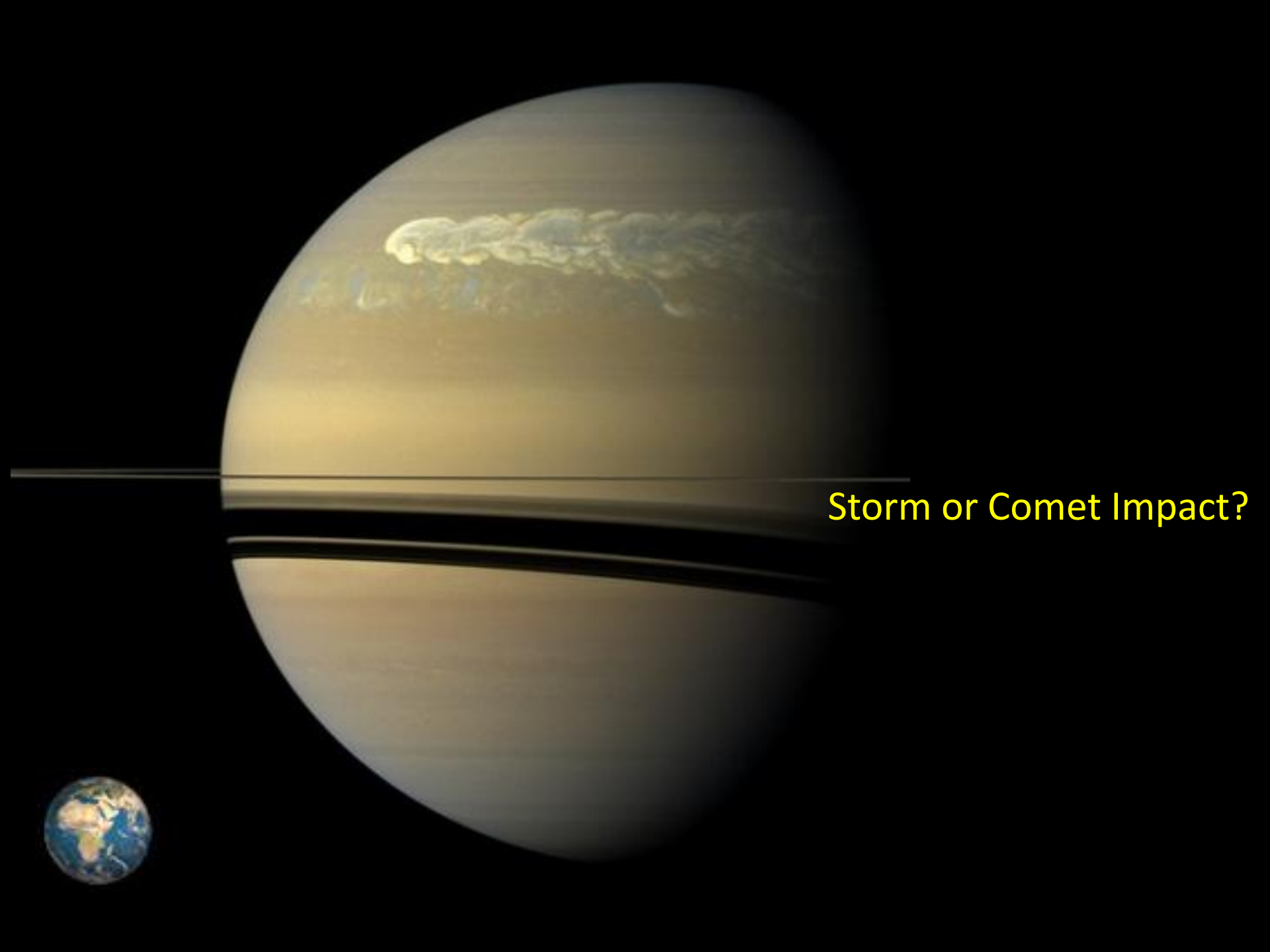
Cassini, the famed Saturn spacecraft that's been orbiting our ringed neighbor for nearly a decade, first spotted this storm in the earliest stages of its infancy, all the way back in early December, 2010. I've highlighted it, below, visible right at Saturn's terminator.



View of Solar System from above
2010 DEC 01 00:00:00 UTC
45.0° field of view



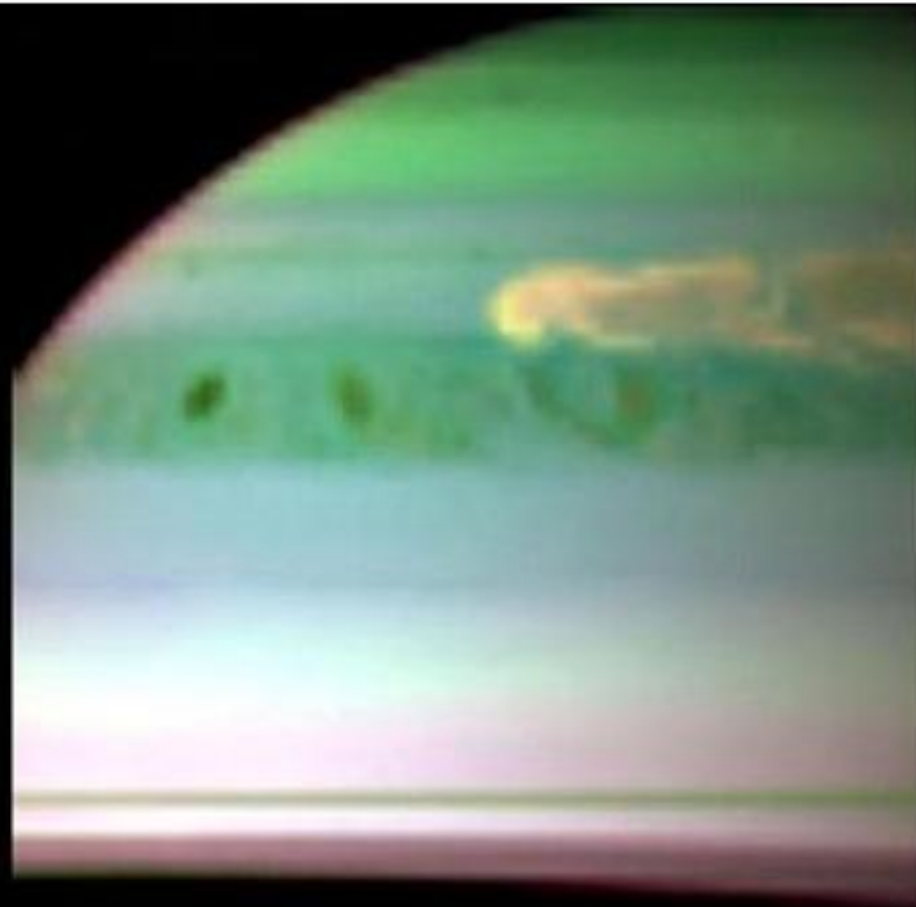
Saturn's position December 1st, 2010 when the storm was detected.



Storm or Comet Impact?

Cometary nuclei contain the least modified material from the formative epoch of our planetary system, and their compositions reflect a range of processes experienced by material prior to its incorporation in the cometary nucleus. Dynamical models suggest that icy bodies in the main cometary reservoirs (Kuiper Belt, Oort Cloud) formed in a range of environments in the protoplanetary disk, and (for the Oort Cloud) even in disks surrounding neighboring stars of the Sun's birth cluster. Photometric and spectroscopic surveys of more than 100 comets have enabled taxonomic groupings based on free radical species and on crystallinity of rocky grains. Since 1985, new surveys have provided emerging taxonomies based on the abundance ratios of primary volatiles. More than 20 primary chemical species are now detected in bright comets. Measurements of nuclear spin ratios (in water, ammonia, and methane) and of isotopic ratios (D/H in water and HCN; $^{14}\text{N}/^{15}\text{N}$ in CN and HCN) have provided critical insights on factors affecting formation of the primary species. The identification of an abundant product species (HNC) has provided clear evidence of chemical production in the inner coma. Parallel advances have occurred in astrochemistry of hot corinos, circumstellar disks, and dense cloud cores. In this review, we address the current state of cometary taxonomy and compare it with current astrochemical insights.

Quite to the contrary, this is a virtually planet-wide storm plume, whose core is a 3,000-mile-wide thunderstorm, kicking up beacons of warm air and leaving behind ammonia ice crystals, which we can tell from *Cassini*'s observations in the infrared.



