



Recovering the Lost World, A Saturnian Cosmology -- Jno Cook Chapter 5: The Absu and Speculation.



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"A discovery must be, by definition,
at variance with existing knowledge."
-- Albert Szent-Györgyi

The Equatorial Rings

Allow me to interrupt this exciting narrative with some comments on my sources and methods, and, since the thesis of this text goes counter to mainstream scientific dogma, I also have some notes on this. And I'll take this opportunity for an early exposition of the Earth's equatorial rings which lasted partially into the current era. I'll start with the rings.

Corollaries are often suggested from available data rather than being derived from initial postulates. There is generally no problem with this, for our reasoning is frequently after the fact. However, in the ideal case we would start from an initial (*a priori*) postulate and follow this up with a search for data and confirmation of corollaries.

Let me take this opportunity to introduce the Absu as an example of this process, or at least as an example which is still clear in my mind what evidence was brought to bear on the initial postulate and in what order. This is modestly revealing of how a particular idea was confirmed. What follows is also an important concept which informs all of the legends and mythology coming out of antiquity. Without the Absu being understood as a set of obscuring rings in the south sky, almost nothing will make any sense.

I started with the postulate that the Earth might at one time have had equatorial rings. The postulate for the existence of equatorial rings for Earth (which do not exist today), came from the general ideas that (1) all the planets with considerable magnetic fields have rings, (2) rings of particles are probably suspended by electrostatic forces, and (3) the rings of Jupiter and the outer planets seem to be fading,

whereas Saturn, which is electrically very active, still has the most noticeable ring structure.

The Earth, thus, would be a good candidate for having had equatorial rings. Earth has a magnetic field, and Earth was electrically active at an earlier time. Perhaps Earth had rings at one time which faded like the rings of other planets seem to be fading. This is already a qualified postulate, incorporating secondary evidence into the original notion.

But now consider the corollaries to the original postulate.

If the rings were seen in antiquity, then a record of this might exist. I had no trouble identifying the Sumerian *Absu*, the Egyptian *Duat*, and the Maya *House of Nine Bushes* as a set of rings seen in the southern night sky. The rings which were called "the Absu" in Sumer, are called the Abyss or "the Deep" in the Bible. The rings were almost universally, throughout the world, understood to be an ocean standing up from the south horizon. [note 1]

Second, if the rings existed, they would most likely have segregated into distinct bands, like ring systems of other planets, which could have been counted. The Sumerian Absu and the Egyptian Duat, seen at 30 degrees north latitude, consisted of "seven seas" (called "mansions" in Egypt as well as in the Bible), while the Maya or Olmec, located at 20 degrees latitude, ten degrees further south than Egypt and Sumer, counted nine rings ("bushes"). In the USA, at Poverty point, Louisiana, at 33 degrees north latitude, only six rings were recalled in a huge land sculpture.

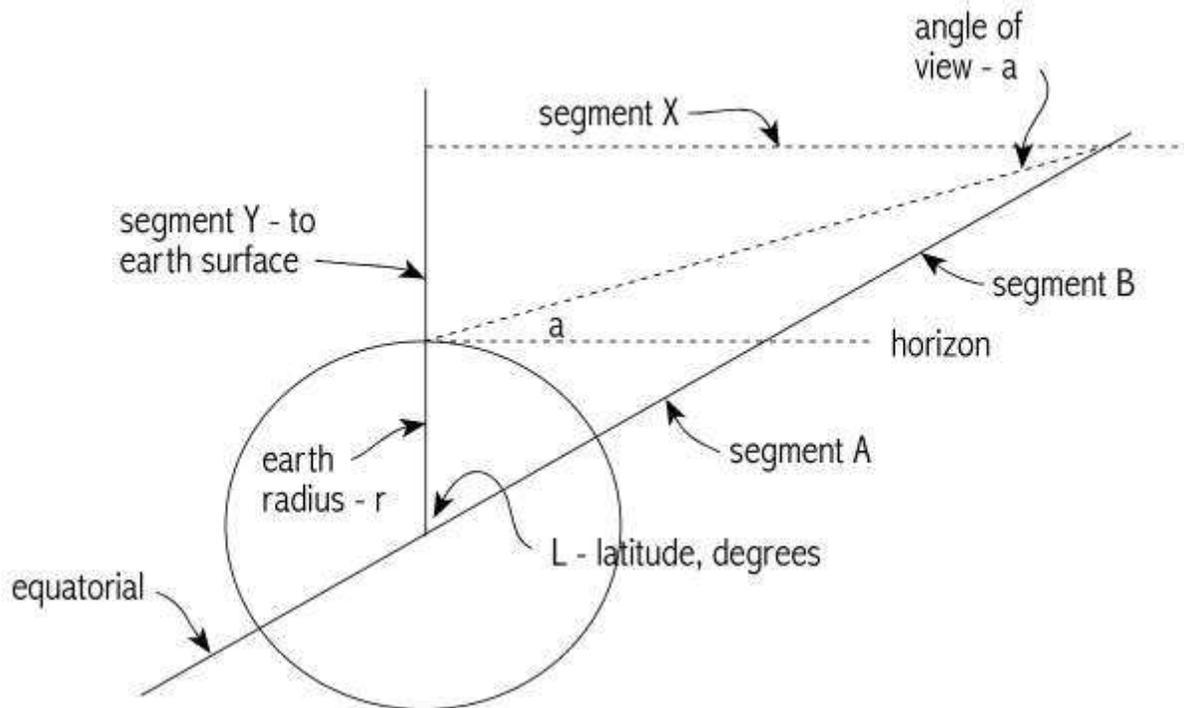
Third, there are very strong traditions of the sky looking like a sea. It may have very well looked like Saturn's rings in the 1980s (when it was electrically more active than in the 2000s). A "sea" would be instantly suggested from the wave patterns seen in the rings, despite the fact that this sea was located in the sky. This is especially so because rings at different distances from the Earth would move at rates different from the rotation of the Earth -- some might even move backwards.

It is clear that both Sumer and Egypt described the southern skies (the Absu or the Duat) as a sea, although some Egyptian descriptions have more of the feel of a swamp. In Egypt, the Gods and the dead pharaohs are described as moving by boat across this sea. In Sumer, the God of water was assigned to the sector of the sky below the equatorial. In Egypt, the mountain of Re (the later lower plasma plume of Jupiter) was said to rise out of the waters, and to illuminate the depths of the sea.

Last, the Earth would have cast a shadow across the rings at night, which would have moved from the east at nightfall to the west at dawn. Depending on the angle of the Sun, it would have looked like an obscured arched doorway, and at the equinoxes as a giant gap. I had no trouble locating references to a doorway of the Duat and to the Egyptian name for the door whose name implied that "reeds did not grow there." And it is also clear that the land of the Gods and dead pharaohs was located in the sky in the west -- the direction in which the portal moved each night.

Once the initial "postulate" that Earth had equatorial rings was established as "not unproven," it suggested other directions of inquiry. For example, the "flood of Noah" suddenly became clear when measured up against the lack of physical evidence and the statement from China (of about the same date of 2349 BC) that the waters "stood above the mountains." I'll detail these events in following chapters.

