

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With the generous help of A. J. Sachs and the late E. F. Weidner, a list of unpublished tablets in the British Museum and in the Vorderasiatische Abteilung of the Staatliche Museen, Berlin, was made available to us.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only has a substantial percentage of the texts previously been published in autograph copy, but also that most of the unpublished ones are written in a clearly legible Neo-Assyrian script and therefore pose no epigraphic problem.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 I

STAR	DATE OF HELIACAL RISING
1. <i>a-ḥa-ti</i>	
2. <i>Ga-ga</i>	
3. ^d DUMU.ZI	
4. ^d <i>Nin-ki-zi-da</i>	
5. <i>E-pá-e</i> ¹	
6. MUL.MUL	II 1
7. <i>is le-e</i>	II 20
8. <i>Ši-pa-zi-a-na</i>	III 10
9. <i>Ka₄-ak-si-si</i>	IV 15
10. GIŠ.BAN	V 15
11. GÍR.TAB	VIII 5
12. Á.MUŠEN	IX 15
13. KU ₆	XII 15
14. <i>Ša-am-ma-ah</i>	X 15
15. <i>Ka₄-ad-du-uh-ḥa</i>	IX 15
16. MÁŠ	VIII 15
17. MAR.TU	XII 15

¹Read *E-ku-e* by Weidner, and identified with *Ikū* = AŠ.GÁN, the first star of the path of Ea in Tables II and III.

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-ga* MU[L . . . MUL ^dNIN. GIŠ].ZID[A] / MUL ŠUL.PA.È. The last name, corresponding to the Boghazköy tablet's *E-pá-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 $+8^\circ$ for the path of Ea; between -12.2° and $+36.9^\circ$ for the path of Anu; and between -43.2° and $+74.1^\circ$ 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 lē* and EN.TE.NA.BAR.HUM replace GULA and *Numušda*; in the path of Anu, one name in Table III is missing which one would expect from Table II to be UR.GULA; 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 ÛZ 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.

TABLE II

MONTH	CONSTELLATION	"PRINCIPAL" STAR	DECLINATION	DATE OF HELIACAL RISING
I	AŠ.GÁN	α Pegasi	-0.3°	XI 5
	<i>Dilbat</i>	(Venus)		
II	APIN	α Trianguli	+10.7°	
	MÚL.MÚL	η Tauri	+8.0°	II 1
	ŠU.GI	α Persei	+32.5°	XII 15
III	<i>Anunītum</i>	ϕ Piscium	+5.5°	XI 25
	SIPA.ZI.AN.NA	α Orionis	-0.5°	III 10
	UR.GU.LA ²	α Leonis	+23.6°	IV 15
IV	MUŠ ³	ζ Hydrae	+12.5°	IV 15
	KAK.SI.SÁ	α Canis Maioris	-18.2°	IV 15
	MAŠ.TAB.BA	ζ Geminorum (?)	+17.3°	IV 5
V	ŠUL.PA.Ē ⁴	(Jupiter)		
	BAN	δ Canis Maioris	-26.6°	V 15
	MAŠ.TAB.BA.GAL.GAL	α Geminorum	+30.4°	III 10
VI	MAR.GÍD.DA	α Ursae Maioris	+73.2°	
	<i>Kalītum</i> ⁵	ζ Puppis	-34.8°	VI 10
	UGA	γ Corvi	+0.6°	VI 10
VII	ŠU.PA	α Boötis	+39.7°	VI 15
	NIN.MAH	γ Velorum	-41.0°	
	<i>Zibanītum</i>	α Librae	+2.1°	VII 15
VIII	EN.TE.NA.BAR.ĤUM	α Centauri	-43.2°	VII 15
	UR.IDIM	α Lupi	-29.0°	VII 15
	GÍR.TAB	α Scorpii	-12.2°	VIII 5
IX	LUGAL	α Leonis	+23.6°	V 15
	<i>Šalbatānu</i>	(Mars)		
	UD.KA.DU ₈ .A	α Cygni	+36.9°	IX 15
X	ÚZ	α Lyrae	+40.4°	VIII 15
	GU.LA	α Aquarii	-12.2°	XI 5
	<i>Alluttum</i> ⁶	δ Cancri	+23.4°	IV 5
XI	Á.MUŠEN	α Aquilae	+6.5°	IX 15
	<i>Numušda</i>			
	SIM.MAH	ζ Pegasi	-3.5°	X 15
XII	<i>Damu</i>			
	KU ₆	α Piscis Austrini	-43.5°	XII 15
	<i>Marduk</i> ⁷	(Jupiter)		
	KA ₅ .A ⁸	80 Ursae Maioris	+74.1°	

²UR.A Pinches³NAGAR Pinches⁴AL.TAR Pinches⁵BIR Pinches⁶AL.LUL Pinches⁷KA₅.A Pinches⁸Marduk Pinches

TABLE III

	STAR	DIRECTION	
Ea	1	AŠ.GÁN	
	2	MUL.MUL, after AŠ.GÁN	East
	3	<i>Is lē</i> , after MUL.MUL	East
	4	SIPA.ZI.AN.NA, after <i>Is lē</i>	East
	5	KAK.SI.SÁ, after SIPA.ZI.AN.NA	East
	6	BAN, after KAK.SI.SÁ	East
	7	{NUN.KI ^d É-a}, after BAN	East
	8	{NIN}.MAḪ, to the right of ^d Ea	East
	9	UR.IDIM, to the left of ^d Ea ⁹	East!
	10	<i>Šalbatānu</i> , before ^d Ea	
	11	EN.TE.NA.BAR.ḪUM	
	12	KU ₆	
Anu	1	<i>Dilbat</i>	
	2	GÍR.TAB, after <i>Dilbat</i>	
	3	<i>Zibanītum</i> , before GÍR.TAB	West
	4	UD.KA.DU ₈ .A, before <i>Zibanītum</i>	
	5	ŠU.GI, after UD.KA.DU ₈ .A	Northeast
	6	SIM.MAḪ, between ŠU.GI and ^d Anu	SW of ŠU.GI, W of Cancer
	7	{UR.GU.LA?}	
	8	{MAŠ.TAB.BA.TUR.TUR}	
	9	MAŠ.TAB.BA.GAL.GAL, before ^d Anu	West of Cancer
	10	<i>Alluttum</i> , a red star, after MAŠ.TAB.BA	East
	11	UGA, after <i>Alluttum</i>	East
	12	<i>Nēberu</i>	
Enlil	1	APIN, before MAR.GÍD.DA	West
	2	<i>Anunītum</i> , before ^d Enlil	
	3	^d MUŠ, after <i>Anunītum</i>	Southeast
	4	MAR.GÍD.DA, between [. . .] and East	
	5	{ŠU.PA?}	
	6	ÛZ, after {ŠU.PA}	East
	7	UR.BAR.RA, after ⁹ ÛZ	West!
	8	Á.MUŠEN	
	9	^d Da[<i>mu</i>], a red star	
	10	ŠUL.PA.È	
	11	KA ₅ .A, after ŠUL.PA.È	
	12	ŠUDUN.IM.U _x .LU, a red star, before ŠUDUN	

⁹This 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 ($\phi = 32;30^{\circ}$); 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 $36;30^{\circ}$ 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."¹⁰ Through the good offices of Mr. and Mrs. R. Webster, and with their assistance and that of Ms. Phyllis Pitluga, 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.

¹⁰In 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), Schaumberger (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 ^dMUŠ (+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 IV

	STAR	IDENTIFICATION	"PRINCIPAL" STAR	δ
Enlil	1 APIN	Triangulum + γ Andromedae	α Tri.	+13.4°
	2 UR.BAR.RA, the seed-funnel of APIN	α Trianguli		
	3 ŠU.GI	* Perseus	α Pers.	+35.3°
	4 GĀM	* Auriga	α Aur.	+36.5°
	5 MAŠ.TAB.BA.GAL.GAL	* α + β Geminorum	α Gem.	+31.8°
	6 MAŠ.TAB.BA.TUR.TUR	* ζ + λ Geminorum	ζ Gem.	+18.8°
	7 AL.LUL	* Cancer	δ Canc.	+23.7°
	8 UR.GU.LA	* Leo	α Leo.	+22.8°
	9 LUGAL, in the breast of UR.GU.LA	* α Leonis		
	10 <i>Ummulu</i> stars in the tail of UR.GU.LA	21 Leonis (?)		
	11 ^d A.EDIN, the frond of the date palm	γ + Comae Berenices (?)		
	12 ŠU.PA	* Boötes	α Boo.	+36.6°
	13 HĒ.GĀL- <i>a-a</i> which is before it	Part of Coma Berenices (?)		
	14 BAL.TĒŠ.A which is after it	Corona Borealis (?)	α Cor. Bor.	+39.9°
	15 MAR.GĪD.DA	Ursa Maior	α Ur. Mai.	+73.2°
	16 KA ₅ .A which is with the cart-pole of MAR.GĪD.DA	80-86 Ursae Maioris (?)		
	17 U ₈ which is at the front of MAR.GĪD.DA	Northern part of Boötes (?)		
	18 MU.BU.KĒŠ.DA			
	19 MAR.GĪD.DA.AN.NA	Ursa Minor	α Ur. Min.	+72.8°
	20 DUMU.UŠ.É.MAḤ which is in its rope	Polaris (?)		
	21 DINGIR.GUB.BA.MEŠ			
	22 DINGIR.KU.A.MEŠ			
	23 ÛZ	* Lyra	α Lyr.	+39.6°
	24 UR.GI ₇ which is before ÛZ	* Hercules	β Herc.	+31.8°
	25 ^d LAMMA, the bright star of ÛZ	α Lyrae		
	26 NIN.SAR and ÌR.RA.GAL, two stars after it	ζ and ξ Lyrae (?)	ζ Lyr.	+38.1°
	27 UD.KA.DU ₈ .A	* Cygnus and (part of) Cepheus	α Cyg.	+37.5°
	28 ŠAḤ <i>Da-mu</i> which is to the right of it			
	29 ANŠE.KUR.RA which is to the left of it			
	30 LU.LIM which is after it	Andromeda	α Andr.	+13.4°
	31 <i>Harriru</i> ^d TIR.AN.NA, the <i>ummulu</i> stars in the breast of LU.LIM	18, 31, 32 Andromedae (?)		
	32 KA.MUŠ.Ì.KÚ.E, the red star in the kidney of LU.LIM	β Andromedae	β Andr.	+19.2°
	33 <i>Marduk</i>	Jupiter		

	STAR	IDENTIFICATION	"PRINCIPAL" STAR	δ
Anu	1 AŠ.GÁN	* α, β, γ Pegasi + α Andromedae	α Peg.	+1.3°
	2 Šinunūtum which is before AŠ.GÁN	Western fish of Pisces + western part of Pegasus	ζ Peg.	- 2.1°
	3 Anunītum which is after AŠ.GÁN	* Eastern fish of Pisces	ϕ Pisc.	+8.1°
	4 LÚ.ḪUN.GÁ which is after it	* Aries	α Ari.	+7.4°
	5 MUL.MUL	* Pleiades	η Tau.	+10.8°
	6 GU ₄ .AN.NA	* Taurus	α Tau.	+5.7°
	7 ^d Is lé	* α Tauri + Hyades		
	8 SIPA.ZI.AN.NA	* Orion	α Or.	+1.4°
	9 LÚ.LÁL and <i>Latarak</i> which are before SIPA.ZI.AN.NA	γ, ξ Geminorum (?)		
	10 DAR.LUGAL which is after it	Canis Minor (?)	α Can. Min.	+7.6°
	11 KAK.SI.SÁ	* α Canis Maioris	α Can. Mai.	- 17.2°
	12 BAN	* $\tau, \delta, \sigma, \epsilon$ + Canis Maioris	δ Can. Mai.	- 25.8°
	13 ^d MUŠ	* Hydra	ζ Hyd.	+12.5°
	14 UGA ^{mušen}	* Corvus	γ Cor.	- 1.6°
	15 AB.SÍN	* α + Virginis	α Virg.	+5.3°
	16 ZI.BA.AN.NA, the horns of <i>Zuqaqīpu</i>	Libra	α Lib.	- 0.8°
	17 <i>Za-ba₄-ba₄</i>			
	18 Á.MUŠEN	* Aquila	α Aquil.	+5.9°
	19 LÚ.BAD			
	20 <i>Dilbat</i>	Venus		
	21 <i>Šalbatānu</i>	Mars		
	22 SAG.UŠ	Saturn		
	23 GU ₄ .UD	Mercury		
Ea	1 KU ₆	* Piscis Austrinus	α Pisc. Aus.	- 42.4°
	2 GU.LA	* Aquarius	α Aq.	- 11.3°
	3 NUN.KI ¹¹	* ζ + Puppis	ζ Pupp.	- 34.9°
	4 NIN.MAḪ which is to the right of it ¹²	* γ + Velorum	γ Vel.	- 41.4°
	5 EN.TE.NA.BAR.ḪUM	* Centaurus	α Cent.	- 45.9°
	6 GIŠ.GÁN.ŪR which is at its side			
	7 ^d Šullat and ^d Ḫaniš which are after it			
	8 <i>Numušda</i> which is after them			
	9 UR.IDIM which is to the left of <i>Zuqaqīpu</i>	* Lupus	α Lup.	- 31.8°
	10 <i>Zuqaqīpu</i>	* Scorpius	α Scorp.	- 14.9°
	11 ^d Li ₉ .si ₄ in the breast of <i>Zuqaqīpu</i>	α Scorpii		
	12 ŠÁR.UR ₄ and ŠÁR.GAZ in the tail of <i>Zuqaqīpu</i>	λ, ν Scorprii	λ Scorp.	- 28.6°
	13 PA.BIL.SAG which is after them	* Sagittarius+ (θ + Ophiuchi?)	α Sag.	- 39.0°
	14 MÁ.GUR ₈			
	15 SUḪUR.MÁŠ	* Capricornus	α Capr.	- 16.3°

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

¹²In 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 \approx 14^h-16^h, $\delta \approx$ -30° - -55°) which is to the left of *Zuqaqīpu* (Scorpius: RA in 1950 \approx 16^h-18^h, $\delta \approx$ -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

STAR	IDENTIFICATION	DECLINATION
edge of UD.KA.DU ₈ .A	γ Cygni (?)	+34.0°
breast of UD.KA.DU ₈ .A	α Cygni	+37.5°
knee of UD.KA.DU ₈ .A	α Lacerti (?)	?
heel of UD.KA.DU ₈ .A	β Cassiopeiae (?)	+43.3°
bright star of ŠU.GI	α Persei	+35.3°
<i>ummulu</i> stars of ŠU.GI	60 Persei (?)	ca. +35°
MAŠ.TAB.BA.GAL.GAL	α Geminorum	+31.8°
UR.GU.LA	ε Leonis (?)	+32.9°
A.EDIN	γ Comae Berenices	ca. +42°
ŠU.PA	α Boötis	+36.6°
DINGIR.GUB.BA.MEŠ		
UR.GI ₇	β Herculis	+31.8°
ÙZ	α Lyrae	+39.6°

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.ŠĀR.RA as it normally is, then it extends to the stars of Taurus just north of MUL.MUL.

TABLE VI

STAR	EXEMPLARY STARS	LATITUDE
MUL.MUL	η Tauri	+3;20°
GU ₄ .AN.NA	α Tauri	-5;10°
SIPA.ZI.AN.NA	α Orionis	-17°
ŠU.GI	χ ¹ Orionis	-3;45°
GĀM	ζ Persei	+11°
MAŠ.TAB.BA.GAL.GAL	γ Aurigae = β Tauri	+5°
AL.LUL	β Geminorum	+6;15°
UR.GU.LA	δ Cancri	-0;10°
AB.SĪN	α Leonis	+0;10°
<i>Zibanitum</i>	α Virginis	-2°
<i>Zuqaqipu</i>	α ² Librae	+0;40°
PA.BIL.SAG	α Scorpii	-4°
SUHUR.MÁŠ	α Sagittarii	-18°
GU.LA	ν ¹ , ν ² Sagittarii	+0;45°
KUN.MEŠ	β Capricorni	+5°
SIM.MAH	α Aquarii	+11°
<i>Anunitum</i>	δ Aquarii	-7;30°
LÚ.ḪUN.GÁ	ω Piscium	+6;20°
	δ Piscium	+2;15°
	η Piscium	+5;20°
	α Arietis	+10;30°
	38 Arietis	-5;15°

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 Gössmann, 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 Gössmann and other sources. The exact readings of some star names, such as EN.TE.NA.BAR.ĤUM, 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.

- AB.SÍN. "The Furrow." Gössmann 4. α + Virginis. Anu 15. XVI 17-18.
- A.EDIN = *Erua*. Gössmann 9. γ + Comae Berenices (?). Enlil 11.
- AGA^dA-nim. "The Crown of Anu." Gössmann 5, 25. Also written AGA.AN.NA/NE, ÁG.AN.NA_x(BÚR)/NE, q.v. Identified with *Is lē* (Astrolabe B B i 7-8, MUL.APIN I ii 1).
- AGA.AN.NA/NE. Gössmann 25, 31. See AGA^dA-nim.
- ÁG.AN.NA_x(BÚR) (AfO 19 107 iii 23). See AGA^dA-nim.
- ÁG.AN.NE. See AGA^dA-nim. VI 3.
- agru*. See LÚ.ĤUN.GÁ.
- AL.LUL = *alluttu*. "The Crab." Gössmann 14. Cancer (van der Waerden 21 identifies it with Canis Minor). Enlil 7. For another logogram see NAGAR. III 7a-b, 28a-b, 33a, 35a; XV 11-13.
- alluttu*. Gössmann 15. See AL.LUL.
- AL.TAR. Gössmann 16. See UD.AL.TAR.
- ^dAMAR.UD = ^d*Marduk*. Gössmann 20. Jupiter. III 29-29a.
- AMA.RU.UM.AN.NA. Cf. (wr. BUR.RU.UM.AN.NA) AfO 19 107 iii 7.
- Amurru*. See MARTU.
- Á.MUŠEN = *erū*. "The Eagle." Gössmann 2. Aquila. Anu 18. III 28a; X 21; XI 7.
- ANŠE.KUR.RA = *sīsū*. "The Horse." Gössmann 32. Enlil 29.
- AN.TA.SUR.RA = *sārīru*. "Flashing." Gössmann 36. Probably a term for shooting star or meteor. II 2; III 6, 6b; XIX 1-2.
- AN.TA.ŠUB.ŠUB.BA. "Falling from Above." Gössmann 35. Probably a term for meteorite. I 20; III 20; IV 14.
- ^dAnu. Gössmann 24. III 32-32a, 33-33a. Stars called the star of the god Anu are AL.LUL (Astrolabe B B ii 24-27, MUL.APIN I i 7), LU.LIM (Astrolabe B B ii 15-17, = III 32-32a), MU.BU.KÉŠ.DA (MUL.APIN I i 19).
- Anunītu*. Gössmann 27. The eastern fish in Pisces. Anu 3.
- Anzū*. See ^dIM.DUGUD.MUŠEN.
- APIN = **epinnu*. "The Plow." Gössmann 39. Triangulum Boreale with γ Andromedae. Enlil 1. For stars belonging to this constellation see UR.BAR.RA. I 3; III 2.
- āribu*. Gössmann 40. See UGA.MUŠEN.
- arītu*. Gössmann 41.
- A.ŠÀ.GA. See AŠ.GÁN. IX 12.

- AŠ.GÁN = *ikū*. “The Field.” Gössmann 110. α , β , and γ Pegasi with α Andromedae. Also wr. EŠ₄.GÁN. For another logogram see A.ŠÀ.GA. II 15a-c, e; III 6c, catch line; IV 3a; IX 1, 16-17, catch line; X 1, 52; XII 1-4; XV 19-23.
- BAL.TÉŠ.A. MUL.BAL.TÉŠ.A = *kakkab balti*. “Star of Dignity.” Gössmann 44. Corona Borealis (?). Enlil 14. III 11d.
- BAN (GIŠ.BAN) = *qaštu*. “The Bow.” Gössmann 47. τ , δ , σ , ϵ + Canis Maioris. 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 = *kalītu*. “The Kidney.” Gössmann 56. ζ + 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.
- BURANUN = *Purattu*. “The Euphrates.” Gössmann 53; AfO 19 107 iii 10.
- ^d*Damu*. Gössmann 97. See ŠAḤ (MUL.APIN I i 29). XVII 5.
- dāpinu*. Gössmann 99. See UD.AL.TAR.
- DAR.LUGAL. “The Rooster.” Gössmann 396. Canis Minor (?). Anu 10.
- 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.
- DINGIR.GUB.BA.MEŠ. “The Standing Gods.” Gössmann 112. Enlil 21.
- DINGIR.KU.A.MEŠ. “The Sitting (?) Gods.” Gössmann 113. Enlil 22.
- DUMU.UŠ.É.MAḤ. Gössmann 191. Polaris (?). Enlil 20.
- ^d*É-a*. Gössmann 115.
- EN.GIŠGALAN.NA. Gössmann 120. Jupiter.
- ^d*En-lil*. Identified with ŠU.PA (MUL.APIN I i 12, ii 46, and iii 21). III 34-34a.
- EN.ME.ŠÁR.RA. Gössmann 122. ζ , σ + Persei with, perhaps, some of the northern stars of Taurus. Identified with (GIŠ.)GIGIR. For stars belonging to the constellation see GIŠ.KAK ^dEN.ME.ŠÁR.RA. XVI 8-9, 12.
- EN.TE.NA.BAR.ḤUM = *habasīrānu*. 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.
- epinnu*. See APIN.
- E-ra-’al-BU*. Gössmann 124.
- Eridu*. Gössmann 127. See NUN.KI.
- eriquu*. See MAR.GÍD.DA.
- erū*. See Á.MUŠEN.
- Erua*. Gössmann 126. See A.EDIN.
- EŠ₄.DAR = *Ištar*. Gössmann 134. Venus. X 16; XI 1.
- EŠ₄.GÁN. See AŠ.GÁN.
- É.TÛR = *tarbašu*. “The Cattle Pen.” Also wr. É.TÛR.RA, E.TU.RA.ME, E.TU.RA.AM.MA/MI, q.v. III 21.
- É.TÛR.RA. Gössmann 130. See É.TÛR. III 22.
- E.TU.RA.AM.MA/MI. See É.TÛR.
- E.TU.RA.ME. Gössmann 131. See É.TÛR.
- E.TU.RAM.MI. AfO 19 106 ii 13. See É.TÛR.
- GABA ŠU.GI. “The Chest of the Old Man.” Probably δ Persei. See ŠU.GI. XV 9; XVI 7.
- GAL = *rabbu, rabū*. “The Great.” Gössmann 62.
- GÀM = *gamlu*. “The Crook.” Gössmann 64. Auriga. Enlil 4. III 9a, 29a; VI 4-4b; VIII 2, 5; XVI 6, 13.
- gamlu*. See GÀM.
- GÁN.ÛR(RA) (GIŠ.GÁN.ÛR) = *maškakātu*. “The Harrow.” Gössmann 66. Ea 6. For stars belonging to the constellation see U₅.GÁN.ÛR. II 12e-f.

- GIGIR (GIŠ.GIGIR) = *narkabtu*. “The Chariot.” Gössmann 89. Identified with EN.ME.ŠÁR.RA.
- GILIM(BA). Gössmann 84 and 227.
- GÌR.MEŠ ŠU.GI. “The Feet of the Old Man.” Probably β+ Persei. See ŠU.GI. XV 10; XVI 5.
- GÍR.TAB = *zuqaqipu*. “The Scorpion.” Gössmann 94. Scorpion. Ea 10. Its deity is ^d*Išhara*, q.v. For stars belonging to the constellation see LI₉.SI₄, *ziqit* 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.ÛR. See GÁN.ÛR.
- GIŠ.GIGIR. See GIGIR.
- GIŠ.KAK ^dEN.ME.ŠÁR.RA. “The Cart Pole of EN.ME.ŠÁR.RA.” Probably ζ Persei. See EN.ME.ŠÁR.RA. XVI 11.
- GIŠ.RÍN. Gössmann 368. See *zibānītu*.
- GU₄.AN.NA. “The Bull of Heaven.” Gössmann 77. Taurus. Anu 6. For stars belonging to the constellation see *Is lē*. XV 30-31.
- GÚ.ĦAL. Gössmann 80.
- GU.LA. “Great.” Gössmann 81. Aquarius. Ea 2. III 28a, 31a.
- GU₄.UD = *ših̄tu*. “Jumping.” Mercury. Anu 23. See UDU.IDIM.GU₄.UD. III 7c, 29a; XVI 17-18.
- ḥabašīrānu*. See EN.TE.NA.BAR.ĦUM.
- ^d*Har-ri-ru*. Gössmann 184. 18, 31, and 32 Andromedae (?). Enlil 31.
- ĦÉ.GÁL-*a-a*. MÚL.ĦÉ.GÁL-*a-a* = *kakkab nuḥši*. “Star of Abundance.” Gössmann 185. Part of Coma Berenices (?). Enlil 13. IX 7.
- ĦU.GÁ. See UGA(MUŠEN). XIV 2.
- ĦUN.GÁ. See LÚ.ĦUN.GÁ.
- ÍD.BURANUN. See BURANUN.
- ÍD.IDIGNA. See IDIGNA.
- IDIGNA = *Idiglat*. “The Tigris.” Gössmann 192; AfO 19 107 iii 9. XVI 14.
- Idiglat*. See IDIGNA.
- ikū*. Gössmann 193. See AŠ.GÁN.
- ilū sibitti*. See ^dIMIN.BI, *^d*sibi*.
- ^dIM.DUGUD.MUŠEN = *Anzū*. “The Anzū Bird.” Gössmann 196. III 11a-b; XVI 10.
- ^dIMIN.BI = *ilū 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.
- IM.ŠEŠ = *marratu* (?). Gössmann 197. Cf. MUL.APIN I iii 7.
- IM.ŠU.RIN.NA = **tinūru*. “The Oven.” Gössmann 198. II 7; III 10; VIII 5.
- IN.DUB.AN.NA. Gössmann 199. Cf. (wr. IB.DUB.AN.NA) AfO 19 107 iii 6.
- Is lē*. “The Jaw of the Bull.” Gössmann 200. α Tauri with the Hyades. Anu 7. Identified with AGA ^d*A-nim*, q.v. IX 3; X 3.
- ^d*Išhara*. Gössmann 202. The deity of GÍR.TAB (Astrolabe B B ii 6-7, MUL.APIN I ii 29). X 19.
- Ištar*. Gössmann 203. Venus. See EŠ₄.DAR.
- KA₅.A = **šēlebu*. “The Fox.” Gössmann 205. 80-86 Ursae Maioris (?). Enlil 16. II 3a, 4-4a; III 8, 29.
- kajamānu*. See SAG.UŠ.
- KAK.BAN. Gössmann 211. For other logograms see KAK.SI.SÁ.
- KAK.SI.SÁ = *šukūdu*. “The Arrow.” Gössmann 212. α Canis Maioris. Anu 11. For other logograms see KAK.BAN, KAK.Ú.TAG.GA. III 28; IX 5, 15; X 5; XVI 18.
- KAK.Ú.TAG.GA = *šiltahu*. “The Arrow.” For other logograms see KAK.SI.SÁ.
- kalītu*. Gössmann 213. See BIR.

