

## Newly Identified Lunar and Planetary Tables from Babylon in the British Museum

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*In memory of John P. Britton*

### Introduction

Lunar and planetary ephemerides and related tables form the largest portion of the corpus of tablets containing mathematical astronomy from Babylonia. Preserved examples come from the sites of Babylon and Uruk and mostly date to the last three centuries BC. In his *Astronomical Cuneiform Texts*, Neugebauer (1955: hereafter ACT) published all lunar and planetary tables known to him: a collection of well over one hundred tablets. Another fifty or so tablets of this same type have since been published, predominantly by Aaboe and (more recently) myself (see, for example, Aaboe (1964, 1968, 1969, 1971, 1977), Aaboe-Henderson (1975), Aaboe-Hamilton (1979), Steele (2002a, 2002b, 2006, 2010)). The present paper adds several more examples to this corpus.

The tablets edited here were all identified during my visits to the British Museum between 2005 and 2009. All probably originate from Babylon. Some of the fragments I identified join previously published tablets (in one case no less than four new fragments have been joined to ACT No. 122). Where the joins provide new information about either the layout of the tablet or its content, I include a full edition here; in two cases the new joins simply confirm Neugebauer's restorations in ACT and so I give only the details of the joins and photos. In my transcriptions, sexagesimal places are separated by commas. The two wedge cuneiform "separation mark" (𐎶) is transcribed by a colon. Preserved tablet edges are indicated by double rulings. In other respects, I follow the conventions established by Neugebauer in ACT.

The greatest number of ephemerides identified since the publication of ACT are lunar System A tablets. These discoveries, coupled with the development of computer programs for calculating long runs of System A data which has allowed the date of several small fragments published in ACT to be determined, place us in a better position to evaluate the corpus of System A lunar ephemerides than at the time of Neugebauer's work. In the final section of this paper I make some preliminary remarks on this subject. In due course it may be possible to make similar investigations of lunar System B and planetary ephemerides, although in these cases scholars today are not in a much better position than Neugebauer with regard to available material.

I wish to thank the Trustees of the British Museum for permission to study and publish these tablets, C. B. F. Walker for making available his catalogue of astronomical

fragments, and the staff of the Department of the Middle East student room at the British Museum. Photographs are copyright the British Museum.

## Lunar Tables

### **Text A: BM 42876 (= 81-7-1, 640)**

Contents: System A new and full moon ephemeris for SE 180.  
Transcription: Plate 1.  
Photograph: Plate 10.

This small fragment preserves the upper left corner of a standard lunar ephemeris for SE 180. The ephemeris overlaps with Text B below, but the appearance of the two tablets suggests that they are not part of the same tablet but duplicate ephemerides covering the same year.

### **Text B: BM 40754 + 44196 (= 81-4-28, 29 + 81-7-1, 1957)**

Contents: System A new moon ephemeris for (at least) SE 180.  
Previous Publication: BM 40754 previously published by Aaboe-Henderson (1975); BM 44196 unpublished.  
Transcription: Plate 2.  
Photograph: Plate 10.

Critical Apparatus:

II, 2: Only 4+x remains of the 6.  
III, 14: Only 13+x remains of the 15.

The preserved fragment is part of the obverse of a lunar ephemeris giving new moon data for at least SE 180. Inspection of the tablet suggests that the last preserved line (line 14) is not the end of the tablet, which would suggest that the tablet covers more than 1 year. In this case, it is likely that the tablet contained only new moons. The new moon data overlaps with that on Text A.

### **Text C: BM 42753 (= 81-7-1, 517)**

Contents: System A full moon ephemeris for SE 223.  
Transcription: Plate 2.  
Photograph: Plate 11.

## Critical Apparatus:

III, 1': Only  $x+19$  is preserved of the 49.

III, 5': The scribe has written 2,40, a small space, and then  $15^2$ . The expected  $G_2$ -value is 2,53.

This small fragment is part of an ephemeris for SE 223. Only one side of the tablet is preserved so it is not possible to determine whether the ephemeris gave both new and full moons or just full moons. Column F is calculated using the abbreviated scheme and has lower values than expected.

**Text D: BM 33050 (= 78-10-15, 33)**

Contents: System A new moon ephemeris for SE 228.

Transcription: Plate 3.

Photograph: Plate 11.

## Critical Apparatus:

I, 1': Only  $x+1$  remains of the 54.

I, 2': Only  $4+x$  remains of the 5.

II, 4': Only the upper traces of the 58,51 remain.

This small fragment of an ephemeris again could contain either just new moons or both new and full moons. The fragment is somewhat unusual for an ephemeris in having no column rulings.

**Text E: BM 42793 (=81-7-1, 557)**

Contents: System A new moon ephemeris for SE 248.

Transcription: Plate 3.

Photograph: Plate 11.

## Critical Apparatus

4': Only the upper traces of the signs in this line are preserved.

The small fragment of an ephemeris again could contain either just new moons or both new and full moons.

**Text F: BM 43024 (= 81-7-1, 788)**

Contents: System A  $\Phi$ -W table.

Transcription: Plate 3.

Photograph: Plate 11.

Critical Apparatus:

II, 2': 5, 2, 6, 2<sup>r</sup>5<sup>r</sup>, [55,33,20] is an error for 5, 2, 5,25,55,33,20.

This small fragment is part of what must have been a large tablet containing a table for converting between  $\Phi$  and W. Two other fragments of  $\Phi$ –W tables are known: Aaboe-Hamilton (1979) Text D and ACT No. 1005. It does not appear from the script and spacing that the present fragment comprised a single tablet with either of these two other fragments. For a full reconstruction of the  $\Phi$ –W table, see Aaboe-Hamilton (1979), p. 7.

**Text G: BM 34580 + 42690 + 42869 + 42902 + 43000 + 43030 (= 81-7-6, 272 + 81-7-6, 277 + 81-7-6, 331 + 81-7-6, 333 + 81-7-6, 386 + 81-7-6, 589 + Sp.II, 52 + Sp.II, 75 + 81-7-1, 454 + 81-7-1, 633 + 81-7-1, 666 + 81-7-1, 764 + 81-7-1, 794)**

Contents: System B new moon ephemeris for SE 208–210.

Previous Publication: BM 34580 + 42690 previously published as ACT No. 122; BM 42869, BM 42902, BM 43000 and BM 43030 previously unpublished.

Transcription: Plates 4–7.

Photograph: Plates 12–13.

Critical Apparatus:

See Neugebauer, ACT, pp. 144–145.

This large tablet is one of the best preserved and best known lunar ephemerides (for details, see Neugebauer, ACT, pp. 144–146). It contains new moon data for three years beginning in SE 208. The four new fragments joined to the obverse confirm all of Neugebauer's restorations. In addition, two of the fragments provide a further piece of the tablet's colophon which is written on the upper edge. This colophon is one of the longest and most interesting of the known colophons on astronomical tablets from Babylon. Part of the interest is in the appearance of the name Kidin (Kidinnu), known also from Greek sources. Unfortunately, the colophon is badly damaged and as is so often the case, the new fragments do not fill in lacuna in the interesting first and second line of the colophon, but simply provide extra details of the date given in the third line. A more complete transcription of the colophon follows (I thank H. Hunger for valuable suggestions for reading the colophon):

1. [ter-si]-tu<sub>4</sub> šá<sup>1</sup> Ki-din-<sup><d></sup>1 šá TA 3,28 EN 3,3[0 ...] A š[á]<sup>1d</sup>AG-TIN-su-E [A<sup>1d</sup>A-KU-ba]-  
ti-la ana tar-sa<sup>1d</sup>AMAR-UTU-DUB-NUMUM



2. [U<sup>l</sup>UMBISAG] AŠ-U<sub>4</sub> *An-na* <sup>d</sup>*En-líl-lá* A šá <sup>l</sup>A[G- ...] *p[a-l]ab* <sup>d</sup>UTU *u* <sup>d</sup>AMAR-UTU *ma-diš ú-šur* [...]

3. [...] ITU.GAN UD-18-KAM MU-1-ME-45-KAM šá [*š-i* MU]-<sup>r</sup>2<sup>l</sup>-ME-<sup>r</sup>9<sup>l</sup>-[KAM <sup>l</sup>]*Ar-šá-kam* [LUGAL]

Tersitu of Kidinnu ... Concerning (the years) from 3,28 to 3,30 (S.E.). ... son of Nabū-balātsu-iqbī, [descendent of Egiba]tila, opposite Marduk-šāpik-zēri, [scribe] of Enūma Anu Enlil, son of Na[bū- ...] Pay very much attention to revering Šamaš and Marduk. [...] ... Month IX, the 18th, year 145 which is [Seleucid era year] 209 [...] Arsaces, [King].

The date of this ephemeris is given in the colophon and this allowed Neugebauer to discover that columns A<sub>1</sub> and G<sub>1</sub> could be connected with several texts (ACT Nos. 142, 143, 144 and 170) from Uruk. However, column B<sub>1</sub> cannot be connected with any of these texts. It is worthy of note that the tablet was copied at a date just after the middle of the period it covers.

## Planetary Tables

**Text H: BM 42736 (= 81-7-1, 500)**

Contents: Mercury ephemeris of unknown system.  
 Transcription: Plate 8.  
 Photograph: Plate 14.

