Sachs & Hunger, Astronomical Texts and Related Texts from Babylonia, p 51&52 (edited)

## **DIARIES**

The texts edited here are usually called "diaries" or "astronomical diaries" by modern authors. The Akkadian term for them is *nasaru ša ginê* "regular watching" which is written at the end and on the edges of the tablets. That a regular watch was kept by observers specifically trained and employed for this purpose is shown by two documents dealing with such employment by the assembly of the temple Esangila in Babylon.

In these documents the term *nasaru nasaru* is used for one of the duties of the employees, and it seems very likely that this can be translated "to make regular observations". They also have to "give" to their employer yearly *tersêtu* and *meš.himes. tersitu* occurs in the colophons of astronomical tablets where it seems to refer to the tablets themselves or their contents; *meš.hi* is the word for the texts called "almanacs" by A. Sachs. It is therefore likely that the same people who had to make observations also prepared almanacs and astronomical tables.

Diaries were filled with entries day by day as the observations were made. This can be seen from the "short diaries" which cover from a few days to a little over a month. In several cases the last lines on these short diaries have rather shallow wedges which are scratched into the clay (e.g., Nos. -200 and -191). This is probably because the tablet was already too dry to allow impressing the wedges in the normal way. While tablets can be kept humid (e.g., by wrapping them in wet cloths) and remain inscribable for a time, some obviously dried too fast in the course of the observation period for which they were used.

Some observations were first written down on writing boards 3, as is indicated by a note in No. -384 r.6, referring to such a board.

From these short diaries, longer diaries covering usually half a year were compiled. It is evident from several points that the longer diaries were not the immediate observational notes: they are more carefully written (usually in smaller script) than the short diaries, and they show no signs of successive adding of material. Occasionally a remark by the scribe that they were checked (i.e., compared to an original) can be found (e.g., No. -384 rev. 5). In one case a diary for a half-year period was compiled although material for part of the time to be covered was not available (No. -384 rev. 6).

Scribes are only infrequently mentioned on the diary tablets. It is not clear why the scribe in most ceases did not put his name on the tablet. One guess could be that the tablets were kept in an archive belonging not to a single astronomer but to the community of them or even to the temple Esangila. The latter possibility is given more weight by the documents mentioned above (p. 11) in which the "assembly of Esangila" agrees to pay certain astronomers who will make observations and prepare tablets. One should keep in mind, however, that these two documents are of comparatively late date (SE 185 and 193), and that the situation may have been different earlier. Also, nothing is known about the locations of discovery of the tablets and their original arrangement, whether they were all found in one building or come from different places within Babylon.

The earliest diary found so far concerns the year -651. We know however that observation of the sky with the intention to control the observed phenomena is older than this date. Eclipse reports preserved on tablets go back to the second half of the 8<sup>th</sup> century B.C., thus confirming the well-known claim of Ptolemy (Almagest III, 7) that he had at his disposal more or less continuous eclipse records from the time of Nabonassar (747-734 B.C.) onwards.

## **CONTENTS OF DIARIES**

A typical diary contains information on the following topics:

- 1. Moon
- 2. Planets
- 3. Solstices and equinoxes, Sirius phenomena
- 4. Meteors, comets, etc.
- 5. Weather
- 6. Prices of commodities
- 7. River level
- 8. Historical events

These topics will be taken up in detail.