KAL.NE. Gössmann 98.

KA.MUŠ.Ī.KÚ.E = *Pāšittu*. Gössmann 215. β Andromedae. Enlil 32. I 7; XV 5.

KU₆ = *nūnu*. “The Fish.” Gössmann 218. Piscis Austrinus. Ea 1. III 29; X 23; XIII 6; XIV 5; XVI 17.

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

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

LI₉.SI₄. Gössmann 253. α Scorpii. Ea 11. III 11c; V 1.

LUGAL = *šarru*. “The King.” Gössmann 240. α Leonis. Enlil 9. XVI 16; XIX 5.

LÚ.ĤUN.GÁ = *agru*. “The Hired Man.” Gössmann 244. Aries. Anu 4. I 2; III 9; XV 26-27.

LULA. Gössmann 247. See KA₅.A.

LU.LIM = *lulīmu*. “The Stag.” Gössmann 248. Andromeda. Enlil 30. For other stars of the constellation Andromeda see APIN, AŠ.GÁN, ^d*Har-ri-ru*, KA.MUŠ.Ī.KÚ.E, TIR.AN.NA. III 32a.

lulīmu. See LU.LIM.

LULLA = *sarru*. “False.” Gössmann 249. Probably not a real star. I 9; II 3; III 7-7a.

^d*Lumnu*. “Evil.” Gössmann 251. Mars.

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

MAN-ma = *šanūmma*. “Strange.” Gössmann 256. Mars. III 12a, 13b.

manzāt. See TIR.AN.NA.

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

^d*Marduk*. Gössmann 260. See ^dAMAR.UD.

MAR.GÍD.DA = *eriquu*. “The Wagon.” Gössmann 258. Ursa Maior. Enlil 15. Abbreviated MAR. For other stars of the constellation Ursa Maior see KA₅.A. I 1; III 1, 28c, subscript.

MAR.GÍD.DA.AN.NA. “The Wagon of Heaven.” Gössmann 259. Ursa Minor. Enlil 19.

marratu. See IM.ŠEŠ.

MAR.TU = *Amurru*. Gössmann 261.

maškakātu. See GÁN.ÛR.

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

MAŠ.TAB.BA.GAL.GAL = *tū'amū rabūtu*. “The Great Twins.” Gössmann 268. α and β Geminorum. Enlil 5.

MAŠ.TAB.BA.TUR.TUR. “The Little Twins.” Gössmann 269. Probably ζ and λ Geminorum. Enlil 6. III 36.

māšū. “The Twins.” Gössmann 265. III 33.

mišūh ^dPA.BIL.SAG. Gössmann 87; AfO 19 107 iii 5. Presumably a part of Sagittarius. See PA.BIL.SAG.

MU.BU.KĒŠ(DA). Gössmann 282. Enlil 18.

MUL.GU.LA. See G.U.LA.

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

MUŠ. “The Snake.” Gössmann 284. Hydra. Anu 13.

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

nakarū. “The Stranger.” Gössmann 295. Mars. XVIII 13.

narkabtu. See GIGIR.

nēberu. “The Ferry.” Gössmann 311. Jupiter. I 10; II 5-5a.

^d*Nergal*. Gössmann 302. See ^dU.GUR.

nēšu. See UR.MAḪ.

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

NIM.MA(KI). “(Star of) Elam.” Gössmann 312. I 13; III 11-11a, 11c.

^dNIN.GÍR.SU. Gössmann 316. Saturn. III 19; IV 12, 13b.

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

NIN.GUL.TI. Venus. Also wr. NÍG.GUL.TI, ^dNIN.GUL.AN.NA, ^dNIN.SI₄.AN.NA.

^dNIN.KILIM = *šikkû*. “The Mongoose.” XV 4; XVII 6.

^dNIN.MAḪ. Gössmann 324. γ + Velorum. Ea 4. Another name is ^(d)NIN.TU.

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

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

^(d)NIN.TU. Another name is NIN.MAḪ.

nīru. Gössmann 329. See ŠUDUN.

NU.KÚŠ.Û = *la āniḫu*. “Tireless.” Gössmann 303. Venus.

NU.MUŠ.DA. Gössmann 305. Ea 8.

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

nūnu. Gössmann 307. See KU₆.

PA.BIL.SAG. Gössmann 358. Sagittarius with, probably, θ + Ophiuchi. Ea 13. For stars belonging to the constellation see *mīših* ^dPA.BIL.SAG.

PAN. See BAN.

^d*Papsukkal*. Identified with SIPA.ZIAN.NA (MUL.APIN I ii 2).

Pāšittu. See KA.MUŠ.Ì.KÚ.E.

Purattu. See BURANUN.

qaštu. See BAN.

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

SA₅. See *Makrû*.

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

SAG.UŠ = *kajamānu*. “Constant.” Gössmann 333. Saturn. Anu 22. See UDU.IDIM.SAG.UŠ.

SALA.KE_x. “(Star of) the Woman.” Cf. UŠ.A.KE_x/ŠÈ. I 16; IV 7.

SALARḪUŠ.ŠÀ.GA. Gössmann 338. III 24.

sarru. Gössmann 342. See LUL.LA.

*^d*sibi*. Gössmann 349. See *ilū sibitti*, ^dIMIN.BI.

SIM.MAḪ = *šinūnūtu* (MUL.APIN I iii 7). “The Swallow.” Gössmann 389. The western fish of Pisces with some of the western part of Pegasus. Anu 2. X 22; XI 8.

^d*Šimut*. Gössmann 351. See ^d*Šimut*.

Sin. Gössmann 352. The Moon. III 24b, 30a; VI 6; XVIII 9.

SIPA.ZIAN.NA = *šidallu* (Hh. XXII Section 10:4); *šitaddalu*, *šitaddaru*. “The True Shepherd of Anu.” Gössmann 348. Orion. Anu 8. For stars belonging to the constellation see LIDUR SIPA.ZIAN.NA; its deity is ^d*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.

sīšū. See ANŠE.KUR.RA.

SUḪUR.MÁŠ = *suhurmašū*. “The Goat Fish.” Gössmann 344. Capricorn. Ea 15. III 26a, 28b, 31a.

suhurmašū. See SUḪUR.MÁŠ.

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

šāriṛu. See AN.TA.SUR.RA.

ŠAH. “The Pig.” Gössmann 371. Perhaps Delphinus (Kugler, SSB Erg. II 11). See ^d*Damu*. XVII 3-4.

Šamaš. Gössmann 373. See ^dUTU.

šanūmma. Gössmann 374. See MAN-*ma*.

ŠAR.GAZ. Gössmann 375. λ or υ Scorpii. Ea 12. Identified with *ziqit* GIR.TAB, q.v.

šarru. See LUGAL.

ŠAR.UR₄. Gössmann 375. λ or υ Scorpii. Ea 12. Identified with *ziqit* GIR.TAB, q.v.

ŠĀ.TÜR.RA.ŠĒ. Gössmann 370. II 8; III 23.

šēlebu. See KA₅.A.

šibu. Gössmann 388. See ŠU.GI. III 32.

šidallu. See SIPA.ZI.AN.NA.

šihṭu. See GU₄.UD.

šikkū. See NIN.KILIM.

šiltahu. See KAK.Ú.TAG.GA.

^d*Šimut*. XVIII 14-16.

šinūnūtu. Gössmann 390. See SIM.MAH.

ŠITA₂.DAR/DA.RA (cf. AfO 19 107 iii 25) = *šitaddaru*. See SIPA.ZI.AN.NA.

šitaddalu (*šitaddaru*). Gössmann 393. See SIPA.ZI.AN.NA.

ŠUDUN = *nīru*. “The Yoke.” Gössmann 379. Boötes. For another name see ŠU.PA. III 27a, 31-31a; VII i 3-4.

ŠUDUN.A.AB.BA. “The Yoke of the Sea.” Gössmann 380.

ŠUDUN.IM.U_x.LU. “The Southern Yoke.”

ŠU.GI = *šibu*. “The Old Man.” Gössmann 378. Perseus. Enlil 3. Identified with EN.ME.ŠĀR.RA (MUL.APIN I i 3); for other stars belonging to the constellation see GABA ŠU.GI, GIR.MEŠ ŠU.GI. III 34a; XV 6-7.

šukūdu. Gössmann 381. See KAK.SI.SĀ.

^dŠUL.PA.È. Gössmann 383. Jupiter. II 14c.

ŠU.PA. Gössmann 385. Boötes. Enlil 12. For another name see ŠUDUN. III 27a; IX 21; XII 8; XVII 1-2.

tarbašu. See É.TÜR.

tinūru. See IM.ŠU.RIN.NA.

TIR.AN.NA = *manzāt*. “The Rainbow.” Gössmann 407. See LU.LIM (MUL.APIN I i 33). I 8; II 1; III 4.

tūʾamū GAL.MEŠ (= *rabūtu*). “The Great Twins.” Gössmann 401. See MAŠ.TAB.BA.GAL.GAL. III 36.

tūltu. “The Worm.” Gössmann 402; AfO 19 107 iii 27. III 10a; XV 24-25.

UD.AL.TAR = *dāpinu*. “Heroic.” Gössmann 137. Jupiter. Abbreviated AL.TAR. II 14a-b; III 28-28a; XIII 8.

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.KIB.NUN.KI. See BURANUN.

UDU.IDIM = *bibbu*. “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.

UDU.IDIM.GU₄.UD. Gössmann 139bis. See GU₄.UD. III 6a.

UDU.IDIM.SAG.UŠ. Gössmann 141. See SAG.UŠ. III 3a.

UGA(MUŠEN) = *āribu*. “The Raven.” Gössmann 132. Corvus. Anu 14. For other logograms see ʔU.GĀ, UG.GA, UG₅.GA. I 6; III 3; XVII 8-11.

U₅.GĀN.ÜR = *rikbu* (*ša*) *maškakāti*. (A part of the Harrow.)

UG.GA, UG₅.GA. Gössmann 133. See UGA(MUŠEN).

^dU.GUR = *Nergal*. Gössmann 302. Mars.

UL.UL. Gössmann 149. See MUL.MUL. XV 28-29.

UR.A. Gössmann 160. See UR.MAḤ.

UR.BAR.RA = *barbaru*. “The Wolf.” Gössmann 161. *a* Trianguli. Enlil 2. For the constellation of which it is a part see APIN. II 12d, 12g, 13a-c.

UR.GU.LA. “The Lion.” Gössmann 162. Leo. Enlil 8. For stars belonging to the constellation see LUGAL; for another name see UR.MAḤ. XV 14; XVI 15; XIX 4.

UR.IDIM. “The Mad Dog.” Gössmann 163. Lupus. Ea 9.

U.R.I.RI. Gössmann 165.

UR.MAḤ = *nēšu*. “The Lion.” Gössmann 168. For other names see UR.A, UR.GU.LA.

UŠ.A.KE_x/ŠÈ. “(Star of) the Man.” Cf. SAL.A.KE_x. IV 6.

^dUTU = *Šamaš*. Gössmann 135. The Sun. III 24b; XVIII 9.

ÛZ = *enzu*. “The She-Goat.” Gössmann 145. Lyra. Enlil 23. For stars belonging to the constellation see ^dLAMMA. II 12a-h, 15d.

zappu. Gössmann 171. See MUL.MUL.

ZI.BA.AN.NA. Gössmann 176. Libra. Anu 16. See *zibānītu*.

zibānītu. “The Scales.” Gössmann 176. Also wr. GIŠ.RÍN, ZI.BA.AN.NA. IX 10; XVII 16.

ziqīt GÍR.TAB. “The Sting of the Scorpion.” Gössmann 177. Identified with ŠĀR.GAZ, ŠĀR.UR₄ (MUL.APIN I ii 31-32). X 20; XI 5.

zuqaqīpu. See GÍR.TAB.

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 = *ittanmar* (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 (ZAL-*ma*) and passes by its month (ITI-šú 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-šú = *ina adannišu*)” and “not at its specified time (*ina la* UD.DUG₄.GA-šú).” 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 *adannu* (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,” ŠÚ, 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.

2.2.1.1.1. 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.DU₈ 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.LÁ 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.”

2.2.1.1.2. In the case of the inferior planet Venus, its heliacal rising in the west (^dUTU.ŠÚ.A; IV 6a) is correctly distinguished from its heliacal rising in the east (^dUTU.È; IV 7a). Presumably, therefore, MUL.MEŠ (*ina*) ^dUTU.È (III 14a, IV 8, and IV 8a) and MUL.MEŠ (*ina*) ^dUTU.ŠÚ.A (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, *nēmuru*, 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.GĀN. These stars are also classified as being the upper (AN.TA) pair or the lower (KI.TA) pair in IX 23-34.

2.2.1.2. When a star is first seen, it is said to “come forth” (È). It is said of *Nēberu* in II 5a and of SIPA.ZI.AN.NA in XVIII 3 (cf. III 3b): “it is high (*šaqu*) (in altitude) at its coming forth (È)”; 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 KI.GUB, as is clear from the parallel to XVIII 3 in XVII 12 where KI.GUB replaces È. A star or planet is frequently said in EAE to “change” (KÛR.KÛR) its KI.GUB; 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 KI.GUB are in XVII 9-10, where the contrast is between the case wherein the head of UGA looks toward heaven in its position (KI.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 *a* 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 *man-zāzu* besides KI.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 (*šēpūt* = foot) of the cattle-pen (TÛR) is the path of Ea (*šūt 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 TÛR.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

¹³The Sumerogram NA is used in BM 42277:7 (MUL.APIN II; courtesy H. Hunger).

¹⁴Note that the image implicit in the meaning “halo” of TÛR 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.GÍD.DA “stands (DU) all year and circles around (*ilammā*).” Such a statement, for an observer at Nineveh, could be made of any constellation whose northern declination is 36;30° or more (MAR.GÍD.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 SIPA.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 NUIGI 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 *adir* “obscured.” In our material this word is used of Venus in IF 7c and of SIPA.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 AŠ.GÁN (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 AŠ.GÁN (IX 27-28) and of the chest of ŠU.GI (XV 9); DULLA “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 AŠ.GÁN (IX 19); and the verb *unnutu*, “to be faint,” said of the planets (III 18a) and of several constellations (XV 12: ALLUL; XV 16: broken; XV 21: AŠ.GÁN; XV 26: LÚ.HUN.GÁ; and XV 34: SIPA.ZI.AN.NA). In XV 29 it is said that UL.UL do not have their “light” (UD.DA = *šētu*).

2.2.2.2 Words indicating that a star or planet is particularly bright are also common. We note, for instance, *ba’lu*, “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 SIPA.ZI.AN.NA (XV 33) and of the stars of ALLUL (XV 11 and XV 13); *uttabbat* (from *nabātu*, “to shine brightly”) is said of the stars of AŠ.GÁN (IX 18) and *ittananbiṭ* of the navel of SIPA.ZI.AN.NA (XVII 13). *Gapāšu*, said of ŠAḤ (XVII 3) and of *Tūltu* (III 10a and XV 25), probably means “to be brilliant.”

2.2.2.3. The navel of SIPA.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 AŠ.GÁN are variables: *β* Pegasi, from 2.4 to 2.8 in ±40 days, and *γ* Pegasi, from 2.8 to 2.82 in 0.15 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 AŠ.GÁN is that it may “shine brightly (*inambūt*) 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 and 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); *ne(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 AŠ.GÁN (IX 27-30). The verb form *imdahḥaru*, “are equal,” said of the stars of SIPA.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 *ittananbiṭu*, “to shine brightly repeatedly,” said of the stars of AŠ.GÁN (IV 3a; XV 20; and XV 22) and *ittananpaḥu*, “to flare up again and again,” said of the stars (IV 11a) and of ŠU.PA (XVII 2); SAR (= *napāḥu*), 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 *mulluḥ* 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.GĀN) is seen and shines brightly (*inambuṭ*) like a torch” (IX 20), with which we must compare the beginning of the protasis of XVI 9: “The star of ^dEN.ME.ŠĀR.RA (shines) like the noonday sun (*karari*).” 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 (*ibarruṣu*) 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.ZI.AN.NA produces (*imšuh*) a *mišhu*.” A ŠE.IR.ZI = *šarūru* is a bright luminous spot, sometimes stated to be red, as mirages often are, and in some texts is said to “fall” (*maqātu*), 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 GĀM, 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 *šallummū*, a word occurring in XV 23: “A *šallummū* lies across (GIL) in front of AŠ.GĀN.”

2.2.5.2. This last passage may refer to the passage of a comet before AŠ.GĀN, and the three words *mišhu*, *šarūru*, and *šallummū* 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 = *šalmu*, “black,” said of AN.TA.SUR.RA (XIX 2); LUGAL (XVI 16); LÚ.ḤUN.GÁ (XV 27); *Nēberu* (II 5a); the stars of *Šimut* (XVIII 14); the navel of SIPA.ZI.AN.NA (XVI 3); UL.LUL (XV 28); and UR.GU.LA (XVI 15). The verb *uṣṣanallam*, “becomes black,” is the predicate of the “appearance” (*zīmu*) of GĀM (XVI 6). Perhaps Venus is MI in XV 36.

SIG₇ = *arqu*, “green,” said of the upper and lower pairs of stars in AŠ.GĀN (IX 29-30); and two stars of *Šimut* (XVIII 16).

SA₅ = *sāmu*, “red,” said of the front stars of AL.LUL (III 7b); AN.TA.SUR.RA (III 6b); the upper and lower pairs of stars in AŠ.GĀN (IX 31-32; cf. III 6c); *Damu* (XVII 5); ^dEN.ME.ŠĀR.RA (XVI 12); IM.DUGUD.MUŠEN (III 11b and XVI 10); KA₅.A (II 4a; cf. II 3a); the navel of SIPA.ZI.AN.NA (XV 32); and UGA (XVII 8). The word AL.SI₄.SI₄, “red,” modifies the pole of ^dEN.ME.ŠĀR.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-dī*) 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* = *pešū*, 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 *agû*, "tiara," of Venus; the phrase *agû 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 TÜR = *tarbašu* (see § 2.2.1.2.1), and the verb associated with it is NIGÍN, "to go around." The phrase occurs only once in our texts, with reference to a halo of the Moon within which SIPA.ZIAN.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* ŠA) AL.LUL (?) (III 7c); of Mars within GİR.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 (É)." 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 = *teḥû*, "to approach," and KUR = *kašādu*, "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 = *sanāqu*) Jupiter"; that of XV 8: "ŠU.GI leaves behind (*ēzib*) GĀM"; those of XVIII 7 and 8: "SIPA.ZIAN.NA comes close to (*iqrib*) the right/left of MUL.MUL"; and that of IV 2a and V 1b: "[...] passes by (*ītiq*)^d LUGAL.GİR.RA and^d MES.LAM.TA.È.A. 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, *ēzib*, 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 VII

	TE			KUR	
	Subject	Object		Subject	Object
III 9a	Jupiter	GĀM			
III 8a, b	Mars	GİR.TAB			
III 12a	Mars	MAŠ.TAB.BA			
III 13b	Mars	Jupiter			
IV 4b	planet	MUL.MUL	IV 4b	planet	MUL.MUL
III 11d	BAL.TÉŠ.A	GİR.TAB			
XVI 17	KU ₆	BAN	XVI 18	BAN	KAK.SI.SÁ
II 12d, g	ÛZ	UR.BAR.RA	II 12e, f	ÛZ	GĀN.ÛR

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: “ŠU.PA is seen with it (AŠ.GÁN)” is equivalent to “It (AŠ.GÁN) is seen below ŠU.PA,” and “It (AŠ.GÁN) is seen below NUN.KI” is equivalent to “NUN.KI is seen with it (AŠ.GÁN).” In MUL.APIN I ii 45-46 the dates of NUN.KI’s and ŠU.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 ŠU.PA rises AŠ.GÁN 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 AŠ.GÁN 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 phenomena might be. For *ritkusu*, however, one text, XII 12, offers the variant U₅, “to ride on top of,” so that the protasis would be “if the upper/lower stars of (AŠ.GÁN) ride on top of one another”; if the upper stars are the upper stars when AŠ.GÁN is at the meridian, α Andromedae and β Pegasi, and the lower stars are α and γ Pegasi, 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 U₅ refers to. A phenomenon similar to the meeting and conjoining of the stars of AŠ.GÁN is what is described with respect to MUL.MUL in XV 28-29; they are said to be “contracted” (*nehšu*) and to be “lengthened” (*šathu*) (cf. *šatāhu* = *arāku* Sin 22:1). With the latter may be compared the statement in XVII 4 that ŠAḤ “opens its mouth” (KA-šu BAD). The elongation of the Pleiades might be due to the diffusion of their light by haze; their contraction and the opening of ŠAḤ’s mouth might be imagined if some of the stars in these respective constellations in the right locations were obscured.

References

- BAEHR, U.
1955 *Tafeln zur Behandlung chronologischer Probleme*. Karlsruhe.
- BEZOLD, C.
1916 “Die Angaben der babylonisch-assyrischen Keilinschriften,” in F. Boll, *Antike Beobachtungen farbiger Sterne*. München. pp. 97-147.
- BEZOLD, C., and A. KOPFF
1913 *Zenit- und Aequatorialgestirne am babylonischen Fixsternhimmel*. Heidelberg.
- CONDON, E. U., *et al.*
1969 *Scientific Study of Unidentified Flying Objects*. New York.
- GÖSSMANN, F.
1950 *Planetarium Babylonicum*. Rom.
- KUGLER, F. X.
1907-14 *Sternkunde und Sterndienst in Babel*, I-II, *und Ergänzungen* I-II. Münster.
- MENZEL, D. H.
1953 *Flying Saucers*. Cambridge, Mass.
- MINNAERT, M.
1940 *Light and Colour in the Open Air*. London.

O'CONNELL, D. J. K.

1958 *The Green Flash*. Vatican Observatory.

SCHAUMBERGER, J.

1935 *Ergänzungsheft III* to Kugler's *SSB*. Münster.

1952 "Die *Ziqpu*-Gestirne nach neuen Keilschrifttexten," *ZA* 50:214-29.

TRICKER, R. A. R.

1970 *Introduction to Meteorological Optics*. New York-London.

VAN DER WAERDEN, B. L.

1949 "Babylonian Astronomy II. The Thirty-six Stars," *JNES* 8:6-26.

WEIDNER, E.

1915 *Handbuch der babylonischen Astronomie*, Vol. I. Leipzig.

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, *Dream-book* 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 = *iṭhi* “approach” or *mišhu imšuh* “produce a luminous phenomenon” may belong to such tablets. It is possible that a “TE-tablet” and a “*mišhu imšuh* 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 “*mišhu imšuh* 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 *Ikū*, 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.

¹AfO 14 (1941-44) 172-195, 308-318; AfO 17 (1954-56) 71-89; AfO 22 (1968-69) 65-75.

²K.2329 (ACh Istar 30).

³*e-nu* ^d*A-num* GAL-^u*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 “TF” and “*mišhu*” 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 (GÍR.TAB) and the Fish (KU₆), 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 (*sātu*, *mukallimtu*)—the terms *ahū*, 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 EAE⁷ 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 identifiably 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.

⁷Weidner, AfO 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 ¶; 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 39-42.

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 *ana* are:

3.2.3.1.1. K.14493: 1' [. . .] É UD KID [. . .]
 2' [MUL . . .] *ana* KILAM [GI.NA]
 3' [. . . KIL]AM *i-kan* ŠE.GIŠ.Ì u [. . .]
 4' [. . . *ana* ZI]-ut [. . .]
 break

3.2.3.1.2. K.8647: 4' [. . . *ana* Z]I-ut BURU₅.HIA [. . .]
 5' [. . .] .MI *a-na* NAM.BAD.MEŠ : ¶ MU [. . .]
 6' [. . .] .GI *a-na* KILAM GI.NA : ¶ M[U . . .]
 7' [. . . *ana* Z]I-ut KU₆.HIA [. . .]
 8' [. . . *ana* Z]I-ut MUŠEN.HIA [. . .]
 9' [. . . *ana* ZI]-ut ŠAḤ.GIŠ.GI [. . .]
 10' [. . . *ana* IM].ŠUB.BA [. . .]

3.2.3.1.3. K.8634, apart from the parallel cited sub II 3, has two more *ana*-entries, in line 8' ([. . .] *a-na* DAGAL-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 [. . .] *ana* BE LUGAL, and possibly two more such entries (r. 5: [*ana* N]AM.GILIM.MA, r. 6: [. . . *ana*] IM.ŠÈG).

The event predicted by an ominous occurrence is sometimes introduced by *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 *ana qīt palē šar Elamti halāq mātišu ukallimanni inbu purussēšu 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' [. . . KIL.LAM 2.GÍN].TA.ÀM *ana* $\frac{1}{2}$.GÍN.TA.ÀM [GAR]
 3' [(. . .) ¶^d]UDU.IDIM *ina* IGI MAN DU *ina* MU.BI GÁN.BA [TUR]
 4' [(. . .) ¶ MU]L[?].KAK.SI.SÁ NU SAR
 5' [. . .]^dUDU.IDIM EN GAL-ú[?] GIM *iq-bu*-[u]
 6' [. . .]^dUDU.IDIM *ana* NAM.BAD.[MEŠ]
 7' [. . .]^dUDU.IDIM SA₅ BE.MEŠ [*šam-ru*]
 (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 *ana* LÁ (or TUR) KI.LAM (in the first preserved line, the LÁ sign is not preceded by *ana*). Such an omen is preserved, e.g., in EAE 55:70: ¶ MUL *zi-ba-ni-tum a-dir zi-ba-ni-tum la [kitti? . . .] KIL.LAM 2.GÍN.TA.ÀM ana* $\frac{1}{2}$.GÍN.TA.ÀM GAR [x], and in Sm. 1154 + D. T. 307:2'-4': [¶ M]UL *zi-ba-ni-tum a-d[ir zibanit la kitti KUR] DIB-bat KIL.LAM i-ša-pil [. . .] KIL.LAM 2.GÍN.TA.ÀM ana* $\frac{1}{2}$.GÍN.[TA.ÀM GAR-x]. The omen cited as illustration is one known from EAE 56:32.

The second omen (line 4') refers to KAK.SI.SÁ = 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.

3.5. 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 *napāhu* or *ba'āhu* (though when it is to be read *kašādu* it is usually followed by the phonetic complement *-ud* or *-dam*). The verb *rabū* “to set” is written not only with the logogram ŠÚ but also with the logogram GAL, which normally stands for the homonym *rabū* “great”; *napāhu* “to rise, shine” is written not only with MUL but also with UL, just as both MUL and UL are used for *kakkabu*.

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., *ūtannat* functions as ingressive to *unmut*, *uššanallam* to *šalim*, *ūtakkal* to *ukkul*; note also *uttabbat* in lieu of the more common *ittanbiṭ* or *ittananbiṭ* while *inambuṭ* (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 ittanabiṭu* XV 20, but *kakkabānišu reštūtu ittanabiṭu* 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., *pališ* "is perforated," but the stative may also be replaced by the preterite, even in the case of a transitive verb, e.g., *ipluš*.