This small fragment of an ephemeris contains longitudes of the last visibility of a planet. Line 8' states that the last visibility is omitted at a longitude within Taurus. This implies that we are dealing with Mercury and that the longitudes are for the last visibility in the morning ( $\Sigma$ ). Two systems for calculating Mercury phenomena are known from other preserved ephemerides (Systems A<sub>1</sub> and A<sub>2</sub>), plus a further system known only from procedure texts (System A<sub>3</sub>). In System A<sub>1</sub>, the longitudes of last visibility phenomena ( $\Sigma$  and  $\Omega$ ) are calculated using “pushes” from the positions of the corresponding first visibility phenomena ( $\Gamma$  and  $\Xi$ ). In System A<sub>2</sub>, last visibility phenomena are calculated directly by a standard System A scheme and it is the first visibility phenomena that are calculated using “pushes”. System A<sub>3</sub> is only incompletely known and it is not certain how  $\Sigma$  would be calculated.

Despite the meagre traces of the longitudes preserved on this fragment it is clear that neither System A<sub>1</sub> or A<sub>2</sub> was used in its computation. This suggests either that it was calculated by System A<sub>3</sub> or, perhaps more likely, by a system that is currently unknown to us. Unfortunately, too little remains to reconstruct the details of the system underlying this tablet's calculation.

**Text I: BM 35495 + 40102 + 42819 + 46176 (= Sp. III, 1 + 81-2-1, 67 + 81-7-1, 583 + 81-7-6, 637)**

Contents: Venus ephemeris for SE 180–242.

Previous Publication: BM 35495 + 40102 + 46176 previously published as ACT No. 420; BM 42819 previously unpublished.

Transcription: See Neugebauer, ACT No. 410

Photograph: Plate 15.

The small fragment BM 42819 joins the bottom of ACT No. 420 and preserved parts of columns VIII–XI, lines 23–27 which is the end of the obverse (note Neugebauer’s transcription ends with line 26; his line Rev. –5 should be seen as Obv. 27).

**Text J: BM 34593 + 42758 (= Sp. II, 66 + 81-7-1, 522)**

Contents: Venus System A<sub>1</sub> ephemeris for (at least) SE 246–256.

Previously Publication: BM 34593 previously published as ACT No. 411; BM 42758 previously unpublished.

Transcription: Plate 8.

Photograph: Plate 14.

Critical Apparatus.

III, 1'. Neugebauer read 12,20 for the longitude in Virgo. Collation indicates the final number is 30, written with a very small third wedge.

Three systems for Venus were known to Neugebauer at the time of writing ACT. All three schemes (A<sub>0</sub>, A<sub>1</sub> and A<sub>2</sub>) calculate successive phenomena not by the normal rules of System A, but by making use of the fact that after five lines, longitudes and dates decrease by set amounts. Subsequently, Aaboe-Hamilton (1998) discovered a true System A scheme for Venus, but this System is known from a single “template” text; no ephemerides calculated with it are currently known. In System A<sub>1</sub>, the decrease in longitude after five lines is 2;30° whereas in System A<sub>2</sub> this decrease is 2;40°. Neugebauer tentatively assigned this text to System A<sub>1</sub>, and noted similarities with ACT No. 420, which is calculated using System A<sub>1</sub> and A<sub>2</sub> for different columns. The newly identified fragment, and collation of the longitude in III, 1' demonstrates conclusively that the fragment is calculated using System A<sub>1</sub>, with a difference in longitude of 2;30° after five lines. This is confirmed by the remains of a short procedure following the seventh line of the text which explicitly gives this figure. The presence of this short procedure, indicates that we are probably dealing with the reverse of the tablet; the obverse presumably contained data for the year before SE 246.

**Text K: BM 42951 (= 81-7-1, 715)**

Contents: Venus ephemeris of unknown system.  
 Transcription: Plate 8.  
 Photograph: Plate 14.

This small fragment attests to a new system for Venus in which the longitude decreases after five steps by  $2;20^\circ$ . Dates continue to decrease by 4 after five steps.

**Text L: BM 43023 + 45730 + 46142 (= 81-7-1, 787 + 81-7-6, 138 + 81-7-6, 597) + CUL x 1**

Contents: Jupiter System A' ephemeris for (at least) SE 142–195.  
 Previous Publication: BM 45730 + 46142 + CUL x 1 previously published as ACT No. 610; BM 43023 previously unpublished.  
 Transcription: See Neugebauer ACT No. 610.  
 Photograph: Plate 16 (BM 43023 + 45730 + 46142 only).

The small fragment BM 43023 joins the upper right corner of the reverse of ACT No. 610, preserving parts of columns III and IV lines 1–9. The new fragment confirms Neugebauer's restoration of this part of ACT No. 610.

**Text M: BM 42761 (= 81-7-1, 525)**

Contents: Jupiter System B ephemeris for (at least) SE 160–167.  
 Transcription: Plate 9.  
 Photograph: Plate 18.

Column II of this small fragment connects with column IV ( $\Delta T(\Omega)$ ) of ACT No. 620a, indicating that column I of our text is  $B(\Psi)$  and column II is  $\Delta T(\Omega)$ . The connection with ACT No. 620a implies that the present text covers the period SE 2,30 to 2,47.

**Text N: BM 55527 + 99661 (82-7-4, 109 + 83-1-21,2023)**

Contents: Jupiter System B ephemeris for (at least) SE 200–232.  
 Previous Publication: BM 55527 previously published as ACT No. 622a; BM 99661 previously unpublished.  
 Transcription: Plate 9.  
 Photograph: Plate 17.

The small fragment BM 99661 joins the bottom of the obverse / top of the reverse of ACT No. 622a. In addition to confirming Neugebauer's restorations of this part of the text, the new fragment indicates that the position of the break between obverse and reverse is two lines lower than Neugebauer estimated.

### **Remarks on Preserved Lunar System A Ephemerides from Babylon**

Forty-two dated lunar ephemerides computed using System A are known from Babylon (see table 1). A further three dated ephemerides are known from Uruk (ACT Nos. 1 and 2 and Hunger (1976), No. 98), plus five more undated ephemerides from Babylon (ACT Nos. 19, 21, 24, 25 and 26). With the exception of two examples from just before the beginning of the Seleucid Era, the System A lunar ephemerides from Babylon span a period of about 125 years beginning in the early part of the second century BC and ending in the mid-first century BC. The earliest ephemeris (BM 40094+) contains columns not found in the later examples, suggesting that the form of the ephemeris became standardised sometime after the beginning of the Seleucid Era. However, the long gap between the pre-Seleucid ephemerides and the next preserved examples from Babylon, dating from SE 141, is probably purely an artefact of the accidents of preservation.

Table 1 lists the dated ephemerides known from Babylon. Column one gives the date the ephemeris covers. Column two gives the tablet number abbreviated to the lowest numbered fragment in the case of joined tablets. Column three gives the most recent publication of the tablet. Details of previous publications may be found in the works cited. Tablets cited as simply "Text A" etc. refer to the present paper. Column four lists the columns preserved on each ephemeris. In column five, each ephemeris is classified as either a new moon ephemeris, containing data for conjunction, a full moon ephemeris, containing data for opposition, or a "standard" ephemeris, which gives new moon data on one side of the tablet and full moon data on the other. Uncertain classifications, generally because one side of the tablet is lost, are indicated by placing the classification within brackets. I use the designation "standard ephemeris" because modern scholarship has tended to use ephemerides that give new moon and full data for a single year as the model form of a lunar ephemeris in explanations of Babylonian lunar theory. As can be seen from table 1, however, standard ephemerides covering a single year make up only 14 out of the 42 the preserved examples, although some of the cases where my classification is given within brackets should possibly be identified as standard ephemerides. Two additional standard ephemerides cover two years rather than the normal single year. Twenty ephemerides appear to concern only new moons compared with only seven that contain only full moon data. Notwithstanding the problems of having only a small part of the original corpus of ephemerides preserved, it does seem certain that new moon

ephemerides were more common than full moon ephemerides. The reason is presumably because of the importance of the new moon for the calendar, although it should be remarked that we have strong evidence that neither System A or System B was ever used to determine the actual calendar in Babylon (Steele 2007).

As is well known, Column F of a System A lunar ephemeris can be calculated using either full or abbreviated parameters. Column six of table 1 details the version of column F found in the preserved ephemerides. Only one ephemeris uses the full form of Column F; perhaps significantly this is one of the latest dated ephemerides. Because the period relation of the abbreviated version of Column F is not sufficiently accurate the function cannot be used over long time scales. Instead, the column must be reset every few years. In table 1, I note 8 different versions of the abbreviated form of Column F that are used in the preserved ephemerides. It is worth noting that only two of these versions are known to have been used in calculating more than one ephemeris: version 2 is used in Steele (2006) Texts D and E (overlapping new moon ephemerides for SE 145–149 and SE 146–149), and version 6 is used in ACT Nos. 9, 10, 15, 16b and Text C in the present paper (a mixture of standard and full moon ephemerides for the years SE 185, 186, 209–210, 223, and 248–249). This latter case represents a remarkably long use of the single version of an abbreviated function and implies that at times it will have been quite out of phase with the full version of Column F. Interestingly, we have other ephemerides from intermediary years which use other versions of the abbreviated Column F. Similarly, we have overlapping texts (Steele (2006) Texts D and E and ACT No. 5) which do not use the same version of the abbreviated Column F. Thus it seems apparent that several versions of abbreviated Column F were in use at the same time, although on occasions one version could be used for a considerable number of years. This behaviour, of course, mirrors the practice of calculating columns in System B.

