THREE MORE DUPLICATES TO ASTROLABE B
Dedicated on the occasion of Prof. Dr. Balkan’s 70th Birthday

G. ÇAĞIRGAN

While the present author had been studying under the supervision of Prof. W.G. Lambert, in Birmingham, in order to get his Ph. D., he was kindly informed by him that there were three more duplicates of so-called Astrolabe B in the collections of the British Museum.

The present edition of the text is based of four different sources. The published text consists of bilingual comments, in Sumerian and Akkadian, on twelve months, their relations with stars, myths, agricultural life and social activities of the Ancient Mesopotamians.

The relevant tablets disagree in line divisions, so the present arrangement is a new one to make the content more understandable. One Sumerian line, 29-30, is also rearranged according to its Akkadian translation.

The first tablet (KAV 218, also known as Ast. B), A here, was written in three columns and excavated in Assur. Both obverse and reverse of the tablet are preserved almost complete. The text consists of two parts. The first part, upper two - third of the obverse, is devoted to the menology, while the second part, beginning in the lower of the obverse and continuing on the reverse explains the positions of the thirty-six stars in various periods of the year.

The text of the menology is thus divided into three columns: the first column, which explains the first four months of the year, contains in 50 lines. The second column deals with the months fifth to eigth and consists of 46 lines. The third column covers the last four months of the year in 46 lines.

There is a colophon which ends the reverse:

qāṭ (šu) marduk (amar. utu) - balāṭ (ti.la) - su ėreš (kam)
tupšari (dub. sar) şehri (tur)
mār - ninurta - uballīṭ ū (ti.la) - su tupšar (dub. sar)
šarri (lugal)
igi. kar mdēl (en) - āha (šēs) - iddina (sum)na
nīṣ (mu) ā - šur šuma (mu) šat - ra la - a ta - pa - šīṭ
[ši]x ud. o. kam 1] i - mu mēk - ka - ru
The hand of Marduk - balāt - su - ĕreš, the junior scribe,  
the son of Ninurta - uballit - su, the scribe of the King.  
Collated by Bēl - aḫa - iddina.  
By Assur, do not erase the written name.  
[The month ..., th day, the e] ponym İkkaru

The date of the tablet can be determined by finds at Assur. During the 
excavation of the Assur Temple in 1911, a room which contained about 650 
tablets and fragments was discovered. Together with these tablets some jars 
were also found. Three of the jars had inscriptions on them bearing the name 
of Tiglat - pileser I, and it was supposed that these jars used to contain these 
tablets. In two of these tablets the eponym İkkaru is named (see, AfO XVI, 
p. 203) and he is proved to be one of the eponyms during the reign of Tiglat- 

The tablet was first published in transliteration and translation by E. 
Weidner in Handbuch der babylonischen Astronomie p. 64 ff. O. Schroeder 
gave it, in cuneiform, in KAV 218 and it was collated for this edition by 
W.G. Lambert.

The second tablet (Sm 755 + 1352 + 1715 + 1988), B here, is the 
upper part of a three - column tablet presumably coming from Ninive. Only 
some parts of the upper portions of the three columns on the obverse remain. 
The first column deals with the first two months in 13 lines, but the 
continuation is broken off. The second column, which is better preserved, 
covers the fifth to ninth months in 32 lines, but only the Akkadian for the fifth 
month survives: the Sumerian was written at the bottom of the previous 
column. After the ninth month a ruling indicates that the menology 
continues at the top of column three. The beginning of the third column is 
broken off and the preserved text begins with the tenth month and ends with 
the twelfth month. When complete it consisted of 32 lines. Considering the 
number of the lines in the last two columns one might assume that the first 
column also contained 32 lines.

Only in column two is writing preserved below the menology. The few 
preserved remains are the signs from a damaged original of which was 
broken away. The content is not so clear:

[... ]šen - ki x x
[... ] x ku
[... ] x ku
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Thus A and B agree in putting the menology in the upper portions of the columns of the obverse, though in detail the division into columns takes place at differing points.