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 ¹
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.GÍD.DA	I 1	=	III 1
3'	LÚ.ĤUN.GÁ	I 2	=	III 9
5'	APIN	I 3	=	III 2
7'	EN.TE.NA.BAR.ĤUM	I 4	=	III 5
9'	UDU.IDIM	I 5		
11'	UGA	I 6	=	III 3
13'	KA.MUŠ.Ì.KÚ.E	I 7		
15'	TIR.AN.NA	I 8 = II 1	=	III 4
16'	AN.TA.SUR.RA		II 2	= III 6
17'	LUL.LA	I 9 = II 3	=	III 7
18'	KA ₅ .A		II 4	= III 8

¹II 7 identifies a star with a deity.

19'	<i>Nēberu</i>	I 10 = II 5
20'	<i>Rabbu</i>	II 6
21'	NIN.GUL.TI	I 11 = II 7a
22'	ŠÀ.TÙR.RA.ŠĚ	II 8 (cf. III 23)
23'	GÍR.TAB	I 12 = II 9
24'	IM.ŠU.RIN.NA	(cf. II 7) = III 10
25'	NIM.MA	I 13 = III 11

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:

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

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

1'	MAŠ.TAB.BA	I 14 = III 12 = IV 2
2'	IMIN.BI	IV 4
3'	<i>Nin-si</i> ₄	I 15 = III 13 = IV 5 (cf. II 10)
4'	UŠ.A.KĚ _x	IV 6
5'	SAL.A.KĚ _x	I 16 = IV 7
6'	MUL.MEŠ _x ^d UTU.È	III 14 = IV 8
7'	MUL.MEŠ _x ^d UTU.ŠÚ.A	I 17 = IV 9
8'	MUL.MEŠ <i>namru</i>	III 15 = IV 10
9'	MUL.MEŠ SAR.MEŠ	I 18 = III 16 = IV 11
10'	?	III 17 = IV 12
11'	MUL.MEŠ DUL.LA	I 19 = III 18 = IV 13
12'	AN.TA.ŠUB.ŠUB.BA	I 20 = III 20 ² = IV 14

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 51.³ 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-

²III 19 is not of the form "star x is for n."

³Weidner, AfO 22 74.

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 $\text{D}\check{\text{S}}$ 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 B⁴ 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 NUSAR “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;⁵ II 13c - II 13d; II 14c - II 14e,⁶ and II 15c - II 15f).

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

12. ÛZ	Path of Enlil
13. UR.BAR.RA	Path of Enlil
15. AŠ.GÁN	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 ÛZ, UR.BAR.RA, and ŠUL.PA.È. AŠ.GÁN 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.

⁴Identified by internal criteria. Actually, this side is curved; the flat side is here edited as reverse.

⁵II 12d - II 12h are apparently all derived from Tablet 55, omens 75-84, of *Enūma Anu Enlil*; the Goat Star is sometimes regarded as an alternate name for Venus, which is why II 12i - II 12l are included.

⁶ŠUL.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.GÁN; 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 KA₅.A with Mars; and the similar apodoses of III 11 and III 11b permit the identification of NIM.MA with ^dIM.DUGUD^{mušen} made in III 11a, where also 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:

III 14	=	IV 8
III 14a	=	IV 8a
III 14b		
III 15	=	IV 10
III 16	=	IV 11
III 16a	=	IV 10a
III 17	=	IV 12
III 18	=	IV 13
III 18a		
III 19	=	IV 13a
III 19a	=	IV 12a
III 20	=	IV 14
III 20a		

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 É.TÛR.(RA), ŠÀ.TÛR.RA.ŠÈ, and SAL.ARĦUŠ.ŠÀ.GA. One of these, [ŠÀ.TÛR.R]A.ŠÈ, 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.

SECTION	MONTH	STARS	ASTROLABE B
III 25	II	GÍR.TAB	rise MUL.MUL, ŠU.GI, <i>Anunitum</i> set UR.IDIM, GÍR.TAB, LUGAL
III 26	III	<i>Šalbatānu</i>	rise SIPA.ZI.AN.NA, UR.GU.LA, MUŠ set <i>Šalbatānu</i> , UD.KA.DU ₈ .A, ÛZ
III 27	VI	BIR, ŠUDUN ⁷	rise <i>Kalītum</i> , UGA, ŠU.PA ⁷ set KU ₆ , ^d AMAR.UD, KA ₅ .A
III 28	IV	KAK.SI.SÁ, MAŠ.TAB.BA, UD.AL.TAR	rise KAK.SI.SÁ, MAŠ.TAB.BA, ŠUL.PA.È ⁸
III 28a		GU.LA, AL.LUL, Á.MUŠEN	set UR.GU.LA, ⁹ <i>Alluttum</i> , Á.MUŠEN
III 29	XII	KU ₆ , KA ₅ .A, ^d AMAR.UD	rise KU ₆ , ^d AMAR.UD, KA ₅ .A ¹⁰ set <i>Kalītum</i> , UG ₅ .GA, ŠU.PA

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” SUĤUR.MÁŠ 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*Ni-ru* ^d*É-a*, combined with MUL.APIN I ii 20: MUL.NUN.KI ^d*É-a*. The commentator’s statement in III 28b that AL.LUL (Cancer), the Anu-star of month X in Astrolabe B, corresponds to SUĤUR.MÁŠ 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.GÍD.DA remains (in the night sky) all year is also correct astronomically, but it can only be a comment on I 1 = III 1; why it is placed here is unclear. Nor do we understand why, in III 29a, ^dAMAR.UD is said to correspond to ^dGU₄.UD and to GÁM.

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:

SECTION	STAR	PATH (ASTROLABE B)
III 30	SIPA.ZI.AN.NA	Ea
III 31	BIR	Ea
III 32	SIM.MAĤ	Anu
III 33	^d PA u ^d LUGAL	Anu
III 34	^d <i>Anunitum</i>	Enlil
III 35	EN.TE.NA.BAR.ĤUM	Ea
III 36	<i>Tu-a-mu</i> GAL.MEŠ	Anu

⁷According to MUL.APIN (I 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.

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

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

¹⁰In the Pinches Astrolabe the order is that of Text III = KU₆, KA₅.A, ^dAMAR.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.È.A, whereas in Astrolabe B those gods are the Small Twins. Moreover, in MUL.APIN I ii 25 ^dPA and ^dLUGAL are two stars after EN.TE.NA.BAR.ĤUM (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 SUĤUR.MÁŠ 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 LU.LIM because the star in III 32 is said to be red, and a red star, KA.MUŠ.Ī.KÚ.E, lies between α Andromedae and ŠU.GI. Astrolabe B does not specify that the star (SIM.MAĤ) 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: [𒀭 MUL.AL.L]UL *šu-bat* ^dA-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.ĤUM 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 = V 1b = VI 1a = VII 2a		
IV 3		
IV 3a		
IV 4 = V 2 = VI 2 = VII 3		
IV 4a = V 2a = VI 2a = VII 3a		
IV 4b = V 2b = VI 2b		
IV 5 = V 3 = VI 3		
IV 5a = V 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 ÁG.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.

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 NIM.MA as does V 1, 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-si*₄ 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.

Text I

A K.2202

	1' [	] x [
I 1	2' [¶	MUL.MAR.GÍD.DA ana AN.MI : x [	III 1 and subscript
I 2	3' [¶	MUL.LÚ.ĤUN.GÁ ana A]B.SÍN : [	III 9
I 3	4' [¶	MUL.APIN ana A]B.SÍN šur-ri-i : x [	III 2
I 4	5' [¶	MUL.EN.TE.N]A.BAR.ĤUM ana IM.SAG : [	III 5
I 5	6' [¶	MU]L.UDU.IDIM ana NAM.BAD : [
I 6	7' ¶	MUL.UGA ana KILAM GI.NA : [	III 3
I 7	8' ¶	MUL.KA.MUŠ.Ī.KÚ.E ana ŠE.x [
I 8	9' ¶	MUL.TIR.AN.NA ana IM.ŠÈG NU ŠÈG [:	II 1; III 4
I 9	10' ¶	MUL.LULLA ana ZI-ut IM [:	II 3; III 7
I 10	11' ¶	MUL Ni-bi-ru ana ZI-ut NIM.MA ^[ki] [:	II 5
I 11	12' ¶	MUL NÍG.GUL.TI ana mas-se-e : [	II 7a
I 12	13' ¶	MUL.GÍR.TAB ana KILAM : [	II 9
I 13	14' ¶	MUL.NIM.MA ana EN.TE.NA [¶] [	III 11
I 14	15' ¶	MUL.MAŠ.TAB.BA ana ú-kul-ti ^d U+GUR ₄ : [	III 12; IV 2; [V 1; VI 1]; VII 2
I 15	16' ¶	MUL Nin-si ₄ ana BALA TIL.LA [:	[II 10]; III 13; cf. IV 5; V 3; VI 3
I 16	17' ¶	MUL SAL.A.KE _x ana NAM.SAL.TUK DUG ₄ .G]A	IV 7
I 17	18' ¶	MUL ^d UTU.ŠÚ.A ana IM.[ŠÈG] [ŠÈG	cf. III 14; IV 8
I 18	19' ¶	MUL.MEŠ SAR.MEŠ ana [	III 16; [IV 11]
I 19	20' ¶	MUL.MEŠ DUL.LA.[MEŠ ana IM.ŠUB.BA	[III 18; IV 13]
I 20	21' ¶	MUL.[AN].T[A.ŠUB.(ŠUB.)BA ana IM.ŠUB.BA	III 20; [IV 14]

-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.Ī.KÚ.E is for
 I 17 The Star of the sunset is for the raining of rain.

Parallels

I 1. 81-7-27, 84:3: [MUL.MAR.GÍD].DA a-na AN.MI [...]; K.3780 ii x+21': ¶ UGU-nu MUL.MAR.GÍD.DA ina AN-e MI AN.MI E-[...]; K.3601+Rm. 103 r. 36 and parallels: {¶ elē-nu MU]L.MAR.GÍD.DA AN-ú MI AN.MI GAR
 I 3. K.8493 r. 4: [... ana AB.SÍN šur]-re-e
 I 5. K.6991:6': [...] ^dUDU.IDIM ana NAM.BAD.[MEŠ[?]]

I 7. Sm. 1317:16': ¶ MUL.MUL MUL.KA.MUŠ.Ī.KÚ.E KUR-u[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

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

C K.12761 + Sm. 1504

	B	1'-3'	broken		
II 1	B	4'	¶ [M]UL.TIR.AN.NA	ana [IM].ŠÈG ŠÈG [	I 8; III 4
II 1a	B	5'		ᵀTIR.AN.NA ina ITI.[AB] [
II 2	B	6'	¶ MUL.AN.TA.SUR.RA	NU SAR	III 6
II 3	B	7'	¶ MUL.LUL.LA	ana [ZI] IM	I 9; III 7
II 3a	B	8'		MUL.KA ₅ .A MUL.BI NU SA ₅ [
II 4	B	9'	¶ MUL.KA ₅ .A	ana É.MEŠ pu-lu-ši	III 8
II 4a	B	10'		MUL.KA ₅ .A · ina · SAR-šú ma-diš SA ₅ u [
II 5	B	11'	¶ MUL.Ni-bi-ru	ᵀma ZI-ut NIM.MA ^{ki} [	I 10
II 5a	B	12'		MUL Ni-bi-ru ina È-šú [MI NIM.MA ^{ki} ZI-ma	
II 6	B	13'	¶ MUL Rab-bu	ana ZI-ut SU.BIR ₄ ^{ki} [	VIII 1
II 6a	B	14'		ᵀUDU.IDIM ina [IM].KUR DU ZI-bu [
II 7	B	15'	¶ MUL.IM.ŠU.RIN.NA	ᵀGu-la be-let DIN [	III 10
II 7a	B	16'	¶ MU]L [NIN].GUL.TI	ana mas-se-e	I 11
II 7b	B	17'		ᵀDil-bat ina ITI.APIN ana ᵀUD.AL.TAR [
II 7c	B	18'		ᵀDil-bat ina ITI.APIN a-dir [
II 8	B	19'	¶ MUL.ŠÀ.TÙR.R]A.ŠÈ	NU SAR	
II 9	B	20'	¶ MUL.GÍR.TAB	ana KIL.LAM	I 12
II 9a	B	21'	[] EŠ	ᵀSAG.ME.GAR ana [SAG.MUL].[GÍR.TAB	VIII 4
II 10	B	22'	¶ MUL Nin-si ₄	ᵀBa-ú be-let T[IL.A? ²	I 15; III 13; cf. IV 5; V 3; VI 3
	B	23'	[blank?]	mu-šal-lim n[a-piš-ti	
	B	24'		traces	
			gap		
II 11	C	1'		traces	
	C	2'		i-šu-ú šá-ru-ru-šú [
II 12	B	r. 1'	[]	S[I? ²	
II 12a	B	r. 2'	¶ MUL.ÙZ	ᵀNin-líl EGÍ GAL-[tu]	
	C	3'	¶ - - - - -	ru-ba-tum GAL-tum	

Parallels

II 1a. MUL.APIN I iii 7-8: ¶ ina ITI.AB UD.15.KAM MUL.SIM.MAḤ MUL Ši-nu-nu-tum MUL.IM.ŠEŠ ina GIŠ.NIM IGI.LÁ.

II 3. K.8634:4'-7': [MUL].LUL.LA [ana ZI IM] 5' [¶ MUL.KA₅.A MUL.BI NU SI₄.SI₄ IGI MUL.BI [. . .] 6' [: MUL.MIN² MU]L.MEŠ-šú la sa-a-mu pa-an MUL.MEŠ-šú . . .] 7' [IM] dan-nu [ZI-a].

II 4. K.10566 r. 9': MUL.KA₅.A ana É.ME pu-lu-ši ina ŠÀ MUL.GÍR.TAB DU-ma.

II 4a. K.2330:26' f. (= EAE 57): [¶ MUL.KA₅.A ina] KUR-šú ma-diš SA₅. Also cited Thompson Rep. 103 r. 9ff.

II 5a. K.6185+ :10': ¶ MUL Ni-bi-ri ina È-šú MI NIM.MA^{ki} ZI-ma KUR [...].

II 6. Thompson Rep. 234A:5ff.: ¶ MUL Rab-bu ana ZI-ut] S[U.BIR₄^{ki}, MUL Rab-bu MUL.UR.GU.LA], MUL Šal-bat-a-nu ina ŠÀ MUL [...] DU-m[a], ¶ MUL.UDU.IDIM ina IM.KUR.RA [DU], ZI-ut SU.BIR₄^{ki} [x], MUL Šal-bat-a-nu [ina ŠÀ] MUL.UR.GU.LA DU-[ma] (coll. A. L. Oppenheim); BM

Translation

- II 1 The Rainbow is for raining [. . .]
 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.BIR₄ [ki].
 II 6a. EAE 56:30: 𒀭 MUL.UDU.IDIM ina IM.KUR.RA DU
 ZI-ut SU.BIR₄^{ki} u Kaš-ši-i ana KUR KÚR.
 II 7. Sm. 1925 r. 4, Rm. 2,299:9: [...] ^dGu-la be-let TI.
 For bēlet balāti 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: ^dNIN.GUL.TI ana mas-si-e ^dDil-bat ana e-šer
 bu-lim, with the commentary ^dNIN.GUL.TI ^dDil-bat MAŠ

bu-lum SI e-še-ru in VAT 9427:61f., cited Weidner, AfO 19
 106; K.11740:3': [...] mas-se-e MUL Dil-[bat ...]; K.6220:7':
 [^dNÍG].GUL.TI ana mas-se-e ^dDil-bat [...].
 II 7c. K.137:14: 𒀭 ^dMIN (= Dil-bat) ina ITLAPIN MIN
 (= a-dir) LUGAL MAŠ.SÙ GÁL-ši.
 II 9a. BM 46236 and dupls.: [𒀭 MUL.SAG.ME.GAR] ana
 SAG MUL.GÍR.TAB ik-ta-šad ina KUR.URI^{ki} KILAM
 GÁL-ú ana 2 HA.LA.

II 12b	B r. 3'	¶ MUL šá EGIR-šu	MUL.ÚZ T[I
	C 4'	¶ - - - -	- - TIL.A 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		¶ - - ana MUL.UR.BAR.RA T[E
II 12e	B r. 6'		6' MUL.ÚZ MUL.G[ÁN?
	C		MUL.ÚZ MUL.GÁN.ÜR KUR-ud ina MU BI ŠUB-tim ÁB.GU[D.HLA
II 12f	B r. 7'		7' MUL.ÚZ MUL.[
	C		- - - GÁN.ÜR Á IM.I KUR-ud ina MU BI x [
II 12g	B r. 8'		MUL.ÚZ ana MUL.[
	C	8'	[MUL.ÚZ ana MUL.UR].BAR.RA i-mid ina MU BI MÁ[Š.ANŠE
II 12h	B r. 9'		MUL.ÚZ [Á [
	C	9'	[- - - -] D]U MÁŠ.ANŠE [
II 12i	B r. 10'		MUL Dil-bat ina ITI x [
	C	10'	[- - - -] x x x KUR GAR-an
II 12j	B r. 11'		MUL Dil-bat ina IGL.L[Á?
	C	11'	[- - - -] MI
II 12k	B r. 12'		MUL [
	C		(See note)
II 12l	B r. 13'		MUL [
<hr/>			
II 13a	B r. 14'	¶ MUL.UR.BAR.RA	dEN.ZU x [
II 13b	B r. 15'	¶ MUL.UR.BAR.RA	ana maš-[re-e
II 13c	B r. 16'		MUL.UR.BA[R.RA
II 13d	B r. 17'		dLU.x [
<hr/>			
II 14a	B r. 18'	¶ MUL.UD.AL.TAR	dEN.ZU x [
II 14b	B r. 19'	¶ MUL.UD.AL.TAR	ana I[M x] x [
II 14c	B r. 20'		dŠul-p[a-è
II 14d	B r. 21'		SAL.KALA.GA [
II 14e	B r. 22'		dSAG.M[E.GAR
<hr/>			
II 15a	B r. 23'	¶ MUL.AŠ.GÁN šá ina ZI IM.KUR DU ip-[rik?	
II 15b	B r. 24'	[¶ M]UL.AŠ.GÁN	ana MA[H?
II 15c	B r. 25'		MUL.AŠ.GÁN [
II 15d	B r. 26'		MUL.Ú[Z?
II 15e	B r. 27'		MUL.AŠ.[GÁN?
II 15f	B r. 28'		MUL.[
		break	

Notes

II 12d-l. 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.RA? [. . .] (possibly to be restored [¶ MUL.ÚZ Á IM].KUR.RA, [. . .]), ^{13'} [. . .] šá-r[u . . .] ^{14'} 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.

- 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 Šulpae [. . .]
- 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 [. . .]
remainder fragmentary

Parallels

II 12b. Astrolabe B B iii 13-14: ¶ MUL ša EGIR-šu DU-zu MUL.ÛZ ^dGu-la.
 II 12c. RA 62 53:11: TE.ÛZ a-na bu-lum.
 II 12e. EAE 55:75 (= K.2342+ r. 11' = ACh Ištar 21:70 and dupls.): ¶ MUL.ÛZ MUL.GÁN.ÛR KUR-ud [ina MU.BI ŠUB-tim bu-lim] (restored from LB 1321 r. 16'f).
 II 12f. EAE 55:76: ¶ MUL.ÛZ MUL.GÁN.ÛR Á IM.[...]; K.2226 ii 53': [¶ MUL.ÛZ] MUL.GIŠ.GÁN.ÛR Á.IM.U_x.LU KUR-ud ina MU.BI ÁB.GUD.ĪIA ŠUB.ME.

II 12g. EAE 55:83: ¶ MUL.ÛZ ana MUL.UR.BAR.RA i-[mid . . .].
 II 12h. EAE 55:84: ¶ MUL.ÛZ Á.IM.U_x.LU [. . .].
 II 13b. K.6185+ r. 10 and K.6211:5: ¶ MUL.UR.BAR.RA KASKAL ^dUTU KUR-ud maš-ru-ú [...], also cited Thompson Rep. 236H.
 II 15a. Astrolabe B B i 1: ¶ MUL.AŠ.GÁN ša ina ZI IM. KUR.RA DU-zu ana IM.U_x.LU GIL.

Text III

D K.4292

III 1	¹ ¶ MUL.MAR.GÍD.DA ana AN.MI	I 1
III 2	² ¶ MUL.APIN a-na AB.SÍN šur-ri-i	I 3
III 2a	³ SAR : šur-ru-u šá la-pa-ti AB.SÍN il-lap-pat-ma ⁴ : ŠE ina UD.ME-šú ú-šar-ru : re-eš me-riš-te šur-ri	
III 3	⁵ ¶ MUL.UGA a-na KI.LAM GI.NA	I 6
III 3a	⁶ dUDU.IDIM.SAG.UŠ i-ba-il-ma	
III 3b	⁷ ¶ MUL.SIPA.ZI.AN.NA ina È-š[ú ša]-qu GAB Ì.GÁL	
III 4	⁸ ¶ MUL.dTIR.AN.NA a-na [ŠÈ]G NU SUR	I 8; II 1
III 4a	⁹ ¶ ina UD er-pi šá ŠÈG SUR dTIR.AN.[NA G]IL ŠÈG NU SUR	
III 5	¹⁰ ¶ MUL.EN.TE.NA.BAR.HUM a-na IM SAG	I 4
III 5a	[IM].SAG : ha-ru-up-tú :	
III 5b	¹¹ ¶ MUL ša ina Á-šú DU-zu MUL.EN.TE.NA.BAR.HUM : dNin-gí[r-su] : ši-i	
III 5c	SAG : ha-ra-pu ¹² KI.LAM.TUR.RA.ŠÈ me-riš-tú har-up-tú SIG ₅ EGIR [MU] ŠÈG i-bat-taq KI.LAM it-tab-ši-ma EN 2-šú IM.SAG KI.LAM.TUR.RA.ŠÈ iq ¹³ -pi (= iq-[bu-ú] or iq-[qa-bi])	
III 6	¹³ ¶ MUL.AN.TA.SUR.RA ana IM ZI.GA	II 2
III 6a	¹⁴ dUDU.IDIM.GUD.UD i-ba-il-ma ¹⁵ KI.MIN dUDU.IDIM.GUD.UD ina ŠÀ MUL.PA.BIL.SAG DU-ma	
III 6b	¹⁶ ¶ MUL.AN.TA.SUR.RA ma-diš SA ₅ A.KAL uš-ša-pa	
III 6c	¹⁷ ¶ MULA.Š.GÁN MUL.MEŠ-šú ma-diš SA ₅ IM KAL BA.AB.ZI.ZI	
III 7	¹⁸ ¶ MUL.LUL.LA ana ZI-ut IM	I 9; II 3
III 7a	MUL.LUL.LA MUL.AL.LUL	
III 7b	¹⁹ ¶ MUL.MEŠ IGI.MEŠ šá MUL.AL.LUL SA ₅ .MEŠ-ma ZI IM	
III 7c	dGUD.UD ina ŠÀ DU-ma	
III 8	²⁰ ¶ MUL.KA ₅ .A ana É.MEŠ pu-ul-lu-ši	II 4
III 8a	²¹ ¶ MUL Šal-bat-a-nu ana MUL.GÍR.TAB TE ina É.GAL NUN BURU ₃ -šú GÁL-ši	
III 8b	²² ¶ MUL Šal-bat-a-nu ana MUL.GÍR.TAB TE URU ina BURU ₃ -ši DIB-bat	
III 9	²³ ¶ MUL.LÚ.HUN.GÁ ana AB.SÍN	I 2
III 9a	²⁴ ¶ dSAG.ME.GAR ana MUL.GÀM TE EBUR KUR.UR ^{ki} S[Ì.SÁ]	
III 10	²⁵ ¶ MUL.IM.ŠU.RIN.NA ana MU TU[K ² (x)]	VIII 5; cf. II 7
III 10a	²⁶ ¶ MUL Tul-tum gīt-pu-šat ARḪUŠ u SILIM.MU [ina KUR GÁL-ši]	
III 11	²⁷ ¶ MUL.NIM.MA ana EN.TE.NA	I 13
III 11a	MUL.NIM.MA MUL Šal-bat-a-nu MUL.dIM.D[UGUD ^{mušen}]	
III 11b	²⁸ ¶ MUL.dIM.DUGUD ^{mušen} MUL-šú ma-diš SA ₅ EN.TE.NA GÁL-[ši]	
III 11c	²⁹ MUL.NIM.MA dNIN.A.ZU EN KI-tim MU dLi ₉ -si ₄ MUL.GÍR.TAB qa-bi dŠal-bat-a-nu cf. V 1 ina ŠÀ DU-ma	
III 11d	³⁰ ¶ MUL.BAL.TEŠ.A SUKKAL dTišpak ana MUL.GÍR.TAB TE MU.3.KAM EN.TE.NA dan-nu GÁL-ma ha-aḫ-ḫu su-ālu KUR DIB-bat	

Parallels

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

III 3b. = XVIII 3.

III 4a. Rm. 501:31 (=ACH Supp. 61): [¶ ina] UD er-pf šá AN iz-nu-n[u...]; K.3535:9 (=ACH Supp. 2 97): [ina ūmi erpi ša šamū/zunnu] iz-nu-nu dTIR.AN.NA GIL ŠÈG NU [SUR]; both parallels cited by Weidner, AfO 22 73 n. 27.

III 5b. Cf. III 35. Astrolabe B B i 26: MUL.EN.TE.NA.BAR.

HUM dNin-gir-su; MUL.APIN I ii 22: MUL.EN.TE.NA.BAR. HUM dNin-gir-su.

III 6a. Cf. Thompson Rep. 227:6.

III 6b. = XIX 1.

III 6c. K.2241+ r. 14-15 (bilingual): u₄ mu¹AŠ.GÁN igi.bi luLaš al.si₄.si₄ im kala.[ga² ba.ab.zi.zi] : MUL.AŠ.GÁN pa-nu-šu ma²-diš sa-a-mu šá-a-r[u ...]; K.3094 ii 5: ¶ MUL.AŠ.GÁN IGI.MEŠ-[šú ma²-diš sa-a-mu] IM.RIB.BA [BA.AB.ZI.ZI].

III 8. See Parallel to II 4.