R = 4.08 μm **G** = 0.90 μm **B** = 2.73 μm

image credit: NASA / JPL / Univ. of Arizona.)

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THE PERFECT DUST STORM STRIKES MARS

THE PERFECT DUST STORM STRIKES MARS

THREE MONTHS AFTER IT BEGAN, AN AWESOME GLOBAL DUST STORM ON MARS IS WANING. TWO NASA SPACECRAFT HAVE CAPTURED DAZZLING IMAGES OF THE PLANETARY TEMPEST.



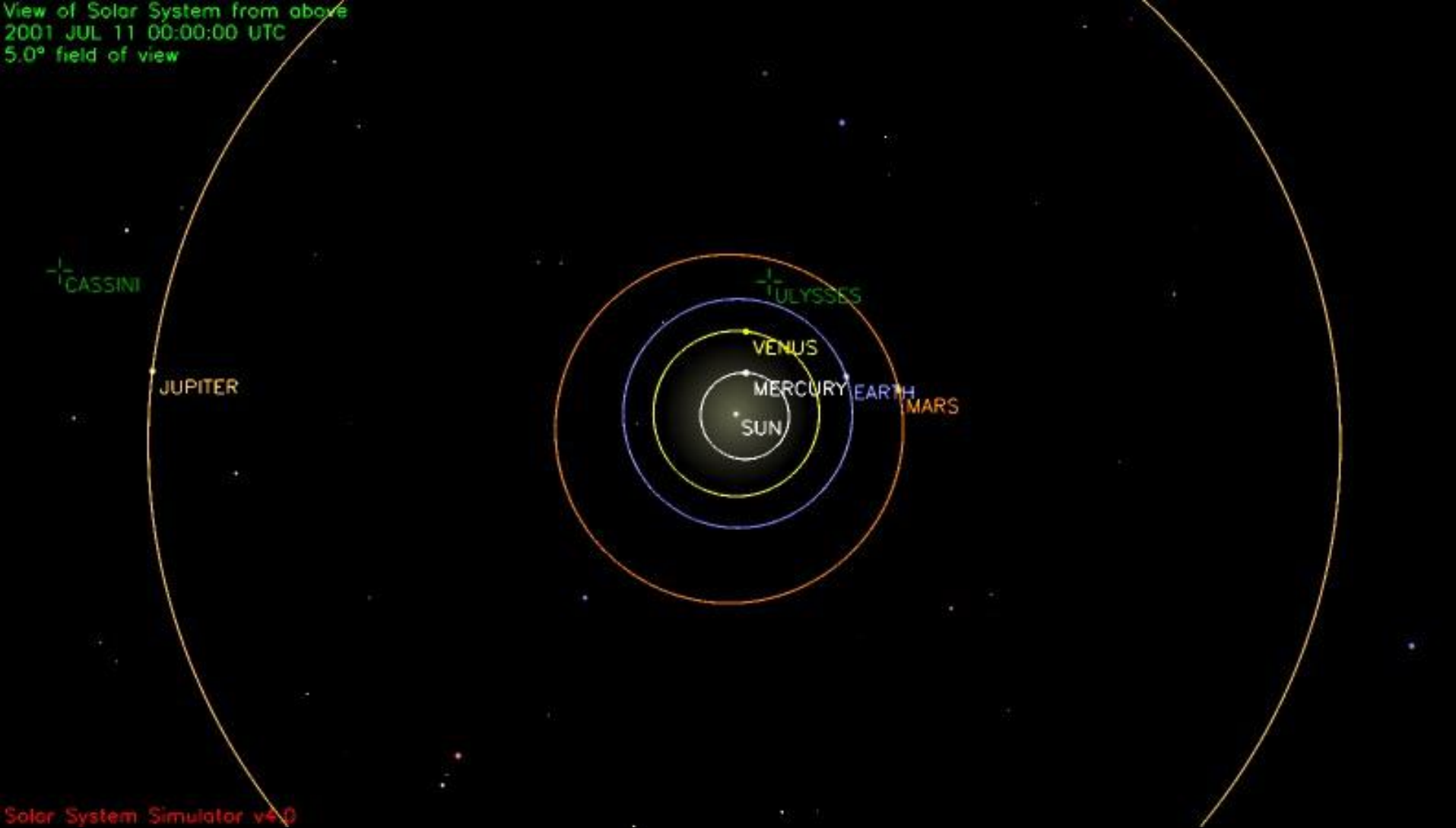
Listen to this story via [streaming audio](#), a [downloadable file](#), or [get help](#).

October 11, 2001: A pair of NASA spacecraft, the Mars Global Surveyor (MGS) and Hubble Space Telescope, is giving scientists a ringside seat for the biggest global dust storm seen on Mars in several decades. The extraordinary storm, which first enveloped the Red Planet three months ago, is finally subsiding -- but researchers say it could flare up again at any time.



Above: These Hubble Space Telescope images show the Red Planet before (left) and during (right) the great Martian dust storm of 2001. [Press information](#)

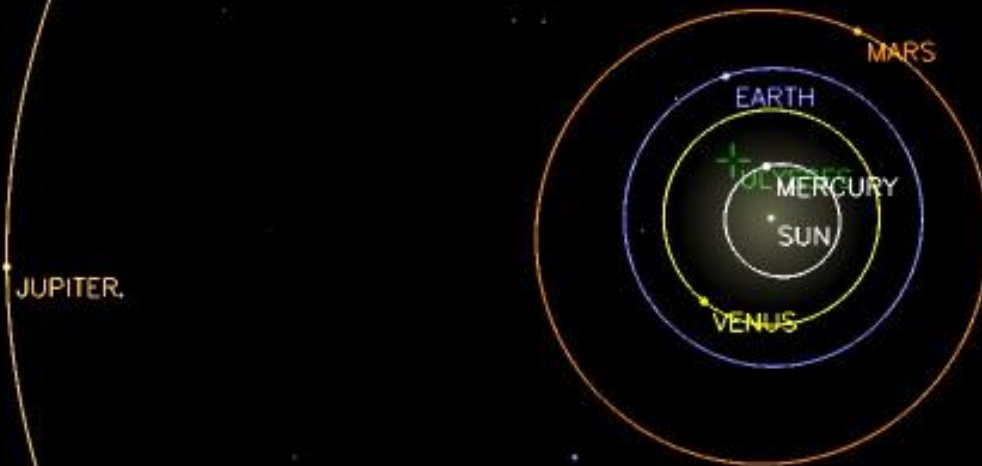
View of Solar System from above
2001 JUL 11 00:00:00 UTC
5.0° field of view



Mars's position July 11, 2001 when massive dust storm began.

View of Solar System from above
2001 OCT 11 00:00:00 UTC
5.0° field of view

CASSINI



Solar System Simulator v4.0

Mars's position July 11, 2001 when massive dust storm began to subside.

www.universetoday.com/14892/mars-dust-storms/

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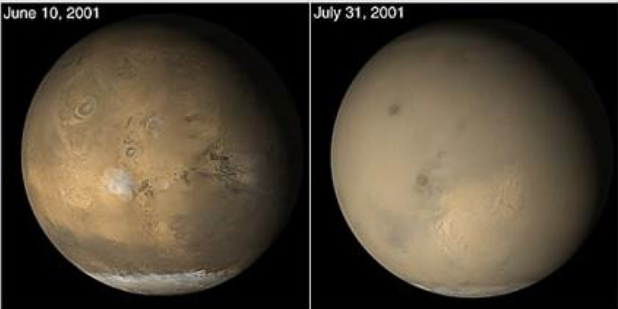
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Space and astronomy news

Mars Dust Storms

by JERRY COFFEY on JUNE 6, 2008

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“Scientists are still trying to determine why the storms become so large and last so long.”

“The chance for storms is increased when there are great temperature variations...”

Mars dust storms are much different than the dust devils that many people have seen in images sent back from the planet. On Mars a dust storm can develop in a matter of hours and envelope the entire planet within a few days. After developing, it can take weeks for a dust storm on Mars to completely expend itself. Scientists are still trying to determine why the storms become so large and last so long.