The Absu probably existed already long before 3147 BC. The Egyptian word for the rings ("Duat") is very old and was never defined in antiquity (Budge). Seen from the ground at a location in the northern hemisphere, the rings would have filled the southern night sky from east to west in a semicircle standing at an angle less than the complement of the latitude -- about 50 degrees up from the south horizon in Mesopotamia and 60 degrees in the Yucatan. The Egyptians and Sumerians recorded that seven rings could be seen. The Olmecs in Central America, located closer to the equator, noted nine rings. India, at 10 or 20 degrees north latitude, also counted nine rings. The bands (rings) above the equator of the Earth probably reached 8500 miles (14,000 km) high. This is found with the following calculations.



[Image: The angle of view of the Absu. Courtesy of K. Widen.]

Measurements

The angle above the southern horizon that the rings could have been seen can be estimated if some assumptions are made about how far the rings might have extended into space.

The diagram above is composed of two similar right triangles, composed as follows:

Large triangle: legs x , and $y + r$, hypotenuse $r + A + B$

Small triangle: legs {unspecified} and r , hypotenuse $r + A$

There is a region of the rings which is not seen because it falls below the horizon. This can be neglected, since we are interested only in what was seen in the sky, not what was unseen. The following lists how many rings were seen at various latitudes:

- The Yucatan at 20 degrees latitude -- 9 rings;
- Egypt, Memphis at 30 degrees latitude -- 7 rings; and

- Poverty Point, Louisiana, at 33 degrees -- 6 rings (as an archaeological model).

The nine rings seen in the Yucatan probably represent the maximum number of rings, since only the region 256 miles (412 km) above the Earth would fall below the horizon. By analogy with the rings of Saturn, it is unlikely that any rings were closer to Earth.

The angle of view (marked a) to the top of the Absu can be found from segment X and segment Y as the arctangent of Y/X.

The remainder of these calculations is in miles.

As a sample, for an estimate of the height of the Absu (A + B) of 20,000 miles, seen from latitude 20 degrees, we can find X and Y as follows:

$$X = (20000 + 4000) * \sin 20 \text{ and}$$

$$Y = (20000 + 4000) * \cos 20 - 4000$$

The results can be found for two latitudes used above (skipping Poverty Point), and for various values of the extent of the rings, as follows:

$$\text{height} = \arctan((14000 * \cos(20) - 4000) / (14000 * \sin(20)))$$

The two additional rings seen at 20 degree latitude, compared to 30 degree latitude, represent a 28.6 percent increase (2/7th) in the number of the rings. As can be seen, a difference of 28 percent between the view at Memphis and in the Yucatan would occur if the rings extended 8500 miles above the equator. There probably were no visible rings close to the atmosphere or stratosphere. The portion of the equatorial below the horizon is 256 miles for the Yucatan (from $A = 4000 / \sin(90-L) - 4000$).

Comparing Memphis, Egypt (30 degrees), with the Yucatan (20 degrees)			
height of Absu in the sky			
extent of the Absu	30 degrees	20 degrees	add'l view
20,000 mi	54.4 deg	66.1 deg	21.5 %
10,000 mi	49.3 deg	62.4 deg	26.6 %
9000 mi	48.2 deg	61.6 deg	27.8 % <---
8000 mi	46.8 deg	60.6 deg	29.4 % <---
6000 mi	43.0 deg	57.6 deg	34.0 %
4000 mi	36.2 deg	52.1 deg	43.9 %
2000 mi	21.7 deg	38.6 deg	77.9 %

I have included values for 20,000 miles and 10,000 miles in the listing above to demonstrate that even extensive rings will only visually approach the equatorial, they will not be placed beyond the equatorial. This is so because the projection of the equator up into the sky remains below what we would identify as the "equatorial" line on a map of the stars. The equatorial rises to 60 degrees from the south horizon at 30 degrees latitude, and rises to 70 degrees at 20 degrees latitude. The Absu, Duat, and the House of Nine Bushes each remained below this.

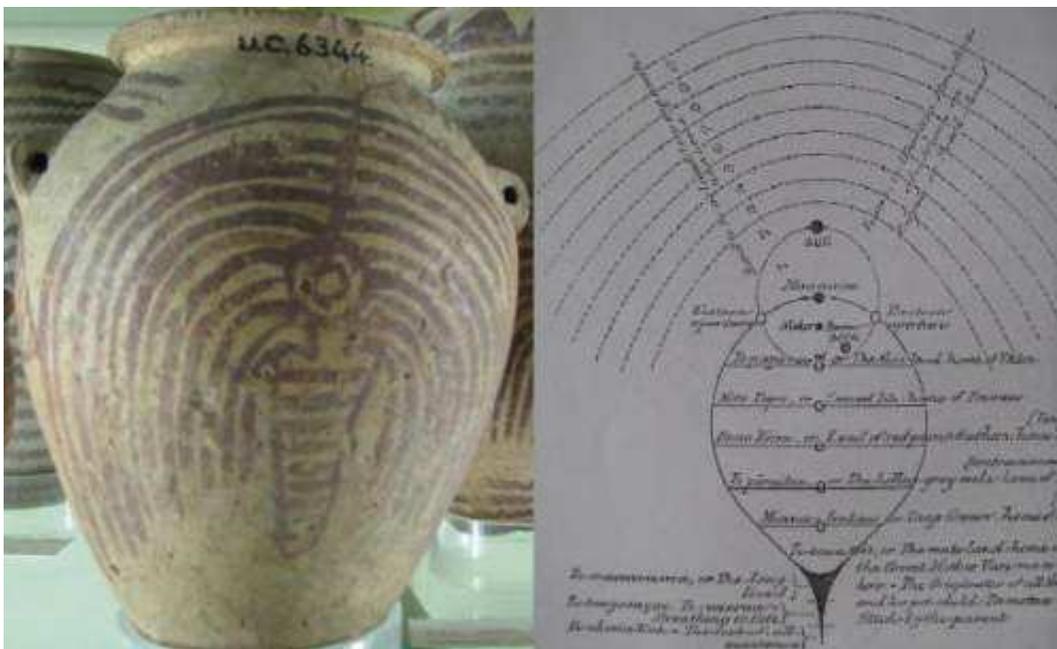
Thus the Absu in Mesopotamia (and the Duat in Egypt) rose about 48 degrees above the southern horizon, somewhat more than half way up into the sky. In the Yucatan the "House of Nine Bushes" would have risen 60 degrees into the sky. In both these cases the rings would have partially obscured the ecliptic.

There are Mesopotamian references to 7 streams of the Absu, the same number as in Egypt. India, extending from 30 degrees latitude down to 7 degrees, recorded 9 rings (or streams, rivers, or seven snakes).

I have neglected Poverty Point (described below) in this comparison, because I am not sure if the concentric berms at Poverty Point would represent the Absu, tempting as this conclusion might be. The six ring structure at Poverty Point may have been constructed a thousand years after the fall of the Absu, and is likely to be a schematic representation of the heavens, since it faces east, the first location of Jupiter when the Earth on its orbit passed Jupiter. The reduction of one ring at Poverty Point from the seven rings of the Duat is, however, consistent with the decrease of two rings between the Yucatan and Memphis.