Translation

- III 1 The Wagon is for eclipses.
- III 2 The Plow is for starting the furrow.
- III 2a SAR = *šurrû 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.
- III 3 The Raven is for a steady market.
- III 3a Saturn is brilliant.
- III 3b "If the True Shepherd of Anu at its coming forth is high: there will be"
- III 4 The Rainbow is for not raining.
- III 4a "If on a cloudy day when it rains a rainbow arches: it will not rain."
- III 5 EN.TE.NA.BAR.ĪM is for early wind.
- III 5a IM.SAG = *haruptu* 'early.'
- III 5b "The star which stands at its side is EN.TE.NA.BAR.ĪM : Ningirsu :"
- III 5c SAG = *harāpu* 'to be early.' KI.LAM.TUR.RA.ŠĒ '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.
- III 6 The Flashing star is for the rising of wind.
- III 6a Mercury is brilliant, variant: Mercury stands in Pabilsag.
- III 6b "If the Flashing star is very red, the flood will increase."
- III 6c "If the Field's stars are very red, a strong wind will rise."
- III 7 The False star is for the rising of wind.
- III 7a The False star (LUL.LA) is the Crab (AL.LUL).
- III 7b "If the front stars of the Crab are red: rising of wind."
- III 7c Mercury stands in it.
- III 8 The Fox is for breaking into houses.
- III 8a "If Mars approaches the Scorpion: there will be a breach in the palace of the prince."
- III 8b "If Mars approaches the Scorpion: the city will be taken through a breach."
- III 9 The Hired Man is for the furrow.
- III 9a "If Jupiter approaches the Crook: the harvest of Akkad will prosper."
- III 10 The Oven is for acquiring progeny².
- III 10a "If the Worm is massive: there will be mercy and reconciliation in the land."
- III 11 The Star of Elam is for cold.
- III 11a The Star of Elam is Mars, the Anzû-bird.
- III 11b "If the Anzû-bird's star is very red: there will be cold."
- III 11c The Star of Elam is Ninazu, the lord of the earth; it is said with reference to Lisi, the Scorpion; Mars stands in it.
- III 11d "If the Star of Dignity, the vizier of Tišpak, approaches the Scorpion: for three years there will be severe cold, cough and phlegm will befall the land."

Parallels

III 8b. Cf. Thompson Rep. 236A r. 1-2.

III 9a. VAT 9818:13: [𒀭 MU]L.SAG.ME.GAR ana MUL.GÀM TE (text: KUR) EBUR KUR.UR^{ki} iš-ša-bit.

III 10a. Cf. XV 25; see there for parallels.

III 11a. Cf. *mul.nim.ma* = (blank) = MIN (= ^dŠal-[bat-a-nu]) Hg. B VI 37, in MSL 11 40.

III 11b. Cf. XVI 10. K.2241+ :30-33 (bilingual): u₄ ^{mul d}IM₄.DUGUD.M[UŠEN mul.bi lu.laš al.si₄.si₄] UD.DA É.[MEŠ ...] : MUL.^dIM.DUGU[D.MUŠEN MUL.(MEŠ)-šu ma⁻²-diš sa-a-mu] [B]E-ma um-[ma-tum...].

III 11c. Cf. V 1. K.2346+ r. 10': 𒀭 MUL.GÍR.TAB ^dLi₉-si₄ ub-bu-úr LUGAL UR^{ki} KUR-s[u...] KI.MIN ^dŠal-bat-a-nu KI MUL Li₉-si₄ D[U-ma]; MUL.APIN I ii 29: MUL.GABA.GÍR.TAB ^dLi₉-si₄ ^dAG.

III 11d. K.2170:31: 𒀭 MU[L.B]AL.TÉŠ.A SUKKAL [d] [Tišpak ana MUL.GÍR.TAB TE MU.3.KAM EN.TENA dan-nu GÁL-ma ha-aḥ]-ḥu u su-a-lum KUR DIB-bat; duplicates: K.6415:8'-9'; BM 47799:19; BM 34058:2f. (=LBAT 1565). See also MUL.APIN I i 14: MUL ša EGIR-šú DU-zu MUL.BAL.TÉŠ.A SUKKAL ^dTišpak.

- III 12³¹ ¶ MUL.MAŠ.TAB.BA ana ú-kul-ti^dU+GUR I 14; IV 2; [V 1; VI 1;] VII 2
 III 12a³² ¶ MUL.MAN-ma ana MUL.MAŠ.TAB.BA TE NUN BE
- III 13³³ ¶ MUL.Nin-si₄ ana BALA.TIL.LA I 15; [II 10; IV 5; V 3;] VI 3
 III 13a³⁴ ^dNin-si₄ ^dŠal-bat-a-nu
 III 13b³⁵ ¶ MUL.MAN-ma ana ^dSAG.ME.GAR TE LUGAL.URI^{ki} BE-ma EBUR.KUR.SI.SÁ
- III 14³⁶ ¶ MUL.MEŠ^dUTU.È ana IM.ŠÈG.ŠÈG IV 8
 III 14a³⁷ ¶ MUL.MEŠ ina ^dUTU.È ne-mu-ru ina MU.BI.ŠÈG u A.KAL.ZAL.ZAL-u IV 8a
 III 14b³⁸ ¶ MUL.UDU.IDIM lu-u 3 lu-u 4 ina ^dUTU.È EGIR a-ḥa-meš DU.MEŠ-ni KI.MIN-ma
- III 15³⁹ [¶ MUL].MEŠ nam-ru ana IM.ZI.GA IV 10
- III 16⁴⁰ [¶ MUL].MEŠ.SAR.MEŠ-hu ana ZI.IM I 18; [IV 11]
 III 16a⁴¹ ^dUDU.IDIM.MEŠ i-ba-íl-u-ma [IV 10a]
- III 17^{r. 1} [DIŠ.MUL] <ana> IM.ŠUB.BA [IV 12]
- III 18^{r. 2} ¶ [MUL.MEŠ.DUL.LA?] <ana> IM.ŠUB.BA I 19; [IV 13]
 III 18a^{r. 3} [^dUDU.IDIM.MEŠ] ú-tan-na-tu-ma [IV 13a]
- III 19^{r. 4} ¶ MUI.[Nin]-gír-su di-nu iq-qír KI.MIN.TUR.KI.MIN.ḤA.A [IV 13b]
 III 19a^{r. 5} ^dUDU.IDIM.MEŠ u MUL.ME.AN-e UD.SUR.MEŠ.ŠU-nu DIB-ma ḥa-an-tiš NU.IGI.MEŠ IV 12a
- III 20^{r. 6} ¶ MUL.AN.TA.ŠUB.ŠUB.BA <ana> IM.ŠUB.BA I 20; [IV 14]
 III 20a^{r. 7} MUL.MEŠ.AN-e ma-gal SUR.MEŠ-ma^{r. 8} ú-lu ^dUDU.IDIM.MEŠ UD.MEŠ.ŠI-na NU
 DIRI.MEŠ-ma ḥa-an-tiš ŠU.MEŠ
- III 21^{r. 9} ¶ MUL.É.TÙR.NAM ar-ku : pa-ar-ku É.TÙR
- III 22^{r. 10} ¶ MUL.É.TÙR.RA.DÍM.MA.AN.NA [DUG₄.GA?]
 III 22a^{r. 11} a-na nap-ḥar AN-e DÍM : na[p-ḥa-ru (DÍM = banû)]^{r. 12} a-na bi-nu-ut AN-e i-qab-bi
- III 23^{r. 13} ¶ MUL.ŠÀ.TÙR.RA.ŠÈ.KI.KÚR.KÚR.RA.ŠÈ bu-lu [la?] lu bu-lu
- III 24^{r. 14} ¶ MUL.SALAR.ḤUŠ.ŠÀ.GA Ú ŠE.MÁŠ.ANŠE
 III 24a^{r. 15} Ú ŠI : me-qit-tú
 III 24b^{r. 16} KASKAL^dUTU še-pi-it TÙR.ŠU-ut ^dDIŠ.KASKAL^dUTU m[i-šil T]ÙR.ŠU-ut ^dA-nu
^{r. 17} KASKAL^dUTU SAG.É.TÙR.ŠU-ut [t^dEn-lil ... T]ÙR ma šá Šin UD u KAL.BU.NU
- III 25^{r. 18} ¶ ina ITI.GUD.MUL.GÍR.TAB u MUL [] x i-qab-bi
- III 26^{r. 19} ¶ ina ITI.SIG₄ ^dŠal-bat-a-nu a-na x [] i-qa]b?-bi
 III 26a^{r. 20} šá ^dŠal-bat-a-nu ina IGI.MUL.SUHUR.MÁŠ [] IGI.LA
- III 27^{r. 21} ¶ ina ITI.KIN.MUL.BIR.MUL.ŠUDUN.KUR-ma
 III 27a MUL.BIR.MUL.NUN.KI.MUL.ŠUD[UN.MUL.ŠU].PA
- III 28^{r. 22} ¶ ina ITI.ŠU.MUL.KAK.SI.SÁ.MUL.MAŠ.TAB.BA.MUL.UD.AL.TAR.KUR.MEŠ-ma
 III 28a^{r. 23} MUL.GU.LA.MUL.AL.LUL.MUL.Á].MUŠEN^dUD.AL.TAR^dSAG.ME.GAR ina UD.ŠÚ.EN.MUL.LU.KUR-ma
 III 28b^{r. 24} MUL.AL.LUL a-na MUL.SUHUR.MÁŠ i-qab-bi ma-a suḥur-ma-šu-u
 III 28c^{r. 25} MUL.MAR.GÍD.DA ka] MU DU-az ma-a i-lam-ma-a
- III 29^{r. 26} ¶ ina ITI.ŠE.MUL.KU₆.MUL.KA₅.A.MUL.^dAMAR.UD.KUR.MEŠ-ma
 III 29a MUL.^dAMAR.UD a-na ^dGUD.UD i-qab-bi^{r. 27} šá-niš ma-a MUL.^dAMAR.UD a-na MUL.GAM i-qab-bi

Parallels

III 12a. K.8000:12: ¶ MUL.MAN-ma ana MUL.MAŠ.TAB.BA.GAL.GAL TE-ḥi LUGAL.BE-ma [...]; Thompson Rep. 231:5f.: ¶ MUL.MAN-ma ana MUL.MAŠ.TAB.BA TE LUGAL.BE-ma SAL.KÚR.GÁL.ŠI.
 III 13b. K.8000:18: ¶ MUL.MAN-ma ana MUL.SAG.ME.GAR TE ina KUR.BI LUGAL.BE-ma [...]; K.3780(+6227 i 12': ¶ MUI.SAG.ME.GAR MUL.MAN-ma TE.ŠU ina MU.BI

LUGAL.URI^{ki} BE-ma EBUR.KUR.SI.SÁ (= Thompson Rep. 195 r. 5-6).

III 14a. = IV 8, see there for parallels. Cf. also K.11370:1: [¶ MUL.MEŠ ana ^dUTU].[È] ne-mu-ru SIG₅; VAT 9436 ii 5 (= AfO 14 pl. 16): [¶] MUL.MEŠ ina ^dUTU.È nen-mu-ru šá UL.UDU.IDIM.GUD.UD UL.UDU.IDIM.SAG.UŠ UL Šal-bat-a-nu MUL.SAG.ME.GAR šá ina ^dUTU.È DU.MEŠ-ma SIG₅

- III 12 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.ŠUB.ŠUB.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?] DÍM.MA.AN.NA.
 III 22a (that is) for the entire sky, (in the vocabularies) *dím* = *napharu* 'totality,' [(*dím* = *banū* '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 Ú ŠI = 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 ŠU.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, *suḫurmašū*.
 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

šā ina ^dUTU.ŠŪ.A DU.MEŠ-ma BAR-tum.

III 24. Cf. *uzu.arḫuša.šā.ga* = x [...] Hh. XV Gap A a₂ 2f.

III 24b. K.3254+ :1-3: ¶ [KASKAL ^d1][UTU Š]c-pi-it TÜR ina ITI.BÁR MUL.AŠ.GÁNDŪ.DŪ ^d50, ¶ KASKAL ^dUTU¹ mi-šil TUR MUL Dil-bat DŪ.DŪ ^dA-nim, ¶ KASKAL ^dUTU re-eš TUR MUL.APIN DŪ.DŪ ^d40, where, however, the paths of Ea and Enlil are interchanged. See § 2.2.1.2.1.

III 28. A quotation of Astrolabe B C 19.

III 28a. Cf. Astrolabe B C 20: [MU]LUR.GU.LA MUL al-lu-ut-tum MUL.Ā.MUŠEN ŠŪ.

III 29. Cf. Astrolabe B C 35: ITI.ŠE MUL.KU₆ MUL ^dAMAR.UD MUL.KA₃.A Ē.

III 29a. Cf. VAT 9818:12' (EAE 64): MUL.GĀM ^dAMAR.UD; Rm. 230:5': ^dGam-lum ^dA[MAR.UD?].

- III 30 r. 28 ¶ MUL šá EGIR-šú DU-zu MUL.SIPA.ZI.AN.NA ^dPap-sukkal IM.SAG.GÁ.ŠÈ
 III 30a r. 29 ¶ Sin TÙR NIGÍN-ma MUL.SIPA.ZI.AN.NA ina ŠÀ-šú DU NIM.MEŠ KUR SI.SÁ.MEŠ
- III 31 r. 30 ¶ MUL šá ina ZI IM ana IGI-it MUL.ŠUDUN DU-zu MUL.BIR
 III 31a MUL.ŠUDUN : MUL GU.LA MUL.BIR MUL.SUHUR.MÁŠ
- III 32 r. 31 ¶ MUL SA₅ šá ina DAL.BA.AN.NA MUL Ši-bi u MUL ^dA-nim DU-zu
 III 32a MUL A-nim MUL.LU.LIM
- III 33 r. 32 ¶ MUL Ma-a-šu šá ana IGI ^dA-nim DU-zu
 III 33a ^dA-nim MUL.AL.LUL
- III 34 r. 33 ¶ MUL SA₅ šá ana IGI ^dEn-líl IGI-it IM.KUR.RA
 III 34a ^dEn-líl a-na MUL.ŠU.GI i-qab-bi
- III 35 r. 34 ¶ MUL šá EGIR-šú DU-zu MUL.EN.TE.NA.BAR.ĤUM
 III 35a MUL.EN.TE.NA.BAR.ĤUM MUL.AL.LUL
- III 36 r. 35 ¶ MUL Tu-a-mu GAL.MEŠ a-na MUL.MAŠ.TAB.BA.TUR.TUR i-qab-bi
 subscript r. 36 ina ŠĀ ¶ MUL.MAR.GÍD.DA ana AN.MI
-
- catchline r. 37 ¶ UL.AŠ.GÁN ina ITI.BÁR IGI-mar
 end

Text IV

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

- IV 1 1' traces
 2' [] LÚ KUR lu x šú? []
 3' [] ^dEN KUR []
 4' [] UN.MEŠ ^dEN KUR SI.SÁ x x []
-
- IV 2 5' [¶ MUL.MAŠ.TAB.BA a-na] KÚ-ti [^dU+GUR I 14; III 12; VII 2
 IV 2a 6' [DU].MEŠ-zu MUL.MEŠ šú-nu ^d[Mes?] -la[m²-]
 7' [^dLugal-gir-ra u] ^dMes-lam-ta-è-a DIB-iq [ina KUR.URI^{ki}] V 1b; VI 1a; VII 2a
 8' [^d50 ep-qá u be]-en-ni ŠUB-ma ^dU+GUR MÁŠ.A[NŠE]
-
- IV 3 9' [¶]-²a-a mi DU-zu a-ga-a a-pí-ir MUL.BI MUL []
 10' [] A.ZI. []
-
- IV 3a 11' [¶ UL.AŠ.GÁN UL.MEŠ-šú it]-tan-bi-ṭu A.KAL DU- [kam]
-
- IV 4 12' [¶ ^dIMIN.BI a-na] KÚ-ti bu-[lim] V 2; VI 2; VII 3
 IV 4a 13' [¶ MUL.MUL u MUL.MAR UR.BI D]U.MEŠ ŠĖG.MEŠ u A.KAL.MEŠ DU.MEŠ-nim-ma V 2a; VI 2a; VII 3a
 ŠĖ.GÙN.NU TUR ina EN.TE.NA ŠUB-[tim bu-lim]
-
- IV 4b 14' [¶ MUL.UDU.IDIM ana MUL.MUL T]E : KUR-ud ^dIMIN.BI KUR KÚ.[MEŠ] V 2b; VI 2b
-
- IV 5 15' [¶ MUL a-n]a BALA TIL.[LA V 3; VI 3; cf. I 15; III 13
 IV 5a ¶ MUL Dil-bat ina SAR-šá ¹⁶[MUL Ma-ak-ru-ú ana ŠĀ]-šá TU-ma È-a V 3a; cf. VI 5; VI 5a
 DUMU LUGAL ana É AD-šú T[U-ma ...]

Parallels

III 30. Astrolabe B B i 9-11: MUL šá EGIR.BI (i.e., Is-lé) izzazzu (DU-zu) MUL.SIPA.ZI.AN.NA ^dNin-šubur SUKKAL ^dA-nim u ^dIštar. Cf. MUL.APIN I ii 2: MUL.SIPA.ZI.AN.NA ^dPap-sukkal SUKKAL ^dA-nim ^dIštar.

III 31. Cf. IX 6. In Astrolabe B B i 17-18 there was a description of BIR (= Kařtu), 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 ù ^dA-nim DU-zu MUL.SIM.MAH.

III 33. Astrolabe B B ii 22-23: MUL.MAŠ.TAB.BA.GAL.GAL šá ina IGI-it ^dA-nim DU ^dPA u ^dLUGAL. Cf. MUL.APIN I ii 25: 2 MUL.MEŠ šá EGIR-šá (i.e., GIŠ.GÁN.ÛR) DU.ME-zu ^dPA u ^dLUGAL.

III 34. Cf. Astrolabe B B iii 4-5: MUL šá IGI-it ^dEn-líl ina ZI IM.[x.x] MUL.BI ^dA-nu-ni-[tum].

- 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.ĪUM.
 III 35a EN.TE.NA.BAR.ĪUM 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 [...]
- IV 2 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 5 [The ... star] is for the end of the dynasty.
 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 2a. MUL.APIN I i 5: {¶ MUL}.MAŠ.TAB.BA.GAL.GAL

^dLugal-gir-ra u ^dMes-lam-ta-è-a. Astrolabe B B ii 20-21: MUL.
 {MAŠ.TAB.BA.TUR[?].TUR[?] ša ina IGI-it} ^dA-nim DU
^dLugal-gir-fra! [u] ^dMes-lam-ta-è.

IV 3a. = XV 20. Cf. K.3094+ ii 8f.: ¶ MUL.AŠ.GÁN MUL.
 [.....] A.KAL.MEŠ [...].

IV 4a. K.3558:10: ¶ MUL.MUL u MUL.MAR.GÍD.DA UR.

BI DU.ME (no apodosis; commentary: ^dDil-bat KI MUL.
 MUL SAR-ma).

IV 4b. EAE 56:81: ¶ MUL.UDU.IDIM MUL.MUL KUR-ud
^dIMIN.BI KUR KÚ.MEŠ.

IV 5a. K.2226 ii 42 and 45, Sm. 1354:6': ¶ MUL Dil-bat ina
 SAR-ša ^dMa-ak-ru-ú ana ŠĀ-šú TU-ma NU È-a DUMU.LUGAL
 ana É AD-šú TU-ma AŠ.TE DIB-bat (i.e., same omen but
 with negation); Rm. 230:16': [...] Ma-ak-ru-u ana Š[Ā...].

IV 6	17'	[¶ MUL.UŠ.A.KE _x a-na] NAM.BAD MÈ ŠUB.BA	
IV 6a	18'	[^d Dil-b]at ina ^d UTU.ŠÚ.A IGI-ma zik-[rat	
<hr/>			
IV 7	19'	[¶ MUL.SAL.A.KE _x a-na] NAM.SAL TUK	[
	20'	[ana UŠ.MEŠ u] l-lu-di	
IV 7a		^d Dil-bat ina ^d UTU. [È IGI-ma sin-ni-šat	
<hr/>			
IV 8	21'	[¶ MUL.MEŠ ^d UTU.È a-na]	I[M.ŠÈG ŠÈG]
IV 8a	22'	[¶ MUL.MEŠ ina ^d UTU.È n] e-mu-ru ŠÈG.MEŠ [u A.KAL.MEŠ ZAL.ZAL-u]	III 14 III 14a
<hr/>			
IV 9	23'	[¶ MUL.MEŠ ^d UTU.ŠÚ.A? a-n] a	IM.[ŠÈG ŠÈG]
IV 9a	24'	[¶ MUL.MEŠ ina ^d UTU.ŠÚ.A? n] e-mu-ru : DU.MEŠ-ma [	I 17
<hr/>			
IV 10	25'	[¶ MUL.MEŠ nam-ru a-na IM].ZI.GA	III 15
IV 10a		^d UDU.IDIM.ME [Š i-ba-il-u-ma]	III 16a
<hr/>			
IV 11	26'	[¶ MUL.MEŠ SAR.MEŠ-ḥu] a-na [ZI IM]	I 18; III 16
IV 11a	27'	[¶ MUL.MEŠ it-t] a-na-an-pa-hu IM.DIRI NU ZI-[a]	
		(gloss): LUGAL	
<hr/>			
IV 12	28'	[¶ MUL ...	
IV 12a		^d]UDU.IDIM.MEŠ ina AN-e a-dan-na-ti-[šú-nu DIB-ma (...)]	III 19a
IV 13	29'	[¶ MUL.MEŠ DUL.LA] a-na IM.ŠUB.BA	I 19; III 18
IV 13a		[^d UDU.IDIM.MEŠ ú-tan-na-tu-ma]	III 18a
IV 13b	30'	[¶ MUL Nin-gír-su di]-nu iq-qir KI.MIN TUR KI.MIN HA.[A]	III 19
IV 14	31'	[¶ MUL.AN.TA.ŠUB.ŠUB.BA] a-na IM.ŠUB.BA [	I 20; III 20

break

Text V

F K.10756

V 1	1'	[MU ^d Li ₉ -s] i ₄ a-na GÍR.TAB MU (= qabi)	cf. III 11c
V 1a		^d U ^d Š[al-bat-a-nu? ...]	
V 1b	2'	[^d Lugal-g]ír-ra u ^d Mes-lam-ta-[è-a DIB-iq]	IV 2a; VI 1a; VII 2a
	3'	[ina KUR URI ^{ki} ^d]50 ep-qá u be-en-na ŠU[B-ma ^d U+GUR MÁŠ.ANŠE...]	
V 2	4'	[¶ ^d IMIN.BI] ana ú-kul-ti bu-lím	IV 4; VI 2; VII 3
V 2a		MUL.[MUL ¹ [u MUL.MAR UR.BI DU.MEŠ ŠLG.MEŠ] ^{s'} [u] [A.KAL ¹ .MEŠ DU-ma ŠE.GÜN.NU TUR-ír ina E[N.TE.NA ŠUB-tim MÁŠ.ANŠE]	IV 4a; VI 2a; VII 3a
V 2b	6'	[¶ MU]L.UDU.IDIM MUL.MUL KUR-ud ^d IMIN.BI [KUR KÚ.MEŠ]	IV 4b; VI 2b
V 3	7'	[¶ MUL ... a-n] a BALA TIL.LA	IV 5; VI 3
V 3a		MUL Dil-bat ina S[AR-šá ^{8'} MUL Ma-ak-ru-ú ana ŠÀ-šá TU-ma(NU)] [^È]-a DUMU LUGAL ana É AD-šú [TU-ma ...]	IV 5a; VI 5a
<hr/>			
V 4	9'	[¶] x DU ₆ :	
V 4a	10'	[¶ ITL.BÁR MUL Dil-[bat ...] DU ₆ :	
V 4b	11'	[¶ MUL Dil-bat ŠU [] [DU ₆ : {MUL} [

break

Notes

IV 11a. LUGAL appears as a gloss to IM.DIRI; for a parallel apodosis with šarru, see Parallels. Note that the gloss presupposes a reading IM.KAL instead of IM.DIRI, i.e., IM dan-nu ZI-a, variant: LUGAL dan-nu ZI-a.

IV 12. Possibly to be restored after III 17.

V 1b. Note that ^d50 is written 20+30.

- 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.ŠUB.ŠUB.BA star is for the abating[?] of wind.
 break

Translation

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

Parallels

IV 6. K.800:12f.: [UL.UŠ.A.ŠÈ ana NAM.BAD ŠUB.BA-ma MUL Dil-bat zik-r[at] ana NAM.BAD qa-[bi]; BM 35614:7'(= LBAT 1570): MUL.UŠ.A.KE_x Dil-bat.
 IV 6a. K.10566 r. 13': dDil-bat ina dUTU.ŠÚ.A zik-rat BAR-tum; BM 134543: [MUL] Dil-bat ina dUTU.ŠÚ.A ŠÚ-ma zak-rat [BAR-tum?]; K.3601 + Rm. 103 r. 35': [MUL Dil-bat ina] dUTU.ŠÚ.A IGI-ma zik-rat BAR-[tum]; etc.
 IV 7. K.800:16f.: [UL.SALA.ŠÈ ana SAL.TUK.DUG₄.GA.ŠÈ MUL Dil-bat sin-ni-šat ana UŠ.MEŠ ul-lu-di; K.8493 r. 7: [...] ana UŠ.MEŠ ul-lu-di; BM 35614:6' (= LBAT 1570): MUL.[SAL].A.KE_x Dil-bat.
 IV 7a. K.10566 r. 12': dDil-bat ina dUTU.È sin-ni-šat SIG₅; BM 134543:3' and K.3601 + Rm. 103 r. 34': [MUL] Dil-

bat ina dUTU.È KUR-ma sin-ni-šat [SIG₅?]; K.800:18: MUL Dil-bat ina dUTU.È KUR-ha-ma sin-ni-šat SIG₅; 81-2-4,239:5': [MUL Dil-bat ina dUTU].È KUR-ma sin-ni-šat SIG₅ ina dUTU.ŠÚ.[A ŠÚ/IGI-ma zik-rat BAR-tum] (parallel: ND 4362 ii 16); K.12762:4: [MUL Dil-bat ina dUTU.È KUR-ma sin-ni-šat...].

IV 8. K.6686:4', K.2894 r. 21 and dupls.: [MU] L.MEŠ ina dUTU.È ne-mu-ru.

IV 11. 81-2-4,204:18: [MUL.MEŠ] ina AN-e it-ta-na-x-x IM.DIRI NU ZI-[a]; K.2229 r. ii 18': [MUL.MEŠ mu-ši-ti it-ta-na-an-pa-hu MAN KALA.GA ZI-a.

V. For parallels see Text IV.

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.ĀG.AN.NE ana BALA TIL.LA [...]; AfO 19 107 iii 23: MUL.ĀG.AN.NA_x(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': [¶ MU]L.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-kúr-ti.

VI 4. Free restoration.

VI 4a. K.3780 i 10, TCL 6 18 + r. 21f.: ¶ MUL.GĀM lum-mu-un BALA HA.A; Rm. 230:3': ¶ ^dGam-lum lum-mu-un [...]; Rm. 2,309 ii 18: ¶ MUL.GĀM l[um-mu-un ...].

VI 4b. = XVI 6. TCL 6 18 + r. 23: MUL.GĀM zi-mu-šu uš-ša-na-la-mu (commentary, no apodosis); Rm. 2,309 ii 19: ¶ MUL.GĀM zi-[-...]; Rm. 230:4': ¶ ^dGam-lum zi-mu-šú [...].

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 [KU].

