Notes on Various Editions of *Norton's Star Atlas* and the Galactic Alignment of Era-2012

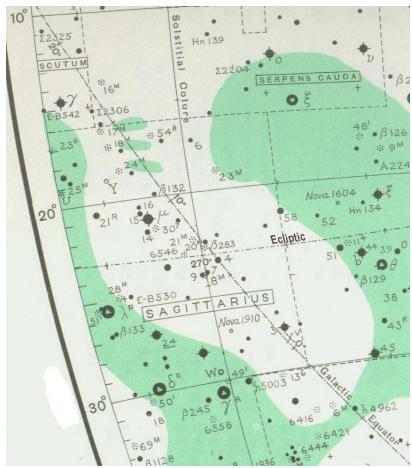
John Major Jenkins. January 30th, 2013

The galactic alignment of era-2012 is real astronomy. There is evidence at Izapa that the creators of the Long Count-2012 calendar were interested in the galactic alignment of era-2012. There is more recent evidence, from the two "2012" inscriptions (at Tortuguero and La Corona) that the Classic Period Maya referenced the 2012 date because of the astronomy. There is evidence at Palenque, Quirigua, Copan, and elsewhere that the Maya liked to reference the like-in-kind "cousins" to the galactic alignment. Why? Because, as I wrote in *Maya Cosmogenesis 2012*, the sun's alignment with the Crossroads of the Milky Way and the ecliptic (a.k.a., the galactic alignment) was a foundational image, a prototypal idea, in Maya thought that informed the traditions and doctrines of the Maya Classic Period (200 AD – 900 AD).

I've observed that the galactic alignment is very often confused with certain crazy notions, is mis-defined in news pieces that I interviewed for (during which I offered them, in writing, the precise definition), or is flippantly dismissed. Sometimes they will call upon a supposed "expert" to "debunk" 2012 and/or the "cosmic planetary alignment" that is "supposed" to happen in 2012, causing pole flips and catastrophe. Yes, that is how the approach to my work has been loaded down with false assumptions and associations. One of the "Maya experts," Mark Van Stone, even devoted a whole chapter in his book on 2012 to debunking the galactic alignment. But not once did he cite or mention my books, essays, or studies on this topic. Instead, he critiqued it through the words of a New Age writer who had appropriated the galactic alignment, loosely defined it in an inaccurate way, and used it for his own speculations. Oddly, I had had lengthy email exchanges with Van Stone in 2008, explaining the correlation question and my work. But to no avail, apparently. That's how the polemics of unethical debunkery works in academia. Again, my further responses to scholars, astronomers, and other mean-spirited misinformed critics are at http://www.update2012.com.

So, it's rather absurd that the galactic alignment cannot be discussed or understood rationally by the "experts" of our day. As a comparison to this unfortunate treatment, I thought I'd share my own process of examining and confirming the galactic alignment from the "pure astronomy" perspective. This occurred in the early 1990s, before the Internet and the widespread availability of computers. Where might one go to investigate?

I've recounted elsewhere how I confirmed the galactic alignment by looking at a copy of *Norton's Star Atlas* in the Boulder library. It contained sky charts, based on a 1950 AD Epoch of precession, with certain features marked, such as "Solstice Colure," "Ecliptic", and "Galactic Equator." The maps also gave a depiction of the visually perceivable edges of the Milky Way, from which it was clear that the Milky Way was wider in the region of Sagittarius — much wider than the thinnest part of the Milky Way in the opposite side of the sky, in Gemini. Just yesterday (1-23-2013) I found an old edition of *Norton's Star Atlas* at a used bookstore, and snagged it.



The "Solstice Colure" near the crossing point of the Galactic Equator and the Ecliptic, calculated for the 1950 AD Epoch of precession. Norton's Star Atlas, 9th Edition 1943.