There is no surviving colophon by which to date this tablet. Paleographic criteria prove that the tablet was written some time in the New Assyrian Period.

The third tablet (K.2920 + 8876 + 9527 + 12242), c here, is written in Babylonian script and in regard to autography the tablet can be dated to the New Babylonian Period. Though the tablet belongs to the “K” collection, it does not necessarily come from Ashurbanipal’s Library. This is shown by the fact that a tablet in a similar script, K.9928 (CT XI, pl. 28), cannot be from the Kuyunjik Library as it is dated to the eighth year of Nebuchadnezzar II.

Only the bottom portion of the tablet remains containing parts of 38 lines in sequence. The remains of the first two preserved lines end a section of unknown content, but the following 27 lines present a variant from the menology, c differs from A and B in that the sections for each month are shorter, and in addition, there are differences of wording. After the twelve month have been dealt with there is a colophon, copied from the original, and so proving that what follows is from a different source. The text reads:

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[... ] x tar
[... ] x min diš
[... ] x x [(..)]
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col. ii, 11.33 - 38

Rev. 11:15-22

Belleten C. XLVIII, 26
Sum (the month Nisan -) the constellation Pegasus, the king is lifted up, the month of Nanna, first born of Enlil. 

[...]. ditto, the star of Anu. [...] of Enlil.

Akk. [...]. the naming of the King, the month of Sin [...] of Anu and Enlil.

Sum. [The month A] yar - the constellation Pleiades, water logged ground is opened [...] [...]

[...]

Akk. [...]. the month of Ningirsu [...]

the plows are splashed.) [...]

[...] ... [...]

One of the joining pieces of this tablet, K 2920, was edited and published by K.D. Macmillan in BA V, pp. 704-705 and E. Weidner edited it in HBA p. 85 ff.

The fourth source, 81 - 2 - 4, 424, D here, is a small piece of a tablet written in the New Assyrian script. What survives might be the right hand side of the obverse consisting of 11 lines partly damaged. The fragment offers an illegible section beside the menology, which corresponds to the first four months. The menology is composed similarly to c in that each month is treated in two lines bilingually.
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1 [itil] [bâra] mulas.gân bâra. an.na
   iti nisannu(bâra) i - ku - u1 šu - bat dâ - nim

2 bâra il.la bâra gar.ra
   šarru(lugal) in-na - âš - ši šarru(lugal) iššakkan(gar) an2

3 gar.ra.an sig5,ga
   šur - ru - ú damqu(sig5)

4 an.na Æen.lil.lâ. ke4
   ša dâ - nim û Æen - lil3

5 [itil]i Ænanna (ŠLS.K1) dumu, sag Æen.lil.lâ. ke4
   arah Æsin (EN.ZU) mâri reš - ti - i4 ša5 Æen - lil3

6 iti gu4 mul.mul Æmin.bi
   iti aiaru (gu4) za - ap - pu Æsibitti(æmin.bi)

7 dingir gal.gal.e.ne
   ilâni meš rabûti (gal) meš

8 ki.pad.du. gu4si.sâ.e.ne
   pe - tu - ú er - še - ti alpû(gu4) meš ul - te - eš - eš - rû6

9 ki.dur5. gal7 kid kid.
   ru - ūtu - ub - tu up - ta - ta

10 gu5 apin dur.dur.ru.ke4 iti Ænin.gir.su8
   gu5 epinnû (apin) mešir - ra - aḥ - aḥ - šu9 arah Ænin - gir - su

11 ur.sag ensi gal Æen.lil.lâ.ke4
   qar - ra - di iš - šá - ak - ki10 rabî11 ša12 Æen - lil13

12 iti sig4 mul gu.an.na aga14 an.na.ke4
   iti simanu(sig4) is le - e a - gi dâ - nim

13 mul.bi KAXNE ba.an.sâ
   [kak]kabu šuâtu ([mu].bi) Ægirra (bil.gi) ša - nin

14 iti úšub lugal.ke4.
   [a]rah na - al - ba - an šarri(lugal)
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A 15 lugal ú šub sig₄.ke₄
šarru(lugal) na - al - ba - na i - la - bi - in