VII. For parallels see Text IV.

Text VIII

I K.9098 reverse (obverse destroyed)

	1'	[]	[
VIII 1	2'	[	¶ MUL Rab-bu ana z	]	I-bu SU.BIR ₄	[^{ki}	II 6
VIII 2	3'	[			MU]L.GÀM MUL Nin-si ₄	[
VIII 2a	4'	[			]	MUL Dil-bat ina ITI	[
VIII 3	5'	[			]	[NU SAR ²]	
VIII 4	6'	[			]	SAG.ME.GAR ana SAG MUL.GÍR.	[TAB
VIII 4a	7'	[]		[
VIII 5	8'	[			MUL.GÀ]M MUL.IM.ŠU.RIN.NA	ana MU x	[
VIII 5a	9'	[			SAL.MEŠ]	ina Û.TU SI.SÁ.MEŠ	MUL
VIII 6	10'	[			]	[NU SAR ²]	
	11'		traces				
			break				

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.: [𒍪 MUL.SAG.ME. KIL.LAM GÁL-u ana 2 HALA.
 GAR] ana SAG MUL.GIR.TAB ik-ta-šad ina KUR.URU^{ki}

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.

IX		X		XI		XII
1-5	=	1-5				
6-11						
12-15						
		16-20	=	1-5		
		21-22	=	7 ¹¹ -8		
		23				
16-34					1-2	
					=	3-21

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.

OMEN	TEXT IX		ASTROLABE B				
	STAR	MONTH	SECTION A		SECTION B		PATH
			STAR	MONTH	STAR	PATH	
1	AŠ.GÁN	I	AŠ.GÁN	I	AŠ.GÁN	Ea	
2	MUL.MUL	II	MUL.MUL	II	MUL.MUL	Ea	
3	<i>Is lē</i>	all year	<i>Is lē</i>	III	<i>Is lē</i>	Ea	
4	SIPA.ZI.AN.NA	III	SIPA.ZI.AN.NA	IV	SIPA.ZI.AN.NA	Ea	
5	KAK.SI.SÁ	IV	KAK.SI.SÁ	V	KAK.SI.SÁ	Ea	
			BAN	VI	BAN	Ea	
6	BIR	VI	MU.BU.KÉŠ.DA	VII			
7	HÉ.GÁL- <i>a-a</i>	VII	(<i>hé-gál-lu</i>)	IX			
			Á.MUŠEN	XI			Enlil
8	<i>Dil-bat</i>	its own			<i>Dil-bat</i>	Anu	
9	GÍR.TAB	VIII/X			GÍR.TAB	Anu	
10	<i>Zibānītu</i>				UDU.IDIM		
					^d <i>Zibānītu</i>	Anu	
11	UD.KA.DU ₈ .A	(X) ¹²			UDU.KA.DU ₈ .A	Anu	

¹¹XI 6 seems to be simply a repetition of XI 4.

¹²The 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.¹³ 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 lê* (*a Tauri* and the Hyades) with month III. Further, he has switched the positions of GÍR.TAB (Scorpius) and *Zibānītu* (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.GÁN
- II MUL.MUL
- III SIPA.ZI.AN.NA
- IV KAK.SI.SÁ
- V BAN
- VI BIR¹⁴
- VII *Zibānītu*
- VIII GÍR.TAB
- IX UD.KA.DU₈.A

Except for the occurrence of AŠ.GÁN 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.KI¹⁵); 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 lê* 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.GÍD.DA in III 28c. He also accepts the substitution of BIR for MU.BU.KÉŠ.DA, quoting in support of it from some unidentifiable description of stars. In omen 7 he introduces HÉ.GÁL-*a-a*, probably through association with the word *hegallu*, "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.GÁL-*a-a* is SUKKAL ^d*Ninlil*, and inexplicably has it rise in month VII instead of *Zibānītu*.¹⁶ 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: GÍR.TAB and *Zibānītu*. 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.

¹³Whether 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*Kalītum* in Astrolabe B.

¹⁵Cf. III 27a.

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

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 lè* 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-ĥi-ir-ma* ITI-šú DIB to *ina* UD.DUG₄.GA-šú KUR-*ĥalina la* UD.DUG₄.GA-šú KUR-*ĥa*, 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).

SECTION 2			ASTROLABE B	
OMEN	STAR	MONTH	STAR	PATH
IX 12	A.ŠĀ.GA	I	AŠ.GĀN	Ea
IX 13	MUL.MUL	II	MUL.MUL	Ea
IX 14	SIPA.ZI.AN.NA	III	SIPA.ZI.AN.NA	Ea
IX 15	[KAK.SI.SĀ]	IV	KAK.SI.SĀ	Ea
X 16, XI 1	BAN	V	BAN	Ea
X 17, XI 2	BIR	VI	<i>Kalītu</i>	Ea
X 18, XI 3	EN.TE.NA.BAR.ĤUM	VII	EN.TE.NA.BAR.ĤUM	Enlil
X 19, XI 4	GĪR.TAB	VIII	GĪR.TAB	Anu
X 20, XI 5	<i>zi-qit-su</i>	IX		
X 21, XI 7	Á.MUŠEN	X	Á.MUŠEN	Enlil
X 22, XI 8	SIM.[MAĤ]	XI	SIM.MAĤ	Anu
X 23	KU ₆	XII	KU ₆	Ea

Again with the exception of AŠ.GĀN, this selection from Astrolabe B (rejecting *Šalbatānu*, UD.KA.DU₈.A, and ŪZ 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 AŠ.GĀN 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 AŠ.GĀN. 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 - XII₂, 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:

OMEN	STAR	MONTH	
4	EN.TE.NA.BAR.HUM	VII	cf. X 18
5	UD.KA.DU ₈ .A	I ¹⁷	
6	KU ₆	I ¹⁸	
7	BAN	V	cf. X 16
9 ¹⁹	BIR	VI	cf. X 17

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.

¹⁷In IX 11 its rising is put in month IX.

¹⁸In X 23 its rising is put in month XII.

¹⁹XIII 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.GÁN ina ITI.BÁR [IGI-mar BE-ma MUL BI NIM-ma IGI ... X 1
J i 2 BE-ma MUL BI ZAL-ma I[TI-šú DIB-ma IGI ...
- IX 2 J i 3 ¶ MUL.MUL ina ITI.GUD IGI-mar BE-ma MU[L BI NIM-ma IGI] 4DINGIR.ME GALGA KÚR ana X 2
SAL.SIG 5 GALGA. [MEŠ]
J i 5 BE-ma MUL BI uh-hi-ir-ma ITI-šú DIB-m[a IGI ...
- 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 ITI.SIG 4 IGI-mar BE-ma MUL B[I NIM-ma IGI ... X 4
K 1' traces
J i 8 BE-ma MUL BI uh-hi-ir-ma ITI-šú DIB-ma IGI LUGAL []
K 2' [] LUGAL KUR BI KUR-s[u x x]
- IX 5 J i 9 ¶ MUL.KAK.SI.SÁ ina ITI.ŠU IGI-mar [X 5
K 3' [] x MUL.BAN [ina ITI.NE IGI-mar 2]
J i 10 BE-ma MUL BI NIM-ma IGI KI. [A KUR u me-riš]
K 4' [] - - - - - ŠE [SI.SÁ]
J i 11 BE-ma MUL BI UD.ZAL-ma IGI KIA [KUR u me-riš]
K 5' [] - - - - - ŠE [NU SI.SÁ]
- IX 6 J i 12 ¶ MUL šá ina ZI IM.U x .LU DU-zu MUL.BIR dNi-ru dÉ-a [X
K 6' [] - - - ina ITI.KIN IGI-mar u DU-an?
J i 13 BE-ma MUL BI NIM-ma IGI KIA [me-riš KUR SI.SÁ]
K 7' [] - - - - - [- -]
J i 14 BE-ma MUL BI UD.ZAL-ma IGI KIA [me-riš KUR NU SI.SÁ]
K 8' [] - - - - - S[l.SÁ]
- IX 7 J i 15 ¶ MUL ĤÉ.GÁL-a-a SUKKAL dNin-líl u dŠar-pa-ni-t[um] X
K 9' [] -[ni]l-tum ina ITI.DU 6 IGI-mar
- IX 8 J i 16, ¶ MUL Dil-bat ina ITI.BI IGI-mar BE-ma MUL [BI NIM-ma IGI X
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 ár-hiš BE
- IX 9 J i 18 ¶ MUL.GÍR.TAB ina ITI.APIN : ITI.A [B IGI-mar X
K 12' [BE-ma MU]L BI NIM-ma IGI LUGAL KUR BI e-tel-liš
GIN.MEŠ
J i 19 MUL.GÍR.[na-ki]-ri-šu GAM-aš BE-ma M[UL BI UD.ZAL-ma IGI
K 13'] LUGAL KUR.BI LUGAL.ME
KUR DÙ.A.BI KÚR.ME-šú

Notes

IX 3. J i 6: x like ME.

IX 9. J i 19 has MUL.GÍR[in gloss script.

Translation

- IX 1 The Field rises heliacally in month I; if this star rises early: [...] if this star is late and passes by its month and rises [...]
- IX 2 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 [...]
- IX 3 The Jaw of the Bull stands all year; if this² star [...]
- IX 4 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.
- IX 5 The Arrow rises heliacally in month IV [and? ...]. 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.
- IX 6 The star which stands at the rising of the south wind is the Kidney, the Yoke, Ea, it rises heliacally in month VI and stands²; 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.
- IX 7 The star of Abundance, the vizier of Ninlil and Šarpanitu, rises heliacally in month VII.
- IX 8 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.
- IX 9 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.² 5ff.: ⁵ MUL.SIPA.ZI.AN.NA ina I[TI ...] ⁶ LUGAL KUR-su i²-ri-[...] ⁷ LUGAL KUR BI KUR-su [...] ⁸ ina ITI.SIG₄ MUL.SIPA.Z[I.AN.NA ...]

⁹ KI.A ina KUR SI.ŠÁ²1 [...].

IX 7. BM 47799:22' and dupl. BM 34058:6' (= LBAT 1565), also K.3780 ii 7': ¶ MUL HÉ.GÁL-a-a SUKKAL^dNin-lil ana MUL.ÛZ TE LUGAL GAL ina KUR GÁL-ši a-la-la DÛG.GA ina KUR GÁL^dGIR u^dNisaba ina KUR GÁL. Cf. MUL.APIN I i 13: MUL ša IGI-šu DU-zu MUL.HÉ.GÁL-a-a SUKKAL^dNin-lil.

- IX 10 J i 20 ¶ MU[L Zi-b]a-ni-tum e [ina ITI x IGI-mar]
K 14' [] - -
- IX 11 J i 21 ¶ M[UL U]D.KA.DU₈.A ina ITI.ŠU ŠÚ ina ITI [x IGI-mar BE-ma MUL BI NIM-ma IGI]
K 15' [MU]L - - - - LUGAL KUR BI ŠI.ŠI
KÚR-šú GAR-an
J i 22 BE-ma MUL BI UD.ZAL-ma [IGI]
K 16' [LUGAL KUR BI] ŠI.ŠI-šú KÚR-šú GAR-an IDIM.ME KUR-ád
-
- IX 12 J i 23 ¶ ina ITI.BÁR MUL.A.ŠĀ.GA MUL []
K 17' [BE-ma ina UD.DUG₄].GA-šú KUR-ḥa KĪA u me-riš-e-tum ina KUR
SĪ.SĀ.ME
J i 24 BE-ma ina la UD.DUG₄.GA-šú []
K 18' [G]A-šú KUR-ḥa KĪA u me-riš-e-tum NU SĪ.SĀ.ME^{19'} [ÍD.MEŠ mīlīšina?]]
ul ub-ba-la
- IX 13 J i 25 ¶ ina ITI.GUD MUL.MUL^dIMIN.B[I (DINGIR.MEŠ GAL.MEŠ) BE-ma ina UD.DUG₄.GA-šú-nu KUR.MEŠ-ni DINGIR.MEŠ
K 20' [D]UG₄.GA-šú-nu - - - - -
J GAL.MEŠ NIGÍN.MEŠ-ma] i 26 GALGA KUR ana SAL.SIG₅ GALGA.MEŠ IM.[MEŠ DŪG.GA.MEŠ DU.MEŠ
K - - - - - 21' []
J BE-ma ina la UD.DUG₄.GA-šú-nu KUR.MEŠ-ni (DINGIR.MEŠ GAL.MEŠ NIGÍN.MEŠ-ma)] i 27 GALGA KUR ana
K - - -] - - - - - 22' []
J SAL.ḤUL GALGA.MEŠ IM.[MEŠ ḤUL.MEŠ DU.MEŠ ŠĀ.ḤUL UN.MEŠ GAR-an]
K [] - - - - -
- IX 14 J i 28 ¶ ina ITI.SIG₄ MUL.SIPA.ZĪ.AN.NA M[UL ...]
K break
J i 29 BE-ma ina la UD.DU[G₄
- IX 15 J i 30 ¶ ina ITI.ŠU¹ [MUL.KAK.SĪ.SĀ ...
break

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 Ikù-omens, i.e., the omens of Text XII 1-2.

- IX 16 K r. 1' [¶ MUL.AŠ.GÁN ina ITI.BÁR IGI-ma šá IM.KUR.RA NU IGI ina KUR.NIM].MA^{ki} [KĪ.MIN] XII 3
- IX 17 K r. 2' [¶ MUL.AŠ.GÁN ina ITI.BÁR IGI-mar šá IM.MAR.TU NU IGI ina KUR.MAR].TU^{ki} [KĪ.MIN] XII 4
- IX 18 J r. 2' ¶ I[GI-ma ut-tab-ḅaṭ MU.3.KAM ina KUR DŪ.A.BI TU.RA^dDĪM.ME] x XII 5
K r. 3' [T]U.RA - - - []
- IX 19 J r. 3' ¶ I[GI-ma ú-tak-kal KUR DŪ.A.BI BE.ME GÁL.ME ŠUB-tim bu-lim BE-ma SU.KÚ] XII 6
K r. 4' [] - - - - - [KÚ]
- IX 20 J r. 4' ¶ I[GI-ma GIM di-pa-ri i-nam-bu-uṭ ina KUR DŪ.A.BI a-ru-ur-tum i-mad] XII 7
K r. 5' [] - - - - - m[ad]
- IX 21 J r. 5' ¶ KI-šú [MUL.ŠU.PA IGI KĪ.MIN KĪ.TA MUL.ŠU.PA IGI BIR-aḥ KUR.KUR] XII 8
K r. 6' [] - - - - -
- IX 22 J r. 6' ¶ KĪ.TA [MUL.NUN.KI IGI KĪ.MIN KI-šú MUL.NUN.KI IGI] šal-pú-ti [KUR GAR] XII 9
K r. 7' [] - - -
- IX 23 J r. 7' ¶ MUL.MEŠ-šú AN.TA nen-mu-du [KUR.SU.BIR₄^{ki} KUR.MAR.TU^{ki}] MU.7.KAM [i-šal] -[lal] XII 10
K r. 8' [] -
- IX 24 J r. 8' ¶ MUL.MEŠ-šú KĪ.TA nen-mu-du [KUR.NIM.MA^{ki}] KUR.URĪ^{ki} [KĪ.MIN] XII 11
K break

IX 25	J r. 9'	¶ MUL.MEŠ-ŠÚ AN.TA rit-ku-su KI.[MIN U ₅ .MEŠ KUR.SU.BIR ₄ ^{ki}] u KUR.MAR.TU ^{ki} KÚR.ME-ma 10' KUR MAR MU.7.KAM [KUR.S]U.BIR ₄ ^{ki} i-šal-lal	XII 12
IX 26	J r. 11'	¶ MUL.MEŠ-ŠÚ KI.TA rit-ku-su KUR.N[IM.MA ^{ki} KU]R.URI ^{ki} MU.5.KAM i-šal-[lal] 12' MU.5.KAM KUR.URI ^{ki} ZI-ma KUR NI[M.MA ^{ki}] ú-šam-qat a-lik IGI ERÍN-ŠÚ KUR-á[d]	XII 13
IX 27	J r. 13'	¶ MUL.MEŠ-ŠÚ AN.TA da- ² -mu MUL.MEŠ-ŠÚ K[IT.A] pa-nu-šú-nu SAG.UŠ.MEŠ ina KUR.SU.BIR ₄ ^{ki} u KUR.MAR.TU ^{ki} [KI.MIN] 14': KUR.NIM.MA ^{ki} MU.5.KAM d ¹ Ir-ra u d ¹ IM UN.MEŠ-ŠÚ-nu KÚ.MEŠ	XII 14
IX 28	J r. 15'	[¶] MUL.MEŠ-ŠÚ KI.TA da- ² -mu MUL.MEŠ-ŠÚ [A]N.TA pa-nu-šú-nu SAG.UŠ.ME[Š] 16' ina KUR.NIM ^{ki} u KUR.URI ^{ki} MU.5.KAM d ¹ Ir-ra u d ¹ IM UN.MEŠ-ŠÚ-nu KÚ.MEŠ	XII 15
IX 29	J r. 17'	¶ MUL.MEŠ-ŠÚ AN.TA SIG ₇ .MEŠ-ina MUL.MEŠ-ŠÚ KI.TA pa-nu-šú-nu SAG.UŠ.MEŠ ina KUR.SU.BIR ₄ ^{ki} u KUR.MAR.TU ^{k[i]} 18' MU.3.KAM ŠĒG.ME ina AN-e A.KAL.ME ina IDIM TAR.ME GÁN.ZI NU SIS.Á ub-bu-tu GÁL-[ši]	XII 16
IX 30	J r. 19'	¶ MUL.MEŠ-ŠÚ KI.TA SIG ₇ .MEŠ-ma MUL.MEŠ-ŠÚ AN.TA pa-nu-šú-nu SAG.UŠ.MEŠ [M]U.[5.KAM] ¹ ina KUR.NIM u KUR.URI ^{ki} GÁN.ZI NU SIS.Á ub-[bu-tu GÁL-ši]	XII 17
IX 31	J r. 20'	¶ MUL.MEŠ-ŠÚ AN.TA ma-gal SA ₅ .MEŠ ina KUR.SU.BIR ₄ u KUR.MAR GÁN.ZI SIS.Á EBUR ina-pu-uš KUR ŠÁ AN []	XII 18
IX 32	J r. 21'	¶ MUL.MEŠ-ŠÚ KI.TA ma-gal SA ₅ .MEŠ ina KUR.NIM u KUR.URI ^{ki} GÁN.ZI SIS.Á []	XII 19
IX 33	J r. 22'	¶ MUL.MEŠ-ŠÚ AN.TA NU IGI.DU ₈ .MEŠ-ma KI.TA IGI.DU ₈ .MEŠ LUGAL [KUR.SU.BIR ₄ ^{ki} u KUR. MAR.TU ^{ki}] 23' i-šal-la-lu-ma ŠĒG.MEŠ []	XII 20
IX 34	J r. 24'	¶ MUL.MEŠ-ŠÚ KI.TA NU IGI.DU ₈ .MEŠ-ma AN.TA IGI.DU ₈ .MEŠ L[UGAL 25' i-šal-la-lu-ma KUR.SU.BIR ₄ ^{k[i]}]	XII 21
catchline	J r. 26'	¶ ina ITI.BÁR MUL.AŠ.GÁN u MUL.MUL IGI.MEŠ x []	
subscript	r. 27'	DUB.51.KAM UD AN d ¹ EN.LÍL É.GAL m ¹ AN.ŠÁR-DÙ-A []	
colophon	r. 28'	GEŠTU ^{II} DAGAL-tu iš-ru-ku-uš i-ḥu-uz-zu []	
end			

Translation

- 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 nobles².
- 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.

Parallels

IX 13. Restored from 1932-12-12,551 TM. MM 10. 134556 (courtesy A. Millard): ⁶ [¶ ina] ITI.GUD MUL.MUL d¹[IMIN.BI] ⁷ [DINGIR.MEŠ] GAL.MEŠ ina a-dan-ni-š[ú-nu] ⁸ (= r.1) [KUR.MEŠ-ni] DINGIR.MEŠ GAL.MEŠ NIGIN. MEŠ-[m]a ⁹ (= r.2) [GALGA KUR ana] SIG₅-tim GALGA.

MEŠ ¹⁰ (= r.3) [IM.MEŠ] DÙG.GA.MEŠ DU.MEŠ.
IX 25-29. Parallel K.3099:1'-14'; this text continues with EAE Tablet 52, and will be edited with that tablet.
Colophon: Hunger Kolophone no. 319 beginning.

Text X

N K.2920 + 3604 + 8876 + 9527 + 12117 + 12136 + 12242 + 15582 + 18407 + 81-7-27,208 (N₁) (+) 80-7-19,100 (N₂)
 Y 81-2-4,424 (courtesy W. G. Lambert)

X	1	N ₂ ¹	¶ MUL.AŠ.GÁN ina ITI.BÁR IGI-mar BE-[ma MUL BI NIM-ma IGI ...	IX 1
		N ₂ ²	BE-ma MUL BI uḫ-hi-ir-ma I[TI-šú DIB-ma IGI ...	
X	2	N ₂ ³	¶ MUL.MUL ina ITI.GUD IGI-mar BE-ma [MUL BI NIM-ma IGI] ⁴ EBUR KUR SI.SÁ KUR SIG ₅ IGI	IX 2
			BE-m[a MUL BI uḫ-hi-ir-ma ...	
X	3	N ₂ ⁵	¶ MUL is le-e kal MU DU-az [	IX 3
X	4	N ₂ ⁶	¶ MUL SIPA.ZIAN.NA ina ITI.[SIG ₄ IGI-mar BE-ma MUL BI NIM-ma IGI ...	IX 4
		N ₂ ⁷	BE-ma MUL BI u[h]-hi-ir-ma ITI-šú DIB-ma IGI ...	
X	5	N ₂ ⁸	[¶] ¹ MUL.KAK.SI.SÁ ¹ [ina ITI.ŠU IGI-mar	IX 5
			Gap of ten omens	
X	16	N ₁ ¹	¶ ina ITI.NE MUL.BAN ^d EŠ ₄ .DAR [NIM.MA ^{ki} ...	XI 1
			BE-ma ina [] ² SILIM.MU ina KUR GÁL	
X	17	N ₁ ^{3'}	¶ ina ITI.KIN MUL.BIR ^d É-a [	XI 2
		N ₁ ^{4'}	BE-ma ina NU UD.DUG ₄ .GA-šú NU [
X	18	N ₁ ^{5'}	¶ ina ITI.DU ₆ MUL.EN.TE.NA.BAR.ḪUM MUL A [n-nu-ni-tum BE-ma ina] UD.DU[G ₄ .GA-šú KUR-ḫa]	XI 3
			⁶ KI.ḪAL GUN-sà ÍL BE-ma ina NU UD.[DUG ₄ .GA-šú KUR-ḫa KI.ḪAL] GUN-sà [NU ² ÍL]	
X	19	N ₁ ^{7'}	¶ ina ITI.APIN MUL.[GÍR].[TAB] [^d Iš ² -ḫa ² l-[ra] [BE-ma ina UD.DUG ₄ .GA-šú KUR-ḫ] a GÁN.BA SÍG.	XI 4
			ḪI.A u.ì.[GIŠ x]	
		N ₁ ^{8'}	BE-ma ina NU UD.D[UG ₄ .GA-šú KUR-ḫa] ina KUR [x (x)]	
X	20	N ₁ ^{9'}	¶ ina ITI.GAN zi-qit-su [] x-tum ina KUR [x (x)]	XI 5
		N ₁ ^{10'}	BE-ma ina UD.DU[G ₄ .GA-šú KUR-ḫa ...]	
X	21	N ₁ ^{11'}	¶ ina ITI.AB [MUL].[Á [?]].[MUŠEN ...] BE-ma ina UD.DUG ₄ .GA-šú KUR-[ḫa] ^{12'} SALKÚR ina KUR	XI 7
			ina-pu-[uš ...] ina KUR GAR	
X	22	N ₁ ^{13'}	¶ ina ITI.ZÍZ MUL.SIM.M [AH ... BE-m]a ina UD.DUG ₄ .GA-šá KUR-[ḫa] ^{14'} taš-mu-ú ina KUR GÁL	XI 8
		N ₁ ^{1'}	[BE-m]a ina NU UD.DU[G ₄ .GA-šá KUR-ḫa ... ina] [KUR] GÁL-ši	
		Y ^{1'}	[] ina KUR G[ÁL]	
X	23	N ₁ ^{15'}	¶ ina ITI.ŠE MUL.KU ₆ ^d [É]-[a EN te]-ni-sě-e-tum BE-m[a ina UD.DUG ₄ .GA-šú KUR-ḫa ŠĚG u]	
			A.KAL.ME ina IDIM ^{16'} DU.MEŠ-ni	
		Y ^{2'}	[] A.KAL.ME ina IDIM DU.[ME]	
		N ₁ ^{3'}	BE-ma ina NU [UD.DUG ₄].GA-šú KUR-ḫa ŠĚG.ME [u A.KAL.ME ina IDIM L]Á.MEŠ	
		Y ^{3'}	[A.KAL].ME ina IDIM LÁ.M[E]	

[Text X continues on p. 62]

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.

