

# An Unusual Calendar Cycle at Tonina

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Three inscriptions at Tonina cite dates that fall eighteen solar years (18 x 365 days) apart. These are:

- |     |                                |                                |
|-----|--------------------------------|--------------------------------|
| (1) | 9.13.7.6.5 1 Chikchan 18 Xul   | Monument 141                   |
| (2) | 9.14.5.10.15 6 Men 18 Xul      | Monument p31 (provisional no.) |
| (3) | 9.15.3.15.5 11 Chikchan 18 Xul | Monument p30 (provisional no.) |

Given such a small sample, the equal spacing of these three days (18.4.10) could be seen as a coincidence. Yet the accompanying texts each exhibit a distinctive “chinstrap” glyph with a –TE’ suffix (Figure 1), strongly suggesting that they are all somehow related. It seems that these dates point to a calendrical cycle that has gone unrecognized at Tonina, where other unusual structures of the Maya calendar are sometimes emphasized (Mathews 1993; Stuart 2000).



Figure 1

The first of the dates is on Monument 141, an important panel dating to the reign of K’inich Baaknal Chaak (Figure 2). The main event of the tablet is the dedication of a ballcourt on 9.13.8.6.7 12 Manik 15 Xul. This occurred 362 days (1.0.2) after the day 9.13.7.6.5, which is described by the somewhat enigmatic phrase:

## U-2-K’AL-li U-?-TE’ K’INICH-BAAK-NAL-CHAAK

*U-cha’-k’al-il u-?-te’ K’inich B’aaknal Chaak*

“(It is) the second binding of the ? tree(?) of K’inich B’aaknal Chaak”

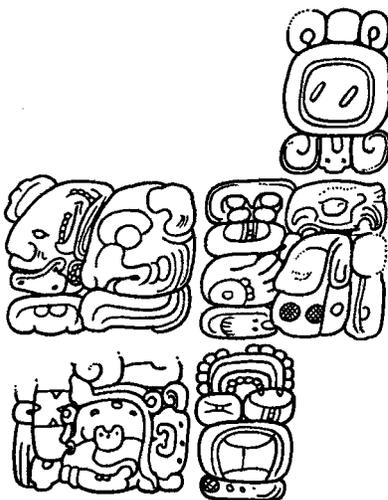


Figure 2

The notation of a second ritual for this king suggests a missing record of an earlier “binding” event for K’inich B’aaknal Chaak, who assumed power about eleven years earlier on 9.12.16.3.12 5 Eb End of Xul. But if we assume these rituals are separated by 18 solar years, as the above dates suggest, then clearly the “first” such rite would have fallen well before the king’s accession. Perhaps the inscription records the second “binding” since the ruler’s birth. However, it is equally plausible that we are actually dealing with a cycle of nine solar years (9.2.5 in Maya terms), whose surviving records happen to fall on the more widely and equally spaced stations cited above. If this is the case, the first ritual in the reign of K’inich B’aaknal Chaak would have fallen on 9.12.18.4.0 5 Ajaw 18 Xul, but no record of it survives.

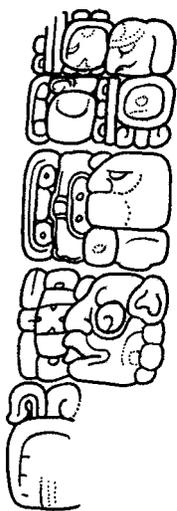


Figure 3

Another station in this possible cycle is recorded on Monument p.31 (a provisional designation) a small circular “disc altar” dating to the reign of the subsequent Tonina king, K’inich ? K’ahk’ (called “Ruler 4” in Martin and Grube [2000]). The unusual small altar bears a circular text on its periphery, recording the Period Ending 9.14.5.0.0 and the death of a court noble on 9.14.5.8.4. A smaller secondary text (Figure 3) near the standing figure states that this death occurred 51 days before “6 Men,” corresponding to 9.14.5.10.15 6 Men 18 Xul. This is in turn described as:

**U-YAX-?-TE’ K’INICH-? K’AHK’-[...]**

*U-yax-?-te’ K’inich ? K’ahk’ ...*

“(It is) the new ? tree of K’inich ? K’ahk’...”

The same “chinstrap” sign with **-TE’** is once again written, but now a **YAX-** modifier appears in place of the “second” seen earlier (no *k’al* verb is given). In fact we know that *yax-* is frequently used to mark the first in the sequence of similar ceremonies (*u-yax-k’altuun*, “his new stone-binding”). As Ruler 4 acceded on 9.13.16.16.18 9 Etz’nab 6 Muwan (Mathews 2001), he had been ruling for less than nine years at this point. It is appropriate, then, that this would be the initial station in the cycle of nine solar years.

Finally we come to the third of the dates (Figure 4). Monument p30 (again a provisional designation) commemorates the Period Ending 9.15.5.0.0, during the reign of the subsequent ruler K’inich Yich’aak Chapat. The monument also records the date 9.15.3.15.5 11 Chikchan 18 Xul, which is noted as

**U-2-TAL-la U-?-TE’ ICH’AAK-CHAPAT**

*u-cha’-tal u-?-te’ (Y)ich’aak Chapat*

“(It is) the second ? tree of Yichaak Chapat”

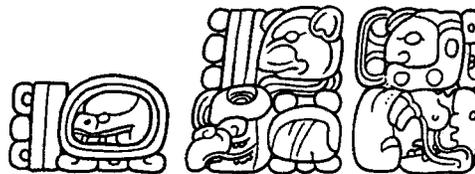


Figure 4

This Tonina ruler assumed the throne on 9.14.12.2.7, eleven years before 9.15.3.15.5. As we saw on Monument 141, this would therefore be the second station in his reign of a cycle of nine solar years (the earlier initial station would be 9.14.14.13.0 2 Ajaw 18 Xul).

What of the “chinstrap” sign that appears in combination with **-TE’** as a marker for this apparent cycle? As the transcriptions above show, no good value has been proposed for the logogram. I would say, however, that we should distinguish this glyph from another head sign perhaps read **WAYWAL**, used often in a royal titles at Palenque.

It would be worthwhile to investigate whether this cycle of nine solar years might be cited outside of Tonina, but I have not come across any other references to it so far. A perusal of other dates falling on “18 Xul” could well yield more examples, and hopefully a more adequate explanation of the cycle would result. As it stands, we can surmise for now that the cycle probably hinges on the ritual importance of “nine” in Maya cosmology and time-keeping.

## References

Martin, Simon, and Nikolai Grube

2000 *Chronicle of the Maya Kings and Queens*. Thames and Hudson, London.

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