16 kur.kur. é.ne.ne mu.un.dù.a
mātātī meš bitāti meš - ši - na ip - pu - šú

17 [iti] kūl.la₁⁵ kalam.ma.ke₄
arağ kūl - la₁⁶ ša₁⁷ ma - a - tī₁⁸

18 iti šu mul sib.zi.an.na
iti du'uzu(šu) ši - ta - ad - da - lu

19 d nin.šubur sukkal.mah
  d pap - sukkal sukkallu ši - i - ru

20 an.na dinin.bi.id.da.ke₄ iti numun dub.bu.ni
  ša d a - nim u dištar arağ zēri šā - pa - ku

21 numun nim.ta.ē.dē
  numun - ni ĕar - pi šu - šī - i

22 kid.kid d nin.ru.ru.gū¹⁹
  ši - si - it d nin - ru - ru - gū

23 iti sib d dumu.zi ba.dib.dib.ba
  arağ rē'ī d dumu - zi ik - ka - mu - ū²⁰

24 [iti] ne mul kak.si.sā d nin.urta.ra
  iti abu(ne) šu - ku - du d nin - urta

25 [ki.izi .. ] x.re.dē
  kinūnētu (ki.izi) meš ²¹ ut - tap - pa - ḫa ²²

26 x [...] da.nun.na.ke₄.ne
  di - pa - ru²³ a - na d a - nun - na - ke₄²⁴ in - na - āš - šī²⁵

27 d KAXNE am.ta.c₁₁. dē.
  d girra (bil.gi) iš - tu šamēe ur - ra - dam - ma
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28 ki ḏutu.ra nim.nim.mu.dè
   it-ti ḏšamaš i-ša-na-an²⁶

29 iti ḏgiš.bil.ga.meš uḏ.9.kam²⁷
   arah ḏgilgmeš (GIŠ.GIN.mañ) tu-šu-ú u₄-mi²⁸

30 guruš ká.ne.ne gēšpu lirum.ma a.da.min
   eṭ-lu-tu²⁹ ina bābāti (kā) meš-šu-nu³⁰ ina³¹
   ú-ma-aš ú-ba-ri³² ul-te-šu-u³³

31 iti kin mul ban ḏinnin elam.ma ki.ke³⁴
   iti ulūlu(kin) ši-pir d ištar e-la-ma-ū³⁵

32 dumu.munus an.na.ke₄³⁶
   mārat(dumu.munus) da-nim³⁶.

33 ama.dınnin.e.ne³⁷ did.lū.ru.gū³⁸ sikil.e.dè
dištaratū mešina d façir ú-tal-la-la³⁹

34 mu.bi⁴⁰ in.daddag⁴¹
   šat-tu-su⁴² ú-tab-ba-ba⁴³

35 iti ḏu₆ mul mudru.kēš.da ḏen.lil⁴⁴
   itišritu (ḏu₆) ni-i-ru ḏen-lil⁴⁵

36 gūp.pa.šu.nir.ne.ne kū.kū.mu⁴⁶
   šu-pā-a-tu⁴⁷ ú-tál-la-la⁴⁸

37 nam.lū.u₄.lu⁴⁹ umun⁵₀ in daddag
   ni-sù⁵¹ u ru-bu-u u-tab-ba-bu⁵²

38 ni₅.sag mu kū.ga kur.kur.ɾa⁵³
   ni-iq šat-te⁵⁴ ellete (kù)te⁵⁵ ša⁵⁶ mātāti(kur) meš ti⁵⁷

39 ḏa.nun.na.ke₄.e.ne⁵⁹ mu.un.na.de⁵⁸
   a-na ḏa-nun-na-ke₄⁶⁰ in-nē-qi⁶¹

40 kā apsu (ZU.AB) ta.e⁶²
   ba-ab⁶³ ap-si-i⁶⁴ ip-pat-te⁶⁵
41 ki.še.ga₆² lugal. du₆₆ kù.га₆⁶ en.ki dën.ki
ki-is-pu [a-n] a lugal-du₆₆ kù-ga dën-ki u dën-ki