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 | 1' | [¶ ina] 'ITI ¹ .NE M[UL.BAN ^d ÉŠ ₄ .DAR NIM.MA ^{ki} | X 16 |
| XI 2 | 2' | ¶ ina ITI.KIN MUL.[BIR ^d É-a | X 17 |
| XI 3 | 4' | ¶ ina ITI.DU ₆ MUL.EN.TE.[NA.BAR.HUM | X 18 |
| XI 4 | 5' | ¶ ina ITI.APIN MUL.GÍR.TAB BE-ma ina UD.SUR [| X 19 |
| XI 5 | 6' | ¶ ina ITI.GAN zi-qit-su BE-ma [| X 20 |
| | 8' | NU KUR-ḥa [| |
| XI 6 | 9' | ¶ ina ITI.APIN MUL.GÍR.TAB [| X 21 |
| XI 7 | r. 1 | ¶ ina ITI.AB MUL.Á.MUŠEN e-ru-[ú | X 21 |
| | 2 | ^d Šal-bat-a-nu ina KI MUL [| |
| | 3 | MUL.Á.MUŠEN ina ITI.A[B [?] | |
| | 4 | SAL.KÚR ina KU[R ina-pu-uš | |
| XI 8 | 5 | ¶ ina ITI.ZÍZ MUL [| X 22 |
| | 6 | 'MUL ¹ [| |

break

left edge: [...] DIŠ BU U NI ŠI U NI

- X 24 N₁^{17'} ¶ iti.bár.zag.gar bára í[l.l] a iti ^dŠEŠ.KI dumu.sag ^dEn.l] il.lá.ke₄
 Y 4' [] - - - - -
- N₁^{18'} ina ITL.BÁR LUGAL in-na-[aš]-ši LUGAL iš-šak-kan [ITI ^dEN.ZU DUMU reš-t] u-ú šá ^dEn-líl
 Y 5' [] DU]MU reš-ti-i - - - -
- X 25 N₁^{19'} ¶ iti.gu₄.si.sá ki.duru₅ gá[l.t]ak₄.tak₄ iti en[sí.gal ^dEn.l]il.lá.ke₄
 Y 6' [] en]sí - - - - -
- N₁^{20'} ina ITL.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 šá ^dEn-líl
 Y 7' [] MI]N - - - - -
- X 26 N₁^{21'} ¶ iti.sig₄.ga kur.[kur é.ne.ne] mu.un.gibil.eš.ám [iti ^dSIG₄] kalam.ma.ke₄
 Y 8' [] it]ī - - - - -
- N₁^{22'} ina ITLSIG₄ KU[R. MEŠ É.MEŠ-ši-na] x x x MEŠ I[TI ^dKu]l-li šá ma-a-ti
 Y 9' []] - - - - -
- X 27 N₁^{23'} ¶ iti.šu.numun.n[a] iti (sipa) ^dDumu.zi ba].dib.ba
 Y 10' []].ba
- N₁^{24'} [ina IT]I.Š[U] ITI (SIPA) ^dDUMU.ZI ik-k]a-mu-u
 Y break
- X 28 N₁^{25'} [¶ iti.NE] x x [] iti ^dGIŠ.BIL.GA].MES u₄.8.kam
 N₁^{26'} []]irum.[ma ká.ne.ne] .ne
 N₁^{27'} [ina ITI.NE] in-nap-pah GI.IZI.LÁ ana ^d[A-nun-na-ki in]-na-aš-ši
 N₁^{28'} [] x SAG um eṭ-lu-tum ina KÁ-šú-nu ina ú-m[aš] u a-ba-ri uš-te-eš-šu-ú
- X 29 N₁^{29'} [¶ iti.kin ^dInanna.NIM.ma].ke₄ AMA.^dINANNA.ke₄.e.ne ^did.lú.ru.gú sik[il.e].da.a.ni.Šè im.mi.in.UD.UD
 N₁^{30'} [ina ITI].KIN ši-pir ^dINANNA.MEŠ ina ^dID.LÚ.RU.GÚ [ú-tal-la-la x]-x-ši-na ú-tab-ba-ba
 (bottom)
- X 30 N₁^{r. 1} [iti.du₆ ne.sag kù kur].kur.ra ^dA.nun.na an.da.gál.le.eš ki.[si.ga Lugal.^dDu₆.kù].ga
 N₁^{r. 2} [^dEn.ki ^dNin.k]i iti pa₄.bil.ga : ^rd¹ ^d[En.lil].lá.ke₄
 N₁^{r. 3} [ina ITL.DU₆ ni-q]u-ú el-lu šá KUR.MEŠ ana ^dA-nun-na-[ki in-na-a]q²-qí ⁴[kis-pu ana] ^dA-nun-na-ki
 ik-kas-sip IT[ī a-bi] ^ra² l-bi šá ^dEn-lil
- X 31 N₁^{r. 5} [¶ iti.apin giš.al (...) gi]š.apin.na a.da.mìn.đi.e.ne [it]i ^dIM gú.gal an.ki.a
 N₁^{r. 6} [ina ITL.APIN GI]Š.AL u GIŠ.APIN uš-te-eš-šu-u ITI ^dIM GÚ.GAL AN-e u KI-tim
- X 32 N₁^{r. 7} [¶ iti.gan hé.gal ... ur.sag AŠ.D]U ^dGİR.UNU.GAL kalam.ma.ta ba.ra.è
 N₁^{r. 8} [ina ITI.GAN hegallu?] uk-ta-mar ITI qar-ra-du gít-ma-lu ^dU+GUR šá ana KUR uš-ša-a
- X 33 N₁^{r. 9} ¶ [iti.ab ... n]e ezen.mah An.na.ke₄ iti ní.gal ^dInanna.ke₄
 N₁^{r. 10} ina [ITL.AB ... up-ta]h-ḥa-ru ana pu-uh-ri-šú-nu [u]š-šu-ni i-sin-nu ši-ru šá ^dA-nim ITI nam-ri-ir-ri
 šá ^dIš-tar
- X 34 N₁^{r. 11} ¶ iti.zíz x [] x ^dEn.lil.lá.ke₄
 ina ITI.ZÍZ ITI hur-ba-ši bi-bil lib-bi šá ^dEn-líl
- X 35 N₁^{r. 12} ¶ iti.še.kin.kud [] ed]in.na ki.a a.gàr gal.gal.la ^dNin.gír.su.ke₄ urudu.šu.kin ki
 nu.tak₄.tak₄
 N₁^{r. 13} ina ITI.ŠE še-um in-ni-iš-ši-id maš-ka-na-a-tum EDIN i-ma-al-la-a u-ga-ru GAL.MEŠ šá ^dNin-gír-su
 ni-gál-lu ul i-sit
- X 36 N₁^{r. 14} 12 ki-iš-ru GABA.RI LIBIR.[RA].KE_x

Notes

X 24-35. Bilingual "astrolabe"; corresponding to section A of Sm. 755+1352+1651+1715+1988; Sm. 755+1352+1651 was Astrolabe B (= KAV 218). Restorations from KAV 218 and from identified as a duplicate of Astrolabe B and joined with Sm.

X 37 N ₁ r. 15	¶ iti.bár.zag.gar mul.AŠ.GÁN bára.íl.la iti ^d 1[ŠEŠ.K]I dumu.sag ^d En.[líl.lá.ke ₄]
N ₁ r. 16	gu.za ^d A.nin ki.min mul.an.na SAR [A]n ^d En.líl.x.[
N ₁ r. 17	ITL.BÁR ni-šit LUGAL ITI ^d Sin [DUMU reš-ti]-f ₁ ¹ šá ^d A-nim u [^d En-líl ...
X 38 N ₁ r. 18	¶ iti.gu ₄ .si.sá mul.mul ki.duru ₅ gál.ta[k ₄] x x [] ¹⁹ giš.apin [...]
N ₁ r. 20	x [x] ki ITI ^d Nin-gír-su [] ²¹ ir-ra-ah-h] a-šu GIŠ.APIN [
X 39 N ₁ r. 22	[¶ iti.si]g ₄ .ga mul.sipa.z[i.an.na
N ₁ r. 23	GIŠ.GI ŠÀ NI IN ITI [
X 40 N ₁ r. 24	[¶ iti.šu].numun.na mul.kak.s[i.sá
N ₁ r. 25	[x] x BI IŠ NUMUN x [
X 41 N ₁ r. 26	[¶ iti.ne].ne.gar m[ul (gap of ca. 10 lines, comprising months VI-XI)
X 47 N ₂ r. 1'	traces
X 48 N ₂ r. 2'	[¶ iti.še.kin.k]ud mul.maš.m[āš?
N ₂ r. 3'	[i-ma-al-l]i ina A.GÀR x [
N ₂ r. 4'	[] x PAD MI SIG ₇ [
X 49 N ₂ r. 5'	[¶ iti.d]iri.še.kin.kud a.da.min [
N ₂ r. 6'	^d ŠEŠ ² .KI igi nu mu.ni.in.[du ₈ ?
N ₂ r. 7'	te-ši-it za/h[a
N ₂ r. 8'	UD.29.KAM [
X 50 N ₂ r. 9'	13 ki-iš-[ru
X 51 N ₂ r. 10'	x [
catchline N ₂ r. 11'	¶ MUL.AŠ.GÁN [
subscript N ₂ r. 12'	PÀ[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 [...]

Notes

- 1988 by ER in the British Museum; Sm. 1715 was joined to it subsequently by W. G. Lambert. Only the obverse of Sm. 755+ is preserved; the upper part contains, as does KAV 218, Astrolabe B column A; the lower part may have contained, as does KAV 218, the remainder of Astrolabe B, but only a few traces are visible, not enough to identify the contents. See Appendix.
- X 27. Compare the "bilingual hemerology" cited Weidner *Handbuch* p. 13: [¶] ITI.ŠU MUL.SIPA.ZI.AN.NA ^dNIN.ŠU.NIR sukkal.mah An.na ^dInanna : ina ITI.ŠU Ši-ta-ad-da-lu ^dPap-sukkal SUKKAL ši-i-ru šá ^dA-nim u ^dIštar.
- X 28. Traces in line 28' do not fit the expected tušu'u (or samanti, samnū) ūmī.
- X 29. Traces (a vertical wedge) in line 30' do not seem to fit the expected zu]-mur-ši-na.
- X 30. Apart from the "Bilingual Astrolabe," the bilingual explanation of the VIIth month is also quoted, with commentary, in the iqqr ipuš commentary BM 42286 (CT 41 39; transcription Labat Commentaires p. 100, no. XIII; partially quoted Labat Calendrier p. 218f.), rev. 6-8: ina ITI.DU₆ SISKUR KÙ šá KUR.KUR ana x [...innaqqi] KI.SI.GA a-na ^dA-nun-na-ki ik-kas-sap ITI a-bi šá ^dEn.líl x [...] A.A ^dEN.LÍL.LÁ.KE₄: ^dMIN a-bi a-bi šá ^dEn.líl : ^dLugal.du₆.kù.ga : ^dÉ-1a¹ [...].
- X 33. There seems to be not enough room in the Sumerian line to restore [ab.ba uru ...], the correspondence to the first half of the Akkadian line, [šībūt āli upta] h̄haru ana puhrišunu uššūni.
- X 34. The Akkadian version is written between the two halves of the Sumerian (the second half being ^dEn.líl.lá.ke₄).
- X 36. Subscript to the preceding 12 sections.
- X 37-49. A second bilingual "astrolabe," adding as thirteenth month the intercalary Addaru. The "mythological explanation" partly corresponds to the first "astrolabe" and wherever possible is restored from it. Note that Text XII ii seems to contain similar material.
- X 38. The distribution of the Sumerian and Akkadian versions is not clear; rev. 20 may be Sumerian.
- X 39. The Akkadian version seems to correspond to the Astrolabe's (MUL.BI) ^dBIL.GI ša-nin; read BIL¹.GI ša-ni-in?
- X 48. The distribution of the Sumerian and Akkadian versions is not certain.
- X 50. Subscript to the preceding 13 sections.

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.GÁN ina ITI.BÁR IGI-ma šá IM.U_x.LU NU [IGI] 2 ina KUR.URI^{ki} GÁN.ZI NU SI.SÁ ub-bu-tu
[GÁL-ši]
- XII 2 M₁ 3 ¶ MUL.AŠ.GÁN ina ITI.BÁR IGI-ma šá IM.SI.SÁ NU IGI ina 1KUR¹ [SU.BIR₄^{ki}] 4GÁN.ZI NU SI.SÁ UN.MEŠ
ŠÁM DUMU.MEŠ-ši-na 1KÚ.MEŠ¹
- XII 3 M₁ 5 ¶ MUL.AŠ.GÁN ina ITI.BÁR IGI-ma šá IM.KUR.RA NU IGI ina KUR.NIM.MA^{ki} [KI.MIN] IX 16
- XII 4 M₁ 6 ¶ MUL.AŠ.GÁN ina ITI.BÁR IGI-ma šá IM.MAR.TU NU IGI ina KUR MA[R.TU^{ki} KI.MIN] IX 17
- XII 5 M₁ 7 ¶ IGI-ma ut-tab-baṭ MU.3.KAM ina KUR DÙ.A.BI TU.RA dDÌM.ME [x x] IX 18
- XII 6 M₁ 8 ¶ IGI-ma ú-tak-kal ina KUR DÙ.A.BI BE.ME GÁL.ME ŠUB-tim bu-lim BE-[ma SU.KÚ] IX 19
- XII 7 M₁ 9 ¶ IGI-ma GIM di-pa-ri i-nam-bu-uṭ ina KUR DÙ.A.BI a-ru-ur-t [um i-mad] IX 20
- XII 8 M₁ 10 ¶ KI-šu MUL.ŠU.PA IGI KI.MIN KI.TA MUL.ŠU.PA IGI [BIR-ah KUR.KUR] IX 21
- XII 9 M₁ 11 ¶ KI.TA MUL.NUN.KI IGI KI.MIN KI-šu MUL.NUN.KI IGI šal-pú-t [i KUR GAR] IX 22
- XII 10 M₁ 12 ¶ MUL.MEŠ-šu AN.TA nen-mu-du KUR.SU.BIR₄^{ki} u KUR.MAR. 1TU^{ki1} [...] IX 23
- XII 11 M₁ 13 [¶ MUL] .MEŠ-šu KI.TA nen-mu-du KUR NIM.MA^{ki} u KUR.URI^{ki} [KI.MIN] IX 24
- XII 12 M₁ 14 [¶ MUL.MEŠ-šu AN.TA r] it-ku-su KI.MIN U₅.MEŠ KUR.SU. [BIR₄^{ki} u KUR.MAR.TU^{ki} 15 [KÚR.ME-
ma KUR.MAR.TU^{ki}] MU.7.KAM KUR.SU.BIR₄^{ki} i-šal-[lal] IX 25
- XII 13 M₁ 16 [¶ MUL.MEŠ-šu KI.TA r] it-ku-su KUR.NIM.MA^{ki} KUR. [URI^{ki} MU.5.KAM] 17 [i-šal-lal MU.5.KAM] IX 26
KUR.URI^{ki} Z [I-ma] 18 [KUR.NIM.MA^{ki} ú-šam-qat a-l] ik pa-ni-šu KUR-[ád]
- XII 14 M₁ 19 [¶ MUL.MEŠ-šu AN.TA da-ṽ-mu MUL].MEŠ-šu KI.TA pa-nu-šu- <nu > 20[SAG.UŠ.MEŠ ina KUR. IX 27
SU.BIR₄^{ki} u KUR.MAR.TU^{ki} KI.MIN] KUR.NIM.MA^{ki} 21[MU.5.KAM d1r-ra dIM UN.MEŠ-
šu-nu] K[U.MEŠ]
- XII 15 M₁ break
- M₂ 1 ¶ MUL.MEŠ-šu [KI.TA da-ṽ-mu MUL.MEŠ-šu AN.TA pa-nu-šu-nu SAG.UŠ.MEŠ ina NIM.MA^{ki}] 2' u IX 28
KUR.URI^{ki} M[U.5.KAM d1r-ra u dIM UN.MEŠ-šu-nu KÚ.MEŠ]
- XII 16 M₂ 3' ¶ MUL.MEŠ-šu AN.TA SIG₇-[ma KI.TA pa-nu-šu-nu SAG.UŠ.MEŠ ina KUR.SU.BIR₄^{ki}] 4' u MAR. IX 29
TU^{ki} MU.3.[KAM ŠĚG.ME ina AN-e A.KAL.ME ina IDIM TAR.ME] 5' me-ri-šu NU SI.SÁ
[ub-bu-tu GÁL-ši]
- XII 17 M₂ 6' ¶ MUL.MEŠ-šu KI.TA SIG₇-ma AN.TA [pa-nu-šu-nu SAG.UŠ.MEŠ MU.5.KAM ina KUR.URI^{ki}] 7' u IX 30
NIM.MA^{ki} [me-ri-šu NU SI.SÁ ub-bu-tu GÁL-ši]
- XII 18 M₂ 8' ¶ MUL.MEŠ-šu AN.TA ma-gal SA₅.MEŠ [ina KUR.SU.BIR₄^{ki} u KUR.MAR.TU^{ki}] 9' KI.LAM ina-pu-uš IX 31
[KUR ŠÀ AN ...]
- XII 19 M₂ 10' ¶ MUL.MEŠ-šu KI.TA ma-gal SA₅.MEŠ [ina NIM.MA^{ki} u KUR.URI^{ki} GÁN.ZI SI.SÁ ...] IX 32
- XII 20 M₂ 11' ¶ MUL.MEŠ-šu AN.TA NU IGI.DU₈-ma KI.[TA IGI.DU₈ LUGAL KUR.SU.BIR₄^{ki}] 12' u KUR.MAR. IX 33
TU^{ki} [i-šal-la-lu-ma ŠĚG.MEŠ ...]
- XII 21 M₂ 13' ¶ MUL.MEŠ-šu KI.TA NU IGI.DU₈-ma [AN.TA IGI.DU₈ LUGAL KUR ... u KUR ... i-šal-la-lu-ma IX 34
KUR.SU.BIR₄^{ki} ...]

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 [...].

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 obverse¹ column ii and reverse² ii are given here in transliteration.

M ₁ ii	1'	[		] x x [
	2'	[	u] h ² -hi-ra NU ² [
	3'	[	] x šu gi x [
	4'	[	] KI.MIN [
	5'	[	] e na 'KL.MIN' ² [
	6'	[	ITI.DIRI].ŠE.KIN.KUD A.DA.[MİN	(cf. X 49)
	7'	[	].BI UD.26.KAM [
	8'	[	] 'i ¹ NU.GÁ.GÁ [
	9'	[	] Á-šá ik ² -x [

ca. three lines broken

	13'	[		] NU TÙM [
	14'	[		] IGI ² dUTU ² [
	15'	[		] x x [
	16'	[		] d ² Šin AN [
	17'	[		] x KA ² x [
	18'	broken		
	19'	[		b]u (or M] EŠ)
	20'	traces		
		bottom		

reverse² ii

M ₁ ii	1	[		] UD ²
	2	[		]-az
	3	[	ŠĚG up-pu]-lu	
	4	[	ú-šal]-pat	
	5	[		] AŠ
	6	[	dIM] RA ú-šal-pat	
	7	[	DÙ].FA ¹ .BI	
	8	[	íL-ši	
	9	[	NIM.M] Aki	
	10	[	ú]-šal-pat	
	11	[		š]i
	12	[		] GÁL

ca. 7-8 lines broken

M ₂ ±20	[		] x x
21	[		] BIR UN.MEŠ
22	[	] DINGIR.MEŠ NE RU RU	
23	[		] x NUN na/uš MUL.MEŠ
24	[		] KUR DÙ.A.BI GAR-an
25	[		] KUR.KUR KÚR.MEŠ
26	[		] KUR ŠE BÚR
27	[		] ITI.BÁR ² MUL.AŠ.GÁN
28	[		] ig-da-ru-ru ²
29	[		ITI].DIRI.ŠE
30	[		] tu ² ne bi ri
31	[		] x ta-di-ra-ti
32	[		] x U ₈ .UDU.HLA
33	[		H]UL ² .MEŠ
34	break		

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 ŠÈG [
XIII 4 P	4'	[	¶ ina ITI.DU ₆ MUL.E]N.TE.NA.BAR.[HUM		XIV 3
	Q	5'	[	¶ ina ITI.DU ₆ MUL.EN.TE.N]A.BAR.HUM IGI LUGAL UD.MEŠ-ŠÚ [GÍD.MEŠ]	
XIII 5 P	5'	[	¶ ina ITI.BÁR MU]L.UD.KA.[		XIV 4
	Q	6'	[	¶ ina ITI.BÁR MUL.UD.KA.D]U ₈ .A IGI MU.S.KAM ina KUR.URI ^{ki} ina KA ^d ir-ra BE.MEŠ[GÁL.MEŠ ana MÁŠ.ANŠE [NU TE]	
XIII 6 P	7'	[	¶ ina ITI.BÁR MU]L.KU ₆ IGI [		XIV 5
	Q	7'	[	¶ ina ITI.BÁR MUL.KU ₆ IGI a-ru-ur-tum ina KUR GÁL	
XIII 7 P	8'	[	¶ ina ITI.NE] MUL.BAN IGI ŠE.[GIŠ]. [		XIV 7
	Q	8'	[	¶ ina ITI.NE MUL.BAN] IGI ŠE.GIŠ.Ī SIG ₅ -iq	
XIII 8 P	9'	[	¶ MUL.BAN ana] MUL.UD.AL.TAR [DIM ₄] KUR.NIM.MA ^{ki} NINDA DUG.GA [KÚ]		
	Q	9'	[	¶ MUL.BAN ana MUL.UD.AL].TAR DIM ₄ KUR.NIM.MA ^{ki} NINDA DUG.GA KÚ x	
XIII 9 P	10'	[	¶ ina ITI.KIN] MUL.BIR [IGI APIN ŠE] SI.SÁ		XIV 6
	Q	10'	[	¶ ina ITI.KIN MUL.BIR] IGI APIN ŠE SI.[SÁ]	
XIII 10 P	break				
	Q	11'	[	...] IGI KU ₆ .HIA u MUŠEN.HIA TAR.MEŠ KU ₆ ina ÍD e-ru-tam MUŠEN ina AN-e x x x x	
colophon	Q	12'	[	KUR ^m AN].ŠÁR.DÙ.A MAN ŠÚ MAN KUR AN.ŠÁR ^{ki}	

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 Irra 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 i 1': []UD.KA.DU₈.A I[GI ...]
 2' [MÁŠ].ANŠE EDIN.NA x x.

XIII 9. Thompson Rep. 221: ¶ ina ITI.KIN MUL.BIR IGI-ir APIN ŠE SI.SÁ MUL.BIR^dMUL.UDU.IDIM.GUD.UD.
 Colophon: Hunger Kolophone no. 317.

Text XIV

R K.9126 reverse?

XIV 1	1'	traces	
	2'	[] x GUR ma x [
	3'	ZI-ut BURU ₅ .Ī.A ana UDU. [
XIV 2	4'	[¶] MUL.ĪU.GÁ IGI ina DI ZI-a [šá?] [
XIV 3	5'	¶ ina ITI.DU ₆ MUL.EN.TE.NA.BAR.ĪU[M IGI] ^{6'} LUGAL UD.MEŠ-šú GÍ[D.MEŠ]	XIII 4
XIV 4	7'	¶ ina ITI.BÁR MUL.UD.KA.DU ₈ .A [IGI] ^{8'} MU.5.KAM ina KUR.URI ^{ki} ina KA ^d Īr-ra [BE.MEŠ] ^{9'} GÁL.MEŠ ana MÁŠ.ANŠE NU T[E]	XIII 5
XIV 5	10'	¶ ina ITI.BÁR MUL.KU ₆ IGI a-ru-ur-tú ina KUR G[ÁL]	XIII 6
XIV 6	11'	¶ ina ITI.KIN MUL.BIR IGI APIN ŠE SI.[SÁ]	XIII 9
XIV 7	12'	[¶ ina ITI.NE] MUL.BAN IGI ŠE.GIŠ.Ì [SIG ₅ -iq]	XIII 7
XIV 8	13'	[] MUL.SIPA.ZI.[AN.NA	
	14'	[] x LU [?] UD [
	15'	[] šá ina [
		break	

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.GÁN. 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.GÁN. The constellations and their occurrences in MUL.APIN are:

	STAR	OMENS	MUL.APIN I (Enlil)
Series I	1. ^d [NIN.KILIM]	4	
	2. KA.[MUŠ.Ī.KÚ.E]	5	i 34-35
	3. ŠU.GI	6-10	i 3
	4. AL.LUL	11-13	i 7
	5. [UR.GU.LA]	14	i 8
	(3 protases lost)		
			MUL.APIN I (Anu)
Series II	6. AŠ.GÁN	19-23	i 40
	7. <i>Tūtu</i>	24-25	i 42 (<i>Anunītu</i>)
	8. LÚ.ĤUN.GÁ	26-27	i 43
	9. MUL.MUL	28-29	i 44
	10. GU ₄ .AN.NA	30-31	ii 1
	11. SIPA.ZI.AN.NA	32-35	ii 2
	(6 protases lost)		

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.ZI.AN.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 GÂM (omens 6 and 13), two constellations close to each other and to SIPA.ZI.AN.NA. Omen 10, regarding the unidentified ^dIM.DUGUD^{mušen}, 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 ÍD.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:

STAR	OMEN	MUL.APIN I
ŠU.PA	1-2	i 12 (Enlil)
ŠAḤ	3-4	i 29 ²¹ (Enlil)
<i>Damu</i>	5	i 29 ²¹ (Enlil)
NIN.KILIM ²²	6	
UGA	8-11	ii 9 (Anu)
SIPA.ZI.AN.NA	12-14	ii 2 (Anu)
<i>Zibānitu</i>	16	ii 11 (Anu)

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.ZI.AN.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 *šumma*; 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.

²⁰MUL.APIN I i 3: MUL.ŠU.GI ^dEN.ME.ŠÁR.RA.

²¹MUL.APIN I i 29: MUL *ša ina* ZAG-šú *izzazzu* MUL.ŠAḤ ^d*Da-mu*.

²²See XV 4, where ^dNIN.KILIM is placed in this same position, just before the star KA.MUŠ.Ī.KÚ.E (MUL.APIN I i 34-35).

Text XV

S K.230

- XV 1 1' [] -tum [x]
 XV 2 2' [] LUḪ [x]
 XV 3 3' [] x DÙ-[uš]
 XV 4 4' [¶ UL] d[Nin-kilim? ... ku-ru-si-i]s-su ŠE.GIŠ.Ī K [Ú] XVII 6
 XV 5 5' [¶] UL.KA.[MUŠ.Ī.KÚ.E ...] x ina KUR Ī.GÁL
 XV 6 6' ¶ UL.ŠU.GI [] x x ki-zi-i SIG-i
 XV 7 7' ¶ UL.ŠU.GI [] su? ki-zu-ú ana EN-šú ḪI.GAR DÙ-ma NU KUR-á[d]
 XV 8 8' ¶ UL.ŠU.GI UL.GÀM e-zib LUGAL PA.AN.MEŠ-šú TAK₄.MEŠ-[šú]
 XV 9 9' ¶ UL.ŠU.GI GABA-su du-²-ú-mat É.GAL šar-ra-qu i-pal-la-[šú] XVI 7
 XV 10 10' ¶ UL.ŠU.GI GĪR.MEŠ-šú NU IGI.MEŠ LUGAL TA [GIŠ.GIGIR x x x]-u[š] XVI 5
 XV 11 11' ¶ [UL].[A]L.LUL UL.MEŠ-šú UL.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.LU]L UL.MEŠ-šú reš-tu-tu UL.UL.MEŠ-ma MIN [] 14' [A.KAL D]U-ma A.ŠÀ A.GÀR ul [i-ma-kar]
 XV 14 15' [¶] U[L.UR.GU.LA? ma]-diš MI ŠÀ KUR NU D[ŪG-ab] cf. XVI 15
 XV 15 16' [¶ UL ŠE.IR].ZI na-ši LUGAL URI^{ki} [KAL-ma NÍG.TUK IGI]
 XV 16 17' [¶ UL] un-nu-ut i-dir-t[um]
 XV 17 18' [] ḪA SA₅ x KUR-s[u]
 XV 18 lower edge 19' [] 20' [x x (x)] x A.AN []
 XV 19 r. 1 [¶ U]L.AŠ.GÁN KA×MI KÁ.GAL.MEŠ KÁ.DINGIR.RA^[ki]]
 XV 20 r. 2 [¶] UL.AŠ.GÁN UL.MEŠ-šú it-ta-na-an-bi-ṭu A.KAL [DU-kam]
 XV 21 r. 3 ¶ UL.AŠ.GÁN UL.MEŠ-šú un-nu-tu₄ A.KAL NU [DU-kam]
 XV 22 r. 4 ¶ UL.AŠ.GÁN UL.MEŠ-šú reš-tu-tu it-ta-na-an-ba-ṭu-ma MIN GU[D] r. 5 A.KAL DU-ma A.ŠÀ A.GÀR
 ul i-[ma-kar]
 XV 23 r. 6 ¶ UL šal-lum-mu-ú ana IGI MULAŠ.GÁN GIL MU.3.KAM ÍD.UD.KIB.NU[N^{ki}] r. 7 A.KAL-ša LÁ-[ti]
 XV 24 r. 8 ¶ UL Tul-tum KA×MI AN.TI.BAL É.MEŠ DINGIR.MEŠ KÚ
 XV 25 r. 9 ¶ UL Tul-tum gup-pu-šat re-e-mu u SILIM.MU ina KUR GÁL-ši
 XV 26 r. 10 ¶ UL.LÚ.ḪUN.GÁ un-nu-ut LUGAL SU.BIR₄^{ki} i-dir-tum IGI-ma[r]
 XV 27 r. 11 ¶ UL.LÚ.ḪUN.GÁ MI LUGAL MAR.TU^{ki} ina GIŠ.TUKUL ŠUB-ut
 XV 28 r. 12 ¶ UL.UL šat-ḫu-ma u MI.MEŠ BE.MEŠ ina KUR GÁL.MEŠ
 XV 29 r. 13 ¶ UL.UL ni-iḫ-su-ma UD.DA-su-nu NU GÁL dĪr-ra ZI-ma UN.MEŠ ul ú-[šam-qat]

Parallels

XV 5. K.2241+ :28f. (bilingual): UD MUL.KA.MUŠ.Ī.KÚ.E M[UL.BI ...] : MUL.KA.MUŠ.Ī.KÚ.E¹ [...].
 XV 8. K.3111:9' (left column of K.2226): [¶ MUL].ŠU.GI Gam-lum TAK₄-ib [...]; VAT 9818:11': [¶ M]UL.ŠU.GI MUL.GÀM TAK₄-ib LUGAL URI^{ki} PA.AN.[...] (with commentary:) MUL.GÀM dMarduk MUL.SAG.ME.GAR KI MUL [...]; K.6860:10': [¶ MUL.ŠU.GI MUL.GÀM ĩzib] LUGAL PA.ĀNĪ.[MEŠ-šú TAK₄.MEŠ-šú].
 XV 9. 81-24,326:4': ¶ MUL.ŠU.GI GABA-su du-²-u-mat É.GAL LUGAL šar-ra-qu fil-[pal-la-šú]; K.6589:6: [¶ MUL.ŠU.GI GABA-su du]²-ú-mat É.GAL [...]; the same apodosis

is attested (protasis 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.M[ÉŠ-...]; K.6589:5: [¶ MUL.ŠU.GI GĪR.MEŠ-š]ú NU IGI.DU₈.MEŠ LUGA[L ...].
 XV 11. K.1872+12062:27': ¶ MUL.AL.LUL M[UL.MEŠ-šú ...]; K.3147:3': [¶ MUL].AL.LUL MUL.MEŠ-šú it-ta-na-[an-ba-ṭu ...]; K.1494a:12': ¶ MUL.AL.LUL [MUL].[...].
 XV 12. K.1494a:13': ¶ MUL.AL.LUL MUL.M[ÉŠ-šú ...]; K.6645 ii 5': [¶ MUL.A]L.LUL MUL.MEŠ-šú un-nu-tú A.KAL NU DU-kam. See also Parallel to XV 21-22.