The *Odyssey*, written in Sicily, assigns six necks and heads to the monster Scylla, who lives in a cave (where else?) very high on a mountain rising out of the "sea." Sicily is at 37.5 degrees north latitude, similar to most of the Greek mainland (or homeland), and also similar to Poverty Point at 33 degrees north latitude where six rings were seen (see further below). See Samuel Butler, in *The Authoress of the Odyssey* (1922), for the very convincing attributions of authorship and location to Nausicaa and Sicily. Robert Graves, in *Homer's Daughter* (1955), comes to the same conclusions.

The count of rings in the "Chilam Balam" is not consistent. It is possible that seven rings should be counted, based on some references to "the seven seas" (which is Mediterranean terminology).

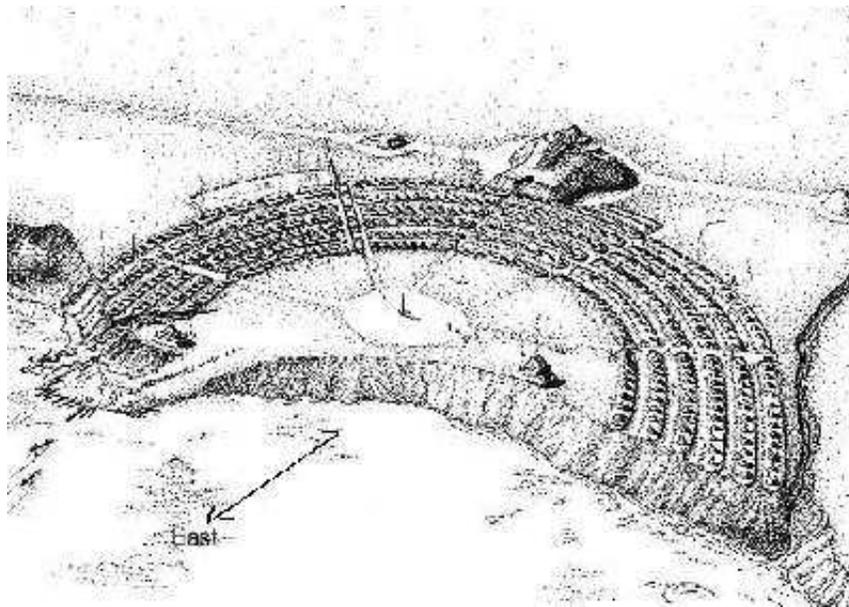


[Images: Left: Naqada II period Egyptian pot showing 6 or 7 ring areas. Right: A 19th century conceptual diagram of the nine heavens above Earth, plus six Underworld regions, Cook Islands. After M. van der Sluijs.]

It looks as if the number of rings which could be distinguished increases with latitude, as the viewing angle became more obtuse, despite the fact that the rings would be lower in the sky. Thus in Nordic countries and in Tibet, China, and Siberia nine rings are counted. I should add that Hesiod counts nine rivers surrounding the Earth (at 38.35 degrees north latitude).

Rens van der Sluijs offered two additional examples, one being an Egyptian Naqada era pot (3500 -- 3200 BC), and another as a native cosmological diagram recorded by a missionary to the Pacific Cook Islands in the 19th century. The Cook islands are at 20 degrees south latitude, and would afford a view of the Absu as consisting of nine rings, similar to what was seen in Central Mexico at 20 degrees north latitude. However, the Cook Islands were not settled until about AD 300. At the time when the Absu last existed, the inhabitants lived in the Bismarck Archipelago or New Guinea at about 5 to 10 degrees south latitude. (TPOD at www.thunderbolts.info, April 17, 2008)

The fact that the rings do not come together in the east and west in the Cook Island diagram, could be attributed to the fact that the reconstruction was made 4000 years after the Absu fell. But for the Naqada period vase, where the rings are also shown equally spaced from left to right, this is not an explanation. The number of rings of the Naqada pot count to 11 or 12 if the lines demarcate separate rings, but to six or seven if each ring is understood as depicted with two edges. The failure of the rings to come together at the horizon may be because in the Nile valley the horizons directly east and west are obscured by a rise of the landscape.



[Image: Artist rendition of Poverty Point, Louisiana, circa 1350 BC. After Jon L. Gibson.]

In North America, in the state of Louisiana, at Poverty Point (33 degrees north latitude), starting circa 1350 BC, a group of villages constructed an amphitheater as a model of the Absu, consisting of six concentric rings of ridges, broken by five aisles radiating from the center. Poverty Point in Northern Louisiana is three degrees further north than Memphis in Egypt, from which we have the measure of the "seven rings" of the Duat. Thus in Louisiana one fewer of the rings would be seen. The opening of the semicircles faces east, with the center (where a bird mound is located) aligned about 15

degrees north of east, possibly in expectation of the easterly rising of Jupiter. As likely the bird is an image of Mercury, seen flying from east to west after 3067 BC for 300 years, and again after 1936 BC for some extended time. Mercury when passing Earth would have polar plumes facing north and south, looking like wings, and a fairly short tail, depending on the location of the Sun. The absolutely giant size of the bird mound is an indication of how large Mercury might have looked in passing Earth. [note 2]

The rings of material would have obscured the southern stars, and probably became organized into distinct bands and broken up into a pattern resembling waves (as was seen for the rings of the planet Saturn in the 1980s). The nearest bands moved to the east, faster than the rotation of the Earth (which seems to move the night sky to the west). Bands further up from the horizon moved slower. The wave pattern filling the southern sky is the "sweetwater ocean" of the Sumerians and, for the Egyptians, the entry to the "Underworld." [note 3]

Each night the shadow of the Earth would sweep across the rings from east to west. In effect a portion of the rings would not be seen, leaving only the left and right (and top) edges. The effect looked like a portal or gate. This became the gateway to the "other world" of the Egyptians, located in the western sky -- the direction in which the doorway rotated each night. [note 4]

Near the equinoxes the Earth's shadow on the Absu would extend all the way across the Absu from bottom to top. Because at this time the penumbra, the widening soft shadow of Earth, also fell on the Absu, the shadowed area would be shaped like an inverted trapezoid, wider at the top. In Mesoamerica the ballcourt, constructed between two sloping walls, is a physical representation of the south sky at night seen at the equinoxes. In Egypt, at the time of the New Kingdom, the God Re (as Jupiter) is almost always depicted as a giant red globe located in a mountain saddle -- a valley between two mountains composed of ridges and grown with reeds. Graphically this also describes the Egyptian "field of rushes." The massive pylons used as the gates to later Egyptian temples are probably meant to represent the left and right edges of the Duat defining where the shadow of the Earth did not fall.

In Akkadian times (after 2335 BC), in Mesopotamia, the name for the village of Babylon is misunderstood by the invading Akkadians as "The Gate of the Gods" -- that is, the doorway through the Absu. Subsequently, Babylon becomes the most important ceremonial center in all of the lands of Akkad and Sumer, a position held for 2000 years.

I have presented this information on the Absu (more will follow) because it is an important concept. Once the reader knows of the Absu, many statements and descriptions from remote antiquity, which have reference to an ocean, a sea, a number of rivers, or a seven-headed snake, all of a sudden take on meaning and start to make sense. The concept of an ocean in the south skies remained even long after the Absu disappeared.

The rings disappeared, rained down upon Earth and drifted out to space, after 2349 BC, in what would later be known as the "flood of Noah," with the last and most distant ring remaining, I suspect, to perhaps AD 600. More on this in a following chapter.