42 iti pa₄₃ bil.га₆⁸ dën.lil.lá.ša₄₉ araḫ a-bi a-bi šá dën-lil₇⁰

43 iti apin gi₅ apin.na [edin.na]₇¹
iti.árâhsamnu (apin) pa-ṭar.⁷² gi₅ epinni₇₃ gi₅ -la₇⁴
üt₇₅ gi₅ epinnu a-na₇₆ šeri

44 a.đa.min.di₄₅ di₄₆ dê₇⁷
ul-te-su-ú₇⁸

45 a.ki.tu₇₉ uru₄₈ gar.ra
a-ki-it e-re-si₈¹ iš-sa-ka-an₈²

46 iti₉₈ iskur gú.gal.an.ki.a.
araḫ d'adad gú-gal šame e ú₈₃ erșeti₈⁴

47 iti.țăn hé.gál hé.me.en[... ]₈₅
iti.kisliμu (gan) hé-gál-lu₈₆ u₈₇ nu-ṭh-su₈₈
uk-ta-ma-ru₈⁹

48 mul x [... ]₉⁹ ur.sag kala (!).ga (!) dér.ra.gal₉₀
qarradu (ur.sag) dan-nu d'nergal(u.gur)

49 urugal(ešgal).la.ta ba ra.č₉¹
iš-tu₉² er-še-ti₉₃ i-la-a₉⁴

50 ur₄₅ ur₄₅ d[ingir.ma] š.tab.ba₉⁶
ka-šu-uš ilañi me₅ ki-lal-la-an

51 iti ur.sag šà.điš. šē₉⁷ dér.ra.gal₉₈
araḫ qarradi (ur.sag) git-ma-li d'nergal (u.gur)...₉⁹

52 iti.țăb ezen.maḥ. an.na.ša₉₈
iti.tebētu (ab.ba) <i>-sin-nu¹⁰⁰ ši-ru šá d'a-nim
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53 iti ni.gal d’innin.ke₄
araḥ nam-ri-ri¹⁰¹ šá diš-tar

54 ab.ba ur[u. ] x [. . .
ši-bu-ut¹⁰² āli ana puḥri (ukkin)¹⁰³ uṣ-ṣu-ni

55 di.šu [m ká].ne.ne [. . .
di-šum bābāṭi (ká) meš-šū-nu i-x [. . ]

56 ḏ uṭu šu.bar.r[a.k]e₄ u ná. ki d[u ...
dšamaš šu-ba-ru-ta¹⁰⁴ u na-i-[lā] šā er-še-ti
i-ša-ka-an

57 iti ṭil.bi. še ṯin.x [ (. . .)]
arḥu šuāṭi (iti.bi) a-di na-ag-ma-ri-[šu]¹⁰⁵
lu-up-pu-[x]

58 itiz muṭi. mušen ḏ za.b[a₂ba₄]
¹⁰⁶ mušabatu (ziz) muṭi.x μušen ḏ za.ba₄.ba₄

59 ú bi.a tēš.bi edin.na m[ū.a ...
ša.m-[u]¹⁰⁷ ... .

60 iti šā.hū[.l.la] ḏen.l[ill.la.ke]
araḥ ḥu-ud [lib-bi ša ḏen-lil ...¹⁰⁶]

61 iti su.ḥūs¹⁰⁸ x [. . .
araḥ ez-z[.i ...]

62 zag.ti, mušen x [. . .
[ ... ]

63 [. . . ṣe mu₅ ku₆ [. . .
itiaddaru (ṣe) mu₅ ku₆ [. . .