One further variation may be found in lunar System A ephemerides: whether the text contains Column  $\Psi$  or  $\Psi'$ . This information is given in the final column of table 1. Clearly,  $\Psi'$  is more common than  $\Psi$ . The preserved cases of the use of  $\Psi'$  come from the middle of the period of attested System A lunar ephemerides, but this may be simply chance.

Date	Tablet	Publication	Preserved Columns	Type	Version of F	$\Psi$ or $\Psi'$
Phil Ard 6-7	BM 40094+	Aaboe-Hamilton (1979) p. 24	K, M, $\Gamma$ , Y, C', K, M, P <sub>3</sub>	new moons	-	-
Phil Ard 6-7	BM 36890	Steele (2002a) Text A	M, P	(full moons)	-	-
SE 141	Rm 721+	ACT No. 3	$\Psi'$ , F, G, J, C'	standard	Abrv 1	$\Psi'$
SE 141	BM 42152	ACT No. 3aa	J, C'	(standard)	-	-
SE 142	BM 41467+	Steele (2006) Text C	T, $\Phi$ , B, C, E, $\Psi'$ , G, J, C', K	standard	-	$\Psi'$
SE 142	BM 37186+	ACT No. 3b	C', K', M, P <sub>21</sub> , P <sub>22</sub>	standard	-	-
SE 145-149	BM 32762+	Steele (2006) Text D	B, C, E, F, G, J	new moons	Abrv 2	-
SE 146-149	BM 32414+	Steele (2006) Text E	E, $\Psi'$ , F, G, J, C', K, M	new moons	Abrv 2	$\Psi'$
SE 146-148	BM 32785+	ACT No. 5	$\Phi$ , B, C, E, F, G, J, C', K, M, P <sub>1</sub> , P <sub>3</sub>	new moons	Abrv 3	-
SE 146	BM 42248	ACT No. 5a	B, C	new moons	-	-
SE 149	BM 46076	ACT No. 6	$\Psi'$ , F, G	(full moons)	Abrv 4	$\Psi'$
SE 150-155	BM 32302+	Steele (2002a) Text D	T, $\Phi$ , B, C, E, $\Psi$ , F	new moons	Abrv 5	$\Psi$
SE 153	BM 36732+	ACT No. 23	J, K, M, P	(new moons)	-	-
SE 154	BM 42081	ACT No. 6ab	B	(new moons)	-	-
SE 155	BM 41029+	ACT No. 6a	J, C', K, M, P <sub>1</sub> , P <sub>3</sub>	standard	-	-
SE 167	BM 35933	ACT No. 20	K, M, P	standard	-	-
SE 176	BM 34582	ACT No. 7	G, J, C', K, M' P	standard	-	-
SE 180	BM 42876	Text A	T, $\Phi$	standard	-	-
SE 180 (- ?)	BM 40754+	Text B	C, E, $\Psi'$	(new moons)	-	$\Psi'$
SE 180-181	BM 46042	ACT No. 7a	G, C', J, K	new moons	-	-
SE 182-183	BM 35288	ACT No. 8	C', K, M	(new moons)	-	-
SE 183	BM 34507	ACT No. 8a	$\Phi$ , B	(full moons)	-	-
SE 183-184	BM 34881	ACT No. 8b	G, J	(new moons)	-	-
SE 185	BM 34088+	ACT No. 9	T, $\Phi$ , B, C, E, $\Psi$ , F, G, J, C', K	standard	Abrv 6	$\Psi$
SE 186	BM 34185+	ACT No. 10	E, $\Psi$ , F, G, J, C', K, M	standard	Abrv 6	$\Psi$
SE 188-189	BM 34630+	ACT No. 11	F, G, J, C', K, M, P	(new moons)	Abrv 7	-
SE 189	BM 40619	Steele (2006), Text F	C', K, M	(new moons)	-	-
SE 189	BM 36007	ACT No. 11a	$\Psi'$ , F, G, C', J	(new moons)	Abrv 8	$\Psi'$
SE 190-191	BM 34847+	ACT No. 12	C', K, M, P <sub>1</sub> , P <sub>3</sub>	(new moons)	-	-
SE 194-195	BM 34604+	ACT No. 13	T, $\Phi$ , B, C	standard 2 years	-	-
SE 202	BM 35150	ACT No. 14	T, $\Phi$ , B	standard	-	-
SE 209-210	BM 34500+	ACT No. 15	$\Psi'$ , F, G, J, C', K, M, P <sub>1</sub> , P <sub>3</sub>	standard 2 years	Abrv 6	$\Psi'$
SE 210	BM 35507	ACT No. 22	K, M, P	standard	-	-
SE 219	BM 34617+	ACT No. 16	T, $\Phi$ , B, C, E, $\Psi'$	standard	-	$\Psi'$
SE 223	BM 42753	Text C	F, G	(full moons)	Abrv 6	-
SE 228	BM 33050	Text D	C, E	(new moons)	-	-
SE 229	BM 33033+	ACT No. 16a	$\Phi$ , B, C, E	(new moons)	-	-
SE 229	BM 33054	Steele (2002a) Text E	G, J	(new moons)	-	-
SE 248	BM 42793	Text E	B, C	(new moons)	-	-
SE 248-249	BM 45790	ACT No. 16b	E, $\Psi'$ , F, G	full moons	Abrv 6	$\Psi'$
SE 253	BM 34237	ACT No. 17	B, C, E	(full moons)	-	-
SE 263	MM 86-11-405+	ACT No. 18	B, C, E, $\Psi'$ , F, G, J, C', K, M, P	standard	Full	$\Psi'$
SE 266-269?	BM 36611+	ACT No. 18a	B, C	full moons excerpt	-	-

Table 1. Dated System A lunar ephemerides from Babylon

PLATE 1

Obv.	I (T <sub>1</sub> )	II (Φ <sub>2</sub> )	III (B <sub>1</sub> )	IV (C <sub>1</sub> )	V (E <sub>1</sub> )	VI (Ψ <sub>1</sub> )	VII (G <sub>1</sub> )	VIII (J <sub>1</sub> )	IX (C <sub>1</sub> )	X (K <sub>1</sub> )
1	2,59 ŠE	2, 3, [5]	[1,56,15 HUN]	[3, 1,17,30]	[6, 0,45,21 LAL LAL]	[1,53,39, 7]	[4,27, 9,22,57,46,40]	[30,18,23,30 LAL]	[9,40, 5 LAL]	[3,47,10]
2	3 BAR	2, 5,50,[55,33,20]	[10, 3,45 MÜL]	[3,20, 1,30]	[6,24,28,57 LAL U]	[1,26,45,39]	[4, 1,20,44,26,40]	[57, 3,45 LAL]	[9,22 LAL]	[2,54,54]
3	GU <sub>1</sub>	2, 8,36,[51, 6,40]	[8,11,15 MAŠ]	[3,31,16,30]	[4,25,43,15 LAL U]	[47,10,25]	[3,35,32, 5,55,33,20]	[57, 3,45 LAL]	[5,37,30 LAL]	[2,32,50]
4	SIG	2,11,22,[46,40]	[6,18,45 ALLA]	[3,35,30,30]	[2,26,57,33 LAL U]	[ 7,35,11]	[3, 9,43,27,24,26,40]	[57, 3,45 LAL]	[2, 7 LAL]	[2,10,32]
5	ŠU	2,14,18,[42,13,20]	[4,26,15 A]	[3,32,44,30]	[1,27,36,18 U U]	[32, 0, 3]	[2,45,30]	[57, 3,45 LAL]	[1,23 TAB]	[1,49,49]
6	[IZI]	[2,16,5]4,[37,46,40]	[2,33,45 ABSIN]	[3,22,58,30]	[3,54,33,51 U U]	[1,11,35,17]	[2,40]	[57, 3,45 LAL]	[4,53 TAB]	[1,47,49]
7	[KIN]	2,14,[29, 4,26,40]	[1,52 RIN]	[3, 5,25,20]	[5,58, 2,33 U U]	[1,52,44,51]	[2,40]	[21,10,35,30 LAL]	[8,46,35 TAB]	[2,27,35]
[8]	[DU <sub>d</sub> ]	[2,11,43, 8,53,20]	[1,52 GIR-TAB]	[2,45,25,20]	[6,19,41,45 U LAL]	[1,25, 9,55]	[2,45,14,26,40]	[10 TAB]	[10 TAB]	[2,55,14]
[9]	[APIN]	[2, 8,57,13,20]	[1,52 PA]	[2,31,15,12]	[4,13,26, 3 U LAL]	[43, 4,41]	[3, 9,19,15,33,20]	[7, 5, 4 TAB]	[7, 5, 4 TAB]	[3,16,24]
[10]	[GAN]	[2, 6,11,17,46,40]	[1,52 MAŠ]	[2,25, 5, 4]	[1,50,20,42 U LAL]	[59,27]	[3,35, 7,54, 4,26,40]	[3, 5, 4 TAB]	[3,38,12]	[3,38,12]
[11]	[AB]	[2, 3,25,22,13,20]	[1,52 GU]	[2,26,54,56]	[2,22,10,42 LAL LAL]	[41, 5,47]	[4, 0,56,32,35,33,20]	[ 54,56 LAL]	[ 54,56 LAL]	[4, 0, 1]
[12]	[ZIZ]	[2, 0,39,26,40]	[1,52 zib]	[2,36,44,48]	[4,29,21, 3 LAL LAL]	[1,23,11, 1]	[4,26,45,11, 6,40]	[4,54,56 LAL]	[4,54,56 LAL]	[4,21,50]
[13]	[ŠE]	[1,57,53,31, 6,40]	[1,33,45 HUN]	[2,24,22,30]	[6,34,23,45 LAL LAL]	[1,55, 8, 5]	[4,51,34,22,57,46,40]	[8,48,51 LAL]	[8,48,51 LAL]	[4,33,30]
[14]	[DIR-ŠE]	[2, 0,28,20]	[29,41,15 HUN]	[3,13, 7,30]	[5,50,50,33 LAL U]	[1,15,32,51]	[4,50,47,31,51, 6,40]	[9,15,24,30 LAL]	[9,22,30 LAL]	[3,44,21]