Three Volcanoes on a Rock

The image below was published in *Newsweek Magazine* in the mid-1980s. It became a starting point for inquiry for me. It is an image taken by the European satellite Giotto of the comet Halley. As originally presented, the image was colored orange -- as if to suggest that the "ice subliming into water vapor" from the comet was lit by a late afternoon Sun.



[Image: The comet Halley spewing forth matter in UV and X-rays from three "volcanoes" on the nine-mile-long rock (14 km). The arcs point almost directly at the Sun. AfterNewsweek.]

It was this image which convinced me to stop believing in official presentations. It was noted at the time that the three "volcanoes" of the nine-mile-long rock were producing X-rays and ultra-violet radiation (measured at several thousand degrees Centigrade) in the process of subliming water. However, no further mention was ever made of this. There was something awry with this presentation.

The traditional explanation is that comets consist of ice, which moves water vapor out into the space surrounding the comet as the ice is heated on approaching the Sun. It occurred to me that the subliming of ice, at the temperature of deep space and at some 100,000,000 miles (160,000,000 km) from the Sun (as far as the Earth is from the Sun), would not hurtle water molecules 12 million miles into space, much less produce X-rays or ultra-violet radiation, representing a temperature of several thousand degrees. On Earth, subliming ice wafts into the air, producing a hovering fog. In a vacuum something similar would happen. But what we were seeing were "jets" of matter, at times attached in the wrong location to comets, being expelled in the wrong direction.

Comets are rocks, like asteroids and meteors -- they are not snowballs. As the comet Halley moved closer to the Sun from the far reaches of space, the major change in its environment was the ever-increasing electric field of the Sun. Halley, initially at a much lower electric potential (higher negative), had to make adjustments. The coma and the tail are a cloud of excited electrons (and sputtered ionized silicates also), a plasma in glow mode. The plasma forms an outer sheath of lower negative charge, seen as the coma and the tube of the tail, which in effect isolates the comet, which

carries a much higher negative charge (a lesser positive voltage), from conditions of the Sun's electric field immediately outside the coma and tail. [note 5]

The coma is maintained by supplying electrons from the disassociation -- the electric breakdown -- of rock inside the coma. Thus within the coma a charge equalization also takes place between the exterior coma sheath and the solid physical object (called the nucleus) of the comet, resulting in an electric current impinging on the rocky core. At the surface of Halley the extreme electric stresses produced three localized spots where the current flow of the plasma was concentrated to arc mode. These were not three volcanoes fed by a heated interior. Halley has been seen as a comet repeatedly since remote antiquity -- at least since Roman times. The whole of the interior would certainly have been expelled by the "volcanoes" by now. What was happening instead is that the rock of the outside surface was being broken down atomically to yield electrons, with the ground-up rock released as positively charged (ionized) fragments and repelled.

If comets are understood as balls of snow or ice, the radiation of ultra-violet and X-rays is completely inexplicable. But radiation is certainly expected when produced by electric arcing. The "water vapor" detected in the tail is actually (and admitted to be) Oxygen radicals, not produced by subliming water, but by the electric decomposition of rocky silica compounds into ionized Oxygen, Silicon, and Helium. The electric field of the comet propels the positive ions into space.

Sources

My method in developing these pages has been varied. First, much of the information has been accumulated over a lifetime and so, in a manner of speaking, I had the facts on hand. Secondly, although most of the time I just had to plod through texts -- checking dates, names, and other details -- quite a few times the story simply jumped to mind. On hindsight the narrative is all too obvious. Of course, backing up these insights frequently took weeks and many rewrites.

I started from four primary sources. The first of these was Immanuel Velikovsky's book, *Worlds in Collision* (1950), which related a close approach to Earth by Venus at the time of the Israeli Exodus, in 1492 BC, and a number of destructive passes by Mars in the 8th and 7th century BC. The information is almost entirely from literary sources rather than physical data (although well established for Mars), but it is quite convincing, even though some of the source data is applied to the wrong events or the wrong era, and Venus never came close to Earth.

The second was David Talbott's book, *The Saturn Myth* (1980). Talbott's search among Egyptian and Mesopotamian sources established the image of a large globe, identified as Saturn, standing above the Earth at the north horizon in remote antiquity. Many other researchers have followed up on his initial ideas and augmented the information. A number of physical models have been suggested, of which only one made sense, as proposed by Wallace Thornhill -- the combination of a stack of planets, planetary electric fields, and plasma interactions.

My third source was Thornhill's insistence on the electric nature of planets (and the Sun) and the electric interactions in the form of plasma streams -- presented at a conference in Nevada in 2001. There is no definitive text on plasma at interplanetary levels. (Although Talbott and Thornhill have now written two books on the topic; see below.) But plasma has been part of physics and electrical studies for 150 years. I have played with plasma devices since high school. [note 6]

The fourth source has been Julian Jaynes's book *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (1976). Jaynes makes the claim that subjective consciousness did not become part of human culture (at least, in the Near East) until the first millennium BC. The overwhelming concern of our ancestors with the gods in earlier antiquity was suddenly explained. Additionally, the book is a gem of insight into how we think. Jaynes's book is independent of any of the above.

Taken together these sources present a picture of antiquity which does not match the traditional histories entertained today. As I mentioned earlier, there is an amazing collection of information in agreement with the postulates of the cosmology presented here, which in turn strongly confers validity. This cosmology suggests sensible answers to questions which remain unanswered by the traditional "handed-down wisdom" usually presented as the history of mankind, the Earth, the Solar System, and the Universe.

Speculation

I have been accused (rightfully so) of speculation. *Mea culpa*: everything in this field is speculative. Even all of the "Electric Universe Forum" (who did the accusing) is completely speculative. But I might point out, that with "mere speculation" I have in only a few years managed to come up with a reliable and detailed chronology, the dynamics of planetary interactions, step-by-step descriptions of catastrophic events, an elucidation of symbols, the effects on culture, philosophy, and religion, and an extension into the Paleolithic and the Precambrian. All from information which is readily available.

All of the "science" of geology or astronomy are speculation also. Speculation at least implies the guessing after causal connections among facts. The facts are not in dispute. The objection was to my mediation of them and the conjectures I might have arrived at, as opposed to what *they* might have derived. True, even to me the narrative proposed here often looks like science fiction, complete with unbelievable portents in the skies and dire psychological effects on humans. And it has taken relentless imaginings of the dynamics and the chronology. But the results, as Rens vd Sluijs proposes as the requirements of an adequate theory (meaning "model"), are both "most convincing" and "complete." The narrative I have developed on these pages is certainly well-founded speculation. Everything fits, although the 3000-year history is as complex as an O'Henry novel. What I *have not done* is to start from an *a priori* assumption that there was only one event -- an important distinction.

I should warn the readers, that the Thunderbolts people (Thunderbolts.info) consider *their* thesis -- based on a single celestial event of circa 3200 BC -- as consisting of "the highest confidence levels and the least amount of conjecture" (vd Sluijs). Their thesis is the demise of the "polar configuration" of planets (a form which I also support, with modifications), in about 3200 BC. And nothing more, only the destruction of this "polar configuration."