Translation

XV 1-4 fragmentary.

- XV 4 [If Ninkilim ...]: kurusissu rodents will eat the flax.
 XV 5 [If] KA.[MUŠ].i.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 IGI.MEŠ-šu ba-²-lu₄ nu-uh-šú ina KUR GÁL; ¶ MUL.MEŠ ša MUL.MIN IGI.MEŠ MUL.MUL.MEŠ-ma ÍD.IDIGNA DU-kam. See also Parallel to XV 21-22.

XV 14. Restored from Thompson Rep. 219:3f., 228:3f.

XV 15. K.3636:12': [... ŠE.IR.Z]I na-ši LUGAL URI^{ki} KAL-ma NÍG.TUK IGI.

XV 20. = IV 3a.

XV 21. Sm. 1093+ :4': [¶ MULAŠ].GÁN 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-šú] reš-tu-t[u ...], line 5: [... reš²-t]u²-tu un-nu-[tu ...].

XV 24. K.5867:2: [...] AN.TI.BAL É [...] (apod.).

XV 25. K.9236:11': [¶ MUL Tul-tum gup-pu]-šat re-e-mu u SILIM.MU ina KUR G[ÁL].

XV 28. K.1494a r. 6: ¶ UL.UL šat-ḥu-ma u [MI.ME]Š BE. MEŠ ina KUR GÁL.MEŠ.

XV 29. K.1494a r. 7: ¶ UL.UL ni-iḥ-su-[ma U]D.DA-su-nu NU GÁL-ši^d Ir-ra ZI-ma UN.MEŠ KUR ú-šam-qat.

- XV 30 r. 14 ¶ UL.GU₄.AN.NA UL.MEŠ-šú lum-mu-nu SIG₅ KUR HA.A Û.TU ÁB.GUD.HI.A u U₈.UDU.HI.A NU
[SI.SÁ]
- XV 31 r. 15 ¶ UL.GU₄.AN.NA UL.MEŠ-šú ba-³-lu₄ Û.TU bu-lim SI.SÁ
- XV 32 r. 16 [¶] [UL.SIPA.ZI].AN.NA LI.DUR-su SA₅ ina 15-šú MI GÁL-ši BAL-tum GÁ[L] r. 17 x x x [ta] ba XVII 14;
nu šá GIM EN-šú ina GIŠ.TUKUL Š[UB²-ut] cf. XVI 3
- XV 33 r. 18 [¶ UL.SIPA.ZI].AN.NA UL.MEŠ-šú UL.UL.MEŠ IDIM ug-dap-pa-šam-ma SAL.HUL [DÛ-uš] XVI 2 or 4
- XV 34 r. 19 [¶ UL.SIPA.ZI.A]N.NA UL.MEŠ-šú un-nu-tu₄ NUN na-ram? [] XVI 2 or 4
- XV 35 r. 20 [¶ UL.SIPA.ZI.AN].NA UL.MEŠ-šú im-daḥ-ḥa-ru a-a-um-ma ana x [] r. 21 x ru NU [x] XVI 2 or 4
- XV 36 r. 22 [¶] [] MI-at DUMU LUGAL i²-dir-[tu²] []
- XV 37 r. 23 [¶] [] BABBAR-at ERÍN LUGAL ina x []
- XV 38 r. 24 [] x GIŠ []
- break

Text XVI

T K.7621

- XVI 1 1' [¶ MU]L.[MEŠ AN-e NU] [GÁL.MEŠ
- XVI 2 2' [¶ MU]L.SIPA.ZI.AN.NA MUL.MEŠ-šú [] [x] [] cf. XV 33-35
- XVI 3 3' [¶] MUL.MIN LI.DUR-su MI AN.MI UD.16.KAM : XVIII 5
- XVI 4 ¶ MUL.MIN MUL.[MEŠ-šú] [] cf. XV 33-35
-
- XVI 5 4' [¶] MUL.ŠU.GI GIR.MEŠ-šú NU IGI.MEŠ LUGAL TA GIŠ.GI[GIR²] XV 10
- XVI 6 5' [¶] MUL.GÀM zi-mu-šú uš-ša-na-lam BALA HA.A-ma MAN-m[a DU₆.DU-a]
- XVI 7 6' [¶] MUL.ŠU.GI GABA-su du-³-ú-mat É.GAL LUGAL šar-ra-[qu i-pal-la-šu] XV 9
- XVI 8 7' ¶ MUL ^dEn-me-šár-ra MUL IGI-šú ma-diš e-kil EN.TE.NA dan-nu G[ÁL²]
- XVI 9 8' [¶] MUL En-me-šár-ra MUL IGI.BI GIM ka-ra-ri-e ina MURUB₄-šú I MUL ma-diš SA₅
um-šum dan-nu [GÁ]L
- XVI 10 9' [¶] MUL ^dIM.DUGUD.MUŠFN MUL.BI IGI.BI ma-diš SA₅ BE-ma EN.TE.NA šur-bu-ú BE-ma
É.MEŠ u[m-šum GÁL]
- XVI 11 10' [¶] MUL.GIŠ.KAK ^dEn-me-šár-ra MUL.BI IGI.BI LUL.AŠ AL.SI₄.SI₄ A.ZI.GA DUGUD.DA
KALAM.MA? []
- XVI 12 11' ¶ ^dEn-me-šár-ra ma-diš SA₅ A.KAL [x] [x]
- XVI 13 12' [¶] MUL.GÀM ŠE.IR.ZI na-ši SUḤUŠ AŠ.TE DU-an MUL.GIŠ.GIGIR KI-šú [x] []
-
- XVI 14 13' ¶ MUL.UDU.IDIM ana IGI MUL.IDIGNA NU [SAR²]

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-šú lum-mu-nu ŠUB-ti GUD.MEŠ.

XV 33. Thompson Rep. 86 r. 6-8: ¶ MUL.SIPA.ZI.AN.NA MUL.MEŠ-šú it-ta-na-an-bi-tu kab-tú ug-da-ap-pa-šá-am-ma le-mut-ti ip-pu-uš.

XV 34. K.6227 ii 6' (to K.3780): ¶ MUL.SIPA.ZI.AN.NA MUL.MEŠ-šú un-nu-tú x [...]; for other parallels see Texts XVI-XVIII.

XVI 6. = VI 4b.

XVI 8. TCL 6 18 + r. 18: ¶ MIN (=En-me-šár-ra) MUL

- XV 30 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.
- XV 31 If the Bull of Heaven's stars are very bright: the offspring of cattle will thrive.
- XV 32 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.
- XV 33 If the True Shepherd of Anu's stars scintillate: an important person will become powerful and commit evil deeds.
- XV 34 If the True Shepherd of Anu's stars are faint: the prince, beloved [...].
- XV 35 If the True Shepherd of Anu's stars are equal(ly bright?): someone [...].
- XV 36 [If ...] is black: the king's son [...].
- XV 37 [If ...] is white: the king's army in [...].

Translation

- XVI 1 If the stars of the sky are not [there? ...].
- XVI 2 If the True Shepherd of Anu's stars [...].
- XVI 3 If ditto's navel is black: eclipse on the 16th.
- XVI 4 If ditto's stars [...].
- XVI 5 If the Old Man's feet are not visible: the king [...] from the chariot.
- XVI 6 If the Crook's aspect becomes black: the dynasty will disappear and another [will arise].
- XVI 7 If the Old Man's chest is very dark: thieves will make a breach in the palace of the king.
- XVI 8 If Enmešarra's front star is very dim: there will be severe cold.
- XVI 9 If Enmešarra's front star is like the noonday sun, and in its middle one star is very red: there will be severe heat.
- XVI 10 If the Anzū bird's front star is very red: if it is winter, there will be frost; if it is summer, there will be heat.
- XVI 11 If the front star of Enmešarra's pole is very red: a severe flood [...] the land.
- XVI 12 If Enmešarra is very red: high water [...].
- XVI 13 If the Crook bears brilliance: the foundation of the throne will be stable—the Chariot [...] with it.
- XVI 14 The Wild Sheep in front of the Tigris star—not [written?].

Parallels

IGI-šú ma-diš e-kil: GU₄.UD ina MUL.ŠU.GI IGI-ma.
 XVI 9. TCL 6 18 + r. 16: En-me-šár-ra MUL IGI-šú GIM ka-ra-ri-e [... 1] MUL ma-diš SA₅: AN ina ÍL šá-ru-ru KI Dil-bat ina MUL [...].
 XVI 10. Cf. III 11b.
 XVI 11. For the Sumerian formulation of the protasis cf. the bilingual omens K.2241+ :24' and 26': u₄ mul.apin mul.bi LUL.AŠ al.si₄.si₄: MUL.APIN MUL.MEŠ-šú ma-?-diš sa-a-mu, also (said of MUL.AN.TA.SUR.RA) ibid. r. 10f.; cf. ibid. 14'-15': [u₄] MUL.GIŠ.FIGIRI [...] : MUL GIŠ.GIGIR

MUL.MEŠ-š[u ...], if MUL.GIGIR stands for Enmešarra.
 XVI 12. TCL 6 18 + r. 14: En-me-šár-ra ma-diš SA₅: GU₄.UD ina ŠU.GI GUR₄-m[a].
 XVI 13. TCL 6 18 + r. 20: MUL.GÀM ŠE.IR.ZI na-ši [išid] kussí ikân : ^dPA.ME.GAR ina MUL.ŠU.GI ša-ru-ru ÍL-ma; Rm. 2,309 ii 17: ¶ MUL.GÀM ŠE.[...].
 XVI 14. TCL 6 16 (EAE Tablet 56) r. 10: [¶] MUL}.UDU.ÍDÍM ana IGI ..ana.. MUL.ÍD.ÍDIGNA DU ^dIM RA-iš : ŠÍ.G.MEŠ : A.KAL.MEŠ GÁL.M[ÉŠ].

XVI 15	14'	¶ MUL.UR.GU.LA MI ŠÀ KUR NU DÙG-ab :	XIX 4; cf. XV 14
XVI 16		¶ MUL.LUGAL MI GAL.UNKIN.NA É. [GAL imât]	XIX 5
XVI 17	15'	¶ MUL.KU ₆ ana MUL.BAN TE EBUR KUR SISÁ MÁŠ.ANŠE.EDIN.NA DAGAL MAN KUR KALA.GA-ma [KÚR-] 16' [x x x] ŠE.GIŠ.Ì u ZÚ.LUM.MA SISÁ.MEŠ dGU ₄ .UD ana MUL.A [B.SÍN]	
XVI 18	17'	¶ MUL.BAN ana MUL.KAK.SI.S]Á KUR-ud EBUR SISÁ KI.LA [M GI.NA (dGU ₄ .UD ina ŠÀ MUL.AB.SÍN DU-ma)]	
XVI 19	18'	[¶ MUL] [x] ŠE.GIŠ.Ì NIM [SIG ₅]	
XVI 20	19'	[¶] ŠE.GIŠ.Ì [x]	
XVI 21	20'	[¶ ŠE.GIŠ.Ì] NIM [x]	
	21'	[šu-ú] r ² MU.B[I]	
	22'	[] [x] M[ES ²]	
		break	

Text XVII

U K.3555 col. i

	1'	traces	
XVII 1	2'	¶ MUL.ŠU.PA [
XVII 2	3'	¶ MUL.ŠU.PA it-ta-[na-an]-[paḥ	
XVII 3	4'	¶ MUL.ŠAḤ gup-pu-uš x [
XVII 4	5'	¶ MUL.ŠAḤ KA-šú BAD NUN.MEŠ ana x [
XVII 5	6'	¶ MUL Da-mu SA ₅ GIG.AN.TI.LA ina []	
XVII 6	7'	¶ MUL Nin-kilim i-[] 8' ku-ru-sis-si ŠE.GIŠ.Ì [KÚ]	XV 4
XVII 7	9'	¶ MUL it-tan-mar Ú.GUG bu-[lim] 10' LUGAL GAL ina KUR GÁL-ma KUR i-x	
XVII 8	11'	¶ MUL.UGA MUL.BI ma-diš S[A ₅] 12' EBUR ŠE.GIŠ.Ì SIS[Á]	
XVII 9	13'	¶ MUL.UGA ina KI.GUB-šú SAG.MEŠ-šú 14' AN i-na-ṭa-la ina MU BI ŠÈG SUR	
XVII 10	15'	¶ MUL.UGA ina KI.GUB-šú SAG.MEŠ-šú 16' KI i-na-ṭa-la ina MU BI ŠÈG DU-[x]	
XVII 11	17'	[¶] MUL.UGA MUL.MES-«šú» ba-ṭ-[lu] 18' dIM ŠÈG ṭaḥ-du-tum ú-šeš-š[ir]	
XVII 12	19'	[¶ MUL].SIPA.ZI.AN.NA ina KI.[GUB-šú] 20' [ša]-qu ina SAG ITI-šú IGI MU [x x]	cf. XVIII 3
XVII 13	21'	[¶ MUL MIN] LI.DUR-su it-ta-na-an-biṭ x [x]	XVIII 4
XVII 14	22'	[¶ MUL].SIPA.ZI.AN.NA LI.DUR-su SA ₅ 23' [ina 15]-šú MI GÁL BAL-[tum GÁL]	XV 32; cf. XVIII 5
	24'	[] x ta ba nu ša GIM EN-[šú ...]	
XVII 15	25'	[¶ MUL Zi-ba]-ni-tum ma-[diš] 26' [] ina []	
		break	
		column ii broken	

Parallels

XVI 15. Thompson Rep. 228:3-4: ¶ MUL.UR.GU.LA MI ùb-bi KUR NU DÙG.GA; ibid. 219:3-4: ¶ MUL.UR.GU.LA MI ŠÀ KUR NU DÙG-ab; K.2071 ii 2: ¶ MUL.UR.GU.LA [...] (followed by XVI 16, 18, 17, and possibly 19, 20, in that order).

XVI 16. Thompson Rep. 228:5-6: ¶ MUL.LUGAL MI mu-ṭ-ir-ru É.GAL.BE; ibid. 199A 1: ¶ MUL.LUGAL MI GAL.UNKIN É.GAL BE; K. 2071 ii 3: ¶ MUL.LUGAL M[I ...].

XVI 17. K.2071 ii 6-8: ¶ MUL.KU₆ ana MUL.BAN TE

EBUR KU[R ...] LUGAL KAL-ma KÚR [...] ŠÈG u A.KAL.MEŠ ina IDIM GÁL.M[ÈŠ].

XVI 18. K.2071 ii 10: ¶ MUL.BAN ana MUL.KAK.SI.SÁ KUR-ud ŠE.G[IŠ.Ì ...]; LB 1321 r. 13': ¶ MUL.BAN ana MUL.KAK.SI.SÁ KUR-ud EBUR SISÁ KI.LAM GI.NA : MUL.UDU.IDIM.[GU₄.UD ...]; K. 5713+ :20': ¶ MUL.BAN ana MUL.KAK.SI.SÁ KUR-ud EBUR SISÁ KI.LAM GI.NA dUDU.IDIM.GU₄.UD ina ŠÀ MUL.[AB.SÍN DU-ma] (restored from K.2177+ :30); Rm. 477:5'6': [¶ MUL].BAN MUL.KAK.SI.SÁ KUR-ud [...] dUDU.IDIM.GU₄.UD [...].

- 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.Á.MUŠEN KUR-ud ŠE.GIŠ.Ī NIM SIG₅ K.5713+ :18', LB 1321 r. 12', also K.2071 ii 9.

XVII 2. K.1776+ :13': [¶] MUL ŠU.PA ina SAR-šú it-ta-nan-pah ina MU.BI ŠĒG.MEŠ u A.KAL.MEŠ uš-ta-bar-ru-u.

XVII 7. BM 34058:17' (= LBAT 1565): [¶] ... it-tan-m] ar Ú.GUG bu-lim LUGAL G[AL ...]; 81-7-27,137:21-22 and dupl. K.6687 r. 4:[¶] MUL i]t-ta-an-mar Ú.GUG bu-lim [LUGAL] GAL ina KUR GÁL-ma KUR EN-el.

XVII 8. = EAE 57:7; Rm. 308+ r. 20: ¶ MUL.[UG]A MUL. BI ma-diš SA₅ [...] ²¹ [šumma/ina] É.MEŠ um-[šum ...]; 82-3-23,120:2' (Sumerian or bilingual): [¶] mul.u]ga mul.bi LUL.AŠ a]l. ...]; K.2241+ :3'5' (bilingual); ¶ MUL.Ú. NAGA.G[A ...] : MUL.UGA [...] ma-³-diš sa-a-[mu ...].
 XVII 9. = EAE 57:10.

XVII 10. = EAE 57:11.

XVII 12-14. See parallels to XVIII.

Text XVIII

V BM 38301 obv.
W Rm. 459

XVIII 1	V i 1'	[𒀭 MUL S]IPA.ZI.A[N.NA	] x [
XVIII 2	V i 2'	[𒀭 MUL SIPA].ZI.AN.N[A ina KI.GUB-šú	] [im ²] u da-am KUR ana K[I.KAL NIGIN]	
	W 1'	[𒀭 MUL] 'SIPA.ZI.AN.NA' [
XVIII 3	V i 3'	[𒀭 M]UL SIPA.ZI.AN.NA ina È-šú ša-qu	ina SAG I[TI-šú IGI MU	cf. XVII 12
	W 2'	[𒀭 M]UL SIPA.ZI.AN.NA ina [
XVIII 4	V i 4'	[𒀭] MUL SIPA.ZI.AN.NA LI.DUR-su it-ta-na-an-[bi]		XVII 13
	W 3'	[𒀭] MUL SIPA.ZI.AN.NA L[I		
XVIII 5	V i 5'	[𒀭] MUL SIPA.ZI.AN.NA LI.DUR-[s]u MI AN.[MI		XVI 3
	W 4'	[𒀭] MUL.SIPA.ZI.AN.NA L[I		
XVIII 6	V i 6'	[𒀭] MUL SIPA.ZI.AN.NA KI.GUB KÚR.KÚR [x x] KA×MI BÁRA ina K[UR		
	W 5'	[𒀭] MUL SIPA.ZI.AN.NA K[I		
XVIII 7	V i 7'	[𒀭 MUL] SIPA.ZI.AN.NA ana 15 MUL.MUL i[q-r]ib ^d En-lil KUR ú-x-[
	W 6'	[𒀭] MUL SIPA.ZI.AN.NA [
XVIII 8	V i 8'	[𒀭 MUL] SIPA.ZI.AN.NA ana 2,30 MUL.MUL iq-rib SAL.KÚR [
	W 7'	[𒀭] MUL SIPA.ZI.AN.NA [
XVIII 9	V i 9'	[𒀭 MUL] SIPA.ZI.AN.NA a-dir AN.MI ^d Sin u ^d UTU ina KUR DÙ.[A.BI GÁL] ^{i 10'} MÁŠ.ANŠE [x (x)]		
	W 8'	[𒀭] MUL SIPA.ZI.AN.NA a-[
XVIII 10	V i 11'	[𒀭 MUL] SIPA.ZI.AN.NA meš-ha im-šu-uh LUGAL EN BALA ina šer-t[i-šú] ^{i 12'} bu-bu- ² -tú DIRI-ma BA.B[E]		
	W 9'	[	].NA m[eš-	
XVIII 11	V i 13'	[𒀭] UD ina GUB.BA-šú EŠ ₄ .DAR DU	LUGAL KUR-su BAL-su	
	W	break		
XVIII 12	V i 14'	[𒀭] UD ina GUB.BA-šú MUL.MEŠ ma-lu-ú	NAM.BAD.MEŠ GÁL.MEŠ	
XVIII 13	V i 15'	[𒀭] UD ina GUB.BA-šú MUL Na-ka-ru DU	BALA NAM.KÚR.MEŠ	
XVIII 14	V i 16'	[𒀭] UD ina IGI MU.KAM ^d Ši-mu-ut MUL.MEŠ-šú MI.MEŠ BE.MEŠ GÁL.MEŠ		
XVIII 15	V i 17'	[𒀭 UD ina] IGI MU.KAM ^d Ši-mu-ut MUL.MEŠ-šú BABBAR na-ág-lu bar-tum GÁL-ši		
XVIII 16	V i 18'	[𒀭 UD ina IG]I MU.KAM ^d Ši-mu-ut 2 MUL.M[EŠ-šú S]IG ₇ .MEŠ : MUL EGIR-ú SIG ₇ ŠUB-di ^{19'} []
			EB[UR ²	] KUR Ì.GÁL
		break		
		column ii broken		

Notes

XVIII 16. Separation sign (:) written with three superimposed oblique wedges, like the number 9.

Reverse of V contains MAR.GÍD.DA omens, parallel to EAE Tablet 55 end.

Parallels

XVIII 1-4. Cf. XVII 12-14, and XVI 2-4.

XVIII 9. Cf. EAE 55:70: [𒀭 MUL] SIPA.ZI.AN.NA a-dir

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 lštar 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 Šimut's stars are black: there will be pestilence.
- XVIII 15 If at the beginning of the year Šimut's stars are flecked⁷ with white: there will be a revolt.
- XVIII 16 If at the beginning of the year two stars of Šimut 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 dupls.: [𒀭 MUL SIPA.ZI.AN].
NA MIN (= mešha imšuh) LUGAL EN BALA ina šer-ti-šú bu-
bu-?-tú DIRI-ma BE.

XVIII 13. K.5867:7: [N]a-ka-ru DU BALA SAL.

KÚR.MEŠ.

XVIII 16-18. Rm. 230:2': 𒀭 UD ina IGI MU dSi-m[u-ut ...].
Other dŠimut omens: K.8000:2-6.

XVIII 16. 89-4-26,174:13': 𒀭 UD dSi-mut 2 MUL.MEŠ-šú
S[IG₇.MEŠ ...].

APPENDIX

Astrolabe B Section A (KAV 218)

i¹ [¶ iti.bár] mul.AŠ.GÁN bára an.na

² [bá]ra il.la bára gar.ra

³ [s]ur.ra.an sig₅.ga

⁴ An.na ^dEn.líl.lá.ke₄

⁵ [it]i ^dŠEŠ.KI dumu.sag

⁶ ^dEn.líl.lá.ke₄

¹² ¶ iti.gud mul.mul ^dImin.bi

¹³ dingir.gal.gal.e.ne

¹⁴ ki.pad.du gu₄.si.sá.e.ne

¹⁵ ki.duru₅ gal tak₄.tak₄

¹⁶ giš.apin dur.dur.ru.ke₄

¹⁷ iti ^dNin.gír.su

¹⁸ ur.sag PA.TE.SI.gal ^dEn.líl.lá.ke₄

²⁶ ¶ iti.sig₄ mul KA.an.na aga(text il).an.na.ke₄

²⁷ mul.bi KA×NE ba.an.sá

²⁸ iti.ù.šub lugal.ke₄

²⁹ lugal ù.šub sig₄.gé

³⁰ kur.kur é.ne.ne mu.un.dù.a

³¹ iti gul.la kalam.ma.ke₄

³⁸ ¶ iti.šu mul.sipa.zi.an.na

³⁹ ^dNin.šubur sukkal.mah ⁴⁰ An.na

^dInnin.bi.id.da.ke₄

⁴¹ iti numun.dub.ba NI numun ⁴² nim.ta.è.dè

⁴³ kád.kád «ITI» ^dNin.ru.ru.gú

⁴⁴ <iti> sipa ^dDumu.zi ba.dib.dib.ba

ii¹ [¶ iti.NE mul.kak.si.sá] ^dNin.urta.ra

² [KI.NE ba.SAR.SA]R.re.ne

³ x [gi.izi.lá] ^dA.nun.na.ke₄.ne

⁵ nim.nim.mu.dè ⁴ KA×NE am.ta.e₁₁.dè

ki ^dUtu.ra <mu.da.sá.e?²> ⁶ iti ^dbil₄.ga.meš

⁷ UD.9.KAM ⁵ guruš gešpù.lirum.ma

⁶ ká.ne.ne ⁷ a.da.mìn

⁷ ITI.BÁR I-ku-ú šu-bat ^dA-nim

⁸ LUGAL in-na-áš-ši LUGAL GAR-an

⁹ šur-ru-ú SIG₅

ša ^dA-nim ¹⁰ ù ^dEn-líl

ITI ^dEN.ZU ¹¹ DUMU reš-ti-i

ša ^dEn-líl

¹⁹ ITI.LGUD Za-ap-pu ^dIMIN.BI

DINGIR.MEŠ GAL.MEŠ

²⁰ pe-tu-ú er-še-ti ²¹ GUD.MEŠ ul-te-eš-še-rù

²² ru-ṭu-ub-tu up-ta-ta

²³ GIŠ.APIN.MEŠ ir-ra-aḥ-ḥa-šu

²⁴ ITI ^dNin-gír-su

qar-ra-di ²⁵ iš-šá-ak-ki GAL-i ša ^dEn-líl

³² ITI.SIG₄ Is le-e a-gi ^dA-nim

³³ [MU]L.BI ^dBIL.GI ša-nin

³⁴ ITI na-al-ba-an LUGAL

³⁵ LUGAL na-al-ba-na i-la-bi-in

³⁶ KUR.MEŠ É.MEŠ-ši-na ip-pu-šú

³⁷ ITI KÚl-la ša ma-a-tim

⁴⁵ ITI.ŠU Ši-ta-ad-da-lu

^dPap-sukkal ⁴⁶ SUKKAL ši-i-ru ša ^dA-nim

⁴⁷ u ^dEŠ₄.DAR

ITI NUMUN šá-pa-ku ⁴⁸ NUMUN.NI har-pi šu-ši-i

⁴⁹ ši-si-it ^dNin.ru.ru.gú

⁵⁰ ITI SIPA ^dDumu-zi ik-ka-mu-ú

⁸ ITI.NE Šu-ku-du ^dNin-urta

KI.NE.MEŠ ⁹ ut-tap-pa-ḥa

di-pa-ru a-na ^dA-nun-na-ke₄

¹⁰ in-na-áš-ši ^dBIL.GI ¹¹ iš-tu AN-e ur-ra-dam-ma

¹² it-ti ^dUTU i-ša-na-an ¹³ ITI ^dGIŠ.GÍM.MAŠ

tu-šu-ṭ-ú ¹⁴ UD-mi eṭ-lu-tu

ina KÁ.MEŠ-šú-nu ¹⁵ ú-ma-áš-ú-ba-ri ul-te-šu-ú

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.