All Mars dust storms are powered by sunshine. Solar heating warms the Martian atmosphere and causes the air to move, lifting dust off the ground. The chance for storms is increased when there are great temperature variations like those seen at the equator during the Martian summer. Because the planet's atmosphere is only about 1% as dense as

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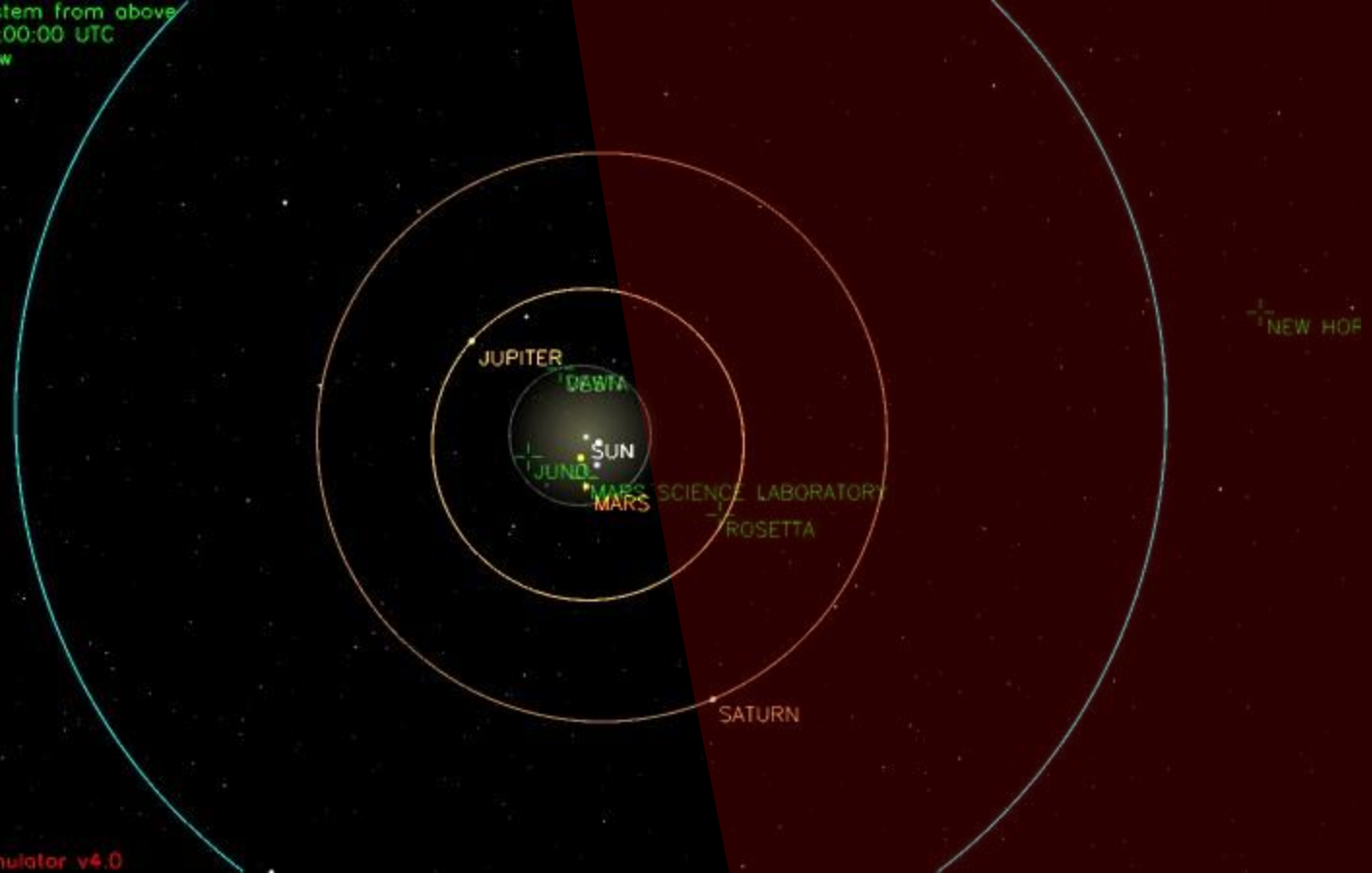
“When I started working with computers, I found that the more I learned the more I wanted to know.”

Jill Larsen

Could this storm have been triggered and sustained by a steady stream of comet fragments seeding the atmosphere?

View of Solar System from above
2012 APR 11 00:00:00 UTC
20.0° field of view

Solar System Simulator v4.0



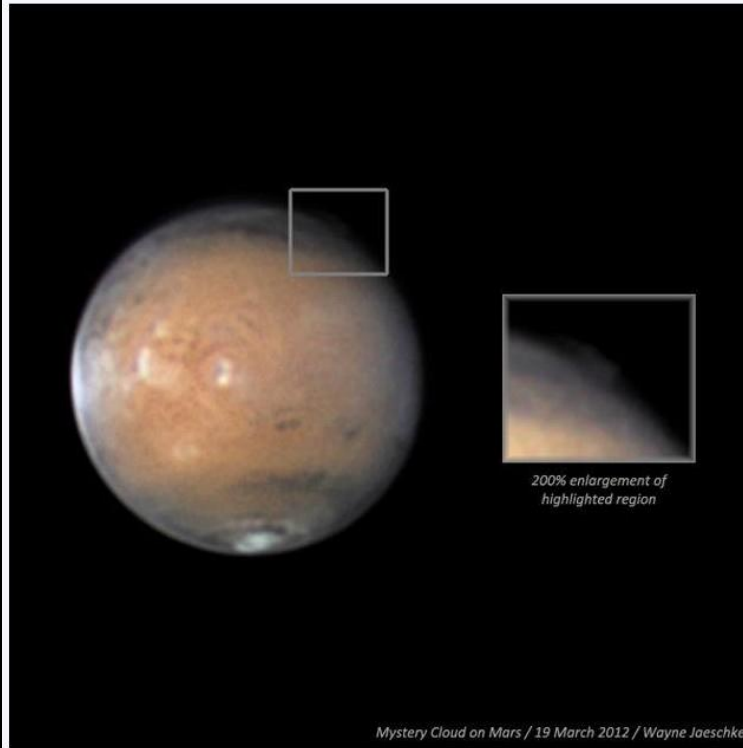
Sticking my neck out and predicting: Massive dust storm on Mars starting almost immediately. Saturn impacted by comet or asteroid.

Space News: Dust Cloud or Meteor Impact on Mars has Astronomers Wondering.

Here's a stumper for any Mars experts. While processing my Mars images from last night, I found a strange feature over Acidalia (top right of the animation below). I made this 5-frame animation of the green-light images. The feature appears in all the channels, but is most visible in blue and green and least visible in IR. Also, it moves with the planet (ruling out dust motes on the sensor) and seems to rise over the limb. Fog rolled in after this, so there is no additional data later than this. If anyone caught Mars after 2:15UT last night, please check your images... particularly after 2:51UT.

Update Note: for those of you Mars geographers, the most appropriate geographic location to cite for where the feature resides is Terra Cimmerium. Acidalia was where I thought it was at first glance, but the measured location is 190 degrees by 43 degrees (South) placing over Terra Cimmerium.

Wayne Jaeschke



Found this after I presented to Christopher Dock Mennonite High School on April 25th, 2012.

This was posted March 19th, 2012

<http://www.informantnews.com/modules.php?name=News&file=article&sid=345>

Mar
21
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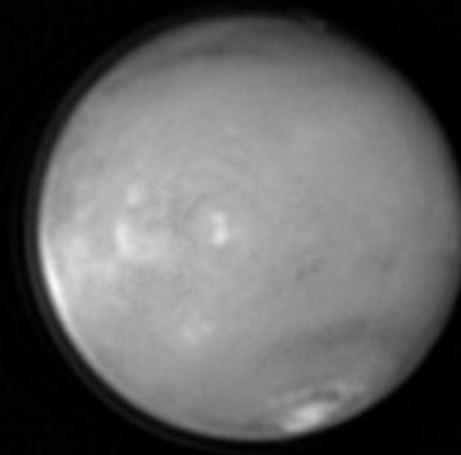
The strange cloud on Mars....

■ All planets, Mars

It appears that numerous imagers captured the features I discovered yesterday and brought to the attention of the amateur community. It's good to know that I'm not just seeing things!

Here are a few more images to help ponder the question of whether it's a high-altitude water-ice cloud of some sort or perhaps a dust plume. I think it looks like a mushroom cloud from an impact, but that's just what I'm seeing. We'll learn more as those with more experience with Martian clouds chime-in.

Here is one of the best green-light images of the feature. I have a lot of data to sort through and will update.



<http://exosky.net/exosky/?m=201203&paged=2>

36.

