

Astronomical Diaries and Related Texts from Babylonia

Diary No. –651 (652 BC)

Unlike other entries in the compendium of dated Diaries, No. –651 does not include a translation table linking dates in the Babylonian calendar to their Julian equivalent. The Babylonian calendar had not yet settled into a regular 19-year cycle.

The work of Parker & Dubberstein that laid the foundation for the conventional Babylonian calendar covers only as far back as 626 BC. Consequently the Babylonian dates presented below may not correspond to a conventional Babylonian calendar.

Babylonian Date			Julian Date		
Samassumukin`	I	14	-651	Apr	5/6
	I	17			8/9
	XII	5	-650	Feb	14/15
	XII	15		Feb	24/25
	XII	19		Mar	1/2
	XII	20		Mar	2/3

The table provides Julian dates for 10 dated entries in Diary –651. The dates are astronomically valid. They fit the lunar year of 354 days from the full moon on Apr 5/6, -651 (both gods were seen) to the 12th full moon on Mar 25/26, -650.

The dating scheme fails twice:

Line 10&11 indicates Mars became stationary around I 17 (Apr 8/9), but *TheSky* software has Mars in the middle of a retrograde period.

Line 13' states one god saw another on XII 15, and 4 days later the moon was observed next to Antares. *TheSky* has the two events separated by 5 days (Feb 24/25 to Mar 1/2). The following day, Mar 2/3, *TheSky* shows the moon next to Jupiter in Scorpio as stated in the Diary, again a day late.

The astronomical evidence for the dates computed in the Diary is compelling, but dating of the tablet would be much less convincing without the historical link discovered in the *Neo-Babylonian Chronicles*.