FOREWORD

The idea of preparing a critical edition of Babylonian celestial omens grew out of the common interests and diverse competencies of the two authors. It was encouraged by A. Leo Oppenheim, whose life-long occupation with technical and scientific texts from Mesopotamia nurtured his conviction that the area would yield new insights into Mesopotamian civilization.

With the generous help of A. J. Sachs and the late E. F. Weidner, a list of unpublished tablets in the British Museum and in the Vorderasiatische Abteilung of the Staatliche Museen, Berlin, was made available to us. Professor D. J. Wiseman put at our disposal his copies of the texts excavated at Nimrud (Calah), and W. G. Lambert and Erle Leichty let us look through their transliterations of omen tablets in the British Museum, so that further fragments of our subject matter could be identified. The Oriental Institute and later a grant from the John F. Guggenheim Memorial Foundation enabled Erica Reiner to obtain photographs of many pertinent texts, and eventually to travel to Berlin and on various occasions to spend prolonged periods at the British Museum in London reading the newly identified texts and collating those previously published. As a result of this work, the corpus of celestial omens grew from the approximately four hundred pieces published in Virolleaud's *Astrologie Chaldéenne* to about two thousand tablets and fragments. Even though many fragments could be rejoined, the number of individual pieces stayed close to two thousand.

In order to be able to deal with this vast material at all, some hard choices had to be made. First, we decided to begin the edition with the stellar omens (see Foreword to BPO I), and to leave the lunar, solar, and meteorological omens for some later time. The material thus restricted represents about one third of the corpus, that is, less than one thousand fragments.

Secondly, we decided to forego autograph copies. Transliterating instead of copying the texts reduced the time needed to be spent in the British Museum. Some justification for this shortcut exists in the facts that not only has a substantial percentage of the texts previously been published in autograph copy, but also that most of the unpublished ones are written in a clearly legible Neo-Assyrian script and therefore pose no epigraphic problem. Uncertainties remain, for the most part, when no parallels exist to help in the reading of difficult passages. Some hard-to-read Neo-Babylonian texts, and partially broken signs, especially at the edges of tablets, are the chief sources of these uncertainties in reading. We expect that photographs published in microfiche form will serve in lieu of copies.

The accuracy of most of the readings—and justified doubts about others—have been verified by repeated collations in the British Museum. Our friends and colleagues there, above all Dr. Edmond Sollberger, Keeper of the Department of Western Asiatic Antiquities, and C. B. F. Walker, Assistant Keeper, checked joins, made many collations, and were helpful in many ways with providing, reading, and interpreting the texts. Other colleagues working in the Student Room, foremost among them W. G. Lambert and D. A. Kennedy, as well as such occasional visitors as Aaron Shaffer and Nicholas Postgate, took time to help with the reading of the tablets and have contributed much to the decipherment of hard-to-read lines.

It is a pleasure to acknowledge the assistance of Cyril Bateman, who not only cleaned and baked the tablets and glued the joins, but occasionally made such joins himself. Joins and parallels were found also with the help of a card file of all stellar omen texts; the enthusiastic and able assistance of Francesca Rochberg-Halton, who parsed and filed the cards, is gratefully acknowledged. Professor Hermann Hunger, University of Chicago, in putting at our disposal his reconstruction of the series *MUL.APIN* as well as his various expertise on Babylonian astronomical and astrological texts, has been of constant support to our project. For this we are greatly in his debt. Peter T. Daniels edited and typed the prose sections and tables and designed the layout of the fascicle, and saw it through the press.
1. HISTORICAL INTRODUCTION

The omens described in the nineteen texts published in this volume generally involve phenomena of the constellations or "fixed" stars. The actual tablets were found mainly in Assurbanipal's library at Kuyunjik (the ancient Nineveh) and were inscribed in the seventh century B.C. The date of their composition in their present form cannot be much earlier; for they are closely related to the Astrolabes, and particularly to Astrolabe B, one copy of which has been dated paleographically ca. -1000, and to MUL.APIN, of which the oldest exemplar is dated -686. The order of the constellation names in our assumed "Tablet 51" is derived from Astrolabe B, a part of which is found in one of our texts (X 24-35; cf. also X 37-49 and XII ii), and the commentaries on our assumed "Tablet 50" and the end of Text III contain statements paralleled in both Astrolabe B (II 12b; II 15a; III 5b; III 27a; III 28; III 29; III 30; III 32; III 33; and III 34) and MUL.APIN (III 5b; III 11d; and III 30; another echo of MUL.APIN is found in IV 2a = V 1b = VI 1a = VII 2a).

But "Tablet 50" is clearly excerpted from earlier collections of omens; it is a sort of index to the kind of terrestrial phenomenon in an apodosis that is associated with a protasis containing a particular star name. Some of these omens are preserved in the commentaries (e.g., in text II), and others are presumably among those found in texts XV-XIX. But the commentators already follow the tradition of identifying some constellation names with planets (e.g., II 12i; II 12j; III 8a; III 8b; III 9a; III 11a; etc.), a procedure that seems to be based on finding an omen in which the apodosis is similar to that of the omen with a constellation name, but whose protasis contains a planet name. The original corpus of omens, then, probably dates back considerably earlier than ca. -1000—possibly to the Old Babylonian period at the beginning of the second millennium B.C.
2. ASTRONOMICAL INTRODUCTION

2.1. The Constellations

2.1.1. A basic hypothesis that we have followed in attempting to identify the constellation names that occur in our texts is that they refer to essentially the same groups of stars as do the same constellation names in the Astrolabes and MUL.APIN. Of course, we cannot be certain of the boundaries of any of these constellations, and they may well have fluctuated over time as did the Greek constellations; we do not pretend to have sufficient knowledge to be dogmatic about anything. But we do believe that in the older tradition the names of "fixed" stars were not used as the names of planets, but only refer to constellations. It is now our intention to review the material that allows us to identify some of these constellations.

2.1.2.1. In the "Prayer to the 'Gods of the Night'," last treated by Oppenheim, *Analecta Biblica* 12 (1959) 282-301, a group of stars is invoked by the diviner to put a propitious sign in the extispicy he is going to perform. Of this prayer there exist two Old Babylonian versions (RA 32 279ff.), a version from Boghazköy (KUB 4 47 r 39ff.), and several, partly fragmentary, copies from Kuyunjik. The Boghazköy tablet preserves on lines 43-46 a list of seventeen stars belonging to the path of Ea. This list is the transcription by a Hittite scribe of an Old Babylonian text. It was transliterated and commented on by Weidner (*Handbuch* 60-62 and 144), and has been re-transliterated by Reiner. We present this list in Table I with a second column supplying the ideal dates of the heliacal risings of the last twelve stars according to MUL.APIN I ii 36 - iii 33; these dates provide at least the proper sequence of and approximate intervals between the risings, though the Boghazköy tablet does not associate the stars with months. It is tempting to connect the first five star names, which precisely occupy line 43, with the planets, though it must be admitted that these names do not occur in connection with either planets or constellations in any other texts known to us.

<table>
<thead>
<tr>
<th>STAR</th>
<th>DATE OF HELIACAL RISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. a-ḥa-ti</td>
<td>II 1</td>
</tr>
<tr>
<td>2. Ga-qa</td>
<td>II 20</td>
</tr>
<tr>
<td>3. dDUMU.ZI</td>
<td>III 10</td>
</tr>
<tr>
<td>4. dNin-ki-zl-da</td>
<td>IV 15</td>
</tr>
<tr>
<td>5. E-pā-e</td>
<td>V 15</td>
</tr>
<tr>
<td>6. MUL.MUL</td>
<td>VIII 5</td>
</tr>
<tr>
<td>7. is le-e</td>
<td>IX 15</td>
</tr>
<tr>
<td>8. Ši-pa-zí-a-na</td>
<td>XII 15</td>
</tr>
<tr>
<td>9. Ka₂-ak-si-sl</td>
<td>X 15</td>
</tr>
<tr>
<td>10. GIŠ.BAN</td>
<td>IX 15</td>
</tr>
<tr>
<td>11. GĪR.TAB</td>
<td>XII 15</td>
</tr>
<tr>
<td>12. Ā.MUŠEN</td>
<td>VIII 15</td>
</tr>
<tr>
<td>13. KU₂</td>
<td></td>
</tr>
<tr>
<td>14. Ša-am-ma-ah</td>
<td></td>
</tr>
<tr>
<td>15. Ka₂-ad-du-uh-ha</td>
<td></td>
</tr>
<tr>
<td>16. MĀŠ</td>
<td></td>
</tr>
<tr>
<td>17. MAR.TU</td>
<td></td>
</tr>
</tbody>
</table>

1Read E-ku-e by Weidner, and identified with Ḫ =$\overset{\text{AŠ.GÁN}, \text{the first star of the path of Ea in Tables II and III.}}{\text{BM} 2, 72}$
However, note that lines 10-11 of a Kuyunjik tablet published by Oppenheim, loc. cit. p. 282, preserve names 2, 4, 5, and probably also originally 3; the end of line 9 is lost. These lines are: MUL Ga-na MUL dNIN. GIS.ZLD[A] / MUL SUL.PA.E. The last name, corresponding to the Boghazköy tablet's E-pa-e, is that of the planet Jupiter; this reading indicates that the scribe of the Kuyunjik tablet, rightly or wrongly, understood at least the fifth name in the older list to belong to a planet.

2.1.2.2. The next set of documents that we must examine is the Astrolabes, again as published by Weidner (Handbuch 65-66: Pinches Astrolabe, and 66: Astrolabe B Section C 1-12); cf. also Kugler (SSB I 229) and Schaumberger (SSB, Erg. III 324-330). They are presented in Table II. Of the three lines for each month, the first represents the path of Ea, the second the path of Anu, and the third the path of Enlil. After each constellation name is given the declination of its brightest or “principal” star in -1500. Finally there is given the date of the constellation’s heliacal rising according to MUL.APIN, if available. Table II clearly demonstrates both that the association of a constellation name with a particular ideal month does not signify that that constellation had its heliacal rising in that ideal month, and that the three paths do not correspond to bands located between certain circles parallel to the equator. The declinations of the representative stars that we have selected range between 43.5° and +8° for the path of Ea; between -12.2° and +36.9° for the path of Anu; and between -43.2° and +74.1° for the path of Enlil. We presume that these associations with ideal months and with the three paths are influenced by mythological as much as by astronomical considerations; for such mythologies see Astrolabe B Section A i-iii (in Weidner Handbuch 85-87, retransliterated in Appendix, p. 81f., cf. our X 24-49).

2.1.2.3. The next star-list that we must examine is found in Astrolabe B, section B, also published by Weidner (Handbuch 76-79 and 145). This lists twelve stars in each path with information concerning their positions with respect to each other. In Table III these data are summarized; where relative positions are given, a final column indicates whether the principal star in the statement is to the east, west, north, or south of the reference star. Table III is mainly a rearrangement of the star-lists of the three paths as given in Table II. In the path of Ea, Is lê and EN.TE.NA.BAR.HUM replace GU.LA and Numušda; in the path of Anu, one name in Table III is missing which one would expect from Table II to be UR.GUA.LA; and in the path of Enlil, UR.BAR.RA and a red star replace EN.TE.NA.BAR.HUM and LUGAL, while the star that precedes ŪZ can probably be restored as ŠU.PA. The meanings of two technical terms can also be established:

after (EGIR) means “to the east of,” i.e., rising after.
before (IGI, ana IGI, ina IGI, ina mihrit) means “to the west of,” i.e., rising before.

[BM 2, 73]
<table>
<thead>
<tr>
<th>MONTH</th>
<th>CONSTELLATION</th>
<th>&quot;PRINCIPAL&quot; STAR</th>
<th>DECLINATION</th>
<th>DATE OF HELIACAL RISING</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Aš.GăN</td>
<td>α Pegasi</td>
<td>-0.3°</td>
<td>XI 5</td>
</tr>
<tr>
<td></td>
<td>Dilbat</td>
<td>(Venus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>II</td>
<td>MUL.MUL</td>
<td>η Tauri</td>
<td>+8.0°</td>
<td>II 1</td>
</tr>
<tr>
<td></td>
<td>ŠU.GI</td>
<td>α Persei</td>
<td>+32.5°</td>
<td></td>
</tr>
<tr>
<td>III</td>
<td>Anunûtûm</td>
<td>φ Piscium</td>
<td>+5.5°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sipa.Zi.An.Na</td>
<td>α Orionis</td>
<td>-0.5°</td>
<td>III 10</td>
</tr>
<tr>
<td></td>
<td>Uru.Gu.La²</td>
<td>α Leonis</td>
<td>+23.6°</td>
<td>IV 15</td>
</tr>
<tr>
<td></td>
<td>Muš³</td>
<td>ζ Hydrae</td>
<td>+12.5°</td>
<td>IV 15</td>
</tr>
<tr>
<td>IV</td>
<td>Kâk.Sî.Sâ</td>
<td>α Canis Maioris</td>
<td>-18.2°</td>
<td>IV 15</td>
</tr>
<tr>
<td></td>
<td>Maš.Tab.Ba</td>
<td>θ Geminorum (?)</td>
<td>+17.3°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Šû.Un.Pâ.É⁴</td>
<td>(Jupiter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>Ban</td>
<td>δ Canis Maioris</td>
<td>-26.6°</td>
<td>V 15</td>
</tr>
<tr>
<td></td>
<td>Mar.Gîd.Da</td>
<td>α Ursae Maioris</td>
<td>+73.2°</td>
<td></td>
</tr>
<tr>
<td>VI</td>
<td>Kalîtûm⁵</td>
<td>ξ Puppis</td>
<td>-34.8°</td>
<td>VI 10</td>
</tr>
<tr>
<td></td>
<td>Uga</td>
<td>γ Corvī</td>
<td>+0.6°</td>
<td>VI 10</td>
</tr>
<tr>
<td></td>
<td>Šû.Un.A</td>
<td>α Boötes</td>
<td>+39.7°</td>
<td>VI 15</td>
</tr>
<tr>
<td>VII</td>
<td>Nîn.Mâh</td>
<td>γ Velorum</td>
<td>-41.0°</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Zibenîtûm</td>
<td>α Libra</td>
<td>+2.1°</td>
<td>VII 15</td>
</tr>
<tr>
<td>VIII</td>
<td>Uru.Idîm</td>
<td>α Lupî</td>
<td>-29.0°</td>
<td>VII 15</td>
</tr>
<tr>
<td></td>
<td>Gir.Tab</td>
<td>α Scorpiî</td>
<td>-12.2°</td>
<td>VIII 5</td>
</tr>
<tr>
<td></td>
<td>Lugal</td>
<td>α Leonis</td>
<td>+23.6°</td>
<td>V 15</td>
</tr>
<tr>
<td>IX</td>
<td>Salbatânu</td>
<td>(Mars)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ud.Ka.Du.Ga</td>
<td>α Cygni</td>
<td>+36.9°</td>
<td>IX 15</td>
</tr>
<tr>
<td></td>
<td>Úz</td>
<td>α Lyrae</td>
<td>+40.4°</td>
<td>VIII 15</td>
</tr>
<tr>
<td>X</td>
<td>Gû.La</td>
<td>α Aquariî</td>
<td>-12.2°</td>
<td>XI 5</td>
</tr>
<tr>
<td></td>
<td>Alluttûm⁶</td>
<td>δ Cancri</td>
<td>+23.4°</td>
<td>IV 5</td>
</tr>
<tr>
<td></td>
<td>Â.Mûšen</td>
<td>α Aquilae</td>
<td>+6.5°</td>
<td>IX 15</td>
</tr>
<tr>
<td>XI</td>
<td>Nuâmûda</td>
<td>ξ Pegasi</td>
<td>-3.5°</td>
<td>X 15</td>
</tr>
<tr>
<td></td>
<td>Sim.MaJ</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Damu</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XII</td>
<td>Ku₆</td>
<td>α Piscis Austrini</td>
<td>-43.5°</td>
<td>XII 15</td>
</tr>
<tr>
<td></td>
<td>Marduk⁷</td>
<td>(Jupiter)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kâ₅.A⁸</td>
<td>80 Ursae Maioris</td>
<td>+74.1°</td>
<td></td>
</tr>
</tbody>
</table>

² U.R.A Pinches
³ NAGAR Pinches
⁴ A.L.TAR Pinches
⁵ BIR Pinches
⁶ A.L.LUL Pinches
⁷ Kâ₅.A Pinches
⁸ Marduk Pinches
# TABLE III

<table>
<thead>
<tr>
<th>STAR</th>
<th>DIRECTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ea</td>
<td></td>
</tr>
<tr>
<td>1 AS.GÁN</td>
<td></td>
</tr>
<tr>
<td>2 MUL.MUL, after AS.GÁN</td>
<td>East</td>
</tr>
<tr>
<td>3 IS.lé, after MUL.MUL</td>
<td>East</td>
</tr>
<tr>
<td>4 SIPA.ZLAN.NA, after IS.lé</td>
<td>East</td>
</tr>
<tr>
<td>5 KAK.SI.SÁ, after SIPA.ZLAN.NA</td>
<td>East</td>
</tr>
<tr>
<td>6 BAN, after KAK.SI.SÁ</td>
<td>East</td>
</tr>
<tr>
<td>7 [NUN.KI dÉ-a], after BAN</td>
<td>East</td>
</tr>
<tr>
<td>8 [NIN].MAI, to the right of dÉa</td>
<td>East</td>
</tr>
<tr>
<td>9 UR.IDIM, to the left of dÉa</td>
<td>East</td>
</tr>
<tr>
<td>10 Salbatānu, before dÉa</td>
<td></td>
</tr>
<tr>
<td>11 EN.TE.NA.BAR.HJUM</td>
<td></td>
</tr>
<tr>
<td>12 KU₆</td>
<td></td>
</tr>
</tbody>
</table>

| Anu         |                   |
| 1 Dilbat    |                   |
| 2 GIR.TAB, after Dilbat | West |
| 3 Zibanītum, before GIR.TAB |         |
| 4 UD.KA.DU₈.A, before Zibanītum | West |
| 5 ŠU.GI, after UD.KA.DU₈.A | Northeast |
| 6 SIM.MAI, between ŠU.GI and dAnu | SW of ŠU.GI, W of Cancer |
| 7 [UR.GU.LA?] |               |
| 8 [MAŠ.TAB.BA.TUR.TUR] |         |
| 9 MAŠ.TAB.BA.GAL.GAL, before dAnu | West of Cancer |
| 10 Alluttum, a red star, after MAŠ.TAB.BA | East |
| 11 UGA, after Alluttum | East |
| 12 Nēberu   |               |

| Enlil       |                   |
| 1 APIN, before MAR.GiD.DA | West |
| 2 Anunitum, before dEnlil | West |
| 3 dMUŠ, after Anunitum | Southeast |
| 4 MAR.GiD.DA, between [...] and East |           |
| 5 [ŠU.PA?] |               |
| 6 ÜZ, after [ŠU.PA] | East |
| 7 UR.BAR.RA, after 9 ÜZ | West! |
| 8 Á.MUŠEN |               |
| 9 dDa[mu], a red star |         |
| 10 ŠUL.PA.È |               |
| 11 KA₅.A, after ŠUL.PA.È |   |
| 12 ŠUDUNIM.Uₓ.LU, a red star, before ŠUDUN |          |

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9 This must be a scribal error.
2.1.2.4. The last text that we must examine is from the first tablet of MUL.APIN. This is the foundation of all our identifications of star-names. We have used the publications by Bezold and Kopff, by Kugler, by Schaumberger, and by van der Waerden, and we are privileged to have been able to use the new edition being prepared by H. Hunger of Chicago. There exists a copy of the second tablet of MUL.APIN that is dated -686; this indicates that the composition as a whole is somewhat earlier. The part of MUL.APIN devoted to the “fixed” stars is divided into six sections:

1. i 1 - ii 35. A star catalog arranged according to the three paths and giving at times indications of relative positions as in the Astrolabe B text summarized in Table III. The MUL.APIN catalog is summarized in Table IV.

2. ii 36 - iii 12. A calendar of the dates of the heliacal risings of selected “fixed” stars. The calendar employs an ideal year of twelve 30-day months, and heliacal risings are dated only on days 1 (for 0), 5, 10, 15, 20, and 25 of any month. Therefore, though the order of risings is presumably correct, the dates are far from precise.

3. iii 13-33. A series of statements concerning the simultaneous risings and settings of certain “fixed” stars.

4. iii 34-48. A list of the intervals in days between the heliacal risings of certain “fixed” stars, compiled from section 2 and therefore of no independent value.

5. iv 1-30. A list of the ziqpu stars, which in this text seem to be stars that cross the meridian close to the zenith for a locality at a latitude of 36° N; and the ideal dates of their being on the meridian when certain other stars are rising or setting. The ideal dates are not useful, but the data on simultaneous culminations and risings/settings are. For the ziqpu stars see Table V.

6. iv 31-39. A list of eighteen stars in the path of the Moon, i.e., within 5° or 6° of the ecliptic. See Table VI.

In attempting to identify these stars, Kugler (SSB, Erg. I) used sections 2 (1-20 and 44-49), 3 (21-32), and 5 (33-44) and computed the data for -500 in Babylon (φ = 32;30°); he added further arguments later (SSB, Erg. II 141-192); Kopff used the same sections and a star map computed for -600 and a latitude of 36;30° N (Nineveh); Schaumberger (SSB, Erg. III 330-347) used sections 1 and 2; and van der Waerden used sections 2 and 4 (the data most subject to inaccuracy), and concluded that the observations of heliacal risings were made between -1400 (or preferably -1300) and -1000 at Babylon, while the classification of the stars into the three paths was made not long before -700.

2.1.2.4.1. There remain many significant differences between the identifications arrived at by these four scholars. In order to check the material again, we chose to use visual analogues which avoid the arbitrary choice of particular stars for which times of heliacal rising and setting must be computed; the visibility near the horizon of some stars in a constellation constituted for us its “rising” or “setting” — terms which in the context cannot have the stricter senses of “heliacal rising” and “heliacal setting.”  Through the good offices of Mr. and Mrs. R. Webster, and with their assistance and that of Ms. Phyllis Pitiuga, we were able to test the data in sections 3 and 5 for various dates and terrestrial latitudes using the Zeiss planetarium projector at the Adler Planetarium in Chicago. This solved most of our problems, and permitted us to conclude that the data best fit the date -1000 and the approximate latitude of Nineveh (we used 36° N). In order to corroborate these conclusions we employed stereographic projections of the northern hemisphere extended to 34° S declination on which were entered the positions of over 200 stars, computed for -2000 and -1000, as found in Baehr; over these projections were fitted transparencies marked with the zeniths and local horizons for terrestrial latitudes of 32° N and 36° N. The results of these operations are recorded in Table IV, which represents section 1 of MUL.APIN. We have also given the declination of a “principal” star in each constellation. Those identifications confirmed by our visual analogues are marked with an asterisk.

10 In this matter we disagree with the strictures of Kugler (SSB, Erg. II 147-48) against Kopff; we also disagree with the methodology and results of W. Papke, who kindly sent us a copy of his dissertation, Die Keilschriftserie MUL.APIN: Dokument wissenschaftlicher Astronomie im 3. Jahrtausend, Tübingen, 1978.
A glance at the last column will show that the Anu stars were close to the equator while those of Enlil were
to the north, those of Ea to the south. This is in contrast to the situation with respect to the Astrolabes' paths.
Furthermore, the planets, while still included, are discretely added at the ends of the lists for the paths of Enlil and
Anu. Clearly astronomical considerations played a greater role in the creation of this star catalog than they did
in the earlier period, but we believe that it is unjustified to see in this circumstance a concept of three bands of
stars parallel to the equator and with fixed boundaries as do Weidner (Handbuch 46-49), Schaubenberger (SSB, Erg.
III 321-322), and van der Waerden. Our interpretation of the three paths will be found in § 2.2.1.2.1. For now we
should note that the most southerly constellation in the path of Enlil in MUL.APIN is APIN itself (+13.4°) and
LU.LIM (+13.4°); the most northerly in the path of Anu is $d$MUŠ (+12.5°) and the most southerly BAN (-25.8°);
and the most northerly in the path of Ea is GU.LA (-11.3°). These figures are only indicative of the general situation,
of course; the “principal” stars that I have chosen are not necessarily the most northerly or southerly within
the Mesopotamian constellations.

<table>
<thead>
<tr>
<th>STAR ID</th>
<th>ENTI</th>
<th>&quot;PRINCIPAL&quot; STAR</th>
<th>$\delta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>APIN</td>
<td>Triangulum $+$ $\gamma$ Andromedae</td>
<td>$a$ Tri.</td>
</tr>
<tr>
<td>2</td>
<td>UR.BAR.RA, the seed-funnel of APIN</td>
<td>$a$ Trianguli</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ŠU.GI</td>
<td>* Perseus</td>
<td>$a$ Pers.</td>
</tr>
<tr>
<td>4</td>
<td>GÂM</td>
<td>* Auriga</td>
<td>$a$ Aur.</td>
</tr>
<tr>
<td>5</td>
<td>MAŠ.TAB.BA.GAL.GAL</td>
<td>* $\alpha + \beta$ Geminorum</td>
<td>$a$ Gem.</td>
</tr>
<tr>
<td>6</td>
<td>MAŠ.TAB.BA.TUR.TUR</td>
<td>* $\xi + \lambda$ Geminorum</td>
<td>$\xi$ Gem.</td>
</tr>
<tr>
<td>7</td>
<td>AL.LUL</td>
<td>* Cancer</td>
<td>$\delta$ Canc.</td>
</tr>
<tr>
<td>8</td>
<td>UR.GU.LA</td>
<td>* Leo</td>
<td>$a$ Leo.</td>
</tr>
<tr>
<td>9</td>
<td>LUGAL, in the breast of UR.GU.LA</td>
<td>$a$ Leonis</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>$Ummalu$ stars in the tail of UR.GU.LA</td>
<td>21 Leonis (?)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>$d$A.EDIN, the frond of the date palm</td>
<td>$\gamma +$ Comae Berenices (?)</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>ŠU.PA</td>
<td>* Boötes</td>
<td>$a$ Boo.</td>
</tr>
<tr>
<td>13</td>
<td>HÉ.GÁL- $a$ which is before it</td>
<td>Part of Coma Berenices (?)</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>BAL.TÉŠ.A which is after it</td>
<td>Corona Borealis (?)</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>MAR.GÍD.DA</td>
<td>Ursa Maior</td>
<td>$a$ Ur. Mai.</td>
</tr>
<tr>
<td>16</td>
<td>KA₅.A which is with the cart-pole</td>
<td>80-86 Ursae Majoris (?)</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>$Ug$ which is at the front of MAR.GÍD.DA</td>
<td>Northern part of Boötes (?)</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>MUBU.KEŠ.DA</td>
<td>Ursa Minor</td>
<td>$a$ Ur. Min.</td>
</tr>
<tr>
<td>19</td>
<td>MAR.GÍD.DA.AN.NA</td>
<td>Polaris (?)</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>DUMU.ŞÉ.MAH which is in its rope</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>DIN.GIR.GUB.BA.MEŠ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>DIN.GIR.KU.A.MEŠ</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>ÚZ</td>
<td>* Lyra</td>
<td>$a$ Lyr.</td>
</tr>
<tr>
<td>24</td>
<td>UR.GI₂, which is before ÚZ</td>
<td>$\beta$ Herc.</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>$d$LAMMA, the bright star of ÚZ</td>
<td>$a$ Lyræ</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>NIN.SAR and $Î.R.RA.GAL$, two stars after it</td>
<td>$\xi$ and $\xi$ Lyrae (?)</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>UD.KA.DU₈.A</td>
<td>* Cygnus and (part of) Cepheus</td>
<td>$\xi$ Lyr.</td>
</tr>
<tr>
<td>28</td>
<td>ŠAH Da-mu which is to the right of it</td>
<td>$a$ Cyg.</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>ANŠE.KUR.RA which is to the left of it</td>
<td>$+37.5^\circ$</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>LU.LIM which is after it</td>
<td>$+38.1^\circ$</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>HARRU $d$TIR.AN.NA, the $Ummalu$ stars in the breast of LU.LIM</td>
<td>$+31.8^\circ$</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>KA.MUŠ.IKÜ.E, the red star in the kidney of LU.LIM</td>
<td>$+39.6^\circ$</td>
<td></td>
</tr>
<tr>
<td>33</td>
<td>Marduk</td>
<td>Andromeda</td>
<td>$a$ Andr.</td>
</tr>
<tr>
<td>34</td>
<td></td>
<td>$+13.4^\circ$</td>
<td></td>
</tr>
</tbody>
</table>

TABLE IV

[BM 2, 77]
<table>
<thead>
<tr>
<th>STAR</th>
<th>IDENTIFICATION</th>
<th>“PRINCIPAL” STAR</th>
<th>δ</th>
</tr>
</thead>
</table>
| Anu  | 1 AŠ.GÁN      | * α, β, γ Pegasi + α  
Andromedae                | α Peg. | +1.3° |
|      | 2 Šimunittum which is before AŠ.GÁN | Western fish of Pisces +  
western part of Pegasus     | ζ Peg. | -2.1° |
|      | 3 Anuníttum which is after AŠ.GÁN | * Eastern fish of Pisces  | φ Pisc. | +8.1° |
|      | 4 LÚ.HUN.GÁ which is after it | * Aries              | α Ari. | +7.4° |
|      | 5 MUL.MUL         | * Pleiades         | η Tau. | +10.8° |
|      | 6 GU₂.AN.NA       | * Taurus            | α Tau. | +5.7° |
|      | 7 dIs té          | * α Tauri + Hyades | a Or.  | +1.4° |
|      | 8 SIPA.ZL.AN.NA   |  |   | |
|      | 9 LÚ.LÁL and Latarak which are before SIPA.ZL.AN.NA | γ, ξ Geminorum (?)  
Canis Minor (?)               | a Can. Min. | +7.6° |
|      | 10 DAR.LUGAL which is after it | * α Canis Maiorius  | a Can. Mai. | -17.2° |
|      | 11 KAK.SI.SÁ      | * τ, δ, σ, ε + Canis Maioris  | δ Can. Mai. | -25.8° |
|      | 12 BAN            | * Hydra             | ζ Hyd. | +12.5° |
|      | 13 dMUŠ           | * Corvus            | γ Cor. | -1.6° |
|      | 14 UGA₄mušen      | * α + Virginis         | a Virg. | +5.3° |
|      | 15 AB.SÍN         | Libra                  | a Lib. | -0.8° |
|      | 16 ZI.BA.AN.NA, the horns of Zuqaqipu | * Aquila          | a Aquil. | +5.9° |
|      | 17 Za-ba₄-ba₄     |  |   | |
|      | 18 Á.MUŠEN       |  |   | |
|      | 19 LÚ.BAD         | Venus                   | a Lup. | -31.8° |
|      | 20 Dilbat         | Mars                     | a Scorpi | -14.9° |
|      | 21 Šalbatānu      |  |   | |
|      | 22 SAG.UŠ         |  |   | |
|      | 23 GU₄.UD        |  |   | |
| Ea   | 1 KU₆            | * Piscis Austrinus     | a Pisc. Aus. | -42.4° |
|      | 2 GU.LA           | * Aquarius            | a Aq. | -11.3° |
|      | 3 NUN.KI¹¹       | * ξ Puppis            | ξ Pupp. | -34.9° |
|      | 4 NIN.MAH which is to the right of it¹² | * γ + Velorum         | γ Vel. | -41.4° |
|      | 5 EN.TE.NA.BAR.HUM | * Centaurus       | a Cent. | -45.9° |
|      | 6 GIŠ.GÁN.UR, which is at its side |  |   | |
|      | 7 dŠulat and dHaniš which are after it |  |   | |
|      | 8 Numušda which is after them |  |   | |
|      | 9 UR.IDIM which is to the left of Zuqaqipu |  |   | |
|      | 10 Zuqaqipu       | * Lupus                | a Lup. | -31.8° |
|      | 11 dLi₉.si₄ in the breast of Zuqaqipu | * Scorpi                | a Scorpi | -14.9° |
|      | 12 ŠAR.UR₄ and ŠAR.GAZ in the tail of Zuqaqipu | λ, ν Scorpi          | λ Scorpi | -28.6° |
|      | 13 PA.BIL.SAG which is after them | * Sagittarius+(θ + Ophiuchi?) | a Sag. | -39.0° |
|      | 14 MÁ.GUR₈       | * Capricornus          | a Capr. | -16.3° |
|      | 15 SUḪUR.MÁŠ    |  |   | |

¹¹This might be α Carinae (Canopus) if the observation was made in Babylon; the declination of α Carinae in -1000 was -53.4°.