Wayne J. says:

March 30, 2012 at 2:42 pm



Hi Michael,

NASA, like all scientific research bodies, adheres to the belief that the researcher that made the observation be the one that announces the finding. As applied to amateurs, what this really means is that since the observation wasn't made by NASA, they are unlikely to comment publicly on it until something is published on it. That said, it's a little premature for any professional researcher to make any public comments as we simply don't know what it is yet -- and NASA/JPL are about the last people in the world to say "hey look.. it's cool but we have no clue what it is!"

That doesn't mean that there aren't researchers from all over the place looking at this and conjecturing what it is. Also, NASA/JPL typically manage programs and spacecraft. The research is done by people at various institutes. In this case, I have been contacted by researchers from at least 5 different organizations and am trying my best to provide them all with factual data from the observation for their analysis. Being scientists, though, they're not going to say too much until they have fully studied the new data against old data and can back-up their conclusions against peer review.

I wouldn't expect to see anything published on this from a professional research organization for at least a few months.

Wayne

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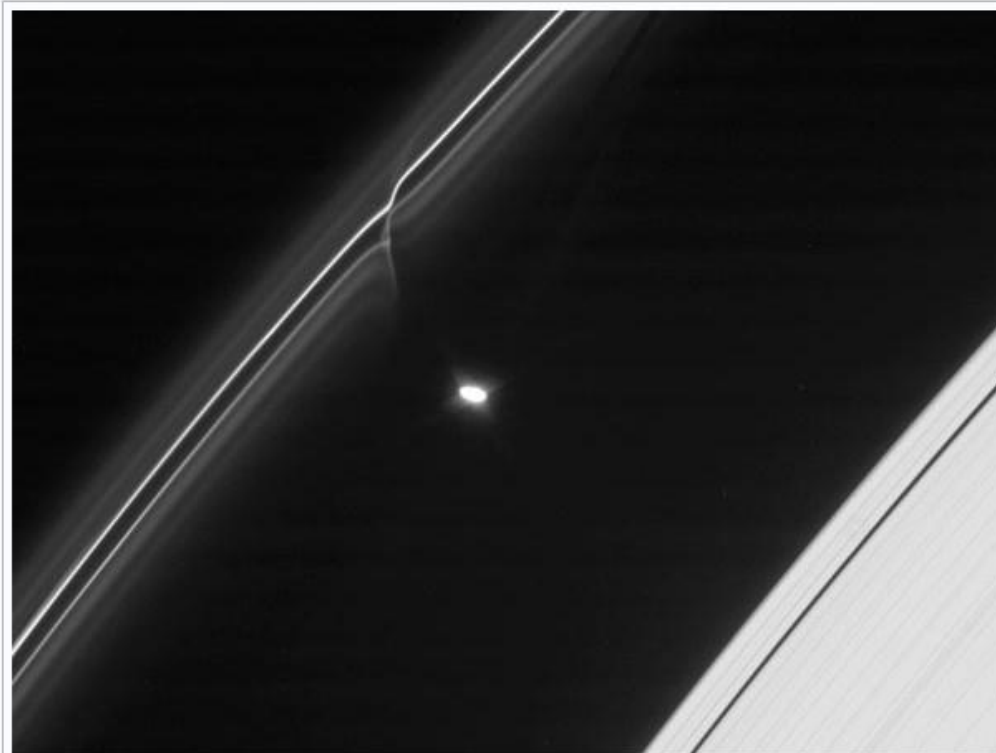
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Huge "Snowballs" Seen Piercing Saturn's Outer Ring

Posted by [Xeno](#) on April 27, 2012



Giant "snowballs" have been discovered plunging through Saturn's outermost ring, creating glittering trails of ice dubbed mini-jets, researchers have announced.

The jets were uncovered in new images from NASA's Cassini orbiter, which has been touring the Saturnian system for the past seven years.

The colliding snowballs are formed as material in Saturn's F ring coalesces due to the gravitational pull of the nearby moon Prometheus. Scientists estimate that the icy bodies, including the one seen above, are each about 0.62 mile (a kilometer) wide.

Sometimes a snowball sails back through the F ring at a gentle clip of roughly 4 miles (6.4 kilometers) an hour, dragging along icy particles.

The resulting jets "are about 10 kilometers [6.2 miles] wide and extend out from the rings anywhere from 40 to 180 kilometers [25 to 112 miles], depending on their age, with their lengths increasing dramatically over just a few hours," said Carl Murray, a Cassini imaging team member based at Queen Mary University in London, England.

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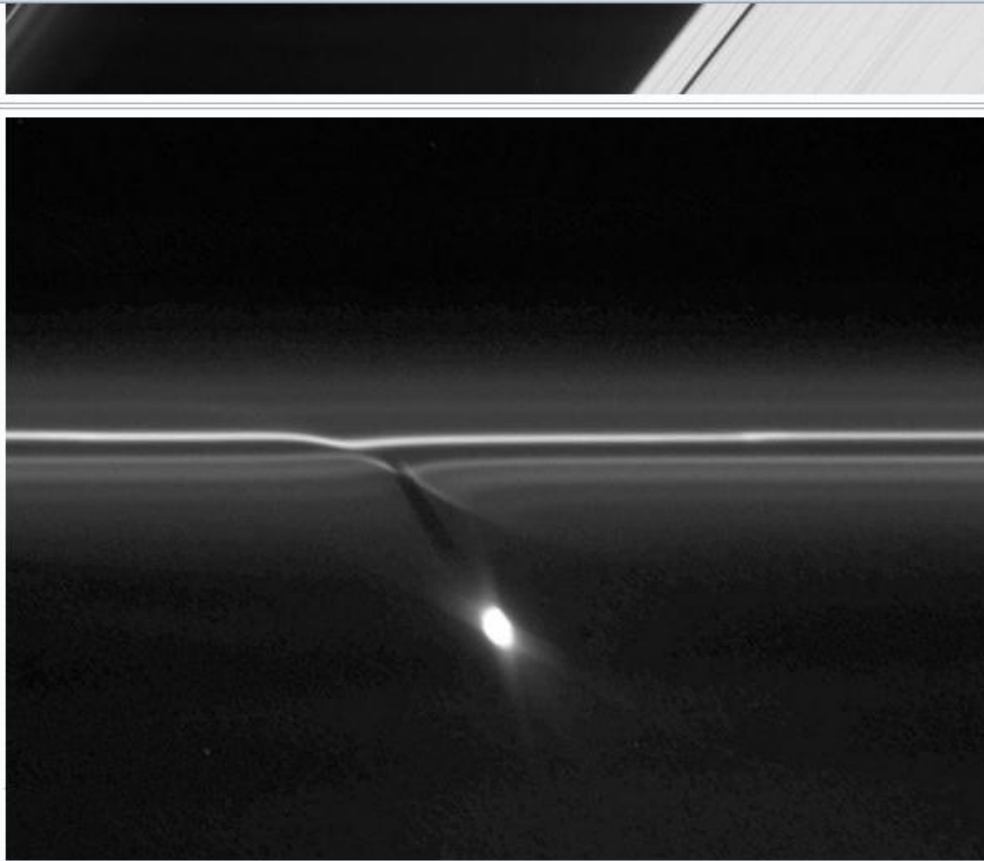
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lengths increasing dramatically over just a few hours," said Carl Murray, a Cassini imaging team member based at Queen Mary University in London, England.

"At any given time we might expect to see about ten of these if we looked all the way around the F ring."

—Andrew Fazekas

* ...

Using pictures from Cassini's narrow-angle camera, scientists were able to track the snowballs at the ends of the mini-jets, such as the one above, as they plowed through Saturn's F ring.

"We have yet to obtain resolved images of these objects," Murray said.

