SUNDIALS

by Floyd R. Cox

TABLE 1. Defining the Celestial North Pole and Celestial Equator (at 45 Degrees North)



The above sundial is located in West Lafayette, IN, on a pedestrian bridge, over the Wabash River. It consists of a bar within a circle pointing toward the North Star. The bar casts a shadow on the second circle to mark the hours of the morning (IV, V, VI, VII, VIII, IX, X, XI, XII) and afternoon (I, II, III, IV, V, VI, VII, VIII).



At noon the bar should cast a shadow on the circle on which the bar is attached.



If a ball were attached to the middle of the bar, it would cast a shadow <u>at noon</u> on the circle on which the bar is attached. The shadow of the ball would reach its highest



If the lower half of a sphere replaced the lower half of the sundial, the ball would then cast its shadow onto

the sphere each hour of a day, and the shadow would reach its highest point on December 21 and its lowest point on June 21.





3a. The Great Pyramid of Giza is located 30 degrees north, and its descending tunnel points up to the North Star. A shaft on the south side points up from the King's chamber to the celestial equator (Orion's belt).

If the pyramid were located 45 degrees north instead of 30, the angles should be altered 15 degrees.



3b. If the viewer were on the magnetic North Pole, then the sun would gradually rise 23.5 degrees above the horizon and set six months later. On the North Pole, days and nights are six months.

The sundial would need to be pointed toward the celestial Equator, which would be on the horizon line.

Month	Year 1	2	3	4	5	6	7	8
1	30	30	30	30	30	30	30	30
2	29	29	29	29	29	29	29	29
3	30	30	30	30	30	30	30	30
4	29	29	29	29	29	29	29	29
5	30	30	30	30	30	30	30	30
6	29	29	29	29	29	29	29	29
7	30	30	30	30	30	30	30	30
8	29	29	29	29	29	29	29	29
9	30	30	30	30	30	30	30	30
10	29	29	29	29	29	29	29	29
11	30	30	30	30	30	30	30	30
12	29	29	29	29	29	29	29	29
Intercalary			30		30			30

 TABLE 4. Eight Year Calendar of 2922 days

TABLE 4 illustrates an eight-year cycle of 2922 days. Each year would average 365.25 days. It also illustrates how there would be 99 lunar months also having 2922 days. Each month would average 29.5 days. Greek festivals, Pythian Games and the Olympic Cycle, were based upon 4-year and 8-year cycles.

In 128 years (8 x 16), the calendar would have 46,752 days, one day too many. In real time, there are only 46,751 days in 128 years. This difference makes each year 365.24219 days instead of 365.25 days (365.25000 - 365.24219 = .00781). The calendar gains 7.81 days in 1,000 years, or one day in 128 years (1,000 / 7.81 = 128). Therefore, ten days were removed from

the calendar when Pope Gregory mandated that Thursday, October 4, 1582 would be followed by Friday, October 15, 1582. Thus, the Gregorian calendar replaced the 365.25-day Julian calendar, which had gained 10 days over the previous 1280 years.

Eight solar years are actually 2921.93752 days, and 99 lunar months are actually 2923.52841 days. The difference is just over 1.5 days per eight years, and the lunar calendar would run ahead of the sun by 1.5 days every eight years.

The Higher Realm likely knows the spin of the earth slows down only one second in 50,000 years and is very precise. A calendar began with Adam (Gen 1:14), which was likely corrected every 128 years, 12 times between Adam and when Noah was 480, i.e., 120 years before the flood (480 + 120 = 600) (Gen 6:3).

It knows the 19-year cycles were counted from after 3957 BC, not four jubilees later as alleged by the Jews, i.e., from after 3761 BC. The cycle began at a time when there was always an eclipse 29.5305 days before the end of each 19 years.

http://code251.com/code1900-p3.html



TABLE 5 illustrates how 45 degrees of a circle can be converted to inches (or time units) on a square. This is done by squaring a circle, that is, by placing circles around squares and by placing squares around circles. One example of this phenomenon occurs when light shines through a hole in a dome and lands on a floor. The light moves across the floor as the sun moves from east to west.

Artists note that this phenomenon of squaring a circle also happens when fence posts appear to get progressively closer to each other as they recede farther and farther down a road.

By blocking out the sun on the sundial between December 21 and March 21, one could actually record how one extra day progressively occurs on the first day of Spring over 128 years.

Once the calendar is corrected, it will accurately replicate the days, weeks, new and full moons during the first century, thus showing that the Crucifixion was on Wednesday, April 25, 31 AD, in <u>a year without 13 moons</u>. And these dates are verified by NASSA's Calendar of New Moons and Full Moons and NASSA's Calendar of Lunar Eclipses:

http://www.cbcg.org/Calendar/index.html http://eclipse.gsfc.nasa.gov/phase/phasecat.html http://eclipse.gsfc.nasa.gov/SEcat5/catalog.html http://www.livius.org/ja-jn/jewish_wars/jwar04.html http://www.friendsofsabbath.org/ABC/Kenneth_Herrmann/ http://www.cbcg.org/franklin/calendar_of_Christ_part2_section2.pdf

The Basis for a 360 Degree Calendar

To understand Daniel 12 and Revelation 12 & 13, the 360-degree calendar needs to be studied.

Early on, star clocks divided the night sky into 180 degrees. These point to certain stars that ascend in the east and descend in the west as they circle around the Celestial North Pole. Sundials also divide the day sky into 180 degrees. These point to the sun as it ascends in the east and descends in the west as it circles around the Celestial North Pole.

In each year, the sun appears to go around the earth 365 times, while the stars go around 366 times. The extra 366th time allows the star clocks to reveal when the time has lapsed a complete year, or lapsed a half or a twelfth of a year.

In Daniel and Revelation, one year is 360 degrees (confused with days). $3\frac{1}{2}$ years are 1260 "days" (Dan 12:7) or 42 months (Rev 13:5). 43 months are 1290 "days" (Dan 12:11), and $44\frac{1}{2}$ months are 1335 "days" (Dan 12:13). 1290 and 1335 are 45 degrees apart, that is, an eighth of a year (360/45 = 8).

The earth's sphere is also divided into degrees. Rome is 42 degrees north; Paris is 47 degrees north, and the North Pole is 90 degrees north.

For over 1,000 years, ancient Egypt's calendar had months of 30 days plus five epagomenal days at the end of the year. A year was 365 days, but the Nile flooded and Sirius ascended in the east every 365.24219 days. Therefore, the first day of Egypt's calendar year (Toth 1) began about a day earlier every four years. If a Pharaoh mentioned a date on his calendar, it would enable chronologists to give a specific BC date to that Pharaoh and his dynasty.

After Alexander captured Egypt and built Alexandria, he added a day every four years, thus creating a calendar of 365.25 days. In king Hezekiah's time, God allegedly turned a sundial backwards 10 degrees (Isa 38:8). Since the earth's surface at the equator is traveling 1,000 miles per hour around its core, it is unlikely that it stopped abruptly and went backward. This would be catastrophic to all life on earth. It is more likely that the earth's 23.5-degree tilt went through a shift in its celestial north pole. Like a spinning top, there is a periodic "wobble" in the tilt of the earth's north pole as it traces a circle in the northern celestial sphere over a period of about 26,000 years as illustrated in a video <u>HERE</u>. Like a spinning top, the northern pole tilts, goes around in a circle and sometimes wobbles as it makes the circle. The degree of the wobble would not affect the speed in which the top is spinning.