¹² In this text “to the right” means the same as “after” and “to the left” the same as “before”; cf. 9: UR.IDIM (Lupus: RA in 1950 = 14ʰ16ᵐ, δ = -30° - 55°) which is to the left of Zuqaqipu (Scorpius: RA in 1950 = 16ʰ18ᵐ, δ = -20° - 145°). Schaumberger (SSB, Erg. III 334-36), assuming that NUN.KI is Canopus, interprets “right” as “north” and “left” as “south.”
2.1.2.4.2. The *ziqpu* stars in section 5 of MUL.APIN are listed in Table V with conjectural identifications and declinations for -1000. Thus all the stars that can be even conjecturally identified lie between 7° north and 5° south of the zenith of Nineveh when they cross the meridian. This is certainly not true in later lists of *ziqpu* stars—e.g., those published by Kugler (SSB, Erg. II 186) and by Schaumberger ("Die Ziqpu-Gestirne").

### TABLE V

<table>
<thead>
<tr>
<th>STAR</th>
<th>IDENTIFICATION</th>
<th>DECLINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>edge of UD.KA.DU₈.A</td>
<td>γ Cygni (?)</td>
<td>+34.0°</td>
</tr>
<tr>
<td>breast of UD.KA.DU₈.A</td>
<td>a Cygni</td>
<td>+37.5°</td>
</tr>
<tr>
<td>knee of UD.KA.DU₈.A</td>
<td>a Lacerti (?)</td>
<td>?</td>
</tr>
<tr>
<td>heel of UD.KA.DU₈.A</td>
<td>β Cassiopeiae (?)</td>
<td>+43.3°</td>
</tr>
<tr>
<td>bright star of ŠU.GI</td>
<td>a Persei</td>
<td>+35.3°</td>
</tr>
<tr>
<td>ummulu stars of ŠU.GI</td>
<td>60 Persei (?)</td>
<td>ca. +35°</td>
</tr>
<tr>
<td>MAŠ.TAB.BA.GAL.GAL</td>
<td>a Geminorum</td>
<td>+31.8°</td>
</tr>
<tr>
<td>UR.GU.LA</td>
<td>e Leonis (?)</td>
<td>+32.9°</td>
</tr>
<tr>
<td>A.EDIN</td>
<td>γ Comae Berenices</td>
<td>ca. +42°</td>
</tr>
<tr>
<td>ŠU.PA</td>
<td>a Boötes</td>
<td>+36.6°</td>
</tr>
<tr>
<td>DINGIR.GUB.BA.MEŠ</td>
<td>β Herculis</td>
<td>+31.8°</td>
</tr>
<tr>
<td>UR.GI</td>
<td>a Lyrae</td>
<td>+39.6°</td>
</tr>
</tbody>
</table>

2.1.2.4.3. The stars that lie along the path of the Moon according to MUL.APIN are listed in Table VI. In principle their latitudes should not exceed 5°-6°; I include a column of Ptolemaic latitudes of certain exemplary stars in each constellation to demonstrate that this is approximately true. The only constellation that seems to be rather distant from the ecliptic is ŠU.GI; but, if that is regarded as including EN.ME.ŠÁ.R.A as it normally is, then it extends to the stars of Taurus just north of MUL.MUL.

### TABLE VI

<table>
<thead>
<tr>
<th>STAR</th>
<th>EXEMPLARY STARS</th>
<th>LATITUDE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUL.MUL</td>
<td>η Tauri</td>
<td>+3.20°</td>
</tr>
<tr>
<td>GU₁,AN.NA</td>
<td>a Tauri</td>
<td>-5.10°</td>
</tr>
<tr>
<td>SIPA.ZI.AN.NA</td>
<td>a Orionis</td>
<td>-17°</td>
</tr>
<tr>
<td>ŠU.GI</td>
<td>χ¹ Orionis</td>
<td>-3.45°</td>
</tr>
<tr>
<td>GĀM</td>
<td>δ Persei</td>
<td>+11°</td>
</tr>
<tr>
<td>MAŠ.TAB.BA.GAL.GAL</td>
<td>γ Aurigae = β Tauri</td>
<td>+5°</td>
</tr>
<tr>
<td>AL.LUL</td>
<td>δ Geminorum</td>
<td>+6.15°</td>
</tr>
<tr>
<td>UR.GU.LA</td>
<td>a Leonis</td>
<td>+0.10°</td>
</tr>
<tr>
<td>AB.SĪN</td>
<td>a Virginis</td>
<td>-2°</td>
</tr>
<tr>
<td>Zihanitum</td>
<td>α² Librae</td>
<td>+0.40°</td>
</tr>
<tr>
<td>Zuqaqqipu</td>
<td>a Scorpii</td>
<td>-4°</td>
</tr>
<tr>
<td>PA.BIL.SAG</td>
<td>a Sagittarii</td>
<td>-18°</td>
</tr>
<tr>
<td>SUHUR.MĀŠ</td>
<td>ν¹, ν² Sagittarii</td>
<td>+0.45°</td>
</tr>
<tr>
<td>GU.LA</td>
<td>β Capricorni</td>
<td>+5°</td>
</tr>
<tr>
<td>KUN.MEŠ</td>
<td>a Aquarii</td>
<td>+11°</td>
</tr>
<tr>
<td>SIM.MAH</td>
<td>δ Aquarii</td>
<td>-7.30°</td>
</tr>
<tr>
<td>Ananitum</td>
<td>ω Piscium</td>
<td>+6.20°</td>
</tr>
<tr>
<td>LÛ.HUN.GÁ</td>
<td>δ Piscium</td>
<td>+2.15°</td>
</tr>
<tr>
<td></td>
<td>η Piscium</td>
<td>+5.20°</td>
</tr>
<tr>
<td></td>
<td>a Arietis</td>
<td>+10.30°</td>
</tr>
<tr>
<td></td>
<td>38 Arietis</td>
<td>-5.15°</td>
</tr>
</tbody>
</table>
Star Catalog

The catalog of star names occurring in the omen texts is arranged according to the English alphabet. An entry consists generally, in its fullest form, of a transliteration of the cuneiform name (the Sumerian, in small capitals, followed by the Akkadian equivalent, if known); an English translation (if known) in quotation marks; a reference to Gossmann, where additional bibliographical information will be found; an identification, if any seems reasonably certain to us; a reference to the star in Table IV (when appropriate); cross-references to other star names in the catalog; and references to the occurrences of the star name in the texts published in this fascicle. A few references are also given to the star list published by Weidner in AfO 19 105-113, but we cannot accept that the items in the parallel columns of that text are intended to be identities. Rather some esoteric relationships no longer clear to us unite the entries in this list (note, e.g., multiple associations of star names both in the left column and in the right column).

This catalog presents what we believe to be the correct readings of the star names; these often differ from the readings in Gossmann and other sources. The exact readings of some star names, such as EN.TE.NA.BAR.HUM, AN.GUB.BA (or DINGIR.GUB.BA), and others, remain uncertain. We do not include star names that appear in lists only (e.g., Hh.XXII) or in astronomical texts.

AGA.AN.NA/NE. Gossmann 25, 31. See AGA d-À-nim.
ÁG.AN.NE. See AGA d-À-nim. VI 3.
agra. See LÚ.HUN.GÁ.

calla. Gossmann 15. See AL.LUL.
AL.TAR. Gossmann 16. See UD.ALTAR.
Ammuru. See MAR.TU.
AN.TA.SUR.RA = sārinu. "Flashing." Gossmann 36. Probably a term for shooting star or meteor. II 2; III 6, 6b; XIX 1-2.
AN.TA.ŠUB.SUB.BA. "Falling from Above." Gossmann 35. Probably a term for meteorite. I 20; III 20; IV 14.
Anzū. See dIM.DUGUD.MUŠEN.
APIN = *epinnu. "The Plow." Gossmann 39. Triangulum Boreale with γ Andromedae. Enlil 1. For stars belonging to this constellation see UR.BAR.RA. I 3; III 2.
áribu. Gossmann 40. See UGA.MUŠEN.
aritu. Gossmann 41.
AŠÁ.GA. See AŠ.GÁ.NA IX 12.
AŠ.GÂN = ıku. “The Field.” Gössmann 110. α, β, and γ Pegasi with α Andromedae. Also wr. EŠ.DAR. For another logogram see AŠ.GÂN. II 15a-c, ε; III 6c, catch line; IV 3a; IX 1, 16-17, catch line; X 1, 52; XII 14; XV 19-23.


BAN (GIS.BAN) = qāštu. “The Bow.” Gössmann 47. τ, δ, θ Canis Majoris. Anu 12. IX 5; X 16; XI 1; XIII 7-8; XIV 7; XVI 17-18.

barbaru. See UR.BAR.RA.

bibbu. See UDU.IDIM.

BIR = kālittu. “The Kidney.” Gössmann 56. ξ+ Puppis. Ea 3. For another name for (part of) the constellation see NUN.KI. III 27-27a, 31-31a; IX 6; X 17; XI 2; XIII 9; XIV 6.


dāpinu. Gössmann 99. See UD.ALT.AR.


Dilbat. Gössmann 109. Venus. Anu 20. II 7b-c; 12 i-j; IV 5a, 6a, 7a; V 3a, 4a-b; VI 5-5a; VIII 2a; IX 8.


DUMU.Š.É.MAH. Gössmann 191. Polaris (?). Enlil 20.


EN.GISGAL.AN.NA. Gössmann 120. Jupiter.

EN-ill. Identified with ŠU.PA (MUL.APIN I i 12, ii 46, and iii 21). III 34-34a.

EN.MEŠ.ÁR.RA. Gössmann 122. α+ Persei with, perhaps, some of the northern stars of Taurus. Identified with GIS.GIGIR. For stars belonging to the constellation see GIS.KAK dEN.MEŠ.ÁR.RA. XVI 8-9, 12.

EN.TE.NA.BAR.HUM = habasirānu. Gössmann 123. Centaurus. Ea 5. I 4; III 5, 5b, 35-35a; X 18; XI 3; XIII 4; XIV 3.

enzu. Gössmann 121. See ÛZ.

épinu. See APIN.

E-ra-al-BU. Gössmann 124.

Eridu. Gössmann 127. See NUN.KI.

eriqqu. See MAR.GI.Đ.DA.

eru. See A.MUSEN.

Erua. Gössmann 126. See A.EDIN.


ES 4 .GÂN. See AŠ.GÂN.


É.TÜR.RA.MA/MI. See É.TÜR.

É.TÜR.RA.ME. Gössmann 131. See É.TÜR.

É.TÜR.RAMI. AFO 19 106 ii 13. See É.TÜR.


gāmlu. See GAM.

GIGIR (GIŠ.GIGIR) = narkabtu. “The Chariot.” Gössmann 89. Identified with EN.ME.ŠÁR.RA.

GILIM.(BA). Gössmann 84 and 227.

GIR. MEŠ ŠU.GI. “The Feet of the Old Man.” Probably ṣ Persei. See ŠU.GI. XV 10; XVI 5.

GÍR.TAB = zuqaqatu. “The Scorpion.” Gössmann 94. Scorpius. Ea 10. Its deity is ḫIšara, q.v. For stars belonging to the constellation see LI₂₉.SI₄, ziqitu GÍR.TAB. I 12; II 9-9a; III 8a-b, 11c-d, 25; V 1; VIII 4; IX 9; X 19; XI 4-6.

GIŠ.BAN. See BAN.

GIŠ.GÁN. UR. See GÁN. UR.

GIŠ.GIGIR. See GIGIR.


GIŠ.RIN. Gössmann 368. See zibānitu.


GIŠ.TAB = zuqaqitu. “The Scorpion.” Gassmann 94. Scorpius. Ea 10. Its deity is ḫIšara, q.v. For stars belonging to the constellation see LI₂₉.SI₄, ziqitu GÍR.TAB. I 12; II 9-9a; III 8a-b, 11c-d, 25; V 1; VIII 4; IX 9; X 19; XI 4-6.

GU₄.GL. “The Feet of the Old Man.” Probably (3+ Persei. See SU.GL XV 10; XVI 5.


Ḫabaṣīrānu. See EN.TE.NA.BAR.HUM.

Ḫar-rā. Gössmann 184. 18, 31, and 32 Andromedae (?). Enlil 31.


ḪU.GÁ. See UGA(MUŠEN). XIV 2.

ḪUN.GÁ. See LUX.UN.GÁ.

ḪD.BURANUN. See BURANUN.

ḪD.IDIGNA. See IDIGNA.


Idiglat. See IDIGNA.

iKU. Gössmann 193. See AŠ.GÁN.

išu sibtittu. See ḫMIN.BI, ḫsibiti.


ḪMIN.BI = išu sibitti. “The Seven Gods.” They are the deities of MUL.MUL (MUL.APIN I i 44). IV 4, 4b; V 2, 2b: VI 2, 2b; VII 3.

ḪM.ŠEŠ = marratu (?). Gössmann 197. Cf. MUL.APIN I iii 7.


Ḫstar. Gössmann 203. Venus. See EŠ₄.DAR.

ḴA₂₄.A = ṭeilatu. “The Fox.” Gössmann 205. 80-86 Ursae Maioris (?). Enlil 16. II 3a, 4-4a; III 8, 29.

Ḵajamānu. See SAG.UŠ.

ḴAK.BAN. Gössmann 211. For other logograms see KAK.SLSÁ.


ḲAK.Û.TAG.GA = šitahu. “The Arrow.” For other logograms see KAK.SLSÁ.

Ḳallitu. Gössmann 213. See BIR.

[BM 2, 82]
KAL.NE. Gössmann 98.


dLAMMA. Gössmann 212bis. α Lyrae. Enlil 25.

LLDUR SIPA.ZI.AN.NA. “The Navel of the True Shepherd of Anu.” Probably α Orionis. See SIPA.ZI.AN.NA. XV 32; X VI 3; XVII 13-14; XVIII 4-5.


LUL. Gössmann 247. See KA₅-A.


lālimu. See LULIM.


(d)Makītu. “Fiery Red.” Gössmann 255. Mars. Also wr. SA₅, IV 5a; V 3a; VI 5.


manzāt. See TIR.AN.NA.

MAR. Gössmann 257. See MAR.GID.DA. IV 4a; V 2a; VI 2a.

dMardu. Gössmann 260. See dAMAR.UD.


marratu. See IM.ŠES.


māšakātu. See GĀN.ÜR.

MAŠ.TAB.BA = tāmā or māša. “The Twins.” Gössmann 267. When unqualified this probably refers to MAŠ.TAB.BA.GAL. I 14; III 12-12a, 28; IV 2; VII 2.


māši. Gössmann 87; AFO 19 107 iii 5. Presumably a part of Sagittarius. See PA.BIL.SAG.

MUBU.KES.DA. Gössmann 282. Enlil 18.

MUL.GU.LA. See GUL.A.

MUL.MUL = zappu. “The Stars” (Sum.) or “The Bristle” (Akk.). Gössmann 279. The Pleiades. Anu 5. Also wr. ULUL, MUL₄.MUL₄. Its deities are dIMIN.BL. IV 4a-b; V 2a-b; VI 2a-b; VII 3a; IX 2, 13, catch line; X 2; XVIII 7-8.


NAGAR. Gössmann 294. Cancer. For another logogram see AL.LUL.


narkabtu. See GIGIR.


Nergal. Gössmann 302. See dUGUR.
nēsu. See UR.MAḪ.

NIG.GUL.TI. See NIN.GUL.TI. I 11; II 7a.

NIM.MAḪ.KI. "(Star of) Elam." Gössmann 312. I 13; III 11-11a, 11c.

̄NIN.GĪR.SU. Gössmann 316. Saturn. III 19; IV 12, 13b.

̄NIN.GUL.AN.NA. Gössmann 320. See NIN.GUL.TI.

NIN.GUL.TI. Venus. Also wr. NIG.GUL.TI, ̄NIN.GUL.AN.NA, ̄NIN.SI₄.AN.NA.


̄NIN.MAḪ. Gössmann 324. γ Velorum. Ea 4. Another name is ̄NIN.TU.

̄NIN.SI₄. Gössmann 318. I 15; II 10; III 13-13a; VIII 2.

̄NIN.SI₄.AN.NA. Gössmann 327. See NIN.GUL.TI.

̄NIN.TU. Another name is NIN.MAḪ.

̄nīru. Gössmann 329. See ŠUDUN.


NU.MUŠ.ĐA. Gössmann 305. Ea 8.

NUN.KI. "(Star of) Eridu." Gössmann 306. For stars belonging to the same constellation see BīR. III 27a; IX 22; XII 9.


PA.BIL.SAG. Gössmann 358. Sagittarius with, probably, θ Ophiuchi. Ea 13. For stars belonging to the constellation see miššu ̄PA.BIL.SAG.

PAN. See BAN.

̄Papsukkal. Identified with SIPA.ZI.AN.NA (MUL.APIN I ii 2).

Pāsittu. See KA.MUŠ.Î.KUGE.

Purattu. See BURANUN.

qaštu. See BAN.

rabbu. Gössmann 367. See GAL. II 6; VIII 1.

SA₅. See Makru.

SAG/SAG.ME.GAR. Gössmann 334. Jupiter. Enlil 33. Its god is ̄AMAR.UD (MUL.APIN I ii 38). II 9a, 14e; III 9a, 13b, 28a; VIII 4.


SAL.A.KEồ. "(Star of) the Woman." Cf. UŠ.A.KE/or/ŠE. I 16; IV 7.


sarru. Gössmann 342. See LUL.LA.

*sibi. Gössmann 349. See iliš sibitti, ̄DIMIN.BI.


̄Šimut. Gössmann 351. See ̄Šimut.


SIPA.ZI.AN.NA = šidallu (Hli. XXII Section 10-4); štaddalu, štaddaru. "The True Shepherd of Anu." Gössmann 348. Orion. Anu 8. For stars belonging to the constellation see LLDur SIPA.ZI.AN.NA; its deity is ̄Papsukkal, q.v. III 3b, 30-30a; IX 4, 14; X 4; XIV 8; XV 33-35; XVI 2; XVII 12; XVIII 1-3; 6-10.

ššu. See ANŠE.KUR.RA.


suhurmašu. See SUḤUR.MĀŠ.

Salbatānu. Gössmann 360. Mars. Anu 21. III 8a-b, 11a, 11c, 13a, 26-26a; V 1a; XI 7.


šamaš. Gössmann 373. See dUtū.

šanūmma. Gössmann 374. See Man-MA.

šār.gaz. Gössmann 375. λ or ν Scorpii. Ea 12. Identified with ziqīt Gir.TAB, q.v.

šarru. See Lugal.

šār.ur. Gössmann 375. λ or ν Scorpii. Ea 12. Identified with ziqīt Gir.TAB, q.v.

šā.tūr.rašē. Gössmann 370. II 8; III 23.

šēlebu. See ka₅.A.

šību. Gössmann 388. See šu.GI. III 32.

šīdallu. See Sipa.ZIan.NA.

šīhṭu. See GU₄.UD.

šikkū. See Nin.KilIM.

šīltahu. See Kاك.ú.tag.GA.

dšīmut. XVIII 14-16.

šīnumūtu. Gössmann 390. See Sim.MaH.

šīta₂.dar/da.Ra (cf. AF 19 107 iii 25) = šītaddarū. See Sipa.ZIan.NA.

šītaddalū (šītaddarū). Gössmann 393. See Sipa.ZIan.NA.


for other stars belonging to the constellation see GABA šu.gi, Gir.MES šu.GI. III 34a; XV 6-7.

šu.kādu. Gössmann 381. See Kاك.ŠI.SA.


tarbaṣu. See E.TUR.

tināru. See Im.Šu.RIN.NA.


ud.Ka.du₈.A. “The Demon with the Gaping Mouth.” Gössmann 144. Cygnus and (a part of) Cepheus. Enlil 27,

IX 11; XIII 5; XIV 4.

ud.Kin.nu.NI. See BURANUN.

udud.im = bībbu. “The Wild Sheep.” Gössmann 139. The term for planet. I 5; II 6a; III 14b, 16a, 18a, 19a,

20a; IV 4b, 10a, 12a, 13a; V 2b; VI 2b; XVI 14.

udud.im.GU₄.UD. Gössmann 139bis. See GU₄.UD. III 6a.

udud.im.SAG.šu. Gössmann 141. See SAG.ŠU. III 3a.


UG₅.GA. I 6; III 3; XVII 8-11.

U₅.gān.ur = ṛikbu (ṣa) maškakātī. (A part of the Harrow.)

UG.GA, UG₅.GA. Gössmann 133. See UG₅.MU.SEN.

2.2. Astronomical Phenomena

The changes that may be observed in the appearances of the "fixed" stars (we are not convinced that we should include variable stars, since their changes are small and regular, and ought not to occasion the dire events said to follow the phenomena interpreted by Schaumberger [SSB, Erg. III 350-352] as referring to variability) are primarily due to the distortions of the stars' light by scattering, reflection, and refraction as it passes through the earth's atmosphere. These phenomena usually occur when the star is near the horizon, and are most likely to be visible in desert areas such as Mesopotamia where the possibilities for haze, for dust particles in the atmosphere, and for temperature inversions are maximized. These phenomena, which are one aspect of meteorological optics, have recently been the object of renewed scientific study because of the fact that they can explain recent reports of flying saucers and other unidentified flying objects. In writing the following we have consulted primarily Minnaert, Menzel, O'Connell, Condon, and Tricker, as well as Schaumberger.

2.2.1. Position in the sky.

2.2.1.1. The words meaning "to rise heliacally" are IGI = ittannar (see XVII 7) and KUR. Section C of Astrolabe B incorrectly interprets the relationship of the twelve stars of each path to the twelve months to be such that each star rises heliacally (KUR) in its month, n, while the star associated with month n + 6 sets; some of these statements are quoted in Text III (III 28, III 28a, and III 29). In the texts of our assumed Tablet 51, in similar statements, the word employed in one section is IGI (e.g., IX 1-2 and 4-9; XII 1-4), in the other KUR (e.g., IX 12-13 and XI 5). But the first section continues after the Astrolabe-like statements with "Star x rises heliacally in month y," with the two possibilities: "if it rises early (nim-ma IGI)" and "if it is late (zar-ma) and passes by its month (iti-su dib-ma) and rises (IGI)." The same idea is expressed in the second section by the two phrases "rises heliacally (KUR) at its specified time (ina ud.dug4 ga-si = ina adamnišu)" and "not at its specified time (ina la ud.dug4 ga-si)." Obviously, since the Mesopotamian months are lunar, no matter what constellation is associated with a month it will not always rise heliacally in that month; but, if it normally does rise in that month (assuming intelligent if not perfectly regular intercalation), then it will sometimes (after intercalation) rise in the month before and sometimes
(when intercalation is needed) in the month after. Note that the term UD.DUG₄.GA, "specified time," here refers to the month in which it is normally expected that the star will rise heliacally; the same term adanu (IV 12a), written UD.SUR (III 19a), occurs with the verb DIB, "pass by," in a sentence whose subject is "the planets and the stars of the sky." Clearly, then, methods existed at the time of the composition of our texts, at the beginning of the first millennium B.C., for predicting (undoubtedly with mean periods) the heliacal risings of the planets. Such methods are indeed known for Venus (EAE 63, 22-33), and for Saturn and Mercury (EAE 56, 96-104). A word meaning "to set heliacally," ŠU, is found only in III 20a and IX 11. In the former case it follows the statement: "the planets do not complete (NU DIRI) their days." This clearly indicates a knowledge of the mean periods between the heliacal risings and the heliacal settings of the planets.

2.2.1.1. The second predicate in III 19a is "do not rise heliacally" (NU IGI), but NU IGI in XII 1-4 and XV 30, as NU IGI.DU₄ in IX 33-34, clearly means "is/are not visible." The invisibility would presumably be due to clouds or other such phenomena (see § 2.2.2). Similarly, IGI in IX 18-22 probably only means "is/are seen." The words IGI.L₄ in II 12j and III 26a, and SAR in IV 5a and parallels, are ambiguous because of the lack of a secure context; they might mean either "heliacal rising" or "rising" or simply "appearance."

2.2.1.2. In the case of the inferior planet Venus, its heliacal rising in the west (dUTU.ŠU₄; IV 6a) is correctly distinguished from its heliacal rising in the east (dUTU; IV 7a). Presumably, therefore, MUL.MES (ina) dUTU (III 14a, IV 8, and IV 8a) and MUL.MES (ina) dUTU.ŠU₄ (IV 9 and IV 9a) might mean "the stars in the East" and "the stars in the West" rather than "the stars at sunrise" and "the stars at sunset"; but the predicate applied to them, nemuru, means simply that the stars are visible, which would be unusual at sunrise or sunset and therefore ominous, but utterly trivial in the east or in the west. The normal words for the cardinal directions are used in the protases of our texts only in XII 1-4 with reference to the four stars of AŠ.GAN. These stars are also classified as being the upper (AN.TA) pair or the lower (KI.TA) pair in IX 23-34.

2.2.2. When a star is first seen, it is said to "come forth" (ē). It is said of Nēberu in II 5a and of SIPA.ZI.AN.NA in XVIII 3 (cf. III 3b): "it is high (sašu) (in altitude) at its coming forth (ē)"; that is, the first time that it is seen in the evening after a period of invisibility its elongation from the Sun is such that its altitude is higher than would be normal at heliacal rising. The text continues: "it rose heliacally (IGI) at the beginning of its month"; that is, it was first seen later in its month some time after its anticipated heliacal rising. The position of the star when it is first seen is called its KLGUB, as is clear from the parallel to XVIII 3 in XVII 12 where KLGUB replaces ē. A star or planet is frequently said in EAE to "change" (KUR.KUR) its KLGUB; in this context, the word must mean that when it is first seen during a particular night its position in the sky is different from what it was on the previous night or from what might on some other grounds be expected. The only occurrence in our texts of this phrase is in XVIII 6, where the star is again SIPA.ZI.AN.NA. The only other occurrences of KLGUB are in XVII 9-10, where the contrast is between the case where the head of UGA looks toward heaven in its position (KL.GUB) when first seen at night and that wherein it looks toward the earth. Unfortunately, if the Mesopotamian UGA was conceived of as is our Corvus with its head at α Corvi, that head would never look toward heaven, though, of course, the orientation with respect to the horizon changes as it rotates from east to west. Another Sumerogram for manzazu besides KL.GUB is GUB.BA (XVIII 11-13). 13

2.2.1.2.1. The three paths of Ea, Anu, and Enlil are thus described in the commentary, III 24b: "The road (KAS.KAL) of the Sun at the end (šēpī = foot) of the cattle-pen (TÜR) is the path of Ea (sūt Ea); the road of the Sun at the middle (mišil) of the cattle-pen is the path of Anu; and the road of the Sun at the beginning (sag = head) of the cattle-pen is the path of Enlil." We would suggest that in this text the "cattle-pen" is the horizon—more specifically in this case, the eastern horizon with its beginning to the northeast and its end to the southeast; perhaps even the mountains over which the Sun was traditionally seen to rise was the wall of the TÜR. 14 If this interpretation be accepted, then it should also be clear that the three paths were not conceived of as imaginary bands in the sky parallel to the celestial equator, but as segments along the eastern horizon; the central segment is that of Anu, that to the north is that of Enlil, and that to the south is that of Ea. A constellation at the time of the composition of

13 The Sumerogram NA is used in BM 42277:7 (MUL.APIN II; courtesy H. Hunger).
14 Note that the image implicit in the meaning "halo" of TÜR is that of the wall of the cattle-pen.
section 1 of MUL.APIN as of the commentary on text III—i.e., shortly after -1000—was classified as belonging to that one of the three “paths” or segments along the eastern horizon over which its heliacal rising occurs. This seems to us a conception much more in line with everything else known about Mesopotamian astronomy than is the usually accepted interpretation. Some constellations, of course, are circumpolar; they are listed in the path of Enlil in MUL.APIN. But their special character is recognized in III 28c, where it is stated that MAR.GID.DA “stands (DU) all year and circles around (ilamman).” Such a statement, for an observer at Nineveh, could be made of any constellation whose northern declination is 36° or more (MAR.GID.DA’s was between +65.6° and +73.2° in -1000). But in IX 3 it is stated that Is lē “stands all year” even though it is an Anu star (the declination of a Tauri was +5.7° in -1000). We believe that the motive for this horrendously wrong statement was the desire to avoid assigning month III for Is lē’s heliacal rising when MUL.APIN places its heliacal rising in month II and SI.PA.ZI.AN.NA’s in month III.

2.2.2. Invisibility, faintness, and brightness.

2.2.2.1. We have already discussed in § 2.2.1.1.1 the use of NUGI to denote the situation in which a star or planet is not seen, presumably because of clouds. A more common term for the obscuration by clouds or by another body (it is used to describe the obscured body in eclipses) is adîr “obscured.” In our material this word is used of Venus in II 7c and of SI.PA.ZI.AN.NA in XVIII 9; in the latter case it portends an eclipse of the Sun and the Moon. The Sumerian equivalent, KAXMI, is applied to AS.GAN (XV 19) and to Tūltum (XV 24). When the obscuration by clouds is not complete, but the star or planet shines faintly, the terms used are: da’mu, “dark,” said of the upper and lower pairs of stars in AS.GAN (IX 27-28) and of the chest of ŠUGI (XV 9); DUL.LA “veiled,” a class of stars (I 19); ekil, “dim,” said of the front stars of dEN.ME.ŠAR.RA (XVI 8) and, in the verbal form, of AS.GAN (IX 19); and the verb unnutu, “to be faint,” said of the planets (III 18a) and of several constellations (XV 12; AL.LUL; XV 16: broken; XV 21: AS.GAN; XV 26: LU.HUN.GA; and XV 34: SI.PA.ZI.AN.NA). In XV 29 it is said that UL.UL do not have their “light” (UD.DA = šeṭū).