Rev.	I (T <sub>2</sub> )	II (Φ <sub>2</sub> )	III (B <sub>2</sub> )	IV (C <sub>2</sub> )	V (E <sub>2</sub> )	VI (Ψ <sub>2</sub> )	VII (G <sub>2</sub> )	VIII (J <sub>2</sub> )	IX (C <sub>2</sub> )	X (K <sub>2</sub> )
[6]	[3 BAR]	[2,10,24,48,53,20]	[26 RIN]	[3,10,40]	[7, 0, 8,12 U U]	[1,46,33,16]	[2,55,41,43,42,13,20]	[57, 3,45 LAL]	[9,22,30 LAL]	[1,49,15]
[5]	[GU <sub>1</sub> ]	[2, 7,38,53,20]	[24, 7,30 GIR-TAB]	[3,25,39]	[5,25, 6, 6 U LAL]	[1, 6,58, 2]	[3,21,30,22,13,20]	[57, 3,45 LAL]	[7,29,30 LAL]	[2,16,57]
[4]	[SIG]	[2, 4,52,57,46,40]	[22,15 PA]	[3,33,38]	[3,26,20,24 U LAL]	[27,22,48]	[3,47,19, 0,44,26,40]	[57, 3,45 LAL]	[3,59,30 LAL]	[2,46,15]
[3]	[ŠU]	[2, 2, 7, 2,13,20]	[20,22,30 MAŠ]	[3,34,37]	[31, 9,24 U LAL]	[12,12,26]	[4,13, 7,39,15,33,20]	[57, 3,45 LAL]	[1,29,30 TAB]	[3,15,34]
[2]	[IZI]	[1,59,21, 6,40]	[18,30 GU]	[3,28,36]	[2,55,11 LAL LAL]	[51,47,40]	[4,38,56,17,46,40]	[57, 3,45 LAL]	[3, 0,30 TAB]	[3,44,53]
[1]	[KIN]	[1,59, 0,44,26,40]	[16,52 zib]	[3,15,25,20]	[4,54,54,42 LAL LAL]	[1,31,42,14]	[4,56,35,33,20]	[49,42,28 LAL]	[6,35,20 TAB]	[4,13,28]
[0]	[DU <sub>d</sub> ]	[2, 1,46,40]	[16,52 HUN]	[2,55,25,20]	[7, 1,10,24 LAL LAL]	[1,46,12,32]	[4,39,20,29,37,46,40]	[10 TAB]	[10 TAB]	[4,49,20]
1	[APIN]	[2, 4,]32,[35,33,20]	[16,52 MÜL]	[2,37,15,12]	[5,16,33,54 LAL U]	[1, 4, 7,18]	[4,13,31,51, 6,40]	[9, 5, 4 TAB]	[9, 5, 4 TAB]	[4,22,36]
2	'GAN'	2, 7,18,[31, 6,40]	[16,52 MAŠ]	[2,27, 5, 4]	[3,10,18,12 LAL U]	[22, 2, 4]	[3,47,43,12,35,33,20]	[5, 5, 4 TAB]	[5, 5, 4 TAB]	[3,52,48]
3	AB	2,10, 4,26,[40]	[16,52 ALLA]	[2,24,54,56]	[15,55 U U]	[20, 3,10]	[3,21,54,34, 4,26,40]	[1, 5, 4 TAB]	[1, 5, 4 TAB]	[3,22,59]
4	ZIZ	2,12,50,22,1[3,20]	[16,52 A]	[2,30,44,48]	[3,26,13,12 U U]	[1, 2, 8,24]	[2,56, 5,55,33,20]	[2,54,56 LAL]	[2,54,56 LAL]	[2,53,10]
5	ŠE	2,15,36,17,46,[40]	[16,52 ABSIN]	[2,44,34,40]	[5,32,28,54 U U]	[1,44,13,38]	[2,40,11,51, 6,40]	[6,54,56 LAL]	[6,54,56 LAL]	[2,33,16]
6	DIR-ŠE	2,15,47,24,26,4[0]	[15,37,30 RIN]	[3, 3,45]	[6,50,13,24 U LAL]	[1,35,20,28]	[2,40]	[37,47,17 LAL]	[9,35,10 LAL]	[1,52,37]

Text A: BM 42876

## PLATE 2

Obv.	[-II (T <sub>1</sub> )]	[-I (Φ <sub>2</sub> )]	[0 (B <sub>1</sub> )]	I (C <sub>1</sub> )	II (E <sub>1</sub> )	III (Ψ <sub>1</sub> )	IV (G <sub>1</sub> )	V (I <sub>1</sub> )	VI (C <sub>1</sub> )	VII (K <sub>1</sub> )
1	[2,59 ŠE] [BAR]	[2, 3, 5] [2, 5,50,55,33,20]	[11,56,15 HUN] [10, 3,45 MÜL]	[3, 1,17],30 <sup>1</sup> [3,20, 1],30 <sup>1</sup>	6:,45,21 LAL LAL '6,24,28,57 LAL U	1,53,39[7] 1,26,45,3[9]	[4,27,9,22,57,46,40] [4, 1,20,44,26,40]	[30,18,23,30 LAL] [57, 3,45 LAL]	[9,40, 5 LAL] [9,22 LAL]	[3,47,10] [2,54,54]
2	[GU]	[2, 8,36,51, 6,40]	[8,11,15 MAŠ] [6,18,45 ALLA]	[3,31,16,30] [3,35,30,30]	[4,25,14,3,15 LAL U [2,26,51],33 LAL U	47,10,2[5] 7,35,[11]	[3,35,32, 5,55,33,20] [3, 9,43,27,24,26,40]	[57, 3,45 LAL] [57, 3,45 LAL]	[5,37,30 LAL] [2, 7 LAL]	[2,32,50] [2,10,32]
3	[SIG]	[2,11,22,46,40]	[4,26,15 A] [2,33,45 ABSIN]	[3,32,44,30] [3,22,58,30]	[1,27,36,1]8 <sup>1</sup> U U [3,54,33,51 U U]	32:, 3 [1,11],35,[17]	[2,45,30] [2,40]	[57, 3,45 LAL] [57, 3,45 LAL]	[1,23 TAB] [4,53 TAB]	[1,49,49] [1,47,49]
4	[IZI]	[2,14, 8,42,13,20]	[2,16,54,37,46,40]	[3,22,58,30] [3, 5,25,20]	[3,54,33,51 U U] [5,58, 2,33 U U]	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[57, 3,45 LAL] [57, 3,45 LAL]	[8,46,35 TAB] [10 TAB]	[2,27,35] [2,55,14]
5	[KIN]	[2,14,29, 4,26,40]	[1,52 RIN] [1,52 GIR-TAB]	[2,45,25,20] [2,31,15,12]	[6,19,41,45] U LAL [4,13,26],3 <sup>1</sup> U LAL	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[21,10,35,30 LAL] [21,10,35,30 LAL]	[7, 5, 4 TAB] [3, 5, 4 TAB]	[2,27,35] [2,55,14]
6	[DU]	[2,11,43, 8,53,20]	[1,52 PA] [1,52 MAŠ]	[2,45,25,20] [2,31,15,12]	[3,54,33,51 U U] [5,58, 2,33 U U]	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[21,10,35,30 LAL] [21,10,35,30 LAL]	[7, 5, 4 TAB] [3, 5, 4 TAB]	[2,27,35] [2,55,14]
7	[APIN]	[2, 8,57,13,20]	[1,52 MAŠ] [1,52 GÜ]	[2,25, 5, 4] [2,26,54,56]	[6,19,41,45] U LAL [4,13,26],3 <sup>1</sup> U LAL	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[21,10,35,30 LAL] [21,10,35,30 LAL]	[7, 5, 4 TAB] [3, 5, 4 TAB]	[2,27,35] [2,55,14]
8	[GAN]	[2, 6,11,17,46,40]	[1,52 MAŠ] [1,52 GÜ]	[2,25, 5, 4] [2,26,54,56]	[6,19,41,45] U LAL [4,13,26],3 <sup>1</sup> U LAL	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[21,10,35,30 LAL] [21,10,35,30 LAL]	[7, 5, 4 TAB] [3, 5, 4 TAB]	[2,27,35] [2,55,14]
9	[AB]	[2, 3,25,22,13,20]	[1,52 GÜ] [1,52 <i>zif</i> ]	[2,25, 5, 4] [2,26,54,56]	[6,19,41,45] U LAL [4,13,26],3 <sup>1</sup> U LAL	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[21,10,35,30 LAL] [21,10,35,30 LAL]	[7, 5, 4 TAB] [3, 5, 4 TAB]	[2,27,35] [2,55,14]
10	[ZIZ]	[2, 0,39,26,40]	[1,52 <i>zif</i> ] [1,33,45 HUN]	[2,36,44,48] [2,54,22,30]	[6,19,41,45] U LAL [4,13,26],3 <sup>1</sup> U LAL	1,25, 9,55 43, 4,41	[2,45,14,26,40] [3, 9,19,15,33,20]	[21,10,35,30 LAL] [21,10,35,30 LAL]	[7, 5, 4 TAB] [3, 5, 4 TAB]	[2,27,35] [2,55,14]
11	[SE]	[1,57,53,31, 6,40]	[1,33,45 HUN] [29,41,15 HUN]	[2,54,22,30] [3,13, 7,30]	[6,34,23,45 LAL] LAL [5,50,50,33 LAL U]	1,55, 8, 5 [1,1',5',32,5[11]	[4,51,34,22,57,46,40] [4,50,47,31,51, 6,40]	[9,15,24,30 LAL] [57, 3,45 LAL]	[8,48,51 LAL] [9,22,30 LAL]	[4,21,50] [4,33,30] [3,44,21]
12	[DIR-ŠE]	[2, 0,28,20]	[29,41,15 HUN]	[3,13, 7,30]	[5,50,50,33 LAL U]	[1,1',5',32,5[11]	[4,50,47,31,51, 6,40]	[57, 3,45 LAL]	[9,22,30 LAL]	[3,44,21]