64 [. . .]
in-nē-eṣ-ṣe-ed

65 [. . . ed]n.na sā.a
maṣ-ka-na-[at]¹⁰⁹ šēri i-ma-al-la-a
66 a.gar gal.gal.la

   ina¹¹⁰ ú - ga - ri¹¹¹ rab - bu - [ti]¹¹²

67 ñnin.üri.su.ke₄¹¹³

   šá ñnin - üri - su¹¹³

68 urudugu.kin.ki¹¹⁴ hu.kid.kid

   nig - gal - lu¹¹⁵ ul e - se - [et]¹¹⁶

69 iti šà.₄u₄ [la ñen.₄i₄.la.₄e₄]

   arah hu - ud li - bi ša ñen - [li]¹¹⁷

70 iti ê.₄e.₄ a

   arah ê - a
1 The month Nisan - the constellation Pegasus, the seat of Anu.

2 The king is lifted up, the king is established.

3 The pleasant beginning

4 of Anu and Enlil.

5 The month of Sin, the first son of Enlil.

6 The month Ayar - the constellation Pleiades, the Seven Gods,

7 the great gods.

8 Opening of the soil, the oxen are directed,

9 waterlogged ground is opened,

10 the plows are splashed. The month of Ningirsu,

11 the hero, the great farmer of Enlil.

12 The month Simanu - the constellation Hyades, the tiara of Anu.

13 Girra rivals this constellation.

14 The month of the brick mould of the king.
15 The king moulds bricks.

16 The lands build their houses.

17 The month of Kulla of the land.

18 The month Tammuz - the constellation Orion,

19 Papsukkal, the sublime vizier of Anu and Ištar. The month of heaping up the seed,

20 bringing forth the early sowings.

21 The wailing of Ninrurugu,

22 The month of the Shepherd Dumuzi (who) was bound.

23 The month Ab - the stars Sirius, Ninurta.

24 The braziers are lit,

25 a torch is lifted for the Anunnaki.

26 Girra comes down from the heaven and
28 rivals with Samaš.

29 The month of Gilgameš, for nine days

30 the young men contest in wrestling and athletics in their city quarters.

31 The month Ulūlu - the Bow star (Akk. the mission of) Ištar of Elam.

32 the Daughters of Anu.

33 The goddesses are purified in the river.

34 They are cleansed annually.

35 The month Tašritu - the Yoke, Enlil.

36 Shrines are purified,

37 people and prince are cleansed.

38 Offerings of the holy year of the lands

39 are offered to the Anunnaki,

40 the Gate of Apsu is opened.
Kispu - offering for Lugaldugula, Enki and Ninki.

The month of the grandfather of Enlil.

The month Araq samnu - the loosening of the plough. Hoe and plough are brought forth into the field.

The Akītu - festival of the cultivation is celebrated.

The month of Adad, the canal inspector of Heaven and Earth.

The month Kislimu - fertility and abundance are heaped up.

The mighty hero Nergal

ascends from the Underworld.

The mighty one of the twin gods.

The month of the perfect hero Nergal.

The month Ṭebētu - the lofty festival of Anu.
The month of the splendour of Ištar.

The elders of the city go out to the assembly-

Išum. [...] their gates.

Šamaš sets up freedom and rest of the Underworld

This month till [its] end.

The month šabātu - the constellation Aquila, Za[baba].

The grasses together [...] in the open country.

The month of rejoicing of Enlil’s heart.

The month of fear [...]

... [...]

The month Addaru - the constellation Pisces, [...

[...] is harvested.

The granaries of the open country are filled
from the large fields

of Ningirsu

the sickle is not superflous.

The month of rejoicing of Enlil’s heart.

