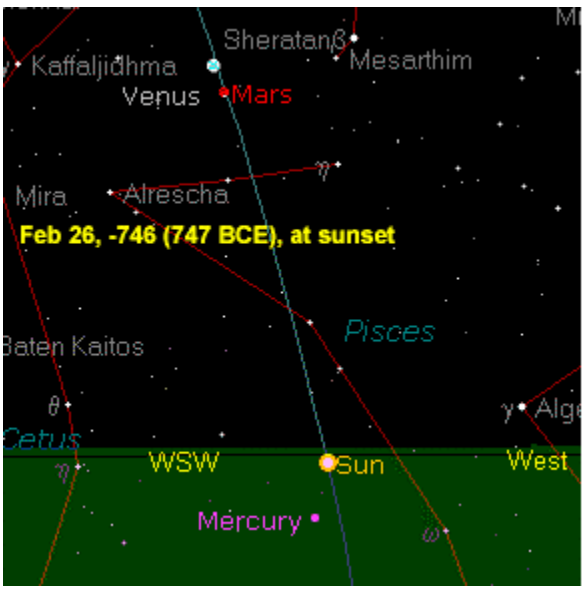
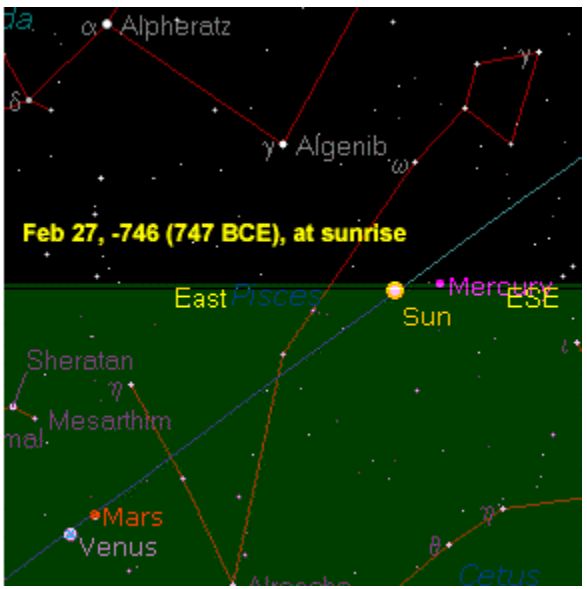
Tripartite Division of the Night

For naked eye astronomy, sunset and sunrise are most important. Many entries in the Diaries deal with the sky around the transitional period between day and night.



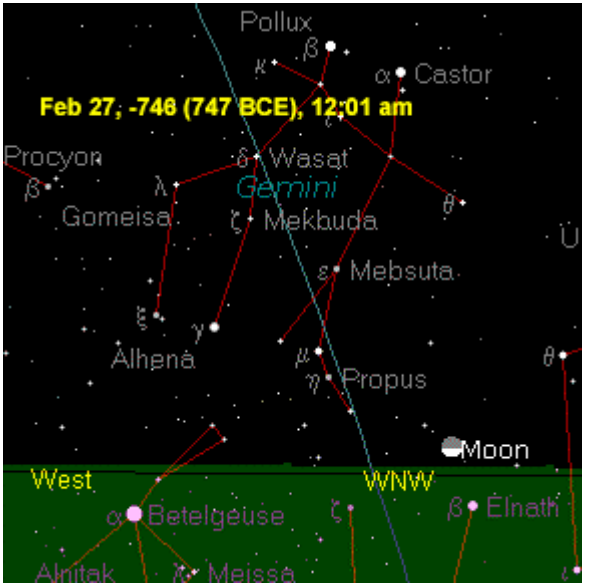


The blue line represents the ecliptic and the red lines the constellations; the thin black line between the black "sky" and green "earth" corresponds to the effective horizon.

The Babylonian "day" begins at sunset, which gets "the first part of the night" underway (left Skyshot.) In the western sky, twilight persists although the sun has disappeared over the horizon. Venus and Mars become visible as the light of the sun wanes. Soon they will follow the sun over the horizon. On occasion, the Babylonian astronomers measured and recorded the interval from sunset to the setting of a planet or moon.

"The last part of the night" in the morning that follows, the sun rises before Mars and Venus (right Skyshot.) The planets track along behind the sun all day, but are not visible until sunset. Mercury, close to the sun, is overwhelmed by brilliant sunlight and never visible. Note the date has changed from Feb 26th at sunset to Feb 27th at sunrise.

Babylonian astronomers seldom logged observations in “the middle of the night.” They found little of interest that could not be seen at sunset or sunrise.



At 12:01 am, the moon is about to set in the west (the Skyshot above.) The Diaries often log the position of the moon and it’s rising and setting, but there was no reason to note moonset on Feb 27th. Had the sky-watchers been on duty that night, they would have recorded the distance of the moon from a nearby normal star, which they could have measured at any time during the night.

The date –746, Feb 26/27 marks the beginning of the Nabonassar Era. Appendix A of *The Almagest* (Great Books Series) states: “Thoth 1, midday, the year 1 of Nabonassar corresponds to February 26 (astronomical style), midday 747 B.C. (historical way)."