The "polar configuration" of Saturn was first developed in the mid-seventies, and codified with the book *The Saturn Myth* by Talbot in 1980. It is promoted and expanded upon at the website Thunderbolts.info. But except for the addition of plasma to the mechanics of this, no advances have been made since 1975. The Thunderbolts group has organized conferences, written glossy books, and produced splendid videos. But all of it seems based on promises of something better to come, and hints at a complete picture at a later date. Yet, in nearly 40 years, nothing further has come forward beyond the original "Polar Configuration" and the obvious conclusion that it must have come to an end at some time in the remote past. Examples of their point of view follow:

Ev Cochrane, in "Beyond Bauer" in *Aeon* (1991), wrote:

"... it should be noted that the upshot of the researches of Talbott and Cardona has been a marked tendency to shift the emphasis away from alleged catastrophes in the 15th and 8th/7th centuries BCE to cataclysmic events of earlier, prehistoric times." [note 7]

And with that the complete content of Immanuel Velikovsky's book *Worlds in Collision* is dismissed.

Cardona asks, in "Velikovsky's Martian Catastrophes" (*Aeon* 1990):

"Where, I ask, is there one unequivocal mention of a Mars looming large in the sky anywhere in the literature of the period?"

Cardona has in mind the writings of the Hebrew prophets, and perhaps the archives of the Assyrian kings. But where does a statement like this come from? There must be hundreds of references to Mars under dozens of names. What is mostly missing from the record was the ability or the felt need for the remaining population, 2 percent of the people alive in 800 BC, to create these records.

Cardona at this time was also not aware of the Maya *Chilam Balam* which states, in no uncertain terms, and for the period starting in 747 BC, "Then it was that the word of Bolon Dzacab [Mars] descended to the tip of his tongue." Any archaeologist of Mesoamerica will tell you that Bolon Dzacab is Mars.

What is the "tip of his tongue?" It is the plasma extension of dust below Mars, first noted in the Egyptian "Eye of Ra" (the "Wedjat"), and shown in the much later giant Aztec calendar wheel as an actual tongue of Mars.

Also lacking is a logical series of events at the close of the Age of the Gods and after. The only end to the polar configuration is the claim by the Thunderbolts group of a catastrophe of unimaginable magnitude involving Chaos Hordes and Dragons -- a "heaven-altering 'Doomsday' catastrophe," which, however, never happened. It is, in fact, an ending concocted from much later events and evidence. Only a worldwide flood happened -- in fact, this was the actual flood of Noah.

Complaining in frustration of what he called "the mediocrity, the shallowness, the amateur sophistry, and the nauseating bluff of the neovelikovskian dilettantes," Roger Ashton once likened it as, "a little bit of this, a little bit of that, all aimed at a picture of earnest and revolutionary scholarly enterprise, but leading absolutely nowhere." [note 8]



[Image: Calendar stone of the Aztecs; after Wikipedia.]

I'll be more charitable and suggest instead that the Thunderbolts group knows something was going on, but they can't quite explain it, can't get at the core, do not understand the impact that the "unknown something" has had, yet they continue to promote the ideas, hoping for clarification and resolution in their lifetime. A look at their past publications shows the enormous intellectual efforts that have gone into deriving a workable model of the past. An absolutely astounding effort, with no viable results.

Some of the Saturn Theory of Talbott may be just dead wrong (as my reconstruction might also be). I believe that something went wrong with the out-of-hand dismissal of Velikovsky. The reasoning may have been based on problems with Velikovsky's suggestion of a "close encounter" with Venus -- for the world would have been destroyed. But when I started to look at this, I could not get Earth and Venus closer than about 10,000,000 miles (16,000,000 km). That solved a lot of problems; but that distance did not preclude an astounding electric field interaction. But to conceive of this and

understand it, required the application of electric field theory. At least, I have a degree in Electrical Engineering, and have no problem with that.

Alfred de Grazia in *The Burning of Troy* (1984) wrote:

"I would call your attention also to the work of an engineer who has occupied himself with electrical phenomena, Ralph Juergens. Mr. Juergens, working alone and without support other than that provided by the inspiration and encouragement of a few friends, has written articles that I am convinced will be numbered among the most important of our age. The thesis which he advances, and which is my candidate for the winning side in the approaching cosmic debate, is that electrical forces of almost unbelievable magnitude were exercised upon the Moon, Mars, Earth and other heavenly bodies in the recent past."

Let me call your attention to the phrase "forces of almost unbelievable magnitude."

Of the core group of Thunderbolts, Juergens had an engineering background, and could think and imagine what could happen within the realm of plasma physics and Earth-sized globes (and larger) located in the domain of the Sun. That capability is today held by Scott and Thornhill, neither one of which is to be neglected in their writings. But the rest are often clueless when it comes to plasma; they tend to wave plasma around like so much New-Year party confetti.

Anyway, the difficulty with Velikovsky and Venus was such that absolutely everything Velikovsky had come up with was summarily moved to the end of the "Era of the Gods" -- to 3200 BC. And so the raging goddess or dragon of 2349 BC, and the sky filled with blood, was incorporated into the demise of the polar configuration of circa 3200 BC. The Exodus (of 1492 BC) was held to be only a retelling of the earlier cataclysm.

The destruction of more than 1000 cities throughout Central Asia, Persia, the Middle East, Greece, and Italy during the 8th century is neglected by the Thunderbolts group and assigned to earthquakes and marauding Assyrians, as mainstream archaeology also does. Nothing is made by the Thunderbolts.info group of the parallel destructions in Mexico and the Southern United States -- in the 8th century BC almost all of the established farming communities in Veracruz and the Valley of Mexico disappeared. It is a parallel to what happened in the Mediterranean, where 98 percent of the population disappeared between 800 BC and 700 BC.

In actuality, and as I have it, the Exodus story as recorded by Moses was largely a retelling of the event of 2349 BC, an incident never sounded by Velikovsky or the David Talbott's group except in equating it to the onslaught of a dragon. And thus the attacking dragon, the three days of blood in the sky, and the new midnight Sun were also moved to 3200 BC, soon followed by the Bull of Heaven, the traveling mountain of the "Sun," the polar plumes, the gates of heaven, the rings of the south, the seven cows, the star in the crescent (from the 7th century BC no less), and any number of other celestial phenomena.

No one seems to have ever asked the question, What happened to each of the planets when the "Polar Configuration" came apart? What caused the breakup? This has remained unanswered for 40 years now. Yet it took me only a few days to trace out what happened in 3147 BC from available data, although it took months to write it all up.

I should point out also that the ideas promoted by Velikovsky had assumed the status of dogma. These included three outstanding fallacies which have endlessly delayed reasonable analysis:

- the concept that Venus exploded out of Jupiter,
- the concept that Venus left its orbit, and
- the concept that Venus came close to Earth.

Speculation or not, the difference -- the reason I have been able to put together a cohesive and valid narrative in a very short time -- is all in my looser requirements but mainly in my adherence to common sense. I have not based efforts on the pronouncements of a guru.

In my reconstruction cataclysmic events have come forward independently, and were confirmed and explicated one by one. I would also attribute much success to a determination to first create a likely chronology and postulate likely celestial dynamics. Once settled on (even as these two were corrected and augmented many times), they became the touchstones to test the available mythological information against.

Additionally I also have had the distinct advantage of starting very late with this, so that almost all of the information was already available, although I found it uncollated and frequently reductively disassembled. And I cannot forget the endless expansion of the Internet during this period as a source. That was a relief from the initial task of acquiring background information from library books. I can now find a single word in Homer's *Iliad* in a fraction of a second, rather than paging through the text. And I no longer need to initiate an inter-library loan to look at de Santillana and von Dechend's *Hamlet's Mill* -- it is now online.