Text B: BM 40754 + 44196

	[-IV (T <sub>2</sub> )]	[-III (Φ <sub>2</sub> )]	[-II (B <sub>2</sub> )]	[-I (C <sub>2</sub> )]	0 (E <sub>2</sub> )	I (Ψ <sub>2</sub> )	II (F <sub>2</sub> )	III (G <sub>2</sub> )	IV (H <sub>2</sub> )	IV (C <sub>2</sub> )	VI (K <sub>2</sub> )
1'	[3,43 IZI]	[2, 2, 6,40]	[2,22,2,30 GÜ]	[3,27, 3]	[3,42, 6,36 LAL U]	[ 32,38,12]	[11,52]	[4,36,13],4,9,37,[46,40]	[57, 3,45 LAL]	[3,31,30 TAB]	[3,42,41]
2'	[KIN]	[2, 4,52,35,33,20]	[21 <i>zif</i> ]	[3,12,40]	[ 58,41,48 LAL U]	[ 7,37, 2]	[12,34]	4,10,25,11, 6,40	[41,50,45 LAL]	[7,11,30 TAB]	[3,35,45]
3'	[DU]	[2, 7,38,31, 6,40]	[21 HUN]	[2,52,40]	[2,48,54,48 U U]	[ 49,42,16]	[13,16]	3,44,36,32,35,33,20	[10 TAB]	[10 TAB]	[3,54,36]
4'	[APIN]	[2,10,24,26,40]	[21 MAŠ]	[2,35,36]	[4,55,10,30 U U]	[1,31,47,130]	13,58	3,18,47,54, 4,26,40	[8,32 TAB]	[8,32 TAB]	[3,27,19]
5'	[GAN]	[2,13,10,22,13,20]	[21 MÜL]	[2,26,32]	[7, 1,26,12 U U]	[1,46, 7,16]	14,40	2,40 '15 <sup>1</sup>	[4,32 TAB]	[4,32 TAB]	[2,57,32]
6'	[AB]	[2,15,56,17,46,40]	[21 ALLA]	[2,25,28]	[5,16,18, 6 U LAL]	[1, 4, 2, 2]	[15,22]	'2,40 <sup>1</sup>	[ 32 TAB]	[ 32 TAB]	[2,40,32]

Text C: BM 42753



PLATE 3

	[-II (T <sub>1</sub> )]	[-I (Φ <sub>1</sub> )]	[0 (B <sub>1</sub> )]	I (C <sub>1</sub> )	II(E <sub>1</sub> )	III (Ψ <sub>1</sub> )	IV (G <sub>1</sub> )	[V (J <sub>1</sub> )]	VI (C <sub>1</sub> )	VII (K <sub>1</sub> )
1'	[3,48 GAN]	[2, 9,43, 8,53,20]	[10,40 PA]	[2,27,5] <sup>1</sup> [4,40]	53,56; <sup>1</sup> [30 LAL U]	[ 8,27,55]	[3,25,13,20]	[ ]	[5,54,40 TAB]	[3,31,8]
2'	[AB]	[2,12,29, 4,26,40]	[10,40 MĀŠ]	[2,24] <sup>1</sup> [5,20]	2,51,27,27 U U	[ 50,33, 9]	[2,59,24,41,28,53,20]	[ ]	[1,54,40 TAB]	[3,1,36]
3'	[Z[Z]	[2,15,15, 0, 0, 0]	[10,40 GU]	[2,28,1] <sup>1</sup> 6'	4,57,43, 9 U U	[1,32,38,23]	[2,40,48,31, 6,40]	[ ]	[2, 5,20 LAL]	[2,38,43]
4'	[ŠE]	[2,16, 8,42,13,20]	[10,40 zib]	[2,40,26,40]	[7, 3], 58,51 <sup>1</sup> [U U]	[1,45,16,23]	[2,40]	[ ]	[6, 5,20 LAL]	[2,33,54]

Text D: BM 33050

	[-I (T <sub>1</sub> )]	[0 (Φ <sub>1</sub> )]	I (B <sub>1</sub> )	II (C <sub>1</sub> )	III (E <sub>1</sub> )	IV (Ψ <sub>1</sub> )	IV (G <sub>1</sub> )	VI (H <sub>1</sub> )	VII (C <sub>1</sub> )	VIII (K <sub>1</sub> )
1'	[4,8 AB]	[2, 1,26, 6,40]	[29,20] TPA <sup>1</sup>	[2,25,25] <sup>1</sup> [20]	[3,52,45,21 U U]	[1,10,59, 7]	[4,42,32,20,44,26,40]	[ ]	[3,25,20 TAB]	[4,39, 7]
2'	[Z[Z]	[2, 4,12, 2,13,20]	[29],20 MĀŠ	2,26,34,[40]	[5,59, 1, 3 U U]	[1,53, 4,21]	[4,16,43,42,13,20]	[ ]	[0,34,40 LAL]	[4,16, 9]
3'	[ŠE]	[2, 6,57,57,46,40]	[29],20 GU	2,35,[44]	[6,18,43,15 U LAL]	[1,24,50,25]	[3,50,55, 3,42,13,20]	[ ]	[4,34,40 LAL]	[3,46,20]
4'	[DIR[G]	[2, 9,43,53,20]	[29,11,15] <sup>1</sup> zib <sup>2</sup>	[2,52, <sup>1</sup> [47,30]	[4,13, 2,33 U LAL]	[ 42,56,51]	[3,25, 6,25,11, 6,40]	[4,26,17,30 TAB]	[8,31,45 LAL]	[3,12, 8]

Text E: BM 42793

I

1'	[1,57,5]8,8,53,[20 TAB]	5, 2, 6, 25 <sup>1</sup> [55,33,20]
2'	[1,58,15],55,33,20 TAB	5,16,54,1[9,15,33,20]
3'	[1,58,37]3,42,13,20 TAB	5,31,37,1[7, 2,13,20]
4'	[1,58,51],28,53,20 TAB	5,45,51,[51, 6,40]
5'	[1,59, 9,1]5,33,20 TAB	5,59,4[8, 8,53,20]
6'	[1,59,22], 2,13,20 TAB	[13,8,53,20]