- 16 ¶ iti.kin mul.ban ^dInanna NIM.ma^{ki}.ke₄
 17 AMA.^dINANNA.e.ne ^d[d.lu.ru.gú ¹⁸sikil.e.ne
 mu.bi in.UD.UD
-
- 22 ¶ iti.du₆ mul.MU.BU.kéš.da ²³^dEn.líl.le
 PA.ŠU.NIR.ne.ne ²⁴kù.kù
 mu nam.lú.u_x.lu U in.UD.UD
 25 ne.sag mu kù.ga kur.kur.ra
 26 ^dA.nun.na.ke₄.e.ne mu.un.na.⟨dé⟩
 ká ²⁷abzu ⟨ab⟩.ta.è
 ki.sè.ga ²⁸Lugal.^dDu₆.kù.ga
 28 ^dEn.ki ^dNin.ki ²⁹iti pa₄.bil.ga ^dEn.líl.lá.ke₄
-
- 39 ¶ iti.apin ⟨...⟩ giš.al.lá.bi giš.apin.na [edin.na] .
 40 a.da.mìn di₅.di₅.ne
 41 a.ki.tu ur gar.ra
 iti ^dIM ⁴²gú.gal an.ki.a
-
- iii 1 ¶ iti.ga [n hé.gál hé.nun tu₁₀]
 2 MUL [... ur.sag kala.ga ^dir.ra.gal]
 3 ururugal.la.[ta ba.ra].è
 4 ur₄.ur₄ [dingir.maš].tab.ba
 5 iti ur.sag GÌR.BÍL AŠ.DU
-
- 11 ¶ iti.ab eze [n.mah] an.na.[ke₄]
 12 iti ní.ga [l ^dInanna.ke₄]
 13 ab.ba uru [...] x [...]
 14 ^dI.šum [ká].ne.ne [...]
 15 šu.bar.ra x ná ki [...]
 16 iti.til.bi.šè in.x [x]
-
- 25 ¶ iti.ZÍZ mul.Á^{mušen} ^dZa.b [a₄.ba₄]
 26 ú.ħi.a ur.bi edin.na x [...]
 27 iti.šà.ħúl(text .IGI.KÁR).la ^dEn.l[il ...]
 28 iti su.ħuš [...]
 29 zag.Á^{mušen} x [...]
-
- 35 [...]
 36 [...]
 37 [a.gàr.gal ...]
 38 [šū.uš x nu ...]
 39 [iti šà.ħúl ...]

- 19 ITI.KIN ši-pír ^dEŠ₄.DAR e-la-ma-ti
 20 ^dEŠ₄.DAR.MEŠ ina ^dID ú-tál-la-la
 21 šat-tu-su ú-tab-ba-ba
-
- 30 ITI.DU₆ Ni-i-ru ^dEn-líl
 31 šu-ba-a-tu ú-tál-la-la
 32 ni-šu u ru-bu-ú ú-tab-ba-bu
 33 ni-iq šat-ti el-lu ša KUR.MEŠ-tim
 34 a-na ^dA-nun-na-ke₄ in-na-qi
 35 ba-ab ap-si-i ip-pat-te
 36 ki-is-pu [š]a LUGAL.DU₆.KÙ.GA
 37 ^dEN.KI u ^dN[IN.KI] ³⁸ITI a-bi a-bi [^dEn-líl]
-
- 43 ITLAPIN pa-ṭar GIŠ.MAH GIŠ al-la
 44 ù GIŠ.APIN a-na EDIN ul-te-šu-ú
 45 a-ki-it e-re-ši iš-ša-kan
 46 ITI ^dIM GÚ.GAL AN-e ù KI-tim
-
- 6 ITI.GAN hé-gál-lu u nu-uh-šu
 7 uk-ta-ma-ru UR.SAG dan-nu
 8 ^dU+GUR iš-tu er-še-ti i-la-a
 9 ka-šu-uš [DINGIR].MEŠ ki-lal-la-an
 10 ITI UR.SAG [gít-m]a-li ^dU+GUR
-
- 17 ITL[AB i]-sin-nu ši-ru šá [^dA-nim]
 18 IT[I] nam-ri-ri šá ^dIš-t[ar]
 19 ši-bu-ut URU ana UNKIN uš-[šu-ni]
 20 ^dI-šum KÁ.MEŠ-šú-nu i-[...]
 21 ^dUTU šu-ba-ru-ta u na-i-[la] ²²šá er-še-ti i-ša-ka-[an]
 23 ITI.BI a-di na-ag-ma-ri-[šu] ²⁴lu-ub-bu-[x]
-
- 30 ITL.ÁŠ MUL.Á [mušen ...]
 31 šam-mu [ina ...]
 32 ITI [ħu-ud lib-bi ša ^dEn-líl]
 33 [ITI ez-zi ...]
 34 [...]
-
- 41 ITI.ŠE M[UL.KU₆ ...]
 42 maš-ka-na-[at] EDIN i-m[a-al-la-a]
 43 ina ú-ga-ri rab-bu-[ti]
 44 nig-gal-lu ul e-si-[it]
 45 ITI ħu-ud lib-bi ša ^dEn-[...] ⁴⁶ITI ^dÉ-a

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 *ana* in Texts I-VIII (see Introduction § 3.2.2), after a star name.

Á	see <i>idu</i>	
abunnatu	navel (of SIPA.ZI.AN.NA) see 2.2.2.3 wr. LI.DUR	XV 32; XVI 3; XVII 13, 14; XVIII 4, 5
adannu	specified time see 2.2.1.1 <i>bibbū (u kakkabāni) ina šamē adannātišunu ittiquma</i> wr. UD.SUR.MES	IV 12a III 19a
	<i>šumma ina (la) adannišu ippuḥa/uni</i> wr. UD.DUG ₄ .GA	IX 12, 13, 14; X 17, 18, 19, 20, 21, 22, 23
	wr. UD.SUR	XI 4
adāru	<i>adir</i> is obscured see 2.2.2.1 wr. KA×MI	II 7c; XVIII 9 XV 19, 24; XVIII 6
adi	EN 2-šū (= <i>adi šinišu</i>) secondly	III 5c
agū	<i>tiara</i> see 2.2.6.2 <i>agā apir</i>	IV 3 III 14b
aḫāmeš	one another	
aḫāzu	marry NAM.SAL.TUK (= <i>ana sinništi</i> (or: <i>aššati</i>)) <i>aḫāzi</i>	I 16; IV 7
alādu	<i>ulludu</i> give birth	IV 7
AL.SI ₄ .SI ₄	see <i>sāmu</i>	
amāru	<i>nanmuru (nenmuru, nēmuru)</i> is visible see 2.2.1.1.1, 2.2.1.1.2, 2.2.2.4 <i>kakkabāni ina šīt/ereb šamši nēmuru</i> <i>innammar</i> wr. IGI wr. IGI-mar wr. IGI.LÁ <i>ittanmar</i> rises heliacally see 2.2.1.1 <i>innamir</i> wr. IGI wr. IGI.DU ₈ (read <i>nenmuru</i> ?)	III 14a; IV 8a, 9a III 19a; IV 6a, 7a; XVII 12 IX 2, 4, 5, 6, 7, 8, 9, 10, [11]; X 1, 2 III 26a XVII 7 IX 4, 6, 8, 9, 11, 16, 17; XII 1-7; XIII 4-7, 9, 10; XIV 2, [3, 4], 5-7; XV 10; XVI 5 IX 33, 34; XII 20, 21

amurru	west šā IM.MAR.TU (= <i>amurri</i>) the western (star)	IX 17; XII 4
AN(-e)	see <i>šamû</i>	
AN.NE	see <i>kararû</i>	
AN.TA	see <i>elû</i>	
<i>apāru</i>	see <i>agû</i>	
arĥu	month see 2.2.1.1 ITI-šû (= <i>arahšû</i>) <i>ītiq</i> (if the star) goes beyond its month <i>ina</i> ITI.BI (= <i>arĥišu</i>) in its month <i>ina rēš</i> ITI-šû (= <i>arĥišu</i>) at the beginning of its month	IX 1, 2, 4; X 1 IX 8 XVII 12; XVIII 3
arki	behind see 2.1.2.3 wr. EGIR	II 12b; III 14b, 30, 35 III 21
arku	(unkn.)	
arkû	rear MUL EGIR-û (= <i>kakkabu arkû</i>) the rear star	XVIII 16
arqu	green see 2.2.6.1 wr. SIG ₇	IX 29, 30; XII 16, 17; XVIII 16
ašû	come forth see 2.2.1.2 <i>Makrû ina libbiša īrubma È-a</i> (= <i>ušša</i>) Mars enters into (Venus) and comes forth (again) <i>ina È-šû</i> (= <i>ina ašišu</i>) at its coming forth	IV 5a; V 3a; VI 5a II 5a; III 3b; XVIII 3
aššu	because wr. MU	III 11c
ba'ālu	be brilliant see 2.2.2.2 <i>iba'īl(u)ma</i> <i>ba'lu</i>	III 3a, 6a, 16a; [IV 10a] XV 31; XVII 11
BABBAR	see <i>pešû, pūšu</i>	
BAD	see <i>petû</i>	
<i>balātu</i>	see <i>bēlet balāti</i> sub <i>bēltu</i>	
banû	create DÍM [= <i>banû</i>] (lexical equation)	III 22a
barāšu	sparkle see 2.2.4 <i>ibarrušu</i>	VI 3a
bašû	be NU GÁL (= <i>ul ibašši</i>) there is not	XV 29; XVI 1
BE- <i>ma</i>	see <i>šumma</i>	
bēltu	lady <i>bēlet balāti</i> (Gula)	II 7, 10 ²
bēlu	lord EN (= <i>bēl</i>) <i>eršeti</i> (Ninazu)	III 11c
binûtu	creation, creature (lexical explanation)	III 22a
birītu	midst wr. DAL.BA.AN.NA	III 32
būlu	cattle <i>ana būli</i> <i>ana ukulti būli</i> <i>bu-lu la² lu bu-lu</i>	II 12c IV 4; V 2; VI 2 III 23
DAL.BA.AN.NA	see <i>birītu</i>	

da'mu	dark <i>see</i> 2.2.2.1 <i>kakkabānišu . . . da-mu</i> <i>da-am</i>	IX 27, 28 XVIII 2
DIB	<i>see etēqu</i>	
DÍM	<i>see banû, napharu</i>	
DÍM.MA.AN.NA	(unkn.) = <i>binût šamē</i>	III 22 III 22a
DIM ₄	<i>see sanāqu</i>	
DIN	<i>see balātu</i>	
dipāru	torch <i>see</i> 2.2.2.3 <i>kīma dipāri inambut</i>	[IX 20]; XII 7
DIRI	<i>see malû</i>	
DU	<i>see uzuzzu</i>	
DUG ₄ .GA	<i>see qabû</i>	
DULLA	veiled <i>see</i> 2.2.2.1 (probably) = <i>katmu</i>	I 19
du'um(at)	very dark <i>see</i> 2.2.2.1	XV 9; XVI 7
È	<i>see ašû</i>	
É.TÛR	<i>see tarbašu</i>	
EGIR	<i>see arki, arkû</i>	
ekēlu	become dim <i>see</i> 2.2.2.1 MUL IGI-ŠU <i>mādiš ekil</i> its (Enmešarra's) front star (or: the star's appearance (= <i>kakkabu panūšu</i>)) is very dim <i>ūtakkal</i> becomes dim	XVI 8 [IX 19]; XII 6
elû	upper <i>see</i> 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 <i>ana</i> MUL.UR.BAR.RA <i>imid</i> <i>nenmudu</i> meet (optical phenomenon) <i>see</i> 2.2.8.4	II 12g IX 23, 24; XII 10, 11
ereb šamši	sunset <i>see</i> 2.2.1.1.2 wr. ^d UTU.ŠÚ.A	I 17; [IV 9, 9a]
	west wr. ^d UTU.ŠÚ.A	IV 6a
erēbu	enter <i>see</i> 2.2.8.1 <i>Makrû ana libbiša</i> TU (= <i>irub</i>)	IV 5a; VI 5, 5a
erpu	cloudy UD ŠÚ, = <i>ūmu erpu</i> cloudy day	III 4a, 28a
eršetu	earth <i>bēl KI-tim</i> (= <i>eršetî</i>) (Ninazu)	III 11c
etēqu	pass by (or between) <i>see</i> 2.2.8.2 <i>see also adannu, arhu</i>	IV 2a; [V 1b]
ezēbu	leave behind <i>see</i> 2.2.8.2	XV 8
GABA	<i>see irtu</i>	
GAL	<i>see rabû</i>	
gapāšu	be brilliant? <i>see</i> 2.2.2.2 (meaning based on occurrence beside <i>ba'ālu</i>) MUL.ŠAH <i>guppuš</i> <i>Tūltu guppušat</i> <i>Tūltu gitpušat</i>	XVII 3 XV 25 III 10a

GIL	see <i>parāku</i>	
GIM	see <i>kīma</i>	
GİR	see <i>šēpu</i>	
GUB.BA	see <i>manzāzu</i>	
hantiš	promptly	
	<i>hantiš ul innamru</i> (the planets) do not rise (heliacally) promptly	III 19a
	<i>hantiš irabbū</i> (the planets) set promptly	III 20a
harāpu	be early	
	SAG = <i>harāpu</i> (lexical equation)	III 5c
	NIM- <i>ma</i> (= <i>ihrupma</i> ?) IGI rises early see 2.2.1.1	IX 5, 6, 8, 9, 11
harrān šamši	road of the sun see 2.2.1.2.1	III 24b
haruptu	early	
	IM.SAG = <i>haruptu</i> (lexical equation)	III 5c
idu	side, direction (preposition)	
	Á . . . (DU) (stands) in the direction (of the south, etc.)	II 12f, 12h
	<i>ina idišu</i>	III 5b
IGI	see <i>amāru</i> , <i>mahrū</i> , <i>panu</i> preposition, <i>panū</i>	
IGI- <i>it</i>	see <i>miḫrit</i>	
IGI.LÁ	see <i>tāmartu</i>	
iltānu	north	
	ša IM.SI.SÁ (= <i>iltāni</i>) the northern (star)	XII 2
IM.1	see <i>šūtu</i>	
IM.KUR(.RA)	see <i>šadū</i>	
IM.MAR.TU	see <i>amurru</i>	
IM.SI.SÁ	see <i>iltānu</i>	
IM.U _x .LU	see <i>šūtu</i>	
imittu	right	
	wr. 15	XV 32; XVIII 7
irtu	chest (of ŠU.GI)	XV 9; XVI 7
ištēniš	together	
	wr UR.BI	IV 4a; [V 2a]; VI 2a
išū	have	
	<i>i-šu-u šarūrišū</i> (obscure)	II 11
ITI	see <i>arḫu</i>	
itti	with see 2.2.8.3	IX 21; 22; XII 8, 9; XVI 13
KA	see <i>pū</i>	
KA×MI	see <i>adāru</i>	
kajānu	(or <i>kajamānu</i>) normal see 2.2.2.4	
	wr. SAG.UŠ	IX 27-30
kakkabu	star	
	wr. MUL	XVI 9; XVII 7; XVIII 16
	MUL IGI.BI/IGI-šú (see <i>panū</i>)	XVI 8-11
	MUL BI (= <i>kakkabu šū</i>)	IX 1-4, 6, 8, 9, 11; X 1
	MUL-šú (= <i>kakkabšu</i>)	XIX 2
	MUL.BI (= <i>kakkabšu</i>)	XVII 8
	MUL.MEŠ (= <i>kakkabāni</i>)	IX 23-34; XII 10-21; XVI 1, 2, 4; XVII 11; XVIII 12, 14-16
	UL.MEŠ-šú (= <i>kakkabānišu</i>)	XV 11-13, 20-22, 30, 31, 33-35

kal	all <i>kal šatti</i> all year see 2.2.1.2.1	III 28c; IX 3; X 3
kararū	noonday sun see 2.2.4 wr. AN.NE	XVI 9 VI 3a, 3b
KASKAL	see <i>harrān šamši</i>	
kašādu	reach see 2.2.8.2 wr. KUR-ud	II 12e, 12f; IV 4b; V 2b; VI 2b; XVI 18; XIX 6
katmu	veiled see 2.2.2.1 wr. DUL.LA	I 19
KI	see <i>itti</i>	
KI.GUB	see <i>manzāzu</i>	
kīma	like (preposition) wr. GIM	VI 3b; [IX 20]; XII 7; XVI 9
KI.KÚR.KÚR.RA.ŠĒ (unkn.)		III 23
KI-tim	see <i>eršetu</i>	
KI.TA	see <i>šaplu, šaplu</i>	
KUR	see <i>kašādu, napāhu</i>	
KÚR.KÚR	see <i>nakāru</i>	
lamū	circle around see 2.2.1.2.1 see also <i>tarbašu</i>	III 28c
lapātu	touch SAR = <i>šurrū ša lapāti</i> (lexical equation)	III 2a
lemēnu	see <i>lummunu</i>	
LI.DUR	see <i>abunnatu</i>	
libbu	(preposition) <i>ana libbi</i> into <i>ina libbi</i> in	IV 5a; VI 5, 5a III 6a, 7c, 11c, 30a
LUL.AŠ	see <i>mādiš</i>	
lummunu	inauspicious, very faint	VI 4a; XV 30
mā	(particle introducing comment)	III 28b, 28c, 29a
mādiš	very (much) see <i>ekēlu, sāmu, šalmu</i> wr. LUL.AŠ	XVII 15 XVI 11
magal	very (much) see <i>sāmu, šarāru</i>	
maḥāru	<i>mithuru</i> be equal see 2.2.2.4 SIPA.ZI.AN.NA <i>kakkabānišu imdahharu</i>	XV 35
maḥrū	front (adjective)	III 7b
malū	full <i>kakkabāni malū</i> full of stars	XVIII 12
malū	<i>mullū</i> complete (verb) see 2.2.1.1 ^d UDU.IDIM.MEŠ <i>ūmēšina ul umallū</i>	III 20a
manzāt	rainbow	III 4a
manzāzu	position see 2.2.1.2 wr. GUB.BA wr. KI.GUB	XVIII 11-13 XVII 9, 10, 12; XVIII 6

mašāḫu	(a luminous phenomenon) see <i>mišḫu</i>	XVIII 10
mašrû	wealth, riches	II 13b
MI	see <i>šalmu, ṣulmu</i>	
miḫrit	facing see 2.1.2.3 wr. IGI- <i>it</i>	III 31, 34
mišḫu	(a luminous phenomenon) see 2.2.5.1, 2.2.5.2 <i>mišḫa imšuh</i>	XVIII 10
mišlu	half <i>mišil tarbaši</i> see 2.2.1.2.1	III 24b
MU	see <i>aššu, qabû, šattu</i>	
MUL	see <i>kakkabu</i>	
MURUB₄	see <i>qablu</i>	
mušītu	night	VI 3b
nabātu	shine brightly, scintillate see 2.2.2.2, 2.2.2.3, 2.2.3, 2.2.4 <i>inambuṭ</i> <i>ittananbaṭu</i> <i>ittananbiṭ(u)</i> wr. UL.UL.MEŠ <i>ittanbiṭu</i> <i>uttabbaṭ</i>	[IX 20]; XII 7 XV 22 XV 20; XVII 13; XVIII 4 XV 11, 13, 33 IV 3a [IX 18]; XII 5
nadû	SIG ₇ ŠUB- <i>di</i> (= <i>urqa iddi</i>) spotted with green see 2.2.6.1	XVIII 16
naglu	streaked? see 2.2.6.1 <i>pūša naglu</i>	XVIII 15
nakāru	change see 2.2.1.2 wr. KÚR.KÚR (= <i>unakkir</i> or <i>uttanakkar</i>)	XVIII 6
NAM	(unkn.)	III 21
NAM.SAL.TUK	see <i>aḫāzu</i>	
namru	bright see 2.2.2.4, 2.2.4	III 15; VI 3b
napāḫu	rise see 2.2.1.1 wr. KUR(- <i>ḫa</i>) (= <i>ippuḫa</i> or <i>ittapha</i>) wr. KUR.MEŠ- <i>ni</i> (plural, = <i>ippuḫuni</i> or <i>ittaphuni</i>) <i>itanpuḫu</i> scintillate see 2.2.3 [MUL.MEŠ <i>itt</i>] <i>ananpaḫu</i> MUL.ŠU.PA <i>ittanan</i> [<i>paḫ</i>]	III 27-29; IX 12; X [18], 19, [20], 21, 22; XI 5 IX 13 IV 11a XVII 2
napḫu	scintillating see 2.2.3 wr. SAR.MEŠ(- <i>ḫu</i>)	I 18; III 16; [IV 11]
napharu	totality DÍM = <i>napharu</i> (lexical equation)	III 22a
našû	bear see <i>šarûru</i>	
naṭālu	look, face see 2.2.1.2	XVII 9, 10
nehēsu	contract? see 2.2.8.4	XV 29
nēmuru	see <i>amāru</i>	
nenmudu	see <i>emēdu</i>	
NIM	see <i>ḫarāpu</i>	

nip̄u	(heliacal) rising see 2.2.1.1.1 wr. SAR	II 4a; IV 5a; V 3a
panu	(in) front (preposition) see 2.1.2.3 <i>pan šatti</i> spring	III 33, 34; VI 6; XV 23; XVI 14 XVIII 14-16
panū	face, looks	IX 27-30; XII 14-17
panū	front (adjective, see also <i>mahrū</i>) wr. IGI	XVI 8-11
parāku	lie across <i>iprik</i>	III 4a; XV 23
pa-ar-ku	(unkn.)	III 21
pešū	white see 2.2.6.1 wr. BABBAR	XV 37
petū	open see 2.2.8.4 MUL.ŠAH <i>pāšu iptē</i>	XVII 4
pū	mouth see <i>petū</i>	XVII 4
pūšu	white spot BABBAR (= <i>pūša</i>) <i>naglu</i>	XVIII 15
qablu	middle <i>ina</i> MURUB ₄ -šū (= <i>qablīšu</i>)	XVI 9
qabū	say <i>iqabbi</i> it says (commentary term) <i>iqqabbi</i> it is said (commentary term) wr. DUG ₄ -GA wr. MU <i>qabi</i> it is said (commentary term)	III 22a, 26, 28b, 29a, 34a, 36 III 5c I 16 V 1 III 11c
qerēbu	come close see 2.2.8.2	XVIII 7, 8
rabū	set (heliacally) see 2.2.1.1 wr. ŠŪ	III 20a; IX 11
rakābu	ride see 2.2.8.4 U ₅ -MEŠ (= <i>ritkubu</i>) ride on one another	[IX 25]; XII 12
rakāsu	tie <i>ritkusu</i> conjoined see 2.2.8.4	IX 25, 26; XII 12, 13
rēštū	first	XV 13, 22
rēšu	head wr. SAG.MEŠ <i>rēš arḫi</i> beginning of the month <i>rēš tarbaši</i> see 2.2.1.2.1	XVII 9, 10 XVII 12; XVIII 3 III 24b
ritkubu	see <i>rakābu</i>	
ritkusu	see <i>rakāsu</i>	
SA₅	see <i>sāmu</i>	
SAG	see <i>rēšu</i> , <i>harāpu</i>	
SAG.UŠ	see <i>kajānu</i>	

sāmu	red see 2.2.6.1 wr. SA ₅ <i>magal</i> SA ₅ (= <i>sam</i>) very red <i>madis</i> SA ₅ very red wr. LUL.AŠ AL.SI ₄ .SI ₄	II 3a; III 7b; XV 17, 32; XVII 5, 14 IX 31, 32; XII 18, 19 II 4a; III 6b, 6c, 11b; XVI 9, 10, 12; XVII 8; XIX 1 XVI 11
sanāqu	come close see 2.2.8.2 wr. DIM ₄	XIII 8
SAR SI ₄	see <i>naphu</i> , <i>niphu</i> see <i>sāmu</i>	
SIG ₇	see <i>arqu</i> , <i>urqu</i>	
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suḥurmašū	Goat-fish (= Capricorn)	III 28b
SUR	see <i>šarāru</i>	
šalāmu	become black see 2.2.6.1 <i>uṣṣanallam(u)</i>	VI 4b; XVI 6
šallummū	(a luminous phenomenon) see 2.2.5.1, 2.2.5.2	XV 23
šalmu	black see 2.2.6.1 wr. MI <i>mādiš</i> MI (= <i>šalim</i>) very black	XV 27, 28, 36; XVI 3, 15, 16; XVIII 5, 14; XIX 2, 4, 5 XV 14
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šūt Anu	path of Anu see 2.2.1.2.1	III 24b
šūt Ea	path of Ea see 2.2.1.2.1	III 24b
šūt Enlil	path of Enlil see 2.2.1.2.1	III 24b
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tarbašu	cattle pen see 2.2.1.2.1 halo see 2.2.7 <i>tarbaša lami</i>	III 21, 24b; VI 6 III 30a
TE	see <i>teĥū</i>	
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VAT 11339	
ND 4362	
LB 1321	Borger, <i>Symbolae Böhl</i> 38ff.
1932-12-12,551 TM. MM 10.134556	

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Volume Two

Fascicle Two

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

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Babylonian Planetary Omens:
Part Two

Enūma Anu Enlil,
Tablets 50-51

by Erica Reiner
in collaboration with David Pingree



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The present volume is the second in an intended series of studies of the canonical corpus of celestial omens—*Enūma 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 *Enūma Anu Enlil*). This volume includes transliteration and translation of and commentary on the texts, and a glossary and relevant indices.

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