"However, when we see an obvious 'head' at the end of the mini-jet trail, it tends to have a fuzzy appearance"—suggestive of the halo that surrounds a comet—"produced, perhaps, from material on its surface or F ring core material."

via [Pictures: Huge "Snowballs" Seen Piercing Saturn's Outer Ring.](#)



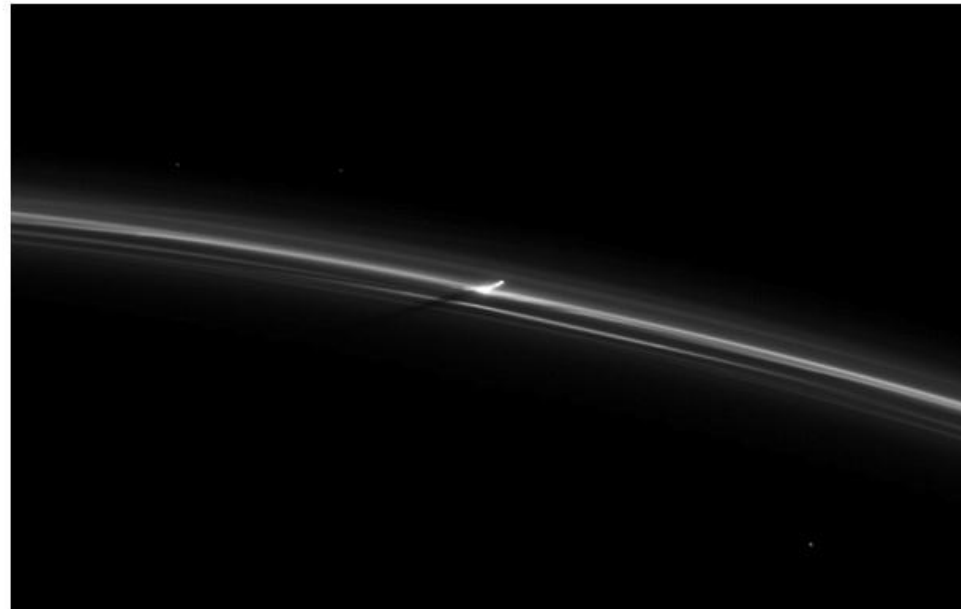
Bad Astronomy

« Amazing Super Powers!
More Saturn ring awesomeness »

Like the fist of an angry god

Deep in the outer realms of our solar system, well over a billion kilometers away, something bizarre happened at Saturn's F ring.

I mean, seriously: what the *hell* happened here?





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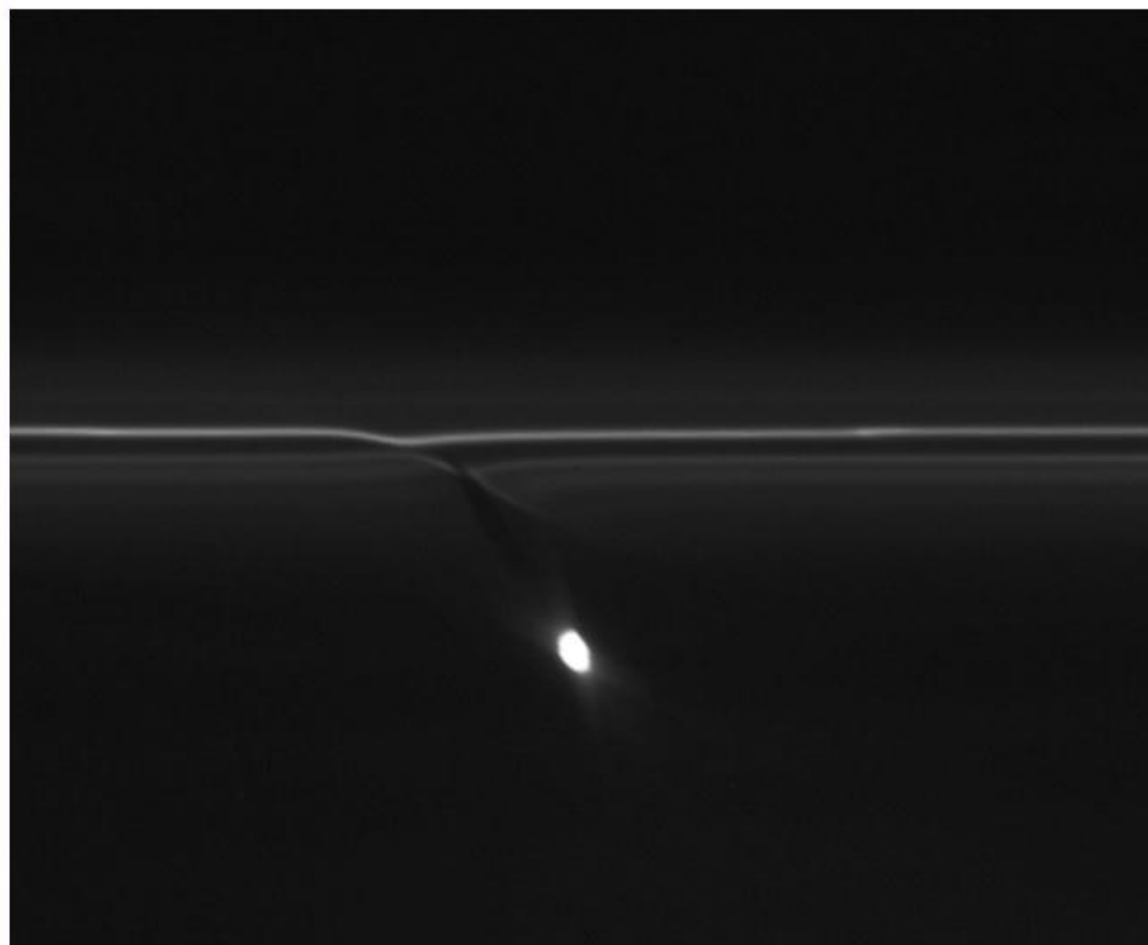


Image details

ID#:
[PIA15501](#)

Date added:
2012-04-23

Mission:
[Cassini-Huygens](#)

Spacecraft:
[Cassini Orbiter](#)

Instruments:
[Imaging Science Subsystem - Narrow Angle](#)

Size:
491 x 400 pixels (width x height)

Rating:
★★★★★

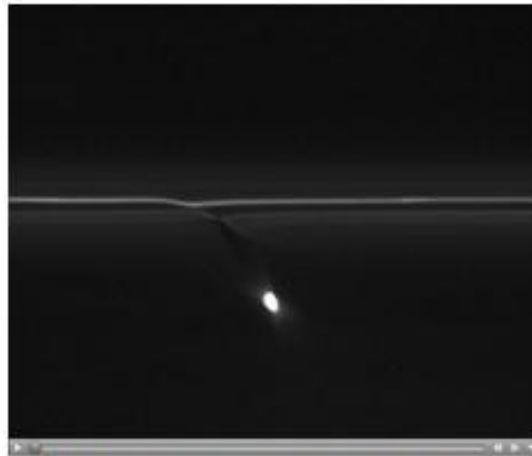
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Full-Res TIFF:
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Full-Res JPG:
[PIA15501.jpg \(0.01 MB\)](#)

Image credit:
NASA/JPL-Caltech/SSI/QMUL

F Ring Patterns



Click on the image for the video

In this movie from NASA's Cassini spacecraft, the gravitational pull of Saturn's moon Prometheus creates patterns in Saturn's F ring. This movie also happens to show a small trail of icy ring particles dragged out when a tiny object punches through the ring. That trail appears at the top right about 12 seconds into the movie and moves along the length of the F ring to the left.

This movie covers 11 hours and 5 minutes on Jan. 30, 2009. The images were re-projected so that the frame is centered on the moon Prometheus, highlighting the interaction between the F ring and Prometheus.

Prometheus, which averages 53 miles or 86 kilometers across, is the bright body moving up and down in the frame. The delicate strands of the F ring run across the top of the frame. The trail, made of icy particles dragged out of Saturn's F ring, varies from about 47 miles (75 kilometers) long to 155 miles (250 kilometers) long over the course of the movie.

Scientists think the trails, also called "mini-jets" by Cassini scientists, are created when small objects about half a mile (1 kilometer) in diameter punch through the F ring and drag icy ring particles behind them. The objects creating the trails were likely originally formed by the pull of the moon Prometheus on tiny F ring particles.

A half mile diameter object impacting the earth could trigger a 250,000 kiloton explosion, decimating as much as a third of the planet.

Study supports theory of extraterrestrial impact

Researchers have conclusively identified a family of nanodiamonds, including the impact form of nanodiamonds called lonsdaleite, which is unique to cosmic impact.

By University of California, Santa Barbara — Published: March 6, 2012



Images of single and twinned nanodiamonds show the atomic lattice framework of the nanodiamonds. Each dot represents a single atom. Credit: University of California, Santa Barbara

A 16-member international team of researchers that includes James Kennett from the University of California, Santa Barbara, has identified a nearly 13,000-year-old layer of thin, dark sediment buried in the floor of Lake Cuitzeo in central Mexico. The sediment layer contains an exotic assemblage of materials, including nanodiamonds, impact spherules, and more, which, according to the researchers, are the result of a cosmic body impacting Earth.

These new data are the latest to strongly support a controversial hypothesis proposing that a major cosmic impact with Earth occurred 12,900 years ago at the onset of an unusual cold climatic period called the Younger Dryas.