2.2.2.2. Words indicating that a star or planet is particularly bright are also common. We note, for instance, ba’tu, “brilliant,” said of the planets (III 16a), of Saturn (III 3a), and of Mercury (III 6a), as well as of the stars of GU₄.AN.NA (XV 13) and of UGA (XVII 11): nabātu, “to shine brightly,” said (wr. UL.UL) of the stars of SI.PA.ZI.AN.NA (XV 33) and of the stars of AL.LUL (XV 11 and XV 13); uttabbat (from nabātu, “to shine brightly”) is said of the stars of AS.GAN (IX 18) and ittanambat of the navel of SI.PA.ZI.AN.NA (XVII 13). Gapāsu, said of ŠAH (XVII 3) and of Tūlu (III 10a and XV 25), probably means “to be brilliant.”

2.2.2.3. The navel of SI.PA.ZI.AN.NA is probably a Orionis, a variable star whose magnitude changes from 0.4 to 1.3 in 2070 days. Moreover, two stars in AS.GAN are variables: β Pegasi, from 2.4 to 2.8 in ±40 days, and γ Pegasi, from 2.8 to 2.82 in 0.1 days. These latter variations would presumably not have been visible to a Babylonian observer, but it might be possible that he could have detected that in β Persei. In any case, one of the phenomena associated with AS.GAN is that it may “shine brightly (inambut) like a torch” (IX 20). Schaumberger, who identifies the star with o Ceti (incorrectly, we think), claims that the text refers to a variable star (SSB, Erg. III 350-352). We agree that this is a possible interpretation of passages with nabātu, but we do not find it likely; see § 2.2.2.4.

2.2.2.4. When a star’s brilliance is normal the terms applied to it are namru, “bright,” said of a class of stars (III 15); nē(n)muru, “to be visible,” for which see § 2.2.1.1.2; and SAG.UŠ “normal,” said of the upper and lower pairs of stars in AS.GAN (IX 27-30). The verb form imdahhane, “are equal,” said of the stars of SI.PA.ZI.AN.NA (XV 35) after they have taken the predicates nabātu (UL.UL) and unnutu, must also indicate normalcy.

2.2.3. Scintillation. The phenomenon called “twinkling” or “scintillation” is a rapid variation in the position, brightness, and color of a star caused by interference with the star’s light as it passes through turbulent spots in the atmosphere such as currents of warm air rising from the ground; the changes in brilliance can easily be observed with the naked eye, but those in position normally amount to no more than 30 seconds of arc and become visible only under abnormal atmospheric conditions. Both variations are more likely to be apparent when the star is near the horizon. See Minnaert 63-71 and Condon 644-646. Scintillation appears to be referred to by ittanambatu, “to shine brightly repeatedly,” said of the stars of AS.GAN (IV 3a; XV 20; and XV 22) and ittananpahu, “to flare up again and again,” said of the stars (IV 11a) and of ŠU.PA (XVII 2); SAR (= napāhu), which designates a class of stars (I 18), may also refer to scintillation, as may SUR, “to flash,” applied to the stars of the sky (III 20a), though these two
words may just indicate an intensity of brilliance. Such a meaning may be necessary if the "stars of the sky" are those above the observer's head, and thus not near the horizon. In any case, though the words ummulu and mullu~ do not occur in our present texts, we are not convinced by Schaumberger (SSB, Erg. III 287-289) that they refer to scintillation.

2.2.4. Exceptional brightness. There are several other phrases used for cases of exceptional brilliance of the stars, due presumably to unusual atmospheric conditions. Such is the statement mentioned in § 2.2.2.3 that "(AŠ.GÂN) is seen and shines brightly (inambu) like a torch" (IX 20), with which we must compare the beginning of the protasis of XVI 9: "The star of dEN.ME.ŠAR.RA (shines) like the noonday sun (kararii)." These seem to indicate intensities in brightness far greater than any that could be explained by variable stars. Similarly, the phrase: "The stars at night are as bright (namru) as noon" (VI 3b) seems to refer to the same phenomenon as does XVI 9 quoted above. The partner of VI 3b is: "The stars sparkle (ibarrn~u) at noon" (VI 3a); this presumably means only that the Sun's light at noon is so diminished that some stars are visible.

2.2.5. Mirages, comets, meteors.

2.2.5.1. A mirage is created by the refraction and reflection of a star's light by a temperature inversion layer in the atmosphere when the star is near the horizon; it will appear as a luminous disc or flying saucer, moving as the observer moves. See Menzel 205-224 and 300-310, and Condon 607-638. Such a mirage may be referred to in XVIII 10: "SIPA.ZLAN.NA produces (imšu~u) a mšu~u." A ŠE.IR.ZI = šarum is a bright luminous spot, sometimes stated to be red, as mirages often are, and in some texts is said to "fall" (maqatu), as a mirage might appear to do if the observer moved toward it. This term occurs only twice in our texts in contexts which leave its identification doubtful; in XVI 13 it is associated with GĂM, while in XV 15 the name of the star is broken away. A third term which is ambiguous, but may from time to time refer to a mirage, is salummu, a word occurring in XV 23: "A salummu lies across (GIL) in front of AŠ GÂN."

2.2.5.2. This last passage may refer to the passage of a comet before AŠ.GÂN, and the three words mšu~u, šarum, and salummu may all refer in various contexts to meteors, meteorites, or "fireballs." See also AN.TA.SUR.RA and AN.TA.ŠUB.ŠUB.BA in the Star Catalog.

2.2.6. Colors.

2.2.6.1. One of the results of the refraction of the light of a star or planet when the body is close to the horizon is the separation of that light into three rays—blue-violet above, green in the middle, and red below. See Condon 638-644. The star or planet as it sets, therefore, may appear as one of these three colors or as variegated. In our texts there are also three colors associated with stars and planets, especially near the horizon; these are:

MI = salmu, "black," said of AN.TA.SUR.RA (XIX 2); LUGAI (XVI 16); LU.HUN.GĂ (XV 27); Nēberu (II 5a); the stars of Šimut (XVIII 14); the navel of SIPA.ZLAN.NA (XV 3); UL.UL (XV 28); and UR.GU.LA (XVI 15). The verb usanallam, "becomes black," is the predicate of the "appearance" (zimu) of GĂM (XVI 6). Perhaps Venus is MI in XV 36.

SIGG = arqu, "green," said of the upper and lower pairs of stars in AŠ.GĂN (IX 29-30); and two stars of Šimut (XVIII 16).

SA5 = šimu, "red," said of the front stars of ALLUL (III 7b); AN.TA.SUR.RA (III 6b); the upper and lower pairs of stars in AŠ.GĂN (IX 31-32; cf. III 6c): Dâmă (XVII 5); dEN.ME.ŠAR.RA (XVI 12); IM.DUG.MUŠEN (III 1b and XVI 10); KA5.A (II 4a; cf. II 3a): the navel of SIPA.ZLAN.NA (XV 32); and UGA (XVII 8). The word ALS4.SI4, "red," modifies the pole of dEN.ME.ŠAR.RA in XVI 11.

In these circumstances it is almost inevitable that MI be understood to signify the blue-violet coloration of a star. A variant in XVIII 16 indicates that the rear of the two stars of Šimut is "spotted" (ŠUB.dı) with green; this is probably a green spot on the upper edge of the red-appearing star as it sets (see Venus in O'Connell 69).

In contrast to all of these colors is the normal white, BABBAR = pešu, which is spoken of with respect to the stars of Šimut (XVIII 15); perhaps Venus is BABBAR in XV 37.

2.2.6.2. One of the possible effects of the separation of the light of a bright planet or star into separate color bands is the creation of a second or even third image above the first; the upper image(s) will often be blue-violet or green,
the lower one red. See Condon 641-643 and O'Connell 19. This phenomenon is perhaps the explanation of the agū, "tiara," of Venus; the phrase agū apir, "wears a tiara," is applied to an unknown star in IV 3.

2.2.7. Halos. The presence in the atmosphere of a cloud of small ice-crystals in the shape of hexagonal prisms can refract the light of the Sun, Moon, or bright planet or star to form a smaller halo of about 22° radius or a larger halo of about 46° radius. See Minnaert 190-200 and Tricker 70-145. In EAE the term for "halo" is TUR = tarbaṣu (see § 2.2.1.2.1), and the verb associated with it is NIGIN, "to go around." The phrase occurs only once in our texts, with reference to a halo of the Moon within which SIPA.ZI.AN.NA lies (III 30a).

2.2.8. Configurations.

2.2.8.1. The positions and motions of the planets with respect to each other and to the stars do not occur frequently in the texts edited in this fascicle. But we do have the general word for being at a certain place, DU = izzaz, "to stand"; it is said of Mercury in PA.BIL.SAG (III 6a); of Mercury within (ina ŠÅ) AL.LUL (?) (III 7c); of Mars within GI.R.TAB (?) (III 11c); of Venus in the position (GUB.BA) of the Moon (?) (XVIII 11); and of Mars in the position of the Moon (?) (XVIII 13). The planets "stand" in a line, one behind the other, at sunrise in one passage (III 14b). The only case of an apparent planetary conjunction is in IV 5a: "Venus at its rising (SAR), Mars enters (TU) within it (Venus) and comes forth (E)." This seems to refer to an occultation of Mars (near conjunction) by Venus.

2.2.8.2. More difficult to interpret are the numerous protases with the verbs TE = tebu, "to approach," and KUR = kašadu, "to reach"; the two verbs are equated in IV 4b. The object of these verbs in our texts is almost always a constellation, but the subject can be either a planet or a constellation. We display in Table VII the bodies said to "approach" and to "reach" each other. With these few examples must be considered the protasis of XIII 8: "BAN comes near (DIM₄ = samāqu) Jupiter"; that of XV 8: "SU.GI leaves behind (ezib) GĀM"; those of XVIII 7 and 8: "SIPA.ZI.AN.NA comes close to (iqrib) the right/left of MUL.MUL"; and that of IV 2a and V 1b: "[...] passes by (itti)lugal.giR.ra and (dim.lam.ta.ē.ē). Since, of course, the fixed stars cannot move with respect to each other, these phenomena were interpreted already in our texts as referring to planets only approaching and reaching or otherwise moving in relation to other planets or to fixed stars. This meant that, when the subject in the protasis is a constellation name, it had to be interpreted as a substitute name for a planet; we have many texts in which equations of substitute names are given (see Bezold). However, if our hypothesis concerning the millennium interval between the composition of the omens themselves and that of the commentaries included in our present texts is correct, then we have no reason to believe that the commentators had any better means of determining the meanings of the protases than do we. The kind of associations established by the commentator of Text III, for instance, based on similarities of apodoses, demonstrates the arbitrary nature of these equations in our extant literature, and makes us believe that the terms TE and KUR, and presumably DIM₄, ezib, and iqrib, have special technical meanings when applied to constellations (and perhaps, in some or all cases, to planets). We do not know what these meanings might be, but we do observe that, in all the omens available to us, if a star "approaches" another star it does not "reach" it, so that these relations are somehow as "fixed" as are the constellations themselves. The most likely area to look for significance, then, is in the apparent diurnal rotation of the "fixed" stars and their crossings of the horizon and meridian; the terms might possibly be related, for instance, to the use of the risings, culminations, and settings of certain stars as a celestial clock.

<table>
<thead>
<tr>
<th>Subject</th>
<th>TE</th>
<th>Object</th>
<th>Subject</th>
<th>KUR</th>
<th>Object</th>
</tr>
</thead>
<tbody>
<tr>
<td>III 9a</td>
<td>Jupiter</td>
<td>GĀM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III 8a, b</td>
<td>Mars</td>
<td>GI.R.TAB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III 12a</td>
<td>Mars</td>
<td>MAŠ.TAB.BA</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III 13b</td>
<td>Mars</td>
<td>Jupiter</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV 4b</td>
<td>planet</td>
<td>MUL.MUL</td>
<td>IV 4b</td>
<td>planet</td>
<td>MUL.MUL</td>
</tr>
<tr>
<td>III 11d</td>
<td>BAL.TÉŠ.A</td>
<td>GI.R.TAB</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>XVI 17</td>
<td>KU₆</td>
<td>BAN</td>
<td>XVI 18</td>
<td>BAN</td>
<td>KAK.SI.SÁ</td>
</tr>
<tr>
<td>II 12d, g</td>
<td>ÜZ</td>
<td>UR.BAR.RA</td>
<td>II 12e, f</td>
<td>ÜZ</td>
<td>GĀN.ÜR</td>
</tr>
</tbody>
</table>

[BM 2.90]
2.2.8.3. The relative positions of the “fixed” stars to each other are sometimes referred to in passages from Astro-
labe B and MUL.APIN quoted by our Texts II and III; the meanings of the directions in these cases are discussed in
§ 2.1.2.3 and § 2.1.2.4.1. The only other statements of such relative positions in our texts are in IX 21-22, where
the terms kI, “with,” and kI.TA, “below,” are used as contrasts: “ȘU.PA is seen with it (AȘ.GÂN)” is equivalent
to “It (AȘ.GÂN) is seen below ȘU.PA,” and “It (AȘ.GÂN) is seen below NUN.kI” is equivalent to “NUN.kI is seen
with it (AȘ.GÂN).” In MUL.APIN I ii 45-46 the dates of NUN.kI’s and ȘU.PA’s heliacal risings are respectively VI
10 and VI 15, while in MUL.APIN I iv 24 they are said to rise together on VI 15. Moreover, in MUL.APIN I iii 21
it is stated that when ȘU.PA rises AȘ.GÂN sets. Therefore, it is clear that the rising star is seen “with” the setting
star, while the setting star is seen “below” the rising star.

2.2.8.4. The apparent motion of stars within a constellation with respect to each other is occasionally mentioned
in our texts. In IX 23-24 the upper and lower pairs of stars in AȘ.GÂN are said to “meet” (nenmudu), in IX 25-26
to “conjoin” (ritkusu). Since the stars are about 20° apart there is no way that these terms can have their literal
meanings in this context; as in the cases of TE and KUR we have as yet no means for clarifying what these phenom-
enae might be. For ritkusu, however, one text, XII 12, offers the variant Us’ “to ride on top of,” so that the protasis
would be “if the upper/lower stars of (AȘ.GÂN) ride on top of one another”; if the upper stars are the upper stars
when AȘ.GÂN is at the meridian, α Andromedae and β Pegasì, and the lower stars are α and γ Pegasì, these pairs
will be tilted with respect to the horizon when the constellation has just risen or is about to set so that one in each
pair will be higher than the other. This common occurrence may be all that the variant Us’ refers to. A phenomenon
similar to the meeting and conjoining of the stars of AȘ.GÂN is what is described with respect to MUL.MUL in XV
28-29; they are said to be “contracted” (nebsu) and to be “lengthened” (Satbu) (cLt satiu/su = ariiku Sin 22:1). With
the latter may be compared the statement in XVII 4 that ȘAH “opens its mouth” (KA-su BAD). The elongation
of the Pleiades might be due to the diffusion of their light by haze; their contraction and the opening of ȘAH’s
mouth might be imagined if some of the stars in these respective constellations in the right locations were obscured.

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3. PHILOLOGICAL INTRODUCTION

3.1. Reconstruction of the series EAE

In his series of articles on EAE,¹ the late E. F. Weidner stopped with the tablet following the last of the group of meteorological omens (Adad). This tablet, in his reconstruction Tablet 50 (± x), is the first with stellar omens; they extend from this tablet—our assumed Tablet 50—to the end of the series. The last tablet of the series had not heretofore been identified, except that it was known, from the subscript of a commentary tablet,² that there existed a tablet numbered 70. We were able to identify a copy of the tablet which is commented on in this text; it bears the number 68 in its subscript and seems, in fact, to be the last tablet of EAE, since the text immediately following to which its catch line points³ appears to deal with matters extraneous to the series EAE. A difference of one or several numbers in the consecutive arrangement of tablets in a series is not uncommon; we may therefore conclude that EAE consisted of sixty-eight tablets according to one system of numbering, and of seventy according to another.

The unity of the subject matter of this last, “sixty-eighth” tablet is established by a recurring term in the protasis, the kenning of the tablet. This kenning is the term *adir* which we translate as “obscure” and which is repeated with reference to various stars throughout most of the tablet (its last section likens shooting stars to various terrestrial objects). The fact that the last tablet of the series is united by a kenning makes us surmise that other tablets too were united by this principle, as are some tablets of the Assyrian Dream-book (see Oppenheim, Dreambook, p. 256) and of the extispicy series, such as the tablets with the kenning KAR (= ekim) published as KAR 427 and 428. If other tablets of EAE were kenning-tablets, a number of fragments with the recurring predicate *TE* = *iti* “approach” or *mīšu ımsūḫ* “produce a luminous phenomenon” may belong to such tablets. It is possible that a “TE-tablet” and a “mīšu ımsūḫ tablet” preceded the last tablet of the series as Tablets 66 and 67 (or only 67 if the two kennings were included in a single tablet), but we have no way of knowing at present whether the “TE-tablet (or -section)” preceded the “mīšu ımsūḫ tablet (or section),” or vice versa.

The assignment of tablet numbers 50 and 51 to the fragments published in this fascicle is argued by David Pingree in the introduction to these texts. As for the rest of the tablets containing stellar omens, we are on firm ground concerning some, and have to resort to hypotheses concerning others. The assumed Tablet 51 is followed—according to its catch line⁴—by a tablet beginning with further omens derived from the constellation *Iku*, to which the number 52 thus may be assigned, though the subscript of one exemplar of this tablet bears the number 51.⁵ The catch line of Tablet 52 introduces the tablet dealing with the Pleiades, which we should therefore number 53.⁶

Later tablets to which a serial number can be assigned from subscripts are 55 (represented by K.2342+ and duplicates); 56 (see provisionally Largement, ZA 52 235ff.); and 57 (represented by K.2330 and duplicates). Tablets 59 through 63 deal with Venus, 64 and 65 with Jupiter. This sequence is also confirmed by the fragmentary incipits of the Assur catalog VAT 9438+, see Weidner, AFO 14 190, although the serial numbers assigned to them in the catalog are lower by six.

¹ AFO 14 (1941-44) 172-195, 308-318; AFO 17 (1954-56) 71-89; AFO 22 (1968-69) 65-75.
² K.2329 (ACh Istar 30).
³ e-nu GĂL-ū a-bi DINGIR.MEŠ.
⁴See our Text IX.
⁵K.2118 = ACh Supp. 2 85; see Weidner, StOr 1 (1925) 358. Another exemplar of Tablet 52 is preceded by the last five lines of Tablet 51, see Text IX 25-29 Parallels.
⁶See also Weidner, StOr 1 (1925) 356 ff.
Thus candidates for only Tablets 54, 58, and 66-67 (and possibly 68-69 of the “long numbering”) have not yet been identified; the last one or two of these may have been the “TE” and “misku” tablets, as suggested above. It seems likely that at least one tablet was devoted to Mars; it could have preceded Venus (in that case being Tablet 58) or followed Jupiter (in that case it would be Tablet 66). Tablet 54, between Tablet 53 dealing with the Pleiades and Tablet 55 dealing with constellations allegedly representing planets, may also have had constellations as subject matter. Many fragments with omens concerning constellations are preserved, but it cannot be decided at present which stood in what position in the series, or even whether they are parts of canonical tablets or merely excerpts. However, it seems likely, considering the number of such fragments, that Scorpius (GIR.IAB) and the Fish (KU₂), and possibly also other constellations, such as the Crab, the Wolf, and the Lion, had a tablet dedicated to them.

Independent omens involving the planets Mercury and Saturn are poorly represented among the surviving fragments.

### 3.2. Presentation of the Material

The ca. 750 fragments dealing with stellar omens represent, as do fragments of other celestial omens and indeed of other omen texts, more than just material from a canonical recension of EAE, which could and should, as far as possible, be reconstructed serially, with the help of subscripts, catch lines, catalogs, and scholia. Many of the surviving fragments are commented texts, commentaries, and other non-canonical matter including excerpts from one tablet or from several tablets; these excerpts seemingly follow some topical principle. Of the ancient designations of such non-canonical material we know only—apart from the standard terminology for commentaries and commented texts (satu, mukallimtu)—the terms abū, which often identifies in this corpus, as elsewhere, an extraneous section inserted in a standard recension, liqtu “collection,” and rikis girri, an as yet ill-understood term, which is found in subscripts of texts belonging to EAE and of the extispicy text TCL 6 5.

We believe that the variety of the material preserved should also be reflected in our edition. Therefore only fragments identifiable belonging to a canonical tablet of the series will be used in the reconstruction of its text; excerpts and commented texts, while used for restoring broken lines, will be presented separately. In this way we hope to be able to clarify the methods of the ancient compilers of celestial omens.

In this fascicle we present in separate sections the material that may pertain to Tablets 50 and 51 of EAE. The texts are accompanied by translations, and parallels from both published and unpublished texts are cited for each omen, if known. The parallels are cited by museum number, and a concordance of museum numbers appears on pp. 97ff. A glossary contains the technical terminology; a star catalog appears in the Introduction, pp. 10-16; a list of the apodoses in transcription with the appropriate references appears on pp. 93ff. Subsequent fascicles will bring these lists up to date. We hope that our presentation may serve both the Assyriologist and the historian of science.

#### 3.2.1. Structure of the texts.

Each celestial omen consists, as omens in general do, of two basic elements: (1) a protasis, describing the celestial phenomenon, and (2) an apodosis, giving the prognostic—the terrestrial event portended by the phenomenon. In many of the texts dealing with this subject matter a third part appears. It comments on the protasis, giving an alternate for the star or planet mentioned there, or explains the phenomenon described, on the basis of some association that will be discussed eventually in connection with such commented texts. This commentary part is always found at the end of the omen following the apodosis or, if there is no apodosis, following directly upon the protasis. Such comments also appear in other omen series, e.g., physiognomic omens and extispicy. The predicate of the commentary is, in contrast to the predicate of the apodosis which is in the preterite, in the present tense and is normally followed by the particle -ma; a predicate followed by -ma in final position of the omen thus always identifies a comment. In our translation we have left this -ma untranslated.

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7Weidner, AO 14 179; Rm. 150 republished, joined to K.14067, by W. G. Lambert, Kramer AV 314. It appears in our Text VI.
3.2.2. Atypical texts.

Texts I-VIII are atypical in their structure, inasmuch as they associate a star with a terrestrial event not by means of sentence-type protases and apodoses, but in the form of a quasi-equation of the form “star x is for event n”; see § 4.1. Text I contains solely such quasi-equations, while Texts II-VIII justify these equations by citing omens in which star x and event n are distributed in the protasis and the apodosis. This structure increases the complexity of the texts; the most complex of these, Text III, includes moreover philological comments and astronomical explanations (see p. 31). In order to make this complex structure clearer, we use in the translation of Text III various typographical conventions: roman for the text commented on, italics and small capitals for the lexical comments, and quotation marks to enclose citations from the omen collections of EAE. English glosses are added in inverted commas.

3.2.3. Texts of related structure.

While the format of Text I and of the omens of similar structure in Texts II-VIII is unique in the omen literature, it may be compared with a group of commented extispicy texts which have the following format: the tablet is divided by vertical rulings into three uneven columns. The first two columns each contain one term only: the first, a term from the protasis, preceded by a vertical wedge, here transcribed \( \triangleright \); the second, a term from the apodosis. The juxtaposition of the two terms—not to be taken as a lexical equation as, e.g., in a synonym list (a format in which one such text, Rm. 131, was published in Meissner Supplement pl. 20)—is then justified in the third column, which gives a complete liver omen, with a protasis using the term in column one, and an apodosis using the term in column two, though not necessarily in the same (nominative) form in which these terms are cited in the first two columns. The most complete tablet representative of this type is CT 20 3942.

3.2.3.1. Apart from texts cited in the parallels to Texts I-VIII, other fragments of celestial omen tablets which connect a star name and an apodosis by means of such a quasi-equation with \( \text{ana} \) are:

3.2.3.1.1. K.14493:

<table>
<thead>
<tr>
<th>Line</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1'</td>
<td>[ ... ] ED KID [ ... ]</td>
</tr>
<tr>
<td>2'</td>
<td>[MUL. ... ] ( \text{ana} ) KI.LAM [GI.NA]</td>
</tr>
<tr>
<td>3'</td>
<td>[ ... ] KI.LAM i-kan ( \text{Š}) \text{E} ) GI.NI ( \text{i} ) u [ ... ]</td>
</tr>
<tr>
<td>4'</td>
<td>[ ... ] ( \text{ana} ) ZI-( \text{ut} ) [ ... ]</td>
</tr>
</tbody>
</table>

break

3.2.3.1.2. K.8647:

<table>
<thead>
<tr>
<th>Line</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>4'</td>
<td>[ ... ] ( \text{ana} ) ZI-( \text{ut} ) BURU₂.HI.A [ ... ]</td>
</tr>
<tr>
<td>5'</td>
<td>[ ... ] MI a-na NAM.BAD.MEŠ : ( | ) MU [ ... ]</td>
</tr>
<tr>
<td>6'</td>
<td>[ ... ] GI a-na KI.LAM GL.NA : ( | ) M [U ... ]</td>
</tr>
<tr>
<td>7'</td>
<td>[ ... ] ( \text{ana} ) ZI-( \text{ut} ) KU₂.HI.A [ ... ]</td>
</tr>
<tr>
<td>8'</td>
<td>[ ... ] ( \text{ana} ) ZI-( \text{ut} ) MUSEN.HI.A [ ... ]</td>
</tr>
<tr>
<td>9'</td>
<td>[ ... ] ( \text{ana} ) ZI-( \text{ut} ) ( \text{ŠAH} ) GI.NI.GI [ ... ]</td>
</tr>
<tr>
<td>10'</td>
<td>[ ... ] ( \text{ana} ) IM.\ŠUB.BA [ ... ]</td>
</tr>
</tbody>
</table>

3.2.3.1.3. K.8634, apart from the parallel cited sub II 3, has two more \( \text{ana} \)-entries, in line 8' ([ ... ] a-na DAGAL-\( \text{aš} \) \[ ... ] ) and in line 11' (only a-na preserved).

3.2.3.1.4. K.8493, whose obverse is a parallel to ACh Sin 3, has on its reverse, besides the parallels r. 4 and 7 cited to I 3 and IV 7, two lines (r. 8 and 9) with [ ... ] \( \text{ana} \) BE LUGAL, and possibly two more such entries (r. 5: [ana N]AM.GLIM.MA, r. 6: [ ... ] \( \text{ana} \) IM.ŠEG).

The event predicted by an ominous occurrence is sometimes introduced by \( \text{ana} \) in texts outside the omen literature. Thus, when Assurbanipal reports on a lunar eclipse which was interpreted as portending the end of the dynasty of Elam, he says \( \text{ana} \) qīṭı̇ pālē /sidebar> \( \text{šar} \) Elam̄tu ḫalāq mātis̄u \( \text{ukallimanni} \) inbu purussē̇ Ša la innennū 'the Fruit (i.e., the Moon) showed me his unchangeable decision for the end of the reign of the king of Elam and the downfall of his land' (Piepkorn Asb. p. 62 v 7f.).
3.2.4. A unique feature of Text II is the notation NU.SAR “not written” which appears in omens 2 and 8 in lieu of a comment on the star name. Both omens appear complete in Text III, the first in III 6, the second in III 23. This indicates that the source from which Text II was copied either lacked these entries or was broken at these points, and that the copyist of Text II did not have at his disposal, or was unwilling to interpolate, the information from Text III. The same notation NU.SAR also appears in the fragmentary text K.6991 whose structure seems similar to Texts I-VIII, but which has not been included among the fragments of the assumed Tablet 50 because it deals in the last omen with planets. It is presented here for comparison:

K.6991: 1' [ ... ] GA LÁ [ ... ]
2' [ ... ] KI.LAM 2.GÍN].TA.AM aná ½.GÍN].TA.AM [GAR]
3' [( ... )] dUDU.IDIM ina IGÍ MAN DU aná MU.BI GÁN.BA [TUR]
4' [( ... )] dMU.L].KAK.SLSÁ NU SAR
5' [ ... ] dUDU.IDIM EN GAL-ú7 GÍM iq-bu-[u]
6' [ ... ] dUDU.IDIM aná NAM.BAD.[MES]
7' [ ... ] dUDU.IDIM SA5 BE.MEŠ [šam-ra]
(bottom)

The first omen (lines 1'-3') cites an omen with an apodosis referring to a “small” market, presumably as illustration of an entry such as MUL NN aná LÁ (or TUR) KI.LAM (in the first preserved line, the LÁ sign is not preceded by aná). Such an omen in preserved, e.g., in EAE 55:70: ¶ MUL zi-ba-ni-tum a-dir zi-ba-ni-tum la [kitti? ... ] KI.LAM 2.GÍN].TA.AM aná ½.GÍN].TA.AM GAR x], and in Sm. 1154 + D. T. 307:2-4: ¶ MUL zi-ba-ni-tum a-dir zibanīt la kitti KUR DÍB-bat KI.LAM i-sa-pil [ ... ] KI.LAM 2.GÍN].TA.AM aná ½.GÍN].TA.AM GAR x]. The omen cited as illustration is one known from EAE 56:32.

The second omen (line 4') refers to KAK.SLSÁ = Sirius with the notation 'not written.' The third omen (lines 5'-7') comments on an entry concerning dUDU.IDIM, citing in line 7' an omen preserved in Thompson Rep. 196, from which it has been restored.

For other occurrences of NU.SAR entries see Text XVI 14 and possibly Text XIX 3.

3.3. On the Problems of Transcription

The scribal habits and the linguistic conventions in the style of the omens often make interpretation difficult. Certain logograms are ambiguous and the ambiguity is only rarely resolved by the device, frequent in other omens (see Leichty Izbu pp. 27ff.), of different sets of phonetic complements for the different possible readings. For instance, the sign LAGAB without phonetic complement may stand in the protasis for the verbs ba‘ālu, lamū, and sahāru; the sign KUR for napaḥu or ba‘ālu (though when it is to be read kasaḥu it is usually followed by the phonetic complement -ud or -dam). The verb rabū “to set” is written not only with the logogram ŠU but also with the logogram GAL, which normally stands for the homonym rabū “great”; napaḥu “to rise, shine” is written not only with MUL but also with UL, just as both MUL and UL are used for kakkabū.