The editions began in 1910. According to the article "<u>Arthur Philip Norton: The Man and His Star Atlas</u>" by Stephen James, the sky maps were redrawn for the Fifth Edition (Gall & Inglis, 1932) to add the galactic poles, the Galactic Equator, and the outline of the Milky Way. Then, for the 9th edition of 1943 they were redrawn again to accord with the 1950 Epoch of precession. These are the same maps used in the 17th edition I acquired, which was published in 1978.

The maps use a 24-hour day convention for the circle around the map, each hour divided into 12 "degrees." This can be converted into standard degrees because of 24 x 12 = 288 hour-degrees = 360 standard degrees. Thus, each hour-degree equals 1.25 standard degrees, or $72 \times 1.25 = 90$ degrees of precessional motion. Map 12 shows the Solstice Colure much less than one hour-degree from the precise crossing-point of the Ecliptic and Galactic Equator. It looks to be perhaps $\frac{1}{2}$ 0 of an hour-degree, which would be about 45 years of precessional motion. Since the positioning of the Solstice Colure in these maps (measured through the exact mid-point of the body of the sun) is taken for the Epoch of 1950 AD, we can extrapolate the shift of the colure, add 45 years to 1950, and come up with the year 1995 AD for the precise alignment of the Solstice Colure and the Galactic Equator *at the Ecliptic* (astronomer Jean Meeus calculated it as 1998).

This exercise has a point. It means that the 1932 Fifth Edition of *Norton's Star Atlas* could have provided a curious and attentive person with a decent estimate for the

much-denigrated "galactic alignment." (The position of the Solstice Colure in the pre-1943 editions, drawn for the 1920 AD Epoch of precession, shows less than half-a-degree difference in sidereal positioning, and a similar operation as sketched above could have been performed to estimate the year of the future galactic alignment. Going all the way back to the 1910 edition, we find no Galactic Equator in its Map 12, but the Index Map shows the outline of the Milky Way, and by comparing the two maps an uber-astute reader might have realized that a future alignment of the Solstice Colure and the centerline of the Milky Way was immanent.)

More importantly, the *very concept* that such an alignment was soon to occur would have dawned on any amateur astronomer who understood that the Solstice Colure depicted in the maps was shifting with precession. I suspect that data along these lines, perhaps from *Norton's Star Atlas* itself, was used by the authors of the 1969 book *Hamlet's Mill* (von Dechend and de Santillana) for their extrapolation that an alignment of the "Solstice Colure" and "the Galaxy" would be occurring around the year 2000 AD. It was the one direct statement of this in *Hamlet's Mill* that Terence and Dennis McKenna quoted in their 1975 book *The Invisible Landscape*, as they explored possible empirical reasons for the strangeness of our times. Intriguingly, Norton's first maps were based on maps published in the late 19th century (in *Vade-mecum de l' astronome* by Jean-Charles Houzoun) and a similar extrapolation to the galactic alignment around AD 2000 might have been possible even at that early time — some 85 years before it was alluded to in *Hamlet's Mill*. At any rate, it is there in the maps in the famous *Norton's Star Atlas*, first published in 1910.

The truly amazing thing, to my mind, is that we *don't* have much indication that readers or astronomers did this or found it interesting. There are, of course, the compelling though brief and indirect speculations of Edgar Conrow which appeared in the 1926 book *The Celestial Ship of the North* (Valentia Straiton), and which I discussed in my book *Galactic Alignment*. An astrologer named Charles Jayne supposedly wrote of it in the 1950s. Hertha von Dechend, beginning in the 1940s or 50s, apparently picked up on this curious thread of galactic alignment lore, which was already mapped *but never explicitly discussed*. It is certainly curious that we don't have an explicit statement in *Norton's* about this rare alignment even though it is there to be perceived in the maps. It is embedded in the images, but requires some secondary knowledge by the viewer in order to understand and extrapolate what the images (maps) are depicting and implying. This is similar to how the iconography at Izapa encodes real unambiguous information, but must be read by a person who understands the overall context with some background in basic principles of Maya star-lore and symbolism.