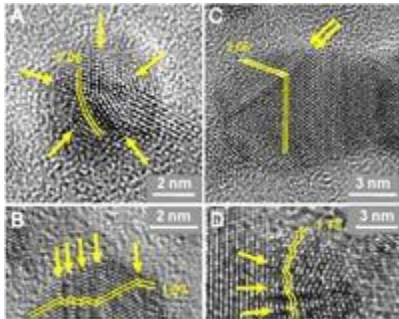
Conducting a wide range of exhaustive tests, the researchers conclusively identified a family of nanodiamonds, including the impact form of nanodiamonds called lonsdaleite, which is unique to cosmic impact. The researchers also found spherules that had collided at high velocities with other spherules during the chaos of impact. Such features, Kennett noted, could not have formed through anthropogenic, volcanic, or other natural terrestrial processes. "These materials form only through cosmic impact," he said.

The data suggest that a comet or asteroid — likely a large, previously fragmented body greater than several hundred meters in diameter — entered the atmosphere at a relatively shallow angle. The heat at impact burned biomass, melted surface rocks, and caused major environmental disruption. "These results are consistent with earlier reported discoveries throughout North America of abrupt ecosystem change, megafaunal extinction, and human cultural change and population reduction," Kennett said.

The sediment layer identified by the researchers is of the same age as that previously reported at numerous locations throughout North America, Greenland, and Western Europe. The current discovery extends the known range of the nanodiamond-rich layer into Mexico and the tropics. In addition, it is the first reported for true lake deposits.

In the entire geologic record, there are only two known continent-wide layers with abundance peaks in nanodiamonds, impact spherules, and aciniform soot. These are in the 65-million-year-old Cretaceous-Paleogene boundary layer that coincided with major extinctions, including the dinosaurs and ammonites; and the Younger Dryas boundary event at 12,900 years ago, closely associated with the extinctions of many large North American animals, including mammoths, mastodons, saber-tooth cats, and dire wolves.

"The timing of the impact event coincided with the most extraordinary biotic and environmental changes over Mexico and Central America during the last approximately 20,000 years, as recorded by others in several regional lake deposits," said Kennett. "These changes were large, abrupt, and unprecedented, and had been recorded and identified by earlier investigators as a 'time of crisis.'"



Asteroid predicted to make near-miss with Earth

www.cbsnews.com/video/watch/?id=7387539n

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Asteroid predicted to make near-miss with Earth

November 8, 2011 7:17 AM

Scientists are predicting that an asteroid will pass between the Earth and the Moon. Terrell Brown reports on the closest asteroid encounter in 35 years.

Scientists are predicting that an asteroid will pass between the Earth and the Moon. Terrell Brown reports on the closest asteroid encounter in 35 years.

Discovery News ... loves the purple crab.

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Discovery News > Space News > No Joke: April Fools' Asteroid Was a Near Miss

NO JOKE: APRIL FOOLS' ASTEROID WAS A NEAR MISS

On Sunday (April 1), a space rock the size of a passenger jet zipped between the Earth and moon.

Mon Apr 2, 2012 11:35 AM ET
Content provided by Tariq Malik, SPACE.com
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257



Although asteroid 2012 EG5 posed no threat to Earth, the near-miss highlights the threat of near-Earth asteroids. [Click to enlarge this image.](#)

ESA - P.Carril

THE GIST

- In the early hours of April Fools' Day a 150-foot wide asteroid flew past the Earth, beneath the orbit of the moon.
- Asteroid 2012 EG5 posed no threat to Earth and even if it did hit Earth, it would have likely burned up in the atmosphere.
- Another asteroid, 2012 FA57, is expected to fly past the Earth-moon system on April 4.

An asteroid the size of a passenger jet zoomed near the Earth Sunday (April 1), just in time for April Fools' Day, but the space rock flyby posed no threat of hitting our planet, NASA officials said.

The asteroid 2012 EG5 was closer than the moon when it flew by Earth at 5:32 a.m. EDT (0932 GMT). The space rock is about 150 feet wide (46 meters), according to a NASA records. Scientists with the space agency announced the April Fools' asteroid flyby on Friday, March 30.

"Asteroid 2012 EG5 will safely pass Earth on April 1," scientists with NASA's Asteroid Watch program at the Jet Propulsion Laboratory in Pasadena, Calif., wrote in a Twitter statement.

2012 DA 14

Near-miss asteroid will return n...

www.sciencedaily.com/releases/2012/03/120315225625.htm

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Near-Miss Asteroid Will Return Next Year, Even Closer

ScienceDaily (Mar. 15, 2012) — When it whizzes past Earth in 2013, a newly discovered asteroid is going to miss our planet -- but not by much. The 50-meter space rock is expected to come closer than many satellites, highlighting the growing need to keep watch on hazards from above.

See Also:

Space & Time

- Asteroids, Comets and Meteors
- ESA
- Satellites
- Space Telescopes
- Space Station
- Space Exploration

Reference

- Geosynchronous orbit
- Near-Earth object
- Near-Earth asteroid
- Space observatory

An amateur team discovered the unusual asteroid, dubbed 2012 DA14, on 22 February. Its small size and orbit meant that it was spotted only after it had flown past Earth at about seven times the distance of the Moon.

However, current predictions indicate that on its next flyby, due on 15 February 2013, it will pass Earth at just 24,000 km -- closer than many commercial satellites.

"This is a safe distance, but it is still close enough to make the asteroid visible in normal binoculars," says Detlef Koschny, responsible for near-earth objects in ESA's Space Situational Awareness (SSA) office.

Astronomers in Spain spot 'slippery target'

The asteroid was discovered by the La Sagra Sky Survey observatory, in the southeast of Spain, near Granada, at an altitude of 1700 m, one of the darkest, least light-polluted locations on the European mainland.

"Considering its path in the morning sky, its rather fast angular motion, the quite faint and fading brightness and its orbit high above the plane of Earth's orbit, it was a slippery target -- and easily could have escaped undetected during this Earth visit," says Jaime Nomen, one of the discoverers.

The team use several automated telescopes to scan the sky,

In this plot, the asteroid is the yellow dot, and Earth is green; the two orbits intersect twice per year. A preliminary orbit calculation shows that 2012 DA14 has a very Earth-like orbit with a period of 366.24 days, just one more day than our terrestrial year, and it 'jumps' inside and outside of the path of Earth two times per year. While an impact with Earth has been ruled out on the asteroid's next visit, astronomers will use that close approach for more studies and calculate the Earth and Moon's gravitational effects on it. (Credit: Deimos-Space)

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Asteroid's near-miss with Earth

An asteroid will today make one of the closest cosmic near-misses with Earth ever recorded.



The asteroid's path makes it the closest space-rock to pass by the Earth since June 2011 Photo: CORBIS



By Murray Wardrop

12:18PM GMT 27 Jan 2012

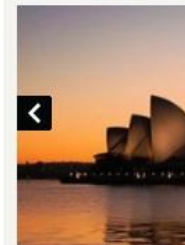
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I COULD NEVER GIVE UP BREAD - I'M A
SANDWICH GUY. BUT WITH WEIGHT WATCHERS
ONLINE FOR MEN, NOTHING IS OFF LIMITS.
-Kevin lost 81 lbs*

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NASA Releases Stunning Video of Near-Miss Asteroid



By Damon Poeter

November 8, 2011 08:53pm EST



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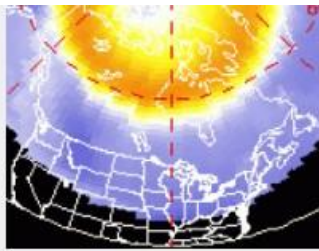
252



A massive asteroid paid Earth a very close visit Tuesday and astronomers were able to capture stunning imagery of the near-miss rock, including a mini-movie put together by NASA (below).

Asteroid 2005 YU55 zoomed by the planet inside the Moon's orbit and reached its closest proximity at 6:28 p.m. ET when it came within 201,700 miles of Earth. It's the largest object on record to pass this close to us with our foreknowledge. And just like that, 2005 YU55 was zooming off into deep space once again at approximately 29,000 miles per hour.