A finite verb in the protasis normally appears in the preterite tense, as in all conditional clauses, whether they are introduced by šumma or not; a state or condition is normally expressed by a stative. However, instead of the stative an ingressive finite form is sometimes used, which, in the case of a II stative takes the form of a II/2 or II/3; e.g., uttannat functions as ingressive to unnut, uşšanallam to sašim, utakkal to ukkul; note also attabbat in lieu of the more common ittananbi or ittanbi while inambut (stem I present) is used as a punctual. The preterite and present of a verb are used seemingly indiscriminately even in the same text, as in kakkabānišu ittanbišitu XV 20, but kakkabānišu rešṭitu ittanbišatu XV 22, so that the resolution of logograms in a text, even when it can be ascertained which Akkadian word was intended, is often only a guess.

If the apodosis is followed by a further statement—a comment on the protasis—its predicate is always in the present tense, followed by -ma. The present tense form is used even when a stative is expected, or when a stative
appears in the protasis. Similar grammatical conventions may be found also in extispicy texts: the description of a feature of the exta in the protasis is normally expressed by the stative of a transitive verb, e.g., \textit{pališ} “is perforated,” but the stative may also be replaced by the preterite, even in the case of a transitive verb, e.g., \textit{iplus}.

Since the readings of the logograms in the protasis and the commentary are often ambiguous regarding both the lexical selection and the grammatical form, a connected transcription of the omens would carry a more than customary or allowable uncertainty. Still, in order to convey to the Assyriologist reader the information at our disposal gathered from the here-published and from the as yet unpublished stellar omens, the resolutions of the logograms into some form of Standard Babylonian, as far as they can be ascertained, appear in the glossary. The translation of a logographically written word indicates at least the lexical selection as interpreted by us; the logograms are listed in the glossary with cross references to the Akkadian words they are assumed to stand for.

In the apodoses there is usually less ambiguity regarding the exact reading. Therefore the apodoses are transcribed in the list of apodoses.
4. TEXTS, TRANSLATIONS, COMMENTARY

4.1. The Assumed Tablet 50

The identification of the material in Texts I-VIII with an assumed "Tablet 50" depends on the subscript and catch line of Text III, which is an excerpt-text with commentary. The identification is correspondingly tenuous, and we cannot say that we have any indisputable knowledge of the contents of a Tablet 50. However, it is clear that the texts here gathered together do share the common feature of possessing statements having the form "star x is for n," where n is a terrestrial event; see § 3.2.2. We assume that these statements are excerpted from an older collection of omens; star x in each case comes from the protasis of an omen, n from the same omen's apodosis. In several cases the commentaries preserve such omens for us, and some can be traced independently in the omen-literature at our disposal.

The original arrangement of the assumed Tablet 50 must have been of omens involving stars in an order something like that of Text I, though we believe it likely that the right half of manuscript A, which is now broken off, contained a second "omen" in each line. The reason for our belief will be given below. Texts I-IV considered together hint that the assumed Tablet 50 was composed from two separate sources, comprising I 1 - I 13 and I 14 - I 20 respectively; the loss of half of the manuscript means that the first source really had at least 26 "omens," and the second source 12.

The evidence for the first source must be sought primarily in Text I and Text II since Text III is an excerpt-text. Their relationship is as follows:

I 8 = II 1
I 9 = II 3
I 10 = II 5
I 11 = II 7a
I 12 = II 9

This seems quite incontrovertibly to indicate that II 2, II 4, II 6, and II 8 were on the lost portion of manuscript A. The stars in this first source, then, were (for their probable identifications see the Star Catalog):

1' MAR.GIŠ.DA = III 1
3' LU.HUN.GÁ = III 9
5' APIN = III 2
7' EN.TE.NA.BAR.HUM = III 5
9' UDU.IDIM = III 3
11' UGA = III 3
13' KA.MUŠ.I.KU.E = III 4
15' TIR.AN.NA = II 1 = III 4
16' AN.TA.SUR.RA = II 2 = III 6
17' LUL.LA = II 3 = III 7
18' KA₅.A = II 4 = III 8

\[BM\ 2,\ 98\]
There seem to be no convincing candidates for numbers 2', 4', 6', 8', 10', 12', 14', and 26'; note, however, that 26' may be IV 1, in which case it would have to be considered the first star in the second source since I 14 = IV 2.

The second source can be reconstructed from Text I and Text IV. If we leave IV 3 out of consideration as being an intrusion, we are left with the following relationship:

\[
\begin{align*}
I 14 & = IV 2 \\
I 15 & = IV 5 \\
I 16 & = IV 7 \\
I 17 & = IV 9 \\
I 18 & = IV 11 \\
I 19 & = IV 13 \\
I 20 & = IV 14
\end{align*}
\]

On this basis we can reconstruct a list of stars that were in the second source:

\[
\begin{align*}
1' & \text{MAŠ.TAB.BA} & I 14 & = III 12 & = IV 2 \\
2' & \text{IMIN.BI} & IV 4 \\
3' & \text{Nin-si} & I 15 & = III 13 & = IV 5 (cf. II 10) \\
4' & \text{UŠ.A.KE} & IV 6 \\
5' & \text{SA.LA.KE} & I 16 & = IV 7 \\
6' & \text{MUL.MEŠ.dUTU.Ē} & III 14 & = IV 8 \\
7' & \text{MUL.MEŠ.dUTU.ŠU.A} & I 17 & = IV 9 \\
8' & \text{MUL.MEŠ namr} & III 15 & = IV 10 \\
9' & \text{MUL.MEŠ SAR.MEŠ} & I 18 & = III 16 & = IV 11 \\
10' & ? & III 17 & = IV 12 \\
11' & \text{MUL.MEŠ DUL.LA} & I 19 & = III 18 & = IV 13 \\
12' & \text{AN.TA.ŠUB.ŠUB.BA} & I 20 & = III 20^2 & = IV 14
\end{align*}
\]

Text I.

Text I contains the simplest form of what we assume to have been the original of Tablet 50 since the catch line of Text III is the incipit of Text IX and the colophon of Text IX states that it contains Tablet 51. With each star is associated a terrestrial event, presumably drawn from the apodosis of an omen in which the protasis contains the name of the star. This, at least, is the case for I 1 and I 7, where such older omens are still preserved in our material. The assumed original of Tablet 50, then, was already a derivative from an older corpus of omens.

Text I, however, does not preserve the original of the assumed Tablet 50, but seems rather to be a fragment. The beginning is broken, so that the text did not begin with the line quoted in the subscript of Text III, which line is 2' in manuscript A, but with some other line(s). Moreover, in lines 2'-7' and 12'-15' there is preserved a gloss-
wedge before the break; presumably a similar wedge once occurred in every line. This gloss-wedge could have served either as a line divider, in which case a second “omen” would have been written on each line on the now broken-off right half of the tablet, or as a divider between the “omen” and its commentary, in which case Text I would have been commented on as are Texts II and III. Part of the DiŠ sign is visible in line 14’ after the divider.

However, even if the right side of manuscript A contained further “omens” of the original, as is suggested by the relationships between Texts I and II and between I and IV, we could not be sure that the complete manuscript A contained all of the assumed Tablet 50. There are no criteria for establishing the extent of Tablet 50.

Text II.

The obverse of manuscript B contains a portion of the assumed Tablet 50 with a commentary. The commentary normally consists of quotations from omens intended to justify the excerpt from the assumed Tablet 50. This is certainly true for II 5a, II 6a, II 7c, and II 9a, where we can recover the apodoses. In the cases of II 3 (LUL.LA), II 6 (Rabbu), and II 7a (NIN.GUL.TI) the commentator evidently did not find the relevant omen and quoted in II 3a an omen with a phonetically similar star name, in II 6a one with “planet” in place of “the Great Star,” and in II 7b and II 7c omens depending on the elsewhere attested equivalence of NIN.GUL.TI with Venus. In other cases he simply appended the notation NU.SAR “not written”; see § 3.2.4. The omens quoted in II 1a and II 7b have not been located in our material. From this discussion it should be clear that the commentator did not have access to all of the omens used by the compiler of the assumed Tablet 50; and it is quite probable that Assurbanipal’s library, from which most of our material comes, did not contain all the texts utilized by the commentators. The “omens” in II 7 and II 10 are statements of the star’s deity such as those found in II 12a, 13a, and 14a.

The reverse of manuscript B contains a text also found in manuscript C. Each section thereof generally contains the following elements:

1. A statement of the star’s deity (II 12a, II 13a, and II 14a; cf. II 7 and II 10).
2. A quotation from Astrolabe B or its source concerning the star’s position (II 12b and II 15a).
3. A statement parallel to those in the assumed Tablet 50 (II 12c, II 13b, II 14b, and II 15b).
4. A series of omens involving the star or its substitutes (II 12d - II 12i, II 13c - II 13d; II 14c - II 14e, and II 15c - II 15f).

Three of the stars in II 12-15 are constellations which can be tentatively identified from MUL.APIN:

12. UZ Path of Enlil
13. UR.BAR.RA Path of Enlil
15. AŠ.GAN Path of Anu

These stars lay on a band between 250° and 350° of right ascension and between 0° and 40° of northern declination in -1000. Whether or not the text continued with stars in the other parts of the heavens we do not know. But it may not be without significance that, according to Astrolabe B (Table III above), the path of Enlil includes UZ, UR.BAR.RA, and ŠUL.PA.È. AŠ.GAN is the first star in the Path of Ea.

Text III.

This text consists of three parts. The first, containing sections 1-20, is closely related to Text I and to Text IV; the second, containing sections 21-24, makes different kinds of statements about stars; and the last, containing sections 25-36, is related to the “astrolabe” material. But, despite this composite nature of the text, the subscript refers to the first line as if it were the incipit of a tablet in a series (it was not the incipit of Text I), and the catch line refers to the incipit of Text IX which, as we have remarked above, may be the incipit of Tablet 51.

---

4 Identified by internal criteria. Actually, this side is curved; the flat side is here edited as reverse.
5 II 12d - II 12h are apparently all derived from Tablet 55, omens 75-84, of Enûma Anû Enûlî; the Goat Star is sometimes regarded as an alternate name for Venus, which is why II 12i - II 12l are included.
6 ŠUL.PA.È and SAG.ME.GAR are other names of UD.AL.TAR or Jupiter.
In the first part every section contains a commentary except for III 1 (the incipit), III 15, and III 17. We assume that III 1 is included in Text III only because it was regarded as the incipit of the tablet and therefore was not commented on; the reason(s) for the lack of a commentary on III 15 and III 17 escape(s) us.

The comments are of three types:

1. Philological, explaining words or Sumerograms (III 2a, III 5a, III 5c);

2. Astronomical, explaining star names (III 3a, III 5b, III 6a, III 7a, III 11a, III 13a, III 16a, III 18a). Some of these can be identified as quotes from the star literature (III 5b, III 11a, and III 11c); others appear to be so (III 13a). One seems to be based on a pun (III 7a);

3. Omens quoted through associations, sometimes in chains (III 3b, III 4a, III 6a, III 6b, III 6c, III 7b [with commentary III 7c], III 8a, III 8b, III 9a, III 10a, III 11b, III 11d, III 12a, III 13b, III 14a, III 14b, III 19a, III 20a). Some of these chains allow us to perceive the way in which at least some equations between unknown and known stars or constellations and planets were established. Thus the similar apodoses of III 6 and III 6c would lead to the equation of AN.TA.SUR.RA and AŠ.GĀN; the similar apodoses of III 7 and III 7b justify the identity of LUL.LA and AL.LUL made punningly in III 7a; III 8a and III 8b support an identification of KA.A with Mars; and the similar apodoses of III 11 and III 11b permit the identification of NIM.MA with the lexical equation of NIM.MA with Mars is cited.

We have already demonstrated in the introduction to the assumed Tablet 50 that III 1 - III 20 bears a close relationship with Text I; we shall here show that the commentary on III 14 - III 20 also is derived from the same source as that on IV 8 - IV 14. The relationship is:

<table>
<thead>
<tr>
<th>III 14</th>
<th>IV 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>III 14a</td>
<td>IV 8a</td>
</tr>
<tr>
<td>III 14b</td>
<td></td>
</tr>
<tr>
<td>III 15</td>
<td>IV 10</td>
</tr>
<tr>
<td>III 16</td>
<td>IV 11</td>
</tr>
<tr>
<td>III 16a</td>
<td>IV 10a</td>
</tr>
<tr>
<td>III 17</td>
<td>IV 12</td>
</tr>
<tr>
<td>III 18</td>
<td>IV 13</td>
</tr>
<tr>
<td>III 18a</td>
<td></td>
</tr>
<tr>
<td>III 19</td>
<td>IV 13a</td>
</tr>
<tr>
<td>III 19a</td>
<td>IV 12a</td>
</tr>
<tr>
<td>III 20</td>
<td>IV 14</td>
</tr>
<tr>
<td>III 20a</td>
<td></td>
</tr>
</tbody>
</table>

The commentary on IV 2 - IV 7, however, is not found in Text III, but, as we shall see, in Text V, Text VI, and Text VII.

The second part of Text III contains statements about the unidentifiable stars Ė.TÛ.R.(RA), ŠÂ.TÛ.R.A.ŠÊ, and SÂ.LARHUŠ.ŠÂ.GA. One of these, [ŠÂ.TÛ.R.R]A.ŠÊ, occurs in II 8.

The contents of the third part of Text III are closely related to material in other early star texts, in particular Astrolabe B, the Pinches Astrolabe, and MUL.APIN; cf. the reverse of manuscript B (Text II). Sections III 25 - III 29, which make statements concerning the first and last visibilities of certain stars in certain months, are most closely allied with Astrolabe B (Table II above), though there are some elements (see III 28 and III 29) which are closer to the Pinches Astrolabe, and one (see III 27) apparently derived from MUL.APIN. The commentator (see III 27a and perhaps III 26a) demonstrates his knowledge of these texts.
A few words may be said about the other material in these sections. Since Šalbatānu or Mars in Astrolabe B (and the Pinches Astrolabe) is the Ea-star of month IX, it must be regarded as being “before” SUHUR.MAŠ as is stated in III 26a if the vernal equinox occurs in month I. The equations BIR = NUN.KI and ŠUDUN (= Nīru) = ŠU.PA in III 27a may result from statements like that in IX 6: MUL.BIR d Nīru d Ė-a, combined with MUL.APIN II 20: MUL.NUN.KI d Ė-a. The commentator’s statement in III 28b that AL.LUL (Cancer), the Anu-star of month X in Astrolabe B, corresponds to SUHUR.MAŠ makes sense astronomically (they are simultaneously rising-setting stars), but does not assist us in understanding how AL.LUL came to have the position it does in Astrolabe B and the Pinches Astrolabe. His assertion in III 28c that MAR.GIŠ.DA remains (in the night sky) all year is also correct astronomically, but it can only be a comment on 1 I = III 1; why it is placed here is unclear. Nor do we understand why, in III 29a, ḏAMAR.UD is said to correspond to ḏGU4.UD and to GÂM.

The final sections (III 30 - III 36) are also related to, but not identical with, statements concerning stars in Astrolabe B; in some cases (III 32 and III 34) Text III omits the name of the star being described. If we assume that the author intended the stars similarly described in Astrolabe B, he deals in this section with:

<table>
<thead>
<tr>
<th>SECTION</th>
<th>STAR</th>
<th>PATH (ASTROLABE B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>III 30</td>
<td>SIPA.ZI.AN.NA</td>
<td>Ea</td>
</tr>
<tr>
<td>III 31</td>
<td>BIR</td>
<td>Ea</td>
</tr>
<tr>
<td>III 32</td>
<td>SIM.MAH</td>
<td>Anu</td>
</tr>
<tr>
<td>III 33</td>
<td>ḏPA u ḏLUGAL</td>
<td>Anu</td>
</tr>
<tr>
<td>III 34</td>
<td>ḏAnunitum</td>
<td>Enlil</td>
</tr>
<tr>
<td>III 35</td>
<td>FN.TE.NA.BAR.HUM</td>
<td>Ea</td>
</tr>
<tr>
<td>III 36</td>
<td>Tu-a-nu GAL.MES</td>
<td>Anu</td>
</tr>
</tbody>
</table>

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7 According to MUL.APIN (l ii 46) the first visibility of ŠUDUN (= Nīru) is on VI 15, in conformity with III 27. The commentator in III 27a identifies ŠUDUN with ŠU.PA.

8 Both UD.AL.TAR and ŠUL.PA.È are names of Jupiter. The Pinches Astrolabe at this point reads AL.TAR.

9 This is a scribal error. GU.LA is the Ea-star of month X in Astrolabe B.

10 In the Pinches Astrolabe the order is that of Text III = KU₆ ḏAMAR.UD.
Note that III 30 to III 34 are in the order of Astrolabe B (Table III). It is not at all clear why these stars were chosen, though obviously III 32 and III 34 form a pair as do III 33 and III 35. In III 36 the Great Twins are said to correspond to the Small Twins to explain that MAŠ.TAB.BA.GAL.GAL in Astrolabe B (cf. III 33) does not mean α and β Geminorum. In MUL.APIN I i 5 the Great Twins are the gods LUGAL.GIR.RA and MES.LAM.TA.É.A, whereas in Astrolabe B those gods are the Small Twins. Moreover, in MUL.APIN I i 25 dPA and dLUGAL are two stars after EN.TE.NA.BAR.HUM (cf. III 35). It follows that III 36 is a part of the commentary rather than of the original text.

The comments of the commentator are generally obscure. He quotes an omen in III 30a that contains the star-name SIPA.ZI.AN.NA as does III 30, but it is not obvious why he chose this omen. It is true, with respect to III 31a, that SUHUR.MAŠ rises before GU.LA, but it is not clear why they are substituted for BIR and ŠUDUN. In III 32a MUL Anim is probably identified with LULIM because the star in III 32 is said to be red, and a red star, KA.MUŠ.I.KÜ.E, lies between α Andromedae and ŠU.GI. Astrolabe B does not specify that the star (SIM.MAH) is red. The identification of dAnu with AL.LUL in III 33a may be due to the commentator's equating Māšu with MAŠ.TAB.BA.TUR.TUR; for in MUL.APIN I i 6 we find MAŠ.TAB.BA.TUR.TUR, and MUL.APIN I i 7 is: [MUL.AL.L]UL ŠU.bat d.A-nim. It would follow that the commentator did not know the correct star-names that ended III 32 and III 33, and that III 36 is a comment on III 33. There seems to be nothing we can suggest to explain III 34a (dEnlil corresponds to ŠU.GI) or III 35a (EN.TE.NA.BAR.HUM is AL.LUL).

Text IV.

We have already remarked, in discussing the contents of the assumed Tablet 50, that IV 2 - IV 14 represent the second source of that Tablet, and that IV 8 - IV 14 with their commentaries are very closely linked with III 14 - III 20 with their commentaries. Furthermore, we suspect that IV 1 and IV 3 are intrusions, though it remains possible that IV 1 involves the first star of the second source, which may have been the lost 26' of Text I. Now we can show that IV 2 - IV 5 are closely paralleled in Text V, Text VI, and Text VII.

IV 2 = VII 2
IV 2a = VII 1a = VII 2a
IV 3
IV 3a
IV 4 = VII 2 = VI 2 = VII 3
IV 4a = VII 2a = VI 2a = VII 3a
IV 4b = VI 2b = VII 2b
IV 5 = VI 3 = VI 3
IV 5a = VI 3a = VI 5a

Text V.

The first omen in this Text, V 1, is part of the commentary on NIM.MA found in III (it with V 1a corresponds to III 11c), while V 1b is a part of the commentary on MAŠ.TAB.BA given in IV (it corresponds to IV 2a). Since NIM.MA is the last recorded star (25') of the first section of the assumed Tablet 50, Text V originally may have contained further excerpts from that section in the commented version represented by Text III, part of which, like V 1b - V 3a, is closely linked to Text IV. Unfortunately, Text V provides no information on the star that we believe to have originally been between NIM.MA and MAŠ.TAB.BA in the assumed Tablet 50.

Text VI.

This text, which proclaims itself to be a rikis girri of EAE, contains excerpts from the material in Texts IV and V with the addition of two extra omens (VI 3a and VI 3b) in the commentary on AG.AN.NE, an extra section (VI 4, VI 4a, VI 4b) suggested by the “apodosis” of VI 3 (the star in VI 4 is not certain), and the unparalleled omen in VI 6.

[BM 2, 103]
Text VII.

Column i of Text VII, though it contains the names of ŠUDUN and [EN.TE.NA.B]AR.HUM (cf. I 4), does not provide enough of a context to allow an identification of its omens, nor do the first four lines of column ii (VII 1); the latter, however, may have preserved a commentary on NIMMA as does V I, or it may have contained whatever was in IV 1, or possibly it may have dealt with the lost star 26° of the first section of the assumed Tablet 50.

Text VIII.

This is a small fragment with some material related to Text II, though in a different order. The occurrence of Nin-si₄ in VIII 2 suggests a connection with IV 5 = V 3 = VI 3; this is strengthened by the appearance of Venus in VIII 2a and in IV 5a = V 3a.
A K.2202

1' [ ] x [ ]

1 1 2' [ ] MUL.MAR.GID.DA ana AN.MI ] : x [ ]

1 2 3' [ ] MUL.LU.HUN.GA ana AB.SIN : [ ]

1 3 4' [ ] MUL.APIN ana AB.SIN sur-ri : x [ ]

1 4 5' [ ] MUL.EN.TE.NA.BAR.HUM ana IM.SAG : [ ]

1 5 6' [ ] MUL.LUDU.IDIM ana NAM.BAD : [ ]

1 6 7' [ ] MUL.UGA ana KI.LAM GLNA : [ ]

1 7 8' [ ] MUL.KA.MUŠ.I.KU.E ana ŠE.EX [ ]

1 8 9' [ ] MUL.TIR.AN.NA ana IM.ŠEG NU ŠEG [: ]

1 9 10' [ ] MUL.LULLA ana ZI-UT IM [: ]

1 10 11' [ ] MUL.NI-bi-ru ana ZI-UT NIM.MA[k] [: ]

1 11 12' [ ] MUL.NI.GUL.TI ana mas-se-e [: ]

1 12 13' [ ] MUL.GIR.TAB ana KI.LAM [: ]

1 13 14' [ ] MUL.NIM.MA ana EN.TE.NA [ ] [: ]

1 14 15' [ ] MUL.MAŠ.TAB.BA ana u-kul-ti dU+GUROS [: ]

1 15 16' [ ] MUL.NIN.SIq ana BALA TILLA [: ]

1 16 17' [ ] MUL.SAL.AKE ana NAM.SAL.TUK DUG4.GILA

1 17 18' [ ] MUL.UTU.ŠU.A ana IM.ŠE.GI ŠE.G

1 18 19' [ ] MUL.MEŠ SAR.MEŠ ana [ ]

1 19 20' [ ] MUL.MEŠ DUL.LA.MEŠ ana IM.ŠUB.BA

1 20 21' [ ] MUL.TAP.ŠU.ŠU.BA ana IM.ŠUB.BA

-break

Translation

I 1-4, 6, 8-16, and 18-20 are translated with their respective commentaries under Texts II and III.

I 5 The Wild Sheep is for pestilence.

I 7 KA.MUŠ.I.KU.E is for . . . .

I 17 The Star of the sunset is for the raining of rain.

Parallels

I 1, 81-7, 84-3: [MUL.MAR.GID].DA ana AN.MI [ ... ]; K.3780 ii x+21; [ ] UGU-nu MUL.MAR.GID.DA ana AN-e MI AN.MI E-[ ... ]; K.3601+Rm. 103 r. 36 and parallels; [ ] el-e-nu MU].MAR.GID.DA AN-ù MI AN.MI GAR

I 3. K. 8493 r. 4: [ ... ana AB.SIN ŠUR]-re-e

I 5. K.6991:6: [ ... dU+DU.IDIM ana NAM.BAD.[MEŠ?]

I 7. Sm. 1317:16: [ ] MUL.MUL MUL.KA.MUŠ.I.KU.E KUR-ù[d ina MU.BI ŠE.PAD GÁL] (restored from K.3780 ii 13')

I 11. See parallel to II 7a

I 16. See parallel to IV 7
Text II

C K.12761 + Sm. 1504

B BM 98594 (1905-4-9,100)

III 1 B 4' [M] UL.TIR.A.NA ana [IM] ŠEG ŠEG [ Text II

III 1a B 5' TIR.A.NA ina ITI.ABI [ ]

II 2 B 6' MUL.An.T.A.SUR.RA NU SAR

III 3 B 7' MUL.LUL.LA ana [IZI] IM

III 3a B 8' MUL.KA₅.A MUL.BI NU SA₅ [ ]

III 4 B 9' MUL.KA₅.A ana Ė.MEŠ pu- lu-ši

III 4a B 10' MUL.KA₅.A ina SAR-šu ma-diš SA₅ u [ ]

II 5 B 11' MUL.Ni-bi-ru [ana [IM] NIM.MA ki [ ] ZI-ma

II 5a B 12' MUL.Ni-bi-ru ina Ė-šu [IM] NIM.MA ki ZI-ma

II 6 B 13' MUL Ra-bu ana [IZI UT] S.U.BIR₄ [ ]

II 6a B 14' U.DU.IDIM ina [IM] KUR DU ZI-bu [ ]

II 7 B 15' MUL.IM.SU.RIN.NA dGu-la be-let DIN [ ]

II 7a B 16' MUL.IN.È.NI.GUL.TI ana mas-se-e

II 7b B 17' DIL-bat ina ITI.APIN ana dUD.ALTAR [ ]

II 7c B 18' DIL-bat ina ITI.APIN a-dir [ ]

III 8 B 19' MUL.SĀ.TUR.RA.ŠE NU SAR

III 9 B 20' MUL.GÍR.TAB ana KILAM

III 9a B 21' EŠ dSA.G.È.GAR ana ÍSAG.MUL.È.GÍR.TAB

III 10 B 22' MUL.Ni-sî₄ [ ] dBa-ù be-let T[I.LA]?

B 23' blank? ] mu-ša-li-ma [a-piš-ti

B 24' gap

III 11 C 1' traces

C 2' i-šu-ù ša-ru-ru-šu [ ]

III 12 B 25' [ ] S[?]

III 12a B 26' MUL.ÚZ dNin-ḫil EGIGAL-ITU

III 13 C 27' ... ru-ba-tum GAL-tum

Parallels

III 1a. MUL.APIN 1 iii 7-8; ] ina ITI.ABI UD.15.KAM MUL.SIM.MAH MUL ŠI-nu-nu-tum MUL.IM.ŠES ina GIŠ.NIM.IGI. LĀ.

III 2. K.8634'4'7': [MUL.LUL.LA [ana ZI IM] 5' ] [ ] MUL.KA₅.LA MUL.BI NU SI₄.SI₄ IGI MUL.BI [ ... ] 6' [: MUL.MIN MUL.MEŠŠU la sa-a-mu pa-an MUL.MEŠŠU [šu ... ] 7' ] [IM] dan-nu [ZI-a].

III 4. K.10566 r. 9': MUL.KA₅.A ana Ė.ME pu- lu-ši ina ŠA MUL.GÍR.TAB DU-ma.


Translation

II 1 The Rainbow is for rain [ ... ]
II 1a The Rainbow in month X [ ... ]

II 2 The Flashing star—it is not written.
II 3 The False star is for the rising of wind.
II 3a The star of the Fox is not red [ ... ]

II 4 The Fox is for breaking into houses.
II 4a The Fox at its rising is very red and [ ... ]

II 5 The Ferry is for an attack by Elam.
II 5a The Ferry at its coming forth is [black: Elam will attack and ... the land]

II 6 The Great star is for an attack by Subartu.
II 6a A planet stands in the east: attack [by Subartu]

II 7 The Oven is Gula, the mistress of life.
II 7a Ningulti is for a leader.
II 7b Venus in month VIII to Jupiter [ ... ]
II 7c Venus in month VIII is obscured: [ ... ]

II 8 The . . . star—it is not written
II 9 The Scorpion is for the market.
II 9a If Jupiter [reaches] the head of [the Scorpion: in Akkad the existing market will be halved.]

II 10 Ninsi is Bau, the mistress of life, who keeps life safe.

gap

II 11 . . . its brilliance [ ... ]

II 12 [. . .]
II 12a The Goat is Ninlil, the great princess.

Parallels

36741:7': [...] UL Rab-bu ana ZI-ut SU.BIR 4.[k]I.
II 6a. EAE 56:30: MUL,UDU.IDIM ina IM.KUR.RA DU ZI-ut SU.BIR 4.kI u Kašši-ii ana KUR KUR.
II 7. Sm. 1925 r. 4, Rm. 2,299:9': [... ] dGu-la be-let TI.
For be-let balati as a name for Vega see ZA 50 226:24, 228 VII.
II 7a. K.250+ and dupl. cited Weidner Handbuch p. 7 and AFO 19 106; K.11740:3': [...] mas-se-e MUL Dil-[bat ... ]: K.6220:7': [dNIG].GUL.TI ana mas-se-e dDîl-bat [...].
II 9a. BM 46236 and dupls.: MUL.SAG.MEGAR] ana SAG MUL.GIR.TAB ikt-tašad ina KUR.UR[k]I KILAM GÂL-û ana 2 HA.LA.

[BM 2, 107]
II 12b B r. 3' MUL šá EGIR-šu MUL.ÚZ T[1
C 4' - - - - - T.LA MÁŠ.ANŠE
II 12c B r. 4' MUL.ÚZ a-na bu-[l][im
C 5' - - - ana - - :
II 12d B r. 5' MUL.ÚZ MUL.x |
C 6' - - ana MUL.UR.BAR.RA T[E
II 12e B r. 6' MUL.ÚZ MUL.[G][ÁN]
C 7' MUL.ÚZ MUL.GÁN.UR KUR-ud ina MU BI ŠUB-tim ÁB.GU[D.HLA
II 12f B r. 7' MUL.ÚZ MUL.
C 8' GÁN.UR Ä IM.1 KUR-ud ina MU BI x [.
II 12g B r. 8' MUL.ÚZ ana MUL.
C 9' MUL.ÚZ ana MUL.UR.BAR.RA i-mid ina MU BI MÁ[Š.ANŠE
II 12h B r. 9' MUL.ÚZ [Á] [D]U MÁŠ.ANŠE [.
C 10' MUL Dil-bat ina ITI x [.
II 12i B r. 10' MUL.ÚZ MUL.[ ]
C 11' x x x KUR GAR-an
II 12j B r. 11' MUL Dil-bat ina IGIL[A7
C 12' [ ] l. Ml
II 12k B r. 12' MUL [ ] (See note)
C 13' MUL [ ]
II 12l B r. 13' MUL [ ]

Notes

II 12d'B. Lines indented on tablet in B; no indentations in C.
II 12k. In C, two more fragmentary lines that seem to diverge from the text of B;12' [...] KUR.RA7 [ ... ] (possibly to be restored [...] MUL.ÚZ Ā IM.KUR.DU ip-[rik7 traces. It is thus possible that the preceding two lines 10' and 11' contained further MUL.ÚZ omens and not yet the Venus omens of B.

[BM 2, 108]
II 12b The star that is after it is the Goat, the life of cattle.

II 12c The Goat is for cattle.

II 12d The Goat approaches the Wolf: [...]