The development of a chronology based on the Sumerian *King List* has been the key to unraveling the oldest mythology. That, plus a long time-sequence of Venus figurines over the period of the Upper Paleolithic and the early Neolithic. I was lucky in that respect. As the chronology and mechanics of celestial events solidified over the years, additional facets of mythological and historical obscurities simply started to fall into place. Speculation bore fruit.

I have also spent an inordinate amount of time thinking about the subject, a luxury which other researchers may not have had, which has allowed the evaluation of many alternatives, some of which only slowly took shape. I can imagine orbits, I can imagine the view from Earth, and I can do geometry and make some calculations. And I have consistently attempted to put myself in the frame of mind of the people who experienced the events in the past. Lastly, I have been allowed to constantly rewrite, augment, and alter this text, since it is presented as a mutable Internet document. I therefore have never backed myself into a corner because of what I might have published earlier.

I have degrees in Electrical Engineering, Industrial Engineering, and a Masters in Fine Art. Electrical engineering study involves an inordinate amount of math and more particle physics than physics majors receive. I remember almost nothing of this, but always know where to look things up, and can recognize what others are doing with physics or math. I understand and can visualize plasma. The MFA background prepared me to consider conceptual aspects of the physical world. I have published probably 70 or 80 essays in art criticism.

I have not departed from the original Saturn "theory" as much as I have extended it. The original Saturn Theory of 1980 was monolithic, and still is today. The approach was known as "neovelikovskian" -- a philosophy meant to replace all of Velikovsky's findings with a single earlier event. The notion of a single cause, a single event, the idea that only one thing happened, and that all the resulting mythology and symbols sprang from this event, is a fallback position, an admission that nothing is really known about the events behind the mythology or about the event that concluded it. The first question on reaching this nexus should have been, "And then what happened?" The disposition of planets after the end of the "Age of the Gods" was never considered.

As a result, the Thunderbolts people have been working from a "story core" model which severely limits what can be imagined. In 2008 Talbott wrote, "*Ra, in his original character, is the primeval Sun and Horus is the warrior-king,*" reiterating a reading which has stood for 40 years. And there is the Princess, the Mother Goddess, the First King, etc. I really think that this morality-play idiom ought to be dropped, since it is so deeply imbedded in Western culture, Christian philosophy, and the Indo-European language as to be useless in the analysis of how people of differing cultures, differing philosophies, and differing languages would have understood the celestial images. What immediately comes to mind is the mythology of Mesoamerica, where there are no Goddesses (the Moon excepted, and she is a hag), no First Kings, and no Warrior Heroes -- only two clever boys with their blowguns.

Affirming the Consequent

I need to explain also how I managed to get so much detail of events, how I determined dates down to the seasonal, how I managed to pinpoint events in the catastrophic history of the Earth which have eluded other researchers, and how I have been able to clear up enigmas and mysteries which have stood in some cases since antiquity. I especially need to explain this to those to whom, by their admission, I am an embarrassment. Someone wrote to me:

"[we] feel uncomfortable about the way you blend our findings with your own thoughts and speculations. You appear with a website that claims to fill in all the gaps."

Absolutely right. This website came out of nowhere, written in basic outline in a year and a half between summer of 2003 and spring of 2005, with further editorial expansion lasting through 2010. And it does "fill in all the gaps" which I assume are recognized to exist by the writer above. Sounding very much like an insulted mainstream uniformitarian, flailing wildly at a heretical catastrophist, I received the following critique:

"Practically every sentence ... contains one or more errors of fact, citing out of context, misunderstanding sources, and so on."

And so on. There is more, but not worth quoting. But let me propose how I filled in all the gaps.

"It is an elementary logical error (known as 'the fallacy of affirming the consequent') to argue backward from the truth of the conclusion to the truth of the premises."

-- Wesley Salmon, *Scientific American*, May 1973.

This method is otherwise known as "abduction." It is illegitimate from the standpoint of classical logic, since conclusions are derived from results, rather than the other way around. But it is exactly the method used in mythological research -- as well as geology and astronomy. Thornhill at one time wrote:

"At the heart of geology and planetary studies is a reasoning process called abduction. It is a form of logic whose major premise is certain and minor premise is probable."

It is a haphazard process at best, but it is also exactly the method used by Talbott in deriving at the content of *The Saturn Myth*: an amazing and unequaled "abductive" leap.

You gather representative data, then look for a theory. Abduction has legitimacy especially in probabilistic approaches to problem solving; it includes, of course, the evaluation of what would be most likely, perhaps requiring an imagination which correctly points up various visual phenomena, and the ability of setting yourself into the mind and eyes of humans of antiquity, even to the point of selecting various points of view from terrestrial locations. There could be thousands of instances of reported observations, but, as Michael Kaplan and Ellen Kaplan observe in *Chances Are* (2006), *"but observation, however diligent, is not the same as understanding the forces that generate phenomena."*

Kaplan and Kaplan are talking about weather data (which is considerably more uncertain than the "it most likely is" used here). But the magic of "understanding the forces of generation" applies, for example, to instances of any recorded data from antiquity, found by the *"hundreds, possibly thousands, all painstakingly accrued from a minute inspection of primary sources, spanning millennia in age and across a spectrum of different languages"* -- as reported to me by one avid Thunderbolts group researcher.

But what do you do with all this data? To suggest even one possible cause -- a hypothesis -- is, in fact, the only resolution to providing parentage to all these orphaned data. If one data point can be assigned to a cause, and another, and more yet, then there is no need for a collection of hundreds or thousands. And in this process I have never been wrong. The date of Exodus might have been 1495 BC instead of 1492 BC; what Isaiah had to say might have been recorded a hundred years later (and probably was); the plasmoid from Jupiter might have been 10 million miles (16,000,000 km) long rather than 15 million miles (24,000,000 km). But the outline of the overall narrative, and the intent of the facts used to support this, remains the same.

History

The center post of the house of the Saturnian Polar Configuration was the existence of a plasma column extending from Saturn via "Venus" and Mars to the north polar region of Earth. This had been the supposition since 1980, and it is also more or less the physical model on which I built my exposition, although I moved the contact point to the magnetic pole instead. Anthony Peratt (an electrical engineer) joined forces with the Thunderbolts group in the year 2000. The Thunderbolts people were elated, as evidenced by their enthusiasm in the online newsletter *Thoth*, volume 5 (1991), at [othergroup.net/thoth/thothv04.txt], for Peratt could explain much of the imagery which the Thunderbolts group had already collected. To quote from *Thoth*:

Then came one of the great surprises in the history of the research. It occurred only last September, when Tony Peratt, one of the world's most accomplished plasma theorists, described the violent evolution of a plasma discharge form that he had documented over more than two decades. In plasma science this configuration is named after Tony -- it is called the "Peratt Instability." From the moment of this revelation, nothing has been the same. The correspondence between the global pictographic record, our reconstruction based on historical testimony, and the extraordinary forms of the evolving discharge in the laboratory is simply "too specific and too precise to be due to accident."