The month of Ea.
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1. B m jul aš.gān
2. B 41jš-sā-kan
3. B 4idim
4. c reš-t]u-ú
5. B c, D šā
6. B uš (!) te-še ru
7. B 4nin.gir.sū
8. c, D ensi
9. B ki.dur, gāl
10. B i-ša-ša
11. B gal
12. B e, D šā
13. B 4idim
14. tablet reads il
15. D 4šig a
16. c, D 4kūl-lī
17. B, c šā
dinin.gir.su
18. c, D ma-a-ti
19. tablet reads kid.kid iti 4nin.ru.ru.gū
20. c ik-k]a-mu-u
21. B ki-nu-nē-tu
22. c in-nap-paḥ
23. B 4-nun-na-k]i
24. c gi.iz[i]á]
25. B in-niš-si
26. B iš-ša-na-[a[n]
27. c ud.8.kām
28. B ud.9.kam
29. B guruš[es t[u]; c et-lu-tu₄
30. B, c kā-šā-nu
31. A omits ina
32. B é maš (might be error for ú-maš)
a-ba-ri; c ú[mas] u a-ba-ri
33. B uš-te-su-u; c uš-te-eš-su-u
34. B elam ma
35. B [t'ul[u] (?)
36. A omits this couplet
37. B 4[nin.ke₄,ne; 4nin.ke₄,ne
38. B itilû.ru.gū
39. B u-te-šu-u; c te-eš-su-u
40. c is not clear ends] x.a.nišše
41. c imm.i.in.daddag
42. B daddag₄-
43. B daddag₄-
44. B 4idim
45. B šu-pa-tu
46. c x-si-na
47. B nam.lū.u
48. c 4en.lil.lā
49. B ù-[kù] gā
50. B nam.lū.u
51. B daddag₄-
52. B daddag₄-
53. B kur.kur
54. c x-si
55. A, c el-lu
56. B kur.kur₄-
57. B kur.kur₄-
58. A in-na-qi; c ...]
A in-na-qi iškas-si³
4a-num-na-ki iškas-si³
A in-na-qi iškas-si³
4a-num-na-ki iškas-si³
4a-num-na-ki iškas-si³
cf. II 41-42
note 58-58; also GT XLI, 39, rev. 1, 7)
59. B 4a-num.na.ke₄,ne
59. mun.]kur.ra₄a.nun.na
an.da.gāl.še ki[. . .] 58
60. B 4a-nun-na-] ki
61. A in-na-qi; c ...]
a-num-na-ki iškas-si³
62. B kā apsu (ZU-AB) aša₆,ga
63. B kā
64 B apsu (ZU.AB)
65 B ip-pe-te
66 B lugal.du₅.kù.ga
67 B nin-ki
68 B pa₄₆ bil
69 B ṭidim.ke₄
70 B ṭidim
71 B ]x dē.de. edin.na; c omits edin.na
72 B pa-ṭar
73 A MAḪ
74 B al-lu; c₄₆al
75 c u; B omits ū
76 B ana
77 c a.da.min.di.e.dè
78 B uš-[te-šu-u]; c uš-te-eš-šu-u
79 B suggests [ā/a..MM]t
80 B ī ur
81 B uru₄₆.kur
82 B ī-šā-kan
83 c u
84 B [a]n.k[i]
85 B remaining part of the sign might be dūr for kamāru.
86 B hē.gāl
87 B omits ū
88 B nu-uh-šū
89 B uk-tā-ma-ru; c u]k-ta-mar
90 A reads ur before urugal
91 B ]a.ē.a
92 B kį
93 B kiñe
94 B e-la-a
95 B omits
96 B dingir.min.a.bi
97 A gir.bil. diš. ša₄
98 A omits
99 c 99 iti ur.sag dišša₄
100 B i-š[i-in-nu]
101 C nam-ri-ir-ri
102 B šē-bu-te
103 C up-[]a ha-ra a-na pu-uh-ri-
104 B šu-bar-[ru-ta]
105 C en.lil.lá.ke₄
106..106 c üšabātu (zig) arāh ĥur-bāši
107 Bער_fft
108 A su.kan (error for su.ḥuṣ)
109 c maš-ka-na-a-tu₄
110 B, c omits ina
111 B a.garنتقل c ú-gā-ru
112 B gal转移到; c gal转移到
113 A omits this couplet
114 B šu.ḥuṣ.ki [n (?)]
115 B ni-gal-[u]; c ni-gāl-lu
116 C ul e-set