II 12e The Goat reaches the Harrow: in that year there will be an epidemic among cattle.

II 12f The Goat reaches the Harrow in the south: in that year [the same]

II 12g The Goat comes up against the Wolf: in that year the cattle [...]

II 12h The Goat stands in the [south]: the cattle [...]

II 12i Venus in month [...]: there will be [... land

II 12j Venus at its visibility [...]

II 12k-l fragmentary

II 13a The Wolf is Sin, [...]

II 13b The Wolf is for wealth

II 13c The Wolf [...]

II 13d The [...]  

II 14a The Heroic is Sin, [...]

II 14b The Heroic is for [... wind.

II 14c Sulpae [...]

II 14d hardship [...]

II 14e Jupiter [...]  

II 15a The Field which stands at the rising of the east wind is crosswise? [...]

II 15b The Field is for [...]

Parallels

II 12b. Astrolabe B B iii 13-14: |

II 12c. RA 62 53:11: TE.UZ a-na bu-lum.

II 12e. EAE 55:75 (= K.2342+ t. 11' = ACh Ištar 21:70 and dupla): |

II 12f. EAE 55:76: |

II 12g. EAE 55:83: |

II 12h. EAE 55:84: |

II 13b. K.6185+ t. 10 and K.6211:5: |

II 15a. Astrolabe B B i 1: |

[BM 2, 109]
Text III

III 1 1 [MUL.MAR.GÍD.DA ana AN.MI]
III 2 2 [MUL.APIN a-na AB.SÍN šúr-ri-i]
III 2a 3 [SÁR šúr-ru-u šá la-pa-tí AB.SÍN il-lap-pat-ma 4 : ŠÉ ina UD.ME šú-šúr-ru : re-eš me-rešš-šúr-ri]
III 3 5 [MUL.UGA a-na KÍ.LAM.GÍ.NA]
III 3a 6 [UDU.IDIM.SAG UŠ i-ba-il-ma]
III 3b 7 [MUL.SIPA.ZÍ.AN.NA ana AN.MI MUL.APIN a-na AB.SÍN sur-ri-i]
III 3c 8 [SAR : sur-mu šMI LAM.TU.RA.SI: im.NA KI.LAM sur-rim a-na KI.LAM sur-mu šMI LAM.TU.RA.SI: im.NA KI.LAM]
III 4 8 [MUL.TIR.AN.NA a-na [ŠÉ]G NU SUR]
III 4a 9 [ina UD er-pi šá ŠEG SUR dTIR.AN.[NA G] IL ŠEG NU SUR]
III 5 10 [MULEN.TE.NA.BAR.HUM a-na IM SAG]
III 5a 10 [IM.SAG : ha-rú-up-tú :]
III 5b 11 [MUL šá ina Ašu DU-zu MULEN.TE.NA.BAR.HUM : ÑIN-gir[r-su] : ši-i]
III 5c 12 [SAG : ha-ra-pu KÍ.LAM.TU.RA.ŠÉ me-niš-tú har-up-tú SIG₃ EGIR [MU] ŠEG i-bat-taq KÍ.LAM it-tab-si-ma EN 2šú IM SAG KÍ.LAM.TU.RA.ŠÉ .iq₃-ke-p₃ (= iq₃-[bu-ú] or ip₃-[qa-bi])]
III 6 13 [MUL.AN.TA.SUR.RA ana IM ZI.GA]
III 6a 14 [UDU.IDIM.GUD.UD i-ba-il-ma KI.MIN ÑUDU.IDIM.GUD.UD ina ŠÁ MUL.PA.BI.SAG DU-ma]
III 6b 15 [MUL.AN.TA.SUR.RA ma-diš SA₃ A.KAL uš-ša-pa]
III 6c 16 [MUL.ÁŠ.GÁN MUL.MEŠŠU ma-diš SA₃ IM KAL.BA.AB.ZI.ZI]
III 7 18 [MUL.LUL.LA ana ZI-it IM]
III 7a 18 [MUL.LUL.LA MUL.ALL.LUL]
III 7b 18 [MUL.MEŠ IGÌ.MEŠ šá MUL.ALL.LUL SA₃.MEŠ-ma ZI IM]
III 7c 19 [GUD.UD ina ŠÁ DU-ma]
III 8 20 [MUL.KÁ.S₃.A ana É.MEŠ pu-ul-lu-ši]
III 8a 21 [MUL Šal-bat-a-nu ana MUL.GÍ.R.TAB TE ina É.GAL NUN BURU₃ šú GÁL-ši]
III 8b 22 [MUL Šal-bat-a-nu ana MUL.GÍ.R.TAB TE URU ina BURU₃ ší DIB-bat]
III 9 23 [MUL.LÚ.HUN.GÁ ana AB.SÍN]
III 9a 24 [dSAG.ME.GAR ana MUL.GÁM TE EBUR KUR.UR.KI S[I.SÁ]]
III 10 25 [MULÍM.ŠU.RIN.NA ana MU TU[K² (x)]]
III 10a 26 [MUL Tul-tum gi-fu-pa-sh arhuš u SÍLIM.MU ina KUR GÁL-ši]
III 11 27 [MUL.NIM.MA ana EN.TE.NA]
III 11a [MUL.NIM.MA MUL Šal-bat-a-nu MUL.dIM.D[UJGUD₃muš] ]
III 11d 30 [MUL.BAL.TEŠ.A SUKKAL dTIšpak ana MUL.GÍ.R.TAB TE MU.3.KAM EN.TE.NA dan-nu GÁL-ma ha-ab-šu-su-šú KUR DIB-bat]

Parallels

III 2a. The lexical equation SÁR = šúr-ru-u šá la-pa-tum is also quoted in the commented text to EAE 24, Rm. 2,38:21, published by Weidner, Babylonica 6 p. 78 and pl. 4, and by Meek, RA 17 184f.; now joined to K.12068.

III 2b. = XVIII 3.


III 3b. Cf. III 35. Astrolabe B B i 26: MULEN.TE.NA.BAR. 

III 3c. Cf. III 35. Astrolabe B B i 26: MULEN.TE.NA.BAR.

HUM d[Nin-gir-su]; MUL.APIN II 22: MULEN.TE.NA.BAR. 

HUM d[Nin-gir-su].


III 6b. = XIX 1.


III 8. See Parallel to II 4.

[BM 2, 110]
The Wagon is for eclipses.

The Plow is for starting the furrow.

SAR = śurrā ša lapāti 'to begin, with reference to "to touch",' (namely) the furrow will be "touched", the barley will grow in season; (alternate illustration): to start the cultivated field.

The Raven is for a steady market.

Saturn is brilliant.

"If the True Shepherd of Anu at its coming forth is high: there will be ...."

The Rainbow is for not raining.

"If on a cloudy day when it rains a rainbow arches: it will not rain."

EN.TE.NA.BAR.HUM is for early wind.

IM.SAG = ḫarātu 'early.'

"The star which stands at its side is EN.TE.NA.BAR.HUM: Ningirsu: ...."

SAG = ḫarāpu 'to be early.' K.I.LAM.TUR.RA.SÉ 'for a small market' (means?) the early-sown cultivated field will be fine, at the end of the year rain will cease; the market ....; secondly: IM.SAG is said with reference to a small market.

The Flashing star is for the rising of wind.

Mercury is brilliant, variant: Mercury stands in Pabilsag.

"If the Flashing star is very red, the flood will increase."

"If the Field's stars are very red, a strong wind will rise."

The False star is for the rising of wind.

The False star (LUL.LA) is the Crab (AL.LUL).

"If the front stars of the Crab are red: rising of wind."

Mercury stands in it.

The Fox is for breaking into houses.

"If Mars approaches the Scorpion: there will be a breach in the palace of the prince."

"If Mars approaches the Scorpion: the city will be taken through a breach."

The Hired Man is for the furrow.

The Oven is for acquiring progeny?

The Star of Elam is for cold.

The Star of Elam is Mars, the Anzu-bird.

"If the Anzu-bird's star is very red: there will be cold."

"If the Star of Dignity, the vizier of Tispak, approaches the Scorpion: for three years there will be severe cold, cough and phlegm will befall the land."

Parallels
### Parallels


The Twins are for devouring by Nergal.
III 12a "If the Stranger approaches the Twins: the prince will die."
III 13 Ninsi is for the end of the dynasty.
III 13a Ninsi is Mars.
III 13b "If the Stranger approaches Jupiter: the king of Akkad will die, and the harvest of the land will prosper."
III 14 The stars of the sunrise are for the raining of rain.
III 14a "If the stars are visible at sunrise: in that year rain and flood will persist."
III 14b "If planets, either three or four, stand at sunrise one after the other: ditto."
III 15 Bright stars are for the rising of wind.
III 16 Scintillating stars are for the rising of wind.
III 16a The planets are brilliant.
III 17 [...] stars are for the abating of wind.
III 18 Veiled stars are for the abating of wind.
III 18a The planets are faint.
III 19 The star of Ningirsu: the verdict will be ..., variant: little, variant: will perish.
III 19a The planets and the stars of the sky pass by their specified time and are not visible promptly/do not rise heliacally promptly.
III 20 The AN.TA.ŞUB.ŞUB.BA star is for the abating of wind.
III 20a The stars of the sky flash greatly, or the planets do not complete their days and set(heliacally) promptly.

III 21 The Cattle-pen .... cattle pen.
III 22 The Cattle-pen [is said for?] Dİ.M.A.AN.NA.
III 22a (that is) for the entire sky, (in the vocabularies) $dfm = \text{napharu} \ '\text{totality}, \ [(\text{dfm} = \text{banû} \ '\text{create})], \ (thus) it is said for the creatures of the sky.
III 23 The star for the womb is for ....
III 24 The star of the woman with the ..... womb .... cattle.
III 24a Ü Şî = epidemic (among cattle).
III 24b The Road of the Sun at the foot of the cattle-pen is (the Path) of Ea; the Road of the Sun at the middle of the cattle-pen is (the Path) of Anu; the Road of the Sun at the head of the cattle pen is (the Path) of Enlil....
III 25 In month II, the Scorpion and [...]—it says so [...].
III 26 In month III, Mars [...] to [...]—it says so [...].

III 27 In month VI, the Kidney and the Yoke rise heliacally.
III 27a The Kidney is the star of Eridu, the Yoke is ŞU.PA.
III 28 In month IV, the Arrow, the Twins, (and) the Heroic rise heliacally.
III 28a The Great Star, the Crab, the Eagle. The Heroic, Jupiter, on a cloudy day ..... rises heliacally.
III 28b The Crab—it says so on account of the Goat-fish, namely, suhurmasû.
III 28c The Wagon stands all year, namely, it circles around.
III 29 In month XII, the Fish, the Fox, (and) the star of Marduk rise heliacally.
III 29a The star of Marduk—it says so on account of Mercury; secondly, the star of Marduk—it says so on account of the Crook.

Parallels

ša ina $d_{	ext{UTU \ ŠU.A DU MEŠ-ma BAR-tum.}}$
III 24. Cf. uzuzarhúšašaša = x [...] 4b, XV Gap A a 2f.
III 24b. K.3254+ :1-3. $[\text{KASKAL } d_{\text{UTU } \text{ši-pi-ti}} \ \text{TUR ina İTI.BAR MUL.AŠ.GAN DÜ.DU } d_{\text{50}}, [\text{KASKAL } d_{\text{UTU }}]$ mi-$\text{ši-ti} \ \text{TUR MUL Dil-bat DÜ.DU } d_{\text{A-nim}}, [\text{KASKAL } d_{\text{UTU re-eš} \ \text{TUR MUL.APIN DÜ.DU } d_{\text{40}}}, \text{where, however, the paths of Ea and Enlil are interchanged. See § 2.2.1.2.1.}$
III 28a. Cf. Astrolabe B C 20: $[\text{MU}] \text{L.UR.GU.LA MUL al-la-at-tum MUL.AMUŠEN ŠO.}$
III 29. Cf. Astrolabe B C 35: İTI.ŞI: MUL.ŞU MUL $d_{\text{AMAR.UD MUL.KA-a A Š.}}$
III 29a. Cf. VAT 9818:12' (EAE 64): $\text{MUL.GÂM } d_{\text{AMAR.UD; RM. 230:5': } d_{\text{Gam-lum } d_{\text{A[MAR.UD?}}}.$
III 31
r. 30  MUL ša ina ZI IM ana IG1-it MULŠUDUN DU-zu MUL.BIR
III 31a  MULŠUDUN : MUL.GU.LA MUL.BIR MUL.SUHUR.MAŠ

III 32  MUL SA ša ina DAL.BA.AN NA MUL Ši-bi u MUL dA-nim DU-zu
III 32a  MUL A-nim MUL.LU.IM

III 33  r. 32  MUL Ma-a-šu ša ana IG1 dA-nim DU-zu
III 33a  dA-nim MUL.A.L.LUL

III 34  r. 33  MUL SA ša ana IG1 dEn-lil IG1-it IM.KUR.RA
III 34a  dEn-lil a-na MUL ŠU.GI i-qab-bi

III 35  r. 34  MUL ša EGIR-šu DU-zu MUL.ENTE.NA.BAR.HUM
III 35a  MUL.ENTE.NA.BAR.HUM MUL.A.L.LUL

III 36  r. 35  MUL Tu-a-mu GALMĖŠ a-na MUL.MAŠ.TAB.BA.TUR.TUR i-qab-bi

subscript r. 36  ina ŠA MUL.MAR.GĪ.Đ.DA ana AN.MI

catchline r. 37  ULAŠ.GĀN ina ITI.BĀR IG1-mar

end

Text IV

E K.6997 + 79-7-8,210

IV 1  traces
2. LŪ KUR lu x šu?
3. [dEN KUR]
4. [UN.MEŠ dEN KUR SLSĀ x x ]

IV 2 5. dMUL.MAŠ.TAB.BA a-na] KU-ti [DU+GUR ] I14; III 12; VII 2
IV 2a 6. [dDU.MEš-žu MUL.ŠI-šu nu d [Mesš] ] dU [m]-ni ] I11; III 12; VII 2a
IV 2b 7. [dLugal-gir-ra i] dMes-lam-ta-e-a DIQ iqa [ina KUR.URKI]
IV 2c 8. [d50 ep-qā u be]-en-ni ŠUB ma dU+GUR MĀŠ.A[NŠE]

IV 3 9. d[UL.AŠ.GĀN ULM.ŠI-šu it] d-a-[a mi DU-zu a-ga-a a-pi-ir MUL.BI MUL ]
IV 3a 10. A.ZI [V 1b; VI 1a; VII 2a]

IV 4 11. dIMIN.BI a-na] KU-ti [V 2; VI 2; VII 3
IV 4b 13. ŞEG.UNU.TUR ina EN.TE.NA ŠUB-[tim bu-lim] ] V 2a; VI 2a; VII 3a

IV 5a 15. [dMUL a-n] a BALA.TIL.[LA] V 2b; VI 2b

IV 5b 16. [dMUL.Dil-bat ina ŠAR-ša ] [MUL.MA-ak-rū a-na ŠA] ša TU-ma E-a ]
IV 6 17. DUMU LUGAL ana E AD-šū T[U-ma ...]

Parallels


III 31. Cf. IX 6. In Astrolabe B B i 17-18 there was a description of BIR (= Kalītu), which is its Ea-star of month VI; what remains of that line, however, does not correspond to our text.

III 32. Cf. Astrolabe B B ii 15-17: MUL ša DAL.BA.AN MUL.ŠU.GI u dA-nim DU-zu MUL.SIM.MAŠ.

III 33. Astrolabe B B i 22-23: MUL.MAŠ.TAB.BA.GAL ša ina IG1-īt dA-nim DU dPA u dLUGAL. Cf. MUL. APIN I ii 25: 2 MUL.MEŠ ša EGIR-ša (i.e., GIŠ.GAN.UR) DU.ME-zu dPA u dLUGAL.

III 30 The star that stands after it is the True Shepherd of Anu, Papsukkal; for an early wind.

III 30a "If the Moon is surrounded by a halo and the True Shepherd of Anu stands within it: the high-lying grounds of the land will prosper."

III 31 The star which at the rising of wind stands facing the Yoke is the Kidney.

III 31a The Yoke is the Great star, the Kidney is the Goat-fish.

III 32 The Red star which stands between the Old Man and the star of Anu.

III 32a The star of Anu is the Stag.

III 33 The Twin which stands in front of Anu.

III 33a Anu is the Crab.

III 34 The Red star which is in front of Enlil facing the east.

III 34a Enlil—it says so on account of the Old Man.

III 35 The star which stands after it is EN.TE.NA.BAR.HUM.

III 35a EN.TE.NA.BAR.HUM is the Crab.

III 36 The Great Twins—it says so on account of the Little Twins.

subscript: From "The Wagon is for eclipse(s)."
catchline: "If the Field rises heliacally in Month I."

Translation

IV 1 (fragmentary) the Lord of the land [...] people, the Lord of the land, prosper [...] The Twins are for devouring by Nergal.

IV 2a "[... ] stand, their stars [...] pass by Lugalgirra and Meslamtaea: in Akkad Enlil will cause leprosy and epilepsy, and Nergal will [devour] the cattle."

IV 3 [The ... star which] stands [...] wears a tiara, this star [...] high water.

IV 3a "If the Field’s stars scintillate: high water will come."

IV 4 The Seven gods are for the devouring of cattle.

IV 4a "If the Bristle and the Wagon stand together: rains and flood will come, and the [...]barley will be little: in winter, epidemic among cattle."

IV 4b "If a planet approaches, variant: reaches, the Bristle: the Seven gods will devour the land."

IV 5a "If at Venus’s rising the Red star enters into it and comes forth: the king’s son will enter his father’s house and [...]"

Parallels

III 35. Cf. III 5b.
IV 3a. = XV 20. Cf. K.3094+ ii 8f.: ¶ MUL.AŠ.GÂN MUL. [........] A.KAL.MEŠ [...].
IV 4b. EAE 56:81: ¶ MUL.UDU.IDIM MUL.MUL.KUR-ud dIMIN.BI KUR KU.MEŠ.
IV 5a. K.2226 ii 42 and 45, Sm. 1354:6': ¶ MUL DIL-bat ina SÂR sâ dMa-ak-ru-u ana ŠÂŠTU-ma NU É-a DUMU.LUGAL ana Ê. AD-ŠI TU-ma AŠ.TE DIB-bat (i.e., same omen but with negation); Rm. 230:16': [...] Ma-ak-ru-u ana Š[...].
Text V

F K.10756

V 1 1' [MU dLi₆]₄ i₄ a-na GIR.TAB MU (= qabi) cf. III 11c
V 1a [dU dS[i-al-bat-a-nu² ...]
V 1b 2' [dLugal-g]ir-ra u dMes-lam-ta-[ē-a DB-iq]
3' [ina KUR URI₄₅ d]50 ep-qā u be-en-na ŠU [B-ma dU+GUR MĀ.S.ANŠE ...]
V 2 4' [dIMIN,BI] ana u-kul-ti bu-lim IV 4; VI 2; VII 3
V 2a MUL..stub [u MUL.MAR UR.BI DU.MEŠ ŠEG.MEŠ] ⁵ [u] I.A.KAL.¹ MEŠ DU-ma
4a; VI 2a; VII 3a
V 2b 6' [dMU] LDLU.DIDM.MUL MUL.KUR-ud dIMIN,BI [KUR KU.MEŠ] IV 4b; VI 2b
V 3 7' [dMU]UL ... a-n]a BALA TILLA IV 5; VI 3
V 3a MUL Dil-bat ina S[AR-ša ⁸ MUL.Ma-ak-ru-û ana ŠA-ša TU-ma(NU)] ¹₉.¹-a IV 5a; VI 5a
DUMU LUGAL ana E AD-šu [TU-ma ...]
V 4 9' [ ] x DU₆:
V 4a ITIL BàR MUL Dil-bat ...
10' [ ] DU₆:
V 4b MUL Dil-bat ŠU [ ] [DU₆ : (MUL) ]

Notes

IV 11a. LUGAL appears as a gloss to IM.DIRI; for a parallel apodosis with šarru, see Parallel. Note that the gloss presupposes a reading IM.KAL instead of IM.DIRI, i.e., IM dan-ša ZI-a, variant: LUGAL da-nu ZI-a.
IV 12. Possibly to be restored after III 17.
V 1b. Note that d₅₀ is written 2₀³₀.
IV 6 The Star of Men is for pestilence ....
IV 6a Venus is seen in the west, she is male.

IV 7 The Star of Women is for taking a wife [...] for giving birth to males.
IV 7a Venus is seen in the east, she is female.

IV 8 The stars of the sunrise are for the raining of rain.
IV 8a “If the stars are visible at sunrise: rains and floods will persist.”

IV 9 The stars of the sunset are for the raining of rain.
IV 9a “If stars are visible, variant: stand, at sunset: [...]”

IV 10 Bright stars are for the rising of wind.
IV 10a The planets are brilliant.

IV 11 Scintillating stars are for the rising of wind.
IV 11a “If the stars flare up again and again: a strong wind, variant: king, will (not) rise.”

IV 12 ...
IV 12a The planets in the sky pass by their specified time ...

IV 13 Veiled stars are for the abating? of wind.
IV 13a The planets are faint.

IV 13b The Star of Ningirsu: the verdict? will be ..., variant: little, variant: will perish.

IV 14 The AN.TA.SUB.SUB.BA star is for the abating? of wind.

Translation

V 1 see III 11c
V 1b-3a see IV 2a-5a

Parallels

IV 6, K.800:12f.: ¶ UL.UŠ.A.ŠE ana NAM.BAD ŠUB.BA-
IV 7, K.800:16f.: ¶ UL.SAL.A.ŠE ana SAL.TUK.DUG₄ GA.
IV 7a, K.10566 r. 12: Dil-bat ina dUTU,E sin-ni-šat SIG₂; BM 134543:3' and K.3601 + Rm. 103 r. 34': ¶ MUL Dil-
IV 11, 81-24,204:18: ¶ L.MEŠ ina AN-e it-ta-na-x-x IM.DIRI NU ZI-[a]; K.2229 r. ii 18': ¶ MUL.MEŠ mu₄ši-ti it-ta-na-an-pa-šu MAN KAL.GA ZI-a.

V. For parallels see Text IV.
Text VI

G Sm. 1267

VI 1

\[\text{broken}\]

VI 1a 1' \[\text{dMes-lam-[la-\text{a} DIB-\text{iq}}\text{] } z'\text{Ina KUR} \text{ UR11 ki d50 ep-qâ}\] u be-en-ni ŠUB-ma d\text{U+GUR MĂŞ.ANŠ x }[\ldots]

VI 2

\[\text{dIMIN.BI ana KU-ti bu-lim :}\]

VI 2a

MUL.MUL u MUL.MAR UR.BI DU.MEȘ [ȘEȘ.MEȘ] 4' u A.KAL.MEȘ DU.MEȘ-ma ȘE,GÜN TUR ina EN.TE.NA ŠUB-tim [bu-lim]

VI 2b

MUL.UDU.IDIM ana MUL.MUL KUR-ud d\text{MIN.BI KUR KU }[?]

VI 3

\[\text{dIMIN.BI ana BALA TIL.LA :}\]

VI 3a

MUL.MEȘ ina AN.NE i-bar-ru-ṣu aḥ-rat BALA MAR [\ldots]

VI 3b

\[\text{MUL.MEȘ mu-ši-te GIM AN.NE nam-ru BALA NAM.K }[\text{˝UR}]

VI 4

\[\text{dUL.GÂM ana BALA TIL.LA }\]

VI 4a

MUL GÂM lum-mu-un BALA HA.[A]

VI 4b

\[\text{dUL.GÂM } zì-mu-šu uṣ-sa-na-l] a-mu BALA HA.A-ma MAN-ma DU₆+DU-a

VI 5

\[\text{dUL.DIL-bat ina SAR-śa MUL.M[ak-ru-\text{a} ana ŠA-ṣu TU DUMU LUGAL AȘ.TE DIB-bat } cf. \text{ IV 5a}\]

VI 5a

\[\text{dUL.DIL-bat ina SAR-śa MUL.MIN ana Š} [\text{˘}A-ṣu TU-ma NU E-a DUMU LUGAL ana E } \text{ cf. \text{ V 3a}\]

AD-ṣu TU-[ma AȘ.TE DIB-bat]

VI 6

\[\text{X TÜR 1 UL IGI Sin DU LUGAL KUR AȘ.TE DIB}\]

subscript 13' [DUB]

remains blank

Text VII

H K.12397

col. i

1' \[\text{MEȘ}\]

2' \[\text{GĂL}\]

3' \[\text{MUL.SUDU.N}\]

4' \[\text{MUL.SUDU.N}\]

5' \[\text{DU-kam}\]

6' \[\text{T}UR-ir\]

7' \[\text{TE-hi}\]

8' \[\text{B|AR.HUM}\]

break

col. ii

VII 1

\[\text{dUL}\]

2' \[\text{M[U]L}\]

3' \[\text{MUL}\]

\[\text{inu}\]

VII 2

\[\text{dUL.MĂŞ.TAB. [BA ana KU-ti dU+GUR ... ]}\]

\[\text{dLugal-[ir-ra u dMes-lam-\text{a-ē-a} DIB-iq] } 7'\text{Ina KUR.UR11 ki } x [\ldots]\]

VII 3

\[\text{dMIN.BI a-n[a ū-kul-ti bu-lim :}\]

VII 3a

\[\text{MUL.MUL u MUL.MAR UR.BI DU.MEȘ] } 9'\text{ȘEȘ u A.K[AL DU-ma ... ] 10' MĂŞ.ANȘ [E ... ]}\]

VII 4

\[\text{dUL ... ]}\]

break

Note

VI 1a. The last preserved sign is not KU.

[BM 2 , 118]
Translation

VI 1a-3 see IV 2a-5

VI 3a  "If the stars sparkle in the noonday sun: the future of the dynasty of Amurru [...] ."
VI 3b  "If the stars of the night are as bright as the noonday sun: a reign of hostilities."
VI 4  The Crook is for the end of the dynasty.
VI 4a  "(If) the Crook is inauspicious: the dynasty will perish."
VI 4b  "If the appearance of the Crook becomes black: the dynasty will perish and another will appear."
VI 5  "If at Venus’s rising the Red star enters into it: the king’s son will seize the throne."
VI 5a  "If at Venus’s rising the same star enters into it and does not come forth: the king’s son will enter his father’s house and seize the throne."
VI 6  "[...] one star stands in front of the Moon: an enemy king will seize the throne."

Subscript: [nth tablet], a rikis girri of Enuma Anu Enlil.

Translation

VII 2-3a see IV 2-4a

Parallels

VI 1-2: see Parallels to IV 2-4.
VI 3. Rm. 230:6: ¶ MUL.AG.AN.NE ana BALA TIL.LA [...] ; AIO 19 107 iii 23: MUL.AG.AN.NA₄(BUR) ana BALA TIL.LUM.
VI 3a. Rm. 932:9': ¶ MUL.MEŠ i-bar-ru-šu a[h-rat BALA MAR]; K.2229 r. ii 9': ¶ MUL.MEŠ ina AN-e i-bar-ru-šu [...]; K.8634:2': ¶ MUL.MEŠ ina AN-e [kal u₄]mi i-bar-ru-[šu ...].
VI 3b. K.2229 r. ii 17': ¶ MUL.MEŠ mu-ši-ti GIM AN.NE nam-ru BALA nu-kūr-ti.
VI 4. Free restoration.

Parallels

VI 4a. K.3780 i 10, TCL 6 18 + r. 21r.: ¶ MUL.GÀM lum-mu-un BALA HA.A; Rm. 230:3': ¶ dGam-lum lum-mu-un [...]; Rm. 2,309 ii 18: ¶ MUL.GÀM [um-mu-un ...].
VI 4b. = XVI 6. TCL 6 18 + r. 23: MUL.GÀM zì-mu-šu uṣ-sa-nà-mu (commentary, no apodosis); Rm. 2,309 ii 19: ¶ MUL.GÀM zì-[...]; Rm. 230:4': ¶ dGam-lum zì-mu-šuì [...].
VI 5. For restoration and parallels see Parallels to IV 5a.
VI 5a. For restoration and parallels see Parallels to IV 5a.
VI 6. x like [KU1.
VI 7. For parallels see Text IV.
Text VIII

I  K.9098 reverse (obverse destroyed)

\[
\begin{array}{ll}
\text{VIII 1} & 2' \quad [\text{MU}][\text{L}]\text{Rab-}bu\text{ ana }\text{Z][I-}bu\text{ SU.BIR}_4 \text{[ki]} \\
\text{VIII 2} & 3' \quad [\text{MU}][\text{L}]\text{GÀM MUL Nin-}si_4 \text{[} \\
\text{VIII 2a} & 4' \quad [\text{MU}][\text{L}]\text{Dil-bat ina ITI} [ \\
\text{VIII 3} & 5' \quad [\text{MUL.GAR ana SAG MUL.GIR.ME.GAR}] [\text{MUL.GAR ana SAG MUL.GIR.ME.GAR}] [\text{MUL.GAR ana SAG MUL.GIR.ME.GAR}] \\
\text{VIII 4} & 6' \quad [\text{SAG.ME.GAR ana SAG MUL.GIR.ME.GAR}] [\text{SAG.ME.GAR ana SAG MUL.GIR.ME.GAR}] [\text{SAG.ME.GAR ana SAG MUL.GIR.ME.GAR}] \\
\text{VIII 4a} & 7' \quad [\text{SAG.ME.GAR ana SAG MUL.GIR.ME.GAR}] [\text{SAG.ME.GAR ana SAG MUL.GIR.ME.GAR}] [\text{SAG.ME.GAR ana SAG MUL.GIR.ME.GAR}] \\
\text{VIII 5} & 8' \quad [\text{MUL.GÅM MUL.IM.SU.RIN.NA ana MU x} [\text{MUL.GÅM MUL.IM.SU.RIN.NA ana MU x} [\text{MUL.GÅM MUL.IM.SU.RIN.NA ana MU x} [\text{MUL.GÅM MUL.IM.SU.RIN.NA ana MU x} [\text{MUL.GÅM MUL.IM.SU.RIN.NA ana MU x} [\text{MUL.GÅM MUL.IM.SU.RIN.NA ana MU x} \\
\text{VIII 5a} & 9' \quad [\text{SAL.MES}] \text{ina }\text{U.TU SI.SA.MES MUL} [\text{SAL.MES}] \text{ina }\text{U.TU SI.SA.MES MUL} [\text{SAL.MES}] \text{ina }\text{U.TU SI.SA.MES MUL} [\text{SAL.MES}] \text{ina }\text{U.TU SI.SA.MES MUL} [\text{SAL.MES}] \text{ina }\text{U.TU SI.SA.MES MUL} [\text{SAL.MES}] \text{ina }\text{U.TU SI.SA.MES MUL} \\
\text{VIII 6} & 10' \quad [\text{NU SAR?}] \quad [\text{NU SAR?}] \quad [\text{NU SAR?}] \quad [\text{NU SAR?}] \quad [\text{NU SAR?}] \\
\text{11'} & \text{traces} \\
\text{break} \\
\end{array}
\]

[BM 2, 120]
Translation

VIII 1  see II 6
VIII 4  see II 9a
VIII 5  see III 10
VIII 5a "[...] women will give birth easily [...]"