II

Text F: BM 43024

## PLATE 4

Obv	[0 (T1)]	I (A.)	II (B.)	III (C.)	IV (D.)	V (Ψ1")	VI (F.)	VII (G.)	VIII (H.)	IX (I.)	X (K.)
1	[ŠE]	[29, 8,3]9,18	2, 2, 6,20 [H]UN	2,56	1,32	6, 5,30 SIG	[11,30]	[3,59,5]2,30	20,20	7,19 LAL	3,52,33,30
2	[3,28 BAR]	[28,50,39],18	[5]2,45,38 MÜL	3,14	1,23	9,46,30 SIG	[11,16,10]	[4,22,22],30	14,52,30	22,11,30 LAL	4, :11
3	[GU,]	[28,3]2,39,18	29,52,24,56 MÜL	3,26	1,17	5,54 SIG	[11,52,10]	[4,14, 1,40]	8, 5'	'30,16',[30 TAT]	[3],43,45,10
4	[SIG]	[28],14,39,18	27,40, 4,14 MAŠ	3,34	1,13	2, 1,30 SIG	12,2[8,10]	[3,51,31,40]	[1,17],30	31,34 LAL	3,19,57,40
5	[ŠÜ]	[2]8,24,40, 2	26, 4,44,16 ALLA	3,32	1,14	1,51 BAR	13, 4,10	[3,29, 1,40]	[5],30	27,5[2 LAL]	3, 1, 9,40
6	[IZI]	[2]8,42,40, 2	24,47,24,18 A	3,24	1,18	2,43,30 NIM	[13],40,10	[3, 6,31,40]	[12],17,30	[15,34,30 LAL]	[2,50,57,10]
7	[KIN]	29, :40, 2	23,48, 4,20 ABSIN	3, 9	1,25	6,36 NIM	14,16,10	[2,44, 1,40]	1'9],5	[3,30,3]0 TAB	2,47,32,10
8	[KIN-2-KAM]	29,18,40, 2	23, 6,44,22 RİN	2,51	1,34	9,16 NIM	14,52,10	[2,21,3]1,40	16,[7,30]	[19,3]8 TAB	2,41,9,40
9	[DU,]	[2]9,36,40, 2	22,43,24,24 GİR-TAB	2,36	1,42	5,23,30 NIM	15, 4	[1,59, 1,40]	9,'20'	[28],58 TAB	2,27,59,40
10	[APIN]	29,54,40, 2	[22,38], 4,26 PA	2,27	1,46	1,31 NIM	14,28	2, 8,37,30	2,3[2,30]	[31],30,30 TAB	2,40, 8
11	[GAN]	[29],51,17,5[8]	[22,29,22],24 MAŠ	2,27	1,46	2,21,30 BAR	13,5[2]	2,31, 7,30	4,15	[2]9,10,30 TAB	3, :18
12	[AB]	[29],33,17,58	[22, 2,40,22 G]U	2,[3]6	1,42	[3,14 SIG]	[13,16]	[2,5]3,37,30	11, 2,3[0]	18, 8 TAB	3,11,45,30
13	[ZIZ]	[2]9,15,17,58	21,17,58,20 <i>zib</i> -ME	2,[50]	1,[35]	[7, 6,30 SIG]	[12,40]	[3,16],7,30'	17,[50]	18 TAB	3,16,25,30
14	[ŠE]	[2]8,57,17,58	20,15,16,18 HUN	3, 8	1,26	[8,45],30 SIG	12,[4]	[3,38,37,30]	[17],22,30	17, 4,30 LAL	3,21,33
15	[3,29 BAR]	[2]8,39,17,58	18,54,34,16 MÜL	3,22	1,19	[4],53 SIG	11,28	[4, 1, 7],30	[10,35]	[27,39,30 LAL]	[3],33,28
16	[GU,]	[28],21,17,58	17,15,52,14 MAŠ	3,32	1,14	[1, :30 SIG]	11,18,10	4,23,37,30	3,47,30	[31,27 LAL]	[3],52,10,30
17	[SIG]	[28,1]8, 1,22	15,33,53,36 ALLA	3,35	1,12	[2],52 BAR	11,5[4],10	4,12,46,40	3	30,29 LAL	3,42,17,40
18	[ŠÜ]	[28,3]6, 1,22	14, 9,54,58 A	3,28	1,16	[3],44,30 NIM	12,30,10	3,50,16,40	9,[4]7,[3]0	20,41,30 LAL	3,29,35,10
19	[IZI]	[28,54, 1],22	13, 3,56,20 ABSIN	3,15	1,22	[7,37 NIM]	[13, 6,10]	[3,27,46,40]	[16,3]5	4, 6,30 LAL	3,23,40,10
20	[KIN]	[29,12, 1,2]2	12,15,57,42 RİN	2,5[8]	[1,31]	[8,15 NIM]	[13,42,10]	[3, 5,16,40]	[18],37,30	14,31 TAB	3,19,47,40

Text G: BM 34580+ Obv.

PLATE 5

	XI (L <sub>1</sub> )	XII (M <sub>1</sub> )	XIII (N <sub>1</sub> )	XIV (O <sub>1</sub> )	XV (P <sub>1</sub> )	XVI (P <sub>3</sub> )	XVII (O <sub>3</sub> )	Obv
←	ŠE 29	[29 ;:30 KUR]	[KUR 30 9,26]	[BE] 14,15	BAR 1	26 17,30 [KUR]	[... BE]	1
	BAR 28	[29 ;:26 DJU]	KUR 30 11,35	[BE] 17,40	GU <sub>1</sub> 1	26 17,50 KUR	[2]3,4[0 BE]	2
	'GU <sub>1</sub> 29	[28 1,2[9 NIM]	KUR 29 7,57	[BE] 13,10	SIG 30	27 17,30 KUR	18,3[0 BE]	3
	SIG 29	[29 1,1[7 KUR]	[KUR 30 1]0,42	[BE ...]	[ŠU 1	27 16,40 KUR	16 BE	4
	Š[U] 28	[28 1,1[38 ŠU]	[KUR 29] 7,39	[BE] 12,30	[IZI 30	27 23,10 KUR	2[2] BE	5
	[IZI 28	[29 1,1,16 DJU]	KUR 3[0] 10,44	BE 20,30	KIN 1	27 19,30 KUR	17 BE	6
	[KIN] 28	[28 1,21 NIM]	KUR 29 7,48	BE 15,50	KIN-2-KAM 30	27 30,40 KUR	22,20 BE	7
	[KIN-2-KAM 28	[29 1, 1 DJU]	KUR 29 4,58	BR 10,10	DU <sub>6</sub> 30	28 16,30 KUR	14 BE	8
	[DU <sub>6</sub> ] 29	[29 ;:13 NIM]	KUR 30 8,23	BE 17,10	APIN 1	27 20,30 KUR	19[... ] BE	9
	[APIN] 28	[29 ;:22 DJU]	KUR 29 5,28	BE 9,20	GAN 30	28 14 KUR	1[2 ... ] BE	10
	GAN 29	[29 ;:10 KUJR]	KUR 30 8,37	BE 15,50	AB 1	27 13,30 KUR	18[... ] BE	11
	AB 28	[29 ;:29 DJU]	KUR 29 5,31	BE 9,30	ZIZ 30	27 12 KUR	2[4 ... ] BE	12
	ZIZ 29	[29 ;:29 NIM]	KUR 30 8,21	BE 14	ŠE 1	27 10,30 KUR	1[8 ... ] BE	13
	ŠE 28	[29 ;:51 DU]	[KUR 3]0 11, 8	BE 18,40	BAR 1	26 16,30 KUR	2[3 ... ] BE	14
	B[AR] 28	[28 1,40 NIM]	[KUR 29 7,4]2	BE 11,50	GU <sub>1</sub> 30	27 17,10 KUR	1[9 ... ] BE	15
	GU <sub>1</sub> 29	[29 ;:23 KUR]	[KUR 30 9]5,55	BE 15,10	SIG 1	27 17 KUR	1[2 ... ] BE	16
	SIG 28	[28 ;:14 ŠU]	[KUR 30 12]1,14	BE 20,30	ŠU 1	27 14,40 KUR	[... ] BE	17
	ŠU 28	[28 ;:47 NIM]	[KUR 29] 8,41	BE 15	IZI 30	27 25,40 [KUR]	[... ] BE	18
	IZI 28	[29 ;:49 DU]	[KUR 29] 5,11	BE 8,30	KIN 30	28 18,30 [KUR]	[... ] BE	19
←	KIN 29	[29 1,15 NIM]	[KUR 30 7,43]	[BE ...]	[DU <sub>6</sub> ] 1	27 2[8 ... ] KUR	[... ] BE	20

Text G: BM 34580+ Obv (cont).