"By animating a sequence of radar images, we can see more surface detail than is visible otherwise," Lance Benner, a radar astronomer at NASA's Jet Propulsion Laboratory said in a statement upon the release of the space agency's imaging sequence. "The animation reveals a number of puzzling structures on the surface that we don't yet understand. To



Switch to: [Europe](#), [USA](#), [New Zealand](#), [Antarctica](#)

Credit: NOAA/POES

Planetary K-index

Now: **Kp= 5 storm**

24-hr max: **Kp= 6 storm**

[explanation](#) | [more data](#)

Interplanetary Mag. Field

B_{total} : **5.9 nT**

B_z : **3.7 nT south**

[explanation](#) | [more data](#)

Updated: Today at 0937 UT

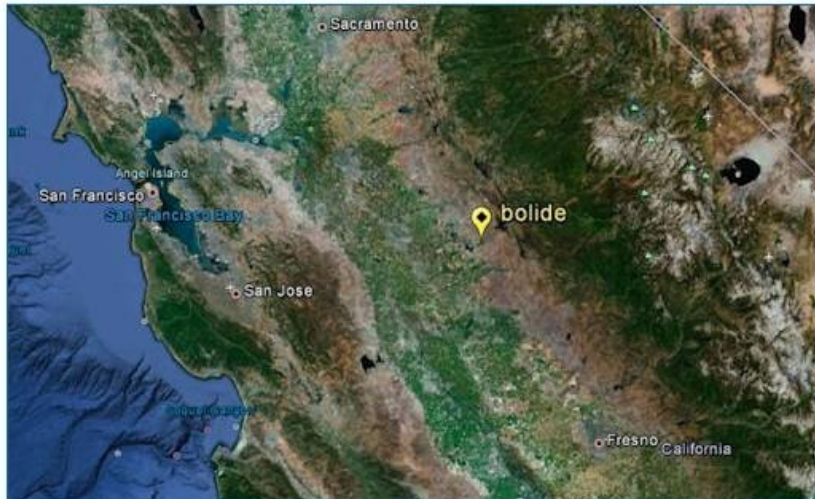
Coronal Holes: 24 Apr 12



There are no large coronal holes on the Earthside of the sun. Credit: SDO/AIA.

SIERRA FIREBALL DECODED: On Sunday morning, April 22nd, just as the Lyrid meteor shower was dying down, a spectacular fireball exploded over California's Sierra Nevada mountain range. The loud explosion rattled homes from central California to Reno, Nevada, and beyond. According to Bill Cooke, head of NASA's Meteoroid Environment Office, the source of the blast was a meteoroid about the size of a minivan.

"Elizabeth Silber at Western University has searched for infrasound signals from the explosion," says Cooke. "Infrasound is very low frequency sound which can travel great distances. There were strong signals at 2 stations, enabling a triangulation of the energy source at 37.6N, 120.5W. This is marked by a yellow flag in the map below."



"The energy is estimated at a whopping **3.8 kilotons of TNT**, so this was a big event," he continues. "I am not saying there was a 3.8 kiloton explosion on the ground in California. I am saying that the meteor possessed this amount of energy before it broke apart in the atmosphere. [The map] shows the location of the atmospheric breakup, not impact with the ground."

"The fact that sonic booms were heard indicates that this meteor penetrated very low in atmosphere, which implies a speed less than 15 km/s (33,500 mph).

“ ...It (Hiroshima) created a blast equivalent to about 13 [kilotons of TNT](#) ...”

http://en.wikipedia.org/wiki/Atomic_bombings_of_Hiroshima_and_Nagasaki#The_bombing



Near Earth Asteroids

Potentially Hazardous Asteroids ([PHAs](#)) are space rocks larger than approximately 100m that can come closer to Earth than 0.05 AU. None of the known PHAs is on a collision course with our planet, although astronomers are finding [new ones](#) all the time.

On April 24, 2012 there were **1287** potentially hazardous asteroids.

Recent & Upcoming Earth-asteroid encounters:

Asteroid	Date(UT)	Miss Distance	Mag.	Size
2012 GP1	Apr 21	9 LD	--	26 m
2012 HN1	Apr 21	5.2 LD	--	18 m
2012 HE	Apr 22	6.9 LD	--	31 m
2012 HE2	Apr 24	8.9 LD	--	28 m
2012 HQ	Apr 24	9.8 LD	--	42 m
2012 HP13	Apr 27	2 LD	--	64 m
2012 HM	Apr 28	1.4 LD	--	67 m
2011 WV134	Apr 28	38.6 LD	--	1.6 km
1992 JD	May 2	9.5 LD	--	43 m
2010 KK37	May 19	2.3 LD	--	31 m
4183 Cuno	May 20	47.4 LD	--	5.7 km
2002 VX94	May 26	72.8 LD	--	1.1 km
2002 AC	Jun 16	62.2 LD	--	1.2 km
1999 BJ8	Jun 16	68.8 LD	--	1.1 km
2005 GO21	Jun 21	17.1 LD	--	2.2 km

Notes: LD means "Lunar Distance." 1 LD = 384,401 km, the distance between Earth and the Moon. 1 LD also equals 0.00256 AU. MAG is the visual magnitude of the asteroid on the date of closest approach.

Sandra Noble, executive director of the Mesoamerican research organization *Foundation for the Advancement of Mesoamerican Studies, Inc.*(FAMSI), notes that "for the ancient Maya, it was a huge celebration to make it to the end of a whole cycle". She considers the portrayal of December 2012 as a doomsday or cosmic-shift event to be "a complete fabrication and a chance for a lot of people to cash in."^[23]

Long Count

Main article: [Mesoamerican Long Count calendar](#)

Since Calendar Round dates repeat every 18,980 days, approximately 52 solar years, the cycle repeats roughly once each lifetime, so a more refined method of dating was needed if history was to be recorded accurately. To specify dates over periods longer than 52 years, Mesoamericans used the Long Count calendar.

The Maya name for a day was *k'in*. Twenty of these k'ins are known as a *winal* or *uinal*. Eighteen winals make one *tun*. Twenty tuns are known as a *k'atun*. Twenty k'atuns make a *b'ak'tun*.

The Long Count calendar identifies a date by counting the number of days from the Mayan creation date 4 Ahaw, 8 Kumk'u (August 11, 3114 BC in the [proleptic Gregorian calendar](#) or September 6 in the [Julian calendar](#)). But instead of using a base-10 ([decimal](#)) scheme like Western numbering, the Long Count days were tallied in a modified base-20 scheme. Thus 0.0.0.1.5 is equal to 25, and 0.0.0.2.0 is equal to 40. As the Uinal unit resets after only counting to 18, the Long Count consistently uses base-20 only if the tun is considered the primary unit of measurement, not the k'in; with the k'in and Uinal units being the number of days in the tun. The Long Count 0.0.1.0.0 represents 360 days, rather than the 400 in a purely base-20 ([vigesimal](#)) count.

There are also four rarely used higher-order cycles: [piktun](#), [kalabtun](#), [k'inchiltun](#), and [alautun](#).

Since the Long Count dates are unambiguous, the Long Count was particularly well suited to use on monuments. The monumental inscriptions would not only include the 5 digits of the Long Count, but would also include the two tzolk'in characters followed by the two haab' characters.

Misinterpretation of the [Mesoamerican Long Count calendar](#) is the basis for a popular belief that a [cataclysm will take place on December 21, 2012](#). December 21, 2012 is simply the day that the calendar will go to the next *b'ak'tun*, at Long Count 13.0.0.0.0. The date on which the calendar will go to the next *piktun* (a complete series of 20 *b'ak'tuns*), at Long Count 1.0.0.0.0.0, will be on October 13, 4772.