Parallels

VIII 4. BM 35045+46236:16 and dupls.: [¶ MUL.SAG.ME,
GAR] ana SAG MUL.GIR.TAB ša-ta-šad ina KUR.UR1ki

KLAM GÅL-u ana 2 HA.LA.

[BM 2, 121]
4.2. The Assumed Tablet 51

It is assumed that Text IX represents the canonical Tablet 51. This assumption is based on the catch line of Text III and the subscript of Text IX, though the latter text is not older than ca. -1000 since our analysis shows that it has three sources, of which the first two are "corrections" of the Astrolabe tradition, and the third (which may not be from "Tablet 51") seems to have been derived from two sources. Closely connected with Text IX are Text X, Text XI, and Text XII.

In Text IX section 1, comprising the first eleven omens, is based on a tradition closely allied to Astrolabe B, as is demonstrated in the following table.

<table>
<thead>
<tr>
<th>TEXT IX</th>
<th>ASTROLABE B</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMEN</td>
<td>SECTION A</td>
</tr>
<tr>
<td></td>
<td>STAR</td>
</tr>
<tr>
<td>1</td>
<td>AŠ.GĀN</td>
</tr>
<tr>
<td>2</td>
<td>MUL.MUL</td>
</tr>
<tr>
<td>3</td>
<td>Is lē</td>
</tr>
<tr>
<td>4</td>
<td>SIPA.ZI.AN.NA</td>
</tr>
<tr>
<td>5</td>
<td>KAK.SL.SĀ</td>
</tr>
<tr>
<td>6</td>
<td>BIR</td>
</tr>
<tr>
<td>7</td>
<td>HĒ.GĀL-a-a</td>
</tr>
<tr>
<td>8</td>
<td>Dil-bat</td>
</tr>
<tr>
<td>9</td>
<td>GIR.TAB</td>
</tr>
<tr>
<td>10</td>
<td>Zibānītu</td>
</tr>
<tr>
<td>11</td>
<td>UD.KA.DU₈.A</td>
</tr>
</tbody>
</table>

¹¹ XI 6 seems to be simply a repetition of XI 4.
¹² The text states that it sets in month IV.
Of these three traditions, that in Section B of Astrolabe B (see Table III, p. 5), where the stars of each path are named, is surely the oldest. Section A associates with most months of the year a star, choosing Ea-stars in their proper order for months I - VI, and an Enlil-star for month XI. The stars in Section A, at least at the beginning of the path of Ea, are listed in the order of their increasing longitudes; but they are not stars that have their heliacal risings in successive months. The original meaning of Section A of Astrolabe B was not strictly astronomical. But Astrolabe B also contains a scheme in which a star from each of the three paths is said to rise in each month; mechanically it is then assumed that a star that rises in month x sets in month x+6. The scheme of the risings of stars is closely followed in the Pinches Astrolabe (see Table II, p. 4). But the compiler of this scheme in both “astrolabes” has corrected one of the major “mistakes” in Section A of Astrolabe B; the association of Is lē (a Tauri and the Hyades) with month III. Further, he has switched the positions of Gīr.TAB (Scorpius) and Zibānitu (Libra) of Section B. Astrolabe B and the Pinches Astrolabe, then, list the following stars for months I - VI in the path of Ea and for months VII - IX in the path of Anu.

I AŠ.GĀN
II MUL.MUL
III SIPA.ZI.AN.NA
IV KAK.SI.SĀ
V BAN
VI BIR
VII Zibānitu
VIII Gīr.TAB
IX UD.KA.DU₈.A

Except for the occurrence of AŠ.GĀN in month I this is not a bad sequence astronomically; MUL.APIN has the above nine constellations rise respectively on XI 5; II 1; III 10; IV 15; V 15; VI 10 (NUN.KI); VII 15; VIII 5; and IX 15.

Clearly the author of text IX has wished to attain the same level of astronomical accuracy as has the compiler of the scheme in Astrolabe B and the Pinches Astrolabe, but he does not, for some reason, choose to omit Is lē of Section A of Astrolabe B. He makes the erroneous statement that it remains (in the night sky) all year (i.e., is circumpolar) that had been correctly made with reference to MAR.GI.DA in III 28c. He also accepts the substitution of BIR for MUL.BUKES.DA, quoting in support of it from some unidentifiable description of stars. In omen 7 he introduces HÉ.GĀL-a-a, probably through association with the word hegalli, “abundance,” which occurs in Section A of Astrolabe B for month IX; he quotes an expanded version of MUL.APIN I i 13, according to which HÉ.GĀL-a-a is SUKKAL d₄ Ninîlî, and inexplicably has it rise in month VII instead of Zibānitu. For omens 8 to 11, where he draws on the list of Anu-stars in Section B of Astrolabe B, he retains Dil-bat (Venus) but correctly refuses to say that it rises only in one month; and he keeps the wrong order: Gīr.TAB and Zibānitu. Suddenly in omen 11 he refers to a setting in month IV rather than to a rising in month X; according to the scheme in Astrolabe B UD.KA.DU₈.A rises in month IX and sets in month III.

Thus the author of this section of the assumed Tablet 51 seems to have followed a list of stars which can be constructed out of Sections A and B of Astrolabe B with great conservatism (we presume that his omission of BAN as the star rising in month V is a simple mistake and not deliberate), but he has tried—not always with success—to make some astronomical sense of it.

13 Whether these months happen to be in the sequence I, II, III in a particular year or some other is irrelevant; they should be chosen so that the dates of their heliacal risings are separated by about thirty days. This is not true of the stars in Section A or Section B of Astrolabe B.

14 Kalitum in Astrolabe B.

15 Cf. III 27a.

16 According to MUL.APIN I i 12-13 HÉ.GĀL-a-a is before ŠU.PA, whose first visibility is on VI 15.

[BM 2, 123]
Instead of continuing with the remaining months of the year, the assumed Tablet 51 gives in section 2, which is IX 12 - IX 15, X 16-23, and XI 1-8, a variant version of section 1 (omitting the troublesome Is lê of IX 3). In this variant version the month is named before the star, and the phraseology of the protasis is changed from NIM-ma IGI /uh-ji-ir-ma tti-su DIB to ina UD.DUG_{4}.GA-šu KUR-ha/ina la UD.DUG_{4}.GA-šu KUR-šu, but the one apodosis that we can still compare (IX 2 with IX 13) has virtually the same wording in each version. After IX 15 in J (obv. 30) there followed probably eight omens corresponding to X 16-23 and four omens before IX 18 (rev. 2') corresponding to XII 1-4. After IX 13 in K (obv. 22) there followed probably twelve omens before IX 16 (rev. 1').

The second section can again be compared with Astrolabe B, this time with Section C (see Table II, p. 4).

<table>
<thead>
<tr>
<th>OMEN</th>
<th>STAR</th>
<th>MONTH</th>
<th>STAR</th>
<th>PATH</th>
</tr>
</thead>
<tbody>
<tr>
<td>IX 12</td>
<td>A.ŠÁ.GA</td>
<td>I</td>
<td>A.Š.GÁN</td>
<td>Ea</td>
</tr>
<tr>
<td>IX 13</td>
<td>MUL.MUL</td>
<td>II</td>
<td>MUL.MUL</td>
<td>Ea</td>
</tr>
<tr>
<td>IX 14</td>
<td>SIPA.ZL.A.NA</td>
<td>III</td>
<td>SIPA.ZL.A.NA</td>
<td>Ea</td>
</tr>
<tr>
<td>IX 15</td>
<td>[KAK.SI.SÁ]</td>
<td>IV</td>
<td>KAK.SI.SÁ</td>
<td>Ea</td>
</tr>
<tr>
<td>X 16, XI 1</td>
<td>BAN</td>
<td>V</td>
<td>BAN</td>
<td>Ea</td>
</tr>
<tr>
<td>X 17, XI 2</td>
<td>BIR</td>
<td>VI</td>
<td>Kâštu</td>
<td>Ea</td>
</tr>
<tr>
<td>X 18, XI 3</td>
<td>EN.TE.NA.BAR.HUM</td>
<td>VII</td>
<td>EN.TE.NA.BAR.HUM</td>
<td>Enlil</td>
</tr>
<tr>
<td>X 19, XI 4</td>
<td>GIR.TAB</td>
<td>VIII</td>
<td>GIR.TAB</td>
<td>Anu</td>
</tr>
<tr>
<td>X 20, XI 5</td>
<td>zi-qit-su</td>
<td>IX</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X 21, XI 7</td>
<td>Á.MUŠEN</td>
<td>X</td>
<td>Á.MUŠEN</td>
<td>Enlil</td>
</tr>
<tr>
<td>X 22, XI 8</td>
<td>SIM.[MAH]</td>
<td>XI</td>
<td>SIM.MAH</td>
<td>Anu</td>
</tr>
<tr>
<td>X 23</td>
<td>KU_{6}</td>
<td>XII</td>
<td>KU_{6}</td>
<td>Ea</td>
</tr>
</tbody>
</table>

Again with the exception of A.Š.ŠÁ.GÁN, this selection from Astrolabe B (rejecting Šalbatânu, UD.KA.DU_{6}.A, and ÚZ in month IX) makes some astronomical sense; according to MUL.APIN these stars rise respectively on XI 5; II 1; III 10; IV 15; V 15; VI 10 (NUN.KI); VII 15; VIII 5; zi-qit-su is omitted; IX 15; X 15; and XII 15. The end of the list, however, is obviously incorrect; this difficulty is also reflected in the omission of months X, XI, and XII from the first section.

In section 3, which completes the assumed Tablet 51 (XII 1 - XII 21 and IX 16 - IX 34), the protases concern the stars of A.Š.Š Á.GÁN in much the same way as the protases of Text XV-Text XIX concern stars. In most cases the omens clearly refer to the four stars that make up the square of Pegasus: α, β, γ Pegasi and α Andromedae (XII 1 - XII 4 and XII 10 - XII 21); this fact confirms the identification of A.Š.ŠÁ.GÁN. But this section 3, despite the subscript of Text IX, is only remotely connected with the contents of the rest of the assumed Tablet 51; note that it is omitted by Text X and appears independently in Text XII.

Text IX.

This text, imperfectly preserved in two copies, once contained eleven omens in section 1 (IX 1 - IX 11), which is followed by a horizontal line, twelve omens in section 2 (only the first four, IX 12 - IX 15, are preserved), and 21 omens in section 3 (only the last 19, IX 16 - IX 34, are preserved).

Text X.

This text, also imperfectly preserved in two copies, once contained the first two sections of Text IX (only the first five omens of section 1, X 1-5, and the last eight of section 2, X 16-23, are preserved), followed by a horizontal line. The rest of the text consists of a version of Section A of Astrolabe B (12 months, X 24 - X 35), followed by a horizontal line, and another version of the same (13 months, of which months I-V, omens X 37-41, and months XII - XII_{2}, omens X 48-49, survive).
Text XI.

This is a small fragment containing omens 5-11 of section 2 of the assumed Tablet 51. It is unclear why XI 6 repeats XI 4; and XI 7 as well, perhaps, as XI 8 have commentaries.

Text XII.

The portion of manuscript M edited as Text XII is a copy of section 3 of the assumed Tablet 51 on the first column of the reverse. The fragmentary remains of the obverse and of the left column of the reverse contain material related to Section A of Astrolabe B and the ends of apodoses of omens, for which see Text XII Notes.

Text XIII.

This is an excerpt text related to section 2 of the assumed Tablet 51, as is shown below:

<table>
<thead>
<tr>
<th>OMEN</th>
<th>STAR</th>
<th>MONTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>EN.TE.NA.BAR.HUM</td>
<td>VII</td>
</tr>
<tr>
<td>5</td>
<td>UD.KA.DU₈.A</td>
<td>1¹⁷</td>
</tr>
<tr>
<td>6</td>
<td>KU₆</td>
<td>1¹⁸</td>
</tr>
<tr>
<td>7</td>
<td>BAN</td>
<td>V</td>
</tr>
<tr>
<td>9¹⁹</td>
<td>BIR</td>
<td>VI</td>
</tr>
</tbody>
</table>

Text XIV.

Omens 3-7 of this text correspond, in slightly different order, to XIII 4 - XIII 7 and XIII 9. We can say nothing further about the additional omens.

¹⁷ In IX 11 its rising is put in month IX.
¹⁸ In X 23 its rising is put in month XII.
¹⁹ XIII 8 is included as an "explanation" or expansion of XIII 7. We cannot restore XIII 10; the apodosis suggests a protasis in which MUL.KU₆ occurs.
Text IX

J K.3921 + D.T. 134 + Rm. 105
K K.8271

IX 1 J i 1  MUL.AŠ.GĀN ina ITI.BĀR [IGI-mar BE-ma MUL BI NIM-ma IGI ...
J i 2  BE-ma MUL BI ZAL-ma I [TI-šu DIB-ma IGI ...
X 1

IX 2 J i 3  MUL.MUL ina ITIL.GUD IGI-mar BE-ma MUL BI NIM-ma IGI]  DINGIR.ME GALGA KUR ana
SAL.SIG GALGA [MEŠ]
J i 5  BE-ma MUL BI uh-hi-ir-ma ITI-šu DIB-m[a IGI ...
X 2

IX 3 J i 6  MUL Is le-e kal MU DU-az BE-ma MUL x [...
X 3

IX 4 J i 7  MUL.SIPA.ZI.AN.NA ina ITIL.SIG IGI-mar BE-ma MUL B I NIM-ma IGI ...
K 1'  traces
J i 8  BE-ma MUL BI uh-hi-ir-ma ITI-šu DIB-ma IGI LUGAL [ ...
K 2'  L IUGAL KUR BI KUR-s[u x x]
X 4

IX 5 J i 9  MUL.KAK.SI.SĀ ina ITI.ŠU IGI-mar [ ...]
K 3'  x MUL.BAN [ina ITI.NE IGI-mar?]
J i 10  BE-ma MUL BI NIM-ma IGI KI [A KUR u me-riš ...
K 4'  [ ] - - - - - - ŠFE [SI.SĀ]
J i 11  BE-ma MUL BI UD.ZAL-ma IGI KLA [KUR u me-riš ...]
K 5'  [ ] - - - - - - ŠE [NU SLSĀ]
X 5

IX 6 J i 12  MUL šā ina ZI IM.Ux.LU DU-zu MUL.BIR dNī-ru dĒ-a [ ...
K 6'  [ ] - - - ina ITI.KIN IGI-mar u DU-an?]
J i 13  BE-ma MUL BI NIM-ma IGI KLA [me-riš KUR SLSĀ]
K 7'  [ ] - - - - - - []
J i 14  BE-ma MUL BI UD.ZAL-ma IGI KLA [me-riš KUR NU SLSĀ]
K 8'  [ ] - - - - - - S[S.SĀ]
X 6

IX 7 J i 15  MUL HĒ.GĀL-a-a SUKKAL dNīn-līl u dṢar-pa-ni-t[um ...]
K 9'  [ ] -ni-tum ina ITI.DU₆ IGI-mar
X 7

IX 8 J i 16  MUL Dil-bat ina ITI.BI IGI-mar BE-ma MUL BI NIM-ma IGI ...
K 10'  [ ] -ma IGI LUGAL KUR BI TI.LA ur-rak ...
J i 17  BE-ma MUL BI UD.ZAL-m[a IGI ...
K 11'  [ ] LUGAL KUR BI ār-riš BE ...
X 8

IX 9 J i 18  MUL.GĪR.TAB ina ITI.APIN : ITI.A BI IGI-mar ...
K 12'  BE-ma MUL BI NIM-ma IGI LUGAL KUR BI e-tel-liš ...
GIN.MEŠ
J i 19  MUL.GĪR ...
na-ki]-ri-šu GAM-aš BE-ma MUL BI UD.ZAL-ma IGI ...
K 13'  [ ] LUGAL KUR.BI LUGAL.ME ...
KUR D.U.A.BI KUR.ME-šū

Notes
IX 3, J i 6: x like ME.
IX 9, J i 19 has MUL.GĪR in gloss script.

[BM 2, 126]
The Field rises heliacally in month I; if this star rises early: [...] if this star is late and passes by its month and rises [...]

The Bristle rises heliacally in month II; if this star rises early: the gods will give good counsel to the land; if this star is late and passes by its month and rises [...]

The Jaw of the Bull stands all year; if this star [...] 

The True Shepherd of Anu rises heliacally in month III; if this star rises early: [...] if this star is late and passes by its month and rises: the king of this land will [...] his land.

The Arrow rises heliacally in month IV [...]. The Bow [rises heliacally in month V?]; if this star rises early: the irrigated land and the cultivated barley land will prosper; if this star rises late: the irrigated land and the cultivated barley land will not prosper.

The star which stands at the rising of the south wind is the Kidney, the Yoke, Ea, it rises heliacally in month VI and stands?; if this star rises early: the irrigated cultivated land of the land will prosper; if this star rises late: the irrigated cultivated land of the land will not prosper.

The star of Abundance, the vizier of Ninlil and Šarpanitu, rises heliacally in month VII.

Venus rises heliacally in its month; if this star rises early: the king of that land will have a long life; if this star rises late: the king of that land will die soon.

The Scorpion rises heliacally in month VIII, variant: month X; if this star rises early: the king of that land will go about proudly, he will subdue [the kings] his enemies; if this star rises late: the kings of all lands will start hostilities against the king of that land.

Parallels

IX 1. The beginning of this line, i.e., the incipit of Tablet 51, is cited in the Diviner’s Manual, line 34, published by A. L. Oppenheim, JNES 33 (1974) 199.

IX 4. VAT 11339 rev. 5ff.: 5 MUL.SIPA.ZI.AN.NA ina i[TI ...] 6 LUGAL KUR-su i?ri [...] 7 LUGAL KUR BI KUR-su [...] 8 ina I?TI.SIG4 MUL.SIPA.ZI.AN.NA [...]

IX 7. BM 47799:22'and dupl. BM 34058:6' (= LBAT 1565), also K.3780 ii 7'; † MUL HE.GAL-a-a SUKKAL dNin-il

IX 9. K.I.A ina KUR SI.'SA7 [...].

IX 7. BM 47799:22'and dupl. BM 34058:6' (= LBAT 1565), also K.3780 ii 7'; † MUL HE.GAL-a-a SUKKAL dNin-il

Cf. MUL.APIN 1 13: MUL sa IGI-šu DU-zu MUL.HE.GAL-a-a SUKKAL dNin-il.
In the break between obverse and reverse were listed the stars for the remaining eight months V-XII, i.e., the omens of Text XI 1-8, and the beginning of the Ikû-omens, i.e., the omens of Text XII 1-2.
IX 10 The Scales [...] rises heliacally in month [...] 
IX 11 The Demon with the Gaping Mouth sets in month IV, it rises in month [...] ; if this star rises early: the king of that land will defeat his enemy; if this star rises late: his enemy will defeat the king of that land, will conquer the nobles?.
IX 12 In month I the Star of the Field [...] ; if it rises heliacally at its specified time: the irrigated land and the cultivated lands in the land will prosper; if it rises heliacally not at its specified time: the irrigated land and the cultivated lands will not prosper, [the rivers?] will not bring [their high waters?].
IX 13 In month II the Bristle, the Seven gods (the great gods); if it rises heliacally at its specified time: the great gods will assemble and give good counsel to the land, good winds will blow; if it rises heliacally not at its specified time: (the great gods will assemble and) will give bad counsel to the land, evil winds will blow, there will be grief for the people.
IX 14 In month III the True Shepherd of Anu, [...] ; if [it rises heliacally] not at its specified time: [...] 
IX 15 In month IV the Arrow [...] 
IX 16-34 See XII 3-21.
Text X

Notes

X 1-5. Free restorations, based on parallel lines of this text in IX 1-5.
X 6-15. The ten omens in this gap probably contained omens from stars rising in months VI-XII, similar to IX 6-11, and again from heliacal risings in months I-IV, on the pattern of X 16-23.
X 16-22. Restorations from parallel Text XI.
XI. Restorations from X 16-22.
Other texts which associate months with constellations are BM 34058 (= LBAT 1565) reverse and parallels K.3380, K.12117, BM 47799, 81-7-27,142.

[ Text X continues on p. 62 ]
Translation

X 1 See IX 1.
X 2 The Bristle rises heliacally in month II; if this star rises early: the harvest of the land will prosper, the land will see good times, if this star is late [...].
X 3-5 See IX 3-5.

gap of ten omens
X 16 In month V the Bow, Ištar of Elam [...] there will be reconciliation in the land, if at [...]
X 17 In month VI the Kidney, Ea [...] if not at its specified time [...].
X 18 In month VII EN.TE.NA.BAR.HUM, the star of Annunītu, [if it rises] at its specified time: the furrow will bring its yield, if [it rises] not at its specified time: [the furrow will not bring] its yield.
X 19 In month VIII the Scorpion, Išhara, [if it] rises [at its specified time]: the market of wool and oil [will ... ], if [it rises] not at its specified time: [...] in the land.
X 20 In month IX its Sting [...] in the land, if [it rises] not at its specified time [...].
X 21 In month X the Eagle [...] if it rises at its specified time: hostilities will flare up in the land, [...] will be in the land.
X 22 In month XI the Swallow [...] if it rises at its specified time: there will be obedience in the land, [if it rises not at its specified time]: there will be [...] in the land.
X 23 In month XII the Fish, Ea [lord of] mankind [...] high water will mount in the springs, if [it rises] not at its specified time: rain (and) high water will be scarce in the springs.

Text XI

O Sm. 1150

XI 1  

X 16

XI 2  

X 17

XI 3  

X 18

XI 4  

X 19

XI 5  

X 20

XI 6  

X 21

XI 7  

X 22

break

left edge: [...] DIŠ BU U NI ŠI U NI
X 24 N₁₁₇’ [iti,bár.zag.gar bára i[l.l]a iti dŠEŠ.KI dumu.sag dEn.l] il.lá.ke₄
Y ₄’ [ ] - - - - - -
N₁₁₈’ ina ITI.BÁR LUGAL in-na-[aš]-ši LUGAL iš-šak-kan [ITI dEN.ZU DUMU reš-t] u-ú ša dEn-lil
Y ₅’ [ ]
X 25 N₁₁₉’ [iti,gú₄.sí.sá ki.duru₅ gá[l.t]ak₄.tak₄ iti en[sí.gal dEn.l] il.lá.ke₄
Y ₆’ [ ] en[si - - - - - -
N₁₂₀’ ina ITIL.GUD GUD.MEŠ [uš-te-eš]-še-ru ba-ma-a-tum up-t[a-at-ta]ITI dMIN PA.T]E.SI GAL-i ša dEn-lil
Y ₇’ [ ] MI[N - - - - - - - - -
X 26 N₁₂¹’ [iti,sig₄.ga kur.[kur e.ne.ne] mu.un.gibil.eš.am [iti dSIG₄] kalam.ma.ke₄
Y ₈’ [ ] iti[ ]
Y ₉’ [ ] - - - 1 - - - - - - -
X 27 N₁₂³’ [iti,šu.numun.n[a iti (sipa) dDumu.zi ba].dib.ba
Y ₁₀’ [ ] ba
N₁₂₄’ [ itu IT]I.Š[U ITI (SIPA) dDUMU.ZI ik-k]a-mu-u
Y break
X 28 N₁₂₅’ [iti,NE] [ ] x x [ iti dGIŠ.BIL.GA].MES u₄₈.kam
N₁₂₆’ [ ] l[irum.[ma kā.ne.ne ] ne
N₁₂₇’ [ ina ITI.NE] in-nap-pa莉 GLI.ZI.LÁ Ana d[A-nun-na-ki in]-na-aš-si
N₁₂₈’ [ ] x SAG um eš-tum ina KĀ šu-nu ana ú-m[aš] u-a-ba-ri uš-te-es-šu-ú
X 29 N₁₂₉’ [iti,kin ] dInanna.NIM.ma] ke₄ AMA dINANNA.ke₄.e.ne dId.lú.ru.gú sīk [il.e].da.a.ni.šē im.mi.in.UD.U
N₁₃₀’ [ ina ITI.KIN ši-pi' dINANNA.MEŠ ana dID.LÚ.RU.GÚ [ú-tal-la-la x-x-si] ina ú-ta-ba-ba (bottom)
X 30 N₁₃₁’ [ ] [iti,du₆ ne.sag šu kur [.kur ra .A.nun-na an.dá.gal.eš ki.[si.gal Lugal].dDu₆.kú].ga
N₁₃₂’ [ ] d[En.ki dNiN.k]a iti pa₄.bil.ga : d₁₁[En.lil].ša.lá.ke₄
N₁₃₃’ [ ina ITILDU₆ i-q] u-ú cl-lu ša KUR.MEŠ ana dA-nun-na-ki iš-na-aš-si
N₁₃₄’ [ ] ina KÁ šu-nu ana ú-m[aš] u-a-ba-ri uš-te-es-šu-ú
X 31 N₁₃₅’ [ ] [iti,apin giš.al (...) giš.apin na .a.dá.min.die.ne iti] dIM gú.gal an.ki.a
N₁₃₆’ [ ] [ini ITILAPIN GIŠAL u GIŠ.APIN uš-te-es-si-u ITI dGM.GAL AN-e u KITIM
X 32 N₁₃₇’ [iti,gan he gal ... ur.sag AŠ.D]U dGIR.UNUGAL kalam.ma.ta ba.ra.ê
N₁₃₈’ [ ina ITIL.GAN hegal u? uk-ta-mar ITI qar-ra-du git-ma-llu dU+GUR ša ana KUR uš-ša-a
X 33 N₁₃₉’ [ ] [iti,ab ... n]e ezen.mah An.na,ke₄ iti ni gal dInanna,ke₄
X 34 N₁₄₁’ [iti,zi₄.x [ ] x dEn.lil.lá.ke₄
N₁₄₂’ [ ina ITIL.ZI₄ ZI₄ ITI hur-ba-ši bi-bil lib-bi ša dEn-lil
X 35 N₁₄₃’ [iti,še,kin,kud [ ] ed]in.ma.ki.a a.gar gal.gal,la dNingir,šu,ke₄ urudu.su,šin ki
N₁₄₄’ [ ] nu,tak₄,tak₄
N₁₄₅’ [ ina ITIL.ŠE še-um in-ni-uš-ši-id maš-ka-na-a-tum EDIN i-ma-al-la-a u-ga-ru GAL.MEŠ ša dNingir-su ni-gal-lu ul iš-it
X 36 N₁₄₆’ [ ] 12 ki-uš-ru GABA.RI LIBIR [RA].KE₄

Notes

X 24-35. Bilingual “astrolabe”; corresponding to section A of Astrolabe B (= KAV 218). Restorations from KAV 218 and from Sm. 755+1352+1651+1715+1988; Sm. 755+1352+1651 was identified as a duplicate of Astrolabe B and joined with Sm. BM 2, 132
X 37 N₁ r. 15

iti.bár.zag.gar mul.AŠ.GĀN bára'il ila iti [št̄Š.K] iti dunnu.sag dEn.[ill.la.ka₄]

N₁ r. 16

gu.za dA.nin.ki.min mul.an.na SAR [ A]|n dEn.lil.x.|

N₁ r. 17

ITILBAR ni-siṭ LUGAL ITI dSin [DUMU reš-ti]-fi ša dA-nim u [dEn-il ...]

X 38 N₁ r. 18

iti.gu₄.sí.sá mul.mul ki.dur₄₉ gál.ta[k₄] x x [ ] 19 giš.apin [...] 

N₁ r. 20

x [x] ki ITI dNin-gir-su [ ] 21 ir-ra-ah-hi a-su GIŠ.APIN [ ]

X 39 N₁ r. 22

[iti.sí]g₄.ga mul.sipa.zi|[a.n.na]

N₁ r. 23

GIŠ.GI ŠÁ NI IN ITI [ ]

X 40 N₁ r. 24

[iti.yang] numun.na mul.kak.s[i.sá]

N₁ r. 25

[x] x BI IŠ NUMUN x [ ]

X 41 N₁ r. 26

[iti.ne] ne.gar m[u]l

(gap of ca. 10 lines, comprising months VI-XI)

X 47 N₂ r. 1'

traces

X 48 N₂ r. 2'

[iti.she.kin.k] ud mul.ma₄.m[aš]

N₂ r. 3'

[l-ša-al-I] i ina A.GAR x[

N₂ r. 4'

[ ] x PAD MI SIG₇ [ ]

X 49 N₂ r. 5'

[iti.d] iri.she.kin.kud a.da.min [ ]

N₂ r. 6'

dŠŠ.KI igi nu mu.ni.in [d₄₂₉]

N₂ r. 7' 

te-si-it za/h[a

N₂ r. 8' 

UD.29.KAM [ ]

X 50 N₂ r. 9'

13 ki-i-[ru

X 51 N₂ r. 10'

[ ]

catchline N₂ r. 11'

MUL.AŠ.GĀN [ ]

subscript N₂ r. 12'

PĀ[D]

end

Translation

X 24-35 bilingual Astrolabe with mythological explanations for the twelve months; for the similar Astrolabe B see Appendix.

X 36 Twelve omens, copy of an original.

X 37-49 bilingual Astrolabe with mythological explanations for the thirteen months.

X 50 Thirteen omens [...]
Text XII

M K.11096 (M₂) (+) Rm. 95 (M₁). M₁ represents the right column, probably column i of the reverse; the text continues, without direct join, on M₂. Of the left column and of the other side only a few ends of lines are preserved; they are transliterated in the notes.