## PLATE 6

Rev	[0 (T <sub>1</sub> )]	I (A <sub>1</sub> )	II (B <sub>1</sub> )	III (C <sub>1</sub> )	IV (D <sub>1</sub> )	V (Ψ <sub>1</sub> <sup>+</sup> )	VI (F <sub>1</sub> )	VII (G <sub>1</sub> )	VIII (H <sub>1</sub> )	IX (J <sub>1</sub> )	X (K <sub>1</sub> )
1	[DU <sub>6</sub> ]	[29,30], 1,22	11,45,59, 4 GIR-TAB	2,40	1,40	4, [22,30 NIM]	[14,18,10]	[2,42,46,40]	[11,50]	[26,21 TAB]	[3, 9, 7,40]
2	[APIN]	[29],48, 1,22	11,34M, ;26 PA	2,29	1,45	:[50 NIM]	[14,5]4,[110]	2, [20,16,40]	[5, 2,30]	[31,23],30 TAB	2,51,40,10
3	[GAN]	[219,57,56,38	11,31,57, 4 MÁŠ	2,35	1,47	:[22],30 BAR	15, 2	1,57,46,40	1,45	31,47,30 TAB	2,29,34,10
4	[AB]	29,39,56,38	11,11,53,42 GU	2,31	1,44	4, [1]5 SIG	14,26	2, 9,52,30	8,22,30	23,15 TAB	2,33, 7,30
5	[ZIZ]	[219,21,56,38	10,33,50,20 <i>zib</i> -ME	2,43	1,38	8, 7,30 SIG	13,50	2,32,22,30	15,20	7,55 TAB	2,40,17,30
6	[ŠE]	[219, 3,56,38	9,37,46,58 HUN	3, 1	1,29	7,44,30 SIG	13,14	2,54,52,30	19,52,30	11,57,30 LAL	2,42,55
7	[3,30 BAR]	[28],45,56,38	8,23,43,36 MŪL	3,18	1,21	3,52 SIG	12,38	3,17,22,30	13,5	25, 2,30 LAL	2,52,20
8	[GU <sub>4</sub> ]	[28,2]7,56,38	6,51,40,14 MÁŠ	3,29	1,15	;; 30 BAR	12, 2	3,39,52,30	6,17	31,20 LAL	3, 8,32,30
9	[SIG]	[28,1]1,22,42	5, 3, 2,56 ALLA	3,35	1,12	:[53 NIM]	11,26	4, 2,22,30	:[30	31,50 LAL	3,30,32,30
10	[ŠŪ]	[28,2]9,22,42	3,32,25,38 A	3,31	1,14	4,45,30 NIM	11,20,10	4,24,52,30	7,17,30	25,48,30 LAL	3,59, 4
11	[IZI]	[28],47,22,42	2,19,48,20 ABSIN	3,20	1,20	8,38 NIM	11,56,10	4,11,31,40	14, 5	11,43,30 LAL	3,59,48,10
12	[KIN]	[29], 5,22,42	1,25,11, 2 RŪN	3, 4	1,28	7,14 NIM	12,32,10	3,49, 1,40	20,52,30	9, 9 TAB	3,58,10,40
13	[DU <sub>6</sub> ]	[219,23,22,42	48,33,44 GIR-TAB	2,46	1,37	3,21,30 [N]IM	13, 8,10	3,26,31,40	14,20	23,29 TAB	3,50, ;40
14	[APIN]	[219,41,22,42	29,56,26 PA	2,33	1,43	31 BAR	[1]3,44,10	3, [4, 1,40]	7,32,30	31, [1],30 TAB	3,35, 3,10
15	[GAN]	[29],59,22,42	29,19, 8 MÁŠ	2,26	1,47	1,23,30 SIG	14,20,10	2,41,31,40	[:45]	31,4[6,30] TAB	3,13,[18],10
16	[AB]	[219,46,35,18	15,54,26 GU	2,28	1,46	5,16 SIG	14,56,10	2,19, 1,40	6, 2,30	27, [7] TAB	2,46, 8,40
17	[ZIZ]	[29],28,35,18	29,44,29,44 GU	2,39	1,40	9, 8,30 SIG	15	1,56,31,40	12,50	[14],17 TAB	2,10,48,40
18	[ŠE]	[29,10,3]5,18	28,55, 5, 2 <i>zib</i> -ME	2,54	1,33	6,43,30 SIG	14,24	2,11, 7,30	19,37,30	5,20,30 LAL	2, 5,47
19	[DIR-ŠE]	[28,52,35]18	27,47,40,20 HUN	3,12	1,24	2,5[1 SIG]	[13,4]8	2,33,37,30	15,35	20,55,30 LAL	2,12,42

Text G: BM 34580+ Rev.

PLATE 7

	XI (L <sub>1</sub> )	XII (M <sub>1</sub> )	XIII (N <sub>1</sub> )	XIV (O <sub>1</sub> )	XV (P <sub>1</sub> )	XVI (P <sub>2</sub> )	XVII (O <sub>2</sub> )	Rev					
DU <sub>6</sub> 28	5,55,42,50	ŠÚ	[2]9	1,35	DU	KUR 30	10,25	BE 20,10	APIN 1	17,20	27 17[... KUR]	[... BE]	1
APIN 28	2,47,23	ŠÚ	28	1, 2	NIM	KUR 29	7,27	BE 14,50	GAN 30	14	27 20,10 KUR	[... BE]	2
GAN 28	5,16,57,10	ŠÚ	29	1,4	DJU	KUR 29	4,56	BE 10,10	AB 30	10,20	28 9,50 KUR	[... BE]	3
AN 29	1,50,4,40	ŠÚ	29	:[6]	NIM	KUR 30	8,25	BE 15,50	ZÍZ 1	16,20	27 11,10 KUR	[... BE]	4
ZÍZ 28	4,30,22,10	ŠÚ	29	;	9	KUR 29	5,51	BE 11,30	ŠE 30	12	27 12 KUR	2[3 ... BE]	5
ŠE 29	1,13,17,10	ŠÚ	29	15	KUR	KUR 30	9,17	BE 16,30	BAR 1	17,40	27 11,20 KUR	17[... BE]	6
BAR 28	4, 5,37,10	ŠÚ	28	34	ŠÚ	KUR 29	6,34	BE 10,10	GU <sub>4</sub> 30	10,50	27 20,10	2[1 ... BE]	7
GU <sub>4</sub> 29	1,14,9,40	ŠÚ	29	;	1	KUR	9,30	BE 15	SIG 1	15,40	27 15,10 KUR	1[6 ... BE]	8
SIG 28	4,44,42,10	ŠÚ	28	[,] 3	[ŠÚ]	KUR 30	12, 3	BE 18,30	ŠU 1	18,50	27 13,20 KUR	1[2 ... BE]	9
ŠU 28	2,43,46,10	ŠÚ	28	1,29	[NIM]	[KUR] 29	8, 2	BE 11,50	IZI 30	11,10	28 11 KUR	[... BE]	10
IZI 29	43,34,20	ŠÚ	29	3[7	KUR]	[K 30ÜR]	9,57	BE 16,50	KIN 1	14,20	27 20,40 KUR	16,30 BE	11
KIN 28	4,41,45	ŠÚ	29	9	[DU]	[K 29ÜR]	5,51	BE 10 UŠ	DU <sub>6</sub> 30	7,30	28 16,1[0] KUR	14 BE	12
DU <sub>6</sub> 29	2,31,45,40	ŠÚ	29	5[5	NIM]	[K 30ÜR]	7,52	BE 14,30	APIN 1	11,50	27 22,10 KUR	21 BE	13
[A]PIN 29	6,48,50	ŠÚ	29	[1,36	KUR]	[KUR 30	10],10	BE 19,40	GAN 1	17,30	27 14,50 KUR	16,10 BE	14
[GAN 2]8	[3],20,7	[ŠÚ]	[28	53	ŠÚ]	[KUR 2]9	[6],53	BE 13,50	AB 30	13,30	27 19,30 KUR	23,20 BE	15
AB 29	6,15,40	ŠÚ	2[9	1,4]0	KUR	KUR 30	10, 8	BE 21,50	ZÍZ 1	21,50	27 9,40 KUR	14 BE	16
ZÍZ 28	2,17, 4,20	ŠÚ	2[8]	37	NIM	KUR 29	8, 2	BE 17,10	ŠE [30	18],20	27 11,50 KUR	19,30 BE	17
ŠE 28	4,22,51,20	ŠÚ	28	;	4	ŠÚ	6, 4	BE 11,30	DIR-ŠE 30	12],20	27 17,50 KUR	23,50 BE	18
DIR-ŠE	35,33,2[0	ŠÚ	29	49	KUR	KUR 30	10, 1	[BE 2]0,1]0	BAR 1	[2]2,50			19

Text G: BM 34580+ Rev (cont).

## PLATE 8

## I

1'	[...] 1' 'x' [... ŠÚ]
2'	[... x+]15,20[+x' ... ŠÚ]
3'	[... x+]18,'7',[... ŠÚ]
4'	[... x+]16, 7,[... ŠÚ]
5'	[... x+]4[+x],10 'x' [ŠÚ]
6'	[...] RÍN [ŠÚ]
7'	[...] GU [ŠÚ]
8'	[...],40 MÚL ŠÚ-ŠÚ DIB
9'	[...],52,40 ABSIN ŠÚ
10'	[... x+]4,52,30 MÁŠ [ŠÚ]
11'	[... x+]9,10 HUN [ŠÚ]

## Text H: BM 42736

	I	II	III	IV
1'	[x]8 ABSIN ŠÚ	4, 6 KIN 25	12,30 A[BSIN] IGI	4, 6 KIN-2-KAM 19
2'	[...] M[ÚL Š]Ú	4, 8 BAR 24	17,20 HUN IGI	4, 8 GU <sub>4</sub> 15
3'	[...]30 PA 'ŠÚ <sup>1</sup>	4, 9 APIN 1[2]	4,30 PA IGI	4, 9 GAN 5
4'	[...] RÍN ŠÚ	4,11 'ŠÚ <sup>1</sup> 7	27,40 MAŠ IGI	4,[11 IZI 2]0
5'	[... ŠÚ]	[4,12 A]B 29	'11',40 'GU <sup>1</sup> [IGI]	4,[12 ZÍZ ...]
6'	[... ŠÚ]	[4,14 KIN 21]	10 ABSIN IGI	4,14 D[U <sub>6</sub> 15]
7'	[... ŠÚ]	[4,16 BAR 20]	14,50 HUN IGI	4,16 GU [11]
8'			[...] LAL 2,30 'x' [...]	