Anthony Peratt published his first findings on petroglyphs in December 2003, in a paper titled "Characteristics for the Occurrence of a High-Current, Z-Pinch Aurora as Recorded in Antiquity" (*IEEE Transactions on Plasma Science*). In his acknowledgements, Peratt thanked A. Acheson, M. Acheson, D. Cardona, E. Cochrane, A. de Grazia, B. G. Low, C. J. Ransom, D. Scott, D. Talbott, W. Thornhill, H. Tresman, I. Tresman, and M. A. van der Sluijs, all people associated with the Thunderbolts group. It is evident that Peratt worked closely with them. [note 9]

For his second paper on petroglyphs, published in August 2007, the same people are listed. Meanwhile, Peratt had co-authored other papers with vd Sluijs and Scott. Peratt's second paper explains in print what must have been known even before the first paper was published, that the "gigantic auroral plasma column," now known as the "Peratt Column," was seen in the south, not in the north.

This must have been a bitter disappointment and major setback for those who had built their whole theory on a northern polar column. A giant of science had been engaged to help carry the logs, but now he had dug a hole which buried the column, center post to the house of Saturn, and flattened the boys when the house blew up. Progressively, from about 2004 or 2006 on, the Thunderbolts related websites started removing the previous reconstructed history of antiquity. Such are the pitfalls of speculation. [note 10]

Peratt's second paper prescribed a date for the south polar column of "about 10,000 BC to 2000 BC" (one date of 5000 BC is listed). I was able to quickly integrate the "Peratt Column" into the archaeology of the remote past, initially finding numerous Mesoamerican references, followed by curious Babylonian and European imagery. Japan and China followed soon after. At some point I just stopped collecting references from antiquity to the "Peratt Column" and the three southern ball plasmoids. From Mesoamerican sources it was relatively easy to find the closing date of the first "Peratt Column" as 3847 BC (in solar years). From this it is apparent that the three plasmoids first showed in 10,900 BC -- the same year that North America was devastated with a repulsive electric field force.

Both the number of entities seen and the number of times the "Peratt Column" showed up in the south sky, mentioned by Peratt, is verified by Mesoamerican, Indian (Vedic), and Chinese sources, and indirectly by the *Popol Vuh*.

The causeways at Carnac point up that the electron beams of the "Peratt Column," which traveled past the Earth (on all sides), connected to another circular entity in the north. The *Popol Vuh* makes the same point: there were two sets of Gods, three in the south, five in the north. See the chapters "The Peratt Column" and "The Popol Vuh." After having been seen three times over a period of 2500 years, 10,900 to 8347 BC (or perhaps as late as 4077 BC), as lines to some objects in the far south,

the "Peratt Column" disappeared along with the terminal ball plasmoids, to be replaced by a stream from a globe in the north. At that point, Saturn was still in glow mode, the enclosing shroud of its coma.

The closing date for this period was initially from an analysis of the Sumerian *King List* (see Appendix A), and can be verified partially from climatic data. I should point out also that Adam of the Bible, who is Saturn, lived 930 years. Subtracting 930 solar years from 3147 BC, which saw the demise of Saturn, a date of 4077 BC is reached -- this is the birth of Adam and the date when Saturn flared up.

I estimate the end of this first period (the "first creation") as 8347 BC, a date derived from the *Chilam Balam* statement about the end of the "first creation" -- 13 Katuns before 3147 BC. The "event" which initiated this count of solar years for the Olmecs would have been the appearance of the brilliant southern ball plasmoids of the "Peratt Column." The form was called "the turtle," and also identified as "the three hearthstones." These would not have been seen unless Earth had already dropped into the lower coma of Saturn.

Additionally, there are two inscriptions that use the Tzolkin and Haab day names corresponding for the year 8347 BC, although this was the end of the first period of the appearance of the ball plasmoids, not the start.

I estimate Saturn lit up (went nova) in 4077 BC and established a plasma connection with Earth. For many nations of the Earth, it is this last date which constituted creation, for the "Sun" suddenly appeared.

There will be an urge for the Thunderbolts group to move their polar column and standing sphere to the south -- or to ignore and invalidate it. But Peratt had elucidated nothing with respect to Mars or Venus, and, in fact, these entities never show up among the 4,000,000 petroglyphs which were collected. They do show up in later physical models -- the henges of Northwestern Europe -- and as petroglyphs which the Saturnians have identified as representing Saturn standing above the north horizon.

Peratt had suggested a "massive aurora" as a shorthand simile for the phenomena, since as a scientist he is not allowed to suggest a planet standing above the Earth's North Pole. Some researchers missed the use of the word "like" and followed up on an urge to identify the polar column with an aurora, despite the fact that an aurora does not assume the shape of a column, and that an aurora moves its curtain south toward the equator with an increase in strength. This also has nothing of the look of lines of electrons in arc mode traveling past the Earth. [note 11]

I will, of course, expand on all this, and explain it piece by piece over the next few chapters.

Endnotes

Note 1 --

The Mesoamerican illusive site of the "city of reeds" -- Tula, Tulan, or Tollan -- is, without a doubt, a recollection of the rings seen in the south. In Mesoamerica the rings were described as bushes; in Egypt the rings were similarly described as reeds.

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Note 2 --

The existence of the Duat also explains the Egyptian phrase of "the Nine Bows." The "Nine Bows" have been used in Egyptian inscriptions as a shorthand for all the enemies of Egypt, that is, the people of foreign lands, but in particular with reference to Nubia. Egypt extended geographically from 30 degrees north latitude to 24 degrees at the first cataract at Elephantine (Aswan). The territory further south was Nubia, extending another 4 degrees to Kerma (19.6 degrees latitude). Kerma was a major site since about 3000 BC and the ancient capital of the Kingdom of Kerma since 2400 BC.

At Elephantine the Duat would have stood in the skies at about 56 degrees up from the south horizon, and at Kerma some 61 degrees. This last is the same latitude as Mesoamerica, where, by the table above, nine rings were seen. Thus the appellation of the "Nine Bows" or "the land (or people) of the Nine Bows" probably entered the Egyptian vocabulary by 3000 BC. After 2349 all the rings disappeared except one and the phrase "Nine Bows" simply meant the foreigners of the "land of the Nine Bows." In the Middle Kingdom of Egypt (circa 2050 to 1492 BC) the phrase had come to mean "enemies."

The Egyptian at various times enlisted the people from Nubia as hired mercenaries, specifically as archers -- the people of the nine bows.
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Note 3 --

Dwardu Cardona, in "The Original Star Of Dawn," a talk presented in 1994(?), spoke about the Duat and identified their number from Egyptian sources:

"... a clue as to its real nature [of the Duat] comes to us from its description as having been divided into regions each of which, among other things, was called 'qerert' -- an Egyptian word that means 'circle.'"

He continues with an identification of these circles as the rings of Saturn before 3147 BC, a concept with which I disagree, and which is inadvertently made clear in the following quoted text.

"... besides being called 'qerert,' each division of the Duat was also referred to as 'arret,' that is, 'a hall.' What is of interest here is that, according to the Papyrus of Nu, these halls of the Duat were seven in number, which, among other things, explains the plurality of circles associated with Ra's habitation."

Ra or Re, which means "sun," was at first the name of the creator God Saturn at the north horizon. It is fairly certain that only three distinct bands were seen around Saturn at that time (as the *I Ching* implies). These seven bands are not the rings of Saturn.