XII 1 M₁ 1) MUL.Aš.GĀN ina ITI.BA.R IGI-ma šā IM.U₄.LU NU [IGI] 2 ina KUR.URTI GĀN.ZI NU S.I.SĀ ub-bu-tu [GĀL-šī]

XII 2 M₁ 3) MUL.Aš.GĀN ina ITI.BA.R IGI-ma šā IM.SI.SĀ NU IGI ina [KUR] 1 SU.BIR₄ [GĀN.ZI NU S.I.SĀ UN.MEŠ ŠĀM DUM.U MEŠ]-ni a KU.MEŠ[1]

XII 3 M₁ 5) MUL.Aš.GĀN ina ITI.BA.R IGI-ma šā IM.KUR.RA NU IGI ina KUR.NIM.MAKI [KU.MIN] IX 16

XII 4 M₁ 6) MUL.Aš.GĀN ina ITI.BA.R IGI-ma šā IM.MAR.TU NU IGI ina KUR.MA[R.TU₄ KU.MIN] IX 17

XII 5 M₁ 7) IGI-ma ut-tab-bat MU.3 KAM ina KUR DÜ.A.BI TU.RA d.DIM.ME [x x] IX 18

XII 6 M₁ 8) IGI-ma ū-tak-kal ina KUR DÜ.A.BI BE.ME GĀL.ME ŠUB-tim bu-lim BE-[ma SU.KŬ] IX 19

XII 7 M₁ 9) IGI-ma GIM di-pa-ri i-nam-bu-ut ina KUR DÜ.A.BI a-ru-ur-t [um i-mad] IX 20

XII 8 M₁ 10) KI-šu MUL.SU.PA IGI KU.MIN KI.TA MUL.SU.PA IGI [BIR-ah KUR.KUR] IX 21

XII 9 M₁ 11) KI.TA MUL.NUN.KI IGI KU.MIN KI-šū MUL.NUN.KI IGÁ šal-pú-t [i KUR GAR] IX 22

XII 10 M₁ 12) MUL.MEŠ-šū AN.TA nen-nu-du KUR.SU.BIR₄ [KU.MIN] IX 23

XII 11 M₁ 13) [MUL] MEŠ-šū KI.TA nen-nu-du KUR NIM.MAKI u KUR.URTI [KU.MIN] IX 24

XII 12 M₁ 14) MUL.MEŠ-šū AN.TA r]it-ku-su KU.MIN U₄ MEŠ KUR.SU. [BIR₄ KU.MIN] IX 25

XII 13 M₁ 15) MUL.MEŠ-šū KI.TA r]it-ku-su KUR.NIM.MAKI KUR. [BIR₄ KU.MIN] IX 26


XII 15 M₁ 17) break

M₂ 1') MUL.MEŠ-šū [KI.TA da [-]nu MUL.MEŠ-šū AN.TA PA-nu-šu- nu SAG.US.MEŠ ina NIM.MAKI] IX 28

XII 16 M₂ 2') MUL.MEŠ-šū [KI.TA da [-]nu MUL.MEŠ-šū AN.TA PA-nu-šu- nu SAG.US.MEŠ ina NIM.MAKI] IX 29

XII 17 M₂ 3') MUL.MEŠ-šū KI.TA SIG₂-[ma KI.TA PA-nu-šu- nu SAG.US.MEŠ ina KUR.SU.BIR₄] IX 30

XII 18 M₂ 4') MUL.MEŠ-šū KI.TA SIG₂-[ma KI.TA PA-nu-šu- nu SAG.US.MEŠ ina KUR.SU.BIR₄] IX 31

XII 19 M₂ 5') MUL.MEŠ-šū KI.TA MA-gal SAG₂ MEŠ [ina KUR.SU.BIR₄ KU.MIN] IX 32

XII 20 M₂ 6') MUL.MEŠ-šū AN.TA ma-gal SAG₂ MEŠ [ina KUR.SU.BIR₄ KU.MIN] IX 33

XII 21 M₂ 7') MUL.MEŠ-šū KI.TA AN.TA ma-gal SAG₂ MEŠ [ina KUR.SU.BIR₄ KU.MIN] IX 34

[BM 2, 134]
The Texts 65

Translation

XII 1 If the Field rises heliacally in month I but the southern one is not visible: in Akkad the cultivated land will not prosper, there will be ...

XII 2 If the Field rises heliacally in month I but the northern one is not visible: in Subartu the cultivated land will not prosper, the people will live off the price of their children.

XII 3 If the Field rises heliacally in month I but the eastern one is not visible: in Elam ditto.

XII 4 If the Field rises heliacally in month I but the western one is not visible: in Amurru ditto.

XII 5 If it rises heliacally and shines brightly: for three years in the entire land illness (and?) the Lamaštu demon [will rage?].

XII 6 If it rises heliacally and becomes dim: in the entire land there will be pestilence, epidemic among cattle, or famine.

XII 7 If it rises heliacally and shines brightly like a torch: in the entire land drought will be great.

XII 8 If ŠU.PA is seen with it, variant: it is seen below ŠU.PA: dispersal of all the countries.

XII 9 If it is seen below the star of Eridu, variant: the star of Eridu is seen with it: desecration of the land will occur.

XII 10 If its upper stars meet: Subartu and Amurru [...].

XII 11 If its lower stars meet: Elam and Akkad [ditto].

XII 12 If its upper stars are conjoined, variant: ride one on the other: Subartu and Amurru will start hostilities and Amurru will plunder Subartu for seven years.

XII 13 If its lower stars are conjoined: Elam will plunder Akkad for five years, in the fifth year Akkad will arise and defeat Elam, and will conquer its leader.

XII 14 If its upper stars are dark, its lower stars look normal: in Subartu and Amurru, variant: Elam, for five years Irra and Adad will ravage their peoples.

XII 15 If its lower stars are dark, its upper stars look normal: in Elam and Akkad for five years Irra and Adad will ravage their peoples.

XII 16 If its upper stars are green, but the lower ones look normal: in Subartu and Amurru for three years rains from the sky, high floods from the springs will cease, the cultivated land will not prosper, there will be ...

XII 17 If its lower stars are green but the upper ones look normal: for five years in Akkad and Elam the cultivated land will not prosper, there will be ...

XII 18 If its upper stars are very red: in Subartu and Amurru the market will expand, the land ...

XII 19 If its lower stars are very red: in Elam and Akkad the cultivated land will prosper.

XII 20 If its upper stars are not visible but the lower ones are visible: the kings of Subartu and Amurru will plunder and rains [...].

XII 21 If its lower stars are not visible but the upper ones are visible: the kings of ... and ... will plunder and Subartu [...].

[BM 2, 135]
Notes to Text XII

Restorations from parallel IX 16-34.

Of the obverse of the tablet, only a few signs of the last twenty lines are preserved. (They are copied in Craig AAT 85 as lines 21-38 of Rm. 95.) On the reverse, the ends of the left column are preserved both on Rm. 95 (M₁) and, after a gap of seven or eight lines, on K.11096 (M₂). The first ± twenty lines are ends of omen apodoses; the last seven lines preserved seem to contain partly omen material, partly explanatory material. For the sake of completeness, the fragmentary obverse column ii and reverse ii are given here in transliteration.

| M₁ | ii | 1' | [ ] x x [ ] | [h₃-h₄-ra] NU [ ] |
| 2' | [ ] | x šu gi x [ ] |
| 3' | [ ] | K.L.MIN [ ] |
| 4' | [ ] | e na 'K.L.MIN' [ ] |
| 5' | [ ] | ITIL.DIR.L.S.E.KIN.KUD.A.DA.[MIN (cf. X 49) |
| 6' | [ ] | BI UD.26.KAM ] |
| 8' | [ ] | ITI NU.GÂ.GÂ [ ] |
| 9' | [ ] | Á-sâ ik²-x [ ] |

ca. three lines broken

| M₁ | ii | 13' | [ ] NU TÚM [ ] |
| 14' | [ ] | IGÎ² dUTU² [ ] |
| 15' | [ ] | x x [ ] |
| 16' | [ ] | d² SIN AN [ ] |
| 17' | [ ] | x KA² x [ ] |

18 broken

19' [ ] b[u (or M]eš) | traces

bottom

reverse ii

| M₁ | ii | 1 | [ ] UD? |
| 2 | [ ] | -az |
| 3 | [ ] | ŠÈG up-pu]-lu |
| 4 | [ ] | ū-šal]-pat |
| 5 | [ ] | AŠ |
| 6 | [ ] | dIM] RA ū-šal-pat |
| 7 | [ ] | DÛ], IA], BI |
| 8 | [ ] | ĮL-ši |
| 9 | [ ] | NIM.M] Aki |
| 10 | [ ] | ū]-šal-pat |
| 11 | [ ] | šî |
| 12 | [ ] | GÂL |

ca. 7-8 lines broken

| M₂ | ±20 | [ ] x x [ ] | BIR UN.MEŠ |
| 21 | [ ] | DINGIR.MEŠ NE RU RU |
| 23 | [ ] | x NUN na/ù MUL.MEŠ |
| 24 | [ ] | KUR DÛ.A.BI GAR-an |
| 25 | [ ] | KUR.KUR KÛR.MEŠ |
| 26 | [ ] | KUR ŠÈ BûR |
| 27 | [ ] | ITIL.BAR³ MUL.AŠ.GAN |
| 28 | [ ] | iqi-da-ru-u² |
| 29 | [ ] | ITI].DIR.L.SI |
| 30 | [ ] | tu² ne bi ri |
| 31 | [ ] | x ta-di-ra-ti |
| 32 | [ ] | x Ùg.UDU.HI.A |
| 33 | [ ] | H]UL².MEŠ |

34 break

[BM 2, 136]
Text XIII

P K.4510
Q 81.2-4,204 reverse (the obverse, fragmentary, will be published in a subsequent fascicle)

XIII 1 P 1  x
XIII 2 P 2  x ma
XIII 3 P 3  x SEG
XIII 4 P 4  ina ITILDU₆ MUL.E]N. TE.NA.BAR.[HUM
XIV 3 Q 5  ina ITILDU₆ MUL.E]N. TE.NA.BAR.[HUM IGI LUGAL UD MEŠ-ŠU [GIDI MEŠ]
XIII 5 P 5  ina ITILBÁR MU[LUD.KA.
XIV 4 Q 6  ina ITILBÁR MUL.UD.KA.D]UG₈ A IGI MU.S.KAM ina KURURIKI ina KA dī-ra BE.MEŠ GÁL MEŠ
ana MÁŠ ANŠE [NUTE]
XIII 6 P 7  ina ITILBÁR MUL.KU₆ IGI
XIV 5 Q 7  ina ITILBÁR MUL.KU₆ IGI a-ru-tum ina KUR GÁL
XIII 7 P 8  ina ITILNE MUL.BAN IGI ŠE IGISHI.
XIV 7 Q 8  ina ITILNE MUL.BAN IGI ŠE.GIŠI SIG̃-iq
XIII 8 P 9  MUL.BAN ana MUL.UD.AL.TAR IDIM₄ KUR.NIM.MAKI NINDA DUG.GA [KÚ]
XIV 6 Q 9  MUL.BAN ana MUL.UD.AL.TAR IDIM₄ KUR.NIM.MAKI NINDA DUG.GA KÚ x
XIII 9 P 10  ina ITIL.KIN MUL.BIR IGI APIN [ŠE] SLSÁ
XIV 9 Q 10  ina ITIL.KIN MUL.BIR IGI APIN ŠE SI[SÁ]
XIII 10 P  break
Q 11  [ ... ] ina ITIKU₆ IV.B.MUŠEN.HI.A TAR.MEŠ KU₆ ina ID e-ru-tam MUŠEN ina AN-e x x x x

colophon Q 12  [ KUR MAN] ŠAR.DU.A MAN ŠU MAN KUR AN.ŠÁR

Translation

XIII 1-3 broken
XIII 4 If in month VII EN.TE.NA.BAR.HUM rises heliacally: the king’s days will be long.
XIII 5 If in month I the Demon with the Gaping Mouth rises heliacally: for five years in Akkad at the command
of Ira there will be plague, but it will not affect cattle.
XIII 6 If in month I the Fish rises heliacally: there will be drought in the land.
XIII 7 If in month V the Bow rises heliacally: flax will prosper.
XIII 8 If the Bow comes close to UD.AL.TAR (Jupiter): Elam will eat fine food.
XIII 9 If in month VI the Kidney rises heliacally: the cultivated barley field will prosper.
XIII 10 If ... is seen, fish and birds will be scarce (lit. cease), fish in the river [will not] spawn, birds in the sky
[will lay no eggs]

Notes

XIII 1. x like BE.
XIII 2. x like A[H.
XIII 3. x like end of GIŠ.

Parallels

XIII 4-9. Restorations from VAT 9433 Piece b 4:10' and
Text XIV 3-7.
XIII 5. Cf. K.10688 1 1': [ ] UD.KA.DUG₈ A IGI ...
|^ MÁŠ ANŠE EDIN.NA X X.

XIII 9. Thompson Rep. 221: [ ] ina ITIL.KIN MUL.BIR
IGI-IR APIN ŠE SLSÁ MUL.BIR DMUL.UDU.IDIM.GUD.UD.
Colophon: Hunger Kolophone no. 317.

[BM 2, 137]
Text XIV

R K.9126 reverse?

XIV 1
1' traces
2' [ ] x GUR ma x [ ]
3' ZI-it BURUS.HILA ana UDU.

XIV 2
4' [ ] MUL.HU.GÁ IGÁ ina DI ZI-a [ša?] [ ]

XIV 3
5' [ ] ina ITI.DU₆ MUL.EN.TE.NA.BAR.HU[M IGÍ] ⁶ LUGAL UD.MEŠ-šu GI[D.MEŠ]

XIV 4
6' [ ] ina ITI.BAR MUL.UD.KA.ĐU₈.A [IGÍ] ⁷ MU.S.KAM ina KUR.UR₄₁ ina KA dÍr-ra [BE.MEŠ]
    ⁹ GÁL.MEŠ ana MÁŠ.ANŠE NU T[E]

XIV 5
10' [ ] ina ITI.BAR MUL.KU₆ IGÍ a-ru-ur-tú ina KUR G[ÂL]

XIV 6
11' [ ] ina ITI.KIN MUL.BIR IGÍ APIN ŞE SI.[SÁ]

XIV 7
12' [ ] ina ITI.NE MUL.BAN IGÍ ŠE.GIŠ.i [SIG₅-iq]

XIV 8
13' [ ] MUL.SIPA.ZI.[AN.NA
14' [ ] x LU? UD [ ]
15' [ ] ša ina [ ]

break

[BM 2, 138]
Translation

XIV 1. .... attack of locusts, to the sheep [ ... ]
XIV 2. If the Raven rises heliacally: ....
XIV 3-7. See translation of XIII.

Notes

Restorations from Text XIII.
XIV 1. There is a dividing line erroneously after line 2' instead of after line 3'.
4.3. Miscellaneous Constellation Texts

Section 3 of the assumed Tablet 51—Text IX 16 - IX 34 (also contained in Text XII)—contains omens relative to AŠ.GÂN. These are extraneous to the structure of both Tablets 50 and 51, but utilize optical phenomena and the relative positions of the stars in the constellations as ominous events (see the astronomical commentary). Other omens using optical phenomena associated with constellation names are quoted in the commentaries to Text II - Text VI. There are other such “non-canonical” texts among our materials which are grouped together here. We have, however, refrained from including at this point that large class of texts that implies a motion of the fixed stars, an implication that led the Mesopotamian scholars who compiled and commented on these texts to interpret the constellation names as an elaborate code for planet names. Some such omens were quoted in the manuscripts of the assumed Tablet 50 (e.g., Text II 12d - II 12h and III 11d), and some appear in the miscellaneous texts (Text XV 8 and XVI 17 - XVI 18). We reserve any discussion of this class of texts until after the publication of the planetary texts, which, as we expect, will clarify the origin of the tradition of identifying constellation names with planet names.

Text XV.

Text XV contains collections of omens involving constellations arranged in two series (the first to the north of the second) essentially in their order of rising. The second series begins—as does the assumed Tablet 51 and the related Astrolabe Texts—with AŠ.GÂN. The constellations and their occurrences in MUL.APIN are:

<table>
<thead>
<tr>
<th>STAR</th>
<th>OMENS</th>
<th>MUL.APIN I (Enlil)</th>
<th>MUL.APIN I (Anu)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MUL.APIN I</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(Enlil)</td>
<td></td>
</tr>
<tr>
<td>Series I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>d[NIN.KI LiM]</td>
<td>4</td>
<td>i 34-35</td>
</tr>
<tr>
<td>2.</td>
<td>KA.[MU.S.I.KU.E]</td>
<td>5</td>
<td>i 3</td>
</tr>
<tr>
<td>3.</td>
<td>ŠU.GI</td>
<td>6-10</td>
<td>i 7</td>
</tr>
<tr>
<td>4.</td>
<td>AL.LUL</td>
<td>11-13</td>
<td>i 8</td>
</tr>
<tr>
<td>5.</td>
<td>[UR.GU.LA]</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>(3 protases lost)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Series II</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>AŠ.GÂN</td>
<td>19-23</td>
<td>i 40</td>
</tr>
<tr>
<td>7.</td>
<td>Tīltu</td>
<td>24-25</td>
<td>i 42 (Anunitu)</td>
</tr>
<tr>
<td>8.</td>
<td>LÚ.HUN.GÂ</td>
<td>26-27</td>
<td>i 43</td>
</tr>
<tr>
<td>9.</td>
<td>MUL.MUL</td>
<td>28-29</td>
<td>i 44</td>
</tr>
<tr>
<td>10.</td>
<td>GU₄.AN.NA</td>
<td>30-31</td>
<td>ii 1</td>
</tr>
<tr>
<td>11.</td>
<td>SIP.AZI.AN.NA</td>
<td>32-35</td>
<td>ii 2</td>
</tr>
<tr>
<td>(6 protases lost)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We suspect that the constellation name (feminine) in omens 36 and 37 was BAN (MUL.APIN I ii 7).

The reason for extending each list through only a third of a circle on the sphere is not apparent. But it is clear that the composer of the text used a variety of sources. This is indicated both by the variation in number of omens associated with each constellation name and by the variation of the preterites of the protases of one section with respect to the others. Unfortunately, we do not possess the original sources of these omens; but our citations of parallel passages in the footnotes to the text indicate that the authors of other texts belonging to our material did have such access.
Text XVI.

Text XVI is a collection of omens divided by horizontal lines into six unequal sections.

Section 1 (omens 1-4) includes the “Stars of the Sky” and SIPA.ZLAN.NA. Omen 3 is similar to, but different from, XVII 14, but possibly is identical with XVIII 5; omens 2 and 3 are possibly related to XV 34-36.

Section 2 (omens 5-13) includes ŠU.GI (omens 5 and 7), dEN.ME.ŠÁR._RA20 (omens 8-9 and 11-12), and GĀM (omens 6 and 13), two constellations close to each other and to SIPA.ZLAN.NA. Omen 10, regarding the unidentified dIM.DUGUD^mukin, is identical with III 11b, while the ŠU.GI omens were known to the compiler of Text XV, where they are omens 10 and 9.

Section 3 (omen 14) involves a planet and the unidentified ˚D.IDIGNA.

Section 4 (omens 15-16), which utilizes UR.GU.LA (omen 15) and LUGAL (omen 16), is identical with XIX 4-5; the first is also found as XV 14.

Section 5 (omens 17-21) contains omens from a text in which the “constellations” move.

Section 6 is too fragmentary to be commented on.

There is no apparent organizational principle which determines the structure of this text; a scribe has excerpted various things that interested him in more or less coherent groupings that correspond to the sections.

Text XVII.

Text XVII is another congeries of omens related to constellations in no apparent order. They are:

<table>
<thead>
<tr>
<th>STAR</th>
<th>OMEN</th>
<th>MUL.APIN I</th>
</tr>
</thead>
<tbody>
<tr>
<td>ŠU.PA</td>
<td>1-2</td>
<td>i 12 (Enlil)</td>
</tr>
<tr>
<td>ŠAH</td>
<td>3-4</td>
<td>i 2921 (Enlil)</td>
</tr>
<tr>
<td>Damu</td>
<td>5</td>
<td>i 2921 (Enlil)</td>
</tr>
<tr>
<td>NIN.KILIM22</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>UGA</td>
<td>8-11</td>
<td>ii 9 (Anu)</td>
</tr>
<tr>
<td>SIPA.ZLAN.NA</td>
<td>12-14</td>
<td>ii 2 (Anu)</td>
</tr>
<tr>
<td>Zibānītu</td>
<td>16</td>
<td>ii 11 (Anu)</td>
</tr>
</tbody>
</table>

The text is too short for us to be sure that the occurrence of Enlil-stars in omens 1-6 and Anu-stars in omens 8-14 and 16 is due to anything but chance.

Text XVIII.

This text contains two sections, divided by a horizontal line. Section 1 (omens 1-10), like section 3 of the assumed Tablet 51, is a collection of omens involving one star; in this case it is SIPA.ZLAN.NA. Several of these omens occur elsewhere in our material, others do not; this confirms the vastness of the corpus of (presumably Old Babylonian) omens from which our texts were compiled. The sign UD with which the omens in section 2 (omens 11-16) begin stands, together with the vertical wedge preceding it, for summa; the subject of omens 11-13 seems to be the Moon. The end of the reverse of the tablet contains the end of EAE Tablet 55.

Text XIX.

This small piece contains two omens relating to AN.TA.SUR.RA, one of the stars in the assumed Tablet 50; and two omens which also occur in Text XVI.

20 MUL.APIN 113: MUL.ŠU.GI dEN.ME.ŠÁR._RA.
21 MUL.APIN 1 i 29: MUL.ŠA ina ZAG-šù izzazu MUL.ŠAH dDamu.
22 See XV 4, where dNIN.KILIM is placed in this same position, just before the star KA.MUŠ.İ.KÜ.E (MUL.APIN 1 i 34-35).
Text XV

S K.230

XV 1 1' [ ]-tum [x]
XV 2 2' [ ] LUH [x]
XV 3 3' [ ] x DÜ-[uš]
XV 4 4' {UL} d [Nin-kilim? ... ku-ru-si-i] s-su ŠE.GIŠ.i K[U]
XV 5 5' {UL.KA.MUŠ.i.KU.E ... } x înă KUR I.GÁL
XV 6 6' {UL.SU.GI } x x ki-zí-i SIG-i
XV 7 7' {UL.SU.GI } su? ki-zu-ú ana EN-šu ILGAR DÜ-ma NU KUR-á[d]
XV 8 8' {UL.SU.GI U.L.GÁM e-zib LUGAL PA.AN.MEŠ-šú TÁ.K4.MEŠ-[šú]}
XV 9 9' {UL.SU.GI GABA-su du-tú-mat E.GAL šár-ra-qu i-pal-la-[šú]}
XV 10 10' {UL.SU.GI GĪR.MEŠ-šú NU IGI.MEŠ LUGAL TA GĪŠ.GIGIR x x]-u[š]
XV 11 11' {UL.LUL UL.MEŠ-šú UL.MEŠ A.KAL [DU-kam]}
XV 12 12' {UL.AL.LUL UL.MEŠ-šú un-nu-tu4 A.KAL NU [DU-kam]}
XV 13 13' {UL.AL.LUL UL.MEŠ-šú reš-tu-tu UL.MEŠ-ma MIN [ ] 14' A.KAL D]-Uma A.SÁ A.GÁR ul [i-ma kar]}
XV 14 15' {UL.]UR.GU.LA? ma]-diš MI ŠA KUR NU D[ÜG-āb]}
XV 15 16' {UL } ŠE.IR.[ZI na-ši LUGAL URULI [KA]-ma NIG.TUK IGI]
XV 16 17' {UL } un-nu-ut i-dir-tum[ ]
XV 17 18' {UL } HA.SÁ x KUR-su[ ]
XV 18 lower edge 19' [ ] 20' [x x (x)] x A.AN [ ]
XV 19 r. 1 {UL.]AS.GÁN KAK[MI KÁ.GAL.MEŠ KÁ.DINGIR.RA[ki ]}
XV 20 r. 2 {UL.]AS.GÁN UL.MEŠ-šú it-ta-na-an-bi-tu A.KAL [DU-kam]}
XV 21 r. 3 {UL.]AS.GÁN UL.MEŠ-šú un-nu-tu4 A.KAL NU [DU-kam]}
XV 22 r. 4 {UL.]AS.GÁN UL.MEŠ-šú reš-tu-tu it-ta-na-an-ba-tu-ma MIN GU [D ] r. 5 A.KAL DU-ma A.SÁ A.GÁR ul i-[ma kar]}
XV 23 r. 6 {UL.]AL.LUL MU.LA-ma ana IGI MUL.AS.GÁN GIL MUL.3.KAM İD.UD.KIB.NU[Nki ] r. 7 A.KAL-sá LÁ-[it]
XV 24 r. 8 {UL ] Tul-tum KAK[M] AN.TIBAL E.MEŠ DINGIR.MEŠ KÚ
XV 25 r. 9 {UL ] Tul-tum gup-pu-šat re-e-mu u SILIM.MU ina KUR GÁL-ší
XV 26 r. 10 {UL.LU.HUN.GÁ un-nu-ut LUGAL SU.BIR.ki i-dir-tum IGI-ma[r]
XV 27 r. 11 {UL.LU.HUN.GÁ MI LUGAL MAR.TUKI ina GĪŠ.TUKUL ŠUB-ut
XV 28 r. 12 {UL.LU šat-ha-ma u MI.MEŠ BE.MEŠ ina KUR GÁL.MEŠ
XV 29 r. 13 {UL.LU ni-iš-su-ma UD.DA-su-nu NU GÁL dIr-ra ZI-ma UN.MEŠ ul ú-[šam-qat]}

Parallels

XV 5. K.2241+ :28f. (bilingual): UD MUL.KA.MUŠ.i.KU.E MUL.UL.BI ... ] : MUL.KA.MUŠ.i.KU.E [ ... ]
XV 8. K.3111:9 (left column of K.2226): [MUL.]ŠU.GI Gam-tum TÁ.K4-ilb [ ... ]; VAT 9818:11: [MUL.]SU.GI MUL.GÁM TÁ.K4-ilb LUGAL URULI PA.[AN ... ] (with commentary: MUL.GÁM Marduk MUL.SAG.ME.GAR KI MUL ... ]; K.6860:10: [MUL.]SU.GI MUL.GÁM ŠU.GI MUL.GÁM [ ... ]; the same apodosis is attested (protaosis broken) in Sm. 442:5'; K.14512:1', K.6860:6'; possibly the same protasis occurs in K.12079:3'.
XV 10. K.1872+12062:25': [MUL.]ŠU.GI GĪR.MEŠ-[šú ... ]; K.6859:5: [MUL.]ŠU.GI GĪR.MEŠ-[šú NU IGI.DU.GÁL.MEŠ LUGA[L ... ].
Translation

XV 1-4 fragmentary.

XV 4 [If Ninkilim ...]: kurusissu rodents will eat the flax.
XV 5 [If] KA.[MUŠ.KU.E ...]: there will be [...] in the land.
XV 6 If the Old Man [...] of a prominent groom.
XV 7 If the Old Man [...] a groom will rebel against his master but will not succeed.
XV 8 If the Old Man leaves the Crook behind: the king’s functions will leave him.
XV 9 If the Old Man’s chest is very dark: thieves will make a breach in the palace.
XV 10 If the Old Man’s feet are not visible: the king will [...] from the chariot.
XV 11 If the Crab’s stars scintillate: high water [will come].
XV 12 If the Crab’s stars are faint: high water will not come.
XV 13 If the Crab’s front stars scintillate and [...] high water will come but will not irrigate the field of the commons.
XV 14 If the [Lion?] is very black: the land will not be happy.
XV 15 [If [...] bears brilliance: the king of Akkad will become strong and will have a profit.
XV 16 [If [...] is faint: misery [...].
XV 17 [If [...] is red: .... his land [...];
XV 18 ....
XV 19 If the Field is obscured: the gates of Babylon [...].
XV 20 If the Field’s stars scintillate: high water [will come].
XV 21 If the Field’s stars are faint: high water will not [come].
XV 22 If the Field’s front stars scintillate, and ditto [...] high water will come but will not irrigate the field of the commons.
XV 23 If a comet crosses toward the Field: for three years the Euphrates’ high water will be reduced.
XV 24 If the Worm is obscured: the ....pest will eat the temples.
XV 25 If the Worm is massive: there will be mercy and reconciliation in the land.
XV 26 If the Hired Man is faint: the king of Subartu will see misery.
XV 27 If the Hired Man is black: the king of Amurru will fall in war.
XV 28 If the Bristle is elongated and black: there will be pestilence in the land.
XV 29 If the Bristle is apart and has no light: Irra will arise but will not fell the people.

Parallels

XV 13. Cf. Sm. 2074 r. i 7'-'8': ¶ MUL.MEŠ ša MUL.AL.LUL IG1.MEŠ-ša 24-lu₃ nu-ulša ina KUR GÄL; ¶ MUL.MEŠ ša MUL.MIN IG1.MEŠ MUL.MUL.MEŠ-ma ÌO.IDIGNA DU-kam. See also Parallel to XV 21-22.
XV 20. = IV 3a.
XV 21. Sm. 1093+ :4': ¶ MUL.AŠ].GÂN MUL.MEŠ-šu un-[nu-tu ...].
XV 21-22 (or XV 12-13): K.12710 (commented text) line 2: [... un]-nu-ut A.KAL NU DU-[kam], line 4: [...] MUL.MEŠ-šu] reš-tu-t[u ...], line 5: [...] reš₂-t[u₃ ], un-nu-[tu ...].
XV 24. K.867:2: [... AN.TI.BAL Ê [...] (apod.).
XV 25. K.9236:11': ¶ MUL Tul₄-tum gup-pu₃]-sat re-e-mu u SILIM.MU ina KUR G[A.L].
XV 28. K.1494a r. 6': ¶ UL.UL šat-ḫu-ma u [MI.ME]Š BE. MEŠ ina KUR GÅL.MEŠ.

[BM 2, 143]
Text XVI

T K.7621

XVI 1 1′ [¶] MUL.IMEŠ AN-e NU [GÁL.MEŠ]

XVI 2 2′ [¶] MUL.SIPA.ZI.AN.NA MUL.MEŠ-šu [ ] fxl [ ]

XVI 3 3′ [¶] MUL.MIN LI.DUR-su MI AN.MI UD.16.KAM :

XVI 4 4′ [¶] MUL.MIN MUL. [MEŠ-šu] [ ]

XVI 5 4′ [¶] MUL.ŠU.GI GIR.MEŠ-šu NU IG.MEŠ LUGAL TA GIŠ.GI [GIR?]

XVI 6 5′ [¶] MUL.GÁM zi-mu-šu us-sa-na-lam BALA HA.A-ma MAN-m[a DU₆.DU-a]

XVI 7 6′ [¶] MUL.GI GABA-su du-š-[ú]-mat É.GAL LUGAL šar-ra-[qu i-pal-la-šu]

XVI 8 7′ [¶] MUL dEn-me-šá-r-ra MULíg-iš ma-diš e-kil EN.TE.NA dan-nu G[ÁL?]

XVI 9 8′ [¶] MUL En-me-šá-r-ra MULíg IGI.BI GIM ka-ra-ri-e ina MURUB₆-šu I MUL ma-diš SA₅

XVI 10 9′ [¶] MUL dIM.DUGUD.MUŠ-F MULí.BI GII.BI ma-diš SA₅ BE-ma EN.TE.NA šur-bu-ú BE-ma

XVI 11 10′ [¶] MUL.GIŠ.KAK dEn-me-šá-r-ra MULí.BI GII.BI LUL.AŠ AL.SI₄.SI₄ A.ZI.GA DUGUD DA

XVI 12 11′ [¶] dEn-me-šá-r-ra ma-diš SA₅ A.KAL [x] [x]

XVI 13 12′ [¶] MUL.GÁM ŠE.IR.ZI na-ši SUHUŠ AŠ.TE DU-an MUL.GIŠ.GI.[GIR] KI-šu [x] [ ]

XVI 14 13′ [¶] MUL.UDU.IDINA ана AGI MUL.IDIGNA NU [SAR?]