## Text J: BM 34593 + 42758

	I	II	III
1'	[... 24]	'6,50 <sup>1</sup> [... IGI]	[...]
2'	[...] 26	'8,20 <sup>1</sup> HUN [IGI]	[...]
3'	[...] APIN 3	11,50 GÍR IGI	[...]
4'	[...] 18	13,50 MAŠ IGI	[...]
5'	[...] AB 18	28 MÁŠ IGI	'2+x',[...]
6'	[...] IZI 20	4,30 ABSIN IGI	'2+x',[...]
7'	[...2]2	6 HUN IGI	[...]
8'	[...] 29	9,30 GÍR IGI	[...]
9'	[... 14]	'11,30 <sup>1</sup> [MAŠ IGI	[...]

## Text K: BM 42758

PLATE 9

	I	II
1'	[...] UŠ	40[+x,...]
2'	[...] UŠ	45,11
3'	[...] MÁŠ UŠ	46,59
4'	[...] GU UŠ	48,57
5'	[...] UŠ	49,39,30
6'	[...] UŠ	47,51,30
7'	[... UŠ]	'46',[3,30]
8'	[... UŠ]	'44',[15,30]

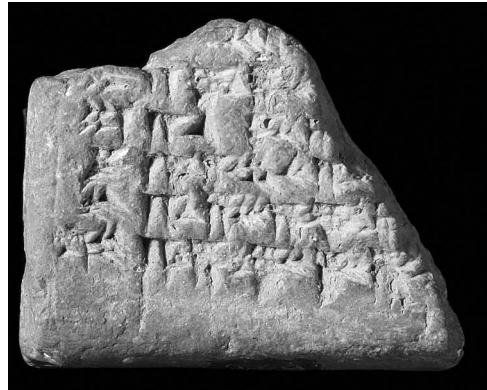
Text M: 42761

Obv.	I	II	III	IV
1'		[3,]2[1 GAN ...]	[25,31]	[2,48 ALLA E]
2'		3,22 'AB' 28	2[7,31]	:7 [A E]
3'		3,23 ZÍZ 10	29, 7	29,14 [A E]
4'		3,24 'ŠE' 21	29,[1]2	2[8,26 ABSIN E]
5'		3,26 BAR 4	31	29,2[6 RÍN E]
6'		3,27 'GU <sub>4</sub> ' 1[9]	32,48	2,14 [PA E]
7'		3,28 [ŠU] 6	[34],3[6]	6,50 [MÁŠ E]
8'		3,29 [ŠU] 24	[36,24]	13,[14 GU E]
9'	[...3]0	3,30 K[IN] 14	[37,52]	2[1, 6 zib E]
10'	[...30]	[3,31] 'DU <sub>6</sub> ' 3	3[6, 4]	[27,10 ĤUN E]
11'		[3,32 APIN ...]	[34,16]	[1,26 MÁŠ E]
12'		[3,33 AB ...]	[32,28]	3,54 ALLA E]
13'		[3,34 AB ...]	30,40	'4',[34 A E]
14'		[3,35 ZÍZ ...]	[28,52]	'3',[26 ABSIN E]
15'		[3,36 DIR ...]	[29,27]	'2',[53 RÍN E]
16'		[3,38 ...]	[31,15]	4,[8 GÍR-TAB E]
17'		[3,39 ...]	[33, 3]	'7',[11 PA E]

Rev.	I	II	III	IV	V
1	[3,40 ...]	[35],51	12, 2 MÁŠ E	[46,37]	[3,40 ...]
2	[3,41 ...]	[36,3]9	18,41 GU E	[48,25]	[3,41 ...]
3	[3,42 ...]	[37,37]	26,18 zib E	[50, 1,30]	[3,42 ...]
4	[3,43 ...]	[35,49]	2, 7 MÚL E]	[48,13,30]	[3,43 ...]
5	[3,44 ...]	[34, 1]	[6], 8 [MÁŠ E]	46,25,30	3,4[4 ...]
6	[3,45 ...]	[3]2,[1]3	8,21 ALLA E	44,37,30	3,45 [...]
7	[3,46 ZÍZ ...]	30,25	8,46 A E	42,49,30	3,47 [...]
8	[3,47 ZÍZ] 14	28,37	7,23 ABSIN E	41, 1,30	3,4[8 ...]
9	[3,4]8 ŠE 25	[29],42	7, 5 RÍN E	41,28	3,[49 ...]
10	[3,5]0 BAR 8	31,30	8,35 GÍR-TAB E	43,16	[3,50 ...]
11	[3,51 GU <sub>4</sub> ...]	[33,18]	[11,53 PA E]	45,[4]	[3,51 ...]

Text N: BM 55527 + 99661

PLATE 10



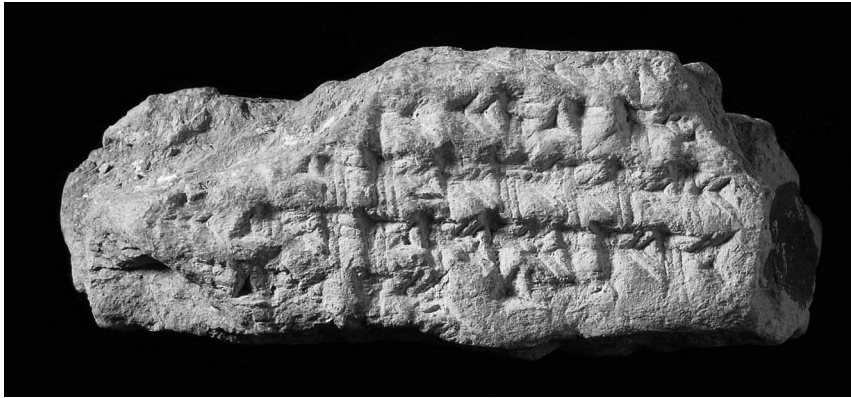
Text A: BM 42876 Obv (left) and Rev (right)



Text B: 40754 + 44196



PLATE 11



Text C: BM 42753



Text D: BM 33050



Text E: BM 42793



Text F: BM 43024

PLATE 12



Text G: BM 34580+ Obv.

PLATE 13



Text G: BM 34580+ Rev (left) and Upper Edge (right).



PLATE 14



Text H: BM 42736

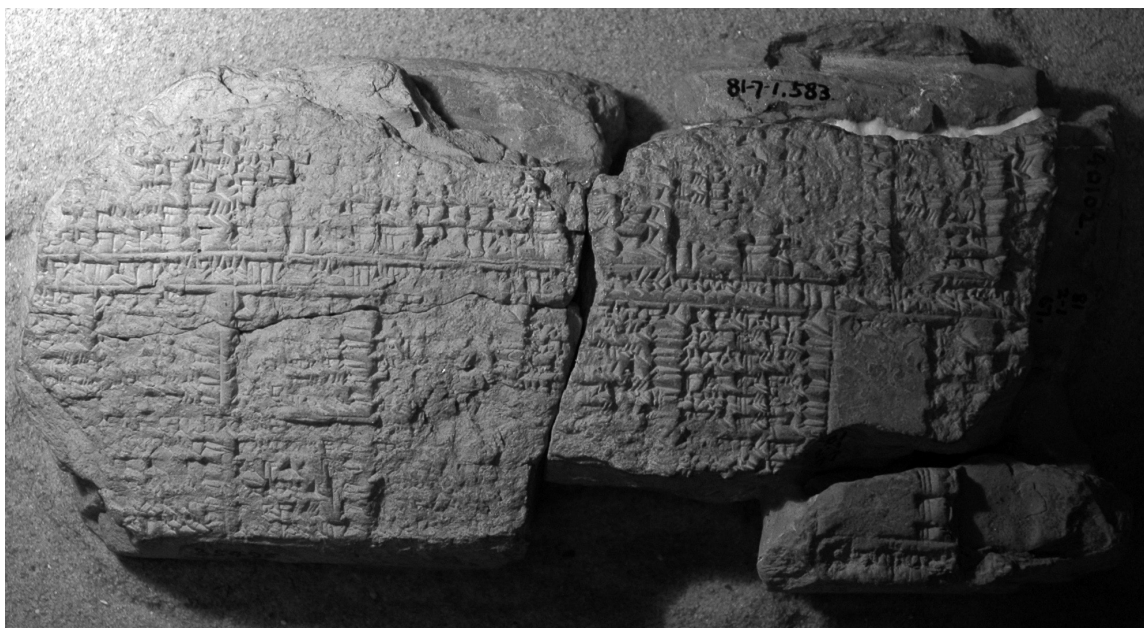


Text K: BM 42951



Text J: BM 34593 + 42758

PLATE 15



Text I: BM 42819 Obv (top) and Rev (bottom).



## PLATE 16



Text L: BM 43023 + 45730 + 46142 (+) CUL x 1 (not shown) Obv (top) and Rev (bottom)

PLATE 17



Text N: BM 55527 + 99661 Obv (top) and Rev (bottom)

PLATE 18



Text M: 42761



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