After 3147 BC the name of Ra was transferred to Jupiter seen in the ecliptic, first on a mountain, and later riding his ship across the circles of the Absu (for which see a following chapter). What Cardona here calls a "hall" was called a "mansion" in Egypt as well as in the Bible.

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Note 4 --

The whole of the Absu, being rounded and with a semi-circular opening, looked like the reed huts which were constructed in the region between the Euphrates and the Tigris in Mesopotamia -- both in antiquity and still today.

In the Andes of South America the doorway of the Absu is reflected in the ubiquitous U-shaped ceremonial centers. For all practical purposes, the Absu framed most of the planetary displays seen from the southern hemisphere. Later catastrophic events mostly happened over the northern hemisphere, and were thus seen in the southern hemisphere only within the doorway of the Absu or in the space above.

There are additional references to the Absu among Mesopotamian seals (most of which appear after 2349 BC; that is, after the fall of the Absu) -- for example, showing the Sumerian Enki, God of water, shedding water and fishes from his shoulders, in effect framing a doorway.

Additionally, there are many mentions of "the gates of heaven," or similar phrasings, in the Bible and classical texts. In Job, Chapter 9, the Lord is He who "... *alone spreads the heaven ... and [makes] the chambers of the south.*" In the King James Version the "chambers of the south" is translated as "constellations of the south." But "chambers of the south" is the Egyptian term for the Duat.

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Note 5 --

NASA has formulated a theory to account for the X-rays. The following is from their webpage www.nasa.gov/topics/technology/features/wide-xray.html:

Scientists first discovered the charge-exchange effect in the mid-1990s while observing comet Hyakutake. "They got quite a surprise," Collier said. "They found an intense source of soft X-rays at the comet's head, which was unusual because comets are cold objects and soft X-rays are associated with hot objects. How could balls of ice emit X-rays? No one could figure it out."

Scientists soon discovered that the X-ray emission was caused by the solar wind, a constantly flowing stream of charged particles that sweeps across the solar system at about a million miles per hour. When highly charged heavy ions in the solar wind collide with neutral atoms found in space, the heavy ions "steal" an electron from the neutrals -- an exchange that puts the heavy ions in a short-lived excited state. As they relax, they emit soft X-rays.

Hyakutake was not the first, but it could not be neglected, since it passed close to Earth. NASA is still caught up in the snowball theory of comets. The American Welding Society notes that the arcs of electric welding produce "soft X-rays." (www.aws.org/itrends/04-03/feature.html)

Wallace Thornhill noted in 1993:

"Further evidence in support of the electrical discharge theory was the baffling flare-up of Halley's comet between the orbits of Saturn and Uranus. The nucleus should be frozen and inert at that distance. However a plasma discharge can occur at any time when the electric stress exceeds breakdown potential. It is significant that the flare-up followed some of the largest solar

flares recorded. In this case, the Sun was rapidly altering the comet's electrical environment at a far greater distance than normal."

-- from Wallace Thornhill, in "Evidence for the Extreme Youth of Venus" (1993), *SIS Proceedings of the 1993 Cambridge Conference*.

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Note 6 --

There are considerable published papers by Hannes Alfvén on plasma theory, extending to the Universe. See *Cosmical Electrodynamics* (1950, 1963), and *On The Origin of the Solar System* (1954).

See also J. H. Piddington *Cosmic Electrodynamics* (1969); Anthony L. Peratt *Physics of the Plasma Universe* (1992).

As mentioned, there are currently two popular books recently published on this subject, by David Talbott and Wallace Thornhill, *Thunderbolts of the Gods* (2005), and *The Electric Universe* (2007). In addition there has been an explosion of plasma-related web sites.

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Note 7 --

All other catastrophists that I am aware of hold to a busy schedule of activities involving Mars and Earth, into the 7th century BC. These include Alfred de Grazia, who reiterated his position in the recent book *The Iron Age of Mars* (2009), Donald W. Patten and Samuel R. Windsor with *The Mars-Earth Wars* (1996), and John Ackerman with *Chaos: A New Solar System Paradigm* (2000).

At the Natural Philosophy Alliance conference in 2011, during an Electric Universe panel on mythology, Dwardu Cardona emphatically insisted that Velikovsky's Venus event of 1500 BC, and the later Mars events of 800-700 BC never happened. Van der Sluijs, sitting next to Cardona, nodded in agreement. The Thunderbolts people simply do not want to be associated with the reaction of instant disgust and dismissal that the name of Velikovsky provokes among "scientists". They feel it hurts their acceptance and approval as serious researchers.

A most interesting history of how the polar location of Saturn developed in parallel between Cardona and Talbott (and a number of other people) since the mid 1970s is presented by Cardona in "The Road to Saturn" in *Aeon* (Volume 1, numbers 1 and 3, 1988). From my perspective the essay confuses many later celestial developments, which are included with the initial time period even though they do not belong there. Frequently also events and actions are mistakenly attributed to the wrong planets.

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Note 8 --

Quoted by Leroy Ellenberger from a letter to him by Ashton of September 1, 2007, and sent on in one of Ellenberger's periodic mass mailings, September 11, 2007.

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Note 9 --

Leroy Ellenberger pointed out to me (January 2009) that I missed the following names: K. Anderson, M. Armstrong, E.J. Bond, K. Moss, and A. Scott, R.M. Smith, and A.B. Mainwaring. I should point out that there are also another 44 people listed who are not connected to the Thunderbolts group.

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Note 10 --

- The site holoscience.com of Thornhill has Velikovsky reduced to "*Since then* [since Velikovsky's time] *sceptical scholars have shown Velikovsky's historical perspective of cataclysmic events to be wrong.*" The sceptical scholars, or their demonstrations, are not identified.
- Dave Talbott's site thunderbolts.info has nothing.
- The site Kronia.com had an extensive Velikovskian catastrophic exposition, and was owned and operated by Talbott or his associates, has been abandoned.
- Rens van der Sluijs's website used to have details, but all ties to the Thunderbolts point of view have been removed. For van der Sluijs only auroras count.
- Ev Cochrane's site maverickscience.com still has considerable texts on mythology.

There are other sites, intimately connected with the Thunderbolts group (and operated under assumed names), which clearly express an interest in plasma and electric issues, and which have retained the list of catastrophes outlined by Velikovsky.

Additionally there are Internet sites which present a catastrophic world-view of the past and are built on Velikovsky's legacy without any connection to the Thunderbolts group.

You might also find information at the *Velikovsky Encyclopedia* at www.velikovsky.info and the Velikovsky archive of unpublished documents at www.varchive.org.

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Note 11 --

Peratt has frequently indicated that the concept of an auroral display is meant as a simile. A presentation authored in 2005 is titled "Evidence of an Influx of Interstellar Plasma from Archaic Z-Pinch Recordings," where the word "interstellar" indicates something beyond an aurora created from a solar wind influx.

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*Calculations are in Unix bc notation, where ^ denotes exponentiation; the functions a(rctangent), s(ine), and c(osine) use radians; angle conversions to radians or degrees by the divisors rad=.0174 and deg=57.2958; other functions are shown as f(); tan()=s()/c()
units: million == 1,000,000; billion == 1,000,000,000;*

AU == 93,000,000 miles.

Special thanks to H Pluut for the inspiration on speculation.
Special thanks to K Widen for a better diagram of the Absu.



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