Notes

XV 37. x = Winkelhaken in upper half of line.
XV 38. x = vertical wedge.

Parallels

XV 30, K.5867:5: [¶] UL.GU₄.AN.NA] MUL.MEŠ-šu lum-mu-nu SIG₅ KUR HA.A ŵTU Á.B.GUD.HI.A U₆.UDU.HI.A NU [SILSÁ]

XV 31. K.6227 ii 6′ (to K.3780): [¶] MUL.SIPA.ZI.AN.NA MUL.MEŠ-šu un-nu-tu x […] for other parallels see Texts XVI-XVIII.

XV 6. = VI 4b.

XV 8. TCL 6 18 + r. 18. [¶] MIN (=En-me-šár-ra) MUL
If the Bull of Heaven’s stars are very faint: the wealth of the land will disappear, the offspring of cattle and sheep will not thrive.

If the Bull of Heaven’s stars are very bright: the offspring of cattle will thrive.

If the navel of the True Shepherd of Anu is red, (and) there is a dark spot on its right: there will be a revolt, a ... who is like his master will fall? through weapons.

If the True Shepherd of Anu’s stars scintillate: an important person will become powerful and commit evil deeds.

If the True Shepherd of Anu’s stars are faint: the prince, beloved [...].

If the True Shepherd of Anu’s stars are equal(ly bright?): someone [...].

If the True Shepherd of Anu’s stars are black: the king’s son [...].

If the True Shepherd of Anu’s stars are white: the king’s army in [...].

Translation

If the stars of the sky are not [...].

If the True Shepherd of Anu’s stars [...].

If ditto’s navel is black: eclipse on the 16th.

If ditto’s stars [...].

If the Old Man’s feet are not visible: the king [...] from the chariot.

If the Crook’s aspect becomes black: the dynasty will disappear and another [will arise].

If the Old Man’s chest is very dark: thieves will make a breach in the palace of the king.

If Enmešarra’s front star is very dim: there will be severe cold.

If Enmešarra’s front star is like the noonday sun, and in its middle one star is very red: there will be severe heat.

If the Anzû bird’s front star is very red: if it is winter, there will be frost; if it is summer, there will be heat.

If the front star of Enmešarra’s pole is very red: a severe flood [...] the land.

If Enmešarra is very red: high water [...].

If the Crook bears brilliance: the foundation of the throne will be stable—the Chariot [...] with it.

The Wild Sheep in front of the Tigris star—not [written?].

Parallels

[BM 2, 145]
Parallels

XVI 15. Thompson Rep. 228:3-4: ¶ MUL.UR.GU.LA MI ša KUR NU DÜG-ab: EAE, Tablets 50-51

Text XVII

U K.3555 col. i

1° traces

XVII 1 2° ¶ MUL.SU.PA [ ]

XVII 2 3° ¶ MUL.SU.PA it-ta-lana-an-[pah]

XVII 3 4° ¶ MUL.SAH gup-pu-uš x [ ]

XVII 4 5° ¶ MUL.SAH KA-šū BAD NUN.MEŠ anax [ ]

XVII 5 6° ¶ MUL Da-mu SA₄ GIGАН.TIL.LA ina [ ]

XVII 6 7° ¶ MUL Nin-kilim i-[ ] 8° ku-ru-sis-iš ŠE.GIŠ.Î NIM [SUG₂]

XVII 7 9° ¶ MUL it-tan-mar Ú.GUG bu-[lim]

XVII 8 11° ¶ MUL.UGA MUL.BI ma-diš S[A₅] 12° EBUR ŠE.GIŠ.Î SIS[A]

XVII 9 13° ¶ MUL.UGA ina KLGUB-sū SAG.MEŠ-šū 14° AN i-na-ta-la ina MU BI ŠEG SUR

XVII 10 15° ¶ MUL.UGA ina KLGUB-sū SAG.MEŠ-šū 16° KI i-na-ta-la ina MU BI ŠEG DU-[x]

XVII 11 17° ¶ MUL.UGA MUL.MEŠ-sū, ba-[u]-[lu] 18° DIM ŠEG ūšu-tum ū-šes-[šir]

XVII 12 19° ¶ MUL.SIPA.ZI.AN.NA ina KI.[GUB-sū] 20° [ša]-qu ina SAG ITI-šū IGÌ MU [x x]

XVII 13 21° ¶ MUL.MIN LI.DUR-su it-ta-na-an-bit x [x]

XVII 14 22° ¶ MUL.SIPA.ZI.AN.NA LI.DUR-su SA₄ 23° [ina 15]-šū MI GÁL BAL-[tum GÁL]

XVII 15 25° ¶ MUL.ZI-bal-ni-tum ma-diš [...]

break

column ii broken

1° MUL.UGA ina KUR NU DUG-AB: EAE, Tablets 50-51
XVI 15 If the Lion is black: the land will not be happy.
XVI 16 If the King is black: the director of the palace will die.
XVI 17 If the Fish comes near the Bow: the harvest of the land will prosper, the beasts of the steppe will increase, the king of the land will become strong and [...], flax and dates will prosper—Mercury to the Furrow [...]
XVI 18 [If the Bow] reaches [the Arrow]: the harvest will prosper, the market will be steady. (Mercury stands in the Furrow.)
XVI 19 [If ...]: the early flax will be fine.
XVI 20 [...] flax [...]
XVI 21 [...] the early flax [...]
rest fragmentary

Translation

XVII 1 If ŠU.PA [...].
XVII 2 If ŠU.PA flares up again and again [...].
XVII 3 If the Pig is massive [...].
XVII 4 If the Pig's mouth is open: the princes [...] to [...].
XVII 5 If Damu is red: healing of the sick [will be] in [...].
XVII 6 If the Mongoose [...] the kurusissu rodent will eat the flax.
XVII 7 If a star becomes visible: famine of the cattle, a great king will be in the land and [...] the land.
XVII 8 If the Raven's star is very red: the flax harvest will prosper.
XVII 9 If the Raven, in its position, its head looks heavenward: in that year there will be rain.
XVII 10 If the Raven, in its position, its head looks earthward: in that year rain will come.
XVII 11 If the Raven's stars are very bright: Adad will bring copious rains.
XVII 12 If the True Shepherd of Anu is high in its position, it is seen at the beginning of its month, [...].
XVII 13 If ditto's navel scintillates: [...].
XVII 14 If the True Shepherd of Anu's navel is red, there is a black spot in its right side: there will be a revolt.
XVII 15 If the Scales is very [...].

Parallels

XVI 19-21. Presumably more MUL.BAN omens to be restored; cf., e.g., MUL.BAN ana MUL.Â.MUSEN KUR-ud ŠE.GIŠ.i NIM SIG₂ K.5713+ :18', LB 1321 r. 12', also K.2071 ii 9.
XVII 8. = EAE 57:7; Rm. 308+ r. 20: MUL.Â.MU.A MUL.Â.BI ma-diš SA₂ [...]. 21 [šumma/ina] Î.MEŠ um-[šum ...]; 82-3-23,120:2' (Sumerian or bilingual): MUL.U.GA mu.bi LUL.AŠ a][l. ...]; K.2241+ :3'5' (bilingual); MUL.U.GA NAGA.G[ ...] MUL.U.GA [... ma-diš sa-a-[mu ...].
XVII 10. = EAE 57:11.
XVII 12-14. See parallels to XVIII.
Text XVIII

V BM 38301 obv.
W Rm. 459


Notes

Parallels


Translation

XVIII 1 If the True Shepherd of Anu [...] 
XVIII 2 If the True Shepherd of Anu, [in its position is [...] and dark: the country will assemble in the fortress. 
XVIII 3 If the True Shepherd of Anu at its coming forth is high, it is seen at the beginning of its month [...] . 
XVIII 4 If the True Shepherd of Anu’s navel scintillates [...] . 
XVIII 5 If the True Shepherd of Anu’s navel is black: [...] . 
XVIII 6 If the True Shepherd of Anu changes its position [...] obscured: the throne in the land [...] . 
XVIII 7 If the True Shepherd of Anu comes close to the right side of the Bristle: Enlil will [...] the land. 
XVIII 8 If the True Shepherd of Anu comes close to the left side of the Bristle: hostilities [...] . 
XVIII 9 If the True Shepherd of Anu is obscured: [there will be] an eclipse of the moon and the sun in all lands, cattle [...] . 
XVIII 10 If the True Shepherd of Anu produces a mishu: the king, lord of the dynasty, through his misdeeds will become full of boils and die. 
XVIII 11 If in its position Ištar stands: the king’s land will revolt against him. 
XVIII 12 If in its position it is filled with stars: there will be pestilence. 
XVIII 13 If in its position the Stranger stands: reign (fraught with) hostilities. 
XVIII 14 If at the beginning of the year Šîmut’s stars are black: there will be pestilence. 
XVIII 15 If at the beginning of the year Šîmut’s stars are flecked7 with white: there will be a revolt. 
XVIII 16 If at the beginning of the year two stars of Šîmut are green, variant: the rear star has a green spot: [...] will be in the land. 
break

Parallels

AN.MI dSin u dUTU ina KUR DÙ. 
XVIII 10. K.3119:24f. and dupl.: [¶ MUL SIPA.ZI.AN]. 
NA MIN (= mešša imšuh) LUGAL EN BALA ina šēr-ti-šû bu- 
bu-²-tû DIRI-ma BE. 
XVIII 13. K.5867:7: [N]a-ka-ru DU BALA SAL. 
KÛR.MEŠ. 
XVIII 16-18. Rm. 230:27: ¶ UD ina IGI MU dSi-m[u-ut ...]. 
Other dŠimut omens: K.8000:2-6. 
XVIII 16. 894-26,174:9: ¶ UD dŠimut 2 MUL.MEŠšû 
S[IG7,MES ...].
Text XIX

X K.12406

XIX 1 1' [Mul.an.ta.sur].ra ma-diš sa₃ ME₃₃

XIX 2 2' [Mul.a]n.ta.sur.ra Mul-šu MI [ ]

XIX 3 3' [ ] (blank) [ ]

XIX 4 4' [Mul.ur.gu.l] MI šā KUR [nu DUG-ab]

XIX 5 5' [Mul.Lugal] MI GAL.UNKIN.[NA É.GAL BE]

XIX 6 6' [ ] Kur-ud GÂN.ZI

Translation

XIX 1  see III 6b

XIX 2  If the star of Antasurra is black: [...].

XIX 4-5  see XVI 15-16

XIX 6  [If ...] reaches [...] : the arable land [...].

Parallels


XIX 4-5. See parallels to XVI 15-16.
APPENDIX

Astrolabe B Section A (KA V 218)

[Text]

Note

Lines i 27-36 (Month IV) are duplicated on 81-7-27,217, right-hand column, with the same arrangement as on KAV 218, i.e., the Sumerian version is followed by the Akkadian version.
\[ BPO \text{ 2: EAE, Tables 50-51} \]
Glossary

The Glossary includes all words occurring in the protases and in the commentaries except star names, for which see the star catalog. For the technical terms, reference is made to the section of the Astronomical Introduction where they are discussed.

Sumerograms are cross-referenced to the corresponding Akkadian word, when known.

Inflected verb forms appear under the infinitive.

Words occurring only in the apodoses are not listed, since a list of apodoses, in transcription and with reference to the translation, is included in this fascicle.

The Glossary does include those words which appear after the introductory anā in Texts I-VIII (see Introduction § 3.2.2), after a star name.

á
abunnatu navel (of SIPA.ZILAN.NA) see 2.2.2.3

adannu specified time see 2.2.1.1

adāru adīr is obscured see 2.2.2.1

adi EN 2šū (= adī šinīšu) secondly

agū tiara see 2.2.6.2

ahāmeš one another

ahāzu marry

alādu ulludu give birth

al.Sl₄.Sl₄ see sāmu

amāru nanmuru (nenmuru, nēmuru) is visible see 2.2.1.1.1, 2.2.1.2, 2.2.2.4

innammar

ittanmar rises heliacally see 2.2.1.1

innamir

[BM 2, 153]
amurru  west
    ša IM.MAR.TU (= amurri) the western (star)  IX 17; XII 4
AN(-e)  see šamū
AN,NE  see kararu
AN.TA  see elū
apāru  see agū
arḥu  month  see 2.2.1.1
    ITI-šū (= arḥišu) itiq  (if the star) goes beyond its month  IX 1, 2, 4; X 1
    ina ITI.B1 (= arḥišu) in its month  IX 8
    ina rēš ITI-šū (= arḥišu) at the beginning of its month  XVII 12; XVIII 3
arki  behind  see 2.1.2.3
    wr. EGIR  II 12b; III 14b, 30, 35
arkū  (unkn.)  III 21
arkū  rear
    MUL EGIR-ū (= kakkabu arkū) the rear star  XVIII 16
arqu  green  see 2.2.6.1
    wr. SIG7  IX 29, 30; XII 16, 17; XVIII 16
āsū  come forth  see 2.2.1.2
    Makrū ina lihbīša inubma ū-a (= ušša) Mars enters into  IV 5a; V 3a; VI 5a
    (Venus) and comes forth (again)  II 5a; III 3b; XVIII 3
    ina Ī-sū (= ina āšša) at its coming forth
āššu  because  III 11c
ba’ālu  be brilliant  see 2.2.2.2
    iba’īl(ū)ma  III 3a, 6a, 16a; [IV 10a]
    ba’lu  XV 31; XVII 11
BABBAR  see pešū, pušu
BAD  see petū
balātu  see bēlet balāṭi sub bēltu
banū  create
    Dīm (= banū)  (lexical equation)  III 22a
barāšu  sparkle  see 2.2.4
    ibarrusu  VI 3a
bašū  be
    nu GĀL (= ul ibašī) there is not  XV 29; XVI 1
BE-ma  see šumma
bēltu  lady
    bēlet balāṭi (Gula)  II 7, 10
bēlu  lord
    EN (= bēl) erṣerti (Ninazu)  III 11c
binūtu  creation, creature (lexical explanation)  III 22a
bīri tu  midst
    wr. DAL.BA.AN.NA  III 32
būlu  cattle
    ana būli
    ana ukulti būli
    bu-lu la7 lu bu-lu  II 12c; IV 4; V 2; VI 2
    III 23
DAL.BA.AN.NA  see bīritu
**Glossary**

- **da’mu**
  - dark see 2.2.2.1
  - *kakkabānīšu... da-mu*
  - *da-am*
  - IX 27, 28
  - XVIII 2

- **DIB**
  - see *etēqu*

- **DīM**
  - see *banū, napbaru*

- **DīM, MA, AN, NA**
  - (unkn.)
  - = *binūt šamē*
  - III 22
  - III 22a

- **DīM₄**
  - see *sanāqu*

- **DIN**
  - see *balātu*

- **dīpāru**
  - torch see 2.2.2.3
  - kīma dipārī inambut
  - [IX 20]; XII 7

- **DIRI**
  - see *malū*

- **DU**
  - see *uzuzzu*

- **DUG₄, GA**
  - see *qabū*

- **DUL.LA**
  - veiled see 2.2.2.1
  - (probably) = *katmu*
  - I 19

- **du’um(at)**
  - very dark see 2.2.2.1
  - XV 9; XVI 7

- **È**
  - see *ašū*

- **È.TŪR**
  - see *tarbaṣu*

- **EGIR**
  - see *arki, arku*

- **ekēlu**
  - become dim see 2.2.2.1
  - MUL.IGI-šu mādiš ekil its (Enmešarra’s) front star (or: the star’s appearance (= *kakkabu panūšu*)) is very dim ūtakkal becomes dim
  - XVI 8
  - [IX 19]; XII 6

- **elū**
  - upper see 2.2.1.1.2, 2.2.8.4
  - wr. AN.TA
  - IX 23, 25, 27, 29, 30, 31, 33, 34; XII 10, [12, 14], 16, 18, 20

- **emēdu**
  - stand close
  - MUL.UZ ana MUL.UR.BAR.RA īmīd
  - nenmuḍu meet (optical phenomenon) see 2.2.8.4
  - II 12g
  - IX 23, 24; XII 10, 11

- **ereb šamši**
  - sunset see 2.2.1.1.2
  - wr. dUTU.SU.A
  - west
  - wr. dUTU.SU.A
  - I 17; [IV 9, 9a]
  - IV 6a

- **erēbu**
  - enter see 2.2.8.1
  - Makru ana libbiša TU (= īrub)
  - IV 5a; VI 5, 5a

- **erpu**
  - cloudy
  - UD ŠU , = ūmu erpu cloudy day
  - III 4a, 28a

- **erṣetu**
  - earth
  - bēl KI-tim (= erṣetī) (Ninazu)
  - III 11c

- **etēqu**
  - pass by (or between) see 2.2.8.2 see also *adannu, arhu*
  - IV 2a; [V 1b]

- **ezēbu**
  - leave behind see 2.2.8.2

- **GABA**
  - see *irtu*

- **GAL**
  - see *rabū*

- **gapāsu**
  - be brilliant? see 2.2.2.2 (meaning based on occurrence beside ba‘ātu)
  - MUL.ŠAḤ guppuṣ
  - Tūtū guppusat
  - Tūtū gittuṣat
  - XVII 3
  - XV 25
  - III 10a

---

[BM 2, 155]
GIL  
see parâku

GIM  
see kima

GIR  
see šépu

GUB.BA  
see manzâzu

ḥantîš: promptly

ḥantîš ul innamrû (the planets) do not rise (heliacally) promptly

ḥantîš irabbû (the planets) set promptly

harâpu: be early

SAG = harâpu (lexical equation)

NIM = ma (≡ ihru?ma?) IGI rises early  see 2.2.1.1

harrân šamši: road of the sun  see 2.2.1.2

haruptu: early

IM.SAG = haruptu (lexical equation)

idu: side, direction (preposition)

Â . . . (DU) (stands) in the direction (of the south, etc.)

ina idîsu

IGI: see amâru, mahru, panu preposition, panû

IGI-ît: see mihrît

IGI.ÎÄ: see tåmartu

iltûnu: north

ša IM.SI.SÁ (≡ iliâni) the northern (star)

IM.Î see šütu

IM.KUR.(RA) see šadû

IM.MAR.TU see umrû

IM.SI.SÁ see iltanû

IM.U.x.LU see šütu

imittu: right

wr. 15

irtu: chest (of ŠU.GI)

ištêniš: together

wr UR.BI

išû: have

i-šu-u šarûrûsu (obscure)

ITI: see arhu

itti: with  see 2.2.8.3

KA: see pû

KA×MI see adâru

kajânu: (or kajamânu) normal  see 2.2.2.4

wr. SAG.UŠ

kakkabu: star

wr. MUL

MUL.IGI.BI/IGI-šû (see panû)

MUL. BI (= kakkabû šû)

MUL.šû (= kakkabûšu)

MUL.BI (= kakkabûšu)

MUL.MEŠ (= kakkâbäni)

UL.MEŠ-šû (= kakkâbânišu)

III 19a

III 20a

III 5c

IX 5, 6, 8, 9, 11

III 24b

III 5c

II 12f, 12h

III 5b

XII 2

XV 32; XVIII 7

XV 9; XVI 7

IV 4a; [V 2a]; VI 2a

II 11

IX 21, 22; XII 8, 9; XVI 13

IX 27-30

XVI 9; XVII 7; XVIII 16

XVI 8-11

IX 1-4, 6, 8, 9, 11; X 1

XIX 2

XVII 8

IX 23-34; XII 10-21, XVI 1, 2, 4; XVII 11; XVIII 12, 14-16

XV 11-13, 20-22, 30, 31, 33-35

[B M 2, 156]
kal all

kalātī all year see 2.2.1.2.1

kararu noonday sun see 2.2.4

karu-an.NE

KASKAL see harrān šamši

kašādu reach see 2.2.8.2

wr. KUR-ad

katmu veiled see 2.2.2.1

wr. DUL.LA

KI see itti

KI.GUB see manzāzu

kima like (preposition)

wr. GIM

KILKUR.KUR.ŠE (unkn.)

KIL-tim see ertetu

KIL.TA see šaplu, šaplu

KUR see kašādu, naπāhu

KUR.KUR see nakaru

lamū circle around see 2.2.1.2.1

see also tarbaṣu

lapātu touch

SAR = šurrū ša lapāti (lexical equation)

lemēnu see lummunu

LI.DUR see abunnatu

libbu (preposition)

anā libbi into

inā libbi in

LUL.AŠ see mādiš

lummunu inauspicious, very faint

ma (particle introducing comment)

mādiš very (much)

see ekēlu, sāmu, šalmu

wr. LUL.AŠ

magal very (much)

see sāmu, šarāru

mahāru mithuru be equal see 2.2.2.4

SIPA.ZI.AN.NA kakkabāniru imdahharu

mahru front (adjective)

malā full

kakkabāniru malā full of stars

malā

mullā complete (verb) see 2.2.1.1

dUDU.IDIM.MES ūmēšina uš umallū

manzāt rainbow

manzāzu position see 2.2.1.2

wr. GUB.BA

wr. KI.GUB

VI 3b; [IX 20]; XII 7; XVI 9

III 23

III 28c; IX 3; X 3

XVI 9

VI 3a, 3b

II 12e, 12f; IV 4b; V 2b; VI 2b;

XVI 18; XIX 6

I 19

IV 5a; VI 5, 5a

III 6a, 7c, 11c, 30a

VI 4a; XV 30

III 28b, 28c, 29a

XVII 15

XVI 11

XVIII 12

XVIII 11-13

XVII 9, 10, 12; XVIII 6
mašahu  (a luminous phenomenon)  
see mīšu  

mašrū  wealth, riches  

MI  see šalmu, šulmu  

mihrit  facing  see 2.1.2.3  
wr. 1G1-š  

mīšhu  (a luminous phenomenon)  see 2.2.5.1, 2.2.5.2  
mīša  imīsh  

mīšlu  half  
misīl  tarbaši  see 2.2.1.2.1  

MU  see aššu, qabū, šattu  

MUL  see kakkabu  

MURUB₄  see qablu  

mušitu  night  

nabātu  shine brightly, scintillate  see 2.2.2.2, 2.2.2.3, 2.2.3, 2.2.4  
inambūt  
ittanabatu  
ittanabīt(u)  
wr.  UL.UL.MES  
ittanbitu  
uttabbaš  

nadū  

SIG₇  ŠUB-di  (= urqa  iddi)  spotted with green  see 2.2.6.1  

naglu  streaked?  see 2.2.6.1  
pūša naglu  

nakāru  change  see 2.2.1.2  
wr.  KUR.KÜR  (= unakkir  or  uttanakkar)  

NAM  (unkn.)  

NAM.SAL.TUK  see  ahāzu  

namru  bright  see 2.2.2.4, 2.2.4  

napāhu  rise  see 2.2.1.1  
wr.  KUR(-ha)  (= ippuha  or  ittapha)  

wr.  KUR.MEŠ-ni  (plural,  =  ippuhuni  or  ittaphuni)  
ittanpuha  scintillate  see 2.2.3  
[MUL.MEŠ  itt]ananpahu  
MUL.ŠU.PA  ittan[pah]  

naphu  scintillating  see 2.2.3  
wr.  SAR.MEŠ(-ha)  

napharu  totality  

DĪM = napharu  (lexical equation)  

našū  bear  
see šarāru  

natālu  look, face  see 2.2.1.2  

nehesu  contract?  see 2.2.8.4  

nemuru  see amaru  

nenmudu  see emedu  

NIM  see harāpu  

[BM 2, 158]
nipbu  (heliacal) rising  see 2.2.1.1.1
   wr. SÁR

panu  (in) front (preposition)  see 2.1.2.3
   \textit{pan suṭṭi} spring

panū  face, looks

panū  front (adjective, see also \\textit{mahru})
   wr. IGÍ

parāku  lie across
   \textit{iprīk}

pa-ar-ku  (unkn.)

peṣū  white  see 2.2.6.1
   wr. BABBBAR

petū  open  see 2.2.8.4
   \textit{MUL.SÁH pāṣu ipte}

pū  mouth
   see petū

pūṣu  white spot
   BABBBAR (= pūṣa) naglu

qablu  middle
   \textit{ina MURUB₄-šú} (= qablišu)

qabū  say
   \textit{iqabbī} it says (commentary term)
   \textit{iqqabbī} it is said (commentary term)
   wr. DUG₄-ΓA
   wr. MU
   \textit{qabi} it is said (commentary term)

qerēbu  come close  see 2.2.8.2

rabū  set (heliacally)  see 2.2.1.1
   wr. ŚU

rakābu  ride  see 2.2.8.4
   \textit{U₃.MEŠ} (= ritkubu) ride on one another

rakāsu  tie
   \textit{ritkusu} conjoined  see 2.2.8.4

reštū  first

rešu  head
   wr. SÁG.MEŠ
   \textit{reš arḫi} beginning of the month
   \textit{reš tarbaši} see 2.2.1.2.1

ritkubu  see rakābu

ritkusu  see rakāsu

SA₅  see sāmu

SAG  see rešu, harāpu

SAG.UŠ  see kajānu
sāmu  
red  see 2.2.6.1  
wt.  SA₅

magal SA₅ (= sam) very red
madis SA₅ very red

wt.  LUL.AŠ AL SI₄ SI₄

sanāqu  
come close  see 2.2.8.2  
wt.  DIM₄

SAR  
see  naphu, nipḫu

SI₄  
see  sāmu

SIG₇  
see  arqu, urqu

Sin  
the Moon

sinnī(at)  
female

suhrmasū  
Goat-fish (= Capricorn)

SUR  
see  sarāru

salāmu  
become black  see 2.2.6.1
ussānanlam(u)

salummū  
(a luminous phenomenon)  see 2.2.5.1, 2.2.5.2

salmu  
black  see 2.2.6.1

wt.  MI

mādiš MI (= șalin) very black

sarāru  
flash  see 2.2.3

magal SUR.MEŠ (= isarruru)

sētu  
light  see 2.2.2.1

šīt šamši  
sunrise  see 2.2.1.1.2

wt.  d UTU.È

east

wt.  d UTU.(È)

sulmu  
black spot

ina imittišu MI (= sulmu) ibašši

šA  
see  libbu

šadu  
east

wt.  IM.KUR(.RA)

šamaš  
the Sun

šāmu  
sky

(ina) AN-e (= šamē)
kakkabāni AN-e (= šamē)
rēšēšu AN (= šamē) ināštala

šanīš  
secondly, alternate explanation

šaplū  
under  see 2.2.8.3

wt.  KI.TA

šaplū  
lower  see 2.2.1.1.2

wt.  KI.TA

šaqū  
high  see 2.2.1.2

šāruru  
brilliance  see 2.2.5.1, 2.2.5.2

šatāhu  
lengthen⁹  see 2.2.8.4

\[BM 2, 160\]
Glossary

šathu  see šatāhu
šattu  year
  *kal MU (= šatti) all year
  *ina IGI MU.KAM (= pan šatti) in spring

šēG  see zanāmu and zumnu
šēpitu  foot end  see 2.2.1.2.1
šēpu  foot (of ŠU.GI)
šE.I.R.ZI  see šārītu
šī  (obscure)
šū  see rabū, erpu
šUB  see nadū
šumēlu  left
  wr. 2,30

šumma  if
  wr. BE-ma

šūt Anu  path of Anu  see 2.2.1.2.1
šūt Ea  path of Ea  see 2.2.1.2.1
šūt Enlil  path of Enlil  see 2.2.1.2.1
šūtu  south
  šā IM. U,.LU (= šāti) the southern (star)
  idi IM.1 (= šāti)

tāmartu  (heliacal) rising  see 2.2.1.1.1
  *ina IGI .I. L[A3:sā3] (= tāmartiša)

tarbašu  cattle pen  see 2.2.1.2.1
  halo  see 2.2.7
  tarbaša lami

TE  see tehū
tību  rising (of wind)
  *ina ZI IM.(KUR) (= tīb šārišādi)

TIR.AN.NA  see manzāt
TU  see erēbu
TÜR  see tarbašu
tehū  approach  see 2.2.8.2
  wr. TE (= itṭi)

US  see rakābu
UD  see ūmu, šumma
  see also BABBAR
UD.DA  see šētu
UD.DUG₄.GA  see adānmu
UD.SUR  see adānmu
UD.ZAL  see uḫḫuru
uḫḫuru  be late  see 2.2.1.1
  wr. UD.ZAL
  wr. ZAL

III 28c; IX 3; X 3
XVIII 14-16
III 24b
XV 10; XVI 5
III 5b
XVIII 8
IX 1-6, 8, 9, 11-14; X 1, 2, 4, 16-23; XI 2, 4, 5
XVIII 11-16
III 24b
III 24b
III 24b
XII 1
II 12f
II 12j
III 21, 24b; VI 6
III 30a
II 15a; III 31
II 12d; III 8a, 8b, 9a, 11d, 12a, 13b; IV 4b; XVI 17
IX 2, 4; X 1, 4
IX 5, 6, 8, 11
IX 1
ukultu  see bālu
UL  see kakkabu
UL.UL  see nabātu
ūmu  day  III 4a, 20a, 28a
unnutu  be faint  see 2.2.2.1
ūtannat
UR.BI  see ıštēniš
urqu  green spot  see ıdı

DU.UTU.È  see ıṭr ısamši
DU.UTU.ŠÚ.A  see ıreb ısamši
uzuzzu  stand  see 2.2.8.1

wr. DU (= ızzaz)
wr. DU-az (= ızzaz)
wr. DU.MEŠ(ni) (= ızzazzu(ni))

ša . . . DU-зу (= ızzazzu)

ZAL  see ıhhuru
zanānu  rain (verb)  II 6a, 12h, 15a; III 30a;
ZI  see ıbu
zik(a)r(at)  male  VI 6; XVIII 11, 13
zimū  appearance  III 6a, 7c, 11c; [XVI 18]
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mār šarri ana bit abišu irrubma
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Bibliotheca Mesopotamica

Primary sources and interpretive analyses for the study of Mesopotamian civilization and its influences from late prehistory to the end of the cuneiform tradition

Edited by Giorgio Buccellati

Volume Two, Fascicle Two

Published Under the Auspices of IIMAS
The International Institute for Mesopotamian Area Studies
Babylonian Planetary Omens:
Part Two

Enuma Anu Enlil,
Tablets 50-51

by Erica Reiner
in collaboration with David Pingree

Undena Publications
Malibu 1981
The present volume is the second in an intended series of studies of the canonical corpus of celestial omens—Enûma Anu Enlil. Tablet 63, the “Venus Tablet”, was published in the first of this series, in Bibliotheca Mesopotamica 2/1. Nineteen texts, probably representing Tablets 50 and 51, form the basis of this study of the constellations or “fixed stars” and the omens associated with them. The constellations correspond to those listed in the Astrolabe B (KAV 218) and the astronomical compendium MUL.APIN. This study contains an Astronomical treatment (comprising discussions of constellations and astronomical phenomena and a star catalog) as well as a Philological one (the reconstruction of Enûma Anu Enlil). This volume includes transliteration and translation of and commentary on the texts, and a glossary and relevant indices.
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