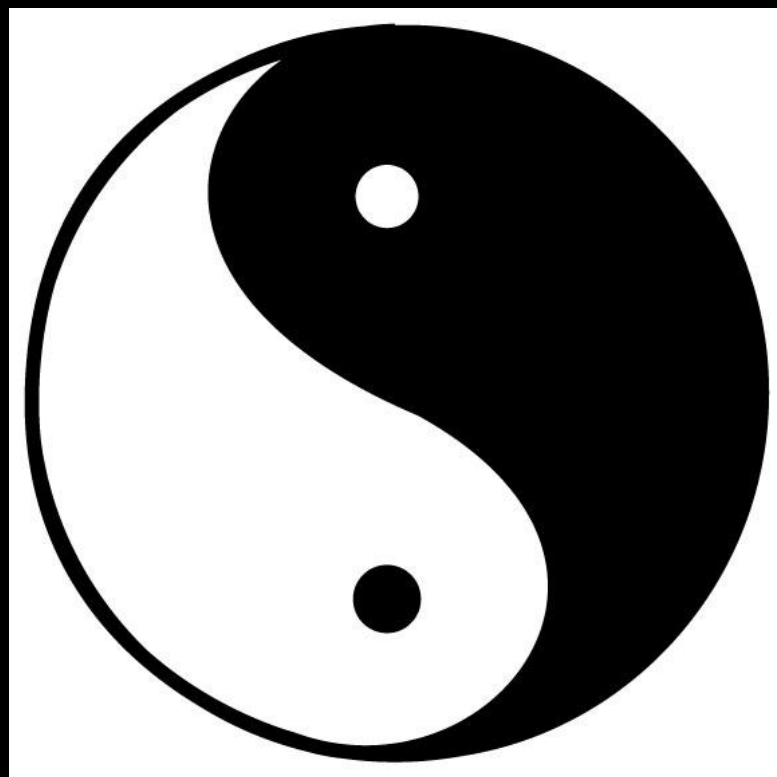
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Table of Long Count units

Days	Long Count period	Long Count unit	Approximate solar years
1		1 Kin	
20	20 Kin	1 Uinal	
360	18 Uinal	1 Tun	~ 1
7,200	20 Tun	1 Ka'tun	19.7
144,000	20 Ka'tun	1 Bak'tun	394.3
2,880,000	20 Bak'tun	1 Pictun	7,885
57,600,000	20 Pictun	1 Kalabtun	157,808
1,152,000,000	20 Kalabtun	1 K'inchiltun	3,156,164
23,040,000,000	20 K'inchiltun	1 Alautun	63,123,288



Detail showing three columns of glyphs from 2nd century CE [La Mojarra Stela 1](#). The left column gives a Long Count date of 8.5.16.9.7, or 156 CE. The two right columns are glyphs from the [Epi-Olmec script](#).



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Scientists Not Concerned Newly Discovered Asteroid Will Hit Earth



Inbox x



Marlaire, Ruth D. (ARC-VC) ruth.marlaire@nasa.gov

Mar 7 ☆



to me ▾

Scientists Not Concerned Newly Discovered Asteroid Will Hit Earth. [Space.com](http://space.com) (3/6) reports, "NASA scientists say the odds are extremely remote that it will pose any danger to us." Don Yeomans, manager of the Near-Earth Object Program Office, said, "Because of the extreme rarity of an impact by a near-Earth asteroid of this size, I fully expect we will be able to significantly reduce or rule out entirely any impact probability for the foreseeable future." Yeomans added, "It is important to note that with additional observations next year the odds will change and we expect them to change in Earth's favor." <http://bit.ly/xAE6Cd>


Hope this answers your questions.

Thank you for contacting NASA about your concern in this matter


Big Asteroid's Chances of Hitting Earth in 2040 Overblown, NASA Says

SPACE.com Staff

Date: 05 March 2012 Time: 10:57 AM ET

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The orbit of asteroid 2011 AG5 carries it beyond the orbit of Mars and as close to the sun as halfway between Earth and Venus.

CREDIT: NASA/JPL/Caltech/NEOPD

[View full size image](#)

An asteroid discovered last year has been gaining notoriety because of a chance that it could hit Earth in 28 years, but NASA scientists say the odds are extremely remote that it will pose any danger to us.

The huge space rock, called [asteroid 2011 AG5](#), is about 460 feet (140 meters) wide and circles the sun on a path between the orbits of Mars and Venus. Astronomers spotted it on Jan. 8, 2011 using the 60-inch Cassegrain reflector telescope on Mount Lemmon north of Tucson, Ariz., with some projections suggesting the odds of an Earth impact are 1 in 625.

Yet currently, the asteroid is rated a 1 on the 1-10 Torino Impact Hazard Scale that denotes [potentially dangerous asteroids](#) (1 is the least hazardous rating), NASA scientists say. So while there is a slight chance that asteroid 2011 AG5 could impact our planet in 2040, astronomers still need much better observations to define its orbit.

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Mazda SKYACTIV Engines Not a Hybrid. Not Electric. - www.MazdaUSA.com - Not a drag to drive. Details here.

RE: Blogger has ??? **about** Asteroid 2012 DA-14



Inbox x



Jenniskens, Petrus M. (ARC-SST)[SETI INSTITUTE] petrus.m.jenniskens@nasa.gov
to Ruth, me ▾

Mar 7



Jack,

Ruth asked if I could help answer your questions about asteroid
2012 DA14. What would you like to know?

Dr. Peter Jenniskens

...



jack althouse
to Petrus ▾

Mar 7



Thank you for getting back to me Dr. Jenniskens,

I am an architect, amateur archeologist, and author.

I saw this web posting on a site called RT.

<http://rt.com/news/paint-asteroid-earth-nasa-767/>

According to the article, it claims the following:

2012 DA14 is 60 meters in diameter.

It was discovered in February.

It is supposed to pass Earth February 2013.

It is supposed to pass within 16700 miles.

The article goes on to speculate the usual doom and gloom scenario of likely impact, nuclear bomb level destruction, etc.



jack althouse

to Petrus ▾

Mar 7 ☆



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The article goes on to speculate the usual doom and gloom scenario of likely impact, nuclear bomb level destruction, etc.

I have a small following of readers on my website. I study archeology and have visited the Palenque site, origin of the so called 2012 prediction. I studied Lynda Schelle's translation of the Mayan. I agree with NASA that the 2012 end of the world speculation is pure hype.

Can you provide me with facts that refute the RT article?

Thank you very much for your time.

Sincerely,

Jack Althouse AIA NCARB

[610 754 9360](tel:6107549360) office

[610 417 0211](tel:6104170211) cell

Architect's website: <http://althousejaffe.com/>

Author's website: <http://falthouse.com/>



Jenniskens, Petrus M. (ARC-SST)[SETI INSTITUTE] petrus.m.jenniskens@nasa.gov

Mar 7 ☆



to David, me ▾

Hello Jack,

David Morrison has answered such questions in the past. If he has time, he may be able to address the claims made in the article you refer to.

-Peter

From: jack althouse [jfalthouse@gmail.com]
Sent: Wednesday, March 07, 2012 1:27 PM
To: Jenniskens, Petrus M. (ARC-SST)[SETI INSTITUTE]
Subject: Re: Blogger has ??? about Asteroid 2012 DA-14

...



jack althouse

Mar 8 ☆



to Petrus, David ▾

Thank you Dr. Jenniskens. I appreciate you taking time out of your schedule to respond to my email. I look forward to (Dr. ?) Morrison's reply.

...



jack althouse

to Petrus, David ▾

Mar 8 ☆



Dr. Jenniskens,

May I pass this on to (Dr.?) Morrison :

I looked at the JPL website and checked the 2012 DA 14 impact risk chart. It listed February 16, 2020 as the first possible impact date. I looked at the JPL Small Body Database and calculated a distance of 27,157 Km for February 15th 2013. I used the Nominal Distance value. Being an architect and not an astronomer I realize I may have made several mistakes in my math. If by some miracle I did use the data correctly, does this mean that 2012 DA 14 will pass within 27,000 Km of Earth on February 16, 2020?

...



jack althouse

to Petrus, David ▾

Mar 8 ☆



I mean on February 16, 2013. Sorry.

...



Morrison, David D. (ARC-D) david.morrison@nasa.gov

Mar 8 ☆



to me, Petrus ▾

This answer was written for Ask an Astrobiologist and will be posted there. I hope it clarifies things.

David

Two recently discovered near-Earth asteroids will come very close to Earth, but neither one threatens to hit us. Asteroid 2011 AG5 will fly by in February 2023, and there exists a “keyhole” which, if the asteroid trajectory were just right, it could come back and impact the Earth in 2040. Calculations indicate such a 2040 impact has a probability of less than 1 percent, but still not negligible. More observations are needed to refine the orbit [http://en.wikipedia.org/wiki/2011_AG5]. AG5 has an estimated diameter of 140 m, so it is large enough to do considerable damage if it ever hit the Earth. Asteroid 2012 DA14 was found a few weeks ago by astronomers in Spain. On February 16 2013 it will fly by Earth inside our ring of geosynchronous satellites, very much like the close approach by Apophis on April 13 2029. DA14 is estimated to be roughly the size of the Tunguska impactor from June 1908. It will probably be visible with binoculars as it flies past, but not by the naked eye. There is no chance of it impacting the Earth in 2013. There are no plans to deflect either of these asteroids. The focus of astronomers is to obtain better telescopic data to refine our knowledge of their orbits.

...

...

...

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[610 417 0211](tel:6104170211) <tel:610%20417%200211> cell

Architect's website: <http://althousejaffe.com/>

Author's website: <http://jfalhouse.com/>

2012 DA 14 was discovered in late February 2012.